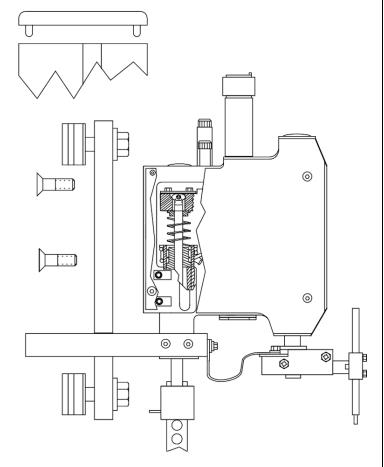
## TL-080B SERIES WELD HEADS — MODEL TL-088B-F CONVERSION INSTRUCTIONS: MANUAL TO EZ-AIR ACTUATION

## MADA AMADA WELD TECH

PN 990-129, Rev D

## PULL ROD AND FOOTPEDAL DISASSEMBLY

- 1. Remove covers from both sides of the head by removing the button head screws (1) in the corners with a 3/32 inch hex key.
- 2. Disconnect the foot pedal linkage (2) from the adapter block (3)
- 3. Remove mounting stand cap (4). Loosen the two bolts (5) which secure the head assembly to the mounting stand and slide the head assembly from the top of the mounting stand
- 4. Remove the four phillips head screws (6) which hold the two heads to the mounting plate (7).
- 5. Facing the front of the right-hand head, remove socket head screw (8) and clamp (9) with a 5/32 inch hex key.

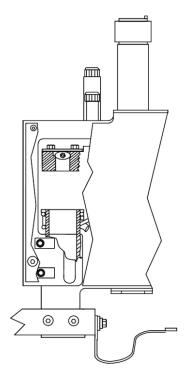


**Typical Weld Head** 

- 6. On left-hand head only, remove the socket head set screw (10) on the pull rod coupling nut with a 1/16 inch hex key.
- 7. On left-hand head, rotate the pull rod (11) counter-clockwise to unscrew from the adapter block (3). Then separate the two heads.

**CAUTION:** The return spring (12) is pre-loaded.

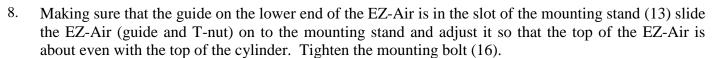
- 8. Remove the socket head screw (13) and clamp in both the left and right-hand heads with a 5/32 inch hex key
- 9. Re-install, but do not tighten, the socket head set screw (10), removed in step 6, on the left hand coupling nut. If necessary, rotate the pull rod (11)
- 10. Remove the pull rod (11) from the left-hand head by rotating it counterclockwise. Then remove the spring stop bushing (14) and pull rod retainer (15)
- 11. From the left-hand head, remove the return spring (12) and the spring retainer (16). Remove the hole plug (17) from the top of both heads
- 12. Remove the adapter block (3) from the right hand head. Then loosen the socket head set screw (10). Repeat step 6 through step 11 for the right-hand head. Both heads should be as illustrated.



Typical Weld Head After Parts Removal

## AIR ACTUATION KIT ASSEMBLY

- 1. Perform steps 2 and 3 for the left-hand.
- 2. Extend cylinder rod (1) from air cylinder (2) as far as possible. Thread the rod (1) into the pull rod coupling nut (3) by rotating the rod. 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 inch hex key.
- 3. Put the shoulder screws (5) into the D-washer (6). Then place 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 top of head, using a 3/32 inch hex key.
- 4. Perform steps 2 and 3 for the right hand head.
- 5. Place left and right heads next to each other and install them on the mounting plate (8) using four phillips flat head screws (9). Re-install socket head screw (10) and post clamp (11) using a 5/32 inch hex key.
- 6. Re-install the head assembly by sliding the T-nuts (12) onto the mounting stand (13), and tightening two hex metric bolts (14). Mount both covers using a 3/32 inch hex key and button head screws (15) in corners.
- 7. Loosen the mounting bolt (16) on the EZ-Air with a 5 mm hex key, so that the T-nut will slide on the mounting stand (13) opposite the weld heads.

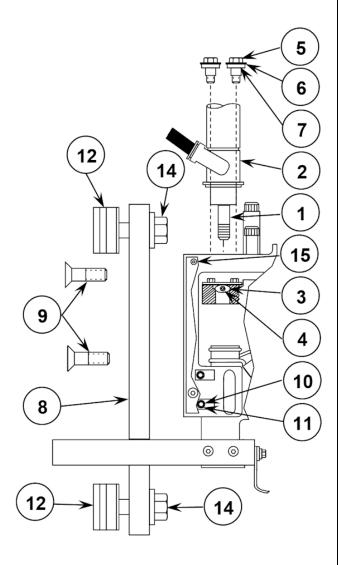


**CAUTION:** Be sure no part of the EZ-Air touches the copper power bars (17); any contact will cause shorting of the weld current.

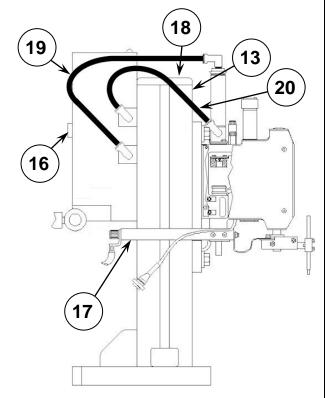
If your application requires the weld head to be positioned high on the mounting post, the original power bars should be replaced with new ones, available through your AMADA WELD TECH representative. These items are shorter, and will not interfere with the mounting of the EZ-Air. You will need two Power Bars (P/N 4-32748-01) and two Power Bar Insulators (P/N 4-32750-01). Use the original mounting hardware to replace these items.

9. Re-install the mounting stand cap (18)

**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



- 10. Cut four 9-inches long pieces of air line. The remaining air line can be used for the shop-air connection.
- 11. Connect one air line (19) between the top of the cylinder and the bottom air port of the EZ-Air on each head (a total of two air lines). Connect one air line (20) between the bottom of the cylinder and the top air port on the EZ-Air on each head (a total of two air lines). Be sure that the air lines are inserted all the way into the sleeve on the fittings to prevent inadvertent blow-outs. The shorter the air lines, the faster the mechanical response of the head.
- 12. A user supplied in-line filter lubricator should be installed on the air supply line to ensure the maximum life of the air cylinder, flow controls and regulator. Connect the inlet port of the regulator valve assembly, as illustrated, to a properly filtered air supply (100 psig maximum). Use the shortest air lines possible to obtain the fastest mechanical response. The inside diameter of the main air supply line must be at least 0.5 inch (13 mm) to allow sufficient air flow. Connect the air line to the input air fitting.



13. Connect the male firing switch cable connectors from the weld head (one from each weld head) to the female switch cable connectors (one on each side) on the EZ-Air kit.