

# LOCTITE®

## EQUIPMENT Operation Manual



## Loctite® Rotorspray Part Numbers 97115

A  Company

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# 1. Please Observe the Following

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## 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.

The numbers printed in bold in the text refer to the corresponding position numbers in the illustration on page 3.

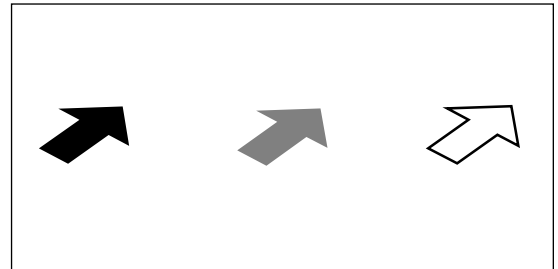
- The pointer emphasizes an instruction step. Instruction steps in the illustrations are indicated with arrows.

When several instruction steps are indicated in an illustration, the shading of the arrow has the following meaning:

Black arrow = 1st step

Grey arrow = 2nd step

White arrow = 3rd step



## 1.2 Items supplied

- (1) Rotorspray 97115
- (1) Rotor Disc dia. 25 mm
- (1) Rotor Connection Cord
- (1) Instruction Manual 97115
- (1) Rotor Disc dia. 10 mm
- (1) Adapter Ring for Diaphragm Valve 97135/97136

As a result of technical development, the illustrations and descriptions in this instruction manual can deviate in detail from the actual unit delivered.

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# 1. Please Observe the Following (continued)

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## 1.3 For Your Safety



For safe and successful operation of the unit, read these instructions completely. If the instructions are not observed, the manufacturer can assume no responsibility.

If Loctite® products are not properly handled, damage to health can result!

- Observe general safety regulations for the handling of chemicals!
- Observe manufacturer's instructions!  
Request a safety data sheet for the Loctite® product used!
- When working with pressurized air, wear protective glasses!

## 1.4 Usage

With the Rotorspray 97115, Loctite® Products can be applied to the interior surface of cylindrical parts.

The Rotorspray 97115 is operated in combination with a pneumatic stationary applicator. The simultaneous control of these units requires the use of a Loctite® Controller 97123.

**Low viscosity** anaerobic and UV curing adhesives can be applied with the Rotorspray 97115.



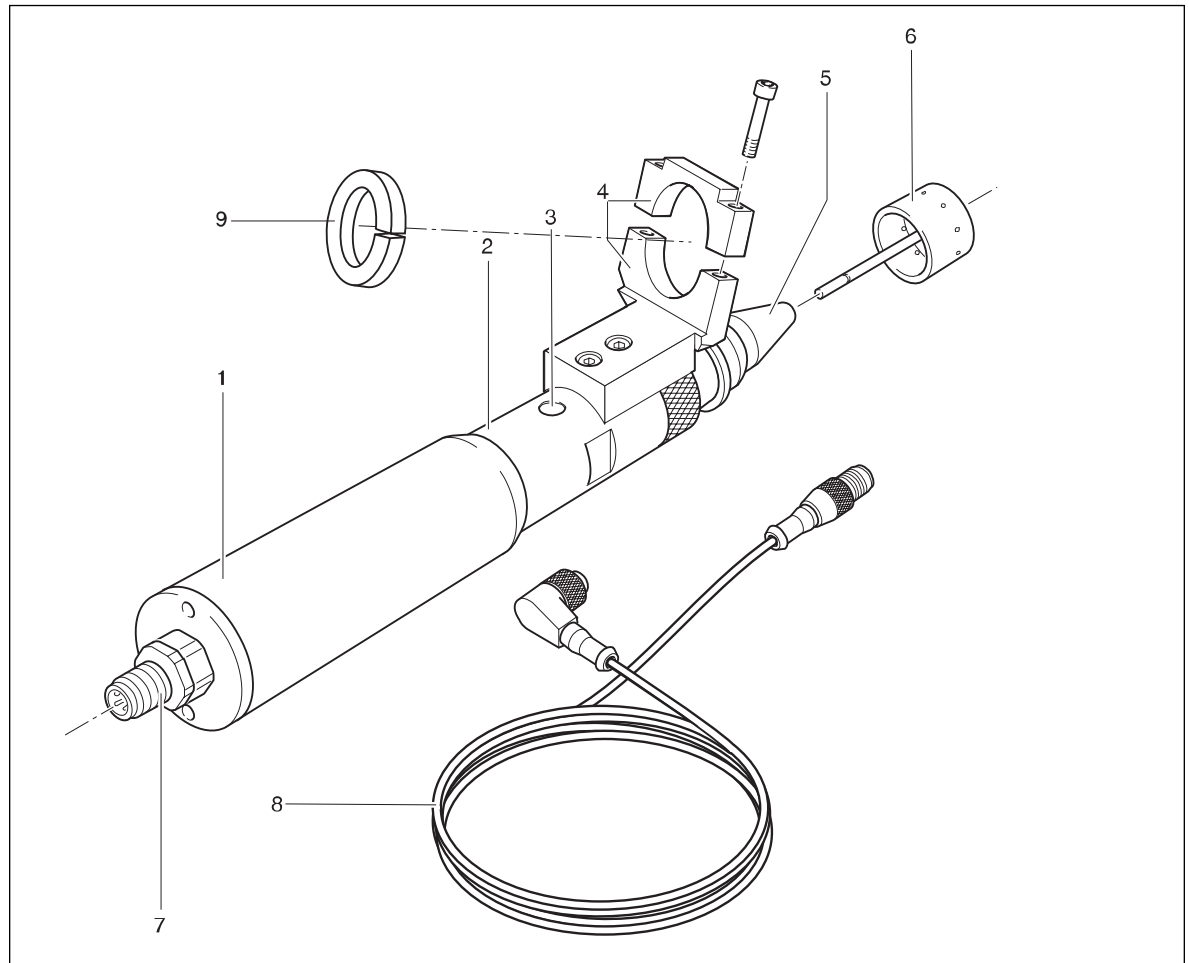
**The rotorspray is not suitable for cyanoacrylate adhesives that are humidity cured and may clog the wetting holes of the rotor disc!**

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## 2. Description

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### 2.1 Operating Elements and Connections



**1 Rotorspray motor assembly**

**2 Rotorspray front end assembly**

**3 Access hole**

For access to the attachment screw  
of the shaft coupling.

**4 Holder for stationary applicator**

**5 Drive assembly with shaft**

**6 Rotor disc with shaft**

**7 Connector**

**8 Rotor connection cord**

**9 Adapter ring for a diaphragm valve**

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## 2. Description (continued)

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### 2.2 Theory of Operation

The Rotorspray 97115 is clamped in a fixture. The stationary applicator is clamped in the holder **4** of the rotorspray so that the tip of the flexible dispensing needle is directed at the inside of the wetting holes on the rotor disc **6**.

The Loctite® Controller 97123 controls:

- The switching on of the rotorspray.
- The dispensing after the rated rotor speed is reached and during the preselected dispensing time.
- The switching off of the rotorspray.

As long as the stationary applicator valve is open, the product is dispersed through the wetting holes by centrifugal force and uniformly distributed onto the cylindrical inner surface of the part.

In conjunction with an advancing slide, the dispensing is performed depending on the switching on of the rotorspray:

- At the end of the advancing movement (bead dispensing) or
- During the advancing movement (area dispensing).

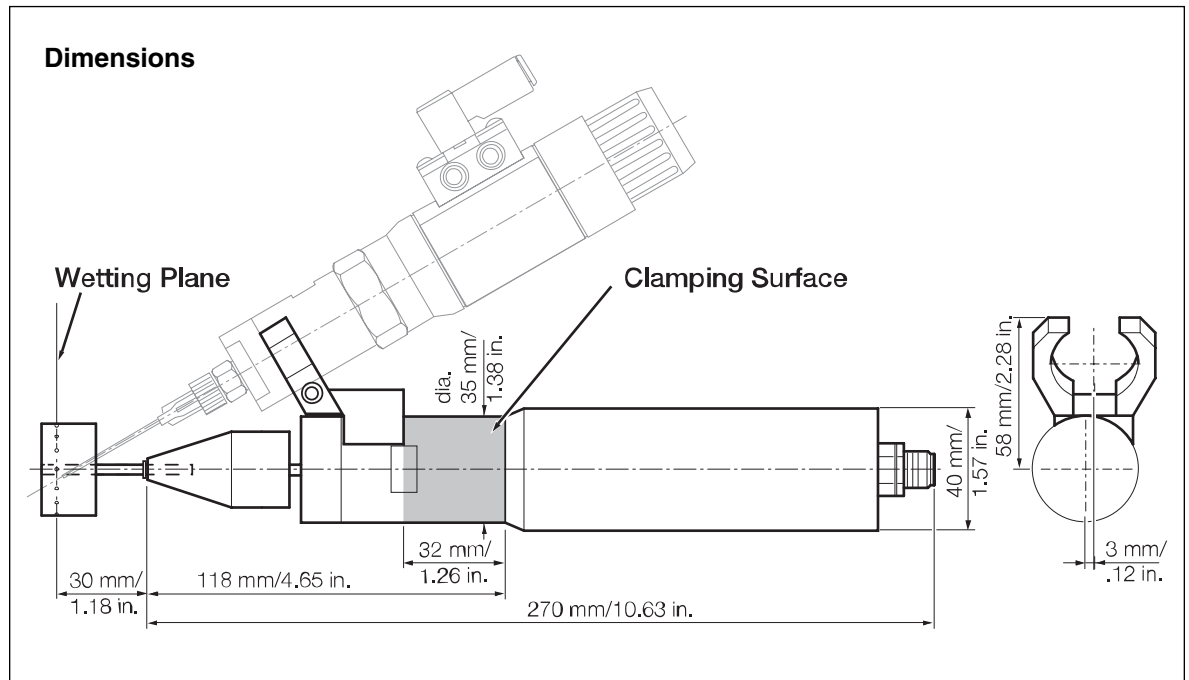
The drive assembly of the rotorspray has longitudinal play of 5 mm. Within this distance, unintentional contact with an obstacle can be compensated without the rotor disc or the drive assembly and its shaft being damaged. Furthermore, the drive assembly is so constructed that in case the product flows back, the drive assembly and the rotor housing cannot glue together. With longitudinal play and with the special construction of the drive assembly, a perfect function is guaranteed.

When a disturbance occurs in a dispensing sequence:

- The dispensing sequence is interrupted.
- The rotorspray is switched off.
- The 97123 Controller signals a error message with a beeping tone (see Section 7).

### 3. Technical Data

Rated speed	8,000 RPM
Rated voltage	24 VDC
Power consumption	10 W, to 24 W for short periods
Operating temperature	+10°C to + 40°C (+50°F to +104°F)
Storage temperature	-10°C to + 60°C (+14°F to +140°F)
Weight	0.6 kg



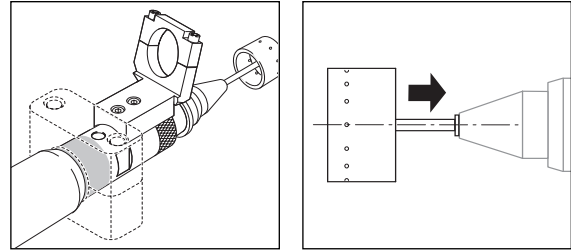
## 4. Installation

### 4.1 Environmental Conditions

- ! – Non-condensing humidity
- No splashing water

### 4.2 Assembling the Unit

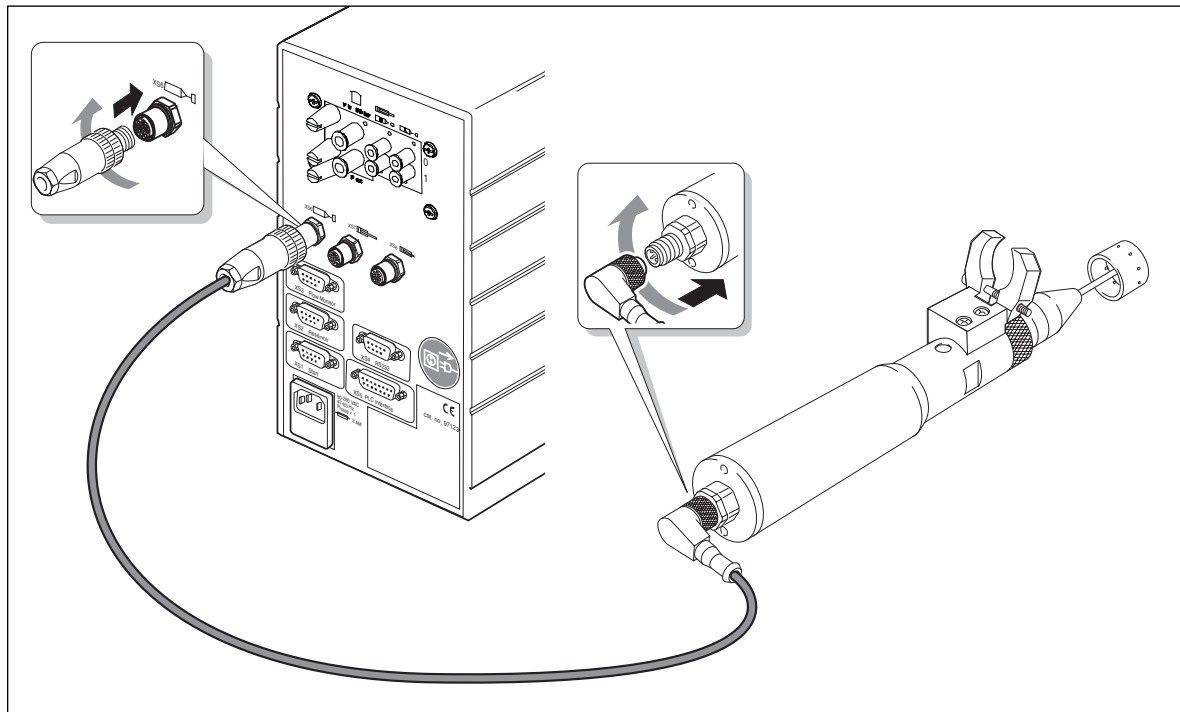
- Clamp the rotorspray into a fixture on the clamping surface.
- The holder 4 of the rotorspray must point upward!
- Insert the shaft of a rotor disc 6 of the required diameter into the drive assembly 4 to the stop.



### 4.3 Connecting the Unit



It is easier to keep track of the dispensing sequence when the connection units that are combined together are connected to the same dispensing channel.





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## 4. Installation (continued)

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### 4.4 Setting Up the Unit

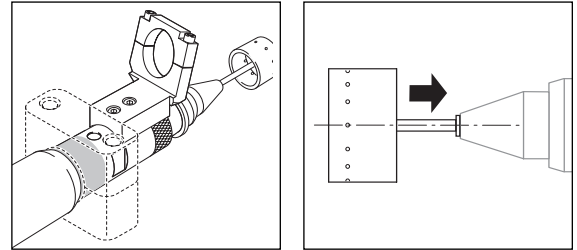
#### 4.4.1 Mounting the Stationary Applicator on the Rotorspray

- Loosen the clamping screws of the holder 4 and clamp in the stationary applicator.



The tip of the flexible dispensing needle must be placed at a distance of approx. 2 mm from the bottom of the rotor disc 6.

When mounting a diaphragm valve use adapter ring 9.



#### 4.4.2 Adjusting the Wetting Position

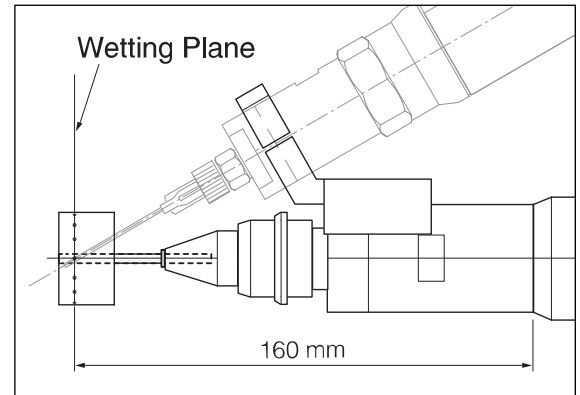
- Place the rotorspray at the wetting position in the part.

##### Wetting plane:

At the middle of the holes in the rotor disc.



**The rotor disc must be able to reach the required wetting position exactly without coming into contact with any obstacles!**



#### 4.4.3 Controlling the Mechanical Sequence

- In the main directory PERIPHERY SETUP on the Controller 97123, check whether all of the necessary connection units are activated (see operating instructions for the Controller 97123).
- In the directory MANUAL OPERATION, switch the rotor on and off (see operating instructions for the Controller 97123). Check whether the rotor rotates.

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## 5. Dispensing

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### 5.1 First Operation

#### 5.1.1 Priming the Feed Line

- Purge the stationary applicator of air according to the operating instructions for the stationary applicator.



Remove the stationary applicator from the holder for purging.

- Perform the filling of the product line according to the operating instructions of the Loctite® Controller 97123.
- Before remounting the stationary applicator, adjust the piston stroke (suck-back effect) and the air outlet chokes (see operating instructions for the Stationary Applicator 97113).

#### 5.1.2 Controlling the Dispensing Sequence

- Place the rotorspray at the wetting position in the part and check the dispensing sequence.
- In the directory MANUAL OPERATION, switch the rotor on and off (see operating instructions for the Controller 97123). Check whether the rotor rotates.



The rotorspray is automatically switched on at the wetting position by the Controller 97123. The dispensing takes place automatically after the rotor reaches the rated speed and according to the preselected dispensing time.

If the dispensed quantity is too small or too large:

- Perform the adjustment of the dispensed quantity according to the operating instructions of the 97123 Controller.
- Reinitiate a start and check the dispensing sequence.
- Repeat the steps until the dispensing sequence is exactly as required and the dispensed quantity is correct.

### 5.2 Shutdown



The rotor is switched off automatically at the end of the dispensing time by the Controller 97123.

#### Shutdown for Longer Periods of Non-use



**For pauses in the work of longer than 14 days, place the system out of operation to prevent curing of the product.**


- Unclamp the stationary applicator and put it out of operation according to its operating instructions.
- Clean the rotor disc according to Section 6.

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## 5. *Dispensing (continued)*

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### 5.3 Returning to Operation

 The rotorspray is automatically switched on at the wetting position by the Controller 97123. The dispensing takes place automatically after the rotor reaches the rated speed and according to the preselected dispensing time.

#### **Returning to Operation after Longer Periods of Non-use**

- Check the installation, according to Section 4.
- Return to operation, according to Section 5.1.

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## 6 *Care, Cleaning, and Maintenance*


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### 6.1 Cleaning


The unit requires no special care and maintenance.

#### **Cleaning**

- For periods of inactivity of more than 14 days or when changing the type of product, remove and clean the rotor disc and its shaft.

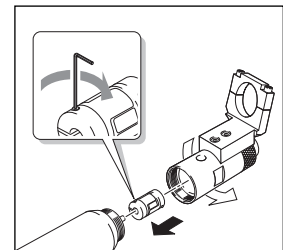
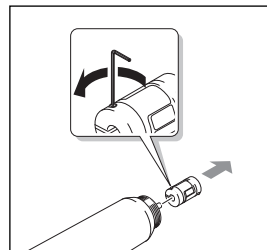
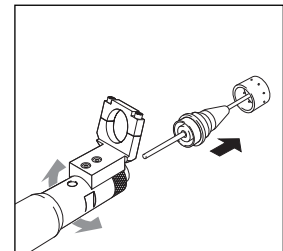
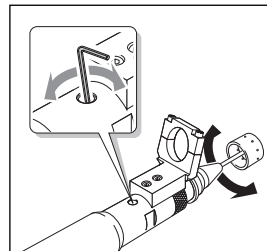
 Use recommended cleaning agents according to the operating instructions of the stationary applicator.

## 7. Troubleshooting

Type of Malfunction	Possible Cause	Correction
<p>Rotor does not run or does not reach full speed. The error message (with beeping) blinks in the digital display:</p>  <p>Message in the upper line = Channel A Message in lower line = Channel B</p>	<ul style="list-style-type: none"> <li>– Controller incorrectly adjusted.</li> <li>– Loose plug or connector on the connection cord.</li> <li>– Connection cord defect.</li> <li>– Rotor was restricted in its mechanical movement and switched off.</li> <li>– Rotorspray motor assembly or bearing assembly defect.</li> <li>– Controller defect.</li> </ul>	<ul style="list-style-type: none"> <li>• Check the settings in the PERIPHERY SET-UP directory (see operating instructions for the Controller 97123).</li> <li>• Switch the power switch (controller) to position O (OFF). Tighten the plug or the connector of the connection cord. Switch the power switch to the position I (ON).</li> <li>• Replace the connection cord.</li> <li>• Check the installation.</li> <li>• Replace the rotorspray motor assembly or the bearing assembly (see below).</li> <li>• Loctite Service.</li> </ul>

### Replacement of motor assembly or bearing assembly

- Turn drive assembly **5** until the fastening screw of the shaft coupling can be seen in the access hole **3**.  
Loosen the shaft coupling.
- Remove drive assembly **5** and rotor disc **6** together with shaft.
- Remove rotorspray front end assembly **2** from rotorspray motor assembly **1** and replace the defective part (without coupling).
- Screw rotorspray front end assembly **2** into the rotorspray motor assembly **1**.
- Insert the shaft with the drive assembly **2** into the rotorspray motor assembly **1**.
- Insert the shaft with the drive assembly **5** and the rotor disc **6** to the stop.
- Tighten the shaft coupling again.

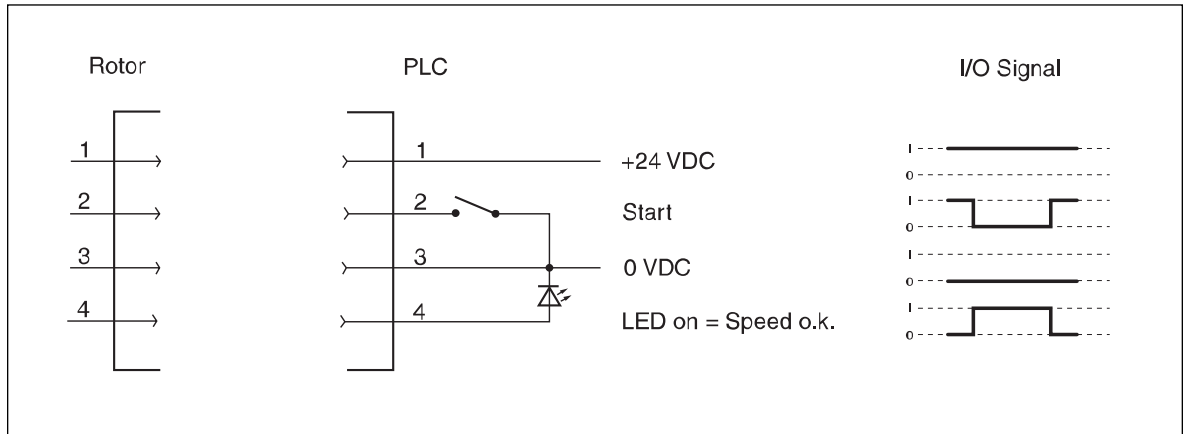


# 8 Documentation


## 8.1 Accessories and Spare Parts

Pos. No.	Description	Loctite Order No.
–	Rotor Top complete with Shaft Ø 3 mm	97266
5	Drive Head Assembly consists of: Rotor Top and Shaft Ø 5 mm	97257
6	Rotor Disc (2 pcs. per box) Rotor Disc, 10 mm dia. with mounted shaft (.39 in.) Rotor Disc, 25 mm dia. with mounted shaft (.98 in.) Rotor Disc with other diameters	97258 97259 On request!
–	Mounting Bracket for stationary applicator and rotorspray	8950700
–	Extension Cord for rotorspray, 2 m (6.5 ft.),	8952153

## 8.2 Pin Assignment of the Plug – Connection Cord Rotor



## 9 CE – Declarations of Conformity

<b>Declaration of Conformity</b>	
<b>In accordance with the EC Regulations for Electro-Magnetic Compatibility 89/336/EWG, Appendix I</b>	
<b>The Manufacturer</b>	Loctite Deutschland GmbH Arabellastraße 17 D-80925 München
declares that the unit designated in the following is, as a result of its design and construction, in accordance with the European regulations, harmonized standards, national standards, and technical specifications listed below.	
Designation of the unit	Rotorspray
Unit number	97115
Applicable EC Regulations	EC Regulations for Electro-Magnetic Compatibility 89/336/EC in the version 93/68/EC
Applicable harmonized standards	EN 50082-1 1992; EN 55014/4 1993; IEC 801-2, 3, 4
Date/Manufacturer's signature	12/08/2000  General Manager (F. Löhr)
<b>For changes to the unit that were not approved by Henkel Loctite, this declaration loses its validity.</b>	

<b>Declaration of Conformity</b>	
<b>In accordance with the EC Machine Regulations 98/37/EC</b>	
<b>The Manufacturer</b>	Loctite Deutschland GmbH Arabellastraße 17 D-80925 München
declares that the unit designated in the following is, as a result of its design and construction, in accordance with the European regulations, harmonized standards, national standards, and technical specifications listed below.	
Designation of the unit	Rotorspray
Unit number	97115
Applicable EC Regulations	EC-Machine Regulations 98/37/EC
Applicable harmonized standards	DIN EN 292 Part 1 11.1991; DIN EN 292 Part 2 11.1991
Date/Manufacturer's signature	12/08/2000  General Manager (F. Löhr)
<b>For changes to the unit that were not approved by Henkel Loctite, this declaration loses its validity.</b>	

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## 10. Warranty (Excluding Germany)

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Henkel Loctite expressly warrants that all products referred to in this Instruction Manual for Rotorspray 97115 (hereafter called "Products") shall be free from defects in materials and workmanship. Liability for Henkel Loctite shall be limited, at 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 therefore 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 Loctite 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 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 or 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 Loctite, the use of products, parts or attachments which are not manufactured by Henkel Loctite.

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

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

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## **Loctite Industrial**

**Henkel Loctite Corporation**  
1001 Trout Brook Crossing  
Rocky Hill, CT 06067-3910

**Henkel Loctite Automotive  
Technology Center**  
2455 Featherstone Road  
Auburn Hills, Michigan 48326

**Henkel Loctite Canada Inc.**  
2225 Meadowpine Boulevard  
Mississauga, Ontario L5N 7P2

**Henkel Ltda. Brazil**  
Av. Prof. Vernon Kriebel, 91  
06690-11-Itapevi  
São Paulo-Brazil

**Henkel Mexicana, S.A. de C.V.**  
Calzada de la Viga s/n, Fracc. Los Laureles  
Loc. Tulpetlac, C.P. 55090  
Ecatepac de Morelos, Edo. de México,  
México

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