

Off Road Engineering LLC
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Power Plant Auxiliary Tank Valving System

Parts Included:

500 psi Ball valve (1), 250 psi Air Hose (15 feet), Mounting bracket (1), 10-24 Thread cutting screw (4)
Push On connector straight (3), Push On connector 90 deg elbow (2), Tee FxFxM (2), Drill bit 11/64 (1)
Plastic vent elbow (1), "AIR" label (1), "WINCH" label (1), Teflon Tape (1)

Operation

During any winching operation of the Warn Power Plant winch, the air compressor air tank cannot be pressurized, or the pressure switch will stop the winch motor. This makes it difficult to connect a permanent auxiliary air tank or hard plumb an ARB locker system. The ORE valving system alleviates this problem.

The auxiliary tank valving system allows the user to retain air pressure in the auxiliary tank while in winch mode and will vent the winch air tank to allow winching.

In the "WINCH" mode, the valve vents the winch air tank and keeps the auxiliary air tank pressurized. Turn the Power Plant mode selector knob to the "HOOK" position and turn the valve handle to "WINCH".

In the "AIR" mode, the valve connects the auxiliary tank directly to the winch air tank. Turn the Power Plant mode selector knob to the "Air Puff" position and turn the valve handle to "AIR".

Installation

1. Remove the winch air tank cover. Remove the 4 Allen bolts with a 5/32 Allen wrench.
2. Remove the quick disconnect air fitting from the tank and replace with the brass 90 deg elbow "Push On" hose fitting.
3. Apply teflon tape to the threads and tighten the fitting and turn the fitting to point up.
4. Wet the hose and the fitting or apply a little WD-40 and push the hose onto the fitting until the hose end reaches the yellow plastic ring. Twisting the hose a little will make the hose go on a little easier.
5. Route the hose to the valve location and turn the fitting another 90 degrees CW.
6. Install the air tank cover back onto the winch.
7. Install the valve bracket in a desired location. Using the valve bracket as a template mark the two mounting holes.
8. Center punch the holes. Drill the two holes with the supplied 11/64 drill bit and mount the bracket using the supplied thread cutting screws. The screws will cut their own threads.
9. Before installing the valve to the bracket, screw on the plastic 90 deg elbow to the vent side of the valve and install the inlet and auxiliary tank fittings to the valve and connect hoses. Apply teflon tape to all brass fitting threads.
10. Determine which way the valve will vent the winch air tank and which way it will connect the inlet to the auxiliary tank, and apply the "AIR" and "WINCH" labels accordingly.

