

Installation Instructions

CR-16 ANTILOCK ASSEMBLY

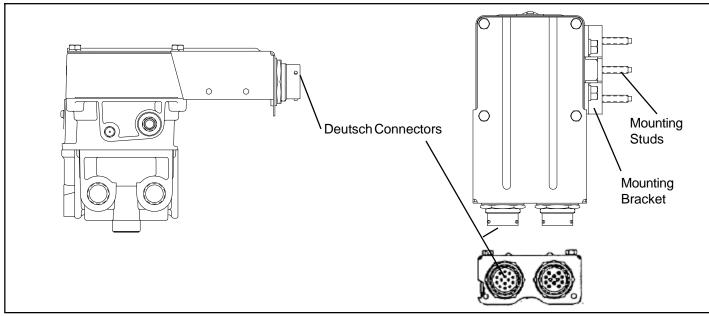


Figure 1 CR-16 Controller Relay Assembly (2-14 Pin Deutsch Connectors)

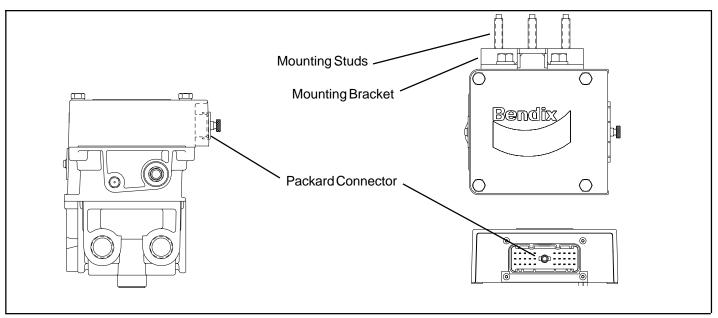


Figure 2 CR-16 Controller Relay Assembly (30 Pin Packard Connector)

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.
- 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.
- 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.

CR-16 REMOVAL

- 1. Identify and mark or label all air lines and fittings connected to, or installed in, the CR-16.
- 2. Disconnect air lines and remove all fittings and plugs from the CR-16.
- Disconnect the electrical connector(s) (Refer to figures 1 & 2) Note the type of connector in use and disconnect appropriately.
- 4. Remove the CR-16 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.

CR-15 INSTALLATION

- Install the air line fittings in the appropriate ports of the replacement CR-16 assembly, as identified during "CR-16 REMOVAL."
 If thread sealer is used, make certain this material does
- not enter the CR-16.

 2. Install the CR-16 on the vehicle.
- 3. Connect air lines to their appropriate ports, as marked or identified in "CR-16 REMOVAL."
- 4. Refer to figures 1 & 2 when installing the CR-16 wire harness assembly(ies). Identify the type of connector in use and note the position of locating pins or lugs on the connector halves. DO NOT FORCE THE CONNECTOR HALVES TOGETHER.
- 5. Connect the wire harness connector(s) to the electronic controller and secure appropriately.
- 6. Perform the Operation and Leakage Tests presented in this Instruction Sheet.

OPERATING TESTS

- After re-installing the CR-16 on the tractor, connect the tractor service and emergency "glad hands" (hose couplings) to dummy connectors, or alternatively, to a trailer. Build the tractor system air pressure to governor cut-out.
- Activate the trailer supply valve (dash control w/red octagonal button) and system park control (dash control w/yellow diamond button) for tractor/trailer operation.
- 3. Apply and release the brakes several times and check for prompt application and release at each wheel. If prompt reaction is noted at some, but <u>not all</u> rear wheels, test the AntiLock modulator between the CR-16 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 CR-16.
- 4. If a complete release of the brakes is noted at some, but not all rear wheels, test the AntiLock modulator between the CR-16 and the brake chamber for proper operation. If an incomplete release is noted at all rear wheels, inspect for a kinked or obstructed air line leading to the CR-16.

LEAKAGE TESTS

- Build the air system pressure to governor cut-out. Activate the dash mounted trailer supply valve for tractor/ trailer operation.
- 2. Make and hold a full brake application and apply a soap solution to all air fittings and check for leakage. Tighten as needed.
- Before placing the vehicle back in service, test the AntiLock system according to Troubleshooting Instructions S-1103.