



**Direct Connection Performance Part**

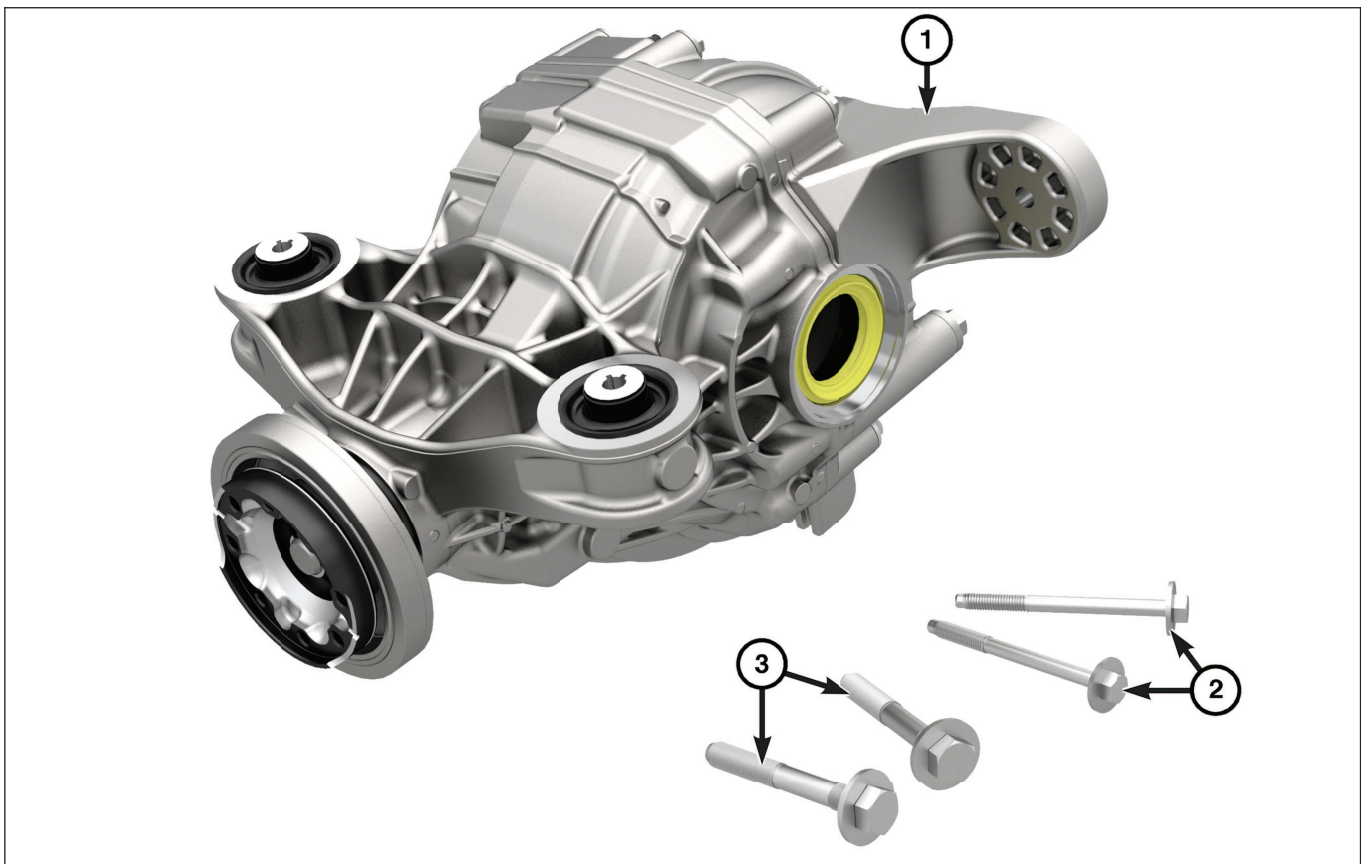
## REDEYE DIFFERENTIAL (3.09)

PART NUMBER: 77072537AB

2015+ R/T - HELLCAT

(5.7L, 6.4L, 6.2L)

**NOTE:** For vehicles equipped with Automatic Transmission Only.



Item	Description	Part Number	Quantity
1	Axle Differential	68427799AA	1
2	M10x1.50x120.00	06511173AA	2
3	M14x1.50x105.00	06512597AA	2

**NOTE:** Some items may be shipped with more than the quantity needed to perform the procedure.

### Tools Required

Description	Part Number
Protector, Half Shaft, Drive	10270
TO PURCHASE GENUINE MOPAR® SPECIAL TOOLS, PLEASE VISIT: WWW.MOPARESENTIALTOOLS.COM	

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

## DIFFERENTIAL REMOVAL

**NOTE:** This procedure requires the compression of the rear suspension to ride height. A drive-on hoist should be used. If a drive-on hoist is not used, screw-style under-hoist jack stands are required to compress the rear suspension, facilitating rear half shaft removal.

**NOTE:** Never grasp half shaft assembly by the inner or outer boots. Doing so may cause the boot to pucker or crease, reducing the service life of the boot and joint. Avoid over angulating or stroking the C/V joints when handling the half shaft.

1. Raise and support the vehicle.
2. Remove the exhaust muffler.
3. Remove the driveshaft to differential flange bolts and washers. Separate the driveshaft from the differential.

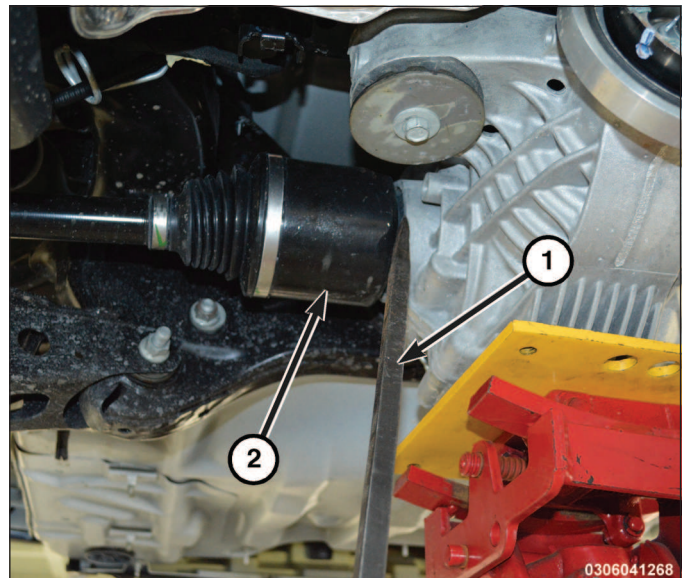
**NOTE:** Do not let the driveshaft hang on the center support bearing.

4. Support the driveshaft with a strap or equivalent.

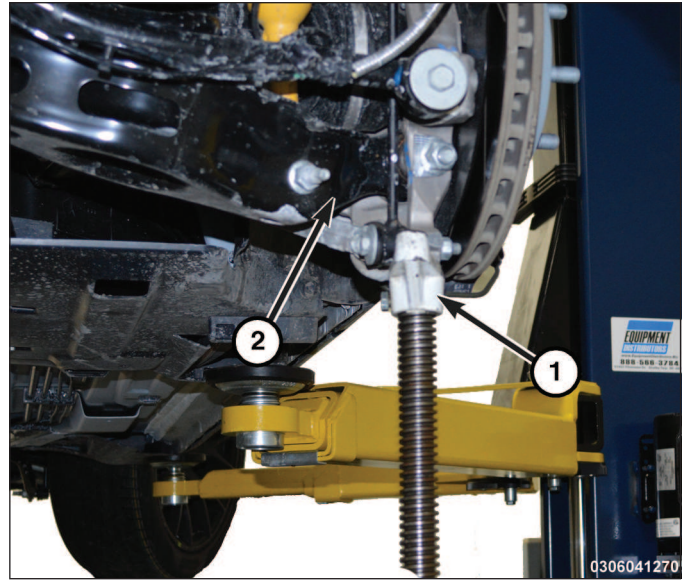
**NOTE:** Do not damage the half shaft seal dust cover and half shaft boot.

**NOTE:** Left Hand (LH) side shown, Right Hand (RH) side similar.

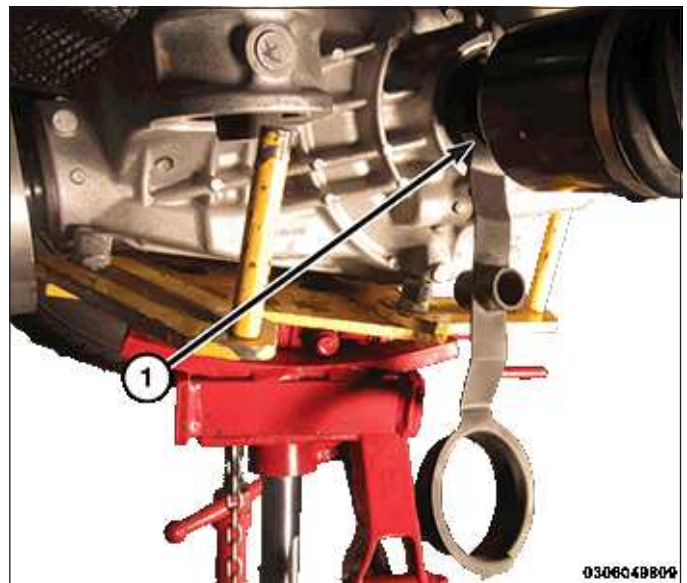
5. Using a suitable screwdriver (1), partially disengage the half shafts (2) from the differential assembly.



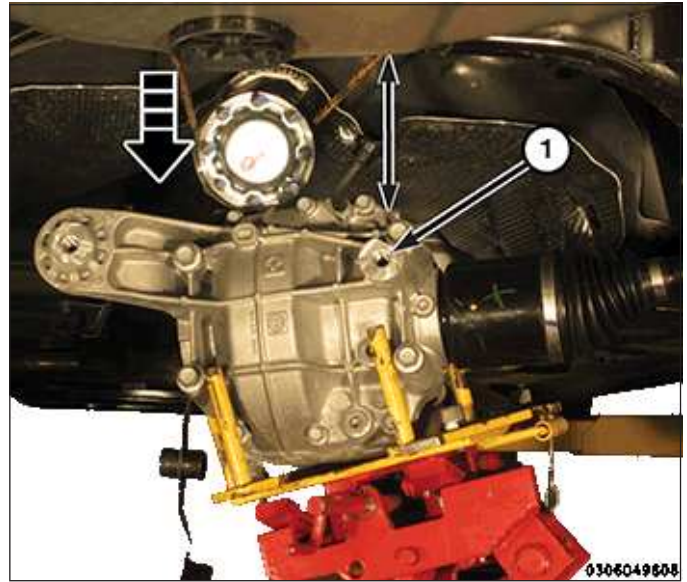
6. Compress the rear suspension (2) using a suitable support (1), and position a jack under the differential assembly.



7. Remove and discard the differential forward mount isolator bolts.
8. Remove the two differential to crossmember bolts from the differential.
9. Install the Protector, Half Shaft, Drive 10270 (1).

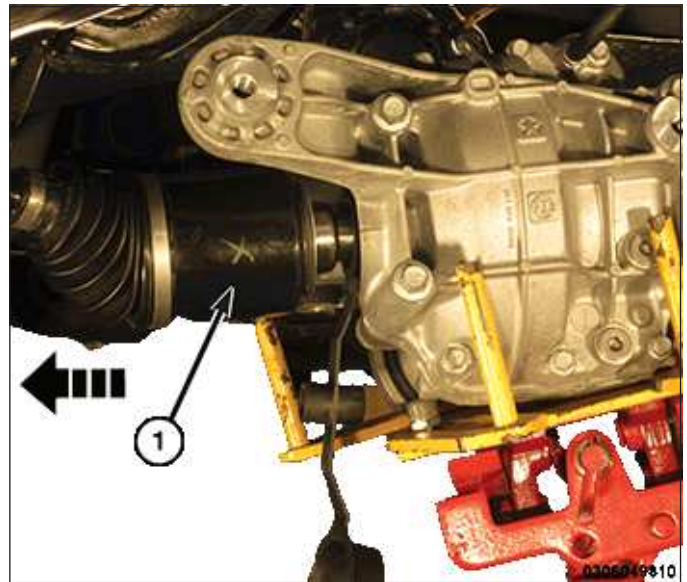


10. Lower the differential (1) approximately six inches and push the differential assembly towards the front of the vehicle.



**NOTE: Do not allow the half shaft splines to come in contact with the half shaft seal.**

11. With the aid of an assistant, shift the differential assembly in one direction and compress one half shaft inner joint as far as possible while removing the other half shaft (1). Repeat necessary procedures for opposing side.

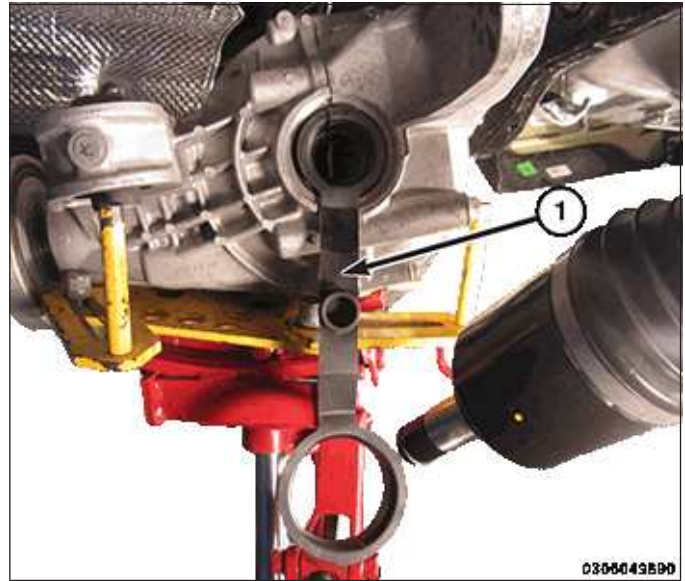


12. Remove the differential assembly from vehicle.

## DIFFERENTIAL INSTALLATION

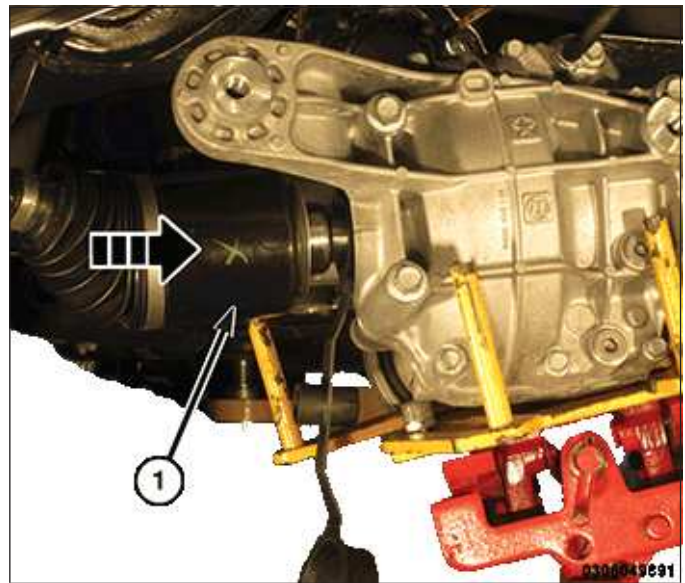
1. Install the Protector, Half Shaft, Drive 10270 (1) in the differential.

**NOTE:** Use care when installing half shaft to differential assembly. The half shaft installation angle should be minimized to avoid damage to seal upon installation.

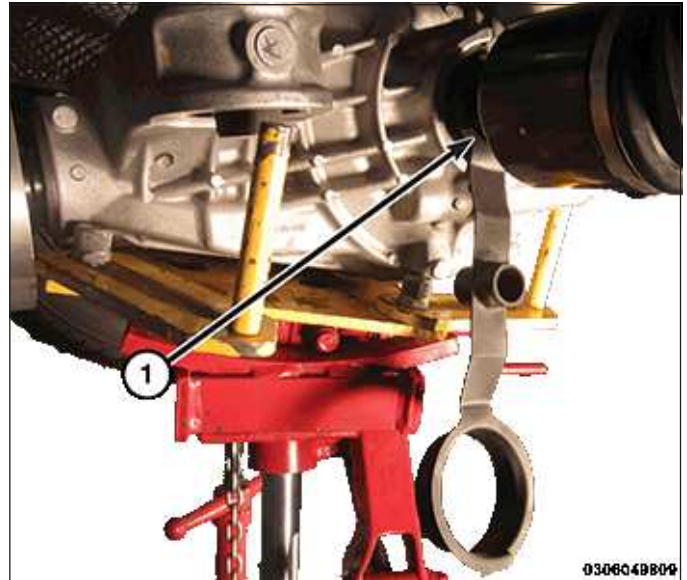


**NOTE:** Use care not to damage the half shaft seal or the seal dust cover.

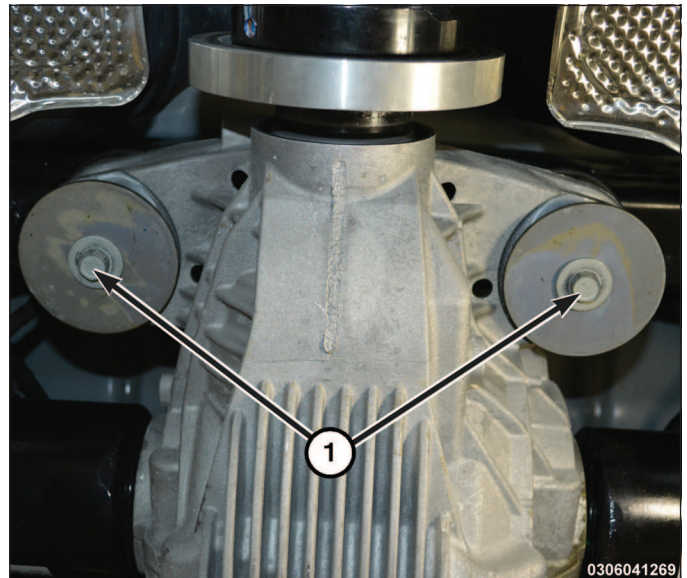
2. With the Protector, Half Shaft, Drive 10270 (1) installed and the aid of an assistant, shift the differential assembly in one direction and compress one half shaft inner joint as far as possible while installing the other half shaft (1).



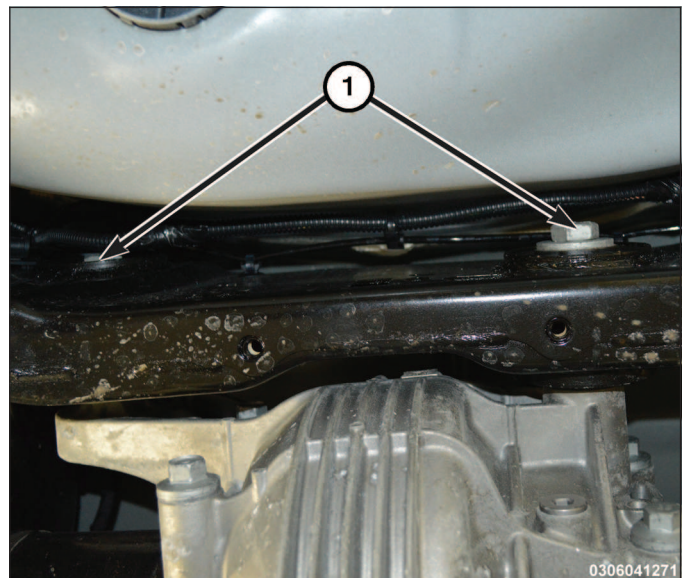
3. Remove the Protector, Half Shaft, Drive 10270 (1) and fully install the half shaft in the differential. Verify proper installation by pulling outward on the joint by hand. Repeat appropriate procedures for opposing side.



4. Raise the differential assembly into position.
5. Install the **NEW** differential forward mount isolator bolts (1) hand tight.



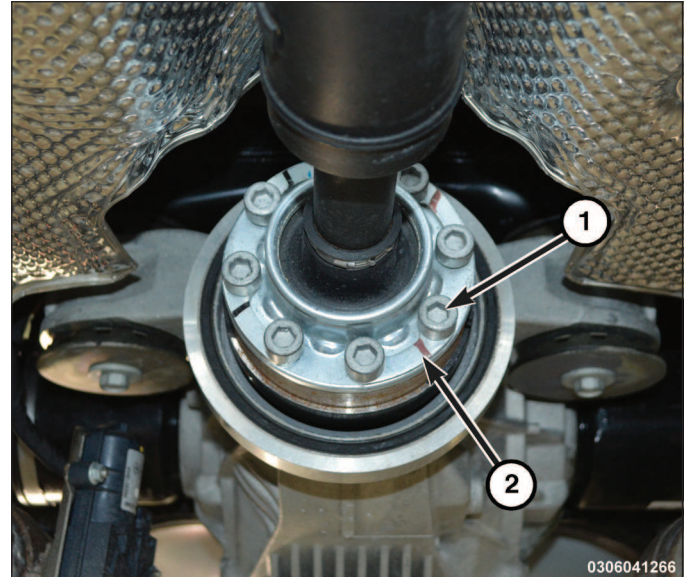
6. Install the differential to crossmember bolts (1) hand tight.



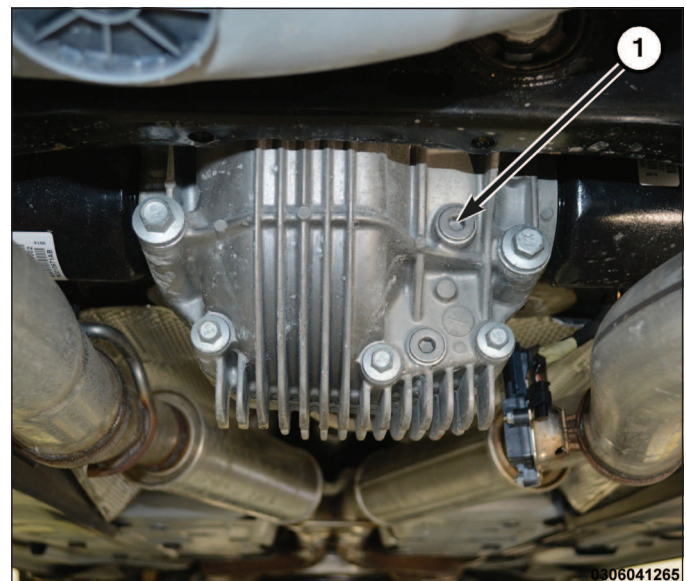
7. Torque the **NEW** differential forward mount isolator bolts to **71 N·m (52 Ft. Lbs.)**.
8. Torque the differential to crossmember bolts to **150 N·m (111 Ft. Lbs.)**.
9. Again verify half shaft inner joints are fully engaged in the axle assembly.
10. Remove the jack from under the differential assembly.
11. Remove the support compressing the rear suspension.
12. Install the driveshaft into position at the differential flange.

**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.**

If yellow index mark exists on driveshaft, align yellow dot on drive shaft with yellow index mark on differential flange before install. If yellow dot does not exist, proceed with driveshaft install and road test and evaluate for vibration or noise. Reapply Mopar lock and seal adhesive or equivalent if driveshaft fasteners are to be reinstalled.



13. Install the **NEW** driveshaft washers (2) and bolts (1) and torque in a star pattern to **66 N·m (49 Ft. Lbs.)**.
14. Install the exhaust muffler.
15. Remove the differential fill plug and check oil level. If needed, fill the differential with the specified MOPAR Part #68083381AA ELSD Synthetic Gear Lubricant SAE 75W85 (API GL5) or equivalent.



16. Install the differential fill plug (1) and torque to **35 N·m (26 Ft. Lbs.)**.
17. Remove the support and lower the vehicle.