

Bendix® AF-3™ In-Line Filter

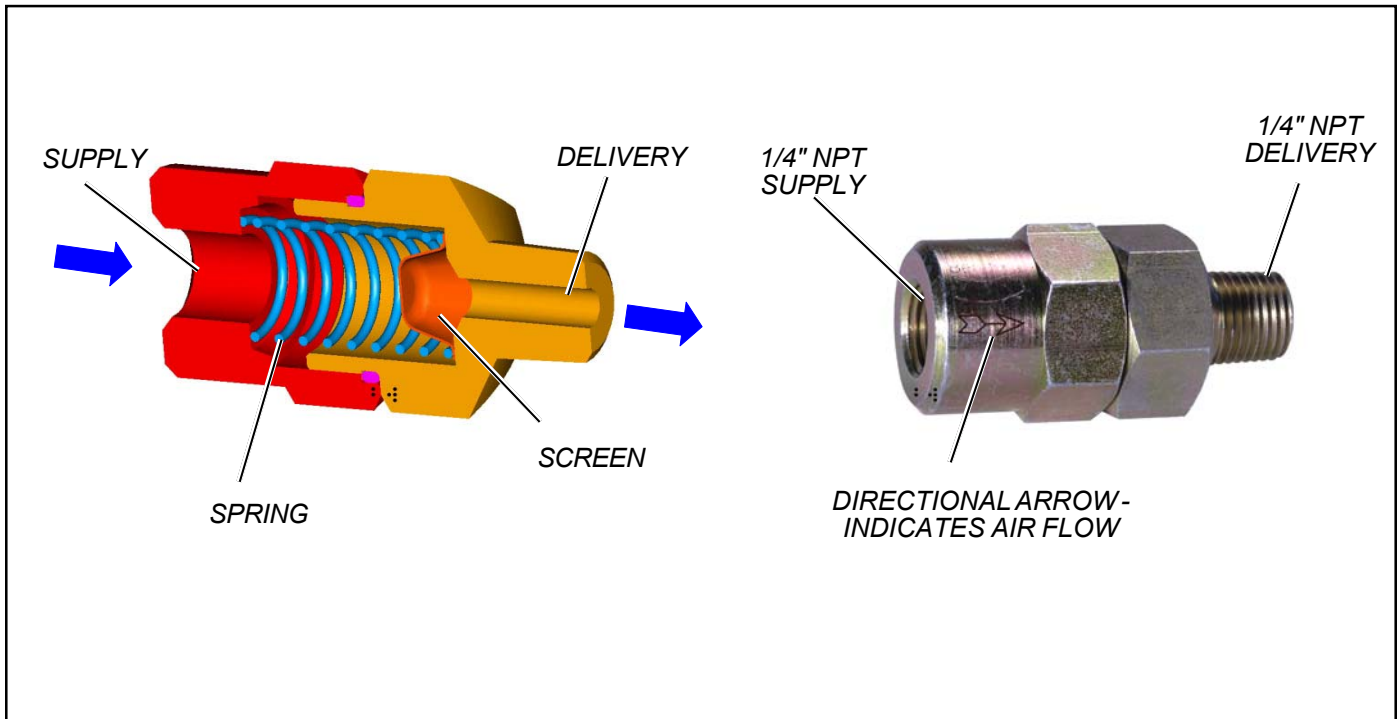


FIGURE 1 - AF-3™ IN-LINE FILTER SECTIONAL AND EXTERIOR VIEW

DESCRIPTION

GENERAL

The AF-3™ in-line filter assembly is designed to prevent foreign material from entering the control port of the Trailer ABS modulator or spring brake relay. The filter body is made of steel with an internal screen element of stainless steel held in place by a spring. The filter is capable of removing particles 0.012 inches in size or larger. The filter has a 1/4 NPT female supply port and a 1/4 NPT male delivery port. **Note: If the filter is installed in the reversed direction, its filtering capability will be reduced.**

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.

PREVENTIVE MAINTENANCE

Because no two vehicles operate under identical conditions, maintenance intervals will vary. Experience is a valuable guide in determining the best maintenance interval for a vehicle. As a recommended minimum, every 12 months, 100,000 miles or 3,600 operating hours, perform the Operational and Leakage Tests noted below. Inspect the filter for unrestricted airflow and blockage from debris collection. Remove the filter assembly and clean as needed. If the unit cannot be cleaned of debris, replace the filter. There are no serviceable parts within the assembly.

SERVICING AND CLEANING

1. Identify the control line to the trailer ABS modulator or spring brake relay valve. Disconnect the control line and remove the filter from the control port.
2. With the AF-3™ in-line filter removed, apply shop air to the delivery port of the filter to clean the debris from the filter screen.
NOTE: Disassembly/reassembly of the AF-3™ in-line filter is not recommended. If an assembly does not meet the Operational and Leakage Tests, it should be replaced with a new AF-3™ in-line filter.
3. Clean the contaminants from the control line by applying shop air to the control line at the gladhand. If the trailer is connected to the tractor, build system pressure and make a light brake application. **Caution: Pressurized debris can cause bodily injury, be sure the area around the trailer is vacated before performing this operation.**

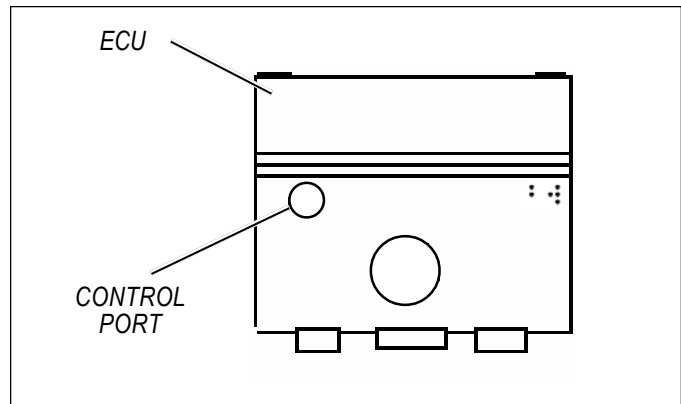


Figure 2 - Trailer Antilock Modulator

4. Apply thread sealant (**do not use Teflon tape**) to the male threads of the control line and the AF-3™ in-line filter.
5. Install the filter in the control port of the ABS modulator or spring brake relay valve. Torque the filter body in place to approximately 10 pound-feet.
6. Connect the control line to the supply port of the AF-3™ in-line filter.

OPERATIONAL AND LEAKAGE TESTS

Apply the brakes and hold 20 psi pressure to the line. Apply a soap solution to the threads to check for leakage. A one-inch bubble in 5 seconds is permitted. Repair any excessive leaks. Perform the Service Check before placing the vehicle in service.

SERVICE CHECK

Apply and release air pressure to the control line containing the filter. The AF-3™ in-line filter should allow delivery and exhausting of the pressure without any noticeable delay in service brake response. A delay can be identified by making a service brake application and viewing the actuator push rods. A delay may indicate foreign material is present in the control line, preventing the proper flow of air. If a delay is found, clean or replace the AF-3™ in-line filter.