AIR SUPPLY CONSIDERATIONS

- A tankless compressor without an air maintenance device that delivers air directly to the system may negatively impact the time required to “trip” the dry or deluge valve and should only be used on small systems where there is no concern for the water delivery times specified in NFPA 13.
- A tank and a listed air maintenance device is required by NFPA 13 when the compressor capacity is 5.5 cfm at 10 psi or greater.
- Compressed air systems utilizing a tank require the use of the Reliable Model A Air Maintenance Device.
- For systems utilizing the Reliable Model B1 Accelerator, an air receiver and Reliable Model A Air Maintenance Device is strongly recommended to avoid false activation of the accelerator.
- Compressors controlled by an on-off pressure switch may not allow low system air pressure settings, thereby negating the advantages of low pressure valves.
- Compressors controlled by an on-off pressure switch will allow system air pressure to fluctuate within the set points of the switch.
- Tank-mounted air compressors provide a reserve supply of air in the event of a short term power outage.

DOs

DO install a tank and Reliable Model A Air Maintenance Device where the compressor capacity is 5.5 cfm at 10 psi or greater.

DO install Reliable Model A and B Air Maintenance Devices in the upright and horizontal position with the bypass valve at the bottom to prevent the accumulation of condensation and debris in the strainer, regulator, and/or pressure switch (see diagram above).

DO install air line check valves in the horizontal position.

DO install the main supply line to the air maintenance device(s) at a lower elevation than the devices to allow condensation to drain back to the tank and not into the devices (see diagram above).

DO NOTs

DO NOT use a Reliable Model B Air Maintenance Device with any compressor that has a built-in pressure control switch.

DO NOT use a tankless air compressor if a Reliable Model B Accelerator is installed or anticipated.

DO NOT set the minimum pressure to less than 15 psi on systems that utilize the Reliable Model B1 Accelerator.

DO NOT use a tankless air compressor with the Reliable Model A Air Maintenance Device. The low flow regulator will cause the compressor to “short cycle.”
THREE TYPES OF AIR COMPRESSORS

TANKLESS/BARE
This compressor does not have a pressure switch to start and stop the motor, therefore, it requires the use of the Reliable Model B AMD. This arrangement is acceptable for a single system, but is not recommended for systems with an accelerator. Limited to 5.5 cfm at 10 psi maximum discharge.

TANKLESS WITH PRESSURE SWITCH AND CHECK VALVE
This compressor has a pressure switch to start and stop the motor and is connected directly to a single system. Not recommended for systems with an accelerator. Limited to 5.5 cfm at 10 psi maximum discharge.

TANK-MOUNTED
This switch on this compressor controls the pressure in the tank which is higher than that required by the system(s). ALWAYS requires the use of the Reliable A AMD (one per system in case of multiple systems). REQUIRED for multiple systems being fed from a single compressor. Also recommended for any system with the Reliable B1 Accelerator. RECOMMENDED AS A “BEST PRACTICE” SOLUTION THAT CAN BE USED FOR ALL INSTALLATIONS.