



Installation Instructions

AT-1 AND 2 ANTILOCK TRACTION ASSEMBLY

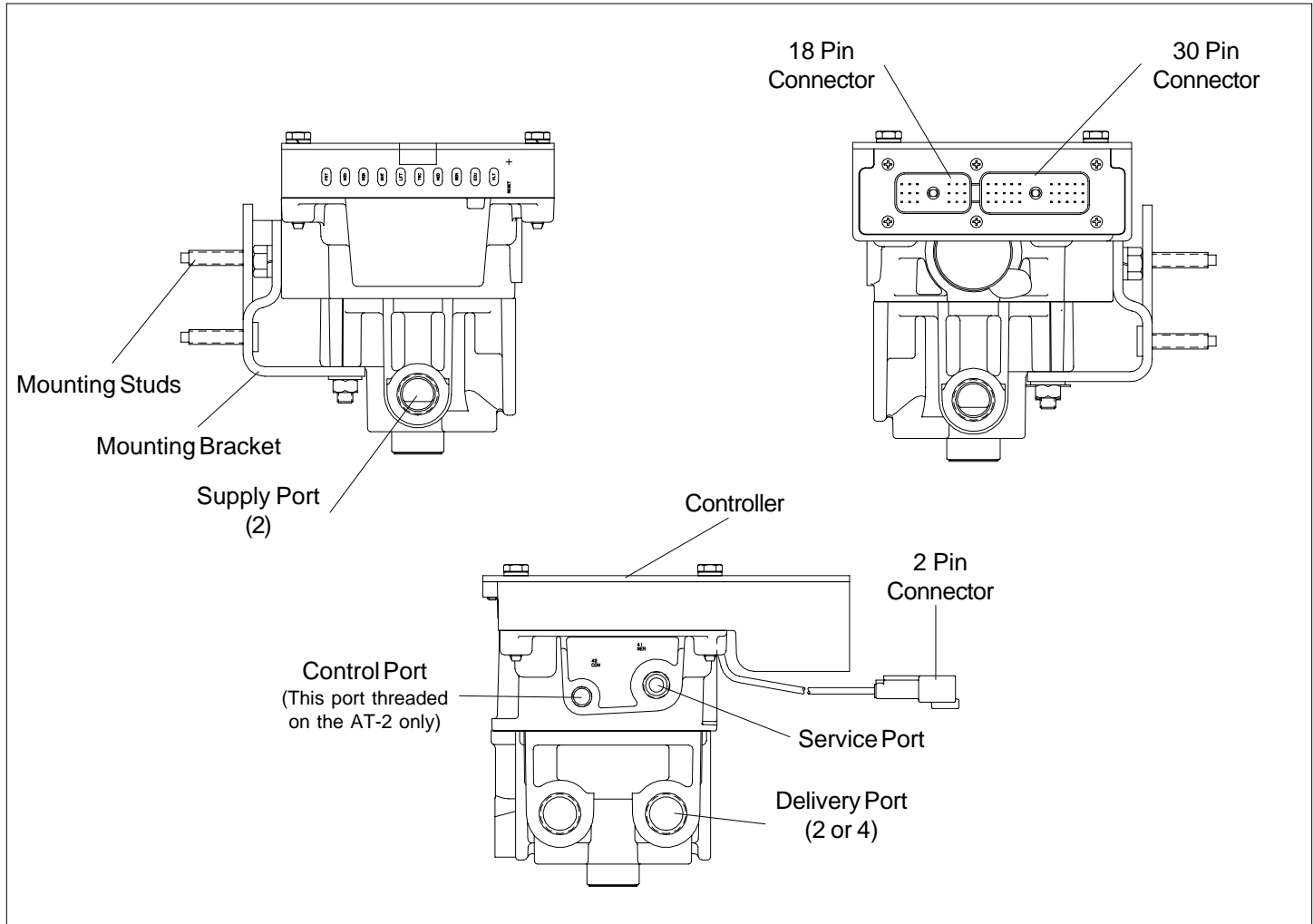


FIGURE 1 AT-1 AntiLock Traction Assembly

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.**
3. Connect air lines to their appropriate ports, as marked or identified in "AT-1 or AT-2 REMOVAL."
 4. Refer to figure 1 when installing the AT-1 or AT-2 wire harness assemblies. Identify each connector and note the position of locating lugs and grooves on the connector halves. **DO NOT FORCE CONNECTOR HALVES TOGETHER.**
 5. Connect the wire harness connectors to the electronic controller and secure the 18 and 30 pin connectors by gently tightening the center securing bolts (Do not over tighten these bolts).
 6. Perform the OPERATION and LEAKAGE TESTS presented in this instruction sheet.

AT-1 or AT-2 REMOVAL

1. Identify and mark or label all air lines and fittings connected to, or installed in, the AT-1 or AT-2. Note the position of the fittings.
2. Disconnect air lines and remove all fittings and plugs from the AT-1 or AT-2.
3. Disconnect all three (3) electrical connectors (Refer to figure 1)
 - 18 Pin connector (See Note Below)
 - 30 Pin connector (See Note Below)
 - 2 Pin connector

NOTE: Loosen the securing bolt at the center of the connector before attempting to separate the connector from the rear of the controller.
4. Remove the AT-1 or AT-2 from the vehicle.

CLEANING & INSPECTION

Look for any visible damage to the connectors, wiring harnesses, air line fittings and mounting hardware. Repair or replace any damaged components. Clean all thread sealer from the pipe threads of air fittings that will be used again.

AT-1 or AT-2 INSTALLATION

1. Install the air line fittings in the appropriate ports of the replacement AT-1 or AT-2 assembly, as identified during "AT-1 or AT-2 REMOVAL." If thread sealer is used, make certain this material does not enter the valve.
2. Install the AT-1 or AT-2 on the vehicle.

OPERATION & LEAKAGE TESTS

The following tests are intended to check for correct installation of the AT-1 or AT-2. Complete Operation and Leakage tests for the ATR-1 or ATR-2 AntiLock Relay (lower half of the AT-1 or AT-2) are presented in Bendix Service Data Sheet SD-13-4811 & 4812, available through any authorized Bendix parts outlet.

OPERATING TEST

1. After installing the AT-1 or AT-2 on the vehicle, build the vehicle system air pressure to governor cut-out.
2. Apply and release the brakes several times and check for prompt application and release at each wheel.
 - A. If prompt reaction is noted at all wheels, proceed to the LEAKAGE TESTS
 - B. If prompt reaction is noted at some, but not all rear wheels, test the AntiLock modulator between the AT-1 or AT-2 and the brake chamber for proper operation. If a "sluggish" response is noted at all rear wheels, inspect for a kinked or obstructed air line leading to or from the AT-1 or AT-2.

LEAKAGE TESTS

1. Build the air system pressure to governor cut-out, and hold the brakes applied. Apply a soap solution to all air fittings and check for leakage. Tighten fittings as needed.
2. Before placing the vehicle back in service, test the AntiLock system according to Troubleshooting Instructions S-1135.