TL-080B WELD HEADS — MODELS TL-080B-F AND TL-086B-F CONVERSION INSTRUCTIONS: MANUAL TO EZ-AIR ACTUATION



AMADA WELD TECH

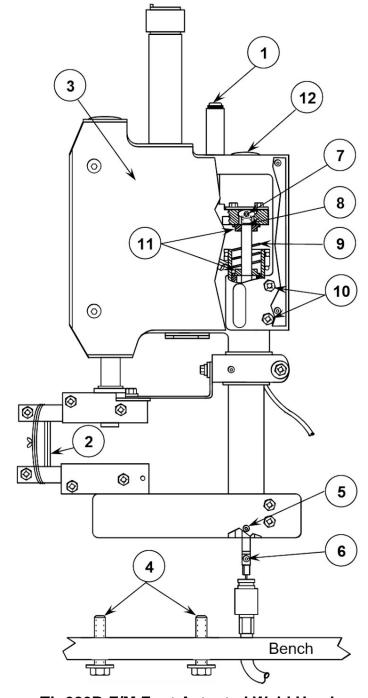
PN 990-128, Rev E

PULL ROD and CABLE PEDAL DISASSEMBLY

- 1. Use 3/16" hex key to loosen the down stop bolt (1) until middle of bolt head is level with top of shaft.
- 2. Remove electrodes. Turn force indicator to "zero" units. Squeeze the top and bottom electrode holders together and secure with a string to hold in place (2).
- 3. Remove both covers (3) from side of head by removing the button head screw in each corner using a 3/32" hex key. Unbolt head from bench by removing the four 1/4"-20 hex head bolts (4) with a wrench.
- 4. Use 0.050" hex key to loosen socket head set screw (5).
- 5. Remove the small screw (6) which attaches the end of the cable to the pull rod using a 0.050" hex key.
- 6. Loosen the socket head set screw (7) on the pull rod coupling nut using 1/16" hex key.
- 7. Unscrew the pull rod (8) by turning it counterclockwise.

CAUTION: The return spring (9) is pre-loaded

- 8. Loosen the two socket screws (10), which clamp the head to the mounting post, using a 5/32" hex key.
- 9. Remove string from electrode holders, and slide the mounting post from the head.



TL-080B-F/M Foot Actuated Weld Head

- 10. Remove the return spring (9) and both of the spring retainers (11) through the hole from which the mounting post was removed.
- 11. Re-install the mounting post into the head and secure it with the two socket screws (9) loosened in step 8, using a 5/32" hex key.
- 12. Re-attach head to bench with four 1/4"-20 hex head bolts (3) removed in step 2.
- 13. Remove the hole plug (12) from the top surface of the head.

EZ-AIR ACTUATION KIT ASSEMBLY

- 1. Extend cylinder shaft from cylinder base as far as possible. Thread the shaft (1) of the air cylinder (2) into the pull rod coupling nut (3) by rotating the shaft. Apply a high strength thread-lock to hex head set screw (4) (part of the pull rod coupling nut), and tighten the set screw with a 1/16" hex key.
- 2. Put the shoulder screw (5) into the D-washer (6). Then place an O-ring (7) on each shoulder screw. Apply a high strength thread-lock to both screws (5) and use them to secure the air cylinder to the top of the weld head, using a 3/32" hex key.
- 3. Replace both covers (8) using a 3/32" hex key to reinstall the button head screws in the corners.
- 4. Loosely install two new hex head flange screws (9) on the rear of the weld head.
- 5. Slide the EZ-Air (10) onto the two screws (9) and tighten the screws with open-end wrench.

CAUTION: Be sure no part of the EZ-Air touches the copper power bars; any contact will cause shorting of the weld current.

NOTE: When cutting air lines, the cuts must be smooth and square. We recommend using an SMC TKA-1 tube cutter. Do not use pliers, wire nippers or scissors.

- 6. Cut two 9" pieces of air line. The remaining air line can be used for the shop-air connection.
- 7. Connect the air line (11) between the top of the cylinder and the air cylinder down port on the EZ-Air. Connect air line (12) between the bottom of the cylinder and the air cylinder up port on the EZ-Air. Be sure that the air lines are inserted all the way into the sleeve on the fittings to prevent inadvertent blowouts. The shorter the air lines, the faster the mechanical response of the head.
- 8. A user supplied in-line filter lubricator should be installed on the air supply line to insure the maximum life of the air cylinder, flow controls and regulator. Connect the inlet part of the regulator valve assembly, as illustrated, to a properly filtered air supply (100 psi maximum). Use the shortest air line possible to obtain the fastest mechanical response. The inside diameter of the main air supply line must be at least 0.5" (13 mm) to allow sufficient air flow. Connect the air line to the input air fitting.
- 9. Connect the male firing switch cable connector from the weld head to the female firing switch cable connector on the EZ-Air kit.

