

# Installation Instructions



## Bendix® GSAT® (Global Scalable Air Treatment) Detached Air Dryer Heater Kit for Volvo® Trucks

### KIT COMPONENTS

The following components are in the Bendix® GSAT® (Global Scalable Air Treatment) detached air dryer heater kit for Volvo® trucks:

Component	Quantity
Heater	1
Grease	1

Bendix Kit Part Number: K181755K57  
Volvo/Mack® Kit Part Number: 23771619

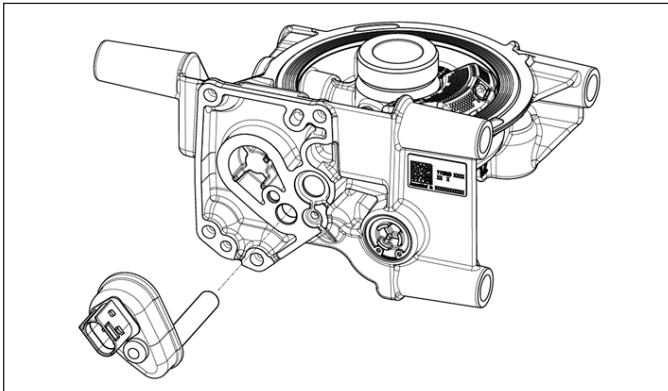


Figure 1 – Detached Air Dryer Heater Kit

### VEHICLE PREPARATION

1. Park the vehicle on a level surface and chock the wheels.
2. Turn the ignition switch OFF.
3. Drain all reservoirs to 0 psi (0 kpa).
4. Clean the exterior of the air dryer body to remove any dirt and debris.



**Always depressurize the air dryer and all other reservoirs on the vehicle to 0 psi (0 kpa) before servicing the air dryer.**

### 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, a Bendix® AD-9si®, AD-HF®, or AD-HFi™ 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.

## DISASSEMBLY

### General

**NOTE:** 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:



**While performing service on the Bendix® GSAT® (Global Scalable Air Treatment) air dryer, do not use a clamping device directly on any die cast aluminum component as damage may result. Instead, install a fitting in the supply port and clamp the fitting into a vise.**

1. Disconnect the vehicle wiring harness connector that mates with the heater and connector on the air dryer body.

**NOTE:** Lift the lock tab on the vehicle wiring harness connector BEFORE attempting to disconnect the connector.

2. Unscrew the mounting screw that secures the heater assembly to the air dryer body using a T-30 Torx® drive. See Figure 2.
3. Carefully pull the heater assembly straight out of the air dryer body and discard.

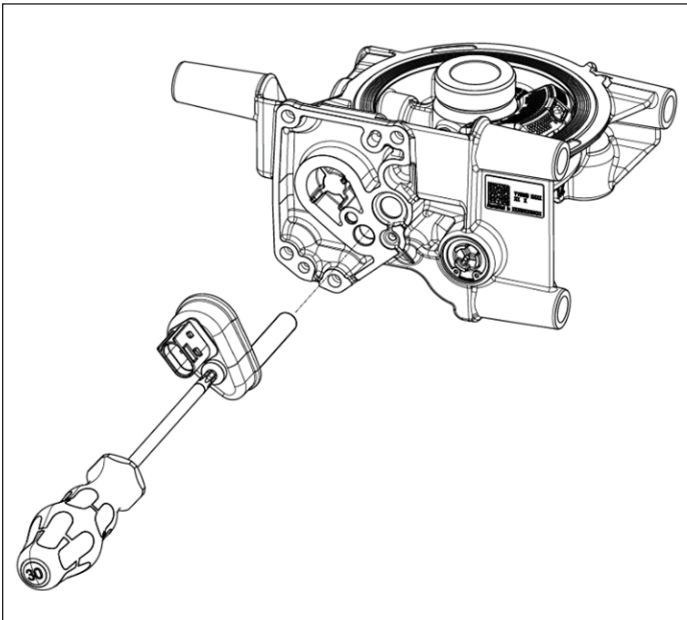


Figure 2 – Disassembly

## Cleaning and Inspection

1. Using a clean rag, wipe the air dryer body bores clean, taking care to not knock contamination into the bores.
2. Inspect for physical damage to the body casting and take note of broken 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. Inspect the bores, valve seating, and o-ring contact areas for deep scuffing, gouges, or nicks that would not permit an air-tight seal. Inspect all air line fittings for corrosion.

**NOTE:** If any of the conditions in Steps 2 to 4 are noted, replace the GSAT air dryer.

## ASSEMBLY

1. Lubricate the heater assembly perimeter seal and the screw o-ring with the silicone grease provided in this kit. Do not grease the ceramic heater or thermostat.

**NOTE:** Use only the silicone grease packaged with this kit.

2. Slide the heater assembly into the body, making certain not to damage the seals.

**NOTE:** There is an alignment feature on the air dryer body assembly which will align with the heater assembly.

3. Secure the heater assembly to the air dryer body with the mounting screw using a T-30 Torx drive to a torque of 28 in-lb (3.2 N•m).
4. Before proceeding, turn the ignition switch ON without starting the engine. Ensure vehicle power is present at the contacts on the vehicle wiring harness. Connect the wiring harness to the heater assembly on the air dryer. Push the wiring harness onto the heater connector until connector stops, and compress the locking feature, thereby securing the wiring harness in place.
5. Before placing vehicle back into service, ensure all reservoir drain cocks are closed, ensure there are no active Diagnostic Trouble Codes (DTCs), and check for proper vehicle operation prior to returning the vehicle to service.

## TECHNICAL ASSISTANCE

For additional assistance, the Bendix Tech Team can be reached by email at [techteam@bendix.com](mailto:techteam@bendix.com) or by phone at 1-800-AIR-BRAKE (1-800-247-2725), option 2. Representatives are available Monday through Thursday, 8:00 a.m. – 6:00 p.m., and Friday, 8:00 a.m. – 5:00 p.m. ET.

