

TRAIL-CREEPER™ TACOMA DUAL TRANSFER CASE ADAPTER KIT

107523-1-KIT



KIT CONTENTS

- 1- Coupler
- 1- Adapter Plate w/Bearings installed
- 1- Bearing Spacer
- 1- Snap Ring
- 11- Washer, Flat M10
- 11- Washer, Lock M10
- 12- Washer, Lock M8
- 6- Bolt, M8-1.25 x 50
- 2- Stud, M8-1.25 x 45
- 5- Stud, M10-1.25 x 48
- 2- Nut, M8-1.25
- 5- Nut, Nylock, M10-1.25
- 3- T-Case Keyway
- 2- Dowel Pin, M10 x 14
- 1- Gasket Kit
- 2- Drain Plug w/Aluminum Washer
- 1- Ultra Grey Silicone
- 2- Dowel Pin M11x15

Additional Items Needed:

- Core T-Case - Top Shift w/23spline Input
- Replacement Crossmember
- Second T-Case Mount
- 90W Gear Oil

305903-1-INS



RECOMMENDED TOOLS

	Sockets	Wrenches
Ratchet		
Air Wrench	12mm	12mm
Needle Nose Pliers	14mm	14mm
Hammer	17mm	17mm
3/16" Diameter Pin Punch	30mm	30mm
Snap Ring Pliers		
6mm Allen Wrench		
10mm Allen Wrench		
Gasket Scraper		
Flat Blade Screwdriver		
Adjustable Wrench		
Blue LocTite		
Axle Grease		

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.

INSTALLATION INSTRUCTIONS

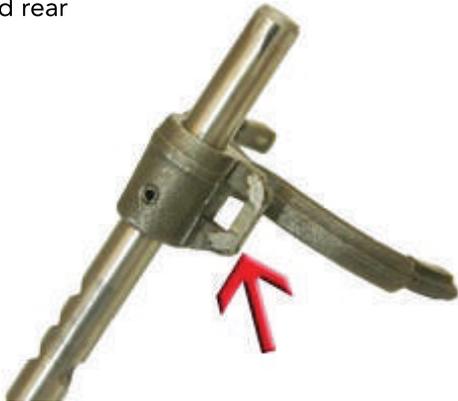


To build a dual transfer case crawler, you will need most of the parts that make up high/low section of a gear-driven Toyota transfer case. Below is a photo showing the factory parts that you will need from a stock transfer case.



STEP 1

Weld the provided key stock to the side of the shift fork as shown below. This prevents the front transfer case shifter from going side to side and only allows it to shift front and rear



STEP 2

If your rear case has this hi-lo shift rail, follow step 3, otherwise, move on to step 5.



STEP 3

Perform this step only after reviewing step 2. Cut 3/8" off of the flat side of the hi-lo shift rail.



STEP 4

After cutting, your shift rail should look like the bottom one in the image.



INSTALLATION INSTRUCTIONS



STEP 5

Using a brush, apply axle grease to the base of the coupler.



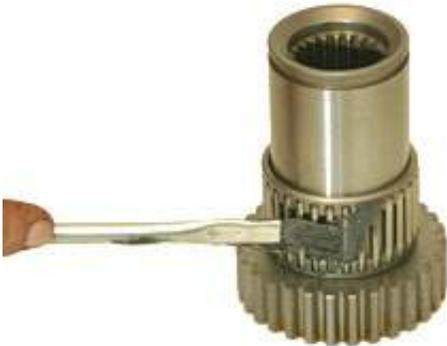
STEP 6

Slide the coupler bearing over the coupler.



STEP 7

Grease the coupler bearing.



STEP 8

Slide the 2.28 low speed gear over the coupler bearing.



STEP 9

Slide the provided bearing spacer onto the coupler, above the low speed gear.



STEP 10

Insert dowel pins into holes



INSTALLATION INSTRUCTIONS



STEP 11

Hold the bearing spacer with one finger and flip the assembly upside down. Slide the coupler (with spacer, bearing and low speed gear) into place on the dual adapter as shown below.



STEP 12

Turn the adapter over so that the coupler is under the adapter. Apply the provided snap ring to the coupler.



STEP 13

Turn the dual case adapter over so that the low speed gear previously installed is again facing up.



STEP 14

Place the collar into the shift fork groove.



STEP 15

Slide the high/low shift rail, fork, and collar onto coupler. Note the position of the shift rail going into the dual adapter.



STEP 16

Fully seat the shift fork assembly onto the low speed gear. This may require turning the shift hub slightly.



INSTALLATION INSTRUCTIONS



STEP 17

Apply grease to the dual case needle bearing.



STEP 18

Install the counter shaft into the adapter plate needle bearing.



STEP 19

Grease the pocket bearing from the original transfer case.



STEP 20

Install the pocket bearing into the coupler.



STEP 21

Slide the input gear into the coupler pocket bearing. Seat the input gear all the way down so that it meshes with the counter shaft gear.



STEP 22

Place the gasket onto the face of the dual adapter as shown below.



INSTALLATION INSTRUCTIONS



STEP 23

Install five of the new studs into the empty reduction housing.



STEP 24

Place housing on the adapter.



STEP 25

Start the nut as shown before fully mating the housing and adapter.



STEP 26

Install two stock bolts in the passenger side of the dual adapter.



STEP 27

Install the nuts and tighten



STEP 28

Slide the snap ring into place over the counter shaft bearing.



INSTALLATION INSTRUCTIONS



STEP 29

Install the snap ring over the input gear bearing.



STEP 30

Place the original detent ball into the hole on the passenger side of the dual adapter.



STEP 31

Place the original detent spring into the hole on the passenger side of the dual adapter.



STEP 32

Place a drop of Loctite® onto the detent ball plug and install into the adapter using a 6mm allen wrench.



STEP 33

Install the drain plug and the gasket (provided with the kit) in to bottom of the dual adapter. Tighten using 10mm Allen wrench.



STEP 34

Your crawl box is now completed.



INSTALLATION INSTRUCTIONS



STEP 35

Remove your transfer case from transmission

STEP 36

To remove the stock coupler from your T-Case weld provided key stock on opposite sides of each other.



STEP 36 CONTINUED



STEP 37

Using a 2 jaw puller remove the coupler



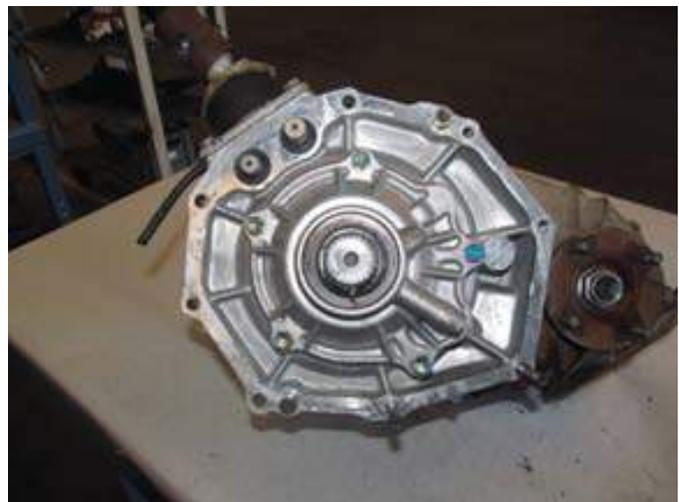
STEP 38

Install 2 M8-1.25 studs on to the transfer case with blue Loctite in the locations shown



STEP 39

Install two 11mm dowels in locations show



INSTALLATION INSTRUCTIONS



STEP 40

Apply RTV to mating surface.



STEP 41

Fasten together with Provided M8-1.25 bolts, and nuts



STEP 40

Remove stock seal from back of transmission



STEP 41

Install provided coupler to transmission



STEP 40

Install Seal housing with seal with a rubber



STEP 41

Your dual transfer case is now ready to mount to your transmission. Use the provided M8-1.25 Bolts and washers on the specified holes. Complete the installation with the stock hardware.

