

2022 CHEVROLET CORVETTE SERVICE MANUAL

- **SEARCH**

1. **Engine/Propulsion**
2. **Engine Mechanical - 6.2L (LT2)**
3. **Repair Instructions**
- 4.

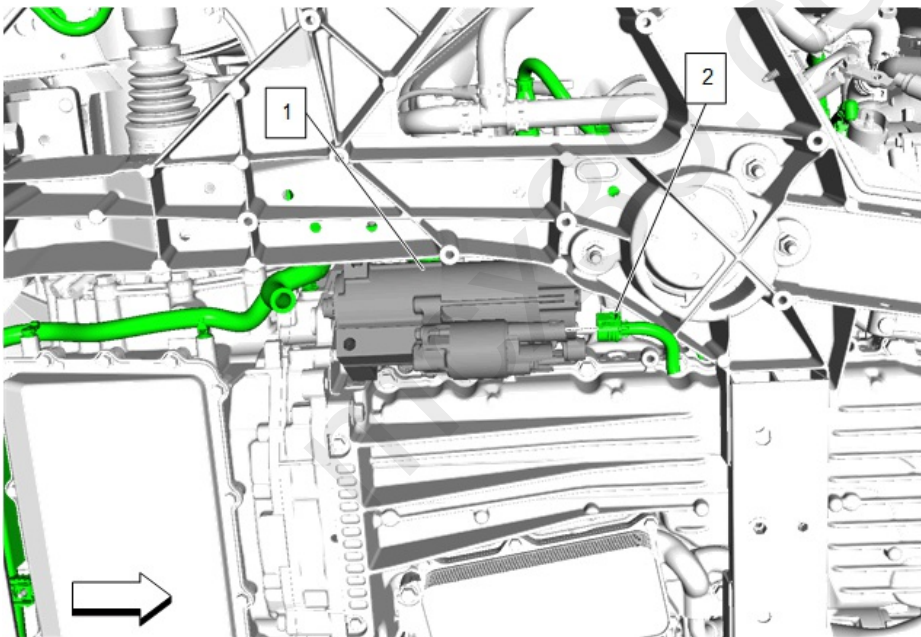
Crankshaft Balancer Replacement

Special Tools

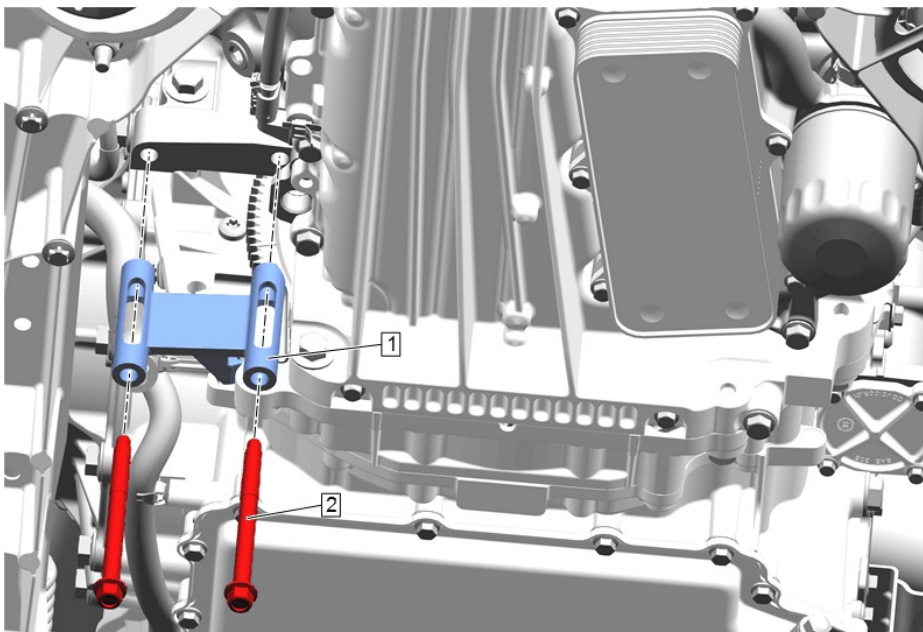
- *EN-41478-AA*, Crankshaft Front Oil Seal Installer
- *EN-41665-AA*, Crankshaft Balancer and Sprocket Installer
- *EN-41816-AA*, Crankshaft Balancer Remover
- *EN-45059-AA*, Angle Meter
- *EN-52751-AA*, Flywheel Holding Tool

Equivalent regional tools: Special Tools

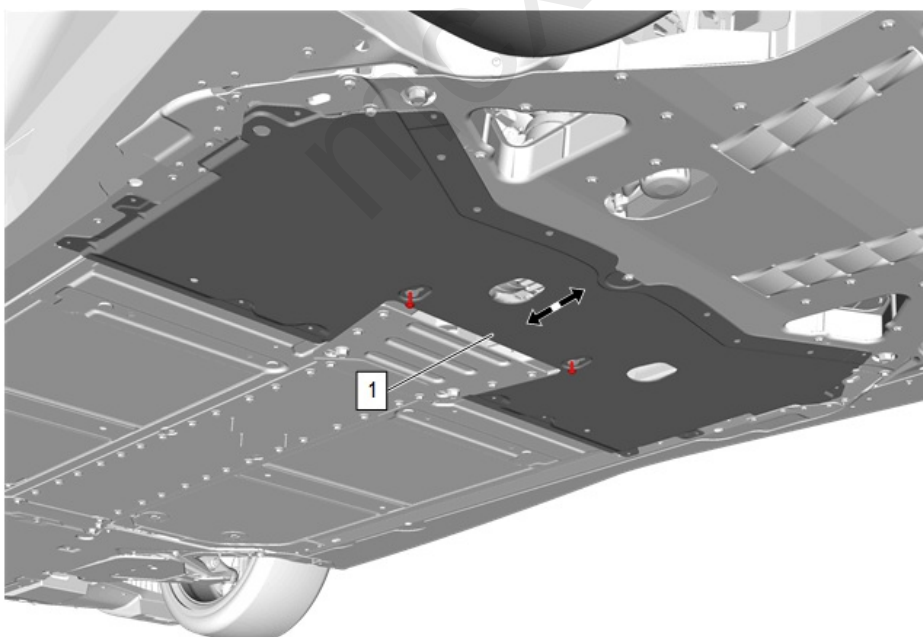
Removal Procedure



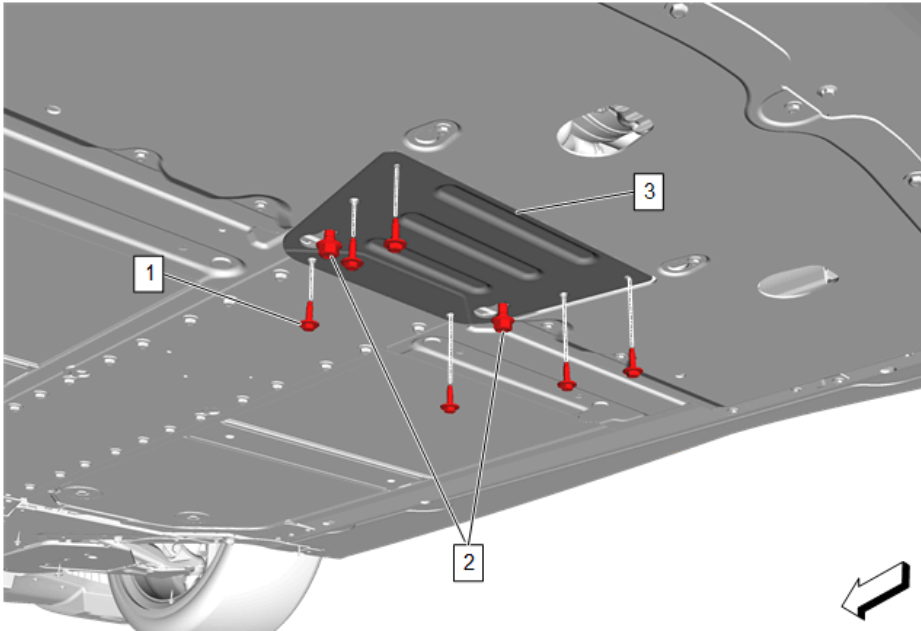
1. [Click here for full size](#)
2. Starter (1>) >> Remove - Starter Replacement



3. [Click here for full size](#)
4. *EN-52751*Ã,Ã Flywheel Holding Tool(1>) >> Install
5. Caution:
Refer to Fastener Caution.
6. Starter Bolt (2>) >> Install and tighten [2x]50N-m (37 lb ft)

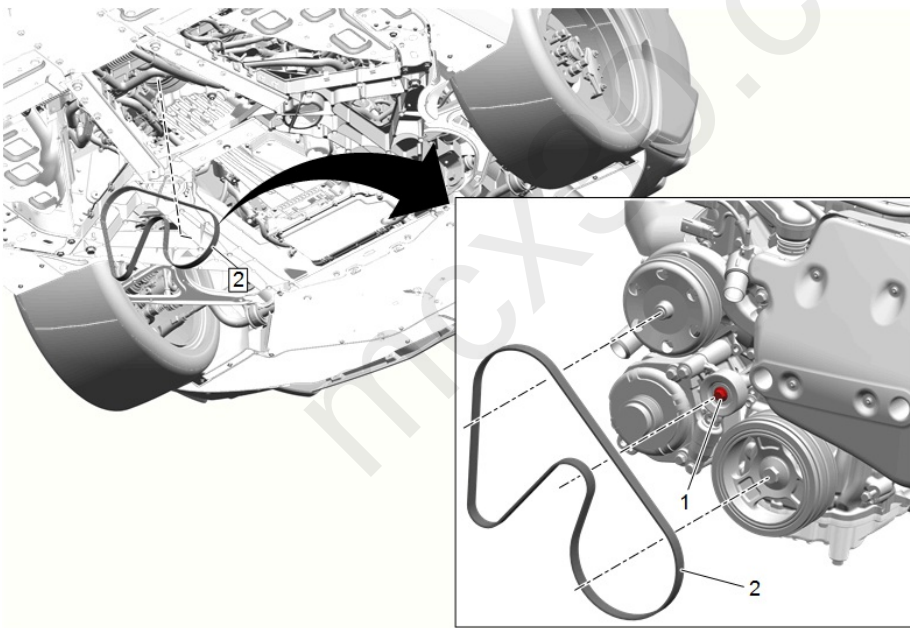


7. [Click here for full size](#)
8. Underbody Rear Air Deflector (1>) >> Remove - Underbody Rear Air Deflector Replacement



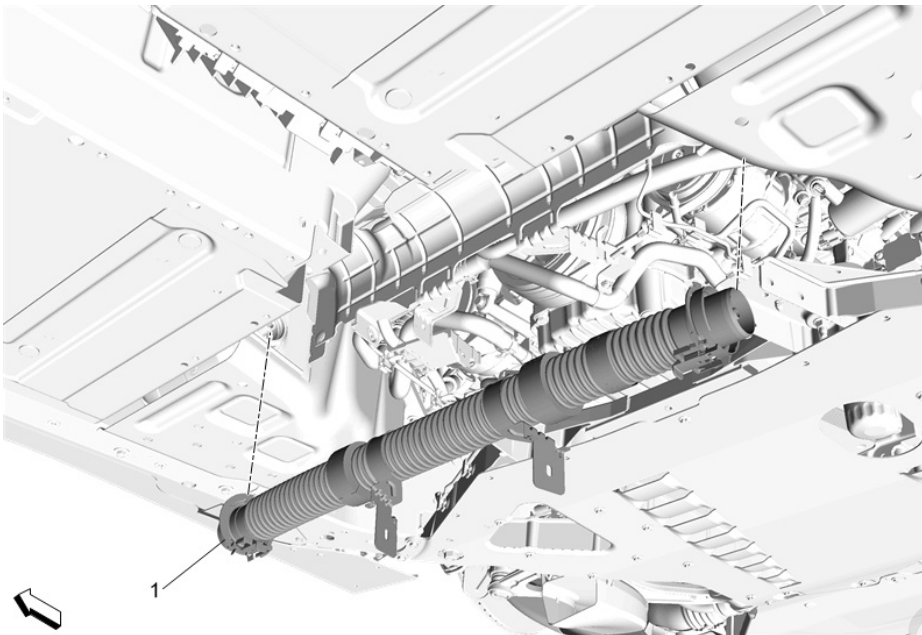
9.
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10. Floor Panel Tunnel Panel Reinforcement (3>) >> Remove - Floor Panel Tunnel Panel Reinforcement Replacement



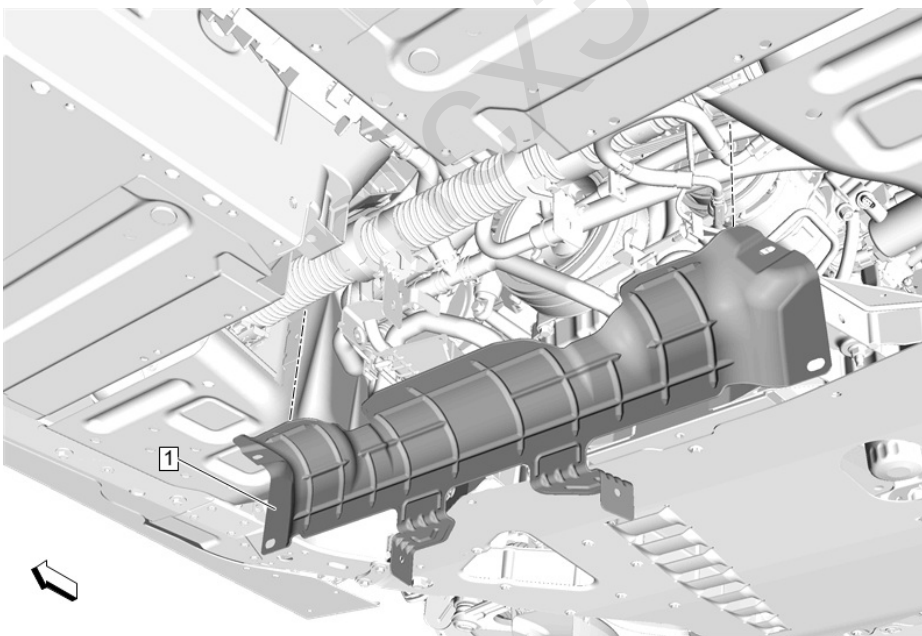
11.
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12. Water Pump and Generator Belt (2>) >> Remove - Water Pump and Generator Belt Replacement



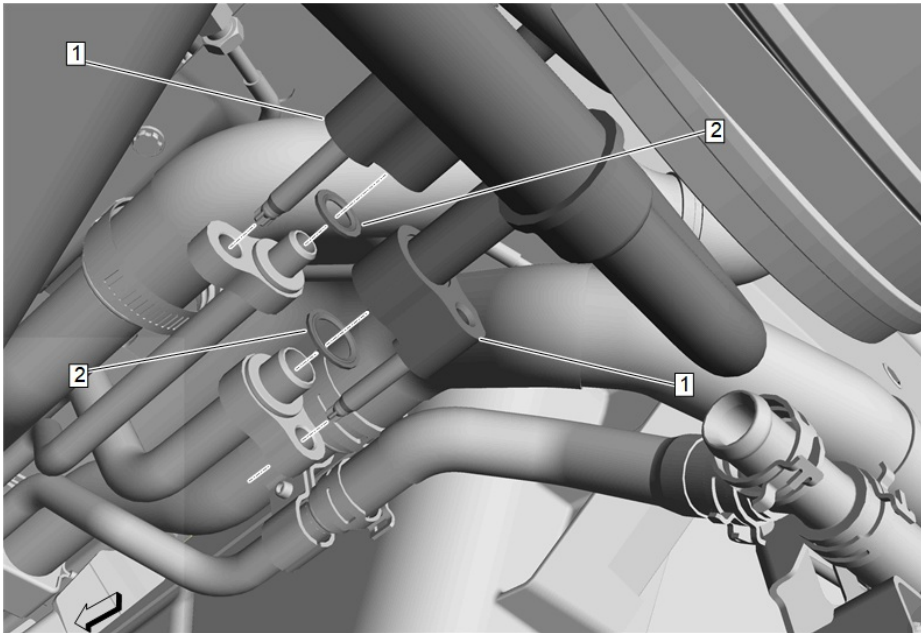
13.
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14. Fuel Tank Crossover Pipe (1>) >> Remove - Fuel Tank Crossover Pipe Replacement



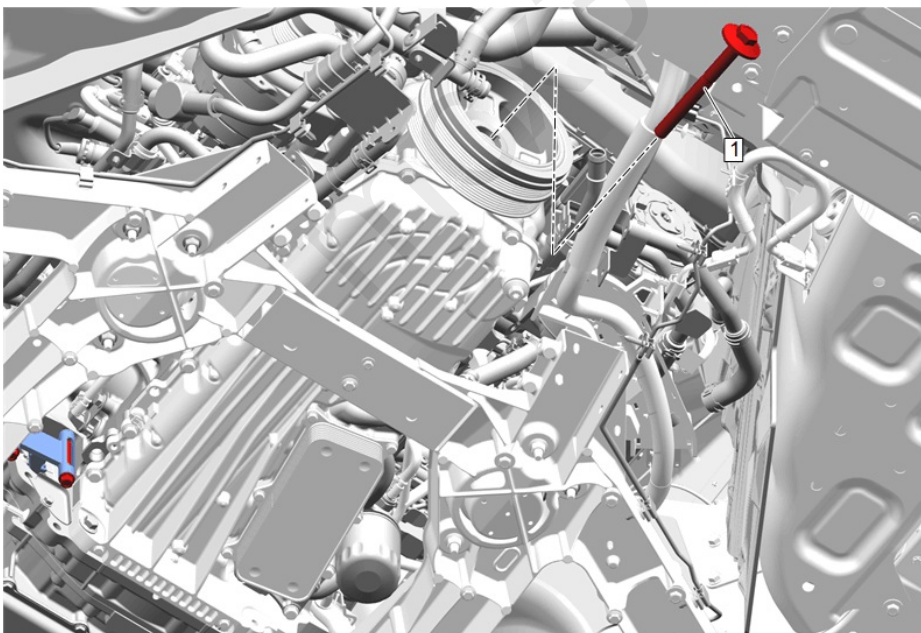
15.
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16. Fuel Feed Front Pipe Shield (1>) >> Remove - Fuel Feed Front Pipe Shield Replacement



17.
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18. Air Conditioning Compressor Hose (1>) >>> Remove - Air Conditioning Compressor Hose Replacement

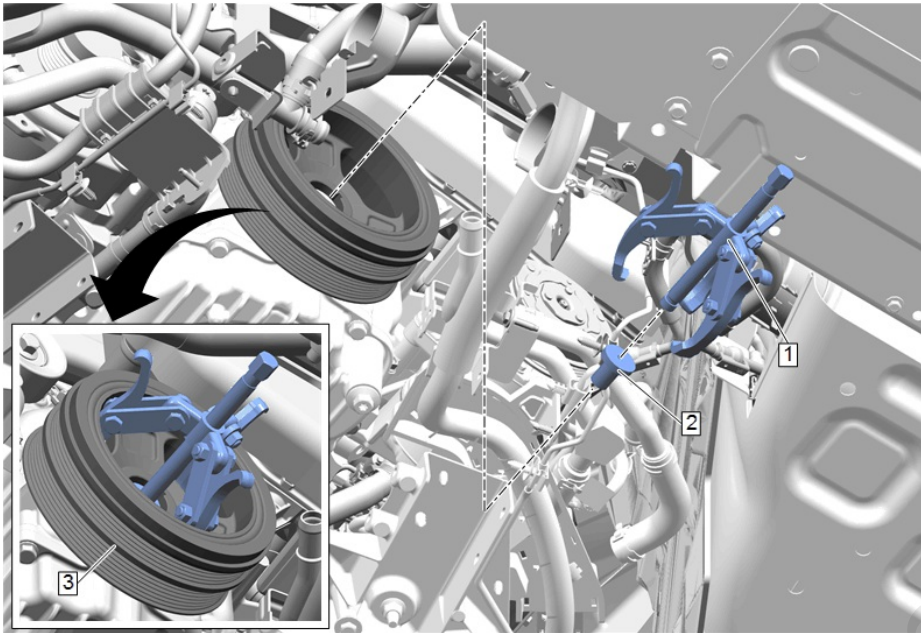


19.
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20. Note:

Retain the used crankshaft balancer bolt for installation. Tag the used bolt for disposal at the end of the procedure.

21. Crankshaft Balancer Bolt (1>) >>> Remove and DISCARD



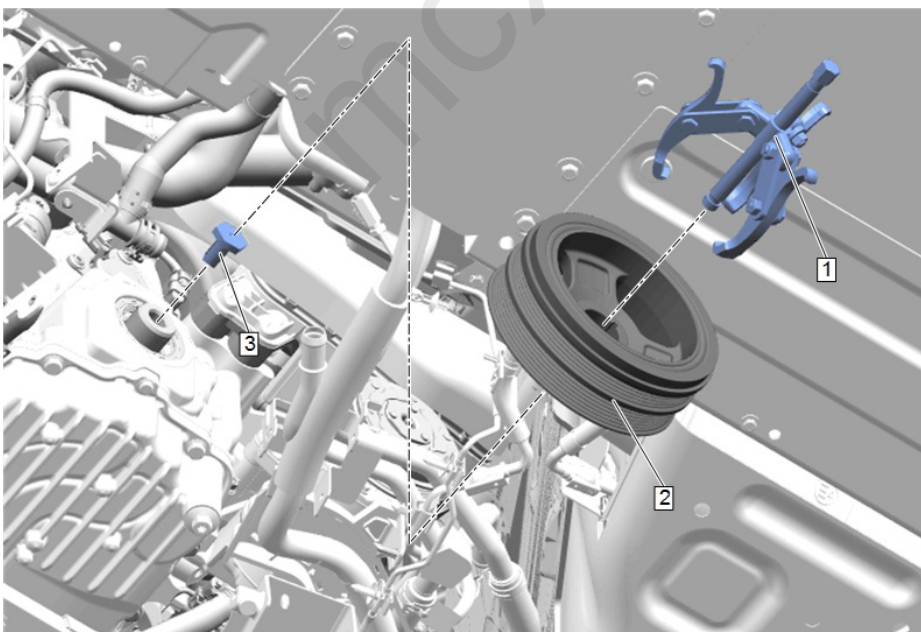
22.

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23. *EN-41816-2*, Crankshaft End Protector(2>) @ Crankshaft >> Install

24. *EN-41816-1*, Crankshaft Balancer Puller(1>) @ Crankshaft Balancer >> Install

25. Use *EN-41816*, Crankshaft Balancer Remover to release the crankshaft balancer (3).



26.

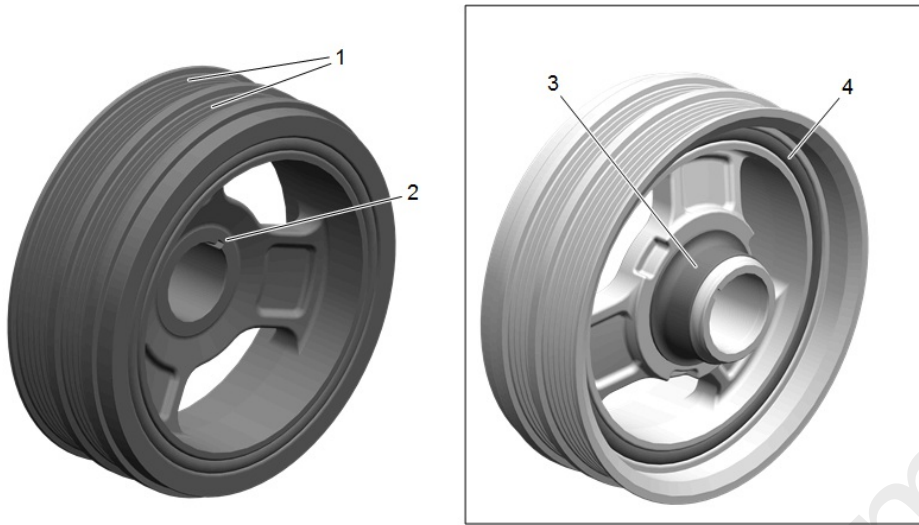
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27. Crankshaft Balancer (2>) >> Remove

28. EN-41816-1Ã,Â Crankshaft Balancer Puller(1>) >> Remove

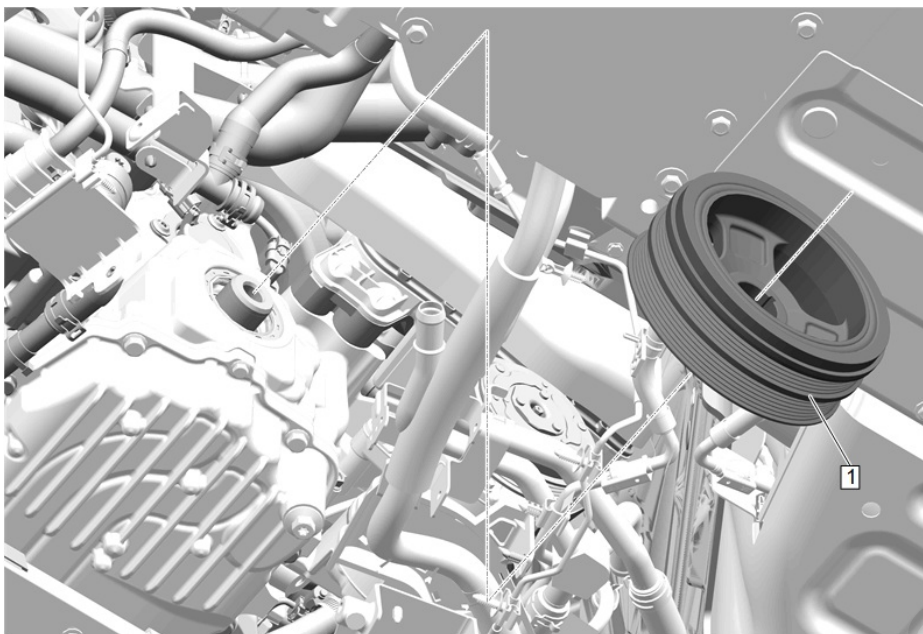
29. EN-41816-2Ã,Â Crankshaft End Protector(3>) >> Remove

Cleaning and Inspection Procedure

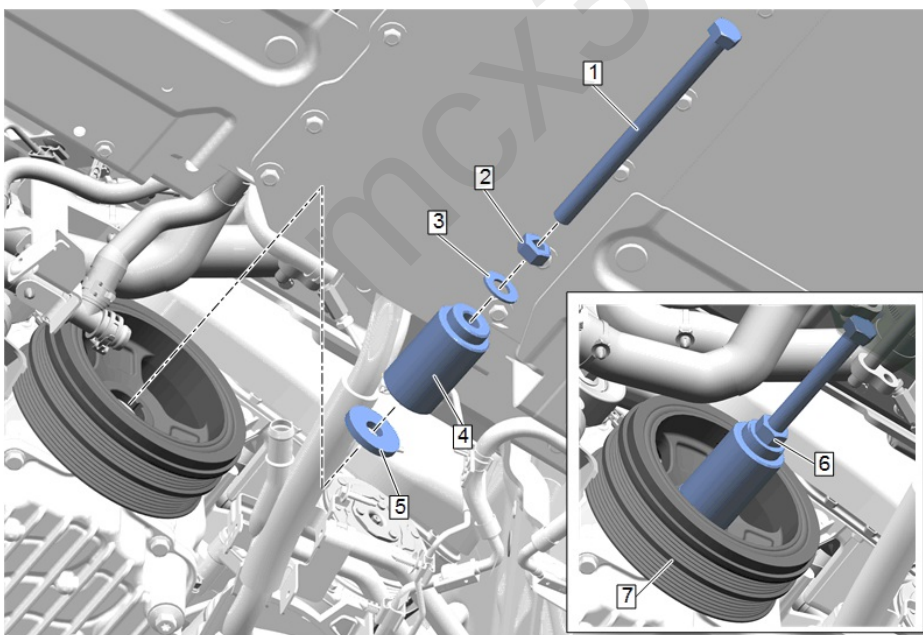


1. [Click here for full size](#)
2. Clean the crankshaft balancer in solvent.
3. Using a wire brush, clean the belt grooves (1) of all dirt and debris.
4. Warning:
Refer to Safety Glasses and Compressed Air Warning.
5. Dry the crankshaft balancer with compressed air.
6. Inspect the crankshaft balancer for the following conditions:
7.
 - Damage to the crankshaft balancer keyway (2)
 - Worn, grooved, or damaged hub seal surface (3)
 - - A crankshaft balancer hub seal surface with excessive scoring, grooves, rust or other damage must be replaced.
 - Minor imperfections on the hub seal surface may be removed with polishing compound or fine grade emery cloth.
 - Dirty or damaged belt grooves (1)
 - - The balancer belt grooves should be free of any nicks, gouges, or other damage that may not allow the belt to track properly.
 - Minor imperfections may be removed with a fine file.
 - Worn, chunking or deteriorated rubber between the hub and pulley (4)

Installation Procedure

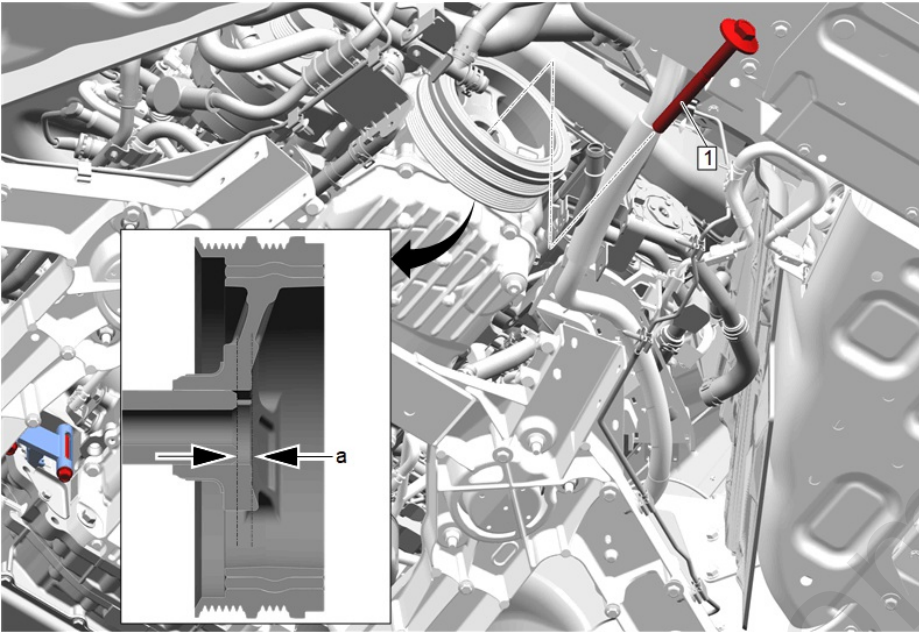


1. [Click here for full size](#)
2. Crankshaft Balancer (1>) >> Loosely install

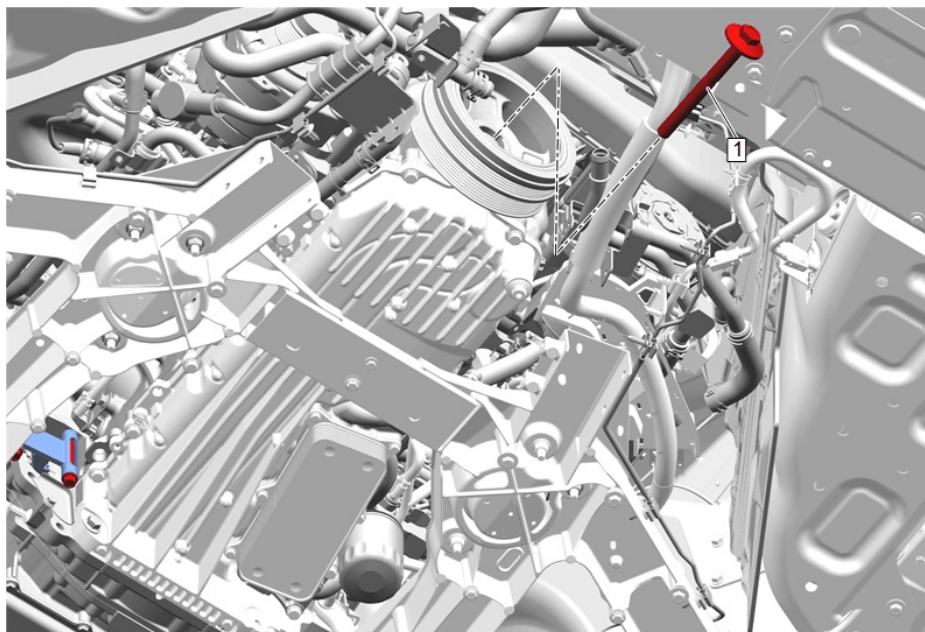


3. [Click here for full size](#)
4. Assemble the bolt (1), nut (2), and washer (3) from *EN-41478* Crankshaft Front Oil Seal Installer.
5. Install the installer (4) and washer (5) from *EN-41665* Crankshaft Balancer and Sprocket Installer onto the bolt from *EN-41478* Crankshaft Front Oil Seal Installer.

6. Thread the bolt from *EN-41478* Crankshaft Front Oil Seal Installer into the crankshaft.
7. Use the adjustment nut (6) at the *EN-41478* Crankshaft Front Oil Seal Installer to seat the crankshaft balancer (7).



8. [Click here for full size](#)
9. **Caution:**
Refer to Fastener Caution.
10. **Note:**
Use the crankshaft balancer bolt retained during the removal procedure to fully seat the crankshaft balancer.
11. Crankshaft Balancer Bolt (1) >> Install and tighten 330N-m (240lb ft)
12. Crankshaft Balancer Bolt (1) >> Remove and DISCARD
13. Measure for correctly installed balancer. The end of the crankshaft (a) should be recessed 2.92 - 5.46 mm (0.115 - 0.215 in) into the balancer bore. If the balancer is not installed to proper dimensions, install the *EN-41665* Crankshaft Balancer and Sprocket Installer and repeat the installation procedure.



14. [Click here for full size](#)

15. **Warning:**

Refer to Torque-to-Yield Fastener Warning.

16. **Caution:**

Refer to Fastener Caution.

17. Crankshaft Balancer Bolt (1>) >> Install NEW and tighten

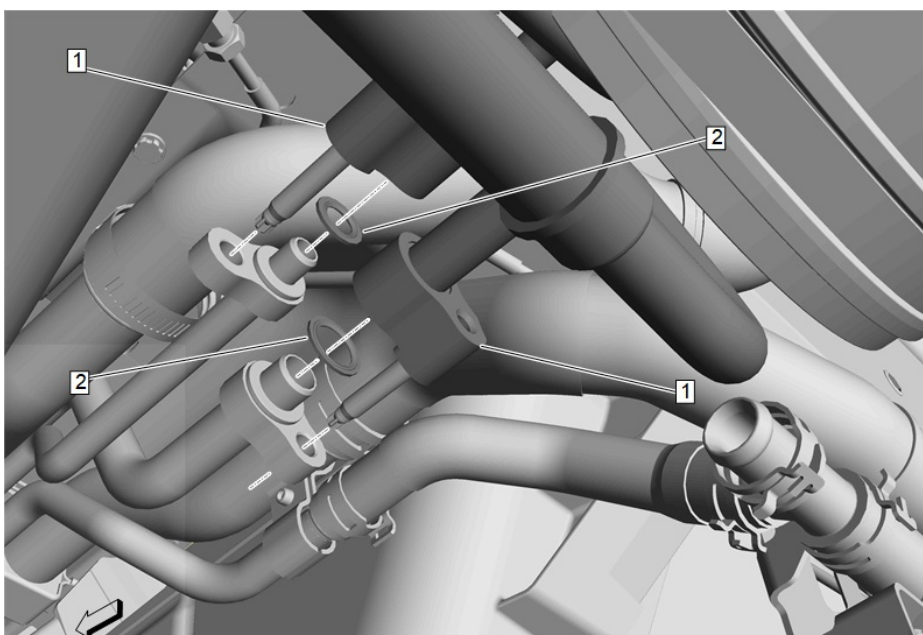
18.

1. First Pass: 150N-m (110thinsp;lb ft)

2. Second Pass: Loosen 360thinsp;degrees

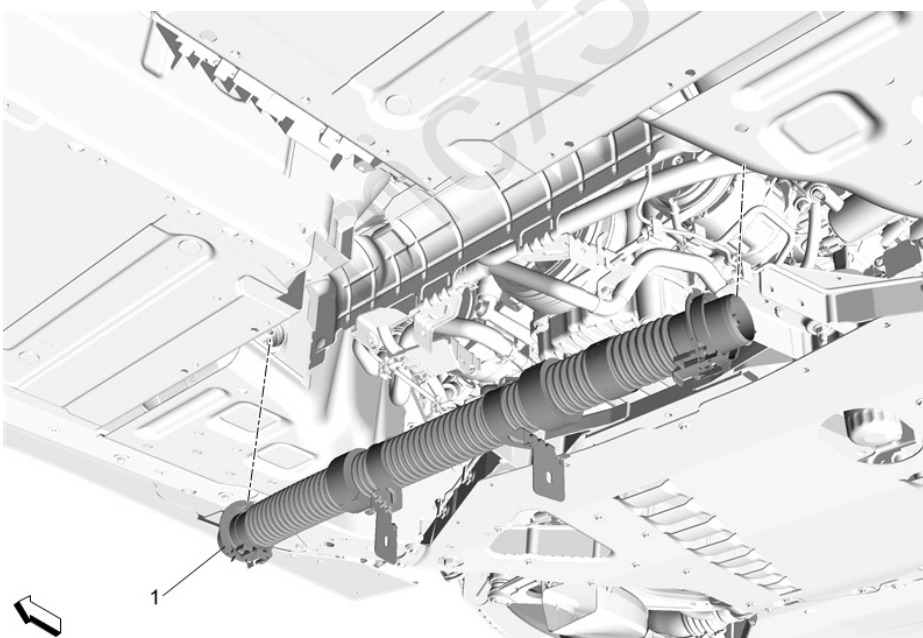
3. Third Pass: 80N-m (59 lb ft)

4. Final Pass: 125thinsp;degrees - Use the special tool: *EN-45059-AA*, Â Angle Meter



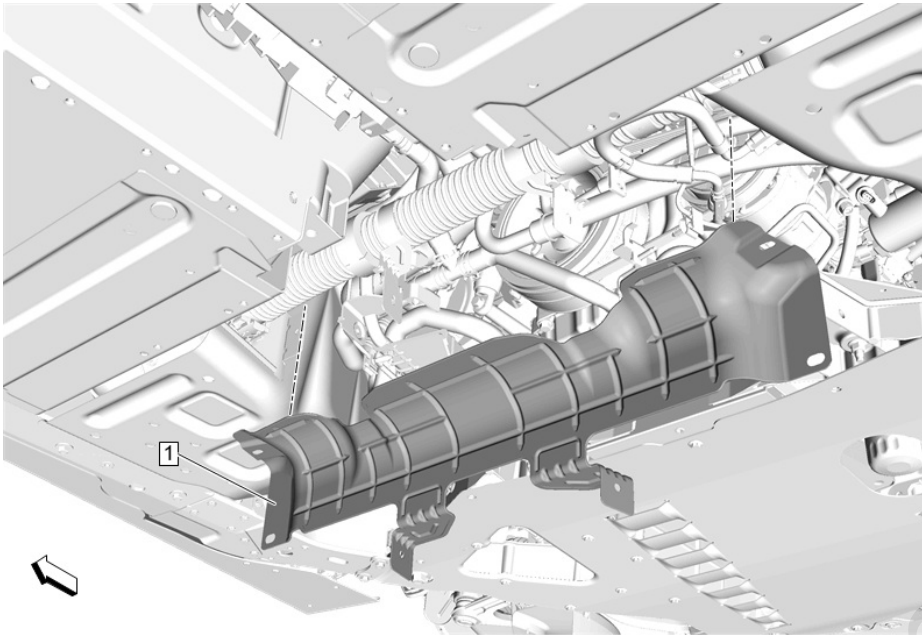
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20. Air Conditioning Compressor Hose (1>) >> Install - Air Conditioning Compressor Hose Replacement



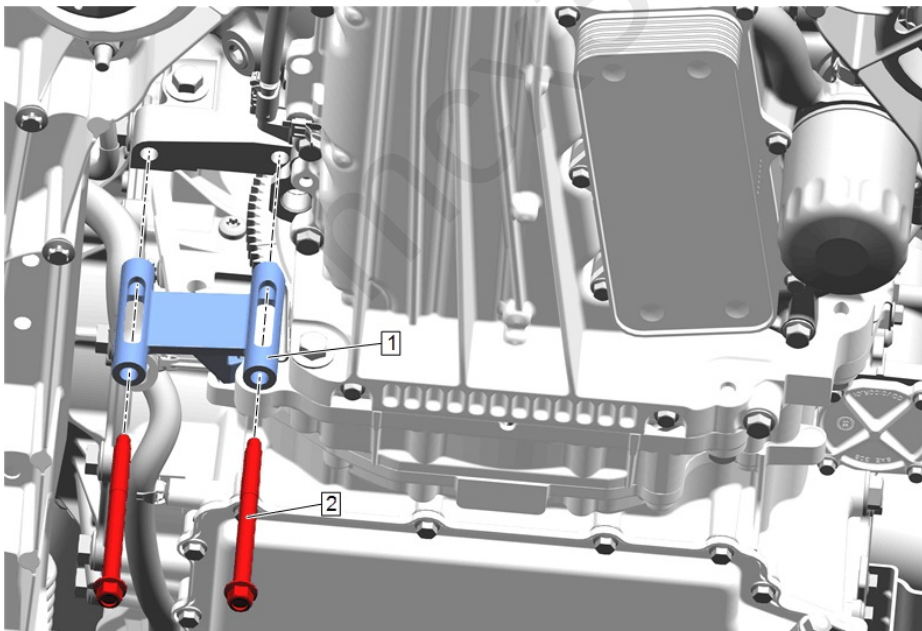
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22. Fuel Tank Crossover Pipe (1>) >> Install - Fuel Tank Crossover Pipe Replacement



23.
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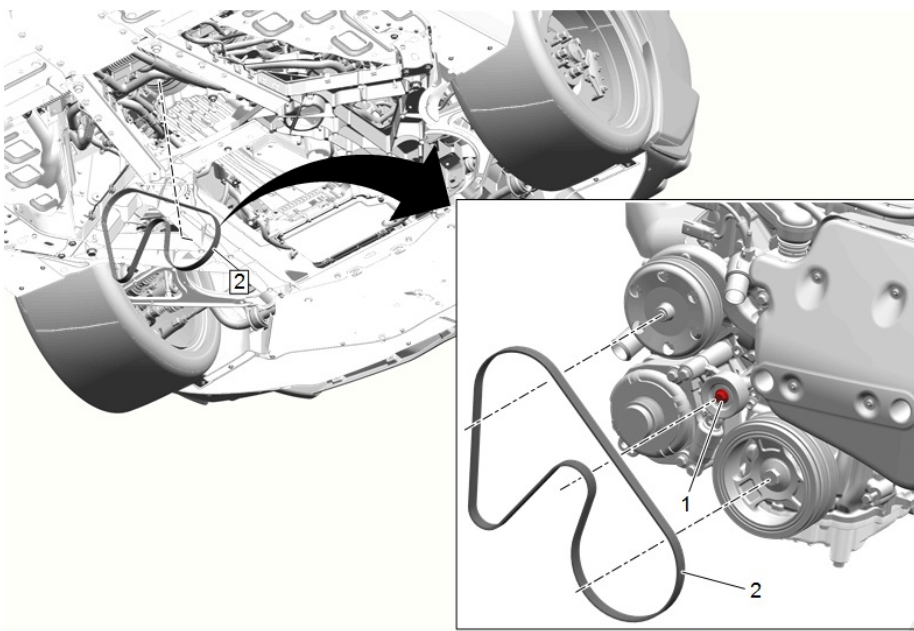
24. Fuel Feed Front Pipe Shield (1>) >> Install - Fuel Feed Front Pipe Shield Replacement



25.
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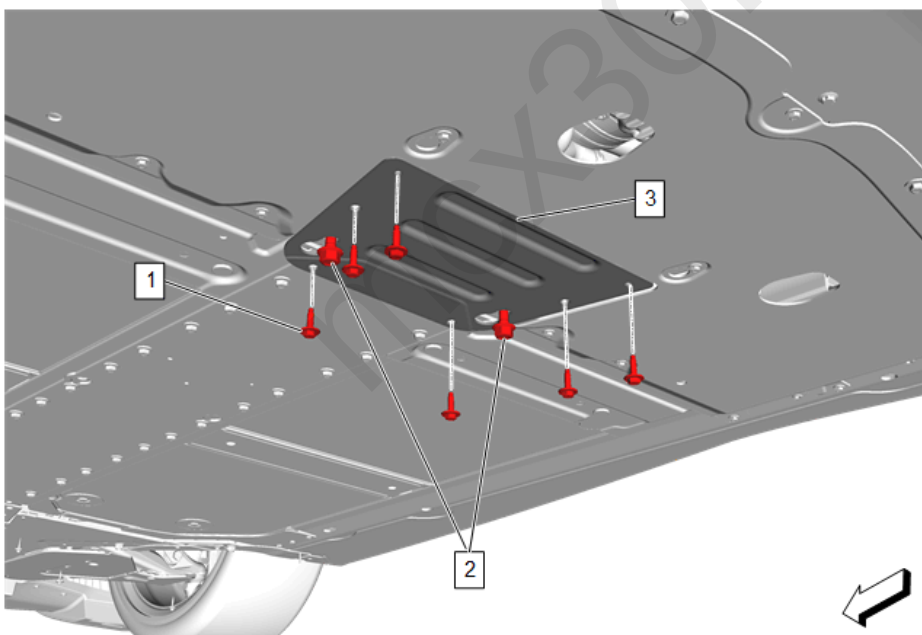
26. Starter Bolt (2>) >> Remove [2x]

27. EN-52751 Flywheel Holding Tool(1>) >> Remove



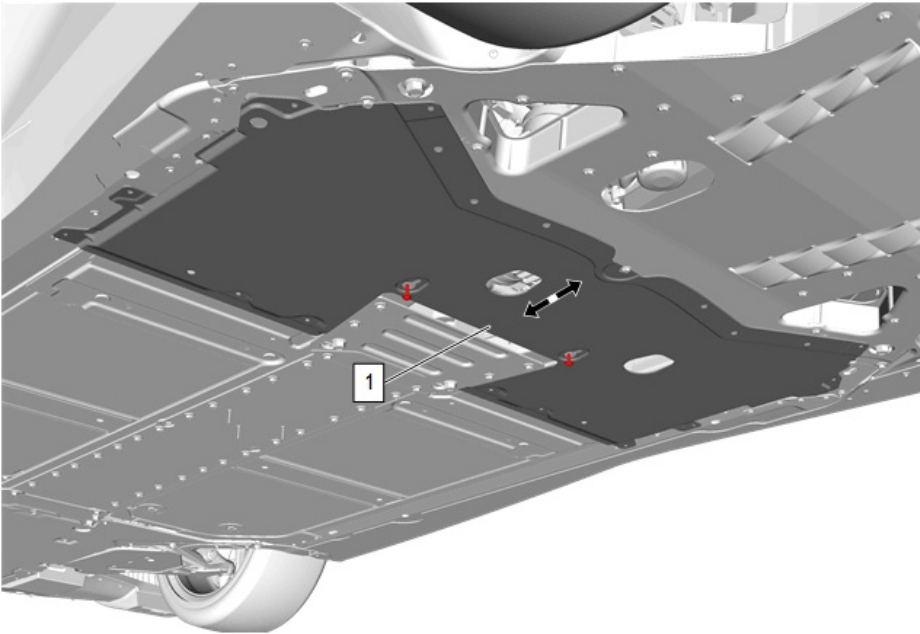
28.
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29. Water Pump and Generator Belt (2>) >> Install - Water Pump and Generator Belt Replacement



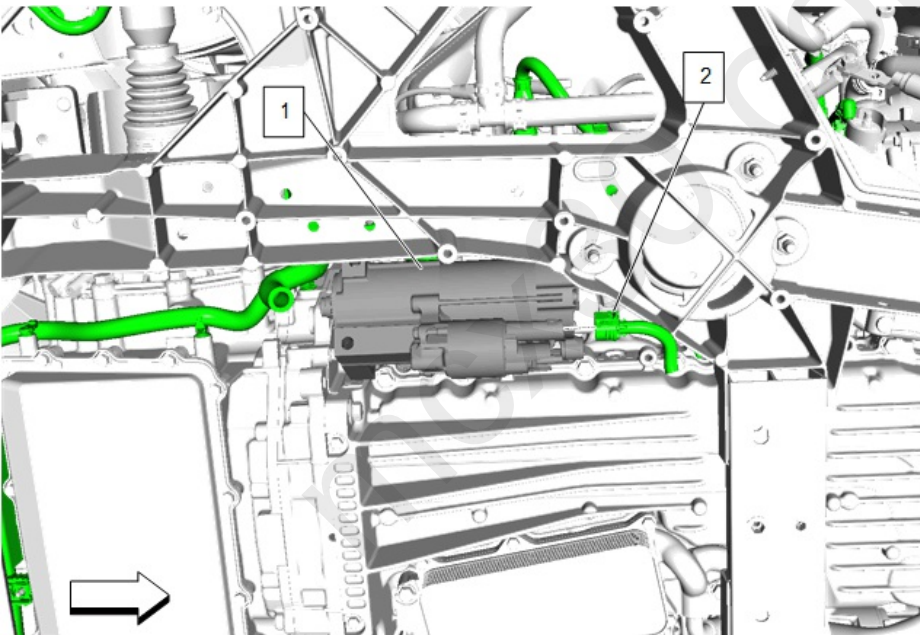
30.
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31. Floor Panel Tunnel Panel Reinforcement (3>) >> Install - Floor Panel Tunnel Panel Reinforcement Replacement



32.
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33. Underbody Rear Air Deflector (1>) >> Install - Underbody Rear Air Deflector Replacement



34.
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35. Starter (1>) >> Install - Starter Replacement