TUFF COUNTRY™

EZ-RIDE™ SUSPENSION

Installation Manual
2014 — 2018 Ram 2500 4x4
5” Lift w/ radius arm drop brackets
Part # 35130

SS2012017 rev 1

Part # 35130
2014-2018 Ram 2500 4x4
5” Lift w/ radius arm drop brackets

Part #	*Description*	*Qty.*
35130-01	driver side radius arm bracket	1
35130-02	passenger side radius arm bracket	1
35130-03	driver side front coil spacer	1
35130-04	passenger side front coil spacer	1
35130-05	front track bar bracket	1
35130-06	rear track bar bracket	1
35130-07	rear sway bar relocation bracket	2
35130-08	front brakeline relocation bracket	2
35130-09	rear bump stop spacer bracket	2
35130-10	rear coil spring spacer	2
34130-11	sleeve w/ welded washer	2
35130-12	driver side radius arm support bracket	1
35130-13	passenger side radius arm support bracket	1
doddssway-01	driver side front sway bar drop bracket	1
podpssway-01	passenger side front sway bar drop bracket	1
54800-12	rear emergency brake cable drop bracket	1
DS2009A	pitman arm	1
35130NB	hardware bag	1
S10256	.600” X 1.000” X 2.100” sleeve	1
S10257	.785” X .750” X 3.275” sleeve	2
71814WA	7/8” x 1/4” washer	2
35130INST	instruction sheet	1

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

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.

For a list of parts, please refer to the back of the installation manual for photos of parts that are included in this suspension system.

Make sure to use thread locker or loctite on all new and stock hardware associated with the installation of this suspension system.

After the completion of the installation, a front end alignment is required.

Important customer information:

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

It is the responsibility of the customer/installer 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. If you have any questions or concerns, please contact our technical department @ (801) 280-2777. Also, the OEM manual should be used as a reference guide.

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.

IMPORTANT!

This kit will NOT work on vehicles equipped with Air Suspension. If your vehicle is equipped with this type of suspension, please contact the company you purchased the lift kit from and arrange for returning the parts.

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:

Tuff Country recommends a 37"x12.50" tire package once part # 35130 has been installed. If larger than a 37"x12.50" tire is installed on your vehicle in conjunction with part # 35130, Tuff Country assumes no liability and the warranty will be VOID. Due to different types of tread patterns, some aggressive tires in this size recommendation may require slight trimming of inner fender plastic. **Our tire and wheel fitments are only a guideline. Different production times or tolerances will vary and this size should only be used as a starting point. Each vehicle is different and will need to be treated as such.**

New longer shocks are required once part # 35130 has been installed on your vehicle and the rear shocks need to be ordered as a separate part #. If you have not already ordered your shocks, please feel free to contact Tuff Country or your local Tuff Country dealer and order your shocks. Tuff Country recommends installing a shock NO LONGER than 26" fully extended in the front, and a shock that is 28"-30" fully extended in the rear.

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.

This Suspension kit comes with (1) installation manual and some post installation procedure literature and it is the installers responsibility to make sure that the customer receives the post installation procedure literature. If a customer would like a copy of the installation manual, please have them visit our website at www.tuffcountry.com. Have them go to the customer care section to download these instructions. If you have any questions, please feel free to call us at (801) 280-2777.

Hardware bag 35130NB includes:

Description		Quantity
M1090B	10mm x 90mm bolt	4
M10WA	10 mm flat washer	4
M1890B	18mm x 90mm bolt	1
M18130B	18mm x 130mm bolt	4
M18WA	18mm flat washer	10
M18UN	18mm unitorque nut	5
716114B	7/16” x 1 1/4” bolt	1
716112B	7/16” x 1 1/2” bolt	5
38WA	3/8” flat washer	12
716UN	7/16” unitorque nut	6
5161B	5/16” x 1” bolt	3
14WA	1/4” flat washer	6
516UN	5/16” unitorque nut	3
381B	3/8” x 1” bolt	4
516WA	5/16” flat washer	8
38UN	3/8” unitorque nut	4
9164B	9/16” x 4” bolt	1
12WA	1/2” flat washer	2
916UN	9/16” unitorque nut	1
121B	1/2” x 1” bolt	4
716WA	7/16” flat washer	8
12UN	1/2” unitorque nut	4

Recommended tool selection:
Drill with assorted bits
Grinder with a metal cut-off disc
Torque wrench
Standard socket set
Standard wrench set
Metric socket set
Metric wrench set
Hydraulic floor jacks
Pitman arm puller tool

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.

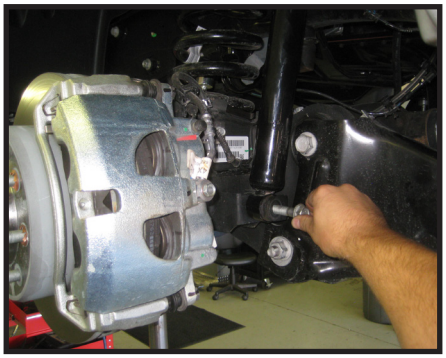
Post installation measurements:

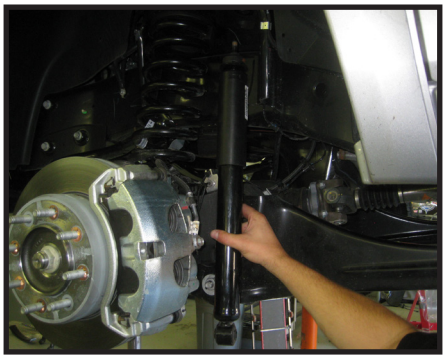
Driver side front:_____
Passenger side front:_____
Driver side rear:_____
Passenger side rear:_____

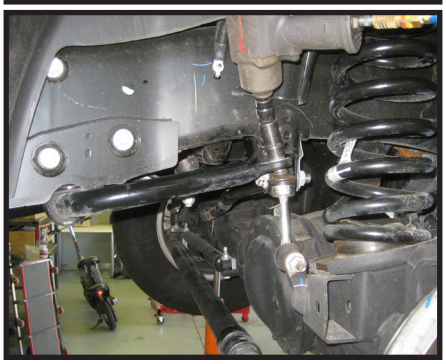
Front end installation:

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 passenger side. Next, remove the wheels and tires from both sides.

2. Remove both front shocks from the vehicle.



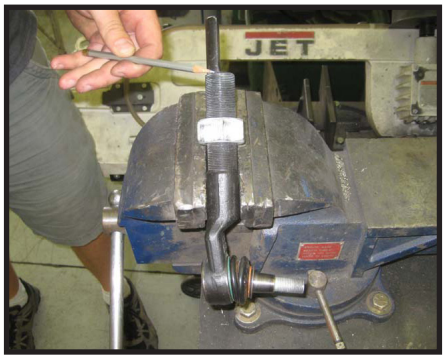




3. Working on the driver side, disconnect the sway bar end link from the sway bar and save the hardware. Repeat on the passenger side.

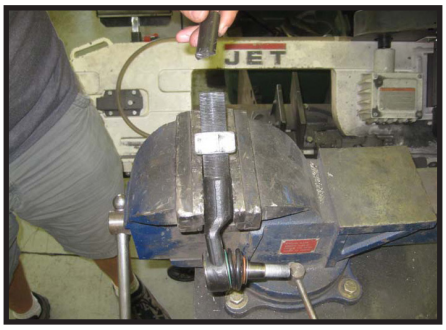
4. Working on the driver side, remove the nut that connects the tie rod end to the pitman arm, and save the nut. Using a hammer, carefully break the taper on the tie rod end that is connected to the pitman arm. **Special note: Take extra care not to rip or tear the stock outer tie rod boot. The new pitman arm has a reverse taper on it, after the new pitman arm has been installed, the stock outer tie rod needs to be rotated 180 degress.**

5. Next, remove the nut and lock washer from the sector shaft on the steering box and save the hardware. Using a pitman arm puller, carefully remove the pitman arm from the sector shaft. The stock pitman arm my be discarded.



6. Locate the new pitman arm and install it onto the steering box sector shaft using the OE nut and lock washer. It is recommended to use a bit of thread locker on the threads as well. **Torque to 225 ft lbs.**

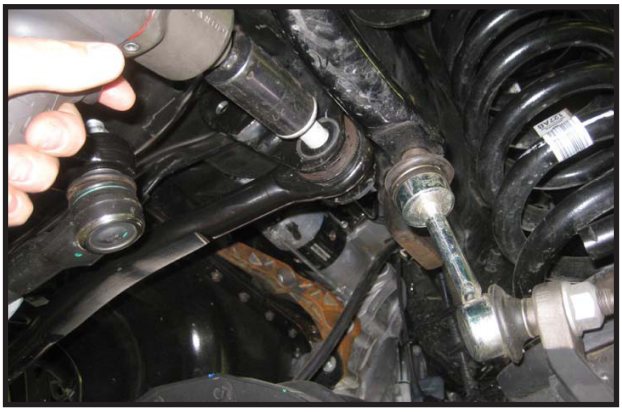
7. Remove the outer tie rod that will connect to the newly installed pitman arm, and place in a vise. Using a die grinder, carefully cut off the locking portion of the outer tie rod end.



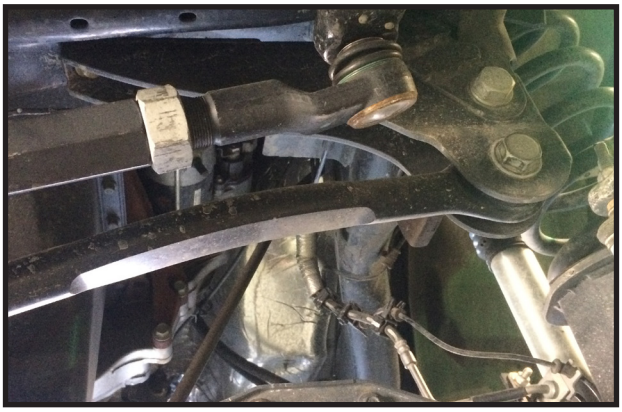
8. Remove the threaded sleeve from the tie rod and save. Using a die grinder, carefully cut off the locking portion of the tie rod.

9. Connect the 2 ends of the tie rod back together using the threaded sleeve and attach to the newly installed pitman arm. **Special note: the new pitman arm has a reverse taper on it, if you have not already rotated the tie rod 180 degrees, do so at this point.** Secure the outer tie rod end to the pitman arm using the OE hardware, make sure to use some thread locker and torque to **85 ft lbs.** Now center the threaded sleeve on both ends of the tie rods and tighten the locking nuts. Once the suspension system has been completely installed and the vehicle gets to an alignment shop, the alignment shop will properly center the tie rod.

10. Working on the driver side, remove the track bar hardware that is connecting the track bar to the OE bracket. Save the hardware.



11. Locate the new 35130-05 front track bar bracket and install it into the OE frame bracket using the (1) M1890B, (2) M18WA's, and (1) M18UN from hardware bag 35130NB. **Special note: in the following photos, it shows the track bar being connected to the new bracket, it is much easier to hook up the track bar when the installation is completed and the vehicle is sitting under its on weight on the ground.**

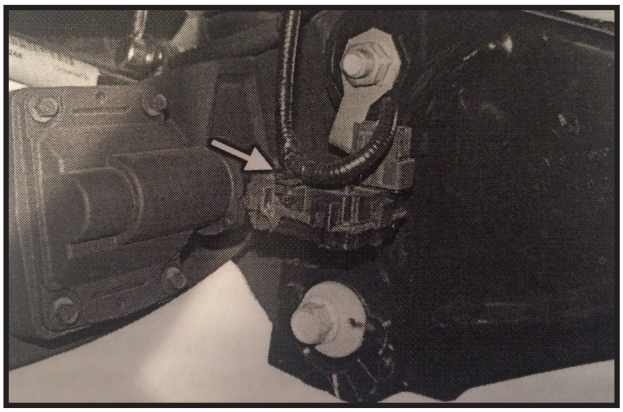


12. With the new track bar bracket pressed against the frame crossmember, using the hole in the new bracket as a guide, carefully drill the crossmember out to 7/16". **Special note: Be extremely careful not to drill into the bottom of the engine oil pan. For extra precaution, it may even be necessary to place a small peice of scrap metal to block the drill bit from going too far.**

13.Locate (1) 7/16" x 1 1/4" bolt (2) 38UN, and (1) 716WA from hardware bag 35130NB. Install this hardware into the newly drilled hold and torque to **28 ft lbs.**

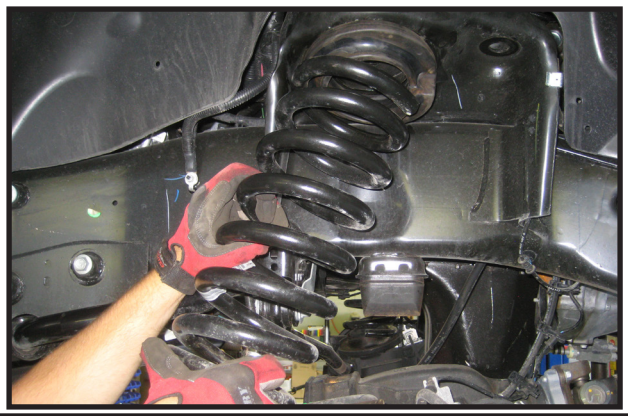
14. Move back to the 18mm hardware attaching the new bracket to the OE location and add some thread locker and torque to **95 ft lbs.**

15. Working on the passenger side of the front axle, you need to remove the retaining plug that is holding the wire harness to the 4wd actuator, to gain some slack in the wires.

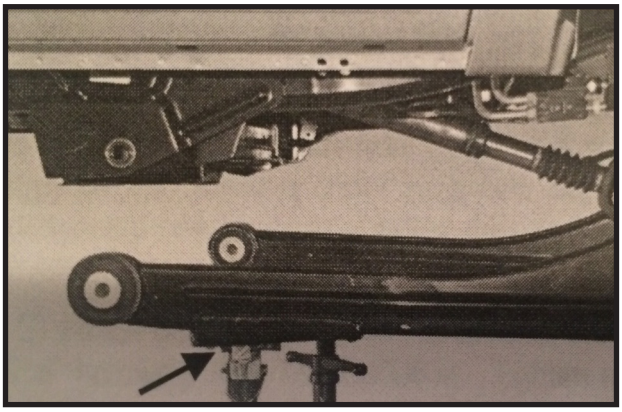


16. On both sides of the front axle, unbolt the brakeline/ABS line bracket from the top of the radius arm mounting position. this is to gain slack in the brackelines/ABS lines.

17. Carefully lower down on both hydraulic floor jacks at the same time allowing enough room to remove the coil springs. **Special note: Be very careful not to over extend any brakelines or wire harness's when performing this step.**



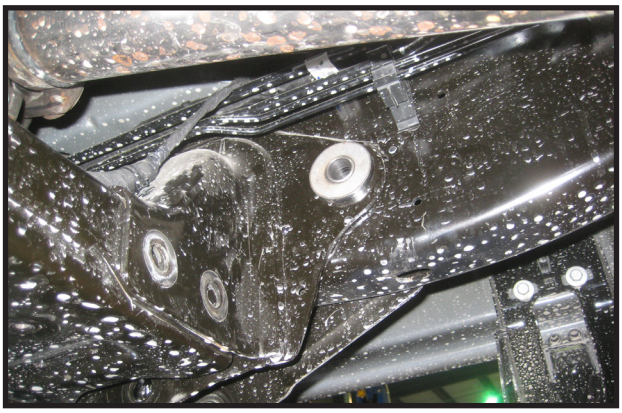
18. While supporting the radius arms, unbolt them and carefully lower them down enough to install the new drop brackets.



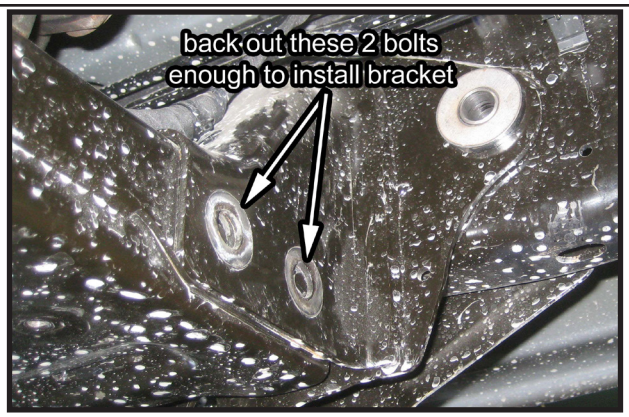
19. Working on the driver side, locate the new radius arm drop bracket part # 35130-01, and the driver side radius arm support bracket part # 35130-12. Also locate the following hardware: (2) M18130B (4) M18WA (2) M18UN (1) 121B (2)716WA (1) 12UN, (1) S10257, (1) 71814WA, and (1) 34130-11 sleeve with welded washer.

20. From the outside of the frame rail, install the 34130-11 sleeve with welded washer into the slotted hole of the OE radius arm bracket and frame.

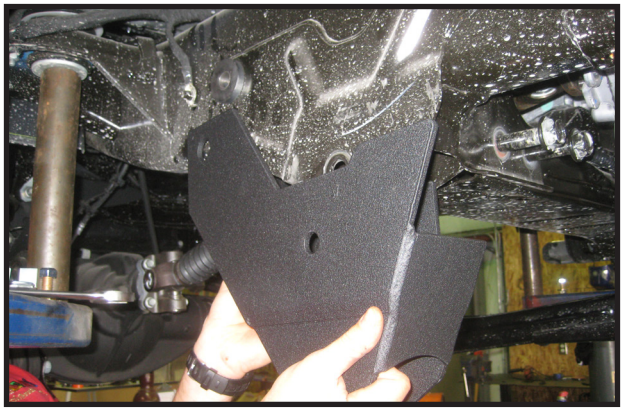
21. On the inside of the frame rail, install the 71814WA over the previously installed sleeve.



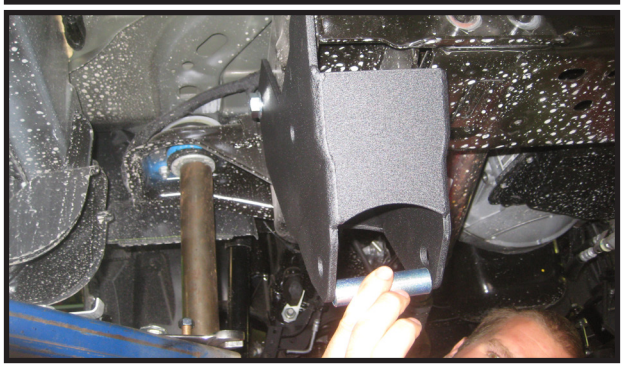
22. At this time, working on the transmission crossmember, remove the 2 nuts and back the 2 bolts out so they are flush with the crossmember.



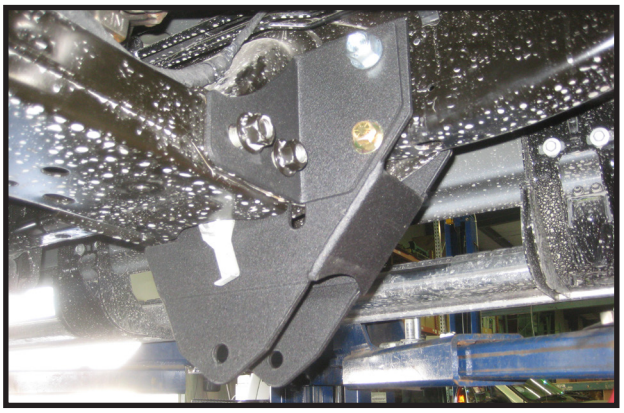
23. Install the new radius arm drop bracket over the OE frame rail bracket and make sure the 71814WA washer stays in place.



24. Pin the mounting hardware for the bracket as follows: use (1) M18130B with hardware into the forward upper hole, install the S10257 crush sleeve into the OE pocket and install the other M18130B bolt with hardware.

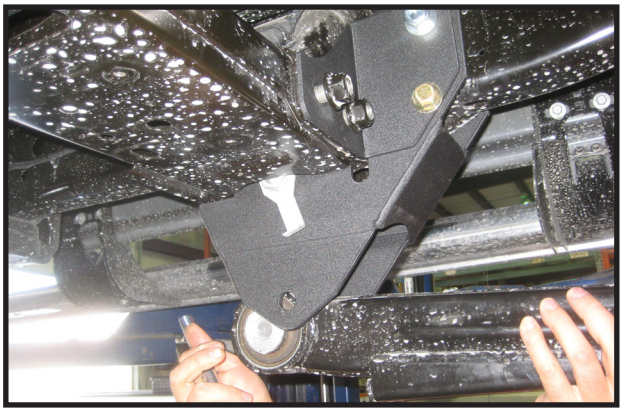


25. Now locate the driver side radius arm support bracket part # 35130-12 and install it on the inside of the frame rail using the (2) transmission crossmember bolts, the M18130B that was installed in the previous step, and (1) 121B (2) 716WA, and (1) 12UN.

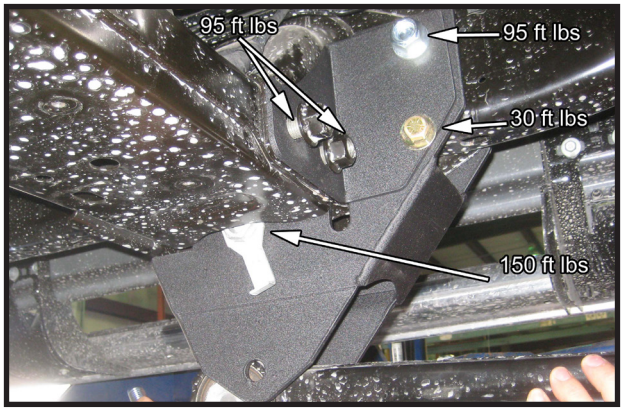


26. Repeat steps # 20-25 on the passenger side of the vehicle using the 35130-02 radius arm drop bracket and 35130-13 support bracket.

27. Carefully raise up on the radius arms so that they go into the newly installed drop brackets and secure them to the brackets using the OE bolt and nut. Torque to **225 ft lbs**



28. Go back to all the hardware installed for this bracket and torque to the specs according to the diagram below.



29. Locate the driver and passenger side front coil spacers, part #'s 35130-03 & 35130-04. Install them onto the coil spring axle position so that the coil springs are moved rearward and outward. Make sure to place the OE rubber isolator on the top of the spacer before installing the coil springs.

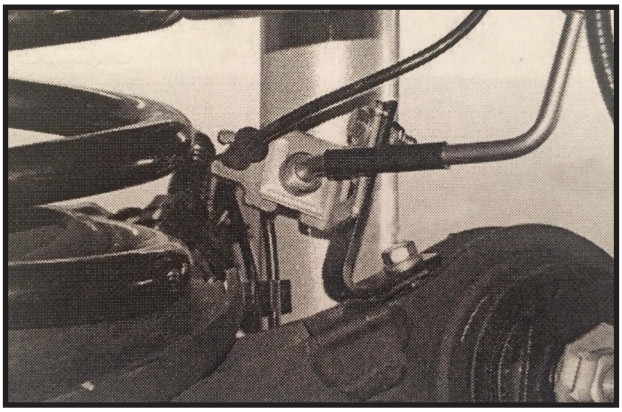
30. **Important Step: On the passenger side UPPER rubber coil isolator, you will need to trim the nipple off flush with the isolator, this is on the passenger side only.**

31. Install both coil springs, and on the passenger side, make sure to turn the coil so that the end of the coil wind is facing straight forward of the vehicle. please refer to the following photo.

32. Install new front shocks. **Special note: Tuff Country recommends installing a shock NO LONGER than 26" fully extended. If a longer shock is installed, the coil spring can fall out when the vehicles suspension is at full droop.**

33. Locate (2) 35130-08 front brakeline relocation brackets. Also locate (2) 5161B (4) 14WA, and (2) 516UN from hardware bag 35130NB.

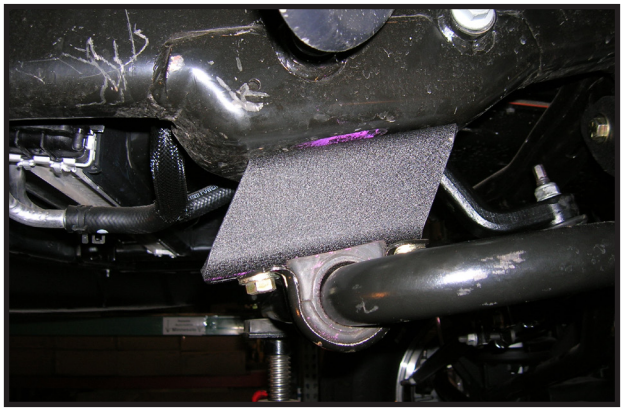
34. Install the brakeline brackets on the OE brakeline mounting location using the OE bolt to attach it to the mount and the new 5/16" hardware to attach the brakeline to the new bracket.



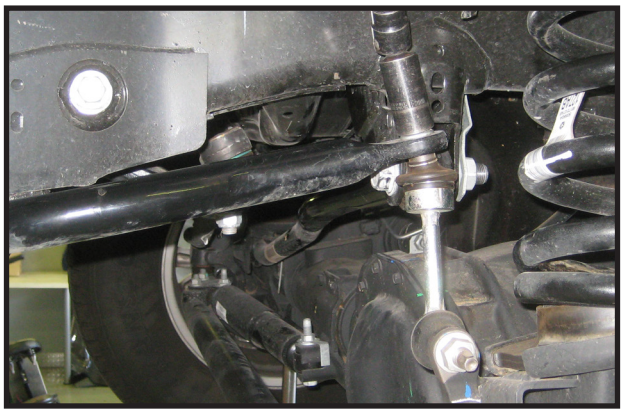
35. Working on the sway bar where it mounts to the frame rail, remove the mounting bolts and carefully lower the sway bar down enough to install the new drop brackets.

36. Locate the new driver side and passenger side sway bar drop brackets. Part # doddssway-01 and podpssway-01. Also locate (4) 716112B (8) 38WA and (4) 716UN from hardware bag 35130NB. Install these brackets to the bottom of the frame rail using the OE bolts, and leave loose for now.

37. Install the sway bar to the bottom of the new drop brackets using the new 7/16" hardware. Leave hardware loose for now.



38. Re-attach the sway bar to the end links



39. Re-install the tires and wheels and carefully lower the vehicle back onto the ground.

40. Attach the front track bar to the new drop bracket that was installed in steps 10 - 14. Secure using the OE hardware and torque to **145 ft lbs. We find it easiest to line up the track bar by having someone help by turning the steering wheel left or right and that will shift the vehicle side to side until the track bar can be lined up to run the bolt through.**

41. Working on the front sway bar hardware that was left loose, position the sway bar so that the endlinks are as close to vertical as you can, and tighten hardware. Torque the OE bolts and the new 7/16" hardware to **38 ft lbs.**

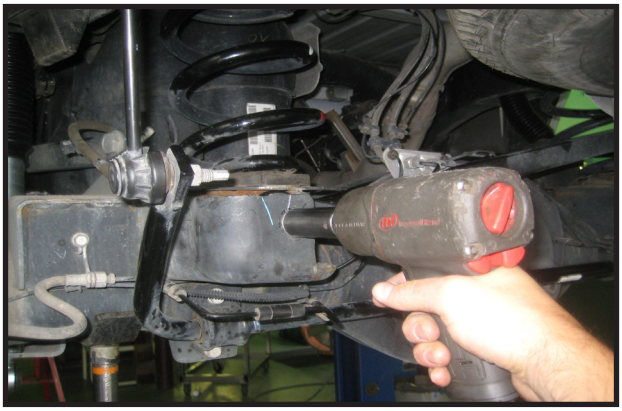
Congratulations, Front end installation is complete!

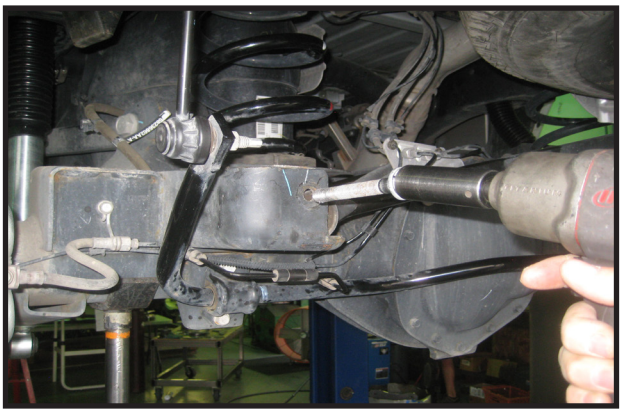
Rear end installation:

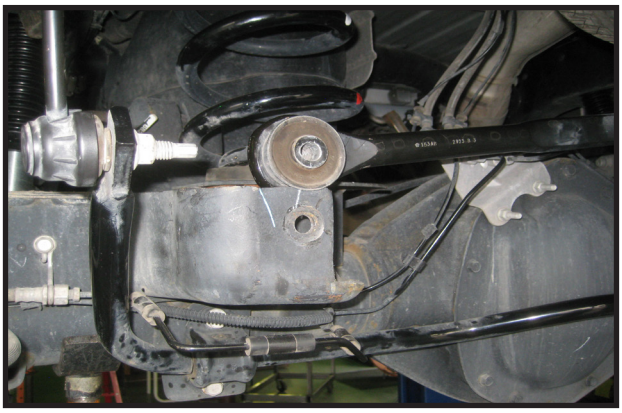
42. To begin installation, block the front tires of the vehicle so that the vehicle is stable and can't roll forward. Safely lift the rear of the vehicle and support the frame with a pair of jack stands. Place a jack stand on both the driver and passenger side. Next, remove the tires and wheels.

43. Position a pair of hydraulic floor jacks under the rear axle. Place one jack stand on the driver side and one on the passenger side, raise up on both hydraulic floor jacks at the same time until they make contact with the rear axle.

44. Working on the driver side where the track bar attaches to the axle bracket, remove the hardware and save.

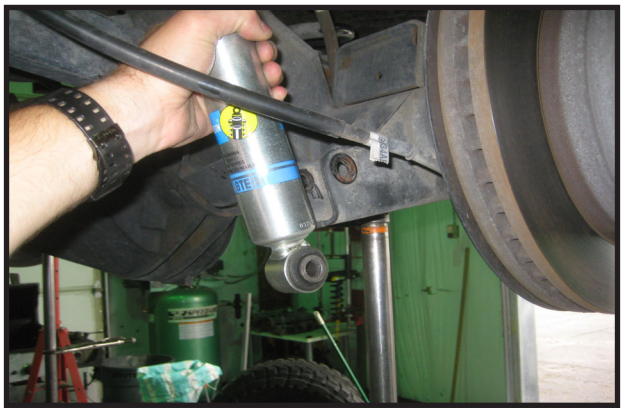






45. Working on the driver side, unbolt the top of the sway bar endlink from its mounting bracket, and save the hardware. Repeat on the passenger side.

46. Remove both of the rear shocks and save the lower mounting hardware.

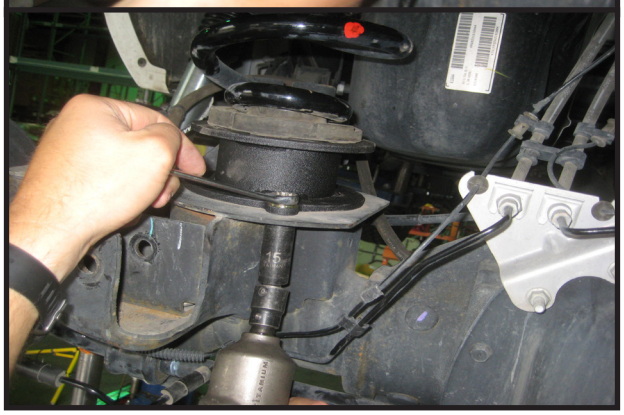


47. On the driver side, follow the emergency brake cable up to where it mounts on the frame, and remove the bolt attaching it to the frame. Save the bolt.

48. Carefully lower both hydraulic floor jacks down enough to let the coil springs be removed.

49. Locate the new rear coil spring spacers part # 35130-10, also locate (2) 381B (4) 516WA, and (2) 38UN from hardware bag 35130NB.

50. Install the new coil spacers onto the axle pad making sure the bolt hole lines up with the hole in the axle pad. Secure the spacers to the mount using the 3/8” bolts and hardware. Torque to **28 ft lbs.**

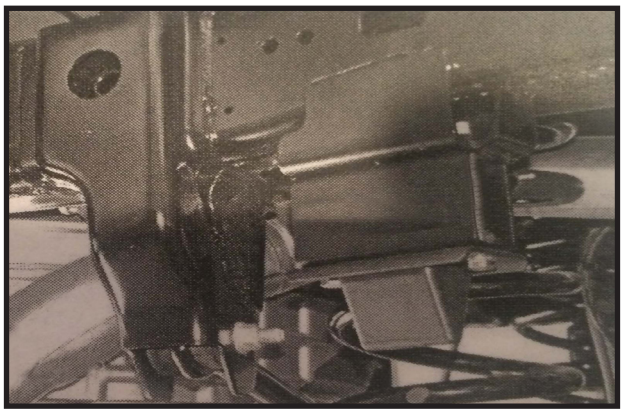


51. Re-install the OE rubber isolator and coil spring on both sides of the vehicle.

52. Working on the driver side, remove the bump stop from the frame mount location and discard the OE hardware. Repeat on the passenger side.

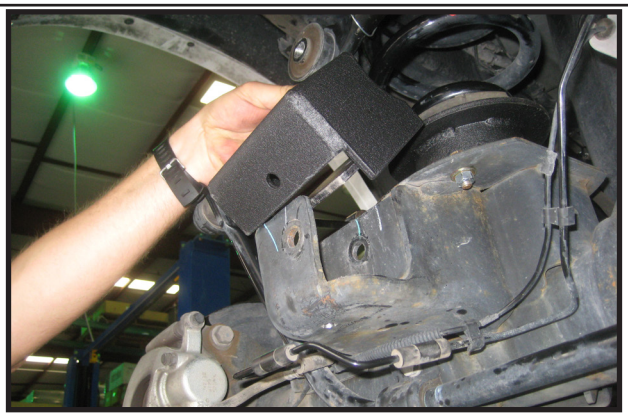
53. Locate the new rear bump stop spacers part # 35130-09. Also locate (4) M1090B and (4) M10WA from hardware bag 35130NB.

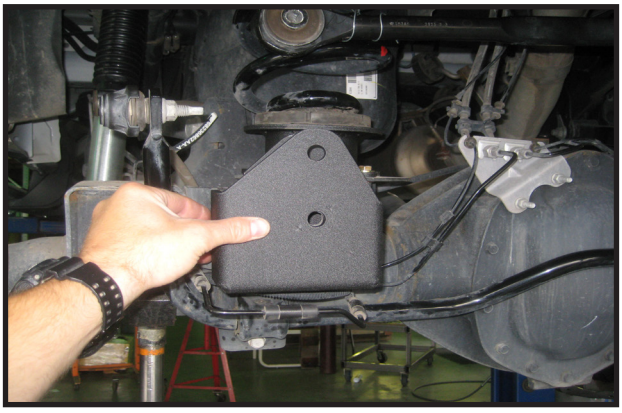
54. Install the new bump stop spacers by running the 10mm bolts and washers through the bump stops first, and then the spacers and into the OE threaded holes. Torque to **28 ft lbs.**



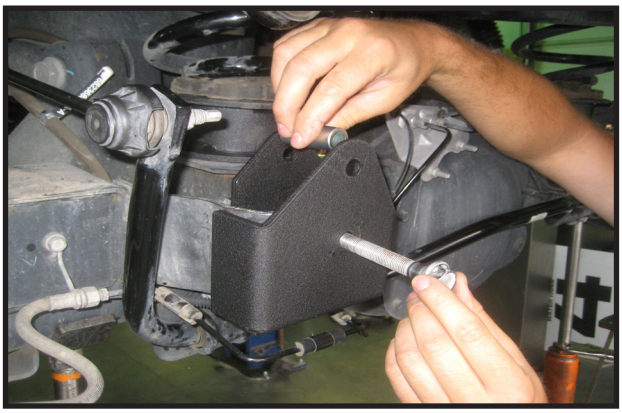
55. Locate the new rear track bar bracket part # 35130-06. Also locate the following hardware from hardware bag 35130NB: (1) 716112B, (2) 38WA, (1) 716UN, (1) 9164B, (2) 12WA, (1) 916UN, and (1) S10256.

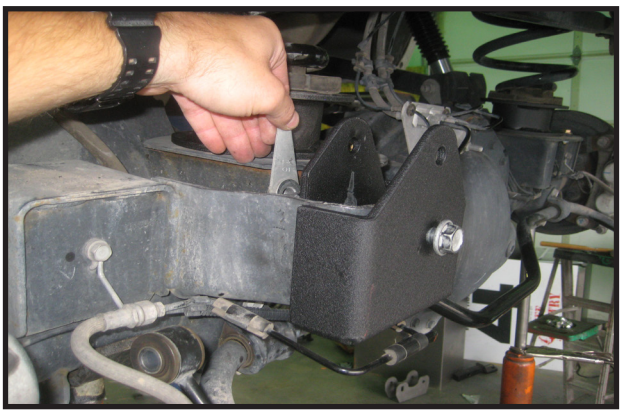
56. Place the new track bar bracket over the OE bracket on the axle.



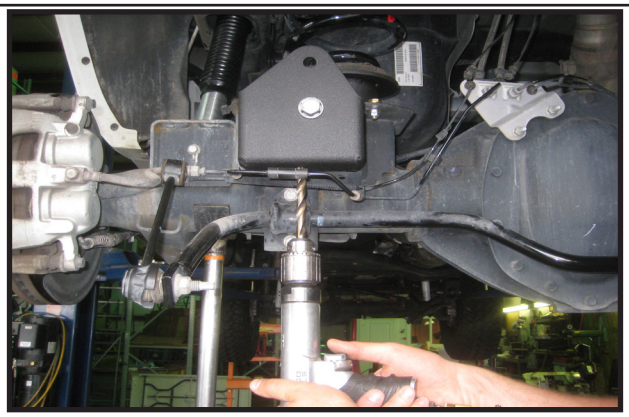


57. Install the S10256 Crush sleeve into the pocket of the bracket and install OE bolt through the new bracket, OE bracket, and crush sleeve. Secure using the OE nut and torque to **75 ft lbs.**

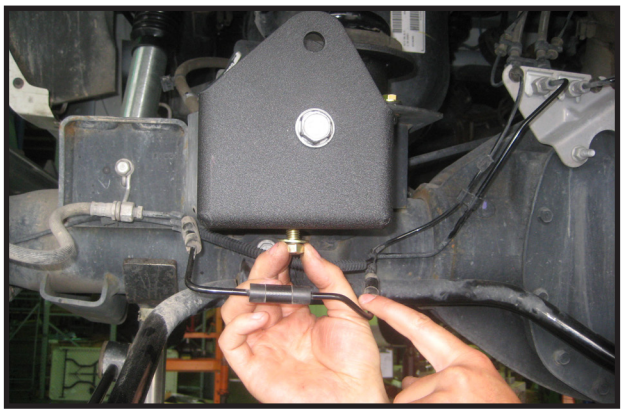


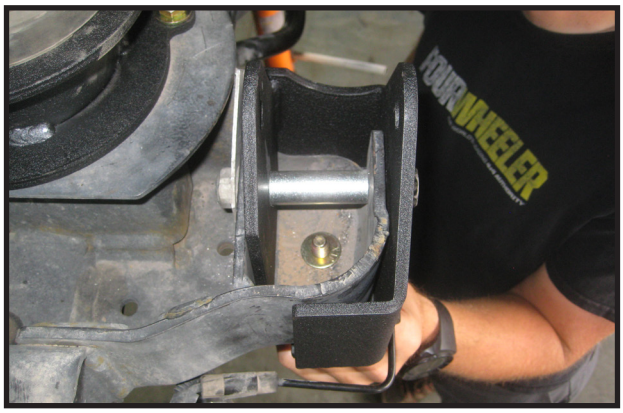


58. Using the hole in the bottom of the new bracket as a guide, drill the OE hole open to 7/16".



59. Install the 716112B, 38WA's, and 716UN and torque to **38 ft lbs.**





60. Locate the 2 new rear sway bar relocation brackets part # 35130-07. Also locate the following hardware: (2) 381B, (4) 516WA, (2) 38UN, (2) 121B, (4) 716WA, and (2) 12UN.

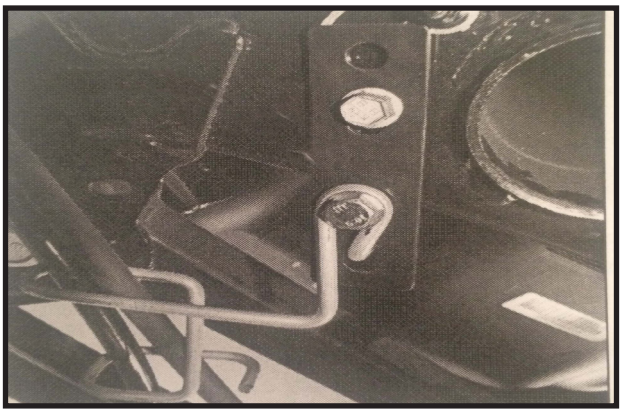
61. Install the new bracket to the outside of the OE Swaybar frame bracket using the 121B and hardware. **Special note: the hole in the OE bracket for the 121B will need to be drilled open with a 1/2" drill bit. Torque bolt and hardware to 40 ft lbs**

62. Install the 381B with hardware into the upper bracket slotted hole and torque to **28 ft lbs.**

63. Re-attach the sway bar end links to the new brackets using the OE nuts and bolts. torque to **30 ft lbs.**

64. Locate the new rear emergency brake cable relocation bracket part # 54800-12. Also locate, (1) 5161B, (2) 14WA, and (1) 516UN.

65. Install the new bracket using the OE bolt on in the original location, and the new 5/16” bolt and hardware to attach the emergency brake cable to the new bracket. torque to **12 ft lbs**



66. Install the new rear shocks using the OE bolts and nuts.

67. Install the tires and wheels and carefully lower the vehicle back on to the ground.

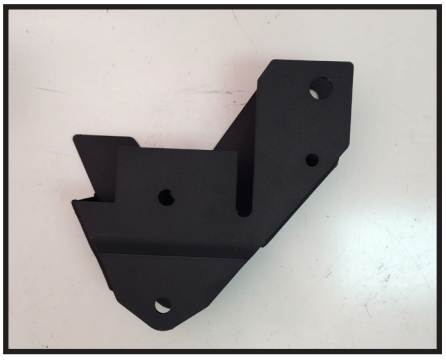
68. Locate (1) 9164B, (2) 12WA, and (1) 916UN from hardware bag 35130NB. Using this new hardware, attach the rear track bar to the new relocation bracket on the axle. Torque hardware to **95 ft lbs.**

Installation Complete!

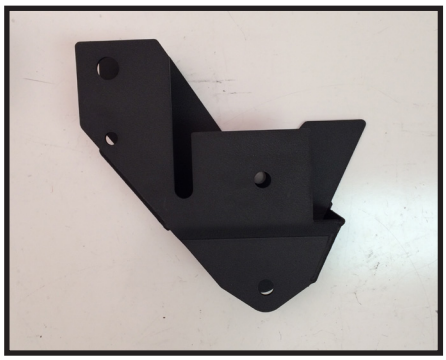
Check and double check to make sure that all steps were performed properly. After the completion of this install, Tuff Country Recommends taking the vehicle in for a complete front end alignment.

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 the system after the first 100 miles of installion. It is also the Customers responsibility to do a complete re-torque after every 3,000 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.

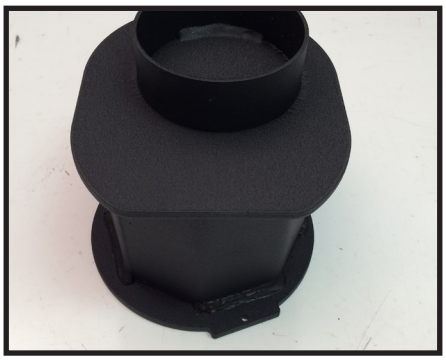
Part # 34130-11 / Qty. 1
Sleeve w/welded washer



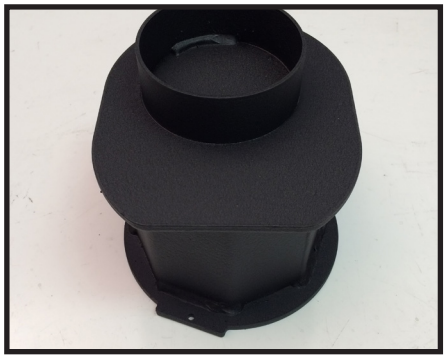
Part # 35130-01 / Qty. 1
Driver side radius arm bracket



Part # 35130-02 / Qty. 1
Passenger side radius arm brack-et

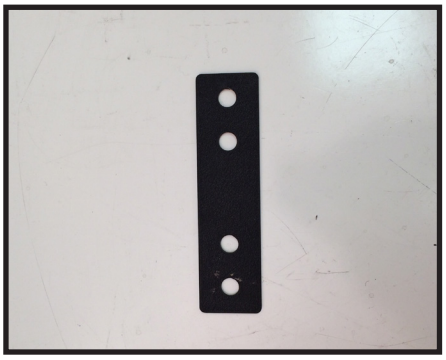


Part # 35130-03 / Qty. 1
driver side front coil spacer

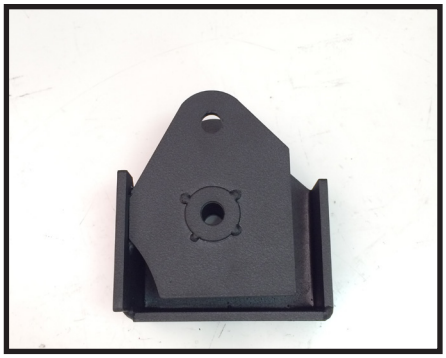


Part # 35130-04 / Qty. 1
Passenger side front coil spacer

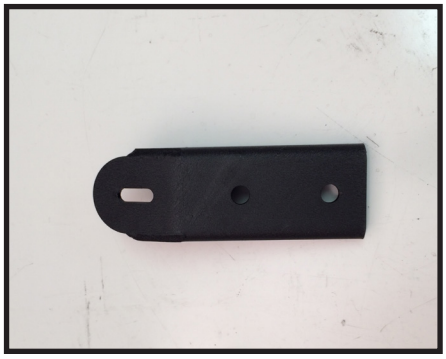
Part # 35130-05 / Qty. 1
Front track bar bracket



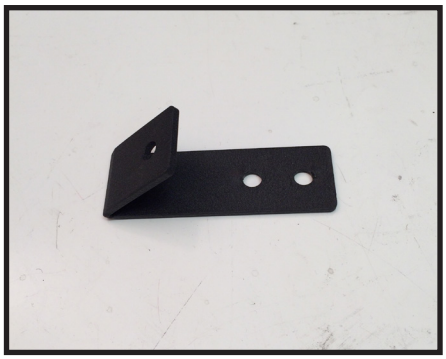
Part # 54800-12 / Qty. 1
Rear emergency brake cable drop bracket



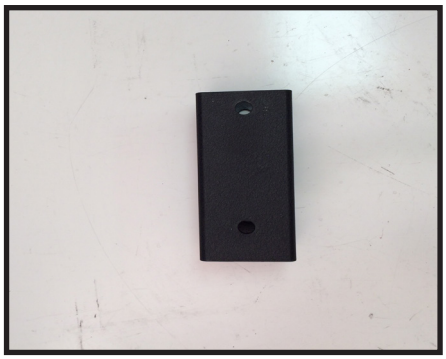
Part # 35130-06 / Qty. 1
Rear track bar bracket



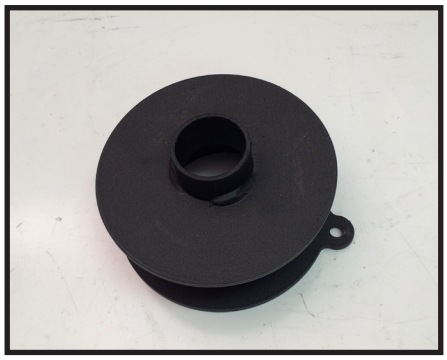
Part # 35130-07 / Qty. 2
Rear sway bar relocation bracket



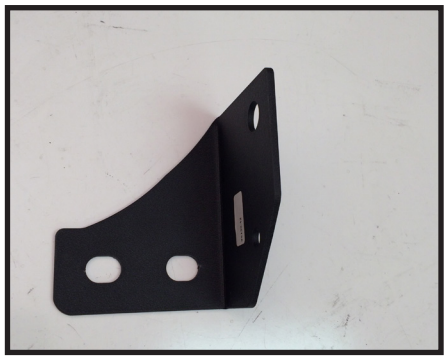
Part # 35130-08 / Qty. 2
Front brake line relocation brack-et



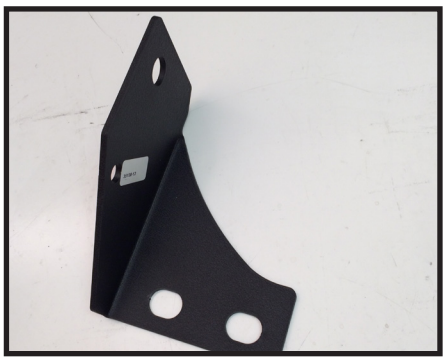
Part # 35130-09 / Qty. 2
Rear bumpstop spacer bracket



Part # 35130-10 / Qty. 2
Rear coil spring spacer



Part # 35130-12 / Qty. 1
Driver side radius arm support bracket



Part # 35130-13 / Qty. 1
Passenger side radius arm sup-port bracket