



1994-2001 Jeep Cherokee XJ Transfer Case Lowering Kit Part # TCL31

REQUIRED TOOL LIST:

- Safety Glasses
- Metric / Standard Wrenches & Sockets
- Floor Jack
- Torque Wrench

Component Box Breakdown:

Part #: TCL31

| Item # | Description | Qty | Item # | Description | Qty |
|-------------|-----------------------------|-----|---------|------------------------|-----|
| TCL114SX6-S | TRANS CS LWR:1 1/2"X2X6-SGL | 2 | I-TCL31 | INSTRUCTIONS FOR TCL31 | 1 |
| HB-TCL31 | HDWR BAG: TCL31 | 1 | | | |

Hardware Bag Breakdown:

Part # HB-TCL31

| Item # | Description | Qty | Item # | Description | Qty |
|---------|----------------------------|-----|------------|-----------------------------|-----|
| TCL24-B | TRANS CASE LNKG RELOC B-TJ | 1 | 10MMX60MMB | 10 X 60 METRIC BOLT/10.9 | 2 |
| 14X1FTB | 1/4 X 1 FINE THD BOLT G8 | 2 | 38X1CTBG5 | 3/8 X 1 CRSE THRD BLT,GRD 5 | 2 |
| 14FTN | 1/4-28 FINE N/I LOCK NUT | 2 | 38CTN | 3/8-16 COARSE N/I LOCK NUT | 2 |
| 14SAEW | 1/4 SAE WASHER | 2 | 38SAEW | 3/8 SAE WASHER | 6 |

Installation:

1. Park the vehicle on a flat, level surface & block the front & rear tires.
2. Place the transmission in neutral.
3. Loosen all of the engine mount bolts about 1/2 turn.
4. Support the transfer case cross member with a transmission or floor jack. Remove the bolts & nuts for each side of the cross member.
(See Photo # 1)
5. Slowly lower the cross member, approximately 2", to allow enough room to install the new Skyjacker tubular spacers.



Photo # 1

6. Install the new Skyjacker tubular spacers between the cross member & frame. Slowly raise the jack to firmly hold the tubular spacers in place.

7. Install the OEM nuts, removed in Step # 4, onto the studs that are protruding out of the frame on each side to hold the top half of the new spacers in place. **Note:** There is only one stud on each side protruding out of the frame. Next, install the 3/8" x 1" bolt on each side through the cross member & the bottom half of the new tubular spacers. Install the 3/8 nut, washer, & hand tighten.



Photo # 2

8. Install the new 10mm x 60mm bolt up through the cross member & tubular spacer & tighten to 33 ft. lbs. (See Photo # 2)

9. Tighten the 3/8" nut down onto the 3/8" x 1" bolt from Step # 7 to 33 ft-lbs. Remove the transmission jack & set aside.

10. Re-torque the engine mount bolts loosened in Step # 3. The engine mount to block bolts torque to 45 ft-lbs. The engine mount to frame bolts torque to 30 ft-lbs. The thru bolts torque to 48 ft-lbs.

11. Install the transfer case linkage bracket. (See Steps # 1 thru # 5 Below)

TRANSFER CASE LINKAGE BRACKET INSTALLATION:

1. Install the new Skyjacker transfer case linkage pivot drop bracket to the stock pivot bracket using the OEM hardware. Using the two 1/4" x 1" bolts with a flat washer & self locking nut, bolt the ball swivel bracket (See Arrow in Photo # 3) to the new Skyjacker drop bracket. **Note:** The bracket has two sets of holes. The bottom holes are for a 4" lift as shown & the upper holes are for a 2 1/2" lift.

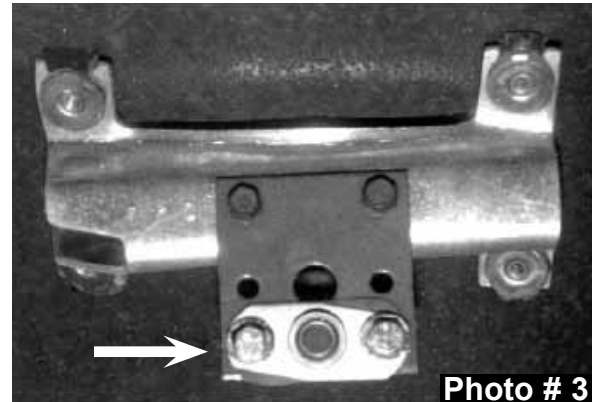


Photo # 3

2. Placing the pivot bracket back in location, start the end of the rod through the ball swivel & bolt the bracket in location with the OEM hardware. (See Photo # 4)

3. Check to make sure that the transfer case will fully engage at each end of the shifter travel. If linkage adjustment is required, see Step # 4.



4. Check the transfer case shifter to see if it will move to 4L. If not, the linkage will need adjusting as follows. Place the shifter in 4L, loosen the adjustment bolt ("A" Arrow in Photo # 5), & push the linkage ("B" Arrow in Photo # 5) forward until it stops. Now retighten adjustment bolt. Check to be sure the 4WD works properly.

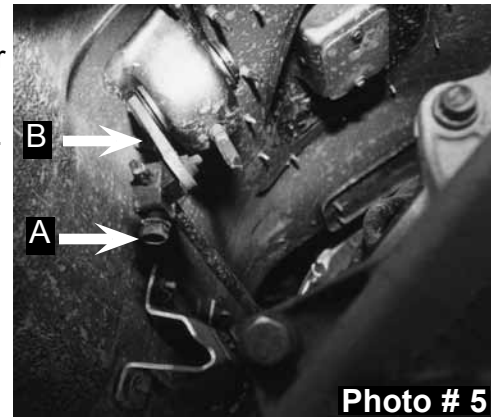


Photo # 5

5. On 5 speed models, engage the clutch & check the transmission shifter to see if it will go into 2nd gear. If not, the shifter housing on the floor will need trimming. Remove the center console, pull back the carpet, remove the screws holding the shifter boot to the floor, & trim or grind the floor board until sufficient clearance is obtained. (See Arrow in Photo # 6) Shift through each gear to check clearance at this time. Now reinstall the shifter boot, carpet, & console.

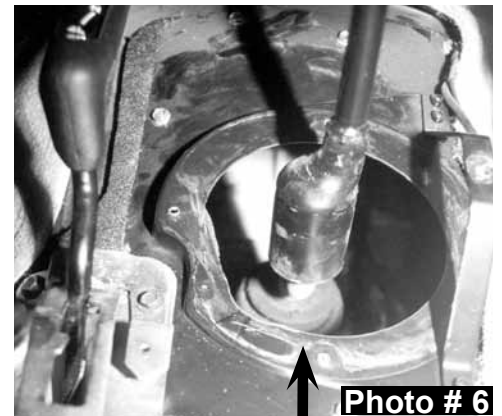


Photo # 6

TORQUE SPECIFICATIONS

| <u>INCH SYSTEM</u> | | | <u>METRIC SYSTEM</u> | | |
|--------------------|----------------|----------------|----------------------|------------------|-------------------|
| Bolt Size | Grade 5 | Grade 8 | Bolt Size | Class 8.8 | Class 10.9 |
| 5/16 | 15 FT LB | 20 FT LB | 6MM | 5 FT LB | 9 FT LB |
| 3/8 | 30 FT LB | 35 FT LB | 8MM | 18 FT LB | 23 FT LB |
| 7/16 | 45 FT LB | 60 FT LB | 10MM | 32 FT LB | 45 FT LB |
| 1/2 | 65 FT LB | 90 FT LB | 12MM | 55 FT LB | 75 FT LB |
| 9/16 | 95 FT LB | 130 FTLB | 14MM | 85 FT LB | 120 FT LB |
| 5/8 | 135 FT LB | 175 FT LB | 16MM | 130 FT LB | 165 FT LB |
| 3/4 | 185 FT LB | 280 FT LB | 18MM | 170 FT LB | 240 FT LB |

• The above specifications are not to be used when the bolt is being installed with a bushing.

Seat Belts Save Lives, Please Wear Your Seat Belt.