T2624 Installation Instructions
2019-22 Toyota Tundra
6" Front Lift Kit

Read and understand all instructions and warnings prior to installation of product and operation of vehicle.

Zone Offroad Products 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. Minimum tool requirements include the following: Assorted metric and standard wrenches, hammer, hydraulic floor jack and a set of jack stands. See the "Special Tools Required" section for additional tools needed to complete this installation properly and safely.

Product Safety Warning

Certain Zone 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. Zone Offroad Products 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.

Technical Support

Live Chat provides instant communication with Zone tech support. Anyone can access live chat through a link on www.zoneoffroad.com .

www.zoneoffroad.com may have additional information about this product including the latest instructions, videos, photos, etc.

Send an e-mail to ***tech-zone@ridefox.com*** detailing your issue for a quick response.

888.998.ZONE Call to speak directly with Zone tech support.

Pre-Installation Notes

1. Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
2. Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
3. 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.
4. 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.
5. Secure and properly block vehicle prior to installation of Zone Offroad Products. Always wear safety glasses when using power tools.
6. If installation is to be performed without a hoist, Zone Offroad Products recommends rear alterations first.
7. 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.

Difficulty Level

easy 1 2 3 (4) 5 difficult

Estimated installation: 5 hours

Special Tools Required

•1-9/16" or 40mm 12 point socket
•Reciprocating Saw

Tire/Wheel Fitment

Tires/Wheels

37x12.5x17, 9" Wide w/ 5-6" BS 5" Trimming Required, 7" may require light trimming

35x12.5,9" wide w/5-6" BS 5" No Trimming Required

*no trimming, Mud flap may need to be removed

Trimming requires, Front fender liner, Body Mount Bump, Tieing back fender liner

* Wheel and Tire combination was tested through normal driving conditions within alignment specs with no rubbing or trimming needed.

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:

*LF*_____ *RF*_____ *LR*_____ *RR*_____

AFTER:

*LF*_____ *RF*_____ *LR*_____ *RR*_____

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

INSTALLATION INSTRUCTIONS

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.
3. Raise the front of the vehicle with a hydraulic jack. Support the frame rails with jack stands.

Installation Instructions

1. Remove (4) Brake Line and ABS bolts from frame and knuckle. ***See Figures 1-3***

Figure 1

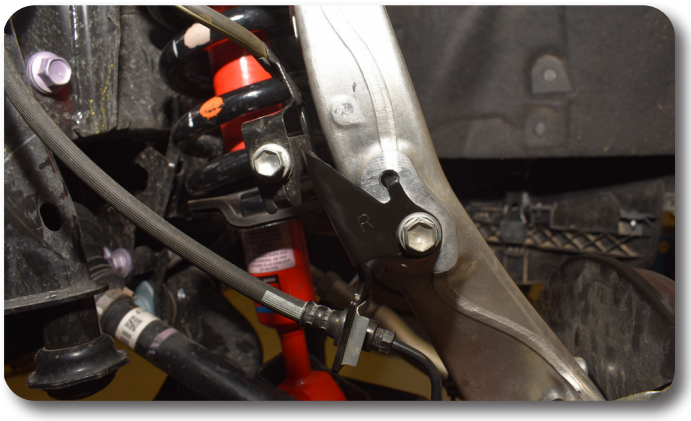

Figure 2

Figure 3

Kit Contents

Important Verify you have all of the kit components before beginning installation.

Qty	Part
3	Bag Kit
6	Bolt Pack
2	6" Top Strut Spacer
1	Front Sway bar drop - Drv
1	Front Sway bar drop - Pass
2	Bump Stop Extension
1	Front Brake Line Brkt -DRV
1	Front Brake Line Brkt - PASS
2	Tie Rod
1	Front Crossmember
1	Rear Crossmember
2	4-5/8" Rear Coil Spring Spacer
1	Shock Stem Eliminator - Drv
1	Shock Stem Eliminator - Pass
1	Rear Track Bar Bracket
2	Sway Bar Link - 7-1/2"
1	Rear Bump Stop -Drv
1	Rear Bump Stop- Pass
2	Rear UCA Bracket Extension
1	6" Skid Plate Box Kit
1	Knuckle Box Kit - Drv
1	Knuckle Box Kit - Pass

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

Figure 4

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

Step 3 TIP: Using hammer strike knuckle to separate outer tie rod end from knuckle.

Figure 5

4. Next remove (2) caliper bolts attaching caliper to knuckle. Hang caliper with bungee, rope etc. to prevent damaging brake lines.
5. Remove Rotor
6. Remove Dust Shield, Tip use a small chisel or screw driver
7. 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 6***

Figure 6

8. Remove cotter key and nut from upper ball joint. ***See Figure 7***

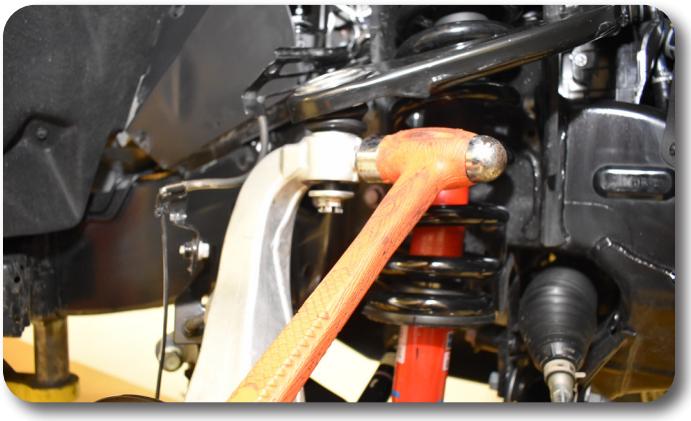

Figure 7

Step 8 TIP: Use hammer to strike knuckle to separate upper ball joint.

9. Loosen axle from wheel bearing. ***See Figure 8 & 9***

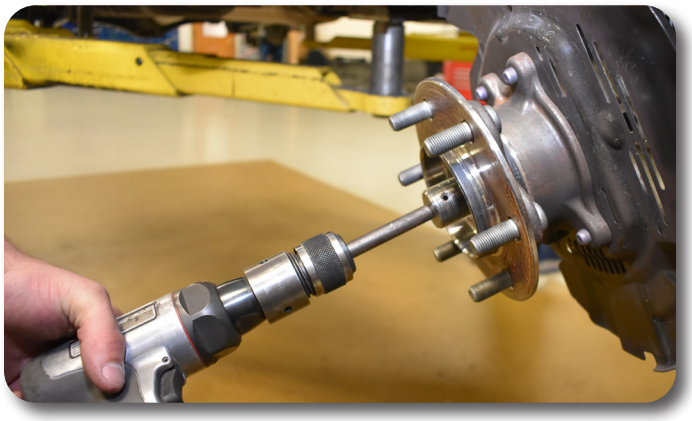

Figure 8

Step 9 TIP: Use of an air hammer or hammer and punch may assist in removing axle from bearings.

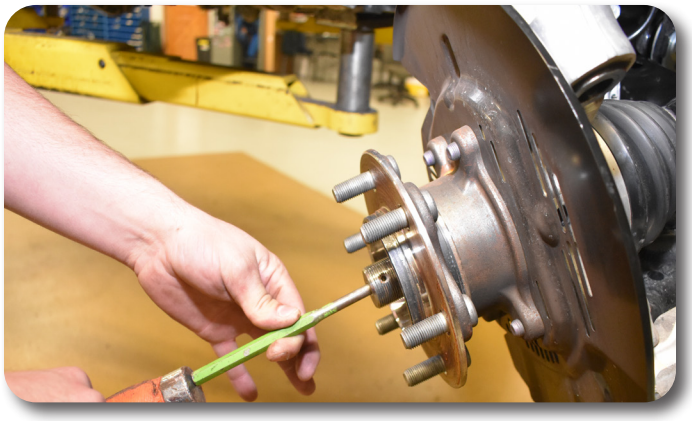

Figure 9

10. Remove 2 lower bolts attaching lower ball joint to knuckle. With both bolts removed you can now remove the knuckle and wheel bearing assembly. ***See Figure 10***

Figure 10

11. Remove Sway bar link bolts attaching sway bar link to lower control arm.
12. Remove factory skid plate if equipped.
13. Remove 2 bolts attaching sway bar to the frame.***See Figure 11***

Figure 11

14. Loosen but DO NOT remove lower control arm nuts. ***See Figure 12***

Figure 12

15. Remove lower strut bolt attaching lower control arm. Once bolt is removed lower control arm will swing down. ***See Figure 13***

Figure 13

16. Remove cam bolts from lower arm and remove lower control arm from vehicle. ***See Figure 14 & 15***

Figure 14

Figure 15

17. Remove (4) strut nuts attaching strut to top of frame. Remove strut from vehicle. ***See figure 16***

NOTE: DO NOT loosen center nut.

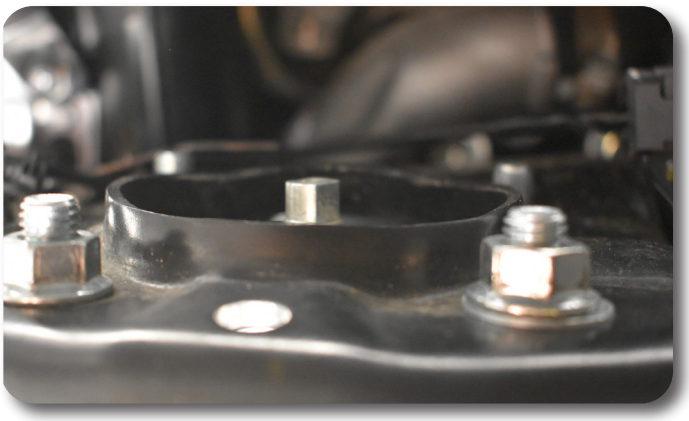

Figure 16

Step 18 TIP: Unbolting wire harness bracket on the steering rack may assist in gaining access to plug/ connector.

18. Locate wire harness located on the passenger side of the differential and unplug harness. ***See Figure 17***

Figure 17

19. Remove Front 4 driveshaft nuts and washers. ***See Figures 18,19***

Figure 18

Figure 19

Step 19 TIP: Use pry bar to dislodge drive shaft from front differential. Use pry bar to wedge drive shaft in place.

20. Remove allen nut from rear differential mount located on the driver side. Allen nut is tucked up in factory cross member. ***See Figure 20***

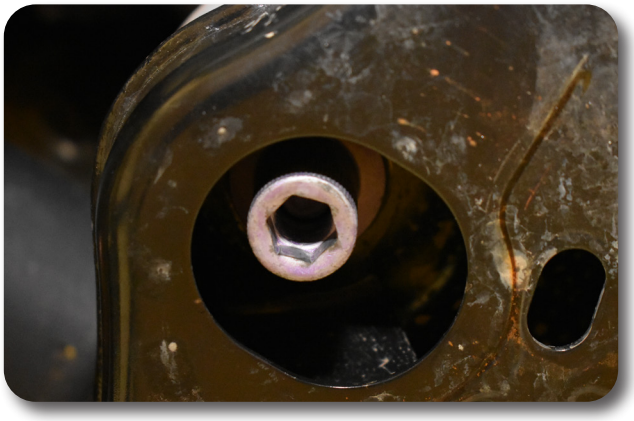

Figure 20

21. Use appropriate jack under front differential. Remove the 2 bolts holding rear of differential to bracket. Do not remove bracket at this time. Remove the 2 front nuts attached to the 2 front differential brackets. Remove bolt holding differential brackets to frame. Remove 2 bolts holding differential bracket to differential. Remove passenger side bolt from frame. ***See Figure 21, 22***

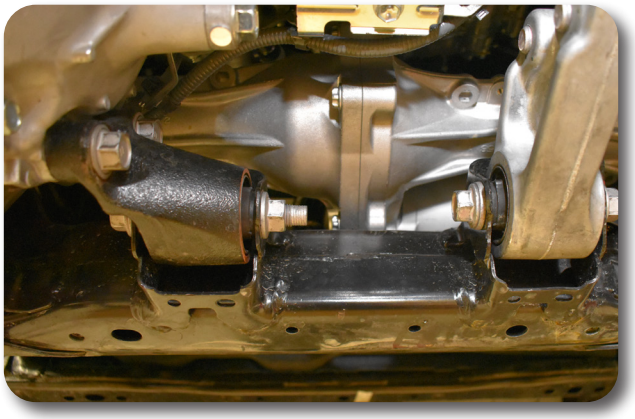

Figure 21

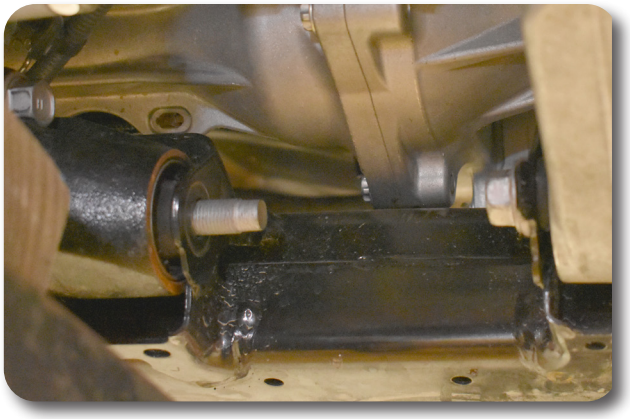

Figure 22

22. Remove differential from vehicle. CAUTION: DIFFERENTIAL IS HEAVY.
23. Remove diff. breather hose. This will not be reused. **Save clamps for re-use.**
24. It is required that the rear cross member be cut to allow clearance for the front differential drive shaft. It recommended to use a Reciprocating Saw or Plasma cutter. Cutting is as follows: See ***Figures 23, 24, 25, 26***

Step 24 Notes:

Cut Passenger side as shown in Figures 23 and 25
Front and Back - 3 3/4" from the Tab

Cut Drivers side as shown in Figures 24 and 26
Front and Back - 9/16" From the Tab.

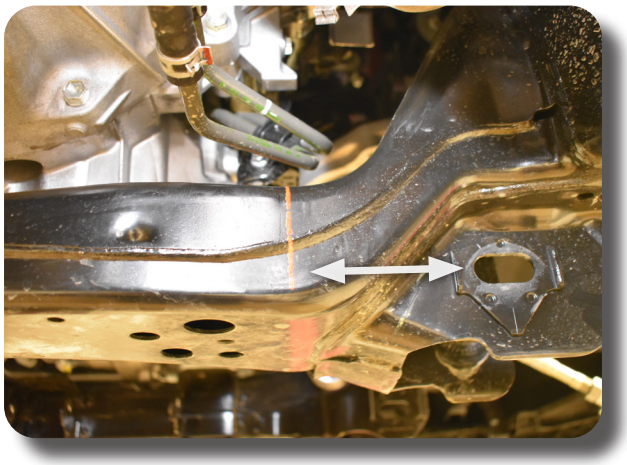

Figure 23

Step 24 CAUTION:

Caution is needed when cutting passenger side crossmember due to the close proximity of the transmission line.

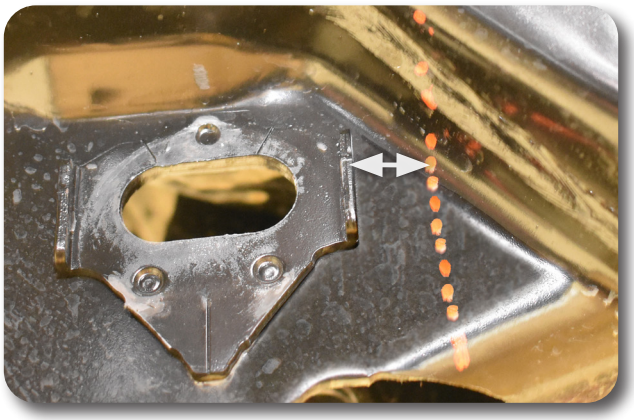

Figure 24

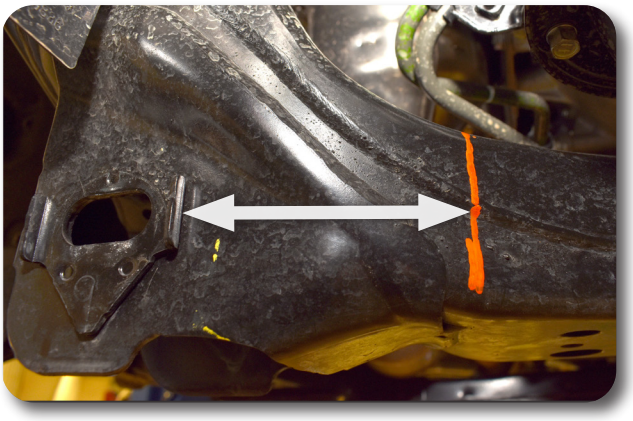

Figure 25

Figure 26

25. Use flap disc or grinding disc to clean up any rough edges.
26. Spray paint raw edges to protect against rust.
27. Install front cross member using short provided bolts, nuts and square washers. "DO NOT TIGHTEN." ***Figure 28, 29***

Figure 27

Step 27 NOTE:

Hardware for cross member located in BP393

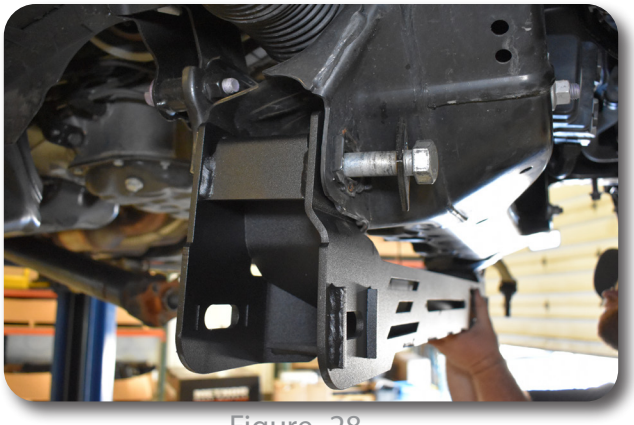

Figure 28

28. Using a transmission jack re-install differential with factory hardware to front cross member. DO NOT TIGHTEN. ***Figure 30,31***

Figure 29

Figure 30

29. Install provided differential breather hose. ***See Figure 32***

Figure 31

30. Re-Attach breather hose. ***See Figure 33***

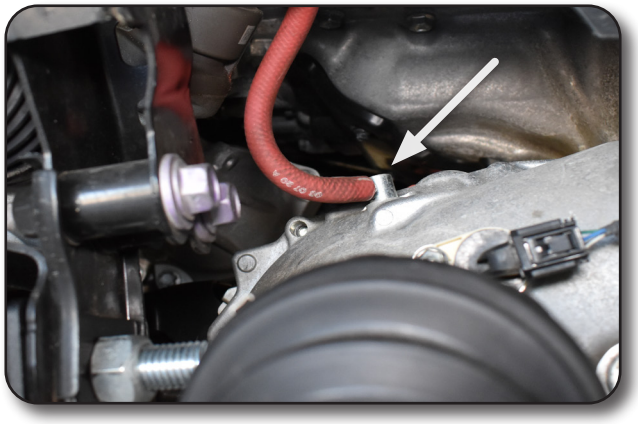

Figure 32

31. Reconnect drive shaft using factory hardware. Torque to 55 ft-lbs. **NOTE: Use Thread locker on the 4 drive shaft bolts.** ***Figure 34, 35***

Figure 33

Figure 34

Step 32 NOTE:
Hardware is located in BP393

32. Install rear cross member using the longer provided 18mm Bolts, Nuts and square washers. Install bolts from front to back. ***Figure 36, 37***

Figure 35

Figure 36

33. The diff can be lowered into place and the diff jack can be removed at this time.
34. Install factory lower control arms using factory cam bolts. NOTE: Rear bolt is longer than the front bolt.
35. Tighten cross member bolts in factory cam bolt spot. Torque the 18mm hardware to 207 ft-lbs.
36. Tighten all differential mount bolts. Torque the front 2 to 92 ft-lbs, Rear allen nut to 74 ft-lbs.
37. Re-Attach differential plug. ***Figure 48***

Figure 37

Step 1 NOTE:

Hardware for rop spacer located in BP1085

STRUT SPACER INSTALLATION

1. Install provided carriage bolts to strut spacer using provided push on washers. ***Figure 39***

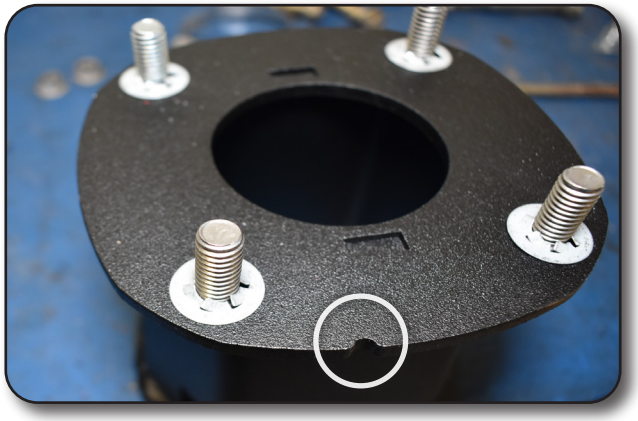

Figure 38

2. Find arrow indication on the top of strut. 89 Align arrow with notch on the strut spacer. ***Figure 40, 41***

Figure 39

Figure 40

3. Tighten the upper 4 nuts to 23 ft-lbs. Leave the LCA bolt loose. ***Figure 42, 43***

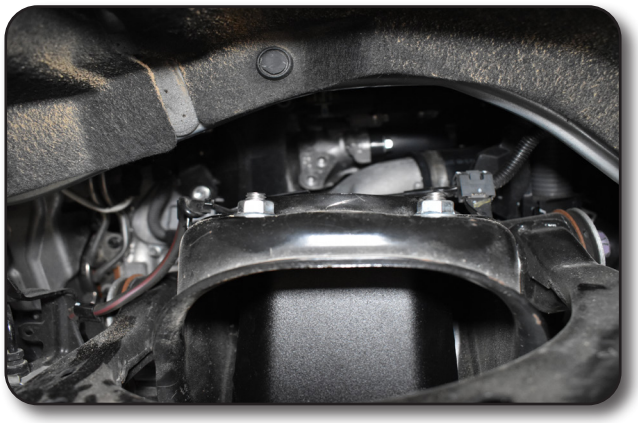

Figure 41

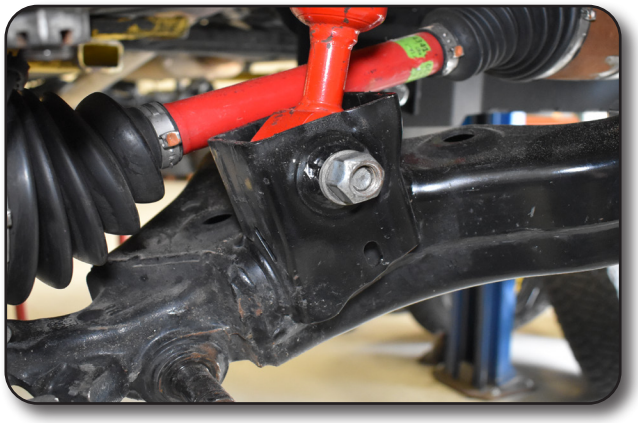

Figure 42

KNUCKLE INSTALLATION

4. 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 44***

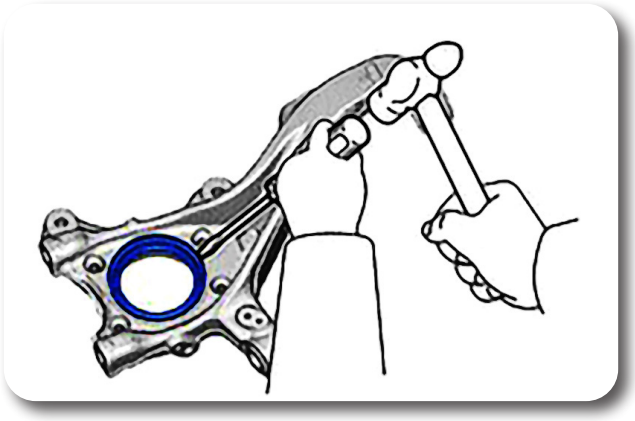

Figure 43

5. Install the steering knuckle oil seal into the new knuckle by carefully tapping it into place with a large piece of wood. ***Figure 45, 46***

6.

Figure 44

Figure 45

7. Prep the 4 bearing bolts for installation with Loctite. ***Figure 47***

Figure 46

8. Install the OE wheel bearing into the new knuckle. Fig. 64A Make sure the o-ring (Fig. 64B) remains on the bearing when installing the bearing into the new knuckle. ***Figure 48, 49***

Figure 47

Figure 48

9. Loctite the 2 lower knuckle bolts prior to connecting the lower ball joint attachment to the knuckle. Torque to 192 ft. lbs. ***Figure 50***

TIP: *You may need the help of a friend to hold the knuckle assembly in place while to thread in the bolts.*

Figure 49

10. Push the knuckle inward inserting the CV axle into the wheel bearing, Thread on axle nut by hand. Not not tighten. ***Figure 51***

Figure 50

11. Align UCA ball joint stud with knuckle head. ***Figure 52***

Figure 51

12. It may be necessary to apply downward pressure on the UCA to fully insert the ball joint stud into the knuckle. ***Figure 53***

Figure 52

13. Install provided nylock nut. Torque to 92 ft-lb ***Figure 54***

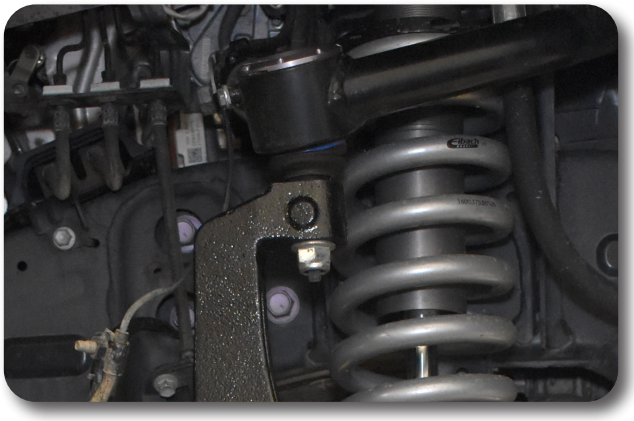

Figure 53

14. Tighten then torque the nut using a 1-9/16" 12 point axle socket. Torque to 251 ft-lb. ***Figure 55***

Figure 54

15. Replace nut retainer and cotter key. It may be necessary to grind out the nut retainer slot to fit the cotter key. ***Figure 56***

Figure 55

16. Re-Install brake rotors
17. Re-install brake calipers to the knuckle. Torque to 151ft-lb.

» BUMP STOP INSTALLATION

1. Mount bump stop to bump stop bracket using provided bump stop flange nut. Note: Use of a vice may be necessary to tighten bump stop to bracket. ***Figure 57***

Step 1 NOTE:

Bump stop hardware located in bolt pack 393

Figure 56

2. Mount provided bump stop to frame bracket into existing threaded hole using provided hardware. Use thread locker on hardware. ***Figure 58***

Step 2 NOTE:

Torque all bump stop hardware to 28 ft-lbs

Figure 57

» TIE ROD END INSTALLATION

1. Remove OE Tie rod end and replace with the provided tie rod end. ***Figure 59***

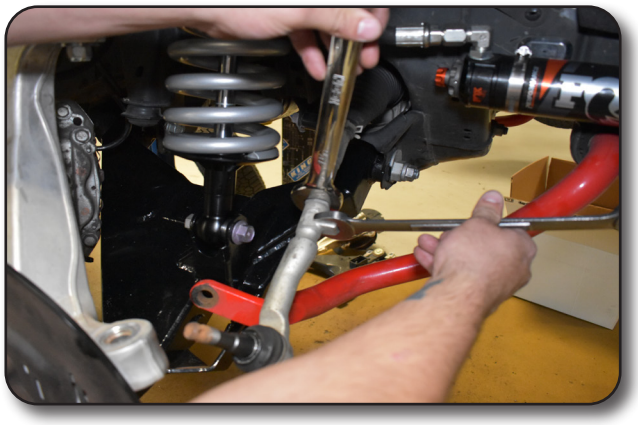

Figure 58

» AIR VALANCE TRIMMING AND SWAY BAR INSTALLATION

1. 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 60, 61***

Figure 59

Figure 60

2. Install provided sway bar drop brackets using factory hardware. NOTE: Brackets are side specific. ***Figure 62***

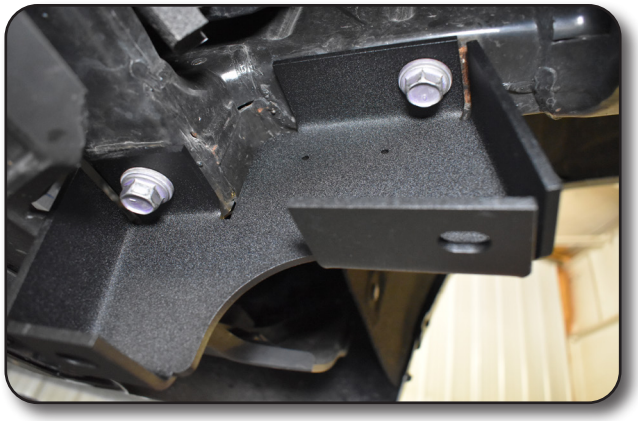

Figure 61

3. Install factory sway bar at the provided drop brackets and LCA using provided 1/2" hardware. DO NOT TIGHTEN. Torque factory hardware to 55 ft-lbs and provided hardware to 57 ft-lbs. ***Figure 63, 64***

Step 3 NOTE:

Sway bar hardware is located in bolt pack 393

Figure 62

Figure 63

» BRAKE LINE BRACKETS INSTALLATION

1. 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 to attach brake line factory bracket to provided bracket. 124- 126 TIP: It may be necessary to bend brake lines down to fit new bracket. Be careful not to kink brake lines. ***Figure 65, 66***

Step 1 NOTE:

Hardware is located in bolt pack 393

Figure 64

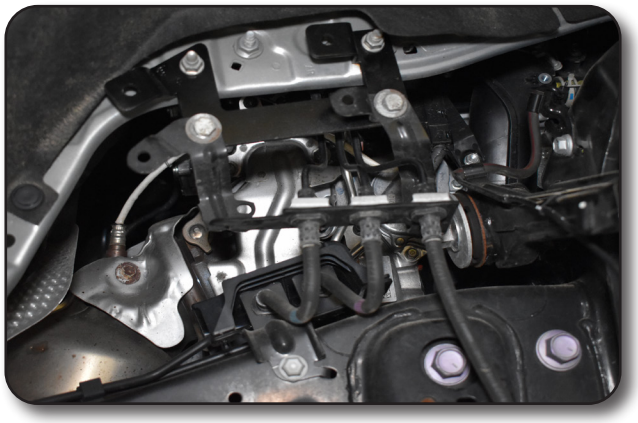

Figure 65

2. Re-attach factory plastic brakeline shield. ***See Figure 67***

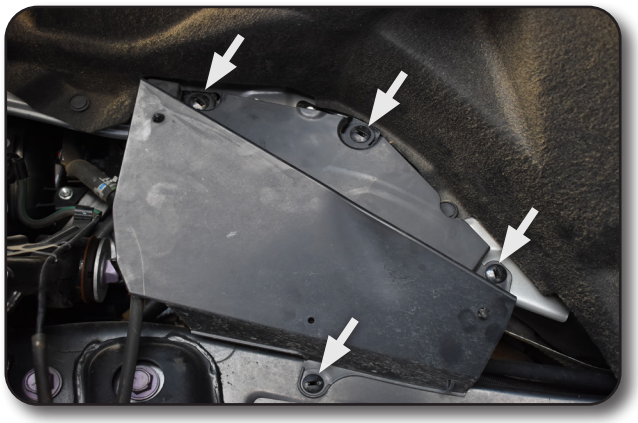

Figure 66

3. Front brake line bracket relocation is required to provide slack. Remove bracket from location and move down to align with frame hole in ***Figure 68, 69, 70***. Mark hole and use provided self tapping screw to re-install bracket in it's new location.

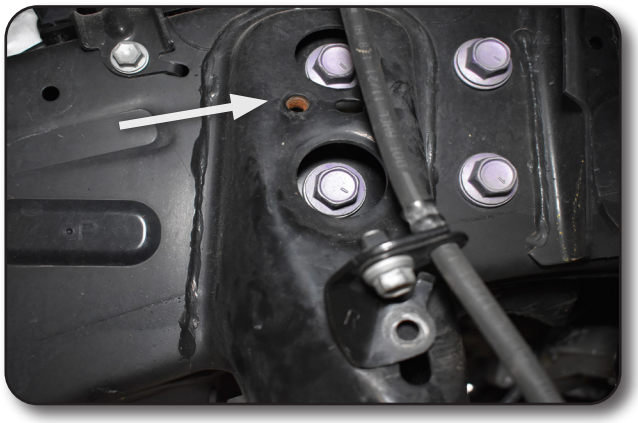

Figure 67

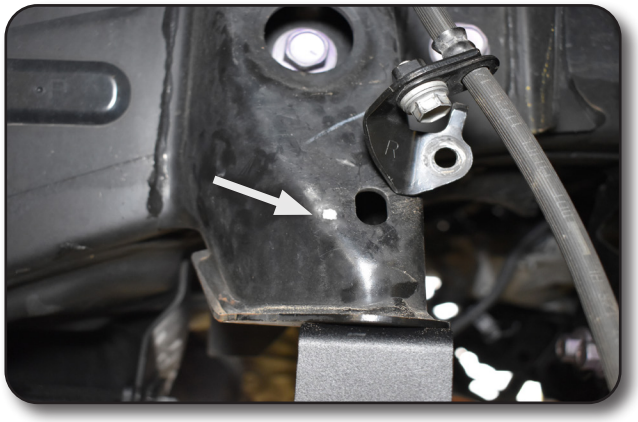

Figure 68

Figure 69

Step 4 NOTE:

Hardware in BP1055

Torque to 26ft-lbs

4. Install front skid plate between the crossmembers. Fig. 71, 72

Figure 70

Figure 71

5. Repeat steps on other side.

» REAR SUSPENSION DISASSEMBLY AND INSTALLATION

1. Remove rear drive shaft hoop. ***Figure 71***

Figure 72

2.

1. Disconnect track bar and retain hardware. ***Figure 71***

Figure 73

2. Remove factory control arm bolt from passenger side and save for later use. ***Figure 72***

Figure 74

3. Install control arm extension bracket using provided bolt, washers sleeve and nut. ***Figure 73***

Figure 75

4. Install bolt, washers and nut into hole at the bottom of the control extension bracket by feed washer and nut up through hole on the control arm frame horn hole. ***Figure 74***

Figure 76

5. Re-install control arm into bracket using provided bolt, nut and washers. TIP: Use a jack to lift rear differential to help align control arm and bracket. DO NOT TIGHTEN. ***Figure 75***

Figure 77

Step 6 NOTE:

Hardware in Bolt Pack 407

6. Install upper spring spacer using supplied bolt, nut and washers. TIP: Use an open end wrench at the top and impact with long extension up through the bottom of the spring spacer. ***Figure 76***

Figure 78

7. Install spring with isolator. ***Figure 77, 78***

Figure 79

Figure 80

8. Install provided shock stem eliminator bracket with provided nut and washer 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. Torque 120 ft-lbs. ***Figure 79, 80, 81***

Figure 81

Figure 82

Figure 83

Step 10 NOTE:

Shock to shock adapter hardware located in BP391(19mm) Torque to 90ft-lbs

9. Install shock bushings. Use small bushing at the top of the shock and the large bushing at the bottom. Re-use lower shock OE hardware, Torque to 72 ft-lbs. Use provided HW for upper shock to shock adapter mount. ***Figure 82, 83***

Figure 84

Figure 85

10. Install bump stop onto bump stop bracket. Mount bracket to frame using factory hardware. ***Figure 84, 85 , 86***

Figure 86

Figure 87

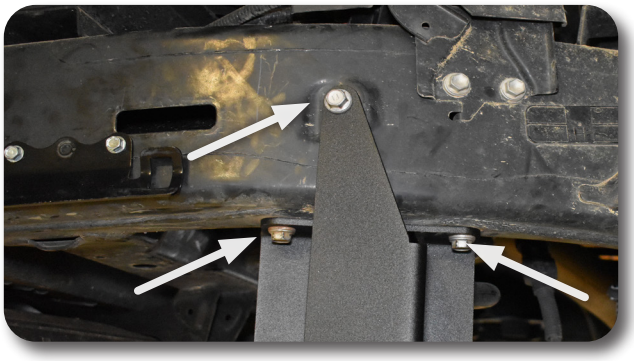

Figure 88

11. Install Sway bar Links, Bolt Pack 404, torque 45 ft-lbs. DO NOT TIGHTEN. ***Figure 89***

Figure 89

Step 12 NOTE:

Rear track bar bracket hardware located in bolt pack BP1053

12. 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. It may be necessary to lower the vehicle to the ground to align trackbar and bracket. Attach trackbar to the bracket using provided Bolt, nut and washers. NOTE: Install track bar bolt front to back to allow for spring clearance. ***Figure 88, 89***

Figure 90

Figure 91

13. Install provided Bolt, sleeve, nut and washers. ***Figure 90***

Figure 92

Step 13 NOTE:

Torque all hardware as follows, Torque 14mm - 111 ft-lbs, 7/16" HW - 52 ft-lbs, OE bolt 103 ft-lbs

14. Identify the straight brake line bracket. Install in the lower location. ***Figure 91***

Figure 93

Step 14 NOTE:

All brake line hardware located in BP1053, Torque all brake line hardware to 75 in-lbs

15. Identify the bent brake line bracket. Install in the upper location. ***Figure 92***

Figure 94

16. Find the driver side ABS line bracket. Use bent bracket to re-install ABS line. ***Figure 93***

Figure 95

17. Remove and reinstall drive shaft safety loop. ***Figure 94, 95***

Figure 96

Figure 97

Post Installation Instructions

18. Check all hardware for proper torque.
19. Check hardware again after 500 miles and at regularly scheduled maintenance intervals.
20. The vehicle will need a complete front end alignment.
21. Adjust headlights.

Post-Installation Warnings

1. 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.

2. 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.

3. Perform head light check and adjustment.

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