

12 TON HYDRAULIC INSTALLING TOOL FOR COLOR-KEYED® and STA-KON® CONNECTORS INSTRUCTION SHEET (Catalog Number: 13642M)



IMPORTANT: Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.

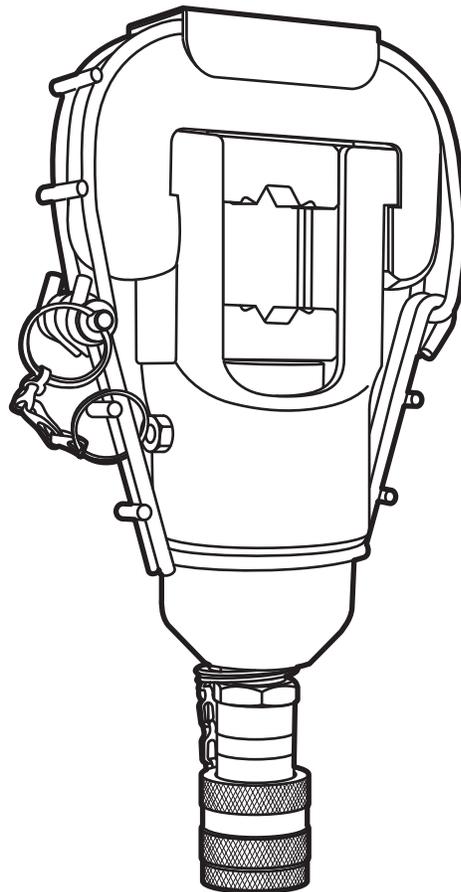


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1.0

GENERAL INFORMATION

⚠ WARNING ⚠

- 1) BEFORE USING THE TOOL, CAREFULLY READ INSTRUCTIONS IN THIS MANUAL.
- 2) WHEN OPERATING THE TOOL, NEVER PLACE HANDS OR OTHER BODY PARTS BETWEEN THE CRIMPING DIES.
- 3) DO NOT USE IN WATER OR IN THE RAIN.
- 4) DO NOT OPERATE WHEN DIES ARE NOT IN PLACE.
- 5) RISK OF ELECTRICAL SHOCK. DO NOT USE ON ENERGIZED LINES.



1.1

DESCRIPTION

This hydraulically operated crimping tool, will install Thomas & Betts COLOR-KEYED® or STA-KON® connectors, to meet or exceed U.L. or Mil. specifications.

1.2

SPECIFICATIONS

Size:.....10-1/4" long x 5-1/8" wide x 2-7/8" thick
Material:.....Quality steel
Approx. Size with Guard:.....10-1/2" long x 5-1/2" wide
Finish:.....Black Oxide
Weight:.....Approx. 8 Lbs.
Hydraulic Pressure Required:.....9,800 ± 100 P.S.I.
Output:.....12 tons
Finish:.....(Tool Guard) ZINC Plate

2.0

INSTRUCTIONS

2.1

TO INSTALL DIES

- 1) Pull locking pin from tool guard and swing open top half of guard (Figure 1).
- 2) Hold yoke and rotate yoke cap, until yoke cap releases from the yoke (Figure 1).
- 3) Select correct die from die chart (see Step 2.4).

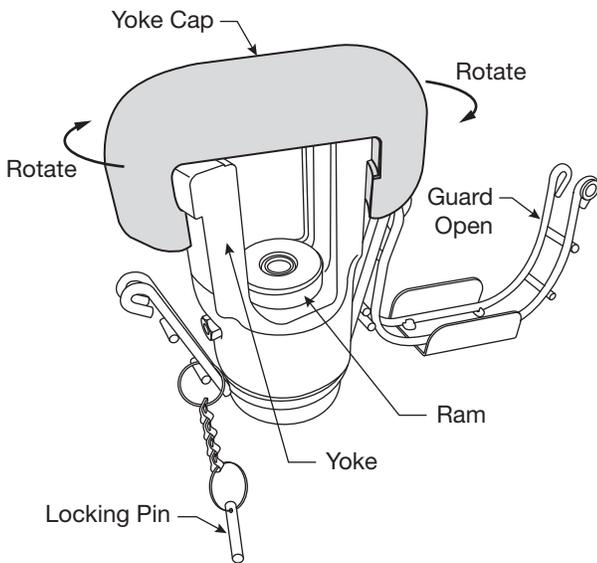


FIGURE 1

- 4) Place die half (without die plate) in grooves of yoke (Figure 2).
- 5) Press die half home against ram, be certain the button snap unit is firmly engaged with the mating snap unit (Figure 2).
- 6) Snap the remaining die half (with die plate) perpendicular on the yoke cap (Figure 3).
- 7) Slide remaining die into groove of yoke (Figure 3).
- 8) Rotate yoke cap until it engages the yoke and the friction catches engage the notches in the yoke (Figure 4).
- 9) Swing top half of tool guard closed. Line up holes and insert locking pin (Figure 4).

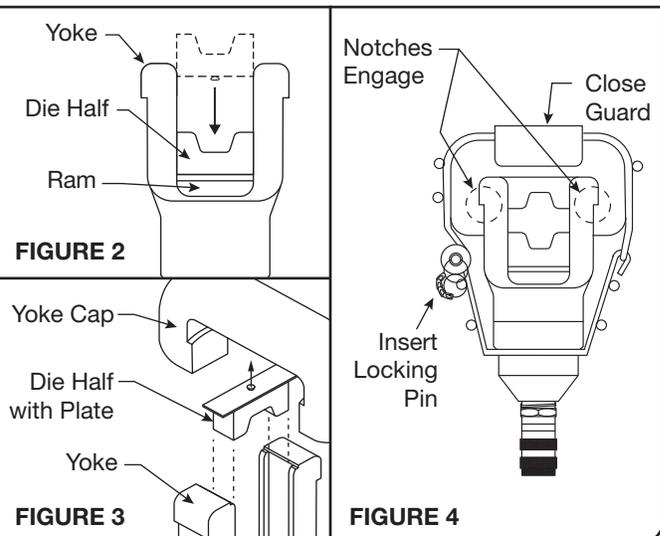


FIGURE 2

FIGURE 3

FIGURE 4

2.2

TYPICAL CRIMPING PROCEDURE



CAUTION
PINCH POINT! KEEP FINGERS CLEAR OF DIE AREA WHEN OPERATING TOOL.
DO NOT OPERATE TOOL WITHOUT GUARD IN PROPER LOCKED POSITION.

- 1) Select terminal to be attached to the wire and insert stripped wire into barrel of terminal.
- 2) Place terminal, with wire inserted, in the movable die and push terminal up against the terminal locator (if available) and crimp (see Figure 5).

NOTE: The COLOR-KEYED® connectors have color bands to show the position and number of crimps. In addition, the dies have engraved code numbers to match code numbers printed on the COLOR-KEYED® connectors.



CAUTION
NEVER OPERATE THIS TOOL WITHOUT THE GUARD IN PROPER LOCKED POSITION, AND WITHOUT A DIE SET IN THE TOOL AND THE CAP IN PLACE. WHEN OPERATING TOOL, ALWAYS KEEP MALE AND FEMALE PROTECTIVE CAPS COUPLED TOGETHER, TO KEEP HYDRAULIC SYSTEM FREE OF DIRT.

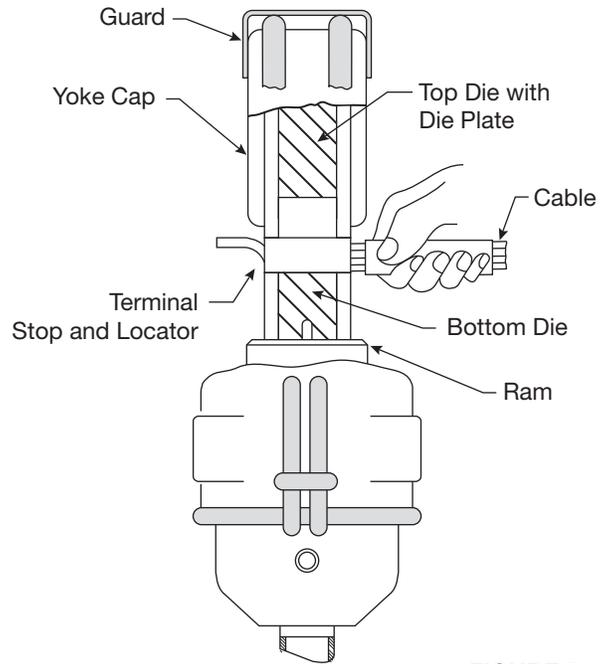


FIGURE 5

2.3

FIELD SERVICE

These are precision tools and must be handled accordingly. Therefore, all maintenance must be performed by qualified personnel only.

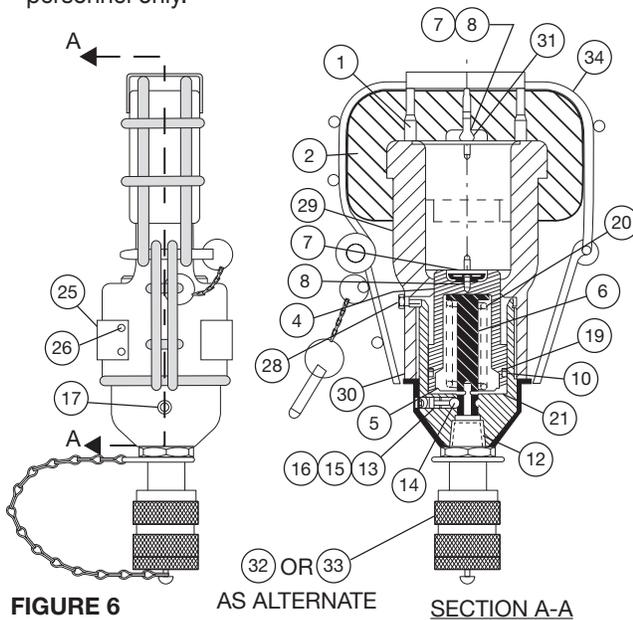


FIGURE 6

NOTES:

- 1) Do not use on hardened objects such as steel.
- 2) Do not use tool without guard in proper locked position.
- 3) Repair Kit Catalog Number 11025 contains replacement parts -7,-8,-10,-12,-14,-15,-16-and 19.
- 4) Dies ordered separately.
- 5) Travel .6875 inches displacement 1.7738 Cu. In. (0.0614 Pint Oil Hydraulic Mil-H-5606A (2 Cu. In.).
- 6) Maximum oil pressure 10,000 P.S.I.

ITEM NO.	SPARE PART NO.	FORMER DESIGNATION*	REQ'D PER UNIT	DESCRIPTION
1	R014501	13642-1	2	Friction—Catch
2	R206703	—	1	Cap, Yoke
4	R205701	13642-4	1	Ram
5	R002101	13642-5	1	Retaining Ring
6	R205801	13642-6	1	Rod, Spring
7	R205901	13642-7	2	Button Unit, Snap, Female
8	R014402	13642-8	2	Screw
10	R002201	13642-10	1	“O” Ring Packing
12	R206001	13642-12	1	Screen
13	R206101	13642-13	1	Plug, Retaining
14	R002301	13642-14	1	Steel Ball
15	R002901	13642-15	1	“O” Ring Gasket
16	R002401	13642-16	1	Ring, Back-up
17	R004814	13642-17	1	Set Screw, Socket
19	R206201	13642-19	1	Ring, Back-up
20	R206301	13642-20	1	Spring Compression
21	R206401	13642-21	1	Support, Spring
25	R206501	13642-25	1	Nameplate
26	R000101	13642-26	4	Drive Screw, Nameplate
27	R004815	13642-27	1	Screw, Set, Dog Point
28	R003204	13642-28	1	Nut, Lock
29	R206601	13642-29	1	Yoke, Head
30	R206803	—	1	Cylinder
31	R017301	13691	1	Bottom Snap Male (for 13642M Only) Replaces Item No's. 7 & 8 in Yoke Cap
32	R228801	13599	1	Hydraulic Coupler Assembly (Female) Blackhawk
33	R210903	13799	1	Hydraulic Coupler Assembly (Female) Pioneer
34	255R001	—	1	Tool Guard
—	297-15878	—	1	Steel Carrying Case

* Former designation of spare parts. Use spare part number when ordering.

For Parts or Service, contact the Tool Service Center at
 1-800-284-TOOL (8665).

STA-KON® DIES AVAILABLE

COLOR-KEYED® DIES AVAILABLE

DIE CAT. NO.	WIRE RANGE	INSTALLS TERMINAL TYPE	GAGING	TYPE OF CRIMPS
11733	8 AWG	D (Code)	.222 / .234	Hex
11734	6 AWG	E (Code)	.282 / .294	Hex
11735	4 AWG	F (Code)	.326 / .337	Hex
11736	2, 1 AWG	G (Code)	.369 / .383	Hex
11737	1/0 AWG	H (Code)	.409 / .423	Hex
11738	2/0 AWG	J (Code)	.445 / .459	Hex
11739	3/0 AWG	K (Code)	.494 / .506	Hex
11770	4/0 AWG	L (Code)	.585 / .591	Hex
11771	250 MCM	M (Code)	.613 / .631	Hex
11781M	8 AN	D (Aircraft)	.208 / .212	Hex
11782M	6 AN	E (Aircraft)	.238 / .242	Hex
11783M	4 AN	F (Aircraft)	.297 / .301	Hex
11784M	2 AN	G (Aircraft)	.375 / .379	Hex
11785M	1 AN	H (Aircraft)	.415 / .419	Hex
11786M	1/0 AN	J (Aircraft)	.454 / .458	Hex
11787M	2/0 AN	K (Aircraft)	.498 / .502	Hex
11788M	3/0 AN	L (Aircraft)	.560 / .564	Hex
11789M	4/0 AN	M (Aircraft)	.616 / .620	Hex
13643	8 AWG	D (Code) Nest	.153 / .161	Indented
13644	6 AWG	E (Code) Nest	.183 / .191	Indented
13645	4 AWG	F (Code) Nest	.214 / .222	Indented
13650	8,6,4 AWG	D, E, F (Indentor)	—	Indented
	2 to 4/0 AWG	G to M (Indentor)	—	Indented
13651	8 AN	D (Aircraft) Nest	.111 / .119	Indented
13652	6 AN	E (Aircraft) Nest	.151 / .159	Indented
13653	4 AN	F (Aircraft) Nest	.163 / .171	Indented
13654	2, 1 AWG / 2N	G (Air. and Code) Nest	.202 / .210	Indented
13655	1/0 AWG / 1 AN	H (Air. and Code) Nest	.230 / .238	Indented
13656	2/0 AWG / 1/0 AN	J (Air. and Code) Nest	.268 / .276	Indented
13657	3/0 AWG / 2/0 AN	K (Air. and Code) Nest	.246 / .254	Indented
13658	4/0 AWG / 3/0 AN	L (Air. and Code) Nest	.262 / .270	Indented
13659	250 MCM / 4/0 AN	M (Air. and Code) Nest	.308 / .316	Indented
21607	8 AWG	RD (Code)	.250 / .254	Elliptical
21608	6 AWG	RE (Code)	.272 / .276	Elliptical
21609	4 AWG	RF (Code)	.288 / .292	Elliptical
21610	1, 2AWG	RG (Code)	.337 / .341	Elliptical
21611	1/0 AWG	RH (Code)	.368 / .372	Elliptical
21612	2/0 AWG	RJ (Code)	.402 / .406	Elliptical
21613	3/0 AWG	RK (Code)	.436 / .440	Elliptical
21614	4/0 AWG	RL (Code)	.471 / .475	Elliptical
21615	250 MCM	RM (Code)	.519 / .523	Elliptical
21707	8 AN	RD (Aircraft)	.168 / .172	Elliptical
21708	6 AN	RE (Aircraft)	.200 / .204	Elliptical
21709	4 AN	RF (Aircraft)	.252 / .256	Elliptical
21710	2 AN	RG (Aircraft)	.310 / .314	Elliptical
21711M	1 AN	RH (Aircraft)	.337 / .341	Elliptical
21712	1/0 AN	RJ (Aircraft)	.368 / .372	Elliptical
21713	2/0 AN	RK (Aircraft)	.402 / .406	Elliptical
21714M	3/0 AN	RL (Aircraft)	.436 / .440	Elliptical
21715	4/0 AN	RM (Aircraft)	.471 / .475	Elliptical
21731	8, 6, 4 AN	D, E, F, (Indentor Only)	—	Indented
21732	2 to 250 MCM	G to M (indentor Only)	—	Indented
21733	8 AWG / 8 AN	D Flag Terminals	.147 / .153	Indented
21734	6 AWG / 6 AN	E Flag Terminals	.171 / .177	Indented
21735	4 AWG / 4 AN	F Flag Terminals	.194 / .200	Indented
21736	2, 1 AWG / 2 AN	G Flag Terminals	.262 / .269	Indented
21737	1/0 AWG / 1 AN	H Flag Terminals	.278 / .284	Indented
21738	2/0 AWG / 1/0 AN	J Flag Terminals	.309 / .315	Indented
21739	3/0 AWG / 2/0 AN	K Flag Terminals	.356 / .362	Indented
21740	4/0 AWG / 3/0 AN	L Flag Terminals	.382 / .388	Indented
21741	250 MCM / 4/0 AN	M Flag Terminals	.434 / .440	Indented

DIE CAT. NO.	WIRE RANGE*		DIE NO. or COLOR CODE	GAGING
	AL.	CU.		
11732	12-10 AWG	8	21 Red	.191 / .207
11733	8	6	24 Blue	.222 / .234
11734	6	4	29 Grey	.282 / .294
11735	—	2	33 Brown	.326 / .337
11736	4	1	37 Green	.369 / .383
11737	2	1/0	42 Pink	.409 / .423
11738	1	2/0	45 Gold/Black	.445 / .459
11739	1/0	3/0	50 Tan/Orange	.494 / .506
11740	2/0	4/0	54 Olive/Purple	.535 / .553
11741	3/0	—	60 Ruby	.587 / .605
11771	—	250 MCM	62 Yellow	.613 / .631
11742	4/0	300 MCM	66H White	.657 / .675
11743	250 MCM	350 MCM	71H Red	.707 / .725
11744	300 MCM	400 MCM	76 Blue	.751 / .769
11746-TB	350 MCM	500 MCM	87H Brown	.861 / .879
11747-TB	400 MCM	600 MCM	94H Green	.935 / .953
11748	500 MCM	700 MCM	99H Pink	.979 / .997
11749	600 MCM	750 MCM	106H Black	1.049 / 1.071
11750	—	800 MCM	107H Orange	1.064 / 1.076
11751	700 MCM	—	112H Purple	1.118 / 1.131
11753	750 MCM	900 MCM	115 Yellow	1.141 / 1.163
11761M	8	—	—	.283 / .293
11762M	6	—	—	.327 / .337
11763M	4	—	—	.395 / .405
11764M	2	—	—	.495 / .505
11765M	1	—	—	.515 / .525
11766M	1/0	—	—	.539 / .549
11767	2/0	—	—	.618 / .628
11768M	3/0	—	—	.651 / .661
11769	4/0	—	—	.737 / .747
11780	See Connector Chart	—	Green	.832 / .852
11790	—	—	Blue	1.110 / 1.130

*EXCEPTION — Consult installation instruction sheets for connector Cat. No. Series 61900, 6110, 61300.

WARRANTY: Thomas & Betts sells this product with the understanding that the user will perform all necessary tests to determine the suitability of this product for the user's intended application. Thomas & Betts warrants that this product will be free from defects in materials or workmanship for a period of two (2) years following the date of purchase. Upon prompt notification of any warranted defect, Thomas & Betts will, at its option, repair or replace the defective product. Misuse, misapplication or modification of Thomas & Betts Products immediately voids all warranties.

Limitations and Exclusions: THE ABOVE WARRANTY IS THE SOLE WARRANTY CONCERNING THIS PRODUCT, AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE SPECIFICALLY DISCLAIMED. LIABILITY FOR BREACH OF THE ABOVE WARRANTY IS LIMITED TO COST OF REPAIR OR REPLACEMENT OF THE PRODUCT, AND UNDER NO CIRCUMSTANCES WILL THOMAS & BETTS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

NOTE: To order the military version of the 13642, add an "M" suffix. EXAMPLE: 13642M, and suffix the die indentor catalog number with an "M". EXAMPLE: 21731M, die nest catalog number does not change.

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