A16A Inside Stripe Gun

Customer Product Manual
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– English –
Issued 03/25

For parts and technical support, call the Industrial Coating Solutions Customer Support Center at (800) 433-9319 or contact your local Nordson representative.

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NORDSON CORPORATION • 100 NORDSON DRIVE, AMHERST, OHIO • USA

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Contact Us
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http://www.nordson.com

http://www.nordson.com/en/global-directory.

Change Record

Revision	Date	Change
B03	5/10	Added 1102112 service kit, retro, manifold, with valve, and replaced 112182 service kit, solenoid valve w/ connector with 1102193 service kit, solenoid valve w/ connector. Noted obsolete guns.
04	07/19	Obsolete kits 1102112 and 1102193.
05	04/20	Added mini gun option and related parts.
06	04/20	Updated DOC. Noted obsoletes.
07	07/22	Added CE and UK symbols.
08	03/25	Corrected wrong dimensions called out on the specifications pages
09	03/25	Updated Manufacturer Address

Safety

Introduction

Read and follow these safety instructions. Task- and equipment-specific warnings, cautions, and instructions are included in equipment documentation where appropriate.

Make sure all equipment documentation, including these instructions, is accessible to persons operating or servicing equipment.

Qualified Personnel

Equipment owners are responsible for making sure that Nordson equipment is installed, operated, and serviced by qualified personnel. Qualified personnel are those employees or contractors who are trained to safely perform their assigned tasks. They are familiar with all relevant safety rules and regulations and are physically capable of performing their assigned tasks.

Intended Use

Use of Nordson equipment in ways other than those described in the documentation supplied with the equipment may result in injury to persons or damage to property.

Some examples of unintended use of equipment include:

- using incompatible materials
- making unauthorized modifications
- removing or bypassing safety guards or interlocks
- using incompatible or damaged parts
- using unapproved auxiliary equipment
- operating equipment in excess of maximum ratings

Regulations and Approvals

Make sure all equipment is rated and approved for the environment in which it is used. Any approvals obtained for Nordson equipment will be voided if instructions for installation, operation, and service are not followed.

Personal Safety

To prevent injury follow these instructions.

- Do not operate or service equipment unless you are qualified.
- Do not operate equipment unless safety guards, doors, or covers are intact and automatic interlocks are operating properly. Do not bypass or disarm any safety devices.
- Keep clear of moving equipment. Before adjusting or servicing moving equipment, shut off the power supply and wait until the equipment comes to a complete stop. Lock out power and secure the equipment to prevent unexpected movement.
- Relieve (bleed off) hydraulic and pneumatic pressure before adjusting or servicing pressurized systems or components. Disconnect, lock out, and tag switches before servicing electrical equipment.
- While operating manual spray guns, make sure you are grounded. Wear electrically conductive gloves or a grounding strap connected to the gun handle or other true earth ground. Do not wear or carry metallic objects such as jewelry or tools.
- If you receive even a slight electrical shock, shut down all electrical or electrostatic equipment immediately. Do not restart the equipment until the problem has been identified and corrected.
- Obtain and read Safety Data Sheets (SDS) for all materials used. Follow the manufacturer's instructions for safe handling and use of materials, and use recommended personal protection devices.
- Make sure the spray area is adequately ventilated. To prevent injury, be aware of less-obvious dangers in the workplace that often cannot be completely eliminated, such as hot surfaces, sharp edges, energized electrical circuits, and moving parts that cannot be enclosed or otherwise guarded for practical reasons.

High-Pressure Fluids

High-pressure fluids, unless they are safely contained, are extremely hazardous. Always relieve fluid pressure before adjusting or servicing high pressure equipment. A jet of high-pressure fluid can cut like a knife and cause serious bodily injury, amputation, or death. Fluids penetrating the skin can also cause toxic poisoning.

If you suffer a fluid injection injury, seek medical care immediately. If possible, provide a copy of the SDS for the injected fluid to the health care provider.

The National Spray Equipment Manufacturers Association has created a wallet card that you should carry when you are operating high-pressure spray equipment. These cards are supplied with your equipment. The following is the text of this card:

WARNING: Any injury caused by high pressure liquid can be serious. If you are injured or even suspect an injury:

- Go to an emergency room immediately.
- Tell the doctor that you suspect an injection injury.
- Show them this card
- Tell them what kind of material you were spraying

MEDICAL ALERT — AIRLESS SPRAY WOUNDS: NOTE TO PHYSICIAN

Injection in the skin is a serious traumatic injury. It is important to treat the injury surgically as soon as possible. Do not delay treatment to research toxicity. Toxicity is a concern with some exotic coatings injected directly into the bloodstream.

Consultation with a plastic surgeon or a reconstructive hand surgeon may be advisable.

The seriousness of the wound depends on where the injury is on the body, whether the substance hit something on its way in and deflected causing more damage, and many other variables including skin microflora residing in the paint or gun which are blasted into the wound. If the injected paint contains acrylic latex and titanium dioxide that damage the tissue's resistance to infection, bacterial growth will flourish. The treatment that doctors recommend for an injection injury to the hand includes immediate decompression of the closed vascular compartments of the hand to release the underlying tissue distended by the injected paint, judicious wound debridement, and immediate antibiotic treatment.

Fire Safety

To avoid a fire or explosion, follow these instructions.

- Ground all conductive equipment. Use only grounded air and fluid hoses. Check equipment and workpiece grounding devices regularly. Resistance to ground must not exceed one megohm.
- Shut down all equipment immediately if you notice static sparking or arcing. Do not restart the equipment until the cause has been identified and corrected.
- Do not smoke, weld, grind, or use open flames where flammable materials are being used or stored. Do not heat materials to temperatures above those recommended by the manufacturer. Make sure heat monitoring and limiting devices are working properly.
- Provide adequate ventilation to prevent dangerous concentrations of volatile particles or vapors. Refer to local codes or your material SDS for guidance.
- Do not disconnect live electrical circuits when working with flammable materials. Shut off power at a disconnect switch first to prevent sparking.
- Know where emergency stop buttons, shutoff valves, and fire extinguishers are located. If a fire starts in a spray booth, immediately shut off the spray system and exhaust fans.
- Shut off electrostatic power and ground the charging system before adjusting, cleaning, or repairing electrostatic equipment.
- Clean, maintain, test, and repair equipment according to the instructions in your equipment documentation.
- Use only replacement parts that are designed for use with original equipment. Contact your Nordson representative for parts information and advice.

Halogenated Hydrocarbon Solvent Hazards

Do not use halogenated hydrocarbon solvents in a pressurized system that contains aluminum components. Under pressure, these solvents can react with aluminum and explode, causing injury, death, or property damage. Halogenated hydrocarbon solvents contain one or more of the following elements:

Element	Symbol	Prefix
Fluorine	F	“Fluoro-”
Chlorine	Cl	“Chloro-”
Bromine	Br	“Bromo-”
Iodine	I	“Iodo-”

Check your material SDS or contact your material supplier for more information. If you must use halogenated hydrocarbon solvents, contact your Nordson representative for information about compatible Nordson components.

Action in the Event of a Malfunction

If a system or any equipment in a system malfunctions, shut off the system immediately and perform the following steps:

- Disconnect and lock out system electrical power. Close hydraulic and pneumatic shutoff valves and relieve pressures.
- Identify the reason for the malfunction and correct it before restarting the system.

Disposal

Dispose of equipment and materials used in operation and servicing according to local codes.

Description

See Figure 1. The A16A inside stripe gun is a pneumatically actuated gun designed to coat the welded seam on three-piece cans. Use this gun with both waterborne and solvent based can lacquers. The gun has an outside diameter of 30 mm (1.18 in.) and can be used to stripe cans with diameters as small as 35 mm (1.38 in.).

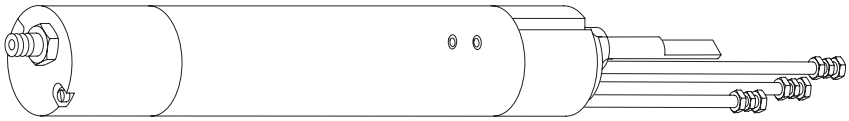

Figure 1 Remotely Actuated Circulating A16A Inside Stripe Gun

Production Rate

The A16A spray gun is uses a remotely located solenoid valve to actuate (open and close) the gun. This configuration is recommended for continuous spraying installations in which there is a minimal gap between cans. Locally actuated versions of the gun, which are no longer available, used a solenoid valve located in the gun body. These versions of the gun were capable of striping at a rate of 700 cycles per minute.

Versions

Only a circulating, remotely actuated version is available. Service parts are still available to repair and maintain obsolete versions.

Timers

The gun actuating solenoid can be triggered using a Nordson EPC-15 or EPC-30 timer, or a Nordson NC-1 driver, or the iTRAX Spray Controller. The EPC-15 and EPC-30 timers are non-spiking 24Vdc drivers. The NC-1 driver and iTRAX spray controller are spiking drivers and apply a 48VDC sourcing PWM (pulse width modulation) output.

Theory of Operation

See Figure 2. The following is a description of how a typical system using an A16A inside stripe gun(s) operates.

1. The proximity sensor detects a can as it passes and sends a signal to the timer.
2. The timer receives the signal and triggers an electro-pneumatic solenoid valve. The valve opens and pressurizes the air line to the gun.
3. The gun valve opens and heated coating material under pressure flows through the nozzle and coats the welded seam of the can.
4. The timer shuts off the solenoid valve. The gun valve closes.
5. The cycle repeats when the proximity sensor senses the next can.

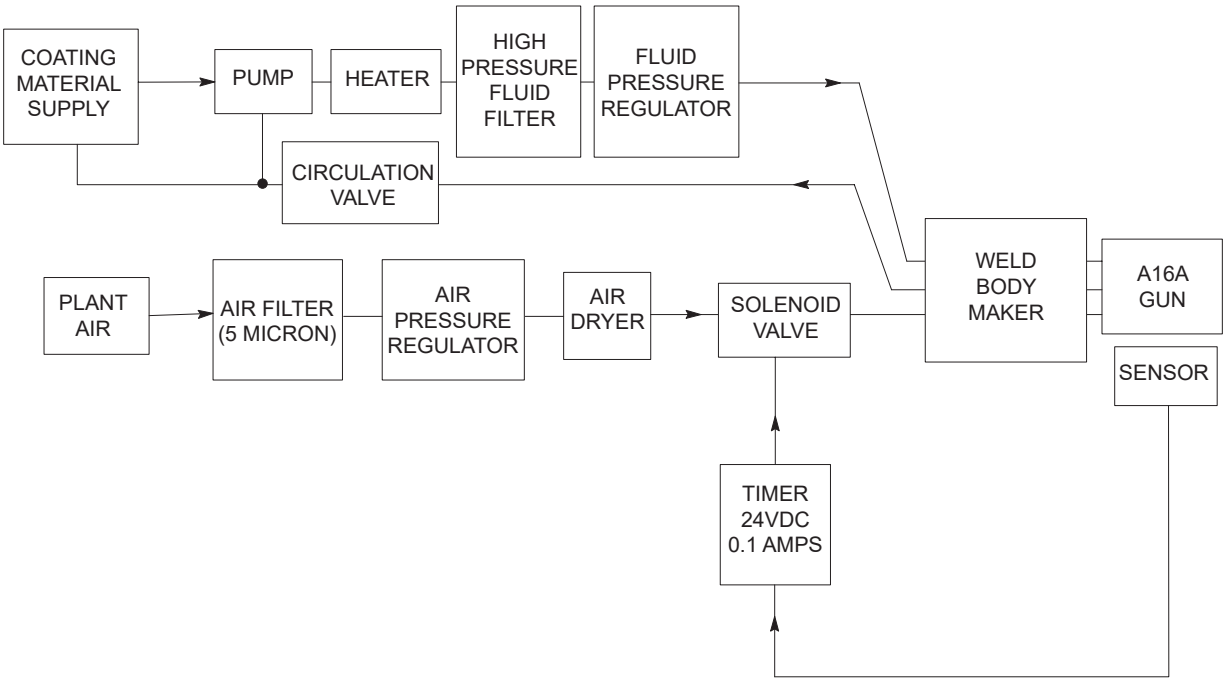

Figure 2 Remotely Actuated System Block Diagram

Installation

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

Tubing Preparation

NOTE: The welding machine fluid and air lines must be configured before connecting the gun.

1. Slip the nut and ferrule onto the tubing. Make sure the long straight end of the ferrule is pointing towards the tube end.
2. Bottom the tubing against the tube stop in the fitting body.
3. Using oil, lightly lubricate the threads on the fitting body and the lead and tail ends of the ferrule.
4. Pre-set the ferrule by screwing the nut down finger tight. Then, use a wrench to tighten the nut 1 3/4 turns.
5. See Figure 3. Disassemble and inspect the ferrule/tube compression (1).

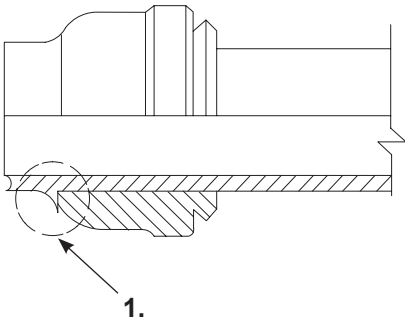

Figure 3 Tubing Preparation

1. Ferrule/tube compression

2. Insert the tube into the fitting body and wrench the nut down until a sudden increase in torque is evident. Then, turn the nut an additional 1/4 to 1/3 turn.

3. Repeat steps 1 through 6 for the remaining tubes.

Gun Mounting

1. Install the gun on the spray arm of the welding machine. A mounting rod is provided with the gun. Make sure the gun is securely mounted.

2. Connect the fluid line(s) to the system fluid line(s). Tighten the fittings securely.

3. Connect the air line to the system air line. Tighten the fitting securely.

Electrical Connections

The remotely actuated gun must be connected to an electro-pneumatic solenoid to provide on-off operation. For continuous spray, the solenoid can be connected to an on-off switch and appropriate power supply. Voltage requirements depend upon the specifications of the solenoid valve selected.

Operation

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

WARNING: Use appropriate respiratory and skin protection when using coating materials and solvents. Obtain the read the Material Safety Data Sheets from the manufacturer before use, and follow the manufacturer's recommended handling and disposal procedures.

NOTE: The operating parameters given in this manual are based on the gun being used with a Nordson fluid delivery system. The operating parameters may differ if another type of fluid delivery system is used.

The startup and shutdown procedures are dependent upon the welding machine operating instructions. Refer to the welding machine manual.

Startup

System Flushing

1. See Figure 4. Open the drain valve (11).
2. Close the circulation valve (10).
3. Circulate solvent through the system to the gun.
4. Trigger the gun several times into a container to evacuate any contaminants.
5. Open the ball valve on the bottom of the filter assembly (9) and drain the solvent into a container.

System Filling

1. Close the ball valve on the filter assembly (9).
2. Repeat steps 1 through 4 of System Flushing using coating material. Circulate the coating material for 15–30 minutes.

WARNING: When the system is under pressure do not trigger the gun without a nozzle attached. Triggering the gun without a nozzle attached may cause serious injury to personnel.

3. Close the drain valve (11) and check for any leaks.

System Startup

1. Set the air regulator (2) on the pump (1) to 4.14 bar (60 psi).
2. As a starting point, set the output pressure on the air regulator to 6.90 bar (100 psi).
3. Set the solenoid (6) air pressure to 4.83 bar (70 psi).
4. Open the circulation valve (10) until the pump is stroking 6–10 strokes per minute.
5. Turn on the heater (14) and adjust the temperature to the setting that is recommended by the coating material supplier. Refer to the heater manual for temperature adjustment procedures.
6. Adjust the circulation valve if the pump is not stroking 6–10 strokes per minute.
7. Install the nozzle on the gun. The nozzle should be aimed directly at the welded seam and between 3.175–25.4 mm (1/8–1 in.) away from the seam substrate.
8. Adjust the timer (7) delay and duration function. Refer to the timer manual for procedures.

NOTE: Operating parameters depend upon the can size, line speed, coating material being used, and the required stripe width and thickness. Fluid pressures typically used are from 6.9–24.14 bar (100–350 psi).

Fluid temperature is typically set between 49–60 °C (120–140 °F).

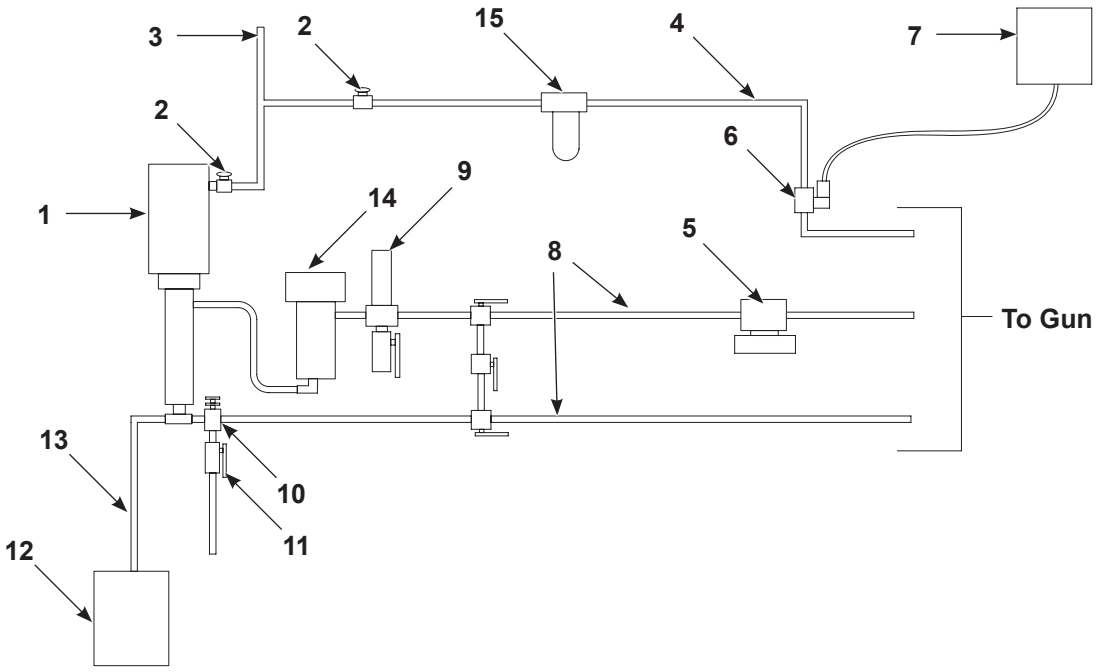

Figure 4 Typical Circulating Fluid System

1. Pump
2. Air regulator
3. Main air supply
4. Air line
5. Fluid regulator
6. Solenoid
7. Timer
8. Fluid lines
9. Filter assembly
10. Circulation valve
11. Drain valve
12. Coating material container
13. Siphon hose
14. NH-4 heater
15. Air filter

Shutdown

See Figure 4.

1. Turn off the heater (14) and allow material to circulate for 15 minutes.
2. Reduce the pump pressure to 0 bar (0 psi).
3. Open the drain valve (11). Following the material manufacturer’s recommended handling and disposal procedures, drain material from the system.
4. Close the circulation valve (10).
5. Adjust the air pressure to the pump until it is stroking 8–10 strokes per minute.
6. Remove the siphon hose (13) from the coating material container (12) and place into the solvent bucket.
7. Flush the system with solvent for approximately 15 minutes.
8. Trigger the gun several times to clean it.
9. Close the drain valve (11).
10. Circulate solvent through the system for approximately 15 minutes.
11. Open the drain valve.
12. Remove pressure from the pump.

NOTE: Leave solvent in the system when not in use.

Daily Maintenance

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

The following paragraphs provide daily preventive maintenance procedures for the A16A inside stripe gun. Experience in gun operation will indicate if less frequent cleaning is required.

WARNING: Make sure all power, air pressure, and fluid pressure is removed from the gun before performing preventive maintenance procedures.

WARNING: Use appropriate respiratory and skin protection when using coating materials and solvents. Obtain and read the Material Safety Data Sheets from the manufacturer before use, and follow the manufacturer's recommended handling and disposal procedures.

Component	Maintenance Procedure
A16A Gun	Remove dirt and dried coating material from the gun exterior with a solvent-soaked cloth. Do not soak any components in solvent. Some solvents may affect O-rings and seals.
Fluid Filter	1. Remove the filter screen from the high-pressure fluid filter. 2. Inspect the filter screen and discard if ruptured or distorted. 3. If the filter screen is not defective, soak it in a compatible solvent. 4. Place a clean filter screen in the high-pressure fluid filter.
Air Filter	1. Drain the air filter. 2. Remove the air filter bowl and dump out any remaining water and dirt. 3. Remove the filter element, wash in soapy water, rinse, dry and reuse.

Troubleshooting

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

WARNING: Make sure all power, air pressure, and fluid pressure are removed from the A16A gun before performing any troubleshooting procedures.

This section contains troubleshooting procedures. These procedures cover only the most common problems that you may encounter. If you cannot solve the problem with the information given here, contact your local Nordson representative for help.

Problem	Possible Cause	Corrective Action
1. Remotely actuated gun fails to trigger	Poor electrical signal or connection	Check connections between timer and solenoid valve.
	Air line leaks or is blocked	Check the air line connections and tighten if needed.
	Defective solenoid valve	Check the solenoid valve, replace if defective.
2. No flow from the nozzle after the gun is triggered	Dirty or blocked nozzle	Clean or replace the nozzle.
	No fluid pressure in the system	Check the fluid lines and tighten if needed. If the fluid lines do not need to be tightened, problems may exist in the pump. Refer to the pump manual for troubleshooting procedures.
3. Gun fails to turn off	Fluid pressure exceeds maximum rating	Reduce the fluid pressure. Refer to system manual for procedures.
4. Gun spitting fluid	Air trapped in the fluid system	Circulate fluid until air is purged from the system.
	Needle and seat are dirty or worn	Flush fluid system while triggering the gun on and off. If spitting continues, disassemble the gun and clean. Replace the defective parts.
5. Gun leaking at end cap tube fittings	Loose tube fittings	Tighten the end cap tube fittings. Refer to *Tubing Preparation* on page 7.
6. Gun leaking between end cap and manifold	Loose end cap	Tighten the end cap retainer.
	End cap O-ring(s) are damaged or worn	Replace the end cap O-ring(s).
7. Gun leaking between manifold and gun body	Loose screws	Tighten the screws.
	Manifold / End cap O-ring(s) damaged or worn	Replace the manifold / end cap O-ring(s).
8. Gun leaking between gun body and seat assembly	Loose seat assembly	Tighten the seat assembly.
	Seat assembly O-ring damaged	Replace the seat assembly O-ring.
9. Gun leaking from the gun body weep hole	Worn seal cartridge or needle or seat	Replace the seal cartridge and needle and seat assembly.

Repair

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

Disassembly

See Figure 5 through Figure 8.

WARNING: Make sure all power, air and fluid pressure is removed from the A16A gun before performing and maintenance. Failure to observe this warning may cause serious injury to personnel and/or damage to equipment.

1. Locally actuated guns: Disconnect the electrical connectors.
2. Loosen the end cap retainer (16 or 19) until it turns freely.
3. Loosen the set screws (12) and remove the gun from the mounting rod (15 or 18).

WARNING: Gun body is under spring tension. To prevent serious injury to personnel and/or damage to the equipment, use extreme care when removing the gun body from the gun.

4. Remove the screws (1) securing the gun body (4) to the manifold (9) / end cap.
5. Remove the spring (8) from the manifold / end cap.
6. In this order remove the seat assembly (2), piston (7) and retainer (5) from the gun body.
7. Thread a screw (1) into the seal cartridge assembly (6) through the back where the retainer and piston were just removed.

NOTE: Removing the seal cartridge assembly will damage the seal in the cartridge. A new seal cartridge must be installed in the gun.

8. Pull on the screw to remove the seal cartridge assembly from the gun body.

O-Ring and Seal Cartridge Replacement

See Figure 5 or Figure 6.

NOTE: Replace the O-rings whenever you disassemble the gun.

1. Remove the manifold / end cap O-rings (10, 11) and discard them.
2. Lightly lubricate the new O-rings and install them in the manifold (9) / end cap.
3. Remove the worn seal cartridge assembly (6) and discard it.
4. Lightly lubricate the O-rings on the new seal cartridge assembly.
5. Remove the seat assembly O-ring (3) and discard.
6. Lightly lubricate the O-ring (3) and install on the seat assembly (2).
7. Assemble the gun. Refer to *Assembly* on page 15.

Solenoid Replacement (Locally Actuated Gun Only)

1. Remove the screws (14) securing the solenoid (13) and gasket (15) to the manifold (9).
2. Install a new gasket and solenoid into the manifold using the screws. Tighten the screws to 0.88−0.98 N•m (7.8−8.7 in-lb).

Assembly

See Figure 5 through Figure 9.

1. Install the seat assembly (2) into the gun body and tighten it securely.
2. Install the seal cartridge assembly (6) into the gun body.
3. Install the retainer (5) into the gun body and tighten securely.

CAUTION: To prevent damage to the piston seal, use extreme care when installing the needle and piston.

4. Carefully install the needle and piston (7) into the gun body (4).
5. Install the spring (8) into the manifold (9) / end cap..
6. Install the gun body to the manifold using the screws (1). Tighten the screws securely.
7. Install the gun manifold / gun body to the end cap (13 or 16). Tighten the end cap retainer (16 or 19) securely.
8. Install the gun to the mounting rod (15 or 18). Tighten the set screws (12) securely.
9. Locally actuated guns: Connect the electrical connectors.

Parts

To order parts, call the Nordson Industrial Coating Systems Customer Service Center at (800) 433−9319 or your local Nordson representative. Use the illustrations and parts lists to locate and describe parts correctly.

Remotely Actuated, Circulating A16A Gun

See Figure 5.

Item	Part	Description	Quantity	Note
—	112176	GUN, A16A, circulating, remotely actuated, inside stripe	1	
—	112178	• GUN ASSEMBLY, A16A, circulating, remotely actuated	1	
1	981742	• • SCREW, fillet head, #6-32 x 2.000 in., slotted, zinc	2	
2	- - - - - -	• • SEAT, assembly	1	A
3	945080	• • O-RING, Viton Extreme, 3/8-in. tube	1	A
4	- - - - - -	• • BODY, gun	1	
5	- - - - - -	• • RETAINER	1	
6	112150	• • CARTRIDGE, seal, assembly	1	A
7	272290	• • SERVICE KIT, needle with piston	1	A
8	152934	• • SPRING, compression, 0.970 x 0.390 OD x 0.062 in.	1	
9	112180	• • MANIFOLD, remote	1	
10	940052	• • O-RING, Buna-N, 0.094 x 0.219 x 0.063 in.	2	A
11	940053	• • O-RING, PTFE, 0.094 x 0.218 x 0.063 in.	4	A
12	981212	• • SCREW, socket set, 1/4-20 x 0.375 in., cup	2	
13	112165	• CAP, end, assembled, circulating	1	
14	112167	• • UNION, straight	3	
15	112175	• ROD, 0.312 in. mounting	1	
16	112174	• RETAINER, end cap	1	
NOTE: A. This part is available in one or more service kits. Refer to *Service Kits* on page 26.				

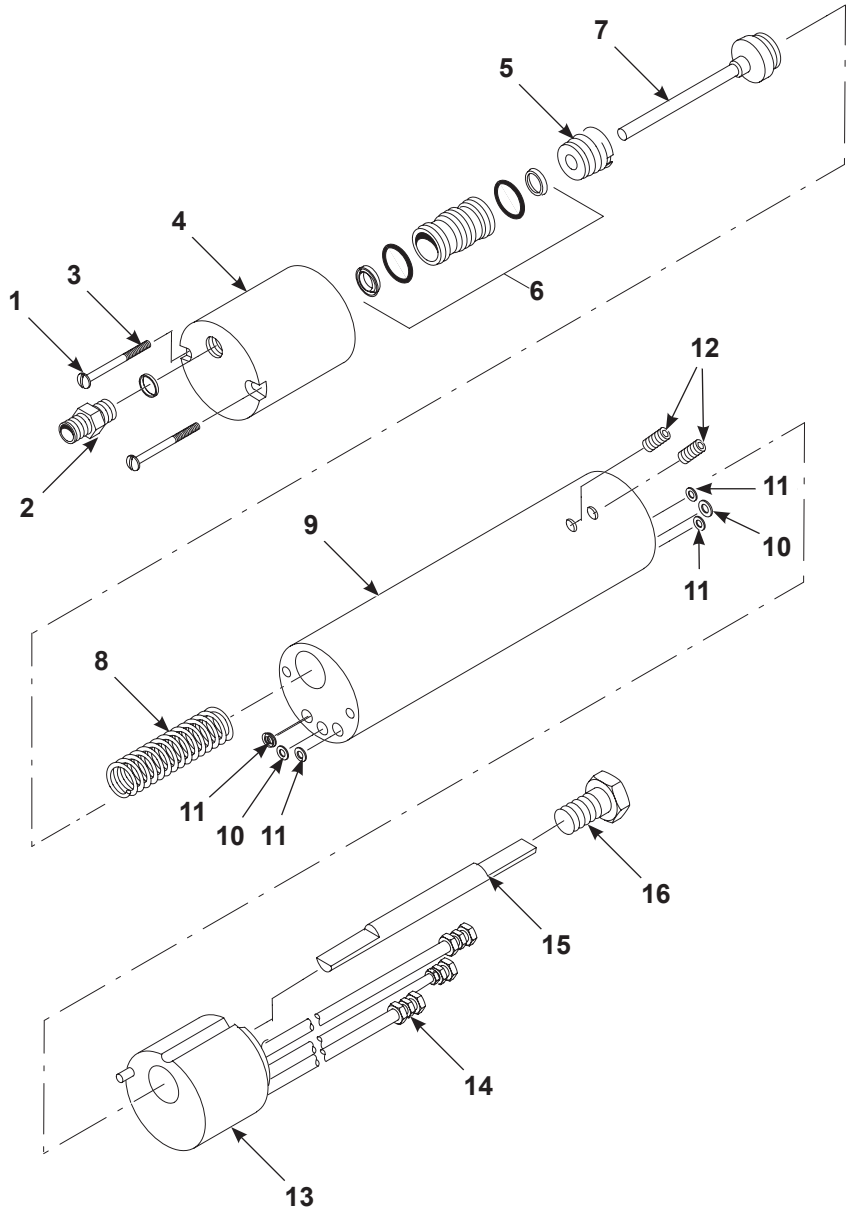

Figure 5 Remotely Actuated, Circulating A16A Gun

Remotely Actuated, Non-Circulating A16A Gun (Obsolete)

See Figure 6.

Item	Part	Description	Quantity	Note
—	- - - - - -	GUN, A16A non-circulating, remotely actuated, inside stripe	1	B
—	112198	• GUN ASSEMBLY, A16A, non-circulating, remotely actuated	1	
1	981742	• • SCREW, fillet head, #6-32 x 2.000 in., slotted, zinc	2	
2	- - - - - -	• • SEAT, assembly	1	A
3	945080	• • O-RING, Viton Extreme, 3/8-in. tube	1	A
4	- - - - - -	• • BODY, gun	1	
5	- - - - - -	• • RETAINER	1	
6	112150	• • CARTRIDGE, seal, assembly	1	A
7	272290	• • SERVICE KIT, needle with piston	1	A
8	152934	• • SPRING, compression, 0.970 x 0.390 OD x 0.062 in.	1	
9	112180	• • MANIFOLD, remote	1	
10	940052	• • O-RING, Buna-N, 0.094 x 0.219 x 0.063 in.	2	A
11	940053	• • O-RING, PTFE, 0.094 x 0.218 x 0.063 in.	4	A
12	981212	• • SCREW, socket set, 1/4-20 x 0.375 in., cup	2	
13	- - - - - -	• CAP, end, assembly, non-circulating	1	
14	112167	• • UNION, straight	2	
15	112175	• ROD, 0.312-in. mounting	1	
16	112174	• RETAINER, end cap	1	

NOTE: A. This part is available in one or more service kits. Refer to *Service Kits* on page 26.

B. Obsolete. Contact your Nordson representative for replacement guns.

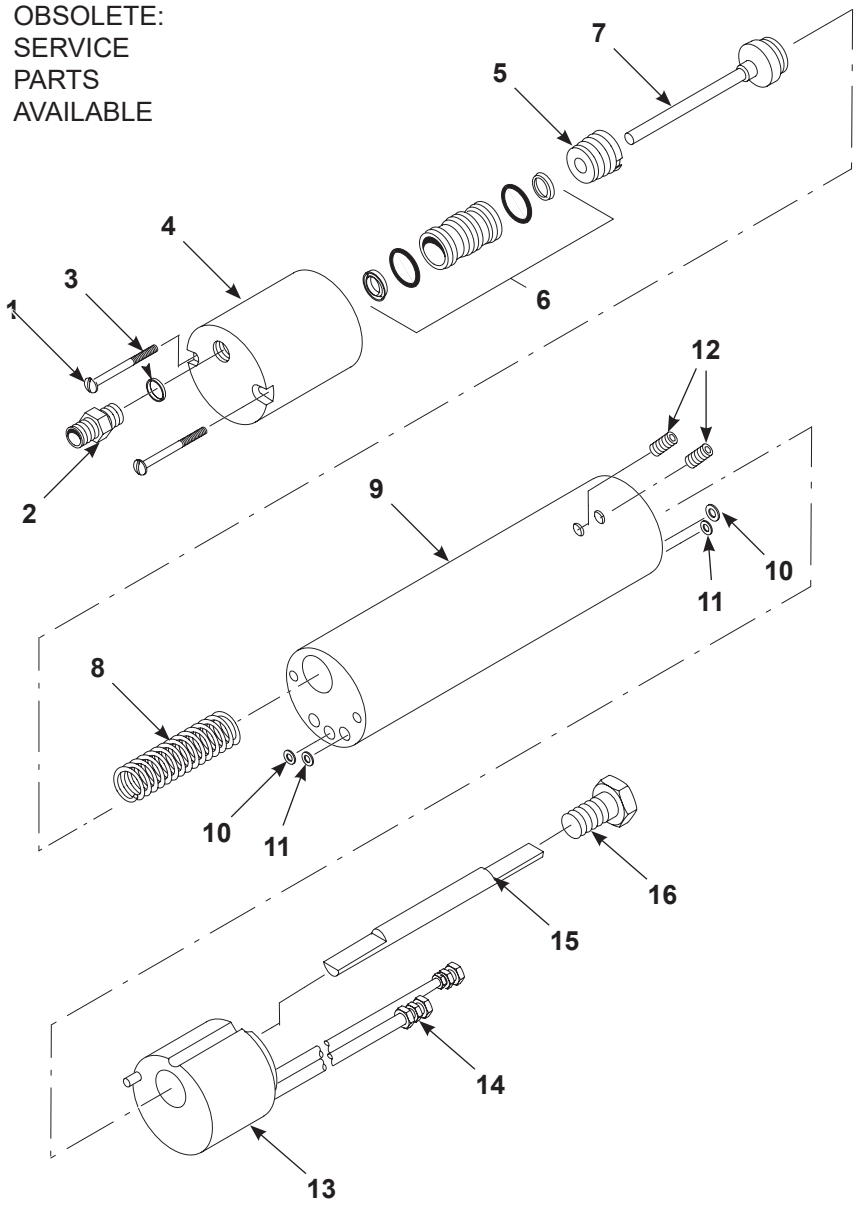

Figure 6 Remotely Actuated, Non-Circulating A16A Gun

Locally Actuated, Circulating A16A Gun (Obsolete)

See Figure 7.

Item	Part	Description	Quantity	Note
—	- - - - - -	GUN, A16A, circulating, locally actuated, inside stripe	1	B
—	112143	• GUN ASSEMBLY, A16A, circulating, locally actuated	1	
1	981742	• • SCREW, fillet head, #6-32 x 2.000 in., slotted, zinc	2	
2	- - - - - -	• • SEAT, assembly	1	A
3	945080	• • O-RING, Viton Extreme, 3/8-in. tube	1	A
4	- - - - - -	• • BODY, gun	1	
5	- - - - - -	• • RETAINER	1	
6	112150	• • CARTRIDGE, seal	1	A
7	272290	• • SERVICE KIT, needle with piston	1	A
8	152934	• • SPRING, compression, 0.970 x 0.390 OD x 0.062 in.	1	
9	- - - - - -	• • MANIFOLD, local	1	A
10	940052	• • O-RING, Buna-N, 0.094 x 0.219 x 0.063 in.	2	A
11	940053	• • O-RING, PTFE, 0.094 x 0.218 x 0.063 in.	4	A
12	981212	• • SCREW, socket set, 1/4-20 x 0.375 in., cup	2	
13	- - - - - -	• • SOLENOID, with connector	1	A
14	- - - - - -	• • • SCREW, M2 x 15 mm	2	
15	- - - - - -	• • • GASKET	1	
16	112165	• CAP, end, assembled, circulating	1	
17	112167	• • UNION, straight	3	
18	112175	• ROD, 0.312 in. mounting	1	
19	112174	• RETAINER, end cap	1	

NOTE: A. This part is available in one or more service kits. Refer to *Service Kits* on page 26.

B. Obsolete. Contact your Nordson representative for replacement guns.

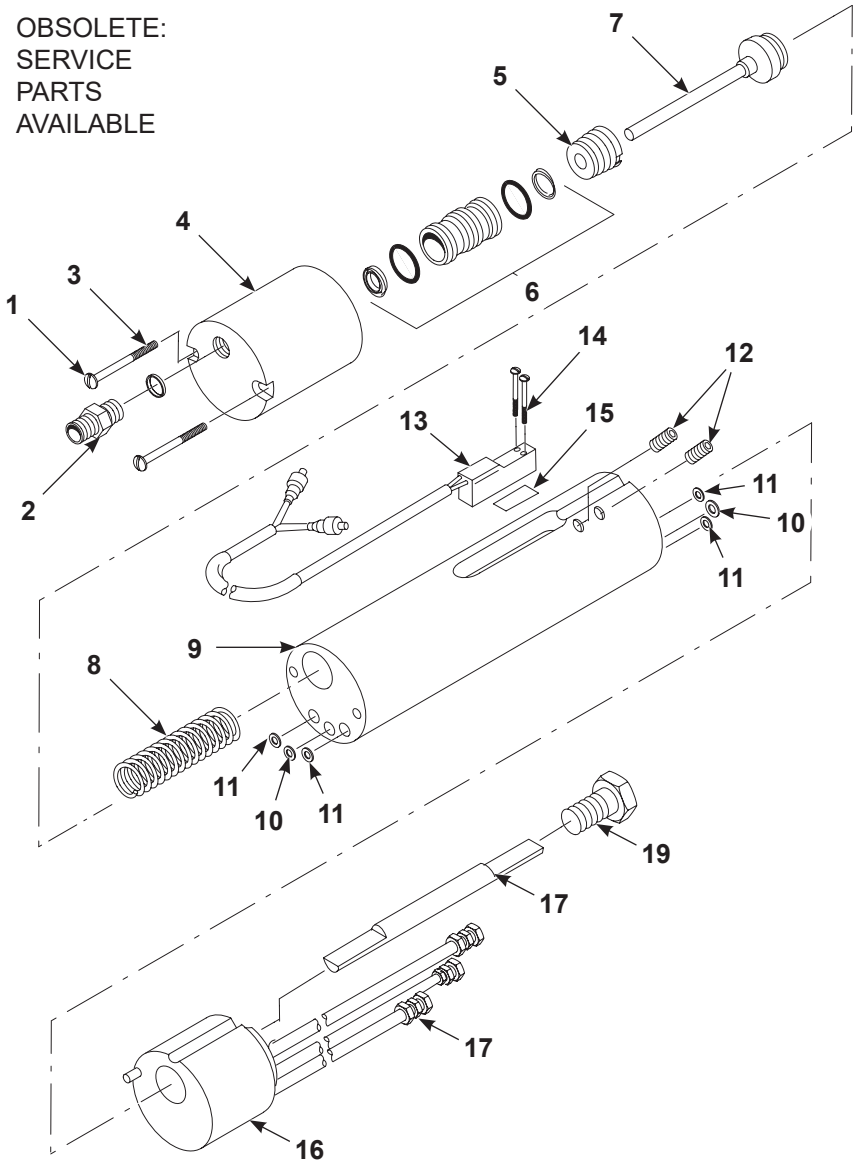

Figure 7 Locally Actuated, Circulating A16A Gun

Locally Actuated, Non-Circulating A16A Gun (Obsolete)

See Figure 8

Item	Part	Description	Quantity	Note
—	- - - - - -	GUN, A16A, non-circulating, locally actuated, inside stripe	1	B
—	112194	• GUN ASSEMBLY, A16A, non-circulating, locally actuated	1	
1	981742	• • SCREW, fillet head, #6-32 x 2.000 in., slotted, zinc	2	
2	- - - - - -	• • SEAT, assembly	1	A
3	945080	• • O-RING, Viton Extreme, 3/8-in. tube	1	A
4	- - - - - -	• • BODY, gun	1	
5	- - - - - -	• • RETAINER	1	
6	112150	• • CARTRIDGE, seal	1	A
7	272290	• • SERVICE KIT, needle with piston	1	A
8	152934	• • SPRING, compression, 0.970 x 0.390 OD x 0.062 in.	1	
9	- - - - - -	• • MANIFOLD, local	1	A
10	940052	• • O-RING, Buna-N, 0.094 x 0.219 x 0.063 in.	2	A
11	940053	• • O-RING, PTFE, 0.094 x 0.218 x 0.063 in.	4	A
12	981212	• • SCREW, socket set, 1/4-20 x 0.375 in., cup	2	
13	- - - - - -	• • SOLENOID, with connector	1	A
14	- - - - - -	• • • SCREW, M2 x 15 mm	2	
15	- - - - - -	• • • GASKET	1	
16	- - - - - -	• CAP, end, with tubes	1	
17	112167	• • UNION, straight	2	
18	112175	• ROD, 0.312-in. mounting	1	
19	112174	• RETAINER, end cap	1	

NOTE: A. This part is available in one or more service kits. Refer to *Service Kits* on page 26.

B. Obsolete. Contact your Nordson representative for replacement guns.

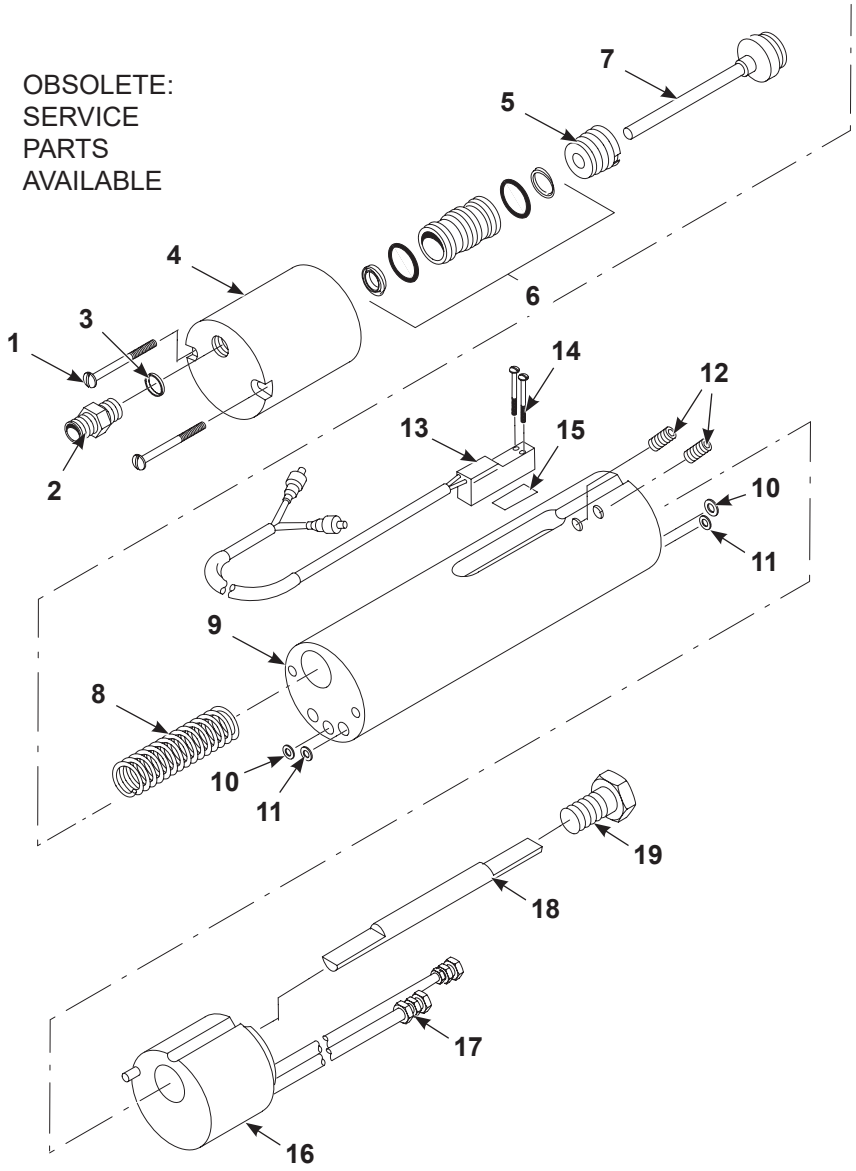

Figure 8 Locally Actuated, Non-Circulating A16A Gun

Remotely Actuated, Circulating A16A Mini Gun

See Figure 9.

Item	Part	Description	Quantity	Note
—	1615949	MINI GUN, A16A, circulating, remotely actuated, inside stripe	1	
—	1615948	• GUN ASSEMBLY, A16A, circulating, remotely actuated	1	
1	981742	• • SCREW, fillet head, #6−32 x 2.000 in., slotted, zinc	2	
2	- - - - - -	• • SEAT, assembly	1	A
3	945080	• • O-RING, Viton Extreme, 3/8 in. tube	1	A
4	- - - - - -	• • BODY, gun	1	
5	- - - - - -	• • RETAINER	1	
6	112150	• • CARTRIDGE, seal, assembly	1	A
7	272290	• • SERVICE KIT, needle with piston	1	A
8	1615944	• • SPRING, compression, 0.437 OD x 0.44 L in.	1	
10	940052	• • O-RING, Buna−N, 0.094 x 0.219 x 0.063 in.	2	A
11	940053	• • O-RING, PTFE, 0.094 x 0.218 x 0.063 in.	4	A
12	981212	• • SCREW, socket set, 1/4−20 x 0.375 in., cup	2	
13	1615946	• CAP, assembled end, A16A, mini	1	
14	112167	• • UNION, straight	3	
15	112175	• ROD, 0.312 in., mounting	1	
16	112174	• RETAINER, end cap	1	NS

NOTE: A. This part is available in one or more service kits. Refer to *Service Kits* on page 26.

NS: Not Shown

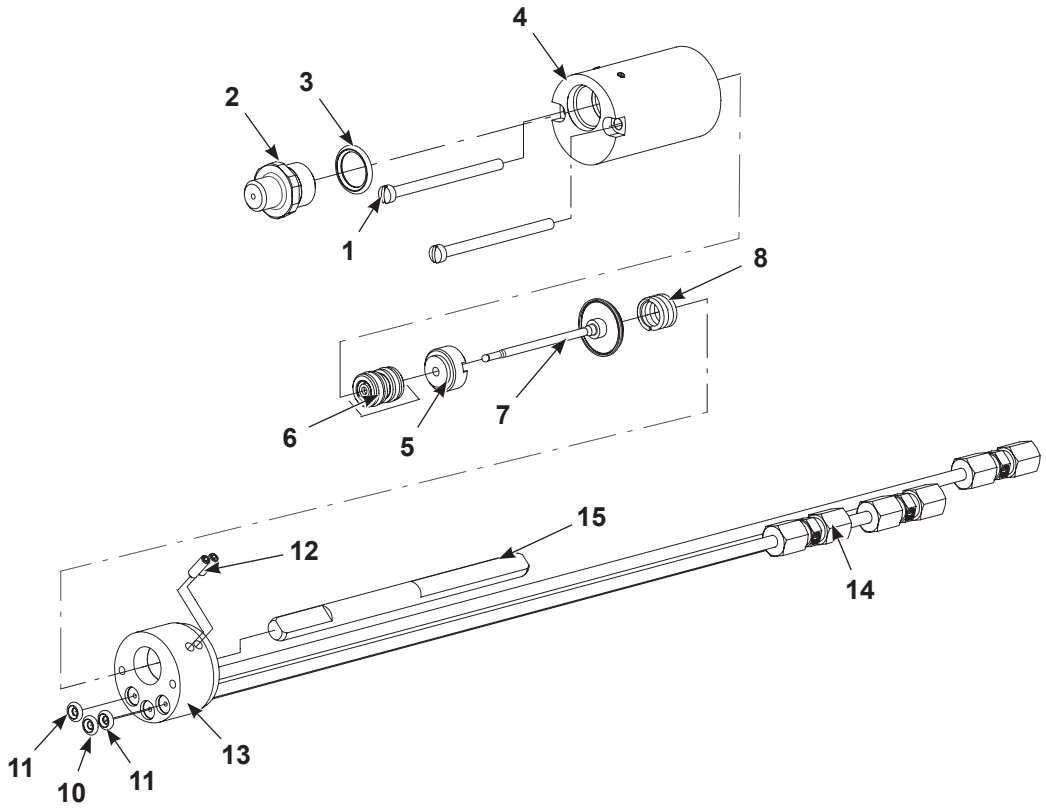

Figure 9 Remotely Actuated Mini Gun

Service Kits

See Figure 5 through Figure 8 as applicable.

Seal/Needle/Seat

Item	Part	Description	Quantity	Note
—	112183	SERVICE KIT, seal/needle/seat	1	
2	- - - - - -	• SEAT, assembly	1	
3	945080	• O-RING, Viton Extreme, 3/8-in. tube	1	
6	112150	• CARTRIDGE, seal	1	
7	- - - - - -	• NEEDLE with piston	1	
10	940052	• O-RING, Buna-N, 0.094 x 0.219 x 0.063 in.	2	
11	940053	• O-RING, PTFE, 0.094 x 0.218 x 0.063 in.	4	

Retrofit Manifold and Solenoid Service Kit

Use this kit when replacing the solenoid valve on locally actuated A16A guns. The kit replaces both the manifold and solenoid valve. The replacement valve will not fit on the original manifold.

Item	Part	Description	Quantity	Note
—	Obsolete	SERVICE KIT, retrofit, manifold with valve	1	
9	- - - - - -	• MANIFOLD, local, A16A	2	
10	940052	• O-RING, Buna-N, 0.094 x 0.219 x 0.063 in.	2	
11	940053	• O-RING, PTFE, 0.094 x 0.218 x 0.063 in.	4	
13	- - - - - -	• VALVE, 4−port, 2−position, micro, solenoid, with connector	1	

Solenoid with Connector

Use this kit to replace the solenoid valve on locally actuated guns with the new manifold included in the retrofit kit. The name plate on the manifold has the retrofit kit part number 1102112 (obsolete) stamped on it.

Item	Part	Description	Quantity	Note
—	Obsolete	SERVICE KIT, solenoid, with connector, valve	1	
10	940052	• O-RING, Buna-N, 0.094 x 0.219 x 0.063 in.	2	
11	940053	• O-RING, PTFE, 0.094 x 0.218 x 0.063 in.	4	
13	- - - - - -	• VALVE, 4−port, 2−position, micro, solenoid, with connector	1	

Recommended Spare Parts

Part	Description	Note
112187	SYSTEM, filter/Reg/Coalescing	A
901237	GAGE, air, 0–100 psi (0–7 kg/cm2)	A
901905	BRUSH (nozzle)	
NOTE: A. Recommended for locally actuated guns.		

Specifications

Dimensions	
Locally Actuated Gun (Obsolete)	See Figure 10
Remotely Actuated Gun	See Figure 11 (PN 112176)
Remotely Actuated Mini Gun	See Figure 12 (PN 1615949)
Pressure	
Maximum Hydraulic Pressure	34.5 bar (500 psi)
Maximum Actuating Air Pressure	6.9 bar (100 psi)
Maximum Fluid Temperature	80°C (175°F)
Maximum Cycle Rate	700 cycles per minute
Can Information	
Type	Three piece
Size	35 mm (1.38 in.) minimum
Solenoid (OBS)	24 Vdc

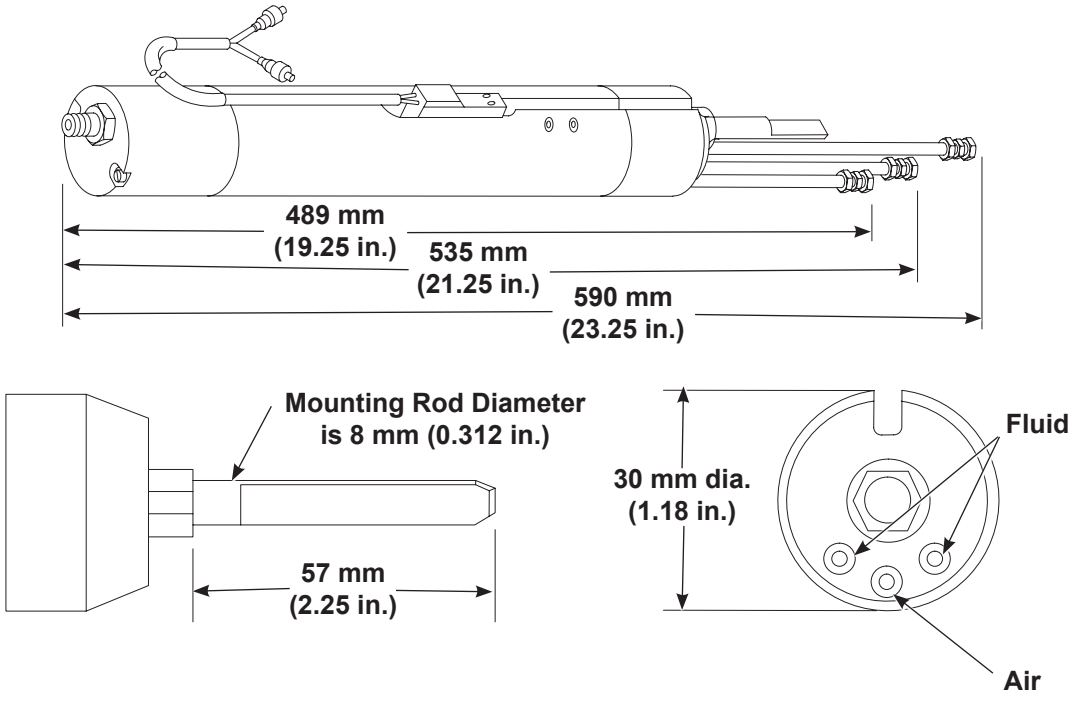

Figure 10 Locally Actuated Gun Dimensions (Obsolete)

Specifications *(contd)*

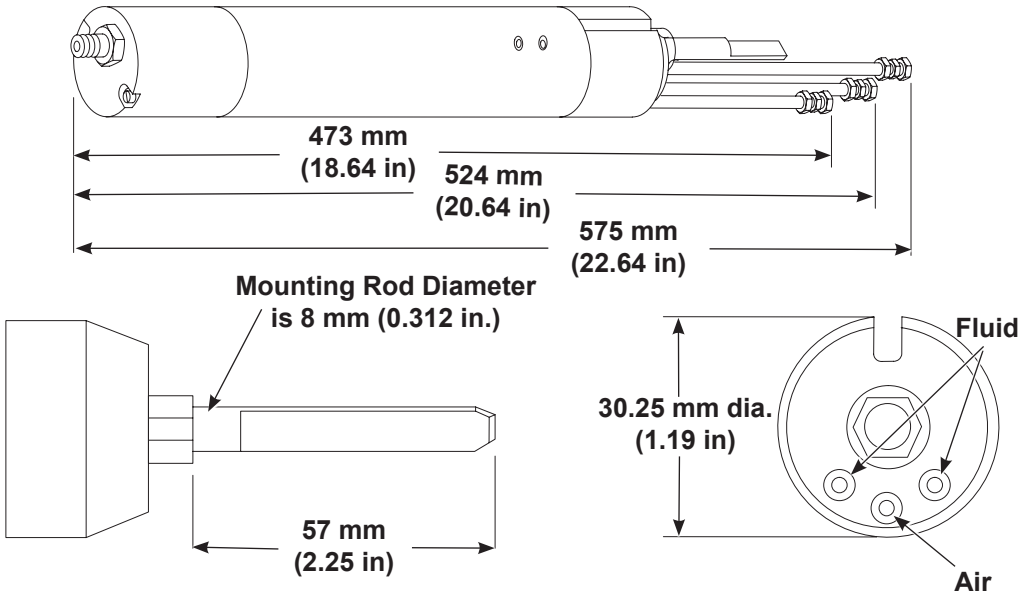

Figure 11 Remotely Actuated Gun Dimensions

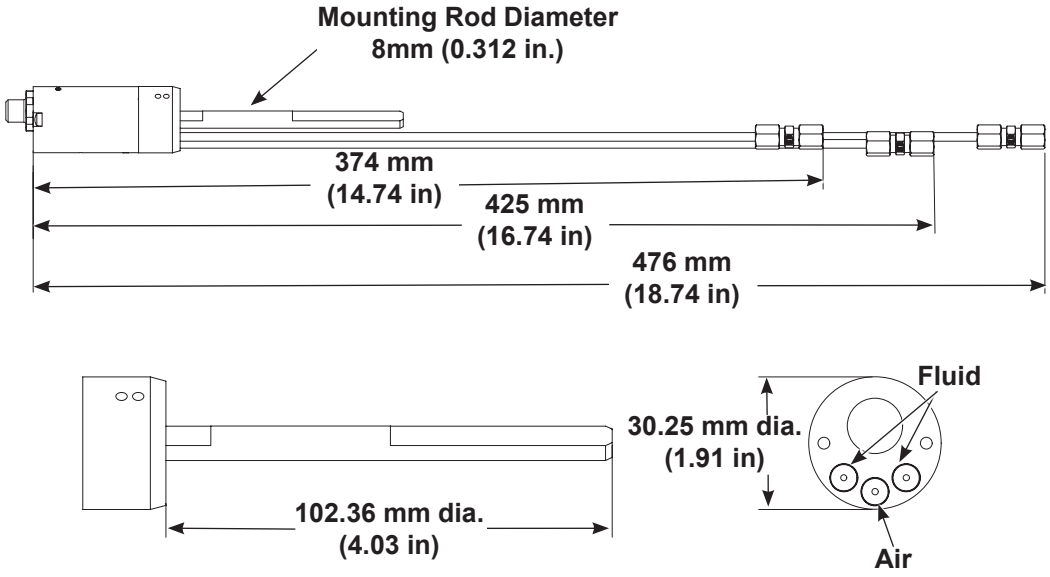

Figure 12 Remotely Activated Mini Gun Dimensions

Label Certification Information

File ref: 0891
h IIB T6 Gb

EU DECLARATION of Conformity

This Declaration is issued under the sole responsibility of the manufacture.

Product: Automatic Airless Spray Applicators, A16A Mini RA

Models: A16A Mini Remote Actuated

Description: This is an air operated airless spray gun. The applicator is used for inside-stripe applications for coating the welded seam of a 3 piece can. These types of cans are typically used in the food industry.

Applicable Directives:
2006/42/EC - Machinery Directive
2014/34/EU - ATEX Directive

Standards Used for Compliance:
EN/ISO12100 (2010)
EN/ISO80079-36 (2016)
EN/ISO80079-37 (2016)

Principles:
This product has been manufactured according to good engineering practice.
The product specified conforms to the directive and standards described above.

Flammable Atmosphere Marking: Ex h IIB T6 Gb
Tech File: Notified Body #0518, Sira, UK
DNV - ISO9001
ATEX Quality Notification – SGS Baseefa (UK)

Date: 02FEB2025

_____
Jeremy Krone
Supervisor Product Development Engineering
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Nordson Authorized Representative in the EU
Contact: Operations Manager
Industrial Coating Systems
Nordson Deutschland GmbH
Heinrich-Hertz-Straße 42-44
D-40699 Erkrath

UK DECLARATION of Conformity

This Declaration is issued under the sole responsibility of the manufacture.

Product: Automatic Airless Spray Applicators, A16A Mini RA

Models: A16A Mini Remote Actuated

Description: This is an air operated airless spray gun. The applicator is used for inside-stripe applications for coating the welded seam of a 3 piece can. These types of cans are typically used in the food industry.

Applicable UK Regulations:
Supply Machinery Safety Regulation 2008
Equipment & Protective Systems Intended for use in Potentially Explosive Atmosphere Regulation 2016

Standards Used for Compliance:
EN/ISO12100 (2010)
EN/ISO80079-36 (2016)
EN/ISO80079-37 (2016)

Flammable Atmosphere Marking: Ex h IIB T6 Gb
Tech File: Sira / CSA Group, NB 0518 (Hawarden, UK)
DNV - ISO9001
Quality Notification – SGS Baseefa, NB 1180 (Buxton, Derbyshire, UK)

Date: 02FEB2025

Jeremy Krone
Engineering Manager
Industrial Coating Systems
Amherst, Ohio, USA

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