

## **AIR SUPPLY RECOMMENDATIONS**

- 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 <u>only</u> 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 <u>required</u> by Section 7.2.6.6.2 of NFPA 13 (2013) when the compressor capacity is 5.5 cfm at 10 psi or greater. For Gast compressors supplied by Reliable, this will be all compressors over ½ horsepower.
- Compressed air systems utilizing a tank <u>require</u> the use of the Reliable Model A-2 Air Maintenance Device.
- For systems utilizing the Reliable Model B-1 Accelerator, an air receiver and Reliable Model A-2 Air Maintenance Device is 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 have system air pressure that fluctuates 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.





**DO** install a tank and Reliable Model A-2 Air Maintenance Device where the compressor capacity is 5.5 cfm at 10 psi or greater.

**DO** install Reliable Model A-2 and B-1 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 <u>horizontal</u> 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 NOT** use a Reliable Model B-1 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-1 Accelerator is installed or anticipated.

**DO NOT** set the minimum pressure to less than **<u>15 psi</u>** on systems that utilize the Reliable Model B-1 Accelerator.

**DO NOT** use a tankless air compressor with the Reliable Model A-2 Air Maintenance Device. The low flow regulator will cause the compressor to "short cycle."

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# **THREE TYPES OF AIR COMPRESSORS**

#### TANKLESS/BARE (e.g., RELIABLE P/N 16A)

This compressor does not have a pressure switch to start and stop the motor, therefore, it requires the use of the Reliable Model B-1 AMD. This arrangement is acceptable for a single system, but is not recommended for systems with an accelerator. Limited to a maximum 1/2 HP motor.



### TANKLESS WITH PRESSURE SWITCH AND CHECK VALVE (e.g., RELIABLE P/N 16PA)

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 a maximum 1/2 HP motor.

#### TANK-MOUNTED (e.g., RELIABLE P/N 16TA)

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-2 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 B-1 Accelerator. RECOMMENDED AS A "BEST PRACTICE" SOLUTION THAT CAN BE USED FOR ALL INSTALLATIONS.



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