



## 88-98 GM 4"- 6" SUSPENSION KIT

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

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 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/heavier 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.

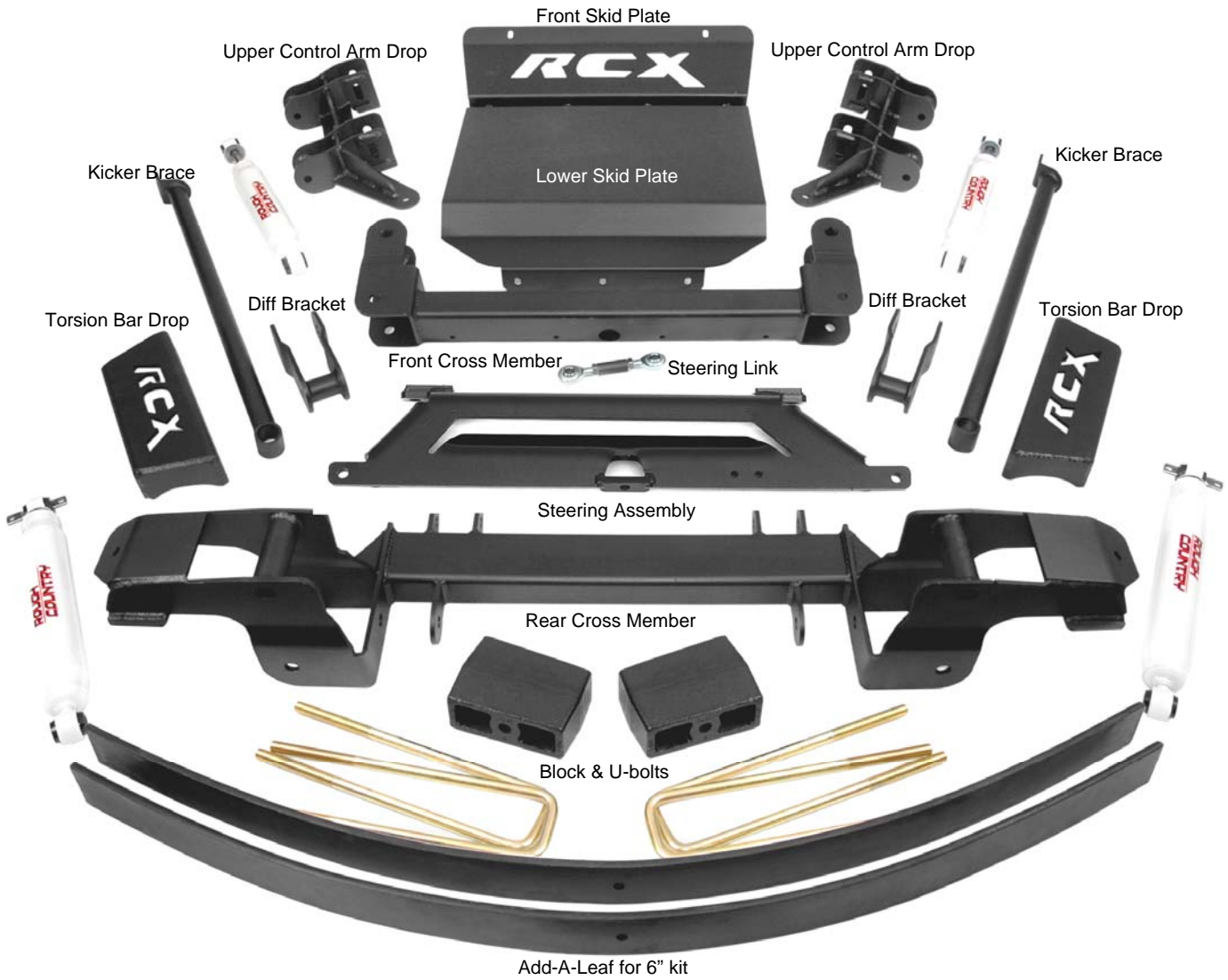
This kit is packaged as a leveling kit. If you desire a different look or if your truck has a tool box or something else that is going to bring the rear end down, please consult with your sales person about higher block and u-bolt options. If your vehicle is equipped with a rear sway bar (Tahoe and Suburban standard equipment), we recommend that you purchase longer sway bar links, part # 1038. **Steering Stabilizer Part # 87369 is also available from Rough Country for use with this kit.**

### NOTICE TO DEALER AND VEHICLE 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.

<p>1274BOX1:</p> <ul style="list-style-type: none"> <li>Pass Upper Arm Bracket</li> <li>Driver Upper Arm Bracket</li> <li>Steering Center Link</li> <li>Steering Assist Link</li> <li>Dr Diff Bracket (2)</li> <li>Pass Diff Bracket</li> <li>Torsion Bar Bracket (2)</li> <li>Front Brake Hose (2)</li> </ul> <p>1274BOX2</p> <ul style="list-style-type: none"> <li>Front Cross member</li> <li>Rear Cross-member</li> <li>Pass Kicker Bar</li> <li>Driver Kicker Bar</li> </ul> <p>1274BOX3</p> <ul style="list-style-type: none"> <li>Front Skid Plate</li> <li>Lower Skid Plate</li> </ul> <p>6112-Add a leaf-6" Kit Only</p> <p>1274BOX5</p> <ul style="list-style-type: none"> <li>Front and Rear Shock Absorbers</li> <li>Rear U-bolts (4)</li> <li>Rear Blocks (2)</li> </ul>	<p><b>Tools Needed</b></p> <ul style="list-style-type: none"> <li>10mm Wrench</li> <li>11mm Wrench</li> <li>13mm Socket</li> <li>14mm Wrench</li> <li>15mm Wrench</li> <li>15mm Socket</li> <li>18mm Wrench</li> <li>18mm Socket</li> <li>21mm Wrench</li> <li>21mm Socket</li> <li>24mm Socket</li> <li>24mm Wrench</li> <li>35mm Socket</li> </ul> <ul style="list-style-type: none"> <li>1 1/16" Wrench</li> <li>7/8" Socket</li> <li>3/8" Allen Head</li> <li>Grinder</li> <li>Saw</li> <li>Jack Stands</li> <li>Reciprocating Saw</li> </ul>	<p><b>Torque Specs</b></p> <table border="1"> <thead> <tr> <th>Size</th> <th>Grade 5</th> <th>Grade 8</th> </tr> </thead> <tbody> <tr> <td>5/16"</td> <td>15 ft/lbs</td> <td>20 ft/lbs</td> </tr> <tr> <td>3/8"</td> <td>30 ft/lbs</td> <td>35 ft/lbs</td> </tr> <tr> <td>7/16"</td> <td>45 ft/lbs</td> <td>60 ft/lbs</td> </tr> <tr> <td>1/2"</td> <td>65 ft/lbs</td> <td>90 ft/lbs</td> </tr> <tr> <td>9/16"</td> <td>95 ft/lbs</td> <td>130 ft/lbs</td> </tr> <tr> <td>5/8"</td> <td>135 ft/lbs</td> <td>175 ft/lbs</td> </tr> <tr> <td>3/4"</td> <td>185 ft/lbs</td> <td>280 ft/lbs</td> </tr> </tbody> </table>	Size	Grade 5	Grade 8	5/16"	15 ft/lbs	20 ft/lbs	3/8"	30 ft/lbs	35 ft/lbs	7/16"	45 ft/lbs	60 ft/lbs	1/2"	65 ft/lbs	90 ft/lbs	9/16"	95 ft/lbs	130 ft/lbs	5/8"	135 ft/lbs	175 ft/lbs	3/4"	185 ft/lbs	280 ft/lbs
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## KIT CONTENTS



**OPTIONAL STEERING STABILIZER AVAILABLE FROM ROUGH COUNTRY FOR USE WITH ROUGH COUNTRY'S 4"-6" LIFT KIT——PART #87369**

## FRONT INSTALLION INSTRUCTIONS

1. Chock the rear wheels to prevent movement. Place a jack under the lower control arm and jack the vehicle up. Place jack stands on the frame rails to support the vehicle. Remove tires and wheels.
2. The next step will require a special tool to unload the torsion bars. This tool is available at some parts houses and also at Kent Moore Tool Group, Roseville, MI.....PH: (800) 345-2233 or (313) 774-9500. Part # J-22517-C.  
**Please Note the torsion bar is under extreme load. Substituting a tool for an actual torsion bar tool may result in injury.**
3. On either side of the vehicle, position unloading tool on cross member. **See Photo 1.** Apply light lubricating grease to tool threads. Be sure to leave adequate clearance to remove the adjuster bolt from the cross member. Tighten the adjuster bolt on the cross member and tighten tool on adjuster arm to relieve tension on the bolt. Loosen the adjuster bolt and remove the bolt and threaded block from cross member. Loosen torsion bar tool until adjuster arm is loose. Slide the bar forward and the adjuster arm will fall free. In the event the bar seems lodged, use a punch and hammer routed through the hole in the back of the cross member to drive it forward. Repeat on opposite side.
4. On vehicles with stock exhaust, it may be necessary to jack-up the exhaust to allow clearance for cross member removal. Using a 18mm wrench and 18mm socket remove the torsion bar cross member, out side bolts. Using a 15mm socket and wrench remove the center bolts. Retain stock hardware. With the cross member out of the way, the bars can be dislodged from the lower control arms and removed. Mark the bars driver / passenger side, front / rear. The bars must be installed on the same side and in the same direction as they were removed. **See Photo 2.**
5. If your vehicle is equipped with factory skid plates remove them using a 15mm wrench.



Photo 1

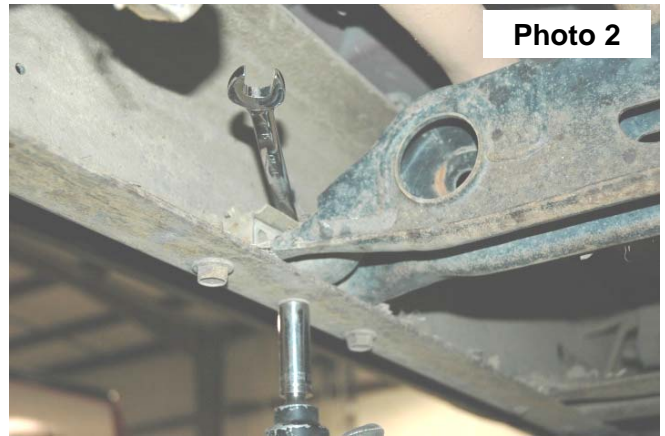


Photo 2

6. Using a 3/8" allen head socket remove the bolts holding the caliper. Tie the caliper out of the way. **See Photo 3.**
7. Remove the rotor.
8. Using a 35mm socket remove the axle nut. Save the stock hardware. **See Photo 4.**

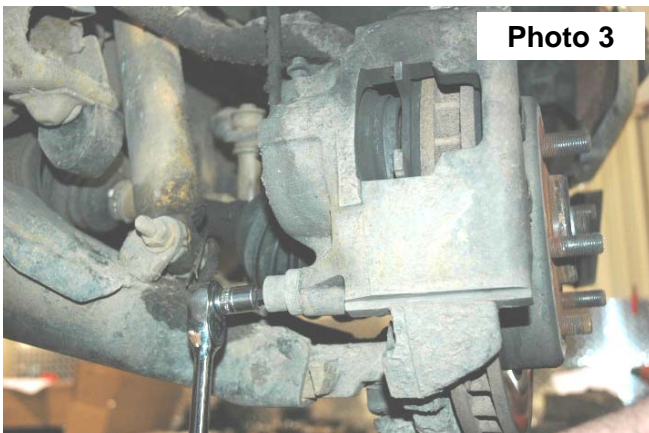


Photo 3

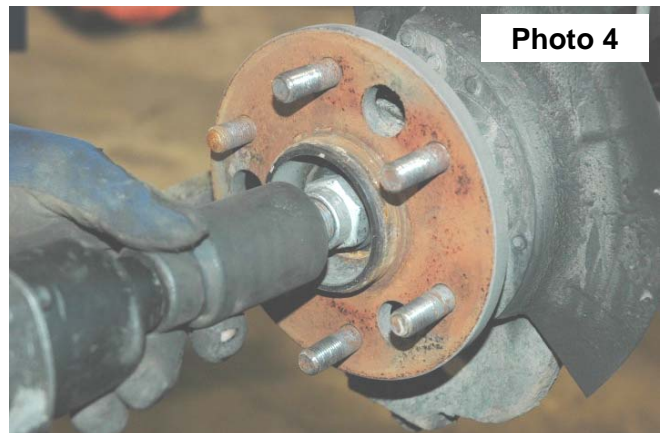


Photo 4

9. Using an 18 mm wrench remove the nut holding the drag link to the knuckle. It may be necessary to hit the knuckle with a hammer to dislodge the drag link. Be careful to only hit on flat surfaces, so you will not break the knuckle. **See Photo 5.**
10. Unplug the ABS wire from the frame. **See Photo 6.**
11. Remove the rubber fender skirt by taking a flat screwdriver and pry out the plastic rivets.



**Photo 5**



**Photo 6**

12. Using a 1 1/16" wrench remove the nut from the ball joint on the upper control arm. Using a hammer hit the knuckle beside the ball joint to dislodge arm. Save the stock hardware. **See Photo 7.**
13. Using a 21mm wrench remove the nuts and bolts that hold the upper control arm, save the stock hardware. Remove the arm. **See Photo 8.**



**Photo 7**



**Photo 8**

14. Remove the upper and lower shock bolts using a 18mm socket and wrench. Remove the shock.
15. Using a 15mm socket remove the 6 bolts holding the axle shaft to the differential. Save the stock hardware. Remove the shaft. **See Photo 9.**
16. Using a 1 1/16" wrench remove the nut holding the lower control arm ball joint to the knuckle. Wrap on the side of the knuckle to dislodge the ball joint from the lower control arm. Save the stock hardware. **See Photo 10.**



**Photo 9**

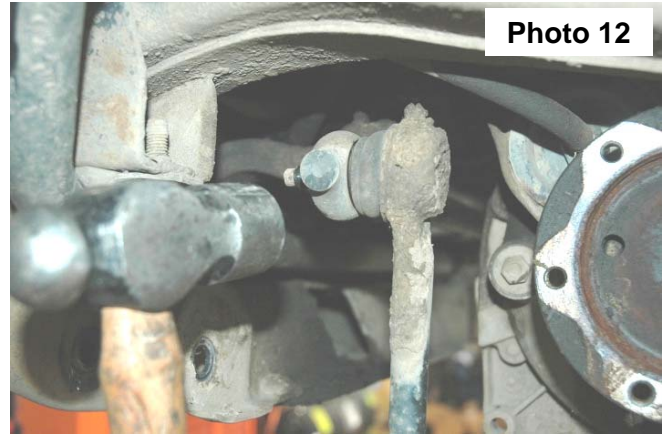


**Photo 10**

17. Using a 13mm socket and wrench remove the sway bar link. Save the stock hardware.
18. Remove the bolts holding the lower control arm, using a 24mm socket and wrench. Remove the arm and save the stock hardware. **See Photo 11.**
19. Using an 18mm wrench remove the nut holding the outer tie rods to the steering link. Lightly hit the end of the center link to dislodge the tie rod. If this does not work you may have to use a puller tool. Save the stock hardware. **See Photo 12.**



**Photo 11**



**Photo 12**

20. Using a 21mm socket remove the stock bolt holding the steering link to the pitman arm. Retain stock nut for later use. **See Photo 13.**
21. Remove the 4 bolts holding the front drive shaft to the differential using a 11mm wrench, retain the stock hardware for later use. **See Photo 14.**



**Photo 13**

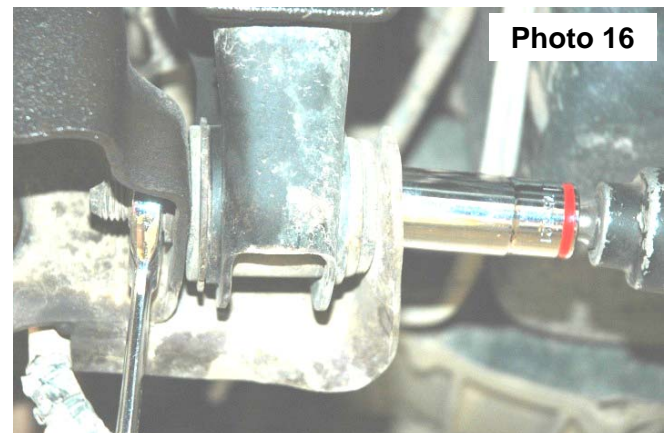


**Photo 14**

22. Remove the vent hose from the differential. Retain for later use.
23. Unplug the wires from the differential solenoid.
24. Using a 21mm wrench and socket remove the 2 bolts that hold the differential to the lower control arm frame mount. Retain stock hardware. **See Photo 15.**
25. Place a jack underneath the differential. Using a 21mm socket remove the bottom differential nuts, retain stock hardware. **See Photo 16.**



**Photo 15**



**Photo 16**

26. Using a 21mm wrench and socket remove the upper bolt that holds the differential. Remove the differential from the vehicle. Do not remove the passenger side differential bracket from the axle. The new drop brackets will attach to the stock differential bracket.
27. Using a reciprocating saw cut the driver side lower differential mount off. **See Photo 17 & 18.**

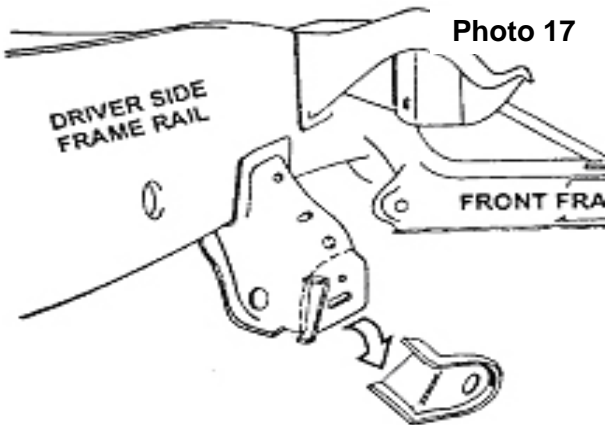


Photo 17

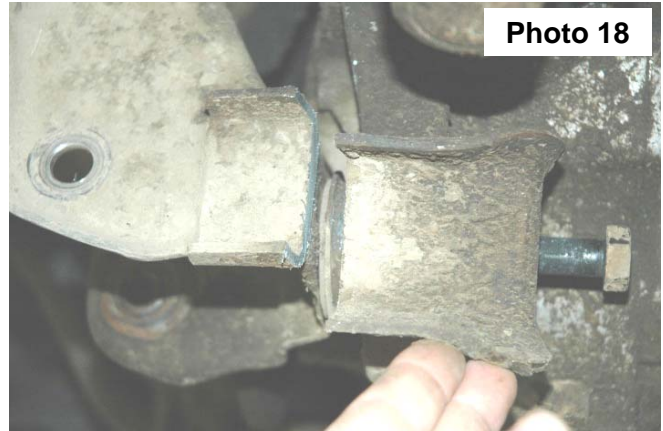


Photo 18

28. Using a grinder, trim down the fins on the drivers side of the differential as shown in **Photo 19**. Start by trimming about a 1/4", then trim to fit.
29. Using a 10mm socket remove the bolts holding the sway bar to the frame. Invert the sway bar where the ends will be pointed downward, and reinstall using the 10mm socket and stock hardware.
30. Using a 13mm socket remove the factory bump stop from the bracket. Retain for later use. Using the reciprocating saw, remove the bump stop from the frame on the driver and passengers side. **See Photo 20.**

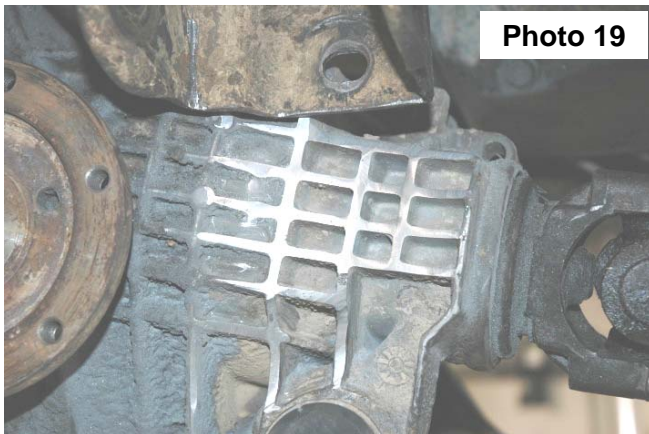


Photo 19



Photo 20

31. Grind the bump stop mount down flush with the frame. **See Photo 21.**



Photo 21

32. Place the driver side upper control arm drop bracket from 1274 Box 2, into the stock upper control arm brackets as seen in **Photo 22 & 23**. Bolt in place using (2) 9/16" 3 1/2" bolts, 9/16" nuts and 2-flat square washers from 1274Bag 7 on the inside of the stock mount as shown in Photo 23.



Photo 22

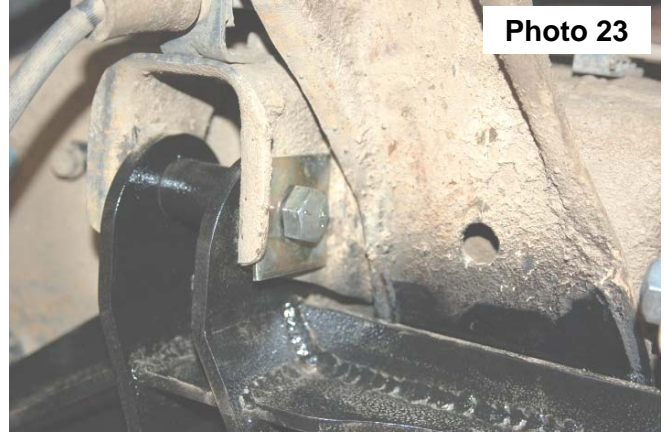


Photo 23

33. Place the passengers side upper control arm drop bracket from 1274 Box 1, into the stock upper control arm bracket. Bolt in place using (2) 9/16" 3 1/2" bolts, 9/16" nuts and 2-flat square washers from 1274Bag 7.
34. Locate the driver and passenger side torsion bar drop brackets in 1274 Box 2. Position the two drop brackets in between the bottom of the frame and the top of the cross member. Using the (2) stock bolts and (1) 7/16" x 1 1/4" bolt, washers and lock nut from 1274Bag4, bolt the drop brackets to the bottom of the frame rail. Torque to 60 ft/lbs. After the cross members are installed.
35. Bolt the stock torsion bar cross member to the bottom of the new torsion bar drop bracket. Using (2) 7/16" x 1 1/4" bolt, washers and lock nut from 1274Bag4, and one stock bolt. Torque to 60 ft/lbs.. **See Photo 24**.
36. Locate the front cross member from 1274 Box 3. Hang the front cross member in the lower control arm pockets using the stock bolts. **See Photo 25**.

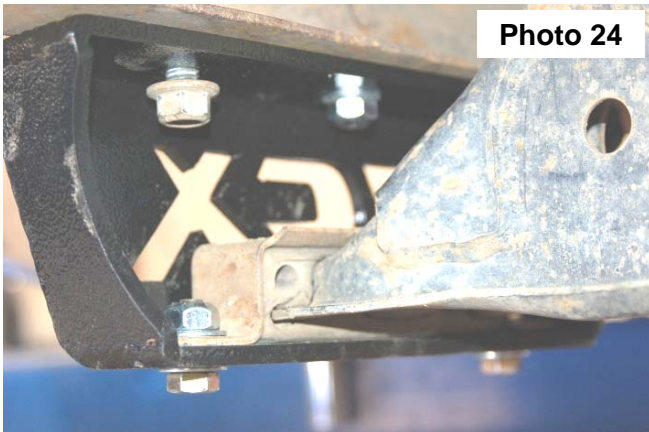


Photo 24



Photo 25

37. Locate the rear cross member from 1274 Box 3. Using a 13mm wrench and stock hardware install the stock bump stop on the lower mount of the rear cross member. Locate the bump stop from 1274bag4. Bolt the upper bump stop on the top of the rear cross member using a 9/16" wrench. Hang the rear cross member in the lower control arm pockets using the stock bolts. **See Photo 26**.
38. Locate the 2 differential brackets from 1274 Box 2. Bolt one bracket to the top mount of the differential as shown in **Photo 27**, using the 9/16" x4" bolts, washers and nuts provided in 1274bag3. Torque to 95 ft/lbs.

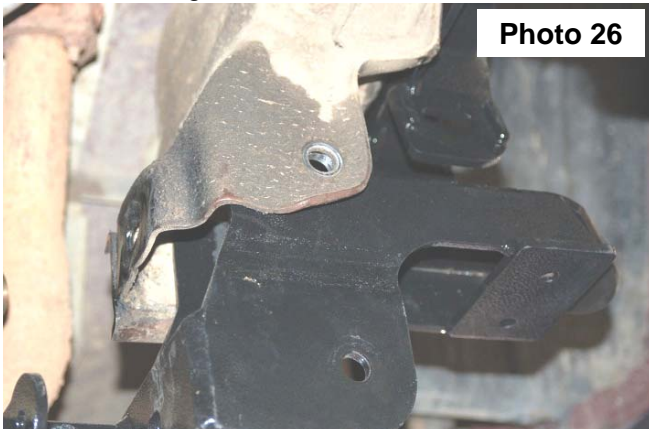


Photo 26

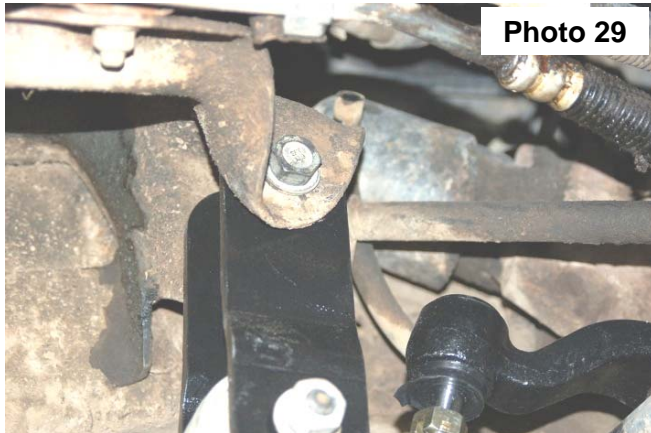


Photo 27

39. Bolt the second differential bracket to the upper axle mount on the passenger side using the 9/16" x4" bolts, washers and nuts provided in 1274bag3. Torque to 95 ft/ lbs **See Photo 28.**
40. Using a floor jack hang the differential back into the stock frame mount using the stock hardware. Torque to 95 ft/ lbs. **See Photo 29 shows the driver side.**
41. Passenger Side shown in **Photo 30.**



**Photo 28**

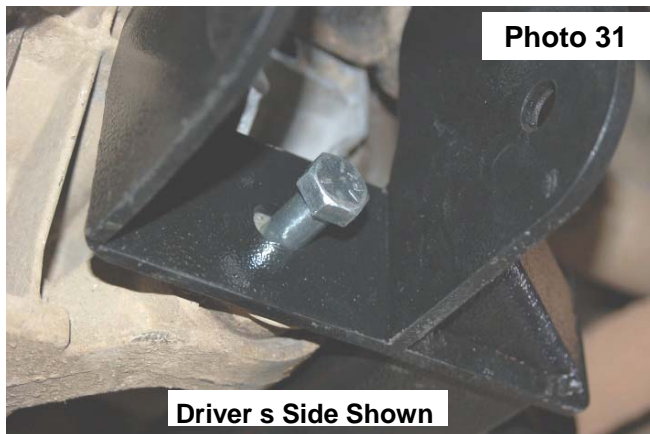


**Photo 29**



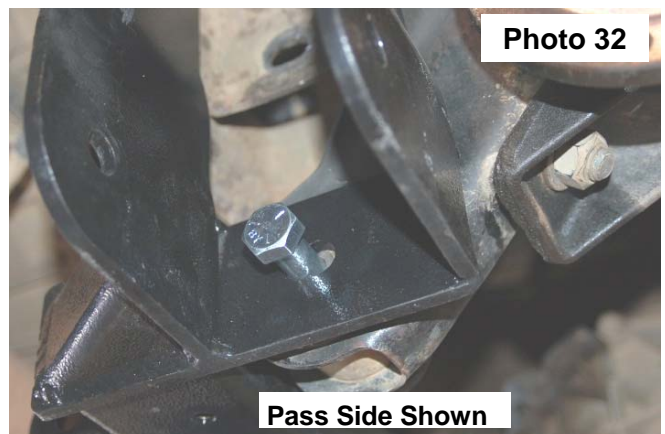
**Photo 30**

42. Using the stock bolts, bolt the lower differential mounts to the rear cross member as shown in **Photo 31& 32.** Torque to 95 ft/lbs.



**Photo 31**

**Driver s Side Shown**



**Photo 32**

**Pass Side Shown**

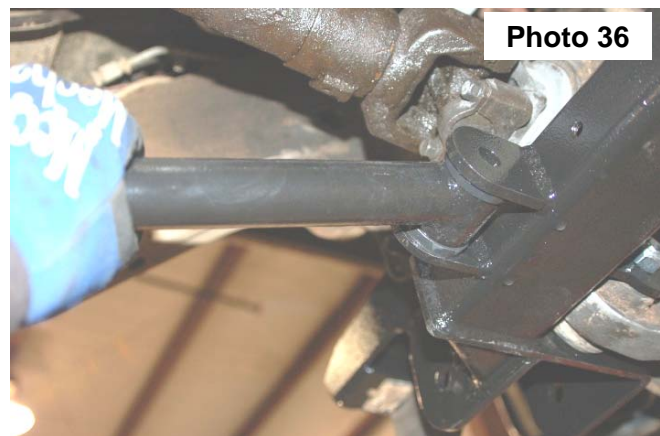
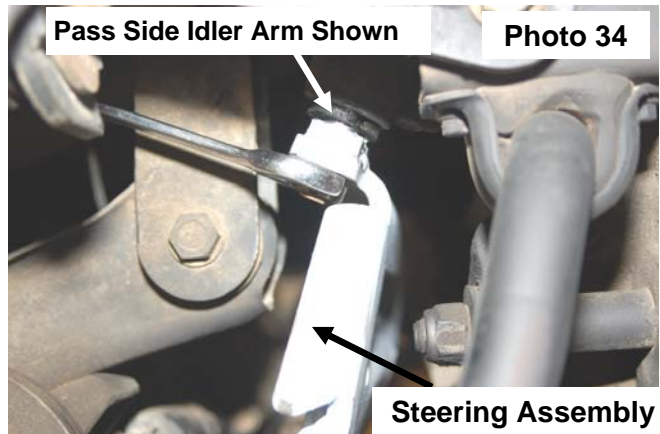
43. Using a 17/32" drill bit, drill 2 holes in the front of the frame, using the upper control arm drop bracket as a guide. Place the washers from 1274bag7, in between the frame and the drop bracket to space the bracket off the frame. Bolt the rear of the bracket to the frame using the crush sleeve from 1274bag7, and the 1/2" X5" bolt, washer and nut. Bolt the front of the drop bracket to the frame using the 1/2" x 1 1/4" bolt washers and nuts. Repeat on the opposite side. Torque bolts to 65 ft/lbs. Torque the 2 upper 9/16" bolts to 130ft/lbs. **See Photo 33.**



**Photo 33**



44. Locate the steering link assembly from 1274Box1. Install the new steering link on the idler arm & pitman arm studs as shown in **Photo 34** and secure with the factory nut & cotter pin. As with any castle nut, always tighten to the next slot after snug, do not loosen the nut to align holes. The steering assist link will be installed in a later step.
45. Reinstall your lower control arms using the 5/8" x 4.5" bolts, washers and nuts, from 1274bag1, using a 24mm wrench and socket. Do not tighten at this time.
46. Reinstall the upper control arms using the stock hardware, and a 21mm wrench / socket. Do not tighten at this time.
47. Using a 15mm socket reinstall the axle shaft onto the differential. Torque to 35 ft/lbs.
48. Reinstall the knuckle on the upper and lower control arm using the stock hardware, and a 1 1/16" wrench.
49. Reinstall axle shaft into the knuckle using a 35mm socket. Torque to 175 ft/lbs.
50. Using an 18mm wrench reinstall the drag link back to the knuckle and new steering link assembly using the stock hardware.
51. Remove the sway bar from the frame rail and flip the sway bar. Reinstall the sway bar on the frame rail with factory hardware. Flipping the sway bar will allow the stock links to be reused. Reinstall the stock sway bar links, using the stock hardware. Tighten bolts until the bushings swells slightly.
52. Reconnect the wires to the differential solenoid. Reconnect the differential hose using the vent hose extension and coupling from 1274bag3.
53. Reattach the A.B.S. wire to the upper control arm. Using WD40, lubricate the bracket that holds the ABS wire to the frame, slide the bracket down to allow slack in the line, reinstall the bracket to the frame using stock hardware.
54. The front driveshaft will not clear the front crossover pipe on the exhaust. The exhaust must be rerouted to allow the front driveshaft to be installed. Using a saw cut the exhaust to allow clearance for the shaft. Using a 11mm wrench reinstall the driveshaft. **See Photo 35.**
55. Locate the kicker braces from 1274Box1. Install the bushings and sleeves from 1274bag5, into the end of the kicker braces. Using the 1/2" x 3.5" bolts washers and nuts, attach the kicker brace to the rear cross member, **See Photo 36.**



56. Using the 1/2" x 1.25" bolts washers, and nuts from 1274bag5, bolt the opposite end of the kicker brace into the cross member using the existing holes. If installing on 4-door Tahoe, you may have to drill the holes in the cross member. **See Photo 37.** Torque both ends of the kicker brace to 65 ft/lbs.

57. Locate 1274bag6. This bag contains the steering link components. Thread the jam nuts onto the heim joints, thread the heim joints into the steering link body. Using the 1/2" x 2.5" bolt, washer, nut and spacer bolt the steering link to the top of the front cross member in the center hole, placing the spacer between the top of the cross member and the heim joint. **See Photo 38.** Torque to 65 ft/lbs.

58. Adjust the heim joints until the steering link aligns with the hole in the center of the steering link assembly. Using the 1/2" x 2.5" bolt, washer, lock washer spacer, and thread lock, bolt the link into the steering assembly, placing the spacer in between the heim joint and the steering link. **See Photo 39.** Torque to 65 ft/lbs. .

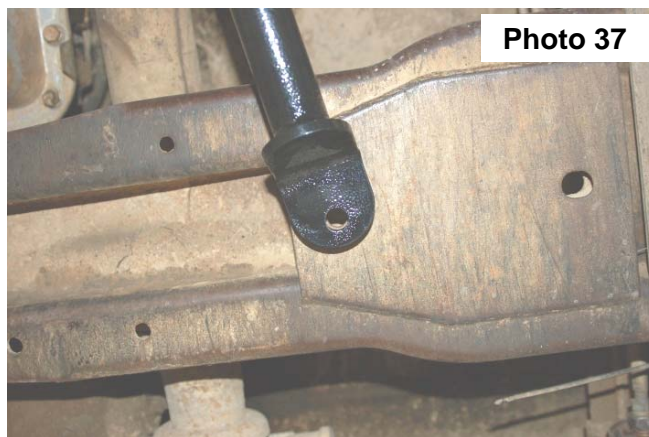


Photo 37



Photo 38



Photo 39

STEERING  
LINK

59. Locate the front skid plate from 1274Box 1. Bolt the top of the skid plate to the factory cross member, using the stock bolts. **See Photo 40.**

60. Locate the bottom skid plate from 1274Box1. Bolt the rear skid plate to the rear Rough Country cross member using the (3) 3/8" x 1" bolts, and washers from 1274bag3. Torque to 30 ft/lbs. **See Photo 41.**



Photo 40

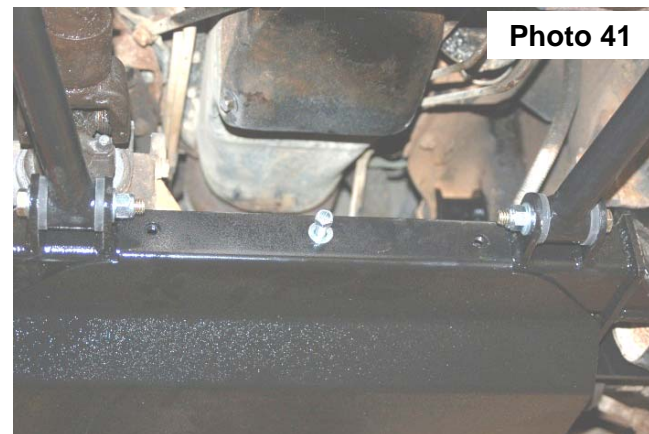


Photo 41

61. Attach the two skid plates together using the 3/8" x 1" allen head bolts from 1274bag3. Torque to 30 ft/lbs. **See Photo 42.**

62. Install part # 657341 hydro or 657342 nitro shock absorber and install with the stock upper and lower bolts, using a 18mm socket and wrench.

63. Reinstall the stock rotor.

64. Before installing the new brake line thoroughly clean all mating surfaces. New brake line crush washers are furnished, be sure to remove the old crush washers from the caliper. Install the new brake line and tighten. Route the new brake line in the same location as the factory line. The steel section of the new line should face inward and forward, away from the tire and wheel.

65. Be sure to route lines away from moving parts or anything that could damage the line or cause the line to fail. Cable ties are included ( if needed) to secure the line out of harms way. After the wheels and tires are installed recheck the brake lines for adequate clearance from moving parts.

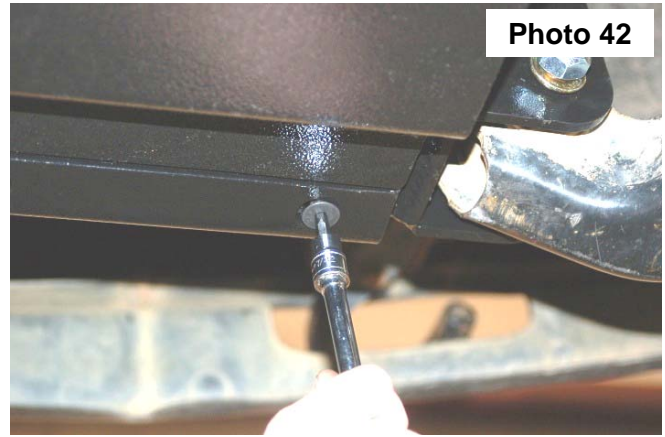
66. Bleed the air from the brake lines per the GM service manual. Note brake fluid must be added to the brake system. Do not drive the vehicle until the brake lines have been bleed and are operational.

67. Reinstall the stock torsion bars into the lower control arms, and the torsion bar adjusters in the stock cross members, Be sure the torsion bars are installed the same way they came out. Using the torsion bar tool adjust the bolt to the same length as stock.

68. Reinstall the tires and wheels.

69. Tighten the upper and lower control arms to 175 ft/lbs.

70. Recheck all fasteners



**Photo 42**

## **REAR INSTALLTION**

1. Chock front wheels and jack up the rear of the vehicle. Secure with jack stands on the frame rail.
2. Place a floor jack under the rear differential on the rear axle. Using a 13mm wrench for the upper, and 18mm and 21mm wrench for the lower, remove the stock shock absorbers, retain the stock hardware for reuse.
3. Using a 21mm socket, remove the stock u-bolts. Use the floor jack to lower the axle assembly to allow for lifted block installation..
4. If installing 4" kit skip to step # 10.
5. Remove the spring eye bolts and nuts and remove the spring
6. Unbolt center pin and remove. Un-clamp leaf spring. CAUTION -Take care when releasing the c-clamps since the springs are under load and will "spring" apart when released
7. Position add-a-leaf under the next longest leaf of the spring pack. Replace the shorter spring leafs under the helper leaf and clamp together, being careful to align the center pin holes in the spring leafs. If less lift is desired the leaf under the new add-a-leaf can be removed
8. Insert the new center pin supplied with the kit through the spring assembly with the head of the center pin in the same location as the stock pin. Re-compress the pack with the c-clamps, not center pin, to avoid stripping of nut/bolt threads. Bolt together, being sure to align leafs. Cut off excess threads on the center pin with a hack saw. If applicable, re-form straps or install new bend straps. If heat is used on the straps, allow them to cool naturally and thoroughly before removing the c-clamps
9. Install the Rough Country block in between the leaf spring and the axle. Jack up the axle and align the pins in the blocks and axle seat. Secure with new u-bolts and torque evenly to 85 ft/lbs
10. Locate shock part number 650341 hydro or 650377 nitro and assemble poly bushings and sleeve in shock. Using a 13mm wrench, for the upper, and a 18mm and 21mm wrench for the lower. Install using factory hardware on upper and lower shock mount
11. If your vehicle is equipped with a rear sway bar you will need to install longer rear sway bar links, part # 1038. These are an option and not included in the kit.
11. Install the tires and wheels
12. Jack up the rear of the vehicle and remove the jack stands. Lower the vehicle to the floor
13. Adjust torsion bars so that the truck sets level.

## **POST INSTALLATION INSTRUCTIONS**

1. Have a qualified alignment center realign front end to factory specs.
2. Install Warning to Driver decal on sun visor.
3. Re-torque all nuts, bolts, and especially u-bolts after the first 100 miles, again after another 100 miles and then check periodically thereafter.
4. All components must be retightened after 500 miles, and every three thousand miles after installation
5. Adjust headlights to proper settings.

Thank you for purchasing a Rough Country Suspension System.

**ROUGH  
COUNTRY**  
SUSPENSION SYSTEMS