

INSTALLATION INSTRUCTIONS

LONGFIELD™ STUDLESS HUB

302583-1-KIT (1979-1985 TOYOTA PICKUP/4RUNNER 4WD & OTHER VEHICLES WITH TOYOTA OEM 8" OR ROCK ASSAULT SOLID FRONT AXLE)

KIT CONTENTS



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WWW.TRAIL-GEAR.COM

INSTALLATION INSTRUCTIONS

RECOMMENDED TOOLS

Ratchet & Socket Set

Torque Wrench

Floor Jack

Jack Stands (2)

Hammer

Snap Ring Pliers

Wheel Bearing Grease

54mm Spindle Nut Socket (P/N 140157-1-KIT)

Torque Wrench

Flat Head Screwdriver

Tapered Punch

Seal Installation Tool

Bearing Race Installation Tool

Pull Scale

Spray Paint

Chromoly Spindle Nut Kit -
(P/N 300519-KIT)

ADDITIONAL PARTS REQUIRED FOR 1979-1981 TOYOTA PICKUPS

IFS Vented Rotors (P/N 140332-1-KIT)

IFS Calipers (P/N 140444-1-KIT & 140445-1-KIT)

IFS Caliper Brake Pads (P/N 140091-1-KIT)

Front Wheel Studs (P/N 140392-1-KIT)

CAUTION

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.
4. This kit 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 kit.

INSTALLATION INSTRUCTIONS

STUDLESS HUB INSTRUCTIONS

STEP 1

Loosen the (5) lug nuts securing the driver's side wheel to the axle. Raise the front end with a floor jack and place a jack stands under the axle. Remove the (5) lug nuts and remove the wheel from the axle. Save the wheel & lug nuts for reinstallation.

STEP 2

Set the control dial on the Locking Hub to the "Free" setting. Remove the (6) bolts holding the Locking Hub Cover onto the body of the Locking Hub. Discard the (6) bolts and the Locking Hub Cover.



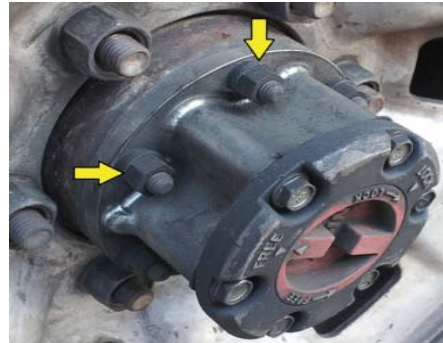
STEP 3

Using snap ring pliers, remove the snap ring from the axle shaft. Discard the snap ring.



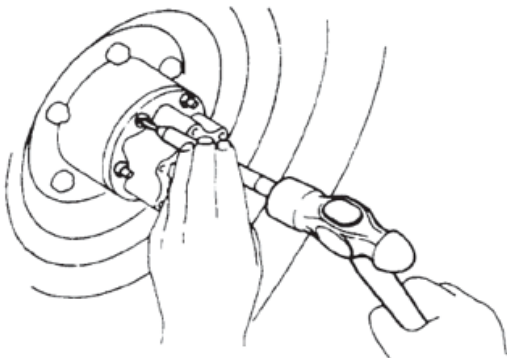
STEP 4

Loosen & remove the (6) stock hex nuts and washers that hold the Locking Hub onto the Hub. Discard the stock hex nuts & washers.



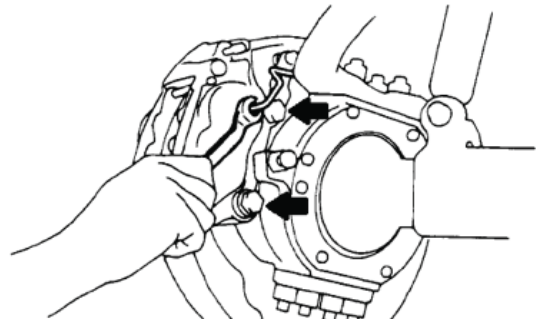
STEP 5

Using a tapered punch, gently tap on the slit of each Cone Washer to loosen the Cone Washers. Remove & discard the (6) stock Cone Washers. Remove the Locking Hub body and discard.



STEP 6

Disconnect the brake line from the brake caliper and remove the brake caliper. For 1979-1981 Pickups, save the mounting hardware and discard the brake caliper and pads. For all other vehicles, save the brake caliper and mounting hardware for reinstallation.



INSTALLATION INSTRUCTIONS

STEP 7

Using a flat-head screwdriver, bend the tabs of the lock washer so the locknut can be removed. Loosen and remove the lock nut using a 54mm socket (TG P/N 140157-1-KIT, sold separately). After the nut is removed, remove the lock washer. Loosen and remove the remaining nut using a 54mm Socket. Remove the thrust washer. Save the (2) locknuts and the thrust washer for reinstallation. Discard the used lock washer.



STEP 8

Remove the hub assembly from the spindle.

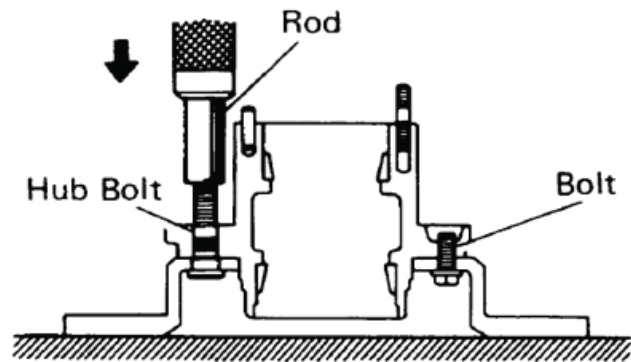


STEP 9

Press the wheel studs out of the hub assembly. Loosen and remove the (2) bolts holding the brake rotor to the hub. If desired, spray paint the outside of the new hub and allow to dry before proceeding. Do not spray any paint into the inside of the hub.

1979-1981 Toyota Pickups: Save the (2) bolts for reinstallation. Discard the old hub, wheel bearings, wheel studs, and rotor.

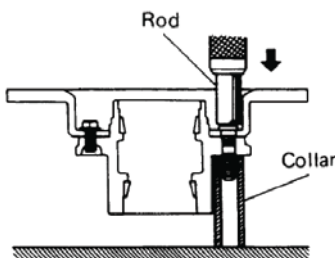
All other vehicles: Save the bolts and rotor for reinstallation. Discard the old hub and wheel bearings.



STEP 10

1979-1981 Toyota Pickups: Attach the new hub to the new IFS Rotor using the (2) bolts removed in Step 9 and torque to 34 ft-lbs. Install the new wheel studs into the hub assembly as shown below.

All other vehicles: Attach the new hub to the Rotor using the (2) bolts removed in Step 9 and torque to 34 ft-lbs. Install the wheel studs into the hub assembly as shown below. You may reuse the wheel studs from your old hub or purchase and install new wheel studs (TG P/N 140392-1-KIT, sold separately).



STEP 11

Carefully drive the race of the new outer wheel bearing into the hub. Note: Discard the set of locking hub gaskets that is provided with the wheel bearing kit. The gaskets are not needed for this installation.



INSTALLATION INSTRUCTIONS

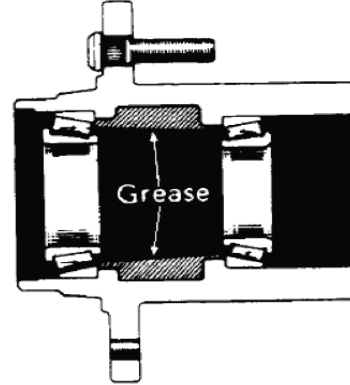
STEP 12

Pack the wheel bearings with wheel bearing grease and install the inner wheel bearing into the hub.



STEP 13

Pack the area of the hub between the two wheel bearings with wheel bearing grease.



STEP 14

Install the inner bearing into the hub. Press the inner bearing seal into the new hub. Coat the inner lip of the seal with wheel bearing grease.



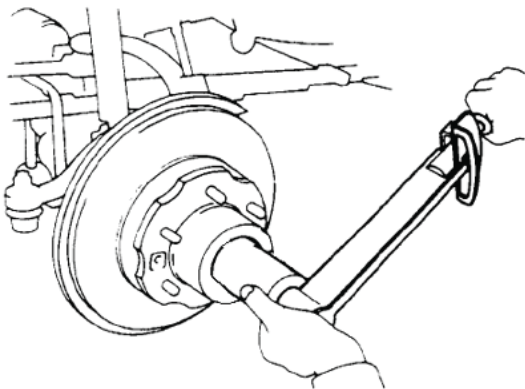
STEP 15

Install the new hub assembly onto the spindle. Install the outer wheel bearing and thrust washer.



STEP 16

If you are installing the TG Chromoly Spindle Nut Kit (sold separately), follow the instructions that came with that kit. Otherwise, install one of the spindle nuts onto the spindle. Using a 54mm socket, tighten the spindle nut to a torque of 43 ft-lbs. Turn the hub right and left 3 times, then loosen the nut until it can be turned by hand. Retighten the spindle nut to a torque of 18 ft-lbs.



STEP 17

Install the spindle lock washer and the spindle lock nut. Torque the lock nut to 33 ft-lbs.

INSTALLATION INSTRUCTIONS

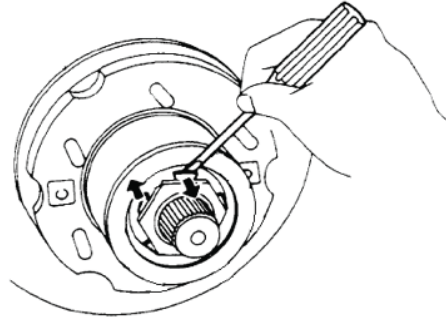
STEP 18

Make sure that the wheel bearing has no play. Using a spring tension gage, measure the preload. If the preload is not within 6.2 lbs to 12.3 lbs, adjust the torque on the lock nut until the preload is in the correct range.



STEP 19

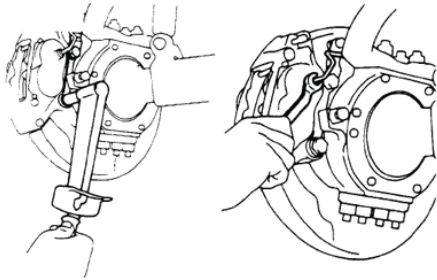
Secure the lock nut by bending one of the lock washer teeth inward and another lock washer teeth outward.



STEP 20

1979-1981 Pickups: Install the new IFS brake pads into the new IFS caliper. Install the brake caliper onto the steering knuckle using the (2) bolts removed in Step 6. Torque the bolts to 65 ft-lbs. Reinstall the brake tube to the caliper and torque to 11 ft-lbs.

All other vehicles: Install the brake caliper back onto the steering knuckle using the (2) bolts removed in Step 6. Torque the bolts to 65 ft-lbs. Reinstall the brake tube to the caliper and torque to 11 ft-lbs.



STEP 21

Install the drive flange gear into the hub. Make sure the drive flange gear is fully seated in the hub.



STEP 22

Apply blue Loctite to the threads of the M8 button head screw provided. Install the M8 button head screw and washer provided with the kit onto the end of the axle stub shaft.



INSTALLATION INSTRUCTIONS

STEP 23

Install the O-ring onto the hub cover. Apply a light coat of wheel bearing grease to the outside of the O-ring after it has been installed onto the hub cover.



STEP 24

Install the hub cover into the hub. Secure the hub cover with the snap ring provided. Make sure the snap ring is fully seated.



STEP 25

Install the wheel back onto the hub and secure with the lug nuts removed in Step 1.



STEP 26

Repeat Steps 1-25 for the other side of the front axle.

OPERATION

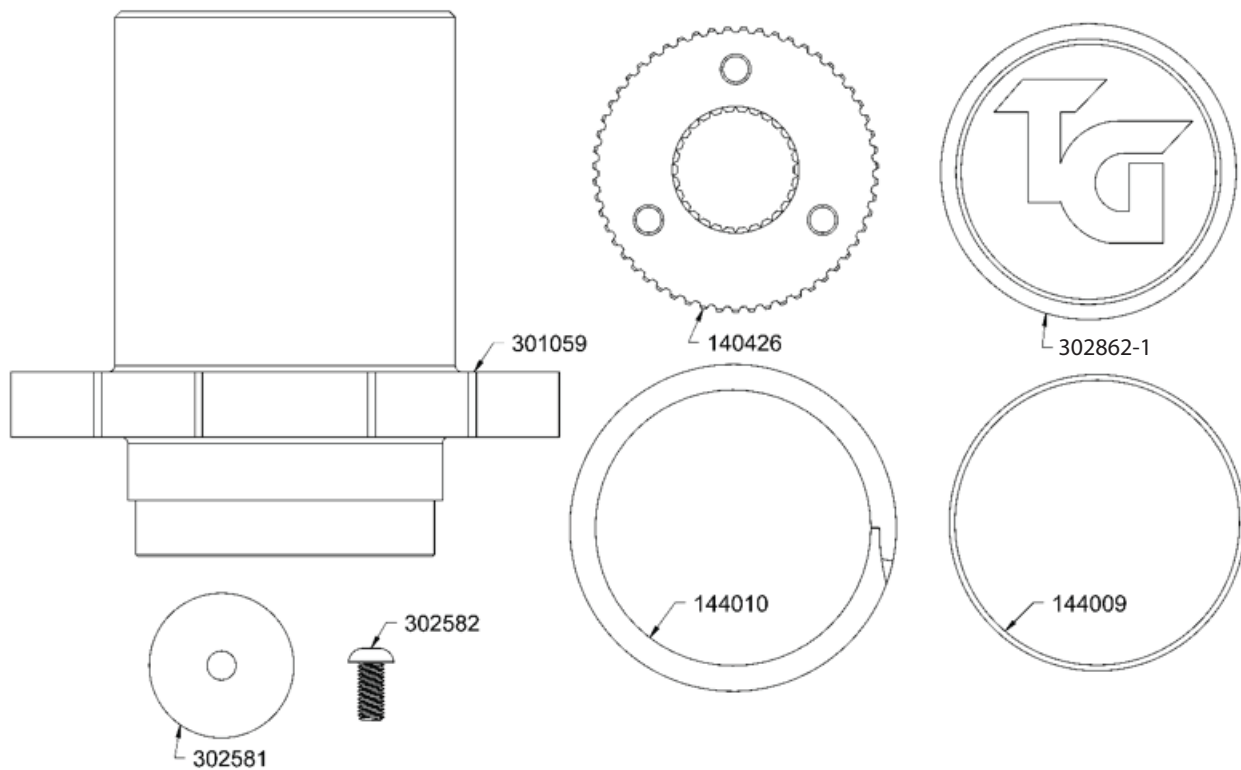
1. When the Studless Hub is completely assembled & installed, this will have the effect of having manual locking hubs permanently engaged. Drive accordingly.

2. To change into Free Wheeling mode, remove the snap ring and hub cover. Remove the button head screw and washer from the axle stub shaft. Remove the drive flange gear by installing 3/8-16 bolts (not included) into (2) of the (3) holes and pulling the gear out of the hub. Reinstall the hub cover and snap ring.



INSTALLATION INSTRUCTIONS

SERVICE PARTS



Note: Wheel bearing components are not available separately. To order replacement wheel bearings, please order the entire Wheel Bearing Kit (P/N 140007-1-KIT).