

USER MANUAL



TS1215 Pressure Pot

Congratulations on your purchase of a quality Pressure Pot System. If you have not done so, see the installation guide provided with your system for installation instructions.

Now that your Pressure Pot is ready to use, take a few moments to get to know the parts of your Pressure Pot. This manual is designed to help you use your Pressure Pot as quickly as possible.

We here at Adhesive Dispensing Ltd hope you find our product beneficial. If you ever have any questions, please contact us at the number listed below.

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This manual is designed to provide information about the product hardware. Every effort has been made to make this manual as complete and accurate as possible. There is no implied or expressed warranty as to the purpose, suitability or fitness of the information. The information is provided on an as-is basis. Adhesive Dispensing Ltd reserves the right to improve and revise its products. This manual specifies and describes the product as it existed at the time of publication.

WARRANTY

Manufacturer warrants this product, the 1215 Pressure Pot, to the original purchaser for a period of one (1) year from date of purchase to be free from defects in material and workmanship. This warranty, however, does not cover damages by misuse, negligence, accident, faulty installation, abrasion, corrosion, or by not operating in accordance with factory recommendations and instructions. Manufacturer will repair or replace (at factory's option), free of charge, any component of the equipment thus found to be defective, on return of the component <u>prepaid</u> to the factory during the warranty period. In no event shall any liability or obligation of Manufacturer arising from this warranty exceed the purchase price of the equipment. This warranty is only valid if a Pressure Pot is returned as a complete assembly without physical damage. The manufacturer's liability, as stated herein, cannot be altered or enlarged except by a written statement signed by an officer of the company. In no event shall manufacturer be liable for consequential or incidental damages. A return authorization is required from Adhesive Dispensing Ltd. prior to shipping a defective unit to the factory.

Manufacturer reserves the right to make engineering or product modifications without notice.

Send warranty returns to:

Adhesive Dispensing Ltd. Willow House, 20 Craigmore Avenue Milton Keynes, Bucks, MK3 6HD, UK

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1. INTRODUCTION

The TS1215 Pressure Pot offers a convenient, easy to use system for dispensing cyanoacrylates, as well as many solvents, lubricants and other low to medium viscosity materials **directly** from the material container/bottle. Air pressure in the chamber forces the material from the container/bottle through disposable polyethylene supply tubing to an optional dispensing valve. An air pressure regulator and pressure gauge control the material flow rate with the dispense quantity being controlled by the length of time the dispense valve is open.

No cleaning operation is required after dispensing; because there is no direct contact of dispense material to the Pressure Pot and tube fittings. The polyethylene tubing may be discarded after use.

To obtain maximum performance, read and follow these instructions carefully before operating.

1.1 Receiving Inspection Procedure

For Receiving Inspection, proceed as follows:

- 1. Carefully remove pressure dispenser from shipping container and examine the items contained in the carton. These will include the following:
 - a. Pressure Dispenser Assembly
 - b. Accessory Pack
- 2. Inspect the unit for any damage that may have occurred in transit.
- 3. If damage has occurred, notify the carrier at once.
- 4. Claims for damage must be made by the consignee to the carrier, and should be reported to the manufacturer.

1.2 Features

- Compatible with UV cured adhesives with O-Ring Kit # TS1215EPR.
- Up to 60 psi operating pressure.
- Durable stain resistant finish.
- Disposable polyethylene tubing.
- Integrated on/off valve and controller available.
- Aluminum Reservoir for higher pressure dispensing (60 psi).
- Relief Valve with pull ring to depressurize after dispense operation.
- One continuous tube for fluid dispensing from container to valve.

- Three different tubing and fitting sizes (3/8" O.D, 1/4" O.D and 4 mm).
- Easy to replace, disposable polyethylene tubing after dispense operation.
- No material contact with tube fittings.
- No cleaning required after dispense operation.
- Two "O" Ring materials provided for different material applications (Viton, EPR/EPDM).

1.3 Technical Specifications

Specification of the TS1251 Pressure Pot is as follows:

Size:	4.5" W x 7" High
Chamber:	4.00" I.D. x 6.0" High
	Aluminum cylinder
Weight:	2.5 kg
Operating Pressure:	60 psi (4 bar) max.
Tube Sizes:	Options available: NEED TO BUY TUBE KIT TS1215-375Accessory kit 3/8" fitting and tubing TS1215-250Accessory kit 1/4" fitting and tubing TS1215-4MMAccessory kit 4mm fitting and tubing

1.4 Cautions And Warnings

- 60 psi (4 bar) maximum pressure
- Eye protection is required.
- Do NOT attempt to open cover lid until air pressure is released.
- Cover knobs must be hand tightened ONLY.
- Secure the pressure Pot to bench top or other stable work surface. Model TS1215 has mounting kit available for base plate.
- Check with Factory if unsure about dispensing material chemical compatibility.

WARNING

Read the material safety data sheets for special precautions for the specific material being dispensed. Wear protective safety equipment as specified in the material safety data sheets.

2. INSTALLATION AND OPERATION

2.1 Connector and Tubing Installation

- Select dispense size Tubing and Male Connector with Ferrule.
 3 combination sizes are available:
 - i. Tube 3/8" diameter, and Male Connector 3/8" X 3/8-18NPT with 3/8" Ferrule.
 - ii. Tube 1/4" diameter, and Male Connector 1/4" X 3/8-18NPT with 1/4" Ferrule.
 - iii. Tube 4mm diameter, Male Connector 4mm X 1/4 –18NPT with 4mm Ferrule, and Reducer Fitting 1/4 FPT X 3/8 MPT.
- 2. Install selected size Male Connector on the Lid by screwing into the 3/8-18 NPT female threads. Note: Use Teflon tape on connector threads.
- 3. Unscrew the Nut only off the Male Connector. Remove the front & back Ferrule.
- 4. Insert selected size Tubing through the Nut and the back and front parts of the Ferrule.
- 5. Insert the Tubing assembly end into the Male Connector body and **loosely** screw the Nut back on the Connector body.

2.2 **Operation SETUP Procedure**

- 1. Insure pressure regulator is off (set at zero). Pull locked regulator knob out to unlock and turn counterclockwise several rotations to set to zero psi.
- 2. Connect Filtered Air Connection to clip of pressure pot as shown in Figure 1.
- 3. Connect air hose from filtered source to the quick male connector air inlet fitting on regulator assembly as shown in Figure 2.
- 4. Turn three locking knobs counterclockwise to remove cover. Unscrew each locking knob until it is able to flip over its hinge to clear the cove plate.
- 5. Remove cover lid on 1258 Pressure Pot using the two handles on top and carefully set it aside.

- 6. Remove cap from material container. Cap may be saved for future resealing of container.
- 7. Place material container inside pressure pot chamber.

NOTE: DO NOT pour or spill dispense material into Pressure Pot chamber.





Figure 1 Connect Filtered Air Connection to Base of Pressure Pot

Figure 2 Filtered Air Connection to Pressure Regulator

- 8. Insure that the 'O-Ring stays in groove of cover.
- 9. Insure the connector tubing installation is complete as described in Section 2.1 Connector and Tubing Installation. Nut on connector body should be very loose to enable easy movement of tube through the connector body on cover.
- 10. Install cover lid on Pressure Pot making sure to direct tube end into opened container with dispense material/fluid.
- 11. Align the 3 slots on cover with the 3 locking knobs.
- 12. Lift the 3 locking knobs into slots on cover and tighten the 3 locking knobs uniformly until snug. (Hand tight only)
- 13. Push tubing through the connector fitting on cover further into dispense material/fluid until it touches the bottom of container. Relying on feel only, pull the tubing to retract about 1/4" from the bottom of container as shown in Figure 3.
- 14. Hand tighten the nut securely onto the connector body. Try to pull on the tube to insure the ferrule is holding the tube securely in the connector.

15. Make necessary connection at the dispense end of the tube.

Note: Connect dispense end of the tube to selected dispense valve



Never pour adhesives or other material directly into dispenser. To do so may cause severe damage to dispenser. Use material container or similar containment vessel.







2.3 **Operation START-UP Procedure**

1. Pull pressure regulator knob and turn clockwise to increase air pressure to the desired operating pressure. Insure that the pressure gauge reading does not exceed **60 psi maximum**. Then push regulator knob in to lock and maintain set gage pressure.

CAUTION

Always start at lowest pressure and gradually increase as needed.

- 2. Listen for any possible air pressure leakage on the Pressure Pot.
- 3. Look for any signs of material/fluid leakage on tubing.

NOTE: PRESSURE POT SET-UP IS NOW COMPLETE AND READY FOR DISPENSING OPERATION WITH THE SELECTED VALVE SYSTEM.





Whenever replacing or removing valve(s), insure that regulator pressure is at zero.



Do not open lid until air pressure is at zero.

2.4 **Operation STOP Procedure**

- 1. Pull air pressure regulator knob, turn counterclockwise and lower air pressure to zero.
- 2. Pull on Relief Valve (figure 4) to insure chamber is completely depressurised.
- 3. Disconnect air supply line if necessary.
- 4. Disconnect fluid tubing from dispense valve.

Note: Hold the fluid tubing in vertical position to allow fluid inside tubing to flow back inside bottle/container.

5. Loosen the 4 lid knobs slowly and evenly. If excessive effort is required, <u>ensure air</u> <u>pressure gauge reading is zero.</u>

- 6. Unscrew tube male connector nut completely. Move nut and ferrule along tubing about 4 inches away from the connector body on the cover.
- 7. Cut off tubing in between connector body on lid and nut/ferule. Put the cut tubing with nut/ferrule aside. Take care to accommodate drainage and spillage at the end of tubing.
- 8. Wipe off any excess fluid material from the cut-ends of the tubings.
- 9. Remove nut and ferrule parts from the used tube.
- 10. Remove cover from Pressure Pot using the two handles, while carefully pulling used tubing half from the container, and set aside. Be careful to avoid splashing and spilling from the tube end in the material container/bottle.
- 11. Using a disposable hand glove or tongs, carefully pull the used-up tube from the connector body on the Lid. Pull tubing from the inner side of cover plate. Dispose used tubing appropriately.
- 12. Screw the nut on the connector body. **Ferrule parts may be replaced.**
- 13. Disconnect fitting on the dispense end of tubing, and discard used tube.

NOTE: New tubing is required for the next dispensing operation. (Ref: section 2.1)

3. ASSEMBLY DRAWINGS

The Installed O-Ring: The standard O-Ring supplied on your Pressure Pot is made of Viton and is intended for applications with Lubricants, Conductive and Non-Conductive Adhesives, and various other compounds not listed below. This O-Ring may be cleaned with Tolvene and/or Isopropyl Alcohol.

CAUTION

DO NOT soak O-Ring in Tolvene, MEK, Acetone. Read material safety data sheet for any solvent prior to use.

Spare O-ring: A Kit is available made of EPR and is intended for applications using fluids containing UV Adhesives, Cyanoacrylates (CA's), Methacrylates, and/or Acrylic Acids. If used, this O-Ring may be cleaned as necessary with Isopropyl Alcohol, Acetone, MEK.

Please Note: Occasionally an EPR O-ring will swell or degrade when in contact with some UV Adhesives, Cyanoacrylates (CA's), Methacrylates, and/or Acrylic Acids. This might be due to other components in the fluid product. In these cases we recommend switching to the Viton O-Ring which will then perform better with this type of fluid.

The O-Rings are listed in Table 1

O-Ring Kit	TS1215
EPR	TS1215-EPR
Viton	TS1215-Vit

Table 1O-Rings Used with Pressure Pot

4. ASSEMBLY DRAWINGS & PARTS LIST

Assembly drawing TS1215 Pressure Pot is shown in Figure 5. The 3/8" Accessory Kit Fitting and Tubing is shown in Figure 6, 1/4" Accessory Kit Fitting and Tubing is shown in Figure 7, and 4mm Accessory Kit Fitting and Tubing is shown in Figure 8.





Figure 7

TS1215-375.....Accessory Kit 3/8" Fitting and Tubing



TS1215-250.....Accessory Kit 1/4" Fitting and Tubing



6	TSD126-160BK	TUBING, POLYETHYLENE BLK, 1/8 O.D x 60" LG., W/LUER	1
5	TSD126-160	TUBING, POLYETHYLENE CLR, 1/8 O.D x 60" LG., W/LUER	1
4	TSD1102-19	CLAMP, PINCH, TUBING UP TO 1/4 O.D	1
3	P3000058	FERRULE, BACK, 4mm NYLON	10
2	P3000057	FERRULE, FRONT, 4mm NYLON	10
1	P3000046	CONNECTOR, MALE, Ø4mm x 1/4-18 NPT, SS	
ITEM	PART NO.	DESCRIPTION	

Figure 8

TS1215-4MM.....Accessory Kit 4mm Fitting and Tubing

Specifications, colours and dimensions can be subject to change.