

# INSTALL INSTRUCTIONS



## LONGFIELD™ SUZUKI REAR AXLE SET

303765-3-KIT	1986-1995 SUZUKI SAMURAI, 1993-1995 JIMNY JB31
303763-3-KIT	1990-1995 SUZUKI JIMNY JA11
303764-3-KIT	1998-2015 SUZUKI JIMNY JB23
304236-3-KIT	1998-2005 SUZUKI JIMNY JB33, 2000-2015 SUZUKI JIMNY JB43
304237-3-KIT	1989-1998 SUZUKI SIDEKICK, 1989-1998 CHEVROLET TRACKER, 1989-1998 GEO TRACKER
TGI-307307	2019-CURRENT SUZUKI JIMNY JB64W/JB74W

## KIT CONTENTS



Part #: 303763-3-KIT, 303765-3-KIT & 304237-3-KIT



Part #: 303764-3-KIT, 304236-3-KIT, & TGI-307307

NOTE: You will need a new bearing retainer when installing this kit. We recommend that you purchase and install new rear axle bearings, retainers, and seals when installing this kit.

**303858-3-INS**

## RECOMMENDED TOOLS

Screwdriver  
Ball Peen Hammer  
Rubber Mallet  
Safety Glasses  
Metric Ratchet & Socket Set  
Metric Wrench Set  
Arbor Press  
Bearing Separator  
Cut-off Wheel or Die Grinder

Snap Ring Pliers  
Wheel Bearing Grease  
Removable Threadlocking Compound (Loctite 242)  
Degreasing Compound (e.g. Brake Cleaner)  
Plastic Hammer  
Torque Wrench  
Respirator  
Brake Bleeder Kit  
Metric Flare Nut Wrench Set

## 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 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.
3. Park 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.
5. This installation is typical for most Suzuki vehicles. Some vehicles may vary. If necessary, refer to the proper Factory Service Manual for the year and model of your vehicle.



# INSTALL INSTRUCTIONS (CONT'D.)

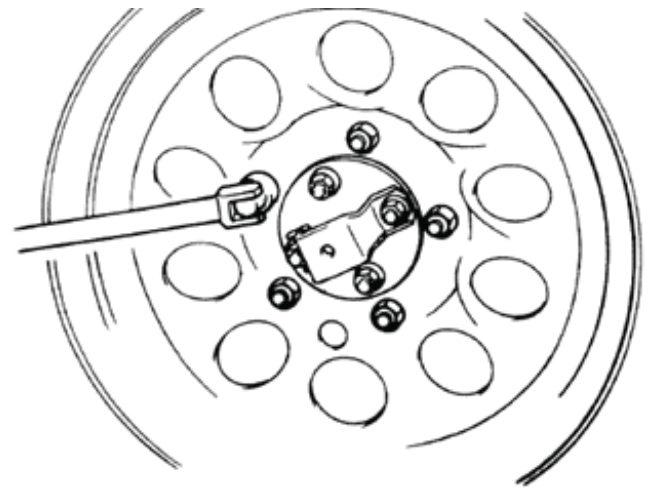


## STEP 1

Loosen and remove bolt holding the rear wheel center cap. Remove the center cap. Save the bolt and center cap for reinstallation.

## STEP 2

Loosen the lug nuts on both rear wheels.

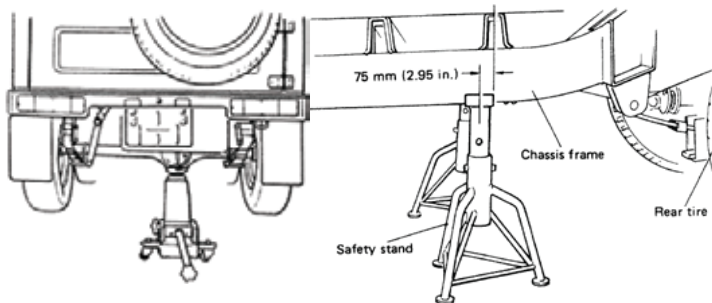
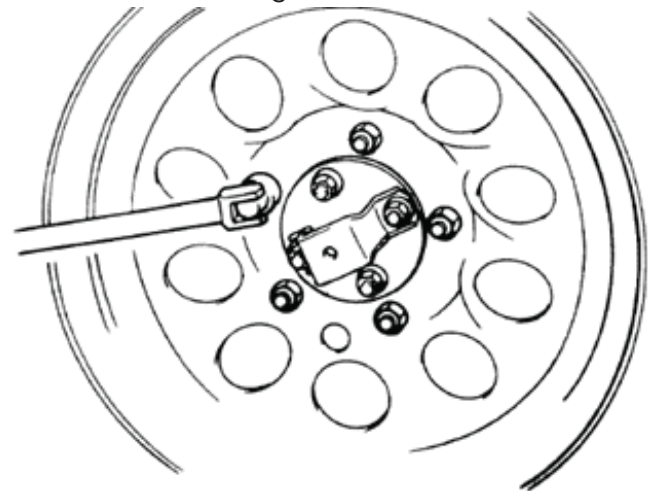


## STEP 3

Place a floor jack under the rear differential and raise the rear end. Place Jack Stands under the frame on both sides of the vehicle. Remove the floor jack.

## STEP 4

Remove the (5) lug nuts on the wheel. Remove the wheel. Save the wheel and lug nuts for reinstallation.

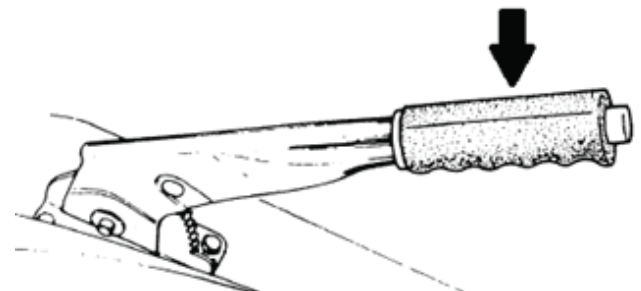
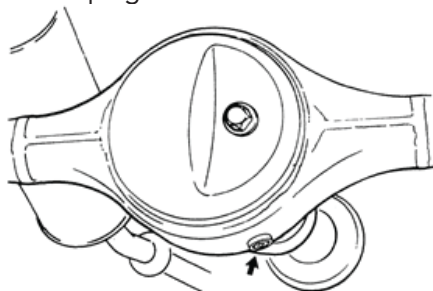


## STEP 5

Place a drain pan under the rear differential. Loosen and remove the drain plug from the axle housing and drain the oil. Discard the used oil in accordance with all local laws. Many auto parts stores will accept used oil for little or no cost. Save the drain plug for reinstallation.

## STEP 6

Make sure the parking brake is in the down position (parking brake off).

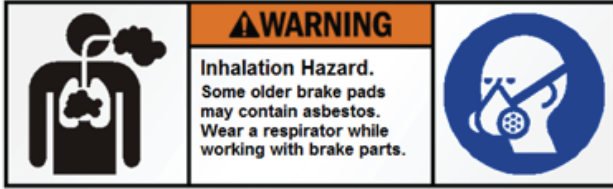


# INSTALL INSTRUCTIONS (CONT'D.)



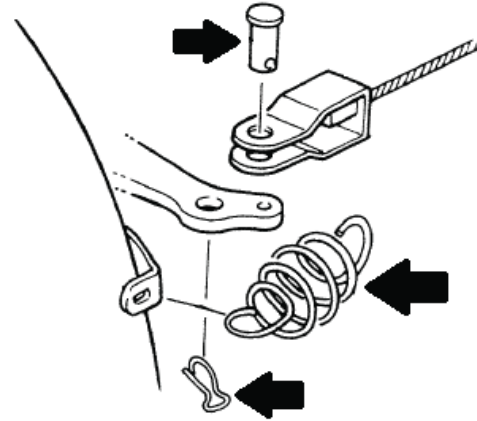
## STEP 7

Some older brake pads contain asbestos. We recommend wearing a respirator while working on brake components to prevent inhalation of asbestos particles.



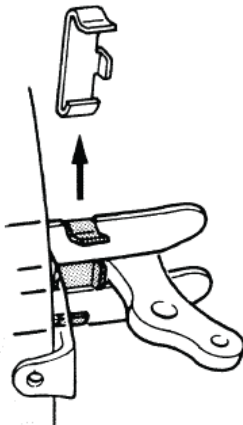
## STEP 8

Remove the parking brake shoe lever return spring. Remove the cotter pin and the clevis pin from the parking brake cable joint. Save all parts for reinstallation.



## STEP 9

Remove the parking brake shoe lever stopper plate. Save the stopper plate for reinstallation.

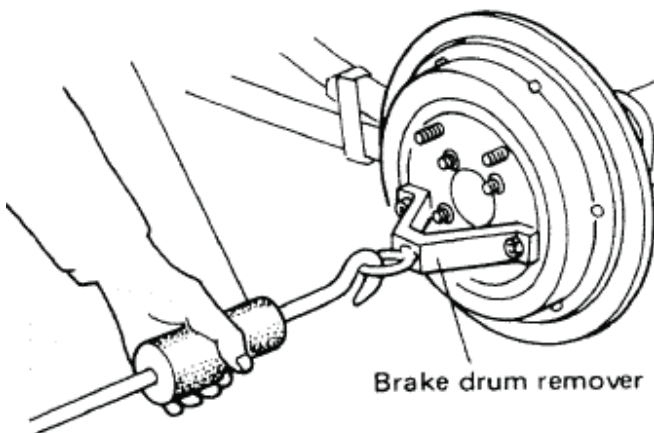


## STEP 10

Loosen and remove the (4) axle nuts from the brake drum. Remove the center cap mounting bracket. Save the nuts and bracket for reinstallation.

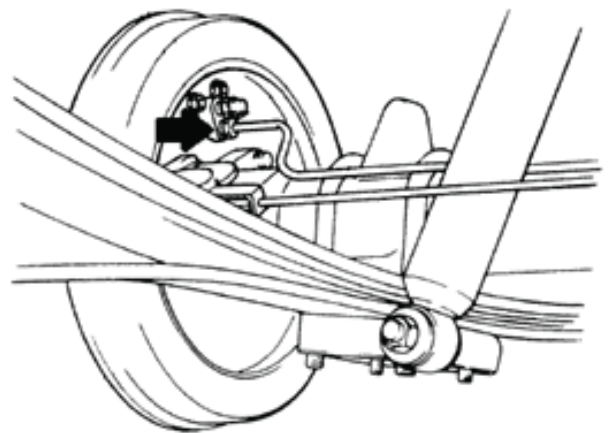
## STEP 11

Attach a brake drum remover to the brake drum using (2) of the lug nuts removed in Step 4. Attach a sliding hammer to the brake drum remove and remove the brake drum. Save the brake drum for reinstallation.



## STEP 12

Using a flare nut wrench, disconnect the brake line from the brake cylinder. Plug the brake tube to prevent brake fluid from leaking out. We recommend using a rubber plug.





# INSTALL INSTRUCTIONS (CONT'D.)

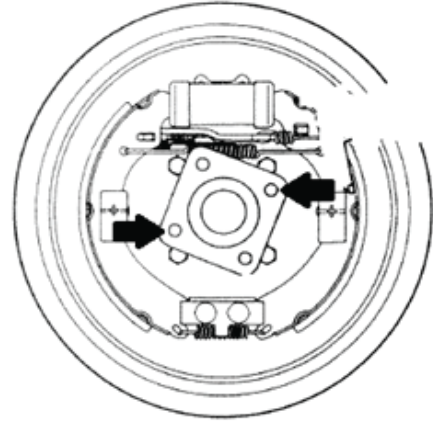


## STEP 13

Remove the (4) brake backing plate bolts. Save the bolts for reinstallation.

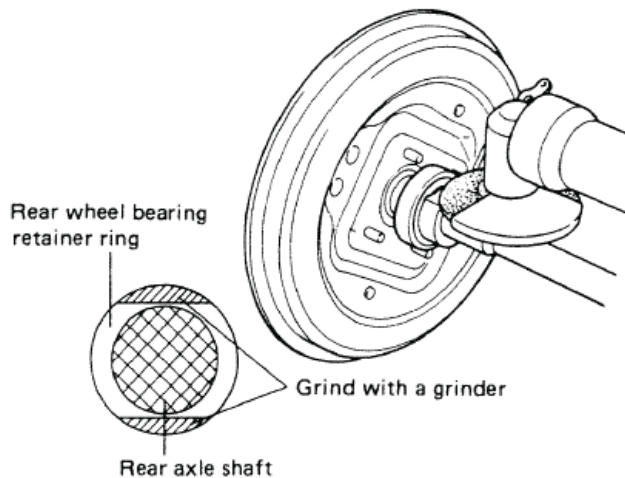
## STEP 14

Attach a rear axle puller to the rear axle shaft. Attach a sliding hammer to the rear axle puller and remove the rear axle assembly.



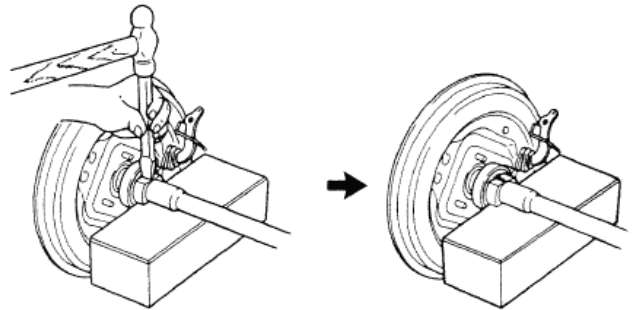
## STEP 15

Using a grinder, grind (2) large flats onto the rear axle bearing retainer.



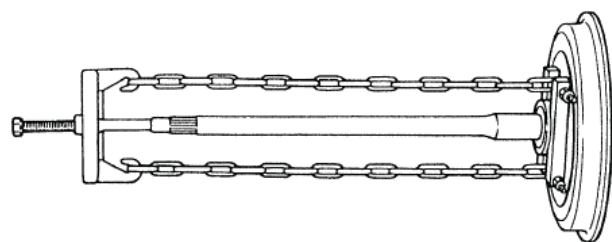
## STEP 16

Place the axle shaft assembly over a wooden block. Using a ball peen hammer and chisel, break the bearing retainer and remove the bearing retainer from the axle shaft. Discard the bearing retainer.



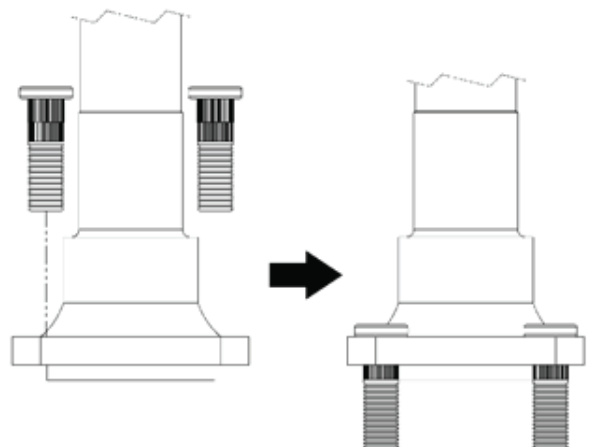
## STEP 17

Using a bearing puller, remove the bearing from the axle shaft. After the bearing has been removed, remove the brake backing plate and bearing spacer (if present). Save the backing plate for reinstallation. If you are replacing the rear wheel bearing, discard the stock rear wheel bearing. Otherwise, save the rear wheel bearing and bearing spacer (if present) for reinstallation. Discard the stock rear axle shaft.



## STEP 18

Press the included studs into the axle as shown below.

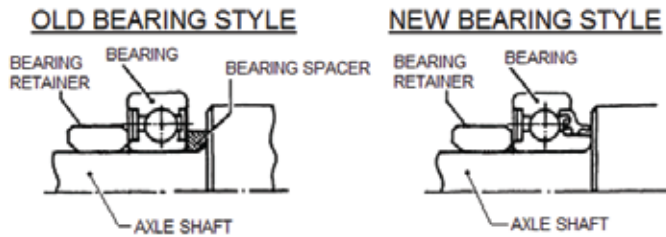


# INSTALL INSTRUCTIONS (CONT'D.)



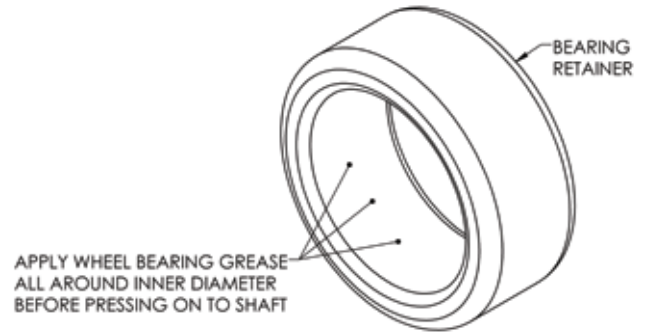
## STEP 19

Install the brake backing plate onto the axle shaft. If you are using the old style bearings, install the bearing spacer, bearing, and bearing retainer on to the axle shaft using an arbor press. If you are using the new style bearing, press the bearing and bearing retainer onto the axle shaft. Make sure the bearing components are installed in the orientation shown below.



## STEP 19 (CONT.)

TIP: Apply wheel bearing grease to the inner diameter of the bearing retainer before pressing the retainer onto the shaft.



## STEP 20

Reinstall the brake backing plate bolts removed in Step 13.

## STEP 21

Apply wheel bearing grease around the lip of the axle seal



## STEP 22

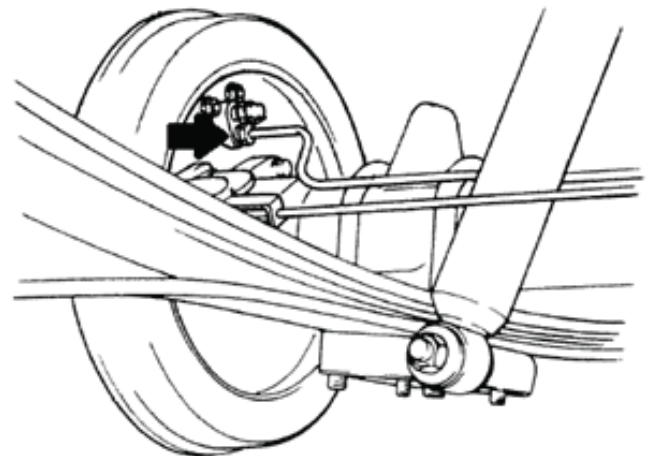
Apply RTV silicone sealing compound around the face of the axle housing flange. Insert the axle shaft assembly into the rear axle shaft assembly. Align the backing plate bolts with the holes in the axle housing flange. Tap on the drum to fully seat the bearings.

## STEP 23

Apply blue (removable) Loctite to the threads of the backing plate nuts. Using a torque wrench, install the nuts onto the backing plate bolts and tighten each one to 13.5-20 ft-lbs (18-28 N-m).

## STEP 24

Using a flare nut wrench, reconnect the brake line to the brake cylinder. Torque the brake line nut to 10.5-13 ft-lbs (14-18 N-m).

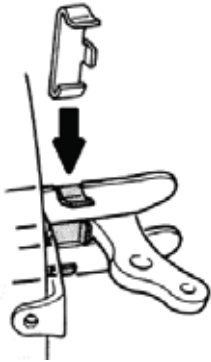


# INSTALL INSTRUCTIONS (CONT'D.)



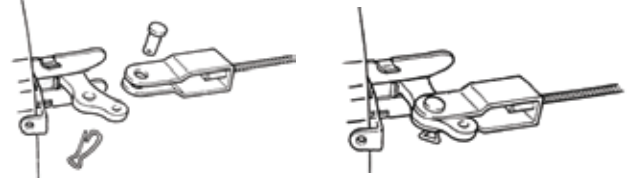
## STEP 25

Reinstall the parking brake shoe lever stopper plate.



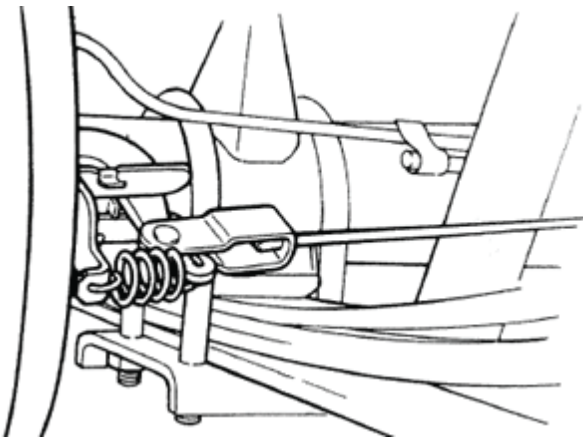
## STEP 26

Reconnect the parking brake cable to the parking brake lever using the clevis pin and cotter pin removed in Step 8.



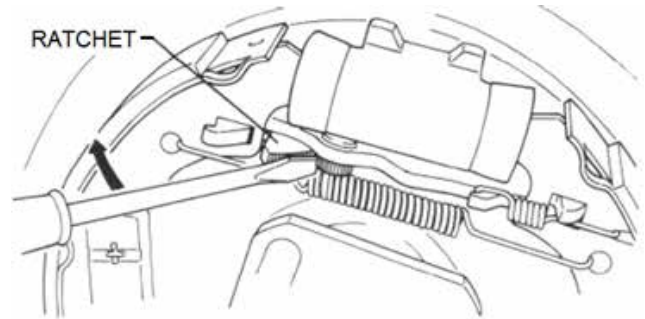
## STEP 27

Using the spring removed in Step 8, reconnect the parking brake spring shoe lever return spring.



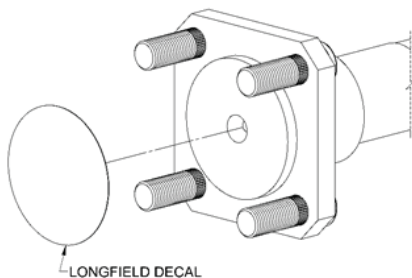
## STEP 28

Using a flat-head screw driver, push down on the brake shoe ratchet as shown below to maximize brake shoe clearance.



## STEP 29

(Optional) If desired, install the provided Longfield™ label on the end of the axle shaft. Alternatively, the label can be applied to the wheel endcap. In either case, clean the mounting surface with isopropyl (rubbing) alcohol and allow to dry. Remove the backing from the label and place the label on the mounting surface. Press down on the label to ensure good adhesion. For best adhesion, keep the axle or hub cover in a room-temperature or warmer environment (68°F minimum) for 24 hours after applying the label. NOTE: Decal may require trimming before installation.



## STEP 30

Reinstall the brake drum back onto the axle.

# INSTALL INSTRUCTIONS (CONT'D.)



## STEP 31

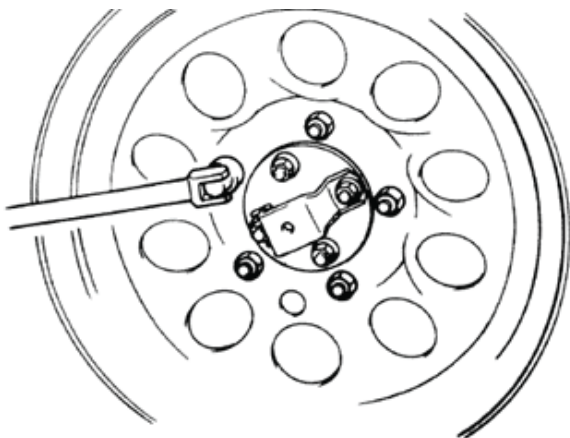
Reinstall the center cap mounting bracket back on to the axle. Reinstall the axle nuts and tighten to 36.5-57.5 ft-lbs (50-80 N-m) of torque.

## STEP 32

Reinstall the wheel center cap.

## STEP 33

Reinstall the wheel and the lug nuts.



## STEP 34

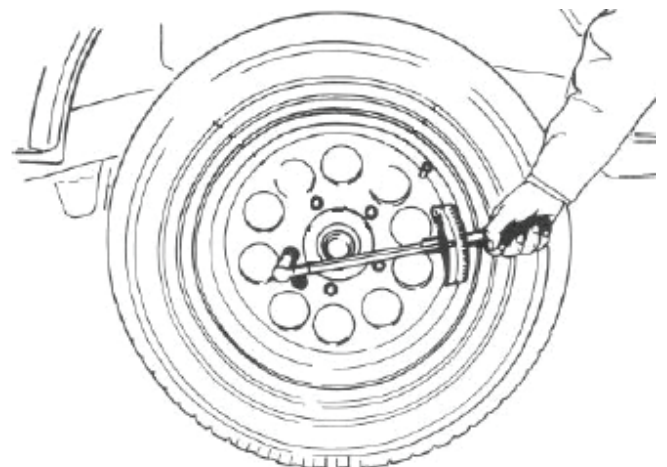
Repeat Steps 1-33 for the other side of the rear axle.

## STEP 35

Jack up the rear end. Remove the jack stands and lower the vehicle.

## STEP 36

Torque the lug nuts on both rear wheels to 36.5-57.5 ft-lbs (50-80 N-m) or to the torque specified in your Owner's manual.

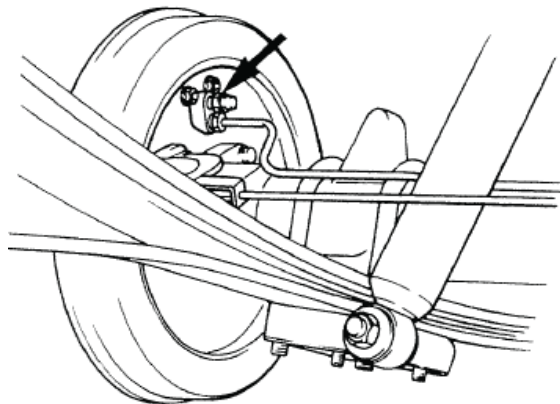


# INSTALL INSTRUCTIONS (CONT'D.)



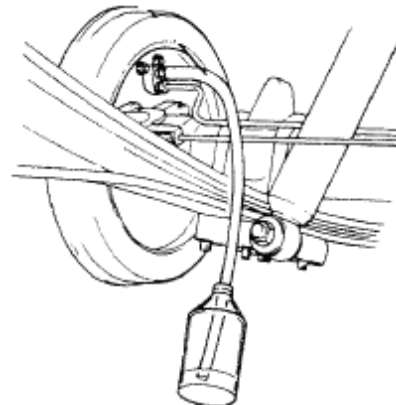
## STEP 37

Remove the bleeder cap from the bleeder plug on the wheel cylinder on the left side of the rear axle.



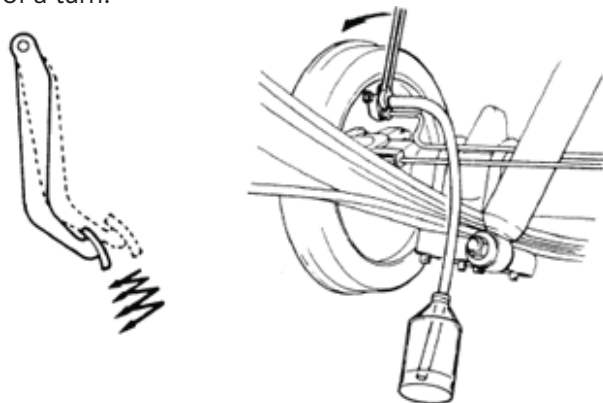
## STEP 38

Attach one end of a plastic tube to the bleeder plug. Insert the other end of the plastic tube into a collection container.



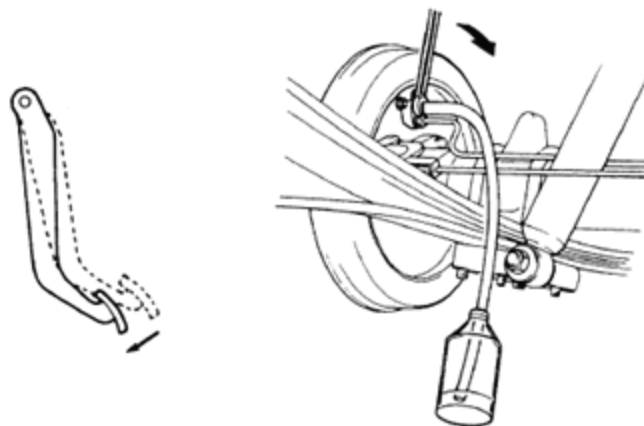
## STEP 39

Pump the brake pedal several times. While holding the brake pedal depressed, use a flare nut wrench to loosen the bleeder plug approximately 1/3 to 1/2 of a turn.



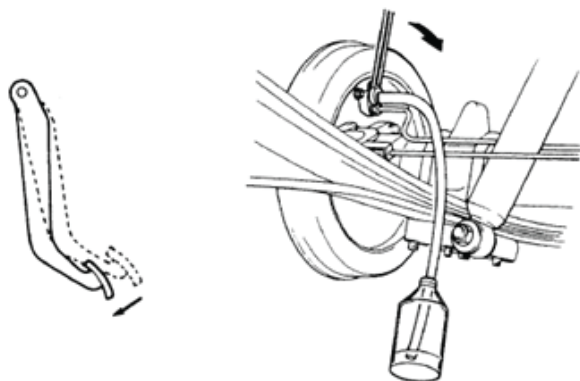
## STEP 40

When fluid pressure in the cylinder is almost depleted, retighten the bleeder plug.



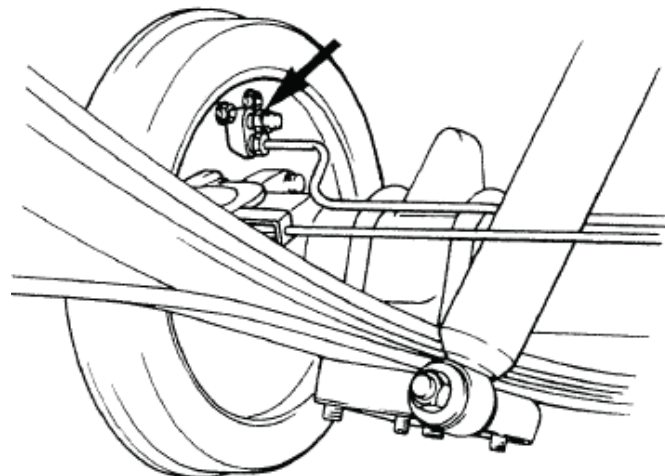
## STEP 41

Repeat Steps 39 thru 40 until there are no more air bubbles in the brake line. Depress the brake and hold the brake pedal while tightening the bleeder plug.



## STEP 42

Reinstall the bleeder cap removed in Step 37.





# INSTALL INSTRUCTIONS (CONT'D.)



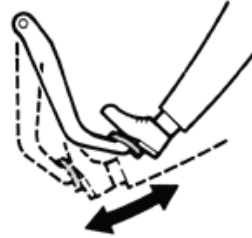
## STEP 43

Check the brake fluid reservoir and fill with brake fluid as needed. Refer to your Owner's Manual for the correct brake fluid to use for your vehicle.



## STEP 44

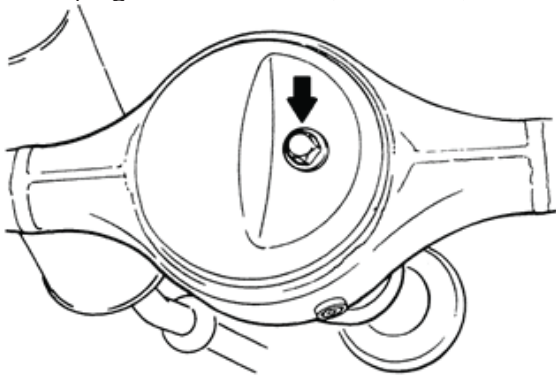
Pump the brake pedal. If the brake pedal has a spongy feel, repeat Steps 37 thru 43 until the brakes have been properly bled.



	<b>! DANGER</b>
	<b>Brake Failure Hazard.</b> Do not proceed until the brakes have been properly bled. Improperly bled brakes may result in a collision causing severe injury or death.

## STEP 45

Reinstall the differential drain plug. Remove the fill plug and fill the transfer case with the API GL-5 SAE 75W-90 gear oil or the gear oil recommended in your Owner's Manual. Reinstall the fill plug. Using a torque wrench, torque the filler plug to 25.5-36 ft-lbs (35-50 N-m) and the drain plug to 13.5-18 ft-lbs (18-25 N-m).



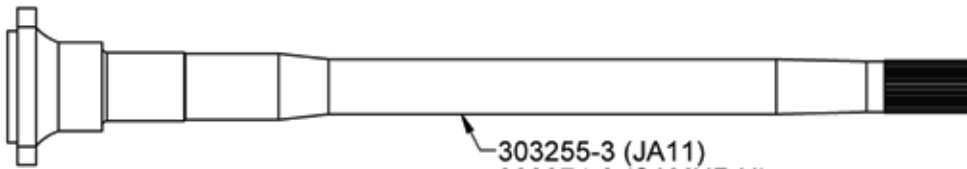
## STEP 46

Verify all bolts have been reinstalled and torqued. Take the vehicle for a short test drive and verify proper brake function. After the differential cools, recheck the gear oil level and add additional gear oil as needed.

# INSTALL INSTRUCTIONS (CONT'D.)



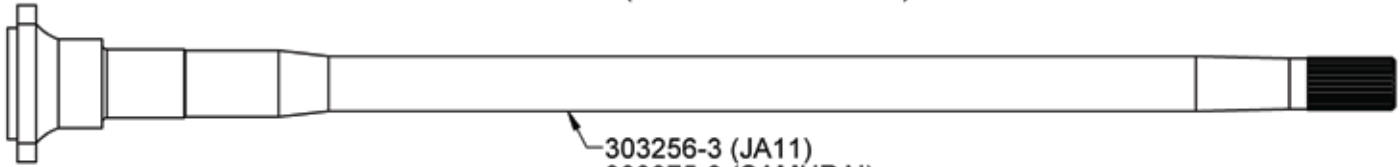
## REPLACEMENT PARTS



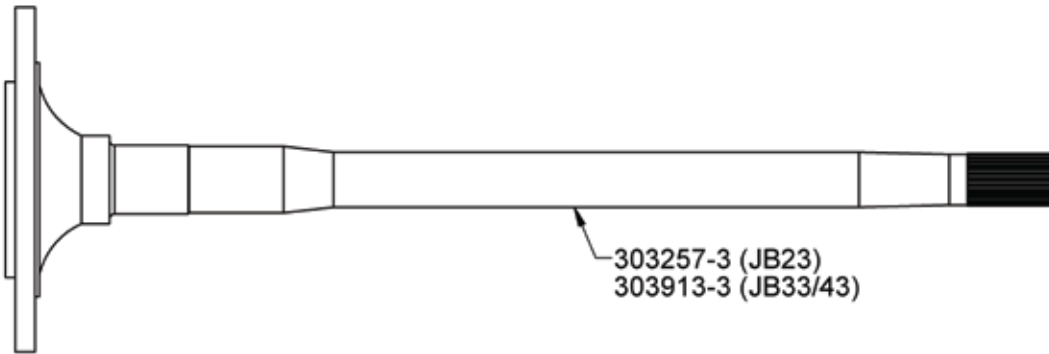
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303374-3 (SAMURAI)  
303909-3 (SIDEKICK/TRACKER)



303819-3



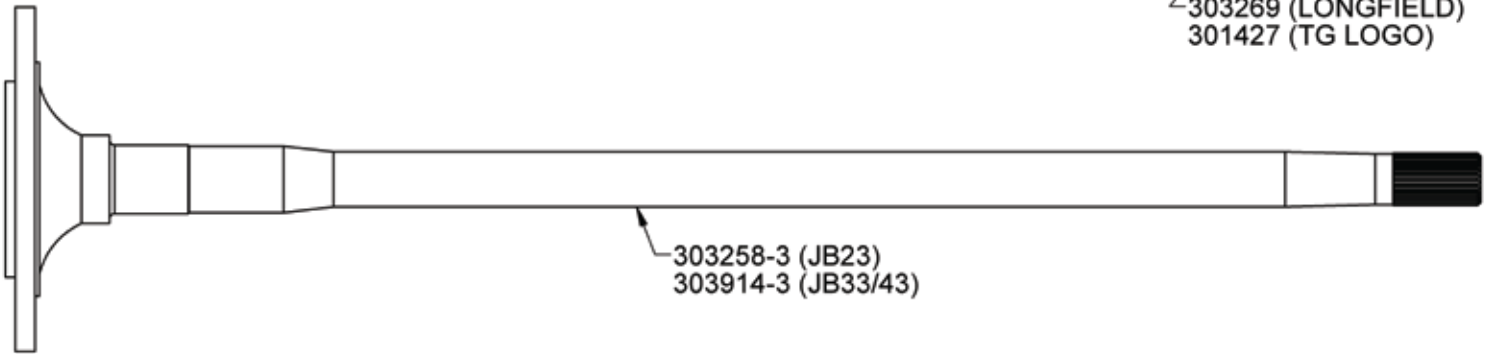
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303910-3 (SIDEKICK/TRACKER)



303257-3 (JB23)  
303913-3 (JB33/43)



303269 (LONGFIELD)  
301427 (TG LOGO)



303258-3 (JB23)  
303914-3 (JB33/43)