



EQUIPMENT
Operation Manual



Loctite® Hysol® 175-AIR

120 Volt Part No. 98036, 230 Volt Part No. 98056

Loctite® Hysol® 175-AIR-HT

120 Volt Part No. 98040, 230 Volt Part No. 98058

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1. Please Observe the Following

1.1 Emphasized Sections



Warning!

Refers to safety regulations and required safety measures that protect the operator or other persons from injury or danger to life.



Caution!

Emphasizes what must be done or avoided so that the unit or other property is not damaged.



Notice

Gives recommendations for better handling of the unit during operation or adjustment as well as for service activities.

1.2 Safety



Do not touch the nozzle or molten adhesive with bare skin as they are hot - the operating temperature of the Loctite® Hysol® 175-AIR and 175-AIR-HT applicators is approximately 400°F (200°C). Protective gloves should always be worn. Careless handling can cause skin burns. If molten adhesive comes into contact with the skin immerse the affected area immediately in plenty of cold water. Seek medical advice if necessary.

In addition to the safety instructions herein, any statutory regulations, local fire insurance regulations, or other generally valid “regulations for accident prevention” must be complied with when using this tool.

- Never use the tool if it is damaged in any way.
- Do not use this tool in damp rooms, outdoors while it is raining, or where there is high humidity.
- Do not use this tool in the vicinity of any heat-sensitive materials, or any flammable materials, liquids, or gases.
- Only use extension cables that meet the specification shown in “Technical data”.
- Never pull on the tool’s connecting cable.

1.3 Items supplied

Loctite® Hysol® 175-AIR

Pneumatically-driven Hot Melt Cartridge Dispenser, fitted with 383°F (195°C) thermostat (suitable for standard EVA-based hot melt adhesives)

Plastic Stand, and Manual

Loctite® Hysol® 175-AIR-HT

Pneumatically-driven Hot Melt Cartridge Dispenser, fitted with 419°F (215°C) thermostat (suitable for polyamide hot melt adhesives)

Plastic Stand, and Manual

2 Description

The Loctite® Hysol® 175-AIR and 175-AIR-HT are the highest output, hand-held industrial hot melt applicators available. With its two powerful 250W stainless steel cartridge heaters, they are capable of dispensing up to 9 lbs. of molten hot melt per hour; yet only take 10 minutes to warm up from cold.

Supported by a range of adhesive formulations, the Loctite® Hysol® 175-AIR and 175-AIR-HT are suitable for most applications. Also, the Loctite® Hysol® 175-AIR and 175-AIR-HT systems are solvent-free and non-toxic, so there are none of the environmental problems often associated with other adhesive applicators.

Designed to comply with world wide safety standards, the Loctite® Hysol® 175-AIR and 175-AIR-HT also feature a totally enclosed heater housing, and are fitted with thermal fuse protection.

3 Technical Data

Dimensions (L x H x W):	approx. 11 13/16" x 9 15/32" x 2 17/32" (Approx. 300 x 240 x 65 mm)
Total weight:	approx. 3 lbs. (1.4 Kg)
Connection cable with mains plug:	10 ft (3 m) long
Operating voltage:	98036 / 98040: 110-120 VAC 50/60Hz 98056 / 98058: 230 VAC 50/60Hz
Power consumption	500W
Heating up time:	10 minutes
Operating temperature:	175-AIR approx. 383°F (195°C) 175-AIR-HT approx. 419°F (215°C)
Diameter of adhesive inlet:	1 11/16" (43 mm)
Extension cable:	max. 65ft (20 m) long
Wire cross section:	at least 16 a.w.g. (1.5 mm ²)
Air Supply / Pneumatic	Minimum 45 p.s.i. (3 bar) Maximum 100 p.s.i. (7 bar)

4 Installation

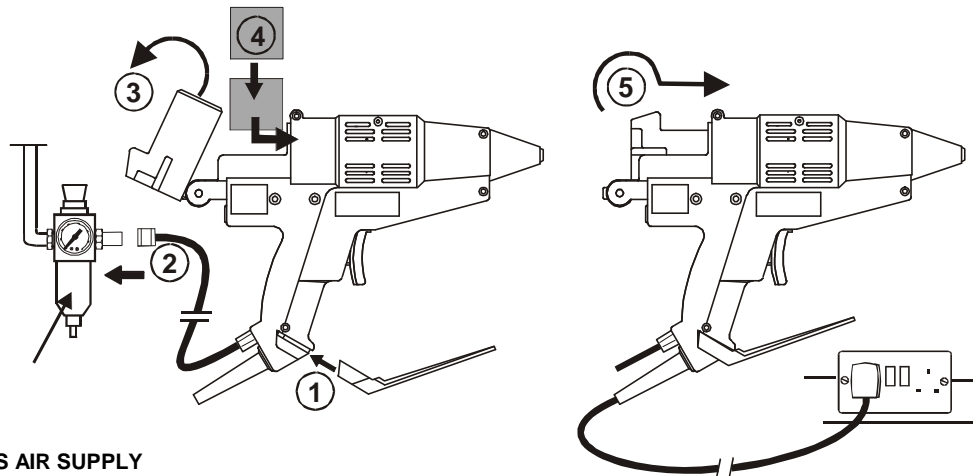


Before using the tool for the first time check it carefully for signs of external damage. If any transit damage is found DO NOT USE THE TOOL - return it to your supplier immediately.

Steps 1 – 5 should be followed before connection to the main supply:



1. Insert the applicator stand into the grooves at the base of the handle. Stand applicator on a flat surface.
2. Connect the air supply hose to a clean, dry and regulated air supply (use of a filter/regulator is recommended).
3. Pull the piston back fully and rotate upwards.
4. Load two adhesive cartridges into the barrel of the tool and push fully forward.
5. Rotate the piston down and slide forward fully until it contacts the rear of the adhesive cartridge - it should engage about 5/16" (6-8mm) into the applicator barrel.



6. Connect tool to main power supply.
7. Red 'Power On' indicator light will illuminate.
8. Allow the applicator to thoroughly warm up for 10 minutes. Do not attempt to operate the applicator until this time has elapsed.

5 Operation

Normal use:

- Assemble the stand and place the applicator in an upright position on a flat surface.
- Plug the applicator into the power supply socket, and switch on the power. Wait 10 minutes for the applicator to reach its normal operating temperature.
- Squeeze the trigger to advance the piston and extrude molten adhesive through the nozzle.
- To stop extruding adhesive simply release the trigger.



During use, the piston will advance into the barrel as the trigger is pulled. A point will be reached where the piston no longer advances, and the sound of air escaping can be heard - this indicates that the applicator needs reloading.

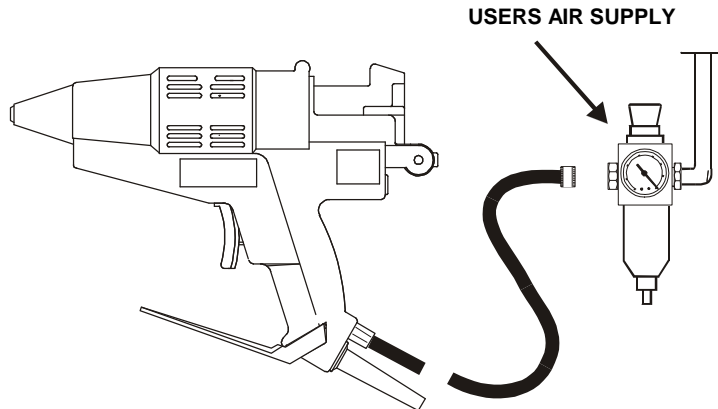
- Release the trigger.
- Pull the piston back.
- Insert a new adhesive cartridge.
- Operate the tool normally.

5.1 Adhesive Flow Rate Adjustment

The flow rate of adhesive is dependent on the air pressure to the piston, and this is adjusted by varying the setting of the pressure regulator on the air supply to the applicator.

The air pressure operating range for the applicator is:

Minimum 45 p.s.i. (3 bar)
Maximum 100 p.s.i. (7 bar)



6 Application Hints

As with all adhesives, performance depends on conditions of use. Suggestions or recommendations contained herein are for guidance only, since actual conditions of use are outside the supplier's control.

- Ensure that the surfaces to be bonded are dry, free from dust, grease, and loose particles.
- Apply adhesive to one surface only. Bring the two surfaces together immediately, quickly making any further adjustments. Hold the joint for 20 – 30 seconds to complete the bond.
- When gluing dissimilar materials, apply the adhesive to the least heat conductive of the two.
- On materials that are cold to the touch, a better bond can be made by pre-warming them before applying the adhesive.
- Surplus adhesive can be trimmed using a sharp knife once it has cooled. Should molten adhesive drip onto a smooth or polished surface, allow it to cool completely before removal.
- Spots or blobs of adhesive are recommended for work pieces having a large surface area, or which are particularly long.
- Applying the adhesive in wavy lines is recommended for gluing textiles or similar materials.
- Foam materials, like polystyrene, can be easily bonded to other surfaces. However the adhesive must be applied to the other surfaces, not to the foam.
- Use only genuine Loctite[®] Hysol[®] adhesives to ensure reliable performance. Loctite[®] Hysol[®] adhesives are non-toxic and non-flammable.

7 Troubleshooting



Before proceeding with any repair or maintenance operation disconnect the tool from the main electricity supply.

Glue “Backup” and “Meltdown”

“Backup” occurs when hot molten adhesive in the glue chamber is forced back between the barrel wall and the outside surface of the adhesive cartridge and piston. Once this adhesive cools, it may lock the adhesive cartridge in the barrel, preventing, or at least restricting, normal extrusion. By far the most likely cause of backup is allowing insufficient warm-up time before operating the tool (the molten glue in the glue chamber cannot escape forwards because the nozzle is blocked, due to being insufficiently warm). In the vast majority of cases the backup self-clears once the tool, having fully reached operating temperature.

"Meltdown" occurs when the rear of the adhesive cartridge softens and is not rigid enough to drive the cartridge forward without collapsing. As with backup, the molten adhesive can solidify, potentially locking the cartridge and / or piston into the barrel. Meltdown occurs when the tool is left on for extended periods of time without operation. If the tool is to be left standing for forty minutes or more, it should be switched off.



The Loctite[®] Hysol[®] 175-AIR and 175-AIR-HT tools are fitted with specially coated pistons which have non-stick characteristics far superior to any PTFE coating; this minimizes the effect of any backup or meltdown, should it occur.

**FOR ANY REPAIRS OR ADJUSTMENTS – OTHER THAN THOSE
DETAILED IN THIS MANUAL – PLEASE CONTACT 1-800-LOCTITE
(562-8483).**

8 Care and Maintenance



Every attempt has been made to make this exceptionally powerful tool both reliable and trouble-free. However the following precautions should be noted:

- Make sure that the applicator is up to temperature before attempting to operate.
- Do not leave the applicator switched on for long periods without use. If the applicator is not to be used for forty minutes or more, switch it off and restart when required.
- Keep the applicator upright when not in use, never lay it on its side. Always use the stand provided, or the optional bench stand or suspension unit (see Spares and Accessory lists at the end of this manual).
- Do not use excessive force on the trigger. Ensure that the tool has fully warmed up before use.
- Keep the nozzle clean to prevent adhesive build-up. This is easily done by wiping the nozzle with a clean paper or cloth while the nozzle is still warm.

9 Accessories and Spare Parts

Spare Parts

Part Number

Spare Parts	Part Number
Complete Check Adapter Assembly, item 9	985078
Nozzle Check Adapter, shown with item 9	985088
Applicator Stand, item 12	985069
Nozzle Shroud Kit, Qty 5, item 8	985223
Piston Support Assembly, item 23	985093
Piston Support O-Ring Kit, Qty 10, item 24	985234
Thermostat Assembly, 383°F (195°C), Hysol 175-Air, item 10	985079
Thermostat Assembly, 419°F (215°C), Hysol 175-Air-HT, item 43	985068
Thermostat Assembly, 266°F (130°C), Option, item 46	985979
Thermostat Assembly, 356°F (180°C), Option, item 47	985123
Heater Assembly 120 Volts, item 11	985080
Heater Assembly 230 Volts, item 11	985761
PCB Assembly, 120 Volts, item 15	985083
PCB Assembly, 230 Volts, item 15	985762
Thermal Fuse, Spacer Assembly, item 7	985076
Airline Assembly, 3 meters, item 16	985773
O-Ring, #2-006 Kit of 10, item 26	985831
Heater Housing Split Ring Seal, Kit of 10, item 5	985836
Label Kit for 98036 Applicator	985884
Label Kit for 98040 Applicator	985886
Label Kit for 98056 Applicator	985888
Label Kit for 98058 Applicator	985890

9 Accessories and Spare Parts (continued)

Spare Parts	Part Number
Barrel Support Kit Qty 1– Barrel Support, item 21 Qty 2 – Flat Washer, item 41 Qty 1 – Lock Washer, item 42 Qty 1 – Shroud Screw, item 31 Qty 1 – Ground Wire, item 29 Qty 1 – Lock Washer, item 39 Qty 1 – Round Head Screw, item 37	985778
Heater Housing Kit For 98036, 98040, 98056 & 98058 Qty 1 – PTFE, Barrel, item 2 Qty 2 – Barrel Support Ring, item 3 Qty 1 – Lock Ring, item 4 Qty 1 – Heater Housing Split Ring Seal, item 5 Qty 1 – Heater Housing, item 6 Qty 1 – Ground Screw, item 35 Qty 1 - Lock Washer, item 39 Qty 1- Ground Wire & Terminal, item 28	989940
Handle Kit Qty 1 – Trigger, item 13 Qty 2 – Moulded handles, item 1 Qty 6 – Casing Screws, item 34 Qty 1 – Red Lens, item 27 Qty 2 – Round Head Screws, item 36	985228
Piston Sleeve Kit Qty 1 – Piston, item 25 Qty 1 – Piston Plate, item 22 Qty 1 – Pan Head Screw, item 32 Qty 2 – Round Head Screw, item 37	985775
Piston Support Hardware Kit Qty 1 – Washer, special with 4 holes, item 30 Qty 1 – Pivot o-ring, item 26 Qty 1 - Washer, flat nylon, item 40	985229
Trigger Valve Kit Qty 1 – Polytube, item 19 Qty 1 - Trigger Valve Assembly, item 14 Qty 1 – Philips Pan Head Screw, item 33 Qty 1 – Trigger, item 13 Qty 1 – Exhaust Assembly, item 20	985230
U.S. Cord Set Assembly, 120 Volt Qty 1 – Cordset, item 17 Qty 1 – Clamp, item 18 Qty 2 – Screws, item 38	985231
Australian Cord Set Assembly, 230 Volt Qty 1 – Cordset, item 17 Qty 1 – Clamp, item 18 Qty 2 – Screws, item 38	985759

9 Accessories and Spare Parts (continued)

Accessories	Part Number
Standard Nozzle 1-Hole Kit, Qty 5, 0.080" (2 mm) orifice	985225
Nozzle 2-Hole	985110
Nozzle 3-Hole	985111
Extension Nozzle 0.120" (3 mm)	985112
Needle Extension Nozzle 0.050" (1.3 mm)	985113
Spreader Extension Nozzle 0.250" (6 mm)	985114
'L' Nozzle, overlap carton sealing	985115
'T' Nozzle, center flap carton sealing (Note: the nozzle shroud cannot be re-fitted with some optional nozzles)	985116
Tool Hanger / Balancer	985243
Heavy-Duty Free-Standing Metal Stand	985087
Airline Filter / Regulator / Gauge	985397

10 Appendix

Available nozzles / accessories



985225
1 Hole
Standard
5 pack

985110
2 Hole

985111
3 Hole

985112
Extension

985113
Needle

985114
Spreader

985115
"L" Nozzle

985116
"T" Nozzle

985088
Nozzle Check
Adapter



985243
Tool Hanger/Balancer

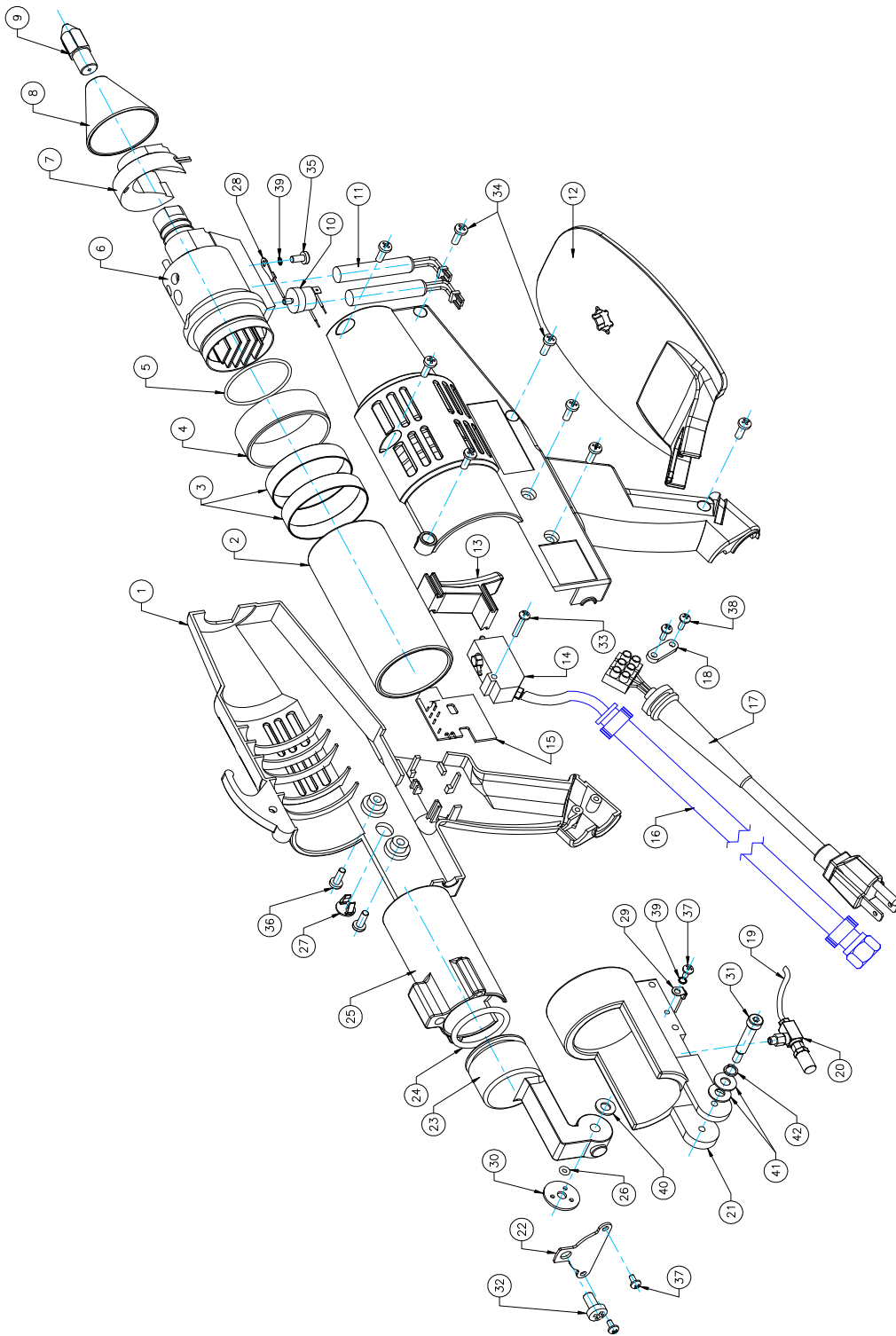


985397
Airline
Filter/Regulator/Gauge



985087
Heavy Duty Free-
Standing Metal
Stand

11 Exploded Diagram



12 Parts List

ITEM	QTY.	DESCRIPTION	REBUILD KITS	AVAILABLE PART NO.
47	1	THERMOSTAT, 180°C, 356°F, OPTION		985123
46	1	THERMOSTAT, 130°C, 266°F		985979
43	1	THERMOSTAT, 215°C, 419°F, 175-AIR-HT		985068
42	1	HELICAL SPRING LOCK WASHER, 1/4", BLACK OXIDE	BARREL SUPPORT KIT	985778
41	2	WASHER, 1/4", FLAT, BRIGHT ZINC PLATE	BARREL SUPPORT KIT	985778
40	1	WASHER, FLAT, NYLON	PISTON SUPPORT HARDWARE KIT	985229
39	2	HELICAL SPRING LOCK WASHER	HEATER HOUSING & BARREL KIT BARREL SUPPORT KIT	989940 985778
38	2	PHILLIPS PAN HEAD SCREW, SELF TAPPING, #6-20 X 3/8, BRIGHT ZINC	US CORDSET KIT AUSTRALIA CORDSET KIT	985231 985759
37	3	PHILLIPS ROUND HEAD SCREW, #6-32 x 1/4 LONG	PISTON KIT BARREL SUPPORT KIT	985775 985778
36	4	PHILLIPS ROUND HEAD SCREW, #10-32 x 5/8 LONG, BLACK OXIDE	HANDLES & SCREWS KIT	985228
35	1	GROUND SCREW, 4BA x 1/2" LONG	HEATER HOUSING & BARREL KIT	989940
34	6	CASING SCREW, 12mm LONG SELF-TAPPING	HANDLES & SCREWS KIT PISTON SUPPORT HARDWARE KIT	985228 985229
33	1	PHILLIPS PAN HEAD SCREW, SELF TAPPING, #6-20 X 3/4, BRIGHT ZINC	TRIGGER VALVE KIT	985230
32	1	PHILLIPS PAN HEAD SCREW, 1/4-20 x 1/2 LONG, BLACK OXIDE	PISTON KIT	985775
31	1	SOCKET HEAD SHOULDER SCREW, 1/4" x 1"	BARREL SUPPORT KIT	985778
30	1	WASHER, SPECIAL WITH 4 HOLES	PISTON SUPPORT HARDWARE KIT	985229
29	1	BARREL SUPPORT GROUND WIRE ASSEMBLY	BARREL SUPPORT KIT	985778
28	1	HEATER HOUSING GROUND WIRE ASSEMBLY	HEATER HOUSING & BARREL KIT	989940
27	1	RED LENS	HANDLES & SCREWS KIT	985228
26	1	O-RING #2-006	PISTON SUPPORT HARDWARE KIT O-RING #2-006 KIT OF 10	985229 985831
25	1	PISTON	PISTON KIT	985775
24	1	O-RING #2-219	O-RING #2-219 KIT OF 10	985234
23	1	PISTON SUPPORT ASSEMBLY		985093
22	1	PISTON PLATE	PISTON KIT	985775
21	1	BARREL SUPPORT	BARREL SUPPORT KIT	985778
20	1	EXHAUST SILENCER ASSEMBLY	TRIGGER VALVE KIT	985230
19	1	URETHANE TUBING, 50mm LONG	TRIGGER VALVE KIT	985230
18	1	CORDSET CLAMP	US CORDSET KIT AUSTRALIA CORDSET KIT	985231 985759
17	1	CORDSET ASSEMBLY, 3M	US CORDSET KIT AUSTRALIA CORDSET KIT	985231 985759
16	1	AIRLINE ASSEMBLY, 3M	AIRLINE ASSEMBLY, 3M	985773
15	1	CONNECTOR & LIGHT PCB ASSEMBLY, 120 VOLT CONNECTOR & LIGHT PCB ASSEMBLY, 230 VOLT		985083 985762
14	1	TRIGGER VALVE ASSEMBLY	TRIGGER VALVE KIT	985230
13	1	TRIGGER	TRIGGER VALVE KIT	985230
12	1	DISPENSER STAND		985069
11	2	HEATER ASSEMBLY, 120 VOLT, 250 WATT HEATER ASSEMBLY, 230 VOLT, 250 WATT		985080 985761
10	1	THERMOSTAT, 195°C, 383°F, 175-AIR		985079
9	1	COMPLETE NOZZLE/CHECK ADAPTER ASSEMBLY		985078
		NOZZLE ONLY, PKG OF 5		985225
		CHECK ADAPTER ONLY		985088
8	1	NOZZLE SHROUD	NOZZLE SHROUD KIT OF 5	985223
7	1	THERMAL FUSE & SPACER ASSEMBLY		985076
6	1	HEATER HOUSING	HEATER HOUSING & BARREL KIT	989940
5	1	HEATER HOUSING SPLIT RING SEAL	HEATER HOUSING & BARREL KIT SPLIT RING SEAL, KIT OF 10	989940 985836
4	1	LOCK RING, ALUMINUM	HEATER HOUSING & BARREL KIT	989940
3	2	BARREL SUPPORT RING	HEATER HOUSING & BARREL KIT	989940
2	1	BARREL, PTFE	HEATER HOUSING & BARREL KIT	989940
1	1	HANDLES, PAIR	HANDLES & SCREWS KIT	985228

13 Warranty

Henkel expressly warrants that all products referred to in this Instruction Manual under Loctite® Hysol® 175-AIR and Hysol® 175-AIR-HT Hot Melt Applicators (hereafter called "Products") shall be free from defects in materials and workmanship. Liability for Henkel shall be limited, as its option, to replacing those Products which are shown to be defective either in materials or workmanship or to credit to the purchaser the amount of the purchase price thereof (plus freight and insurance charges paid therefor by the user). The purchaser's sole and exclusive remedy for breach of warranty shall be such replacement or credit.

A claim of defect in materials or workmanship in any Products shall be allowed only when it is submitted to Henkel in writing within one month after discovery of the defect or after the time the defect should have reasonably been discovered and in any event, within twelve months after the delivery of the Products to the purchaser. No such claim shall be allowed in respect of Products which have been neglected or improperly stored, transported, handled, installed, connected, operated, used or maintained. In the event of unauthorized modification of the Products including; where products, parts or attachments for use in connection with the Products are available from Henkel, the use of products, parts or attachments which are not manufactured by Henkel, no claim shall be allowed.

No Products shall be returned to Henkel for any reason without prior written approval from Henkel. Products shall be returned freight prepaid, in accordance with instructions from Henkel.

NO WARRANTY IS EXTENDED TO ANY EQUIPMENT WHICH HAS BEEN ALTERED, MISUSED, NEGLECTED, OR DAMAGED BY ACCIDENT, OR IF THE SYSTEM IS USED TO DISPENSE ANY LIQUID MATERIAL OTHER THAN HENKEL PRODUCTS.

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