



Installation Instructions

AIR DRYER HEATER & THERMOSTAT REPLACEMENT KIT

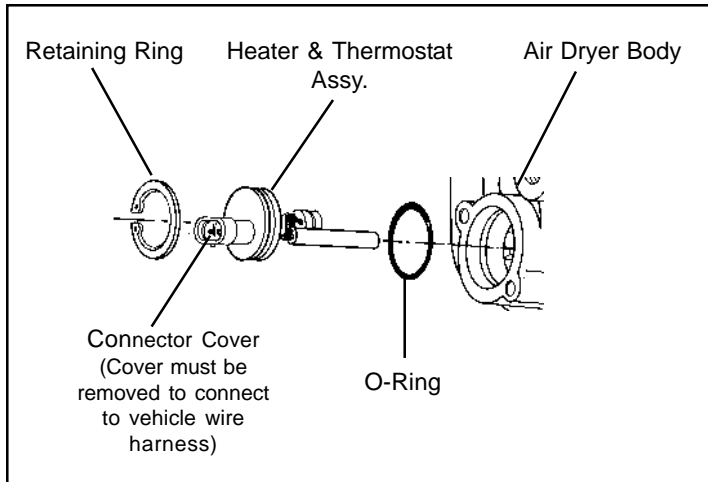


Figure 1 Air Dryer Heater and Thermostat Replacement Assembly

This kit contains the following parts;

Qty.	Description
1	O-Ring
1	Heater & Thermostat Assy. w/Protective Connector Cover
1	Retaining ring
1	Dielectric grease
1	Silicone grease

KIT DESCRIPTION

This kit is intended for use in servicing the Heater & Thermostat in all Bendix air dryers, **except** the AD-2, 3, 4 & 9.

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.

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. (0 kPa).
3. Turn ignition switch off.
4. Clean the exterior of the air dryer body.

DISASSEMBLY

General

This maintenance kit does not generally require removal of the air dryer from the vehicle however if removal is necessary adhere to the following caution.

Caution: While performing service on the air dryer, it is not recommended that a clamping device (vise, C-clamp, etc.) be used to hold any die cast aluminum component as damage may result. To hold the body, install a pipe nipple in the supply port and clamp the nipple in a vise.

1. Disconnect the vehicle wiring harness connector that mates with the heater and thermostat connector on the air dryer body.
Note: Lift the lock tab on the vehicle wire harness connector BEFORE attempting to disconnect the connector.
Make sure accordion seal is present on the vehicle wiring harness connector.
2. Remove and discard the retaining ring that secures the heater and thermostat assembly in the air dryer body.
3. Carefully pull the heater and thermostat assembly straight out of the air dryer body and discard.
2. Install the o-ring on the heater and thermostat assembly, then slide the heater and thermostat assembly into the body making certain not to damage the o-ring.
Note: Typically there is an indicator (a tab, lug or other) on the heater/thermostat assembly which aligns with the corresponding slot or channel in the air dryer body. [For example, the AD-IS uses the thermostat bore instead of a slot or channel for alignment.]
3. Install the retaining ring in the groove in the air dryer body, making certain that it is fully seated in the groove. *Note: If you experience any problem installing the retaining ring, make sure that the heater/thermostat assembly is aligned correctly (see Note above).*

CLEANING & INSPECTION

1. Using a clean rag, wipe the body bores clean.
2. Inspect for physical damage to the body casting, broken and or missing parts.
3. Inspect the interior and exterior of the body for severe corrosion, pitting and cracks. Superficial corrosion and or pitting on the exterior portion is acceptable.
4. If any of the conditions in steps 2 & 3 are noted replace the air dryer or the appropriate parts.
4. Remove the protective connector cover from the heater and thermostat assembly.
5. Before proceeding, turn the **ignition switch ON without starting the engine**. Make certain vehicle power is present at the contacts on the vehicle wire harness. If vehicle power is not detected, troubleshoot the vehicle wire harness beginning at the fuse or circuit breaker. Turn the **ignition switch OFF**.

ASSEMBLY

1. Lubricate the heater and thermostat assembly o-ring groove and the o-ring with a silicone grease. Do not grease the stick heater or thermostat. *Note: Use only the silicone grease packaged with this kit.*
6. Apply the dielectric grease, packaged in this kit on the heater and thermostat connector contacts (both the air dryer heater and thermostat and vehicle wiring harness connector halves).
7. After making certain the accordion seal is in place on the vehicle wire harness connector, connect the wire harness to the heater and thermostat assembly on the dryer. Push the wire harness onto the heater connector until the lock tab "clicks" into place.
8. Before placing vehicle back into service, make certain all reservoir drain cocks are closed.