3M Scotch-Weld[™] Polyurethane Reactive Adhesive Applicator Replacement Part Installation Guide



Important Safety Instructions

WARNING

Disconnect air and electrical power and make sure applicator has cooled to room temperature below servicing. Failure to follow these precautions **may cause electrical shock or burns.**

IMPORTANT

The service procedure shown in this installation guide should be performed only by a qualified service person.

Refer to 3M[™] Scotch-Weld[™] Polyurethane Reactive Adhesive Applicator User's Manual for more information. Read the manual completely before servicing the applicator.

Installation Guide



1. Disconnect air and electrical power and allow the applicator to cool to room temperature before disassembly.

Cut and discard the plastic tie wrap closest to the applicator that holds the power cord and air hose together.

Unscrew the endcap from the heat tube.

NOTE: If the endcap cannot be unscrewed, disassembly may not be possible. Contact your Scotch-Weld distributor for assistance.



2. Pull one side of the wirestand out of the pivot hole (A) and allow it to spring down into the recessed area (B).

NOTE: Do not attempt to pull the end completely out in this step or binding may occur on the other side. For best results, follow steps 2 and 3 to reduce possible damage to wirestand or applicator.



3. Turn the applicator over and pull the other side of the wirestand out of the other pivot hole and over the edge of the applicator.

The wirestand can now be removed completely.

Save the wirestand for reassembly.



- **4.** Remove the 12 screws that hold the housing halves together and save them for reassembly.
- **NOTE:** A long, magnetized Phillips bit (P2) is recommended because it will pull screws out of the deeper recesses.

If a non-magnetized bit is used, it may be necessary to hold the housing halves together and turn the applicator over to allow the screws to drop out.

It is recommended that all the screws be removed before separating housings. This ensures that a partially loosened screw will not cause problems in steps 5 and 6.



5. To make sure the upper housing will lift off cleanly, just **slightly** separate the two halves at the location shown.

Clear an area to the left of the applicator to allow both housings to lie side by side.

HINT: To prevent the weight of the power cord and air hose from pulling the applicator off the work surface, they can be taped, tied, or put in a drawer just beneath the work surface, if available.



6. Hold the trigger and the air hose up into the upper housing and lift off – at the same time flipping it over so the interior is visible – and lay it next to the lower housing.

NOTE: If adhesive contamination prevents separation of the housings, contact your Scotch-Weld distributor for assistance. **Do not** attempt to remove Scotch-Weld adhesives with heat, flame, or solvent. **This may cause hazardous vapors or fire.**

HINT: Position the endcap above the rear portion of the applicator as shown so it will not interfere when laying the upper housing down.



7. If the front standoff (C) or the rear standoff (D) is dislodged in any way, replace them on the heat tube (E). Upper and lower sets of standoffs should be in contact with no visible gaps between them at all four locations (F).



8. Unscrew the endcap from the quick dump valve by holding fitting (A) and turning in the direction as shown.

Unscrew the quick dump valve from the endcap air hose.

Unless you are also replacing the quick dump valve or the endcap, save both for reassembly.

IMPORTANT: Remove any loose pieces of thread sealent tape and any other foreign material from the threaded inlet to the quick dump valve.



9. Pull the valve (B) out of the upper housing by lifting the tubing out of the notched ribs and lifting up on the trigger.



10. Use a 1/4 in. open end wrench and remove the brass fitting that connects the air supply tubing to the valve.

Discard the faulty valve



11. Pull the tapered locking pin out of the air hose strain relief (C).

Save the pin for reassembly.

NOTE: A needle-nosed locking pliers is recommended for this procedure. It will hold the pin securely and the pin can be left in the locking pliers in proper position for reassembly.



12. Squeeze the upper and lower parts of the strain relief together and at the same time, pull it out of the housing. Discard the hose and all connected fittings and strain

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13. Attach the **replacement air valve** to the air supply tubing by screwing the valve on the fitting.

Tighten the fitting with 1/4 in. open end wrench.

IMPORTANT: Tighten the fitting firmly, but do not use excessive torque. The rubber sealing washer could be damaged if the fitting is overtightened.



14. Attach the quick dump valve from step 8 to the replacement air hose.

IMPORTANT: Make sure the inlet in the quick dump valve is free from foreign material. Debris that could enter the quick dump valve may cause adhesive run-on during applicator operation.



15. Insert the tubing end of the endcap air hose through the opening in the housing.

Hold the fitting in position on the valve and twist the endcap air hose to screw the fitting to the valve.

Tighten the fitting with 1/4 in. open end wrench.

IMPORTANT: Tighten the fitting firmly, but do not use excessive torque. The rubber sealing washer could be damaged if the fitting is overtightened.



16. Position the strain relief so that it is about 1/2 in (12.7 mm) from the hose fitting as shown.

Rotate the strain relief so the hole (B) is toward the top of the applicator housing.

Squeeze the strain relief together and push it into the opening in the housing until it snaps into place.

Pull the hose back through the strain relief until it resists further movement. There will be approximately 1/8 in. (3.2 mm) between the strain relief and the hose fitting when in proper position.



17. Twist the endcap hose so the quick dump valve will lie flat on the work surface and fitting (A) will be directed straight down the center of the housing when the hose is bent up into the position shown above.



18. Push the smaller diameter end of the tapered locking pin into the hole in the strain relief.

Push the pin through the strain relief until the small end rests in the recessed area (C) as shown.

NOTE: A needle-nosed locking pliers is recommended for this procedure. It will hold the pin securely and allow you to guide the pin through the strain relief more easily.



19. Place the valve in position and press the tubing down into the grooved ribs as shown. The tubing on the replacement air supply line should be underneath the tubing that connects to the endcap.

Engage the trigger (D) on the valve button (E) and position the trigger into its bearing.

When properly positioned, the top flat of the hexagonal valve body will be horizontal and the tube fittings will be directed away from you and down along the inside surface of the housing.



20. Check the locations indicated by arrows above to make sure all components are positioned properly.

Wires at E1 and E2 should be down into positions so the upper housing and air valve will not pinch them during reassembly.

Air tubing at A1, A2 and A3 should be positioned in grooved ribs so the valve will be held in position.



21. Hold trigger and the air hose in position in the upper housing and lift and turn the upper housing over onto the lower housing. Crossing the hands as shown will make it easier to hold the components in position while turning the housing over.

Make sure both housings are aligned and press them together.

Attach one housing screw along the top of the applicator where shown, but do not fully tighten. This will hold the housing halves together during final adjustment of power cord and air hose.

NOTE: You should feel a definite engagement when the housing halves mate properly. If not, lift the upper housing off – as in step 6 – and check for components that might be out of position. Repeat steps 15 and 16.



22. Separate the housing halves at the bottom of the handle just enough to adjust the position of the power cord strain relief. The hex (H) should be aligned and fully engaged with the matching hex-shaped recess in the housings. If necessary, rotate the strain relief hex one flat in either direction to obtain good fit.

If necessary, adjust the position of the air supply hose so it is located properly in the circular recesses.

While holding the housings halves together, insert a housing screw into the lowest hole and tighten just snugly.



23. Recheck proper fit and alignment between the housing halves and make sure the trigger pivots freely.

Insert the other 10 housing screws and tighten all the screws firmly but not too tightly.

IMPORTANT: Do not use a large screwdriver or a power driver at a high torque setting. Overtightening the housing screws could cause the threads to strip out and damage the lower housing.



24. Hold the wirestand so the rounded part (C) curves away from the applicator and temporarily hook one end of the wirestand so the end rests down in the bottom of the recess (B) as shown.



26. Pull the first end of the wirestand – from step 24 – out of the recess and position it over its pivot hole. The spring action of the wirestand will pull itself down into place.



25. Pull the other end of the wirestand just enough to go over the edge of the applicator and position it into the pivot hole (A). The spring action of the wirestand will pull itself down into place.



27. Reattach endcap to quick dump valve by holding fitting with wrench and turning endcap in direction shown.

IMPORTANT: Overtightening may cause the fitting to bind and prevent free rotation of the endcap. Loosen the fitting slightly if endcap does not rotate freely.

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Industrial Business Industrial Adhesives and Tapes Division 3M Center, Building 220-5E-06 St. Paul, MN 55144-1000

