




<b>A</b>		<b>Pinzas con tuerca y tapón de seguridad</b> FASTENERS WITH KNURLED NUT AND SAFETY CAP				
		<b>Art.Nr./PART NO.</b>	<b>Diámetro</b>	<b>DIAMETER</b>	<b>Agarre</b>	<b>GRIP</b>

<b>2072KU-20</b>	2,0 mm	5/64"	0-6 mm	0-1/4	negro	black
<b>2072KU-24</b>	2,4 mm	3/32"	0-6 mm	0-1/4	marrón	brown
<b>2072KU-26</b>	2,6 mm	#38	0-6 mm	0-1/4	azul	blue
<b>2072KU-32</b>	3,2 mm	1/8"	0-6 mm	0-1/4	rojo	red
<b>2072KU-35</b>	3,5mm	9/64"	0-6 mm	0-1/4	gris	grey
<b>2072KU-40</b>	4,0 mm	5/32"	0-6 mm	0-1/4	amarillo	yellow
<b>2072KU-45</b>	4,5 mm	#16	0-6 mm	0-1/4	transparente	transparent
<b>2072KU-48</b>	4,8 mm	3/16"	0-6 mm	0-1/4	verde	green
<b>2072KU-50</b>	5,0 mm	#9	0-6 mm	0-1/4	negro	black
<b>2072KU-56</b>	5,6 mm	7/32"	0-10 mm	0-3/8"	blanco	white
<b>2072KU-60</b>	6,0 mm	15/64"	0-10 mm	0-3/8"	plateado	silver

<b>B</b>		<b>Pinzas largas con tuerca cilíndrica y tapón de seguridad</b> FASTENERS, LONG, WITH KNURLED NUT AND SAFETY CAP				
		<b>Art.Nr./PART NO.</b>	<b>Diámetro</b>	<b>DIAMETER</b>	<b>Agarre</b>	<b>GRIP</b>

<b>2072KU-24 x 15</b>	2,4 mm	3/32"	5-15 mm	3/16-19/32"	marrón	brown
<b>2072KU-26 x 15</b>	2,6 mm	#38	5-15 mm	3/16-19/32"	azul	blue
<b>2072KU-32 x 15</b>	3,2 mm	1/8"	5-15 mm	3/16-19/32"	rojo	red
<b>2072KU-35 x 15</b>	3,5mm	9/64"	5-15 mm	3/16-19/32"	gris	grey
<b>2072KU-40 x 15</b>	4,0 mm	5/32"	5-15 mm	3/16-19/32"	amarillo	yellow
<b>2072KU-45 x 15</b>	4,5 mm	#16	5-15 mm	3/16-19/32"	transparente	transparent
<b>2072KU-48 x 15</b>	4,8 mm	3/16"	5-15 mm	3/16-19/32"	verde	green
<b>2072KU-50 x 15</b>	5,0 mm	#9	5-15 mm	3/16-19/32"	negro	black
<b>2072KU-56 x 15</b>	5,6 mm	7/32"	5-15 mm	3/16-19/32"	blanco	white
<b>2072KU-60 x 15</b>	6,0 mm	15/64"	0-15 mm	0-19/32"	plateado	silver
<b>2072KU-64 x 15</b>	6,4 mm	1/4"	0-15 mm	0-19/32"	plateado	silver

<b>C</b>		<b>Pinzas manuales con muelle</b> FASTENERS, SPRING-LOADED, PLIER-OPERATED				
		<b>Art.Nr./PART NO.</b>	<b>Diámetro</b>	<b>DIAMETER</b>	<b>Agarre</b>	<b>GRIP</b>

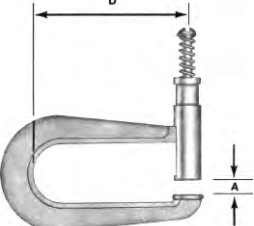
<b>2071Z-20</b>	2,0 mm	5/64"	0-6 mm	0-1/4	negro	black
<b>2071Z-24</b>	2,4mm	3/32"	0-6 mm	0-1/4	marrón	brown
<b>2071Z-26</b>	2,6mm	#38	0-6 mm	0-1/4	plateado	silver
<b>2071Z-32</b>	3,2 mm	1/8"	0-6 mm	0-1/4	cobre	copper
<b>2071Z-40</b>	4,0 mm	5/32"	0-6 mm	0-1/4	amarillo	yellow
<b>2071Z-48</b>	4,8 mm	3/16"	0-6 mm	0-1/4	plateado	silver

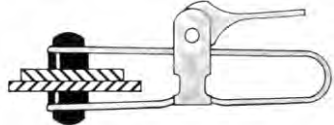
<b>D</b>		<b>Pinzas manuales con muelle</b> FASTENERS, SPRING-LOADED, HAND-OPERATED				
		<b>Art.Nr./PART NO.</b>	<b>Diámetro</b>	<b>DIAMETER</b>	<b>Agarre</b>	<b>GRIP</b>


<b>2071HZ-32</b>	3,2 mm	1/8"	0-6 mm	0-1/4	cobre	copper
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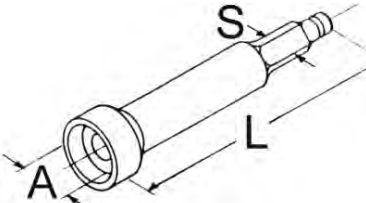
Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !

<b>A</b>			<b>Pinzas de cocodrilo para alicates</b> <b>(use alicate TP-74)</b> SIDE GRIPS, PLIER OPERATED EDGE CLAMPS (USE PLIER P/N TP-74)						
			<b>Art.Nr./PART NO.</b>	<b>Grosor</b>	<b>MATERIAL THICKNESS</b>	<b>Profundidad</b>	<b>JAW DEPTH</b>	<b>Color</b>	<b>COLOR</b>
			<b>KSG 1/2" x 1/2"</b>	0-12,7 mm	1/2"	0-12,7 mm	0-1/2"	cobre	copper
			<b>KSG 3/4" x 1/2"</b>	0-19,0 mm	3/4"	0-12,7 mm	0-1/2"	latón	brass
			<b>KSG 1/2" x 1"</b>	0-12,7 mm	1/2"	0-25,4 mm	0-1"	cobre	copper
<b>KSG 3/4" x 1"</b>	0-19,0 mm	3/4"	0-25,4 mm	0-1"	latón	brass			

<b>B</b>			<b>Pinzas laterals para alicates</b> <b>(use alicate TP-74)</b> <b>Blechklemmen, zangenbetätigt (verwenden Sie Zange TP-74)</b> SIDE GRIPS, PLIER OPERATED EDGE CLAMPS (USE PLIER P/N TP-74)				
			<b>Art.Nr./PART NO.</b>	<b>Grosor</b>	<b>MATERIAL THICKNESS</b>	<b>Profundidad</b>	<b>JAW DEPTH</b>
			<b>542</b>	0 - 9,5 mm	0" - 3/8"	max. 50 mm	2"
			<b>543</b>	6,35 - 14,3 mm	1/4" - 9/16"	max. 75 mm	3"

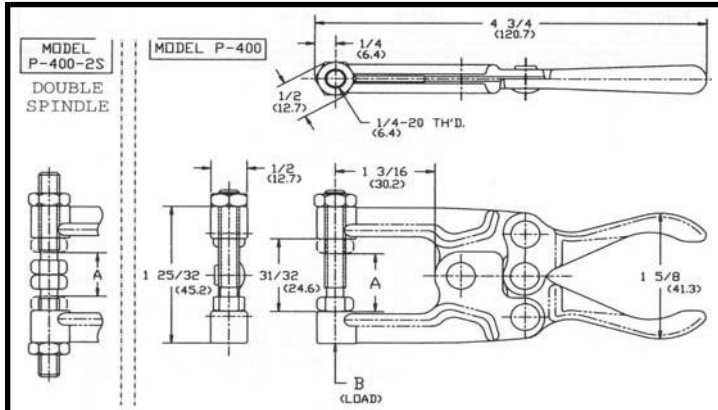
<b>C</b>			<b>Pinzas manuales</b> HANDI-KLAMPS, HAND OPERATED				
			<b>Art.Nr./PART NO.</b>	<b>Grosor</b>	<b>MATERIAL THICKNESS</b>	<b>Profundidad</b>	<b>JAW DEPTH</b>
			<b>K-1</b>	0-7,94 mm	0-5/16"	25,4 mm	1"
			<b>K-2</b>	0-7,94 mm	0-5/16"	38,1 mm	1.1/2"

<b>D</b>			<b>Alicates abrepinzas</b> PLIER FOR FASTENERS AND CLAMPS					
			<b>Art.Nr./PART NO.</b>					
			<b>TP-74</b>					

<b>E</b>			<b>Atornilladores para pinzas con tuerca rosacada</b> NUT SETTER FOR FASTENERS WITH KNURLED NUTS					
			<b>Art.Nr. PART NO.</b>	<b>A</b>	<b>L</b>	<b>S = hexágono S = HEX SHANK</b>	<b>Mango SHANK TYPE</b>	<b>Recomendado para RECOMMEND FOR TYPE</b>
			<b>452012</b>	<b>16,5 mm (0.650")</b>	<b>85 mm (3.350")</b>	<b>1/4" (6,35 mm)</b>	<b>STANDARD</b>	2072KU (hasta/to: 5,9 mm)
			<b>452016</b>	<b>18,5 mm (0.650")</b>	<b>112 mm (3.350")</b>	<b>1/4" (6,35 mm)</b>	<b>STANDARD</b>	2072KU (desde/from: 6,0 mm)
			<b>452023</b>	<b>16,5 mm (0.650")</b>	<b>85 mm (3.350")</b>	<b>5/16" (7,94 mm)</b>	<b>DESOUTTER</b>	2072KU (hasta/to: 5,9 mm)
			<b>452024</b>	<b>18,5 mm (0.730")</b>	<b>112 mm (4.410")</b>	<b>5/16" (7,94 mm)</b>	<b>DESOUTTER</b>	2072KU (desde/from: 6,0 mm)
			<b>452025</b>	<b>16,5 mm (0.650")</b>	<b>85 mm (3.350")</b>	<b>5/16" (7,94 mm)</b>	<b>STANDARD</b>	2072KU (hasta/to: 5,9 mm)
			<b>452026</b>	<b>16,5 mm (0.650")</b>	<b>112 mm (4.410")</b>	<b>5/16" (7,94 mm)</b>	<b>STANDARD</b>	2072KU (hasta/to: 5,9 mm) (agarre desde/GRIP from 15 mm)

# Alicates de presión / TOGGLE PLIERS

## KNU-VISE



1 huso sin goma / 1 Spindle without Rubber Pad

**P-400**

P-400-2S = 2 husos sin goma / 2 Spindles without Rubber Pads

P-400-2S-1 = 2 husos con 1 goma / 2 Spindles with 1 Rubber Pad

P-400-2S-2 = 2 Spindeln, mit 2 Gummipuffer / 2 Spindles with 2 Rubber Pads

Modelo MODEL	(A) Max. grosor MAX. CLAMP THICK. (A)	Máxima carga LOAD	Peso WEIGHT
P-400	23/32" (18 mm)	400 Lbs (180 kg)	0.30 lbs. (0.14 kg)
P-400-2S	19/32" (15 mm)	400 Lbs (180 kg)	0.30 lbs. (0.14 kg)
P-400-1	9/16" (14 mm)	400 Lbs (180 kg)	0.30 lbs. (0.14 kg)
P-400-2S-1	7/16" (11 mm)	100 lbs. (45 kg)	0.30 lbs. (0.14 kg)
P-400-2	5/16" (8 mm)	100 lbs. (45 kg)	0.30 lbs. (0.14 kg)
P-400-2S-2	3/16" (4,8 mm)	100 lbs. (45 kg)	0.30 lbs. (0.14 kg)



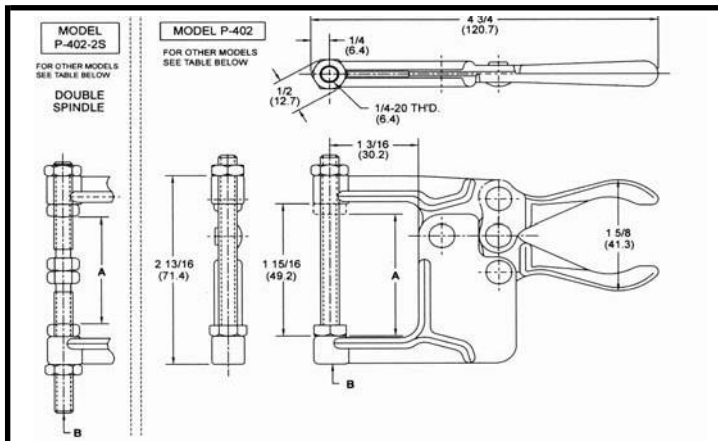
1 huso con goma / 1 Spindle with Rubber Pad

**P-400-1**



1 huso con dos gomas / 1 Spindle with 2 Rubber Pads

**P-400-2**



1 huso con goma / 1 Spindle without Rubber Pad

**P-402**

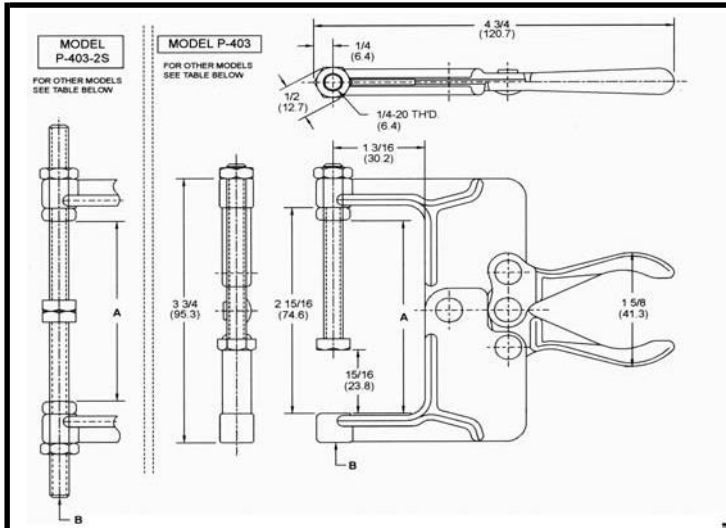
P-402-1 = 1 huso con una goma / 1 Spindles with 1 Rubber Pad

P-402-2S = 2 husos sin goma / 2 Spindles without Rubber Pads

P-402-2S-2 = 2 husos con 2 gomas / 2 Spindles with 2 Rubber Pads

Modelo MODEL	(A) Max. grosor MAX. CLAMP THICK. (A)	Carga máxima LOAD	Peso WEIGHT
P-402	1.3/4" (45.5 mm)	400 Lbs (180 kg)	0.36 lbs. (0.16 kg)
P-402-1	1.1/2" (38.1 mm)	100 lbs. (45 kg)	0.36 lbs. (0.16 kg)
P-402-2S	1.1/2" (38.1 mm)	400 Lbs (180 kg)	0.38 lbs. (0.17 kg)
P-402-2S-2	1.1/8" (28.6 mm)	100 lbs. (45 kg)	0.39 lbs. (0.18 kg)

# Alicates de presión / TOGGLE PLIERS

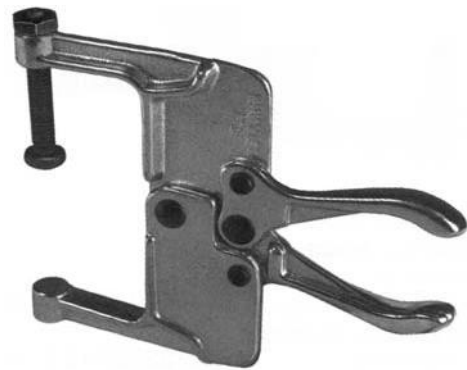


P-403-1 = 1 huso con 1 goma / 1 Spindles with 1 Rubber Pad

P-403-2S = 2 husos sin goma / 2 Spindles without Rubber Pads

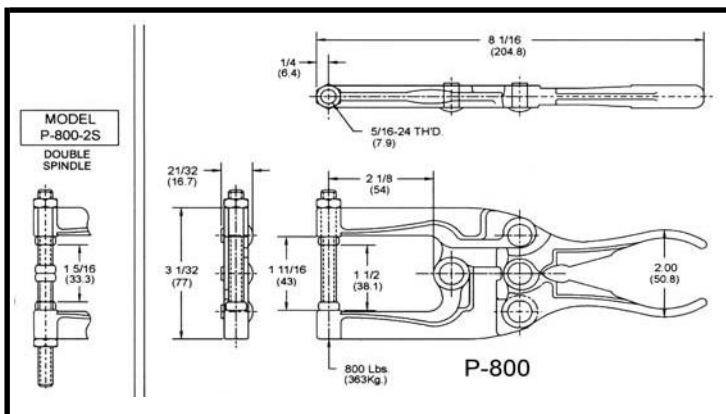
P-403-2S-2 = 2 husos con 2 gomas / 2 Spindles with 2 Rubber Pads

Modelo MODEL	(A) Max. grosor MAX. CLAMP THICK. (A)	Carga máxima LOAD	Peso WEIGHT
<b>P-403</b>	2.3/4" (69.9 mm)	400 Lbs (180 kg)	0.42 lbs. (0.19 kg)
<b>P-403-1</b>	2.1/2" (63.5 mm)	100 lbs. (45 kg)	0.42 lbs. (0.19 kg)
<b>P-403-2S</b>	2.5/8" (66.7 mm)	400 Lbs (180 kg)	0.44 lbs. (0.20 kg)
<b>P-403-2S-2</b>	2.1/8" (54.0 mm)	100 lbs. (45 kg)	0.45 lbs. (0.20 kg)



1 huso sin goma / 1 Spindle without Rubber Pad

**P-403**



P-800 = 1 huso sin goma / 1 Spindle without Rubber Pad

P-800-2S = 2 husos sin gomas / 2 Spindles without Rubber Pads

Modelo MODEL	(A) Max. grosor MAX. CLAMP THICK. (A)	Carga máxima LOAD	Peso WEIGHT
<b>P-800</b>	1.1/2" (38.1 mm)	800 lbs. (362 kg)	1.06 lbs. (0.48 kg)
<b>P-800-2S</b>	1.5/16" (33.3 mm)	800 lbs. (362 kg)	1.06 lbs. (0.48 kg)



**P-800 \***

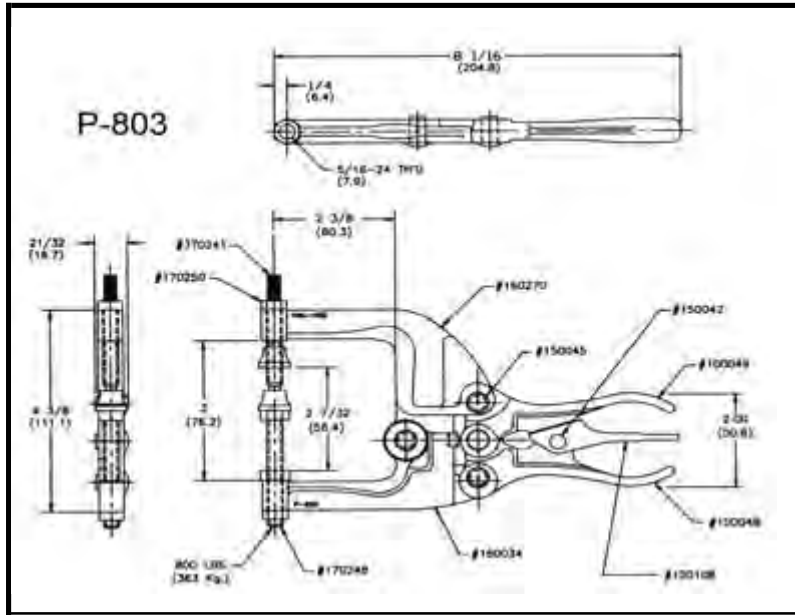
\* También con muelle de soltado rápido

\* Also available with Quick Release Lever !

Mod.: **LUP-800 & LUP-800-2S**

# Alicates de presión / TOGGLE PLIERS

## KNU-VISE

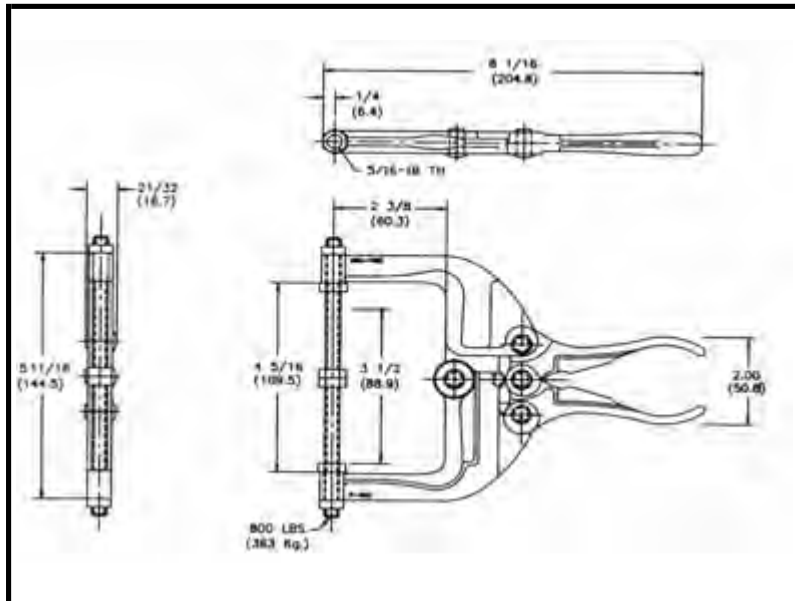


**P-803 \***

\* Con muelle de soltado rápido y un huso

\* Included Quick Release Lever and 1 Swivel Foot Spindle

Modelo MODEL	(A) Max. grosor MAX. CLAMP THICK. (A)	Carga máxima LOAD	Peso WEIGHT
<b>P-803</b>	2.7/32" (56.4 mm)	700 lbs. (318 kg)	1.28 lbs. (0.58 kg)



**P-804 \***

2 husos, cabeza hexagonal  
2 Hex Head Spindles

\* Auch mit Schnelllösehebel lieferbar !

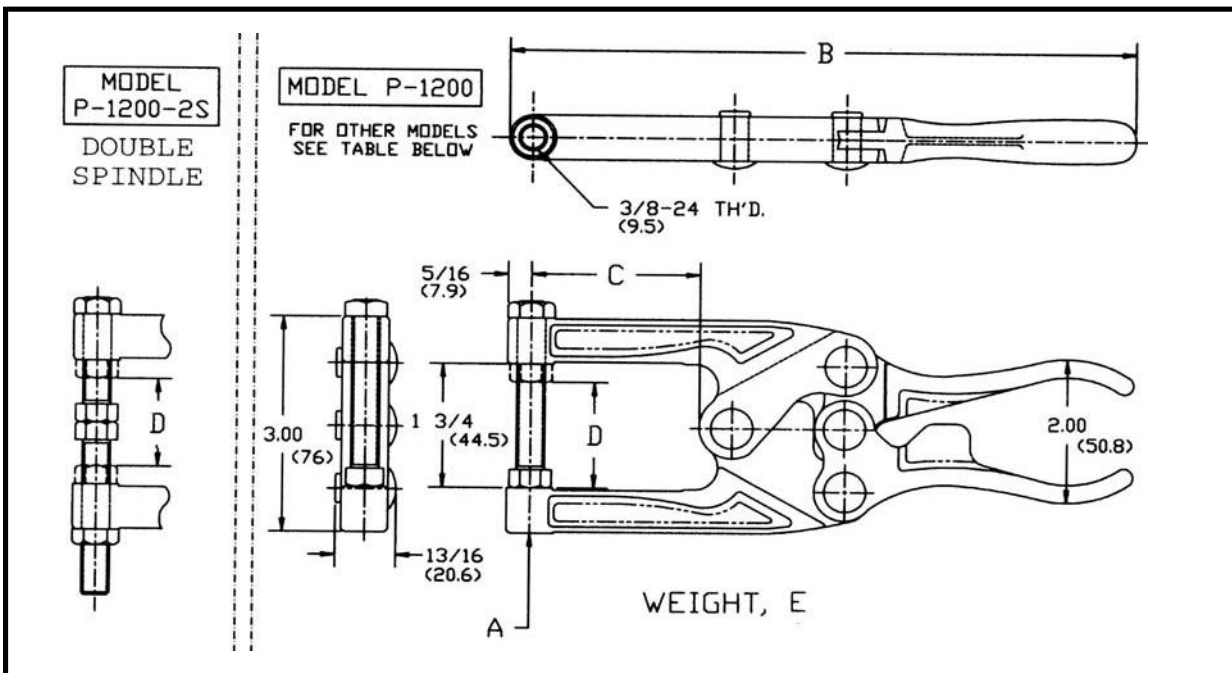
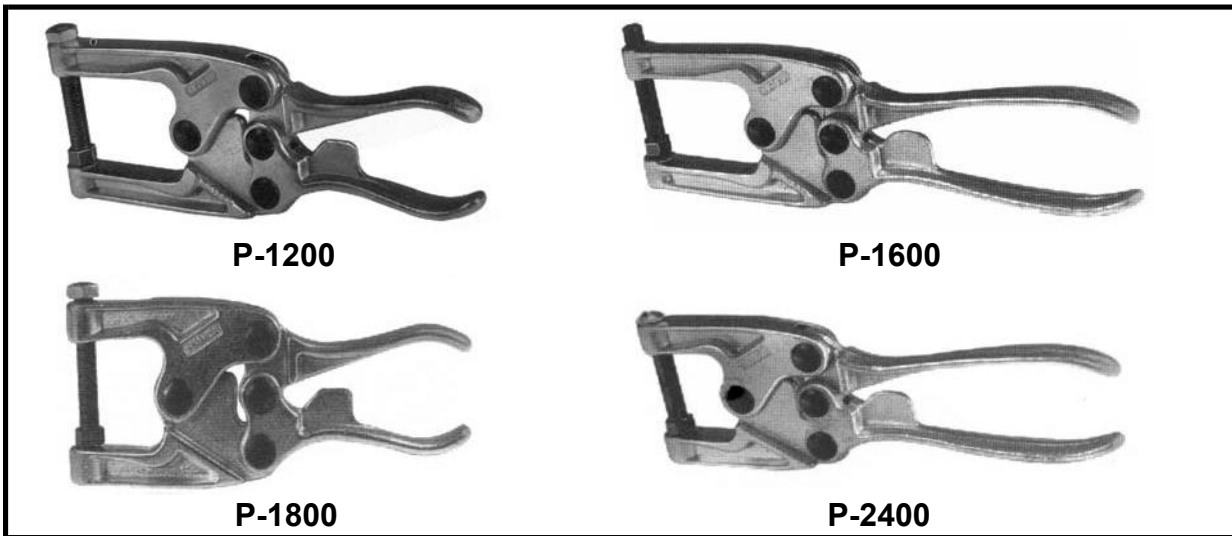
\* Also available with Quick Release Lever !

Modelo MODEL	(A) Max. grosor MAX. CLAMP THICK. (A)	Carga máxima LOAD	Peso WEIGHT
<b>P-804</b>	3.1/2" (88.9 mm)	600 lbs. (272 kg)	1.36 lbs. (0.62 kg)

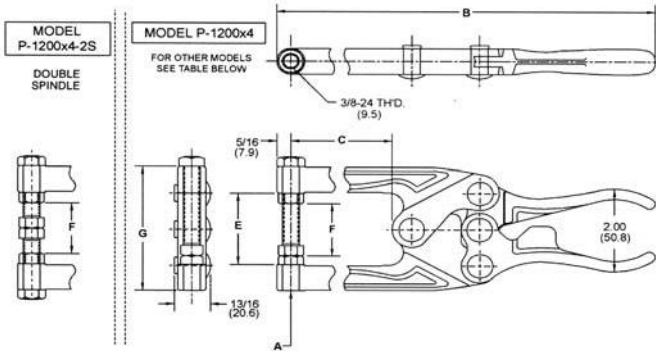
Mod.: **LUP-804**

# Alicates de presión / TOGGLE PLIERS

## KNU-VISE



Modelo	A	B	C	D	E	Nº de husos NO OF SPINDLES
MODEL	LOAD	LENGTH	THROAT DEPTH	MAX. CLAMP THICK.	WEIGHT	
<b>P-1200</b>	1200 lbs. (540 kg)	8.3/8" (212.7 mm)	2.1/4" (57.2 mm)	1.7/32" (31.0 mm)	1.56 lbs. (0.71 kg)	1
<b>P-1600</b>	1600 lbs. (725 kg)	9.3/4" (247.7 mm)	2.1/4" (57.2 mm)	1.7/32" (31.0 mm)	1.64 lbs. (0.74 kg)	1
<b>P-1800</b>	1800 lbs. (820 kg)	7.3/8" (187.3 mm)	1.1/4" (31.8 mm)	1.1/4" (31.8 mm)	1.46 lbs. (0.66 kg)	1
<b>P-2400</b>	2400 lbs. (1100 kg)	8.3/4" (222.2 mm)	1.1/4" (31.8 mm)	1.1/4" (31.8 mm)	1.54 lbs. (0.70 kg)	1
<b>P-1200-2S</b>	1200 lbs. (540 kg)	8.3/8" (212.7 mm)	2.1/4" (57.2 mm)	1.1/32" (26.2 mm)	1.60 lbs. (0.73 kg)	2
<b>P-1600-2S</b>	1600 lbs. (725 kg)	9.3/4" (247.7 mm)	2.1/4" (57.2 mm)	1.1/32" (26.2 mm)	1.68 lbs. (0.76 kg)	2
<b>P-1800-2S</b>	1800 lbs. (820 kg)	7.3/8" (187.3 mm)	1.1/4" (31.8 mm)	1.1/16" (27.0 mm)	1.50 lbs. (0.68 kg)	2
<b>P-2400-2S</b>	2400 lbs. (1100 kg)	8.3/4" (222.2 mm)	1.1/4" (31.8 mm)	1.1/16" (27.0 mm)	1.58 lbs. (0.73 kg)	2



**P1200x4**

Modelo	A	B	C	D	E	F	G		
MODEL	LOAD	LENGTH	THROAT DEPTH	WEIGHT	JAW OPENING	MAX. CLAMP THICK.	HEIGHT	MIN. CLAMP THICK.	SPINDLE NO.
<b>Huso solo / SINGLE SPINDLE</b>									
<b>P-1200x4</b>	600 lbs. 270 kg	10 7/16" 265 mm	4" 101.6 mm	2.01 lbs. .91 kg	1 3/4" 44.5 mm	1 7/32" 31 mm	3" 76 mm	0 0	370009
<b>P-1203x4</b>	600 lbs. 270 kg	10 7/16" 265 mm	4" 101.6 mm	2.31 lbs. 1.05 kg	3 17/32" 89.7 mm	2 13/16" 71.4 mm	5" 127 mm	1 19/32" 40.5 mm	370009
<b>P-1204x4</b>	600 lbs. 270 kg	10 7/16" 265 mm	4" 101.6 mm	2.41 lbs. 1.109 kg	4 17/32" 115 mm	3 13/16" 96.8 mm	6" 152.4 mm	3 19/32" 91.3 mm	370009
<b>P-1206x4</b>	600 lbs. 270 kg	10 7/16" 265 mm	4" 101.6 mm	2.60 lbs. 1.18 kg	6 17/32" 166 mm	5 13/16" 147.6 mm	8" 203.2 mm	5 19/32" 142.1 mm	370009
<b>P-1200x6</b>	400 lbs. 180 kg	12 7/16" 316 mm	6" 152.4 mm	2.48 lbs. 1.13 kg	1 3/4" 44.5 mm	1 7/32" 31 mm	3" 76 mm	0 0	370009
<b>P-1203x6</b>	400 lbs. 180 kg	12 7/16" 316 mm	6" 152.4 mm	2.78 lbs. 1.26 kg	3 17/32" 89.7 mm	2 13/16" 71.4 mm	5" 127 mm	1 19/32" 40.5 mm	370009
<b>P-1204x6</b>	400 lbs. 180 kg	12 7/16" 316 mm	6" 152.4 mm	2.88 lbs. 1.31 kg	4 17/32" 115 mm	3 13/16" 96.8 mm	6" 152.4 mm	3 19/32" 91.3 mm	370009
<b>P-1206x6</b>	400 lbs. 180 kg	12 7/16" 316 mm	6" 152.4 mm	3.07 lbs. 1.39kg	6 17/32" 166 mm	5 13/16" 147.6 mm	8" 203.2 mm	5 19/32" 142.1 mm	370009
<b>P-1200x8</b>	300 lbs. 135 kg	14 7/16" 367 mm	8" 203.2 mm	2.94 lbs. 1.33 kg	1 3/4" 44.5 mm	1 7/32" 31 mm	3" 76 mm	0 0	370009
<b>P-1203x8</b>	300 lbs. 135 kg	14 7/16" 367 mm	8" 203.2 mm	3.24 lbs. 1.47 kg	3 17/32" 89.7 mm	2 13/16" 71.4 mm	5" 127 mm	1 19/32" 40.5 mm	370009
<b>P-1204x8</b>	300 lbs. 135 kg	14 7/16" 367 mm	8" 203.2 mm	3.34 lbs. 1.52 kg	4 17/32" 115 mm	3 13/16" 96.8 mm	6" 152.4 mm	3 19/32" 91.3 mm	370009
<b>P-1206x8</b>	300 lbs. 135 kg	14 7/16" 367 mm	8" 203.2 mm	3.53 lbs. 1.60 kg	6 17/32" 166 mm	5 13/16" 147.6 mm	8" 203.2 mm	5 19/32" 142.1 mm	370009
<b>Huso doble / DOUBLE SPINDLE</b>									
<b>P-1200x4-2S</b>	600 lbs. 270 kg	10 7/16" 265 mm	4" 101.6 mm	2.05 LBS. 0.93 KG.	1 3/4" 44.5 mm			3" 76mm	
<b>P-1203x4-2S</b>	600 lbs. 270 kg	10 7/16" 265 mm	4" 101.6 mm	2.41 LBS. 1.09 KG.	3 17/32" 89.7 mm			5" 127mm	
<b>P-1204x4-2S</b>	600 lbs. 270 kg	10 7/16" 265 mm	4" 101.6 mm	2.65 LBS. 1.203 KG.	4 17/32" 115 mm			6" 152.4mm	
<b>P-1206x4-2S</b>	600 lbs. 270 kg	10 7/16" 265 mm	4" 101.6 mm	2.70 LBS. 1.19 KG.	6 17/32" 166 mm			8" 203.2mm	
<b>P-1200x6-2S</b>	400 lbs. 180 kg	12 7/16" 316 mm	6" 152.4 mm	2.52 LBS. 1.4 KG.	1 3/4" 44.5 mm			3" 76mm	
<b>P-1203x6-2S</b>	400 lbs. 180 kg	12 7/16" 316 mm	6" 152.4 mm	2.88 LBS. 1.31 KG.	3 17/32" 89.7 mm			5" 127mm	
<b>P-1204x6-2S</b>	400 lbs. 180 kg	12 7/16" 316 mm	6" 152.4 mm	3.12 LBS. 1.42 KG.	4 17/32" 115 mm			6" 152.4mm	
<b>P-1206x6-2S</b>	400 lbs. 180 kg	12 7/16" 316 mm	6" 152.4 mm	3.17 LBS. 1.44 KG.	6 17/32" 166 mm			8" 203.2mm	
<b>P-1200x8-2S</b>	300 lbs. 135 kg	14 7/16" 367 mm	8" 203.2 mm	2.98 lbs. 1.35 kg	1 3/4" 44.5 mm			3" 76mm	
<b>P-1203x8-2S</b>	300 lbs. 135 kg	14 7/16" 367 mm	8" 203.2 mm	3.34 lbs. 1.52 kg	3 17/32" 89.7 mm			5" 127mm	
<b>P-1204x8-2S</b>	300 lbs. 135 kg	14 7/16" 367 mm	8" 203.2 mm	3.58 lbs. 1.63 kg	4 17/32" 115 mm			6" 152.4mm	
<b>P-1206x8-2S</b>	300 lbs. 135 kg	14 7/16" 367 mm	8" 203.2 mm	3.63 lbs. 1.65 kg	6 17/32" 166 mm			8" 203.2mm	
<b>Un solo huso largo / FULL LENGTH SINGLE SPINDLE</b>									
<b>P-1203x4-L</b>	600 lbs. 270 kg	10 7/16" 265 mm	4" 101.6 mm	2.35 lbs. 1.07 kg	3 17/32" 89.7 mm			0 0	370028
<b>P-1204x4-L</b>	600 lbs. 270 kg	10 7/16" 265 mm	4" 101.6 mm	2.48 lbs. 1.13 kg	4 17/32" 115 mm			0 0	370029
<b>P-1206x4-L</b>	600 lbs. 270 kg	10 7/16" 265 mm	4" 101.6 mm	2.72 lbs. 1.23 kg	6 17/32" 166 mm			0 0	370030
<b>P-1203x6-L</b>	400 lbs. 180 kg	12 7/16" 316 mm	6" 152.4 mm	2.92 lbs. 1.33 kg	3 17/32" 89.7 mm			0 0	370028
<b>P-1204x6-L</b>	400 lbs. 180 kg	12 7/16" 316 mm	6" 152.4 mm	2.95 lbs. 1.34 kg	4 17/32" 115 mm			0 0	370029
<b>P-1206x6-L</b>	400 lbs. 180 kg	12 7/16" 316 mm	6" 152.4 mm	3.19 lbs. 1.45 kg	6 17/32" 166 mm			0 0	370030
<b>P-1203x8-L</b>	300 lbs. 135 kg	14 7/16" 367 mm	8" 203.2 mm	3.28 lbs. 1.49 kg	3 17/32" 89.7 mm			0 0	370028
<b>P-1204x8-L</b>	300 lbs. 135 kg	14 7/16" 367 mm	8" 203.2 mm	3.41 lbs. 1.55 kg	4 17/32" 115 mm			0 0	370029
<b>P-1206x8-L</b>	300 lbs. 135 kg	14 7/16" 367 mm	8" 203.2 mm	3.65 lbs. 1.66 kg	6 17/32" 166 mm			0 0	370030

# Alicates de presión / TOGGLE PLIERS

## KNU-VISE

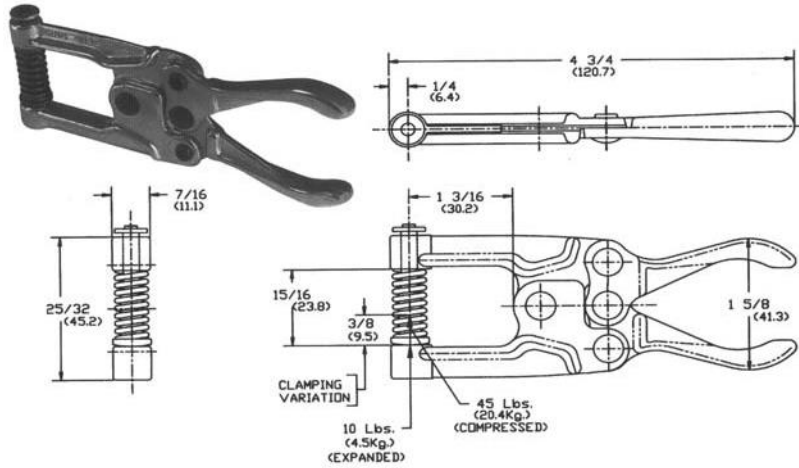
### FGP-400

#### Con muelle

Peso 0,14 kg  
 Fuerza muelle 4,5-20 kg  
 Incluye Unión muelle

#### Spring Loaded

Weight 0.31 lbs.  
 Spring Load 10-45 lbs.  
 Included Spring Assembly



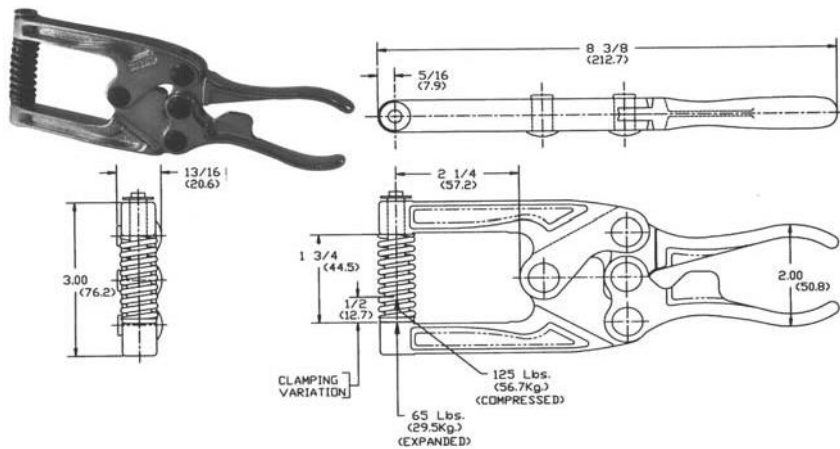
### FGP-1200

#### Con muelle

Peso 0,73 kg  
 Fuerza muelle 30-57 kg  
 Incluye Unión muelle

#### Spring Loaded

Weight 1,60 lbs.  
 Spring Load 65-125 lbs.  
 Included Spring Assembly



### HLP-400

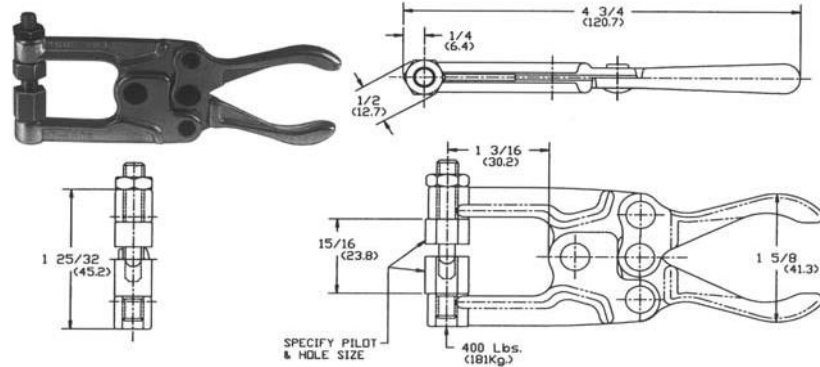
#### Con agujero

Peso 0,15 kg  
 Agarre 180 kg

#### Hole Location

Weight 1,60 lbs.  
 Holding Cap. 65-125 lbs.

Especifique: tamaño guía y agujero  
 Please specify: Pilot & Hole Size



### HLP-1200

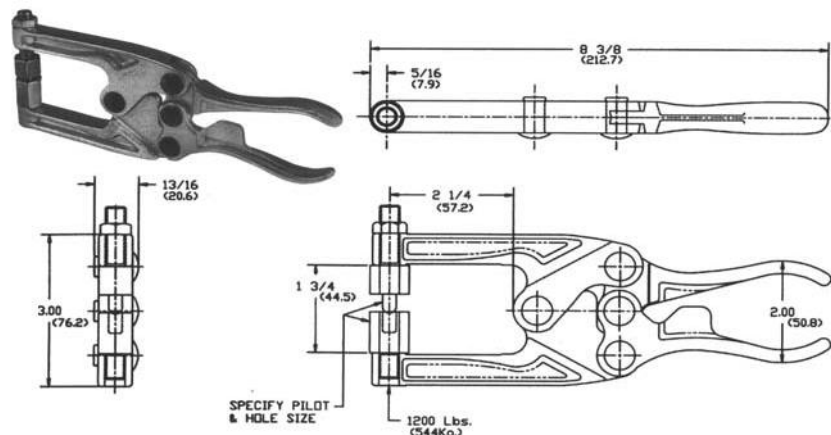
#### Con agujero

Peso 0,78 kg  
 Agarre 540 kg

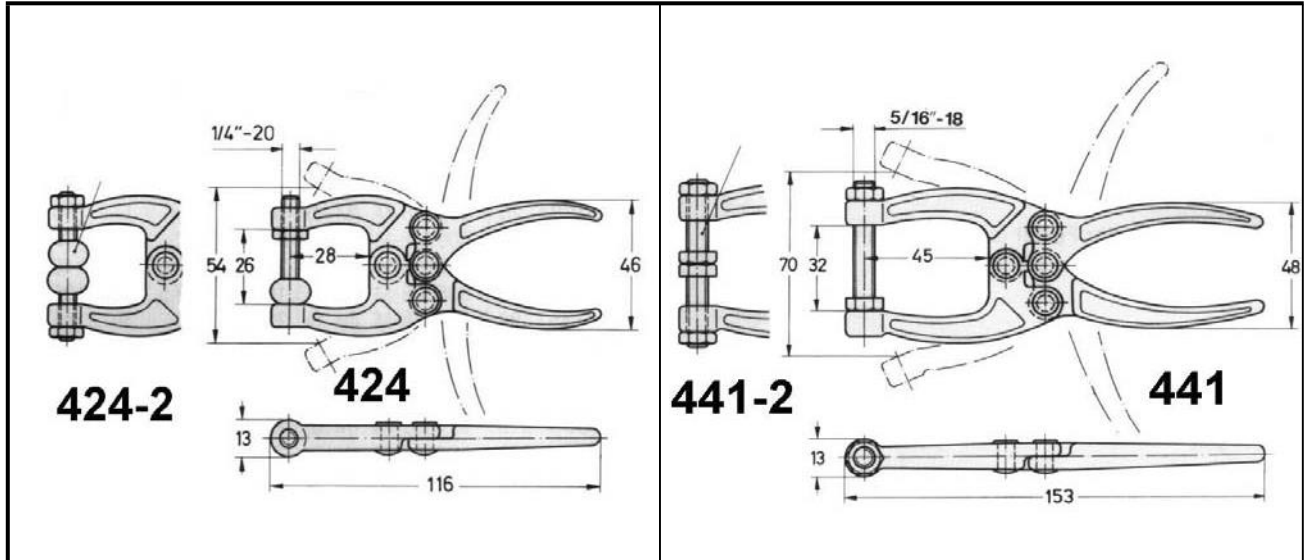
#### Hole Location

Weight 1,72 lbs.  
 Holding Cap. 1200 lbs.

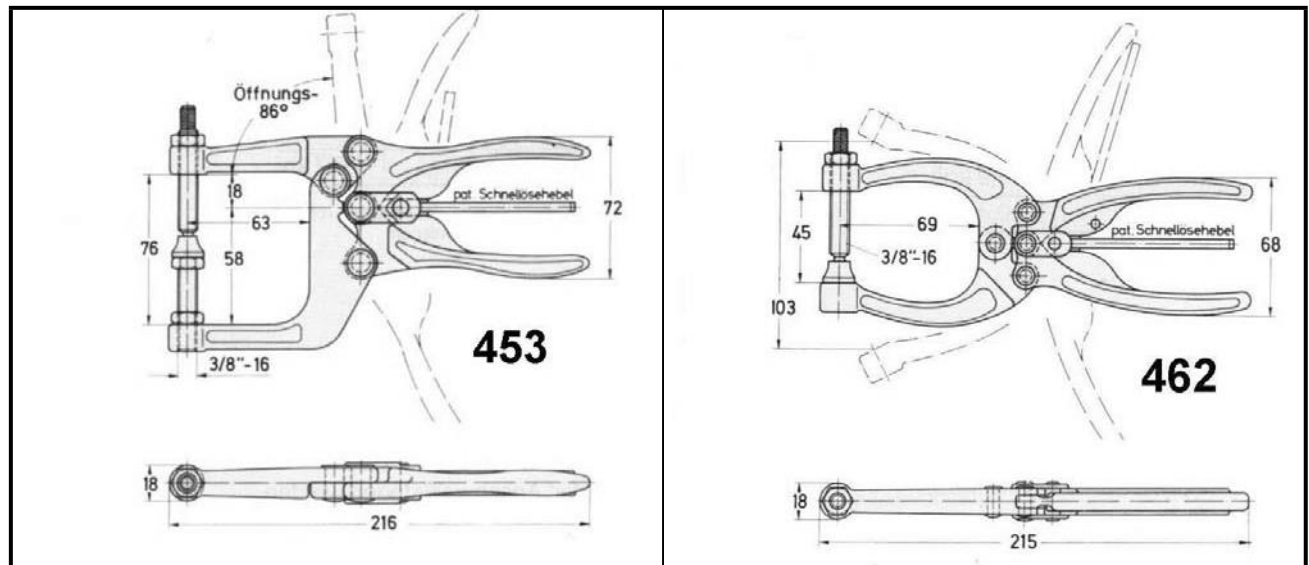
Especifique: tamaño guía y agujero  
 Please specify: Pilot & Hole Size



*Destaco*



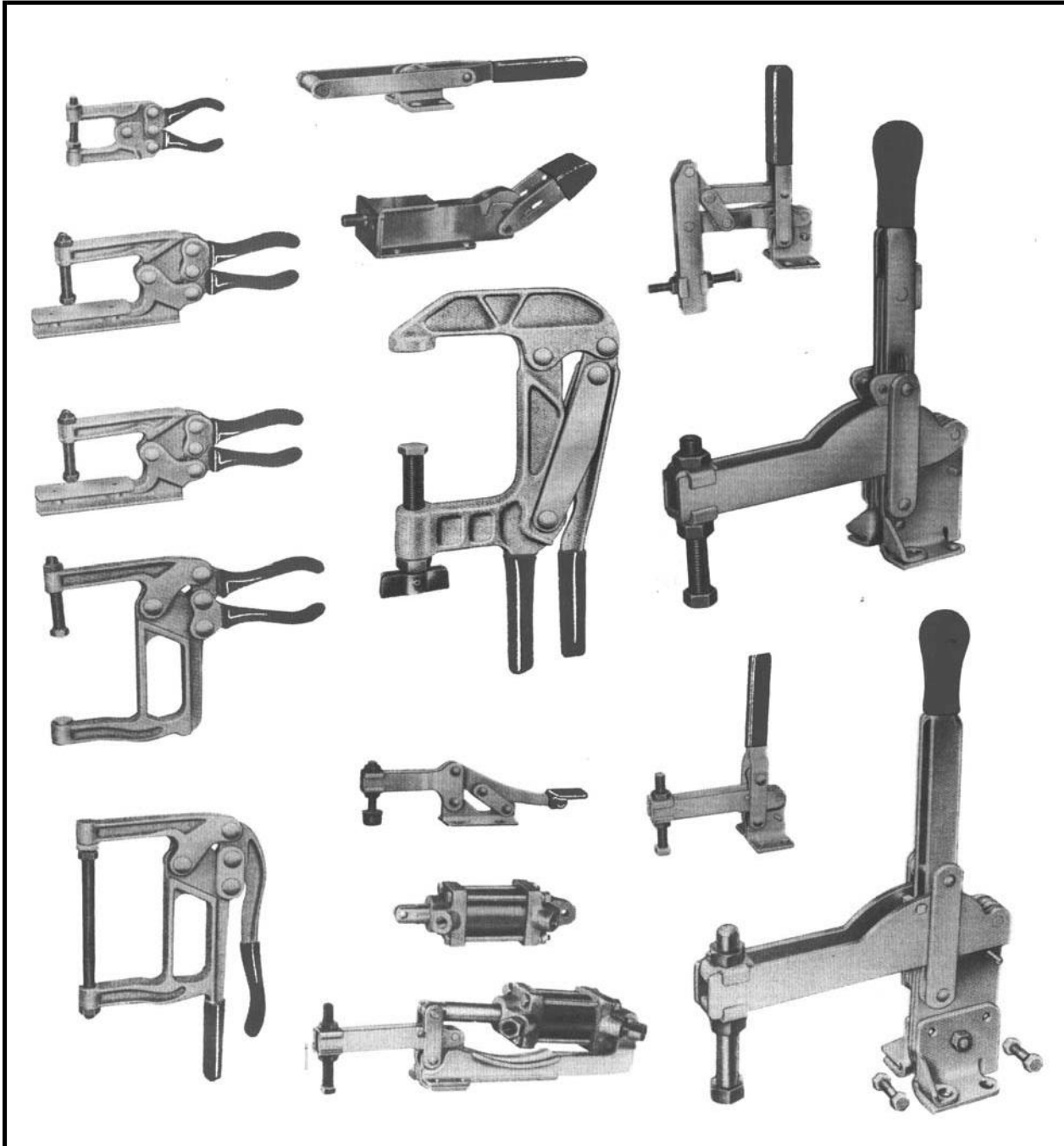
Art.Nr. Part No.	Descripción	Description	Agarre / Holding Pressure	Peso / Weight
<b>424</b>	1 huso	1 Spindle	90 daN	0,20 kg / 0,44 lbs.
<b>424-2</b>	2 husos	2 Spindles	90 daN	0,20 kg / 0,44 lbs.
<b>441</b>	1 huso	1 Spindle	150 daN	0,25 kg / 0,55 lbs.
<b>441-2</b>	2 husos	2 Spindles	150 daN	0,25 kg / 0,55 lbs.



Art.Nr. Part No.	Descripción	Description	Agarre Holding Pressure	Peso / Weight
<b>453</b>	2 husos, uno con pie giratorio	2 Spindles, one with Swivel Foot	450 daN	0,90 kg / 2,00 lbs.
<b>462</b>	1 huso con pie giratorio	1 Spindle with Swivel Foot	320 daN	0,60/1,3lbs

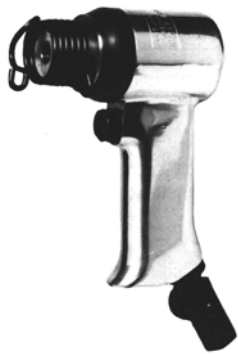
**Elementos agarre / Toggle Clamps and Clamping Devices**

**KNU-VISE  
DESTACO  
GOOD HAND**



**Otros tipos y medidas bajo pedido**

Other types and dimensions are available on request !



Mod. 100B

**A**



Mod. 400

**B/C**



Mod. 3X

**D**

Art.Nr./Part No.	Remache admitido / Rated Rivet Capacity				Long. / Length		Peso / Weight	
	Acero	Aluminio	Steel	Aluminium	mm	Inches	Kg.	Lbs.
<b>100-B</b>	3,2 mm	3,2 mm	1/8"	1/8"	95	3.3/4"	1,0	2.1/4
<b>200-B</b>	4,0 mm	4,8 mm	5/32"	3/16"	108	4.1/4"	1,2	2.5/8

Art.Nr./Part No.	Remache admitido / Rated Rivet Capacity				Long. / Length		Peso / Weight	
	Acero	Aluminio	Steel	Aluminium	mm	Inches	Kg.	Lbs.
<b>200</b>	4,0 mm	4,8 mm	5/32"	3/16"	136	5.3/8"	1,4	3.1/8
<b>300</b>	4,8 mm	6,4 mm	3/16"	1/4"	168	6.5/8"	1,6	3.1/2
<b>400</b>	6,4 mm	9,5 mm	1/4"	3/8"	191	7.1/2"	1,65	3.5/8

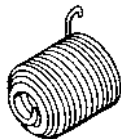
Art.Nr./Part No.	Remache admitido / Rated Rivet Capacity				Long. / Length		Peso / Weight	
	Acero	Aluminio	Steel	Aluminium	mm	Inches	Kg.	Lbs.
<b>600</b>	8,0 mm	9,5 mm	5/16"	3/8"	241	9.1/2"	3,3	7.1/4
<b>800</b>	9,5 mm	11,1 mm	3/8"	7/16"	305	12"	3,9	8.3/4

Art.Nr./Part No.	Remache admitido / Rated Rivet Capacity				Long. / Length		Peso / Weight	
	Acero	Aluminio	Steel	Aluminium	mm	Inches	Kg.	Lbs.
<b>2-X</b>	2,4 mm	3,2 mm	3/32"	1/8"	170	6.11/16"	1,0	2.1/4
<b>3-X</b>	4,0 mm	4,8 mm	5/32"	3/16"	189	7.5/16"	1,05	2.5/16
<b>4-X</b>	4,8 mm	6,4 mm	3/16"	1/4"	211	8.5/16"	1,25	2.3/4



**114C-3**

Muelle soltado rápido



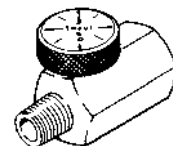
**115A + 115B**

Muelle tipo colmena



**J-985**

Muelle soltado rápido



**J-109B**

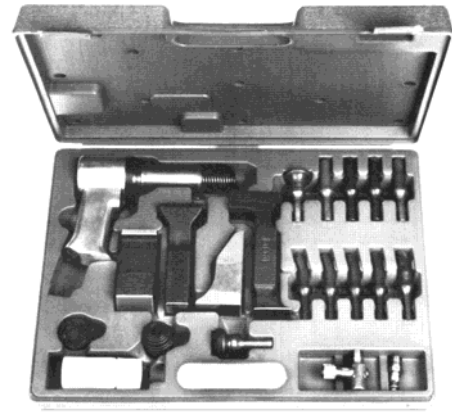
Regulador de aire

Recomendado /recommend for:	A	B	C	D
<b>114C-3</b>	X	X		X
<b>115A</b>		X		X
<b>115B</b>			X	
<b>J-985</b>	X			
<b>J-109B</b>	X	X	X	X



**LSRR-400**

**A/B**



**590-RGK**

**C**


<b>A</b>	<b>Remachadoras de retroceso para buterolas mango 10,2 x 30 / 40,3 mm (Parker Taper)</b>							
	RECOILLESS RIVET HAMMERS, FOR RIVET SETS WITH <b>PARKER TAPER</b> SHANK .401 X 1.164 / 1.11/16"							
<b>Art.Nr./Part No.</b>	<b>Remache admitido / Rated Rivet Capacity</b>				<b>Long. / Length</b>		<b>Peso / Weight</b>	
	<b>Acero</b>	<b>Aluminio</b>	<b>Steel</b>	<b>Aluminum</b>	<b>mm</b>	<b>Inches</b>	<b>Kg.</b>	<b>Lbs.</b>
<b>LSRR-200A</b>	4,0 mm	4,8 mm	5/32"	3/16"	192	7.9/16"	1,5	3.3
<b>LSRR-300A</b>	4,8 mm	6,4 mm	3/16"	1/4"	211	8.5/16"	1,6	3.5
<b>LSRR-400A</b>	6,4 mm	9,5 mm	1/4"	3/8"	216	8.1/2"	1,63	3.6


<b>B</b>	<b>Remachadoras de retroceso para buterolas mango 12,6 x 30 / 40,3 mm (Parker Taper)</b>							
	RECOILLESS RIVET HAMMER, FOR RIVET SETS WITH <b>PARKER TAPER</b> SHANK .498 X 1.164 / 1.11/16"							
<b>Art.Nr./Part No.</b>	<b>Remache admitido / Rated Rivet Capacity</b>				<b>Long. / Length</b>		<b>Peso / Weight</b>	
	<b>Acero</b>	<b>Aluminio</b>	<b>Steel</b>	<b>Aluminum</b>	<b>mm</b>	<b>Inches</b>	<b>Kg.</b>	<b>Lbs.</b>
<b>LSRR-600A</b>	8,0 mm	9,5 mm	5/16"	3/8"	266	10.1/2"	3,1	6.3/4
<b>LSRR-800A</b>	9,5 mm	11,1 mm	3/8"	7/16"	330	13"	3,7	8.1/4


<b>C</b>	<b>Kit con remachadora 3x o 4x (especifique) con maletín de plástico</b>							
	RIVET GUN KIT WITH RIVET HAMMER 3-X OR 4-X (PLEASE SPECIFY) WITH MOLDED RUBBER-CASE							
<b>Art.Nr./Part No.</b>								
<b>590-RGK</b>	<b>Inhalt / Contents</b>							
<b>Cantidad/Qty.</b>	<b>Descripción</b>	<b>Description</b>	<b>Artikel-Nummer / Part-Number</b>					
1	Remachadora	Rivethammer	3X oder/or 4X (Bitte angeben / please specify)					
1	Regulador de aire	Air-Regulator	TP-97					
1	Muelle	Retainer Spring	114C-3					
1	Muelle	Retainer Spring	115A					
1	Aceite	Air Tool Oil	A1142					
1	Entibe	Bucking Bar	638					
1	Entibe	Bucking Bar	647					
1	Entibe	Bucking Bar	670					
1	Entibe	Bucking Bar	681					
1	Buterola recta	Straight Rivet Set	100A3-3/32" (AN470)					
1	Buterola recta	Straight Rivet Set	100A3-1/8" (AN470)					
1	Buterola recta	Straight Rivet Set	100A3-5/32" (AN470)					
1	Buterola recta	Straight Rivet Set	100A3-3/16" (AN470)					
1	Buterola doblada 10°	Offset Rivet Set 10°	101A3-3/32" (AN470)					
1	Buterola doblada 10°	Offset Rivet Set 10°	101A3-1/8" (AN470)					
1	Buterola doblada 10°	Offset Rivet Set 10°	101A3-5/32" (AN470)					
1	Buterola doblada 10°	Offset Rivet Set 10°	101A3-3/16" (AN470)					
1	Buterola plana	Flush Rivet Set	101AF-3A					
1	Buterola plana	Flush Rivet Set	110CB					
1	Buterola plana	Flush Rivet Set	107A-2					


**Buterola de mango 10,2 x 30/40,3 mm, para AN470/MS20470**

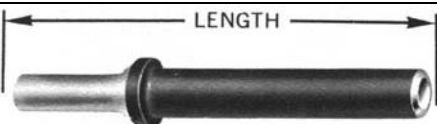
CUPPED RIVET SETS, PARKER TAPER SHANK .401 X 1.164/1.11/16", FOR AN470 / MS20470

<b>A</b>				<b>Buterola recta</b> RIVET SET, STRAIGHT-TYPE		
	Longitud Length	Remache 2,4 mm Rivet Size 3/32"	Remache 3,2 mm Rivet Size 1/8"	Remache 4,0 mm Rivet Size 5/32"	Remache 4,8 mm Rivet Size 3/16"	Remache 6,4 mm Rivet Size 1/4"
	<b>mm / Inch</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>
	64 / 2.1/2"	100A2-3/32"	100A2-1/8"	100A2-5/32"	100A2-3/16"	100A2-1/4"
	89 / 3.1/2"	100A3-3/32"	100A3-1/8"	100A3-5/32"	100A3-3/16"	100A3-1/4"
	140 / 5.1/2"	100A5-3/32"	100A5-1/8"	100A5-5/32"	100A5-3/16"	100A5-1/4"
	191 / 7.1/2"	100A7-3/32"	100A7-1/8"	100A7-5/32"	100A7-3/16"	100A7-1/4"
267 / 10.1/2"	100A8-3/32"	100A8-1/8"	100A8-5/32"	100A8-3/16"	100A8-1/4"	
343 / 13.1/2"	100A9-3/32"	100A9-1/8"	100A9-5/32"	100A9-3/16"	100A9-1/4"	

<b>B</b>				<b>Buterola doblada 10°</b> RIVET SET, OFFSET-TYPE 10°		
	Longitud Length	Remache 2,4 mm Rivet Size 3/32"	Remache 3,2 mm Rivet Size 1/8"	Remache 4,0 mm Rivet Size 5/32"	Remache 4,8 mm Rivet Size 3/16"	Remache 6,4 mm Rivet Size 1/4"
	<b>mm / Inch</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>
	89 / 3.1/2"	101A3-3/32"	101A3-1/8"	101A3-5/32"	101A3-3/16"	101A3-1/4"
	140 / 5.1/2"	101A5-3/32"	101A5-1/8"	101A5-5/32"	101A5-3/16"	101A5-1/4"
	191 / 7.1/2"	101A7-3/32"	101A7-1/8"	101A7-5/32"	101A7-3/16"	101A7-1/4"
	267 / 10.1/2"	101A8-3/32"	101A8-1/8"	101A8-5/32"	101A8-3/16"	101A8-1/4"
343 / 13.1/2"	101A9-3/32"	101A9-1/8"	101A9-5/32"	101A9-3/16"	101A9-1/4"	

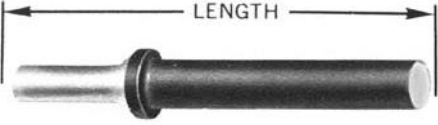

<b>C</b>				<b>Buterola doblada</b> RIVET SET, GOOSENECK-TYPE		
	Longitud Length	Remache 2,4 mm Rivet Size 3/32"	Remache 3,2 mm Rivet Size 1/8"	Remache 4,0 mm Rivet Size 5/32"	Remache 4,8 mm Rivet Size 3/16"	Remache 6,4 mm Rivet Size 1/4"
	<b>mm / Inch</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>
	168 / 6.5/8"	104A-3/32"	104A-1/8"	104A-5/32"	104A-3/16"	104A-1/4"

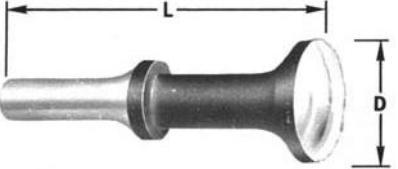

<b>D</b>				<b>Buterola dos curvas</b> RIVET SET, DOUBLE OFFSET-TYPE		
	Longitud Length	Remache 2,4 mm Rivet Size 3/32"	Remache 3,2 mm Rivet Size 1/8"	Remache 4,0 mm Rivet Size 5/32"	Remache 4,8 mm Rivet Size 3/16"	Remache 6,4 mm Rivet Size 1/4"
	<b>mm / Inch</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>
	146 / 5.3/4"	105A-3/32"	105A-1/8"	105A-5/32"	105A-3/16"	105A-1/4"



<b>E</b>				<b>Buterola recta para cabeza universal modificada / RIVET SET, STRAIGHT, CUPPED, MODIFIED UNIVERSAL HEAD <b>BOEING</b> <b>RACR15ET</b> TYPE</b>		
	Longitud Length	Remache 2,4 mm Rivet Size 3/32"	Remache 3,2 mm Rivet Size 1/8"	Remache 4,0 mm Rivet Size 5/32"	Remache 4,8 mm Rivet Size 3/16"	Remache 6,4 mm Rivet Size 1/4"
	<b>mm / Inch</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>
	89 / 3.1/2"	100A3-1/8"FT	100A3-5/32"FT	100A3-3/16"FT	100A3-7/32"FT	100A3-1/4"FT



## Buterola plana mango 10,2 x 30/40,3 mm

FLUSH RIVET SETS, PARKER TAPER SHANK .401 X 1.164/1.11/16"

<b>A</b>		<b>B</b>	
	Recta, diámetro 12,7 mm STRAIGHT-TYPE, BODY DIAMETER 1/2"		Curvada 10°, diámetro 12,7 mm 10° OFFSET-TYPE, BODY DIAMETER 1/2"
<b>Art.Nr. / Part No.</b>	<b>Long. mm / Length Inch</b>	<b>Art.Nr. / Part No.</b>	<b>Long. mm / Length Inch</b>
100AF-2A	64 / 2.1/2"	----	----
100AF-3A	89 / 3.1/2"	101AF-3A	89 / 3.1/2"
100AF-5A	140 / 5.1/2"	101AF-5A	140 / 5.1/2"
100AF-7A	191 / 7.1/2"	101AF-7A	191 / 7.1/2"
100AF-8A	267 / 10.1/2"	101AF-8A	267 / 10.1/2"

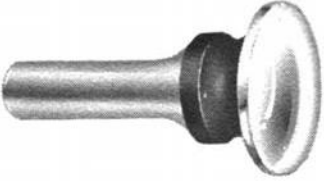

<b>C</b>		<b>D</b>			
	Buterola plana con cara pulida FLUSH-SET, STRAIGHT, WITH POLISHED FACE		Buterola plana con protección de goma FLUSH-SET, STRAIGHT, WITH RUBBER GUARD		
<b>Art. Nr.</b>	<b>Long. mm</b>	<b>Diámetro</b>	<b>Art. Nr.</b>	<b>Long. mm</b>	<b>Diámetro</b>
Part No.	Length Inch	Face Diameter	Part No.	Length Inch	Face Diameter
107A-1	70 / 2.3/4"	25,4 / 1"			
107A-2	70 / 2.3/4"	31,8 / 1.1/4"	110CA	63,5 / 2.1/2"	19,1 / 3/4"
107A-3	89 / 3.1/2"	31,8 / 1.1/4"	110CB	63,5 / 2.1/2"	25,4 / 1"
107A-4	140 / 5.1/2"	25,4 / 1"	110CC	63,5 / 2.1/2"	31,8 / 1.1/4"

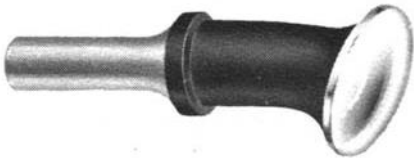
<b>E</b>		<b>F</b>			
	Buterola con goma de plástico FLUSH-SET, SWIVEL-TYPE WITH RUBBER SLEEVE		Buterola plana con cabeza de aluminio FLUSH-SET, STRAIGHT, WITH ALUMIUM-HEAD		
<b>Art. Nr.</b>	<b>Long.</b>	<b>Diámetro</b>	<b>Art. Nr.</b>	<b>Long.</b>	<b>Diámetro</b>
Part No.	Length	Face Diameter	Part No.	Length	Face Diameter
106A	83 mm 3.1/4"	31,8 mm 1.1/4"	107A-2D	80 mm 3.5/32"	25,4 mm 1"

<b>G</b>		<b>H</b>			
	Buterola plana con cubierta de nylon FLUSH RIVET SET, MUSHROOM TYPE WITH NYLON SLEEVE		Buterola plana FLUSH RIVET SET, MUSHROOM TYPE		
<b>Art. Nr.</b>	<b>Long.</b>	<b>Diámetro</b>	<b>Art. Nr.</b>	<b>Long.</b>	<b>Diámetro</b>
Part No.	Length	Face Diameter	Part No.	Length	Face Diameter
ST11111B-V401K-3	61 mm 2.4"	32 mm 1.1/4"	112A	76 mm 3"	48 mm 1.7/8"

## Buterola plana mango 10,2 x 30/40,3 mm


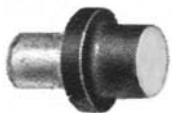
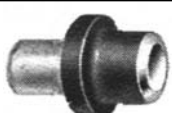
FLUSH RIVET SETS, PARKER TAPER SHANK .401 X 1.164/1.11/16"

<b>A</b>			<b>B</b>		
	<b>Buterola plana corta</b> FLUSH-RIVET-SET, STUBBY-TYPE			<b>Buterola plana extracorta con cara pulida</b> FLUSH-RIVET-SET, EXTRA-SHORT, WITH POLISHED FACE	
<b>Art. Nr.</b> Part No.	<b>L<sub>onge</sub> mm</b> Length Inch	<b>Durchmesser</b> Face Diameter	<b>Art. Nr.</b> Part No.	<b>L<sub>onge</sub> mm</b> Length Inch	<b>Durchmesser</b> Face Diameter
<b>119A-1B</b>	54 / 2.1/8"	19,1 / 3/4"			
<b>119A-2B</b>	54 / 2.1/8"	25,4 / 1"	<b>113A-1</b>	43,0 / 1.11/16"	19,1 / 3/4"
<b>119A-3B</b>	54 / 2.1/8"	28,6 / 1.1/8"	<b>113A-2</b>	46,0 / 1.13/16"	25,4 / 1"
<b>119A-4B</b>	54 / 2.1/8"	31,8 / 1.1/4"	<b>113A-3</b>	46,0 / 1.13/16"	31,8 / 1.1/4"

<b>C</b>			<b>Buterola plana curvada 10°</b> FLUSH-RIVET-SET, 10° OFFSET-TYPE		
	<b>Art. Nr. / Part No.</b>	<b>Longitud mm / Length Inch</b>	<b>Diámetro / Face Diameter</b>		
<b>121A-3</b>	89 / 3.1/2"	31,8 / 1.1/4"			
<b>121A-4</b>	140 / 5.1/2"	25,4 / 1"			
<b>121A-5</b>	140 / 5.1/2"	31,8 / 1.1/4"			
<b>121A-6</b>	191 / 7.1/2"	25,4 / 1"			
<b>121A-7</b>	191 / 7.1/2"	31,8 / 1.1/4"			


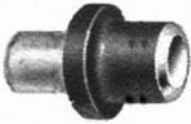
## Buterola remachadora / RIVET SETS FOR RIVET-HAMMERS Mod. 100B & 200B

Mango / Shank dimension: 10,2 x 12,7 mm / .401 x 1/2"

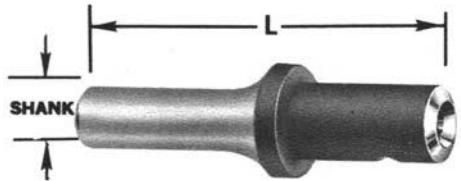
	<b>Buterola plana</b> Flush Rivet Sets	<b>Art. Nr.</b> Part No.	<b>Long. mm</b> Length Inch	<b>Diámetro</b> Face Diameter
				
				
	Cupped Type for AN470/MS20470	Part No.	Length Inch	Rivet Size
<b>F</b>		JAT100A-1-3/32"	<b>25,4 mm</b>	2,4 mm / 3/32"
		JAT100A-1-1/8"		3,2 mm / 1/8"
		JAT100A-1-5/32"	<b>1"</b>	4,0 mm / 5/32"
		JAT100A-1-3/16"		4,8 mm / 3/16"

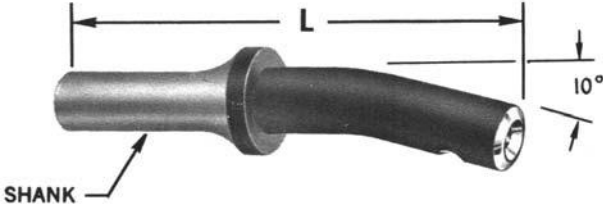
## Buterola remachadora / RIVET SETS FOR RIVET-HAMMERS ATLAS-COPCO Mod. RRN11P02


**Mango / Shank dimension: 10,2 x 17,0 mm / .401 x .669**  
**Longitud sin mango / Length without shank: 25 mm / 1"**


Plana / Flush Rivet Sets		Art. Nr. / Part No.	Diámetro / Face Diameter
<b>A</b>		<b>DAN 5014E-H-3/4" x 25 mm</b>	19,1 mm / 3/4"
		<b>DAN 5014E-H-1.1/8" x 25 mm</b>	28,2 mm / 1.1/8"
<b>Para / Cupped Type for:</b> AN470/MS20470 / LN9198		<b>Art. Nr. / Part No.</b>	<b>Remache / Rivet Size</b>
<b>B</b>		<b>DAN 5014A-H-2,4x25</b>	2,4 mm / 3/32"
		<b>DAN 5014A-H-3,2x25</b>	3,2 mm / 1/8"
		<b>DAN 5014A-H-4,0x25</b>	4,0 mm / 5/32"
		<b>DAN 5014A-H-4,8x25</b>	4,8 mm / 3/16"


**Buterola para Hi-Shear mango 10,2 X 30/40,3 MM**  
**DRIVE SETS FOR HI-SHEAR RIVETS, PARKER TAPER SHANK .401 X 1.164/1.11/16"**

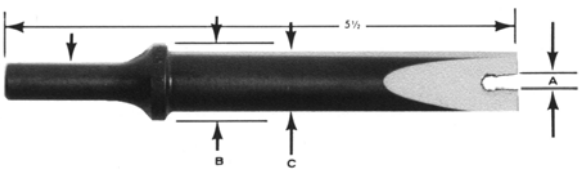
<b>C</b>				<b>HI-SHEAR</b> <b>Buterola recta</b> DRIVE SET, STRAIGHT-TYPE	
	Longitud Length	Remache 3,2 mm Rivet Size 1/8"	Remache 4,0 mm Rivet Size 5/32"	Remache 4,8 mm Rivet Size 3/16"	Remache 6,4 mm Rivet Size 1/4"
mm / Inch	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	
89 / 3.1/2"	<b>MM117-2-3.1/2"-.401</b>	<b>MM117-3-3.1/2"-.401</b>	<b>MM117-4-3.1/2"-.401</b>	<b>MM117-5-3.1/2"-.401</b>	
140 / 5.1/2"	<b>MM117-2-5.1/2"-.401</b>	<b>MM117-3-5.1/2"-.401</b>	<b>MM117-4-5.1/2"-.401</b>	<b>MM117-5-5.1/2"-.401</b>	

<b>D</b>				<b>HI-SHEAR</b> <b>Buterola curvada 10°</b> DRIVE SET, OFFSET-TYPE 10°	
	Longitud Length	Remache 3,2 mm Rivet Size 1/8"	Remache 4,0 mm Rivet Size 5/32"	Remache 4,8 mm Rivet Size 3/16"	Remache 6,4 mm Rivet Size 1/4"
mm / Inch	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	<b>Art.Nr. / Part No.</b>	
140 / 5.1/2"	<b>MM127-2-5.1/2"-.401</b>	<b>MM127-3-5.1/2"-.401</b>	<b>MM127-4-5.1/2"-.401</b>	<b>MM127-5-5.1/2"-.401</b>	

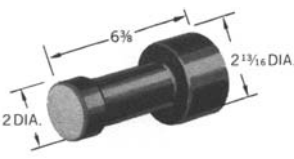
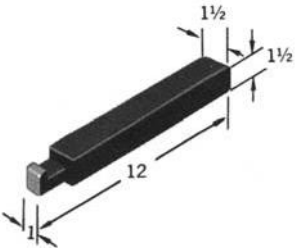
<b>A</b>			<b>Punzones KNOCK-OUT PUNCHES</b>	
	Long. apr. 108 MM, Punzón apr. 64 MM LENGTH APPR. 4.1/4", PUNCH APPR. 2.1/2"			
<b>Remache RIVET SIZE</b>	<b>Mango 10,2 x 30/40,3 mm SHANK .401 X 1.164/1.11/16" Art. Nr. / Part No.</b>		<b>Mango 12,7 x 30/40,3 mm SHANK .498 X 1.164/1.11/16" Art. Nr. / Part No.</b>	
3/32"	<b>140A-3</b>			
1/8"	<b>140A-4</b>			
5/32"	<b>140A-5</b>			
3/16"	<b>140A-6</b>		<b>140B-6</b>	
1/4"	<b>140A-8</b>		<b>140B-8</b>	
5/16"	<b>140A-10</b>		<b>140B-10</b>	
3/8"	<b>140A-12</b>		<b>140B-12</b>	

<b>B</b>			<b>Punzones KNOCK-OUT PUNCHES</b>	
	Long. apr. 89 MM, Punzón apr. 13 MM LENGTH APPR. 3.1/2", PUNCH APPR. 1/2"			
<b>Remache RIVET SIZE</b>	<b>Mango 10,2 x 30/40,3 mm SHANK .401 X 1.164/1.11/16" Art. Nr. / Part No.</b>		<b>Mango 12,7 x 30/40,3 mm SHANK .498 X 1.164/1.11/16" Art. Nr. / Part No.</b>	
3/32"	<b>141A3-3/32"</b>			
1/8"	<b>141A3-1/8"</b>			
5/32"	<b>141A3-5/32"</b>			
3/16"	<b>141A3-3/16"</b>		<b>141B3-3/16"</b>	
1/4"	<b>141A3-1/4"</b>		<b>141B3-1/4"</b>	
5/16"	<b>141A3-5/16"</b>		<b>141B3-5/16"</b>	
3/8"	<b>141A3-3/8"</b>		<b>141B3-3/8"</b>	

<b>C</b>			<b>Cinzel para remachadora FLAT CHISEL GUN SET</b>	
	Longitud 171 MM OVER-ALL-LENGTH 6.3/4"			
<b>Mango 10,2 X 30/40,3 MM SHANK .401 X 1.164/1.11/16"</b>		<b>Art. Nr. / Part No.: 1206-6</b>		

<b>D</b>				<b>Cinzel para LOCKBOLTS GUN-TYPE CHISEL FOR LOCKBOLTS</b>		
	<b>Art. Nr. Part No.</b>	<b>Longitud Over-All-Length</b>	<b>Remache Rivet Size</b>	<b>A</b> +0,03 / -0,00 mm +0.001 / -.000 Inch	<b>B</b>	<b>C</b>
<b>2165-2</b>	140 mm / 5.1/2"	4,0 mm / 5/32"	3,96 mm / .156	19,05 mm / 3/4"	12,7 mm / 1/2"	
<b>2165-3</b>	140 mm / 5.1/2"	4,8 mm / 3/16"	4,75 mm / .187	19,05 mm / 3/4"	15,9 mm / 5/8"	
<b>2165-4</b>	140 mm / 5.1/2"	6,4 mm / 1/4"	6,35 mm / .250	19,05 mm / 3/4"	15,9 mm / 5/8"	
<b>2165-5</b>	140 mm / 5.1/2"	7,9 mm / 5/16"	7,92 mm / .312	19,05 mm / 3/4"	15,9 mm / 5/8"	
<b>2165-6</b>	140 mm / 5.1/2"	9,5 mm / 3/8"	9,53 mm / .375	22,23 mm / 7/8"	19,1 mm / 3/4"	

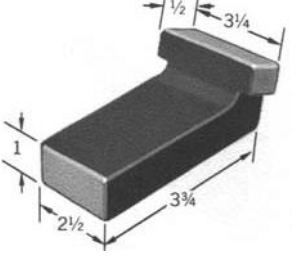
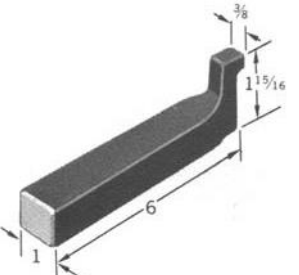
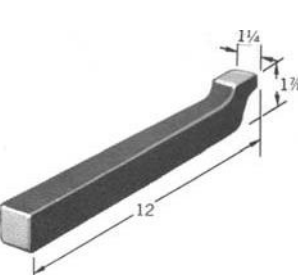
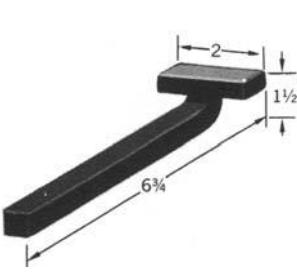
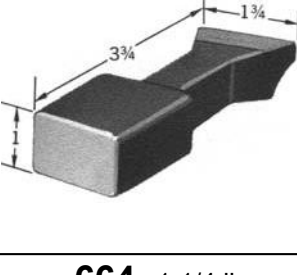
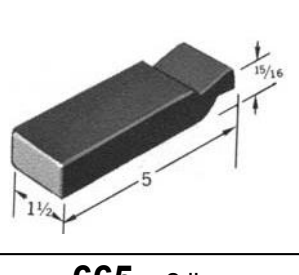
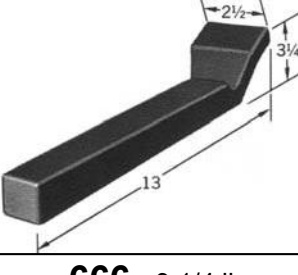
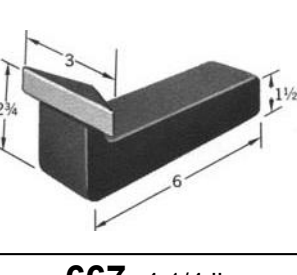
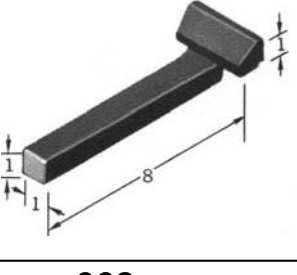
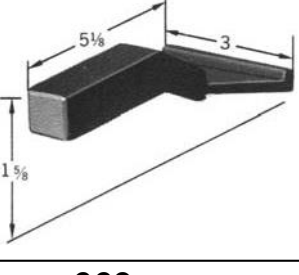
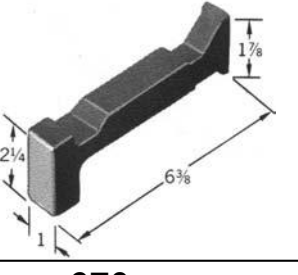
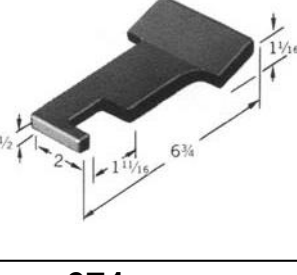
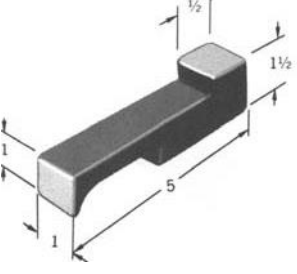
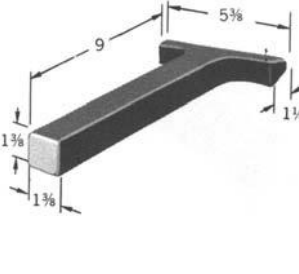
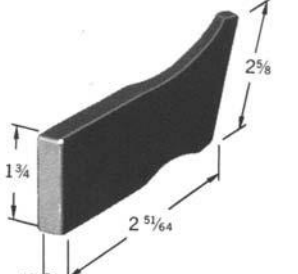
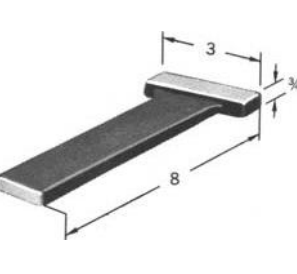
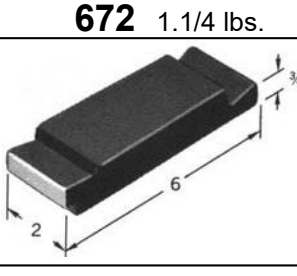
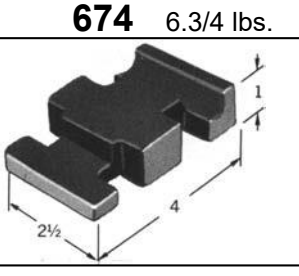
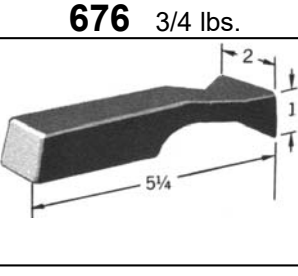
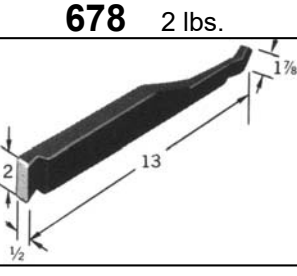
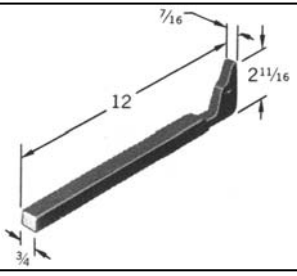
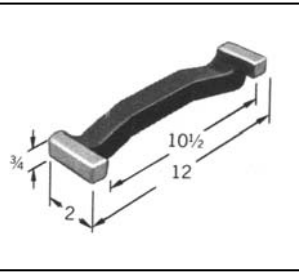
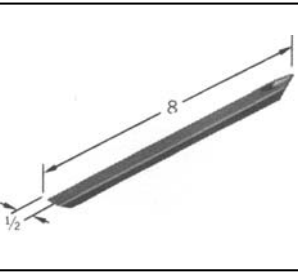
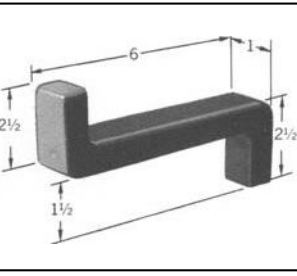
# Entibes / BUCKING BARS

			
<b>601</b> 6 lbs.	<b>602</b> 1.1/4 lbs.	<b>603</b> 6.1/2 lbs.	<b>604</b> 1.3/4 lbs.
			
<b>605</b> 1.1/2 lbs.	<b>606</b> 3/4 lbs.	<b>607</b> 2.1/2 lbs.	<b>608</b> 1.1/4 lbs.
			
<b>609</b> 1/2 lbs.	<b>610</b> 3/4 lbs.	<b>611</b> 1 lbs.	<b>612</b> 1.1/4 lbs.
			
<b>613</b> 5.1/4 lbs.	<b>614</b> 2.3/4 lbs.	<b>616</b> 1 lbs.	<b>618</b> 2.1/2 lbs.
			
<b>619</b> 1.1/4 lbs.	<b>620</b> 5 lbs.	<b>621</b> 6.1/2 lbs.	<b>622</b> 2.1/2 lbs.
			
<b>624</b> 1 lbs.	<b>625</b> 1 lbs.	<b>626</b> 6 lbs.	<b>627</b> 8.3/4 lbs.

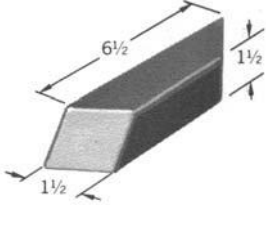
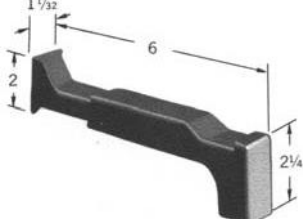
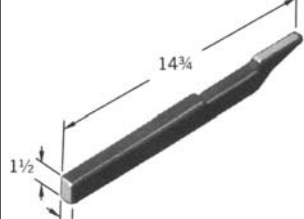
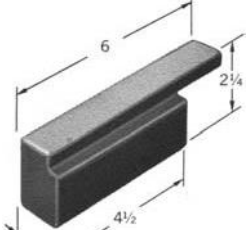
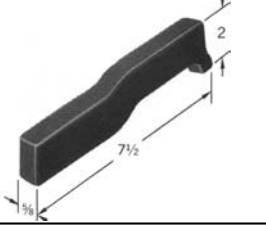
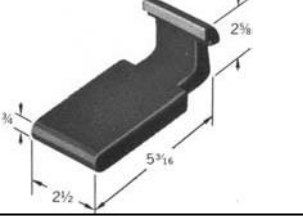
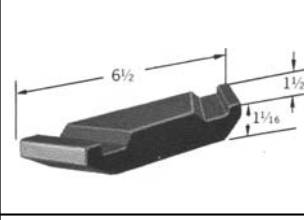
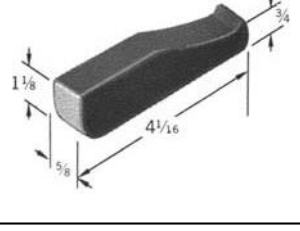
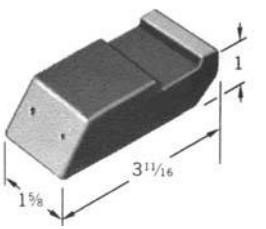
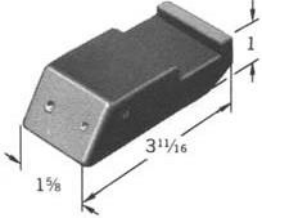
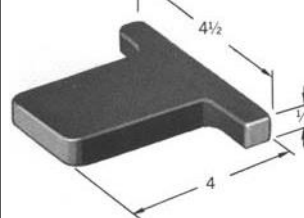
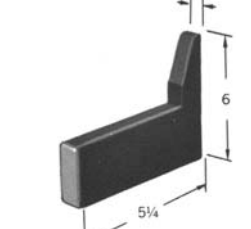
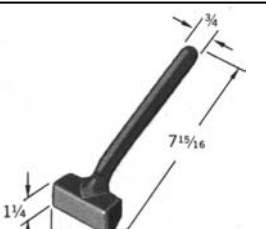
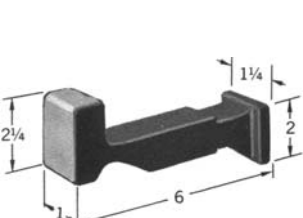
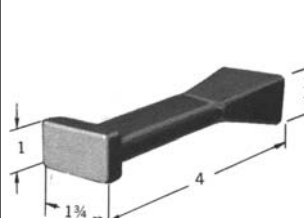
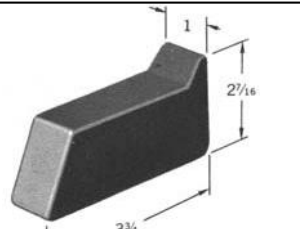
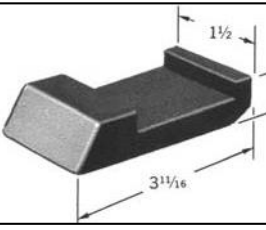
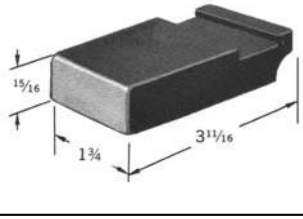
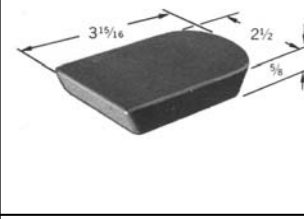
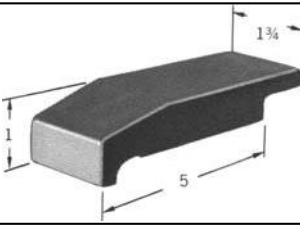
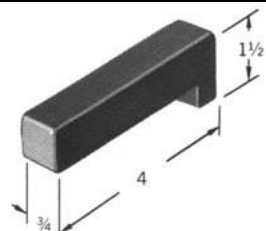
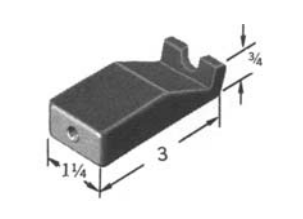
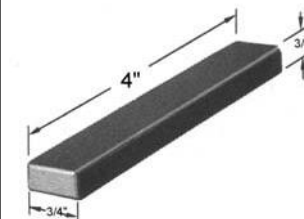
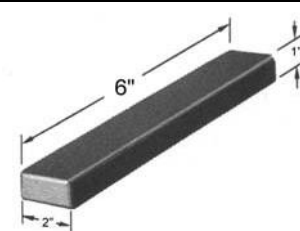
# Entibes / BUCKING BARS

<b>628</b> 1.1/4 lbs.	<b>629</b> 1 lbs.	<b>630</b> 1/2 lbs.	<b>632</b> 4.3/4 lbs.
<b>633</b> 1.1/4 lbs.	<b>634</b> 1 lbs.	<b>636</b> 1 lbs.	<b>637</b> 1.3/4 lbs.
<b>638</b> 1.1/4 lbs.	<b>639</b> 2 lbs.	<b>640</b> 3 lbs.	<b>641</b> 5.1/4 lbs.
<b>642</b> 2.1/2 lbs.	<b>643</b> 1.1/4 lbs.	<b>644</b> 11.1/4 lbs.	<b>646</b> 2.1/4 lbs.
<b>647</b> 1.1/2 lbs.	<b>648</b> 1.3/4 lbs.	<b>649</b> 2 lbs.	<b>650</b> 2.3/4 lbs.
<b>652</b> 10.3/4 lbs.	<b>653</b> 3 lbs.	<b>656</b> 1.1/4 lbs.	<b>657</b> 3 lbs.

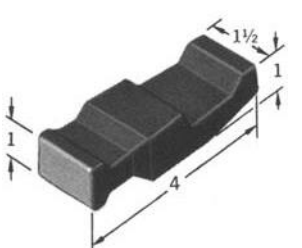
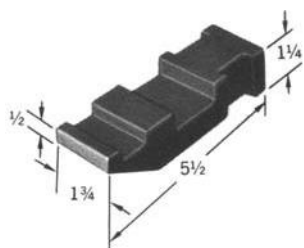
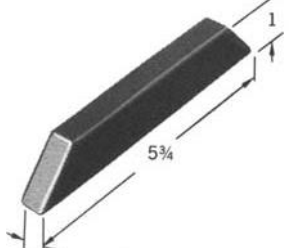
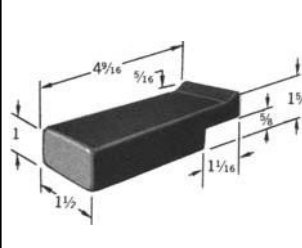
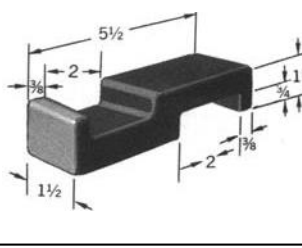
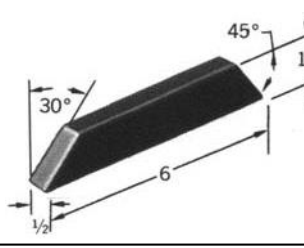
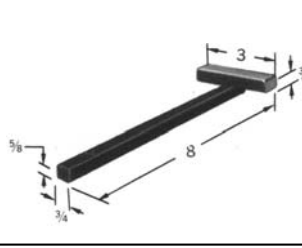
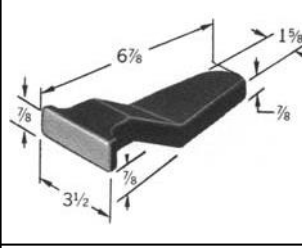
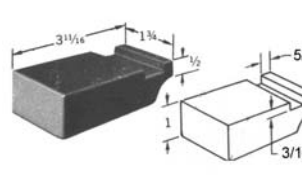
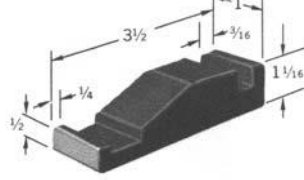
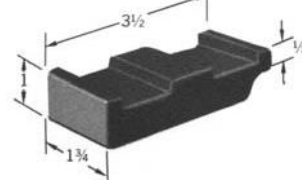
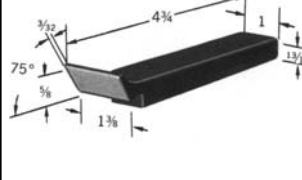
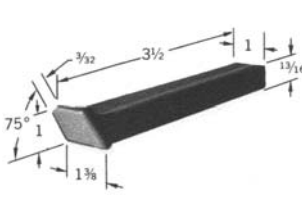
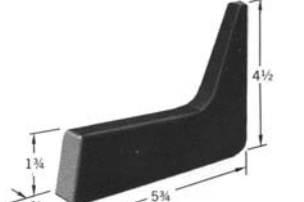
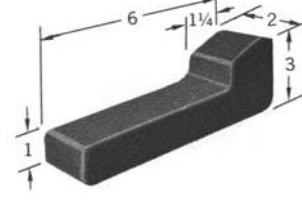
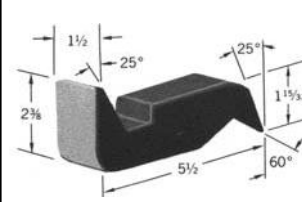
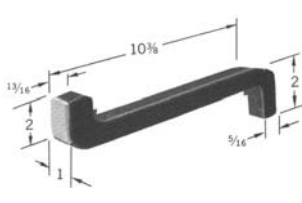
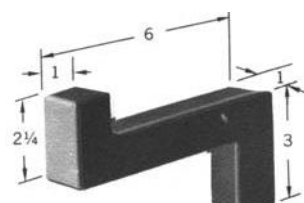
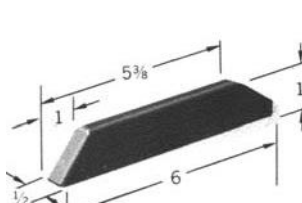
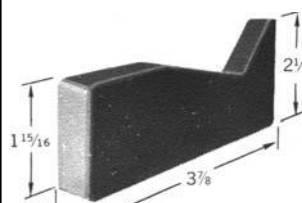
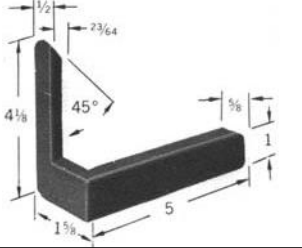
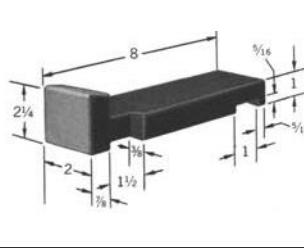
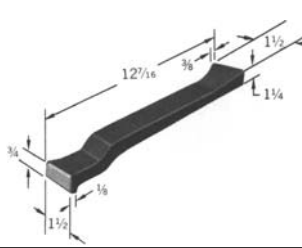
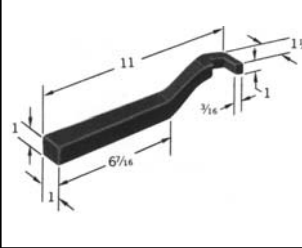
# Entibes / BUCKING BARS

			
<b>658</b> 3 lbs.	<b>659</b> 1.1/2 lbs.	<b>661</b> 5 lbs.	<b>662</b> 1 lbs.
			
<b>664</b> 1.1/4 lbs.	<b>665</b> 2 lbs.	<b>666</b> 9.1/4 lbs.	<b>667</b> 4.1/4 lbs.
			
<b>668</b> 3.1/4 lbs.	<b>669</b> 1 1/2 lbs.	<b>670</b> 2 lbs.	<b>671</b> 2.1/4 lbs.
			
<b>672</b> 1.1/4 lbs.	<b>674</b> 6.3/4 lbs.	<b>676</b> 3/4 lbs.	<b>678</b> 2 lbs.
			
<b>679</b> 3 lbs.	<b>680</b> 2 lbs.	<b>681</b> 1.1/2 lbs.	<b>683</b> 3.1/4 lbs.
			
<b>685</b> 2 lbs.	<b>686</b> 4.1/4 lbs.	<b>687</b> 1/2 lb.	<b>690</b> 2.3/4 lbs.

# Entibes / BUCKING BARS

			
<b>692</b> 3 lbs.	<b>694</b> 2 lbs.	<b>697</b> 3 lbs.	<b>698</b> 3.1/2 lbs.
			
<b>700</b> 1.3/4 lbs	<b>701</b> 3 lbs.	<b>702</b> 2.1/4 lbs.	<b>704</b> 3/4 lbs.
			
<b>707</b> 1.1/2 lbs.	<b>708</b> 1.1/2 lbs.	<b>711</b> 1.1/4 lbs.	<b>715</b> 2 lbs.
			
<b>718</b> 1.1/2 lbs.	<b>719</b> 2 lbs.	<b>720</b> 3/4 lbs.	<b>721</b> 1.3/4 lbs.
			
<b>722</b> 1 lbs.	<b>723</b> 1.1/2 lbs.	<b>724</b> 1.1/2 lbs	<b>725</b> 2 lbs.
			
<b>727</b> 1 lbs.	<b>728</b> 3/4 lbs.	<b>729-2</b> 1/2 lb.	<b>729-9</b> 3.1/2 lbs.

# Entibes / BUCKING BARS

			
<b>730</b> 1.1/4 lbs.	<b>731</b> 2 lbs.	<b>732</b> 3/4 lb.	<b>735</b> 1.3/4 lbs.
			
<b>736</b> 2.1/2 lbs.	<b>737</b> 1 lbs.	<b>750D-23</b> 1.1/2 lbs.	<b>750E-1</b> 3.3/8lbs.
			
<b>750J- 5</b> 1.3/4 lbs.	<b>750J-9</b> 7/8 lb.	<b>750J-51</b> 1.5/8 lbs.	<b>750K-1</b> 1.1/8 lbs.
			
<b>750K-2</b> 1.1/4 lbs.	<b>750N-1</b> 2.1/4 lbs.	<b>750N-26</b> 4.1/2 lbs.	<b>750P-3</b> 3 lbs.
			
<b>750S- 1</b> 3.1/4 lbs.	<b>750S-61</b> 3 lbs.	<b>750T-1</b> 3/4 lb.	<b>750U-1</b> 2 lbs.
			
<b>750V- 1</b> 1.1/4 lbs.	<b>750Y-1</b> 4.1/2 lbs.	<b>750Z-1</b> 2.1/2 lbs.	<b>751K-1</b> 3 lbs.

## Entibes / BUCKING BARS

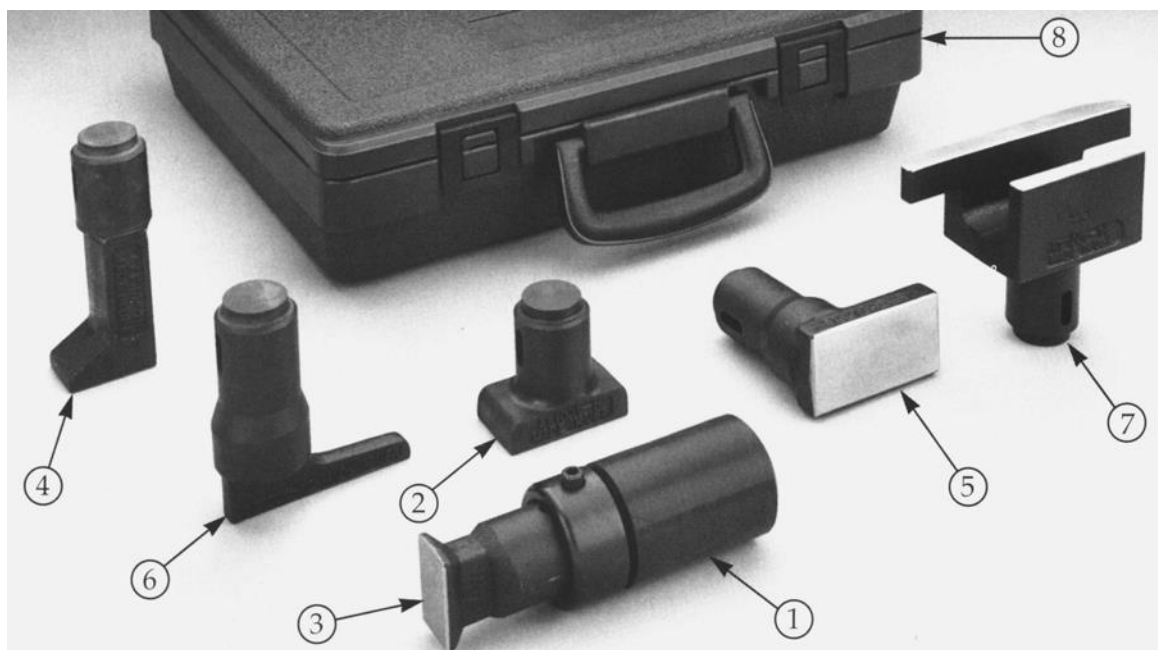
<b>751L-4</b> 1/2 lb.	<b>751R-H</b> 1/2 lb.	<b>751U-1</b> 1.1/4 lbs.	<b>751V-1</b> 1.1/4 lbs.
<b>751Y-11</b> 3/4 lbs.	<b>752A-1</b> 2.1/4 lbs.	<b>752B-1</b> 3.3/4 lbs.	<b>752C-1</b> 2.1/2 lbs.
<b>752F-1</b> 1 lbs.	<b>752P-1</b> 1/2 lb.	<b>752Z-1</b> 1.1/4 lbs.	<b>753T-4</b> 1 lbs.
<b>760B-2</b> 1 lbs.	<b>760B-3</b> 1.1/2 lbs.	<b>760B-7</b> 1.1/2 lbs.	<b>760B-8</b> 1.1/4 lbs.
<b>760B-10</b> 3/4 lb.	<b>760D-3</b> 2.1/4 lbs.	<b>761C-5</b> 1.1/4 lbs.	<b>763</b> 2.1/2 lbs.

**Entibes de wolframio  
disponibles bajo pedido**

HEAVY METAL (WOLFRAM) BUCKING BARS  
ARE AVAILABLE ON REQUEST !

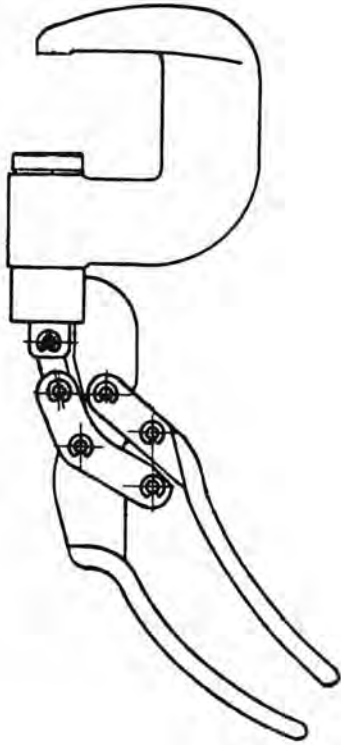
**Kit de entibes**  
**TRAUMA REDUCING BUCKING BAR - KIT**

# 1001K



<b>Pos.</b> <b>ITEM</b>	<b>Descripción</b> <b>DESCRIPTION</b>	<b>Art. N°</b> <b>PART NO.</b>
1	<b>Mango/HANDLE</b>	<b>1001-A</b>
2	<b>Entibe/BAR</b>	<b>1001-8</b>
3	<b>Entibe/BAR</b>	<b>1001-9</b>
4	<b>Entibe/BAR</b>	<b>1001-10</b>
5	<b>Entibe/BAR</b>	<b>1001-11</b>
6	<b>Entibe/BAR</b>	<b>1001-12</b>
7	<b>Entibe/BAR</b>	<b>1001-13</b>
8	<b>Caja/CARRYING CASE</b>	<b>1001-14</b>

# Remachadora/ HAND RIVET SQUEEZER



**Cabeza giratoria 360° fijable en cualquier posición**

**agarre ajustable (max. 15 mm)**

**Mango buterola: 4,76 mm**

**Golpe: 8 mm**

**Remache: Aluminio 2,6 mm Metal 2,0 mm**

**Sin yugo en C**

**Escoja de la tabla de abajo**

360° SWIVEL YOKE CAN BE LOCKED IN ANY POSITION WITH ADJUSTABLE SET HOLDER (MAX. .590")

RIVET SHANK 3/16"

STROKE: .315"

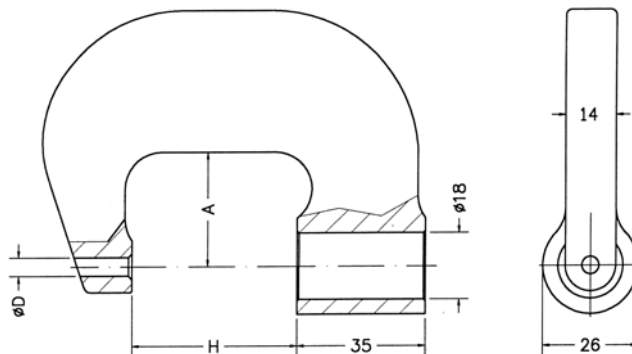
RIVET CAPACITY: ALUMINUM .1024" STEEL .0787"

WITHOUT C-YOKE !

PLEASE SELECT FROM FOLLOWING CHART !

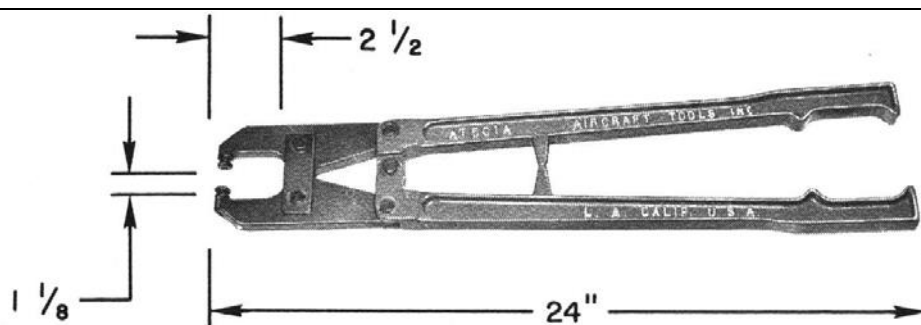
**NZ62 (410510)**

## Yugo en C para NZ62 / C-YOKES FOR NZ62

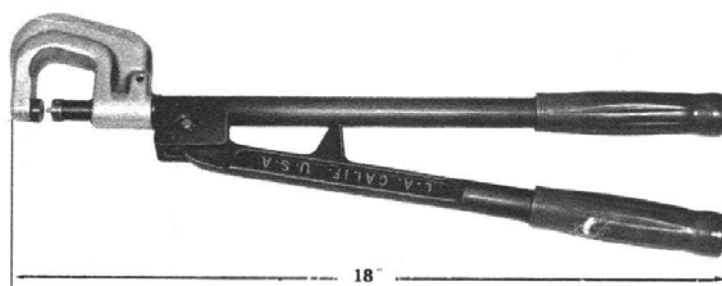


Art. N° PART NO.	para remache FOR RIVET SHANK	Medidas DIMENSIONS	
		A	H
<b>417002</b>	<b>3/16" (4,76 mm)</b>	<b>30 mm (1.18")</b>	<b>45 mm (1.77")</b>
<b>417007</b>	<b>3/16" (4,76 mm)</b>	<b>40 mm (1.57")</b>	<b>45 mm (1.77")</b>
<b>417012</b>	<b>3/16" (4,76 mm)</b>	<b>60 mm (2.36")</b>	<b>45 mm (1.77")</b>
<b>417052</b>	<b>3/16" (4,76 mm)</b>	<b>40 mm (1.57")</b>	<b>70 mm (2.76")</b>
<b>417057</b>	<b>3/16" (4,76 mm)</b>	<b>60 mm (2.36")</b>	<b>70 mm (2.76")</b>
<b>417062</b>	<b>3/16" (4,76 mm)</b>	<b>100 mm (3.93")</b>	<b>70 mm (2.76")</b>

# Remachadoras / HAND RIVET SQUEEZER



Art N° PART NO.	para diámetro FOR RIVET SHANK	Observaciones REMARKS
<b>501-A</b>	<b>3/16"</b> (4,76 mm)	<b>agarre de buterola ajustable</b> ADJUSTABLE RIVET SET HOLDER



**360° la cabeza puede ajustarse a cualquier posición**  
**360° SWIVEL YOKE CAN BE LOCKED IN ANY POSITION**

Art N° PART NO.	para mango FOR RIVET SHANK	Medidas cabeza	Observaciones REMARKS
<b>502-AHD</b>	<b>3/16"</b> (4,76 mm)	<b>1.1/2"</b> (38,1 mm)	<b>agarre de buterola ajustable</b> ADJUSTABLE RIVET SET HOLDER
<b>502-AHE</b>	<b>3/16"</b> (4,76 mm)	<b>3"</b> (76,2 mm)	<b>agarre de buterola ajustable</b> ADJUSTABLE RIVET SET HOLDER

## Uniones cabeza de 360° 360° SWIVEL YOKE ATTACHEMENTS FOR COMPRESSION RIVETERS

sin remachadora / without Riveter !		<b>agarre de buterola ajustable</b> <b>ADJUSTABLE RIVET SET HOLDER / REACH 1.1/2"</b>  <b>para mango 4,76 mm</b> <b>FOR RIVET SHANK 3/16"</b>  <b>recomendado para remachadoras</b> <b>RECOMMEND FOR RIVETERS MOD.</b>  <b>705C / 114CC / CP214</b>
Art. N° / PART NO.	<b>502YA</b>	Alcance / REACH : (38 mm) <b>1.1/2"</b>
Art. N° / PART NO.	<b>502YB</b>	Alcance / REACH: (76 mm) <b>3"</b>

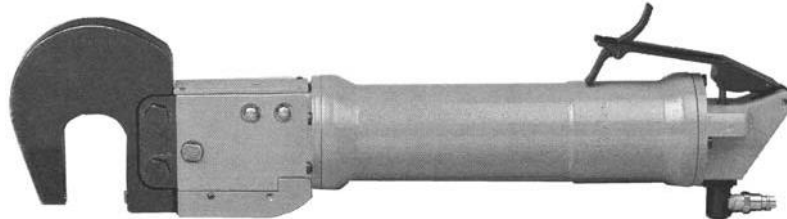
# Remachadoras Tipo C / COMPRESSION RIVETERS - C TYPE



**114CC & 705-HF**



**114TCC & 720-HF**



**735-C**

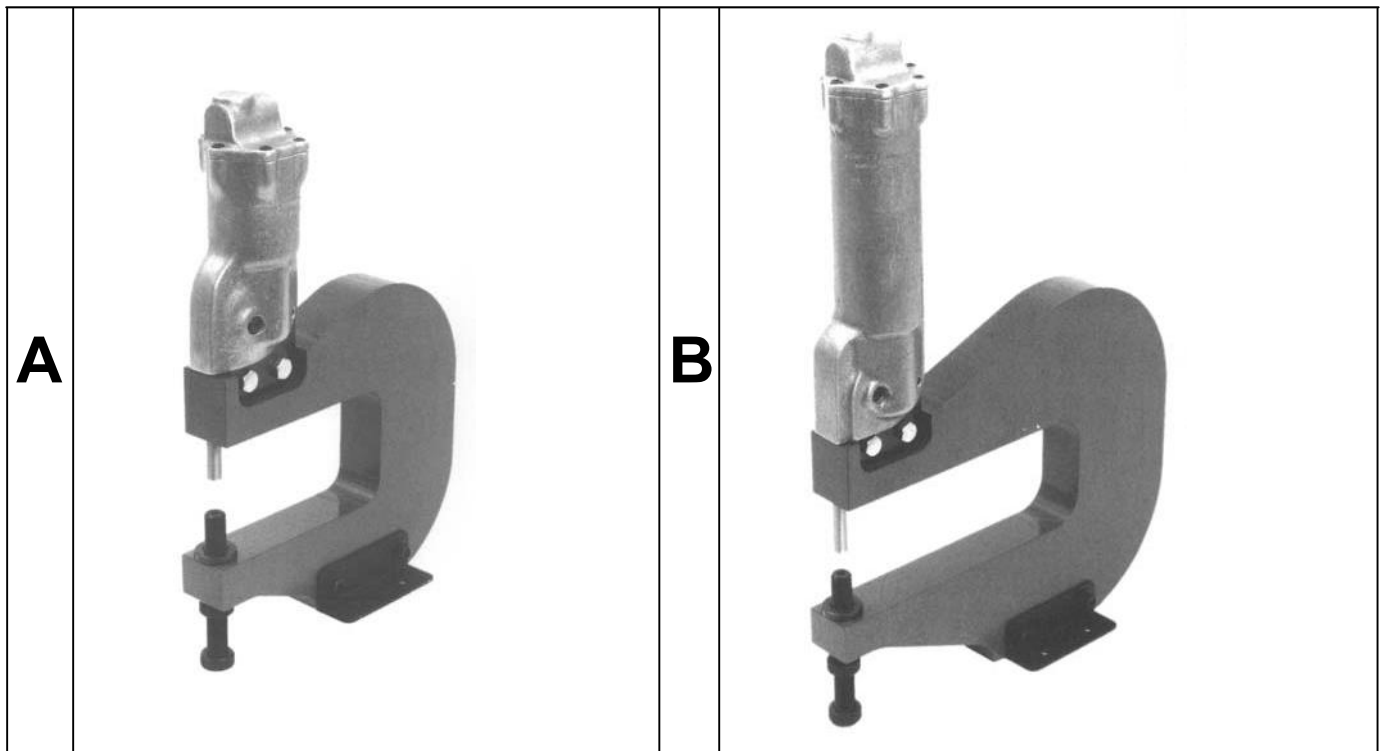
Modelo	114-CC		705-HF		114-TCC		720-HF		735-C	
	Alu	metal	Alu	metal	Alu	metal	Alu	metal	Alu	metal
<b>Capacidad en frío (mm)</b> CAPACITY COLD RIVET (INCH)	4,0 5/32	3,2 1/8	4,0 5/32	3,2 1/8	6,4 1/4	4,8 3/16	6,4 1/4	4,8 3/16	7,9 5/16	6,4 1/4
<b>max. apertura (mm)</b> MAX. TRAVEL (INCH)	14,3 mm 9/16 "		12,7 mm 1/2 "		14,3 mm 9/16 "		12,7 mm 1/2 "		14,3 mm 9/16 "	
<b>max. fuerza mit 6,21 bar</b> MAX. FORCE mit/with 90 P.S.I.	18,69 kn 4200 lbs.		20,03 kn 4500 lbs.		34,26 kn 7700 lbs.		40,05 kn 9000 lbs.		48,95 kn 11000 lbs.	
<b>max. golpe a maxima fuerza:</b> PART OF STROKE AT MAX. FORCE:	1,6 mm 1/16"		0,8 mm 1/32"		1,6 mm 1/16"		0,8 mm 1/32"		3,2 mm 1/8"	
<b>peso apr. con C standard</b> APPR. WEIGHT WITH STD. C -YOKE	2,0 kg 4.5 lbs.		2,0 kg 4.5 lbs.		2,5 kg 5.5 lbs.		2,5 kg 5.5 lbs.		4,6 kg 10.1 lbs.	
<b>longitude apr. con C standard</b> APPR. LENGTH with STD C-YOKE	260 mm 10.1/4"		260 mm 10.1/4"		362 mm 14"		362 mm 14"		525 mm 21"	
<b>entrada de aire / AIR INLET</b>	1/4" NPT		1/4" NPT		1/4" NPT		1/4" NPT		1/4" NPT	

114CC 114TCC 705-HF 720-HF						735-C				
C N° Yoke No.	Reach	Gap	Set Hole	Width	Thickness	C N Yok	Reach	Gap	Set Hole	Thickness
538	38 mm 1.1/2"	32 mm 1.1/4"	4,8 mm 3/16"	76 mm 3"	14,3 mm 9/16"	74	38 mm 1.1/2"	32 mm 1.1/4"	4,8 mm 3/16"	19,4 mm 3/4"
958	51 mm 2"	32 mm 1.1/4"	4,8 mm 3/16"	90 mm 3.9/16"	14,3 mm 9/16"	74	51 mm 2"	38 mm 1.1/2"	4,8 mm 3/16"	22,2 mm 7/8"
959	64 mm 2.1/2"	35 mm 1.3/8"	4,8 mm 3/16"	117 mm 4.5/8"	14,3 mm 9/16"	74	76 mm 3"	38 mm 1.1/2"	4,8 mm 3/16"	28,6 mm 1.1/8"
960	76 mm 3"	38 mm 1.1/2"	4,8 mm 3/16"	133 mm 5.1/4"	25,4 mm 1"	74	38 mm 1.1/2"	51 mm 2"	4,8 mm 3/16"	25,4 mm 1"
961	89 mm 3.1/2"	38 mm 1.1/2"	4,8 mm 3/16"	154 mm 6.1/16"	25,4 mm 1"	74	64 mm 2.1/2"	35 mm 1.3/8"	4,8 mm 3/16"	25,4 mm 1"
						74	64 mm 2.1/2"	44 mm 1.3/4"	4,8 mm 3/16"	28,6 mm 1.1/8"

**Al pedir una remachadora completa especifique el n° de C que desea**  
**BY ORDERING A COMPLETE RIVETER PLEASE SPECIFY C-YOKE PART-NUMBER !**

## Remachadoras para banco

### FOOT CONTROL COMPRESSION RIVETERS - C TYPE - BENCH MODELS



	<b>A</b>		<b>A</b>		<b>A</b>		<b>B</b>		<b>B</b>		<b>B</b>	
<b>Modelo</b> <b>Modelo (alternativo)</b>	<b>30C-C-60B</b>		<b>30-C-C-90B</b> <b>114C-98</b>		<b>30C-C-120B</b>		<b>60C-C-60B</b>		<b>60C-C-90B</b> <b>114TC-98</b>		<b>60C-C-120B</b>	
	Alu	metal	Alu	metal	Alu	metal	Alu	metal	Alu	metal	Alu	metal
<b>Capacidad en frío (mm)</b> CAPACITY COLD RIVET (INCH)	3,2 1/8	2,4 3/32	3,2 1/8	2,4 3/32	3,2 1/8	2,4 3/32	4,8 3/16	4,0 5/32	4,8 3/16	4,0 5/32	4,8 3/16	4,0 5/32
<b>max. apertura (mm)</b> MAX. TRAVEL (INCH)	14,3 mm 9/16 "		14,3 mm 9/16 "		14,3 mm 9/16 "		14,3 mm 9/16 "		14,3 mm 9/16 "		14,3 mm 9/16 "	
<b>max. fuerza con barra 6,21</b> MAX. FORCE con/with 90 P.S.I.	13,35 kn 3000 lbs.		13,35 kn 3000 lbs.		13,35 kn 3000 lbs.		26,70 kn 6000 lbs.		26,70 kn 6000 lbs.		26,70 kn 6000 lbs.	
<b>golpe con fuerza máxima:</b> PART OF STROKE AT MAX. FORCE:	1,6 mm 1/16"		1,6 mm 1/16"		1,6 mm 1/16"		1,6 mm 1/16"		1,6 mm 1/16"		1,6 mm 1/16"	
<b>peso aproximada con C</b> APPR. WEIGHT WITH C -YOKE	14 kg 32 lbs.		27 kg 60 lbs.		81 kg 179 lbs.		15 kg 34 lbs.		28 kg 62 lbs.		82 kg 180 lbs.	
<b>entrada de aire</b> AIR INLET	1/4" NPT		1/4" NPT		1/4" NPT		1/4" NPT		1/4" NPT		1/4" NPT	
<b>alcance yugo</b> YOKE-REACH	152,4 mm 6"		228,6 mm 9"		304,6 mm 12"		152,4 mm 6"		228,6 mm 9"		304,6 mm 12"	
<b>apertura yugo</b> YOKE-GAP	88,9 mm 3.1/2"		88,9 mm 3.1/2"		101,6 mm 4"		88,9 mm 3.1/2"		88,9 mm 3.1/2"		101,6 mm 4"	
<b>grosor yugo</b> YOKE-THICKNESS	34,9 mm 1.3/8"		41,3 mm 1.5/8"		60,3 mm 2.3/8"		34,9 mm 1.3/8"		41,3 mm 1.5/8"		60,3 mm 2.3/8"	

## Remachadoras tipo lagarto

### COMPRESSION RIVETERS - ALLIGATOR JAW TYPE



**114AA & 710A-HF**



**114TAA & 725A-HF**



**735A**

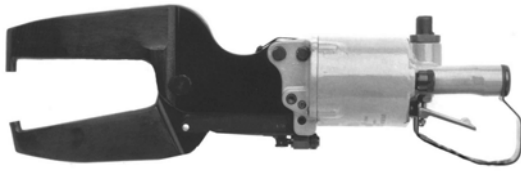
Model - mandibula	Capacidad en frío		fuerza maxima con barra 6,21	parte golpe con fuerza max.	Peso con mandibula	Longitud	Entrada aire
MODEL - JAW REACH	CAPACITY COLD RIVETS		MAX. FORCE WITH 90 PSI	PART OF STROKE AT MAX. FORCE	WEIGHT WITH JAWS	LENGTH	AIR INLET
	Alu	Steel					
<b>114AA - 1.1/2"</b>	4,0 mm 5/32"	3,2 mm 1/8"	19,13 kn 4300 lbs.	1,6 mm 1/16"	1,7 kg 3.3/4 lbs.	233 mm 9.3/16"	1/4" NPT
<b>710A-HF - 1.1/2"</b>	4,0 mm 5/32"	3,2 mm 1/8"	20,03 kn 4500 lbs.	0,8 mm 1/32"	1,7 kg 3.3/4 lbs.	233 mm 9.3/16"	1/4" NPT
<b>114AA - 2.1/4"</b>	3,2 mm 1/8"	2,4 mm 3/32"	17,35 kn 3900 lbs.	2,4 mm 3/32"	1,9 kg 4.1/4 lbs.	257 mm 10.1/8"	1/4" NPT
<b>710A-HF - 2.1/4"</b>	3,2 mm 1/8"	2,4 mm 3/32"	14,69 kn 3300 lbs.	1,2 mm 3/64"	1,9 kg 4.1/4 lbs.	257 mm 10.1/8"	1/4" NPT
<b>114TAA - 1.1/2"</b>	6,4 mm 1/4"	4,8 mm 3/16"	34,71kn 7800 lbs.	1,6 mm 1/16"	2,3 kg 5 lbs.	305 mm 12"	1/4" NPT
<b>725A-HF - 1.1/2"</b>	6,4 mm 1/4"	4,8 mm 3/16"	40,05 kn 9000 lbs.	0,8 mm 1/32"	2,5 kg 5.1/2 lbs.	305 mm 12"	1/4" NPT
<b>114TAA - 2.1/4"</b>	4,8 mm 3/16"	4,0 mm 5/32"	28,03 kn 6300 lbs.	2,4 mm 3/32"	2,5 kg 5.1/2 lbs.	330 mm 13"	1/4" NPT
<b>725A-HF - 2.1/4"</b>	4,8 mm 3/16"	4,0 mm 5/32"	28,70 kn 6450 lbs.	1,2 mm 3/64"	2,7 kg 6 lbs.	330 mm 13"	1/4" NPT
<b>114TAA - 3"</b>	4,0 mm 5/32"	3,2 mm 1/8"	24,92 kn 5600 lbs.	3,2 mm 1/8"	2,7 kg 6 lbs.	349 mm 13.3/4"	1/4" NPT
<b>725A-HF - 3"</b>	4,0 mm 5/32"	3,2 mm 1/8"	22,70 kn 5100 lbs.	1,6 mm 1/16"	2,8 kg 6.1/4 lbs.	349 mm 13.3/4"	1/4" NPT
<b>735A - 3"</b>	6,4 mm 1/4"	4,8 mm 3/16"	44,50 kn 10000 lbs.	1,6 mm 1/16"	4,4 kg 9.3/4 lbs.	565 mm 22.1/4"	1/4" NPT
<b>735A - 5"</b>	4,8 mm 3/16"	4,0 mm 5/32"	30,26 kn 6800 lbs.	2,4 mm 3/32"	5,0 kg 11 lbs.	616 mm 24.1/4"	1/4" NPT

Los siguientes artículos solo valen para 710A/725A Las medidas valen para las remachadoras de esta página

Following Part-Numbers are only valid for Riveters 710A/725A ! The dimensions are valid for all Riveters on this page !

	JAW ASSY NO	STAT. JAW	MOVING JAW	Set Hole Size	REACH	GAP	MAX.TRAVEL
<b>710A-HF-....</b>							
<b>725A-HF-....</b>							
	<b>7360</b>	<b>457</b>	<b>3488</b>	4,76 mm 3/16"	38 mm 1.1/2"	41 mm 1.5/8"	15,88 mm 5/8"
	<b>7362</b>	<b>1213</b>	<b>3490</b>	4,76 mm 3/16"	57 mm 2.1/4"	45 mm 1.3/4"	22,23 mm 7/8"
	<b>7364</b>	<b>1215</b>	<b>3491</b>	4,76 mm 3/16"	76 mm 3"	54 mm 2.1/8"	31,75 mm 1.1/4"
<b>735A-3"</b>	<b>16780</b>	<b>16800</b>	<b>16793</b>	4,76 mm 3/16"	76 mm 3"	57 mm 2.1/4"	22,23 mm 7/8"
<b>735A-5"</b>	<b>16773</b>	<b>16790</b>	<b>16748</b>	4,76 mm 3/16"	127 mm 5"	57 mm 2.1/4"	29,37 mm 1.5/32"

## Remachadoras con cabeza lagarto COMPRESSION RIVETERS - ALLIGATOR JAW TYPE

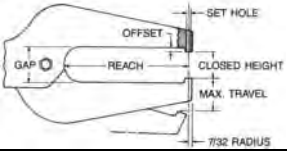


**740A & 151A**

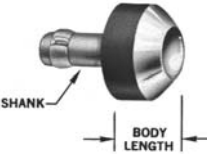



**750A**

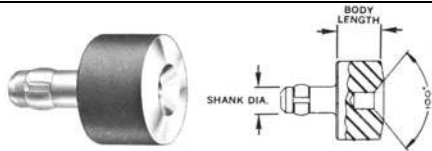
Modelo alcance mandíbula MODEL - JAW REACH	Capacidad en frío CAPACITY COLD RIVETS		max fuerza con barra 6,21 MAX. FORCE WITH 90 PSI	parte de golpe con fuerza máx PART OF STROKE AT MAX. FORCE	Peso con mandíbula WEIGHT WITH JAWS	Longitud LENGTH	Entrada de aire AIR INLET
	Alu	Metal					
<b>740A - 2.7/8"</b>	4,8 mm 3/16"	4,0 mm 5/32"	36,19 kn 8150 lbs.	3,2 mm 1/8"	7,5 kg 16.1/2 lbs.	502 mm 19.3/4"	1/4" NPT
<b>151A - 2.7/8"</b>	4,0 mm 5/32"	3,2 mm 1/8"	23,14 kn 5200 lbs.	3,2 mm 1/8"	7,3 kg 16 lbs.	495 mm 19.1/2"	1/4" NPT
<b>740A - 5"</b>	4,0 mm 5/32"	3,2 mm 1/8"	20,85 kn 4695 lbs.	3,2 mm 1/8"	9,9 kg 21.3/4 lbs.	552 mm 21.3/4"	1/4" NPT
<b>151A - 5"</b>	3,2 mm 1/8"	2,4 mm 3/32"	15,13 kn 3400 lbs.	3,2 mm 1/8"	9,1 kg 20 lbs.	549 mm 21.5/8"	1/4" NPT
<b>740A - 7"</b>	3,2 mm 1/8"	2,4 mm 3/32"	14,88 kn 3350 lbs.	4,8 mm 3/16"	11,6 kg 25.1/2 lbs.	603 mm 23.3/4"	1/4" NPT
<b>151A - 7"</b>	3,2 mm 1/8"	2,4 mm 3/32"	13,35 kn 3000 lbs.	4,8 mm 3/16"	10,9 kg 24 lbs.	600 mm 23.5/8"	1/4" NPT
<b>750A - 2.7/8"</b>	7,9 mm 5/16"	6,4 mm 1/4"	72,38 kn 16300 lbs.	4,8 mm 3/16"	8,6 kg 19 lbs.	635 mm 25"	1/4" NPT
<b>750A - 5"</b>	6,4 mm 1/4"	4,8 mm 3/16"	41,70 kn 9390 lbs.	4,8 mm 3/16"	11,0 kg 24.1/4"	685 mm 27"	1/4" NPT
<b>750A - 7"</b>	4,8 mm 3/16"	4,0 mm 5/32"	29,84 kn 6720 lbs.	4,8 mm 3/16"	12,7 kg 28 lbs.	736 mm 29"	1/4" NPT
<b>750A - 9.1/8"</b>	4,8 mm 3/16"	4,0 mm 5/32"	22,82 kn 5140 lbs.	4,8 mm 3/16"	13,1 kg 29 lbs.	790 mm 31.1/8"	1/4" NPT

	JAW - ASSY NO	STAT. JAW	MOVING JAW	Set Hole Size	REACH	GAP	CLOSED HIGHT	MAX. TRAVEL
<b>740A-2.7/8"</b>	<b>2460</b>	<b>2459</b>	<b>2461</b>	4,76 mm 3/16"	73 mm 2.7/8"	41 mm 1.5/8"	22,23 mm 7/8"	20,64 mm 13/16"
<b>740A-5"</b>	<b>1767</b>	<b>1744</b>	<b>1745</b>	4,76 mm 3/16"	127 mm 5"	41 mm 1.5/8"	22,23 mm 7/8"	34,93 mm 1.3/8"
<b>740A-7"</b>	<b>1769</b>	<b>582</b>	<b>581</b>	4,76 mm 3/16"	178 mm 7"	54 mm 2.1/8"	19,05 mm 3/4"	47,63 mm 1.7/8"
<b>151A-2.7/8"</b>		<b>35208</b>	<b>35209</b>	4,76 mm 3/16"	73 mm 2.7/8"	41 mm 1.5/8"	22,23 mm 7/8"	20,64 mm 13/16"
<b>151A-5"</b>		<b>35210</b>	<b>35211</b>	4,76 mm 3/16"	127 mm 5"	41 mm 1.5/8"	22,23 mm 7/8"	34,93 mm 1.3/8"
<b>151A-7"</b>		<b>35220</b>	<b>35219</b>	4,76 mm 3/16"	178 mm 7"	54 mm 2.1/8"	38,10 mm 1.1/2"	42,86 mm 1.11/16"
<b>750A-2.7/8"</b>	<b>2460</b>	<b>2459</b>	<b>2461</b>	4,76 mm 3/16"	73 mm 2.7/8"	41 mm 1.5/8"	22,23 mm 7/8"	20,64 mm 13/16"
<b>750A-5"</b>	<b>1767</b>	<b>1744</b>	<b>1745</b>	4,76 mm 3/16"	127 mm 5"	41 mm 1.5/8"	22,23 mm 7/8"	34,93 mm 1.3/8"
<b>750A-7"</b>	<b>1769</b>	<b>582</b>	<b>581</b>	4,76 mm 3/16"	178 mm 7"	54 mm 2.1/8"	19,05 mm 3/4"	47,63 mm 1.7/8"
<b>750A-9.1/8"</b>	<b>449</b>	<b>414</b>	<b>549</b>	4,76 mm 3/16"	232 mm 9.1/8"	54 mm 2.1/8"	19,05 mm 3/4"	63,50 mm 2.1/2"

<b>A</b>	 <p>Mango 4,76 mm Shank Diameter 3/16"</p>	<b>Buterolas planas de conejito</b> <b>RIVET SQUEEZER SETS, FLUSH-TYPE</b> <b>MS20426 / AN426 / LN 9199 / DIN 65399</b>  <b>Diámetro 12,7 mm / Body Diameter 1/2"</b>					
		<b>B</b>	 <p>Mango 4,76 mm Shank Diameter 3/16"</p>	<b>Buterolas planas de conejito</b> <b>RIVET SQUEEZER SETS, FLUSH-TYPE</b> <b>MS20426 / AN426 / LN 9199 / DIN 65399</b>  <b>Diámetro 9,53 mm / Body Diameter 3/8"</b>			
Long. 3,18 mm LENGTH 1/8"	Long. 6,35 mm LENGTH 1/4"			Long. 9,53 mm LENGTH 3/8"	Long. 12,7 mm LENGTH 1/2"	Long. 15,88 mm LENGTH 5/8"	Long. 19,05 mm LENGTH 3/4"
	Art.Nr. / Part No.	Art.Nr. / Part No.	Art.Nr. / Part No.	Art.Nr. / Part No.	Art.Nr. / Part No.	Art.Nr. / Part No.	
<b>A</b>	<b>109AN</b>	<b>109AP</b>	<b>109AR</b>	<b>109AS</b>	<b>109AT</b>	<b>109AW</b>	
<b>B</b>	<b>109EN</b>	<b>109EP</b>	<b>109ER</b>	<b>109ES</b>	<b>109ET</b>	<b>109EW</b>	

<b>C</b>	 <p>Mango 4,76 mm / Shank Diameter 3/16"</p>	<b>Buterolas</b> <b>RIVET SQUEEZER SETS, CUPPED-TYPE</b> <b>MS20470 / AN470 / LN 9198</b>					
		Longitud BODY LENGTH	Remache 2,4 mm Rivet Size 3/32"	Remache 3,2 mm Rivet Size 1/8"	Remache 4,0 mm Rivet Size 5/32"	Remache 4,8 mm Rivet Size 3/16"	Remache 6,4 mm Rivet Size 1/4"
	mm / Inch	Art.Nr. / Part No.	Art.Nr. / Part No.	Art.Nr. / Part No.	Art.Nr. / Part No.	Art.Nr. / Part No.	
	3,18 / 1/8"	<b>108AN-3/32"</b>	<b>108AN-1/8"</b>	<b>108AN-5/32"</b>	<b>108AN-3/16"</b>		
	6,35 / 1/4"	<b>108AP-3/32"</b>	<b>108AP-1/8"</b>	<b>108AP-5/32"</b>	<b>108AP-3/16"</b>	<b>108AP-1/4"</b>	
	9,53 / 3/8"	<b>108AR-3/32"</b>	<b>108AR-1/8"</b>	<b>108AR-5/32"</b>	<b>108AR-3/16"</b>	<b>108AR-1/4"</b>	
	12,70 / 1/2"	<b>108AS-3/32"</b>	<b>108AS-1/8"</b>	<b>108AS-5/32"</b>	<b>108AS-3/16"</b>	<b>108AS-1/4"</b>	
	15,88 / 5/8"	<b>108AT-3/32"</b>	<b>108AT-1/8"</b>	<b>108AT-5/32"</b>	<b>108AT-3/16"</b>		
	19,05 / 3/4"	<b>108AW-3/32"</b>	<b>108AW-1/8"</b>	<b>108AW-5/32"</b>	<b>108AW-3/16"</b>		

<b>D</b>	 <p>Mango 4,76 mm / Shank Diameter 3/16"</p>	<b>Estampillas 100° (macho)</b> <b>DIMPLE DIES (MALE) 100°</b> <b>MS20426 / AN426</b> <b>Mango 4,76 mm / Shank Diameter 3/16"</b>					
		Longitud BODY LENGTH	Remache 2,4 mm Rivet Size 3/32"	Remache 3,2 mm Rivet Size 1/8"	Remache 4,0 mm Rivet Size 5/32"	Remache 4,8 mm Rivet Size 3/16"	Remache 6,4 mm Rivet Size 1/4"
	mm / Inch	Art.Nr. / Part No.	Art.Nr. / Part No.	Art.Nr. / Part No.	Art.Nr. / Part No.	Art.Nr. / Part No.	
	6,35 / 1/4"	<b>206A3P</b>	<b>206A4P</b>	<b>206A5P</b>	<b>206A6P</b>	<b>206A8P</b>	
	9,53 / 3/8"	<b>206A3R</b>	<b>206A4R</b>	<b>206A5R</b>	<b>206A6R</b>	<b>206A8R</b>	

<b>E</b>	 <p>Mango 4,76 mm / Shank Diameter 3/16"</p>	<b>Estampillas 100° (hembra)</b> <b>DIMPLE DIES (FEMALE) 100°</b> <b>MS20426 / AN426</b> <b>Mango 4,76 mm / Shank Diameter 3/16"</b>					
		Longitud BODY LENGTH	Remache 2,4 mm Rivet Size 3/32"	Remache 3,2 mm Rivet Size 1/8"	Remache 4,0 mm Rivet Size 5/32"	Remache 4,8 mm Rivet Size 3/16"	
	Art.Nr. / Part No. (long aprox./appr. Length)	Art.Nr. / Part No. (long aprox./appr. Length)	Art.Nr. / Part No. (long aprox./appr. Length)	Art.Nr. / Part No. (long aprox./appr. Length)	Art.Nr. / Part No. (long aprox./appr. Length)		
	<b>207A3P</b> (6,3 mm / 1/4")	<b>207A4P</b> (7,9 mm / 5/16")	<b>207A5P</b> (9,5 mm / 3/8")	<b>207A6P</b> (11,1 mm / 7/16")	<b>207A8P</b> (12,7 mm / 1/2")		
	<b>207A3R</b> (9,5 mm / 3/8")	<b>207A4R</b> (9,5 mm / 3/8")	<b>207A5R</b> (10,0 mm / 25/64")	<b>207A6R</b> (11,1 mm / 7/16")	<b>207A8R</b> (12,7 mm / 1/2")		

*KITS REMACHADORA Y ESTAMPILLAS*  
**RIVET SQUEEZER - AND DIMPLE DIE KITS**

**A/B** Buterolas / RIVET SQUEEZER



**Mango 4,76 mm**  
 SHANK DIA 3/16" (.187)

**C** Estampillas / DIMPLE DIES



**Mango 4,76 mm**  
 SHANK DIA 3/16" (.187)

<b>A</b>	Art.Nº / PART NO.:
	<b>108A-28PC</b>
Contenido / CONTENTS OF THE KIT:	
1 caja con base plateada 5 buterolas planas de diámetro 12,7 mm 23 buterolas en diferentes longitudes para remaches 2,4 mm, 3,2 mm, 4,0 mm, 4,8 mm, 6,35 mm	
1 KIT BOX WITH ENGRAVED KIT PLATE 5 RIVET SETS, FLUSH, DIAMETER 1/2" 23 RIVET SETS, CUPPED TYPE, IN DIFFERENT LENGTH, FOR RIVET DIAMETER 3/32", 1/8", 5/32", 3/16" & 1/4"	

<b>C</b>	Art Nº / PART NO.:
	<b>206A-24PC</b>
Contenido / CONTENTS OF THE KIT:	
1 caja con base plateada 12 pares estampillas macho y hembra con longitudes 6,35 mm, 9,53 mm, 12,7 mm. para remaches de 2,4 mm, 3,2 mm, 4,0 mm, 4,8 mm, 6,35 mm	
1 KIT BOX WITH ENGRAVED KIT PLATE 12 PAIR MALE & FEMALE DIMPLE DIES, WITH BODY LENGTH 1/4", 3/8" AND 1/2" FOR RIVET DIAMETER 3/32", 1/8", 5/32", 3/16" & 1/4"	

<b>B</b>	Art Nº / PART NO.:
	<b>108A-33PC</b>
Contenido / CONTENTS OF THE KIT:	
1 caja con base plateada 5 buterolas planas diámetro 12,7mm 5 buterolas planas diámetro 9,53 23 buterolas con tope para remaches de 2,4 mm, 3,2 mm, 4,0 mm, 4,8 mm, 6,35 mm	
1 KIT BOX WITH ENGRAVED KIT PLATE 5 RIVET SETS, FLUSH, DIAMETER 1/2" 5 RIVET SETS, FLUSH, DIAMETER 3/8" 23 RIVET SETS, CUPPED TYPE, IN DIFFERENT LENGTH, FOR RIVET DIAMETER 3/32", 1/8", 5/32", 3/16" & 1/4"	

**Fresadora neumática con extension de 102 mm**  
**PNEUMATIC RIVET SHAVER WITH 4" EXTENDED SKIRT**

**A**



Art N° Part No.	Capacidad corte Cutter Capacity	Peso Weight	Longitud Length	Velocidad Cutter Speed	Cutter Capacity Capacidad corte	Skirt No. Ext N°.
<b>7387-RSE</b>	12,70 mm 1/2"	1,3 kg 2.87 lbs.	273 mm 10.3/4"	<b>18000 RPM/UPM</b>	5/16" / 7,94 mm 3/8" / 9,53 mm 1/2" / 12,70 mm	<b>3692</b> <b>3693</b> <b>3694</b>

**La fresadora viene con standard para fresas de 1/2" si no se dice lo contrario**  
**THE RIVET SHAVER COMES WITH STANDARD SKIRT FOR 1/2" CUTTERS, IF NOT OTHER SPECIFIED!**

<b>B</b>			<b>Fresa plaquita metal duro</b> <b>CUTTER, CARBIDE TIPPED</b>	
	<b><u>Rosca/Thread 1/4"-28</u></b>		<b><u>Rosca/Thread 1/4"-26</u></b> (Para/For <u>DESOUTTER</u> )	
Diámetro fresa CUTTER DIAMETER		Fresa Art N° CUTTER - PART NO.	Fresa Art N° CUTTER - PART NO.	
Inch	mm			
1/4"	6,35	<b>ZT 108-0</b>		
5/16"	7,94	<b>ZT 108-1</b>	<b>HP-5/16" x 1/4"-26</b>	
3/8"	9,53	<b>ZT 108-2</b>	<b>HP-3/8" x 1/4"-26</b>	
7/16"	11,11	<b>ZT 108-3</b>	<b>HP-7/16" x 1/4"-26</b>	
1/2"	12,70	<b>ZT 108-4</b>	<b>HP-1/2" x 1/4"-26</b>	
9/16"	14,29	<b>ZT 108-5</b>		
5/8"	15,88	<b>ZT 108-6</b>		
3/4"	19,05	<b>ZT 108-7</b>		
7/8"	22,23	<b>ZT 108-8</b>		
1"	25,40	<b>ZT 108-9</b>		
1.1/8"	28,58	<b>ZT 108-10</b>		
1.1/4"	31,75	<b>ZT 108-11</b>		

# Fresadora neumática / PNEUMATIC SUPER SHAVER

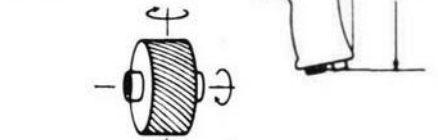
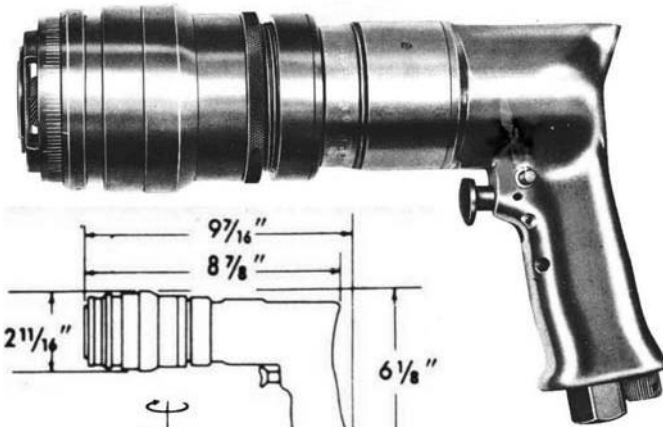
Para trabajar con pinzas de titanio acero inox monel y otras de alta dureza

Ajustable en espacios de 0,0127 mm. Velocidad 12000 UPM

FOR USE ON TITANIUM, STAINLESS STEEL, MONEL AND SIMILAR HIGH STRENGTH FASTENERS

DEPTH ADJUSTMENT IN INCREMENTS OF .0005", CUTTER ROTATION APPR. 12000 RPM

## A ZT 507 C



Rotación dual  
Dual Rotating

## B ESTABILIZADOR STABILIZER

ZT 507053



Fresa, mango, pie, y estabilizador no se incluyen.  
Si los necesita, especifíquelo en el pedido

Cutter, Cutter-Shaft, Footpiece and Stabilizer are not furnished with the machine.

If required, specify at time of order !

Ancho fresa CUTTER WIDTH	Nº Art. fresa PART NO. CUTTER SHAFT ASSY	Nº Art pie metálico PART NO. STEEL FOOTPIECE	Nº Art pie de nylon PART NO. NYLON FOOTPIECE
3/8" / 9,53 mm	ZT 5070171	ZT 507084	
7/16" / 11,11 mm	ZT 5070172	ZT 507084	
1/2" / 12,70 mm	ZT 5070173	ZT 507029	ZT 507041
3/4" / 19,05 mm	ZT 5070174	ZT 507035	ZT 507055

## C



## Fresas metal duro CARBIDE CUTTER

Art Nº PART NO.	Ancho fresa CUTTER WIDTH	Dientes TEETH	Diámetro DIAMETER	rompeplaca CHIP BREAKER	Apto para APPLICATION
ZT 507-20B	1/2" / 12,70 mm	49	1.1/8" / 31.75 mm	NO	Monel, Steel, Titanium
ZT 507-21B	3/4" / 19,05 mm	49	1.1/8" / 31.75 mm	NO	Monel, Steel, Titanium
ZT 507-22B	1/2" / 12,70 mm	25	1.1/8" / 31.75 mm	NO	Monel, Steel, Titanium, Jo-Bolt
ZT 507-23B	3/8" / 9,53 mm	49	1.1/8" / 31.75 mm	NO	Monel, Steel, Titanium
ZT 507-24B	1/2" / 12,70 mm	37	1.1/8" / 31.75 mm	SI / YES	NACA, Straylar Rivet, Aluminum, Jo-Bolt
ZT 507-25B	3/4" / 19,05 mm	37	1.1/8" / 31.75 mm	SI / YES	NACA, Straylar Rivet, Aluminum, Jo-Bolt
ZT 507-26B	3/8" / 9,53 mm	37	1.1/8" / 31.75 mm	SI / YES	NACA, Straylar Rivet, Aluminum, Jo-Bolt
ZT 507-27B	1/2" / 12,70 mm	25	1.1/8" / 31.75 mm	NO	A-286 Stainless Steel Rivet
ZT 507-28B	3/4" / 19,05 mm	25	1.1/8" / 31.75 mm	NO	A-286 Stainless Steel Rivet
ZT 507-29B	7/16" / 11,11 mm	49	1.1/8" / 31.75 mm	NO	Monel, Steel, Titanium

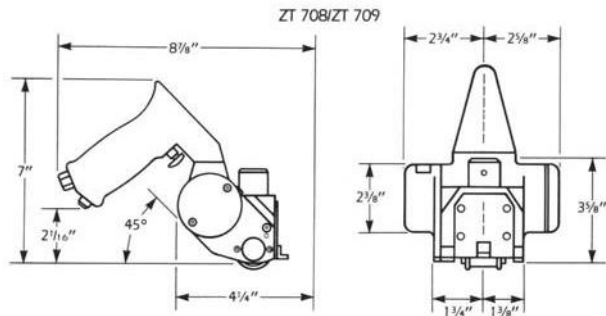
# Corta soldaduras neumático / PNEUMATIC WELD SHAVER

Para trabajar con pinzas de titanio acero inox monel y otras de alta dureza

Ajustable en espacios de 0,0254 mm. Velocidad 2700 UPM

FOR USE ON TITANIUM, STAINLESS STEEL, MONEL AND SIMILAR HIGH STRENGTH MATERIALS  
DEPTH ADJUSTMENT IN INCREMENTS OF .001", CUTTER ROTATION APPR. 2700 RPM

## A ZT 708



ca. 2,7 kg / appr. 6 lbs.

Quita soldaduras a la altura que se seleccione. Corta soldaduras hasta 22,3 mm y 0,8 mm de altura de una sola pasada.


REMOVE WELDS TO SURFACE PLANE OR PRE-SELECTED-HIGHT. SHAVE WELDS UP TO 7/8" WIDE BY 0.030 INCHES WITH ONE PASS.

Juntas y fresa no se incluyen con la máquina. Especificuelo al hacer su pedido

ROLLER ASSEMBLY AND CUTTERS ARE NOT FURNISHED WITH THE MACHINE ! PLEASE SPECIFY AT TIME OF ORDER !

<b>B</b>		<b>ZT 708</b>
		<b>Fresas de metal duro CARBIDE CUTTER WITHOUT CHIPBREAKER</b>

Art N° PART NO.	Diámetro DIAMETER	Ancho fresa CUTTER WIDTH	Dientes TEETH	Art. Nr. completo PART NO. ROLLER SHAFT ASSY
<b>ZT 508-20B</b>	1.1/2" (38,10 mm)	1/2" (12,70 mm)	49	<b>ZT 709041</b>
<b>ZT 508-21B</b>	1.1/2" (38,10 mm)	3/4" (19,05 mm)	49	<b>ZT 709042</b>
<b>ZT 508-22B</b>	1.1/2" (38,10 mm)	3/8" (9,53 mm)	49	<b>ZT 709040</b>

<b>C</b>		<b>ZT708</b>
		<b>Fresas metal duro CARBIDE CUTTER WITH CHIPBREAKER</b>

Art N° PART NO.	Diámetro DIAMETER	Ancho fresa CUTTER WIDTH	Dientes TEETH	Art. No. completo PART NO. ROLLER SHAFT ASSY
<b>ZT 508-26B</b>	1.1/2" (38,10 mm)	1/2" (12,70 mm)	49	<b>ZT 709041</b>
<b>ZT 508-27B</b>	1.1/2" (38,10 mm)	3/4" (19,05 mm)	49	<b>ZT 709042</b>
<b>ZT 508-28B</b>	1.1/2" (38,10 mm)	3/8" (9,53 mm)	49	<b>ZT 709040</b>
<b>ZT 508-29B</b>	1.1/2" (38,10 mm)	5/8" (15,88 mm)	49	<b>ZT 709098</b>
<b>ZT 508-30B</b>	1.1/2" (38,10 mm)	3/8" (9,53 mm)	65	<b>ZT 709040</b>
<b>ZT 508-35B</b>	1.1/2" (38,10 mm)	3/8" (9,53 mm)	36	<b>ZT 709040</b>
<b>ZT 508-36B</b>	1.1/2" (38,10 mm)	1/2" (12,70 mm)	36	<b>ZT 709041</b>
<b>ZT 508-37B</b>	1.1/2" (38,10 mm)	3/4" (19,05 mm)	36	<b>ZT 709042</b>
<b>ZT 508-38B</b>	1.1/2" (38,10 mm)	15/16" (23,81 mm)	49	<b>ZT 708031</b>
<b>ZT 708-20B</b>	1.1/2" (38,10 mm)	1" (25,40 mm)	49	<b>ZT 709043</b>

# Corta soldaduras neumática / PNEUMATIC WELD SHAVER

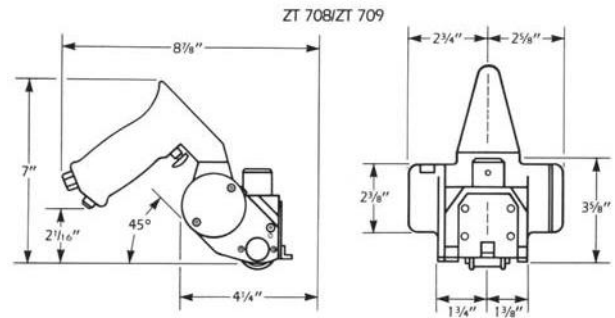
Para trabajar piezas de aluminio, magnesio, cobre y otras aleaciones más suaves

Se ajusta en incrementos de 0,001" Velocidad de 13500 RPM

FOR USE ON ALUMINUM, MAGNESIUM, COPPER AND SOFTER ALLOYS

DEPTH ADJUSTMENT IN INCREMENTS OF .001", CUTTER ROTATION APPR. 13500 RPM

## A ZT 709



apr. 2,7 kg / appr. 6 lbs.

Quita soldaduras a la altura que se seleccione. Corta soldaduras hasta 22,3 mm y 3,18 mm de altura de una pasada. También surca.

REMOVE WELDS TO SURFACE PLANE OR PRE-SELECTED-HIGHT. SHAVE WELDS UP TO 7/8" WIDE BY 0.125 INCHES WITH ONE PASS AND ALSO GROOVES.

Juntas y fresa no se incluyen con la máquina. Especificuelo al hacer su pedido

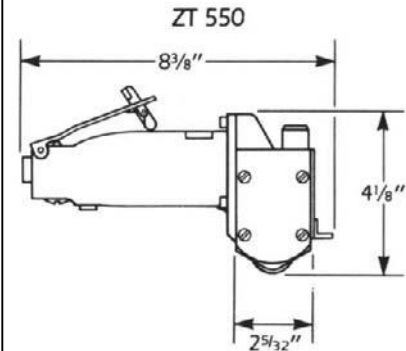
ROLLER ASSEMBLY AND CUTTERS ARE NOT FURNISHED WITH THE MACHINE ! PLEASE SPECIFY AT TIME OF ORDER !

B		ZT 709 Fresa CUTTER			
Art N° PART NO.	MATERIAL	Diámetro DIAMETER	Ancho fresa CUTTER WIDTH	Dientes TEETH	Completo ROLLER SHAFT ASSY Art. Nr. / PART NO.
ZT 509-20	H.S.S.	1.1/2" (38,10 mm)	1/2" (12,70 mm)	15	ZT 709041
ZT 509-21	H.S.S.	1.1/2" (38,10 mm)	3/4" (19,05 mm)	15	ZT 709042
ZT 509-22B	VHM / CARBIDE	1.1/2" (38,10 mm)	1/2" (12,70 mm)	15	ZT 709041
ZT 509-23B	VHM / CARBIDE	1.1/2" (38,10 mm)	3/4" (19,05 mm)	15	ZT 709042
ZT 509-24	H.S.S.	1.1/2" (38,10 mm)	3/8" (9,53 mm)	15	ZT 709040
ZT 509-25B	VHM / CARBIDE	1.1/2" (38,10 mm)	3/8" (9,53 mm)	15	ZT 709040
ZT 509-32B	VHM / CARBIDE	1.1/2" (38,10 mm)	5/8" (15,88 mm)	15	ZT 709098
ZT 509-37B	VHM / CARBIDE	1.1/2" (38,10 mm)	1/2" (12,70 mm)	10	ZT 709041
ZT 509-38B	VHM / CARBIDE	1.1/2" (38,10 mm)	1" (25,40 mm)	15	ZT 709043
ZT 509-39B	VHM / CARBIDE	1.1/2" (38,10 mm)	3/4" (19,05 mm)	8	ZT 709042

C		ZT 709 Fresa GROOVE -CUTTER					
Art N° PART NO.	MATERIAL	Diámetro DIAMETER	Ancho fresa CUTTER WIDTH	Grados Angel	Radius	Diente TEETH	Completo ROLLER SHAFT ASSY Art. Nr. / PART NO.
ZT 509-33	H.S.S.	1.1/2" (38,10 mm)	1/2" (12,70 mm)	75°	.046" (1,17 mm)	10	ZT 709041
ZT 509-36B	placa MD CARBIDE TIP	1.906" (48,41 mm)	1/2" (12,70 mm)	60°	.062" (1,57 mm)	6	ZT 709041
ZT 509-45B	placa MD CARBIDE TIP	1.687" (42,85 mm)	1/2" (12,70 mm)	88°	.062" (1,57 mm)	6	ZT 709041

## Corta soldaduras neumática ligera LIGHT DUTY PNEUMATIC WELD SHAVER

Para trabajar en aluminio magnesio, cobre y aleaciones suaves Se ajusta en incrementos de 0,0127 mm. Velocidad 15000 UPM FOR USE ON ALUMINUM, MAGNESIUM, COPPER AND SOFTER ALLOYS  
DEPTH ADJUSTMENT IN INCREMENTS OF .0005" CUTTER ROTATION APPR. 15000 RPM

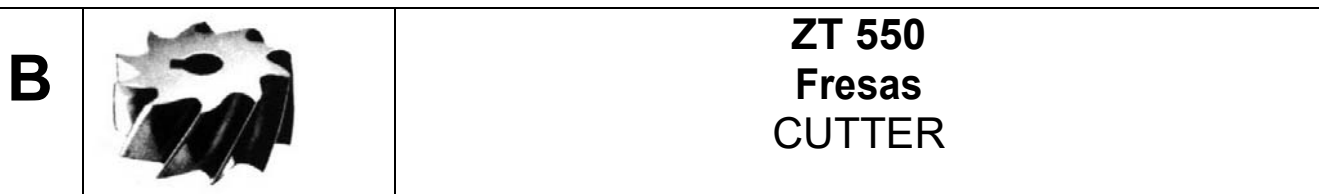


apr. 1,7 kg / appr. 3.3/4 lbs.

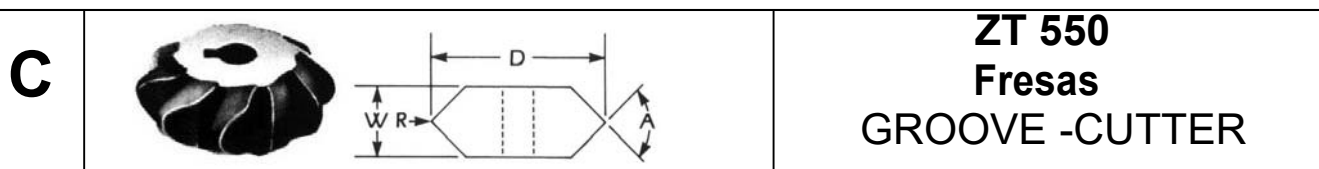
Quita soldaduras a la altura que se seleccione. Corta soldaduras hasta 12,7 mm de ancho, y hace ranuras de hasta 9,53 mm de ancho.

REMOVE WELDS TO SURFACE PLANE OR PRE-SELECTED-HIGHT.  
SHAVE WELDS UP TO 1/2" WIDE AND GROOVES UP TO 3/8".

**Juntas y fresa no se incluyen con la máquina. Especificuelo al hacer su pedido**  
ROLLER ASSEMBLY AND CUTTERS ARE NOT FURNISHED WITH THE MACHINE ! PLEASE SPECIFY AT TIME OF ORDER !



Art N°. PART NO.	MATERIAL	Diámetro DIAMETER	Ancho fresa CUTTER WIDTH	Dientes TEETH	Completo ROLLER SHAFT ASSY Art. Nr. / PART NO.
ZT 550-21	H.S.S.	1.1/8" (28,58 mm)	3/8" (9,53 mm)	10	ZT 550069
ZT 550-23	H.S.S.	1.1/8" (28,58 mm)	1/2" (12,70 mm)	10	ZT 550070
ZT 550-30	MD / CARBIDE	1.1/8" (28,58 mm)	1/4" (6,35 mm)	10	ZT 550069
ZT 550-31	MD / CARBIDE	1.1/8" (28,58 mm)	3/8" (9,53 mm)	10	ZT 550069
ZT 550-32	MD / CARBIDE	1.1/8" (28,58 mm)	1/2" (12,70 mm)	10	ZT 550070



Art N° PART NO.	MATERIAL	Diámetro DIAMETER	Ancho fresa CUTTER WIDTH	Grados Angel	Radius	Dientes TEETH	Completo ROLLER SHAFT ASSY Art. Nr. / PART NO.
ZT 550-29	H.S.S.	1.5/16" (33,34 mm)	3/8" (9,53 mm)	60°	.062" 1,57 mm	6	ZT 550069
ZT 550-40	H.S.S.	1.31/64" (37,70 mm)	3/8" (9,53 mm)	40°	.062" 1,57 mm	8	ZT 550069
ZT 550-41	H.S.S.	1.5/16" (33,34 mm)	3/8" (9,53 mm)	40°	.062" 1,57 mm	6	ZT 550069

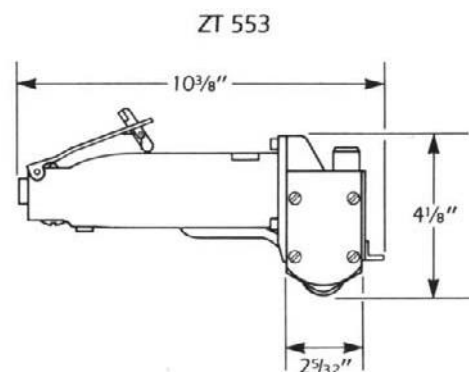
## Corta soldaduras neumática ligera LIGHT DUTY PNEUMATIC WELD SHAVER

Para trabajar en aluminio magnesio, cobre y aleaciones suaves Se ajusta en incrementos de 0,0127 mm. Velocidad 15000 UPM

FOR USE ON TITANIUM, STAINLESS STEEL, MONEL AND SIMILAR HIGH STRENGTH MATERIALS  
DEPTH ADJUSTMENT IN INCREMENTS OF .0005", CUTTER ROTATION APPR. 3500 RPM

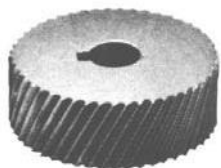
**A**

**ZT 553**



Apr. 2,3 kg / appr. 5 lbs.

**B**

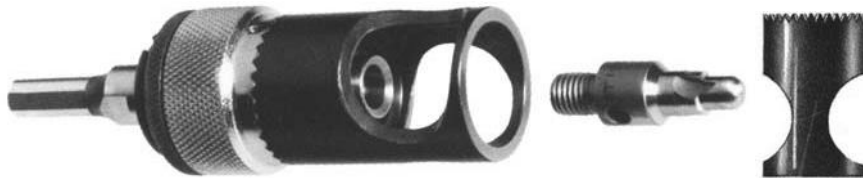


**ZT 553**

**Hartmetall-Walzenfräser ohne Spanbrecher  
CARBIDE CUTTER WITHOUT CHIPBREAKER**

Art N° PART NO.	MATERIAL	Diámetro DIAMETER	Ancho fresa CUTTER WIDTH	Dientes TEETH	Completo ROLLER SHAFT ASSY Art. Nr. / PART NO.
<b>ZT 553-26</b>	VHM / CARBIDE	1.1/8" (28,58 mm)	1/2" (12,70 mm)	34	<b>ZT 550070</b>
<b>ZT 553-28</b>	VHM / CARBIDE	1.1/8" (28,58 mm)	3/8" (9,53 mm)	34	<b>ZT 550069</b>

**CARCASAS Y FRESAS  
PARA  
PINZAS BRILES  
MICROSTOPS  
AND COUNTERSINK CUTTER  
FOR BRILES FASTENERS**



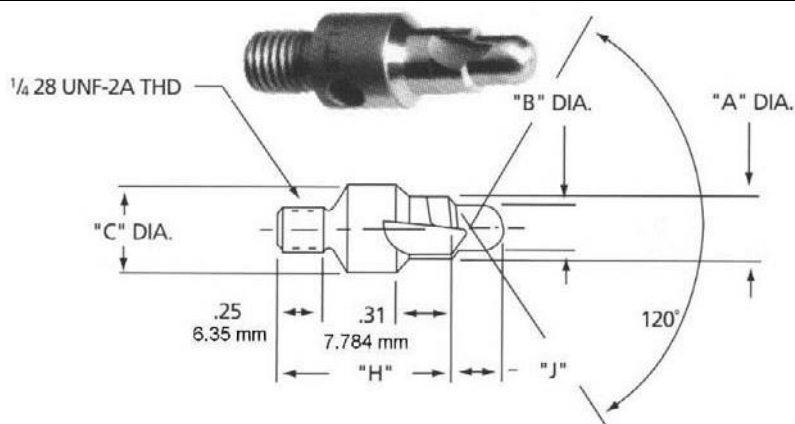
**441-HSBR...**

**438BRC-...**

**440-9X**

**440-LF-1X**

Art N° PART-NO.	Rosca THREAD	Diámetro fresa máx MAX. CUTTER DIA	ajuste profundidad DEPTH ADJUSTMENT	Tipo carcasa TYPE OF SKIRT
<b>441-HSBRF</b>	<b>1/4"-28</b>	<b>15,87 mm / 5/8"</b>	<b>.001 (0,025 mm)</b>	<b>Metal/ STEEL 440LF-1X</b>
<b>441-HSBR S</b>	<b>1/4"-28</b>	<b>15,87 mm / 5/8"</b>	<b>.001 (0,025 mm)</b>	<b>Metal / STEEL 440-9X</b>

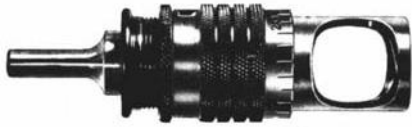


**438BRC-....**

Art N° PART NO.	Remache RIVET SIZE	Rosca THREAD	<b>C</b>	<b>A</b>	<b>B</b>	<b>H</b>	<b>J</b>
<b>438BRC-4</b>	<b>1/8"</b> 3,18 mm	<b>1/4"-28</b>	<b>3/8"</b> 9,53 mm	<b>.1625</b> 4,13 mm	<b>.126</b> 3,20 mm	<b>.952</b> 24,18 mm	<b>.200</b> 5,08 mm
<b>438BRC-5</b>	<b>5/32"</b> 3,96 mm	<b>1/4"-28</b>	<b>3/8"</b> 9,53 mm	<b>.2105</b> 5,35 mm	<b>.159</b> 4,04 mm	<b>.955</b> 24,26 mm	<b>.220</b> 5,59 mm
<b>438BRC-6</b>	<b>3/16"</b> 4,76 mm	<b>1/4"-28</b>	<b>3/8"</b> 9,53 mm	<b>.2585</b> 6,57 mm	<b>.191</b> 4,85 mm	<b>.958</b> 24,33 mm	<b>.250</b> 6,35 mm
<b>438BRC-7</b>	<b>7/32"</b> 5,56 mm	<b>1/4"-28</b>	<b>3/8"</b> 9,53 mm	<b>.3125</b> 7,94 mm	<b>.226</b> 5,74 mm	<b>.962</b> 24,43 mm	<b>.280</b> 7,11 mm
<b>438BRC-8</b>	<b>1/4"</b> 6,35 mm	<b>1/4"-28</b>	<b>1/2"</b> 12,7 mm	<b>.3585</b> 9,11 mm	<b>.255</b> 6,48 mm	<b>.966</b> 24,54 mm	<b>.280</b> 7,11 mm

**Carcasas micrométricas max. 3000 RPM**  
**MICRO-STOP-COUNTERSINKS FOR SPEEDS UP TO 3000 RPM**

**A**



Longitud / LENGTH 83 mm / 3.1/4"  
 Incrementos / INCREMENTS 0.025 mm/ 0.001"  
 max. recorrido / MAX. TRAVEL 7,14 mm / 9/32"  
 Diámetro mango / SPINDLE DIA 6,35 mm / 1/4"

**Carcasas / SKIRTS**



Tipo/ TYPE : **S** **W** **SP** **WP**  
 Art.Nº / PART NO.: ZT33004 ZT330015 ZT33005 \* ZT330013 \*

\* Sin arandela de metal o nylon / Without Steel-/or Nylon-Footplate !

Tipo TYPE	Art Nº PART-NO.	Rosca THREAD	Diam. máximo MAX. CUTTER DIA	Tipo de carcasa TYPE OF SKIRT
<b>S</b>	<b>ZT 330-S</b>	<b>1/4"-28</b>	15,87 mm / <b>5/8"</b>	Standard, Metal / STANDARD, STEEL
<b>W</b>	<b>ZT 330-W</b>	<b>1/4"-28</b>	19,05 mm / <b>3/4"</b>	De campana, metal/ BELL-TYPE, STEEL
<b>SP</b>	<b>ZT 330-SP-S</b>	<b>1/4"-28</b>	15,87 mm / <b>5/8"</b>	Arandela metal / STEEL-FOOTPLATE
<b>SP</b>	<b>ZT 330-SP-N</b>	<b>1/4"-28</b>	15,87 mm / <b>5/8"</b>	Arandela nylon / NYLON FOOTPLATE
<b>WP</b>	<b>ZT 330-WP-S</b>	<b>1/4"-28</b>	19,05 mm / <b>3/4"</b>	Arandela metal/ STEEL-FOOTPLATE
<b>WP</b>	<b>ZT 330-WP-N</b>	<b>1/4"-28</b>	19,05 mm / <b>3/4"</b>	Arandela nylon / NYLON FOOTPLATE
<b>S</b>	<b>ZT 330-S-M6x1</b>	<b>M6 x 1</b>	15,87 mm / <b>5/8"</b>	Standard, Stahl / STANDARD, STEEL
<b>W</b>	<b>ZT 330-W-M6x1</b>	<b>M6 x 1</b>	19,05 mm / <b>3/4"</b>	Glockenform, Stahl / BELL-TYPE, STEEL
<b>SP</b>	<b>ZT 330-SP-S-M6x1</b>	<b>M6 x 1</b>	15,87 mm / <b>5/8"</b>	Stahl-Ring / STEEL-FOOTPLATE
<b>SP</b>	<b>ZT 330-SP-N-M6x1</b>	<b>M6 x 1</b>	15,87 mm / <b>5/8"</b>	Nylon-Ring / NYLON FOOTPLATE
<b>WP</b>	<b>ZT 330-WP-S-M6x1</b>	<b>M6 x 1</b>	19,05 mm / <b>3/4"</b>	Stahl-Ring / STEEL-FOOTPLATE
<b>WP</b>	<b>ZT 330-WP-N-M6x1</b>	<b>M6 x 1</b>	19,05 mm / <b>3/4"</b>	Nylon-Ring / NYLON FOOTPLATE

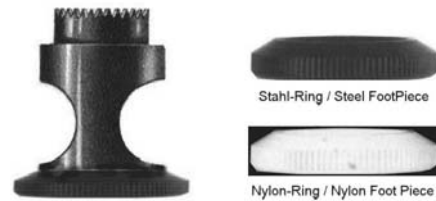
	Arandela metal "SP" Steel-Insert for "SP"	Arandela nylon "SP" Nylon-Insert for "SP"	Arandela metal "WP" Steel-Insert for "WP"	Arandela nylon "WP" Nylon-Insert for "WP"
Artikel Nr./PART NO.:	<b>ZT 33006</b>	<b>ZT 330014</b>	<b>ZT 330010</b>	<b>ZT 330021</b>

**B**



Longitud / LENGTH 89 mm / 3.1/2"  
 Incrementos / INCREMENTS 0.025 mm/0.001"  
 recorrido / MAX. TRAVEL 7,94 mm / 5/16"  
 Diámetro mango / SPINDLE DIA 6,35 mm / 1/4"

**Carcasa con rosca exterior**  
**SKIRT WITH EXTERNAL THREAD**



Art. Nº **S578E \*** **F578EB** (Metal/Steel)  
 PART NO. **F578EN** (Nylon)

\* Sin arandela de metal o nylon ! / Without Steel-/or Nylon-Footplate !

Art Nº PART-NO.	Rosca THREAD	Diámetro fresa MAX. CUTTER DIA	Tipo de carcasa TYPE OF SKIRT
<b>BE 565</b>	<b>M8 x1</b>	16,00 mm / <b>5/8"</b>	Standard, metal / STANDARD, STEEL
<b>BE 578</b>	<b>M8 x1</b>	21,00 mm / <b>53/64"</b>	Standard, metal / STANDARD, STEEL
<b>BE 578 EB</b>	<b>M8 x1</b>	21,00 mm / <b>53/64"</b>	Arandela metal / STEEL-FOOTPLATE
<b>BE 578 EN</b>	<b>M8 x1</b>	21,00 mm / <b>53/64"</b>	Arandela nylon / NYLON FOOTPLATE

**Carcasa micrométrica hasta 5000 RPM**  
**HIGH SPEED MICROSTOP COUNTERSINKS UP TO 5000 RPM**



**441**

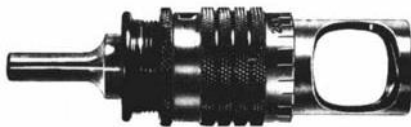
Longitud / LENGTH 89 mm / 3.1/2"  
 Incrementos / INCREMENTS 0.025 mm / 0.001"  
 recorrido / MAX. TRAVEL 7,94 mm / 5/16"  
 diámetro mango / SPINDLE DIA 6,35 mm / 1/4"

**Carcasa / SKIRTS**



Tipo / TYPE : **S D F A**  
 Art N° / PART NO.: 440-9X 440LD-9X 440LF-1X 440A-1X

Tipo TYPE	Art N° PART-NO.	Rosca THREAD	Diámetro fresa MAX. CUTTER DIA	Tipo de carcasa TYPE OF SKIRT
<b>S</b>	<b>441-HSS</b>	<b>1/4"-28</b>	15,87 mm / <b>5/8"</b>	Standard, metal / STANDARD, STEEL
<b>D</b>	<b>441-HSD</b>	<b>1/4"-28</b>	19,05 mm / <b>3/4"</b>	Campanoide, metal / BELL-TYPE, STEEL
<b>F</b>	<b>441-HSF</b>	<b>1/4"-28</b>	15,87 mm / <b>5/8"</b>	Metal / FLANGE-TYPE, STEEL
<b>A</b>	<b>441-HSA</b>	<b>1/4"-28</b>	14,28 mm / <b>9/16"</b>	PHENOLIC INSERT
<b>S</b>	<b>441-HSS-M6x1</b>	<b>M6 X 1</b>	15,87 mm / <b>5/8"</b>	Standard, Metal / STANDARD, STEEL
<b>D</b>	<b>441-HSD-M6x1</b>	<b>M6 x 1</b>	19,05 mm / <b>3/4"</b>	Campanoide metal / BELL-TYPE, STEEL
<b>F</b>	<b>441-HSF-M6x1</b>	<b>M6 x 1</b>	15,87 mm / <b>5/8"</b>	Metal / FLANGE-TYPE, STEEL
<b>A</b>	<b>441-HSA-M6x1</b>	<b>M6 x 1</b>	14,28 mm / <b>9/16"</b>	PHENOLIC INSERT



**ZT663**

Longitud / LENGTH 89 mm / 3.1/2"  
 Incrementos / INCREMENTS 0.0125 mm / 0.0005"  
 recorrido / MAX. TRAVEL 7,14 mm / 9/32"  
 diámetro mango/SPINDLE DIA 6,35 mm / 1/4"

**Carcasas / SKIRTS**



Tipo / TYPE : **S W SP WP**  
 Art.N° / PART NO.: \* \* \* \*

\* Sin arandela de metal o nylon / Without Steel-/or Nylon-Footplate !

Tipo TYPE	Art N° PART-NO.	Rosca THREAD	Fresa MAX. CUTTER DIA	Tipo de carcasa TYPE OF SKIRT
<b>S</b>	<b>ZT 663-S</b>	<b>1/4"-28</b>	15,87 mm / <b>5/8"</b>	Standard, metal / STANDARD, STEEL
<b>W</b>	<b>ZT 663-W</b>	<b>1/4"-28</b>	22,23 mm / <b>7/8"</b>	Campanoide, metal / BELL-TYPE, STEEL
<b>SP</b>	<b>ZT 663-SP-S</b>	<b>1/4"-28</b>	15,87 mm / <b>5/8"</b>	Arandela metálica / STEEL-FOOTPLATE
<b>SP</b>	<b>ZT 663-SP-N</b>	<b>1/4"-28</b>	15,87 mm / <b>5/8"</b>	Arandela nylon / NYLON FOOTPLATE
<b>WP</b>	<b>ZT 663-WP-S</b>	<b>1/4"-28</b>	22,23 mm / <b>7/8"</b>	Arandela metálica / STEEL-FOOTPLATE
<b>WP</b>	<b>ZT 663-WP-N</b>	<b>1/4"-28</b>	22,23 mm / <b>7/8"</b>	Arandela nylon / NYLON FOOTPLATE
<b>S</b>	<b>ZT 663-S-M6</b>	<b>M6 x 1</b>	15,87 mm / <b>5/8"</b>	Standard, metal / STANDARD, STEEL
<b>W</b>	<b>ZT 663-W-M6</b>	<b>M6 x 1</b>	22,23 mm / <b>7/8"</b>	Campanoide metal / BELL-TYPE, STEEL
<b>SP</b>	<b>ZT 663-SP-S-M6</b>	<b>M6 x 1</b>	15,87 mm / <b>5/8"</b>	Arandela metálica / STEEL-FOOTPLATE
<b>SP</b>	<b>ZT 663-SP-N-M6</b>	<b>M6 x 1</b>	15,87 mm / <b>5/8"</b>	Arandela nylon / NYLON FOOTPLATE
<b>WP</b>	<b>ZT 663-WP-S-M6</b>	<b>M6 x 1</b>	22,23 mm / <b>7/8"</b>	Arandela metálica / STEEL-FOOTPLATE
<b>WP</b>	<b>ZT 663-WP-N-M6</b>	<b>M6 x 1</b>	22,23 mm / <b>7/8"</b>	Arandela nylon / NYLON FOOTPLATE

**Carcasa micrométrica con mango basculante**  
**5° de diferencia entre el eje del mango y el de la fresa para**  
**velocidades hasta 6000 RPM**  
**HIGH SPEED MICROSTOP COUNTERSINKS WITH SWIVEL SHANK**  
**5° DIFFERENCE BETWEEN THE SPINDLE AXIS AND CUTTER AXIS**  
**FOR SPEEDS UP TO 6000 RPM**



**ZT666 & ZT667 & ZT668**

Longitud / LENGTH 89 mm / 3.1/2"  
 Incrementos / INCREMENTS 0.025 mm / 0.001"  
 recorrido / MAX. TRAVEL 6,00 mm / .2362"  
 Diámetro mango/SPINDLE DIA 6,00mm/ .2362"

**Carcasas / SKIRTS**



**SP**







**WP**




Tipo/TYPE :  
 Art. N°/PART NO. : **ZT666016 \*** **ZT666021 \***

\* Sin arandela de metal o nylon / Without Steel-/or Nylon-Footplate !

Tipo TYPE	Art N° PART-NO.	Rosca THREAD	Fresa MAX. CUTTER DIA	Tipo de carcasa TYPE OF SKIRT
<b>SP</b>	<b>ZT 666-SP-SI</b>	<b>M6 x 1</b>	<b>14 mm / 9/16"</b>	<b>Arandela metálica / STEEL-FOOTPLATE</b>
<b>SP</b>	<b>ZT 666-SP-NI</b>	<b>M6 x 1</b>	<b>14 mm / 9/16"</b>	<b>Arandela nylon / NYLON FOOTPLATE</b>
<b>SP</b>	<b>ZT 666-SP-SE</b>	<b>M6 x 1</b>	<b>17 mm / 11/16"</b>	<b>Arandela metálica / STEEL-FOOTPLATE</b>
<b>SP</b>	<b>ZT 666-SP-NE</b>	<b>M6 x 1</b>	<b>17 mm / 11/16"</b>	<b>Arandela nylon / NYLON FOOTPLATE</b>
<b>WP</b>	<b>ZT 666-WP-SE</b>	<b>M6 x 1</b>	<b>21 mm / 13/16"</b>	<b>Arandela metálica / STEEL-FOOTPLATE</b>
<b>WP</b>	<b>ZT 666-WP-NE</b>	<b>M6 x 1</b>	<b>21 mm / 13/16"</b>	<b>Arandela nylon / NYLON FOOTPLATE</b>
				<b>Arandela metálica / STEEL-FOOTPLATE</b>
<b>SP</b>	<b>ZT 667-SP-NI</b>	<b>M8 x 1</b>	<b>14 mm / 9/16"</b>	<b>Arandela nylon / NYLON FOOTPLATE</b>
<b>SP</b>	<b>ZT 667-SP-SE</b>	<b>M8 x 1</b>	<b>17 mm / 11/16"</b>	<b>Arandela metálica / STEEL-FOOTPLATE</b>
<b>SP</b>	<b>ZT 667-SP-NE</b>	<b>M8 x 1</b>	<b>17 mm / 11/16"</b>	<b>Arandela nylon / NYLON FOOTPLATE</b>
<b>WP</b>	<b>ZT 667-WP-SE</b>	<b>M8 x 1</b>	<b>21 mm / 13/16"</b>	<b>Arandela metálica / STEEL-FOOTPLATE</b>
<b>WP</b>	<b>ZT 667-WP-NE</b>	<b>M8 x 1</b>	<b>21 mm / 13/16"</b>	<b>Arandela nylon / NYLON FOOTPLATE</b>
				<b>Arandela metálica / STEEL-FOOTPLATE</b>
<b>SP</b>	<b>ZT 668-SP-SI</b>	<b>1/4"-28</b>	<b>14 mm / 9/16"</b>	<b>Arandela metálica / STEEL-FOOTPLATE</b>
<b>SP</b>	<b>ZT 668-SP-NI</b>	<b>1/4"-28</b>	<b>14 mm / 9/16"</b>	<b>Arandela nylon / NYLON FOOTPLATE</b>
<b>SP</b>	<b>ZT 668-SP-SE</b>	<b>1/4"-28</b>	<b>17 mm / 11/16"</b>	<b>Arandela metálica / STEEL-FOOTPLATE</b>
<b>SP</b>	<b>ZT 668-SP-NE</b>	<b>1/4"-28</b>	<b>17 mm / 11/16"</b>	<b>Arandela nylon / NYLON FOOTPLATE</b>
<b>WP</b>	<b>ZT 668-WP-SE</b>	<b>1/4"-28</b>	<b>21 mm / 13/16"</b>	<b>Arandela metálica / STEEL-FOOTPLATE</b>
<b>WP</b>	<b>ZT 668-WP-NE</b>	<b>1/4"-28</b>	<b>21 mm / 13/16"</b>	<b>Arandela nylon / NYLON FOOTPLATE</b>

	<b>SI/NI rosca interior / FOR INTERNAL THREAD</b>		<b>SE/NE rosca externa / FOR EXTERNAL THREAD</b>	
	Metal/Steel-Footplate	Nylon/Nylon-Footplate	Metal/Steel-Footplate	Nylon/Nylon-Footplate
	 <b>SI</b>	 <b>NI</b>	 <b>SE</b>	 <b>NE</b>
<b>Carcasa FOR SKIRT:</b>	<b>Art N° / PART NO. :</b>	<b>Art N° / PART NO. :</b>	<b>Art N° / PART NO. :</b>	<b>Art N° / PART NO. :</b>
<b>Type -SP-</b>	<b>ZT 666017</b>	<b>ZT 666018</b>	<b>ZT 666019</b>	<b>ZT 666020</b>
<b>Type -WP-</b>	<b>-----</b>	<b>-----</b>	<b>ZT 666022</b>	<b>ZT 666023</b>

**Carcasa micrométrica hasta 3000 RPM**  
**MICRO-STOP-COUNTERSINKS FOR SPEEDS UP TO 3000 RPM**

 <b>ZT331</b> Longitud / LENGTH 151 mm / 5.15/16" Incrementos / INCREMENTS 0.025 mm/0.001" Recorrido / MAX. TRAVEL 12,7 mm / 1/2" Diámetro mango / SPINDLE DIA 7,94 mm / 5/16"	<b>Carcasas / SKIRTS</b>			
	   			
	Tipo/ TYPE : <b>S W SP WP</b> Art.Nº / PART NO.: ZT33104 ZT331017 ZT331021 * ZT331023 * * Sin arandela metálica o de nylon / Without Steel-/or Nylon-Footplate !			

Tipo TYPE	Art N° PART-NO.	Rosca THREAD	Fresa MAX. CUTTER DIA	Tipo de carcasa TYPE OF SKIRT
<b>S</b>	<b>ZT 331-S</b>	<b>3/8"-24</b>	22,23 mm / <b>7/8"</b>	Standard, Metal / STANDARD, STEEL
<b>W</b>	<b>ZT 331-W</b>	<b>3/8"-24</b>	34,93 mm / <b>1.3/8"</b>	Campanoide metal / BELL-TYPE, STEEL
<b>SP</b>	<b>ZT 331-SP-S</b>	<b>3/8"-24</b>	22,23 mm / <b>7/8"</b>	Arandela metal / STEEL-FOOTPLATE
<b>SP</b>	<b>ZT 331-SP-N</b>	<b>3/8"-24</b>	22,23 mm / <b>7/8"</b>	Arandela nylon / NYLON FOOTPLATE
<b>WP</b>	<b>ZT 331-WP-S</b>	<b>3/8"-24</b>	34,93 mm / <b>1.3/8"</b>	Arandela metal / STEEL-FOOTPLATE
<b>WP</b>	<b>ZT 331-WP-N</b>	<b>3/8"-24</b>	34,93 mm / <b>1.3/8"</b>	Arandela nylon / NYLON FOOTPLATE

	<b>Arandela metal"SP"</b> Steel-Insert for "SP"	<b>Arandela Nylon"SP"</b> Nylon-Insert for "SP"	<b>Arandela metal"WP"</b> Steel-Insert for "WP"	<b>Arandela Nylon "WP"</b> Nylon-Insert for "WP"
Art N°/PART NO.:	<b>ZT 331028</b>	<b>ZT 331022</b>	<b>ZT 331029</b>	<b>ZT 331024</b>

 <b>ZT334</b> Longitud / LENGTH 151 mm / 5.15/16" Incrementos / INCREMENTS 0.025 mm/0.001" Recorrido / MAX. TRAVEL 12,7 mm / 1/2" Diámetro mango / SPINDLE DIA 7,94 mm / 5/16"	<b>Carcasa / SKIRTS</b>			
	   			
	Tipo / TYPE : <b>S W SP WP</b> Art.Nº / PART NO.: ZT33104 ZT33402 ZT331021 * ZT33406 * * Sin arandela de metal o nylon / Without Steel-/or Nylon-Footplate !			

Tipo TYPE	Art N° PART-NO.	Rosca THREAD	Fresa MAX. CUTTER DIA	Tipo de carcasa TYPE OF SKIRT
<b>S</b>	<b>ZT 334-S</b>	<b>7/16"-20</b>	22,23 mm / <b>7/8"</b>	Standard, Metal / STANDARD, STEEL
<b>W</b>	<b>ZT 334-W</b>	<b>7/16"-20</b>	38,10 mm / <b>1.1/2"</b>	Campanoide, metal / BELL-TYPE, STEEL
<b>SP</b>	<b>ZT 334-SP-S</b>	<b>7/16"-20</b>	22,23 mm / <b>7/8"</b>	Arandela metal / STEEL-FOOTPLATE
<b>SP</b>	<b>ZT 334-SP-N</b>	<b>7/16"-20</b>	22,23 mm / <b>7/8"</b>	Arandela nylon / NYLON FOOTPLATE
<b>WP</b>	<b>ZT 334-WP-N</b>	<b>7/16"-20</b>	38,10 mm / <b>1.1/2"</b>	Arandela nylon / NYLON FOOTPLATE

	<b>Arandela metal"SP"</b> Steel-Insert for "SP"	<b>Arandela Nylon"SP"</b> Nylon-Insert for "SP"	<b>Arandela metal"WP"</b> Steel-Insert for "WP"	<b>Arandela nylon "WP"</b> Nylon-Insert for "WP"
Art N°/PART NO.:	<b>ZT 331028</b>	<b>ZT 331022</b>	-----	<b>ZT 33407</b>

**Carcasa micrométrica hasta 3000 UPM**  
**MICRO-STOP-COUNTERSINKS FOR SPEEDS UP TO 3000 RPM**



**432**

Longitud / LENGTH 170 mm / **6.11/16"**  
 Incrementos / INCREMENTS 0,025 mm / **0.001"**  
 Recorrido / MAX. TRAVEL 12,7 mm / **1/2"**  
 Diámetro mango / SPINDLE DIA 9,53 mm / **3/8"**

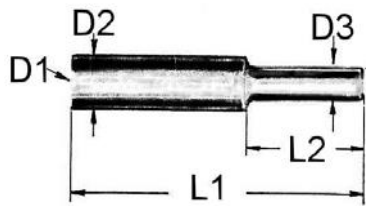
Art N° PART-NO.	Rosca THREAD	Fresa MAX. CUTTER DIA	Tipo de carcasa TYPE OF SKIRT
<b>432 A</b>	<b>7/16"-20</b>	<b>31,75 mm / 1.1/4"</b>	<b>Campanoide, metal / BELL-TYPE, STEEL</b>
<b>432 B</b>	<b>3/8"-24</b>	<b>31,75 mm / 1.1/4"</b>	<b>Campanoide, metal / BELL-TYPE, STEEL</b>



**462**

Longitud / LENGTH 170 mm / **6.11/16"**  
 Incrementos / INCREMENTS 0,08 mm / **0.003"**  
 Recorrido / MAX. TRAVEL 12,7 mm / **1/2"**  
 Diámetro mango / SPINDLE DIA 9,53 mm / **3/8"**

Art N° PART-NO.	Rosca THREAD	Fresa hasta MAX. CUTTER DIA	Tipo de carcasa TYPE OF SKIRT
<b>462 A</b>	<b>3/8"-24</b>	<b>22,23 mm / 7/8"</b>	<b>Standard, Stahl / STANDARD, STEEL</b>
<b>462 B</b>	<b>3/8"-24</b>	<b>31,75 mm / 1.1/4"</b>	<b>Glockenform, Stahl / BELL-TYPE, STEEL</b>



**Para avellanadores**  
 HOLDER WITH INTERNAL THREAD  
 FOR COUNTERSINK CUTTERS AND HOLLOW CUTTERS

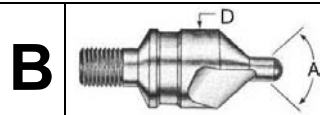
Art. N° PART NO.	D1	L1	L2	D2	D3
<b>202 001</b>	<b>M 6 x 1</b>	<b>22 mm (0.866")</b>	<b>8 mm (0.315")</b>	<b>10 mm (0.394")</b>	<b>4 mm (0.158")</b>
<b>202 002</b>	<b>M 6 x 1</b>	<b>32 mm (1.260")</b>	<b>15 mm (0.591")</b>	<b>10 mm (0.394")</b>	<b>6 mm (0.236")</b>
<b>202 003</b>	<b>1/4"- 28</b>	<b>32 mm (1.260")</b>	<b>15 mm (0.591")</b>	<b>10 mm (0.394")</b>	<b>6 mm (0.236")</b>
<b>202 006</b>	<b>M 6 x 1</b>	<b>50 mm (1.969")</b>	<b>20 mm (0.787")</b>	<b>10 mm (0.394")</b>	<b>6 mm (0.236")</b>
<b>202 007</b>	<b>1/4"- 28</b>	<b>50 mm (1.969")</b>	<b>20 mm (0.787")</b>	<b>10 mm (0.394")</b>	<b>6 mm (0.236")</b>
<b>202 010</b>	<b>M 8 x 1</b>	<b>50 mm (1.969")</b>	<b>20 mm (0.787")</b>	<b>12 mm (0.472")</b>	<b>6 mm (0.236")</b>
<b>202 011</b>	<b>3/8"-24</b>	<b>50 mm (1.969")</b>	<b>20 mm (0.787")</b>	<b>14 mm (0.551")</b>	<b>6 mm (0.236")</b>
<b>202 034</b>	<b>1/4"- 28</b>	<b>70 mm (2.756")</b>	<b>25 mm (0.984")</b>	<b>10 mm (0.394")</b>	<b>6 mm (0.236")</b>

Avellanadores 100° HSS  
100° HSS - COUNTERSINK CUTTERS



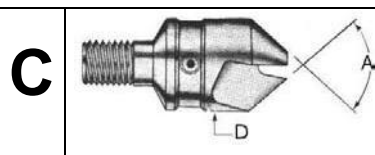
**3 hélices, con guía fija y rosca 1/4"-28**  
3-FLUTES, WITH SOLID PILOT, THREAD 1/4"-28

Diámetro BODY-DIA.	6,35 mm 1/4"	7,94 mm 5/16"	9,53 mm 3/8"	11,1 mm 7/16"	12,7 mm 1/2"	14,3 mm 9/16"	15,9 mm 5/8"
Guía PILOT DIA.	Art-Nº PART NO.	Art-Nº PART NO.	Art-Nº PART NO.	Art-Nº PART NO.	Art-Nº PART NO.	Art-Nº PART NO.	Art-Nº PART NO.
	<b>SPECIAL</b>	<b>SPECIAL</b>	<b>SPECIAL</b>	Standard	<b>SPECIAL</b>	<b>SPECIAL</b>	<b>SPECIAL</b>
2,38 / 3/32"	420A4-3/32"	420B4-3/32"	420C4-3/32"	420D4-3/32"	420E4-3/32"		
2,50 / #40	420A4-#40	420B4-#40	420C4-#40	420D4-#40	420E4-#40		
3,18 / 1/8"	420A4-1/8"	420B4-1/8"	420C4-1/8"	420D4-1/8"	420E4-1/8"		
3,26 / #30	420A4-#30	420B4-#30	420C4-#30	420D4-#30	420E4-#30		
3,97 / 5/32"			420C4-5/32"	420D4-5/32"	420E4-5/32"	420F4-5/32"	420G4-5/32"
4,04 / #21			420C4-#21	420D4-#21	420E4-#21	420F4-#21	420G4-#21
4,76 / 3/16"				420D-3/16"	420E4-3/16"	420F4-3/16"	420G4-3/16"
4,91 / #10					420E4-#10	420F4-#10	420G4-#10
6,35 / 1/4"					420E4-1/4"	420F4-1/4"	420G4-1/4"



**2 hélices, con guía fija, rosca 1/4"-28**  
2-FLUTES, WITH SOLID PILOT, THREAD 1/4"-28

Diámetro BODY-DIA.	6,35 mm 1/4"	7,94 mm 5/16"	9,53 mm 3/8"	11,1 mm 7/16"	12,7 mm 1/2"	14,3 mm 9/16"	15,9 mm 5/8"
Guía PILOT DIA.	Art-Nº PART NO.	Art-Nº PART NO.	Art-Nº PART NO.	Art-Nº PART NO.	Art-Nº PART NO.	Art-Nº PART NO.	Art-Nº PART NO.
	<b>SPECIAL</b>	<b>SPECIAL</b>	<b>SPECIAL</b>	<b>SPECIAL</b>	Standard	<b>SPECIAL</b>	<b>SPECIAL</b>
2,38 / 3/32"	445A4-3/32"	445B4-3/32"	445C4-3/32"	445D4-3/32"	445E4-3/32"		
2,50 / #40	445A4-#40	445B4-#40	445C4-#40	445D4-#40	445E4-#40		
3,18 / 1/8"	445A4-1/8"	445B4-1/8"	445C4-1/8"	445D4-1/8"	445E4-1/8"		
3,26 / #30	445A4-#30	445B4-#30	445C4-#30	445D4-#30	445E4-#30		
3,97 / 5/32"			445C4-5/32"	445D4-5/32"	445E4-5/32"	445F4-5/32"	445G4-5/32"
4,04 / #21			445C4-#21	445D4-#21	445E4-#21	445F4-#21	445G4-#21
4,76 / 3/16"				445D-3/16"	445E4-3/16"	445F4-3/16"	445G4-3/16"
4,91 / #10					445E4-#10	445F4-#10	445G4-#10
6,35 / 1/4"					445E4-1/4"	445F4-1/4"	445G4-1/4"



**2 hélices, rosca 1/4"-28**  
**para guías reemplazables de mango 2,18 mm**  
2-FLUTES, THREAD 1/4"-28,  
FOR REPLACEABLE PILOTS WITH SHANK .086"

Diámetro BODY-DIA.	6,35 mm 1/4"	7,94 mm 5/16"	9,53 mm 3/8"	11,1 mm 7/16"	12,7 mm 1/2"	14,3 mm 9/16"	15,9 mm 5/8"
	<b>SPECIAL</b>	<b>SPECIAL</b>	Standard	Standard	Standard	<b>SPECIAL</b>	Standard
Art N° PART NO.	<b>455A-4</b>	<b>455B-4</b>	<b>455C-4</b>	<b>455D-4</b>	<b>455E-4</b>	<b>455F-4</b>	<b>455G-4</b>



**Guías reemplazables mango 2,18 mm, para "455..."**  
REPLACEABLE PILOTS WITH SHANK .086" FOR CUTTER "455..."

Guía=D PILOT =D	2,38 mm 3/32"	2,50 mm #40	3,18 mm 1/8"	3,26 mm #30	3,97 mm 5/32"	4,04 mm #21	4,76 mm 3/16"	4,85 mm #11	4,91 mm #10	5,56 mm 7/32"	6,35 mm 1/4"
Art N° PART NO.	<b>484-56</b>	<b>484-2</b>	<b>484-57</b>	<b>484-12</b>	<b>484-59</b>	<b>484-21</b>	<b>484-61</b>	<b>484-31</b>	<b>484-32</b>	<b>484-63</b>	<b>484-65</b>

Otras medidas y ángulos bajo pedido / OTHER DIMENSION AND ANGLES ON REQUEST !

Avellanadores 100° HSSCO  
**100° COBALT - COUNTERSINK CUTTERS (M42)**

Art. Nº PART NO.	Diámetro cuerpo BODY-DIA.	Diámetro guía PILOT DIA.	Radius (min.-max.)	Rosca THREAD	Hélices FLUTES
<b>569 E 10 - 2.38</b>	<b>10,0 mm (.3937)</b>	<b>2,38 mm (.0938)</b>	<b>0,3-0,5 (.0118-.0197)</b>	<b>M6 x 1</b>	<b>2</b>
<b>569 E 10 - 3.17</b>	<b>10,0 mm (.3937)</b>	<b>3,17 mm (.1240)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M6 x 1</b>	<b>2</b>
<b>569 E 10 - 3.50</b>	<b>10,0 mm (.3937)</b>	<b>3,50 mm (.1378)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M6 x 1</b>	<b>2</b>
<b>569 E 10 - 3.60</b>	<b>10,0 mm (.3937)</b>	<b>3,60 mm (.1417)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M6 x 1</b>	<b>2</b>
<b>569 E 10 - 3.96</b>	<b>10,0 mm (.3937)</b>	<b>3,96 mm (.1559)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M6 x 1</b>	<b>2</b>
<b>569 E 10 - 4.00</b>	<b>10,0 mm (.3937)</b>	<b>4,00 mm (.1575)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M6 x 1</b>	<b>2</b>
<b>569 E 10 - 4.35</b>	<b>10,0 mm (.3937)</b>	<b>4,35 mm (.1713)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M6 x 1</b>	<b>2</b>
<b>569 E 10 - 4.76</b>	<b>10,0 mm (.3937)</b>	<b>4,76 mm (.1874)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M6 x 1</b>	<b>2</b>
<b>569 E 10 - 5.08</b>	<b>10,0 mm (.3937)</b>	<b>5,08 mm (.2000)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M6 x 1</b>	<b>2</b>
<b>569 E 10 - 5.49</b>	<b>10,0 mm (.3937)</b>	<b>5,49 mm (.2161)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M6 x 1</b>	<b>2</b>

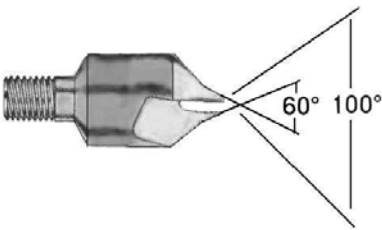
Art. Nº PART NO.	Diámetro cuerpo BODY-DIA.	Diámetro guía PILOT DIA.	Radius (min.-max.)	Rosca THREAD	Hélices FLUTES
<b>575 E 14 - 4.76</b>	<b>14,0 mm (.5512)</b>	<b>4,76 mm (.1874)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 14 - 5.00</b>	<b>14,0 mm (.5512)</b>	<b>5,00 mm (.1969)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 14 - 5.60</b>	<b>14,0 mm (.5512)</b>	<b>5,60 mm (.2205)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 14 - 6.00</b>	<b>14,0 mm (.5512)</b>	<b>6,00 mm (.2362)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 14 - 6.27</b>	<b>14,0 mm (.5512)</b>	<b>6,27 mm (.2470)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 14 - 6.65</b>	<b>14,0 mm (.5512)</b>	<b>6,65 mm (.2618)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 14 - 7.08</b>	<b>14,0 mm (.5512)</b>	<b>7,08 mm (.2787)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 14 - 7.84</b>	<b>14,0 mm (.5512)</b>	<b>7,84 mm (.3087)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 14 - 8.25</b>	<b>14,0 mm (.5512)</b>	<b>8,25 mm (.3248)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 14 - 8.63</b>	<b>14,0 mm (.5512)</b>	<b>8,63 mm (.3398)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 14 - 9.04</b>	<b>14,0 mm (.5512)</b>	<b>9,04 mm (.3559)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 17 - 6.27</b>	<b>17,0 mm (.6693)</b>	<b>6,27 mm (.2470)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 17 - 6.65</b>	<b>17,0 mm (.6693)</b>	<b>6,67 mm (.2626)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 17 - 7.08</b>	<b>17,0 mm (.6693)</b>	<b>7,05 mm (.2776)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 17 - 9.42</b>	<b>17,0 mm (.6693)</b>	<b>9,42 mm (.3709)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 17 - 9.82</b>	<b>17,0 mm (.6693)</b>	<b>9,82 mm (.3866)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 17 - 10.21</b>	<b>17,0 mm (.6693)</b>	<b>10,21 mm (.4020)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>
<b>575 E 17 - 10.61</b>	<b>17,0 mm (.6693)</b>	<b>10,61 mm (.4177)</b>	<b>0,6-0,9 (.0236-.0354)</b>	<b>M8 x 1</b>	<b>3</b>

Otras medidas y ángulos bajo pedido / OTHER DIMENSION AND ANGLES ON REQUEST !

Avellanadores 100° HSS-E (HSSCO)  
**100° COBALT - COUNTERSINK CUTTERS (M42)**


<b>A</b>		<b>Para guías reemplazables</b>		
		<b>FOR REPLACEABLE PILOTS</b>		
<b>Art N°</b> PART NO.	<b>Diámetro cuerpo</b> BODY-DIA.	<b>Agujero</b> PILOT HOLE	<b>Rosca</b> THREAD	<b>Hélices</b> FLUTES
<b>MBBN549A-10x2,0-2HSS-E</b>	<b>10,0 mm (.3937)</b>	<b>2,0 mm (.0787)</b>	<b>M6 x 1</b>	<b>2</b>
<b>MBBN549A-10x2,5-2HSS-E</b>	<b>10,0 mm (.3937)</b>	<b>2,5 mm (.0984)</b>	<b>M6 x 1</b>	<b>2</b>
<b>MBBN549A-10x3,5-2HSS-E</b>	<b>10,0 mm (.3937)</b>	<b>3,5 mm (.1378)</b>	<b>M6 x 1</b>	<b>2</b>
<b>MBBN549A-14x3,5-2HSS-E</b>	<b>14,0 mm (.5512)</b>	<b>3,5 mm (.1378)</b>	<b>M8 x 1</b>	<b>2</b>
<b>MBBN549A-14x4,0-2HSS-E</b>	<b>14,0 mm (.5512)</b>	<b>4,0 mm (.1575)</b>	<b>M8 x 1</b>	<b>2</b>

Avellanadores Hi-Lok HSSCO 100°/60°  
**100°/60° COBALT - HI-LOK COUNTERSINK CUTTERS (M42)**


<b>B</b>		<b>2 hélices,</b> <b>para guías reemplazables</b> <b>ángulos 100° y 60°</b>		
		<b>2 FLUTES,</b> <b>FOR REPLACEABLE PILOTS</b> <b>2 CUTTING ANGELES 100° + 60°</b>		
<b>Art N° (sin guía)</b> PART NO. (WITHOUT PILOT !)	<b>Diámetro cuerpo</b> BODY-DIA.	<b>Agujero</b> PILOT HOLE	<b>Rosca</b> THREAD	
<b>MBBN549C-10x2,5-2HSS-E</b>	<b>10,0 mm (.3937)</b>	<b>2,5 mm (.0984)</b>	<b>M6 x 1</b>	
<b>MBBN549C-10x3,5-2HSS-E</b>	<b>10,0 mm (.3937)</b>	<b>3,5 mm (.1378)</b>	<b>M6 x 1</b>	
<b>MBBN549C-14x4,0-2HSS-E</b>	<b>14,0 mm (.5512)</b>	<b>4,0 mm (.1575)</b>	<b>M8 x 1</b>	
<b>Art N° (con una guía)</b> PART NO. (incl. 1 Pilot !)	<b>Diam cuerpo</b> BODY-DIA.	<b>Agujero guía</b> PILOT HOLE	<b>Diam guía</b> PILOT DIA.	<b>Rosca</b> THREAD
<b>MBBN549C-10x2,5-2HSS-E-2,5 x 4,05</b> (REP9-4,07x2,5x4,05)	<b>10,0 mm (.3937)</b>	<b>2,5 mm (.0984)</b>	<b>4,05 mm (.1594)</b>	<b>M6 x 1</b>
<b>MBBN549C-10x3,5-2HSS-E-3,5 x 4,71</b> (REP10-4,73x3,5x4,71)	<b>10,0 mm (.3937)</b>	<b>3,5 mm (.1378)</b>	<b>4,71 mm (.1854)</b>	<b>M6 x 1</b>
<b>MBBN549C-14x4,0-2HSS-E-4,0 x 6,24</b> (REP11-6,26x4,0x6,24)	<b>14,0 mm (.5512)</b>	<b>4,0 mm (.1575)</b>	<b>6,24 mm (.2457)</b>	<b>M8 x 1</b>


Otras medidas y ángulos bajo pedido / OTHER DIMENSION AND ANGLES ON REQUEST !

Avellanadores 100° metal duro  
100° SOLID CARBIDE STOP COUNTERSINK CUTTERS

<b>A</b>		<b>Para guías reemplazables (cabeza metal duro) FOR REPLACEABLE PILOTS (SOLID CARBIDE HEAD)</b>			
		<b>Art N° PART NO.</b>	<b>Diámetro cuerpo BODY-DIA.</b>	<b>Agujero PILOT HOLE</b>	<b>Rosca THREAD</b>
	<b>MBBN549B-10x2,0-3K10</b>	<b>10,0 mm (.3937)</b>	<b>2,0 mm (.0787)</b>	<b>M6 x 1</b>	<b>3</b>
	<b>MBBN549B-10x2,5-3K10</b>	<b>10,0 mm (.3937)</b>	<b>2,5 mm (.0984)</b>	<b>M6 x 1</b>	<b>3</b>
	<b>MBBN549B-10x3,5-3K10</b>	<b>10,0 mm (.3937)</b>	<b>3,5 mm (.1378)</b>	<b>M6 x 1</b>	<b>3</b>
	<b>MBBN549B-10x4,0-3K10</b>	<b>10,0 mm (.3937)</b>	<b>4,0 mm (.1575)</b>	<b>M6 x 1</b>	<b>3</b>

Avellanadores 100° con plaquita de metal duro  
100° CARBIDE TIPPED STOP COUNTERSINK CUTTERS

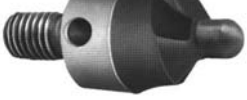
<b>B</b>		<b>Para guías reemplazables FOR REPLACEABLE PILOTS</b>			
		<b>Art N° PART NO.</b>	<b>Diámetro cuerpo BODY-DIA.</b>	<b>Agujero PILOT HOLE</b>	<b>Rosca THREAD</b>
	<b>MBBN549B-14x2,5-3K10</b>	<b>14,0 mm (.3937)</b>	<b>2,5 mm (.0984)</b>	<b>M8 x 1</b>	<b>3</b>
	<b>MBBN549B-14x4,0-3K10</b>	<b>14,0 mm (.3937)</b>	<b>4,0 mm (.1575)</b>	<b>M8 x 1</b>	<b>3</b>
	<b>MBBN549B-17x5,0-3K10</b>	<b>17,0 mm (.4802)</b>	<b>5,0 mm (.1969)</b>	<b>M8 x 1</b>	<b>3</b>
	<b>MBBN549B-21x5,0-3K10</b>	<b>21,0 mm (.8268)</b>	<b>5,0 mm (.1969)</b>	<b>M8 x 1</b>	<b>3</b>

<b>C</b>		<b>Guías para MBBN549... REPLACEABLE PILOTS FOR CUTTER MBBN549... Combinaciones standard/STANDARD COMBINATIONS</b>					
		<b>D</b>	<b>S =</b>	<b>2,0 mm (.0787)</b>	<b>2,5 mm (.0984)</b>	<b>3,5mm (.1378)</b>	<b>4,0 mm (.1575)</b>
	<b>2,38 mm (.0937)</b>		MBBN549-2,0x2,38				
	<b>2,40 mm (.0945)</b>		MBBN549-2,0x2,40				
	<b>2,50 mm (.0984)</b>		MBBN549-2,0x2,50				
	<b>3,00 mm (.1181)</b>		MBBN549-2,0x3,00	MBBN549-2,5x3,00			
	<b>3,17 mm (.1248)</b>			MBBN549-2,5x3,17			
	<b>3,20 mm (.1260)</b>		MBBN549-2,0x3,20				
	<b>3,50 mm (.1378)</b>			MBBN549-2,5x3,50			
	<b>3,80 mm (.1496)</b>			MBBN549-2,5x3,80			
	<b>4,00 mm (.1575)</b>		MBBN549-2,0x4,00	MBBN549-2,5x4,00	MBBN549-3,5x4,00		
	<b>4,05 mm (.1594)</b>			MBBN549-2,5x4,05			
	<b>4,17 mm (.1642)</b>			MBBN549-2,5x4,17	MBBN549-3,5x4,17		
	<b>4,71 mm (.1854)</b>				MBBN549-3,5x4,71		
	<b>4,76 mm (.1874)</b>		MBBN549-2,0x4,76		MBBN549-3,5x4,76	MBBN549-4,0x4,76	
	<b>4,80 mm (.1890)</b>				MBBN549-3,5x4,80		
	<b>4,83 mm (.1902)</b>				MBBN549-3,5x4,83	MBBN549-4,0x4,83	
	<b>5,10 mm (.2008)</b>				MBBN549-3,5x5,10		
	<b>5,60 mm (.2205)</b>				MBBN549-3,5x5,60		
	<b>6,00 mm (.2362)</b>				MBBN549-3,5x6,00		
	<b>6,24 mm (.2457)</b>					MBBN549-4,0x6,24	
	<b>6,27 mm (.2469)</b>						MBBN549-5,0x6,27
	<b>6,35 mm (.2500)</b>		MBBN549-2,0x6,35		MBBN549-3,5x6,35	MBBN549-4,0x6,35	
	<b>6,67 mm (.2626)</b>						MBBN549-5,0x6,67
	<b>6,70 mm (.2638)</b>				MBBN549-3,5x6,70		
	<b>7,05 mm (.2776)</b>						MBBN549-5,0x7,05
	<b>7,92 mm (.3118)</b>						MBBN549-5,0x7,92
	<b>8,00 mm (.3150)</b>					MBBN549-4,0x8,00	
	<b>9,52 mm (.3748)</b>						MBBN549-5,0x9,52

Otras medidas y ángulos bajo pedido / OTHER DIMENSION AND ANGLES ON REQUEST !

## Avellanadores 100° Metal Duro

### 100° SOLID CARBIDE STOP COUNTERSINK CUTTERS

<b>A</b>		<b>2 hélices, con guía fija cabeza de metal duro unida a mango de metal</b> <b>2-FLUTES, WITH SOLID PILOT</b> <b>SOLID CARBIDE HEAD BRAZED TO STEEL SHANK</b>
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Diámetro BODY-DIA.	11,1 mm <b>7/16"</b>	12,7 mm <b>1/2"</b>	15,9 mm <b>5/8"</b>	19,1 mm <b>3/4"</b>	22,3 mm <b>7/8"</b>	25,4 mm <b>1"</b>
Rosca THREAD	<b>1/4"-28</b>	<b>1/4"-28</b>	<b>1/4"-28</b>	<b>3/8"-24</b>	<b>3/8"-24</b>	<b>3/8"-24</b>
Guía PILOT DIA.	Art N° PART NO.	Art N° PART NO.	Art N° PART NO.	Art N° PART NO.	Art N° PART NO.	Art N° PART NO.
2,38 / 3/32"	<b>151-2SC-3/32"</b>	<b>152-2SC-3/32"</b>				
2,50 / #40	<b>151-2SC-40</b>	<b>152-2SC-40</b>				
3,18 / 1/8"	<b>151-2SC-1/8"</b>	<b>152-2SC-1/8"</b>				
3,26 / #30	<b>151-2SC-30</b>	<b>152-2SC-30</b>				
3,97 / 5/32"	<b>151-2SC-5/32"</b>	<b>152-2SC-5/32"</b>	<b>153-2SC-5/32"</b>			
4,04 / #21	<b>151-2SC-21</b>	<b>152-2SC-21</b>	<b>153-2SC-21</b>			
4,76 / 3/16"	<b>151-2SC-3/16"</b>	<b>152-2SC-3/16"</b>	<b>153-2SC-3/16"</b>			
4,85 / #11		<b>152-2SC-11</b>	<b>153-2SC-11</b>			
4,91 / #10		<b>152-2SC-10</b>	<b>153-2SC-10</b>			
6,35 / 1/4"		<b>152-2SC-1/4"</b>	<b>153-2SC-1/4"</b>	<b>155-2SC-1/4"</b>	<b>156-2SC-1/4"</b>	<b>157-2SC-1/4"</b>
7,94 / 5/16"			<b>153-2SC-5/16"</b>	<b>155-2SC-5/16"</b>	<b>156-2SC-5/16"</b>	<b>157-2SC-5/16"</b>
9,53 / 3/8"				<b>155-2SC-3/8"</b>	<b>156-2SC-3/8"</b>	<b>157-2SC-3/8"</b>
11,11/ 7/16"					<b>156-2SC-7/16"</b>	<b>157-2SC-7/16"</b>
12,70/ 1/2"						<b>157-2SC-1/2"</b>

## Avellanador 100° placa metal duro

### 100° CARBIDE TIPPED STOP COUNTERSINK CUTTERS


<b>B</b>		<b>2 hélices, con guía fija</b> <b>2-FLUTES, WITH SOLID PILOT</b>
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Diámetro BODY-DIA.	11,1 mm <b>7/16"</b>	12,7 mm <b>1/2"</b>	15,9 mm <b>5/8"</b>	19,1 mm <b>3/4"</b>	22,3 mm <b>7/8"</b>	25,4 mm <b>1"</b>
Rosca THREAD	<b>1/4"-28</b>	<b>1/4"-28</b>	<b>1/4"-28</b>	<b>3/8"-24</b>	<b>3/8"-24</b>	<b>3/8"-24</b>
Guía PILOT DIA.	Art N° PART NO.	Art N° PART NO.	Art N° PART NO.	Art N° PART NO.	Art N° PART NO.	Art N° PART NO.
2,38 / 3/32"	<b>151-2CT-3/32"</b>	<b>152-2CT-3/32"</b>				
2,50 / #40	<b>151-2CT-40</b>	<b>152-2CT-40</b>				
3,18 / 1/8"	<b>151-2CT-1/8"</b>	<b>152-2CT-1/8"</b>				
3,26 / #30	<b>151-2CT-30</b>	<b>152-2CT-30</b>				
3,97 / 5/32"	<b>151-2CT-5/32"</b>	<b>152-2CT-5/32"</b>	<b>153-2CT-5/32"</b>			
4,04 / #21	<b>151-2CT-21</b>	<b>152-2CT-21</b>	<b>153-2CT-21</b>			
4,76 / 3/16"	<b>151-2CT-3/16"</b>	<b>152-2CT-3/16"</b>	<b>153-2CT-3/16"</b>			
4,85 / #11		<b>152-2CT-11</b>	<b>153-2CT-11</b>			
4,91 / #10		<b>152-2CT-10</b>	<b>153-2CT-10</b>			
6,35 / 1/4"		<b>152-2CT-1/4"</b>	<b>153-2CT-1/4"</b>	<b>155-2CT-1/4"</b>	<b>156-2CT-1/4"</b>	<b>157-2CT-1/4"</b>
7,94 / 5/16"			<b>153-2CT-5/16"</b>	<b>155-2CT-5/16"</b>	<b>156-2CT-5/16"</b>	<b>157-2CT-5/16"</b>
9,53 / 3/8"				<b>155-2CT-3/8"</b>	<b>156-2CT-3/8"</b>	<b>157-2CT-3/8"</b>
11,11/ 7/16"					<b>156-2CT-7/16"</b>	<b>157-2CT-7/16"</b>
12,70/ 1/2"						<b>157-2CT-1/2"</b>

Otras medidas y ángulos bajo pedido / OTHER DIMENSION AND ANGLES ON REQUEST !

## Avellanadores 100° placa metal duro

### 100° CARBIDE TIPPED STOP COUNTERSINK CUTTERS


<b>A</b>		<b>para guías reemplazables</b> <b>FOR REPLACEABLE PILOTS</b>  <b>SERIES 700</b>
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Art Nº PART NO.	Diámetro cuerpo BODY-DIA.	Agujero PILOT HOLE	Rosca THREAD	Hélices FLUTES
700-100°	3/8" (9,53 mm)	5/64" (1,98 mm)	1/4"-28	2
701-100°	7/16" (11,11mm)	5/64" (1,98 mm)	1/4"-28	2
702-100°	1/2" (12,70 mm)	5/64" (1,98 mm)	1/4"-28	2
703-100°	1/2" (12,70 mm)	3/32" (2,38 mm)	1/4"-28	2
704-100°	1/2" (12,70 mm)	1/8" (3,18 mm)	1/4"-28	2
705-100°	5/8" (15,88 mm)	1/8" (3,18 mm)	1/4"-28	2
706-100°	5/8" (15,88 mm)	3/16" (4,76 mm)	1/4"-28	2
707A-100°	3/4" (19,05 mm)	3/16" (4,76 mm)	3/8"-24	3
708A-100°	7/8" (22,23 mm)	3/16" (4,76 mm)	3/8"-24	3
709A-100°	1" (25,40 mm)	3/16" (4,76 mm)	3/8"-24	3
710A-100°	1.1/8" (28,58 mm)	1/4" (6,35 mm)	3/8"-24	3
711A-100°	1.1/4" (31,75 mm)	1/4" (6,35 mm)	3/8"-24	3
707B-100°	3/4" (19,05 mm)	3/16" (4,76 mm)	7/16"-20	3
708B-100°	7/8" (22,23 mm)	3/16" (4,76 mm)	7/16"-20	3
709B-100°	1" (25,40 mm)	3/16" (4,76 mm)	7/16"-20	3
710B-100°	1.1/8" (28,58 mm)	1/4" (6,35 mm)	7/16"-20	3
711B-100°	1.1/4" (31,75 mm)	1/4" (6,35 mm)	7/16"-20	3


D	S =	5/64" (1,98 mm)	3/32" (2,38 mm)	1/8" (3,18 mm)	3/16" (4,76 mm)	1/4" (6,35 mm)
1/8" (3,18 mm)		755-1-5/64"	755-1-3/32"			
#30 (3,26 mm)		755-2-5/64"	755-2-3/32"			
5/32" (3,97 mm)		755-3-5/64"	755-3-3/32"	755-3-1/8"		
#20 (4,09 mm)		755-4-5/64"	755-4-3/32"	755-4-1/8"		
3/16" (4,76 mm)		755-5-5/64"	755-5-3/32"	755-5-1/8"		
#10 (4,91 mm)		755-6-5/64"	755-6-3/32"	755-6-1/8"		
7/32" (5,56 mm)		755-7-5/64"	755-7-3/32"	755-7-1/8"	755-7-3/16"	
1/4" (6,35 mm)		755-8-5/64"	755-8-3/32"	755-8-1/8"	755-8-3/16"	
"F" (6,53 mm)			755-9-3/32"	755-9-1/8"	755-9-3/16"	
9/32" (7,14 mm)				755-10-1/8"	755-10-3/16"	
5/16" (7,94 mm)				755-11-1/8"	755-11-3/16"	755-11-1/4"
11/32" (8,73 mm)					755-12-3/16"	755-12-1/4"
3/8" (9,53 mm)					755-13-3/16"	755-13-1/4"
13/32" (10,32 mm)					755-14-3/16"	755-14-1/4"
7/16" (11,11 mm)					755-15-3/16"	755-15-1/4"
15/32" (11,91 mm)					755-16-3/16"	755-16-1/4"
1/2" (12,70 mm)					755-17-3/16"	755-17-1/4"
17/32" (13,49 mm)					755-18-3/16"	755-18-1/4"
9/16" (14,29 mm)					755-19-3/16"	755-19-1/4"
19/32" (15,08 mm)					755-20-3/16"	755-20-1/4"
5/8" (15,88 mm)					755-21-3/16"	755-21-1/4"


Otras medidas y ángulos bajo pedido / OTHER DIMENSION AND ANGLES ON REQUEST !


**Avellanadores 100° con insertos de policristalino**  
100° COMPOSITE COUNTERSINK CUTTERS WITH POLYCRISTALINE INSERTS


<b>A</b>		<b>para guías reemplazables</b> FOR REPLACEABLE PILOTS		
		SERIES 455P		
<b>Art N°</b> PART NO.	<b>Diámetro cuerpo</b> BODY-DIA.	<b>Agujero</b> PILOT HOLE	<b>Rosca</b> THREAD	<b>Hélices</b> FLUTES
<b>455PCE-4-.086</b>	<b>1/2"</b> (12,70 mm)	<b>.086</b> (2,18 mm)	<b>1/4"-28</b>	<b>1</b>
<b>455PDE-4-.086</b>	<b>1/2"</b> (12,70 mm)	<b>.086</b> (2,18 mm)	<b>1/4"-28</b>	<b>2</b>
<b>455PCG-4-.086</b>	<b>5/8"</b> (15,88 mm)	<b>.086</b> (2,18 mm)	<b>1/4"-28</b>	<b>1</b>
<b>455PDG-4-.086</b>	<b>5/8"</b> (15,88 mm)	<b>.086</b> (2,18 mm)	<b>1/4"-28</b>	<b>2</b>
<b>455PCH-4-1/8"</b>	<b>3/4"</b> (19,05 mm)	<b>1/8"</b> (3,18 mm)	<b>3/8"-24</b>	<b>1</b>
<b>455PDH-4-1/8"</b>	<b>3/4"</b> (19,05 mm)	<b>1/8"</b> (3,18 mm)	<b>3/8"-24</b>	<b>2</b>

**Avellanadores 100° Kevlar con hélices en S**  
100° KEVLAR COUNTERSINK CUTTERS WITH "S" CUTTING FLUTES


<b>B</b>		<b>para guías reemplazables</b> FOR REPLACEABLE PILOTS		
		SERIES 455SK		
<b>Art N°</b> PART NO.	<b>Diámetro cuerpo</b> BODY-DIA.	<b>Agujero</b> PILOT HOLE	<b>Rosca</b> THREAD	<b>Hélices</b> FLUTES
<b>455SKE-4-.086</b>	<b>1/2"</b> (12,70 mm)	<b>.086</b> (2,18 mm)	<b>1/4"-28</b>	<b>2</b>
<b>455SKG-4-.086</b>	<b>5/8"</b> (15,88 mm)	<b>.086</b> (2,18 mm)	<b>1/4"-28</b>	<b>2</b>


<b>D</b>		<b>Guías reemplazables 2,18 mm, para "455P/SK"</b> REPLACEABLE PILOTS WITH SHANK .086" FOR CUTTER "455P/SK"									
		<b>Guía=D</b> PILOT =D	2,38 mm <b>3/32"</b>	2,50 mm <b>#40</b>	3,18 mm <b>1/8"</b>	3,26 mm <b>#30</b>	3,97 mm <b>5/32"</b>	4,04 mm <b>#21</b>	4,76 mm <b>3/16"</b>	4,85 mm <b>#11</b>	4,91 mm <b>#10</b>
<b>Art N°</b> PART NO.	<b>484-56</b>	<b>484-2</b>	<b>484-57</b>	<b>484-12</b>	<b>484-59</b>	<b>484-21</b>	<b>484-61</b>	<b>484-31</b>	<b>484-32</b>	<b>484-63</b>	<b>484-65</b>

<b>D</b>		<b>Guías reemplazables 3,18 mm, para "455P.."</b> REPLACEABLE PILOTS WITH SHANK 1/8" FOR CUTTER "455P.."									
		<b>Guía=D</b> PILOT =D	3,97 mm <b>5/32"</b>	4,09 mm <b>#20</b>	4,76 mm <b>3/16"</b>	4,91 mm <b>#10</b>	5,56 mm <b>7/32"</b>	6,35 mm <b>1/4"</b>	6,53 mm <b>"F"</b>	7,14 mm <b>9/32"</b>	7,62 mm <b>5/16"</b> (7,94 mm)
<b>Art N°</b> PART NO.	<b>755-3-1/8"</b>	<b>755-4-1/8"</b>	<b>755-5-1/8"</b>	<b>755-6-1/8"</b>	<b>755-7-1/8"</b>	<b>755-8-1/8"</b>	<b>755-9-1/8"</b>	<b>755-10-1/8"</b>	<b>755-11-1/8"</b>		

<b>E</b>		<b>Broca de metal duro manufactura especial para Kevlar y compuestos de grafito</b> SOLID CARBIDE DRILL WITH SPECIAL GRINDING FOR KEVLAR AND GRAPHITE COMPOSITES				
		<b>Art N°</b> / PART NO.	<b>342-3/32"</b>	<b>342-1/8"</b>	<b>342-5/32"</b>	<b>342-3/16"</b>
<b>Diámetro</b> / DIAMETER		<b>3/32"</b> (2,38 mm)	<b>1/8"</b> (3,18 mm)	<b>5/32"</b> (3,97 mm)	<b>3/16"</b> (4,76 mm)	<b>1/4"</b> (6,35 mm)
<b>Longitud</b> / O/A LENGTH		<b>1.690</b> (43 mm)	<b>1.930</b> (49 mm)	<b>2.160</b> (55 mm)	<b>2.440</b> (62 mm)	<b>2.756</b> (43 mm)
<b>Zona corte</b> / FLUTE LENGTH		<b>.551</b> (14 mm)	<b>.709</b> (18 mm)	<b>.866</b> (22 mm)	<b>1.024</b> (26 mm)	<b>1.221</b> (31 mm)


Otras medidas y ángulos bajo pedido / OTHER DIMENSION AND ANGLES ON REQUEST !

<b>Avellanadores 100° metal duro con mango</b> 100° SOLID CARBIDE STRAIGHT SHANK COUNTERSINKS					
<b>A</b>		<b>6 hélices con cabeza metal duro</b> 6-FLUTES WITH SOLID CARBIDE HEAD BRAZED TO STEEL SHANK			
		<b>Art N°</b> PART NO.	<b>910-3/8"-100°</b>	<b>910-1/2"-100°</b>	<b>910-5/8"-100°</b>
	<b>Diámetro cuerpo</b> BODY-DIA.	<b>3/8"</b> (9,53 mm)	<b>1/2"</b> (12,70 mm)	<b>5/8"</b> (15,88 mm)	<b>3/4"</b> (19,05 mm)
	<b>Diámetro mango</b> SHANK DIAMETER	<b>1/4"</b> (6,35 mm)	<b>1/4"</b> (6,35 mm)	<b>3/8"</b> (9,53 mm)	<b>3/8"</b> (9,53 mm)
	<b>Longitud aprox.</b> APPR. O/A LENGTH	<b>2.1/4"</b> (57,2 mm)	<b>2.1/2"</b> (63,5 mm)	<b>2.3/4"</b> (69,9 mm)	<b>2.3/4"</b> (69,9 mm)

<b>Avellanador 100° HSS con mango</b> 100° HSS - STRAIGHT SHANK COUNTERSINKS						
<b>B</b>		<b>3 hélices</b> 3-FLUTES				
		<b>Art N°</b> PART NO.	<b>408A-4</b>	<b>408B-4</b>	<b>408C-4</b>	<b>408D-4</b>
	<b>Diámetro cuerpo</b> BODY-DIA.	<b>1/4"</b> (6,35 mm)	<b>5/16"</b> (7,94 mm)	<b>3/8"</b> (9,53 mm)	<b>7/16"</b> (11,11 mm)	<b>1/2"</b> (12,70 mm)
	<b>Diámetro mango</b> SHANK DIAMETER	<b>3/16"</b> (4,76 mm)	<b>1/4"</b> (6,35 mm)	<b>1/4"</b> (6,35 mm)	<b>1/4"</b> (6,35 mm)	<b>1/4"</b> (6,35 mm)
	<b>Longitud aprox.</b> APPR. O/A LENGTH	<b>1.1/2"</b> (38,1 mm)	<b>1.1/2"</b> (38,1 mm)	<b>1.3/4"</b> (44,5 mm)	<b>1.3/4"</b> (44,5 mm)	<b>2"</b> (59,8 mm)

<b>Mini avellanador 100°</b> 100° MINIATURE-STOP-COUNTERSINK CUTTER	
<b>C</b>	
	<p><b>HSS, 2 hélices, mango 6 mm, longitud 33 mm incluye 1 guía reemplazable</b></p> <p>HSS, 2-FLUTES, SHANK .236, OVER ALL LENGTH 1.19/64" INCL. 1 REPLACEABLE PILOT</p> <p><b>Norm: LN9199, DIN 65399, AN426, MS20426</b></p>

<b>Art N°</b> PART NO.	<b>402-3/32"</b>	<b>402-1/8"</b>	<b>402-5/32"</b>	<b>402-3/16"</b>	<b>402-1/4"</b>
<b>d</b>	<b>3/32"</b> (2,38 mm)	<b>1/8"</b> (3,18 mm)	<b>5/32"</b> (3,97 mm)	<b>3/16"</b> (4,76 mm)	<b>1/4"</b> (6,35 mm)
<b>D</b>	<b>.1772</b> (4,50 mm)	<b>.2244</b> (5,70 mm)	<b>.2835</b> (7,20 mm)	<b>.3504</b> (8,90 mm)	<b>.4764</b> (12,1 mm)
<b>D1</b>	<b>.5118</b> (13,0 mm)	<b>.5118</b> (13,0 mm)	<b>.5512</b> (14,0 mm)	<b>.6229</b> (15,8 mm)	<b>.7480</b> (19,0 mm)

<b>D</b>		<b>Guía para avellanador tipo 402</b> REPLACEABLE PILOT FOR CUTTER TYPE 402				
		<b>Art N°</b> PART NO.	<b>411-3/32"</b>	<b>411-1/8"</b>	<b>411-5/32"</b>	<b>411-3/16"</b>

Otras medidas bajo pedido / OTHER DIMENSION AND ANGLES ON REQUEST !

# DAN 5109

Avellanador 100° con placa metal duro

100° CARBIDE TIPPED COUNTERSINK CUTTER

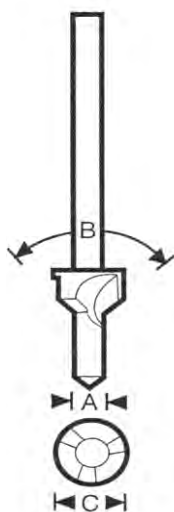


3 hélices, con guía fija  
3-FLUTES, WITH SOLID PILOT

Art N°	Cuerpo	Guía	Rosca	Longitud	Long. guía	Radio
PART NO.	BODY DIA.	PILOT DIA.	THREAD	OVERALL LENGTH	PILOT LENGTH	+/- 0,1 mm
DAN5109-10-4,71-M6x1	10 mm	4,71 mm	M 6 x 1	34 mm	6 mm	0,6 mm
DAN5109-10-4,77-M6x1	10 mm	4,77 mm	M 6 x 1	34 mm	6 mm	0,6 mm
DAN5109-14-5,44-M8x1	14 mm	5,44 mm	M 8 x 1	34 mm	6 mm	0,6 mm
DAN5109-14-5,45-M8x1	14 mm	5,45 mm	M 8 x 1	34 mm	6 mm	0,6 mm
DAN5109-14-5,50-M8x1	14 mm	5,50 mm	M 8 x 1	34 mm	6 mm	0,6 mm
DAN5109-14-6,24-M8x1	14 mm	6,24 mm	M 8 x 1	34 mm	6 mm	0,6 mm
DAN5109-14-6,30-M8x1	14 mm	6,30 mm	M 8 x 1	34 mm	6 mm	0,6 mm
DAN5109-14-7,83-M8x1	14 mm	7,83 mm	M 8 x 1	34 mm	6 mm	0,9 mm
DAN5109-14-7,88-M8x1	14 mm	7,88 mm	M 8 x 1	34 mm	6 mm	0,9 mm

## Avellanadores 100° HSSCO

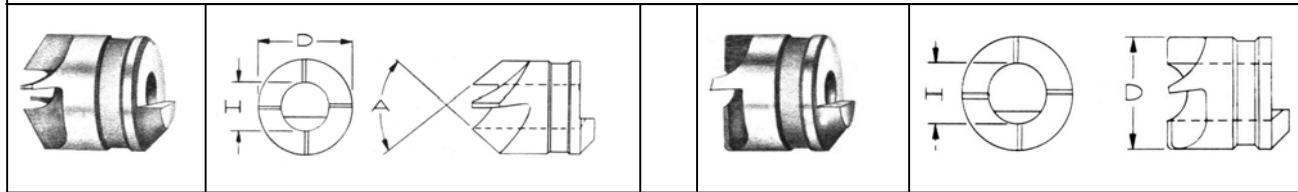
HSSCo - STRAIGHT SHANK COUNTERSINK CUTTERS - 100°



Art N°	Guía	Cuerpo	Hélices	Mango
PART NO.	PILOT DIA.	BODY DIA.	FLUTES	SHANK DIA.
	A	C		
350-.1875-100-.0938	2,38 mm 3/32"	4,76 mm 3/16"	3	4,76 mm 3/16"
350-.2500-100-.1250	3,18 mm 1/8"	6,35 mm 1/4"	3	4,76 mm 3/16"
350-.3125-100-.1562	3,97 mm 5/32"	7,94 mm 5/16"	3	4,76 mm 3/16"
350-.3750-100-.1875	4,76 mm 3/16"	9,53 mm 3/8"	3	4,76 mm 3/16"
350-.5000-100-.2500	6,35 mm 1/4"	12,7 mm 1/2"	3	4,76 mm 3/16"

Otras medidas y ángulos bajo pedido / OTHER DIMENSIONS AND ANGLES ON REQUEST !

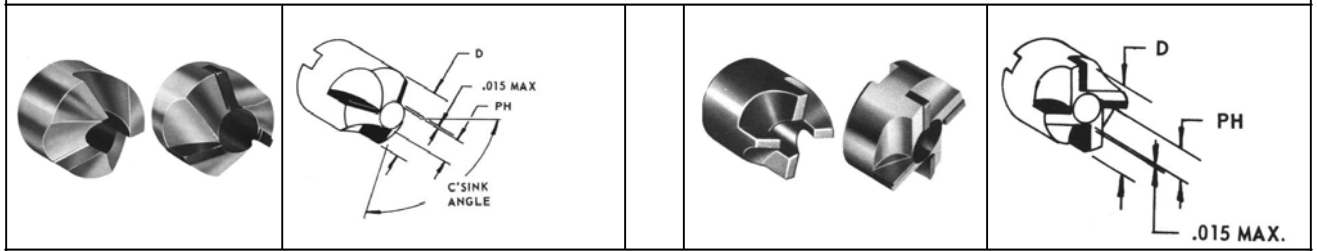
<b>A</b>	<b>Fresas tirón 100°</b> BACK COUNTERSINK CUTTERS 100° HSS / HIGH SPEED STEEL 4 hélices / 4-FLUTES	<b>B</b>	<b>Fresas tirón</b> BACK SPOTFACER CUTTERS HSS / HIGH SPEED STEEL 4 hélices / 4-FLUTES
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Art N° PART NO.	D = Cuerpo D = BODY DIA	H = Agujero H = PILOT HOLE	Art N° PART NO.	D = Cuerpo D = BODY DIA	H = Agujero H = PILOT HOLE
402A-4	1/4" (6,35 mm)	1/8" (3,18 mm)	403A	1/4" (6,35 mm)	3/32" (2,38 mm)
402B-4	1/4" (6,35 mm)	3/32" (2,38 mm)	403B	1/4" (6,35 mm)	1/8" (3,18 mm)
180-2J	5/16" (7,94 mm)	3/32" (2,38 mm)	190-	5/16" (7,94 mm)	3/32" (2,38 mm)
402C-4	5/16" (7,94 mm)	1/8" (3,18 mm)	403C	5/16" (7,94 mm)	1/8" (3,18 mm)
402D-4	5/16" (7,94 mm)	5/32" (3,97 mm)	403D	5/16" (7,94 mm)	5/32" (3,97 mm)
180-3J	3/8" (9,53 mm)	1/8" (3,18 mm)	190-	3/8" (9,53 mm)	1/8" (3,18 mm)
402E-4	3/8" (9,53 mm)	3/16" (4,76 mm)	403E	3/8" (9,53 mm)	3/16" (4,76 mm)
402F-4	3/8" (9,53 mm)	5/32" (3,97 mm)	403F	3/8" (9,53 mm)	5/32" (3,97 mm)
180-4J	7/16" (11,11 mm)	1/8" (3,18 mm)	190-	7/16" (11,11 mm)	1/8" (3,18 mm)
402G-4	7/16" (11,11 mm)	3/16" (4,76 mm)	403	7/16" (11,11 mm)	3/16" (4,76 mm)
402H-4	7/16" (11,11 mm)	5/32" (3,97 mm)	403H	7/16" (11,11 mm)	5/32" (3,97 mm)
180-5J	1/2" (12,70 mm)	5/32" (3,97 mm)	190-	1/2" (12,70 mm)	5/32" (3,97 mm)
402I-4	1/2" (12,70 mm)	3/16" (4,76 mm)	403I	1/2" (12,70 mm)	3/16" (4,76 mm)
402J-4	1/2" (12,70 mm)	1/4" (6,35 mm)	403J	1/2" (12,70 mm)	1/4" (6,35 mm)
180-6J	9/16" (14,29 mm)	5/32" (3,97 mm)	190-	9/16" (14,29 mm)	5/32" (3,97 mm)
402K-4	9/16" (14,29 mm)	3/16" (4,76 mm)	403K	9/16" (14,29 mm)	3/16" (4,76 mm)
402L-4	9/16" (14,29 mm)	1/4" (6,35 mm)	403L	9/16" (14,29 mm)	1/4" (6,35 mm)
180-7J	5/8" (15,88 mm)	3/16" (4,76 mm)	190-	5/8" (15,88 mm)	3/16" (4,76 mm)
402M-4	5/8" (15,88 mm)	1/4" (6,35 mm)	403	5/8" (15,88 mm)	1/4" (6,35 mm)
402N-4	5/8" (15,88 mm)	5/16" (7,94 mm)	403N	5/8" (15,88 mm)	5/16" (7,94 mm)
180-8J	11/16" (17,46 mm)	3/16" (4,76 mm)	190-	11/16" (17,46 mm)	3/16" (4,76 mm)
402O-4	11/16" (17,46 mm)	1/4" (6,35 mm)	403	11/16" (17,46 mm)	1/4" (6,35 mm)
402P-4	11/16" (17,46 mm)	5/16" (7,94 mm)	403P	11/16" (17,46 mm)	5/16" (7,94 mm)
402Q-4	3/4" (19,05 mm)	1/4" (6,35 mm)	403	3/4" (19,05 mm)	1/4" (6,35 mm)
402R-4	3/4" (19,05 mm)	5/16" (7,94 mm)	403R	3/4" (19,05 mm)	5/16" (7,94 mm)
180-9L	3/4" (19,05 mm)	3/8" (9,53 mm)	190-	3/4" (19,05 mm)	3/8" (9,53 mm)
180-10J	7/8" (22,23 mm)	1/4" (6,35 mm)	190-	7/8" (22,23 mm)	1/4" (6,35 mm)
402S-4	7/8" (22,23 mm)	5/16" (7,94 mm)	403S	7/8" (22,23 mm)	5/16" (7,94 mm)
402T-4	7/8" (22,23 mm)	3/8" (9,53 mm)	403T	7/8" (22,23 mm)	3/8" (9,53 mm)
402U-4	1" (25,40 mm)	5/16" (7,94 mm)	403U	1" (25,40 mm)	5/16" (7,94 mm)
402V-4	1" (25,40 mm)	3/8" (9,53 mm)	403V	1" (25,40 mm)	3/8" (9,53 mm)
180-11L	1" (25,40 mm)	1/2" (12,7 mm)	190-	1" (25,40 mm)	1/2" (12,7 mm)
			190-	1.1/8" (28,58 mm)	3/8" (9,53 mm)
			190-	1.1/8" (28,58 mm)	1/2" (12,7 mm)
402W-4	1.1/4" (31,75 mm)	3/8" (9,53 mm)	403	1.1/4" (31,75 mm)	3/8" (9,53 mm)
402X-4	1.1/4" (31,75 mm)	1/2" (12,7 mm)	403X	1.1/4" (31,75 mm)	1/2" (12,7 mm)

Otras medidas y ángulos bajo pedido / OTHER DIMENSION AND ANGLES ON REQUEST !

<b>A</b>	<b>Fresas 100°</b> BACK COUNTERSINK CUTTERS 100° <b>Metal duro (placas)</b> SOLID CARBIDE (** CARBIDE TIPPED) <b>3 hélices / 3-FLUTES</b>	<b>B</b>	<b>Fresas tirón BACK</b> SPOTFACER CUTTERS Metal <b>duro (placas)</b> SOLID CARBIDE (** CARBIDE TIPPED) <b>4 hélices / 4-FLUTES</b>
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Art N° PART NO.	D = Cuerpo D = BODY DIA	PH = Agujero PH = PILOT HOLE		Art N° PART NO.	D = Cuerpo D = BODY DIA	PH = Agujero PH = PILOT HOLE
181-1J	1/4" (6,35 mm)	3/32" (2,38 mm)		191-	1/4" (6,35 mm)	3/32" (2,38 mm)
181-1K	1/4" (6,35 mm)	1/8" (3,18 mm)		191-	1/4" (6,35 mm)	1/8" (3,18 mm)
181-2J	5/16" (7,94 mm)	3/32" (2,38 mm)		191-	5/16" (7,94 mm)	3/32" (2,38 mm)
181-2 K	5/16" (7,94 mm)	1/8" (3,18 mm)		191-2	5/16" (7,94 mm)	1/8" (3,18 mm)
181-2 L	5/16" (7,94 mm)	5/32" (3,97 mm)		191-2	5/16" (7,94 mm)	5/32" (3,97 mm)
181-3J	3/8" (9,53 mm)	1/8" (3,18 mm)		191-	3/8" (9,53 mm)	1/8" (3,18 mm)
181-3K	3/8" (9,53 mm)	5/32" (3,97 mm)		191-	3/8" (9,53 mm)	5/32" (3,97 mm)
181-3L	3/8" (9,53 mm)	3/16" (4,76 mm)		191-	3/8" (9,53 mm)	3/16" (4,76 mm)
181-4J	7/16" (11,11 mm)	1/8" (3,18 mm)		191-	7/16" (11,11 mm)	1/8" (3,18 mm)
181-4K	7/16" (11,11 mm)	5/32" (3,97 mm)		191-	7/16" (11,11 mm)	5/32" (3,97 mm)
181-4L	7/16" (11,11 mm)	3/16" (4,76 mm)		191-	7/16" (11,11 mm)	3/16" (4,76 mm)
181-5J	1/2" (12,70 mm)	5/32" (3,97 mm)		191-	1/2" (12,70 mm)	5/32" (3,97 mm)
181-5K	1/2" (12,70 mm)	3/16" (4,76 mm)		191-	1/2" (12,70 mm)	3/16" (4,76 mm)
181-5L	1/2" (12,70 mm)	1/4" (6,35 mm)		191-	1/2" (12,70 mm)	1/4" (6,35 mm)
181-6J	9/16" (14,29 mm)	5/32" (3,97 mm)		191-	9/16" (14,29 mm)	5/32" (3,97 mm)
181-6K	9/16" (14,29 mm)	3/16" (4,76 mm)		191-	9/16" (14,29 mm)	3/16" (4,76 mm)
181-6L	9/16" (14,29 mm)	1/4" (6,35 mm)		191-	9/16" (14,29 mm)	1/4" (6,35 mm)
181-7J	5/8" (15,88 mm)	3/16" (4,76 mm)		191-	5/8" (15,88 mm)	3/16" (4,76 mm)
181-7K	5/8" (15,88 mm)	1/4" (6,35 mm)		191-	5/8" (15,88 mm)	1/4" (6,35 mm)
181-7L	5/8" (15,88 mm)	5/16" (7,94 mm)		191-	5/8" (15,88 mm)	5/16" (7,94 mm)
181-8J	11/16" (17,46 mm)	3/16" (4,76 mm)		191-8J	11/16" (17,46 mm)	3/16" (4,76 mm)
181-8K	11/16" (17,46 mm)	1/4" (6,35 mm)		191-8K	11/16" (17,46 mm)	1/4" (6,35 mm)
181-8L	11/16" (17,46 mm)	5/16" (7,94 mm)		191-8L	11/16" (17,46 mm)	5/16" (7,94 mm)
181-9J	3/4" (19,05 mm)	1/4" (6,35 mm)		191-9J	3/4" (19,05 mm)	1/4" (6,35 mm)
181-9K	3/4" (19,05 mm)	5/16" (7,94 mm)		191-9K	3/4" (19,05 mm)	5/16" (7,94 mm)
181-9L	3/4" (19,05 mm)	3/8" (9,53 mm)		191-9L	3/4" (19,05 mm)	3/8" (9,53 mm)
181-10J	7/8" (22,23 mm)	1/4" (6,35 mm)		191-10J	7/8" (22,23 mm)	1/4" (6,35 mm)
181-10K	7/8" (22,23 mm)	5/16" (7,94 mm)		191-10K	7/8" (22,23 mm)	5/16" (7,94 mm)
181-10L	7/8" (22,23 mm)	3/8" (9,53 mm)		191-10L	7/8" (22,23 mm)	3/8" (9,53 mm)
181-11J	1" (25,40 mm)	5/16" (7,94 mm)		191-11J	1" (25,40 mm)	5/16" (7,94 mm)
181-11K	1" (25,40 mm)	3/8" (9,53 mm)		191-11K	1" (25,40 mm)	3/8" (9,53 mm)
181-11L	1" (25,40 mm)	1/2" (12,7 mm)		191-11L	1" (25,40 mm)	1/2" (12,7 mm)
			**	191-11M	1.1/8" (28,58 mm)	3/8" (9,53 mm)
			**	191-11N	1.1/8" (28,58 mm)	1/2" (12,7 mm)
181-12J	1.1/4" (31,75 mm)	3/8" (9,53 mm)	**	191-12J	1.1/4" (31,75 mm)	3/8" (9,53 mm)
181-12K	1.1/4" (31,75 mm)	1/2" (12,7 mm)	**	191-12K	1.1/4" (31,75 mm)	1/2" (12,7 mm)

Otras medidas y ángulos bajo pedido / OTHER DIMENSION AND ANGLES ON REQUEST !

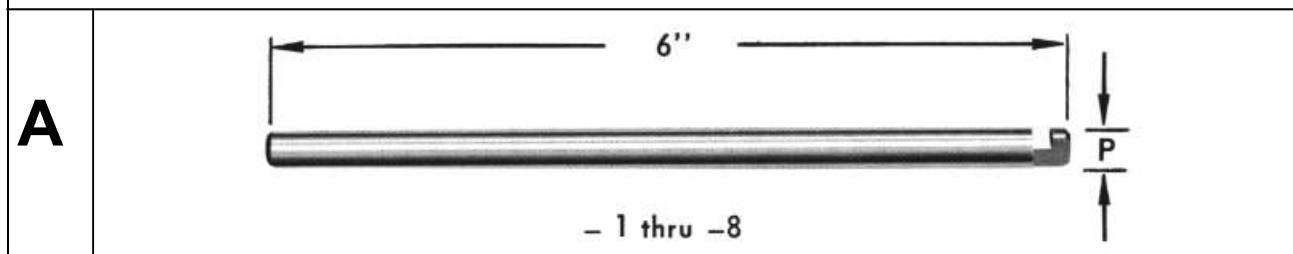
## Guías para fresas

**Serie 180 - 181 - 190 - 191 - 402 - 403**

PILOTS FOR BACK COUNTERSINK CUTTERS & BACK SPOTFACER CUTTERS

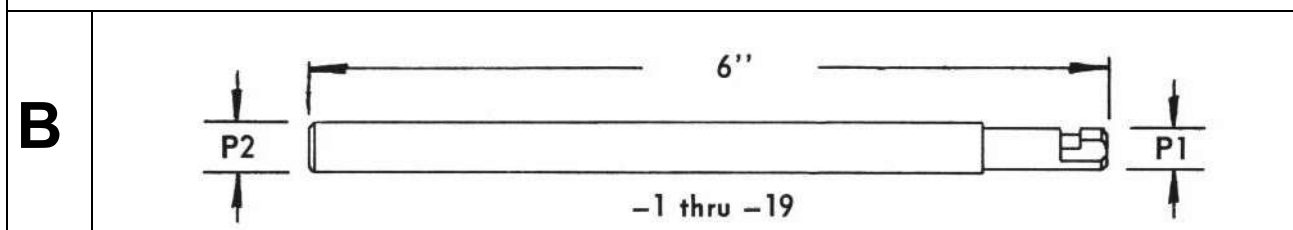
SERIES 180 - 181 - 190 - 191 - 402 - 403

### Varillas / PLAIN PILOTS



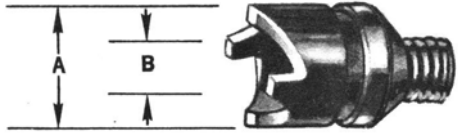
Art N° PART NO.	P = Diámetro P = PILOT DIA		Art N° PART NO.	P = Diámetro P = PILOT DIA		Art N° PART NO.	P = Diámetro P = PILOT DIA
<b>185-1</b>	<b>3/32"</b> (2,38 mm)		<b>185-4</b>	<b>3/16"</b> (4,76 mm)		<b>185-7</b>	<b>3/8"</b> (9,53 mm)
<b>185-2</b>	<b>1/8"</b> (3,18 mm)		<b>185-5</b>	<b>1/4"</b> (6,35 mm)		<b>185-8</b>	<b>1/2"</b> (12,7 mm)
<b>185-3</b>	<b>5/32"</b> (3,97 mm)		<b>185-6</b>	<b>5/16"</b> (7,94 mm)			

### Varillas / STEP PILOTS



Art N° PART NO.	P1	P2	Sólo para fresas de diámetro : ONLY FOR USE WITH CUTTER DIAMETER :
<b>186-1</b>	<b>3/32"</b> (2,38 mm)	<b>1/8"</b> (3,18 mm)	<b>1/4" - 5/16"</b>
<b>186-2</b>	<b>1/8"</b> (3,18 mm)	<b>5/32"</b> (3,97 mm)	<b>1/4" - 5/16" - 3/8" - 7/16"</b>
<b>186-3</b>	<b>5/32"</b> (3,97 mm)	<b>3/16"</b> (4,76 mm)	<b>5/16" - 3/8" - 7/16" - 1/2"</b>
<b>186-4</b>	<b>3/16"</b> (4,76 mm)	<b>1/4"</b> (6,35 mm)	<b>3/8" - 7/16" - 1/2"</b>
<b>186-5</b>	<b>1/4"</b> (6,35 mm)	<b>5/16"</b> (7,94 mm)	<b>1/2"</b>
<b>186-6</b>	<b>5/32"</b> (3,97 mm)	<b>3/16"</b> (4,76 mm)	<b>9/16"</b>
<b>186-7</b>	<b>3/16"</b> (4,76 mm)	<b>1/4"</b> (6,35 mm)	<b>9/16" - 5/8" - 11/16"</b>
<b>186-8</b>	<b>1/4"</b> (6,35 mm)	<b>5/16"</b> (7,94 mm)	<b>9/16" - 5/8" - 11/16" - 3/4"</b>
<b>186-9</b>	<b>5/16"</b> (7,94 mm)	<b>3/8"</b> (9,53 mm)	<b>5/8" - 11/16" - 3/4" - 7/8"</b>
<b>186-10</b>	<b>3/8"</b> (9,53 mm)	<b>1/2"</b> (12,7 mm)	<b>3/4" - 7/8" - 1"</b>
<b>186-11</b>	<b>1/2"</b> (12,7 mm)	<b>9/16"</b> (14,29 mm)	<b>1"</b>
<b>186-16</b>	<b>3/8"</b> (9,53 mm)	<b>1/2"</b> (12,7 mm)	<b>1.1/8" - 1.1/4"</b>
<b>186-17</b>	<b>1/2"</b> (12,7 mm)	<b>9/16"</b> (14,29 mm)	<b>1.1/8" - 1.1/4"</b>

Otras medidas bajo pedido / OTHER DIMENSIONS REQUEST !

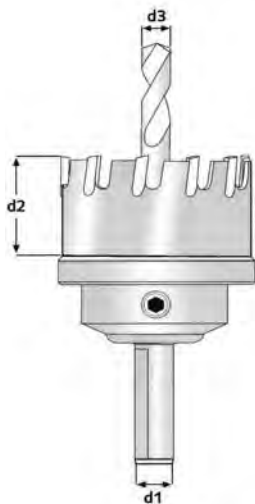
<b>A</b>			<b>Fresas de vaciado HSS con rosca 1/4"-28</b> <b>HSS-HOLLOW-CUTTERS WITH THREADED SHANK 1/4"-28</b>	
	Art N° PART NO.	A = Diámetro exterior A = OUTSIDE DIAMETER	B = Diámetro interior B = INSIDE DIAMETER	Pinza y medida FASTENER & SIZE
	<b>493C-0</b>	<b>.365</b> (9,27 mm)	<b>.124</b> (3,15 mm)	<b>Hi-Shear Rivet 1/8"</b> (3,18 mm)
	<b>493C-00</b>	<b>.365</b> (9,27 mm)	<b>.157</b> (3,99 mm)	<b>Hi-Shear Rivet 5/32"</b> (3,97 mm)
	<b>493C-1</b>	<b>.438</b> (11,13 mm)	<b>.1875</b> (4,76 mm)	<b>Hi-Shear Rivet 3/16"</b> (4,76 mm)
	<b>493C-2</b>	<b>.500</b> (12,70 mm)	<b>.247</b> (6,27 mm)	<b>Hi-Shear Rivet 1/4"</b> (6,35 mm)
	<b>493C-3</b>	<b>.562</b> (14,27 mm)	<b>.310</b> (7,87 mm)	<b>Hi-Shear Rivet 5/16"</b> (7,94 mm)
	<b>493C-4</b>	<b>.625</b> (15,88 mm)	<b>.373</b> (9,47 mm)	<b>Hi-Shear Rivet 3/8"</b> (9,53 mm)
	<b>493D-1</b>	<b>.323</b> (8,20 mm)	<b>.1875</b> (4,76 mm)	<b>Huck Bolt L6</b>
	<b>493D-3</b>	<b>.413</b> (10,49 mm)	<b>.250</b> (6,35 mm)	<b>Huck Bolt L8</b>

<b>B</b>			<b>Fresas de vaciado HSS con dientes curvados para aluminio y metal</b> <b>HSS-HOLE SAWS WITH COARSE TOOTH FOR ALUMINUM AND STEEL</b>			
	<b>Rosca / THREAD 5/16"-24</b>		<b>Rosca / THREAD 1/2"-20</b>		<b>Rosca / THREAD 1/2"-20</b>	
Art N° PART NO.	Diámetro DIAMETER	Art N° PART NO.	Diámetro DIAMETER	Art N° PART NO.	Diámetro DIAMETER	
	<b>474-3</b>	<b>474-16</b>	<b>474-29</b>	<b>474-29</b>	<b>474-29</b>	
	<b>1/2"</b> (12,70 mm)	<b>1.5/16"</b> (33,34 mm)	<b>1.5/16"</b> (33,34 mm)	<b>2.1/8"</b> (53,98 mm)	<b>2.1/8"</b> (53,98 mm)	
	<b>474-4</b>	<b>474-17</b>	<b>474-30</b>	<b>474-30</b>	<b>474-30</b>	
	<b>9/16"</b> (14,29 mm)	<b>1.3/8"</b> (34,93 mm)	<b>1.3/8"</b> (34,93 mm)	<b>2.3/16"</b> (55,56 mm)	<b>2.3/16"</b> (55,56 mm)	
	<b>474-5</b>	<b>474-18</b>	<b>474-31</b>	<b>474-31</b>	<b>474-31</b>	
	<b>5/8"</b> (15,88 mm)	<b>1.7/16"</b> (36,51 mm)	<b>1.7/16"</b> (36,51 mm)	<b>2.1/4"</b> (57,15 mm)	<b>2.1/4"</b> (57,15 mm)	
	<b>474-6</b>	<b>474-19</b>	<b>474-32</b>	<b>474-32</b>	<b>474-32</b>	
	<b>11/16"</b> (17,46 mm)	<b>1.1/2"</b> (38,10 mm)	<b>1.1/2"</b> (38,10 mm)	<b>2.5/16"</b> (58,74 mm)	<b>2.5/16"</b> (58,74 mm)	
	<b>474-7</b>	<b>474-20</b>	<b>474-33</b>	<b>474-33</b>	<b>474-33</b>	
	<b>3/4"</b> (19,05 mm)	<b>1.9/16"</b> (39,69 mm)	<b>1.9/16"</b> (39,69 mm)	<b>2.3/8"</b> (60,33 mm)	<b>2.3/8"</b> (60,33 mm)	
	<b>474-8</b>	<b>474-21</b>	<b>474-35</b>	<b>474-35</b>	<b>474-35</b>	
	<b>13/16"</b> (20,64 mm)	<b>1.5/8"</b> (41,28 mm)	<b>1.5/8"</b> (41,28 mm)	<b>2.1/2"</b> (63,50 mm)	<b>2.1/2"</b> (63,50 mm)	
	<b>474-9</b>	<b>474-22</b>	<b>474-38</b>	<b>474-38</b>	<b>474-38</b>	
	<b>7/8"</b> (22,23 mm)	<b>1.11/16"</b> (42,86 mm)	<b>1.11/16"</b> (42,86 mm)	<b>2.11/16"</b> (68,26 mm)	<b>2.11/16"</b> (68,26 mm)	
	<b>474-10</b>	<b>474-23</b>	<b>474-39</b>	<b>474-39</b>	<b>474-39</b>	
	<b>15/16"</b> (23,81 mm)	<b>1.3/4"</b> (44,45 mm)	<b>1.3/4"</b> (44,45 mm)	<b>2.3/4"</b> (69,85 mm)	<b>2.3/4"</b> (69,85 mm)	
	<b>474-11</b>	<b>474-24</b>	<b>474-40</b>	<b>474-40</b>	<b>474-40</b>	
	<b>1"</b> (25,40 mm)	<b>1.13/16"</b> (46,04 mm)	<b>1.13/16"</b> (46,04 mm)	<b>2.13/16"</b> (71,44 mm)	<b>2.13/16"</b> (71,44 mm)	
	<b>474-12</b>	<b>474-25</b>	<b>474-41</b>	<b>474-41</b>	<b>474-41</b>	
	<b>1.1/16"</b> (26,99 mm)	<b>1.7/8"</b> (47,63 mm)	<b>1.7/8"</b> (47,63 mm)	<b>2.7/8"</b> (73,03 mm)	<b>2.7/8"</b> (73,03 mm)	
	<b>474-13</b>	<b>474-26</b>	<b>474-43</b>	<b>474-43</b>	<b>474-43</b>	
	<b>1.1/8"</b> (28,58 mm)	<b>1.15/16"</b> (49,21 mm)	<b>1.15/16"</b> (49,21 mm)	<b>3"</b> (76,20 mm)	<b>3"</b> (76,20 mm)	
	<b>474-14</b>	<b>474-27</b>				
	<b>1.3/16"</b> (30,16 mm)	<b>2"</b> (50,80 mm)				
	<b>474-15</b>	<b>474-28</b>				
	<b>1.1/4"</b> (31,75 mm)	<b>2.1/16"</b> (52,39 mm)				

<b>C</b>	<b>adaptador para Serie 474</b> <b>HOLE SAW ARBOR FOR SERIE 474</b>			
	Art N° PART NO.	Tipo de mango y medida SHANK TYPE & SIZE	Diámetro guía PILOT DIAMETER	Rosca THREAD SIZE
	<b>415-0</b>	<b>1/4" DIA.</b> (6,35 mm Rund)	<b>3/16"</b> (4,76 mm)	<b>5/16"-24</b>
	<b>415-1</b>	<b>1/4" DIA.</b> (6,35 mm Rund)	<b>1/4"</b> (6,35 mm)	<b>5/16"-24</b>
	<b>415-2</b>	<b>1/2" DIA.</b> (12,70 mm Rund)	<b>1/4"</b> (6,35 mm)	<b>1/2"-20</b>
	<b>415-3</b>	<b>1/2" DIA.</b> (12,70 mm Rund)	<b>3/8"</b> (9,53 mm)	<b>1/2"-20</b>
	<b>415-10</b>	<b>1/4" DIA.</b> (6,35 mm Rund)	<b>1/4"</b> (6,35 mm)	<b>1/2"-20</b>
	<b>415-11</b>	<b>1/4" DIA.</b> (6,35 mm Rund)	<b>3/8"</b> (9,53 mm)	<b>1/2"-20</b>

## Fresa vaciado MD "GP Integral" Métrico/Pulgadas

### CARBIDE TIPPED HOLE SAWS "GP INTEGRAL" METRIC/INCH



Art.Nr. P/N	D mm	d1 mm	d2 mm	d3 mm
CT16	16	10	15	6
CT17	17	10	15	6
CT18	18	10	15	6
CT19	19	10	15	6
CT20	20	10	15	6
CT21	21	10	15	6
CT22	22	10	15	6
CT23	23	10	15	6
CT24	24	10	15	6
CT25	25	10	15	6
CT26	26	10	15	6
CT27	27	10	15	6
CT28	28	10	15	6
CT29	29	10	15	6
CT30	30	10	15	6
CT31	31	10	15	6
CT32	32	10	15	6
CT33	33	10	15	6
CT34	34	10	15	6
CT35	35	10	15	6
CT36	36	10	15	6
CT37	37	10	15	6
CT38	38	10	15	6
CT39	39	10	15	6
CT40	40	10	15	6
CT41	41	10	15	6
CT42	42	10	15	6
CT43	43	10	15	6
CT44	44	10	15	6
CT45	45	10	15	6
CT46	46	10	15	6
CT47	47	10	15	6
CT48	48	10	15	6
CT49	49	10	15	6
CT50	50	10	15	6

Art.Nr. P/N	D mm	d1 mm	d2 mm	d3 mm
CT51	51	10	15	6
CT52	52	13	15	6
CT53	53	13	15	6
CT54	54	13	15	6
CT55	55	13	15	6
CT56	56	13	15	6
CT57	57	13	15	6
CT58	58	13	15	6
CT59	59	13	15	6
CT60	60	13	15	6
CT61	61	13	15	6
CT62	62	13	15	6
CT63	63	13	15	6
CT64	64	13	15	6
CT65	65	13	15	6
CT66	66	13	15	6
CT67	67	13	15	6
CT68	68	13	15	6
CT69	69	13	15	6
CT70	70	13	15	6
CT71	71	13	15	6
CT72	72	13	15	6
CT73	73	13	15	6
CT74	74	13	15	6
CT75	75	13	15	6
CT76	76	13	15	6
CT77	77	13	15	6
CT78	78	13	15	6
CT79	79	13	15	6
CT80	80	13	15	6
CT85	85	13	15	6
CT90	90	13	15	6
CT95	95	13	15	6
CT100	100	13	15	6

Art.Nr. P/N	D Inch	d1 Inch	d2 Inch	d3 Inch
TCT5/8	5/8	3/8	5/8	1/4
TCT3/4	3/4	3/8	5/8	1/4
TCT7/8	7/8	3/8	5/8	1/4
TCT1	1	3/8	5/8	1/4
TCT1.1/8	1-1/8	3/8	5/8	1/4
TCT1.1/4	1-1/4	3/8	5/8	1/4
TCT1.3/8	1-3/8	1/2	5/8	1/4
TCT1-1/2	1-1/2	1/2	5/8	1/4
TCT1-5/8	1-5/8	1/2	5/8	1/4
TCT1-3/4	1-3/4	1/2	5/8	1/4
TCT1-7/8	1-7/8	1/2	5/8	1/4
TCT2	2	1/2	5/8	1/4
TCT2-1/8	2-1/8	1/2	5/8	1/4
TCT2-1/4	2-1/4	1/2	5/8	1/4

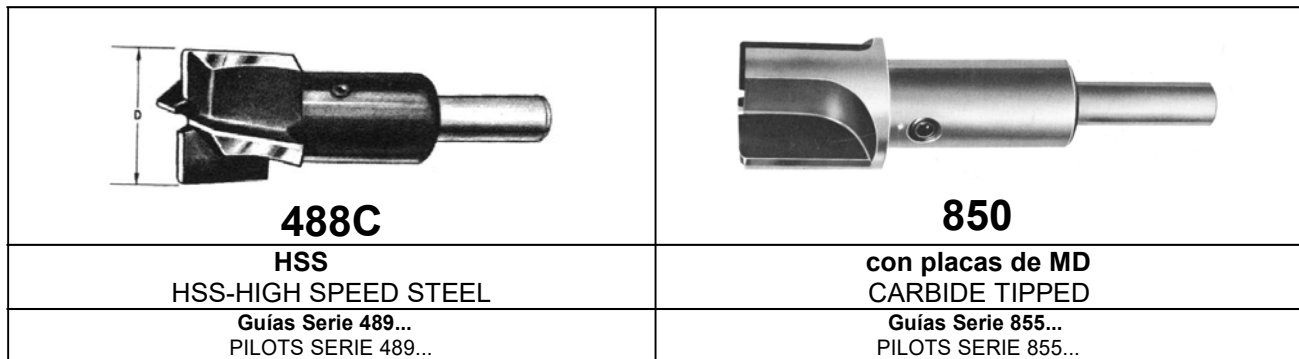
Art.Nr. P/N	D Inch	d1 Inch	d2 Inch	d3 Inch
TCT2.3/	2-3/8	1/2	5/8	1/4
TCT2.1/	2-1/2	1/2	5/8	1/4
TCT2.5/	2-5/8	1/2	5/8	1/4
TCT2.3/	2-3/4	1/2	5/8	1/4
TCT2-	2-7/8	1/2	5/8	1/4
TCT3	3	1/2	5/8	1/4
TCT3.1/	3-1/8	1/2	5/8	1/4
TCT3.1/	3-1/4	1/2	5/8	1/4
TCT3.3/	3-3/8	1/2	5/8	1/4
TCT3.1/	3-1/2	1/2	5/8	1/4
TCT3-	3-5/8	1/2	5/8	1/4
TCT3-	3-3/4	1/2	5/8	1/4
TCT3-	3-7/8	1/2	5/8	1/4
TCT4	4	1/2	5/8	1/4

Broca reemplazo para GP integral  
REPLACEMENT DRILL FOR GP INTEGRAL HOLE SAWS



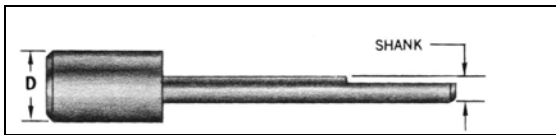
Art.Nr. P/N	Diámetro DIA	Longitud LENGTH
PCT6	6,35 mm	60 mm

Avellanadores con mango recto y agujero para guía reemplazable  
COUNTERBORES WITH STRAIGHT SHANK AND HOLE FOR REPLACEABLE PILOTS



Art N° PART NO.	Art N° PART NO.	D = Diámetro D = BODY-DIA.	Agujero guía PILOT HOLE DIA.	Diámetro mango SHANK DIAMETER	Longitud total OVER ALL LENGTH
<b>488C-0</b>	-----	3/16" (4,76 mm)	3/32" (2,38 mm)	1/4" (6,35 mm)	2.3/8" (60,3 mm)
<b>488C-1</b>	<b>850-1</b>	1/4" (6,35 mm)	3/32" (2,38 mm)	1/4" (6,35 mm)	2.3/8" (60,3 mm)
<b>488C-2</b>	<b>850-2</b>	9/32" (7,14 mm)	3/32" (2,38 mm)	1/4" (6,35 mm)	2.3/8" (60,3 mm)
<b>488C-3</b>	<b>850-3</b>	5/16" (7,94 mm)	3/32" (2,38 mm)	1/4" (6,35 mm)	2.3/8" (60,3 mm)
<b>488C-4</b>	<b>850-4</b>	11/32" (8,73 mm)	3/32" (2,38 mm)	1/4" (6,35 mm)	2.3/8" (60,3 mm)
<b>488C-5</b>	<b>850-5</b>	3/8" (9,53 mm)	3/32" (2,38 mm)	1/4" (6,35 mm)	2.3/8" (60,3 mm)
<b>488C-6</b>	<b>850-6</b>	13/32" (10,32 mm)	1/8" (3,18 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-7</b>	<b>850-7</b>	7/16" (11,11 mm)	1/8" (3,18 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-8</b>	<b>850-8</b>	15/32" (11,91 mm)	1/8" (3,18 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-9</b>	<b>850-9</b>	1/2" (12,70 mm)	1/8" (3,18 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-10</b>	<b>850-10</b>	17/32" (13,49 mm)	1/8" (3,18 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-11</b>	<b>850-11</b>	9/16" (14,29 mm)	1/8" (3,18 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-12</b>	<b>850-12</b>	19/32" (15,08 mm)	1/8" (3,18 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-13</b>	<b>850-13</b>	5/8" (15,88 mm)	1/8" (3,18 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-14</b>	<b>850-14</b>	21/32" (16,67 mm)	3/16" (4,76 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-15</b>	<b>850-15</b>	11/16" (17,46 mm)	3/16" (4,76 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-16</b>	<b>850-16</b>	23/32" (18,26 mm)	3/16" (4,76 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-17</b>	<b>850-17</b>	3/4" (19,05 mm)	3/16" (4,76 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-18</b>	<b>850-18</b>	25/32" (19,84 mm)	3/16" (4,76 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-19</b>	<b>850-19</b>	13/16" (20,64 mm)	3/16" (4,76 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-20</b>	<b>850-20</b>	27/32" (21,43 mm)	3/16" (4,76 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-21</b>	<b>850-21</b>	7/8" (22,23 mm)	3/16" (4,76 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-22</b>	<b>850-22</b>	29/32" (23,02 mm)	3/16" (4,76 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-23</b>	<b>850-23</b>	15/16" (23,81 mm)	3/16" (4,76 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-24</b>	<b>850-24</b>	31/32" (24,61 mm)	3/16" (4,76 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-25</b>	<b>850-25</b>	1" (25,40 mm)	3/16" (4,76 mm)	1/4" (6,35 mm)	2.3/4" (69,9 mm)
<b>488C-26</b>	<b>850-26</b>	1.1/16" (26,99 mm)	3/16" (4,76 mm)	3/8" (9,35 mm)	2.3/4" (69,9 mm)
<b>488C-27</b>	<b>850-27</b>	1.1/8" (28,58 mm)	3/16" (4,76 mm)	3/8" (9,35 mm)	2.3/4" (69,9 mm)
<b>488C-28</b>	<b>850-28</b>	1.3/16" (30,16 mm)	3/16" (4,76 mm)	3/8" (9,35 mm)	2.3/4" (69,9 mm)
<b>488C-29</b>	<b>850-29</b>	1.1/4" (31,75 mm)	3/16" (4,76 mm)	3/8" (9,35 mm)	2.3/4" (69,9 mm)
<b>488C-30</b>	<b>850-30</b>	1.5/16" (33,34 mm)	3/16" (4,76 mm)	3/8" (9,35 mm)	2.3/4" (69,9 mm)
<b>488C-31</b>	<b>850-31</b>	1.3/8" (34,93 mm)	3/16" (4,76 mm)	3/8" (9,35 mm)	2.3/4" (69,9 mm)
<b>488C-32</b>	<b>850-32</b>	1.1/2" (38,10 mm)	3/16" (4,76 mm)	3/8" (9,35 mm)	2.3/4" (69,9 mm)

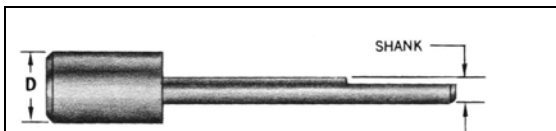
Otras medidas bajo pedido / OTHER DIMENSIONS OIN REQUEST !



### Guía para serie 488C

REPLACEABLE PILOTS FOR CUTTER SERIES 488C

Medida / SIZE	D	Mango / SHANK 3/32" (2,38 mm)	Mango / SHANK 1/8" (3,18 mm)	Mango / SHANK 3/16" (4,76 mm)
3/32" (2,38 mm)	.093 (2,36 mm)	489A-1		
1/8" (3,18 mm)	.124 (3,15 mm)	489A-2	489B-2	
5/32" (3,97 mm)	.154 (3,91 mm)	489A-3	489B-3	
#20 (4,09 mm)	.159 (4,04 mm)	489A-4	489B-4	
3/16" (4,76 mm)	.186 (4,72 mm)	489A-5	489B-5	489C-5
#10 (4,91 mm)	.1915 (4,86 mm)	489A-6	489B-6	489C-6
7/32" (5,56 mm)	.2167 (5,50 mm)	489A-7	489B-7	489C-7
1/4" (6,35 mm)	.248 (6,30 mm)	489A-8	489B-8	489C-8
"F" (6,53 mm)	.255 (6,48 mm)	489A-9	489B-9	489C-9
9/32" (7,14 mm)	.279 (7,09 mm)	489A-10	489B-10	489C-10
5/16" (7,94 mm)	.3105 (7,89 mm)	489A-11	489B-11	489C-11
11/32" (8,73 mm)	.3415 (8,67 mm)		489B-12	489C-12
3/8" (9,53 mm)	.373 (9,47 mm)		489B-13	489C-13
13/32" (10,32 mm)	.404 (10,26 mm)		489B-14	489C-14
7/16" (11,11 mm)	.4355 (11,06 mm)		489B-15	489C-15
15/32" (11,91 mm)	.4665 (11,85 mm)		489B-16	489C-16
1/2" (12,70 mm)	.498 (12,65 mm)		489B-17	489C-17
17/32" (13,49 mm)	.529 (13,44 mm)			489C-18
9/16" (14,29 mm)	.560 (14,22 mm)			489C-19
19/32" (15,08 mm)	.591 (15,01 mm)			489C-20
5/8" (15,88 mm)	.622 (15,80 mm)			489C-21
21/32" (16,67 mm)	.653 (16,59 mm)			489C-22
11/16" (17,46 mm)	.685 (17,40 mm)			489C-23
23/32" (18,26 mm)	.716 (18,19 mm)			489C-24
3/4" (19,05 mm)	.747 (18,97 mm)			489C-25



### Guía para Serie 850

REPLACEABLE PILOTS FOR CUTTER SERIES 850

Medida / SIZE	D	Mango / SHANK 3/32" (2,38 mm)	Mango / SHANK 1/8" (3,18 mm)	Mango / SHANK 3/16" (4,76 mm)
3/32" (2,38 mm)	.093 (2,36 mm)	855-1-3/32"		
1/8" (3,18 mm)	.124 (3,15 mm)	855-2-3/32"	855-2-1/8"	
5/32" (3,97 mm)	.154 (3,91 mm)	855-3-3/32"	855-3-1/8"	
#20 (4,09 mm)	.159 (4,04 mm)	855-4-3/32"	855-4-1/8"	
3/16" (4,76 mm)	.186 (4,72 mm)	855-5-3/32"	855-5-1/8"	855-5-3/16"
#10 (4,91 mm)	.1915 (4,86 mm)	855-6-3/32"	855-6-1/8"	855-6-3/16"
7/32" (5,56 mm)	.2167 (5,50 mm)	855-7-3/32"	855-7-1/8"	855-7-3/16"
1/4" (6,35 mm)	.248 (6,30 mm)	855-8-3/32"	855-8-1/8"	855-8-3/16"
"F" (6,53 mm)	.255 (6,48 mm)	855-9-3/32"	855-9-1/8"	855-9-3/16"
9/32" (7,14 mm)	.279 (7,09 mm)		855-10-1/8"	855-10-3/16"
5/16" (7,94 mm)	.3105 (7,89 mm)		855-11-1/8"	855-11-3/16"
11/32" (8,73 mm)	.3415 (8,67 mm)			855-12-3/16"
3/8" (9,53 mm)	.373 (9,47 mm)			855-13-3/16"
13/32" (10,32 mm)	.404 (10,26 mm)			855-14-3/16"
7/16" (11,11 mm)	.4355 (11,06 mm)			855-15-3/16"
15/32" (11,91 mm)	.4665 (11,85 mm)			855-16-3/16"
1/2" (12,70 mm)	.498 (12,65 mm)			855-17-3/16"
17/32" (13,49 mm)	.529 (13,44 mm)			855-18-3/16"
9/16" (14,29 mm)	.560 (14,22 mm)			855-19-3/16"
19/32" (15,08 mm)	.591 (15,01 mm)			855-20-3/16"
5/8" (15,88 mm)	.622 (15,80 mm)			855-21-3/16"

Otras medidas bajo pedido / OTHER DIMENSIONS ON REQUEST !

## Avellanador con placa de MD CARBIDE TIPPED STOP COUNTERBORES



**Para guías reemplazables  
FOR REPLACEABLE PILOTS**

**SERIES 730**

Radius 0,40 mm

Máximo diámetro sin corte 0,79 mm más que el agujero de la guía Use guías de 0,79 mm más grandes que el agujero de la guía

RADIUS 1/64"

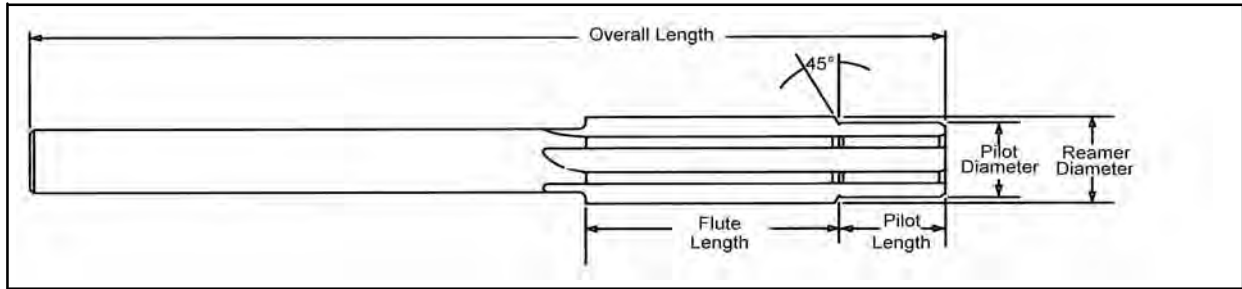
MAX. NONCUTTING DIAMETER IS 1/32" LARGER THAN PILOT HOLE ! USE PILOTS WITH HEAD DIAMETER 1/32" LARGER THAN PILOT HOLE !

Art N° PART NO.	Diámetro cuerpo BODY-DIA.	Agujero PILOT HOLE	Rosca THREAD
730-1	3/8" (9,53 mm)	3/32" (2,38 mm)	1/4"-28
730-2	7/16" (11,11 mm)	1/8" (3,18 mm)	1/4"-28
730-3	1/2" (12,70 mm)	1/8" (3,18 mm)	1/4"-28
730-4	9/16" (14,29 mm)	1/8" (3,18 mm)	1/4"-28
730-5	5/8" (15,88 mm)	1/8" (3,18 mm)	1/4"-28
730-6A	11/16" (17,46 mm)	3/16" (4,76 mm)	3/8"-24
730-6B	11/16" (17,46 mm)	3/16" (4,76 mm)	7/16"-20
730-7A	3/4" (19,05 mm)	3/16" (4,76 mm)	3/8"-24
730-7B	3/4" (19,05 mm)	3/16" (4,76 mm)	7/16"-20
730-8A	13/16" (20,64 mm)	3/16" (4,76 mm)	3/8"-24
730-8B	13/16" (20,64 mm)	3/16" (4,76 mm)	7/16"-20
730-9A	7/8" (22,23 mm)	3/16" (4,76 mm)	3/8"-24
730-9B	7/8" (22,23 mm)	3/16" (4,76 mm)	7/16"-20
730-10A	15/16" (23,81 mm)	3/16" (4,76 mm)	3/8"-24
730-10B	15/16" (23,81 mm)	3/16" (4,76 mm)	7/16"-20
730-11A	1" (25,40 mm)	3/16" (4,76 mm)	3/8"-24
730-11B	1" (25,40 mm)	3/16" (4,76 mm)	7/16"-20
730-12A	1.1/8" (28,58 mm)	3/16" (4,76 mm)	3/8"-24
730-12B	1.1/8" (28,58 mm)	3/16" (4,76 mm)	7/16"-20
730-13A	1.1/4" (31,75 mm)	3/16" (4,76 mm)	3/8"-24
730-13B	1.1/4" (31,75 mm)	3/16" (4,76 mm)	7/16"-20

		<b>Guía para avellanador Serie 730...</b> <b>PILOTS FOR COUNTERSINK CUTTER SERIES 730...</b> <b>Combinaciones standard/STANDARD COMBINATIONS</b>		
D	S =	3/32" (2,38 mm)	1/8" (3,18 mm)	3/16" (4,76 mm)
1/8" (3,18 mm)		755-1-3/32"		
#30 (3,26 mm)		755-2-3/32"		
5/32" (3,97 mm)		755-3-3/32"	755-3-1/8"	
#20 (4,09 mm)		755-4-3/32"	755-4-1/8"	
3/16" (4,76 mm)		755-5-3/32"	755-5-1/8"	
#10 (4,91 mm)		755-6-3/32"	755-6-1/8"	
7/32" (5,56 mm)		755-7-3/32"	755-7-1/8"	755-7-3/16"
1/4" (6,35 mm)		755-8-3/32"	755-8-1/8"	755-8-3/16"
"F" (6,53 mm)		755-9-3/32"	755-9-1/8"	755-9-3/16"
9/32" (7,14 mm)			755-10-1/8"	755-10-3/16"
5/16" (7,94 mm)			755-11-1/8"	755-11-3/16"
11/32" (8,73 mm)				755-12-3/16"
3/8" (9,53 mm)				755-13-3/16"
13/32" (10,32 mm)				755-14-3/16"
7/16" (11,11 mm)				755-15-3/16"
15/32" (11,91 mm)				755-16-3/16"
1/2" (12,70 mm)				755-17-3/16"
17/32" (13,49 mm)				755-18-3/16"
9/16" (14,29 mm)				755-19-3/16"
19/32" (15,08 mm)				755-20-3/16"
5/8" (15,88 mm)				755-21-3/16"

Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !

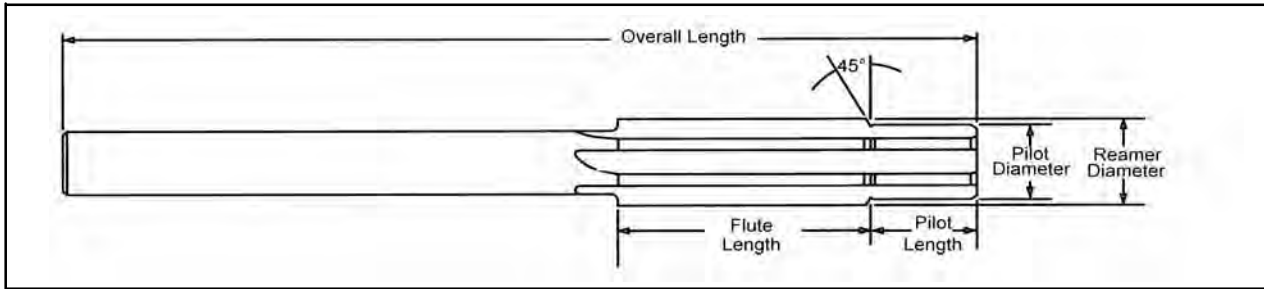
Escariadores de HSS con guía  
HSS - PILOTED CHUCKING REAMERS



Art Nº	Diámetro	Dia	Hélice		Guía	Longitud
	escariador	Guía	No.	Longitud	Longitud	total
31-219	0,1610	0,1250	6	13/16"	5/16"	4-1 /2"
33-737	0,1850	0,1600	6	13/16"	5/16"	4-1 /2"
31-602	0,1860	0,1540	6	13/16"	5/16"	4-1 /2"
44-100	0,1870	0,1740	6	3/4"	3/8"	6"
44-410	0,1875	0,1600	6	5/8"	1/2"	6"
99-200	0,1985	0,1845	6	3/4"	1/2"	5"
31-604	0,1985	0,1850	6	15/16"	5/16"	5"
33-738	0,1985	0,1945	6	15/16"	5/16"	5"
44-150	0,2000	0,1870	6	7/8"	3/8"	6"
44-160	0,2031	0,1875	6	3/4"	1/2"	6"
99-300	0,2130	0,1985	6	3/4"	1/2"	5"
33-739	0,2130	0,1950	6	15/16"	5/16"	6"
31-207	0,2140	0,1970	6	15/16"	5/16"	6"
44-200	0,2158	0,2000	6	7/8"	3/8"	6"
44-210	0,2188	0,2031	6	3/4"	1/2"	6"
44-250	0,2314	0,2158	6	1-1 /8"	3/8"	6"
31-605	0,2330	0,2140	6	1-3/16"	5/16"	6"
33-740	0,2340	0,2130	6	1-3/16"	5/16"	6"
44-260	0,2344	0,2180	6	1"	1/2"	6"
99-500	0,2435	0,2340	6	1"	1/2"	6"
33-741	0,2455	0,2340	6	1-3/16"	5/16"	6"
31-222	0,2460	0,2330	6	1-3/16"	5/16"	6"
44-300	0,2470	0,2314	6	1-1 /8"	3/8"	6"
44-310	0,2500	0,2344	6	1"	1/2"	6"
33-742	0,2600	0,2460	6	1-3/16"	5/16"	6"
31-600	0,2610	0,2450	6	1"	1/2"	6"
31-221	0,2620	0,2470	6	1"	1/2"	6"
44-350	0,2621	0,2470	6	1-1 /8"	3/8"	6"
44-360	0,2656	0,2500	6	1"	1/2"	6"
31-221	0,2620	0,2470	6	1"	1/2"	6"
44-350	0,2621	0,2470	6	1-1/8"	3/8"	6"
44-360	0,2656	0,2500	6	1"	1/2"	6"
33-743	0,2755	0,2600	6	1-3/16"	5/16"	6"
31-215	0,2770	0,2610	6	1-3/16"	5/16"	6"
30-378	0,2780	0,2620	6	1-3/16"	5/16"	6"
44-400	0,2782	0,2621	6	1-1 /8"	3/8"	6"
30-368	0,2810	0,2670	6	1-3/16"	5/16"	6"
44-320	0,2812	0,2656	6	1"	1/2"	6"
99-701	0,2910	0,2755	6	1"	1/2"	6"
31-601	0,2920	0,2770	6	1-3/16"	5/16"	6"
44-450	0,2939	0,2782	6	1-1 /8"	3/8"	6"
44-460	0,2969	0,2812	6	1"	1/2"	6"
99-702	0,3075	0,2910	6	1"	1/2"	6"
44-500	0,3090	0,2939	6	1-1 /8"	3/8"	6"

Otras dimensiones bajo pedido / OTHER DIMENSIONS ON REQUEST !

Escariadores de HSS con guía  
HSS - PILOTED CHUCKING REAMERS



Art N°	Diámetro escariador	Dia guía	Hélice		Lon guía	Longitud Total
			No.	Longitud		
31-216	0,3100	0,2920	6	1-3/16"	5/16"	6"
44-510	0,3125	0,2969	6	1 "	1/2"	6"
99-703	0,3225	0,3075	6	1 "	1/2"	6"
31-217	0,3230	0,3100	6	1-3/16"	5/16"	6"
44-550	0,3251	0,3090	6	1-1/8"	3/8"	6"
44-560	0,3281	0,3125	6	1 "	1/2"	6"
99-704	0,3380	0,3225	6	1 "	1/2"	6"
30-394	0,3390	0,3230	6	1-3/16"	5/16"	6"
31-218	0,3390	0,3350	6	1-3/16"	5/16"	6"
44-600	0,3407	0,3251	6	1-1/8"	3/8"	6"
44-610	0,3438	0,3281	6	1 "	1/2"	6"
99-705	0,3535	0,3380	6	1-3/16"	1/2"	6"
44-620	0,3594	0,3438	6	1-1/4"	1/2"	6"
99-706	0,3700	0,3535	6	1-3/16"	1/2"	7"
30-409	0,3710	0,3550	6	1-7/16"	5/16"	6"
99-707	0,3850	0,3700	6	1/2"	5/16"	6"
44-630	0,3750	0,3594	6	1"	1/2"	6"
34-116	0,3860	0,3720	6	1-7/16"	5/16"	6"
44-640	0,3906	0,3750	6	1-1/4"	1/2"	6"
99-708	0,4005	0,3850	6	1-1/4"	1/2"	7"
31-603	0,4010	0,3860	6	1-1/4"	5/16"	6"
44-650	0,4062	0,3906	6	1-1/4"	1/2"	6"
99-709	0,4160	0,4005	6	1-1/4"	1/2"	7"
44-660	0,4219	0,4062	6	1-1/4"	1/2"	6"
99-710	0,4325	0,4160	6	1-1/4"	1/2"	7"
99-719	0,4375	0,4219	6	1-1/4"	1/2"	7"
99-711	0,4485	0,4325	6	1-1/4"	1/2"	7"
99-720	0,4531	0,4375	6	1-1/4"	1/2"	7"
99-712	0,4640	0,4405	6	1-1/2"	1/2"	8"
99-721	0,4688	0,4531	6	1-1/4"	1/2"	7"
99-713	0,4795	0,4640	6	1-3/8"	1/2"	8"
99-722	0,4844	0,4688	6	1-3/8"	1/2"	8"
99-714	0,4950	0,4795	6	1-3/8"	1/2"	8"
99-723	0,5000	0,4844	6	1-1/2"	1/2"	8"
99-715	0,5110	0,4950	6	1-3/8"	1/2"	8"
99-724	0,5156	0,5000	6	1-3/8"	1/2"	8"
99-716	0,5265	0,5110	6	1-3/8"	1/2"	8"
99-725	0,5312	0,5156	6	1-3/8"	1/2"	8"
99-726	0,5469	0,5312	8	1-1/2"	1/2"	8"
99-727	0,5625	0,5469	8	1-1/2"	1/2"	8"
99-728	0,5781	0,5625	8	1-1/2"	1/2"	8"
99-729	0,5938	0,5781	8	1-1/2"	1/2"	8"
99-730	0,6094	0,5938	8	1-5/8"	1/2"	9"
99-731	0,6250	0,6094	8	1-5/8"	1/2"	9"

Otras medidas bajo pedido / OTHER DIMENSIONS ON REQUEST !

# Taladro NUTPLATE DRILLMOTOR NPDM-II B

✦ podrá localizar, agujerear y avellanar ambos agujeros de remache con una sola mano y en 4 segundos  
✦ Intercambiable de un agujero a otro intercambiando los complementos y el conjunto del eje

✦ ONE HAND OPERATION TO LOCATE, DRILL AND COUNTERSINK BOTH RIVET HOLES IN A SINGLE 4 SECOND OPERATION  
✦ TOOL IS EASILY CONVERTED FROM ONE RIVET HOLE SPACING TO ANOTHER BY INTERCHANGING THE FOOT ATTACHMENTS AND SPINDLE SPACER BLOCK



### Características:

- ✦ diseño ergonómico
- ✦ alimentación ajustable
- ✦ pie standard, mandril para pinzas y cortadores
- ✦ 1,36 kg más ligero que el modelo antiguo
- ✦ compatible con todos los soportes de eje desde 5,56 mm a 28,57 mm.
- ✦ medidas métricas disponibles bajo pedido

### Opcionales Zubehör:

- ✦ Cyugo en c para trabajo en bordes
- ✦ Fuerza extra para agujerear en materials duros
- ✦ sistema de enfriado y lubricación para mayor vida
- ✦ escape hacia delante atrás o los lados

### Standard Features:

- ✦ ergonomic design
- ✦ fully adjustable feed rate
- ✦ standard foot assembly, collet-mandrel and cutters from older model
- ✦ 3 lbs. lighter than older model
- ✦ accommodates all nutplate spindle spacings from .219 to 1.125 inches.
- ✦ popular metric spacings available on special request

### Optional Features:

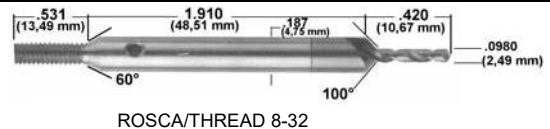
- ✦ c-yoke foot attachment for work edge application
- ✦ booster pump to increase clamp and thrust forces for drilling in tough materials
- ✦ coolant-lubricant system for improved cycle time and increased drill life
- ✦ forward, rearward, right or left exhaust direction

**Longitud de brocado**  
**velocidades disponibles**  
**entrada por revolución**  
**Motorleistung**  
**Máximo consume de aire**  
**Longitud de pinza**  
**Peso**

DRILL STROKE LENGTH  
AVAILABLE SPINDLE SPEEDS  
FEED RATE RANGE PER REVOLUTION  
AIR MOTOR POWER  
OPERATING MAXIMUM AIR CONSUMPTION  
COLLET STROKE LENGTH  
WEIGHT

**0.500 inches / 12,7 mm**  
**600 and 7,000 RPM / 600 und 7000 UPM**  
**0.001 to 0.012 inches / 0,025 mm bis 0,305 mm**  
**0.54 HP / 0,4 KW**  
**18CFM at 90PSI**  
**0.250 inch / 6,35 mm**  
**4.75 lbs. / 2,15 kg**

## Broca de fresado NUTPLATE COUNTERSINK DRILL



**Metal duro / SOLID CARBIDE**

Art N° / PART NO.:

**HPD-40C-100-35-8**

**HSS-E (Cobalto) / COBALT**

Art N° / PART NO.:

**HPD-40M42-100-35-8**

## Taladro con guía no reversible - 0,52 KW AIR-DRILL WITH GOVERNOR, NON-REVERSIBLE - .7 HP

viene con portabrocas de 3 mandíbulas y llave  
regulador calibrado para elegir velocidad  
**\* Nota: las brocas de 1/2" han de estar equipadas con mango de soporte**  
COMES WITH 3-JAW CHUCK & KEY.  
CALIBRATED DIAL ON REAR OF TOOL SIMPLIFIES DRILL SPEED SELECTION  
**\*NOTE: 1/2" CAPACITY DRILLS MUST BE EQUIPPED WITH SUPPORT HANDLE.**



Part No. Art N°	RPM No Load RPM sin carga	RPM Governed RPM con carga	Chuck* capacity Capacidad portabrocas	Side to Center Del lado al medio	Overall Length Longitud	Weight Peso
<b>135DPV-7B-43</b>	600	150-550	3/8" (10 mm)	25/32" (19,84 mm)	9-5/8" (245 mm)	3-5/8 lbs. (1,6 kg)
<b>135DPV-7B-50</b>	600	150-550	1/2" (13 mm) *	25/32" (19,84 mm)	9-5/8" (245 mm)	3-5/8 lbs. (1,6 kg)
<b>135DPV-14B-50</b>	1250	400-1200	1/2" (13 mm) *	25/32" (19,84 mm)	9-1/4" (235 mm)	3-3/8 lbs. (1,5 kg)
<b>135DPV-14B-51</b>	1250	400-1200	3/8" (10 mm)	25/32" (19,84 mm)	9-1/4" (235 mm)	3-3/8 lbs. (1,5 kg)
<b>135DPV-28B-51</b>	2600	700-2400	3/8" (10 mm)	25/32" (19,84 mm)	8-1/2" (216 mm)	3-1/8 lbs. (1,4 kg)

## Taladros - DHE



### Características

- diseño ergonómico
- escape "DHE"
- gatillo suave
- baja vibración
- mango de resina epoxy
- disponible en .3hp "D" Series, .7hp "D2" Series y 1.1hp "CXT" Series
- portabrocas de primera calidad

### "D" Series .3 hp

Model N°	N° Pedido	Velocidad RPM	Portabrocas
750-DHE	17352-4247	750	0-3/8"
1000-DHE	17353-4247	1000	0-3/8"
1500-DHE	17354-4245	1500	0-1/4"
2800-DHE	17355-4245	2800	0-1/4"
4500-DHE	17356-4245	4500	0-1/4"
25000-DHE	17357-4245	25000	0-1/4"

### "D2" Series .7 hp

Model N°	N° Pedido	Velocidad RPM	Portabrocas
250D2-DHE	17493-4251	250	5/64"-1/2"
450D2-DHE	17351-4251	450	5/64"-1/2"
650D2-DHE	17885-4248	650	0-3/8"
1000D2-DHE	17768-4248	1000	0-3/8"
2700D2-DHE	17324-4249	2700	0-1/4"
4500D2-DHE	17769-4249	4500	0-1/4"
20000D2-DHE	17770-4249	20000	0-1/4"

### "CXT" Series 1.1 hp

Model N°	N° Pedido	Velocidad RPM	Portabrocas
1000-CXT	17087-4249	1000	0-1/4"
2000-CXT	17088-4249	2000	0-1/4"
2700-CXT	17089-4249	2700	0-1/4"
4500-CXT	17090-4249	4500	0-1/4"
6000-CXT	17091-4249	6000	0-1/4"
18000-CXT	17767-4249	18000	0-1/4"

# TALADROS Ultraligeros



Max. Air Consumption: 45 SCFM@90 psi

Minimum Hose Size: 3/8" dia.  
Weight: 3 lbs.

**CXT-II**

**At 1.5 Hp, The Most Powerful Handheld Pneumatic Drill Available. Anywhere.  
A 1,5 caballos el más poderoso taladro disponible en ningún sitio.**

## "CXT-II" Series 1.5 hp

Nº Modelo y velocidad	Ref	Portabrocas				
		0 - 1/4" (0 - 6,3 mm)		0 - 3/8" (0 - 9,5 mm)		5/64"-1/2" (2 - 12,7 mm)
		Normal	protegido	Normal	protegido	Normal sólo
750-CXT-II	19452	-	-	4248	19013	4251
1000-CXT-II	19433	-	-	4248	19013	4251
1500-CXT-II	19412	4249	4250	19015	19014	-
2000-CXT-II	19454	4249	4250	19015	19014	-
2800-CXT-II	19432	4249	4250	19015	19014	-
4500-CXT-II	19451	4249	4250	19015	19014	-
6000-CXT-II	19407	4249	4250	19015	19014	-
20000-CXT-II	19453	4249	4250	19015	19014	-



Max. Air Consumption: 20 SCFM@90 psi

Minimum Hose Size: 1/4" dia.

Weight: 1.75 lbs.

**CXD**

**Medio caballo de potencia nunca ha sido tan pequeño y ligero**

## "CXD" Series .5 hp

Nº Modelo y velocidad	Ref	Portabroca	
		0 - 1/4" (0 - 6,3 mm)	0 - 3/8" (0 - 9,5 mm)
250-CXD	19382	4246	4247
450-CXD	19383	4246	4247
750-CXD	19384	4246	4247
1000-CXD	19385	4246	4247
1500-CXD	19386	4246	4247
2800-CXD	19387	4246	4247
4500-CXD	19388	4246	4247
25000-CXD	19389	4246	4247

# Taladros con forma de pistola PNEUMATIC PISTOL GRIP DRILLS

**Características:**  
Reversible y no reversible  
encendido en gatillo  
escape rotatable  
(1407,1410,1412)  
Cambio rápido  
mango cómodo  
Entrada de aire 1/4" NPT

**Features:**  
Reversible and  
Non-reversible  
Trigger Start  
Rotatable Exhaust (1407,  
1410, 1412 models)  
Rapid Reverse  
Comfort Grip  
Air Inlet 1/4" NPT



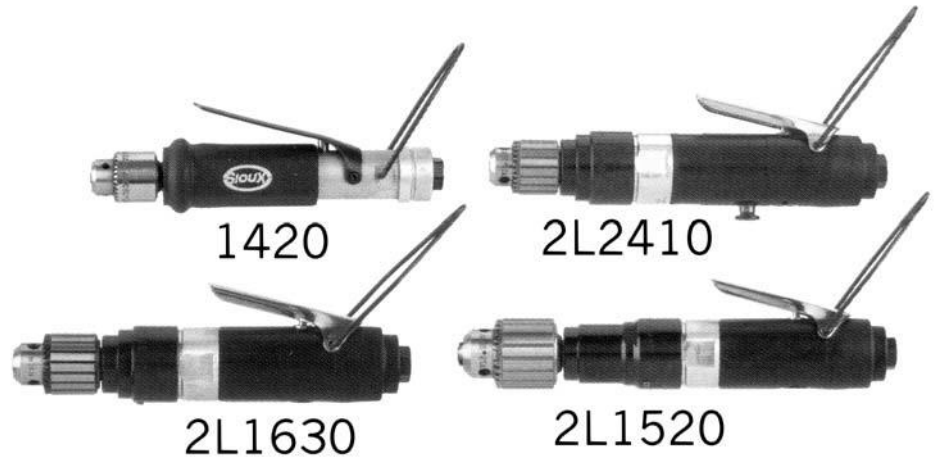
MODEL NUMBER Mod N°	CHUCK CAPACITY Porta brocas		FREE SPEED Velocidad	WEIGHT Peso		LENGTH Longitud		SLIDE TO CENTER Centro		AIR CONSUMPTION Aire		SOUND LEVEL Ruido	SPINDLE THREAD Rosca eje
	in.	mm	rpm/upm	lb	kg	in.	mm	in.	mm	cfm	l/s	dB(A)	
<b>250 Watt (0.33 hp) – Hacia la derecha (Non-reversible)</b>													
<b>1412</b>	1/4	6	3600	1.3	0.6	6.3	160	0.6	15	12	6	75	3/8"-24
<b>1410</b>	1/4	6	2600	1.3	0.6	6.3	160	0.6	15	12	6	75	3/8"-24
<b>1407</b>	1/4	6	950	1.3	0.6	6.7	170	0.6	15	12	6	75	3/8"-24
<b>670 Watt (0.90 hp) – Hacia la derecha (Non-reversible)</b>													
<b>1456ES</b>	1/4	6	6000	2.5	1.1	7.0	178	0.8	20	30	14	78	3/8"-24
<b>1453ES</b>	1/4	6	4500	2.5	1.1	7.0	178	0.8	20	30	14	78	3/8"-24
<b>1452ES</b>	1/4	6	3300	2.5	1.1	7.0	178	0.8	20	30	14	78	3/8"-24
<b>1450ES</b>	1/4	6	2600	2.5	1.1	7.0	178	0.8	20	30	14	78	3/8"-24
<b>1456ES3/8</b>	3/8	10	6000	2.6	1.2	7.0	178	0.8	20	30	14	78	3/8"-24
<b>1453ES3/8</b>	3/8	10	4500	3.1	1.4	7.0	178	0.8	20	30	14	78	3/8"-24
<b>1452ES3/8</b>	3/8	10	3300	2.6	1.2	7.0	178	0.8	20	30	14	78	3/8"-24
<b>1454ES</b>	3/8	10	2600	2.6	1.2	7.0	178	0.8	20	30	14	78	3/8"-24
<b>1451ES</b>	3/8	10	1600	3.1	1.4	8.2	208	0.9	23	30	14	78	3/8"-24
<b>1455ES</b>	3/8	10	1000	3.1	1.4	8.2	208	0.9	23	30	14	78	3/8"-24
<b>1449ES</b>	3/8	10	500	3.1	1.4	8.2	208	0.9	23	30	14	78	1/2"-20
<b>1450ESB</b>	1/2	13	2600	2.8	1.3	7.0	178	0.8	20	30	14	78	3/8"-24
<b>1455ESB *</b>	1/2	13	1000	3.3	1.5	8.7	221	0.9	23	30	14	78	3/8"-24
<b>1449ESB *</b>	1/2	13	500	3.3	1.5	8.7	221	0.9	23	30	14	78	1/2"-20
<b>150 Watt (0.20 hp) - Reversible</b>													
<b>1412R</b>	1/4	6	2600	1.3	0.6	6.3	160	0.6	15	10	5	75	3/8"-24
<b>1410R</b>	1/4	6	2000	1.3	0.6	6.3	160	0.6	15	10	5	75	3/8"-24
<b>450 Watt (0.60 hp) - Reversible</b>													
<b>1450ESR</b>	1/4	6	2600	2.6	1.2	7.5	191	0.8	20	25	12	78	3/8"-24
<b>1449ESR</b>	3/8	10	4500	3.2	1.5	8.7	221	0.9	23	25	12	78	3/8"-24
<b>1454ESR</b>	3/8	10	2000	2.9	1.3	7.5	191	0.8	20	25	12	78	3/8"-24
<b>1451ESR</b>	3/8	10	1200	3.2	1.5	8.7	221	0.9	23	25	12	78	3/8"-24
<b>1455ESR</b>	3/8	10	700	3.2	1.5	8.7	221	0.9	23	25	12	78	3/8"-24
<b>1455ESBR*</b>	1/2	13	700	3.5	1.6	9.2	234	0.9	23	25	12	78	3/8"-24
<b>1449ESBR*</b>	1/2	13	450	3.5	1.6	9.2	234	0.9	23	25	12	78	1/2"-20

# Taladros neumáticos rectos

## PNEUMATIC STRAIGHT DRILLS

**Características:**  
 Reversible y no reversible  
 Arranque con palanca  
 Agarre cómodo (1420, 1422)  
 Salida atrás  
 Entrada de aire: 1/4" NPT

**Features:**  
 Reversible and Non-reversible  
 Lever Start  
 Rear Exhaust  
 Comfort Grip (1420, 1422)  
 Air Inlet: 1/4" NPT



MODEL NUMBER Art. Nº	CHUCK CAPACITY Capacidad agarret		FREE SPEED Velocida libre rpm/upm	WEIGHT Peso		LENGTH Longitud		SLIDE TO CENTER Al centro		AIR CONSUMPTION Consumo aire		SOUND LEVEL Ruido dB(A)	SPINDLE THREAD Rosca eje
	in.	mm		lb	kg	in.	mm	in.	mm	cfm	l/s		
<b>250 Watt (0.33 hp) - (Non-reversible)</b>													
<b>1422</b>	1/4	6	3600	1.2	0.54	8.0	203	.6	15	12	6	75	3/8"-24
<b>1420</b>	1/4	6	2600	1.2	0.54	8.0	203	.6	15	12	6	75	3/8"-24
<b>560 Watt (0.75 hp) - (Non-Reversible)</b>													
<b>2L1910</b>	1/4	6	18000	2.3	1.0	8.9	226	1.0	25	28	13	85	3/8"-24
<b>2L1410</b>	1/4	6	5800	2.3	1.0	8.9	226	1.0	25	28	13	85	3/8"-24
<b>2L1310</b>	1/4	6	3350	2.3	1.0	8.9	226	1.0	25	28	13	85	3/8"-24
<b>2L1610</b>	1/4	6	2600	2.3	1.0	8.9	226	1.0	25	28	13	85	3/8"-24
<b>2L1210</b>	1/4	6	1600	2.7	1.2	10.0	254	1.0	25	28	13	85	3/8"-24
<b>2L1110</b>	1/4	6	900	2.7	1.2	10.0	254	1.0	25	28	13	85	3/8"-24
<b>2L1510</b>	1/4	6	540	2.7	1.2	10.0	254	1.0	25	28	13	85	3/8"-24
<b>2L1430</b>	3/8	10	5800	2.4	1.1	8.9	226	1.0	25	28	13	85	3/8"-24
<b>2L1330</b>	3/8	10	3350	2.4	1.1	8.9	226	1.0	25	28	13	85	3/8"-24
<b>2L1630</b>	3/8	10	2600	2.4	1.1	8.9	226	1.0	25	28	13	85	3/8"-24
<b>2L1230</b>	3/8	10	1600	2.8	1.3	10.0	254	1.0	25	28	13	85	3/8"-24
<b>2L1130</b>	3/8	10	900	2.8	1.3	10.0	254	1.0	25	28	13	85	3/8"-24
<b>2L1520 *</b>	1/2	13	540	2.8	1.3	10.0	254	1.0	25	28	13	85	3/8"-24
<b>370 Watt (0.50 hp) - (Reversible)</b>													
<b>2L2910</b>	1/4	6	16000	2.5	1.1	9.6	243	1.0	25	24	11	84	3/8"-24
<b>2L2410</b>	1/4	6	4400	2.6	1.2	9.3	236	1.0	25	24	11	84	3/8"-24
<b>2L2210</b>	1/4	6	1600	3.0	1.4	11.0	279	1.0	25	24	11	84	3/8"-24
<b>2L2230</b>	3/8	10	1600	3.1	1.4	11.0	279	1.0	25	24	11	84	3/8"-24

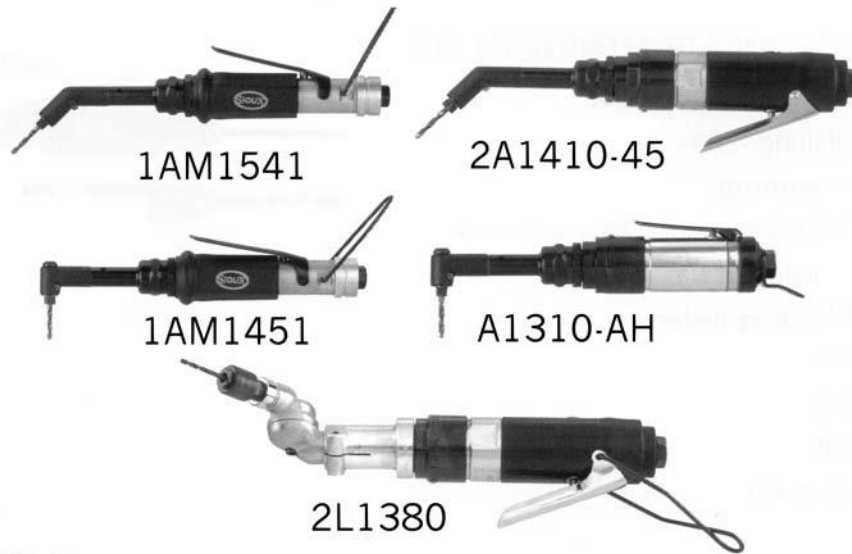
\* Mango soporte incluido / Support handle included

# Taladros neumáticos en ángulo

## PNEUMATIC ANGLE DRILLS

**Características:**  
 No reversible  
 Encendido palanca  
 Salida atrás  
 Ángulos de 45° o 90°  
 (excepto modelo 2L1380)  
 Cabeza rotatoria de 180°  
 (solo mod. 2L1380)  
 Entrada de aire: 1/4"  
 NPT

**Features:**  
 Non-reversible  
 Lever Start  
 Rear Exhaust  
 45° or 90° Angle Heads  
 (except 2L1380)  
 180° Adjustable Rotating Head  
 (only Mod. 2L1380)  
 Air Inlet: 1/4" NPT



MODEL NUMBER Art. N°	CHUCK CAPACITY	FREE SPEED		WEIGHT		LENGTH		SLIDE TO CENTER		AIR CONSUMPTION
	Capacidad agarret	Velocidad libre		Peso		Longitud		Al centro		dB(A)
	rpm/upm	lb	kg	in.	mm	in.	mm	cfm	l/s	
<b>Cabeza 45° - 250 Watt - 1/4"-28 Rosca eje interno</b> 45° Angle Head - 0.33 hp - 1/4"-28 Internal Thread Spindle										
<b>1AM1541</b>	2800	1.5	0.7	10.2	259	0.3	8	12	6	75
<b>1AM1441</b>	2200	1.5	0.7	10.2	259	0.3	8	12	6	75
<b>Cabeza 45° - 300 Watt - 1/4"-28 Rosca eje interno</b> 45° Angle Head - 0.40 hp - 1/4"-28 Internal Thread Spindle										
<b>A1310-45</b>	2500	2.3	1.1	10.6	269	0.3	8	18	8	85
<b>Cabeza 45° - 560 Watt - 1/4"-28 Rosca eje interno</b> 45° Angle Head - 0.75 hp - 1/4"-28 Internal Thread Spindle										
<b>2A1410-45</b>	5800	2.7	1.3	12.0	305	0.3	8	28	13	85
<b>Cabeza 90° - 250 Watt - 1/4"-28 Rosca eje interno</b> 90° Angle Head - 0.33 hp - 1/4"-28 Internal Thread Spindle										
<b>1AM1551</b>	2800	1.5	0.7	9.7	246	0.3	8	12	6	75
<b>1AM1451</b>	2200	1.5	0.7	9.7	246	0.3	8	12	6	75
<b>Cabeza 90° - 250 Watt - 9/32"-40 Rosca eje interno</b> 90° Angle Head - 0.33 hp - 9/32"-40 Internal Thread Spindle										
<b>1AM1552</b>	2800	1.5	0.7	9.7	246	0.3	8	12	6	75
<b>1AM1452</b>	2200	1.5	0.7	9.7	246	0.3	8	12	6	75
<b>Cabeza 90° - 300 Watt - 1/4"-28 Rosca eje interno</b> 90° Angle Head - 0.40 hp - 1/4"-28 Internal Thread Spindle										
<b>A1310-AH</b>	2500	2.3	1.1	10.0	254	0.3	8	18	8	85
<b>Cabeza 90° - 560 Watt - 1/4"-28 Rosca eje interno</b> 90° Angle Head - 0.75 hp - 1/4"-28 Internal Thread Spindle										
<b>2A1410-AH</b>	5800	2.7	1.3	11.4	290	0.3	8	28	13	85
<b>2A1510-AH</b>	540	3.1	1.4	12.8	325	0.3	8	28	13	85
<b>Cabeza 180° - 560 Watt - Capacidad : 0,7 - 6,35 mm</b> 180° Rotating Head - 0.75 hp - Chuck Capacity: #70 - 1/4"										
<b>2L1380</b>	3350	2.3	1.1	13.7	348	0.6	15	28	13	85

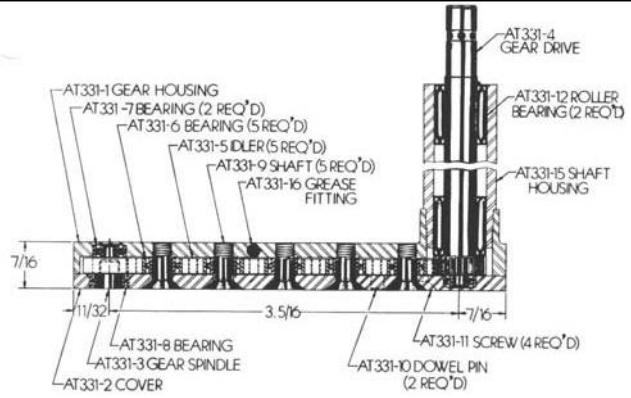
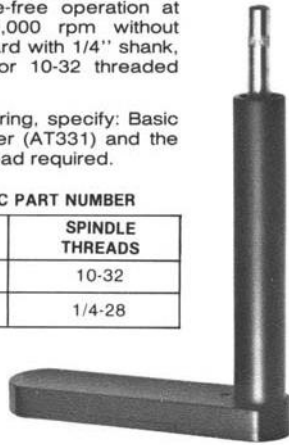
## OFFSET ANGLE DRILL AT331

The AT331 Series Offset Angle Drills are designed to reach inaccessible areas: Equipped with anti-friction ball bearings for smooth, trouble-free operation at speeds up to 10,000 rpm without overheating. Standard with 1/4" shank, and either 1/4-28 or 10-32 threaded spindle.

**NOTE:** When ordering, specify: Basic Part Number (AT331) and the spindle thread required.

### ORDER BY BASIC PART NUMBER

BASIC PART NO.	SPINDLE THREADS
AT331A	10-32
AT331B	1/4-28



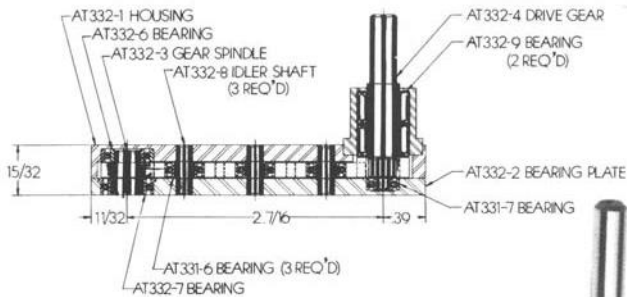
## OFFSET ANGLE DRILL AT332

The AT332 Series Offset Angle Drills are designed to reach inaccessible areas: Equipped with anti-friction ball bearings for smooth, trouble-free operation at speeds up to 10,000 rpm without overheating. Standard with 1/4" shank, and either 1/4-28 or 10-32 threaded spindle.

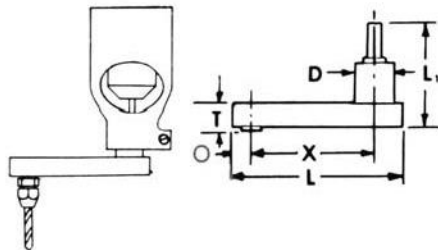
**NOTE:** When ordering, specify: Part Number (AT332) and the spindle thread required.

### ORDER BY BASIC PART NUMBER

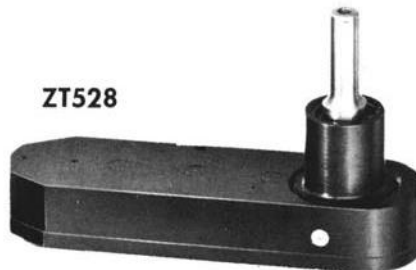
BASIC PART NO.	SPINDLE THREADS
AT332A	10-32
AT332B	1/4-28



**DRILLS OFFSET FOR THOSE PLACES INACCESSIBLE FOR ORDINARY DRILLS. HOUSINGS ENCASE HEAT TREATED GEARS, WITH SHAFTS HARDENED AND PRECISION GROUND TO TAKE THE TOUGHEST TASKS WITH EASE.**

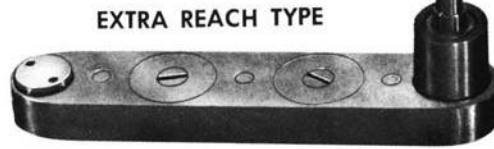
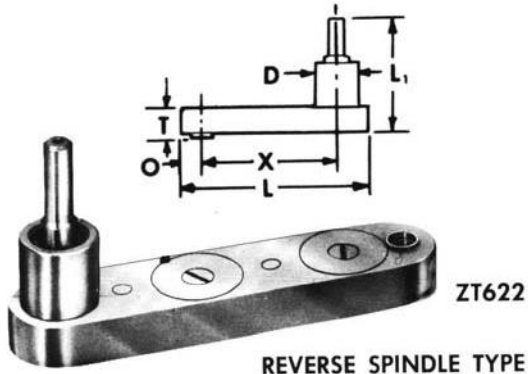


**ZT528**



MODEL	FOR USE WITH MOTORS	SPINDLE THREAD	SPINDLE OFFSET O	DRILL OFFSET X	OVERALL LENGTH L	LENGTH SHORT END L <sub>1</sub>	BODY THICKNESS T	MOUNT. DIA. D	MAX. REC. CAP.
ZT528-B		5/16-24	3/8	2 5/16	3 1/16	2 1/8	5/16	1 1/16	5/16
ZT528-C		1/4-28							

OFFSET DRILLS FOR THOSE "HARD TO GET AT" AREAS. HEAT TREATED GEARS, HARDENED AND PRECISION GROUND SHAFTS, MAKE THIS TOOL ACCEPTABLE FOR THE TOUGHEST JOBS.



ZT535

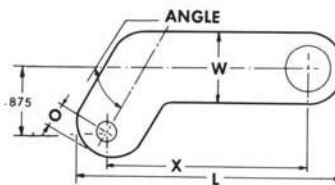
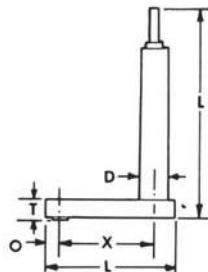


ZT721

ZT733

MODEL	FOR USE WITH MOTOR	SPINDLE THREAD **	SPINDLE OFFSET O	DRILL OFFSET X	OVERALL LENGTH L	LENGTH SHORT END L <sub>1</sub>	THICKNESS T	MOUNT DIA. D	MAX. REC. CAP.
ZT535-C		1/4-28							
-D		#10-32	5/16"	3 13/16"	4 35/64"	1 61/64"	1 7/32"	1 1/16"	1/4"
-G		#5-40							
ZT622-C		1/4-28							
-D		#10-32	5/16"	3 1/8"	3 7/8"	1 61/64"	1 7/32"	1 1/16"	1/4"
-G		#5-40							
ZT721-C		1/4-28							
-D		#10-32	5/16"	2 29/64"	3 13/64"	1 15/16"	1/2"	1 1/16"	1/4"
-G		#5-40							
ZT733-C		1/4-28							
-D		#10-32	5/16"	2 15/32"	3 7/32"	1 13/16"	3/8"	1 1/16"	3/16"
-G		#5-40							

EXTRA THIN DRILLS WHICH ALLOW ACCESS INTO TIGHT AREAS. AL STEEL HOUSINGS, HEAT TREATED GEARS, HARDENED AND PRECISION GROUND SHAFTS TACKLE THE TOUGHEST OF TASKS WITH EASE.



MODEL	SPINDLE THREAD	SPINDLE OFFSET O	DRILL OFFSET X	OVERALL LENGTH L	LENGTH L <sub>1</sub>	BODY THICKNESS T	BODY WIDTH W	ANGLE	DRILL CAP.	PREVIOUS MODEL
ZT562	10-32	3/32"	2 5/8"	3 1/8"	5 1/16"	1/4"	7/8"	30° R.H.	1/8"	ZT513
ZT563								30° L.H.		ZT514
ZT561								STRAIGHT		ZT515
ZT762			2 5/8"	3 1/8"	1 13/16"			30° R.H.		ZT713
ZT763								30° L.H.		ZT714
ZT761			3 3/4"	3 1/8"				STRAIGHT		ZT715

## Brocas de corte doble - NAS 937

**Longitud normal M42, 8% Cobalto, 135° punta**



Diseñado para tolerancias pequeñas en titanio, inoxidable, material tratado al calor y aleaciones de aluminio. Cuando la broca penetra suficiente para que el segundo filo toque la pared del agujero, la punta se estabiliza y se establece la geometría cilíndrica, se hacen agujeros precisos y se elimina la escariación.

Art N°	Tamaño	Diámetro		Zona corte	Longitud total	
13-DM40	#40	.0980		1.3/8"	2.3/8"	
13-DM065	1/8"	.1250		1.5/8"	2-3/4"	
13-DM30	#30	.1285		1.5/8"	2.3/4"	
13-DM27	#27	.1440		1.7/8"	3"	
13-DM067	5/32"	.1562		2"	3.1/8"	
13-DM21	#21	.1590		2.1/8"	3.1/4"	
13-DM20	#20	.1610		2.1/8"	3.1/4"	
13-DM16	#16	.1770		2.3/16"	3.3/8"	
13-DM15	#15	.1800		2.3/16"	3.3/8"	
13-DM13	#13	.1850		2.1/8"	3.1/2"	
13-DM069	3/16"	.1875		2.5/16"	3.1/2"	
13-DM12	#12	.1890		2.5/16"	3.1/2"	
13-DM11	#11	.1910		2.5/16"	3.1/2"	
13-DM10	#10	.1935		2.7/16"	3.5/8"	
13-DM08	#8	.1990		2.7/16"	3.5/8"	
13-DM06	#6	.2040		2.1/2"	3.3/4"	
13-DM05	#5	.2055		2.1/2"	3.3/4"	
13-DM93	D	.2460		2.3/4"	4"	
13-DM73	1/4"	.2500		2.3/4"	4"	
13-DM077	5/16"	.3125		3.3/16"	4.1/2"	

## Broca de corte doble con guía

**Longitud normal M42, 8% Cobalto, 135° punta**

Diseñado para aplicaciones en titanio, inoxidable y superficies tratadas. En cuanto la punta penetra lo suficiente para que el segundo filo toque la pared del agujero, la punta se estabiliza y se establece la geometría cilíndrica, se hacen agujeros precisos y se elimina la escariación.

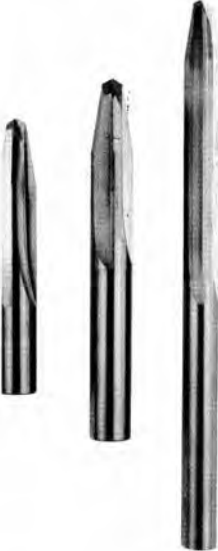
Art N°	Tamaño	Diámetro	Guía	Zona corte	Longitud total	Long. guía
13-100	30 x 40	.1285	.0980	1.5/8"	2.3/4"	1/4"
13-107	21 x 30	.1590	.1285	2.1/8"	3.1/4"	1/4"
13-114	21 x 40	.1590	.0980	2.5/16"	3.1/4"	1/4"
13-121	13 x 40	.1850	.0980	2.5/16"	3.1/2"	1/4"
13-128	13 x 30	.1850	.1285	2.5/16"	3.1/2"	1/4"
13-135	13 x 21	.1850	.1590	2.5/16"	3.1/2"	1/4"
13-142	12 x 40	.1890	.0980	2.5/16"	3.1/2"	1/4"
13-149	12 x 30	.1890	.1285	2.5/16"	3.1/2"	1/4"
13-156	12 x 21	.1890	.1590	2.5/16"	3.1/2"	1/4"
13-163	11 x 21	.1910	.1590	2.5/16"	3.1/2"	1/4"
13-170	11 x 30	.1910	.1285	2.5/16"	3.1/2"	1/4"
13-177	10 x 30	.1935	.1285	2.3/4"	3.5/8"	1/4"
13-184	10 x 40	.1935	.0980	2.3/4"	3.5/8"	1/4"
13-191	10 x 21	.1935	.1590	2.3/4"	3.5/8"	1/4"
13-198	"D" x 3/16"	.2460	.1875	2.3/4"	4"	5/16"
13-205	"D" x 13	.2460	.1850	2.3/4"	4"	5/16"
13-216	1/4" x 10	.2500	.1935	2.3/4"	4"	5/16"
13-223	1/4" x 11	.2500	.1910	2.3/4"	4"	5/16"
13-230	1/4" x 30	.2500	.1285	2.3/4"	4"	5/16"
13-327	1/4" x 21	.2500	.1590	2.3/4"	4"	5/16"
13-244	5/16" x 1/4"	.3125	.2500	3.1/16"	4"	5/16"

## HERRAMIENTAS DE METAL DURO-ALTA CALIDAD

Para Grafito, Kevlar, fibra de vidrio y otros compuestos

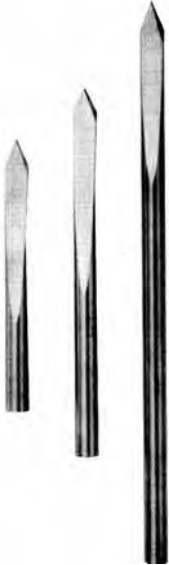
### BROCA ESCARIADORA – principalmente para Fibra de vidrio o grafito.


Para escariar y erforar con tolerancia muy pequeñas.

	Tamaño	Art N°	Art N°	Art N°
		Longitud 3"	Longitud 4"	Longitud 6"
.0980	DR-0980-3"	DR-0980-4"	DR-0980-6"	
.1250	DR-1250-3"	DR-1250-4"	DR-1250-6"	
.1285	DR-1285-3"	DR-1285-4"	DR-1285-6"	
.1406	DR-1406-3"	DR-1406-4"	DR-1406-6"	
.1562	DR-1562-3"	DR-1562-4"	DR-1562-6"	
.1590	DR-1590-3"	DR-1590-4"	DR-1590-6"	
.1610	DR-1610-3"	DR-1610-4"	DR-1610-6"	
.1719	DR-1719-3"	DR-1719-4"	DR-1719-6"	
.1875	DR-1875-3"	DR-1875-4"	DR-1875-6"	
.1910	DR-1910-3"	DR-1910-4"	DR-1910-6"	
.1935	DR-1935-3"	DR-1935-4"	DR-1935-6"	
.1990	DR-1990-3"	DR-1990-4"	DR-1990-6"	
.2010	DR-2010-3"	DR-2010-4"	DR-2010-6"	
.2031	DR-2031-3"	DR-2031-4"	DR-2031-6"	
.2188	DR-2188-3"	DR-2188-4"	DR-2188-6"	
.2280	DR-2280-3"	DR-2280-4"	DR-2280-6"	
.2340	DR-2340-3"	DR-2340-4"	DR-2340-6"	
.2380	DR-2380-3"	DR-2380-4"	DR-2380-6"	
.2500	DR-2500-3"	DR-2500-4"	DR-2500-6"	
.2510	DR-2510-3"	DR-2510-4"	DR-2510-6"	


### BROCA – para perforar laminas de Grafito/Epoxy.


Puede usarse en combinación con aluminio.

	Tamaño	Art N°	Art N°	Art N°
		Longitud 3"	Longitud 4"	Longitud 6"
.1250	DD-1250-3"	DD-1250-4"	DD-1250-6"	
.1285	DD-1285-3"	DD-1285-4"	DD-1285-6"	
.1406	DD-1406-3"	DD-1406-4"	DD-1406-6"	
.1562	DD-1562-3"	DD-1562-4"	DD-1562-6"	
.1590	DD-1590-3"	DD-1590-4"	DD-1590-6"	
.1610	DD-1610-3"	DD-1610-4"	DD-1610-6"	
.1719	DD-1719-3"	DD-1719-4"	DD-1719-6"	
.1875	DD-1875-3"	DD-1875-4"	DD-1875-6"	
.1910	DD-1910-3"	DD-1910-4"	DD-1910-6"	
.1935	DD-1935-3"	DD-1935-4"	DD-1935-6"	
.1990	DD-1990-3"	DD-1990-4"	DD-1990-6"	
.2010	DD-2010-3"	DD-2010-4"	DD-2010-6"	
.2031	DD-2031-3"	DD-2031-4"	DD-2031-6"	
.2188	DD-2188-3"	DD-2188-4"	DD-2188-6"	
.2280	DD-2280-3"	DD-2280-4"	DD-2280-6"	
.2340	DD-2340-3"	DD-2340-4"	DD-2340-6"	
.2380	DD-2380-3"	DD-2380-4"	DD-2380-6"	
.2500	DD-2500-3"	DD-2500-4"	DD-2500-6"	
.2510	DD-2510-3"	DD-2510-4"	DD-2510-6"	

<b>A</b>			<b>Broca fresado cónica, 3 hélices</b> <b>TAPER ROUTER, 3-FLUTES</b> <b>TAPER 1/4 INCH PER FOOT</b>			
	<b>Art N°</b> PART NO.	<b>Mango</b> SHANK DIA.	<b>Diámetro pequeño</b> SMALL END	<b>Diámetro grande</b> LARGE END	<b>Zona corte</b> FLUTE LENGTH	<b>Longitud total</b> OVERALL LENGTH
	<b>4244-1</b>	<b>.098</b> (2,49 mm)	<b>.081</b> (2,06 mm)	<b>.098</b> (2,49 mm)	<b>13/16"</b> (20,64 mm)	<b>2"</b> (50,8 mm)
	<b>4244-2</b>	<b>.128</b> (3,25 mm)	<b>.110</b> (2,79 mm)	<b>.128</b> (3,25 mm)	<b>7/8"</b> (22,23 mm)	<b>2.1/4"</b> (57,2 mm)
	<b>4244-3</b>	<b>.1875</b> (4,76 mm)	<b>.165</b> (4,19 mm)	<b>.1875</b> (4,76 mm)	<b>1.1/16"</b> (26,99 mm)	<b>2.1/2"</b> (63,5 mm)
	<b>4244-4</b>	<b>.250</b> (6,35 mm)	<b>.224</b> (5,69 mm)	<b>.250</b> (6,35 mm)	<b>1.1/4"</b> (31,75 mm)	<b>2.3/4"</b> (69,9 mm)

<b>B</b>	<b>Fresa con punta a 135° para fibra de vidrio y materials no metálicos</b> <b>ROUTER WITH 135° DRILL POINT FOR FIBRE GLASS &amp; NON-METALLIC MATERIALS</b>				
	<b>Art N°</b> PART NO.	<b>Mango</b> SHANK DIA.	<b>Diámetro cabeza</b> HEAD DIAMETER	<b>Longitud hélices</b> FLUTE LENGTH	<b>Longitud total</b> OVERALL LENGTH
	<b>223-1/4"</b>	<b>1/4"</b> (6,35 mm)	<b>1/4"</b> (6,35 mm)	<b>3/4"</b> (19,05 mm)	<b>2.1/2"</b> (63,5 mm)

<b>C</b>			<b>Broca de metal duro especial para Kevlar y compuestos de grafito</b> <b>SOLID CARBIDE DRILL WITH SPECIAL GRINDING FOR KEVLAR AND GRAPHITE COMPOSITES</b>				
	<b>Art N°</b> / PART NO.		<b>342-3/32"</b>	<b>342-1/8"</b>	<b>342-5/32"</b>	<b>342-3/16"</b>	<b>342-1/4"</b>
	<b>Diámetro</b> / DIAMETER		<b>3/32"</b> (2,38 mm)	<b>1/8"</b> (3,18 mm)	<b>5/32"</b> (3,97 mm)	<b>3/16"</b> (4,76 mm)	<b>1/4"</b> (6,35 mm)
	<b>Longitud total</b> / O/A LENGTH		<b>1.690</b> (43 mm)	<b>1.930</b> (49 mm)	<b>2.160</b> (55 mm)	<b>2.440</b> (62 mm)	<b>2.756</b> (43 mm)
	<b>Longitud corte</b> / FLUTE LENGTH		<b>.551</b> (14 mm)	<b>.709</b> (18 mm)	<b>.866</b> (22 mm)	<b>1.024</b> (26 mm)	<b>1.221</b> (31 mm)

<b>D</b>			<b>Broca punzón de cobalto</b> <b>Longitud aprox. 35mm, Zona corte aprox. 14 mm</b> <b>COBALT-RIVET-KNOCKOUT-DRILL</b> <b>OVERALL LENGTH APPR. 1.3/8", FLUTE LENGTH APPR. 9/16"</b>			
	<b>Schneidenwinkel 135°</b> <b>SPLIT POINT 135°</b>					
<b>Art N° / PART NO.</b>	<b>Diámetro / DIAMETER</b>		<b>Art N° / PART NO.</b>	<b>Diámetro / DIAMETER</b>		
	<b>MM</b>	<b>INCH</b>		<b>MM</b>	<b>INCH</b>	
<b>HAUS94-2,00 MM-M42</b>	<b>2,00</b>	<b>.0787</b>	<b>HAUS94-4,10 MM-M42</b>	<b>4,10</b>	<b>.1614</b>	
<b>HAUS94-2,40 MM-M42</b>	<b>2,40</b>	<b>.0945</b>	<b>HAUS94-4,20 MM-M42</b>	<b>4,20</b>	<b>.1654</b>	
<b>HAUS94-2,50 MM-M42</b>	<b>2,50</b>	<b>.0984</b>	<b>HAUS94-4,50 MM-M42</b>	<b>4,50</b>	<b>.1772</b>	
<b>HAUS94-3,00 MM-M42</b>	<b>3,00</b>	<b>.1181</b>	<b>HAUS94-4,80 MM-M42</b>	<b>4,80</b>	<b>.1890</b>	
<b>HAUS94-3,20 MM-M42</b>	<b>3,20</b>	<b>.1260</b>	<b>HAUS94-5,00 MM-M42</b>	<b>5,00</b>	<b>.1969</b>	
<b>HAUS94-3,26 MM-M42</b>	<b>3,26</b>	<b>.1283</b>	<b>HAUS94-5,50 MM-M42</b>	<b>5,50</b>	<b>.2165</b>	
<b>HAUS94-3,50 MM-M42</b>	<b>3,50</b>	<b>.1378</b>	<b>HAUS94-6,00 MM-M42</b>	<b>6,00</b>	<b>.2362</b>	
<b>HAUS94-4,00 MM-M42</b>	<b>4,00</b>	<b>.1575</b>	<b>HAUS94-6,40 MM-M42</b>	<b>6,40</b>	<b>.2520</b>	
<b>HAUS94-4,09 MM-M42</b>	<b>4,09</b>	<b>.1610</b>				

Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !



## BROCA DE COBALTO PARA MAQUINA

Punta 135°

**Serie M40Co Fracciones**  
 1/16 a 19/64, 12 por sobre; 5/16 a 1/2 6 por sobre  
 33/64 a 3/4, 1 por estuche

Referencia	Tamaño	Decimales	Zona Corte	Longitud total
40304	1/16	.0625	5/8	1-5/8
40305	5/64	.0781	11/16	1-11/16
40306	3/32	.0938	3/4	1-3/4
40307	7/64	.1094	13/16	1-13/16
40308	1/8	.1250	7/8	1-7/8
40309	9/64	.1406	15/16	1-15/16
40310	5/32	.1562	1	2-1/16
40311	11/64	.1719	1-1/16	2-1/8
40312	3/16	.1875	1-1/8	2-3/16
40313	13/64	.2031	1-3/16	2-1/4
40314	7/32	.2188	1-1/4	2-3/8
40315	15/64	.2344	1-5/16	2-7/16
40316	1/4	.2500	1-3/8	2-1/2
40317	17/64	.2656	1-7/16	2-5/8
40318	9/32	.2812	1-1/2	2-11/16
40319	19/64	.2969	1-9/16	2-3/4
40320	5/16	.3125	1-5/8	2-13/16
40321	21/64	.3281	1-11/16	2-15/16
40322	11/32	.3438	1-11/16	3
40323	23/64	.3594	1-3/4	3-1/16
40324	3/8	.3750	1-13/16	3-1/8
40325	25/64	.3906	1-7/8	3-1/4
40326	13/32	.4062	1-15/16	3-5/16
40327	27/64	.4219	2	3-3/8
40328	7/16	.4375	2-1/16	3-7/16
40329	29/64	.4531	2-1/8	3-9/16
40330	15/32	.4688	2-1/8	3-5/8
40331	31/64	.4844	2-3/16	3-11/16
40332	1/2	.5000	2-1/4	3-3/4
46033	33/64	.5156	2-3/8	3-7/8
46034	17/32	.5312	2-3/8	3-7/8
46035	35/64	.5469	2-1/2	4
46036	9/16	.5625	2-1/2	4
46037	37/64	.5781	2-5/8	4-1/8
46038	19/32	.5938	2-5/8	4-1/8
46039	39/64	.6094	2-3/4	4-1/4
46040	5/8	.6250	2-3/4	4-1/4
46041	41/64	.6406	2-7/8	4-1/2
46042	21/32	.6562	2-7/8	4-1/2
46043	43/64	.6719	2-7/8	4-5/8
46044	11/16	.6875	2-7/8	4-5/8
46045	45/64	.7031	3	4-3/4
46046	23/32	.7188	3	4-3/4
46047	47/64	.7344	3-1/8	5
46048	3/4	.7500	3-1/8	5

**Serie M41Co**  
 1 a 60, 12 por sobre

Referencia	Tamaño	Decimales	Zona Corte	Longitud total
41301	1	.2280	1-5/16	2-7/16
41302	2	.2210	1-5/16	2-7/16
41303	3	.2130	1-1/4	2-3/8
41304	4	.2090	1-1/4	2-3/8
41305	5	.2055	1-1/4	2-3/8
41306	6	.2040	1-1/4	2-3/8
41307	7	.2010	1-3/16	2-1/4
41308	8	.1990	1-3/16	2-1/4
41309	9	.1960	1-3/16	2-1/4
41310	10	.1935	1-3/16	2-1/4
41311	11	.1910	1-3/16	2-1/4
41312	12	.1890	1-3/16	2-1/4
41313	13	.1850	1-1/8	2-3/16
41314	14	.1820	1-1/8	2-3/16
41315	15	.1800	1-1/8	2-3/16
41316	16	.1770	1-1/8	2-3/16
41317	17	.1730	1-1/8	2-3/16
41318	18	.1695	1-1/16	2-1/8
41319	19	.1660	1-1/16	2-1/8
41320	20	.1610	1-1/16	2-1/8
41321	21	.1590	1-1/16	2-1/8
41322	22	.1570	1-1/16	2-1/8
41323	23	.1540	1	2-1/16
41324	24	.1520	1	2-1/16
41325	25	.1495	1	2-1/16
41326	26	.1470	1	2-1/16
41327	27	.1440	1	2-1/16
41328	28	.1405	15/16	1-15/16
41329	29	.1360	15/16	1-15/16
41330	30	.1285	15/16	1-15/16
41331	31	.1200	7/8	1-7/8
41332	32	.1160	7/8	1-7/8
41333	33	.1130	7/8	1-7/8
41334	34	.1110	7/8	1-7/8
41335	35	.1100	7/8	1-7/8
41336	36	.1065	13/16	1-13/16
41337	37	.1040	13/16	1-13/16
41338	38	.1015	13/16	1-13/16
41339	39	.0995	13/16	1-13/16
41340	40	.0980	13/16	1-13/16
41341	41	.0960	13/16	1-13/16
41342	42	.0935	3/4	1-3/4
41343	43	.0890	3/4	1-3/4
41344	44	.0860	3/4	1-3/4
41345	45	.0820	3/4	1-3/4
41346	46	.0810	3/4	1-3/4
41347	47	.0785	11/16	1-11/16
41348	48	.0760	11/16	1-11/16
41349	49	.0730	11/16	1-11/16
41350	50	.0700	11/16	1-11/16
41351	51	.0670	11/16	1-11/16
41352	52	.0635	11/16	1-11/16

\* Surface treated flutes .5156 and over



## BROCA DE LONGITUD NORMAL, COBALTO

### NAS 907, Tipo J, Punta a 135°

Serie R10Co Fraccional  
 1/16 a 19/64m 12 por sobre 5/16 a 1/2, & por sobre  
 33/64 a 11/16, 1 por estuche 1 a 80, 12 por sobre

Serie R18Co, continua  
 1 a 80, 12 por sobre

Referencia	Diametro	Decimal	Longitud corte	Diametro Total
<b>R10CO Fractional</b>				
10301	*1/64	.0156	3/16	3/4
10302	*1/32	.0312	1/2	1-3/8
10303	3/64	.0469	3/4	1-3/4
10304	1/16	.0625	7/8	1-7/8
10305	5/64	.0781	1	2
10306	3/32	.0938	1-1/4	2-1/4
10307	7/64	.1094	1-1/2	2-5/8
10308	1/8	.1250	1-5/8	2-3/4
10309	9/64	.1406	1-3/4	2-7/8
10310	5/32	.1562	2	3-1/8
10311	11/64	.1719	2-1/8	3-1/4
10312	3/16	.1875	2-5/16	3-1/2
10313	13/64	.2031	2-7/16	3-5/8
10314	7/32	.2188	2-1/2	3-3/4
10315	15/64	.2344	2-5/8	3-7/8
10316	1/4	.2500	2-3/4	4
10317	17/64	.2656	2-7/8	4-1/8
10318	9/32	.2812	2-15/16	4-1/4
10319	19/64	.2969	3-1/16	4-3/8
10320	5/16	.3125	3-3/16	4-1/2
10321	21/64	.3281	3-5/16	4-5/8
10322	11/32	.3438	3-7/16	4-3/4
10323	23/64	.3594	3-1/2	4-7/8
10324	3/8	.3750	3-5/8	5
10325	25/64	.3906	3-3/4	5-1/8
10326	13/32	.4062	3-7/8	5-1/4
10327	27/64	.4219	3-15/16	5-3/8
10328	7/16	.4375	4-1/16	5-1/2
10329	29/64	.4531	4-3/16	5-5/8
10330	15/32	.4688	4-5/16	5-3/4
10331	31/64	.4844	4-3/8	5-7/8
10332	1/2	.5000	4-1/2	6
10333	33/64	.5156	4-13/16	6-5/8
10334	17/32	.5312	4-13/16	6-5/8
10335	35/64	.5469	4-13/16	6-5/8
10336	9/16	.5625	4-13/16	6-5/8
10337	37/64	.5781	4-13/16	6-5/8
10338	19/32	.5938	5-3/16	7-1/8
10339	39/64	.6094	5-3/16	7-1/8
10340	5/8	.6250	5-3/16	7-1/8
10341	41/64	.6406	5-3/16	7-1/8
10342	21/32	.6562	5-3/16	7-1/8
10343	43/64	.6719	5-5/8	7-5/8
10344	11/16	.6875	5-5/8	7-5/8
<b>R18CO Wire</b>				
18301	1	.2280	2-5/8	3-7/8
18302	2	.2210	2-5/8	3-7/8
18303	3	.2130	2-1/2	3-3/4
18304	4	.2090	2-1/2	3-3/4
18305	5	.2055	2-1/2	3-3/4
18306	6	.2040	2-1/2	3-3/4

Referencia	Diametro	Decimal	Longitud corte	Diametro Total
<b>R18CO Wire, Continued</b>				
18307	7	.2010	2-7/16	3-5/8
18308	8	.1990	2-7/16	3-5/8
18309	9	.1960	2-7/16	3-5/8
18310	10	.1935	2-7/16	3-5/8
18311	11	.1910	2-5/16	3-1/2
18312	12	.1890	2-5/16	3-1/2
18313	13	.1850	2-5/16	3-1/2
18314	14	.1820	2-3/16	3-3/8
18315	15	.1800	2-3/16	3-3/8
18316	16	.1770	2-3/16	3-3/8
18317	17	.1730	2-3/16	3-3/8
18318	18	.1695	2-1/8	3-1/4
18319	19	.1660	2-1/8	3-1/4
18320	20	.1610	2-1/8	3-1/4
18321	21	.1590	2-1/8	3-1/4
18322	22	.1570	2	3-1/8
18323	23	.1540	2	3-1/8
18324	24	.1520	2	3-1/8
18325	25	.1495	1-7/8	3
18326	26	.1470	1-7/8	3
18327	27	.1440	1-7/8	3
18328	28	.1405	1-3/4	2-7/8
18329	29	.1360	1-3/4	2-7/8
18330	30	.1285	1-5/8	2-3/4
18331	31	.1200	1-5/8	2-3/4
18332	32	.1160	1-5/8	2-3/4
18333	33	.1130	1-1/2	2-5/8
18334	34	.1110	1-1/2	2-5/8
18335	35	.1100	1-1/2	2-5/8
18336	36	.1065	1-7/16	2-1/2
18337	37	.1040	1-7/16	2-1/2
18338	38	.1015	1-7/16	2-1/2
18339	39	.0995	1-3/8	2-3/8
18340	40	.0980	1-3/8	2-3/8
18341	41	.0960	1-3/8	2-3/8
18342	42	.0935	1-1/4	2-1/4
18343	43	.0890	1-1/4	2-1/4
18344	44	.0860	1-1/8	2-1/8
18345	45	.0820	1-1/8	2-1/8
18346	46	.0810	1-1/8	2-1/8
18347	47	.0785	1	2
18348	48	.0760	1	2
18349	49	.0730	1	2
18350	50	.0700	1	2
18351	51	.0670	1	2
18352	52	.0635	7/8	1-7/8
18353	53	.0595	7/8	1-7/8
18354	54	.0550	7/8	1-7/8
18355	55	.0520	7/8	1-7/8
18356	56	.0465	3/4	1-3/4
18357	57	.0430	3/4	1-3/4



## BROCA EXTRA LARGA, COBALTO

### 6" de longitud total

Referencia	Diametro	Decimales	Longitud corte	Longitud total
53604	1/16	.0625	7/8	6
53605	5/64	.0781	1	6
53606	3/32	.0938	1-1/4	6
53607	7/64	.1094	1-1/2	6
53608	1/8	.1250	1-5/8	6
53609	9/64	.1406	1-3/4	6
53610	5/32	.1562	2	6
53611	11/64	.1719	2-1/8	6
53612	3/16	.1875	2-5/16	6
53613	13/64	.2031	2-7/16	6
53614	7/32	.2188	2-1/2	6
53615	15/64	.2344	2-5/8	6
53616	1/4	.2500	2-3/4	6
53701	1	.2280	2-5/8	6
53702	2	.2210	2-5/8	6
53703	3	.2130	2-1/2	6
53704	4	.2090	2-1/2	6
53705	5	.2055	2-1/2	6
53706	6	.2040	2-1/2	6
53707	7	.2010	2-7/16	6
53708	8	.1990	2-7/16	6
53709	9	.1960	2-7/16	6
53710	10	.1935	2-7/16	6
53711	11	.1910	2-5/16	6
53712	12	.1890	2-5/16	6
53713	13	.1850	2-5/16	6
53714	14	.1820	2-3/16	6
53715	15	.1800	2-3/16	6
53716	16	.1770	2-3/16	6
53717	17	.1730	2-3/16	6
53718	18	.1695	2-1/8	6
53719	19	.1660	2-1/8	6
53720	20	.1610	2-1/8	6
53721	21	.1590	2-1/8	6
53722	22	.1570	2	6
53723	23	.1540	2	6
53724	24	.1520	2	6
53725	25	.1495	1-7/8	6
53726	26	.1470	1-7/8	6
53727	27	.1440	1-7/8	6
53728	28	.1405	1-3/4	6
53729	29	.1360	1-3/4	6
53730	30	.1285	1-5/8	6
53731	31	.1200	1-5/8	6
53732	32	.1160	1-5/8	6
53733	33	.1130	1-1/2	6
53734	34	.1110	1-1/2	6
53735	35	.1100	1-1/2	6
53736	36	.1065	1-7/16	6
53737	37	.1040	1-7/16	6
53738	38	.1015	1-7/16	6
53739	39	.0995	1-3/8	6
53740	40	.0980	1-3/8	6
53741	41	.0960	1-3/8	6
53742	42	.0935	1-1/4	6
53743	43	.0890	1-1/4	6
53744	44	.0860	1-1/8	6
53745	45	.0820	1-1/8	6
53746	46	.0810	1-1/8	6
53747	47	.0785	1	6
53748	48	.0760	1	6
53749	49	.0730	1	6
53750	50	.0700	1	6
53751	51	.0670	1	6
53752	52	.0635	7/8	6

### 12" de longitud total

Referencia	Diametro	Decimales	Longitud corte	Longitud total
52604	1/16	.0625	7/8	12
52605	5/64	.0781	1	12
52606	3/32	.0938	1-1/4	12
52607	7/64	.1094	1-1/2	12
52608	1/8	.1250	1-5/8	12
52609	9/64	.1406	1-3/4	12
52610	5/32	.1562	2	12
52611	11/64	.1719	2-1/8	12
52612	3/16	.1875	2-5/16	12
52613	13/64	.2031	2-7/16	12
52614	7/32	.2188	2-1/2	12
52615	15/64	.2344	2-5/8	12
52616	1/4	.2500	2-3/4	12
52801	1	.2280	2-5/8	12
52802	2	.2210	2-5/8	12
52803	3	.2130	2-1/2	12
52804	4	.2090	2-1/2	12
52805	5	.2055	2-1/2	12
52806	6	.2040	2-1/2	12
52807	7	.2010	2-7/16	12
52808	8	.1990	2-7/16	12
52809	9	.1960	2-7/16	12
52810	10	.1935	2-7/16	12
52811	11	.1910	2-5/16	12
52812	12	.1890	2-5/16	12
52813	13	.1850	2-5/16	12
52814	14	.1820	2-3/16	12
52815	15	.1800	2-3/16	12
52816	16	.1770	2-3/16	12
52817	17	.1730	2-3/16	12
52818	18	.1695	2-1/8	12
52819	19	.1660	2-1/8	12
52820	20	.1610	2-1/8	12
52821	21	.1590	2-1/8	12
52822	22	.1570	2	12
52823	23	.1540	2	12
52824	24	.1520	2	12
52825	25	.1495	1-7/8	12
52826	26	.1470	1-7/8	12
52827	27	.1440	1-7/8	12
52828	28	.1405	1-3/4	12
52829	29	.1360	1-3/4	12
52830	30	.1285	1-5/8	12
52831	31	.1200	1-5/8	12
52832	32	.1160	1-5/8	12
52833	33	.1130	1-1/2	12
52834	34	.1110	1-1/2	12
52835	35	.1100	1-1/2	12
52836	36	.1065	1-7/16	12
52837	37	.1040	1-7/16	12
52838	38	.1015	1-7/16	12
52839	39	.0995	1-3/8	12
52840	40	.0980	1-3/8	12
52841	41	.0960	1-3/8	12
52842	42	.0935	1-1/4	12
52843	43	.0890	1-1/4	12
52844	44	.0860	1-1/8	12
52845	45	.0820	1-1/8	12
52846	46	.0810	1-1/8	12
52847	47	.0785	1	12
52848	48	.0760	1	12
52849	49	.0730	1	12
52850	50	.0700	1	12
52851	51	.0670	1	12
52852	52	.0635	7/8	12



## BROCAS CORTAS METRICO, COBALTO

PUNTA 135°

PUNTA 135°

Referencia	Diámetro		Zona corte			Longitud total
	mm	Dec.	mm	Frac.	mm	Frac.
32200	2.00	.0787	12	15/32	38	1-1/2
32205	2.05	.0807	12	15/32	38	1-1/2
32210	2.10	.0827	12	15/32	38	1-1/2
32215	2.15	.0846	13	1/2	40	1-9/16
32220	2.20	.0866	13	1/2	40	1-9/16
32225	2.25	.0886	13	1/2	40	1-9/16
32230	2.30	.0906	13	1/2	40	1-9/16
32235	2.35	.0925	13	1/2	40	1-9/16
32240	2.40	.0945	14	9/16	43	1-11/16
32245	2.45	.0965	14	9/16	43	1-11/16
32250	2.50	.0984	14	9/16	43	1-11/16
32260	2.60	.1024	14	9/16	43	1-11/16
32270	2.70	.1063	16	5/8	46	1-13/16
32280	2.80	.1102	16	5/8	46	1-13/16
32290	2.90	.1142	16	5/8	46	1-13/16
32300	3.00	.1181	16	5/8	46	1-13/16
32310	3.10	.1220	18	23/32	49	1-15/16
32320	3.20	.1260	18	23/32	49	1-15/16
32330	3.30	.1299	18	23/32	49	1-15/16
32340	3.40	.1339	20	25/32	52	2-1/16
32350	3.50	.1378	20	25/32	52	2-1/16
32360	3.60	.1417	20	25/32	52	2-1/16
32370	3.70	.1457	20	25/32	52	2-1/16
32380	3.80	.1496	22	7/8	55	2-5/32
32390	3.90	.1535	22	7/8	55	2-5/32
32400	4.00	.1575	22	7/8	55	2-5/32

Referencia	Diámetro		Zona corte			Longitud total
	mm	Dec.	mm	Frac.	mm	Frac.
32410	4.10	.1614	22	7/8	55	2-5/32
32420	4.20	.1654	22	7/8	55	2-5/32
32430	4.30	.1693	24	15/16	58	2-9/32
32440	4.40	.1732	24	15/16	58	2-9/32
32450	4.50	.1772	24	15/16	58	2-9/32
32460	4.60	.1811	24	15/16	58	2-9/32
32470	4.70	.1850	24	15/16	58	2-9/32
32480	4.80	.1890	26	1-1/32	62	2-7/16
32490	4.90	.1929	26	1-1/32	62	2-7/16
32500	5.00	.1969	26	1-1/32	62	2-7/16
32510	5.10	.2008	26	1-1/32	62	2-7/16
32520	5.20	.2047	26	1-1/32	62	2-7/16
32530	5.30	.2087	26	1-1/32	62	2-7/16
32540	5.40	.2126	28	1-3/32	66	2-19/32
32550	5.50	.2165	28	1-3/32	66	2-19/32
32560	5.60	.2205	28	1-3/32	66	2-19/32
32570	5.70	.2244	28	1-3/32	66	2-19/32
32580	5.80	.2283	28	1-3/32	66	2-19/32
32590	5.90	.2323	28	1-3/32	66	2-19/32
32600	6.00	.2362	28	1-3/32	66	2-19/32
32610	6.10	.2402	31	1-7/32	70	2-3/4
32620	6.20	.2441	31	1-7/32	70	2-3/4
32630	6.30	.2480	31	1-7/32	70	2-3/4
32640	6.40	.2520	31	1-7/32	70	2-3/4



## BROCAS LONGITUD NORMAL, METRICA, COBALTO

Cobalto, NAS907, Construcción tipo J, 135° (según norma DIN)

Referencia	Diámetro		Zona Corte			Longitud total
	mm	Dec.	mm	Frac.	mm	Frac.
16420	2.00	.0787	24	15/16	49	1-15/16
16365	2.05	.0807	24	15/16	49	1-15/16
16421	2.10	.0827	24	15/16	49	1-15/16
16366	2.15	.0846	27	1-1/16	53	2-3/32
16422	2.20	.0866	27	1-1/16	53	2-3/32
16367	2.25	.0886	27	1-1/16	53	2-3/32
16423	2.30	.0906	27	1-1/16	53	2-3/32
16368	2.35	.0925	27	1-1/16	53	2-3/32
16424	2.40	.0945	30	1-3/16	57	2-1/4
16369	2.45	.0965	30	1-3/16	57	2-1/4
16425	2.50	.0984	30	1-3/16	57	2-1/4
16426	2.60	.1024	30	1-3/16	57	2-1/4
16427	2.70	.1063	33	1-5/16	61	2-13/32
16370	2.75	.1083	33	1-5/16	61	2-13/32
16428	2.80	.1102	33	1-5/16	61	2-13/32
16429	2.90	.1142	33	1-5/16	61	2-13/32
16430	3.00	.1181	33	1-5/16	61	2-13/32
16431	3.10	.1220	36	1-7/16	65	2-9/16
16432	3.20	.1260	36	1-7/16	65	2-9/16
16371	3.25	.1280	36	1-7/16	65	2-9/16
16433	3.30	.1299	36	1-7/16	65	2-9/16
16434	3.40	.1339	39	1-17/32	70	2-3/4
16435	3.50	.1378	39	1-17/32	70	2-3/4
16436	3.60	.1417	39	1-17/32	70	2-3/4
16437	3.70	.1457	39	1-17/32	70	2-3/4
16372	3.75	.1476	39	1-17/32	70	2-3/4
16438	3.80	.1496	43	1-11/16	75	2-15/16
16439	3.90	.1535	43	1-11/16	75	2-15/16
16440	4.00	.1575	43	1-11/16	75	2-15/16

Referencia	Diámetro		Zona Corte			Longitud total
	mm	Dec.	mm	Frac.	mm	Frac.
16441	4.10	.1614	43	1-11/16	75	2-15/16
16442	4.20	.1654	43	1-11/16	75	2-15/16
16373	4.25	.1673	43	1-11/16	75	2-15/16
16443	4.30	.1693	47	1-27/32	80	3-5/32
16444	4.40	.1732	47	1-27/32	80	3-5/32
16445	4.50	.1772	47	1-27/32	80	3-5/32
16446	4.60	.1811	47	1-27/32	80	3-5/32
16447	4.70	.1850	47	1-27/32	80	3-5/32
16374	4.75	.1870	47	1-27/32	80	3-5/32
16448	4.80	.1890	52	2-1/16	86	3-3/8
16449	4.90	.1929	52	2-1/16	86	3-3/8
16450	5.00	.1969	52	2-1/16	86	3-3/8
16451	5.10	.2008	52	2-1/16	86	3-3/8
16452	5.20	.2047	52	2-1/16	86	3-3/8
16375	5.25	.2067	52	2-1/16	86	3-3/8
16453	5.30	.2087	52	2-1/16	86	3-3/8
16454	5.40	.2126	57	2-1/4	93	3-21/32
16455	5.50	.2165	57	2-1/4	93	3-21/32
16456	5.60	.2205	57	2-1/4	93	3-21/32
16457	5.70	.2244	57	2-1/4	93	3-21/32
16376	5.75	.2264	57	2-1/4	93	3-21/32
16458	5.80	.2283	57	2-1/4	93	3-21/32
16459	5.90	.2323	57	2-1/4	93	3-21/32
16460	6.00	.2362	57	2-1/4	93	3-21/32
16461	6.10	.2402	63	2-15/32	101	3-31/32
16462	6.20	.2441	63	2-15/32	101	3-31/32
16377	6.25	.2461	63	2-15/32	101	3-31/32
16463	6.30	.2480	63	2-15/32	101	3-31/32
16464	6.40	.2520	63	2-15/32	101	3-31/32
16465	6.50	.2559	63	2-15/32	101	3-31/32

## DRILL STOPS

### AT 570 SERIES



Primarily designed to control hole depth. This tool will also cushion the break-through of a drill and prevent chuck jaws from coming in contact with the skin surface. Unit locks on drill with a set screw.

PART NO.	DRILL SIZE
AT 570-50	#50
AT 570-40	#40
AT 570-30	#30
AT 570-28	#28
AT 570-21	#21
AT 570-20	#20
AT 570-12	#12
AT 570-11	#11
AT 570-10	#10
AT 570-1/4	1/4
AT 570-5/16	5/16

ORDER BY PART NO. ONLY

## PORTABLE DRILL BUSHING ASSEMBLY

### AT 589A... AT 589C SERIES

PART NO. FOR COMPLETE ASSEMBLY OF HOUSING & BUSHINGS	DRILL SIZE REF.	HOUSING PART NO.	BUSHING PART NO.	BUSHING THREAD SIZE
AT 589A-.098	#40	AT 589AA	AT 589AB-.098	1/2-13
AT 589A-.1285	#30		AT 589AB-.1285	
AT 589A-.159	#21		AT 589AB-.159	
AT 589A-.1562	3/32		AT 589AB-.1562	
AT 589A-.1875	3/16		AT 589AB-.1875	
AT 589A-.1935	#10		AT 589AB-.1935	
AT 589A-.2187	7/32		AT 589AB-.2187	
AT 589A-.250	1/4		AT 589AB-.250	
AT 589A-.257	F		AT 589AB-.257	
AT 589C-.2812	3/32	AT 589CA	AT 589CB-.2812	3/4-16
AT 589C-.3125	3/16		AT 589CB-.3125	
AT 589C-.3437	1 1/32		AT 589CB-.3437	
AT 589C-.375	3/8		AT 589CB-.375	
AT 589C-.4375	7/16		AT 589CB-.4375	
AT 589C-.500	1/2		AT 589CB-.500	



### Short Series

### Long Series

With 10-32 Thread		With 10-32 Thread	
With 1/4-28 Thread		With 1/4-28 Thread	
With 5/16-24 Thread		With 5/16-24 Thread	
Special Thin Wall Hex		Special Thin Wall Hex	
	10-32 or 1/4-28 Thread		10-32 or 1/4-28 Thread

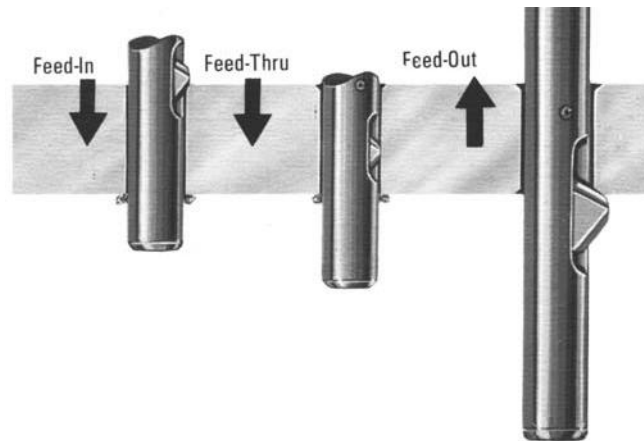
# Bohrbuchsen-Satz DRILL BUSHING ASSEMBLY KIT



## 590-DBK

Inhalt des Satzes:	CONTENTS OF THE KIT:
<b>1 Aufbewahrungskasten</b> <b>3 Plastik-Gehäuse</b> <b>zur Aufnahme der auswechselbaren Bohrbuchsen</b>	<b>1 KIT BOX</b> <b>3 PLASTIC-HOUSING</b> <b>FOR INTERCHANGEABLE DRILL-BUSHINGS</b>
<b>9 Bohrbuchsen in folgenden Größen:</b>	<b>9 DRILL-BUSHING IN FOLLOWING SIZES:</b>
<b>#40</b> (2,50 mm) <b>#30</b> (3,26 mm) <b>5/32"</b> (3,97 mm) <b>#21</b> (4,04 mm) <b>3/16"</b> (4,76 mm) <b>#10</b> (4,91 mm) <b>7/32"</b> (5,56 mm) <b>1/4"</b> (6,35 mm) <b>F</b> (6,53 mm)	<b>#40</b> (2,50 mm) <b>#30</b> (3,26 mm) <b>5/32"</b> (3,97 mm) <b>#21</b> (4,04 mm) <b>3/16"</b> (4,76 mm) <b>#10</b> (4,91 mm) <b>7/32"</b> (5,56 mm) <b>1/4"</b> (6,35 mm) <b>F</b> (6,53 mm)

# Rebarbadores BURRAWAY TOOLS



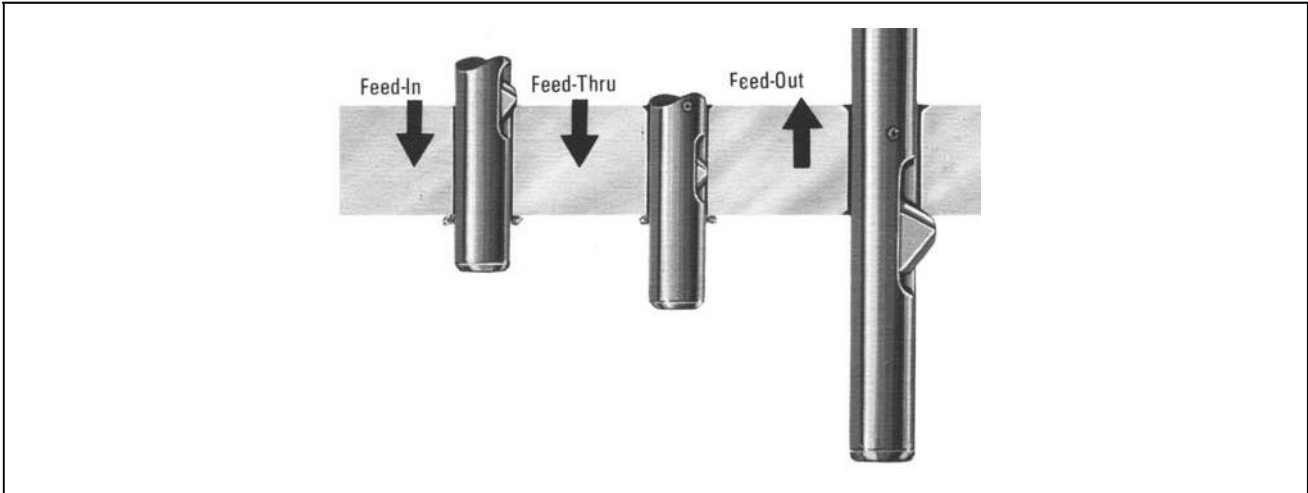
<b>Type A</b> <b>Tipo A</b>	<p style="font-size: small;">ADAPTER ASSEMBLY 5 Tension Spring Assembly 7-Adapter 6 Chamfer adjustment screw 8 Arbor setscrew</p> <p style="font-size: small;">ARBOR ASSEMBLY 1 Arbor 3 Pivot Pin 2 Blade 4 Plunger</p> <p style="font-size: x-small;">Pilot length may be shortened to suit. Dim. .003 to .005 Under nominal hole size</p>	<p>Standard</p> <p><b>Cuchillas</b> REPLACEMENT BLADES</p>
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**.0787" (2,0 mm) to 13/64" (5,16 mm)**

Art N° PART NO.	Agujero HOLE SIZE		Dim/DIM. A		Dim/DIM. B		Cuchilla N° REPLACEMENT BLADE NO.
<b>CTP-078</b>	.0787"		2,00 mm	3.3/8" (85,7 mm)	.45" (11,4 mm)		<b>CTP-3/32"</b>
<b>CTP-090</b>	.0906"		2,30 mm	3.3/8" (85,7 mm)	.45" (11,4 mm)		<b>CTP-3/32"</b>
<b>CTP-093</b>	.0938"	3/32"	2,38 mm	3.3/8" (85,7 mm)	.45" (11,4 mm)		<b>CTP-3/32"</b>
<b>CTP-098</b>	.0984"		2,50 mm	3.3/8" (85,7 mm)	.45" (11,4 mm)		<b>CTP-3/32"</b>
<b>CTP-109</b>	.1094"	7/64"	2,78 mm	3.3/8" (85,7 mm)	.45" (11,4 mm)		<b>CTP-3/32"</b>
<b>CTP-118</b>	.1181"		3,00 mm	3.3/8" (85,7 mm)	.45" (11,4 mm)		<b>CTP-1/8"</b>
<b>CTP-125</b>	.1250"	1/8"	3,18 mm	3.3/8" (85,7 mm)	.45" (11,4 mm)		<b>CTP-1/8"</b>
<b>CTP-137</b>	.1378"		3,50 mm	3.3/8" (85,7 mm)	.45" (11,4 mm)		<b>CTP-1/8"</b>
<b>CTP-140</b>	.1406"	9/64"	3,57 mm	3.3/8" (85,7 mm)	.45" (11,4 mm)		<b>CTP-1/8"</b>
<b>CTP-156</b>	.1562"	5/32"	3,97 mm	3.3/8" (85,7 mm)	.45" (11,4 mm)		<b>CTP-5/32"</b>
<b>CTP-157</b>	.1575"		4,00 mm	3.3/8" (85,7 mm)	.45" (11,4 mm)		<b>CTP-5/32"</b>
<b>CTP-171</b>	.1719"	11/64"	4,37 mm	3.3/8" (85,7 mm)	.45" (11,4 mm)		<b>CTP-5/32"</b>
<b>CTP-177</b>	.1772"		4,50 mm	4.1/8" (104,8 mm)	.72" (18,3 mm)		<b>CTP-3/16"</b>
<b>CTP-187</b>	.1875"	3/16"	4,76 mm	4.1/8" (104,8 mm)	.72" (18,3 mm)		<b>CTP-3/16"</b>
<b>CTP-196</b>	.1968"		5,00 mm	4.1/8" (104,8 mm)	.72" (18,3 mm)		<b>CTP-3/16"</b>
<b>CTP-203</b>	.2031"	13/64"	5,16 mm	4.1/8" (104,8 mm)	.72" (18,3 mm)		<b>CTP-3/16"</b>

**Otras medidas bajo pedido OTHER DIMENSIONS ON REQUEST !**

# Rebarbadores BURRAWAY TOOLS



<b>Type B</b> <b>Tipo B</b>		<p>Standard</p> <p><b>Cuchillas</b> REPLACEMENT BLADES</p>
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**7/32" (5,56 mm) to 3/4" (19,05 mm)**

Art N° PART NO.	Agujero HOLE SIZE			DIM. A	DIM. B	Cuchilla N° REPLACEMENT BLADE NO.
<b>CTP-216</b>	<b>.2165"</b>		5,50 mm	<b>4.1/2" (114,3 mm)</b>	<b>.87" (22,1 mm)</b>	<b>CTP-1</b>
<b>CTP-218</b>	<b>.2188"</b>	7/32"	5,56 mm	<b>4.1/2" (114,3 mm)</b>	<b>.87" (22,1 mm)</b>	<b>CTP-1</b>
<b>CTP-234</b>	<b>.2344"</b>	15/64"	5,95 mm	<b>4.1/2" (114,3 mm)</b>	<b>.87" (22,1 mm)</b>	<b>CTP-1</b>
<b>CTP-236</b>	<b>.2362"</b>		6,00 mm	<b>4.1/2" (114,3 mm)</b>	<b>.87" (22,1 mm)</b>	<b>CTP-1</b>
<b>CTP-250</b>	<b>.2500"</b>	1/4"	6,35 mm	<b>4.1/2" (114,3 mm)</b>	<b>.87" (22,1 mm)</b>	<b>CTP-1</b>
<b>CTP-255</b>	<b>.2559"</b>		6,50 mm	<b>4.1/2" (114,3 mm)</b>	<b>.87" (22,1 mm)</b>	<b>CTP-1</b>
<b>CTP-265</b>	<b>.2656"</b>	17/64"	6,75 mm	<b>4.1/2" (114,3 mm)</b>	<b>.87" (22,1 mm)</b>	<b>CTP-1</b>
<b>CTP-275</b>	<b>.2756"</b>		7,00 mm	<b>4.1/2" (114,3 mm)</b>	<b>.87" (22,1 mm)</b>	<b>CTP-1</b>
<b>CTP-281</b>	<b>.2812"</b>	9/32"	7,14 mm	<b>4.1/2" (114,3 mm)</b>	<b>.87" (22,1 mm)</b>	<b>CTP-1</b>
<b>CTP-295</b>	<b>.2953"</b>		7,50 mm	<b>4.1/2" (114,3 mm)</b>	<b>.96" (24,4 mm)</b>	<b>CTP-2</b>
<b>CTP-296</b>	<b>.2969"</b>	19/64"	7,54 mm	<b>4.1/2" (114,3 mm)</b>	<b>.96" (24,4 mm)</b>	<b>CTP-2</b>
<b>CTP-312</b>	<b>.3125"</b>	5/16"	7,94 mm	<b>4.1/2" (114,3 mm)</b>	<b>.96" (24,4 mm)</b>	<b>CTP-2</b>
<b>CTP-315</b>	<b>.3150"</b>		8,00 mm	<b>4.1/2" (114,3 mm)</b>	<b>.96" (24,4 mm)</b>	<b>CTP-2</b>
<b>CTP-328</b>	<b>.3281"</b>	21/64"	8,33 mm	<b>4.1/2" (114,3 mm)</b>	<b>.96" (24,4 mm)</b>	<b>CTP-2</b>
<b>CTP-334</b>	<b>.3346"</b>		8,50 mm	<b>4.1/2" (114,3 mm)</b>	<b>.96" (24,4 mm)</b>	<b>CTP-2</b>
<b>CTP-343</b>	<b>.3438"</b>	11/32"	8,73 mm	<b>4.1/2" (114,3 mm)</b>	<b>.96" (24,4 mm)</b>	<b>CTP-2</b>
<b>CTP-354</b>	<b>.3543"</b>		9,00 mm	<b>5" (127,0 mm)</b>	<b>1.00" (25,4 mm)</b>	<b>CTP-3</b>
<b>CTP-359</b>	<b>.3594"</b>	23/64"	9,13 mm	<b>5" (127,0 mm)</b>	<b>1.00" (25,4 mm)</b>	<b>CTP-3</b>
<b>CTP-374</b>	<b>.3740"</b>		9,50 mm	<b>5" (127,0 mm)</b>	<b>1.00" (25,4 mm)</b>	<b>CTP-3</b>
<b>CTP-375</b>	<b>.3750"</b>	3/8"	9,53 mm	<b>5" (127,0 mm)</b>	<b>1.00" (25,4 mm)</b>	<b>CTP-3</b>
<b>CTP-390</b>	<b>.3906"</b>	25/64"	9,92 mm	<b>5" (127,0 mm)</b>	<b>1.00" (25,4 mm)</b>	<b>CTP-3</b>
<b>CTP-393</b>	<b>.3937"</b>		10,00 mm	<b>5" (127,0 mm)</b>	<b>1.00" (25,4 mm)</b>	<b>CTP-3</b>

**Otras medidas bajo pedido OTHER DIMENSIONS ON REQUEST !**

# Atornilladores automáticos de pistola

## STALL PISTOL GRIP SCREWDRIVER

Atornilladores automáticos de pistola

Torsion: 18 in. lb (2.0 Nm) - 310 in. lb (35Nm)

Velocidad: 400 rpm - 5800 rpm

Reversible y no reversible

Con gatillo

Agarre comodo (10M, SD9 Serie)

Agarre hembra de 1/4"

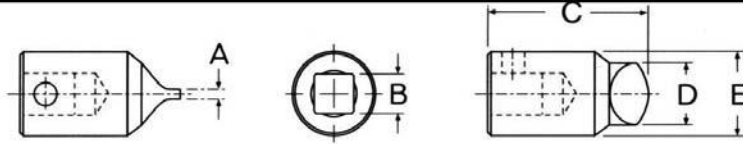


Modelo N°	Maxima torsion		Velocidad	Peso		Longitud		Lado a centro		Ruido
	in. lb	Nm	rpm	lb	kg	in.	mm	in.	mm	dB(A)
Arranque a gatillo - reversible a gatillo										
10M2507	18	2.0	2600	1.6	0.7	6.7	170	0.7	18	75
10M2407	24	2.7	2000	1.6	0.7	6.7	170	0.7	18	75
10M2307	30	3.4	1400	1.8	0.8	7.7	196	0.7	18	75
10M2207	40	4.5	1000	1.8	0.8	7.7	196	0.7	18	75
10M2107	55	6.2	725	1.8	0.8	7.7	196	0.7	18	75
2P2407	30	3.4	4400	2.3	1.0	8.8	224	0.9	23	82
2P2307	55	6.2	2500	2.3	1.0	8.8	224	0.9	23	82
2P2607	70	7.9	2000	1.8	0.8	8.8	224	0.9	23	82
2P2207	105	11.7	1200	1.8	0.8	10	254	0.9	23	82
2P2107	185	20.9	700	1.8	0.8	10	254	0.9	23	82
2P2507	325	36.7	400	1.8	0.8	10	254	0.9	23	82
Arranque a gatillo - reversible rapido										
SD9APB-44Q	32	3.6	4400	2.4	1.1	6.4	163	0.9	23	78
SD9APB-25Q	55	6.2	2500	2.4	1.1	6.4	163	0.9	23	78
SD9APB-20Q	70	7.9	2000	2.4	1.1	6.4	163	0.9	23	78
SD9APB-12Q	120	13.6	1200	2.9	1.3	7.6	193	0.9	23	78
SD9APB-7Q	200	22.6	700	2.9	1.3	7.6	193	0.9	23	78
SD9APB-4Q	350	39.6	400	2.9	1.3	7.6	193	0.9	23	78
Arranque a gatillo - no reversible										
2P1407	40	4.5	5800	2.3	1.0	5.4	137	0.9	23	82
2P1607	90	10.2	2600	2.3	1.0	5.4	137	0.9	23	82
2P1207	140	15.8	1600	2.7	1.2	6.6	168	0.9	23	82
2P1107	240	27.1	900	2.7	1.2	6.6	168	0.9	23	82

Entrada de aire: 1/4" NPT  
 Manguera recomendada 1/4" (6mm) (serie 10M); 3/8" (10mm) (serie 2p, SD9)  
 a 6,2 bar de presion  
 disponible con entrada de aire BSPT

Con despiece, y manual de instrucciones y seguridad  
 Agarre comodo (10M, serie SD9)

# HI-TORQUE DRIVER



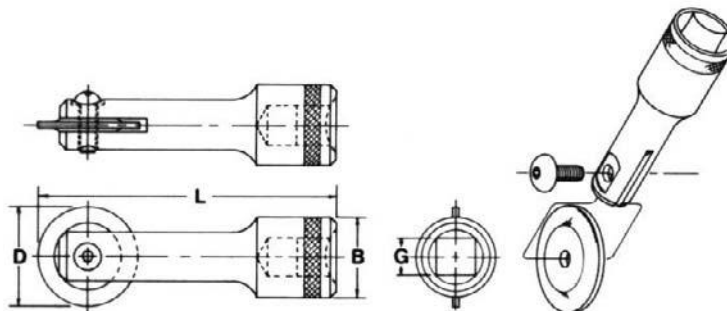
Zephyr Part No	A (Ref)	B (Ref)	C (Ref)	D (Ref)	E (Ref)	Recess	Nom. Screw Size	Driver Number	MIL*
ZHTS-1	.049	1/4	1	.274	1/2	1	3, 4, 5, 6	HTS-1	MIL-B-9946-1
ZHTS-2	.059	1/4	1	.295	1/2	2	8	HTS-2	MIL-B-9946-2
ZHTS-3	.059	1/4	1	.377	1/2	3	10	HTS-3	MIL-B-9946-3
ZHTS-4	.073	1/4	1	.502	1/2	4	1/4	HTS-4	MIL-B-9946-4
ZHTS-4A	.073	3/8	1	.502	1/2	4	1/4	HTS-4A	MIL-B-9946-4A
ZHTS-5	.079	3/8	1 1/4	.629	3/4	5	5/16	HTS-5	MIL-B-9946-5
ZHTS-6	.095	3/8	1 1/4	.745	3/4	6	3/8	HTS-6	MIL-B-9946-6
ZHTS-7	.112	1/2	1 5/8	.884	1	7	7/16	HTS-7	MIL-B-9946-7
ZHTS-8	.142	1/2	1 5/8	.995	1	8	1/2	HTS-8	MIL-B-9946-8

\*Also conforms to MS33750 Hi Torque® is a registered Trademark of Voi-Shan.







HT 3000M Series  
Two-Piece Drivers



## HT 3000M SERIES







BOLT NOMINAL DIAMETER	HI-TORQUE RECESS NUMBER	ORDER BY HI-TORQUE TOOL NUMBER BELOW		B DIA.	D DIA.	G SQUARE DRIVE SOCKET	L
		COMPLETE ASSEMBLY	BLADE ONLY				
#10	HT3	HT3203M	HTB3M	.50	.552	.25	1.36
1/4	HT4	HT3304M	HTB4M	.75	.864	.37	2.67
5/16	HT5	HT3305M	HTB5M	.75	.990	.37	2.73
3/8	HT6	HT3306M	HTB6M	.75	1.240	.37	2.73
3/8	HT6	HT3406M	HTB6M	1.00	1.240	.50	3.17
7/16	HT7	HT3407M	HTB7M	1.00	1.375	.50	3.23
1/2	HT8	HT3408M	HTB8M	1.00	1.500	.50	3.30
9/16	HT9	HT3409M	HTB9M	1.00	1.750	.50	3.42
5/8	HT10	HT3410M	HTB10M	1.00	2.000	.50	3.55

<b>A</b>		<b>PHILLIPS INSERT BITS</b> <b>PUNTAS PHILLIPS</b>	
	1/4" HEX SHANK		
<b>Art N°</b> PART NO.	<b>Tamaño</b> POINT SIZE	<b>Longitud</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
D1220AA	0	1" (25,4 mm)	
D1221AA	1	1" (25,4 mm)	
D1221AA-15	1	1.1/2" (38,1 mm)	
D1221AA-2	1	2" (50,8 mm)	
D1222AA	2	1" (25,4 mm)	
D1222AA-15	2	1.1/2" (38,1 mm)	
D1222AA-2	2	2" (50,8 mm)	
D1222AA-25	2	2.1/2" (63,8 mm)	
D1223AA	3	1" (25,4 mm)	
D1224AA	4	1.1/4" (31,8 mm)	

<b>B</b>		<b>PHILLIPS INSERT BITS</b> <b>MILLED TYPE</b>	
	1/4" HEX SHANK		
<b>Art N°</b> PART NO.	<b>Tamaño</b> POINT SIZE	<b>Longitud</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
D1221AM	1	1" (25,4 mm)	
D1222AM	2	1" (25,4 mm)	
D1223AM	3	1" (25,4 mm)	

<b>C</b>		<b>ACR - PHILLIPS INSERT BITS</b> <b>WITH REMOVAL-RIPS</b>	
	1/4" HEX SHANK		
<b>Art N°</b> PART NO.	<b>Tamaño</b> POINT SIZE	<b>Longitud</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
D1221AA-R	1	1" (25,4 mm)	
D1222AA-R	2	1" (25,4 mm)	
D1223AA-R	3	1" (25,4 mm)	

<b>D</b>		<b>ACR - PHILLIPS INSERT BITS</b> <b>WITH REMOVAL &amp; INSTALLATION RIPS</b>	
	1/4" HEX SHANK		
<b>Art N°</b> PART NO.	<b>Tamaño</b> POINT SIZE	<b>Longitud</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
D1221AA-ACR-B	1	1" (25,4 mm)	
D1222AA-ACR-B	2	1" (25,4 mm)	
D1223AA-ACR-B	3	1" (25,4 mm)	

<b>E</b>		<b>ACR - PHILLIPS INSERT BITS</b> <b>MILLED TYPE - WITH REMOVAL-RIPS</b>	
	1/4" HEX SHANK		
<b>Art N°</b> PART NO.	<b>Tamaño</b> POINT SIZE	<b>Longitud</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
D1221AM-R	1	1" (25,4 mm)	
D1222AM-R	2	1" (25,4 mm)	
D1223AM-R	3	1" (25,4 mm)	

<b>A</b>	 5/16" HEX SHANK	<b>PHILLIPS INSERT BITS</b>	
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Art N° PART NO.	Tamaño POINT SIZE	Longitud total OVERALL LENGTH	Diámetro cuerpo BODY DIAMETER
D1231AA	1	1.1/4" (31,8 mm)	
D1232AA	2	1.1/4" (31,8 mm)	
D1233AA	3	1.1/4" (31,8 mm)	
D1234AA	4	1.1/4" (31,8 mm)	
D1234AA-15	4	1.1/2" (38,1 mm)	

<b>B</b>	 5/16" HEX SHANK	<b>ACR - PHILLIPS INSERT BITS WITH REMOVAL-RIPS</b>	
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Art N° PART NO.	Tamaño POINT SIZE	Longitud total OVERALL LENGTH	Diámetro cuerpo BODY DIAMETER
D1231AA-R	1	1.1/4" (31,8 mm)	
D1232AA-R	2	1.1/4" (31,8 mm)	
D1233AA-R	3	1.1/4" (31,8 mm)	

<b>C</b>	 1/4" HEX SHANK	<b>PHILLIPS POWER BITS</b>	
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Art N° PART NO.	Tamaño POINT SIZE	Longitud total OVERALL LENGTH	Diámetro cuerpo BODY DIAMETER
E1101AA	1	1.15/16" (49,2 mm)	3/16" (4,76 mm)
E1102AA	2	1.15/16" (49,2 mm)	1/4" (6,35 mm)
E1103AA	3	1.15/16" (49,2 mm)	1/4" (6,35 mm)
E1101AA-275	1	2.3/4" (69,9 mm)	3/16" (4,76 mm)
E1102AA-275	2	2.3/4" (69,9 mm)	1/4" (6,35 mm)
E1103AA-275	3	2.3/4" (69,9 mm)	1/4" (6,35 mm)
E1101AA-35	1	3" (76,2 mm)	3/16" (4,76 mm)
E1102AA-35	2	3" (76,2 mm)	1/4" (6,35 mm)
E1103AA-35	3	3" (76,2 mm)	1/4" (6,35 mm)
E1101AA-6	1	6" (152,4 mm)	3/16" (4,76 mm)
E1102AA-6	2	6" (152,4 mm)	1/4" (6,35 mm)
E1103AA-6	3	6" (152,4 mm)	1/4" (6,35 mm)

<b>C</b>	 1/4" HEX SHANK	<b>ACR - PHILLIPS POWER BITS WITH REMOVAL-RIPS</b>	
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Art N° PART NO.	Tamaño POINT SIZE	Longitud total OVERALL LENGTH	Diámetro cuerpo BODY DIAMETER
E1101AA-R	1	1.15/16" (49,2 mm)	3/16" (4,76 mm)
E1102AA-R	2	1.15/16" (49,2 mm)	1/4" (6,35 mm)
E1103AA-R	3	1.15/16" (49,2 mm)	1/4" (6,35 mm)
E1101AA-275-R	1	2.3/4" (69,9 mm)	3/16" (4,76 mm)
E1102AA-275-R	2	2.3/4" (69,9 mm)	1/4" (6,35 mm)
E1103AA-275-R	3	2.3/4" (69,9 mm)	1/4" (6,35 mm)
E1101AA-35-R	1	3" (76,2 mm)	3/16" (4,76 mm)
E1102AA-35-R	2	3" (76,2 mm)	1/4" (6,35 mm)
E1103AA-35-R	3	3" (76,2 mm)	1/4" (6,35 mm)
E1101AA-6-R	1	6" (152,4 mm)	3/16" (4,76 mm)
E1102AA-6-R	2	6" (152,4 mm)	1/4" (6,35 mm)
E1103AA-6-R	3	6" (152,4 mm)	1/4" (6,35 mm)

<b>A</b>	 1/4" HEX SHANK	<b>SLOTTED INSERT BITS</b>	
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Art N°	Tamaño	Grosor aprox	Longitud total	
H3199A	2F-3R	.026" (0,66 mm)	.138" (3,51 mm)	1" (25,4 mm)
H3201A	3F-4R	.030" (0,76 mm)	.154" (3,91 mm)	1" (25,4 mm)
H3211A	4F-5R	.034" (0,86 mm)	.170" (4,32 mm)	1" (25,4 mm)
H3205A	5F-6R	.036" (0,91 mm)	.219" (5,56 mm)	1" (25,4 mm)
H3212A	6F-8R	.040" (1,02 mm)	.219" (5,56 mm)	1" (25,4 mm)
H3213A	8F-10R	.042" (1,07 mm)	.250" (6,35 mm)	1" (25,4 mm)
H3214A	10F-12R	.046" (1,17 mm)	.281" (7,14 mm)	1" (25,4 mm)
H3215A	12F-14R	.050" (1,27 mm)	.297" (7,54 mm)	1" (25,4 mm)

<b>B</b>	 1/4" HEX SHANK	<b>SLOTTED INSERT BITS</b>	
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Art N°	Tamaño	Grosor aprox	Ranura	Longitud total
H3219A	2F-3R	.026" (0,66 mm)	.138" (3,51 mm)	1.1/2" (38,1 mm)
H3220A	3F-4R	.030" (0,76 mm)	.154" (3,91 mm)	1.1/2" (38,1 mm)
H3221A	4F-5R	.034" (0,86 mm)	.188" (4,78 mm)	1.1/2" (38,1 mm)
H3222A	6F-8R	.040" (1,02 mm)	.218" (5,54 mm)	1.1/2" (38,1 mm)
H3223A	8F-10R	.042" (1,07 mm)	.250" (6,35 mm)	1.1/2" (38,1 mm)
H3224A	10F-12R	.046" (1,17 mm)	.281" (7,14 mm)	1.1/2" (38,1 mm)
H3225A	12F-14R	.050" (1,27 mm)	.297" (7,54 mm)	1.1/2" (38,1 mm)
H3226A	14F-16R	.055" (1,40 mm)	.344" (8,74 mm)	1.1/2" (38,1 mm)

<b>C</b>	 5/16" HEX SHANK	<b>SLOTTED INSERT BITS</b>	
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Art N° PART NO.	Tamaño SCREW SIZE	Grosor aprox BLADE THICKNESS APPR.	Ranura BLADE WIDTH APPR.	Longitud total OVERALL LENGTH
H3231A	4F-5R	.034" (0,86 mm)	.188" (4,78 mm)	1.1/2" (38,1 mm)
H3232A	6F-8R	.040" (1,02 mm)	.218" (5,54 mm)	1.1/2" (38,1 mm)
H3233A	8F-10R	.042" (1,07 mm)	.250" (6,35 mm)	1.1/2" (38,1 mm)
H3234A	10F-12R	.046" (1,17 mm)	.281" (7,14 mm)	1.1/2" (38,1 mm)
H3235A	12F-14R	.050" (1,27 mm)	.297" (7,54 mm)	1.1/2" (38,1 mm)
H3236A	14F-16R	.055" (1,40 mm)	.344" (8,74 mm)	1.1/2" (38,1 mm)

<b>D</b>	 1/4" HEX SHANK	<b>SLOTTED POWER BITS</b>	
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Art N°	Tamaño	Grosor aprox	Ranura	Longitud total
E3104A	8F-10R	.042" (1,07 mm)	.275" (6,99 mm)	1.15/16" (49,2 mm)
E3105A	10F-12R	.046" (1,17 mm)	.312" (7,92 mm)	1.15/16" (49,2 mm)
E3106A	12F-14R	.050" (1,27 mm)	.360" (9,14 mm)	1.15/16" (49,2 mm)
E3104A275	8F-10R	.042" (1,07 mm)	.275" (6,99 mm)	2.3/4" (69,9 mm)
E3105A275	10F-12R	.046" (1,17 mm)	.312" (7,92 mm)	2.3/4" (69,9 mm)
E3106A275	12F-14R	.050" (1,27 mm)	.360" (9,14 mm)	2.3/4" (69,9 mm)
E3104A3	8F-10R	.042" (1,07 mm)	.275" (6,99 mm)	3" (76,2 mm)
E3105A3	10F-12R	.046" (1,17 mm)	.312" (7,92 mm)	3" (76,2 mm)
E3106A3	12F-14R	.050" (1,27 mm)	.360" (9,14 mm)	3" (76,2 mm)

<b>A</b>	 1/4" HEX SHANK	<b>SLOTTED POWER BITS REDUCED SHANK DIAMETER</b>	
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Art N°	Tamaño	Grosor aprox	Ranura	Longitud total
E3098A	1F-2R	.022" (0,56 mm)	.122" (3,10 mm)	1.15/16" (49,2 mm)
E3100A	3F-4R	.030" (0,76 mm)	.154" (3,91 mm)	1.15/16" (49,2 mm)
E3101A	4F-5R	.034" (0,86 mm)	.188" (4,78 mm)	1.15/16" (49,2 mm)
E3101A	4F-5R	.034" (0,86 mm)	.188" (4,78 mm)	1.15/16" (49,2 mm)
E3102A	5F-6R	.036" (0,91 mm)	.250" (6,35 mm)	1.15/16" (49,2 mm)
E3103A	6F-8R	.038" (0,97 mm)	.250" (6,35 mm)	1.15/16" (49,2 mm)
E3101A275	4F-5R	.034" (0,86 mm)	.188" (4,78 mm)	2.3/4" (69,9 mm)
E3102A275	5F-6R	.036" (0,91 mm)	.250" (6,35 mm)	2.3/4" (69,9 mm)
E3103A275	6F-8R	.038" (0,97 mm)	.250" (6,35 mm)	2.3/4" (69,9 mm)
E3098A3	1F-2R	.022" (0,56 mm)	.122" (3,10 mm)	3" (76,2 mm)
E3100A3	3F-4R	.030" (0,76 mm)	.154" (3,91 mm)	3" (76,2 mm)
E3101A3	4F-5R	.034" (0,86 mm)	.188" (4,78 mm)	3" (76,2 mm)
E3102A3	5F-6R	.036" (0,91 mm)	.250" (6,35 mm)	3" (76,2 mm)
E3103A3	6F-8R	.038" (0,97 mm)	.250" (6,35 mm)	3" (76,2 mm)



<b>B</b>	 1/4" HEX SHANK	<b>FRENCH RECESS INSERT BITS</b>	
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Art N° PART NO.	Tamaño POINT SIZE	Longitud total OVERALL LENGTH	Diámetro cuerpo BODY DIAMETER
H7224AA	4	1" (25,4 mm)	
H7225AA	5	1" (25,4 mm)	
H7226AA	6	1" (25,4 mm)	
H7228AA	8	1" (25,4 mm)	



<b>C</b>	 5/16" HEX SHANK	<b>FRENCH RECESS INSERT BITS</b>	
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Art N° PART NO.	Tamaño POINT SIZE	Longitud total OVERALL LENGTH	Diámetro cuerpo BODY DIAMETER
H7326AA	6	1.1/4" (31,8 mm)	
H7328AA	8	1.1/4" (31,8 mm)	



<b>A</b>  <b>SOCKET HEAD (ALLEN) INSERT BITS</b> 			
1/4" HEX SHANK			
Art N° PART NO.	Tamaño HEX SIZE	Longitud total OVERALL LENGTH	Diámetro cuerpo BODY DIAMETER
H5221A	1/16" (1,59 mm)	1" (25,4 mm)	
H5222A	5/64" (1,98 mm)	1" (25,4 mm)	
H5223A	3/32" (2,38 mm)	1" (25,4 mm)	
H5224A	7/64" (2,78mm)	1" (25,4 mm)	
H5225A	1/8" (3,18 mm)	1" (25,4 mm)	
H5226A	9/64" (3,57 mm)	1" (25,4 mm)	
H5227A	5/32" (3,97 mm)	1.5/16" (33,3 mm)	
H5228A	3/16" (4,76 mm)	1.5/16" (33,3 mm)	
H5229A	7/32" (5,56 mm)	1.5/16" (33,3 mm)	
H5220A	1/4" (6,35 mm)	1.5/16" (33,3 mm)	



<b>A</b>  <b>SOCKET HEAD (ALLEN) INSERT BITS</b> 			
5/16" HEX SHANK			
Art N° PART NO.	Tamaño HEX SIZE	Longitud total OVERALL LENGTH	Diámetro cuerpo BODY DIAMETER
H5234A	5/32" (3,97 mm)	1.5/16" (33,3 mm)	
H5235A	3/16" (4,76 mm)	1.5/16" (33,3 mm)	
H5236A	7/32" (5,56 mm)	1.5/16" (33,3 mm)	
H5237A	1/4" (6,35 mm)	1.5/16" (33,3 mm)	
H5238A	5/16" (7,94 mm)	1.5/16" (33,3 mm)	
H5239A	3/8" (9,53 mm)	1.5/16" (33,3 mm)	



<b>C</b>  <b>SOCKET HEAD (ALLEN) INSERT BITS</b> 			
1/4" HEX SHANK			
<b>METRIC</b>			
Art N° PART NO.	Tamaño HEX SIZE	Longitud total OVERALL LENGTH	Diámetro cuerpo BODY DIAMETER
H52215XM	1,5 mm (.059)	1" (25,4 mm)	
H5222XM	2,0 mm (.079)	1" (25,4 mm)	
H52225XM	2,5 mm (.098)	1" (25,4 mm)	
H5223XM	3,0 mm (.118)	1" (25,4 mm)	
H5204XM	4,0 mm (.157)	1" (25,4 mm)	
H5205XM	5,0 mm (.197)	1" (25,4 mm)	
H5206XM	6,0 mm (.236)	1" (25,4 mm)	
H5207XM	7,0 mm (.276)	1" (25,4 mm)	
H5208XM	8,0 mm (.315)	1" (25,4 mm)	
H5224XM	4,0 mm (.157)	1.5/16" (33,3 mm)	
H5225XM	5,0 mm (.197)	1.5/16" (33,3 mm)	
H5226XM	6,0 mm (.236)	1.5/16" (33,3 mm)	
H5227XM	7,0 mm (.276)	1.5/16" (33,3 mm)	
H5228XM	8,0 mm (.315)	1.1/4" (31,7 mm)	



<b>A</b>		<b>SOCKET HEAD (ALLEN) INSERT BITS METRIC</b>		
<b>Art N°</b>	<b>Tamaño</b>	<b>Longitud total</b>	<b>Diámetro cuerpo</b>	
PART NO.	HEX SIZE	OVERALL LENGTH	BODY DIAMETER	
H5235XM	5,0 mm (.197)	1.5/16" (33,3 mm)		
H5236XM	6,0 mm (.236)	1.5/16" (33,3 mm)		
H5238XM	8,0 mm (.315)	1.5/16" (33,3 mm)		
H5230XM	10,0 mm (.394)	1.5/16" (33,3 mm)		



<b>B</b>		<b>SOCKET HEAD (ALLEN) POWER BITS METRIC</b>		
<b>Art N°</b>	<b>Tamaño</b>	<b>Longitud total</b>	<b>Diámetro cuerpo</b>	
PART NO.	HEX SIZE	OVERALL LENGTH	BODY DIAMETER	
E5102XM	2,0 mm (.079)	1.15/16" (49,2 mm)		
E51025XM	2,5 mm (.098)	1.15/16" (49,2 mm)		
E5103XM	3,0 mm (.118)	1.15/16" (49,2 mm)		
E5104XM	4,0 mm (.157)	1.15/16" (49,2 mm)		
E5105XM	5,0 mm (.197)	1.15/16" (49,2 mm)		
E5106XM	6,0 mm (.236)	1.15/16" (49,2 mm)		
E5108XM	8,0 mm (.315)	1.15/16" (49,2 mm)		
H5110XM	10,0 mm (.394)	1.15/16" (49,2 mm)		

<b>C</b>		<b>SOCKET HEAD (ALLEN) POWER BITS METRIC</b>		
<b>Art N°</b>	<b>Tamaño</b>	<b>Longitud total</b>	<b>Diámetro cuerpo</b>	
PART NO.	HEX SIZE	OVERALL LENGTH	BODY DIAMETER	
E5095XM35	5,0 mm (.197)	3.1/2" (88,9 mm)		
E5096XM35	6,0 mm (.236)	3.1/2" (88,9 mm)		
E5098XM35	8,0 mm (.315)	3.1/2" (88,9 mm)		
H5090XM35	10,0 mm (.394)	3.1/2" (88,9 mm)		

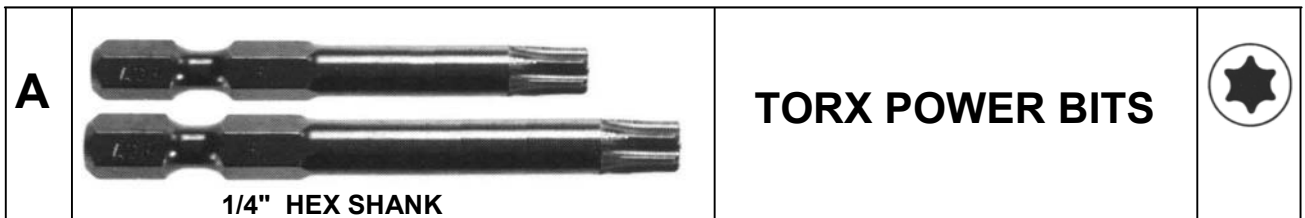
<b>D</b>		<b>SQUARE RECESS INSERT BITS</b>		
<b>Art N°</b>	<b>Punta</b>	<b>Tornillo</b>	<b>Diámetro cuerpo</b>	
PART NO.	POINT SIZE	SCREW SIZE	OVERALL LENGTH	
H8100XX	0	3 & 4	1" (25,4 mm)	
H8101XX	1	5, 6, 7	1" (25,4 mm)	
H8102XX	2	8, 9, 10	1" (25,4 mm)	
H8103XX	3	12, 14, 1/4	1" (25,4 mm)	

<b>A</b>	 1/4" HEX SHANK	<b>TORX INSERT BITS</b>		
Art N° PART NO.	Atornillador DRIVER SIZE	Punta (Ref.) POINT SIZE (Ref.)	Longitud total OVERALL LENGTH	
ZOT6X	T6	.065"	1" (25,4 mm)	
ZOT7X	T7	.077"	1" (25,4 mm)	
ZOT8X	T8	.090"	1" (25,4 mm)	
ZOT9X	T9	.097"	1" (25,4 mm)	
ZOT10X	T10	.107"	1" (25,4 mm)	
ZOT15X	T15	.128"	1" (25,4 mm)	
ZOT20X	T20	.151"	1" (25,4 mm)	
ZOT25X	T25	.173"	1" (25,4 mm)	
ZOT27X	T27	.195"	1" (25,4 mm)	
ZOT30X	T30	.216"	1" (25,4 mm)	
ZOT40X	T40	.260"	1" (25,4 mm)	

<b>B</b>	 1/4" HEX SHANK	<b>TORX INSERT BITS WITH HOLE THRU HEX SHANK</b>		
Art N° PART NO.	Atornillador DRIVER SIZE	Punta (Ref.) POINT SIZE (Ref.)	Longitud total OVERALL LENGTH	
ZOT20XD	T20	.151"	1" (25,4 mm)	
ZOT27XD	T27	.195"	1" (25,4 mm)	
ZOT30XD	T30	.216"	1" (25,4 mm)	
ZOT40XD	T40	.260"	1" (25,4 mm)	
ZOT45XD	T45	.306"	1" (31,8 mm)	


<b>C</b>	 5/16" HEX SHANK	<b>TORX INSERT BITS</b>		
Art N° PART NO.	Atornillador DRIVER SIZE	Punta (Ref.) POINT SIZE (Ref.)	Longitud total OVERALL LENGTH	
Z5T30X	T30	.216"	1.1/4" (31,8 mm)	
Z5T40X	T40	.260"	1.1/4" (31,8 mm)	
Z5T45X	T45	.306"	1.1/4" (31,8 mm)	
Z5T50X	T50	.346"	1.1/4" (31,8 mm)	
Z5T55X	T55	.440"	1.1/4" (31,8 mm)	



Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !







Art N° PART NO.	Atornillador DRIVER SIZE	Punta (Ref.) POINT SIZE (Ref.)	Longitud total OVERALL LENGTH	Cuerpo BODY DIAMETER
ZPT6X	T6	.065"	1.15/16" (49,2 mm)	1/8" (3,18 mm)
ZPT7X	T7	.077"	1.15/16" (49,2 mm)	1/8" (3,18 mm)
ZPT8X	T8	.090"	1.15/16" (49,2 mm)	1/8" (3,18 mm)
ZPT9X	T9	.097"	1.15/16" (49,2 mm)	1/8" (3,18 mm)
ZPT10X	T10	.107"	1.15/16" (49,2 mm)	5/32" (3,97 mm)
ZPT15X	T15	.128"	1.15/16" (49,2 mm)	5/32" (3,97 mm)
ZPT20X	T20	.151"	1.15/16" (49,2 mm)	3/16" (4,76 mm)
ZPT25X	T25	.173"	1.15/16" (49,2 mm)	3/16" (4,76 mm)
ZPT27X	T27	.195"	1.15/16" (49,2 mm)	1/4" (6,35 mm)
ZPT30X	T30	.216"	1.15/16" (49,2 mm)	1/4" (6,35 mm)
ZPT40X	T40	.260"	1.15/16" (49,2 mm)	5/16" (7,93 mm)
ZPT7X275	T7	.077"	2.3/4" (69,9 mm)	1/8" (3,18 mm)
ZPT8X275	T8	.090"	2.3/4" (69,9 mm)	1/8" (3,18 mm)
ZPT9X275	T9	.097"	2.3/4" (69,9 mm)	1/8" (3,18 mm)
ZPT10X275	T10	.107"	2.3/4" (69,9 mm)	5/32" (3,97 mm)
ZPT15X275	T15	.128"	2.3/4" (69,9 mm)	5/32" (3,97 mm)
ZPT20X275	T20	.151"	2.3/4" (69,9 mm)	3/16" (4,76 mm)
ZPT25X275	T25	.173"	2.3/4" (69,9 mm)	3/16" (4,76 mm)
ZPT27X275	T27	.195"	2.3/4" (69,9 mm)	1/4" (6,35 mm)
ZPT30X275	T30	.216"	2.3/4" (69,9 mm)	1/4" (6,35 mm)
ZPT40X275	T40	.260"	2.3/4" (69,9 mm)	5/16" (7,93 mm)
ZPT7X35	T7	.077"	3.1/2" (88,9 mm)	1/8" (3,18 mm)
ZPT8X35	T8	.090"	3.1/2" (88,9 mm)	1/8" (3,18 mm)
ZPT9X35	T9	.097"	3.1/2" (88,9 mm)	1/8" (3,18 mm)
ZPT10X35	T10	.107"	3.1/2" (88,9 mm)	5/32" (3,97 mm)
ZPT15X35	T15	.128"	3.1/2" (88,9 mm)	5/32" (3,97 mm)
ZPT20X35	T20	.151"	3.1/2" (88,9 mm)	3/16" (4,76 mm)
ZPT25X35	T25	.173"	3.1/2" (88,9 mm)	3/16" (4,76 mm)
ZPT27X35	T27	.195"	3.1/2" (88,9 mm)	1/4" (6,35 mm)
ZPT30X35	T30	.216"	3.1/2" (88,9 mm)	1/4" (6,35 mm)
ZPT40X35	T40	.260"	3.1/2" (88,9 mm)	5/16" (7,93 mm)
ZPT7X6	T7	.077"	6" (152,4 mm)	1/8" (3,18 mm)
ZPT8X6	T8	.090"	6" (152,4 mm)	1/8" (3,18 mm)
ZPT9X6	T9	.097"	6" (152,4 mm)	1/8" (3,18 mm)
ZPT10X6	T10	.107"	6" (152,4 mm)	5/32" (3,97 mm)
ZPT15X6	T15	.128"	6" (152,4 mm)	5/32" (3,97 mm)
ZPT20X6	T20	.151"	6" (152,4 mm)	3/16" (4,76 mm)
ZPT25X6	T25	.173"	6" (152,4 mm)	3/16" (4,76 mm)
ZPT27X6	T27	.195"	6" (152,4 mm)	1/4" (6,35 mm)
ZPT30X6	T30	.216"	6" (152,4 mm)	1/4" (6,35 mm)
ZPT40X6	T40	.260"	6" (152,4 mm)	5/16" (7,93 mm)

Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !



<b>A</b>	 1/4" HEX SHANK	<b>TORQ-SET INSERT BITS</b>	
<b>Art. N°</b> PART NO.	<b>Atornillador</b> SCREW SIZE	<b>Longitud total</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
TS212-0	0	1" (25,4 mm)	
TS212-1	1	1" (25,4 mm)	
TS212-2	2	1" (25,4 mm)	
TS212-3	3	1" (25,4 mm)	
TS212-4	4	1" (25,4 mm)	
TS212-5	5	1" (25,4 mm)	
TS212-6	6	1" (25,4 mm)	
TS212-8	8	1" (25,4 mm)	
TS212-10	10	1" (25,4 mm)	
TS212-1/4	1/4	1" (25,4 mm)	



<b>B</b>	 1/4" HEX SHANK	<b>TORQ-SET INSERT BITS</b> BULLNOSE	
<b>Art N°</b> PART NO.	<b>Atornillador</b> SCREW SIZE	<b>Longitud total</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
TS212-1/4B	1/4	1" (25,4 mm)	
TS212-5/16B	5/16	1" (25,4 mm)	



<b>C</b>	 5/16" HEX SHANK	<b>TORQ-SET INSERT BITS</b>	
<b>Art N°</b> PART NO.	<b>Atornillador</b> SCREW SIZE	<b>Longitud total</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
TS212-8A	8	1.1/4" (31,8 mm)	
TS212-10A	10	1.1/4" (31,8 mm)	
TS212-1/4A	1/4	1.1/4" (31,8 mm)	
TS212-5/16A	5/16	1.1/4" (31,8 mm)	
TS212-3/8A	3/8	1.1/4" (31,8 mm)	



<b>B</b>	 5/16" HEX SHANK	<b>TORQ-SET INSERT BITS</b> BULLNOSE	
<b>Art N°</b> PART NO.	<b>Atornillador</b> SCREW SIZE	<b>Longitud total</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
TS212-5/16AB	5/16	1.1/4" (31,8 mm)	

Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !



<b>A</b>		<b>ACR - TORQ-SET INSERT BITS</b> con muesca de soldado	
<b>Art N°</b> PART NO.	<b>Atornillador</b> SCREW SIZE	<b>Longitud total</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
TS212-6R	6	1" (25,4 mm)	
TS212-8R	8	1" (25,4 mm)	
TS212-10R	10	1" (25,4 mm)	
TS212-1/4R	1/4	1" (25,4 mm)	



<b>B</b>		<b>ACR - TORQ-SET INSERT BITS</b> con muesca de soldado	
<b>Art N°</b> PART NO.	<b>Atornillador</b> SCREW SIZE	<b>Longitud total</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
TS212-8AR	8	1.1/4" (31,8 mm)	
TS212-10AR	10	1.1/4" (31,8 mm)	
TS212-1/4AR	1/4	1.1/4" (31,8 mm)	
TS212-5/16AR	5/16	1.1/4" (31,8 mm)	



<b>C</b>		<b>TORQ-SET POWER BITS</b>	
<b>Art. N°</b> PART NO.	<b>Atornillador</b> SCREW SIZE	<b>Longitud total</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
TS170-0	0	1.1/4" (31,8 mm)	
TS170-1	1	1.1/4" (31,8 mm)	
TS170-2	2	1.1/4" (31,8 mm)	
TS170-3	3	1.1/4" (31,8 mm)	
TS170-4	4	1.1/4" (31,8 mm)	
TS170-5	5	1.1/4" (31,8 mm)	
TS170-6	6	1.1/4" (31,8 mm)	
TS170-8	8	1.1/4" (31,8 mm)	
TS170-10	10	1.1/4" (31,8 mm)	



<b>D</b>		<b>TORQ-SET POWER BITS</b> BULLNOSE	
<b>Art N°</b> PART NO.	<b>Atornillador</b> SCREW SIZE	<b>Longitud total</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
TS170-1/4B	1/4	1.1/4" (31,8 mm)	
TS170-5/16B	5/16	1.1/4" (31,8 mm)	
TS170-3/8B	3/8	1.1/4" (31,8 mm)	



Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !



<b>A</b>  1/4" HEX SHANK		<b>TORQ-SET POWER BITS</b> 	
Art N° PART NO.	Atornillador SCREW SIZE	Longitud total OVERALL LENGTH	Diámetro cuerpo BODY DIAMETER
TS273-0	0	1.15/16" (49,2 mm)	1/8" (3,18 mm)
TS273-1	1	1.15/16" (49,2 mm)	1/8" (3,18 mm)
TS273-2	2	1.15/16" (49,2 mm)	1/8" (3,18 mm)
TS273-3	3	1.15/16" (49,2 mm)	5/32" (3,97 mm)
TS273-4	4	1.15/16" (49,2 mm)	5/32" (3,97 mm)
TS273-5	5	1.15/16" (49,2 mm)	3/16" (4,76 mm)
TS273-6	6	1.15/16" (49,2 mm)	3/16" (4,76 mm)
TS273-8	8	1.15/16" (49,2 mm)	1/4" (6,35 mm)
TS273-10	10	1.15/16" (49,2 mm)	1/4" (6,35 mm)



<b>B</b>  1/4" HEX SHANK		<b>TORQ-SET POWER BITS</b> 	
Art. N° PART NO.	Atornillador SCREW SIZE	Longitud total OVERALL LENGTH	Diámetro cuerpo BODY DIAMETER
TS265-0-35	0	3.1/2" (88,9 mm)	1/8" (3,18 mm)
TS265-1-35	1	3.1/2" (88,9 mm)	1/8" (3,18 mm)
TS265-2-35	2	3.1/2" (88,9 mm)	1/8" (3,18 mm)
TS265-3-35	3	3.1/2" (88,9 mm)	5/32" (3,97 mm)
TS265-4-35	4	3.1/2" (88,9 mm)	5/32" (3,97 mm)
TS265-5-35	5	3.1/2" (88,9 mm)	3/16" (4,76 mm)
TS265-6-35	6	3.1/2" (88,9 mm)	3/16" (4,76 mm)
TS265-8-35	8	3.1/2" (88,9 mm)	1/4" (6,35 mm)
TS265-10-35	10	3.1/2" (88,9 mm)	1/4" (6,35 mm)

<b>B</b>  1/4" HEX SHANK		<b>TORQ-SET POWER BITS</b> 	
Art N° PART NO.	Atornillador SCREW SIZE	Longitud cuerpo OVERALL LENGTH	Diámetro cuerpo BODY DIAMETER
TS265-0-6	0	6" (152,4 mm)	1/8" (3,18 mm)
TS265-1-6	1	6" (152,4 mm)	1/8" (3,18 mm)
TS265-2-6	2	6" (152,4 mm)	1/8" (3,18 mm)
TS265-3-6	3	6" (152,4 mm)	5/32" (3,97 mm)
TS265-4-6	4	6" (152,4 mm)	5/32" (3,97 mm)
TS265-5-6	5	6" (152,4 mm)	3/16" (4,76 mm)
TS265-6-6	6	6" (152,4 mm)	3/16" (4,76 mm)
TS265-8-6	8	6" (152,4 mm)	1/4" (6,35 mm)
TS265-10-6	10	6" (152,4 mm)	1/4" (6,35 mm)



<b>A</b>		<b>TORQ-SET POWER BITS</b>		
<b>Art. N°</b>	<b>Atornillador</b>	<b>Longitud total</b>	<b>Diámetro cuerpo</b>	
<b>PART NO.</b>	<b>SCREW SIZE</b>	<b>OVERALL LENGTH</b>	<b>BODY DIAMETER</b>	
TS170-8A	8	1.1/4" (31,8 mm)		
TS170-10A	10	1.1/4" (31,8 mm)		



<b>B</b>		<b>TORQ-SET POWER BITS BULLNOSE</b>		
<b>Art N°</b>	<b>Atornillador</b>	<b>Longitud total</b>	<b>Diámetro cuerpo</b>	
<b>PART NO.</b>	<b>SCREW SIZE</b>	<b>OVERALL LENGTH</b>	<b>BODY DIAMETER</b>	
TS170-1/4A	1/4	1.1/4" (31,8 mm)		
TS170-5/16A	5/16	1.1/4" (31,8 mm)		
TS170-3/8A	3/8	1.1/4" (31,8 mm)		
TS170-7/16A	7/16	1.1/4" (31,8 mm)		
TS170-1/2A	1/2	1.1/4" (31,8 mm)		



<b>C</b>		<b>TORQ-SET POWER BITS</b>		
<b>Art N°</b>	<b>Atornillador</b>	<b>Longitud total</b>	<b>Diámetro cuerpo</b>	
<b>PART NO.</b>	<b>SCREW SIZE</b>	<b>OVERALL LENGTH</b>	<b>BODY DIAMETER</b>	
TS170-1/4	1/4	1.1/4" (31,8 mm)		
TS170-5/16	5/16	1.1/4" (31,8 mm)		
TS170-3/8	3/8	1.1/4" (31,8 mm)		
TS170-7/16	7/16	1.1/4" (31,8 mm)		



<b>D</b>		<b>TORQ-SET POWER BITS</b>		
<b>Art N°</b>	<b>Atornillador</b>	<b>Longitud total</b>	<b>Diámetro cuerpo</b>	
<b>PART NO.</b>	<b>SCREW SIZE</b>	<b>OVERALL LENGTH</b>	<b>BODY DIAMETER</b>	
TS273-1/4	1/4	1.15/16" (49,2 mm)	11/32" (8,73 mm)	
TS273-5/16	5/16	1.15/16" (49,2 mm)	3/8" (9,53 mm)	
TS273-3/8	3/8	1.15/16" (49,2 mm)	7/16" (11,11 mm)	
TS273-7/16	7/16	1.15/16" (49,2 mm)	7/16" (11,11 mm)	

Otras medidas bajo pedido/ OTHER DIMENSION ON REQUEST !



<b>A</b>		<b>TORQ-SET POWER BITS</b>		
<b>Art N°</b>	<b>Atornillador</b>	<b>Longitud total</b>	<b>Diámetro cuerpo</b>	
<b>PART NO.</b>	<b>SCREW SIZE</b>	<b>OVERALL LENGTH</b>	<b>BODY DIAMETER</b>	
TS265-1/4-35	1/4	3.1/2" (88,9 mm)	11/32" (8,73 mm)	
TS265-5/16-35	5/16	3.1/2" (88,9 mm)	3/8" (9,53 mm)	
TS265-3/8-35	3/8	3.1/2" (88,9 mm)	7/16" (11,11 mm)	
TS265-7/16-35	7/16	3.1/2" (88,9 mm)	7/16" (11,11 mm)	



<b>B</b>		<b>TORQ-SET POWER BITS</b>		
<b>Art N°</b>	<b>Atornillador</b>	<b>Longitud total</b>	<b>Diámetro cuerpo</b>	
<b>PART NO.</b>	<b>SCREW SIZE</b>	<b>OVERALL LENGTH</b>	<b>BODY DIAMETER</b>	
TS265-1/4-6	1/4	6" (152,4 mm)	11/32" (8,73 mm)	
TS265-5/16-6	5/16	6" (152,4 mm)	3/8" (9,53 mm)	
TS265-3/8-6	3/8	6" (152,4 mm)	7/16" (11,11 mm)	
TS265-7/16-6	7/16	6" (152,4 mm)	7/16" (11,11 mm)	



<b>C</b>		<b>TORQ-SET POWER BITS</b>		
<b>Art N°</b>	<b>Atornillador</b>	<b>Longitud total</b>	<b>Diámetro cuerpo</b>	
<b>PART NO.</b>	<b>SCREW SIZE</b>	<b>OVERALL LENGTH</b>	<b>BODY DIAMETER</b>	
TS170-1/2	1/2	1.1/4" (31,8 mm)		
TS170-9/16	9/16	1.1/4" (31,8 mm)		
TS170-5/8	5/8	1.1/4" (31,8 mm)		



<b>D</b>		<b>ACR - TORQ-SET POWER BITS</b>		
<b>Art N°</b>	<b>Atornillador</b>	<b>Longitud total</b>	<b>Diámetro cuerpo</b>	
<b>PART NO.</b>	<b>SCREW SIZE</b>	<b>OVERALL LENGTH</b>	<b>BODY DIAMETER</b>	
TS170-6R	6	1.1/4" (31,8 mm)		
TS170-8R	8	1.1/4" (31,8 mm)		
TS170-10R	10	1.1/4" (31,8 mm)		



Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !

<b>A</b>	 1/4" HEX SHANK	<b>ACR - TORQ-SET POWER BITS WITH REMOVAL-RIPS</b>	
<b>Art N°</b> PART NO.	<b>Atornillador</b> SCREW SIZE	<b>Longitud total</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
TS273-6R	6	1.15/16" (49,2 mm)	3/16" (4,76 mm)
TS273-8R	8	1.15/16" (49,2 mm)	1/4" (6,35 mm)
TS273-10R	10	1.15/16" (49,2 mm)	1/4" (6,35 mm)



<b>B</b>	 1/4" HEX SHANK	<b>ACR - TORQ-SET POWER BITS WITH REMOVAL-RIPS</b>	
<b>Art N°</b> PART NO.	<b>Atornillador</b> SCREW SIZE	<b>Longitud total</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
TS265-6-35R	6	3.1/2" (88,9 mm)	3/16" (4,76 mm)
TS265-8-35R	8	3.1/2" (88,9 mm)	1/4" (6,35 mm)
TS265-10-35R	10	3.1/2" (88,9 mm)	1/4" (6,35 mm)



<b>C</b>	 5/16" HEX SHANK	<b>ACR - TORQ-SET POWER BITS WITH REMOVAL-RIPS / BULLNOSE</b>	
<b>Artikel Nr.</b> PART NO.	<b>Schraubengröße</b> SCREW SIZE	<b>Gesamtlänge</b> OVERALL LENGTH	<b>Körperdurchmesser</b> BODY DIAMETER
TS170-1/4AR	1/4	1.1/4" (31,8 mm)	
TS170-5/16AR	5/16	1.1/4" (31,8 mm)	



<b>D</b>	 7/16" HEX SHANK	<b>ACR - TORQ-SET POWER BITS WITH REMOVAL-RIPS</b>	
<b>Art N°</b> PART NO.	<b>Atornillador</b> SCREW SIZE	<b>Longitud total</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
TS170-1/4AR	1/4	1.1/4" (31,8 mm)	
TS170-5/16AR	5/16	1.1/4" (31,8 mm)	



<b>E</b>	 7/16" HEX SHANK	<b>ACR - TORQ-SET POWER BITS WITH REMOVAL-RIPS</b>	
<b>Art N°</b> PART NO.	<b>Atornillador</b> SCREW SIZE	<b>Longitud total</b> OVERALL LENGTH	<b>Diámetro cuerpo</b> BODY DIAMETER
TS265-1/4-35R	1/4	3.1/2" (88,9 mm)	11/32" (8,73 mm)
TS265-5/16-35R	5/16	3.1/2" (88,9 mm)	3/8" (9,53 mm)

Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !



<b>A</b>		<b>TRI-WING INSERT BITS</b>			
		1/4" HEX SHANK			
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE		
			TENSION HEAD	SHEAR HEAD	
TW-0D	0	1" (25,4 mm)	0-80	-----	
TW-1D	1	1" (25,4 mm)	2-56	4-40	
TW-2D	2	1" (25,4 mm)	4-40	6-32	
TW-3D	3	1" (25,4 mm)	6-32	8-32	
TW-4D	4	1" (25,4 mm)	8-32	10-32	
TW-5D	5	1" (25,4 mm)	10-32	1/4-28	



<b>B</b>		<b>TRI-WING INSERT BITS BULLNOSE</b>			
		1/4" HEX SHANK			
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE		
			TENSION HEAD	SHEAR HEAD	
TW-6B4D	6	1.1/4" (31,8 mm)	1/4-28	5/16-24	
TW-7B4D	7	1.1/4" (31,8 mm)	5/16-24	3/8-24	
TW-8B4D	8	1.1/4" (31,8 mm)	3/8-24	7/16-20	



<b>C</b>		<b>TRI-WING INSERT BITS</b>			
		5/16" HEX SHANK			
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE		
			TENSION HEAD	SHEAR HEAD	
TW-4AD	4	1.1/4" (31,8 mm)	8-32	10-32	
TW-5AD	5	1.1/4" (31,8 mm)	10-32	1/4-28	
TW-6AD	6	1.1/4" (31,8 mm)	1/4-28	5/16-24	



<b>D</b>		<b>TRI-WING INSERT BITS BULLNOSE</b>			
		5/16" HEX SHANK			
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE		
			TENSION HEAD	SHEAR HEAD	
TW-6B5D	6	1.1/4" (31,8 mm)	1/4-28	5/16-24	
TW-7B5D	7	1.1/4" (31,8 mm)	5/16-24	3/8-24	
TW-8B5D	8	1.1/4" (31,8 mm)	3/8-24	7/16-20	

Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !



<b>A</b>		<b>TRI-WING POWER BITS</b>		
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE	
			TENSION HEAD	SHEAR HEAD
TW-0	0	1.1/4" (31,8 mm)	0-80	-----
TW-1	1	1.1/4" (31,8 mm)	2-56	4-40
TW-2	2	1.1/4" (31,8 mm)	4-40	6-32
TW-3	3	1.1/4" (31,8 mm)	6-32	8-32
TW-4	4	1.1/4" (31,8 mm)	8-32	10-32
TW-5	5	1.1/4" (31,8 mm)	10-32	1/4-28

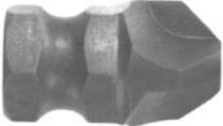

<b>B</b>		<b>TRI-WING POWER BITS BULLNOSE</b>		
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE	
			TENSION HEAD	SHEAR HEAD
TW-6B4	6	1.1/4" (31,8 mm)	1/4-28	5/16-24
TW-7B4	7	1.1/4" (31,8 mm)	5/16-24	3/8-24
TW-8B4	8	1.1/4" (31,8 mm)	3/8-24	7/16-20



<b>C</b>		<b>TRI-WING POWER BITS</b>		
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE	
			TENSION HEAD	SHEAR HEAD
TW-4A	4	1.1/4" (31,8 mm)	8-32	10-32
TW-5A	5	1.1/4" (31,8 mm)	10-32	1/4-28



<b>D</b>		<b>TRI-WING POWER BITS BULLNOSE</b>		
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE	
			TENSION HEAD	SHEAR HEAD
TW-6B5	6	1.1/4" (31,8 mm)	1/4-28	5/16-24
TW-7B5	7	1.1/4" (31,8 mm)	5/16-24	3/8-24
TW-8B5	8	1.1/4" (31,8 mm)	3/8-24	7/16-20



Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !

<b>A</b>		<b>TRI-WING POWER BITS</b>		
<b>Art N°</b>	<b>Tamaño</b>	<b>Longitud total</b>	<b>Atornillador / SCREW SIZE</b>	
<b>PART NO.</b>	<b>RECESS NO.</b>	<b>OVERALL LENGTH</b>	<b>TENSION HEAD</b>	<b>SHEAR HEAD</b>
<b>TW-6</b>	<b>6</b>	<b>1.1/4"</b> (31,8 mm)	<b>1/4-28</b>	<b>5/16-24</b>
<b>TW-7</b>	<b>7</b>	<b>1.1/4"</b> (31,8 mm)	<b>5/16-24</b>	<b>3/8-24</b>
<b>TW-8</b>	<b>8</b>	<b>1.1/4"</b> (31,8 mm)	<b>3/8-24</b>	<b>7/16-20</b>



<b>B</b>		<b>TRI-WING POWER BITS BULLNOSE</b>		
<b>Art N°</b>	<b>Tamaño</b>	<b>Longitud total</b>	<b>Atornillador / SCREW SIZE</b>	
<b>PART NO.</b>	<b>RECESS NO.</b>	<b>OVERALL LENGTH</b>	<b>TENSION HEAD</b>	<b>SHEAR HEAD</b>
<b>TW-9B</b>	<b>9</b>	<b>1.1/4"</b> (31,8 mm)	<b>7/16-20</b>	<b>1/2-20</b>



<b>C</b>		<b>TRI-WING POWER BITS</b>		
<b>Art N°</b>	<b>Tamaño</b>	<b>Longitud total</b>	<b>Atornillador / SCREW SIZE</b>	
<b>PART NO.</b>	<b>RECESS NO.</b>	<b>OVERALL LENGTH</b>	<b>TENSION HEAD</b>	<b>SHEAR HEAD</b>
<b>TW-9</b>	<b>9</b>	<b>1.1/4"</b> (31,8 mm)	<b>7/16-20</b>	<b>1/2-20</b>
<b>TW-10</b>	<b>10</b>	<b>1.1/4"</b> (31,8 mm)	<b>1/2-20</b>	<b>9/16-18</b>
<b>TW-11</b>	<b>11</b>	<b>1.1/4"</b> (31,8 mm)	<b>9/16-18</b>	<b>5/8-18</b>



<b>D</b>		<b>TRI-WING POWER BITS BULLNOSE</b>		
<b>Art N°</b>	<b>Tamaño</b>	<b>Longitud total</b>	<b>Atornillador / SCREW SIZE</b>	
<b>PART NO.</b>	<b>RECESS NO.</b>	<b>OVERALL LENGTH</b>	<b>TENSION HEAD</b>	<b>SHEAR HEAD</b>
<b>TW-12B</b>	<b>12</b>	<b>1.1/4"</b> (31,8 mm)	<b>5/8-18</b>	<b>3/4-16</b>
<b>TW-13B</b>	<b>13</b>	<b>2.1/2"</b> (63,5 mm)	<b>3/4-16</b>	<b>7/8-14</b>



<b>E</b>		<b>TRI-WING POWER BITS BULLNOSE</b>		
<b>Art N°</b>	<b>Tamaño</b>	<b>Longitud total</b>	<b>Atornillador / SCREW SIZE</b>	
<b>PART NO.</b>	<b>RECESS NO.</b>	<b>OVERALL LENGTH</b>	<b>TENSION HEAD</b>	<b>SHEAR HEAD</b>
<b>TW-14B</b>	<b>14</b>	<b>3"</b> (76,2 mm)	<b>7/8-14</b>	<b>1-12</b>
<b>TW-15B</b>	<b>15</b>	<b>3"</b> (76,2 mm)	<b>1-12</b>	



Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !



<b>A</b>		<b>ACR - TRI-WING INSERT BITS WITH REMOVAL-RIPS</b>		
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE	
			TENSION HEAD	SHEAR HEAD
TW-3DR	3	1" (25,4 mm)	6-32	8-32
TW-4DR	4	1" (25,4 mm)	8-32	10-32
TW-5DR	5	1" (25,4 mm)	10-32	1/4-28

<b>B</b>		<b>ACR - TRI-WING INSERT BITS WITH REMOVAL-RIPS / BULLNOSE</b>		
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE	
			TENSION HEAD	SHEAR HEAD
TW-6B4DR	6	1.1/4" (31,8 mm)	1/4-28	5/16-24

<b>C</b>		<b>ACR - TRI-WING INSERT BITS WITH REMOVAL-RIPS</b>		
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE	
			TENSION HEAD	SHEAR HEAD
TW-4ADR	4	1.1/4" (31,8 mm)	8-32	10-32
TW-5ADR	5	1.1/4" (31,8 mm)	10-32	1/4-28
TW-6ADR	6	1.1/4" (31,8 mm)	1/4-28	5/16-24

<b>D</b>		<b>ACR - TRI-WING POWER BITS WITH REMOVAL-RIPS</b>		
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE	
			TENSION HEAD	SHEAR HEAD
TW-3R	3	1.1/4" (31,8 mm)	6-32	8-32
TW-4R	4	1.1/4" (31,8 mm)	8-32	10-32
TW-5R	5	1.1/4" (31,8 mm)	10-32	1/4-28

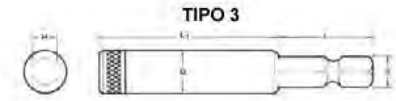
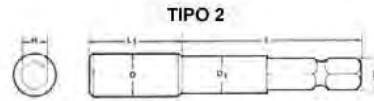
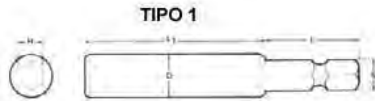
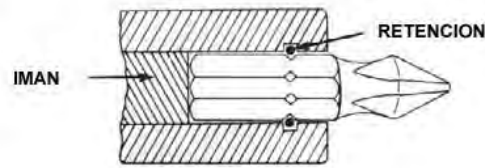
<b>E</b>		<b>ACR - TRI-WING POWER BITS WITH REMOVAL-RIPS / BULLNOSE</b>		
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE	
			TENSION HEAD	SHEAR HEAD
TW-6B4R	6	1.1/4" (31,8 mm)	1/4-28	5/16-24






<b>F</b>		<b>TRI-WING POWER BITS WITH REMOVAL-RIPS</b>		
Art N° PART NO.	Tamaño RECESS NO.	Longitud total OVERALL LENGTH	Atornillador / SCREW SIZE	
			TENSION HEAD	SHEAR HEAD
TW-6R	6	1.1/4" (31,8 mm)	1/4-28	5/16-24
TW-7R	7	1.1/4" (31,8 mm)	5/16-24	3/8-24

Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !


## EXTENSIONES PARA PUNTAS DE ATORNILLADOR DE MANGO HEXAGONAL A HEMBRA HEXAGONAL

CON IMAN Y ARANDELA DE RETENCION

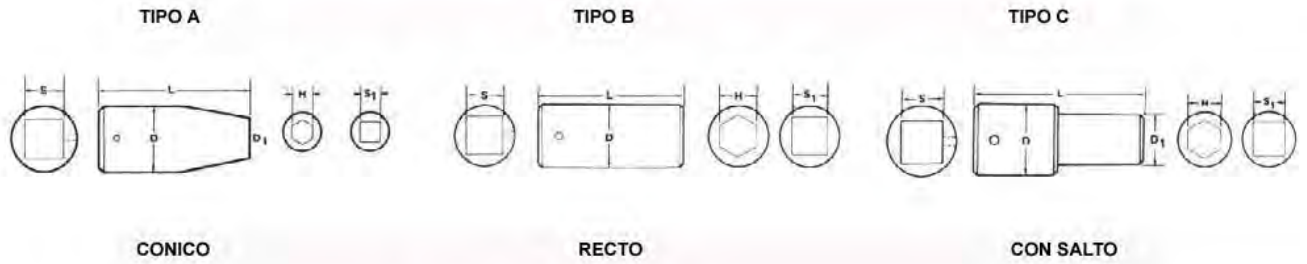


	ART N° PART NO.	S HEX	H	D	D <sub>i</sub>	L	L <sub>i</sub>
<b>TIPO MAGNETICO 1</b> 	ZM10	1/4"	1/4"	7/16"	—	1"	1 7/8"
	ZM18	7/16"	1/4"	1/2"	—	1 1/4"	1 7/8"
	ZM19	5/16"	1/4"	7/16"	—	1 1/8"	1 7/8"
	ZM20	5/16"	5/16"	1/2"	—	1 1/8"	1 11/32"
	ZM28	7/16"	5/16"	9/16"	—	1 5/16"	2 1/16"
	ZM39	1/4"	1/4"	7/16"	—	1"	1 1/4"
	ZM47	1/4"	5/16"	1/2"	—	1 1/16"	2 1/8"
	ZM59	1/4"	1/4"	3/8"	—	1"	1 1/8"
<b>TIPO MAGNETICO 2</b> 	ZM10-L 4	1/4"	1/4"	7/16"	5/16"	2 1/8"	1 7/8"
	ZM10-L 6	1/4"	1/4"	7/16"	5/16"	4 1/8"	1 7/8"
	ZM10-L 8	1/4"	1/4"	7/16"	5/16"	6 1/8"	1 7/8"
	ZM10-L 10	1/4"	1/4"	7/16"	5/16"	8 1/8"	1 7/8"
	ZM35	1/4"	1/4"	7/16"	3/8"	1"	1 7/8"
	ZM38	1/4"	1/4"	7/16"	3/8"	1 1/8"	1 7/8"
<b>TIPO MAGNETICO 3</b> 	ZM60	1/4"	1/4"	7/16"	—	1"	2 3/32"
	ZM61	1/4"	1/4"	7/16"	3/8"	1"	2 3/32"
	ZM62	1/4"	1/4"	7/16"	—	1"	1 1/4"
<b>NO MAGNETICO TIPO 1</b> 	ZNM18	7/16"	1/4"	1/2"	7/16"	1 1/4"	1 1/2"
	ZNM19	5/16"	1/4"	7/16"	—	1 1/8"	3/4"
	ZNM20	5/16"	5/16"	1/2"	—	1 1/8"	1 3/8"
	ZNM28	7/16"	5/16"	9/16"	—	1 1/4"	1 1/2"
<b>NO MAGNETICO TIPO 2</b> 	ZNM10	1/4"	1/4"	7/16"	9/32"	1 1/8"	5/8"
	ZNM10L4	1/4"	1/4"	7/16"	5/16"	3"	1"
	ZNM10L6	1/4"	1/4"	7/16"	5/16"	5"	1"

## PUNTAS DE DESTORNILLADOR DE ROSCA A HEXAGONAL

	ART N° PART NO.	T	H	D	LONGITUD TOTAL	TIPO TYPE
<b>MAGNETICO</b> 	ZM45	3/16-24 R.H.	1/4"	3/8"	1 7/8"	tapon reemplazable
	ZM41	5/8-24 R.H.	1/4"	3/8"	1 7/8"	cuerpo entero

## PUNTAS DE DESTORNILLADOR HEMBRA CUADRADA SOBRE HEMBRA CUADRADA O HEXAGONAL



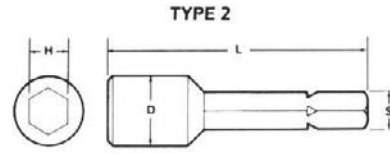
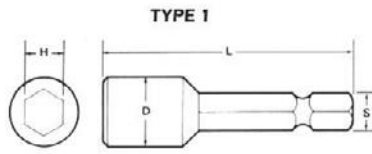
ART N° PART NO.	ENTRADA DRIVE S	CUADRADA SQUARE S <sub>1</sub>	HEXAGONAL HEX H	D	D <sub>1</sub>	L	
ZNM25	3/16" SQ.	—	1/4"	1 1/16"	—	1 1/4"	NO MAGNETICO TIPO A 
ZNM26	3/16" SQ.	—	5/16"	1 1/16"	—	1 1/2"	
ZNM27	1/2" SQ.	—	5/16"	1 5/16"	—	1 1/2"	
ZNM33	3/16" SQ.	5/16"	—	1 1/16"	5/16"	1 1/2"	
ZNM34	1/2" SQ.	5/16"	—	1"	5/16"	1 3/4"	
ZNM37	1/2" SQ.	—	1/4"	1 5/16"	—	1 1/2"	
ZNM23	1/4"	—	1/4"	7/16"	—	7/8"	NO MAGNETICO TIPO B 
ZM23	1/4" SQ.	—	1/4"	9/16"	7/16"	2 1/16"	MAGNETICO TIPO C 
ZM25	3/16" SQ.	—	1/4"	1 1/16"	7/16"	2 1/16"	
ZM26	3/16" SQ.	—	5/16"	1 1/16"	1/2"	2 3/4"	
ZM37	1/2" SQ.	—	1/4"	1 5/16"	7/16"	2 3/4"	




## PUNTA DE DESTORNILLADOR

ART N° PART NO.	S	H	D	L <sub>1</sub>	L	
ZM21	9/32"	1/4"	7/16"	1 7/8"	1 1/2"	NO MAGNETICO 
ZM22	5/16"	1/4"	7/16"	1 1/8"	1 1/2"	
ZM30	7/32"	1/4"	7/16"	1 1/8"	1 1/2"	
ZNM21	9/32"	1/4"	7/16"	3/4"	1 1/2"	MAGNETICO 
ZNM22	5/16"	1/4"	7/16"	3/4"	1 1/2"	
ZNM30	7/32"	1/4"	7/16"	3/4"	1 1/2"	

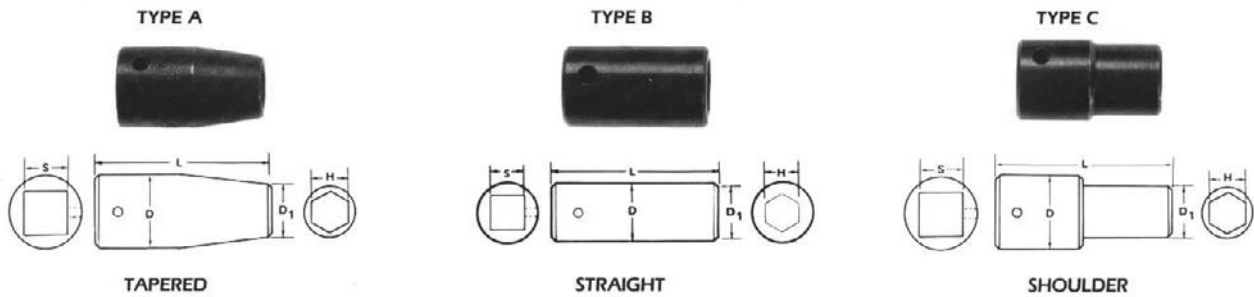
# NUT SETTERS

## HEX SHANK DRIVE TO FEMALE HEX



	ZEPHYR PART NO.	S HEX	H	D	L
<b>magnetic type 1 power</b> 	Z10MSH-1/4	1/4"	1/4"	7/16"	1 11/16"
	Z10MSH-5/16	1/4"	5/16"	1/2"	1 11/16"
	Z10MSH-3/8	1/4"	3/8"	9/16"	1 11/16"
	Z10MSHL-1/4	1/4"	1/4"	7/16"	2 9/16"
	Z10MSHL-5/16	1/4"	5/16"	1/2"	2 9/16"
Z10MSHL-3/8	1/4"	3/8"	9/16"	2 9/16"	
<b>magnetic type 2 insert</b> 	Z10MSHS-1/4	1/4"	1/4"	7/16"	1 1/8"
	Z10MSHS-5/16	1/4"	5/16"	1/2"	1 1/8"
	Z10MSHS-3/8	1/4"	3/8"	1/2"	1 1/8"
<b>non-magnetic type 1 power</b> 	Z10OSH-1/4	1/4"	1/4"	7/16"	1 11/16"
	Z10OSH-5/16	1/4"	5/16"	1/2"	1 11/16"
	Z10OSH-3/8	1/4"	3/8"	9/16"	1 11/16"
	Z10OSHL-1/4	1/4"	1/4"	7/16"	2 9/16"
	Z10OSHL-5/16	1/4"	5/16"	1/2"	2 9/16"
	Z10OSHL-3/8	1/4"	3/8"	9/16"	2 9/16"


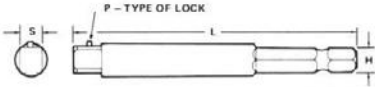



## SQUARE DRIVE SOCKETS FOR HEX HEAD SCREWS OR NUTS




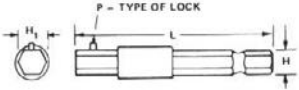
### 1/4" SQUARE DRIVE SOCKETS

ZEPHYR PART NO.	H	D	D <sub>1</sub>	L	S	TYPE	
Z48MST-1/4	1/4"	1/2"	3/8"	7/8"	1/4"	A	<b>magnetic</b>
Z48MS-1/4	1/4"	1/2"	7/16"	7/8"	1/4"	C	
Z48MS-5/16	5/16"	1/2"	1/2"	7/8"	1/4"	B	
Z48MST-5/16	5/16"	1/2"	7/16"	7/8"	1/4"	A	
Z48MS-3/8	3/8"	9/16"	9/16"	1"	1/4"	B	
Z48MS-7/16	7/16"	3/4"	3/4"	1"	1/4"	B	
Z48S-1/4	1/4"	1/2"	7/16"	7/8"	1/4"	C	<b>non-magnetic</b>
Z48ST-1/4	1/4"	1/2"	3/8"	7/8"	1/4"	A	
Z48S-5/16	5/16"	1/2"	1/2"	7/8"	1/4"	B	
Z48S-3/8	3/8"	9/16"	9/16"	1"	1/4"	B	
Z48S-7/16	7/16"	3/4"	3/4"	1"	1/4"	B	
Z48STD-1/4	1/4"	1/2"	3/8"	7/8"	1/4"	A	

## EXTENSIONS HEX SHANK DRIVE TO MALE SQUARE

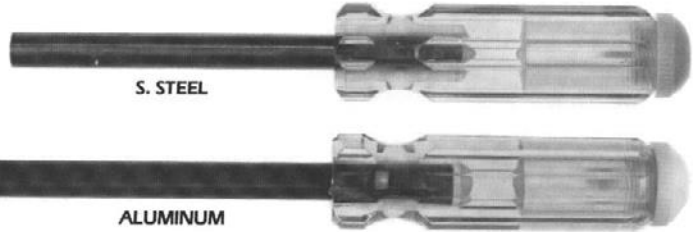
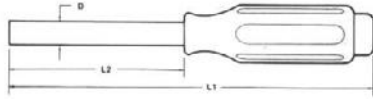
	ZEPHYR PART NO.	S	H	L	P	
<b>1/4" hex to 1/4" square</b>  	Z10SH- 1-3/8	1/4"	1/4"	1 3/8"	PIN	
	Z10SH- 2	1/4"	1/4"	2"	PIN	
	Z10SH- 3	1/4"	1/4"	3"	PIN	
	Z10SH- 4	1/4"	1/4"	4"	PIN	
	Z10SH- 5	1/4"	1/4"	5"	PIN	
	Z10SH- 6	1/4"	1/4"	6"	PIN	
	Z10SH- 8	1/4"	1/4"	8"	PIN	
	Z10SH-10	1/4"	1/4"	10"	PIN	
	Z10SH-12	1/4"	1/4"	12"	PIN	
	<b>1/4" hex to 3/8" square</b> 	Z10SH-3/8-2	3/8"	1/4"	2"	PIN
		Z10SH-3/8-3	3/8"	1/4"	3"	PIN
		Z10SH-3/8-4	3/8"	1/4"	4"	PIN
Z10SH-3/8-6		3/8"	1/4"	6"	PIN	
Z10SH-3/8-8		3/8"	1/4"	8"	PIN	
<b>7/16" hex to 3/8" square</b> 	Z09SH-3/8	3/8"	7/16"	1 3/4"	PIN	
	Z09SH-3/8- 2	3/8"	7/16"	2"	PIN	
	Z09SH-3/8- 3	3/8"	7/16"	3"	PIN	
	Z09SH-3/8- 4	3/8"	7/16"	4"	PIN	
	Z09SH-3/8- 5	3/8"	7/16"	5"	PIN	
	Z09SH-3/8- 6	3/8"	7/16"	6"	PIN	
	Z09SH-3/8- 8	3/8"	7/16"	8"	PIN	
	Z09SH-3/8-10	3/8"	7/16"	10"	PIN	
<b>7/16" hex to 1/2" square</b> 	Z09SH-1/2	1/2"	7/16"	2 1/8"	PIN	
	Z09SH-1/2- 3	1/2"	7/16"	3"	PIN	
	Z09SH-1/2- 4	1/2"	7/16"	4"	PIN	
	Z09SH-1/2- 5	1/2"	7/16"	5"	PIN	
	Z09SH-1/2- 6	1/2"	7/16"	6"	PIN	
	Z09SH-1/2- 8	1/2"	7/16"	8"	PIN	

## EXTENSIONS HEX SHANK TO MALE HEX (Reversible Sockets)

	ZEPHYR PART NO.	H	H <sub>1</sub>	L	P
<b>1/4" HEX TO 1/4" HEX</b>  	Z10SHR-2	1/4"	1/4"	2"	PIN
	Z10SHR-3	1/4"	1/4"	3"	PIN
	Z10SHR-4	1/4"	1/4"	4"	PIN

## HAND BIT HOLDERS COMBINATION HOLDER WITH BIT STORAGE

BIT SIZE	D	L <sub>1</sub>	L <sub>2</sub>	SHANK MATERIAL	ZEPHYR PART NO.	
1/4" HEX	3/8"	7 3/16"	3 3/4"	ALUMINUM	H104MA	<b>magnetic</b>
1/4" HEX	3/8"	7 3/16"	3 3/4"	S. STEEL	H104MS	
5/16" HEX	7/16"	7 3/16"	3 3/4"	ALUMINUM	H105MA	
5/16" HEX	7/16"	7 3/16"	3 3/4"	S. STEEL	H105MS	

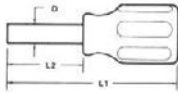


1/4" HEX	7/16"	7 3/16"	3 3/4"	STEEL	H104NM	<b>non-magnetic</b>
5/16" HEX	1/2"	7 3/16"	3 3/4"	STEEL	H105NM	

Note: Bit storage handle will accommodate up to four 1/4" Hex 1" insert bits.

## HAND BIT HOLDERS STUBBY HOLDER WITH SOLID HANDLE

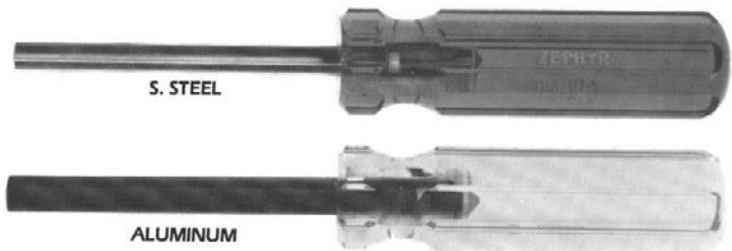
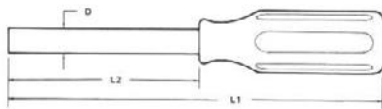
BIT SIZE	D	L <sub>1</sub>	L <sub>2</sub>	SHANK MATERIAL	ZEPHYR PART NO.	
1/4" HEX	3/8"	3 5/8"	1 5/8"	S. STEEL	SH104M	<b>magnetic</b>



1/4" HEX	7/16"	3 5/8"	1 5/8"	STEEL	SH104NM	<b>non-magnetic</b>
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## HAND BIT HOLDERS SOLID HANDLE

BIT SIZE	D	L <sub>1</sub>	L <sub>2</sub>	SHANK MATERIAL	ZEPHYR PART NO.	
1/4" HEX	3/8"	8 1/4"	3 3/4"	ALUMINUM	H106MA	<b>magnetic</b>
1/4" HEX	3/8"	8 1/4"	3 3/4"	S. STEEL	H106MS	
5/16" HEX	7/16"	8 1/4"	3 3/4"	ALUMINUM	H107MA	
5/16" HEX	7/16"	8 1/4"	3 3/4"	S. STEEL	H107MS	



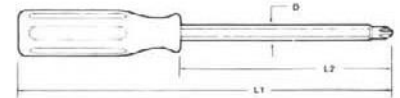
1/4" HEX	7/16"	8 1/4"	3 3/4"	STEEL	H106NM	<b>non-magnetic</b>
5/16" HEX	1/2"	8 1/4"	3 3/4"	STEEL	H107NM	



# HAND SCREWDRIVERS

## ACR®-PHILLIPS

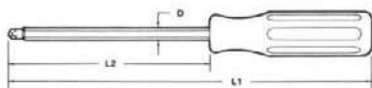
POINT SIZE	D	L <sub>1</sub>	L <sub>2</sub>	ZEPHYR PART NO.	
				INSTALLATION	REMOVAL
1	1/4" HEX	7 1/16"	3 1/8"	PL-101-ACR-I	PL-101-ACR-R
2	1/4" HEX	8 1/2"	4"	PL-102-ACR-I	PL-102-ACR-R
3	5/16" HEX	10 1/2"	6"	PL-103-ACR-I	PL-103-ACR-R



# HAND SCREWDRIVERS

## TORQ-SET®

POINT SIZE	D	L <sub>1</sub>	L <sub>2</sub>	ZEPHYR PART NO.
0	1/4" HEX	3"	1-1/4"	TS201P-0
1	1/4" HEX	3"	1-1/4"	TS201P-1
2	1/4" HEX	7 1/16"	3-1/8"	TS201P-2
3	1/4" HEX	7 1/16"	3-1/8"	TS201P-3
4	1/4" HEX	7 1/16"	3-1/8"	TS201P-4
5	1/4" HEX	7 1/16"	3-1/8"	TS201P-5
6	1/4" HEX	7 1/16"	4"	TS201P-6
8	1/4" HEX	7 1/16"	4"	TS201P-8
10	1/4" HEX	7 1/16"	4"	TS201P-10
1/4	5/16" HEX	10 1/2"	6"	TS201P-1/4
5/16	3/8" HEX	12 1/2"	8"	TS201P-5/16
3/8	3/8" HEX	12 1/2"	8"	TS201P-3/8

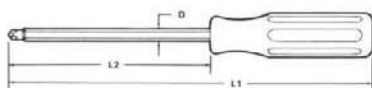


TORQ-SET® is a registered trademark of Phillips Screw Company.

# HAND SCREWDRIVERS

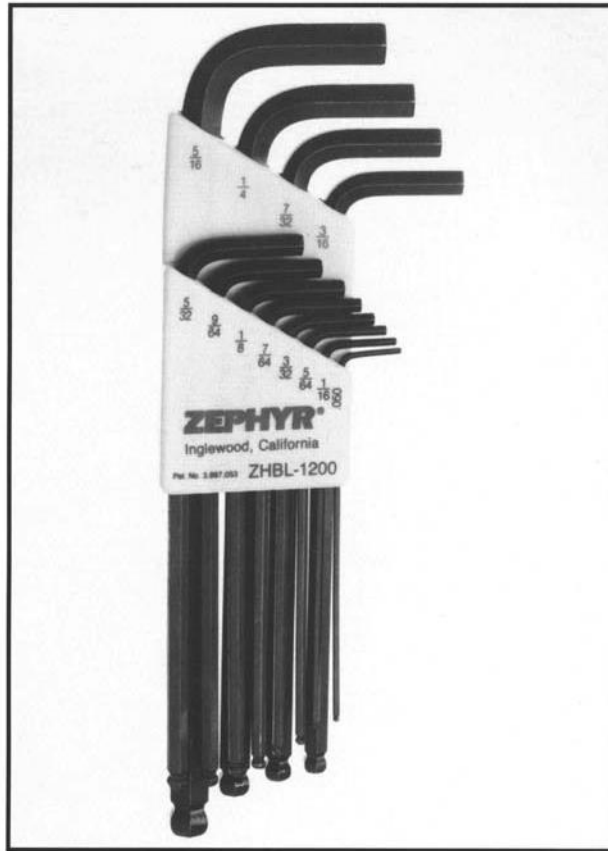
## TRI-WING®

POINT SIZE	D	L <sub>1</sub>	L <sub>2</sub>	ZEPHYR PART NO.
0	1/4"	3"	1-1/4"	TW301P-0
1	1/4"	3"	1-1/4"	TW301P-1
2	1/4"	7 1/16"	3-1/8"	TW301P-2
3	1/4"	7 1/16"	4"	TW301P-3
4	1/4"	7 1/16"	4"	TW301P-4
5	1/4"	7 1/16"	4"	TW301P-5
6	3/8"	10 1/2"	6"	TW301P-6
7	3/8"	12 1/2"	8"	TW301P-7



# Z-Hex Ball™ L-WRENCH SET

**Zephyr's new Z-Hex Ball™ L-Wrench set** helps get to those hard to reach areas and provides the torque to do the job. The new set includes 12 sizes: .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 1/4 and 5/16 inch.

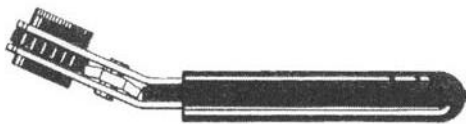


ZHBL-1200

## Carracas BIT-RATCHET

**Carracas con hexágono hembra, reversible, con ángulo de 25°, aleación de acero, cromado y pulido.**

BIT-RATCHETS WITH MAGNETIC FEMALE-HEX-DRIVE; REVERSIBLE;  
25° BENT RATCHET HEADS; US-ALLOY-STEEL, CHROMATED AND POLISHED:



6722-BK

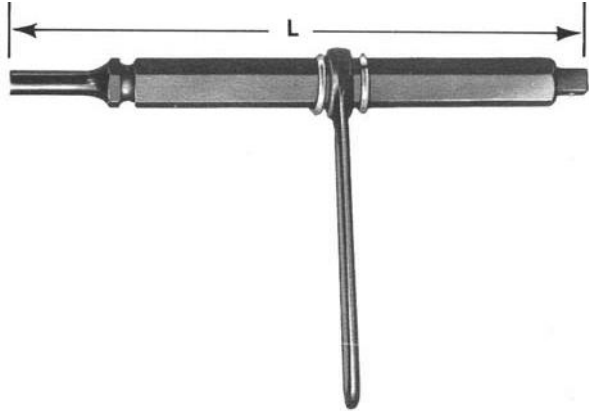
**Mini carraca, un lado,  
para puntas de 1/4"  
hexagonales, Longitud 110  
mm, Peso 65 g**  
MINI-BIT-RATCHET, SINGLE SIDE  
FOR BITS WITH 1/4" HEX,  
LENGTH 4.3/8", WEIGHT 0.14 LBS.



6720

**Carraca, para puntas de  
1/4" + 5/16" hexagonal  
Longitud 140 mm, Peso 105 g**  
COMBI-BIT-RATCHET  
FOR BITS WITH 1/4" + 5/16" HEX  
LENGTH 5.1/2", WEIGHT 0.23 LBS.

## Desatornillador / SCREW REMOVAL TOOL



Para quitar tornillos con martillo remachador

**FOR REMOVING SCREWS  
WITH RIVET HAMMER**

Art N° PART NO.	Longitud (L) LENGTH (L)	Cuadrado SQUARE DRIVE	Mango y diámetro SHANK TYPE AND DIAMETER
<b>540</b>	9" (229 mm)	3/8" (9,53 mm)	PARKER TAPER .401 SHANK (10,2 mm Standard)
<b>540S</b>	4.1/2" (114 mm)	3/8" (9,53 mm)	PARKER TAPER .401 SHANK (10,2 mm Standard)

## Desatornillador industrial HEAVY DUTY SCREW REMOVAL TOOL

Art N° PART NO.	Descripción DESCRIPTION
<b>5-2869</b>	Para tornillos de 4 mm a 6,35 mm FOR SCREWS FROM #8 TO 1/4"
<b>7-2868</b>	Para tornillos de 6,35 mm a 9,53 mm FOR SCREWS FROM 1/4" TO 3/8"



## Medidor de profundidad TYRE TREAD DEPTH GAUGE

Rango de medición / DEPTH RANGE : 0 - 26 mm

### TDG 16 C 01

## Reglas de acero flexibles STEEL-RULES - FLEXIBLE



### CF-616

satinadas y  
cromadas  
SATIN CHROME FINISH

Long.	Graduación cara 1	Graduación cara 2	Color letra	Anch
LENGTH	GRADUATION SIDE 1	GRADUATION SIDE 2	LETTER COLOR	Width
6 Zoll	1/32" + 1/64"	1/10" + 1/100"	negra	11,9 mm
6 INCH	32nds + 64ths	10ths + 100ths	black	15/32"



### EZ 65 F

negras niqueladas  
BLACK NICKEL PLATED

Long	Graduación cara 1	Graduación cara 2	Color letra	Anch
LENGTH	GRADUATION SIDE 1	GRADUATION SIDE 2	LETTER COLOR	Width
6 Zoll	1/32" + 1/64"	1/10" + 1/100"	blan	12,7 mm
6 INCH	32nds + 64ths	10ths + 100ths	white	1/2"

# SAFETY WIRE TWISTER



Tapered



Square



Diagonal



Cushion Throat



Deep Reach

**Descriptions:**

- Cushion Throat** – Form fit plastic in the jaws holds the cut ends of the wire and prevents them from flying into assembly.
- Automatic** – Twister mechanism retracts automatically making operation simpler and much faster.
- Right Hand Twist** – Safetytwist plier rotates clockwise when twister mechanism is pulled.
- Left Hand Twist** – Safetytwist plier rotates counter clockwise when twister mechanism is pulled.
- Deep Reach** – Twister mechanism with two extensions attached (overall 19") provides access to deep safetywiring jobs.

## REVERSIBLE - AUTOMATIC RETURN



**TigerWave®**

- Unique jaw design eliminates cuts and nicks in wire
- Cushion throat holds clipped wire -- No F.O.D.
- Reversible action for Left and Right twists
- Auto spring return



26W

Model	Description*
25W	6" TigerWave
26W	9" TigerWave
<b>Standard-Jaw Reversible with Diagonal Nose</b>	
45W	6" NSN 5120-01-429-8147
41W	9" NSN 5120-01-429-8146
42W	12" NSN 5120-01-429-8153

## AUTOMATIC RETURN



1W393

9WS	6" Tapered Nose
11WS	6" Diagonal Nose
1W393	9" Diagonal Nose (NSN 5120-01-112-5031)
3W6	9" Cushion Throat
5W4	9" Left Hand Twist
2W393	12" Diagonal Nose
4W6	12" Cushion Throat
6W4	12" Left Hand Twist

## MANUAL RETURN

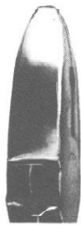


31W

9W	6" Tapered Nose
10W	6" Square Nose
11W	6" Diagonal Nose (NSN 5120-01-307-5143)
1W	9" Diagonal Nose (NSN 5120-00-305-2306)
31W	9" AeroTwister® Professional's Choice
3W5	9" Cushion Throat
5W6	9" Left Hand Twist
1W392	9" With Bearing on Spinner
2W	12" Diagonal Nose (NSN 5120-00-542-4171)
4W5	12" Cushion Throat
6W6	12" Left Hand Twist

\*Models may differ slightly from photographs

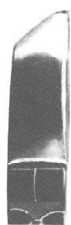
# SAFETY WIRE TWISTER



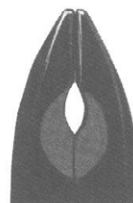
Tapered



Square



Diagonal



Cushion Throat




Deep Reach

**Descriptions:**



- Cushion Throat** – Form fit plastic in the jaws holds the cut ends of the wire and prevents them from flying into assembly.
- Automatic** – Twister mechanism retracts automatically making operation simpler and much faster.
- Right Hand Twist** – Safetytwist plier rotates clockwise when twister mechanism is pulled.
- Left Hand Twist** – Safetytwist plier rotates counter clockwise when twister mechanism is pulled.
- Deep Reach** – Twister mechanism with two extensions attached (overall 19") provides access to deep safetywiring jobs.

**SPECIALTY TWISTER - For difficult access situations; i.e. deep reach or close quarters.**



**13W      19" Deep Reach Twister**

**SAFETY WIRE-STAINLESS STEEL**

Conforms to Govt. Spec. QQW-423, Military Spec. MS-20995-C.		<b>14WA</b> .020 Dia. - 234 Ft. <b>15WA</b> .032 Dia. - 91 Ft. <b>16WA</b> .041 Dia. - 55 Ft.	<b>1/4 Lb. Spools</b>	
		<b>17WA</b> .020 Dia. - 937 Ft. <b>18WA</b> .025 Dia. - 599 Ft. <b>19WA</b> .032 Dia. - 366 Ft. <b>20WA</b> .041 Dia. - 223 Ft. <b>21WA</b> .051 Dia. - 144 Ft.		<b>One Pound Dispensers</b>

# SAFETY WIRE TWISTER KITS



**No. 105W**

**Professional Safety Wiring Kit.** Contains three different Twisters to cover almost any application: 9" Automatic, 6" Mini, and a 19" Deep Reach Twister. Includes three 1/4 lb. spools of stainless steel safety wire (.020, .032, .041). Durable plastic storage case.

Weight: 4 lbs.  
 Length: 13-1/2" Width: 10"  
 Height: 2-1/16"



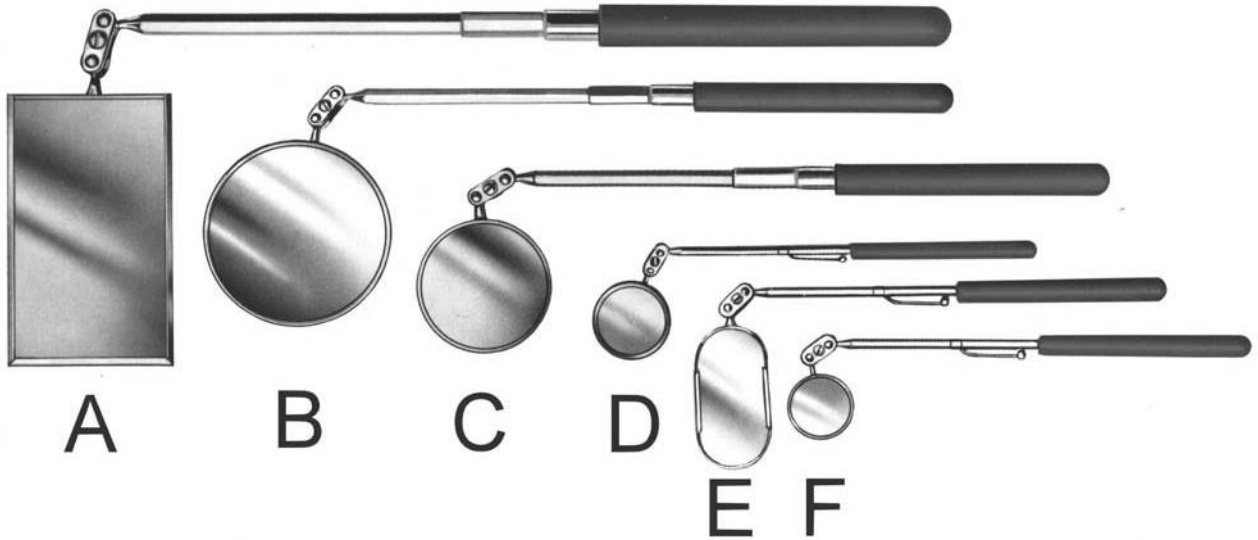
**No. 109W**

**Limited Access Safety Wiring Kit.** Contains the 6" Mini for general purpose wiring and work in close quarters, and the 19" Deep Reach Twister for special applications. Includes three 1/4 lb. spools of stainless steel safety wire (.020, .032, .041). Durable plastic storage case.

Weight: 2 lbs. 12 oz.  
 Length: 12-1/4" Width: 8"  
 Height: 1-3/4"

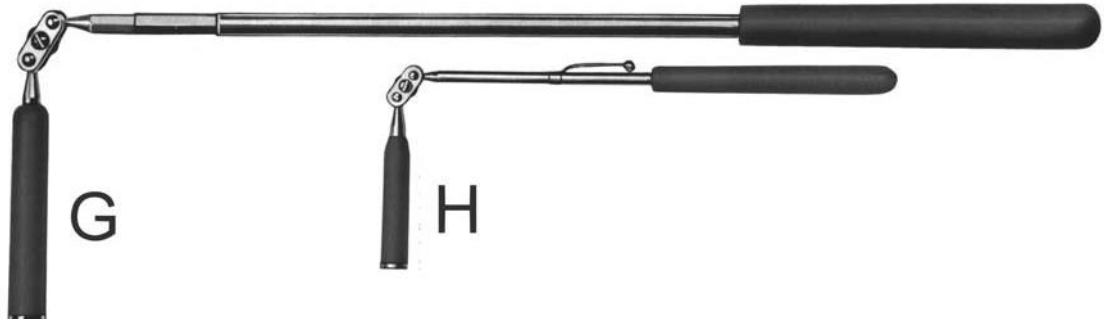
Model Kits	Description
<b>105W</b>	Professional Kit includes 1W393, 9W, 13W, 14WA, 15WA, 16WA and Case (NSN 5180-90-986-8939)
<b>109W</b>	Deep Reach Kit includes 11W, 13W, 14WA, 15WA, 16WA and Case (NSN 5180-01-337-9841)

# Espejos Inspección / INSPECTION MIRRORS



	Art N° PART-NO.	Tipo TYPE	Tamaño esp. MIRROR SIZE	Longitud LENGTH	Repuesto REFILL HEAD ASSY
<b>A</b>	<b>70-929</b>	<b>Rectangular RECTANGULAR</b>	<b>54 X 89 mm 2.1/8" x 3.1/2"</b>	<b>286 - 394 mm 11.1/4" x 15.1/2"</b>	<b>PO-255</b>
<b>B</b>	<b>S-2</b>	<b>Redondo CIRCULAR</b>	<b>83 mm 3.1/4"</b>	<b>280 - 381 mm 11" x 15"</b>	<b>S-2HD</b>
<b>C</b>	<b>70-925</b>	<b>Redondo CIRCULAR</b>	<b>57 mm 2.1/4"</b>	<b>254 - 356 mm 10" x 14"</b>	<b>PO-252</b>
<b>D</b>	<b>70-927</b>	<b>Redondo CIRCULAR</b>	<b>32 mm 1.1/4"</b>	<b>203 mm 8"</b>	<b>PO-253</b>
<b>E</b>	<b>70-923</b>	<b>Oval OVAL</b>	<b>25 X 51 mm 1" x 2"</b>	<b>216 mm 8.1/2"</b>	<b>S34563</b>
<b>F</b>	<b>70-921</b>	<b>Redondo CIRCULAR</b>	<b>22 mm 7/8"</b>	<b>191 mm 7.1/2"</b>	<b>A-2HD</b>


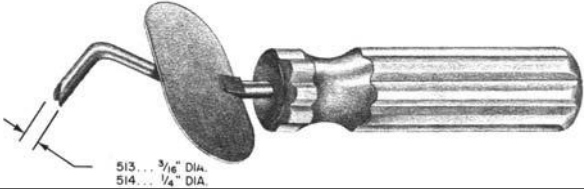
# Elevador mag. / MAGNETIC RETRIEVING TOOLS



	Art N° PART-NO.	Longitud LENGTH			Art N° PART-NO.	Longitud LENGTH
<b>G</b>	<b>70-933</b>	<b>425 - 679 mm 16.3/4" x 26.3/4"</b>		<b>H</b>	<b>70-935</b>	<b>216 mm 8.1/2"</b>

# Rebabadores / EDGE BREAKERS

para quitar rebabas de planchas  
REMOVE ANY BURRS AND ROUGHNESS FROM SHEETS

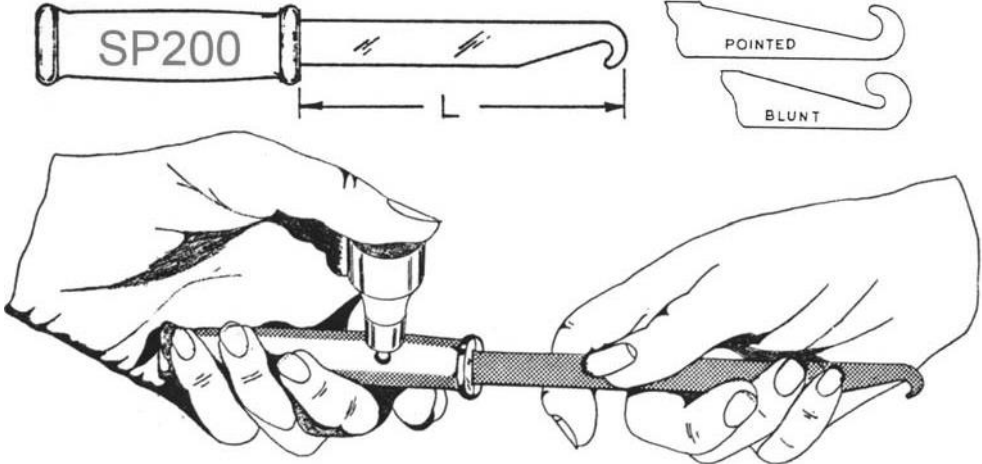
<b>A</b>			<b>B</b>		
	<b>Art N°</b> PART NO.	<b>Cuchilla</b> BLADE SIZE		<b>Observaciones</b> REMARKS	
<b>A</b>	<b>2004</b>	<b>15/64"</b> (6,00 mm)	<b>Mango madera /</b> WOOD HANDLE		
<b>B</b>	<b>514</b>	<b>1/4"</b> (6,35 mm)	<b>Mango plástico /</b> PLASTIC SAFETY HANDLE		

# Quitaviruta / CHIP CHASERS

para quitar viruta entre planchas despues de perforarlas  
REMOVE CHIPS BETWEEN SHEETS AFTER DRILLING OF HOLES

<b>C</b>			
	<b>Art N°</b> PART NO.	<b>Longitud cuchilla</b> BLADE LENGTH	<b>Observaciones</b> REMARKS
<b>C</b>	<b>511</b>	<b>2.3/4"</b> (70 mm)	<b>Mango de plástico /</b> PLASTIC HANDLE
<b>C</b>	<b>512</b>	<b>5.7/8"</b> (150 mm)	<b>Mango de plástico /</b> PLASTIC HANDLE

**D**

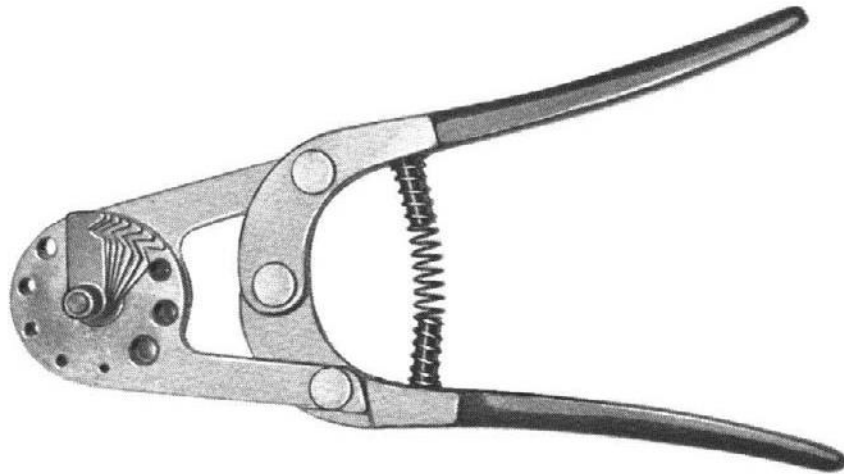


**Mango de aluminio con cuchillas reemplazables**  
**ALUMINUM HANDLE WITH REPLACEBLE BLADES**

	<b>Art N°</b> PART NO.	<b>Longitud cuchilla</b> BLADE LENGTH		<b>Art N°</b> PART NO.	<b>Art N°</b> PART NO.
	<b>Cuchilla y mango</b> Blade with Handle			<b>Mango solo</b> HANDLE ONLY	<b>Cuchillas de repuesto</b> REPLACEMENT BLADES
<b>D</b>	<b>SP200-1</b>	<b>5.7/8"</b> (150 mm)		<b>SP200</b>	<b>SP20002</b> (GANCHO DE PUNTA)
<b>D</b>	<b>SP200-2</b>	<b>5.7/8"</b> (150 mm)		<b>SP200</b>	<b>SP20003</b> (GANCHO ROMO)
<b>D</b>	<b>SP200-3</b>	<b>2.3/4"</b> (70 mm)		<b>SP200</b>	<b>SP20004</b> (GANCHO DE PUNTA)
<b>D</b>	<b>SP200-4</b>	<b>2.3/4"</b> (70 mm)		<b>SP200</b>	<b>SP20005</b> (GANCHO ROMO)

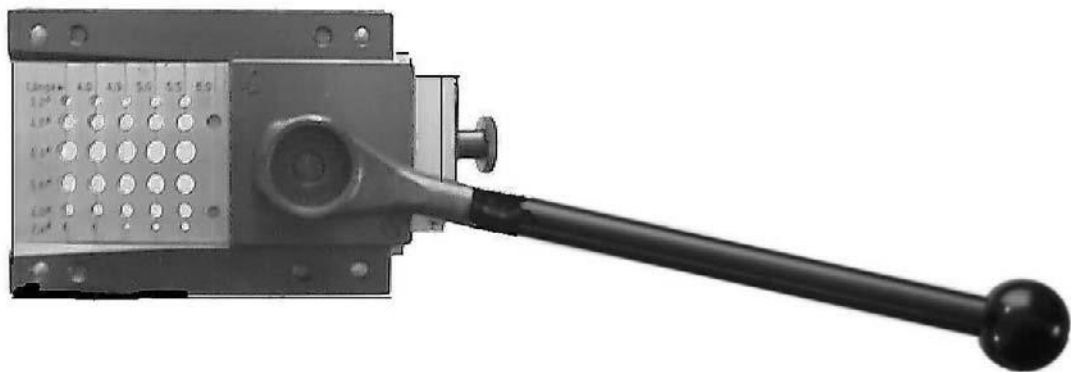
# Cortarremaches / RIVET CUTTERS

**A**



	Art N° PART NO.	Remache RIVET SIZE	Long. remache RIVET LENGTH	Incrementos INCREMENTS
<b>A</b>	<b>501-R</b>	<b>1/16" up to 1/4"</b> (1,59 mm bis 6,35 mm)	<b>1/4" up to 3/4"</b> (6,35 mm bis 19,05 mm)	<b>1/16"</b> (1,59 mm)

**B**



## Cortarremaches de banco / BENCH TYPE RIVET CUTTER

	Art N° PART NO.	Diámetro remache RIVET SIZE	Longitud remache RIVET LENGTH	Incrementos INCREMENTS
		<b>En pulgadas / INCH-TYPE</b>		
<b>B</b>	<b>500-Z</b>	<b>3/32" + 1/8" + 5/32"</b> <b>3/16" + 7/32" + 1/4"</b> (2,38 + 3,18 + 3,97 mm) (4,76 + 5,56 + 6,35 mm)	<b>.1575 up to .9252</b> (4,00 mm hasta 23,50 mm) <b>(incl. 2 distanciadores)</b> (INCL. 2 DISTANCE PIECES)	<b>.0197</b> (0,5 mm)
		<b>Métrico / METRIC-TYPE</b>		
<b>B</b>	<b>500-M</b>	<b>2,50 + 3,00 + 3,50 mm</b> <b>4,00 + 5,00 + 6,00 mm</b> (.0980 + .1181 + .1378) (.1575 + .1969 + .2362)	<b>4,00 mm hasta 23,50 mm</b> (.1575 up to .9252) <b>(incl. 2 Distanciadores)</b> (INCL. 2 DISTANCE PIECES)	<b>0,5 mm</b> (.0197)

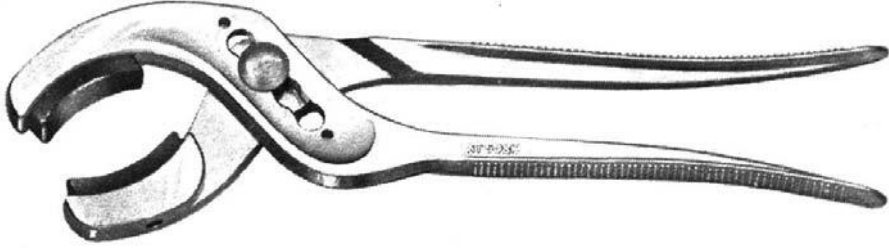
## Carracas rectas de ajuste al tubo STRAIGHT SNAP-TIGHT TUBE FITTING WRENCHES

**A**

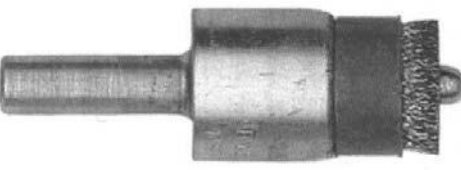


Art N° PART NO.	Apertura hexagonal HEX OPENING	Longitud total OVERALL LENGTH	Peso WEIGHT
92110	5/16"	5.3/8" (136 mm)	.16 lbs. (0,07 kg)
92112	3/8"	5.3/8" (136 mm)	.16 lbs. (0,07 kg)
92114	7/16"	5.3/8" (136 mm)	.16 lbs. (0,07 kg)
92116	1/2"	5.3/8" (136 mm)	.16 lbs. (0,07 kg)
92118	9/16"	7.5/16" (186 mm)	.31 lbs. (0,14 kg)
92120	5/8"	7.5/16" (186 mm)	.31 lbs. (0,14 kg)
92122	11/16"	7.5/16" (186 mm)	.31 lbs. (0,14 kg)
92124	3/4"	7.5/16" (186 mm)	.31 lbs. (0,14 kg)
92126	13/16"	9.3/8" (238 mm)	.58 lbs. (0,26 kg)
92128	7/8"	9.3/8" (238 mm)	.58 lbs. (0,26 kg)
92130	15/16"	9.3/8" (238 mm)	.58 lbs. (0,26 kg)
92132	1"	9.3/8" (238 mm)	.58 lbs. (0,26 kg)
92207	7 MM	5.3/8" (136 mm)	.16 lbs. (0,07 kg)
92208	8 MM	5.3/8" (136 mm)	.16 lbs. (0,07 kg)
92209	9 MM	5.3/8" (136 mm)	.16 lbs. (0,07 kg)
92210	10 MM	5.3/8" (136 mm)	.16 lbs. (0,07 kg)
92211	11 MM	5.3/8" (136 mm)	.16 lbs. (0,07 kg)
92212	12 MM	5.3/8" (136 mm)	.16 lbs. (0,07 kg)
92213	13 MM	5.3/8" (136 mm)	.16 lbs. (0,07 kg)
92214	14 MM	7.5/16" (186 mm)	.31 lbs. (0,14 kg)
92215	15 MM	7.5/16" (186 mm)	.31 lbs. (0,14 kg)
92216	16 MM	7.5/16" (186 mm)	.31 lbs. (0,14 kg)
92217	17 MM	7.5/16" (186 mm)	.31 lbs. (0,14 kg)
92218	18 MM	7.5/16" (186 mm)	.31 lbs. (0,14 kg)
92219	19 MM	7.5/16" (186 mm)	.31 lbs. (0,14 kg)
92221	21 MM	9.3/8" (238 mm)	.58 lbs. (0,26 kg)
92222	22 MM	9.3/8" (238 mm)	.58 lbs. (0,26 kg)
92223	23 MM	9.3/8" (238 mm)	.58 lbs. (0,26 kg)
92224	24 MM	9.3/8" (238 mm)	.58 lbs. (0,26 kg)

**Alicates para conectores eléctricos  
(Conectores de canon)  
ELECTRICAL CONNECTOR PLIER  
(CANNON CONNECTORS)**




<b>A</b>		
	<b>Art N°</b> PART NO.	<b>Observaciones</b> REMARKS
<b>A</b>	<b>508-K</b>	ajustable de 19 mm a 63 mm, con insertos de plástico reemplazables ADJUSTABLE FROM 3/4" TO 2.1/2"- REMOVEABLE PLASTIC INSERTS

**Escobillas masa/ RIVET HOLE BRUSHES**

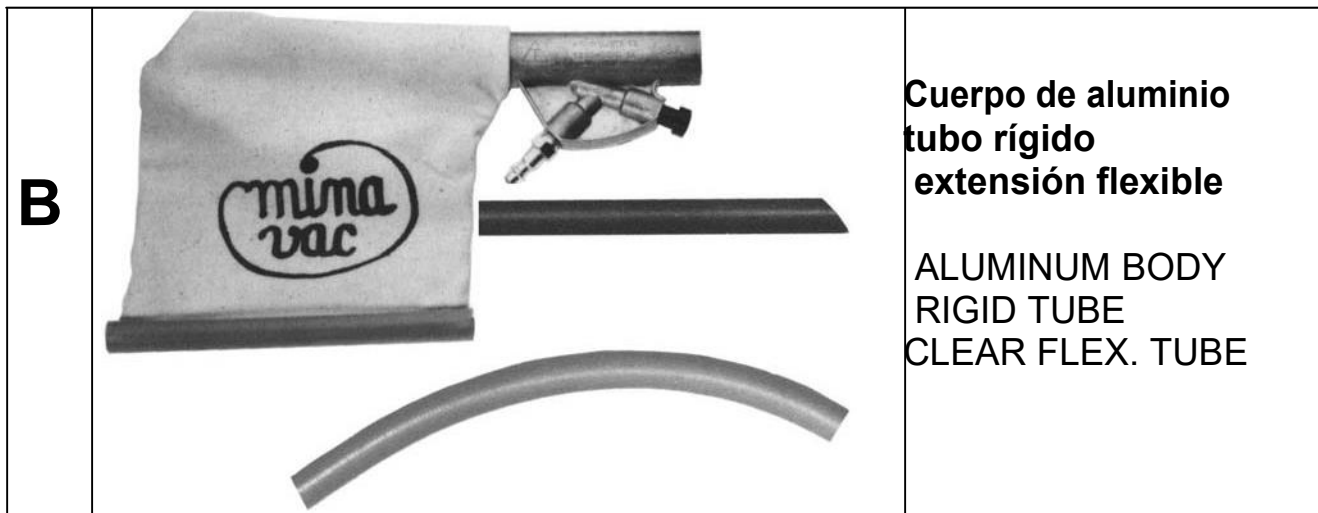
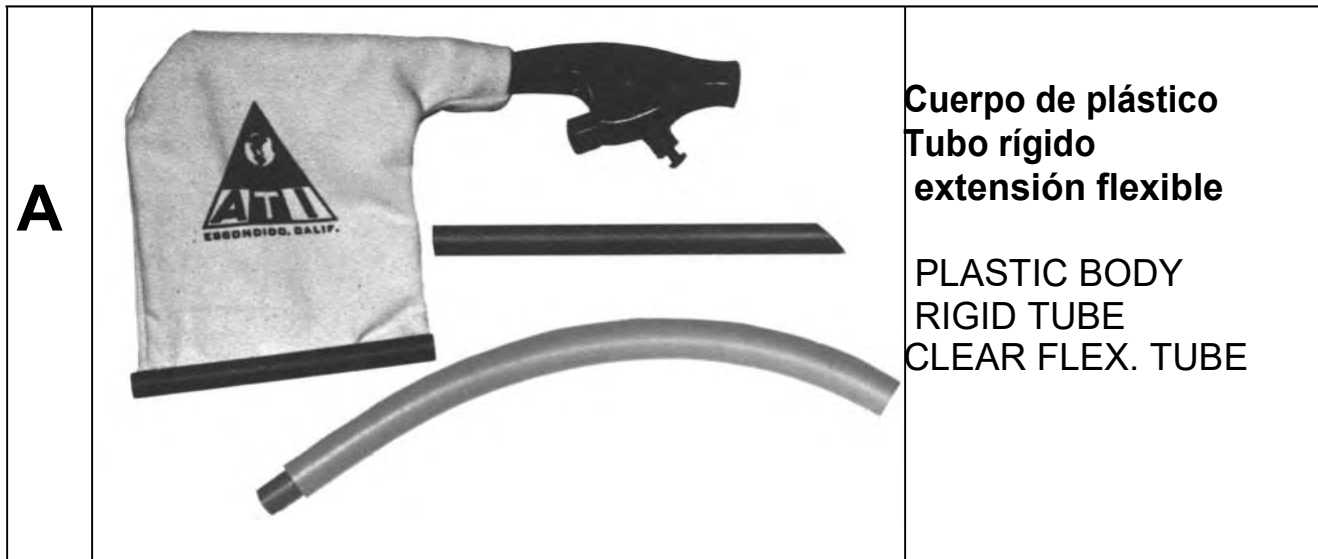
<b>B</b>		<b>Alambre de acero inoxidable</b> STAINLESS STEEL WIRE <b>Diámetro alambre</b> <b>0,127 mm</b> WIRE DIAMETER                .005" <b>hasta 8000 UPM</b> RATED UP TO                   8000 RPM		
	<b>Art N°</b> PART NO.	<b>Diámetro guía</b> PILOT DIAMETER	<b>Diam. escobilla</b> BRUSH DIAMETER	<b>Diámetro mango</b> SHANK DIAMETER
<b>B</b>	<b>TP-6721</b>	<b>3/32"</b> (2,38 mm)	<b>1/2"</b> (12,7 mm)	<b>1/4"</b> (6,35 mm)
<b>B</b>	<b>TP-6741</b>	<b>1/8"</b> (3,18 mm)	<b>1/2"</b> (12,7 mm)	<b>1/4"</b> (6,35 mm)
<b>B</b>	<b>TP-6761</b>	<b>5/32"</b> (3,97 mm)	<b>1/2"</b> (12,7 mm)	<b>1/4"</b> (6,35 mm)
<b>B</b>	<b>TP-6781</b>	<b>3/16"</b> (4,76 mm)	<b>1/2"</b> (12,7 mm)	<b>1/4"</b> (6,35 mm)
<b>B</b>	<b>TP-6801</b>	<b>1/4"</b> (6,35 mm)	<b>1/2"</b> (12,7 mm)	<b>1/4"</b> (6,35 mm)

**Acero inoxidable**  
**Todas las piezas reemplazables**

STAINLESS STEEL WIRE  
ALL PARTS ARE REPLACEABLE

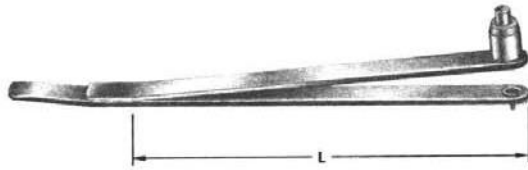
	<b>D1</b>	<b>D2</b>	<b>Ref. escobilla</b> BRUSH ASSY	<b>solo escobilla</b> BRUSH ONLY	<b>solo guía</b> PILOT ONLY	<b>solo mango</b> SHANK ONLY	<b>solo cuerpo</b> BODY ONLY
<b>Art N° / PART NO.</b>	10 mm	3,2 mm	<b>441001</b>	 <b>441050</b>	 <b>441056</b>	 <b>441060</b>	<b>441065</b>
<b>Art N° / PART NO.</b>	10 mm	4,0 mm	<b>441002</b>	<b>441050</b>	<b>441058</b>	<b>441060</b>	<b>441065</b>
<b>Art N° / PART NO.</b>	12 mm	3,2 mm	<b>441010</b>	<b>441052</b>	<b>441056</b>	<b>441060</b>	<b>441068</b>
<b>Art N° / PART NO.</b>	12 mm	4,0 mm	<b>441011</b>	<b>441052</b>	<b>441058</b>	<b>441060</b>	<b>441068</b>
<b>Art N° / PART NO.</b>	14 mm	3,2 mm	<b>441020</b>	<b>441052</b>	<b>441056</b>	<b>441060</b>	<b>441070</b>
<b>Art N° / PART NO.</b>	14 mm	4,0 mm	<b>441021</b>	<b>441052</b>	<b>441058</b>	<b>441060</b>	<b>441070</b>
<b>Art N° / PART NO.</b>	14 mm	4,8 mm	<b>441022</b>	<b>441052</b>	<b>441059</b>	<b>441060</b>	<b>441070</b>

# Aspiradoras de aire AIR VACUUM CLEANER



		aspiradora sin tubos CLEANER WITHOUT TUBES	bolsa BAG	CLIP
<b>A</b>	Art N° / PART NO.	<b>560C</b>	<b>560A3</b>	<b>560A4</b>
<b>B</b>	Art N° / PART NO.	<b>560M</b>	<b>560A3</b>	<b>560A4</b>
		tubo rígido RIGID TUBE	extension flexible CLEAR FLEX TUBE	
<b>A</b>	Art N° / PART NO.	<b>560R-10</b> (10")	<b>560CF-18</b>	(18")
<b>B</b>	Art N° / PART NO.	<b>560MRE-12</b> (12")	<b>560MFE-18</b>	(18")
<b>B</b>	Art N° / PART NO.	<b>560MRE-18</b> (18")	<b>560MFE-24</b>	(24")

## PUNCH TYPE STRAP DUPLICATORS AT 500...AT 500C SERIES



Spring Loaded Strap Duplicator with hardened marking pin permits the marking of sheet stock from a hidden pilot hole on the job, and is of particular help in marking hard-to-reach spots. Bevelled edge on the handle makes it a convenient tool for prying sheets apart.

ORDER BY PART NO. ONLY

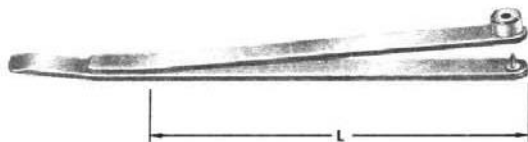
## DRILL BUSHING TYPE STRAP DUPLICATORS AT 532...AT 532C SERIES



This tool provides an accurate method for drilling duplicate matching holes in over-lapping sheets. Hole to be duplicated is drilled through bushing when pilot is in place.

ORDER BY PART NO. ONLY

## DRILL BUSHING INVERTED PILOT TYPE STRAP DUPLICATORS AT 532A...AT 532D SERIES



These tools are identical to the AT 532 and AT 532C Series, except that the pilot is inverted to allow hole duplication in places where the sheets cannot be pried apart.

ORDER BY PART NO. ONLY

PART NO.	PILOT & DRILL SIZE	L
AT 500-51	#40	
AT 500-52	#30	
AT 500-53	#21	
AT 500-54	#19	6 1/4
AT 500-55	#10	
AT 500-56	# 5	
AT 500-57	"F"	
AT 500-58	1/4	
AT 500C-51	#40	
AT 500C-52	#30	
AT 500C-53	#21	
AT 500C-54	#19	13 1/4
AT 500C-55	#10	
AT 500C-56	# 5	
AT 500C-57	"F"	
AT 500C-58	1/4	

PART NO.	PILOT & DRILL SIZE	L
AT 532-61	#40	
AT 532-62	#30	
AT 532-63	#21	
AT 532-64	#19	6 1/4
AT 532-65	#10	
AT 532-66	# 5	
AT 532-67	"F"	
AT 532-68	1/4	
AT 532C-61	#40	
AT 532C-62	#30	
AT 532C-63	#21	
AT 532C-64	#19	13 1/4
AT 532C-65	#10	
AT 532C-66	# 5	
AT 532C-67	"F"	
AT 532C-68	1/4	

PART NO.	PILOT & DRILL SIZE	L
AT 532A-61	#40	
AT 532A-62	#30	
AT 532A-63	#21	
AT 532A-64	#19	6 1/4
AT 532A-65	#10	
AT 532A-66	# 5	
AT 532A-67	"F"	
AT 532A-68	1/4	
AT 532D-61	#40	
AT 532D-62	#30	
AT 532D-63	#21	
AT 532D-64	#19	13 1/4
AT 532D-65	#10	
AT 532D-66	# 5	
AT 532D-67	"F"	
AT 532D-68	1/4	

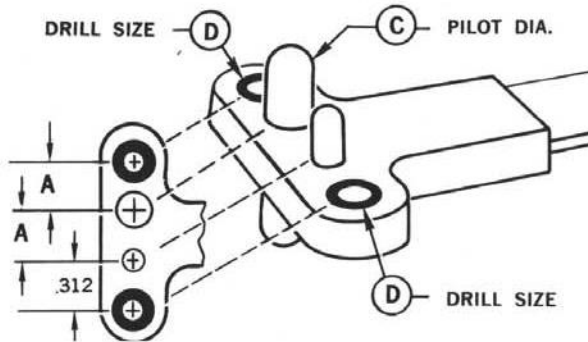
# PLATE NUT DRILL JIGS AT 518 SERIES



Designed for accurate drilling of rivet holes for plate nuts.  
Manufactured with flexible handle to provide hand clearance  
when jig is in use.

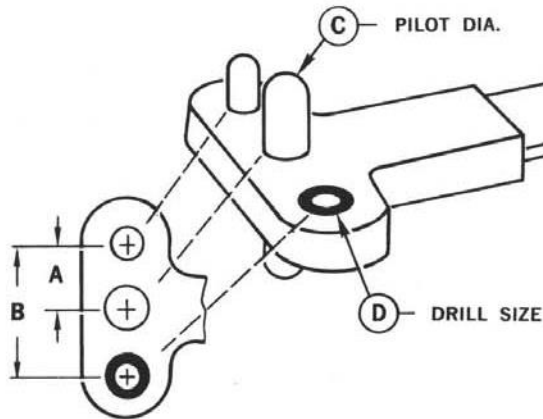
## ONE LUG TYPE

PART NO.	BOLT SIZE REF.	A	C	D
AT518-G	#6	.344	.139	#40
AT518-H	#8	.344	.164	#40
AT518-J	#10	.344	.191	#40
AT518-K	1/4	.344	.248	#40
AT518-L	#10 Spec.	.344	.213	#40
AT518-LF	#8 #10	.344	.281	#40
AT518-YF	1/4	.500	.343	#40



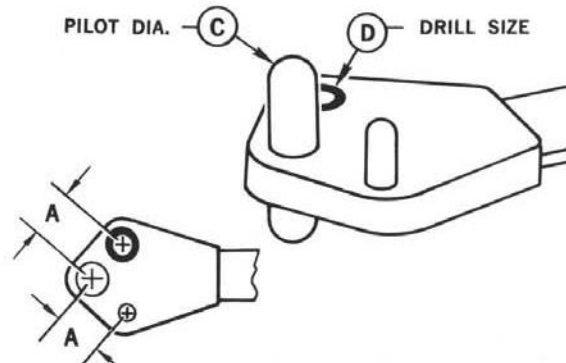
## TWO LUG TYPE

PART NO.	BOLT SIZE REF.	A	B	C	D
AT518-A	#6	.344	.688	.139	#40
AT518-B	#8	.344	.688	.164	#40
AT518-C	#10	.344	.688	.191	#40
AT518-D	1/4	.500	1.000	.248	#40
AT518-E	5/16	.500	1.000	.312	#30
AT518-F	3/8	.500	1.000	.372	#30
AT518-M	-	.375	.750	.4375	#40
AT518-N	-	.500	1.000	.6875	#30
AT518-P	-	.6875	1.375	.811	#30
AT518-BF	#8 & #10	.344	.688	.281	#40
AT518-DF	1/4	.500	1.000	.343	#40



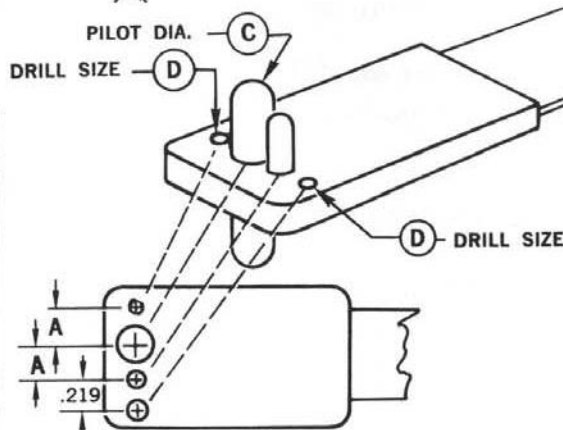
## CORNER TYPE

PART NO.	BOLT SIZE REF.	A	C	D
AT518-R	#6	.344	.139	#40
AT518-S	#8	.344	.164	#40
AT518-T	#10	.344	.191	#40
AT518-U	1/4	.500	.248	#40
AT518-V	5/16	.500	.312	#30
AT518-W	3/8	.500	.372	#30
AT518NAS-C-A5	5/16	.359	.312	#30
AT518NAS-C-A6	3/8	.414	.372	#30



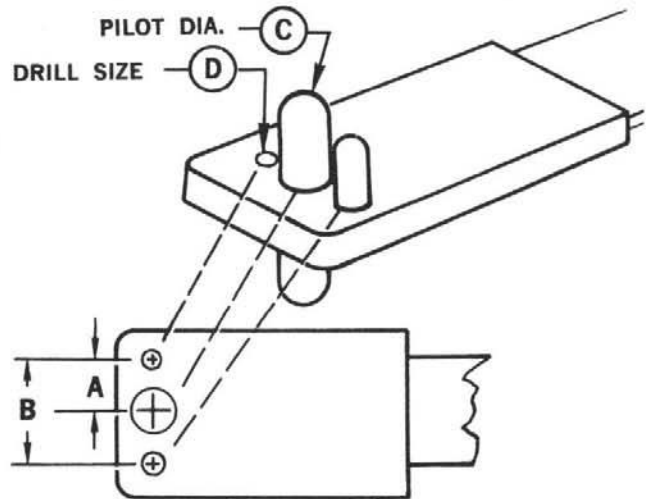
## ONE LUG TYPE

PART NO.	BOLT SIZE REF.	A	C	D
AT518-PA	#4	.203	.112	#40
AT518-PB	#6	.218	.139	#40
AT518-PC	#8	.234	.164	#40
AT518-PD	#10	.250	.191	#40
AT518-PE	#1/4	.281	.248	#40
AT518NAS-B-A02	#2	.125	.086	#51
AT518NAS-B-A03	#3	.133	.099	#51
AT518NAS-B-A04	#4	.148	.112	#51
AT518NAS-B-A06	#6	.171	.139	#51



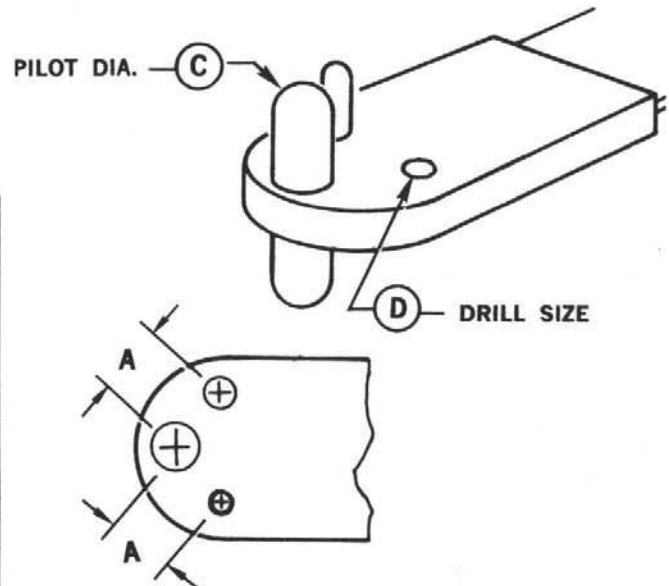
## TWO LUG TYPE

PART NO.	BOLT SIZE REF.	A	B	C	D
AT518NA	# 4	.203	.406	.112	#40
AT518NB	# 6	.218	.436	.139	#40
AT518NC	# 8	.234	.468	.164	#40
AT518ND	#10	.250	.500	.191	#40
AT518NE	1/4	.281	.562	.248	#40
AT518NF	5/16	.3125	.625	.312	#30
AT518NAS-A-A02	# 2	.125	.250	.086	#51
AT518NAS-A-A03	# 3	.1325	.265	.099	#51
AT518NAS-A-A04	# 4	.148	.296	.112	#51
AT518NAS-A-A06	# 6	.1715	.343	.139	#51



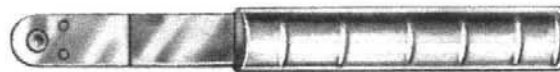
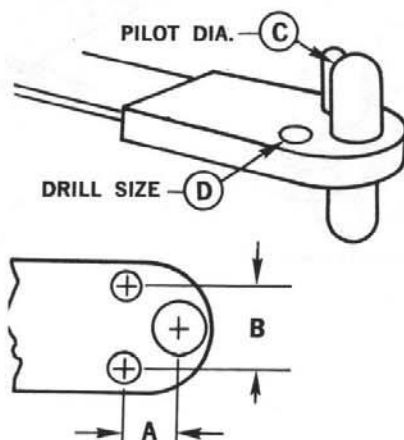
## CORNER TYPE

PART NO.	BOLT SIZE REF.	A	C	D
AT518-SA	# 4	.203	.112	#40
AT518-SB	# 6	.218	.139	#40
AT518-SC	# 8	.234	.164	#40
AT518-SD	#10	.250	.191	#40
AT518-SE	1/4	.281	.248	#40
AT518-SF	5/16	.312	.312	#30
AT518NAS-C-A02	# 2	.125	.086	#51
AT518NAS-C-A03	# 3	.138	.099	#51
AT518NAS-C-A04	# 4	.148	.112	#51
AT518NAS-C-A06	# 6	.172	.139	#51



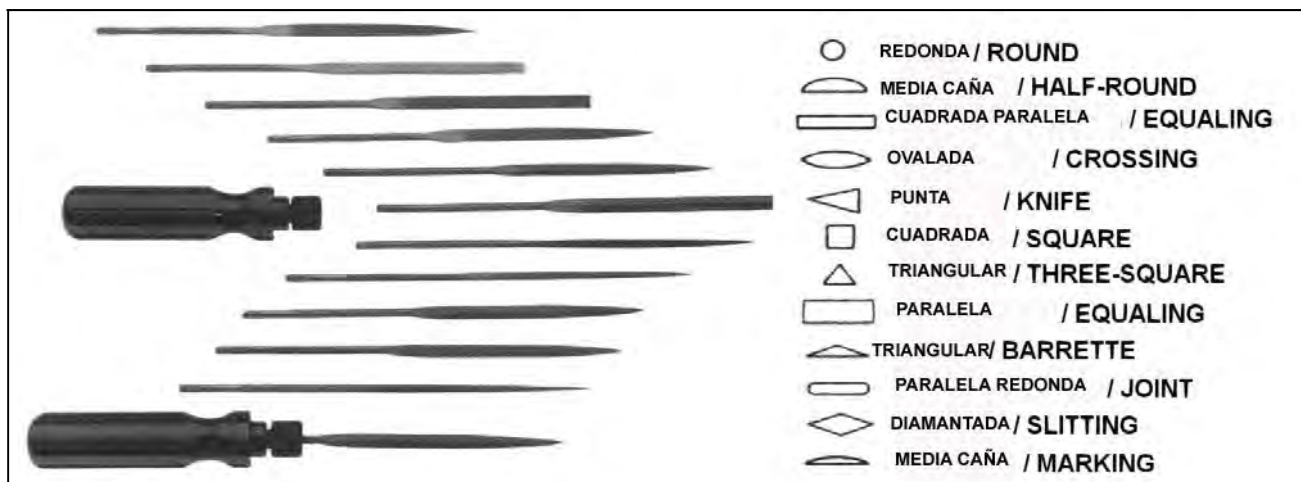
## MINIATURE ANCHOR NUT

### PLATE NUT DRILL JIG



PART NO.	BOLT SIZE REF.	A	B	C	D
AT518-TA	#10	.250	.219	.191	#40
AT518-TB	1/4	.281	.219	.248	#40
AT518-TC	5/16	.312	.250	.312	#30
AT518NAS-D-A08	#8	.234	.219	.164	#40
AT518NAS-D-A5	5/16	.359	.269	.312	#30
AT518NAS-D-A6	3/8	.414	.269	.372	#30

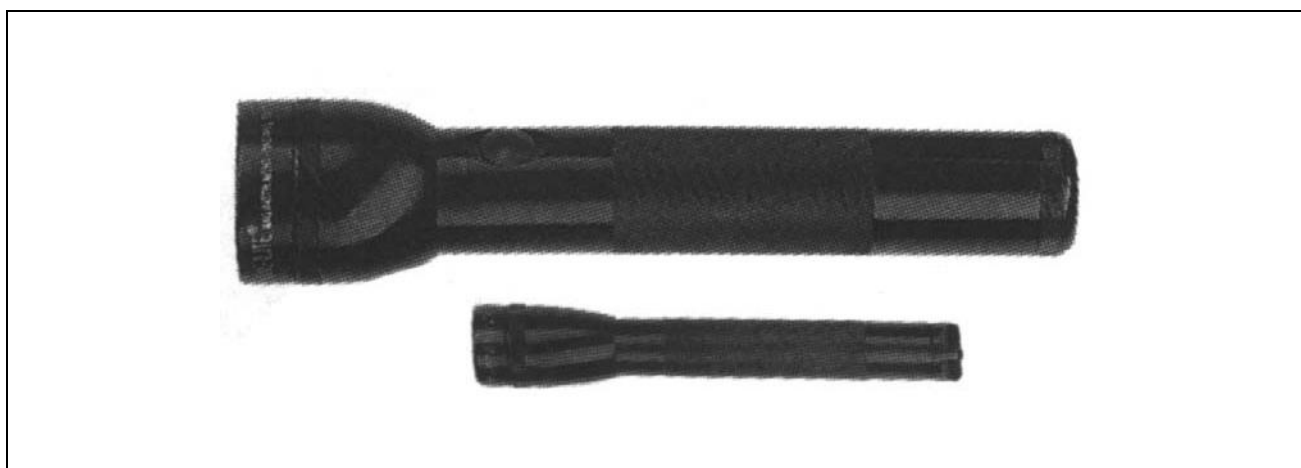
## Limas de aguja NEEDLE FILE SET ATSK 3519 K



### Contenido / CONSISTING OF:

1 Ud./EA Caja plástico	PLASTIC POUCH
12 Ud./EA Limas 160 mm	GROBET FILES 6.1/4"
1 Ud./EA Mango de pinza	COLLET LOCKING HANDLE

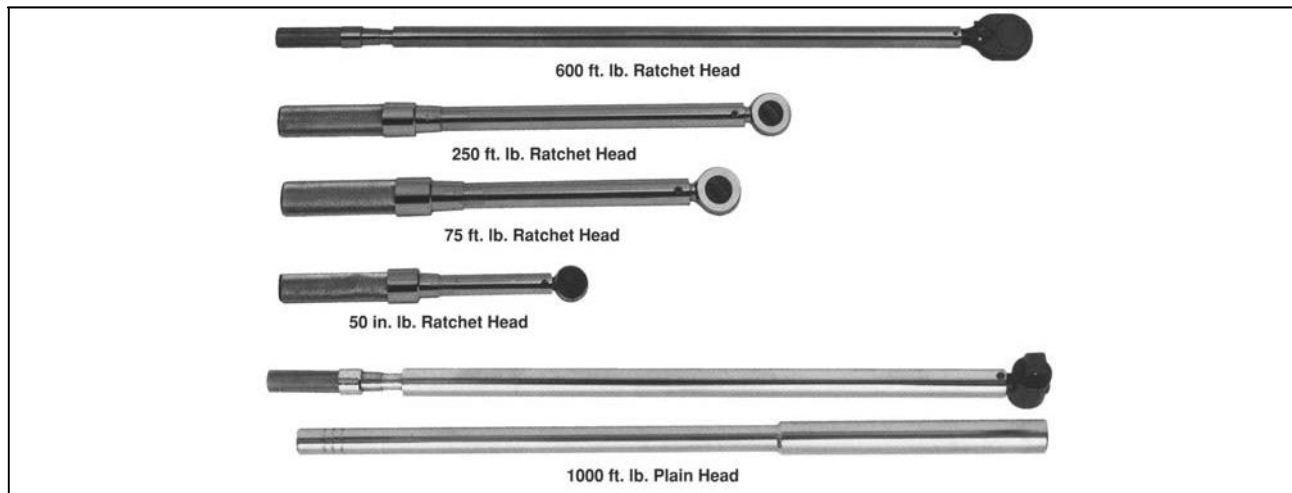
## Linternas - MAG LITE FLASHLIGHT - MAG LITE



Art N° PART NO.	Descripción DESCRIPTION
<b>M2A-016</b>	Linterna "MINI MAGLITE", Longitud 146 mm, incl. 2 pilas 2-CELL AA Flashlight, "MINI MAGLITE", LENGTH 5.3/4", INCL. 2 BATTERIES
<b>S2D-016</b>	Linterna "MAGLITE", Longitud 260 mm, sin pilas 2-CELL D FLASHLIGHT, "MAGLITE", LENGTH 10.1/4", BATTERIES NOT INCLUDED

# Llaves Torque microajustable con mango metálico

## MICRO ADJUSTABLE TORQUE WRENCH WITH METAL HANDLE

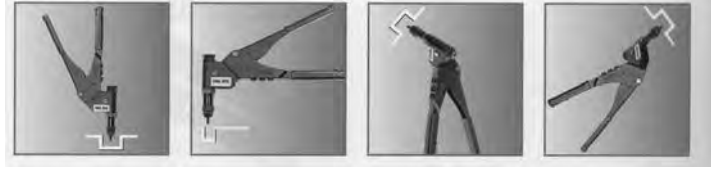
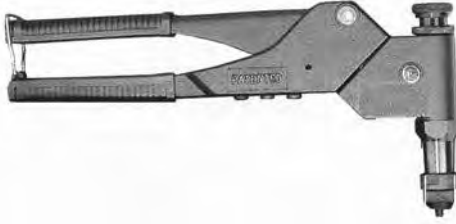


Art N° PART NO.	Rango RANGE	Increm. INCR.	Rango RANGE (Nm)	Increm. INCR. (Nm)	Cuadrad SQUARE DRIVE	Cabeza HEAD STYLE	Longitud LENGTH	Peso WEIGHT Lbs. (KG)
<b>PULGADA</b>								
501MMH	10-50	1	NO/NONE	NO/NONE	1/4" (6,35 mm)	plano/PLAIN	8.3/4" (222 mm)	0.60 (0,27)
501MRMH	10-50	1	NO/NONE	NO/NONE	1/4" (6,35 mm)	RATCHET	8.3/4" (222 mm)	0.75 (0,34)
1501MMH	20-150	1	2.8-16.4	.1	1/4" (6,35 mm)	plano/PLAIN	8.3/4" (222 mm)	0.60 (0,27)
1501MRMH	20-150	1	2.8-16.4	.1	1/4" (6,35 mm)	RATCHET	8.3/4" (222 mm)	0.75 (0,34)
2002MMH	30-200	1	3.9-22.0	.1	3/8" (9,53 mm)	plano/PLAIN	8.3/4" (222 mm)	0.60 (0,27)
2002MRMH	30-200	1	3.9-22.0	.1	3/8" (9,53 mm)	RATCHET	8.3/4" (222 mm)	0.75 (0,34)
2502MMH	30-250	1	3.9-27.7	.1	3/8" (9,53 mm)	plano/PLAIN	14.3/4" (375mm)	2.4 (1,09)
2502MRMH	30-250	1	3.9-27.7	.1	3/8" (9,53 mm)	RATCHET	14.3/4" (375mm)	2.5 (1,13)
7502MMH	100-750	5	14.1-81.9	.6	3/8" (9,53 mm)	plano/PLAIN	14.3/4" (375mm)	2.4 (1,09)
7502MRMH	100-750	5	14.1-81.9	.6	3/8" (9,53 mm)	RATCHET	14.3/4" (375mm)	2.5 (1,13)
10002MMH	150-1000	5	19.8-110.2	.6	3/8" (9,53 mm)	plano/PLAIN	14.3/4" (375mm)	2.4 (1,09)
10002MRMH	150-1000	5	19.8-110.2	.6	3/8" (9,53 mm)	RATCHET	14.3/4" (375mm)	2.5 (1,13)
16003MMH	700-1600	10	84.4-175.2	1.2	1/2" (12,7 mm)	plano/PLAIN	18" (457 mm)	2.8 (1,27)
16003MRMH	700-1600	10	84.4-175.2	1.2	1/2" (12,7 mm)	RATCHET	18" (457 mm)	3.0 (1,36)
25003MMH	300-2500	10	39.6-276.8	1.2	1/2" (12,7 mm)	plano/PLAIN	18" (457 mm)	2.8 (1,27)
25003MRMH	300-2500	10	39.6-276.8	1.2	1/2" (12,7 mm)	RATCHET	18" (457 mm)	3.0 (1,36)
<b>PIE</b>								
752MFMH	5-75	.5	10.2-98.3	.7	3/8" (9,53 mm)	plano/PLAIN	14.3/4" (375mm)	2.4 (1,09)
752MFRMH	5-75	.5	10.2-98.3	.7	3/8" (9,53 mm)	RATCHET	14.3/4" (375mm)	2.5 (1,13)
1002MFMH	10-100	.5	16.9-132.2	.7	3/8" (9,53 mm)	plano/PLAIN	18" (457 mm)	2.4 (1,09)
1002MFRMH	10-100	.5	16.9-132.2	.7	3/8" (9,53 mm)	RATCHET	18" (457 mm)	2.5 (1,13)
1503MFMH	20-150	1	34-197	1.5	1/2" (12,7 mm)	plano/PLAIN	18" (457 mm)	2.8 (1,27)
1503MFRMH	20-150	1	34-197	1.5	1/2" (12,7 mm)	RATCHET	18" (457 mm)	3.0 (1,36)
2003MFMH	30-200	1	47-264	1.5	1/2" (12,7 mm)	plano/PLAIN	18" (457 mm)	2.8 (1,27)
2003MFRMH	30-200	1	47-264	1.5	1/2" (12,7 mm)	RATCHET	18" (457 mm)	3.0 (1,36)
2503MFMH	30-250	1	47-332	1.5	1/2" (12,7 mm)	plano/PLAIN	18" (457 mm)	2.8 (1,27)
2503MFRMH	30-250	1	47-332	1.5	1/2" (12,7 mm)	RATCHET	18" (457 mm)	3.0 (1,36)
6004MFMH	100-600	5	169-779	7	3/4" (19,05 mm)	plano/PLAIN	43" (1092 mm)	10.5 (4,76)
6004MFRMH	100-600	5	169-779	7	3/4" (19,05 mm)	RATCHET	43" (1092 mm)	11.0 (4,98)
10005MFMH	200-1000	5	305-1320	7	1" (25,4 mm)	plano/PLAIN	69" (1753 mm)	24.5 (11,1)

\* 10005MFMH incl. extensión ! 10005MFMH INCL. 1 EXTENSION !

Otras medidas bajo pedido OTHER STYLES ON REQUEST !

## Alicates manuales para tuercas remachables BLIND RIVET NUT HAND PLIER, SWIVEL-MOUNTED



### EH-VNG255

**Kit en caja de plástico con:**

- 1 Ud. Alicates manuales
- 1 set Adaptadores para tuerca:
  - Métricos: M4, M5, M6
  - Pulgadas: UNC 6-32, UNC 8-32, UNC 10-24, UNF 10-32, UNF 1/4-28
- 1 set Adaptadores para tuercas: Métricos: M4, M5

**SET IN PLASTIC-CASE, CONSISTING OF:**

- 1 EA HANDPLIER
- 1 SET ADAPTER FOR BLIND-NUTS SIZE:
  - METRIC : M4, M5, M6
  - INCH : UNC 6-32, UNC 8-32, UNC 10-24, UNF 10-32, UNF 1/4-28
- 1 SET ADAPTER FOR BLIND-BOLTS SIZE:
  - METRIC : M4, M5

## Remachadora para tuercas de remache BLIND RIVET NUT SPEED DRIVER



Art N° PART-NO.	Rosca THREAD SIZE	Art N° de mandril y boquilla PART NO. MANDRELS AND NOSEPIECES
L6000-A	6-32	SCA-6-32
L6000-B	8-32	SCA-8-32
L6000-C	10-32	SCA-10-32
L6000-D	1/4"-28	SCA-1/4"-28

## Remachadora hidráulica HYDRAULIC HAND RIVETER/NUTSETTER

**Kit con el siguiente contenido:  
KIT WITH FOLLOWING CONTENTS:**



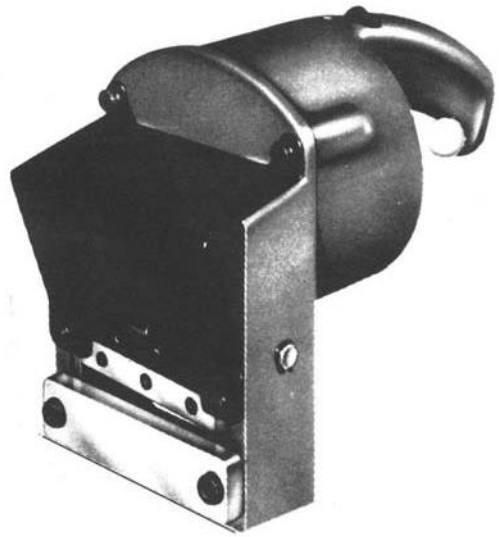
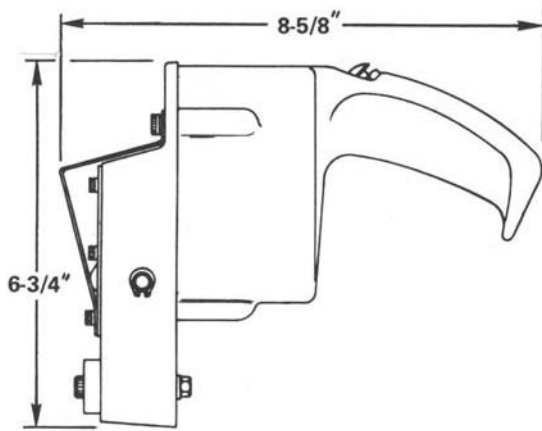
### D-100-RN

ca./appr. 4000 lbs Fuerza tirón/Pulling Force

ART N°	Descripción	DESCRIPTION
D-100-C	Remachadora hidráulica	HAND HYDR. RIVETER
<b>Para remaches Cherry / FOR CHERRY RIVETS</b>		
F-159-C	Boquilla 1/8"	NOSEPIECE 1/8"
F-143-C	Boquilla 5/32"-3/16"	NOSEPIECE 5/32"-3/16"
F-142-C	Boquilla 1/4"	NOSEPIECE 1/4"
F-156-C	Boquilla 3/32"	NOSEPIECE 3/32"
<b>Para tuercas remachables / FOR RIVET-NUTS</b>		
F-170-A	Adaptador de eje	MASTER SHAFT
F-171	Adaptador de tuerca	TURN NUT
F-360-C	Tachuela de tirón 6-32	PULL-UP-STUD 6-32
F-361-C	Tachuela de tirón 8-32	PULL-UP-STUD 8-32
F-362-C	Tachuela de tirón 10-32	PULL-UP-STUD 10-32
F-363-C	Tachuela de tirón 1/4-28	PULL-UP-STUD 1/4-28
F-367-C	Boquilla Gr. 6	ANVIL NO. 6
F-364-C	Boquilla Gr. 8	ANVIL NO. 8
F-365-C	Boquilla Gr. 10	ANVIL NO. 10
F-366-C	Boquilla Gr. 1/4	ANVIL NO. 1/4
F-197	Caja de plástico	PLASTIC CASE

# Cizallas neumáticas PNEUMATIC SHEARS

**A**



**Cizalla de golpeo  
TAB SHEAR**

**Capacidad**  
CAPACITY  
**Apertura**  
OPENNING  
**Peso**  
WEIGHT

**1,6 mm Acero 4,8 mm Aluminio**  
1/16" Steel 3/16" Aluminum  
**3,18 mm x 76,2 mm**  
1/8" x 3"  
**ca. 3 kg**  
APPR. 6.5 LBS.

**Art. N° / PART NO.:**

**650**



**C**



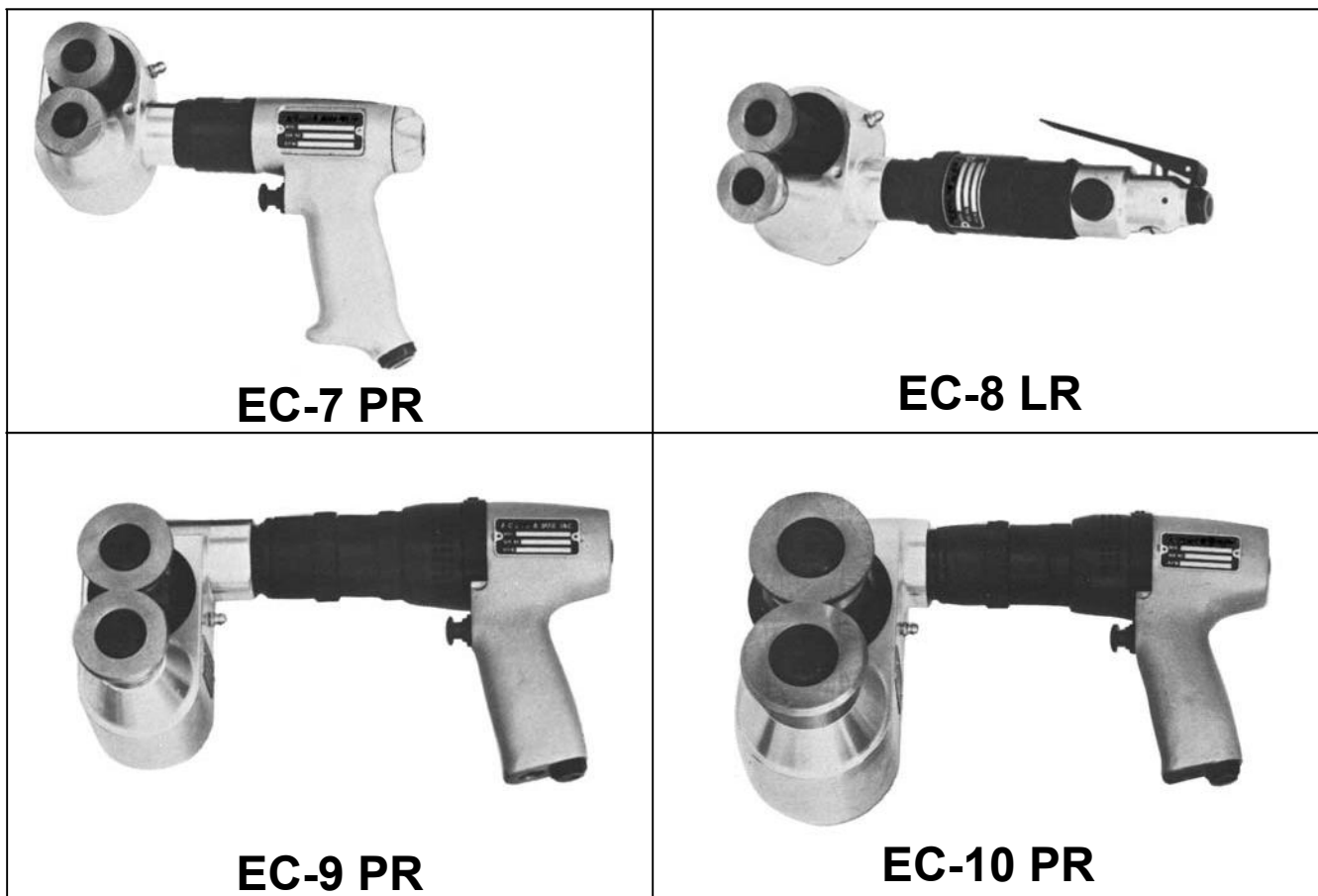
**Capacidad: max. 1,9 mm Acero**  
CAPACITY: 14 GAUGE STEEL

**Peso: 1,7 kg**  
WEIGHT: 3,8 LBS.

**Art N° / PART NO.:**

**P-540**

# CIZALLAS NEUMÁTICAS, REVERSIBLES PNEUM. TRIM SHEARS, REVERSIBLE

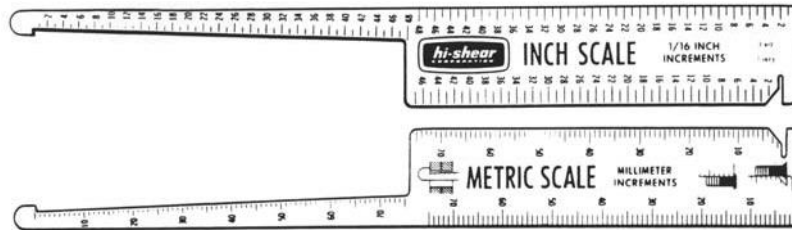


Art N° * PART NO. *	Capacidad ap./Acero normal APPR. CAP./MILD STEEL		Cap. corte THROAT CAP.	Peso WEIGHT	Longitud LENGTH	Altura HEIGHT	Ancho WIDTH	manguito mínimo MIN. HOSE SIZE
<b>EC-7 LR</b>	<b>13 Gauge</b> ca. 2,4 mm	<b>8 Ft./min</b> 2,4 m/min	<b>1.1/4"</b> 31,75 mm	<b>4.5 lbs.</b> 2,1 kg	<b>10.1/4"</b> 260 mm	<b>3.13/16"</b> 97 mm	<b>3.1/4"</b> 83 mm	<b>5/16"</b> 8 mm
<b>EC-7 PR</b>	<b>13 Gauge</b> ca. 2,4 mm	<b>8 Ft./min</b> 2,4 m/min	<b>1.1/4"</b> 31,75 mm	<b>5 lbs.</b> 2,3 kg	<b>8.1/4"</b> 210 mm	<b>3.13/16"</b> 97 mm	<b>3.1/4"</b> 83 mm	<b>5/16"</b> 8 mm
<b>EC-8 LR</b>	<b>14 Gauge</b> ca. 2,1 mm	<b>8 Ft./min</b> 2,4 m/min	<b>2.1/4"</b> 57,15 mm	<b>5.5 lbs.</b> 2,5 kg	<b>10.1/4"</b> 260 mm	<b>3.13/16"</b> 97 mm	<b>4.1/4"</b> 108 mm	<b>5/16"</b> 8 mm
<b>EC-8 PR</b>	<b>14 Gauge</b> ca. 2,1mm	<b>8 Ft./min</b> 2,4 m/min	<b>2.1/4"</b> 57,15 mm	<b>5.5 lbs.</b> 2,5 kg	<b>8.1/4"</b> 210 mm	<b>3.13/16"</b> 97 mm	<b>4.1/4"</b> 108 mm	<b>5/16"</b> 8 mm
<b>EC-9 PR</b>	<b>10 Gauge</b> ca. 3,4 mm	<b>4 Ft./min</b> 1,2 m/min	<b>2.1/2"</b> 63,50 mm	<b>12.5 lbs.</b> 5,7 kg	<b>11.5/8"</b> 295 mm	<b>5.5/8"</b> 143 mm	<b>5"</b> 127 mm	<b>3/8"</b> 9,5 mm
	capacidad apr./acero inox. APPR. CAP./INCONEL							
<b>EC-10PR</b>	<b>Upto .080"</b> bis 2,00 mm	<b>3.5 Ft./min</b> 1,0 m/min	<b>2."</b> 50,80 mm	<b>19 lbs.</b> 8,6 kg	<b>12.1/8"</b> 308 mm	<b>7.3/8"</b> 187 mm	<b>5"</b> 127 mm	<b>3/8"</b> 9,5 mm

\* L = Straight Motor/Motor recto P = PistolGrip Motor/Motor mango pistola R = Reversible Motor/Motor reversible

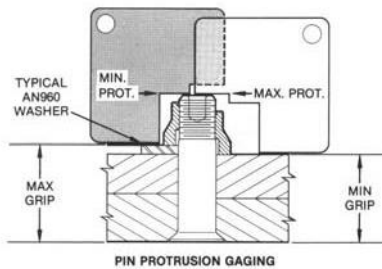
<b>Repuestos de cortadores circulares REPLACEMENT ROLLS FOR TRIM SHEARS</b>		
para cizalla mod. FOR TRIM-SHEAR MOD.	Art N° cortadora PART-NO./FEED CUTTER	Art N°/cortadora circular PART-NO./ROLL CUTTER
<b>EC-7</b>	<b>EC9097</b>	<b>EC9098</b>
<b>EC-8</b>	<b>EC9097</b>	<b>EC9101</b>
<b>EC-9</b>	<b>EC9280</b>	<b>EC9279</b>
<b>EC-10</b>	<b>EC9915</b>	<b>EC9914</b>

## Reglas y llaves hexagonales Hi-Lok HI-LOK SCALES AND HEX KEYS



### 2-612

**Regla con mango, Mide desde 1 mm a 75 mm para medir la profundidad de un agujero y remachadoras**  
GRIP SCALE, 1/16 INCREMENTS TO 3"  
FOR MEASURING DEPTH OF HOLE AND GRIP LENGTH OF FASTENERS



### 2-1522

**Plantillas de inspección Hi-Lok**  
PIN PROTRUSION GAGE FOR INSPECTION OF PINS FOR CORRECT GRIP LENGTH



### 607

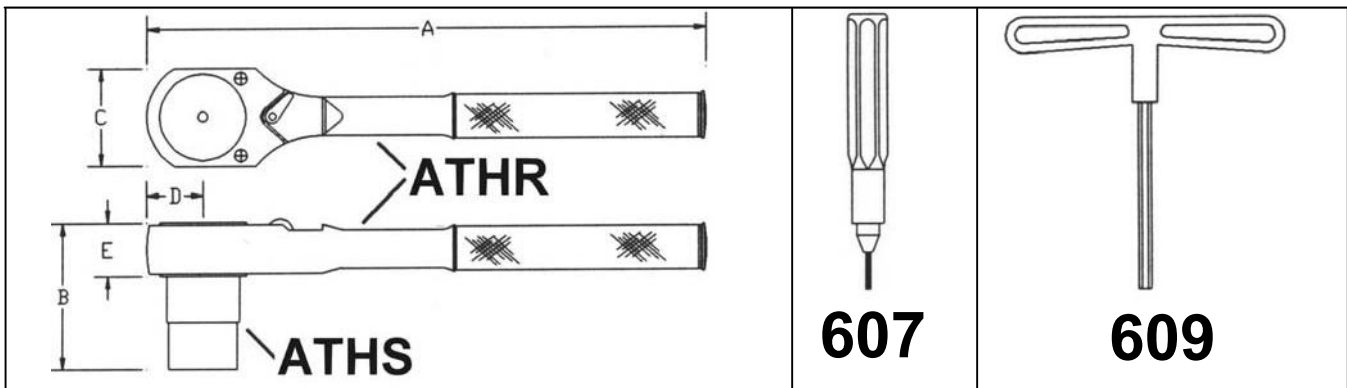


### 609

Tamaño HEX KEY SIZE	Art N° PART NO.	Tamaño HEX KEY SIZE	Art N° PART NO.
.028 0,71 mm	607-028	5/6 1,98 mm	609-5/64"
.035 0,89 mm	607-035	3/3 2,38 mm	609-3/32"
.050 1,27 mm	607-050	1/8 3,18 mm	609-1/8"
1/16" 1,59 mm	607-1/16"	5/3 3,97 mm	609-5/32"
5/64" 1,98 mm	607-5/64"	3/1 4,76 mm	609-3/16"
3/32" 2,38 mm	607-3/32"	7/3 5,56 mm	609-7/32"
1/8" 3,18 mm	607-1/8"	1/4 6,35 mm	609-1/4"
		5/1 7,94 mm	609-5/16"

Otras medidas bajo pedido / OTHER DIMENSION ON REQUEST !

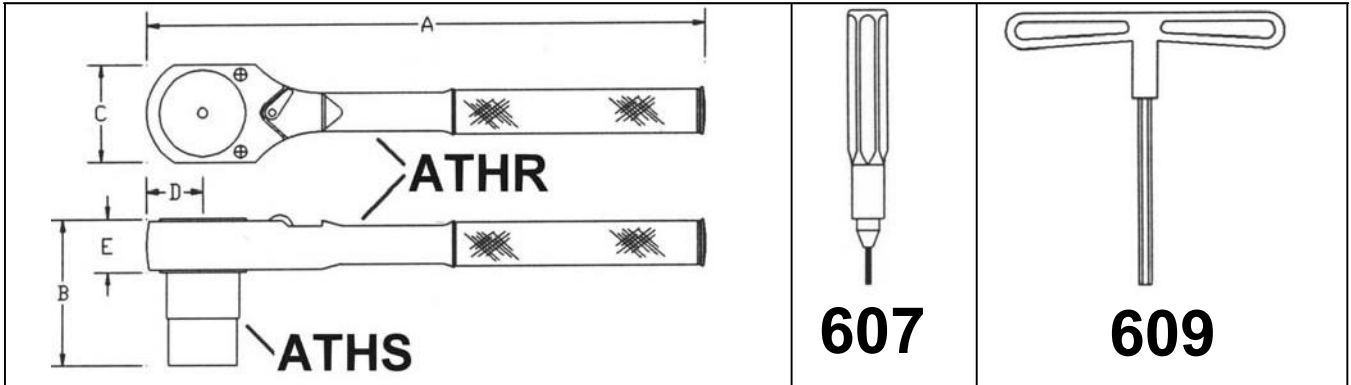
## Herramientas de instalación Hi-lok HI-LOK HAND INSTALLATION TOOLS



Herramienta compl. COMPLETE ASSEMBLY	ATHS SOCKET HEX (ATHS)	Llave hex. HEX KEY SIZE (607 & 609)	A	B	C	D	E	Carraca RATCHET	Alargue SOCKET	Llave hex. HEX-KEY
ATHA-1	3/16" 4,76 mm	1/16 1,59 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS187	607-1/16"
ATHA-2	7/32" 5,56 mm	1/16 1,59 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS218	607-1/16"
ATHA-3	1/4" 6,35 mm	1/16 1,59 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS250	607-1/16"
ATHA-4	9/32" 7,14 mm	1/16 1,59 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS281	607-1/16"
ATHA-5	5/16" 7,94 mm	1/16 1,59 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS312	607-1/16"
ATHA-6	11/32" 8,73 mm	1/16 1,59 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS343	607-1/16"
ATHA-7	7/32" 5,56 mm	5/64" 1,98 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS218	607-5/64"
ATHA-8	1/4" 6,35 mm	5/64" 1,98 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS250	607-5/64"
ATHA-9	9/32" 7,14 mm	5/64" 1,98 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS281	607-5/64"
ATHA-10	5/16" 7,94 mm	5/64" 1,98 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS312	607-5/64"
ATHA-11	11/32" 8,73 mm	5/64" 1,98 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS343	607-5/64"
ATHA-12A	3/8" 9,53 mm	5/64" 1,98 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS375A	607-5/64"
ATHA-12	3/8" 9,53 mm	5/64" 1,98 mm	7" 178 mm	1.1/2" 38 mm	1.1/4" 32 mm	5/8" 16 mm	1/2" 13 mm	ATHR375	ATHS375	607-5/64"
ATHA-13	5/16" 7,94 mm	3/32" 2,38 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS312	609-3/32"
ATHA-14	11/32" 8,73 mm	3/32" 2,38 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS343	609-3/32"
ATHA-15A	3/8" 9,53 mm	3/32" 2,38 mm	5" 127 mm	1.1/4" 32 mm	15/16" 24 mm	7/16" 11 mm	3/8" 10 mm	ATHR250	ATHS375A	609-3/32"
ATHA-15	3/8" 9,53 mm	3/32" 2,38 mm	7" 178 mm	1.1/2" 38 mm	1.1/4" 32 mm	5/8" 16 mm	1/2" 13 mm	ATHR375	ATHS375	609-3/32"
ATHA-16	7/16" 11,11 mm	3/32" 2,38 mm	7" 178 mm	1.1/2" 38 mm	1.1/4" 32 mm	5/8" 16 mm	1/2" 13 mm	ATHR375	ATHS437	609-3/32"
ATHA-21	1/2" 12,7 mm	3/32" 2,38 mm	7" 178 mm	1.1/2" 38 mm	1.1/4" 32 mm	5/8" 16 mm	1/2" 13 mm	ATHR375	ATHS500	609-3/32"
ATHA-17	3/8" 9,53 mm	1/8" 3,18 mm	7" 178 mm	1.1/2" 38 mm	1.1/4" 32 mm	5/8" 16 mm	1/2" 13 mm	ATHR375	ATHS375	609-1/8"
ATHA-18	7/16" 11,11 mm	1/8" 3,18 mm	7" 178 mm	1.1/2" 38 mm	1.1/4" 32 mm	5/8" 16 mm	1/2" 13 mm	ATHR375	ATHS437	609-1/8"
ATHA-22	1/2" 12,7 mm	1/8" 3,18 mm	7" 178 mm	1.1/2" 38 mm	1.1/4" 32 mm	5/8" 16 mm	1/2" 13 mm	ATHR375	ATHS500	609-1/8"
ATHA-19	7/16" 11,11 mm	5/32" 3,97 mm	7" 178 mm	1.1/2" 38 mm	1.1/4" 32 mm	5/8" 16 mm	1/2" 13 mm	ATHR375	ATHS437	609-5/32"
ATHA-20	1/2" 12,7 mm	5/32" 3,97 mm	7" 178 mm	1.1/2" 38 mm	1.1/4" 32 mm	5/8" 16 mm	1/2" 13 mm	ATHR375	ATHS500	609-5/32"

## Herramienta de instalación Hi-Lok para cuello grande

### HI-LOK HAND INSTALLATION TOOLS FOR LARGE SIZE COLLAR



Herramienta compl. COMPLETE ASSEMBLY	ATHS SOCKET HEX (ATHS)	Llave hex. HEX KEY SIZE (607 & 609)	A	B	C	D	E	Carraca RATCHET	Alargue SOCKET	Llave hex. HEX-KEY
<b>ATHA-23</b>	3/8" 9,53 mm	5/64" 1,98 mm	7" 178 mm	1.437" 37 mm	1.375" 35 mm	0.687" 18 mm	0,5" 13 mm	<b>ATHR375</b>	<b>ATHS375</b>	<b>607-5/64"</b>
<b>ATHA-24</b>	1/2" 12,70 mm	3/32" 2,38 mm	7" 178 mm	1.5" 38 mm	1.375" 35 mm	0.687" 18 mm	0,5" 13 mm	<b>ATHR375</b>	<b>ATHS500</b>	<b>609-3/32"</b>
<b>ATHA-25</b>	1/2" 12,70 mm	1/8" 3,18 mm	7" 178 mm	1.5" 38 mm	1.375" 35 mm	0.687" 18 mm	0,5" 13 mm	<b>ATHR375</b>	<b>ATHS500</b>	<b>609-1/8"</b>
<b>ATHA-26</b>	9/16" 14,29 mm	1/8" 3,18 mm	10" 254 mm	2.187" 56 mm	1.75" 45 mm	1.75" 45 mm	0.687" 18 mm	<b>ATHR500</b>	<b>ATHS562</b>	<b>609-1/8"</b>
<b>ATHA-27</b>	9/16" 14,29 mm	5/32" 3,97 mm	10" 254 mm	2.187" 56 mm	1.75" 45 mm	1.75" 45 mm	0.687" 18 mm	<b>ATHR500</b>	<b>ATHS562</b>	<b>609-5/32"</b>
<b>ATHA-28</b>	9/16" 14,29 mm	3/16" 4,76 mm	10" 254 mm	2.187" 56 mm	1.75" 45 mm	1.75" 45 mm	0.687" 18 mm	<b>ATHR500</b>	<b>ATHS562</b>	<b>609-3/16"</b>
<b>ATHA-29</b>	5/8" 15,88 mm	5/32" 3,97 mm	10" 254 mm	2.187" 56 mm	1.75" 45 mm	1.75" 45 mm	0.687" 18 mm	<b>ATHR500</b>	<b>ATHS625</b>	<b>609-5/32"</b>
<b>ATHA-30</b>	11/16" 17,46 mm	5/32" 3,97 mm	10" 254 mm	2.25" 57 mm	1.75" 45 mm	1.75" 45 mm	0.687" 18 mm	<b>ATHR500</b>	<b>ATHS687</b>	<b>609-5/32"</b>
<b>ATHA-31</b>	11/16" 17,46 mm	7/32" 5,56 mm	10" 254 mm	2,25" 57 mm	1.75" 45 mm	1.75" 45 mm	0.687" 18 mm	<b>ATHR500</b>	<b>ATHS687</b>	<b>609-7/32"</b>
<b>ATHA-32</b>	3/4" 19,05 mm	3/16" 4,76 mm	10" 254 mm	2.25" 57 mm	1.75" 45 mm	1.75" 45 mm	0.687" 18 mm	<b>ATHR500</b>	<b>ATHS750</b>	<b>609-3/16"</b>
<b>ATHA-33</b>	7/8" 22,23 mm	7/32" 5,56 mm	10" 254 mm	2.437" 62 mm	1.75" 45 mm	1.75" 45 mm	0.687" 18 mm	<b>ATHR500</b>	<b>ATHS875</b>	<b>609-7/32"</b>
<b>ATHA-34</b>	15/16" 23,81 mm	1/4" 6,35 mm	20" 508 mm	3.125" 79 mm	2.625" 67 mm	2.625" 67 mm	1.125" 29 mm	<b>ATHR750</b>	<b>ATHS937</b>	<b>609-1/4"</b>
<b>ATHA-35</b>	1" 25,40 mm	1/4" 6,35 mm	20" 508 mm	3.125" 79 mm	2.625" 67 mm	2.625" 67 mm	1.125" 29 mm	<b>ATHR750</b>	<b>ATHS1000</b>	<b>609-1/4"</b>
<b>ATHA-36</b>	1.1/8" 28,58 mm	5/16" 7,94 mm	20" 508 mm	3.437" 87 mm	2.625" 67 mm	2.625" 67 mm	1.125" 29 mm	<b>ATHR750</b>	<b>ATHS1125</b>	<b>609-5/16"</b>

**Herramienta de instalación manual**  
**HI-LOK HAND INSTALLATION TOOL**  
**Roller Drive Wrench Assembly/ Carraca**



ZRDA80-31



ZRDW80S-250

**The Roller Drive Wrench Assemblies** are ideal for the installation of any frangible hex collar fastener system such as Hi-Lok, Hi-Lite, Hi-Tigue, Veri-Lite and C-Lok and the removal of any hex nut or hex collar in the most difficult close quarter applications.

**Features**

- One piece hot forged handle construction for maximum strength.
- Bright yellow knurled handle for easy visibility reducing chance of FOD.
- Minimum edge and height clearance plus a minimum handle swing angle allows easy access to the most restricted close quarter applications.
- The 1/4" square drive spindle and all ZRDS sockets feature a through hole for those applications that require the use of a hex keys.
- The ZRDW roller drive wrench also accepts all standard 1/4" square drive sockets.

All components listed below are completely interchangeable and can be ordered separately or as an assembly.

**How To select a tool:** To order a complete assembly select the roller drive wrench 6.0" or 3.0" length from the parts list to the right. Then select the appropriate ZRDS socket hex that match the collar or nut hex. Example:

ZRDA80-31 Includes:

- ZRDW80 Roller Drive Wrench 6.0" OAL
- ZRDS-31 5/16" Drive Hex Socket

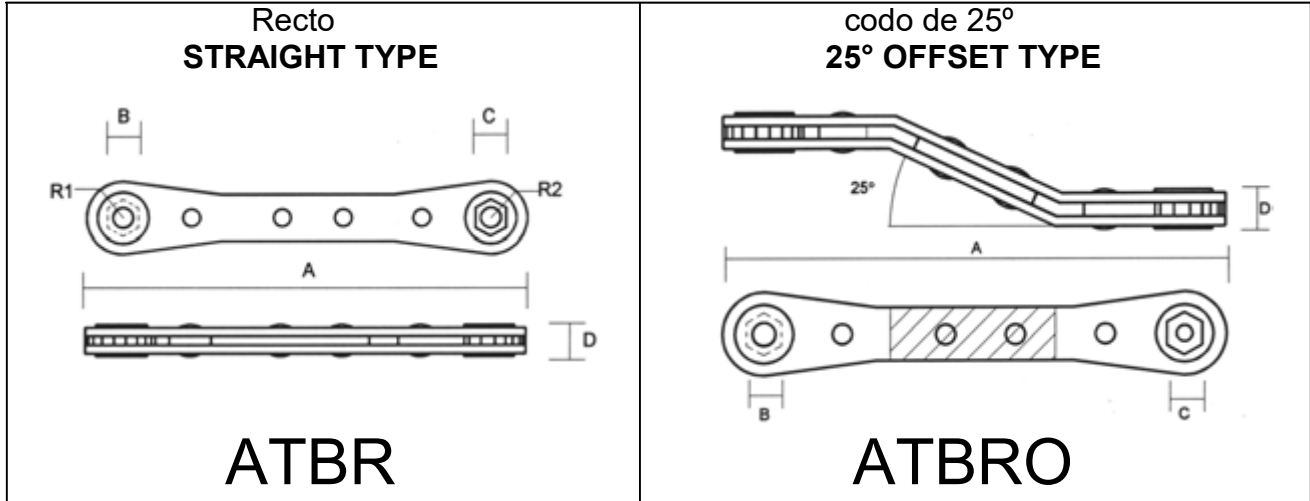
To order the Roller Drive Wrench equipped with a 1/4" square drive the part numbers are:

- ZRDW80S-250 3.0" Handle
- ZRDW80-250 6.0" Handle

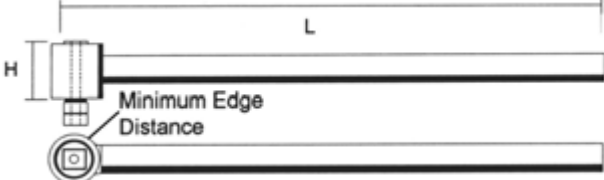
Socket Hex Size	Complete Tool Part-Number	Roller Drive Wrench Part Number	Socket Part Number
3/16	ZRDA80-18S	ZRDW80S 80 in lbs 3" OAL	ZRDS-18
7/32	ZRDA80-22S		ZRDS-22
1/4	ZRDA80-25S		ZRDS-25
9/32	ZRDA80-28S		ZRDS-28
5/16	ZRDA80-31S		ZRDS-31
11/32	ZRDA80-34S		ZRDS-34
3/8	ZRDA80-37S		ZRDS-37
7/16	ZRDA80-43S		ZRDS-43
3/16	ZRDA80-18		ZRDW80 80 in lbs 6" OAL
7/32	ZRDA80-22	ZRDS-22	
1/4	ZRDA80-25	ZRDS-25	
9/32	ZRDA80-28	ZRDS-28	
5/16	ZRDA80-31	ZRDS-31	
11/32	ZRDA80-34	ZRDS-34	
3/8	ZRDA80-37	ZRDS-37	
7/16	ZRDA80-43	ZRDS-43	

# Llaves de Carraca Hi-Lok

## HI-LOK BOX RATCHET WRENCH

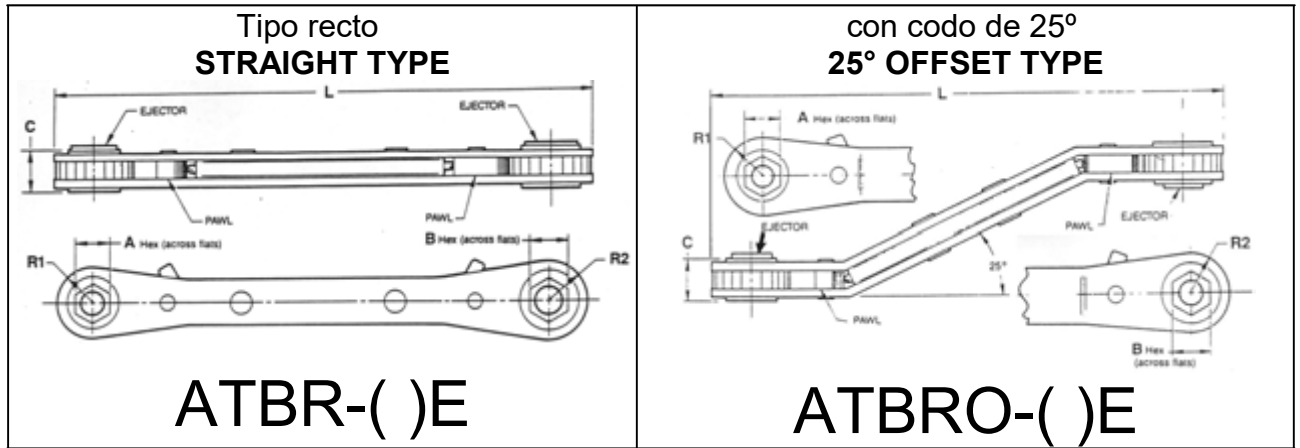


Art N° PART NO.	A	B	C	D	R1	R2
<b>ATBR-2125</b>	4.1/4" 108 mm	7/32" 5,56 mm	1/4" 6,35 mm	3/8" 9,53 mm	19/64" 7,54 mm	21/64" 8,33 mm
<b>ATBR-2528</b>	4.1/4" 108 mm	1/4" 6,35 mm	9/32" 7,14 mm	3/8" 9,53 mm	19/64" 7,54 mm	21/64" 8,33 mm
<b>ATBR-2531</b>	4.1/4" 108 mm	1/4" 6,35 mm	5/16" 7,94 mm	3/8" 9,53 mm	19/64" 7,54 mm	21/64" 8,33 mm
<b>ATBR-3134</b>	4.1/4" 108 mm	5/16" 7,94 mm	11/32" 8,73 mm	3/8" 9,53 mm	19/64" 7,54 mm	21/64" 8,33 mm
<b>ATBR-3137</b>	5.1/2" 140 mm	5/16" 7,94 mm	3/8" 9,53 mm	3/8" 9,53 mm	25/64" 9,92 mm	29/64" 11,51 mm
<b>ATBR-4350</b>	5.1/2" 140 mm	7/16" 11,11 mm	1/2" 12,7 mm	3/8" 9,53 mm	25/64" 9,92 mm	29/64" 11,51 mm
<b>ATBRO-2125</b>	4.3/32" 104 mm	7/32" 5,56 mm	1/4" 6,35 mm	3/8" 9,53 mm	19/64" 7,54 mm	21/64" 8,33 mm
<b>ATBRO-2528</b>	4.3/32" 104 mm	1/4" 6,35 mm	9/32" 7,14 mm	3/8" 9,53 mm	19/64" 7,54 mm	21/64" 8,33 mm
<b>ATBRO-3134</b>	4.3/32" 104 mm	5/16" 7,94 mm	11/32" 8,73 mm	3/8" 9,53 mm	19/64" 7,54 mm	21/64" 8,33 mm
<b>ATBRO-3137</b>	5.7/32" 133 mm	5/16" 7,94 mm	3/8" 9,53 mm	3/8" 9,53 mm	25/64" 9,92 mm	29/64" 11,51 mm
<b>ATBRO-4350</b>	5.7/32" 133 mm	7/16" 11,11 mm	1/2" 12,7 mm	3/8" 9,53 mm	25/64" 9,92 mm	29/64" 11,51 mm


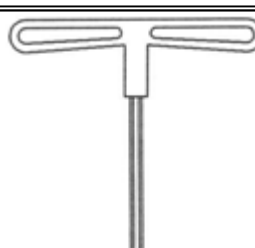
	<p><b>Llave de uso para zonas limitadas, con agarre especial que elimina la pérdida de movimiento habitual en carracas manuales.</b></p> <p>ROLLER RATCHET FOR USE IN LIMITED AREAS. SPECIAL BEARING ELIMINATING THE LOST MOTION COMMON TO CONVENTIONAL HAND RATCHETS. WITH TROUGH HOLE FOR HEX KEYS.</p>
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Art N° PART NO.	L		H		distancia mínima MIN. DISTANCE	tuerca máxima MAX. TORQUE	cuello SOCKET DRIVE
<b>RR-40SP</b>	6"	152 mm	0.47"	11,9 mm	.275" 7,01 mm	<b>150 in-lbs</b>	1/4" 6,35 mm
<b>RR-80SP</b>	6"	152 mm	1.00"	25,4 mm	.275" 7,01 mm	<b>150 in-lbs</b>	1/4" 6,35 mm
<b>RR-90SP</b>	6.3/8"	162 mm	0.47"	11,9 mm	.395" 10,03 mm	<b>200 in-lbs</b>	1/4" 6,35 mm
<b>RR-130SP</b>	7"	178 mm	0.47"	11,9 mm	.49" 12,45 mm	<b>250 in-lbs</b>	1/4" 6,35 mm
<b>RR-250SP</b>	8"	203 mm	0.63"	16,0 mm	.55" 13,97 mm	<b>400 in-lbs</b>	3/8" 9,53 mm
<b>RR-400SP</b>	9"	229 mm	0.63"	16,0 mm	.7" 17,78 mm	<b>600 in-lbs</b>	3/8" 9,53 mm
<b>RR40S-SP</b>	3"	76 mm	0.47"	11,9 mm	.280" 7,15 mm	<b>150 in-lbs</b>	1/4" 6,35 mm

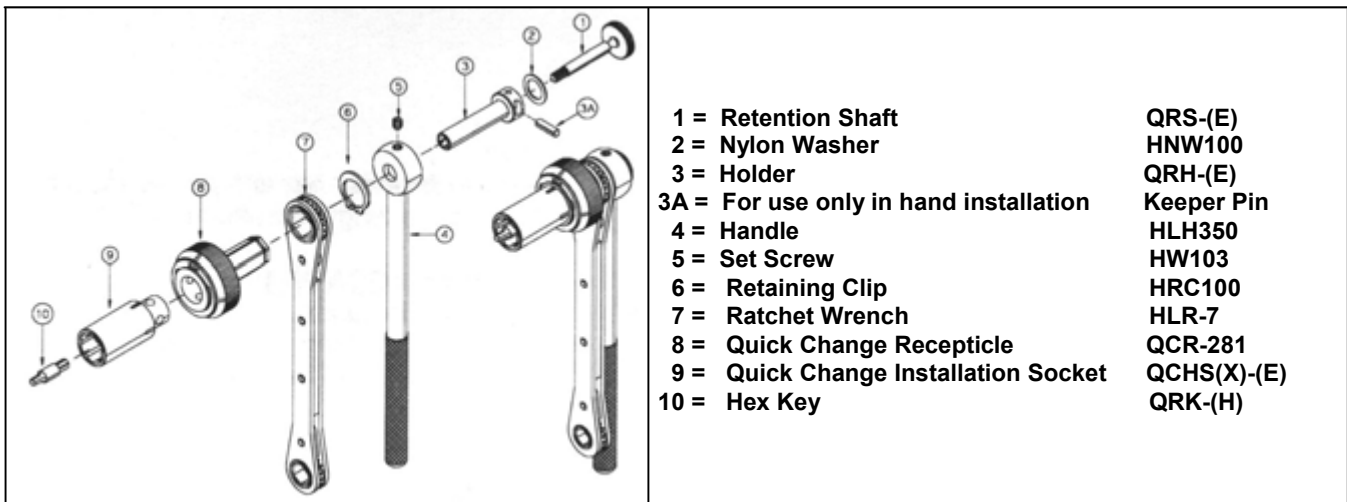
# Carracas Hi-Lok con expulsor HI-LOK BOX RATCHET WRENCH WITH EJECTOR



Art N° PART NO.	A	B	C	L	R1	R2
<b>ATBR-2125E</b>	7/32" 5,56 mm	1/4" 6,35 mm	5/16" 7,94 mm	4.3/32" 104 mm	19/64" 7,54 mm	21/64" 8,33 mm
<b>ATBR-2528E</b>	1/4" 6,35 mm	9/32" 7,14 mm	3/8" 9,53 mm	4.3/32" 104 mm	19/64" 7,54 mm	21/64" 8,33 mm
<b>ATBR-3134E</b>	5/16" 7,94 mm	11/32" 8,73 mm	3/8" 9,53 mm	4.3/32" 104 mm	19/64" 7,54 mm	21/64" 8,33 mm
<b>ATBR-3137E</b>	5/16" 7,94 mm	3/8" 9,53 mm	3/8" 9,53 mm	5.7/32" 133 mm	25/64" 9,92 mm	29/64" 11,51 mm
<b>ATBR-4350E</b>	7/16" 11,11 mm	1/2" 12,7 mm	3/8" 9,53 mm	5.7/32" 133 mm	25/64" 9,92 mm	29/64" 11,51 mm
<b>ATBRO-2125E</b>	7/32" 5,56 mm	1/4" 6,35 mm	5/16" 7,94 mm	4.3/32" 104 mm	19/64" 7,54 mm	21/64" 8,33 mm
<b>ATBRO-2528E</b>	1/4" 6,35 mm	9/32" 7,14 mm	3/8" 9,53 mm	4.3/32" 104 mm	19/64" 7,54 mm	21/64" 8,33 mm
<b>ATBRO-3134E</b>	5/16" 7,94 mm	11/32" 8,73 mm	3/8" 9,53 mm	4.3/32" 104 mm	19/64" 7,54 mm	21/64" 8,33 mm
<b>ATBRO-3137E</b>	5/16" 7,94 mm	3/8" 9,53 mm	3/8" 9,53 mm	5.7/32" 133 mm	25/64" 9,92 mm	29/64" 11,51 mm
<b>ATBRO-4350E</b>	7/16" 11,11 mm	1/2" 12,7 mm	3/8" 9,53 mm	5.7/32" 133 mm	25/64" 9,92 mm	29/64" 11,51 mm

 <p style="font-size: 24pt; margin-top: 10px;"><b>607</b></p>	 <p style="font-size: 24pt; margin-top: 10px;"><b>609</b></p>		
<p><b>Hexágono</b> HEX KEY SIZE</p>	<p><b>Art N°</b> PART NO.</p>	<p><b>Hexágono</b> HEX KEY SIZE</p>	<p><b>Art N°</b> PART NO.</p>
1/16" 1,59 mm	<b>607-1/16"</b>	3/3 2,38 mm	<b>609-3/32"</b>
5/64" 1,98 mm	<b>607-5/64"</b>	1/8 3,18 mm	<b>609-1/8"</b>
3/32" 2,38 mm	<b>607-3/32"</b>	5/3 3,97 mm	<b>609-5/32"</b>
		3/1 4,76 mm	<b>609-3/16"</b>

# Conjunto manual de instalación y cambiado rápido HI-LOK QUICK CHANGE INSTALLATION HAND ASSEMBLY



conjunto entero CPL. INSTALLATION SOCKET ASSEMBLY	Tamaño cuello hexagonal SOCKET HEX SIZE	Diámetro exterior cuello SOCKET OUTSIDE DIA.	Cuello solo SOCKET ONLY	agarre solo HOLDER ONLY	mango de retencion RETENTION SHAFT	llave hex HEX KEY
Pos. / ITEM 1-10	(X)		Pos. / ITEM 9	Pos. / ITEM 3	Pos./ITEM 1	Pos./ITEM 10
<b>QCHA218-(E)-(H)</b>	<b>7/32"</b> 5,56 mm	<b>0.34"</b> 8,64 mm	<b>QCHS218-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>
<b>QCHA250-(E)-(H)</b>	<b>1/4"</b> 6,35 mm	<b>0.375"</b> 9,53 mm	<b>QCHS250-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>
<b>QCHA281-(E)-(H)</b>	<b>9/32"</b> 7,14 mm	<b>0.42"</b> 10,67 mm	<b>QCHS281-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>
<b>QCHA312-(E)-(H)</b>	<b>5/16"</b> 7,94 mm	<b>0.468"</b> 11,89 mm	<b>QCHS312-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>
<b>QCHA343-(E)-(H)</b>	<b>11/32"</b> 8,73 mm	<b>0.48"</b> 12,19 mm	<b>QCHS343-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>
<b>QCHA375-(E)-(H)</b>	<b>3/8"</b> 9,53 mm	<b>0.531"</b> 13,49 mm	<b>QCHS375-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>
<b>QCHA437-(E)-(H)</b>	<b>7/16"</b> 11,11 mm	<b>0.607"</b> 15,42 mm	<b>QCHS437-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>

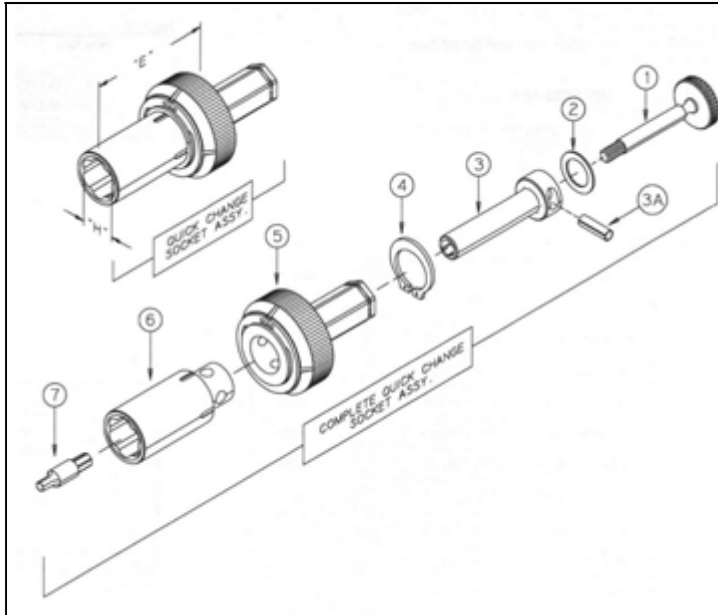
**(E) = especifique un número de guión para la longitud del cuello según tabla (Long standard 25,4 mm) !**  
**(E) = PLEASE SPECIFY DASH # FOR SOCKET LENGTH AS PER TABLE (STANDARD LENGTH IS 1") !**

**(H) = especifique número de guión para la llave hexagonal según tabla**  
**(H) = PLEASE SPECIFY DASH # FOR HEX KEY SIZE AS PER TABLE !**

**Conjuntos completos en página K-7 COMPLETE SOCKET ASSEMBLIES SEE PAGE K-7 !**

<b>(E)</b> Longitud cuello / SOCKET LENGTH		<b>(H)</b> Llave hexagonal / HEX KEY SIZE		
Guión / DASH #	(Pos./ ITEM 6)	Guión/DASH #	(Pos. / ITEM 7)	
<b>10</b>	<b>1.0"</b> 25,40 mm			
		<b>5</b>	<b>1/16"</b> (.062)	1,59 mm
<b>20</b>	<b>2.0"</b> 50,80 mm	<b>6</b>	<b>5/64"</b> (.078)	1,98 mm
		<b>8</b>	<b>3/32"</b> (.094)	2,38 mm
<b>30</b>	<b>3.0"</b> 76,20 mm	<b>10</b>	<b>1/8"</b> (.125)	3,18 mm

## Conjunto de instalación Hi-Lok con cuello de cambiado rápido HI-LOK QUICK CHANGE SOCKET INSTALLATION ASSEMBLY



- |  |             |
|--|-------------|
| 1 = Retention Shaft                    | QRS-(E)     |
| 2 = Nylon Washer                       | HNW100      |
| 3 = Holder                             | QRH-(E)     |
| 3A = For use only in hand installation | Keeper Pin  |
| 4 = Retaining Clip                     | HRC-100     |
| 5 = Quick Change Receptacle            | QCR-281     |
| 6 = Quick Change Installation Socket   | QCHS(X)-(E) |
| 7 = Hex Key                            | QRK-(H)     |

conjunto entero CPL. INSTALLATION SOCKET	Tamaño cuello hexagonal SOCKET HEX SIZE	Diámetro exterior cuello SOCKET OUTSIDE DIA.	Cuello solo SOCKET ONLY	agarre solo HOLDE R	mango de retencion RETENTION SHAFT	llave hex HEX KEY
Pos. / ITEM 1-7	(X)		Pos. / ITEM 6	Pos. / ITEM 3	Pos./ITEM 1	Pos./ITEM 7
<b>QCA218-(E)-(H)</b>	<b>7/32"</b> 5,56 mm	<b>0.34"</b> 8,64 mm	<b>QCHS218-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>
<b>QCA250-(E)-(H)</b>	<b>1/4"</b> 6,35 mm	<b>0.375"</b> 9,53 mm	<b>QCHS250-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>
<b>QCA281-(E)-(H)</b>	<b>9/32"</b> 7,14 mm	<b>0.42"</b> 10,67 mm	<b>QCHS281-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>
<b>QCA312-(E)-(H)</b>	<b>5/16"</b> 7,94 mm	<b>0.468"</b> 11,89 mm	<b>QCHS313-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>
<b>QCA343-(E)-(H)</b>	<b>11/32"</b> 8,73 mm	<b>0.48"</b> 12,19 mm	<b>QCHS343-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>
<b>QCA375-(E)-(H)</b>	<b>3/8"</b> 9,53 mm	<b>0.531"</b> 13,49 mm	<b>QCHS375-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>
<b>QCA437-(E)-(H)</b>	<b>7/16"</b> 11,11 mm	<b>0.607"</b> 15,42 mm	<b>QCHS437-(E)</b>	<b>QRH-(E)</b>	<b>QRS-(E)</b>	<b>QRK-(H)</b>

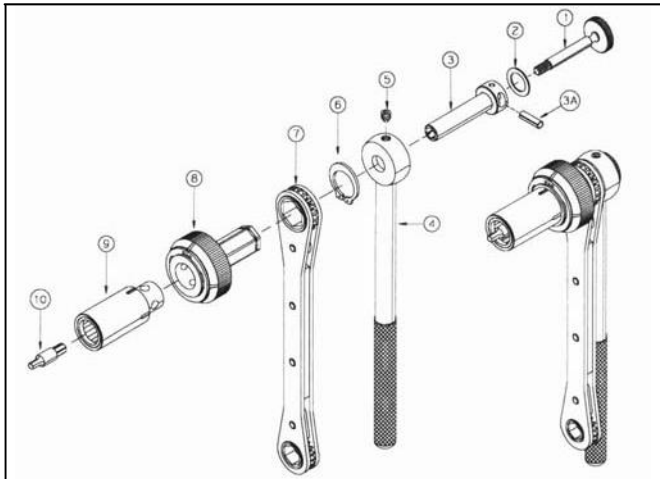
**(E) = especifique un número de guión para la longitud del cuello según tabla (Long standard 25,4 mm) !**  
**(E) = PLEASE SPEZIFY DASH # FOR SOCKET LENGTH AS PER TABLE (STANDARD LENGTH IS 1" ) !**

**(H) = especifique número de guión para la llave hexagonal según tabla**  
**(H) = PLEASE SPEZIFY DASH # FOR HEX KEY SIZE AS PER TABLE !**

<b>(E)</b> Longitud cuello / SOCKET LENGTH		<b>(H)</b> Llave hexagonal / HEX KEY SIZE	
Guión/DASH #	(Pos. / ITEM 6)	Guión/DASH #	(Pos. / ITEM 7)
<b>10</b>	<b>1.0"</b> 25,40 mm		
		<b>5</b>	<b>1/16"</b> (.062) 1,59 mm
<b>20</b>	<b>2.0"</b> 50,80 mm	<b>6</b>	<b>5/64"</b> (.078) 1,98 mm
		<b>8</b>	<b>3/32"</b> (.094) 2,38 mm
<b>30</b>	<b>3.0"</b> 76,20 mm	<b>10</b>	<b>1/8"</b> (.125) 3,18 mm

## Conjunto Hi-Lok de desinstalación (cambio rápido)

### HI-LOK QUICK CHANGE REMOVAL HAND ASSEMBLY



- |  |              |
|--|--------------|
| 1 = Retention Shaft                    | QRS-(E)      |
| 2 = Nylon Washer                       | HNW100       |
| 3 = Holder                             | QRH-(E)      |
| 3A = For use only in hand installation | Keeper Pin   |
| 4 = Handle                             | HLH350       |
| 5 = Set Screw                          | HW103        |
| 6 = Retaining Clip                     | HRC100       |
| 7 = Ratchet Wrench                     | HLR-7        |
| 8 = Quick Change Receptacle            | QCR-281      |
| 9 = Quick Change Removal Socket        | QCHRS(R)-(H) |
| 10 = Hex Key                           | QRK-(H)      |

Conjunto completo CPL. REMOVAL SOCKET ASSEMBLY	Agarre del cuello GRIP RANGE OF SOCKET	Diámetro exterior cuello SOCKET OUTSIDE DIA.	Solo cuello SOCKET ONLY	Agarre solo HOLDER ONLY	Mango de retención RETENTION SHAFT	Llave hex. HEX KEY
Pos. / ITEM 1-7	(R)		Pos. / ITEM 6	Pos./ITEM 3	Pos./ITEM 1	Pos./ITEM 7
QCHRA235-10-(H)	.235" 5,97 mm .255" 6,48 mm	0.593" 15,06 mm	QCHR235-10	QRH-10	QRS-10	QRK-(H)
QCHRA255-10-(H)	.255" 6,48 mm .275" 6,99 mm	0.703" 17,86 mm	QCHR255-10	QRH-10	QRS-10	QRK-(H)
QCHRA275-10-(H)	.275" 6,99 mm .295" 7,49 mm	0.703" 17,86 mm	QCHR275-10	QRH-10	QRS-10	QRK-(H)
QCHRA295-10-(H)	.295" 7,49 mm .315" 8,00 mm	0.718" 18,24 mm	QCHR295-10	QRH-10	QRS-10	QRK-(H)
QCHRA315-10-(H)	.315" 8,00 mm .335" 8,51 mm	0.781" 19,84 mm	QCHR315-10	QRH-10	QRS-10	QRK-(H)
QCHRA335-10-(H)	.335" 8,51 mm .355" 9,02 mm	0.781" 19,84 mm	QCHR335-10	QRH-10	QRS-10	QRK-(H)
QCHRA355-10-(H)	.355" 9,02 mm .375" 9,53 mm	0.843" 21,41 mm	QCHR355-10	QRH-10	QRS-10	QRK-(H)
QCHRA375-10-(H)	.375" 9,53 mm .395" 10,03 mm	0.875" 22,23 mm	QCHR375-10	QRH-10	QRS-10	QRK-(H)
QCHRA395-10-(H)	.395" 10,03 mm .415" 10,54 mm	0.937" 23,80 mm	QCHR395-10	QRH-10	QRS-10	QRK-(H)
QCHRA415-10-(H)	.415" 10,54 mm .435" 11,05 mm	0.968" 24,59 mm	QCHR415-10	QRH-10	QRS-10	QRK-(H)
QCHRA435-10-(H)	.435" 11,05 mm .455" 11,56 mm	1.008" 25,60 mm	QCHR435-10	QRH-10	QRS-10	QRK-(H)

Longitud standard 25,4 mm ! Otras bajo pedido STANDARD LENGTH IS 1" ! SPECIAL LENGTH ONLY ON REQUEST !

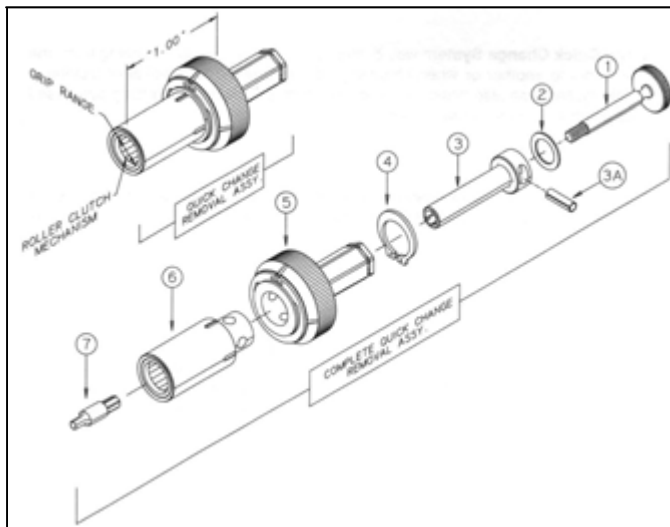
(H) = Especifique guión para la llave hexagonal según tabla  
(H) = PLEASE SPECIFY DASH # FOR HEX KEY SIZE AS PER TABLE !

Conjuntos completos en página K-6 COMPLETE SOCKET ASSEMBLIES SEE PAGE K-6 !

(H)		
Tamaño llave hex. / HEX KEY SIZE		
Guión/DASH #	(Pos. / ITEM 7)	
5	1/16" (.062)	1,59 mm
6	5/64" (.078)	1,98 mm
8	3/32" (.094)	2,38 mm
10	1/8" (.125)	3,18 mm

# Sistema de remoción de cambiado rápido Hi-Lok-Collar

## HI-LOK-COLLAR QUICK CHANGE SOCKET REMOVAL SYSTEM



1 = Retention Shaft	QRS-(E)
2 = Nylon Washer	HNW100
3 = Holder	QRH-(E)
3A = For use only in hand installation	Keeper Pin
4 = Retaining Clip	HRC-100
5 = Quick Change Receptacle	QCR-281
6 = Quick Change Removal Socket	QCHRS(R)-(E)
7 = Hex Key	QRK-(H)

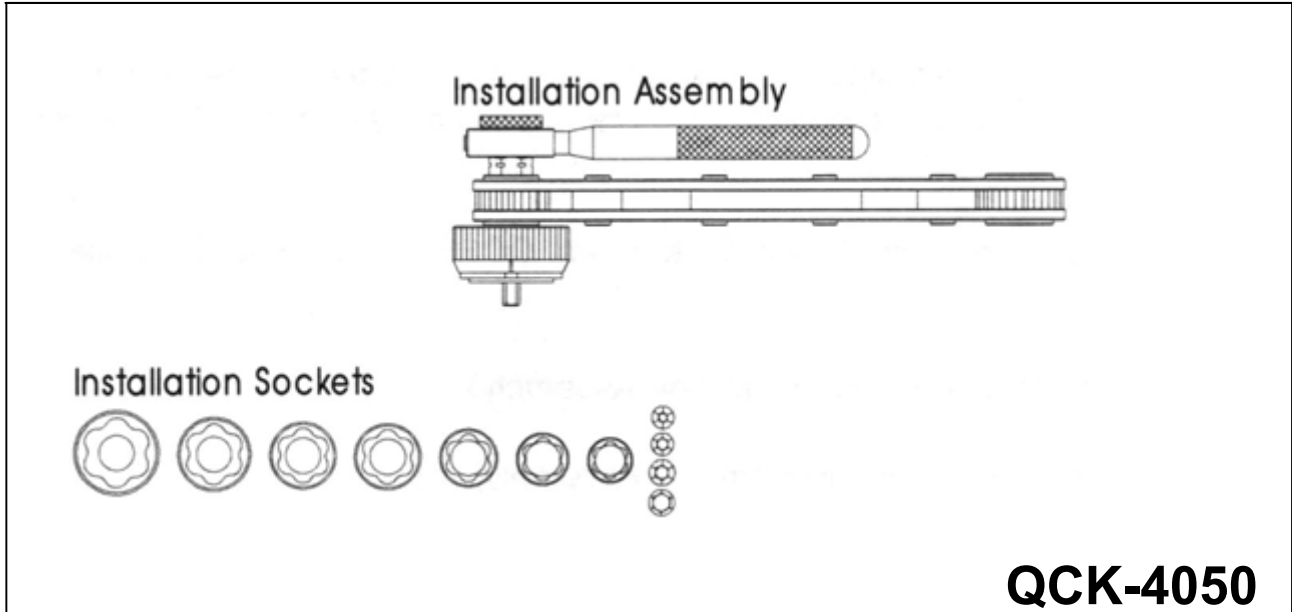
Conjunto completo CPL. REMOVAL SOCKET ASSEMBLY	Agarre del cuello GRIP RANGE OF SOCKET	Diámetro exterior cuello SOCKET OUTSIDE DIA.	Solo cuello SOCKET ONLY	Agarre solo HOLDER ONLY	Mango de retención RETENTION SHAFT	Llave hex. HEX KEY
Pos. / ITEM 1-7	(R)		Pos. / ITEM 6	Pos./ITEM 3	Pos./ITEM 1	Pos./ITEM 7
QCRA235-10-(H)	.235" 5,97 mm .255" 6,48 mm	0.593" 15,06 mm	QCHR235-10	QRH-10	QRS-10	QRK-(H)
QCRA255-10-(H)	.255" 6,48 mm .275" 6,99 mm	0.703" 17,86 mm	QCHR255-10	QRH-10	QRS-10	QRK-(H)
QCRA275-10-(H)	.275" 6,99 mm .295" 7,49 mm	0.703" 17,86 mm	QCHR275-10	QRH-10	QRS-10	QRK-(H)
QCRA295-10-(H)	.295" 7,49 mm .315" 8,00 mm	0.718" 18,24 mm	QCHR295-10	QRH-10	QRS-10	QRK-(H)
QCRA315-10-(H)	.315" 8,00 mm .335" 8,51 mm	0.781" 19,84 mm	QCHR315-10	QRH-10	QRS-10	QRK-(H)
QCRA335-10-(H)	.335" 8,51 mm .355" 9,02 mm	0.781" 19,84 mm	QCHR335-10	QRH-10	QRS-10	QRK-(H)
QCRA355-10-(H)	.355" 9,02 mm .375" 9,53 mm	0.843" 21,41 mm	QCHR355-10	QRH-10	QRS-10	QRK-(H)
QCRA375-10-(H)	.375" 9,53 mm .395" 10,03 mm	0.875" 22,23 mm	QCHR375-10	QRH-10	QRS-10	QRK-(H)
QCRA395-10-(H)	.395" 10,03 mm .415" 10,54 mm	0.937" 23,80 mm	QCHR395-10	QRH-10	QRS-10	QRK-(H)
QCRA415-10-(H)	.415" 10,54 mm .435" 11,05 mm	0.968" 24,59 mm	QCHR415-10	QRH-10	QRS-10	QRK-(H)
QCRA435-10-(H)	.435" 11,05 mm .455" 11,56 mm	1.008" 25,60 mm	QCHR435-10	QRH-10	QRS-10	QRK-(H)

Longitud standard 25,4 mm ! Otras bajo pedido  
STANDARD LENGTH IS 1" ! SPECIAL LENGTH ONLY ON REQUEST !

**(H) = Especifique guión para la llave hexagonal según tabla**  
(H) = PLEASE SPEZIFY DASH # FOR HEX KEY SIZE AS PER TABLE !

(H)	
Tamaño llave hex. / HEX KEY SIZE	
Guión/DASH #	(Pos. / ITEM 7)
5	1/16" (.062) 1,59 mm
6	5/64" (.078) 1,98 mm
8	3/32" (.094) 2,38 mm
10	1/8" (.125) 3,18 mm

# Kit de instalación Hi-Lok HI-LOK INSTALLATION TOOL KIT



## Contenido / CONTENTS:

**Herramienta de instalación manual con receptáculo para cuellos**  
HAND-INSTALLATION TOOL WITH RECEPTICLE FOR SOCKETS

**QCHA932**

**1 conjunto = 7 piezas**  
1 cpl. SET = 7 PCS

**QCSS22-43**

incl. 4 x QRK

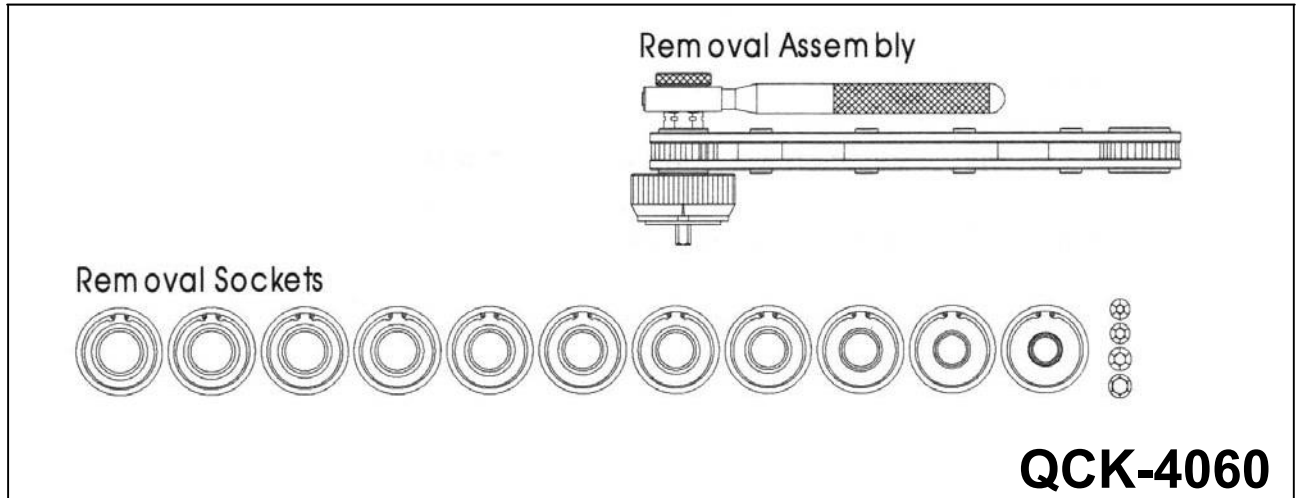
con/EXIST OF:

llaves instalación INSTALLATION SOCKET	Hexágono HEX SIZE	Llave hexagonal HEX KEY
<b>QCHS218-10</b>	<b>7/32"</b> 5,56 mm	<b>QRK-5</b> (1/16")
<b>QCHS250-10</b>	<b>1/4"</b> 6,35 mm	<b>QRK-6</b> (5/64")
<b>QCHS281-10</b>	<b>9/32"</b> 7,14 mm	<b>QRK-8</b> (3/32")
<b>QCHS312-10</b>	<b>5/16"</b> 7,94 mm	<b>QRK-10</b> (1/8")
<b>QCHS343-10</b>	<b>11/32"</b> 8,73 mm	
<b>QCHS375-10</b>	<b>3/8"</b> 9,53 mm	
<b>QCHS437-10</b>	<b>7/16"</b> 11,11 mm	

**Longitud standard del cuello 25,4mm**

**STANDARD SOCKET LENGTH IS 1" !**

## Kit de remoción Hi-Lok HI-LOK REMOVAL TOOL KIT



### Contenido / CONTENTS:

Herramienta de remoción con receptáculo para cuellos  
HAND-REMOVAL TOOL WITH RECEPTICLE FOR SOCKETS

**QCHRA932**

1 conjunto = 11 Piezas  
1 cpl. SET = 11 PCS

#### **QCRSS23-43**

incl. 4 x QRK

con/EXIST OF:

**cuello de remoción**  
REMOVAL SOCKET

**Agarre**  
GRIP RANGE

**Llave hexagonal**  
HEX KEY

**QCHR235-10**

**.235"** 5,97 mm  
**.255"** 6,48 mm

**QRK-5** (1/16")

**QCHR255-10**

**.255"** 6,48 mm  
**.275"** 6,99 mm

**QRK-6** (5/64")

**QCHR275-10**

**.275"** 6,99 mm  
**.295"** 7,49 mm

**QRK-8** (3/32")

**QCHR295-10**

**.295"** 7,49 mm  
**.315"** 8,00 mm

**QRK-10** (1/8")

**QCHR315-10**

**.315"** 8,00 mm  
**.335"** 8,51 mm

**QCHR335-10**

**.335"** 8,51 mm  
**.355"** 9,02 mm

**QCHR355-10**

**.355"** 9,02 mm  
**.375"** 9,53 mm

**QCHR375-10**

**.375"** 9,53 mm  
**.395"** 10,03 mm

**QCHR395-10**

**.395"** 10,03 mm  
**.415"** 10,54 mm

**QCHR415-10**

**.415"** 10,54 mm  
**.435"** 11,05 mm

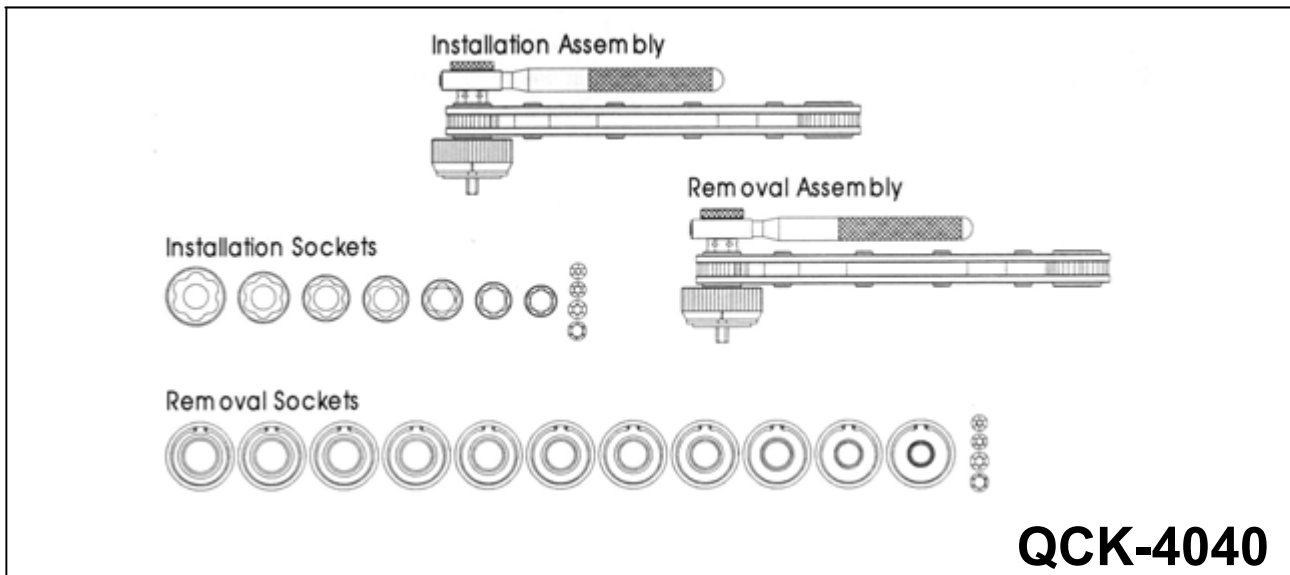
**QCHR435-10**

**.435"** 11,05 mm  
**.455"** 11,56 mm

**Longitud standard del cuello 25,4mm**

**STANDARD SOCKET LENGTH IS 1" !**

# Kit de instalación y remoción Hi-Lok HI-LOK INSTALLATION & REMOVAL TOOL KIT



**QCK-4040**

## Contenido / CONTENTS:

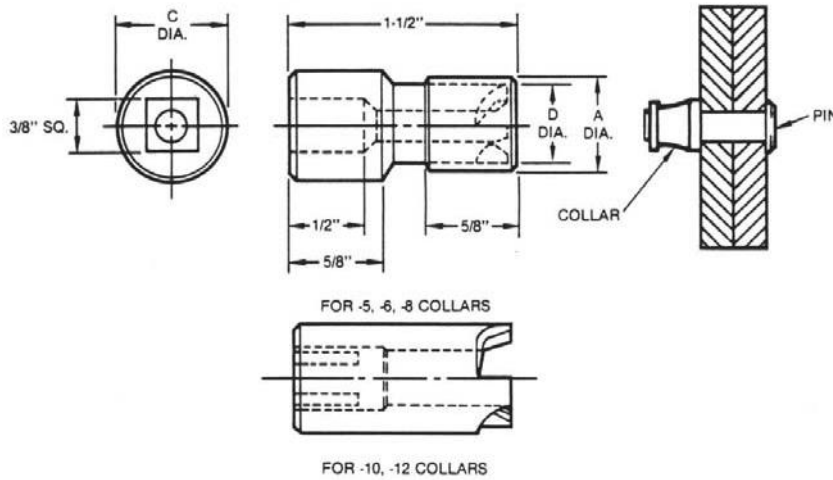
<b>Herramienta de instalación manual con receptáculo para cuellos</b> HAND-INSTALLATION TOOL WITH RECEPTICLE FOR SOCKETS	<b>QCHA932</b>
<b>Herramienta de remoción manual con receptáculo para cuellos</b> HAND-REMOVAL TOOL WITH RECEPTICLE FOR SOCKETS	<b>QCHRA932</b>

<b>1 conjunto = 7 Piezas</b> 1 cpl. SET = 7 PCS		<b>1 conjunto = 11 Piezas</b> 1 cpl. SET = 11 PCS	
<b>QCSS22-43</b> incl. 4 x QRK con/EXIST OF:		<b>QCRSS23-43</b> incl. 4 x QRK con/EXIST OF:	
<b>cuello de instalación</b> INSTALLATION SOCKET	<b>Hexágono</b> HEX SIZE	<b>cuello de remoción</b> REMOVAL SOCKET	<b>Agarre</b> GRIP RANGE
			<b>Llave hexagonal</b> HEX KEY
<b>QCHS218-10</b>	7/32" 5,56 mm	<b>QCHR235-10</b>	<b>QRK-5</b> (1/16")
<b>QCHS250-10</b>	1/4" 6,35 mm	<b>QCHR255-10</b>	<b>QRK-6</b> (5/64")
<b>QCHS281-10</b>	9/32" 7,14 mm	<b>QCHR275-10</b>	<b>QRK-8</b> (3/32")
<b>QCHS312-10</b>	5/16" 7,94 mm	<b>QCHR295-10</b>	<b>QRK-10</b> (1/8")
<b>QCHS343-10</b>	11/32" 8,73 mm	<b>QCHR315-10</b>	
<b>QCHS375-10</b>	3/8" 9,53 mm	<b>QCHR335-10</b>	
<b>QCHS437-10</b>	7/16" 11,11 mm	<b>QCHR355-10</b>	
		<b>QCHR375-10</b>	
		<b>QCHR395-10</b>	
		<b>QCHR415-10</b>	
		<b>QCHR435-10</b>	
		<b>QCHR455-10</b>	

**Longitud standard 25,4 mm ! STANDARD SOCKET LENGTH IS 1" !**

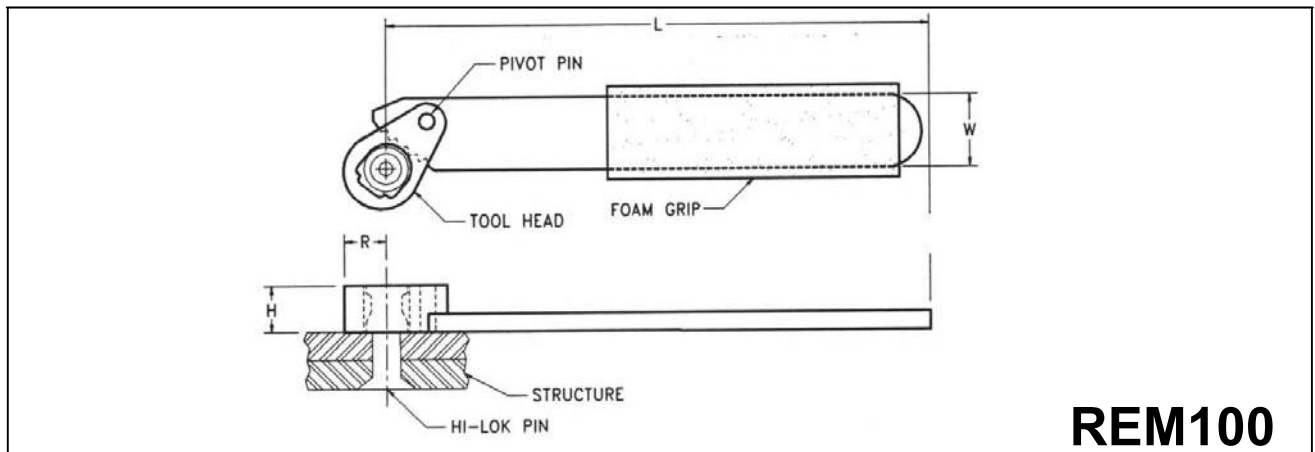
## Herramienta de remoción de cuellos HI-LOK COLLAR REMOVAL TOOLS

Con cuadrado de 9,53 mm / WITH 3/8" INSIDE SQUARE DRIVE



### HLC1

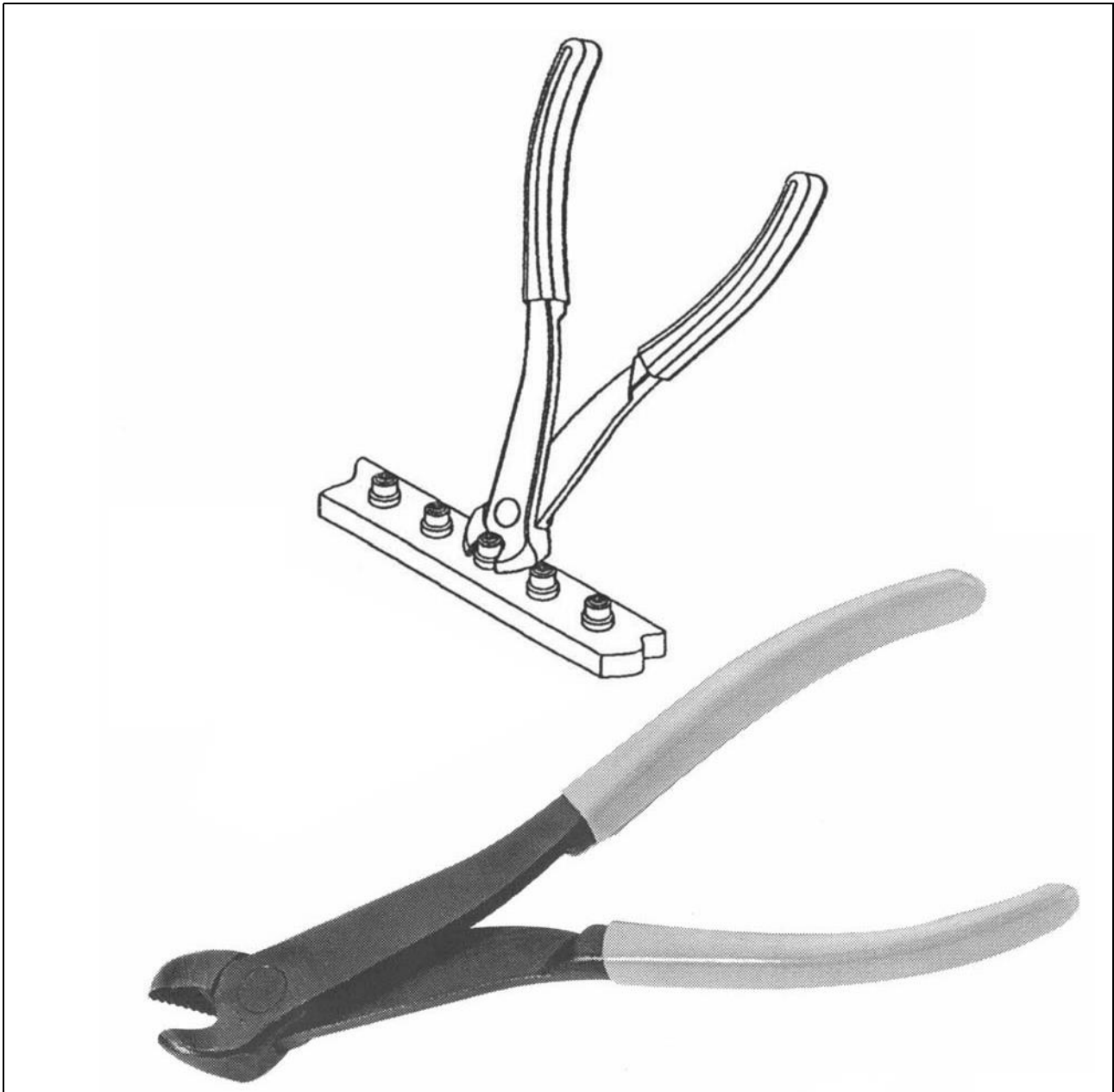
Art N° PART NO.	Guión DASH NO.	Diámetro pin PIN NOM. DIA.	A	C	D
<b>HLC1-5</b>	<b>-5</b>	<b>5/32"</b> (4,0 mm)	<b>5/8"</b> 15,88 mm	<b>3/4"</b> 19,05 mm	<b>1/2"</b> 12,70 mm
<b>HLC1-6</b>	<b>-6</b>	<b>3/16"</b> (4,8 mm)	<b>5/8"</b> 15,88 mm	<b>3/4"</b> 19,05 mm	<b>1/2"</b> 12,70 mm
<b>HLC1-8</b>	<b>-8</b>	<b>1/4"</b> (6,4 mm)	<b>13/16"</b> 20,64 mm	<b>3/4"</b> 19,05 mm	<b>11/16"</b> 17,46 mm
<b>HLC1-10</b>	<b>-10</b>	<b>5/16"</b> (8,0 mm)	---	<b>3/4"</b> 19,05 mm	<b>3/4"</b> 19,05 mm
<b>HLC1-12</b>	<b>-12</b>	<b>3/8"</b> (9,5 mm)	---	<b>7/8"</b> 22,23 mm	<b>7/8"</b> 22,23 mm



### REM100



Art N° PART NO.	Guión DASH NO.	Diámetro pin PIN NOM. DIA.	H	R	L	W
<b>REM100-56T</b>	<b>-5</b>	<b>5/32"</b> (4,0 mm)	<b>0.25</b> 6,35 mm	<b>0.28</b> 7,11 mm	<b>5.60</b> 142,2 mm	<b>0.42</b> 10,67 mm
<b>REM100-56T</b>	<b>-6</b>	<b>3/16"</b> (4,8 mm)	<b>0.25</b> 6,35 mm	<b>0.28</b> 7,11 mm	<b>5.60</b> 142,2 mm	<b>0.42</b> 10,67 mm
<b>REM100-8T</b>	<b>-8</b>	<b>1/4"</b> (6,4 mm)	<b>0.31</b> 7,87 mm	<b>0.35</b> 8,89 mm	<b>5.80</b> 147,3 mm	<b>0.55</b> 13,97 mm
<b>REM100-10T</b>	<b>-10</b>	<b>5/16"</b> (8,0 mm)	<b>0.38</b> 9,65 mm	<b>0.43</b> 10,92 mm	<b>6.90</b> 175,3 mm	<b>0.67</b> 17,02 mm
<b>REM100-12T</b>	<b>-12</b>	<b>3/8"</b> (9,5 mm)	<b>0.38</b> 9,65 mm	<b>0.55</b> 14,03 mm	<b>7.90</b> 200,7 mm	<b>0.75</b> 19,05 mm
<b>REM100-14T</b>	<b>-14</b>	<b>7/16"</b> (11,0 mm)	<b>0.50</b> 12,70 mm	<b>0.61</b> 15,49 mm	<b>9.90</b> 251,5 mm	<b>0.95</b> 24,13 mm

**Alicate de remoción de cuellos Hi-Lok**  
**HI-LOK COLLAR REMOVAL PLIER**

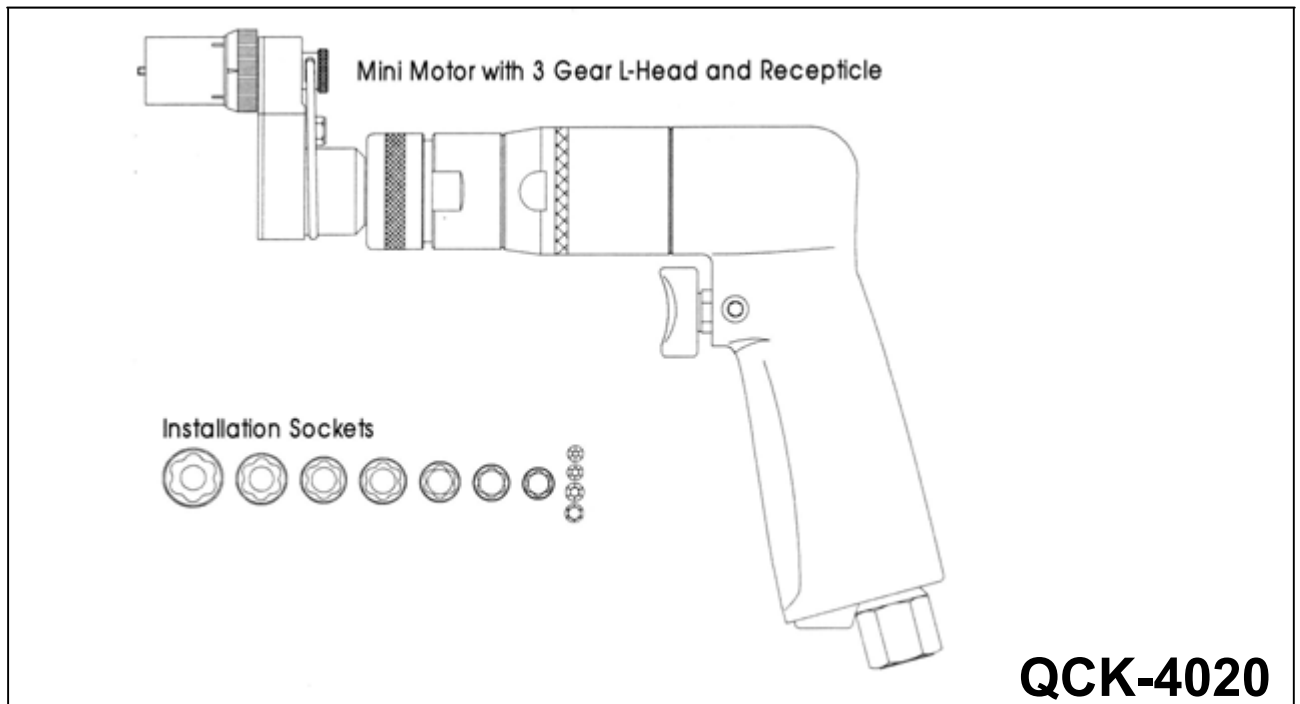


**Mango curvado que asegura una buena accesibilidad, recubierto de plástico**  
 Longitud aproximada 180mm

TAPERED GRIPPING SURFACE  
 HANDLE DESIGN ENSURE GOOD ACCESSIBILITY  
 PLASTIC COVERD HANDLES  
 OVERALL LENGTH APPR. 7.1/4 INCH

<b>Art N°</b> <b>PART NO.</b>	<b>Superficie agarre</b> <b>GRIPPING SURFACE</b>	<b>Recomendado para</b> <b>RECOMMEND FOR FOLLOWING MATERIALS</b>
<b>EH-3579</b>	<b>cruzado</b> <b>CROSS SERRATED</b> 	<b>materiales como aluminio, titanio y acero inoxidable</b> <b>ALL MATERIALS SUCH AS</b> <b>ALUMINIUM, TITANIUM AND STAINLESS STEEL</b>
<b>2979D-180</b>	<b>serrado</b> <b>SERRATED</b> 	<b>solo materials como aluminio y acero normal</b> <b>ONLY FOR SOFT MATERIALS SUCH AS</b> <b>ALUMINIUM AND MILD STEEL</b>

## Kit de instalación Hi-Lok HI-LOK INSTALLATION TOOL KIT



### Contenido/ CONTENTS:

<b>Mini atornillador neumático con cabeza en L y receptáculo para cuellos</b> PNEUM. MINI MOTOR WITH 3 GEAR L-HEAD AND RECEPTICLE FOR SOCKETS	<b>MQCLA43S-10-()</b>
--	-----------------------

**1 kit = 7 piezas**  
1 cpl. SET = 7 PCS

**QCSS22-43**

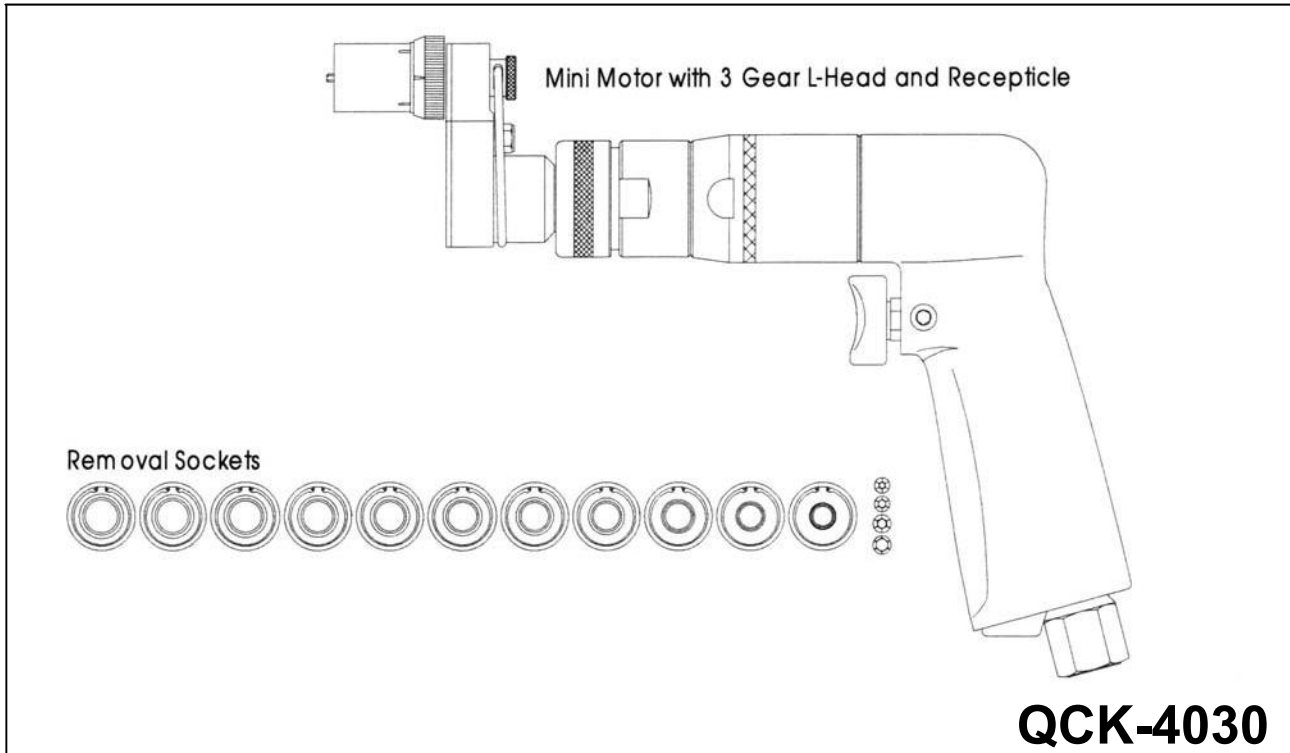
incl. 4 x QRK

con/EXIST OF:

Cuello de instalación INSTALLATION SOCKET	hexágono HEX SIZE	Llave hexagonal HEX KEY	
<b>QCHS218-10</b>	<b>7/32"</b> 5,56 mm	<b>QRK-5</b> (1/16")	
<b>QCHS250-10</b>	<b>1/4"</b> 6,35 mm	<b>QRK-6</b> (5/64")	
<b>QCHS281-10</b>	<b>9/32"</b> 7,14 mm	<b>QRK-8</b> (3/32")	
<b>QCHS312-10</b>	<b>5/16"</b> 7,94 mm	<b>QRK-10</b> (1/8")	
<b>QCHS343-10</b>	<b>11/32"</b> 8,73 mm		
<b>QCHS375-10</b>	<b>3/8"</b> 9,53 mm		
<b>QCHS437-10</b>	<b>7/16"</b> 11,11 mm		

**Longitud standard 25,4 mm ! STANDARD SOCKET LENGTH IS 1" !**

# Kit de remoción Hi-Lok HI-LOK REMOVAL TOOL KIT



## Contenido / CONTENTS:

Mini atornillador neumático con cabeza en L y receptáculo para cuellos  
PNEUM. MINI MOTOR WITH 3 GEAR L-HEAD AND RECEPTICLE FOR SOCKETS

**MQCLA43S-10-()**

1 kit = 11 piezas  
1 cpl. SET = 11 PCS  
**QCRSS23-43**  
incl. 4 x QRK  
con/EXIST OF:  
Cuello de remoción  
REMOVAL SOCKET

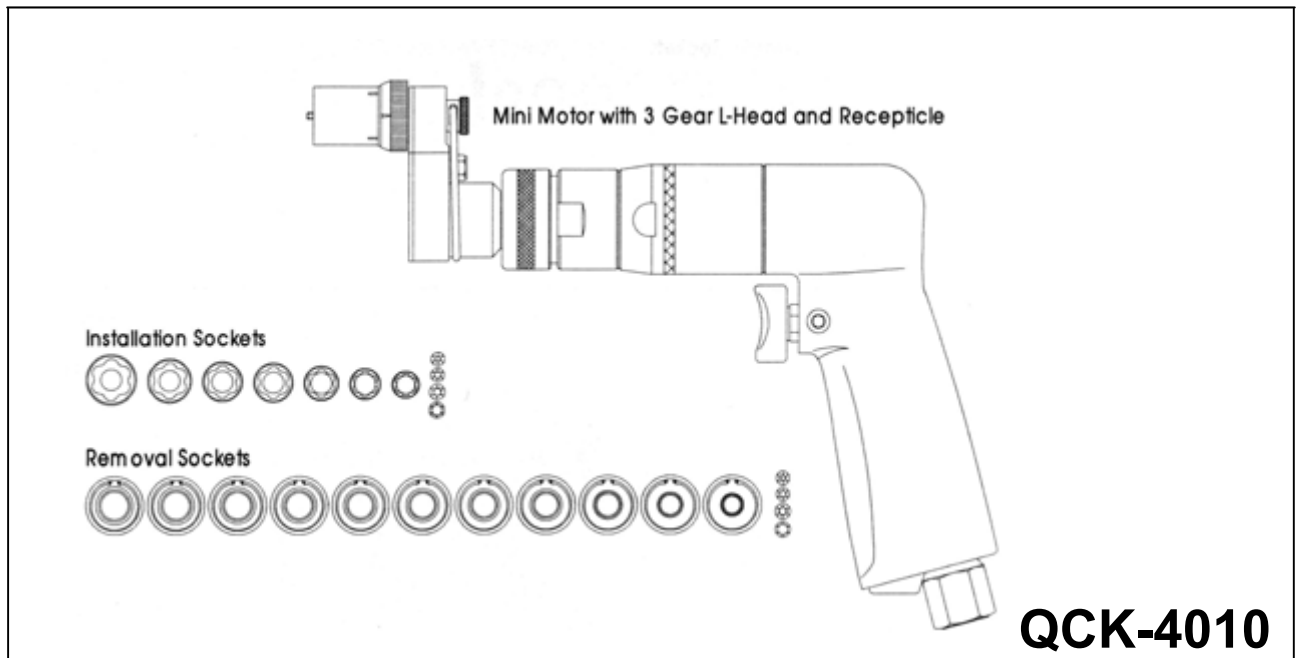
Agarre  
GRIP RANGE

Llave hexagonal  
HEX KEY

<b>QCHR235-10</b>	.235" 5,97 mm	<b>QRK-5</b> (1/16") <b>QRK-6</b> (5/64") <b>QRK-8</b> (3/32") <b>QRK-10</b> (1/8")
<b>QCHR255-10</b>	.255" 6,48 mm	
<b>QCHR275-10</b>	.275" 6,99 mm	
<b>QCHR295-10</b>	.295" 7,49 mm	
<b>QCHR315-10</b>	.315" 8,00 mm	
<b>QCHR335-10</b>	.335" 8,51 mm	
<b>QCHR355-10</b>	.355" 9,02 mm	
<b>QCHR375-10</b>	.375" 9,53 mm	
<b>QCHR395-10</b>	.395" 10,03 mm	
<b>QCHR415-10</b>	.415" 10,54 mm	
<b>QCHR435-10</b>	.435" 11,05 mm	
<b>QCHR455-10</b>	.455" 11,56 mm	

**Longitud standard 25,4mm STANDARD SOCKET LENGTH IS 1" !**

# Kit de instalación y remoción Hi-Lok HI-LOK INSTALLATION & REMOVAL TOOL KIT

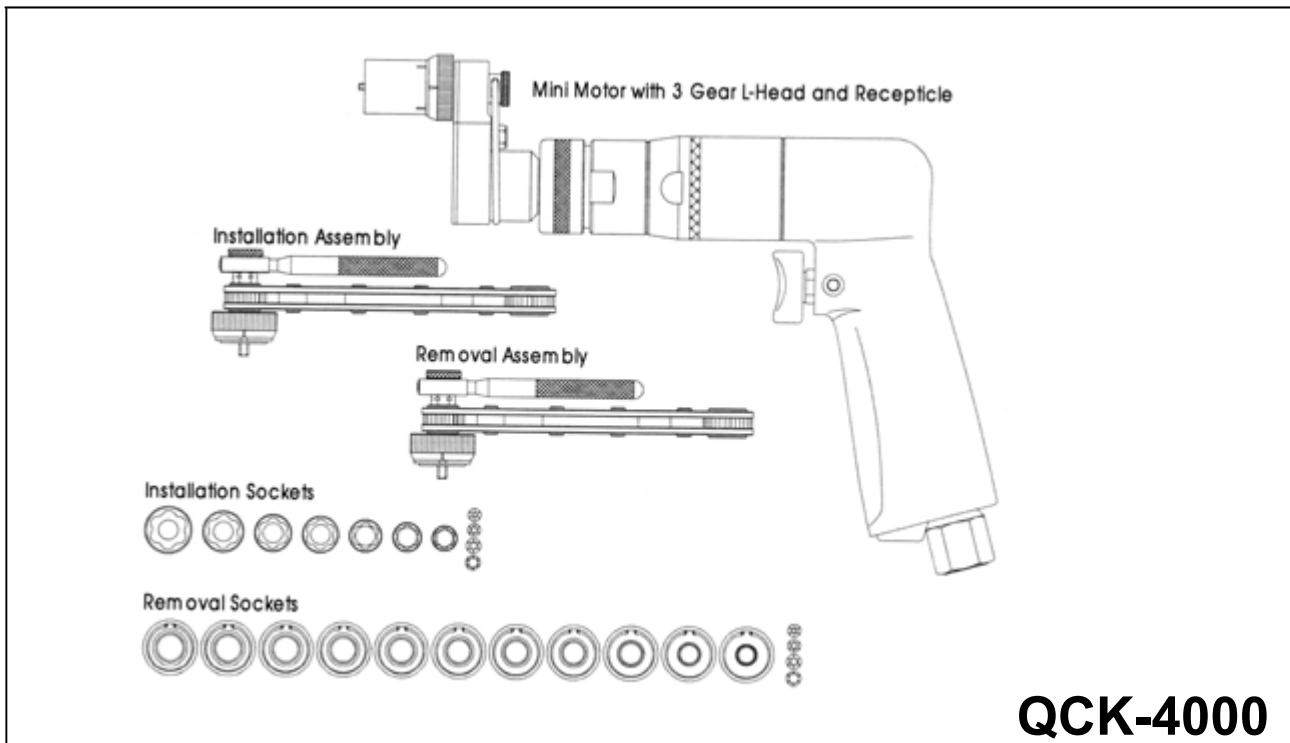


<b>Contenido / CONTENTS:</b>				
<b>Mini atornillador neumático con cabeza en L y receptáculo para cuellos</b> PNEUM. MINI MOTOR WITH 3 GEAR L-HEAD AND RECEPTICLE FOR SOCKETS				<b>MQCLA43S-10-()</b>
<b>1 kit = 7 Stück</b> 1 cpl. SET = 7 PCS		<b>1 kit = 11 Stück</b> 1 cpl. SET = 11 PCS		
<b>QCSS22-43</b> incl. 4 x QRK con/EXIST OF:		<b>QCRSS23-43</b> incl. 4 x QRK con/EXIST OF:		
<b>Cuello de instalación</b> INSTALLATION SOCKET	<b>Hexágono</b> HEX SIZE	<b>Cuello de remoción</b> REMOVAL SOCKET	<b>Agarre</b> GRIP RANGE	<b>Llave hexagonal</b> HEX KEY
<b>QCHS218-10</b>	7/32" 5,56 mm	<b>QCHR235-10</b>	.235" 5,97 mm .255" 6,48 mm	<b>QRK-5</b> (1/16")
<b>QCHS250-10</b>	1/4" 6,35 mm	<b>QCHR255-10</b>	.255" 6,48 mm .275" 6,99 mm	<b>QRK-6</b> (5/64")
<b>QCHS281-10</b>	9/32" 7,14 mm	<b>QCHR275-10</b>	.275" 6,99 mm .295" 7,49 mm	<b>QRK-8</b> (3/32")
<b>QCHS312-10</b>	5/16" 7,94 mm	<b>QCHR295-10</b>	.295" 7,49 mm .315" 8,00 mm	<b>QRK-10</b> (1/8")
<b>QCHS343-10</b>	11/32" 8,73 mm	<b>QCHR315-10</b>	.315" 8,00 mm .335" 8,51 mm	
<b>QCHS375-10</b>	3/8" 9,53 mm	<b>QCHR335-10</b>	.335" 8,51 mm .355" 9,02 mm	
<b>QCHS437-10</b>	7/16" 11,11 mm	<b>QCHR355-10</b>	.355" 9,02 mm .375" 9,53 mm	
		<b>QCHR375-10</b>	.375" 9,53 mm .395" 10,03 mm	
		<b>QCHR395-10</b>	.395" 10,03 mm .415" 10,54 mm	
		<b>QCHR415-10</b>	.415" 10,54 mm .435" 11,05 mm	
		<b>QCHR435-10</b>	.435" 11,05 mm .455" 11,56 mm	

**Longitud standard 25,4 mm STANDARD SOCKET LENGTH IS 1" !**

# Kit de instalación y remoción Hi-Lok

## HI-LOK INSTALLATION & REMOVAL TOOL KIT



### Contenido / CONTENTS:

Mini atornillador con cabeza en L y receptáculo para cuellos PNEUM. MINI MOTOR WITH 3 GEAR L-HEAD AND RECEPTICLE FOR SOCKETS	MQCLA43S-10-()
Herramienta de instalación manual con receptáculo para cuellos HAND-INSTALLATION TOOL WITH RECEPTICLE FOR SOCKETS	QCHA932
Herramienta de remoción manual con receptáculo para cuellos HAND-REMOVAL TOOL WITH RECEPTICLE FOR SOCKETS	QCHRA932

1 kit = 7 piezas 1 cpl. SET = 7 PCS		1 kit = 11 piezas 1 cpl. SET = 11 PCS	
<b>QCSS22-43</b> incl. 4 x QRK con/EXIST OF:		<b>QCRSS23-43</b> incl. 4 x QRK con/EXIST OF:	
<b>Cuello de instalación</b> INSTALLATION SOCKET	<b>Hexágono</b> HEX SIZE	<b>Cuello de remoción</b> REMOVAL SOCKET	<b>Agarre</b> GRIP RANGE
			<b>Llave hexagonal</b> HEX KEY
<b>QCHS218-10</b>	7/32" 5,56 mm	<b>QCHR235-10</b>	.235" 5,97 mm .255" 6,48 mm
<b>QCHS250-10</b>	1/4" 6,35 mm	<b>QCHR255-10</b>	.255" 6,48 mm .275" 6,99 mm
<b>QCHS281-10</b>	9/32" 7,14 mm	<b>QCHR275-10</b>	.275" 6,99 mm .295" 7,49 mm
<b>QCHS312-10</b>	5/16" 7,94 mm	<b>QCHR295-10</b>	.295" 7,49 mm .315" 8,00 mm
<b>QCHS343-10</b>	11/32" 8,73 mm	<b>QCHR315-10</b>	.315" 8,00 mm .335" 8,51 mm
<b>QCHS375-10</b>	3/8" 9,53 mm	<b>QCHR335-10</b>	.335" 8,51 mm .355" 9,02 mm
<b>QCHS437-10</b>	7/16" 11,11 mm	<b>QCHR355-10</b>	.355" 9,02 mm .375" 9,53 mm
		<b>QCHR375-10</b>	.375" 9,53 mm .395" 10,03 mm
		<b>QCHR395-10</b>	.395" 10,03 mm .415" 10,54 mm
		<b>QCHR415-10</b>	.415" 10,54 mm .435" 11,05 mm
		<b>QCHR435-10</b>	.435" 11,05 mm .455" 11,56 mm

**Longitud standard 25,4 mm STANDARD SOCKET LENGTH IS 1" !**

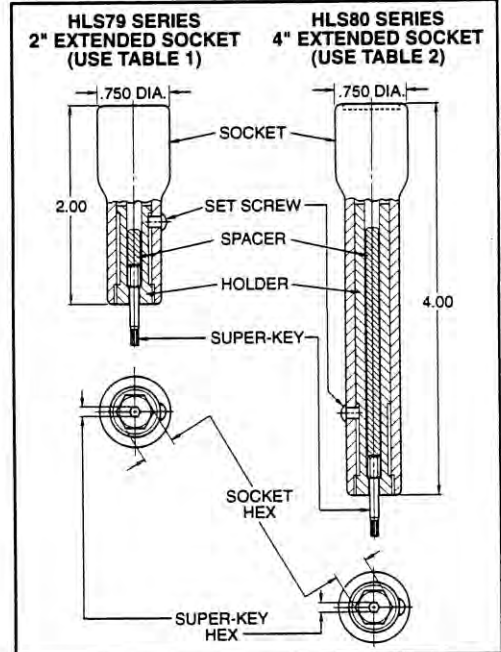
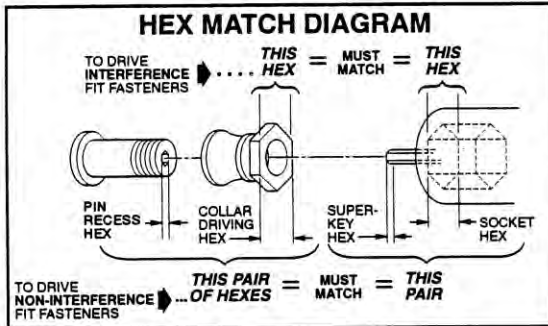
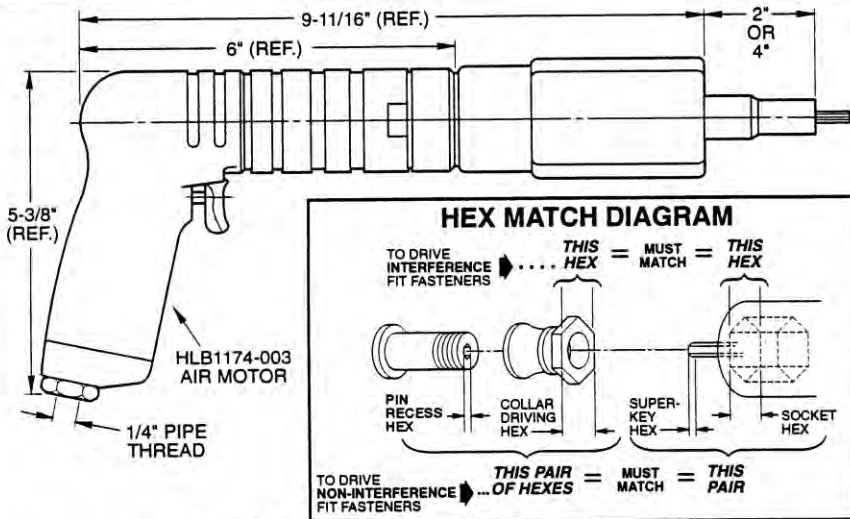


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA1051

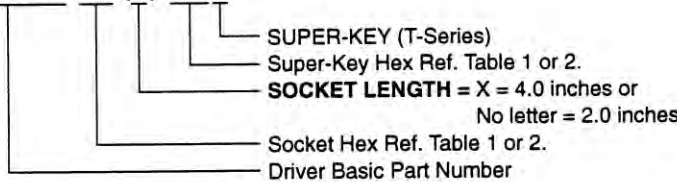
## STRAIGHT DRIVER ASSEMBLY WITH EXTENDED SOCKET AND SUPER-KEY™ (T-Series)



**ORDERING INFORMATION**

1. MATCH PIN and COLLAR HEXES with SUPER-KEY HEX and SOCKET HEX. Reference HEX MATCH DIAGRAM.
2. See TABLES 1 & 2 for corresponding COMPLETE DRIVER ASSEMBLY PART NO.
3. Example of COMPLETE DRIVER ASSEMBLY PART NO.

**\*HLA1051-312(X)-078T**



TECHNICAL DATA	
Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING</b> (Motor)	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.75
Air Consumption	25 cfm
Weight	3.5 lb

**TABLE 1**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO. WITH HLS79 SERIES 2\"/>
3/16	1/16	HLA1051-187-062T
7/32		HLA1051-218-062T
1/4		HLA1051-250-062T
9/32		HLA1051-281-062T
5/16		HLA1051-312-062T
11/32		HLA1051-343-062T
7/32	5/64	HLA1051-218-078T
1/4		HLA1051-250-078T
9/32		HLA1051-281-078T
5/16		HLA1051-312-078T
11/32		HLA1051-343-078T
3/8		HLA1051-375-078T
5/16	3/32	HLA1051-312-094T
11/32		HLA1051-343-094T
3/8		HLA1051-375-094T
7/16		HLA1051-437-094T
*3/8		HLA1051-375-125T
*7/16		HLA1051-437-125T
*7/16	5/32	HLA1051-437-156T
*1/2		HLA1051-500-156T

**TABLE 2**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO. WITH HLS79 SERIES 4\"/>
3/16	1/16	HLA1051-187X-062T
7/32		HLA1051-218X-062T
1/4		HLA1051-250X-062T
9/32		HLA1051-281X-062T
5/16		HLA1051-312X-062T
11/32		HLA1051-343X-062T
7/32	*5/64	HLA1051-218X-078T
1/4		HLA1051-250X-078T
9/32		HLA1051-281X-078T
*5/16		*HLA1051-312X-078T
11/32		HLA1051-343X-078T
3/8		HLA1051-375X-078T
5/16	3/32	HLA1051-312X-094T
11/32		HLA1051-343X-094T
3/8		HLA1051-375X-094T
7/16		HLA1051-437X-094T
*3/8		HLA1051-375X-125T
*7/16		HLA1051-437X-125T
*7/16	5/32	HLA1051-437X-156T
*1/2		HLA1051-500X-156T

\* Super-Key™ not available in these sizes, standard hex tin only.

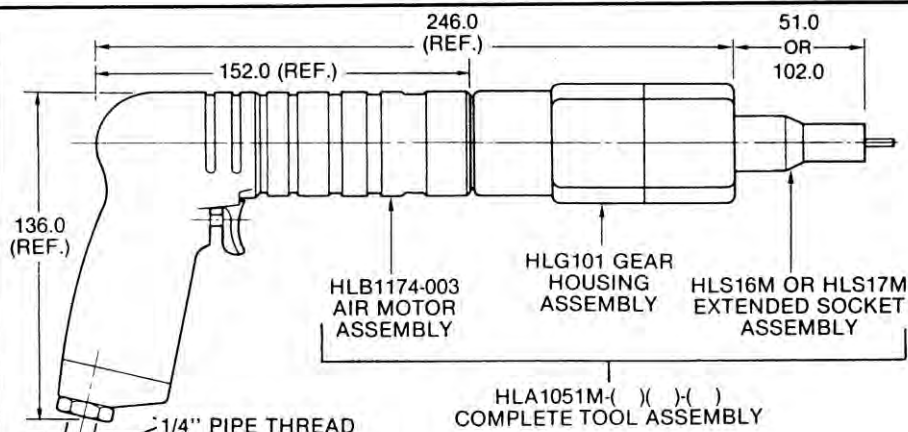


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE® FASTENING SYSTEMS

# HLA1051M

## METRIC STRAIGHT TOOL WITH EXTENDED SOCKET



**ORDERING INFORMATION**

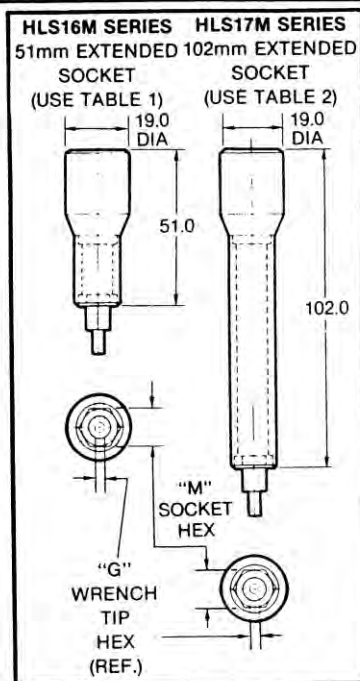
1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. Determine length (either 51mm or 102mm) of extended socket assembly desired.
3. See Table 1 or Table 2 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions. Determine Complete Tool Assembly Part Number.

4. Example of Complete Tool Assembly Part Number:

HLA1051M-8 X-2.03

- Second dash number indicates "G" wrench tip hex to match pin recess hex. Ref. Table 1. or 2. (2.03).
- "X" indicates 102mm extended socket assembly desired. (Table 2)
- No letter indicates 51mm extended socket assembly desired. (Table 1)
- First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1 or 2. (-8 = 8mm).
- Basic part number includes: HLB1174-003 Air Motor HLG101 Gear Housing Assembly, and either a HLS16M or HLS17M Extended Socket Assembly.

5. Refer to HLS16M (51mm) or HLS17M (102mm) catalog pages for complete parts breakdown of extended socket assemblies.
6. HLG101 Gear Housing Assembly, HLS16M and HLS17M Extended Socket Assemblies may be ordered separately.



**TECHNICAL DATA**

Operating Pressure	6.2 BAR
<b>MAXIMUM TORQUE RATING</b>	30.5 N.M. at 6.2 BAR
Socket Speed	600 rpm
Horsepower Rating	0.75
Air Consumption	708 LTR/MIN
Weight	1.6 Kg

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	"G" WRENCH TIP HEX (Matches Pin Recess Hex) (mm)	COMPLETE TOOL ASSEMBLY PART NO. WITH HLS16M SERIES 51mm EXTENDED SOCKET
5	1.62	HLA1051M-5-1.62
8		HLA1051M-8-1.62
6	2.03	HLA1051M-6-2.03
8		HLA1051M-8-2.03
9.5		HLA1051M-9.5-2.03
10		HLA1051M-10-2.03
11	2.43	HLA1051M-11-2.03
7		HLA1051M-7-2.43
11		HLA1051M-11-2.43
13	3.26	HLA1051M-13-2.43
9.5		HLA1051M-9.5-3.26
13		HLA1051M-13-3.26
11	4.06	HLA1051M-11-4.06

**TABLE 2**

"M" SOCKET HEX (Matches Collar Driving Hex)	"G" WRENCH TIP HEX (Matches Pin Recess Hex) (mm)	COMPLETE TOOL ASSEMBLY PART NO. WITH HLS17M SERIES 102mm EXTENDED SOCKET
5	1.62	HLA1051M-5X-1.62
8		HLA1051M-8X-1.62
6	2.03	HLA1051M-6X-2.03
8		HLA1051M-8X-2.03
9.5		HLA1051M-9.5X-2.03
10		HLA1051M-10X-2.03
11	2.43	HLA1051M-11X-2.03
7		HLA1051M-7X-2.43
11		HLA1051M-11X-2.43
13	3.26	HLA1051M-13X-2.43
9.5		HLA1051M-9.5X-3.26
13		HLA1051M-13X-3.26
11	4.06	HLA1051M-11X-4.06

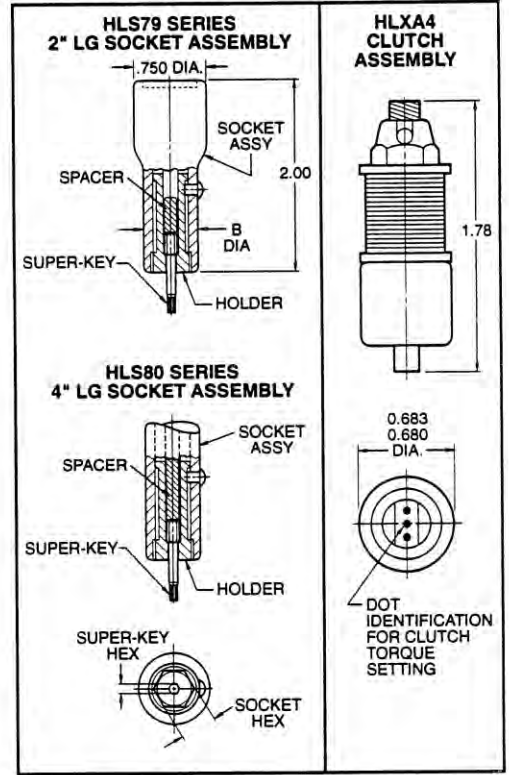
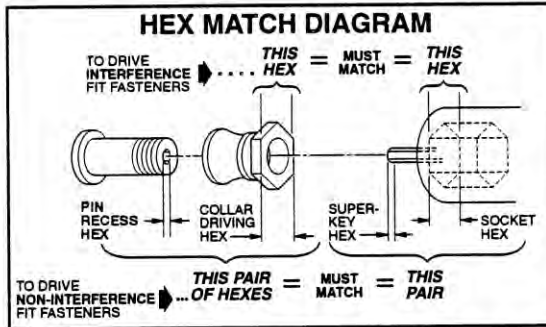
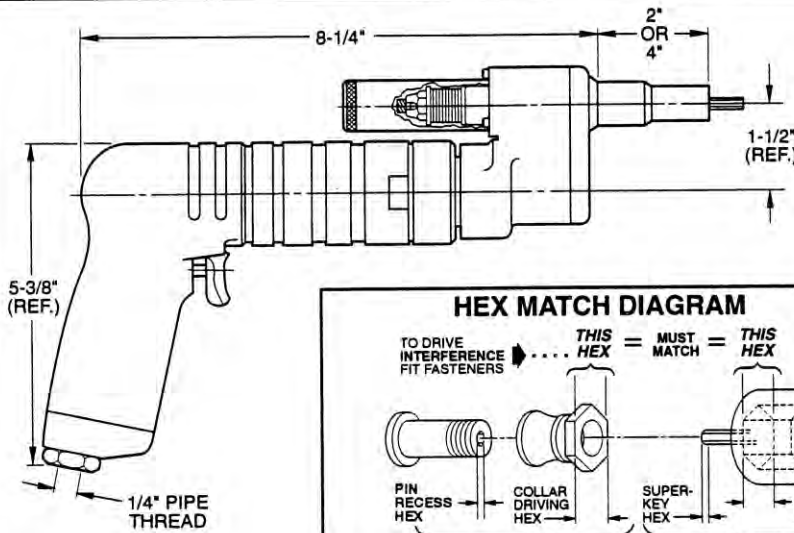


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA1066

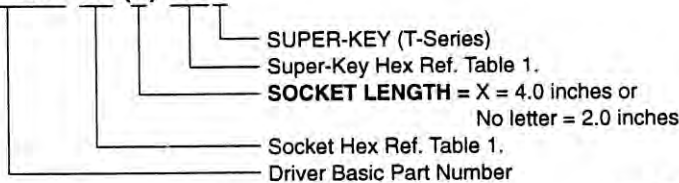
## OFFSET DRIVER ASSEMBLY WITH CLUTCH, EXTENDED SOCKET AND SUPER-KEY™ (T-Series)



### ORDERING INFORMATION

1. MATCH PIN and COLLAR HEXES with SUPER-KEY HEX and SOCKET HEX. Reference **HEX MATCH DIAGRAM**.
2. See **TABLE 1** for corresponding **COMPLETE DRIVER ASSEMBLY PART NO.**
3. Example of **COMPLETE DRIVER ASSEMBLY PART NO.**

**\*HLA1066-312(X)-078T**



### TECHNICAL DATA

Operating Pressure .....	90 psia
<b>MAXIMUM TORQUE RATING</b> .....	270 in. lb
(Motor)	at 90 psia
Socket Speed .....	600 rpm
Horsepower Rating .....	0.75
Air Consumption .....	25 cfm
Weight .....	3.5 lb

**TABLE 1**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE TOOL ASSEMBLY PART NO.		B DIA.	HLAX4 CLUTCH ASSEMBLIES		
		WITH HLS79 SERIES 2" EXTENDED SOCKET	WITH HLS80 SERIES 4" EXTENDED SOCKET		PART NO.	DOT IDENTIFICATION	TORQUE SETTING
1/4	1/16	HLA1066-250-062T	HLA1066-250X-062T	0.468	HLXA4-5	•	8-10 IN. LB
9/32		HLA1066-281-062T	HLA1066-281X-062T	0.468			
5/16		HLA1066-312-062T	HLA1066-312X-062T	0.500			
11/32		HLA1066-343-062T	HLA1066-343X-062T	0.500			
1/4	*5/64	HLA1066-250-078T	HLA1066-250X-078T	0.468	HLXA4-6	• •	18-20 IN. LB
9/32		HLA1066-281-078T	HLA1066-281X-078T	0.468			
*5/16		HLA1066-312-078T	*HLA1066-312X-078T	0.500			
11/32		HLA1066-343-078T	HLA1066-343X-078T	0.500			
3/8	3/32	HLA1066-375-078T	HLA1066-375X-078T	0.550	HLXA4-8	• • •	30-32 IN. LB
5/16		HLA1066-312-094T	HLA1066-312X-094T	0.500			
11/32		HLA1066-343-094T	HLA1066-343X-094T	0.500			
3/8		HLA1066-375-094T	HLA1066-375X-094T	0.550			
7/16	1/8	HLA1066-437-094T	HLA1066-437X-094T	0.625	HLXA4-1012	• • • •	55-60 IN. LB
3/8		*HLA1066-375-125T	*HLA1066-375X-125T	0.550			
7/16		*HLA1066-437-125T	*HLA1066-437X-125T	0.625			

\* Super-Key not available in these sizes, standard hex tip only.

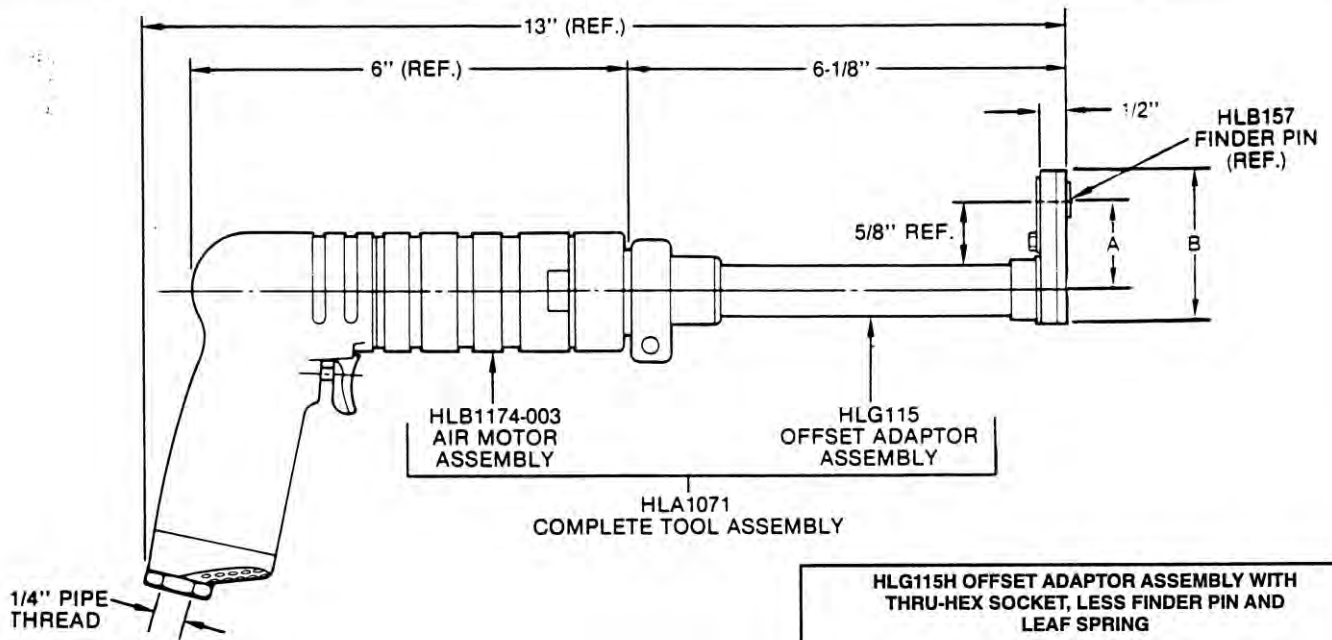


Installation Tooling

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA1071

## 1 INCH OFFSET DRIVER ASSEMBLY WITH INTERFERENCE FIT FLUSH SOCKET



### ORDERING INFORMATION

- Determine collar driving hex dimensions of the fasteners to be installed.
- See Table 1 for "M" socket hex to match collar driving hex dimensions. Determine Complete Tool Assembly Part Number.
- Example of Complete Tool Assembly Part Number:  
**HLA1071-312**  
First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (312 = 5/16").  
Basic part number includes: HLB1174-003 Air Motor Assembly and HLG115 Offset Adaptor Assembly.
- See Table 2 for Complete Tool Assembly Part Numbers to obtain an Offset Adaptor Assembly featuring a thru-hex socket, less finder pin and leaf spring.
- Example of Complete Tool Assembly Part Number that has a thru-hex socket:  
**HLA1071H-312**  
First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 2. (312 = 5/16").  
Basic part number plus "H" indicates HLB1174-003 Air Motor Assembly and HLG115H Offset Adaptor Assembly, which has a thru-hex socket, less finder pin and leaf spring.

Collar Hex Size	A	B	C
	C to C	OVERALL	EDGE DISTANCE
up to 3/8	1.375	2.330	0.431
7/16 and up	1.420	2.450	0.500

TABLE 1

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	OFFSET ADAPTOR ASSEMBLY PART NO. (REF.)	OFFSET ADAPTOR ASSEMBLY PART NO. (REF.)
5/16	HLA1071-312	HLG115-312	HLB157-312
11/32	HLA1071-343	HLG115-343	HLB157-343
3/8	HLA1071-375	HLG115-375	HLB157-375
7/16	HLA1071-437	HLG115-437	HLB157-437

\* "Super-Key" not available in these sizes, standard hex tip only.

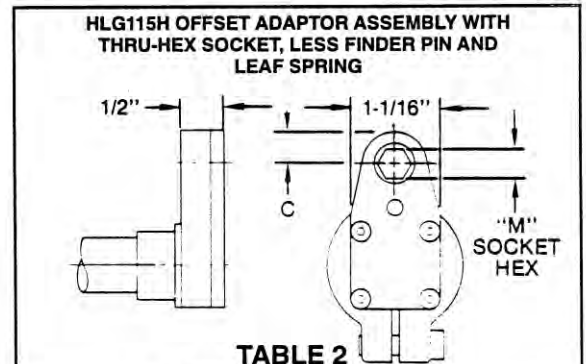


TABLE 2

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	OFFSET ADAPTOR ASSEMBLY PART NO. (REF.)
5/16	HLA1071H-312	HLG115H-312
11/32	HLA1071H-343	HLG115H-343
3/8	HLA1071H-375	HLG115H-375
7/16	HLA1071H-437	HLG115H-437

### TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.75
Air Consumption	25 cfm
Weight	3.5 lb

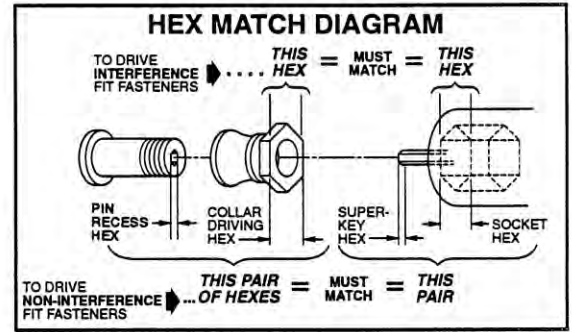
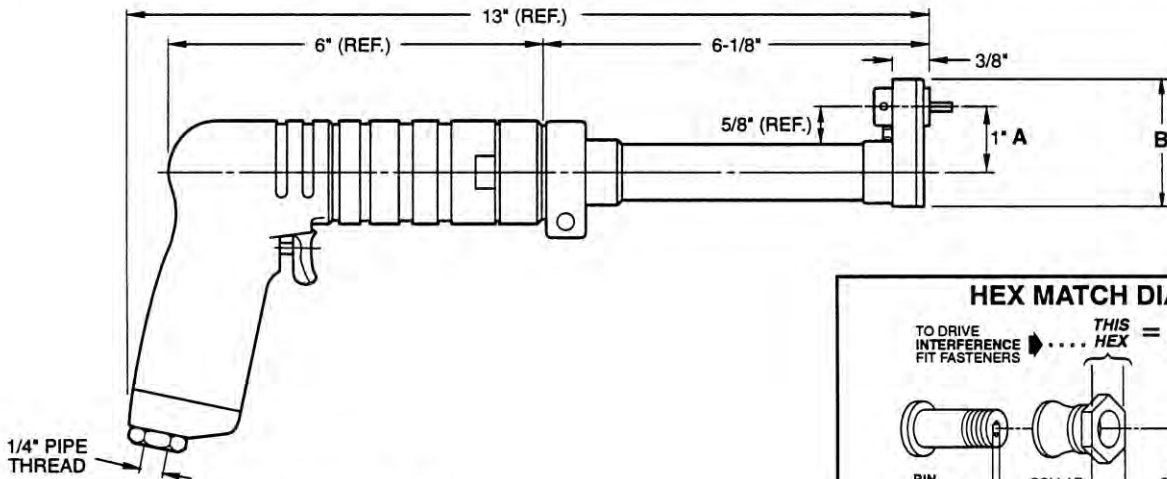


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA1072

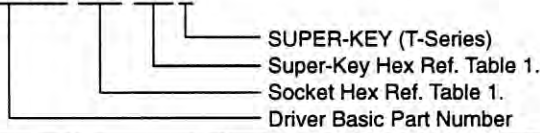
**1 INCH OFFSET DRIVER ASSEMBLY  
WITH THIN FLUSH SOCKET  
AND SUPER-KEY™ (T-Series)**



**ORDERING INFORMATION**

- MATCH PIN** and **COLLAR HEXES** with **SUPER-KEY HEX** and **SOCKET HEX**. Reference **HEX MATCH DIAGRAM**.
- See **TABLE 1** for corresponding **COMPLETE DRIVER ASSEMBLY PART NO.**
- Example of **COMPLETE DRIVER ASSEMBLY PART NO.**

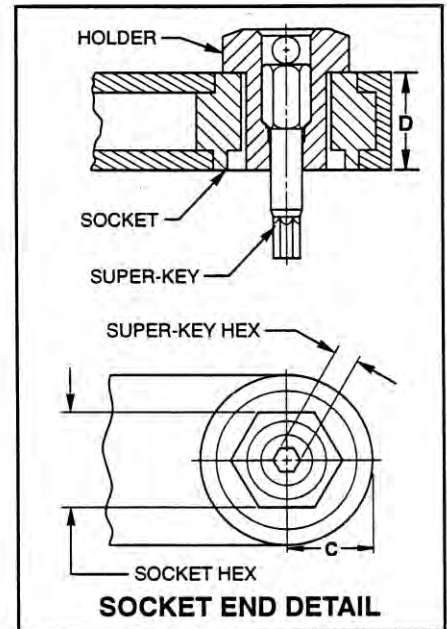
**\*HLA1072-312-078T**



Collar Hex Size	A C to C	B Overall	C Edge Dist.	D Width
up to 3/8	1.375	2.338	0.437	0.375
7/16 and up	1.420	2.418	0.470	0.375

**TABLE**

COLLAR DRIVING HEX (Matches)	PIN RECESS HEX (Matches)	COMPLETE DRIVER ASSEMBLY	OFFSET ADAPTOR AND SOCKET ASSEMBLY
3/16	1/16	HLA1072-187-062T	HLG137-187-062T
7/32		HLA1072-218-062T	HLG137-218-062T
1/4		HLA1072-250-062T	HLG137-250-062T
9/32		HLA1072-281-062T	HLG137-281-062T
5/16		HLA1072-312-062T	HLG137-312-062T
11/32	* 5/64	HLA1072-343-062T	HLG137-343-062T
7/32		HLA1072-218-078T	HLG137-218-078T
1/4		HLA1072-250-078T	HLG137-250-078T
9/32		HLA1072-281-078T	HLG137-281-078T
* 5/16		* HLA1072-312-078T	HLG137-312-078T
11/32		HLA1072-343-078T	HLG137-343-078T
3/8		HLA1072-375-078T	HLG137-375-078T
6/16	3/32	HLA1072-312-094T	HLG137-312-094T
11/32		HLA1072-343-094T	HLG137-343-094T
3/8		HLA1072-375-094T	HLG137-375-094T
7/16		HLA1072-437-094T	HLG137-437-094T
3/8	1/8	HLA1072-375-125T	HLG137-375-125T
7/16		HLA1072-437-125T	HLG137-437-125T



**TECHNICAL DATA**

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.72
Air Consumption	25 cfm
Weight	3 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

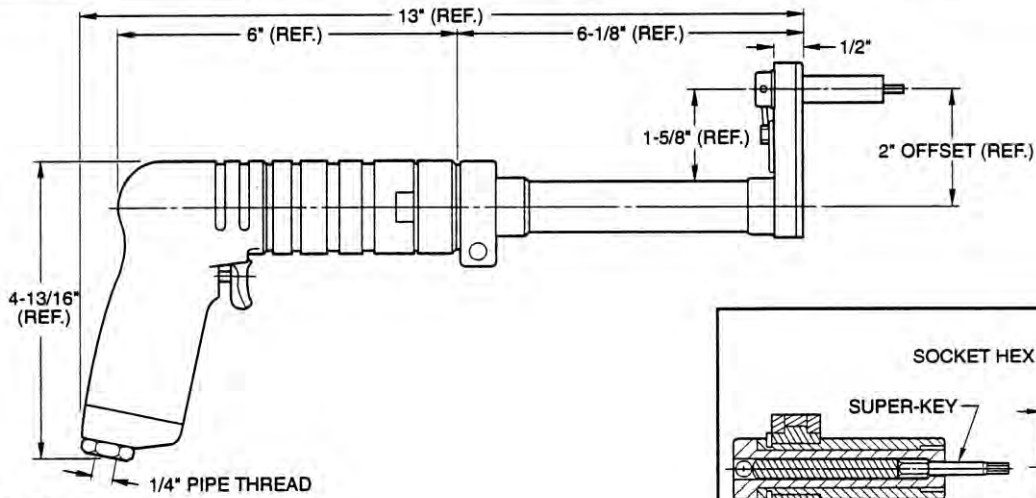


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA1076

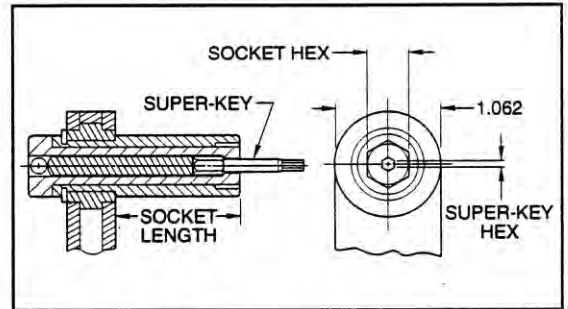
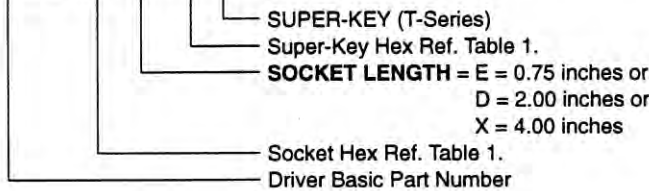
**2 INCH OFFSET DRIVER ASSEMBLY  
WITH MULTI-LENGTH SOCKET  
AND SUPER-KEY™ (T-Series)**



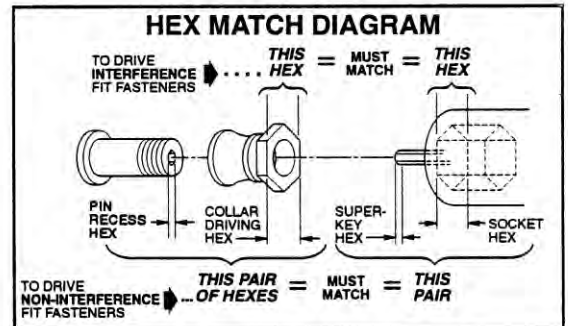
**ORDERING INFORMATION**

1. **MATCH PIN** and **COLLAR HEXES** with **SUPER-KEY HEX** and **SOCKET HEX**. Reference **HEX MATCH DIAGRAM**.
2. See **TABLE 1** for corresponding **COMPLETE DRIVER ASSEMBLY PART NO.**
3. Example of **COMPLETE DRIVER ASSEMBLY PART NO.**

**\*HLA1076-312(E)-078T**



**HLS76-( )-( )T SOCKET ASSY**



**TABLE 1**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	OFFSET ADAPTOR AND SOCKET ASSEMBLY PART NO.	EXTENDED SOCKET ASSEMBLY PART NO.	
3/16	1/16	HLA1076-187( )-062T	HLG321-187( )-062T	HLS76-187( )-062T	
7/32		HLA1076-218( )-062T	HLG321-218( )-062T	HLS76-218( )-062T	
1/4		HLA1076-250( )-062T	HLG321-250( )-062T	HLS76-250( )-062T	
9/32		HLA1076-281( )-062T	HLG321-281( )-062T	HLS76-281( )-062T	
5/16		HLA1076-312( )-062T	HLG321-312( )-062T	HLS76-312( )-062T	
11/32	*5/64	HLA1076-343( )-062T	HLG321-343( )-062T	HLS76-343( )-062T	
7/32		HLA1076-218( )-078T	HLG321-218( )-078T	HLS76-218( )-078T	
1/4		HLA1076-250( )-078T	HLG321-250( )-078T	HLS76-250( )-078T	
9/32		HLA1076-281( )-078T	HLG321-281( )-078T	HLS76-281( )-078T	
*5/16		*HLA1076-312( )-078T	HLG321-312( )-078T	HLS76-312( )-078T	
11/32		HLA1076-343( )-078T	HLG321-343( )-078T	HLS76-343( )-078T	
3/8		HLA1076-375( )-078T	HLG321-375( )-078T	HLS76-375( )-078T	
5/16		3/32	HLA1076-312( )-094T	HLG321-312( )-094T	HLS76-312( )-094T
11/32			HLA1076-343( )-094T	HLG321-343( )-094T	HLS76-343( )-094T
3/8			HLA1076-375( )-094T	HLG321-375( )-094T	HLS76-375( )-094T
7/16	HLA1076-437( )-094T		HLG321-437( )-094T	HLS76-437( )-094T	
3/8	HLA1076-375( )-125T		HLG321-375( )-125T	HLS76-375( )-125T	
7/16	1/8	HLA1076-437( )-125T	HLG321-437( )-125T	HLS76-437( )-125T	

**TABLE 2**

TECHNICAL DATA	
Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.75
Air Consumption	25 cfm
Weight	3 lb

\* Super-Key™ not available in these sizes, standard hex tip only.



**Installation Tooling**

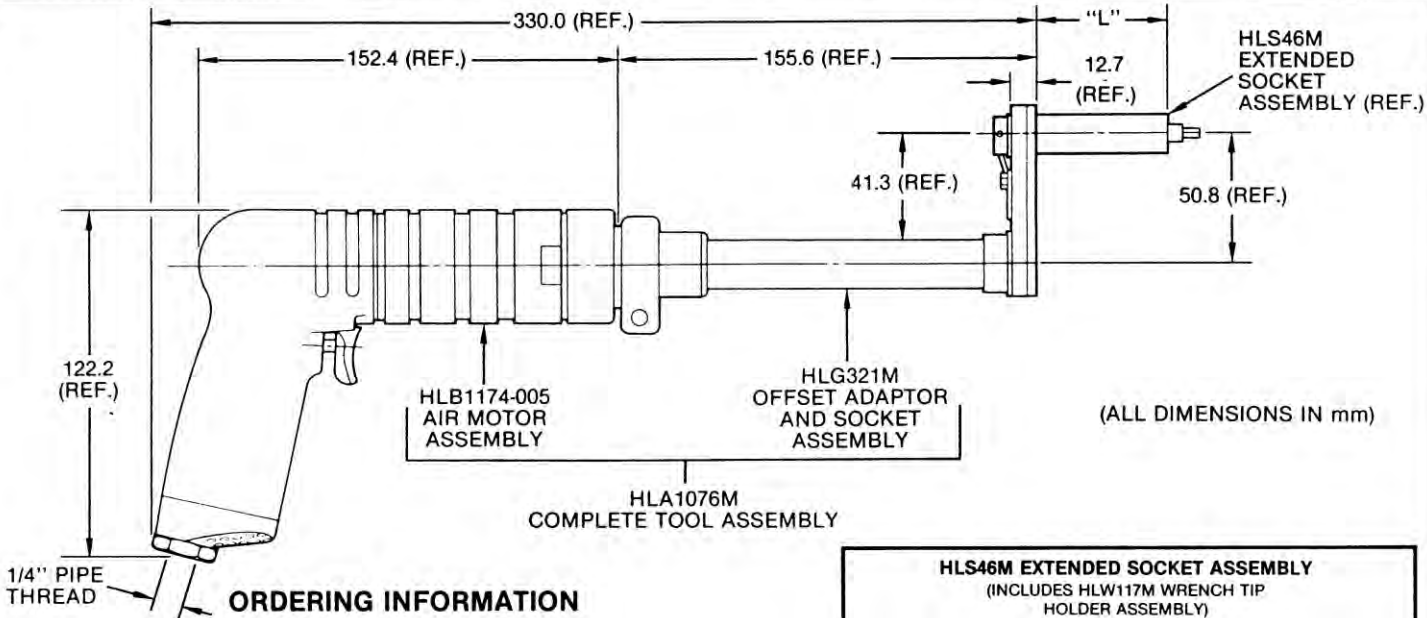
HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA1076M

**METRIC 51 MM**

**OFFSET DRIVER ASSEMBLY**

**WITH MULTI-LENGTH EXTENDED SOCKET**



**ORDERING INFORMATION**

1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions.
3. See Table 2 for proper code letter representing desired "L" extended socket length.
4. Example of Complete Tool Assembly Part Number:

HLA1076M-8D-2.03

- Second dash number indicates "G" wrench tip hex to match pin recess hex. Ref. Table 1. (2.03).
- Letter following first dash number indicates "L" extended socket length. Ref. Table 2. (D = 51mm).
- First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1 (-8 = 8mm).
- Basic part number HLA1076M includes: HLB1174-005 Air Motor Assembly, HLG321M Offset Adaptor & Socket Assembly with HLS46M Multi-Length Extended Socket.

**HLS46M EXTENDED SOCKET ASSEMBLY**  
(INCLUDES HLW117M WRENCH TIP HOLDER ASSEMBLY)

**TABLE 2**

CODE	"L" EXTENDED SOCKET LENGTH (mm)
E	19
D	51
X	102

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex) (mm)	"G" WRENCH TIP HEX (Matches Pin Recess Hex) (mm)	COMPLETE TOOL ASSEMBLY PART NO.	OFFSET ADAPTOR & ADAPTOR ASSEMBLY PART NO. (REF.)	EXTENDED SOCKET ASSEMBLY PART NO.
5	1.62	HLA1076M-5( )-1.62	HLG321M-5( )-1.62	HLS46M-5( )-1.62
8		HLA1076M-8( )-1.62	HLG321M-8( )-1.62	HLS46M-8( )-1.62
6		HLA1076M-6( )-2.03	HLG321M-6( )-2.03	HLS46M-6( )-2.03
8	2.03	HLA1076M-8( )-2.03	HLG321M-8( )-2.03	HLS46M-8( )-2.03
9.5		HLA1076M-9.5( )-2.03	HLG321M-9.5( )-2.03	HLS46M-9.5( )-2.03
10		HLA1076M-10( )-2.03	HLG321M-10( )-2.03	HLS46M-10( )-2.03
11	2.43	HLA1076M-11( )-2.03	HLG321M-11( )-2.03	HLS46M-11( )-2.03
7		HLA1076M-7( )-2.43	HLG321M-7( )-2.43	HLS46M-7( )-2.43
11		HLA1076M-11( )-2.43	HLG321M-11( )-2.43	HLS46M-11( )-2.43
13	3.26	HLA1076M-13( )-2.43	HLG321M-13( )-2.43	HLS46M-13( )-2.43
9.5		HLA1076M-9.5( )-3.26	HLG321M-9.5( )-3.26	HLS46M-9.5( )-3.26
13		HLA1076M-13( )-3.26	HLG321M-13( )-3.26	HLS46M-13( )-3.26
11	4.06	HLA1076M-11( )-4.06	HLG321M-11( )-4.06	HLS46M-11( )-4.06

**TECHNICAL DATA**

Operating Pressure ..... 6.2 BAR  
**MAXIMUM TORQUE RATING** ..... 30.5 N.M.  
 at 6.2 BAR  
 Socket Speed ..... 600 rpm  
 Horsepower Rating ..... 0.75  
 Air Consumption ..... 708 LTR/MIN  
 Weight ..... 1.6 Kg

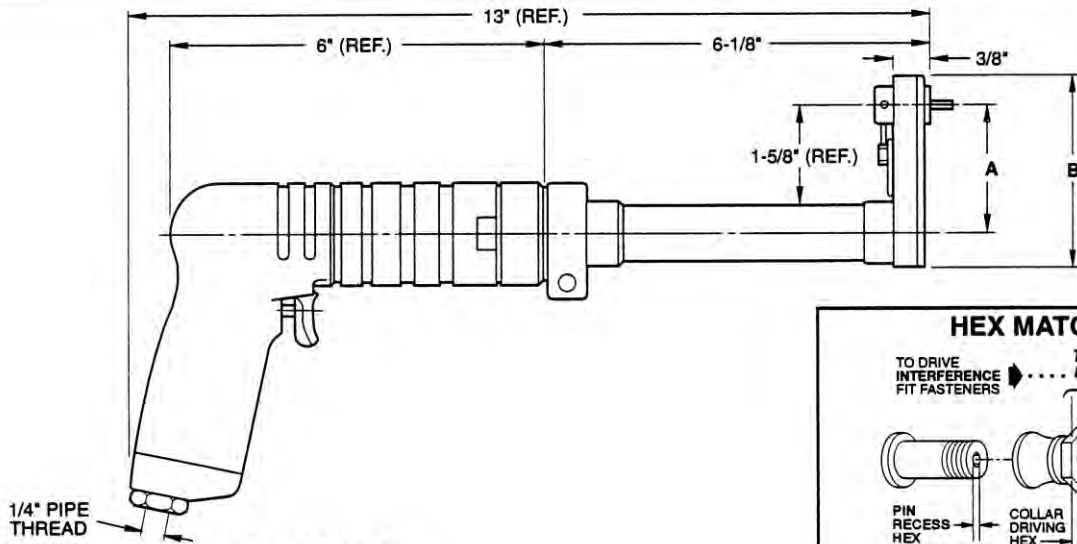


Installation Tooling

HI-LITE®, HI-LOK®, HI-TIGUE® FASTENING SYSTEMS

# SUPER HLA1079

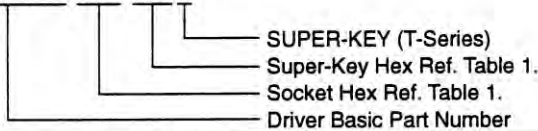
2 INCH OFFSET DRIVER ASSEMBLY  
WITH THIN FLUSH SOCKET  
AND SUPER-KEY™ (T-Series)



## ORDERING INFORMATION

1. MATCH PIN and COLLAR HEXES with SUPER-KEY HEX and SOCKET HEX. Reference HEX MATCH DIAGRAM.
2. See TABLE 1 for corresponding COMPLETE DRIVER ASSEMBLY PART NO.
3. Example of COMPLETE DRIVER ASSEMBLY PART NO.

### \*HLA1079-312-078T

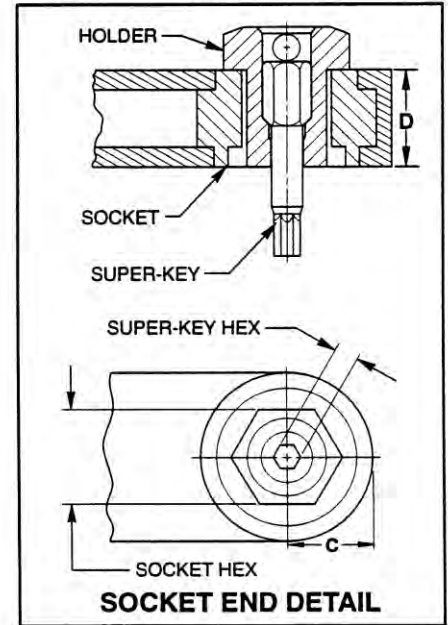
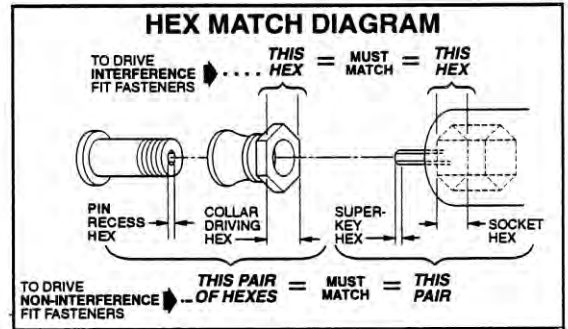


Collar Hex Size	A C to C	B Overall	C Edge Dist.	D Width
up to 3/8	2.210	3.175	0.431	0.375
7/16 and up	2.250	3.254	0.470	0.375

TABLE 1

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	OFFSET ADAPTOR AND SOCKET ASSEMBLY PART NO.
3/16	1/16	HLA1079-187-062T	HLG148-187-062T
7/32		HLA1079-218-062T	HLG148-218-062T
1/4		HLA1079-250-062T	HLG148-250-062T
9/32		HLA1079-281-062T	HLG148-281-062T
5/16		HLA1079-312-062T	HLG148-312-062T
11/32		HLA1079-343-062T	HLG148-343-062T
7/32	*5/64	HLA1079-218-078T	HLG148-218-078T
1/4		HLA1079-250-078T	HLG148-250-078T
9/32		HLA1079-281-078T	HLG148-281-078T
*5/16		*HLA1079-312-078T	HLG148-312-078T
11/32		HLA1079-343-078T	HLG148-343-078T
3/8		HLA1079-375-078T	HLG148-375-078T
5/16	3/32	HLA1079-312-094T	HLG148-312-094T
11/32		HLA1079-343-094T	HLG148-343-094T
3/8		HLA1079-375-094T	HLG148-375-094T
7/16		HLA1079-437-094T	HLG148-437-094T
3/8		HLA1079-375-125T	HLG148-375-125T
7/16		HLA1079-437-125T	HLG148-437-125T

\*"Super-Key" not available in these sizes; standard hex tin only.



TECHNICAL DATA	
Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.72
Air Consumption	25 cfm
Weight	3 lb



**Installation Tooling**

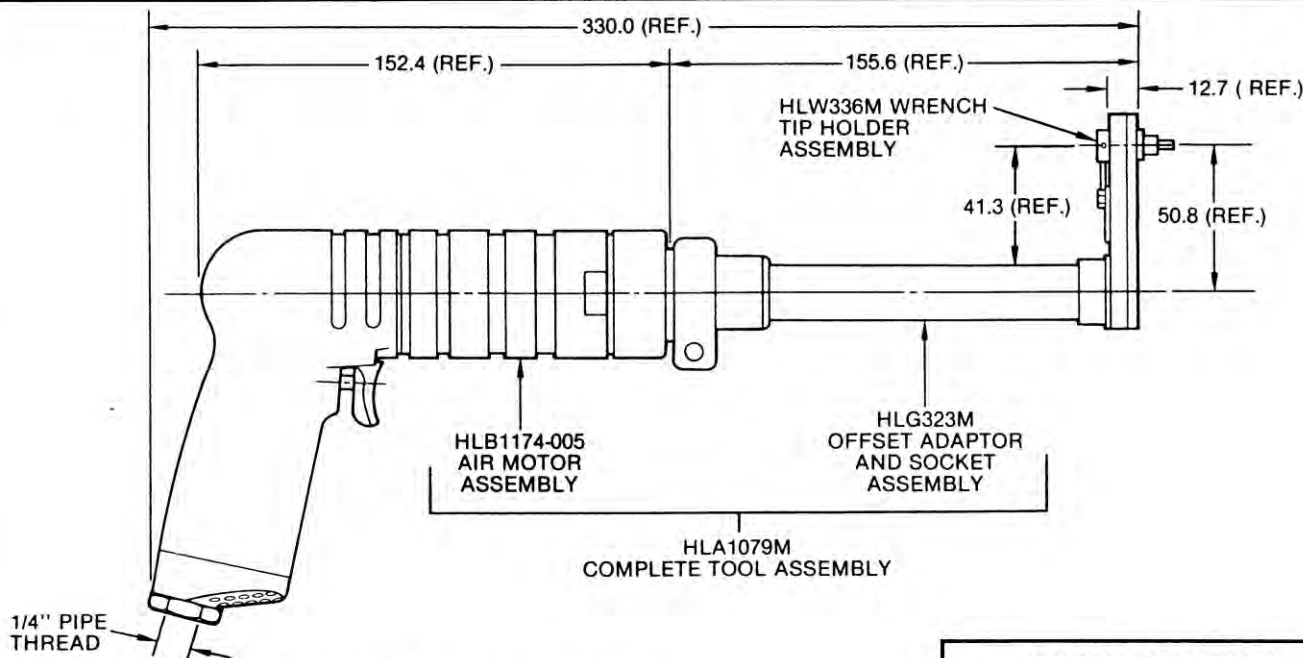
HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA1079M

## METRIC 51 MM

### OFFSET DRIVER ASSEMBLY

### WITH FLUSH SOCKET

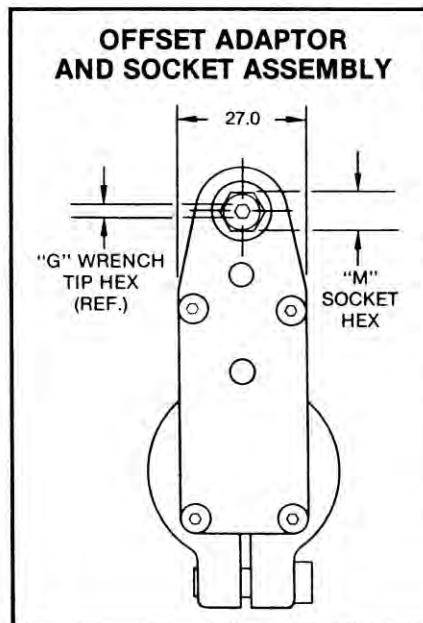


**ORDERING INFORMATION**

1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions. Determine Complete Tool Assembly Part Number.
3. Example of Complete Tool Assembly Part Number:

HLA1079M-8-2.03

- Second dash number indicates "G" wrench tip hex to match pin recess hex. (2.03) Ref. Table 1.
- First dash number indicates "M" socket hex to match collar driving hex. (-8 = 8mm) Ref. Table 1.
- Basic part number HLA1079M includes: HLB1174-005 Air Motor Assembly and HLG323M Offset Adaptor and Socket Assembly with flush socket.



**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex) (mm)	"G" WRENCH TIP HEX (Matches Pin Recess Hex) (mm)	COMPLETE TOOL ASSEMBLY PART NO.	OFFSET ADAPTOR & SOCKET ASSEMBLY PART NO.
5	1.62	HLA1079M-5-1.62	HLG323M-5-1.62
8		HLA1079M-8-1.62	HLG323M-8-1.62
6	2.03	HLA1079M-6-2.03	HLG323M-6-2.03
8		HLA1079M-8-2.03	HLG323M-8-2.03
9.5		HLA1079M-9.5-2.03	HLG323M-9.5-2.03
10		HLA1079M-10-2.03	HLG323M-10-2.03
11	2.43	HLA1079M-11-2.03	HLG323M-11-2.03
7		HLA1079M-7-2.43	HLG323M-7-2.43
11		HLA1079M-11-2.43	HLG323M-11-2.43
9.5	3.26	HLA1079M-9.5-3.26	HLG323M-9.5-3.26

**TECHNICAL DATA**

Operating Pressure	6.2 BAR
<b>MAXIMUM TORQUE RATING</b>	30.5 N.M. at 6.2 BAR
Socket Speed	600 RPM
Horsepower Rating	0.75
Air Consumption	708LTR/Min
Weight	1.6 Kg

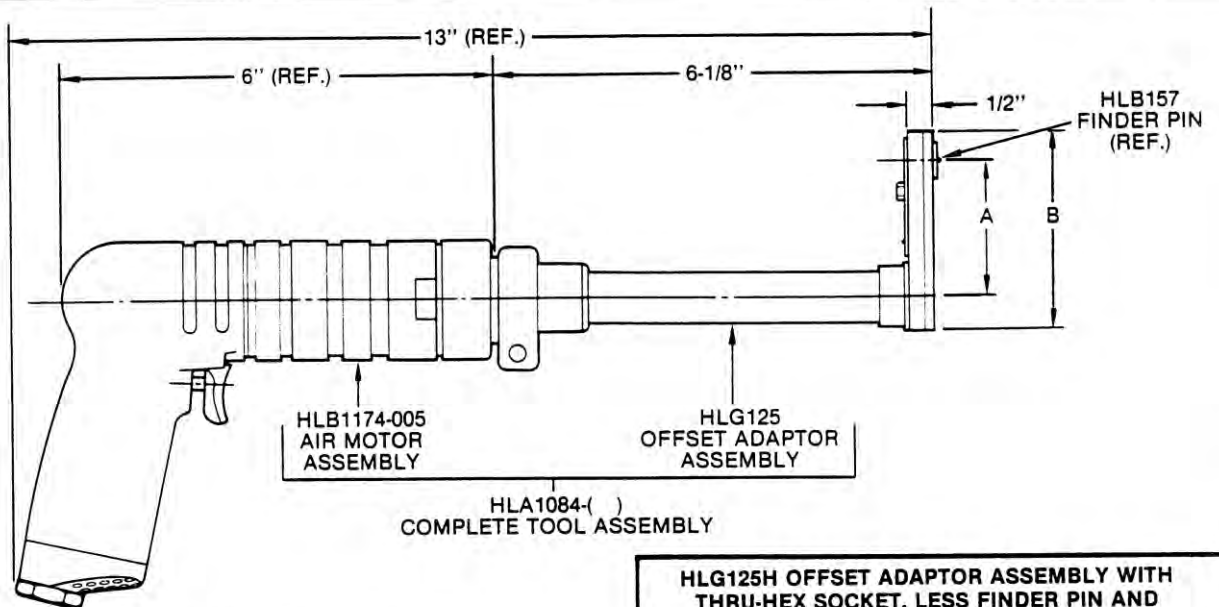


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA1084

## 2 INCH OFFSET DRIVER ASSEMBLY WITH INTERFERENCE FIT FLUSH SOCKET



**ORDERING INFORMATION**

- Determine collar driving hex dimensions of the fasteners to be installed.
- See Table 1 for "M" socket hex to match collar driving hex dimensions. Determine Complete Tool Assembly Part Number.
- Example of Complete Tool Assembly Part Number:

**HLA1084-312**

First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (312 = 5/16").  
Basic part number includes: HLB1174-005 Air Motor Assembly and HLG125 Offset Adaptor Assembly.

- See Table 2 for Complete Tool Assembly Part Numbers to obtain an Offset Adaptor Assembly featuring a thru-hex socket, less finder pin and leaf spring.
- Example of Complete Tool Assembly Part Number that has a thru-hex socket:

**HLA1084H-312**

First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 2. (312 = 5/16").  
Basic part number plus "H" indicates HLB1174-005 Air Motor Assembly and HLG125H Offset Adaptor Assembly, which has a thru-hex socket, less finder pin and leaf spring.

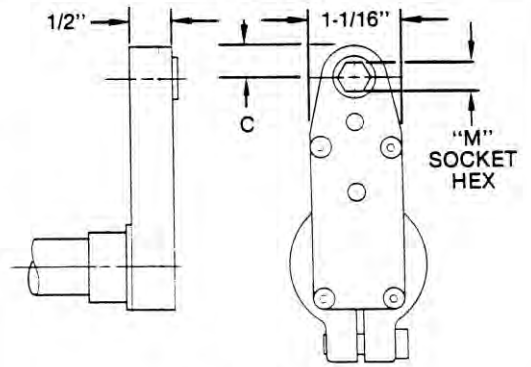
Socket Size	A	B	C	D
	C to C	Overall	Edge Dist.	Width
up to 3/8	2.210	3.182	0.431	0.500
7/16 and up	2.250	3.283	0.500	0.500

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	OFFSET ADAPTOR ASSEMBLY PART NO. (REF)	FINDER PIN PART NO.
1/4	HLA1084-250	HLG125-250	HLB157-250
5/16	HLA1084-312	HLG125-312	HLB157-312
11/32	HLA1084-343	HLG125-343	HLB157-343
7/16	HLA1084-437	HLG125-437	HLB157-437

\* "Super-Key" not available in these sizes, standard hex tip only.

**HLG125H OFFSET ADAPTOR ASSEMBLY WITH THRU-HEX SOCKET, LESS FINDER PIN AND LEAF SPRING**



**TABLE 2**

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	OFFSET ADAPTOR ASSEMBLY PART NO.(REF)
1/4	HLA1084H-250	HLG125H-250
5/16	HLA1084H-312	HLG125H-312
11/32	HLA1084H-343	HLG125H-343
7/16	HLA1084H-437	HLG125H-437

**TECHNICAL DATA**

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.75
Air Consumption	25 cfm
Weight	3 lb

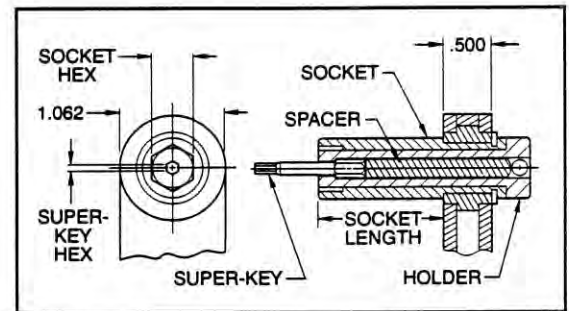
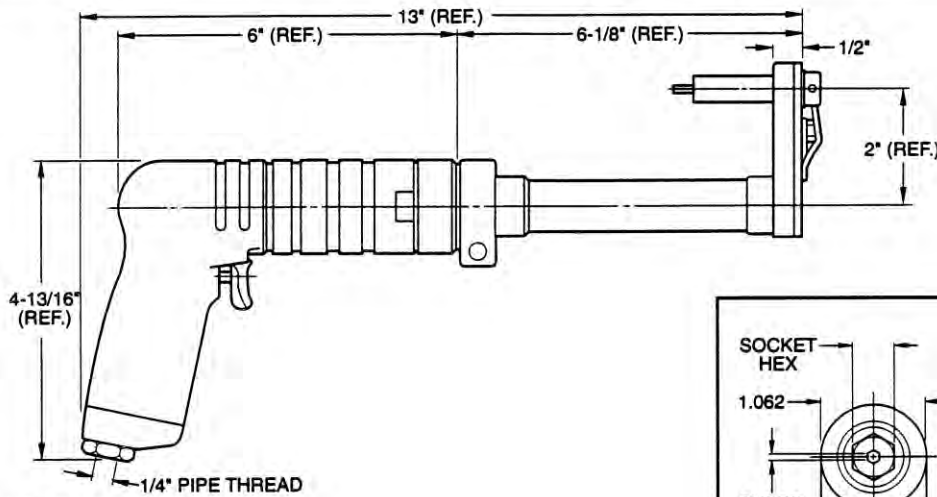


Installation Tooling

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA1086

2 INCH OFFSET BACK DRIVE  
DRIVER ASSEMBLY WITH EXTENDED SOCKET  
AND SUPER-KEY™ (T-Series)



HLS76-( ) ( ) ( ) T SOCKET ASSY

## ORDERING INFORMATION

1. MATCH PIN and COLLAR HEXES with SUPER-KEY HEX and SOCKET HEX. Reference HEX MATCH DIAGRAM.
2. See TABLE 1 for corresponding COMPLETE DRIVER ASSEMBLY PART NO.
3. Example of COMPLETE DRIVER ASSEMBLY PART NO.

**\*HLA1086-312(A)-078T**

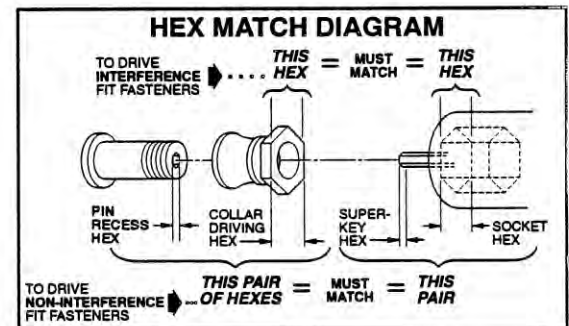
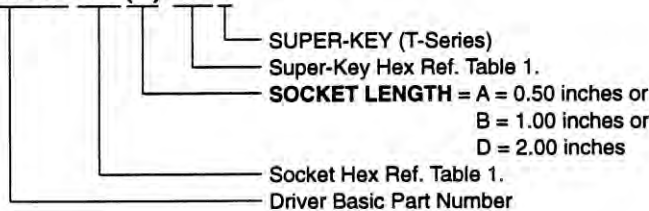


TABLE 1

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	OFFSET ADAPTOR AND SOCKET ASSEMBLY PART NO.	EXTENDED SOCKET ASSEMBLY PART NO.	
3/16	1/16	HLA1086-187( )-062T	HLG222-187( )-062T	HLS76-187( )-062T	
7/32		HLA1086-218( )-062T	HLG222-218( )-062T	HLS76-218( )-062T	
1/4		HLA1086-250( )-062T	HLG222-250( )-062T	HLS76-250( )-062T	
9/32		HLA1086-281( )-062T	HLG222-281( )-062T	HLS76-281( )-062T	
5/16		HLA1086-312( )-062T	HLG222-312( )-062T	HLS76-312( )-062T	
11/32	*5/64	HLA1086-343( )-062T	HLG222-343( )-062T	HLS76-343( )-062T	
7/32		HLA1086-218( )-078T	HLG222-218( )-078T	HLS76-218( )-078T	
1/4		HLA1086-250( )-078T	HLG222-250( )-078T	HLS76-250( )-078T	
9/32		HLA1086-281( )-078T	HLG222-281( )-078T	HLS76-281( )-078T	
*5/16		*HLA1086-312( )-078T	HLG222-312( )-078T	HLS76-312( )-078T	
11/32		HLA1086-343( )-078T	HLG222-343( )-078T	HLS76-343( )-078T	
3/8		HLA1086-375( )-078T	HLG222-375( )-078T	HLS76-375( )-078T	
5/16		HLA1086-312( )-094T	HLG222-312( )-094T	HLS76-312( )-094T	
11/32		3/32	HLA1086-343( )-094T	HLG222-343( )-094T	HLS76-343( )-094T
3/8			HLA1086-375( )-094T	HLG222-375( )-094T	HLS76-375( )-094T
7/16	HLA1086-437( )-094T		HLG222-437( )-094T	HLS76-437( )-094T	
3/8	HLA1086-375( )-125T		HLG222-375( )-125T	HLS76-375( )-125T	
7/16	1/8	HLA1086-437( )-125T	HLG222-437( )-125T	HLS76-437( )-125T	

TABLE 2

TECHNICAL DATA	
Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.75
Air Consumption	25 cfm
Weight	3 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

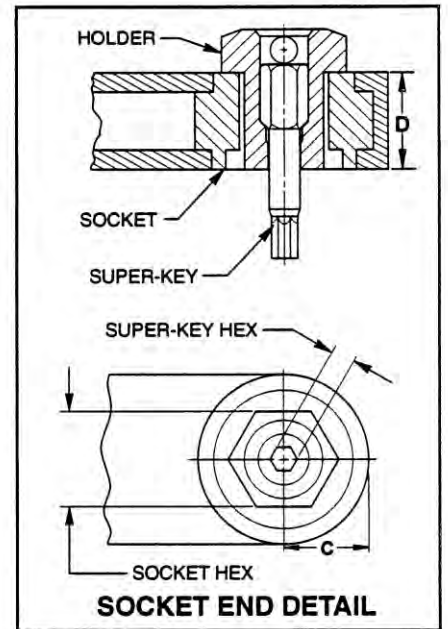
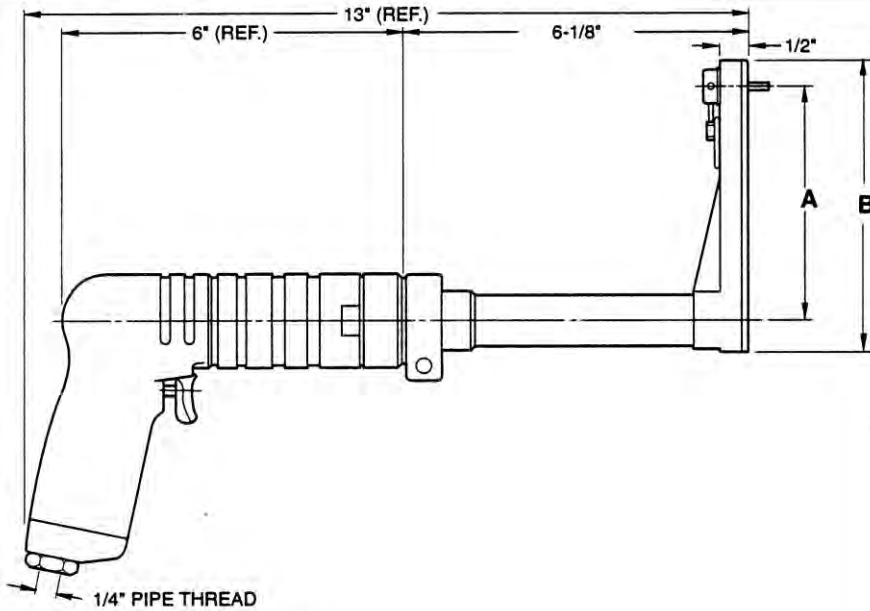


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA1097

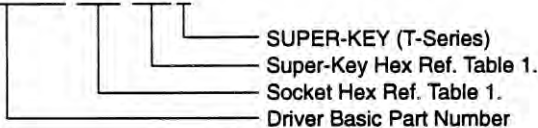
## 4 INCH OFFSET DRIVER ASSEMBLY WITH FLUSH SOCKET AND SUPER-KEY™ (T-Series)



### ORDERING INFORMATION

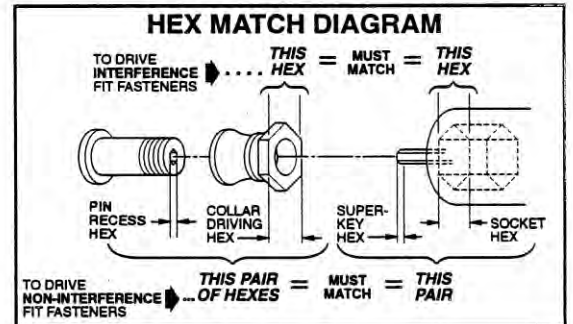
1. MATCH PIN and COLLAR HEXES with SUPER-KEY HEX and SOCKET HEX. Reference HEX MATCH DIAGRAM.
2. See TABLE 1 for corresponding COMPLETE DRIVER ASSEMBLY PART NO.
3. Example of COMPLETE DRIVER ASSEMBLY PART NO.

**\*HLA1097-312-078T**



**TABLE 1**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	OFFSET ADAPTOR AND SOCKET ASSEMBLY PART NO.
3/16	1/16	HLA1097-187-062T	HLG168-187-062T
7/32		HLA1097-218-062T	HLG168-218-062T
1/4		HLA1097-250-062T	HLG168-250-062T
9/32		HLA1097-281-062T	HLG168-281-062T
5/16		HLA1097-312-062T	HLG168-312-062T
11/32	*5/64	HLA1097-343-062T	HLG168-343-062T
7/32		HLA1097-218-078T	HLG168-218-078T
1/4		HLA1097-250-078T	HLG168-250-078T
9/32		HLA1097-281-078T	HLG168-281-078T
*5/16		*HLA1097-312-078T	HLG168-312-078T
11/32		HLA1097-343-078T	HLG168-343-078T
3/8		HLA1097-375-078T	HLG168-375-078T
5/16	3/32	HLA1097-312-094T	HLG168-312-094T
11/32		HLA1097-343-094T	HLG168-343-094T
3/8		HLA1097-375-094T	HLG168-375-094T
7/16		HLA1097-437-094T	HLG168-437-094T
3/8		HLA1097-375-125T	HLG168-375-125T
7/16	1/8	HLA1097-437-125T	HLG168-437-125T



Collar Hex Size	A	B	C	D
	C to C	Overall	Edge Dist.	Width
up to 11/32	4.470	5.502	0.450	0.500
3/8 and up	4.512	5.594	0.500	0.500

### TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.72
Air Consumption	25 cfm
Weight	3 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

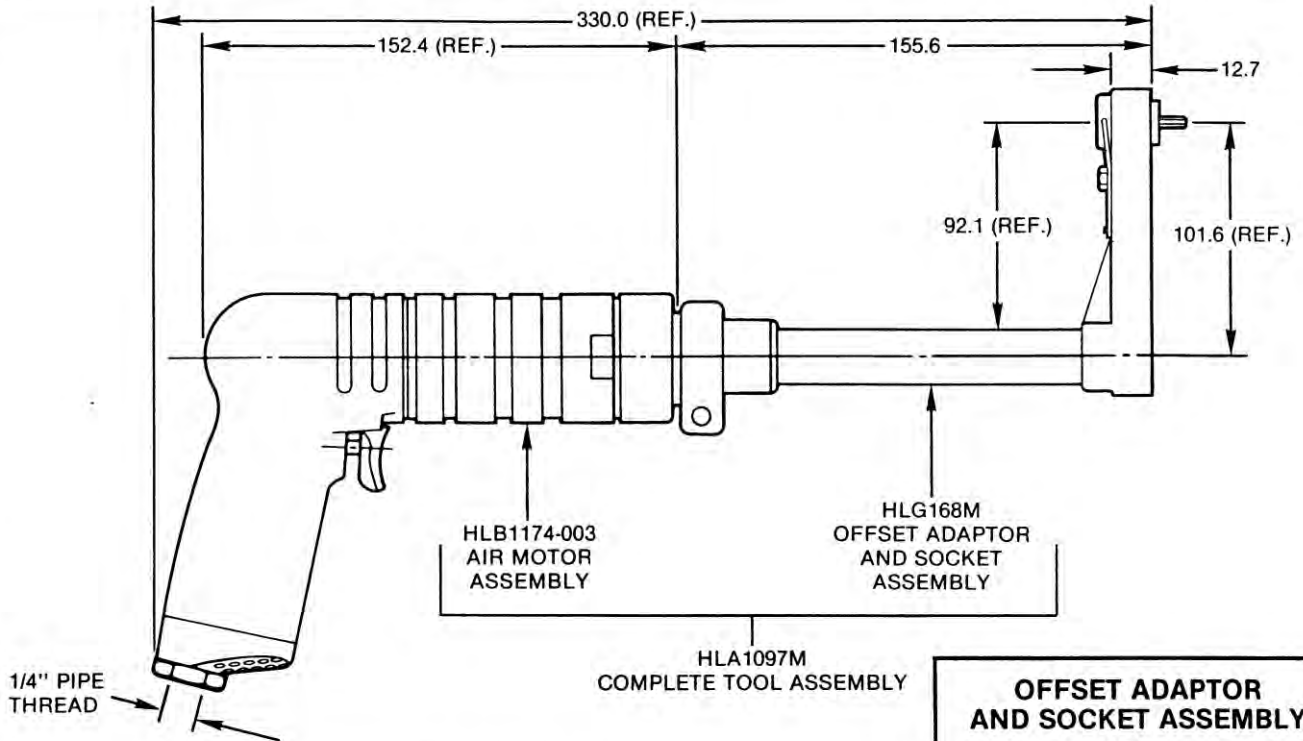


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA1097M

## 102MM OFFSET DRIVER ASSEMBLY WITH METRIC FLUSH SOCKET

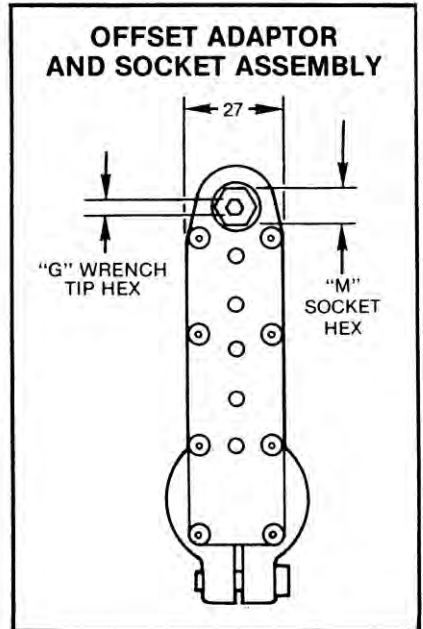


**ORDERING INFORMATION**

1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions. Determine Complete Tool Assembly Part Number.
3. Example of Complete Tool Assembly Part Number:

HLA1097M-8-2.03

- Second dash number indicates "G" wrench tip hex to match pin recess hex. (2.03) Ref. Table 1
- First dash number indicates "M" socket hex to match collar driving hex. (-8 = 8mm) Ref. Table 1.
- Basic part number HLA1097M includes: HLB1174-003 Air Motor Assembly and HLG168M Offset Adaptor and Socket Assembly with flush socket.



**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex) (mm)	"G" WRENCH TIP HEX (Matches Pin Recess Hex) (mm)	COMPLETE TOOL ASSEMBLY PART NO.	OFFSET ADAPTOR & SOCKET ASSEMBLY PART NO.
8	1.62	HLA1097M-8-1.62	HLG168M-8-1.62
8	2.03	HLA1097M-8-2.03	HLG168M-8-2.03
9.5		HLA1097M-9.5-2.03	HLG168M-9.5-2.03
10		HLA1097M-10-2.03	HLG168M-10-2.03
11		HLA1097M-11-2.03	HLG168M-11-2.03
11	2.43	HLA1097M-11-2.43	HLG168M-11-2.43
9.5	3.26	HLA1097M-9.5-3.26	HLG168M-9.5-3.26

**TECHNICAL DATA**

Operating Pressure	6.2 BAR
<b>MAXIMUM TORQUE RATING</b>	30.5 N.M.
(Motor)	at 6.2 BAR
Socket Speed	600 rpm
Horsepower Rating	0.75
Air Consumption	708 LTR/MIN
Weight	1.6 Kg

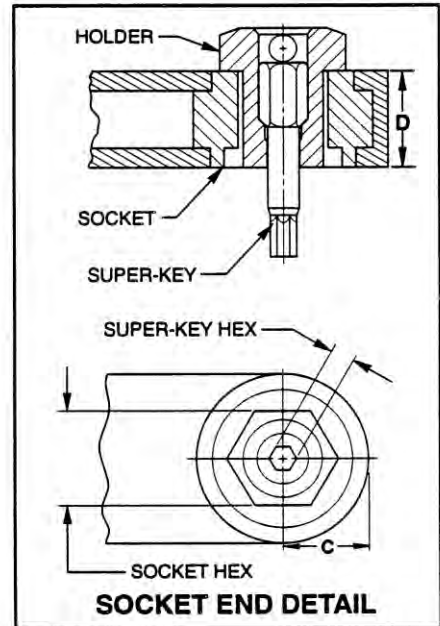


Installation Tooling

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA1201

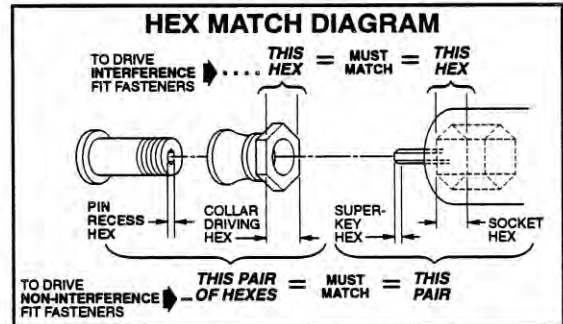
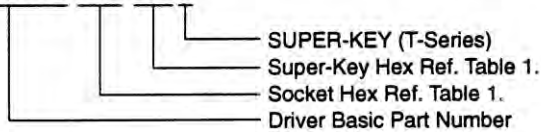
1 INCH OFFSET MINI DRIVER ASSEMBLY  
WITH THIN FLUSH SOCKET  
AND SUPER-KEY™ (T-Series)



## ORDERING INFORMATION

1. MATCH PIN and COLLAR HEXES with SUPER-KEY HEX and SOCKET HEX. Reference HEX MATCH DIAGRAM.
2. See TABLE 1 for corresponding COMPLETE DRIVER ASSEMBLY PART NO.
3. Example of COMPLETE DRIVER ASSEMBLY PART NO.

**\*HLA1201-312-078T**



Socket Size	A C to C	B Overall	C Edge Dist.	D Width
ALL	1.094	2.000	0.360	0.387

TABLE 1

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	OFFSET ADAPTOR AND SOCKET ASSEMBLY PART NO.
3/16	1/16	HLA1201-187-062T	HLG326-187-062T
7/32		HLA1201-218-062T	HLG326-218-062T
1/4		HLA1201-250-062T	HLG326-250-062T
9/32		HLA1201-281-062T	HLG326-281-062T
5/16		HLA1201-312-062T	HLG326-312-062T
11/32	*5/64	HLA1201-343-062T	HLG326-343-062T
7/32		HLA1201-218-078T	HLG326-218-078T
1/4		HLA1201-250-078T	HLG326-250-078T
9/32		HLA1201-281-078T	HLG326-281-078T
*5/16		*HLA1201-312-078T	HLG326-312-078T
11/32		HLA1201-343-078T	HLG326-343-078T

\*"Super-Kev" not available in these sizes. standard hex tip only.

## TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	60 in. lb at 90 psia
Socket Speed	500 rpm
Horsepower Rating	0.2
Air Consumption	20 cfm
Weight	2 lb

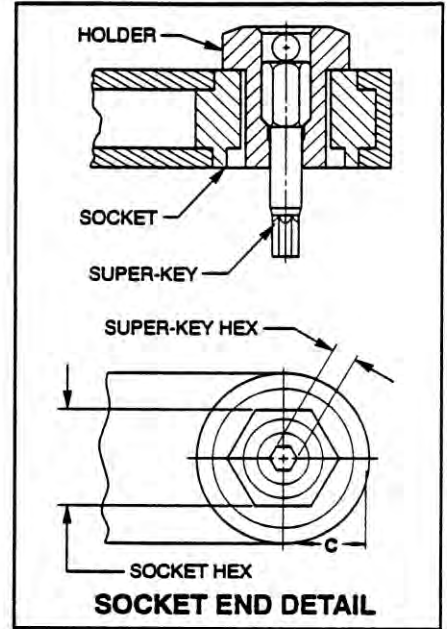
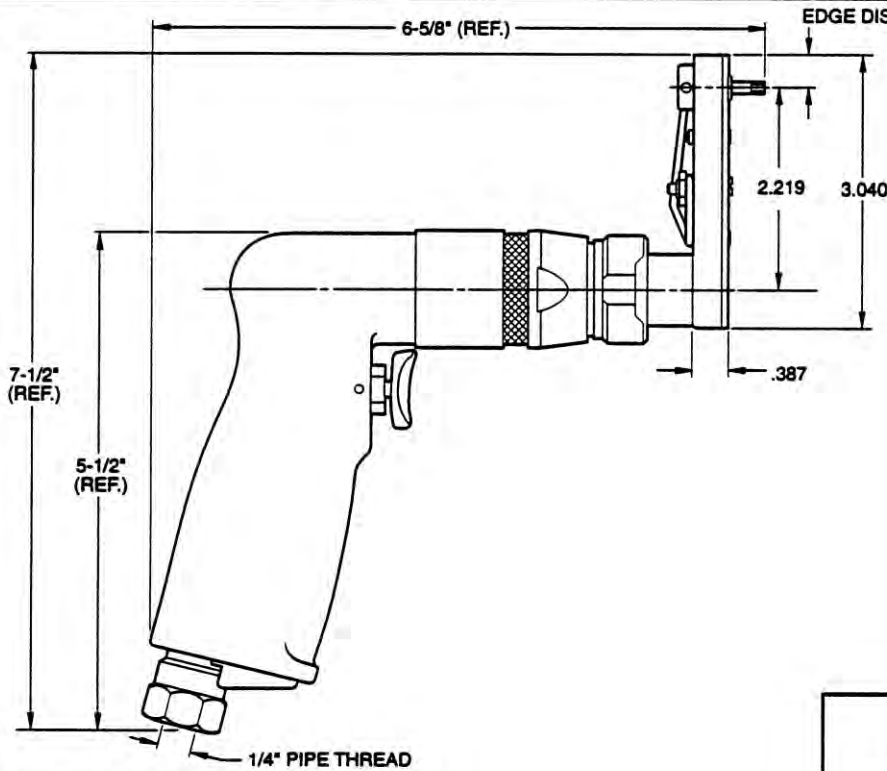


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA1202

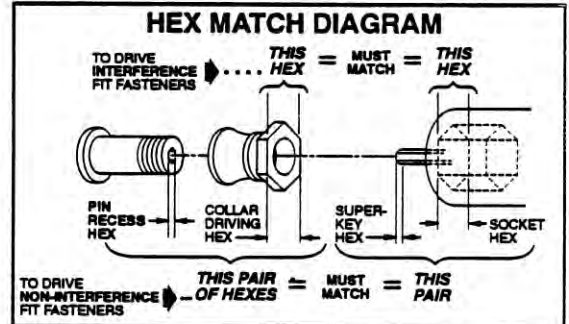
**2 INCH OFFSET MINI DRIVER ASSEMBLY  
WITH THIN FLUSH SOCKET  
AND SUPER-KEY™ (T-Series)**



**ORDERING INFORMATION**

1. MATCH PIN and COLLAR HEXES with SUPER-KEY HEX and SOCKET HEX. Reference HEX MATCH DIAGRAM.
2. See TABLE 1 for corresponding COMPLETE DRIVER ASSEMBLY PART NO.
3. Example of COMPLETE DRIVER ASSEMBLY PART NO.

**\*HLA1202-312-078T**



Socket Size	A C to C	B Overall	C Edge Dist.	D Width
ALL	2.219	3.040	0.360	0.387

**TABLE 1**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	OFFSET ADAPTOR AND SOCKET ASSEMBLY PART NO.
3/16	1/16	HLA1202-187-062T	HLG327-187-062T
7/32		HLA1202-218-062T	HLG327-218-062T
1/4		HLA1202-250-062T	HLG327-250-062T
9/32		HLA1202-281-062T	HLG327-281-062T
5/16		HLA1202-312-062T	HLG327-312-062T
11/32		HLA1202-343-062T	HLG327-343-062T
7/32	*5/64	HLA1202-218-078T	HLG327-218-078T
1/4		HLA1202-250-078T	HLG327-250-078T
9/32		HLA1202-281-078T	HLG327-281-078T
*5/16		*HLA1202-312-078T	HLG327-312-078T
11/32		HLA1202-343-078T	HLG327-343-078T

**TECHNICAL DATA**

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	60 in. lb at 90 psia
Socket Speed	500 rpm
Horsepower Rating	0.2
Air Consumption	20 cfm
Weight	2 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

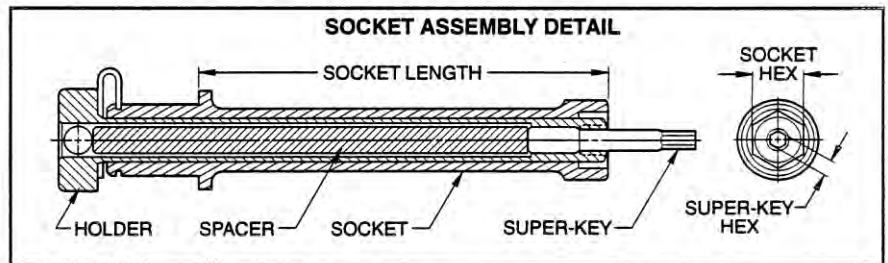
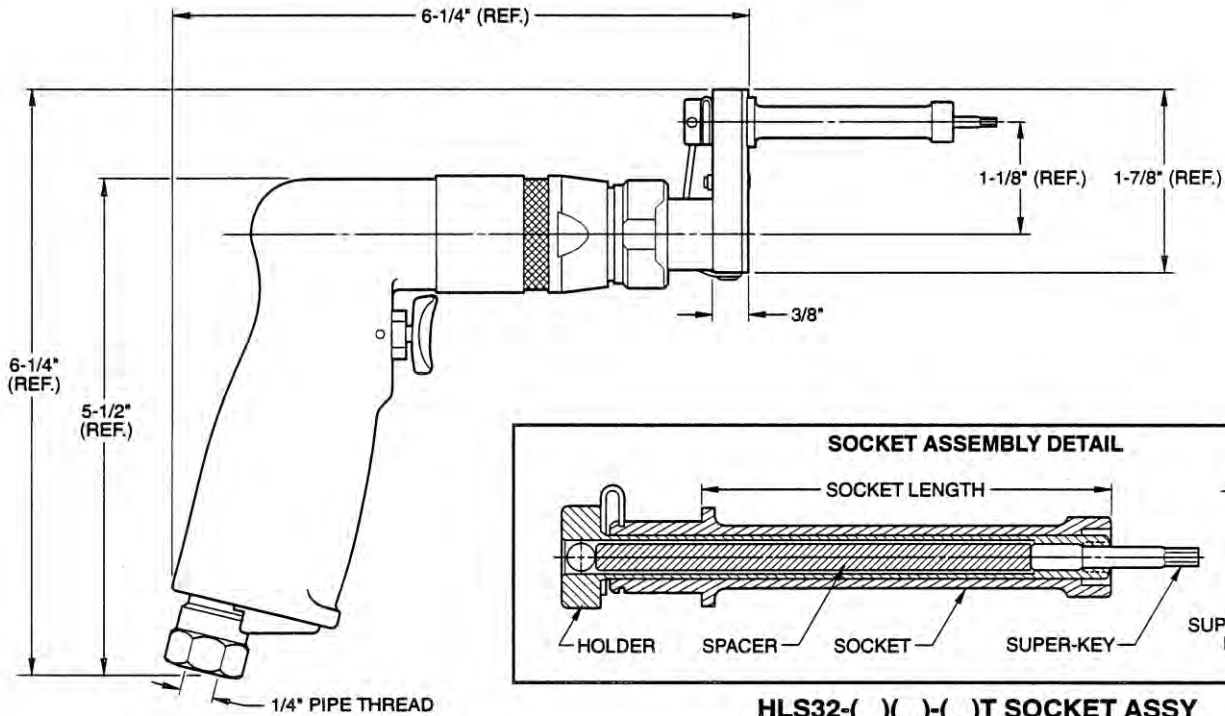


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE® FASTENING SYSTEMS

# SUPER HLA1203

**1 INCH OFFSET MINI DRIVER ASSEMBLY WITH MULTI-LENGTH SOCKET AND SUPER-KEY™ (T-Series)**

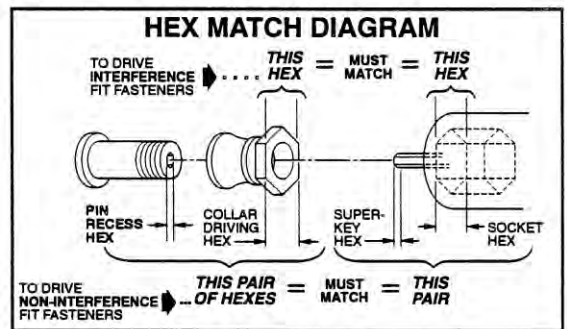
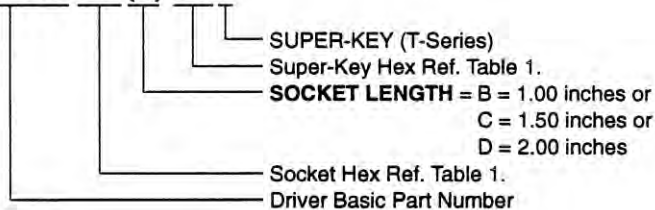


**HLS32-( )-( )T SOCKET ASSY**

**ORDERING INFORMATION**

1. MATCH PIN and COLLAR HEXES with SUPER-KEY HEX and SOCKET HEX. Reference HEX MATCH DIAGRAM.
2. See TABLE 1 for corresponding COMPLETE DRIVER ASSEMBLY PART NO.
3. Example of COMPLETE DRIVER ASSEMBLY PART NO.

**\*HLA1203-312(B)-078T**



**TABLE 1**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	SOCKET ASSEMBLY PART NO.
1/4	5/64	HLA1203-250( )-078T	HLS32-250( )-078
*5/16	*5/64	*HLA1203-312( )-078T	HLS32-312( )-078

\* "Super-Key" not available in these sizes, standard hex tip only.

**TABLE 2**

TECHNICAL DATA	
Operating Pressure . . . . .	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b> . . . . .	60 in. lb at 90 psia
Socket Speed . . . . .	500 rpm
Horsepower Rating . . . . .	0.2
Air Consumption . . . . .	20 cfm
Weight . . . . .	2 lb

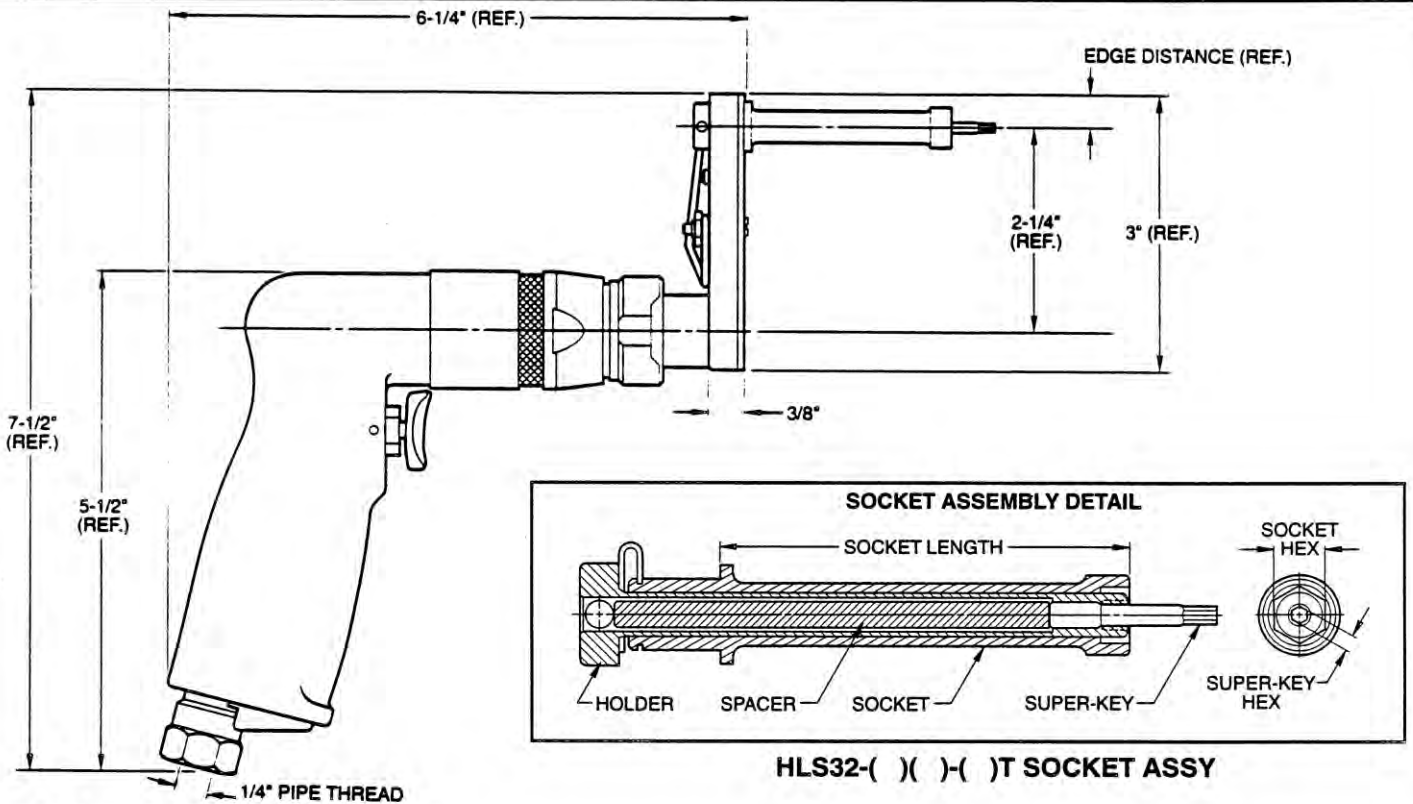


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA1204

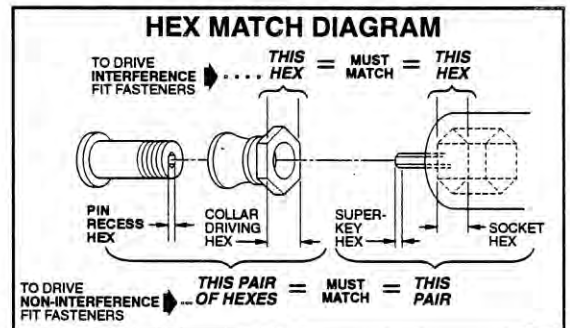
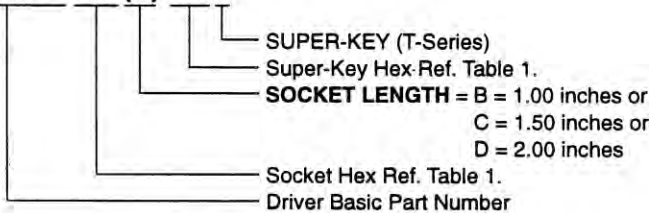
**2 INCH OFFSET MINI DRIVER ASSEMBLY  
WITH MULTI-LENGTH SOCKET  
AND SUPER-KEY™ (T-Series)**



**ORDERING INFORMATION**

1. **MATCH PIN** and **COLLAR HEXES** with **SUPER-KEY HEX** and **SOCKET HEX**. Reference **HEX MATCH DIAGRAM**.
2. See **TABLE 1** for corresponding **COMPLETE DRIVER ASSEMBLY PART NO.**
3. Example of **COMPLETE DRIVER ASSEMBLY PART NO.**

**\*HLA1204-312(B)-078T**



**TABLE 1**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	SOCKET ASSEMBLY PART NO.
1/4	5/64	HLA1204-250( )-078T	HLS32-250( )-078
*5/16	*5/64	*HLA1204-312( )-078T	HLS32-312( )-078

\* "Super-Key" not available in these sizes, standard hex tip only.

**TABLE 2**

TECHNICAL DATA	
Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING</b> (Motor)	60 in. lb at 90 psia
Socket Speed	500 rpm
Horsepower Rating	0.2
Air Consumption	20 cfm
Weight	2 lb

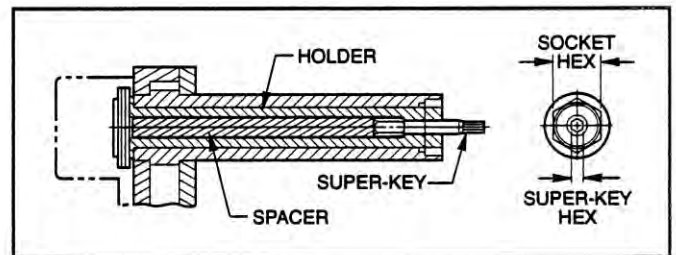
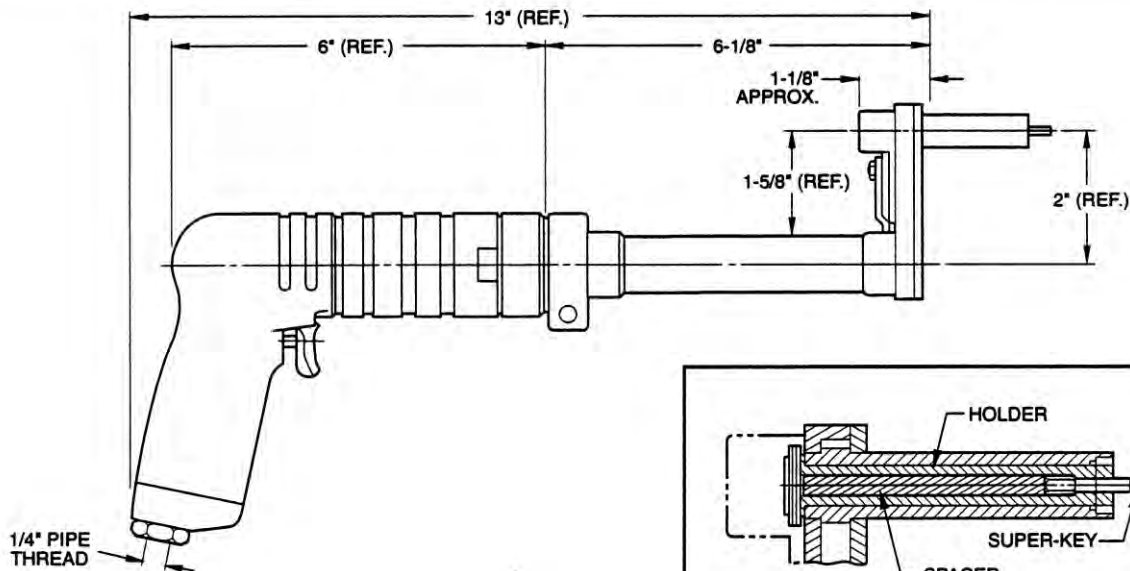


Installation Tooling

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA2068

HEAVY DUTY 2 INCH OFFSET DRIVER  
ASSEMBLY WITH 2 INCH EXTENDED SOCKET  
AND SUPER-KEY™ (T-Series)



## ORDERING INFORMATION

1. MATCH PIN and COLLAR HEXES with SUPER-KEY HEX and SOCKET HEX. Reference HEX MATCH DIAGRAM.
2. See TABLE 1 for corresponding COMPLETE DRIVER ASSEMBLY PART NO.
3. Example of COMPLETE DRIVER ASSEMBLY PART NO.

**\*HLA2068-312-078T**

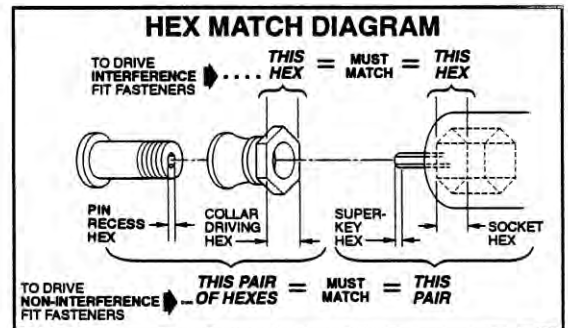
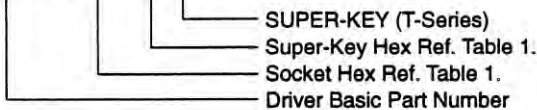


TABLE 1

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	OFFSET ADAPTOR AND SOCKET ASSEMBLY PART NO.
5/16	1/16	HLA2068-312-062T	HLG208-312-062T
11/32		HLA2068-343-062T	HLG208-343-062T
*5/16	*5/64	*HLA2068-312-078T	HLG208-312-078T
11/32		HLA2068-343-078T	HLG208-343-078T
3/8		HLA2068-375-078T	HLG208-375-078T
5/16		HLA2068-312-094T	HLG208-312-094T
11/32		HLA2068-343-094T	HLG208-343-094T
3/8	3/32	HLA2068-375-094T	HLG208-375-094T
7/16		HLA2068-437-094T	HLG208-437-094T
3/8		HLA2068-375-125T	HLG208-375-125T
7/16	1/8	HLA2068-437-125T	HLG208-437-125T

## TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.72
Air Consumption	25 cfm
Weight	3 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

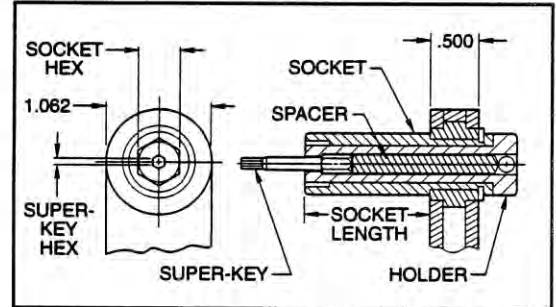
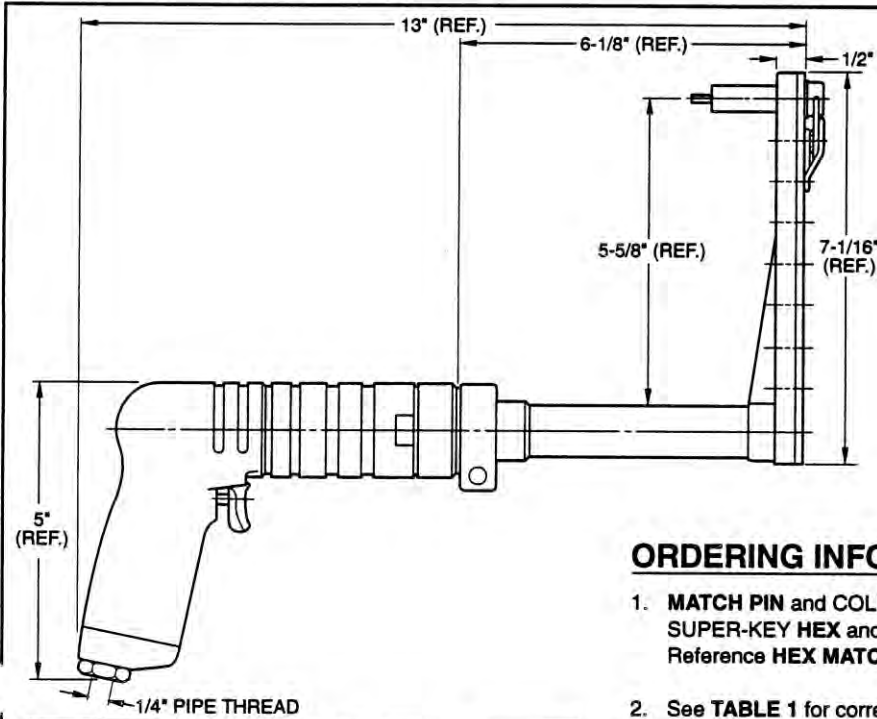


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA3023

## 6 INCH OFFSET BACK DRIVE DRIVER ASSEMBLY WITH EXTENDED SOCKET AND SUPER-KEY™ (T-Series)



HLS76-( )-( )T SOCKET ASSY

### ORDERING INFORMATION

1. MATCH PIN and COLLAR HEXES with SUPER-KEY HEX and SOCKET HEX. Reference HEX MATCH DIAGRAM.
2. See TABLE 1 for corresponding COMPLETE DRIVER ASSEMBLY PART NO.
3. Example of COMPLETE DRIVER ASSEMBLY PART NO. \*HLA3023-312(A)-078T

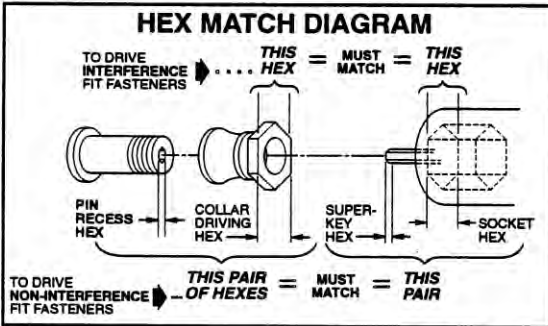


TABLE 1

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	OFFSET ADAPTOR AND SOCKET ASSEMBLY PART NO.	EXTENDED SOCKET ASSEMBLY PART NO.
3/16	1/16	HLA3023-187( )-062T	HLG329-187( )-062T	HLS76-187( )-062T
7/32		HLA3023-218( )-062T	HLG329-218( )-062T	HLS76-218( )-062T
1/4		HLA3023-250( )-062T	HLG329-250( )-062T	HLS76-250( )-062T
9/32		HLA3023-281( )-062T	HLG329-281( )-062T	HLS76-281( )-062T
5/16		HLA3023-312( )-062T	HLG329-312( )-062T	HLS76-312( )-062T
11/32		HLA3023-343( )-062T	HLG329-343( )-062T	HLS76-343( )-062T
7/32	*5/64	HLA3023-218( )-078T	HLG329-218( )-078T	HLS76-218( )-078T
1/4		HLA3023-250( )-078T	HLG329-250( )-078T	HLS76-250( )-078T
9/32		HLA3023-281( )-078T	HLG329-281( )-078T	HLS76-281( )-078T
*5/16		*HLA3023-312( )-078T	HLG329-312( )-078T	HLS76-312( )-078T
11/32		HLA3023-343( )-078T	HLG329-343( )-078T	HLS76-343( )-078T
3/8		HLA3023-375( )-078T	HLG329-375( )-078T	HLS76-375( )-078T
5/16	3/32	HLA3023-312( )-094T	HLG329-312( )-094T	HLS76-312( )-094T
11/32		HLA3023-343( )-094T	HLG329-343( )-094T	HLS76-343( )-094T
3/8		HLA3023-375( )-094T	HLG329-375( )-094T	HLS76-375( )-094T
7/16		HLA3023-437( )-094T	HLG329-437( )-094T	HLS76-437( )-094T
3/8		HLA3023-375( )-125T	HLG329-375( )-125T	HLS76-375( )-125T
7/16		HLA3023-437( )-125T	HLG329-437( )-125T	HLS76-437( )-125T

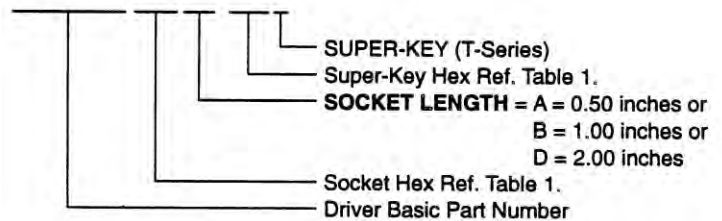


TABLE 2

TECHNICAL DATA	
Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.72
Air Consumption	25 cfm
Weight	3 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

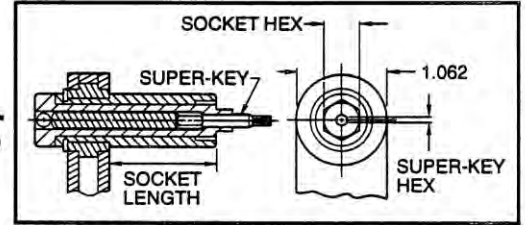
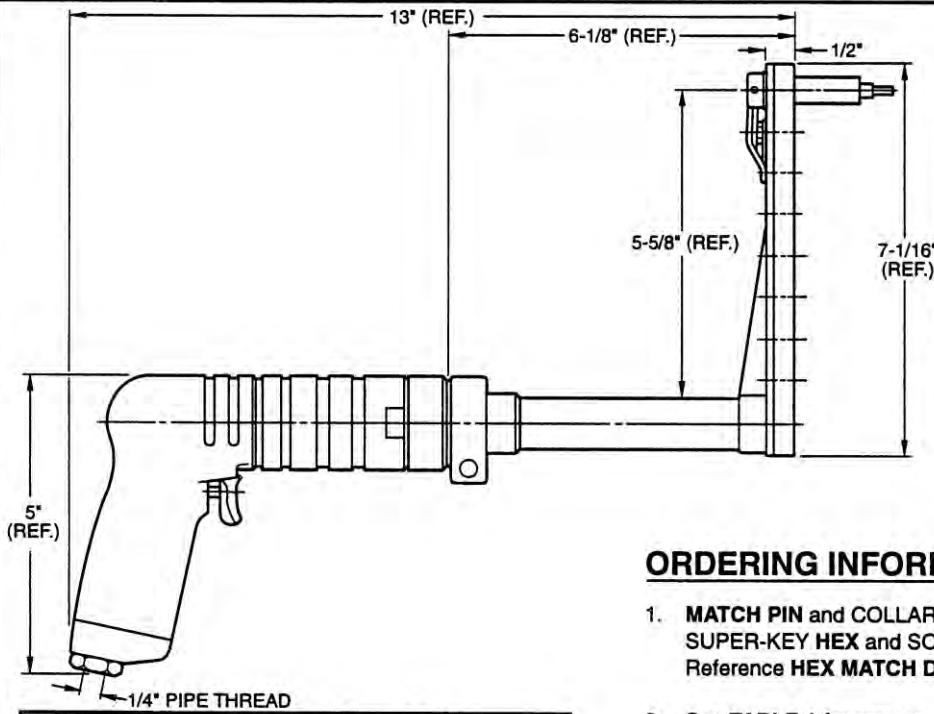


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE® FASTENING SYSTEMS

# SUPER HLA3025

**6 INCH OFFSET DRIVER ASSEMBLY WITH MULTI-LENGTH SOCKET AND SUPER-KEY™ (T-Series)**

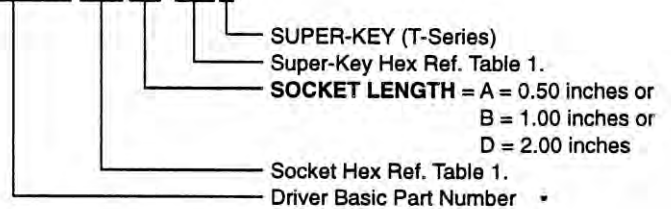


HLS76-( ) ( )-( ) T SOCKET ASSY

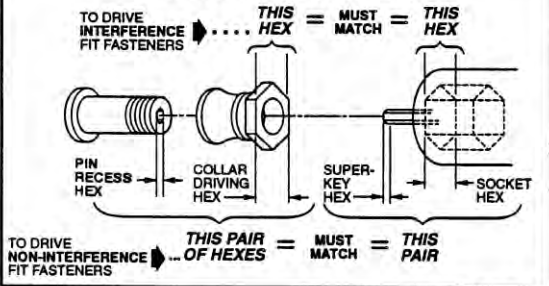
**ORDERING INFORMATION**

1. **MATCH PIN** and **COLLAR HEXES** with **SUPER-KEY HEX** and **SOCKET HEX**. Reference **HEX MATCH DIAGRAM**.
2. See **TABLE 1** for corresponding **COMPLETE DRIVER ASSEMBLY PART NO.**
3. Example of **COMPLETE DRIVER ASSEMBLY PART NO.**

**\*HLA3025-312(A)-078T**



**HEX MATCH DIAGRAM**



**TABLE 1**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	OFFSET ADAPTOR AND SOCKET ASSEMBLY PART NO.	EXTENDED SOCKET ASSEMBLY PART NO.	
3/16	1/16	HLA3025-187( )-062T	HLG331-187( )-062T	HLS76-187( )-062T	
7/32		HLA3025-218( )-062T	HLG331-218( )-062T	HLS76-218( )-062T	
1/4		HLA3025-250( )-062T	HLG331-250( )-062T	HLS76-250( )-062T	
9/32		HLA3025-281( )-062T	HLG331-281( )-062T	HLS76-281( )-062T	
5/16		HLA3025-312( )-062T	HLG331-312( )-062T	HLS76-312( )-062T	
11/32		HLA3025-343( )-062T	HLG331-343( )-062T	HLS76-343( )-062T	
7/32	*5/64	HLA3025-218( )-078T	HLG331-218( )-078T	HLS76-218( )-078T	
1/4		HLA3025-250( )-078T	HLG331-250( )-078T	HLS76-250( )-078T	
9/32		HLA3025-281( )-078T	HLG331-281( )-078T	HLS76-281( )-078T	
*5/16		*HLA3025-312( )-078T	HLG331-312( )-078T	HLS76-312( )-078T	
11/32		HLA3025-343( )-078T	HLG331-343( )-078T	HLS76-343( )-078T	
3/8		HLA3025-375( )-078T	HLG331-375( )-078T	HLS76-375( )-078T	
5/16	3/32	HLA3025-312( )-094T	HLG331-312( )-094T	HLS76-312( )-094T	
11/32		HLA3025-343( )-094T	HLG331-343( )-094T	HLS76-343( )-094T	
3/8		HLA3025-375( )-094T	HLG331-375( )-094T	HLS76-375( )-094T	
7/16		HLA3025-437( )-094T	HLG331-437( )-094T	HLS76-437( )-094T	
3/8		1/8	HLA3025-375( )-125T	HLG331-375( )-125T	HLS76-375( )-125T
7/16			HLA3025-437( )-125T	HLG331-437( )-125T	HLS76-437( )-125T

\* "Super-Key" not available in these sizes, standard hex tip only.

**TABLE 2**

**TECHNICAL DATA**

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.72
Air Consumption	25 cfm
Weight	3 lb

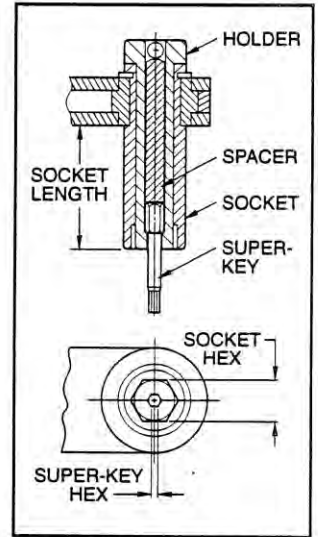
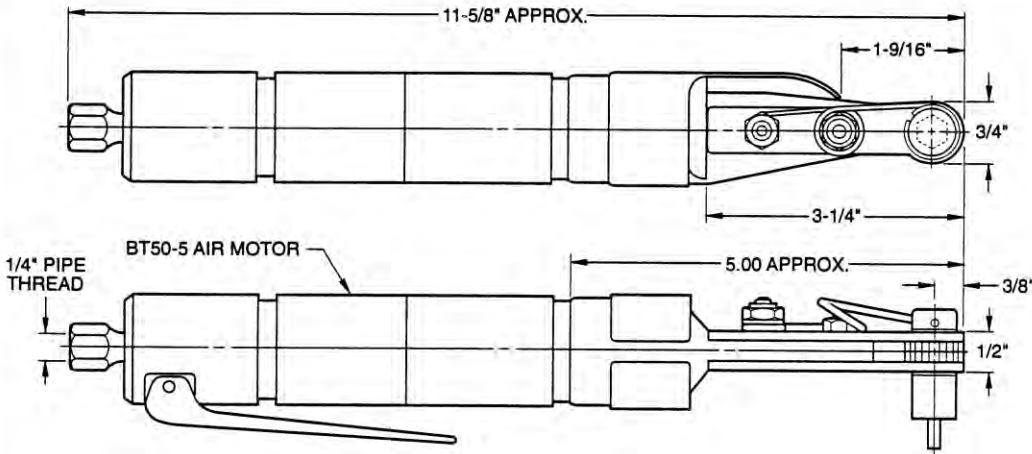


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA2002

**STRAIGHT RATCHET WRENCH DRIVER ASSEMBLY  
WITH MULTI-LENGTH SOCKET  
AND SUPER-KEY™ (T-Series)**

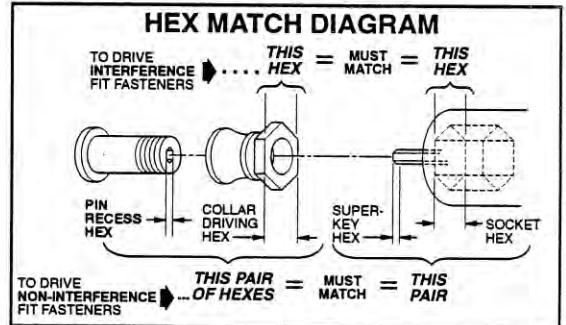
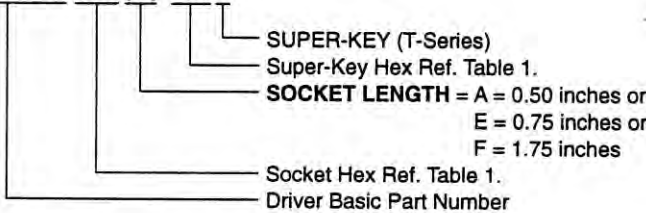


**HLS76-( ) ( ) ( )  
SOCKET ASSY**

**ORDERING INFORMATION**

1. MATCH PIN and COLLAR HEXES with SUPER-KEY HEX and SOCKET HEX. Reference HEX MATCH DIAGRAM.
2. See TABLE 1 for corresponding COMPLETE DRIVER ASSEMBLY PART NO.
3. Example of COMPLETE DRIVER ASSEMBLY PART NO.

**\*HLA2002-312(A)-078T**



**TABLE 1**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	OFFSET ADAPTOR AND SOCKET ASSEMBLY PART NO.	EXTENDED SOCKET ASSEMBLY PART NO.
3/16	1/16	HLA2002-187( )-062T	HLR252-187( )-062T	HLS76-187( )-062T
7/32		HLA2002-218( )-062T	HLR252-218( )-062T	HLS76-218( )-062T
1/4		HLA2002-250( )-062T	HLR252-250( )-062T	HLS76-250( )-062T
9/32		HLA2002-281( )-062T	HLR252-281( )-062T	HLS76-281( )-062T
5/16		HLA2002-312( )-062T	HLR252-312( )-062T	HLS76-312( )-062T
11/32	*5/64	HLA2002-343( )-062T	HLR252-343( )-062T	HLS76-343( )-062T
7/32		HLA2002-218( )-078T	HLR252-218( )-078T	HLS76-218( )-078T
1/4		HLA2002-250( )-078T	HLR252-250( )-078T	HLS76-250( )-078T
9/32		HLA2002-281( )-078T	HLR252-281( )-078T	HLS76-281( )-078T
*5/16		*HLA2002-312( )-078T	HLR252-312( )-078T	HLS76-312( )-078T
11/32	3/32	HLA2002-343( )-078T	HLR252-343( )-078T	HLS76-343( )-078T
3/8		HLA2002-375( )-078T	HLR252-375( )-078T	HLS76-375( )-078T
5/16		HLA2002-312( )-094T	HLR252-312( )-094T	HLS76-312( )-094T
11/32		HLA2002-343( )-094T	HLR252-343( )-094T	HLS76-343( )-094T
3/8		HLA2002-375( )-094T	HLR252-375( )-094T	HLS76-375( )-094T
7/16		HLA2002-437( )-094T	HLR252-437( )-094T	HLS76-437( )-094T

**TABLE 2**

**TECHNICAL DATA**

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	109 in. lb at 90 psia
Socket Speed	330 rpm
Horsepower Rating	0.33
Air Consumption	18 cfm
Weight	3 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

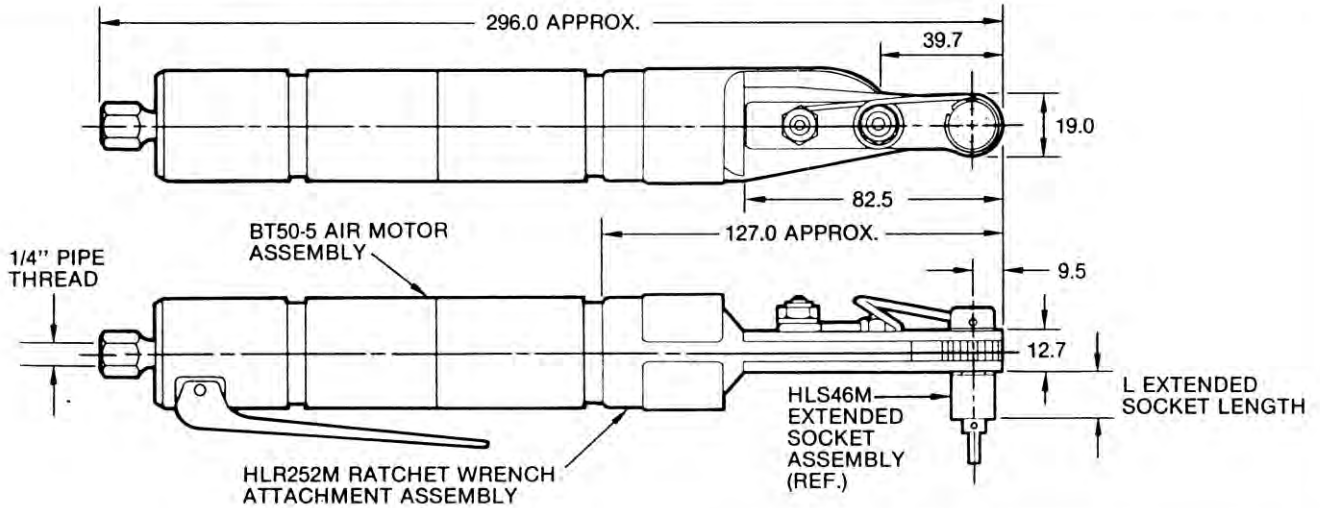


**Installation Tooling**

HI-LITE<sup>®</sup>, HI-LOK<sup>®</sup>, HI-TIGUE<sup>®</sup>  
FASTENING SYSTEMS

# HLA2002M

## SMALL STRAIGHT RATCHET WRENCH TOOL ASSEMBLY WITH METRIC EXTENDED SOCKET



**ORDERING INFORMATION**

1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions.
3. See Table 2 for proper code letter representing desired "L" extended socket length.
4. Example of Complete Tool Assembly Part Number:

HLA2002M-8 E-2.03

- Second dash number indicates "G" wrench tip hex to match pin recess hex. Ref. Table 1. (2.03).
- Letter following first dash number indicates "L" extended socket length. Ref. Table 2. (E = 19.0mm).
- First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (-8 = 8mm).
- Basic part number HLA2002M includes: BT50-5 Air Motor Assembly, HLR252M Ratchet Wrench Attachment Assembly, and HLS46M Extended Socket Assembly.

**HLS46M EXTENDED SOCKET ASSEMBLY**  
(INCLUDES HLW117M WRENCH TIP HOLDER ASSEMBLY)

**TABLE 2**

CODE	"L" EXTENDED SOCKET LENGTH (MM)
A	13
E	19
B	25

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex) (mm)	"G" WRENCH TIP HEX (Matches Pin Recess Hex) (mm)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSY. PART NO.	EXTENDED SOCKET ASSEMBLY PART NO.
5	1.62	HLA2002M-5( )-1.62	HLR252M-5( )-1.62	HLS46M-5( )-1.62
8		HLA2002M-8( )-1.62	HLR252M-8( )-1.62	HLS46M-8( )-1.62
6	2.03	HLA2002M-6( )-2.03	HLR252M-6( )-2.03	HLS46M-6( )-2.03
8		HLA2002M-8( )-2.03	HLR252M-8( )-2.03	HLS46M-8( )-2.03
9.5		HLA2002M-9.5( )-2.03	HLR252M-9.5( )-2.03	HLS46M-9.5( )-2.03
10		HLA2002M-10( )-2.03	HLR252M-10( )-2.03	HLS46M-10( )-2.03
11	2.43	HLA2002M-11( )-2.03	HLR252M-11( )-2.03	HLS46M-11( )-2.03
7		HLA2002M-7( )-2.43	HLR252M-7( )-2.43	HLS46M-7( )-2.43
11		HLA2002M-11( )-2.43	HLR252M-11( )-2.43	HLS46M-11( )-2.43
13		HLA2002M-13( )-2.43	HLR252M-13( )-2.43	HLS46M-13( )-2.43

**TECHNICAL DATA**

Operating Pressure . . . . . 6.2 BAR  
**MAXIMUM TORQUE RATING** . 12.9 N.M.  
 (Motor) at 6.2 BAR  
 Socket Speed . . . . . 330 rpm  
 Horsepower . . . . . 0.33  
 Air Consumption . . . . . 510 Ltr./Min.  
 Weight . . . . . 1.36 Kg

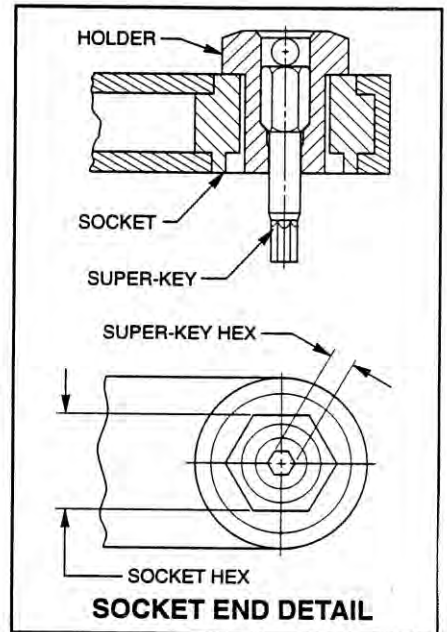
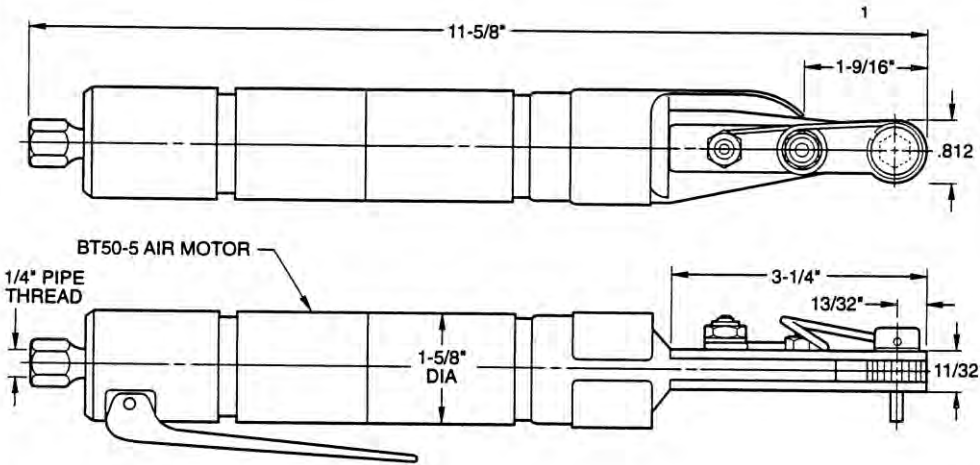


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA2006

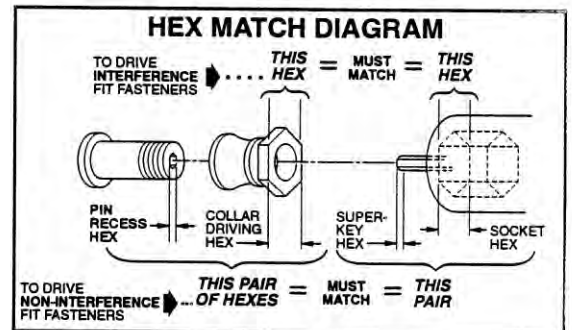
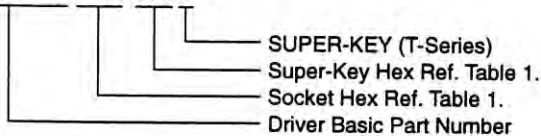
**STRAIGHT RATCHET WRENCH DRIVER ASSEMBLY  
WITH FLUSH SOCKET  
AND SUPER-KEY™ (T-Series)**



**ORDERING INFORMATION**

1. **MATCH PIN** and **COLLAR HEXES** with **SUPER-KEY HEX** and **SOCKET HEX**.  
Reference **HEX MATCH DIAGRAM**.
2. See **TABLE 1** for corresponding **COMPLETE DRIVER ASSEMBLY PART NO.**
3. Example of **COMPLETE DRIVER ASSEMBLY PART NO.**

**\*HLA2006-312-078T**



**TABLE 1**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	OFFSET ADAPTOR AND SOCKET ASSEMBLY PART NO.
3/16	1/16	HLA2006-187-062T	HLR256-187-062T
7/32		HLA2006-218-062T	HLR256-218-062T
1/4		HLA2006-250-062T	HLR256-250-062T
9/32		HLA2006-281-062T	HLR256-281-062T
5/16		HLA2006-312-062T	HLR256-312-062T
11/32		HLA2006-343-062T	HLR256-343-062T
7/32	*5/64	HLA2006-218-078T	HLR256-218-078T
1/4		HLA2006-250-078T	HLR256-250-078T
9/32		HLA2006-281-078T	HLR256-281-078T
*5/16		*HLA2006-312-078T	HLR256-312-078T
11/32		HLA2006-343-078T	HLR256-343-078T
3/8		HLA2006-375-078T	HLR256-375-078T
5/16	3/32	HLA2006-312-094T	HLR256-312-094T
11/32		HLA2006-343-094T	HLR256-343-094T
3/8		HLA2006-375-094T	HLR256-375-094T
7/16		HLA2006-437-094T	HLR256-437-094T

\* "Super-Key" not available in these sizes, standard hex tip only.

**TECHNICAL DATA**

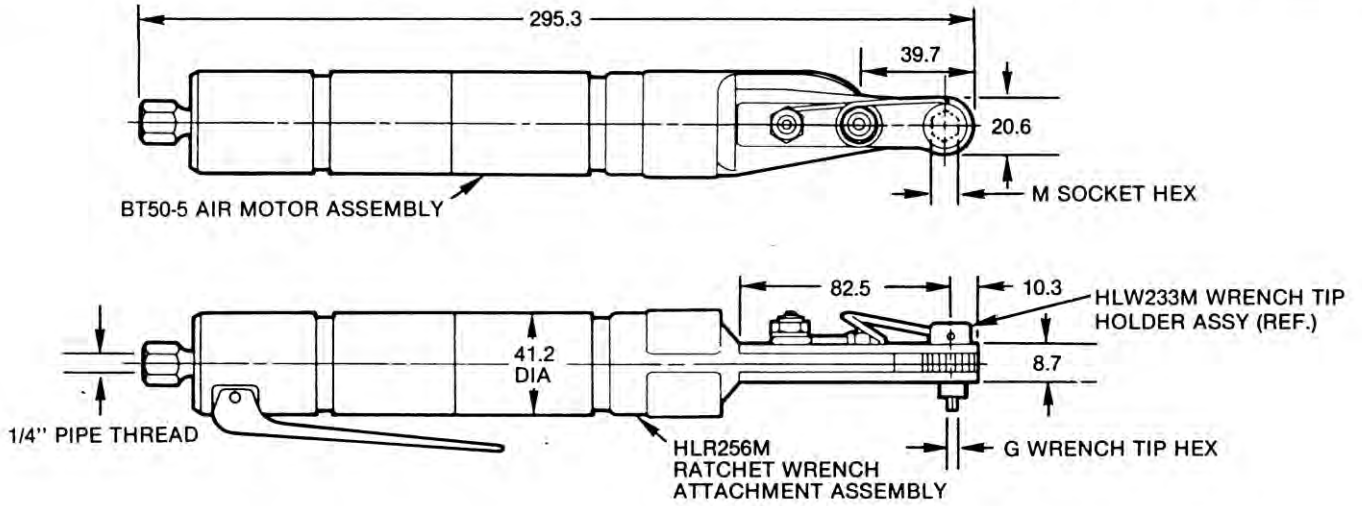
Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	114 in. lb at 90 psia
Socket Speed	330 rpm
Horsepower Rating	0.33
Air Consumption	18 cfm
Weight	3 lb



**Installation Tooling**  
 HI-LITE®, HI-LOK®, HI-TIGUE®  
 FASTENING SYSTEMS

# HLA2006M

## SMALL STRAIGHT RATCHET WRENCH TOOL ASSEMBLY WITH METRIC FLUSH SOCKET



### ORDERING INFORMATION

1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions.
3. Example of Complete Tool Assembly Part Number:

HLA2006M-8 2.03

- Second dash number indicates "G" wrench tip hex to match pin recess hex. (2.03) Ref. Table 1.
- First dash number indicates "M" socket hex to match collar driving hex. (-8 = 8mm) Ref. Table 1.
- Basic part number includes: BT50-5 Air Motor Assembly, HLR256M Ratchet Wrench Attachment Assembly, with flush socket.

### TECHNICAL DATA

Operating Pressure	6.2 BAR
<b>MAXIMUM TORQUE RATING</b> (Motor)	12.9 N.M. at 6.2 BAR
Socket Speed	330 rpm
Horsepower	0.33
Air Consumption	510 Ltr./Min.
Weight	1.36 Kg

TABLE 1

"M" SOCKET HEX (Matches Collar Driving Hex) (mm)	"G" WRENCH TIP HEX (Matches Pin Recess Hex) (mm)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSY. PART NO.	SOCKET GEAR PART NUMBER
5	1.62	HLA2006M-5-1.62	HLR256M-5-1.62	HLS68M-5
8		HLA2006M-8-1.62	HLR256M-8-1.62	HLS68M-8
6	2.03	HLA2006M-6-2.03	HLR256M-6-2.03	HLS68M-6
8		HLA2006M-8-2.03	HLR256M-8-2.03	HLS68M-8
9.5		HLA2006M-9.5-2.03	HLR256M-9.5-2.03	HLS68M-9.5
10		HLA2006M-10-2.03	HLR256M-10-2.03	HLS68M-10
11	2.43	HLA2006M-11-2.03	HLR256M-11-2.03	HLS68M-11
7		HLA2006M-7-2.43	HLR256M-7-2.43	HLS68M-7
11		HLA2006M-11-2.43	HLR256M-11-2.43	HLS68M-11

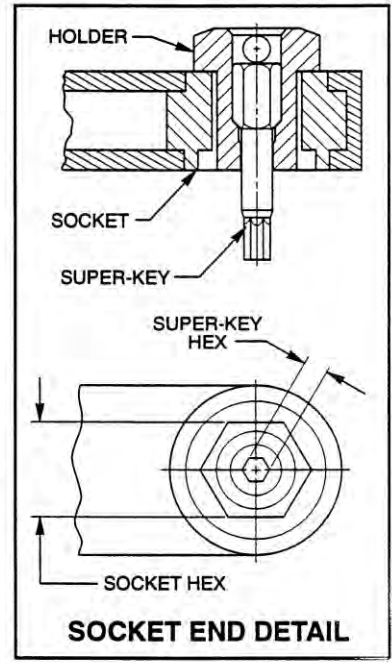
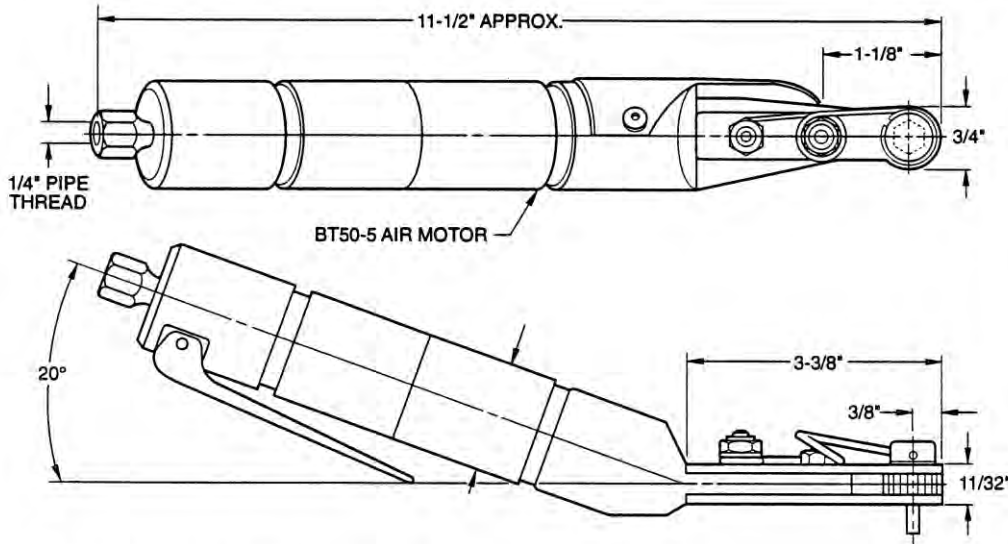


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

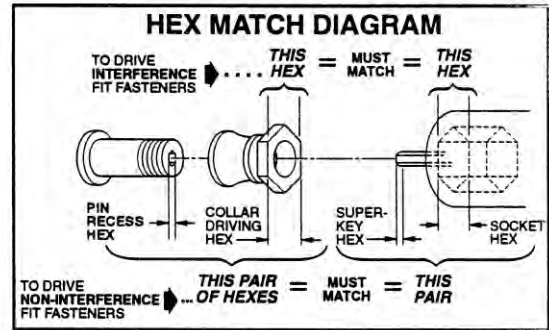
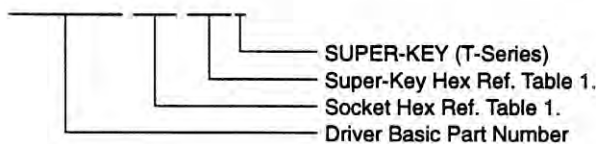
# SUPER HLA2008

## 20° OFFSET RATCHET WRENCH DRIVER ASSEMBLY WITH FLUSH SOCKET AND SUPER-KEY™ (T-Series)



**ORDERING INFORMATION**

1. **MATCH PIN** and **COLLAR HEXES** with **SUPER-KEY HEX** and **SOCKET HEX**.  
Reference **HEX MATCH DIAGRAM**.
2. See **TABLE 1** for corresponding **COMPLETE DRIVER ASSEMBLY PART NO.**
3. Example of **COMPLETE DRIVER ASSEMBLY PART NO.**  
**\*HLA2008-312-078T**



**TABLE 1**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO.
3/16	1/16	HLA2008-187-062T	HLR255-187-062T
7/32		HLA2008-218-062T	HLR255-218-062T
1/4		HLA2008-250-062T	HLR255-250-062T
9/32		HLA2008-281-062T	HLR255-281-062T
5/16		HLA2008-312-062T	HLR255-312-062T
11/32	*5/64	HLA2008-343-062T	HLR255-343-062T
7/32		HLA2008-218-078T	HLR255-218-078T
1/4		HLA2008-250-078T	HLR255-250-078T
9/32		HLA2008-281-078T	HLR255-281-078T
*5/16		*HLA2008-312-078T	HLR255-312-078T
11/32	3/32	HLA2008-343-078T	HLR255-343-078T
3/8		HLA2008-375-078T	HLR255-375-078T
5/16		HLA2008-312-094T	HLR255-312-094T
11/32		HLA2008-343-094T	HLR255-343-094T
3/8		HLA2008-375-094T	HLR255-375-094T
7/16		HLA2008-437-094T	HLR255-437-094T

TECHNICAL DATA	
Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	114 in. lb at 90 psia
Socket Speed	330 rpm
Horsepower Rating	0.33
Air Consumption	18 cfm
Weight	3 lb

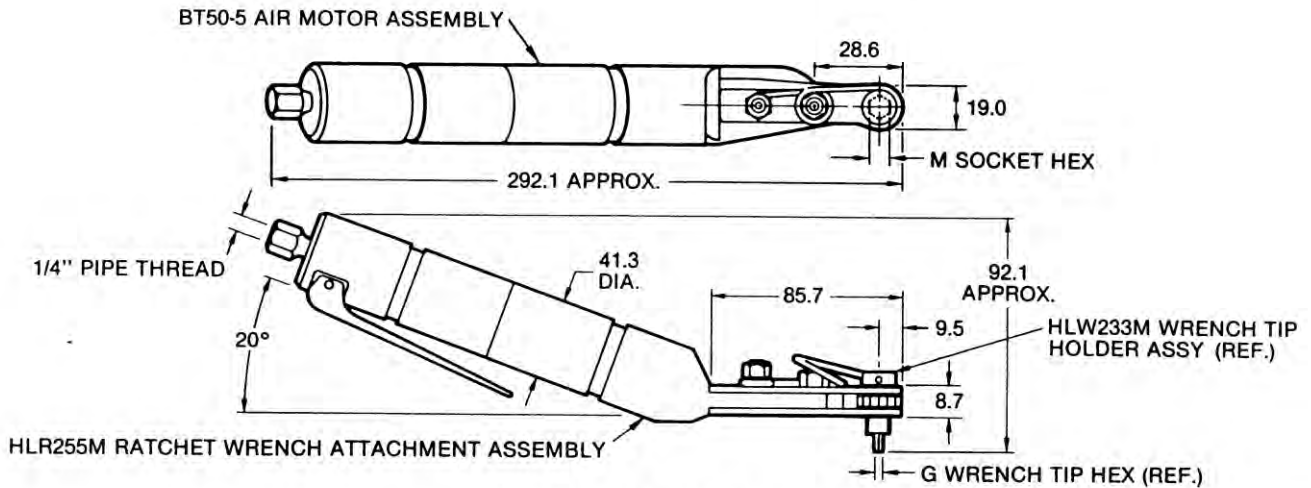
\* "Super-Key" not available in these sizes, standard hex tip only.



**Installation Tooling**  
 HI-LITE®, HI-LOK®, HI-TIGUE®  
 FASTENING SYSTEMS

# HLA2008M

## SMALL 20° OFFSET RATCHET WRENCH TOOL ASSEMBLY WITH METRIC FLUSH SOCKET



### ORDERING INFORMATION

1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions. Determine Complete Tool Assembly Part Number.
3. Example of Complete Tool Assembly Part Number:

HLA2008M-8-2.03

- Second dash number indicates "G" wrench tip hex to match pin recess hex. (2.03) Ref. Table 1.
- First dash number indicates "M" socket hex to match collar driving hex. (-8 = 8mm) Ref. Table 1.
- Basic part number HLA2008M includes: BT50-5 Air Motor Assembly and HLR255M Ratchet Wrench Attachment Assembly.

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex) (mm)	"G" WRENCH TIP HEX (Matches Pin Recess Hex) (mm)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO.
5	1.62	HLA2008M-5-1.62	HLR255M-5-1.62
8		HLA2008M-8-1.62	HLR255M-8-1.62
6	2.03	HLA2008M-6-2.03	HLR255M-6-2.03
8		HLA2008M-8-2.03	HLR255M-8-2.03
9.5		HLA2008M-9.5-2.03	HLR255M-9.5-2.03
10		HLA2008M-10-2.03	HLR255M-10-2.03
11		HLA2008M-11-2.03	HLR255M-11-2.03
7	2.43	HLA2008M-7-2.43	HLR255M-7-2.43
11		HLA2008M-11-2.43	HLR255M-11-2.43

TECHNICAL DATA	
Operating Pressure	6.2 BAR
<b>MAXIMUM TORQUE RATING</b>	12.9 N.M. at 6.2 BAR
Socket Speed	330 rpm
Horsepower	0.33
Air Consumption	510 Ltr./Min.
Weight	1.36 Kg

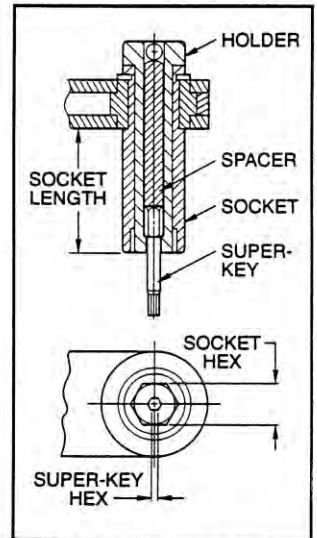
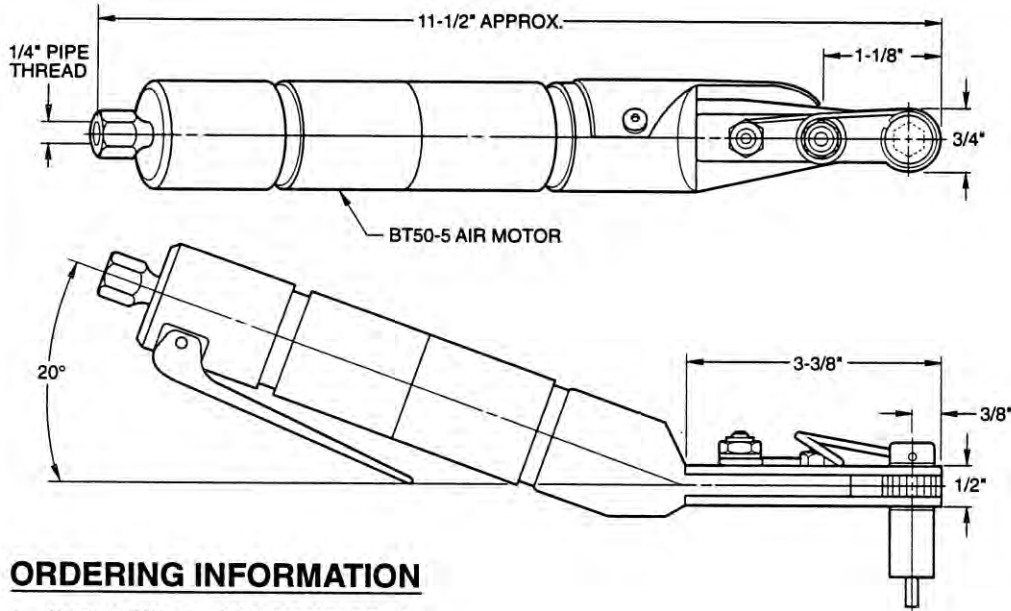


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE® FASTENING SYSTEMS

# SUPER HLA2016

## 20° OFFSET RATCHET WRENCH DRIVER ASSEMBLY WITH MULTI-LENGTH SOCKET AND SUPER-KEY™ (T-Series)

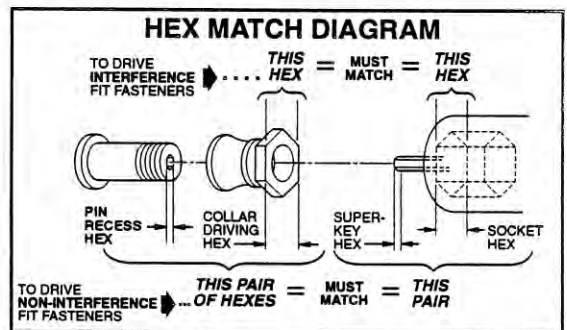
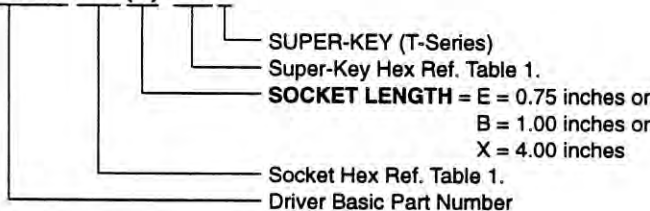


HLS76-( ) ( ) ( ) T SOCKET ASSY

### ORDERING INFORMATION

1. MATCH PIN and COLLAR HEXES with SUPER-KEY HEX and SOCKET HEX. Reference HEX MATCH DIAGRAM.
2. See TABLE 1 for corresponding COMPLETE DRIVER ASSEMBLY PART NO.
3. Example of COMPLETE DRIVER ASSEMBLY PART NO.

**\*HLA2016-312(E)-078T**



**TABLE 1**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	OFFSET ADAPTOR AND SOCKET ASSEMBLY PART NO.	EXTENDED SOCKET ASSEMBLY PART NO.
3/16	1/16	HLA2016-187( )-062T	HLR251-187( )-062T	HLS76-187( )-062T
7/32		HLA2016-218( )-062T	HLR251-218( )-062T	HLS76-218( )-062T
1/4		HLA2016-250( )-062T	HLR251-250( )-062T	HLS76-250( )-062T
9/32		HLA2016-281( )-062T	HLR251-281( )-062T	HLS76-281( )-062T
5/16		HLA2016-312( )-062T	HLR251-312( )-062T	HLS76-312( )-062T
11/32	*5/64	HLA2016-343( )-062T	HLR251-343( )-062T	HLS76-343( )-062T
7/32		HLA2016-218( )-078T	HLR251-218( )-078T	HLS76-218( )-078T
1/4		HLA2016-250( )-078T	HLR251-250( )-078T	HLS76-250( )-078T
9/32		HLA2016-281( )-078T	HLR251-281( )-078T	HLS76-281( )-078T
*5/16		*HLA2016-312( )-078T	HLR251-312( )-078T	HLS76-312( )-078T
11/32		HLA2016-343( )-078T	HLR251-343( )-078T	HLS76-343( )-078T
3/8		HLA2016-375( )-078T	HLR251-375( )-078T	HLS76-375( )-078T
5/16		HLA2016-312( )-094T	HLR251-312( )-094T	HLS76-312( )-094T
11/32		HLA2016-343( )-094T	HLR251-343( )-094T	HLS76-343( )-094T
3/8		HLA2016-375( )-094T	HLR251-375( )-094T	HLS76-375( )-094T
7/16	HLA2016-437( )-094T	HLR251-437( )-094T	HLS76-437( )-094T	

**TABLE 2**

TECHNICAL DATA	
Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	109 in. lb at 90 psia
Socket Speed	330 rpm
Horsepower Rating	0.33
Air Consumption	18 cfm
Weight	3 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

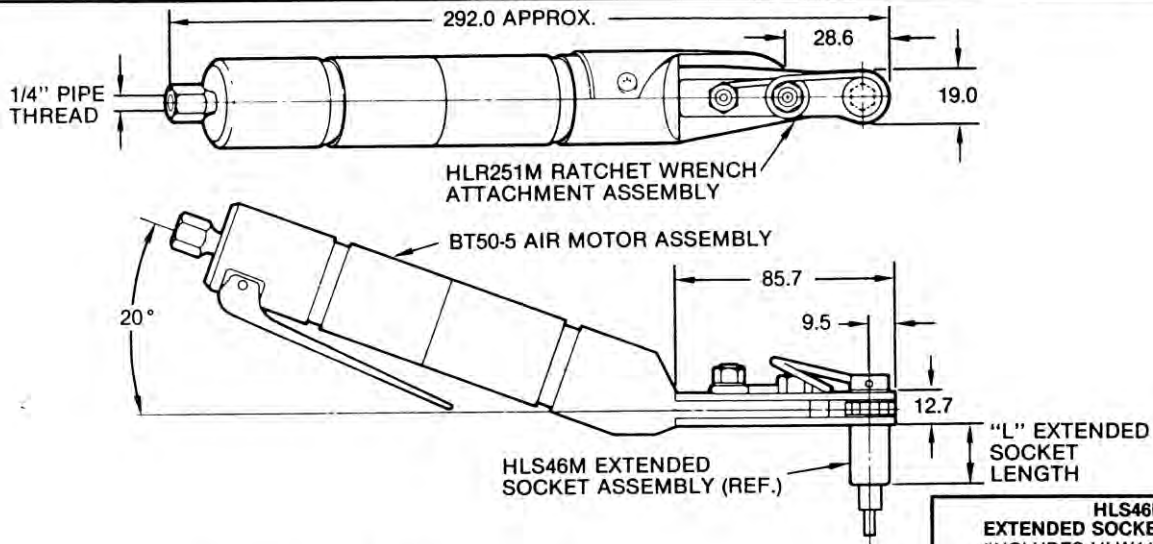


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE® FASTENING SYSTEMS

# HLA2016M

## SMALL 20° OFFSET RATCHET WRENCH TOOL ASSEMBLY METRIC EXTENDED SOCKET



### ORDERING INFORMATION

1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions.
3. See Table 2 for proper code letter representing desired "L" extended socket length.
4. Example of Complete Tool Assembly Part Number:

HLA2016M-8 E-2.03

- Second dash number indicates "G" wrench tip hex to match pin recess hex. Ref. Table 1. (2.03).
- Letter following first dash number indicates "L" extended socket length. Ref. Table 2. (E = 19.0 mm).
- First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (-8 = 8 mm).
- Basic part number HLA2016M includes: BT50-5 Air Motor Assembly, and HLR251M Ratchet Wrench Attachment Assembly.

5. Refer to HLS46M catalog page for complete parts breakdown of extended socket assembly.

### HLS46M EXTENDED SOCKET ASSEMBLY (INCLUDES HLW117M WRENCH TIP HOLDER ASSEMBLY AND HLS47M SOCKET)

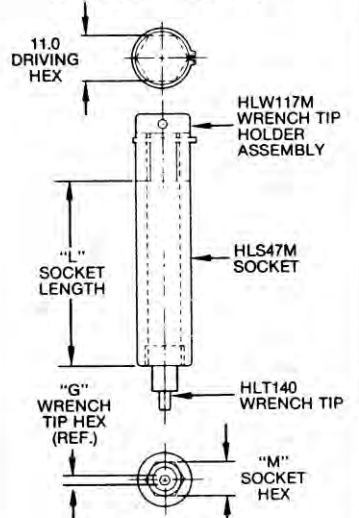


TABLE 2

CODE	"L" EXTENDED SOCKET LENGTH (mm)
E	19
B	25
X	102

TABLE 1

"M" SOCKET HEX (Matches Collar Driving Hex) (mm)	"G" WRENCH TIP HEX (Matches Pin Recess Hex) (mm)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSY. PART NO.	EXTENDED SOCKET ASSEMBLY PART NO.
5	1.62	HLA2016M-5( )-1.62	HLR251M-5( )-1.62	HLS46M-5( )-1.62
8		HLA2016M-8( )-1.62	HLR251M-8( )-1.62	HLS46M-8( )-1.62
6		HLA2016M-6( )-2.03	HLR251M-6( )-2.03	HLS46M-6( )-2.03
8	2.03	HLA2016M-8( )-2.03	HLR251M-8( )-2.03	HLS46M-8( )-2.03
9.5		HLA2016M-9.5( )-2.03	HLR251M-9.5( )-2.03	HLS46M-9.5( )-2.03
10		HLA2016M-10( )-2.03	HLR251M-10( )-2.03	HLS46M-10( )-2.03
11	2.43	HLA2016M-11( )-2.03	HLR251M-11( )-2.03	HLS46M-11( )-2.03
7		HLA2016M-7( )-2.43	HLR251M-7( )-2.43	HLS46M-7( )-2.43
11		HLA2016M-11( )-2.43	HLR251M-11( )-2.43	HLS46M-11( )-2.43
13		HLA2016M-13( )-2.43	HLR251M-13( )-2.43	HLS46M-13( )-2.43

### TECHNICAL DATA

Operating Pressure . . . . . 6.2 BAR  
**MAXIMUM TORQUE RATING** .12.9 N.M.  
 (Motor) at 6.2 BAR  
 Socket Speed . . . . . 330 rpm  
 Horsepower . . . . . 0.33  
 Air Consumption . . . . . 510 Ltr./Min.  
 Weight . . . . . 1.36 Kg

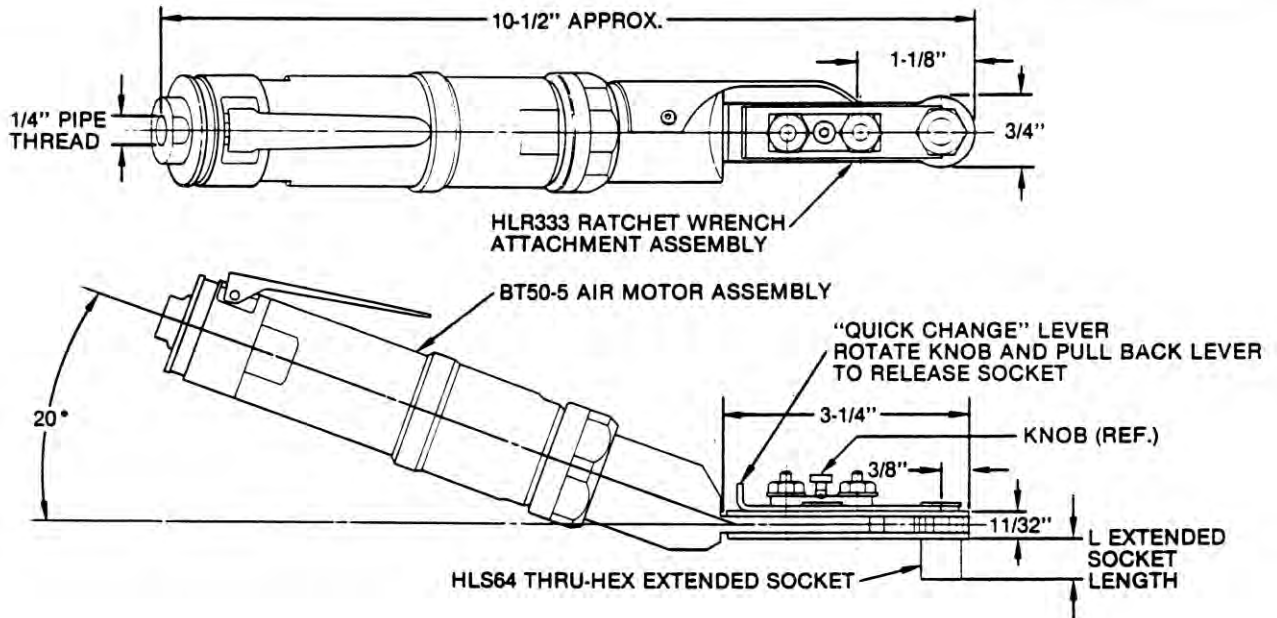


Installation Tooling

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA2026

## SMALL 20° OFFSET RATCHET WRENCH TOOL ASSEMBLY WITH "QUICK CHANGE" THRU-HEX EXTENDED SOCKET



### ORDERING INFORMATION

1. Determine collar driving hex dimension of the fasteners to be installed.
2. See Table 1 for "M" socket hex to match collar driving hex dimension. Determine Complete Tool Assembly Part Number.
3. See Table 2 for proper code letter representing desired "L" extended socket length.
4. Example of Complete Tool Assembly Part Number:

HLA2026-312A

Letter following first dash number indicates "L" extended socket length. Ref. Table 2. (A = 0.50").

First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 12. (312 = 5/16").

Basic part number HLA2026 includes BT50-7 Air Motor Assembly and HLR333 Ratchet Wrench Attachment Assembly with HLS64 Quick Change Thru-Hex Extended Socket.

5. U.S. Patent 4,924,734

TABLE 1

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)	EXTENDED SOCKET ASSEMBLY PART NO.
3/16	HLA2026-187( )	HLR333-187( )	HLS64-187( )
7/32	HLA2026-218( )	HLR333-218( )	HLS64-218( )
1/4	HLA2026-250( )	HLR333-250( )	HLS64-250( )
9/32	HLA2026-281( )	HLR333-281( )	HLS64-281( )
5/16	HLA2026-312( )	HLR333-312( )	HLS64-312( )
11/32	HLA2026-343( )	HLR333-343( )	HLS64-343( )

\* "Super-Key" not available in these sizes, standard hex tip only.

HLS64 THRU-HEX EXTENDED SOCKET

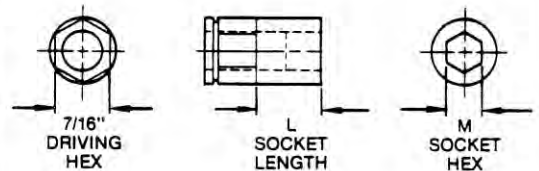


TABLE 2

CODE	"L" EXTENDED SOCKET LENGTH
A	0.50
B	1.00
E	0.75

### TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING</b> (Motor)	109 in. lb at 90 psia
Socket Speed	330 rpm
Horsepower Rating	0.30
Air Consumption	18 cfm
Weight	2.8 lb

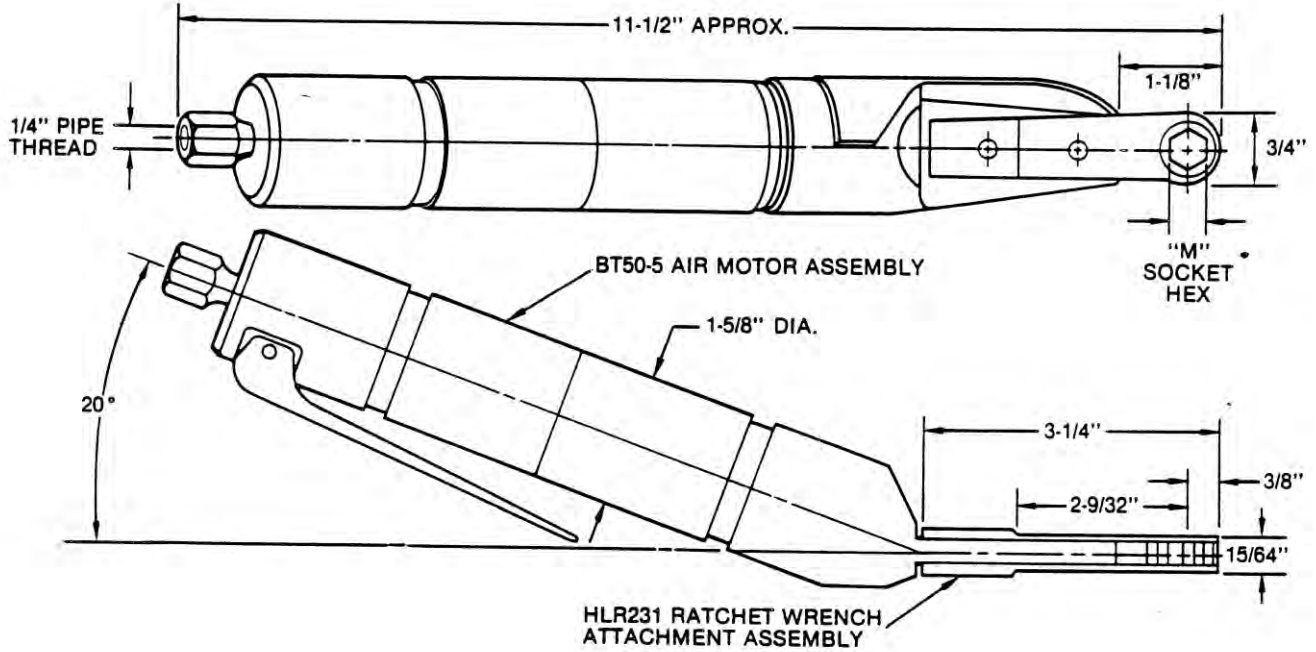


Installation Tooling

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# SUPER HLA2033

SMALL 20° OFFSET RATCHET WRENCH  
TOOL ASSEMBLY WITH  
INTERFERENCE FIT EXTRA THIN SOCKET



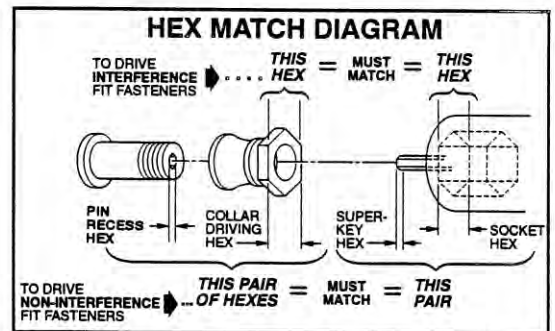
## ORDERING INFORMATION

1. Determine collar driving hex of the fasteners to be installed.
2. See Table 1 for "M" socket hex to match collar driving hex dimensions. Determine Complete Tool Assembly Part Number.
3. Example of Complete Tool Assembly Part Number:

**HLA2033-312**

First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (312 = 5/16").

Basic part number includes BT50-5 Air Motor Assembly and HLR231 Ratchet Wrench Attachment Assembly.



**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)
5/16	HLA2033-312	HLR231-312
11/32	HLA2033-343	HLR231-343
3/8	HLA2033-375	HLR231-375

## TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING</b> (Motor)	109 in. lb at 90 psia
Socket Speed	330 rpm
Horsepower Rating	0.33
Air Consumption	18 cfm
Weight	3 lb

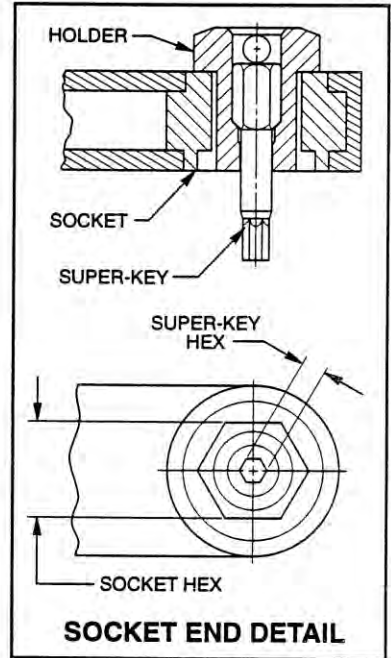
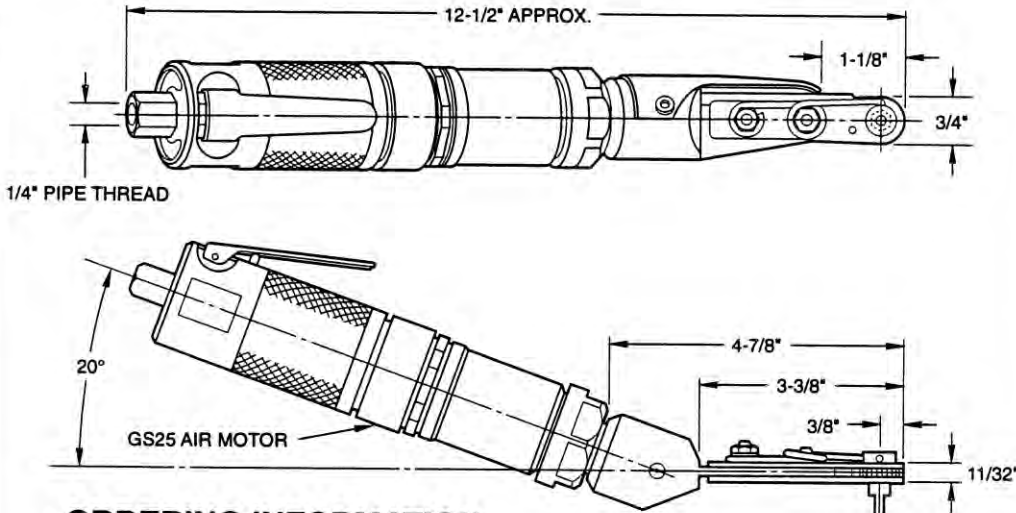


Installation Tooling

HI-LITE®, HI-LOK®, HI-TIGUE® FASTENING SYSTEMS

# SUPER HLA2073

MEDIUM 20° OFFSET RATCHET WRENCH DRIVER ASSEMBLY WITH THIN FLUSH SOCKET AND SUPER-KEY™ (T-Series)



## ORDERING INFORMATION

1. MATCH PIN and COLLAR HEXES with SUPER-KEY HEX and SOCKET HEX. Reference HEX MATCH DIAGRAM.
2. See TABLE 1 for corresponding COMPLETE DRIVER ASSEMBLY PART NO.
3. Example of COMPLETE DRIVER ASSEMBLY PART NO.  
**\*HLA2073-312-078T**

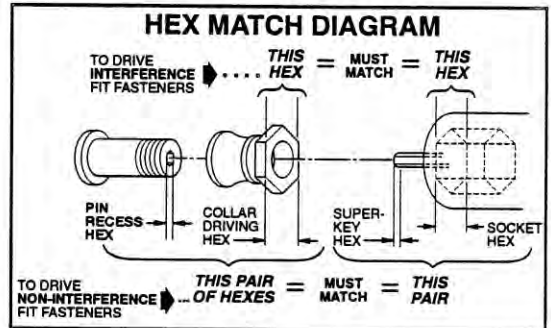
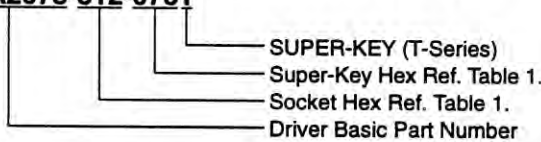


TABLE 1

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO.
3/16	1/16	HLA2073-187-062T	HLR255-187-062T
7/32		HLA2073-218-062T	HLR255-218-062T
1/4		HLA2073-250-062T	HLR255-250-062T
9/32		HLA2073-281-062T	HLR255-281-062T
5/16		HLA2073-312-062T	HLR255-312-062T
11/32		HLA2073-343-062T	HLR255-343-062T
7/32	*5/64	HLA2073-218-078T	HLR255-218-078T
1/4		HLA2073-250-078T	HLR255-250-078T
9/32		HLA2073-281-078T	HLR255-281-078T
*5/16		*HLA2073-312-078T	HLR255-312-078T
11/32		HLA2073-343-078T	HLR255-343-078T
3/8		HLA2073-375-078T	HLR255-375-078T
5/16	3/32	HLA2073-312-094T	HLR255-312-094T
11/32		HLA2073-343-094T	HLR255-343-094T
3/8		HLA2073-375-094T	HLR255-375-094T
7/16		HLA2073-437-094T	HLR255-437-094T
1/2		HLA2073-500-094T	HLR255-500-094T
3/8		HLA2073-375-125T	HLR255-375-125T
7/16	1/8	HLA2073-437-125T	HLR255-437-125T

## TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	216 in. lb at 90 psia
Socket Speed	185 rpm
Horsepower Rating	0.40
Air Consumption	21 cfm
Weight	3.5 lb

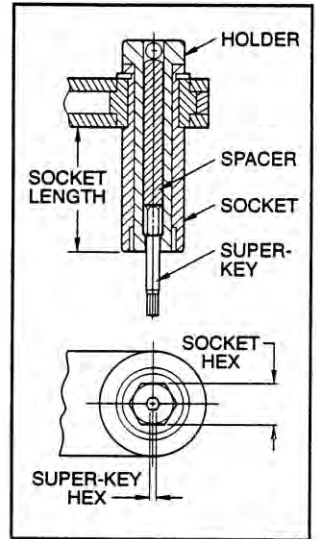
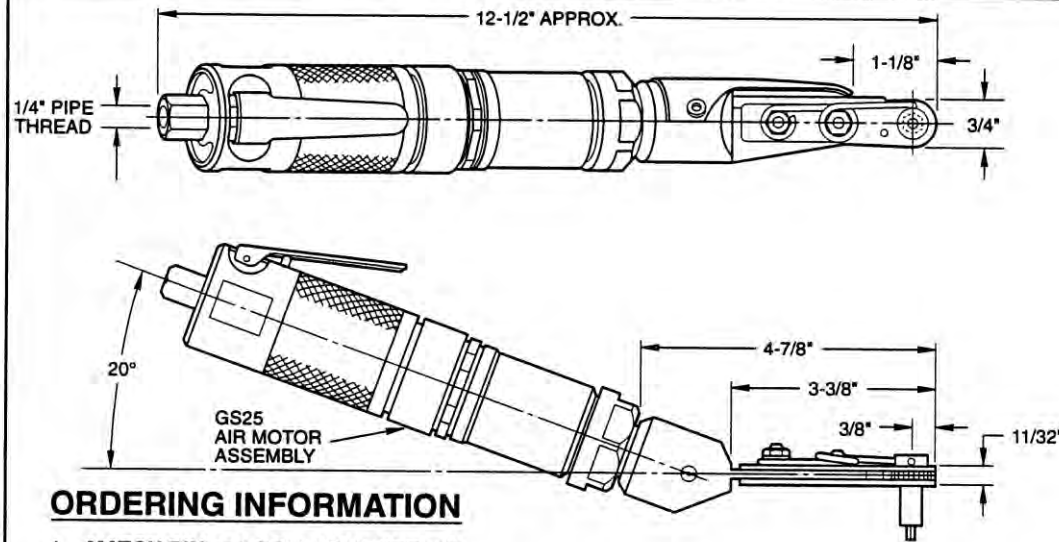
\* "Super-Key" not available in these sizes, standard hex tip only.



**Installation Tooling**  
 HI-LITE®, HI-LOK®, HI-TIGUE®  
 FASTENING SYSTEMS

# SUPER HLA2075

**MEDIUM 20° OFFSET RATCHET WRENCH  
 DRIVER ASSEMBLY WITH MULTI-LENGTH SOCKET  
 AND SUPER-KEY™ (T-Series)**

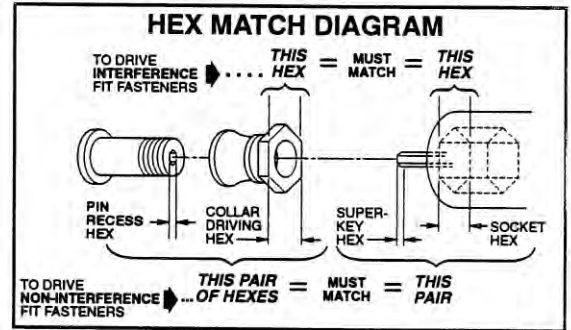
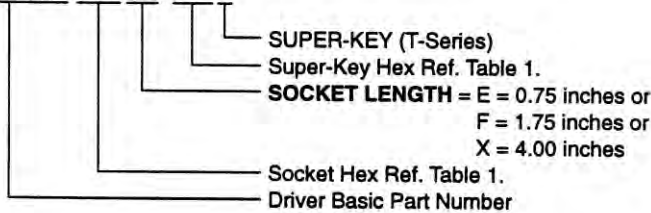


**HLS78-( ) ( )-( ) T  
 SOCKET ASSY**

### ORDERING INFORMATION

1. **MATCH PIN** and **COLLAR HEXES** with **SUPER-KEY HEX** and **SOCKET HEX**. Reference **HEX MATCH DIAGRAM**.
2. See **TABLE 1** for corresponding **COMPLETE DRIVER ASSEMBLY PART NO.**
3. Example of **COMPLETE DRIVER ASSEMBLY PART NO.**

**\*HLA2075-312(A)-078T**



**TABLE 1**

COLLAR DRIVING HEX (Matches Socket Hex)	PIN RECESS HEX (Matches Super-Key Hex)	COMPLETE DRIVER ASSEMBLY PART NO.	OFFSET ADAPTOR AND SOCKET ASSEMBLY PART NO.	EXTENDED SOCKET ASSEMBLY PART NO.	
3/16	1/16	HLA2075-187( )-062T	HLR206-187( )-062T	HLS78-187( )-062T	
7/32		HLA2075-218( )-062T	HLR206-218( )-062T	HLS78-218( )-062T	
1/4		HLA2075-250( )-062T	HLR206-250( )-062T	HLS78-250( )-062T	
9/32		HLA2075-281( )-062T	HLR206-281( )-062T	HLS78-281( )-062T	
5/16		HLA2075-312( )-062T	HLR206-312( )-062T	HLS78-312( )-062T	
11/32	*5/64	HLA2075-343( )-062T	HLR206-343( )-062T	HLS78-343( )-062T	
7/32		HLA2075-218( )-078T	HLR206-218( )-078T	HLS78-218( )-078T	
1/4		HLA2075-250( )-078T	HLR206-250( )-078T	HLS78-250( )-078T	
9/32		HLA2075-281( )-078T	HLR206-281( )-078T	HLS78-281( )-078T	
*5/16		*HLA2075-312( )-078T	HLR206-312( )-078T	HLS78-312( )-078T	
11/32		HLA2075-343( )-078T	HLR206-343( )-078T	HLS78-343( )-078T	
3/8		HLA2075-375( )-078T	HLR206-375( )-078T	HLS78-375( )-078T	
5/16		HLA2075-312( )-094T	HLR206-312( )-094T	HLS78-312( )-094T	
11/32		3/32	HLA2075-343( )-094T	HLR206-343( )-094T	HLS78-343( )-094T
3/8			HLA2075-375( )-094T	HLR206-375( )-094T	HLS78-375( )-094T
7/16	HLA2075-437( )-094T		HLR206-437( )-094T	HLS78-437( )-094T	
1/2	HLA2075-500( )-094T		HLR206-500( )-094T	HLS78-500( )-094T	
3/8	1/8		HLA2075-375( )-125T	HLR206-375( )-125T	HLS78-375( )-125T
7/16		HLA2075-437( )-125T	HLR206-437( )-125T	HLS78-437( )-125T	
1/2		HLA2075-500( )-125T	HLR206-500( )-125T	HLS78-500( )-125T	

**TABLE 2**

TECHNICAL DATA	
Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	216 in. lb at 90 psia
Socket Speed	185 rpm
Horsepower Rating	0.40
Air Consumption	25 cfm
Weight	3.5 lb

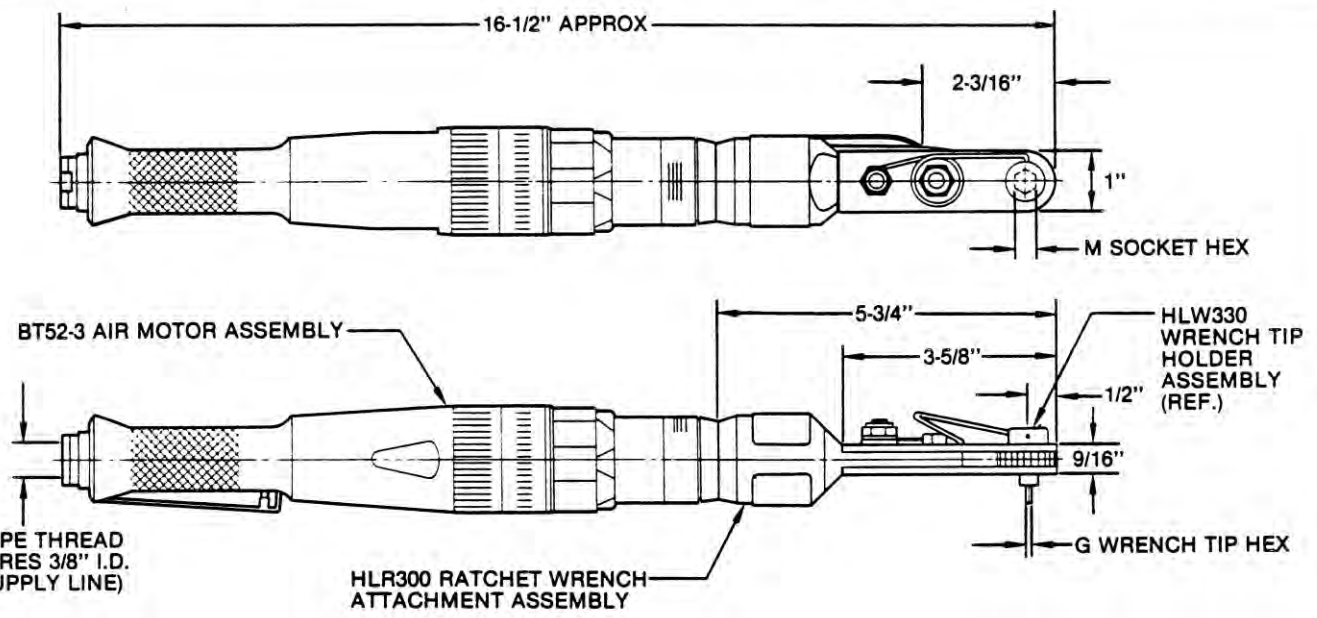
\* "Super-Key" not available in these sizes, standard hex tip only.



**Installation Tooling**  
 HI-LITE®, HI-LOK®, HI-TIGUE®  
 FASTENING SYSTEMS

# HLA3000

## LARGE STRAIGHT RATCHET WRENCH TOOL ASSEMBLY WITH FLUSH SOCKET



### ORDERING INFORMATION

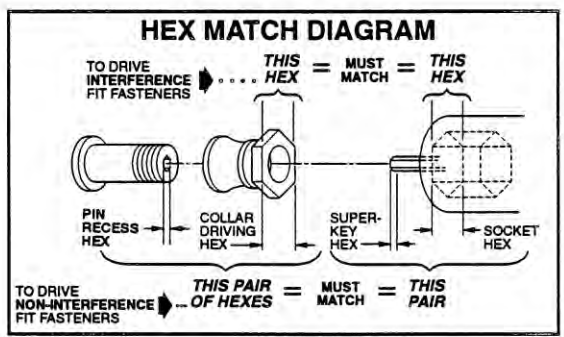
1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions. Determine Complete Tool Assembly Part Number:
3. Example of Complete Tool Assembly Part Number:

**HLA3000-437-156**

Second dash number indicates "G" wrench tip hex to match pin recess hex. Ref. Table 1. (156 = 5/32").

First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (437 = 7/16").

Basic part number includes BT52-3 Air Motor and HLR300 Ratchet Wrench Attachment Assembly.



**TABLE 1**

"M" SOCKET HEX Matches Collar Driving Hex)	"G" WRENCH TIP HEX (Matches Pin Recess Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)
3/8	1/8	HLA3000-375-125	HLR300-375-125
7/16		HLA3000-437-125	HLR300-437-125
1/2		HLA3000-500-125	HLR300-500-125
9/16		HLA3000-562-125	HLR300-562-125
7/16	5/32	HLA3000-437-156	HLR300-437-156
1/2		HLA3000-500-156	HLR300-500-156
9/16		HLA3000-562-156	HLR300-562-156
5/8		HLA3000-625-156	HLR300-625-156

TECHNICAL DATA	
Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	330 in. lb at 90 psia
Motor Speed	170 rpm
Horsepower	0.65
Air Consumption	30 cfm
Weight	4 lb

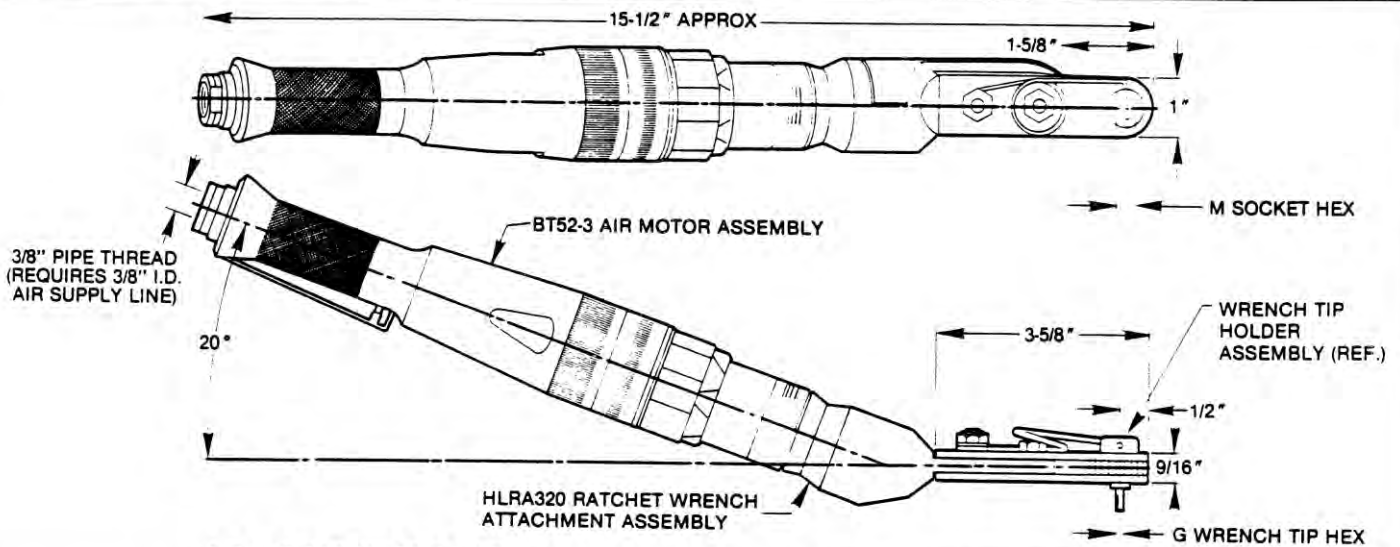
\* "Super-Key" not available in these sizes, standard hex tip only.



**Installation Tooling**  
 HI-LITE®, HI-LOK®, HI-TIGUE®  
 FASTENING SYSTEMS

# HLA3020

## LARGE 20° OFFSET RATCHET WRENCH TOOL ASSEMBLY WITH FLUSH SOCKET



### ORDERING INFORMATION

1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions. Determine Complete Tool Assembly Part Number.
3. Example of Complete Tool Assembly Part Number:

HLA3020-437-156

- Second dash number indicates "G" wrench tip hex to match pin recess hex. Ref. Table 1. (156 = 5/32").
- First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (437 = 7/16").
- Basic part number includes BT52-3 Air Motor and HLRA320 Ratchet Wrench Attachment Assembly.

4. See Table 2 for Complete Tool Assembly Part Numbers to obtain a Ratchet Wrench featuring a thru-hex socket and no wrench tip holder assembly.

5. Example of Complete Tool Assembly Part Number that has a thru-hex socket:

HLA3020H-437

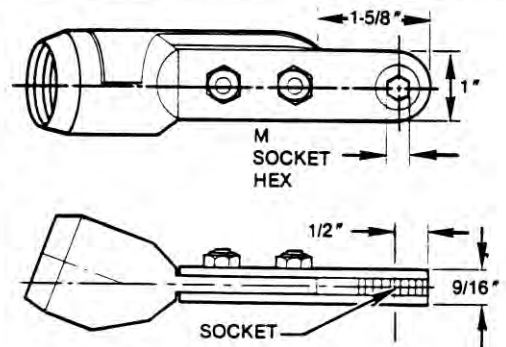
- First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 2. (437 = 7/16").
- Basic part number plus "H" indicates BT52-3 Motor and HLRA320H Ratchet Wrench Attachment Assembly, which has a thru-hex driving socket, and no wrench tip holder assembly.

6. HLRA320 or HLRA320H Ratchet Wrench Attachment Assembly may be ordered separately.

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	"G" WRENCH TIP HEX (Matches Pin Recess Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)
3/8	1/8	HLA3020-375-125	HLRA320-375-125
7/16		HLA3020-437-125	HLRA320-437-125
1/2		HLA3020-500-125	HLRA320-500-125
9/16		HLA3020-562-125	HLRA320-562-125
7/16	5/32	HLA3020-437-156	HLRA320-437-156
1/2		HLA3020-500-156	HLRA320-500-156
9/16		HLA3020-562-156	HLRA320-562-156
5/8		HLA3020-625-156	HLRA320-625-156

### TOOL ASSEMBLY WITH THRU-HEX SOCKET, LESS WRENCH TIP HOLDER ASSY



**TABLE 2**

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)
3/8	HLA3020H-375	HLRA320H-375
7/16	HLA3020H-437	HLRA320H-437
1/2	HLA3020H-500	HLRA320H-500
9/16	HLA3020H-562	HLRA320H-562
5/8	HLA3020H-625	HLRA320H-625

### TECHNICAL DATA

Operating Pressure . . . . . 90 psia	Horsepower Rating . . . . . 0.65
<b>MAXIMUM TORQUE RATING</b> . . . 330 in. lb (Motor) at 90 psia	Air Consumption . . . . . 30 cfm
Socket Speed . . . . . 170 rpm	Weight . . . . . 4 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

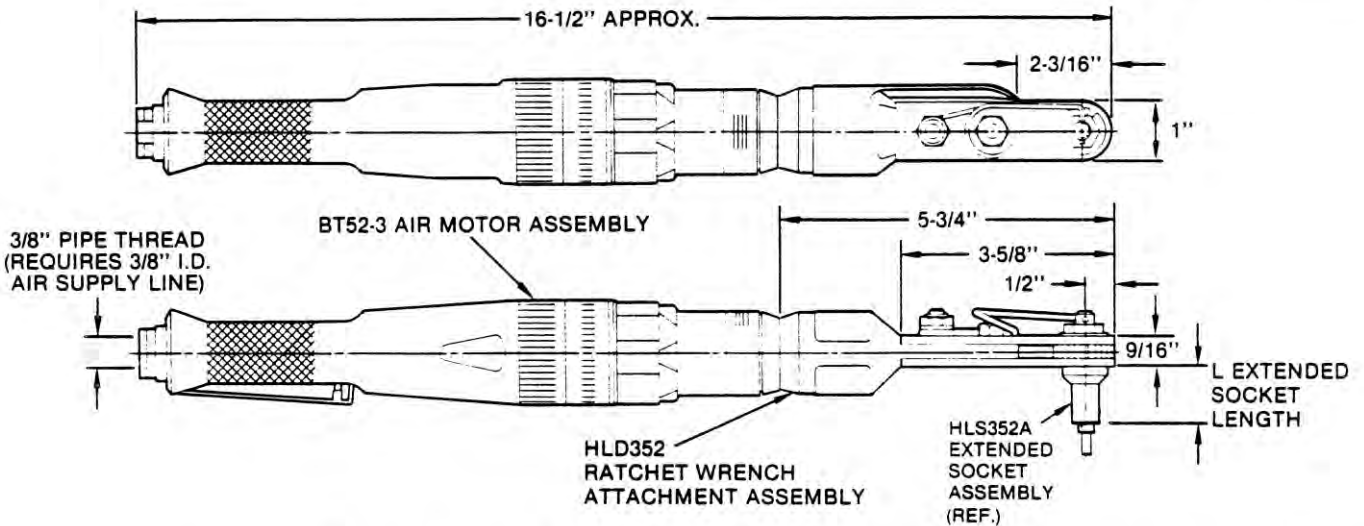


**Installation Tooling**

HI-LITE<sup>®</sup>, HI-LOK<sup>®</sup>, HI-TIGUE<sup>®</sup>  
FASTENING SYSTEMS

# HLA3502

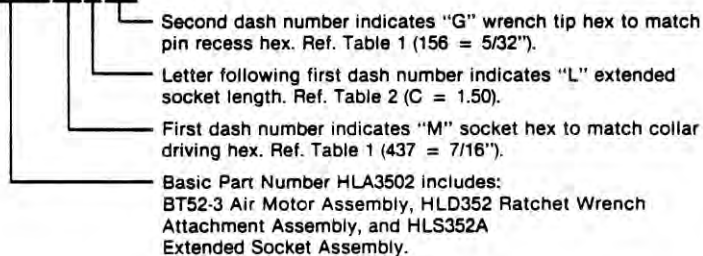
## LARGE STRAIGHT RATCHET WRENCH TOOL ASSEMBLY WITH EXTENDED SOCKET



**ORDERING INFORMATION**

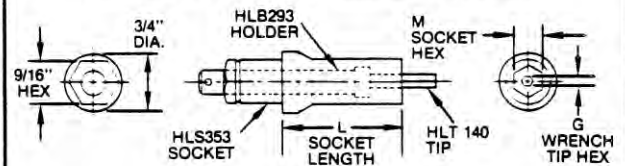
1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions.
3. See Table 2 for proper code letter representing desired "L" extended socket length.
4. Example of complete tool assembly part number:

**HLA3502-437C-156**



**HLS352A EXTENDED SOCKET ASSEMBLY**

(INCLUDES HLW352 WRENCH TIP HOLDER ASSEMBLY AND HLS352 SOCKET ASSEMBLY)



**TABLE 2**

CODE	"L" EXTENDED SOCKET LENGTH
* B	1.00
C	1.50
D	2.00

\*Available with 7/16" hex socket only.

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	"G" WRENCH TIP HEX (Matches Pin Recess Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)	EXTENDED SOCKET ASSEMBLY PART NO.
7/16	1/8	HLA3502-437( )-125	HLD352-437( )-125	HLS352A-437( )-125
1/2		HLA3502-500( )-125	HLD352-500( )-125	HLS352A-500( )-125
9/16		HLA3502-562( )-125	HLD352-562( )-125	HLS352A-562( )-125
5/8		HLA3502-625( )-125	HLD352-625( )-125	HLS352A-625( )-125
11/16		HLA3502-687( )-125	HLD352-687( )-125	HLS352A-687( )-125
7/16	5/32	HLA3502-437( )-156	HLD352-437( )-156	HLS352A-437( )-156
1/2		HLA3502-500( )-156	HLD352-500( )-156	HLS352A-500( )-156
9/16		HLA3502-562( )-156	HLD352-562( )-156	HLS352A-562( )-156
5/8		HLA3502-625( )-156	HLD352-625( )-156	HLS352A-625( )-156
11/16		HLA3502-687( )-156	HLD352-687( )-156	HLS352A-687( )-156

**TECHNICAL DATA**

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	330 in. lb at 90 psia
Motor Speed	170 rpm
Horsepower	0.65
Air Consumption	30 cfm
Weight	4 lb

\* "Super-Key" not available in these sizes, standard hex tip only

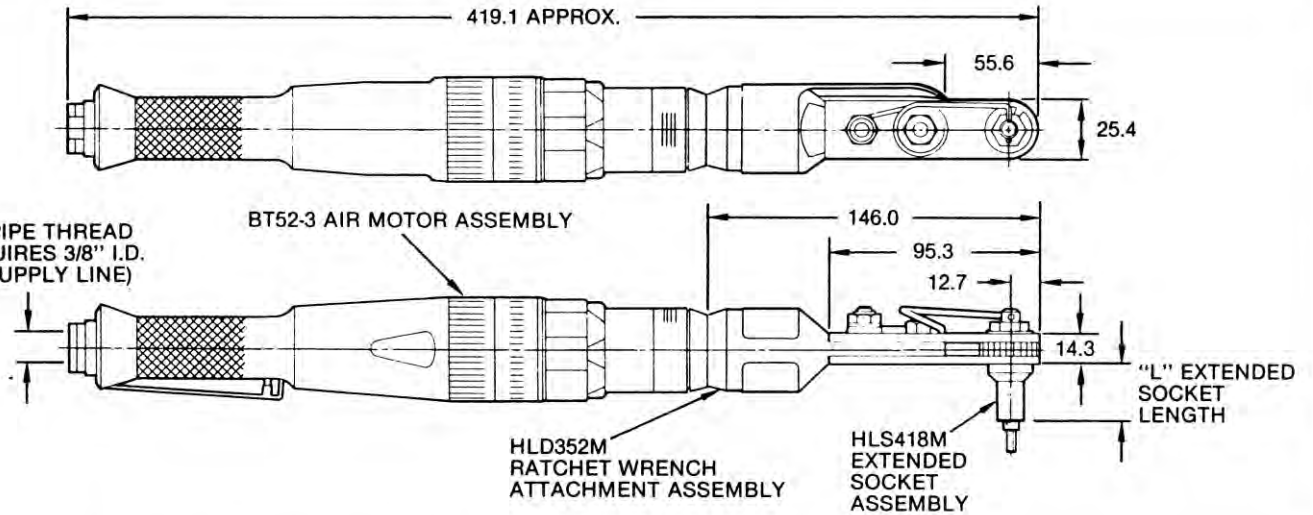


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA3502M

## LARGE STRAIGHT RATCHET WRENCH TOOL ASSEMBLY WITH METRIC EXTENDED SOCKET



### ORDERING INFORMATION

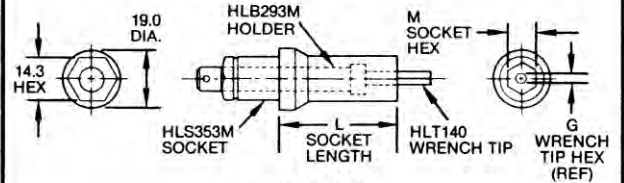
1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions.
3. See Table 2 for proper code letter representing desired "L" extended socket length.
4. Example of Complete Tool Assembly Part Number:

HLA3502M-11 C-4.06

- Second dash number indicates "G" wrench tip hex to match pin recess hex. Ref. Table 1. (4.06).
- Letter following first dash number indicates "L" extended socket length. Ref. Table 2. (C = 38.1 mm).
- First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (11 = 11 mm).
- Basic part number HLA3502M includes BT52-3 Air Motor Assembly, HLD352M Ratchet Wrench Attachment Assembly, and HLS418M Extended Socket Assembly.

### HLS418M EXTENDED SOCKET ASSEMBLY

(INCLUDES HLW352M WRENCH TIP HOLDER ASSEMBLY AND HLS352M SOCKET ASSEMBLY)



**TABLE 2**

CODE	"L" EXTENDED SOCKET LENGTH (mm)
B	25
C	38
D	51

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex) (mm)	"G" WRENCH TIP HEX (Matches Pin Recess Hex) (mm)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO.	EXTENDED SOCKET ASSEMBLY PART NO.
11	3.26	HLA3502M-11( )-3.26	HLD352M-11( )-3.26	HLS418M-11( )-3.26
13		HLA3502M-13( )-3.26	HLD352M-13( )-3.26	HLS418M-13( )-3.26
14		HLA3502M-14( )-3.26	HLD352M-14( )-3.26	HLS418M-14( )-3.26
11	4.06	HLA3502M-11( )-4.06	HLD352M-11( )-4.06	HLS418M-11( )-4.06
13		HLA3502M-13( )-4.06	HLD352M-13( )-4.06	HLS418M-13( )-4.06
14		HLA3502M-14( )-4.06	HLD352M-14( )-4.06	HLS418M-14( )-4.06

### TECHNICAL DATA

Operating Pressure ..... 6.2 BAR

**MAXIMUM TORQUE RATING** .37.3 N.M.  
(Motor) at 6.2 BAR

Socket Speed ..... 170 rpm

Horsepower ..... 0.66

Air Consumption ..... 850 Ltr./Min.

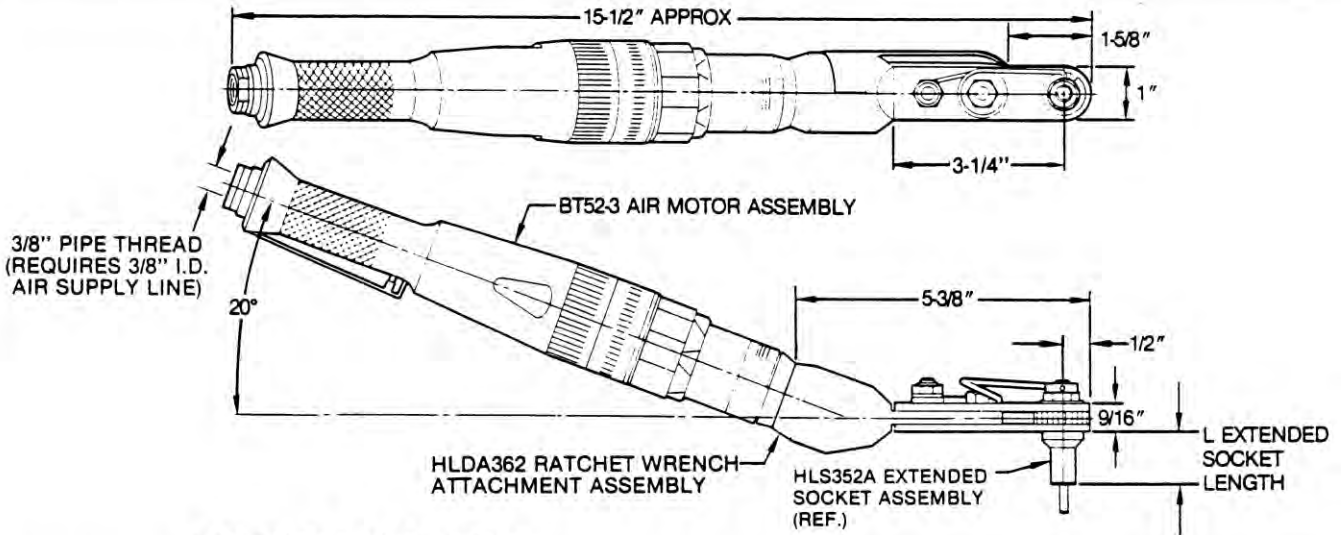
Weight ..... 1.8 Kg



**Installation Tooling**  
 HI-LITE®, HI-LOK®, HI-TIGUE®  
 FASTENING SYSTEMS

# HLA3522

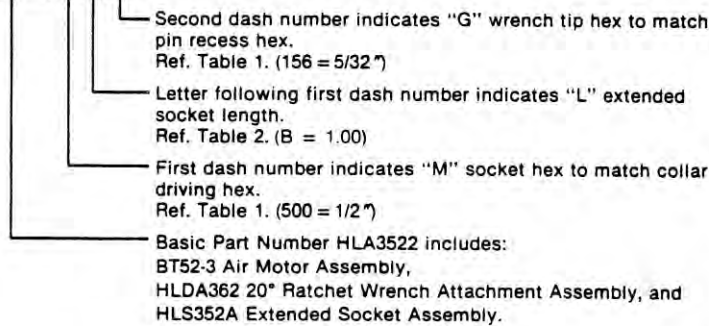
## LARGE 20° OFFSET RATCHET WRENCH TOOL ASSEMBLY WITH EXTENDED SOCKET



### ORDERING INFORMATION

- Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
- See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions.
- See Table 2 for proper code letter representing desired "L" extended socket length. Optional "L" socket lengths not shown in Table 2 available upon request.
- Example of complete tool assembly part number.

HLA3522-500B-156



### HLS352A EXTENDED SOCKET ASSEMBLY

(INCLUDES HLW352 WRENCH TIP HOLDER ASSEMBLY AND HLS352 SOCKET ASSEMBLY)

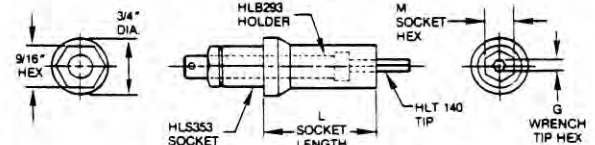


TABLE 2

CODE	"L" EXTENDED SOCKET LENGTH
* B	1.00
F	1.75
X	4.00

\* Available with 7/16" hex socket only.  
 \*\* "Super-Key" not available in these sizes, standard hex tip only.

TABLE 1

"M" SOCKET HEX (Matches Collar Driving Hex)	"G" WRENCH TIP HEX (Matches Pin Recess Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)	EXTENDED SOCKET ASSEMBLY PART NO.
7/16	1/8	HLA3522-437( )-125	HLDA362-437( )-125	HLS352A-437( )-125
1/2		HLA3522-500( )-125	HLDA362-500( )-125	HLS352A-500( )-125
9/16		HLA3522-562( )-125	HLDA362-562( )-125	HLS352A-562( )-125
5/8		HLA3522-625( )-125	HLDA362-625( )-125	HLS352A-625( )-125
11/16		HLA3522-687( )-125	HLDA362-687( )-125	HLS352A-687( )-125
7/16	5/32	HLA3522-437( )-156	HLDA362-437( )-156	HLS352A-437( )-156
1/2		HLA3522-500( )-156	HLDA362-500( )-156	HLS352A-500( )-156
9/16		HLA3522-562( )-156	HLDA362-562( )-156	HLS352A-562( )-156
5/8		HLA3522-625( )-156	HLDA362-625( )-156	HLS352A-625( )-156
11/16		HLA3522-687( )-156	HLDA362-687( )-156	HLS352A-687( )-156

### TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING</b> (Motor)	330 in. lb at 90 psia
Socket Speed	170 rpm
Horsepower Rating	0.65
Air Consumption	30 cfm
Weight	4 lb

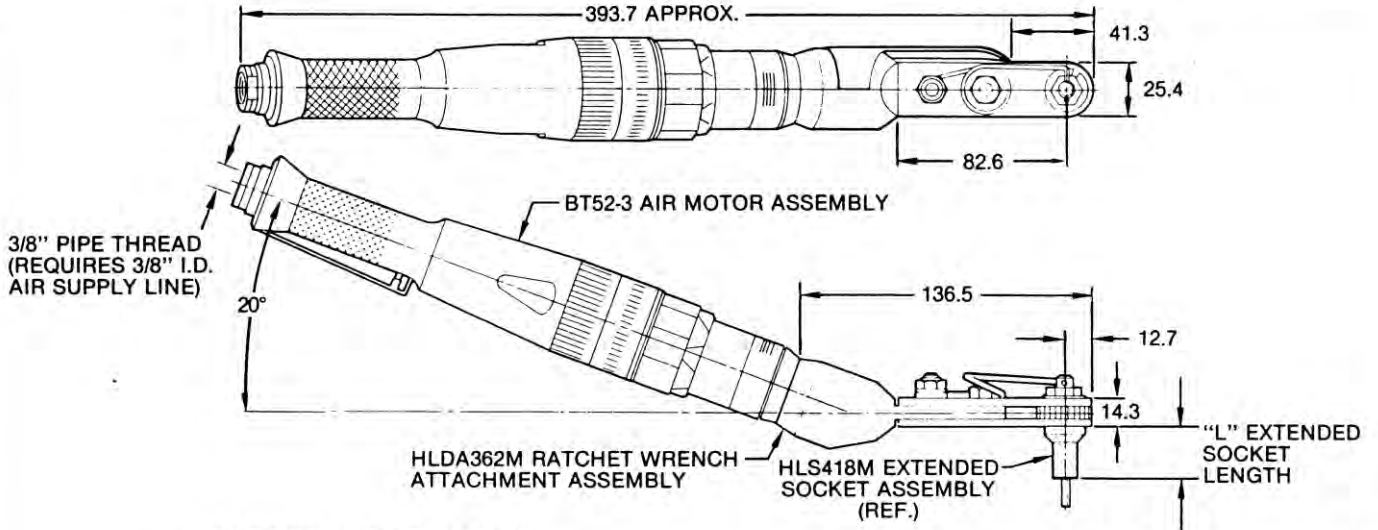


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA3522M

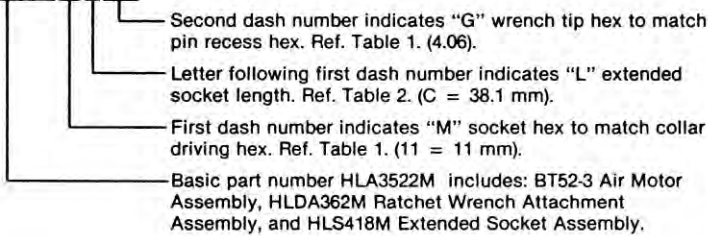
## LARGE 20° OFFSET RATCHET WRENCH TOOL ASSEMBLY WITH METRIC EXTENDED SOCKET



**ORDERING INFORMATION**

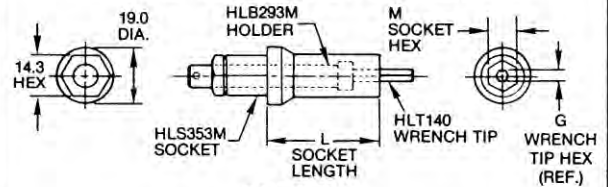
1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions.
3. See Table 2 for proper code letter representing desired "L" extended socket length. Optional "L" socket lengths not shown in Table 2 available upon request.
4. Example of Complete Tool Assembly Part Number:

**HLA3522M-11 C-4.06**



**HLS418M EXTENDED SOCKET ASSEMBLY**

(INCLUDES HLW352M WRENCH TIP HOLDER ASSEMBLY AND HLS352M SOCKET ASSEMBLY)



**TABLE 2**

CODE	"L" EXTENDED SOCKET LENGTH (mm)
E *	19
F	44
X	102

\* Available with 11mm hex socket only

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex) (mm)	"G" WRENCH TIP HEX (Matches Pin Recess Hex) (mm)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO.	EXTENDED SOCKET ASSEMBLY PART NO.
11	3.26	HLA3522M-11( )-3.26	HLDA362M-11( )-3.26	HLS418M-11( )-3.26
13		HLA3522M-13( )-3.26	HLDA362M-13( )-3.26	HLS418M-13( )-3.26
14		HLA3522M-14( )-3.26	HLDA362M-14( )-3.26	HLS418M-14( )-3.26
11	4.06	HLA3522M-11( )-4.06	HLDA362M-11( )-4.06	HLS418M-11( )-4.06
13		HLA3522M-13( )-4.06	HLDA362M-13( )-4.06	HLS418M-13( )-4.06
14		HLA3522M-14( )-4.06	HLDA362M-14( )-4.06	HLS418M-14( )-4.06

**TECHNICAL DATA**

Operating Pressure	6.2 BAR
<b>MAXIMUM TORQUE RATING</b> (Motor)	37.3 N.M. at 6.2 BAR
Socket Speed	170 rpm
Horsepower	0.65
Air Consumption	850 Ltr./Min.
Weight	1.8 Kg

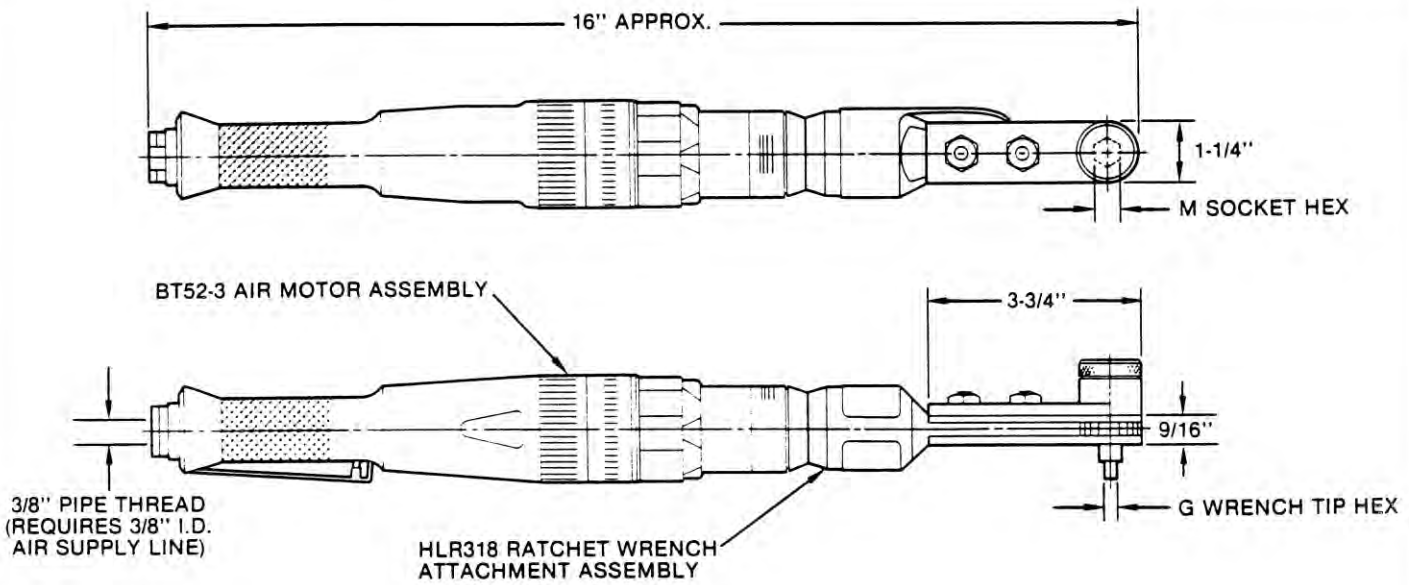


**Installation Tooling**

HI-LITE<sup>®</sup>, HI-LOK<sup>®</sup>, HI-TIGUE<sup>®</sup>  
FASTENING SYSTEMS

# HLA4001

## LARGE STRAIGHT HEAVY DUTY RATCHET WRENCH TOOL ASSEMBLY WITH FLUSH SOCKET



### ORDERING INFORMATION

- Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
- See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions.
- Determine Complete Tool Assembly Part Number.

Example of Complete Tool Assembly Part Number:

**HLA4001-437-156**

Second dash number indicates "G" wrench tip hex to match pin recess hex. Ref. Table 1. (156 = 5/32").

First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (437 = 7/16").

Basic part number includes BT52-3 Air Motor and HLR318 Ratchet Wrench Attachment Assembly.

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	"G" WRENCH TIP HEX (Matches Pin Recess Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO.(REF.)
7/16	1/8	HLA4001-437-125	HLR318-437-125
1/2		HLA4001-500-125	HLR318-500-125
9/16		HLA4001-562-125	HLR318-562-125
5/8		HLA4001-625-125	HLR318-625-125
11/16		HLA4001-687-125	HLR318-687-125
7/16	5/32	HLA4001-437-156	HLR318-437-156
1/2		HLA4001-500-156	HLR318-500-156
9/16		HLA4001-562-156	HLR318-562-156
5/8		HLA4001-625-156	HLR318-625-156
11/16		HLA4001-687-156	HLR318-687-156
9/16	3/16	HLA4001-562-187	HLR318-562-187
3/4		HLA4001-750-187	HLR318-750-187
11/16		HLA4001-687-218	HLR318-687-218

### TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	400 in. lb at 90 psia
Motor Speed	170 rpm
Horsepower	0.65
Air Consumption	30 cfm
Weight	4.2 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

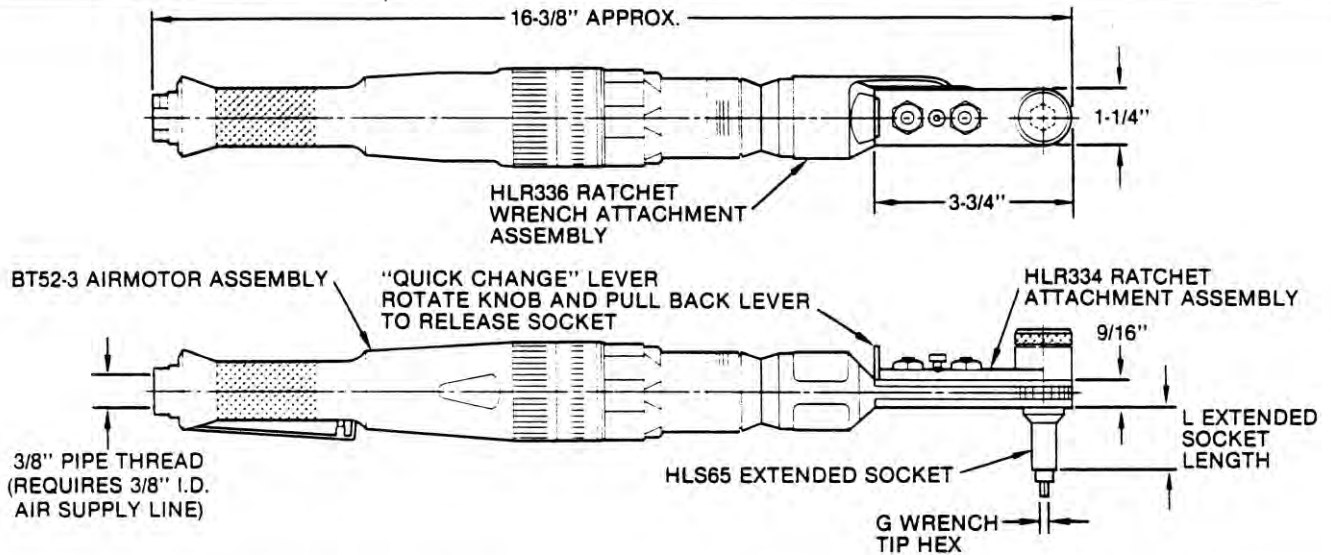


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA4007

## LARGE STRAIGHT HEAVY DUTY RATCHET WRENCH TOOL ASSEMBLY WITH "QUICK CHANGE" EXTENDED SOCKET



### ORDERING INFORMATION

- Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
- See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions.
- See Table 2 for proper code letter representing desired "L" extended socket length.
- Example of Complete Tool Assembly Part Number:

HLA4007-437F-156

Second dash number indicates "G" wrench tip hex to match pin recess hex. Ref. Table 1. (156 = 5/32").  
 Letter following first dash number indicates "L" extended socket length. Ref. Table 2. (F = 1.75").  
 First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1 (437 = 7/16").  
 Basic part number HLA4007 includes: BT52-3 Air Motor Assembly, HLR336 Ratchet Wrench Attachment Assembly, and HLS65 Extended Socket.

5. U.S. Patent 4.924.734.

### HLS65 EXTENDED SOCKET

**TABLE 2**

CODE	"L" EXTENDED SOCKET LENGTH
A	0.50
F	1.75
X	4.00

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	"G" WRENCH TIP HEX (Matches Pin Recess Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)	EXTENDED SOCKET ASSEMBLY PART NO.
7/16	1/8	HLA4007-437( )-125	HLR336-437( )-125	HLS65-437( )
1/2		HLA4007-500( )-125	HLR336-500( )-125	HLS65-500( )
9/16		HLA4007-562( )-125	HLR336-562( )-125	HLS65-562( )
5/8		HLA4007-625( )-125	HLR336-625( )-125	HLS65-625( )
11/16		HLA4007-687( )-125	HLR336-687( )-125	HLS65-687( )
7/16	5/32	HLA4007-437( )-156	HLR336-437( )-156	HLS65-437( )
1/2		HLA4007-500( )-156	HLR336-500( )-156	HLS65-500( )
9/16		HLA4007-562( )-156	HLR336-562( )-156	HLS65-562( )
5/8		HLA4007-625( )-156	HLR336-625( )-156	HLS65-625( )
11/16		HLA4007-687( )-156	HLR336-687( )-156	HLS65-687( )
9/16	3/16	HLA4007-562( )-187	HLR336-562( )-187	HLS65-562( )
3/4		HLA4007-750( )-187	HLR336-750( )-187	HLS65-750( )
11/16		HLA4007-687( )-218	HLR336-687( )-218	HLS65-687( )

### TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING</b> (Motor)	400 in. lb at 90 psia
Motor Speed	170 rpm
Horsepower	0.65
Air Consumption	30 cfm
Weight	4.2 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

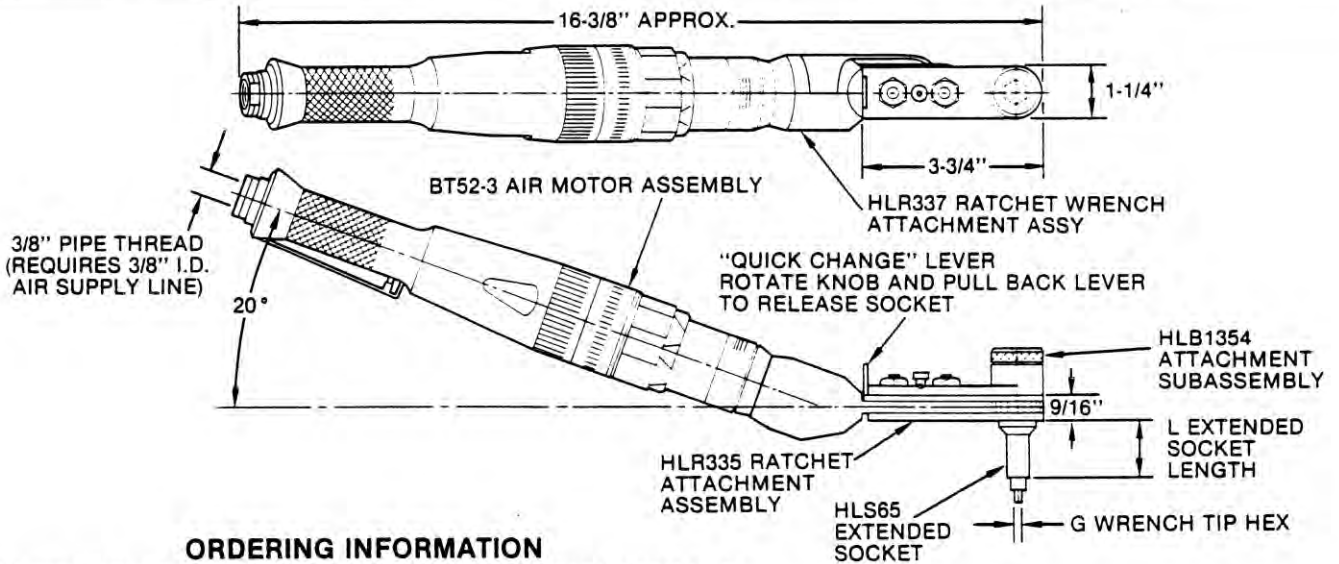


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA4008

## LARGE 20° OFFSET HEAVY DUTY RATCHET WRENCH TOOL ASSEMBLY WITH "QUICK CHANGE" EXTENDED SOCKET



**ORDERING INFORMATION**

- Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
- See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions.
- See Table 2 for proper code letter representing desired "L" extended socket length.
- Example of complete tool assembly part number:

**HLA4008-500E-156**

- Second dash number indicates "G" wrench tip hex to match pin recess hex. Ref. Table 1 (156 = 5/32").
- Letter following first dash number indicates "L" extended socket length. Ref. Table 2 (E = 0.75).
- First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1 (500 = 1/2").

Basic Part Number HLA4008 includes:  
BT52-3 Air Motor Assembly, HLR337 20° Ratchet Wrench Attachment Assembly, and HLS65 Extended Socket.

5. U.S. Patent 4,924,734.

**HLS65 EXTENDED SOCKET**

**TABLE 2**

CODE	"L" EXTENDED SOCKET LENGTH
E	0.75
F	1.75
X	4.00

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	"G" WRENCH TIP HEX (Matches Pin Recess Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)	EXTENDED SOCKET ASSEMBLY PART NO.
7/16	1/8	HLA4008-437( )-125	HLR337-437( )-125	HLS65-437( )
1/2		HLA4008-500( )-125	HLR337-500( )-125	HLS65-500( )
9/16		HLA4008-562( )-125	HLR337-562( )-125	HLS65-562( )
5/8		HLA4008-625( )-125	HLR337-625( )-125	HLS65-625( )
11/16		HLA4008-687( )-125	HLR337-687( )-125	HLS65-687( )
7/16	5/32	HLA4008-437( )-156	HLR337-437( )-156	HLS65-437( )
1/2		HLA4008-500( )-156	HLR337-500( )-156	HLS65-500( )
9/16		HLA4008-562( )-156	HLR337-562( )-156	HLS65-562( )
5/8		HLA4008-625( )-156	HLR337-625( )-156	HLS65-625( )
11/16		HLA4008-687( )-156	HLR337-687( )-156	HLS65-687( )
9/16	3/16	HLA4008-562( )-187	HLR337-562( )-187	HLS65-562( )
3/4		HLA4008-750( )-187	HLR337-750( )-187	HLS65-750( )
11/16		HLA4008-687( )-218	HLR337-687( )-218	HLS65-687( )

**TECHNICAL DATA**

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING</b> (Motor)	400 in. lb at 90 psia
Motor Speed	170 rpm
Horsepower	0.65
Air Consumption	30 cfm
Weight	4.2 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

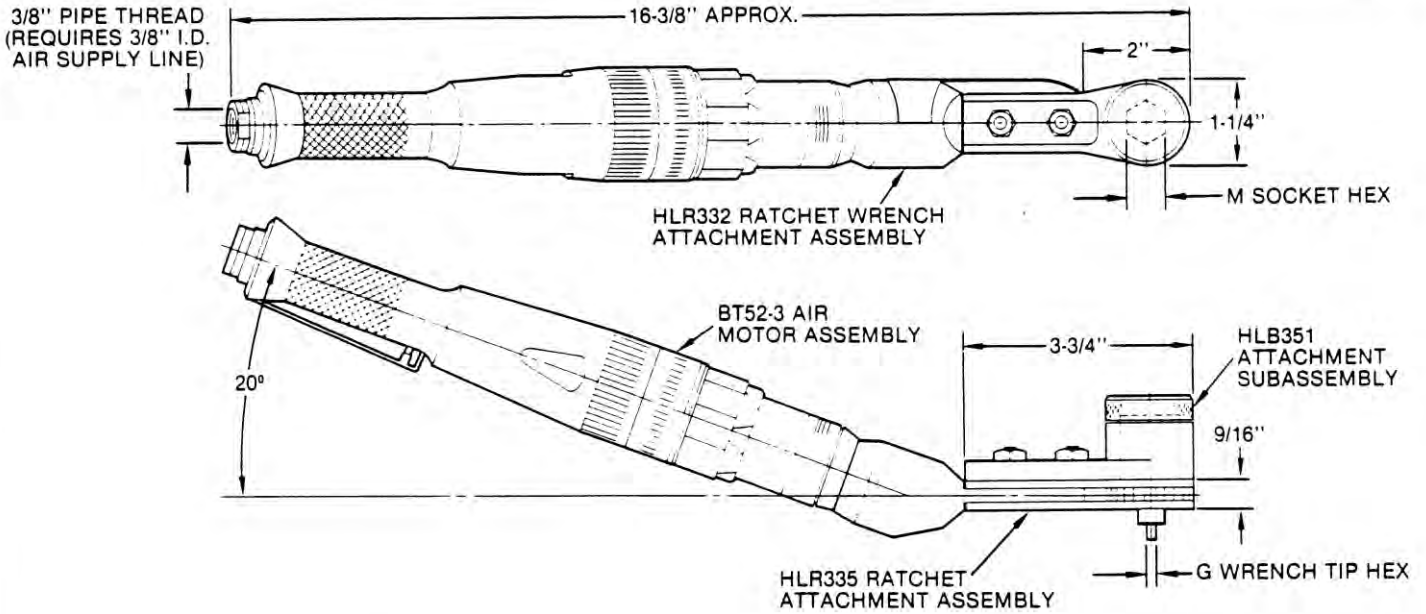


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA4020

## LARGE 20° OFFSET HEAVY DUTY RATCHET WRENCH TOOL ASSEMBLY WITH FLUSH SOCKET



### ORDERING INFORMATION

1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions. Determine Complete Tool Assembly Part Number.
3. Example of Complete Tool Assembly Part Number:

HLA4020-437-125

- Second dash number indicates "G" wrench tip hex to match pin recess hex. Ref. Table 1. (125 = 1/8").
- First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (437 = 7/16").
- Basic part number includes: BT52-3 Air Motor Assembly and HLR332 Ratchet Wrench Attachment Assembly.

### TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING</b> (Motor)	400 in. lb at 90 psia
Socket Speed	170 rpm
Horsepower	0.65
Air Consumption	30 cfm
Weight	4.2 lb

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	"G" WRENCH TIP HEX (Matches Pin Recess Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)	ATTACHMENT SUBASSEMBLY PART NO. (REF.)	RATCHET ATTACHMENT ASSEMBLY PART NO. (REF.)
7/16	1/8	HLA4020-437-125	HLR332-437-125	HLB351-437-125	HLR335-437
1/2		HLA4020-500-125	HLR332-500-125	HLB351-500-125	HLR335-500
9/16		HLA4020-562-125	HLR332-562-125	HLB351-562-125	HLR335-562
5/8		HLA4020-625-125	HLR332-625-125	HLB351-625-125	HLR335-625
11/16		HLA4020-687-125	HLR332-687-125	HLB351-687-125	HLR335-687
7/16	5/32	HLA4020-437-156	HLR332-437-156	HLB351-437-156	HLR335-437
1/2		HLA4020-500-156	HLR332-500-156	HLB351-500-156	HLR335-500
9/16		HLA4020-562-156	HLR332-562-156	HLB351-562-156	HLR335-562
5/8		HLA4020-625-156	HLR332-625-156	HLB351-625-156	HLR335-625
11/16		HLA4020-687-156	HLR332-687-156	HLB351-687-156	HLR335-687
9/16	3/16	HLA4020-562-187	HLR332-562-187	HLB351-562-187	HLR335-562
3/4		HLA4020-750-187	HLR332-750-187	HLB351-750-187	HLR335-750
11/16		HLA4020-687-218	HLR332-687-218	HLB351-687-218	HLR335-687

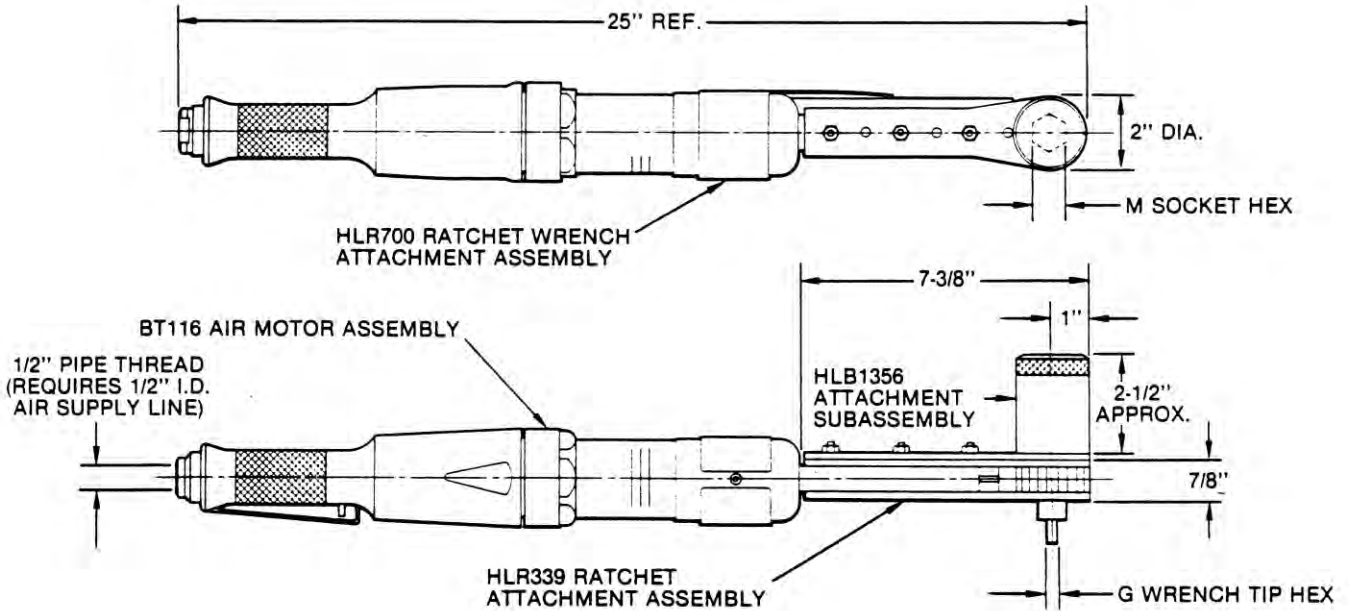
\* "Super-Key" not available in these sizes, standard hex tip only.



**Installation Tooling**  
 HI-LITE®, HI-LOK®, HI-TIGUE®  
 FASTENING SYSTEMS

# HLA7000

## LARGE STRAIGHT HEAVY DUTY RATCHET WRENCH TOOL ASSEMBLY WITH FLUSH SOCKET



### ORDERING INFORMATION

1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions. Determine Complete Tool Assembly Part Number.
3. Example of Complete Tool Assembly Part Number:

HLA7000-625-156

- Second dash number indicates "G" wrench tip hex to match pin recess hex. Ref. Table 1. (156 = 5/32").
- First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (625 = 5/8").
- Basic part number includes: BT116 Air Motor Assembly and HLR700 Ratchet Wrench Attachment Assembly.

### TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING</b> (Motor)	.185 ft lb at 90 psia
Socket Speed	75 rpm
Horsepower	2.70
Air Consumption	.55 cfm
Weight	15 lb

TABLE 1

"M" SOCKET HEX (Matches Collar Driving Hex)	"G" WRENCH TIP HEX (Matches Pin Recess Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)	ATTACHMENT SUBASSEMBLY PART NO. (REF.)
1/2	5/32	HLA7000-500-156	HLR700-500-156	HLB1356-500-156
5/8		HLA7000-625-156	HLR700-625-156	HLB1356-625-156
3/4	3/16	HLA7000-750-187	HLR700-750-187	HLB1356-750-187
7/8	7/32	HLA7000-875-218	HLR700-875-218	HLB1356-875-218
1	1/4	HLA7000-1000-250	HLR700-1000-250	HLB1356-1000-250
1-1/8	5/16	HLA7000-1125-312	HLR700-1125-312	HLB1356-1125-312

\* "Super-Key" not available in these sizes, standard hex tip only.

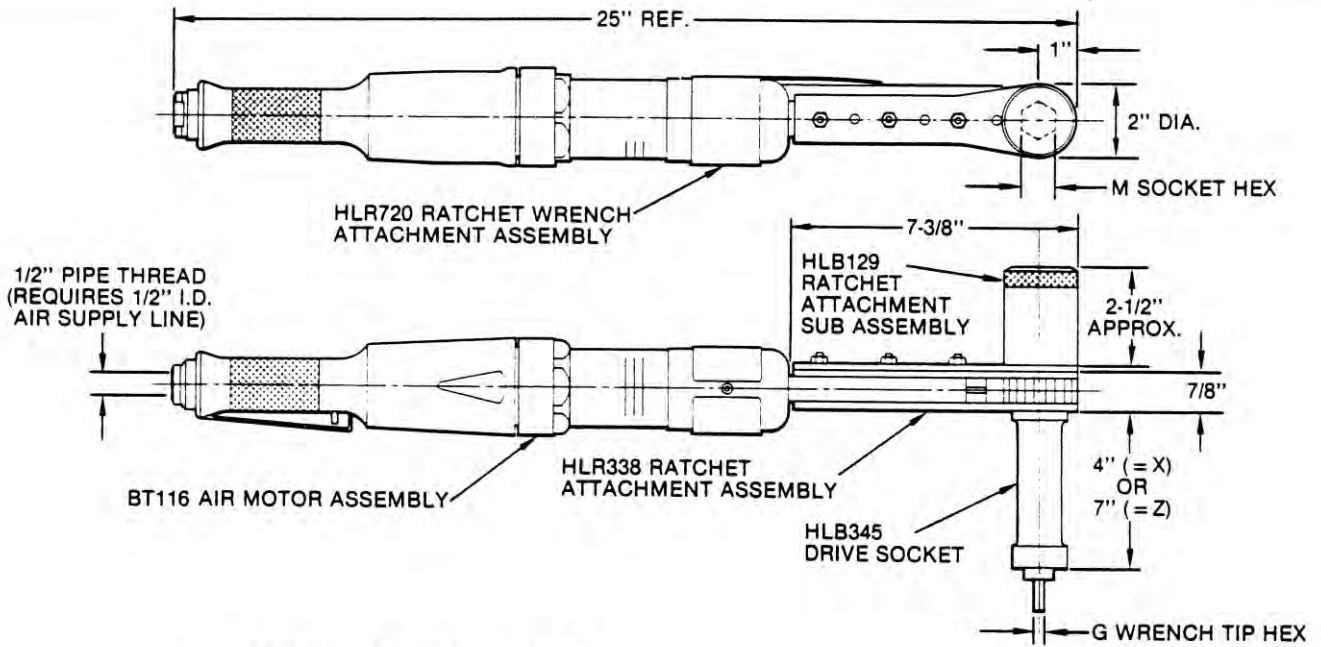


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA7020

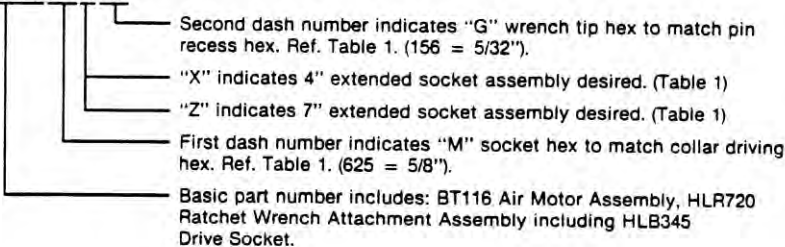
## LARGE STRAIGHT HEAVY DUTY RATCHET WRENCH TOOL ASSEMBLY WITH EXTENDED SOCKET



### ORDERING INFORMATION

1. Determine collar driving hex and pin recess hex dimensions of the fasteners to be installed.
2. Determine length (either 4" or 7") of extended socket assembly desired.
3. See Table 1 for "M" socket hex and "G" wrench tip hex combination to match collar driving hex and pin recess hex dimensions. Determine Complete Tool Assembly Part Number.
4. Example of Complete Tool Assembly Part Number:

HLA7020-625X-156



### TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING</b> (Motor)	185 ft lb at 90 psia
Socket Speed	.75 rpm
Horsepower Rating	2.70
Air Consumption	55 cfm
Weight	15 lb

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	"G" WRENCH TIP HEX (Matches Pin Recess Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)	EXTENDED SOCKET PART NO.	ATTACHMENT SUB ASSEMBLY PART NO.	SOCKET LENGTH
1/2	5/32	HLA7020-500X-156	HLR720-500X-156	HLB345-500X	HLB129-500X-156	4"
5/8		HLA7020-625X-156	HLR720-625X-156	HLB345-625X	HLB129-625X-156	
9/16		HLA7020-562X-187	HLR720-562X-187	HLB345-562X	HLB129-562X-187	
3/4		HLA7020-750X-187	HLR720-750X-187	HLB345-750X	HLB129-750X-187	
11/16	7/32	HLA7020-687X-218	HLR720-687X-218	HLB345-687X	HLB129-687X-218	
7/8		HLA7020-875X-218	HLR720-875X-218	HLB345-875X	HLB129-875X-218	
7/8		HLA7020-875X-250	HLR720-875X-250	HLB345-875X	HLB129-875X-250	
1/2		HLA7020-500Z-156	HLR720-500Z-156	HLB345-500Z	HLB129-500Z-156	
3/4	3/16	HLA7020-750Z-187	HLR720-750Z-187	HLB345-750Z	HLB129-750Z-187	7"
7/8		HLA7020-875Z-218	HLR720-875Z-218	HLB345-875Z	HLB129-875Z-218	
7/8		HLA7020-875Z-250	HLR720-875Z-250	HLB345-875Z	HLB129-875Z-250	
1.0		HLA7020-1000Z-250	HLR720-1000Z-250	HLB345-1000Z	HLB129-1000Z-250	
1-1/8	5/16	HLA7020-1125Z-312	HLR720-1125Z-312	HLB345-1125Z	HLB129-1125Z-312	

\* "Super-Key" not available in these sizes, standard hex tip only.



Installation Tooling

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

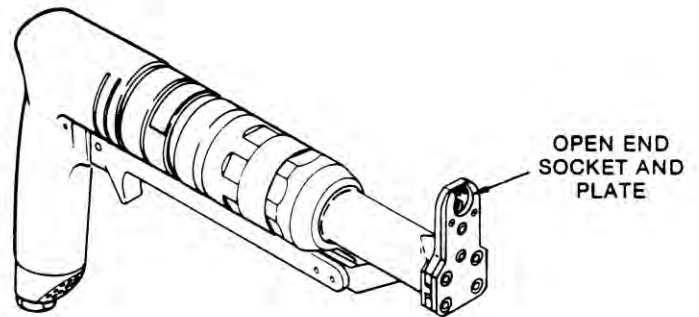
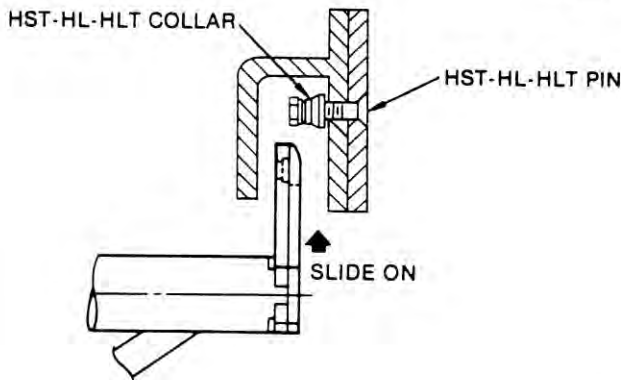
# OPEN END SELF-INDEXING DRIVE SOCKET TYPE TOOLS

## HI-SHEAR SELF-INDEXING POWER TOOLS

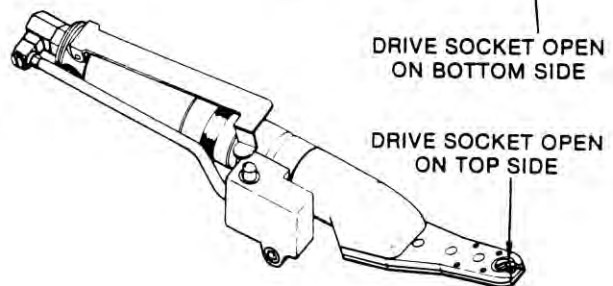
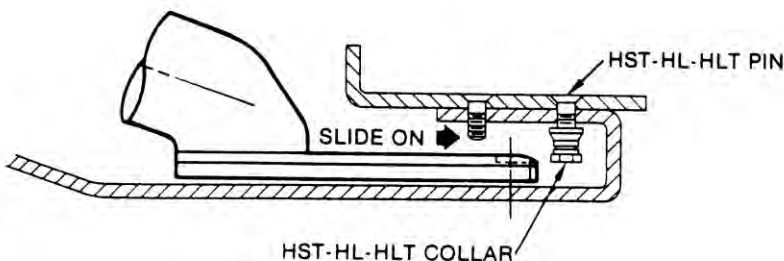
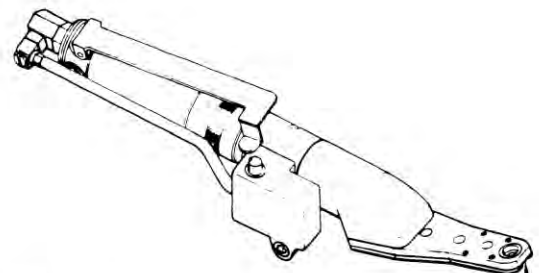
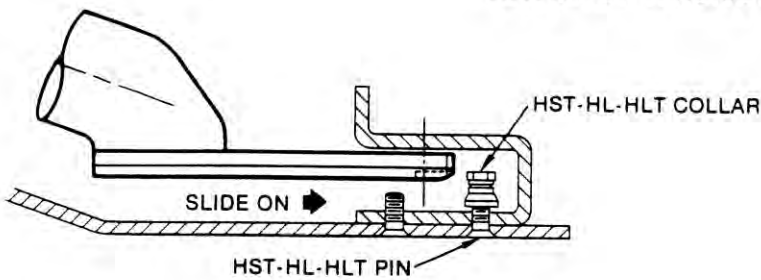
Installation of Hi-Lite/Hi-Lok/Hi-Tigue threaded fasteners in restricted access areas can be achieved with Hi-Shear's self-indexing drive socket tools. The proprietary design of these tools allows the operator to slide the open ended socket on the corresponding driving hex of the Hi-Lite/Hi-Lok/Hi-Tigue collar rather than having to raise over the collar's driving hex. These tools exhibit an internal air bleed feature that automatically and consistently aligns the open end of the driving socket with the open end of the tool offset plate for easy engagement of the next collar.

This innovative design is offered in both ratchet wrench and pistol grip type pneumatic tools. All are designed to operate on factory air pressure of 90 psi.

### PISTOL GRIP TYPE



### RATCHET WRENCH TYPES

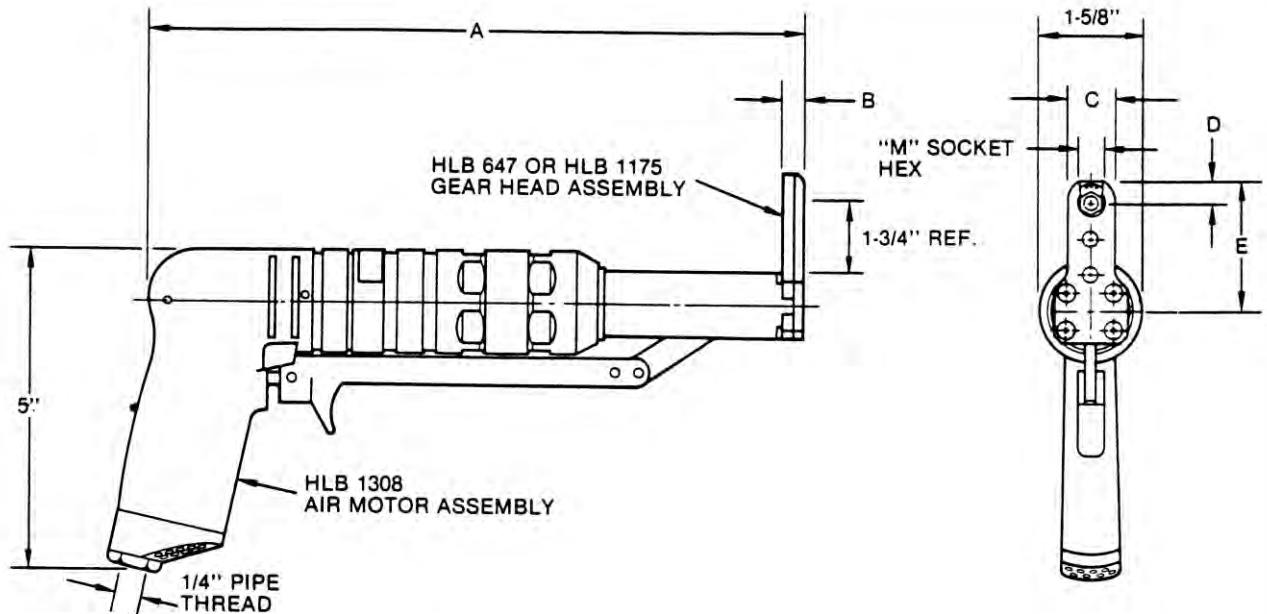




**Installation Tooling**  
 HI-LITE®, HI-LOK®, HI-TIGUE®  
 FASTENING SYSTEMS

# HLA1041

## 90° OFFSET DRIVER ASSEMBLY WITH OPEN END SELF-INDEXING SOCKET



### ORDERING INFORMATION

1. Determine collar driving hex dimensions of the fasteners to be installed.
2. See **TABLE 1** for "M" socket hex to match the collar driving hex. Determine Complete Tool Assembly Part Number.
3. Example of **COMPLETE TOOL ASSEMBLY PART NUMBER.**

**HLA1041-312**

First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (312 = 5/16")

Basic part number HLA1041 includes: HLB1308 Air Motor Assembly, HLB647-312 Gear Head Assembly and associated connector and trigger assemblies.

4. This tool is for installing interference fit fasteners only.
5. U.S Patent No. 3,620,105

### TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING</b> (Motor)	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.75
Air Consumption	25 cfm
Weight	3.5 lb

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	GEAR HEAD ASSEMBLY PART NO.	DIMENSIONS					SOCKET PART NO.
			A	B	C	D	E	
1/4	HLA1041-250	HLB647-250	9.75	0.312	0.875	0.340	2.117	HLB856-250
5/16	HLA1041-312	HLB647-312	9.75	0.312	0.875	0.340	2.117	HLB644-312
11/32	HLA1041-343	HLB647-343	9.75	0.312	0.875	0.340	2.117	HLB774-343
7/16	HLA1041-437	HLB1175-437	9.90	0.462	1.062	0.428	2.483	HLB1178-437

\* "Super-Key" not available in these sizes, standard hex tip only.

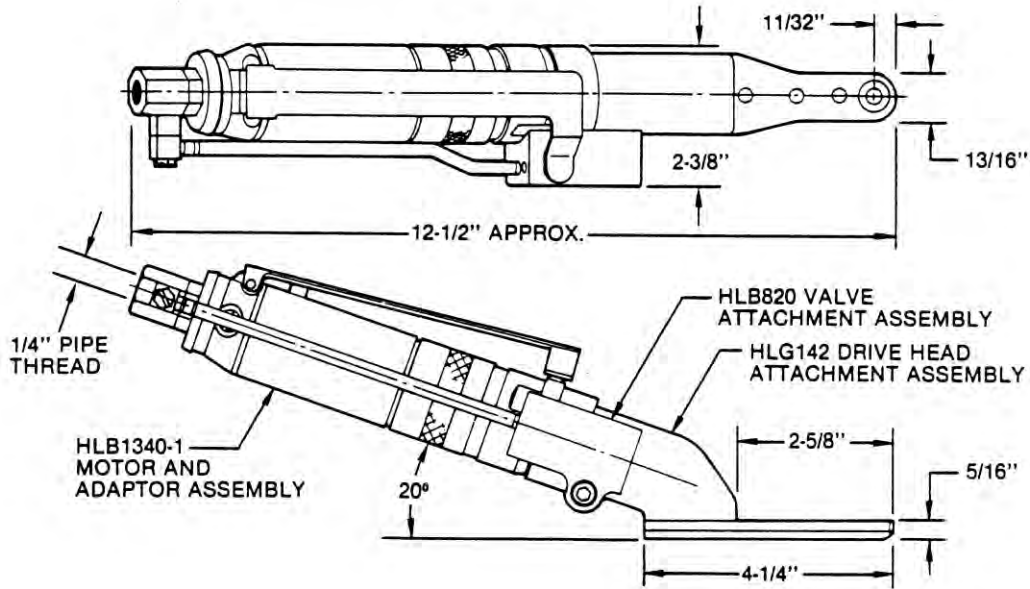


Installation Tooling

HI-LITE®, HI-LOK®, HI-TIGUE® FASTENING SYSTEMS

# HLA1034

**SMALL 20° OFFSET RATCHET WRENCH WITH OPEN END SELF-INDEXING SOCKET ON BOTTOM SIDE**



## ORDERING INFORMATION

1. Determine collar driving hex dimensions of the fasteners to be installed.
2. See TABLE 1 for "M" socket hex to match the collar driving hex. Determine Complete Tool Assembly Part Number.
3. Example of **COMPLETE TOOL ASSEMBLY PART NUMBER**.

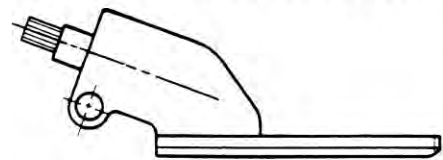
### HLA1034-312

First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (312 = 5/16")

Basic part number HLA1034 includes: HLB1340-1 Motor and Adaptor Assembly, HLB820 Valve Attachment Assembly, and HLG142-312 Drive Head Attachment Assembly.

4. This tool is for installing interference fit fasteners only.
5. U.S. Patent No. 3,620,105

### DRIVE HEAD ATTACHMENT ASSEMBLY WITH OPEN END SOCKET



"M" SOCKET HEX ON BOTTOM SIDE

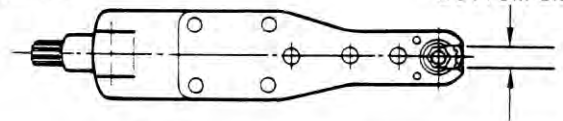


TABLE 1

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	DRIVE HEAD ATTACHMENT ASSEMBLY PART NO.	SOCKET PART NO.
1/4"	HLA1034-250	HLG142-250	HLB856-250
9/32"	HLA1034-281	HLG142-281	HLB856-281
5/16"	HLA1034-312	HLG142-312	HLB644-312
11/32"	HLA1034-343	HLG142-343	HLB774-343

### TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	114 in. lb at 90 psia
Socket Speed	550 rpm
Horsepower Rating	0.33
Air Consumption	18 cfm
Weight	4 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

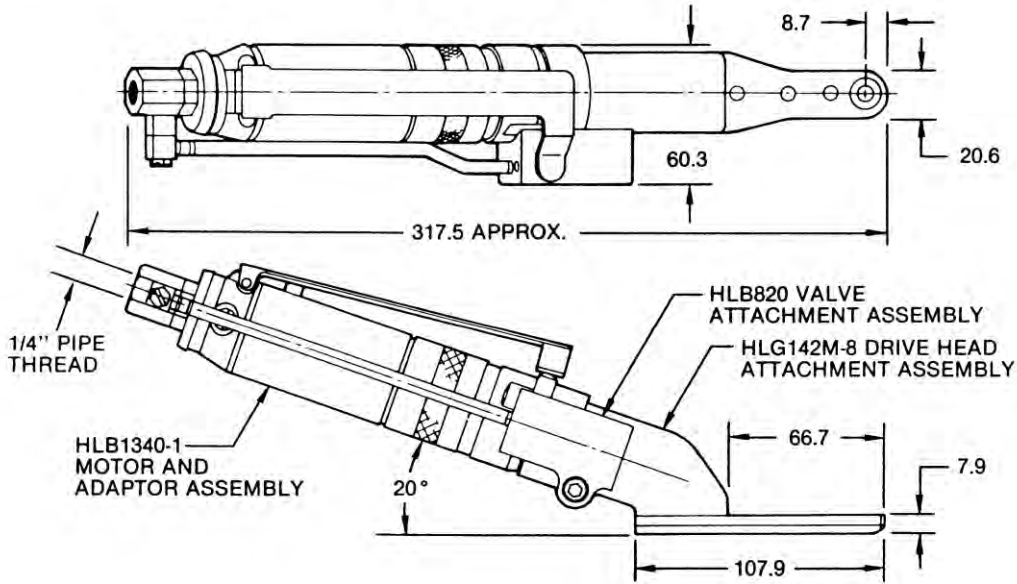


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA1034M

**SMALL 20° OFFSET GEAR WRENCH  
WITH OPEN END SELF-INDEXING  
METRIC SOCKET ON BOTTOM SIDE**



### ORDERING INFORMATION

- Determine collar driving hex dimensions of the fasteners to be installed.
- See Table 1 for "M" socket hex to match the collar driving hex. Determine Complete Tool Assembly Part Number.
- Example of Complete Tool Assembly Part Number:  
HLA1034M-8  
  - First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (-8 = 8mm).
  - Basic part number HLA1034M includes: HLB1340-1 Motor and Adaptor Assembly, HLB820 Valve Attachment Assembly, and HLG142M-8 Drive Head Attachment Assembly.
- This tool is for installing interference fit fasteners only.
- U.S. Patent No. 3,620,105.

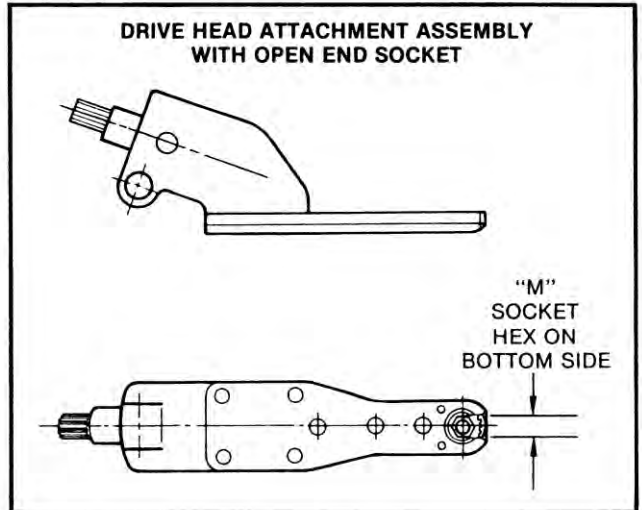


TABLE 1

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	DRIVE HEAD ATTACHMENT ASSEMBLY PART NO.	SOCKET PART NO.
5MM	HLA1034M-5	HLG142M-5	HLB644M-5
6MM	HLA1034M-6	HLG142M-6	HLB644M-6
8MM	HLA1034M-8	HLG142M-8	HLB644M-8

### TECHNICAL DATA

Operating Pressure	6.2 BAR
<b>MAXIMUM TORQUE RATING</b>	12.9 N.M. at 6.2 BAR
Socket Speed	550 rpm
Horsepower Rating	0.33
Air Consumption	509.7 Ltr./Min.
Weight	1.81 Kg

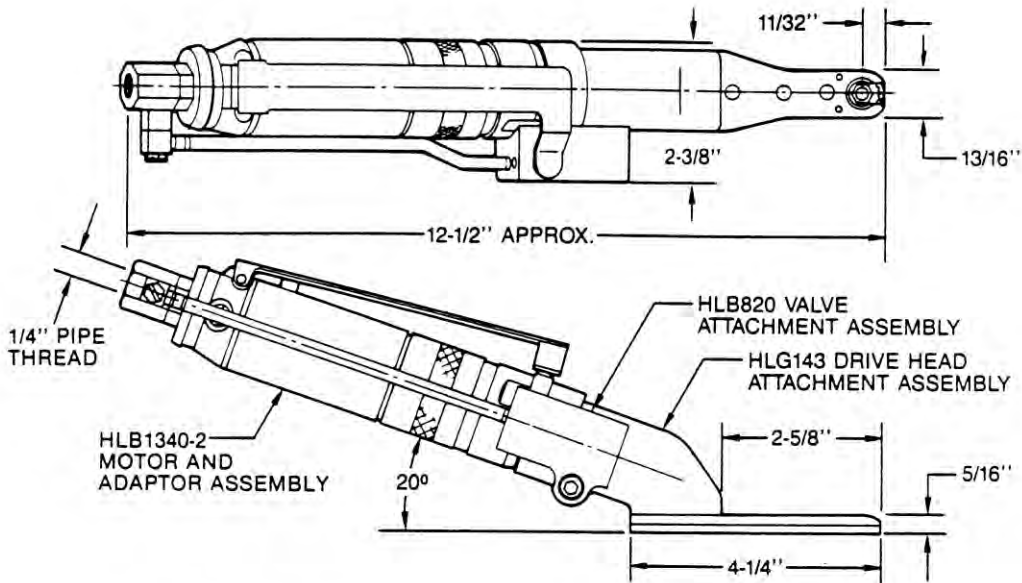


Installation Tooling

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA1111

**SMALL 20° OFFSET RATCHET WRENCH  
WITH OPEN END SELF-INDEXING  
SOCKET ON TOP SIDE**



## ORDERING INFORMATION

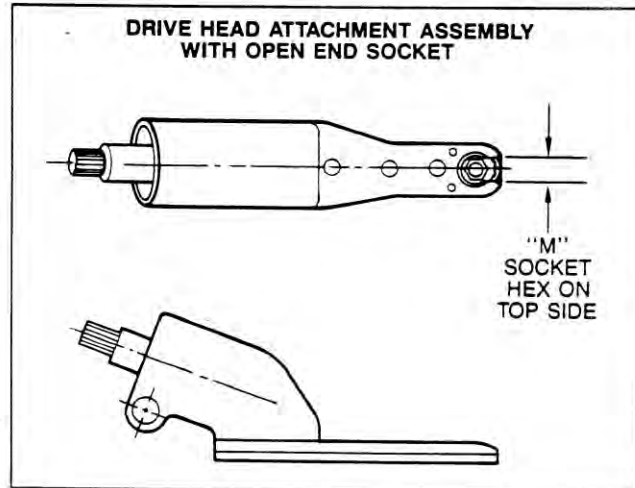
1. Determine collar driving hex dimensions of the fasteners to be installed.
2. See **TABLE 1** for "M" socket hex to match the collar driving hex. Determine Complete Tool Assembly Part Number.
3. Example of **COMPLETE TOOL ASSEMBLY PART NUMBER.**

### HLA1111-312

First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (312 = 5/16")

Basic part number HLA1111 includes:  
HLB821-003 Motor and Adaptor Assembly,  
HLB820 Valve Attachment Assembly, and  
HLG143-312 Drive Head Attachment Assembly.

4. This tool is for installing interference fit fasteners only.
5. U.S. Patent No. 3,620,105



**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	DRIVE HEAD ATTACHMENT ASSEMBLY PART NO.	SOCKET PART NO.
1/4"	HLA1111-250	HLG143-250	HLB856-250
9/32"	HLA1111-281	HLG143-281	HLB856-281
5/16"	HLA1111-312	HLG143-312	HLB644-312
11/32"	HLA1111-343	HLG143-343	HLB774-343

TECHNICAL DATA	
Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	114 in. lb at 90 psia
Socket Speed	550 rpm
Horsepower Rating	0.33
Air Consumption	18 cfm
Weight	4 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

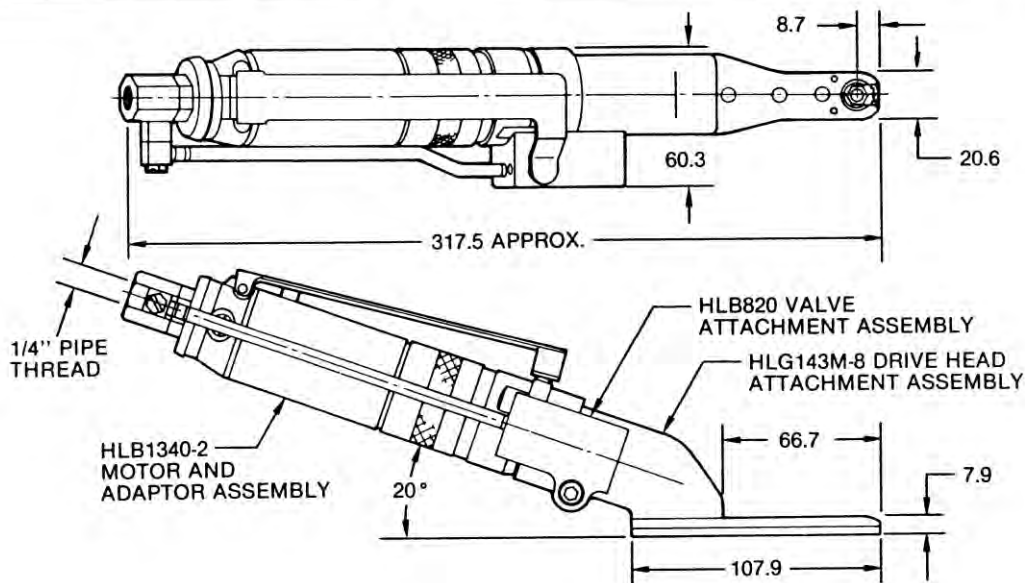


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

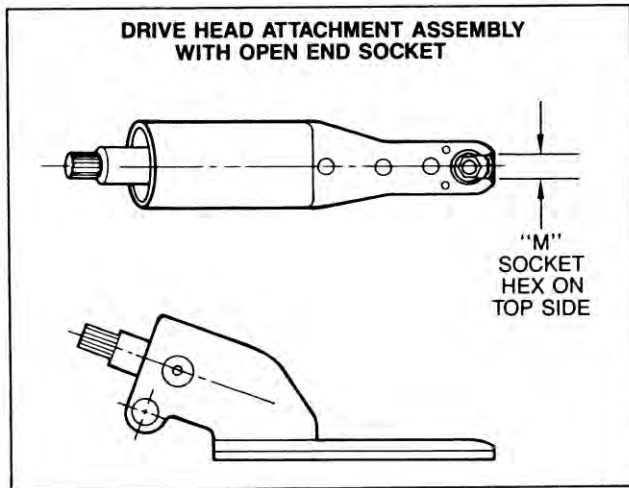
# HLA1111M

## SMALL 20° OFFSET GEAR DRIVE WITH OPEN END SELF-INDEXING METRIC SOCKET ON TOP SIDE



**ORDERING INFORMATION**

- Determine collar driving hex dimensions of the fasteners to be installed.
- See Table 1 for "M" socket hex to match the collar driving hex. Determine Complete Tool Assembly Part Number.
- Example of Complete Tool Assembly Part Number:  
HLA1111M-8  
  - First dash number indicates "M" socket hex to match collar driving hex. Ref. Table 1. (-8 = 8mm).
  - Basic part number HLA1111M includes: HLB1340-2 Motor and Adaptor Assembly, HLB820 Valve Attachment Assembly, and HLG143M-8 Drive Head Attachment Assembly.
- This tool is for installing interference fit fasteners only.
- U.S. Patent No. 3,620,105.



**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	DRIVE HEAD ATTACHMENT ASSEMBLY PART NO.	SOCKET PART NO.
5MM	HLA1111M-5	HLG143M-5	HLB644M-5
6MM	HLA1111M-6	HLG143M-6	HLB644M-6
8MM	HLA1111M-8	HLG143M-8	HLB644M-8

TECHNICAL DATA	
Operating Pressure .....	6.2 BAR
<b>MAXIMUM TORQUE RATING</b> .....	12.9 N.M. at 6.2 BAR
(Motor)	
Socket Speed .....	550 rpm
Horsepower Rating .....	0.33
Air Consumption .....	509.7 Ltr./Min.
Weight .....	1.81 Kg

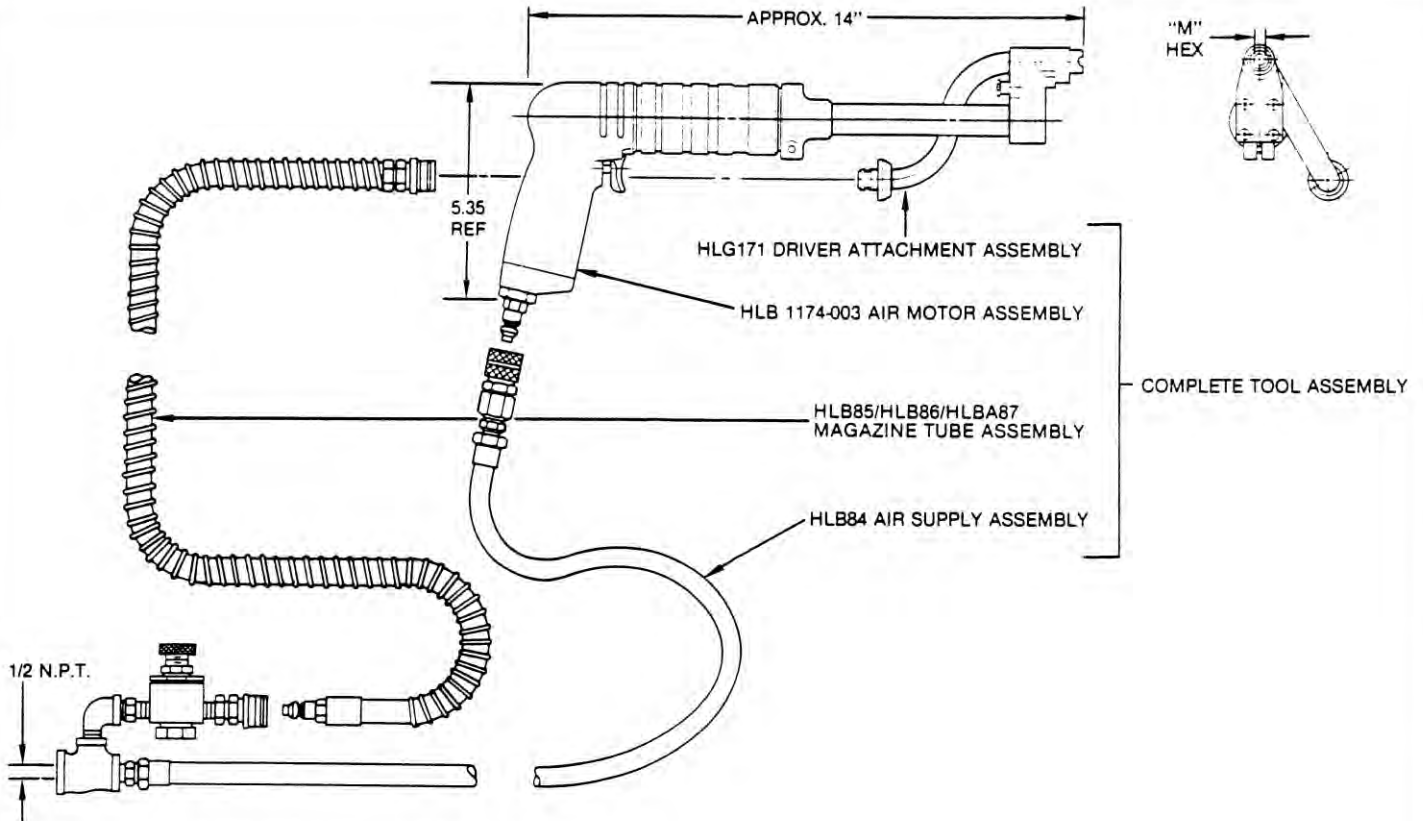


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA1007

## AUTOMATIC FEED DRIVER ASSEMBLY 1 INCH OFFSET



### ORDERING INFORMATION

1. Determine collar driving hex of the fasteners to be installed.
2. See Table 1 for "M" socket hex to match collar driving hex dimensions. Determine Complete Tool Assembly Part Number.
3. Example of Complete Tool Assembly Part Number:

**HLA1007-312**

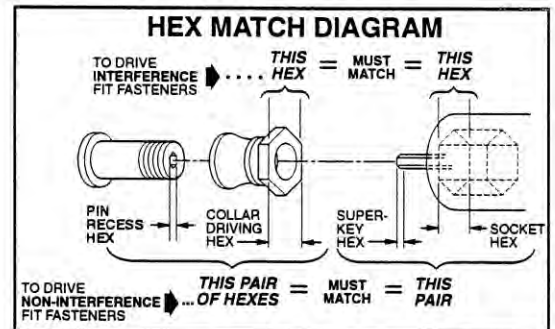
First dash number indicates "M" socket hex. Ref. Table 1. (312 = 5/16").

Basic part number includes HLB1174-003 Air Motor Assembly, HLG171 Driver Attachment Assembly, HLB84 Air Supply Assembly and HLB85-3/HLB86-3/HLBA87-1 Magazine Tube Assembly.

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)
5/16	HLA1007-312	HLG171-312
11/32	HLA1007-343	HLG171-343
3/8	HLA1007-437	HLG171-437

\* "Super-Key" not available in these sizes, standard hex tip only.



### TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.75
Air Consumption	25 cfm
Weight	3 lb

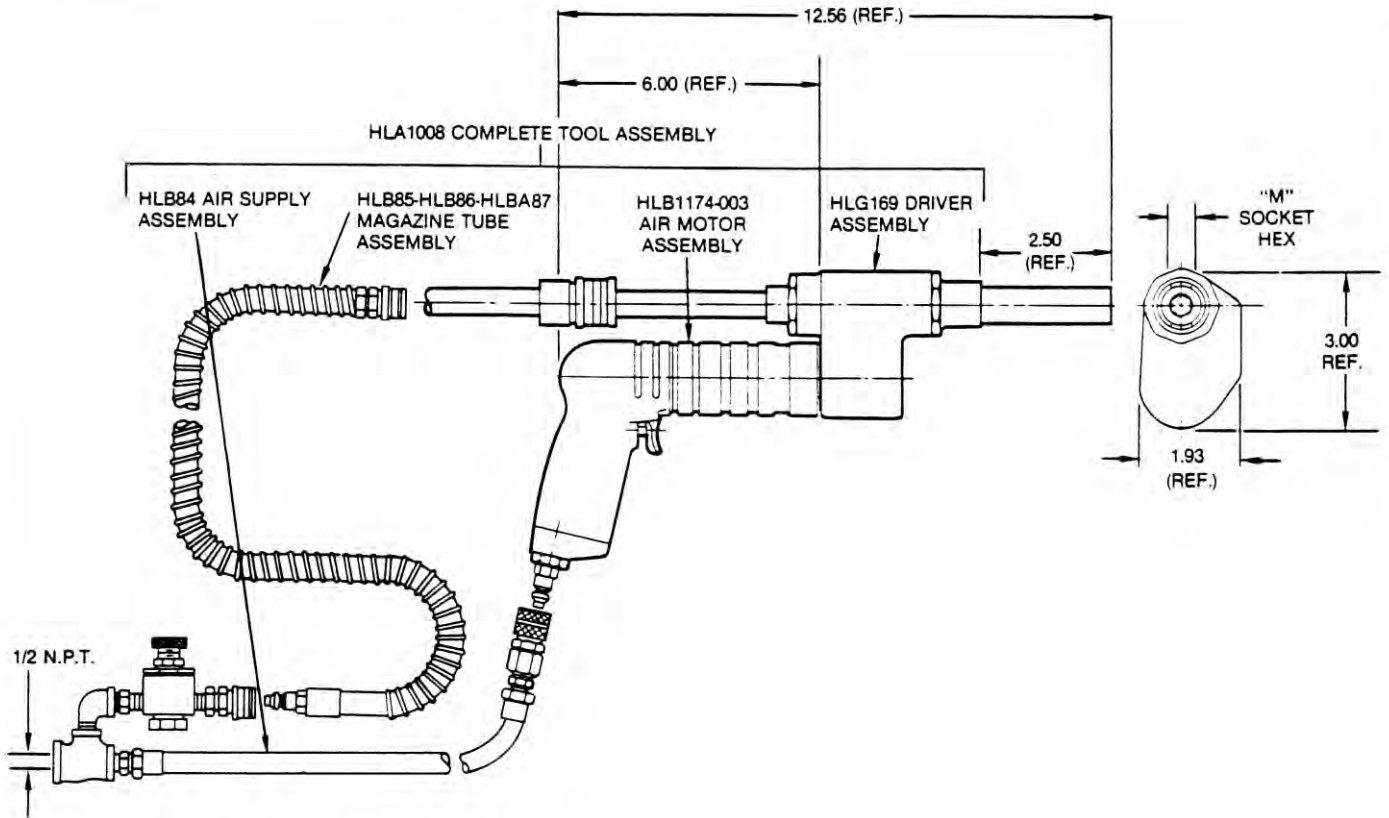


**Installation Tooling**

HI-LITE®, HI-LOK®, HI-TIGUE®  
FASTENING SYSTEMS

# HLA1008

## AUTOMATIC FEED DRIVER ASSEMBLY



### ORDERING INFORMATION

1. Determine collar driving hex of the fasteners to be installed.
2. See Table 1 for "M" socket hex to match collar driving hex dimensions. Determine Complete Tool Assembly Part Number.
3. Example of Complete Tool Assembly Part Number:

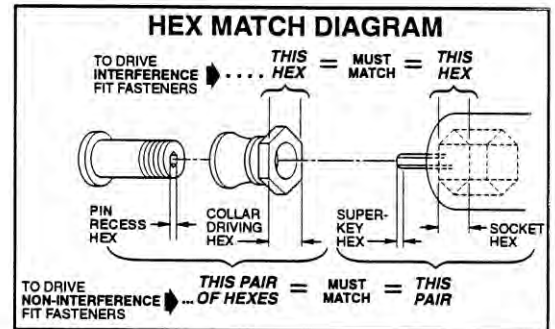
**HLA1008-312**

First dash number indicates "M" socket hex.  
Ref. Table 1. (312 = 5/16").

Basic part number includes HLB1174-003 Air Motor Assembly, HLG169 Driver Assembly, HLB84 Air Supply Assembly and HLB85-3/HLB86-3/HLBA87-1 Magazine Tube Assembly.

**TABLE 1**

"M" SOCKET HEX (Matches Collar Driving Hex)	COMPLETE TOOL ASSEMBLY PART NO.	RATCHET WRENCH ATTACHMENT ASSEMBLY PART NO. (REF.)
5/16	HLA1008-312	HLG171-312
11/32	HLA1008-343	HLG171-343
3/8	HLA1008-437	HLG171-437



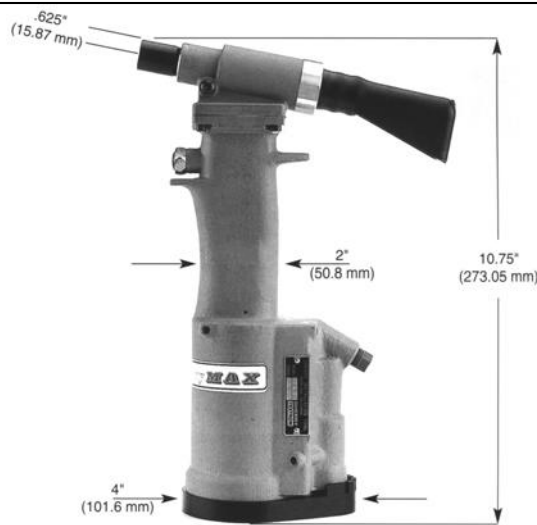
### TECHNICAL DATA

Operating Pressure	90 psia
<b>MAXIMUM TORQUE RATING (Motor)</b>	270 in. lb at 90 psia
Socket Speed	600 rpm
Horsepower Rating	0.75
Air Consumption	25 cfm
Weight	3 lb

\* "Super-Key" not available in these sizes, standard hex tip only.

# CHERRYMAX

# Remachadoras RIVET TOOLING



**G 747**

## remachadora neudrática PNEUDRAULIC RIVETER

**Carga/RATED PULL LOAD: 2100 lbs on 90 PSI**

**Elevación/ STROKE : .437" (11,10 mm)**

**Peso / WEIGHT : 3.625 lbs. (1,64 kg)**

**Diámetro máx. remache/  
MAX. RIVET DIAMETER : (-6) 3/16" (4,8 mm)**

**No se incluyen las boquillas con las remachadoras  
Deben pedirse aparte.  
NOSE ASSEMBLIES ARE NOT FURNISHED WITH THE  
RIVETER AND MUST BE ORDERED SEPARATELY !**



**GBP 704 D**

## Remachadora neudrática PNEUDRAULIC RIVETER

**Carga / RATED PULL LOAD: 3300 lbs on 90 PSI**

**Elevación/ STROKE : .539" (13,69 mm)**

**Peso / WEIGHT : 4.3 lbs. (1,95 kg)**

**Diámetro max. remache/  
MAX. RIVET DIAMETER : (-6) 3/16" (4,8 mm)**

**No se incluyen las boquillas con las remachadoras  
Deben pedirse aparte  
NOSE ASSEMBLIES ARE NOT FURNISHED WITH THE  
RIVETER AND MUST BE ORDERED SEPARATELY !**



**GBP 744 C**

## Remachadoras neudráticas PNEUDRAULIC RIVETER

**Carga / RATED PULL LOAD: 3800 lbs / 90 PSI**

**Elevación/ STROKE : .625" (15,88 mm)**

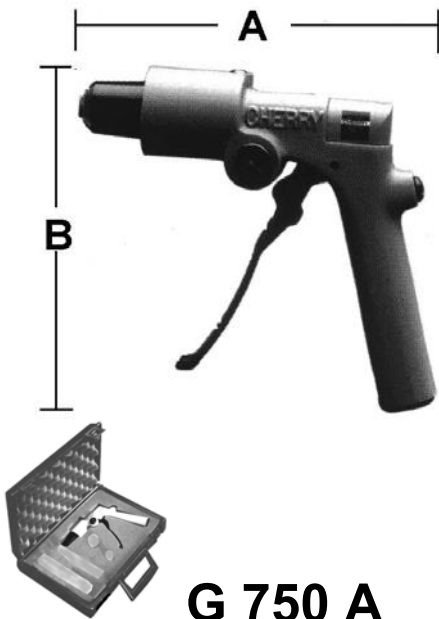
**Peso / WEIGHT : 7 lbs. (3,17 kg)**

**Diámetro máx. remache/  
MAX. RIVET DIAMETER : (-8) 1/4" (6,4 mm)**

**No se incluyen las boquillas con las remachadoras  
Deben pedirse aparte  
NOSE ASSEMBLIES ARE NOT FURNISHED WITH THE  
RIVETER AND MUST BE ORDERED SEPARATELY !**

# CHERRYMAX

# Remachadotas RIVET TOOLING



**G 750 A**

## Remachadora manual hidráulica HYDRAULIC HAND-RIVTER

**Carga / RATED PULL LOAD:** 3800 lbs / 90 PSI  
**Elevación/ STROKE :** .750" (19,05 mm)  
**Peso / WEIGHT :** 1.9 lbs. (0,86 kg)  
**Diámetro máx. remache/  
MAX. RIVET DIAMETER :** (-6) 3/16" (4,8 mm)

**A = 7.5" (191 mm) B = 6.4" (163 mm)**

La remachadora viene con una boquilla recta en una caja de plástico. El kit tiene una 269C3 (CherryMax) y una 269B12 (Maxibolt) CA22 (CherryMax) y CA71 (Maxibolt) tarjetas de regencia de plástico y manual de instrucciones.

THE RIVETER COMES WITH A STRAIGHT PULLING HEAD IN A PLASTIC CARRYING CASE. THE KIT IS PROVIDE WITH 269C3 CHERRYMAX AND 269B12 MAXIBOLT GRIP GAGE, CA22 AND CA71 MAXIBOLT PLASTIC REFERENCE CARDS AND INSTRUCTION SHEETS !



**G 750 A-CMR**

**Como la anterior pero incluye:**  
SAME AS ABOVE, BUT ALSO ENCLOSED IS:

1 ud./EA adaptador/ADAPTER 750-050

1 ud./EA boquilla/PULLING HEAD H781-456

1 St./EA boquilla/PULLING HEAD H753A-456



**D-100**

**D-100-1**

## Remachadora manual hidráulica HYDRAULIC HAND-RIVTER

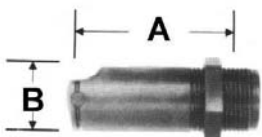
**Carga / RATED PULL LOAD:** 4200 lbs.  
**Elevación/ STROKE :** .625" (15,88 mm)  
**Peso / WEIGHT :** 1.27 lbs. (0,58 kg)  
**Diámetro máx. remache/  
MAX. RIVET DIAMETER :** (-8) 1/4" (6,35 mm)

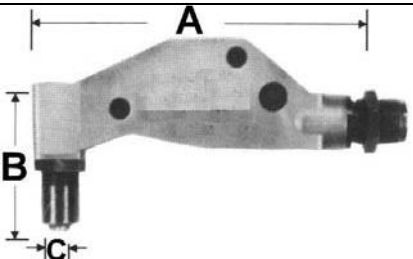
**Incluye punta de boca de 3/32", 1/8", 5/32"-3/16", 1/4"**  
INCL. NOSE-TIPS FOR SIZE 3/32", 1/8", 5/32"-3/16", 1/4"

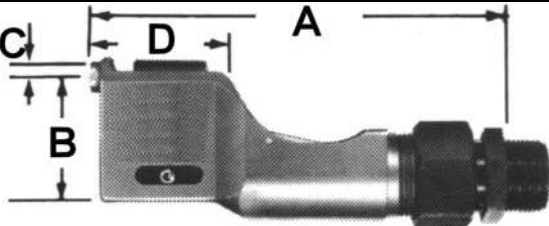
(sin adaptador / WITHOUT ADAPTER)

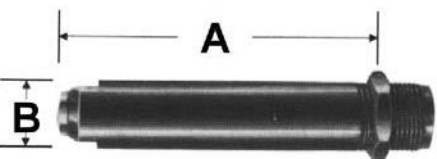
incluye adaptador para boquillas CherryMax en pag. L-3  
INCL. ADAPTER FOR CHERRYMAX PULLING HEADS PAGE L-3

<h1>CHERRYMAX</h1>	<h2>Remachadoras RIVET TOOLING</h2>
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 <p><b>456MAX-701-17</b></p>	<p><b>Boquillas rectas</b> STRAIGHT PULLING HEAD</p> <p>A = 1.75" (44,45 mm) B = 0.75" (19,05 mm)</p> <p>para remaches: -4, -5, -6 (3,2mm, 4,0 mm, 4,8 mm) FOR RIVET SIZE: -4, -5, -6 (1/8", 5/32", 3/16")</p>
<p>remachadoras recom./RECOMMEND RIVETERS</p>	<p><b>G701A, G704B, GBP704A</b></p>

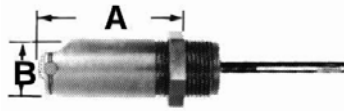
 <p><b>456MAX-753-54</b></p>	<p><b>Boquillas con codo</b> RIGHT ANGLE PULLING HEAD</p> <p>A = 5.06" (128,5 mm) B = 2.25" (57,2 mm) C = .375" (9,53 mm)</p> <p>para remaches: -4, -5, -6 (3,2mm, 4,0 mm, 4,8 mm) FOR RIVET SIZE: -4, -5, -6 (1/8", 5/32", 3/16")</p>
<p>remachadoras recom./RECOMMEND RIVETERS</p>	<p><b>G701A, G704B, GBP704A, G749A</b> (GBP744 + ADAPTER 744704)</p>

 <p><b>456MAX-763-43</b></p>	<p><b>Boquilla curvada 2 x 90°</b> OFFSET PULLING HEAD</p> <p>A = 4.31" (109,5 mm) B = 1.00" (25,4 mm) C = .187" (4,76 mm) D = 1.31" (33,3 mm)</p> <p>para remaches: -4, -5, -6 (3,2mm, 4,0 mm, 4,8 mm) FOR RIVET SIZE: -4, -5, -6 (1/8", 5/32", 3/16")</p>
<p>remachadoras recom./RECOMMEND RIVETERS</p>	<p><b>G701A, G704B, GBP704A, G749A</b> (GBP744 + ADAPTER 744704)</p>

 <p><b>456MAX-749-35</b></p>	<p><b>Boquilla recta</b> STRAIGHT PULLING HEAD</p> <p>A = 3.56" (90,50 mm) B = 0.75" (19,05 mm)</p> <p>para remaches: -4, -5, -6 (3,2mm, 4,0 mm, 4,8 mm) FOR RIVET SIZE: -4, -5, -6 (1/8", 5/32", 3/16")</p>
<p>remachadoras recom./RECOMMEND RIVETERS</p>	<p><b>G701A, G704B, GBP704A, G749A</b> (GBP744 + ADAPTER 744704)</p>

# CHERRYMAX

# Remachadoras RIVET TOOLING



**456MAX-744-20**

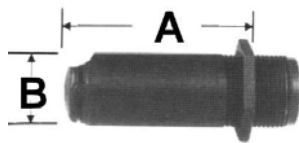
**Boquilla recta**  
STRAIGHT PULLING HEAD

A = 2.06" (52,4 mm)  
B = .813" (20,64 mm)

para remaches: -4, -5, -6 (3,2mm, 4,0 mm, 4,8 mm)  
FOR RIVET SIZE: -4, -5, -6 (1/8", 5/32", 3/16")

remachadoras recom./RECOMMEND RIVETERS

**G744, GBP744A**



**08MAX-744-20**

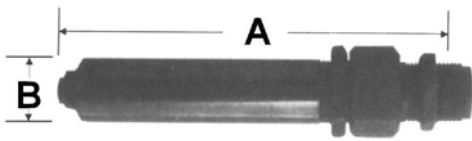
**Boquilla recta**  
STRAIGHT PULLING HEAD

A = 2.06" (52,4 mm)  
B = .813" (20,64 mm)

para remaches: -8 (6,4 mm)  
FOR RIVET SIZE: -8 (1/4")

remachadoras recom./RECOMMEND RIVETERS

**G744, GBP744A**



**08MAX-749-35**

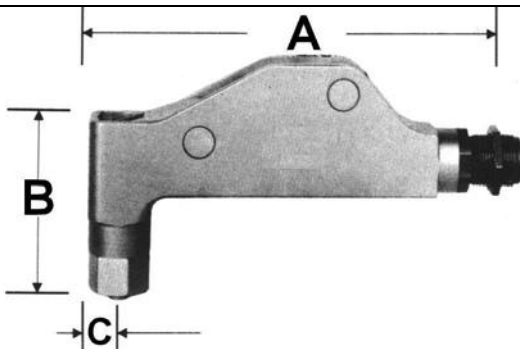
**Boquilla reta**  
STRAIGHT PULLING HEAD

A = 4.75" (120,7 mm)  
B = .813" (20,7 mm)

para remaches : -8 (6,4 mm)  
FOR RIVET SIZE: -8 (1/4")

remachadoras recom./RECOMMEND RIVETERS

**G744, GBP744A**



**H828-8**

**Boquilla con codo**  
RIGHT ANGLE PULLING HEAD

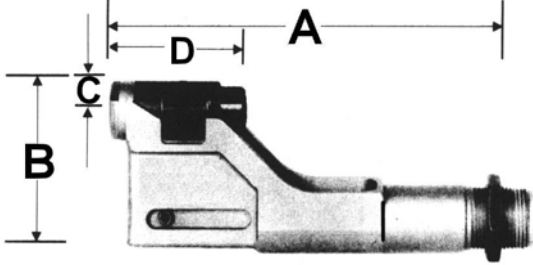
A = 6.44" (163,5 mm)  
B = 2.81" (71,4 mm)  
C = .500" (12,7 mm)

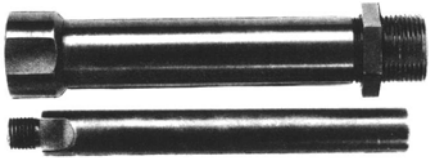
para remaches : -8 (6,4 mm)  
FOR RIVET SIZE: -8 (1/4")

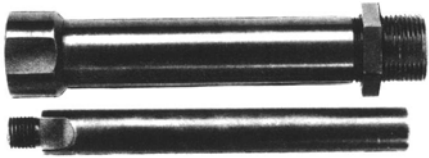
remachadoras recom./RECOMMEND RIVETERS


**G744, GBP744A**

<h1>CHERRYMAX</h1>	<h1>Remachadoras RIVET TOOLING</h1>
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 <p><b>08MAX-744-50OS</b></p>	<p><b>Boquilla curvada 2 x 90° OFFSET PULLING HEAD</b></p> <p>A = 5.00" (127,0 mm)          B = 2.25" (57,2 mm)          C = .375" (9,53 mm)          D = 1.44" (36,5 mm)</p> <p>para remaches : -8 (6,4 mm)          FOR RIVET SIZE: -8 (1/4")</p>
remachadoras recom./RECOMMEND RIVETERS	<b>G744, GBP744A</b>

 <p><b>7040..</b></p>	<p><b>Extensión / EXTENSION</b></p> <p style="text-align: right;">Art N° / PART NO.</p> <p>A = 2" ( 50,8 mm)      <b>704002</b>          A = 4" (101,6 mm)      <b>704004</b>          A = 6" (152,4 mm)      <b>704006</b>          A = 12" (304,8 mm)      <b>704012</b></p>
Remachadoras recom. /RECOMMEND RIVETERS	<b>G701A, G704B, GBP704A</b>

 <p><b>744B35</b></p>	<p><b>Extensión / EXTENSION</b></p> <p style="text-align: right;">Artikel Nr. / PART NO.</p> <p>A = 2" ( 50,8 mm)      <b>744B35-2</b>          A = 4" (101,6 mm)      <b>744B35-4</b>          A = 6" (152,4 mm)      <b>744B35-6</b>          A = 12" (304,8 mm)      <b>744B35-12</b></p>
Remachadoras recom./RECOMMEND RIVETERS	<b>G744, GBP744A</b>

 <p><b>744704</b></p>	<p><b>Adaptador 744704</b></p> <p>Permite a la G744 o GBP744A aceptar las siguientes boquillas: PERMITS THE G744 OR GBP744A TOP ACCEPT FOLLOWING PULLING HEADS:</p> <p><b>456MAX-753-54, 456MAX-763-43, 456MAX-749-35</b></p>
Remachadoras recom./RECOMMEND RIVETERS	<b>G744, GBP744A</b>

 <p><b>G 27</b></p> <p><b>G 27 KIT</b></p>	<p><b>Remachadora manual / HAND-RIVETER</b></p> <p>Peso / WEIGHT : 13 oz. (0,37 kg)          Diámetro máximo remache / MAX. RIVET DIAMETER : (-4) 1/8" (3,2 mm)          Longitud / LENGTH : 9.25" (235 mm)</p> <p>La remachadora viene con una boquilla 728A9-4 para remaches de 3,2 mm.          THE RIVETER COMES EQUIPPED WITH A 728A9-4 NOSE PIECE FOR 1/8" RIVETS</p>
	incluye una caja de plástico rugoso INCL. RUGGED PLASTIC CASE

# CHERRYLOCK

(NAS1398, NAS1399, NAS1738, NAS1739)

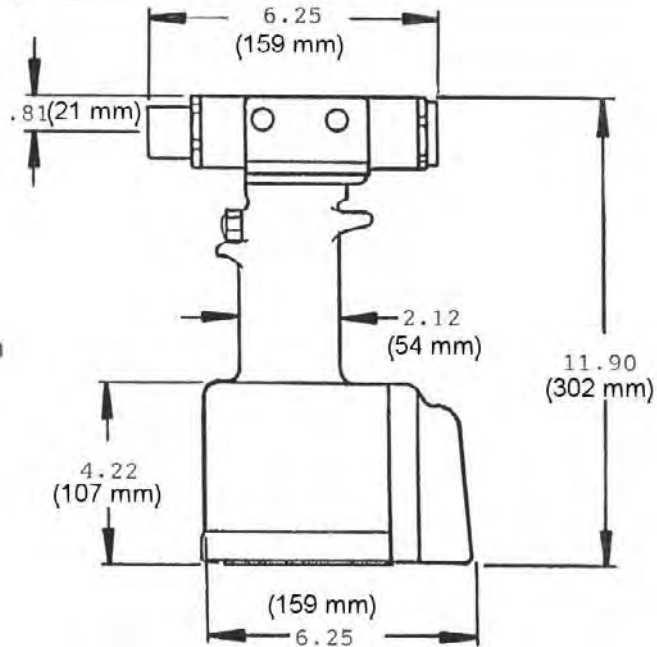
# Remachadoras RIVET TOOLING

## Remachadora neumática / PNEUDRAULIC RIVETER

# GBP784



GBP784  
8 lbs.  
11.90" high

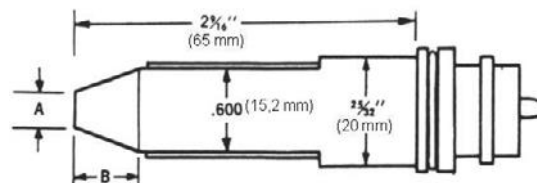
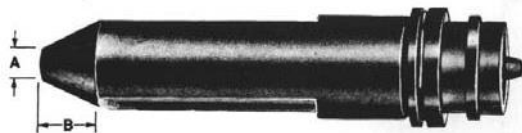


**Carga/ RATED PULL LOAD:** 2650 pounds on 90 PSI  
**Elevación/ STROKE** : .938" (23,8 mm)  
**Peso / WEIGHT** : 8 lbs. (3,62 kg)  
**Diámetro máx. remache /**  
**MAX. RIVET DIAMETER** : (-8) 1/4" (6,4 mm)

**No se incluyen las boquillas, que han de pedirse por separado**  
 NOSE ASSEMBLIES ARE NOT FURNISHED WITH THE RIVETER AND MUST BE ORDERED SEPARATELY !

## Boquilla recta / STRAIGHT PULLING HEAD

# .C-681-25



Remachadora recom./RECOMMEND RIVETER

**G784, GBP784**

**para boquilla de fresado y universal**  
 FOR COUNTERSUNK HEAD AND UNIVERSAL HEAD

Diám. remache RIVET SIZE	Art N° PART NO.	A	B
3/32" (2,4 mm)	<b>3C-681-25</b>	.163 (4.14 mm)	.332 (8,43 mm)
1/8" (3,2 mm)	<b>4C-681-25</b>	.208 (5,28 mm)	.341 (8,66 mm)
5/32" (4,0 mm)	<b>5C-681-25</b>	.269 (6,83 mm)	.352 (8,94 mm)
3/16" (4,8 mm)	<b>6C-681-25</b>	.335 (8,51 mm)	.386 (9,80 mm)
1/4" (6,4 mm)	<b>8C-681-25</b>	.458 (11,63 mm)	.398 (10,11 mm)

**NUT PLATE RIVETS  
COMMERCIAL RIVETS**

**Remachadoras  
RIVET TOOLING**



**GBP703C  
4.5 lb.  
11.50" high**

**GBP703C**

**Remachadora neudrática  
PNEUDRAULIC RIVETER**

**Carga / RATED PULL LOAD: 2400 lbs/ 90 PSI**

**Elevación/ STROKE : .780" (19,8 mm)**

**Peso / WEIGHT : 4.5 lbs. (2,04 kg)**

**Diámetro máx. remache /  
MAX. RIVET DIAMETER : (-8) 1/4" (6,35 mm)**

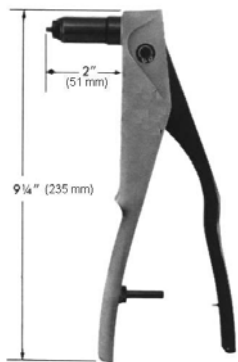
**Esta remachadora viene con una boquilla 6N-703-18 y una boquilla extra 10202 para la conversión a la 4N-703-18 !**

**THE RIVETER IS FURNISHED WITH ONE NOSE ASSEMBLY NO. 6N-703-18 AND WITH A SPARE NOSE TIP 10202 TO CONVERT TO 4N-703-18 NOSE ASSEMBLY.**

**Tabla de selección / SELECTION CHART**

	Remache / FASTENER	Diámetro/DIA	Art N°/PART NO.	Boquilla/NOSE TIP
<p><b>Boquilla recta STRAIGHT PULLING HEAD</b></p> <p><b>A = 1.84 (ca. 46,7 mm) B = 0.86 (ca. 21,8 mm)</b></p>	N, Q & E, POP®, CLOSED END, AVEX® (1621) & COMMERCIAL RIVETS	3/32" 1/8" 5/32" 3/16" 1/4" **	<b>3N-703-18</b> <b>4N-703-18</b> <b>5N-703-18</b> <b>6N-703-18</b> <b>8Z-743-24</b>	10247 10202 10203 10204 10211
	C RIVET	3/32" 1/8" 5/32" 3/16"	<b>4N-703-18</b> <b>5N-703-18</b> <b>6N-703-18</b> <b>6C-703-18</b>	10202 10203 10204 10208
	C-M RIVET	3/16" 1/4" ***	<b>4N-703-18</b> <b>6N-703-18</b>	10202 10204
	T RIVET®	3/16" 1/4" ***	<b>6T-703-18</b> <b>8T-743 24</b>	10209 10286
	NUT PLATE RIVETS	3/32" 1/8"	<b>4N-703-18</b> <b>5N-703-18</b>	10202 10203

\*\* mandril con remache de acero solo / ALUMINIUM RIVET STEEL MANDREL ONLY \*\*\* solo aluminio / ALUMINIUM ONLY !



**G 29**

**Remachadora manual / HAND-  
RIVETER**

**Peso / WEIGHT : 13 oz. (0,37 kg)**

**Diámetro máx. remache /  
MAX. RIVET DIAMETER : (-4) 1/8" (3,2 mm)**

**Longitud / LENGTH : 9.25" (235 mm)**

**La remachadora viene con 2 boquillas para remaches 2,4 mm y 3,2 mm**

**THE RIVETER COMES WITH 2 NOSE PIECES FOR 3/32" and 1/8" RIVETS.**

**Boquilla para 2,4 mm sola  
NOSE PIECE ONLY FOR 3/32"**

**Art N° /PART NO.: 728A9-3**

**Boquilla para 3,2 mm sola  
NOSE PIECE ONLY FOR 1/8"**

**Art N° /PART NO.: 728A9-104**

# CHERRYMAX CHERRYLOCK

# Remachadoras RIVET TOOLING



**269C3**

Galga con mango para medir el grosor del material y la longitud apropiada del remache

GRIP GAGE FOR DETERMINING MATERIAL THICKNESS AND PROPER RIVET GRIP LENGTH.



**T-172**

Galga de precisión pasa/no pasa, para comprobar las perforaciones para remaches Cherry.

RIVET HOLE SIZE GAGES "GO/NO-GO GAGES" USED TO CHECK HOLES DRILLED FOR CHERRY RIVETS.

## CHERRYMAX RIVETS/REMACHES CHERRYMAX

Diámetro nominal remache RIVET DIAMETER NOMINAL	Art N° PART NO.	Diámetro remache grande RIVET DIAMETER OVERSIZE	Art N° PART NO.
1/8" (3,2 mm) Nominal	T-172-4	1/8" (3,2 mm) Oversize	T-172-400
5/32" (4,0 mm) Nominal	T-172-5	5/32" (4,0 mm) Oversize	T-172-500
3/16" (4,8 mm) Nominal	T-172-6	3/16" (4,8 mm) Oversize	T-172-600
1/4" (6,4 mm) Nominal	T-172-8	1/4" (6,4 mm) Oversize	T-172-800

## CHERRYLOCK RIVETS/REMACHES CHERRYLOCK

Diámetro nominal remache RIVET DIAMETER NOMINAL	Art N° PART NO.	Diámetro remache grande RIVET DIAMETER OVERSIZE	Art N° PART NO.
3/32" (2,4 mm)	T-172-3		
1/8" (3,2 mm)	T-172-4	1/8" (3,2 mm) Bulbed	T-172-400
5/32" (4,0 mm)	T-172-5	5/32" (4,0 mm) Bulbed	T-172-500
3/16" (4,8 mm)	T-172-6	3/16" (4,8 mm) Bulbed	T-172-600
1/4" (6,4 mm)	T-172-8		



**700A77**


Alimentación de aire para remachadoras neum. e hidr. AIR BLEEDER FOR PNEUM./HYDR. RIVETERS



**745B45**

Alimentación de aire para la remachadora G749A AIR BLEEDER FOR HYDR. RIVETER G749

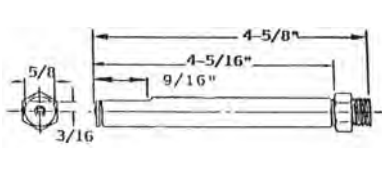
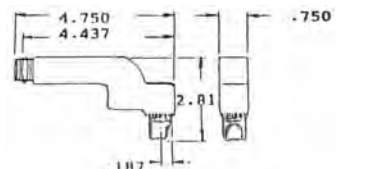
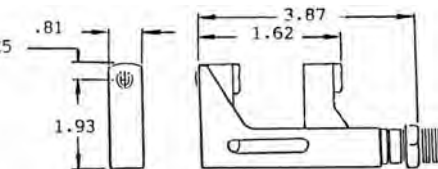
<b>MS20600 Rivets</b> <b>Cherry Lock</b> <b>Bulb Lock</b> <b>Olympic Lock</b> <b>HUCK Unimatic</b>	<b>Remachadoras</b> <b>RIVET TOOLING</b>
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 <p><b>GBP715B</b> 4.0 lbs. 10.62" high</p> <p><b>GBP715B</b></p>	<p><b>Remachadora neumática</b> <b>PNEUDRAULIC RIVETER</b></p> <p>Carga / RATED PULL LOAD: 1600 lbs/ 90 PSI</p> <p>Elevación/ STROKE : 1.1/8" (28,6 mm)</p> <p>Peso / WEIGHT : 4 lbs. (1,81 kg)</p> <p>Diámetro máx. remache / MAX. RIVET DIAMETER : (-6) 3/16" (4,76 mm)</p>
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**Tabla de selección / SELECTION CHART**

Remache / FASTENER	Diámetro/DIA	Art N°/PART NO.		
		Recta	con codo	doble codo
MS20600 SERIES	3/32"	<b>3C-715A-43</b>	<b>3C-715A-44RA</b>	<b>3C-715-38OS</b>
MS/9SP/PT	1/8"	<b>4C-715A-43</b>	<b>4C-715A-44RA</b>	<b>4C-715-38OS</b>
BACR15CC/CF/DR	5/32" *	<b>5C-715A-43</b>	<b>5C-715A-44RA</b>	<b>5C-715-38OS</b>
	3/16" *	<b>6C-715A-43</b>	<b>6C-715A-44RA</b>	<b>6C-715-38OS</b>
NUT-PLATE	3/32"	<b>3NP-715A-43</b>	<b>3NP-715A-44RA</b>	<b>3NP-715A-38OS</b>
BACR15DR	1/8"	<b>4NP-715A-43</b>	<b>4NP-715A-44RA</b>	<b>4NP-715A-38OS</b>
A' CODE	3/32"	<b>3A-715A-43</b>	<b>3A-715A-44RA</b>	<b>3A-715-38OS</b>
NAS1398A	1/8"	<b>4A-715A-43</b>	<b>4A-715A-44RA</b>	<b>4A-715-38OS</b>
NAS1399A	5/32" *	<b>5A-715A-43</b>	<b>5A-715A-44RA</b>	<b>5A-715-38OS</b>
	3/16" **	<b>6A-715A-43</b>	<b>6A-715A-44RA</b>	<b>6A-715-38OS</b>
HUCK UNIMATIC®	1/8"	<b>SMLS04-715A-43</b>	<b>SMLS04-715A-44RA</b>	<b>SMLS04-715-38OS</b>
NAS1919S	5/32" *	<b>SMLS05-715A-43</b>	<b>SMLS05-715A-44RA</b>	<b>SMLS05-715-38OS</b>
NAS1921S	3/16" *	<b>SMLS06-715A-43</b>	<b>SMLS06-715A-44RA</b>	<b>SMLS06-715-38OS</b>
HUCK UNIMATIC®	1/8"	<b>456MAX-715-43</b>	<b>456MAX-715-54RA</b>	<b>456MAX-715-38OS</b>
NAS1919U	5/32" *	<b>456MAX-715-43</b>	<b>456MAX-715-54RA</b>	<b>456MAX-715-38OS</b>
NAS1921U	3/16" *	<b>456MAX-715-43</b>	<b>456MAX-715-54RA</b>	<b>456MAX-715-38OS</b>

\* Sólo aluminio / ALUMINIUM ONLY \*\* Sólo aluminio de auto enganche / SELF-PLUGGING ALUMINIUM ONLY !

		
<b>XXX-715-43</b>	<b>XXX-715-44</b>	<b>XXX-715-38</b>

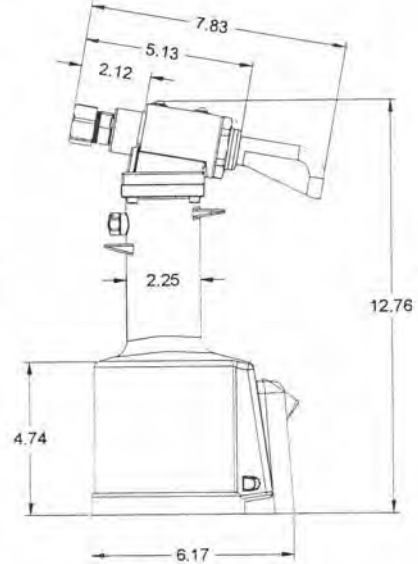
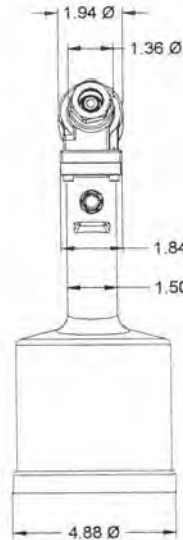
**LOCKBOLTS  
SINGLE ACTION BLIND BOLTS  
SINGLE ACTION BLIND RIVETS**

**Remachadoras  
RIVET TOOLING**

**Remachadora neudrática  
PNEUDRAULIC RIVETER**



**GBP712B**  
**6.8 lbs.**  
**12.80" high**

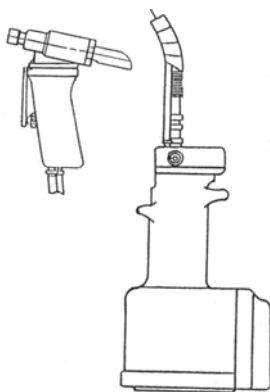


**GBP712B**

**Carga / RATED PULL LOAD: 5000 lbs/ 90 PSI**  
**Elevación/ STROKE : .770" (19,6 mm)**  
**Peso / WEIGHT : 6.8 lbs. (3,08 kg)**  
**Diámetro máx. remache /**  
**MAX. RIVET DIAMETER : (-8) 1/4" (6,4 mm)**

**Remachadora con mango separado  
SPLIT HANDLE RIVETER**

**Manguera 2,4 Meter apr./ HOSE APPR. 8 FEET**

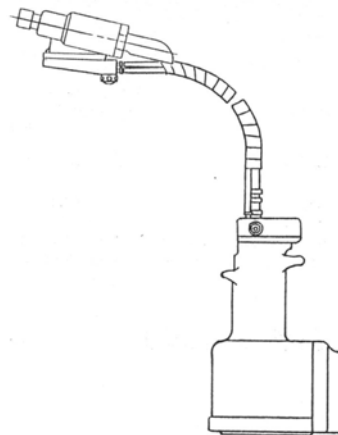


**GBP712B-SH**

**Peso mango/WEIGHT HANDLE: 2.25 lbs. (1,0 kg)**  
**Peso compl./WEIGHT CPL. : 9.25 lbs. (4,2 kg)**

**Remachadora separada  
SPLIT RIVETER**

**Manguera 0,9 Meter aprox./ HOSE APPR. 3 FEET**



**GBP712B-SR**

**Peso mango/WEIGHT HEAD : 1.75 lbs. (0,8 kg)**  
**Peso completo/WEIGHT CPL. : 8.75 lbs. (4,0 kg)**

No se incluyen las boquillas, que han de pedirse aparte  
 NOSE ASSEMBLIES ARE NOT FURNISHED WITH THE RIVETER AND MUST BE ORDERED SEPARATELY !

**Tabla selección  
SELECTION CHART**

**GBP712B**

**Boquillas  
NOSE ASSEMBLIES**

Remache FASTENER	Diámetro DIA.	Recta STRAIGHT	Curvada 2 x 90° OFFSET ***
MANDRIL CIEGO GRANDE	1/4"	BOM08-713-20	
COMMERCIAL LOCKBOLTS C6L AVDELOK	3/16 1/4	LB06-713-20 LB08-713-20	NAS06-204B-25OS, NAS06-204B-34OS NAS08-204B-25OS, NAS08-204B-34OS
LGP LOCKBOLT	5/32 3/16 1/4"	LGP05-730B-10, LGP05-730B-20 LGP05-730B-45 LGP06-730B-10, LGP06-730B-20 LGP06-730B-45 LGP08-730B-10, LGP08-730B-20 LGP08-730B-45	LGP05-204B-25OS, LGP05-204B-30OS LGP05-204B-34OS LGP06-204B-25OS, LGP06-204B-30OS LGP06-204B-34OS LGP08-204B-25OS, LGP08-204B-30OS LGP08-204B-34OS
LOCKBOLT NAS SHEAR PULL TYPE NAS TENSION PULL TYPE & GROOVE PROPORTION NASS=SHEAR NAST=TENSION	5/32 3/16	NASS05-730B-10, NAST05-730B-10 NASS05-730B-20, NAST05-730B-20 NASS05-730B-45, NAST05-730B-45 NAS06-730B-10, NAS06-730B-20 NAS06-730B-45	NASS05-204B-25OS, NAST05-204B-25OS NASS05-204B-30OS, NAST05-204B-30OS NASS05-204B-34OS, NAST05-204B-34OS NAS06-204B-25OS, NAS06-204B-30OS NAS06-204B-34OS
MULTI GRIP LOCKBOLT	3/16 1/4	MG06-713-20, MG06-713-60 MG08-713-20	
SINGLE ACTION BLIND BOLT MS90353S, MS90354S MS90353U, MS90354U MS21141S, MS21140S MS21141U, MS21140U	5/32 3/16 1/4"	SB05-752B-20, SB05-752B-45 SB06-752B-20, SB06-752B-45 SB08-713-20	SB05-204B-27OS, SB05-204B-37OS SB06-204B-27OS, SB06-204B-37OS SB08-204B-27OS, SB08-204B-37OS

\*\*\* Las boquillas "204" (curvada) solo funcionan con el adaptador 751204 y el limitador 712152 !

\*\*\* NOSE ASSEMBLIES STYLE "204" (OFFSET) ONLY APPLICABLE WITH ADPATER 751204 AND STROKE LIMITER 712152 !

Las boquillas diseñadas para el Mod. 352 se montan directamente en la GBP 712 !

NOSE ASSEMBLIES THAT WERE DESIGNED FOR THE MOD. 352 MOUNT DIRECTLY ON THE GBP712 !

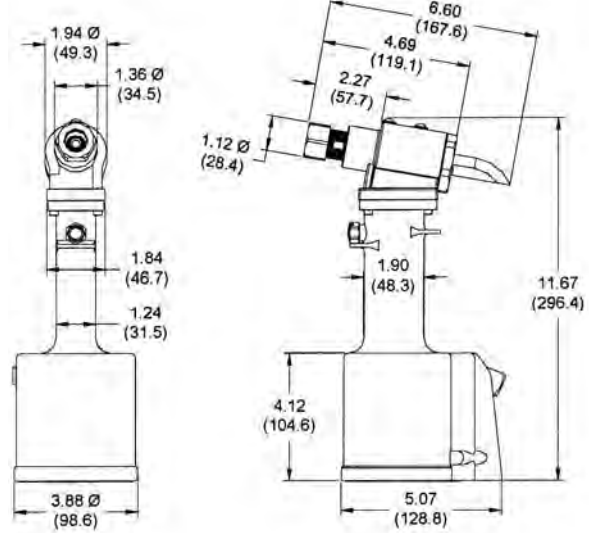
**LOCKBOLTS**  
**SINGLE ACTION BLIND BOLTS**  
**SINGLE ACTION BLIND RIVETS**

**Remachadoras**  
**RIVET TOOLING**

**Remachadora neumática**  
**PNEUDRAULIC RIVETER**



**GBP730D**  
**4.7 lbs.**  
**11.67" high**

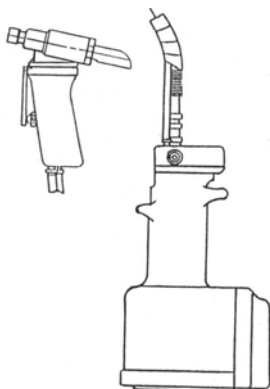


**GBP730D**

**Carga / RATED PULL LOAD:** 4000 lbs/ 90 PSI  
**Elevación/ STROKE** : .460" (11,7 mm)  
**Peso / WEIGHT** : 4.7 lbs. (2,13 kg)  
**Diámetro máximo remache /**  
**MAX. RIVET DIAMETER** : (-8) 1/4" (6,35 mm)

**Remachadora con mango separado**  
**SPLIT HANDLE RIVETER**

**Manguera 2,4 Metros aprox./ HOSE APPR. 8 FEET**

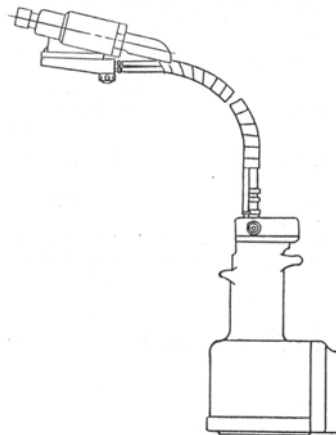


**GBP730D-SH**

**Peso mango/WEIGHT HANDLE:** 2.5 lbs. (0,9 kg)  
**Peso completo/WEIGHT CPL. :** 8.5 lbs. (3,9 kg)

**Remachora separada**  
**SPLIT RIVETER**

**Manfuera 0,9 Metros aprox./ HOSE APPR. 3 FEET**



**GBP730D-SR**

**Peso cabeza/WEIGHT HEAD :** 2 lbs. (0,9 kg)  
**Peso completo/WEIGHT CPL. :** 8 lbs. (3,6 kg)

No se incluyen con la remachadora las boquillas, que han de pedirse por separado  
 NOSE ASSEMBLIES ARE NOT FURNISHED WITH THE RIVETER AND MUST BE ORDERED SEPARATELY !

**Tabla de selección  
SELECTION CHART**

**GBP730D**

**Boquillas  
NOSE ASSEMBLIES**

Remache FASTENER	Diámetro DIA.	Recta STRAIGHT	Con codo RIGHT ANGLE	Curvada 2 x 90° OFFSET ***
"A" Code NAS1398 & NAS1399'A' NAS1438 & NAS1439'A'	3/32 1/8 5/32 3/16 1/4	3A-352A-25 4A-352A-25, 4A-752B-45 5A-752B-20, 5A-752B-45 6A-752B-20, 6A-752B-45 SMLS08-730-20, SMLS08-730-45	3A-751-54RA 4A-751-54RA 5A-751-54RA 6A-751-54RA	4A-204B-27OS, 4A-204B-37OS 5A-204B-27OS, 5A-204B-37OS 6A-204B-27OS, 6A-204B-37OS SMLS08-204B-27OS, SMLS08-204B-37OS
2 ASP & ASP PF ASP FF & ADSP F ASP-LC	13/64" 17/64"	ASP06-752B-20, ASP06-752B-45 ASP08-752B-20, ASP08-752B-45	ASP06-751-54RA ASP08-751-54RA	ASP06-204B-27OS, ASP06-204B-37OS ASP08-204B-27OS, ASP08-204B-37OS
COMMERCIAL LOCKBOLTS C6L AVDELOK	3/16 1/4	LB06-713-20 LB08-713-20		NAS06-204B-25OS, NAS06-204B-34OS NAS08-204B-25OS, NAS08-204B-34OS
LGP LOCKBOLT	5/32 3/16	LGP05-730B-10, LGP05-730B-20 LGP05-730B-45 LGP06-730B-10, LGP06-730B-20 LGP06-730B-45		LGP05-204B-25OS, LGP05-204B-30OS LGP05-204B-34OS LGP06-204B-25OS, LGP06-204B-30OS LGP06-204B-34OS
LOCKBOLT NAS SHEAR PULL TYPE NAS TENSION PULL TYPE & GROOVE PROPORTION NASS=SHEAR NAST=TENSION	5/32 3/16	NASS05-730B-10, NAST05-730B-10 NASS05-730B-20, NAST05-730B-20 NASS05-730B-45, NAST05-730B-45 NAS06-730B-10, NAS06-730B-20 NAS06-730B-45		NASS05-204B-25OS, NAST05-204B-25OS NASS05-204B-30OS, NAST05-204B-30OS NASS05-204B-34OS, NAST05-204B-34OS NAS06-204B-25OS, NAS06-204B-30OS NAS06-204B-34OS
UNIMATIC BLIND RIVET CHERRYMAX ALLMAX, HUCKMAX NAS1919U & NAS1921U BACR15FR/FP BACR15GF/GK NAS9301-9312 M7885	1/8 5/32 3/16 1/4	456MAX-752-21, 456MAX-752-61 456MAX-752-21, 456MAX-752-61 456MAX-752-21, 456MAX-752-61 08MAX-752B-20, 08MAX-752B-45	456MAX-751-54RA 456MAX-751-54RA 456MAX-751-54RA	456MAX-352-43OS 456MAX-352-43OS 456MAX-352-43OS 08MAX-204B-27OS, 08MAX-204B-37OS
SINGLE ACTION BLIND BOLT MS90353S, MS90354S MS90353U, MS90354U MS21141S, MS21140S MS21141U, MS21140U	5/32 3/16	SB05-752B-20, SB05-752B-45 SB05-730-80 SB06-752B-20, SB06-752B-45 SB06-730-80	SB05-751-54RA SB06-751-54RA	SB05-204B-27OS, SB05-204B-37OS SB06-204B-27OS, SB06-204B-37OS
SINGLE ACTION BLIND RIVET NAS1919S NAS1921S	1/8 5/32 3/16 1/4	SMLS04-752B-20, SMLS04-752B-45 SMLS05-752B-20, SMLS05-752B-45 SMLS06-752B-20, SMLS06-752B-45 SMLS08-730-20, SMLS08-730-45	SMLS04-751-54RA SMLS05-751-54RA SMLS06-751-54RA	SMLS04-204B-27OS, SMLS04-204B-37OS SMLS05-204B-27OS, SMLS05-204B-37OS SMLS06-204B-27OS, SMLS06-204B-37OS SMLS08-204B-27OS, SMLS08-204B-37OS

**Las boquillas 456MAX se instalan en los diámetros 1/8", 5/32", 3/16"**  
456MAX-... PULLING HEADS INSTALLS ALL 3 DIAMETERS 1/8", 5/32", 3/16"

\*\*\* **Las boquillas tipo "204" y 456MAX-352-43OS (curvadas) sólo funcionan con el adaptador 751204**  
\*\*\* NOSE ASSEMBLIES STYLE "204" and 456MAX-352-43OS(OFFSET) ONLY APPLICABLE WITH ADPATER 751204 !

**Las boquillas diseñadas para el Mod. 352 se montan directamente sobre la GBP730**  
NOSE ASSEMBLIES THAT WERE DESIGNED FOR THE MOD. 352 MOUNT DIRECTLY ON THE GBP730 !

**Las boquillas con codo requieren más de un tirón**  
RIGHT ANGLE NOSE ASSEMBLIES REQUIRE MORE THAN ONE PULL.

**LOCKBOLTS  
SINGLE ACTION BLIND BOLTS  
SINGLE ACTION BLIND RIVETS**

**Remachadoras  
RIVET TOOLING**

**Remachadora neumática  
PNEUDRAULIC RIVETER**



**GBP745C**

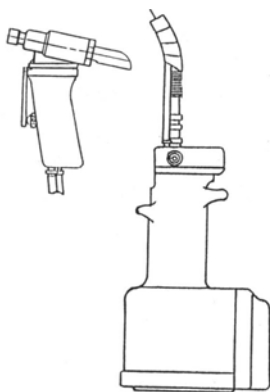
**Carga / RATED PULL LOAD: 6300 lbs/ 90 PSI**  
**Elevación/ STROKE : .600" (15,2 mm)**  
**Peso / WEIGHT : 7 lbs. (3,17 kg)**  
**Diámetro máx. remache /  
MAX. RIVET DIAMETER : (-10) 3/8" (9,53 mm)**

**Remachadora mango separado  
SPLIT HANDLE RIVETER**

**Manguera 2,4 Metros aprox./ HOSE APPR. 8 FEET**

**Remachadora separada  
SPLIT RIVETER**

**Manguera 0,9m / HOSE APPR. 3 FEET**



**GBP745C-SH**

**Peso mango/WEIGHT HANDLE: 2.75 lbs. (1,3 kg)**  
**Peso completo/WEIGHT CPL. : 10.5 lbs. (4,8 kg)**

**GBP745C-SR**

**Peso cabeza/WEIGHT HEAD : 2.25 lbs. (1,0 kg)**  
**Peso completo/WEIGHT CPL. : 10.5 lbs. (4,8 kg)**

Las boquillas no se incluyen con la remachdoran, y han de pedirse por separado  
NOSE ASSEMBLIES ARE NOT FURNISHED WITH THE RIVETER AND MUST BE ORDERED SEPARATELY !

**Tabla de selección**  
**SELECTION CHART**

**GBP745C**

**Boquillas**  
**NOSE ASSEMBLIES**

Remache FASTENER	Diámetro DIA.	Recta STRAIGHT	con codo RIGHT ANGLE	curvada 2 x 90° OFFSET
A' CODE NAS1398 & NAS 1399 'A' NAS1438 & NAS1439'A'	1/8 5/32 3/16 1/4	4A-745B-23, 4A-745B-48 5A-745B-23, 5A-745B-48 6A-745B-23, 6A-745B-48 SMLS08-745B-23, SMLS08-745B-48	4A-352-54RA* 5A-352-54RA* 6A-352-54RA*	4A-204B-27OS**, 4A-204B-37OS** 5A-204B-27OS**, 5A-204B-37OS** 6A-204B-27OS**, 6A-204B-37OS** SMLS08-204B-27OS**, SMLS08-204B-37OS**
2 ASP & ASP PF ASP FF & ASP F ASP-LC	13/64" 17/64" 21/64"	ASP06-745B-23, ASP06-745B-48 ASP08-745B-23, ASP08-745B-48 ASP10-745C-23, ASP10-745C-48	ASP06-352A-54RA* ASP08-352A-54RA*	ASP06-204B-27OS**, ASP06-204B-37OS** ASP08-204B-27OS**, ASP08-204B-37OS** ASP10-204B-27OS**, ASP10-204B-37OS**
BLIND OVERSIZE MANDREL	1/4	BOM08-745C-23		
COMMERCIAL LOCKBOLTS C6L AVDELOK	3/16 1/4 5/16 3/8 6	NAS06-745B-12, NAS06-745B-48 NAS06-745B-23 NAS08-745B-12, NAS08-745B-48 NAS08-745B-23 LB10-745B-26, NAS10-745B-48 LB12-745B-26, NAS12-745B-48		NAS06-204B-25OS** NAS06-204B-30OS** NAS06-204B-34OS** NAS08-204B-25**, NAS08-204B-30** NAS08-205A-34**, NAS08-205-31*** NAS 10-205A-31*** NAS 12-205A-31***
LGP® LOCKBOLTS	5/32 3/16 1/4 5/16	LGP05-745B-12, LGP05-745B-23 LGP05-745B-48 LGP06-745B-12, LGP06-745B-23 LGP06-745B-48 LGP08-745B-12, LGP08-745B-23 LGP08-745B-48 LGP10-745B-12, LGP10-745B-23 LGP10-745B-48		LGP05-204B-25OS**, LGP05-204B-30OS** LGP05-204B-34OS** LGP06-204B-25OS**, LGP06-204B-30OS** LGP06-204B-34OS** LGP08-204B-25OS**, LGP08-204B-30OS** LGP08-204B-34OS**, LGP08-205A-31*** LGP10-205C-31***
LOCKBOLT NAS SHEAR PULL TYPE, NAS TENSION PULL TYPE, AND GP® NASS = NAS SHEAR NAST= NAS TENSION	5/32 3/16 1/4 5/16 3/8 2	NASS05-745B-12, NAST05-745B-12 NASS05-745B-23, NAST05-745B-23 NASS05-745B-48, NAST05-745B-48 NAS06-745B-12, NAS06-745B-23 NAS06-745B-48 NAS08-745B-12, NAS08-745B-23 NAS08-745B-48 NAS10-745B-12, NAS10-745B-23 NAS10-745B-48 NAS12-745B-12, NAS12-745B-23 NAS12-745B-48		NASS05-204B-25OS**, NAST05-204B-25OS** NASS05-204B-30OS**, NAST05-204B-30OS** NASS05-204B-34OS**, NAST05-204B-34OS** NAS06-204B-25OS**, NAS06-204B-30OS**, NAS06-204B-34OS** NAS08-204B-25**, NAS08-204B-30**, NAS08-204B-34**, NAS08-205A-31*** NAS10-205A-31*** NAS12-205A-31***
MAGNA-GRIP® FASTENERS MULTI-GRIP LOCKBOLT	3/16 1/4 5/16 3 3/8 4	MG06-745-48 MG08-745-48 MG10-226-28 MG12-226-48		
MAGNA-GRIP® DAISY® RIVET	1/4	MG06-745-48		
PT/MS/9SP MS20600, MS20601	1/4	PT08-745-48		
CHERRYMAX® NAS1919U ALLMAX® NAS1921U HUCKMAX® NAS9301-9312 BACR15FR-FP BACR 15GJ/GK, M7885	1/8 5/32 3/16 1/4	456MAX-752-21*, 456MAX-752-61* 456MAX-752-21*, 456MAX-752-61* 456MAX-752-21*, 456MAX-752-61* 08MAX 745B-23, 08MAX-745B-48	456MAX-352-54RA* 456MAX-352-54RA* 456MAX-352-54RA*	456MAX-352-43OS** 456MAX-352-43OS** 456MAX-352-43OS** 08MAX-204B-27OS**, 08MAX-204B-37OS**
SINGLE ACTION BLIND BOLT MS21140S & MS21140U MS21141S & MS21141U MS90353S & MS90353U MS90354S & MS90354U	5/32 3/16 1/4 5/16 5 3/8 4	SB05-745B-23, SB05-745B-48 SB06-745B-23, SB06-745B-48 SB08-745C-23, SB08-745C-48 SB10-4801-28, SB10-4801-48 SB12-4801-28, SB12-4801-48	SB05-352-54RA* SB06-352-54RA*	SB05-204B-27OS**, SB05-204B-37OS** SB06-204B-27OS**, SB06-204B-37OS** SB08-204B-27OS**, SB08-204B-37OS** SB10-205-35*** SB12-205-35***
SINGLE ACTION BLIND RIVET NAS 1919S NAS 1921S	1/8 5/32 3/16 1/4	SMLS04-745B-23, SMLS04-745B-48 SMLS05-745B-23, SMLS05-745B-48 SMLS06-745B-23, SMLS06-745B-48 SMLS08-745B-23, SMLS08-745B-48	SMLS04-352A-54RA* SMLS05-352A-54RA* SMLS06-352A-54RA*	SMLS04-204B-27OS**, SMLS04-204B-37OS** SMLS05-204B-27OS**, SMLS05-204B-37OS** SMLS06-204B-27OS**, SMLS06-204B-37OS** SMLS08-204B-27OS**, SMLS08-204B-37OS**

\* **Requiere adaptador 353352** / REQUIRES 353352 NOSE ASSEMBLY ADAPTER.

\*\* **Requiere adaptador 353204** / REQUIRES 353204 NOSE ASSEMBLY ADAPTER.

\*\*\* **Requiere adaptador 353205** / REQUIRES 353205 NOSE ASSEMBLY ADAPTER.

1. **Las boquillas con codo pueden requerir más de un tirón** / RIGHT ANGLE NOSE ASSEMBLIES (XXX-54RA) MAY REQUIRE MORE THAN 1 PULL.

2. **Todos los materiales excepto titanio e inoxidable** / ALL MATERIALS EXCEPT TITANIUM & STAINLESS.

3. **100 PSI para acero** / 100 PSI REQUIRED FOR STEEL

4. **Sólo aluminio** / ALUMINUM ONLY

5. **7 Bar (100 PSI) requeridos para aleaciones** / 100 PSI REQUIRED FOR ALLOY (MS90353 & 4).

6. **Sólo para lockbolt** / GENERAL PURPOSE LOCKBOLTS ONLY.

**Las boquillas diseñadas para el Mod. 353 se montan directamente sobre la GBP745C**

NOSE ASSEMBLIES THAT WERE DESIGNED FOR THE MOD. 353 MOUNT DIRECTLY ON THE GBP745C !

**Las boquillas diseñadas para el Mod. 352 se montan en la GBP745C con el adaptador 353352**

NOSE ASSEMBLIES THAT WERE DESIGNED FOR THE MOD. 352 MOUNT WITH ADAPTER 353352 ON THE GBP745C !

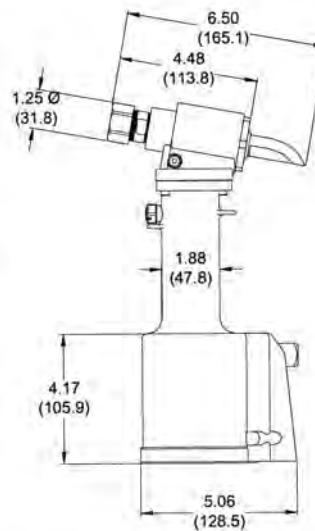
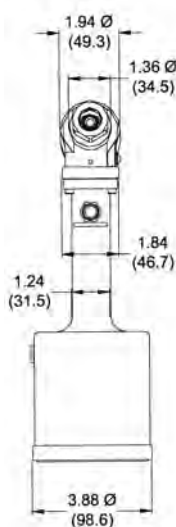
**SINGLE ACTION BLIND BOLTS** (tornillo ciego)  
**SINGLE ACTION BLIND RIVETS** (remache ciego)

# Remachadoras RIVET TOOLING

## Remachadora neumática PNEUDRAULIC RIVETER



**GBP752D**  
**4.7 lbs.**  
**10.90" high**

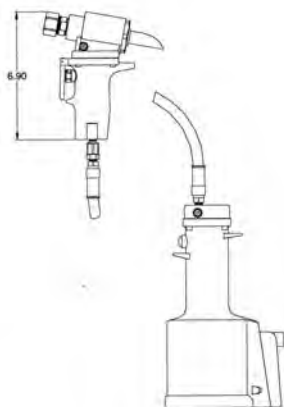


## GBP752D

**Carga / RATED PULL LOAD:** 3800 pounds on 90 PSI  
**Elevación / STROKE** : .500" (12,7 mm)  
**Peso / WEIGHT** : 4.7 lbs. (2,13 kg)  
**Diámetro máx. remache/**  
**MAX. RIVET DIAMETER** : (-10) 5/16" (7.94 mm)

### Remachadora mango separado SPLIT HANDLE RIVETER

**Manguera 2,4 Metros/ HOSE APPR. 8 FEET**

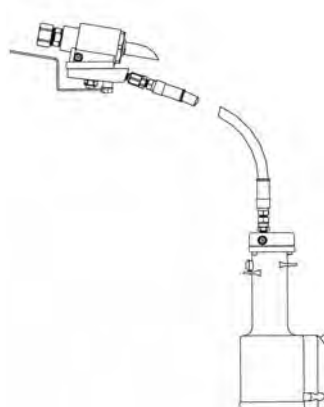


## GBP752D-SH

**Peso mango/WEIGHT HANDLE:** 2.5 lbs. (1,1 kg)  
**Peso completo/WEIGHT CPL.** : 7.5 lbs. (3,4 kg)

### Remachadora separada SPLIT RIVETER

**Manguera 0,9 Metros / HOSE APPR. 3 FEET**



## GBP752D-SR

**Peso cabeza/WEIGHT HEAD:** 2 lbs. (0,9 kg)  
**Peso completo/WEIGHT CPL.** : 7 lbs. (3,2 kg)

Las boquillas no se incluyen y han de pedirse por separado  
 NOSE ASSEMBLIES ARE NOT FURNISHED WITH THE RIVETER AND MUST BE ORDERED SEPARATELY !

**Tabla de selección**  
**SELECTION CHART**

**GBP752D**

**Boquillas**  
**NOSE ASSEMBLIES**

Remache FASTENER	Diámetro DIA.	Recta STRAIGHT	con codo RIGHT ANGLE 3	curvada 2 x 90° OFFSET *
COMMERCIAL LOCKBOLTS C6L & AVDELOK	3/16 1/4	LB06-713-20 LB08-713-20		
MAGNA-GRIP® MAXLOK®	3/16 1/4 <sup>2</sup>	MG06-713-20, MG06-713-60 MG08-713-20, MG08-713-60		
SINGLE ACTION BLIND BOLT MS90353S & U, MS90354S & U MS21140S & U, MS21141 S & U	5/32 3/16	SB05-752B20, SB05-752B-45 SB05-730-80 SB06-752B-20, SB06-752B-45 SB06-730-80	SB05-751-54RA SB06-751-54RA	SB05-204B-27OS, SB05-204B-37OS SB06-204B-27OS, SB06-204B-37OS
SINGLE ACTION BLIND RIVET NAS1919 S & U NAS1921 S & U	1/8 <sup>1</sup> 5/32 <sup>1</sup> 3/16 <sup>1</sup> 1/4 <sup>1,2</sup>	SMLS04-352A-25, SMLS04-752B-45 SMLS05-752B-20, SMLS05-752B-45 SMLS06-752B-20, SMLS06-752B-45 SMLS08-730-20, SMLS08-730-45	SMLS04-751-54RA SMLS05-751-54RA SMLS06-751-54RA	SMLS04-204B-27OS, SMLS04-204B-37OS SMLS05-204B-27OS, SMLS05-204B-37OS SMLS06-204B-27OS, SMLS06-204B-37OS SMLS08-204B-27OS, SMLS08-204B-37OS
'A' Code NAS1398A & NAS1399A NAS1438A & NAS1439A	3/32 1/8 5/32 3/16 1/4 <sup>2</sup>	3A-352A-25 4A-352A-25, 4A-752B-45 5A-752B-20, 5A-752B-45 6A-752B-20, 6A-752B-45 SMLS08-730-20, SMLS08-730-45	3A-751-54RA 4A-751-54RA 5A-751-54RA 6A-751-54RA	4A-204B-27OS, 4A-204B-37OS 5A-204B-27OS, 5A-204B-37OS 6A-204B-27OS, 6A-204B-37OS SMLS08-204B-27OS, SMLS08-204B-37OS
NUT PLATE RIVETS BACR15DR	3/32 1/8	4N-352-21, 4N-352-61 5N-352-21, 5N-352-61	4N-751-54RA 4NP-751-54RA	3NP-715A-38OS ** 4NP-715A-38OS **
CHERRYMAX® ALLMAX® BACR15FR-FP/BACR15GF-GK NAS1919U & 1921U	1/8 <sup>4</sup> 5/32 <sup>4</sup> 3/16 <sup>4</sup> 1/4 <sup>2</sup>	456MAX-752-21, 456MAX-752-61 456MAX-752-21, 456MAX-752-61 456MAX-752-21, 456MAX-752-61 08MAX 752B-20, 08MAX-752B-45	456MAX-751-54RA 456MAX-751-54RA 456MAX-751-54RA	456MAX-352-43OS 456MAX-352-43OS 456MAX-352-43OS 08MAX 204B-27OS, 08MAX-204B-37OS
ASP 2, ASP PF, ASP 4 FF, ASP 2 F, ASP 2 LC	13/64 17/64	ASP06-752B-20, ASP06-752B-45 ASP08-752B-20, ASP08-752B-45	ASP06-751-54RA	ASP06-204B-27OS, ASP06-204B-37OS ASP08-204B-27OS, ASP08-204B-37OS
MBC® NAS1719, NAS1720 NAS1721	1/8 5/32 3/16	MBC04-352A-25, MBC04-752B-45 MBC05-752B-20, MBC05-752B-45 MBC06-752B-20, MBC06-752B-45	MBC04-751-54RA MBC05-751-54RA MBC06-751-54RA	MBC04-204B-27OS, MBC04-204B-37OS MBC05-204B-27OS, MBC05-204B-37OS MBC06-204B-27OS, MBC06-204B-37OS
GROUND STUD BACR553B	8/32 10/32	GS8-752B-20, GS8-752B-45 GS10-752B-20, GS10-752B-45	GS8-751-54RA GS10-751-54RA	GS8-204B-32OS, GS8-204B-42OS GS10-204B-32OS, GS10-204B-42OS
N, Q & E CLOSED END, OPEN END & AVEX® C'SUNK COMMERCIAL RIVETS	3/32 1/8 5/32 3/16	3N-352-21, 3N-352-61 4N-352-21, 4N-352-61 5N-352-21, 5N-352-61 6N-352-21, 6N-352-61	3N-751-54RA 4N-751-54RA 5N-751-54RA 6N-751-54RA	

1. Manfo de 1 tirón a 5 1 PULL THRU -5 GRIP !

2. 7 Bar necesario / 100 PSI REQUIRED !

3. Las boquillas con codo requieren más de un tirón / RIGHT ANGLE NOSE ASSEMBLIES REQUIRE MORE THAN 1 PULL !

4. Las boquillas 456 se instalan en los tres diámetros/ 456.... NOSE ASSEMBLIES INSTALLS ALL THREE DIAMETERS !

\* La boquilla tipo "204" (Offset) solo es compatible con el adaptador 751204

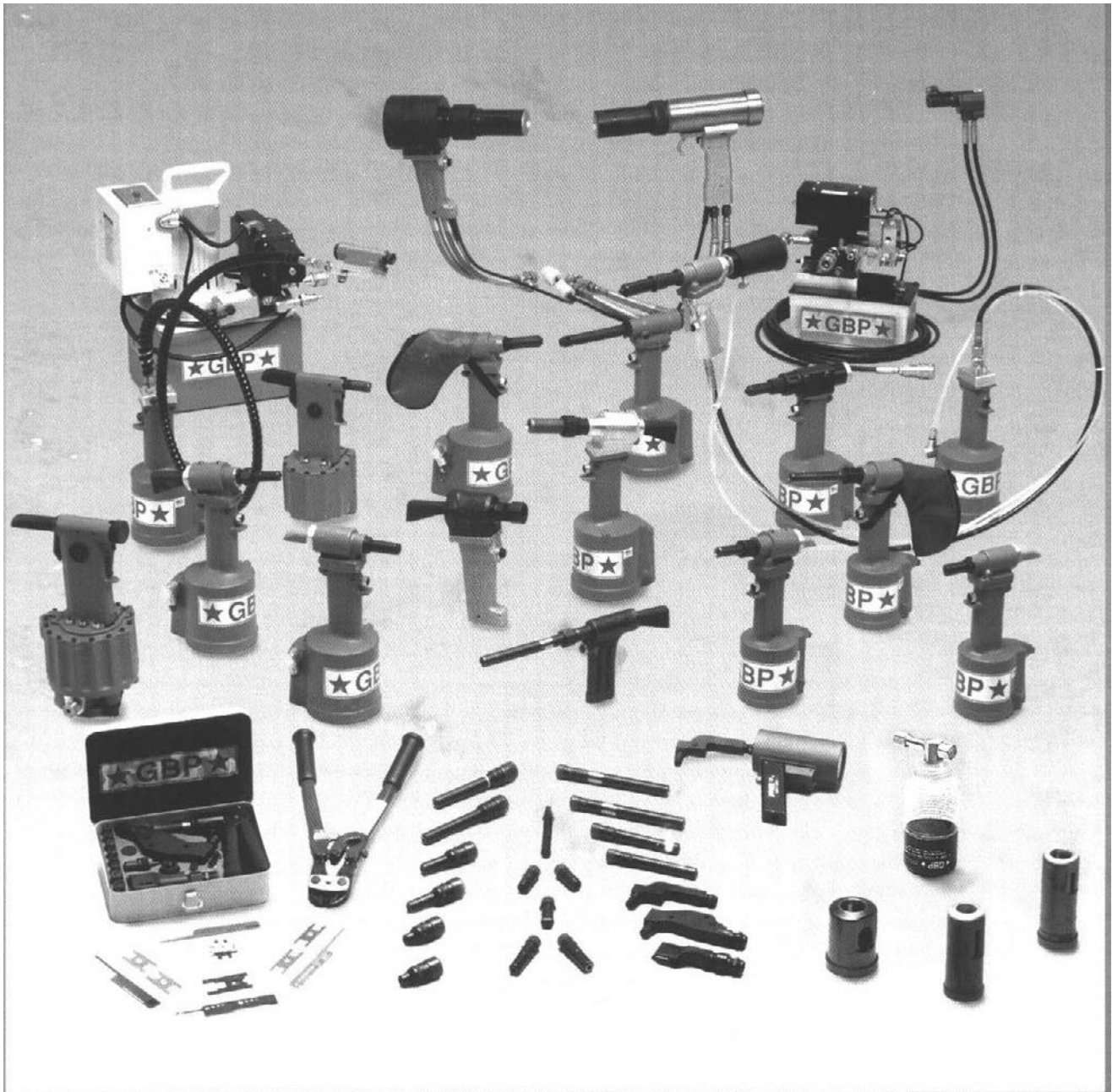
\* NOSE ASSEMBLIES OFFSET STYLE "204" ONLY APPLICABLE WITH ADPATER 751204 !

\*\* La XX-715A-38OS requiere el adaptador 730715 XX-715A-38OS REQUIRES ADAPTER 730715 !

Las boquillas diseñadas para el Mod. 352 se montan directamente en la GBP 752D !

NOSE ASSEMBLIES THAT WERE DESIGNED FOR THE MOD. 352 MOUNT DIRECTLY ON THE GBP752D !

# INSTALLATION SYSTEMS FOR AEROSPACE BLIND RIVETS AND LOCKBOLTS










**Más información bajo pedido**

**MORE INFORMATIONS ARE AVAILABLE ON REQUEST !**

# HTAS PARA ENDEREZAR CABLES

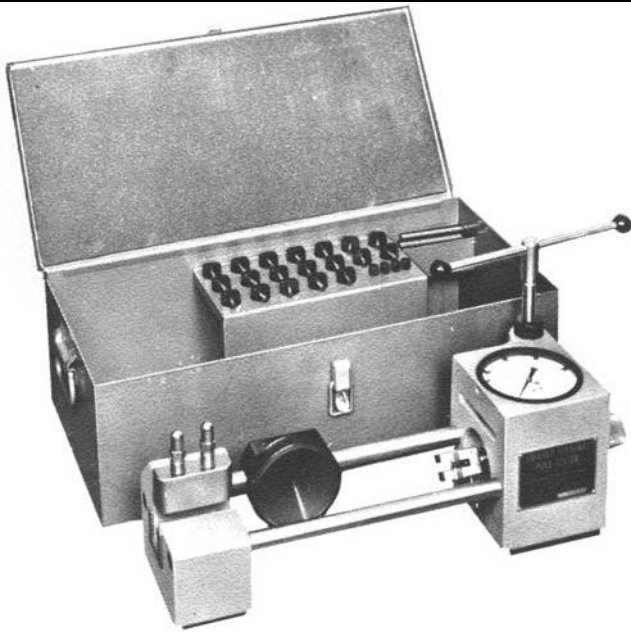
## CABLE SWAGING TOOLS

		
<b>520JK</b>	<b>520J</b>	<b>520SG</b>
<p><b>Enderezador de cables con:</b> Caja, Enderezador 520J, Galga 520SG y los siguientes moldes.</p> <p>CABLE SWAGER KIT EXIST OF: TOOL-BOX, SWAGER 520J, GAGE 520SG AND ALL DIES AS PER FOLLOWING LIST.</p>	<p>Enderezador neumático</p> <p>PNEUMATIC CABLE SWAGER</p>	<p>Galga</p> <p>SWAGING GAUGE</p>

<p><b>para terminales de mango doble</b></p> <p>FOR DOUBLE SHANK BALL END TERMINALS</p>		<b>Art Nº</b> PART NO.	<b>Dia. cable</b> CABLE DIA	<b>Ref. terminal</b> TERMINAL REF.
		520CDB-2	1/16"	MS20663-2
		520CDB-3	3/32"	MS20663-3
		520CDB-4	1/8"	MS20663-4
		520CDB-5	5/32"	MS20663-5
		520CDB-6	3/16"	MS20663-6
<p><b>para terminales de mango simple</b></p> <p>FOR SINGLE SHANK BALL END TERMINALS</p>		520CSB-2	1/16"	MS20664-2
		520CSB-3	3/32"	MS20664-3
		520CSB-4	1/8"	MS20664-4
		520CSB-5	5/32"	MS20664-5
		520CSB-6	3/16"	MS20664-6
		<p><b>para terminales de bola simple</b></p> <p>FOR PLAIN BALL END TERMINALS</p>		520CB-2
520CB-3	3/32"			RA2487
520CB-4	1/8"			RA2487
<p><b>para terminales cilindricos</b></p> <p>FOR SLEEVE TYPE TERMINALS</p>				520CS-2
		520CS-3	3/32"	-3
		520CS-4	1/8"	-4
		520CS-5	5/32"	-5
		520CS-6	3/16"	-6
		520CS-7	7/32"	-7
		520CS-8	1/4"	-8
		<p><b>cortacables ***</b></p> <p>CABLE CUT-OFF AND TRIM DIES ***</p>	<p>***</p> 	<b>Troquel Nr.</b> DIE NO.
520CD-2	1/16"			520CP-2
520CD-3	3/32"			520CP-3
520CD-4	1/8"			520CP-4
520CD-5	5/32"			520CP-5
520CD-6	3/16"			520CP-6
520CD-7	7/32"			520CP-7
520CD-8	1/4"			520CP-8

\*\*\* todas se venden por pares, excepto los cortacables  
ALL SWAGING DIES SOLD IN PAIRS. TRIM DIES SOLD INDIVIDUALLY

# Comprobador de cables enderezados SWAGED CABLE TERMINAL PULL TESTER KIT



**520CT**  
Sólo comprobador  
PULL TESTER ONLY

**520CTK**  
Kit completo  
PULL TESTER KIT

**Incluye: / EXIST OF:**

Art N° PART NO.	Descripción	DESCRIPTION
520 CT	Comprobador con mango y mango de mandíbula	PULL TESTER WITH HANDLE AND JAW HOLDER
520 CTB	Caja	CARRYING CASE
520 CTD-1	Bloque	BLOCK
520 CTD-2	mandíbula para diámetro 1/16 (1,59 mm)	JAWS FOR 1/16" CABLE DIAMETER
520 CTD-3	mandíbula para diámetro 3/32 (2,38 mm)	JAWS FOR 3/32" CABLE DIAMETER
520 CTD-4	mandíbula para diámetro 1/8 (3,18 mm)	JAWS FOR 1/8" CABLE DIAMETER
520 CTD-5	mandíbula para diámetro 5/32 (3,97 mm)	JAWS FOR 5/32" CABLE DIAMETER
520 CTD-6	mandíbula para diámetro 3/16 (4,76 mm)	JAWS FOR 3/16" CABLE DIAMETER
520 CTD-7	mandíbula para diámetro 7/32 (5,56 mm)	JAWS FOR 7/32" CABLE DIAMETER
520 CTD-8	mandíbula para diámetro 1/4 (6,35 mm)	JAWS FOR 1/4" CABLE DIAMETER
520 CTF-5	Adaptador para terminales 5/32" AN667	ADAPTER FOR 5/32" AN667 TERMINAL
520 CTF-6	Adaptador para terminales 3/16" AN667	ADAPTER FOR 3/16" AN667 TERMINAL
520 CTF-7	Adaptador para terminales 7/32" AN667	ADAPTER FOR 7/32" AN667 TERMINAL
520 CTF-8	Adaptador para terminales 1/4" AN667	ADAPTER FOR 1/4" AN667 TERMINAL
520 CTS-2	Adaptador para terminales 1/16" AN663 y AN664	ADAPTER FOR 1/16" AN663 & AN664 TERMINAL
520 CTS-3	Adaptador para terminales 3/32" AN663 y AN664	ADAPTER FOR 3/32" AN663 & AN664 TERMINAL
520 CTS-4	Adaptador para terminales 1/8" AN663 y AN664	ADAPTER FOR 1/8" AN663 & AN664 TERMINAL
520 CTS-5	Adaptador para terminales 5/32" AN663 y AN664	ADAPTER FOR 5/32" AN663 & AN664 TERMINAL
520 CTS-6	Adaptador para terminales 3/16" AN663 y AN664	ADAPTER FOR 3/16" AN663 & AN664 TERMINAL
520 CTT-2	Adaptador terminales 1/16" AN666 & AN669 Re.	ADAPTER FOR 1/16" AN666 & AN669 TERMINAL RH TH#D
520 CTT-3	Adaptador terminales 3/32" AN666 & AN669 Re..	ADAPTER FOR 3/32" AN666 & AN669 TERMINAL RH TH#D
520 CTT-4	Adaptador terminales 1/8" AN666 & AN669 Re.	ADAPTER FOR 1/8" AN666 & AN669 TERMINAL RH TH#D
520 CTT-4	Adaptador terminales 5/32" AN666 & AN669 Re.	ADAPTER FOR 5/32" AN666 & AN669 TERMINAL RH TH#D
520 CTT-6	Adaptador terminales 3/16" AN666 & AN669 Re.	ADAPTER FOR 3/16" AN666 & AN669 TERMINAL RH TH#D
520 CTT-7	Adaptador terminales 7/32" AN666 & AN669 Re.	ADAPTER FOR 7/16" AN666 & AN669 TERMINAL RH TH#D
520 CTT-20	Adaptador terminales 1/16" AN666 & AN669 Li.	ADAPTER FOR 1/16" AN666 & AN669 TERMINAL LH TH#D
520 CTT-30	Adaptador terminales 3/32" AN666 & AN669 Li.	ADAPTER FOR 3/32" AN666 & AN669 TERMINAL LH TH#D
520 CTT-40	Adapt. terminales 1/8 y 5/32 AN666 & AN669 Li.	ADAPTER 1/8 & 5/32 AN666 & AN669 TERMINAL LH TH#D
520 CTT-60	Adaptador terminales 3/16" AN666 & AN669 Li.	ADAPTER FOR 3/16" AN666 & AN669 TERMINAL LH TH#D
520 CTT-70	Adaptador terminales 1/4 & 7/32 AN666 & AN669 Li.	ADAPTER 1/4 & 7/16" AN666 & AN669 TERMINAL LH TH#D
520 CTP-1	pin 3/16" para AN667 & AN668	PIN 3/16" FOR AN667 & AN668 TERMINAL
520 CTP-2	pin 1/4" para AN667 & AN668	PIN 1/4" FOR AN667 & AN668 TERMINAL
520 CTP-3	pin 5/16" para AN667 & AN668	PIN 5/16" FOR AN667 & AN668 TERMINAL
520 CTP-4	pin 3/8" para AN667 & AN668	PIN 3/8" FOR AN667 & AN668 TERMINAL

**Las mandíbulas se sirven en pares. Todos los artículos anteriores se pueden servir por separado.**  
JAWS ARE FURNISHED IN PAIRS. ALL LISTED ITEMS CAN BE PURCHASED SEPARATELY !

# Kit portátil de máquina de enderezar PORTABLE SWAGING MACHINE KIT LOCOLOC Hand Swager Type 1 - Mod. M1-K

This portable, hand operated roll type swaging machine, shown below, will swage MS type terminals onto galvanized and stainless steel cables from 1/16" diameter up to and including 3/16" diameter. Marine-industrial terminals can also be assembled if the terminals have the same outside diameter and bore diameters as standard MS terminals before swaging. The LOCOLOC-Kearney Type 1 Roll Swaging Kit, which includes the machine, guide adapters in a steel carrying and storage case, a full set of roll dies, terminal gauges, and feed is pictured and itemized below.



Index No.	Part No.	Old Kearney Part No.	Part Name	Qty.
1	M1 (74)	7-4	Swaging Machine with Case, Allen Wrench, Feed Guide Assembly and Feed Guide Adapters	1
2	M1-B2	12748-10	Shank-Type Ball Terminal Roll Assy. (for 1/16 inch cable)	1
3	M1-B3	12748-11	Shank-Type Ball Terminal Roll Assy. (for 3/32 inch cable)	1
4	M1-B4	12748-12	Shank-Type Ball Terminal Roll Assy. (for 1/8 inch cable)	1
5	GA-B24	12971-1	Ball-Type Terminal Gage (1/16-1/8 inch cable)	1
6	M1-S2	13655-7	Straight-Shank Terminal Roll Assy. (for 1/16 inch cable)	1
7	M1-S3	13655-17	Straight-Shank Terminal Roll Assy. (for 3/32 inch cable)	1
8	M1-S4	13655-27	Straight-Shank Terminal Roll Assy. (for 1/8 inch cable)	1
9	M1-S5	13655-37	Straight-Shank Terminal Roll Assy. (for 5/32 inch cable)	1
10	M1-S6	13655-47	Straight-Shank Terminal Roll Assy. (for 3/16 inch cable)	1
11	GA-S26	12971-2	Straight-Shank Terminal Gauge 1/16 - 3/16 inch cable)	1

**LOCOLOC -KEARNEY Portable Swaging Machine Kit (As illustrated) contains the following:**

- 1 ea. M1 LOCOLOC/Æ-KEARNEY Type 1 Portable Swaging Machine
- 3 ea. Ball Terminal Rolls (Dies) to fit 1/16", 3/32" & 1/8" Cable
- 5 ea. Shank Terminal Rolls (Dies) to fit 1/16", 3/32", 1/8", 5/32" & 3/16" Cable
- 1 ea. Gauge for Ball Terminals (Part No. GA-B24)
- 1 ea. Gauge for Straight Shank Terminals (Part No. GA-S26)
- 1 ea. Steel Carrying Case

**PART NO. M1-K TYPE 1 PORTABLE SWAGING MACHINE KIT AS DESCRIBED ABOVE**

(Shipping Wgt. appr. 64 lbs./ca. 29 kg)

## Tensiómetros CABLE TENSIOMETER



**T60 Series**



**T5-2000 Series**

Model No.	For/para cables	Lbs.	Elevador
<b>T60-1001-C8-1A</b>	1/16, 3/32, 1/8	10 - 200	-
	5/32, 3/16	30 - 200	-
	7/32, 1/4	80 - 200	-
<b>T60-1001-C9-1A</b>	1/8, 5/32, 3/16, 7/32, 1/4	150 - 450	-
<b>T60-1002-C8-00</b>	3CWT, 5CWT, 10CWT	10 - 200	-
	15CWT, 25CWT	30 - 200	-
	35CWT, 45CWT	80 - 200	-
Model No.	For/para cables	Lbs.	Elevador
<b>T5-2002-101-00</b>	1/16, 3/32, 1/8	10 - 100	No. 1
	5/32, 3/16	15 - 150	No. 2C
	7/32, 1/4	25 - 150	No. 3
<b>T5-2002-103-00</b>	1/16, 3/32, 1/8	30 - 160	No. 1
	5/32, 3/16	30 - 200	No. 2C
	7/32, 1/4	30 - 150	No. 3
<b>T5-2002-104-00</b>	1/16, 3/32, 1/8	30 - 200	No. 1
	5/32, 3/16	30 - 300	No. 2C
	7/32, 1/4	30 - 300	No. 3
<b>T5-2002-104A-00</b>	1/16, 3/32	30 - 300	No. 1
	1/8, 5/32, 3/16	30 - 300	No. 2C
	7/32, 1/4	30 - 300	No. 3
<b>T5-2002-105-00</b>	1/16, 3/32, 1/8	30 - 200	No. 1
	5/32, 3/16	30 - 400	No. 2C
	7/32, 1/4	30 - 400	No. 3
<b>T5-2002-301-00</b>	3, 5, 10 (CWT)	10 - 100	No. 1
	15, 25 (CWT)	15 - 150	No. 2C
	35, 45 (CWT)	25 - 150	No. 3
<b>T5-2002-304-00</b>	3, 5, 10 (CWT)	30 - 200	No. 1
	15, 25 (CWT)	30 - 300	No. 2C
	35, 45 (CWT)	30 - 300	No. 3
<b>T5-2002-401-00</b>	1/16, 3/32, 1/8	10 - 100	No. 1
	5/32, 3/16	15 - 150	No. 2C
	7/32, 1/4	25 - 150	No. 3
	10, 15 (CWT)	5 - 100	No. 1
	15 (CWT)	5 - 150	No. 2C
	20, 25 (CWT)	5 - 150	No. 2C
70 (CWT)	25 - 150	No. 3	
<b>T5-2004-113-00</b>	1/16, 3/32, 1/8	10 - 100	No. 1
<b>T5-2006-115-00</b>	1/16	5 - 60	No. 1

## Tensiómetro CABLE TENSIOMETER

Model No.	For/para cables	Lbs.	Elevador
<b>T5-8002-104B-00</b>	1/16	5 - 300	No. 1
	3/32, 1/8	5 - 300	No. 2
	5/32, 3/16	5 - 300	No. 2C
	7/32, 1/4	5 - 300	No. 3A
<b>T5-8002-105-00</b>	1/16, 3/32, 1/8	30 - 200	No. 1
	5/32, 3/16	30 - 400	No. 2C
	7/32, 1/4	30 - 400	No. 3
<b>T5-8002-211-00</b>	1/16, 3/32, 1/8	35 - 350	No. 2
<b>T5-8002-401-00</b>	1/16, 3/32, 1/8	10 - 100	No. 1
	5/32, 3/16	15 - 150	No. 2C
	7/32, 1/4	25 - 150	No. 3
	10, 15 (CWT)	5 - 100	No. 1
	15 (CWT)	5 - 150	No. 2C
	20, 25 (CWT)	5 - 150	No. 2C
	70 (CWT)	25 - 150	No. 3
<b>T5-8003-106-00</b>	3/16, 7/32, 1/4	40 - 600	No. 2C
	5/16	40 - 600	No. 3A
<b>T5-8003-107-00</b>	3/16, 7/32, 1/4	100 - 800	No. 2C
	5/16	100 - 800	No. 3A
<b>T5-8003-108-00</b>	3/16, 7/32, 1/4	200 - 1000	No. 2C
	5/16	200 - 1000	No. 3A
<b>T5-8003-209-00</b>	1/4, 5/16, 3/8	200 - 400	No. 4
<b>T5-8005-109-00</b>	3/16	250 - 1300	No. 2
	7/32, 1/4	250 - 1300	No. 2C
	5/16	250 - 1300	No. 3A
<b>T5-8005-110-00</b>	3/16	300 - 1600	No. 2
	7/32, 1/4	300 - 1600	No. 2C
	5/16	300 - 1600	No. 3A
<b>T5-8005-111-00</b>	3/16	500 - 2000	No. 2
	7/32, 1/4	500 - 2000	No. 2C
<b>T5-8008-106-00</b>	1/8, 5/32	40 - 600	No. 2
	3/16	40 - 600	No. 2C
	1/4	40 - 600	No. 3
<b>T5-8008-306-00</b>	10, 15 (CWT)	40 - 600	No. 2
	25 (CWT)	40 - 600	No. 2C
	25 (CWT)	40 - 600	No. 3
<b>T5-8103-406-00</b>	3/16, 7/32, 1/4	40 - 600	No. 2C
	5/16	40 - 600	No. 3A
	5, 10, 15 (CWT)	25 - 125	No. 1
	20, 25 (CWT)	25 - 125	No. 2
	25 (CWT)	150 - 250	No. 2
	45 (CWT)	200 - 1400	No. 3A
	80 (CWT)	200 - 600	No. 3A
80 (CWT)	600 - 1400	No. 3B	
<b>T5-8203-108-00</b>	3/8	200 - 1000	No. 3B



**T5-8000 Series**

# ECKOLD Handformer

Máquinas universales para transformación en frío de placas de metal y secciones de perfil  
 Universal machines for chipless coldforming of sheet metal and profile sections



## HF 80 CH

- Mit Ständer
- With stand
- Avec support



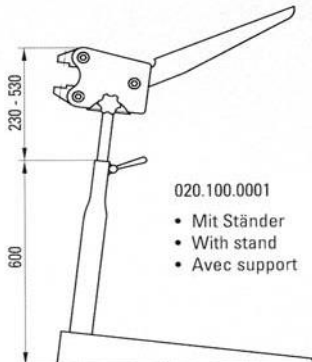
- Ohne Ständer
- Without stand
- Sans support



- Schnellwechsel
- Quick tool change
- Changement rapide

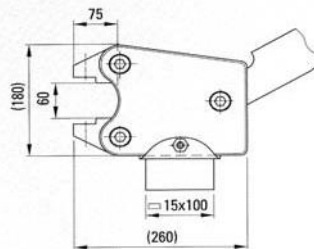


- Arbeitshöhe einstellbar
- Adjustable height
- Hauteur réglable



020.100.0001

- Mit Ständer
- With stand
- Avec support

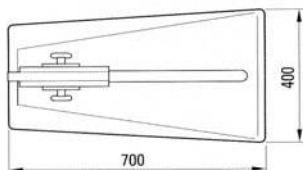


020.100.0011

- Ohne Ständer
- Without stand
- Sans support



- Alle Verschleissteile in Werkzeugen können einzeln ausgetauscht werden.
- All wear and tear parts of tools can be replaced individually.
- Toutes les pièces d'usure sont remplaçable individuellement.



Ausladung beim Stauchen und Strecken

Depth of gap when shrinking or stretching

Antrieb  
 Arbeitshub  
 Umformkraft f,r:  
 - Stahl  
 - Aluminium  
 - Inox

Drive  
 Working stroke  
 Forming capacity:  
 - steel  
 - aluminium  
 - stainless steel

Profundidad al alargar y estrechar  
 tracción  
 capacidad de trabajo  
 Capacidad de transformación:  
 - acero  
 - aluminio  
 - inoxidable

80 mm  
 manuell/manual/manuel  
 max. 6.0 mm

max. 1.5 mm  
 max. 2.0 mm  
 max. 1.0 mm

Verstellbare Arbeitshöhe  
 Gewicht netto  
 - mit Ständer  
 - ohne Ständer

Adjustable working height  
 Netweight  
 - with stand  
 - without stand

Altura de trabajo ajustable  
 Peso  
 - con apoyo  
 - sin apoyo

830 -1130 mm  
 ~24.0 kg  
 ~12.6 kg

## Hinweis

Alle Angaben zu Blechdicken beziehen sich auf Material in Tiefziehqualität: Stahlblech (R<sub>m</sub>~400 N/mm<sup>2</sup>) Aluminium, nicht ausgehärtet, umformbar (R<sub>m</sub>~250 N/mm<sup>2</sup>) und rostfreies Stahlblech (R<sub>m</sub>~600 N/mm<sup>2</sup>)

## Remark

All sheet thickness data are based on material in deep drawing quality: mild steel (R<sub>m</sub>~400 N/mm<sup>2</sup>) aluminium not hardened, formable (R<sub>m</sub>~250 N/mm<sup>2</sup>) and stainless steel (R<sub>m</sub>~600 N/mm<sup>2</sup>)

## Observaciones

Todos los datos de grosor están basados en una gran calidad de dibujo: acero (R<sub>m</sub>~400 N/mm<sup>2</sup>) aluminio no endurecido transformable (R<sub>m</sub>~250 N/mm<sup>2</sup>) y acero inoxidable (R<sub>m</sub>~600 N/mm<sup>2</sup>)

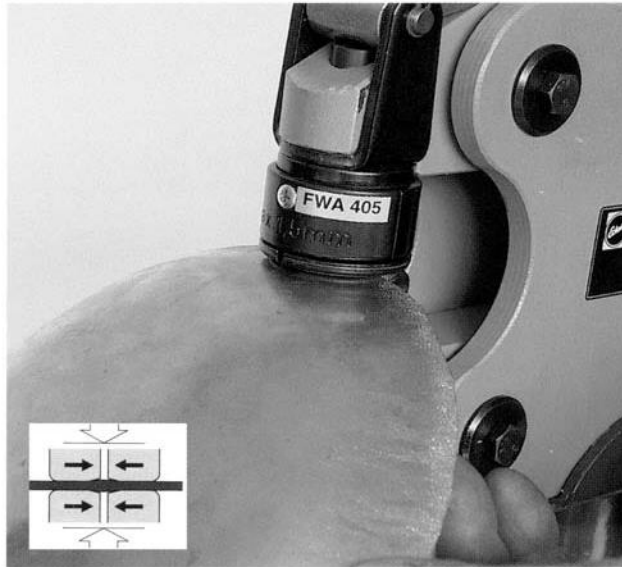
# ECKOLD Handformer

Herramientas para encoger y ensanchar para la HF80CH  
 TOOLS FOR SHRINKING AND STRETCHING FOR HANDFORMER HF80CH

Stauchern

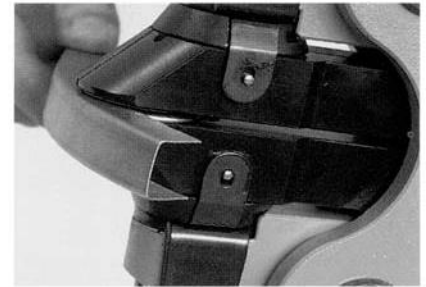
Shrinking

Encoger



**FWA 405 SSP**

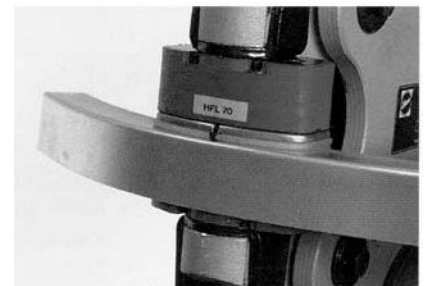
- Profile biegen, Bleche runden und Falten entfernen durch genau kontrolliertes Zusammendrücken der Bearbeitungszone
- Bending profiles, forming sheets and removing wrinkles by precisely controlled shrinking of the area worked on
- Cintrage par rétreint de profilés, formage de tôles, élimination de déformations par rétreint dans la zone de travail



**HS 40 SSP**



für U-Profile  
 for U-profiles  
 pour des profilés U



**HFL 70 SSP**

ohne Oberflächenbeschädigung  
 without damaging the surface  
 sans endommager la surface de travail

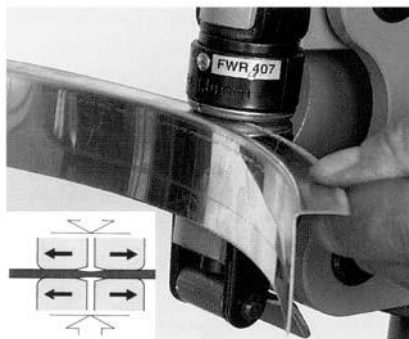
Tipo/Type	Dim. mm	Satz set/kit	Bestell-Nr. / Order no. N° de pedido	kg	Blechdicke / Sheet thickness / grosor placa		
					Stahl/Steel/Acero	Inox	Aluminium
<b>FWA 405 SSP</b>	40	1	220.000.000	1,1	1,5	1	2
<b>HS 40 SSP</b>	-	1*	220.000.030	2,75	1,5	1	2
<b>HFL 70 SSP</b>	40 x 70	1	220.000.020	1,2	1,25	1	1,5

\* St,ck/ piece / piÈce

Strecken

Stretching

Ensanchar



**FWR 407 SSP**

- Zum Biegen, Aufweiten oder Korrigieren
- For bending, expanding or correcting
- Cintrage par allongement de profilés, formage de tôles, élimination de déformation par allongement dans la zone de travail

Tipo/Type	Dim. mm	Satz set/kit	Bestell-Nr. / Order no. N° de pedido	kg	Blechdicke / Sheet thickness / ...paisseur		
					Stahl/Steel/Acero	Inox	Aluminio
<b>FWR 407 SSP</b>	40	1	220.000.010	1,1	1,5	1	2

# ECKOLD Handformer

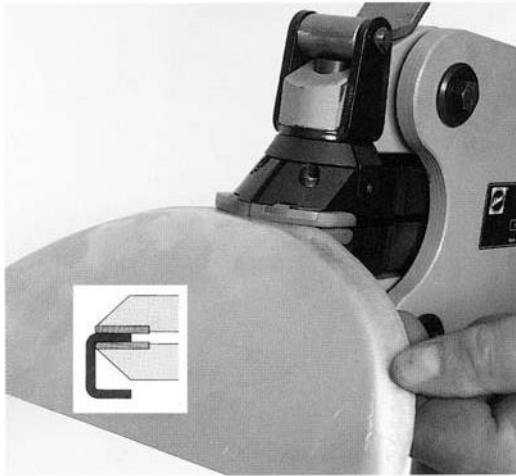
Herramienta para corregir y ajustar la HF80CH

TOOLS FOR CORRECTING AND ADJUSTING FOR HANDFORMER HF80CH

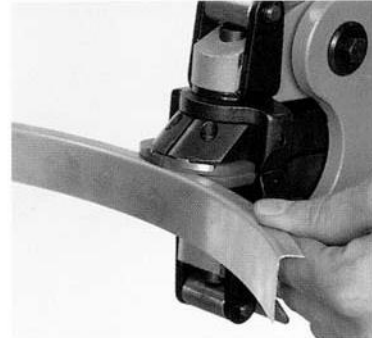
Korriegiren/  
Anpassen

Correcting/  
Adjusting

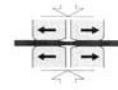
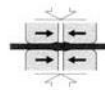
Corregir/  
Ajustar



**HLA 60 SSP**



**HLR 60 SSP**



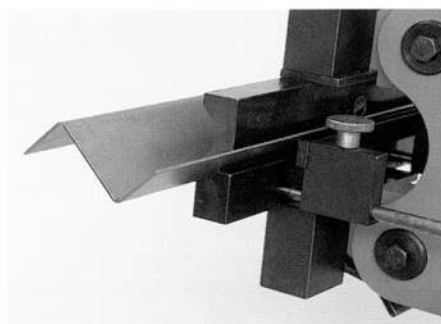
- Schnabelförmige Werkzeuge mit synthetischen Stollen, für feinste Anpassarbeiten ohne Oberflächenbeschädigung
- Beak shaped tools with synthetic jaw plates, for most sensitive adjusting or correcting jobs without damaging the surface
- Outils à bec avec mâchoires plastiques pour des travaux de formage sans endommager la surface de travail

Tipo / Type	Dim. mm	St.ck piece Pieza	Bestell-Nr. / Order no. N° de pedido	kg	Blechdicke / Sheet thickness / grosor mm		
					Stahl / Steel / Acerp	Inox	Aluminio
<b>H LA 60 SSP</b>	-	1	220000040	2,8	1,0	-	1,5
<b>HLR 60 SSP</b>	-	1	220000050	3	1,0	-	1,5

Abkanten

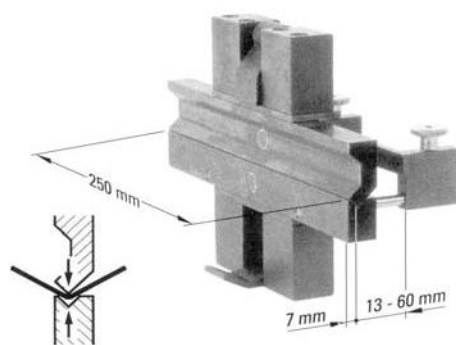
Edging

Plegado



**AK 250**

- Zum 90°-Abkanten von Blechen
- 90deg. edging of sheets
- Pour le pliage à 90 degré



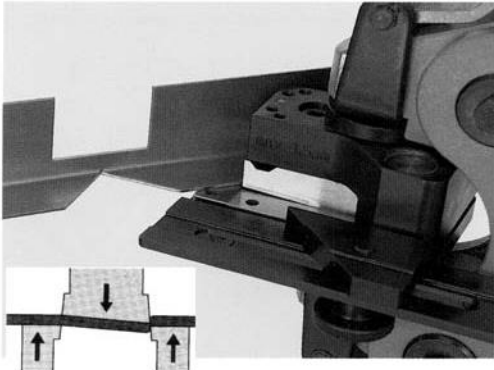
Beispiele / Examples / Exemples:



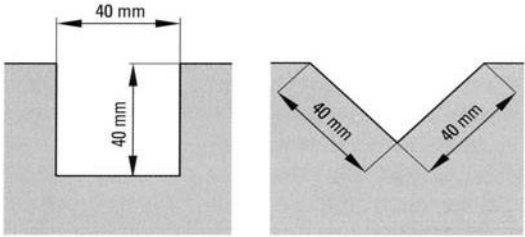
Tipo / Type	Dim. mm	Satz set / kit	Bestell-Nr. / Order no. No. de pedido	kg	Blechdicke / Sheet thickness / grosor mm Max .		
					Stahl / Steel / Acero	Inox	Aluminio
<b>AK 250</b>	-	1	230040001	5,1	1,2	1,0	1,5

**ECKOLD Handformer**  
**Herramienta para corregir y ajustar la HF80CH**  
**TOOLS FOR CORRECTING AND ADJUSTING FOR HANDFORMER HF80CH**

**Ausklinken**  
**Notching**  
**Hacer muescas**



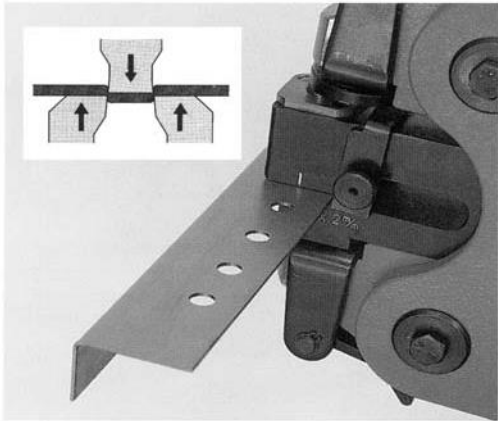
**ASW 42 SSP**



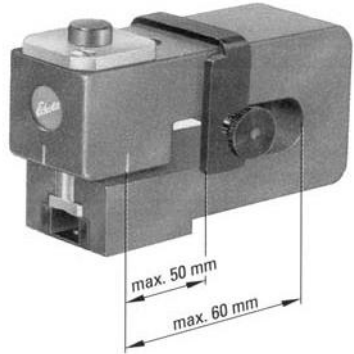
- Saubere Ausklinkungen, einstellbarer Anschlag für Teil- und Winkelschnitte
- Clean notching, adjustable stop for partial-cuts and angle-cuts
- Grugeage précis, avec butée réglable pour coupes partielles ou angulaires

Tipo / Type	Dim. mm	Satz set / kit	Bestell-Nr. / Order no. No. de pedido	kg	Blechdicke / Sheet thickness / grosor mm max.		
					Stahl / Steel / Acero	Inox	Aluminio
<b>ASW 42 SSP</b>	-	1	221000000	2,9	1,5	1	2

**Stanzen**  
**Punching**  
**Agujerear**



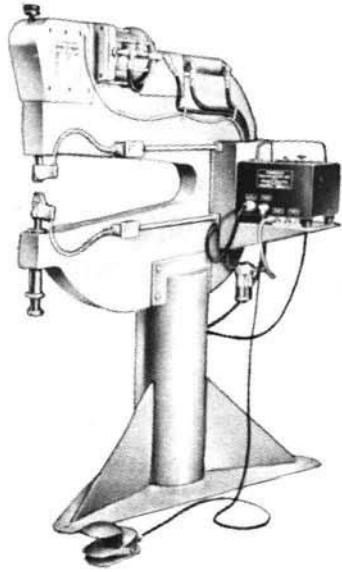
**LSW 1 SSP**



- Runde Löcher schnell und exakt stanzen, auswechselbare Stempel und Matrizen
- Punching round holes fast and precise, interchangeable punches and dies
- Poinçonnage rapide et exacte

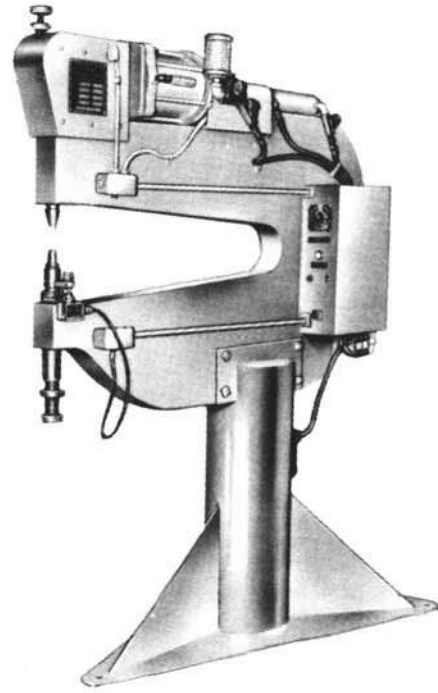
Typ / Type	Dim. mm	set / kit	Bestell-Nr. / Order no. No. de pedido	kg	Blechdicke / Sheet thickness / grosor mm max.		
					Stahl / Steel / Acero	Inox	Aluminio
<b>LSW 1 SSP</b>	8,5	1	022.100.0010	1,7	2,0	1,5	2,0

Stempel und Matrize Punch and Die Poinçon et Matrice			
	3,2	1	263000100
	3,4	1	263000200
	4,2	1	263000300
	5,4	1	263000400
	6,4	1	263000500
	7	1	263000600



**AT 256SS**  
STATIONARY DIMPLING MACHINE

**AT 257JAF**  
TERMO DIMPLE GUN  
USED WITH AT 249P



STATIONARY RIVETING MACHINE



AT 244 LB DOLLY BAR



AT 246TM TEST METER



**AT 249P**  
THERMOMATIC DIMPLING CONTROL UNIT  
WITH SOLID STATE  
TEMPERATURE CONTROLS

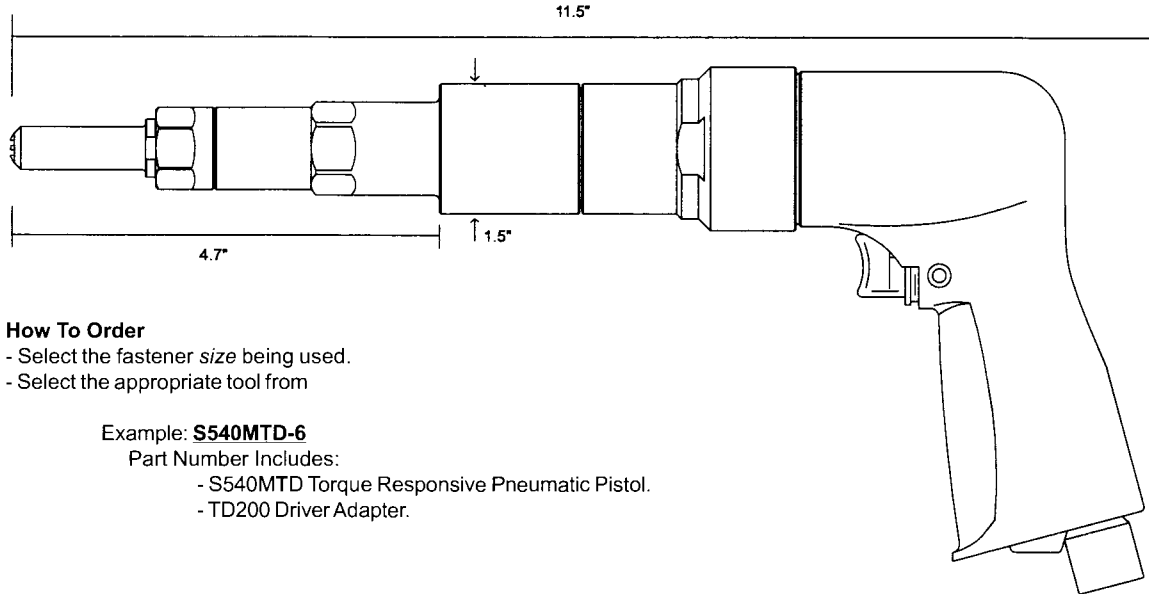


**AT 259 SERIES**  
PORTABLE HOT DIMPLING SQUEEZER  
USED WITH AT 249P

# Visu-Lok

## Blind Fastener Tools

### Master Torque Driver



#### How To Order

- Select the fastener size being used.
- Select the appropriate tool from

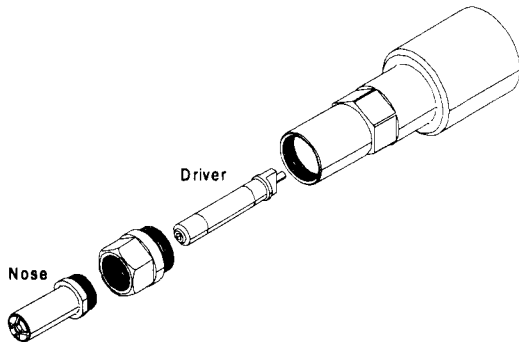
Example: **S540MTD-6**

Part Number Includes:

- S540MTD Torque Responsive Pneumatic Pistol.
- TD200 Driver Adapter.

Pin Dia	Visu-Lok Series	Pneumatic Pistol	Driver Adapter	Nose	Driver
5/32	flush - 5	S540MTD-5	TD165	PW3652	TD1651
3/16	flush - 6	S540MTD-6	TD200	PW3002	TD2001
1/4	flush - 8	S540MTD-8	TD260	PW3602	TD2601
5/16	flush - 10	S540MTD-10	TD312	PW3122	TD3121
3/8	flush - 12	S540MTD-12	PT375	PT3752	PT3751
5/32	protruding - 5	S540MTD-5P	TD165P	PW3652P	TD1651
3/16	protruding - 6	S540MTD-6P	TD200P	PW3002P	TD2001
1/4	protruding - 8	S540MTD-8P	TD260P	PW3602P	TD2601
5/16	protruding - 10	S540MTD-10P	TD312P	PW3122P	TD3121
3/8	protruding - 12	S540MTD-12P	PT375P	PW3752P	PT3751
5/32	millable - 5	S540MTD-5A	TD165A	PW3652A	TD1651
3/16	millable - 6	S540MTD-6A	TD200A	PW3002A	TD2001
1/4	millable - 8	S540MTD-8A	TD260A	PW3602A	TD2601
5/32	reduced flush - 5	S540MTD-5T	TD165T	PW3652T	TD1651
3/16	reduced flush - 6	S540MTD-6T	TD200T	PW3002T	TD2001
1/4	reduced flush - 8	S540MTD-8T	TD260T	PW3602T	TD2601
5/16	reduced flush - 10	S540MTD-10T	TD312T	PW3122T	TD3121
3/8	reduced flush - 12	S540MTD-12T	PT375T	PT3752T	PT3751

\* Driver Adapter contains both the Nose and Driver



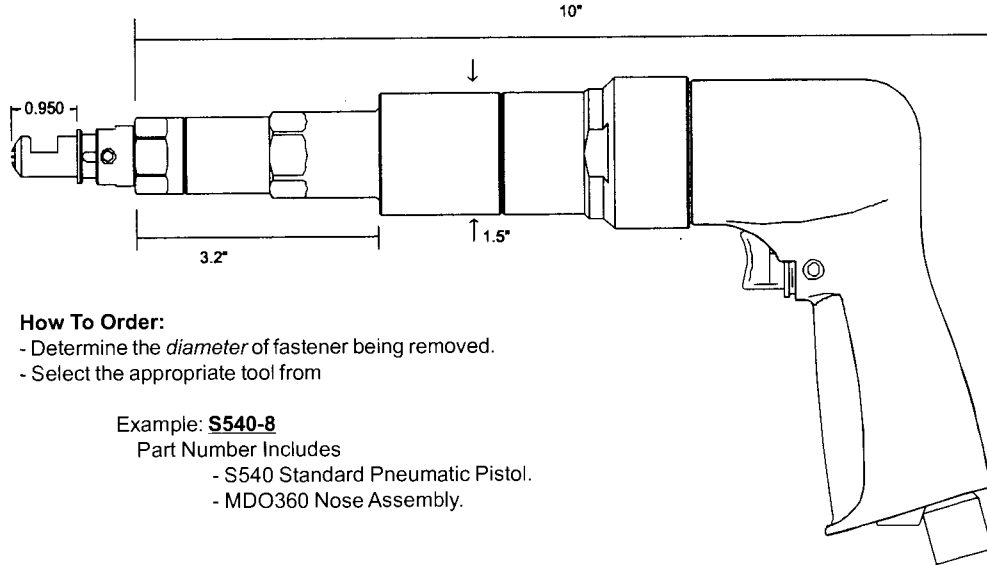
#### Technical Data

Operating Pressure	90 PSI
Torque Output	32.5 lbs
Stall Torque	32.5 lbs
Motor Speed	540 rpm
Air Consumption (at free speed)	28 cfm
Horse Power Rating	0.7
Weight	3.5lb

# Visu-Lok

## Blind Fastener Tools

### Pneumatic Drill-Out



#### How To Order:

- Determine the *diameter* of fastener being removed.
- Select the appropriate tool from

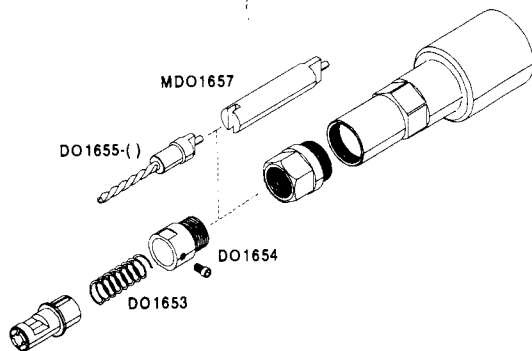
Example: **S540-8**

Part Number Includes

- S540 Standard Pneumatic Pistol.
- MDO360 Nose Assembly.

Dia	Visu-Lok Series	Complete Assy	Drill-Out Assy	Nose	Drill
5/32	flush - 5	S540-5	MDO365	DO1652	DO1655-5
3/16	flush - 6	S540-6	MDO300	DO2002	DO1655-6
1/4	flush - 8	S540-8	MDO360	DO2602	DO1655-8
5/16	flush - 10	S540-10	MDO312	DO3122	DO1655-10
3/8	flush - 12	S540-12	MDO375	DO3752	DO1655-12
5/32	protruding - 5	S540-5P	MDO365P	DO1652P	DO1655-5
3/16	protruding - 6	S540-6P	MDO300P	DO2002P	DO1655-6
1/4	protruding - 8	S540-8P	MDO360P	DO2602P	DO1655-8
5/16	protruding - 10	S540-10P	MDO312P	DO3122P	DO1655-10
3/8	protruding - 12	S540-12P	MDO375P	DO3752P	DO1655-12
5/32	millable - 5	S540-5A	MDO365A	DO1652A	DO1655-5
3/16	millable - 6	S540-6A	MDO300A	DO2002A	DO1655-6
1/4	millable - 8	S540-8A	MDO360A	DO2602A	DO1655-8
5/32	reduced flush - 5	S540-5T	MDO365T	DO1652T	DO1655-5
3/16	reduced flush - 6	S540-6T	MDO300T	DO2002T	DO1655-6
1/4	reduced flush - 8	S540-8T	MDO360T	DO2602T	DO1655-8
5/16	reduced flush - 10	S540-10T	MDO312T	DO3122T	DO1655-10
3/8	reduced flush - 12	S540-12T	MDO375T	DO3752T	DO1655-12

\*Drill out Assembly contains both the Nose and Driver



#### Technical Data

Operating Pressure	90 PSI
Torque Output	32.5 lbs
Stall Torque	32.5 lbs
Motor Speed	540 rpm
Air Consumption	28 cfm
(at free speed)	
Horse Power Rating	0.7
Weight	3.5lb

# Visu-Lok

## Blind Fastener Tools

### Torque Responsive Adapter



#### How To Order

- Select the fastener *size* being used.
- Select the appropriate tool from Table below

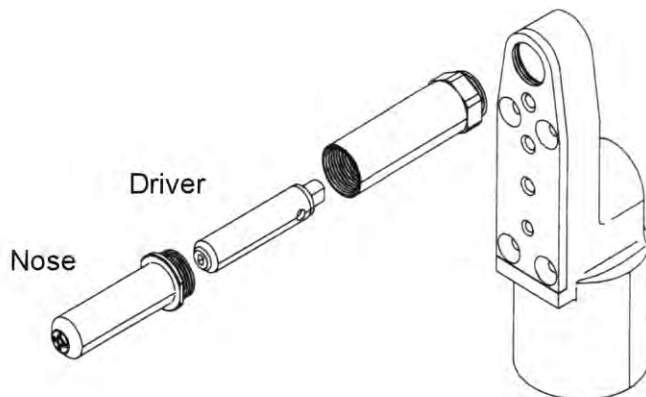
#### Example: **7440M-6**

##### Part Number Includes

- 7440M Pneumatic Right Angle Motor.
- PT400 Driver Assembly.

Dia.	Visu-Lok Series	Pneumatic Assembly	Driver Assy	Nose	Driver
5/32	flush - 5	7440M-5	PT465	PT4652	PT4651
3/16	flush - 6	7440M-6	PT400	PT4002	PT4001
1/4	flush - 8	7440M-8	PT460	PT4602	PT4601
5/32	protruding - 5	7440M-5P	PT465P	PT4652P	PT4651
3/16	protruding - 6	7440M-6P	PT400P	PT4002P	PT4001
1/4	protruding - 8	7440M-8P	PT460P	PT4602P	PT4601
5/32	millable - 5	7440M-5A	PT465A	PT4652A	PT4651
3/16	millable - 6	7440M-6A	PT400A	PT4002A	PT4001
1/4	millable - 8	7440M-8A	PT460A	PT4602A	PT4601
5/32	reduced flush - 5	7440M-5T	PT465T	PT4652T	PT4651
3/16	reduced flush - 6	7440M-6T	PT400T	PT4002T	PT4001
1/4	reduced flush - 8	7440M-8T	PT460T	PT4602T	PT4601

\*Driver Assembly contains both the Nose and Driver



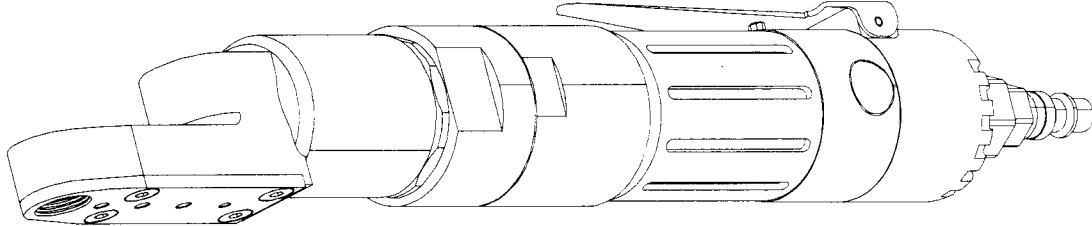
#### Technical Data

Operating Pressure	90 PSI
Torque Output	108 in lbs
Stall Torque	10 ft lbs
Motor Speed	500 rpm
Air Consumption (at free speed)	18 cfm
Horse Power Rating	0.33
Weight	3.5lb

# Visu-Lok

## Blind Fastener Tools

### Standard Assembly



#### How To Order

- Select the fastener size being used.
- Select the appropriate tool from Table below

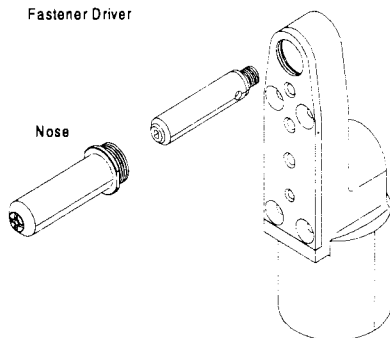
Example: **7440-5**

Part Number Includes

- 7440 Pneumatic Right Angle Motor.
- PW465 Driver Assembly.

Dia.	Visu-Lok Series	Pneumatic Driver	Driver Assy	Nose	Driver
5/32	flush - 5	7440-5	PW465	PW3652	PW4651
3/16	flush - 6	7440-6	PW400	PW3002	PW4001
1/4	flush - 8	7440-8	PW460	PW3602	PW4601
5/32	protruding - 5	7440-5P	PW465P	PW3652P	PW4651
3/16	protruding - 6	7440-6P	PW400P	PW3002P	PW4001
1/4	protruding - 8	7440-8P	PW460P	PW3602P	PW4601
5/32	millable - 5	7440-5A	PW465A	PW3652A	PW4651
3/16	millable - 6	7440-6A	PW400A	PW3002A	PW4001
1/4	millable - 8	7440-8A	PW460A	PW3602A	PW4601
5/32	reduced flush - 5	7440-5T	PW465T	PW3652T	PW4651
3/16	reduced flush - 6	7440-6T	PW400T	PW3002T	PW4001
1/4	reduced flush - 8	7440-8T	PW460T	PW3602T	PW4601

\*Driver Assembly contains both the Nose and Driver



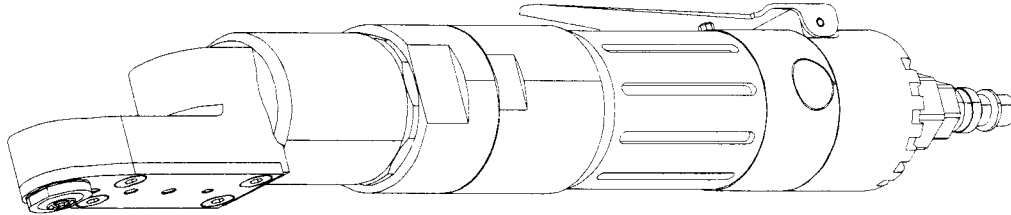
#### Technical Data

Operating Pressure	90 PSI
Torque Output	108 in lbs
Stall Torque	10 ft lbs
Motor Speed	500 rpm
Air Consumption	18 cfm
(at free speed)	
Horse Power Rating	0.33
Weight	3.5lb

# Visu-Lok

## Blind Fastener Tools

### Pneumatic Close Quarter



#### How To Order

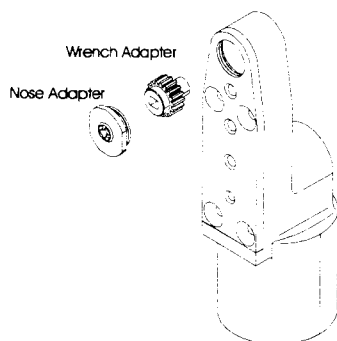
- Select the fastener size being used.
- Select the appropriate tool from Table below

Example: **7440C-5**

Part Number Includes

- 7440C Pneumatic Right Angle Close Quarters Motor.
- 41165 Nose Tip.
- RW5-1 Drive Gear.

Dia.	Visu-Lok Series	Pneumatic Driver	Drive Gear	Nose Tip
5/32	flush - 5	7440C-5	RW5-1	41165
3/16	flush - 6	7440C-6	RW6-1	41200
1/4	flush - 8	7440C-8	RW8-1	41260
5/32	protruding - 5	7440C-5P	RW5-1	41165P
3/16	protruding - 6	7440C-6P	RW6-1	41200P
1/4	protruding - 8	7440C-8P	RW8-1	41260P
5/32	millable - 5	7440C-5A	RW5-1	41165A
3/16	millable - 6	7440C-6A	RW6-1	41200A
1/4	millable - 8	7440C-8A	RW8-1	41260A
5/32	reduced flush - 5	7440C-5T	RW5-1	41165T
3/16	reduced flush - 6	7440C-6T	RW6-1	41200T
1/4	reduced flush - 8	7440C-8T	RW8-1	41260T



#### Technical Data

Operating Pressure	90 PSI
Torque Output	108 in lbs
Stall Torque	10 ft lbs
Motor Speed	500 rpm
Air Consumption (at free speed)	18 cfm
Horse Power Rating	0.33
Weight	3.5lb

# Visu-Lok

## Blind Fastener Tools

### Ratchet Hand Tool



**How To Order:**

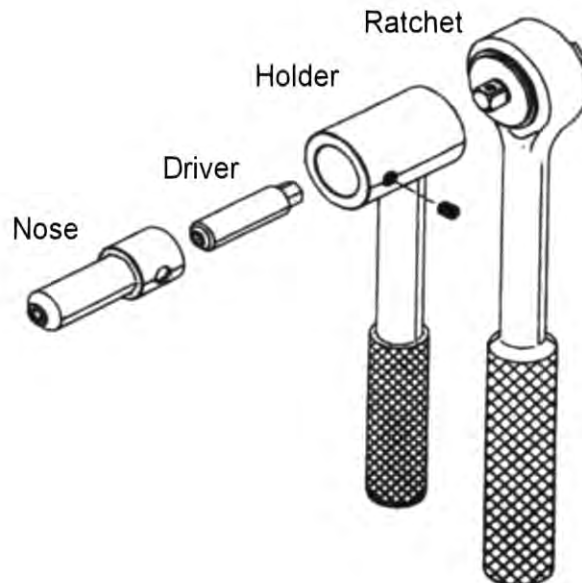
- Determine the type (flush, protruding, etc.) and size of the fastener.
- Refer to the table to select the correct part number for the required tool.

Example: **HWF165**

- HW300 Ratchet Wrench
- HW202 Holder
- HW1650 Adapter Assembly  
(HW1652, HW1651)

Dia.	Visu-Lok Series	Complete Assembly	Driver Assembly	Nose	Wrench Driver
5/32	flush - 5	HWF165	HW1650	HW1652	HW1651
3/16	flush - 6	HWF200	HW2000	HW2002	HW2001
1/4	flush - 8	HWF260	HW2600	HW2602	HW2601
5/16	flush - 10	HWF312	HW3120	HW3122	HW3121
3/8	flush - 12	HWF375	HW3750	HW3752	HW3751
5/32	protruding - 5	HWP165	HW1650P	HW1652P	HW1651
3/16	protruding - 6	HWP200	HW2000P	HW2002P	HW2001
1/4	protruding - 8	HWP260	HW2600P	HW2602P	HW2601
5/16	protruding - 10	HWP312	HW3120P	HW3122P	HW3121
3/8	protruding - 12	HWP375	HW3750P	HW3752P	HW3751
5/32	millable - 5	HWA165	HW1650A	HW1652A	HW1651
3/16	millable - 6	HWA200	HW2000A	HW2002A	HW2001
1/4	millable - 8	HWA260	HW2600A	HW2602A	HW2601
5/32	reduced flush - 5	HWT165	HW1650T	HW1652T	HW1651
3/16	reduced flush - 6	HWT200	HW2000T	HW2002T	HW2001
1/4	reduced flush - 8	HWT260	HW2600T	HW2602T	HW2601
5/16	reduced flush - 10	HWT312	HW3120T	HW3122T	HW3121
3/8	reduced flush - 12	HWT375	HW3750T	HW3752T	HW3751

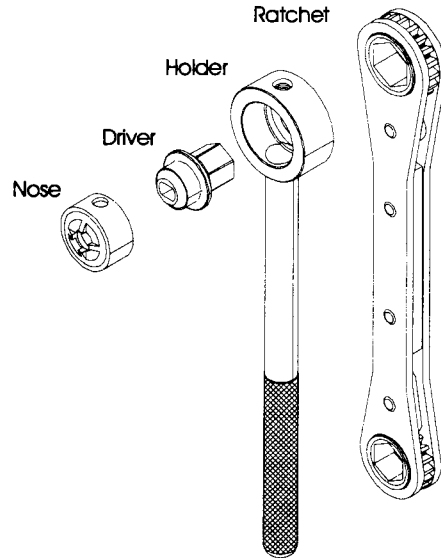
\*Driver Assembly contains both the Nose and Driver



# Visu-Lok

## Blind Fastener Tools

### Close Quarter Hand Tool



**How To Order:**

- Select the fastener size.
- Refer to the table to select the correct part number for tool.

Example: **HWF5**

- HW101 Ratchet
- HW102 Handle
- HN5 Nose
- HW5 Drive

Dia.	Visu-Lok Series	Complete Assembly	Drive	Nose	Ratchet	Holder
5/32	flush - 5	HWF5	HW5	HN5	HW101	HW102
3/16	flush - 6	HWF6	HW6	HN6		
1/4	flush - 8	HWF8	HW8	HN8	HW401	HW402
5/16	flush - 10	HWF10	HW10	HN10		
3/8	flush - 12	HWF12	HW12	HN1		
5/32	protruding - 5	HWP5	HW5	HN5P	HW101	HW102
3/16	protruding - 6	HWP6	HW6	HN6P		
1/4	protruding - 8	HWP8	HW8	HN8P	HW401	HW402
5/16	protruding - 10	HWP10	HW10	HN10P		
3/8	protruding - 12	HWP12	HW12	HN1P		
5/32	millable - 5	HWA5	HW5	HN5A	HW101	HW102
3/16	millable - 6	HWA6	HW6	HN6A		
1/4	millable - 8	HWA8	HW8	HN8A	HW401	HW402
5/32	reduced flush - 5	HWT5	HW5	HN5T	HW101	HW102
3/16	reduced flush - 6	HWT6	HW6	HN6T		
1/4	reduced flush - 8	HWT8	HW8	HN8T	HW401	HW402
5/16	reduced flush - 10	HWT10	HW10	HN10T		
3/8	reduced flush - 12	HWT12	HW12	HN1T		

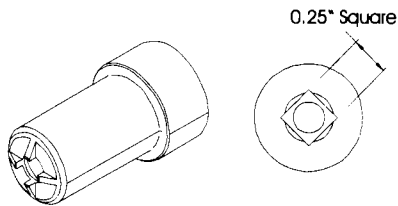
# Visu-Lok

## Blind Fastener Tools

### Torque Adapter

**How To Order:**

- Select the fastener size being used.
- Select the appropriate tool part number from the table

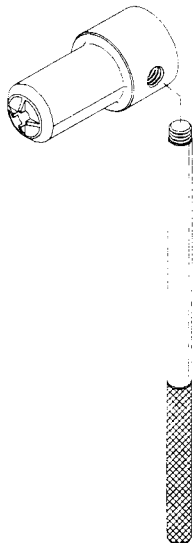


Dia.	Visu-Lok Series	Toque Adapter	Torque (in. lbs.)
5/32	flush - 5	TOR1652	4.00
3/16	flush - 6	TOR2002	6.00
1/4	flush - 8	TOR2602	10.00
5/16	flush - 10	TOR3122	20.00
3/8	flush - 12	TOR3752	30.00
5/32	protruding - 5	TOR1652P	4.00
3/16	protruding - 6	TOR2002P	6.00
1/4	protruding - 8	TOR2602P	10.00
5/16	protruding - 10	TOR3122P	20.00
3/8	protruding - 12	TOR3752P	30.00
5/32	millable - 5	TOR1652A	4.00
3/16	millable - 6	TOR2002A	6.00
1/4	millable - 8	TOR2602A	10.00
5/32	reduced flush - 5	TOR1652T	4.00
3/16	reduced flush - 6	TOR2002T	6.00
1/4	reduced flush - 8	TOR2602T	10.00
5/16	reduced flush - 10	TOR3122T	20.00
3/8	reduced flush - 12	TOR3752T	30.00

### Hand Drill-Out

**How To Order:**

- Select the fastener size being used.
- Select the appropriate tool part number from the table

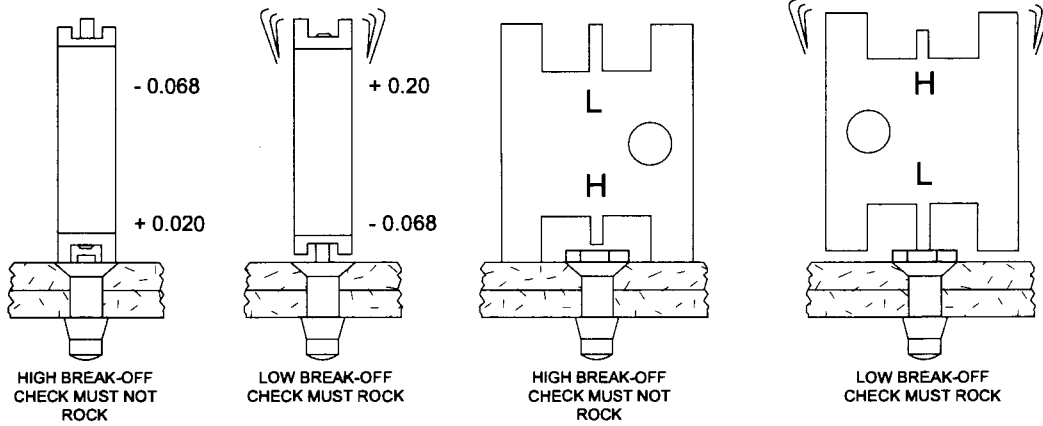


Dia.	Visu-Lok Series	Hand Drill Out	Drill Size
5/32	flush - 5	HDO1652	9/64
3/16	flush - 6	HDO2002	5/32
1/4	flush - 8	HDO2602	13/64
5/16	flush - 10	HDO3122	1/4
3/8	flush - 12	HDO3752	9/32
5/32	protruding - 5	HDO1652P	9/64
3/16	protruding - 6	HDO2002P	5/32
1/4	protruding - 8	HDO2602P	13/64
5/16	protruding - 10	HDO3122P	1/4
3/8	protruding - 12	HDO3752P	9/32
5/32	millable - 5	HDO1652A	9/64
3/16	millable - 6	HDO2002A	5/32
1/4	millable - 8	HDO2602A	13/64
5/32	reduced flush - 5	HDO1652T	9/64
3/16	reduced flush - 6	HDO2002T	5/32
1/4	reduced flush - 8	HDO2602T	13/64
5/16	reduced flush - 10	HDO3122T	1/4
3/8	reduced flush - 12	HDO3752T	9/32

# Visu-Lok

## Blind Fastener Tools

### Visu-Lok Break-Off Gauges



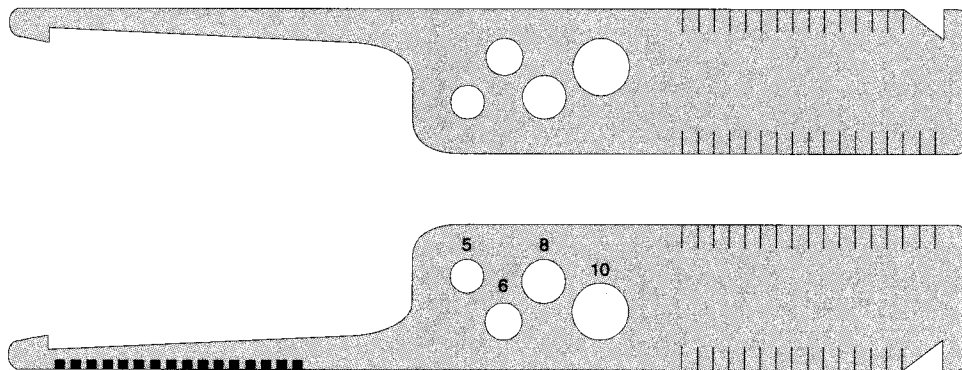
Visu-Lok Series	Leaf Gauges	Break-Off Limits	Round Gauges	Break-Off Limits	Jo-Bolt Series
PLT210-5	<b>3P5</b>	+0.088 / +0.000	-	-	-
PLT210-6	<b>3P6</b>	+0.098 / +0.010	<b>4P6</b>	-0.005 / -.103	P/PO 200
PLT210-8	<b>3P8</b>	+0.135 / +0.047	<b>4P8</b>	+0.010 / -.088	P/PO 260
PLT210-10	<b>3P10</b>	+0.146 / +0.043	<b>4P10</b>	-0.004 / -.117	P/PO 312
PLT210-12	<b>3P12</b>	+0.152 / +0.049	<b>4P12</b>	-0.028 / -.141	P/PO 375
PLT110-5	<b>3F5</b>	+0.020 / -.068	<b>4F5</b>	+0.020 / -.068	-
PLT110-6	<b>3F6</b>	+0.015 / -.073	<b>4F6</b>	+0.015 / -.073	-
PLT110-8	<b>3F8</b>	+0.010 / -.078	<b>4F8</b>	+0.010 / -.078	-
PLT110-10	<b>3F10</b>	+0.010 / -.083	<b>4F10</b>	+0.010 / -.083	-
PLT110-12	<b>3F12</b>	+0.010 / -.093	<b>4F12</b>	+0.010 / -.093	-
PLT220-5	<b>A3P5</b>	+0.088 / +0.000	-	-	-
PLT220-6	<b>A3P6</b>	+0.103 / +0.015	-	-	-
PLT220-8	<b>A3P8</b>	+0.130 / +0.032	-	-	-
PLT220-10	<b>A3P10</b>	+0.130 / +0.027	-	-	-
PLT220-12	<b>A3P12</b>	+0.130 / +0.027	-	-	-
PLT120-5	-	-	<b>A4F5-LS</b>	+0.082 / -.006	-
PLT120-6	-	-	<b>A4F6-LS</b>	+0.072 / -.016	-
PLT120-8	-	-	<b>A4F8-LS</b>	+0.072 / -.026	-
PLT120-10	-	-	<b>A4F10-LS</b>	+0.072 / -.031	-
PLT120-12	-	-	<b>A4F12-LS</b>	+0.072 / -.031	-
PLT130-5	<b>3P5</b>	+0.088 / +0.000	-	-	-
PLT130-6	<b>3P6</b>	+0.098 / +0.010	<b>4FA6</b>	+0.025 / -.069	SHFA/FAO 200
PLT130-8	<b>3P8</b>	+0.098 / +0.010	<b>4FA8</b>	+0.026 / -.069	SHFA/FAO 260
PLT230-5	<b>3P5</b>	+0.088 / +0.000	-	-	-
PLT230-6	<b>3PA6</b>	+0.103 / +0.015	-	-	-
PLT230-8	<b>3P8</b>	+0.135 / +0.047	-	-	-
PLT1058-5	-	-	<b>LF5-F5</b>	+0.088 / +0.000	-
PLT1058-6	-	-	<b>LF5-F5</b>	+0.088 / +0.000	-
PLT1058-8	-	-	<b>LF5-F8</b>	+0.098 / +0.000	-
PLT1058-10	-	-	<b>LF5-F10</b>	+0.103 / +0.000	-
PLT1058-12	-	-	<b>LF5-F10</b>	+0.103 / +0.000	-

# Visu-Lok

## Blind Fastener Tools

### Visu-Lok Grip Scales

Grip Scale Part #: LFVLG-1



#### Selection of Grip Length

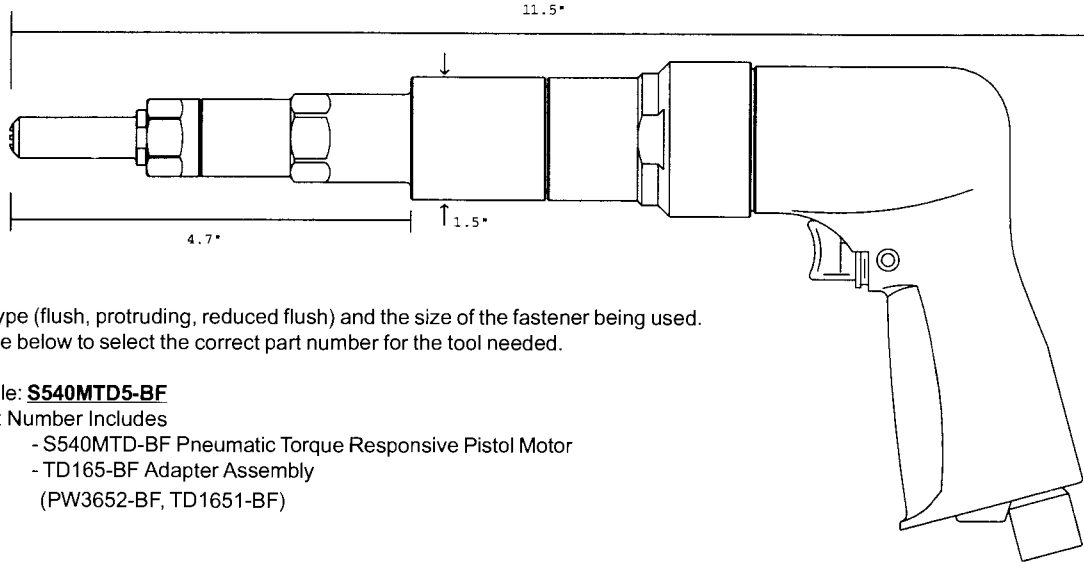
In measuring hole depth take reading where the skin surface meets the number or line on gauge. If directly on a line use either the indicated grip or the next longer grip.

In cases where there a tapered sheet condition exists, determine grip length at the hole centerline. The taper must not exceed 7° to ensure the proper performance of the fastener.

# Composi-Lok

## Blind Fastener Tools

### Composi-Lok Master Torque Driver



#### How To Order:

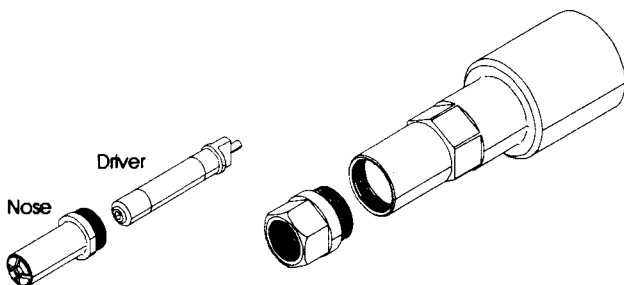
- Determine the type (flush, protruding, reduced flush) and the size of the fastener being used.
- Refer to the table below to select the correct part number for the tool needed.

Example: **S540MTD5-BF**

Part Number Includes

- S540MTD-BF Pneumatic Torque Responsive Pistol Motor
- TD165-BF Adapter Assembly  
(PW3652-BF, TD1651-BF)

Dia.	Composi-Lok Series	Complete Assembly	Adapter Assembly	Driver	Nose
5/32	flush - 5	S540MTD5 - BF	TD165 - BF	TD1651 - BF	PW3652 - BF
3/16	flush - 6	S540MTD6 - BF	TD200 - BF	TD2001 - BF	PW3002 - BF
7/32	flush - 7	S540MTD7 - BF	TD220 - BF	TD7 - BF	PW7F - BF
1/4	flush - 8	S540MTD8 - BF	TD260 - BF	TD2601 - BF	PW3602 - BF
9/32	flush - 9	S540MTD9 - BF	PT280 - BF	PT9 - BF	PT9F - BF
5/16	flush - 10	S540MTD10 - BF	PT312 - BF	PT10 - BF	PT10F - BF
11/32	flush - 11	S540MTD11 - BF	PT340 - BF	PT11 - BF	PT11F - BF
3/8	flush - 12	S540MTD12 - BF	PT375 - BF	PT12 - BF	PT12F - BF
5/32	protruding - 5	S540MTD5P - BF	TD165P - BF	TD1651 - BF	PW3652P - BF
3/16	protruding - 6	S540MTD6P - BF	TD200P - BF	TD2001 - BF	PW3002P - BF
7/32	protruding - 7	S540MTD7P - BF	TD220P - BF	TD7 - BF	PW7P - BF
1/4	protruding - 8	S540MTD8P - BF	TD260P - BF	TD2601 - BF	PW3602P - BF
9/32	protruding - 9	S540MTD9P - BF	PT280P - BF	PT9 - BF	PT9P - BF
5/16	protruding - 10	S540MTD10P - BF	PT312P - BF	PT10 - BF	PT10P - BF
11/32	protruding - 11	S540MTD11P - BF	PT340P - BF	PT11 - BF	PT11P - BF
3/8	protruding - 12	S540MTD12P - BF	PT375P - BF	PT12 - BF	PT12P - BF
5/32	reduced flush - 5	S540MTD5T-BF	TD165T-BF	TD1651-BF	PW3652T-BF
3/16	reduced flush - 6	S540MTD6T-BF	TD200T-BF	TD2001-BF	PW3002T-BF
7/32	reduced flush - 7	S540MTD7T-BF	TD220T-BF	TD7-BF	PW7FT-BF
1/4	reduced flush - 8	S540MTD8T-BF	TD260T-BF	TD2601-BF	PW3602T-BF
9/32	reduced flush - 9	S540MTD9T-BF	PT280T-BF	PT9-BF	PT9FT-BF
5/16	reduced flush - 10	S540MTD10T-BF	PT312T-BF	PT10-BF	PT10FT-BF
11/32	reduced flush - 11	S540MTD11T-BF	PT340T-BF	PT11-BF	PT11FT-BF
3/8	reduced flush - 12	S540MTD12T-BF	PT375T-BF	PT12-BF	PT12FT-BF



#### Technical Data

Operating Pressure	90 PSI
Torque Output	32.5 lbs
Stall Torque	32.5 lbs
Motor Speed	540 rpm
Air Consumption (at free speed)	28 cfm
Horse Power Rating	0.7
Weight	3.5lb

# Composi-Lok

## Blind Fastener Tools

### Composi-Lok Right Angle Master Torque Driver



#### How To Order:

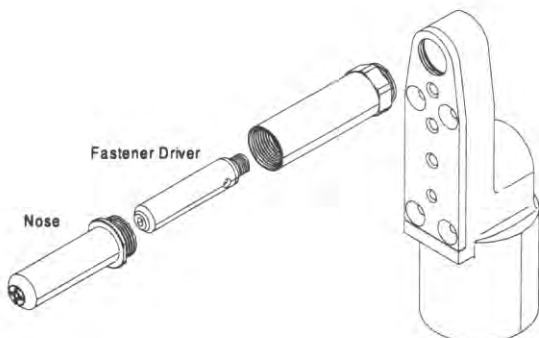
- Determine the type (flush, protruding, reduced flush) and the size of the fastener being used.
- Refer to the table below to select the correct part number for the tool needed.

Example: **7440M5-BF**

Part Number Includes

- 7440M Torque Responsive Pneumatic Wrench Motor
- TD565-BF Adapter Assembly  
(TD5652-BF, TD5651-BF)

Dia.	Composi-Lok Series	Complete Assembly	Adapter Assembly	Wrench Driver	Nose Adapter
5/32	flush - 5	7440M5 - BF	TD565 - BF	TD5651 - BF	TD5652 - BF
3/16	flush - 6	7440M6 - BF	TD500 - BF	TD5001 - BF	TD5002 - BF
7/32	flush - 7	7440M7 - BF	TD520 - BF	TD5201 - BF	TD5202 - BF
1/4	flush - 8	7440M8 - BF	TD560 - BF	TD5601 - BF	TD5602 - BF
5/32	protruding - 5	7440M5P - BF	TD565P - BF	TD5651 - BF	TD5652P - BF
3/16	protruding - 6	7440M6P - BF	TD500P - BF	TD5001 - BF	TD5002P - BF
7/32	protruding - 7	7440M7P - BF	TD520P - BF	TD5201 - BF	TD5202P - BF
1/4	protruding - 8	7440M8P - BF	TD560P - BF	TD5601 - BF	TD5602P - BF
5/32	reduced flush - 5	7440M5T - BF	TD565T-BF	TD5651-BF	TD5652T-BF
3/16	reduced flush - 6	7440M6T - BF	TD500T-BF	TD5001-BF	TD5002T-BF
7/32	reduced flush - 7	7440M7T - BF	TD520T-BF	TD5201-BF	TD5202T-BF
1/4	reduced flush - 8	7440M8T - BF	TD560T-BF	TD5601-BF	TD5602T-BF



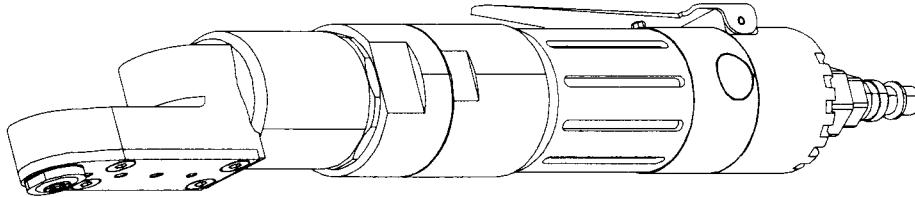
#### Technical Data

Operating Pressure	90 PSI
Torque Output	108 in lbs
Stall Torque	10 ft lbs
Motor Speed	500 rpm
Air Consumption (at free speed)	18 cfm
Horse Power Rating	0.33
Weight	3.5lb

# Composi-Lok

## Blind Fastener Tools

### Composi-Lok Right Angle Close Quarter



#### How To Order:

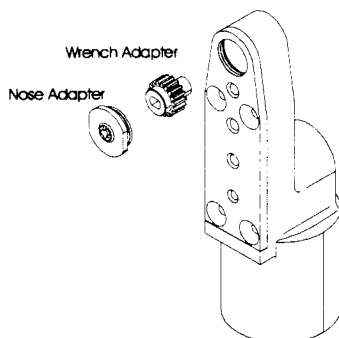
- Determine the type (flush, protruding, reduced flush) and the size of the fastener being used.
- Refer to the table below to select the correct part number for the tool needed.

Example: **7440C5-BF**

Part Number Includes

- 7440C Close Quarters Pneumatic Motor
- 41165-BF Nose Adapter
- RW5-1-BF Wrench Adapter

Dia.	Composi-Lok Series	Complete Assembly	Drive Gear	Nose
5/32	flush - 5	7440C5 - BF	RW5-1-BF	41165 - BF
3/16	flush - 6	7440C6 - BF	RW6-1-BF	41200 - BF
7/32	flush - 7	7440C7 - BF	RW7-1-BF	41220 - BF
1/4	flush - 8	7440C8 - BF	RW8-1-BF	41260 - BF
5/32	protruding - 5	7440C5P - BF	RW5-1-BF	41165P - BF
3/16	protruding - 6	7440C6P - BF	RW6-1-BF	41200P - BF
7/32	protruding - 7	7440C7P - BF	RW7-1-BF	41220P - BF
1/4	protruding - 8	7440C8P - BF	RW8-1-BF	41260P - BF
5/32	reduced flush - 5	7440C5T - BF	RW5-1-BF	41165T-BF
3/16	reduced flush - 6	7440C6T - BF	RW6-1-BF	41200T-BF
7/32	reduced flush - 7	7440C7T - BF	RW7-1-BF	41220T-BF
1/4	reduced flush - 8	7440C8T - BF	RW8-1-BF	41260T-BF



#### Technical Data

Operating Pressure	90 PSI
Torque Output	108 in lbs
Stall Torque	10 ft lbs
Motor Speed	500 rpm
Air Consumption (at free speed)	18 cfm
Horse Power Rating	0.33
Weight	3.5lb

# Composi-Lok Blind Fastener Tools

## Composi-Lok Ratchet Hand Tool



### How To Order:

- Determine the type (flush, protruding, reduced flush) and the size of the fastener being used.
- Refer to the table below to select the correct part number for the tool needed.

Example: **HW165-BF**

Part Number Includes

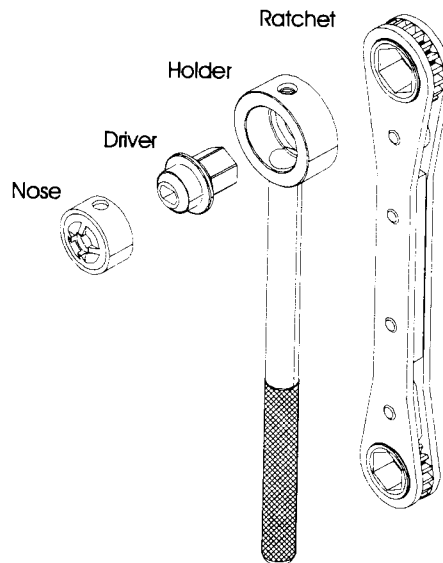
- HW300 Ratchet Wrench
- HW202 Handle
- HW1650-BF Adapter Assembly  
(HW1652-BF, HW1651-BF)

Dia.	Composi-Lok Series	Complete Assembly	Adapter Assembly	Wrench Adapter	Nose Adapter
5/32	flush - 5	HWF165 - BF	HW1650 - BF	HW1651 - BF	HW1652 - BF
3/16	flush - 6	HWF200 - BF	HW2000 - BF	HW2001 - BF	HW2002 - BF
7/32	flush - 7	HWF220 - BF	HW2200 - BF	HW2201 - BF	HW2202 - BF
1/4	flush - 8	HWF260 - BF	HW2600 - BF	HW2601 - BF	HW2602 - BF
9/32	flush - 9	HWF280 - BF	HW2800 - BF	HW2801 - BF	HW2802 - BF
5/16	flush - 10	HWF312 - BF	HW3120 - BF	HW3121 - BF	HW3122 - BF
11/32	flush - 11	HWF340 - BF	HW3400 - BF	HW3401 - BF	HW3402 - BF
3/8	flush - 12	HWF375 - BF	HW3750 - BF	HW3751 - BF	HW3752 - BF
5/32	protruding - 5	HWP165 - BF	HW1650P - BF	HW1651 - BF	HW1652P - BF
3/16	protruding - 6	HWP200 - BF	HW2000P - BF	HW2001 - BF	HW2002P - BF
7/32	protruding - 7	HWP220 - BF	HW2200P - BF	HW2201 - BF	HW2202P - BF
1/4	protruding - 8	HWP260 - BF	HW2600P - BF	HW2601 - BF	HW2602P - BF
9/32	protruding - 9	HWP280 - BF	HW2800P - BF	HW2801 - BF	HW2802P - BF
5/16	protruding - 10	HWP312 - BF	HW3120P - BF	HW3121 - BF	HW3122P - BF
11/32	protruding - 11	HWP340 - BF	HW3400P - BF	HW3401 - BF	HW3402P - BF
3/8	protruding - 12	HWP375 - BF	HW3750P - BF	HW3751 - BF	HW3752P - BF
5/32	reduced flush - 5	HWT165-BF	HW1650T-BF	HW1651-BF	HW1652T-BF
3/16	reduced flush - 6	HWT200-BF	HW2000T-BF	HW2001-BF	HW2002T-BF
7/32	reduced flush - 7	HWT220-BF	HW2200T-BF	HW2201-BF	HW2202T-BF
1/4	reduced flush - 8	HWT260-BF	HW2600T-BF	HW2601-BF	HW2602T-BF
9/32	reduced flush - 9	HWT280-BF	HW2800T-BF	HW2801-BF	HW2802T-BF
5/16	reduced flush - 10	HWT312-BF	HW3120T-BF	HW3121-BF	HW3122T-BF
11/32	reduced flush - 11	HWT340-BF	HW3400T-BF	HW3401-BF	HW3402T-BF
3/8	reduced flush - 12	HWT375-BF	HW3750T-BF	HW3751-BF	HW3752T-BF



# Composi-Lok Blind Fastener Tools

## Composi-Lok Close Quarter Hand Tool



### How To Order:

- Determine the type (flush, protruding, reduced flush) and the size of the fastener being used.
- Refer to the table below to select the correct part number for the tool needed.

### Example: **HW5-BF**

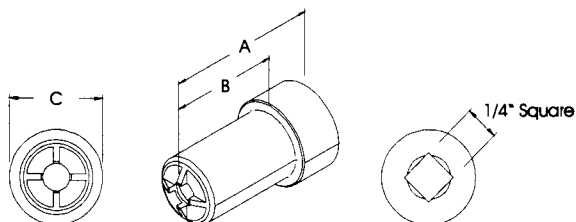
#### Part Number Includes

- HW401 Ratchet
- HW402 Holder
- HN5-BF Nose Adapter
- HW5-BF Wrench Adapter

Dia.	Composi-Lok Series	Complete Assembly	Driver	Nose	Ratchet	Holder
5/32	flush - 5	HWF5 - BF	HW5 - BF	HN5 - BF	HW101	HW102
3/16	flush - 6	HWF6 - BF	HW6 - BF	HN6 - BF		
7/32	flush - 7	HWF7 - BF	HW7 - BF	HN7 - BF	HW401	HW402
1/4	flush - 8	HWF8 - BF	HW8 - BF	HN8 - BF		
9/32	flush - 9	HWF9 - BF	HW9 - BF	HN9 - BF		
5/16	flush - 10	HWF10 - BF	HW10 - BF	HN10 - BF		
11/32	flush - 11	HWF11 - BF	HW11 - BF	HN11 - BF		
3/8	flush - 12	HWF12 - BF	HW12 - BF	HN12 - BF		
5/32	protruding - 5	HWP5 - BF	HW5 - BF	HN5P - BF	HW101	HW102
3/16	protruding - 6	HWP6 - BF	HW6 - BF	HN6P - BF		
7/32	protruding - 7	HWP7 - BF	HW7 - BF	HN7P - BF	HW401	HW402
1/4	protruding - 8	HWP8 - BF	HW8 - BF	HN8P - BF		
9/32	protruding - 9	HWP9 - BF	HW9 - BF	HN9P - BF		
5/16	protruding - 10	HWP10 - BF	HW10 - BF	HN10P - BF		
11/32	protruding - 11	HWP11 - BF	HW11 - BF	HN11P - BF		
3/8	protruding - 12	HWP12 - BF	HW12 - BF	HN12P - BF		
5/32	reduced flush - 5	HWT5-BF	HW5-BF	HN5T-BF	HW101	HW102
3/16	reduced flush - 6	HWT6-BF	HW6-BF	HN6T-BF		
7/32	reduced flush - 7	HWT7-BF	HW7-BF	HN7T-BF	HW401	HW402
1/4	reduced flush - 8	HWT8-BF	HW8-BF	HN8T-BF		
9/32	reduced flush - 9	HWT9-BF	HW9-BF	HN9T-BF		
5/16	reduced flush - 10	HWT10-BF	HW10-BF	HN10T-BF		
11/32	reduced flush - 11	HWT11-BF	HW11-BF	HN11T-BF		
3/8	reduced flush - 12	HWT12-BF	HW12-BF	HN12T-B		

# Composi-Lok Blind Fastener Tools

## Composi-Lok Hand Torque Adapter



Dia.	Composi-Lok Series	Torque Adapter	Torque (in lbs)
5/32	flush - 05	TOR1652-BF	4.00
3/16	flush - 06	TOR2002-BF	6.00
7/32	flush - 07	TOR2202-BF	Contact Fastener Mfg.
1/4	flush - 08	TOR2602-BF	10.00
9/32	flush - 09	TOR2802-BF	Contact Fastener Mfg.
5/16	flush - 10	TOR3122-BF	20.00
11/32	flush - 11	TOR3402-BF	Contact Fastener Mfg.
3/8	flush - 12	TOR3702-BF	30.0
5/32	protruding - 05	TOR1652P - BF	4.00
3/16	protruding - 06	TOR2002P - BF	6.00
7/32	protruding - 07	TOR2202P - BF	Contact Fastener Mfg.
1/4	protruding - 08	TOR2602P - BF	10.00
9/32	protruding - 09	TOR2802P - BF	Contact Fastener Mfg.
5/16	protruding - 10	TOR3122P - BF	20.00
11/32	protruding - 11	TOR3402P - BF	Contact Fastener Mfg.
3/8	protruding - 12	TOR3702P - BF	30.0
5/32	reduced flush - 05	TOR1652T-BF	4.00
3/16	reduced flush - 06	TOR2002T-BF	6.00
7/32	reduced flush - 07	TOR2202T-BF	Contact Fastener Mfg.
1/4	reduced flush - 08	TOR2602T-BF	10.00
9/32	reduced flush - 09	TOR2802T-BF	Contact Fastener Mfg.
5/16	reduced flush - 10	TOR3122T-BF	20.00
11/32	reduced flush - 11	TOR3402T-BF	Contact Fastener Mfg.
3/8	reduced flush - 12	TOR3702T-BF	30.0

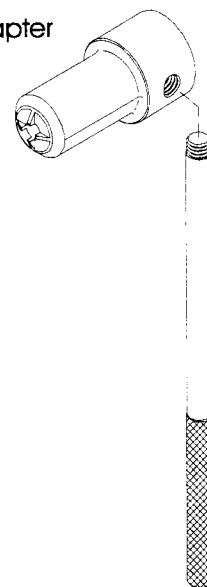
## Composi-Lok Hand Drill-Out

### How To Order:

- Select the fastener *type* (flush, protruding, reduced flush) and size being used.
- Select the appropriate tool part number from the table

Dia.	Visu-Lok Series	Hand Drill Out	Drill Size
5/32	flush - 5	HDO1652	9/64
3/16	flush - 6	HDO2002	5/32
1/4	flush - 8	HDO2602	13/64
5/16	flush - 10	HDO3122	1/4
3/8	flush - 12	HDO3752	9/32
5/32	protruding - 5	HDO1652P	9/64
3/16	protruding - 6	HDO2002P	5/32
1/4	protruding - 8	HDO2602P	13/64
5/16	protruding - 10	HDO3122P	1/4
3/8	protruding - 12	HDO3752P	9/32
5/32	reduced flush - 5	HDO1652	9/64
3/16	reduced flush - 6	HDO2002	5/32
1/4	reduced flush - 8	HDO2602	13/64
5/16	reduced flush - 10	HDO3122	1/4
3/8	reduced flush - 12	HDO3752	9/32

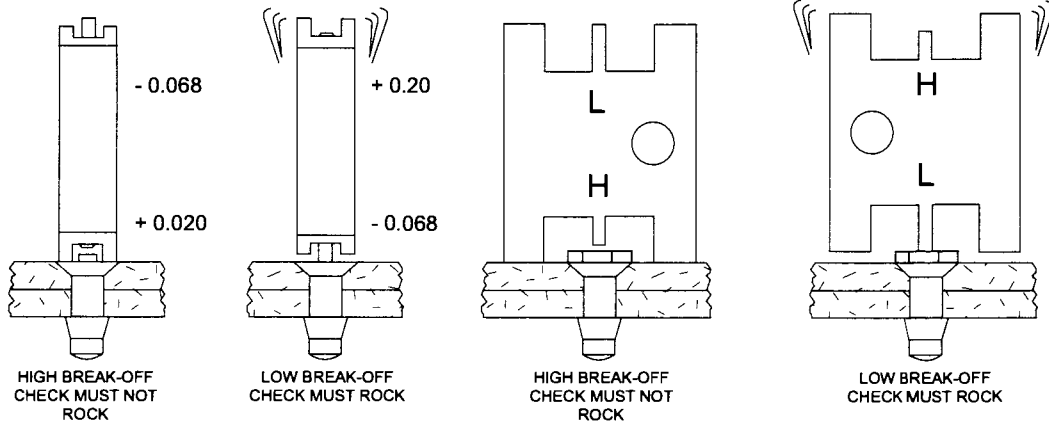
### Nose Adapter



# Composi-Lok

## Blind Fastener Tools

### Composi-Lok Break-Off Gauges



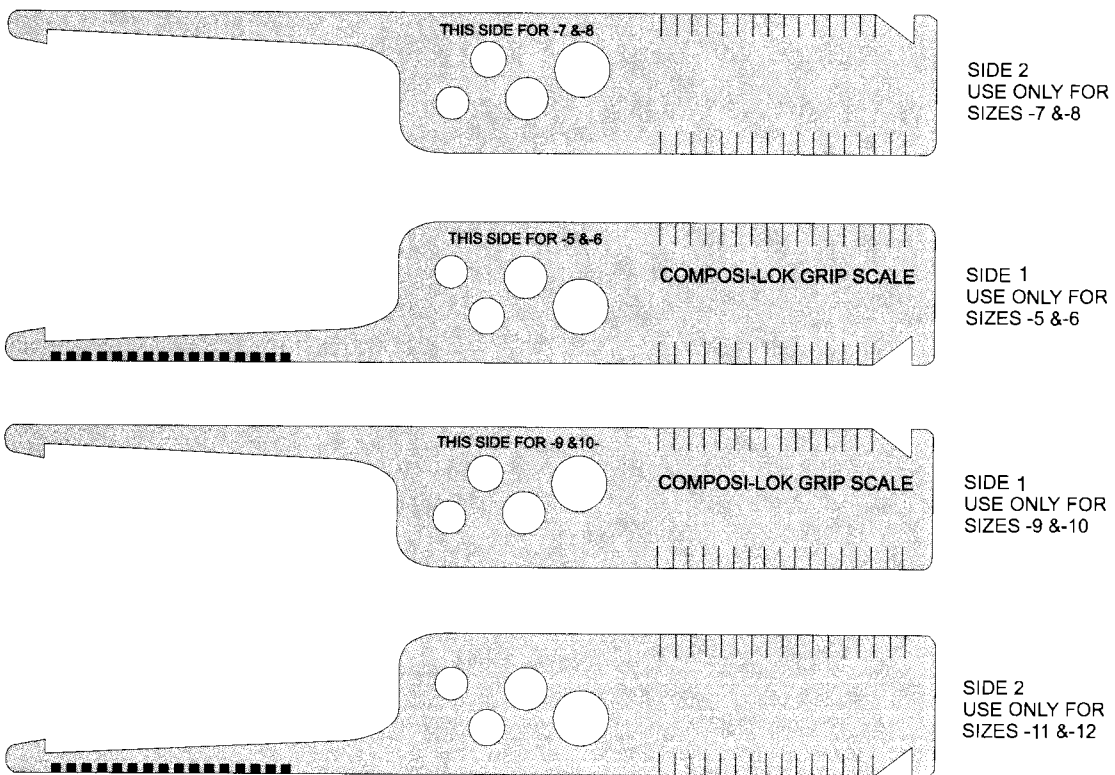
Dia	Composi-Lok Series	Leaf Gauges	Round Gauges	Break-Off Limits
5/32	MBF2010-05	LFP7-CL	LF8-F5	+ .103 / +.000
5/32	MBF2011-05	LFP7-CL	LF8-F5	+ .103 / +.000
5/32	MBF2012-05	LFP7-CL	LF8-F5	+ .103 / +.000
5/32	MBF2013-05	LFP7-CL	LF8-F5	+ .103 / +.000
3/16	MBF2010-06	LFP7-CL	LF8-F6	+ .103 / +.000
3/16	MBF2011-06	LFP7-CL	LF8-F6	+ .103 / +.000
3/16	MBF2012-06	LFP7-CL	LF8-F6	+ .103 / +.000
3/16	MBF2013-06	LFP7-CL	LF8-F6	+ .103 / +.000
7/32	MBF2010-07	LFP7-CL	LF8-F7	+ .103 / +.000
7/32	MBF2011-07	LFP7-CL	LF8-F7	+ .103 / +.000
7/32	MBF2012-07	LFP7-CL	LF8-F7	+ .103 / +.000
7/32	MBF2013-07	LFP7-CL	LF8-F7	+ .103 / +.000
1/4	MBF2010-08	LFP7-CL	LF8-F8	+ .103 / +.000
1/4	MBF2011-08	LFP7-CL	LF8-F8	+ .103 / +.000
1/4	MBF2012-08	LFP7-CL	LF8-F8	+ .103 / +.000
1/4	MBF2013-08	LFP7-CL	LF8-F8	+ .103 / +.000
9/32	MBF2010-09	LFP7-CL	LF8-F9	+ .103 / +.000
9/32	MBF2011-09	LFP7-CL	LF8-F9	+ .103 / +.000
9/32	MBF2012-09	LFP7-CL	LF8-F9	+ .103 / +.000
9/32	MBF2013-09	LFP7-CL	LF8-F9	+ .103 / +.000
5/16	MBF2010-10	LFP7-CL	LF8-F10	+ .103 / +.000
5/16	MBF2011-10	LFP7-CL	LF8-F10	+ .103 / +.000
5/16	MBF2012-10	LFP7-CL	LF8-F10	+ .103 / +.000
5/16	MBF2013-10	LFP7-CL	LF8-F10	+ .103 / +.000
11/32	MBF2010-11	LFP7-CL	LF8-F11	+ .103 / +.000
11/32	MBF2011-11	LFP7-CL	LF8-F11	+ .103 / +.000
11/32	MBF2012-11	LFP7-CL	LF8-F11	+ .103 / +.000
11/32	MBF2013-11	LFP7-CL	LF8-F11	+ .103 / +.000
3/8	MBF2010-12	LFP7-CL	LF8-F12	+ .103 / +.000
3/8	MBF2011-12	LFP7-CL	LF8-F12	+ .103 / +.000
3/8	MBF2012-12	LFP7-CL	LF8-F12	+ .103 / +.000
3/8	MBF2013-12	LFP7-CL	LF8-F12	+ .103 / +.000

# Composi-Lok

## Blind Fastener Tools

### Composi-Lok Grip Scales

#### Grip Scale Part #: LFCLG-1 & LFCLG-2



#### Selection of Grip Length

In measuring hole depth take reading where the skin surface meets the number or line on gauge. If directly on a line use either the indicated grip or the next longer grip.

In cases where there a tapered sheet condition exists, determine grip length at the hole centerline. The taper must not exceed 7° to ensure the proper performance of the fastener.

# Visu-Lok II

## Blind Fastener Tools

### Universal Nose Tip™ System for Installing Drive-Nut Type Fasteners

Driver Model #	Universal Nose Tip	Nose Tip Connector	Wrench Adapter	Torque Driver
S540MTD / S540MTD-BF Pneumatic Pistol				
7440 - 90° Right Angle Driver				
7440M / 7440M-BF 90° Pneumatic Torque Responsive				
7440M / 7440M-BF Integrated Wrench / Torque Driver				
7440C Close Quarter 90° Right Angle				
HW200 / HW300 Standard Ratchet Hand Tool				
HW100 / HW400 Close Quarter Ratchet Hand Tool				

### Universal Interchangeable Nose Tips

Installation tools have been simplified in the "DRIVE NUT" fastener system in both Visu-Lok II® and Composi-Lok II®.

LOK-FAST has further simplified the tooling with UNIVERSAL NOSE TIP™. Now, for a given size range any nose tip may be interchangeable with any driver.

An installation tool consists of a driver and an adapter assembly. The adapter assembly is comprised of a nose adapter to engage the corebolt through rotation to clamp-up and break-off. In most cases, for a given driver, the LOK-FAST UNIVERSAL NOSE TIP™ SYSTEM uses only three complete nose adapters for all the fastener head styles, and for the complete range of sizes from 5/32" to 3/8".

### Two Part Nose Adapter

The nose adapter is now a two piece design consisting of the Universal Nose Tip™ and the Nose Tip Connector™. The nose tip engages the fastener drivenut, and the nose tip is threaded onto the connector to form a complete installation tool. The two piece design allows interchanging of the nose tips among all driver configurations and further allows interchangeability between Visu-Lok II® and Composi-Lok II® installation tools. The nose tip may be removed with a standard allen wrench using clockwise rotation.

The pictorial chart on the proceeding page is an illustration of the Universal Nose Tip™ System.

Universal Nose Tip™ is a Trademark of LOK-FAST

Nose Tip™ Connector™ is a Trademark of LOK-FAST



# Visu-Lok II

## Blind Fastener Tools

### Drive-Nut Interchangeability

Dia.	Fastener	Pneumatic	Standard Right Angle	Torq. Resp. Right Angle	Close Qtr. Right Angle	Standard Hand Tool	Close Qtr. Hand Tool
-5	VLII / CLII						
-6	VLII / CLII						
-7	CLII only						
-8	VLII / CLII						
-9	CLII only						
-10	VLII / CLII						
-11	CLII only						
-12	VLII / CLII						

NOTE: VLII - represents Visu-Lok II®  
 CLII - represents Composi-Lok II®

 Composi-LokII® adapter assemblies may install Visu-LokII®  
 Adapter assemblies identical for both Visu-LokII® and Composi-LokII®

Visu-Lok II® and Composi-Lok II® fasteners have certain common driving dimensions. The drivenuts are identical for both fasteners. In the -8, -10, and -12 diameter fasteners the wrench flats are common to both fastener types. In the -5 and -6 diameters, the wrench flats are not common to Visu-Lok II® and Composi-Lok II®. Therefore, wrench adapters used to install these fasteners are **not** interchangeable.

The larger blind side "footprint" of Composi-Lok II® is accomplished through the use of a longer sleeve and corebolt. The close quarter installation tools permit the corebolt to pass completely through the wrench. Therefore, in the -8, -10, and -12 diameters, close quarter installation is 100% interchangeable. In all other installation tools, the corebolt does not pass completely through the wrench. The wrench adapter (and consequently, the nose adapter) must be longer to install the Composi-Lok II®.

In the common wrench-flat diameters, the longer installation tooling (Composi-Lok II®) may be used to install the Visu-Lok II®, but the tooling for Visu-Lok II® may not be used for Composi-Lok II® installations.

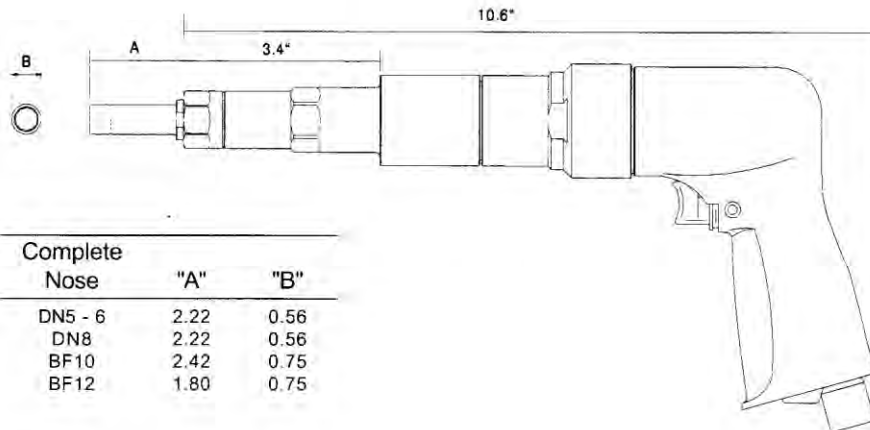
If it is desired to standardize on one system of adapters for use with both types of fasteners, Lok-Fast provides a longer wrench adapter for the -5 and -6 Visu-Lok II® to be used with the Composi-Lok II® nose adapters.

The opposite chart illustrates the interchangeability. The two tooling systems are described in separate sections of this catalog. The new wrench adapters for Visu-Lok II® sizes -5 and -6 are contained only in the section on Visu-Lok II®. For these wrench adapters, selection of the corresponding Composi-Lok II® nose adapter is made by referring to the same page in the section on Composi-Lok tooling.

# Visu-Lok II

## Blind Fastener Tools

### Pneumatic Pistol Driver Assembly for Visu-Lok II®



Complete Nose	"A"	"B"
DN5 - 6	2.22	0.56
DN8	2.22	0.56
BF10	2.42	0.75
BF12	1.80	0.75

#### How To Order:

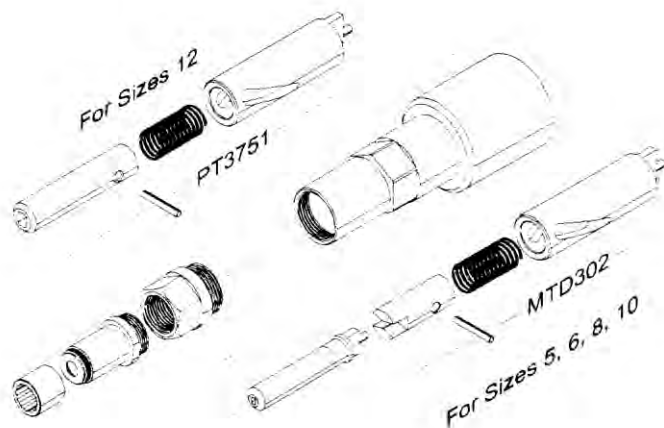
1. Select the diameter and match with the Table below
2. From the corresponding row select the complete assembly part number or the parts needed.

#### Example: **DN8AA**

##### Part Number Includes

- S540MTD Pneumatic Pistol Driver
- MTD302 Master Torque Driver
- DNC8 Nose Tip Connector
- DNUT5-6 Universal Nose Tip
- TD2601 Wrench Adapter

Dia.	Visu-Lok II Series	Complete Assembly	Pneumatic Pistol	Adapter Assembly	Complete Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter	VLII Wrench for CLII Nose
5/32	PLT5000-5-(-)	DN5AA		DN5A	DN5-6	DNC5-6	DNUT5-6	TD1651	TD1651-VL
3/16	PLT5000-6-(-)	DN6AA		DN6A	DN5-6	DNC5-6	DNUT5-6	TD2001	TD2001-VL
1/4	PLT5000-8-(-)	DN8AA	S540MTD	DN8A	DN8	DNC8	DNUT8	TD2601	
5/16	PLT5000-10-(-)	DN10AA		DN10A	DN10	DNC10	DNUT12	TD3121	
3/8	PLT5000-12-(-)	DNPT12AA		DNPT12A	DNPT12	DNCPT12	DNUT12	PT3751	



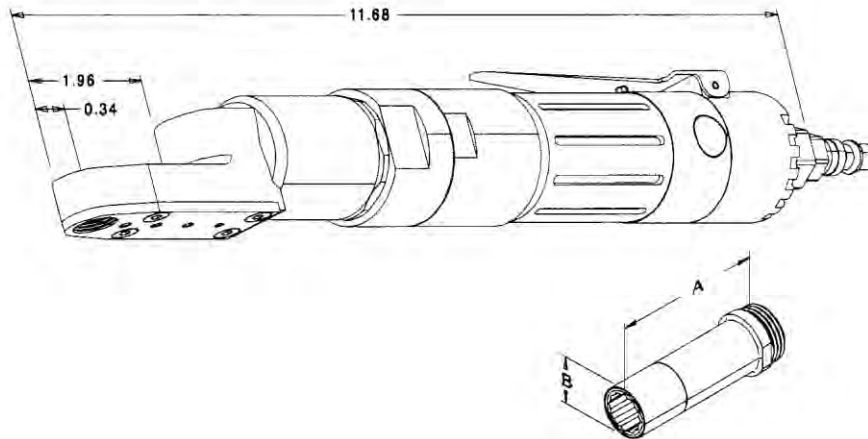
#### Technical Data

Operating Pressure	90 PSI
Torque Output	32.5 lbs
Stall Torque	32.5 lbs
Motor Speed	540 rpm
Air Consumption (at free speed)	28 cfm
Horse Power Rating	0.7
Weight	3.5 lbs

# Visu-Lok II

## Blind Fastener Tools

### Pneumatic Right Angle for Visu-Lok II®



#### How To Order:

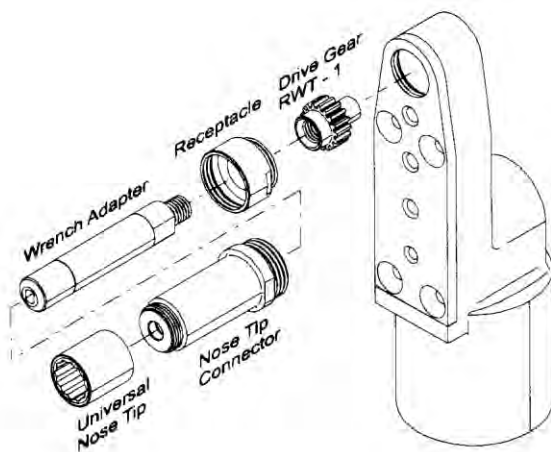
1. Select the diameter and match with the Table below
2. From the corresponding row select the complete assembly part number or the parts needed.

#### Example: **DNR8AA**

##### Part Number Includes

- 7440 Pneumatic Wrench Driver
- DNC8 Nose Tip Connector
- DNUT8 Universal Nose Tip
- PW4601 Wrench Adapter

Dia.	Visu-Lok II Series	Complete Assembly	Pneumatic Pistol	Adapter Assembly	Complete Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter	VLII Wrench for CLII Nose
5/32	PLT5000-5(-)	DNR5AA		DNR5A	DN5-6	DNC5-6	DNUT5-6	PW4651	PW4651-VL
3/16	PLT5000-6(-)	DNR6AA	7440	DNR6A	DN5-6	DNC5-6	DNUT5-6	PW4001	PW4001-VL
1/4	PLT5000-8(-)	DNR8AA		DNR8A	DN8	DNC8	DNUT8	PW4601	
5/16	PLT5000-10(-)	DNR10AA		DNR10A	DN10	DNC10	DNUT12	PW4121	



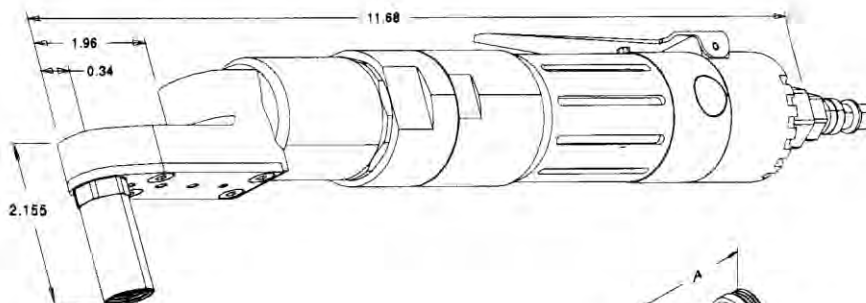
#### Technical Data

Operating Pressure	90 PSI
Torque Output	108 in lbs
Stall Torque	10 ft lbs
Motor Speed	500 rpm
Air Consumption	18 cfm
(at free speed)	
Horse Power Rating	0.33
Weight	3.5 lbs

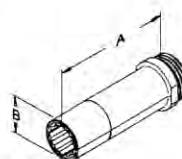
# Visu-Lok II

## Blind Fastener Tools

### Pneumatic Right Angle Torque Responsive Adapter for Visu-Lok II®



Complete Nose	"A"	"B"
DNRT5 - 6	2.22	0.56
DNRT8	2.22	0.56
DNRT10	2.42	0.75



#### How To Order:

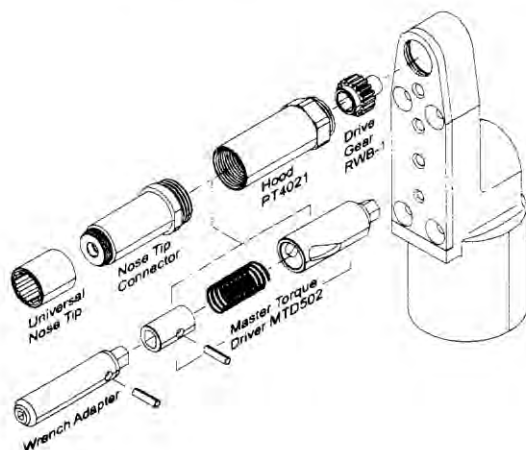
1. Select the diameter and match with the Table below
2. From the corresponding row select the complete assembly part number or the parts needed.

#### Example: **DNRT5AA**

##### Part Number Includes

- 7440M Pneumatic Wrench Driver
- DNCRT5-6 Nose Tip Connector
- DNUT5-6 Universal Nose Tip
- TD5651 Wrench Adapter

Dia.	Visu-Lok II Series	Complete Assembly	Pneumatic Pistol	Adapter Assembly	Complete Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter	VLII Wrench for CLII Nose
5/32	PLT5000-5-(-)	DNRT5AA	7440M	DNRT5A	DNRT5-6	DNCRT5-6	DNUT5-6	TD5651	TD5651-VL
3/16	PLT5000-6-(-)	DNRT6AA		DNRT6A	DNRT5-6	DNCRT5-6	DNUT5-6	TD5001	TD5001-VL
1/4	PLT5000-8-(-)	DNRT8AA		DNRT8A	DNRT8	DNCRT8	DNUT8	TD5601	
5/16	PLT5000-10-(-)	DNRT10AA		DNRT10A	DNRT10	DNCRT10	DNUT12	TD5121	



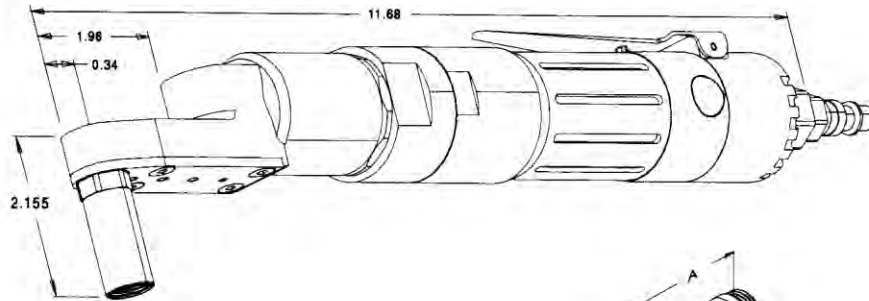
#### Technical Data

Operating Pressure	90 PSI
Torque Output	108 in lbs
Stall Torque	10 ft lbs
Motor Speed	500 rpm
Air Consumption (at free speed)	18 cfm
Horse Power Rating	0.33
Weight	3.5 lbs

# Visu-Lok II

## Blind Fastener Tools

### Pneumatic Right Angle w/ Integrated Socket Torque Responsive Adapter for Visu-Lok II®



Complete Nose	"A"	"B"
DNRPT5 - 6	1.33	0.56
DNRPT8	1.33	0.56
DNRPT10	1.53	0.75

#### How To Order:

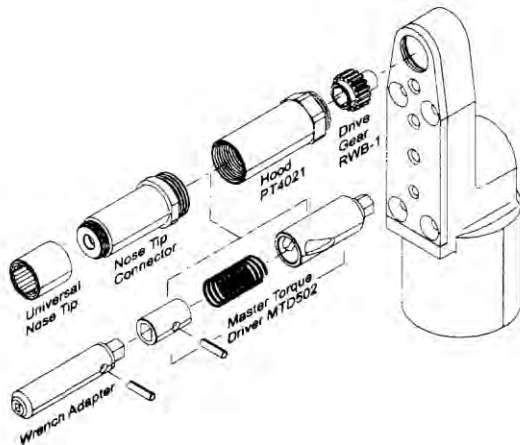
1. Select the diameter and match with the Table below
2. From the corresponding row select the complete assembly part number or the parts needed.

#### Example: **DNRPT5AA**

##### Part Number Includes

- 7440M Pneumatic Wrench Driver
- DNRPT5-6 Nose Tip Connector
- DNUT5-6 Universal Nose Tip
- UPTRW-5 Complete Wrench/Driver
- UWT-5 Wrench Tip

Dia.	Visu-Lok II Series	Complete Assembly	Pneumatic Pistol	Adapter Assembly	Complete Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter	Wrench Tip
5/32	PLT5000-5-( )	DNRPT5AA	7440M	DNRPT5A	DNPT5-6	DNCRPT5-6	DNUT5-6	UPTRW-5	UWT-5
3/16	PLT5000-6-( )	DNRPT6AA		DNRPT6A	DNPT5-6	DNCRPT5-6	DNUT5-6	UPTRW-6	UWT-6
1/4	PLT5000-8-( )	DNRPT8AA		DNRPT8A	DNPT8	DNCRPT8	DNUT8	UPTRW-8	UWT-8
5/16	PLT5000-10-( )	DNRPT10AA		DNRPT10A	DNPT10	DNCRPT10	DNUT12	UPTRW-10	UWT-10



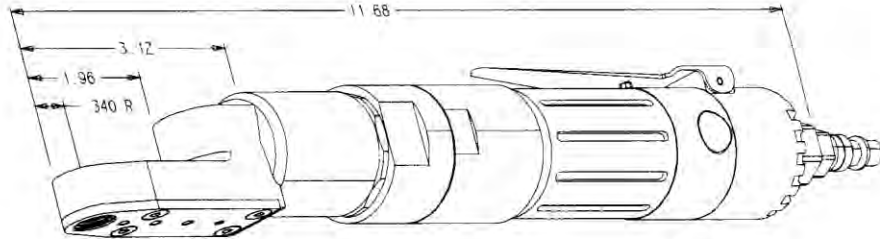
#### Technical Data

Operating Pressure	90 PSI
Torque Output	108 in lbs
Stall Torque	10 ft lbs
Motor Speed	500 rpm
Air Consumption (at free speed)	18 cfm
Horse Power Rating	0.33
Weight	3.5 lbs

# Visu-Lok II

## Blind Fastener Tools

### Pneumatic Right Angle Close Quarter for Visu-Lok II®



Complete Nose	"A"	"B"
DNRC5 - 6	0.53	0.56
DNRC8	0.53	0.56
BFRC10	0.73	0.75



#### How To Order:

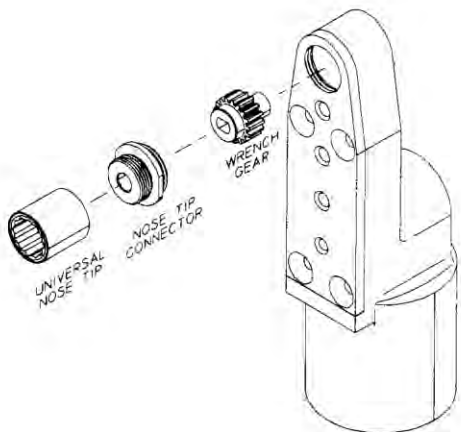
1. Select the diameter and match with the Table below
2. From the corresponding row select the complete assembly part number or the parts needed.

#### Example: **DRNRC6-AA**

##### Part Number Includes

- 7440C Pneumatic Wrench Driver
- DNRC5-6 Nose Tip Connector
- DNUT5-6 Universal Nose Tip
- RW5-1 Wrench Gear

Dia.	Visu-Lok II Series	Complete Assembly	Pneumatic Pistol	Adapter Assembly	Complete Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter
5/32	PLT5000-5-()	DNRC5AA	7440C	DNRC5A	DNRC5-6	DNCR5-6	DNUT5-6	RW5-1
3/16	PLT5000-6-()	DNRC6AA		DNRC6A	DNRC5-6	DNCR5-6	DNUT5-6	RW6-1
1/4	PLT5000-8-()	DNRC8AA		DNRC8A	DNRC8	DNCR8	DNUT8	RW8-1
5/16	PLT5000-10-()	DNRC10AA		DNRC10A	DNRC10	DNCR10	DNUT12	RW10-1



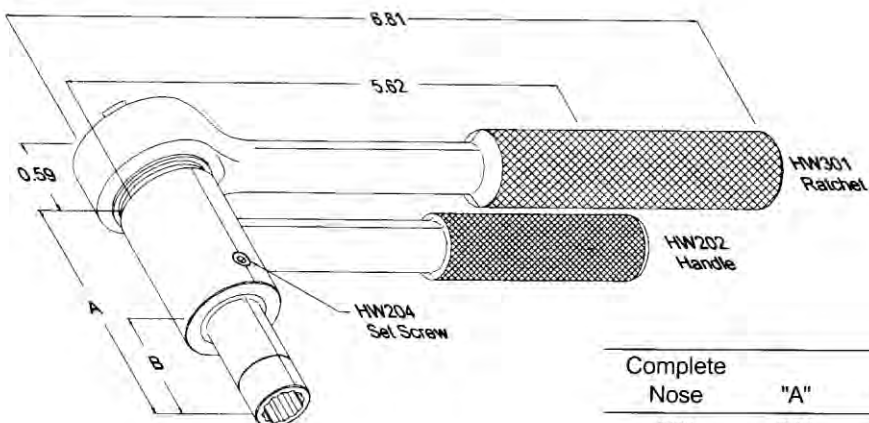
#### Technical Data

Operating Pressure	90 PSI
Torque Output	108 in lbs
Stall Torque	10 ft lbs
Motor Speed	500 rpm
Air Consumption (at free speed)	18 cfm
Horse Power Rating	0.33
Weight	3.5 lbs

# Visu-Lok II

## Blind Fastener Tools

### Ratchet Hand Tool for Visu-Lok II®



Complete Nose	"A"	"B"	"C"
5/32	2.94	1.50	0.56
3/16	2.94	1.50	0.56
7/32	3.07	1.62	0.56
1/4	3.07	1.62	0.56
5/16	3.14	1.70	0.75
3/8	3.16	1.72	0.75

#### How To Order:

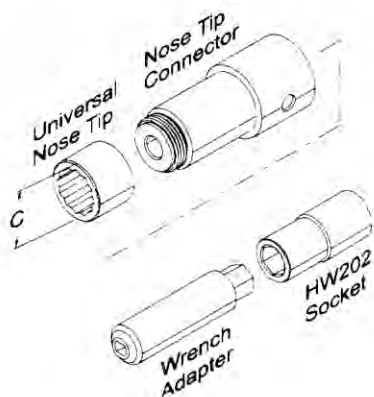
1. Select the diameter and match with the Table on this page.
2. From the corresponding row select the complete assembly part number or the parts needed.

#### Example: **DNH5AA**

##### Part Number Includes

- HW300 Ratchet Wrench
- HW202 Holder
- DNCH5-6 Nose Tip Connector
- DNUT5-6 Universal Nose Tip
- HW1651 Wrench Gear

Dia.	Visu-Lok II Series	Complete Assembly	Pneumatic Pistol	Adapter Assembly	Complete Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter	VLII Wrench FOR CLII Nose
5/32	PLT5000-5-()	DNH5AA		DNH5A	DNH5-6	DNCH5-6	DNUT5-6	HW1651	HW1651-VL
3/16	PLT5000-6-()	DNH6AA		DNH6A	DNH5-6	DNCH5-6	DNUT5-6	HW2001	HW2001-VL
1/4	PLT5000-8-()	DNH8AA	HW300	DNH8A	DNH8	DNCH8	DNUT8	HW2601	
5/16	PLT5000-10-()	DNH10AA		DNH10A	DNH10	DNCH10	DNUT12	HW3121	
3/8	PLT5000-12-()	DNH12AA		DNH12A	DNH12	DNCH12	DNUT12	HW3751	

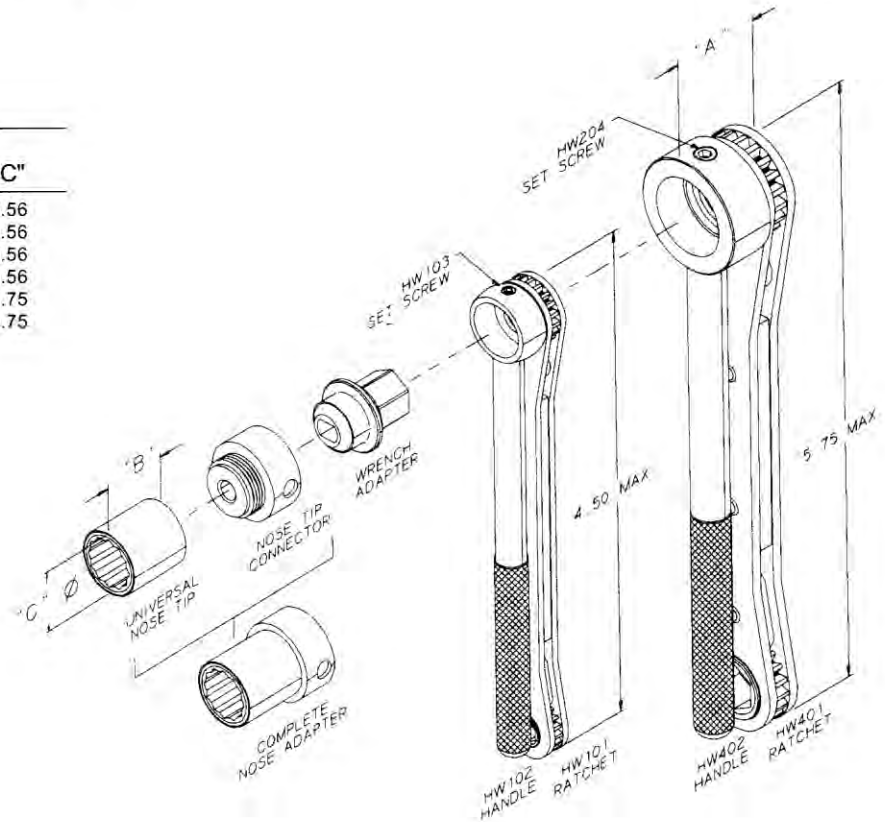


# Visu-Lok II

## Blind Fastener Tools

### Ratchet Hand Tool Close Quarter for Visu-Lok II®

Complete Nose	"A"	"B"	"C"
5/32	0.65	0.51	0.56
3/16	0.65	0.51	0.56
7/32	0.80	0.46	0.56
1/4	0.80	0.46	0.56
5/16	0.80	0.67	0.75
3/8	0.80	0.67	0.75



#### How To Order:

1. Select the diameter and match with the Table on this page.
2. From the corresponding row select the complete assembly part number or the parts needed.

Example: **DNHC5AA**

Part Number Includes

- HW100 Ratchet Wrench
- HW102 Holder
- DNHC5-6 Nose Tip Connector
- DNUT5-6 Universal Nose Tip
- HW5 Wrench Gear

Dia.	Visu-Lok II Series	Complete Assembly	Pneumatic Pistol	Adapter Assembly	Complete Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter
5/32	PLT5000-5(-)	DNHC5AA	HW100	DNHC5A	DNHC5-6	DNCHC5-6	DNUT5-6	HW5
3/16	PLT5000-6(-)	DNHC6AA	HW100	DNHC6A	DNHC5-6	DNCHC5-6	DNUT5-6	HW8
1/4	PLT5000-8(-)	DNHC8AA	HW400	DNHC8A	DNHC8	DNCHC8	DNUT8	HW8
5/16	PLT5000-10(-)	DNHC10AA	HW400	DNHC10A	DNHC12	DNCHC12	DNUT12	HW10
3/8	PLT5000-12(-)	DNHC12AA	HW400	DNHC12A	DNHC12	DNCHC12	DNUT12	HW12

# Visu-Lok II

## Blind Fastener Tools

### Visu-Lok Grip Scales

Grip Scale Part #: LFVLG-1



#### Selection of Grip Length

In measuring hole depth take reading where the skin surface meets the number or line on gauge. If directly on a line use either the indicated grip or the next longer grip.

In cases where there a tapered sheet condition exists, determine grip length at the hole centerline. The taper must not exceed 7° to ensure the proper performance of the fastener.

# Composi-Lok II

## Blind Fastener Tools

### Universal Nose Tip™ System for Installing Drive-Nut Type Fasteners

Driver Model #	Universal Nose Tip	Nose Tip Connector	Wrench Adapter	Torque Driver
S540MTD / S540MTD-BF Pneumatic Pistol				
7440 - 90° Right Angle Driver				
7440M / 7440M-BF 90° Pneumatic Torque Responsive				
7440M / 7440M-BF Integrated Wrench / Torque Driver				
7440C Close Quarter 90° Right Angle				
HW200 / HW300 Standard Ratchet Hand Tool				
HW100 / HW400 Close Quarter Ratchet Hand Tool				

### Universal Interchangeable Nose Tips

Installation tools have been simplified in the "DRIVE NUT" fastener system in both Visu-Lok II® and Composi-Lok II®.

LOK-FAST has further simplified the tooling with UNIVERSAL NOSE TIP™. Now, for a given size range any nose tip may be interchangeable with any driver.

An installation tool consists of a driver and an adapter assembly. The adapter assembly is comprised of a nose adapter to engage the corebolt through rotation to clamp-up and break-off. In most cases, for a given driver, the LOK-FAST UNIVERSAL NOSE TIP™ SYSTEM uses only three complete nose adapters for all the fastener head styles, and for the complete range of sizes from 5/32" to 3/8".

### Two Part Nose Adapter

The nose adapter is now a two piece design consisting of the Universal Nose Tip™ and the Nose Tip Connector™. The nose tip engages the fastener drivenut, and the nose tip is threaded onto the connector to form a complete installation tool. The two piece design allows interchanging of the nose tips among all driver configurations and further allows interchangeability between Visu-Lok II® and Composi-Lok II® installation tools. The nose tip may be removed with a standard allen wrench using clockwise rotation.

The pictorial chart on the preceding page is an illustration of the Universal Nose Tip™ System.

Universal Nose Tip™ is a Trademark of LOK-FAST

Nose Tip™ Connector™ is a Trademark of LOK-FAST

# Composi-Lok II

## Blind Fastener Tools

### Drive-Nut Interchangeability

Dia.	Fastener	Pneumatic	Standard Right Angle	Torq. Resp. Right Angle	Close Qtr. Right Angle	Standard Hand Tool	Close Qtr. Hand Tool
-5	VLII / CLII						
-6	VLII / CLII						
-7	CLII only						
-8	VLII / CLII						
-9	CLII only						
-10	VLII / CLII						
-11	CLII only						
-12	VLII / CLII						

NOTE: VLII - represents Visu-Lok II®  
 CLII - represents Composi-Lok II®

- Composi-LokII® adapter assemblies may install Visu-LokII®
- Adapter assemblies identical for both Visu-LokII® and Composi-LokII®

Visu-Lok II® and Composi-Lok II® fasteners have certain common driving dimensions. The drivenuts are identical for both fasteners. In the -8, -10, and -12 diameter fasteners the wrench flats are common to both fastener types. In the -5 and -6 diameters, the wrench flats are not common to Visu-Lok II® and Composi-Lok II®. Therefore, wrench adapters used to install these fasteners are **not** interchangeable.

The larger blind side "footprint" of Composi-Lok II® is accomplished through the use of a longer sleeve and corebolt. The close quarter installation tools permit the corebolt to pass completely through the wrench. Therefore, in the -8, -10, and -12 diameters, close quarter installation is 100% interchangeable. In all other installation tools, the corebolt does not pass completely through the wrench. The wrench adapter (and consequently, the nose adapter) must be longer to install the Composi-Lok II®.

In the common wrench-flat diameters, the longer installation tooling (Composi-Lok II®) may be used to install the Visu-Lok II®, but the tooling for Visu-Lok II® may not be used for Composi-Lok II® installations.

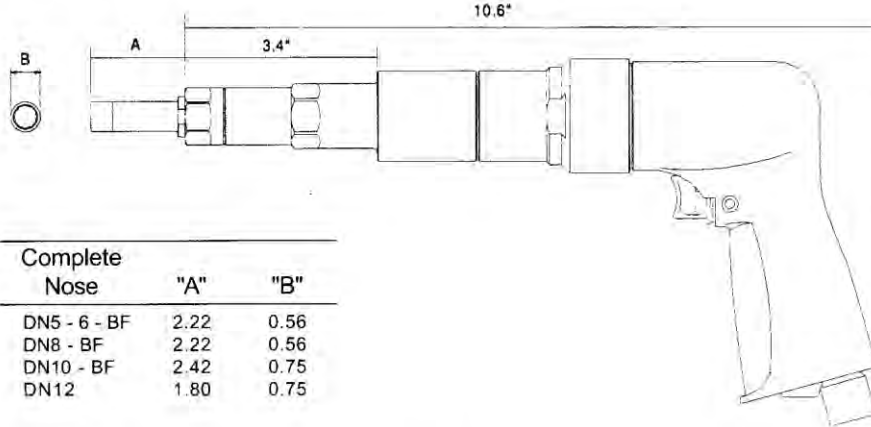
If it is desired to standardize on one system of adapters for use with both types of fasteners, Lok-Fast provides a longer wrench adapter for the -5 and -6 Visu-Lok II® to be used with the Composi-Lok II® nose adapters.

The opposite chart illustrates the interchangeability. The two tooling systems are described in separate sections of this catalog. The new wrench adapters for Visu-Lok II® sizes -5 and -6 are contained only in the section on Visu-Lok II®. For these wrench adapters, selection of the corresponding Composi-Lok II® nose adapter is made by referring to the same page in the section on Composi-Lok tooling.

# Composi-Lok II

## Blind Fastener Tools

### Pneumatic Pistol Driver Assembly for Composi-Lok II®



Complete Nose	"A"	"B"
DN5 - 6 - BF	2.22	0.56
DN8 - BF	2.22	0.56
DN10 - BF	2.42	0.75
DN12	1.80	0.75

#### How To Order:

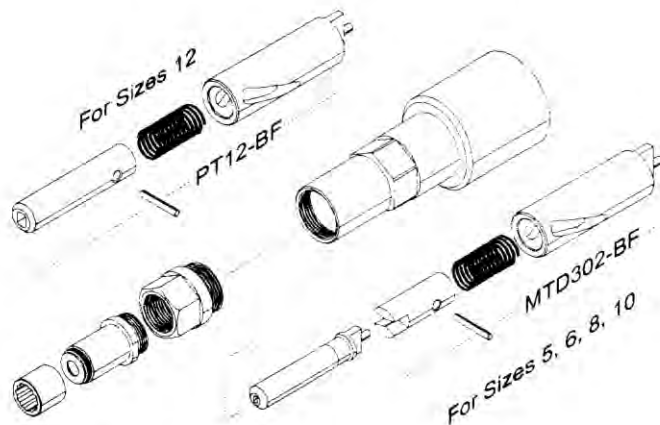
1. Select the diameter and match with the Table below
2. From the corresponding row select the complete assembly part number or the parts needed.

#### Example: **DN8AA-BF**

##### Part Number Includes

- S540MTD-BF Pneumatic Pistol Driver
- MTD302 Master Torque Driver
- DNC8-BF Nose Tip Connector
- DNUT8 Universal Nose Tip
- TD2601-BF Wrench Adapter

Dia.	Fastener Size	Complete Assembly	Adapter Assembly	Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter
5/32	5(-)	DN5AA-BF	DN5A-BF	DN5-6-BF	DNC5-6-BF	DNUT5-6	TD1651-BF
3/16	6(-)	DN6AA-BF	DN6A-BF	DN5-6-BF	DNC5-6-BF	DNUT5-6	TD2001-BF
7/32	7(-)	DN7AA-BF	DN7A-BF	DN8-BF	DNC8-BF	DNUT8	TD7-BF
1/4	8(-)	DN8AA-BF	DN8A-BF	DN8-BF	DNC8-BF	DNUT8	TD2601-BF
9/32	9(-)	DN10AA-BF	DN10A-BF	DN10-BF	DNC10-BF	DNUT12	TD3121-BF
5/16	10(-)	DNPT10AA-BF	DNPT10A-BF	DNPT12	DNCPT12	DNUT12	PT10-BF
11/32	11(-)	DN12AA-BF	DNPT12A-BF	DNPT12	DNCPT12	DNUT12	PT12-BF
3/8	12(-)	DN12AA-BF	DNPT12A-BF	DNPT12	DNCPT12	DNUT12	PT12-BF



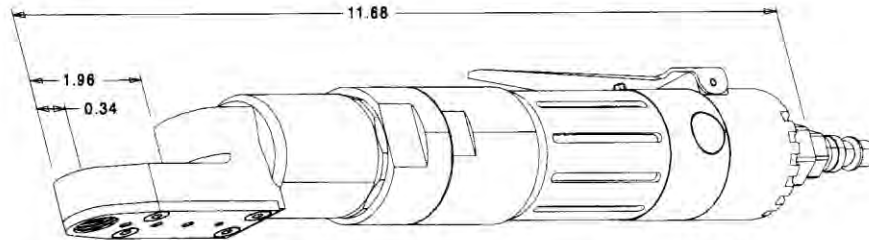
#### Technical Data

Operating Pressure	90 PSI
Torque Output	32.5 lbs
Stall Torque	32.5 lbs
Motor Speed	540 rpm
Air Consumption (at free speed)	28 cfm
Horse Power Rating	0.7
Weight	3.5 lbs

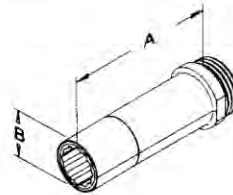
# Composi-Lok II

## Blind Fastener Tools

### Pneumatic Right Angle for Composi-Lok II®



Complete Nose	"A"	"B"
DN5 - 6 - BF	2.22	0.56
DN8 - BF	2.22	0.56
DN10 - BF	2.42	0.75



#### How To Order:

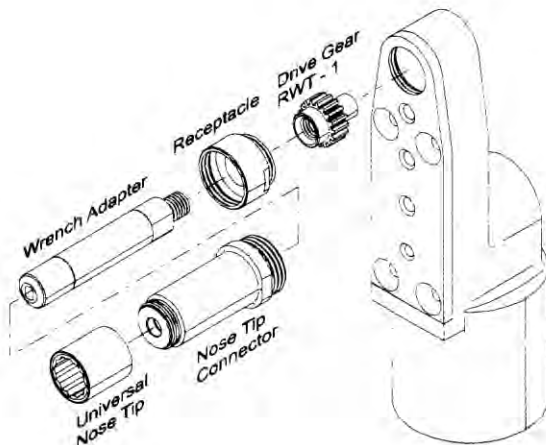
1. Select the diameter and match with the Table below
2. From the corresponding row select the complete assembly part number or the parts needed.

Example: **DNR8AA-BF**

Part Number Includes

- 7440 Pneumatic Wrench Driver
- DNC8-BF Nose Tip Connector
- DNUT8 Universal Nose Tip
- PW4602-BF Wrench Adapter

Dia.	Fastener Assembly	Complete Assembly	Adapter Assembly	Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter
5/32	5-( )	DNR5AA-BF	DNR5A-BF	DN5-6-BF	DNC5-6-BF	DNUT5-6	PW4651-BF
3/16	6-( )	DNR6AA-BF	DNR6A-BF	DN5-6-BF	DNC5-6-BF	DNUT5-6	PW4001-BF
7/32	7-( )	DNR7AA-BF	DNR7A-BF	DN8-BF	DNC8-BF	DNUT8	PW4201-BF
1/4	8-( )	DNR8AA-BF	DNR8A-BF	DN8-BF	DNC8-BF	DNUT8	PW4602-BF
9/32	9-( )	DNR10AA-BF	DNR10A-BF	DN10-BF	DNC10-BF	DNUT12	PW4121-BF
5/16	10-( )	DNR10AA-BF	DNR10A-BF	DN10-BF	DNC10-BF	DNUT12	PW4121-BF



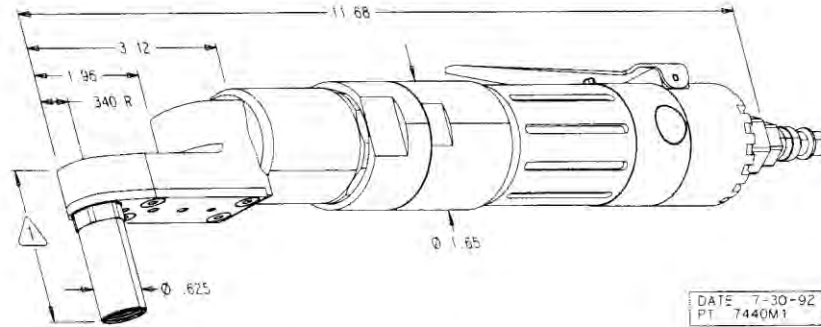
#### Technical Data

Operating Pressure	90 PSI
Torque Output	108 in lbs
Stall Torque	10 ft lbs
Motor Speed	500 rpm
Air Consumption (at free speed)	18 cfm
Horse Power Rating	0.33
Weight	3.5 lbs

# Composi-Lok II

## Blind Fastener Tools

### Pneumatic Right Angle Torque Responsive Adapter Assemblies for Composi-Lok II®



2 155 - 7440M  
 2 615 - 7440M-BF

Complete Nose	"A"	"B"
DNRT5 - 6 - BF	2.22	0.56
DNRT8 - BF	2.22	0.56
DNRT10 - BF	2.42	0.75

#### How To Order:

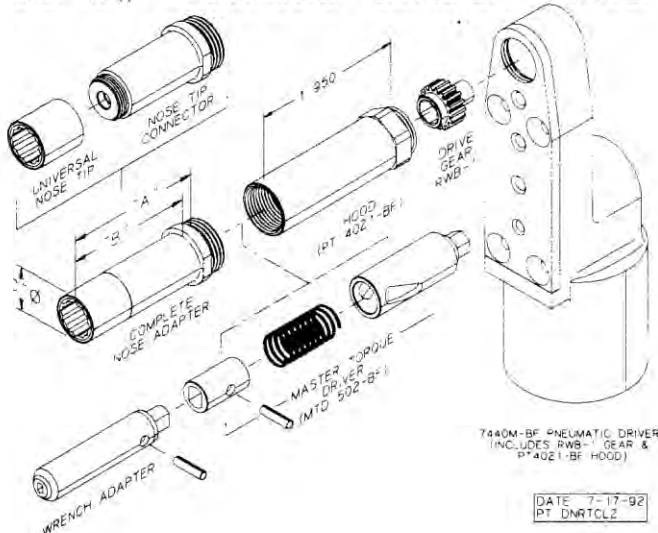
1. Select the diameter and match with the Table below
2. From the corresponding row select the complete assembly part number or the parts needed.

#### Example: **DNRT7AA-BF**

##### Part Number Includes

- 7440M-BF Pneumatic Wrench Driver
- DNCRT8-BF Nose Tip Connector
- DNUT5-6 Universal Nose Tip
- TD5201-BF Wrench Adapter

Dia.	Fastener Size	Complete Assembly	Adapter Assembly	Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter
5/32	5-( )	DNRT5AA-BF	DNRT5A-BF	DNRT5-6-BF	DNCRT5-6-BF	DNUT5-6	TD5651-BF
3/16	6-( )	DNRT6AA-BF	DNRT6A-BF	DNRT5-6-BF	DNCRT5-6-BF	DNUT5-6	TD5001-BF
7/32	7-( )	DNRT7AA-BF	DNRT7A-BF	DNRT8-BF	DNCRT8-BF	DNUT8	TD5201-BF
1/4	8-( )	DNRT8AA-BF	DNRT8A-BF	DNRT8-BF	DNCRT8-BF	DNUT8	TD5601-BF
9/32	9-( )	DNRT10AA-BF	DNRT10A-BF	DNRT10-BF	DNCRT10-BF	DNUT12	TD5121-BF
5/16	10-( )	DNRT10AA-BF	DNRT10A-BF	DNRT10-BF	DNCRT10-BF	DNUT12	TD5121-BF



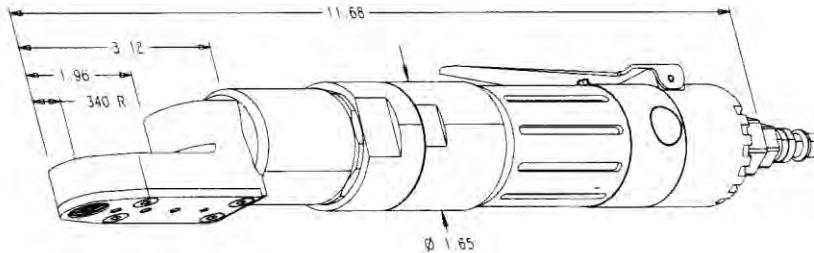
#### Technical Data

Operating Pressure	90 PSI
Torque Output	108 in lbs
Stall Torque	10 ft lbs
Motor Speed	500 rpm
Air Consumption (at free speed)	18 cfm
Horse Power Rating	0.33
Weight	3.5 lbs

# Composi-Lok II

## Blind Fastener Tools

**Pneumatic Right Angle Torque Responsive  
with Integrated Wrench/Torque Driver for Composi-Lok II®**



DATE: 7-30-92  
PT: 7440C1

Complete Nose	"A"	"B"
DNRPT5 - 6 - BF	1.33	0.56
DNRPT8-BF	1.33	0.56
DNRPT10-BF	1.53	0.75

**How To Order:**

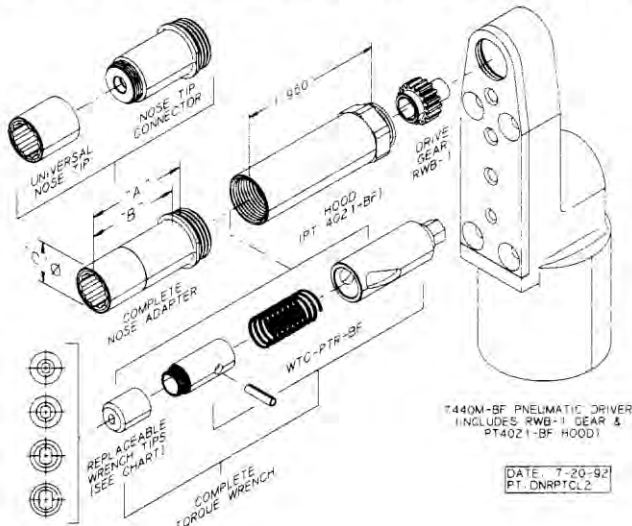
1. Select the diameter and match with the Table below
2. From the corresponding row select the complete assembly part number or the parts needed.

**Example: DNRPT10AA-BF**

**Part Number Includes**

- 7440M-BF Pneumatic Wrench Driver
- DNCRPT10-BF Nose Tip Connector
- DNUT12 Universal Nose Tip
- UPTRW-10-BF Complete Wrench/Driver
- UWT-10 Wrench Tip

Dia.	Fastener Size	Complete Assembly	Adapter Assembly	Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter	Wrench Tip
5/32	5-( )	DNRPT5AA-BF	DNRPT5A-BF	DNRPT5-6-BF	DNCRPT5-6-BF	DNUT5-6	UPTRW-5-BF	UWT-5-BF
3/16	6-( )	DNRPT6AA-BF	DNRPT6A-BF	DNRPT5-6-BF	DNCRPT5-6-BF	DNUT5-6	UPTRW-6-BF	UWT-6-BF
7/32	7-( )	DNRPT7AA-BF	DNRPT7A-BF	DNRPT8-BF	DNCRPT8-BF	DNUT8	UPTRW-7-BF	UWT-7-BF
1/4	8-( )	DNRPT8AA-BF	DNRPT8A-BF	DNRPT8-BF	DNCRPT8-BF	DNUT8	UPTRW-8-BF	UWT-8-BF
5/16	10-( )	DNRPT10AA-BF	DNRPT10A-BF	DNRPT10-BF	DNCRPT10-BF	DNUT12	UPTRW-10-BF	UWT-10-BF



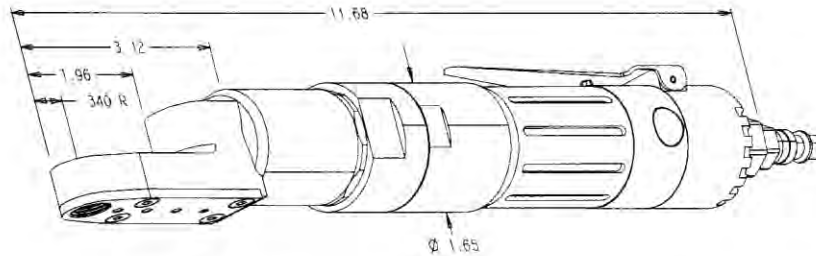
**Technical Data**

Operating Pressure	90 PSI
Torque Output	108 in lbs
Stall Torque	10 ft lbs
Motor Speed	500 rpm
Air Consumption (at free speed)	18 cfm
Horse Power Rating	0.33
Weight	3.5 lbs

# Composi-Lok II

## Blind Fastener Tools

### Pneumatic Right Angle Close Quarter Driver Assemblies for Composi-Lok II®



DATE 7-30-92  
PT 7440C1

Complete Nose	"A"	"B"
DNRC5 - 6 - BF	0.53	0.56
DNRC8-BF	0.53	0.56
DNRC10-BF	0.73	0.75

#### How To Order:

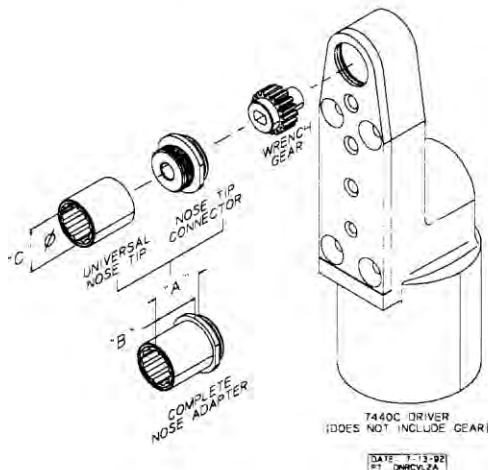
1. Select the diameter and match with the Table below
2. From the corresponding row select the complete assembly part number or the parts needed.

Example: **DNRC5AA-BF**

Part Number Includes

- 7440C Pneumatic Wrench Driver
- DNCR5-6 Nose Tip Connector
- DNUT5-6 Universal Nose Tip
- RW5-1-BF Wrench Gear

Dia.	Fastener Size	Complete Assembly	Adapter Assembly	Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter
5/32	5-( )	DNRC5AA-BF	DNRC5A-BF	DNRC5-6	DNCRC5-6	DNUT5-6	RW5-1-BF
3/16	6-( )	DNRC6AA-BF	DNRC6A-BF	DNRC5-6	DNCRC5-6	DNUT5-6	RW6-1-BF
7/32	7-( )	DNRC7AA-BF	DNRC7A-BF	DNRC8	DNCRC-8	DNUT8	RW7-1-BF
1/4	8-( )	DNRC8AA-BF	DNRC8A	DNRC8	DNCRC-8	DNUT8	RW8-1
9/32	9-( )	DNRC10AA	DNRC10A	DNRC10	DNCRC-10	DNUT12	RW10-1
5/16	10-( )	DNRC10AA	DNRC10A	DNRC10	DNCRC-10	DNUT12	RW10-1



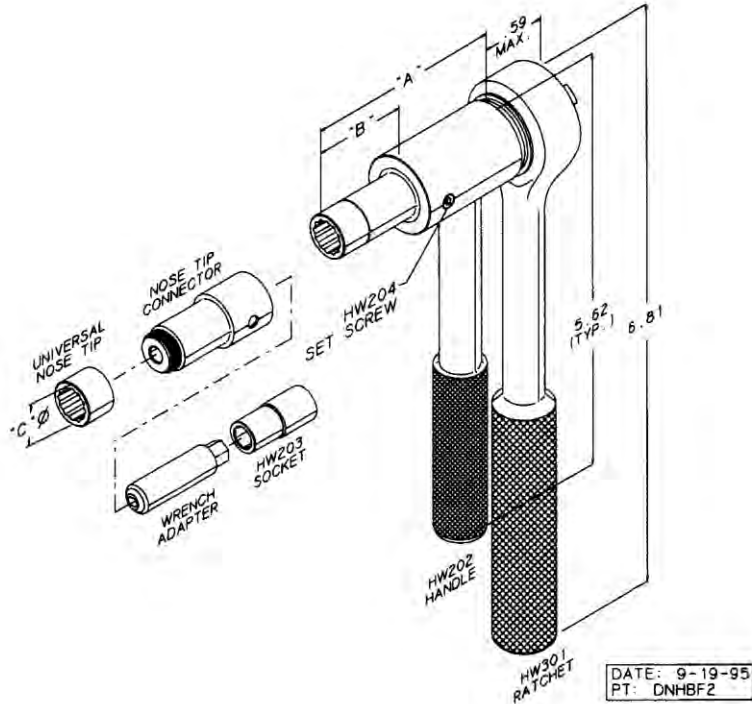
#### Technical Data

Operating Pressure	90 PSI
Torque Output	108 in lbs
Stall Torque	10 ft lbs
Motor Speed	500 rpm
Air Consumption (at free speed)	18 cfm
Horse Power Rating	0.33
Weight	3.5 lbs

# Composi-Lok II

## Blind Fastener Tools

### Standard Ratchet Hand Tool Adapter Assembly for Composi-Lok II®



Nose	"A"	"B"
5/32	2.94	0.56
3/16	2.94	0.56
7/32	3.07	0.56
1/4	3.07	0.56
5/16	3.14	0.75
3/8	3.16	0.75

#### How To Order:

1. Select the diameter and match with the Table on this page.
2. From the corresponding row select the complete assembly part number or the parts needed.

#### Example: **DNH5AA-BF**

##### Part Number Includes

- HW301 Ratchet Wrench
- HW202 Holder
- DNCH5-6-BF Nose Tip Connector
- DNUT5-6 Universal Nose Tip
- HW1651-BF Wrench Gear

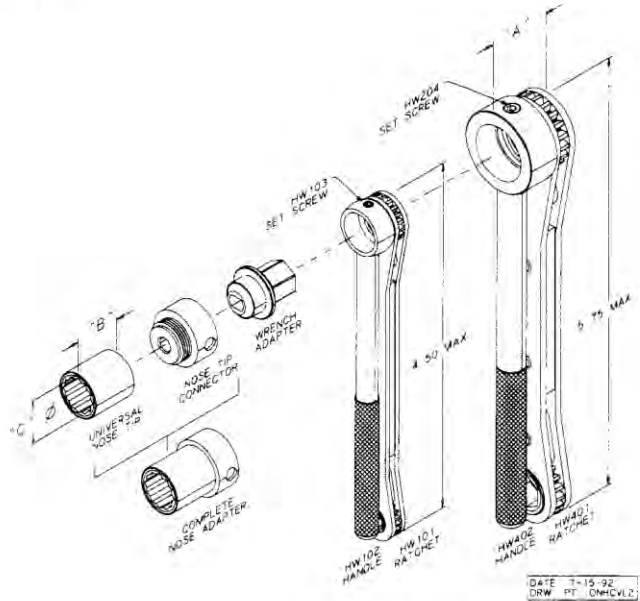
Dia.	Fastener Size	Complete Assembly	Adapter Assembly	Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter
5/32	5-( )	DNH5AA-BF	DNH5A-BF	DNH5-6-BF	DNCH5-6-BF	DNUT5-6	HW1651-BF
3/16	6-( )	DNH6AA-BF	DNH6A-BF	DNH5-6-BF	DNCH5-6-BF	DNUT5-6	HW2001-BF
7/32	7-( )	DNH7AA-BF	DNH7A-BF	DNH8-BF	DNCH8-BF	DNUT8	HW2201-BF
1/4	8-( )	DNH8AA-BF	DNH8A-BF	DNH8-BF	DNCH8-BF	DNUT8	HW2601-BF
9/32	9-( )	DNH10AA-BF	DNH10A-BF	DNH12-BF	DNCH12-BF	DNUT12	HW3121-BF
5/16	10-( )	DNH10AA-BF	DNH10A-BF	DNH12-BF	DNCH12-BF	DNUT12	HW3121-BF
11/32	11-( )	DNH12AA-BF	DNH12A-BF	DNH12-BF	DNCH12-BF	DNUT12	HW3751-BF
3/8	12-( )	DNH12AA-BF	DNH12A-BF	DNH12-BF	DNCH12-BF	DNUT12	HW3751-BF

# Composi-Lok II

## Blind Fastener Tools

### Close Quarter Ratchet Hand Tool Adapter Assemblies for Composi-Lok II®

Nose	"A"	"B"
DNHC5-6	0.65	0.56
DNHC8	0.80	0.56
DNHC12	0.80	0.75



#### How To Order:

1. Select the diameter and match with the Table on this page.
2. From the corresponding row select the complete assembly part number or the parts needed.

#### Example: **DNHC5AA-BF**

##### Part Number Includes

- HW101 Ratchet Wrench
- HW102 Holder
- DNHC5-6 Nose Tip Connector
- DNUT5-6 Universal Nose Tip
- HW5-BF Wrench Gear

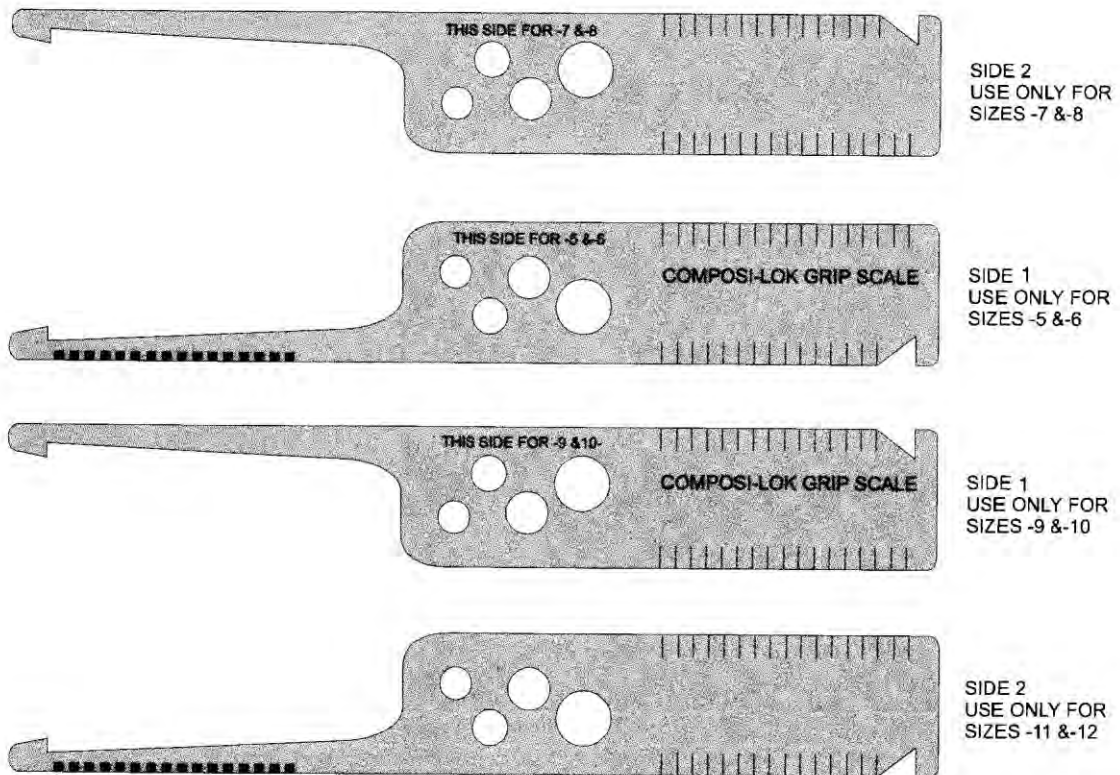
Dia.	Fastener Size	Complete Assembly	Ratchet Driver	Adapter Assembly	Nose Adapter	Nose Tip Connector	Universal Nose Tip	Wrench Adapter
5/32	5-( )	DNHC5AA-BF	HW100	DNHC5A-BF	DNHC5-6	DNCHC5-6	DNUT5-6	HW5-BF
3/16	6-( )	DNHC6AA-BF	HW100	DNHC6A-BF	DNHC5-6	DNCHC5-6	DNUT5-6	HW6-BF
7/32	7-( )	DNHC7AA-BF	HW400	DNHC7A-BF	DNHC8	DNCHC8	DNUT8	HW7-BF
1/4	8-( )	DNHC8AA	HW400	DNHC8A	DNHC8	DNCHC8	DNUT8	HW8
9/32	9-( )	DNHC10AA	HW400	DNHC10A	DNHC12	DNCHC12	DNUT12	HW10
5/16	10-( )	DNHC10AA	HW400	DNHC10A	DNHC12	DNCHC12	DNUT12	HW10
11/32	11-( )	DNHC12AA	HW400	DNHC12A	DNHC12	DNCHC12	DNUT12	HW12
3/8	12-( )	DNHC12AA	HW400	DNHC12A	DNHC12	DNCHC12	DNUT12	HW12

# Composi-Lok II

## Blind Fastener Tools

### Grip Scales for Composi-Lok® and Composi-Lok II® Fasteners

Grip Scale Part #: LFCLG-1 & LFCLG-2



#### Selection of Grip Length

In measuring hole depth take reading where the skin surface meets the number or line on gauge. If directly on a line use either the indicated grip or the next longer grip.

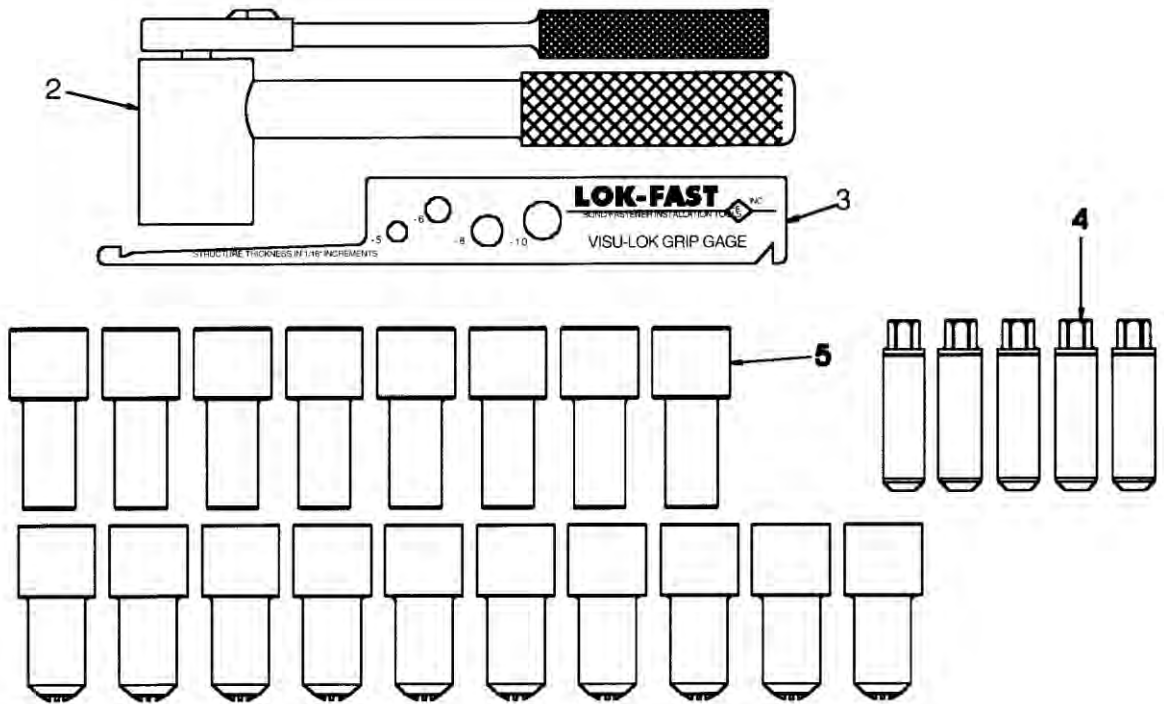
In cases where there a tapered sheet condition exists, determine grip length at the hole centerline. The taper must not exceed 7° to ensure the proper performance of the fastener.

# Jo-Bolt Kits

## Blind Fastener Tools

### 4000 Kit

### Visu-Lok Ratchet Hand Tool



Item	Part #	Description
1	4020-4	Tool Box
2	HW300	Ratchet Hand Tool
3	LFVLG-1	Visu-Lok Grip Gauge
4	HW1651	Fastener Driver -5
	HW2001	Fastener Driver -6
	HW2601	Fastener Driver -8
	HW3121	Fastener Driver -10
	HW3751	Fastener Driver -12
5	HW1652	Flush Nose -5
	HW1652P	Protruding Nose -5
	HW1652A	Millable Nose -5
	HW1652T	Reduced Flush Nose -5
	HW2002	Flush Nose -6

Item	Part #	Description
5	HW2002P	Protruding Nose -6
	HW2002A	Millable Nose -6
	HW2002T	Reduced Flush Nose -6
	HW2602	Flush Nose -8
	HW2602P	Protruding Nose -8
	HW2602A	Millable Nose -8
	HW2602T	Reduced Flush Nose -8
	HW3122	Flush Nose -10
	HW3122P	Protruding Nose -10
	HW3122T	Reduced Flush Nose -10
	HW3752	Flush Nose -12
	HW3752P	Protruding Nose -12
	HW3752T	Reduced Flush Nose -12

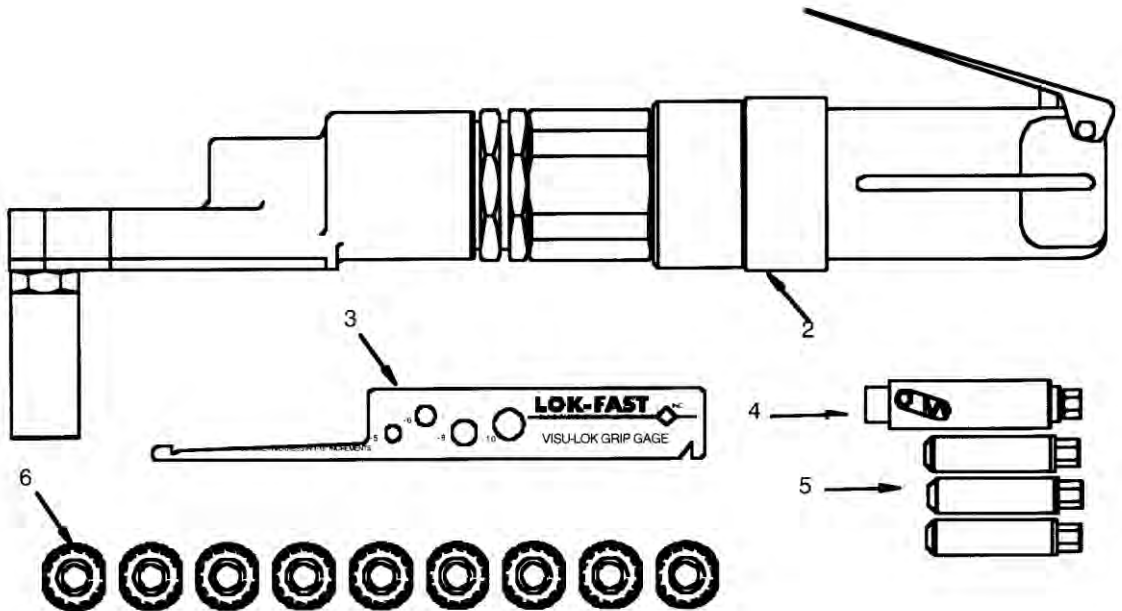
# Jo-Bolt Kits

## Blind Fastener Tools

### 4060 Kit

#### Composi-Lok Right Angle

#### Master Torque Driver Assembly



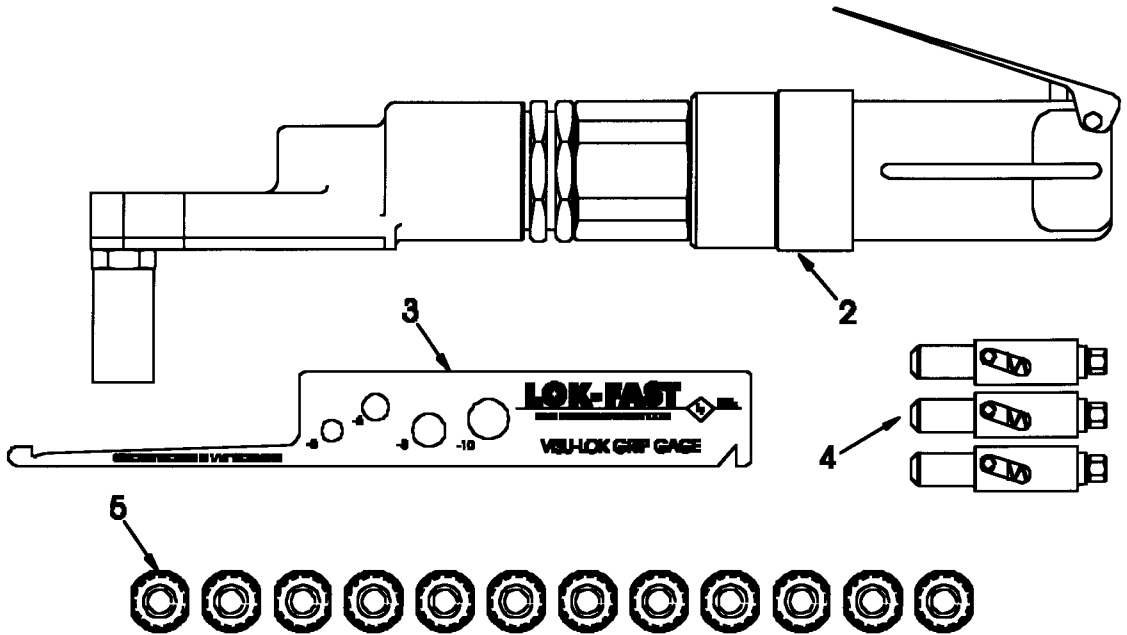
Item	Part #	Description
1	4020-4	Tool Box
2	7440M-BF	Complete Driver Assy.l
3	LFCLG-1	Composi-Lok Grip Gauge
4	MTD502-BF	Master Torque Driver
5	TD5651-BF	Fastener Driver -5
	TD5001-BF	Fastener Driver -6
	TD5601-BF	Fastener Driver -8
6	TD5652T-BF	Reduced Flush Nose -5

Item	Part #	Description
6	TD5652P-BF	Protruding Nose 5
	TD5652-BF	Flush -5
	TD5002T-BF	Reduced Flush Nose -6
	TD5002P-BF	Protruding Nose -6
	TD5002-BF	Flush Nose -6
	TD5602T-BF	Reduced Flush Nose -8
	TD5602P-BF	Protruding Nose -8
	TD5602-BF	Flush Nose -8

# Jo-Bolt Kits

## Blind Fastener Tools

**4070 Kit**  
**Visu-Lok Right Angle**  
**Torque Responsive Kit**



Item	Part #	Description
1	4020-4	Tool Box
2	7440M	Complete Driver Assy. I
3	LFVLG-1	Visu-Lok Grip Gauge
4	PT4651	Fastener Driver -5
	PT4001	Fastener Driver -6
	PT4601	Fastener Driver -8
5	PT4652	Flush Nose -5
	PT4652P	Protruding Nose -5
	PT4652A	Millable Nose -5

Item	Part #	Description
5	PT4652T	Reduced Flush -5
	PT4002	Flush Nose -6
	PT4002P	Protruding Nose -6
	PT4002A	Millable Nose -6
	PT4002T	Reduced Flush Nose -6
	PT4602	Flush Nose -8
	PT4602P	Protruding Nose -8
	PT4602A	Millable Nose -8
	PT4602T	Reduced Flush -8

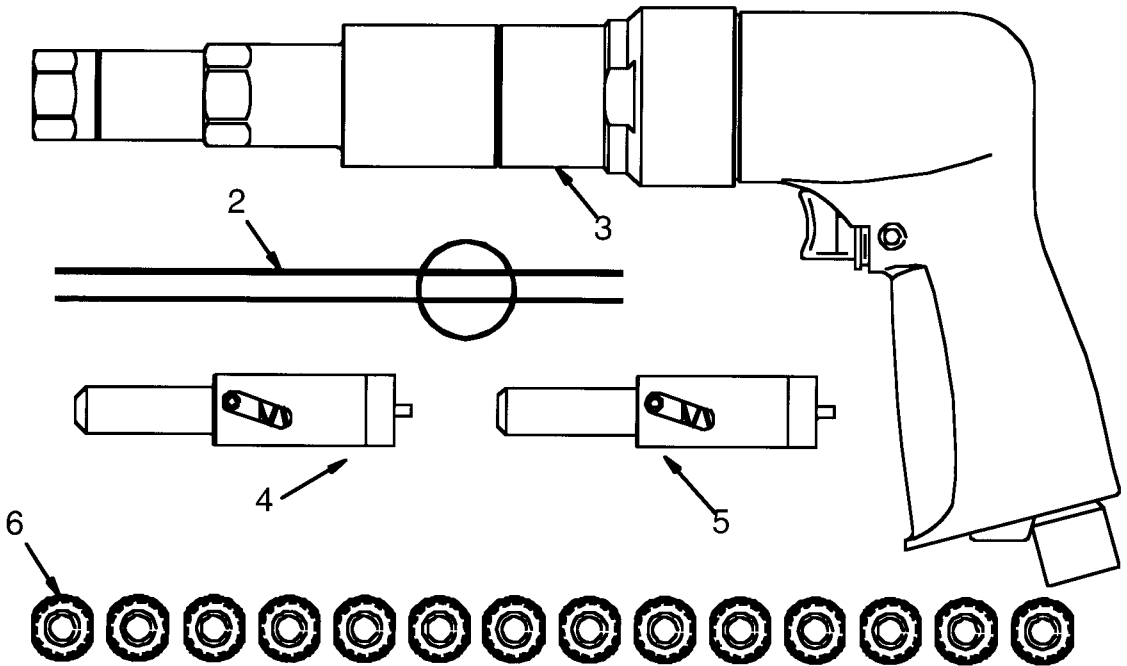
# Jo-Bolt Kits

## Blind Fastener Tools

### 4080 Kit

#### Composi-Lok Pistol

#### Master Torque Driver



Item	Part #	Description
1	4020-4	Tool Box
2	S540MTD-BF	Ratchet Hand Tool
3	LFCLG-1	Composi-Lok Grip Gauge
	LFCLG-2	Composi-Lok Grip Gauge
4	PT10-BF	Fastener Driver -10
5	PT12-BF	Fastener Driver -12
6	TD1651-BF	Fastener Driver -5
	TD2001-BF	Fastener Driver -6
	TD2601-BF	Fastener Driver -8
	PW3652T-BF	Reduced Flush Nose - 5
	PW3652P-BF	Protruding Nose -5
	PW3652-BF	Flsuh Nose -5

Item	Part #	Description
6	PW3002T-BF	Reduced Flush Nose -6
	PW3002P-BF	Protruding Nose -6
	PW3002-BF	Flush Nose -6
	PW3602T-BF	Reduced Flush Nose -8
	PW3602P-BF	Protruding Nose -8
	PW3602-BF	Flush Nose -8
	PT10FT-BF	Reduced Flush Nose -10
	PT10P-BF	Protruding Nose -10
	PT10F-BF	Flush Nose -10
	PT12FT-BF	Reduced Flush Nose -12
	PT12P-BF	Protruding Nose -12
	PT12F-BF	Flush Nose -12

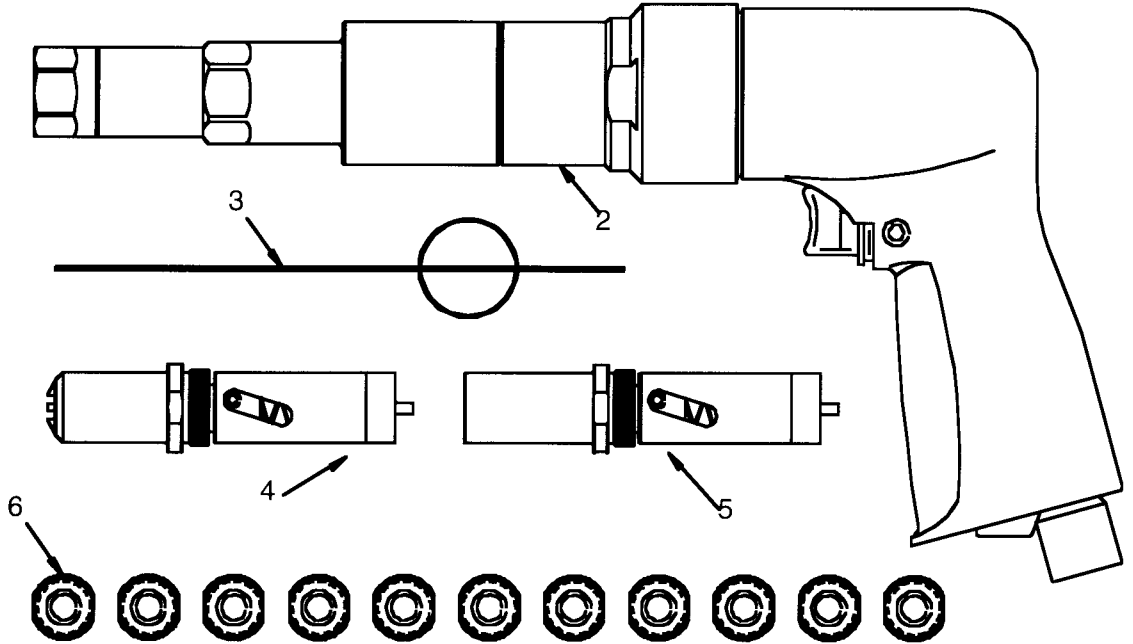
# Jo-Bolt Kits

## Blind Fastener Tools

### 4090 Kit

### Visu-Lok Pistol

### Master Torque Driver

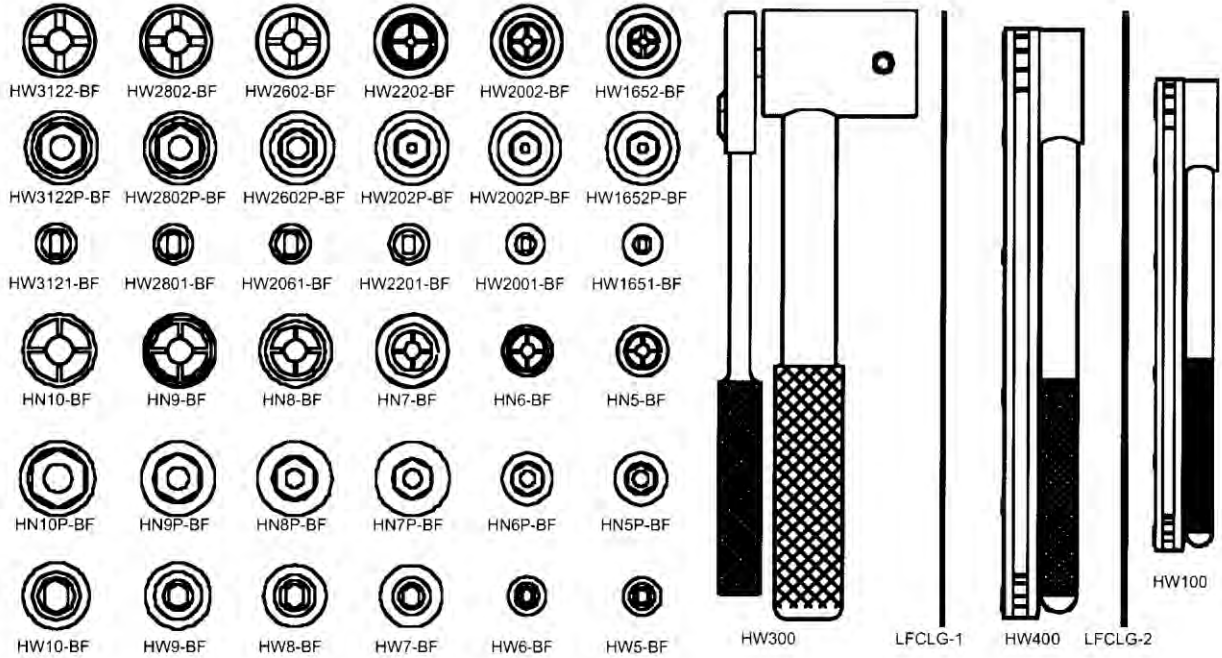


Item	Part #	Description
1	4020-4	Tool Box
2	S540MTD	Pneumatic Motor
3	LFVLG-1	Grip Gauge
4	PT375	PT Flush Nose
5	PT375P	PT Protruding Nose
6	TD165	Flush Nose
	TD165P	Protruding Nose
	TD165A	Millable Nose
	TD200	Flush Nose
	TD200P	Protruding Nose
	TD200A	Millable Nose
	TD260	Flush Nose
	TD260P	Protruding Nose
	TD260A	Millable Nose
	TD312	Flush Nose
	TD312P	Millable Nose

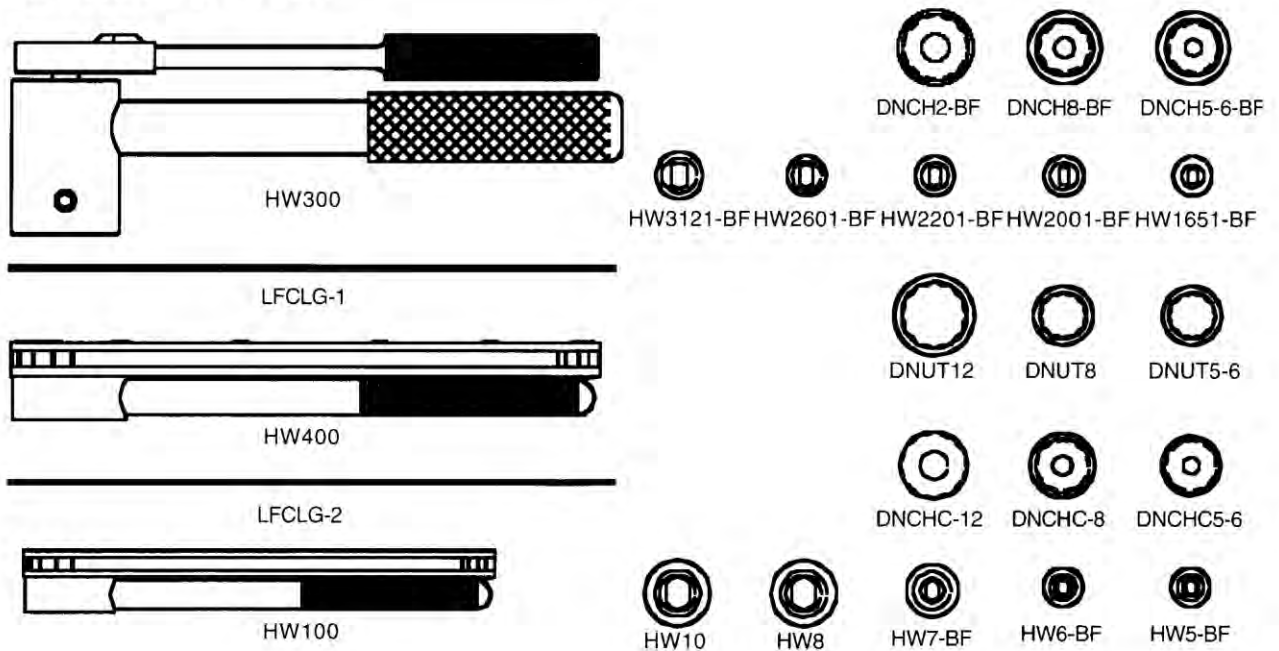
# Jo-Bolt Kits

## Blind Fastener Tools

### CLHK-101 Composi-Lok Ratchet Hand Tool Kit



### CLIIHK-101 Composi-LokII Ratchet Hand Tool Kit

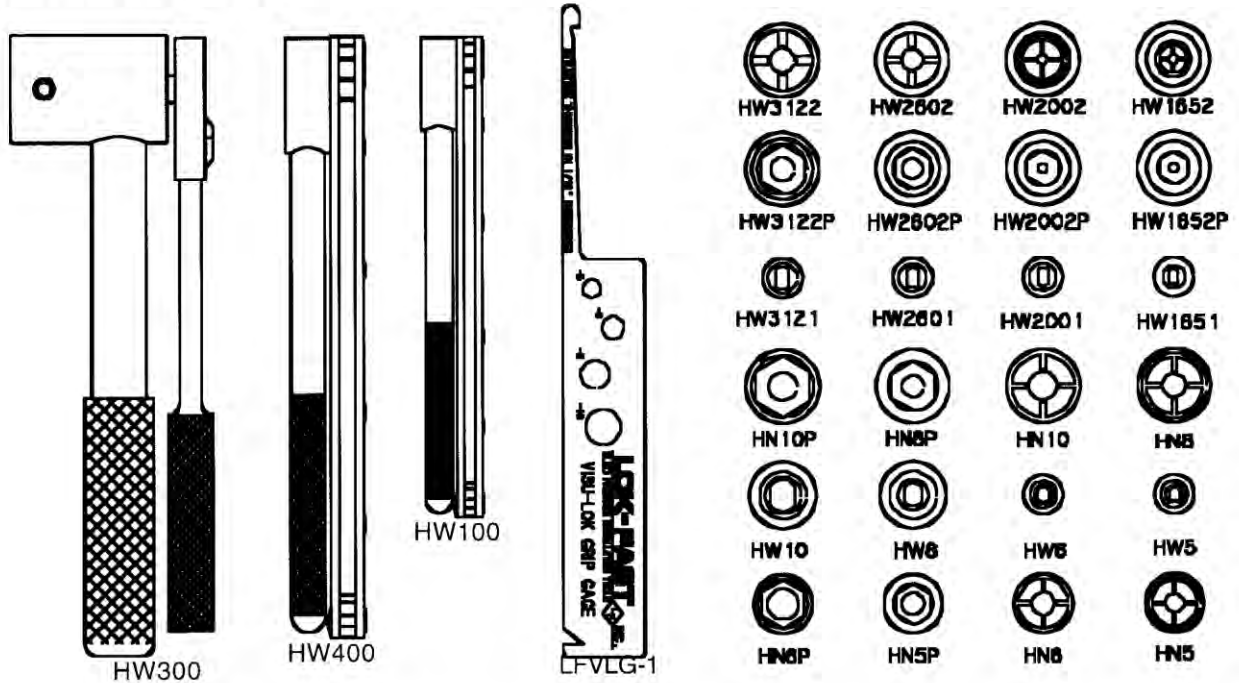


# Jo-Bolt Kits

## Blind Fastener Tools

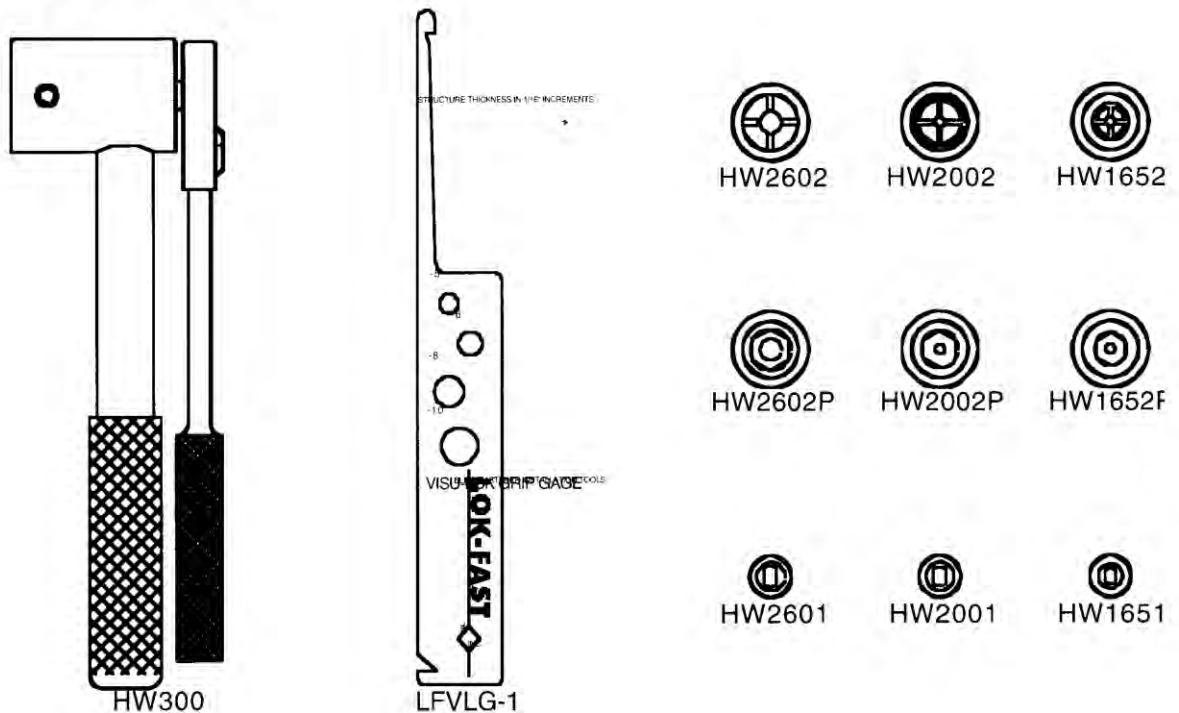
### VLHK-101

Visu-Lok = Ratchet Hand Tool Kit  
Flush and Protruding



### VLHK-102

Visu-Lok = Ratchet Hand Tool Kit  
Flush and Protruding



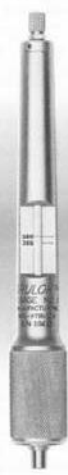
# TRULOK

## INDICADORES / GAGES

### TRULOK® GAGES - ACCURACY GUARANTEED

*Accurate, repeatable & reproducible, Trulok gages can eliminate costly rework with early detection of defective cutting tools. Digital models are ideal for SPC implementation!*

**Rivet Flushness Gages      Countersink Depth Gages      Countersink Dia. Gages**

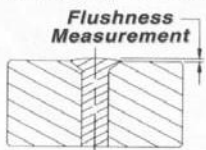


**MANUAL MODEL FEATURES:**

- Insures that installed fastener meets flushness specifications
- Direct indicating scale with large size .001" divisions
- Calibrated scale from -.010" to .015"
- Simple to use, measurement remains until gage is re-zeroed
- Tripod base sits solidly on any surface

**DIGITAL MODEL FEATURES:**

- Insures that installed fastener meets flushness specifications
- Floating zero gives accurate measurements on flat, convex or concave surfaces
- Custom bushings are available for virtually any type of fastener

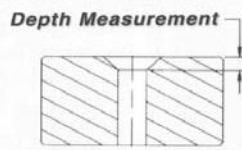


**MANUAL MODEL FEATURES:**

- Direct indicating scale with large size .005" divisions
- Simple to use, operation involves a single push of the gage head into the countersink. The measurement holds until the gage is reset.
- Ideal for counterbored and/or countersunk holes
- Insures that countersinks meet process specifications

**DIGITAL MODEL FEATURES:**

- Direct countersink depth reading
- Perfect for setting cages and micro-stops
- Insures that countersinks meet process specifications

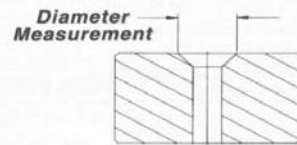


**MANUAL MODEL FEATURES:**

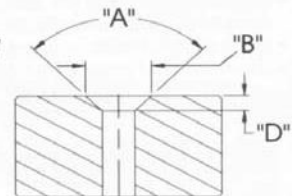
- Direct indicating scale with large size .005" divisions
- Simple to use, operation involves a single push of the gage head into the countersink. The measurement holds until the gage is reset.
- Insures that countersinks meet process specifications

**DIGITAL MODEL FEATURES:**

- Direct countersink diameter reading
- Insures that countersinks meet process specifications



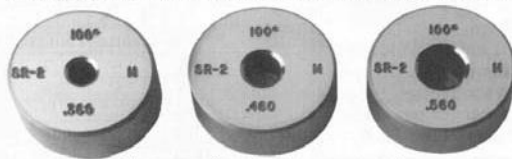
**Ordering Instructions:**



### TRULOK® MASTER SET BLOCKS

- Manufactured to meet NIST and MIL standards
- Certificates of calibration are available
- Precision machined and then hand lapped and polished to size
- Rigorous inspection process by our quality control department insures absolute accuracy
- Engraved with the model number, measurement and serial number for internal tracking purposes

**To order:** please let us know your countersink angle "A", major diameter range "B" so we can determine the model number needed. See illustration at right.



*Comes in custom case!*

**To order flushness gages:** please let us know the diameter "B" of your rivet head.

**To order depth and diameter gages:** please let us know your countersink angle "A", major diameter range "B", depth "D", and fastener type to be used so we can determine the model number needed.

# Micrómetros ópticos de profundidad

## OPTICAL DEPTH MICROMETER



### 2 BASIC MODELS

Model No. 966 (100 power)  
Model No. 966A (200 power)

- Easy to operate—no confusing calculations—no indoctrination training.
- Micro-measurement within  $\pm .0002$ " accuracy.
- Adaptable to convex, concave and compound contour surfaces.
- Measures depth of scratches, cracks, blind holes, corrosion, dents and pits, and height of spurs and other small protrusions in all materials. Measures transparent materials for thickness, depth of crazing, depth of fractures and depth and thickness of imbedded bubbles or seeds.
- Shock resistant to withstand normal shop abuse.

Five additional interchangeable bases, each designed for specific applications on all types of material, are available for use with the Optical Depth Micrometer. These bases provide greater flexibility and ease of operation.



P/N 973  
WEDGE BIPOD BASE  
INSIDE ANGLES



P/N 974  
TRANSLUCENT V-BLOCK BASE  
ROUND SURFACES, OUTSIDE ANGLES AND  
FLAT SURFACES NEAR RECESS



P/N 972  
OFFSET TRIPOD BASE  
FLAT & CURVED SURFACES  
ADJACENT TO PROTRUSION



P/N 975  
LARGE TRIPOD BASE  
PARTS INSPECTION



P/N 971  
QUADPOD BASE  
SIMPLE CURVED SURFACE

P/N 970  
TRIPOD BASE  
FLAT SURFACE . . . TRANSPARENT MATERIALS

P/N 966A1



1. Optical Depth Micrometer Model No. 966A (200 Power)
2. Tripod Base P/N 970
3. Quadpod Base P/N 971
4. Offset Tripod Base P/N 972
5. Wedge Bipod Base P/N 973


6. Translucent V-Block Base P/N 974
7. Large Tripod Base P/N 975
8. Reticle Eyepiece Cell P/N 966AR
9. Interchangeable Objectives 100 power 5 X Objective P/N 966C

10. Micrometer Light P/N 981
  11. Micrometer Light Adapter P/N 982
  12. Instrument Kit Case P/N 977
  13. Allen Wrench P/N 984
- 2 Batteries Size AA

## Herramientas de instalación y desinstalación de conectores de contacto

Mil Spec Composition B & C


### Hta instala/desinstala – Cuerpo de plástico composición de metal


	Art N°	Color/código	Tamaño	Conector serie
	M81969/1-01	Green/White	22	MIL-C-24308
	M81969/1-02	Red/White	20	MIL-C-81659
	M81969/1-03	Blue/White	16	
	M81969/1-04	Green/White	22D	


### Hta instala/desinstala – Cuerpo de plástico

	Art N°	Color/código	Tamaño	Conector serie
				MIL-C-26482
	M81969/14-01	Verde/Blanco	22D/M	MIL-C-81703
	M81969/14-02	Rojo/Blanco	20	MIL-C-83723
	M81969/14-03	Azul/Blanco	16	MIL-C-38999
	M81969/14-04	Amarillo/Blan	12	MIL-T-81714
M81969/14-05	Gris/Blanco	10	MIL-C-38999	

	Art N°	Color/código	Tamaño	Conector serie
				MIL-C-26482
	M81969/14-06	Rojo	8	MIL-C-81703
	M81969/14-07	Azul	4	MIL-C-83723
	M81969/14-08	Amarillo	0	MIL-C-38999 *
				MIL-T-81714
			MIL-C-5015	
			* Not for Size 8 !	

	Art N°	Color/código	Tamaño	Conector serie
	M81969/14-09	Marrón/Blanc	22	MIL-C-55302/169/171
	M81969/14-10	Rojo/Naranja	20	MIL-C-38999
	M81969/14-11	Rojo/Blanco	20	MIL-C-26482
				MIL-C-81703
				MIL-C-83723
			MIL-T-81714	
			MIL-C-5015	


	Art N°	Color/código	Tamaño	Conector serie
	M81969/14-12	Verde	8	MIL-C-38999


	Art N°	Color/código	Tamaño	Conector serie
	M81969/16-01	Rojo/Blanco	20	MIL-C-81511 Series 3 & 4
	M81969/16-02	Azul/Blanco	16	
	M81969/16-03	Amarillo/Blan	12	


## Herramientas de instalación y desinstalación de conectores de contacto


Mil Spec Composition B & C

### Hta instala/desinstala – Composición de plástico


	Art N°	Color/código	Tamaño	Conector serie
	M81969/16-04	Green/White	23	MIL-C-81511 Series 3 & 4

	Art N°	Color/código	Tamaño	Conector serie
	M81969/39-01	Green/White	20	MIL-C-24308
				MIL-C-81659
	MS27534-12	Yellow/White	12	MIL-C-26482
	MS27534-16	Blue/White	16	MIL-C-81703
	MS27534-20	Red/White	20	MIL-C-83723
	MS27534-22D	Green/White	22D/M	MIL-C-38999
			MIL-T-81714	
			MIL-C-5015	


	Art N°	Color/código	Tamaño	Conector serie
	M81969/29-02	Red	8	MIL-C-26482
				MIL-C-81703
				MIL-C-83723
				MIL-C-38999
				MIL-T-81714
			MIL-C-5015	

	Art N°	Color/código	Tamaño	Conector serie
	M15570-20-1 **	Red/White	20	MIL-C-26482
				MIL-C-83723
				MIL-C-38999
				MIL-T-81714
	** Has Insertion Depth Line for use with Deutsch Connectors !			
M15570-22-1	Yellow/White	22	MIL-C-815111 and Deutsch Sub Miniature Types RE, RSM,RTK, etc.	

### Removal Tool - Plastic composition

	Art N°	Color/código	Tamaño	Conector serie
	ACET20-11	Green	20	MIL-C-24308
	ACET20-15 **	Green	20	MIL-C-81659
	** Removes Pin/Soc Contacts with oversized wire inculation !			As well as Cannon and Matrix Equivalents

### Removal Tool Probe Tip - Plastic composition

	Art N°	Color/código	Tamaño	Conector serie
	MS3448-001A	Red	20	MIL-C-26482
	MS3448-001B	Blue	16	MIL-C-81703
	MS3448-001C	Yellow	12	MIL-C-83723
				MIL-C-83733
				MIL-C-815111 Class L
			MIL-C-5015	

# 37° Perforadoras

## 37° FLARING TOOLS



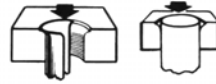
437-FB

### 37° FLARING TOOL

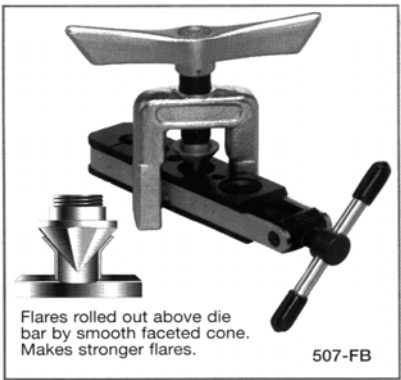
For 3/16", 1/4", 5/16", 3/8", 1/2" and 5/8" O.D. tubing.

**437-FB** For use with soft copper, aluminum and brass tubing. Hardened steel chrome finished cone makes exceptionally smooth, high strength flares with a radius at base of flare – instead of the sharp angle formed by ordinary tools. New slip-on yoke permits use in tight quarters, allows flaring where there is little space between nut and tube end. New feed screw design provides smooth, easier operation. Positive gripping and self-gauging of tube for exact flare size. Sliding die blocks lock in place by clamp action. Satin chrome and black finish. Wt. 1.75 lbs.

**Forms Stronger Flares**  
Stronger flares assured by smooth, even radius formed at base of every flare by engineered chamfer.



**Self-Gauging**  
Just insert tube flush with top of die for accurate flare size.



Flares rolled out above die bar by smooth faceted cone. Makes stronger flares.

507-FB

### 37° ROL-AIR® FLARING TOOL

For 3/16", 1/4", 5/16", 3/8", 1/2" and 5/8" O.D. tubing.

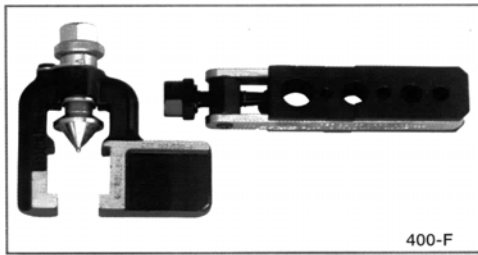
**507-FB** For use with soft copper, aluminum and brass tubing. Faceted, hard chrome finished cone rolls out perfect 37° flares above die block-then automatically burnishes flare face. Original wall thickness is maintained at base of flare. New slip-on yoke permits use in tight quarters where there is little space between nut and tube end. Larger handle, with better leverage, and precision threads on feed screw make flaring effortless. Heat treated dies firmly grip tubing. Satin chrome and black nickel finish. Wt. 1.75 lbs.

### METRIC SIZE 37° ROL-AIR® FLARING TOOL

**507-FBM** Metric 37° Rol-Air® flaring tool. Same as 507-FB except for metric size tubing 6mm, 8mm, 10mm, 12mm, 14mm, 15mm O.D. tubing.

### 37° ROL AIR® FLARING TOOLS

For 3/16", 1/4", 5/16", 3/8", 1/2" and 5/8" O.D. tubing.



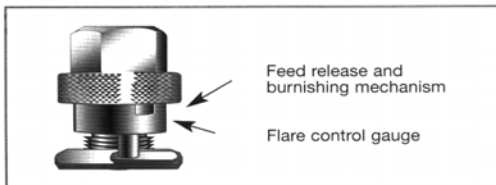
400-F

**400-F** Forms 37° flares to Government Specifications in steel, stainless steel (including MIL-T-6845), titanium and other metal tubing. Positive stop gauge assures correct size of flare. Special burnishing action polishes flare face. Three rollers in flaring cone roll out 37° flare above die block. Roller action cuts effort required; maintains original wall thickness-eliminates stress concentration. Extension on yoke for clamping in vise. Satin chrome and black nickel finish. Furnished in sturdy tool case. Wt. 2.5 lbs.

**401-FA** Reaming yoke for 1/4" to 5/8" O.D. tubing. Recommended for use with steel and stainless steel tubing for proper flaring. Wt. 0.7 lbs.

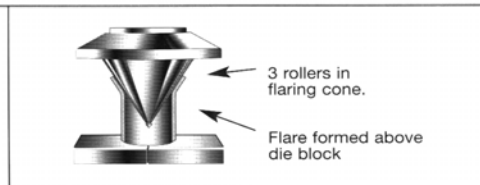
**402-FA** Flaring and reaming kit. Contains No. 400-F Flaring Tool and No.401-FA Reaming Yoke for 1/4" to 5/8" O.D. tubing. In tool case. Wt. 3.2 lbs.

Conforms to Federal Specification GGG-F-451a. Type 1, Class 1, Style A.



Feed release and burnishing mechanism

Flare control gauge



3 rollers in flaring cone.

Flare formed above die block

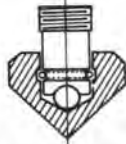


Feed screw controls depth of reaming

401-FA

# 37° Perforadoras

## 37° FLARING TOOLS

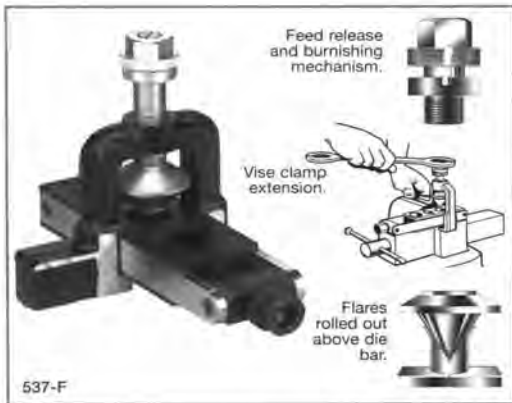


Ball thrust bearing in flaring cone minimizes friction, makes operation easier.

### 37° HEAVY DUTY FLARING TOOL

For 1/8", 3/16", 1/4", 5/16", 3/8", and 1/2" O.D. tubing.

447-F Forms 37° flares in annealed stainless steel (MIL-T-6345 or AMS5566), cold drawn stainless steel and annealed copper or aluminum tubing. Built to withstand continuous rugged service. Ball thrust bearing mechanism reduces effort required. Hardened tool steel die features non-slip grip of tubing, even after repetitive flaring. Bar has vise extension. Wt. 3.25 lbs.



Feed release and burnishing mechanism.

Vise clamp extension.

Flares rolled out above die bar.

### LARGE SIZE 37° ROL-AIR® FLARING TOOLS

For 3/4", 7/8", 1", 1-1/4", 1-1/2" and 2" O.D. tubing.

Three cylinders in flaring cone roll out 37° flare above die block. Flares soft steel, copper, aluminum and fully annealed stainless steel tubing. Roller action cuts effort required; maintains original wall thickness; eliminates stress concentration. Feed release and burnishing action. Vise clamp extension on yoke. Heat treated dies clamp tubing without marking it. Satin chrome and black nickel finish. Furnished in tool case.

537-F Flares and burnishes 3/4", 7/8", 1", and 1-1/4" O.D. tubing. Wt. 13.0 lbs.

637-F Flares and burnishes 1-1/4", 1-1/2", and 2" O.D. tubing. Wt. 13.0 lbs.

\*Conforms to Federal Specification GGG-F-451a, Type 1, Class 1, Style B.



407-FA

### 37° PRECISION FLARING TOOL

For 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1", 1-1/4" and 1-1/2" O.D. tubing.

407-FA Precision tool flares (37°) 1/8 hard stainless steel and other tubing to extremely close tolerances. Swivel-head clamp locks tubing in smooth bore die blocks. Lathe type tube feed. Flares rolled out by ball-bearing mounted concentric flaring cone. Tool must be clamped in vise. Will flare 1/8 hard stainless steel tubing in the sizes and wall thicknesses listed below. In some cases these wall thicknesses can be exceeded when flaring aluminum, copper or soft steel tubing. In tool case. Wt. 50.0 lbs.

Tube O.D. (in.)	Wall Thickness (in.)	Tube O.D. (in.)	Wall Thickness (in.)
1/8"	.020, .028	5/8"	.035, .049
3/16"	.010, .028	3/4"	.028, .035, .049
1/4"	.016, .028, .035	1"	.028, .035
5/16"	.035	1-1/4"	.035, .049
3/8"	.028, .035	1-1/2"	.035, .049, .065
1/2"	.035, .049		

#### Facing and Deburring Attachments. (Not included with 407-FA)

407-F Same as 407-FA, except includes the facing and deburring attachments.  
S74460 Internal deburring tool for 1/8" to 1/2" O.D. tubing.  
S74455 Internal deburring tool for 5/8" to 1-1/2" O.D. tubing.  
S74447 External deburring tool.  
S74462 Facing tool.



## Máquinas de acabado de tuberías TUBE/PIPE END-FINISHING MACHINES



**2-CPV**



**3-CPV**

### CAPACITY RANGE FOR END-FINISHING MACHINES

		Tube outer diameter								
		0	1 in	2 in	3 in	4 in	5 in	6 in	7 in	8 in
<b>FLARE</b> 	2C, 2CP, 2CPV									
	3CPV									
	8CP									
	DF									
<b>BEAD</b> 	2C, 2CP, 2CPV									
	3CPV									
	8CP									
	DF									
<b>SQUARE/ DEBURR</b> 	2C, 2CP, 2CPV									
	3CPV									
	8CP									
	DF									
<b>DOUBLE FLARE</b> 	2C, 2CP, 2CPV									
	3CPV									
	8CP									
	DF									

### Rebabadores de metal duro CARBIDE DEBURRING BLADES

Grosor 1,59 mm / THICKNESS 1/16"

Usado con cabezas rebabadoras / USED IN CONJUNCTION WITH SQUARING & DEBURRING HEADS



**437C-1      437C-2      437C-3**

Descripción	DESCRIPTION	Art.Nr./PART-NO.
Kit completo	CPL. SET	<b>437C</b>
Cuadrada	SQUARE BLADE	<b>437C-1</b>
Interior	INSIDE BLADE	<b>437C-2</b>
Exterior	OUTSIDE BLADE	<b>437C-3</b>

# Heli-Coil – Máquina de insertar

## HELI-COIL HAND INSERTING TOOLS

NOMINAL THREAD SIZE	HAND INSERTING TOOLS 3 Dia. Lengths Thru 7/8 2 Dia. Lengths 1" and up	NOMINAL THREAD SIZE	HAND INSERTING TOOLS 3 Dia. Lengths Thru 7/8 2 Dia. Lengths 1" and up
<b>UNIFIED COARSE</b>		<b>UNIFIED FINE</b>	
2 (.086)-56	551-02	3 (.099)-56	7552-03
3 (.099)-48	551-03	4 (.112)-48	7552-04
4 (.112)-40*	7551-04	6 (.138)-40	7552-06
5 (.125)-40	7551-05	8 (.164)-36	7552-2
6 (.138)-32	7551-06	10 (.190)-32	7552-3
8 (.164)-32*	7551-2	1/4 (.2500)-28	7552-4
10 (.190)-24*	7551-3	5/16 (.3125)-24	7552-5
12 (.216)-24	7551-1	3/8 (.3750)-24	7552-6
1/4 (.2500)-20	7551-4	7/16 (.4375)-20	7552-7
		1/2 (.5000)-20	7552-8
5/16 (.3125)-18	7551-5	9/16 (.5625)-18	535-9
3/8 (.3750)-16	7551-6	5/8 (.6250)-18	535-10
7/16 (.4375)-14	7551-7	3/4 (.7500)-16	535-12
1/2 (.5000)-13	7551-8	7/8 (.8750)-14	535-14
9/16 (.5625)-12	3724-9	1 (1.0000)-14	535-16
5/8 (.6250)-11	3724-10	1 (1.0000)-12	535-161
3/4 (.7500)-10	3724-12	1-1/8 (1.1250)-12	535-18
7/8 (.8750)-9	3724-14	1-1/4 (1.2500)-12	535-20
1 (1.0000)-8	3724-16	1-3/8 (1.3750)-12	535-22
1-1/8 (1.1250)-7	3724-18	1-1/2 (1.5000)-12	535-24
1-1/4 (1.2500)-7	3724-20		
1-3/8 (1.3750)-6	3724-22		
1-1/2 (1.5000)-6	3724-24		

\*Special tools required to install Phosphor Bronze and Inconel X Inserts in these sizes. To order add "9" to the part number shown.

The various designs of *Heli-Coil* hand inserting tools are pictured. Generally, finer pitch inserts are proportionately larger in the free state than coarse pitch inserts and thus have to be "pre-wound" to a smaller diameter for installation. Large coarse pitch inserts (and 2-56 and 3-48 inserts) need only a threaded mandrel tool for installation.



TABLE X — HELI-COIL HAND INSERTING TOOL DIMENSIONS

SIZE	A	B	C	SIZE	A	B	C	SIZE	A	B	C
<b>TYPE I</b>				<b>TYPE II — UNC &amp; UNF (cont'd)</b>				<b>TYPE III — UNC</b>			
2-56	2-7/16	2	5/16	7/16"	5-1/4	25/32	3-23/32	9/16-18	5-3/8	2-7/8	1-1/8
3-56	6	3	5/8	1/2"	5-1/2	7/8	3-23/32	5/8-18	5-3/8	2-7/8	1-1/8
<b>TYPE II — UNC &amp; UNF</b>				<b>TYPE III — UNC</b>				<b>TYPE IV — UNF</b>			
#4	4-5/8	3/8	2-9/32	9/16-12	4-7/8	1-13/16	4	3/4-16	6	2-7/8	1-1/2
#5	4-5/8	3/8	2-9/32	5/8-11	4-7/8	2	4	7/8-14	6-3/8	2-7/8	1-1/2
#6	4-5/8	3/8	2-9/32	3/4-10	4-7/8	2-3/8	4	1-14	5-7/8	2-7/8	1-5/8
#8	4-5/8	3/8	2-9/32	7/8-9	4-7/8	2-3/4	4-1/2	1-12	5-7/8	2-7/8	1-5/8
#10	4-5/8	15/32	2-9/32	1-8	4-7/8	2-1/8	4-1/2	1-1/8-12	6-5/16	3-11/16	2
#12	4-5/8	33/64	2-17/32	1-1/8-7	6-3/4	2-1/2	6	1-1/4-12	6-13/16	3-5/16	2
1/4"	4-5/8	33/64	2-17/32	1-1/4-7	6-3/4	2-3/4	6	1-3/8-12	7-5/16	3-9/16	2-1/4
5/16"	4-5/8	5/8	3-23/32	1-3/8-6	6-3/4	3	6	1-1/2-12	7-13/16	3-13/16	2-1/4
3/8"	5	45/64	3-23/32	1-1/2-6	6-3/4	3-1/4	6				

# Heli-Coil – Machos manuales

## HELI-COIL HAND TAPS

**STRAIGHT FLUTE** - Widely used for general hand and machine tapping operations. Available in sizes thru 1½".

### PLUG STYLE



(4 Thread Chamfer) - Used in thru holes and in blind holes that allow for ample chip clearance. Are easier starting and require less tapping torque than bottoming taps.

### BOTTOMING STYLE



(2 Thread Chamfer) - Used in blind holes drilled to a minimum depth and that require threads close to the bottom of the hole.

**SPIRAL POINTED & SPIRAL FLUTE** - Used for efficient chip disposal in production tapping operations. Available in sizes thru 1½".

### SPIRAL POINTED - PLUG



(4 Thread Chamfer) - Incorporates an angular grind at the point end of the tap which shears chips and drives them forward of the tap. Used widely in long thru holes and blind holes with ample chip clearance. They are free cutting and provide increased tap strength. Not recommended for abrasive materials.

### HIGH SPIRAL FLUTE - BOTTOMING



(2 Thread Chamfer) - Have spiral flute for efficiently pulling stringy chips out of deep or blind holes in soft materials.

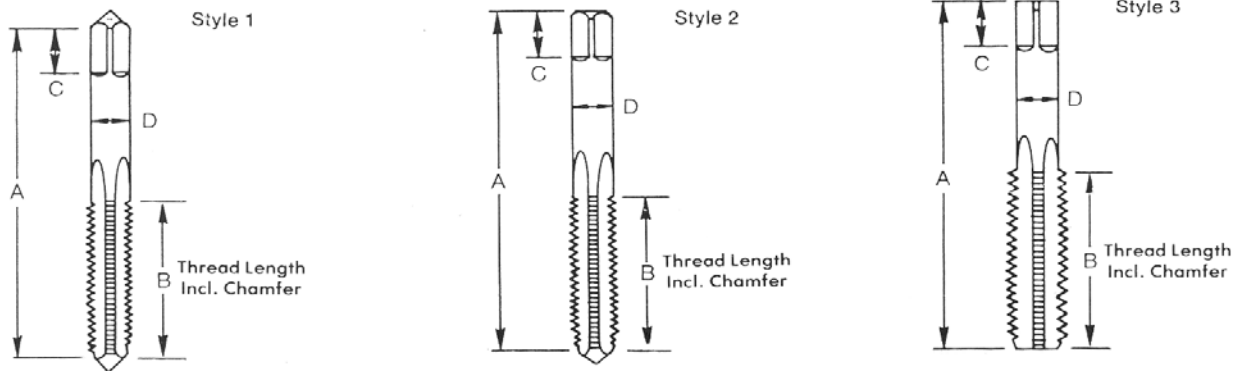
**ROUGHING TAPS** - Are available for difficult tapping operations where it is desirable to reduce the load on the finishing tap. Available in sizes 7/16 - 1".

TABLE VI - HELI-COIL STI TAP PART NUMBERS

NOMINAL THREAD SIZE	STRAIGHT FLUTE				SPIRAL POINT		HIGH SPIRAL FLUTE		ROUGHING TAP
	PLUG		BOTTOMING		PLUG		BOTTOMING		
	3B	2B	3B	2B	3B	2B	3B	2B	
<b>UNIFIED COARSE</b>									
2 (.086)-56	02CPB	02CPA	02CBB	02CBA	02CSB	02CSA	5905-02	6905-02	
3 (.099)-48	03CPB	03CPA	03CBB	03CBA	03CSB	03CSA	5905-03	6905-03	
4 (.112)-40	04CPB	04CPA	04CBB	04CBA	04CSB	04CSA	5905-04	6905-04	
5 (.125)-40	05CPB	05CPA	05CBB	05CBA	05CSB	05CSA	5905-05	6905-05	
6 (.138)-32	06CPB	06CPA	06CBB	06CBA	06CSB	06CSA	5905-06	6905-06	
8 (.164)-32	2CPB	2CPA	2CBB	2CBA	2CSB	2CSA	5905-2	6905-2	
10 (.190)-24	3CPB	3CPA	3CBB	3CBA	3CSB	3CSA	5905-3	6905-3	
12 (.216)-24	1CPB	1CPA	1CBB	1CBA	1CSB	1CSA	5905-1	6905-1	
1/4 (.2500)-20	4CPB	4CPA	4CBB	4CBA	4CSB	4CSA	5905-4	6905-4	
5/16 (.3125)-18	5CPB	5CPA	5CBB	5CBA	5CSB	5CSA	5905-5	6905-5	
3/8 (.3750)-16	6CPB	6CPA	6CBB	6CBA	6CSB	6CSA	5905-6	6905-6	
7/16 (.4375)-14	7CPB	7CPA	7CBB	7CBA	7CSB	7CSA	5905-7	6905-7	7CRU
1/2 (.5000)-13	8CPB	8CPA	8CBB	8CBA	8CSB	8CSA	5905-8	6905-8	8CRU
9/16 (.5625)-12	187-9	38187-9	4187-9	43187-9					9CRU
5/8 (.6250)-11	8187-10	18187-10	10187-10	20187-10					10CRU
3/4 (.7500)-10	8187-12	18187-12	10187-12	20187-12					12CRU
7/8 (.8750)-9	8187-14	18187-14	10187-14	20187-14					14CRU
1 (1.0000)- 8	8187-16	18187-16	10187-16	20187-16					16CRU
1-1/8 (1.1250)- 7	8187-18	18187-18	10187-18	20187-18					
1-1/4 (1.2500)- 7	8187-20	18187-20	10187-20	20187-20					
1-3/8 (1.3750)- 6	8187-22	18187-22	10187-22	20187-22					
1-1/2 (1.5000)- 6	8187-24	18187-24	10187-24	20187-24					
<b>UNIFIED FINE</b>									
3 (.099)-56	03FPB	03FPA	03FBB	03FBA	03FSB	03FSA	5906-03	6906-03	
4 (.112)-48	04FPB	04FPA	04FBB	04FBA	04FSB	04FSA	5906-04	6906-04	
6 (.138)-40	06FPB	06FPA	06FBB	06FBA	06FSB	06FSA	5906-06	6906-06	
8 (.164)-36	2FPB	2FPA	2FBB	2FBA	2FSB	2FSA	5906-2	6906-2	
10 (.190)-32	3FPB	3FPA	3FBB	3FBA	3FSB	3FSA	5906-3	6906-3	
1/4 (.2500)-28	4FPB	4FPA	4FBB	4FBA	4FSB	4FSA	5906-4	6906-4	
5/16 (.3125)-24	5FPB	5FPA	5FBB	5FBA	5FSB	5FSA	5906-5	6906-5	
3/8 (.3750)-24	6FPB	6FPA	6FBB	6FBA	6FSB	6FSA	5906-6	6906-6	
7/16 (.4375)-20	7FPB	7FPA	7FBB	7FBA	7FSB	7FSA	5906-7	6906-7	7FRU
1/2 (.5000)-20	8FPB	8FPA	8FBB	8FBA	8FSB	8FSA	5906-8	6906-8	8FRU
9/16 (.5625)-18	38193-9	18193-9	43193-9	20193-9					9FRU
5/8 (.6250)-18	8193-10	18193-10	10193-10	20193-10					10FRU
3/4 (.7500)-16	8193-12	18193-12	10193-12	20193-12					12FRU
7/8 (.8750)-14	8193-14	18193-14	10193-14	20193-14					14FRU
1 (1.0000)-14	8193-16	18193-16	10193-16	20193-16					16FRU
1 (1.0000)-12	8193-161	18183-161	10193-161	20193-161					161FRU
1-1/8 (1.1250)-12	8193-18	18193-18	10193-18	20193-18					
1-1/4 (1.2500)-12	8193-20	18193-20	10193-20	20193-20					
1-3/8 (1.3750)-12	8193-22	18193-22	10193-22	20193-22					
1-1/2 (1.5000)-12	8193-24	18193-24	10193-24	20193-24					

# Heli-Coil – Machos manuales

## HELI-COIL HAND TAPS



**TABLE VII — HELI-COIL STI TAP DIMENSIONS**

NOMINAL THREAD SIZE	TAP DIMENSIONS					NUMBER OF FLUTES			H LIMITS		
	LENGTH OVER ALL A	LENGTH OF THREAD B	LENGTH OF SQUARE C	MAX DIA. OF SHANK D	MAX SIZE OF SQUARE	STRAIGHT FLUTE	SPIRAL POINT PLUG	SPIRAL FLUTE BOT.	STYLE*	3B	2B
<b>UNIFIED COARSE</b>											
2 (.086)-56	1-7/8	9/16	3/16	.141	.110	3	2	2	1	H1	H2
3 (.099)-48	1-15/16	5/8	3/16	.141	.110	3	2	2	1	H1	H2
4 (.112)-40	2	11/16	3/16	.141	.110	3	2	2	1	H1	H2
5 (.125)-40	2-1/8	3/4	1/4	.168	.131	3	2	3	1	H1	H2
6 (.138)-32	2-3/8	7/8	1/4	.194	.152	3	2	3	1	H2	H3
8 (.164)-32	2-3/8	15/16	9/32	.220	.165	3	2	3	1	H2	H3
10 (.190)-24	2-1/2	1	5/16	.255	.191	3	2	3	2	H2	H3
12 (.216)-24	2-23/32	1-1/8	3/8	.318	.238	3	2	3	2	H2	H3
1/4 (.2500)-20	2-23/32	1-1/8	3/8	.318	.238	3	2	3	2	H2	H3
5/16 (.3125)-18	2-15/16	1-1/4	7/16	.381	.286	4	3	3	2	H3	H4
3/8 (.3750)-16	3-3/8	1-21/32	7/16	.367	.275	4	3	3	3	H3	H4
7/16 (.4375)-14	3-19/32	1-21/32	1/2	.429	.322	4	3	4	3	H3	H4
1/2 (.5000)-13	3-13/16	1-13/16	9/16	.480	.360	4	3	4	3	H3	H4
9/16 (.5625)-12	4-1/32	1-13/16	5/8	.542	.406	4	—	—	3	H3	H4
5/8 (.6250)-11	4-1/4	2	11/16	.590	.442	4	—	—	3	H3	H4
3/4 (.7500)-10	4-11/16	2-7/32	3/4	.697	.523	4	—	—	3	H3	H5
7/8 (.8750)-9	5/8	2-1/2	13/16	.800	.600	4	—	—	3	H3	H5
1 (1.0000)-8	5-3/4	2-9/16	1	1.021	.766	4	—	—	3	H4	H6
1-1/8 (1.1250)-7	6-1/16	3	1-1/16	1.108	.831	4	—	—	3	H4	H6
1-1/4 (1.2500)-7	6-3/8	3	1-1/8	1.233	.925	4	—	—	3	H4	H6
1-3/8 (1.3750)-6	6-11/16	3-3/16	1-1/8	1.305	.979	6	—	—	3	H6	H8
1-1/2 (1.5000)-6	7	3-3/16	1-1/4	1.430	1.072	6	—	—	3	H6	H8
<b>UNIFIED FINE</b>											
3 (.099)-56	1-15/16	5/8	3/16	.141	.110	3	2	2	1	H1	H2
4 (.112)-48	2	11/16	3/16	.141	.110	3	2	2	1	H1	H2
6 (.138)-40	2-1/8	3/4	1/4	.168	.131	3	2	3	1	H1	H2
8 (.164)-36	2-3/8	15/16	9/32	.220	.165	3	2	3	1	H1	H2
10 (.190)-32	2-1/2	1	5/16	.255	.191	3	2	3	2	H2	H3
1/4 (.2500)-28	2-23/32	1-1/8	3/8	.318	.238	3	2	3	2	H2	H3
5/16 (.3125)-24	2-15/16	1-1/4	7/16	.381	.286	4	3	3	2	H2	H3
3/8 (.3750)-24	3-5/32	1-7/16	13/32	.323	.242	4	3	3	3	H2	H3
7/16 (.4375)-20	3-3/8	1-21/32	7/16	.367	.275	4	3	3	3	H3	H4
1/2 (.5000)-20	3-19/32	1-21/32	1/2	.429	.322	4	3	4	3	H3	H4
9/16 (.5625)-18	3-13/16	1-13/16	9/16	.480	.360	4	—	—	3	H3	H4
5/8 (.6250)-18	4-1/32	1-13/16	5/8	.542	.406	4	—	—	3	H3	H4
3/4 (.7500)-16	4-15/32	2	11/16	.652	.489	4	—	—	3	H3	H4
7/8 (.8750)-14	5-1/8	2-1/2	13/16	.800	.600	4	—	—	3	H3	H4
1 (1.0000)-14	5-7/16	2-9/16	7/8	.896	.672	4	—	—	3	H4	H6
1 (1.0000)-12	5-7/16	2-9/16	7/8	.896	.672	4	—	—	3	H4	H6
1-1/8 (1.1250)-12	5-3/4	2-9/16	1	1.021	.766	6	—	—	3	H4	H6
1-1/4 (1.2500)-12	6-1/16	3	1-1/16	1.108	.831	6	—	—	3	H4	H6
1-3/8 (1.3750)-12	6-3/8	3	1-1/8	1.233	.925	6	—	—	3	H4	H6
1-1/2 (1.5000)-12	6-11/16	3-3/16	1-1/8	1.305	.979	6	—	—	3	H4	H6

\*NOTE: All bottoming taps have male center on thread end removed.

# Heli-Coil – Indicadores a rosca

## HELI-COIL THREAD GAGES

### HeliCoil THREAD GAGES

Accuracy of the finished thread, when the insert is installed, is dependent upon the accuracy of the tapped hole. If the finished tapped hole gages satisfactorily, the installed insert will be within the thread tolerance. **It is not necessary to gage the installed insert.** After the insert is installed, the GO thread plug gage may not enter freely; however, the insert will always seat itself when the bolt or screw is installed and tightened. (Reference MS33537)

Gage handles and all gage nibs are marked with the extreme product limits for the particular size and class of fit. (See Page 11, Table 5, Pitch Diameter Limits)

When gaging tapped holes which have been thoroughly cleaned or which have a protective finish applied, the gage should always be lubricated with light oil.

HI nib may enter provided a definite drag results on or before 3rd turn from entry - Ref. FED-STD-H28, Screw Thread Standards for Federal Services.

Heli-Coil sTi Thread Plug Gages for checking the tapped hole are listed in the accompanying table.

Working gages provide a guaranteed minimum wear allowance on the pitch diameter of the GO members of two ten thousandths of an inch (.0002). These gages are recommended for production in sizes 1/2 inch and smaller.

Reference Gages have pitch diameters on or close to minimum (basic size). They are essentially laboratory or master gages and should be used in case of conflict between two working gages, which sometimes arises due to one of them having received more use and wear.

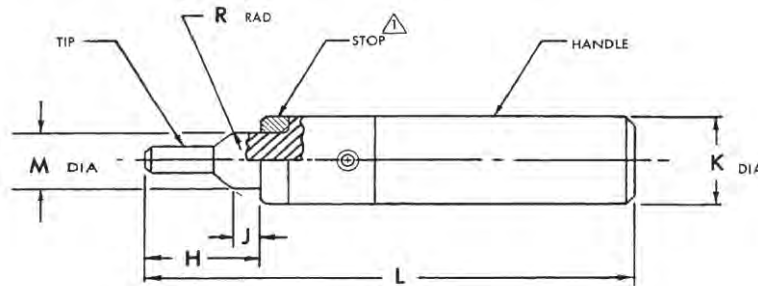
TABLE VIII — HELI-COIL THREAD PLUG GAGES				
NOMINAL THREAD SIZE	WORKING GAGES		REFERENCE GAGES	
	SUGGESTED FOR LONGER WEAR LIFE		SUGGESTED AS MASTER GAGES	
	3B	2B	3B	2B
<b>UNIFIED COARSE</b>				
2 (.086)-56	3688-02	1442-02	1688-02	1440-02
3 (.099)-48	3688-03	1442-03	1688-03	1440-03
4 (.112)-40	3688-04	1442-04	1688-04	1440-04
5 (.125)-40	3688-05	1442-05	1688-05	1440-05
6 (.138)-32	3688-06	1442-06	1688-06	1440-06
8 (.164)-32	3688-2	1442-2	1688-2	1440-2
10 (.190)-24	3688-3	1442-3	1688-3	1440-3
12 (.216)-24	3688-1	1442-1	1688-1	1440-1
1/4 (.2500)-20	3688-4	1442-4	1688-4	1440-4
5/16 (.3125)-18	3688-5	1442-5	1688-5	1440-5
3/8 (.3750)-16	3688-6	1442-6	1688-6	1440-6
7/16 (.4375)-14	3688-7	1442-7	1688-7	1440-7
1/2 (.5000)-13	3688-8	1442-8	1688-8	1440-8
9/16 (.5625)-12			1688-9	1440-9
5/8 (.6250)-11			1688-10	1440-10
3/4 (.7500)-10			1688-12	1440-12
7/8 (.8750)-9			1688-14	1440-14
1 (1.0000)-8			1688-16	1440-16
1-1/8 (1.1250)-7			1688-18	1440-18
1-1/4 (1.2500)-7			1688-20	1440-20
1-3/8 (1.3750)-6			1688-22	1440-22
1-1/2 (1.5000)-6			1688-24	1440-24
<b>UNIFIED FINE</b>				
3 (.099)-56	3694-03	1443-03	1694-03	1441-03
4 (.112)-48	3694-04	1443-04	1694-04	1441-04
6 (.138)-40	3694-06	1443-06	1694-06	1441-06
8 (.164)-36	3694-2	1443-2	1694-2	1441-2
10 (.190)-32	3694-3	1443-3	1694-3	1441-3
1/4 (.2500)-28	3694-4	1443-4	1694-4	1441-4
5/16 (.3125)-24	3694-5	1443-5	1694-5	1441-5
3/8 (.3750)-24	3694-6	1443-6	1694-6	1441-6
7/16 (.4375)-20	3694-7	1443-7	1694-7	1441-7
1/2 (.5000)-20	3694-8	1443-8	1694-8	1441-8
9/16 (.5625)-18			1694-9	1441-9
5/8 (.6250)-18			1694-10	1441-10
3/4 (.7500)-16			1694-12	1441-12
7/8 (.8750)-14			1694-14	1441-14
1 (1.0000)-14			1694-16	1441-16
1 (1.0000)-12			1694-161	1441-161
1-1/8 (1.1250)-12			1694-18	1441-18
1-1/4 (1.2500)-12			1694-20	1441-20
1-3/8 (1.3750)-12			1694-22	1441-22
1-1/2 (1.5000)-12			1694-24	1441-24



HELI-COIL sTi GAGE WITH GO AND HI MEMBERS

# SLIMSERT – Insertores manuales

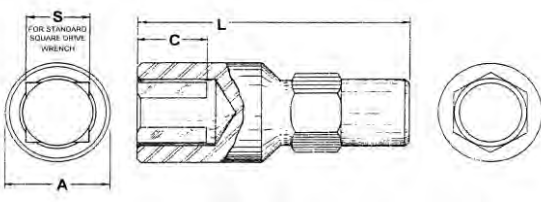
## SLIMSERT - HAND INSERTING TOOLS



### Herramienta de estampado

Herramienta	TAPÓN STOP	H +/- .015	J +.000 -.010	K DIA	L +/- .060	M DIA min.	R RAD
SR 08 S-A	SR 08 S-2	.126	.038	.31	3.808	.103	.015
SR 11 S-A	SR 11 S-2	.185	.051	.43	3.808	.103	.015
SR 14 S-A	SR 14 S-2	.205	.055	.43	3.985	.161	.015
SR 16 S-A	SR 16 S-2	.205	.061	.43	3.985	.192	.015
SR 19 S-A	SR 19 S-A-2	.273	.077	.43	4.055	.211	.015
SR 25 S-A	SR 25 S-2	.348	.075	.50	4.085	.280	.030
SR 31 S-A	SR 31 S-A-2	.423	.072	.56	4.270	.345	.040
SR 37 S-A	SR 37 S-A-2	.513	.096	.62	4.488	.408	.045
SR 43 S-A	SR 43 S-2	.548	.100	.62	4.548	.470	.045
SR 50 S-A	SR 50 S-A-2	.548	.100	.75	4.665	.536	.045
SR 56 S-A	SR 56 S-2	.501	.119	1.00	4.905	.605	.040
SR 62 S-A	SR 62 S-2	.501	.119	1.00	4.905	.669	.040
SR 75 S-A	SR 75 S-2	.501	.130	1.00	4.905	.798	.075
SR 87 S-A	SR 87 S-2	.501	.130	1.25	5.148	.929	.075
SR 93 S-A	SR 93 S-2	.501	.147	1.38	5.295	.985	.075

**Notes:** Tapones de repuesto de nylon disponibles  
Si cambia el tapón, presione para que encaje sobre el resalte de la fresa

	Art N°	A DIA.	C	L (REF)	S
	SR 11 W-A	.44	.28	.84	1/4"
SR 14 W-A	.44	.28	.87	1/4"	
SR 16 W-A	.44	.28	.90	1/4"	
SR 19 W-A	.44	.28	.94	1/4"	
SR 25 W-A	.44	.28	1.03	1/4"	
SR 31 W-A	.44	.28	1.12	1/4"	
SR 37 W-A	.62	.40	1.39	3/8"	
SR 43 W-A	.62	.40	1.48	3/8"	
SR 50 W-A	.62	.40	1.58	3/8"	
SR 56 W-A	.75	.40	1.66	3/8"	
SR 62 W-A	.88	.40	1.75	3/8"	
SR 75 W-A	1.0	.40	1.94	3/8"	

### Wrench - 6 Point

**Observación:**

Las "KT8000H..." están obsoletas y han sido reemplazadas por las de la lista adjunta.

Se necesita una llave y una herramienta de estampado.

**Notice:**

Installation Tools "KT8000H..." are obsolete and replaced by the tools listed beside.

You need now 1 Wrench Tool and 1 Swage Tool.

Ref.antigua	Herramienta nueva		Nueva llave
KT8000H-02	SR 08 S-A	+	-
KT8000H-04	SR 11 S-A	+	SR 11 W-A
KT8000H-06	SR 14 S-A	+	SR 14 W-A
KT8000H-08	SR 16 S-A	+	SR 16 W-A
KT8000H-3	SR 19 S-A	+	SR 19 W-A
KT8000H-4	SR 25 S-A	+	SR 25 W-A
KT8000H-5	SR 31 S-A	+	SR 31 W-A
KT8000H-6	SR 37 S-A	+	SR 37 W-A
KT8000H-7	SR 43 S-A	+	SR 43 W-A
KT8000H-8	SR 50 S-A	+	SR 50 W-A
KT8000H-9	SR 56 S-A	+	SR 56 W-A
KT8000H-10	SR 62 S-A	+	SR 62 W-A
KT8000H-12	SR 75 S-A	+	SR 75 W-A
KT8000H-14	SR 87 S-A	+	-
KT8000H-15	SR 93 S-A	+	-

**Tabla de equivalencias decimales**  
**Fractional, Wire, Letter, Metric**

Broca		Decimal	Broca		Decimal	Broca		Decimal	Broca		Decimal
	mm	Equiv.		mm	Equivr		mm	Equiv.		mm	Equiv.
-	0,10	.0039									
-	0,20	.0079	45	2,08	.0820	5	5,22	.2055	7/16	11,11	.4375
-	0,25	.0098	44	2,18	.0860	4	5,31	.2090	29/64	11,51	.4531
-	0,30	.0118	43	2,26	.0890	3	5,41	.2130	15/32	11,91	.4688
80	0,34	.0135	42	2,37	.0935	7/32	5,56	.2188	-	12,00	.4724
79	0,37	.0145	3/32	2,38	.0938	2	5,61	.2210	31/64	12,30	.4844
1/64	0,40	.0156	41	2,44	.0960	1	5,79	.2280	1/2	12,70	.5000
78	0,41	.0160	40	2,50	.0980	A	5,94	.2340	-	13,00	.5118
77	0,46	.0180	39	2,53	.0995	15/64	5,95	.2344	33/64	13,10	.5156
-	0,50	.0197	38	2,58	.1015	--	6,00	.2362	17/32	13,49	.5312
76	0,51	.0200	37	2,64	.1040	B	6,05	.2380	35/64	13,89	.5469
75	0,53	.0210	36	2,71	.1065	C	6,15	.2420	-	14,00	.5512
74	0,57	.0225	7/64	2,78	.1094	D	6,25	.2460	9/16	14,29	.5625
-	0,60	.0236	35	2,79	.1100	1/4	6,35	.2500	37/64	14,68	.5781
73	0,61	.0240	34	2,82	.1110	E	6,35	.2500	-	15,00	.5906
72	0,64	.0250	33	2,87	.1130	F	6,53	.2570	19/32	15,08	.5938
71	0,66	.0260	32	2,95	.1160	G	6,63	.2610	39/64	15,48	.6094
-	0,70	.0276	-	3,00	.1181	17/64	6,75	.2656	5/8	15,88	.6250
70	0,71	.0280	31	3,05	.1200	H	6,76	.2660	-	16,00	.6299
69	0,74	.0292	1/8	3,18	.1250	I	6,91	.2720	41/64	16,27	.6406
-	0,75	.0295	30	3,26	.1285	-	7,00	.2756	21/32	16,67	.6562
68	0,79	.0310	29	3,45	.1360	J	7,04	.2770	-	17,00	.6693
1/32	0,79	.0313	28	3,57	.1405	K	7,14	.2810	43/64	17,07	.6719
-	0,80	.0315	9/64	3,57	.1406	9/32	7,14	.2812	11/16	17,46	.6875
67	0,81	.0320	27	3,66	.1440	L	7,37	.2900	45/64	17,86	.7031
66	0,84	.0330	26	3,73	.1470	M	7,49	.2950	-	18,00	.7087
65	0,89	.0350	25	3,80	.1495	19/64	7,54	.2969	23/32	18,26	.7188
-	0,90	.0354	24	3,86	.1520	N	7,67	.3020	47/64	18,65	.7344
64	0,91	.0360	23	3,91	.1540	5/16	7,94	.3125	-	19,00	.7480
63	0,94	.0370	5/32	3,97	.1562	-	8,00	.3150	3/4	19,05	.7500
62	0,97	.0380	22	3,99	.1570	O	8,03	.3160	49/64	19,45	.7656
61	0,99	.0390	-	4,00	.1575	P	8,20	.3230	25/32	19,84	.7812
-	1,00	.0394	21	4,04	.1590	21/64	8,33	.3281	-	20,00	.7874
60	1,02	.0400	20	4,09	.1610	Q	8,43	.3320	51/64	20,24	.7969
59	1,04	.0410	19	4,22	.1660	R	8,61	.3390	13/16	20,64	.8125
58	1,07	.0420	18	4,31	.1695	11/32	8,73	.3438	-	21,00	.8268
57	1,09	.0430	11/64	4,37	.1719	S	8,84	.3480	53/64	21,03	.8281
56	1,18	.0465	17	4,39	.1730	-	9,00	.3543	27/32	21,43	.8438
3/64	1,19	.0469	16	4,50	.1770	T	9,09	.3580	55/64	21,84	.8594
55	1,32	.0520	15	4,57	.1800	23/64	9,13	.3594	-	22,00	.8661
54	1,40	.0550	14	4,62	.1820	U	9,35	.3680	7/8	22,23	.8750
53	1,51	.0595	13	4,70	.1850	3/8	9,53	.3750	57/64	22,62	.8906
1/16	1,59	.0625	3/16	4,76	.1875	V	9,56	.3770	-	23,00	.9055
52	1,61	.0635	12	4,80	.1890	W	9,80	.3860	29/32	23,02	.9062
51	1,70	.0670	11	4,85	.1910	25/64	9,92	.3906	59/64	23,42	.9219
50	1,78	.0700	10	4,91	.1935	-	10,00	.3937	15/16	23,81	.9375
49	1,85	.0730	9	4,98	.1960	X	10,08	.3970	-	24,00	.9449
48	1,93	.0760	-	5,00	.1968	Y	10,26	.4040	61/64	24,21	.9531
5/64	1,98	.0781	8	5,05	.1990	13/32	10,32	.4062	31/32	24,61	.9688
47	1,99	.0785	7	5,11	.2010	Z	10,49	.4130	-	25,00	.9842
-	2,00	.0787	13/64	5,16	.2031	27/64	10,72	.4219	63/64	25,00	.9844
46	2,06	.0810	6	5,18	.2040	-	11,00	.4331	1 "	25,40	1.000

