

INSTALL INSTRUCTIONS



TOYOTA LAND CRUISER SEMI-FLOAT REAR AXLE REBUILD KIT SET

304569-1-KIT (1974-1983 TOYOTA LAND CRUISER FJ40 W/ SEMI-FLOAT REAR AXLE)
(1980-1990 TOYOTA LAND CRUISER FJ60 W/ SEMI-FLOAT REAR AXLE)
(1990-1992 TOYOTA LAND CRUISER FJ80 W/ SEMI-FLOAT REAR AXLE)

KIT CONTENTS



304568-1-INS

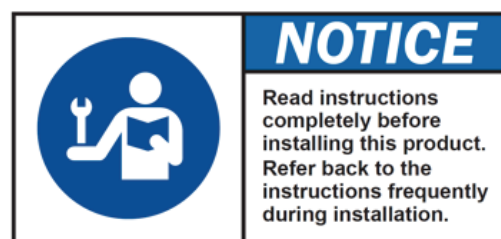


RECOMMENDED TOOLS

Flat Head Screwdrivers (2)	Bearing Remover
Ball Peen Hammer or Rubber Mallet	Seal Puller
Safety Glasses	Floor Jack
Metric Ratchet & Socket Set	Jack Stands
Wheel Bearing Grease	Bearing/ Seal Driver Set
Torque Wrench	Respirator
Hypoid Gear Oil (Refer to your Land Cruiser Owners Manual)	Drain Pan
	Metric 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 or email 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 email tech@trail-gear.com.
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 Land Cruisers with semi-float rear axles. Some years or models may vary. If necessary, refer to the proper Toyota Factory Service Manual for the year and model of your vehicle.

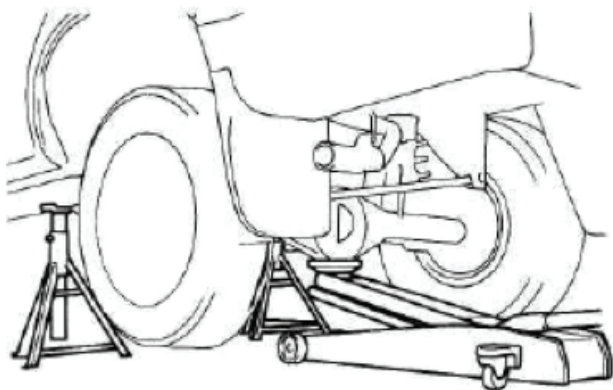


INSTALL INSTRUCTIONS (CONT'D.)



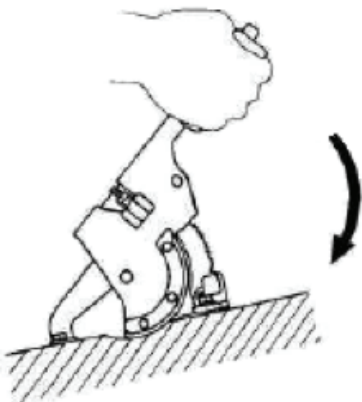
STEP 1

1. Loosen the lug nuts on both rear wheels. 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.



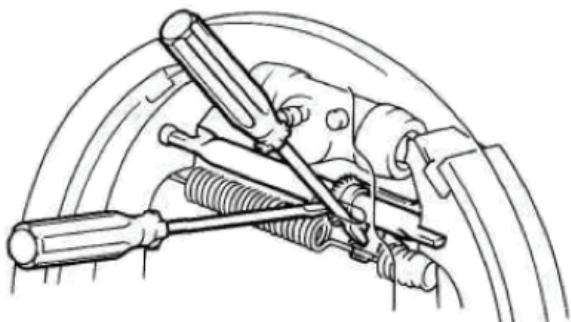
STEP 4

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



STEP 6

Remove the brake drum. If the brake drum cannot be removed easily, insert a screwdriver through the hole in the backing plate and hold the automatic adjusting lever away from the adjusting bolt. Using a second screwdriver, reduce the brake shoe adjustment by turning the adjusting bolt. Save the brake drum for reinstallation.

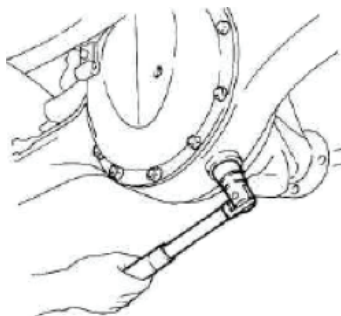


STEP 2

Remove the (6) lug nuts on each rear wheel. Remove the wheels. Save the wheels and lug nuts for reinstallation.

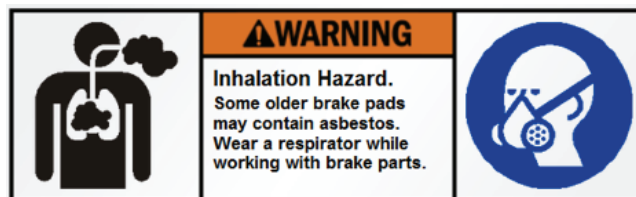
STEP 3

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.



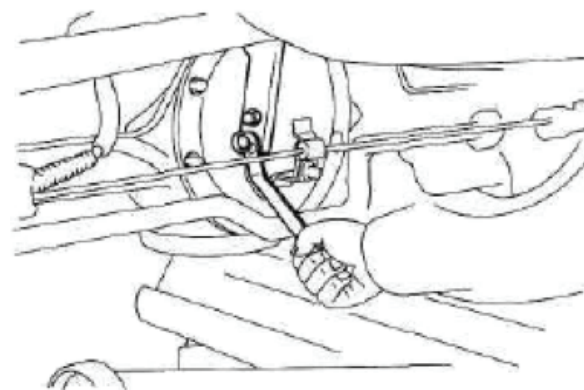
STEP 5

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



STEP 7

Using a wrench, unbolt and remove the (2) bolts and the Load-Sensing Proportional Valve shackle bracket from the differential cover. Save all parts for reinstallation.

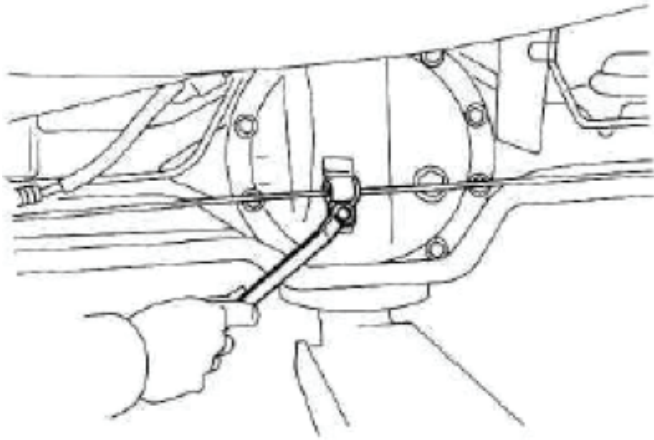


INSTALL INSTRUCTIONS (CONT'D.)



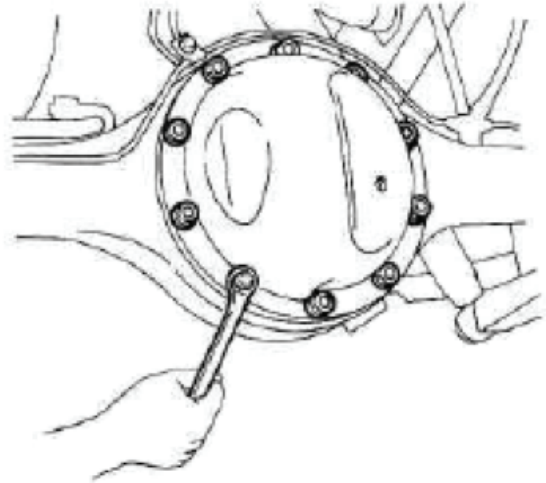
STEP 8

Using a wrench, unbolt and remove the bolt and the parking brake cable clamp from the differential cover. Save all parts for reinstallation.



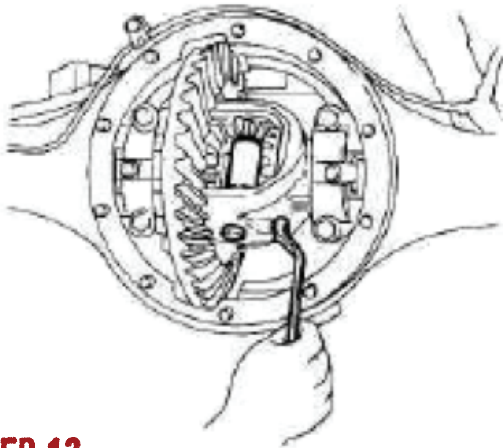
STEP 9

Remove the (10) nuts and washers from the differential cover. Remove the differential cover and gasket from the axle housing. Discard the gasket. Save all other parts for reinstallation.



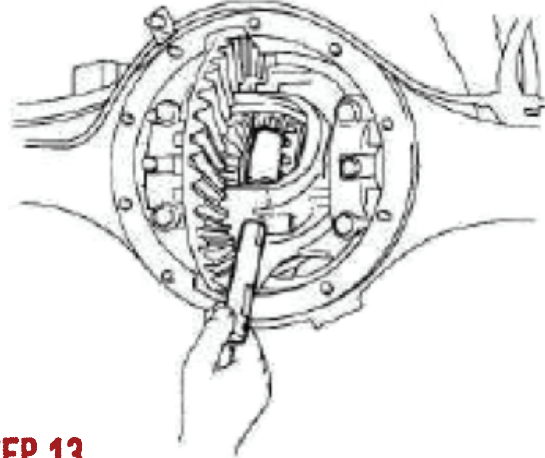
STEP 10

Remove the pinion shaft pin from the differential. Save the pinion shaft pin for reinstallation.



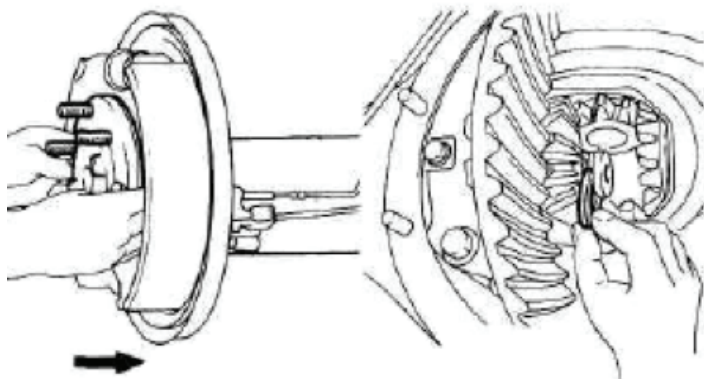
STEP 11

Remove the pinion shaft and spacer from the differential. Save both parts for reinstallation.



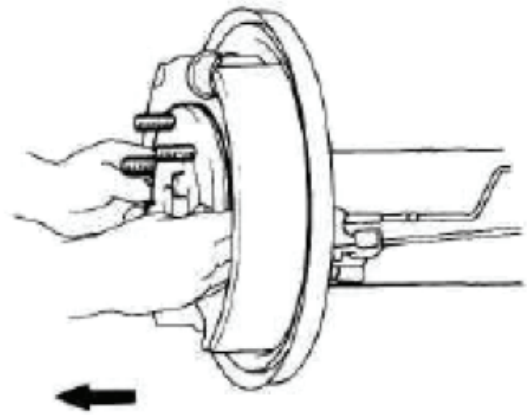
STEP 12

Push the rear axle shaft all the way into the axle housing. Remove the axle shaft c-clip retainer from the axle. Save the retainer for reinstallation.



STEP 13

Remove the axle shaft from the axle housing. Save the axle shaft for reinstallation.

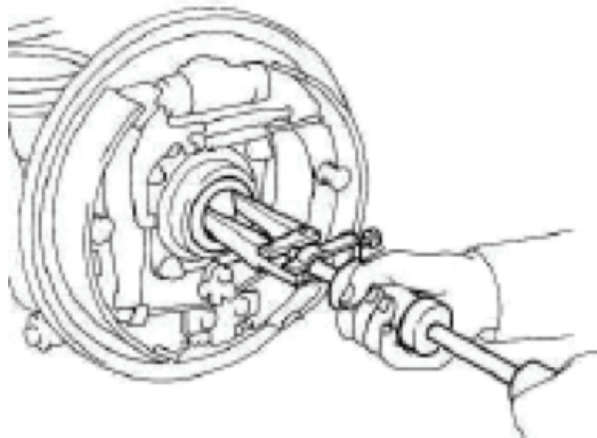


INSTALL INSTRUCTIONS (CONT'D.)



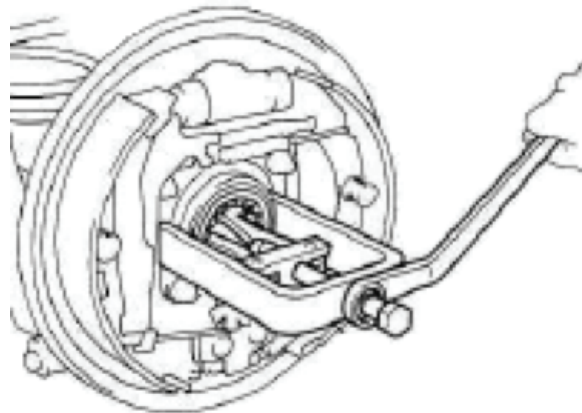
STEP 14

Using a seal puller, remove the rear axle oil seal from the axle housing. Discard the oil seal.



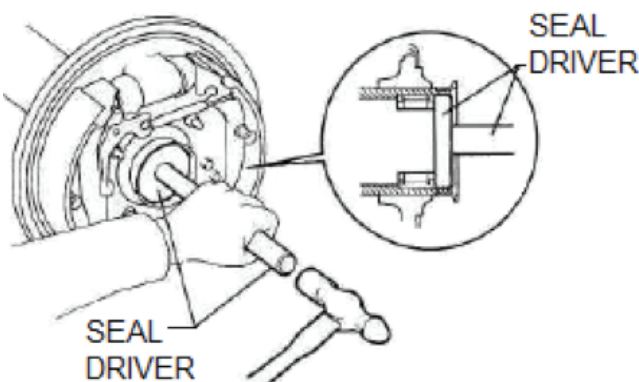
STEP 15

Using a bearing remover, remove the rear axle bearing from the axle housing. Discard the bearing.



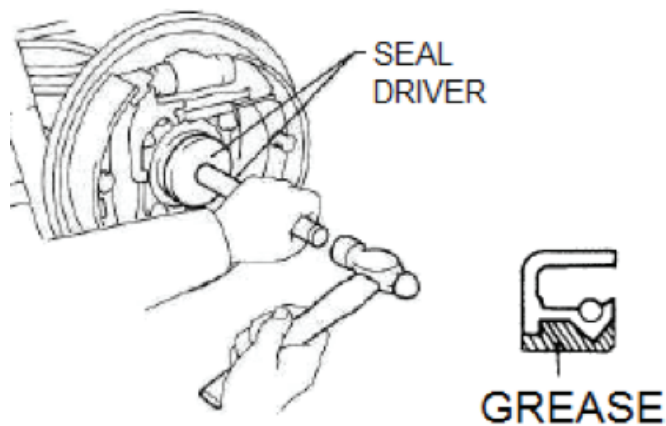
STEP 16

Apply wheel bearing grease to the rollers on the wheel bearing. Using a seal driver, install the new bearing into the axle housing.



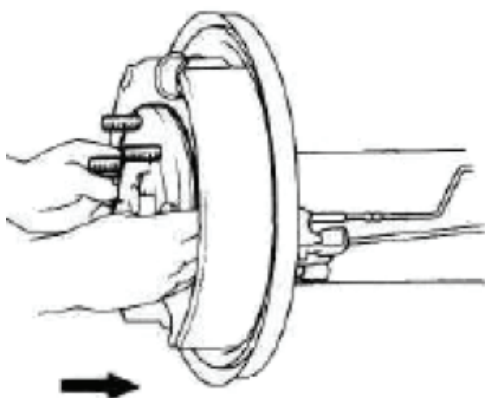
STEP 17

Using a seal driver, install the new oil seal into the axle housing. Apply a generous coat of wheel bearing grease all around the inside of the oil seal lips.



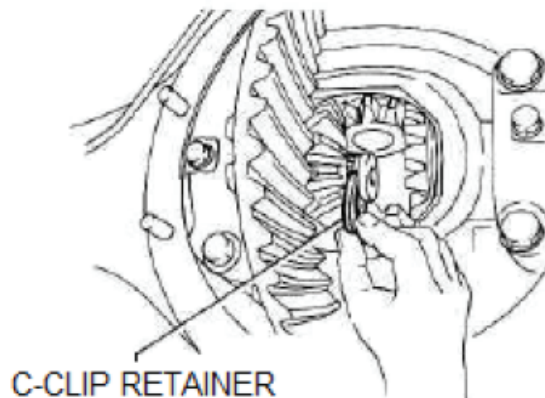
STEP 18

Install the rear axle shaft into the axle housing. While installing the axle shaft, be careful not to damage the oil seal.



STEP 19

Reinstall the axle shaft c-clip retainer back onto the axle shaft.

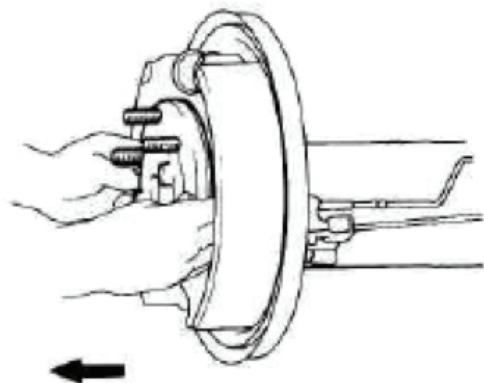


INSTALL INSTRUCTIONS (CONT'D.)



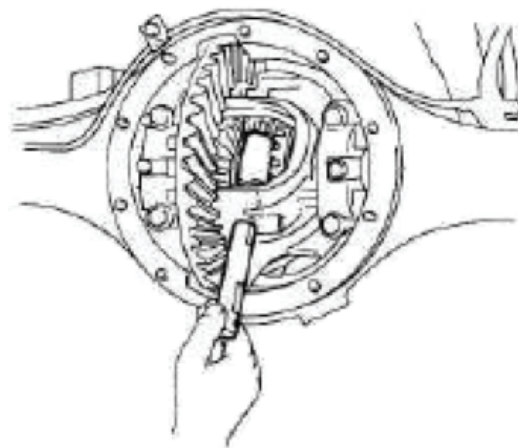
STEP 20

Pull the rear axle shaft fully towards the outside of the vehicle.



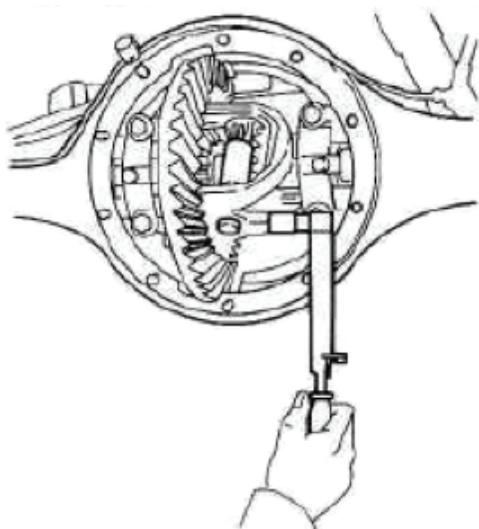
STEP 21

Reinstall the pinion spacer and pinion shaft into the differential.



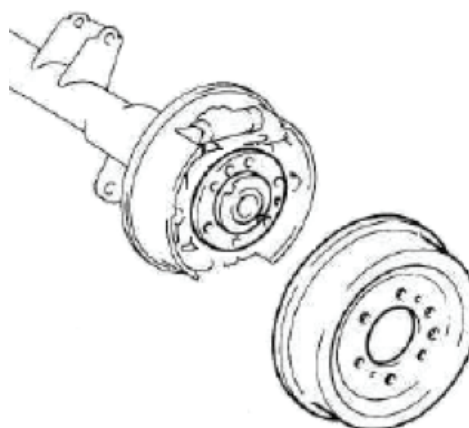
STEP 22

Reinstall the pinion shaft pin and torque to 20 ft-lbs (27 N-m) or to the torque value specified in the Toyota Factory Service Manual for the year and model of your vehicle.



STEP 23

Insert a large drift punch into the end of the shaft. Gently tap the drift punch and drive the shaft out until it shaft comes out of the gland on the hammered end. Use care not to damage the shaft threads or the seal gland.

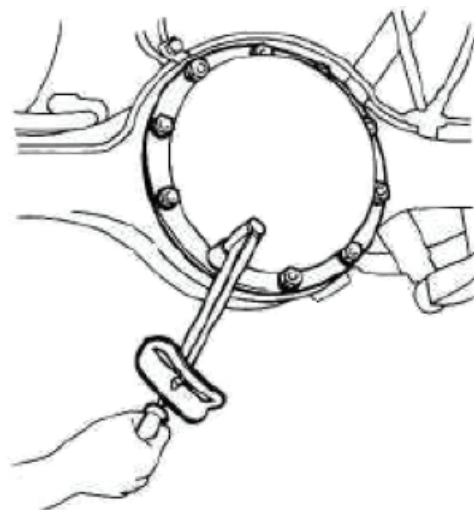


STEP 24

Repeat Steps 6 through 23 for the other side of the axle.

STEP 25

Install the new differential cover gasket along with the differential cover, nuts, and washers removed in Step 9. Make sure all sealing surfaces are clean and free of old gasket material before installing the new gasket. Torque the nuts to 9 ft-lbs (13 N-m) or to the torque value specified in the Toyota Factory Service Manual for the year and model of your vehicle.

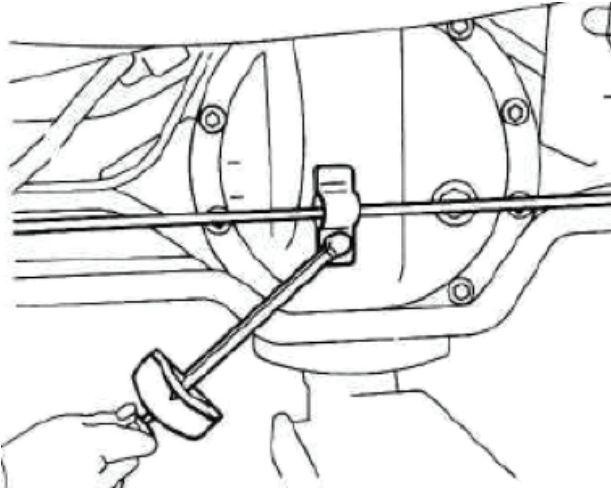


INSTALL INSTRUCTIONS (CONT'D.)



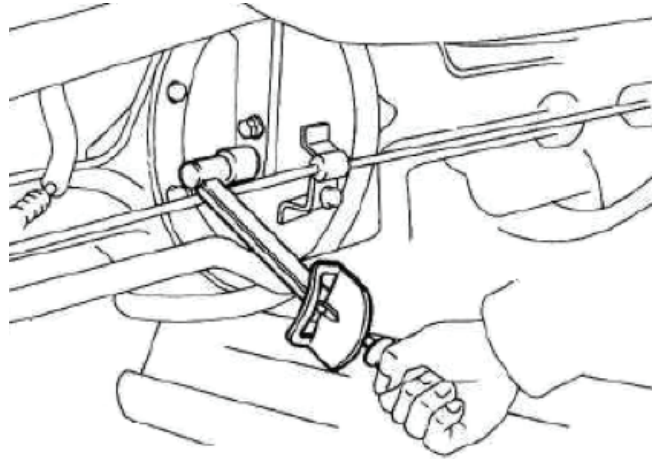
STEP 26

Reinstall the parking brake cable clamp and bolt back onto the differential cover. Torque the bolt to 9 ft-lbs (13 N-m) or to the torque value specified in the Toyota Factory Service Manual for the year and model of your vehicle.



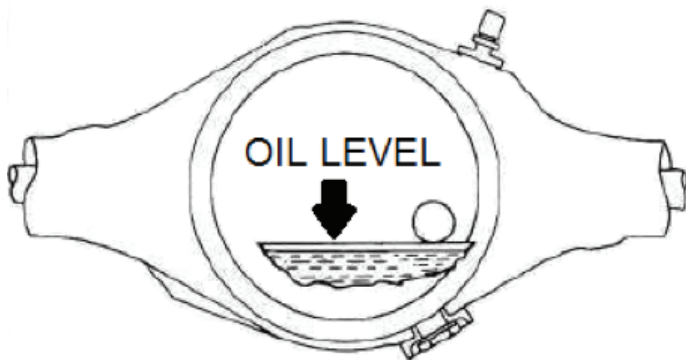
STEP 27

Reinstall the Load-Sensing Proportional Valve shackle bracket and mounting bolts back onto the differential cover. Torque the bolt to 14 ft-lbs (19 N-m) or to the torque value specified in the Toyota Factory Service Manual for the year and model of your vehicle.



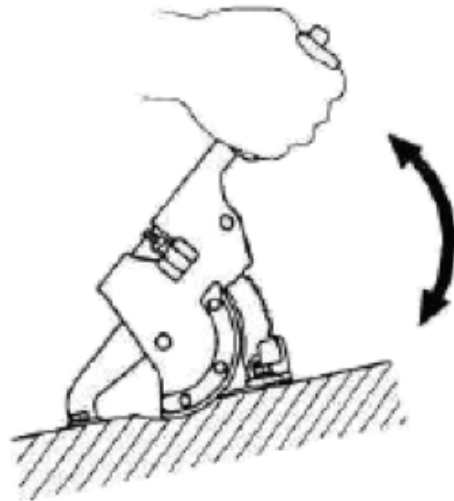
STEP 28

Reinstall the differential drain plug. Remove the fill plug and fill the transfer case with the grade of hypoid gear oil recommended in your Land Cruiser Owner's Manual. Reinstall the fill plug. Using a torque wrench, torque the filler plug and drain plug to 36 ft-lbs (49 N-m) or to the torque value specified in the Toyota Factory Service Manual for the year and model of your vehicle.



STEP 29

Cycle the parking brake lever all the way up and down until a clicking sound can no longer be heard from the rear brake drum.



STEP 30

Reinstall the wheels and lug nuts. Jack up the vehicle, remove the jack stands, and lower the vehicle. Torque the lug nuts to 108 ft-lbs (147 N-m) or to the torque value specified in your Land Cruiser Owner's manual.

STEP 31

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

