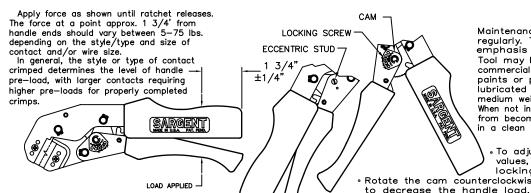
RGENT OPERATING PROCEDURE 4100 CRIMP TOOL



TOOL MAINTENANCE

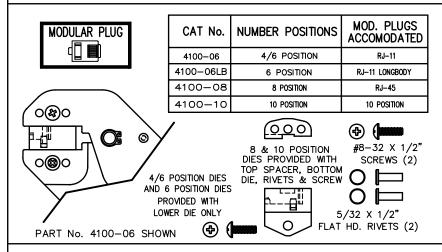
Maintenance and inspection should be performed regularly. Tool should be wiped clean with special emphasis on the crimping cavities.

Tool may be cleaned by immersing in a suitable commercial solvent or cleaner which does not attack paints or plastic material. The tool should be relubricated after cleaning using a light film of a medium weight oil on bearing surfaces and pivot pins. When not in use, keep handles closed to prevent objects from becoming lodged in the crimping dies and store from becoming lodged in the crimping dies and store in a clean dry area.

ECCENTRIC ADJUSTMENT

• To adjust the tool to obtain the proper force values, open the handles and remove the cam locking screw with a 1/16" hex wrench. Rotate the cam counterclockwise to increase handle load or clockwise

- Position odd numbers on the cam in the locking screw hole adjacent to the letter "L" and even numbers adjacent to the letter "T."
 Lock the cam at the desired handle load setting and remeasure force. Continue adjustment if necessary.

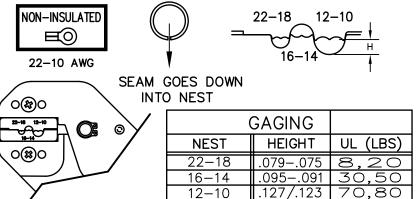


Strip cable according to manufacturer's specifications. Insert cable fully into connector. Place connector in die, end of modular plug butting against back of die cavity, and close tool completing crimp cycle. Grasp cable near connector and lift and pull to remove cable/plug assembly. Inspect crimp to assure all contacts are crimped and strain relief portion is latched. Test by holding plug and pulling firmly on cable.

THE TOOL IS EQUIPPED WITH A RATCHET MECHANISM TO ASSURE RELIABLE CRIMP TERMINATIONS.

A RATCHET RELEASE LEVER IS PROVIDED TO ALLOW FOR REMOVAL OF AN INCORRECTLY PLACED OR OVERSIZE CONNECTOR.

ADJUST RATCHET RELEASE HANDLE FORCE TO <u>5-15 LBS.</u> FOR MODULAR PLUGS AS INSTRUCTED ABOVE IN ECCENTRIC ADJUSTMENT SECTION.



THE NON-INSULATED CRIMP DIE CRIMPS STANDARD NON-INSULATED RING, FORK AND SPADE BRAZED AND UNBRAZED CONNECTORS AS WELL AS MISCELLANEOUS

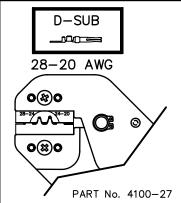
OTHER TYPES OF NON-INSULATED CONNECTORS.

ALL CRIMPS SHOULD BE TESTED FOR ACCEPTABLE
TENSILE VALUES FOR THE PARTICULAR TERMINAL AND WIRE BEING USED AND COMPARED AGAINST ACCEPTED STANDARDS (UL OR MIL). VALUES FOR THE INTENDED WIRE SIZES ARE LISTED AND SHOULD BE CHECKED WITH AN APPROPRIATE TENSILE TESTING MACHINE OR OTHER DEVICE.

THE TOOL IS EQUIPPED WITH A RATCHET MECHANISM TO ASSURE RELIABLE CRIMP TERMINATIONS.

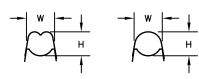
A RATCHET RELEASE LEVER IS PROVIDED TO ALLOW FOR REMOVAL OF AN INCORRECTLY PLACED OR OVERSIZE CONNECTOR.

ADJUST RATCHET RELEASE HANDLE FORCE TO 15–30 FOR OPEN BARREL TERMINALS AS INSTRUCTED IN THE ECCENTRIC ADJUSTMENT SECTION. <u>15-30 LBS.</u>



PART No. 4100-25

PART No. 4100 (TOOL FRAME)



GAGING WITH WIRE SOLDER

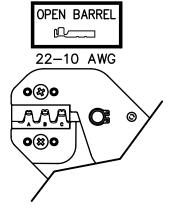
| NEST | CONDUCTOR | INSULATION | |
|-------|-----------|------------|--|
| | HEIGHT | HEIGHT | |
| 28-24 | .027/.025 | .041 MAX. | |
| 24-20 | .029/.027 | .062 MAX. | |

GAGING WITH WIRE SOLDER

NOTE: SHOULD OVERCRIMPING OF CONTACT RESULT-ADJUST RATCHET RELEASE FORCE TO 30-50 LBS. FOR D-SUB. STYLE CONTACTS.

GAGE CRIMPS WITHIN SPECIFICATIONS- ADJUST HANDLE PRE-LOADS ACCORDINGLY.

REFER TO ECCENTRIC ADJUSTMENT PROCEDURE ABOVE.



PART No. 4100-30 SHOWN PART No. 4100-29 SIMILAR EXCEPT FOR WIRE SIZES

4100-30 GAGING INFORMATION

| NEST | WIRE | COND. JAW | |
|------|-----------|-----------|-----------|
| | SIZE | HEIGHT | WIDTH |
| Α | 22-18 AWG | .034 NOM. | .107 NOM. |
| В | 16-14 AWG | .042 NOM. | .111 NOM. |
| С | 12-10 AWG | .070 NOM. | .134 NOM. |

4100-29 GAGING INFORMATION

| NECT | WIRE | COND. JAW | |
|------|-----------|-----------|---------|
| NEST | SIZE | HEIGHT | WIDTH |
| Α | 16-20 AWG | .054046 | .075071 |
| В | 14-16 AWG | .062055 | .087083 |
| С | 22-30 AWG | .030025 | .067063 |

GAGING WITH WIRE SOLDER

EARLY DESIGN CRIMP DIES HAD TO BE PINNED IN PLACE FOR PROPER OPERATION USING THE FOUR DOWEL PINS PROVIDED.

TAP PINS IN PLACE WHILE ALIGNING DIE/SPACER HOLES WITH HOLES IN TOOL FRAME.

REPEAT PROCEDURE FOR LOWER DIE.

REPLACE THE #8-32 SCREWS AS SHOWN.

LATER DESIGNS HAVE DIE HALVES PINNED TOGETHER AND ARE HELD IN PLACE BY THE CENTER SCREW ONLY.

THE TOOL IS EQUIPPED WITH A RATCHET MECHANISM TO ASSURE RELIABLE CRIMP TERMINATIONS.

A RATCHET RELEASE LEVER IS PROVIDED TO ALLOW FOR REMOVAL OF AN INCORRECTLY PLACED OR OVERSIZE 15-30 LBS. CONNECTOR.

ADJUST RATCHET RELEASE HANDLE FORCE TO FOR OPEN BARREL TERMINALS AS INSTRUCTED IN THE ECCENTRIC ADJUSTMENT SECTION.

DIE FRONT VIEW **INSULATED** BUTT STOP TANG UP RED 18-22 BLUE 14-16 YELLOW 10-12 0(%)0 36A 0 0(%)0 BUTT or SPLICE CONNECTOR LOCATION CONNECTOR LOCATION PART No. 4100-40

Select the appropriate nest for the terminal or wire splice being crimped.

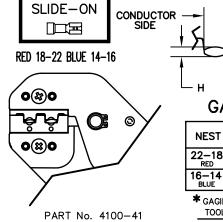
Position terminal or splice as shown in diagram. Close tool carefully until jaws grip the terminal without distortion.

Insert the properly stripped wire into the terminal. Holding the wire in place close the tool past the ratchet release position and allow the jaws to spring open.

Remove and inspect the crimp.

ADJUST RATCHET RELEASE HANDLE FORCE TO 30-50 LBS. FOR INSULATED TERMINALS AS INSTRUCTED IN THE ECCENTRIC ADJUSTMENT SECTION DEPENDING ON WIRE SIZE AND CONNECT-OR BRAND AND STYLE OR TYPE.

NOTE: 4100-20 & -22 INSULATED TERMINAL DIES CRIMP CONDUCTOR PORTION ONLY!



2/3 NOM. GAGE DIA.

GAGING INFORMATION

INSULATION

SIDE

CABLES

FERRULE CRIMP

| NECT | CONDUCTOR | | INSULATION | |
|---------------|-----------|-----------|------------|-----------|
| NEST | H | W | H | W |
| 22-18 RED | .100 NOM. | .220 REF. | .135 NOM. | .240 REF. |
| 16-14 BLUE | .108 NOM. | .240 REF. | .165 NOM. | .260 REF. |

*****GAGING USING FLATTED GO/NO GO PINS WITH TOOL CLOSED TO LAST TOOTH OF RATCHET

CAVITY

CAT No.

SELECT THE APPROPRIATE NEST FOR THE TERMINAL BEING CRIMPED.

POSITION THE TERMINAL WITH INSULATION SIDE TOWARDS THE FRONT OF THE TOOL.

CLOSE THE TOOL CAREFULLY UNTIL THE JAWS GRIP THE TERMINAL WITHOUT DISTORTION.

INSERT THE PROPERLY STRIPPED WIRE INTO THE TERMINAL. HOLDING THE WIRE IN PLACE, CLOSE THE TOOL PAST THE RATCHET RELEASE POSITION AND ALLOW THE JAWS TO OPEN.

REMOVE AND INSPECT THE CRIMP.

ADJUST RATCHET RELEASE HANDLE FORCE TO 60-75 LBS. FOR SLIDE-ON TERMINALS AS INSTRUCTED IN THE ECCENTRIC ADJUSTMENT SECTION.



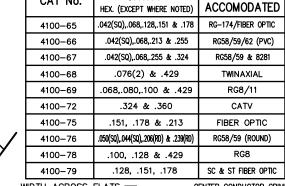
0

PART No. 4100-66 SHOWN

0(48)0

0(%)0

SARG41INSR



WIDTH ACROSS FLATS CENTER CONDUCTOR CRIMP 7/**| | | | | |**

Strip cable according to manufacturer's specifications. Select proper hex cavity for size of cable being used. Crimp center conductor in area shown. Assemble connector and crimp outer ferrule.

THE TOOL IS EQUIPPED WITH A RATCHET MECHANISM TO ASSURE RELIABLE CRIMP TERMINATIONS.

A RATCHET RELEASE LEVER IS PROVIDED TO ALLOW FOR REMOVAL OF AN INCORRECTLY PLACED OR OVERSIZE CONNECTOR.

ADJUST RATCHET RELEAS HANDLE FORCE TO 30-50 LBS. DEPENDING ON SIZE OF CONNECTOR & CABLE. LARGER CONNECTORS REQUIRE HIGHER HANDLE PRE-LOADS TO ASSURE A SECURE AND SYMMETRICAL CRIMP. MEASURE EACH CRIMP ACROSS THE FLATS AND ADJUST THE HANDLE PRE-LOAD TO OBTAIN SYMMETRY WITHIN .003.

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