3M Scotch-Weld™

120V. USA 100V. JAPAN 120V. USA REFURB

Polyurethane Reactive Adhesive Applicator

User's Manual



Use only with 3M[™] Scotch-Weld[™] Polyurethane Reactive Adhesives Please read all instructions before using.

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Important Safety Instructions

SAVE THESE INSTRUCTIONS

Read all instructions before using this product.

3M[™] Scotch-Weld[™] Polyurethane Reactive Adhesive

For health and safety information, see product label and Material Safety Data Sheet for Scotch-Weld Polyurethane Reactive Adhesive before using.

AWARNING

Use only with 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Cartridges. Use with any other materials **may cause hazardous conditions.**

WARNING

Scotch-Weld Polyurethane Reactive Adhesive Cartridges should be preheated or used in 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Preheater or 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Applicator only. Do not preheat Scotch-Weld Polyurethane Reactive Adhesive Cartridges in ovens or other heating devices or use in other applicators. **May cause hazardous conditions.**

AWARNING

Do not heat or expose Scotch-Weld Polyurethane Reactive Adhesive to temperatures or surfaces above 275°F (135°C). Vapors of heated material may be irritating to eyes and respiratory tract and may cause asthma-like symptoms in persons previously sensitized to isocyanates.

AWARNING

Do not clean or remove Scotch-Weld Polyurethane Reactive Adhesive with heat, flame, or solvent. **May cause hazardous vapors or fire.** For additional health and safety information, see product label and Material Safety Data Sheet for Scotch-Weld Adhesive used.

Scotch-Weld Polyurethane Reactive Adhesive Applicator Operation

WARNING

To reduce the risk of electrical shock or injury while operating or servicing the Scotch-Weld Polyurethane Reactive Adhesive Applicator, observe the following safety rules:

- 1. Operate and service the applicator only as described in this manual.
- 2. Connect the applicator only to a properly grounded outlet.
- 3. Do not unplug the applicator by pulling on the cord. Grasp the plug, not the cord, to unplug.
- 4. Do not handle the plug or applicator with wet hands.
- 5. Do not use the applicator outdoors or on wet surfaces.
- 6. Do not use the applicator with damaged cord or plug.
- 7. Do not use the applicator if it is not working properly or has been dropped, damaged, submerged in water, or left outdoors.

AWARNING

Use only 3-prong grounded plug and properly grounded outlet. Failure to use properly grounded plug and outlet **may cause electrical shock.** If you are not sure of proper connections, get help from a qualified electrician or service person.

AWARNING

Do not use an unapproved extension cord with the applicator. Use of an improper extension cord **may cause electrical shock.** Use an extension cord which complies with NEC requirements and state and local codes and other requirements.

Continued on next page

Important Safety Instructions (continued)

∕!\Caution

Avoid contact with hot adhesive, cartridge, applicator tip, and metal components. **May cause burns.** Wear heat resistant gloves and safety glasses when using.

∱Caution

Do not connect the applicator to air supply with greater than 80 psi air pressure. **May cause** hazardous conditions or damage the applicator.

3M[™] Scotch-Weld[™] Polyurethane Reactive Adhesive Applicator Servicing

AWARNING

Disconnect air and electrical power and make sure applicator has cooled to room temperature before servicing. Failure to disconnect air and electrical power or failure to allow applicator to cool before servicing **may cause electrical shock or burns.**Read User's Manual before servicing.

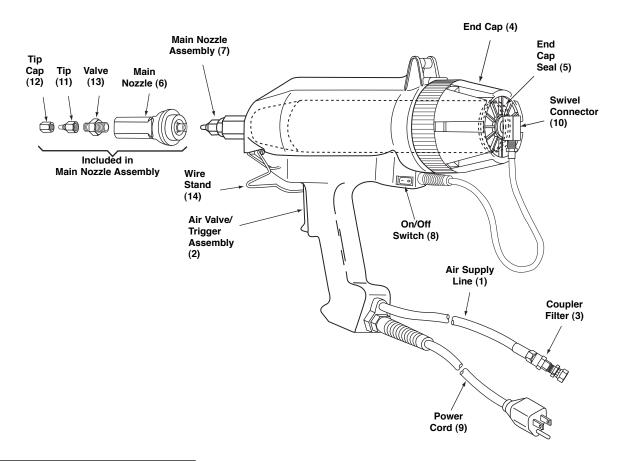
AWARNING

Use only 3M-specified replacement parts. Use of other replacement parts may cause hazardous conditions or damage the applicator.

Important

This 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Applicator is designed exclusively for use with 3MTM Scotch-WeldTM Adhesives. The use of this applicator with other adhesives or use of this applicator other than for its intended use may result in unsafe or hazardous conditions.

Applicator Diagram and Replacement Parts List



AWARNING

Use only 3M-specified replacement parts. Use of other replacement parts may cause hazardous conditions or damage the applicator.

All $3M^{TM}$ Scotch-WeldTM Polyurethane Reactive Adhesive Replacement Parts contain replacement procedure.

(1) Air Supply
(2) Air Valve/Trigger
(3) Coupler Filter
(4) End Cap
(5) End Cap Seal
(6) Main Nozzle
(7) Main Nozzle Assembly
(8) On/Off Switch
(9) Power Cord
(10) Swivel Connector
(11) Tip (.090)
(12) Tip Cap
(13) Valve
(14) Wire Stand

3MScotch-Weld[™] Polyurethane Reactive Adhesive Applicator REPLACEMENT PARTS and ACCESSORIES

DESCRIPTION	STOCK NO.	CONTENTS
Tip Cap	62-9773-0014-4 pk. of 3	
Standard Tip .090''	62-9773-0013-6 pk. of 3	
Low Flow Tip .063"	62-9895-0016-0 pk. of 3	
High Flow Tip .125''	62-9895-0017-8 pk. of 3	
Extension Tip .072''	62-9895-0015-2 pk. of 3	
Valve	62-9773-0012-8	
Main Nozzle	62-9895-0018-6	
Main Nozzle Assembly	62-9895-0019-4	62-9773-0012-8 62-9773-0014-4 62-9895-0018-6 62-9773-0013-6
Swivel Connector	62-9845-9934-8	

DESCRIPTION	STOCK NO.	CONTENTS
Wire Stand	62-9895-0033-5	
End Cap Seal	62-9895-0004-6	
End Cap	62-9895-0003-8	62-9895-0004-6
Coupler Filter	62-9895-0001-2	
Air Valve Kit	62-9845-0009-0	
On/Off Switch Kit	62-9895-0024-4	

DESCRIPTION	STOCK NO.	CONTENTS
Power Cord Kit	62-9895-0021-0	
Air Supply Line Kit	62-9895-0005-3	

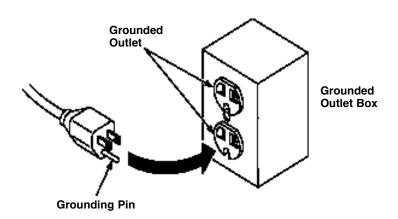
Grounding Instructions

A WARNING

Do not modify the plug provided with the applicator or use with an adapter or ungrounded outlet. Improper grounding connection of the applicator **may cause electric shock.** If the plug will not fit the outlet, have a qualified electrician or service person install the proper outlet.

The 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Applicator must be grounded. If the applicator malfunctions or breaks down, grounding provides a path of least resistance for electric current to help reduce the risk of electric shock.

This applicator is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be used with an appropriate outlet that is properly installed and grounded in accordance with all state and local codes and requirements.



The Scotch-Weld Polyurethane Reactive Adhesive Applicator is intended for use on a nominal 120-volt circuit and has a grounding plug as shown in the figure above. Make sure the applicator is connected to an outlet having the same configurations as the plug. **Do not use an adapter.**

 $3M^{\text{TM}}$ Scotch-Weld $^{\text{TM}}$ Polyurethane Reactive Adhesive Applicator

120VAC 50/60Hz 1.7A 200W

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

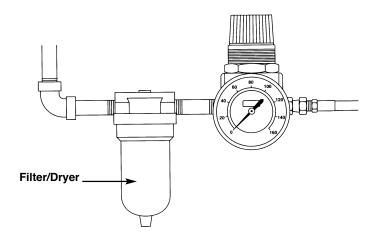


Setup and Installation

ACaution

Do not connect the applicator to air supply with greater than 80 psi air pressure. May cause hazardous conditions or damage the applicator.

- 1. Remove the applicator from its shipping container and inspect for any obvious damage. If damaged, do not use and immediately contact your local 3M representative.
- Connect air coupling provided on the end of the supply hose (male 1/8-inch pipe thread) to a filtered, regulated and dry air supply. (Regulator and filter not included.)



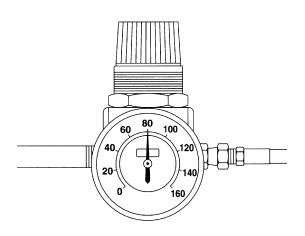
3. Adjust air regulator to a 80 psi starting point.



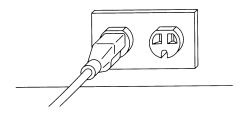
Use only 3-prong grounded plug and properly grounded outlet. Failure to use properly grounded plug and outlet **may cause electrical shock.** If you are not sure of proper connections, get help from a qualified electrician or service person.

AWARNING

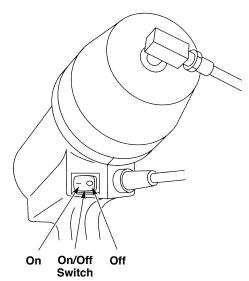
Do not use an unapproved extension cord with the applicator. Use of an improper extension cord may cause electrical shock. Use an extension cord which complies with NEC requirements and state and local codes and other requirements.



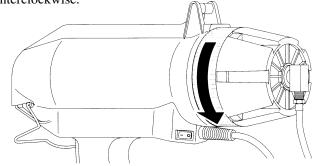
4. Plug applicator into grounded 120 VAC receptacle.



5. Push the on/off switch to the "on" position, indicated by visible red portion of the switch.



- 6. Let applicator heat for five (5) minutes prior to loading adhesive cartridge.
- 7. Remove end cap from applicator by unscrewing end cap counterclockwise.



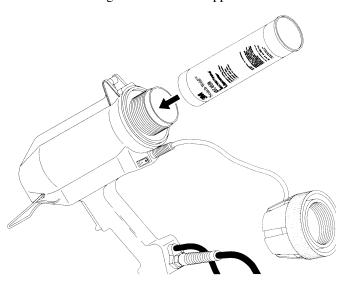
8. Select adhesive cartridge and insert into applicator as shown.

WARNING

Use only 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Cartridges. Use with any other material **may cause hazardous conditions.**

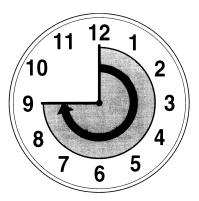
WARNING

3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Cartridges should be preheated or used in 3M Scotch-Weld Polyurethane Reactive Adhesive Preheater or 3M Scotch-Weld Polyurethane Reactive Adhesive Applicator only. Do not preheat 3M Scotch-Weld Polyurethane Reactive Adhesive Cartridges in ovens or other heating devices or use in other applicators. May cause hazardous conditions.



Setup and Installation (continued)

9. Loosely replace end cap and warm the adhesive cartridge for a **minimum** of 45 minutes.

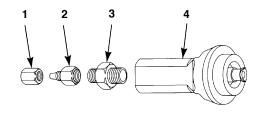


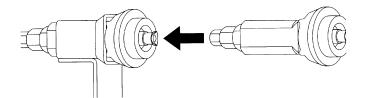
Important Do not attach main nozzle to a cold cartridge.

!Caution

Avoid contact with hot adhesive, cartridge, applicator tip, and metal components. **May cause burns.** Wear heat resistant gloves and safety glasses when using.

- 10. Unscrew and remove end cap, and remove warm adhesive cartridge from applicator.
- 11. Place main nozzle assembly consisting of tip cap (1), tip (2), valve (3), and main nozzle (4) into the bench wrench. Align flats on main nozzle with those on bench wrench.





Loading Applicator and Dispensing

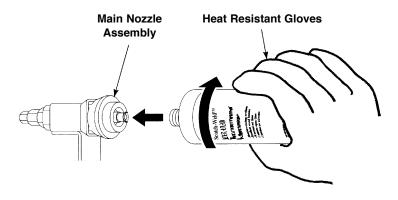
∕•Caution

Avoid contact with hot adhesive, cartridge, applicator tip, and metal components. **May cause burns.** Wear heat resistant gloves and safety glasses when using.

AWARNING

Use only 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Cartridges. Use with any other material **may cause hazardous conditions.**

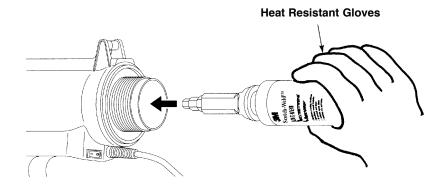
1. Thread warmed adhesive cartridge (approximately 1-1/4 turns) clockwise onto main nozzle up to the point of resistance. Give cartridge an aggressive turn to puncture seal, and continue turning the cartridge until it is sealed onto main nozzle.



2. Remove cartridge with attached main nozzle from bench wrench.

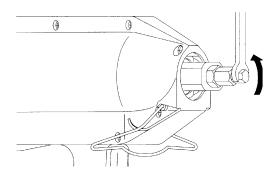


3. Insert assembly into rear of applicator. Fasten end cap securely onto applicator, carefully aligning end cap threads to prevent binding. (If you are completing the setup and installation procedure, wait five (5) minutes to allow nozzle to warm to proper temperature.)



Loading Applicator and Dispensing (continued)

4. Remove tip cap from main nozzle assembly using pliers or 3/8-inch wrench.



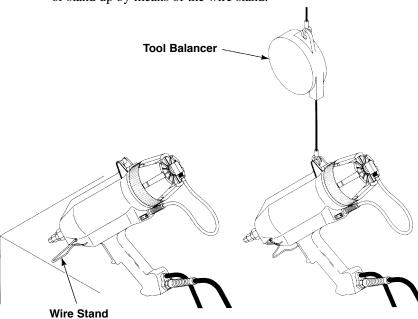
- 5. Actuate trigger on applicator for adhesive application.
- 6. Adjust for desired flow rate by setting air regulator between 30 psi and 80 psi.

ACaution

Do not connect the applicator to air supply with greater than 80 psi air pressure. May cause hazardous conditions or damage the applicator.

Note

For best results, hang the applicator from a tool balancer or stand up by means of the wire stand.



- 7. When finished using the applicator, see "Applicator Shutdown" procedure on page 14.
- 8. To reload a cold cartridge, proceed to "Reloading Applicator" procedure on page 9.
- To reload a preheated cartridge, proceed to "Reloading Applicator" procedure on page 12.

Reloading Applicator

Cold Cartridge Reload

AWARNING

3MTM Scotch-WeldTM
Polyurethane Reactive Adhesive
Cartridges should be preheated
or used in 3M Scotch-Weld
Polyurethane Reactive Adhesive
Preheater or 3M Scotch-Weld
Polyurethane Reactive Adhesive
Applicator only. Do not preheat
3M Scotch-Weld Polyurethane
Reactive Adhesive Cartridges in
ovens or other heating devices
or use in other applicators. May
cause hazardous conditions.

A WARNING

Use only 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Cartridges. Use with any other material **may cause hazardous conditions.**

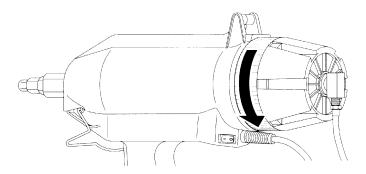
♠Caution

Avoid contact with hot adhesive, cartridge, applicator tip, and metal components. **May cause burns.** Wear heat resistant gloves and safety glasses when using.

Important

Adhesive will resist flowing through applicator if total heat history of adhesive cartridge at application temperature exceeds 16 hours (total time in preheater and in applicator). Properly discard any adhesive cartridge that has been heated longer than 16 hours and replace with a new, heated cartridge.

- 1. If applicator is cold, turn it on and allow to heat for five (5) minutes.
- 2. Unscrew and remove end cap from applicator.

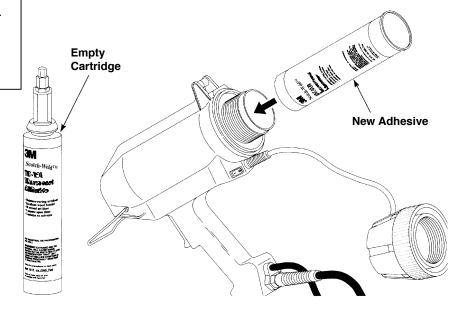


3. Remove empty cartridge with attached main nozzle assembly from applicator and set aside.

Important Do not attempt to remove main nozzle from cartridge

4. Select and insert new adhesive cartridge into applicator. Warm for 45 minutes.

while cold. Damage to the main nozzle may occur.



Reloading Applicator (continued)

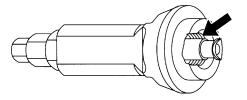
Caution

Avoid contact with hot adhesive, cartridge, applicator tip, and metal components. **May cause burns.** Wear heat resistant gloves and safety glasses when using.

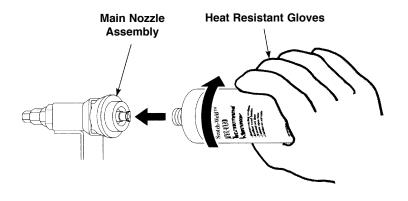
- 5. After heating for 45 minutes, remove the warmed cartridge from applicator and reinsert empty cartridge with attached main nozzle assembly into rear of applicator for approximately five (5) minutes. This will reheat adhesive residue for easy removal of main nozzle assembly.
- 6. Remove warm, empty cartridge from rear of applicator and insert into bench wrench to remove main nozzle assembly. Rotate cartridge counterclockwise until main nozzle assembly releases.



7. Inspect threads on main nozzle. **Periodic use of lithium grease or petroleum jelly on threads is recommended.** If threads become damaged, replace with new main nozzle.



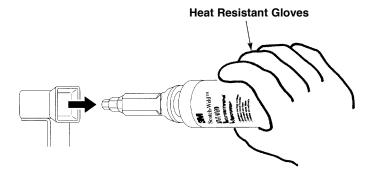
8. Thread new warm cartridge clockwise onto main nozzle up to the point of resistance (approximately 1-1/4 turns). Give cartridge an aggressive turn to puncture seal, and continue turning until cartridge is sealed onto main nozzle.



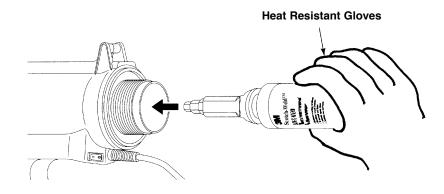
∕• Caution

Avoid contact with hot adhesive, cartridge, applicator tip, and metal components. **May cause burns.** Wear heat resistant gloves and safety glasses when using.

9. Remove cartridge with attached main nozzle from bench wrench.



10. Insert assembly into rear of applicator.



- 11. Fasten end cap securely onto applicator, carefully aligning end cap threads to prevent binding.
- 12. Remove tip cap from main nozzle assembly using pliers or 3/8-inch wrench.
- 13. Actuate trigger on applicator for adhesive application.
- 14. Adjust for desired flow rate by setting air regulator between 30 psi and 80 psi.

Important

Adhesive will resist flowing through applicator if total heat history of adhesive cartridge at application temperature exceeds 16 hours (total time in preheater and in applicator). Properly discard any adhesive cartridge that has been heated longer than 16 hours and replace with a new, heated cartridge.

Reloading Applicator (continued)

Preheated Cartridge Reload

♠ Caution

Avoid contact with hot adhesive, cartridge, applicator tip, and metal components. **May cause burns.** Wear heat resistant gloves and safety glasses when using.

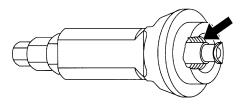
Note

Applicator must be warmed for a minimum of five (5) minutes before proceeding.

 Remove warm, empty cartridge from rear of warm applicator and insert into bench wrench to remove main nozzle assembly. Rotate cartridge counterclockwise until main nozzle assembly releases from cartridge.



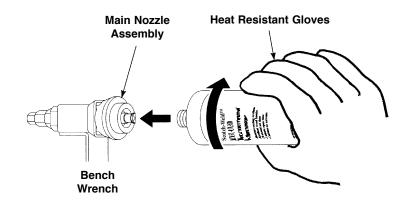
2. Inspect threads on main nozzle. **Periodic use of lithium grease or petroleum jelly on the threads is recommended.** If threads become damaged, replace with new main nozzle.



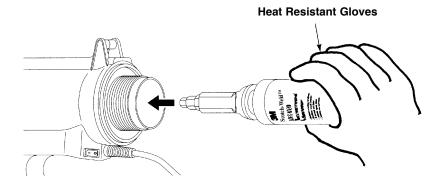
WARNING

3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Cartridges should be preheated or used in 3M Scotch-Weld Polyurethane Reactive Adhesive Preheater or 3M Scotch-Weld Polyurethane Reactive Adhesive Applicator only. Do not preheat 3M Scotch-Weld Polyurethane Reactive Adhesive Cartridges in ovens or other heating devices or use in other applicators. May cause hazardous conditions.

3. Remove warmed cartridge from preheater and thread warm cartridge clockwise onto main nozzle up to the point of resistance (approximately 1-1/4 turns). Give cartridge an aggressive turn to puncture seal, and continue turning the cartridge until it is sealed onto main nozzle.



4. Remove cartridge with attached main nozzle from bench wrench and insert assembly into rear of applicator.



- 5. Fasten end cap securely onto applicator, carefully aligning end cap threads to prevent binding.
- 6. Remove tip cap from main nozzle assembly with pliers or 3/8-inch wrench.
- 7. Actuate trigger on applicator for adhesive application.
- 8. Adjust for desired flow rate by setting air regulator between 30 psi and 80 psi.

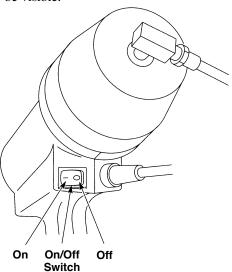
Applicator Shutdown

Important

Do not remove cartridge from applicator! <u>Cartridge</u> <u>must be connected to main nozzle assembly</u> <u>and remain sealed during applicator shutdown.</u> Failure to do so will allow moisture to cure the

Failure to do so will allow moisture to cure the adhesive in the cartridge and in the main nozzle and render them unusable.

1. Push on/off switch to "off" position. The red portion of the switch will no longer be visible.



ACaution

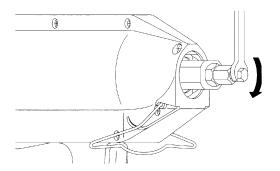
Avoid contact with hot adhesive, cartridge, applicator tip, and metal components. **May cause burns.** Wear heat resistant gloves and safety glasses when using.

2. Immediately wipe away any excess adhesive from tip threads with a clean cloth.

Note

If any damage has occurred to the tip, replace it immediately to prevent poor sealing and possible curing in the tip-valve area. Do not remove cartridge from applicator.

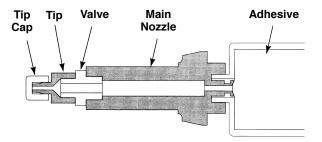
- 3. Fill tip cap with a high temperature lithium grease or petroleum jelly.
- 4. Screw tip cap onto tip and tighten with pliers or a 3/8-inch wrench. (Do not overtighten.)



3M[™] Scotch-Weld[™] Polyurethane Reactive Adhesive Application Operating Recommendations

The following recommendations will help optimize the use of the 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Applicator.

1. Always make certain the 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Cartridge is connected to the main nozzle and the tip cap is sealed onto the tip during shut down.



- 2. Inspect the threads on the main nozzle assembly prior to installing a new adhesive cartridge. The periodic use of lithium grease or petroleum jelly on the threads is recommended.
- 3. Warm the cartridge and main nozzle assembly prior to reloading.
- 4. Tighten the main nozzle securely onto cartridge to ensure the inner cartridge seal has been punctured.
- 5. To prevent curing, use a clean cloth to wipe away any excess adhesive on the threads of tip while all applicator parts are still warm.
- 6. To ensure a better seal and to help minimize curing between the tip and the tip cap, fill the tip cap with lithium grease before securing it to the tip.
- 7. Periodic replacement of tip cap 62-9773-0014-4 is recommended after 10-15 shutdowns or when excess cured adhesive begins to prevent a good seal.
- 8. Avoid damaging the tip. If any damage occurs, replace the tip 62-9773-0013-6 immediately to prevent poor sealing and possible curing in the tip-valve area. See page 16 for more information.
- 9. The adhesive flow rate and bead diameter from the Scotch-Weld Polyurethane Reactive Adhesive Applicator can be adjusted by following any of the listed methods.
 - Speed of adhesive applicator movement. Slower movement produces larger diameter beads.
 - Air Pressure. Higher pressure produces higher adhesive output.
 - Nozzle tip selection.

AWARNING

3MTM Scotch-WeldTM
Polyurethane Reactive Adhesive
Cartridges should be preheated
or used in 3M Scotch-Weld
Polyurethane Reactive Adhesive
Preheater or 3M Scotch-Weld
Polyurethane Reactive Adhesive
Applicator only. Do not preheat
3M Scotch-Weld Polyurethane
Reactive Adhesive Cartridges in
ovens or other heating devices
or use in other applicators. May
cause hazardous conditions.

A WARNING

Do not clean or remove 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive with heat, flame, or solvent. **May cause hazardous vapors or fire.** For additional health and safety information, see product label and Material Safety Data Sheet for Adhesive used.

!\Caution

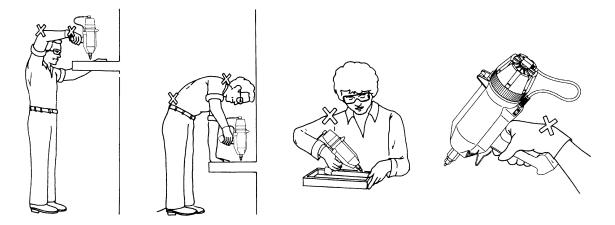
Do not connect the applicator to air supply with greater than 80 psi air pressure. May cause hazardous conditions or damage the applicator.

Operating Productivity and Comfort

Avoid positions that can product irritation of nerves, muscles, tendons, and cartilage of shoulder, elbow, wrist, hand, and back.

Avoid:

- · Raised elbow
- Bent wrist
- Reaching
- · Bending over



Adjust your workstation so you can:

- Stand or sit erect.
- Keep your elbows close your sides.
- Hold the applicator with a straight wrist.



Troubleshooting

A WARNING

Use only 3M-specified replacement parts. Use of other replacement parts may cause hazardous conditions or damage the applicator.

This part of the User's Manual is divided into five sections to assist in evaluating possible problems with your $3M^{\text{TM}}$ Scotch-WeldTM Polyurethane Reactive Adhesive Applicator.

If the applicator is heating refer to:

Condition 1: No or Low Adhesive Flow/Audible Air Leak

Page 22

Condition 2: No or Low Adhesive Flow/No Audible Air Leak

Page 27

Condition 3: Nozzle Drip

Page 32

Condition 4: Slow Adhesive Shut Off

Page 32

If the applicator will not heat, refer to:

Condition 5: Applicator Will Not Heat

Page 32

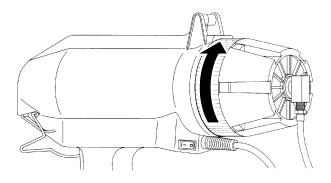
An applicator diagram and replacement parts list can be found on page 16. Should your applicator require repair, replacement parts can be ordered from your local authorized 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive distributor. If, after following these procedures, a problem still exists, contact your local 3M sales representative. For telephone numbers of the nearest 3M location refer to the back cover of this manual.

Important Service on this applicator should only be performed by a qualified electrician or service person.

Condition 1: No or Low Adhesive Flow/Audible Air Leak

Perform the following steps until adhesive flow is achieved.

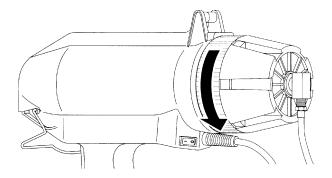
1. Tighten applicator end cap to ensure positive seal. If this does not produce adhesive flow, proceed to next step.



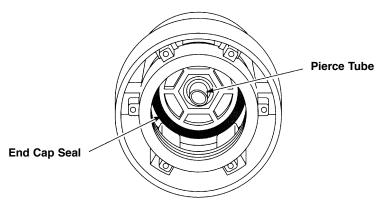
!Caution

Avoid contact with hot adhesive, cartridge, applicator tip, and metal components. **May cause burns.** Wear heat resistant gloves and safety glasses when using.

2. Remove end cap by rotating end cap counterclockwise.



3. Inspect inside of end cap for improperly seated or damaged seal. Reposition or replace seal if necessary with end cap seal 62-9895-0004-6. If this does not produce adhesive flow, proceed to next step.



!Caution

Avoid contact with hot adhesive, cartridge, applicator tip, and metal components. **May cause burns.** Wear heat resistant gloves and safety glasses when using.

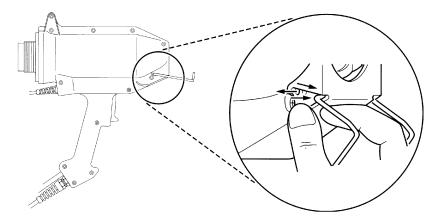
- 4. Inspect the 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Cartridge for dents or damage and replace with an undamaged cartridge. Dented or damaged cartridges will not allow a proper seal and air will leak past the cartridge.
- 5. If air leak occurs at connections on the end cap, disconnect air service and tighten connections.
- 6. If the connections or air line is damaged or broken, replace with air valve/trigger assembly 62-9895-0009-5.
- 7. If air supply line has been cut or damaged, replace air supply line 62-9895-0005-3.
- 8. If air leak occurs inside the handle, the two handle halves must be separated by following the disassembly procedure, page 24.

Disassembly Procedure

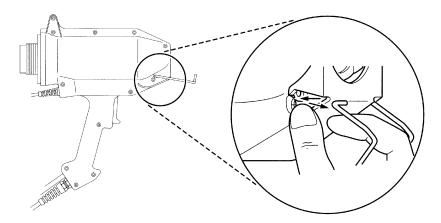
AWARNING

Disconnect air and electrical power and make sure applicator has cooled to room temperature before servicing. Failure to disconnect air and electrical power or failure to allow applicator to cool before servicing may cause electrical shock or burns. Read User's Manual before servicing.

- Remove power cord from grounded electrical outlet and disconnect air supply.
- 10. Remove wire stand by pulling one side just enough to clear wire out of its pivot hole. Let the wire settle into the recess just forward of the pivot hole location.

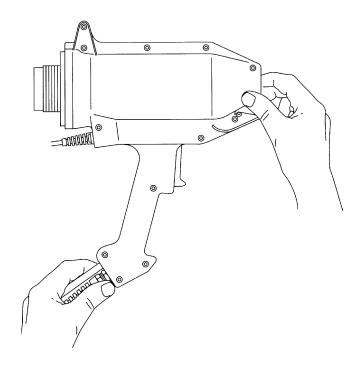


- 11. Repeat the above procedure on the opposite side of the applicator.
- 12. Pull either side of the wire stand over the housing, preferably at the lowest point which is the small groove at the front. Remove the wire stand and set aside.

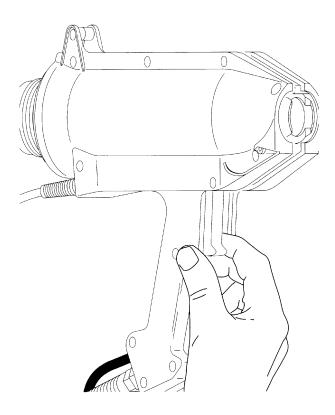


- 13. Remove end cap by turning it counterclockwise.
- 14. If possible, remove cartridge with attached nozzle from applicator.
- 15. Lay applicator on side so screw heads face upward.
- 16. Unscrew all twelve (12) Phillips head screws.

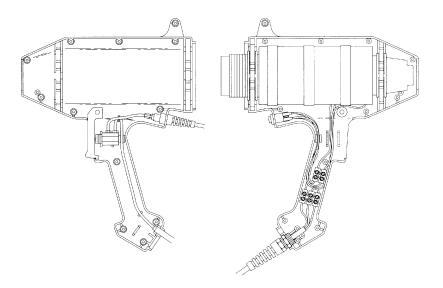
17. Gently pull to separate the two housing halves.



18. Hold the trigger in the upper housing and lift off.



19. Lift and rotate the housing 180 degrees clockwise so both sides are open and all components are visible.



AWARNING

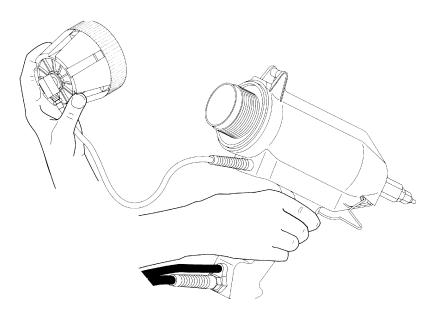
Use only 3M-specified replacement parts. Use of other replacement parts may cause hazardous conditions or damage the applicator.

- 20. Reconnect air supply set at 30-40 psi maximum to help locate air leak.
- 21. Inspect connections and retighten if necessary. If air valve/trigger is leaking or air line going to end cap is leaking or has been damaged, replace with air valve/trigger assembly 62-9845-0009-0.
- 22. If air supply line has been punctured, cut or has been disconnected from air valve/trigger assembly, replace or reconnect air supply lines or replace with air supply line 62-9895-0005-3.
- 23. After inspecting, tightening loose fittings, or replacing parts, reassemble handle halves by following Reassembly Instructions. See page 38.

Condition 2: No or Low Adhesive Flow/No Audible Air Leak

Conduct the following tests if there is NO audible air leak but the applicator heats.

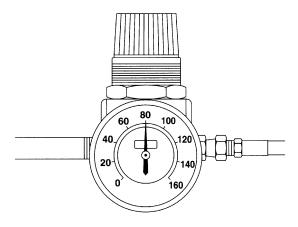
- 1. Check air supply for a pinched line.
- 2. Remove applicator end cap by turning counterclockwise. Point the end cap away from you and others in the work area, and pull trigger. A steady air stream flowing from the pierce tube indicates air valve and air source are in working order. Proceed to next step. If there is no air flow, proceed to page 29. step 8.



ACaution

Do not connect the applicator to air supply with greater than 80 psi air pressure. May cause hazardous conditions or damage the applicator.

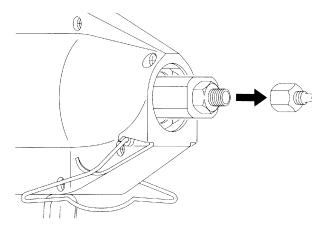
3. Replace and tighten end cap, turning it in a clockwise direction. Increases air pressure to approximately 80 psi. If adhesive begins to flow, readjust to desired pressure. If there is still no or low-adhesive flow, continue to next step.



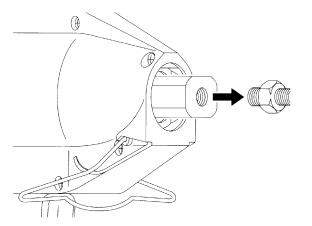
AWARNING

Do not clean or remove 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive with heat, flame, or solvent. **May cause hazardous vapors or fire.** For additional health and safety information, see product label and Material Safety Data Sheet for Scotch-Weld Adhesive used.

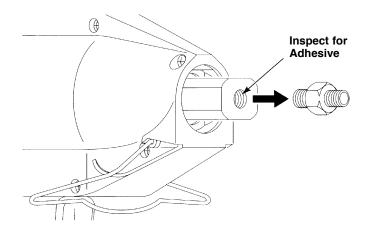
- 4. Cured adhesive in the tip could cause adhesive flow to become slow or stop. A small .089 drill bit may be used to dislodge any cured adhesive. If there is no adhesive flow, proceed to next step.
- 5. Remove applicator tip and actuate trigger. If adhesive begins to flow, a new applicator tip 62-9773-0013-6 or another accessory tip is needed. If no flow, continue to next step.



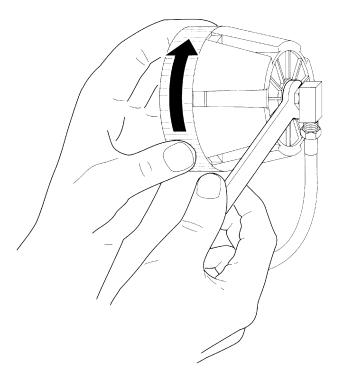
6. Remove valve and actuate trigger. If adhesives begins to flow, a new valve 62-9773-0012-8, as well as the nozzle tip of your choice, is needed.



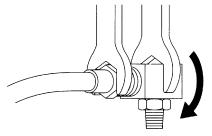
7. Inspect interior of main nozzle. If molten adhesive is present, replace old adhesive cartridge. If material in main nozzle appears as a solid mass, replace with a new main nozzle assembly 62-9895-0019-4 and adhesive cartridge.



- 8. If air flow to end cap does not occur when trigger is pulled, check to see that applicator is properly connected to a pressurized air regulator. If connections are properly made and pressure is at 30 psi minimum, proceed to next step.
- 9. Remove end cap from applicator. Place a 1/2-inch open end wrench on fitting of swivel connector. Hold fitting with wrench and turn end cap in direction of arrow in diagram. Remove end cap and set aside.

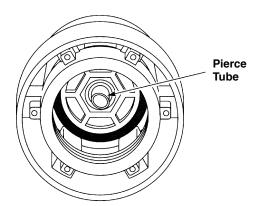


- 10. Hold swivel connector and point in a direction away from you and others in the work area and actuate the trigger. If a steady stream of air flows from the swivel connector, replace the end cap 62-9895-0003-8. If no air flows from the swivel connector, proceed to next step.
- 11. Remove swivel connector from air line fitting by holding the fitting with a 7/16-inch wrench while rotating the swivel connector as shown in the diagram, using a 1/2-inch wrench.

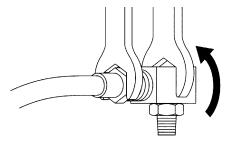


- 12. Hold the air line fitting and point in a direction away from you and others in the work area. Actuate the trigger. If a steady stream of air flows from the fitting, replace swivel connector 62-9895-9934-8.
- 13. Inspect end cap to make certain opening through the pierce tube is clean and free of obstruction. If obstruction in opening has occurred, replace end cap 62-9895-0003-8.

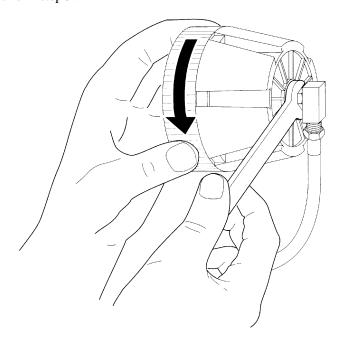
If no air flows from the air line fitting, reassemble fitting onto swivel connector using reverse procedure found in step 11.



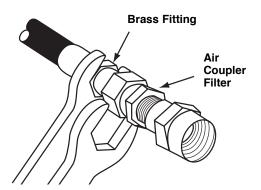
14. If no air flows from the air line fitting, reassemble fitting into swivel connector using reverse procedure found in step 11.



15. Reconnect end cap onto swivel connector using reverse procedure found in step 9.



- 16. Disconnect main air line from air source.
- 17. While holding the brass fitting with a 7/16-inch open end wrench, loosen and remove the air coupler filter using a 9/16-inch open end wrench.



- 18. Connect the brass fitting to air source. With end cap removed from applicator and pointed in a direction away from you and others in the work area, pull the trigger. If steady stream of air flows from the pierce tube, replace coupler filter 62-9895-0001-2. If no air flows from the pierce tube, proceed to next step.
- 19. By conducting the above tests, all problems other than the air valve/trigger assembly have been eliminated. Replace air valve/trigger assembly 62-9895-0009-5.

Note

If after replacing air valve/trigger assembly, the applicator fails to operate properly, contact your local 3M representative.

Condition 3: Nozzle Drip

This problem may occur after a several day shutdown period because the material around the plunger in the rear of the cartridge has begun to cure. This problem should be eliminated after a short period of use or when a new adhesive cartridge is introduced. If dripping continues after introducing a new cartridge of adhesive, replace valve assembly 62-9773-0012-8.

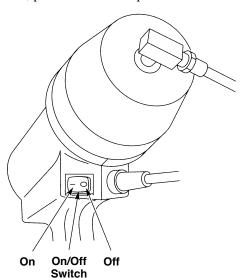
Condition 4: Slow Adhesive Shut Off

If after releasing the trigger on the applicator, adhesive continues to flow from the tip for a few seconds before shutting off, the swivel connector 62-9895-0020-2 may need replacement. **This can occur as a result of moist, oily or dirty air partially plugging the exhaust valve.**

Condition 5: Applicator Will Not Heat

Important Troubleshooting steps should be conducted by a qualified electrician or service person.

- 1. Check electrical outlet. If no power, contact electrician; if outlet has power, proceed to next step.
- 2. Push on/off switch to "on" position indicated by visible red portion of switch. If no heat, proceed to next step.



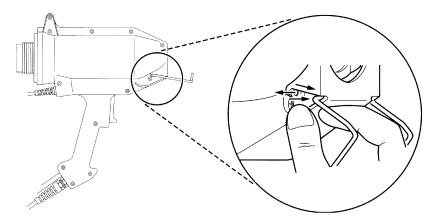
Important Remove power cord from grounded electrical outlet and disconnect air supply before conducting any further evaluations or repairs.

AWARNING

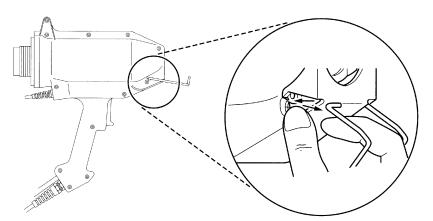
Disconnect air and electrical power and make sure applicator has cooled to room temperature before servicing. Failure to disconnect air and electrical power or failure to allow applicator to cool before servicing may cause electrical shock or burns. Read User's Manual before servicing.

Disassembly Procedure

3. Remove wire stand by pulling one side just enough to clear wire out of its pivot hole. Let the wire settle into the recess just forward of the pivot hole location.



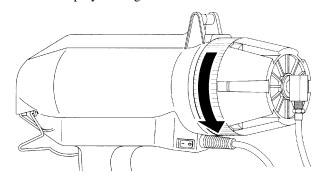
- 4. Do the same with the opposite side of the wire stand.
- 5. Pull either side of the wire stand over the housing, preferably at the lowest point which is the small groove at the front. Remove the wire stand and set aside.



AWARNING

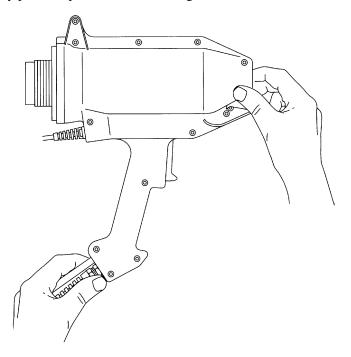
Disconnect air and electrical power and make sure applicator has cooled to room temperature before servicing. Failure to disconnect air and electrical power or failure to allow applicator to cool before servicing may cause electrical shock or burns. Read User's Manual before servicing.

6. Remove end cap by turning counterclockwise.

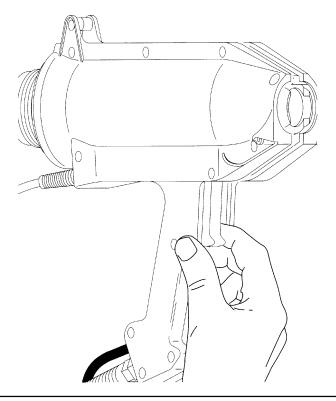


- 7. If possible, remove cartridge and nozzle.
- 8. Lay applicator on side so screw heads face upward.

- 9. Unscrew all twelve (12) Phillips head screws.
- 10. Gently pull to separate the two housing halves.



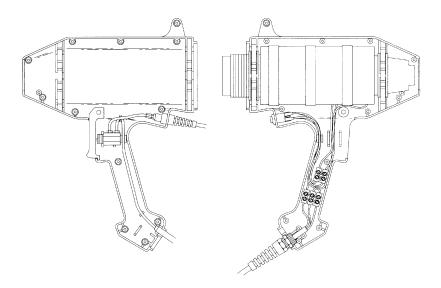
11. Hold the trigger in the upper housing and lift off.



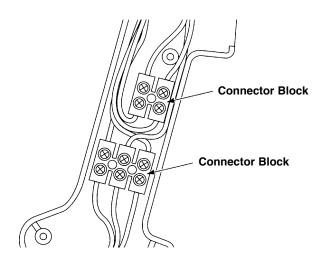
AWARNING

Disconnect air and electrical power and make sure applicator has cooled to room temperature before servicing. Failure to disconnect air and electrical power or failure to allow applicator to cool before servicing may cause electrical shock or burns. Read User's Manual before servicing.

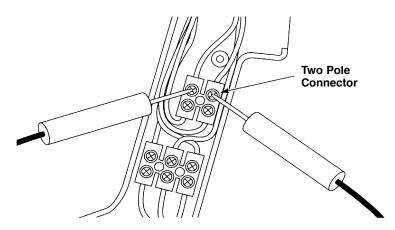
12. Lift and rotate the housing 180 degrees clockwise so both sides are open and all components are visible.



13. Inspect all wire connections for loose or disconnected wires by making certain screws in all connector blocks are securing the wires properly. If any connections are loose and have pulled out of connector blocks, reconnect and tighten connection per wiring diagram.



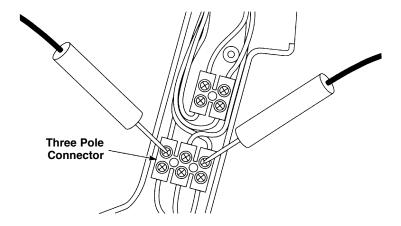
14. Use volt/ohm meter to check the heat tube assembly. Place one probe in upper left position of two pole connector blocks. With the other meter probe, touch the connector on upper right side of two pole connector.



15. If no continuity exists and applicator is still within the 12 month warranty period. Contact your nearest 3M sales representative or authorized 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive distributor. If applicator is past the 12 month warranty period, contact your nearest 3M sales representative or authorized 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive distributor to inquire about a "refurbish" program.

If continuity does exist, proceed to the next step.

16. Using a volt/ohm meter to check on/off switch, **first push switch to** "on" position indicated by visible red portion of switch. Place one probe in upper left position of three pole connector block. With the other meter problem, touch the connector on upper side right of three pole connector block.

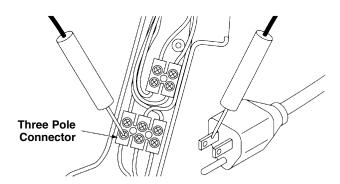


17. If no continuity exists, replace on/off switch assembly 62-9895-0024-4. If continuity exists, proceed to next step.

AWARNING

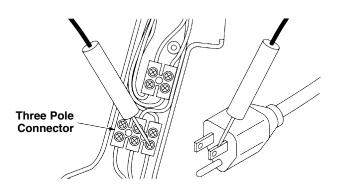
Disconnect air and electrical power and make sure applicator has cooled to room temperature before servicing. Failure to disconnect air and electrical power or failure to allow applicator to cool before servicing may cause electrical shock or burns. Read User's Manual before servicing.

18. Using a volt/ohm meter to check power cord, place one probe in lower left position of three pole connector containing black wire. Connect the other probe to the left side of the electrical plug.



Move the cord back and forth to insure there is not a partial or intermittent connection.

- 19. If no or intermittent continuity exists, replace power cord assembly 62-9895-0021-0.
- 20. If continuity exists place one probe of the volt/ohm meter into lower right position of three pole connector containing white wire. Connect the other probe to the neutral side of the electrical plug. Move the cord back and forth to insure there is not a partial or intermittent connection.



- 21. If no or intermittent continuity exists, replace power cord assembly 62-9895-0021-0.
- 22. If power cord has continuity but unit still does not heat, repeat troubleshooting steps or contact your local 3M representative.

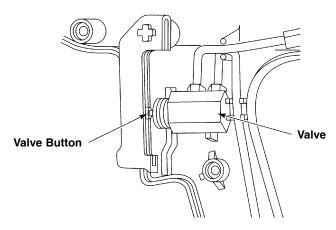
AWARNING

Disconnect air and electrical power and make sure applicator has cooled to room temperature before servicing. Failure to disconnect air and electrical power or failure to allow applicator to cool before servicing may cause electrical shock or burns. Read User's Manual before servicing.

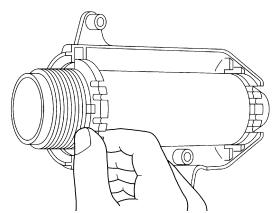
Applicator Reassembly Procedure

The housing assembly is generally in reverse order of the disassembly procedure with the following precautions:

1. Make sure the trigger is on the valve button before locating the valve in position. Position the valve so the fittings are pointing away from you and down along the inside surface of the housing. The flat portion of the hex on the valve should be positioned as shown.



2. If thermal standoffs have been removed or have come out of housing, push the standoffs into position on the heat tube. Make sure they are fully engaged with the keys in the heat tube and there is not a gap between the opposing standoffs.



- 3. Hold air line in its groove at the bottom of the handle when placing the air side onto the electrical side.
- 4. Do not force the housing halves together. Recheck position of trigger and valve if they will not mate properly. Make sure heat tube is in its proper position if it has been removed.
- 5. Replace twelve (12) screws and tighten. Do not overtighten screws.
- 6. Connect electrical and air supplies.
- 7. After sufficient heating (up to 45 minutes may be required) check for proper operation.

AWARNING

Use only 3-prong grounded plug and properly grounded outlet. Failure to use properly grounded plug and outlet **may cause electrical shock.** If you are not sure of proper connections, get help from a qualified electrician or service person.

∕∴Caution

Do not connect the applicator to air supply with greater than 80 psi air pressure. May cause hazardous conditions or damage the applicator.

Warranty and Important Notice Information

During Warranty Period

Contact your authorized 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive distributor.

After Warranty Period

The 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Applicator has been engineered to be durable and reliable. Recognizing that it will eventually need maintenance, we have made it easy to disassemble and repair.

Should your 3M Scotch-Weld Polyurethane Reactive Adhesive Applicator require repair, you can contact your local 3M representative to order replacement parts, or inquire about a refurbish program.

Important Notice

User is responsible for determining whether the $3M^{\text{TM}}$ Scotch-WeldTM Polyurethane Reactive Adhesive Applicator is fit for a particular purpose and suitable for user's method of application.

Warranty

With respect to the 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Applicator, 3M warrants for 12 months from the date of purchase or use, whichever occurs first that this applicator will be free from defects in material and manufacture. With respect the 3MTM Scotch-WeldTM Polyurethane Reactive Refurbished Adhesive Applicator, 3M warrants for 30 days from the date of purchase or use, whichever occurs first that this applicator will be free from defects in material and manufacture. 3M MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. This warranty does not cover routine maintenance, normal wear and tear, or damage resulting from accident, misuse, alteration, corrosion, lack of reasonable care, service performed by an unauthorized repair service, use of unauthorized replacement parts or accessories, or installation, use, operation, or maintenance not in accordance with 3M recommended procedures, or use of adhesive cartridges not manufactured by 3M or not subject to 3M quality standards.

Limitation of Remedies

If the 3MTM Scotch-WeldTM Polyurethane Reactive Adhesive Applicator is proven to be defective within the warranty period stated above, THE EXCLUSIVE REMEDY, AT 3M'S OPTION, SHALL BE TO REFUND THE PURCHASE PRICE OF OR TO REPAIR OR REPLACE THE DEFECTIVE 3M APPLICATOR, provided that the defective applicator is, at 3M's choice, returned immediately to 3M or an authorized service representative designated by 3M, or made available at user's premises in a location suitable for servicing.

Limitation of Liability

3M shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal or equitable theory asserted, including contract, negligence, warranty, or strict liability.



