# Zebra® Muscle™ Coalescer for Air Compressor Condensate

ASSEMBLY, INSTALLATION, and OPERATION MANUAL



If you have any questions or would like assistance, please contact 888-249-4855



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# TOOLS NEEDED FOR ASSEMBLY

Phillips screw drive Hose clamps (2) 1/2" ID hose cut to your required length Teflon tape Clean water (10 gallons) Knife

- Unpacking the coalescer 1. Remove lid by unlatching the metal band clamp.
- 2. Remove the parts bag and place any coalescing media that may

have fallen out during shipping in the diffuser basket. 3. Discard the foam block that is placed atop he coalescing cartridge.

## Lid Vent Assembly

1. Take the 1-1/2" tee, insert the end with the pipe end cemented onto it, through the top side of the lid.

2. Match up the alignment marks on the tee and elbow and slide together until the screw holes align. Using the supplied screw, attach the 1-1/2" elbow as shown.



### **Final Assembly**

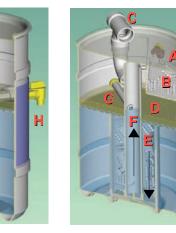
 Install 1/2" hose fittings on condensate inlet (A) and clean water discharge (F) fittings. The clean water discharge fitting should point down.

2. Install your reinforced hose (1/2" I.D. maximum), from the valve on bottom of compressor tank to condensate hose barb fitting (A) on the barrel. Use hose clamps on both ends.

3. Install your hose from clean water discharge fitting (F) to your drain. Be sure the drain is below the height of the barrel fitting. The barrel may need elevated if the drain is above the discharge height. 4. Install oil drain spigot (H) on the oil outlet fitting.

# How It Works

- A. Air is injected
- в Compressor discharge flows into diffusing chamber
- De-watered air automatically exits
- D. Water and oils collect
- De-oiled water forced down and through media to remove trace E. oils, then through tube to exit
- De-oiled water automatic discharge F.
- G. Oil floats to surface
- H. Manual oil discharge



# **OPERATION PARAMETERS**

Inlet Connection, max.: 1/2" (12.7mm) Inlet Pressure, max.: Condensate, per release, max .: Release Interval, min .: 5 minutes Oil Volume Capacity, max.: 0.75 gallons (2.84 liters)

150 psi (10.3 barg) 1 gallon (3.78 liters) approx. 1" (2.54 cm) of oil

# WARNING! EXCEEDING THESE PARAMETERS MAY CAUSE INJURY AND WILL VOID ALL WARRANTIES

# **Operation Instructions**

 Close the oil drain spigot (H).
Fill the barrel with clean water to the level of the clean water discharge (F) fitting so that water starts to drain. 3. Place lid on barrel with the air vent (C) directly above the clean water discharge (F) fitting, orienting the air vent elbow toward the

center of the barrel. Secure the lid with band clamp, verifying a tight seal

4. Open the compressor condensate drain valve until the condensate has been completely discharged. Frequency of release will be determined upon your accumulated condensate volume versus maximum release volume of the coalescer:

Example: In 24 hour period, total condensate volume is 20 gallons. The coalescer handles 1 gallon, so release should be done in one hour intervals. Please contact us if you would like assistance in determining the condensate volume of your compressor. 5. Clean water will empty automatically to the drain.

**Emptying the Oil** 1. You will need to periodically drain the oil from the barrel, as needed. Oil drain frequency will be determined upon your accumulated oil volume:

Example: In 24 hour period, total oil volume within the 20 gallons of accumulated condensate is approximately 2%, or 0.4 gallons. The coalescer handles approximately 0.75 gallons of oil, so drain at least every 48 hours. Please contact us if you would like assistance in determining the oil volume of your condensate.

2. Remove the band clamp and the lid, if necessary.

3. Place your oil collection container under the oil discharge spigot (H) and open the valve. If additional oil needs to be removed, add clean water into the barrel opposite the oil discharge to move the oil to the drain. When all the oil has been removed, close the drain valve and reinstall the lid and band clamp.

## Important Note

Coalescers utilize gravity separation to separate oils from water. In some cases where there are specialized detergents in a compressor lubricant, a stable oil/water emulsion may remain and may not be fully separated by this process. These emulsions may be safe to dispose of depending upon their content and volume.

Check with your local water municipality for more information to determine what chemicals and volumes are allowed for direct release at the local level. They should be able to provide free testing services to determine contaminant levels and if they are safe to dispose of without further treatment.

> WARNING! IF PLACING THE COALESCER **OUTDOORS. INSULATE THE** BARREL TO PREVENT FREEZING OF THE CONDENSATE