Service Manual: PROPELLER SHAFT

SPECIFICATIONS > TORQUE SPECIFICATIONS

PROPELLER SHAFT TORQUE SPECIFICATIONS

DESCRIPTION	N.m	Ft. Lbs.	In. Lbs.	NEW FASTENER*
Center Bearing Support Bolts	50	37	-	X
***NEW FASTENER:** Do not reuse these fasteners. If removed, a new fastener must be installed and tightened to specifications.				

SPECIAL TOOLS > SPECIAL TOOLS

Tool (EMEA)	Tool (NAFTA)	Name	Function Usage
2000043000	*	Axle Support Fixture	Support Axle
2000043400	*	Adjustable Bracket	Support Axle
2019500030	*	Elastic Ring Spreader	Removing Rear Drive Shaft
*Tool not available for NAFTA. Use a commercially available tool or contact Mopar Essential Tools to order the custom EMEA tool.			

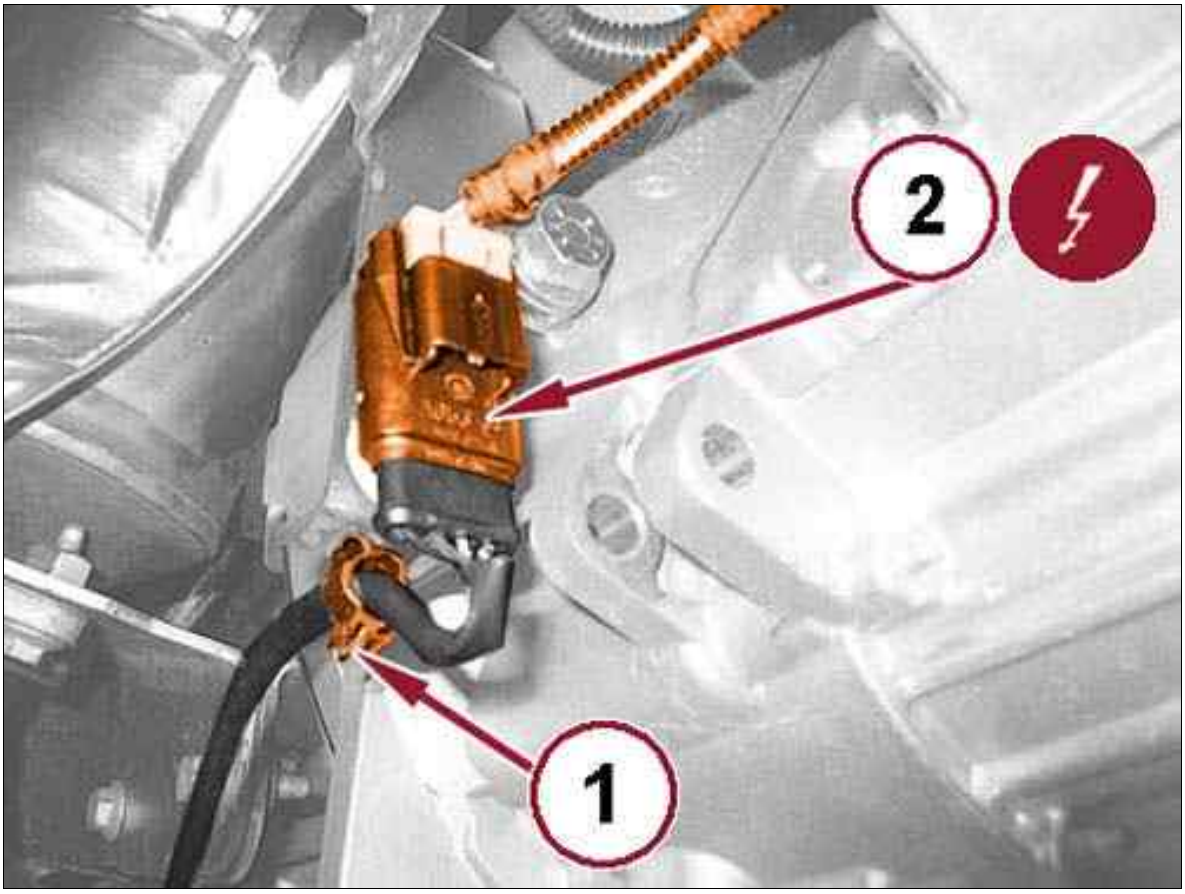
REMOVAL AND INSTALLATION > 1.4 TURBO MULTIAIR > REMOVAL

⚠ *CAUTION:*

Propeller shaft removal is a two-person operation. Never allow propeller shaft to hang from the center bearing, or while only connected to power transfer unit (PTU) or rear driveline module flanges. A helper is required. If a propshaft section is hung unsupported, damage may occur to the joint, boot, and/or center bearing from over-angulation. This may result in driveline vibrations.

1. Raise and support the vehicle. Refer to HOISTING, STANDARD PROCEDURE .
2. Remove the belly pan. Refer to BELLY PAN, REMOVAL AND INSTALLATION and BELLY PAN, SIDE, REMOVAL AND INSTALLATION .

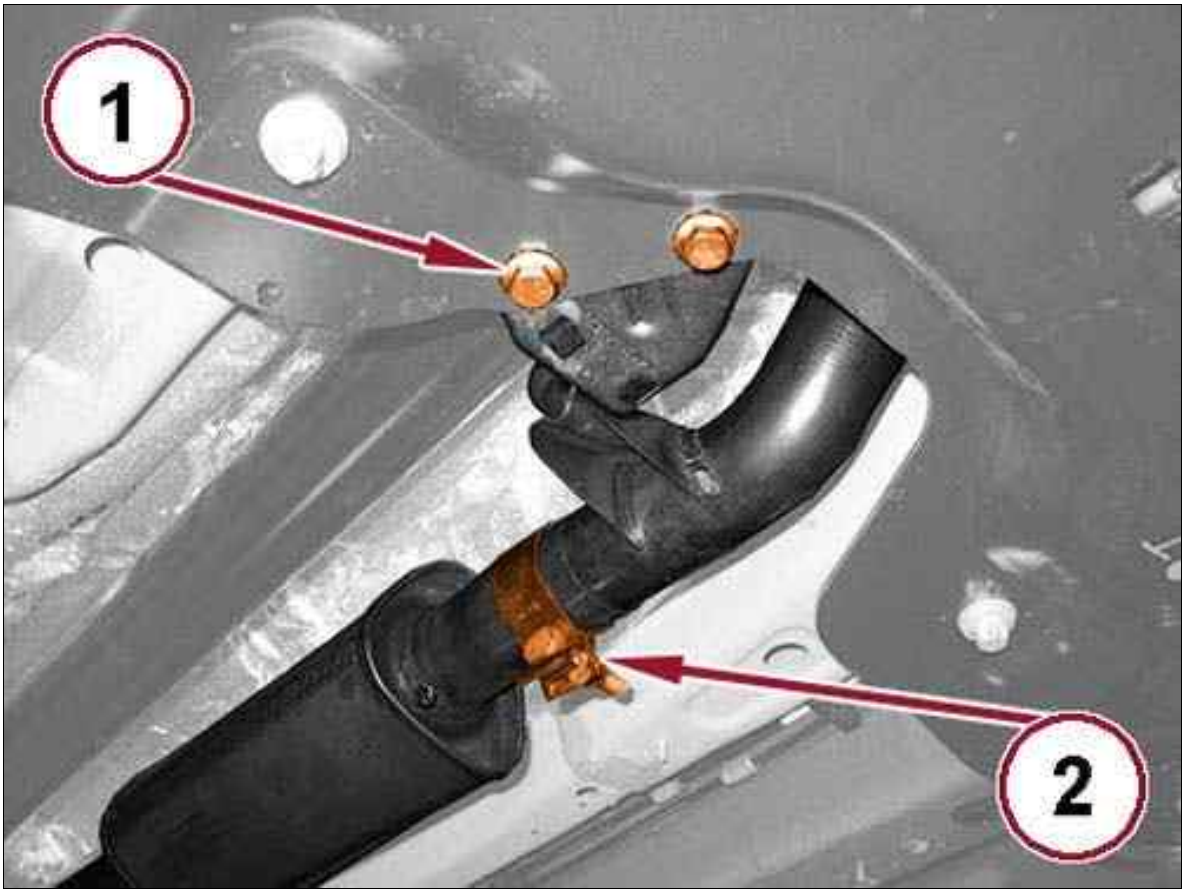
Fig 1: Downstream Oxygen Sensor Wire Harness Connector & Routing Clip



Courtesy of CHRYSLER GROUP, LLC

3. Disconnect the downstream oxygen sensor wire harness connector (2) and disengage the wiring from the routing clip (1).

Fig 2: Rear Exhaust Hanger Bracket Bolts & Exhaust Clamp Nut



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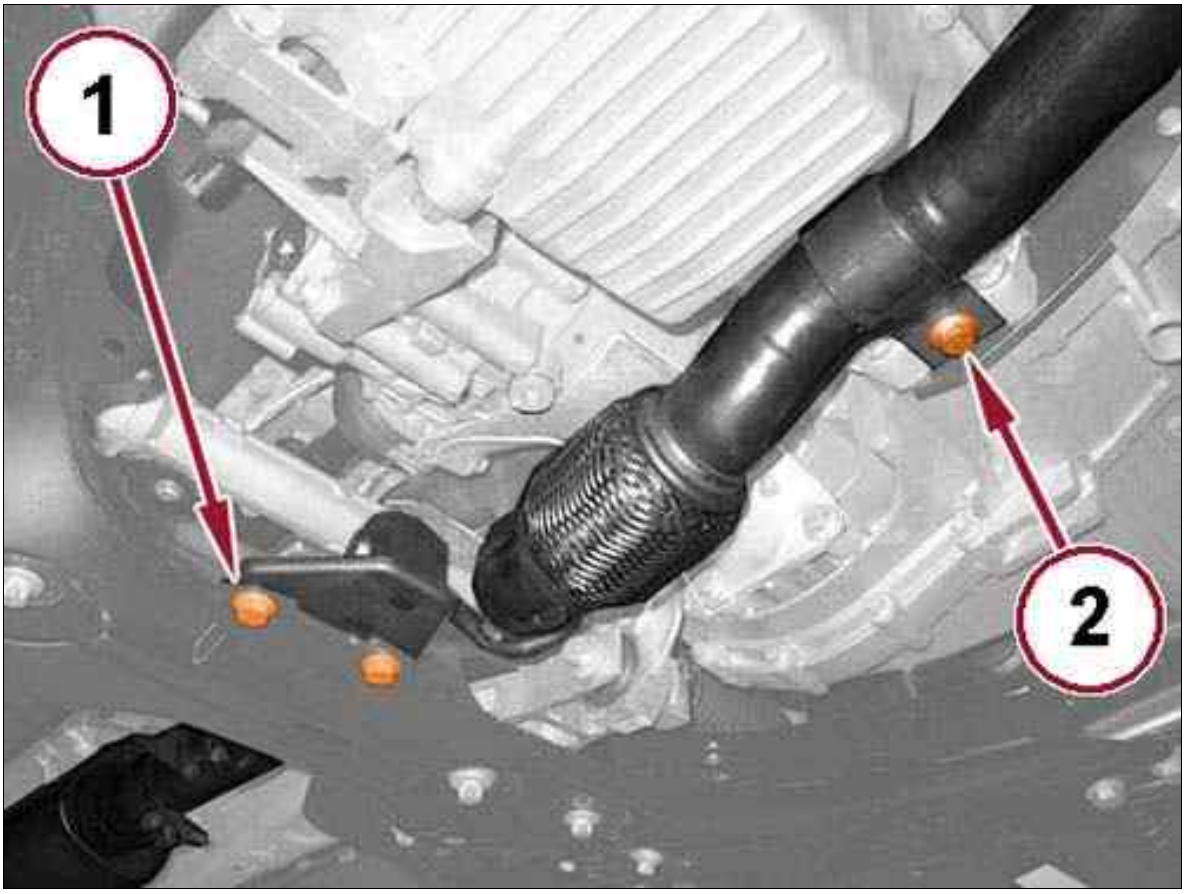
4. Remove the bolts (1) securing the rear exhaust hanger bracket supporting the crossunder pipe at the front crossmember.
5. Loosen the exhaust clamp nut (2) securing the muffler to the crossunder pipe.

Fig 3: Front Exhaust Pipe Support Bracket Bolts & Exhaust Pipe Support Bracket Bolt



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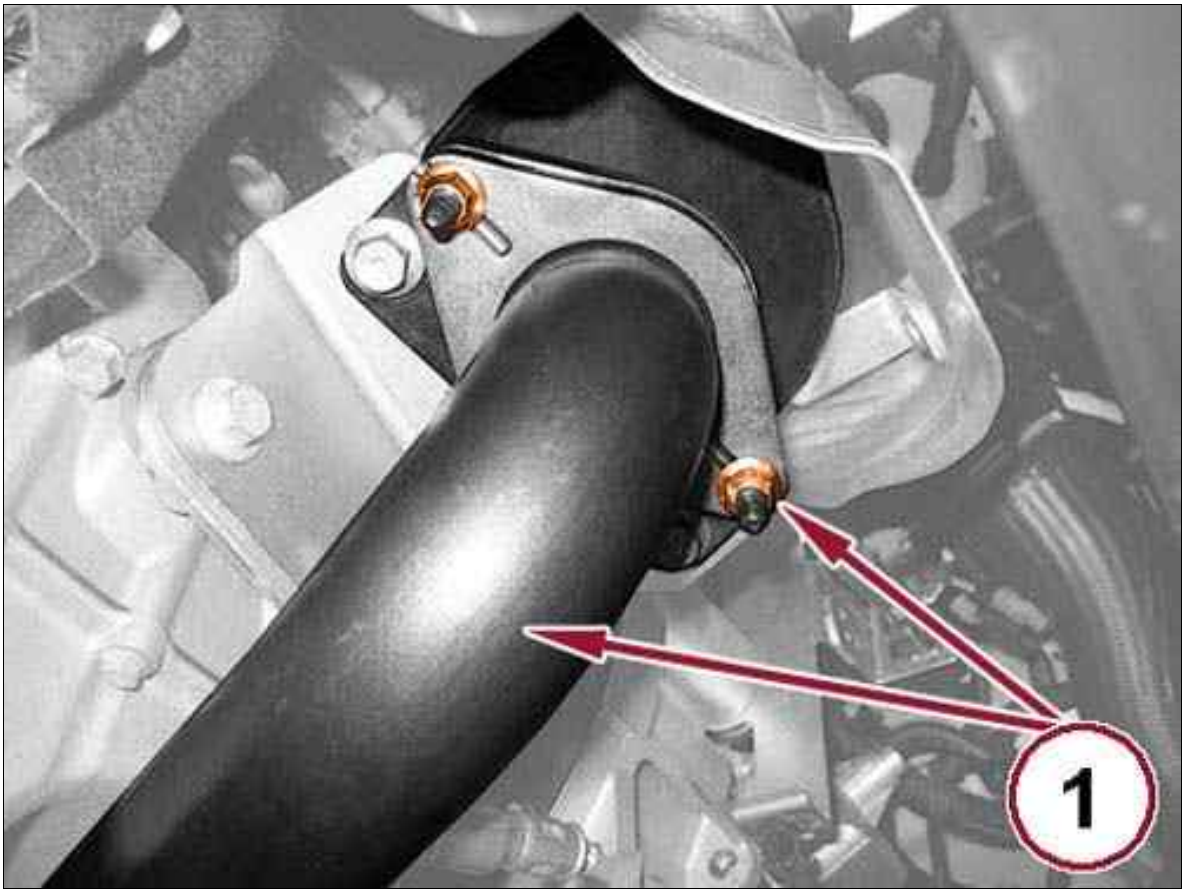
6. Remove the crossunder pipe front hanger support bracket bolts (1).
7. Remove the crossunder pipe bracket bolt (2) from the engine oil pan.

Fig 4: Exhaust Pipe At Catalytic Converter & Nuts



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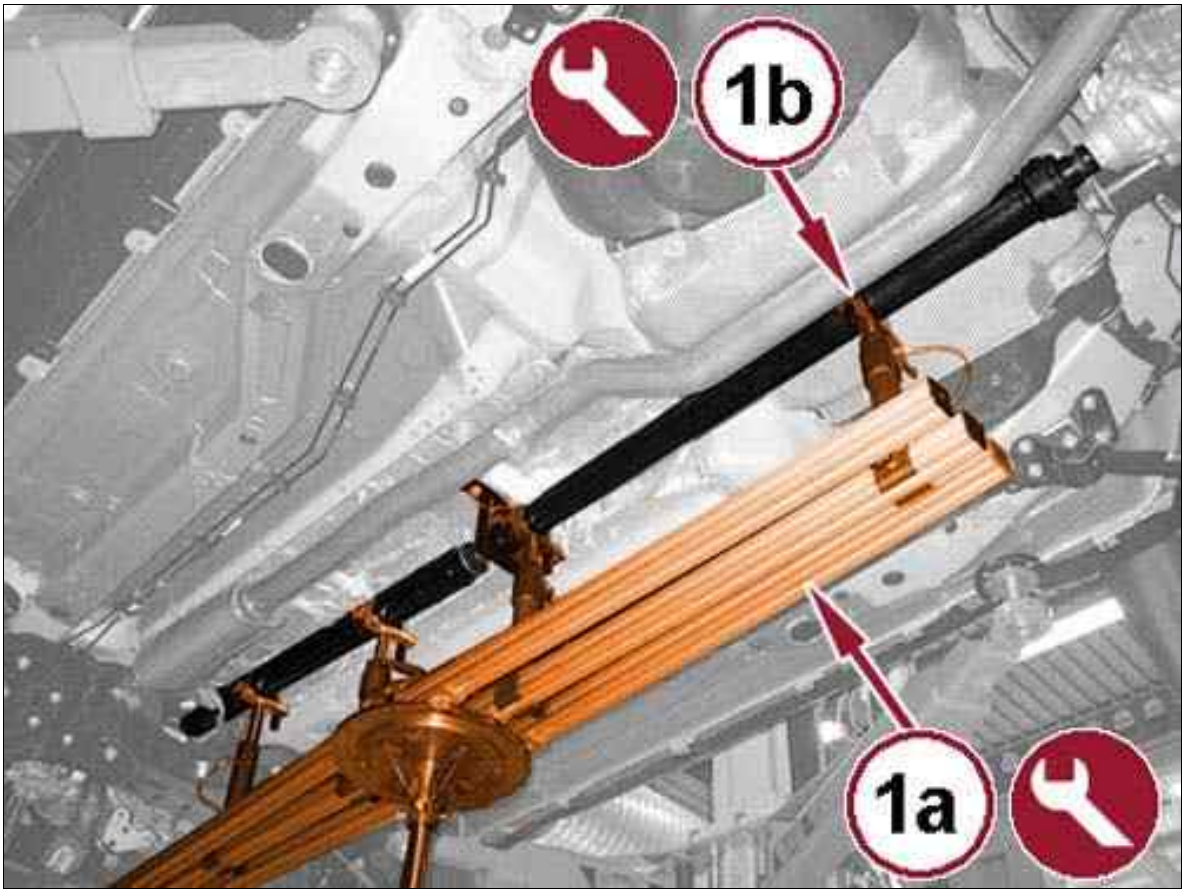
8. Remove the crossunder pipe to catalytic converter flange nuts (1).
9. Remove and discard the exhaust flange gasket.

Fig 5: Support Tools Under Propeller Shaft



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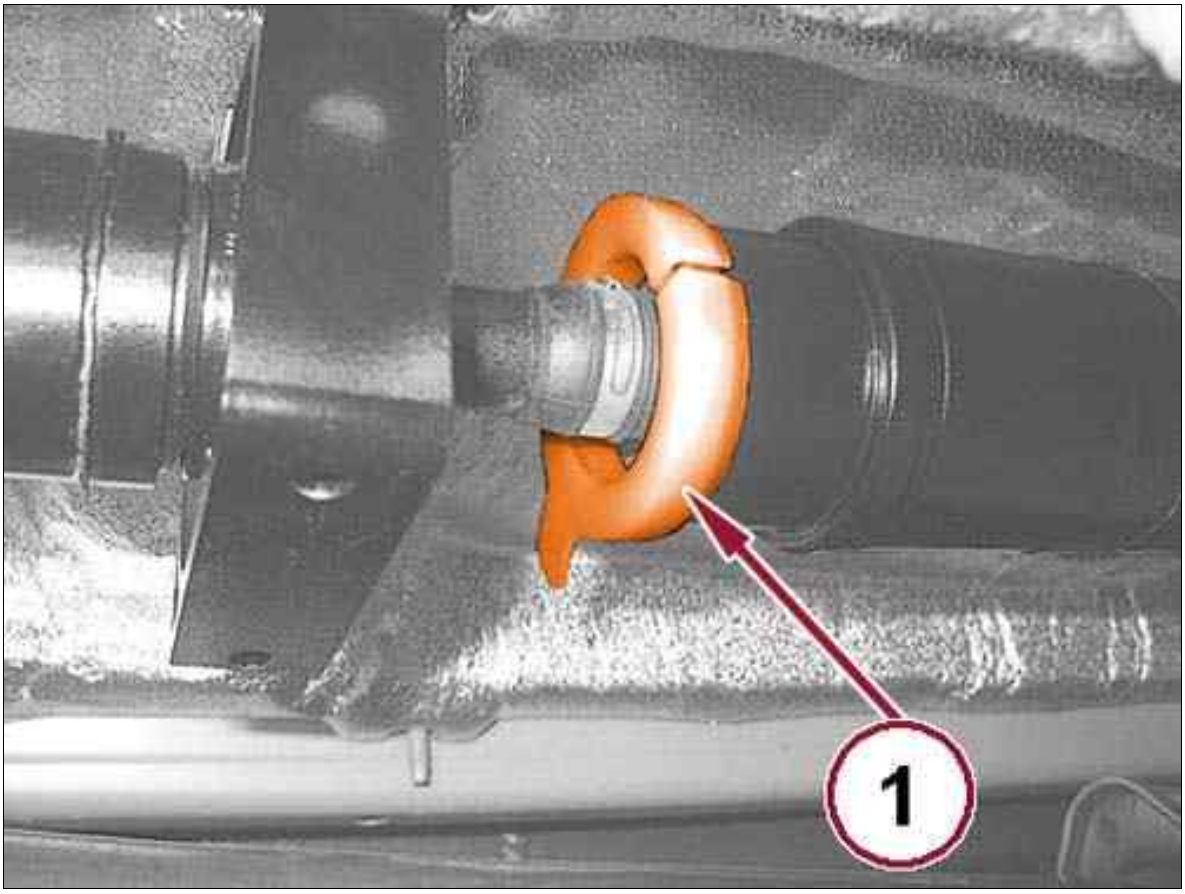
NOTE:

Protect the propeller shaft coating with a suitable duct tape to prevent any scratches caused by the propeller shaft support tools.

10. Position support tools 2000043000 (1b) and 2000043400 (1a) under the propeller shaft.

Fig 6: Protective Sleeve



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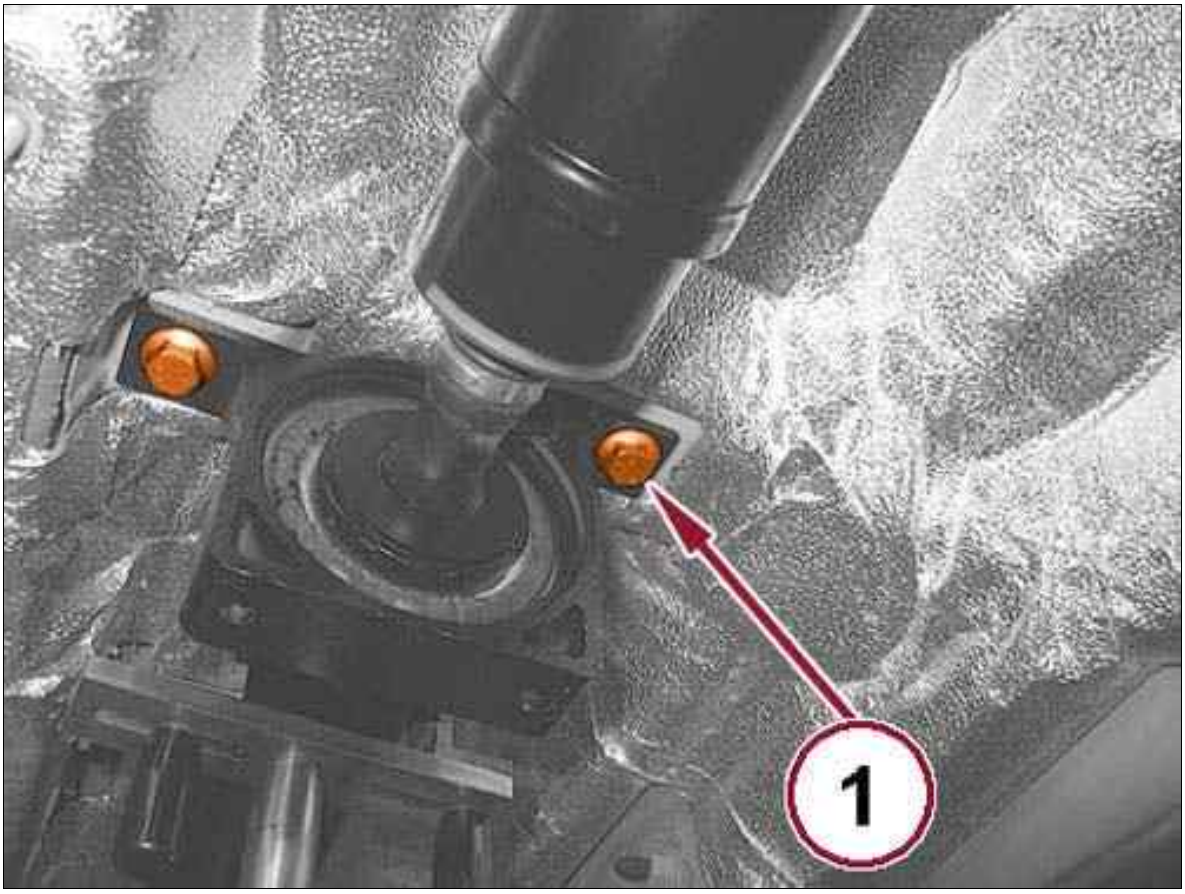
11. Install the protective sleeve (1) at the center propeller shaft joint to protect the boot as shown in illustration.

> *NOTE:*
>
> *The protective sleeve is provided in the parts package with the dust cover and snap rings for the propeller shaft.*

Fig 7: Propeller Shaft Center Support Bolts



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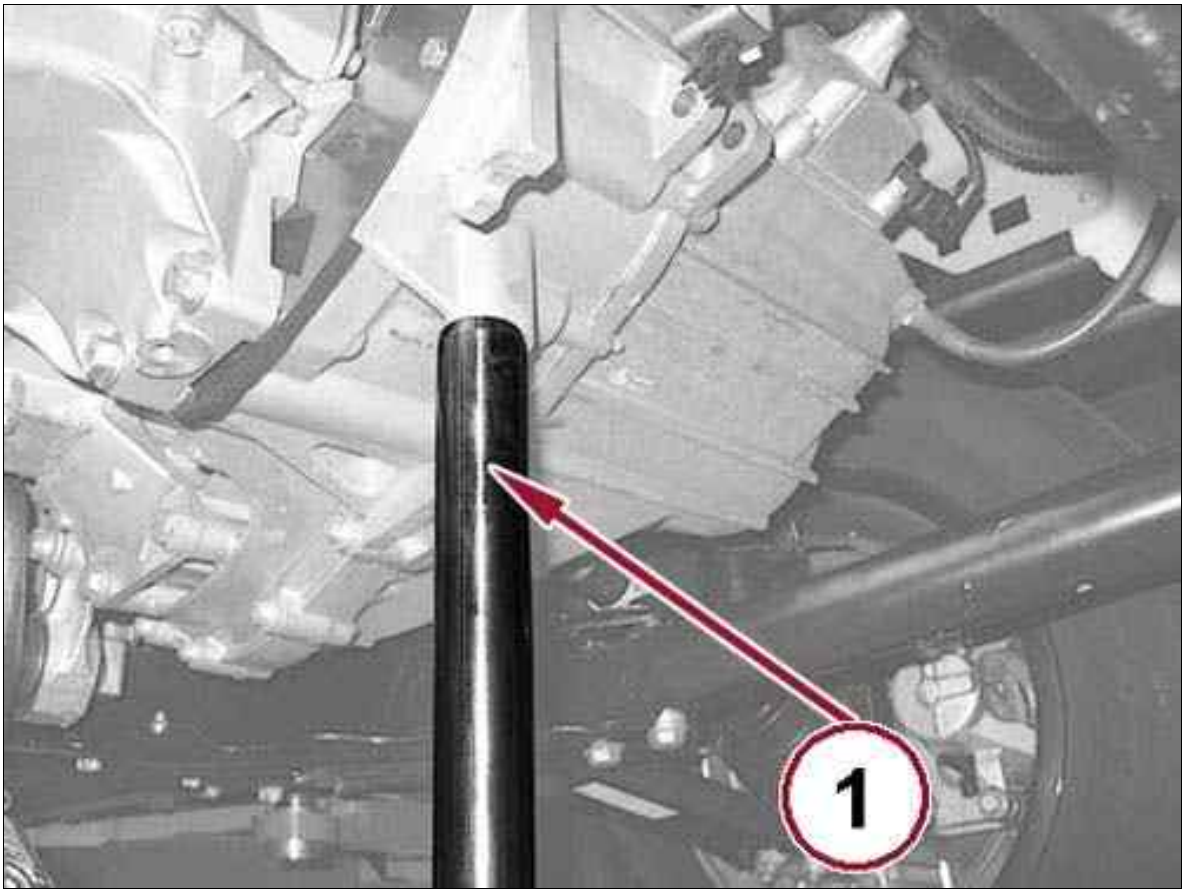
12. Loosen the propeller shaft center support bolts (1).

Fig 8: Jack Under Transmission



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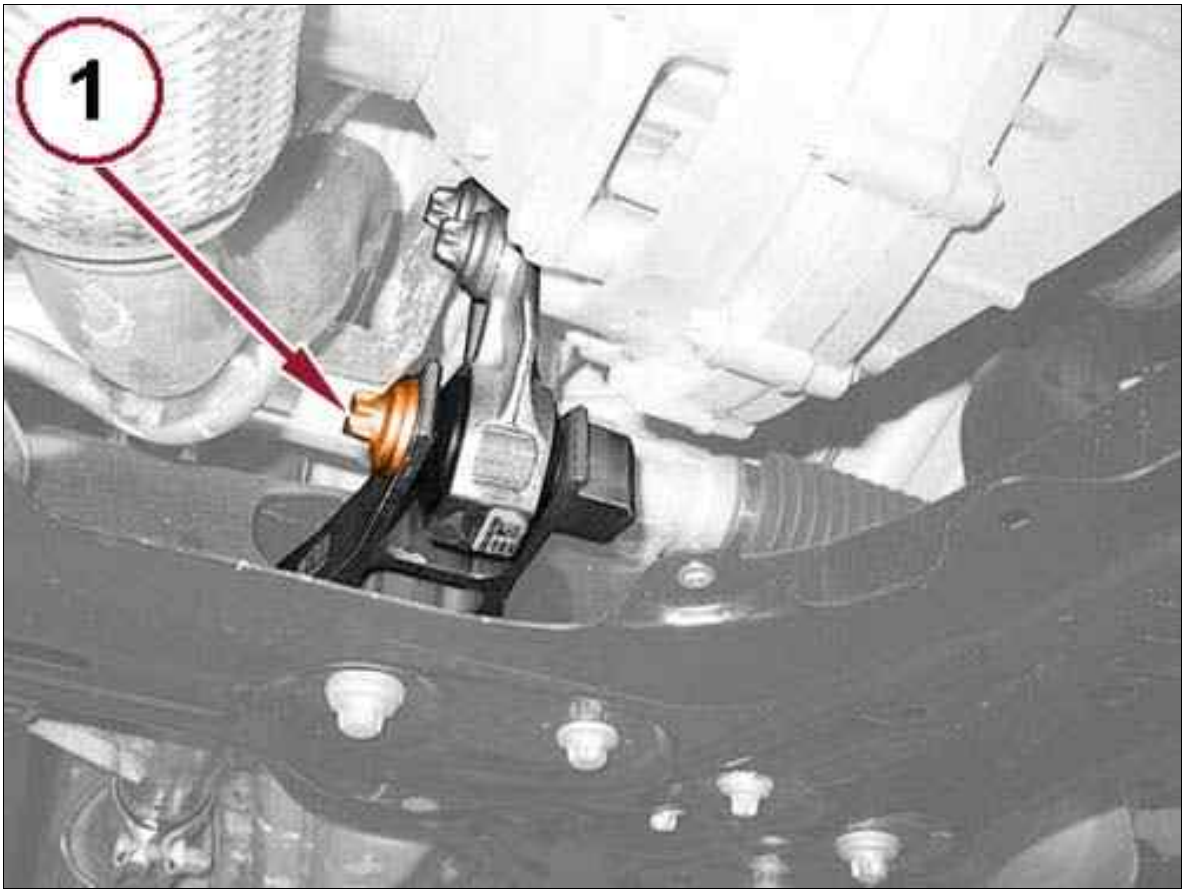
13. Place a suitable jack (1) under the transmission.

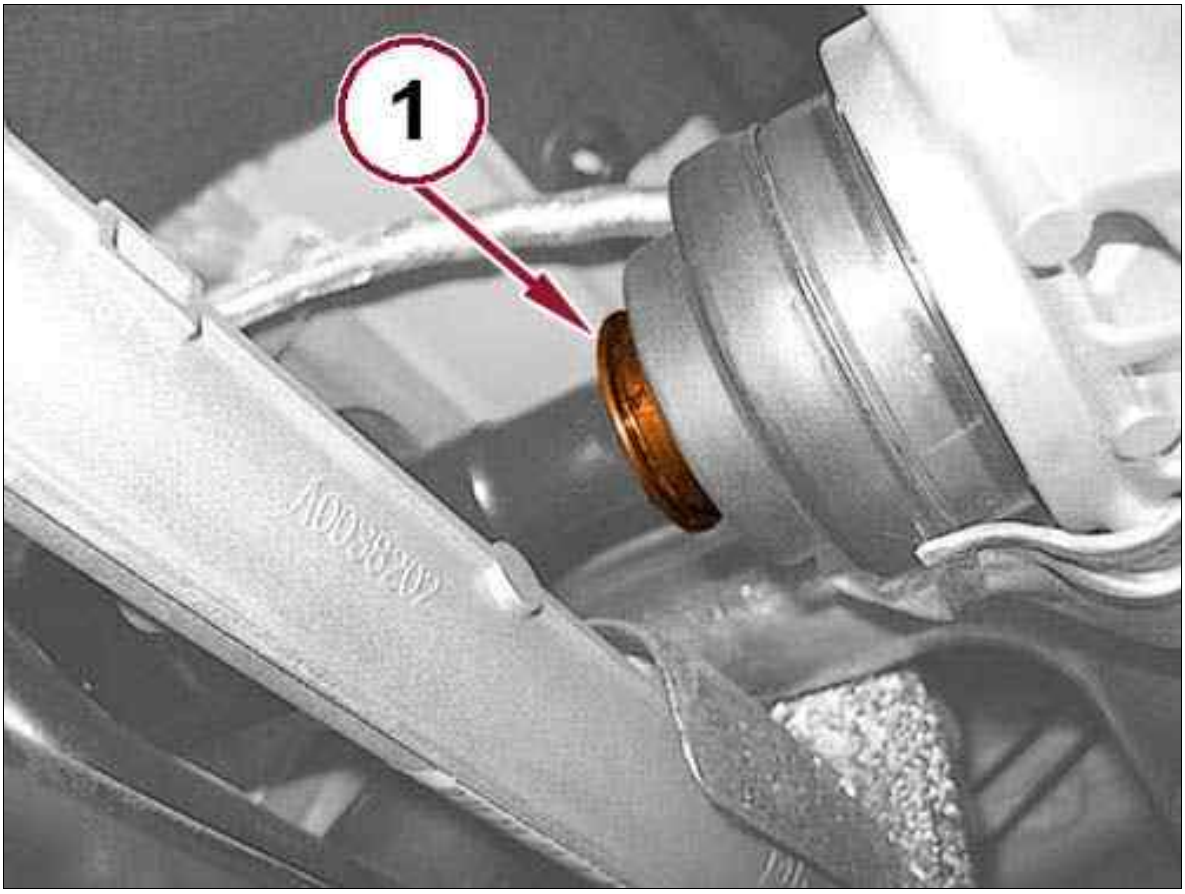
Fig 9: Rear Engine Mount Through Bolt



Courtesy of CHRYSLER GROUP, LLC

14. Remove the rear engine mount through bolt (1).
15. Adjust the jack to carefully shift the powertrain forward.

Fig 10: Dust Cover

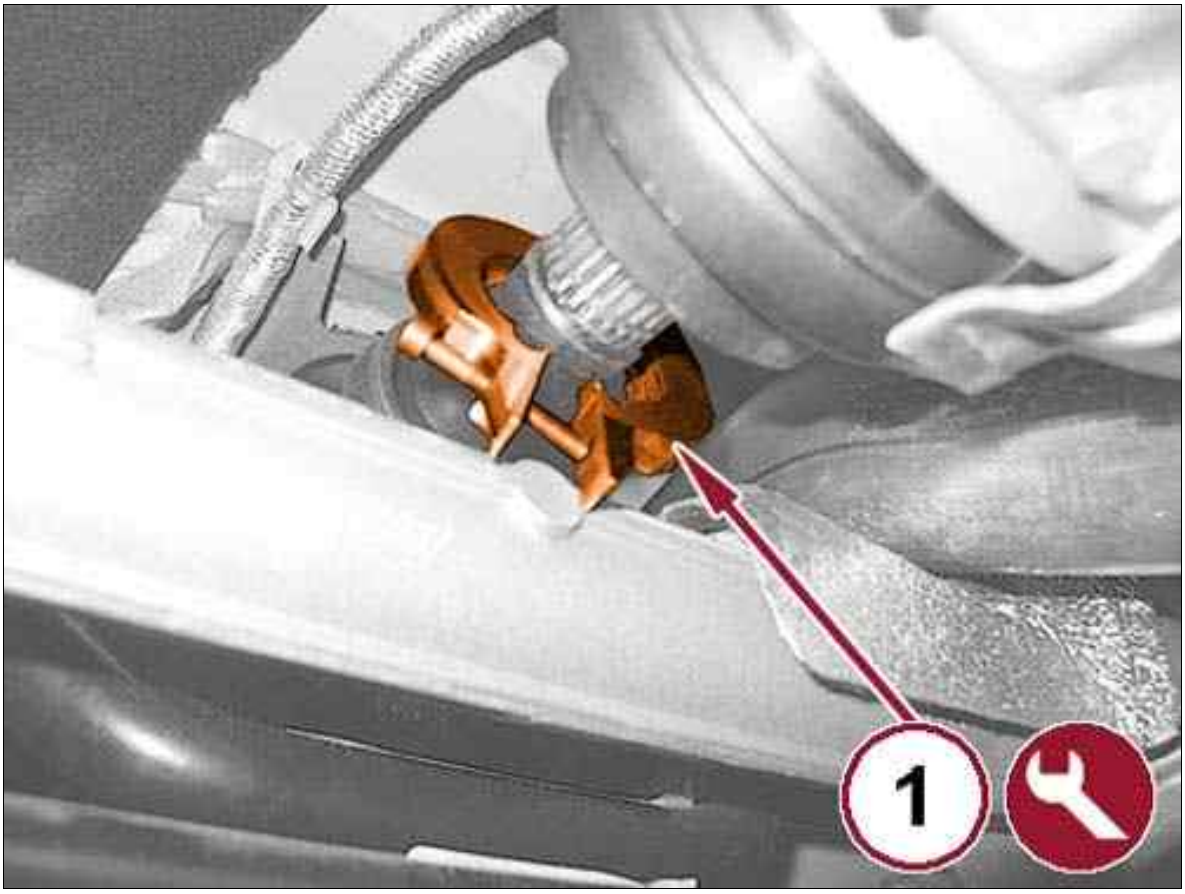


Courtesy of CHRYSLER GROUP, LLC

> *NOTE:*
>
> *The dust cover must be replaced every time the propeller shaft is removed.*

16. Slide the dust cover (1) at the front of the propeller shaft away from the Power Transfer Unit (PTU) to access the snap ring.

Fig 11: Propeller Shaft Snap Ring Tool



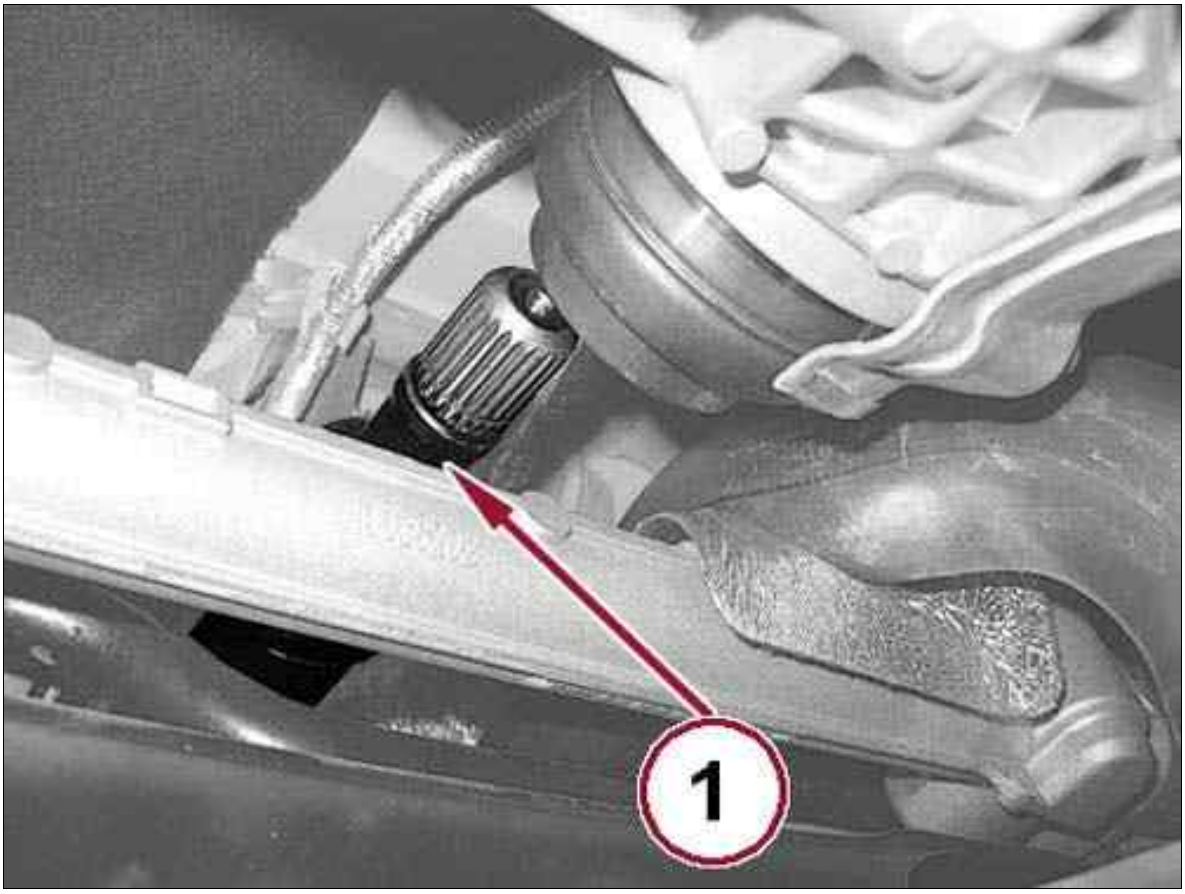
Courtesy of CHRYSLER GROUP, LLC

NOTE:

The snap ring must be replaced every time the propeller shaft is removed.

17. Use tool 2019500030 (1) to open propeller shaft snap ring at the PTU.

Fig 12: Propeller Shaft At PTU



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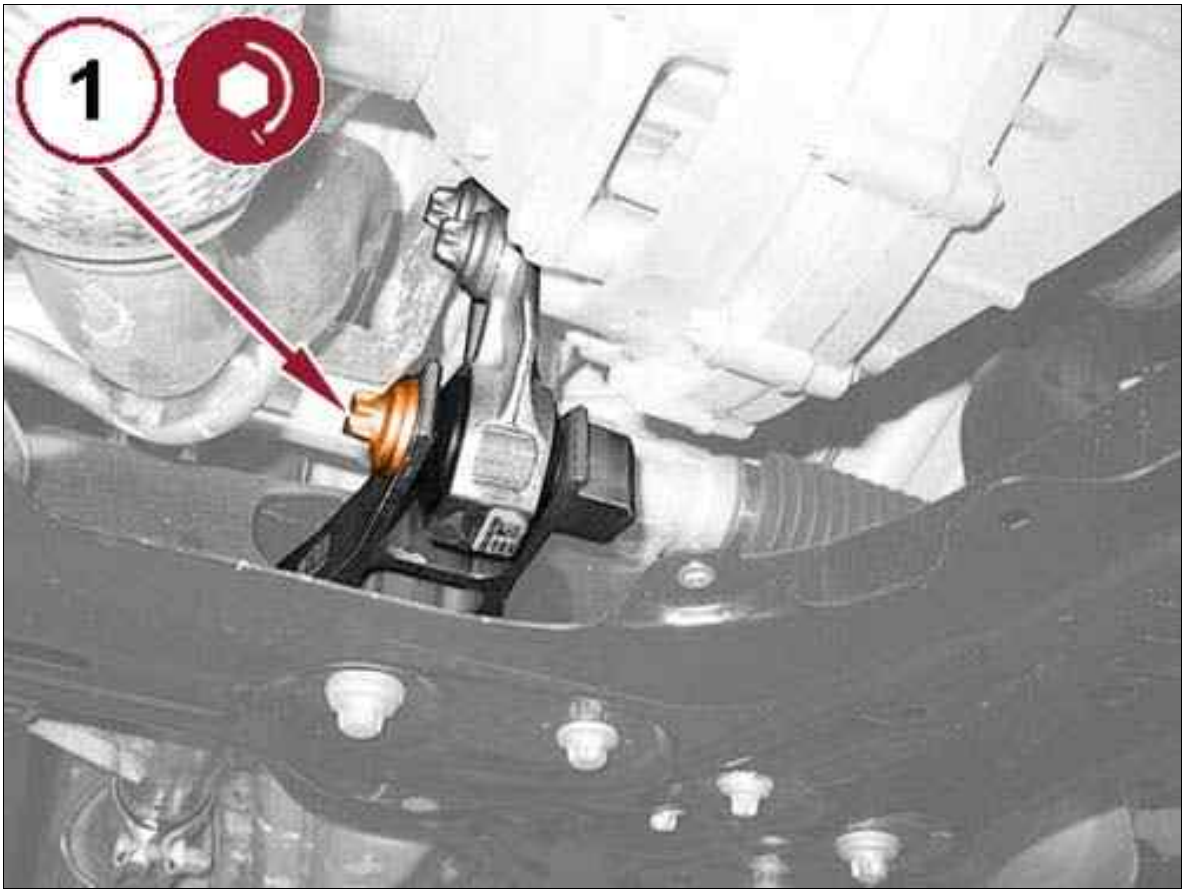
18. Disconnect the propeller shaft (1) from the PTU.
19. Remove the tool 2019500030.

Fig 13: Rear Engine Mount Through Bolt



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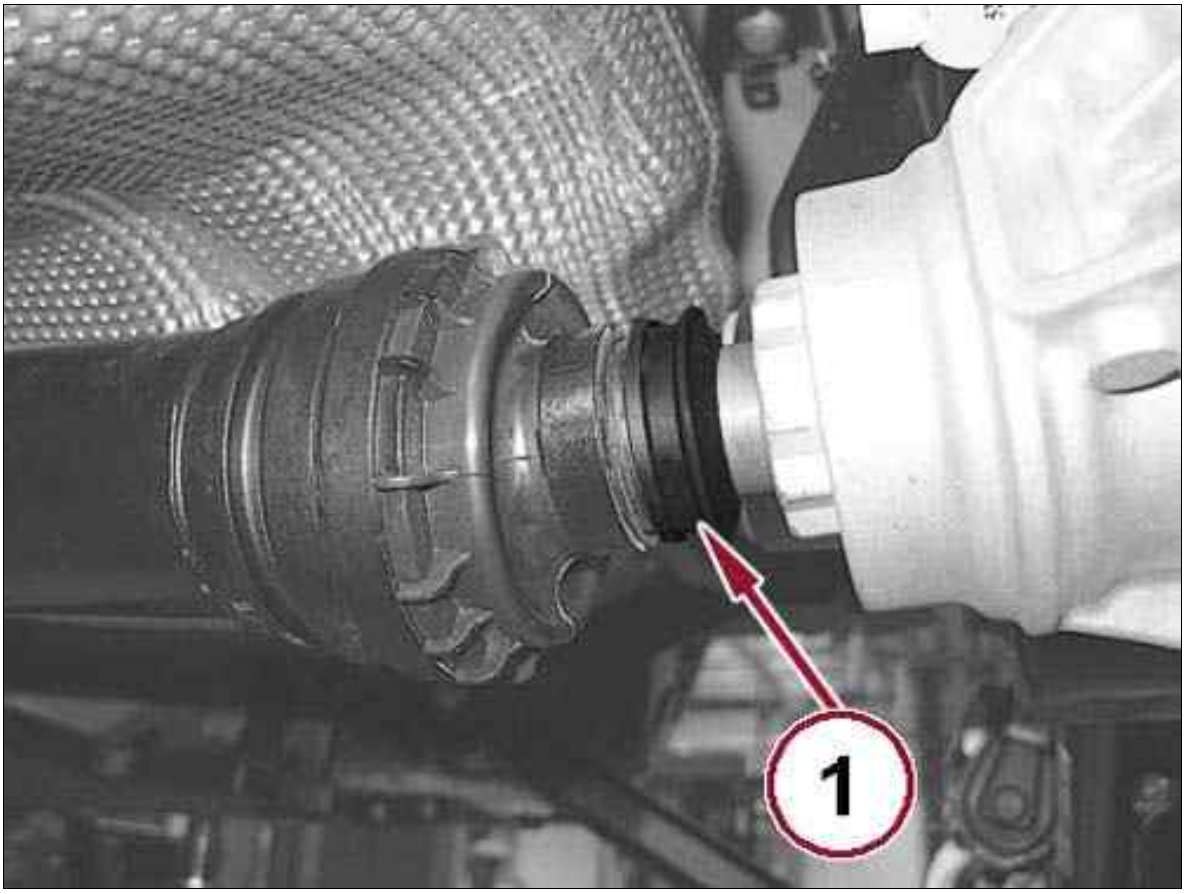
20. Install the rear engine mount through bolt and torque to the proper specification. Refer to TORQUE SPECIFICATIONS .
21. Remove the jack from under the transmission.
22. Remove the previously loosened propeller shaft center support bolts.

Fig 14: Dust Cover



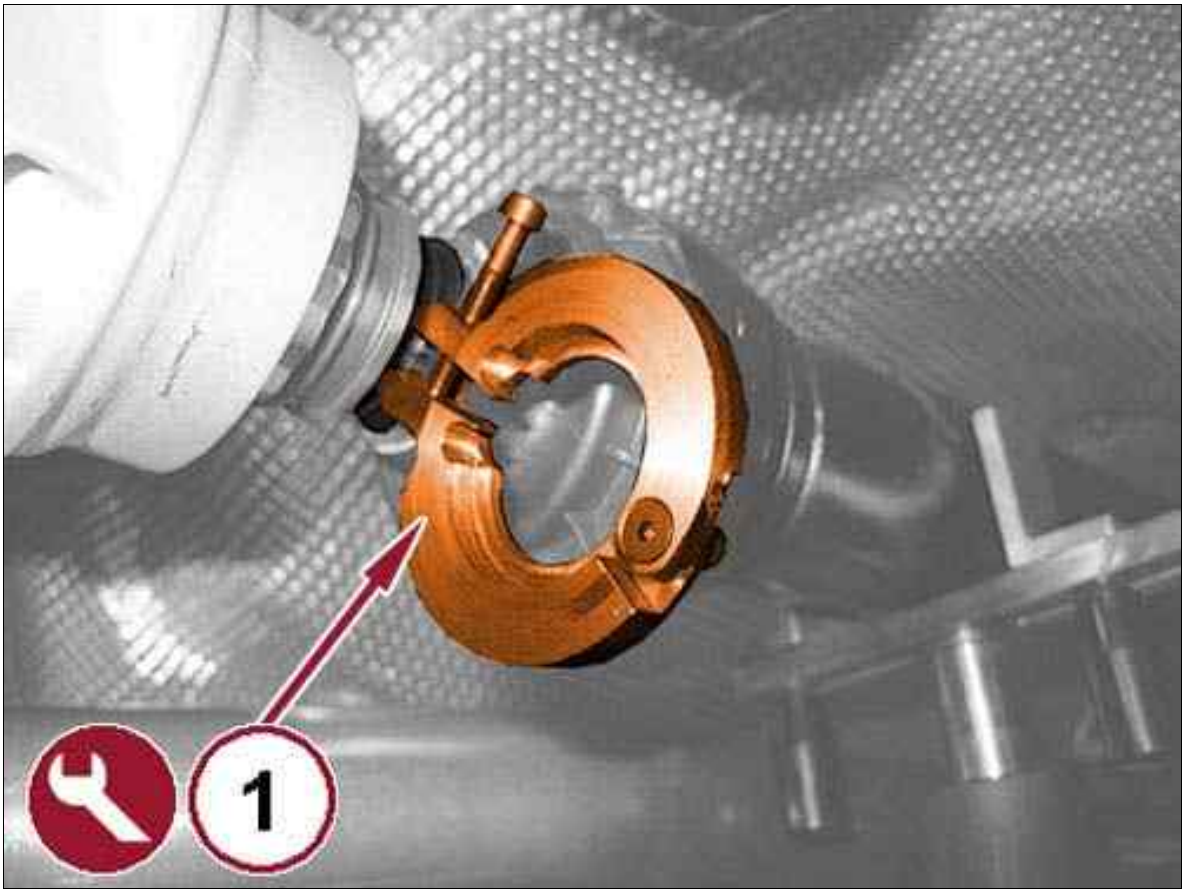
Courtesy of CHRYSLER GROUP, LLC

NOTE:

The dust cover must be replaced every time the propeller shaft is removed.

23. Slide the dust cover (1) at the rear of the propeller shaft towards the differential to access the snap ring.

Fig 15: Opening Propeller Shaft Snap Ring



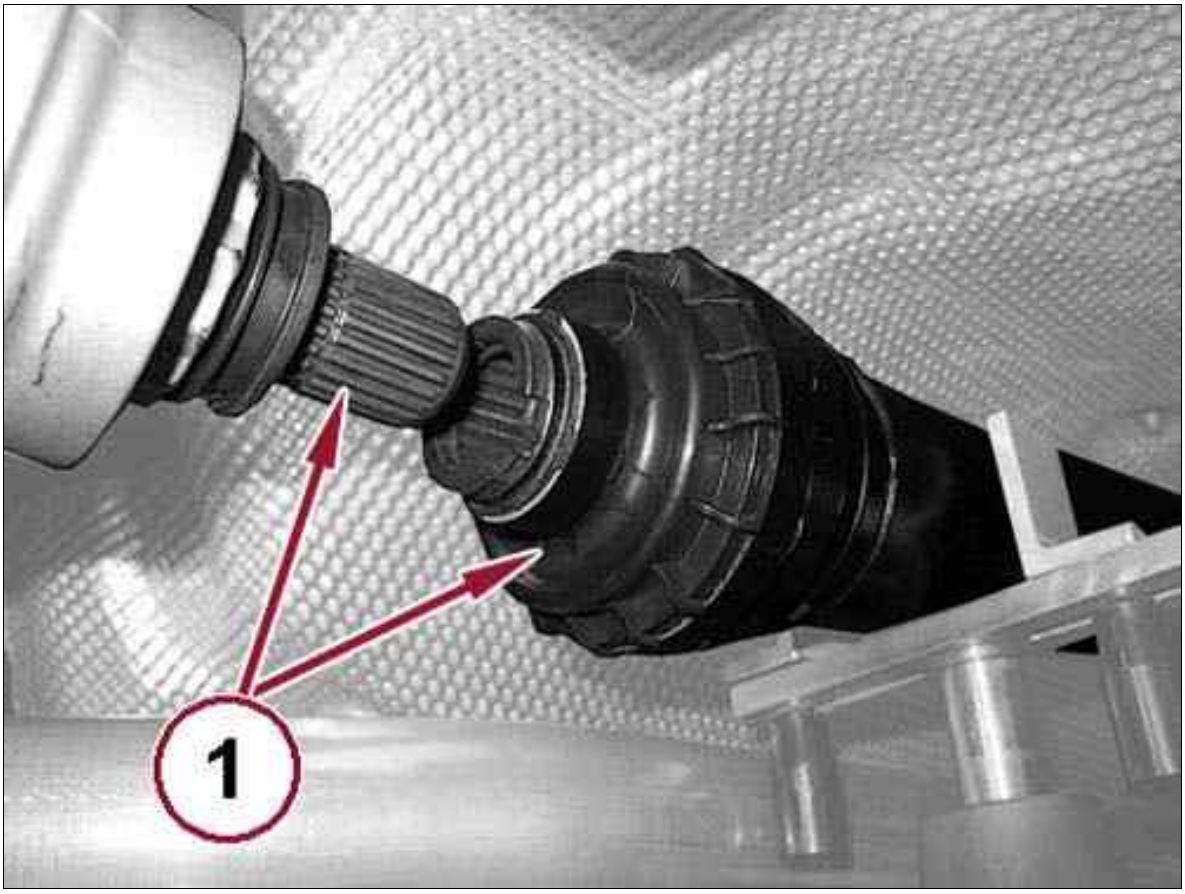
Courtesy of CHRYSLER GROUP, LLC

NOTE:

The snap ring must be replaced every time the propeller shaft is removed.

24. Use tool 2019500030 (1) to open propeller shaft snap ring at the Rear Driveline Unit (RDU).

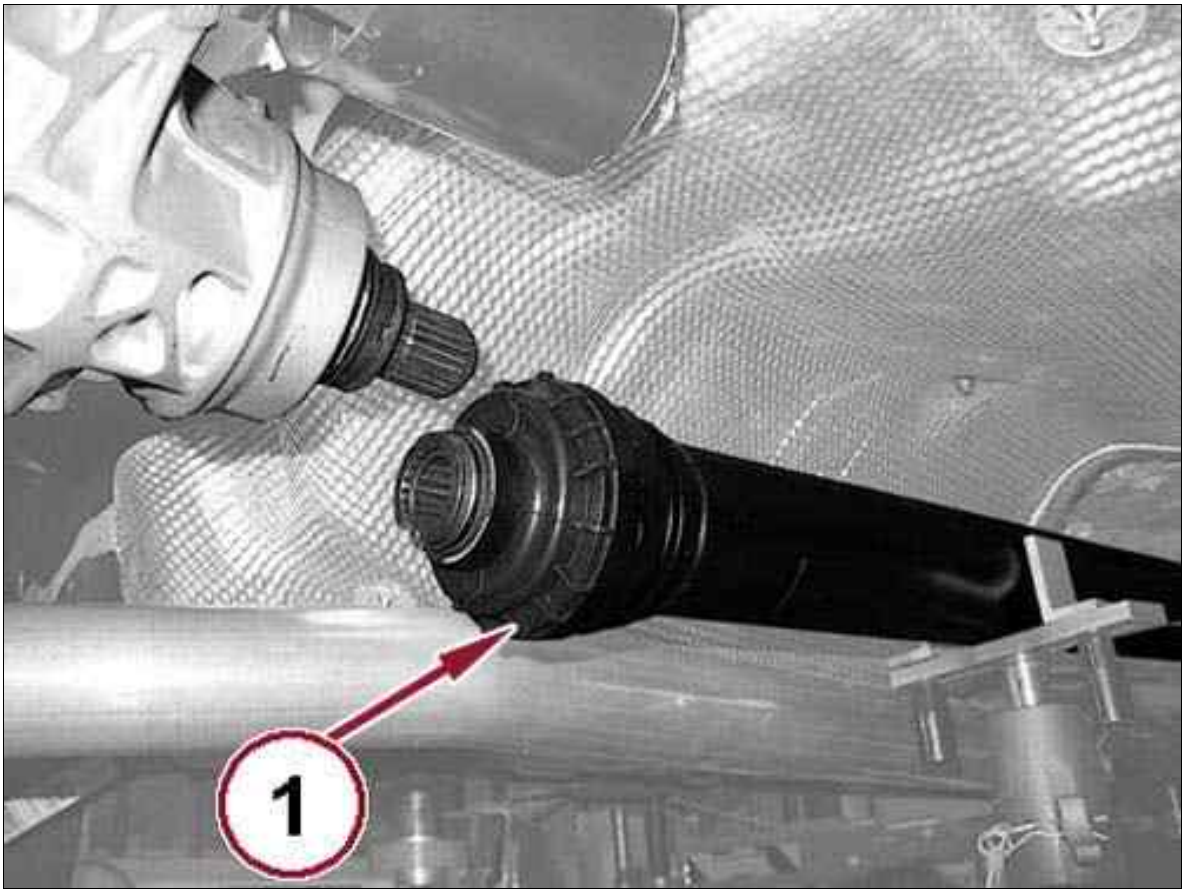
Fig 16: Propeller Shaft & Pinion



Courtesy of CHRYSLER GROUP, LLC

25. Disconnect the propeller shaft from the pinion of the RDU (1).
26. Remove the tool 2019500030.

Fig 17: Propeller Shaft At RDU



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27. Lower the propeller shaft until the rear joint of the shaft is under the RDU as shown in illustration.

> *NOTE:*
>
> *Pay close attention to avoid excessive articulation between the two halves of the propeller shaft during removal.*

28. Turn the jack to remove the drive shaft, guiding it away from the front suspension crossmember.

REMOVAL AND INSTALLATION > 1.4 TURBO MULTIAIR > INSTALLATION

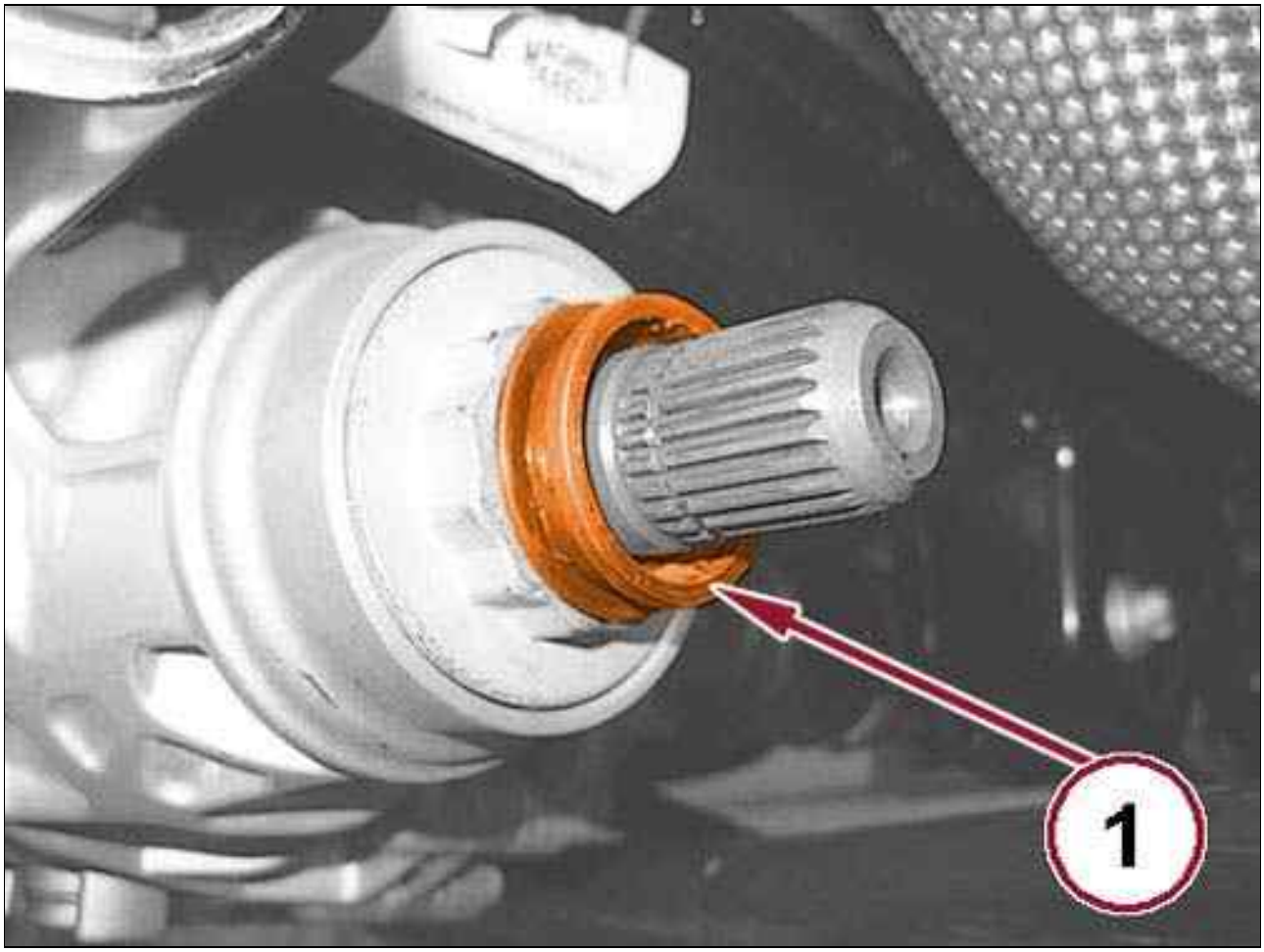
> *CAUTION:*
>
> *Propeller shaft removal is a two-person operation. Never allow propeller shaft to hang from the center bearing, or while only connected to power transfer unit (PTU) or rear driveline module flanges. A helper is required. If a propshaft section is hung unsupported, damage*

may occur to the joint, boot, and/or center bearing from over-angulation. This may result in driveline vibrations.

NOTE:

Lightly apply grease to the splines prior to installation.

Fig 1: Pinion Shaft Dust Seal



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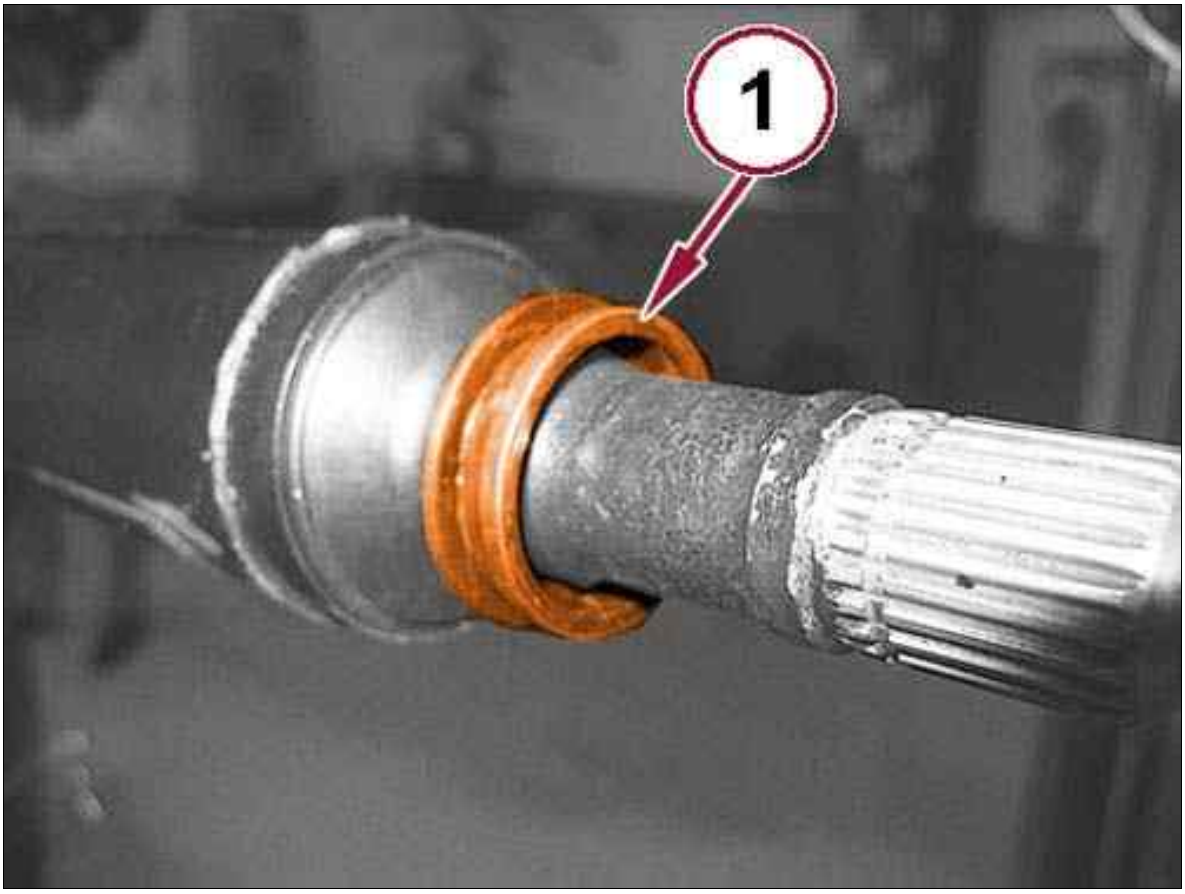
1. Install a **NEW** dust seal (1) on the pinion shaft of the Rear Driveline Unit (RDU).

Fig 2: Front Of Propeller Shaft Dust Seal



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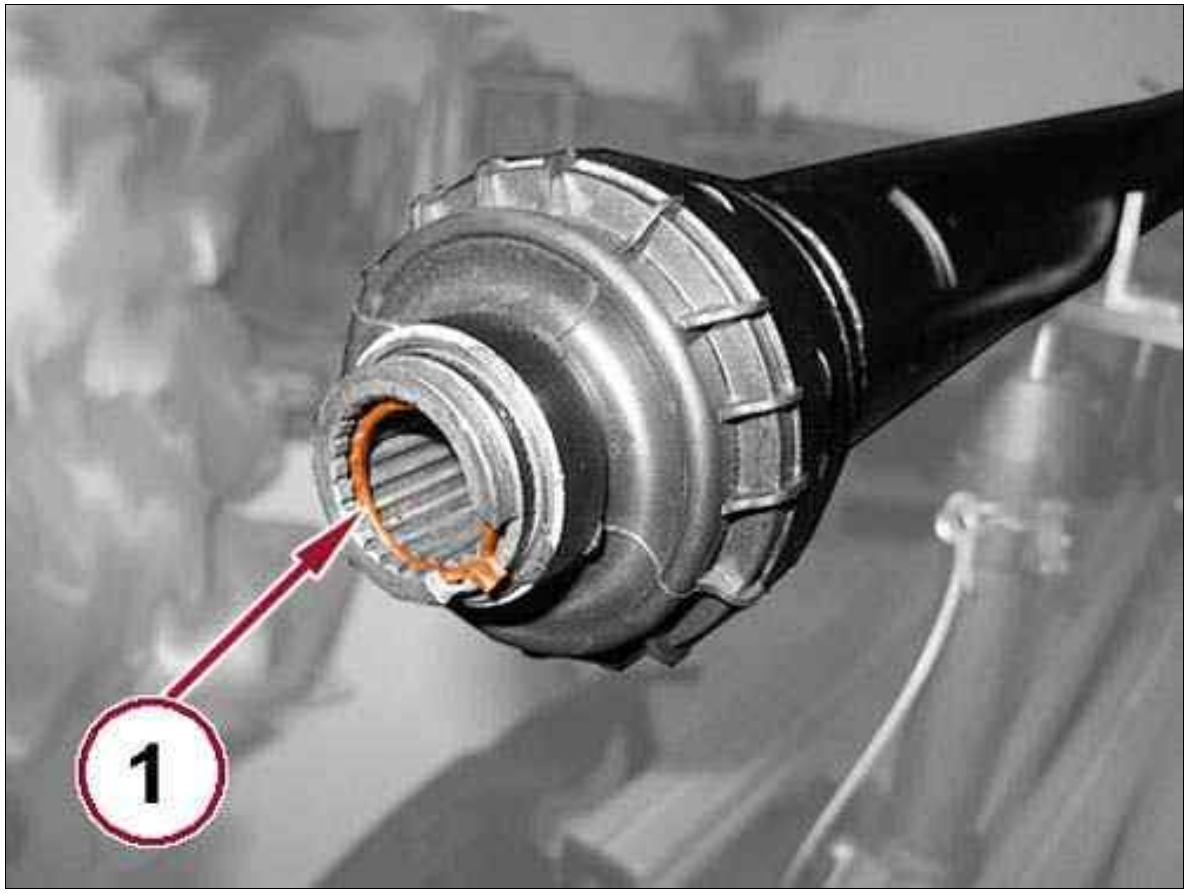
2. Install a **NEW** dust seal (1) on the front shaft of the propeller shaft.

Fig 3: Drive Shaft Snap Ring



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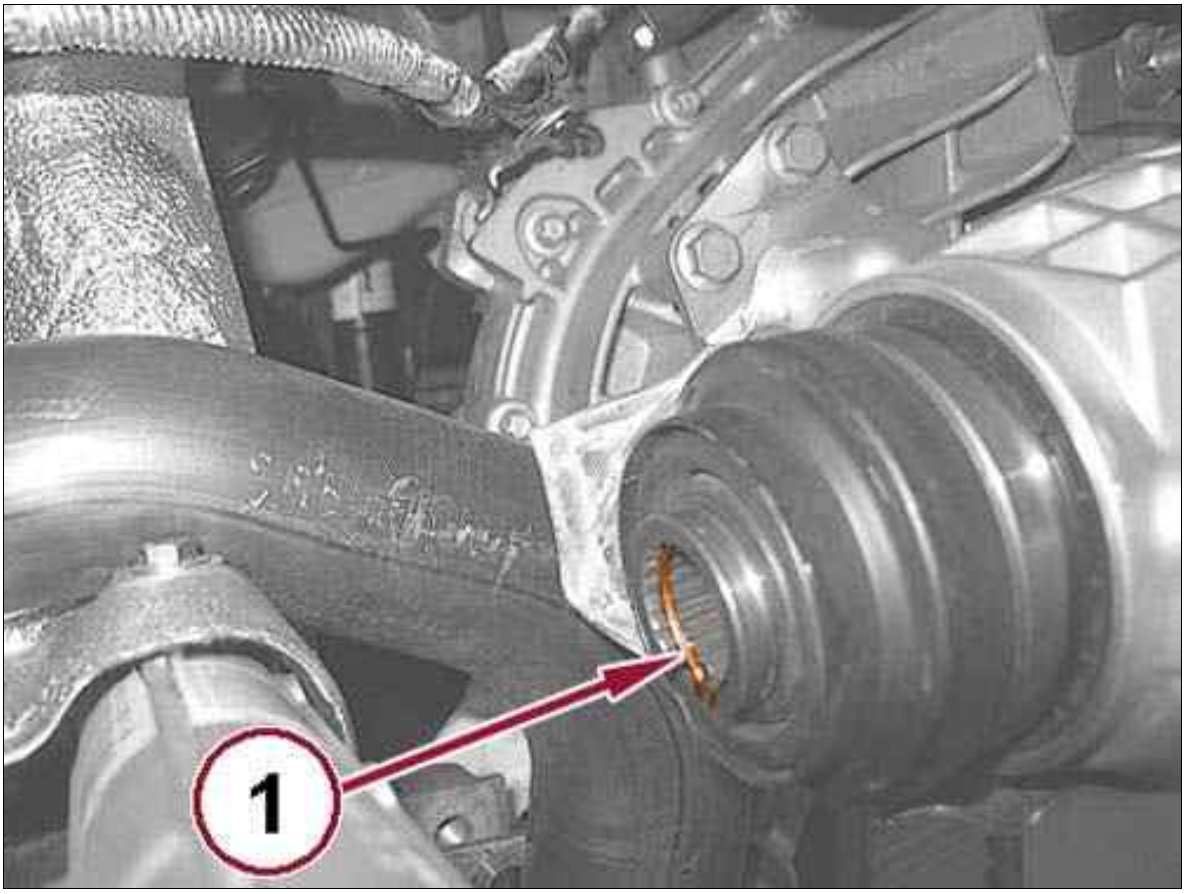
3. Install a **NEW** snap ring (1) in the drive shaft.

Fig 4: PTU Snap Ring



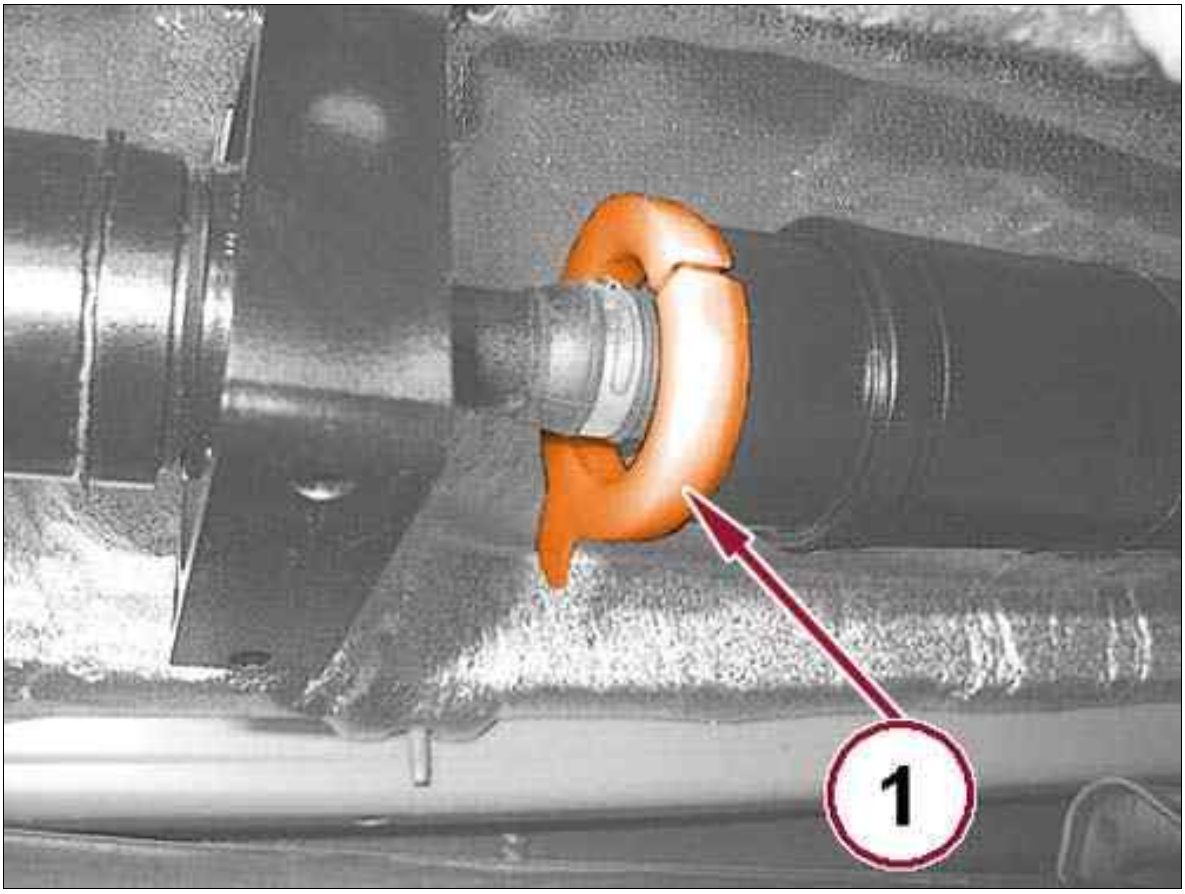
Courtesy of CHRYSLER GROUP, LLC

4. Install a **NEW** snap ring (1) in the Power Transfer Unit (PTU).

> *NOTE:*
>
> *Protect the propeller shaft coating with a suitable duct tape to prevent any scratches caused by the propeller shaft support tools.*

5. Position the propeller shaft on the support tools 2000043000 and 2000043400.

Fig 5: Protective Sleeve At Center Propeller Shaft Joint



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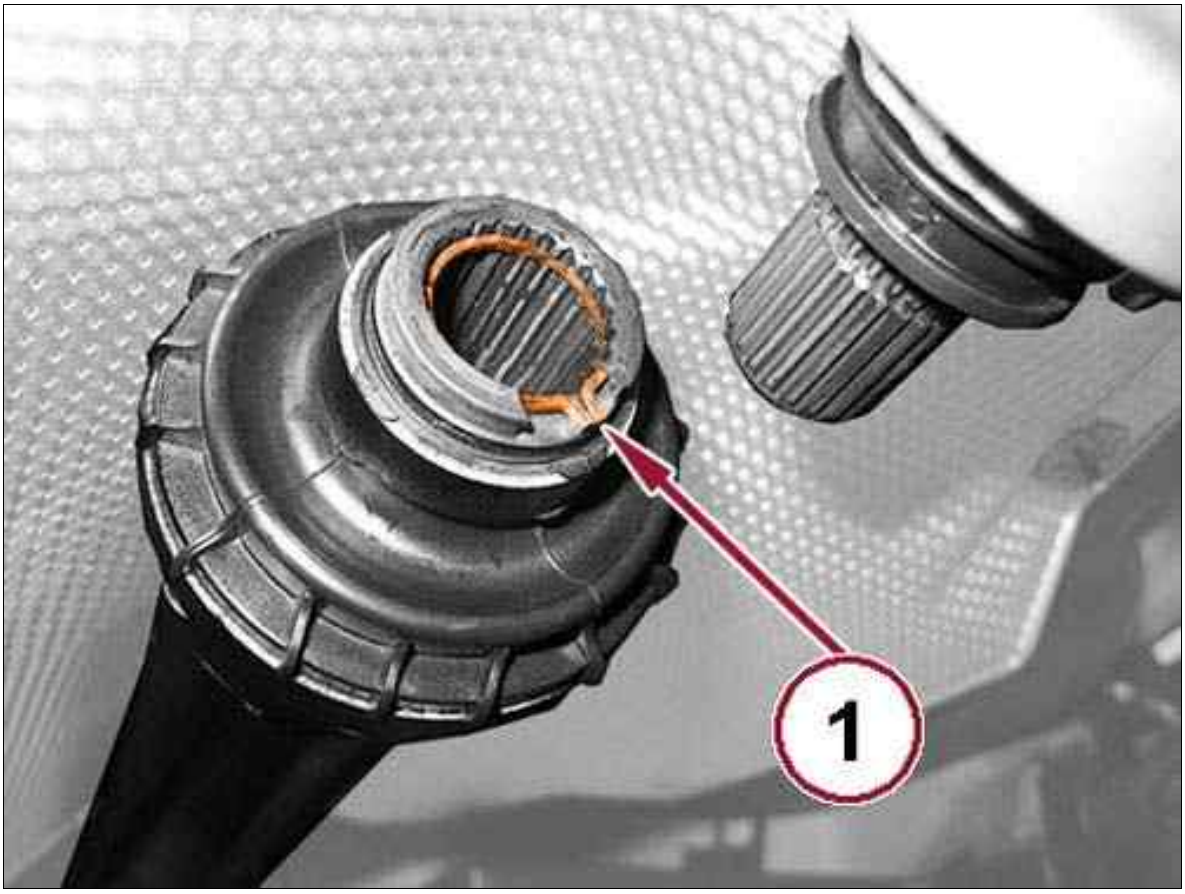
6. Install the protective sleeve (1) at the center propeller shaft joint to protect the boot as shown in illustration.
7. Raise the propeller shaft into the vehicle positioning the front of the shaft above the front cross member and the steering gear.

Fig 6: Propeller Shaft Snap Ring Seated



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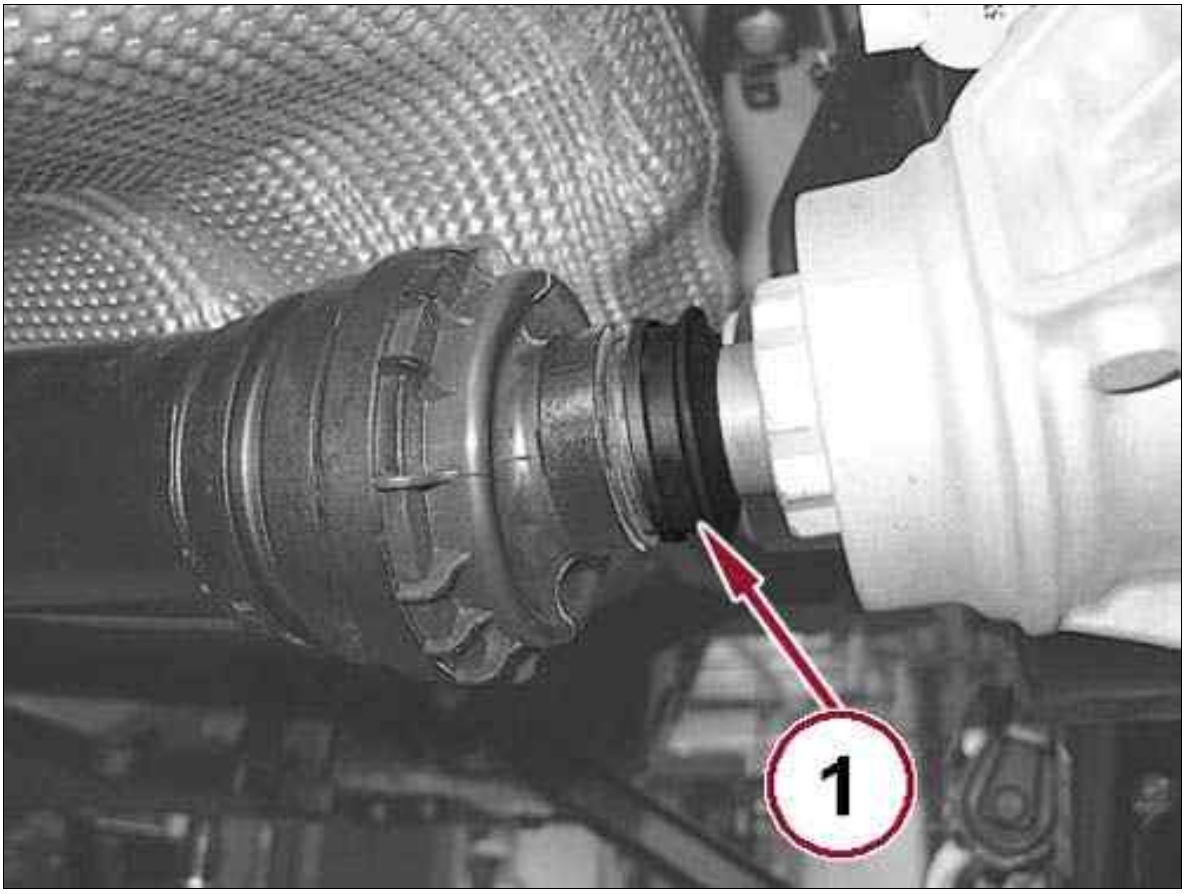
8. Connect the propeller shaft (1) to the pinion of the RDU, verify the snap ring is seated in the groove of the pinion shaft.

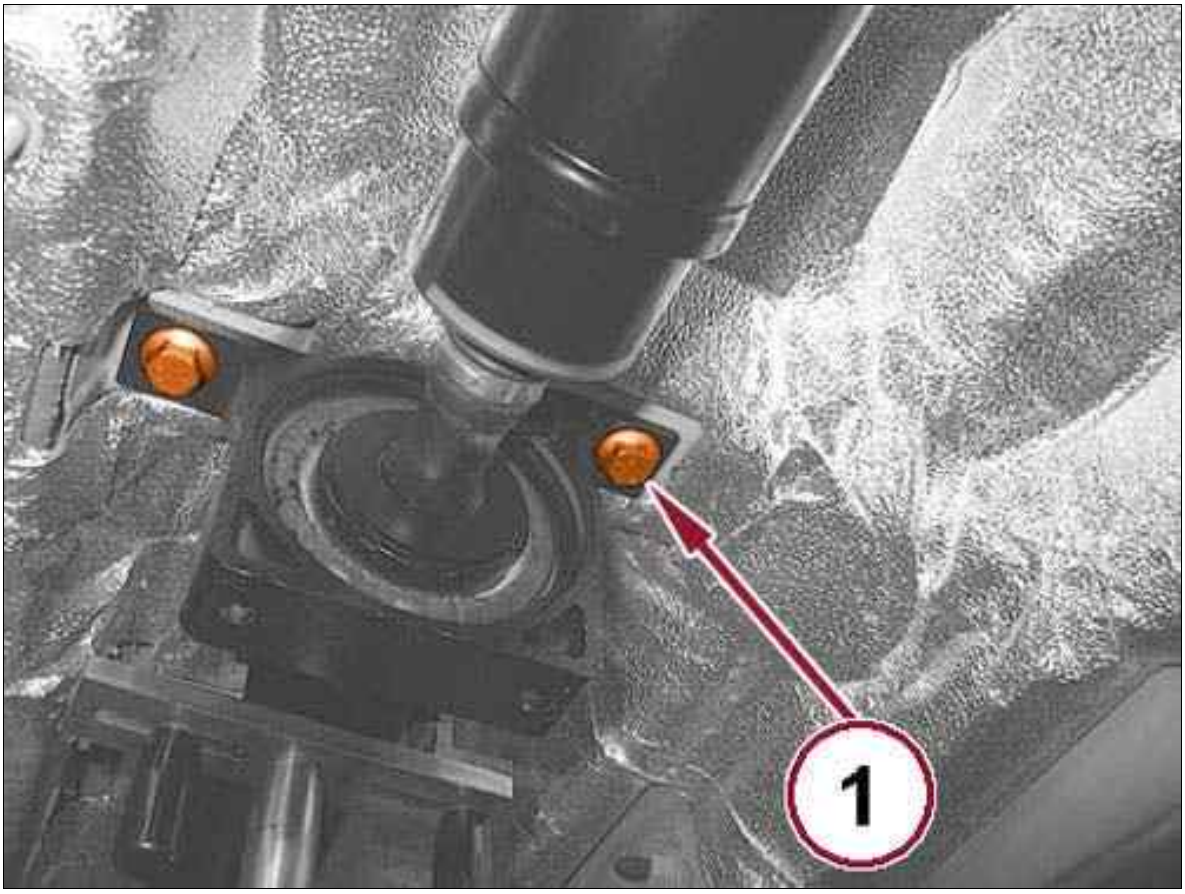
Fig 7: Rear Propeller Shaft Dust Cover



Courtesy of CHRYSLER GROUP, LLC

9. Position the new dust cover (1) over the joint at the rear of the propeller shaft.

Fig 8: Center Support Bracket Bolts



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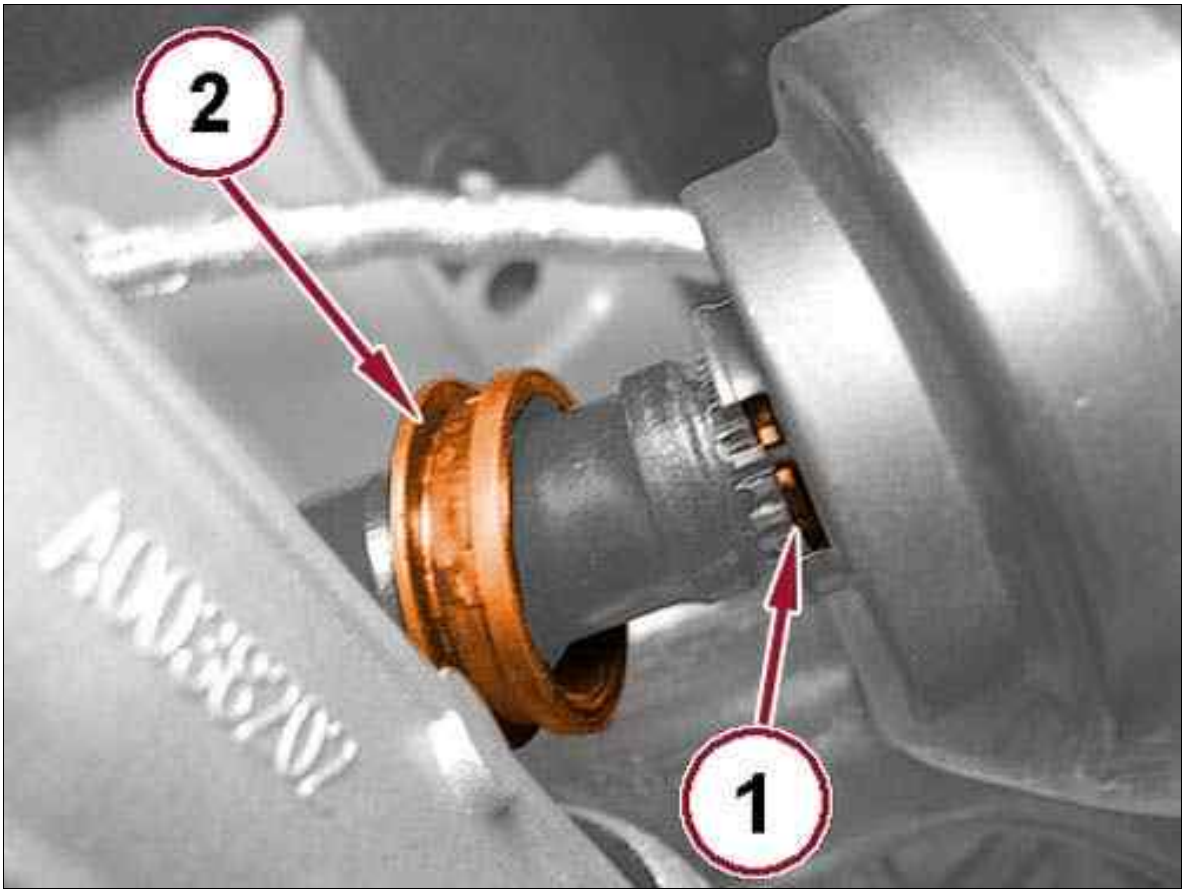
10. Loosely install the **NEW** bolts (1) for the center support bracket.

Fig 9: Propeller Shaft Snap Ring & Dust Cover



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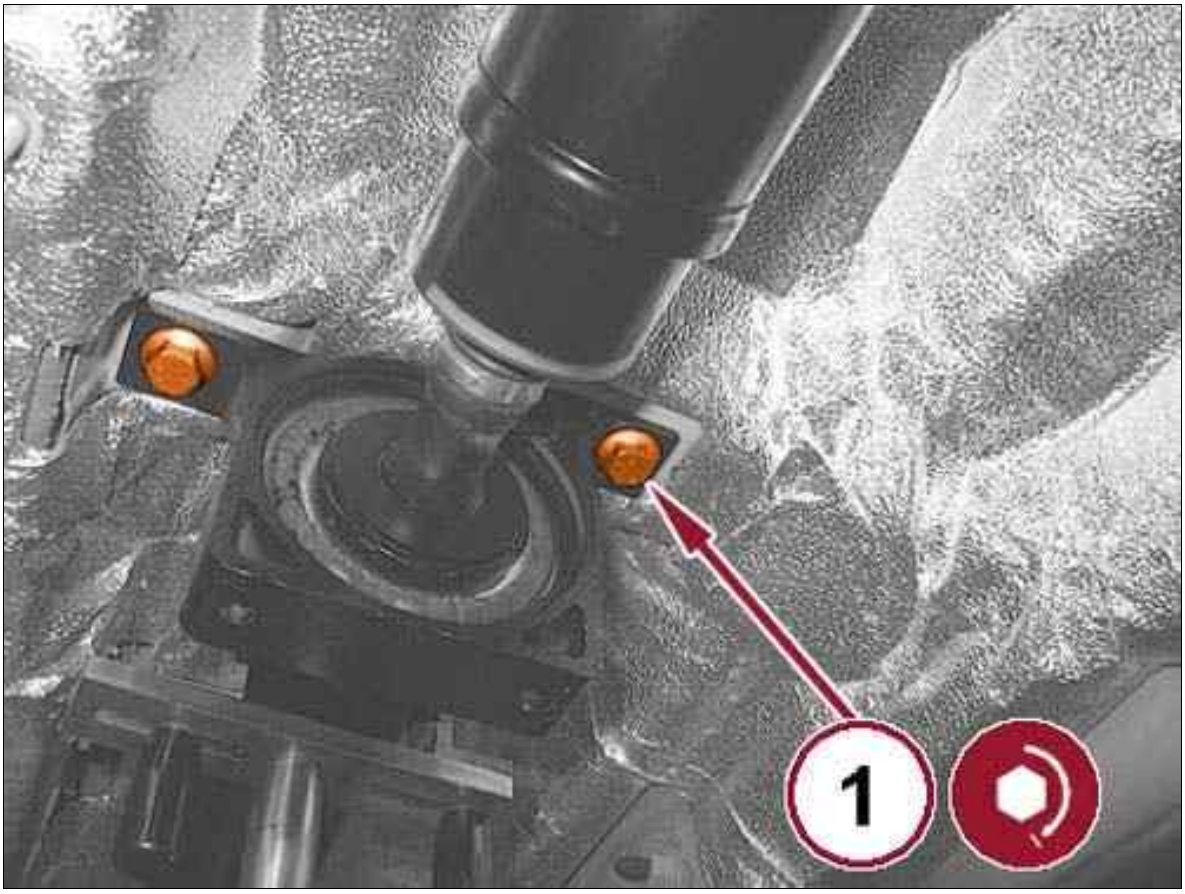
11. Connect the propeller shaft (1) to PTU, verify the snap ring is (1) seated in the groove of the propeller shaft.
12. Position the new dust cover (2) over the joint at the front of the propeller shaft.

Fig 10: Center Support Bracket Bolts



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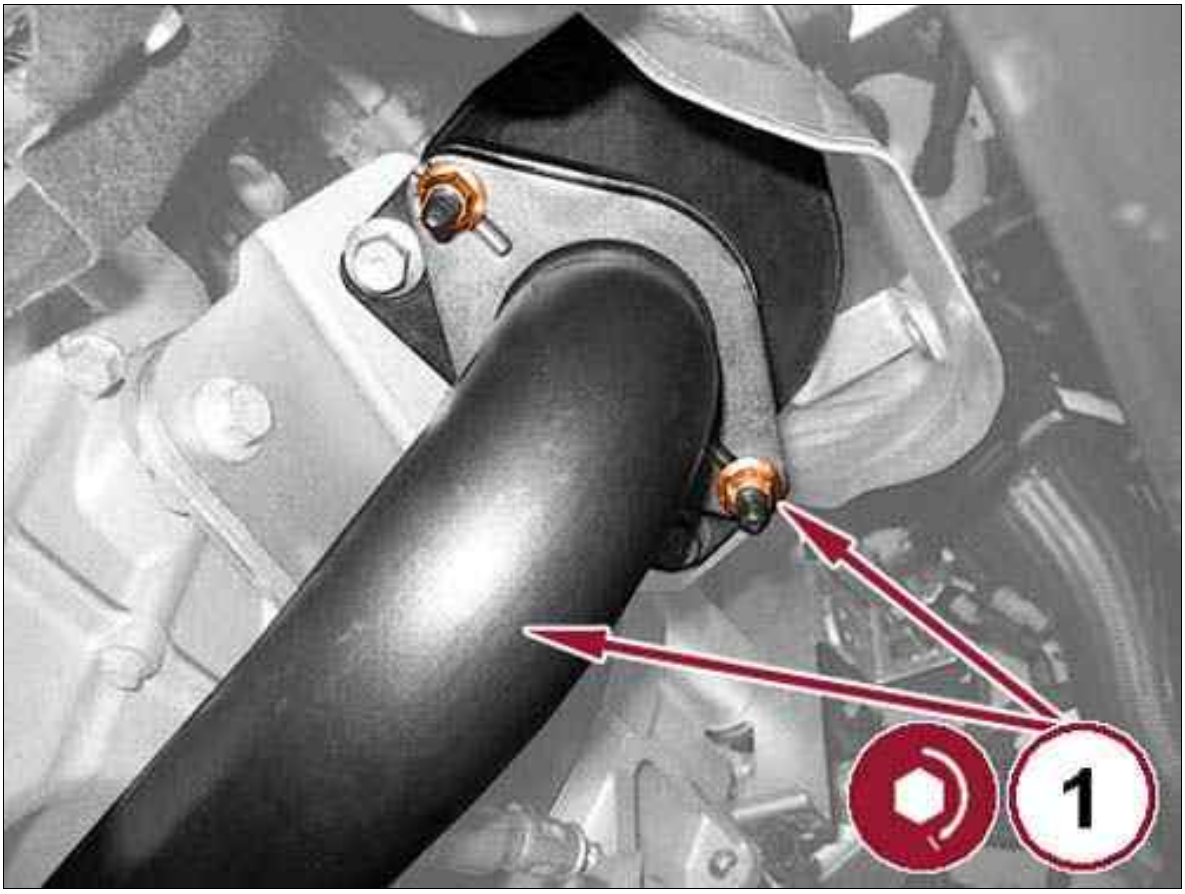
13. Tighten the center support bracket bolts (1) to the proper specification. Refer to SPECIFICATIONS .
14. Remove the propeller shaft support tools.
15. Remove the tape and the protective sleeve from the propeller shaft.

Fig 11: Flange Nuts



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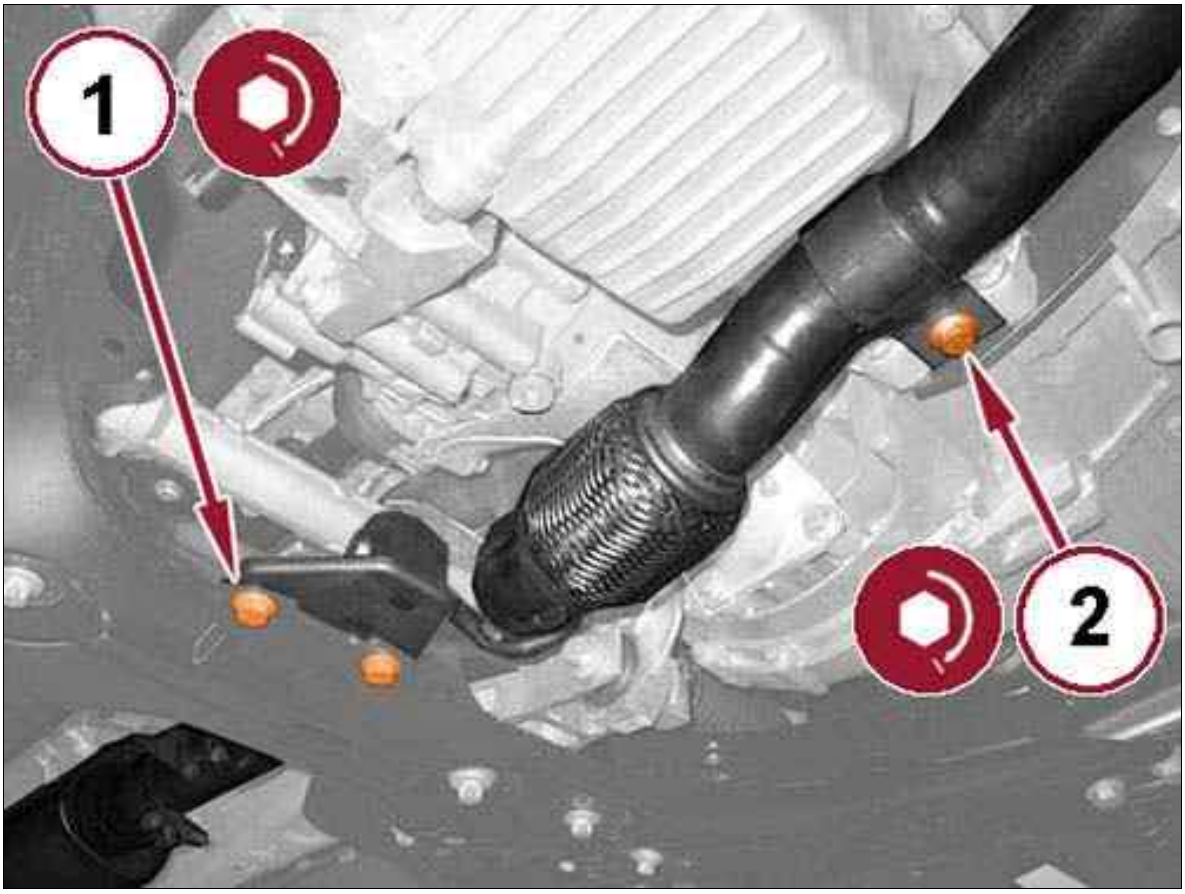
16. Connect the crossunder pipe to the catalytic converter using a **NEW** flange gasket and tighten the **NEW** nuts (1) to the proper specification. Refer to SPECIFICATIONS .

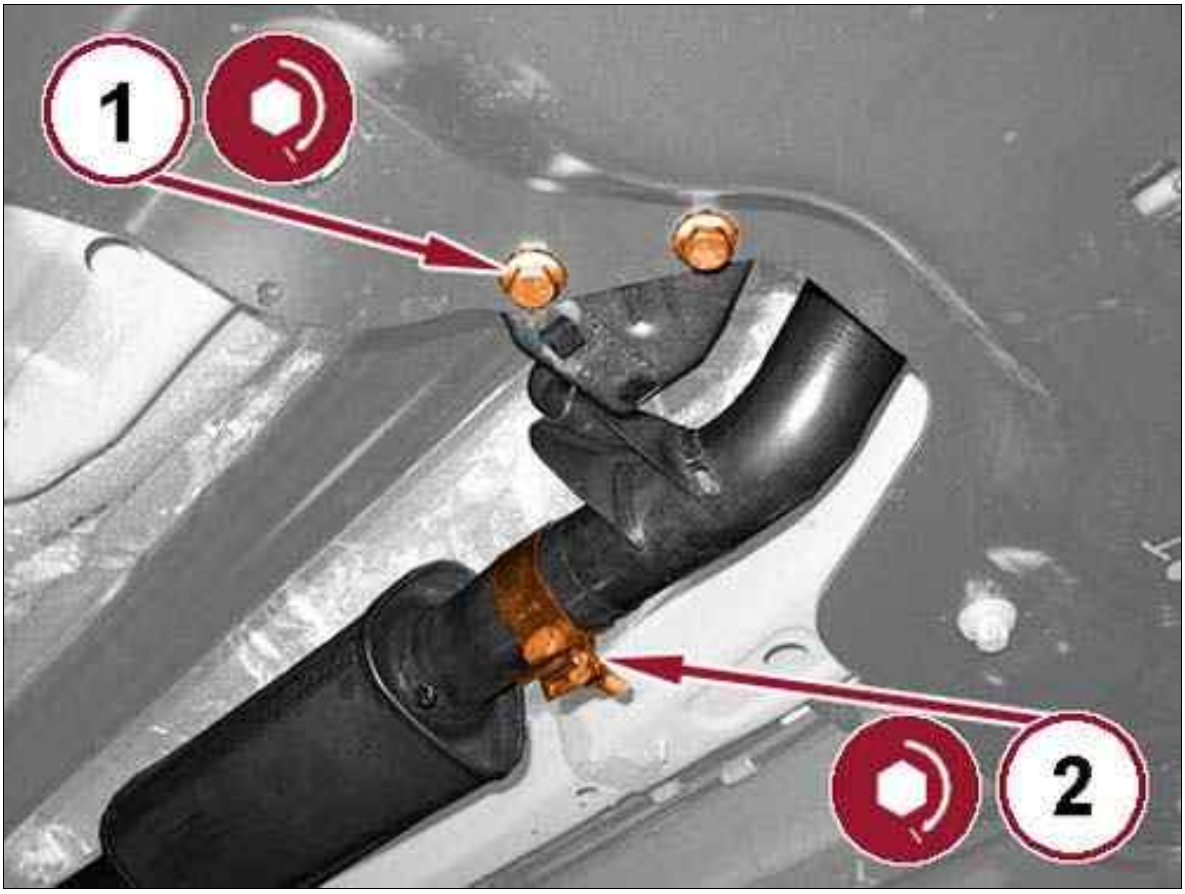
Fig 12: Front Exhaust Pipe Support Bracket Bolts & Exhaust Pipe Support Bracket Bolt



Courtesy of CHRYSLER GROUP, LLC

17. Install the crossunder pipe front hanger support bracket bolts (1) and tighten to the proper specification. Refer to SPECIFICATIONS .
18. Install the crossunder pipe bracket bolt (2) to the engine oil pan and tighten to the proper specification. Refer to SPECIFICATIONS .

Fig 13: Rear Exhaust Hanger Bracket Bolts & Exhaust Clamp Nut



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19. Install the bolts (1) securing the exhaust hanger bracket supporting the crossunder pipe at the front crossmember and tighten to the proper specification. Refer to SPECIFICATIONS .
20. Tighten the exhaust clamp nut (2) securing the muffler to the crossunder pipe to the proper specification. Refer to SPECIFICATIONS .
21. Connect the downstream oxygen sensor wire harness connector and disengage the wiring from the routing clip.
22. Install the belly pan. Refer to BELLY PAN, REMOVAL AND INSTALLATION and BELLY PAN, SIDE, REMOVAL AND INSTALLATION .

REMOVAL AND INSTALLATION > 2.0 TURBO DIESEL -120 / 140 HP > REMOVAL

CAUTION:

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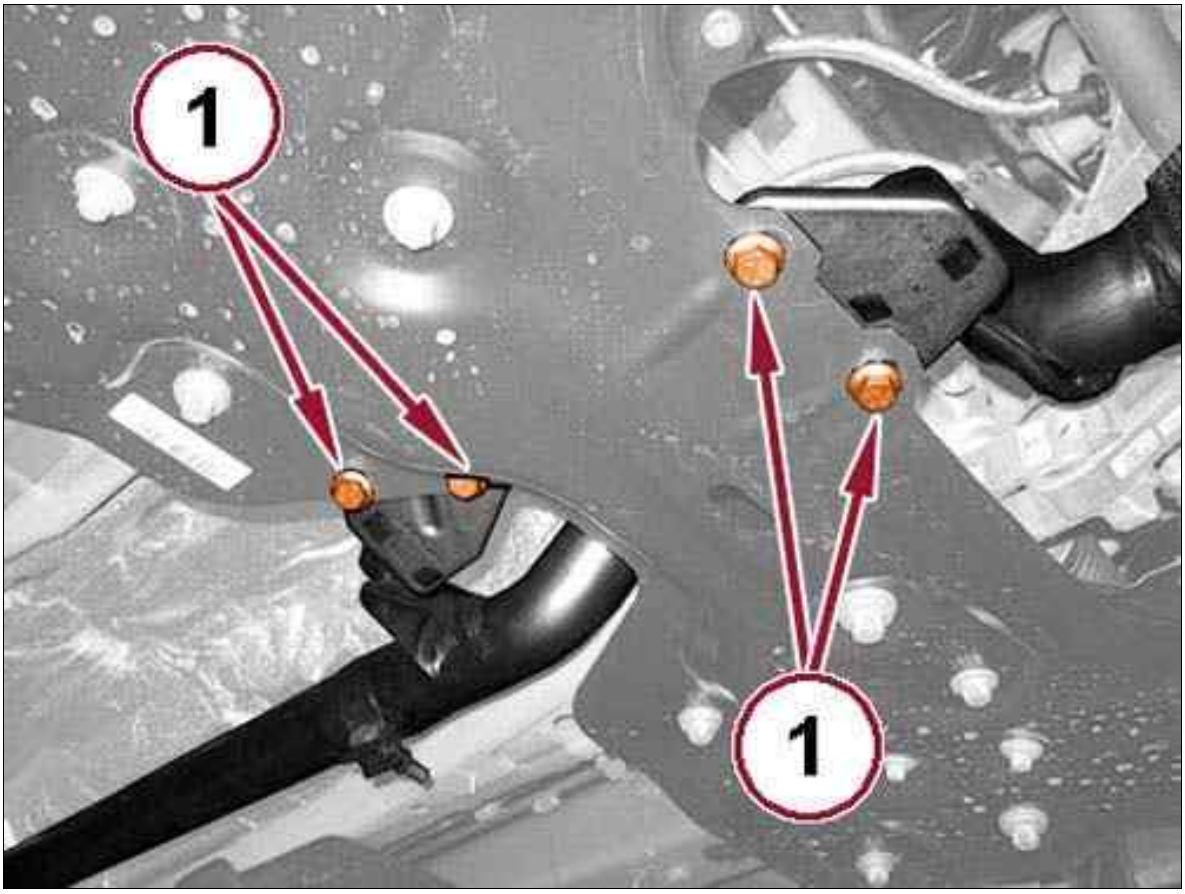
1. Raise and support the vehicle. Refer to HOISTING, STANDARD PROCEDURE .
2. Remove the belly pan. Refer to BELLY PAN, REMOVAL AND INSTALLATION and BELLY PAN, SIDE, REMOVAL AND INSTALLATION .

   Fig 1: Crossunder Pipe Front And Rear Hanger Bolts



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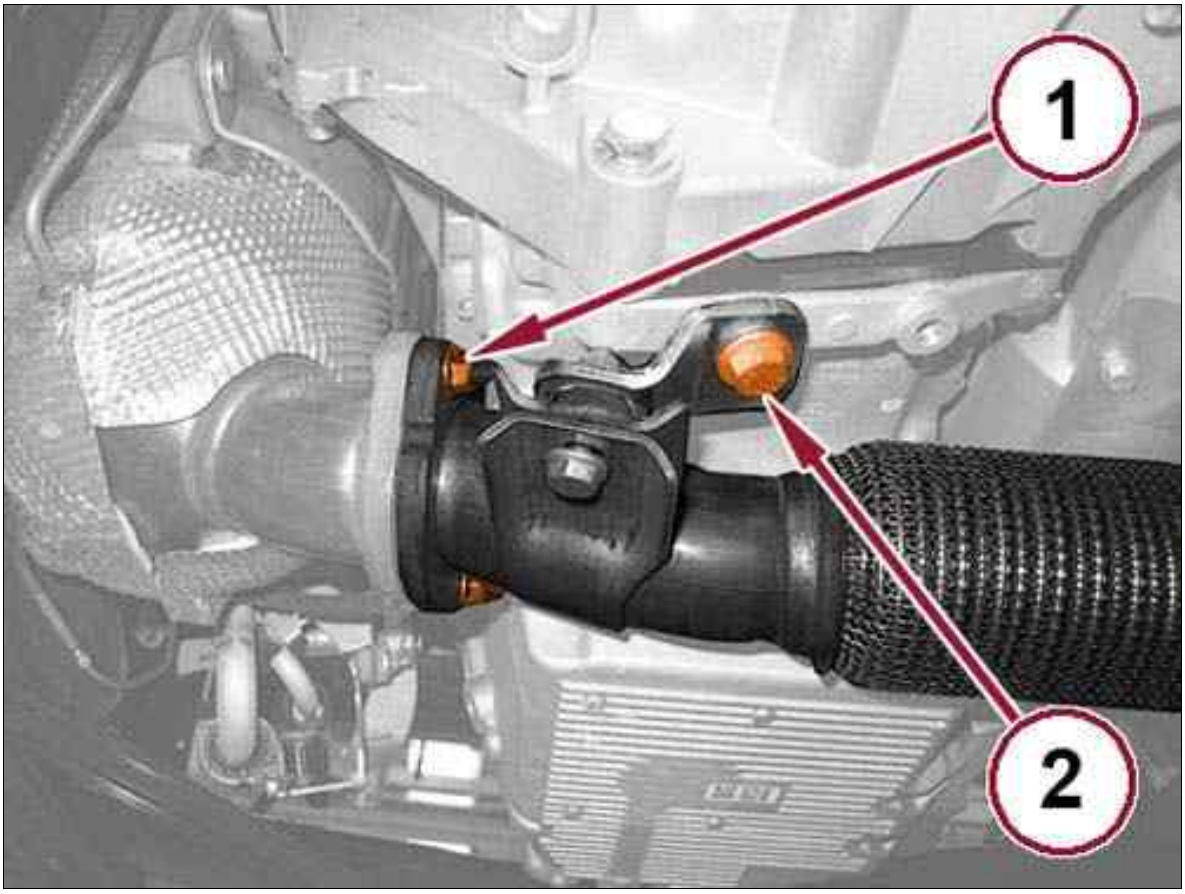
3. Remove the crossunder pipe front and rear hanger bolts (1) at the front crossmember.

Fig 2: Crossunder Pipe To DPF Flange Nuts & Bracket Bolt



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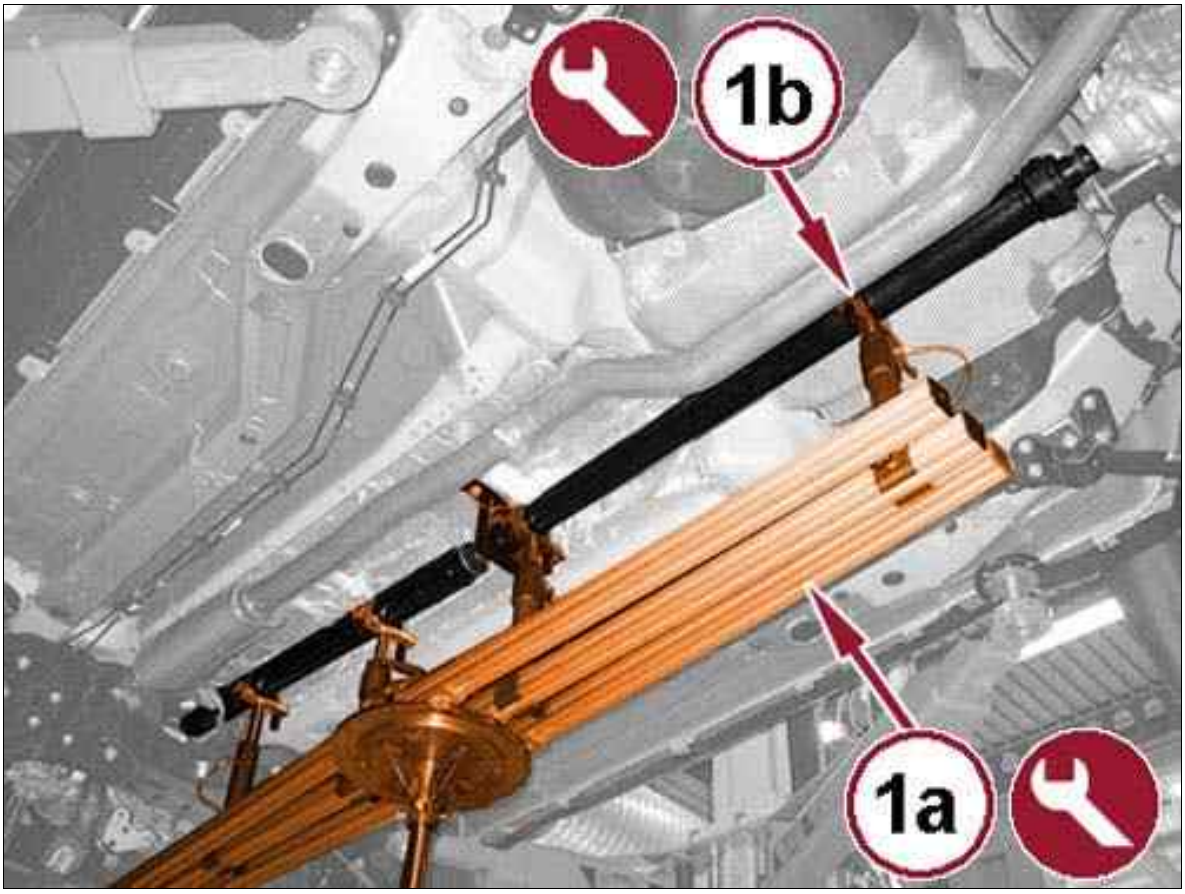
4. Remove the crossunder pipe to Diesel Particulate Filter (DPF) flange nuts (1).
5. Remove the crossunder pipe bracket bolt (2).
6. Remove and discard the exhaust flange gasket.

Fig 3: Support Tools Under Propeller Shaft



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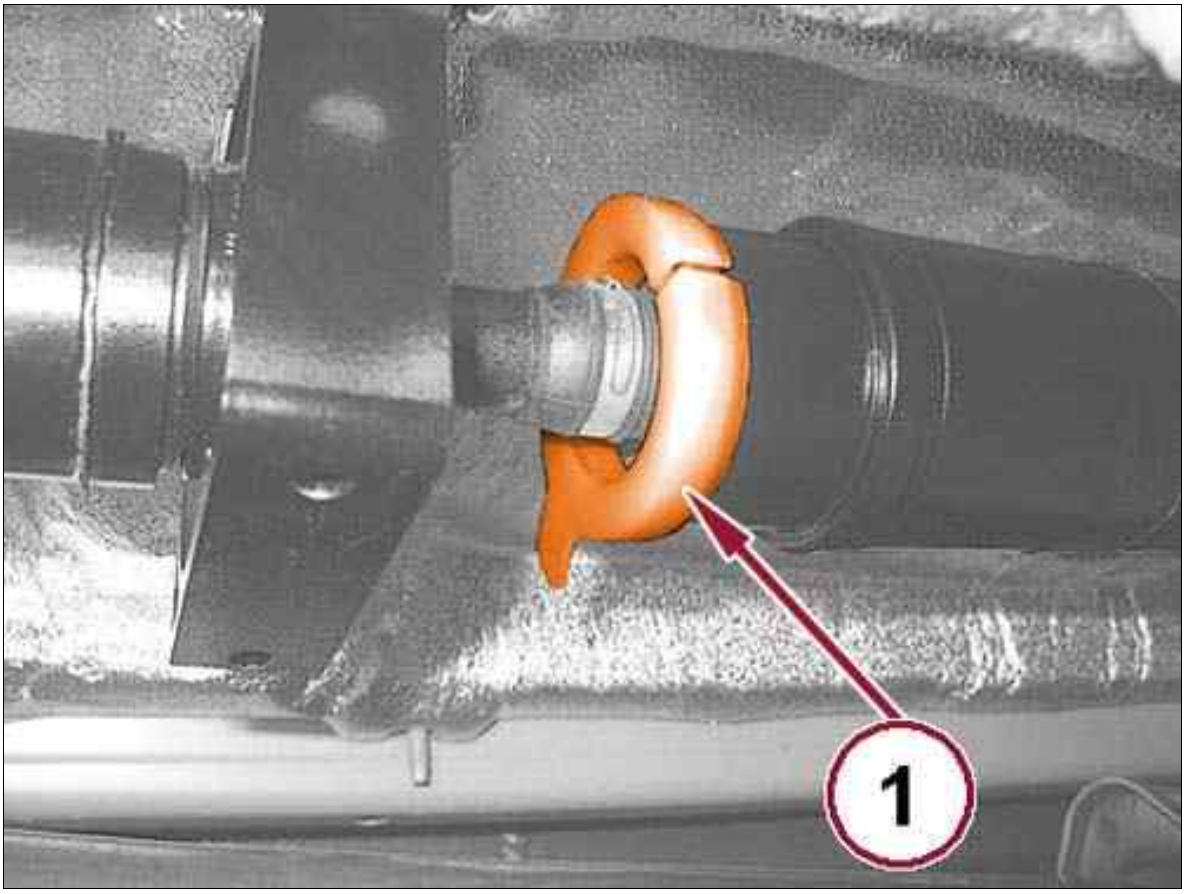
NOTE:

Protect the propeller shaft coating with a suitable duct tape to prevent any scratches caused by the propeller shaft support tools.

7. Position support tools 2000043000 (1b) and 2000043400 (1a) under the propeller shaft.

Fig 4: Protective Sleeve



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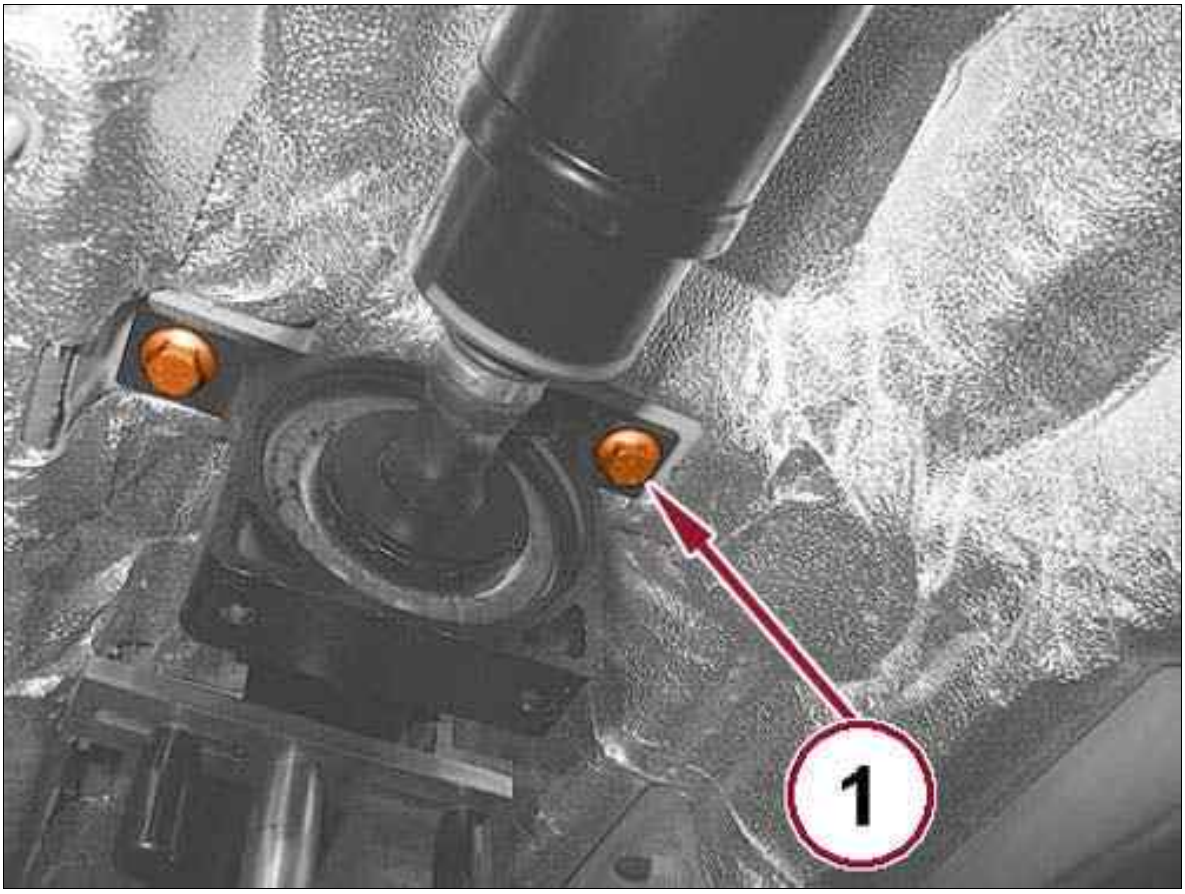
8. Install the protective sleeve (1) at the center propeller shaft joint to protect the boot as shown in illustration.

> *NOTE:*
>
> *The protective sleeve is provided in the parts package with the dust cover and snap rings for the propeller shaft.*

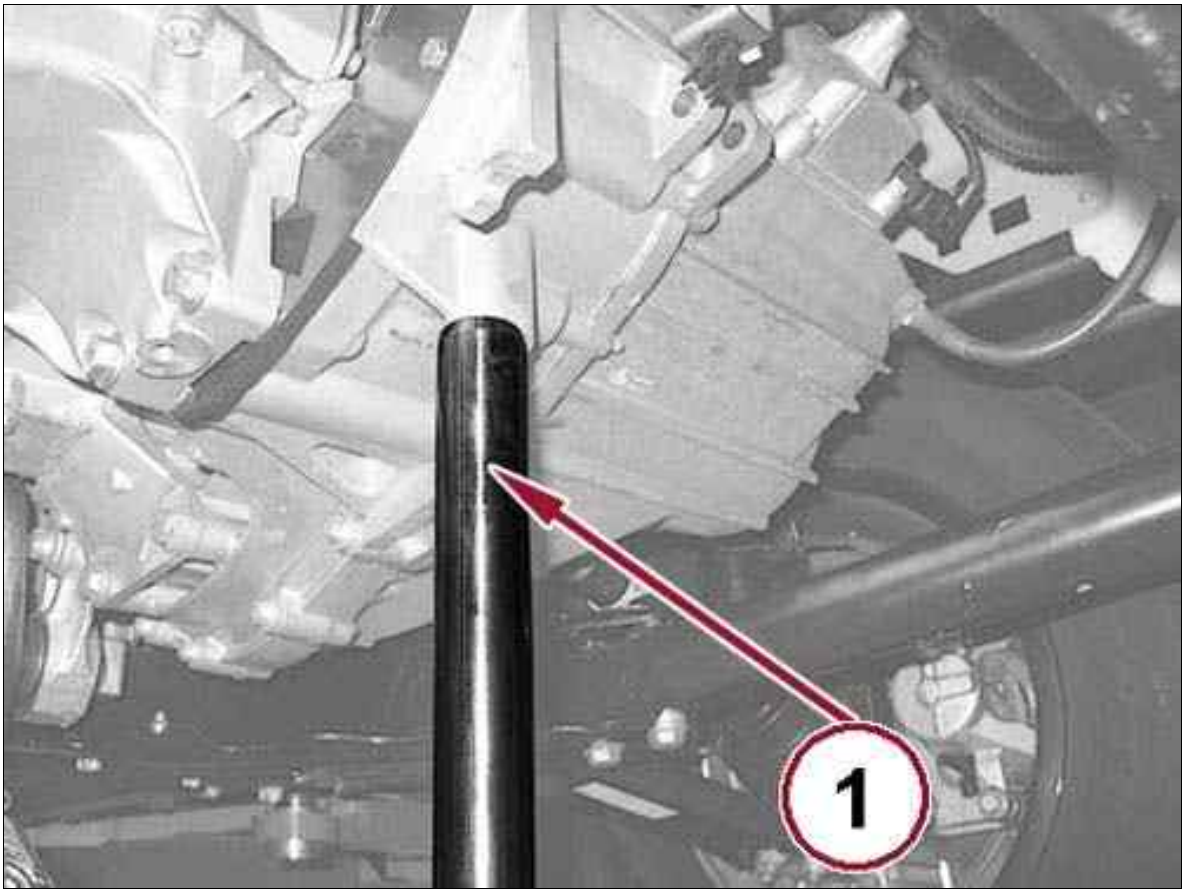
Fig 5: Propeller Shaft Center Support Bolts



Courtesy of CHRYSLER GROUP, LLC

9. Loosen the propeller shaft center support bolts (1).

Fig 6: Jack Under Transmission



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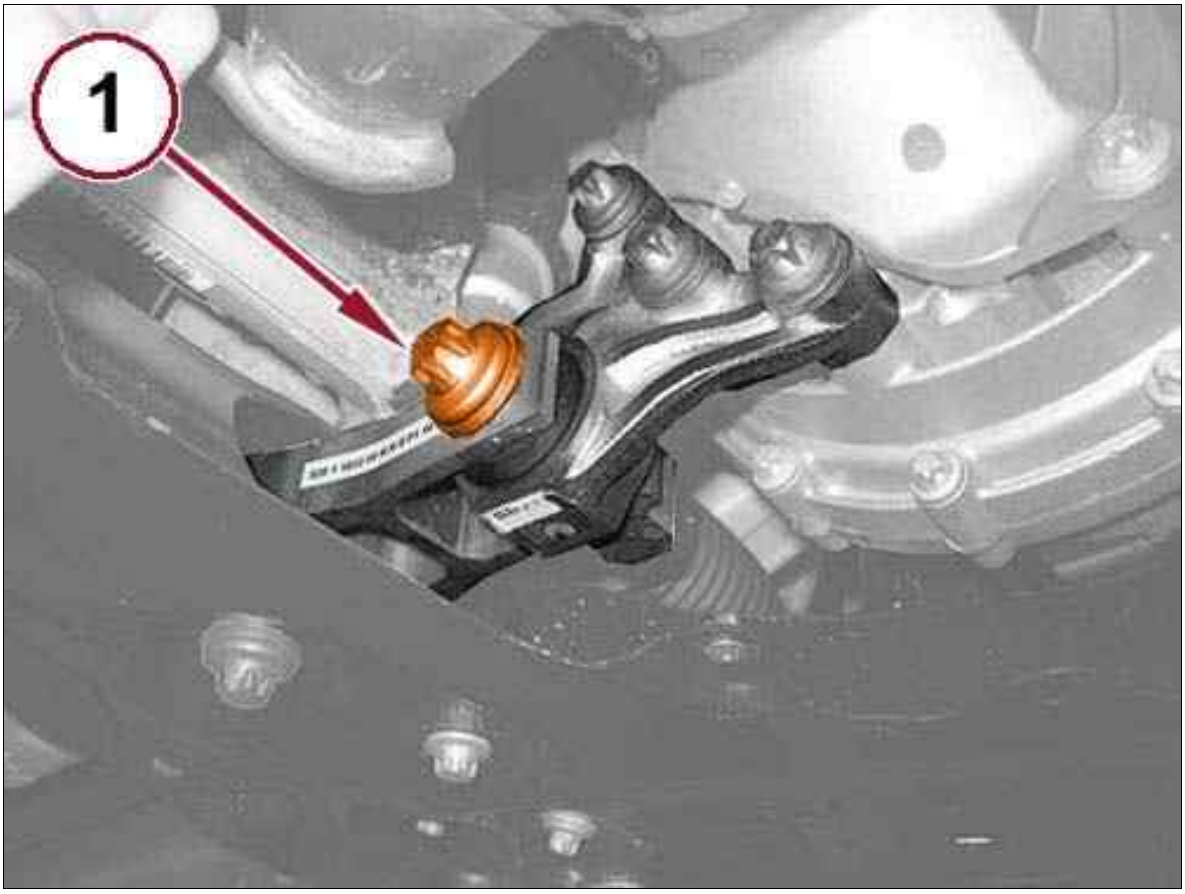
10. Place a suitable jack (1) under the transmission.

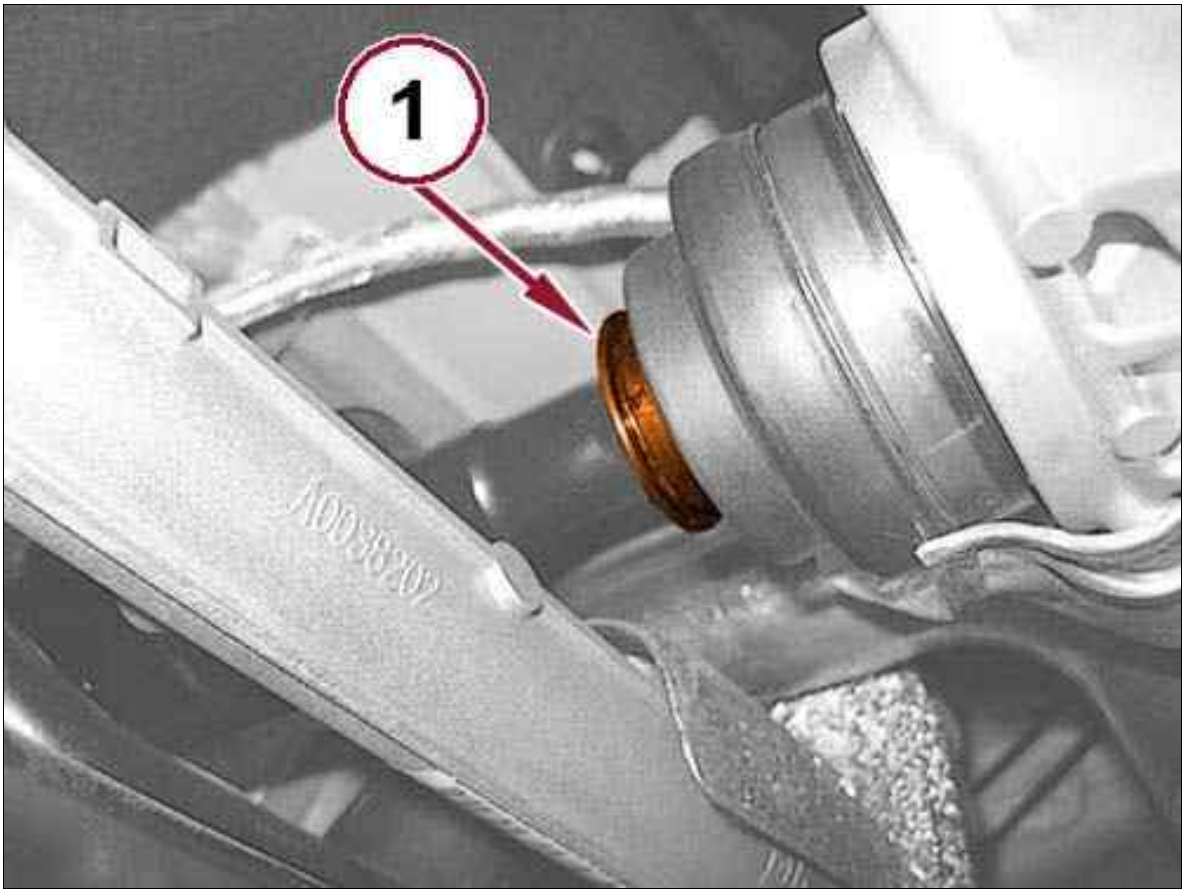
Fig 7: Rear Engine Mount Through Bolt



Courtesy of CHRYSLER GROUP, LLC

11. Remove the rear engine mount through bolt (1).
12. Adjust the jack to carefully shift the powertrain forward.

Fig 8: Dust Cover

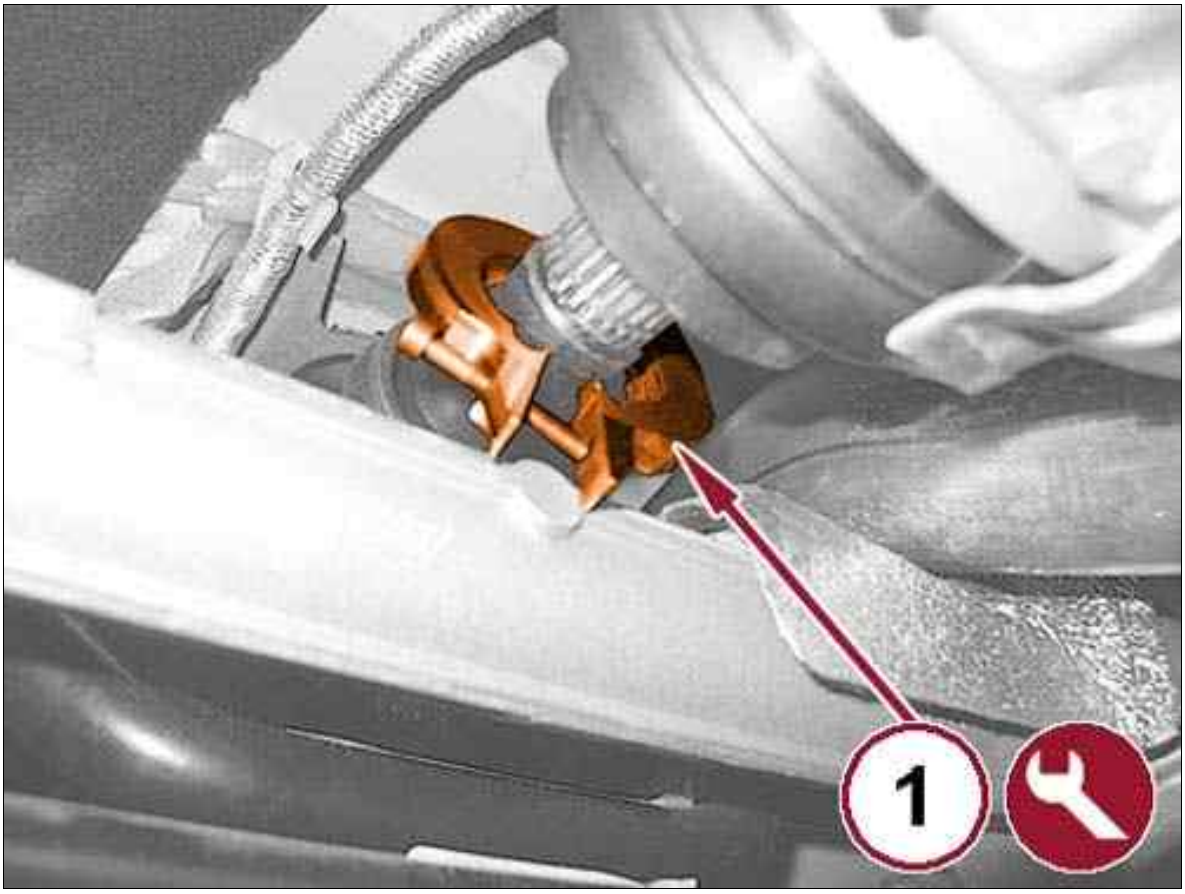


Courtesy of CHRYSLER GROUP, LLC

> *NOTE:*
>
> *The dust cover must be replaced every time the propeller shaft is removed.*

13. Slide the dust cover (1) at the front of the propeller shaft away from the Power Transfer Unit (PTU) to access the snap ring.

Fig 9: Propeller Shaft Snap Ring Tool



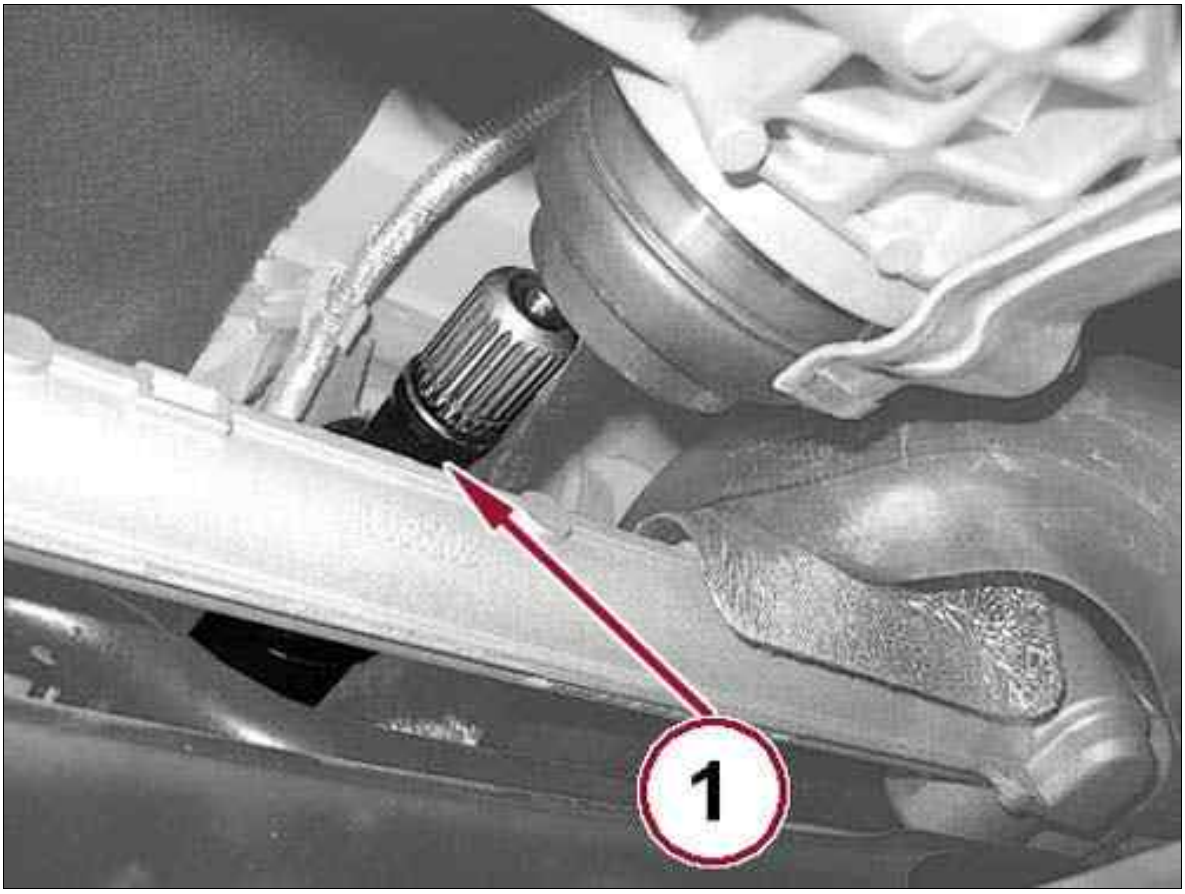
Courtesy of CHRYSLER GROUP, LLC

NOTE:

The snap ring must be replaced every time the propeller shaft is removed.

14. Use tool 2019500030 (1) to open propeller shaft snap ring at the PTU.

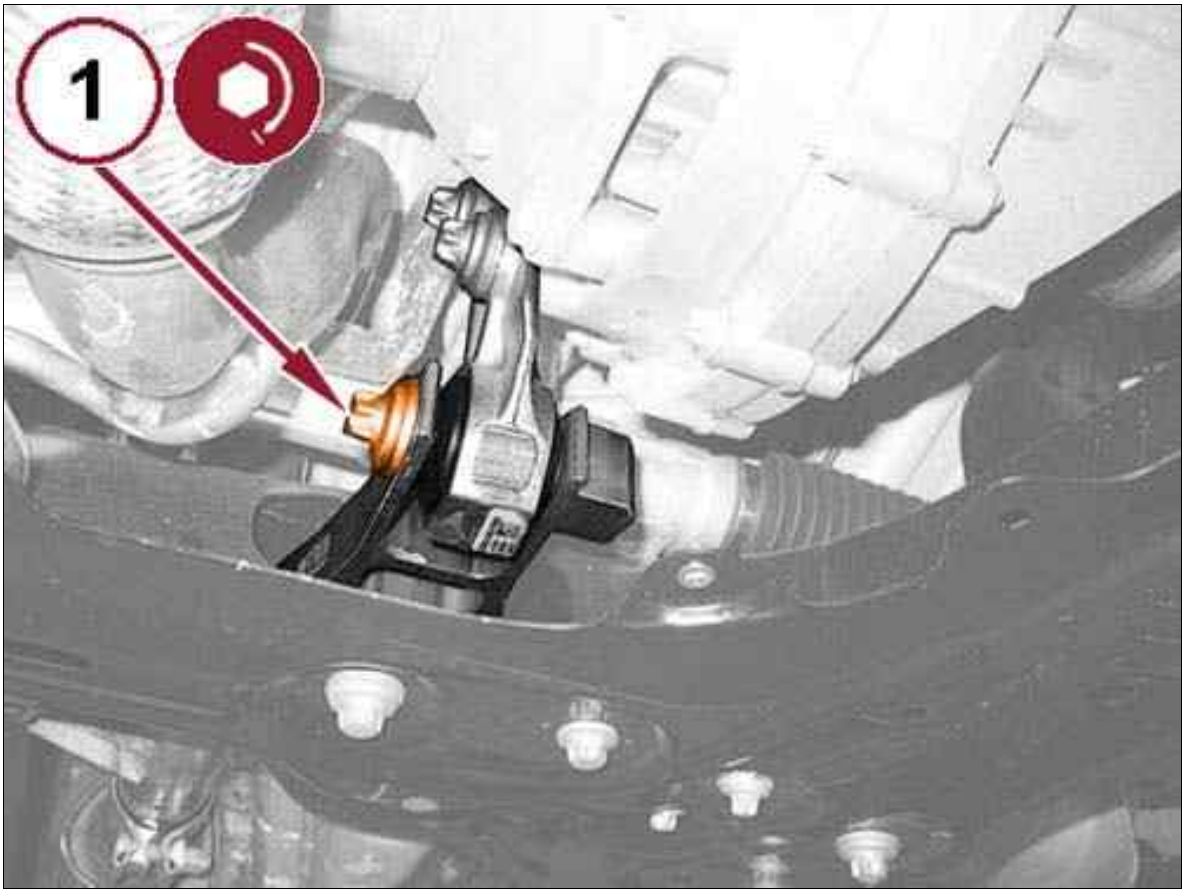
Fig 10: Propeller Shaft At PTU



Courtesy of CHRYSLER GROUP, LLC

15. Disconnect the propeller shaft (1) from the PTU.
16. Remove the tool 2019500030.

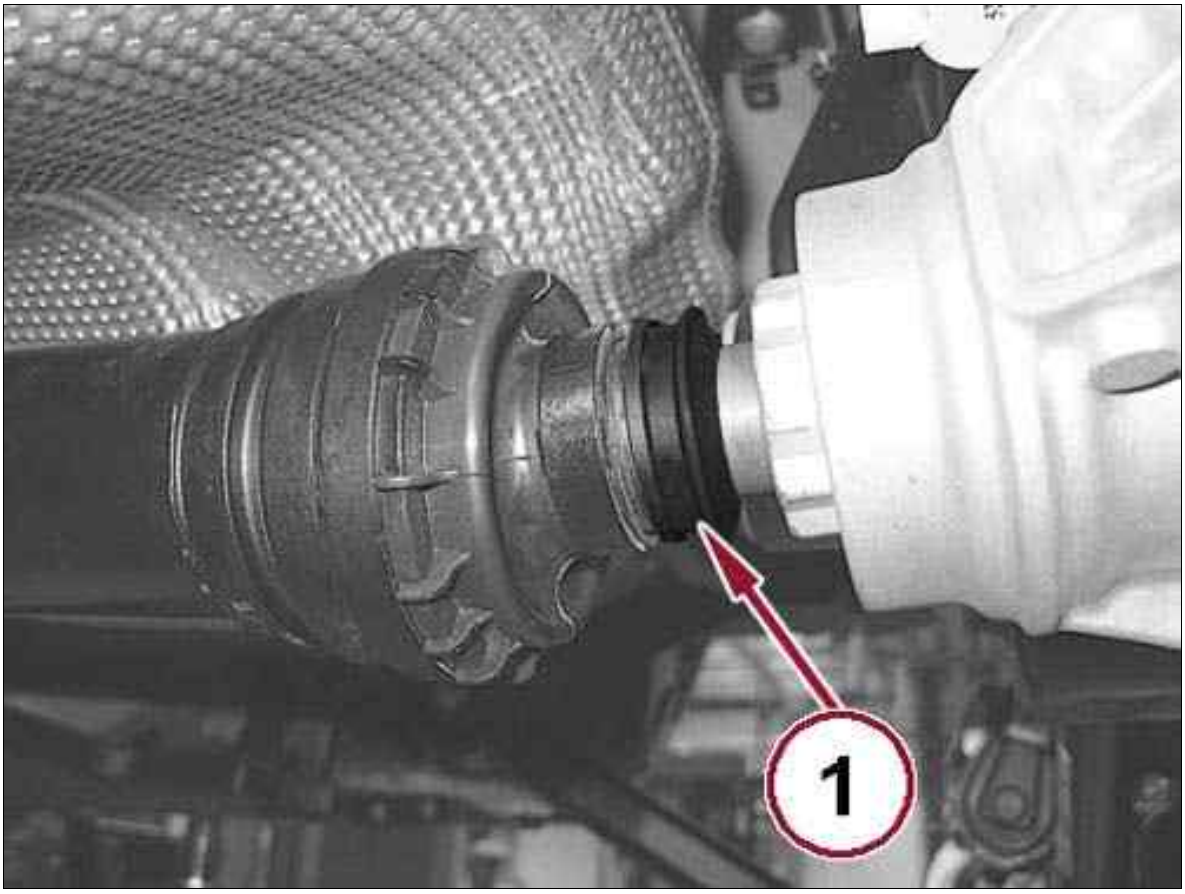
Fig 11: Rear Engine Mount Through Bolt



Courtesy of CHRYSLER GROUP, LLC

17. Install the rear engine mount through bolt and torque to the proper specification. Refer to TORQUE SPECIFICATIONS .
18. Remove the jack from under the transmission.
19. Remove the previously loosened propeller shaft center support bolts.

Fig 12: Dust Cover



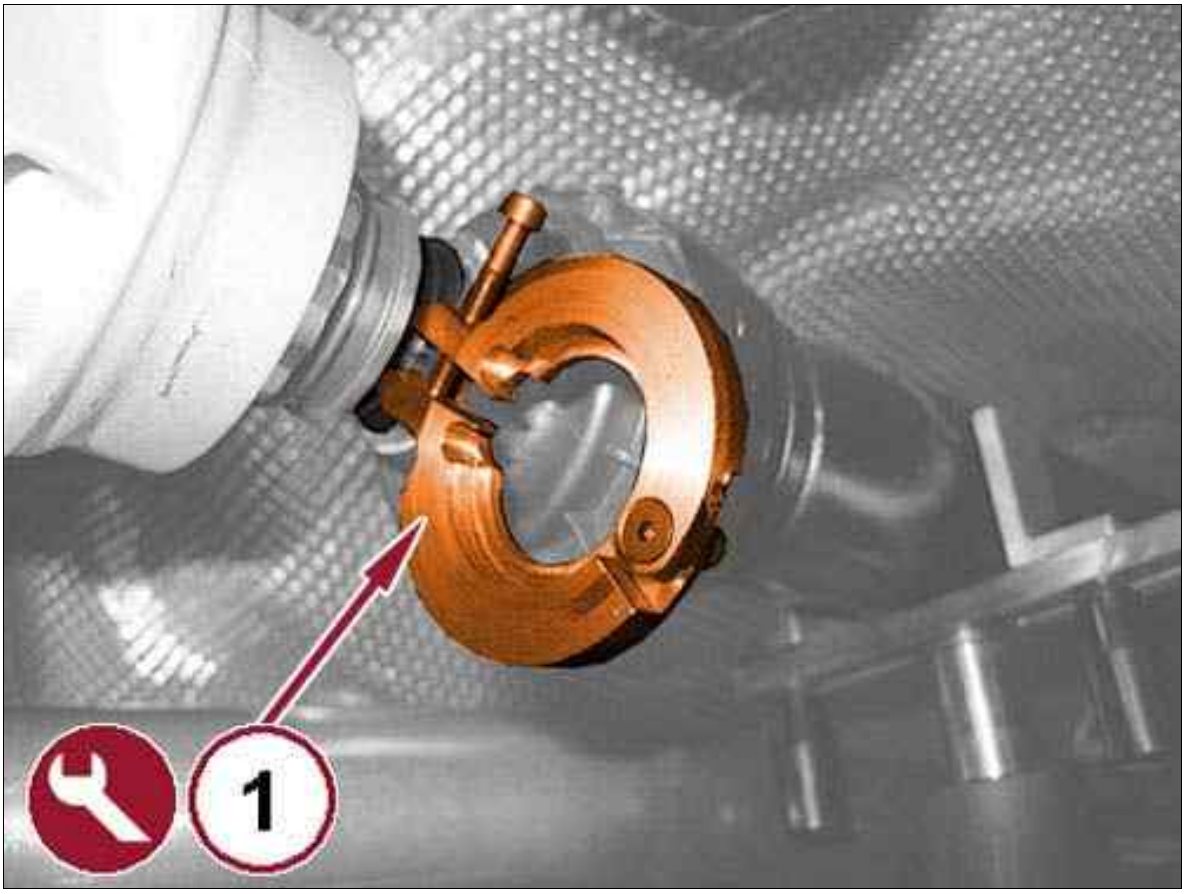
Courtesy of CHRYSLER GROUP, LLC

NOTE:

The dust cover must be replaced every time the propeller shaft is removed.

20. Slide the dust cover (1) at the rear of the propeller shaft towards the differential to access the snap ring.

Fig 13: Opening Propeller Shaft Snap Ring



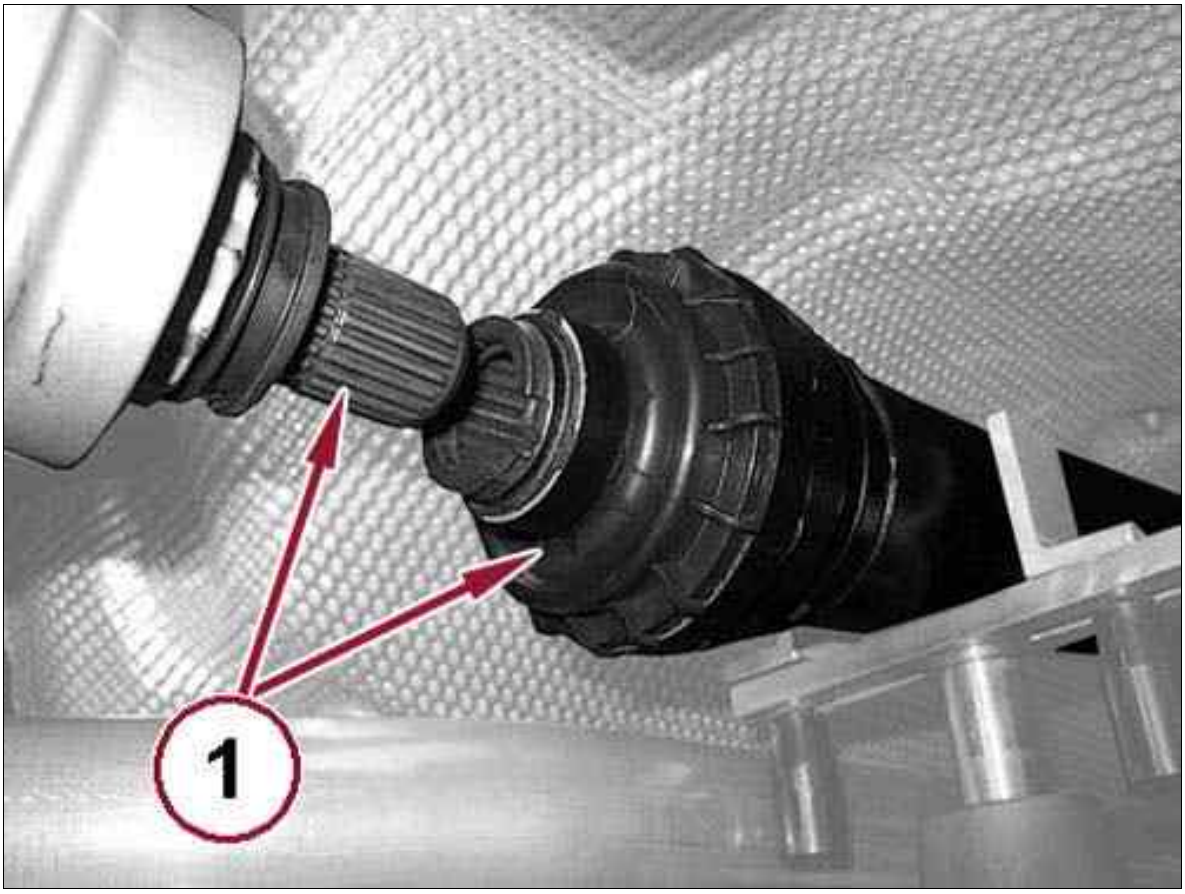
Courtesy of CHRYSLER GROUP, LLC

NOTE:

The snap ring must be replaced every time the propeller shaft is removed.

21. Use tool 2019500030 (1) to open propeller shaft snap ring at the Rear Driveline Unit (RDU).

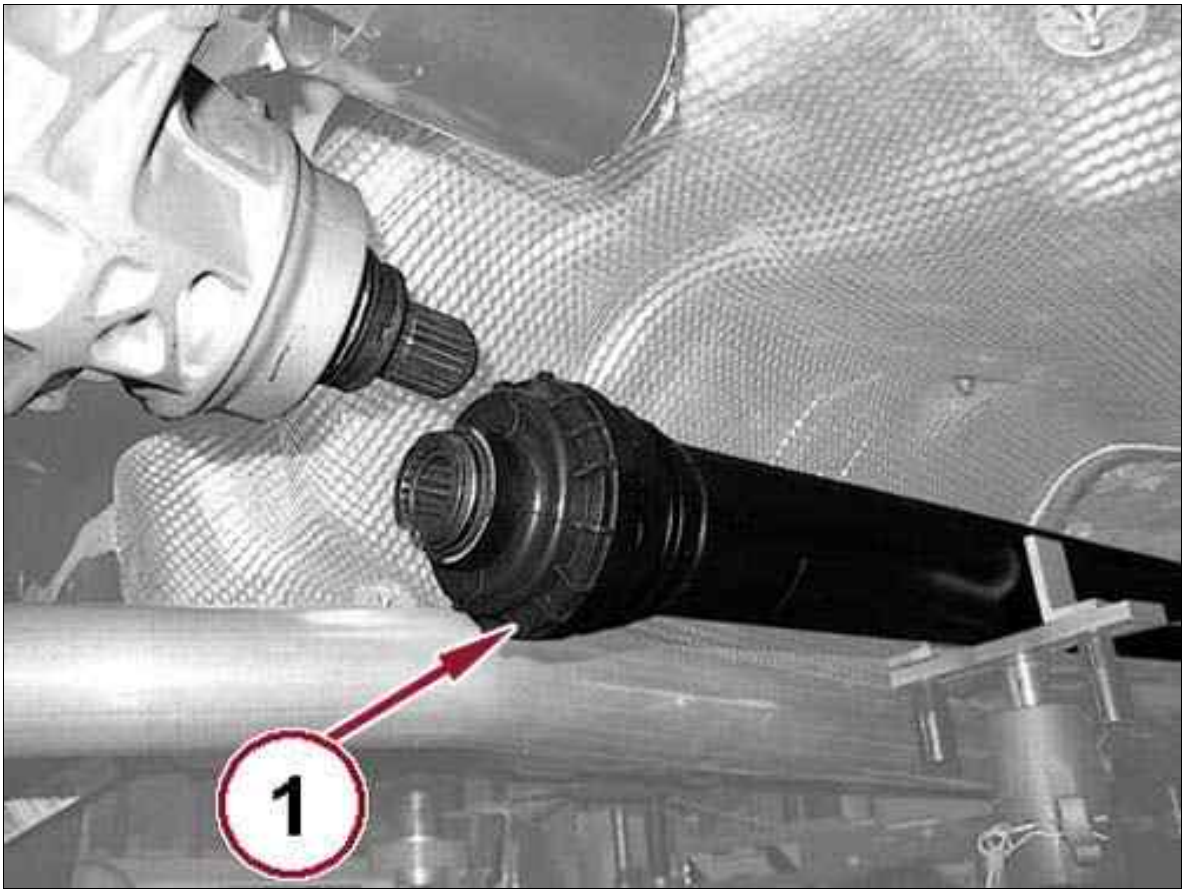
Fig 14: Propeller Shaft & Pinion



Courtesy of CHRYSLER GROUP, LLC

22. Disconnect the propeller shaft from the pinion of the RDU (1).
23. Remove the tool 2019500030.

Fig 15: Propeller Shaft At RDU



Courtesy of CHRYSLER GROUP, LLC

24. Lower the propeller shaft until the rear joint of the shaft is under the RDU as shown in illustration.

> *NOTE:*
>
> *Pay close attention to avoid excessive articulation between the two halves of the propeller shaft during removal.*

25. Turn the jack to remove the drive shaft, guiding it away from the front suspension crossmember.

REMOVAL AND INSTALLATION > 2.0 TURBO DIESEL -120 / 140 HP > INSTALLATION

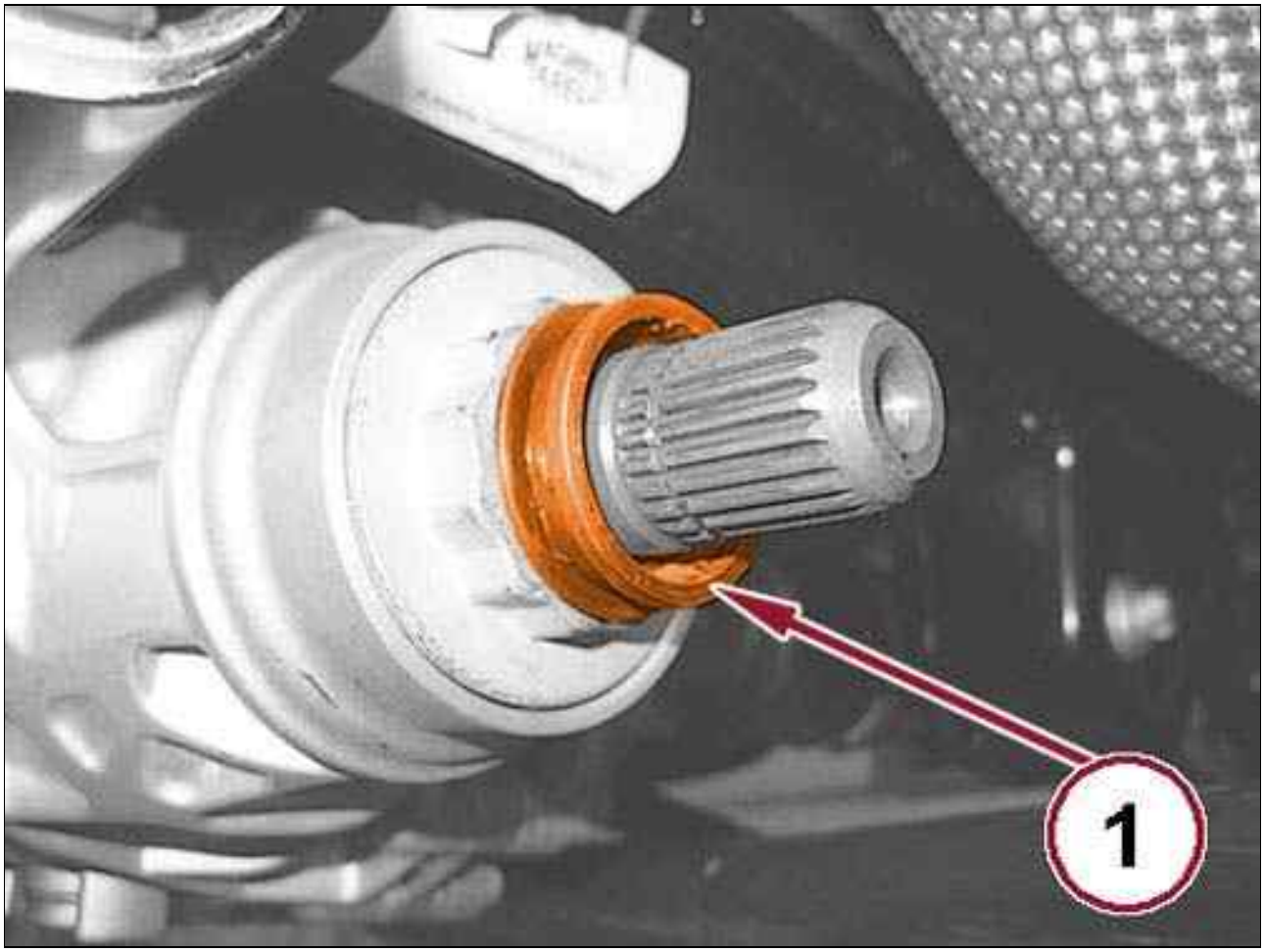
> *CAUTION:*
>
> *Propeller shaft removal is a two-person operation. Never allow propeller shaft to hang from the center bearing, or while only connected to power transfer unit (PTU) or rear driveline module flanges. A helper is required. If a propshaft section is hung unsupported, damage*

may occur to the joint, boot, and/or center bearing from over-angulation. This may result in driveline vibrations.

NOTE:

Lightly apply grease to the splines prior to installation.

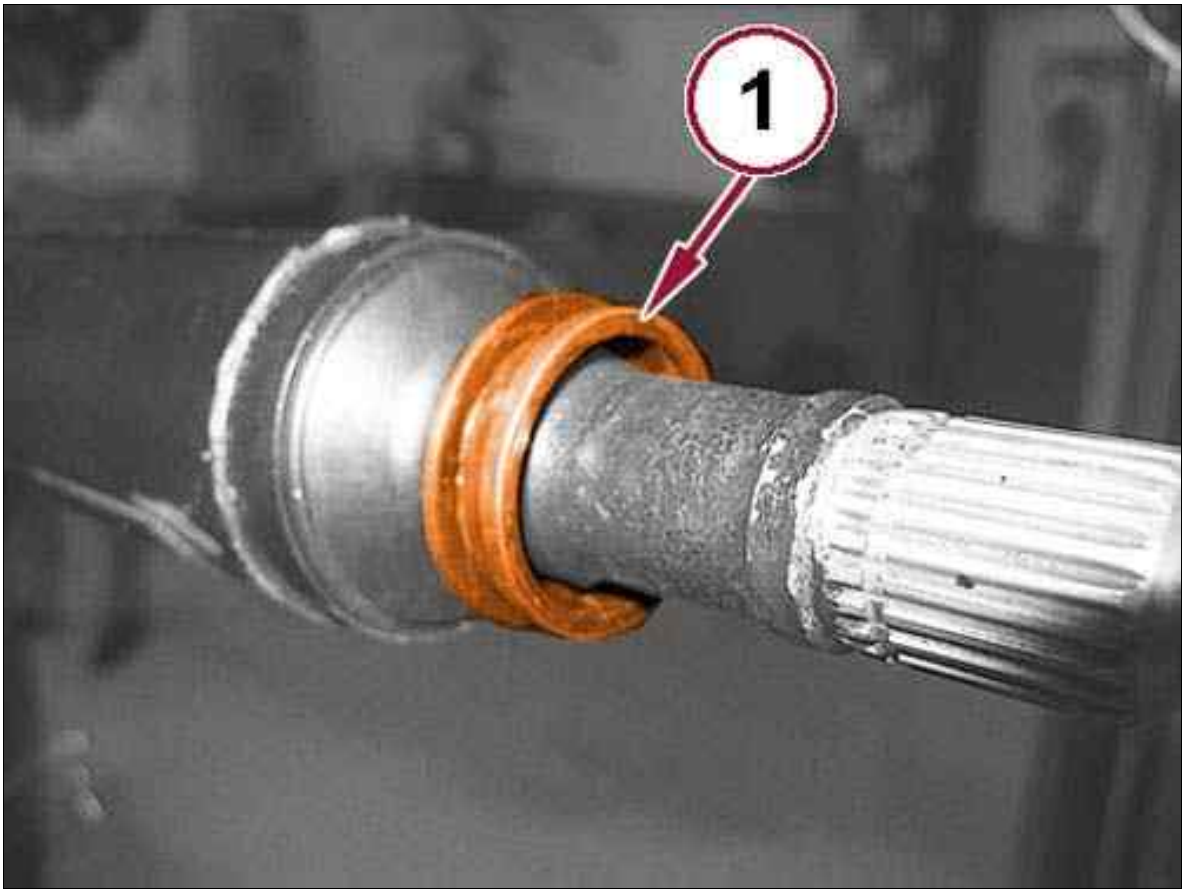
Fig 1: Pinion Shaft Dust Seal



Courtesy of CHRYSLER GROUP, LLC

1. Install a **NEW** dust seal (1) on the pinion shaft of the Rear Driveline Unit (RDU).

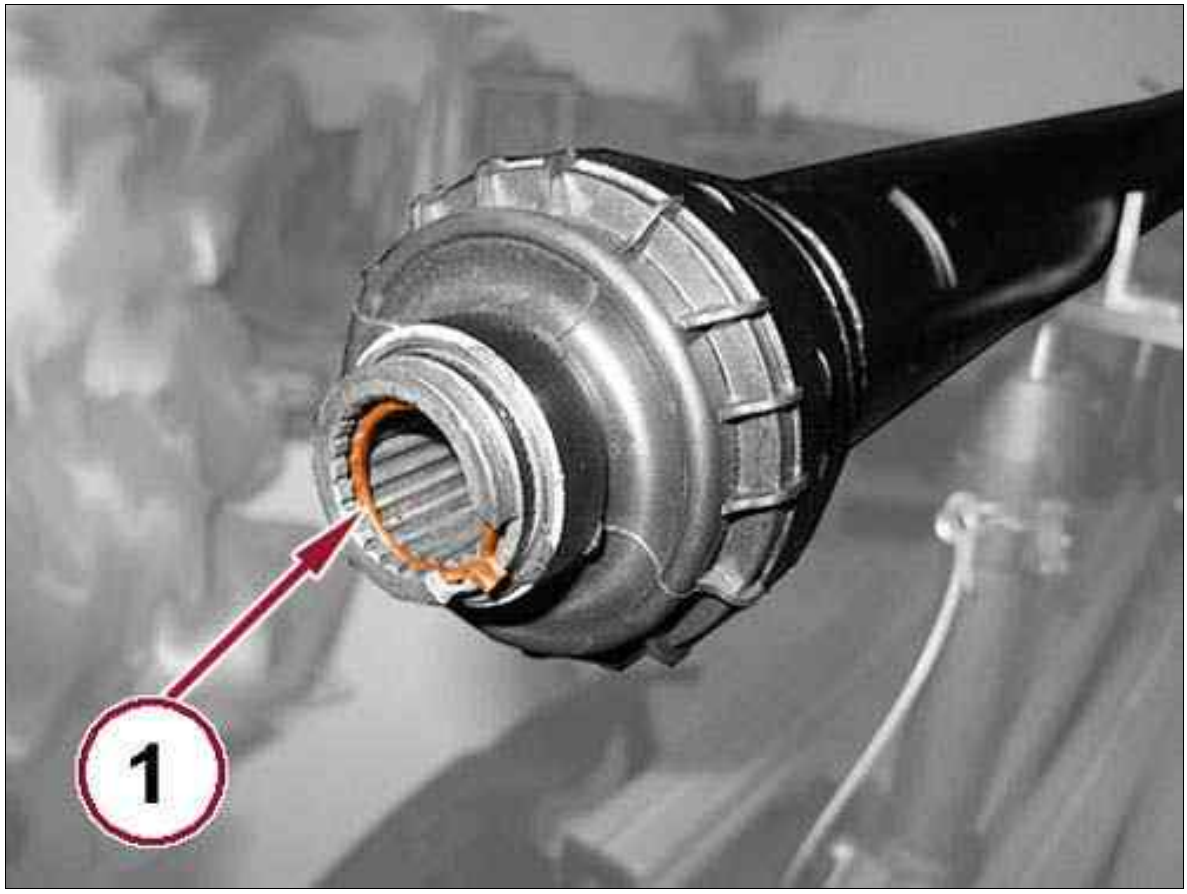
Fig 2: Front Of Propeller Shaft Dust Seal



Courtesy of CHRYSLER GROUP, LLC

2. Install a **NEW** dust seal (1) on the front shaft of the propeller shaft.

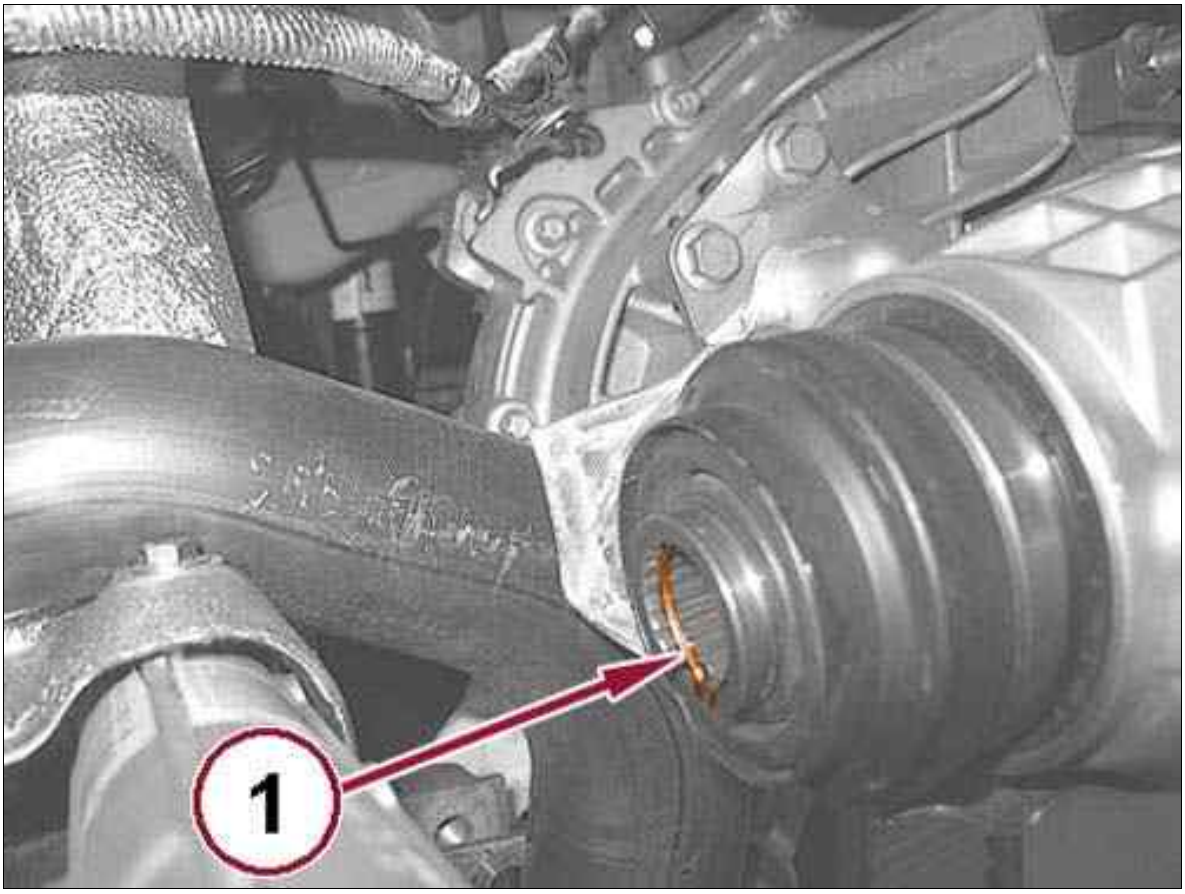
Fig 3: Drive Shaft Snap Ring



Courtesy of CHRYSLER GROUP, LLC

3. Install a **NEW** snap ring (1) in the drive shaft.

Fig 4: PTU Snap Ring



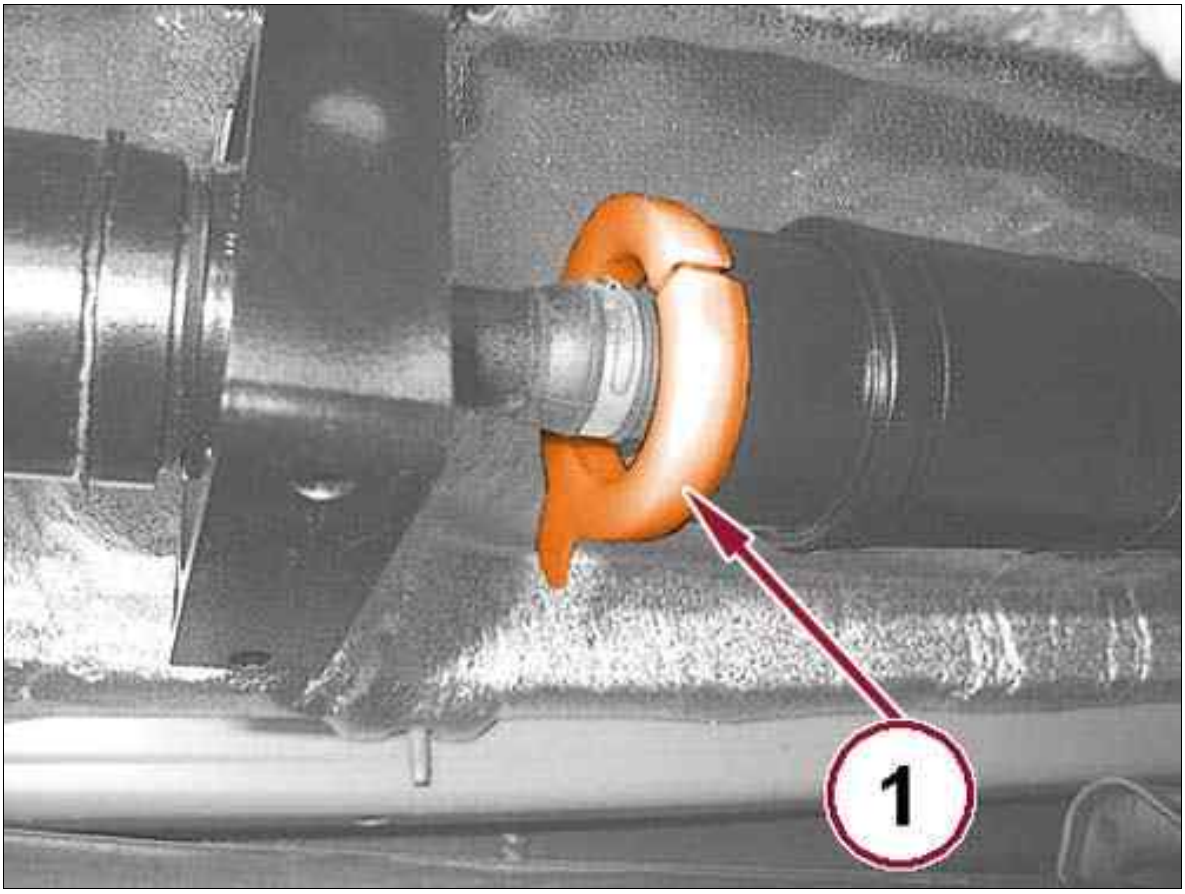
Courtesy of CHRYSLER GROUP, LLC

4. Install a **NEW** snap ring (1) in the Power Transfer Unit (PTU).

> *NOTE:*
>
> *Protect the propeller shaft coating with a suitable duct tape to prevent any scratches caused by the propeller shaft support tools.*

5. Position the propeller shaft on the support tools 2000043000 and 2000043400.

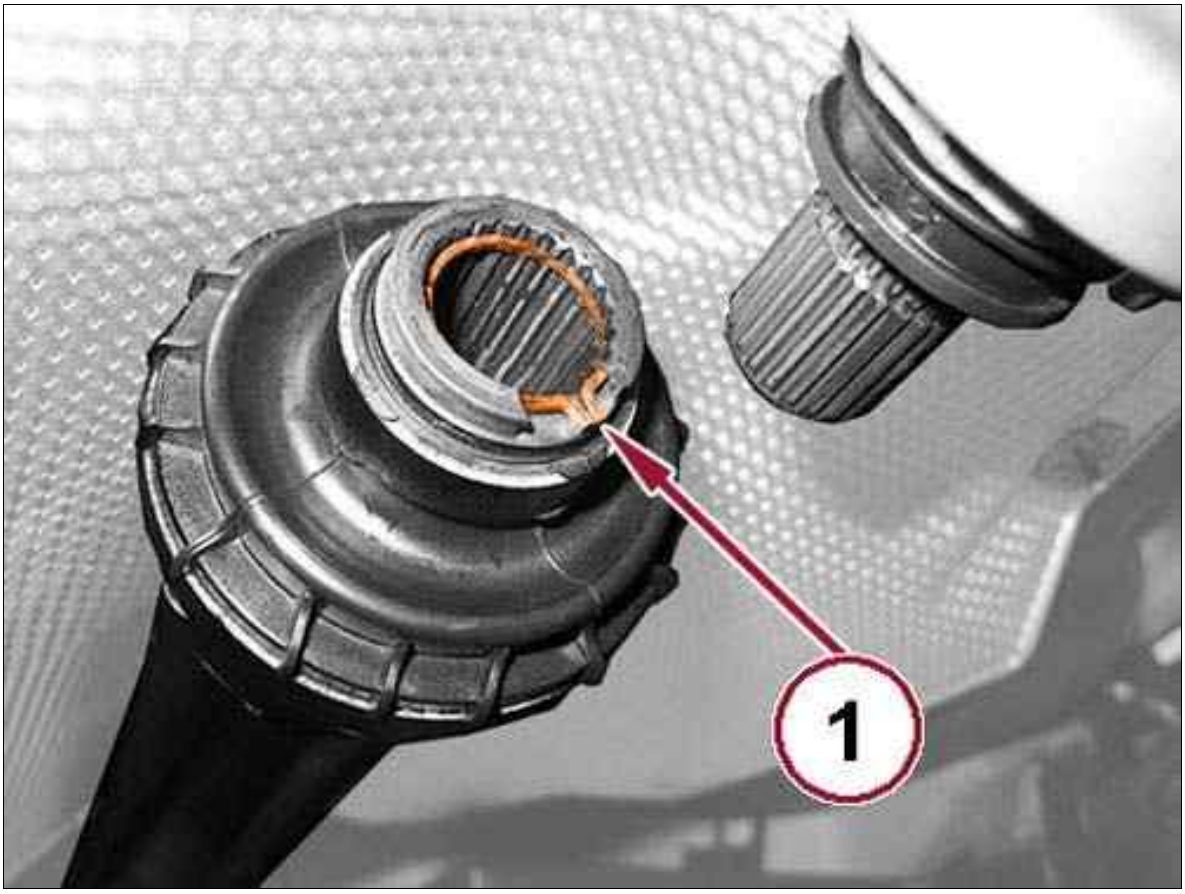
Fig 5: Protective Sleeve At Center Propeller Shaft Joint



Courtesy of CHRYSLER GROUP, LLC

6. Install the protective sleeve (1) at the center propeller shaft joint to protect the boot as shown in illustration.
7. Raise the propeller shaft into the vehicle positioning the front of the shaft above the front cross member and the steering gear.

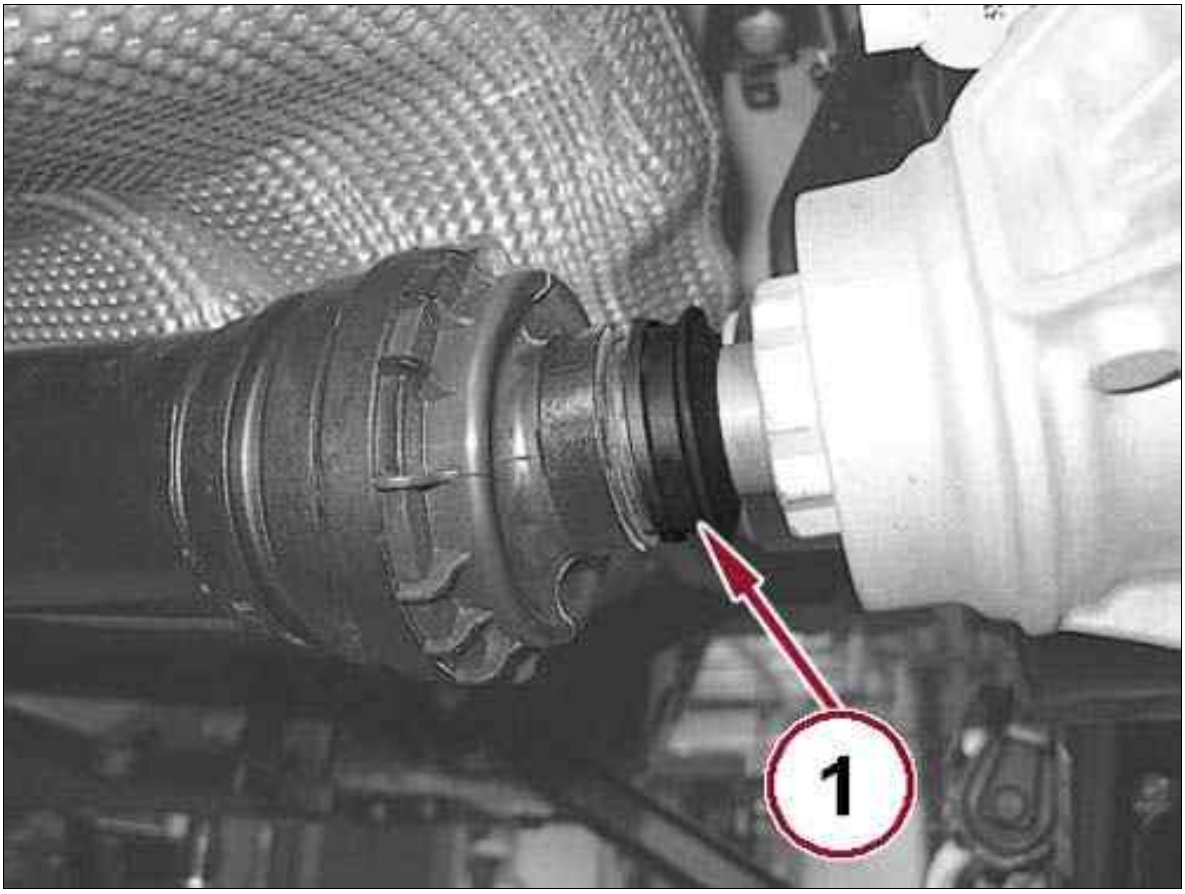
Fig 6: Propeller Shaft Snap Ring Seated



Courtesy of CHRYSLER GROUP, LLC

8. Connect the propeller shaft to the pinion of the RDU, verify the snap ring (1) is seated in the groove of the pinion shaft.

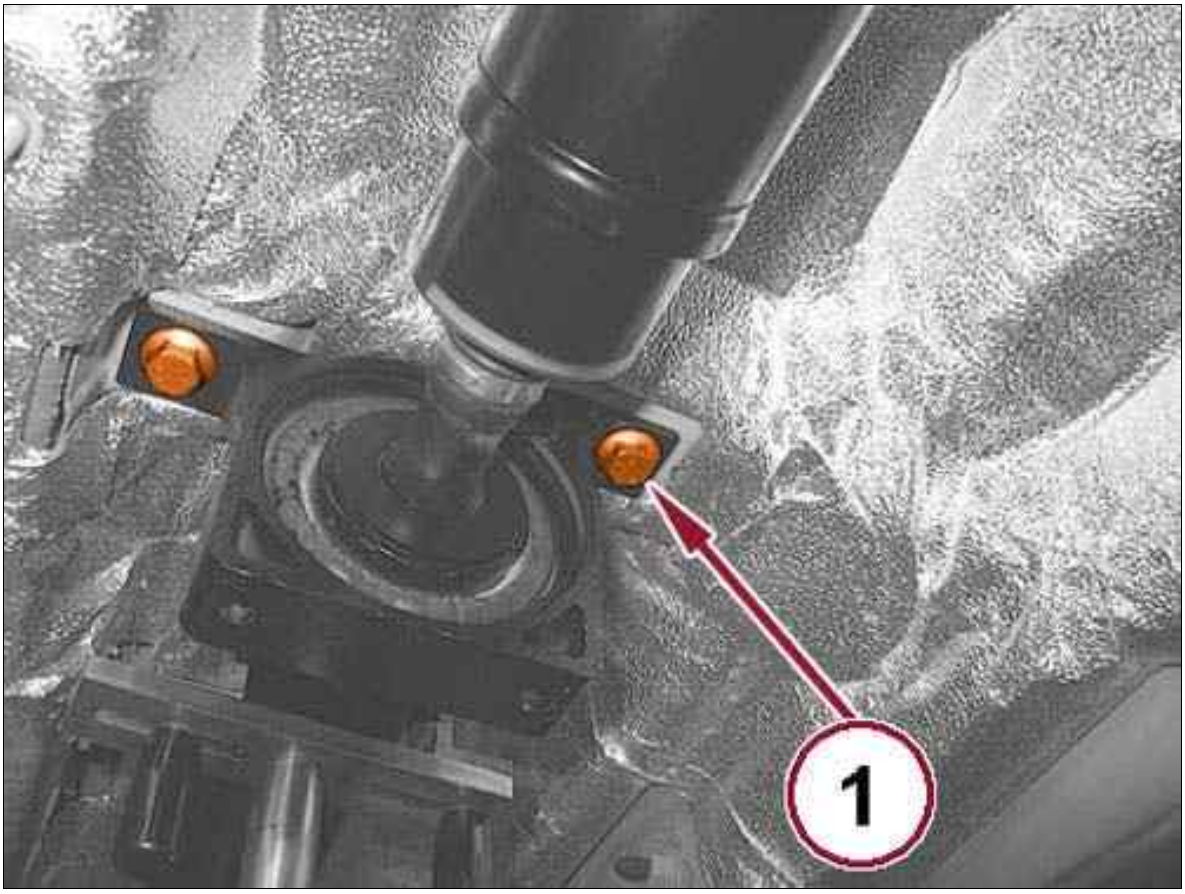
Fig 7: Rear Propeller Shaft Dust Cover



Courtesy of CHRYSLER GROUP, LLC

9. Position the new dust cover (1) over the joint at the rear of the propeller shaft.

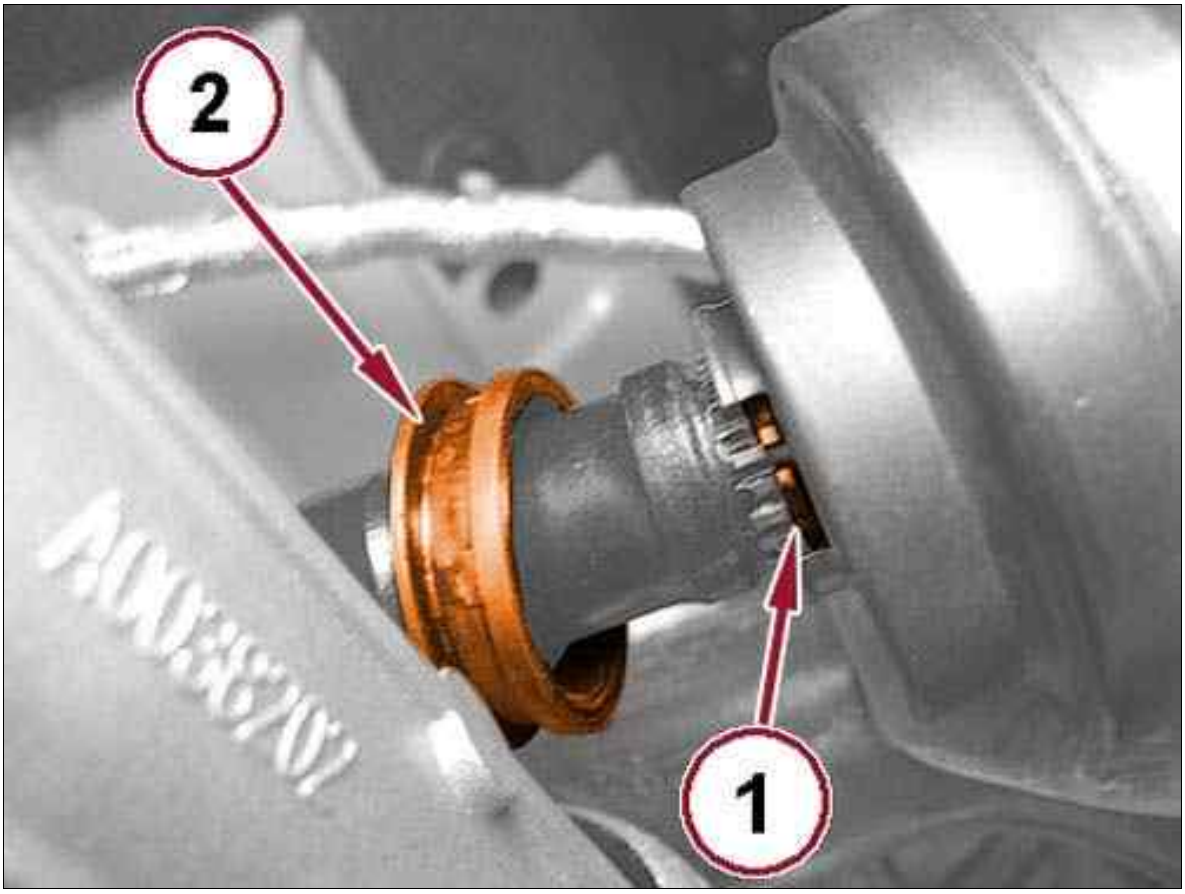
Fig 8: Center Support Bracket Bolts



Courtesy of CHRYSLER GROUP, LLC

10. Loosely install the **NEW** bolts (1) for the center support bracket.

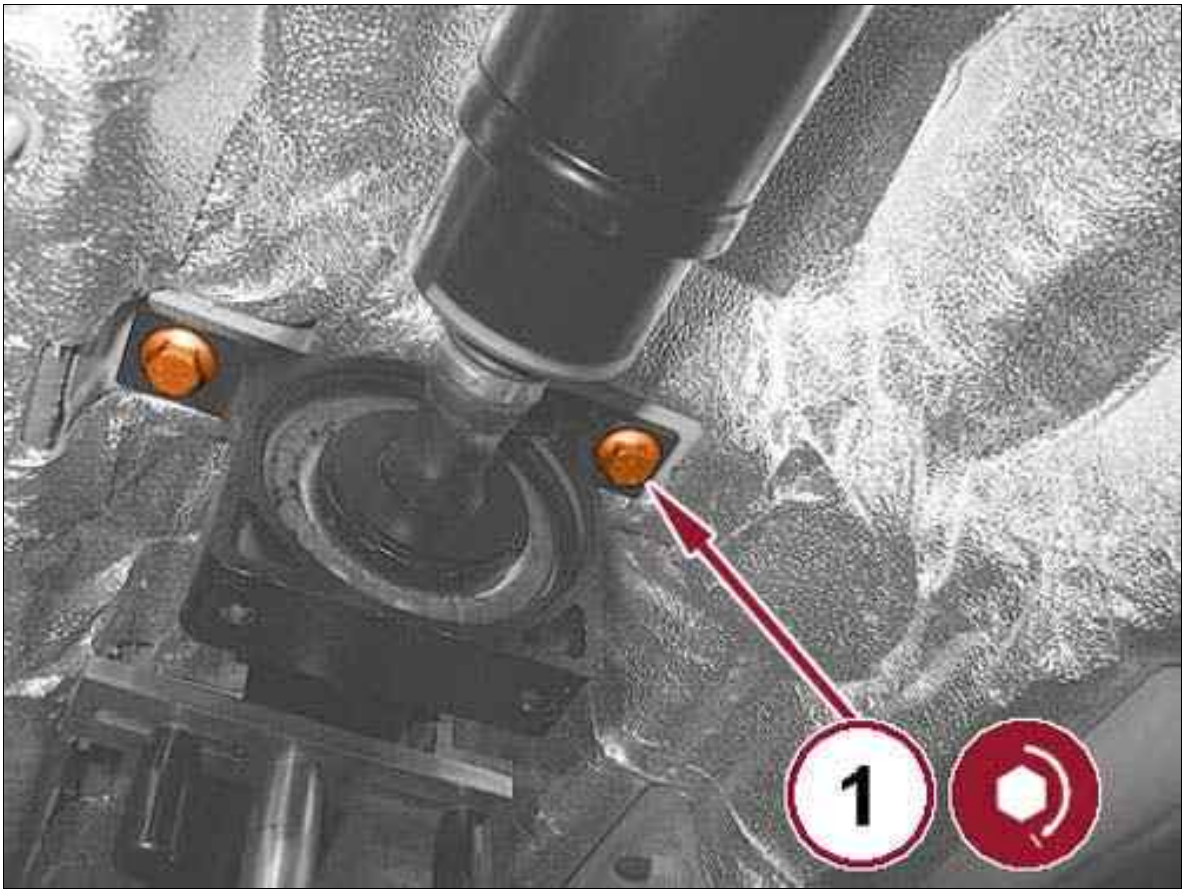
Fig 9: Propeller Shaft Snap Ring & Dust Cover



Courtesy of CHRYSLER GROUP, LLC

11. Connect the propeller shaft (1) to PTU, verify the snap ring is (1) seated in the groove of the propeller shaft.
12. Position the new dust cover (2) over the joint at the front of the propeller shaft.

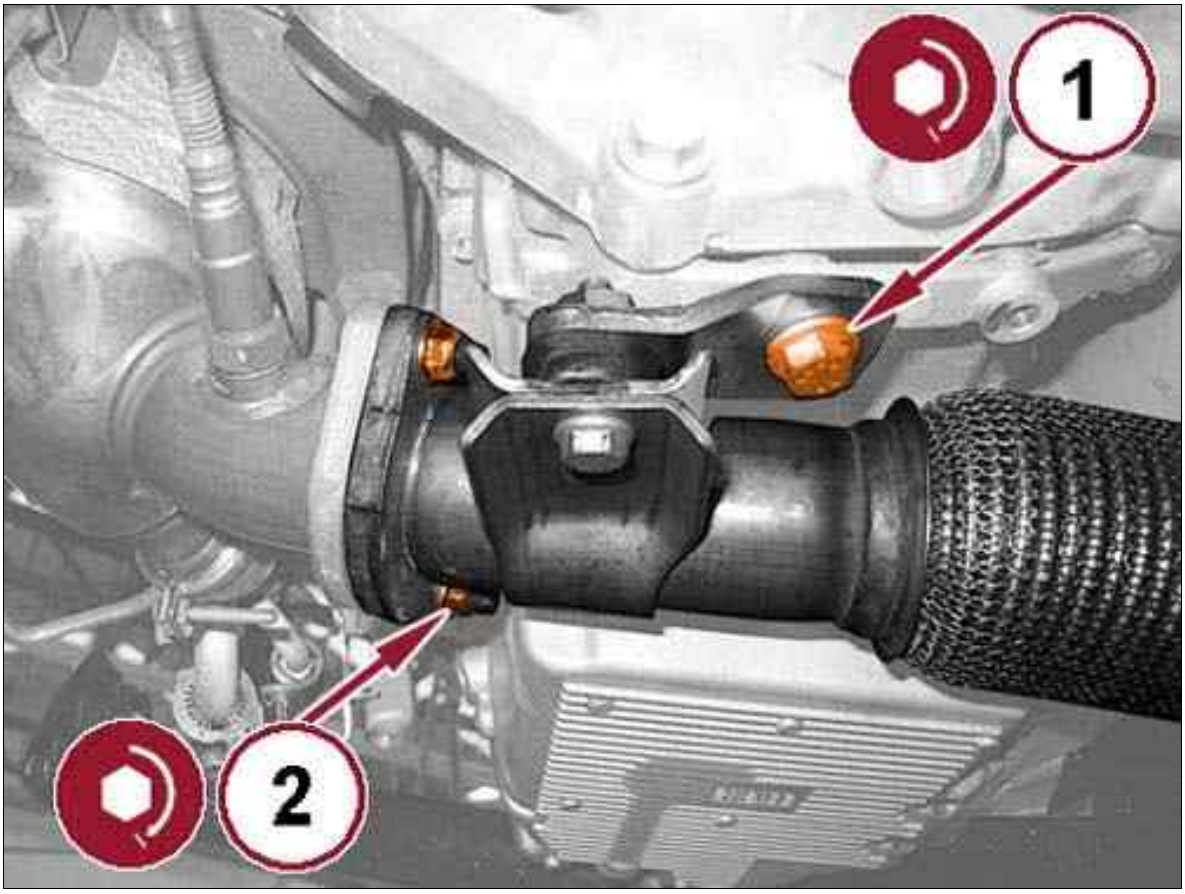
Fig 10: Center Support Bracket Bolts



Courtesy of CHRYSLER GROUP, LLC

13. Tighten the center support bracket bolts (1) to the proper specification. Refer to SPECIFICATIONS .
14. Remove the propeller shaft support tools.
15. Remove the tape and the protective sleeve from the propeller shaft.

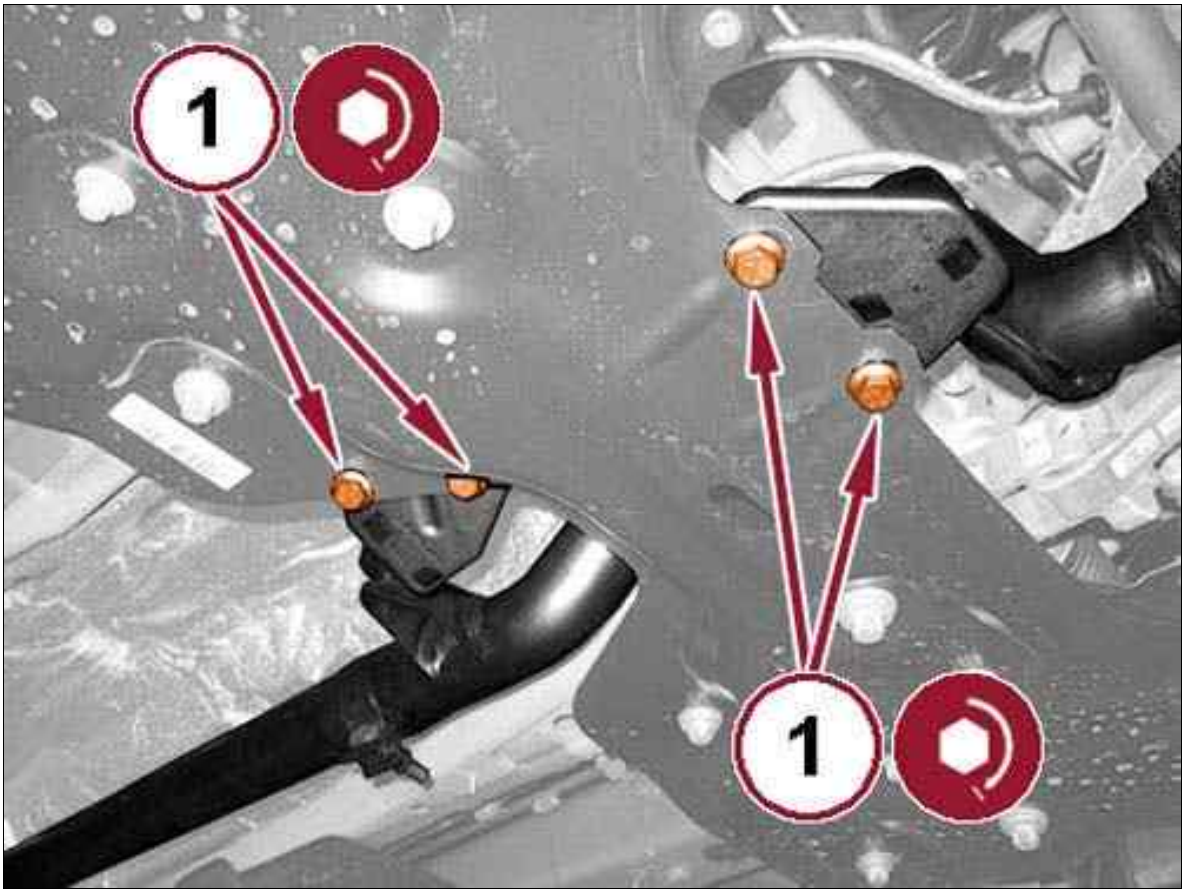
Fig 11: DPF Flange Nuts & Crossunder Pipe Bracket Bolt



Courtesy of CHRYSLER GROUP, LLC

16. Connect the crossunder pipe to the Diesel Particulate Filter (DPF) using a **NEW** flange gasket and tighten the **NEW** nuts (2) to the proper specification. Refer to SPECIFICATIONS .
17. Install the crossunder pipe front hanger support bracket bolts (1) and tighten to the proper specification. Refer to SPECIFICATIONS .
18. Install the crossunder pipe bracket bolt (1) and tighten to the proper specification. Refer to SPECIFICATIONS .

Fig 12: Front And Rear Crossunder Pipe Hanger Bolts



Courtesy of CHRYSLER GROUP, LLC

19. Install the front and rear crossunder pipe hanger bolts (1) at the front crossmember and tighten to the proper specification. Refer to SPECIFICATIONS .
20. Install the belly pan. Refer to BELLY PAN, REMOVAL AND INSTALLATION and BELLY PAN, SIDE, REMOVAL AND INSTALLATION .

REMOVAL AND INSTALLATION > 2.0 TURBO DIESEL -170 HP > REMOVAL

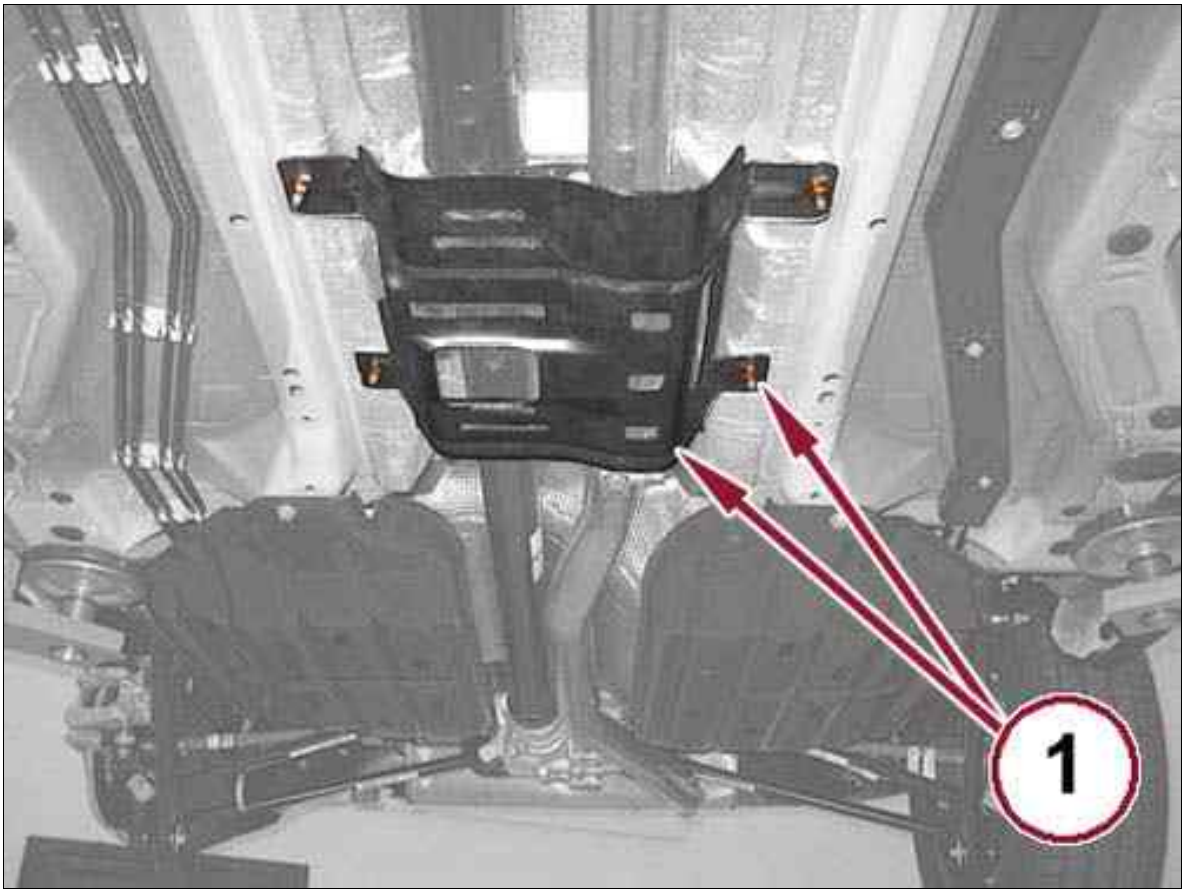
⚠ *CAUTION:*

Propeller shaft removal is a two-person operation. Never allow propeller shaft to hang from the center bearing, or while only connected to power transfer unit (PTU) or rear driveline module flanges. A helper is required. If a propshaft section is hung unsupported, damage may occur to the joint, boot, and/or center bearing from over-angulation. This may result in driveline vibrations.

1. Raise and support the vehicle. Refer to HOISTING, STANDARD PROCEDURE .
2. Remove the belly pan. Refer to BELLY PAN, REMOVAL AND INSTALLATION and BELLY PAN,

SIDE, REMOVAL AND INSTALLATION .

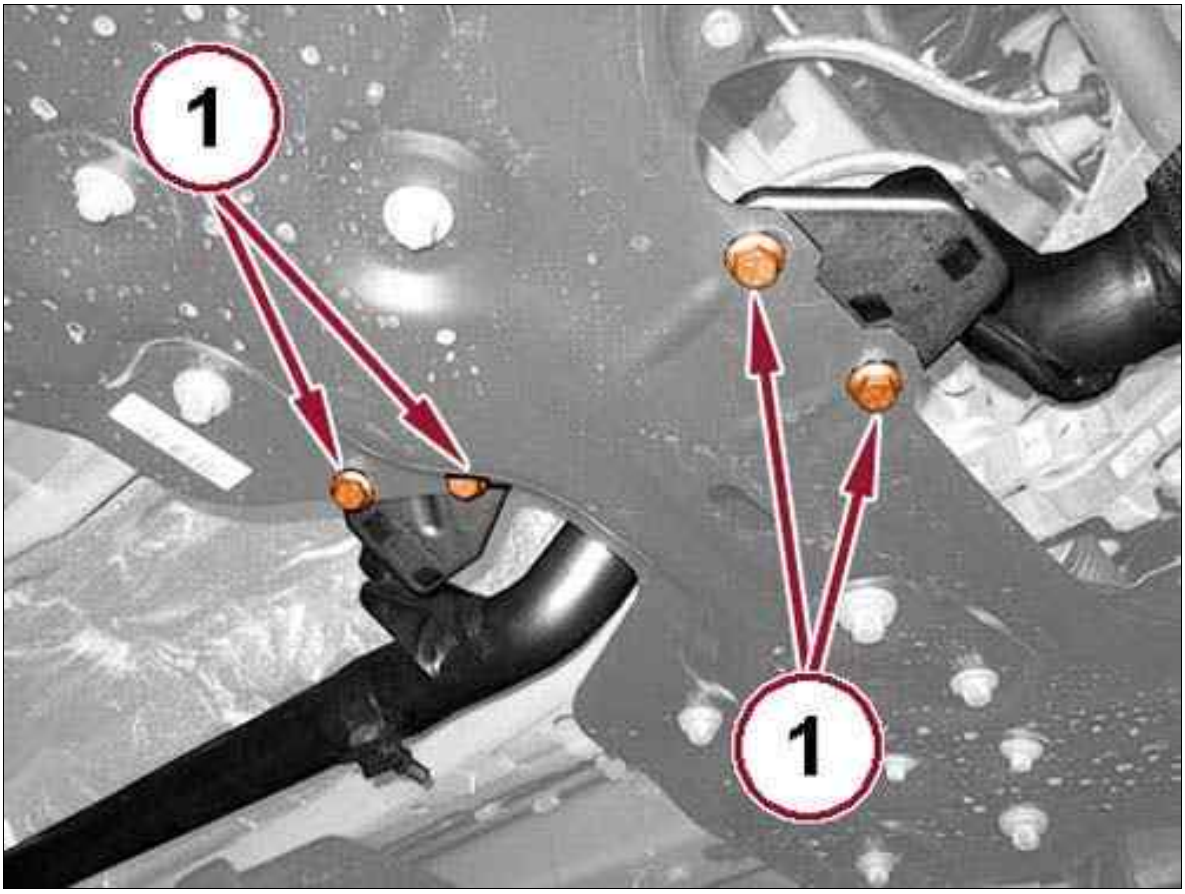
Fig 1: Propeller Shaft Skid Plate & Fasteners



Courtesy of CHRYSLER GROUP, LLC

3. Remove the nuts and remove the propeller shaft skid plate.

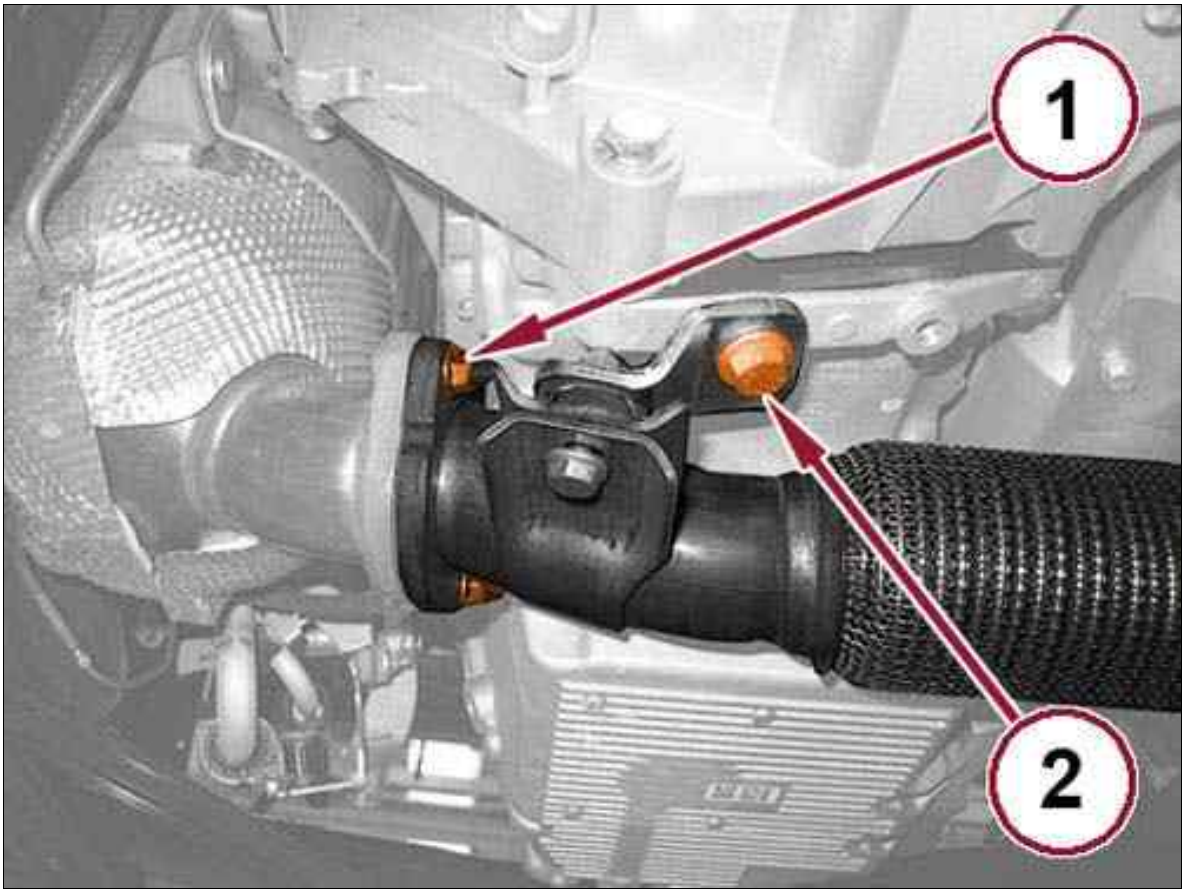
Fig 2: Crossunder Pipe Front And Rear Hanger Bolts



Courtesy of CHRYSLER GROUP, LLC

4. Remove the crossunder pipe front and rear hanger bolts (1) at the front crossmember.

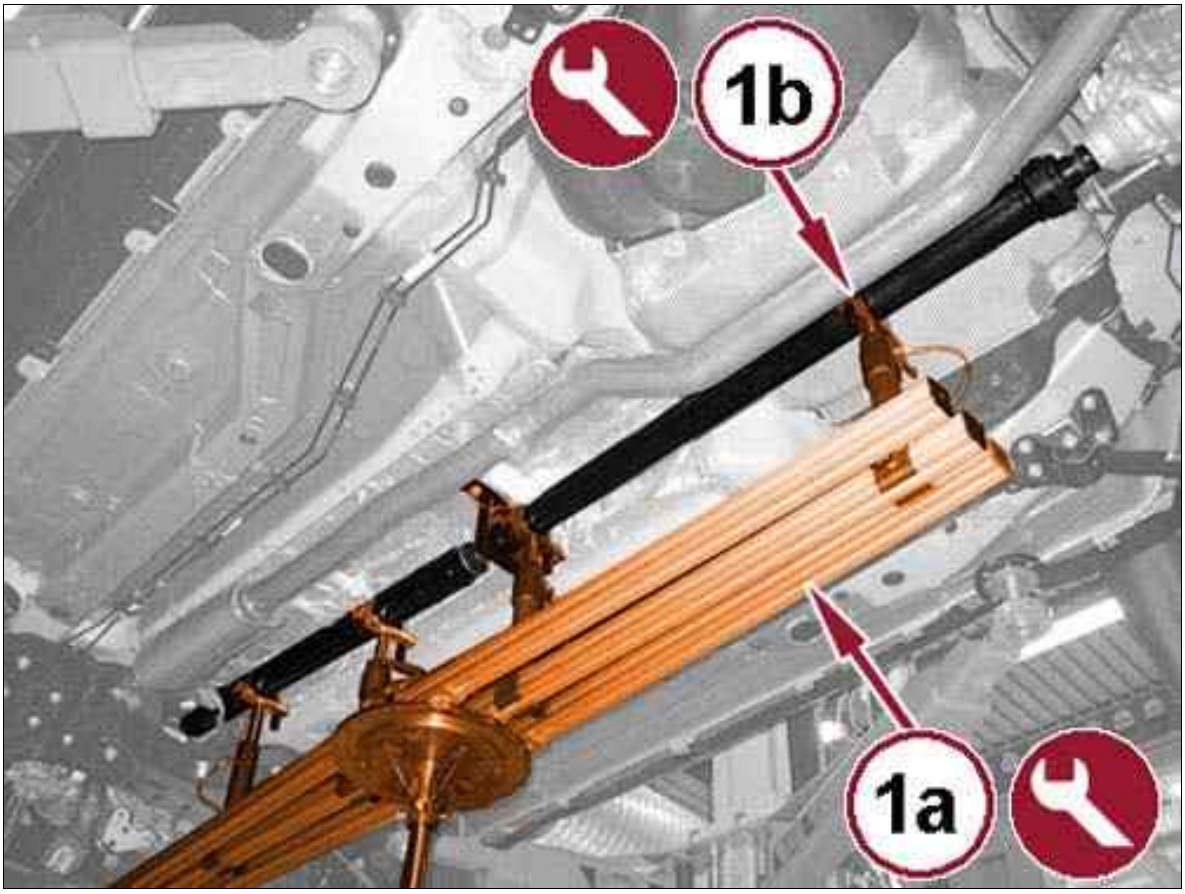
Fig 3: Crossunder Pipe To DPF Flange Nuts & Bracket Bolt



Courtesy of CHRYSLER GROUP, LLC

5. Remove the crossunder pipe to Diesel Particulate Filter (DPF) flange nuts (1).
6. Remove the crossunder pipe bracket bolt (2).
7. Remove and discard the exhaust flange gasket.

Fig 4: Support Tools Under Propeller Shaft



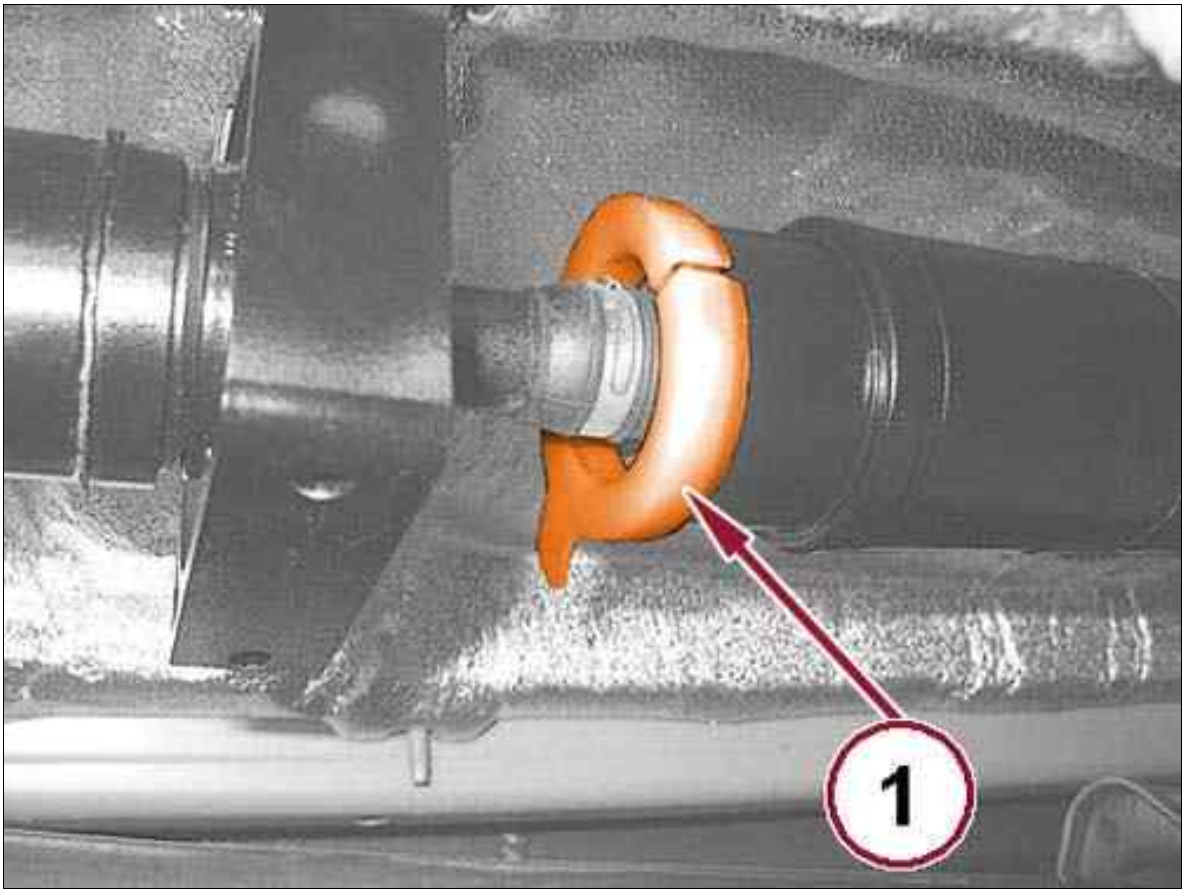
Courtesy of CHRYSLER GROUP, LLC

NOTE:

Protect the propeller shaft coating with a suitable duct tape to prevent any scratches caused by the propeller shaft support tools.

8. Position support tools 2000043000 (1b) and 2000043400 (1a) under the propeller shaft.

Fig 5: Protective Sleeve

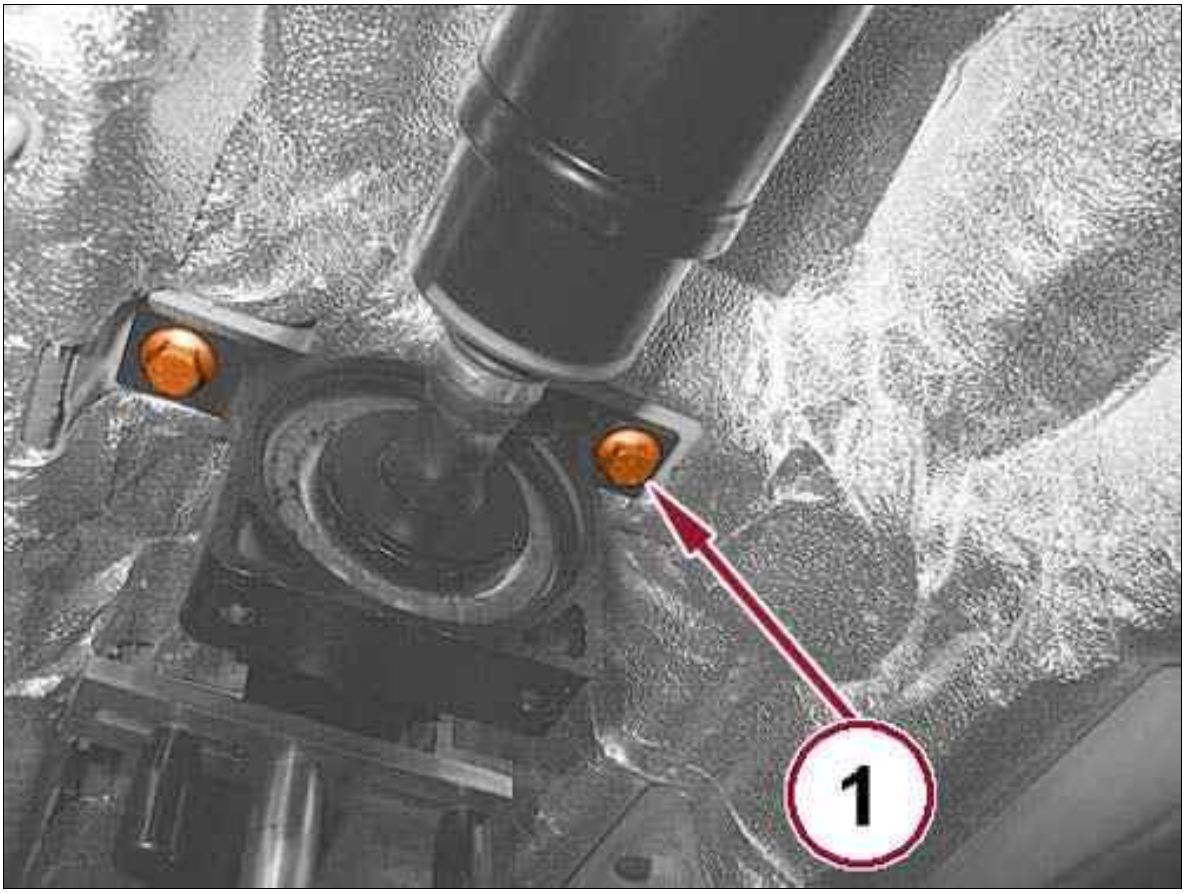


Courtesy of CHRYSLER GROUP, LLC

9. Install the protective sleeve (1) at the center propeller shaft joint to protect the boot as shown in illustration.

> *NOTE:*
>
> *The protective sleeve is provided in the parts package with the dust cover and snap rings for the propeller shaft.*

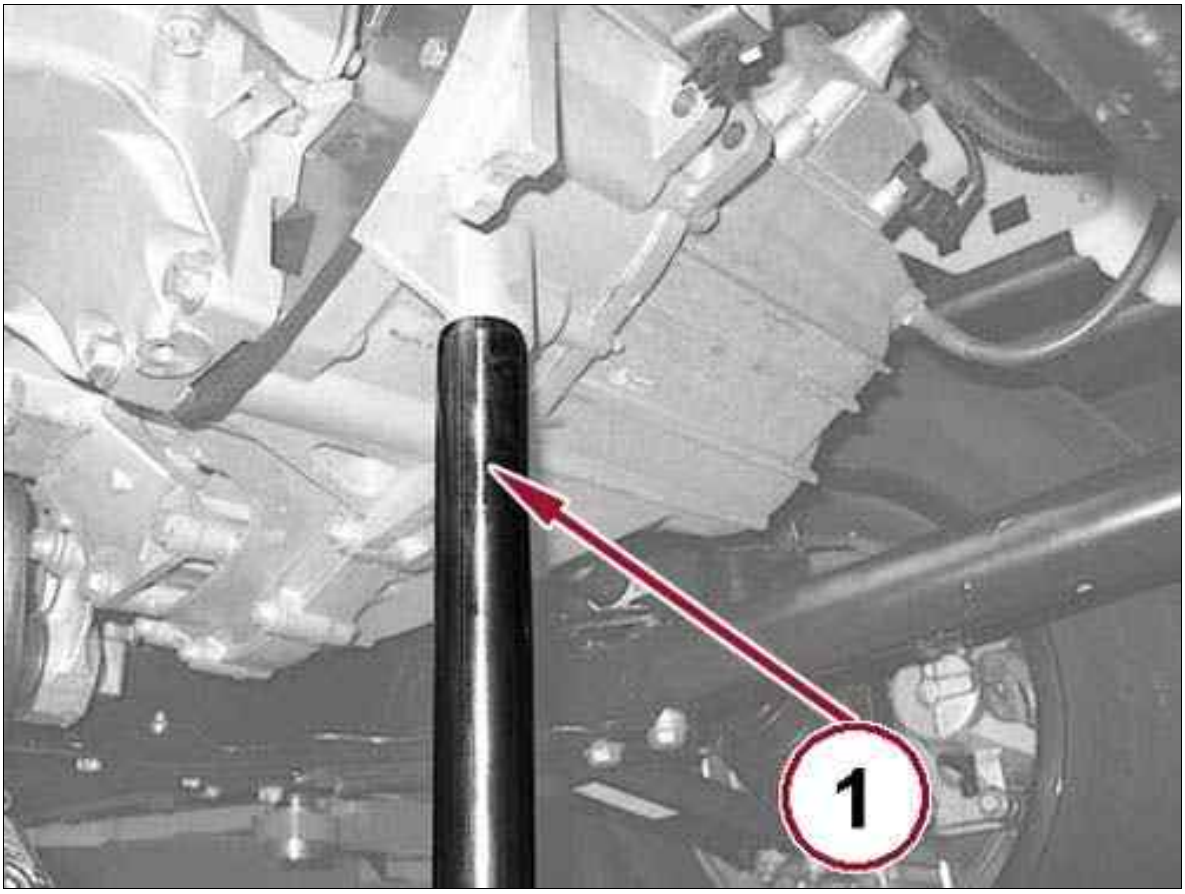
Fig 6: Propeller Shaft Center Support Bolts



Courtesy of CHRYSLER GROUP, LLC

10. Loosen the propeller shaft center support bolts (1).

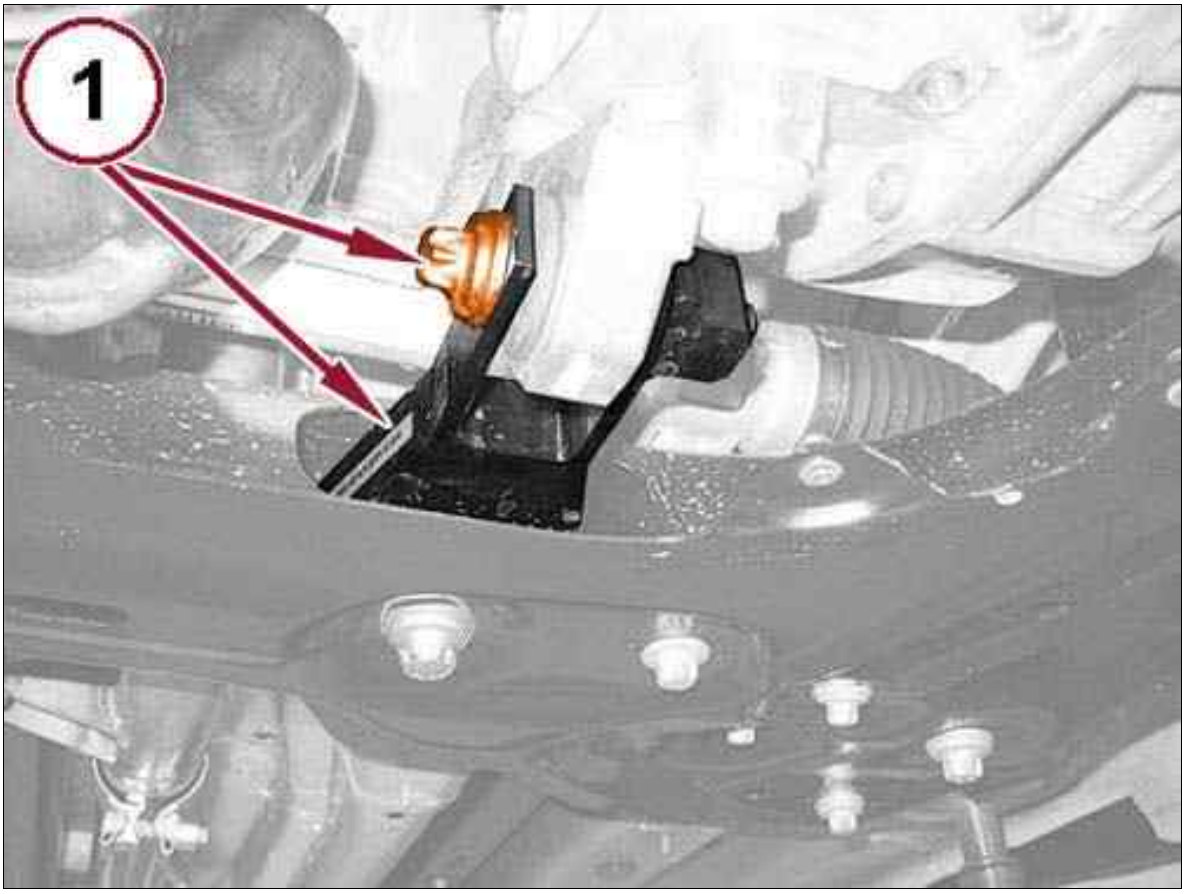
Fig 7: Jack Under Transmission



Courtesy of CHRYSLER GROUP, LLC

11. Place a suitable jack (1) under the transmission.

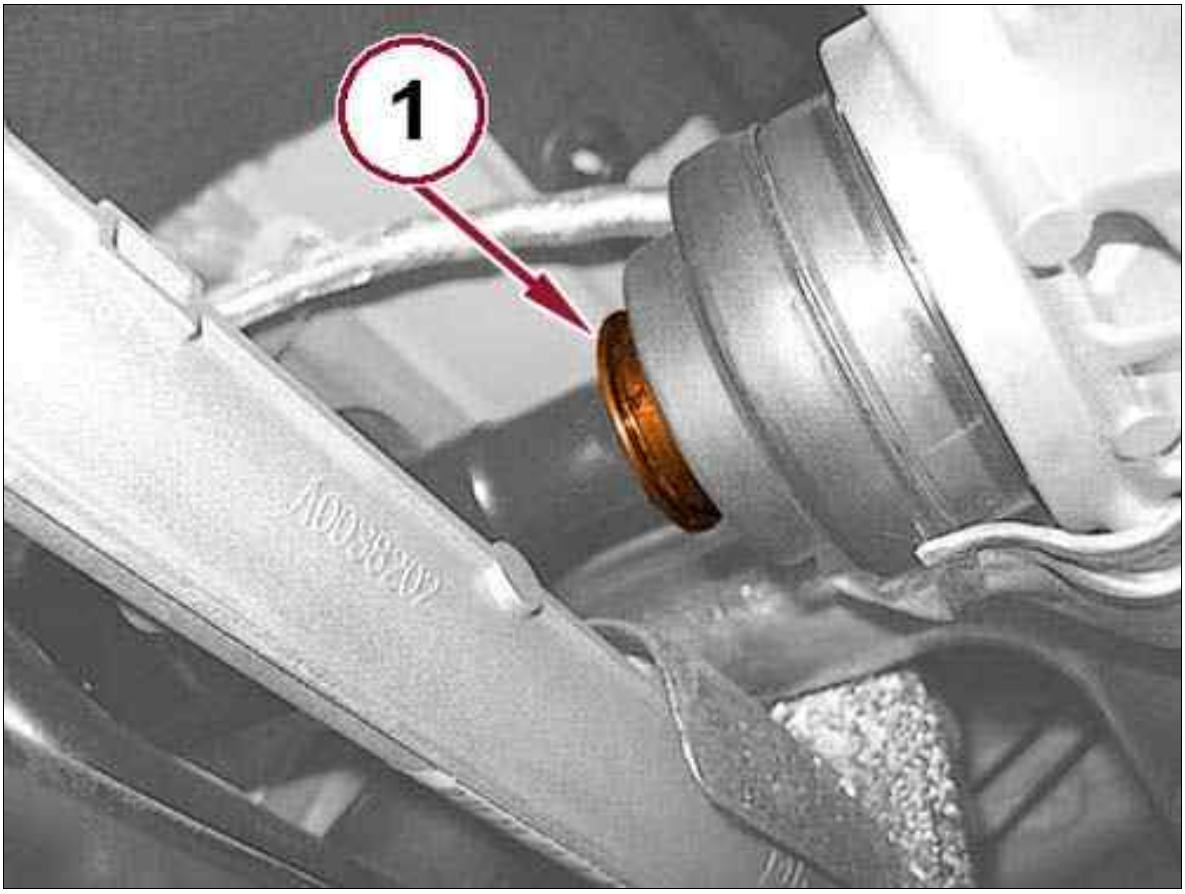
Fig 8: Rear Engine Mount Through Bolt



Courtesy of CHRYSLER GROUP, LLC

12. Remove the rear engine mount through bolt (1).
13. Adjust the jack to carefully shift the powertrain forward.

Fig 9: Dust Cover

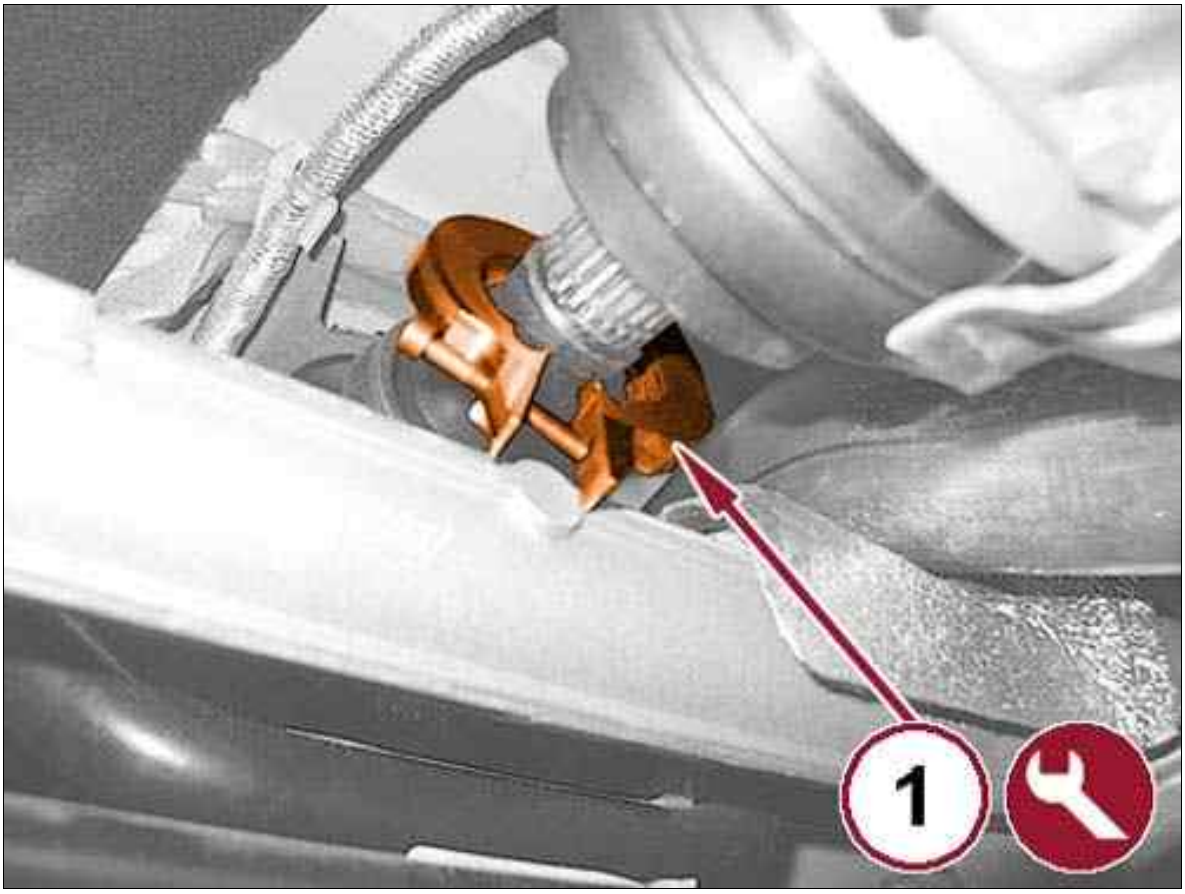


Courtesy of CHRYSLER GROUP, LLC

> *NOTE:*
>
> *The dust cover must be replaced every time the propeller shaft is removed.*

14. Slide the dust cover (1) at the front of the propeller shaft away from the Power Transfer Unit (PTU) to access the snap ring.

Fig 10: Propeller Shaft Snap Ring Tool



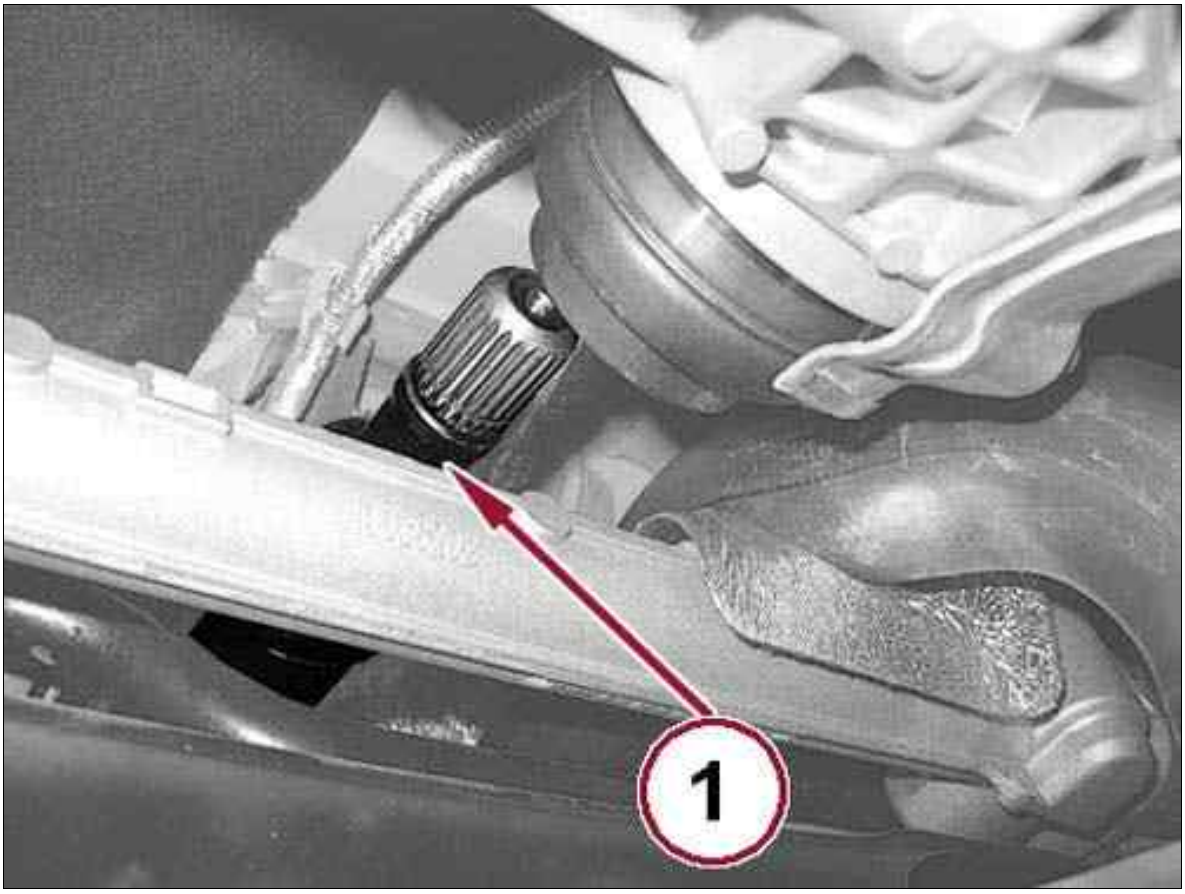
Courtesy of CHRYSLER GROUP, LLC

NOTE:

The snap ring must be replaced every time the propeller shaft is removed.

15. Use tool 2019500030 (1) to open propeller shaft snap ring at the PTU.

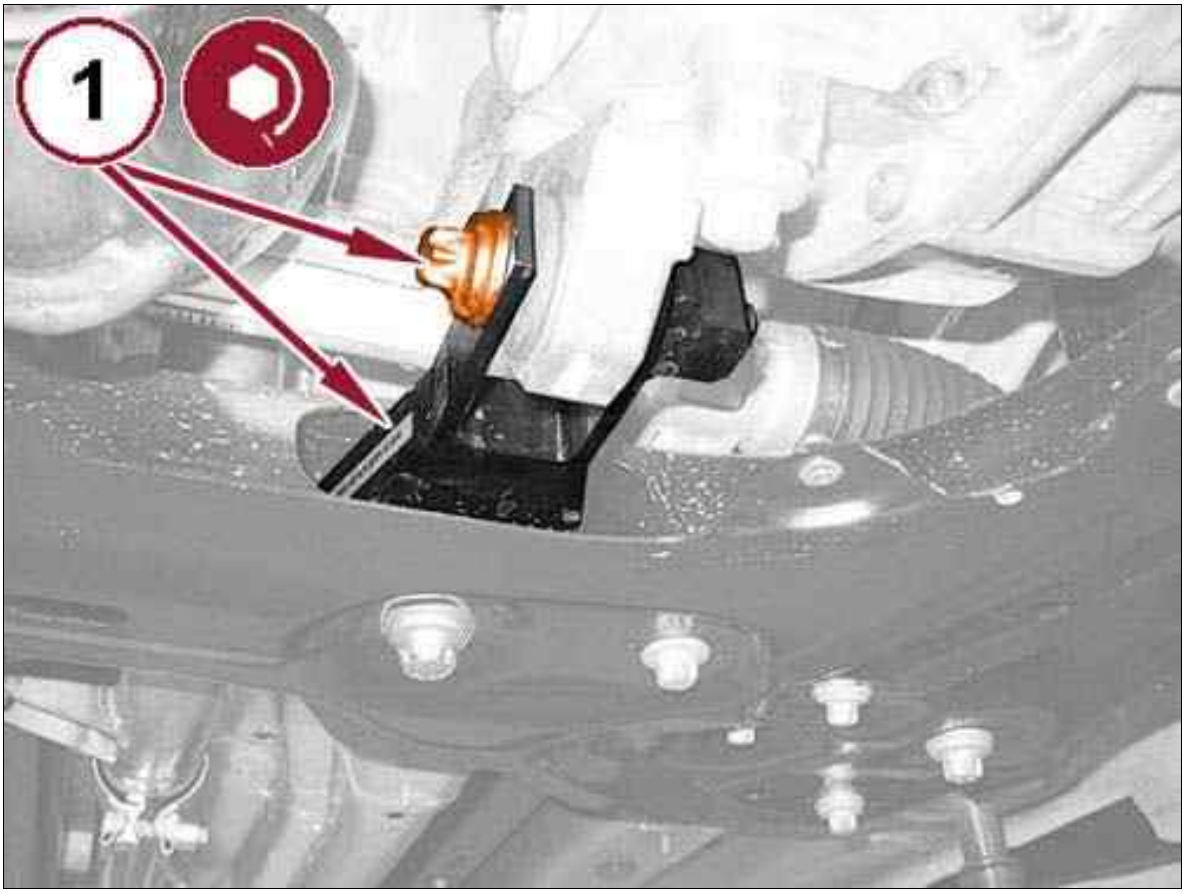
Fig 11: Propeller Shaft At PTU



Courtesy of CHRYSLER GROUP, LLC

16. Disconnect the propeller shaft (1) from the PTU.
17. Remove the tool 2019500030.

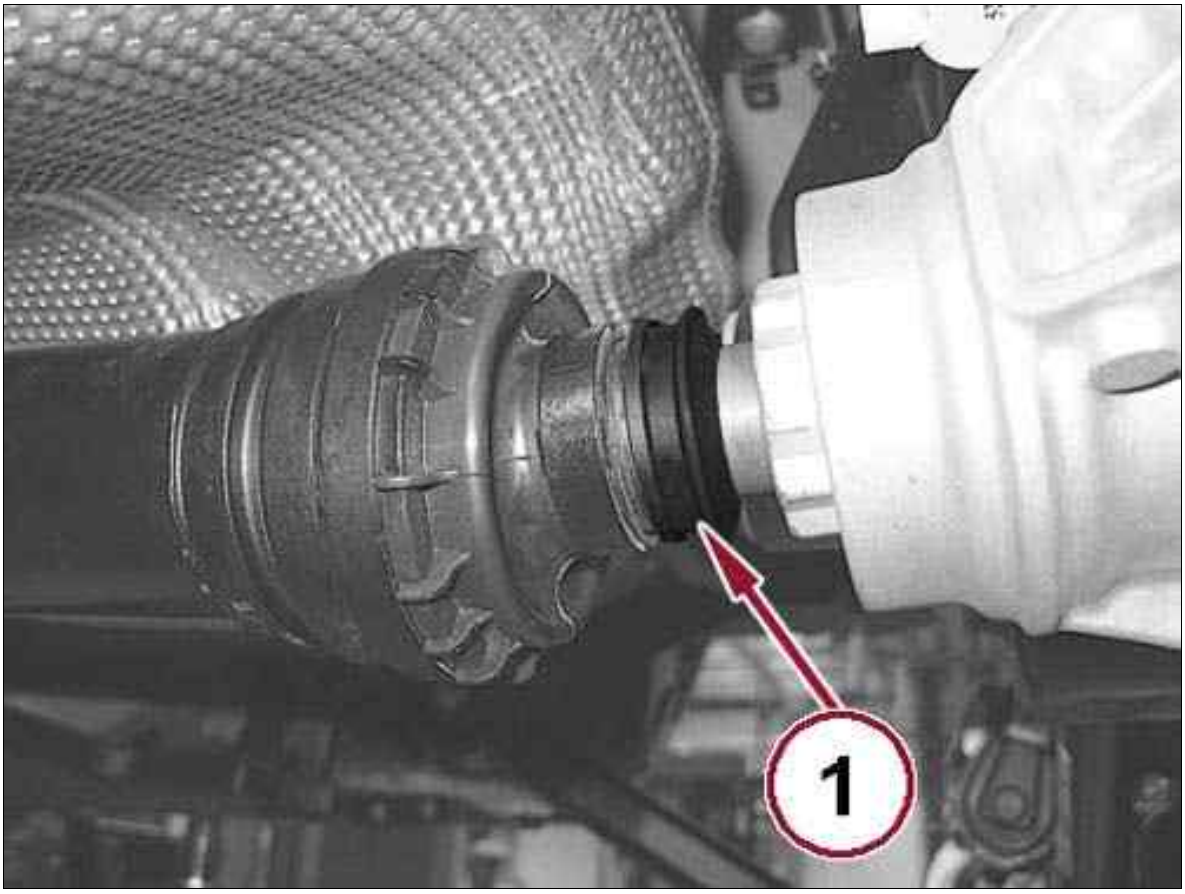
Fig 12: Rear Engine Mount Through Bolt



Courtesy of CHRYSLER GROUP, LLC

18. Install the rear engine mount through bolt and torque to the proper specification. Refer to TORQUE SPECIFICATIONS .
19. Remove the jack from under the transmission.
20. Remove the previously loosened propeller shaft center support bolts.

Fig 13: Dust Cover



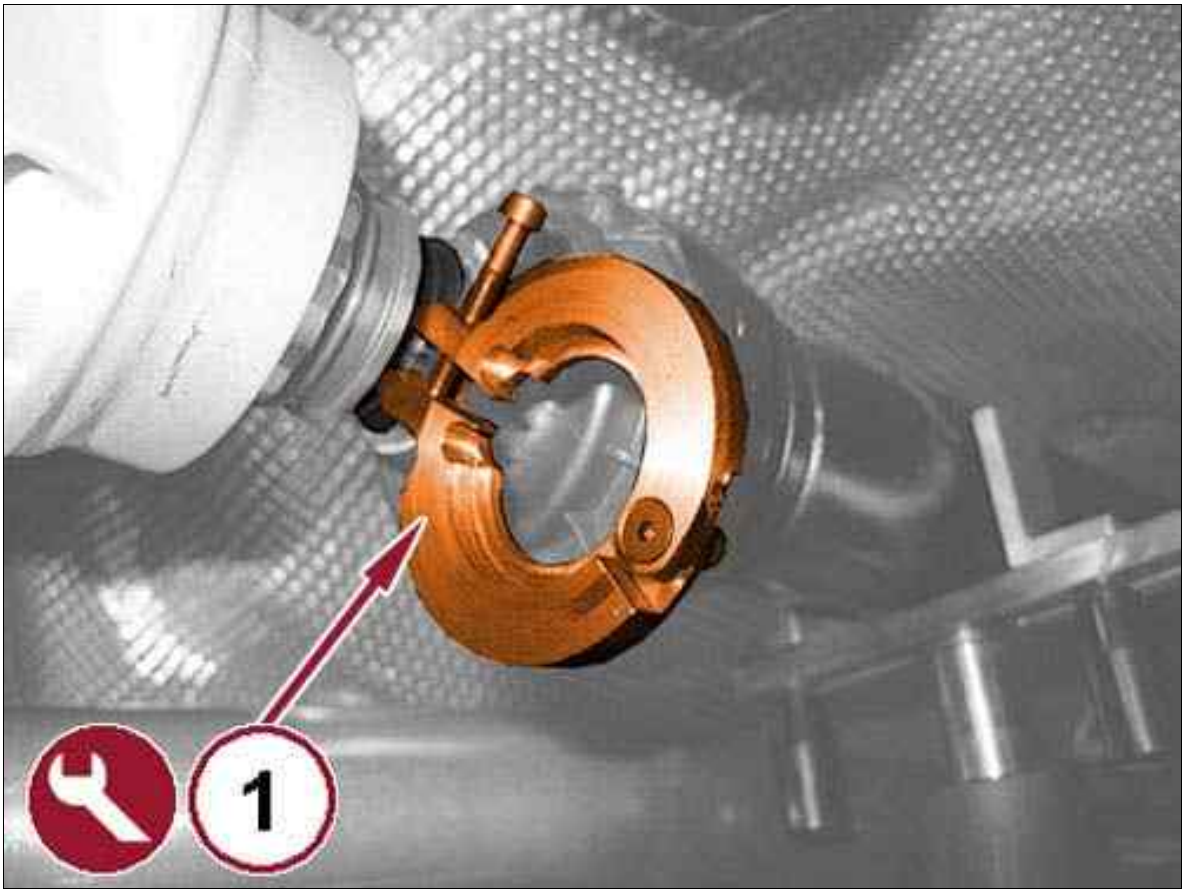
Courtesy of CHRYSLER GROUP, LLC

NOTE:

The dust cover must be replaced every time the propeller shaft is removed.

21. Slide the dust cover (1) at the rear of the propeller shaft towards the differential to access the snap ring.

Fig 14: Opening Propeller Shaft Snap Ring



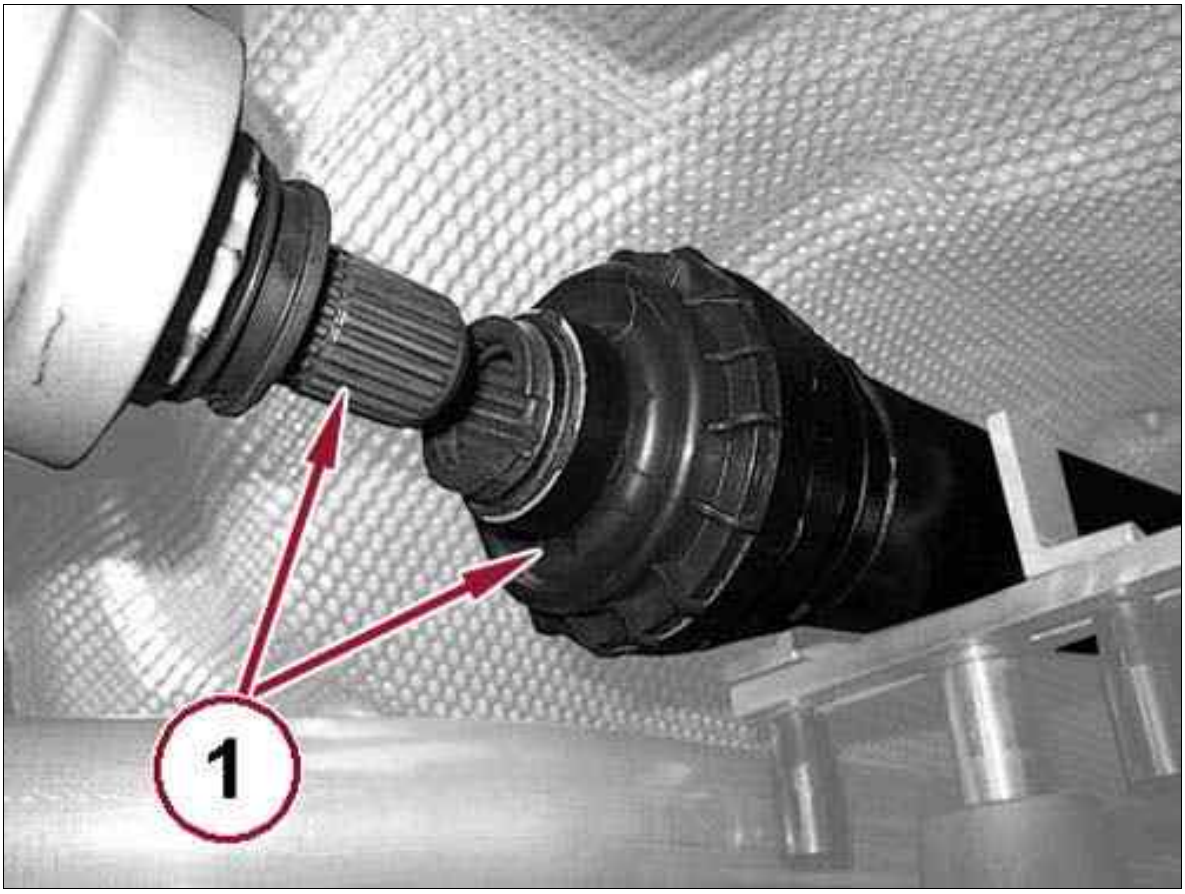
Courtesy of CHRYSLER GROUP, LLC

NOTE:

The snap ring must be replaced every time the propeller shaft is removed.

22. Use tool 2019500030 (1) to open propeller shaft snap ring at the Rear Driveline Unit (RDU).

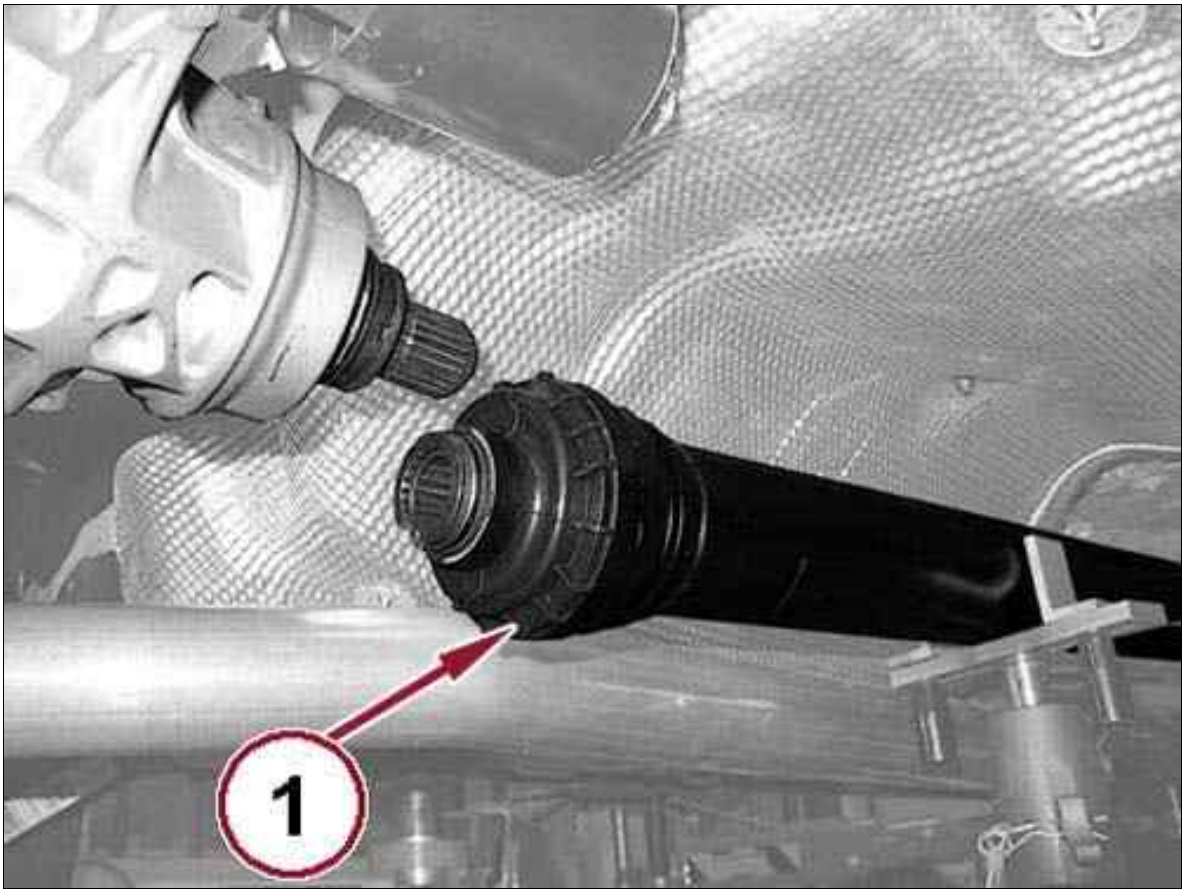
Fig 15: Propeller Shaft & Pinion



Courtesy of CHRYSLER GROUP, LLC

23. Disconnect the propeller shaft from the pinion of the RDU (1).
24. Remove the tool 2019500030.

Fig 16: Propeller Shaft At RDU



Courtesy of CHRYSLER GROUP, LLC

25. Lower the propeller shaft until the rear joint of the shaft is under the RDU as shown in illustration.

> *NOTE:*
>
> *Pay close attention to avoid excessive articulation between the two halves of the propeller shaft during removal.*

26. Turn the jack to remove the drive shaft, guiding it away from the front suspension crossmember.

REMOVAL AND INSTALLATION > 2.0 TURBO DIESEL -170 HP > INSTALLATION

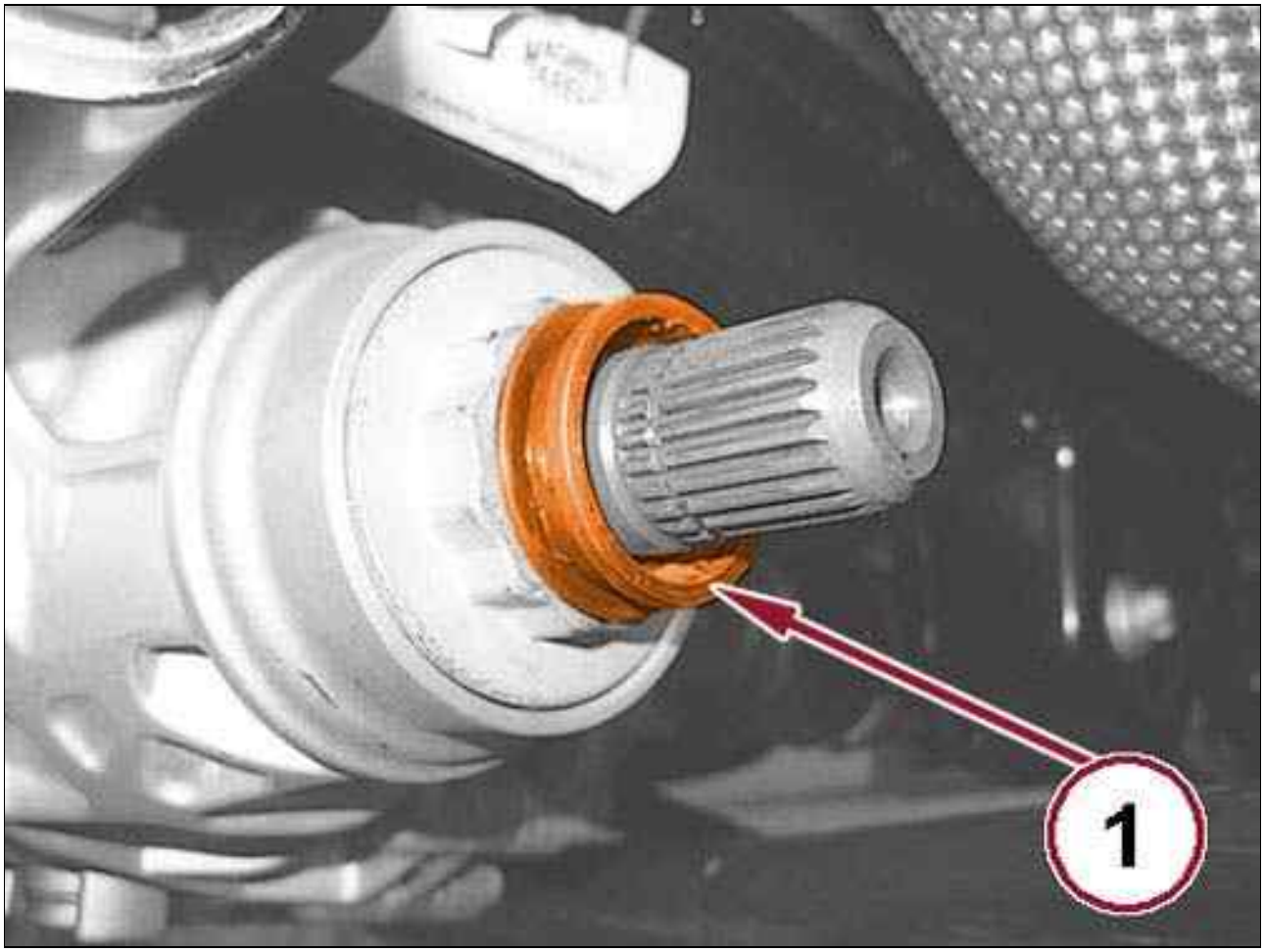
> *CAUTION:*
>
> *Propeller shaft removal is a two-person operation. Never allow propeller shaft to hang from the center bearing, or while only connected to power transfer unit (PTU) or rear driveline module flanges. A helper is required. If a propshaft section is hung unsupported, damage*

may occur to the joint, boot, and/or center bearing from over-angulation. This may result in driveline vibrations.

NOTE:

Lightly apply grease to the splines prior to installation.

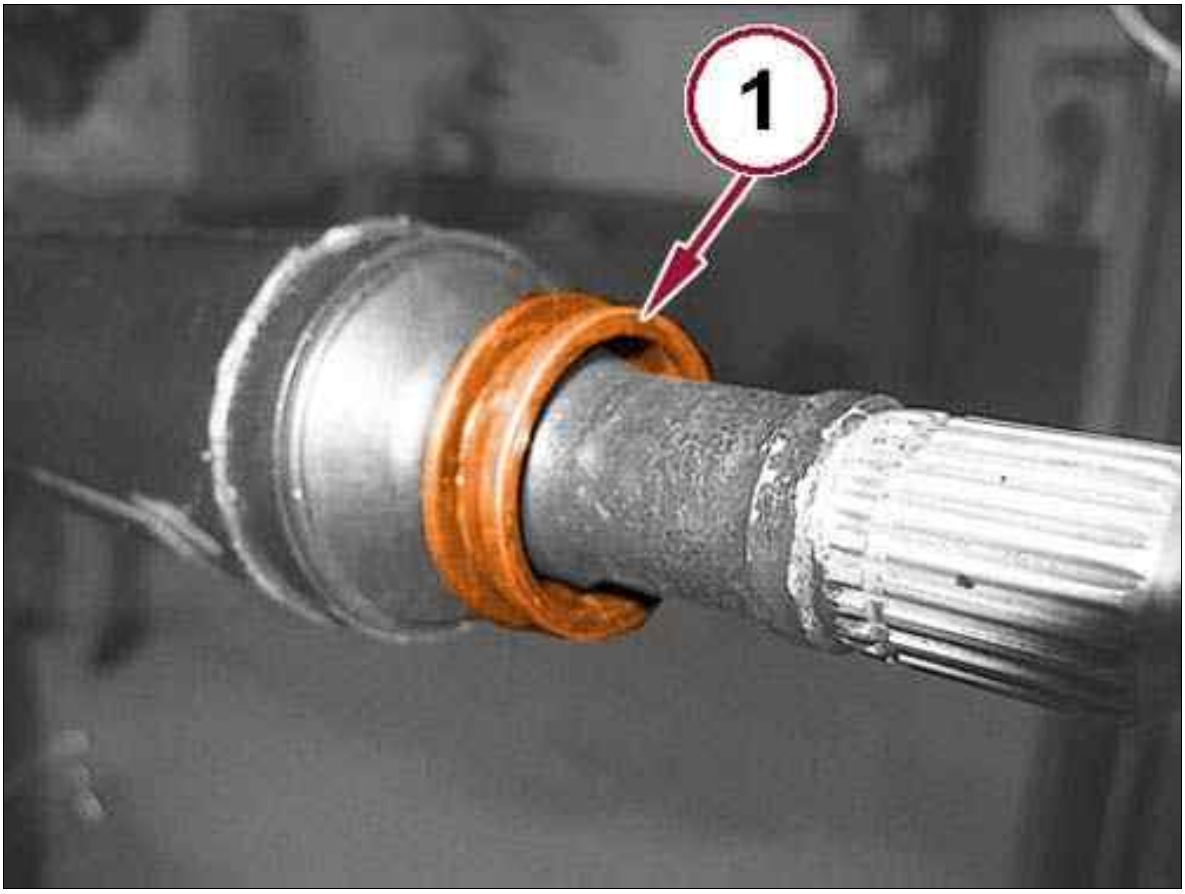
Fig 1: Pinion Shaft Dust Seal



Courtesy of CHRYSLER GROUP, LLC

1. Install a **NEW** dust seal (1) on the pinion shaft of the Rear Driveline Unit (RDU).

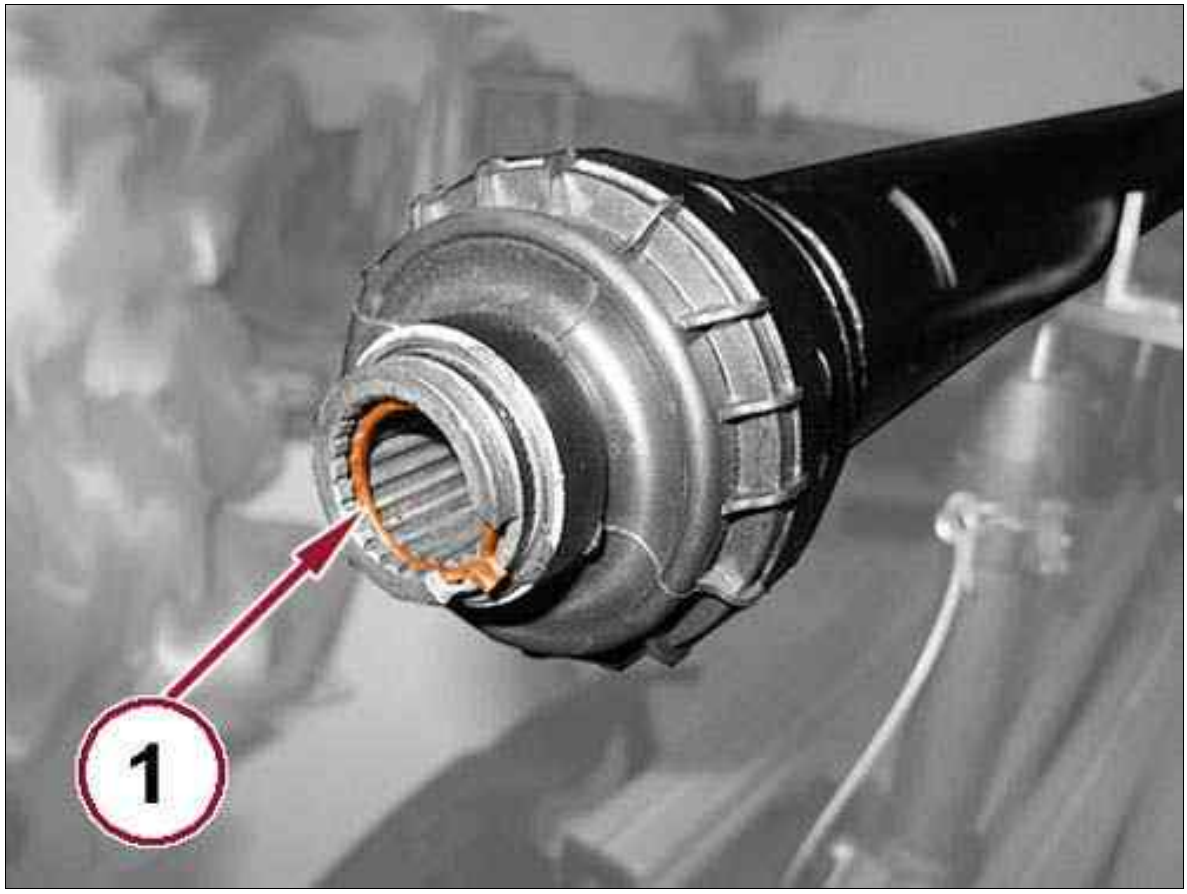
Fig 2: Front Of Propeller Shaft Dust Seal



Courtesy of CHRYSLER GROUP, LLC

2. Install a **NEW** dust seal (1) on the front shaft of the propeller shaft.

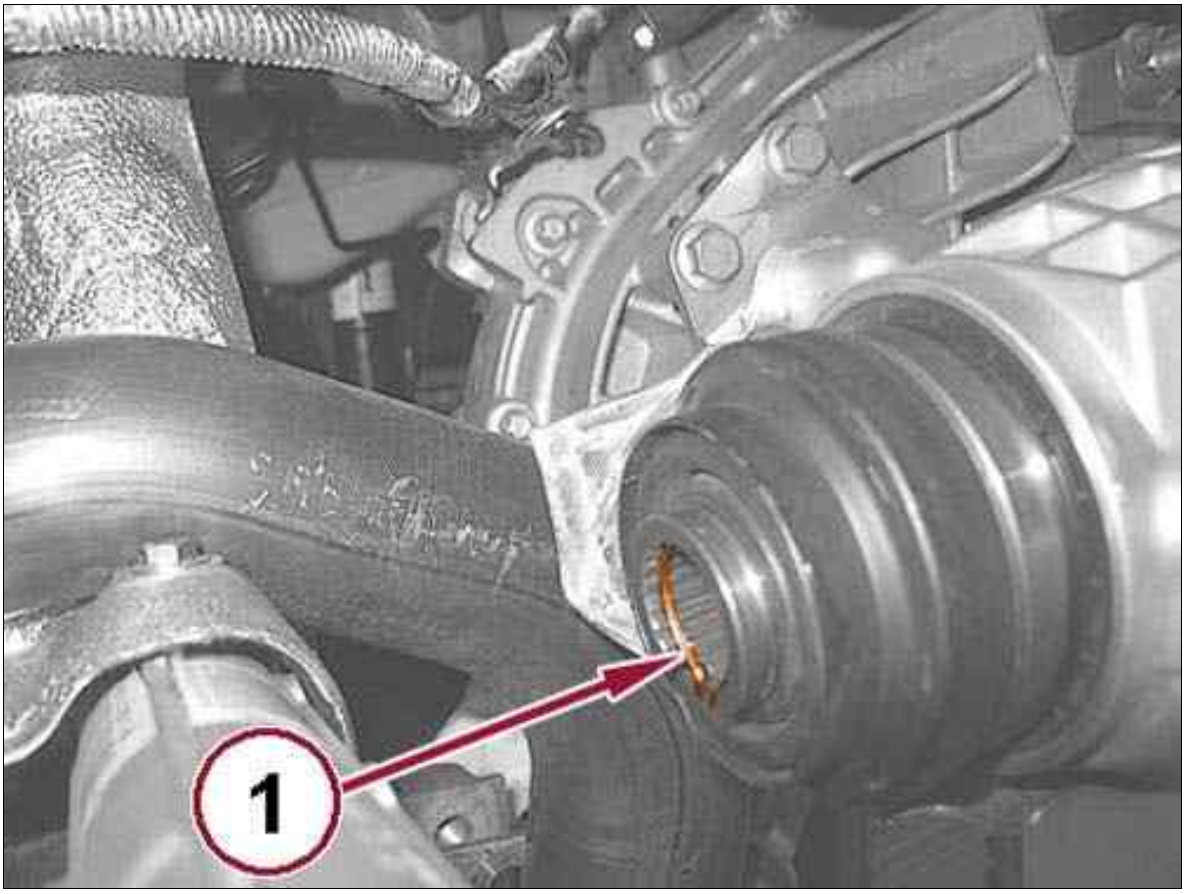
Fig 3: Drive Shaft Snap Ring



Courtesy of CHRYSLER GROUP, LLC

3. Install a **NEW** snap ring (1) in the drive shaft.

Fig 4: PTU Snap Ring



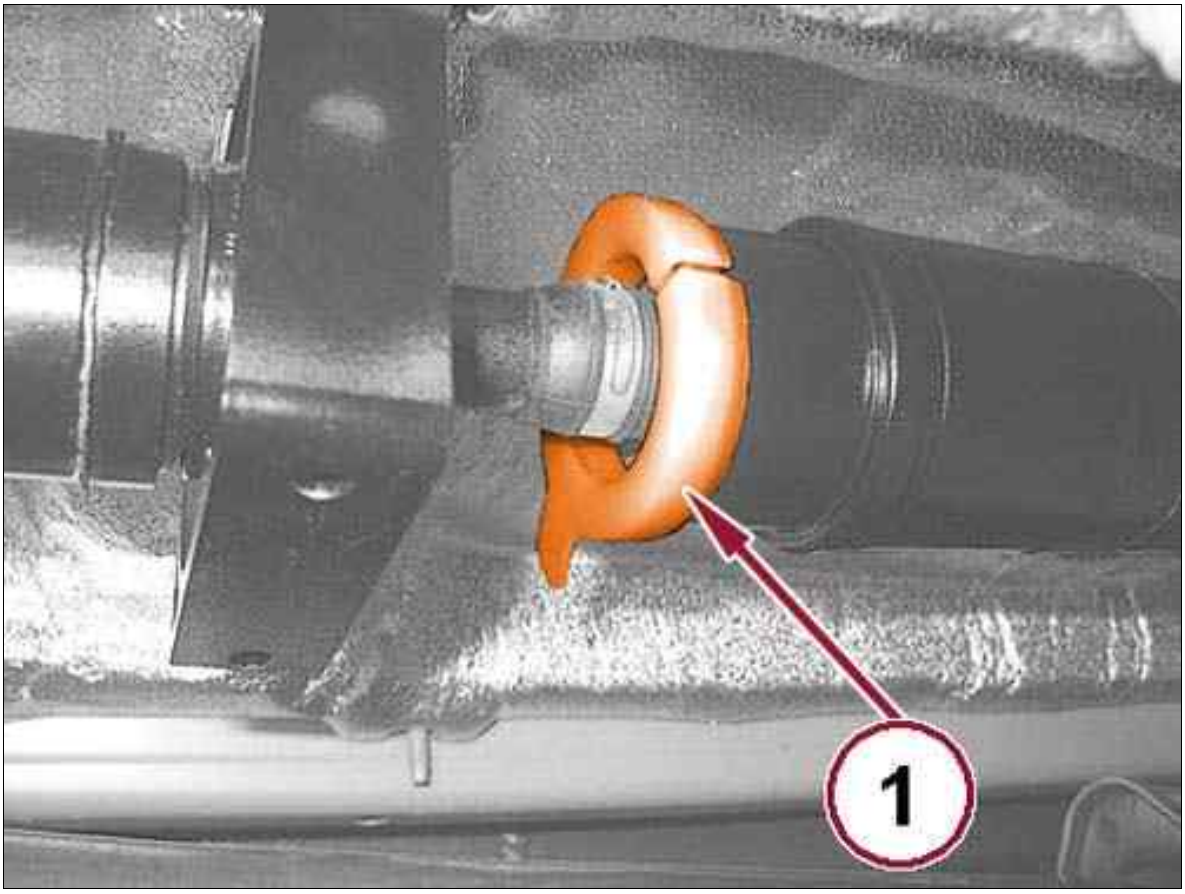
Courtesy of CHRYSLER GROUP, LLC

4. Install a **NEW** snap ring (1) in the Power Transfer Unit (PTU).

> *NOTE:*
>
> *Protect the propeller shaft coating with a suitable duct tape to prevent any scratches caused by the propeller shaft support tools.*

5. Position the propeller shaft on the support tools 2000043000 and 2000043400.

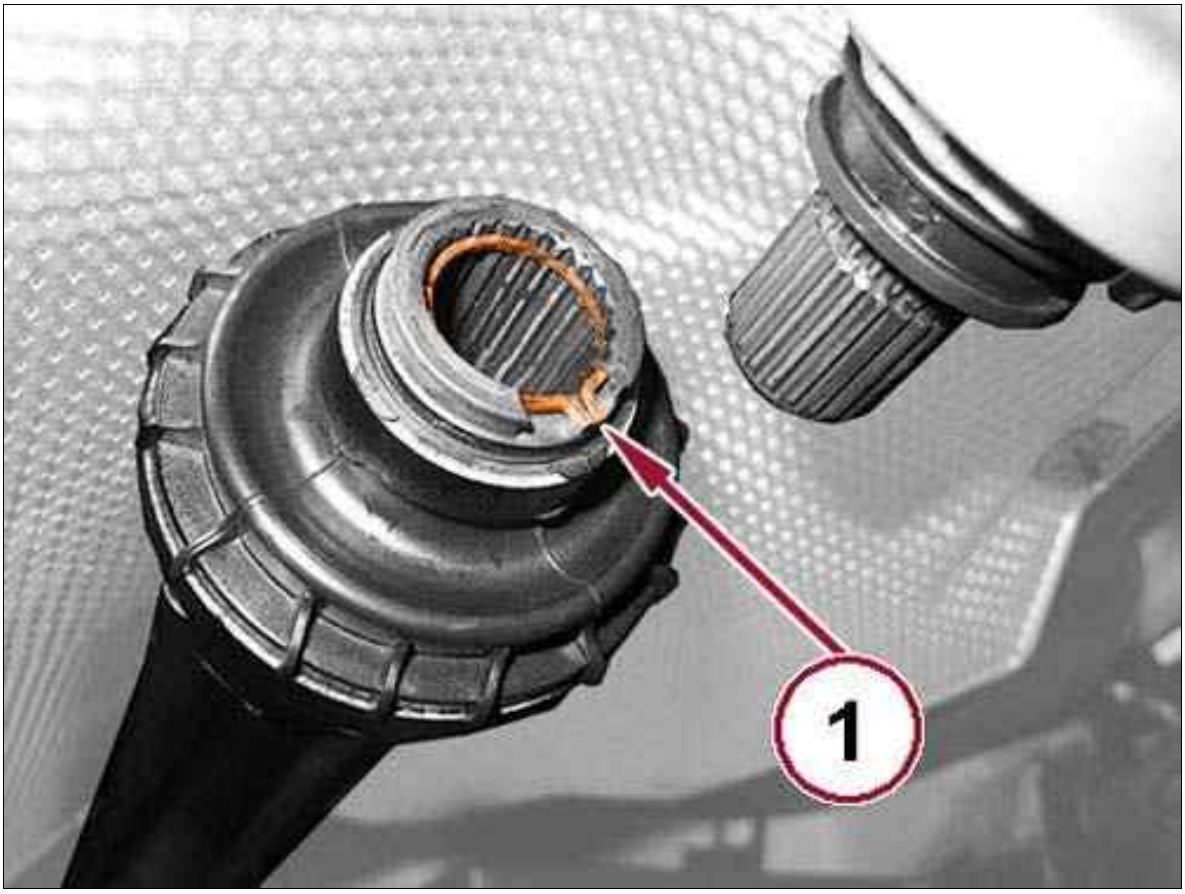
Fig 5: Protective Sleeve At Center Propeller Shaft Joint



Courtesy of CHRYSLER GROUP, LLC

6. Install the protective sleeve (1) at the center propeller shaft joint to protect the boot as shown in illustration.
7. Raise the propeller shaft into the vehicle positioning the front of the shaft above the front cross member and the steering gear.

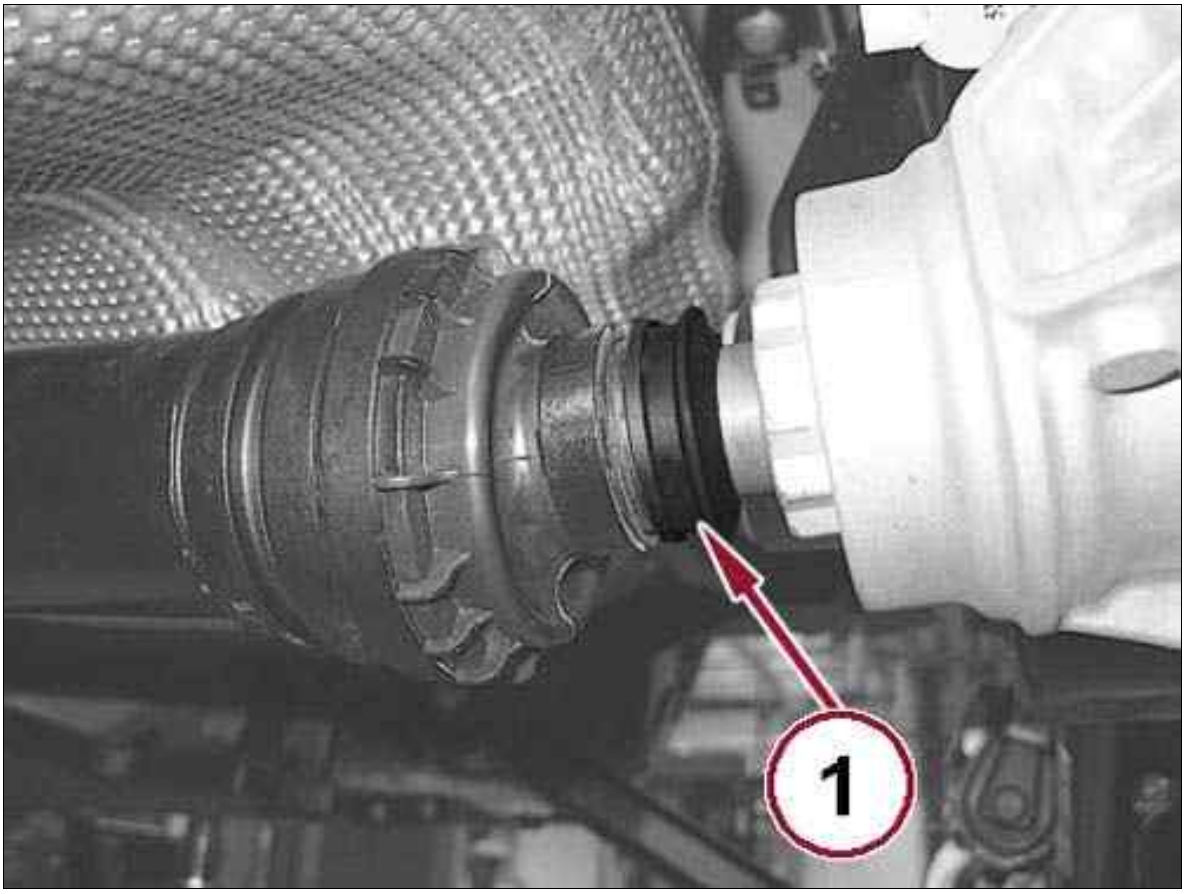
Fig 6: Propeller Shaft Snap Ring Seated



Courtesy of CHRYSLER GROUP, LLC

8. Connect the propeller shaft to the pinion of the RDU, verify the snap ring (1) is seated in the groove of the pinion shaft.

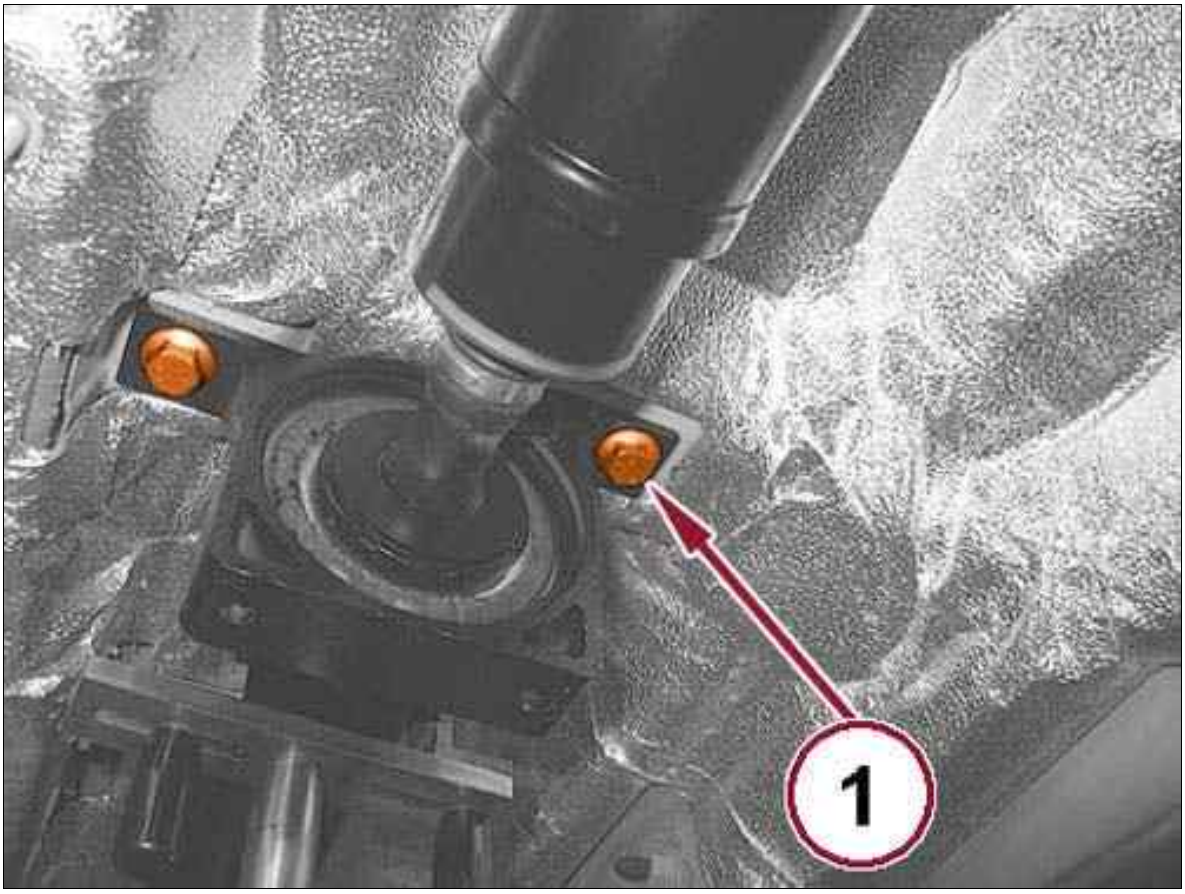
Fig 7: Rear Propeller Shaft Dust Cover



Courtesy of CHRYSLER GROUP, LLC

9. Position the new dust cover (1) over the joint at the rear of the propeller shaft.

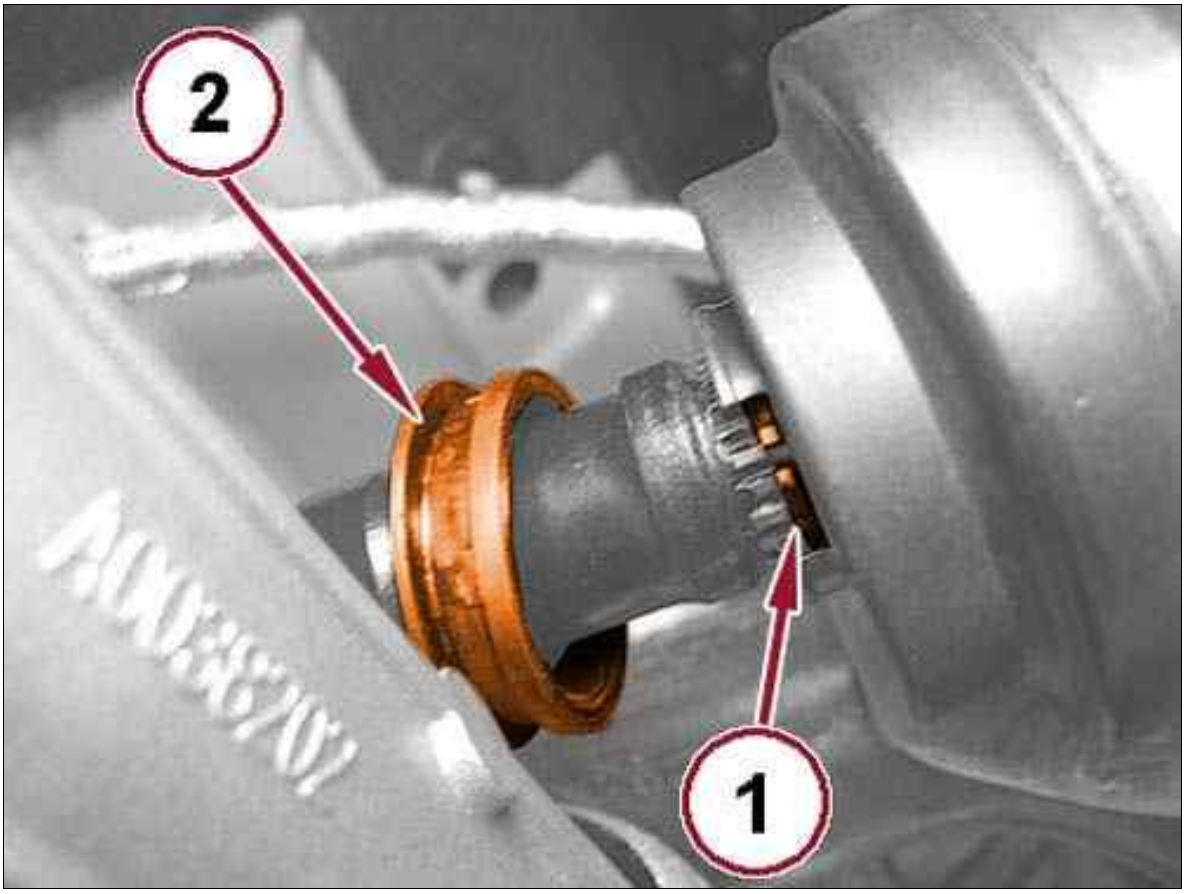
Fig 8: Center Support Bracket Bolts



Courtesy of CHRYSLER GROUP, LLC

10. Loosely install the **NEW** bolts (1) for the center support bracket.

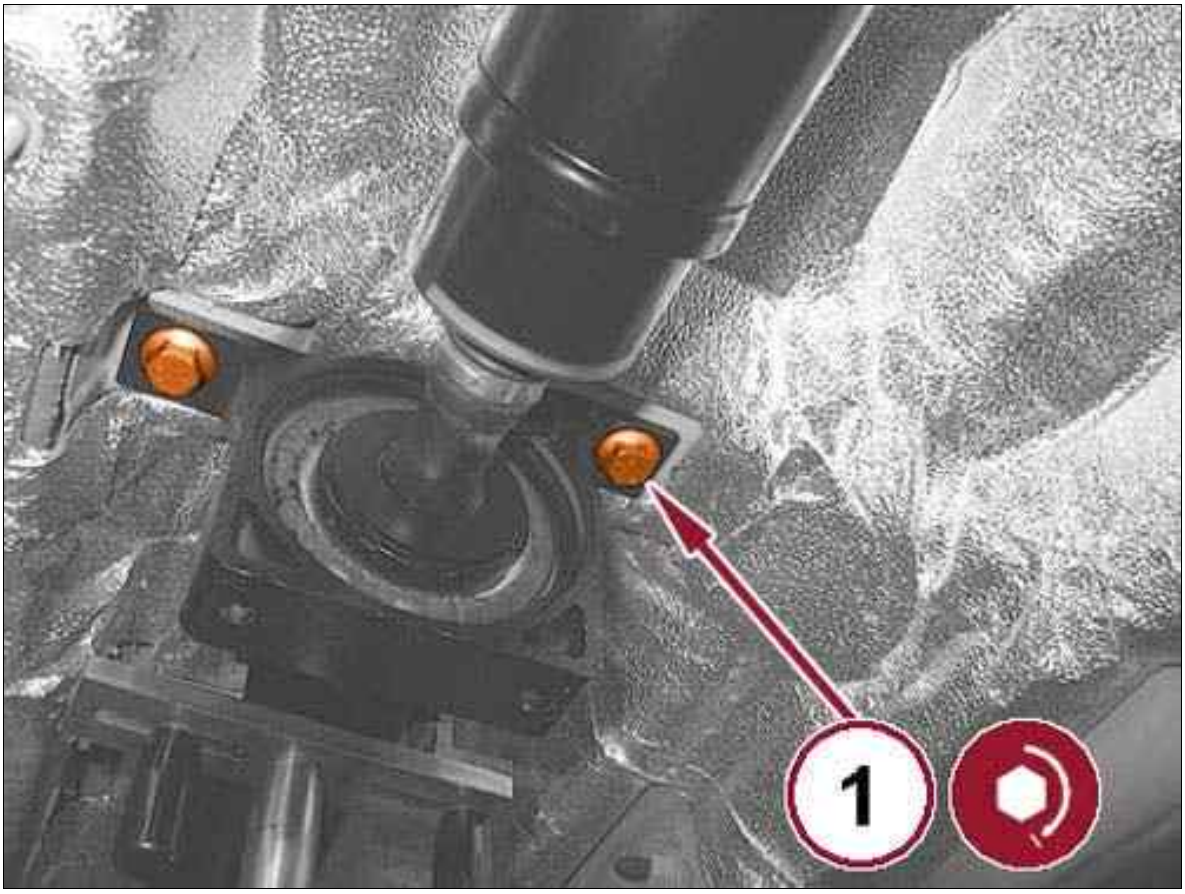
Fig 9: Propeller Shaft Snap Ring & Dust Cover



Courtesy of CHRYSLER GROUP, LLC

11. Connect the propeller shaft (1) to PTU, verify the snap ring is (1) seated in the groove of the propeller shaft.
12. Position the new dust cover (2) over the joint at the front of the propeller shaft.

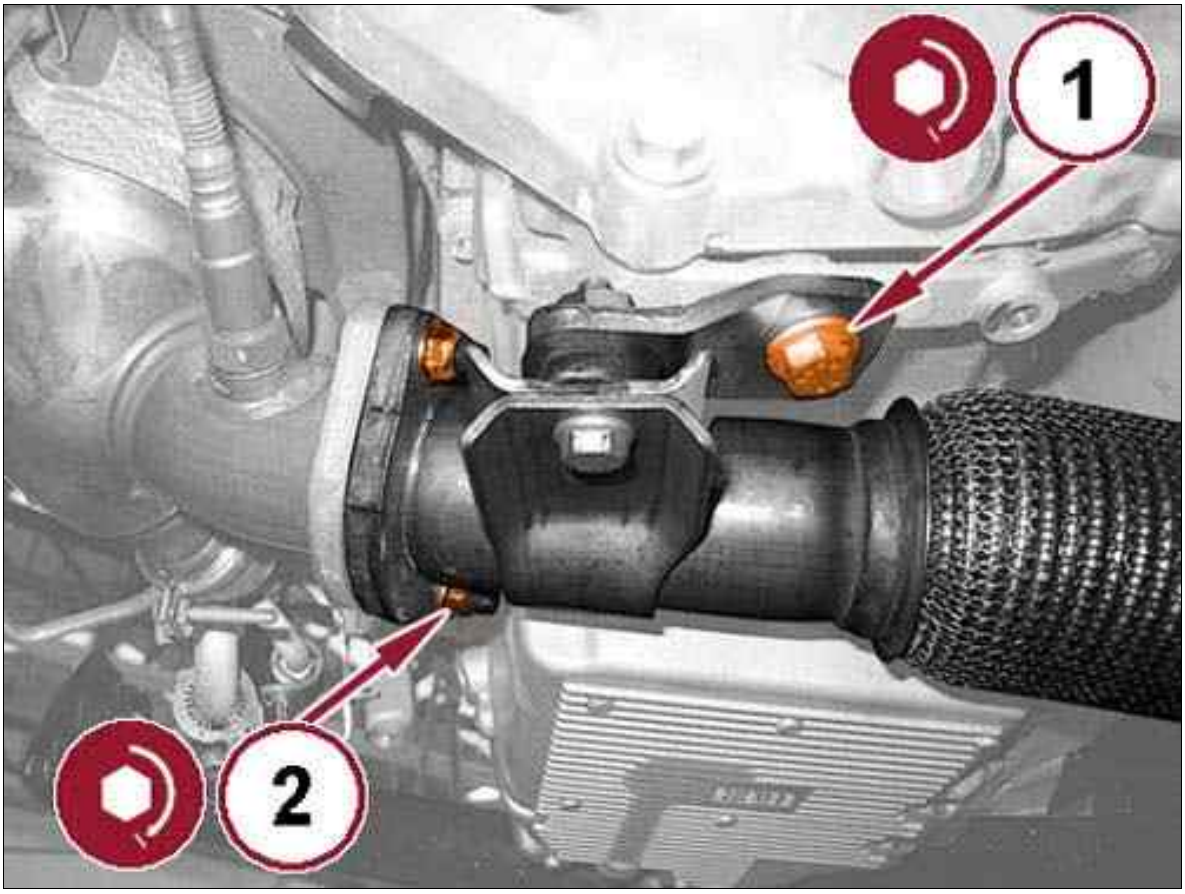
Fig 10: Center Support Bracket Bolts



Courtesy of CHRYSLER GROUP, LLC

13. Tighten the center support bracket bolts (1) to the proper specification. Refer to SPECIFICATIONS .
14. Remove the propeller shaft support tools.
15. Remove the tape and the protective sleeve from the propeller shaft.

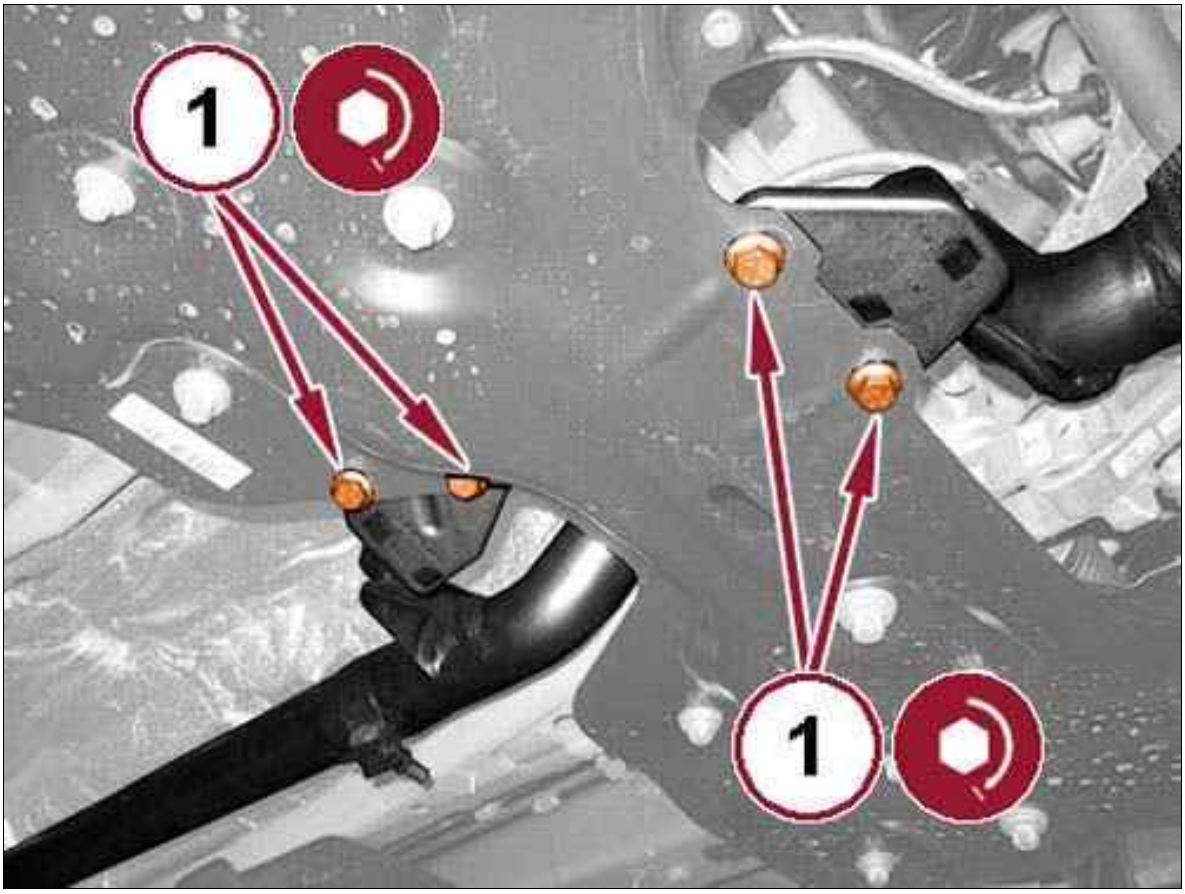
Fig 11: DPF Flange Nuts & Crossunder Pipe Bracket Bolt



Courtesy of CHRYSLER GROUP, LLC

16. Connect the crossunder pipe to the Diesel Particulate Filter (DPF) using a **NEW** flange gasket and tighten the **NEW** nuts (2) to the proper specification. Refer to SPECIFICATIONS .
17. Install the crossunder pipe front hanger support bracket bolts (1) and tighten to the proper specification. Refer to SPECIFICATIONS .
18. Install the crossunder pipe bracket bolt (1) and tighten to the proper specification. Refer to SPECIFICATIONS .

Fig 12: Front And Rear Crossunder Pipe Hanger Bolts



Courtesy of CHRYSLER GROUP, LLC

19. Install the propeller shaft skid plate and tighten the nuts.
20. Install the front and rear crossunder pipe hanger bolts (1) at the front crossmember and tighten to the proper specification. Refer to SPECIFICATIONS .
21. Install the belly pan. Refer to BELLY PAN, REMOVAL AND INSTALLATION and BELLY PAN, SIDE, REMOVAL AND INSTALLATION .

REMOVAL AND INSTALLATION > 2.4 MULTIAIR > REMOVAL

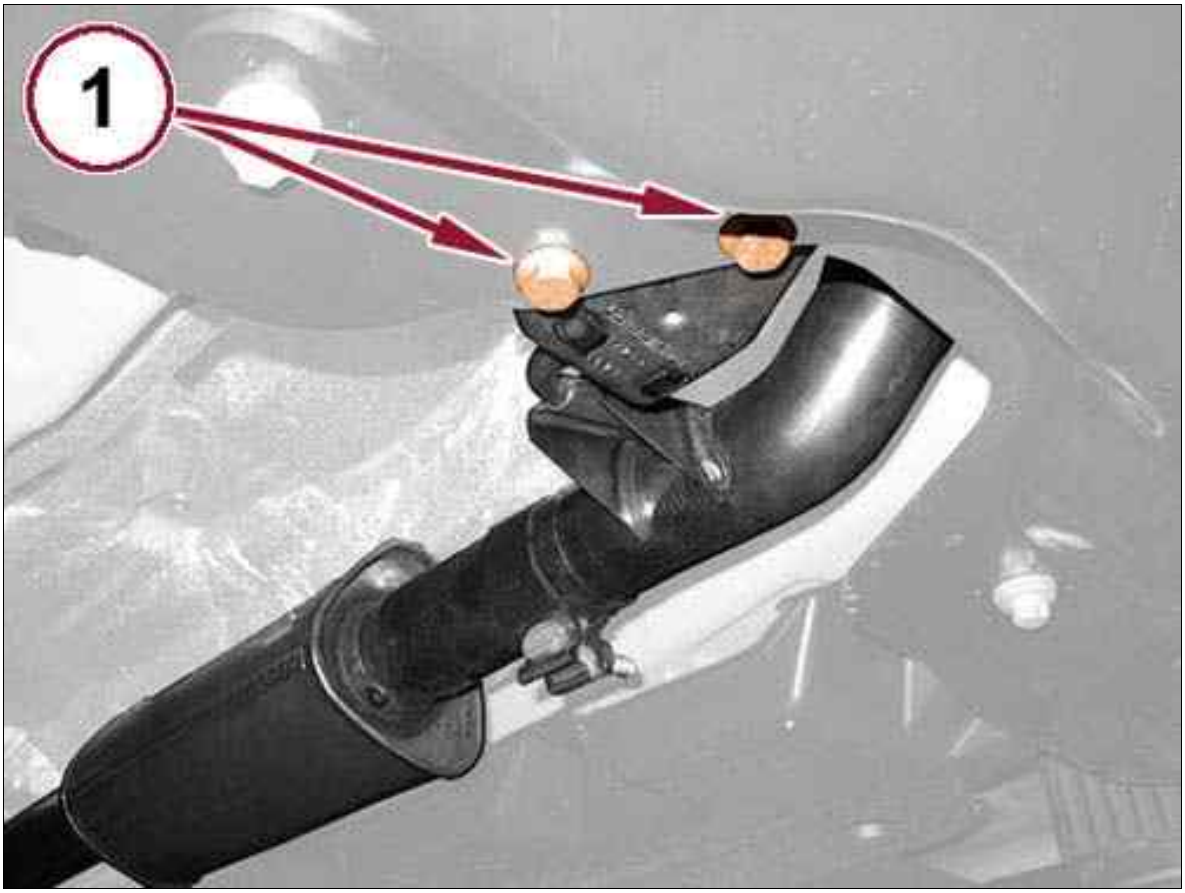
CAUTION:

Propeller shaft removal is a two-person operation. Never allow propeller shaft to hang from the center bearing, or while only connected to power transfer unit (PTU) or rear driveline module flanges. A helper is required. If a propshaft section is hung unsupported, damage may occur to the joint, boot, and/or center bearing from over-angulation. This may result in driveline vibrations.

1. Raise and support the vehicle. Refer to HOISTING, STANDARD PROCEDURE .

2. Remove the belly pan. Refer to BELLY PAN, REMOVAL AND INSTALLATION and BELLY PAN, SIDE, REMOVAL AND INSTALLATION .

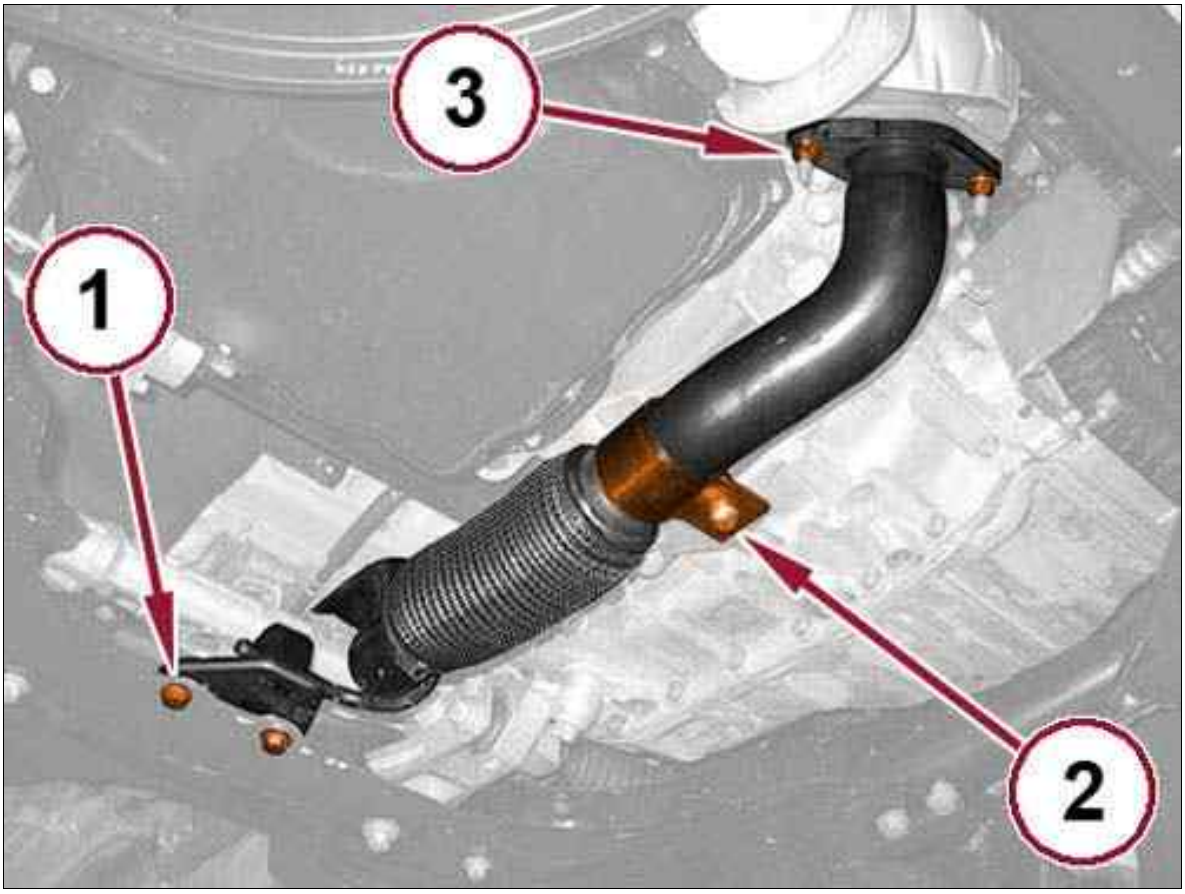
Fig 1: Rear Exhaust Hanger Bracket Bolts



Courtesy of CHRYSLER GROUP, LLC

3. Remove the bolts (1) securing the rear exhaust hanger bracket supporting the crossunder pipe at the front crossmember.

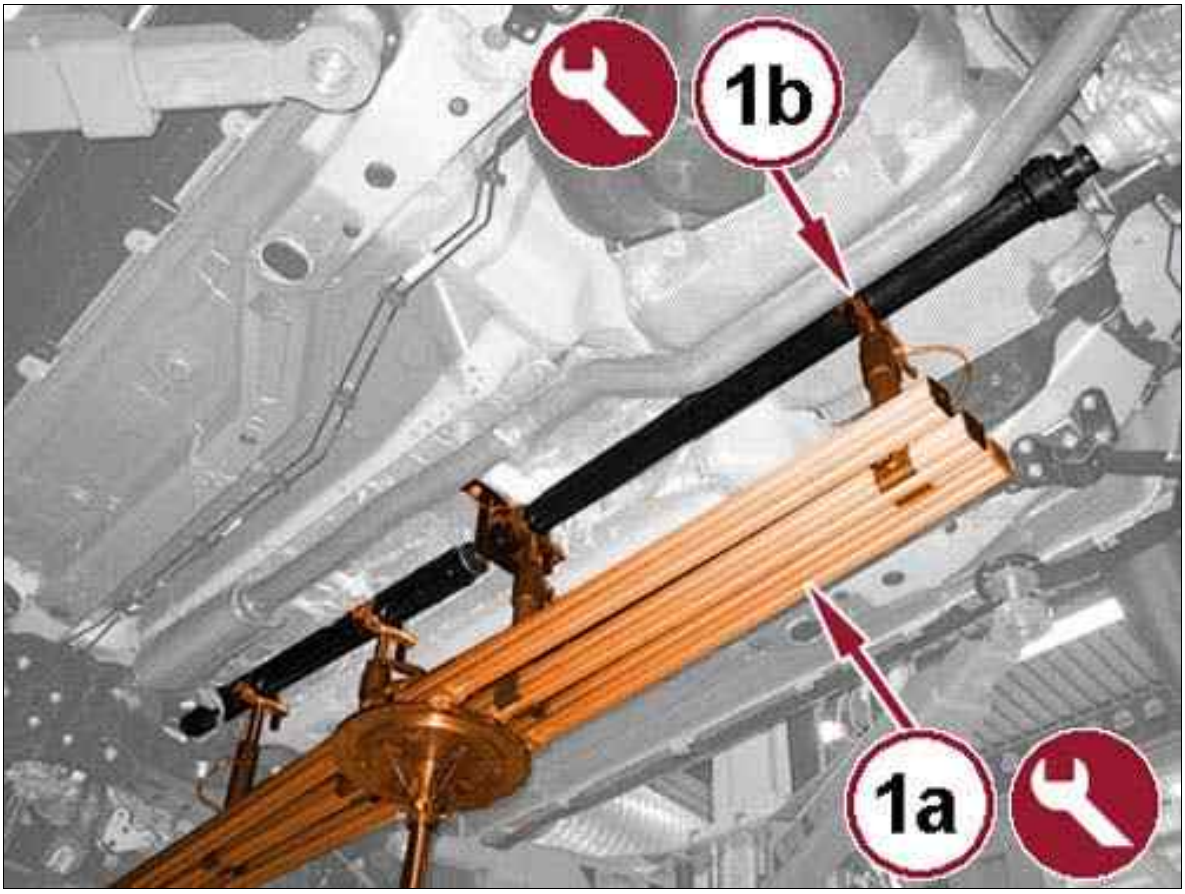
Fig 2: Support Brackets Bolts & Flange Nuts



Courtesy of CHRYSLER GROUP, LLC

4. Remove the crossunder pipe front hanger support bracket bolts (1).
5. Remove the crossunder pipe bracket bolt (2).
6. Remove the crossunder pipe to catalytic converter flange nuts (3).
7. Remove and discard the exhaust flange gasket.

Fig 3: Support Tools Under Propeller Shaft

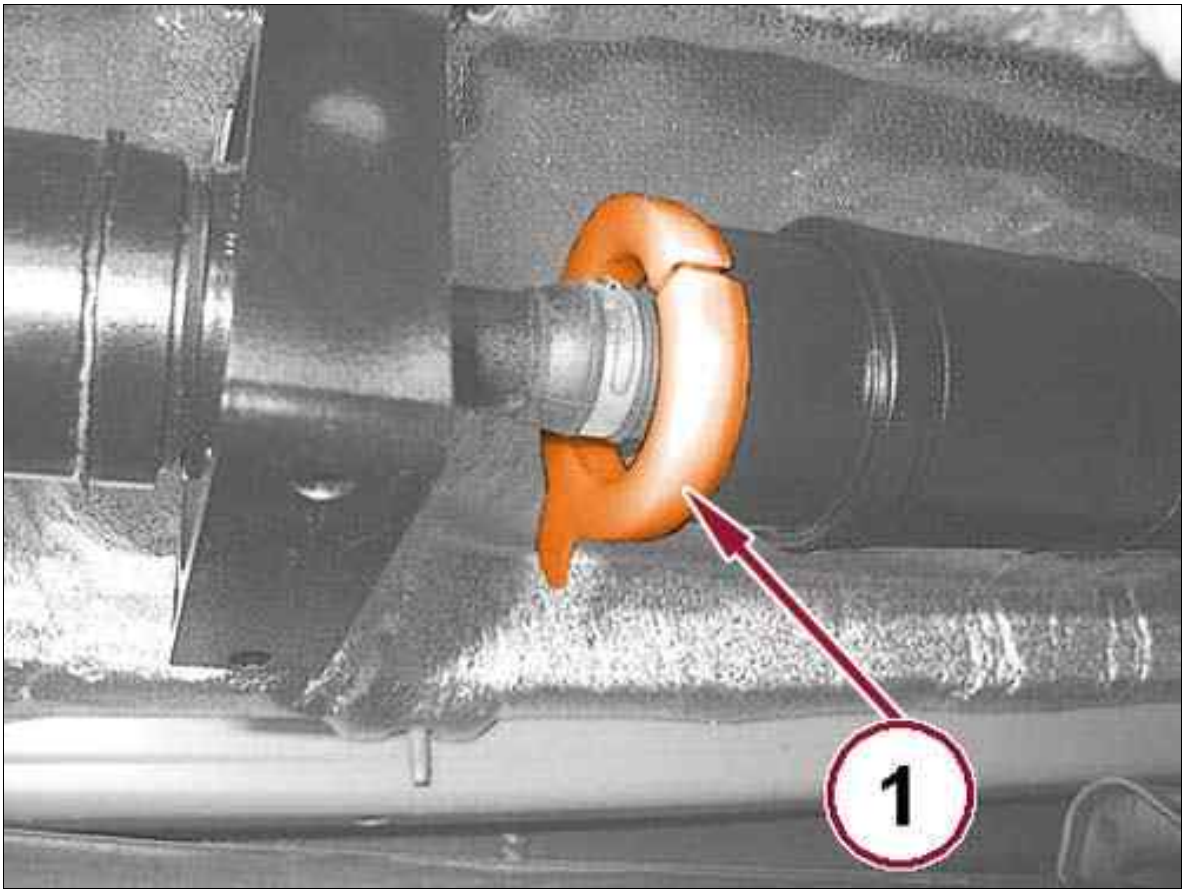


Courtesy of CHRYSLER GROUP, LLC

> *NOTE:*
>
> *Protect the propeller shaft coating with a suitable duct tape to prevent any scratches caused by the propeller shaft support tools.*

8. Position support tools 2000043000 (1b) and 2000043400 (1a) under the propeller shaft.

Fig 4: Protective Sleeve

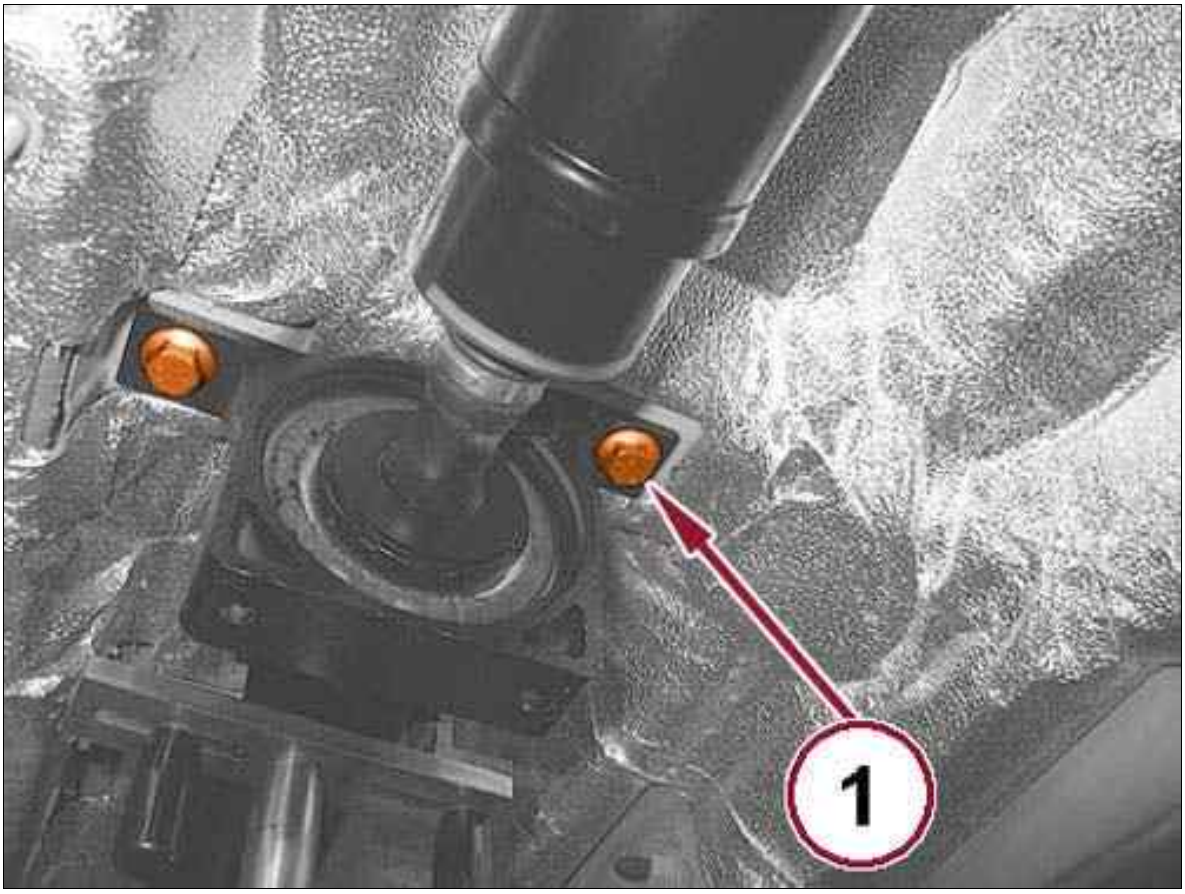


Courtesy of CHRYSLER GROUP, LLC

9. Install the protective sleeve (1) at the center propeller shaft joint to protect the boot as shown in illustration.

> *NOTE:*
>
> *The protective sleeve is provided in the parts package with the dust cover and snap rings for the propeller shaft.*

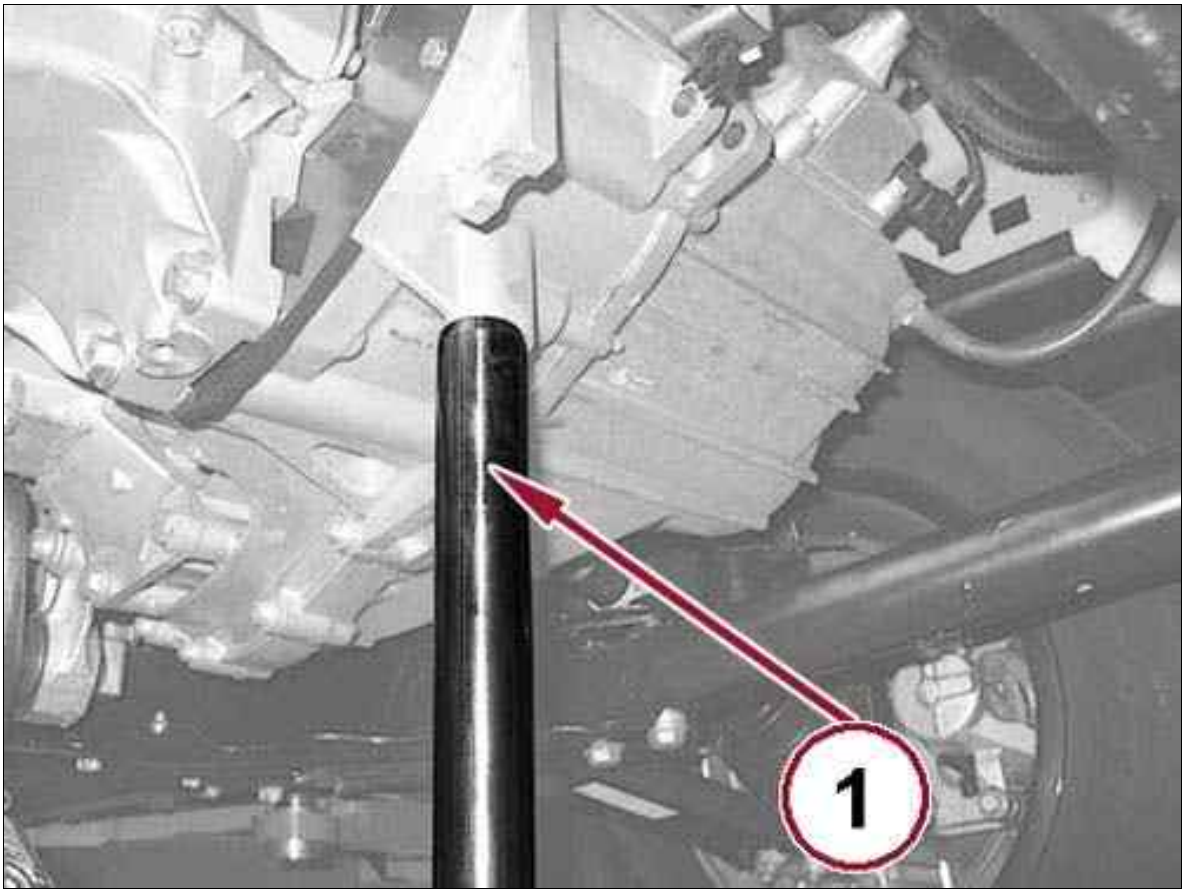
Fig 5: Propeller Shaft Center Support Bolts



Courtesy of CHRYSLER GROUP, LLC

10. Loosen the propeller shaft center support bolts (1).

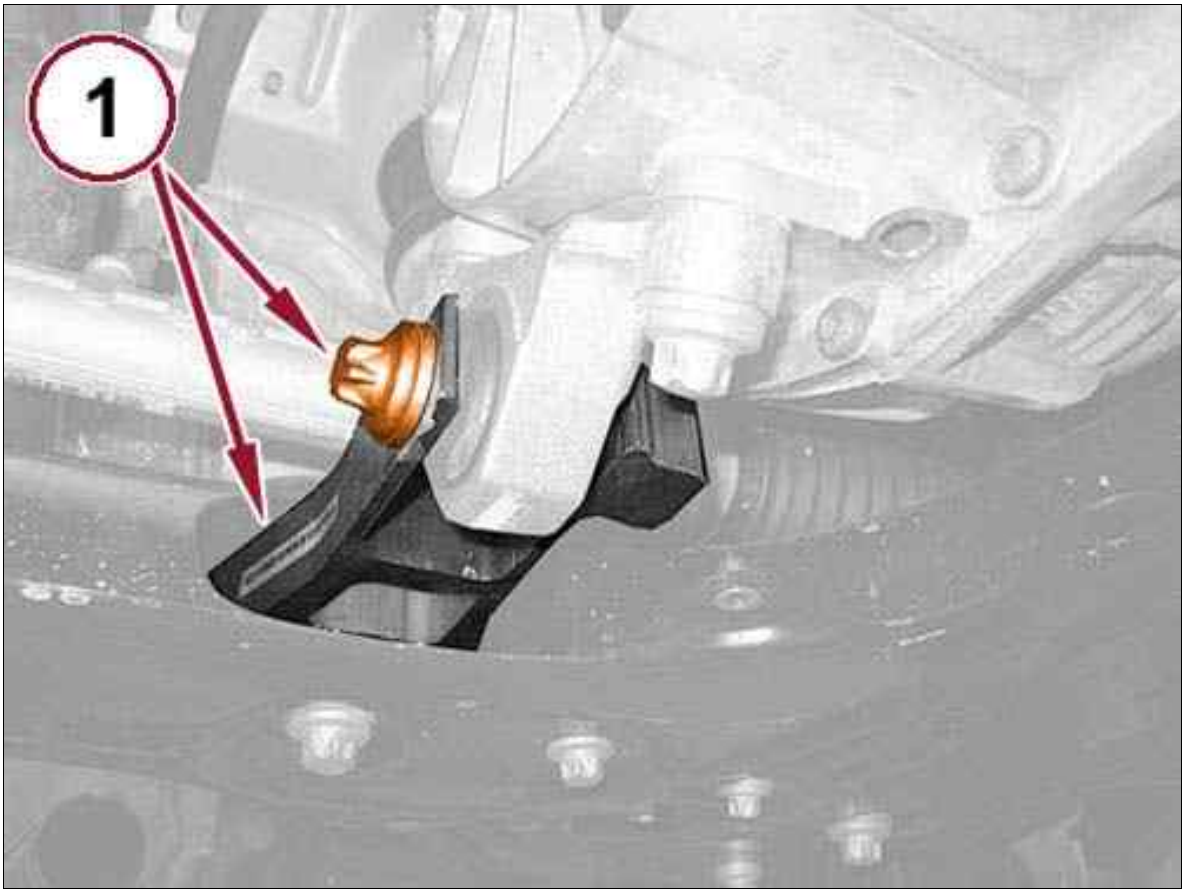
Fig 6: Jack Under Transmission



Courtesy of CHRYSLER GROUP, LLC

11. Place a suitable jack (1) under the transmission.

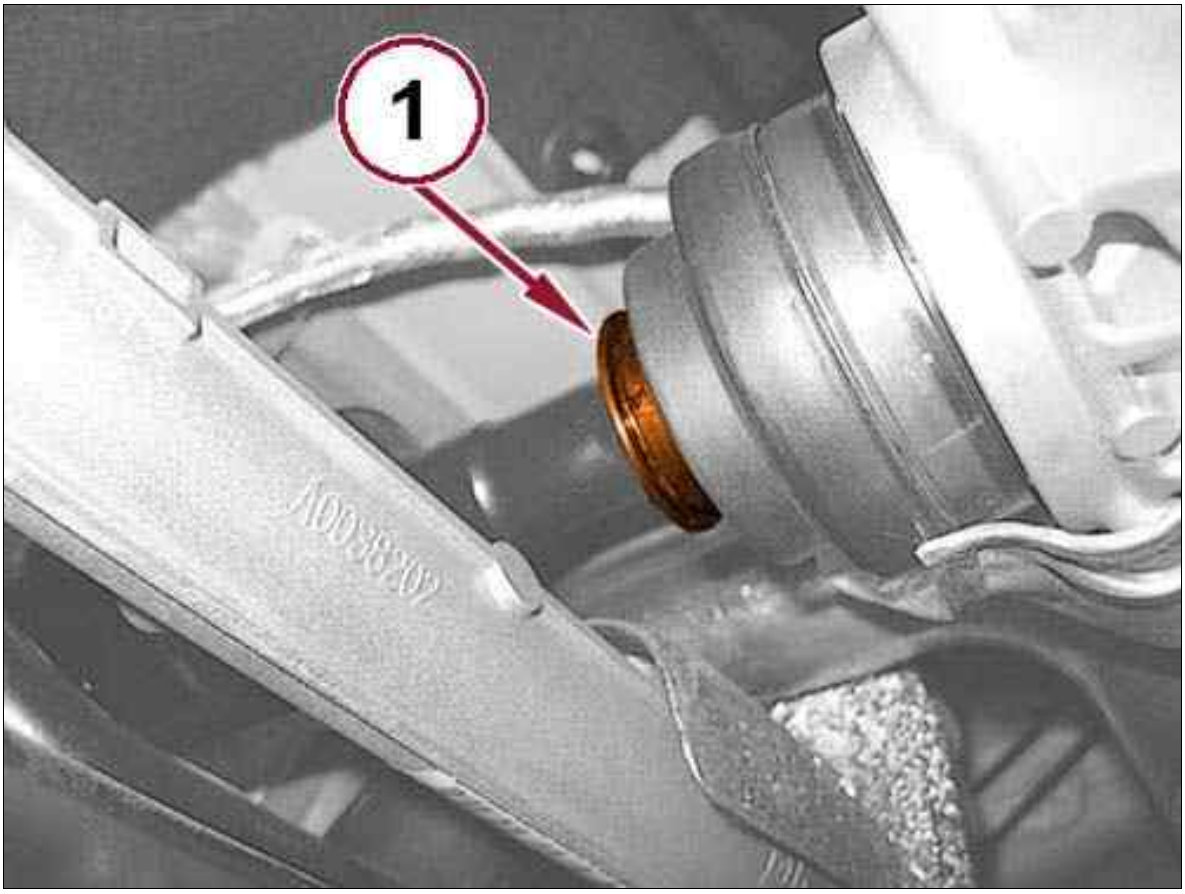
Fig 7: Rear Engine Mount Through Bolt



Courtesy of CHRYSLER GROUP, LLC

12. Remove the rear engine mount through bolt (1).
13. Adjust the jack to carefully shift the powertrain forward.

Fig 8: Dust Cover



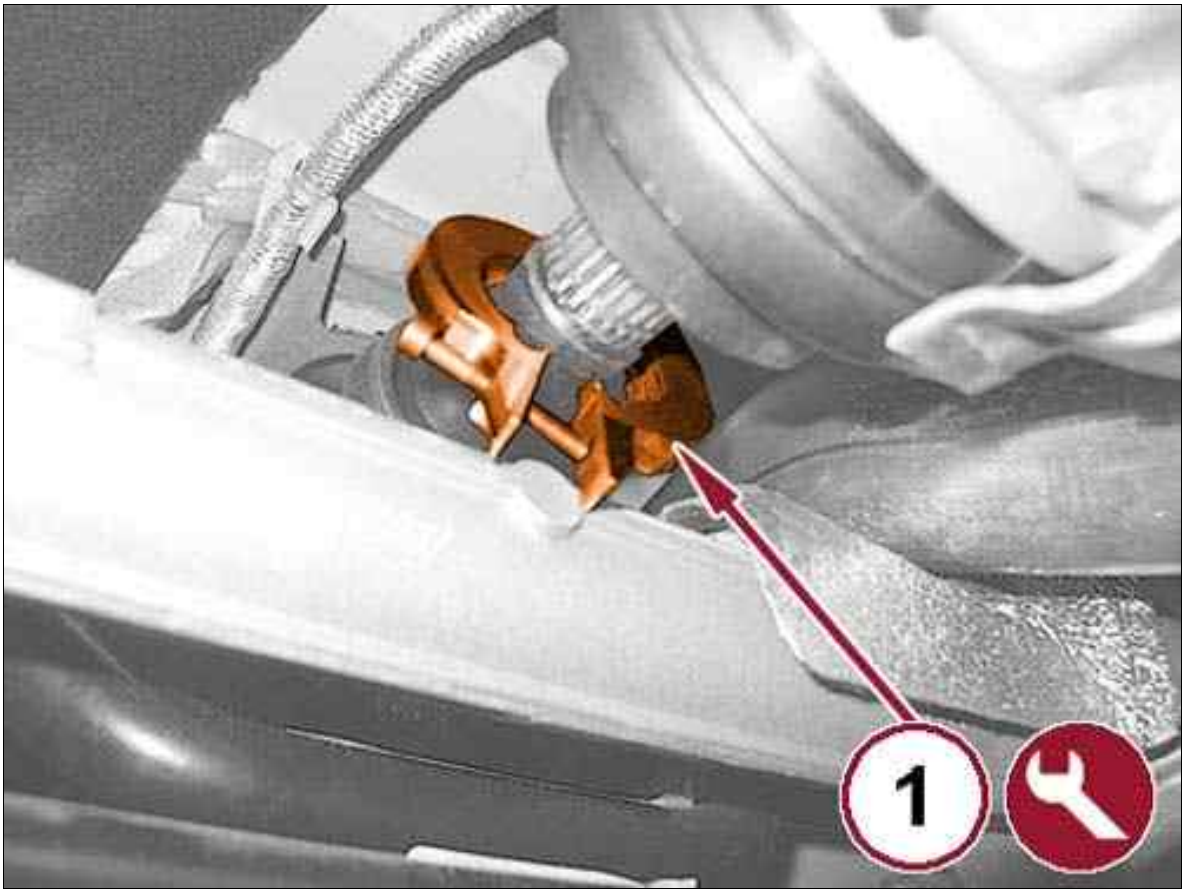
Courtesy of CHRYSLER GROUP, LLC

NOTE:

The dust cover must be replaced every time the propeller shaft is removed.

14. Slide the dust cover (1) at the front of the propeller shaft away from the Power Transfer Unit (PTU) to access the snap ring.

Fig 9: Propeller Shaft Snap Ring Tool

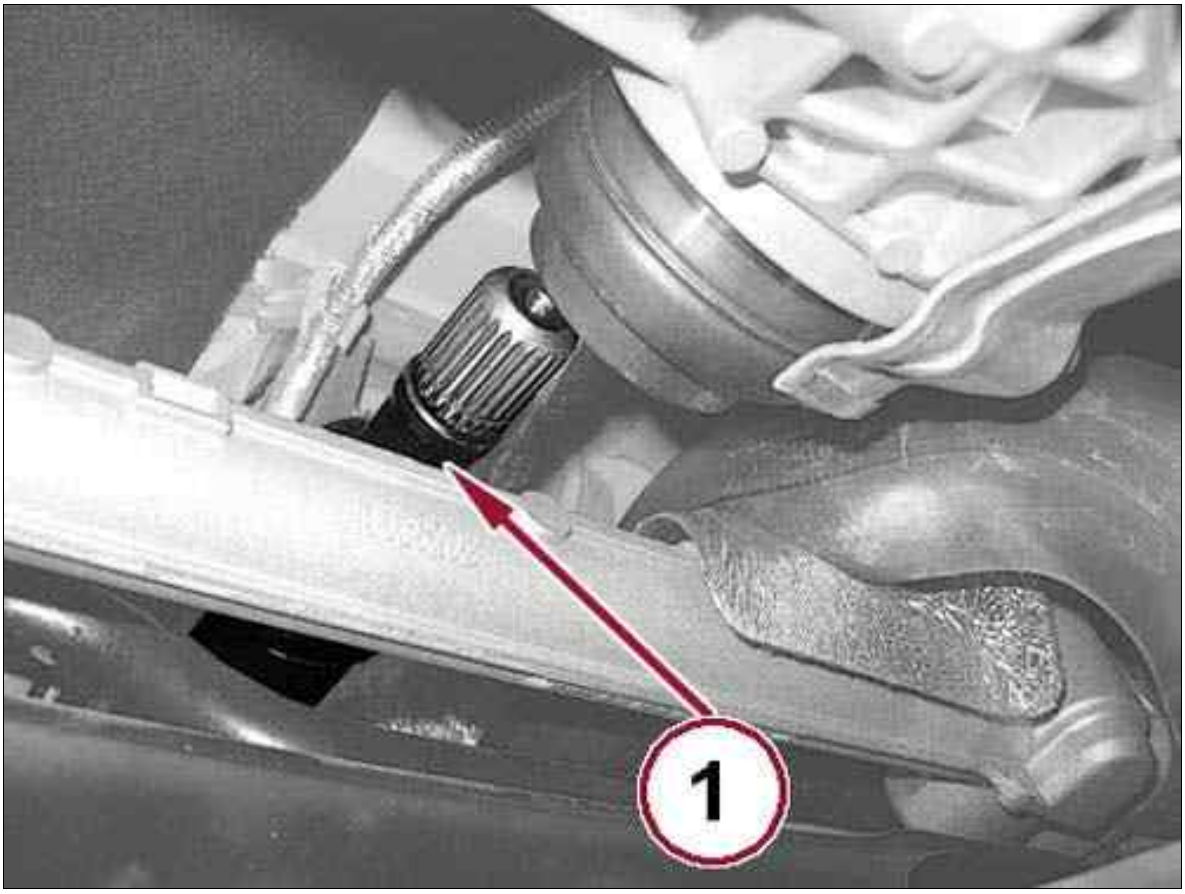


Courtesy of CHRYSLER GROUP, LLC

> *NOTE:*
>
> *The snap ring must be replaced every time the propeller shaft is removed.*

15. Use tool 2019500030 (1) to open propeller shaft snap ring at the PTU.

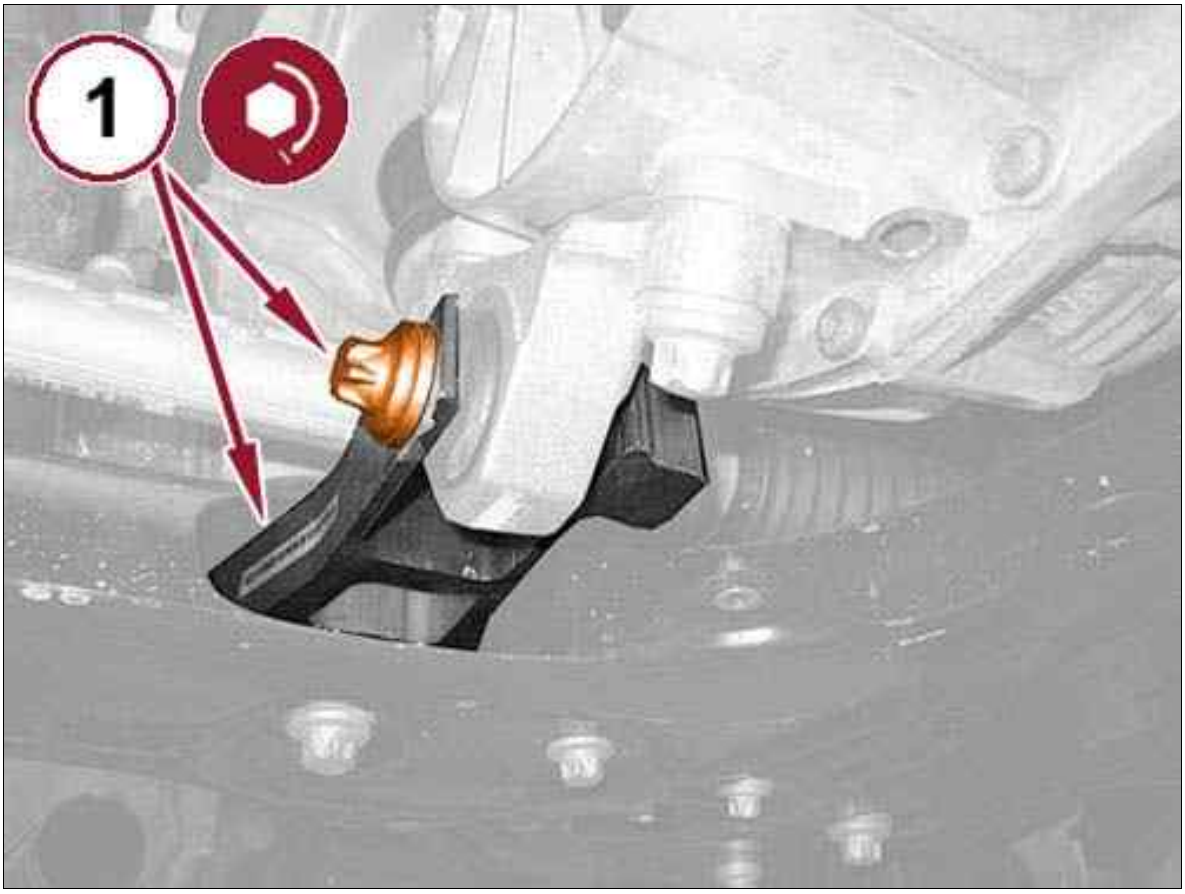
Fig 10: Propeller Shaft At PTU



Courtesy of CHRYSLER GROUP, LLC

16. Disconnect the propeller shaft (1) from the PTU.
17. Remove the tool 2019500030.

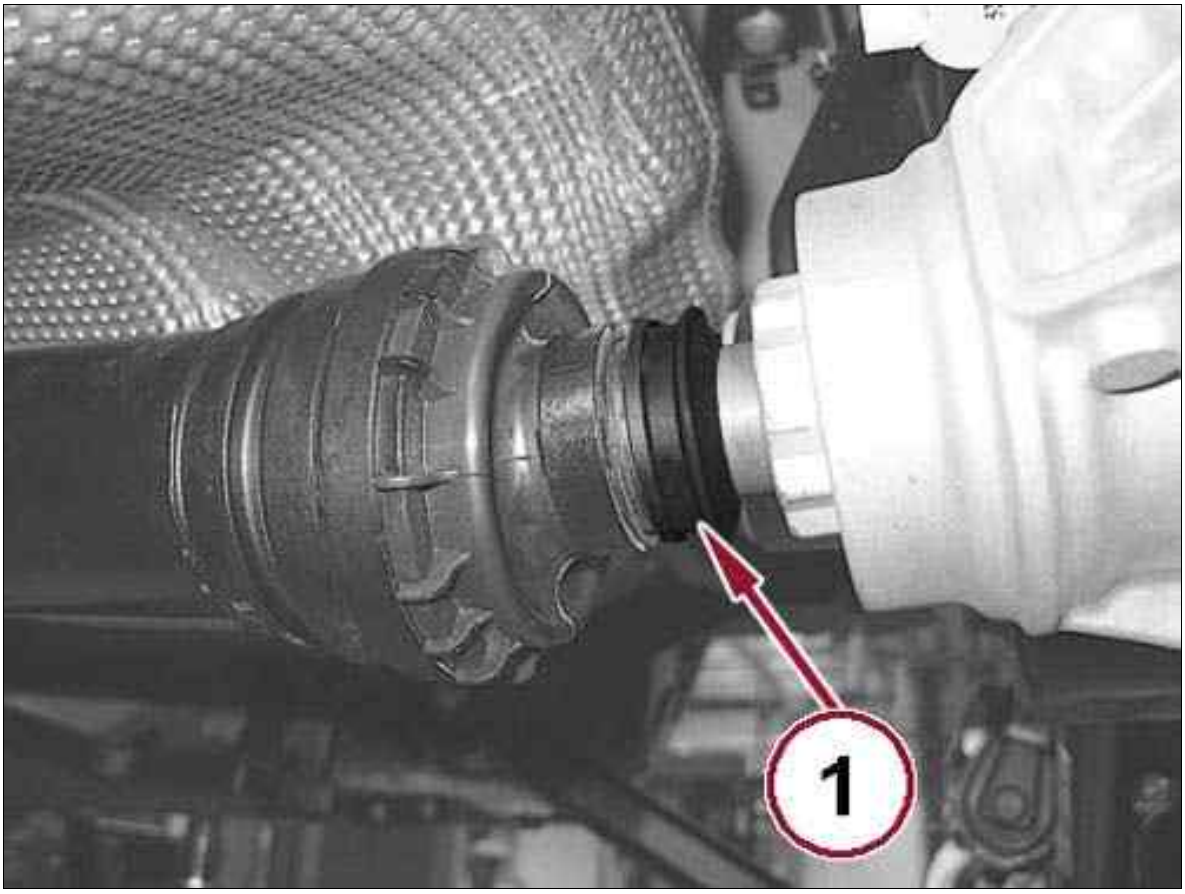
Fig 11: Rear Engine Mount Through Bolt



Courtesy of CHRYSLER GROUP, LLC

18. Install the rear engine mount through bolt and torque to the proper specification. Refer to TORQUE SPECIFICATIONS .
19. Remove the jack from under the transmission.
20. Remove the previously loosened propeller shaft center support bolts.

Fig 12: Dust Cover



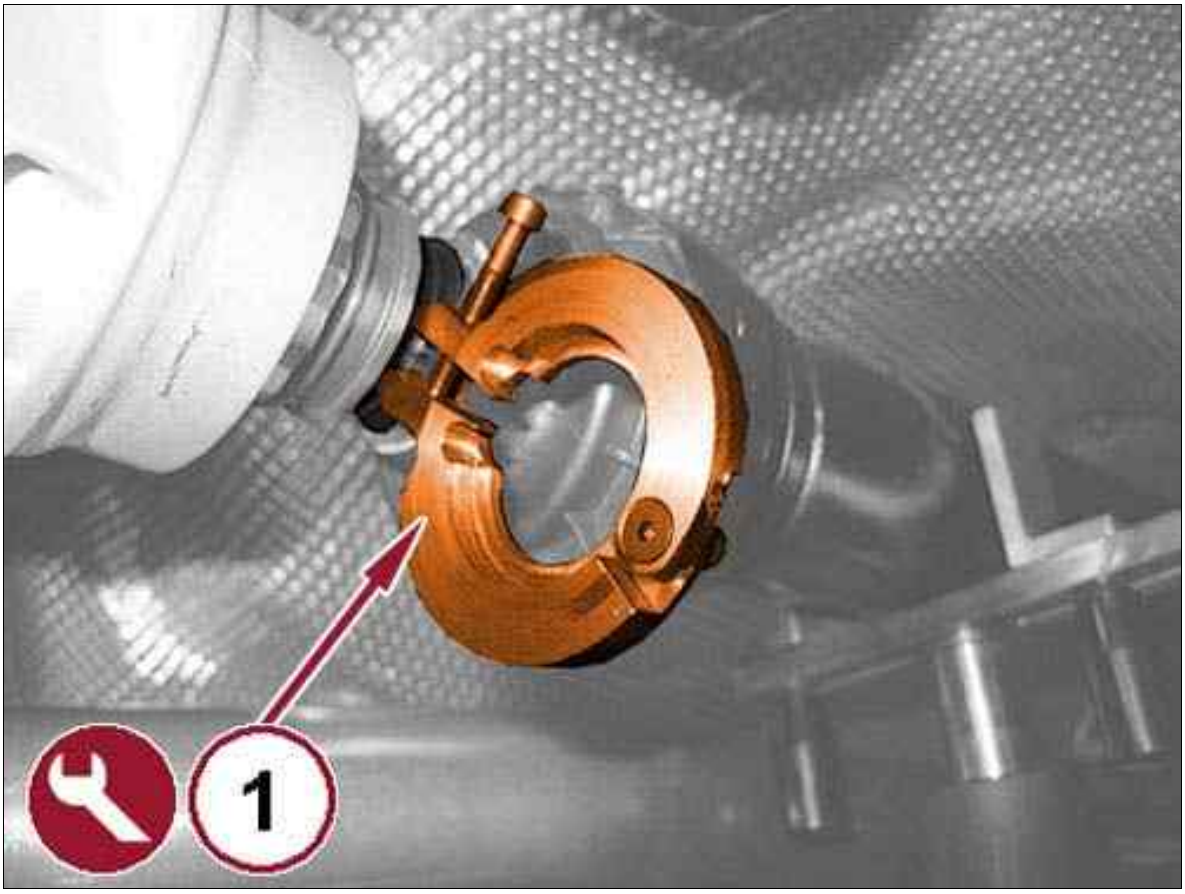
Courtesy of CHRYSLER GROUP, LLC

NOTE:

The dust cover must be replaced every time the propeller shaft is removed.

21. Slide the dust cover (1) at the rear of the propeller shaft towards the differential to access the snap ring.

Fig 13: Opening Propeller Shaft Snap Ring



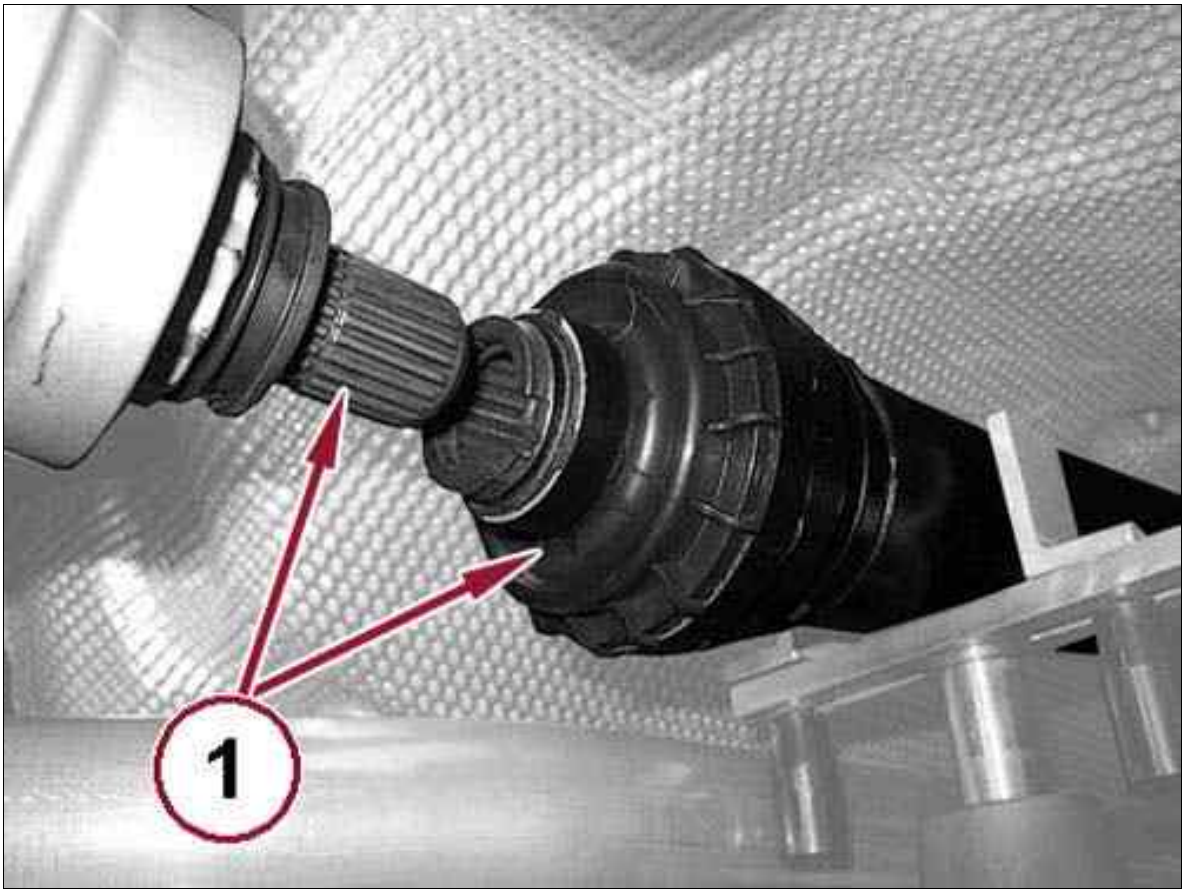
Courtesy of CHRYSLER GROUP, LLC

NOTE:

The snap ring must be replaced every time the propeller shaft is removed.

22. Use tool 2019500030 (1) to open propeller shaft snap ring at the Rear Driveline Unit (RDU).

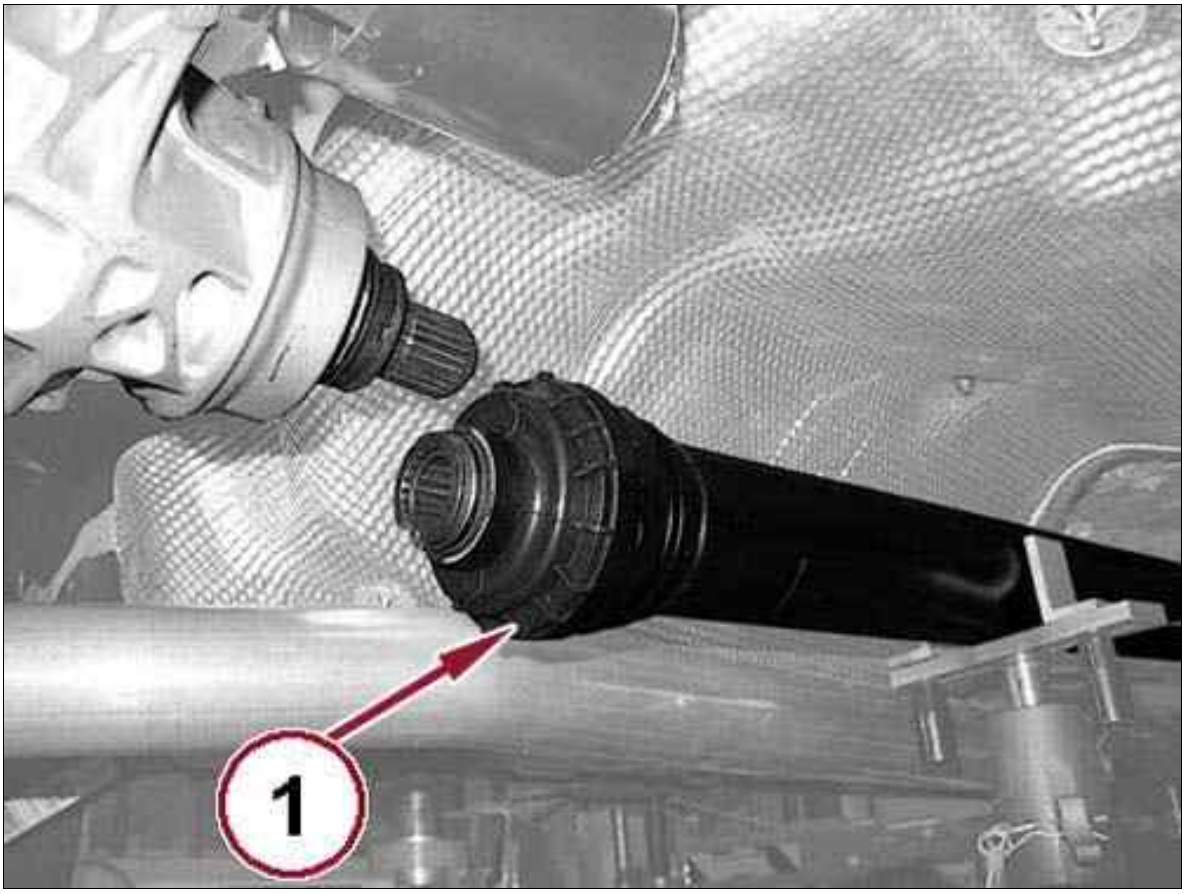
Fig 14: Propeller Shaft & Pinion



Courtesy of CHRYSLER GROUP, LLC

23. Disconnect the propeller shaft from the pinion of the RDU (1).
24. Remove the tool 2019500030.

Fig 15: Propeller Shaft At RDU



Courtesy of CHRYSLER GROUP, LLC

25. Lower the propeller shaft (1) until the rear joint of the shaft is under the RDU as shown in illustration.

> *NOTE:*
>
> *Pay close attention to avoid excessive articulation between the two halves of the propeller shaft during removal.*

26. Turn the jack to remove the drive shaft, guiding it away from the front suspension crossmember.

REMOVAL AND INSTALLATION > 2.4 MULTIAIR > INSTALLATION

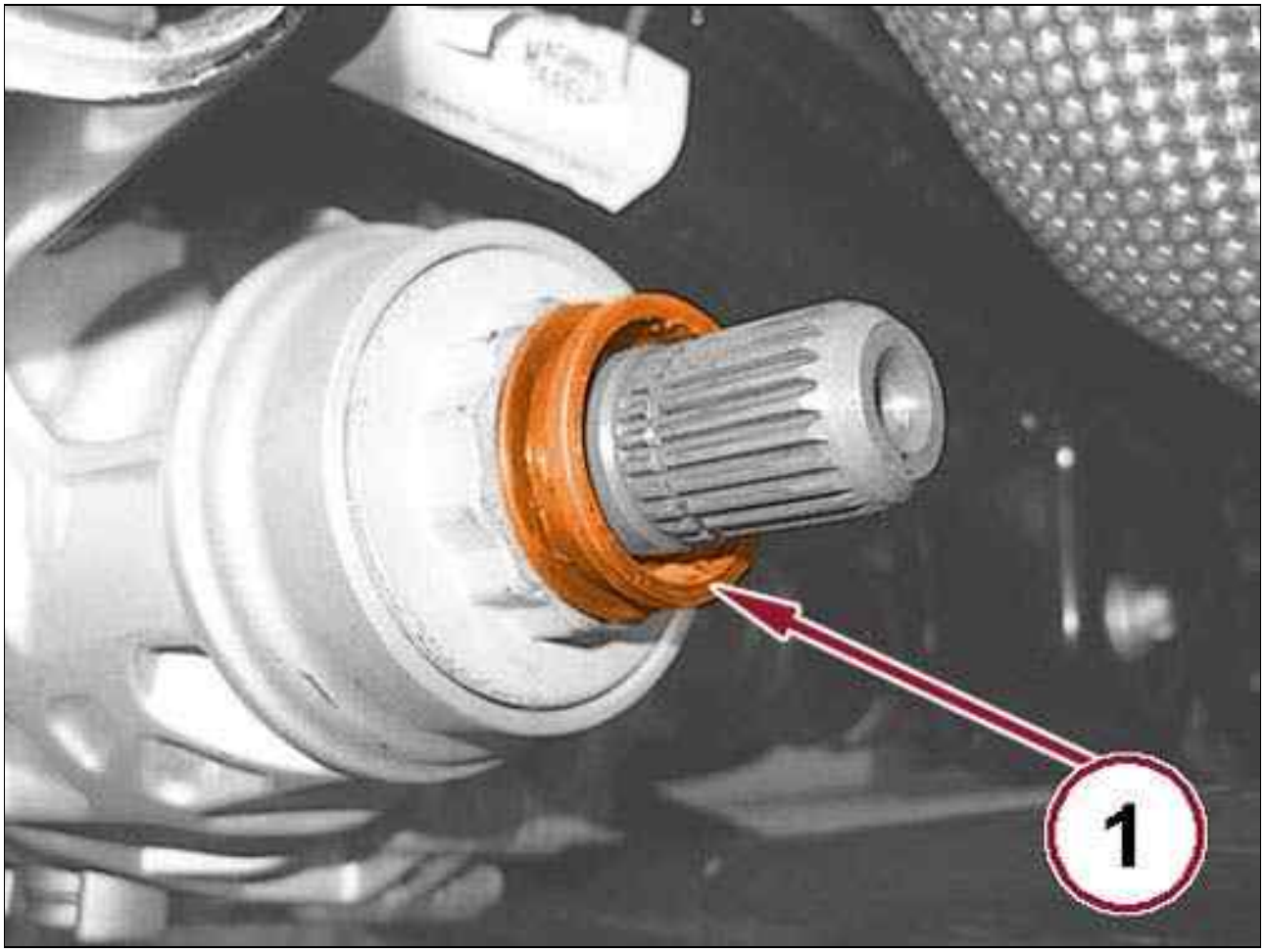
> *CAUTION:*
>
> *Propeller shaft removal is a two-person operation. Never allow propeller shaft to hang from the center bearing, or while only connected to power transfer unit (PTU) or rear driveline module flanges. A helper is required. If a propshaft section is hung unsupported, damage*

may occur to the joint, boot, and/or center bearing from over-angulation. This may result in driveline vibrations.

NOTE:

Lightly apply grease to the splines prior to installation.

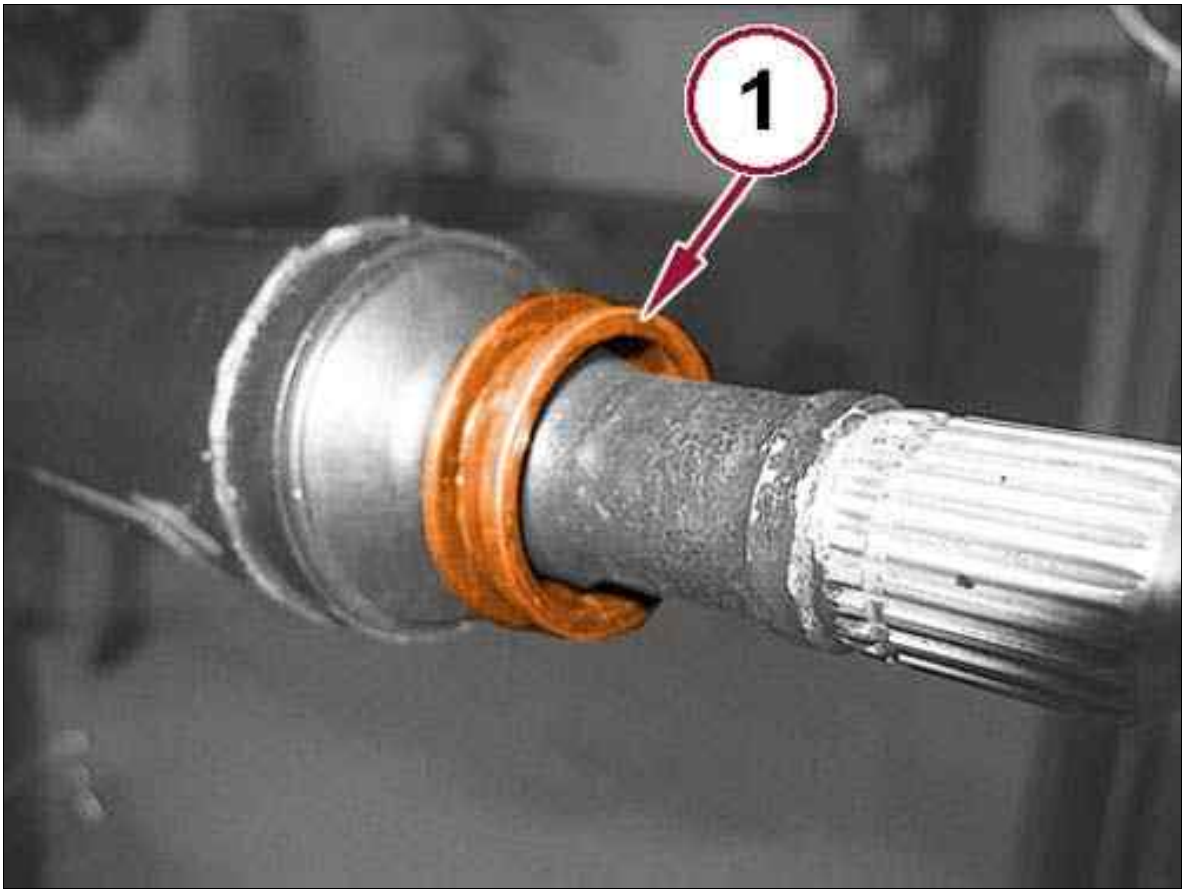
Fig 1: Pinion Shaft Dust Seal



Courtesy of CHRYSLER GROUP, LLC

1. Install a **NEW** dust seal (1) on the pinion shaft of the Rear Driveline Unit (RDU).

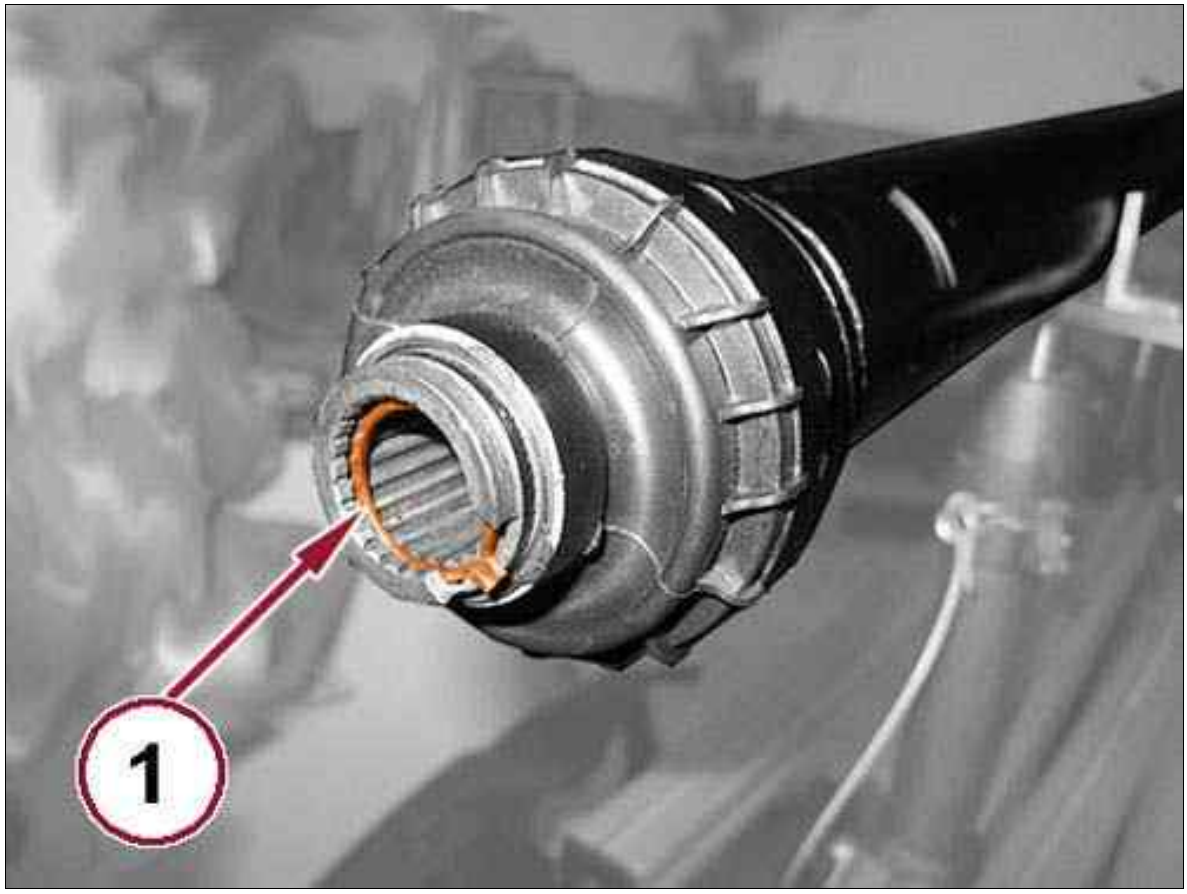
Fig 2: Front Of Propeller Shaft Dust Seal



Courtesy of CHRYSLER GROUP, LLC

2. Install a **NEW** dust seal (1) on the front shaft of the propeller shaft.

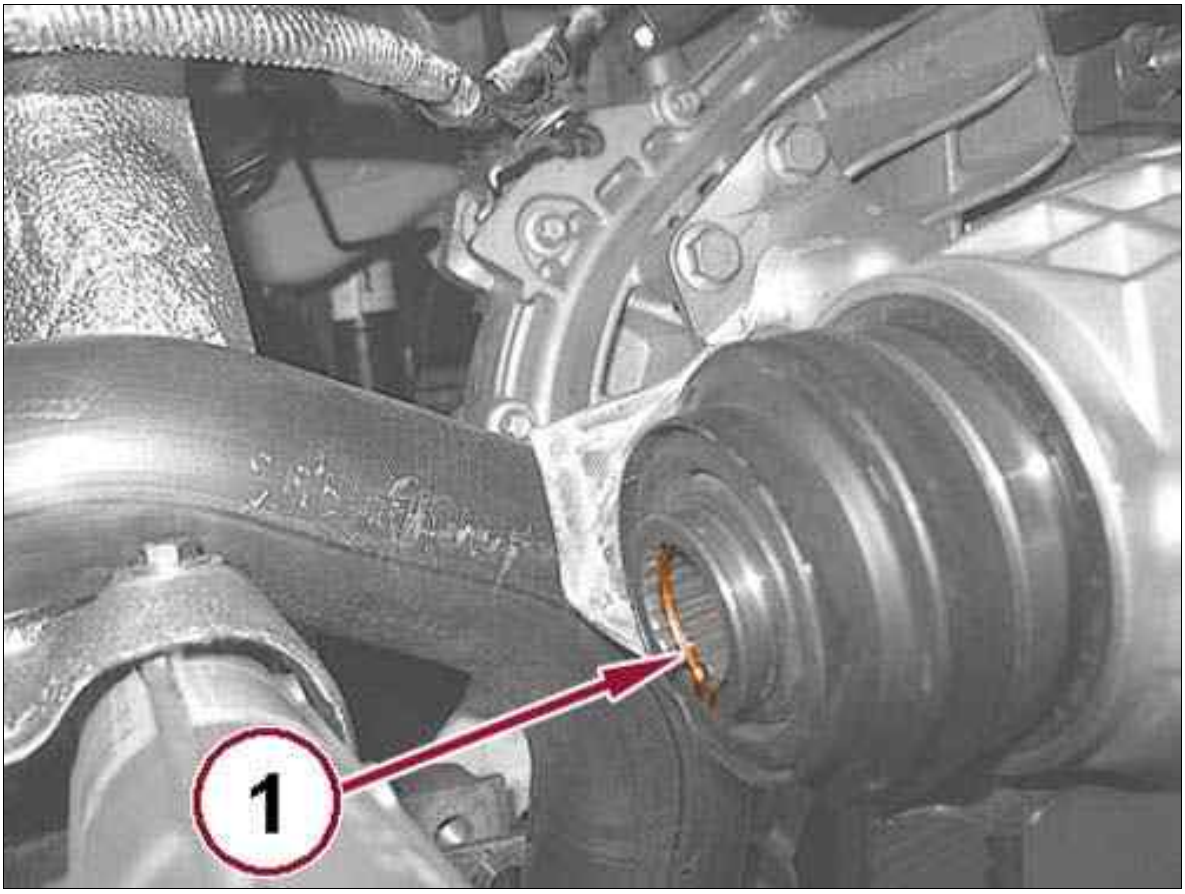
Fig 3: Drive Shaft Snap Ring



Courtesy of CHRYSLER GROUP, LLC

3. Install a **NEW** snap ring (1) in the drive shaft.

Fig 4: PTU Snap Ring



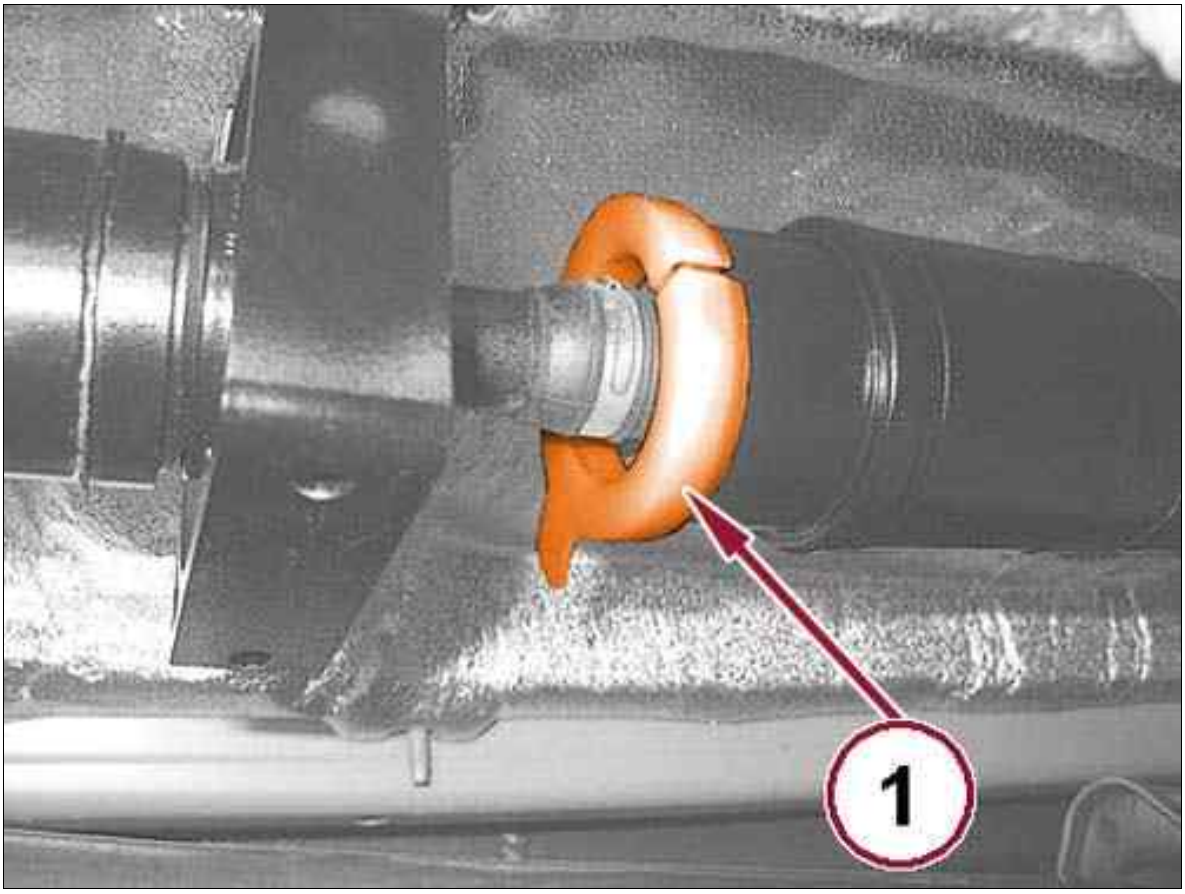
Courtesy of CHRYSLER GROUP, LLC

4. Install a **NEW** snap ring (1) in the Power Transfer Unit (PTU).

> *NOTE:*
>
> *Protect the propeller shaft coating with a suitable duct tape to prevent any scratches caused by the propeller shaft support tools.*

5. Position the propeller shaft on the support tools 2000043000 and 2000043400.

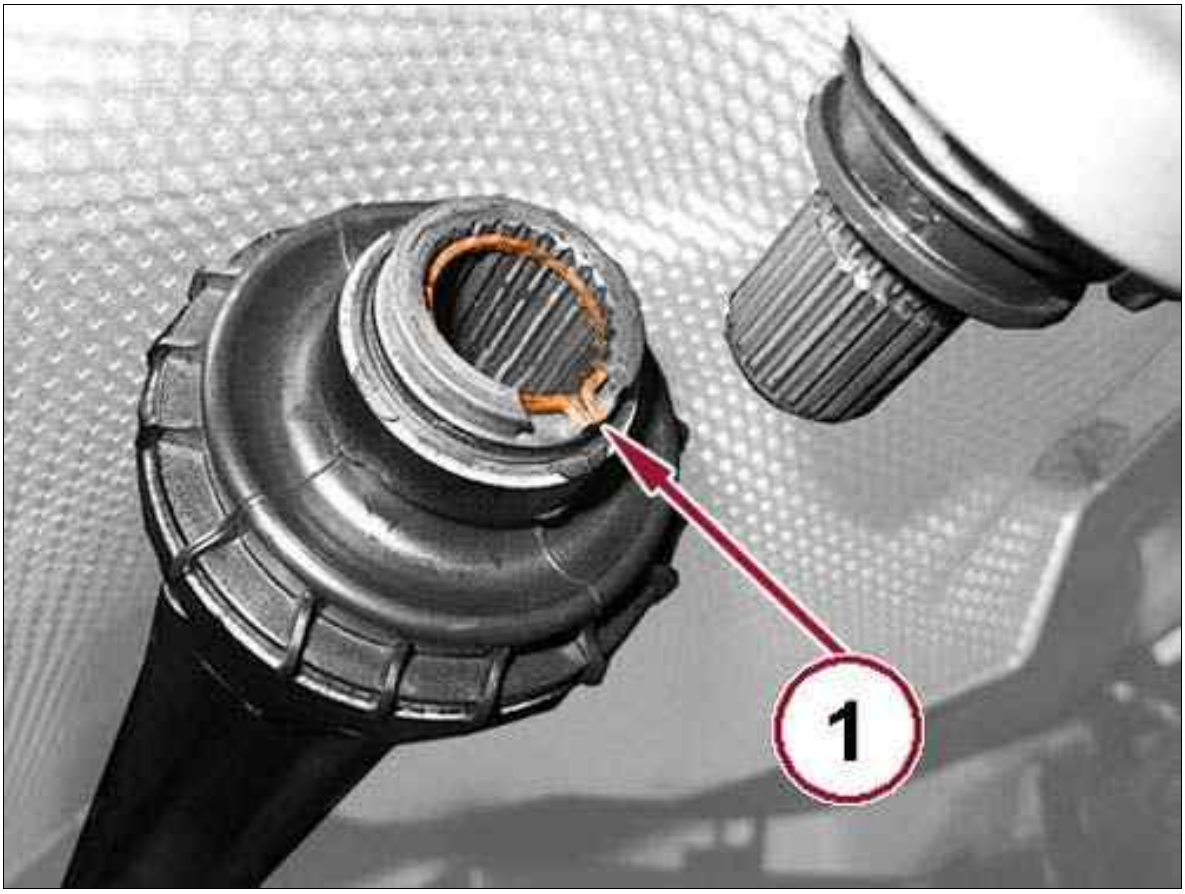
Fig 5: Protective Sleeve At Center Propeller Shaft Joint



Courtesy of CHRYSLER GROUP, LLC

6. Install the protective sleeve (1) at the center propeller shaft joint to protect the boot as shown in illustration.
7. Raise the propeller shaft into the vehicle positioning the front of the shaft above the front cross member and the steering gear.

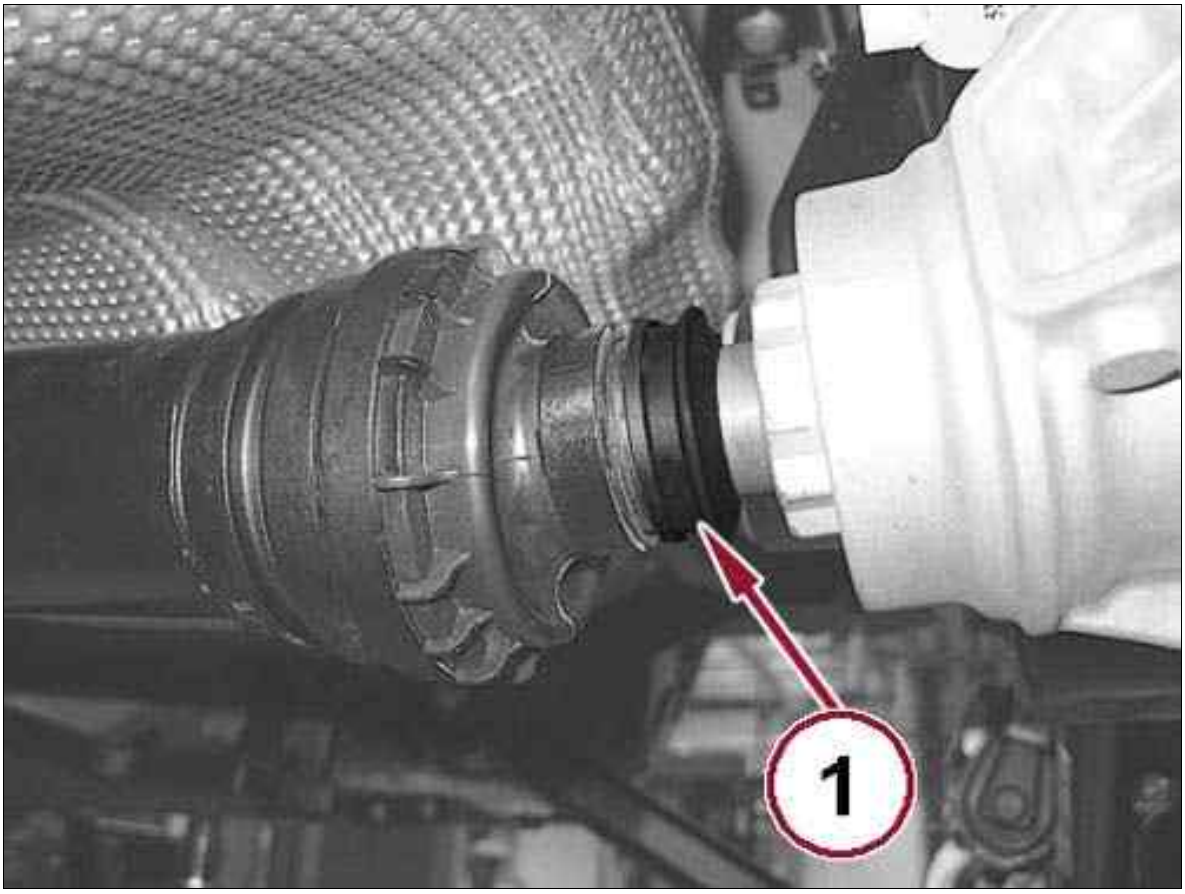
Fig 6: Propeller Shaft Snap Ring Seated



Courtesy of CHRYSLER GROUP, LLC

8. Connect the propeller shaft (1) to the pinion of the RDU, verify the snap ring is seated in the groove of the pinion shaft.

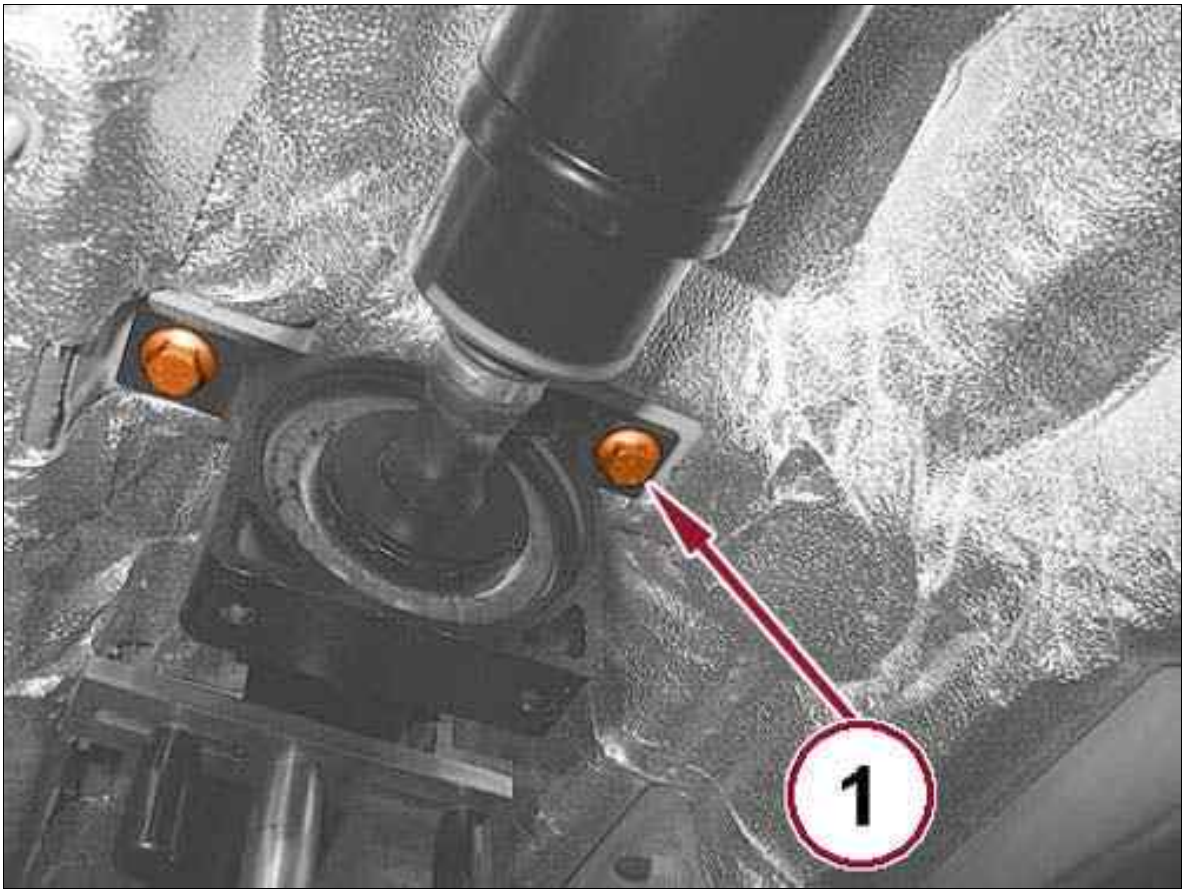
Fig 7: Rear Propeller Shaft Dust Cover



Courtesy of CHRYSLER GROUP, LLC

9. Position the new dust cover (1) over the joint at the rear of the propeller shaft.

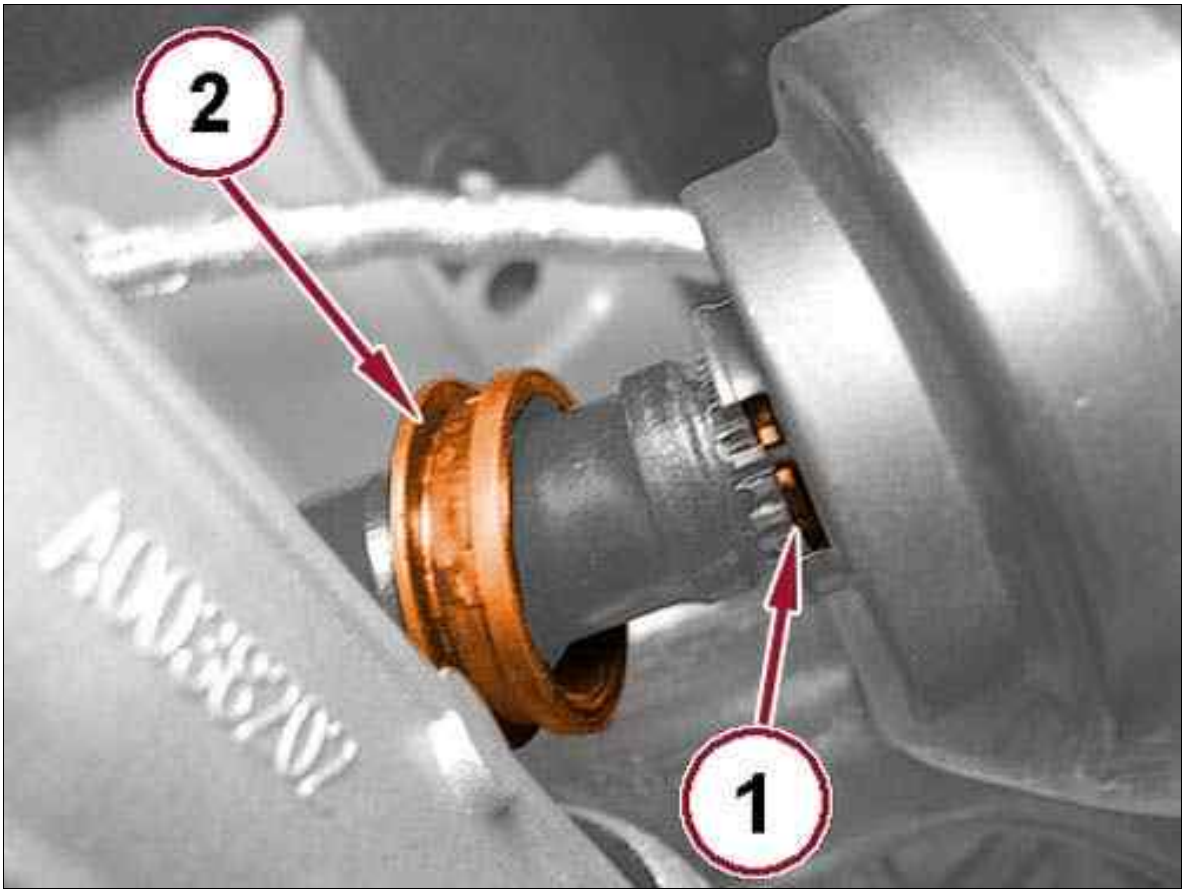
Fig 8: Center Support Bracket Bolts



Courtesy of CHRYSLER GROUP, LLC

10. Loosely install the **NEW** bolts (1) for the center support bracket.

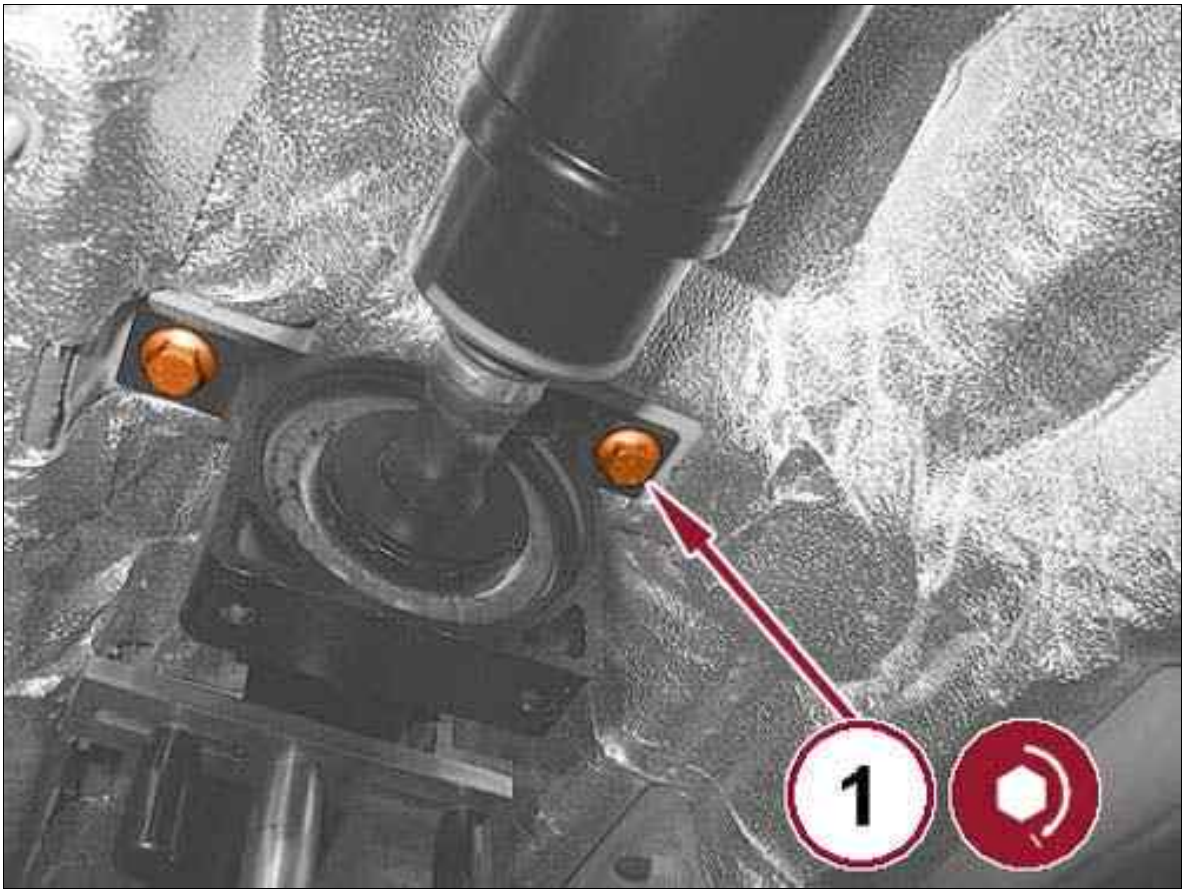
Fig 9: Propeller Shaft Snap Ring & Dust Cover



Courtesy of CHRYSLER GROUP, LLC

11. Connect the propeller shaft (1) to PTU, verify the snap ring is (1) seated in the groove of the propeller shaft.
12. Position the new dust cover (2) over the joint at the front of the propeller shaft.

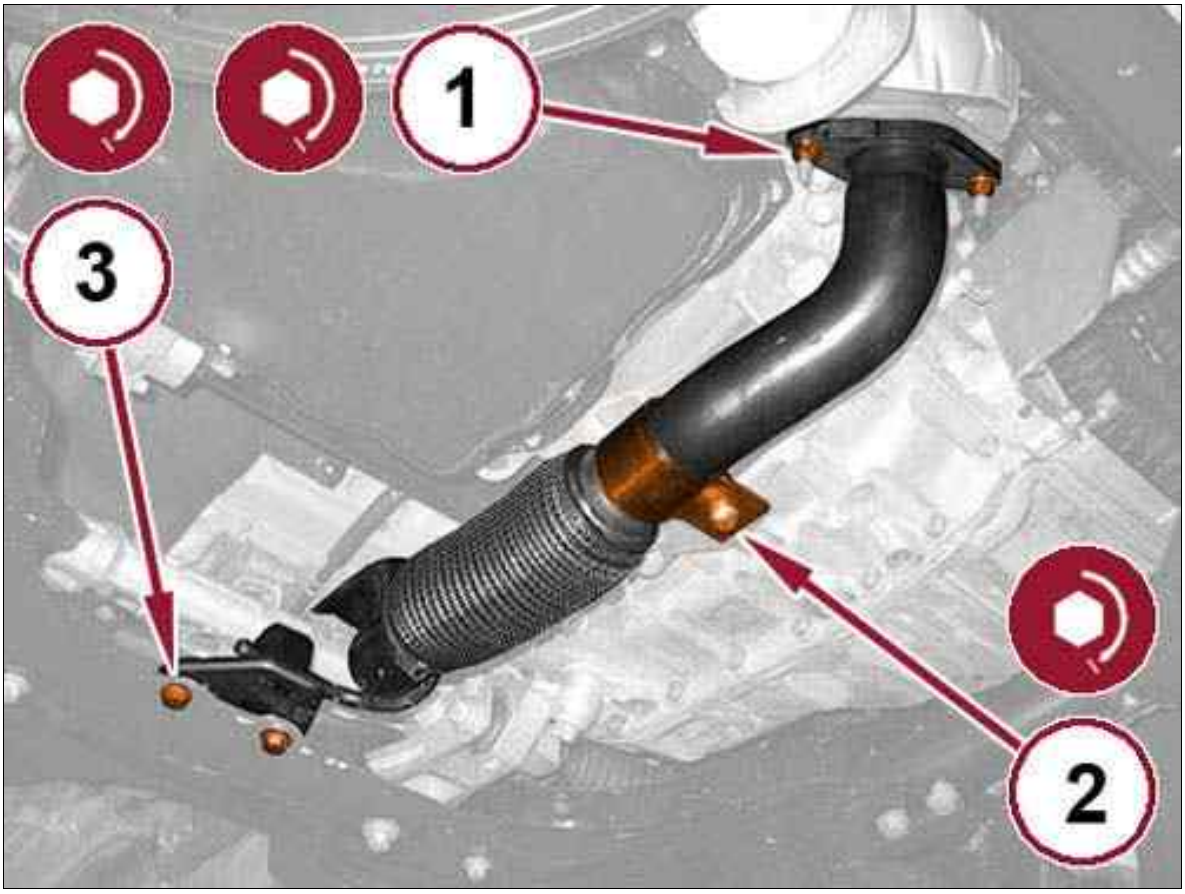
Fig 10: Center Support Bracket Bolts



Courtesy of CHRYSLER GROUP, LLC

13. Tighten the center support bracket bolts (1) to the proper specification. Refer to SPECIFICATIONS .
14. Remove the propeller shaft support tools.
15. Remove the tape and the protective sleeve from the propeller shaft.

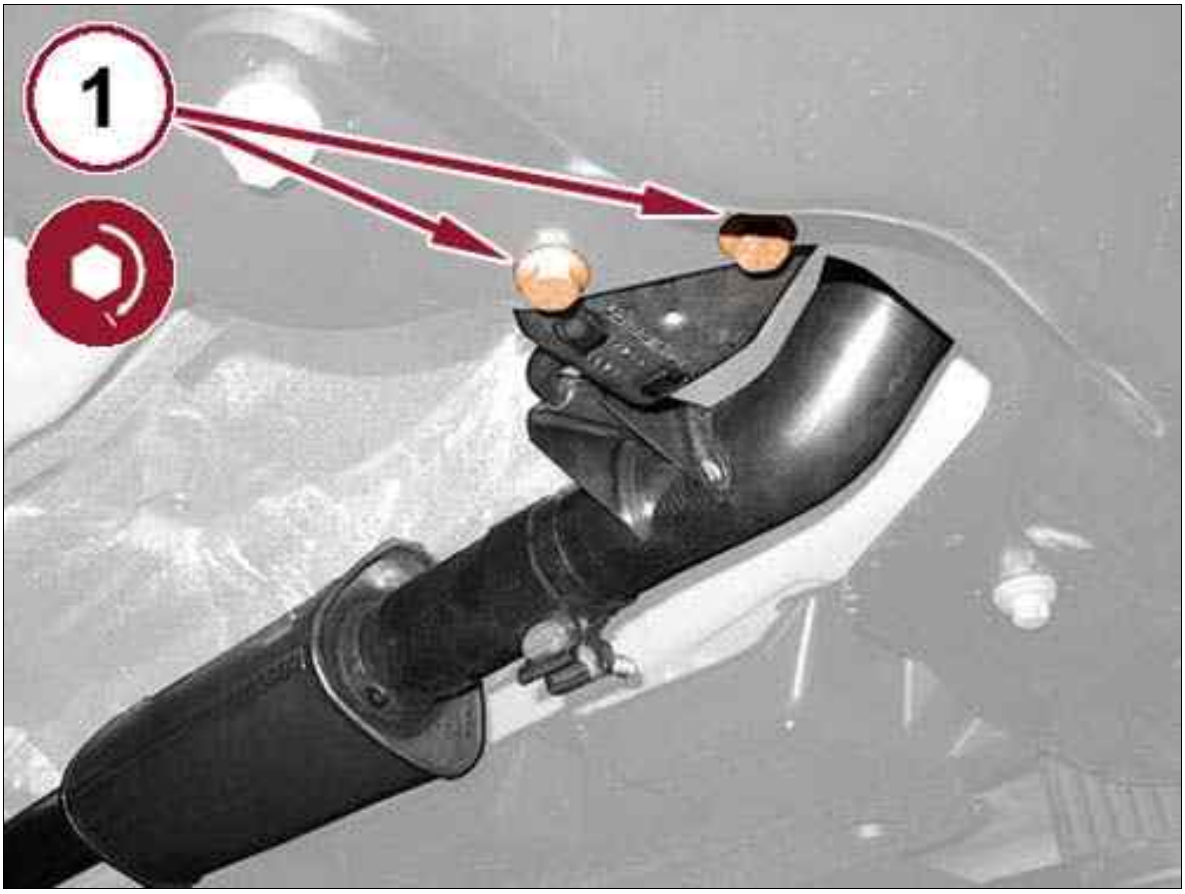
Fig 11: Support Brackets Bolts & Flange Nuts



Courtesy of CHRYSLER GROUP, LLC

16. Connect the crossunder pipe to the catalytic converter using a **NEW** flange gasket and tighten the **NEW** nuts (1) to the proper specification. Refer to SPECIFICATIONS .
17. Install the crossunder pipe bracket bolt (2) to the engine and tighten to the proper specification. Refer to SPECIFICATIONS .
18. Install the crossunder pipe front hanger support bracket bolts (3) and tighten to the proper specification. Refer to SPECIFICATIONS .

Fig 12: Rear Exhaust Hanger Bracket Bolts



Courtesy of CHRYSLER GROUP, LLC

19. Install the bolts (1) securing the rear exhaust hanger bracket supporting the crossunder pipe at the front crossmember and tighten to the proper specification. Refer to SPECIFICATIONS .
20. Install the belly pan. Refer to BELLY PAN, REMOVAL AND INSTALLATION and BELLY PAN, SIDE, REMOVAL AND INSTALLATION .