

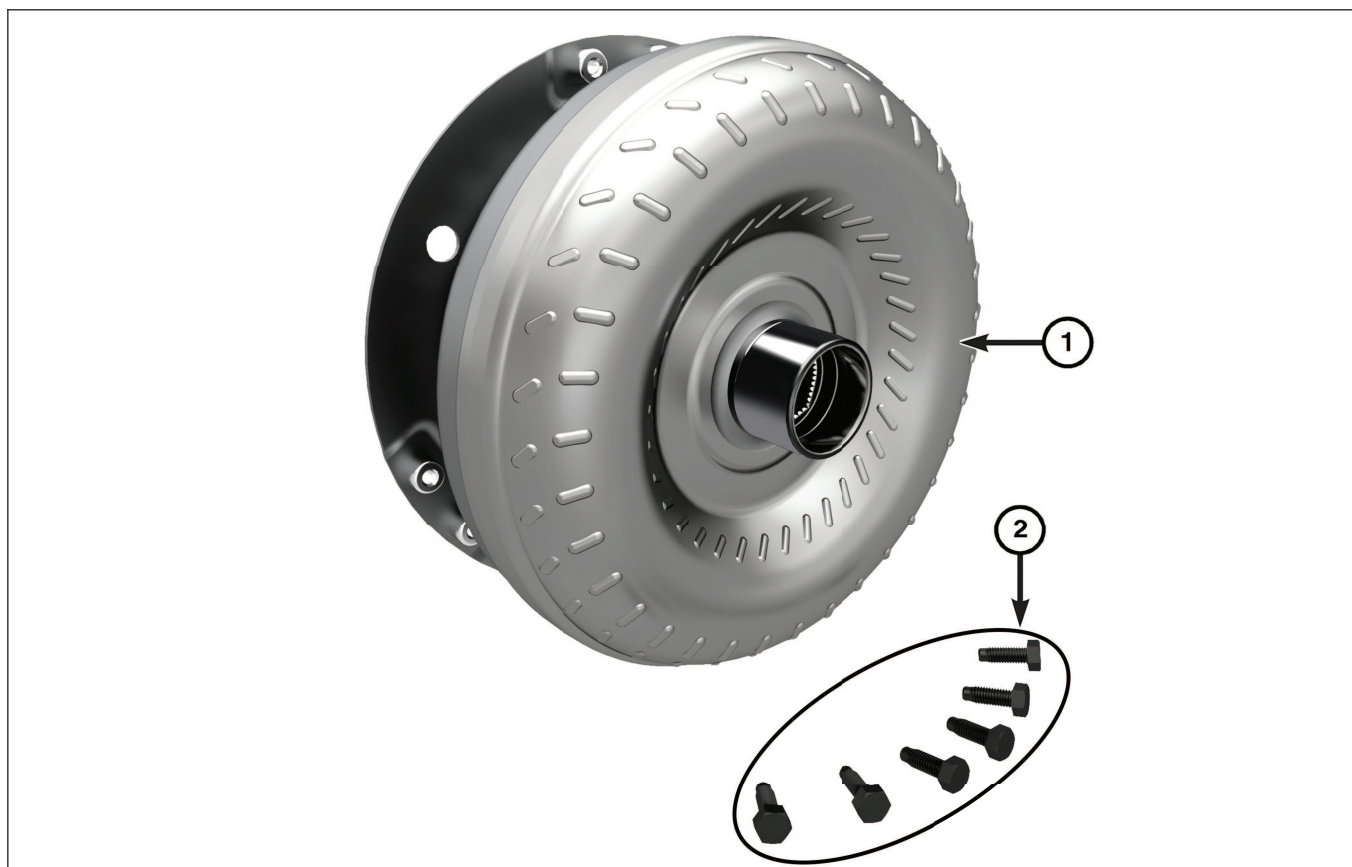


Direct Connection Performance Part

REDEYE TORQUE CONVERTER

PART NUMBER: 77072542AB

2015+ HELLCAT (6.2L w/ 8HP90)



Item	Description	Part Number	Quantity
1	8HP90 151K Torque Converter	RL378429AB	1
2	Bolt M8x1.25x23.00	06509361AA	6

Description	Capacities	Type
8HP90 Transmission Fluid - Overhaul Fill	9.17 Quarts / 8.68 Liters	MOPAR ZF 8&9 Speed ATF Automatic Transmission Fluid, or equivalent.

PLEASE READ ALL INSTRUCTION PRIOR TO INSTALLATION.
FOR ASSISTANCE CONTACT DIRECT CONNECTION TECH HOTLINE 1-800-998-1110

TORQUE CONVERTER REMOVAL

1. Remove the transmission from the vehicle.
2. Place a suitable drain pan under the torque converter housing end of the transmission.

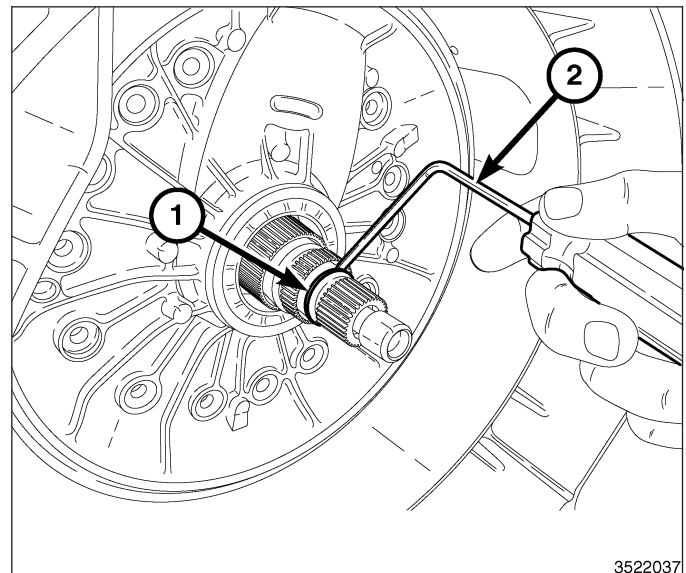
CAUTION! Verify that transmission is secure on the lifting device or work surface. The center of gravity of the transmission will shift when the torque converter is removed, creating an unstable condition. The torque converter is a heavy unit. Use caution when separating the torque converter from the transmission.

3. Pull the torque converter forward until the center hub clears the oil pump seal.
4. Separate the torque converter from the transmission.

TORQUE CONVERTER INSTALLATION

NOTE: Check the torque converter hub for sharp edges, burrs, scratches, or nicks. Polish the hub with 320/400 grit paper or crocus cloth if necessary. The hub must be smooth to avoid damaging the pump seal at installation.

1. Lubricate the oil pump seal lip with transmission fluid.
2. Check the input shaft O-ring (1) for any damage. Replace if necessary using an appropriate O-ring service tool (2).



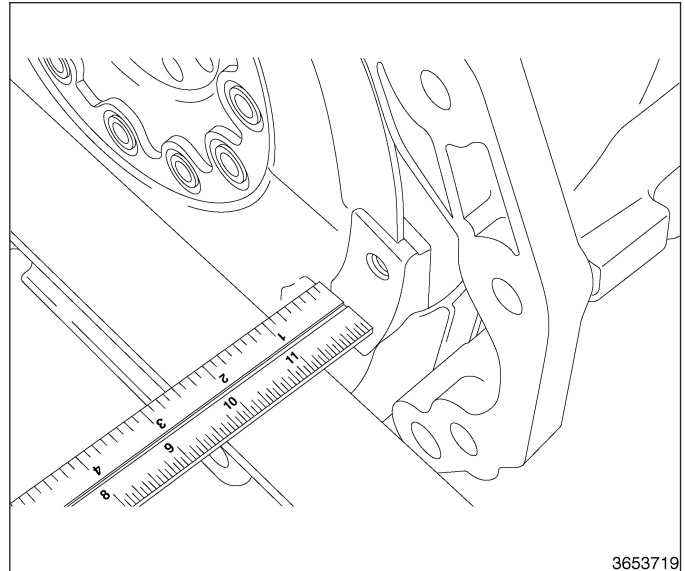
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3. Place the torque converter in position on the transmission.

CAUTION! Do not damage oil pump seal or converter hub while inserting torque converter into the front of the transmission.

4. Align the torque converter to the oil pump seal opening.
5. Insert the torque converter hub into the oil pump drive gear.
6. While pushing the torque converter inward, rotate the torque converter until the torque converter is fully seated into the oil pump drive gear.

7. Check the torque converter seating with a scale and straightedge. The surface of the torque converter lugs should be at least 19 mm (3/4 in.) to the rear of the straightedge when the torque converter is fully seated.



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8. If necessary, temporarily secure the torque converter with a C-clamp attached to the torque converter housing.

TRANSMISSION INSTALLATION

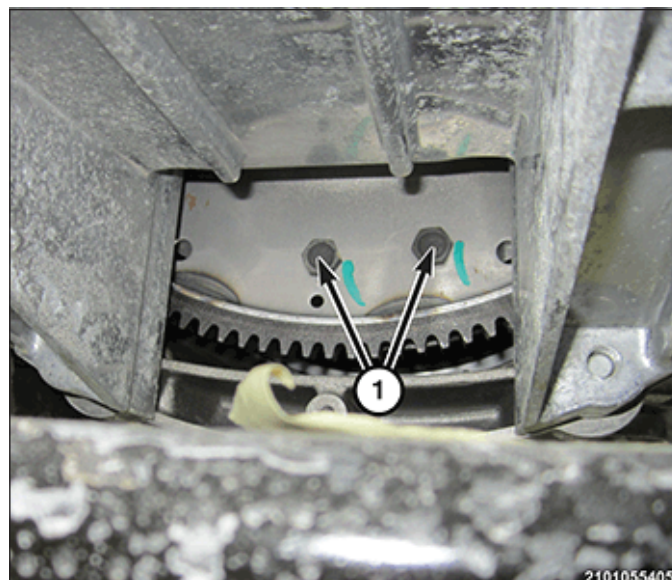
CAUTION! When supporting or lifting the transmission at the oil pan the weight of the transmission must be distributed evenly on the lifting fixture. Failure to do so could damage the oil pan and transmission.

NOTE: Make sure that the transmission dowel pins are seated in engine block and protrude far enough to hold transmission in alignment.

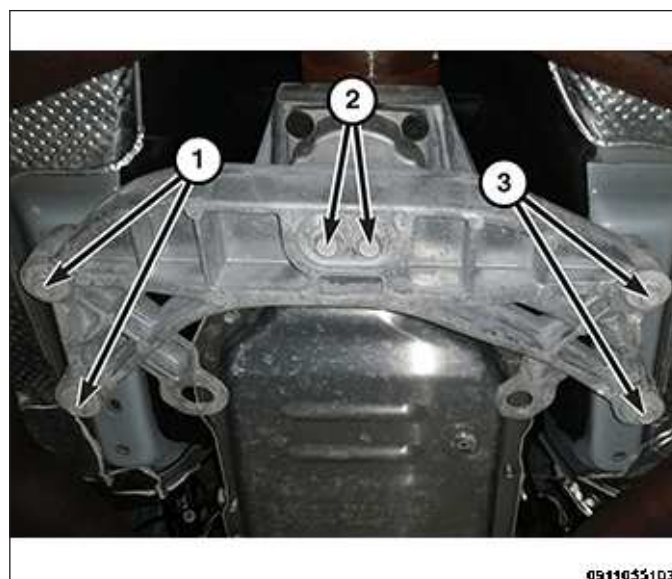
NOTE: Hold torque converter in place during transmission installation.

1. Position the transmission in the vehicle.
2. Install the transmission to engine stubbolts and transmission to engine bolts.
3. Torque all the transmission to engine bolts to **45 N·m (33 Ft. Lbs.)**.
4. Install the LH and RH wiring harness brackets.
5. Rotate crankshaft in clockwise direction to line up the alignment hole (1) in the flex plate, then start the first torque converter bolt.

6. Rotate the crankshaft clockwise until the torque converter bolts (1) are accessible. There are three sets of two bolts 120° apart. Install the remaining torque converter bolts and torque to **37 N·m (27 Ft. Lbs.)**.



7. Position the crossmember in place and install the crossmember bolts (1 and 3) and torque to **68 N·m (50 Ft. Lbs.)**.
8. Install the rear support isolator bolts (2) and torque to **61 N·m (45 Ft. Lbs.)**.



9. Remove the transmission jack.
10. Connect transmission fluid cooler lines to the transmission fittings and install the clips.
11. Connect the wiring harness push pins to the transmission.
12. Connect the transmission wire harness connector to the transmission.
13. Turn the locking mechanism lock of the transmission wire harness connector clockwise to secure.
14. Position the Manual Park Release (MPR) cable bracket/cable, install the bolts and torque to **20 N·m (15 Ft. Lbs.)**.
15. Install the MPR cable on the MPR lever.
16. Install the starter. Torque starter B+ nut to **11 N·m (97 In. Lbs.)** and the starter mounting bolts to **54 N·m (40 Ft. Lbs.)**.

NOTE: It is recommended the driveshaft bolts be replaced with NEW. If NEW bolts are not available clean the old bolts and apply Mopar® Lock and Seal Adhesive or equivalent.

17. Install the drive shaft. Install the **NEW** drive shaft washers and bolts and torque in a star pattern to 66 N·m (51 Ft. Lbs.).
18. Connect the negative battery cable and tighten nut to **11 N·m (97 In. Lbs.)**.
19. Verify the transmission fluid level. To properly check and fill the transmission, perform the following procedure:

WARNING! There is a risk of accident from vehicle moving when the engine is running. Secure vehicle to prevent it from moving. There is a risk of injury from contusions and burns if you insert your hands into the engine when it is running. Do not touch hot or rotating parts. Wear properly fitted work clothes.

CAUTION! A unique transmission fluid has been developed for this transmission. This fluid is **NOT** compatible with ATF+4 or any other current FCA US LLC transmission fluid. You must use **MOPAR ZF 8&9 Speed ATF Automatic Transmission Fluid**.

- 1) Raise and support the vehicle **on a level hoist**.
- 2) Start the engine. The engine must continue to run for the entire test.
- 3) Using a scan tool or the vehicle information center, verify that the transmission fluid temperature is below 30°C (86°F).
- 4) Remove the transmission fill plug from the right rear of the transmission case.
- 5) Add the specified MOPAR ZF 8&9 Speed ATF Automatic Transmission Fluid or equivalent until it trickles from the fill opening.
- 6) Install the transmission fill plug.
- 7) Lower the vehicle for access to inside of the vehicle, leaving the tires at least 8 inches off the ground.
- 8) With the brakes applied, place the transmission in Reverse and hold for 5 seconds.
- 9) Place the transmission in Drive and hold for 5 seconds.
- 10) Release the brakes, slowly accelerate to 2nd gear and hold for 5 seconds.
- 11) Apply the brakes and place the transmission in Neutral.
- 12) Raise the engine speed to 2000 RPM for 5 seconds.
- 13) Return the engine to idle and place the transmission in Park.

NOTE: A full transmission will have fluid at the fill hole with the transmission between 30°C (86°F) and 50°C (122°F). Do not over fill.

- 14) Remove the transmission fill plug and allow excess fluid to drain from fill hole or add fluid as necessary.
- 15) Install the transmission fill plug and torque to **35 N·m (26 Ft. Lbs.)**.
- 16) Using a scan tool, clear any DTCs.