

PUBLISHED: 17-SEP-2019
2020.0 DEFENDER (LE), 205-02

REAR DRIVE AXLE/DIFFERENTIAL

DRIVE PINION SEAL (G2422499)

mcx30.com

SPECIAL TOOL(S)



E54135

100-012

Slide Hammer



E193517

100-012-01

Slide Hammer Adapter



E117041

204-266

Adapter for 204-265



E193454

204-269A

Flange remover forcing screw



E54574

205-053

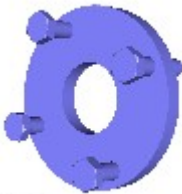
Retainer, Differential Pinion Flange



E52536

307-520

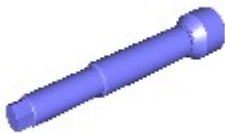
Installer, Output Shaft Seal



E166128

JLR-205-1014

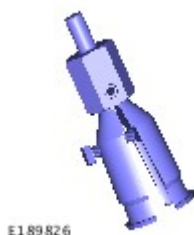
Remover/Installer, Differential Pinion Flange



E166129

JLR-205-1015A

Installer, Halfshaft



E189826

JLR-205-1031

Remover, Differential Pinion Seal



E145964

JLR-205-998

Installer, Rear Differential Seal

REMOVAL

WARNING:

Be prepared to collect escaping oil.

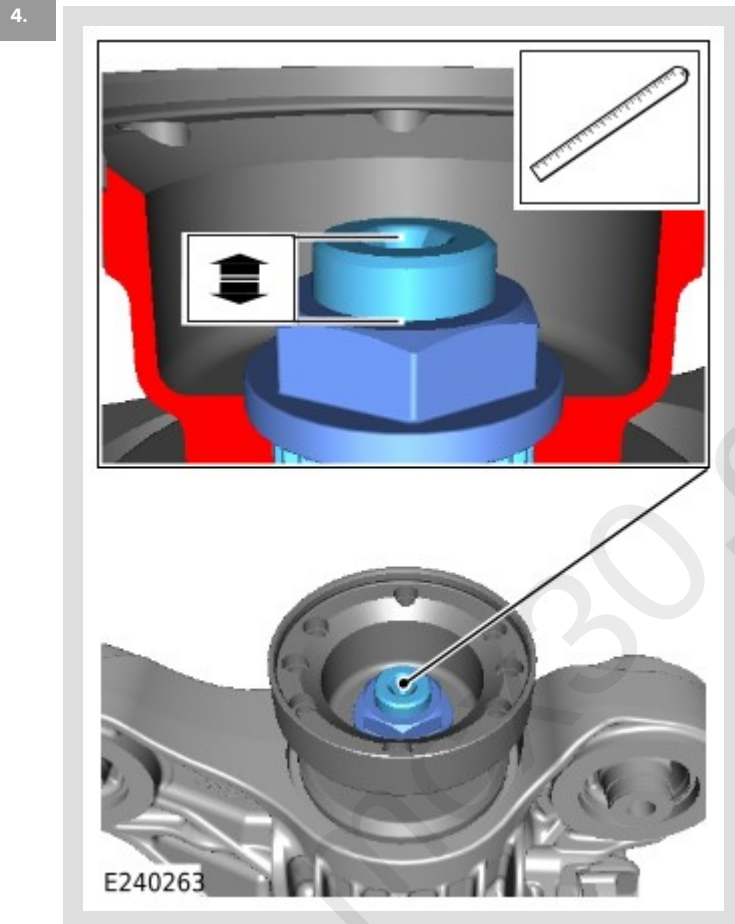
NOTE:

- This procedure contains some variation in the illustrations depending on the vehicle specification, but the essential information is always correct.
- This procedure contains illustrations showing certain components removed to provide extra clarity.

1. Raise and support the vehicle on a suitable 2 post lift.
Refer to: [Jacking and Lifting](#) (100-02 Jacking and Lifting, Description and Operation).

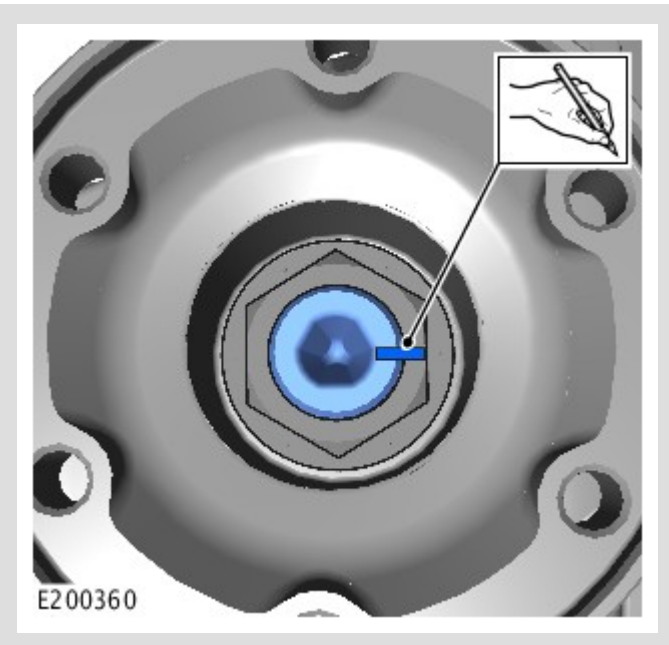
2. Drain the rear differential oil.
Refer to: [Differential Draining and Filling](#) (205-02 Rear Drive Axle/Differential, General Procedures).

3. Remove the rear driveshaft.
Refer to: [Rear Driveshaft](#) (205-01 Driveshaft, Removal and Installation).



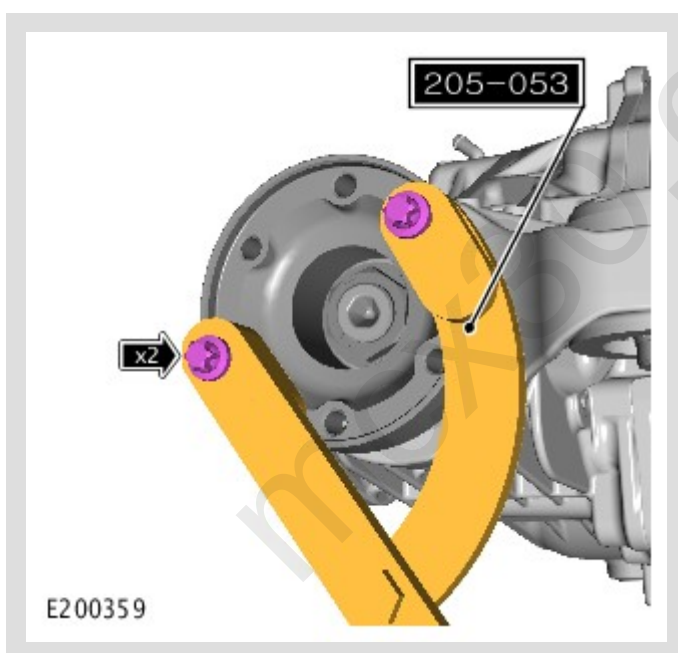
Measure the distance between the top surface of the pinion nut and the top surface of the pinion shaft.

5.



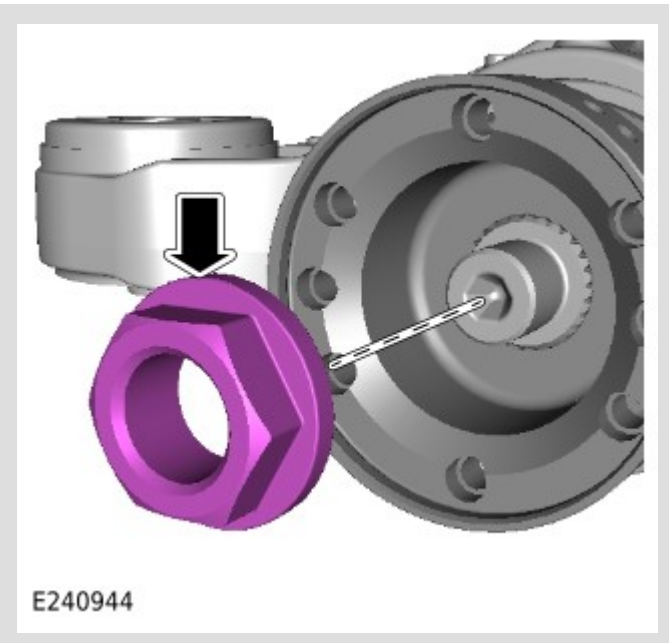
Mark the pinion nut in relation to the pinion shaft.

6.



- Install the special tool to prevent the pinion from rotating when removing the pinion nut.
Special Tool(s): [205-053](#)

7.



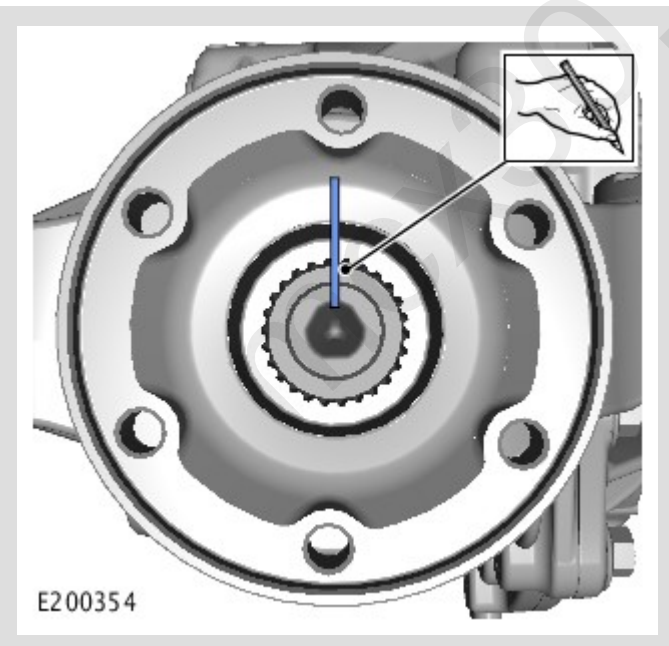
Remove the pinion nut.

8.

Remove the special tool.

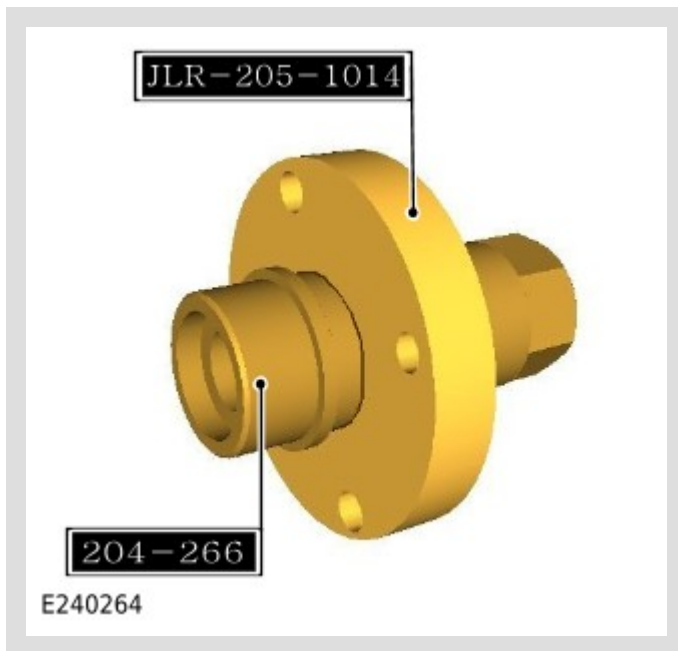
Special Tool(s): [205-053](#)

9.



Mark the position of the pinion flange in relation to the pinion shaft.

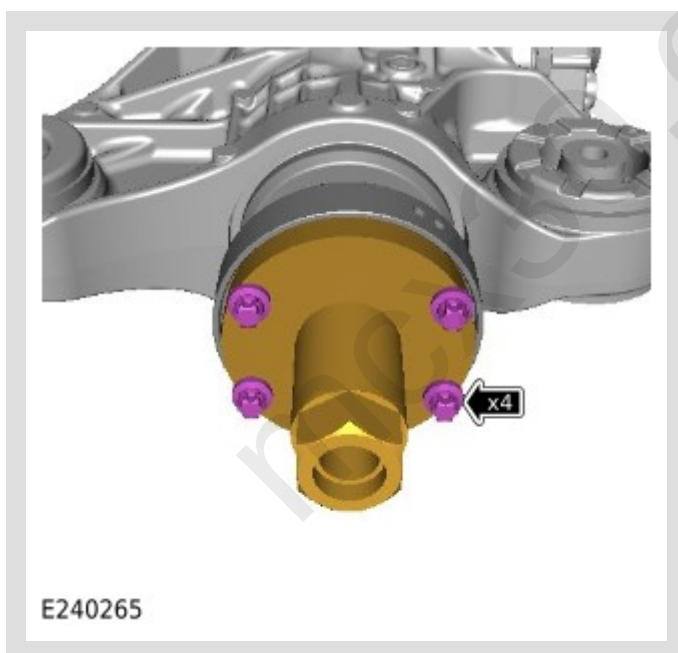
10.



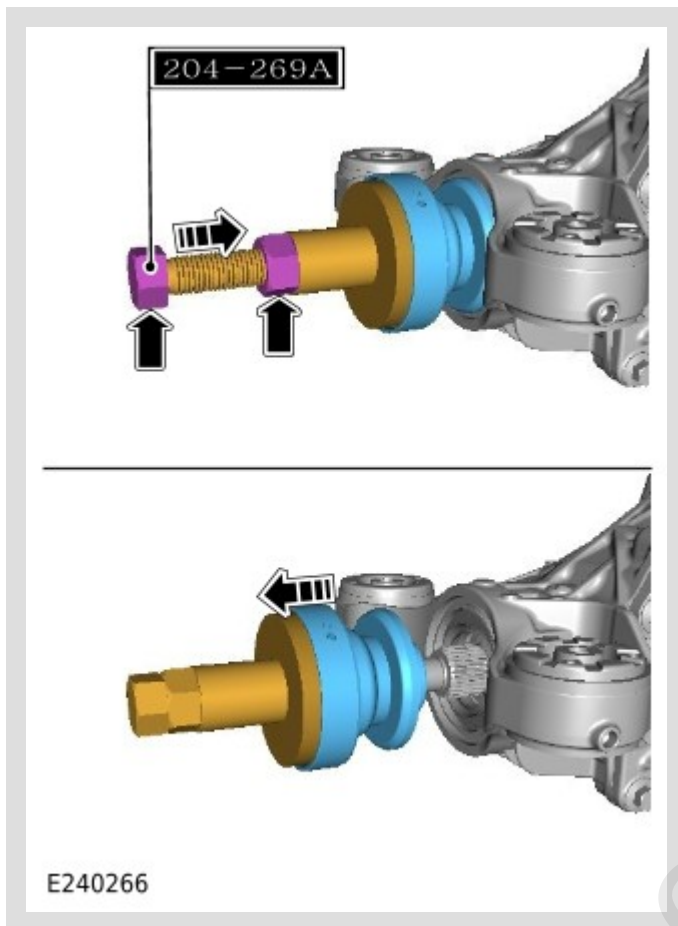
- Assemble the special tools as illustrated.

Special Tool(s): [JLR-205-1014](#), [204-266](#)

11.

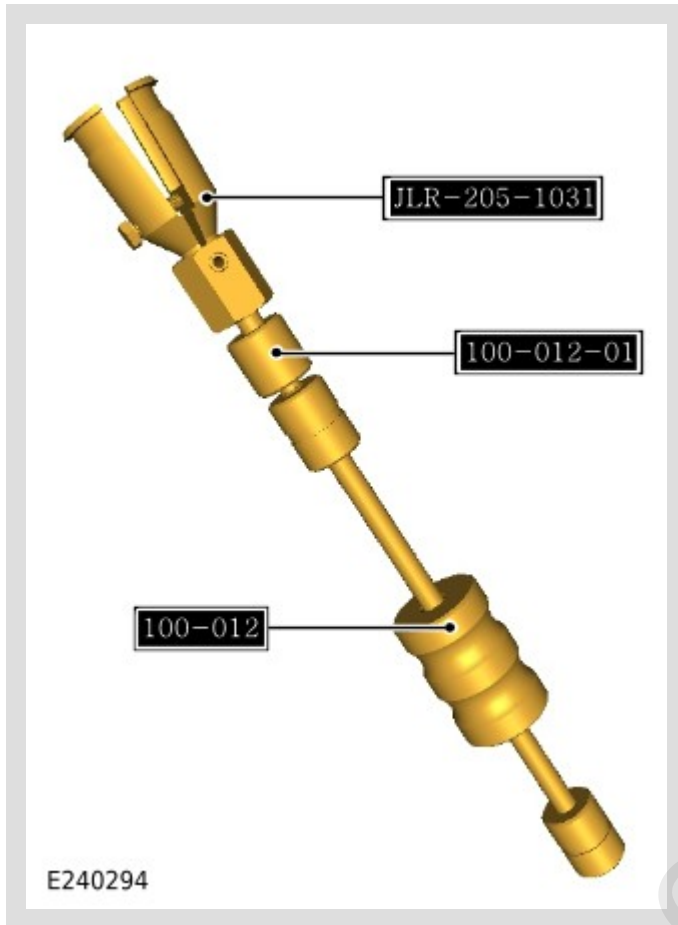


Install the special tools to the pinion flange.



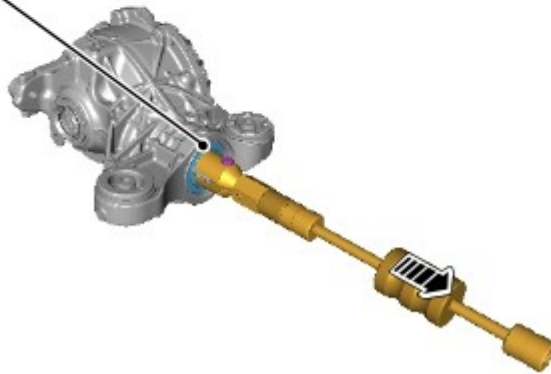
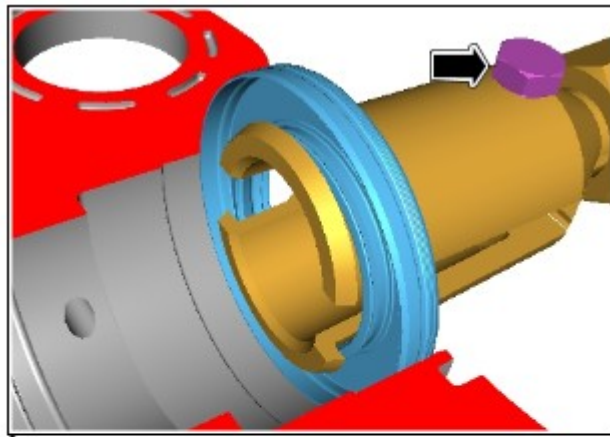
- Use the special tools to remove the pinion flange.

Special Tool(s): [204-269A](#)



- Assemble the special tools as illustrated.

Special Tool(s): [100-012](#), [100-012-01](#), [JLR-205-1031](#)

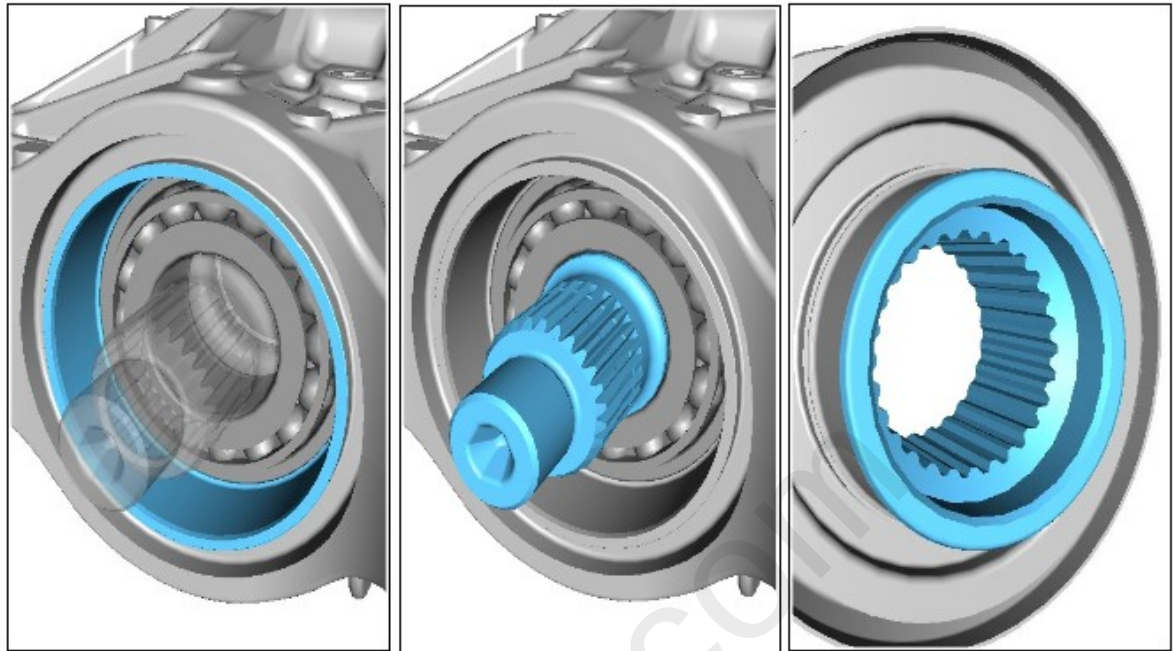


E240267

- Install the special tool and tighten the bolt until the jaws are fully engaged with the pinion seal.
- Use the special tools to remove the pinion seal.

ⓘ CAUTION:

Make sure the differential pinion bearings are not contaminated.

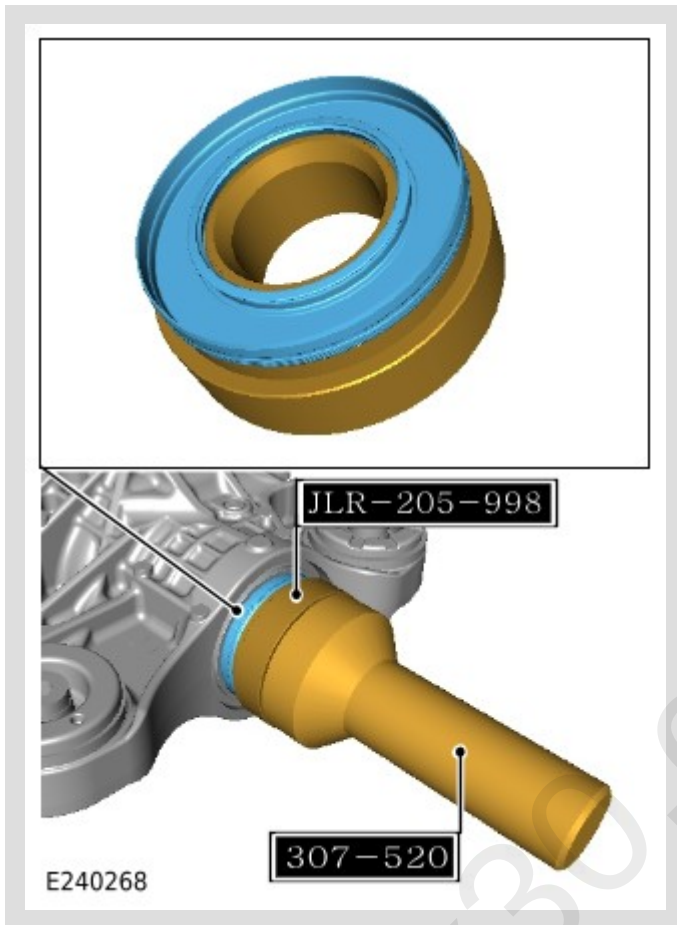


E240312

- Clean and inspect the differential case to differential pinion seal mating face.
- Clean and inspect the pinion shaft splines and threads.
- Clean and inspect the pinion flange splines.

INSTALLATION

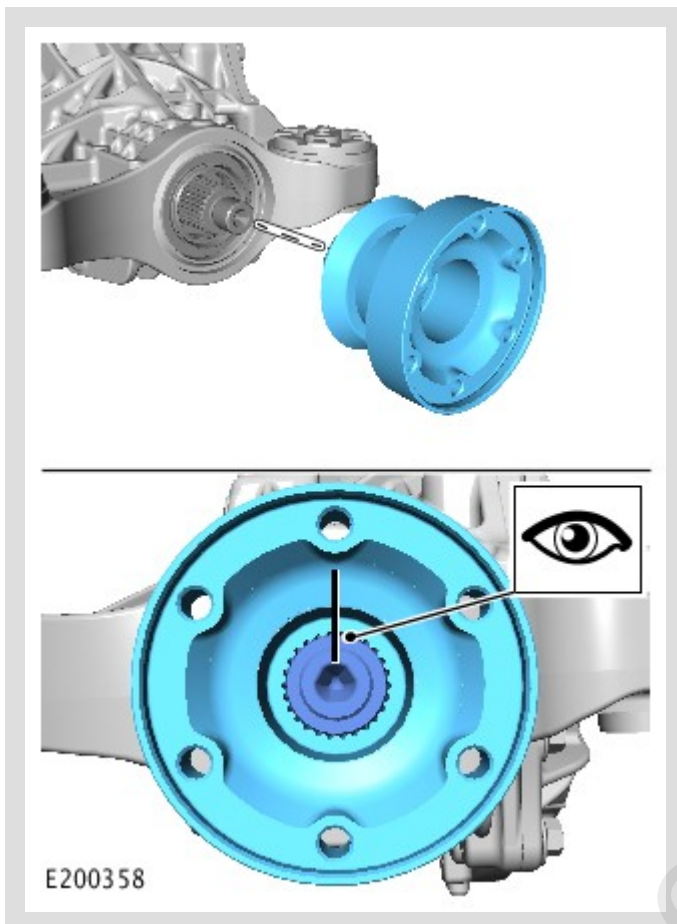
1.



- Make sure that the new pinion seal is correctly installed to the special tool.
- Use the special tools to install the new pinion seal.

Special Tool(s): [JLR-205-998](#), [307-520](#)

2.



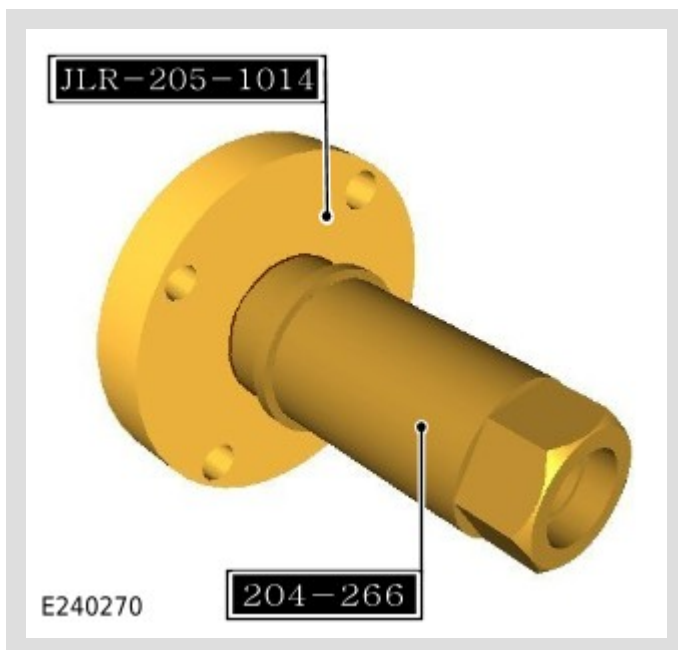
- Apply thread locking fluid to splines.
- Install the pinion flange. Make sure the marks are correctly aligned.

3.



- Install the special tool to the pinion shaft.
Special Tool(s): [JLR-205-1015A](#)

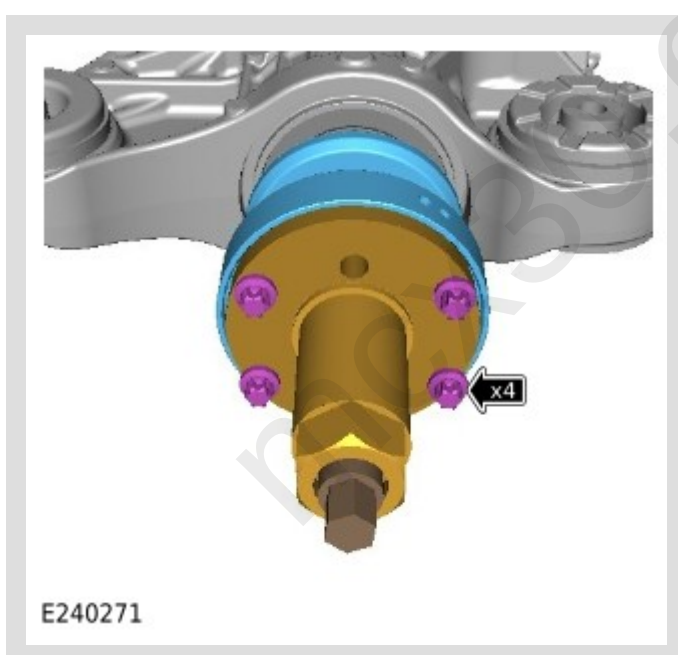
4.



- Assemble the special tools as illustrated.

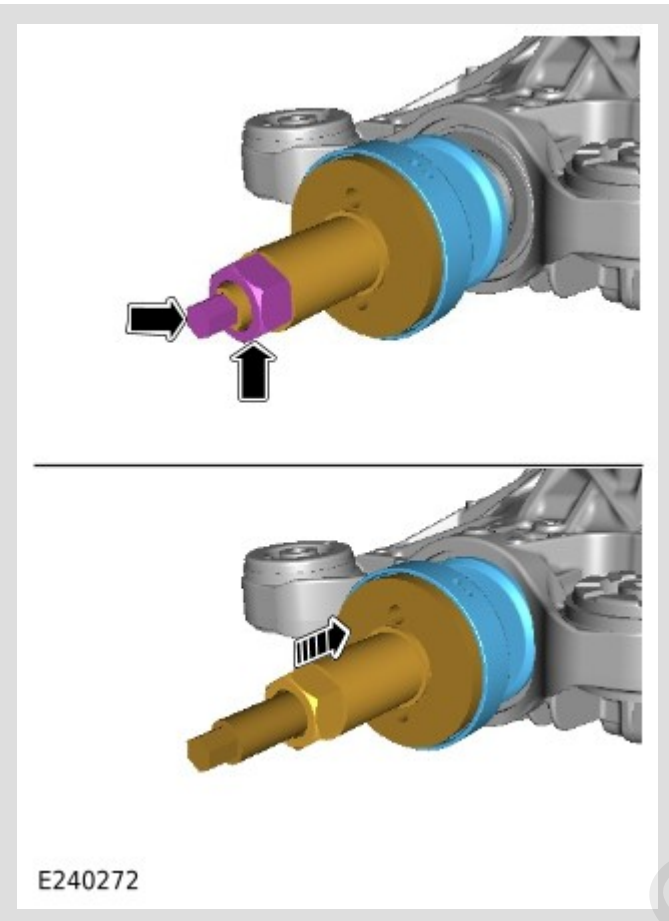
Special Tool(s): [204-266](#), [JLR-205-1014](#)

5.



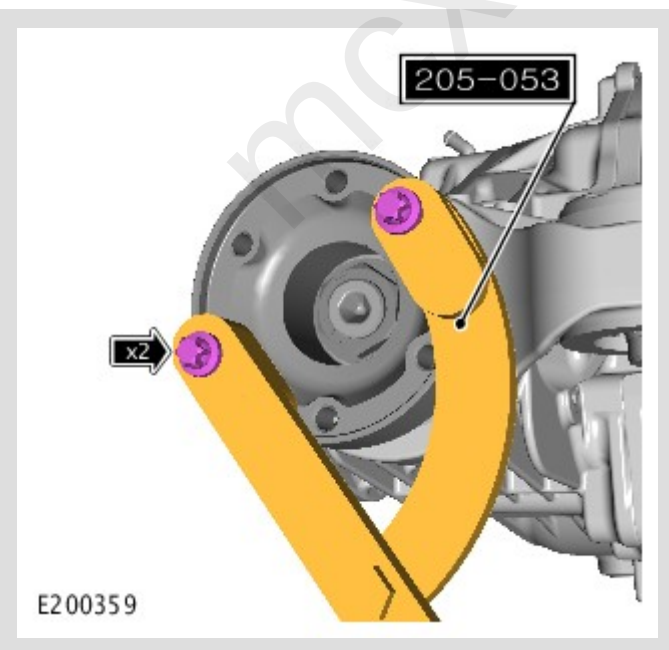
Install the special tools to the pinion flange.

6.



- Use the special tools to install the pinion flange.
- Remove the special tools.

7.



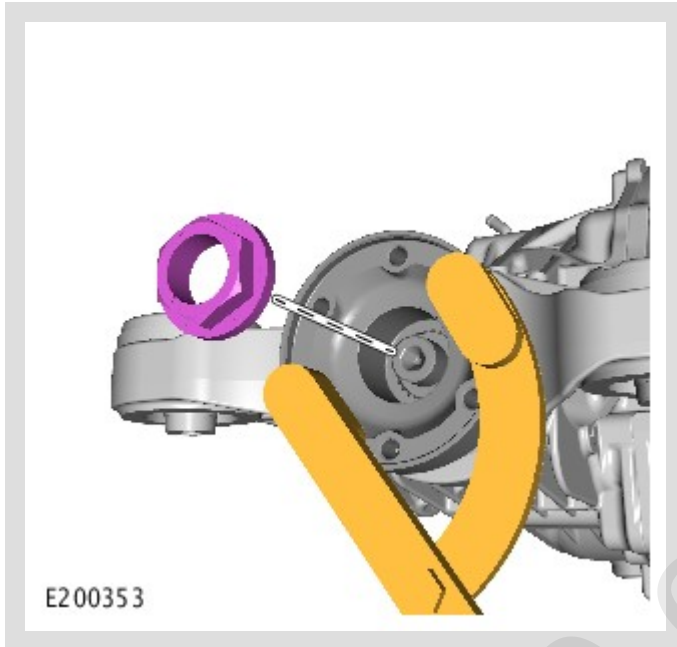
Install the special tool.

Special Tool(s): [205-053](#)

8.

⚠ CAUTION:

- Make sure that the line scribed on the pinion nut aligns with the line on the pinion shaft.
- Never under tighten the pinion nut.
- Never over tighten the pinion nut by more than 5 degrees past the scribed lines.



- Apply thread locking fluid to threads.
- Install and tighten the pinion nut.
- Check the measurement from the top surface of the pinion nut and the top surface of the pinion shaft is the same as in the removal step.
- Make sure the pinion flange has no end float and is free to rotate.

9. Remove the special tool.

Special Tool(s): [205-053](#)

10. Refill the rear differential.

Refer to: [Differential Draining and Filling](#) (205-02 Rear Drive Axle/Differential, General Procedures).

11. Install the rear driveshaft.

Refer to: [Rear Driveshaft](#) (205-01 Driveshaft, Removal and Installation).