

**ROUGH
COUNTRY**
SUSPENSION SYSTEMS



S-10 SPINDLE LOWERING KIT 2" FRONT & 2.5" REAR

Thank you for choosing Rough Country for all your suspension needs.

Rough Country recommends a certified technician install this system. In addition to these instructions, professional knowledge of disassemble/reassembly procedures as well as post installation checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating safety of the vehicle.

Please read instructions before beginning installation. Check the kit hardware against the kit contents list on the back page. Be sure you have all needed parts and know where they go. Also please review tools needed list and make sure you have the tools needed to install the kit.

PRODUCT USE INFORMATION

Generally, braking performance and capability are decreased when larger/heavier tires and wheels are used. Take this into consideration while driving. Do not add, alter, or fabricate any factory or after-market parts to decrease vehicle height over the intended height of the Rough Country product purchased. Mixing component brands is not recommended.

Rough Country makes no claims regarding lowering devices and excludes any and all implied claims. We will not be responsible for any product that is altered.

We will be happy to answer any questions concerning the design, function, and use of our products.

NOTICE TO DEALER AND VEHICLE OWNER

INSTALLING DEALER / OWNER - It is your responsibility to install the warning decal and forward these installation instructions on to the vehicle owner for review. These instructions should be kept in the vehicle for its service life.

Tools Needed:

11mm Wrench
13mm Wrench
18mm Wrench
21mm Wrench
3/4" Socket
7/8" Wrench
15/16" Wrench
3/8"mm Allen
Wrench
Channel Locks
Needle Nose Pliers
Floor Jack
Jack Stands



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FRONT INSTALLATION INSTRUCTIONS

1. Lift the front of the vehicle using a jack and support the vehicle with jack stands, so that the front wheels are off the ground
2. Remove the front tires/wheels., using a 3/4" deep well socket
3. Loosen the tie-rod using an 18mm wrench as shown in **Photo 1**. Do not remove nuts completely. Strike the side of the knuckle with a hammer to loosen the taper lock and then remove nut.
4. Remove brake caliper bolts using a 3/8" allen wrench as shown in **Photo 2**.



5. Remove the dust cap as shown in **Photo 3**.
6. Remove the cotter key and loosen the axle nut as shown in **Photo 4**. Remove the outside bearing then pull the rotor and inside bearing off the factory spindle.



7. Remove the backing plate as shown in **photo 5** with a 11mm and 13mm wrench. Be carefully not to damage the abs wire if truck is equipped.
8. Remove cotter pin from the lower ball joint and using a 7/8" wrench loosen the lower ball joint nut as shown in **Photo 6**. Do not completely remove nut.



9. Remove the upper ball joint cotter pin and then loosen the upper ball joint nut using a 15/16" wrench as shown in **Photo 7**. Do not remove nut.
10. Use a hammer to strike the sides of the spindle on the top and bottom ball joint to loosen the taper locks. Place a stand under the control arm and remove the top and bottom ball joint nuts and then remove the spindle from the control arms.
11. Remove the gasket from the factory knuckle and place it on the new lowering spindle. **See Photo 8**.



PHOTO 7



PHOTO 8

12. Place the new lowering spindle on the lower ball joint and hand tighten factory nut. **See Photo 9**. Pull the upper control arm down and attach the upper ball joint to the spindle using the factory nut. Using a 15/16" for the upper and a 7/8" for the lower tighten the ball joint nuts and insert new supplied cotter pins.
13. Install the backing plate to the new spindle with factory bolts tighten with a 11mm and 13mm wrench. Slide the rotor assembly and outside bearing over the spud **See Photo 10** and tighten the factory nut with a pair of channel locks until the nut is snug and the rotor still turns freely. Install new supplied cotter pin and dust cap.

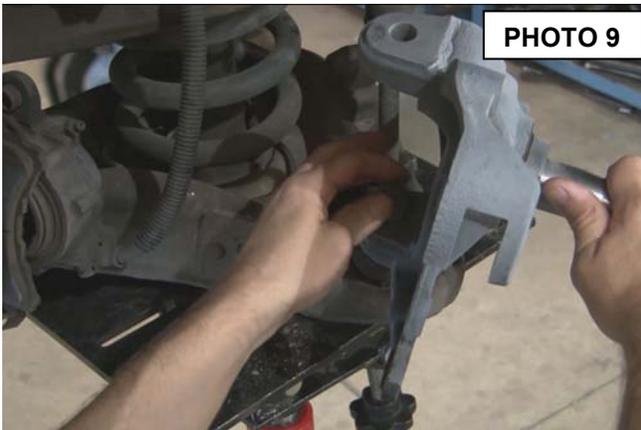


PHOTO 9



PHOTO 10

14. Install the brake caliper with the factory bolts and tighten with a 3/8" allen wrench.
15. Insert the tie-rod into the spindle and tighten with a 18mm wrench. Use the new supplied cotter pin to lock the factory nut.
16. Repeat steps 3-15 on the driver side.
17. Install the tires and wheels with a 3/4" socket.
18. Jack up front of the truck to remove jack stand and lower truck to the ground.

Rear Installation

1. Jack the rear of the truck up and place the frame on jack stands.
2. Remove the rear tires and wheels with a 3/4" deep well socket.
3. Using a 21mm socket remove the passenger side lower rear shock mount. **See Photo 1.**
4. Next remove the factory u-bolts with a 21mm socket. **See Photo 2.**



5. Raise the rear axle and install the new supplied block between the axle and the leaf spring. Make sure the smaller end of the block points to the front of the truck. **See Photo 3.**
6. Install the new supplied u-bolts and nylocks using the factory u-bolt plate. Tighten with a 22mm socket. **See Photo 4.**



7. Install the lower mount of the rear factory shock to the u-bolt plate using factory hardware and a 21mm socket.
8. Repeat steps 3-7 on the driver side.
9. Install tires and wheels with a 3/4" socket.
10. Jack up the rear of the truck to remove jack stands and lower truck to the ground.

Post Instructions

1. Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check steering for interference and proper working order. Test brake system.
2. Perform steering sweep. The distance between the tire sidewall and the brake hose must be checked closely. Cycle the steering from full turn to full turn to check for clearance.
3. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
4. Readjust headlights to proper settings and take truck in for a front-end alignment to a qualified alignment professional.