



#### **Expello Pneumatic Drain Valve**

The Expello Pneumatic Drain Valve provides long lasting, durable air system protection. The Expello Drain Valve expels build-up of harmful contamination in air tanks on Tracks, Trailers, Buses, RV's and other equipment with compressed air systems.

The Expello Pneumatic Drain Valve expels contaminants from your air tanks with a powerful blast of air whenever your compressor reaches cut out and at compressor cut in. The 50 watt heater with built in thermostat provides year round protection even in the coldest conditions.

The Expello Pneumatic Drain Valve has a proven corrosion resistant construction that ensures maintenance free protection over the long haul. Once installed in place of your manual drain petcock the Expello Valve's self-cleaning, blow through design provides long-term air tank draining without daily checks. With contaminants expelled from your air tanks the service life of other air-operated components will be extended.

This highly durable, proven technology is an inexpensive method of extending service life and minimizing maintenance costs of your vehicle and equipment. The Expello Pneumatic Drain Valve comes with a one - year unlimited mileage warranty.



SPECIFICATIONS			
Heater Current:	Direct Current (DC)		
Heater Switch-On-Point:			
Heater Switch-Off-Point:	105° F / 40° C		
Heater Voltage:	12 VDC or 24 VDC		
	50 Watts		
Heater Amp Draw:	4.2 Amps (12 V) or 2.1 Amps (24 V)		
Maximum Operating Range:	200 PSI / 13.8 Bar		
Maximum Operating Pressure of Unloader:			
Thermal Range of Operation:	40° F to 180° F / -40° C to 82° C		
Weight:	. Approx. 1.2 Pounds / .55 Kilograms		
Height and Diameter:	3.6 in. × 2.5 in. / 91.4 mm × 65.8 mm		

Part Number	<b>Description - Repair Parts</b>	
995214	Pneumatic Valve Rebuild Kit	
995223	Upper Body, 12 V Heater Assembly	
995227	Upper Body, 24 V Heater Assembly	
995235	Lower Body Assembly with Manual Drain	
995218	Cover Assembly, ¼" NPT	
995220	Cover Assembly, ¾" NPT	
995221	Cover Assembly, ½" NPT	

Part Number	<b>Description - Valves</b>	Inlet Size
995100	Pneumatic Valve, Non Heated	1⁄4" NPT
995101	Pneumatic Valve, Non Heated	<b>¾" NPT</b>
995102	Pneumatic Valve, Non Heated	1⁄2" NPT
995103	Pneumatic Valve, 12 Volt Heated	1⁄4" NPT
995104	Pneumatic Valve, 12 Volt Heated	3∕%" NPT
995105	Pneumatic Valve, 12 Volt Heated	1⁄2" NPT
995106	Pneumatic Valve, 24 Volt Heated	1⁄4" NPT
995107	Pneumatic Valve, 24 Volt Heated	3∕8" NPT
995108	Pneumatic Valve, 24 Volt Heated	1⁄2" NPT

### **EXPELLO Pneumatic Drain Valve**

## Destruments

#### **Easy Installation Instructions**

1. With vehicle not running, depressurize the air system. This can be accomplished by slowly opening the manual drain petcock on the air tank to have the Expello Drain Valve installed.

2. If the manual drain petcock is not on the bottom of the tank inspect the tank for the lowest position possible to mount the Expello Drain Valve. After depressurization of system remove the manual drain petcock valve or the plug in the lowest position and wipe the threaded port clean.

3. Install the Expello Drain Valve in the port selected. The Expello Drain Valve should be mounted on the very bottom of the tank either horizontally or vertically. Pipe tape or sealant may be used on the brass threads of the cover to assure a tight seal. Be sure not to cover the inlet port of the Expello Drain Valve with the tape or sealant.

4. Connect the Black wire (ground) to the vehicle system ground first. **Do not use the Expello Drain Valve for a ground.** The frame can be used as a ground but be sure to make contact with the bare frame. Insulate all exposed connections.

5. Connect the Red wire (power) to the master fuse panel. The ignition "on" switch is recommended. A 10-amp fuse is required either in-line or at the master fuse panel connection. Insulate all exposed connections.

6. Remove a plug from the Unload (UNL) port of the air system governor or place a tee into an existing line (Actuation Line) connected to the unload port.

7. Run an Actuation Line (tube) from the Governor or existing line to the Expello Pneumatic Drain Valve. Connect the line to the <sup>1</sup>/<sub>8</sub>" NPT port identified by "ACT" on the valve. **NOTE: Keep tubing (line) away from hot items such as exhaust pipes and the compressor discharge line.** 

8. Start engine to build system pressure. Listen and feel for air leaks at the tank and Expello Drain Valve connection.

9. The Expello Pneumatic Drain Valve will purge a blast of air out the exhaust (EXH) port when the compressor reaches system pressure "cut out". The valve will also purge a blast of air when the compressor "cuts in".







# Probable Cause Solution ve Improper connection of actuation line Check all air line connections to be

Problem	Probable Cause	Solution
	Improper connection of actuation line at the governor or valve	Check all air line connections to be sure they match the diagram
	Expello Drain Valve may have ice build up in the inlet port not allowing air to pass through	Make sure the heater wires have the correct power and give the heater time to thaw the unit. The valve should be warm to touch after start.
	Inlet Cover screen is plugged	Remove Expello Drain Valve and clean screen
Expello Pneumatic Drain Valve leaks air out the exhaust (EXH) port or has faulty ejections.	Valve internals may be clogged or stuck with debris.	Attempt to blowout debris by slowly turning the Manual Drain stem clockwise until releasing air and turn counterclockwise to re-seat. If leakage continues depressurization of system and valve removal and cleaning is required. Be sure the screen is present in top of cover. Suggest Rebuild Kit 995214.
	O-Rings may be deteriorated or unseated due to over pressurization.	Rebuild the Expello Drain Valve with Rebuild Kit 995214.
The compressor runs continuously or cycles rapidly	Defective Governor or Compressor Unload Valve	Repair or replace Governor or compressor
	Leak in air system (most likely the Sensing Line) or faulty Air Dryer Check Valve	Repair leaks or replace check valve

#### **EXPELLO AIR PRODUCTS**

A Unit of D&D Instruments 2525 Winter Street NE Minneapolis, MN 55413 1-800-766-4243 www.ddinstruments.com

# Expello