

**21 - Transmission and Transfer Case/Transfer Case, MP1622C/Disassembly and Assembly**


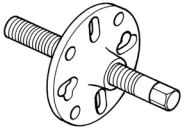
**4:1 ROCK-TRAC**

**Labor Operations:** Click to hide the list of LOPs associated with this procedure

Primary LOP	Related LOP	Description	Skill Level	Skill Category
21020102	-	Transfer Case assembly	2 - Skilled	3
	13300460	Skid plate 3.0L Diesel Equipped	0 - Low Skilled	1A
	21020167	Transfer Case MGU equipped	-	-
21030111	-	T-case remove and install for repair-	2 - Skilled	3
	13300460	Skid plate 3.0L Diesel Equipped	0 - Low Skilled	1A
	21030165	T-case remove and install for repair- MGU equipped	-	-
	21030350	Input Seal-Replace (2 - Skilled)	2 - Skilled	3
	21030351	Input Seal-Replace Output Shaft Seal-Replace (2 - Skilled)	2 - Skilled	3
21030416	-	Transfer Case - remove and install for recondition - Remove and Install for Recondition	2 - Skilled	3
	21030350	Input Seal-Replace (2 - Skilled)	2 - Skilled	3
	21380258	Transfer Case Group A - Seal, pump, coupling, rear bearing, rear case, retainer, extension (2 - Skilled)	2 - Skilled	3
	21380358	Transfer Case Group B - Includes Group A, front output, chain, mainshaft, shifting components, selector plate. (2 - Skilled)	2 - Skilled	3
	21380458	Transfer Case Group C - Includes A and B, low range planetary, input gear, front bearing, front case.(2 - Skilled)	2 - Skilled	3

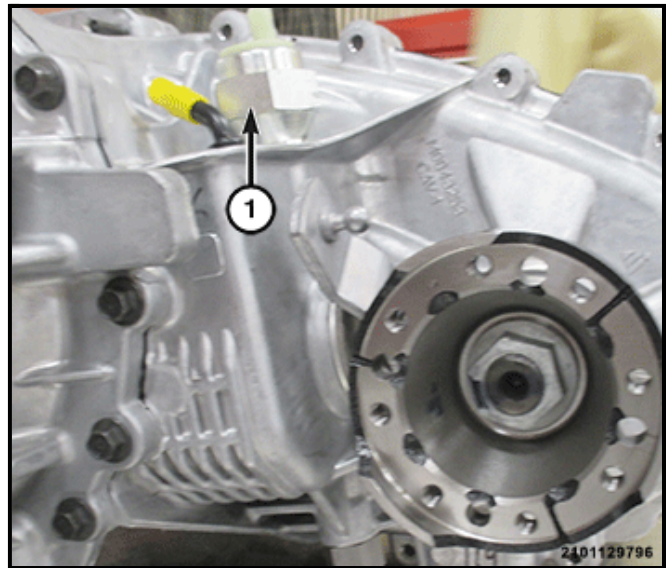
**Special Tools:** Click to hide the list of tools used in this procedure

[Click here to launch the form to order any tools you need.](#)

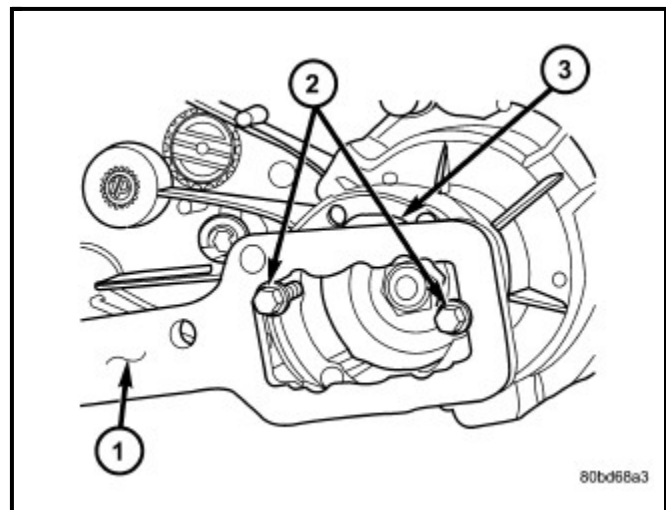
	<p style="text-align: center;"><b>C-3281 - Holder, Flange</b></p> <p style="text-align: center;">Originally Shipped In Kit Number(s) 9202, 9202A-CAN, 9202CC, 9299, 9299CC, 9299CC, 9300A-CAN.</p>
	<p style="text-align: center;"><b>C-452 - Puller, Companion Flange</b></p>

**DISASSEMBLY**

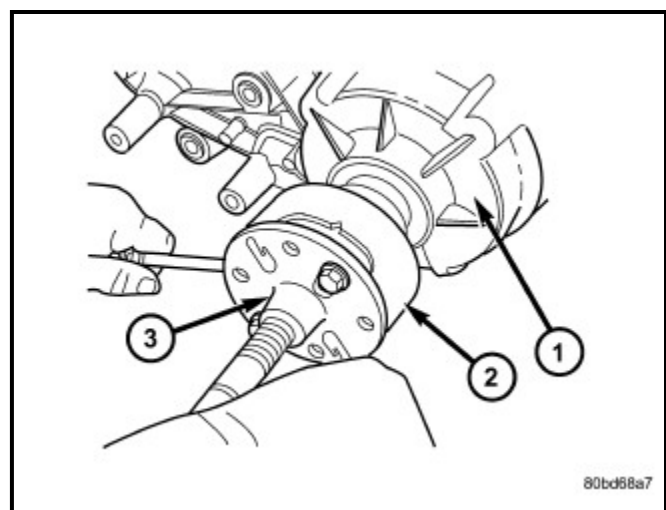
1. Remove the transfer case position sensor (1).



2. Install two bolts (2) partially in the propeller shaft companion flange (3), 180° from each other.
3. Install the rectangular end of the C-3281 (1) over the bolts to hold the companion flange stationary and remove the nut holding the companion flange to the output shaft.



4. Using the C-452 (3) remove the companion flange (2) from the assembly (1).



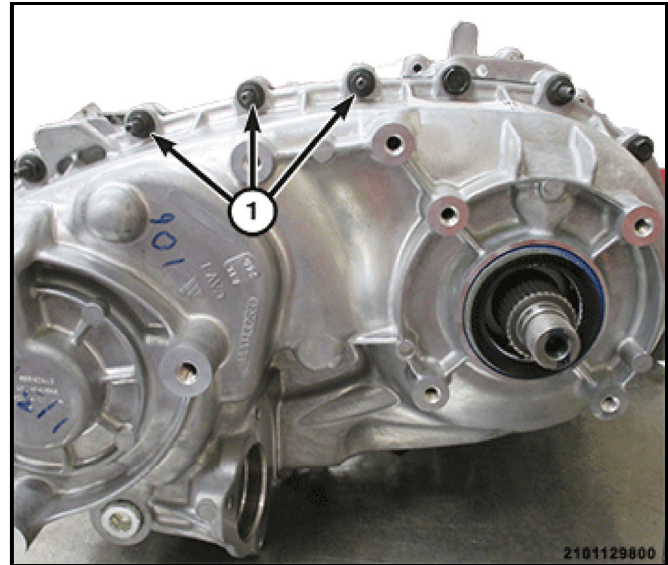
5. Using the same procedure as the companion flange, remove the main shaft output flange.

6. Remove the range lever to selector shaft bolt.

**NOTE:**

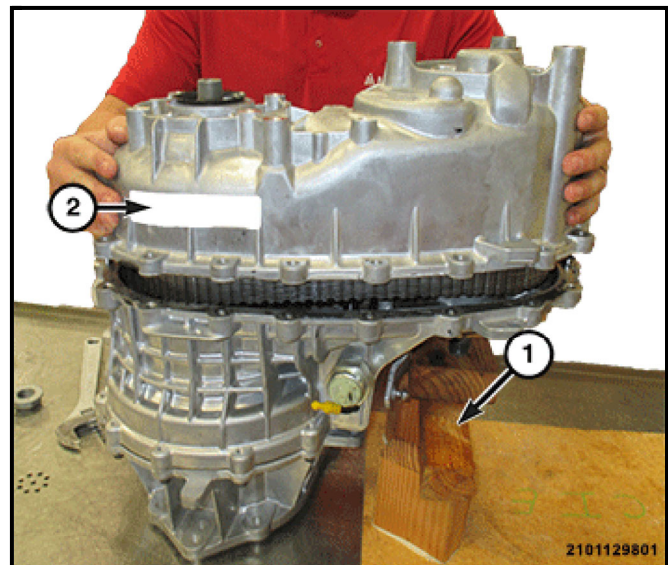
Be sure to note the orientation of the range lever (lever up or down) so that it may be re-installed in the same direction.

7. Remove the transfer case bolts (1).

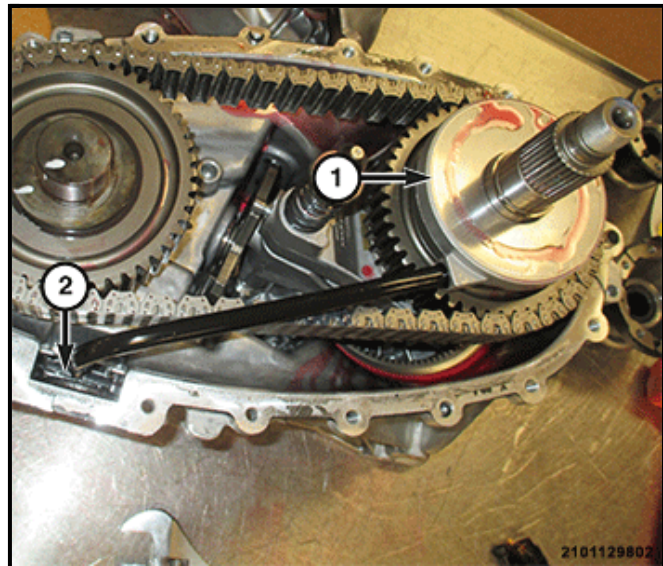


8. Using an acceptable pry tool inserted in the slot at each end of the transfer case, loosen the transfer case halves to break the sealer bead.

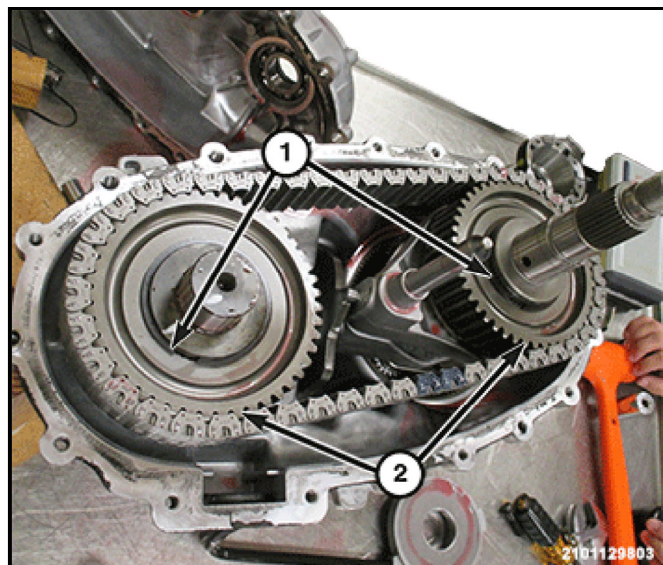
9. Remove the case by disengaging the rear of the case (2) from the alignment dowels.



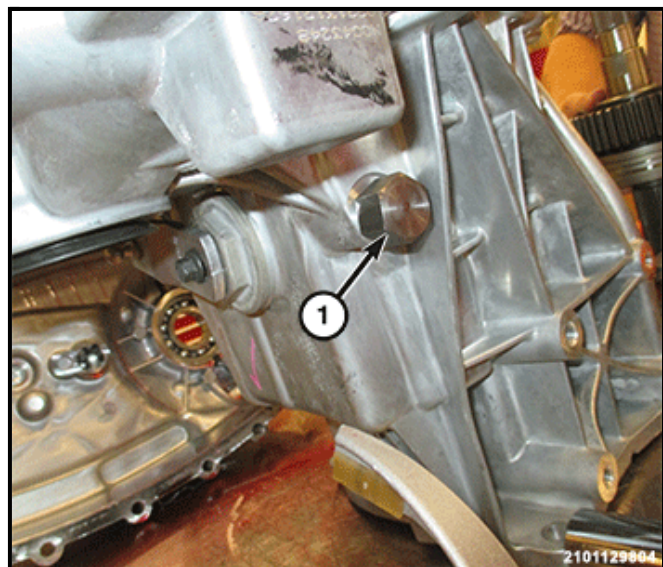
10. Remove the oil pump (1) and the oil pump pick-up tube (2).



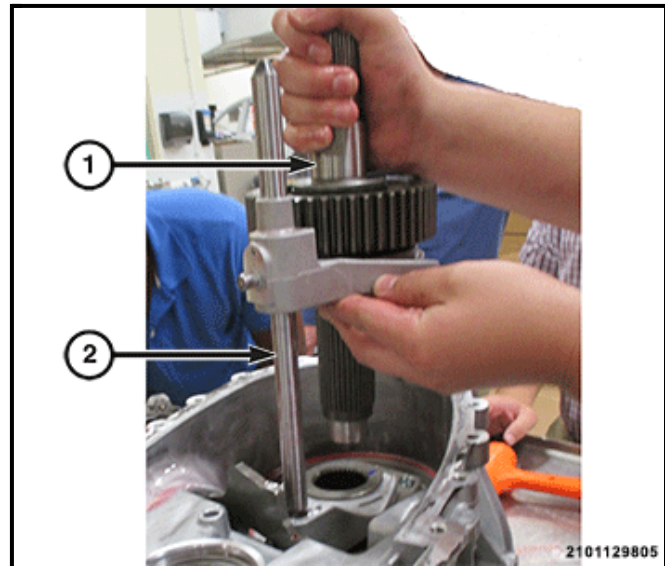
11. Remove and **DISCARD** the snap-rings (1) from each sprocket (2) and remove the chain and sprockets (2) by lifting both sprockets off of the shafts equally.



12. Remove the detent plug (1) with spring and plunger.

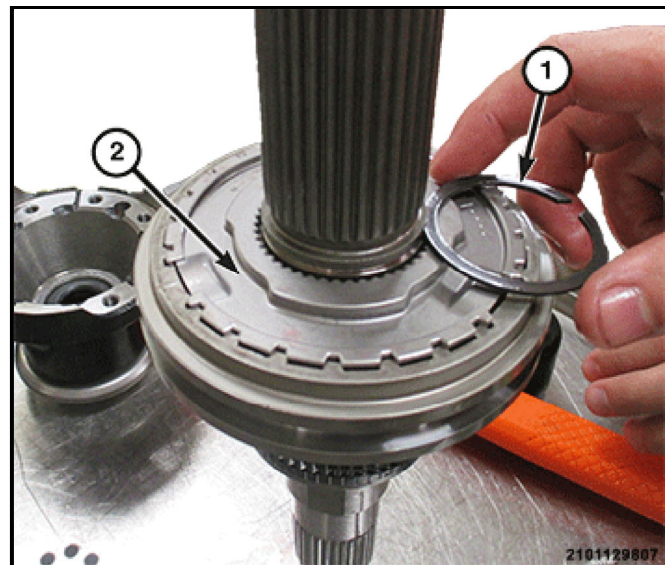


13. Remove the mainshaft (1) and the shift fork and rail (2) from the transfer case.

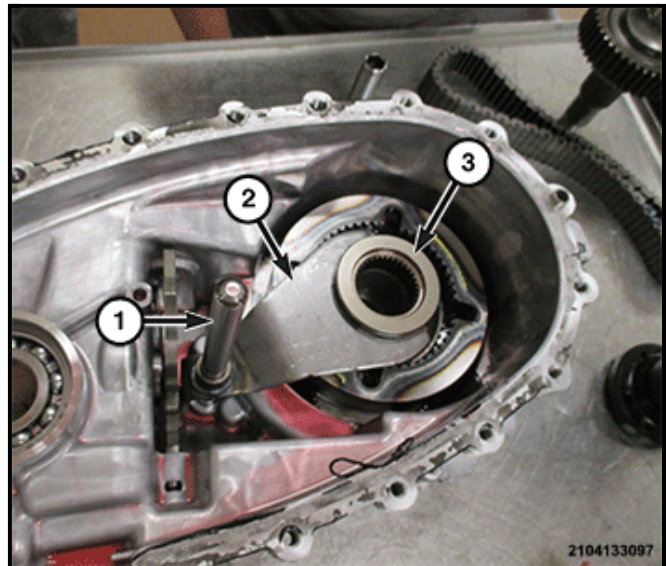


14. Remove the output shaft.
15. Remove and **DISCARD** the snap ring (1) and remove the synchronizer (2) from the mainshaft.

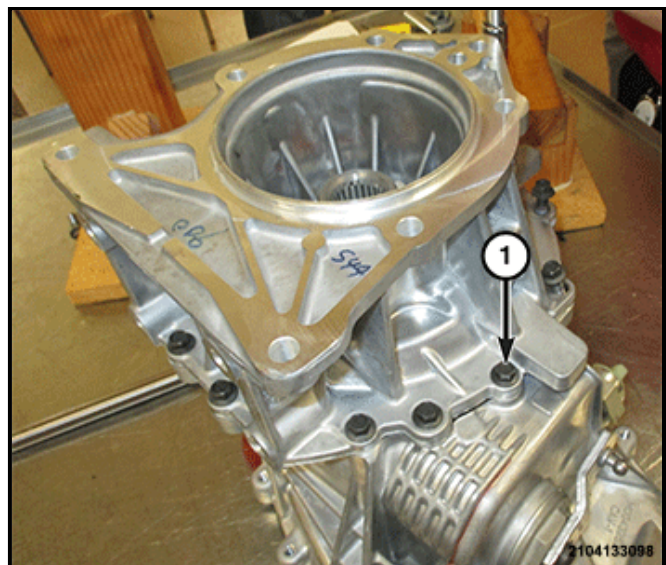
**NOTE:** Grasp the synchronizer at both the top and bottom when installing or removing the synchronizer. Failure to hold the synchronizer together may allow the outer ring of the synchronizer to drop, allowing the small springs, ball bearings, and slides to fall out and scatter.



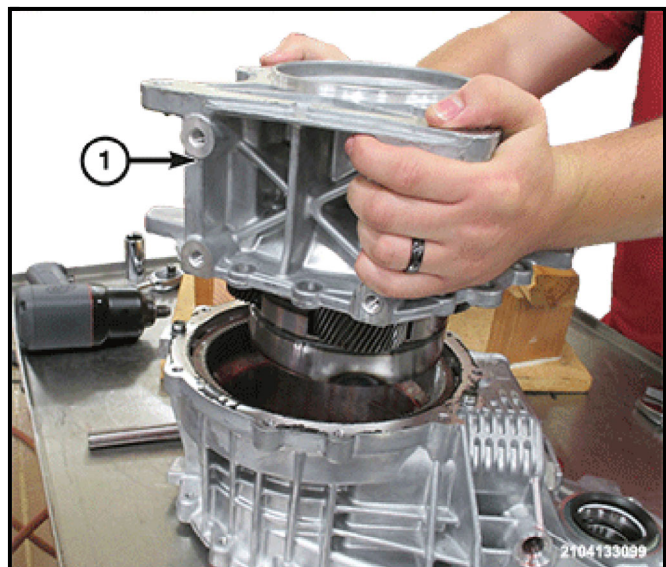
16. Remove the shift rail (1), range fork (2) and the input gear (3).



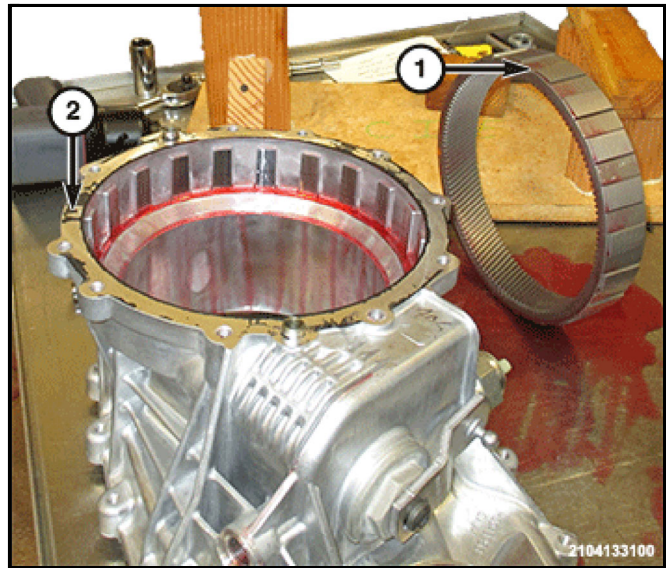
17. Remove the extension housing bolts (1).



18. Remove the extension housing (1) from the case.



19. Remove the annulus ring gear (1) from the case (2).

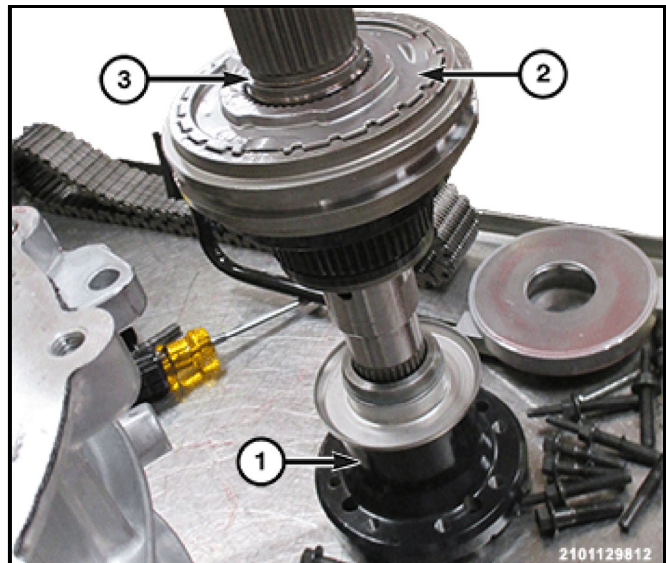


20. Clean the case halves.

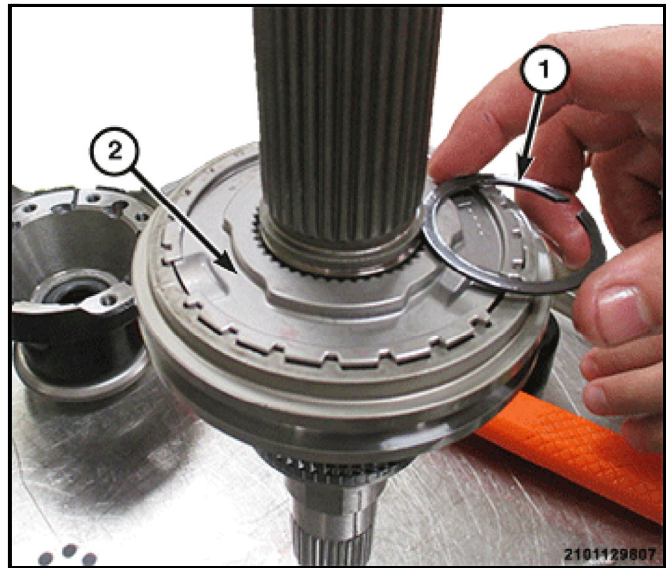
## ASSEMBLY

1. Clean both case halves and mating surfaces using brake cleaner or similar. Make sure all of the old sealer is removed and the surface is free of any oils or debris.
2. Replace any bearings in the case halves that are spalled, damaged, or have been subjected to highly contaminated fluid (metal contamination from catastrophic failure).

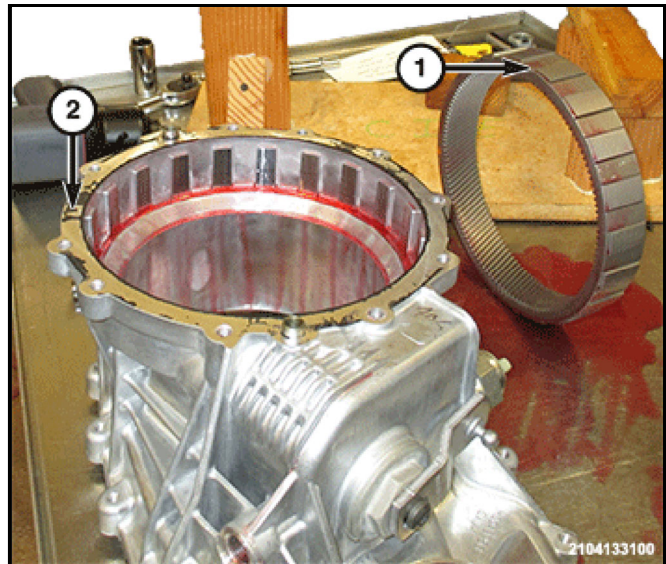
3. Using the output flange (1) as a stand, install the synchronizer (2) onto the mainshaft (3).



4. Install the **NEW** snap ring (1) for the synchronizer (2) onto the main shaft.

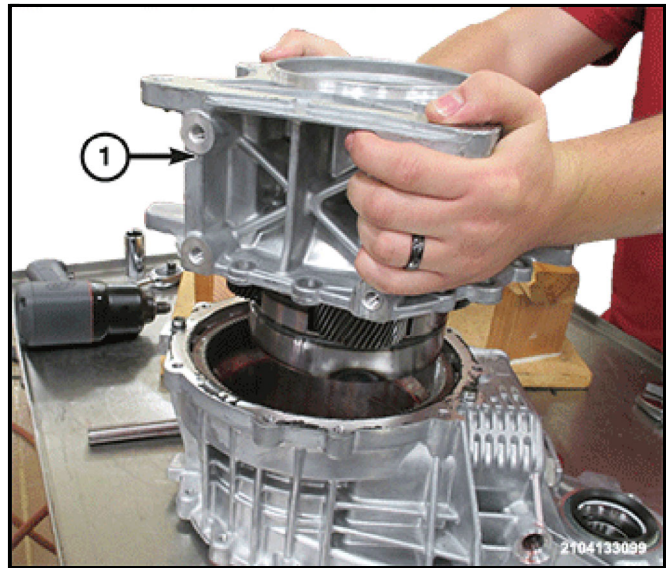


5. Install the annulus ring gear (1) into the case (2).

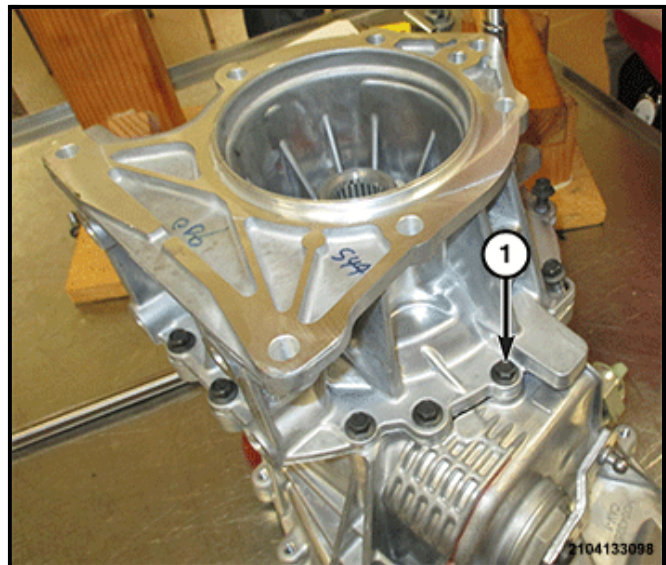


6. Clean the extension housing mating surfaces with brake cleaner or equivalent and wipe with a lint free shop cloth.
7. Place a 1/4" bead of Mopar® RTV sealant around the extension housing.

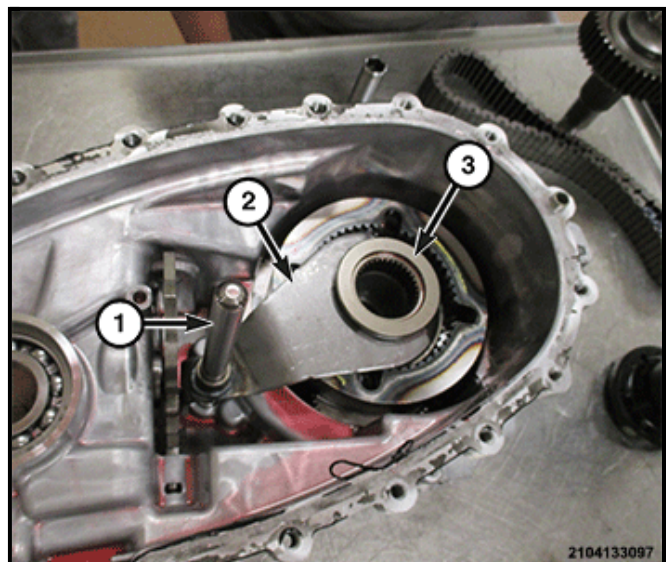
8. Install the extension housing (1) into the case.



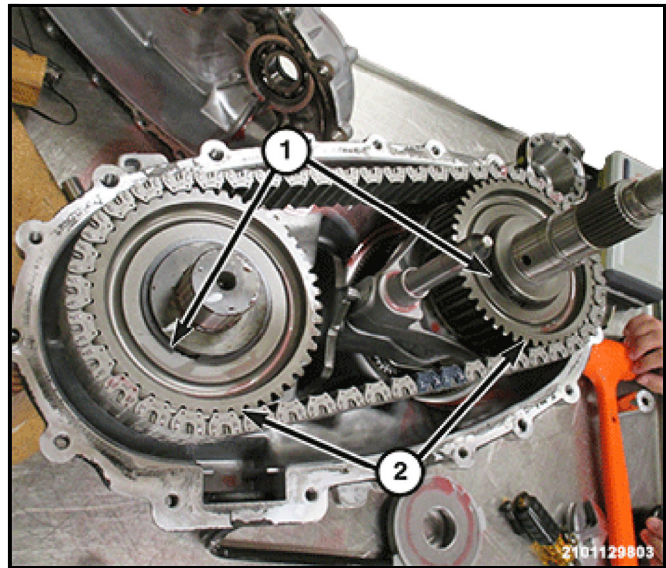
9. Install the extension housing bolts (1) in a crisscross pattern to the proper (Torque Specifications) .



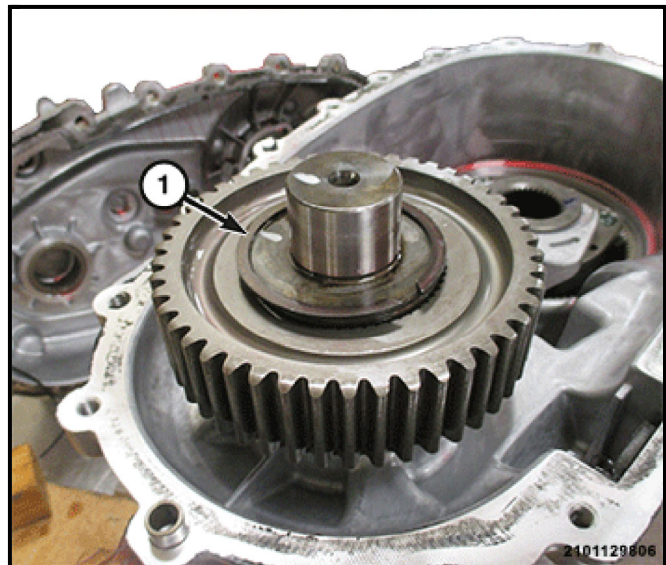
10. Install the range fork (2), shift rail (1) and the input gear (3) into the case.



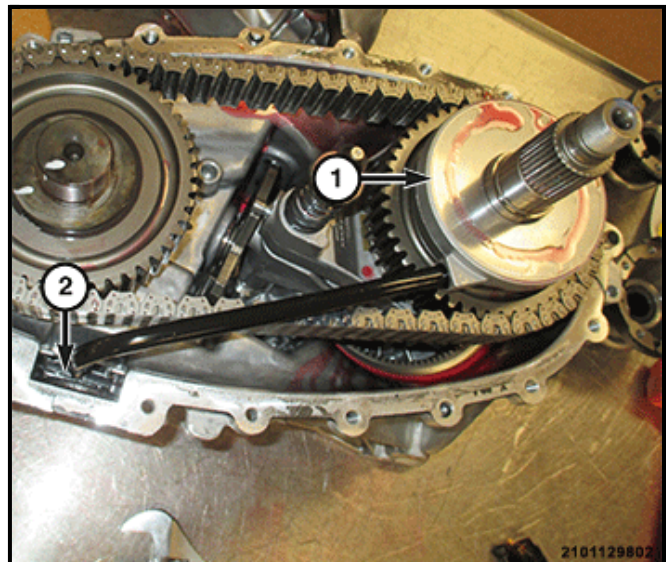
11. Install the output shaft into the case and install the chain and sprockets (2) with the blue link facing upward.



12. Install the snap rings (1) on both sprockets. If the snap rings are over extended or loose, replace them with **NEW** snap rings.

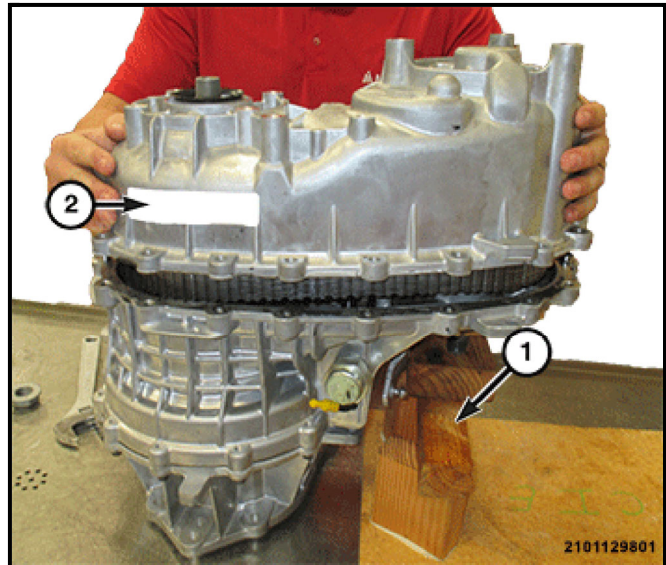


13. Install the oil pump (1) and pick up tube (2). Verify the pick up tube (2) is seated in the slot in the case half.

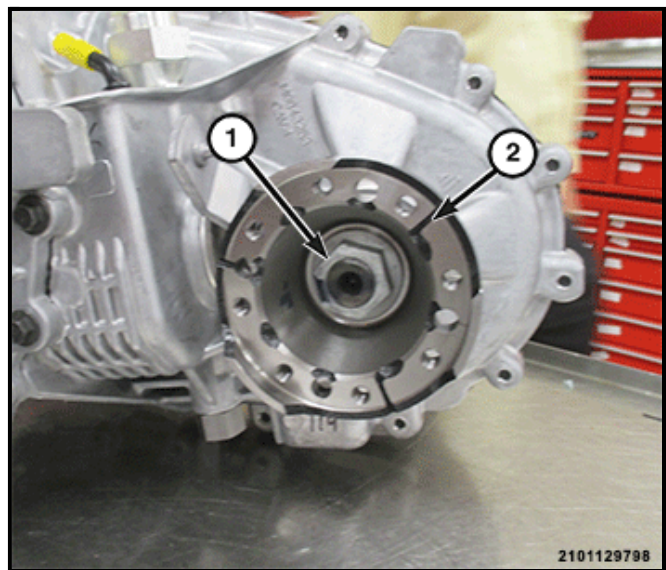


14. Wipe the case half mating surfaces and place a 1/4" bead of Mopar® sealer on one case half.

15. Install the case halves together, ensuring they are fully seated. Tighten the bolts in a criss-cross pattern to the proper (Torque Specifications) .



16. Install the front and rear output flanges (2) and the flange nuts (1). Tighten the nuts to the proper (Torque Specifications) .



17. Install the transfer case position sensor and tighten to the proper (Torque Specifications) .

**NOTE:** Inspect the transfer case position sensor O-ring for damage before installing the transfer case position sensor.

18. Install the transfer case (Refer to 21 - Transmission and Transfer Case/Transfer Case/Removal and Installation) .

