



Installation Instructions

PuraGuard™
Piece Nos.
800691 & 800719

PURAGUARD™ SYSTEM FILTER

IMPORTANT! 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.
2. Stop the engine when working around the vehicle.
3. If the vehicle is equipped with air brakes, make certain to drain the air pressure from all reservoirs before beginning ANY work on the vehicle.
4. Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in manner that removes all electrical power from the vehicle.
5. When working in the engine compartment the engine should be shut off. 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.
6. 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.
7. Never exceed recommended pressures and always wear safety glasses.
8. 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.
9. Use only genuine Bendix replacement parts, components, and kits. Replacement hardware, tubing, hose, fittings, etc. should be of equivalent size, type, and strength as original equipment and be designed specifically for such applications and systems.
10. Components with stripped threads or damaged parts should be replaced rather than repaired. Repairs requiring machining or welding should not be attempted unless specifically approved and stated by the vehicle or component manufacturer.
11. Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.

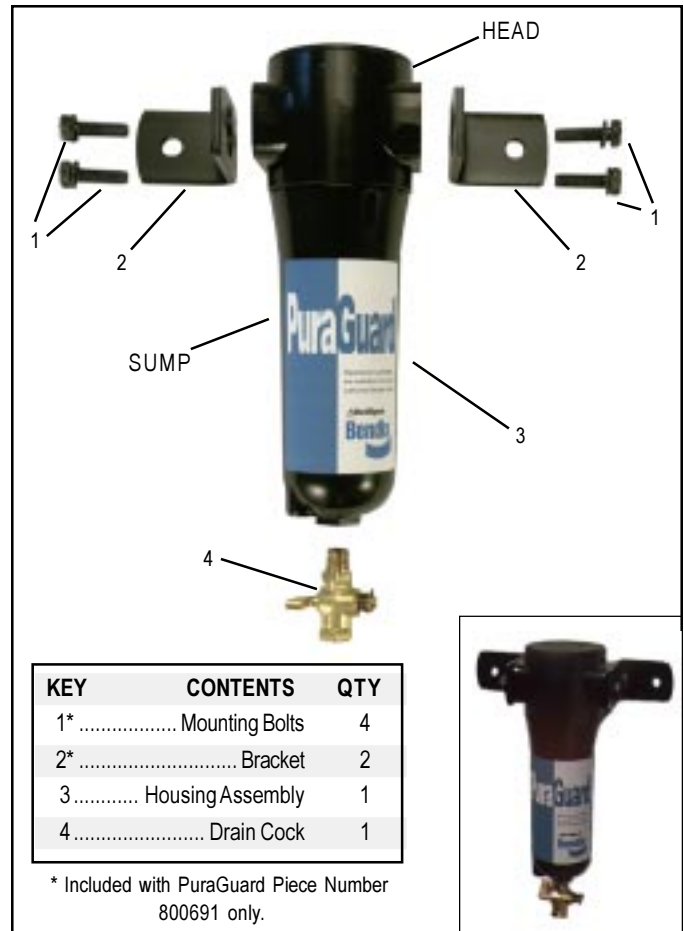


FIGURE 1 - PURAGUARD EXPLODED VIEW

Note: The PuraGuard™ System Filter is not recommended to be used in conjunction with an alcohol evaporator or injector. [The PuraGuard will remove the liquid or aerosol alcohol introduced, defeat the purpose of the evaporator/injector and require the sump to be drained more often than usual.]

DESCRIPTION

This instruction sheet is intended for installing or replacing the Bendix PuraGuard System Filter.

VEHICLE PREPARATION

1. Park the vehicle on a level surface and prevent movement by means other than the brakes.
2. Drain all reservoirs to 0 p.s.i.

ASSEMBLY

1. Coat the drain valve threads with a liquid pipe thread sealant. Install the drain valve using two wrenches - one at the base of the PuraGuard and one on the drain valve, using a maximum final torque of 130-170 in. lbs.

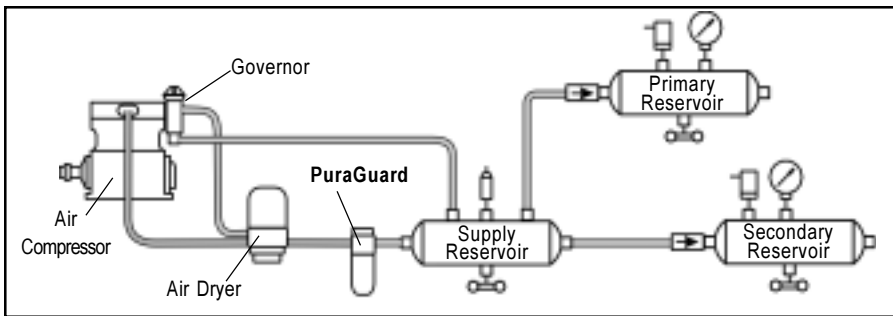


FIGURE 2 - PURAGUARD INSTALLATION - SYSTEM WITH AIR DRYER

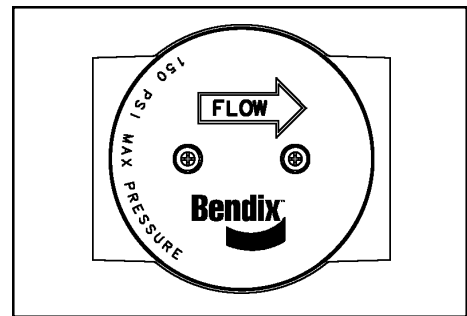


FIGURE 4 - TOP VIEW - SHOWS AIR FLOW

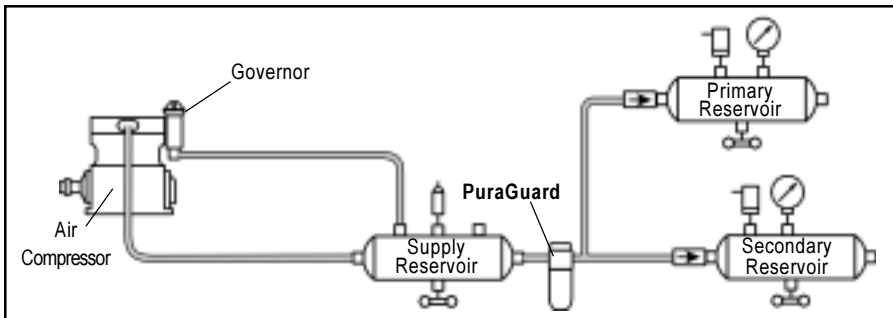


FIGURE 3 - PURAGUARD INSTALLATION - SYSTEM WITHOUT AIR DRYER

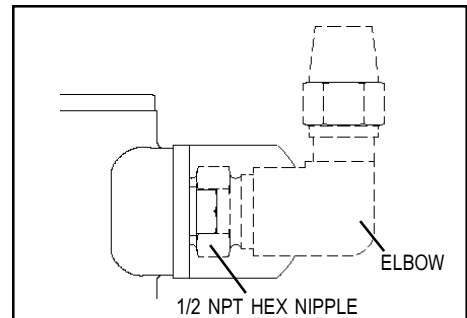


FIGURE 5 - ELBOW FITTING IF NEEDED

2. The threaded top of the Sump (lower) section is preinstalled into the head of the PuraGuard. Check that this connection is fully hand-tight before proceeding with the installation.
3. The Head of the PuraGuard has an arrow symbol showing the direction that the air must be supplied into the Head (see Figure 4). Align the PuraGuard correctly and then insert the four bolts through the mounting bracket holes into the PuraGuard head. Tighten to approximately 15 ft. lbs.

LOCATING THE PURAGUARD ON THE VEHICLE

1. The PuraGuard must be mounted vertically ($\pm 5^\circ$) and must not be exposed to direct wheel splash (located behind axle mud flap is acceptable).
2. Locate the PuraGuard as close to the first (Supply) reservoir as possible.
 - (a) **For vehicles with air dryers**, mount the PuraGuard upstream of the Supply reservoir (see Figure 2).
 - (b) **For vehicles without air dryers**, install the PuraGuard downstream of the Supply reservoir (wet tank) (see Figure 3). Both the Primary and Secondary reservoirs will receive their air supply from the discharge of the PuraGuard and depending original vehicle hose arrangement, extra fittings may be required.
3. To minimize vibration, mount the PuraGuard on a frame rail. If the vehicle requires the PuraGuard to be directly mounted to the reservoir, be sure to only use a high strength nipple fitting. (See further notes under *Connecting the Air Hoses.*)
4. Do not locate the PuraGuard near heat producing components such as the vehicle exhaust and provide adequate clearance from moving components e.g. drive shaft, suspension, pitman arm, etc.

5. Locate the PuraGuard on the vehicle so that a minimum of 12 inches clearance horizontally (90° minimum arc) to allow servicing. This will permit, for example, a strap wrench to be used when replacing the filter.
6. Be sure that there is sufficient room to attach hoses to the PuraGuard. Hoses must be installed without tight turns that might cause air flow restrictions. Note: Check that the hose attachment agrees with the air flow arrow symbol (see Figure 4).
7. To permit draining of collected contaminants, at least a 6 inch clearance below the PuraGuard is recommended. Nominal clearance above is required.

MOUNTING THE PURAGUARD

1. After positioning the PuraGuard according to the installation requirements, mark the position of the mounting holes on the frame rail. Note: Check the vehicle manual before drilling a frame member.
2. Use vehicle manufacturer guidelines for mounting hardware (use at minimum grade 5 hardware).

CONNECTING THE AIR HOSES

Follow either Figure 2 or 3 for air hose arrangement. The PuraGuard supply and delivery ports are 1/2-14 NPT. Install minimum 1/2 inch inside diameter air hoses. When installing an elbow fitting use the fitting arrangement shown in Figure 5, using a high strength nipple and then a female-male elbow fitting.

OPERATIONAL TEST

Build the air system to governor cutout. Shut off the engine. Using a soap solution, check all lines and fittings leading to and from the PuraGuard for leakage and integrity. Repair any excessive leaks - exceeding a 1 inch bubble in 5 seconds - before restoring vehicle to service.

For further maintenance information see Service Data Sheet SD-08-187.