Installation Instructions



INLET CHECK VALVE KIT FOR COMPRESSORS

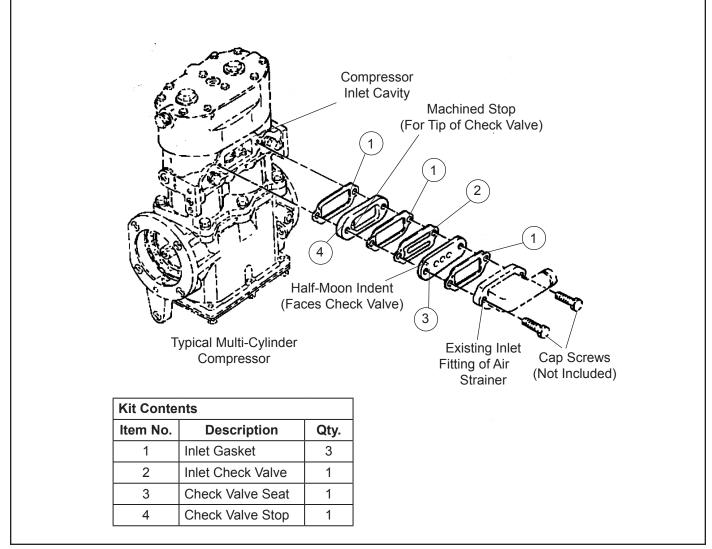


Figure 1 – Inlet Check Valve Kit Contents

KIT INSTALLATION

- 1. Remove the two 5/16"-18 cap screws or studs and nuts along with the lock washers which secure the existing inlet fitting or air strainer to the compressor inlet cavity.
- 2. Remove the inlet fitting or air strainer and its gasket.
- 3. Thoroughly clean the gasket surfaces of both the compressor inlet cavity and the inlet fitting or air strainer.
- 4. Install the inlet check valve (ICV) components in the manner and sequence illustrated in Figure 1, making certain that:
 - A. The locating pin holes in the check valve (2), gasket (1), and the check valve stop (4) are aligned and will mate with the corresponding pin installed in the check valve seat (3).
- B. One of the three gaskets (1) furnished is installed between the check valve stop (4) and the inlet check valve (2). Note: All three gaskets (1) furnished in this kit are identical and may be used in any position in the ICV assembly. However, DO NOT SUBSTITUTE OTHER INLET GASKETS in this position. The thickness of the gaskets (1) furnished in this kit contribute to the required valve travel.
- C. The free end or tip of the ICV (2) is positioned over the machined stop in the check valve stop (4).
- D. No gasket is used between the check valve (2) and the seat (3).

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 guidelines should be observed AT ALL TIMES:

- ▲ Park the vehicle on a level surface, apply the parking brakes and always block the wheels. Always wear personal protection equipment.
- ▲ Stop the engine and remove the 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.
- ▲ 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.
- ▲ 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, a Bendix[®] DRM[™] dryer reservoir module, or a Bendix[®] AD-9si[®] air dryer, be sure to drain the purge reservoir.
- ▲ Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in a manner that safely removes all electrical power from the vehicle.
- ▲ Never exceed manufacturer's recommended pressures.
- ▲ Never connect or disconnect a hose or line containing pressure; it may whip and/or cause hazardous airborne dust and dirt particles. Wear eye protection. Slowly open connections with care, and verify that no pressure is present. Never remove a component or plug unless you are certain all system pressure has been depleted.
- ▲ Use only genuine Bendix[®] brand replacement parts, components and kits. Replacement hardware, tubing, hose, fittings, wiring, etc. must be of equivalent size, type and strength as original equipment and be designed specifically for such applications and systems.
- ▲ 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.
- ▲ Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.
- ▲ 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.
- ▲ The power MUST be temporarily disconnected from the radar sensor whenever any tests USING A DYNAMOMETER are conducted on a vehicle equipped with a Bendix[®] Wingman[®] system.
- ▲ You should consult the vehicle manufacturer's operating and service manuals, and any related literature, in conjunction with the Guidelines above.

 Secure the ICV components and inlet fitting or air strainer to the compressor inlet cavity using two lock washers, 5/16"-18 cap screws or studs and nuts. Torque both cap screws or stud nuts to 125-150 lb-in (14.12-16.95 Nm.).

Note: The assembled ICV is approximately 5/8" thick and will require cap screws or studs of the appropriate length to secure it to the compressor inlet. If the existing cap screws or studs are not long enough, replace them using grade 5 cap screws or studs of the proper length.

6. Perform the Operation Test.

OPERATION TEST

- 1. Before placing the vehicle back into service, close all reservoir drain cocks, start the engine, and build air pressure.
- 2. System air pressure should rise to governor cutout and the compressor should unload in a normal fashion. Should the system fail to build, inspect the ICV installation paying particular attention to the position of the check valve (2), check valve stop (4), and check valve seat (3) relative to the compressor inlet cavity (*Refer to Figure 1*).





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