

Tool Instruction Front Crankshaft Seal Remover

4328877R1

Tool Number: 12-174-04



0000478542

Figure 1. Front Crankshaft Seal Remover

Purpose

Essential tool used to remove the crankshaft seal at the front of the engine.

Application(s)

2024 International[®] S13 Integrated Powertrain, 2024 International[®] S13 Engine, Other Applications May Apply

Application(s) (cont.)



GOVERNMENT REGULATION: Engine fluids (oil, fuel, and coolant) may be a hazard to human health and the environment. Handle all fluids and other contaminated materials (such as filters or rags) in accordance with applicable regulations. Recycle or dispose of engine fluids, filters, and other contaminated materials according to applicable regulations.



WARNING: To prevent personal injury and / or death, or damage to property, read all safety instructions in the “Safety Information” section of the *Engine Service Manual* or *Engine Diagnostic Manual*.



WARNING: To prevent personal injury and / or death, or damage to property, park vehicle on hard flat surface, turn the engine off, set the parking brake, and install wheel chocks to prevent the vehicle from moving in either direction.





WARNING: To prevent personal injury and / or death, always wear safe eye protection when performing vehicle maintenance.



WARNING: To prevent personal injury and / or death, or damage to property, inspect tool for wear / damage prior to use. Replace any worn or damaged components as necessary.

Tool Contents

Table 1

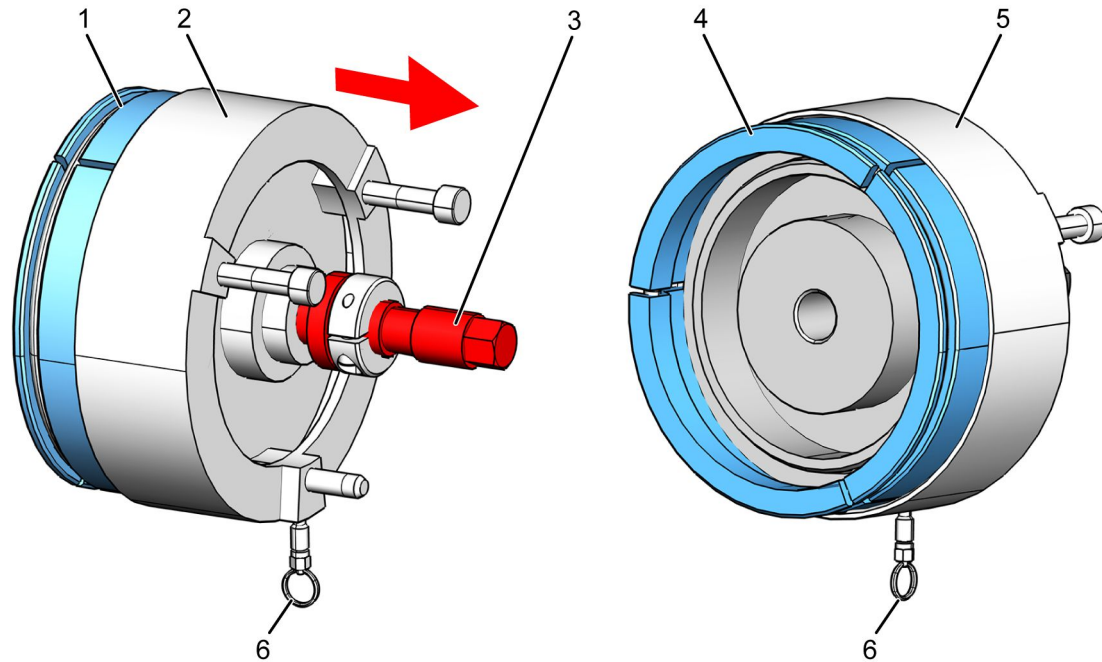
Image	Tool Number	Qty	Description
 <p>0000478543</p>	12-174-04	1	Front Crankshaft Seal Remover
 <p>0000160075</p>	4328877R1	1	Tool Instruction

Instructions

IMPORTANT: Please reference International® Service PortalSM regarding any possible revisions to this document.

1. Refer to appropriate Service Manual for detailed instructions.

Tool Installation:



0000478440

Figure 2. Initial Tool Setup

1. Segmented jaws
2. Collar (lower position)
3. 16mm nut
4. Segmented jaws
5. Collar (upper position)
6. Detent ring

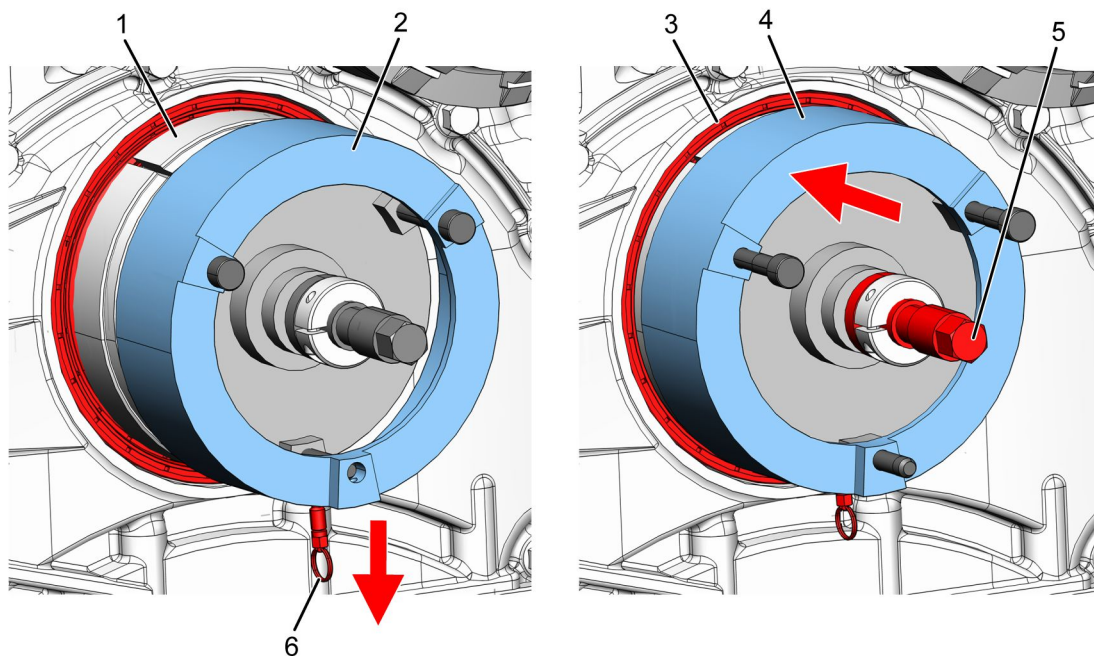
NOTE: Ensure tool is clean and lubricated. Before using tool to remove seal, ensure that the tool is set properly.

1. Ensure tool is in its most collapsed state and rotate 16mm nut (Figure 2, Item 3) clockwise to collapse tool.
2. Raise collar (Figure 2, Item 2) of tool, and leave in locked upper position (Figure 2, Item 5).
3. Ensure gaps between three segmented jaws (Figure 2, Item 4) are similar in spacing.

Instructions (cont.)

Figure 3. Front Crankshaft Seal Remover

1. Crankshaft front cover
 2. Seal
 3. Crankshaft
 4. Segmented jaws
 5. Collar (upper position)
 6. Detent ring
4. Place tool over the metal portion of the crankshaft seal (Figure 3, Item 2) and apply force until Segmented jaws (Figure 3, Item 4) are over crankshaft seal lip.



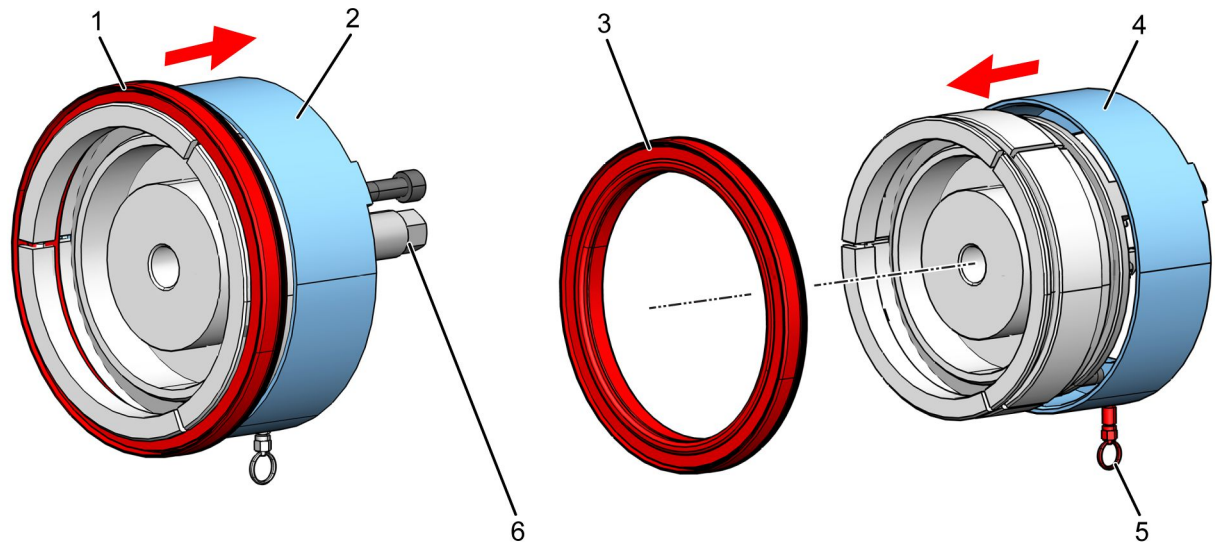
0000478441

Figure 4. Seal Removal

1. Segmented jaws
 2. Collar (upper position)
 3. Seal
 4. Collar (lower position)
 5. 16mm nut
 6. Detent ring
5. Pull on the detent ring (Figure 4, Item 6) to release collar from upper position (Figure 4, Item 2) and position collar to lower position (Figure 4, Item 4) on segmented jaws (Figure 4, Item 1) until fully seated.
6. With segmented jaws (Figure 4, Item 1) over the seal lip, begin rotating the 16mm nut (Figure 4, Item 5) counter-clockwise to draw out crankshaft seal (Figure 4, Item 3).

Instructions (cont.)

Tool Removal:



0000478442

Figure 5. Seal Disposal

1. Seal
2. Collar (lower position)
3. Seal
4. Collar (upper position)
5. Detent ring
6. 16mm nut

1. With seal (Figure 5, Item 1) on tool, raise collar (Figure 5, Item 2) of tool to release jaw tension.
2. Remove seal (Figure 5, Item 3) from tool and discard.
3. Pull on the spring loaded detent ring (Figure 5, Item 5) to release the collar (Figure 5, Item 4) to the lower position.
4. Holding the center portion of tool, rotate 16mm nut (Figure 5, Item 6) clockwise to bring tool back to its collapsed state.

Care and Maintenance

- Keep tools clean and free of contaminants.
- Replace any damaged components.

Contact Information

If you would like to order additional tools or need replacement parts, please refer to the Navistar Service Tool Catalog. If you have questions, concerns, or feedback, please contact Navistar Service Tool Support Center:

- Submit a Service Tool iKNow Case File.

Contact Information (cont.)

- Phone: 800-365-0088 (toll free).