

# **YJ SPRING OVER CONVERSION KIT**

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

Please read all the instructions before beginning the installation.

#### PRODUCT USE INFORMATION

As a general rule, the taller a vehicle is the easier it will roll. We strongly recommend, because of rollover possibility, that seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur. Braking performance and capabilities are decreased when significantly larger/heaver tires and wheels are used. Take this into consideration while driving. Also, speedometer recalibration is necessary when larger tires are installed. 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.

### NOTICE TO DEALER AND VECHICLE OWNER

Any vehicle equipped with any Rough country product must have the "Warning to Driver" decal installed on the sun visor or dash. The decal is to 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 to forward these installation instructions on too the vehicle owner for review and to be kept in the vehicle for its service life.

### **IMPORTANT INSTALLATION NOTES:**

This is a spring over kit and will require more components depending on how the vehicle is expected to perform. This kit does require welding, therefore it is recommended to have this kit installed by a professional that is familiar with welding procedures. This kit is designed to move the leaf springs from the bottom of the axle to the top effectively giving lift to the vehicle and flexibility with the use of the stock springs. A CV type driveshaft is highly recommended for this application. Aftermarket springs can be used with this kit, but pinion angle will be affected and may require driveshaft modification or the mandatory use of a CV type driveshaft. Steering will typically need a s-link system or high steer system to make sure all components are clear. At the least a new pitman arms is recommended to reattach the steering. Take care not to use excessive heat when welding the spring perches on the axles. Longer shocks will be required for this kit. We also recommend the use of stainless steel brake lines.

### **INSTALLATION INSTRUCTIONS**

- 1. Park vehicle on a clean, level surface and block the wheels for safety.
- 2. Raise the front and rear of the vehicle.
- 3. Place jack stands under the frame rails and lower the axle onto the jack stands. The axles will need to be removed from the vehicle.
- 4. Remove the following from the axle to allow them to be removed:
  - Disconnect the brake lines, e-brake cables and breather tubes
  - Disconnect the shock absorbers
  - Disconnect and remove the rear track bar.
  - Disconnect the front track bar at the axle.
  - Remove the front and rear drive shafts
  - Disconnect the front vacuum lines on the axle
  - Disconnect the drag link on the pitman arm.
  - Remove the u-bolts
  - Remove the front and rear leaf springs and remove the axles from the vehicle.

- Position the front spring pad as shown on the axle, directly above the stock spring pad. Driver side shown in Photo

   Note the three holes in the spring pad. This allows the wheels base to be slightly changed. The center hole will set
   the vehicle to the stock wheelbase, while the other two holes will either lengthen or shorten the wheelbase. As a
   starting point the pinion angle will be set to 7 degrees using a angle finder.
- 6. Position the side spring pad on the passenger side and tack into place. Make sure the spring pads are positioned properly and they match the stock spring width. Tack into place.





- 7. Reinstall the axle under the springs and double check the pinion angle and spring width. When properly positioned, weld spring pads onto the axles. Take care not to use excessive heat when welding the spring perches on the axles.
- 8. Reinstall all front end components previously removed including drive shaft. Steering will typically need a s-link system or high steer system to make sure all components are clear. At a minimum a new drop pitman arms is recommended to reattach the steering. Please note longer shocks are required and can be purchased separately. If reinstalling the front track bar, a track bar bracket will be necessary. Also longer brake lines will be needed. We recommend the use of stainless steel brake lines.
- 9. On the rear axle position the spring pad directly over the stock spring pad and tack into place making sure the spring pads are the correct width apart. Keep in mind if using the stock drive shaft the pinion angle will only be changed about 2.5" degrees from stock. If using a CV type drive shaft the pinion angle will generally be set higher with the pinion on the axle pointing more toward the transfer case at ride height.
- 10. Reinstall the leaf springs and install the axle under the leaf springs on the desired hole in the spring pad. As on the front pad the pad had three holes to adjust wheel base if desired.
- 11. Check the pinion angle and weld the spring pads into place. Take care not to use excessive heat when welding the spring perches on the axles.
- 12. Reinstall the rear end components removed and tighten all hardware including the u-bolts, spring bolts, shock mounts and rear driveshaft. If using a stock type driveshaft, have the driveshaft lengthened and balanced. If installing a SYE kit and CV driveshaft do so at this time. It may be necessary to change the yoke on 94-95 models from the 1330 to a 1310 u-joint to gain extra length for the shaft. Always use new u-joint straps or change to a non strap u-bolt yoke for optimum reliability.
- 13. The rear track bar is typically not reinstalled. As in the front longer shocks are required and can be purchased separately. Also longer brake lines will be needed. We recommend the use of stainless steel brake lines.

### **POST INSTALLATION**

- 1. It is recommended to apply a coat of paint to the new spring perches to prevent rusting.
- 2. 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.
- 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. Failure to perform inspections may result in component failure.
- 4. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service. Readjust headlights to proper settings.

## **RECOMMENDED PARTS**

- Rough Country Shock Absorbers-FRONT Part # 8170 / REAR Part # 8113
- Front Track Bar Bracket- Part # 1163
- Transfer Case Drop kit Part # 1622TC or Slip Yoke Eliminator Part # 50-7906 and CV Driveshaft. (Vehicle Specific)
- Front U-bolt Part # 7635 and Rear U-bolt kit Part # 7621
- Front Brake Line Part # 89702 and Rear Brake Line Part # 89703
- Pitman Arm for Power Steering Part # 6605 / Manual Steering Part # 6609
- Front Disconnects Part # 1186

