

DIAPHRAGM PUMP EVACUATION SYSTEM USER'S MANUAL

Part No. JDI-DPES & Part No. JDI-DPES-UL

FOR WARRANTY INFORMATION, PLEASE CALL 800-433-0708

MODEL NO:	
DATE OF PURCHASE:	

READ AND SAVE THIS MANUAL

FOR SERVICE ASSISTANCE, CALL 800-433-0708 OR VISIT JOHNDOW.COM



Important Safety Information

Read this manual and safety information before using this product.

AWARNING Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

- Do not exceed the maximum inlet air pressure noted on the pump model plate.
- Spark can ignite from flammable material and vapors.
- You must ground the pumping system when in use. Ground the dispensing valve or device, containers, hoses and the object you are pumping to.
- Keep inflammables away from heat, open flames and sparks.
- Pump exhaust may contain contaminants. Pipe exhaust away from work area and people.
- Hazardous pressure can result in serious injury or property damage. Do not service or clean pump, hoses, or dispensing valve while the system is pressurized.
- · Explosion Hazard. Models containing aluminum-wetted parts cannot be used with III-Trichloroethane, Methylene Chloride or other Halogenated Hydrocarbon solvents which may react and explode.
- Air pressure should not exceed 115 psi (JDI-DPES) or 110 psi (JDI-DPES-UL).

ACAUTION

Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

- Check all hoses for damage or wear.
- Ensure dispensing device is clean and in proper working condition.
- Use proper ventilation.
- Verify the chemical compatibility of the pump-wetted parts and the substance you are pumping, flushing, or recirculating.
- Do not use the pump for the structural support of the piping system. Ensure system components are supported properly to prevent stress on the pump.
- Prevent unnecessary damage to the pump. Do not allow pump to operate when out of material for long periods of time. Disconnect air line from pump when system sits idle for extended periods of time.

NOTICE

Indicates information considered important, but not hazard-related.

- The size of the air delivery pipe must be big enough for proper air delivery.
- Secure pump, connections and all contact points to avoid vibration and generation of contact or static spark.
- After grounding, periodically verify continuity of electrical path to ground. Test with an Ohmmeter for each component to ground to ensure continuity. Ohmmeter should show 1000 ohms or less.
- · Keep closed when not in use.
- Consult local building codes and electrical codes for specific grounding requirements.
- Use a filter capable of filtering out particles larger than 50 microns on the air supply. There is no lubrication required other than the O-ring lubricant which is applied during assembly or repair.
- Confirm O-ring compatibility if lubricated air is present in the air motor pump section.

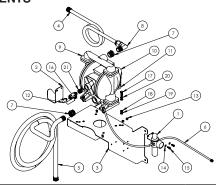
FLUID COMPATIBILITY

If in doubt about compatibility of a specific fluid, contact fluid supplier to check for any adverse reactions to the wetted materials.

GETTING STARTED

This pump comes fully assembled and ready for use. If you notice any parts are missing or damaged per the contents list below, please contact us.

CONTENTS



Item No.	Description	Qty.	JDI-DPES Replacement Part	JDI-DPES-UL Replacement Part
1	Filter Regulator	1	AFR2000	AFR2000
2	Hose Hanger Bracket	1	1340002	1340002
3	Wall Bracket	1	1340001	1340001
4	3/4" x 6' PVC hose w/3/4" NPT M x M	1	25HDC-1	25HDC-1
5	1" x 10' PVC w/wire hose, 3/4" NPT M x M	1	1340005	1340005
6	1/4" ID x 2 ft air hose, 1/4" NPT M x M	2	1340006	1340006
7	3/4" to 1" NPT Steel Bushing	2	TANK-BUSHING	TANK-BUSHING
8	3/4" NPT M x 3/4" 90° Swivel Pipe Fitting	1	1501-12-12	1501-12-12
9	1" Diaphragm Pump	1	PU201.03	WR1DP
10	1" NPT 90° Elbow	1	-	44605K136
11	Pump Muffler (included with UL pump)	1	-	-
12	1/4" NPT M x F 90° Brass Fitting	1	50785K43	50785K43
13	M6 Nylon Insert Lock Nut	4	90576A115	90576A115
14	M6 Flat Washer	8	2085-B	2085-B
15	M6 x 16 Hex Bolt	4	2002-B	2002-B
16	1/4" NPT Ball Valve	1	BV-04	BV-04
17	M8 x 30 Hex Bolt	4	2030-B	2030-B
18	M8 Flat Washer	8	2077-B	2077-B
19	M8 Hex Nut	4	2086-B	2086-B
20	M8 Lock Washer	4	2094-B	2094-B
21	1/4" to 1/2" NPT Steel Bushing	1	-	1/2X1/4

TOOLS & SUPPLIES NEEDED [Not included]

Philips head screwdriver 13/16" wrench 10mm wrenches/sockets

PTFE Tape 11/16" wrench Adjustable wrench 13mm wrenches/sockets

ASSEMBLY INSTRUCTIONS

- Locate mounting points, on 16" x 8.5" rectangle. Mount wall bracket [3], source fasteners for 40 lb. load.
- 2. Remove pump [9] from carton. Remove black, plastic 1" port plugs using Phillips head screwdriver.
- 3. Wrap threads of 3/4" to 1" threaded bushings [7] with PTFE tape. Thread one bushing in front, bottom port of pump. Thread second bushing into rear, top port of pump. Tighten with adjustable wrench.
- 4. Wrap threads of 3/4" NPT M x 3/4" 90° Swivel Pipe Fitting [8] with PTFE tape. Thread into rear bushing. Tighten with 11/16" wrench, positioning towards the desired storage system.
- 5. Wrap threads of 1/4" NPT M x F 90° Brass Fitting [12] with PTFE tape. Thread into ball valve [16].
- 6. For JDI-DPES:
 - Wrap threads of ball valve [16] with PTFE tape. Thread into front, center port of pump. Tighten with 13/16" wrench until ball valve handle is facing up. Tighten the 1/4" NPT M x F 90° Brass Fitting [12] with 11/16" wrench, positioning towards lower, left corner of pump.
- 7. For JDI-DPES-UL:
 - Wrap threads of ball valve and 1/4" to 1/2" NPT Steel Bushing [21] with PTFE tape. Thread ball valve into bushing. Thread assembly into front, center port of pump. Tighten with 13/16" wrench until ball valve handle is facing up. Tighten the 1/4" NPT M x F 90° Brass Fitting [12] with 11/16" wrench, positioning towards lower left corner of pump.
 - Wrap threads of 1"NPT elbow [10] with PTFE tape. Thread into rear, center port of pump. Tighten with pipe wrench, positioning downwards.
 - Wrap threads of pump muffler [11] with PTFE tape. Thread into 1/4" NPT M x F 90° Brass Fitting [12]. Tighten with a large adjustable wrench.
- 8. Attach pump onto wall mount bracket using M8 hardware [17 20]. Tighten with 13mm wrenches/sockets.
- Remove filter regulator [1] from carton. Apply PTFE tape to gauge threads. Thread into middle port of regulator. Remove top regulator nut, place bracket, and replace and tighten down nut.
- Wrap each end of ¼" ID x 18" long hoses [6] with PTFE tape. Thread one hose into 1/4" NPT M x F 90° Brass Fitting [12], on front of pump. Thread other end of hose into output port of regulator.
- 11. Attach regulator to left side of wall bracket with half the M6 hardware [13 15]. Tighten with 10mm wrenches/sockets.
- 12. Thread second 1/4" NPT M x F 90° Brass Fitting [6] into input port of filter regulator [1]. Attach other end of hose into an air supply system.
- 13. Attach hose hanger bracket [2] to right side of wall bracket [3] with remaining M6 hardware. Tighten with 10mm wrenches/sockets.
- 14. Wrap fittings of 1" ID x 10' hose [5] with PTFE tape. Thread hose into front, bottom bushing. Tighten with 11/16" wrench. Wrap hose over hanger bracket for storage.
- 15. Wrap threads of 3/4" NPT x 6' hose [4] fittings with PTFE tape. Thread into 3/4" NPT M x 3/4" 90° Swivel Pipe Fitting [8]. Tighten with 11/16" and adjustable wrenches. Attach other end of hose to desired storage system.

MAINTENANCE

- Before each use, inspect the general condition of the pump. Check for broken or bent parts, loose or missing parts, and any issues that may impact the proper operation of the pump. Correct before further use.
- 2. Before maintenance or repair, shut off the compressed air line, bleed the pressure, and disconnect the air line from the pump.
- 3. Keep the suction and delivery ports free of dirt and debris.
- 4. After each use, wipe off the unit. Store in a clean dry place, out of reach of children.
- When using the pump for materials that tend to settle out or solidify, flush the pump after each use to prevent damage. Completely drain the pump between uses when using in freezing temperatures.
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