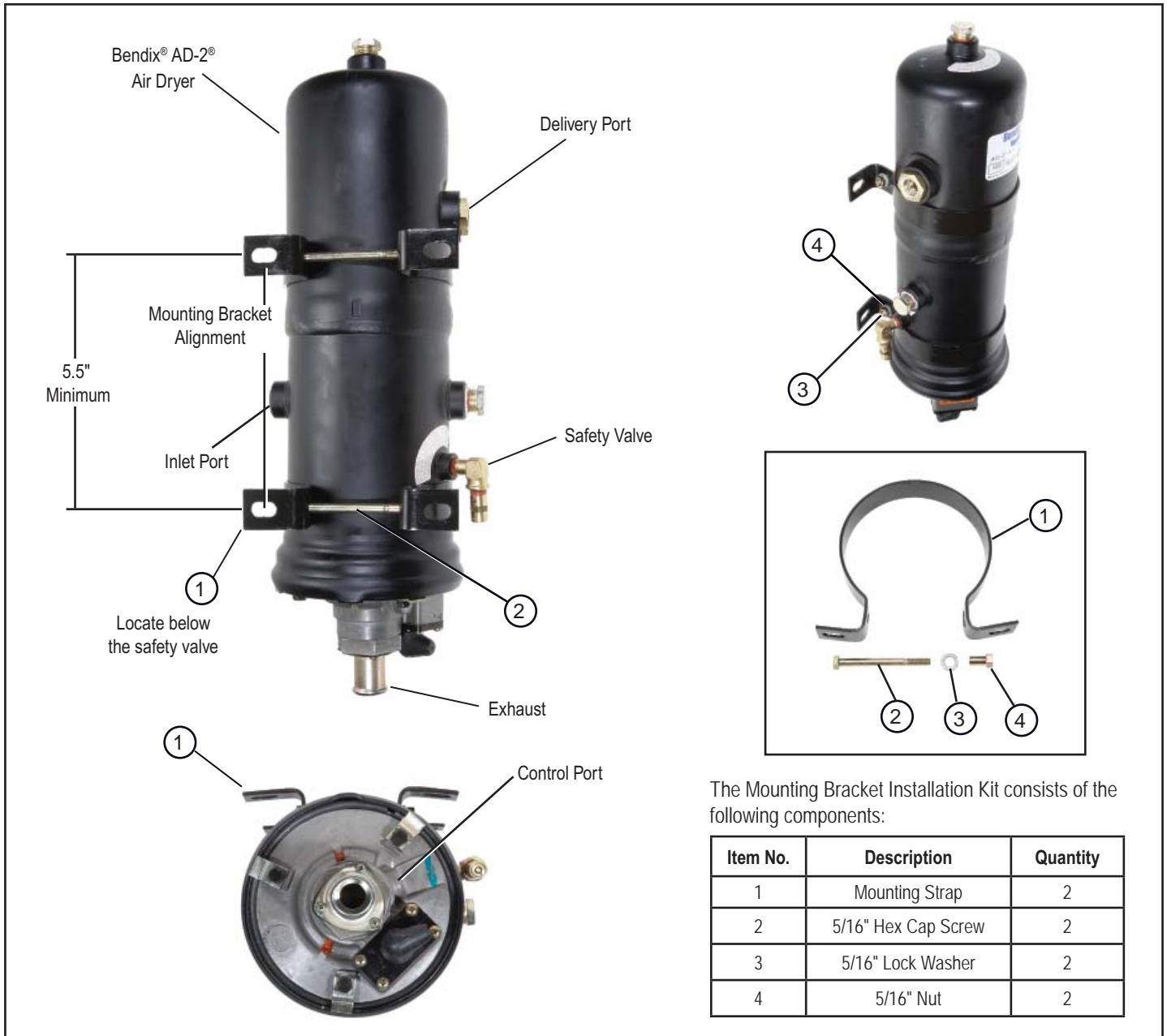




# Installation Instructions

## BENDIX® AD-2® AIR DRYER BRACKET INSTALLATION



The Mounting Bracket Installation Kit consists of the following components:

Item No.	Description	Quantity
1	Mounting Strap	2
2	5/16" Hex Cap Screw	2
3	5/16" Lock Washer	2
4	5/16" Nut	2

FIGURE 1 - BENDIX® AD-2® MOUNTING BRACKET INSTALLATION

This kit contains the mounting bracket components necessary to install the air dryer mounting steps on the Bendix® AD-2® air dryer.

### BRACKET INSTALLATION

Assemble the two mounting straps (1) as illustrated in Figure 1.

1. Place the two mounting straps (1) over the air dryer housing.

- Loosely secure the straps to the housing using the 5/16" cap screw (2), lock washer (3) and nut (4) provided in the kit. Do not tighten the nut and cap screw.
- Position the two mounting straps on the air dryer so that they are parallel to, and in alignment with, each other as shown in the illustration.
- The spacing between the upper and lower bracket slots should be a minimum of 5.5 inches. Torque the nut (4) to 45-60 in-lbs on each bracket.

## GENERAL SAFETY GUIDELINES

### **WARNING! PLEASE READ AND FOLLOW THESE INSTRUCTIONS TO AVOID PERSONAL INJURY OR DEATH:**

When working on or around a vehicle, the following general precautions should be observed at all times.

1. Park the vehicle on a level surface, apply the parking brakes, and always block the wheels. Always wear safety glasses.
2. Stop the engine and remove ignition key when working under or around the vehicle. When working in the engine compartment, the engine should be shut off and the ignition key should be removed. Where circumstances require that the engine be in operation, **EXTREME CAUTION** should be used to prevent personal injury resulting from contact with moving, rotating, leaking, heated or electrically charged components.
3. Do not attempt to install, remove, disassemble or assemble a component until you have read and thoroughly understand the recommended procedures. Use only the proper tools and observe all precautions pertaining to use of those tools.
4. If the work is being performed on the vehicle's air brake system, or any auxiliary pressurized air systems, make certain to drain the air pressure from all reservoirs before beginning ANY work on the

vehicle. If the vehicle is equipped with a Bendix® AD-IS® air dryer system or a dryer reservoir module, be sure to drain the purge reservoir.

5. Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in a manner that safely removes all electrical power from the vehicle.
6. Never exceed manufacturer's recommended pressures.
7. Never connect or disconnect a hose or line containing pressure; it may whip. Never remove a component or plug unless you are certain all system pressure has been depleted.
8. Use only genuine Bendix® brand replacement parts, components and kits. Replacement hardware, tubing, hose, fittings, etc. must be of equivalent size, type and strength as original equipment and be designed specifically for such applications and systems.
9. Components with stripped threads or damaged parts should be replaced rather than repaired. Do not attempt repairs requiring machining or welding unless specifically stated and approved by the vehicle and component manufacturer.
10. Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.
11. For vehicles with Automatic Traction Control (ATC), the ATC function must be disabled (ATC indicator lamp should be ON) prior to performing any vehicle maintenance where one or more wheels on a drive axle are lifted off the ground and moving.

## BENDIX® AD-2® AIR DRYER INSTALLATION

1. Install the air dryer in the compressor discharge line as close to the supply (first) reservoir as possible. The discharge line between the compressor and air dryer must not exceed 20 feet in length or be less than six feet in length for a two cylinder compressor or less than ten feet in length for a single cylinder compressor. Six feet of discharge line and a 90 cubic inch reservoir can be used in lieu of ten feet of discharge line for single cylinder compressors.

The discharge line should slope downward from the compressor to the air dryer inlet to avoid water traps and to allow drainage to the air dryer. (If the 90 cubic inch reservoir is used, it should also be mounted and plumbed to avoid water traps and to allow drainage into the air dryer.) Discharge lines may be either be copper tubing or high temperature hose.

2. Locate the air dryer outside the engine compartment in an area of air flow when the vehicle is in motion. Do not mount near the exhaust system or other heat-producing components and avoid road-splash areas. Provide 8 inches (20 cm) clearance below the air dryer for servicing.

3. Mount the air dryer vertically, with the purge valve exhaust toward the ground, away from the frame and other components. Connect a hose to the exhaust cover if necessary, since this valve may expel rust and scale particles, as well as condensate and oil collected in the dryer.
4. Connect the purge valve control port to one of the governor unloader ports. This line should be routed such that no water traps are formed.
5. Connect a fused #16 gauge wire from the "on" position of the engine control or ignition switch to the heater terminal. This connection must be waterproof. Use an 8 to 10 amp. fuse with 12 volt end covers and with 24 volt end covers identified with the marking "24V 120W." Use a 4 to 5 amp. fuse with 24 volt end covers identified with the marking "**24V.**" Refer to the system schematic as illustrated in Figure 2.

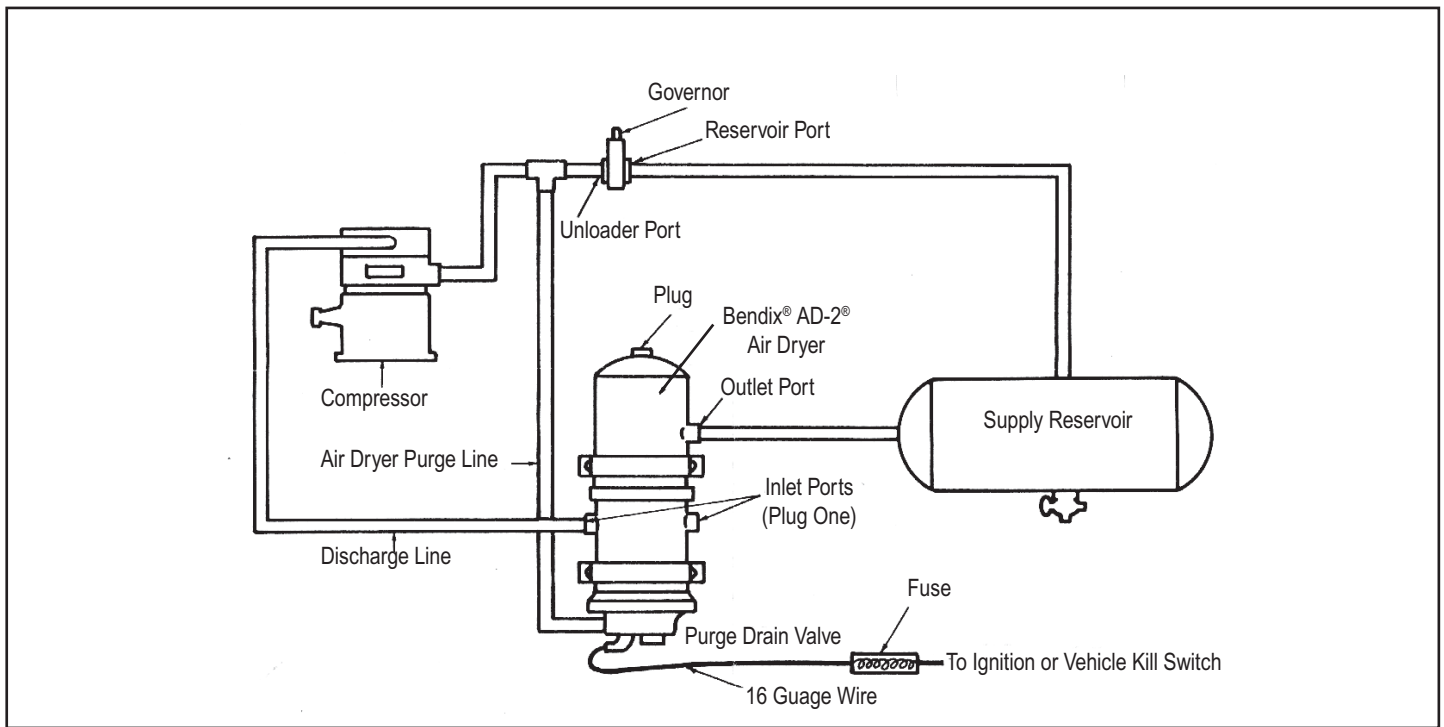


FIGURE 2 - BENDIX® AD-2® AIR DRYER INSTALLATION

### TESTING THE BENDIX® AD-2® AIR DRYER

Before placing the vehicle in service, perform the following tests.

1. Close all reservoir drain cocks.
2. Build up system pressure to governor cut-out and note that the Bendix® AD-2® air dryer purges with an audible escape of air.
3. "Fan" the service brakes to reduce system air pressure to governor cut-in. Note that the system once again builds to full pressure and is followed by a purge at the AD-2 air dryer exhaust.
4. It is recommended that the following items be tested for leakage to assure that the air dryer will not cycle excessively.
  - (A) Total air system leakage (See Bendix publication BW5057 "Air Brake Handbook")
  - (B) Compressor unloader mechanism
  - (C) Governor
  - (D) Drain cock and safety valve in first (supply) reservoir.
  - (E) All air connections leading to and from the first (supply) reservoir.