

PICABOND CONNECTORS AND PRESSERS
DESCRIPTION, USE AND MAINTENANCE

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- 1.03 Approved conductor combinations joined with Picabond connectors are equivalent to a soldered joint.
- 1.04 Picabond connectors are not recommended for use on aluminum conductors or waterproof cable.
- 1.05 Only approved Picabond tools may be used to press the Picabond connectors. The description, use and maintenance of these tools is covered in Parts 4, 5, 6 and 9 of this section.

2. CONNECTORS — DESCRIPTION

1. GENERAL

- 1.01 This section describes the Picabond method of splicing copper cable conductors. It covers the various gauges and combinations of paper, pulp, polyethylene and polypropylene-insulated copper cable conductors that may be joined using this method.
- 1.02 Pre-stripping is not required with Picabond connectors regardless of the conductor gauge and/or type of conductor insulation.

- 2.01 Picabond connectors (Figs. 1A-1C) have a tin plated, phosphor bronze body with bonded polyester insulation and sets of sharp lances to displace the conductor insulation.
- 2.02 Along the edge of the body of the connector are four pieces of metal designated as stuffers. The stuffers force the conductor into the lances to insure good contact and also press against the wire to increase the tensile strength of the wire joint. (See Figs. 1A-1C.)

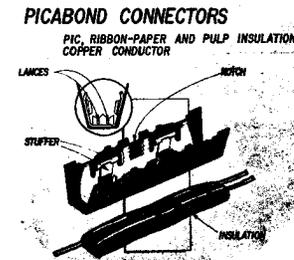
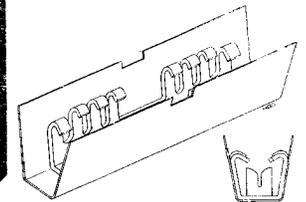


Fig. 1A



Fig. 1B



Blue Mini-Connector
Fig. 1C

2.03 The connectors are provided in strip form or individually. The strip connectors are packaged on rolls containing 500 or 1000 connectors per roll, while the individual connectors are packaged 1000 to a carton.

2.04 The connectors are color coded for identification purposes. The color code identifies the connector type and the wire gauges which can be accommodated by each. The color codes are as follows:

- Red — 24-19 gauge, straight splice or bridge splice
- Green — 26-22 gauge, straight splice or bridge splice
- Blue — 26-22 gauge, straight splice only

3. CONDUCTOR COMBINATIONS

3.01 Table A shows the various combinations of paper, pulp and polyethylene-insulated copper cable conductors that may be joined with the Picabond connectors as shown:

TABLE A

| Two-Wire Combinations | Three-Wire Combinations | Four-Wire Combinations |
|-----------------------|-------------------------|------------------------|
| 19-19 (Red) | *19-19-19 (Red) | *19-19-19-19 (Red) |
| 19-22 " | *19-19-22 " | *19-19-19-22 " |
| 19-24 " | 19-22-22 " | *19-19-22-22 " |
| 22-22 (Green) | 19-22-24 " | 19-22-22-22 " |
| 22-24 " | 19-24-24 " | 19-22-22-24 " |
| 22-26 " | | 19-22-24-24 " |
| 24-24 " | | 19-24-24-24 " |
| 24-26 " | | 22-22-22-22 (Green) |
| 26-26 " | | 22-22-22-24 " |
| | | 22-22-22-26 " |
| | | 22-22-24-24 " |
| | | 22-22-24-26 " |
| | | 22-22-26-26 " |
| | | 22-24-24-24 " |
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| | | 22-24-26-26 " |
| | | 22-26-26-26 " |
| | | 24-24-24-24 " |
| | | 24-24-24-26 " |
| | | 24-24-26-26 " |
| | | 24-26-26-26 " |
| | | 26-26-26-26 " |

*Note: For filled cable with polypropylene insulation, only one 19-gauge conductor per each end of connector is required.

3.02 To insure that satisfactory wire joints are made with Picabond connectors, the following rules *must* be observed:

- (a) Splice only 19-, 22-, 24-, or 26-gauge solid copper conductors.
- (b) Never join more than four conductors in a connector.
- (c) Never place more than two conductors in each end of a connector.
- (d) When placing two conductors in one end of a connector, be sure to place one wire on each side of the tool's wire support.
- (e) Only two conductors, one in each end of the connector, are to be joined in strip-form connectors when using the MA-10 Presser.

4. HAND PRESSERS — DESCRIPTION AND USE

4.01 The MR-1, VS-3, and MVS-3 Hand Tool Kits consist of three separate parts.

- A carrying case
- A hand presser
- A crimped connector gauge

4.02 The MR-1, VS-3, and MVS-3 Hand Pressers (see Figs. 2A and 2B) are hand fed and hand

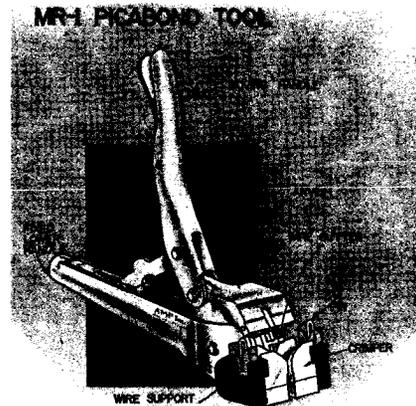
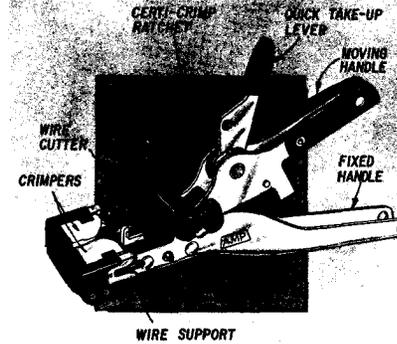


Fig. 2A

TOOL FEATURES



**VS-3 (Blue Handle)
MVS-3 (Black Handle)
Fig. 2B**

operated. They consist of a fixed handle attached to the tool head, two crimpers, a moving anvil, a wire cutter, two wire supports, a moving handle, a quick take-up lever (VS-3 and MVS-3 only), and a ratchet-pawl mechanism.

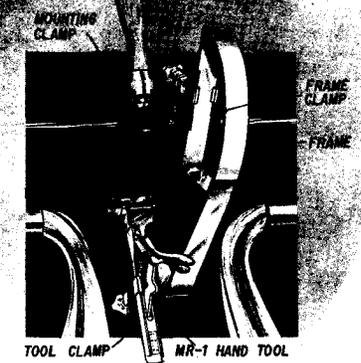
4.03 These hand pressers can also be mounted in the MR-1, VS-3 or MVS-3 Tool Holders (see Figs. 3A and 3B) when used over extended periods of time. The tool holders are specifically designed to clamp directly onto the strand, allowing the craftsman free use of both hands for tool operation and wire handling. Tool holders are supplied with an adjustable locking device which provides total insulation between the strand and tool. In addition to aerial applications, they can be used for buried and/or underground splicing by securing the hand presser to a B Presser Stand, or attaching a 51B Bracket to the cable sheath on each side of the splice opening with aereoseal clamps and mounting the tool holder on the bracket.

4.04 VS-3 and MR-1 Hand Pressers are lightweight tools capable of handling all green and red Picabond connector applications. They are primarily designed for small jobs and are hand fed and hand operated using individual connectors.

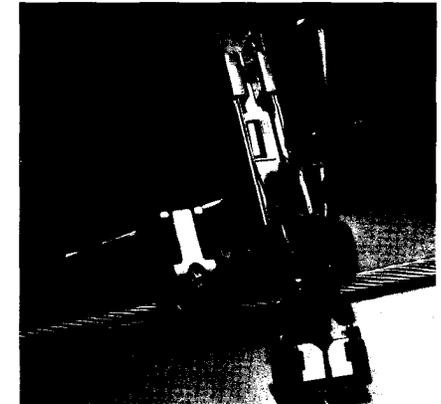
4.05 The MVS-3 Hand Presser is similar to the VS-3 and MR-1 pressers, except it is used for crimping the blue mini-connector.

4.06 Straight splicing with the MVS-3 Hand Presser should be accomplished in the following manner:

TOOL HOLDER ADAPTER



**MR-1 Tool Holder (No. 251852-1)
Fig. 3A**



**MVS-3 or VS-3 Tool Holder (No. 229775-1)
Fig. 3B**

- (a) Take a pair of wires from one side of the splice opening of the cable being joined.
- (b) Separate the pair enough to feed one of the wires into the wire support.
- (c) Feed one of the wires into the wire support so it enters the slot *above the pin in the support*.
- (d) Place the wire flush against the back of the wire support and introduce some slack in the

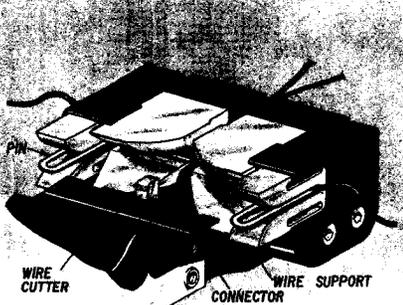
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wire. Pull the end of the wire out through the space between the crimpers.

(e) Repeat the above procedures, this time using a pair from the other side of the splice opening.

(f) With the wires properly placed, insert the connector into the tool. With the connector placed in the tool, make sure that the wire cutter engages the slot in the connector and that the connector lies flat against the anvil. (See Fig. 4.)

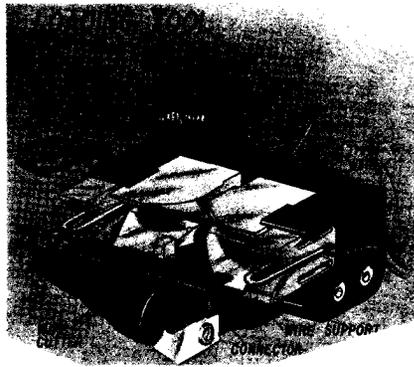
**LOADING TOOL
(THRU SPLICING)**



Wire Inserted into the MVS-3 & VS-3 Hand Presser For Straight Splicing
Fig. 4

4.07 When inserting the wires for bridging, use the same procedure as used for straight splicing, with the following exceptions:

- (a) Install the through wires so they enter the wire supports *below the pin*.
- (b) Install the bridge wire(s) so it enters the wire support *above the pin*.
- (c) With the wires properly placed, insert the connector as described in paragraph 4.05 (f) and complete the crimping cycle. (See Fig. 5.)

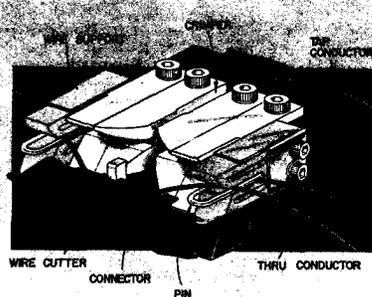


Inserting Wire into VS-3 or MR-1 Hand Presser For Bridging Onto Through Wire
Fig. 5

4.08 The wire placement as described below and illustrated in Fig. 6 permits tapping onto an existing through wire without interrupting the "in-service" wire.

- (a) Place the through wire into the connector and insert the connector into the tool in the normal manner, making sure the through wire lies *behind* the wire cutter. (See Fig. 6.)

**WIRE PLACEMENT
TAP CONNECTION**



Wire Placement Tap Connection, VS-3 or MR-1
Fig. 6

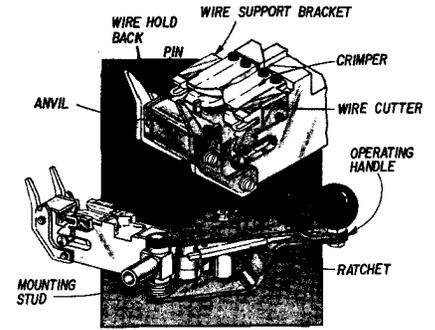
APPLICATOR FEATURES

(b) Insert the through wire into the lower halves of the wire support so it enters the slot *below* the pin as far as possible without too much slack.

(c) Insert the tap wire above the pins and flush against the back of the wire support. Since the through wire is placed behind the wire cutter, it is not cut during the crimping cycle.

5. MA-6 PRESSER — DESCRIPTION AND USE

5.01 The MA-6 Applicator Kit (see Fig. 7) consists of an MA-6 Presser, a crimped connector gauge, a support rig for mounting the presser to the cable, and a pair of legs for the support rig. All parts are packed in a carrying case for easy transportation.

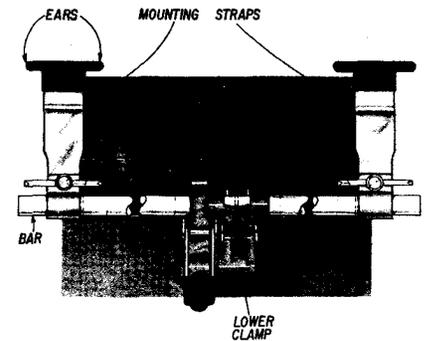


MA-6 Presser
Fig. 8

5.03 The support rig provides the stability required to effectively operate the MA-6 and/or MA-10 Pressers.

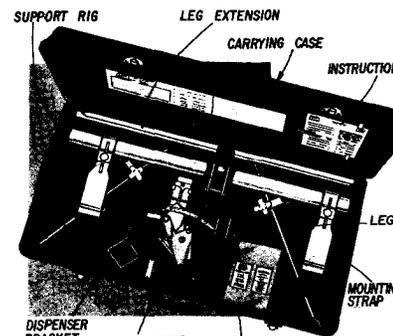
5.04 Fig. 9 illustrates the support rig. The support rig includes two extendible legs and a support bar to which are attached a pair of mounting straps and a double applicator clamp. The mounting straps are attached to the cable using standard hose clamps. Then extendible legs are attached and adjusted to provide a firm base for the presser.

SUPPORT RIG



Support Rig
Fig. 9

MA6-B KIT



MA-6 Applicator Kit
Fig. 7

5.02 The MA-6 Presser (see Fig. 8), which is hand operated and hand fed, consists of a cast frame to which are attached a movable anvil, two fixed crimpers, two wire support brackets, two wire hold backs, a wire cutter, a mounting stud, pins for separating the wires, an operating handle, and a ratchet-pawl mechanism.

5.05 The MA-6 Presser mounts on a bar that is attached to the cable on each side of the splice opening. It is primarily designed for large count bridging and/or tapping operations. Although not recommended, it can be used for straight splicing. It is hand fed and hand operated using individual connectors.

Note: Too much tension on the wire causes it to pull out of the connector. Be sure enough slack is put in the wire.

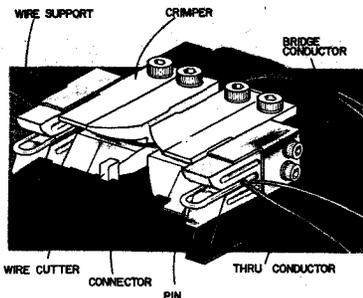
5.06 Fig. 10 illustrates the conductor placements for a bridge connection using the MA-6 Presser.

(a) Wire placements for bridging are almost the same as for straight splicing, except that through wires are placed *below the pins* in the wire supports.

(b) The bridge wire is placed in the wire support *above the pin*.

(c) With the wires correctly placed in the presser, insert the connector, making sure the wire cutter enters the notch on the connector. Press the connector down flush against the anvil and the wire cutter. (See Fig. 10.)

CONDUCTOR PLACEMENT (BRIDGE CONNECTION)



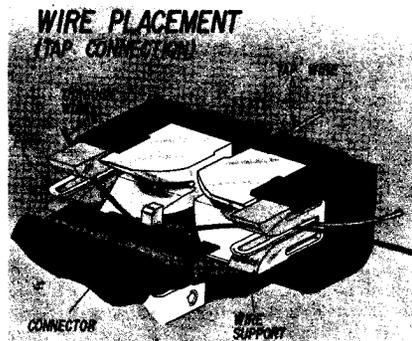
Conductor Placement for a Bridge Connection (MA-6)
Fig. 10

5.07 Fig. 11 illustrates the wire placements for a tap connection onto an existing through wire without interrupting the "in-service" wire.

(a) Place the through wire into the connector and insert the connector in the normal manner, making sure that the through wire is behind the wire cutter. Then place the through wire into the lower halves of the wire supports so it enters the slot below the pin as far as possible without too much slack.

(b) Place the tap wires above the pin and flush against the back of the wire supports.

(c) Since the through wire is placed behind the wire cutter, it is not cut during the crimping cycle and service is not interrupted.



Wire Placement for a Tap Connection (MA-6)
Fig. 11

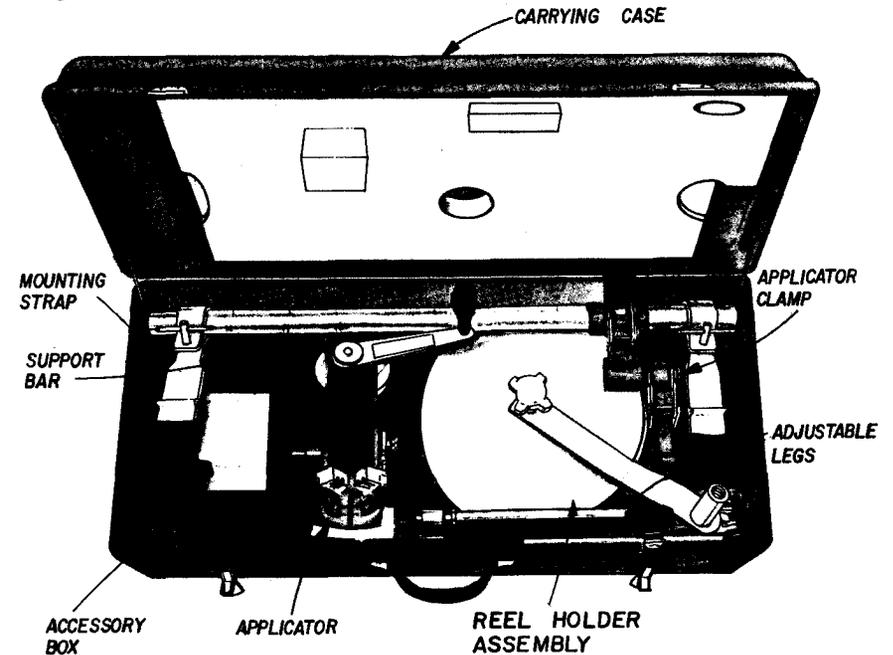
5.08 A reel version (MA-6R) is available for the MA-6 to utilize strip connectors. Refer to Part 6 for instructions on proper usage.

6. MA-10 PRESSER — DESCRIPTION AND USE

6.01 The MA-10 Applicator Kit (see Fig. 12) consists of the MA-10 Presser, a carrying case, a support rig including two adjustable legs, one applicator clamp, two mounting straps, a 30' standard support bar, a connector reel holder, a shear pin replacement kit, a crimped connector gauge, and a cutter blade replacement kit.

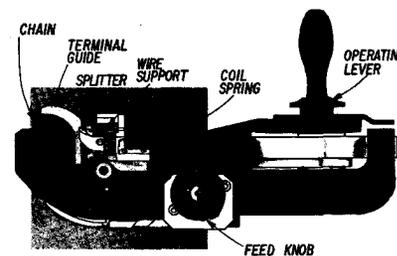
6.02 The MA-10 Presser (see Fig. 13) is hand operated and automatically fed. It consists of a precision-machined casting to which two fixed anvils and two movable crimpers are attached. The wire sup-

MA-10 PICABOND SPLICING KIT



MA-10 Applicator Kit
Fig. 12

MA-10 APPLICATOR



MA-10 Presser
Fig. 13

ports are designed to position the wires in the crimpers which in turn places the wires properly in the connector. The splitters contained in the supports are designed to separate the wires as they are laced into the tool. The coil spring attached to the top of the tool holds the wires during the crimping procedure. The feed knob on the side of the tool is used to start the connectors into the presser and, if necessary, remove damaged or jammed connectors from the presser. The operating lever drives the feed chain which carries the connectors through the presser and centers them on the anvils. The chain guard/wire cutter affords protection for the chain and cuts the wire during the crimping cycle.

6.03 The MA-10 Presser provides high-speed, reliable, straight splicing — a pair at a time.

It mounts on a bar that is attached to each side of the cable opening. This tool is designed for straight splicing only. It is hand operated and automatically feeds using strip connectors.

6.04 The support rig described in paragraphs 5.03 and 5.04 is also used with the MA-10 Presser.

6.05 Fig. 14 illustrates the conductor placement for straight splicing with the MA-10 Presser.

(a) Select a pair of wires from either side of the splice opening and feed them into the wire supports. The points on the splitters will separate the wires as they are pulled into the wire supports.

(b) Press the wires into the depression along the side of the crimper. This will provide the minimum amount of slack required. (See Fig. 14.) A slack wire bracket is available for modifying the MA-10 to ensure that the proper amount of slack is allowed.

(c) Separate the pair well past the inner end of the crimpers; pull the ends taut and slip them into the coil springs.

(d) Repeat the above steps using a pair from the other side of the splice opening, making sure that the tip-to-tip and ring-to-ring conductors are properly matched as the second pair is placed into the presser. (See Fig. 14.)

CONDUCTOR PLACEMENT



Wire Placement, MA-10 Presser
Fig. 14

(e) To complete the cycling operation, simply rotate the operating lever counterclockwise one complete revolution.

6.06 Following are several suggestions that will be helpful in operating the MA-10 Presser and will minimize breakdowns:

(a) Never turn the operating lever clockwise.

(b) Keep dirt and debris out of the presser.

(c) Remove cut-off wire ends.

(d) Keep the back of the tool free of crimped connectors.

(e) Watch for the last connector on the strip.

6.07 Loading connectors into the MA-10 Presser should be accomplished as follows:

(a) Be sure the operating lever is in the "at rest" (9 o'clock) position. Rotate the feed knob counterclockwise until the arrow engraved on it aligns with the red triangular mark on the mounting plate. If you should turn past the mark, continue to turn in the same direction until the marks are aligned.

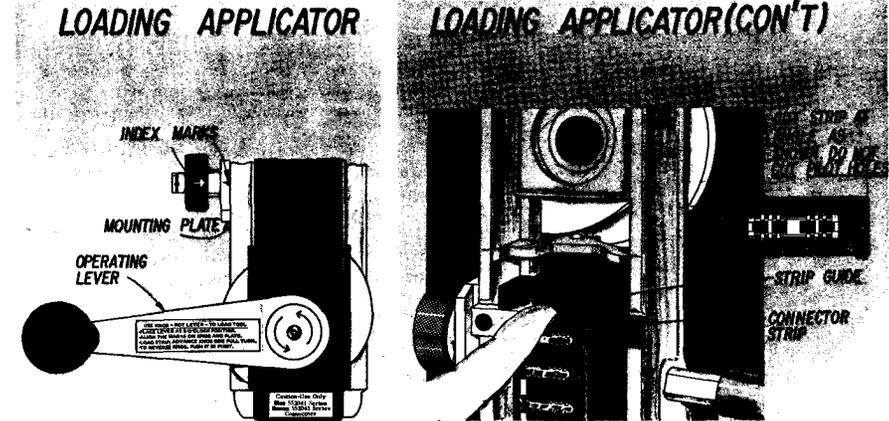
(b) Make sure all damaged connectors are removed from the connector strip. Never feed damaged connectors into the presser.

(c) Cut the strip on each side of the first connector at an angle, and feed the connector straight into the strip guide as far as possible with the index finger. Turn the feed knob counterclockwise one full turn until the index marks are aligned again. (See Fig. 15.)

Note: If the feed knob turns with difficulty, push it in and rotate it clockwise to back the connectors out of the presser, then check for damaged connectors. Repeat steps (a) thru (c) above.

(d) With the connector strip started properly, cycle the operating lever *three* times so that the first two connectors are properly positioned on the anvils.

(e) Check to see that the plastic strips are feeding out of the bottom of the presser. If they are not, take the extractor tool and clear the strips.



Loading MA-10 Presser
Fig. 15

6.08 Positioning the MA-10 Presser in accordance with the following procedures will allow a minimum amount of slack in the completed connections. If additional slack is required, it can be added as the wires are placed into the presser.

(a) Withdraw a reference pair of wires from either side of the splice opening, preferably from the center of the cable units you wish to join. It is recommended that you begin with the lower rear units in the cable and that the sequence outlined in Fig. 16 be used for the remaining units.

(b) Pull the wires together until they are taut; then twist or tape them together, making sure they are parallel to the axis of the cable.

(c) Hold the presser firmly as you release both the upper and lower applicator clamps, and center the presser in the splice opening. Align the arrow on the lower clamp with the nearest index mark on the support bar.

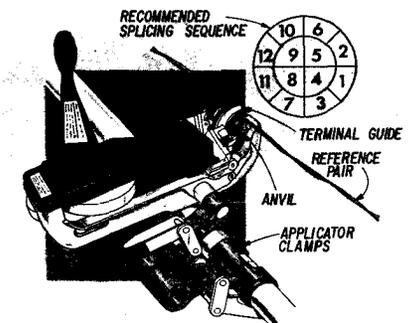
(d) Pivot the presser around the support bar so that:

(1) The reference pair lies under the chain guard directly over the rear edge of the anvil

(2) The head of the presser is just slightly higher than the handle end

(c) Lock the presser in place by closing both clamp handles, then lay the reference pair back on the cable unit.

POSITIONING APPLICATOR



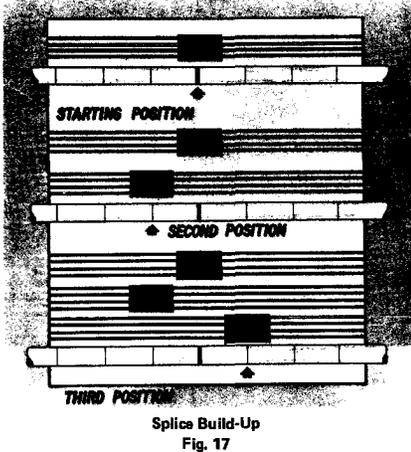
Positioning the Presser and
Recommended Splicing Sequence
Fig. 16

7. SPLICE BUILD-UP

7.01 To build a uniform compact splice, place the finished joints in rows along the splice opening. This is best accomplished by moving the MA-6 or MA-10 Presser after completion of each 25-pair group.

- After joining the first group in the center of the cable opening, loosen the applicator clamp. While holding the presser level, move it to the left until the arrow on the clamp aligns with the first index mark from center. (See Fig. 17.)
- Tighten the lower applicator clamp and join the next binder group.
- After completing the second binder group, move the presser to the first index mark to the right of the center index mark. Continue this alternating from one side to the other, always locating the presser on the index mark next to the last group spliced on that side of the cable. (See Fig. 17.)
- Upon completion of the number of bays possible, start at the center and continue splicing in the same manner.

SPLICE BUILD-UP

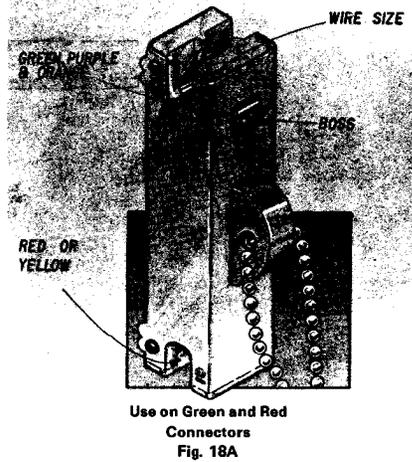


7.02 When using the hand pressers, follow the instructions above, except that the spacing of the connectors must be accomplished by exercising judgement since index marks are not available.

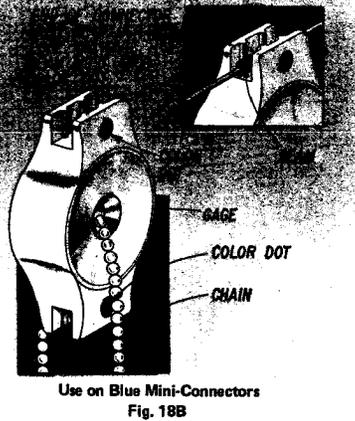
8. CRIMPED CONNECTOR GAUGES

- Each connection should be visually inspected as it is removed from the presser.
- Using the appropriate crimped connector gauge (illustrated in Figs. 18A and 18B), check the first and last connections made during a work tour.

CRIMPED CONNECTOR GAGE



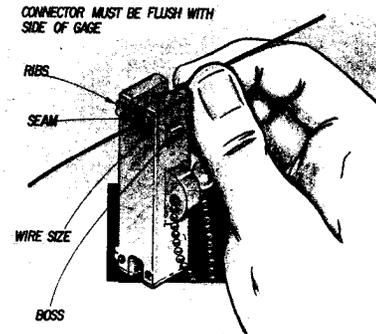
CRIMPED CONNECTOR GAGE



8.03 Fig. 18A illustrates the gauge to be used on standard sized (red and green) connectors. Select the proper end of the gauge for the type connectors to be inspected. Each end is stamped with the wire size it accepts and has a color dot which corresponds to the color of the connectors. If the dots are not visible, check the green connectors in the end of the gauge that has the boss. Check red connectors in the end without the boss. Fig. 18B illustrates the gauge for the blue mini-connector. Use the end of this gauge with the blue color dot.

8.04 Notice the seam in the connector and the double rib on the gauge. Insert the connector into the gauge so the seam faces the double rib. Place the connector so its end is flush with the side of the gauge. (See Fig. 19.)

GAGING



Gauging Connectors
Fig. 19

8.05 Hold the free end of the connector and remove the gauge from the connector. The gauge must slide off easily with very little force. If it does, repeat the test on the opposite end of connector.

8.06 If either end of the connector sticks in the gauge, the connector may be improperly crimped. If this happens, proceed as follows:

- Check the presser by making several crimps on scrap wire. If these gauge satisfactorily, check all connections made since the last gauging. Re-crimp those that do not gauge properly.

(b) If the samples you have just made do not gauge properly, return the defective presser to your supervisor and replace it with a new one.

(c) With the new presser, make several sample crimps on scrap wire and gauge them. If they are good, go back and re-crimp all connections made since the last good gauging.

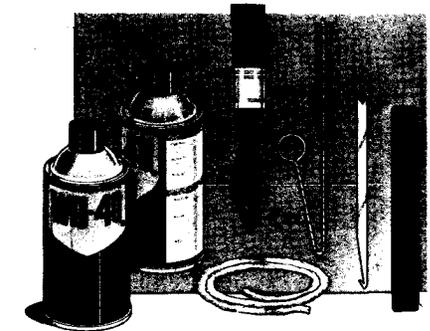
9. TOOLS — MAINTENANCE

9.01 While in use, the moving parts of the pressers tend to collect dirt and/or grit which can lead to early failure. The cleaning kit shown in Fig. 20 should be used to assist in keeping all pressers trouble-free.

9.02 The cleaning kit for all pressers consists of:

- A 16-oz. aerosol can of WD-40 lubricant (24358-2)
- A 2" bristle brush (229329-1)
- A tube brush (229328-1)
- A length of pipe cleaner (229330-1)
- An extractor (229331-1)

CLEANING KIT

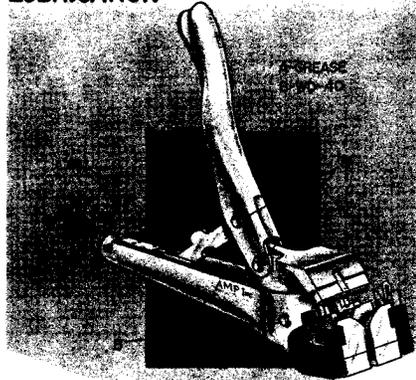


Cleaning Kit
Fig. 20

9.03 Lubricate the hand pressers every time you clean them. Oil all pivot pins and sliding surfaces. Refer to Fig. 21 for the lubricating points.

Note: WD-40 lubricant should be used only in well ventilated areas.

LUBRICATION



Lubrication Points
Fig. 21

9.04 MA-6 Presser: Lubricate the presser after it has been cleaned. Oil sparingly, as excess oil may work into the conductors during the crimping cycle and cause short circuits.

9.05 Should the MA-6 Presser jam and not open, proceed as follows:

(a) If it is certain the jam is due to some hard metallic object lodged between the anvil and the crimpers, remove the presser and return it for repairs.

(b) Many times, however, a jam occurs because a connector is cocked at an angle between the anvil and the crimpers. In this case, push the handle forward until the ratchet releases and allows it to open. Replace the damaged connector with a good connector, making sure as you continue to splice that the connectors are being placed properly in the presser.

9.06 MA-10 Presser: Maintenance of the MA-10 Presser consists of keeping it cleaned and oiled and adjusting the synchronization of the tool.

9.07 The following maintenance should be performed on the MA-10 Presser:

(a) Use the bristle brush (229329-1) to clean the exterior surfaces of the presser. Do NOT jam it down inside the presser because the bristles may break off and lodge inside.

(b) Use pipe cleaners (229330-1) to clean the crimping dies, crimping anvils, and all exterior polished surfaces of the presser. To use, bend back approximately 2 inches of the cleaner. This will prevent the end of the cleaner from marring the surfaces.

(c) Use the extractor tool (229331-1) to remove scrap wire and plastic strips from inside the presser. Before using, rotate the presser operating lever COUNTERCLOCKWISE to the 3 o'clock position. This provides an opening in front of the cam that facilitates removal of scrap. Turn the presser bottom-side up and remove the cutter blades by prying up and pulling straight out on the locking tabs. Now check the scrap strip and connector channels for bits of wire and plastic particles. Insert the "V" notched end of the tool straight through until it butts against the cam. If there is an obstruction in the presser, push it through until it is visible in the opening in the cam. Now, using the hooked end of the extractor, insert it into the opening and remove any scraps that are visible.

(d) After you have cleaned the presser with the extractor, slide the tube brush (229328-1) up and down several times in the scrap strip and connector channels. Use the brush to clean all internal parts in the bottom side. Then turn the tool over and do the same on the top side.

(e) Rotate the presser operating lever COUNTERCLOCKWISE to the 9 o'clock position. Then turn the presser over. Liberally spray all components, EXCEPT THE SEALED BEARINGS, with WD-40 lubricant (24358-2). Give special attention to the cutter blade assembly. Rotate the feed knob several times until the full length of the chain has been lubricated.

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NEVER lubricate the four sealed bearings surrounding the cam. Turn the tool over and spray all components in the same manner. Allow any excess lubricant to drain off. Then check the presser for particles that you may have loosened, and remove them with the proper tool.

9.08 Wire Support Adjustment: To work properly, the wire supports must fit the wire being joined. When you have been using a large size wire and then change to a smaller size, check the supports and adjust them if necessary. In addition, check them when you set up at a new location. Proceed as follows:

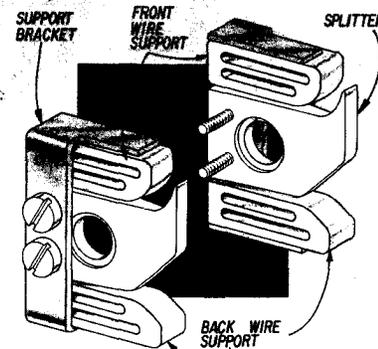
(a) Using a length of the wire you are joining, slide it into both slots in each wire support. Check how tightly the support grips the wire. It should not grip the wire too tightly, but it must grip it tightly enough to keep the wire from pulling out during the crimping operation.

Note: The wire combs are adjusted for 28-through 19-gauge wire. When 19-gauge wire is used for a long period of time, the wire support is bent out of shape but can be bent back into shape very easily.

(b) If the support is too loose, press on the small metal tab above the support and pry on the metal tab below the support as shown in Fig. 22. Use a small screwdriver to pry the tab.

(c) If you make the support too tight, insert a small screwdriver into the slots in the plastic part of the supports and pry to loosen the tab.

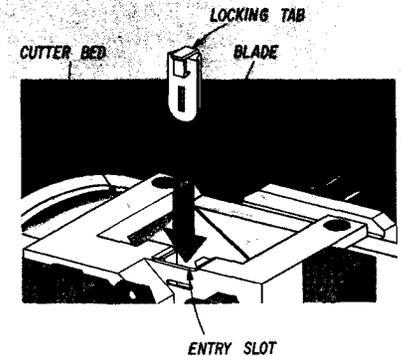
WIRE SUPPORT



Wire Support Adjustment
Fig. 22

9.09 Replacing Cutter Blades: If the connectors are ejected from the presser with pieces of the carrier strip, or if the connectors appear to be binding, it may be due to dull or damaged cutter blades. In each carrying case for the MA-10 Presser there is a tube containing two (2) sets of cutter blades. Each set contains one black and one white blade to match the black and white cutter bed assemblies. The replacement of dull or damaged cutter blades is illustrated in Fig. 23.

BLADE REPLACEMENT



Cutter Blade Replacement
Fig. 23

(a) Unlatch the locking tab and pull the blade holder straight out.

(b) Check the presser for accumulated dirt and debris.

Note: It is not necessary to replace both blades at the same time.

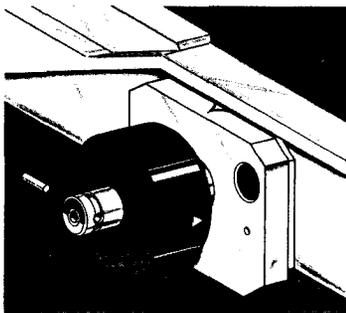
(c) Align the dovetails on the blade holder and the cutter bed, and push the blade into the cutter bed. Make sure that the color of the blade matches the color of the cutter bed.

(d) Push the blade holder down flush and snap the locking tab into the detent in the cutter bed.

9.10 Replacing Shear Pins: The MA-10 Presser is provided with a shear pin designed to prevent damage in the event of a jam. The replacement shear pins are packaged along with extra "O" rings, a small "T" handle tool, and instructions for the removal and replacement of the pins. (See Fig. 24.) Procedures for replacing shear pins are as follows:

- (a) Push back or cut the "O" ring.
- (b) Turn the outer shaft clockwise until the color codes align.
- (c) With the holes aligned, push out the broken shear pin with the "T" handle tool. Leave the tool in the hole.
- (d) Insert the new shear pin into the hole from the bottom and push out the tool.
- (e) Replace the "O" ring in the groove in the shaft.

SHEAR PIN REPLACEMENT



Shear Pin Replacement
Fig. 24

9.11 Chain Synchronization: The feed chain and the operating lever on the MA-10 Presser must be synchronized so that each time the operating lever is rotated to the 9 o'clock position, the connectors center on the anvil as shown in Fig. 25. The presser must be adjusted if the connectors do NOT center on the anvils, otherwise an improper crimp and damage to the presser will result. A Chain Synchronization Kit is included in the MA-10 Carrying

Case. Procedures for synchronizing the presser are as follows:

- (a) Release the applicator clamp and turn the tool lever end up so that you can see the plastic sprockets.
- (b) Cycle the tool COUNTERCLOCKWISE until the screw is visible in the right-hand sprocket, with the operating lever in the 9 o'clock position.
- (c) Insert the locking wrench into the threaded hole in the left-hand (white) cutter bed. Tighten the screw to lock the sprocket shaft.

Note: DO NOT move the operating lever or feed knob again until the locking wrench is removed.

- (d) Using the "T" handle tool (wrench), loosen the screw in the right-hand sprocket two full turns.
- (e) Insert the "T" handle wrench into the hole in the left-hand sprocket wheel. Make sure the wrench is bottomed in the hole.
- (f) Center the connectors on the anvils by moving the wrench up or down to rotate the sprocket.
- (g) With the "T" handle wrench, tighten the set screw in the sprocket as tight as you can. Now remove the "T" handle wrench and the locking screw.
- (h) Cycle the tool to double-check the alignment of the connectors.

CHAIN SYNCHRONIZATION

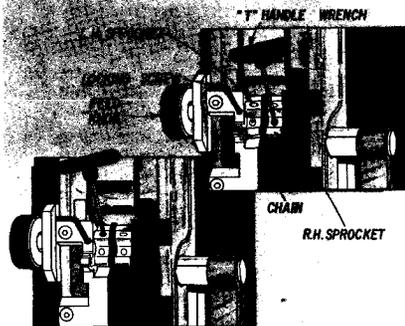


Fig. 25

10. CARE OF PRESSERS

10.01 Always use the hand tools and materials provided in the cleaning kits. For example, the use of a lubricant other than WD-40 could clog the presser action, causing malfunction.

10.02 Replacement parts for the cleaning kits are available from the AMP Corporation. Always order by using the part numbers which have been provided in paragraphs 9.02 and 9.07.

11. RETURNING PRESSERS FOR REPAIR

11.01 Any presser returned to the AMP Corporation for repair should be packed in its carrying case. Fill out the Tool Repair Tag (Fig. 26) according to the instructions on the tag. Attach the tag to the tool. Close and strap the case. A pre-addressed shipping label is supplied with the repair tag.

Note: Every tool returned for repair *must* have a repair tag attached. Keep one copy of the repair tag for your local tool record.



Tool Repair Tag
Fig. 26