



**ROUGH
COUNTRY**
SUSPENSION SYSTEMS®

FJ Cruiser 3" Front 2" Rear Leveling Kit

Thank you for choosing Rough Country for your suspension needs.

Rough Country recommends a certified technician install this system. In addition to these instructions, professional knowledge of disassembly/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 parts list on this page and the product layout on the last page. Be sure you have all needed parts and know where they go. Also please review tools needed list and make sure you have needed tools.

PRODUCT USE INFORMATION

As a general rule, the taller a vehicle is, the easier it will roll. Seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

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 increase vehicle height over the intended height of the Rough Country product purchased. Mixing component brands is not recommended.

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

If questions exist we will be happy to answer any questions concerning the design, function, and correct use of our products.

This suspension system was developed using a 285/70R-17 tire with factory wheels. For aftermarket wheel and tire combinations consult your tire and wheel specialist.

NOTICE TO DEALER AND VEHICLE OWNER

Any vehicle equipped with any Rough Country product should have a "Warning to Driver" decal installed on the inside of the windshield or on the vehicle's dash. The decal should act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics.

INSTALLING DEALER - 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

Kit Contents

2-Front Strut Extensions
2-Rear Coil Springs
2-Rear Shocks Absorbers with Jounce Bumpers
2-Rear Shock Upper Mounting Hardware Bags
1-Kit Bag that includes
6-Star Lock Nuts
6-Stud Extensions
2-Cotter Pins

Tools Needed

12 mm Wrench
14 mm Socket
17 mm Socket
17 mm Wrench
19 mm Socket
19 mm Wrench
Hammer
16mm Wrench
21mm Socket

FRONT INSTALLATION

1. Jack up the front of the vehicle and support the vehicle with jack stands, so that the front wheels are off the ground
2. Remove the front tires/wheels. Using a 21mm deep well socket.
3. Remove cotter pin from the outer tie rod end on the steering linkage. Using 19mm socket remove the nut. Using a hammer hit on the side of the cast knuckle to allow the tie rod end to separate from the knuckle. Remove the linkage from the knuckle. Push linkage forward to make room for installation. Retain factory nut. **See Figure 1.**
4. Using a 17mm wrench, remove the sway bar bolts, allowing the sway bar to drop. Retain factory hardware. **See Figure 2.**
5. Using a 14mm socket, remove the strut nuts on the upper strut tower that holds the assembly in place. **See Figure 3.** One nut can be left on an upper stud to hold the strut in place .

Figure 1

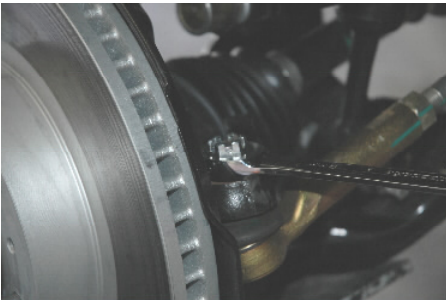


Figure 2

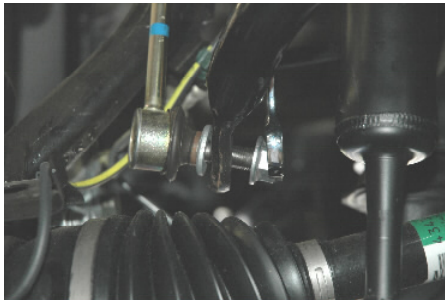


Figure 3



6. Place jack stand under the knuckle for support. Using 19 mm socket remove nut from the ball joint on the upper control arm. Using a hammer hit the knuckle to allow the ball joint to separate from the upper control arm **See Figure 4.** Do not allow the knuckle to pull out far enough that it pulls the CV shaft out of the differential.
7. Using a 19mm socket and wrench, remove the strut bolt from the lower control arm and remove the strut assembly from the vehicle. Retain the factory lower hardware for reassembly. Note the direction of the bolt for reassembly. **See Figure 5.**
8. Place star washer from kit bag on the top of the factory stud. **See Figure 6 and Figure 7.**

Figure 4

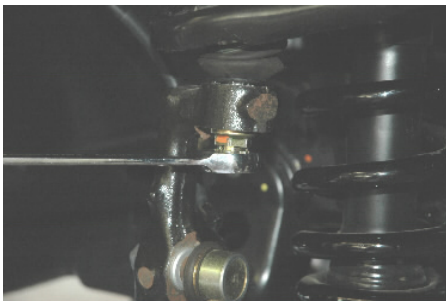


Figure 5



Figure 6



9. Place stud extension from kit bag on the factory stud and tighten to 47ft. lbs. with a 16mm wrench. **See Figure 7.**
10. Install the new strut extension, the chamfer on the center hole goes down and sets on the plate. Align the holes on the strut extension with the stud extenders and rest on top of the strut plate. **See Figure 8.**
11. Install the strut assembly into the strut tower and start the three factory nuts. Using a 14mm wrench torque to 47ft. lbs **See Figure 9.**

Figure 7



Figure 8

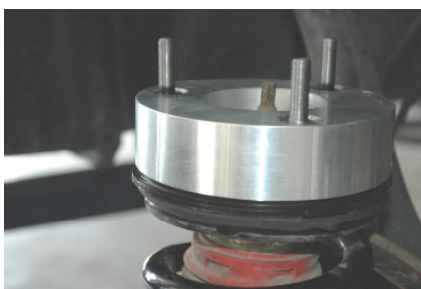


Figure 9



12. Position the strut assembly to reinstall the lower strut bolt in its original position that it was removed. Using original hardware and a 19mm socket torque to 100ft lbs.
13. Using a floor jack, raise the lower control arm and connect the upper ball joint on the upper control arm to the spindle. Using a original nut and a 19mm socket, torque to 40ft lbs.
14. Reinstall the tie rod end off steering linkage into knuckle using original factory nut. Using a 19mm socket torque nut to 65ft. Lbs. Install supplied new cotter pin
15. Repeat steps 3-14 on opposite side of vehicle.
16. Using 17 mm wrench reinstall sway bar links using factory hardware. Torque to 52 ft. lbs.
17. Install the wheels / tires. Torque to 85 ft. lbs. With vehicle on the ground, check the clearance between the tire and upper control arm to make sure the arm does not rub the tire.
18. Jack up the vehicle and remove the jack stands. Lower the vehicle to the ground and re-check all bolts, to assure they are tight.
19. This vehicle must have a front-end alignment after installation of the suspension kit. The vehicle will be aligned to factory specs.

REAR INSTALLATION

1. Jack up the rear of the vehicle and support the vehicle with jack stands, so that the rear tires are off the ground
2. Remove the rear tires/wheels. Using a 21mm deep well socket.
3. Using a 17mm socket and wrench remove the rear shocks. Retain the lower shock hardware for reuse. **See Figure 11 & 12**
4. Using a 17mm socket or wrench disconnect the sway bar links. **See Figure 13**

Figure 11



Figure 12



Figure 13



5. Using a 12mm wrench remove the bolt holding the brake line bracket to the frame on the drivers side, and the ABS wire on the passengers side.
6. Lower the axle and remove the factory coil spring.
7. Install new coil spring in the factory pocket, a coil spring compressor may be needed to facilitate the install of the coil. Turn the coil until the end of the wrap hits the stop on the coil pocket. **See Figure 14**
8. Repeat steps 3-7 on the opposite side.
9. Using a 12mm wrench reinstall the brake line bracket on the drivers side, and the ABS bracket on the passengers side.
9. Using 17mm wrench reinstall sway bar links using factory hardware. Torque to 52 ft. lbs.
10. Using 17mm socket install new Rough Country shocks, using new hardware for the top, and factory hardware for the lower mount. Torque upper shock mount nut to 18 ft. lbs. Lower shock bolt torque to 72 ft. lbs.
11. Reinstall tire/wheels. Torque to 82 ft. lbs. Jack up the rear of the vehicle and remove the jack stands.

Figure 14



POST INSTALLATION

1. Check and recheck all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check clearance between upper control arm and sidewall of tire for proper clearance. Check steering for interference and proper working order. Test brake system.
2. Perform steering sweep. Cycle the steering from full turn to full turn to check for clearance. Failure to perform inspections may result in component failure.
3. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
4. Adjust headlights to proper settings given increased vehicle height.

MAINTENANCE INFORMATION

It is the ultimate buyers responsibility to have all bolts/nuts checked for tightness after the first 500 miles and then every 1000 miles. Wheel alignment steering system, suspension and driveline systems must be inspected by a qualified professional mechanic at least every 3000 miles.



Thank you for purchasing a Rough Country Suspension System.