



Installation Instructions

Bracket Assembly Kits for Bendix® Wingman® FLR10™ Radar Sensors

GENERAL SAFETY GUIDELINES

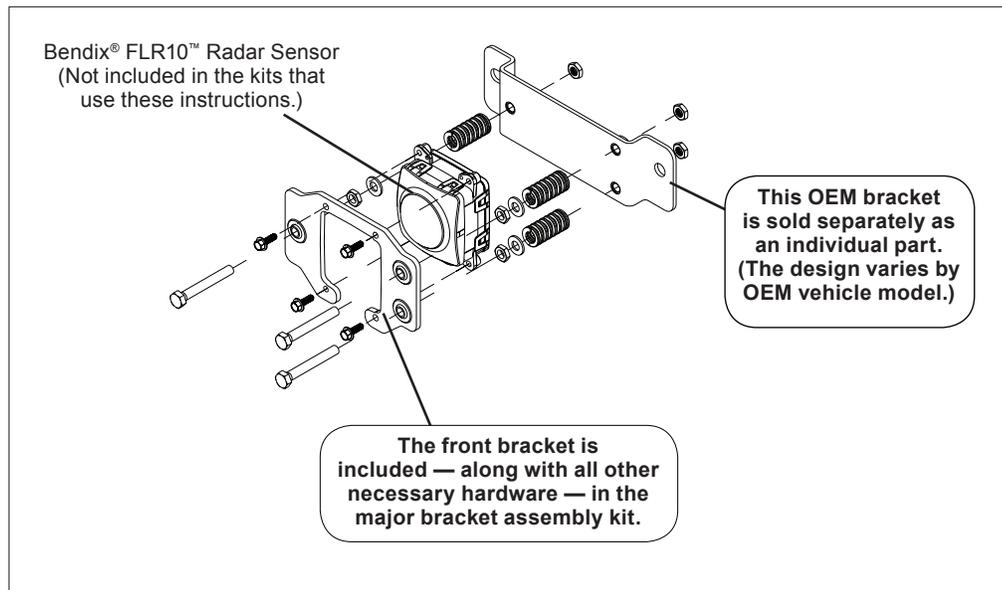
WARNING!

PLEASE READ AND FOLLOW THESE INSTRUCTIONS TO AVOID PERSONAL INJURY OR DEATH:

When working on or around a vehicle, the following 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. Always wear safety glasses.
2. Stop the engine and remove 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.
3. 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.
4. 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

5. on the vehicle. If the vehicle is equipped with a Bendix® AD-IS® air dryer system or a dryer reservoir module, be sure to drain the purge reservoir.
5. Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in a manner that safely removes all electrical power from the vehicle.
6. Never exceed manufacturer's recommended pressures.
7. 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.
8. Use only genuine Bendix® brand replacement parts, components and kits. Replacement hardware, tubing, hose, fittings, etc. must be of equivalent size, type and strength as original equipment and be designed specifically for such applications and systems.
9. 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.
10. Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.
11. 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 vehicle must be parked on level ground. Switch off the ignition and disconnect the battery. Read and understand this document before beginning work. *See the General Safety Guidelines above.*

These instructions assume that you are installing the major bracket assembly kit.

Removal

1. After removing, as necessary, any vehicle trim covering the radar sensor and bracket assembly, detach the harness connector. Be sure to protect the harness and connector from damage.
2. Remove and retain the two (2) OEM-specific fasteners attaching the assembly to the vehicle.
3. Remove the entire bracket assembly from the vehicle.
4. *In cases where the Radar Sensor and/or OEM bracket is to be re-used:* On a workbench, carefully disassemble the unit. Remove and retain the radar sensor/bracket.

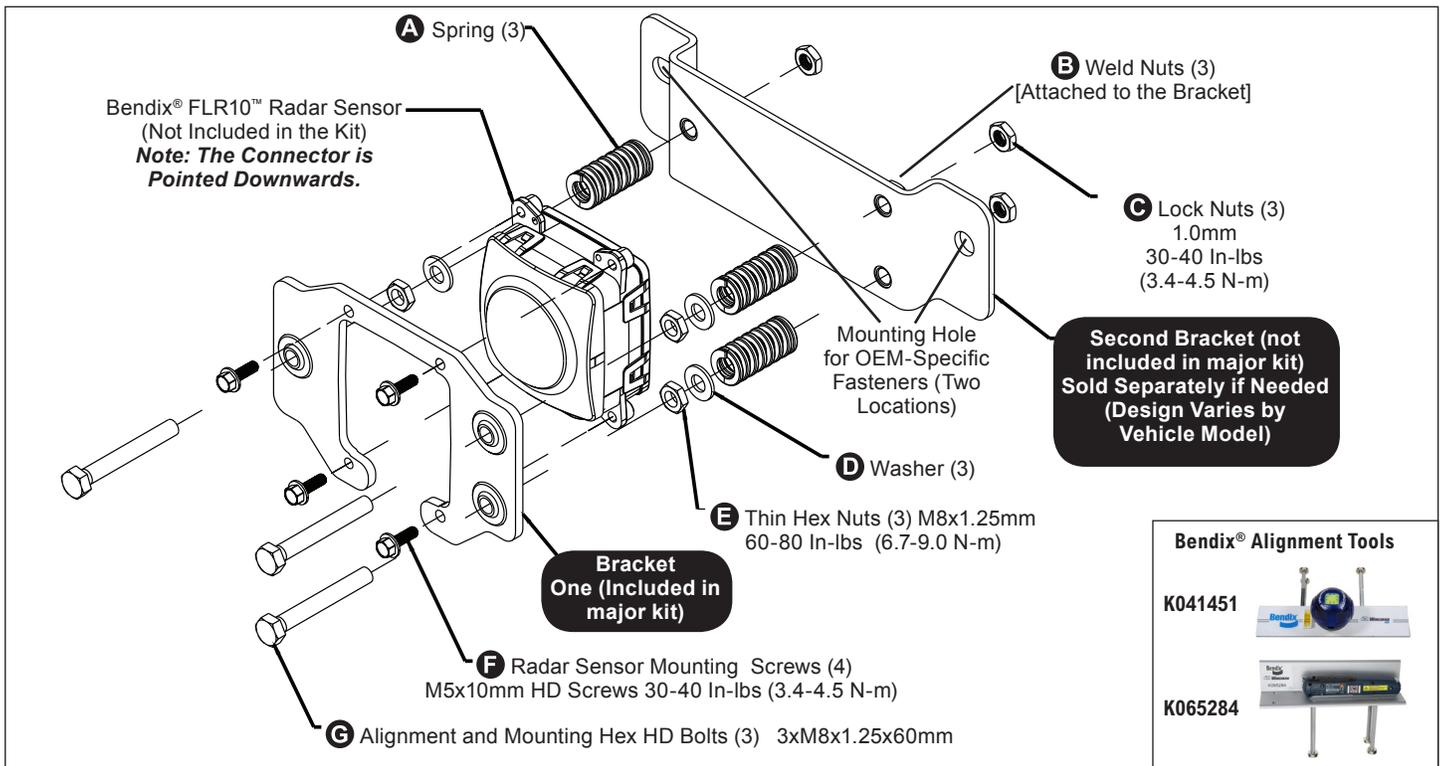


FIGURE 1 - EXPLODED VIEW OF KIT COMPONENTS

Assembly

Use the Assembly Torques shown in Figure 1.

1. Using the four Radar Sensor Mounting Screws **F**, install the radar sensor onto Bracket One. See Figure 1.
2. Install the three Alignment Adjustment and Mounting Bolts **G**, into Bracket One. Retain them in position using the Thin Hex Nuts **E**. Install the nuts to final torque.
3. Install a washer **D** and spring **A** onto each Alignment Bolt. Install onto the OEM bracket so that the thread extends through each of the weld nuts **B** 6 mm. See Figure 2. The three Lock Nuts **C** are then installed onto the end of the Alignment bolts **G**. The Lock Nuts are designed to only engage a few threads and then they will lock in place.
4. Install the combined Bracket assembly onto the vehicle using the two (2) OEM-specific fasteners retained in Step 1. Follow the vehicle manufacturer's torque.
5. Re-connect the harness to the radar sensor.
6. See Figure 1 for Bendix alignment tools. Align the radar laterally first; then vertically, using the Alignment Adjustment bolts **G**. See Figure 3.

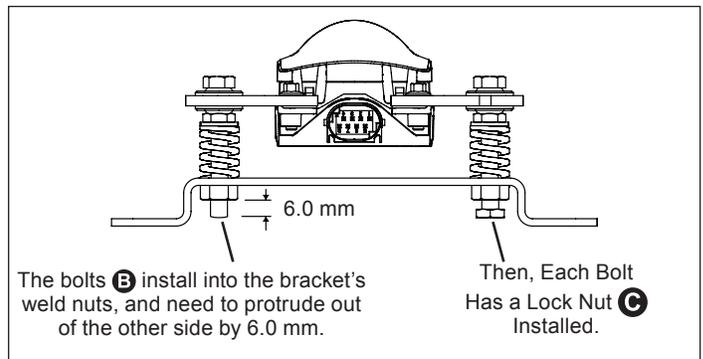


FIGURE 2 - BOLT INITIAL INSTALLATION

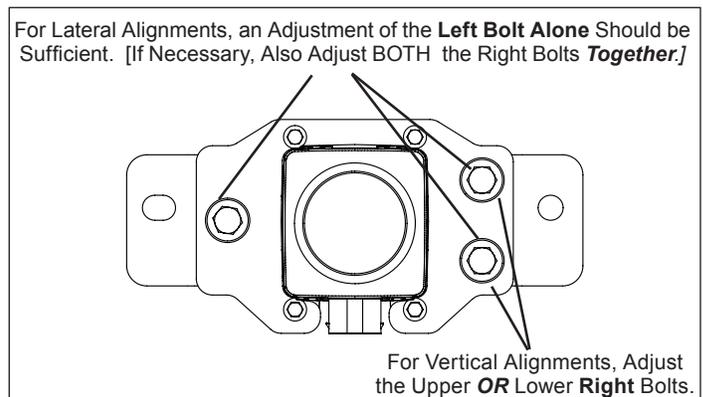


FIGURE 3 - ALIGNMENT ADJUSTMENT

Typical alignment procedures are shown in SD-61-4962 (previously SD-13-4962), or see the vehicle documentation.

7. Check for any Diagnostic Trouble Codes before returning the vehicle to service.