

### TACOMA REAR LIFT KIT

110230-1-K

### KIT CONTENTS









### RECOMMENDED TOOLS

Loctite	Level	Sockets	Wrenches
Cutoff Wheel	Straight Edge	8mm	8mm
Welder	Punch	10mm	10mm
Grinder	C-Clamps (2)	12mm	12mm
Plasma Cutter	Gasket Scraper	13mm	13mm
Paint Pen	Drill	14mm	14mm
Tape Measure	5/16" Drill Bit (2.4 Engines Only)	17mm	17mm
Jack Stands	Allen Set	18mm	18mm
Floor Jack		19mm	19mm
3/8" Ratchet		21mm	21mm
1/2" Drive Ratchet			

### CAUTION

Hammer

- 1. Read all instructions completely and carefully before you begin.
- 2. Check to make sure the kit is complete and that no parts are missing (refer to the Kit Contents List on the first page of these instructions). If anything is missing, please contact Trail-Gear at 559.252.4950.
- 3. Park vehicle on a clean, dry, flat, level surface and block the tires so the vehicle can not roll in either direction.



STEP 1

Remove spare tire. Spare tire mount will need to be relocated



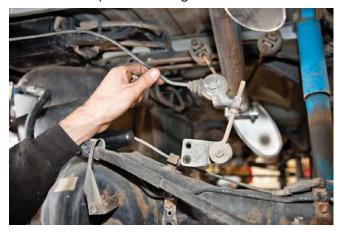
STEP 2

Trim exhaust just behind axle housing.



STEP 3

Remove brake pressure linkage.



STEP 4

Disconnect e-locker and ABS connectors if present.



STEP 5

Remove brake line and brake line clip.



STEP 6

Disconnect e-brake linkage.



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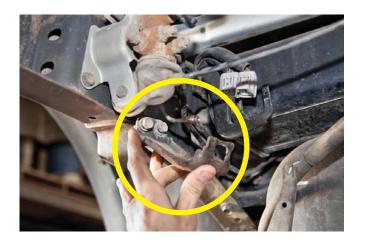
**STEP 6**Remove shocks.



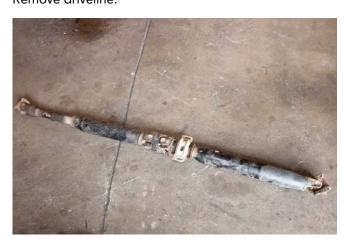
**STEP 8**Using a plasma cutter, cut the factory shock mounts off



**STEP 10**Remove stock brake line bracket.



**STEP 7**Remove driveline.



**STEP 9**Factory mount is welded on the outside of the frame on the driver's side only.



**STEP 11**Move load sensing proportioning valve out of the way for future installation of frame boxing kit.





STEP 12

Remove e-locker vent from frame.



STEP 13

Mark the 3 purge lines to ensure proper reinstallation.



**STEP 14** 

Remove purge canister from vehicle.



STEP 15

Mark centerline of axle housing for future reference.



STEP 16

Remove axle housing by removing u-bolts and then leaf spring bolts.



**STEP 17** 

Mark center of stock front leaf spring bolt.





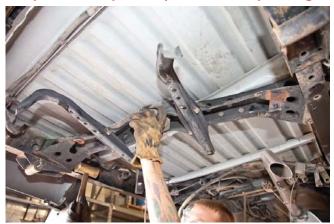
**STEP 18** 

Mark center of stock rear shackle bolt.



#### STEP 20

Remove the spare tire crossmember. Be sure to leave bumper bolted up to keep frame from spreading.



STEP 22

On the front most part of the body mount, above where previous mount was removed, measure up 1" and remove to make room for new bracket.



#### **STEP 19**

Remove front spring brackets from frame. Note: On driver's side, bracket is close to the gas tank. We recommend removing the gas tank before cutting and welding.



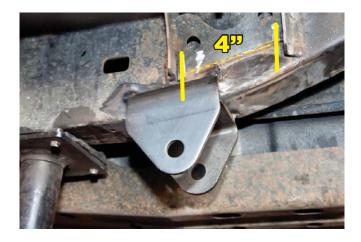
STEP 21

Remove shackle mounts and grind frame smooth.



STEP 23

Measure 4" forward from original mark and tack new mount into place.





**STEP 24**Make sure mount is square before tacking into place.



**STEP 25**Install spring into front mount.



**STEP 26**Assemble shackle, leaf spring, and mount.



**STEP 27** 

Tack shackle mount to frame 2.5" forward of previous mount (bolt center to bolt center).



**STEP 28**Remove all electrical components from housing.

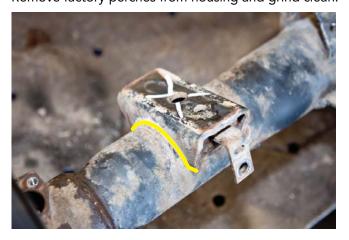


**STEP 29**Remove brake lines from housing.

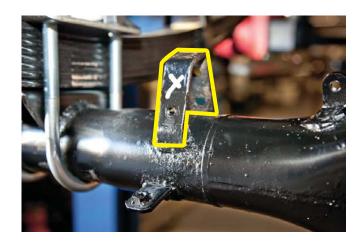




**STEP 30**Remove factory perches from housing and grind clean.

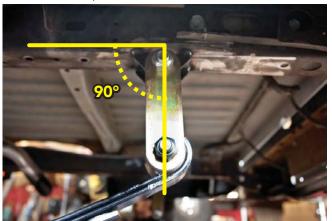


STEP 31 CONTINUED



#### STEP 33

Place rear axle on jack stands with weight of vehicle on suspension. Ensure shackles are at a 90° angle. If so continue to step 34.



**STEP 31**Remove brackets from housing.



#### STEP 32

Install new perches without welding, u-bolts, and plates to leaf spring and housing and tighten to a snug fit. Center pin to center pin should be 39 1/2".



#### STEP 34

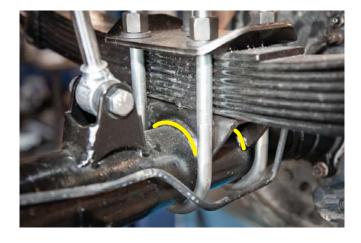
Rotate housing to achieve desired pinion angle. Once desired pinion angle is achieved, tack perches to housing. Remove u-bolts and weld perches into place.





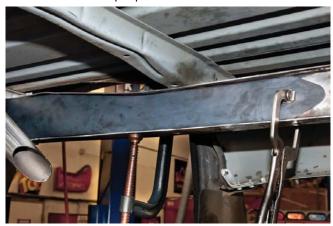
#### STEP 34 CONTINUED

Perches welded.



#### STEP 36

Place frame boxing plate in frame rail and clamp into place. Due to frame variations, you may need to clamp frame to ensure a proper fit.



### STEP 38

Tack rear support tube onto frame plates as desired. We recommend placing it as far back to the rear of the plate as possible.



#### STEP 35

Using wire wheel, clean frame to allow frame boxing kit to be welded.



#### STEP 37

Tack plate to frame and remove clamps.



#### **STEP 39**

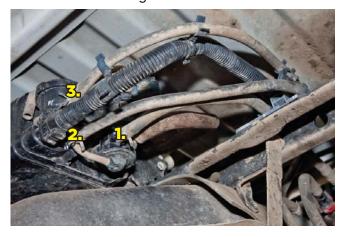
Weld plates to frame and weld the support tube to the plates.





#### STEP 40

Re-install purge canister, ensuring that the 3 lines are connected in their original locations.



#### STEP 42

Place vehicle on jack stands to compress the suspension. Position shock tube above axle on frame plates and approximately 1" behind axle centerline and tack into place.



#### STEP 44

Measure from lower shock mount to upper tube and mark where shock bolt will be as shown in the following 2 images.



### STEP 41

Measure approximately 3 1/2" from leaf pack and tack shock mount as shown. Do same for both sides.



#### STEP 43

Measure shock length eye to eye with desired amount of shock shaft showing. We recommend 50/50.



STEP 44 CONTINUED





STEP 45

Drill previously marked spot out with 3/4" drill bit or hole saw.



STEP 47

Place load sensing proportioning valve on frame and mark holes.



STEP 49

Mount valve and install brake lines.



#### STEP 46

Place sleeve into tube and weld into place. At this time you can also weld the shock tube into place.



#### STEP 48

Either tack bolts to the frame as shown or drill and tap plate to mount the valve to the frame.



STEP 50

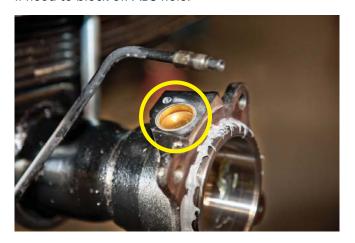
You may need to straighten your brake lines to reach the valve.



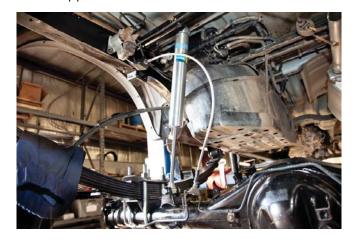


STEP 51

Install supplied freeze plug in housing using ultra grey if need to block off ABS hole.



**STEP 53**Install supplied rear brake line.



**STEP 55**Install e-brake cable to housing.



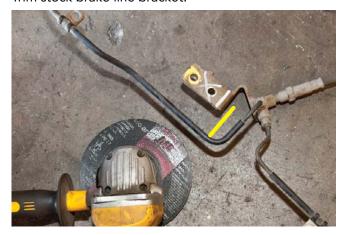
**STEP 52** Install shocks.



**STEP 54**Remove bracket from e-brake cable.



**STEP 56**Trim stock brake line bracket.





**STEP 57**Weld brake line bracket to housing.



**STEP 59**Re-install parking brake.



**STEP 61**Re-install e-locker harness in truck.



**STEP 58**Re-install brake lines.



**STEP 60**Remove e-locker harness from loom with ABS wires and tape together.



STEP 62

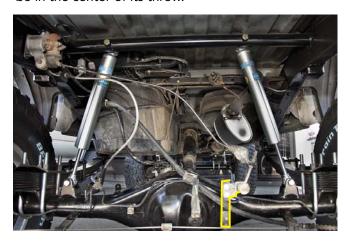
The load sensing proportioning valve line will need to be reattached. This can be done by fabricating a bracket, or sometimes by stretching out the assembly.





#### STEP 63

Below is an example of how your load sensing proportioning valve line should look. Adjust the mounting location at the housing. At ride height, the valve should be in the center of its throw.



#### STEP 64

Install driveline. Driveline may need to be lengthened.



STEP 65 Bleed brakes.

**STEP 66**Torque all hardware.

#### STEP 67

Grease suspension at greasable bolts.

#### STEP 68

Install tires and test drive.

#### STEP 69

Re-torque u-bolts.