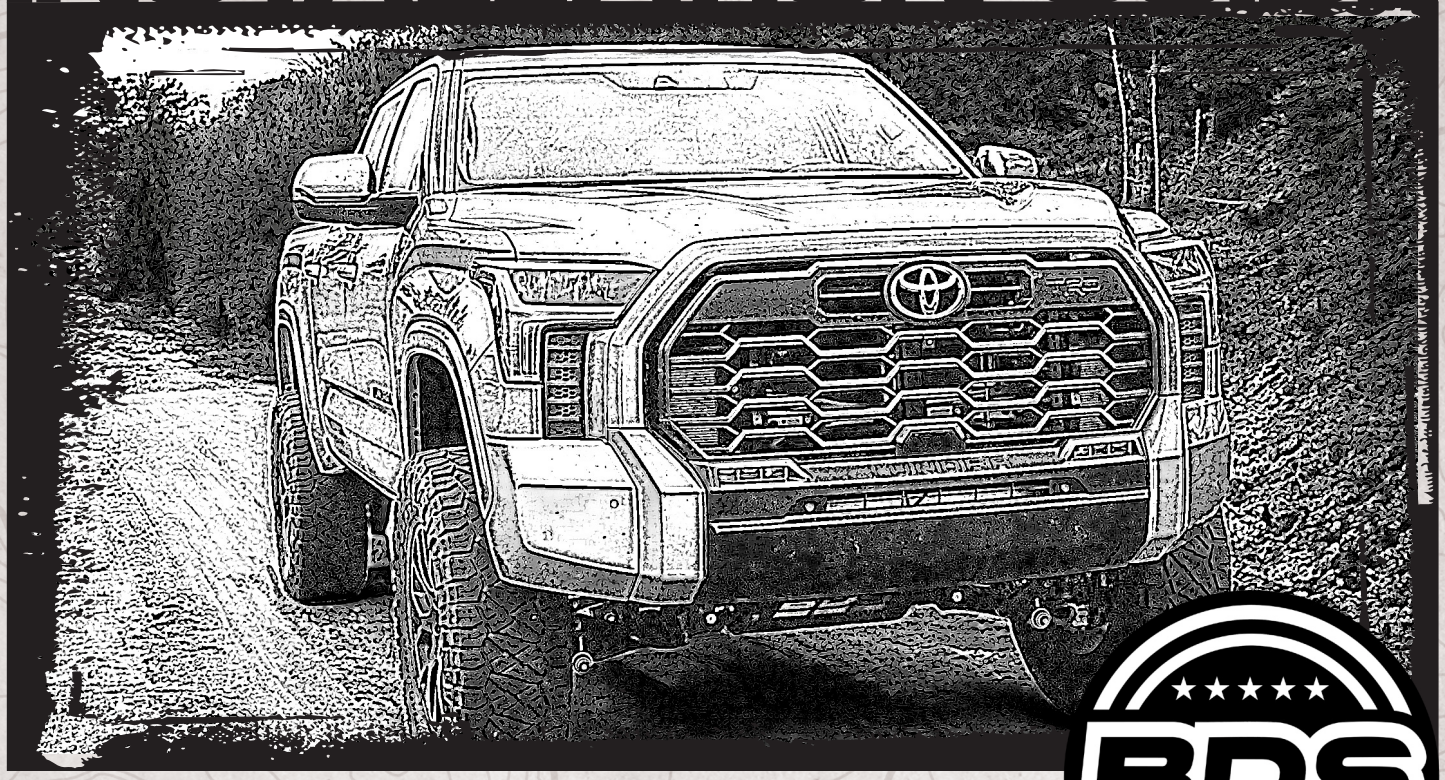
INSTALLATION GUIDE



Part#: 028720

HARDCORE LIMITED LIFETIME WARRANTY

5" & 7" Suspension System

Toyota Tundra 4WD | 2022-2024

Rev. 011725

491 W. Garfield Ave., Coldwater, MI 49036 • Phone: 517-279-2135

Web: www.bds-suspension.com • E-mail: tech-bds@ridefox.com

Read And Understand All Instructions And Warnings Prior To Installation Of System And Operation Of Vehicle.

THANK YOU

Your truck is about to be fitted with the best suspension system on the market today. That means you will be driving the baddest looking truck in the neighborhood, and you'll have the warranty to ensure that it stays that way for years to come. Thank you for choosing BDS Suspension!

BEFORE YOU START

BDS Suspension Co. recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known.

FOR YOUR SAFETY

Certain BDS Suspension products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. BDS Suspension Co. does not recommend the combined use of suspension lifts, body lifts, or other lifting devices. You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

BEFORE INSTALLATION

- Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
- Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
- Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
- Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
- Secure and properly block vehicle prior to installation of BDS Suspension components. Always wear safety glasses when using power tools.
- If installation is to be performed without a hoist, BDS Suspension Co. recommends rear alterations first.
- Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

FACTORY PROTECTION PLUS

Visit 560plus.com for more information.

TIRES AND WHEELS

5" Lift
35x12.5, 20" Wheel 9" wide - 5-6" BS - No trimming
37x12.5, 18" Wheel 9" wide 5" BS - Trimming required*
37x12.5 20" Wheel 9" wide 5-6" BS - Trimming required*

7" Lift
35x12.5, 20" Wheel 9" wide - 5-6" BS - No trimming
37x12.5, 18" Wheel 9" wide 5" BS - May require light trimming*
37x12.5 20" Wheel 9" wide 5-6" BS - 7" May require light trimming*

Wheel and Tire Combination was tested through normal driving conditions within alignment specs and some or all the following were rquired: removal of mud flap, fender liner beign trimmed or fastened further back, body mount bump being cut off or ground down

*37" tires will rub the sway bar during full lock turning with wheel that have 5" & 5.5" BS.

BEFORE YOU DRIVE

Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.

Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure. Longer replacement hoses, if needed can be purchased from a local parts supplier.

Perform head light check and adjustment.

Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

CONTENTS OF YOUR KIT

028720 Front Box Kit		
Part #	Qty	Description
B1642	1	Bag Kit
62147	4	.625 x .075 x 1.375 Sleeve
SB58BK	4	5/8 ID Hourglass Bushing - black
404	1	Bolt Pack Sway Bar 99
B1626	1	Bag Kit
01264	8	6in Square Washer
400403-8	1	8 in x 1/4in Vent Hose
05433	1	2022 Toyota Tundra Weld In Plate - Drv
02205	1	Weld In Plate
M02855	4	3/4" ID x 1-3/16" OD Half Bushing
99	2	3/4 x .090 x 2.62 Sleeve
11129042	2	M14-1.5 NYLOCK NUT
992	1	Bolt Pack
B1441	1	Bag Kit
	2	BDS Badge (4.378")
	1	Bolt Pack
387	1	Bolt Pack -Diff Drop
	3	16mm-2.00 x 60mm, Grade 8.8, Clear Zinc
	6	16mm Washer, Clear Zinc
	3	16mm-2.0 Prevailing Torque Nut, Clear Zinc
	2	14mm-1.50 x 60mm, SHCS Grade 12.9 Clear Zinc
	2	14mm Washer, Clear Zinc
	2	9/16" Washer, Thick .188", Clear Zinc
393	1	Bolt Pack
	2	18mm-2.50 x 140mm Bolt, Class 10.9, Clear Zinc
	2	18mm-2.50 x 160mm Bolt, Class 10.9, Clear Zinc
	8	18mm Washer, Clear Zinc
	4	18mm-2.50 Nylock Nut, Clear Zinc
	4	1/2"-13 x 1" Bolt, Grade 5, Clear Zinc
	4	1/2"-13 Nyloc Nut, Clear Zinc
	8	1/2" SAE Washer, Clear Zinc
	4	5/16"-18 x 3/4", Grade 5, Clear Zinc
	4	5/16"-18, Nylock Nut, Clear Zinc
	8	5/16" SAE Washer, Clear Zinc
	2	1/4" x 5/8" Self Tapping Bolt, Hex Head type 23, Clear Zinc
	2	10mm-1.25 x 25mm, Class 10.9, Clear Zinc
	2	10mm-1.25 Flange Nut, Clear Zinc
	2	3/8" SAE Washer, Clear Zinc
	2	M8-1.00 x 16mm, Class 8.8, Clear Zinc
	2	M8 Flat Washer, Clear Zinc
	3	Wire Clamp (Fastenal #0708762)

BP1054	1	Bolt Pack
	4	7/16-14 x 1-1/2", Grade 8, Yellow Zinc
	4	7/16 SAE Washer, Yellow Zinc
05434	1	Front Sway bar drop - BDS Drv
05435	1	Front Sway bar drop - BDS Pass
05440	1	Bump Stop Extention - BDS Pass
05441	1	Bump Stop Extenstion - BDS Drv
401-1870	2	Tie Rod
05298	1	Driver Front Diff Drop
05299	1	Passenger Front Diff Drop
05509	1	Front Brake Line Bracket - DRV
05510	1	Front Brake Line Bracket - PASS
392	1	Bolt Pack
	4	1/4"-20 x 1" Hex Drive, Rounded Head Screw, SS
	4	1/4" Stainless Steel Washer
	4	1/4"-20 Stainless Steel Nylon-Insert LockNut

028716 Rear Box Kit		
Part #	Qty	Description
911127	2	Sway Bar Link - 7-1/2" Tundra
05481	1	Rear Track Bar Bracket
05484	1	Rear Bump Stop - BDS - Drv
05485	1	Rear Bump Stop - BDS - Pass
05486	2	Rear UCA Bracket Extenstion
05479	1	Shock Stem Eliminator - Drv
05480	1	Shock Stem Eliminator - Pass
BP1053	1	Bolt Pack
	2	7/16"-14 x 7/8" Bolt Grade 5, Clear Zinc
	2	7/16"-14 Serrated Edge Flange Nut, Clear Zinc
	2	7/16" SAE Washer, Clear Zinc
	1	14mm-2.00 x 90mm Bolt Grade 10.9, Clear Zinc
	1	14mm-2.00 Nyloc Nut, Clear Zinc
	2	9/16" SAE Washer, Clear Sinc
	2	9/16"-12 x 4" Bolt, Grade 8, Yellow Zinc
	2	9/16"-12, Nylock Nut, Yellow Zinc
	4	9/16" SAE Washer, Yellow Zinc
	2	1/2"-13 x 1-1/2" Bolt Grade 8, Yellow Zinc
	2	1/2"-13 x Nylock Nut, Yellow Zinc
	4	1/2" SAE Washer, Yellow Zinc
	3	1/4" washer SAE, Clear Zinc
	3	1/4"-20 Nylock Nut, Clear Zinc
	1	5/16-18 x 3/4", Grade 5 Bolt, Clear Zinc
	2	5/16 SAE Washer, Clear Zinc
	1	5/16-18 Center Lock Nut, Clear Zinc
	2	3/8"-16, Serrated Edge Flange Nut, Clear Zinc

028716 Rear Box Kit Cont'd		
	2	1" x 3/16" Spacer - Black
391	1	Bolt Pack
	2	3/4"-10 Hex Nut-, Clear Zinc
	2	3/4" SAE Washer, Clear Zinc
	2	14mm-2.00 x 70mm, Grade 10.8, Clear Zinc
	2	9/16" SAE Washer, Clear Zinc
	2	14mm-2.00 Prevailing Torque Nut, Clear Zinc
B1627	1	Bag Kit
11	2	.875 x .156 x 2.70 DOM Sleeve
05511	1	1.25 x .250 x 1.55 DOM sleeve
73	4	1.25 x 5/16 x .875 DOM Sleeve
01655	3	Strap w/Stud Offset
01625	1	Safety Cable Extension Strap
05512	2	1.00 x .125 x .188 Spacer
M02096-BK	2	Pyramid Bushing - black
028713 Box Kit		
05431	1	2022 Toyota Tundra Front Crossmember - BDS
05432	1	2022 Toyota Tundra Rear Crossmember - BDS
028714 Box Kit		
05439	1	Front Diff Skid Plate
05438	1	Front Radiator Skid Plate
05535	1	2022 Toyota Tundra Radiator Skid Logo
028712 Box Kit		
05428	1	2022 Toyota Tundra Knuckle - Pass
028711 Box Kit		
05427	1	2022 Toyota Tundra Knuckle - Drv
028406 Box Kit		
038406R	2	2022 Toyota Tundra 4" Coil Spring
028606 Box Kit		
038606R	2	2022 Toyota Tundra 6" Coil Spring

IMPORTANT

It is required that ride height measurements be taken before and after installation. Measure from the **WHEEL AXLE CENTER** up to the **FENDER LIP** of the wheel opening. Do this for all 4 wheels. Record measurements below.**

BEFORE

*Left Front*_____ *Right Front*_____

*Left Rear*_____ *Right Rear*_____

AFTER

*Left Front*_____ *Right Front*_____

*Left Rear*_____ *Right Rear*_____

***These ride heights will be required if you have any ride height concerns after installation. Please be prepared to provide these to Technical Support.*

TROUBLESHOOTING INFORMATION FOR YOUR VEHICLE

TECH TIPS

1. TRD Sports will achieve the same ride height (1" tall lift) than other models in the front.
2. Will not work with Adaptive Variable Suspension (AVS) System equipped vehicles
3. Will not work with Air Ride models
4. Will not work with TRD Pro models
5. For regular off-road use, it recommended to upgrade Non TRD Off-Road trucks half axles (CVs) to Toyota TRD's (Driver Part# 434200C020, Passenger Part# 434100C020. Not including TRD Pro models.
6. The ADAS system in some vehicles needs to be recalibrated by a certified shop. The vehicle may warn the driver of potential collision from lower bridges, overhead signs/wires, and signs in windy conditions. Most windshield repair shops (Safelite) and dealers are capable of doing this.

INSTALLATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS

SPECIAL TOOLS

Welder	1-9/16" 12 point socket
Sawzall	

PRE-INSTALLATION

1. Park vehicle on clean and level surface. Block the rear wheels for safety.
2. Measure the ride height of the vehicle from the center of the wheel to the fender and record on page 5.
3. Raise the front of the vehicle with a hydraulic jack. Support the frame rails with jack stands.
4. Remove wheels/tires.
5. Disconnect battery.

INSTALLATION INSTRUCTIONS

1. Remove (4) Brake Line and ABS bolts from frame and knuckle. ***Fig. 1, 2, 3***

FIGURE 1

FIGURE 2

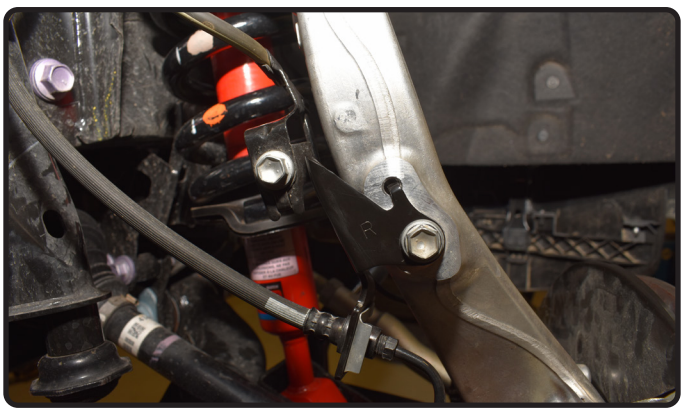
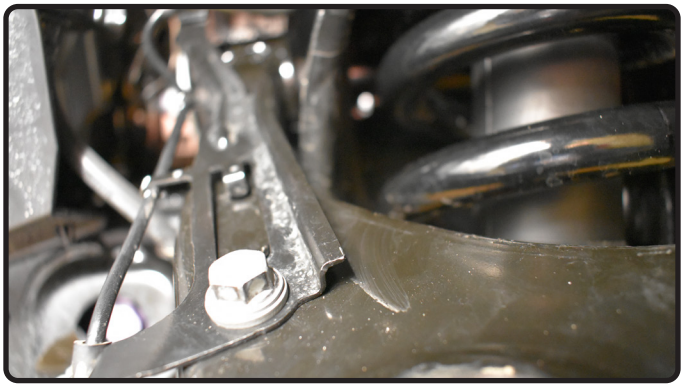


FIGURE 3

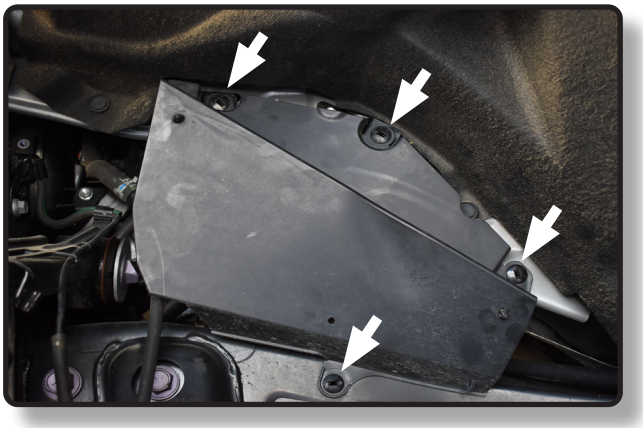
2. Remove ABS bracket bolt located on the upper control arm. ***See Figure 4***

FIGURE 4



3. Remove factory plastic brake line shield. ***Figure 5***

FIGURE 5



4. Remove the 2 bolts retaining the air valance to the air valance mechanism. ***Figure 6***

FIGURE 6

5. Remove cotter key and nut from outer tie rod. ***See Figure 7***

FIGURE 7

6. Next remove (2) caliper bolts attaching caliper to knuckle. Hang caliper with bungee, rope etc. to prevent damaging brake lines.
7. Remove brake rotor
8. Remove cotter key and CV nut retaining plate and nut. (Specialty tool required: 1-9/16" 12 point axle socket required for removal) ***See Figure 8***

FIGURE 8

9. Remove cotter key and loosen ball joint castle nut to the end of the threads. ***DO NOT REMOVE***. Separate the ball Joint from the knuckle using the recommended tool SST: 09628-62011. ***See Figure 9 - Note: Striking the aluminum knuckle to separate the ball joint could result in damaging the knuckle and/or ball joint.***

FIGURE 9

10. Loosen axle from wheel bearings. ***See Figure 10 & 11***

FIGURE 10

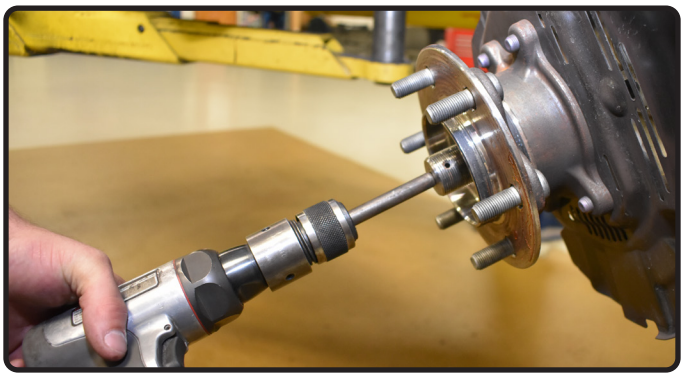
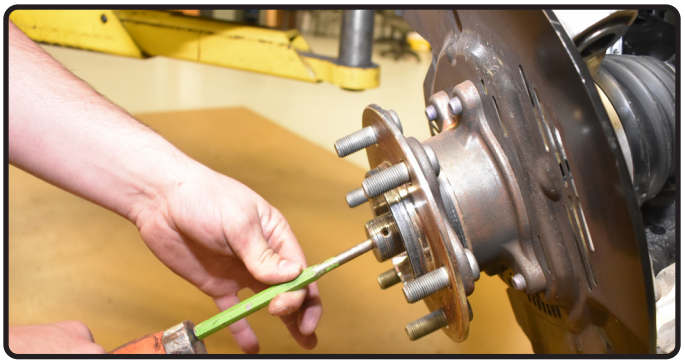


FIGURE 11



11. Remove 2 lower bolts attaching lower knuckle to main knuckle. With both bolts removed you can now remove the knuckle and wheel bearing assembly. ***See Figure 12***

    It is recommended that you tie and or bungee the axle shafts up to prevent them from separating at the CV joint. See Figure 13

FIGURE 12

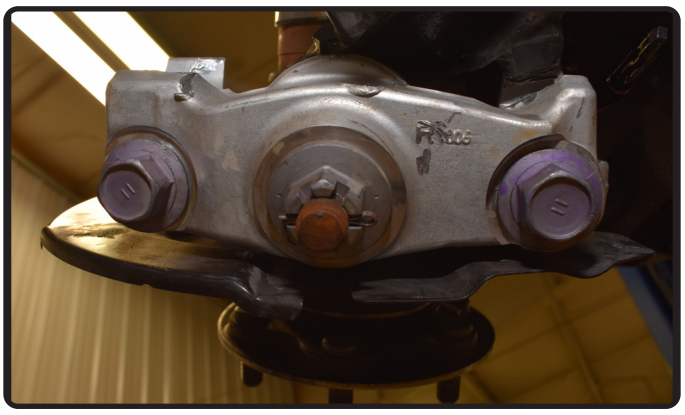
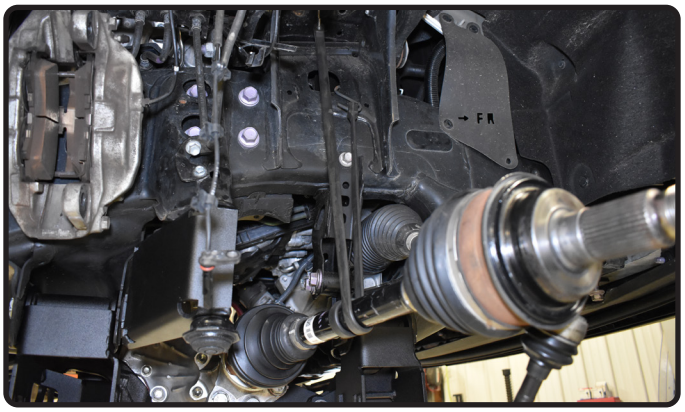


FIGURE 13



12. Remove sway bar link bolts attaching sway bar link to lower control arm. See ***Figure 14***

FIGURE 14

13. Remove factory skid plate if equipped.
14. Remove 4 bolts attaching sway bar to the frame.
15. Loosen but DO NOT remove lower control arm nuts. See ***Figure 15***

FIGURE 15

16. Remove lower strut bolt attaching lower control arm. Once bolt is removed lower control arm will swing down. ***See Figure 16***

FIGURE 16

17. Remove cam bolts from lower arm and remove lower control arm from vehicle. ***See Figure 17 & 18***

FIGURE 17

FIGURE 18

18. Remove (4) strut nuts attaching strut to top of frame. **DO NOT LOOSEN THE CENTER NUT**. Remove strut from vehicle. ***See figure 19***

FIGURE 19

19. Locate wire harness located on the passenger side of the differential and unplug harness. ***See Figure 20***

FIGURE 20

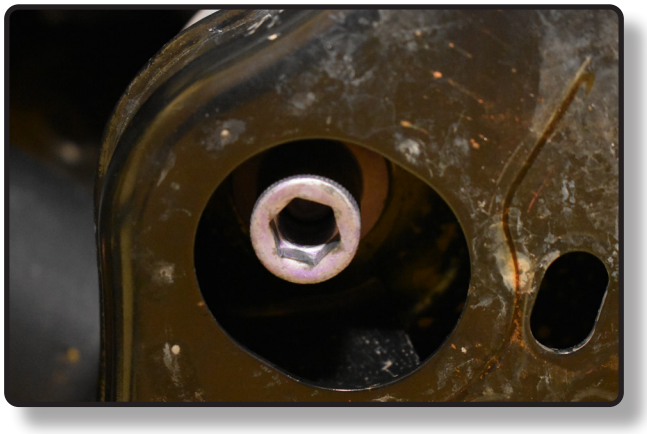
20. Remove front 4 driveshaft nuts and washers. ***Tip: use a prybar to prevent the front drive shaft from spinning.*** *- See Figures 21, 22*

FIGURE 21

FIGURE 22

21. Remove Allen nut from rear differential mount located on the driver side. Allen nut is tucked up in factory cross member. ***See Figure 23***

FIGURE 23

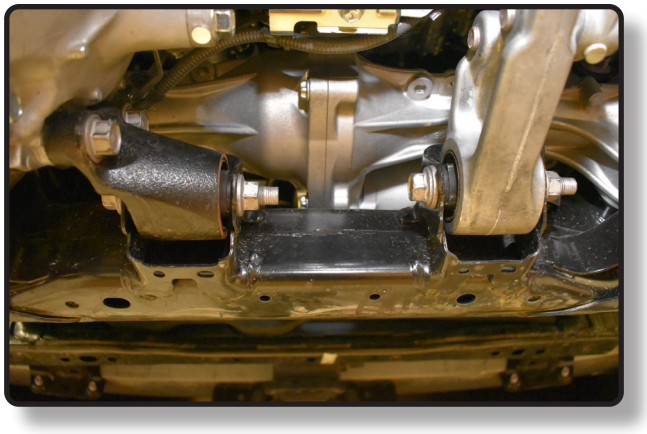


22. Place jack under front differential to support it.
23. Remove the 2 bolts holding rear of differential to bracket. Do not remove bracket at this time. Bracket can be removed after the differential is removed from the vehicle. ***See Figure 24***

FIGURE 24

24. Remove passenger and driver side bolt from frame to free up differential. ***See Figure 25***

FIGURE 25



25. Remove differential from vehicle. CAUTION: DIFFERENTIAL IS HEAVY.
26. Remove differential vacuum hose. This will not be reused. Retain clamps for reuse.
27. It is required that the rear cross member be cut to allow clearance for the front differential drive shaft. Cutting is as follows: Cut Passenger side as shown in Figures 26 and 27 Front and Back - 3 3/4" from the Tab Cut Drivers side as shown in Figures 28 and 29 Front and Back - 9/16" From the Tab.

FIGURE 26

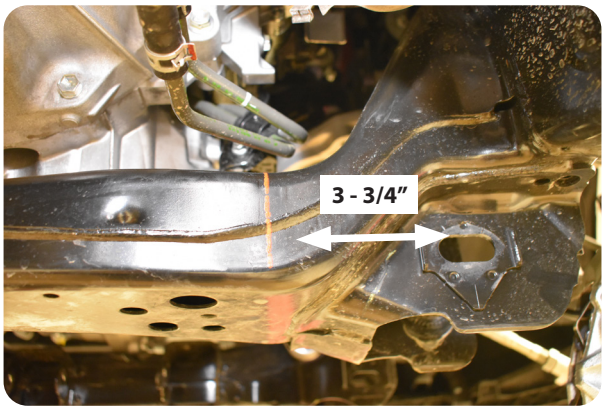


FIGURE 27

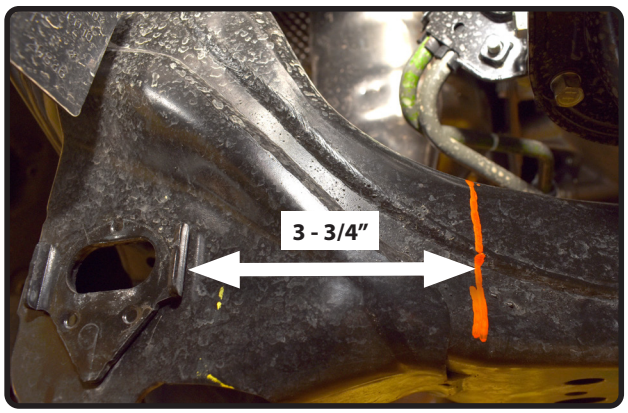


FIGURE 28

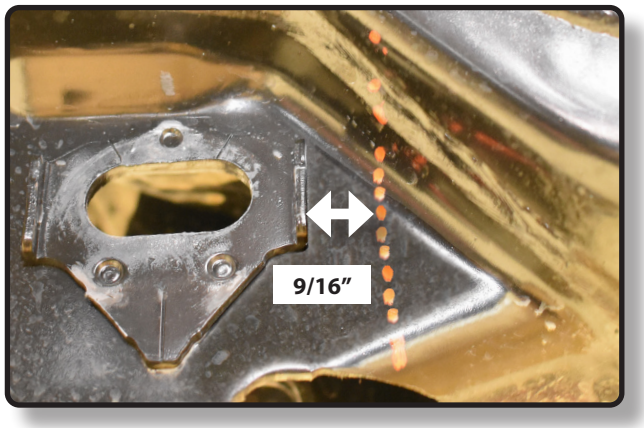


FIGURE 29

28. On some vehicles it may be required to trim the flange off the factory lower control arm pocket to fit he front crossmember. Test fit crossmember to verify. ***Figure 30***

FIGURE 30

29. Use flap disc or grinding disc to clean up any rough edges.

30. Spray paint raw edges to protect against rust. ***Figure 31***

FIGURE 31

31. Install front cross member using provided bolts, nuts and square washers. ***Figure 32*** - "**DO NOT TIGHTEN.**" ***Figure 33 - Use the 18mm X 140mm found in bolt Pack 392 - Note: Use the longer bolts for the rear cross member. When fitting crossmember to the vehicle it may be necessary to use a mallet to shift the crossmember left or right to fit the square washers. Snug but do not tighten until LCA's are installed.***

FIGURE 32

FIGURE 33

CROSS MEMBER FRAME PATCH INSTALLATION

32. Clean up the metal sections of the cross member to remove paint, rust, grease where frame patches will be welded to the frame. ***Figure 34***

FIGURE 34

33. Weld frame patches as shown in images ***Figure 35, 36 - Note: The large frame patch will be used on the driver side. The small frame patch will be used on the passenger side.***

FIGURE 35

FIGURE 36

34. Clean up rough surfaces, sharp edges and welds with flapper disc or grinder. ***Figure 37, 38, 39.*** Wipe down the welds and any exposed metal with a de-greaser.
35. Paint any exposed metal to prevent rust.

FIGURE 37

FIGURE 38

FIGURE 39

36. Install bushings and sleeves into provided differential brackets. ***Tip: Lubricate the rubber bushings and use an arbor press or a vice to press bushings into brackets.*** Install polyurethane bushings then sleeves. ***Figure 40***

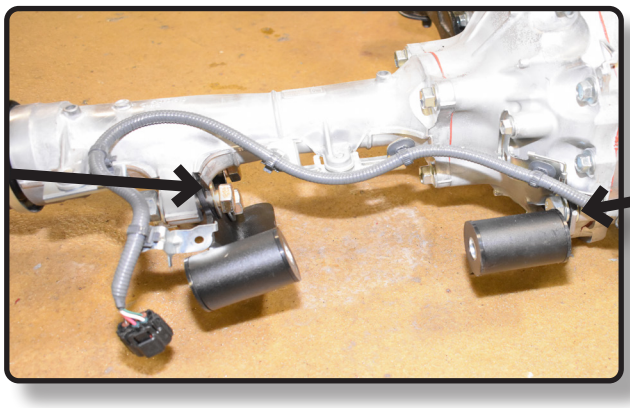
FIGURE 40

37. Remove factory differential mounts from differential. ***Figure 41***

FIGURE 41

38. Install provided differential mount brackets with provided hardware, leave loose - Bolt Pack 387 . ***Figure 42***

FIGURE 42

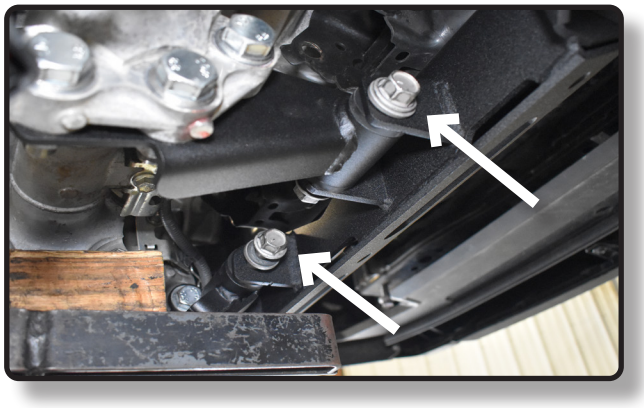


39. Using an appropriate jack, re-install front differential. ***Figure 43***

FIGURE 43

40. Install into the front cross member tabs using OE hardware. ***Figure 44***

FIGURE 44



41. Install provided differential vent hose. ***Figure 45***

FIGURE 45

42. Re-connect differential wire harness. ***Figure 46***

FIGURE 46

43. Re-attach drive shaft to differential using a swivel extension. Use thread locker on all the drive shaft nuts. Torque to 55 ft-lbs. ***Figure 47, 48***

FIGURE 47

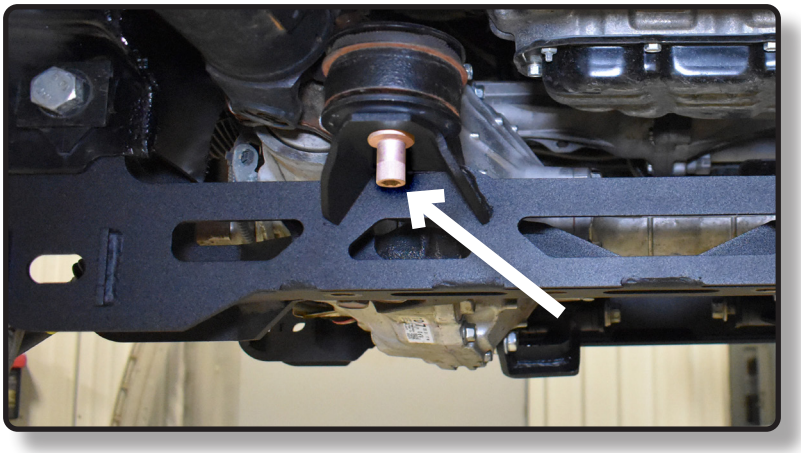
FIGURE 48

44. Re-attach rear differential mount bracket to differential using OE hardware. Torque to 133 ft-lbs.
45. Install provided rear cross member, running bolts (18mm x 160mm - Bolt Pack 392) from back to front. Leave Loose. ***Figure 49***

FIGURE 49

46. Attach rear differential mount to mount tab on rear cross member using factory hardware. DO NOT TIGHTEN. ***Figure 50***

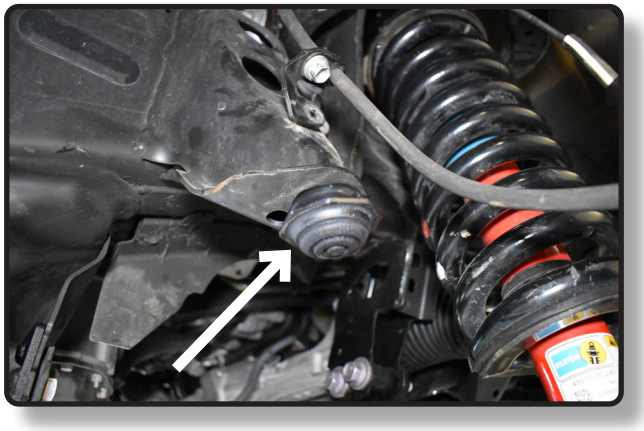
FIGURE 50



BUMP STOP EXTENSION BRACKET INSTALLATION

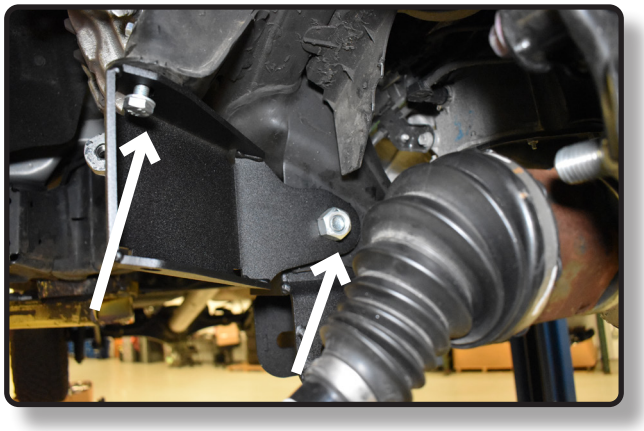
47. Remove bump stop from the factory bracket and retain it and all hardware. ***Figure 51***

FIGURE 51



48. Install provided bump stop bracket using the provided hardware. Bolt Pack 393(10mmx25 bolt and washer) Torque to 28 ft-lbs., Leave 18mm hardware loose for tightening later. ***Figure 52*** - ***Note: Bump stop brackets are side specific.***

FIGURE 52

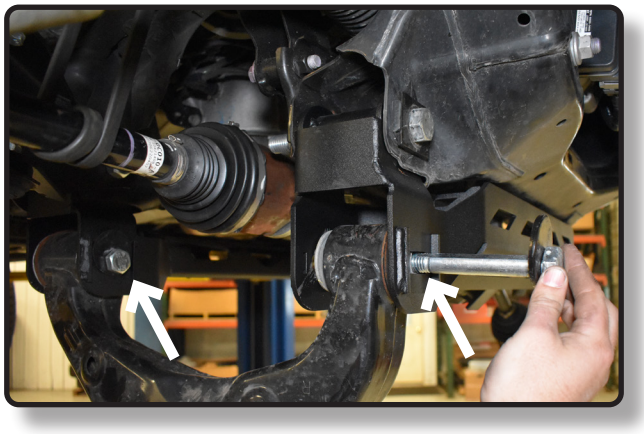


49. Install factory bump stop to bracket with provided Serrated Nut in Bolt Pack 393. Torque to 28 ft lbs. ***TIP: Use pliers to prevent bump stop from spinning when tightening***. ***Figure 53***

FIGURE 53

50. Install lower control arms using factory cam bolts, nuts and washers. ***NOTE: The long bolt will be used to install the rear arm and the short bolt will be used for the front arm. Both will be installed front to back. Figure 54***

FIGURE 54



CROSS MEMBER HARDWARE TIGHTENING

51. Tighten front and rear cross member bolts at the frame along with the differential mounting hardware. ***NOTE: Make sure all cam plates are fully seated before tightening. See Torque specifications below. Figure 55***

FIGURE 55

TORQUE SPECIFICATIONS

- 18mm X-members = 207 ft-lbs
- 16mm Diff = 133 ft-lbs
- 14mm Diff = 107 ft-lbs
- Allen Nut Rear Diff = 74 ft-lbs
- Front diff x-mem = 92 ft-lbs

FRONT COIL OVER INSTALLATION

(PLEASE FOLLOW THE STEPS IN THIS BDS INSTRUCTION. THE INCLUDED FOX INSTRUCTIONS ARE FOR REFERENCE ONLY.)

Perform the following steps one side at a time, starting with the passenger's side.

52. Install the new coil-over assembly. With remote reservoir models make sure that the hoses are facing outward and towards the front of the vehicle. Feed the reservoir up first, ***Figure 56*** then the coilover. Connect the coilover hat to the vehicle using the 4 nuts provided. ***Figure 57*** Leave hardware loose. Proper installation will look like ***Figure 58***.

NOTE: The reservoir bracket will be installed during the sway bar drop spacer installation.

FIGURE 56

FIGURE 57

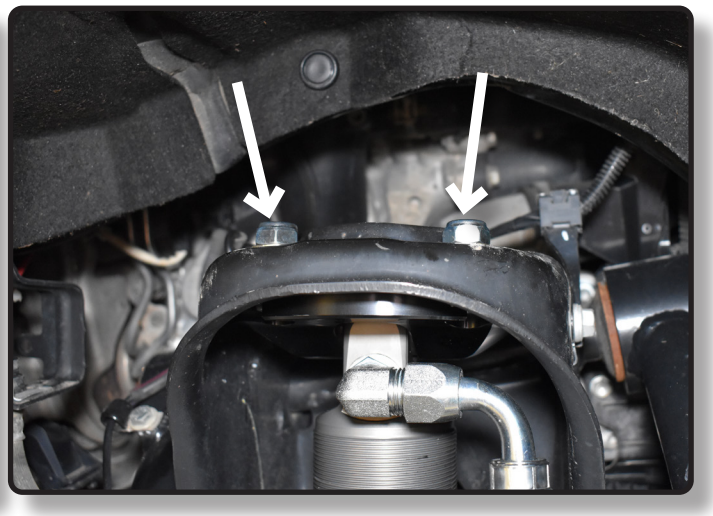


FIGURE 58

53. To mount the lower coilover to the LCA, use a jack to lift the LCA assembly giving drive axle clearance of the shock bolt, and assisting in alignment of the coilover bolt hole with the LCA mount hole as shown in (***Figures 59, 60***)Connect the shock to the lower control arm with the longer spacers toward the front of the vehicle reuse the factory lower bolt and nut. Torque to 122 ft-lbs. . ***Note: The drive axle can come out during disassembly so it may be necessary to relocate the drive axle as the LCA is lifted.***

FIGURE 59

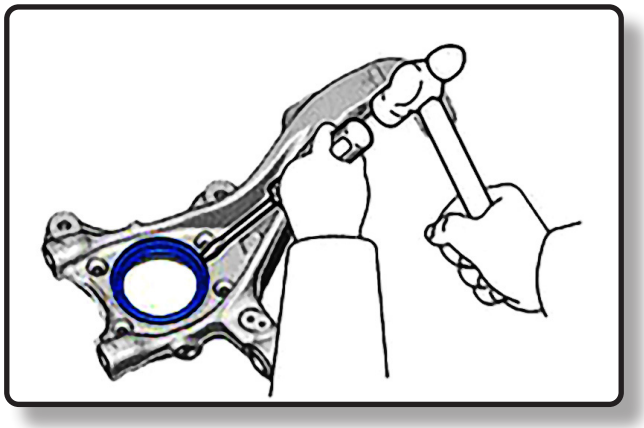
FIGURE 60

54. Tighten all four bolts or nuts on the top shock hat hardware to 24 ft- lbs.
55. Repeat procedure on the driver's side.

KNUCKLE INSTALLATION

56. Remove the 4 wheel bearing bolts and the bearing from the OE knuckle. Remove the steering knuckle oil seal from the OE knuckle. Using a flat head screwdriver tap around the edge to release the seal. ***Figure 61***

FIGURE 61



57. Install the steering knuckle oil seal into the new knuckle by carefully tapping it into place with a large piece of wood. ***Figure 62, 63***

FIGURE 62

FIGURE 63

58. Prep the 4 bearing bolts for installation with Loctite. ***Figure 64***

FIGURE 64

59. Install the OE wheel bearing into the new knuckle with dust shield. ***Fig. 65A*** Make sure the o-ring (***Fig. 65B***) remains on the bearing when installing the bearing into the new knuckle. Torque to 89 ft-lbs.

FIGURE 65A

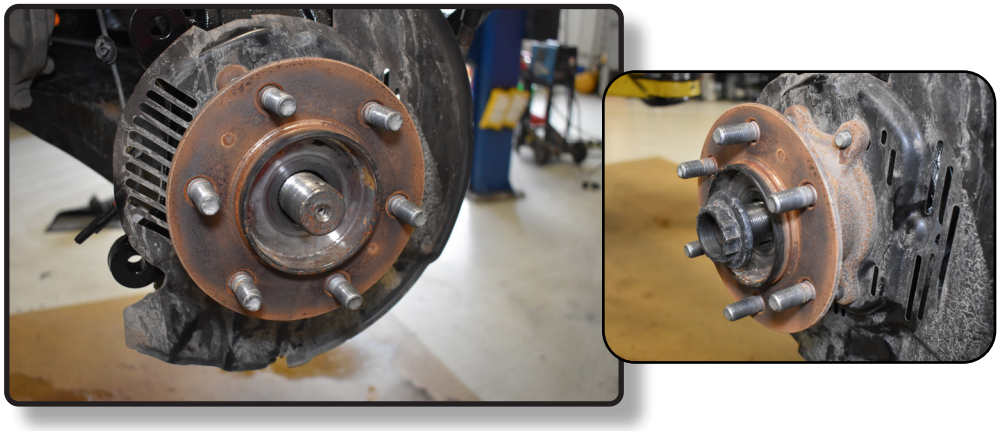
FIGURE 65B

60. Loctite the 2 lower knuckle bolts prior to connecting the lower ball joint attachment to the knuckle. Torque to 192 ft-lbs. ***TIP: You may need the help of a friend to hold the knuckle assembly in place while you thread in the bolts. Figure 66***

FIGURE 66

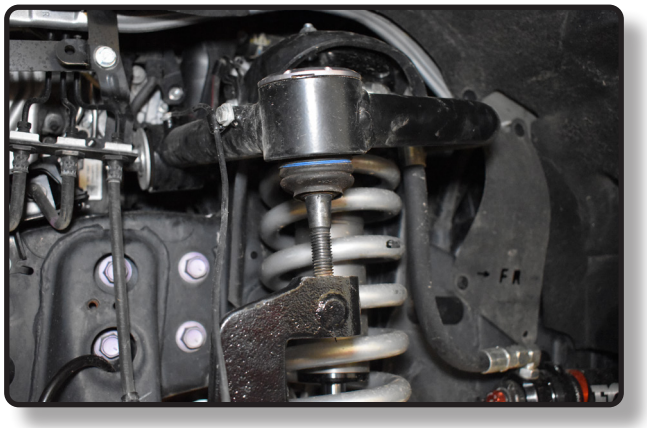
61. Push the knuckle inward inserting the CV axle into the wheel bearing, Thread on axle nut by hand. Do not not tighten. ***Figure 67***

FIGURE 67



62. Align UCA ball joint stud with knuckle head. ***Fig. 68***

FIGURE 68

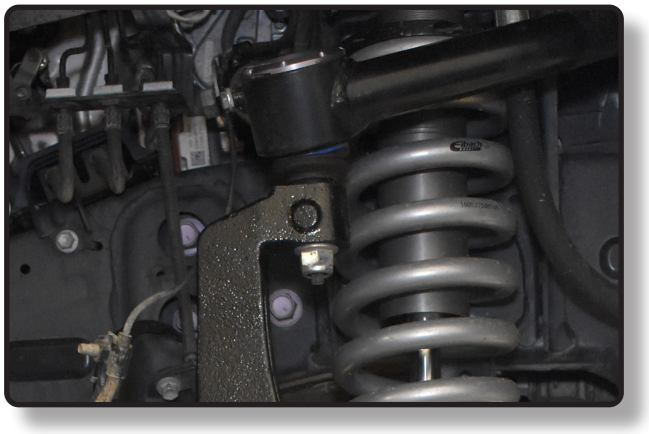


63. It may be necessary to apply downward pressure on the UCA to fully insert the ball joint stud into the knuckle. ***Figure 69***

FIGURE 69

64. Install provided nylock nut. Torque to 92 ft-lb ***Figure 70***

FIGURE 70



65. Tighten then torque the CV axle nut using a 1-9/16" 12 point axle socket. Torque to 251 ft-lb. ***Figure 71***

FIGURE 71

66. Replace nut retainer and cotter key. Note: It may be necessary to grind out the nut retainer slot to fit the cotter key. ***Figure 72***

FIGURE 72

67. Re-Install brake rotors
68. Re-install brake calipers to the knuckle using factory hardware. Torque to 151ft-lb.

INSTALL NEW TIE ROD ENDS

69. Remove OE tierod from steering rack by breaking loose jam nut. Unthread tie rod and remove. Do not remove jam nut. ***Figure 73***

FIGURE 73

70. Install provided tie rod threading up to jam nut. Leave loose. ***Figure 74***

FIGURE 74

71. Install tie rod ball joint into knuckle using the nut supplied in Bag Kit B1626. ***Do not use the nut supplied with the tie rod.*** Tighten to 89 ft-lbs. ***Figure 75***

FIGURE 75

72. Install provided grease zerk. Grease tie rod joint. ***Figure 76***

FIGURE 76

73. Install ABS sensor into knuckle by partially installing sensor so that the o-ring is not seated, then finger tighten bolt into the knuckle. Torque bolt to 75 in-lbs. ***Figure 77***

FIGURE 77

74. Attach ABS line to back of knuckle using factory hardware and provided wire clamp found in bolt pack 393. Also reattach factory brake line bracket and ABS line bracket to the side of the knuckle with factory hardware. ***Figure 78, 79***

FIGURE 78

FIGURE 79

BRAKE LINE BRACKETS INSTALLATION

75. Brake line drop bracket need to be installed to give adequate slack to the brake lines. Use factory hardware to install provided bracket to inner fender. Use provided hardware in Bolt Pack 393(5/16"x 3/4" Bolt, 5/15" nut and washer) to attach brake line factory bracket to provided bracket. ***TIP: It may be necessary to bend brake lines down to fit new bracket. Be careful not to kink brake lines.*** Torque to 12 ft-lbs. ***Figure 80, 81***

FIGURE 80

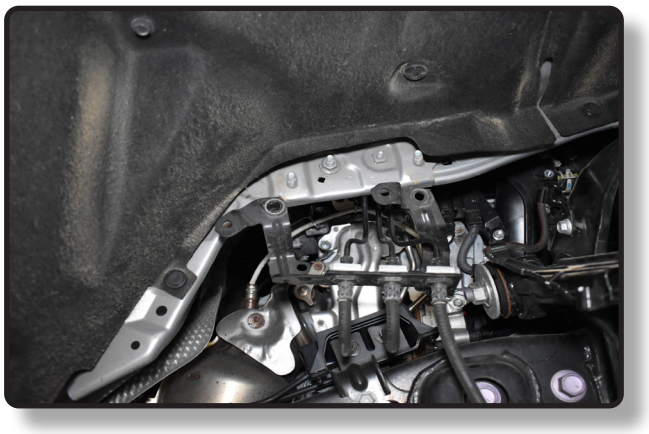
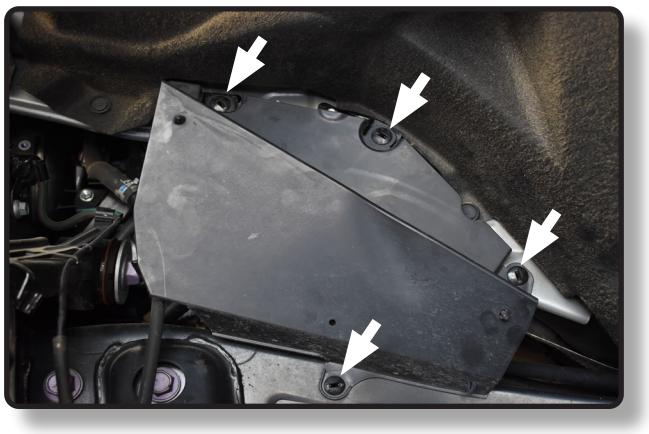


FIGURE 81

76. Re-attach factory plastic brake line . ***Figure 82***

FIGURE 82



77. Front brake line bracket relocation is required to provide slack. Remove bracket from location and move down to align with frame hole in FIG. 81. Mark hole and use provided 1/4" self tapping screw to re-install bracket in it's new location. Bolt Pack 393 ***Figure 83, 84, 85***

FIGURE 83

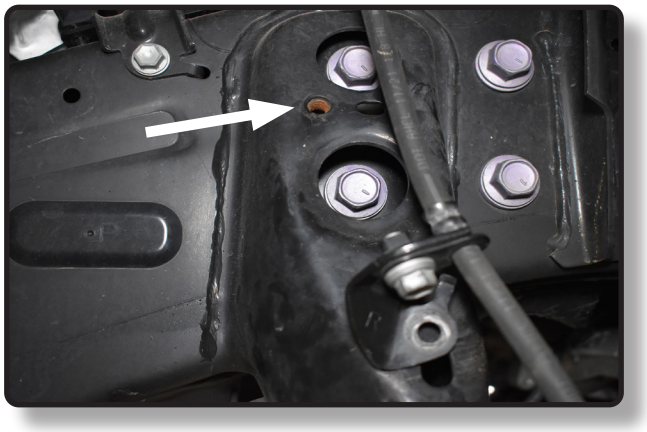


FIGURE 84

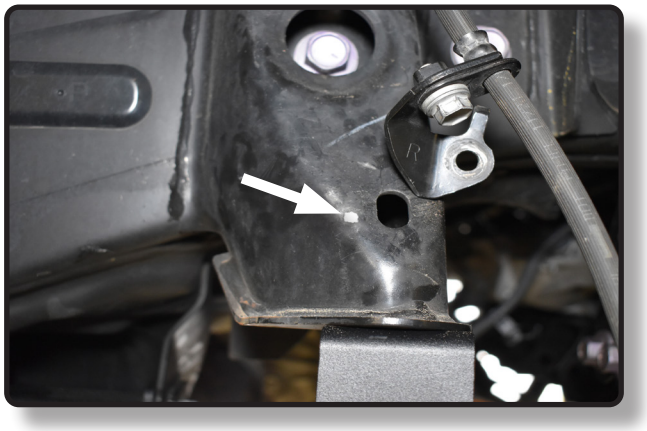
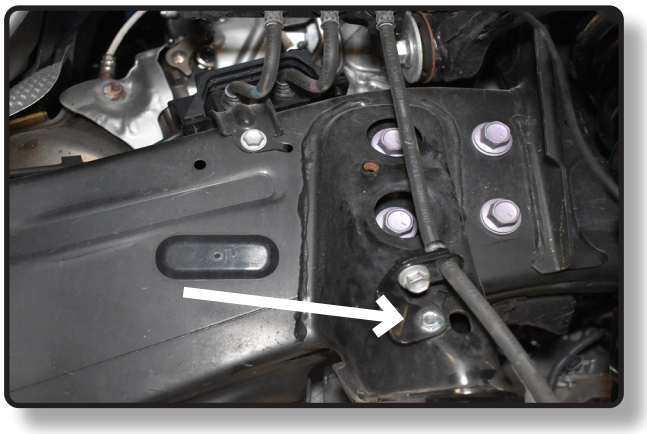


FIGURE 85



INSTALLATION OF SWAY BAR DROP BRACKETS

78. To provide clearance for sway bar drop bracket, test fit provided drop brackets and trim valance as needed using adequate saw or hot knife. ***Figure 86, 87***

FIGURE 86

FIGURE 87

79. Install provided sway bar drop brackets along with the reservoir bracket as shown in ***Figure 88***. ***NOTE: Remote reservoir and drop brackets are side specific.*** Torque to 55 ft-lbs. ***Figure 89***

FIGURE 88

FIGURE 89

80. Install factory sway bar at the provided drop brackets and LCA using factory hardware. Tighten at the drop brackets. Torque 57 ft-lbs. ***DO NOT TIGHTEN*** the LCA bolts. Bolt Pack 393(1/2"x1-3/4" bolt, 1/2" nut and washer) ***Figure 90, 91***

FIGURE 90

FIGURE 91

81. Install remote reservoir to the reservoir bracket using the hardware provided with your coilovers.

SKID PLATE INSTALLATION

82. Install colored backing plate to radiator skid using the 1/4" SS hardware in bolt pack 992. TIGHTEN WITH HAND TOOLS ONLY. ***Figure 92***

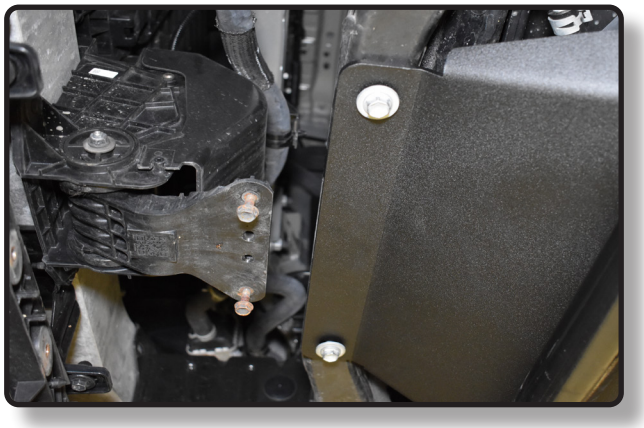
FIGURE 92

83. Install rear skid plate section to the rear cross member using the 7/16" hardware in BP1054. DO NOT TIGHTEN ***Figure 93***

FIGURE 93

84. Install front skid plate section to the front radiator cross member using OE hardware. DO NOT TIGHTEN. ***Figure 94***

FIGURE 94



85. Overlap rear skid plate with the front skid plate at the front crossmember. ***Figure 95*** Align the 2 holes in the front skid plate, the rear skid plate and the threaded holes in the crossmember. Install the 2 provided bolts found in BP1054. ***Figure 96*** Tighten all bolts. Torque to 52 ft-lbs

FIGURE 95

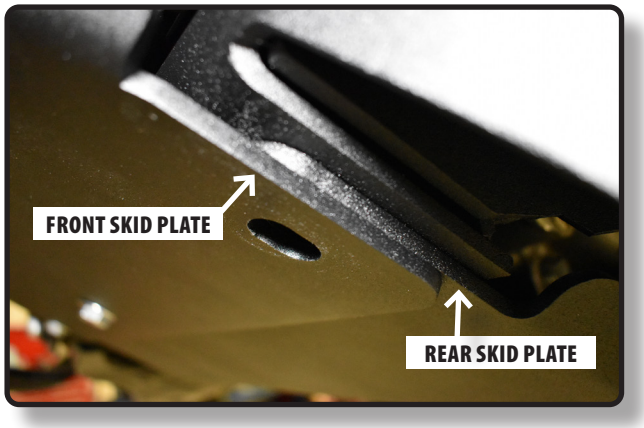


FIGURE 96

86. Re-install the 2 OE bolts in the air valance.
87. Re-Install front wheels.
88. Lower vehicle to the ground.

REAR SUSPENSION DISASSEMBLY AND INSTALLATION

89. Block front wheels.
90. Lift rear of vehicle and place on jack stands.
91. Remove rear wheels.
92. Disconnect track bar and retain hardware. ***Figure 97***

FIGURE 97

93. Remove drive shaft loop to provide drive shaft clearance. ***Figure 98***

FIGURE 98

94. Support axle with jack.
95. Disconnect shocks from the axle. ***Figure 99***

FIGURE 99

96. Disconnect brake lines and ABS lines from the frame.
97. Disconnect rear e-locker if equipped.
98. Lower axle.
99. Remove OE Springs
100. Remove factory control arm bolt from passenger side. ***Figure 100***

FIGURE 100

101. Install control arm extension bracket using provided bolt, washers sleeve and nut. BP1053(9/16" x 4 -1/2"" bolt, 9/16" Nut and Washer) Leave loose. ***Figure 101***

FIGURE 101

102. Install bolt, washers and nut into hole at the bottom of the control extension bracket by feeding washer and nut up through hole on the control arm frame horn hole. BP1053(1/2" x 1-1/2" bolt, 1/2" Nut and Washer) Leave loose. ***Figure 102***

FIGURE 102

103. Re-install control arm into bracket using OE bolt, nut and washers. ***TIP: Use a jack to lift rear differential to help align control arm and bracket. DO NOT TIGHTEN. Figure 103***

FIGURE 103

104. Prior to spring installation, remove rubber insulators from stock spring and place on provided spring. ***Figure 104, 105***

FIGURE 104

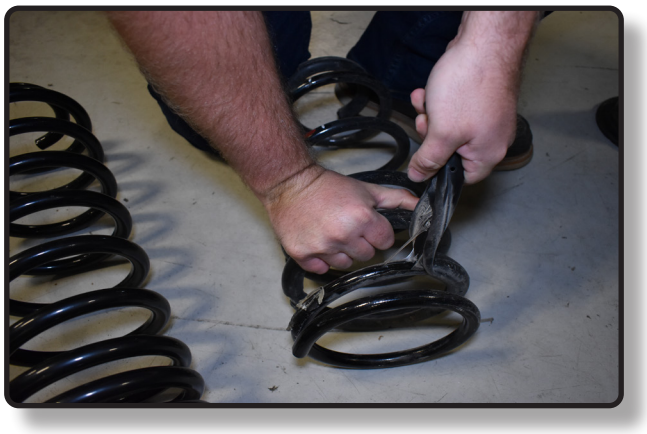


FIGURE 105

105. Install spring with bump stop inside top of spring. ***Figure 106, 107***

FIGURE 106

FIGURE 107

106. Install provided shock stem eliminator bracket with provided nut and spacer. Brackets are side specific and have a tab that fits into alignment hole on the frame. ***NOTE: Ensure that the washer fits into hole and is aligned before tightening.*** BP391, Torque to 120 ft-lbs ***Figure 108, 109, 110***

FIGURE 108

FIGURE 109

FIGURE 110

107. Install shock bushings. Use small bushing at the top of the shock and the large bushing at the bottom. Re-use factory hardware lower shock mount. Torque to 72 ft-lbs Use provided hardware for shock to shock adapter mount. BP391(19mm) Torque to 90ft-lbs ***Figure 111, 112***

FIGURE 111

FIGURE 112

108. Remove OE bump stop and bracket.

109. Install bump stop onto bump stop bracket using 3/8" serrated nut. Mount bracket to frame using factory hardware. BP1053, Torque to 23 ft-lbs ***Figure 113, 114 , 115***

FIGURE 113

FIGURE 114

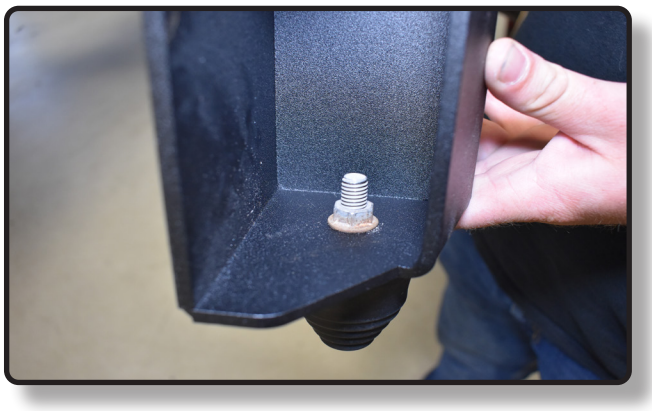
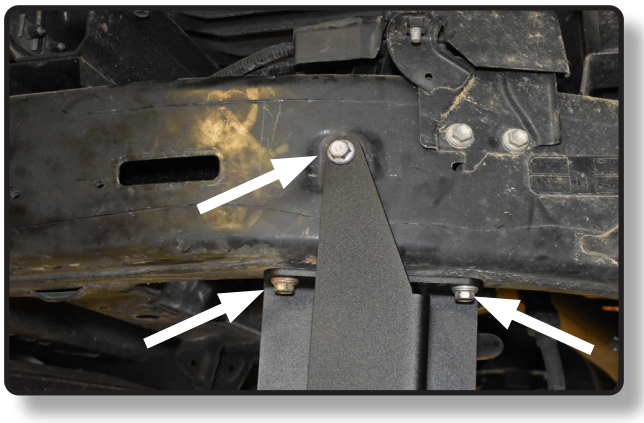


FIGURE 115



110. Install provided bushings and sleeves into sway bar link. ***Note: Lubricating the bushings makes it much easier.*** Install new sway bar links ***(found in Bolt Pack 404)*** to OE bracket using factory hardware. Torque to 45 ft-lbs DO NOT TIGHTEN. ***Figure 116***

FIGURE 116

111. Install rear track bar bracket. Install the 2 bottom bolts and washers from the top down through the provided bracket, the factory bracket and into the flange nuts. Tighten from the top. BP1053(7/16" hardware) ***Figure 117, 118***

FIGURE 117

FIGURE 118

112. Install OE hardware and washers through the bracket and the provided 1.25"OD x 1.55" long sleeve found in ***Bag Kit 1627***. Torque 7/16" hardware to 52 ft-lbs, OE bolt to103 ft-lbs ***Figure 119***

FIGURE 119

113. It may be necessary to lower the vehicle to the ground to align trackbar and bracket. Attach trackbar to the bracket using provided 14mm x 90mm bolt, nut and washers hardware found in BP1053. Leave loose. ***NOTE: Install track bar bolt front to back to allow for spring clearance.***

114. Identify the straight brake line bracket. Install in the lower location at the axle using the OE hardware and the provided hardware in BP1053(5/16" hardware) Torque 10 ft-lbs. ***Figure 120***

FIGURE 120

115. Identify the bent brake line bracket. Install in the upper location at the frame with OE hardware and hardware in BP1053. Torque 1/4" hardware to 75 in-lbs ***Figure 121***

FIGURE 121

116. Re-attach the driver/passenger side ABS line brackets. Use bent bracket to re-install ABS line using OE hardware and hardware in BP1053. Torque 1/4" hardware to 75 in-lbs ***Figure 122***

FIGURE 122

117. Re-install drive shaft loop using the OE bolts and the provided 1-1/4" x 7/8" sleeve with OE hardware. ***Figure 123***

FIGURE 123

118. Re-Install wheels and torque to spec.
119. Lower vehicle to the ground.
120. Torque rear UCA to 103 ft-lbs
121. Torque rear track bar 14mm hardware to 111 ft-lbs
122. Torque front LCA to 207ft-lbs. The vehicle will need a complete front end alignment.

POST INSTALLATION INSTRUCTIONS

123. Check all hardware for proper torque.
124. Check hardware again after 500 miles and at regularly scheduled maintenance intervals.
125. Adjust headlights.

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