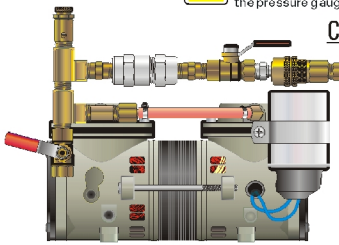
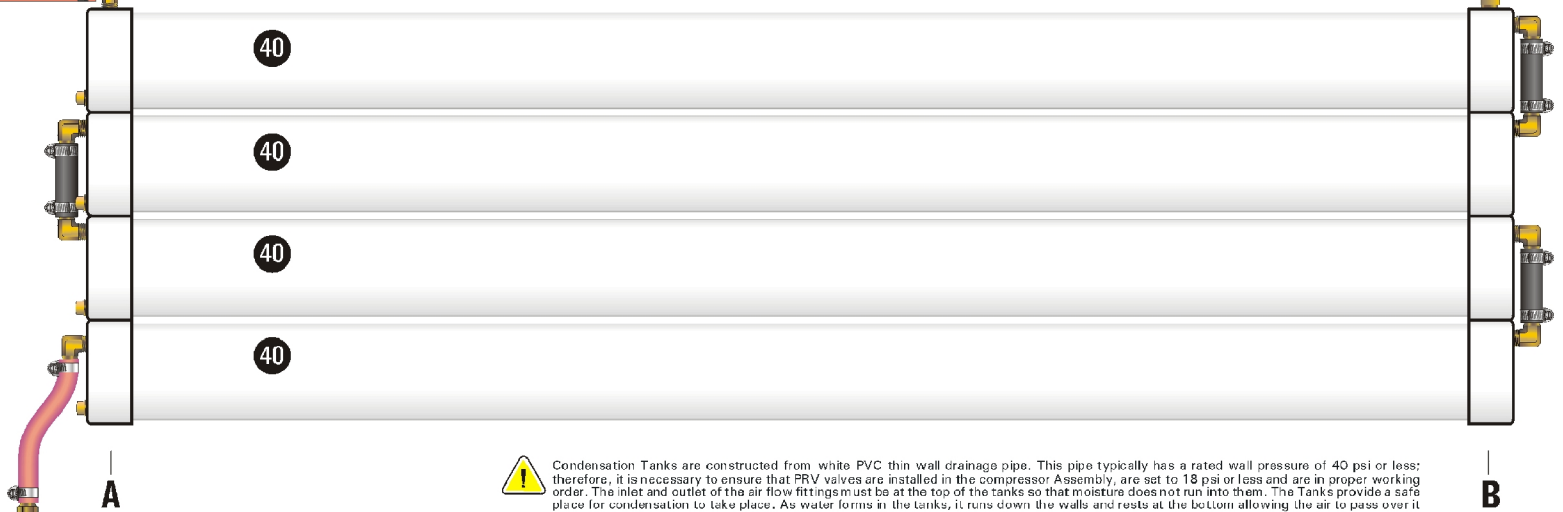
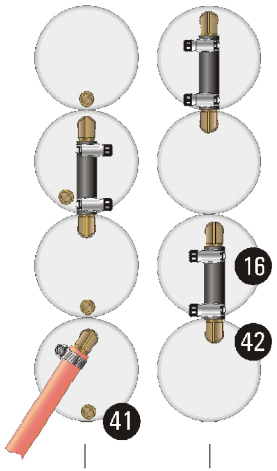
See Standard PFRA Aeration Drawings 265019 through 265021 for suitable assemblies and connection details for most small aeration compressors. Note that when using Condensation Tanks, the pressure gauge can mount directly to the tanks, rather than requiring a separate Header Tank.

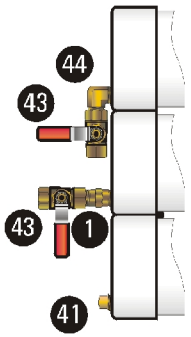
Connection Details







To dugout and diffuser. See Standard PFRA Drawings 265022, 265024 and 265025



Drill and tap holes to accept 1/4" NPT 1/4" brass air fittings. Use caution drilling or apply pressure to thin-wall pipe ends so as not to crack or damage. Use black rubber 1/2" air hose to interconnect tanks, **DO NOT** use plastic or poly pipe.

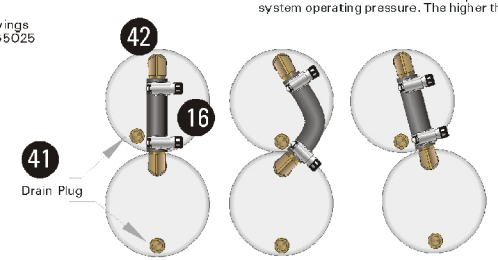
Tank Interconnection Details

Ball Valves can be used for quick tank drainage. Be aware that in the winter, ice will form in the valve and make it inoperable.

Drain Plug Arrangements

Condensation Tanks are constructed from white PVC thin wall drainage pipe. This pipe typically has a rated wall pressure of 40 psi or less; therefore, it is necessary to ensure that PRV valves are installed in the compressor Assembly, are set to 18 psi or less and are in proper working order. The inlet and outlet of the air flow fittings must be at the top of the tanks so that moisture does not run into them. The Tanks provide a safe place for condensation to take place. As water forms in the tanks, it runs down the walls and rests at the bottom allowing the air to pass over it unrestricted. Condensation takes place in the system based primarily on three factors - the ambient air temperature/relative humidity and the system operating pressure. The higher the relative humidity and system operating pressure, the more likely condensation is to form in the system.

Condensation Tanks



Drill and tap holes to accept 1/4" NPT 1/4" brass air fittings. Use caution drilling or apply pressure to thin-wall pipe ends so as not to crack or damage. Use black rubber 1/2" air hose to interconnect tanks, **DO NOT** use plastic or poly pipe. The pipes should be mounted to a wall, stand or some other stable device. If installing outside be aware that the Tanks may be exposed to damage from wind and animals. Mount tanks so that they can be easily drained. Draining the tanks should be done every two to four weeks until the amount of condensation likely to occur in the system is understood, then adjust the draining schedule accordingly.

Tank Drain End Details

1. Hex Nipple 1/4" mpt x mpt
16. Rubber Air Line 1/2"
40. Condensation Tank - (4) 3" dia x 48" long PVC tube and end caps
41. Brass Plug - 1/4" mpt
42. 90deg Elbow - Hose Barb to Male Pipe 1/2" barb x 1/4" mpt
43. Ball Valve (Tank Drain Valve) 1/4" fpt x fpt
44. 90deg Elbow - 1/4" mpt x 1/4" mpt

Standard Condensation Tank Construction Details

Drawn: J.H.Squires, Jan 12, 2000 PFRA DRAWING No. 265026 rev 1.00

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