



Lowering / Lift Shackles

Note: Confirm that all of the hardware listed in the parts list is in the kit. **Do not** begin installation if any part is missing. Read the instructions thoroughly before beginning this installation.

Warning: DO NOT work under a vehicle supported by only a jack. Place support stands securely under the vehicle in the manufacturer's specified locations unless otherwise instructed.

Warning: DO NOT drive vehicle until all work has been completed and checked. Torque all hardware to values specified.

Reminder: Proper use of safety equipment and eye/face/hand protection is absolutely necessary when using these tools to perform procedures!

Note: It is very helpful to have an assistant available during installation.

RECOMMENDED TOOLS:

- Properly rated floor jack, support stands, and wheel chocks
- Combination wrench set
- Torque wrench: *50-250 lb ft. range*
- Ratcheting socket wrench and socket sets
- Safety Glasses

JACKING, SUPPORTING AND PREPARING THE VEHICLE

1. Open the hardware kit and remove all of the contents. Refer to the part list (Page 3) to verify that all parts are present.

2. Park the vehicle on a smooth, level concrete or seasoned asphalt surface and activate the parking brake. Block the FRONT wheels of the vehicle with appropriate wheel chocks; making sure the vehicle's transmission is in 1st gear (manual) or "Park" (automatic).

3. Using a properly rated floor jack, lift the REAR wheels of the vehicle off the ground. Place support stands, rated for the vehicle's weight, and in the factory specified locations. Refer to the vehicle Owner's Manual. Prior to lowering the vehicle onto the stands, make sure the supports will securely contact the chassis. It is very important that the vehicle is properly supported during this installation to prevent personal injury and chassis damage! Make sure that the supports stands are properly placed prior to performing the following procedures. We **DO NOT RECOMMEND** using wheel ramps while performing this installation.

4. Slowly lower the vehicle onto the stands and, before placing the vehicle's entire weight on them, again check that they properly and securely contact the chassis as described above.

5. Check for possible interference with any lines, wires, cables, or other easily damaged components.

SHACKLE INSTALLATION

1. Block the front wheel and raise the back of the truck. Place jack stands under the frame just ahead of the front spring hangers.

2. Position the rear end with a floor jack so there is no pressure on the leaf springs at the rear shackles. Remove the spring eyebolts from the shackle and remove it from the leaf spring.

CAUTION: Leaf springs are under tension, use caution when disconnecting.

3. Lift the rear of the spring up and place the new shackle on the spring. Make sure you put the spring eyebolt in from the inside out so the threads are toward the outside.

4. Lower the shackle into position, into the stock hanger on the frame and slide the spring eyebolt through the spring into place. Raise the truck with the floor jack just until the truck lifts off the stands. Now tighten the four spring eyebolts on the shackles. Remove the jack stands carefully and lower the truck to the ground. Your installation is now complete.

All hardware being fastened to the vehicle's original fastening points should be torqued to the proper specifications. To prevent chassis damage, never over-torque the hardware.

6. Check that all components and fasteners have been properly installed, tightened and torqued.

7. Check brake hoses, and other components for any possible interference.

8. Lift vehicle and remove support stands. Carefully lower vehicle to ground.

9. Immediately test-drive the vehicle in a remote location so that you can become accustomed to the revised driving characteristics and handling. Be aware that the vehicle will handle substantially different now that it has been modified.

10. Installation is complete. Check all of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.

SPECIAL INSTRUCTIONS

For the 513130 shackles

When installing the 513130 shackles you must fold the bed flange to one side or trim the flange for adequate shackle clearance.

It is helpful to bolt the shackle to the hanger and swing it thru its range of motion to see where the flange needs to be modified.

For the 513220 shackles

When installing the 513220 shackles you must trim the bed support just in front of the shackle.