



# Installation Instructions

## AT-2 Cover Plate Installation AntiLock Traction Relay

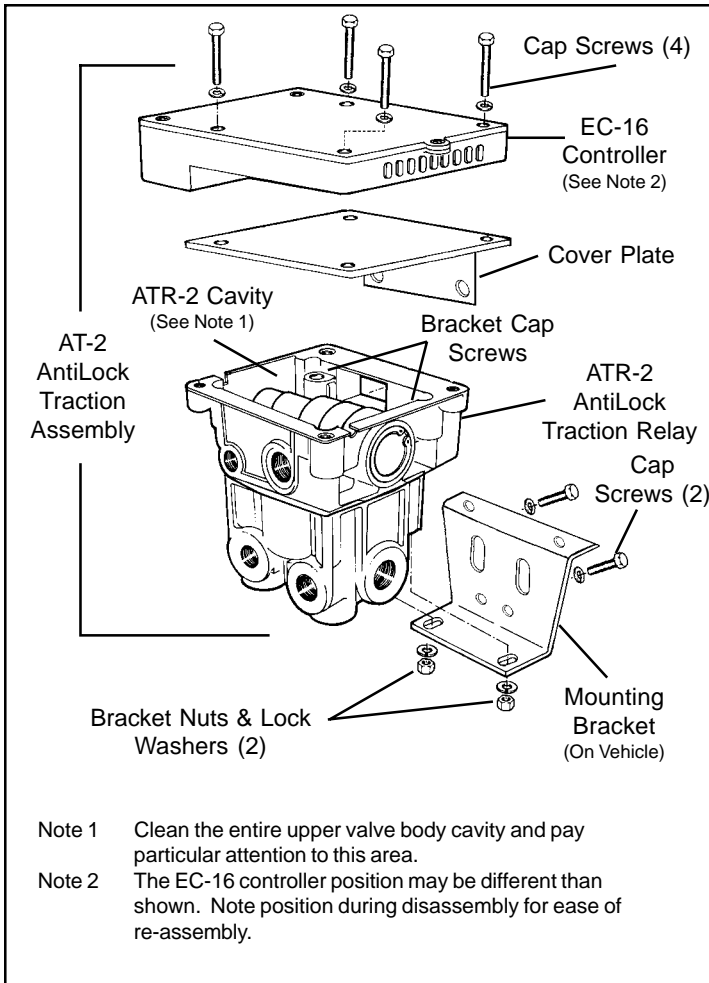


Figure 1 AT-2 (ATR-2) Cover Plate Installation

### DESCRIPTION

The following instructions describe the procedures necessary to install a cover plate on the ATR-2 antilock traction relay valve portion of the AlliedSignal Bendix AT-2 antilock traction assembly. The cover plate offers added protection against contamination.

### **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.

### PREPARATION

#### General

The installation of the cover plate generally requires removal of the antilock traction relay valve from the vehicle. Adhere to the following caution.

*Caution: While performing service on the valve, 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.*

1. Locate the AT-2 assembly on the cross member beneath the fifth wheel.
2. Clean the exterior of the AT-2 assembly and air lines connected to it.
3. Remove or loosen tie wraps or tubing clamps used to secure air lines connected to the AT-2 assembly.

#### **REMOVING THE EC-16 CONTROLLER & ATR-2 VALVE**

1. Remove and retain the four cap screws and washers that secure the EC-16 controller to the ATR-2 AntiLock Traction Relay valve .
2. Remove the two lock washers and nuts that secure the bracket to the bottom of the ATR-2 valve. [Note: If necessary the hex heads of the bracket cap screws can be held and are 2 of four found inside the cavity in the upper portion of the ATR-2. These screws are located closest to the bracket and extend through the upper and lower valve body.]
3. Remove and retain the two cap screws, that secure the rear of the ATR-2 valve to the mounting bracket.
4. Separate the ATR-2 valve from the mounting bracket. Disconnecting the air lines from the ATR-2 should not be necessary.

#### **CLEANING AND INSPECTION**

1. Thoroughly clean all contaminants from the cavity in the upper ATR-2 valve body. *Pay particular attention to the area indicated in figure 1 and make certain all loose debris is removed.*

#### **INSTALLING THE NEW COVER PLATE**

1. Position the cover plate over the ATR-2 cavity, as illustrated in figure 1, so that the vertical portion will be between the ATR-2 and the vehicle mounting bracket. Position the solenoid wire grommet and make certain that the solenoid wires are not pinched between the cover plate and ATR-2 valve.
2. Position the ATR-2 on the mounting bracket and secure the bracket, cover plate and ATR-2 together using the cap screws removed during Step 4 of the removal process. Note: Do not tighten the cap screws completely at this time.
3. Further secure the ATR-2 valve to the mounting bracket by installing the two lock washers and nuts removed during step 2 of the removal process. Tighten both and, if necessary, hold the screw heads located in the cavity of the ATR-2 (see figure 1).
4. Tighten the bracket screws installed in step 2 of this section.
5. Secure the EC-16 controller to the ATR-2 valve using the four cap screws and washers removed during step 1 of the removal process.
6. Tighten any hose clamps that were loosened during step 2 of the Vehicle Preparation. Using the tie wraps provided, replace any tie wraps that were removed during preparation.
7. Before placing the vehicle in service, test the air line connections to the ATR valve for leakage and tighten or reinstall as required.

