

### 97-06 JEEP TJ 2 1/2"PROGRESSIVE COIL SUSPENSION KIT

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

Transfer Case Bolts

Rough Country recommends a certified technician installs 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 all the instructions before beginning the installation. Check the kit hardware against the parts list. Be sure you have all the needed parts and understand where they go. Also please review the 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. We strongly recommend, because of rollover possibility, that the vehicle be equipped with a functional roll-bar and cage system. 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.

Do not add, alter, or fabricate any factory or after-market parts which increase vehicle height over the intended height of the Rough Country product purchased. Mixing component brands, lifts, and/or combining body lift with suspension lifts voids all warranties. 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.

This 2 1/2" suspension system was developed for 31x10.50x15 tire on a stock wheel. An after market 8" wide wheel with 3.75" of back spacing may also be used for larger tires (32" x 11.50"). The use of **stock wheels** with larger than stock tires may cause the tire to come in contact with the lower control arm at full turn. The use of aftermarket wheels is recommended to avoid this. Due to the inconsistency of vehicles when manufactured and the various options available, the amount of actual lift gained by this lift kit may vary slightly. On models outfitted with extra bolt-on equipment and accessories, Rough Country offers new coil spring isolator pads made from polyurethane to boost ride height 3/4" and these may be needed to maintain a level performance look. Longer shocks are needed on this kit. For optimum performance RCX 2.2 Series shocks are highly recommended for full suspension articulation and optimum ride quality.

#### 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 in-

Kit Contents	Tools Needed	Torque Specs		
4 Cylinder:	Spring Compressor	Size	Grade 5	Grade 8
9239-Fr Coils	Silicone spray	5/16"	15 ft/lbs	20 ft/lbs
9237-RR Coils	Torx key socket	3/8"	30 ft/lbs	35 ft/lbs
Transfer Case Spacers	Floor jacks	7/16"	45 ft/lbs	60 ft/lbs
Transfer Case Bolts	Wheel chocks	1/2"	65 ft/lbs	90 ft/lbs
	Torque wrench	9/16"	95 ft/lbs	130 ft/lbs
6 Cylinder:	1/2 drive ratchet and sockets	5/8"	135 ft/lbs	175 ft/lbs
9238-Fr Coils	Heavy duty jack stands	3/4"	185 ft/lbs	280 ft/lbs
9237-Rr Coils	Safety glasses			
Transfer Case Spacers				



#### FRONT INSTALLATION INSTRUCTIONS

- 1. The front-end components are installed first.
- 2. Place the vehicle on a level surface. Set the parking brake. Center the front wheels and chock rear wheels.
- 3. From inside the engine compartment, remove the upper stud nut, retainer and grommet from both of the front shocks.
- 4. Place jack stands on the frame rail behind the lower control arm mount on the frame and jack up the vehicle. Installation is done one side at a time.
- 5. Remove the front tires and wheels.
- 6. Remove the sway bar links from the axle using a 18mm wrench / T55 torx head bit to allow the axle to be lowered for coil spring removal. See Photo 1.
- 7. Place a floor jack underneath the axle for support and complete the removal of the front shock absorbers. Retain factory lower mounting hardware for re-use.
- 8. Remove the coil spring clip located on the bottom coil seat as shown in **Photo 2** using a 13mm wrench on the driver side of the vehicle. Lower the axle and remove the coil spring.





- 9. Install the new front progressive rate coil spring. A coil spring or strut compressor may be needed for the new coil spring installation. Install the new coil spring (with the coil wraps that are closer together to the top) into the upper and lower spring pockets and carefully remove the compressor. Make sure the coil is seated properly in the coil seat by rotating the spring so the pig tail end fits in the spring pocket. Install the coil spring clamp and torque the spring clip bolt to 16ft.-lbs.
- 10. Install the front shock absorber in the factory upper &lower mounts. (Longer shocks are highly recommended for this lift).
- 11. Repeat installation on the opposite side of the vehicle.
- 12. Install the tires, wheels and lug nuts and tighten to factory specifications. Lower the vehicle to the ground
- 13. Reinstall the sway bar links in the factory location with factory hardware using a 18mm wrench and T55 torx head bit.

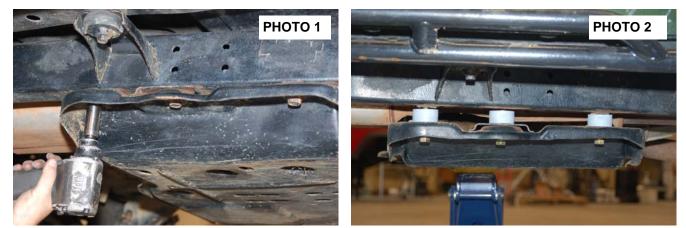


#### **REAR INSTALLATION INSTRUCTIONS**

- 1. Chock the front wheels. Jack up the rear of the vehicle and remove the tires and wheels.
- 2. Place jack stands under the frame rail to support the vehicle. Place a floor jack under the differential to lightly support the axle.
- 3. Remove the stock shock absorbers. Retain the hardware for reuse.
- 4. Remove the lower sway bar links from the sway bar using a 15mm wrench. **See Photo 4**. Retain the factory hardware for re-installation.
- 3. Carefully lower the axle with the floor jack and remove the coil springs. NOTE: It may be necessary to use a coil spring or strut compressor to remove the stock coil springs. Be careful not to overextend the vent tube on the axle. It may be necessary to disconnect the vent tube during installation and reroute the vent tube after installation to ensure the line does not get damaged.
- 4. Install the new Rough Country progressive rate coil springs making sure the coil isolator is positioned in the upper mount. It may be necessary to use a coil spring or strut compressor to install the new coil springs. See Photo 5. Rough Country's New RCX 2.2 series shock is also pictured.
- 5. Jack up the axle to lightly compress the coil springs.
- 6. Install the rear shock absorber in the factory mounts with the factory hardware using a 15mm & 18mm wrench for the lower and a 13mm socket for the upper. Tighten hardware. (Longer shocks are highly recommended for this lift).
- 7. Install the wheels and tires and lower the vehicle to the floor.
- 8. Reinstall the factory sway bar links with the factory hardware using a 15mm wrench and tighten.

#### TRANSFER CASE DROP INSTRUCTIONS

1. Position a floor jack under the transfer case skid plate and remove the stock bolts from the skid plate on one side only. Slightly loosen other side, but do not remove bolts. **See Photo 1.** 



- 2. Carefully lower the skid plate/t-case to allow for installation of the transfer case drop pucks. **See Photo 2**. Jack up the floor jack and install with the supplied bolts. Tighten bolts.
- 3. Repeat on other side.
- 4. On some 03-06 models, in addition to the 3 skid plate bolts ,the vehicle may be equipped with a skid plate for the automatic transmission. For this option, two spacers and two bolts are supplied and the installation procedure is the same.







#### POST INSTALLATION INSTRUCTIONS

- Check the transfer case shifter to see if it will move to 4L. If not, the linkage will need adjusting. Place the shifter in 4L, loosen adjustment bolt and push the linkage forward until it stops. Now re-tighten adjustment bolt. See Photo 1. Check to be sure 4WD works properly.
- Rotate driveshaft and check for interference at differential yoke and cardan joint. If necessary, lightly dress casting(s) and/or U-joint tabs in order to eliminate binding
- 3. Have a qualified alignment center realign front end to factory specifications.
- 4. Install Warning to Driver decal on sun visor.
- 5. Adjust headlights to proper settings.

#### MAINTENANCE INFORMATION

It is the ultimately the buyers responsibility to have all bolts/nuts checked for tightness after the first 500 miles and then every 1000 miles or 3 months. Wheel alignment steering system, suspension and driveline systems must be inspected by a qualified professional mechanic at least every 3000 miles.

#### **TROUBLESHOOTING TIPS**

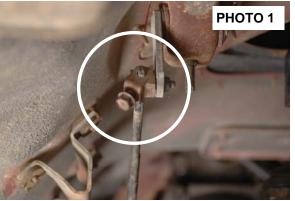
#### **Problem**: Driveline Vibrations

**Possible Solution**: Check all u-joints to insure that there is no wear on the existing hardware caps. Even a new vehicle can cause vibrations in the angle on the U-joint is changed after being run for even a short period of time. **Possible Solution**: Driveline vibrations can be caused from the removal or addition of the hardtop which changes the rear vehicle weight, and the rear height, which affects the rear drive shaft pinion angle. If excessive vibration occurs, Rough Country's adjustable eccentric upper cam-bolt kit will eliminate such vibrations by adjusting / rotating the rear pinion angle up or down as needed.

<u>Problem:</u> On 03-06 models equipped with the automatic transmission, the transmission skid plate may come in contact with the front driveshaft at full droop even when equipped with the 1" lowering spacers supplied. **Possible Solution:** Lower the transmission skid plate more to create distance in between the driveshaft & skid plate or remove the skid plate from the vehicle.



Thank you for purchasing a Rough Country Suspension Lift Kit.





## 97-06 JEEP TJ 1 1/4" BODY LIFT KIT

Congratulations on your purchase of a new Rough Country 1 1/4" Body Lift. We are committed to providing you with the best product available for the best value. Your satisfaction is our highest priority!

Rough Country recommends a certified technician installs this system. In addition to these instructions, professional knowledge of disassemble/reassembly procedures as well as post installation checks must be known. Check the kit hardware against the parts list. Be sure you have all the needed parts and understand where they go. Also please review the 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. We strongly recommend, because of rollover possibility, that the vehicle be equipped with a functional roll-bar and cage system. Seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

Do not add, alter, or fabricate any factory or after-market parts which increase vehicle height over the intended height of the Rough Country product purchased. We will not be responsible for any product that is altered.

This 1 1/4" body lift kit can be used with Rough Country's lift kit if desired to allow the fitment of larger tires for off road use.

#### 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.

#### **BODY LIFT PRE INSTALLATION NOTES:**

To ensure the SRS system (Air bag system) is not accidentally deployed during installation, always ground yourself and the vehicle. Exercise extreme caution when working near SRS sensors and wiring. DO not allow anyone near air bags during the lift kit installation. Accidental deployment can result in serious injury or death. As a precaution, the negative and positive wire should be disconnected from the battery with the negative wire being removed first. Also the air bag fuse can be removed from the fuse panel behind the glove box. Check hoses and wiring before and recheck during installation taking caution to not overextend them.

#### Kit Contents :

11-1 1/4" Body Pucks 6-1/2" x 4 1/2" bolts 6-1/2" Flat Washers 5-7/16" Flat Washers 2-Bump stops 1-Shift Control Bracket 1-Shift Control Poly Bag Containing 2 --1/4" x 3/4" bolts 4--1/4" Washers 2--1/4" Nuts

#### **Torque Specs:**

Size	Grade 5	Grade 8
7/16"	45 ft/lbs	60 ft/lbs
1/2"	65 ft/lbs	90 ft/lbs
1/4"	12 ft/lbs	18 ft/lbs

Class 8.8 Class 10.9 6MM 5 ft/lbs 9 ft/lbs

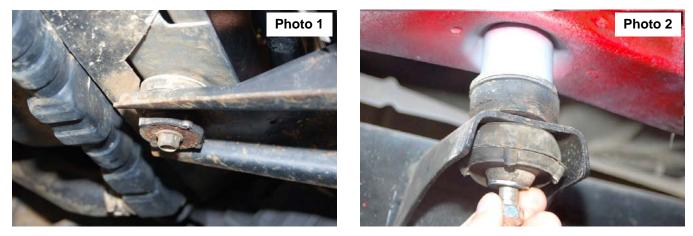


#### **Tools Needed:**

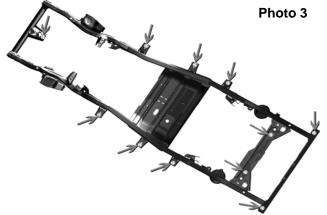
Floor jacks, Wood Blocks, Wheel chocks, Torque wrench, 1/2 drive ratchet 5/8" socket/wrench, 3/4" socket /wrench, Safety glasses, Thread locker

#### BODY LIFT INSTALLATION INSTRUCTIONS

- 1. Make sure the vehicle is on a level smooth surface.
- 2. Loosen the 11 body bolts using a 5/8" socket. Do not remove the stock bolts at this time.
- 3. Remove the front body mount bolt as shown in **Photo 1.** Remove either the 5 passenger side bolts or the 5 driver side bolts. Do not remove both sides. Installation is performed one side at a time.
- 4. Using a floor jack slowly jack up the body of the Jeep and insert the supplied body lift blocks between the body and the three side cab mount bushings as shown in **Photo 2**. Take caution to keep your hands out from between the frame and the body. The three side body mounts will be secured with the supplied 1/2" x 4 1/2" bolts. Apply thread locker to the bolts and install. Do not tighten at this time.



- Insert the supplied body lift blocks in the 4 rear most mounts. Apply thread locker to the supplied 7/16" x 4" bolts and install. Photo 3 shows all body mounts. Rear corner mount shown in Photo 4. Do not tighten at this time.
  Remove the front arill support hump stops as shown in Photo 5. If needed remove the motel had on the frame.
- 6. Remove the front grill support bump stops as shown in **Photo 5**. If needed remove the metal pad on the frame



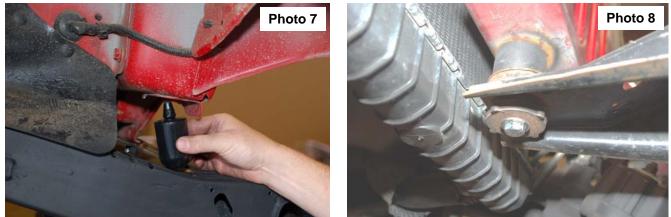


with a cutting wheel and reciprocating saw to allow the new bump stop to be installed . See Photo 6. Grind the area smooth and paint to prevent rusting.

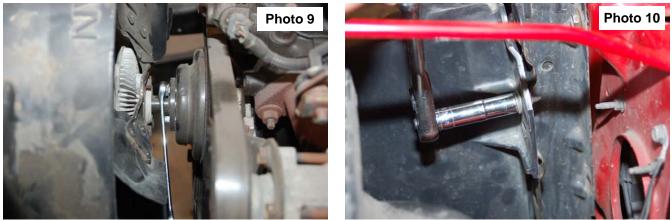




- 7. Install the supplied bumps stop as shown in the stock location **See Photo 7**. It may be necessary to remove the head light trim bezel and pull the bump stop from the top to secure the bump stop in place.
- 8. Slowly lower the body onto the body mounts.
- 9. Proceed to opposite side and install the body lift blocks as installed on the previous side.
- 10. Install the front body spacer as shown in Photo 8. Apply thread locker to the supplied 7/16 x 4" bolt and install.



- 11. Tighten all body bolts to 30-35 ft/lbs. Do not over tighten. Over tightening the body mount bolts could crush the factory body mounts.
- 12. Remove the fan from the motor as shown in Photo 9 using a 1/2" wrench. Save the hardware for reuse.
- 13. Remove the power steering reservoir from the fan shroud to allow it to be removed
- 14. Remove the fan shroud using a 7/16" wrench. See Photo 10. Save the factory hardware for reuse.



- 15. Measure 1 1/4" up as shown in **Photo 11 and drill the shroud using a 1/4**" **bit.** The lower passenger side hole will line up with an existing factory hole and will not require marking with a center punch. **On 6 cylinder models,** it may be necessary to remove a small portion of the fan shroud webbing to allow the 1/4" hole to be drilled.
- 16. Test fit the fan shroud to the radiator by aligning with the new mounting holes and mark the location where the lower radiator hose interferes with the fan shroud. Trim the fan shroud until it completely clears the radiator hose when mounted to the radiator. Reinstall the fan with factory hardware using a 1/2" wrench and check for interference between the fan shroud and fan blades, or any other objects, and trim the fan shroud accordingly.
- 17. Secure the shroud to the factory location with factory hardware using a 7/16" wrench. Tighten all hardware.

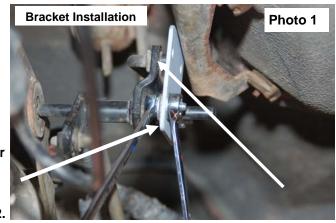


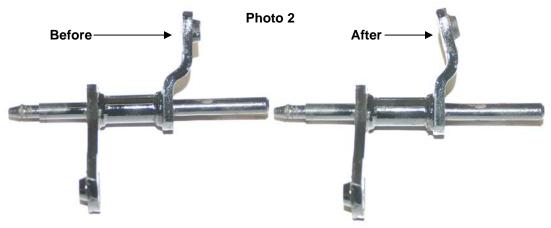
#### TRANSFER CASE SHIFTER BRACKET INSTALLATION INSTRUCTIONS

These next steps will be necessary if the vehicle is equipped with a transfer case drop kit. If the vehicle does NOT have a transfer case kit installed the bracket should NOT be installed. The bracket is designed to adjust the 4WD shifter allowing the full range of the shift pattern. After drop bracket installation, check the operation of the 4WD shift lever to ensure the transfer case engages fully in all ranges. Additional "fine tuning" can be performed if the shifter does not fully engage in all the ranges. Refer to instructions on the next page to adjust the shift linkage. It may also be necessary to trim the body under the middle console to avoid interference with the shifter.

- 1. From underneath the vehicle, locate the shift control bracket. It is attached to the inside of the transmission tunnel on the driver side and acts as a pivot for the transfer case shift lever.
- 2. Remove the shifter linkage from the shifter plate that is mounted on the body tunnel as shown using a 10 mm wrench.
- 3. Reinstall the stock shifter bracket on the new drop bracket as shown with the 1/4" x 3/4" hardware. Tighten using a 7/16" wrench. **See Photo 1.**
- 4. Install the supplied drop bracket on the stock tunnel bracket with the supplied 1/4" x 3/4" bolts/washers & nuts. Tighten hardware using a 7/16" wrench. Check clearance on bolts. **See Photo 1.**

Due to factory variations on the shifter rod bracket, it may be necessary to modify the shifter bracket by slightly bending the mount on the rod to clear the shifter bracket or shifter bracket bolts. After noting how much to bend the bracket to clear, remove the shifter assembly and bend the bracket as shown to slightly clear the bracket / bolts. Do not over-bend!! See Photo 2.

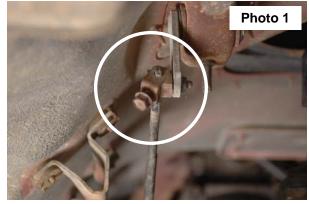




#### SHIFTER LINKAGE ADJUSTMENT INSTRUCTIONS

# If the 4WD shifter engages in all ranges, the following procedure will NOT be necessary.

 Check the transfer case shifter to see if it will move to 4L. If not, the linkage will need adjusting. Place the shifter in 4L, loosen adjustment bolt and push the linkage forward until it stops. Now re-tighten adjustment bolt. See Photo 1. Check to be sure 4WD works properly.



#### MAINTENANCE INFORMATION

It is the ultimately the buyers responsibility to have all bolts/nuts checked for tightness after the first 500 miles and then every 1000 miles or 3 months. Wheel alignment steering system, suspension and driveline systems must be inspected by a qualified professional mechanic at least every 3000 miles.