

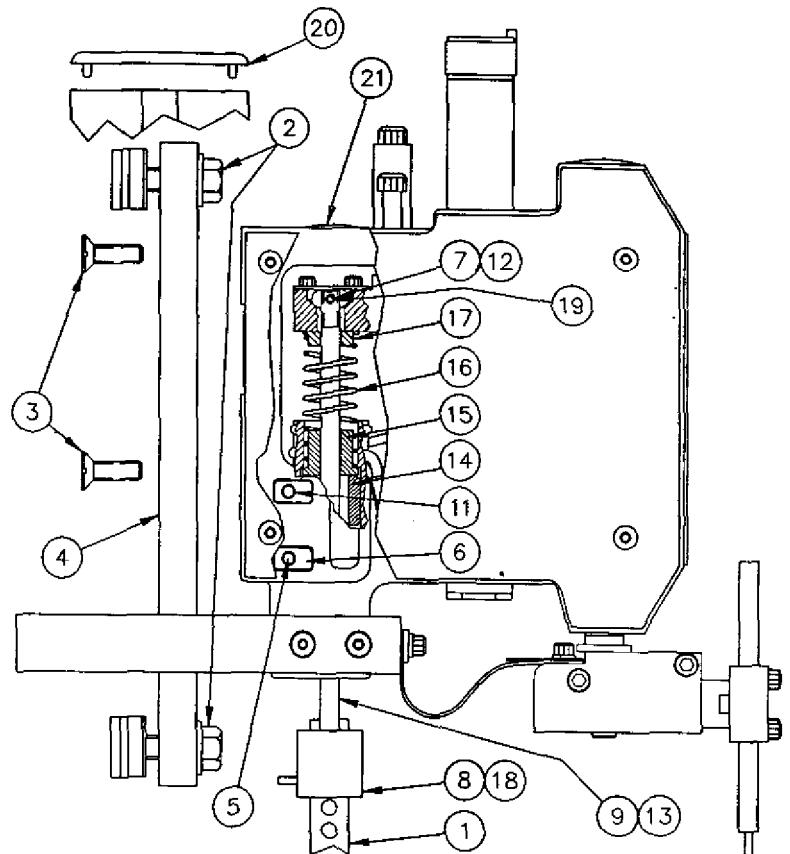
80 SERIES WELD HEADS — MODELS 88F AND 89F CONVERSION INSTRUCTIONS: MANUAL TO AIR ACTUATION



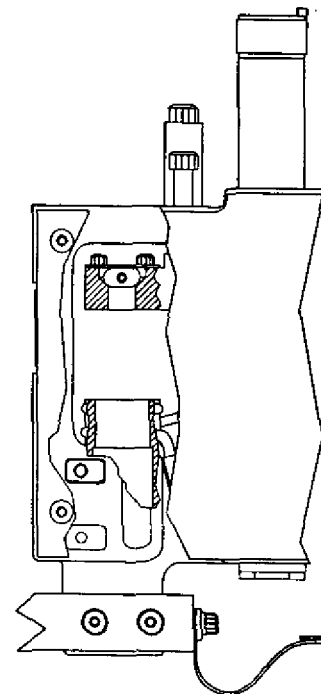
PN 990-123

PULL ROD and FOOTPEDAL DISASSEMBLY

- 1 Remove Covers from both sides of the Head by removing the button head screws in the corners with a 3/32 inch hex Key. Remove flexures.
- 2 Disconnect the Foot pedal Linkage (1) from the Adapter Block (8) .
- 3 Remove Mounting Stand Cap (20) . Loosen the two Bolts (2) which secure the Head to the Mounting Stand and remove the Head from the Stand.
- 4 Remove the four Phillips head Screws (3) which hold the Mounting Plate (4) to the Head.
- 5 Facing the front of the Head, remove socket head Screw (5) and Clamp (6) on right-hand Head with 5/32 inch hex Key.
- 6 On left-hand Head only, remove the socket head Set Screw (7) on the Pull Rod Coupling Nut with a 1/16 inch hex Key.
- 7 On left-hand Head, rotate the Pull Rod (9) counter-clockwise to unscrew from the Adapter Block (8) . Then separate the two Heads.
- 8 Caution - the Return Spring (16) is pre-loaded. Remove the socket head Screw (11) 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 (7), removed in step 6, on the left hand Coupling Nut. If necessary, rotate the Pull Rod.
- 10 Remove the Pull Rod 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 (16) and the Spring Retainer (17). Remove the Hole Plug (21) from the top of head.
- 12 Remove the Adapter Block (8) from the right hand Head. Then Loosen the socket head Set Screw (7) . Repeat step 6 through step 11 for the right-hand Head. Both Heads should be as illustrated.



RIGHT HAND HEAD



WELD HEAD
AFTER PARTS REMOVAL

AIR ACTUATION KIT ASSEMBLY

* Perform steps for Model 88 only.

** Perform steps for Models 88 or 89.

- 1 Perform steps 2 through 8 for the left-hand Head and then repeat these steps for the right-hand Head.
- * 2 Attach Assist Spring plate (3) to bottom of Spring Tube Arm using the two 6-32X1/4 inch flat head Screws (supplied) with a 5/64 inch hex Key.
- * 3 Slide the Assist Spring Assembly (3) into the post mounting hole in the bottom of the Head. While pushing up on the Assist Spring Assembly, secure it with the External Retaining Ring (2) (snap ring pliers not supplied)
- * 4 Insert a 1/8 inch hex Key (5) into the bottom of the Assist Spring Assembly (3) and turn it counterclockwise until the Assist Spring Assembly (3) is securely threaded into the Assist Spring plate (7) . Then turn hex key clockwise 1/8 turn to allow for free head movement.
- * 5 Slip Spring Stop Bushing (4) over the bottom of the Assist Spring Assembly (3) and push it up until it bottoms.
- ** 6 Tighten the socket head Screw (11) and clamp with a 5/32 inch hex Key.
- ** 7 Open Flow Controls (27) on Air Cylinder (19) . Extend Cylinder Rod (12) from nose of Air Cylinder (19) as far as possible. Thread the Rod (12) of the Air Cylinder (19) into the Pull Rod Coupling Nut (6) by rotating the Rod. Tighten the hex head Set Screw (13) which is part of the Pull Rod Coupling Nut (6) with a 1/16 inch hex Key Be sure the Air Cylinder and Flow Controls face in the proper direction.
- ** 8 Put the Shoulder Screws (16) into the D-Washer (15) . Then place "O" Ring (14) on each Shoulder Screw. Tighten Screws (16) to secure the Air Cylinder to top of Head with a 3/32 inch hex Key.
- 9 Perform steps 2 through 8 for the right hand Head.
- ** 10 Place left and right Heads next to each other. Install Mounting Plate (9) on the spine of the Heads using four Phillips flat head Screws (8) . Re-install socket head Screw (17) and Post Clamp (18) using a 5/32 inch hex Key.
- ** 11 Re-install the Head Assembly on Mounting Stand using two hex metric Bolts (10) . Mount both Covers (22) using a 3/32 inch hex Key and button head screws in corners. Re-install flexures.
- ** 12 Attach the Solenoid Valve and Regulator Assembly to rear spine of the Mounting Stand using two hex head metric bolts and T-nuts (supplied) (21).
- * 13 Connect Air Lines (24) and (25) to the Top and Air Lines (23) and (26) to the Bottom of the Cylinder, as illustrated. 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.
- ** 14 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 (100psig 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 c flow. Connect the air line to the input air fitting.

