

# EQ HM18 Reactive Urethane Cartridge Dispenser

Item No. 2011543 for 120 Volt

Item No. 967646 for 230 Volt

## **Operating Manual**







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## 1 Please Observe The Following

#### 1.1 Emphasized Sections



#### Warning!

Refers to safety regulations and requires 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:

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



#### Caution: Hot Surface!

Accident Prevention Regulation VBG 125 – W26 Hot surfaces such as machine parts, tanks or materials, but also hot liquids cannot always be perceived. The utmost caution is advised when this symbol is attached to a component. Wear protective gloves whenever you have to touch hot surfaces.



#### **Tripping Hazard!**

To avoid accidents lay the cables so that they will not cause any risk of stumbling.



Wear protective gloves and safety goggles whenever you work with the applicator. If the safety glove sign isn't clearly visible or not at all on the glue applicator please contact Henkel.



#### 1.2 For Your Safety

- Read Manual Prior to Operating the Reactive Urethane Cartridge Dispenser.
- The glue and nozzle of the dispenser can reach temperatures of 250 Degrees
  Fahrenheit. Avoid all skin contact. If hot glue comes into contact with the skin,
  cool it with cold water immediately. Do not try to remove the hot melt from the
  skin first. If necessary, consult a doctor. If hot glue comes into contact with the
  eyes, immediately cool them under running water for about 15 minutes and
  consult your doctor at once.
- Connect only to a properly grounded electrical outlet. Do not modify the plug or use with an adapter. Improper connection may cause electrical shock. Do Not Use in damp or wet conditions!
- Wear safety glasses and protective gloves when operating dispenser.
- Set temperature switch to "off" and unplug dispenser when not in use.
- Never put any object in dispenser other than the Reactive Urethane or Cleaning Cartridges from Loctite®.
- Never handle heated cartridges or nozzles without gloves.
- Cartridges should not be heated above 275 Degrees Fahrenheit. Vapors of heated material may irritate eyes and respiratory tract. May cause asthma-like symptoms in people previously sensitized to isocynates. Read Safety Data Sheet prior to product use.
- Place receptacle under nozzle to catch any residual Reactive Urethane, when unit is on but not dispensing.
- Cartridge contents exposed to moisture will cause loss of useable product life.
- Unplug the connecting cable before replacing a nozzle. Warning: risk of burns!
   When a nozzle is replaced, liquid glue might leak out.
- Do not clean nozzles or surfaces with heat or flame. Do not feed solvents or paraffin. Risk of explosion!

#### 1.3 Unpacking and Inspection

Carefully unpack the Loctite® EQ HM18 Reactive Urethane Cartridge Dispenser and examine the items contained in the carton. Inspect the unit for any damage that might have occurred in transit. If such damage has occurred, notify the carrier immediately. Claims for damage must be made by the consignee to the carrier and should be reported to the manufacturer.

#### 1.4 Items supplied

- Cartridge Dispenser
- Cartridge Dispenser Base
- Tubing Assembly 8904578
- Wire Stand 8904579
- Cartridge to Nozzle Adapter 478554
- 2.5mm Nozzle With Cap 478555
- Equipment Manual

#### 1.5 Features

- Light weight, well balanced and ergonomically designed for operator comfort and application control
- Low actuation force to reduce finger fatigue
- Electronic temperature control
- Rugged molded thermoset plastic housing for "cool to the touch" operation up to 250 degrees F (121 degrees C)
- Single cartridge loading
- Direct nozzle cartridge mounting for guick cartridge changeover
- Various nozzles for different dispense patterns

#### 1.6 Intended Use

The applicator works with hot glue which is dispensed by a pneumatic conveying system. It is suitable for hot melt from 2,000 – 15,000 mPas\*. The glue applicator should only be used by trained, instructed and authorized persons who have been familiarized

with its proper use and the safety precautions. Handling the applicator properly will avoid unnecessary accident hazards and problems. Bodily injury or material damage caused by not using the glue applicator as intended shall not be the manufacturers, but the user's responsibility.

#### 2 Description

The Loctite® Hot Melt Cartridge Dispenser is a hand-held, electro-pneumatic 300 ml dispenser. The product is ergonomically designed to heat, melt and dispense all Loctite® Reactive Urethane 300 ml products. The Loctite® Hot Melt Cartridge Dispenser is designed for high volume, high production industrial environments.

#### 3 Technical Data

Dispenser Dimensions (L x H x W): 318mm x 78mm x 261mm

Base Dimensions (L x H x W): 314mm x 282mm x 117mm

Total weight: 6.5 lbs. (2.9 Kg)
Operating voltage: 120 VAC, 60Hz

230 VAC, 50Hz

Power consumption: 120 VAC, 400 Watts

230 VAC, 600 Watts

Operating pressure: 0.5 – 6 bar

Temperature Consistency: plus/minus 2 degrees C

Heat-up Time: approximately 3 – 10 minutes

<sup>\*</sup> less than 2,000 and more than 15,000 mPas possible with limitations.

#### 4 Installation

- Before using the equipment for the first time check it carefully for signs of external damage. If any shipping damage is found DO NOT USE THE EQUIPMENT return it to your supplier immediately.
- A. Use a dry air source and connect to Dispenser Base @ max. 6 bar input.
- B. Connect air pressure line from dispenser to regulator (elbow fitting) in the bottom of the Dispenser Base.
- C. Plug in the power cord to a properly grounded electrical outlet. If the temperature switch on the dispenser illuminates, turn the switch to the off position.

#### 5 Operation

#### 5.1 Setting the Hot Melt Working Temperature



Switching the temperature control on and off:

Press the lower button to switch the temperature control on or off.

#### Raising the temperature:

Press the upper button until the desired temperature is indicated. Press the lower button once to confirm the setting.

#### Reducing the temperature:

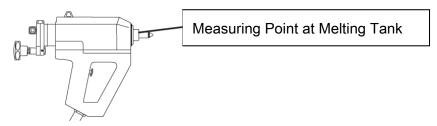
Press the middle button until the desired temperature is indicated. Press the lower button once to confirm the setting.

While the applicator is heating up to the set temperature, the numbers on the display are flashing. If the chosen temperature is not confirmed within a few seconds by pushing the lower button, the applicator will use the last set temperature.

#### 5.2 General Notice on Hot Melt Working Temperature

#### Please note:

The temperature regulation is not calibrated! If an exact temperature is required, use a calibrated thermometer to check the temperature. Please also note that the outside temperature of the melting tank differs from the actual temperature inside the melting tank.



The heating temperature should be lowered during longer work breaks to preserve the hot melt. Ongoing heating makes the hot melt coke and may also change its' characteristics.

#### 5.3 Working with a Balancer (Suspender)

If the glue dispenser is attached to a balancer (suspender), the nozzle must point down to prevent glue from getting into the vent valve!







#### 5.4 Dispenser Base Including Regulator & Gauge

The precision adjustment for the compressed air regulates your glue application. The set pressure may be read from the indication of the gauge.

When you use the stand for holding the applicator, remove the wire stand.

Connect the compressed air hose to the rear side of the stand. Connect air pressure line from dispenser to regulator (elbow fitting) in the bottom of the Dispenser Base.

Pressure controller on the right side of the Dispenser Base = air for glue output 2-4 bars.

This setting is dependent on the glue type and desired quantity to be applied.

#### 5.5 Using PUR Hot Melt Cartridges

Cartridges may only be inserted or exchanged, when the applicator is warm or heated up. Only use cartridges in perfect condition, that is without dents, etc., so that the piston may move freely in the cartridge.



Wear protective gloves and safety goggles whenever you work with the applicator.



When the applicator has warmed up, there is a risk of burns!



If, when changing the cartridge, another type of glue is used, the nozzle must be rinsed thoroughly (see chapter "Cleaning of the Nozzle/Nozzle Adapter").

The heating temperature should be lowered during longer work breaks to preserve the hotmelt. Ongoing heating makes the hot-melt coke and may also change its' characteristics.

#### 5.6 Preparation of the Cartridge

#### Preparation of the Cartridge



To open the cartridge pierce the outlet, using a pointed tool.



Screw nozzle adapter and nozzle onto the cartridge.

#### 5.7 Loading the Hot Melt Cartridge

As soon as the applicator has warmed up, turn the star grip (item 6) anticlockwise and open the lid (item 5) upward.

Be sure that the cartridge outlet has been opened and an adapter and nozzle are fitted (see "Preparation of the Cartridge").



Insert the cartridge into the cartridge applicator.



Allow approx. 20 minutes for the applicator to warm up (depending on the type of glue). Warming-up will not take as long, if the cartridge has been preheated.



Apply the hot-melt glue.

If an empty cartridge is replaced by a full one containing a different type of glue, nozzle and adapter must be cleaned. For this, please read "Cleaning the Nozzle/Nozzle Adapter after working with PUR Hot Melt Glue Cartridges" in chapter "Cleaning and Maintenance".

#### 5.8 Applying Hot Melt Glue

Make yourself familiar with the instrument first. Apply a little glue in varying forms on a piece of paper or cardboard. For example, lines, or glue points. Try to find out the correct quantity and the ideal pattern by adjusting the air and glue quantities by means of the pressure regulator at the dispenser base stand, always observing the correct working temperatures of the specific hot melt. This temperature is indicated in the technical datasheet of the respective hot melt.

#### Applying Hot-Melt Glue



Wear protective gloves and safety goggles whenever you work with the applicator



Never start working before fitting a nozzle first.

Never direct the glue jet towards people!



If hot glue comes into contact with the skin, cool it with cold water immediately. Do not try to remove the hot-melt from the skin first. If necessary, consult a doctor. If hot glue comes into contact with the eyes, immediately cool them under running water for about 15 minutes and consult your doctor at once.

### 6 Cleaning and Maintenance

The applicator is to be maintained by skilled personnel on a regular basis. The frequency of maintenance depends on wear and the hot melt in use. The heating temperature should be lowered during longer work breaks to preserve the hot melt. Ongoing heating makes the hot melt coke and may also change its' characteristics. If you follow all advice given in the operating manual, the glue applicator does normally not need cleaning. The working temperature of the respective glue may be taken from the technical datasheet which can be procured from the producer of the glue. This temperature must not be exceeded, otherwise the glue may coke in the glue applicator. Hot melts on a polyamide basis are particularly sensitive. If the glue has coked, the applicator should be cleaned. If a special cleaning agent is needed, information on this cleaning agent is available at your glue supplier.

Never clean the applicator with solvent, benzine, benzene, toluene, acetone, turpentine, etc. risk of explosion!

When reactive PUR hot melt glues are used, the adapter and the nozzles must be flushed thoroughly. For this, use a special cleaning agent in 300ml cartridges. Please ask your glue supplier for the cleaning agent suited for the hot melt used by you.

#### 6.1 Replacement of Nozzles

Only replace nozzles when the applicator is warm (applicator temperature 60-80 degrees C) and the cartridge is empty. Replacing a nozzle when the applicator is cold, may damage the applicator. If the nozzle is replaced when the applicator is too hot, liquid glue may leak out. For the melting range and the melting point of the used glue, please see the technical datasheet of the respective glue.

**After Work:** Please unplug the device after working with it. Do not unplug it by pulling the cord, pull the plug instead.

#### Replacement of Nozzles



Warning: risk of burns!

If hot glue comes into contact with the skin, cool it with cold water immediately.

Do not try to remove the hot-melt from the skin first. If necessary, consult a doctor. If hot glue comes into contact with the eyes, immediately cool them under running water for about 15 minutes and consult your doctor at once.



For your own safety wear protective gloves and safety goggles whenever you work with the applicator.

Unplug the connecting cable before replacing nozzles!

#### 6.2 Cleaning the Nozzle / Nozzle Adapter After Use

When the applicator will not be used for a longer time, we recommend that you clean the nozzle / the adapter because reactive PUR hot melts may harden within a short time and cannot melt any more.

#### Proceed as follows:



Remove the PUR cartridge from the applicator.

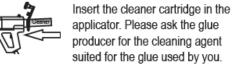


Unscrew the nozzle adapter from the warm glue cartridge.

Use a pointed tool to open the outlet of the PUR-cleaner cartridge.



Screw the nozzle adapter on the screw thread of the cleaner cartridge.





Allow about 20 minutes for the applicator to warm up the cleaner.

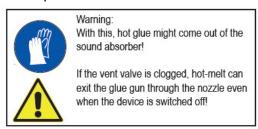


Flush the nozzle adapter with cleaner until you see cleaning agent come out steadily. Remove the cleaner cartridge from the applicator and unscrew the nozzle adapter and nozzle from the cleaner cartridge while it is still warm.

Caution: Hot cleaning agent may flow out! Allow the cleaner cartridge to cool and keep it for further use.

#### 6.3 Cleaning the Vent Valve

Each time the trigger (item 7) has been pulled, the applicator must audibly vent through the vent valve ("SEV"). If the sound absorber (item 8) got stuck, the glue tank may be under pressure.



Prevent liquid glue from getting into the sound absorber, when the applicator is ready for operation by ...

- placing the glue applicator on a level plane, using its wire bracket;
- placing the glue applicator on the dispenser base stand;
- suspending the glue applicator at a spring balancer;
- always pointing the nozzle downwards.

If nevertheless glue got into the vent valve, replace it or clean it if possible and when the glue gun is warmed up. Replacement or cleaning of the vent valve when the glue gun is cold may lead to damaging the device.

## 7 Troubleshooting

## List of possible fault indications and assistance in trouble-shooting

In case of damage, send the glue applicator to Henkel, indicating type and serial no. of your applicator. Self-made repairs void the warranty.

Fault	Possible Cause	Corrective Actions
No or too little glue output,	Foreign objects in nozzle?	Replace nozzle
though the heat-up time has	Low air pressure	Check pressure settings and
been observed exactly		check air pressure supply if
		applicable
	Low hot melt temperature	Check temperature setting
	The piston in the cartridge can't	Replace the cartridge
	move freely	
Hot melt is too thin or too thick	Temperature either too high or	Check the temperature
	too low	
Hot melt contains brown flakes	Hot melt was heated over	Lower the heating temperature
	recommended temperature	
	Hot melt was heated for too long	Lower the heating temperature
	and is coked	during work breaks
Leaking nozzle	Silencer / Vent Valve is clogged	Clean the vent valve and replace
		silencer
	Foreign objects in nozzle?	Replace nozzle
	The piston in the cartridge can't	Replace the cartridge
	move freely	
Applicator doesn't heat up	Device is switch off	Check power supply
		Turn on the applicator at
		The LCD panel

#### 8 Environmental Protection

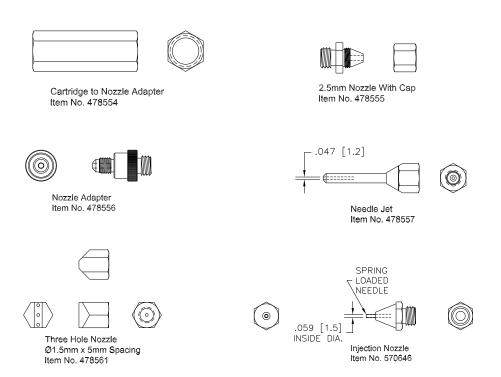
Never throw electric tools in the domestic waste. According to the European directive 2002/96/EC for used electric and electronic devices and according to national regulations, used electric tools must be collected separately and treated in an environmentally compatible way for reuse.

Packing material used by Henkel Corporation can be recycled completely.

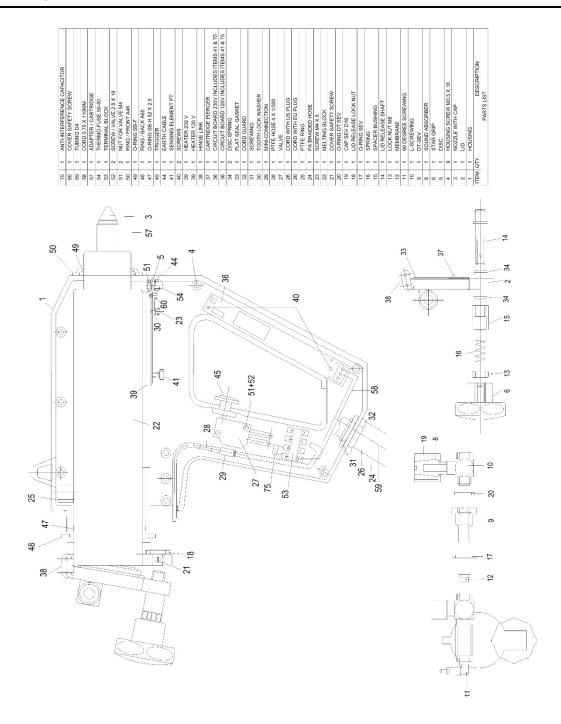
Please take instructions for the disposal of hot melt glues and hot melt cartridges from the respective safety specifications.



### 9 Accessories and Spare Parts



## 10 Diagrams



#### 11 Warranty

Henkel expressly warrants that all products referred to in this Instruction Manual for EQ HM18 Reactive Urethane Cartridge Dispenser (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 in either materials or workmanship or to credit 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 in writing within one month after discovery of the defect or after the time the defect should reasonably have been discovered and in any event, within (12) months after the delivery of the Products to the purchaser. This warranty does not apply to perishable items, such as (fuses, filters, lights, etc.). 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.

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### 12 Declaration of Conformity

Declaration of Conformity		
The Manufacturer according to the EC regulations	Henkel AG & Co. KGaA Standort München Gutenbergstr. 3 D-85748 Garching bei München	
	ving is, as a result of its design and construction, in armonized standards and national standards listed below.	
Designation of the unit	EQ HM18 Urethane Cart Gun 230V/110V	
Unit number	230 V version: 967646 110 V Version: 2011543	
Applicable EC Regulations	EC Directive of Machinery 2006/42/EC EC Directive of RoHS 2011/65/EU	
Applicable harmonized standards	IEC CISPR14; IEC 60335; IEC 61000; EN 60204	
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