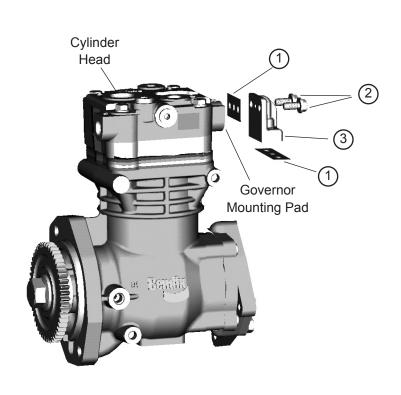
Installation Instructions



BENDIX® BA-921® & BA-922® AIR COMPRESSOR GOVERNOR ADAPTER KIT





Bendix BA-921 Compressor



Bendix BA-922 Compressor

Governor Adapter Kit used for both the Bendix® BA-921® and BA-922® Compressors

Kit Contents		
Item No.	Description	Qty.
1	Gasket	2
2	Bolt with Washer	2
3	Adapter	1

Figure 1 – Governor Installation Exploded View (Bendix® BA-921® Compressor shown)

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.

VEHICLE PREPARATION

These instructions are general and are intended to be a guide. In some cases additional preparations and precautions are necessary. In all cases, follow the instructions contained in the vehicle maintenance manual in lieu of the instructions, precautions, and procedures presented in this document.

- 1. Block the wheels of the vehicle and drain the air pressure from all the reservoirs in the system.
- 2. Remove as much road dirt and grease from the exterior of the compressor as possible.

INSTALLING GOVERNOR ADAPTER KIT

- Locate the governor mounting pad on the Bendix® BA-921® or BA-922® compressor cylinder head. Note and mark the position of the existing hardware (governor or governor adapter). Disconnect any air lines and remove the existing hardware. (Refer to Figure 1.)
- 2. Remove and discard the governor adapter mounting bolts (2), then the governor adapter (3) and gaskets (1).
- 3. Carefully remove any remaining gasket material from the governor mounting pad on the cylinder head. Make certain not to gouge or nick the gasket sealing surface of the pad. (*Refer to Figure 1.*)
- Position one of the gaskets (1) provided in the kit between the governor adapter (3) and the cylinder head mounting pad. Using the adapter bolts and washers (2) provided, secure the adapter to the head. Torque the bolts to 131-160 in-lbs. (*Refer to Figure 1*.)
- 5. A second gasket (1) is provided for use between the adapter (3) and the governor.
- Follow the instructions under "Returning The Vehicle To Service" within this document.

RETURNING THE VEHICLE TO SERVICE

- 1. Install any supporting bracketry on the compressor in the same position noted and marked during removal.
- Install the discharge, inlet, and governor adapter fittings, if applicable, in the same position on the compressor as noted and marked during disassembly. Make certain the threads are clean and the fittings are free of corrosion. Replace as necessary. See the Torque Specifications for various fitting sizes and thread types.
- Inspect all air, oil, and coolant lines and fittings before reconnecting them to the compressor. Make certain o-ring seals are in good condition. Check all hose clamps.
- 4. Before returning the vehicle to service, perform the Operation and Leakage Tests detailed in this instruction sheet. Pay particular attention to all lines reconnected during installation and check for air, oil, and coolant leaks at compressor connections. Also, check for noisy operation and repair and/or replace components as necessary.

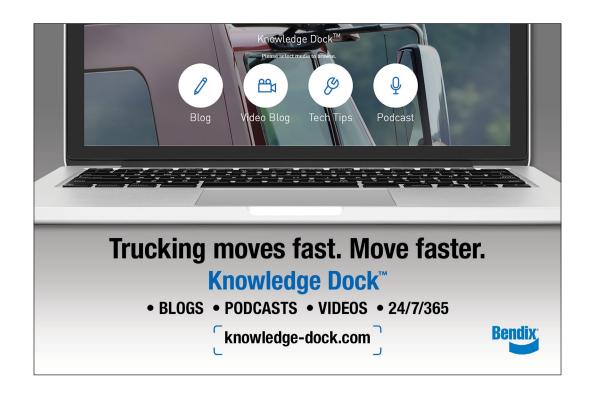
OPERATION & LEAKAGE TESTS

- 1. Start the engine and note that the air system steadily builds pressure.
- 2. With system air pressure increasing, check for cylinder head gasket air leakage. Apply a soap solution around the cylinder head. Check the gaskets between the cylinder head, cooling plate, and valve plate assembly for air leakage. No leakage is permitted. If leakage is detected, try re-torquing the head bolts after draining all air pressure. Replace the compressor if replacing the head gasket has not resolved the leakage problem.
- 3. Allow air system pressure to build and note that the compressor unloads properly at the specified governor cut-out pressure. Repeat this test three times, noting that the compressor unloads at approximately the same pressure each time. If the compressor fails to unload by at least 150 psi system pressure, check all air lines to and from the governor. Make certain each line is clear (unobstructed) and not kinked or leaking. Repair or replace the governor as needed. If an unloader kit was also installed, recheck the installation.
- 4. More complete compressor performance tests are provided in the Bendix Service Data sheet SD-01-690 for the Bendix BA-921 Compressor and SD-01-700 for the Bendix BA-922 Compressor. These publications are available on-line at bendix.com or by calling the Bendix Tech Team at 1-800-AIR-BRAKE (1-800-247-2725).

TORQUE SPECIFICATIONS

Bolt, Fitting, Nut, or Screw	. Assembly Torque
Adapter Bolts M8 x 1.25-6g 5/16"-18 UNC-2A	
<u>Inlet Port Fittings</u> 1-3/16"-12 UN-2B 1" - 12-1/2 NPT	
<u>Discharge Port Fittings</u> 7/8"-14 UNF	
Water Port Fittings 3/4"-16 UNF	
Unloader Port Fittings 1/8"-27 NPT	2-3 TFFT ¹
<u>Safety Valve Port</u> 3/4"-16 UNF	
<u>Oil Port</u> 7/16"-16 UNF	97-115 in-lbs

¹Note: TFFT = Turns From Finger Tight





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