



# Installation Instructions

PuraGuard QC™  
Service Replacement  
Piece No. 801731 &  
Mounting Bracket Kit  
Piece No. 5013671

Bendix® PuraGuard QC™ Oil Coalescing Filter

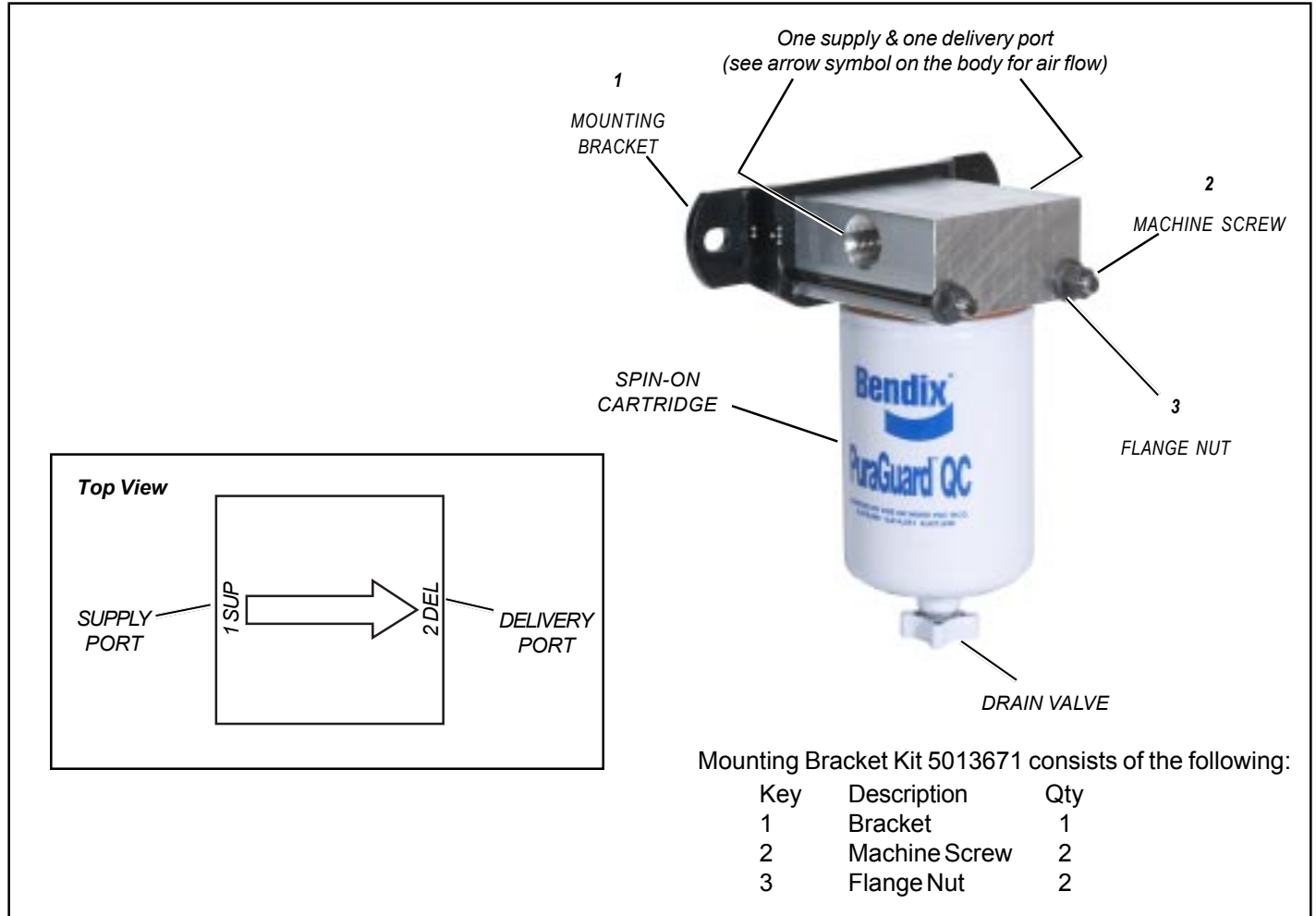


Figure 1 - Bendix® PuraGuard QC™ oil coalescing filter

**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 an 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® 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.**

## DESCRIPTION

*This instruction sheet is intended for use in installing the PuraGuard QC™ oil coalescing filter assembly piece number 801731 and for the installation of the mounting bracket kit piece number 5013671.*

The PuraGuard QC™ oil coalescing filter provides purified compressed air on any air braked vehicle. It consists of a spin-on housing, or cartridge, mounted to an aluminum body.

The PuraGuard QC™ oil coalescing filter has two female pipe thread air connections: one supply, one delivery — identified by their relationship to the arrow symbol showing air flow on the PuraGuard QC™ filter top (see Figure 1).

**Note:** The PuraGuard QC™ filter is not recommended to be used in conjunction with an alcohol evaporator or injector. The PuraGuard QC™ oil coalescing filter will remove the liquid or aerosol alcohol introduced, defeating the purpose of the evaporator/injector and requiring the sump to be drained more often than normal.

## REPLACING OR RETROFITTING THE PURAGUARD QC™ OIL COALESCING FILTER OR MOUNTING BRACKET

### REMOVAL

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.
3. Identify and disconnect the two air hoses from the PuraGuard QC™ filter.
4. Remove the 2 mounting bolts that secure the bracket and assembly to the vehicle. *If replacing the assembly go to "Mounting the PuraGuard QC™ oil coalescing filter" step 2.*
5. Remove the two machine screws (2) and two flange nuts(3) that secure the mounting bracket(1) to the PuraGuard QC™ filter assembly. Go to "Assembly" step 1.

## RETROFIT

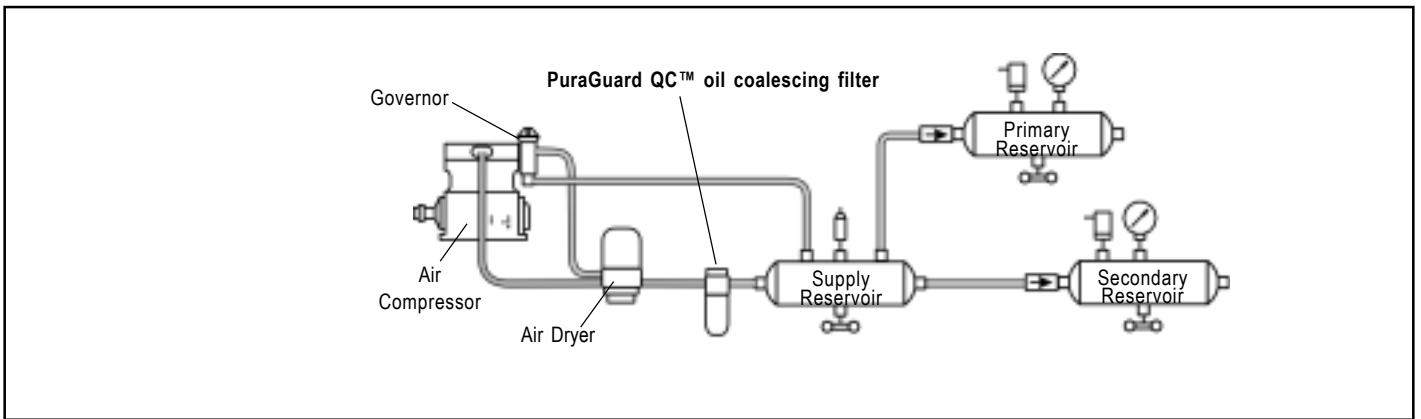
1. The PuraGuard QC™ oil coalescing filter must be installed after a properly functioning air dryer. Failure to locate the filter after an air dryer can cause the filter to malfunction. An air dryer eliminates certain conditions in the discharge line that could compromise the design of the filter.
2. The PuraGuard QC™ filter must be mounted vertically ( $\pm 5^\circ$ ) and must not be exposed to direct wheel splash (located behind axle mud flap is acceptable).
3. Locate it as close to the first (supply) reservoir as possible and upstream of the supply reservoir (see figure 2).
4. To minimize vibration, mount the PuraGuard QC™ filter on a frame rail. If the vehicle requires the filter 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.*)
5. Do not locate the PuraGuard QC™ filter near heat producing components such as the vehicle exhaust and provide adequate clearance from moving components e.g. drive shaft, suspension, pitman arm, etc.
6. Locate the PuraGuard QC™ filter on the vehicle so that a minimum of 12 inches of clearance is available horizontally ( $90^\circ$  minimum arc) to allow servicing. This will permit a strap wrench to be used when replacing the filter.
7. Be sure that there is sufficient room to attach hoses to the PuraGuard QC™ filter.
8. To permit draining of collected contaminants, at least a 6 inch clearance below the filter is recommended. Nominal clearance above is required.
9. Do not mount the unit in the engine compartment.

## ASSEMBLY

1. The top of the system filter has an arrow symbol showing the air flow direction (see figure 1).
2. Secure the mounting bracket(1) to the body using the machine screws(2) and flange nuts(3). Torque to 160-200 in-lbs.

## MOUNTING THE PURAGUARD QC™ OIL COALESCING FILTER

1. After positioning the PuraGuard QC™ oil coalescing filter 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 least grade 5 hardware).



**FIGURE 2 - PURAGUARD QC™ OIL COALESCING FILTER INSTALLATION SYSTEM WITH AIR DRYER**

### **CONNECTING THE AIR HOSES**

1. The PuraGuard QC™ filter supply and delivery ports are 1/2-14 NPT. Install minimum 1/2 inch inside diameter air hoses. Install fittings prior to mounting the filter.
2. 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 1).

### **OPERATION & LEAKAGE TESTS**

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 QC™ filter for leakage and integrity. Repair any excessive leaks — exceeding a 1 inch bubble in 5 seconds — before restoring vehicle to service.