



# Component Service Manual

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**TRANSFER CASE  
231**

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## **Application**

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**Cherokee/Wagoneer  
Comanche**

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**AUGUST, 1986**

**U.S.A./Canada Edition**

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**8980 010 378**

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# T.C. 231 TRANSFER CASE



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# T.C. 231 TRANSFER CASE

## SPECIAL TOOLS



### SPECIAL TOOLS

TOOL REF.	DESCRIPTION
J-2619-01	Slide Hammer
J-8092	Driver Handle
J-29369-1	Bearing Remover
J-33826	Bushing Remover/Bearing Installer
J-29170	Sprocket Bearing Tool
J-33829	Mainshaft Pilot Bearing Installer
J-33830	Input Gear Bearing Installer
J-33831	Input Gear Seal Installer
J-29369-2	Bearing Remover
J-33833	Output Shaft Bearing Installer
J-33834	Seal Installer
J-33835	Oil Pump Seal Installer
J-33839	Extension Housing Bushing Remover

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J-33831



J-33834



J-33835



J-8092



J-29369-1



J-33826



J-33829



J-29170



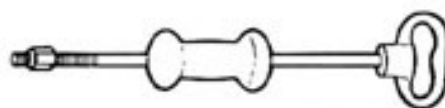
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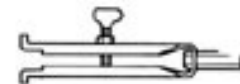
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J-33830



J-2619-01



J-29369-2

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## T.C. 231 TRANSFER CASE SPECIFICATIONS



### TORQUE SPECIFICATIONS

Component	Service Set-To Torque	Service Recheck Torque
Oil pump screws	1.6 N·m (14 in-lbs)	1.4-1.8 N·m (12-15 in-lbs)
Yoke nut	149 N·m (110 ft-lbs)	122-176 N·m (90-130 ft-lbs)
Vacuum switch	27 N·m (20 ft-lbs)	20-34 N·m (15-25 ft-lbs)
Range lever nut	30 N·m (22 ft-lbs)	27-34 N·m (20-25 ft-lbs)
Front case-to-rear case bolts	41 N·m (30 ft-lbs)	35-46 N·m (26-34 ft-lbs)
Rear retainer bolts	24 N·m (18 ft-lbs)	20-27 N·m (15-20 ft-lbs)
Extension housing bolts	41 N·m (30 ft-lbs)	35-46 N·m (26-34 ft-lbs)
Drain/fill plugs	47 N·m (35 ft-lbs)	41-54 N·m (30-40 ft-lbs)
Detent plug	20 N·m (15 ft-lbs)	16-24 N·m (12-18 ft-lbs)
Front bearing retainer bolts	21 N·m (16 ft-lbs)	16-27 N·m (12-20 ft-lbs)

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### GENERAL SPECIFICATIONS

Transfer Case Type:	Part-time, dual range with low range reduction. Four-wheel drive range is undifferentiated.
Torque Transfer Mode:	Output shaft and sprocket driven by interconnecting drive chain.
Operating Ranges:	2-high, 4-high, 4-low and Neutral. Low range reduction ratio is 2.72:1.
Case Configuration:	Two-piece aluminum with removable extension and rear retainer housings.
Lubricant Capacity:	
Cherokee/Wagoneer	1.54 liters (3.25 pints)
Wrangler/YJ	1.04 liters (2.2 pints)
Required Lubricant:	AMC/JEEP/RENAULT automatic transmission fluid or equivalent marked DEXRON® II.
Transfer Case Fill Level:	To bottom edge of fill plug hole.



## T.C. 231 TRANSFER CASE



### GENERAL INFORMATION

#### DESCRIPTION

The Model 231 is a part-time transfer case with a built-in low range reduction gear system. It has three operating ranges plus a Neutral position. The low range system provides a low range reduction ratio for increased low speed torque capability.

#### OPERATING RANGES

The Model 231 has three operating ranges which are: two-wheel drive high, four-wheel drive high and four-wheel drive low. The four-wheel drive operating ranges are undifferentiated.

Two-wheel drive range is used for on-road, highway operation. The four-wheel drive ranges are for off-road operation or when the vehicle is driven on paved road surfaces covered by snow, ice or similar low traction elements.

#### SHIFT MECHANISM

Transfer case operating ranges are selected with a floor mounted shift lever. The shift lever is connected to the transfer case range lever by an adjustable linkage rod. A straight line shift pattern is used. Range positions are marked on the shifter bezel cover plate.



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A synchronizer assembly in the transfer case allows the unit to be shifted between the two- and four-wheel high ranges while the vehicle is in motion.



## T.C. 231 TRANSFER CASE

### GENERAL INFORMATION



#### TWO-WHEEL DRIVE OPERATION

Two-wheel drive operation is provided by a disconnect mechanism in the front axle. A vacuum operated shift motor on the axle disconnects the right hand axle shaft when two-wheel drive range is selected. The axle shift motor is controlled by a vacuum switch that is actuated by the transfer case shift sector and linkage.

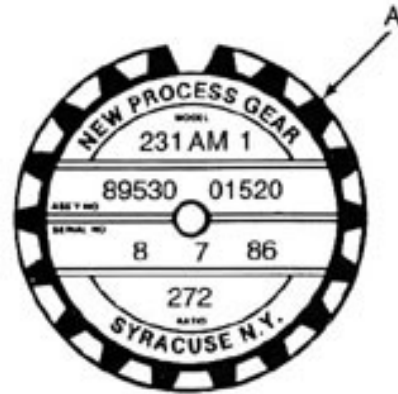
#### FOUR-WHEEL DRIVE OPERATION

Two internal mechanisms provide four-wheel drive operation. A vacuum shift motor connects the right hand axle shaft and a synchronizer assembly engages the transfer case front output shaft. The shift motor is operated by a vacuum switch mounted on the transfer case. The switch is actuated by the transfer case shift linkage.

#### IDENTIFICATION

A circular ID tag is attached to the rear case of each Model 231 transfer case. The ID tag (A) provides the transfer case model number, assembly number, serial number and low range ratio.

The transfer case serial number also represents the date of build. For example, a serial number of 8-7-86 would represent August 7, 1986.



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## T.C. 231 TRANSFER CASE

### SERVICE DIAGNOSIS



Condition	Possible Cause	Correction
TRANSFER CASE DIFFICULT TO SHIFT OR WILL NOT SHIFT INTO DESIRED RANGE	(1) Vehicle speed too great to permit shifting.	(1) Stop vehicle and shift into desired range. Or reduce speed to 3-4 km/h (2-3 mph) before attempting to shift.
	(2) If vehicle was operated for extended period in 4H mode on dry paved surface, driveline torque load may cause difficulty.	(2) Stop vehicle, shift transmission to neutral, shift transfer case to 2H mode and operate vehicle in 2H on dry paved surfaces.
	(3) Transfer case external shift linkage binding.	(3) Lubricate, repair or replace linkage, or tighten loose components as necessary.
	(4) Insufficient or incorrect lubricant.	(4) Drain and refill to edge of fill hole with Jeep Automatic Transmission Fluid or equivalent labeled DEXRON® II only.
	(5) Internal components binding, worn or damaged.	(5) Disassemble unit and replace worn or damaged components as necessary.
TRANSFER CASE NOISY IN ALL DRIVE MODES	(1) Insufficient or incorrect lubricant.	(1) Drain and refill to edge of fill hole with Jeep Automatic Transmission Fluid or equivalent labeled DEXRON® II only. Check for leaks and repair if necessary. <b>Note: if unit is still noisy after drain and refill, disassembly and inspection may be required to locate source of noise.</b>
NOISY IN — OR JUMPS OUT OF FOUR WHEEL DRIVE LOW RANGE	(1) Transfer case not completely engaged in 4L position.	(1) Stop vehicle, shift transfer case to Neutral, then shift back into 4L position.
	(2) Shift linkage loose or binding.	(2) Tighten, lubricate or repair linkage as necessary.
	(3) Range fork damaged, inserts worn, or fork is binding on shift rail.	(3) Disassemble unit and repair as necessary.
	(4) Low range gear worn or damaged.	(4) Disassemble and repair as necessary.
LUBRICANT LEAKING FROM OUTPUT SHAFT SEALS OR FROM VENT	(1) Transfer case overfilled.	(1) Drain to correct level.
	(2) Vent closed or restricted.	(2) Clear or replace vent if necessary.
	(3) Output shaft seals damaged or installed incorrectly.	(3) Replace seals. Be sure seal lip faces interior of case when installed. Also be sure yoke seal surfaces are not scored or nicked. Remove scores and nicks with fine sandpaper or replace yoke(s) if necessary.
ABNORMAL TIRE WEAR	(1) Extended operation on dry hard surface (paved) roads in 4H range.	(1) Operate in 2H on hard surface (paved) roads.

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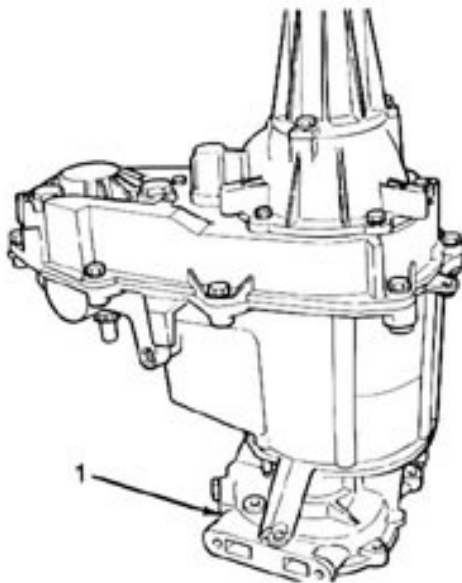


## T.C. 231 TRANSFER CASE OVERHAUL



### TRANSFER CASE DISASSEMBLY

**NOTE:** The rear extension housing (1) from a manual or automatic transmission makes a convenient support stand for the transfer case. The housing can be used for all disassembly/assembly operations.



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Remove the fill and drain plugs.

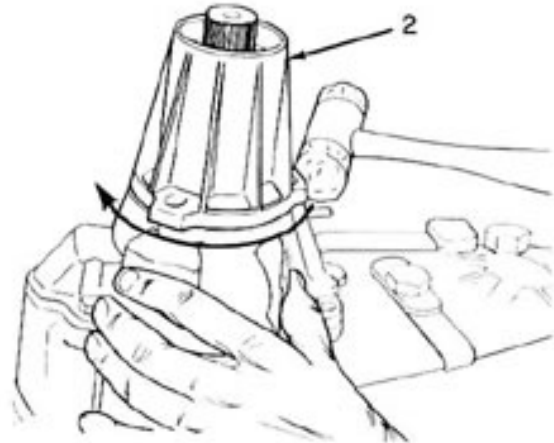
Remove the front yoke. Discard the yoke seal washer and nut. They are not reusable.

Move the transfer case range lever all the way rearward to the four-wheel low position.

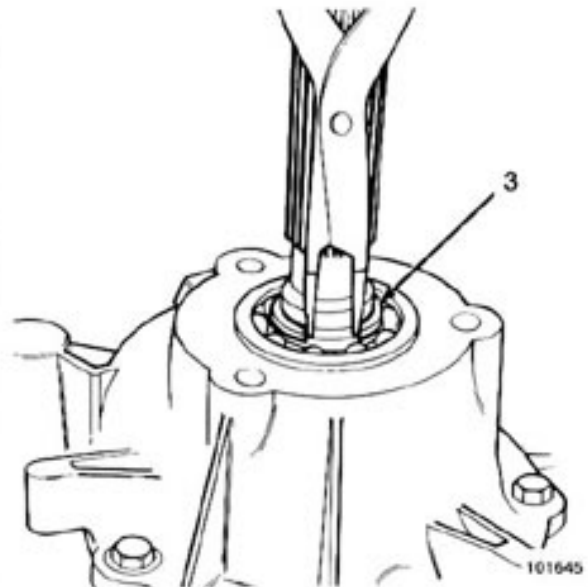
Remove the extension housing attaching bolts.

Tap the extension housing (2) in a clockwise direction with a rawhide mallet to break the sealer bead. Then remove the housing.

**CAUTION:** To avoid damaging the sealing surfaces of the extension housing and rear retainer, do not attempt to pry or wedge the housing off the retainer.



Remove the rear bearing snap ring (3) from the mainshaft. Discard the snap ring.



Remove the rear retainer attaching bolts.



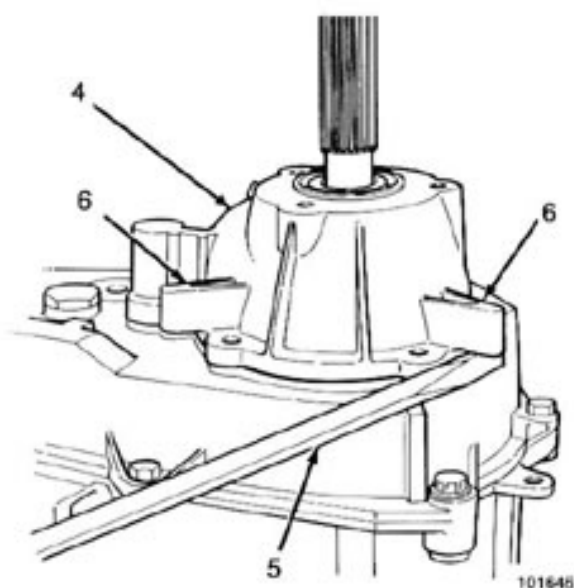


## T.C. 231 TRANSFER CASE OVERHAUL



Remove the rear retainer (4). Position a screwdriver (5) under each of the tabs (6) on the retainer housing. Then carefully pry the retainer upward and off the rear case.

**CAUTION:** Do not pry against the sealing surfaces of the retainer or rear case. The surfaces could be damaged.



Remove the bolts attaching the rear case to the front case. Retain the bolts and the washers used at the dowel bolt locations.

Separate the rear case from the front case using two screwdrivers (7). Insert the screwdrivers into the slots cast in the case ends. Then gently pry upward to break the sealer bead and separate the case halves.

**CAUTION:** Do not pry against the sealing surfaces of the retainer or rear case. The surfaces could be damaged.



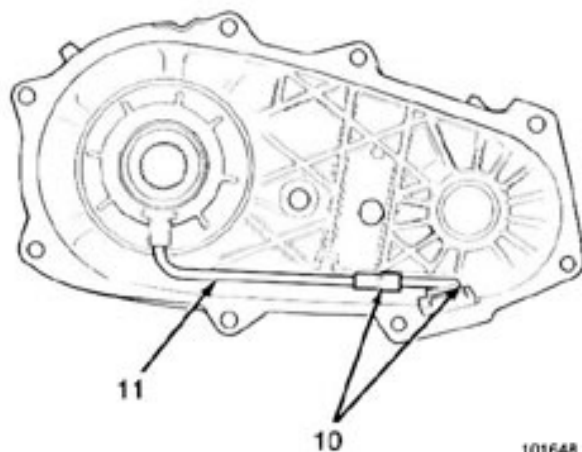
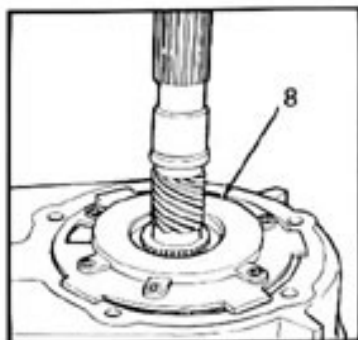
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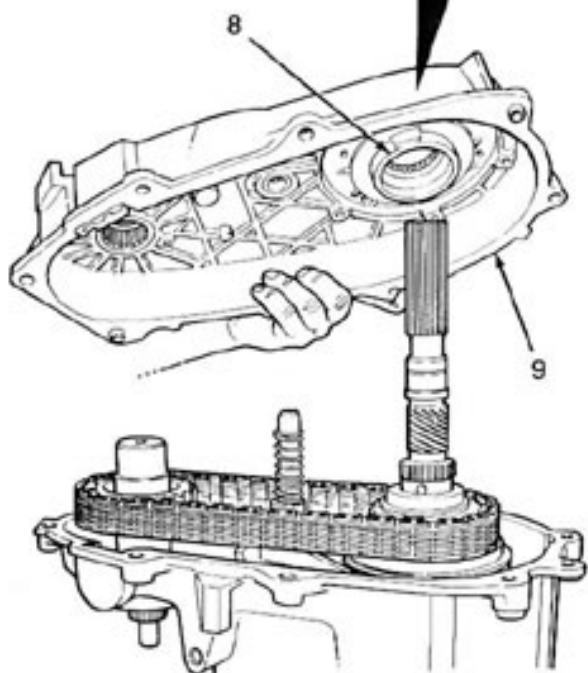
## T.C. 231 TRANSFER CASE OVERHAUL



Remove the oil pump (8) and rear case (9) as an assembly.



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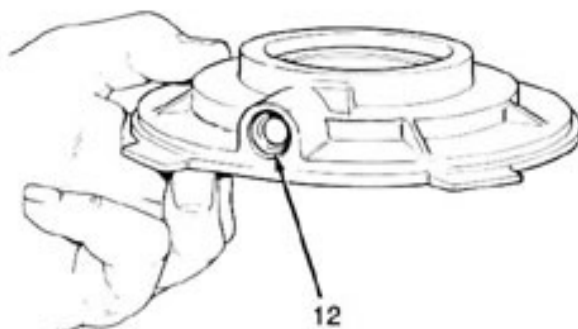


Remove the pickup tube (11) from the oil pump.

Remove the oil pump from the rear case.

Remove the pickup tube O-ring (12) from the oil pump (10). Discard the O-ring.

Slide the oil pickup screen (10) out of the case pocket. Disconnect the screen from the pickup tube (11).



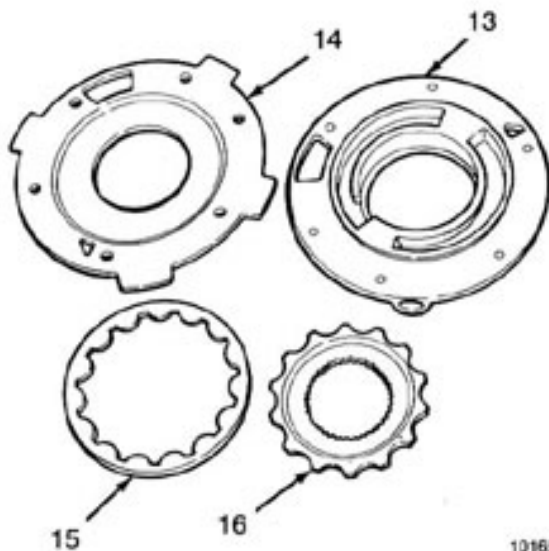


## T.C. 231 TRANSFER CASE OVERHAUL

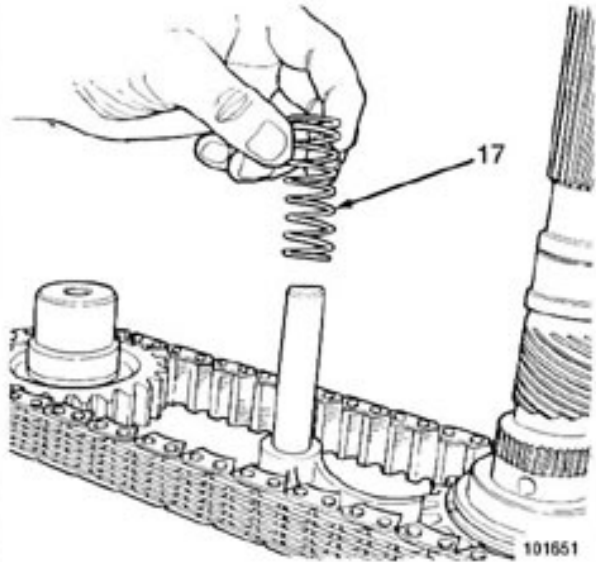


Disassemble the oil pump as follows:

- Mark position of the pump housings for assembly reference.
- Remove the screws that attach the two halves of the pump.
- Remove the feed housing (13) from the gear housing (14).
- Note position of the pump gears (15) and (16) in the gear housing and remove the gears.

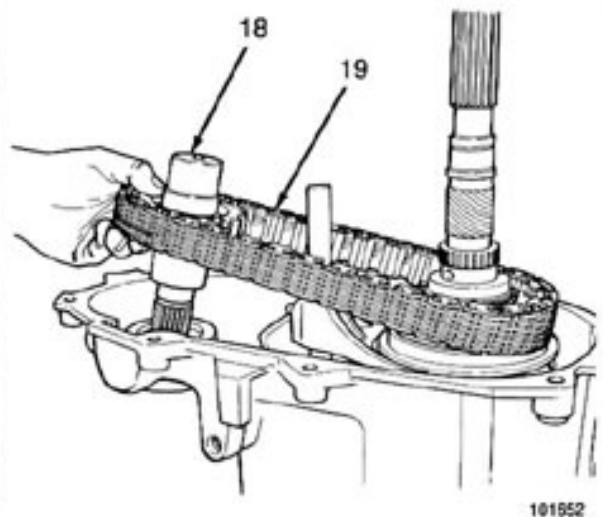


Remove the mode spring (17).



Tap the front output shaft (18) upward with a rawhide mallet to free it from the shaft bearing.

Remove the front output shaft (18) and drive chain (19) as an assembly. Raise the mainshaft slightly to ease chain removal if necessary.



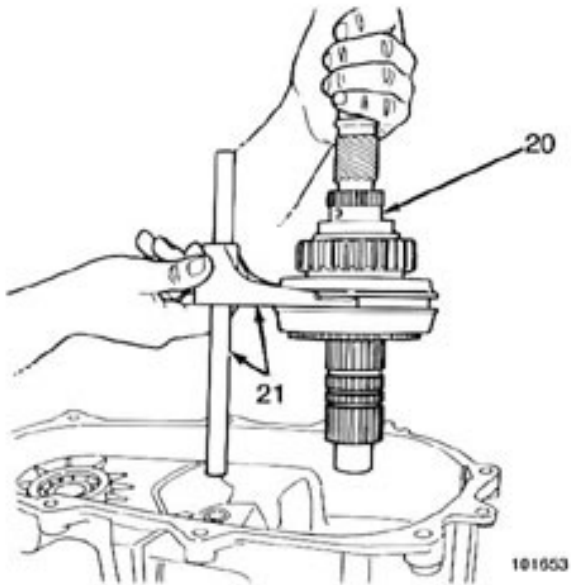
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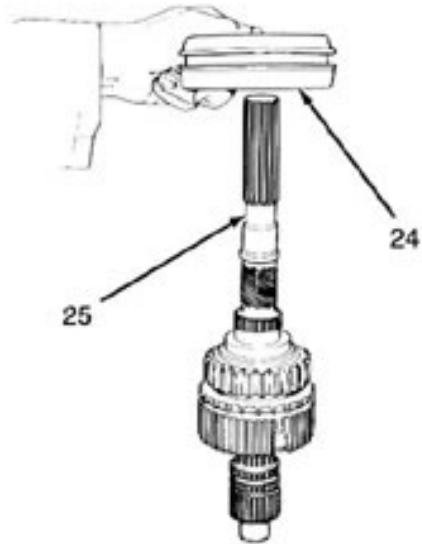
## T.C. 231 TRANSFER CASE OVERHAUL



Remove the mainshaft (20) and mode fork and shift rail (21) from the front case as an assembly.

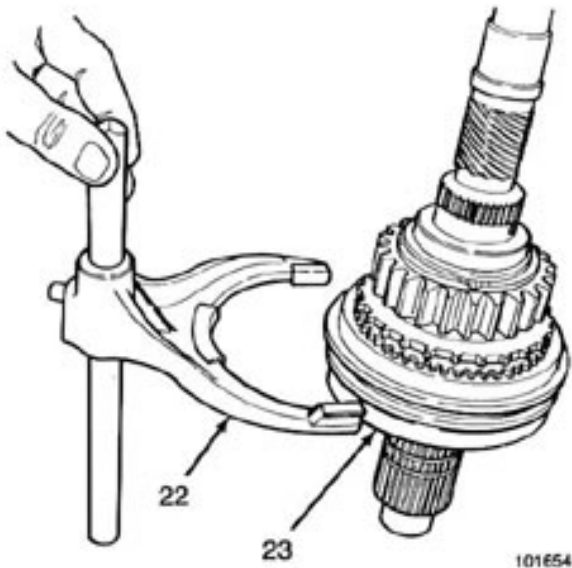


Remove the synchronizer sleeve (24) from the mainshaft (25).

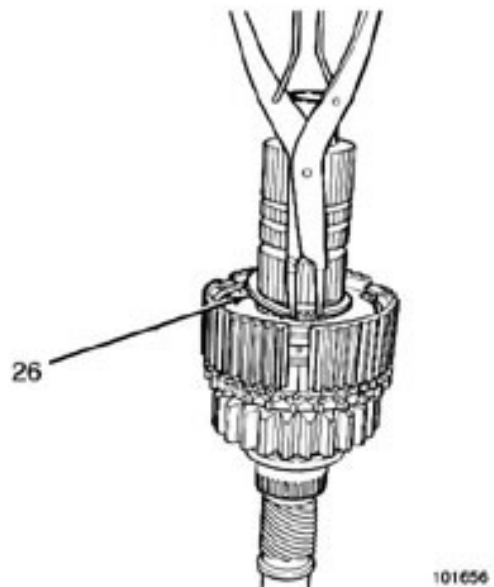


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Remove the mode fork and shift rail (22) from the synchronizer sleeve (23). Mark position of the sleeve (23) for assembly reference.



Remove the synchronizer hub snap ring (26). Discard the snap ring.

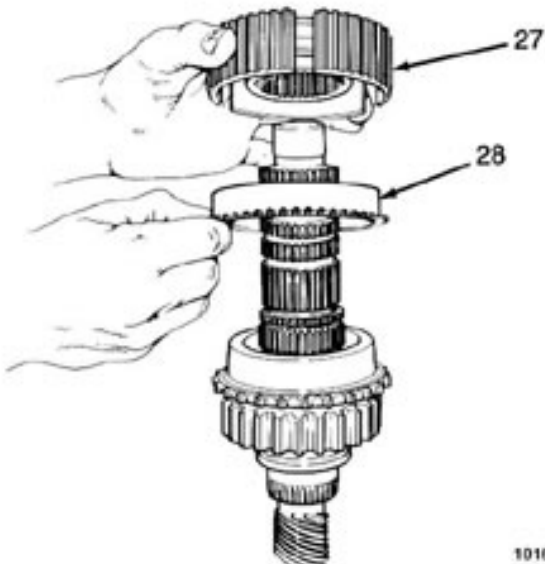




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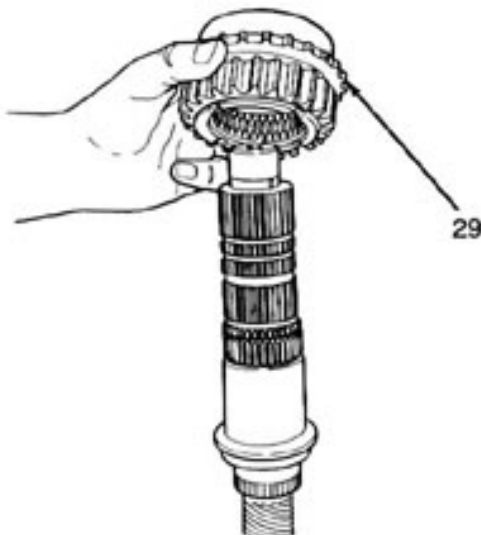


Remove the synchronizer hub (27) and stop ring (28) from the mainshaft.



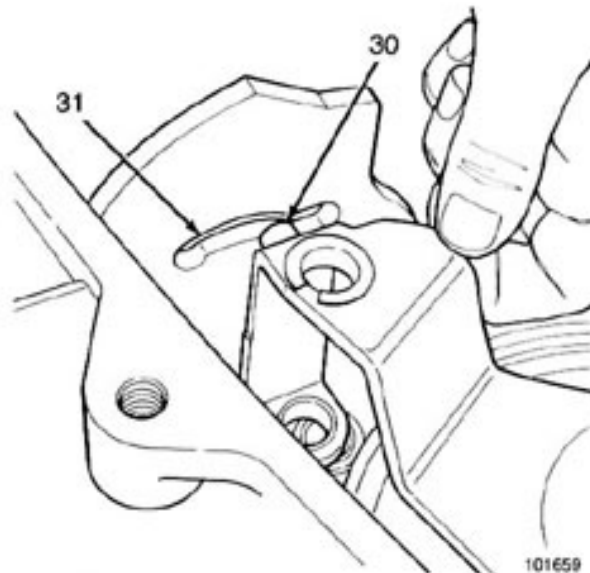
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Remove the drive sprocket (29) from the mainshaft.



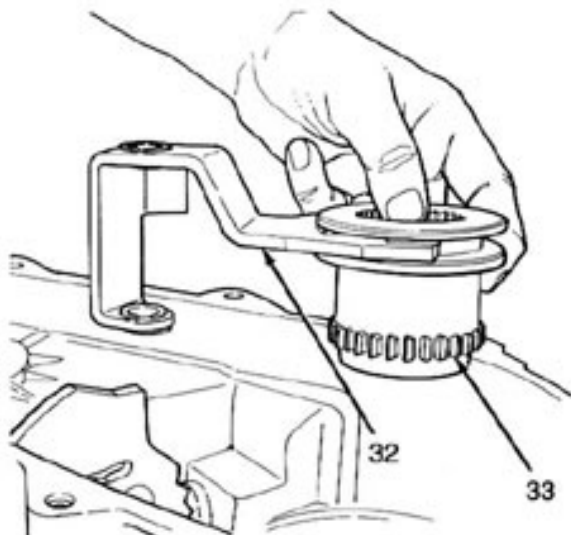
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Slide the range fork pin (30) out of the slot in the sector (31).



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Remove the range fork (32) and shift hub (33) as an assembly. Note position of the fork and hub for assembly reference.



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## T.C. 231 TRANSFER CASE OVERHAUL



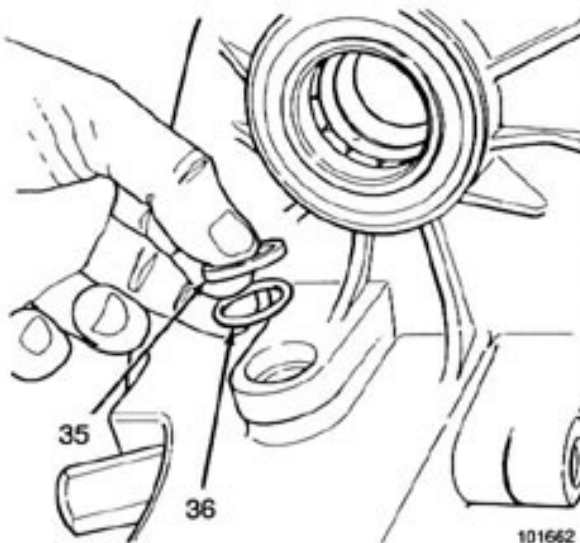
Remove the transfer case range lever from the sector shaft. Retain the lever attaching nut and washer.

Remove the shift sector (34).

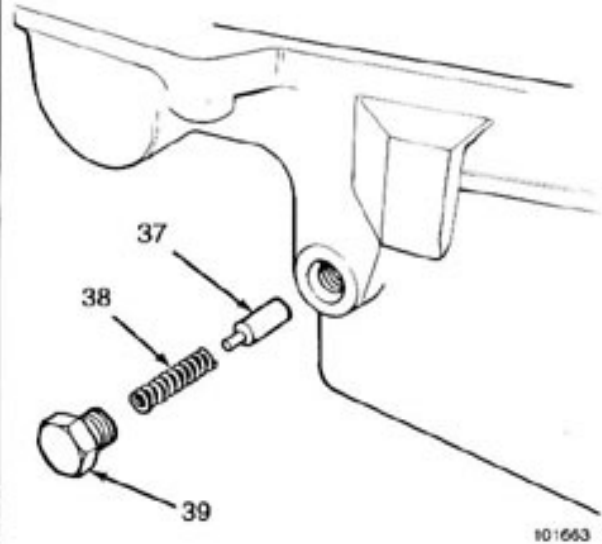


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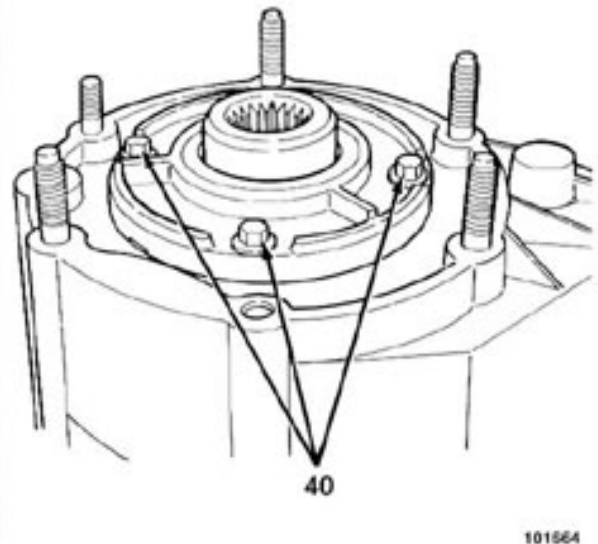
Remove the sector shaft bushing (35) and O-ring (36).



Remove the shift detent pin (37), spring (38) and plug (39).



Turn the front case over and remove the front bearing retainer attaching bolts (40).

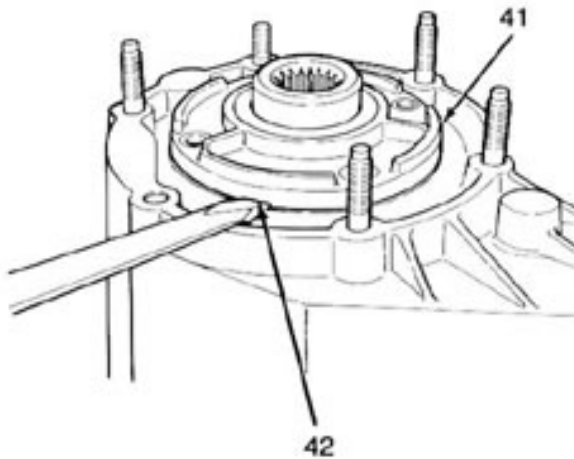




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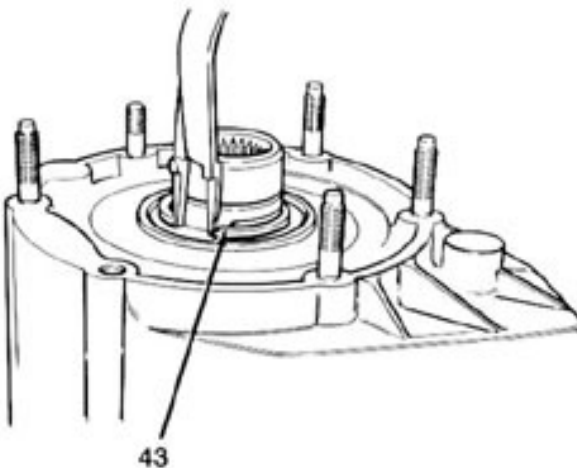


Remove the front bearing retainer (41). Carefully pry the retainer loose with a screwdriver. Position the screwdriver in the slots (42) cast into the retainer.



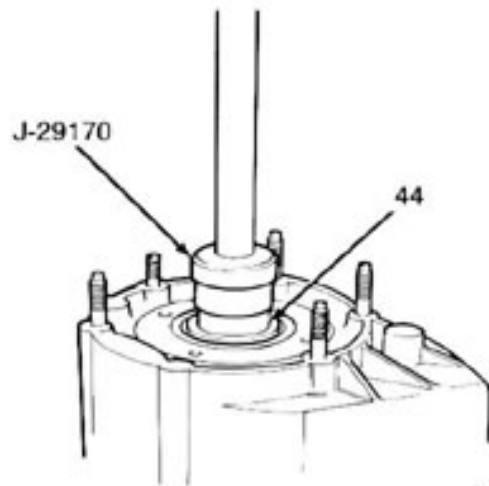
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Remove the input gear snap ring (43).



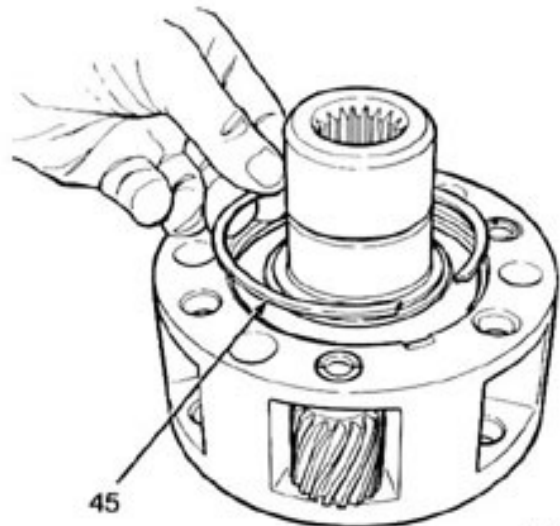
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Press the input and low range gear assembly (44) out of the input gear bearing with tool J-29170 and an arbor press.



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Remove the low range gear snap ring (45).



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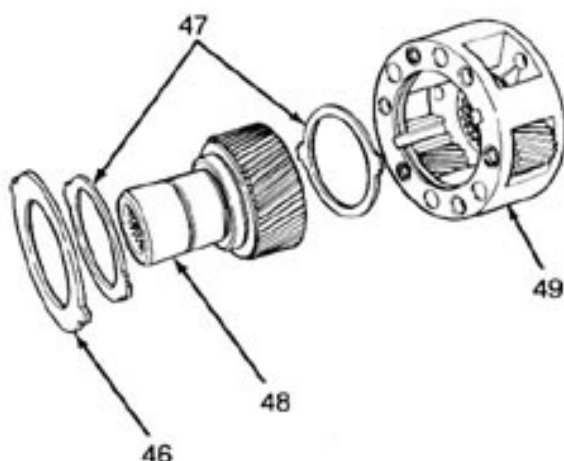
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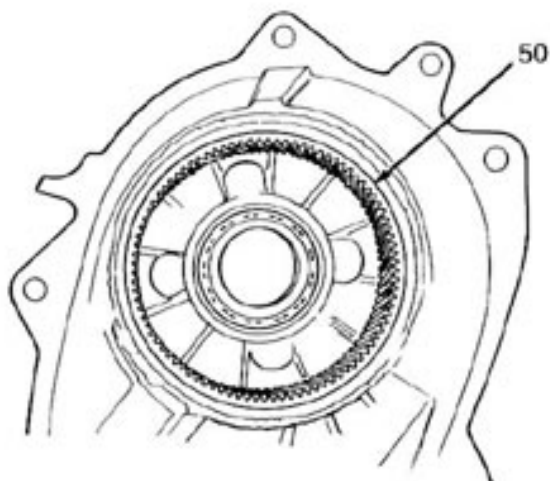


Remove the input gear retainer (46), thrust washers (47) and input gear (48) from the low range gear (49).



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**NOTE:** The low range annulus gear (50) is not a serviceable component. If the gear is damaged, replace the gear and front case as an assembly.



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Remove the oil seals from the rear retainer, rear extension housing, oil pump feed housing and case halves. Discard the seals.

Remove the magnet from the front case.

### CLEANING AND INSPECTION

Clean the transfer case components thoroughly with solvent. Remove all traces of sealer from the case and retainer seal surfaces.

Clean the oil pickup screen with solvent and dry it with compressed air. Also use compressed air to remove solvent residue from all oil feed passages and channels.

Inspect the case halves, extension housing and retainers for cracks, porosity, or damaged sealing surfaces. Inspect the shafts, gears, chain and shift components for wear or damage.

Inspect all of the transfer case bearings for wear, roughness, pitting, or galling. Replace worn or damaged bearings as outlined in the assembly section.

### TRANSFER CASE ASSEMBLY

Lubricate the transfer case components with JEEP automatic transmission fluid or an equivalent Dexron® II fluid before installation.

**CAUTION:** The bearing bores in various transfer case components contain oil feed holes. Be sure replacement bearings do not block the feed holes.

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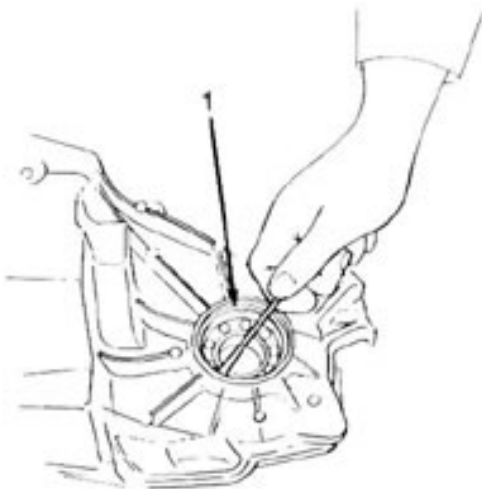


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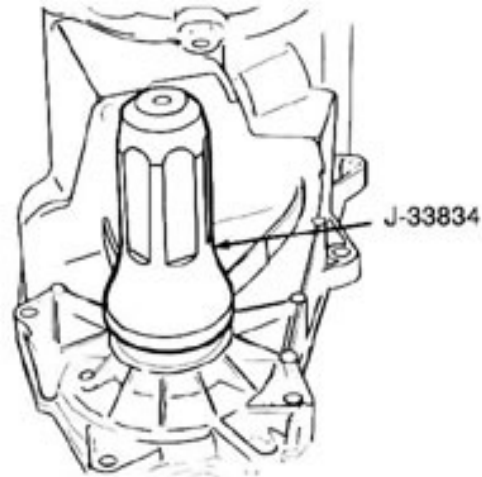
Replace the output shaft front bearing and seal as follows:

- Remove the shaft oil seal from the front case.
- Remove the bearing snap ring (1).



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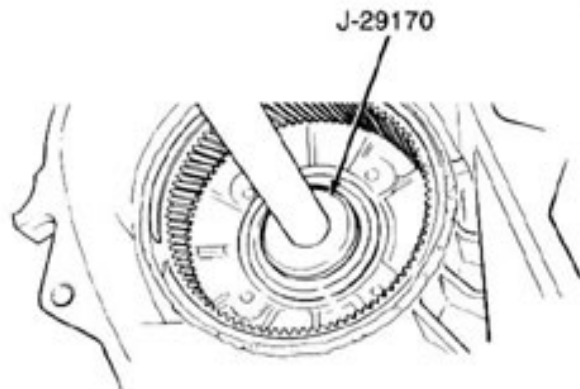
- Tap the original bearing out of the case with a plastic mallet.
- Install the replacement bearing with driver handle J-8092 and tool J-33833. The bearing is fully seated when tool J-33833 contacts the front case.
- Install the bearing snap ring (1).
- Install the replacement shaft seal with tool J-33834.



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Replace the input gear bearing as follows:

- Press the bearing out of the front case with tool J-29170 and an arbor press.



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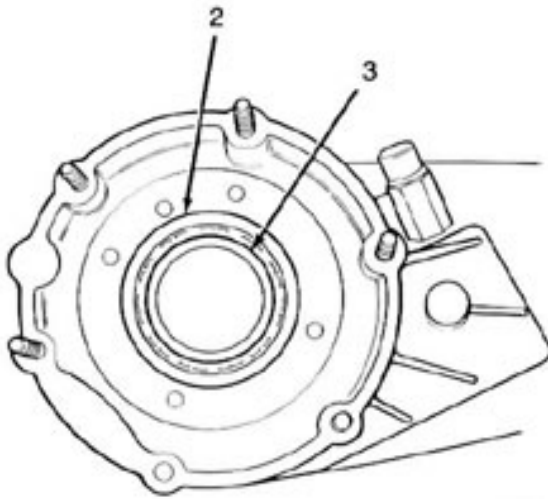


## T.C. 231 TRANSFER CASE OVERHAUL



- Install the snap ring (2) on the replacement bearing.
- Install the bearing (3) into the case with tool J-29170 and a wood block. Install the bearing far enough into the case to seat the snap ring (2) against the case.

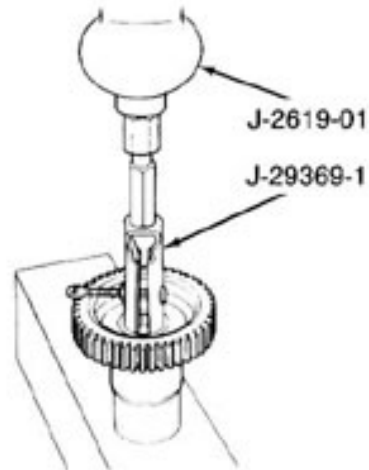
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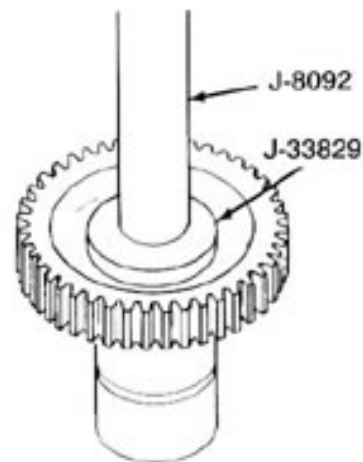
Replace the input gear pilot bearing as follows:

- Remove the pilot bearing with slide hammer J-2619-01 and tool J-29369-1.



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- Install the replacement pilot bearing with driver handle J-8092 and tool J-33829.



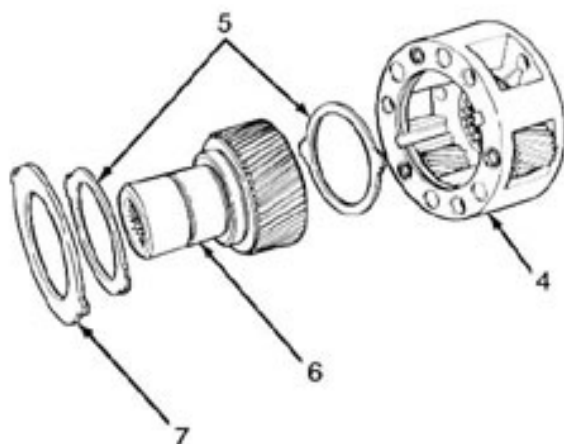
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## T.C. 231 TRANSFER CASE OVERHAUL

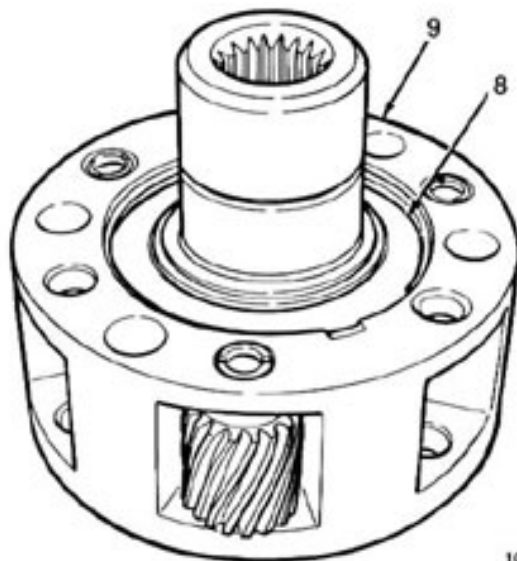


Assemble the low range gear (4), input gear thrust washers (5), input gear (6) and input gear retainer (7).



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Install the input gear snap ring (8). Be sure the snap ring is seated in the snap ring groove of the low range gear (9).

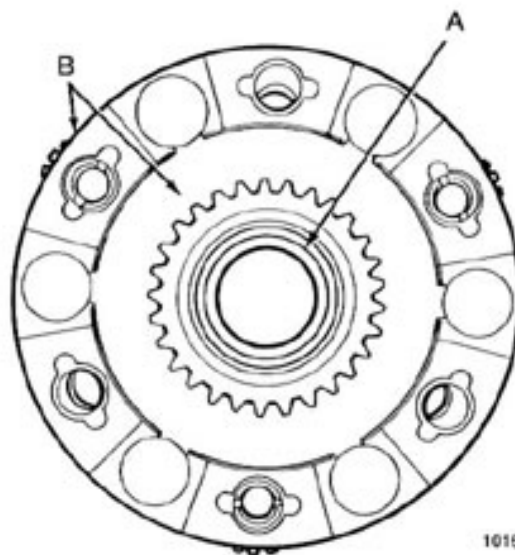


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Install the assembled input and low range gears as follows:

- Lubricate the input gear shaft with automatic transmission fluid.
- Start the input gear shaft into the bearing in the front case.
- Press the input gear shaft into the front bearing with tool J-33829 and an arbor press. Be sure the tool is seated in the input gear before applying any pressure.

**CAUTION:** Use tool J-33829 only to press the input gear into the front bearing. An incorrect tool could push the input gear pilot bearing (A) too far into the gear bore. Also, do not press against the end surface (B) of the low range gear. The gear case and thrust washers could be damaged.



101675

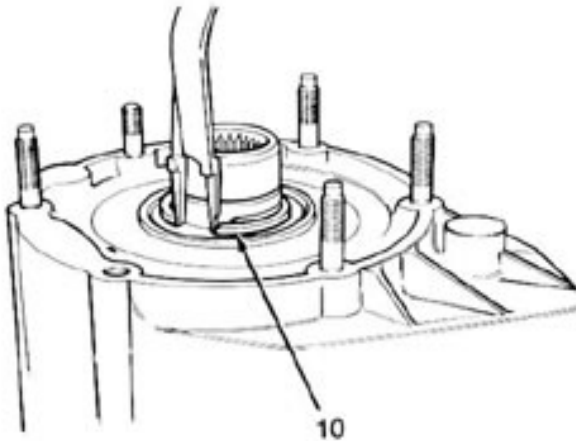
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## T.C. 231 TRANSFER CASE OVERHAUL

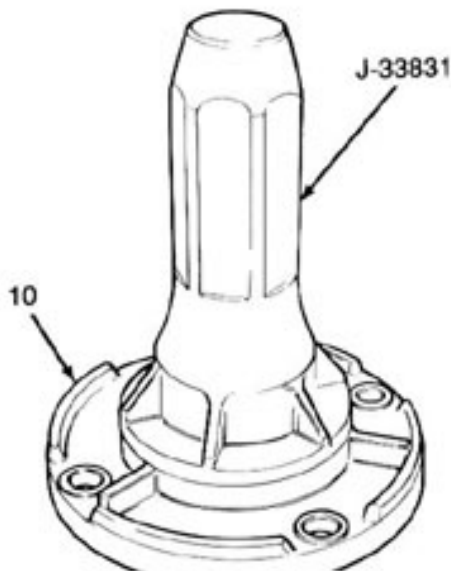


Install a replacement input gear snap ring (10).



101706

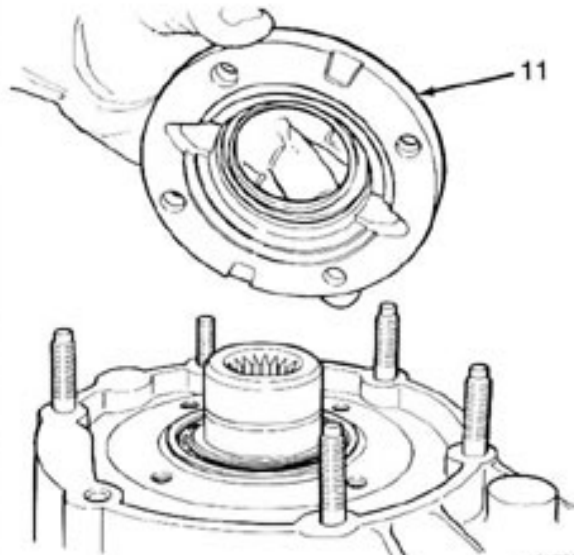
Install a replacement oil seal in the front bearing retainer (10) with tool J-33831.



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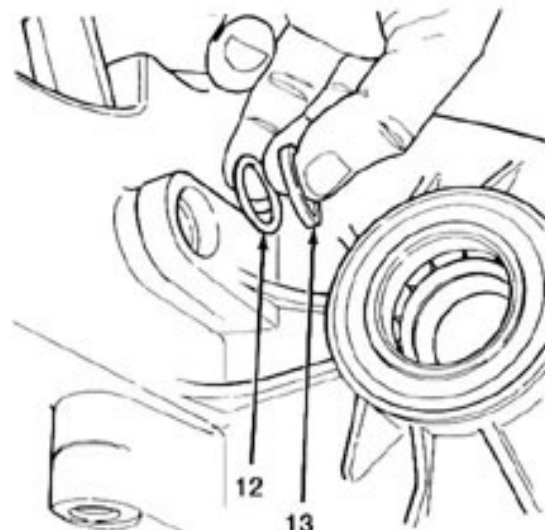
Apply a 3 mm (1/8 inch) wide bead of sealer to the seal surface of the front bearing retainer (11). Use Jeep Gasket-In-A-Tube sealer or an equivalent RTV-type sealer.

Install the front bearing retainer (11) on the front case. Tighten the retainer bolts to specified torque.



101707

Install a replacement sector shaft O-ring (12) and bushing (13) in the case bore.



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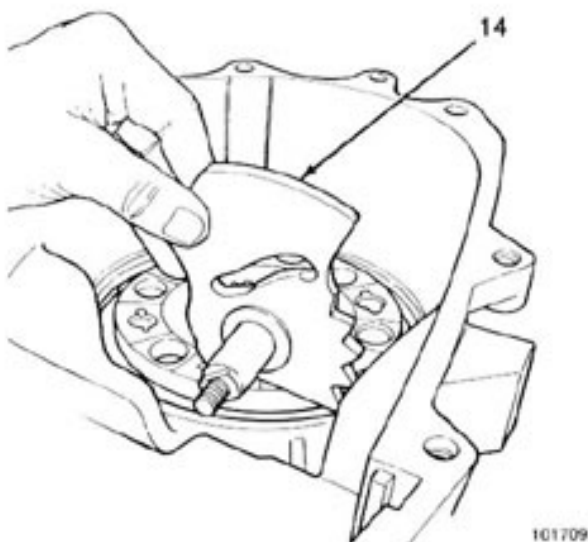
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## T.C. 231 TRANSFER CASE OVERHAUL

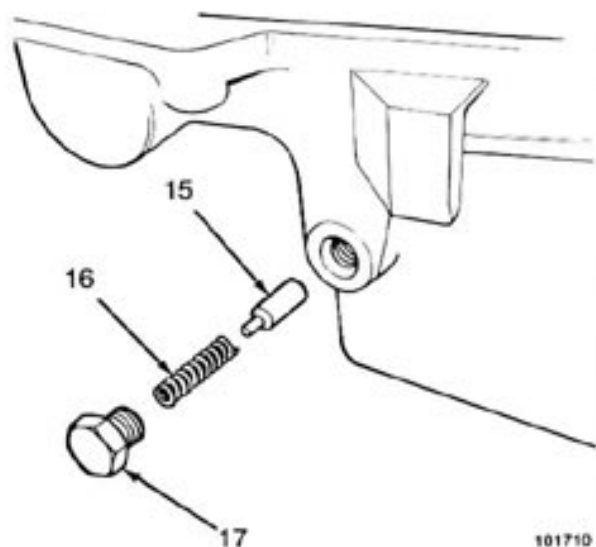


Install the range sector (14) in the case.

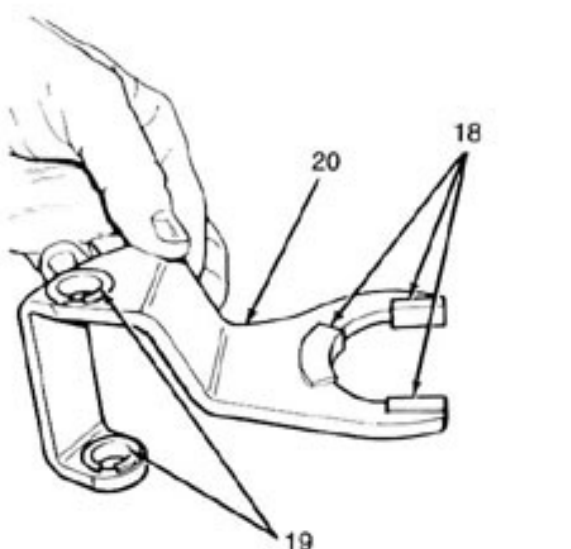


Install the range lever and lever attaching nut on the range sector shaft. Tighten the attaching nut to specified torque.

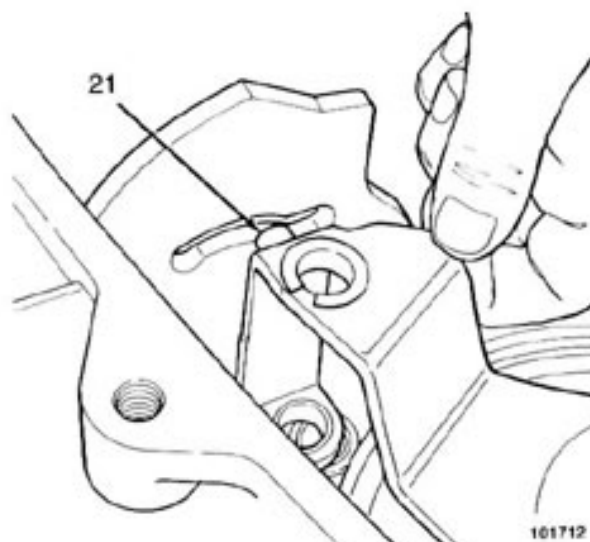
Install the detent (15), detent spring (16) and detent plug (17) in the case.



Install replacement pads (18) and shift rail bushings (19) in the range fork (20).



Assemble and install the range fork and shift hub. Be sure the range fork pin (21) is engaged in the sector slot.



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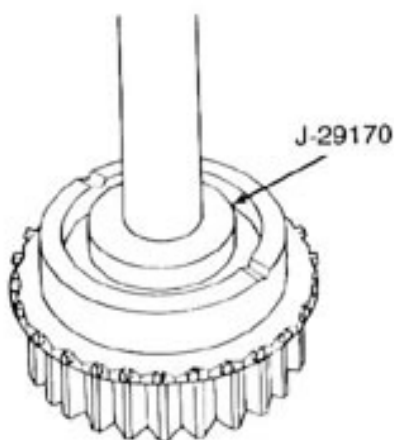


## T.C. 231 TRANSFER CASE OVERHAUL



Install replacement bearings in the drive sprocket (22) as follows:

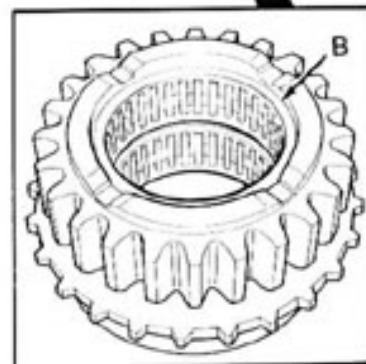
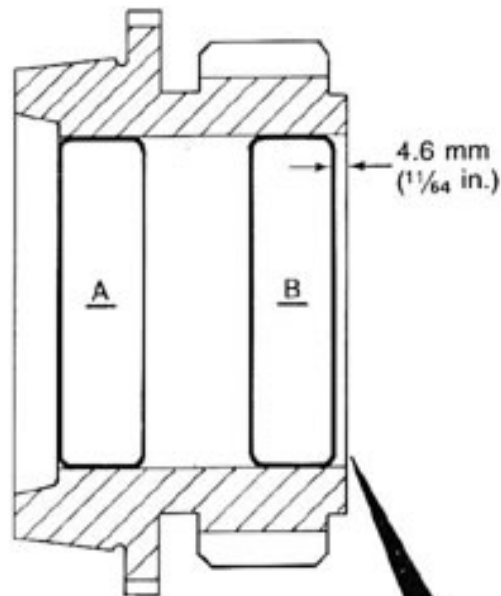
- Press both bearings out of the sprocket simultaneously with tool J-29170 and an arbor press.



84395A

- Install the replacement front bearing (A) with an arbor press and tool J-29170. Press the bearing in until flush with the edge of the bore as shown.
- Install the replacement rear bearing (B) with an arbor press and tool J-29170. Press the bearing in until it is 4.6 mm (11/64 inch) below the edge of the bore as shown.

**CAUTION:** Do not press the bearings any farther into the sprocket than specified. The bearings could block the mainshaft oil feed hole if pressed too deeply into the sprocket.



101713

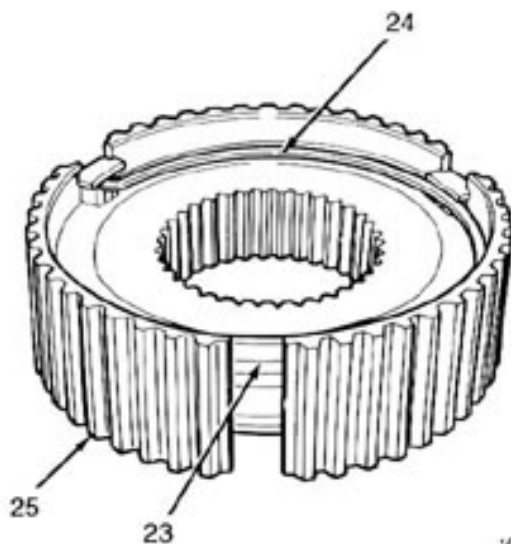
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## T.C. 231 TRANSFER CASE OVERHAUL



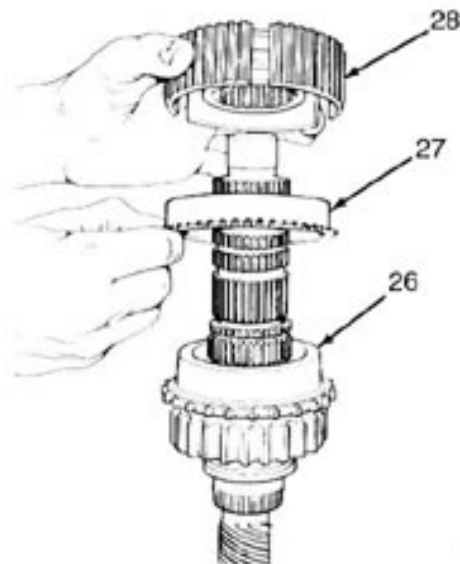
Install the struts (23) and spring (24) in the synchronizer hub (25).



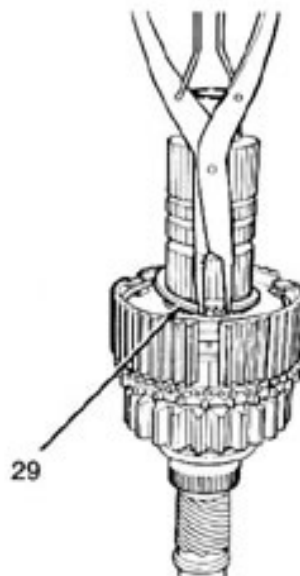
Lubricate the drive sprocket bearings and install the sprocket (26) on the mainshaft.

Install the synchronizer stop ring (27) on the mainshaft. Seat the ring on the drive sprocket.

Install the synchronizer hub (28) on the mainshaft. Align and seat the hub struts on the stop ring lugs.



Install a replacement synchronizer hub snap ring (29).



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## T.C. 231 TRANSFER CASE OVERHAUL



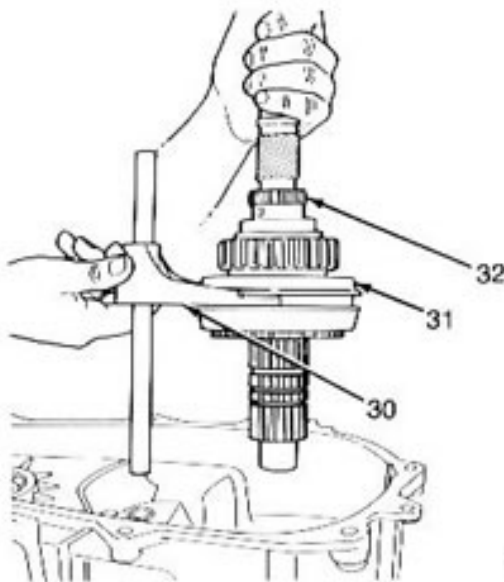
Install the synchronizer sleeve on the synchronizer hub. Be sure the sleeve is installed so the beveled spline ends face the stop ring.

Install replacement pads on the mode fork if necessary.

Engage the mode fork (30) in the synchronizer sleeve (31). Then install the fork and rail and the mainshaft assembly (32) in the case.

**NOTE:** Be sure the mode fork shift rail is seated in both of the range fork bushings.

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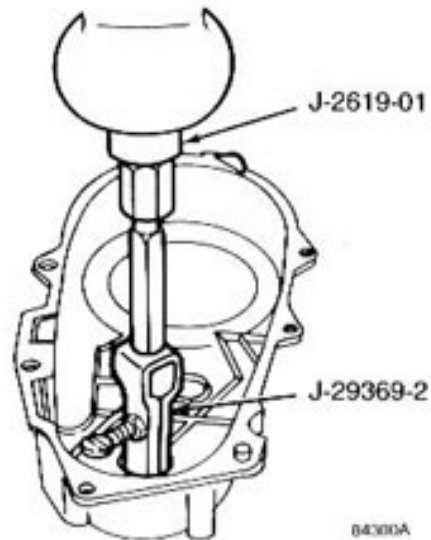
101717

Assemble and install the output shaft and drive chain. Lift the mainshaft slightly to ease chain and shaft installation.

Install the mode spring on the shift rail.

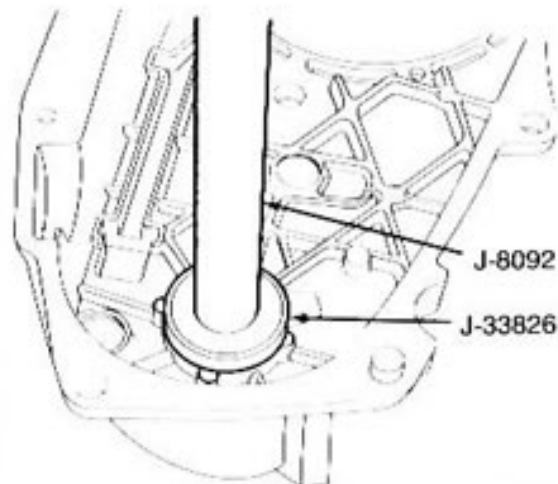
Replace the output shaft rear bearing as follows:

- Remove the bearing with puller J-29369-2 and slide hammer J-2619-01.



84300A

- Install the replacement bearing with tool J-33826 and driver handle J-8092. Lubricate the bearing after installation.



84399A

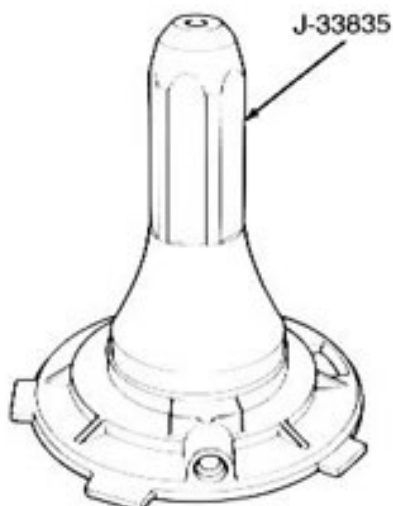




## T.C. 231 TRANSFER CASE OVERHAUL

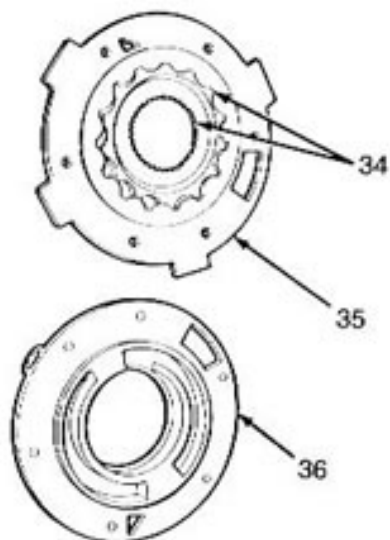


Install a replacement seal in the oil pump feed housing (33) with tool J-33835.

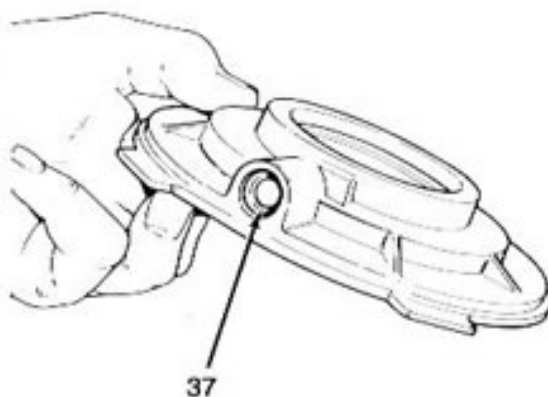


Assemble the oil pump.

- Lubricate and install the two gears (34) in the gear housing (35).
- Align and install the feed housing (36) on the gear housing.
- Install and tighten the pump screws to specified torque.



Install a replacement pickup tube O-ring (37) in the oil pump.



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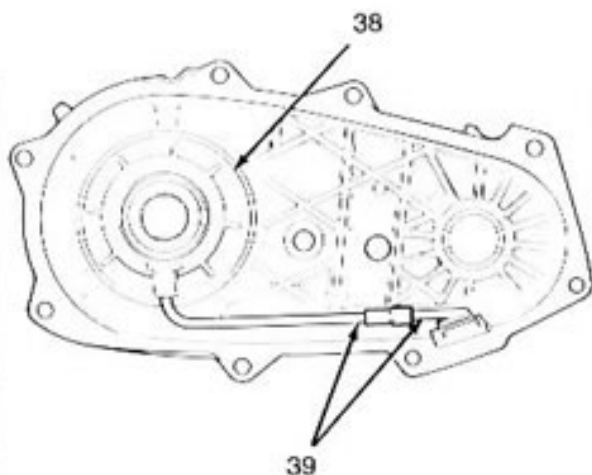


## T.C. 231 TRANSFER CASE OVERHAUL



Insert the oil pickup tube in the oil pump. Then attach the screen and connecting hose to the pickup tube.

Install the assembled oil pump (38), pickup tube and screen (39) in the rear case. Be sure the screen is seated in the case slot as shown.



101721

Install the magnet in the front case.

Apply a 3 mm (1/8 inch) wide bead of sealer to the seal surface of the front case. Use Jeep Gasket-In-A-Tube sealer or an equivalent RTV-type sealer.

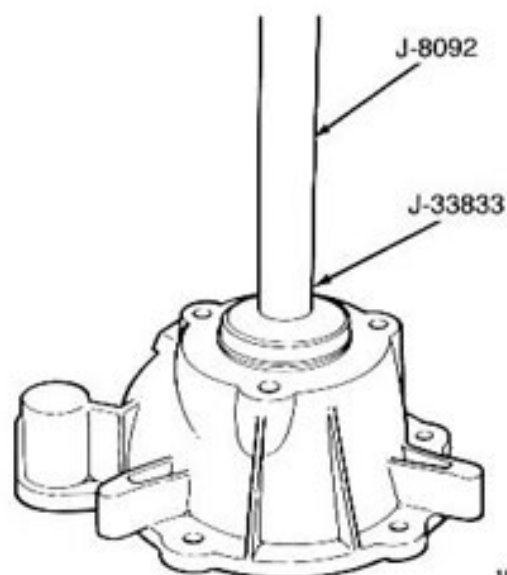
Align and install the rear case on the front case. Be sure the case locating dowels are in place and that the mainshaft splines are engaged in the oil pump inner gear.

Install and tighten the front case-to-rear case attaching bolts to specified torque.

**NOTE:** Be sure to install a washer under each of the bolts used at the case dowel locations.

Replace the rear bearing as follows:

- Tap the original bearing out of the rear retainer with a hammer and brass drift.
- Install the replacement bearing in the retainer with tool J-33833 and driver handle J-8092.



101722

Apply a 3 mm (1/8 inch) wide bead of sealer to the seal surface of the rear retainer. Use Jeep Gasket-In-A-Tube sealer or an equivalent RTV-type sealer.

Install the locating dowel in the rear retainer if removed and install the rear retainer on the case. Tighten the retainer bolts to specified torque.

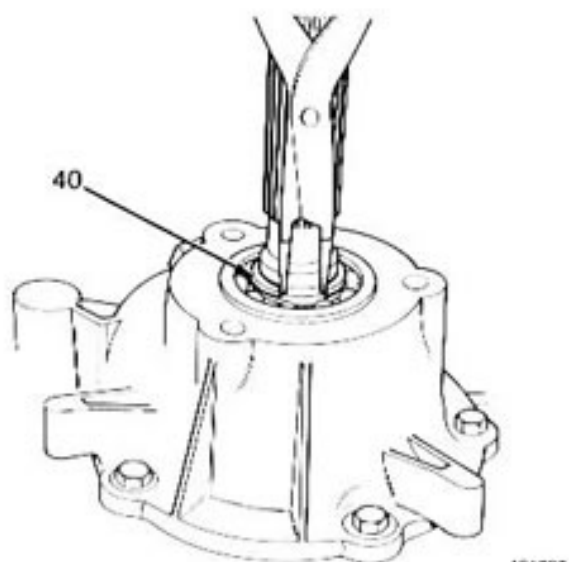
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## T.C. 231 TRANSFER CASE OVERHAUL



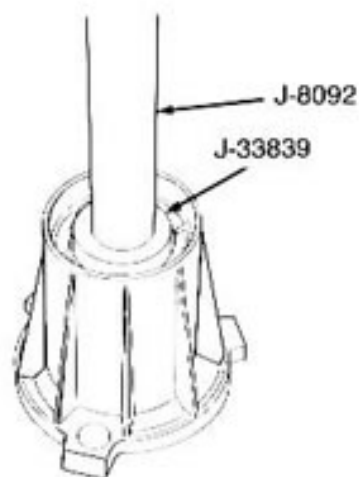
Install a replacement rear retainer snap ring (40). Lift the mainshaft slightly to seat the snap ring in the shaft groove.



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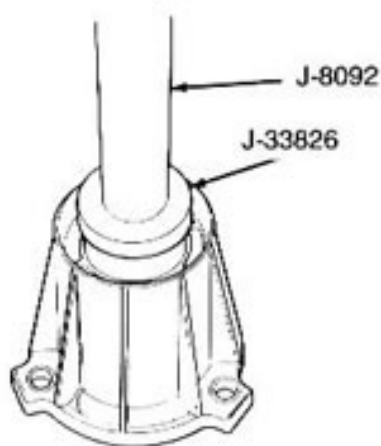
Replace the extension housing bushing as follows:

- Remove the rear extension housing seal if not removed previously.
- Remove the bushing with driver handle J-8092 and tool J-33839.



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- Install the replacement bushing with driver handle J-8092 and tool J-33826. The bushing is fully seated when the installer tool contacts the housing.



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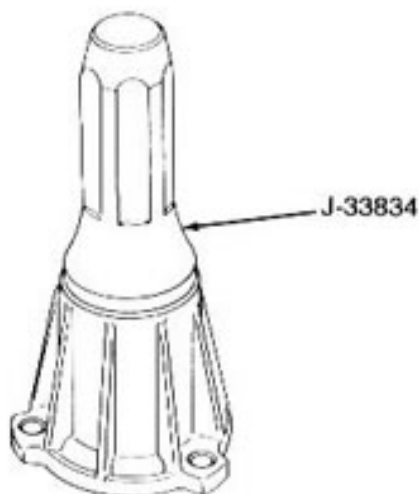
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## T.C. 231 TRANSFER CASE OVERHAUL



- Install a replacement seal in the extension housing with tool J-33834.



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Apply a 3 mm (1/8 inch) wide bead of sealer to the seal surface of the extension housing. Use Jeep Gasket-In-A-Tube or an equivalent RTV-type sealer.

Install the extension housing on the case. Tighten the housing bolts to specified torque.

Install the front yoke. Secure the yoke with a replacement seal washer and nut. Tighten the nut to specified torque.

Install a replacement gasket on the vacuum switch and install the switch in the case.

Install and tighten the drain plug to specified torque.

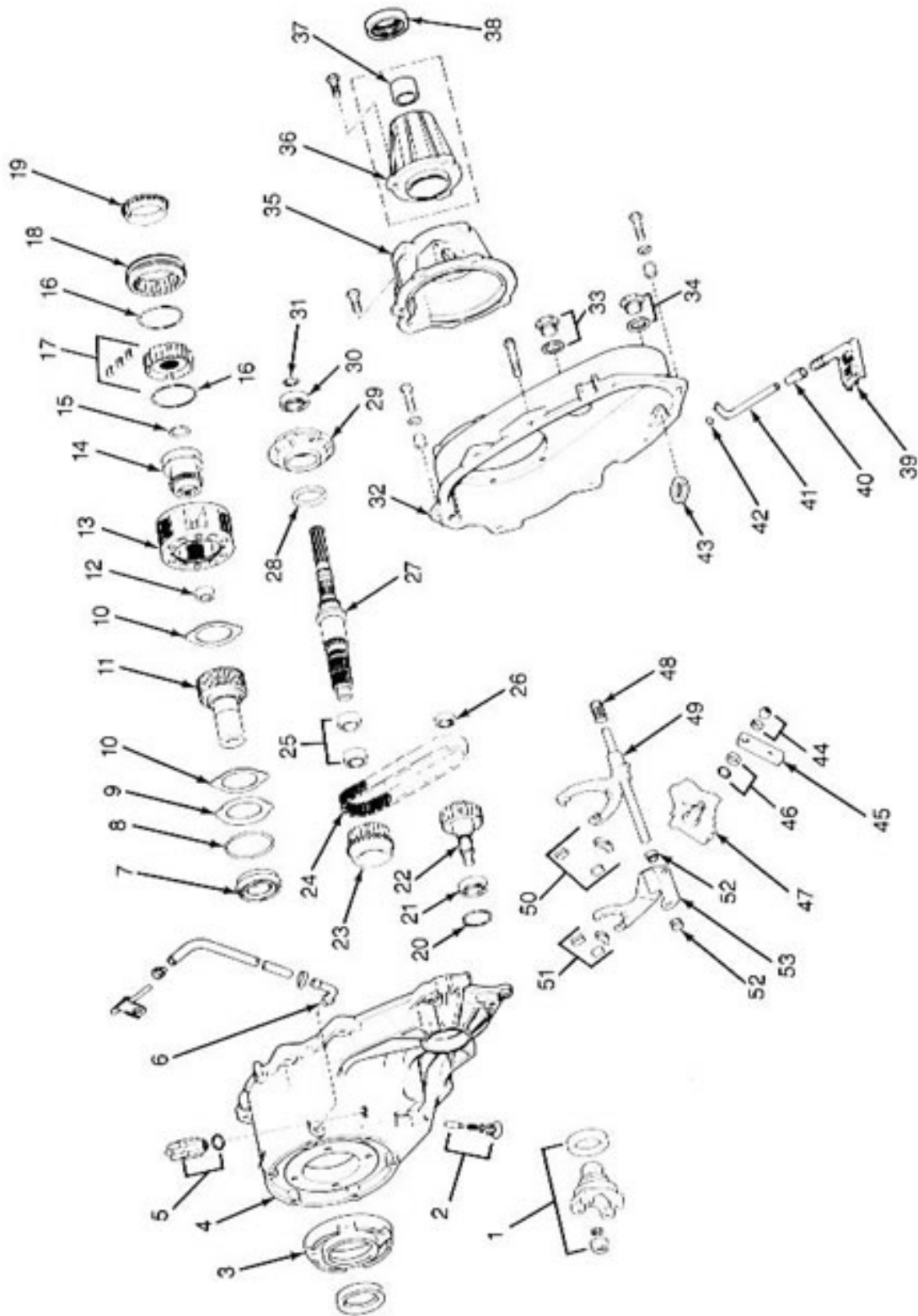
Fill the transfer case with the required amount of Jeep automatic transmission fluid, or an equivalent Dexron® II fluid, after installation.

Install and tighten the fill plug to specified torque.



# T.C. 231 TRANSFER CASE

## TRANSFER CASE COMPONENTS



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## T.C. 231 TRANSFER CASE

### TRANSFER CASE COMPONENTS



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| 1 - Front yoke nut, seal washer,<br>yoke and oil seal | 27 - Mainshaft                  |
| 2 - Shift detent plug, spring and pin                 | 28 - Oil seal                   |
| 3 - Front retainer and seal                           | 29 - Oil pump assembly          |
| 4 - Front case  | 30 - Rear bearing               |
| 5 - Vacuum switch and seal                            | 31 - Snap ring                  |
| 6 - Vent assembly                                     | 32 - Rear case                  |
| 7 - Input gear bearing and snap ring                  | 33 - Fill plug and gasket       |
| 8 - Low range gear snap ring                          | 34 - Drain plug and gasket      |
| 9 - Input gear retainer                               | 35 - Rear retainer              |
| 10 - Low range gear thrust washers                    | 36 - Extension housing          |
| 11 - Input gear                                       | 37 - Bushing                    |
| 12 - Input gear pilot bearing                         | 38 - Oil seal                   |
| 13 - Low range gear                                   | 39 - Oil pickup screen          |
| 14 - Range fork shift hub                             | 40 - Tube connector             |
| 15 - Synchronizer hub snap ring                       | 41 - Oil pickup tube            |
| 16 - Synchronizer hub springs                         | 42 - Pickup tube O-ring         |
| 17 - Synchronizer hub and inserts                     | 43 - Magnet                     |
| 18 - Synchronizer sleeve                              | 44 - Range lever nut and washer |
| 19 - Synchronizer stop ring                           | 45 - Range lever                |
| 20 - Snap ring  | 46 - O-ring and seal            |
| 21 - Output shaft front bearing                       | 47 - Sector                     |
| 22 - Output shaft (front)                             | 48 - Mode spring                |
| 23 - Drive sprocket                                   | 49 - Mode fork                  |
| 24 - Drive chain                                      | 50 - Mode fork inserts          |
| 25 - Drive sprocket bearings                          | 51 - Range fork inserts         |
| 26 - Output shaft rear bearing                        | 52 - Range fork bushings        |
|   | 53 - Range fork                 |