



Direct Connection Performance Part

REDEYE 41 SPLINE HALF SHAFTS PACKAGE

PART NUMBER: 77072535AB

**2015+ R/T - HELLCAT (5.7L,
6.2L, 6.4L)**

NOTE: Only for vehicles equipped with 230MM rear axle



Item	Description	Part Number	Quantity
1	Half Shaft - L	53010849AB	1
2	Half Shaft - R	53010848AB	1
3	Half Shaft Washers	68269561AA	2
4	Circlip	68268840AA	2
5	Half Shaft Nut	06509598AA	2
6	Seal - L	68084192AA	1

Item	Description	Part Number	Quantity
7	Seal - R	68084193AA	1

Tools Required	
Tool 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

HALF SHAFT 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. Remove the rear exhaust system.
2. Remove the rear tire and wheel assemblies.
3. Remove the half shaft nuts and discard.
4. Apply alignment index marks to the driveshaft and differential companion flanges.

NOTE: The use of soft/blunt tools is recommend for removal of joints from the companion flanges. Use of sharp pry tools, such as a screwdriver, will damage the joint housing and could result in driveline imbalance.

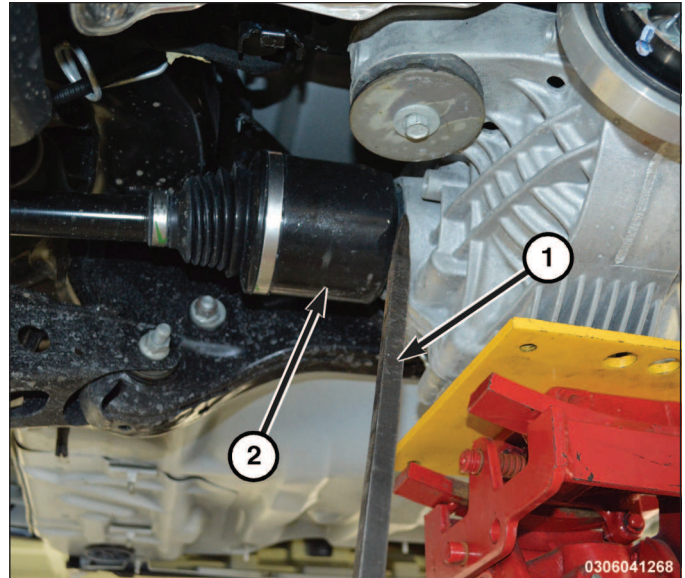
5. Remove the driveshaft to differential flange bolts and washers. Separate the driveshaft from the differential.

NOTE: Do not let the driveshaft hang unsupported, damage may occur to the shaft.

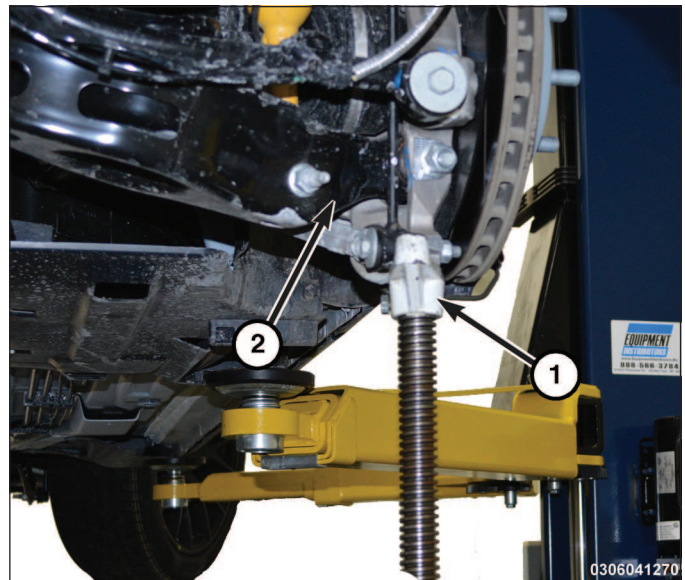
6. Support the driveshaft with a strap or equivalent.

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

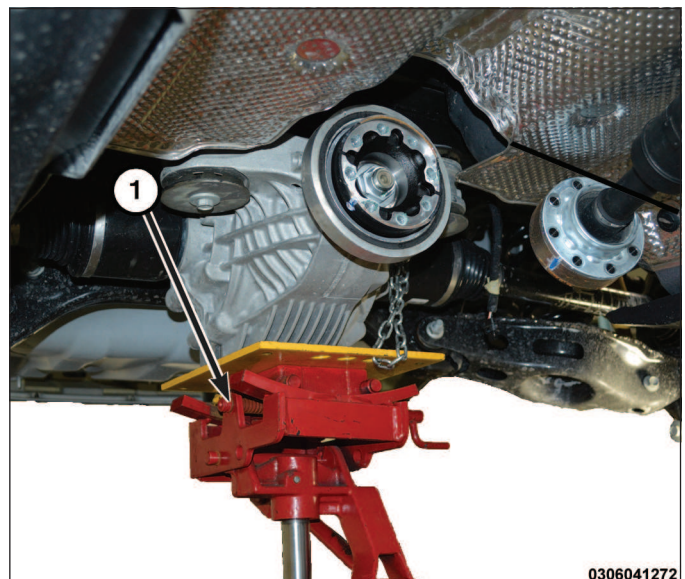
- Using a suitable screwdriver (1), partially disengage the half shaft (2) from the differential assembly.



- Compress the rear suspension (2) using a suitable support (1).

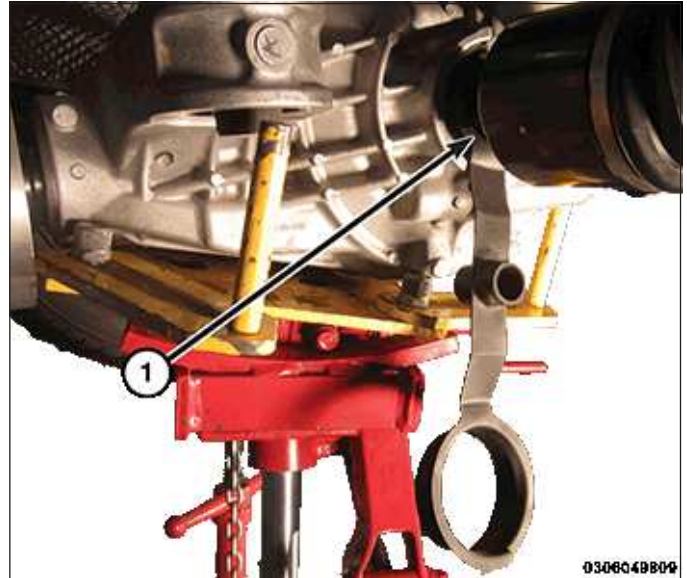


- Position a jack (1) under the differential assembly.

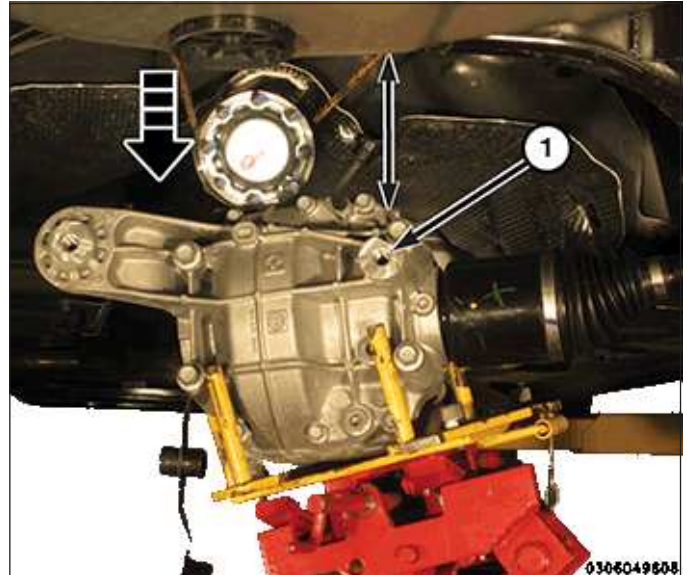


- Remove the differential forward mount isolator bolts.

11. Remove the two differential to crossmember bolts from the differential.
12. Install the Protector, Half Shaft, Drive 10270 (1).

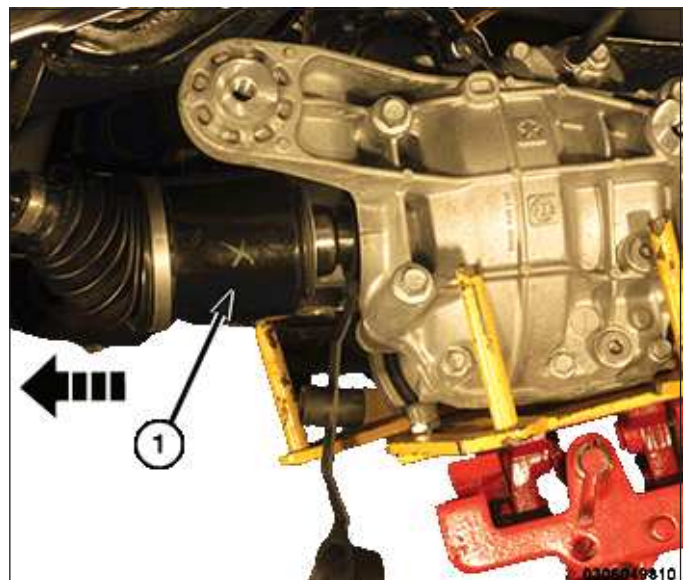


13. Lower the differential (1) approximately six inches and push the differential assembly towards the front of the vehicle.



NOTE: Do not allow the half shaft splines to come in contact with the half shaft seal. If half shaft seal is damaged during half shaft removal, replace with new seal included with the kit.

14. 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).



15. Remove the half shaft from the hub and the vehicle. Repeat necessary procedures for opposing side.

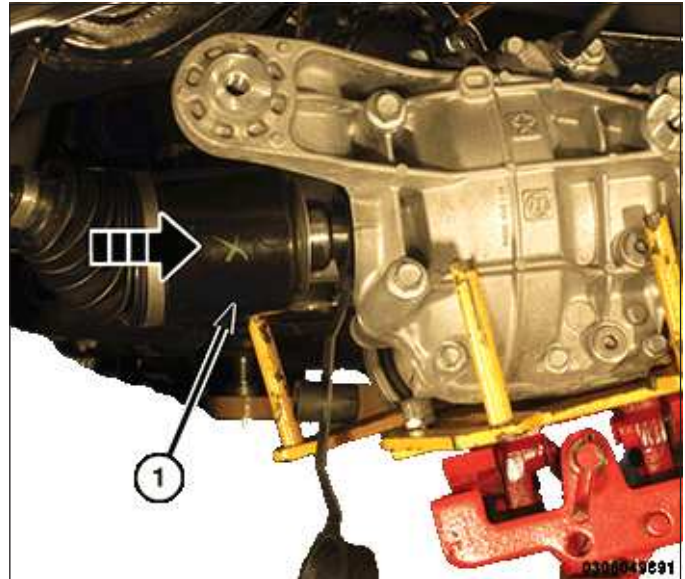
HALF SHAFT INSTALLATION

NOTE:

- **Always install a NEW half shaft nut. The original half shaft nut is one-time use only and should be discarded when removed.**
 - **Inspect the half shaft seals before starting half shaft installation. If necessary replace damaged half shaft seal(s) with seal(s) included with the kit.**
 - **Circlips and half shaft washers are installed on the half shafts. If they become damaged, replace with circlips and half shaft washers included with the kit.**
 - **Left Hand (LH) side shown, Right Hand (RH) side similar.**
1. Inspect half shaft seals for damage prior to half shaft installation. Replace as needed with new seals included in the kit.
 2. Install the half shaft in the hub and install a **NEW** half shaft nut hand tight.
 3. Install the Protector, Half Shaft, Drive 10270 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.

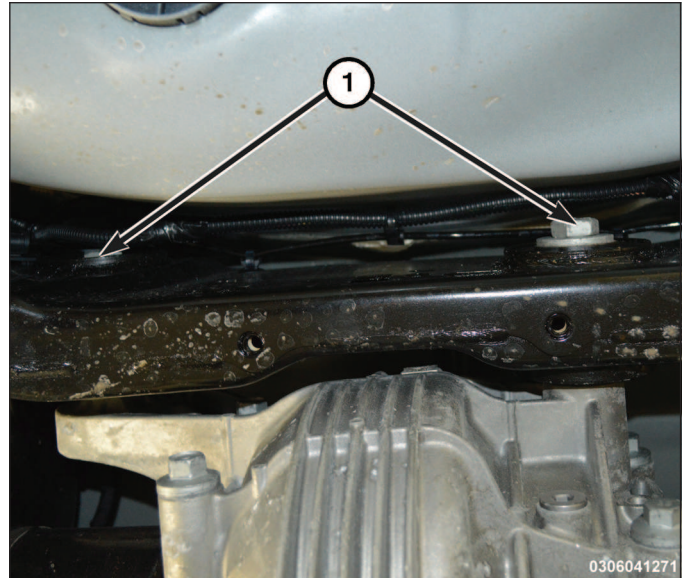
4. Apply a light film of differential lubricant to all of the machined half shaft surfaces that go into the differential. With the aid of an assistant, shift the differential assembly in one direction and compress one half shaft inner joint as much as possible while installing the other half shaft (1).



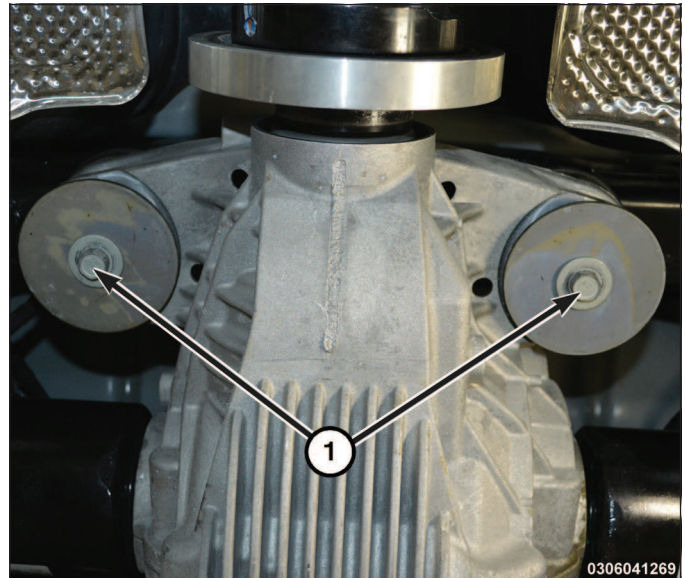
NOTE: Use care not to damage the half shaft seal or the seal dust cover.

5. Remove the Protector, Half Shaft, Drive 10270 and fully install the half shaft in the differential. Verify proper installation by pulling outward on the joint by hand. Repeat necessary procedures for opposing side.
6. Raise the differential into position.

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

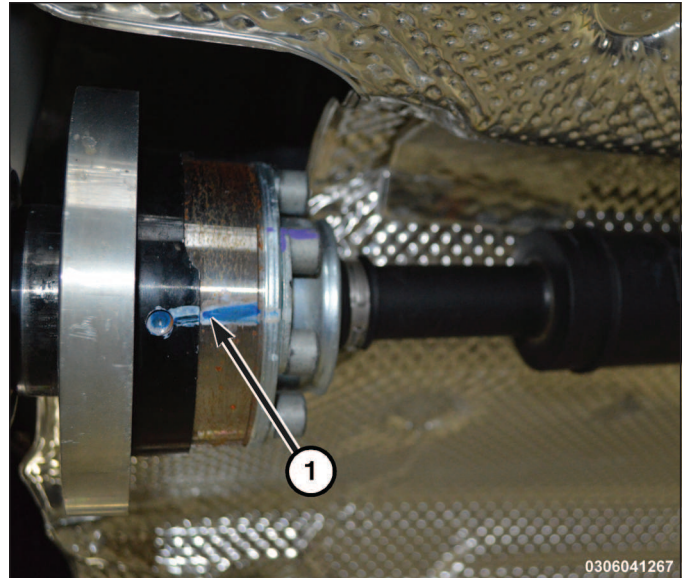


8. Install the differential forward mount isolator bolts (1) hand tight.



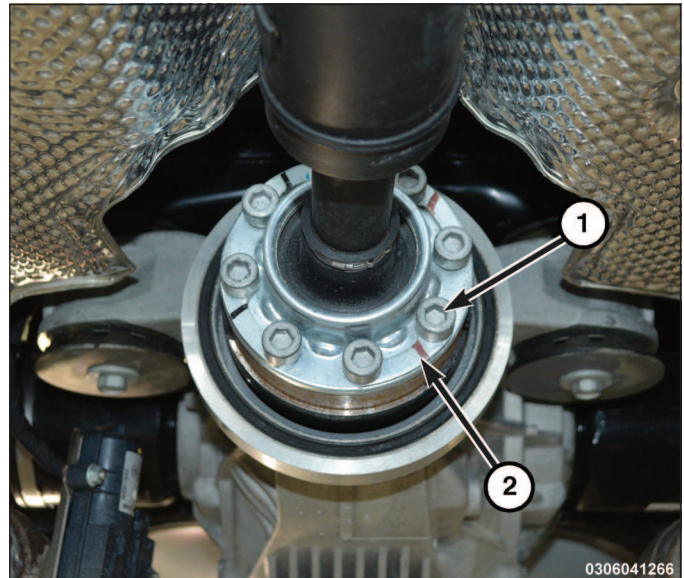
9. Torque the differential forward mount isolator bolts to **55 N·m (41 Ft. Lbs.)** and the differential to crossmember bolts to **150 N·m (111 Ft. Lbs.)**.
10. Verify half shafts are fully engaged in the differential assembly.
11. Remove the jack from under the differential assembly.
12. Remove the support(s) compressing the rear suspension.

13. Align the index marks (1) made to the driveshaft and differential companion flanges during removal.



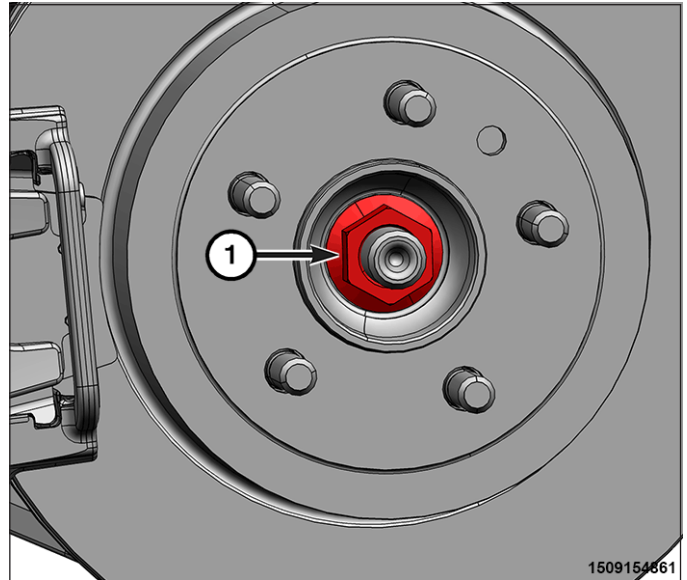
NOTE: It is recommend the driveshaft bolts be replaced with **NEW**. If **NEW** bolts are not available clean the old bolts and apply **Mopar® Lock and Seal Adhesive** or equivalent.

14. Install the driveshaft washers (2) and bolts (1) and torque in a star pattern to **66 N·m (49 Ft. Lbs.)**.



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 GL-5) or equivalent.
16. Install the differential fill plug and torque to **35 N·m (26 Ft. Lbs.)**.

17. Torque the **NEW** left and right half shaft nuts (1) to **213 N·m (157 Ft. Lbs.)**.



18. Install the rear tire and wheel assemblies.
19. Install the rear exhaust system.

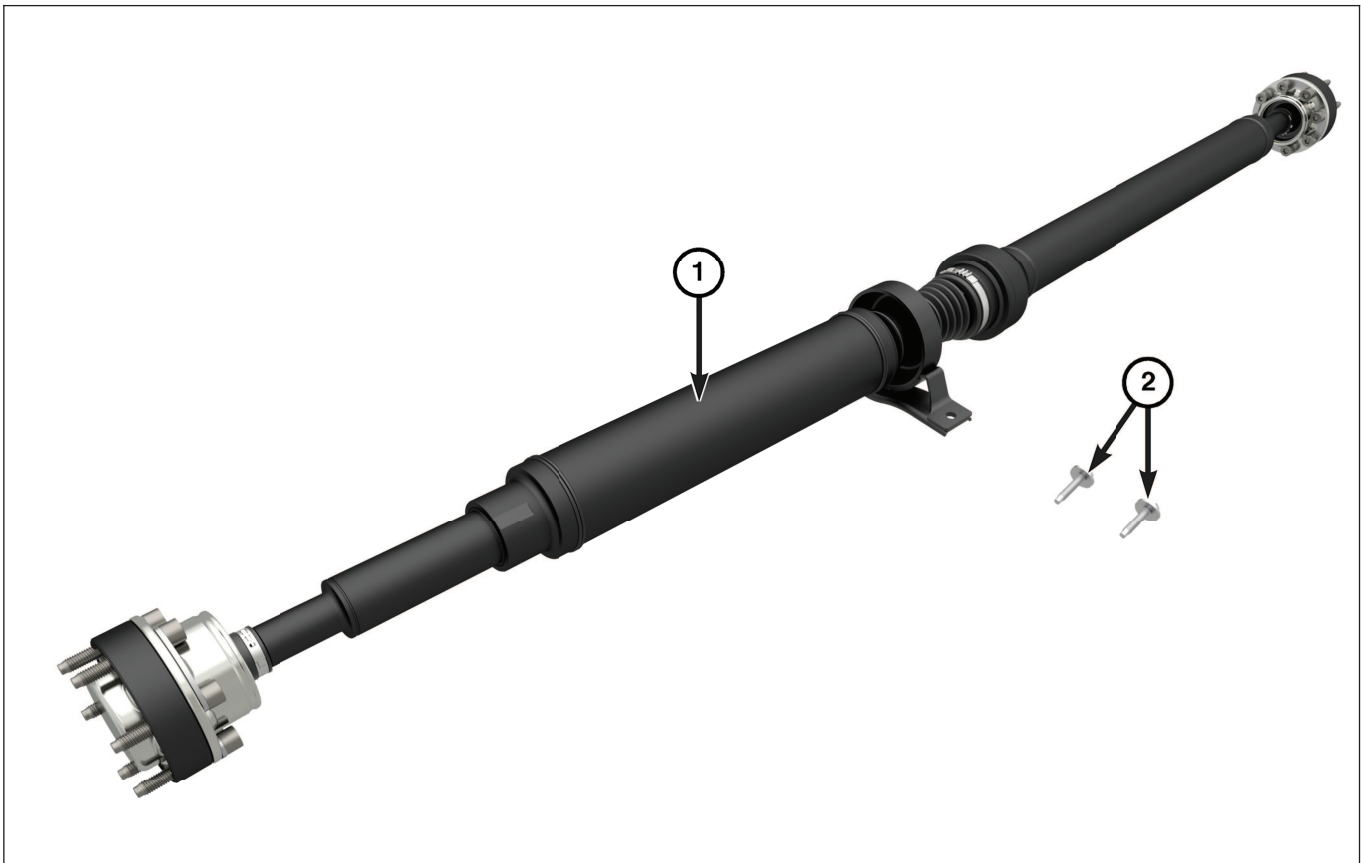


Direct Connection Performance Part

REDEYE DRIVESHAFT PACKAGE

PART NUMBER: 77072536AB

2015+ CHALLENGER HELLCAT (6.2L)



Item	Description	Part Number	Quantity
1	Driveshaft	53010846AB	1
2	Center Bearing Bolts	06101839	2

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

PLEASE READ ALL INSTRUCTION PRIOR TO INSTALLATION.

FOR ASSISTANCE CONTACT DIRECT CONNECTION TECH HOTLINE 1-800-998-1110

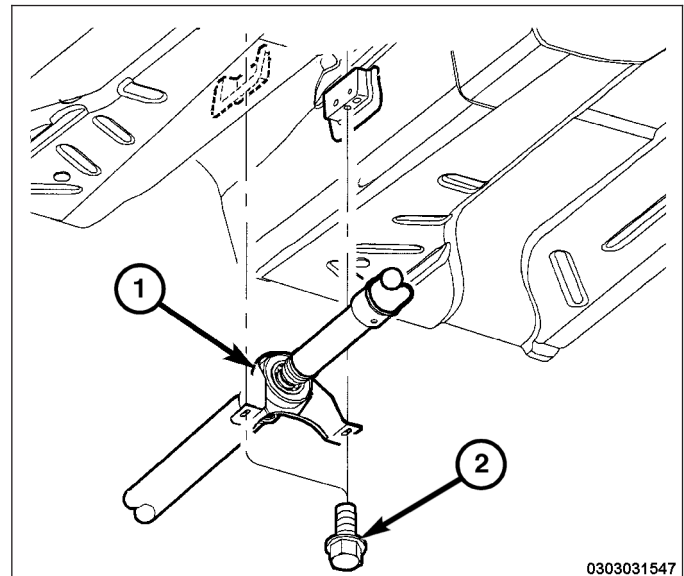
DRIVESHAFT REMOVAL

CAUTION! Driveshaft removal is a two-person operation. Never allow the driveshaft to hang from the center bearing, or while only connected to the transmission or differential flanges. An assistant is required. If a driveshaft section is hung unsupported, damage may occur to the shaft, joint and center bearing from over-angulation. This may result in driveline vibrations or component failure.

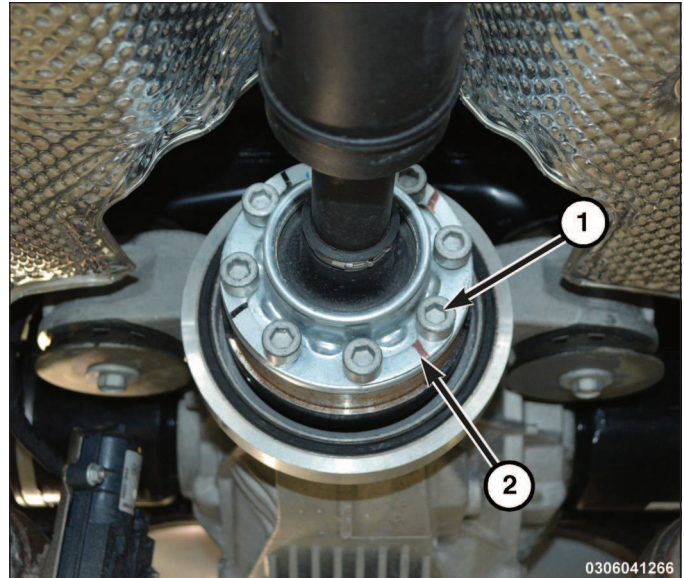
NOTE: During driveshaft removal or installation avoid any contact with the front and rear joint grease caps. Any damage to the grease cap caused by improper handling during installation or removal could cause a grease leak and subsequent damage to the CV joint. Do not pull on the shaft in order to remove the front joint from the transmission/transfer case flange, this could dent or dislodge the boot and cause a grease leak and subsequent joint failure.

NOTE: The use of soft blunt tools is recommended for removal of the joints from companion flanges. Use of sharp pry tools, such as a screwdriver, will damage the joint housing and could result in driveline imbalance.

1. Raise and support the vehicle.
2. Remove the rear exhaust system.
3. Remove the heat shield nuts and the heat shield.
4. Remove and discard the driveshaft to transmission flange bolts and washers.
5. Remove the center bearing bracket (1) bolts (2).



6. Remove and discard the driveshaft to differential flange bolts (1) and washers (2).



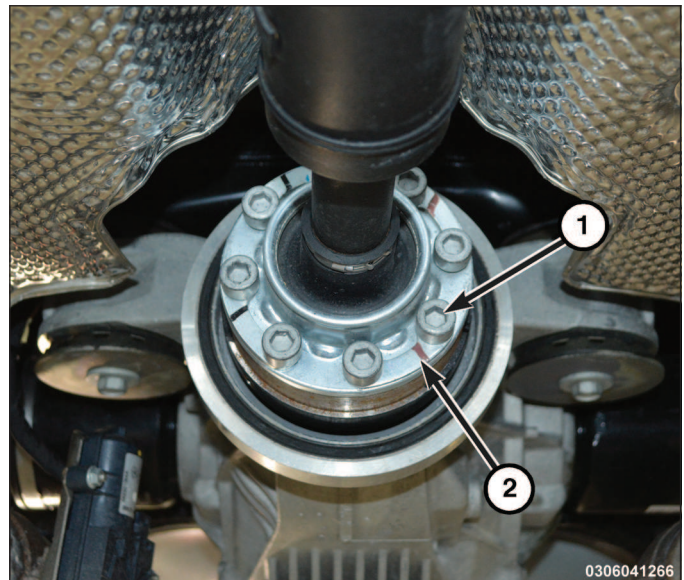
7. With the aid of an assistant, remove the driveshaft assembly.

DRIVESHAFT INSTALLATION

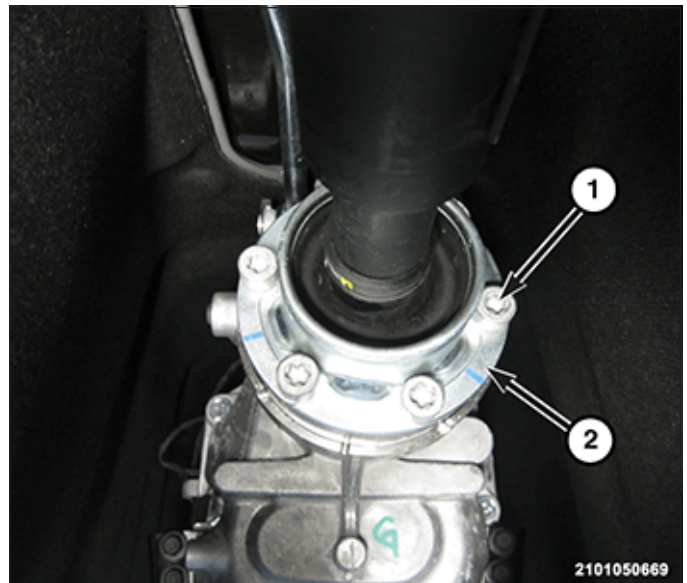
1. With the aid of an assistant, install the driveshaft into position at the differential flange.

NOTE: When installing the new driveshaft use the new hardware already included in the driveshaft.

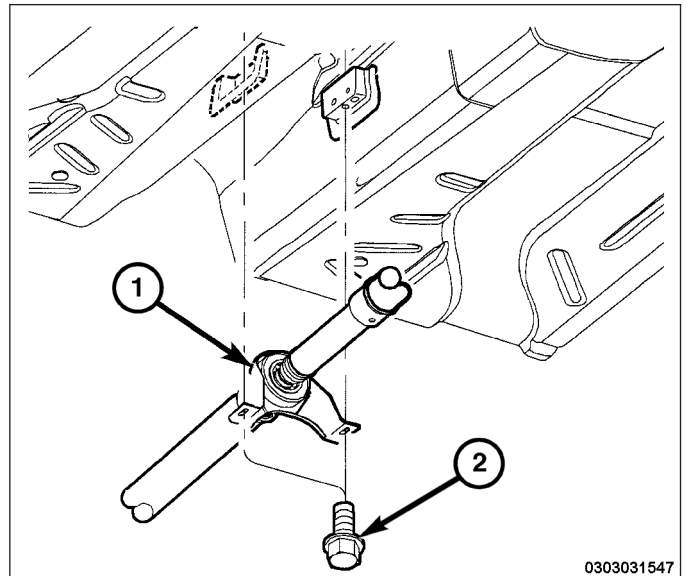
2. Install the **NEW** driveshaft to differential flange washers (2) and bolts (1) by hand. **Do not tighten at this time.** If yellow index mark exists on rear axle, align yellow dot on driveshaft with yellow index mark on differential flange before install. If yellow dot does not exist, proceed with 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.



3. Install driveshaft into position at the transmission flange. Install the **NEW** driveshaft to transmission flange washers (2) and driveshaft bolts (1) by hand. **Do not tighten at this time.**

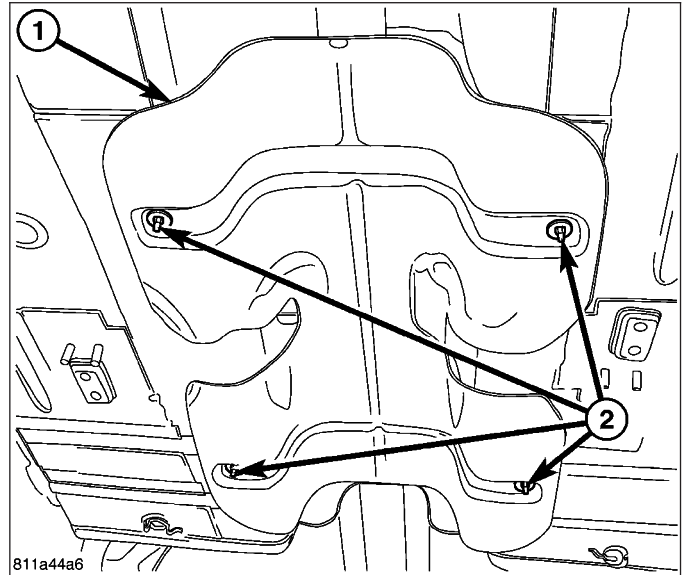


4. Position the center bearing (1) in place and loosely install the center bearing to body bolts (2) by hand. **Do not tighten at this time.**



5. Torque the driveshaft to transmission flange bolts in a star pattern to **66 N·m (49 Ft. Lbs.)**
6. Torque the driveshaft to rear differential flange bolts in a star pattern to **66 N·m (49 Ft. Lbs.)**
7. Torque the center bearing to body bolts to **28 N·m (21 Ft. Lbs.)**

8. Install the heat shield (1) and the heat shield nuts (2). Torque the nuts to **6 N·m (53 In. Lbs.)**.



9. Install the rear exhaust system.



Direct Connection Performance Part

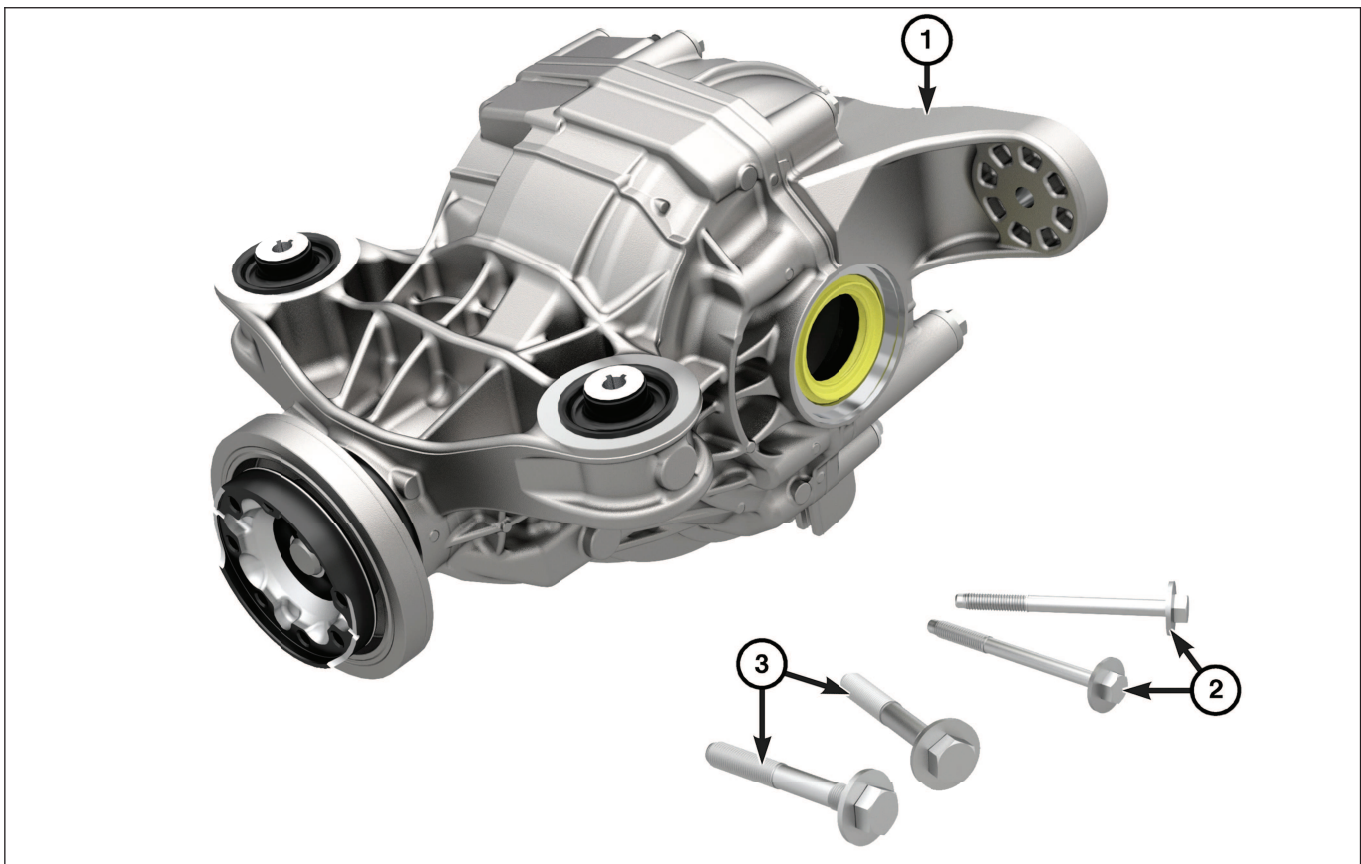
REDEYE DIFFERENTIAL (3.09)

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	

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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.

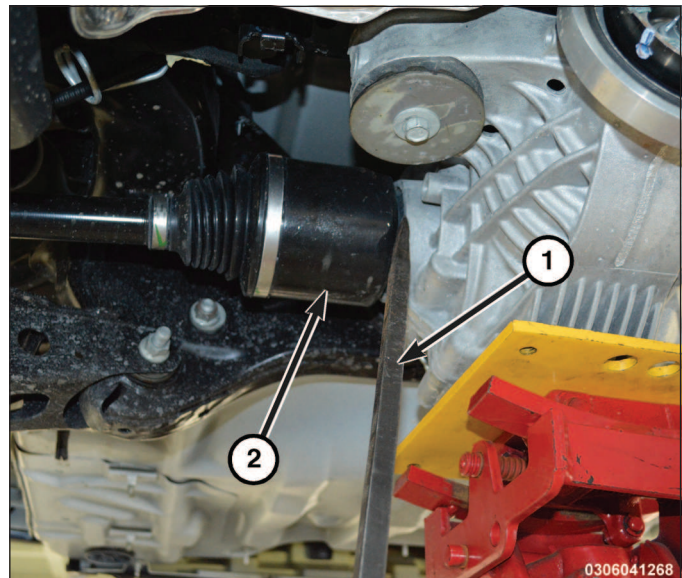
NOTE: Do not let the driveshaft hang on the center support bearing.

4. Support the driveshaft with a strap or equivalent.

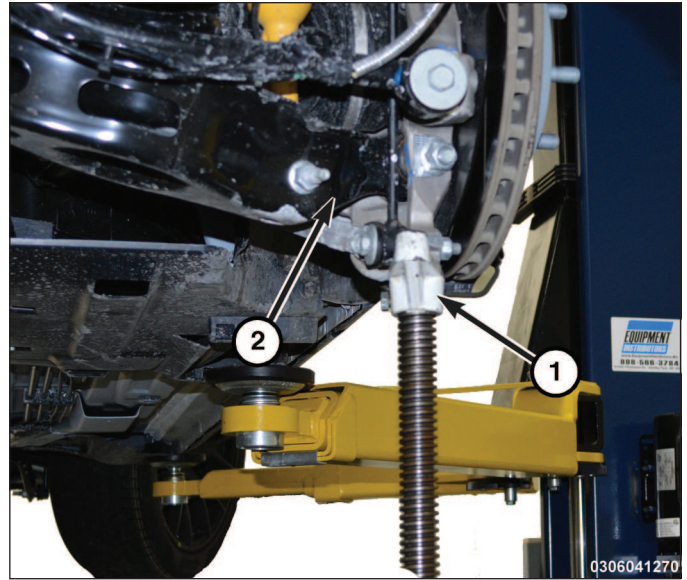
NOTE: Do not damage the half shaft seal dust cover and half shaft boot.

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

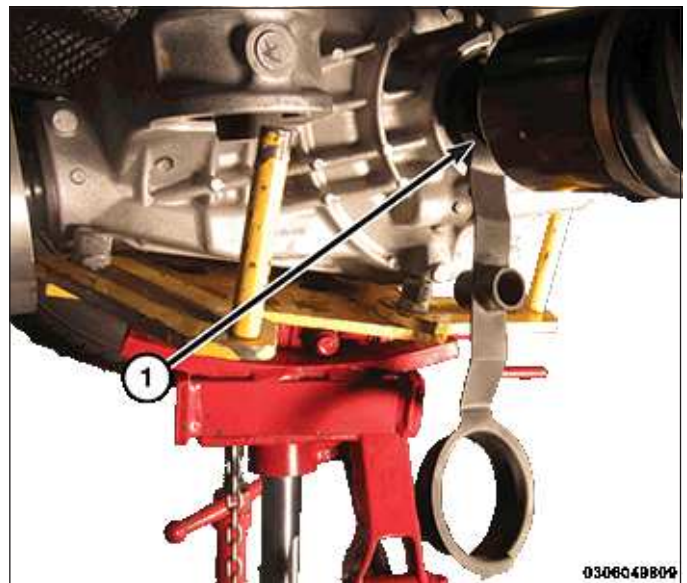
5. Using a suitable screwdriver (1), partially disengage the half shafts (2) from the differential assembly.



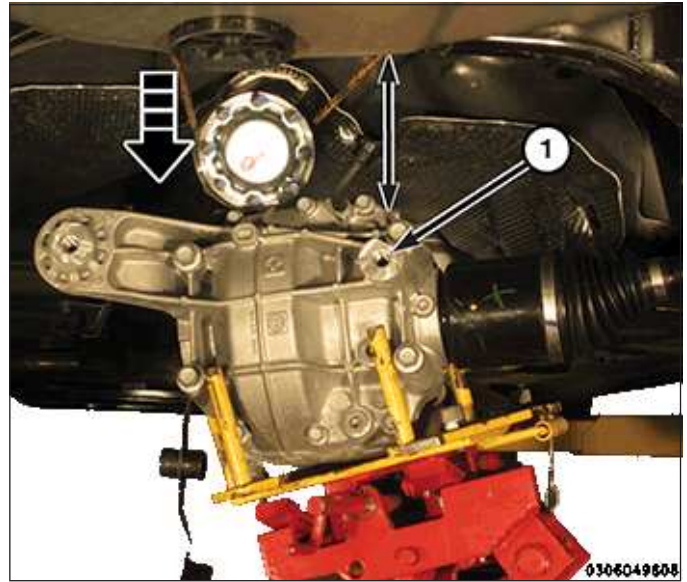
6. Compress the rear suspension (2) using a suitable support (1), and position a jack under the differential assembly.



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).

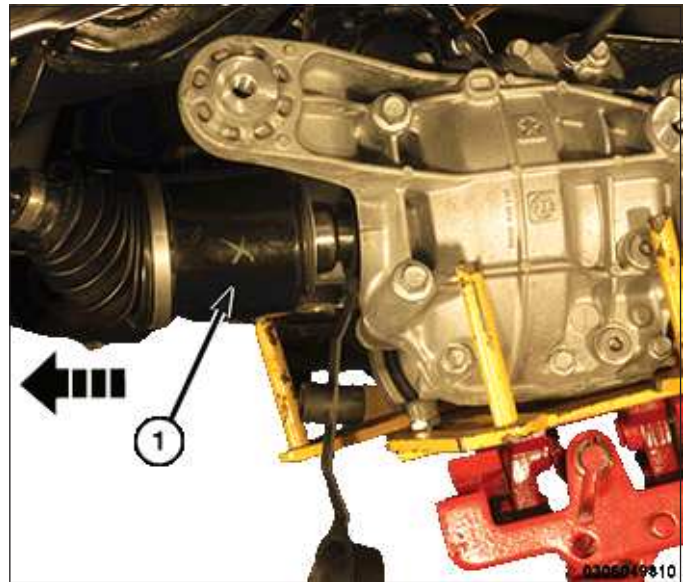


10. Lower the differential (1) approximately six inches and push the differential assembly towards the front of the vehicle.



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.

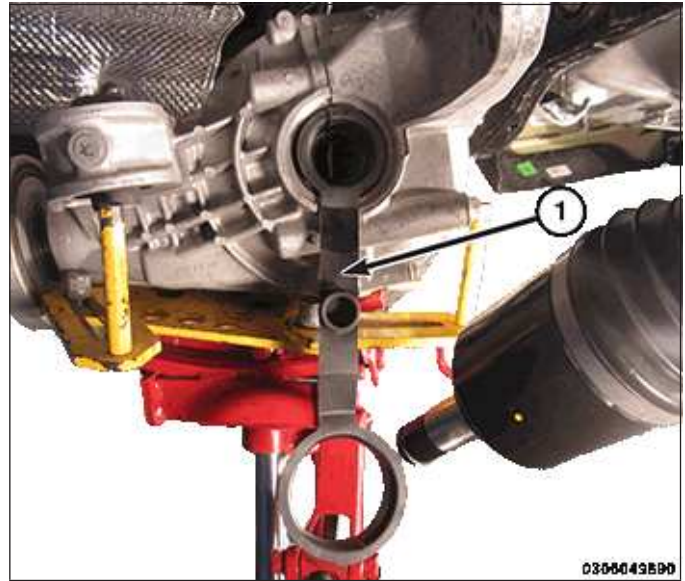


12. Remove the differential assembly from vehicle.

DIFFERENTIAL INSTALLATION

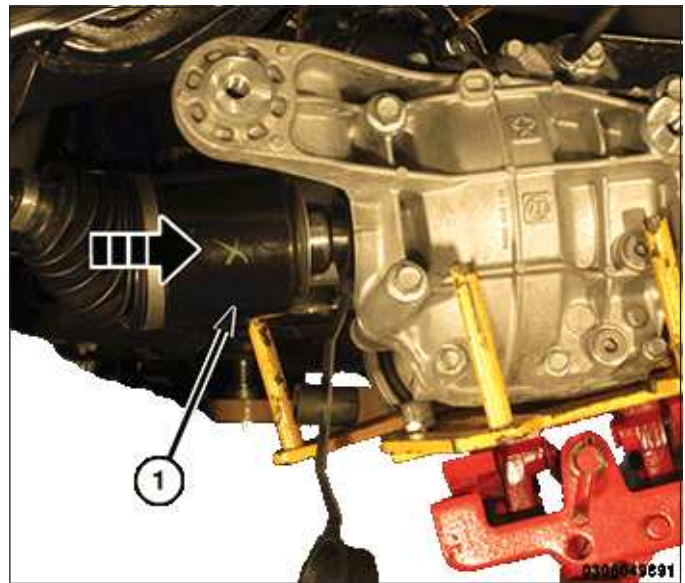
1. Install the Protector, Half Shaft, Drive 10270 (1) in the differential.

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.

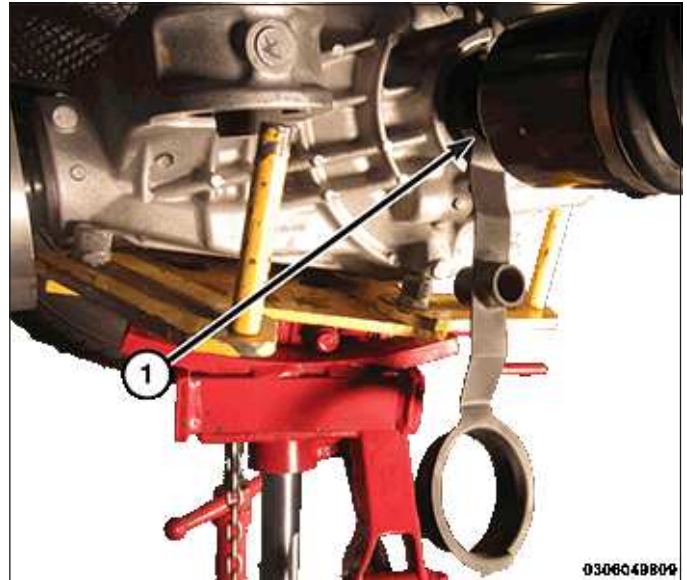


NOTE: Use care not to damage the half shaft seal or the seal dust cover.

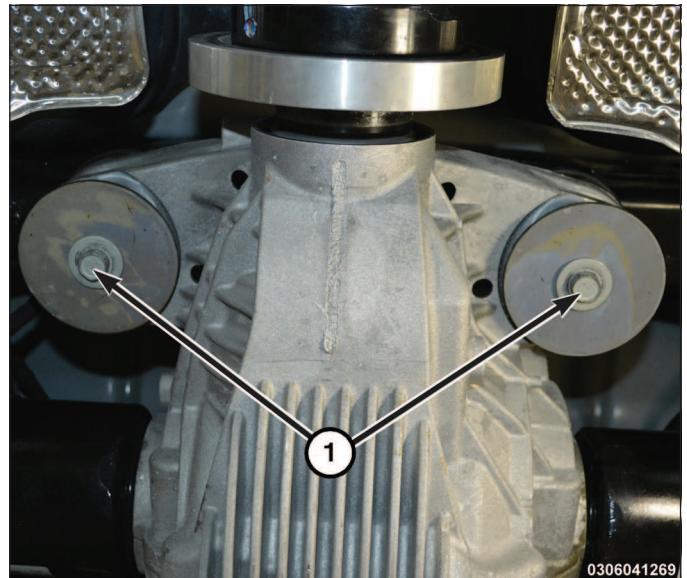
2. With the Protector, Half Shaft, Drive 10270 (1) installed and the aid of an assistant, shift the differential assembly in one direction and compress one half shaft inner joint as far as possible while installing the other half shaft (1).



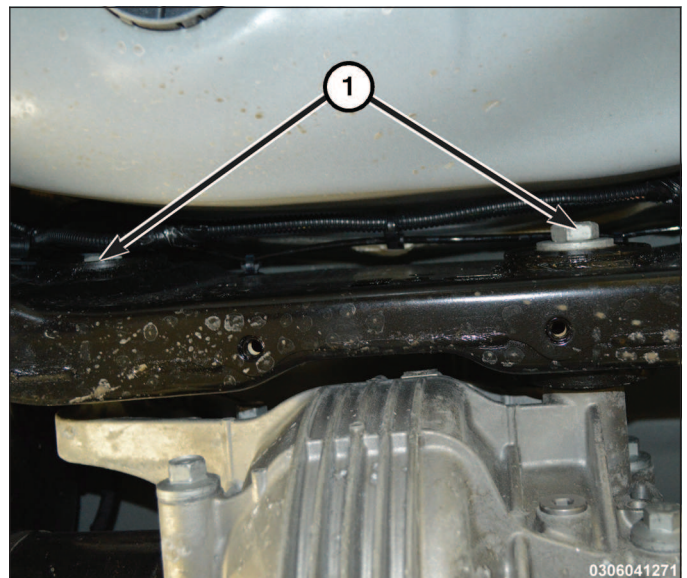
3. Remove the Protector, Half Shaft, Drive 10270 (1) and fully install the half shaft in the differential. Verify proper installation by pulling outward on the joint by hand. Repeat appropriate procedures for opposing side.



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



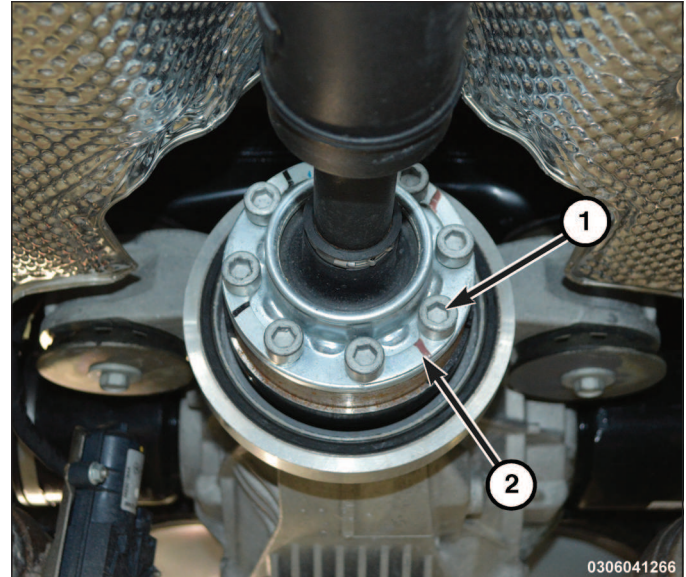
6. Install the differential to crossmember bolts (1) hand tight.



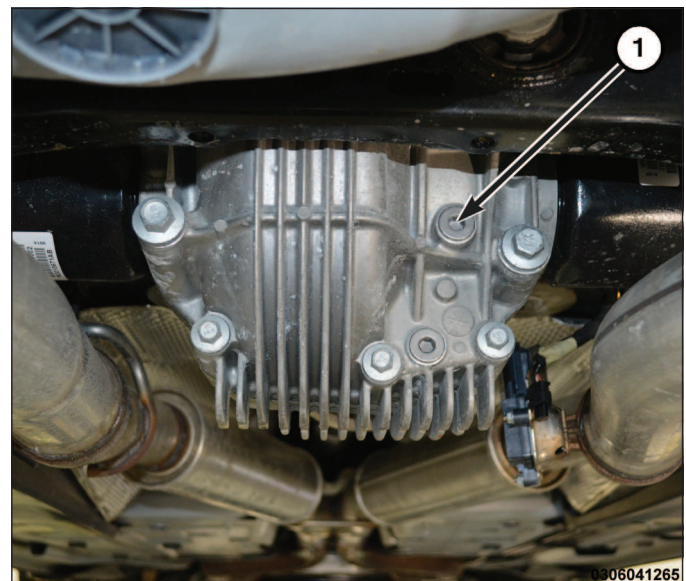
7. Torque the **NEW** differential forward mount isolator bolts to **71 N·m (52 Ft. Lbs.)**.
8. Torque the differential to crossmember bolts to **150 N·m (111 Ft. Lbs.)**.
9. Again verify half shaft inner joints are fully engaged in the axle assembly.
10. Remove the jack from under the differential assembly.
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.