



Part # 56070
2007 - 2016 Toyota Tundra
6" suspension system

Parts contained in Box 1 of 3

<u>Part #</u>	<u>Description</u>	<u>Qty.</u>
56070-03	Front cross member	1
56070-04	Rear cross member	1
56070-06	Rear lateral compression arm plate	1
56070-11	Front lower skid plate	1
56070-13	Front upper skid plate	1
56070-16	Lateral compression arms	2
TCI-R40	Rear add-a-leafs	2

Parts contained in Box 2 of 3

<u>Part #</u>	<u>Description</u>	<u>Qty.</u>
56070-05	DS & PS front upper strut spacers	2
56070-07	DS & PS front sway bar drop brackets	2
56070-08	Front DS differential relocation bracket	1
56070-09	Front PS differential relocation bracket	1
56070-10	Rear DS differential relocation bracket	1
56070-14	Front bump stop relocation bracket	4
56070-15	Coil over pre load spacer	2
56070-17	Rear lifted block	2
5U-249S	9/16" x 2 9/16" x 11 5/8" square u-bolts	4
916NW	Hardware bag	1
CB38	Hardware bag	1
56070NB	Hardware bag	1
56070NB1	Hardware bag	1
56070INST	Instruction manual (customer copy)	1
56070INST	Instruction manual (installer copy)	1
MIRRORHANGER	Rear view mirror hanger	1
WARNINGDECAL	Warning decal	1
DECAL	Window sticker	1

Parts contained in Box 2 of 3

<u>Part #</u>	<u>Description</u>	<u>Qty.</u>
55070-01	Driver side knuckle	1
55070-02	Passenger side knuckle	1

Congratulations on your selection to purchase a Tuff Country EZ-Ride Suspension System. We at Tuff Country are proud to offer a high quality product at the industries most competitive pricing. Thank you for your confidence in us, and our product.

Before installation begins, it is the customers/installers responsibility to make sure that all parts are on hand. If any parts are missing, please feel free to call one of our customer service representatives @ (801) 280-2777.

Installation manual
6" suspension system
2007 - 2016
Toyota Tundra
Part # 56070

sj121008rev.01

Important customer information:

Tuff Country EZ-Ride Suspension highly recommends that a qualified and/or certified mechanic performs this installation.

If you desire to return your vehicle to stock, it is the customers responsibility to save all stock hardware.

This vehicles reaction and handling characteristics may differ from standard cars and/or trucks. Modifications to improve and/or enhance off road performance may raise the intended center of gravity. Extreme caution must be utilized when encountering driving conditions which may cause vehicle imbalance or loss of control. **DRIVE SAFELY!** Avoid abrupt maneuvers, such as sudden sharp turns which could cause a roll over, resulting in serious injury or death.

It is the customers responsibility to make sure that a re-torque is performed on all hardware associated with this suspension system after the first 100 miles of installation. It is also the customers responsibility to do a complete re-torque after every 3000 miles or after every off road use.

After the original installation, Tuff Country EZ-Ride Suspension also recommends having the alignment checked every 6 months to ensure proper tracking, proper wear on tires and front end components. Tuff Country EZ-Ride Suspension takes no responsibility for abuse, improper installation or improper suspension maintenance.

It is the responsibility of the customer or the mechanic to wear safety glasses at all times when performing this installation.

It is the customers/installers responsibility to read and understand all steps before installation begins. OEM manual should be used as a reference guide.

Make sure to use lock tite on all new and stock hardware associated with this installation.

The Tuff Country EZ-Ride Suspension product safety label that is included in your kit box must be installed inside the cab in plain view of all occupants.

Limited lifetime warranty

Notice to all Tuff Country EZ-Ride Suspension customers: It is your responsibility to keep your original sales receipt! If failure should occur on any Tuff Country EZ-Ride Suspension component, your original sales receipt must accompany the warranted unit to receive warranty. Warranty will be void if the customer can not provide the original sales receipt. Do not install a body lift in conjunction with a suspension system. If a body lift is used in conjunction with any Tuff Country EZ-Ride Suspension product, your Tuff Country EZ-Ride Suspension WARRANTY WILL BE VOID. Tuff Country Inc. ("Tuff Country") suspension products are warranted to be free from defects in material and workmanship for life if purchased, installed and maintained on a non-commercial vehicle; otherwise, for a period of twelve (12) months, from the date of purchase and installation on a commercial vehicle, or twelve thousand (12,000) miles (which ever occurs first). Tuff Country does not warrant or make any representations concerning Tuff Country Products when not installed and used strictly in accordance with the manufacturer's instructions for such installation and operation and accordance with good installation and maintenance practices of the automotive industry. This warranty does not apply to the cosmetic finish of Tuff Country products nor to Tuff Country products which have been altered, improperly installed, maintained, used or repaired, or damaged by accident, negligence, misuse or racing. ("Racing is used in its broadest sense, and, for example, without regards to formalities in relation to prizes, competition, etc.) This warranty is void if the product is removed from the original vehicle and re-installed on that or any other vehicle. This warranty is exclusive and is in lieu of any implied warranty of merchantability, fitness for a particular purpose or other warranty of quality, whether express or implied, except the warranty of title. All implied warranties are limited to the duration of this warranty. The remedies set forth in this warranty are exclusive. This warranty excludes all labor charges or other incidental of consequential damages. Any part or product returned for warranty claim must be returned through the dealer of the distributor from whom it was purchased. Tuff Country reserves the right to examine all parts returned to it for warranty claim to determine whether or not any such part has failed because of defect in material or workmanship. The obligation of Tuff Country under this warranty shall be limited to repairing, replacing or crediting, at its option, any part or product found to be so defective. Regardless of whether any part is repaired, replaced or credited under this warranty, shipping and/or transportation charges on the return of such product must be prepaid by the customer under this warranty.

Important information that needs to be read before installation begins:

Choosing a tire and wheel combination is an important step to make sure that you have a proper fit. For part # 56070, an 18" wheel or larger must be used once the suspension system has been installed. If using a 18" wheel, it is not recommended to exceed 9" in the width of the wheel and also the backspacing must be 5 1/2" or less. If using a 20" wheel, it is not recommended to exceed 9" in the width of the wheel and also the backing spacing must be 6" or less. Tuff Country recommends a 35x12.50 tire package. If larger than a 35x12.50 tire is installed on your vehicle in conjunction with part # 56070; Tuff Country assumes no liability and the warranty will be VOID. Slight trimming or removal of the front inner mud flaps may be necessary for proper clearance.

Tuff Country EZ-Ride Suspension recommends a wall mounted strut compressor be used when performing the steps that talk about installing the pre load spacer into the strut. If you do not have a wall mounted strut compressor, please have these steps performed by your local Toyota Dealership.

Before installation begins, Tuff Country EZ-Ride Suspension highly recommends that the installer performs a test drive on the vehicle. During the test drive, check to see if there are any uncommon sounds or vibrations. If uncommon sounds or vibrations occur on the test drive, uncommon sounds or vibrations will be enhanced once the suspension system has been installed. Tuff Country EZ-Ride Suspension highly recommends notifying the customer prior to installation to inform the customer of these issues if they exist.

New longer rear shocks are needed after this suspension system has been installed and the rear shocks need to be ordered as a separate part #. If you have not already ordered your rear shocks, please feel free to contact Tuff Country or your local Tuff Country dealer and order your new rear shocks. Tuff Country recommends installing a 30" fully extended nitrogen gas shock in the rear.

Tuff Country EZ-Ride Suspension packages (2) sets of instruction sheets with this box kit. (1) is for the installer and (1) is for the customer. The (1) for the customer has some post installation procedure literature and it is the installers responsibility to make sure that the customer receives a copy of the installation manual along with the literature.

Hardware bag 56070NB includes:

Bag # 1

<u>Description</u>	<u>Quantity</u>
516UN (5/16" unitorque nut)	12
14WA (1/4" USS flat washer)	18
SUW-916 (9/16 harden u-bolt washer)	5
916312B (9/16" x 3 1/2" bolt)	4
12WA (1/2 USS flat washer)	12
916UN (9/16" unitorque nut)	6
916214B (9/16" x 2 1/4" bolt)	2
5161B (5/16" x 1" bolt)	6

Bag # 2

<u>Description</u>	<u>Quantity</u>
716112B (7/16" x 1 1/2" bolt)	10
38WA (3/8" USS flat washer)	32
716UN (7/16" unitorque nut)	20
3834STB (3/8" x 3/4" self threading bolt)	2
7165B (7/16" x 5" bolt)	2
SUW-12 (1/2" harden u-bolt washer)	2

Bag # 3

<u>Description</u>	<u>Quantity</u>
78512B (7/8" x 5 1/2" bolt)	2
78WA (7/8" flat washer)	4
78UN (7/8" unitorque nut)	2
M18165B (18 mm x 165 mm bolt)	2
M18WA (18 mm flat washer)	4
M18UN (18 mm unitorque nut)	2
12312B (1/2" x 3 1/2" bolt)	4
716WA (7/16" USS flat washer)	8
12UN (1/2" unitorque nut)	4

Hardware bag 56070NB1 includes:

<u>Description</u>	<u>Quantity</u>
PB2408 (poly bushing)	16
S10082 (.875" x .563" x 2.080" sleeve)	4
S10058 (.875" x .510" x 2.080" sleeve)	4
S10203 (1.000" x .485" x .750" sleeve)	2
S10204 (1.750" x .563" x .593" sleeve)	1
SPN-05 (Adel bracket)	2
BH01 (.325" x .160" x 12" breather hose)	1
BH02 (.500" x .250" x 12" breather hose)	1
1434B (1/4" x 3/4" bolt)	2
14WA (1/4" USS flat washer)	2
56070-12 (rear cross member slot washer)	4
56070-18 (brake line relocation bracket)	4
56070-19 (brake line relocation bracket)	1
56070-20 (rear ABS wiring harness bracket)	1
LUBE (poly lube pack)	2

Hardware bag 916NW includes:

<u>Description</u>	<u>Quantity</u>
9/16" u-bolt high nuts	8
9/16" u-bolt harden washers	8

Hardware bag CB38 includes:

<u>Description</u>	<u>Quantity</u>
CB381 (3/8" x 6" centering bolt)	2
38FN (3/8" fine nut)	2

Special note: Before installation begins, it is the customers/installers responsibility to make sure that all parts are on hand. If any parts are missing, please feel free to call one of our customer service representatives @ (801) 280-2777.

Recommended tools selection:

Cut off wheel
Sawzall
Torque wrench
Standard socket set
Standard wrench set
Metric socket set
Metric wrench set
Tape measure
Hydraulic floor jacks

Torque settings:

5/16"	15—18 ft lbs.
3/8"	28—32 ft lbs.
7/16"	30—35 ft lbs.
1/2"	65—85 ft lbs.
9/16"	85—120 ft lbs.
5/8"	95—130 ft lbs.
3/4"	100—140 ft lbs.

Please follow instructions carefully:

Before installation begins, measure from the center of the hub, to the bottom of the fender well, and record measurements below.

Pre-installation measurements:

Driver side front: _____

Passenger side front: _____

Driver side rear: _____

Passenger side rear: _____

At the end of the installation take the same measurements and compare to the pre-installation measurements.

Post installation measurements:

Driver side front: _____

Passenger side front: _____

Driver side rear: _____

Passenger side rear: _____

Front end installation:

1. To begin installation, block the rear tires of the vehicle so that the vehicle is stable and can't roll backwards. Safely lift the front of the vehicle and support the frame with a pair of jack stands. Place a jack stand on both the driver and the passenger side. Next, remove the front wheels and tires from both sides.

2. Remove the stock front upper skid plate from the stock location. The (2) stock lower bolts and (2) stock upper bolts need to be saved for later re-installation. The (3) stock upper mounting hardware that connects the skid plate to the plastic valence and the skid plate can be discarded.

3. Working on the driver side, remove the stock sway bar from the stock lower control arm. Save the stock hardware. Repeat procedure on the passenger side.

4. Working on the driver side, remove the stock sway bar from the stock frame mounting location. Save the stock hardware. Repeat procedure on the passenger side. Set the stock front sway bar aside.

5. Working on the driver side, remove the stock cotter pin from the stock castle nut that connects the outer tie rod to the stock knuckle. Save the stock cotter pin. Now, loosen but do not remove the stock castle nut that connects the outer tie rod to the stock knuckle. Carefully break the stock taper. **Special note: Hitting the stock knuckle with a hammer will make removal of the stock outer tie rod easier. Take special care not to rip or tear the stock outer tie rod ball joint dust boot.** Repeat procedure on the passenger side.

6. Working on the driver side, remove the stock ABS line

and brake line brackets from the stock location on the knuckle and the upper control arm. Save all mounting hardware. Repeat procedure on the passenger side.

7. Working on the driver side, remove the stock brake caliper from the stock location. Save the stock hardware. Carefully tie the stock brake caliper up out of the way in the fender well. **Take special care not to over extend the brake lines or ABS lines.** Repeat procedure on the passenger side.

8. Working on the driver side, remove the stock hub assembly cap from the center of the stock hub assembly. Save the hub assembly cap. Repeat procedure on the passenger side.

9. Working on the driver side, remove the stock cotter pin, locking cap and castle nut that connects the CV axle to the hub assembly. Save all stock hardware. Repeat procedure on the passenger side.

10. Working on the driver side, remove the stock rotor from the stock location and set aside. Repeat procedure on the passenger side.

11. Working on the driver side, remove the stock cotter pin that attaches the stock upper control arm castle nut to the stock knuckle and set aside. Now, loosen but do not remove the stock castle nut from the upper control arm ball joint. Carefully break the stock taper on the upper control arm ball joint and the knuckle. Repeat procedure on the passenger side.

12. Working on the driver side, remove the (2) stock bolts that connect the stock lower control arm to the stock knuckle. Set the (2) stock bolts aside. Repeat procedure on the passenger side.

13. Move back to the stock upper control arm castle nut that connects the upper control arm to the stock knuckle and remove completely. Set the stock castle nut, stock knuckle and hub assembly aside. Repeat procedure on the passenger side.

14. Working on the driver side, carefully tie the stock CV axle to the stock upper control arm so that once the stock coil over is removed and the stock lower control arm is removed the CV axle will not over extend and cause damage. Repeat procedure on the passenger side.

15. Working on the driver side, remove the (4) stock nuts holding the stock coil over into the stock upper location. Save the (4) stock nuts. Now remove the stock lower mounting hardware that connects the stock coil over to the stock lower control arm. Set the stock lower hardware and the stock coil over aside. **Special note: To help make remove of the stock coil over easier, loosen but do not remove the stock front and rear hardware securing the stock lower control arm to the stock location.** Repeat procedure on the passenger side.

16. Working on the driver side, remove the stock front and rear hardware that connects the stock lower control arm into the stock location. Set the stock lower control arm, front and rear mounting hardware aside. Repeat procedure on the passenger side.

17. Place a hydraulic floor jack under the front differential and carefully raise up on the hydraulic floor jack until it makes contact with the front differential.

18. Working on the driver side, remove the stock rear mounting hardware that connects the stock rear bracket to the rear portion of the front differential and the rear driver side stock lower control arm pocket. We want to save the shorter of the two stock bolts. The longer stock bolt and bracket may be discarded.

19. Working on the back side of the stock rear cross member, measure from the center of the of the stock lower control arm mounting location to the the inside of the vehicle 2 1/2" and scribe a mark. Repeat procedure on the passenger side. Using a sawzall, carefully cut the rear cross member out of the stock location. Follow the lines that were scribed on the driver and passenger side of the stock rear cross member and also make sure to cut all the way through the rear cross member. The stock rear cross member may be discarded. **Special note: Tuff Country does not recommend using a torch when making these cuts on the rear cross member.**



20. Now that the rear cross member has been removed, clean, dress up and paint any exposed metal.

21. Place a hydraulic floor jack under the front drive line and carefully raise up on the hydraulic floor jack until it makes contact with the front drive line.

22. Working on the driver side, remove the stock front mounting hardware that connects the stock front differential bracket to the front cross member. The stock hardware may be discarded. Repeat procedure on the passenger side.

23. Carefully lower down at the same time on both hydraulic floor jacks holding the stock front differential and the stock front drive line about 6". **Take special care not to damage the 4WD wire harness when lowering the front differential.**

24. Working on the driver side, remove the (3) stock bolts

that connect the stock driver side differential relocation bracket to the stock front differential. Save the stock hardware. The stock bracket may be discarded.

25. Working on the passenger side, remove the (2) stock bolts that connect the stock passenger side differential relocation bracket to the stock front differential. The stock hardware and stock bracket may be discarded.

26. Locate the new driver side differential relocation bracket. Also, locate (2) PB2408 poly bushings and (1) .875" x .563" x 2.080 crush sleeve from hardware bag 56070NB1. Install the new bushings and sleeve into the new driver side differential relocation bracket. **Make sure to use a lithium or moly base grease on the new bushings and sleeve before installing them into the new bracket. This will increase the life of the bushing as well as help prevent squeaking.** Set the new bracket aside.

27. Locate the driver side rear differential relocation bracket. Also, locate (2) PB2408 poly bushings and (1) .875" x .563" x 2.080 crush sleeve from hardware bag 56070NB1. Install the new bushings and sleeve into the new driver side rear differential relocation bracket. **Make sure to use a lithium or moly base grease on the new bushings and sleeve before installing them into the new bracket. This will increase the life of the bushing as well as help prevent squeaking.** Set the new bracket aside.

28. Locate the new passenger side differential relocation bracket. Also, locate (4) PB2408 poly bushings and (2) .875" x .563" x 2.080 crush sleeve from hardware bag 56070NB1. Install the new bushings and sleeves into the new passenger side differential relocation bracket. **Make sure to use a lithium or moly base grease on the new bushings and sleeves before installing them into the new bracket. This will increase the life of the bushing as well as help prevent squeaking.** Set the new bracket aside.

29. Locate the new driver side front differential relocation bracket and the stock hardware. Also, locate (3) 9/16" u-bolt harden washers from hardware bag # 1 in the hardware box 56070NB. Install the new front driver side differential relocation bracket to the stock location and secure using the stock hardware and the new 9/16" u-bolt harden washers. **Special note: The new 9/16" u-bolt harden washers need to be installed between the new bracket and the differential.** For now, just get the (3) stock bolts hand tight.

30. Locate the new passenger side front differential relocation bracket. Locate (2) 9/16" x 2 1/4" bolts, (4) 1/2" USS flat washers, (2) 9/16" unitorque nuts and (2) 9/16" u-bolt harden washers from hardware bag # 1 in hardware box 56070NB. Install the new front passenger side differential relocation bracket to the inside of the stock passenger side differential mounting location. Secure using the new 9/16" x 2 1/4" bolts and hardware. **Special note: We want to install the new bolt from the passenger side of the vehi-**

cle towards the driver and also we want to make sure that we install the new 9/16" u-bolt harden washers between the stock front differential and the new bracket. For now, just get the (2) new bolts hand tight.

31. Locate the driver side rear differential relocation bracket and the short stock mounting hardware. Also, locate (1) 1.750" x .563" x .593" spacer sleeve from hardware bag 56070NB1. Install the new bracket using the stock hardware into the stock rear mounting location. **Special note: We want to make sure and install the spacer sleeve between the new bracket and the stock differential. Also, we want to make sure that the "L" side of the bracket is towards the inside of the vehicle.** For now, just get the stock bolt hand tight.



32. Locate the new front cross member. Locate (2) 7/8" x 5 1/2" bolts, (4) 7/8" flat washers and (2) 7/8" unitorque nuts from hardware bag # 3 in hardware box 56070NB. Install the new front cross member into the stock front lower control arm pockets and secure using the new 7/8" x 5 1/2" bolts and hardware. Do not tighten at this point. **Special note: When we install the front cross member make sure that the Tuff Country Logo is facing forward.**



33. Locate the new rear cross member. Locate (2) 18 mm x 165 mm bolts, (4) 18 mm flat washers and (2) 18 mm unitorque nuts from hardware bag # 3 in hardware box 56070NB. Also, locate (4) slot washers from hardware bag 56070NB1. Install the new rear cross member into the stock front lower control arm pockets and secure using the 18 mm x 165 mm bolt, hardware and slot washers. Do not tighten at this point. **Special note: Make sure that the new slot washers seat properly into the stock cam washers. You will need to remember this once the new 18 mm bolts are torqued to specs. The new 18 mm flat washer will fit towards the head of the bolt and towards the new unitorque nut.**



34. Locate (4) 9/16" x 3 1/2" bolts, (8) 1/2" USS flat washers and (4) 9/16" unitorque nuts from hardware bag # 1 in hardware box 56070NB. Carefully lower down on both hydraulic floor jacks at the same time until the newly installed differential relocation brackets seat properly into the newly installed front and rear cross member. Slight prying of the differential may be needed to help the brackets going into the new location. Secure all (4) locations using the new 9/16" x 3 1/2" bolts and hardware. Do not tighten at this point. Both hydraulic floor jacks may be removed from the front differential and the front drive line.

35. Locate the stock driver and passenger side lower control arms and the stock hardware. Working on the driver side, install the stock lower control arm into the newly installed front and rear cross members and secure using the stock hardware. Do not tighten at this point. Repeat procedure on the passenger side. Let the stock lower control arms hang.

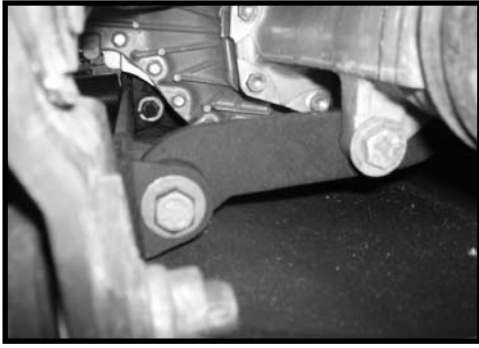
36. Working on the driver side, add some thread locker or loctite to the stock bolts holding the new driver side differential relocation bracket to the differential and torque the (3) stock bolts to **74 ft. lbs.**

37. Working on the passenger side, add some thread locker or loctite to the new 9/16" x 2 1/4" bolts holding the new passenger side differential relocation bracket to the differential and torque both bolts to **95 ft. lbs.**

38. Working on the driver side, add some thread locker or loctite to the stock hardware securing the new driver side rear differential bracket to the differential and torque to **74 ft. lbs.**

39. Working on the driver side, add some thread locker or loctite to the new 9/16" x 3 1/2" bolts securing the new differential relocation brackets to the new front and rear cross member and torque to **95 ft lbs.**

40. Working on the passenger side, add some thread locker or loctite to the new 9/16" x 3 1/2" bolts securing the new differential bracket to the new front and rear cross member and torque to **95 ft lbs.**



41. Locate (1) BH01 breather hose and (1) BH02 breather hose from hardware bag 56070NB1. Working on the driver side, remove the (2) stock breather hoses from the stock location. On the large of the two stock breather hoses we need to remove the stock clamps. Install the stock clamps to the larger of the two new breather hoses. Now install the new breather hoses into the stock location.



42. Locate the new front lower skid plate. Locate (6) 7/16" x 1 1/2" bolts, (12) 3/8" USS flat washers and (6) 7/16" uni-torque nuts from hardware bag # 2 in hardware box 56070NB. Install the new front lower skid plate to the front and rear cross member using then new 7/16" x 1 1/2" bolts and hardware. Make sure to use thread locker or loctite and torque to **45 ft lbs.**



43. Move back to the (2) new 7/8" x 5 1/2" bolts holding the front cross member into the new location and add some thread locker or loctite and torque both new bolts to **140 ft. lbs.**

44. Move back to the (2) new 18 mm x 165 mm bolts and hardware holding the rear cross member into the new location and add some thread locker or loctite and torque both new bolts to **125 ft. lbs.**

45. Working on the driver side, remove the (2) stock bump stops from the stock location and save the stock bump stops. Repeat procedure on the passenger side.

46. Locate (4) new bump stop relocation brackets and the stock bump stops. Add some thread locker and loctite to the threaded part of the stock bump stops and install them into the new bump stop relocation bracket. Add some thread locker or loctite to the threaded part of the new bump stop relocation brackets and install into the stock location on the driver and passenger side. **Special note: We want to make sure that we get the new bump stop relocation bracket tight to the stock location but we also want to make sure that we do not over tighten them and break off the threads of the new bump stop relocation brackets.**



Tuff Country EZ-Ride Suspension recommends a wall mounted strut compressor be used when performing the steps that talk about installing the pre load spacer into the strut. If you do not have a wall mounted strut compressor, please have these steps performed by your local Toyota Dealership.

47. Working on the driver side strut, measure the exposed threads sticking out of the middle bolt on the stock strut. Repeat procedure on the passenger side strut.

Driver side measurement: _____

Passenger side measurement: _____

48. Working on the driver side strut, lay the strut on a work bench with the out arrow on the upper strut bearing plate facing the sky. Then scribe a reference mark on the bottom eyelet of the stock strut. This will allow you to install the upper strut plate in the stock location once the strut is put back together with the strut pre load spacers. Repeat procedure on the passenger side strut.

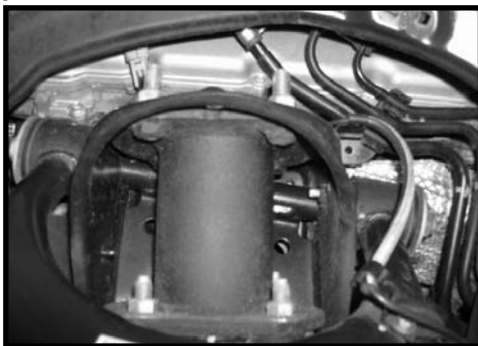
49. Using a wall mounted strut compressor, carefully compress the driver side stock strut until the upper stock strut bearing plate can be removed. Remove the stock nut and hardware from the top of the stock strut assembly and save

the stock hardware. Set the stock upper strut bearing plate and isolator aside.

50. Locate (1) new upper strut pre load spacer. Also, locate the stock hardware, stock upper strut bearing plate and isolator. Install the new upper strut pre load spacer to the stock bearing plate then install the stock isolator to the new pre load spacer. Now install into the stock strut using the stock hardware. Refer back to the measurements that were made in step # 47 and tighten the nut until the measurement is the same as the measurement from step # 47. **Special note: Make sure that the stock upper strut bearing plate with the out arrow is facing the reference mark that was made on the bottom of the stock strut.** Remove the modified driver side stock strut from the wall mounted strut compressor and set aside. Repeat procedure on the passenger side strut.



51. Locate (2) new strut spacers and the stock upper strut hardware. Install the new strut spacers to the top of the driver and passenger side struts and secure using the stock hardware. Make sure to use thread locker or loctite and torque to **42 lbs.** **Special note: on the bottom plate of the new strut spacer, there is a straight edge, this straight edge needs to be installed towards the outside of the strut. Refer back to the reference mark on the top of the bearing plate.**



52. Locate (8) 7/16" unitorque nuts and (8) 3/8" USS flat washers from hardware bag # 2 in hardware box 56070NB. Also, locate the stock lower strut mounting hardware. Working on the driver side, install the modified strut into the stock upper location and secure using the new 7/16" unitorque nuts and hardware. Do not tighten at this point. Install the lower portion of the modified strut to the stock lower control arm using the stock hardware. Make sure to add some thread locker or loctite on the stock bolt and torque to **144 ft. lbs.** Move back to the (4) 7/16" nuts and add some thread locker or loctite and torque to **42 ft. lbs.** Repeat procedure on the passenger side modified strut.

53. Locate the driver side stock knuckle and hub assembly. Remove the (4) stock bolts holding the hub assembly and backing plate to the stock knuckle. Set the stock hardware aside.

54. Remove the hub assembly and backing plate from the stock knuckle and set aside.

55. Remove the stock seal from the stock knuckle and set aside. **Special note: Take special care not to damage the stock seal during removal. Once the stock seal is removed, take some time to clean the seal so that there is no dust or rust around the seal.**

56. Locate the new driver side knuckle and the stock seal that was removed earlier. Install the stock seal into the new knuckle. Special note: Take special care not to damage the stock seal during installation.

57. Now install the stock backing plate and stock hub assembly to the new knuckle and secure using the stock hardware. Make sure to use thread locker or loctite and torque the (4) stock bolts to **92 ft. lbs.**

58. Repeat procedure on the new passenger side knuckle.

59. Working on the driver side, remove the wire tie that is holding the stock CV axle to the stock upper control arm. Repeat procedure on the passenger side.

60. Working on the driver side, loosen but do not remove the stock hardware that connects the stock upper control arm into the stock location. We want to do this so that the stock upper control arm can move freely and will also help make the installation of the new knuckle easier. Repeat procedure on the passenger side.

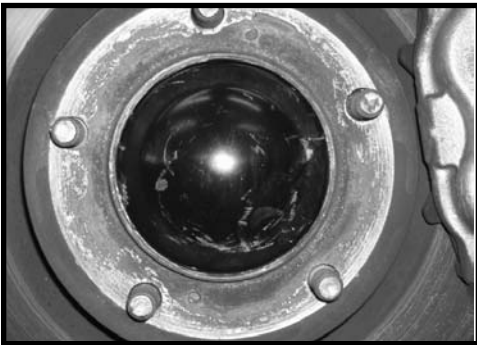
61. Locate the new driver side knuckle, the stock upper control arm castle nut and stock upper control arm castle nut cotter pin. Install the new driver side knuckle to the stock upper control arm and secure using the stock castle nut. Torque the stock castle nut to 67 ft lbs. Then install the stock cotter pin through the stock upper control arm ball joint and stock castle nut. **Special note: if the holes in the stock upper control arm ball joint and castle nut do not line up, DO NOT loosen but tighten until the stock cotter pin can be installed. Also, when installing the new knuckle to the stock upper control arm, we want to make sure and carefully slide the stock CV axle back into the stock hub assembly.**



62. Locate the stock (2) lower mounting bolts that connected the stock knuckle to the stock lower control arm. Add some thread locker or loctite to the stock bolts and secure the new knuckle to the stock lower control arm. Torque the stock bolts to **270 ft lbs**. Repeat procedure on the passenger side.

63. Locate the stock CV axle nuts, locking washer and cotter pins. Working on the driver side, install the stock CV axle nut to the stock CV. Torque the stock nut to **270 ft. lbs**. Now install the locking washer and cotter pin. **Special note: if the stock cotter pin does not line up with the holes in the stock CV axle and locking washer, DO NOT loosen but tighten until the stock cotter pin can be installed.** Repeat procedure on the passenger side.

64. Locate the stock CV axle dust caps. Working on the driver side, install the CV axle dust cap into the stock location. Repeat procedure on the passenger side.



65. Locate the stock outer tie rod castle nut and cotter pin. Working on the driver side, rotate the stock outer tie rod 180 degrees and then install the stock outer tie rod to the newly installed knuckle. Secure using the stock castle nut and torque to **67 ft lbs**. Now install the stock cotter pin into the stock location. **Special note: if the stock cotter pin does not line up with the holes in the stock outer tie rod and the castle nut, DO NOT loosen but tighten until the stock cotter pin can be installed.** Repeat procedure on the passenger side.



66. Locate the stock rotors. Working on the driver side, install the stock rotor into the stock location. **Special note: It would be a good idea to install one lug to help secure the stock rotor which will make installation of the stock brake caliper easier.** Repeat procedure on the passenger side.

67. Working on the driver side, remove the stock brake line bracket from the stock frame rail. Save the stock hardware.

Repeat procedure on the passenger side.

68. Locate the stock brake caliper hardware. Working on the driver side, install the stock brake caliper to the newly installed knuckle using the stock hardware. Make sure to use thread locker or loctite and torque to **75 ft. lbs**. Repeat procedure on the passenger side.

69. Working on the driver side, remove and discard the stock brake line bracket that connects the ABS lines and the brake line together. Repeat procedure on the passenger side.

70. Working on the driver side, remove the stock ABS line for the stock upper clip. **Special note: there is and upper and lower attaching point on the upper ABS clip. We only want to remove the ABS from the lower portion of the ABS clip.** Repeat procedure on the passenger side.

71. Locate the stock mounting hardware that connected the stock ABS clip to the stock upper control arm. Install the stock upper ABS clip to the stock upper control arm using the stock hardware. Make sure to use thread locker or loctite and torque to **8 ft. lbs**. Repeat procedure on the passenger side.

72. Locate (2) brake line relocation bracket from hardware bag 56070NB1. Locate (2) 5/16" x 1" bolts, (4) 1/4 USS flat washers and (2) 5/16" unitorque nuts from hardware bag # 1 in hardware box 56070NB. Working on the driver side, install the new brake line relocation bracket to the stock brake line relocation bracket using the new 5/16" x 1" bolt and hardware. **Do not tighten at this point.** Repeat procedure on the passenger side.

73. Locate the stock brake line bracket hardware. Working on the driver side, install the newly installed brake line relocation bracket to the stock location using the stock hardware. Make sure to use thread locker or loctite and torque to **12 ft lbs**. Repeat procedure on the passenger side. Now move back the the new 5/16" x 1" bolt securing the stock brake line bracket to the new brake line bracket and add some thread locker or loctite and torque to **12 ft lbs**. Repeat procedure on the passenger side.



74. Locate the stock hardware that attached the stock brake line bracket to the stock knuckle. Working on the driver side, secure the stock brake line bracket to the newly installed knuckle using the stock hardware. Make sure to use thread locker or loctite and torque to **12 ft lbs. Special**

note: Take special care not to kink the hard line going to the brake caliper. Repeat procedure on the passenger side.



75. Working on the driver side, remove the stock bracket that is attached to lower portion of the ABS line. The stock bracket may be discarded. Repeat procedure on the passenger side.

76. Working on the driver side, attach the ABS sensor to the new knuckle using the stock hardware. Make sure to use thread locker or loctite and torque to **8 ft. lbs.** Repeat procedure on the passenger side.

77. Locate (2) SPN-05 adel clamps, (2) 1/4" x 3/4" bolts and (2) 1/4" USS flat washers from hardware bag 56070NB1. Working on the driver side, secure the ABS line to the inside of the newly installed knuckle using the new adel clamp and hardware. Make sure to use thread locker or loctite and torque to **8 ft lbs.** Repeat procedure on the passenger side. **Special note: Now we want to cycle the steering to make sure that we have enough play in the stock brake lines and ABS lines.**



78. Locate the stock sway bar and the stock sway bar mounting hardware. Install the stock sway bar to the driver and passenger side lower control arm using the stock hardware. Make sure to use thread locker or loctite and torque both the driver and passenger side stock hardware to **85 ft lbs.**

79. Locate the new driver and passenger side sway bar relocation brackets. Also, locate the stock upper sway bar mounting hardware. Working on the driver side, install the new sway bar relocation bracket to the stock frame rail and secure using the stock hardware. Make sure to use thread locker or loctite and torque to **85 ft. lbs.** Repeat procedure on the passenger side.

80. Locate (4) 7/16" x 1 1/2" bolts, (8) 3/8" USS flat wash-

ers and (4) 7/16" unitorque nuts from hardware bag # 2 in hardware box 56070NB. Working on the driver side, install the stock sway bar to the newly installed sway bar relocation bracket using the new 7/16" x 1 1/2" bolts and hardware. **Do not tighten at this point.** Repeat procedure on the passenger side. Move back to the (4) new 7/16" x 1 1/2" bolt and add some thread locker or loctite and torque all (4) bolts to **46 ft lbs.**



81. Locate the new upper skid plate. Locate (6) 5/16" unitorque nuts and (6) 1/4" USS flat washers from hardware bag # 1 in hardware box 56070NB. Also, locate (4) stock skid plate bolts. Install the (3) 5/16" nuts on the bolts that are welded to the new skid plate. We want to run the nuts all the way down on the bolt until we run out of thread. Now install the new upper skid plate to the stock location using the stock hardware. Make sure to use thread locker or loctite and torque to **12 ft. lbs.** Now install 1/4" USS flat washers on top of the 5/16" nuts that were installed on the bolts that are welded onto the new skid plate. Install the skid plate to the front valance using the new 5/16" unitorque nuts and hardware.



82. Locate the new lateral compression arm. Locate (8) PB2408 poly bushings and (4) .875" x .500" x 2.080 crush sleeves from hardware bag 56070NB1. Install the new bushings and sleeves into each end of the new lateral compression arms. **Special note: Make sure to use a lithium or moly base grease on the new bushings and sleeves.**

This will help increase the life of the bushing and also help prevent squeaking.

83. Working on the driver side, remove the inner bolt that connects the transfer case cross member to the stock location. The stock hardware may be discarded. Repeat procedure on the passenger side.

84. Locate the lateral compression arm plate. Locate (2) 7/16" x 5" bolts, (4) 3/8" USS flat washers, (2) 7/16" uni-torque nuts and (2) 1/2" harden u-bolt washers from hardware bag # 2 in hardware box 56070NB. Install the new lateral compression arm plate to the stock transfer case cross member using the new 7/16" x 5" bolt and hardware on both the driver and the passenger side of the vehicle. Do not tighten at this point. **Special note: We want to install the new 1/2" harden u-bolt washers between the back side of the new lateral compression arm plate and the stock transfer case cross member. Make sure we do this on both the driver and passenger side. Also, you will notice that there are (2) 3/8" holes in the center of the new lateral compression arm plate, once the new lateral compression arm plate is installed these holes will be facing the top of the vehicle.**

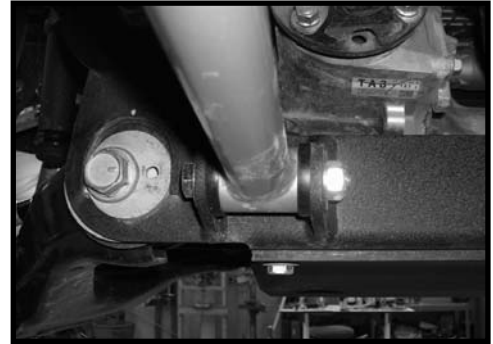
85. Using the new holes in the new lateral compression arm plate as a guide, carefully drill (2) 5/16" holes into the front portion of the stock transfer case cross member.

86. Locate (2) 3/8" x 3/4" self threading bolts from hardware bag # 2 from hardware box 56070NB. Secure the new lateral compression arm plate to the stock transfer case cross member using the new 3/8" x 3/4" self threading bolts to the holes that were drilled previously into the the stock transfer case cross member. Make sure to use thread locker or loctite and torque to **18 ft lbs**. Now move back to the newly installed 7/16" x 5" bolt holding the new lateral compression arm plate to the stock transfer case cross member and add some thread locker or loctite and torque both bolts **48 ft lbs**.



87. Locate (4) 1/2" x 3 1/2" bolts, (8) 7/16" USS flat washers and (4) 1/2" unitorque nuts from hardware bag # 3 from hardware box 56070NB. Also, locate the new lateral compression arms with the new bushings and sleeves installed in them. Install the new lateral compression arms to the newly installed lateral compression arm plate using the new 1/2" x 3 1/2" bolts and hardware. **Do not tighten at this point.** Now swing the new lateral compression arms forward and install them into the newly installed rear cross

member using the new 1/2" x 3 1/2" bolt and hardware. Move back to the (4) new 1/2" x 3 1/2" bolt and add some thread locker or loctite and torque all (4) bolts to **55 ft lbs**.



88. Place a hydraulic floor jack under the driver side of the rear differential and carefully raise up on the hydraulic floor jack until it makes contact with the rear differential.

89. Working on the driver side, remove the stock rear shock from the stock upper and lower location. Save the stock lower mounting hardware but the upper mounting hardware may be discarded. The stock shock may be discarded. **Special note: New longer rear shocks are needed after this suspension system has been installed and the rear shocks need to be ordered as a separate part #. If you have not already ordered your rear shocks, please feel free to contact Tuff Country or your local Tuff Country dealer and order your new rear shocks. Tuff Country recommends installing a 30" fully extended nitrogen gas shock in the rear.** Repeat procedure on the passenger side.

90. Working on the driver side, remove the stock e-brake cable bracket from the rear differential. Save the stock hardware. Repeat procedure on the passenger side.

91. Working on the passenger side, loosen but do not remove the stock rear u-bolts. We want to do this so that we can move the rear differential forward or rearward once we install the new rear add-a-leaves and block on the driver side.

92. Working on the driver side, remove and discard the stock u-bolts and hardware. Save the stock lower u-bolt plate and upper bump stop plate.

93. Working on the rear differential, we want to remove the stock brake line bracket and save the stock hardware.

94. Remove the stock ABS bracket from the stock location above the spare tires. Make sure to save the stock hardware.

95. Remove the stock rear brake line brackets that connects to the rear differential just to the driver and passenger side of the rear pumpkin. Save the stock hardware.

96. Carefully lower down on the hydraulic floor jack enough so that the new rear add-a-leaves and the new block can be installed. **Special note: Even though we have removed**

all the brake line and ABS points, make sure not to over extend or kink any brake lines or ABS lines.

97. Working on the driver side and using a pair of "C" channel vise grips, clamp the stock rear springs together. Place one towards the front of the stock centering bolt and one towards the rear. **Special note: Make sure not to clamp the stock over load.**

98. Carefully remove the stock centering bolt from the stock location and discard. There is a dahl that is holding the stock over load to the stock spring pack. This dahl needs to be removed. To do this, remove the stock over load from the stock spring pack and remove the dahl. The dahl may be discarded. Set the stock over load aside.

99. Locate the new rear add-a-leafs. Also, locate the new 3/8" centering bolts and nuts from hardware bag CB38. Working on the driver side, install the new add-a-leaf between the stock spring and the stock overload. Secure using the new 3/8" centering bolt and nuts. Tighten the new centering bolt until all the springs come together and torque to **40 ft lbs.** **Special note: Make sure that the hole where the dahl was located is installed towards the rear of the vehicle. Also, Tuff Country does not recommend using a high speed air gun to tighten the nut all the way down. Once the springs are starting to come together, Tuff Country recommends using a hand wrench to finish tightening the nut. If a high speed air gun is used to tighten the centering bolt all the way down, the centering bolt may strip causing the springs to come apart. By installing some anti-seize lubricant on the new centering bolt will also help during the installation of the new rear add-a-leaf.** Remove the "C" channel vise grips that are holding the stock spring together.

100. Working on the driver side and using a die grinder, carefully cut off the excess thread from the new centering bolt.

101. Locate (1) new rear block. Working on the driver side, install the new block between the modified stock spring pack and the stock axle. **Special note: There is an arrow stamped in the new block, make sure that this arrow is pointing towards the front of the vehicle. Also, make sure that we install the block into the center hole in the stock spring perch.** Carefully raise up on the hydraulic floor jack until the new block seats properly with the modified stock spring pack.

102. Locate the (2) new 9/16" x 2 9/16" x 11 5/8" square u-bolts. Locate (4) 9/16" u-bolt high nuts and (4) 9/16" u-bolt washers from hardware bag 916NW. Also, locate the stock upper bump stop plate and stock lower u-bolt plate. Working on the driver side, install the new u-bolts into the stock location and secure using the new the new hardware. For now, just get the new hardware started on each leg of the new u-bolts.



103. Repeat step # 96 - 102 on the passenger side.

104. Move back to the driver and passenger side and torque the new u-bolts to **115 ft lbs.**

105. Locate (2) rear brake line relocation bracket from hardware bag 56070NB1. Also, locate the stock e-brake cable hardware that was removed earlier. Working on the driver side, install the new brake line relocation bracket to the stock rear axle using the stock hardware. **Do not tighten at this point.** Repeat procedure on the passenger side.

106. Locate (2) 5/16" x 1" bolt, (4) 1/4" USS flat washers and (2) 5/16" unitorque nuts from hardware bag # 1 from hardware box 56070NB. Working on the driver side, install the stock e-brake cable bracket to the newly installed brake line relocation bracket and secure using the new 5/16" x 1" bolts and hardware. Make sure to use thread locker or loctite and torque to **12 ft lbs.** Now move back to the stock lower e-brake mounting hardware and add some thread locker or loctite and torque to **10 ft lbs.** Repeat procedure on the passenger side.



107. Locate the new rear shocks. **Special note: New longer rear shocks are needed, if you have not already ordered your new shocks, please contact Tuff Country or your local Tuff Country dealer and order the proper shocks. Tuff Country recommends using a 30" fully extended nitrogen gas shock.** Insert the proper crush sleeve from your shock sleeve bag into the eyelet of the new shocks. **Special note: make sure to use a lithium or moly base grease to apply on the sleeve before it is installed into the new shock.** Now install new shocks into the stock location using the stock hardware for the lower mount and the new upper bushing, washers, and nut on the upper mount. Make sure to add thread locker or loctite and torque the bottom hardware to **65 ft lbs.** and the upper to **18 ft lbs.**

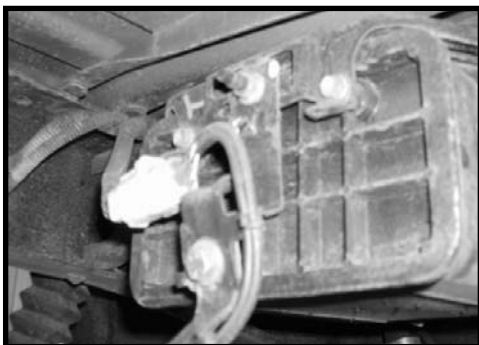
108. Locate the new rear brake line relocation bracket from hardware bag 56070NB1. Locate the stock hardware that

was removed earlier in the installation. Also, locate (1) 5/16" x 1" bolt, (2) 1/4" USS flat washers and (1) 5/16" unitorque nuts from hardware bag 56070NB1. Install the new brake line relocation to the stock location on the top of the pumpkin and secure using the stock hardware. **Do not tighten at this point.** Now install the stock brake line bracket to the newly installed brake line relocation bracket using the new 5/16" x 1" bolt and hardware. Make sure to use thread locker or loctite and torque to **12 ft lbs.** Now move back to the stock hardware on the top of the pumkpin and add some thread locker or loctite and torque the stock bolt to **10 ft lbs.**



109. Locate the stock brake line hardware that was removed from the brake line just to the driver and passenger side of the pumpkin. Install the new stock brackets back to the stock location in the upside down location using the stock hardware. Make sure to use thread locker or loctite and torque to 10 ft lbs.

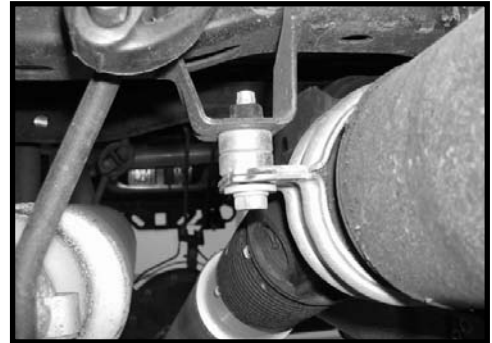
110. Locate the new rear ABS brake line relocation bracket from hardware bag 56070NB1. Locate the stock hardware that was removed earlier in the installation. Also, locate (1) 5/16" x 1" bolt, (2) 1/4" USS flat washers and (1) 5/16" unitorque nuts from hardware bag 56070NB1. Install the new ABS relocation bracket to the stock location above the spare tire and secure using the stock hardware. **Do not tighten at this point.** Now secure the stock ABS bracket to the newly installed relocation bracket using the new 5/16" x 1" bolt and hardware. Make sure to use thread locker or loctite and torque to **12 ft lbs.** Move back to the stock hardware and add some thread locker or loctite and torque the stock hardware to **8 ft lbs.**



111. If you still have the hydraulic floor jacks under the rear differential, they may be removed at this time.

112. Place a haydraulic floor jack under the rear drive line close to the stock carrier bearing. Remove the stock hardware that connects the stock rear carrier bearing to the stock bracket. Save the stock hardware. Carefully lower down on the hydraulic floor jack about 1".

113. Locate (2) 1.000" x .485" x .750" spacer sleeves from hardware bag 56070NB1. Also, locate the stock carrier bearing hardware that was removed earlier. Install the new sleeves between the stock carrier bearing and the stock carrier bearing bracket and secure using the stock hardware. Make sure to use thread locker or loctite and torque the stock bolts to **65 ft lbs.** The hydraulic floor jack may be removed.



114. Check and double check to make sure that all steps have been performed properly and check again.

115. Install the new tires and wheel and carefully lower the vehicle to the ground.

116. Working on the driver side, add some thread locker or loctite to the stock bolt holding the stock upper control arm into the stock location and torque to **75 ft lbs.** Repeat procedure on the passenger side.

117. Working on the driver side, move back to the stock hardware that connects the stock lower control arm to the newly installed front and rear cross member and torque the **140 ft lbs.**

Special note: After the completion of the installation, Tuff Country EZ-Ride Suspension recommends taking the vehicle to an alignment shop and having a proper front end alignment performed.

Tuff Country EZ-Ride Suspension recommends that a complete re-torque is done on all bolts associated with this suspension system. It is the customers responsibility to make sure that a re-torque is performed on all hardware associated with this suspension system after the first 100 miles of installation. It is also the customers responsibility to do a complete re-torque after every 3000 miles or after every off road use. Neglect of following these steps could cause brackets to come loose and cause serious damage to the suspension system and to the vehicle.

Tuff Country EZ-Ride Suspension packages (2) sets of instruction sheets with this box kit. (1) is for the installer and (1) is for the customer. The (1) for the customer has some post installation procedure literature and it is the installers responsibility to make sure that the customer receives a copy of the installation manual along with the literature.



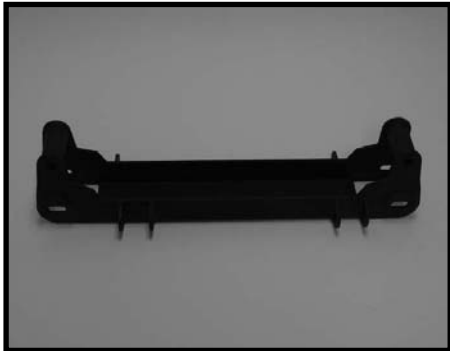
55070-01 / Qty. 1
Driver side knuckle



55070-02 / Qty. 1
Passenger side knuckle



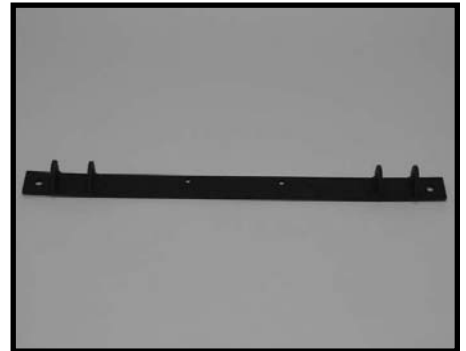
56070-03 / Qty. 1
Front cross member



56070-04 / Qty. 1
Rear cross member



56070-05 / Qty. 2
Driver and Passenger side front upper strut spacer



56070-06 / Qty. 1
Rear lateral compression arm plate



56070-07 / Qty. 2
Driver and Passenger side front sway bar relocation bracket



56070-08 / Qty. 1
Driver side front differential relocation bracket



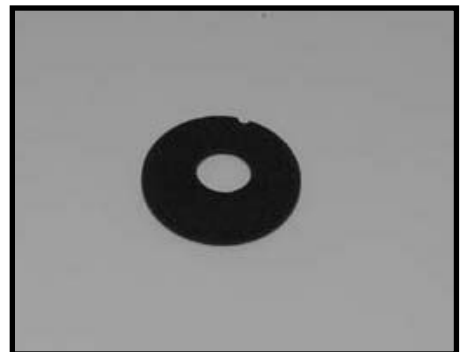
56070-09 / Qty. 1
Passenger side front differential relocation bracket



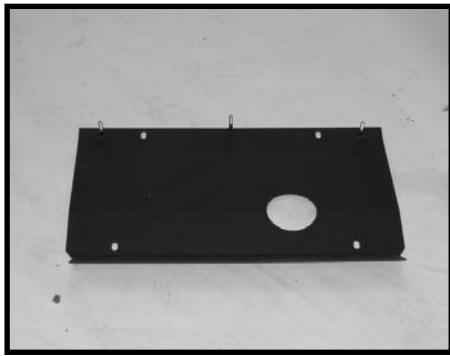
56070-10 / Qty. 1
Driver side rear differential relocation bracket



56070-11 / Qty. 1
Front lower skid plate



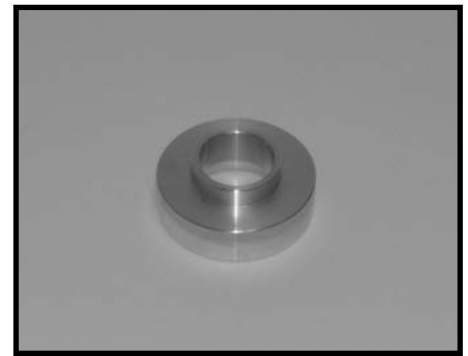
56070-12 / Qty. 4
Rear cross member slot washers



56070-13 / Qty. 1
Front upper skid plate



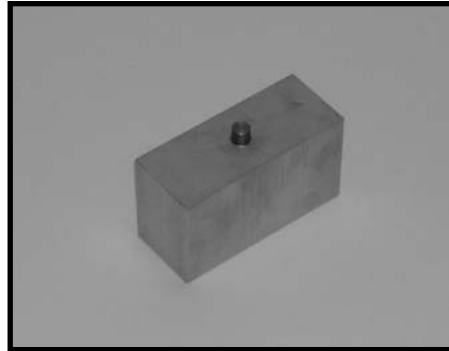
56070-14 / Qty. 4
Driver and Passenger side front bump stop relocation bracket



56070-15 / Qty. 2
Driver and Passenger side front coil over pre load spacer



56070-16 / Qty. 2
Lateral compression arm



56070-17 / Qty. 2
Rear lifted block



56070-18 / Qty. 4
Front and rear brake line and ABS relocation bracket



56070-19 / Qty. 1
Rear brake line relocation bracket



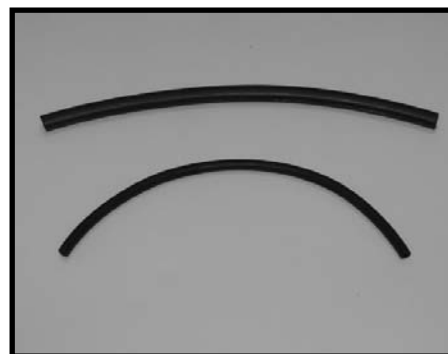
56070-20 / Qty. 1
Rear ABS wiring harness relocation bracket



TCI-R40 / Qty. 2
Rear add-a-leaf



SPN-05 / Qty. 2
Brake line adel clamps



BH01 / Qty. 1 (bottom of picture)
BH02 / Qty. 1 (top of picture)
Breather hose