



Trail-Gear 2nd Gen (05-15) Tacoma Rock Assault Bolt in Axle For 8.4"/8.0" E-Locker Removal and Installation

For Part Numbers: TGI-312729, TGI-312730, TGI-312731, TGI-312732

Kit Contents:



TGI-312736



TRAIL-GEAR

5356 PIINE AVE • FRESNO, CA 93727
USA TOLL FREE: 877.4X4.TOYS • WORLDWIDE: 559.252.4950
WWW.TRAIL-GEAR.COM

INSTALLATION INSTRUCTIONS



Recommended Tools:

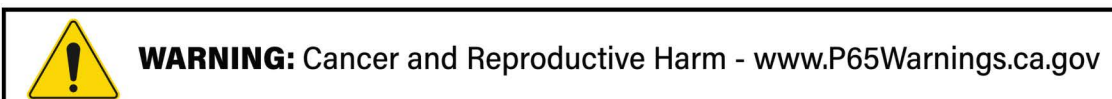
- Safety Glasses
- Hearing Protection
- Metric Ratchet & Socket Set
- Metric Wrench Set
- Metric Flare Nut Wrench Set
- Torque Wrench
- Jack Stands
- Hydraulic/Mechanical Jack
- Brass Hammer
- Plastic Dead Blow Hammer
- Single-Edge Utility Blade
- Seal Driver Set
- Scotch-Brite Hand Sanding Pad or Equivalent
- Needle Nose Pliers/Blunt Edge Pliers
- Degreasing Compound (E.g. Brake Clean)
- Shop Towels or Rags
- Drain Pan
- Rubber Nitrile Gloves Or Equivalent
- Factory Service Manual For Your Vehicle

Additional Parts Required

- 3.5" U-Bolt Kit (Sold Separate)
- Gear Oil (Refer to Your Owner's Manual or the Factory Service Manual for Correct Type)

CAUTION

1. Read all instructions completely and carefully before you begin. If anything is not clear, please call our tech support line at 1.877.4X4.TOYS or 559.252.4950 or e-mail tech@trail-gear.com before proceeding.
2. Check to make sure the kit is complete and that no parts are missing (refer to the Kit Contents Section on the first page of these instructions). If anything is missing, please contact Trail-Gear at 1.877.4X4.TOYS or 559.252.4950 or e-mail tech@trail-gear.com.
3. Park the vehicle on a clean, dry, flat, level surface and block the tires so the vehicle cannot roll in either direction.
4. This product is for off-road use only. It is recommended that the installation steps below be performed by a competent mechanic. Buyers and users of this product hereby expressly assume all risks associated with the installation and use of this product.



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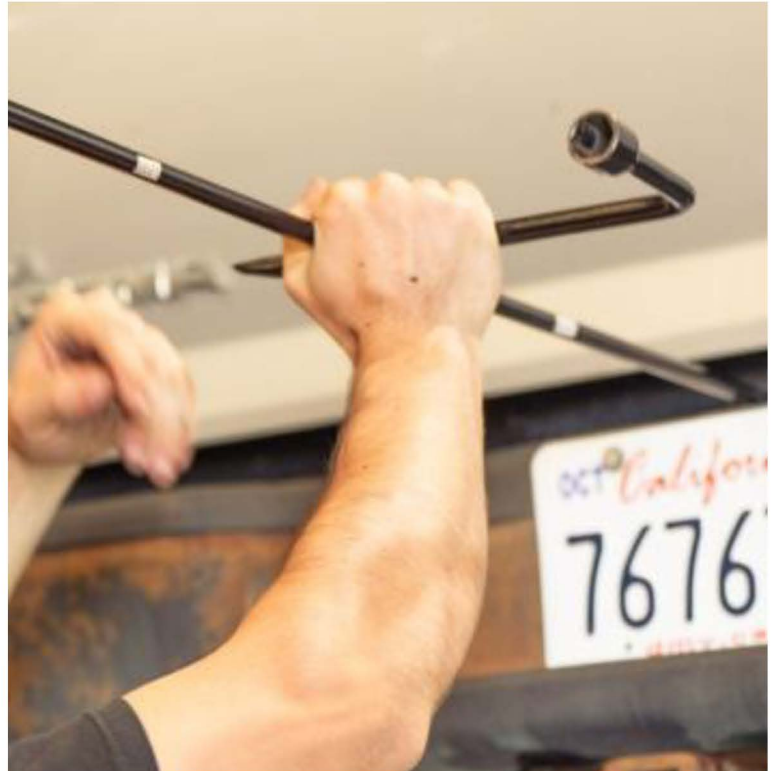


NOTES

- When installing a new axle housing, it is a good time to consider installing other components such as shocks, rear axle rebuild kit, axle shafts, leaf springs, U-bolt flip kit, ring & pinion or third member, and disc brake conversion.
- This kit does not include provisions for stock U-bolt re-installation, to install you must purchase an aftermarket U-bolt kit which can accommodate 3.5" OD axle tubes. *We recommend AP-307348 (sold separately).*

STEP 1

Safely lift the truck and place it on jack stands, supporting the frame. Loosen the rear lug nuts and remove the rear wheels. Remove the Spare tire by using the jack and tool kit in your vehicle. Locate the small hole above the rear license plate and insert the tool. Rotate counterclockwise until lowered. In the center of the tire remove the metal bracket retaining the tire.

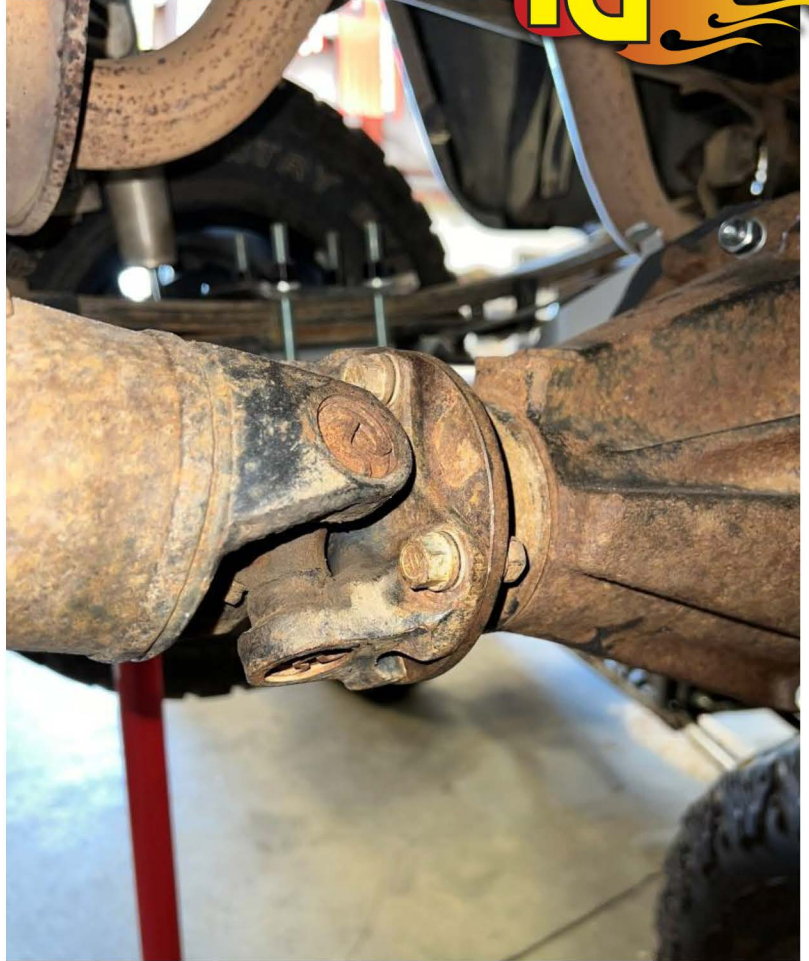


INSTALLATION INSTRUCTIONS



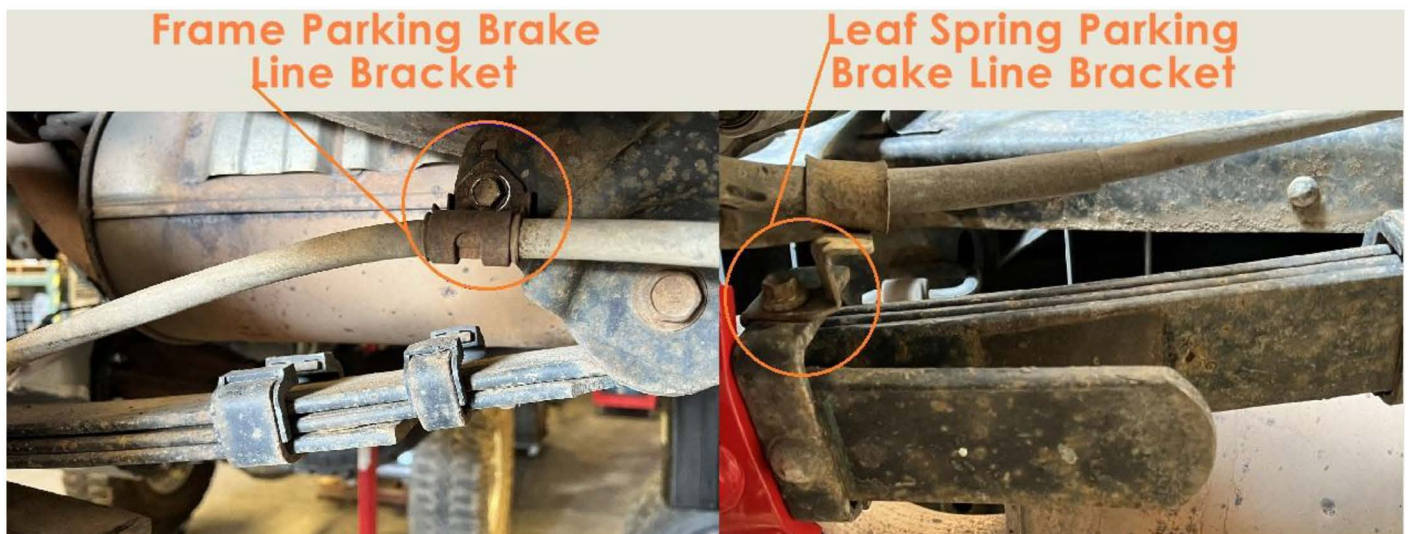
STEP 2

At the rear differential (third member), remove the driveshaft bolts using two 14mm wrenches. Gently set the driveshaft aside to keep the area clear. Save the hardware for reinstallation.



STEP 3

Locate and remove the two parking brake routing brackets on either side of the vehicle — one near the cab on the frame, and one on the leaf spring perch — using a 12mm socket or wrench.



INSTALLATION INSTRUCTIONS



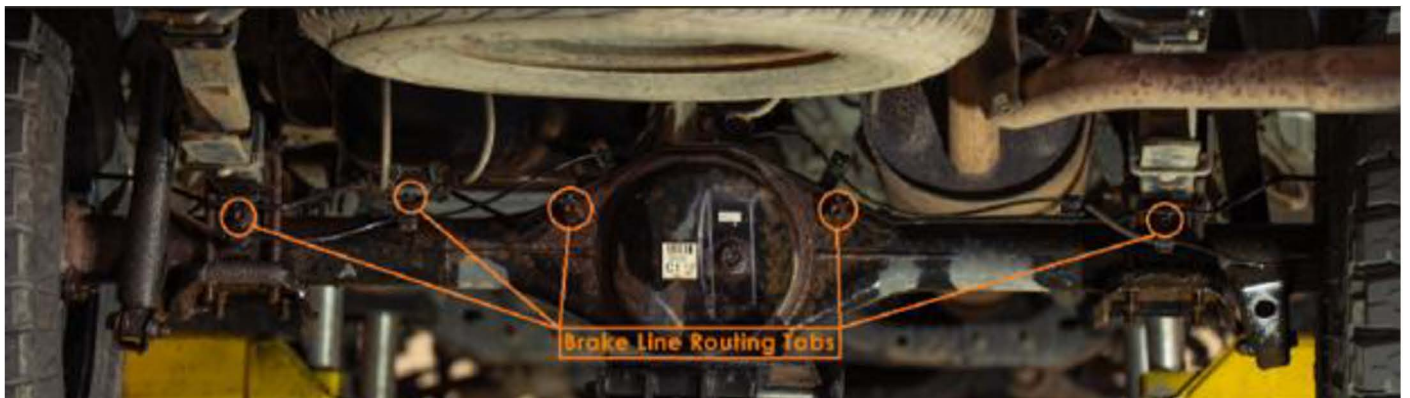
STEP 4

Use a 10mm flare nut wrench (or open-end wrench) to disconnect the brake lines from the drums.



STEP 5

Remove the bolts securing the brake lines to the axle housing using a 13mm socket (or wrench). Start at the leaf spring perches and work toward the center, including the brake line mounting bracket on the driver side axle tube. Leave the lines connected to the brake line T-fitting at the frame and gently move them aside.



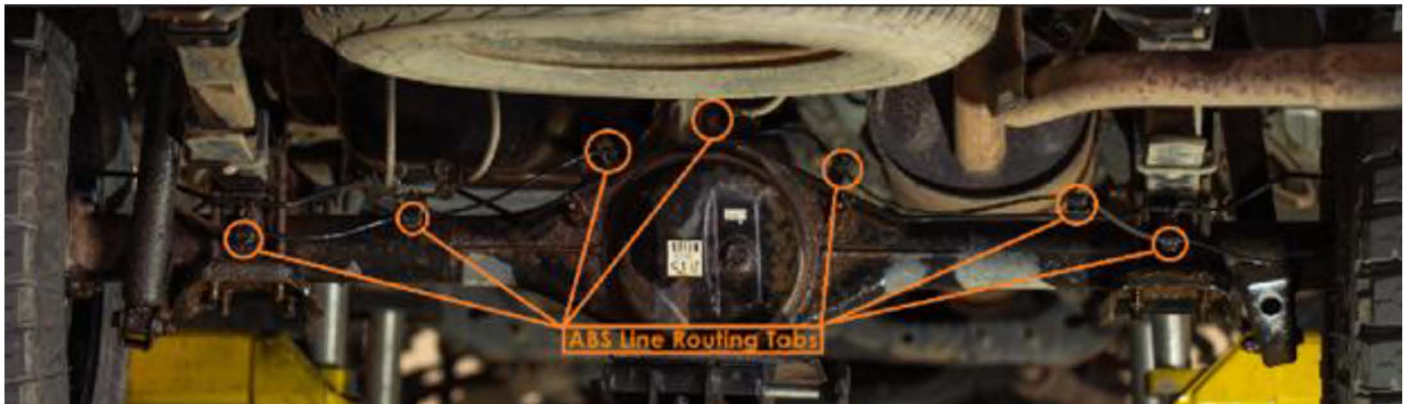
INSTALLATION INSTRUCTIONS



STEP 6

Remove ABS Sensors and Clips

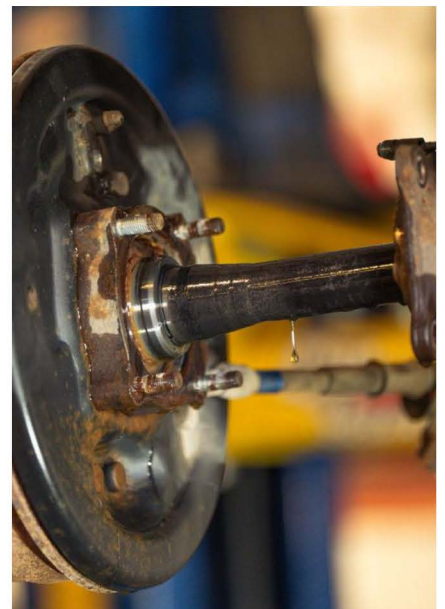
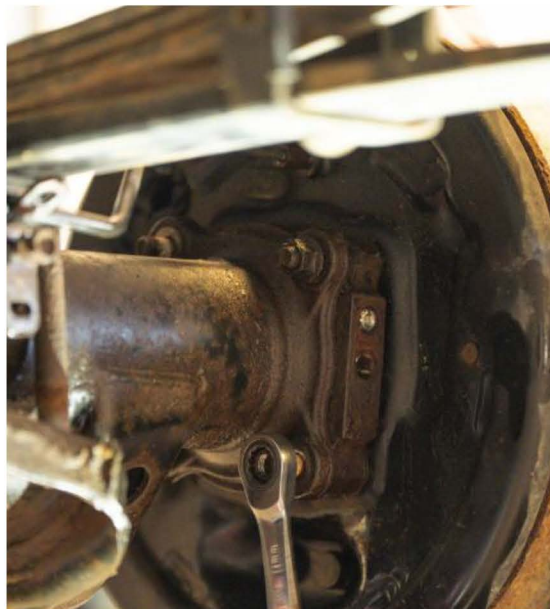
Unplug the ABS sensors at each drum. Carefully remove the ABS line clips from the axle brackets using pliers or by hand. Make sure to keep track of bolts removed.



STEP 7

Remove Axle Shafts

Unbolt the 4 outer flange bolts (14mm) and gently slide the axle shafts out. If they resist, tap lightly with a dead-blow hammer. Be prepared for gear oil to drain out of the axle tubes. Make sure to keep track of the nuts removed. Save the nuts for reinstallation.



INSTALLATION INSTRUCTIONS



STEP 8

Set Aside Parking Brake Lines

When removing the axle shafts, the parking brake lines are fixed to the brake drum. As a result, carefully set the axle shafts aside, using care not to stretch the brake lines.



STEP 9

Remove the Third Member

Use a 14mm socket to remove the nuts around the third member. Tap the housing with a dead-blow hammer to break it loose. This may require firm strikes. Note its orientation before removal.



INSTALLATION INSTRUCTIONS



STEP 10

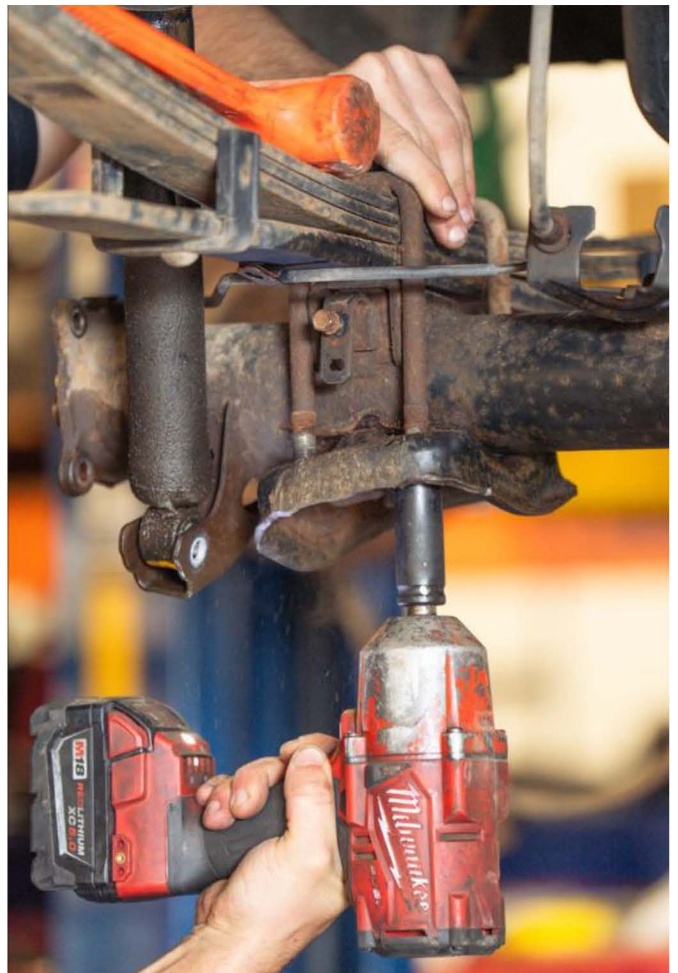
Remove Shock Mount Bolts

Unbolt the lower shock mounts using a 17mm socket and wrench. If bolts are tight, jack up the center of the axle slightly to relieve pressure.



STEP 11

Remove U-Bolts and Axle Housing Use a 20mm socket to remove the stock U-bolt nuts. Ensure the axle is supported before removing all nuts. If the housing is stuck, tap near the leaf springs with a dead-blow hammer.



STEP 12

Remove the Old Axle Housing

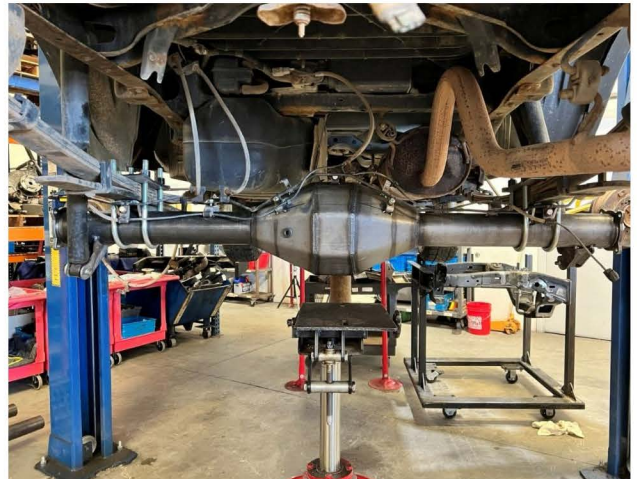
Carefully remove the stock housing from underneath the truck once free from all mounting surfaces and lines. Set the housing aside at this time, be mindful of gear oil that may spill out of both the axle tubes and the center of the housing.



STEP 13

Position the New Axle Housing

Slide the new housing under the truck. Use a jack to align the shock mounts and leaf spring pins. Here we used a transmission jack. You may choose to offset the axle 1" forward or back using the alternate perch holes.



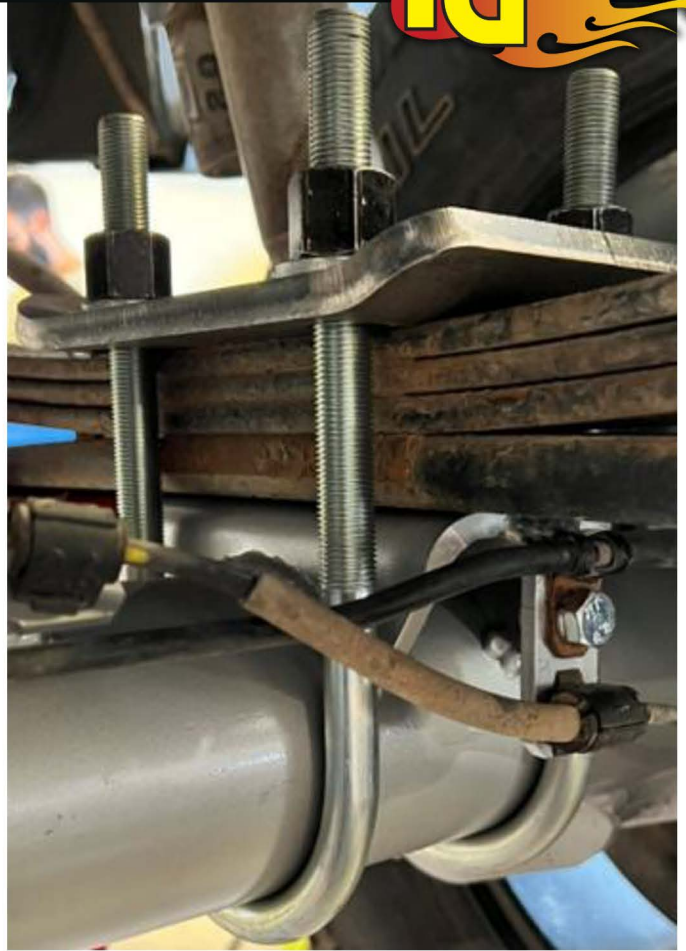
INSTALLATION INSTRUCTIONS



STEP 14

Install U-Bolts and Spring Plates

Position the U-bolts and spring plates over the leaf springs and axle. Tighten to the torque spec provided with your U-bolt kit. If you use our U-bolt flip kit, see the image below.



STEP 15

Install Shock Mount Bolts

Insert the shock bolts and tighten them according to the torque values specified in the Factory Service Manual. Jack the axle until the leaf springs seat properly. See steps 10 and 13 images for reference.



INSTALLATION INSTRUCTIONS



STEP 16

Prepare the Third Member (If Reusing)

Scrape off old gasket material, pre-cut or RTV, and debris using a utility blade. If needed, use a Scotch-Brite pad to clean the surface ensuring minimum material removal.



STEP 17

Clean and Degrease Spray the third member thoroughly with brake cleaner until all gear oil is removed. Let it dry completely. Also clean the axle housing mating surface with brake cleaner and a rag.

STEP 19

Install the Third Member Carefully place the third member back in its original orientation and install to the axle housing. Clean off excess RTV from the studs and install lock washers and nuts.

STEP 18

Apply RTV Gasket Maker Wearing gloves, apply a bead of Permatex Ultra Grey RTV to both mating surfaces, avoiding bolt holes. Spread evenly. If using a pre-cut gasket, apply at this time.

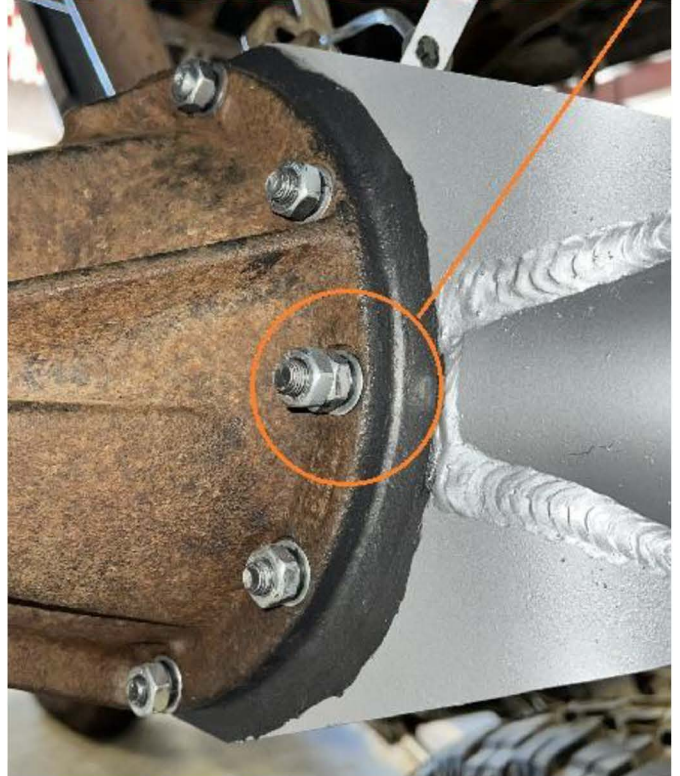


STEP 20

Torque the Third Member

Tighten all nuts to the torque values specified in the Factory Service Manual in a crisscross pattern. Use lock nuts on the two studs aligned with the axle tubes.

Lock Nuts On Either Side of Third Member In Line With Axle Tube



STEP 21

Seal the RTV

Smooth any excess RTV around the flange. Allow for full cure before adding gear oil.

STEP 22

Install Axle Seals

Using a properly sized seal driver or equivalent tool, gently tap the seal evenly into the axle housing until fully seated on both sides of the housing as seen in the image below.

Seal In Place

Seal Driver In Place

Seal Seated In Axle



INSTALLATION INSTRUCTIONS



STEP 23

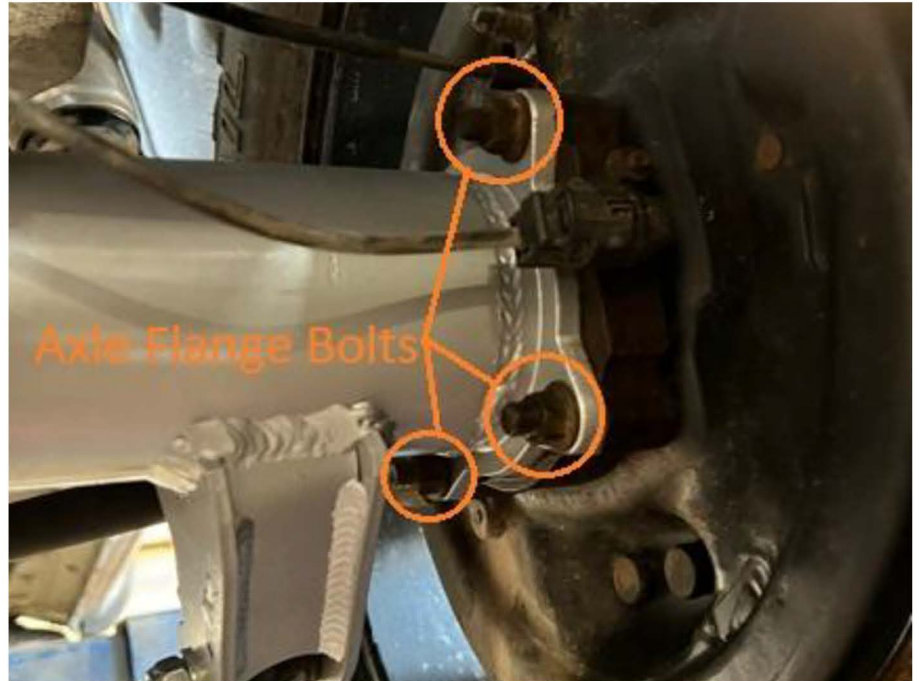
Install Axle Shafts

Slide the shafts back in gently. If they don't seat fully, rotate and wiggle until the splines align.

STEP 24

Torque Axle Flange Bolts

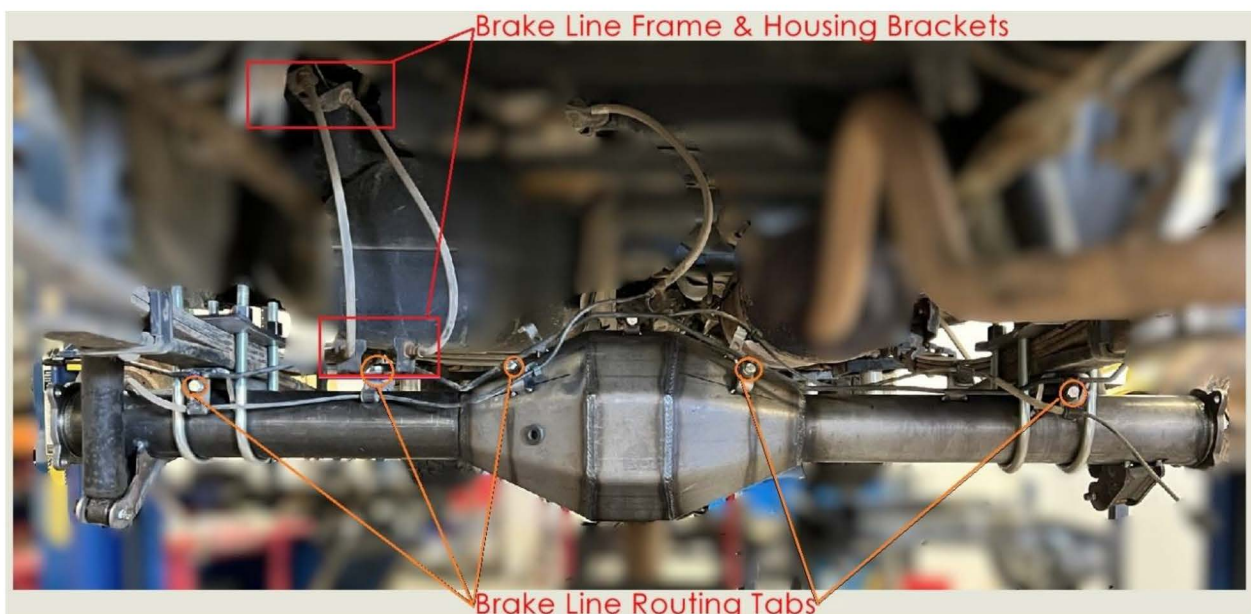
Tighten the axle flange nuts to 52 ft-lbs using a 14mm socket.



STEP 25

Reinstall Brake Lines

Route the brake lines using the supplied M8 bolts and lock washers using a 13mm socket to a maximum torque specification of 13 ft-lbs. Reconnect the lines at the drums using a 10mm wrench. Reference steps 5, 6, & 13 for images of brake line routing.



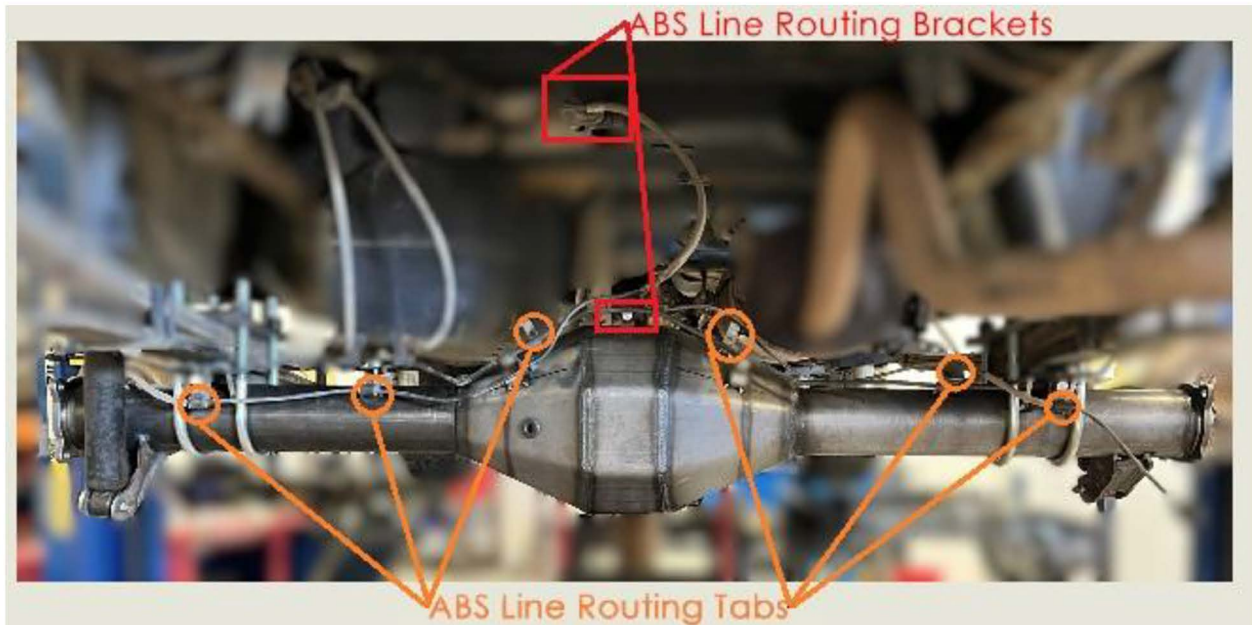
INSTALLATION INSTRUCTIONS



STEP 26

Reinstall ABS Lines

Clip the ABS lines into the brackets and bolt the sensors back in place using a 10mm socket. Reference steps 5, 6, & 13 for images of ABS line routing.



STEP 27

Reinstall Parking Brake Brackets

Bolt the brackets back to the frame using a 12mm socket. Reference step 3 for location of the parking brake routing brackets.

STEP 28

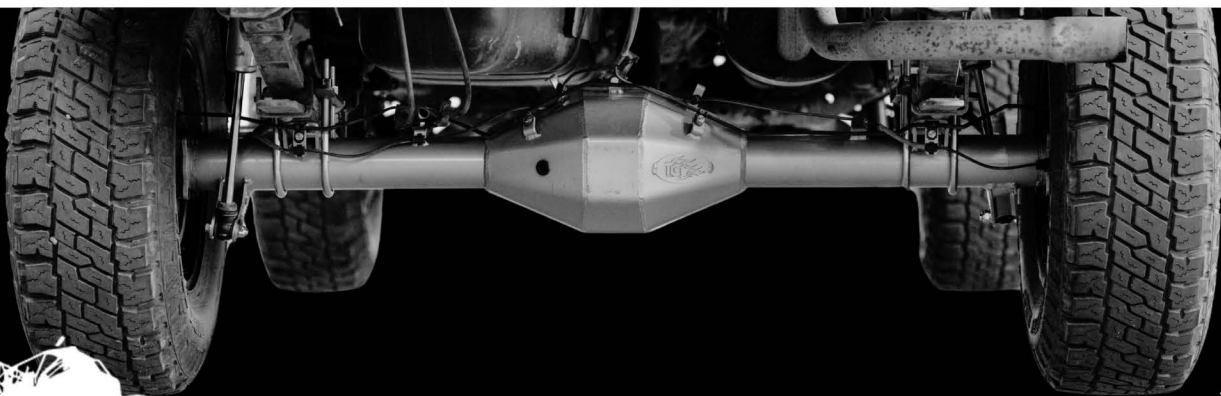
Reconnect Driveshaft

Bolt the driveshaft back to the third member using two 14mm wrenches. Tighten securely.

STEP 29

Final Steps

After the RTV has cured, fill the axle housing with gear oil as specified in your owner's manual. Reinstall the wheels, remove the jack stands, and lower the vehicle.



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