Instructions

For the Assembly of the MDR 101XX-6000 Wiremount Plug using the 10960-2000 MDR Assembly Press and Related Accessories

The assembly of the MDR plug requires the following tooling which must be ordered individually prior to any tooling set-up:

- 10960-2000 .....Hand Press (Fig. 1)
- 10961 .....Cutting Unit (Fig. 5); includes 2 spare blades (10970-9)
- 10962-2000 .....Fixture Unit (Fig. 14); includes 14, 20, 26, 36, 40, 50, 68, 80, and 100 position connector stops
- 10964-1 .....Cable Clamp (Fig. 13); Black, 14-50 position
- 10964-2 .....Cable Clamp (Fig. 13); Silver, 68-100 position

Optional:

- 10963-2000 .....Fixture Block (Fig. 12); Not required for initial unit; only needs to be ordered when additional stations are set-up. Must also order another 10962-2000.

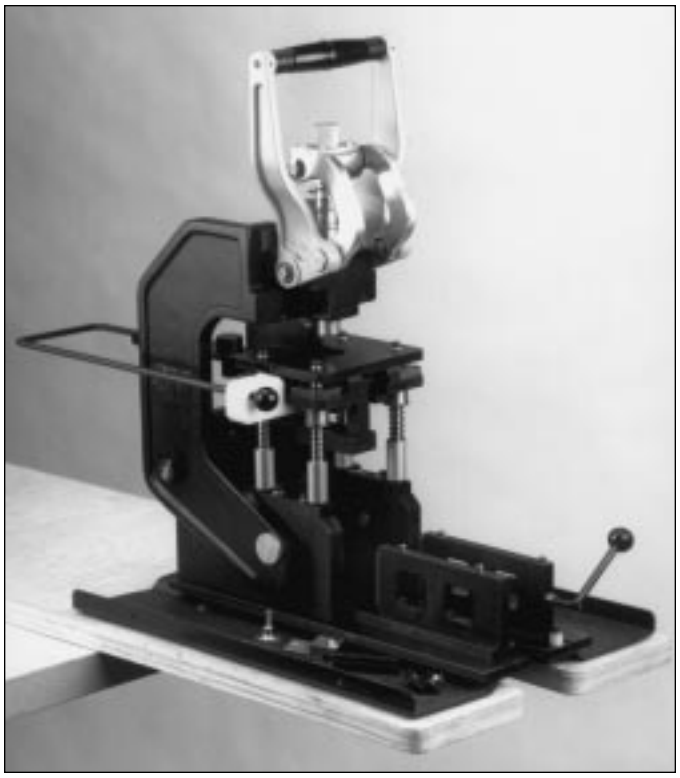

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Figure 1. 10960-2000 Hand Press

Initial Tooling Set Up

1. Unpack the items listed above and set them on a clean work bench.
2. Select the 10960-2000 Hand Press and place it in front of the operator so the handle is toward the operator. It is recommended for assembling connectors that the press be positioned in a manner so cable may hang freely below the press when moving the shuttle block (C of Fig. 4).
3. Locate the thumbscrew (C of Fig. 2) at the back of the press. Loosen the thumbscrew and gently lower the armature of the press away from the operator (Fig. 3). This allows easy access to the back of the press to install the cutting unit.
4. Slide the platen assembly forward using the side bar which has a round black knob (B of Fig. 4) on the operator's left side.

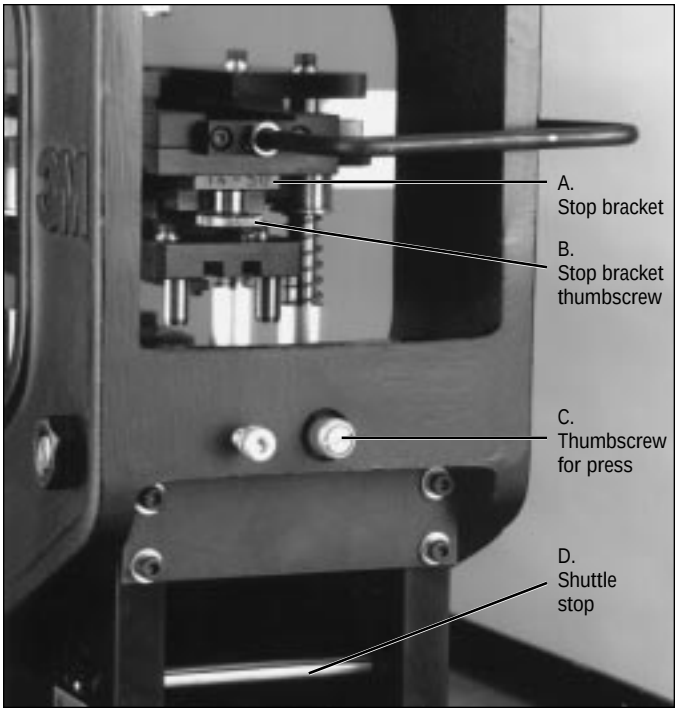

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Figure 2. Back of press

5. Select the 10961 cutting unit (Fig. 5). Install cutting unit from the rear of the press. The "A" portion of the cutting unit faces the front of the press with the "B" portion going toward the back. Slide cutting unit forward in the two grooves provided.

6. Locate cutting unit stop brackets and thumbscrew (D & E of Fig. 4). Depending on size of assembly choose stop bracket accordingly.
(Black for 14-50 position and Silver for 68-100 position.)
Stop brackets are installed using the thumbscrew (A & B of Fig. 2).

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Figure 3. Press leaned back

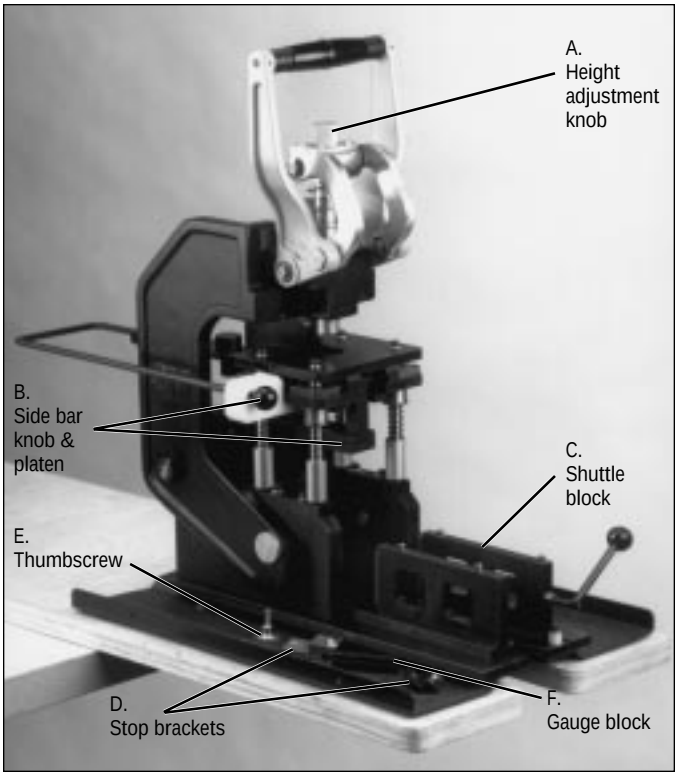

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Figure 4. 10960-2000 Hand Press

7. Push platen back into place using the side bar.
8. After installing the stop bracket, position the armature of the press back in an upright position. Tighten the thumbscrew (C of Fig. 2) to hold it in place.
9. Located at the back of the press is a silver, dowel shaped shuttle stop (D of Fig. 2). Set shuttle stop for appropriate connector pin count.
10. Locate the shuttle block (C of Fig. 4) and install fixture unit (Fig. 14) on the guide pins. Push the release buttons on the front of the fixture unit to open the grooved plates.
11. Locate the gauge block (F of Fig. 4). Height adjustment can be accomplished by placing the gauge block, narrow side down, in the fixture unit between the two grooved plates. Close plates manually by squeezing them together.

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Figure 5. 10961 Cutting Unit

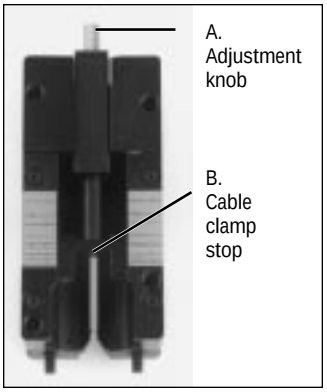
12. Push shuttle, with fixture unit and gauge block, away from the operator to the rear of the press until it stops.
13. Pull the press handle down, toward the operator, until the platen contacts the gauge block.
DO NOT FORCE HANDLE.
14. Adjust the silver knob at the top of the press (A of Fig. 4) by hand until the platen lightly contacts the gauge block. Lift press handle up and adjust the silver knob approximately another one-half turn tighter. Pull handle down again. It should lightly lock in place when fully depressed. The platen should apply enough pressure on the gauge block and shuttle to prevent them from moving when trying to slide them out.
15. Height adjustment should be checked periodically.

Fixture Unit Adjustment

Once the size of the connector to be assembled has been determined the 10962 Fixture Unit requires some adjustments.

1. Select the correct connector stop (14, 20, 26, 36, 40, 50, 68, 80 or 100 position; B of Fig. 14) for your application.
2. Locate the yolk shaped cover plate (A of Fig. 14) and thumbscrew at the top of the fixture unit. Remove and set aside. Close fixture unit grooved plates by manually squeezing them together.

3. Grasp the stop so the numbers face up, the rounded end to the rear and the grooved end facing the operator. With the grooved end raised up, slide the back end against the small spring that contacts the stop under the cover plate. Make sure the stop pushes against the spring. Lower the grooved end (front end) down into the slot and maintain downward pressure. The spring should be pushing forward against the connector stop which should be held in place by the silver colored pin against a tab mechanism underneath.
4. Holding the connector stop down in place, replace the yolk shaped cover plate and tighten the thumbscrew. To verify the connector stop is correctly installed, press the release buttons on the front of the fixture unit (A of Fig. 7) and the connector stop should spring to the back. Close the grooved plates and the stop should spring forward again.
5. If planning to terminate with flat cable, then proceed to Step 7. Otherwise, turn the fixture unit over and locate the size indexes on the two strips adhered to the bottom sides (Fig. 6).
6. Adjust the cable clamp stop (B of Fig. 6) by turning the adjustment knob (A of Fig. 6) on the rear of the unit to align the grooves in the cable clamp stop with the correct size index. Return fixture unit to shuttle block.
7. Fixture unit is now ready for use.



6 *Figure 6. Back side of 10962-2000 Fixture Unit*

Cable Preparation

Before assembly of the MDR 101XX-6000 Wiremount Plug can take place, the cable must be prepared. After selecting the appropriate conductor count cable, use the corresponding method for round jacketed discrete wire or flat ribbon cable.

Discrete Wire Cable Preparation

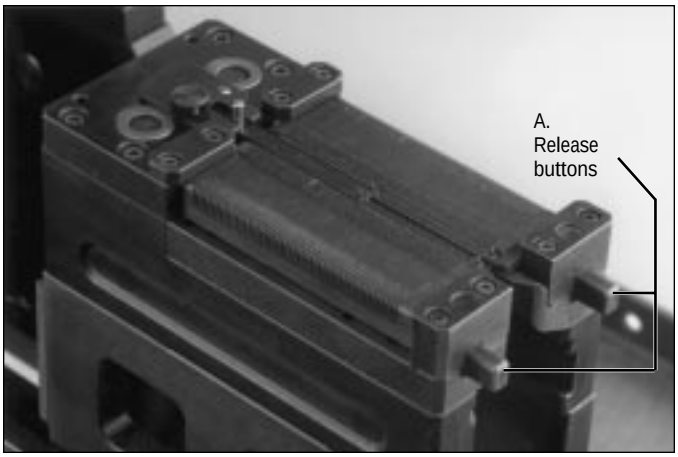
1. Remove approximately 3 inches of the outer jacket of insulation revealing the braided shielding.
2. Cut the braided shielding about 1/2 inch above the end of the jacket and peel it back over the jacket.
   CAUTION: Do not score the underlying insulation of the conductors when cutting the braid.
3. Unwrap and remove the foil as far back as the jacket.
4. Remove any fiber or plastic stiffeners so only conductors are revealed.
5. Cable is now ready for termination.

0.025” Flat Ribbon Cable Preparation

1. If the cable is shielded, cut jacket back, exposing the pleated foil. Peel pleated foil back above the jacket and leave attached.
2. Split insulated conductors to separate them individually.
3. Cable is now ready for termination.

Connector Termination

1. Place the fixture unit onto either the fixture block (Fig. 12) or the shuttle block on the press (C of Fig. 4) with the slot on the fixture unit toward the operator and the cable clamp stop adjustment knob at the rear of the unit, away from the operator.
2. Select a connector and both covers of the correct size.



7 *Figure 7. “U” cover plate*

3. Place the first cover, shaped like the letter “U”, into the slot at the top of the fixture unit (Fig. 7), open end toward the operator and the grooved side with the posts facing up. Push the cover down in the slot and back against the spring loaded connector stop previously installed to lock it in place.
4. For termination choose the appropriate type of cable:
   Discrete Wire Cable
   A. Place prepared cable into the cable clamp (Fig. 13) with the jacket even with the top of the clip’s edge.
   B. Arrange the individual cable conductors into bundles so that the first to be assembled are closest to the clamp opening.
   C. Place the clamped cable into the fixture unit while guiding the first conductors into the open “U” of the cover. Push the clamp back until it contacts the previously adjusted stop.
   D. Carefully untwist the first set of conductors. Push the first conductor to the back of the slot. Gently pull up and to the left to align wire with the groove in rear left of the cover and then down into the corresponding wire slot. Stretch it slightly and lay it into the grooved wire holding slot. Be sure the wire is properly seated into the “U” shaped cover (Fig. 8) by gently pushing it into the slot.

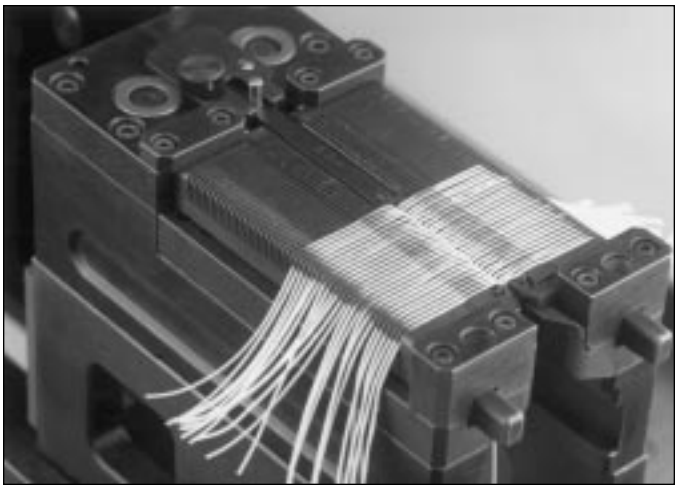


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Figure 8. Wires in "U" slot cover

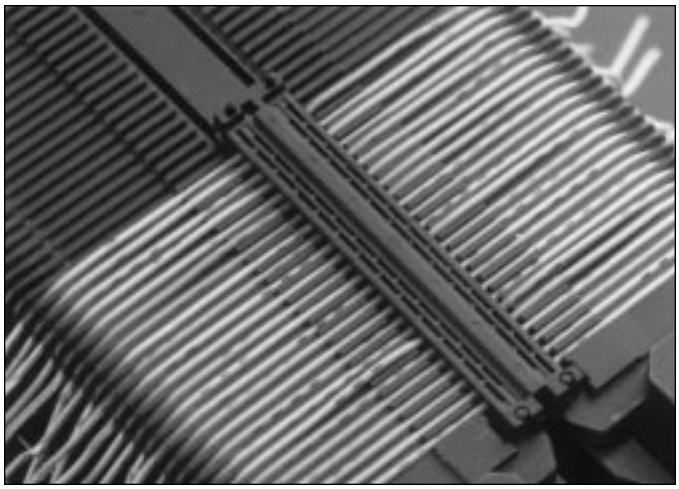

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Figure 9. 2nd cover on top of wires

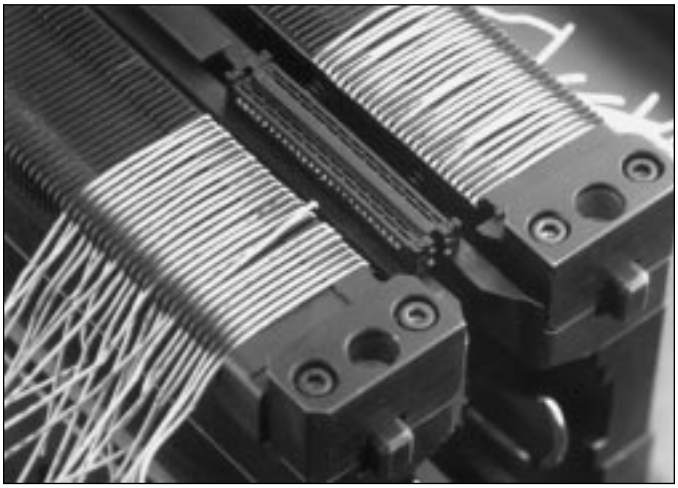

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Figure 10. Cut wires

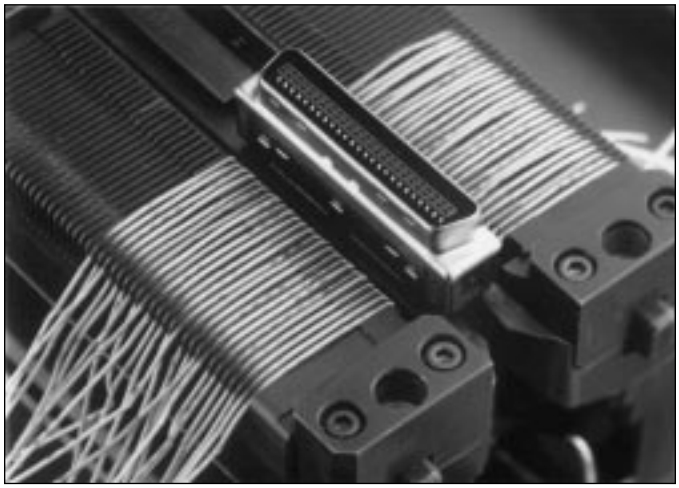

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Figure 11. Connector body

E. Repeat for the next conductor, except position it to the rear and right. Place the next wire in the left slot (adjacent to the first one), followed by another wire in the right slot, etc., until all conductors are in position. Proceed to Step 5.

0.025" Flat Ribbon Cable

A. To use the fixture unit, first remove the cable clamp stop (B of Fig. 6) from the fixture unit. This is done so that the flat cable may be inserted into the fixture unit without obstruction.

B. Slide the prepared cable end into the fixture slot so the first conductor is towards the back, facing the left side.

C. Lay the conductors into the grooved wire holding slot accordingly until all conductors are positioned. Proceed to Step 5.

5. Pick up second cover and rub the paper liner to ensure transfer of adhesive to the cover. Remove the paper liner from the back of the second cover and place the cover (adhesive side down) over the wires and first cover, aligning it with the first cover's guide pins. Keep the notched end toward the operator. Press it down on the first cover's guide posts (Fig. 9).
6. Slide the platen assembly forward using the side bar on the operator's left side to reveal the cutting unit.
7. Push shuttle block with fixture unit and cable subassembly away from the operator, back under the cutting unit, until it contacts the shuttle stop.
8. Pull the press handle down and release, cutting the wires (Fig. 10).
9. Push platen back into place using the side bar.
10. Pull the shuttle out. Placing one finger near the center of the covers to prevent movement or wire dislocation, remove the cut wires from the fixture unit.
11. Push the release buttons on the front of the fixture unit to allow placement of the connector body over the covers (Fig. 11). Make sure the alignment tab on the inside end of the connector body is aligned with the notch on the second cover, nearest the operator. Push the connector body down over the covers until a slight "click" is heard.
12. Push shuttle block, with fixture unit and cable subassembly, away from the operator until it stops.
13. Pull press handle completely down, pressing connector body onto the covers and subassembly.
14. Lift handle and pull shuttle block and assembly toward the operator.
15. Completed assembly may now be removed from the fixture unit.

Blade Replacement

Remove the cutting unit (Fig. 5) from the press. Loosen the set of hex screws on each side of the cutting unit, approximately two turns. Blades may now be removed. Install new blades* ensuring the beveled edge is facing out. Blades are self aligning. Tighten the screws and reinstall the cutting unit.
*Order 10970-9 replacement blades which are packaged 2 blades per set.

Multiple Wiring Stations

Increased through-put and greater press utilization can be achieved by setting up additional wiring stations. When required, order one each of the 10963-2000 fixture block and one each of the 10962-2000 fixture unit. After the wires are properly positioned in the fixture unit, move the unit to the press for final termination of connector.

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Figure 12. 10963-2000 Fixture Block

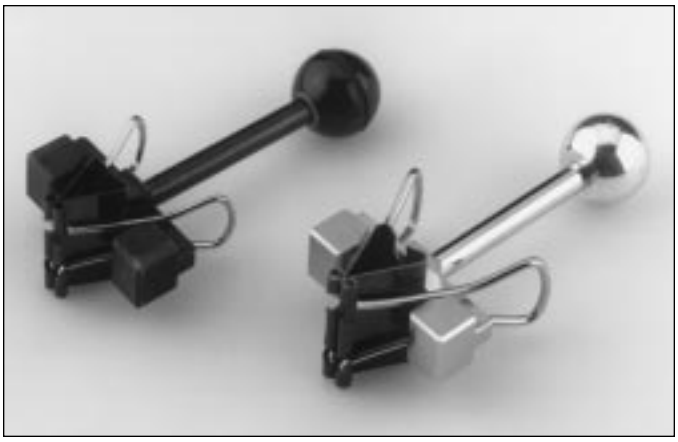

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Figure 13. 10964-1 10964-2 Cable Clamps

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Figure 14. 10962-2000 Fixture Unit with connector stops

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Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.