



Installation Instructions

MC-12 TO MC-30 SERVICE REPLACEMENT KIT

IMPORTANT NOTES FOR KIT USE

Special instructions for replacing MC-12 units that were directly bolted to the trailer chassis

The following steps are intended to be used together with the Bendix MC-30 ABS Service Data Sheet (SD-13-4834).

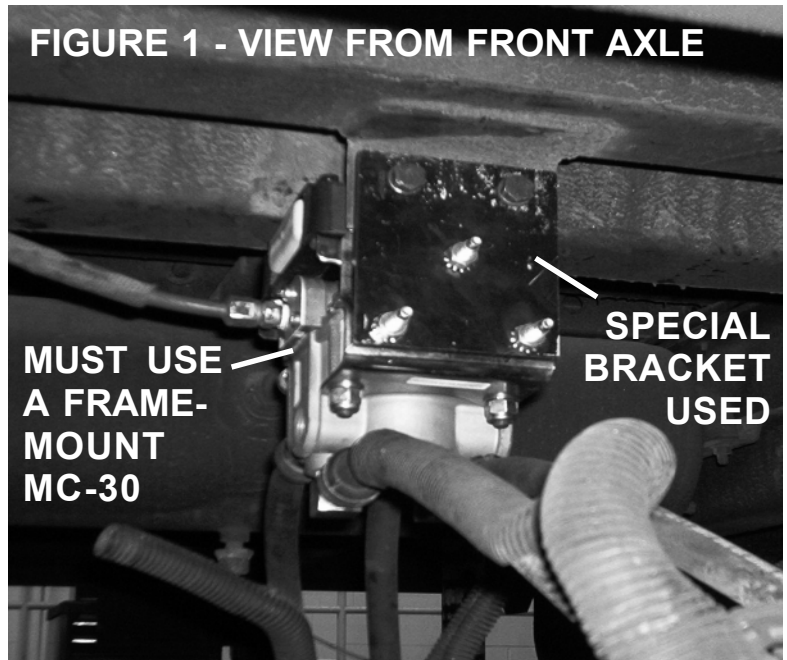
IMPORTANT

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.

FIGURE 1 - VIEW FROM FRONT AXLE



REPLACING THE MC-12 WITH AN MC-30 KIT

1. Disconnect the power connector and wheel speed sensors from the MC-12 pigtail harness.
2. Remove all air lines connected to the unit. (Use spray lubricant on the swivel fittings of the delivery lines before attempting to remove them.)
3. Remove the MC-12 assembly and pigtail from the vehicle by removing the mounting bracket nuts.
4. Install the new pigtail, starting at the power connector and properly securing the harness every 18 inches to the ECU location.
5. Position and secure the new ABS unit in the original mounting orientation.

Note: Use frame (bracket) mount unit – Torque all mounting nuts to 180-220 in-lbs. Install special mounting bracket as required.

CAUTION: If the unit being replaced was directly bolted between the chassis and the relay body, a special bracket must be installed along with a studded frame bracket MC-30 unit. **DO NOT ATTEMPT TO INSTALL A TANK MOUNT MC-30 UNIT BY BOLTING DIRECTLY TO THE ECU BRACKET.**

6. Reconnect all air lines and plugs to the modulator-valve assembly. Do not use Teflon tape, and make certain that no thread sealing material enters the valve. Check all air lines and fittings for leaks prior to returning the vehicle to service.
7. Reconnect the ECU, modulator and sensor electrical connectors to the pigtail. Torque the 30-pin ECU connector jack-screw to 15-20 in. lbs. Over-tightening the jack-screw can cause damage to the ECU.
8. Perform a Service Check and an Operational and Leakage Test according to Bendix MC-30 ABS Service Data Sheet SD-13-4834. Also refer to the SD sheet if more detailed instructions on MC-30 configuration, troubleshooting and testing are needed.

SPECIAL MOUNTING CONSIDERATIONS:

- A bracket (frame) mount MC-30 with a special mounting bracket must be used for this MC-12 replacement. Mount the ABS unit and bracket as shown in the picture.
- Use two 90 deg fittings for connecting the forward axle delivery lines to the MC-30. Inspect and re-use fittings taken from the original MC-12 unit as required.
- Remember to use spray lubricant on the swivel fittings of the delivery lines before attempting to remove them.

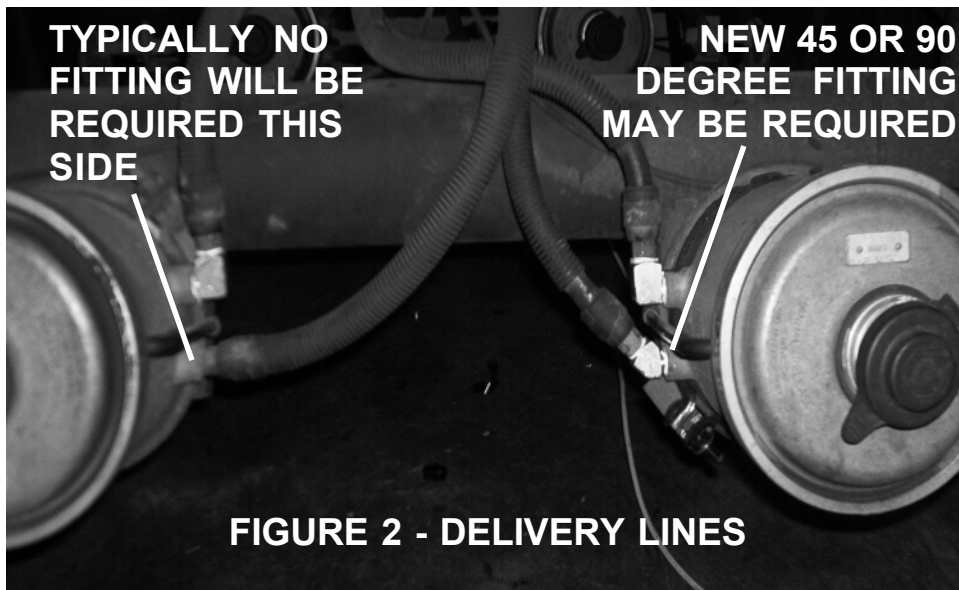


FIGURE 2 - DELIVERY LINES

- A 90 or 45 degree fitting may be needed to allow the delivery lines to loosely reach the new ABS unit without being too tight or dragging on the forward axle. See Figure 2.

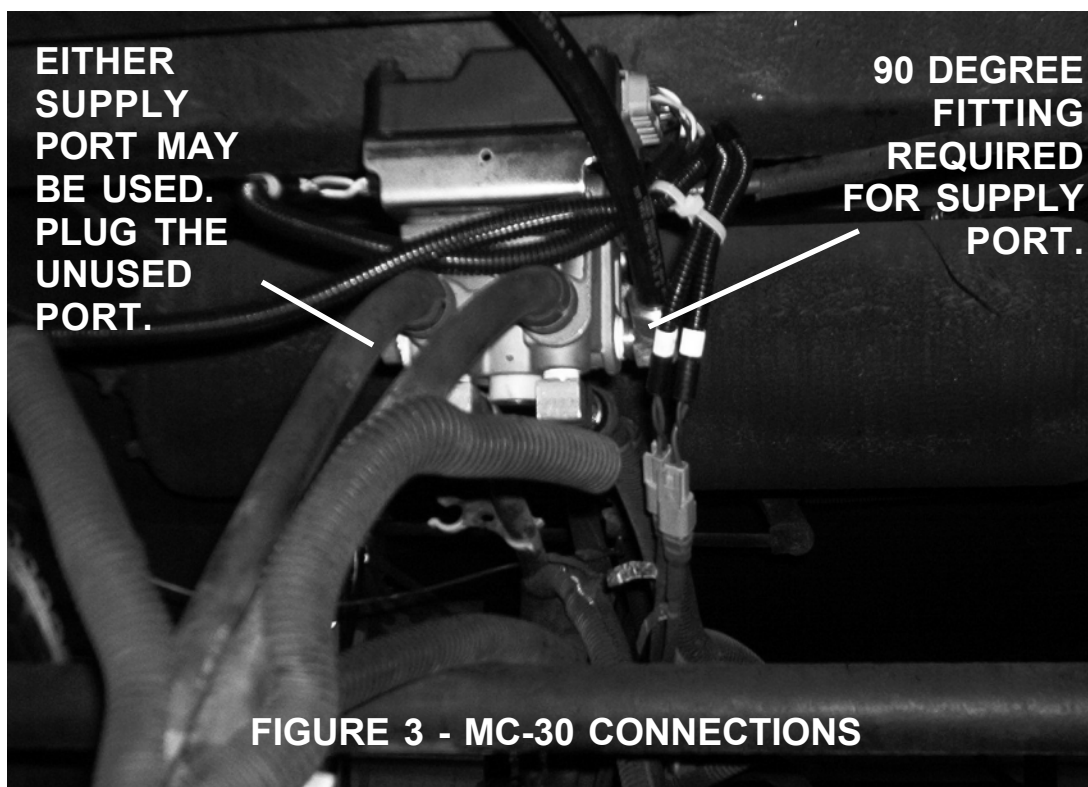


FIGURE 3 - MC-30 CONNECTIONS

- Connect the MC-30 wiring harness as shown in Figure 3.
- Install a 90 deg fitting into one of the supply ports from the synflex tubing coming from the supply tank. The other supply port must be plugged.