# **Tool Instruction**

# Front Crankshaft Seal Installer

4328876R2

Tool Number: 12-174-03



Figure 1. Front Crankshaft Seal Installer

0000478497

# **Purpose**

Essential tool used to install the front crankshaft seal.

# Application(s)

2024 International® S13 Integrated Powertrain and 2024 International® S13 Engine. Other applications may apply.

#### **Tool Contents**

Image	Tool Number	Qty	Description
0000478498	12-174-03	1	Front Crankshaft Seal Installer
NAVISTAR 0000160075	4328876R2	1	Tool Instruction

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.

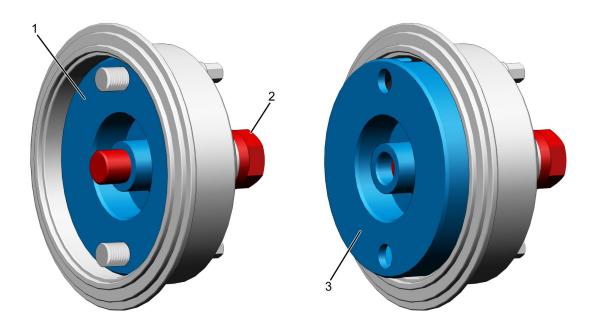
WARNING: To prevent personal injury and / or death, or damage to property, inspect tool for wear / damage prior to use. Replace any worn or damaged components as necessary.

## **Instructions**

IMPORTANT: Please reference International® Service Portal<sup>™</sup> regarding any possible revisions to this document.

Refer to appropriate Service Manual for detailed instructions.

#### **Tool Installation:**



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Figure 2. Front Crankshaft Seal Installer

- 1. Plate collapsed
- 2. Center bolt
- 3. Plate expanded
- 1. Ensure tool is clean and threads are lubricated.
- 2. When tool is expanded beyond 1/4 inch (0.64 cm) of thread exposure, it may be difficult to collapse.
- 3. Turn center bolt (Figure 2, Item 2) clockwise to expand plate (Figure 2, Item 3).

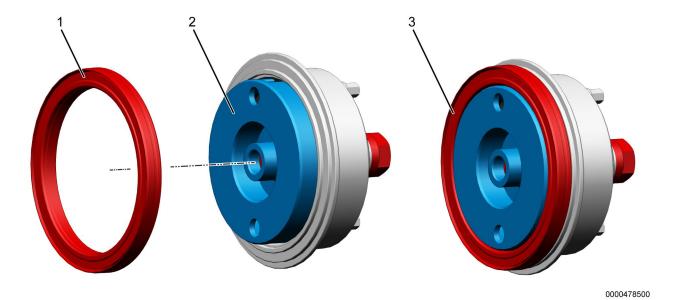
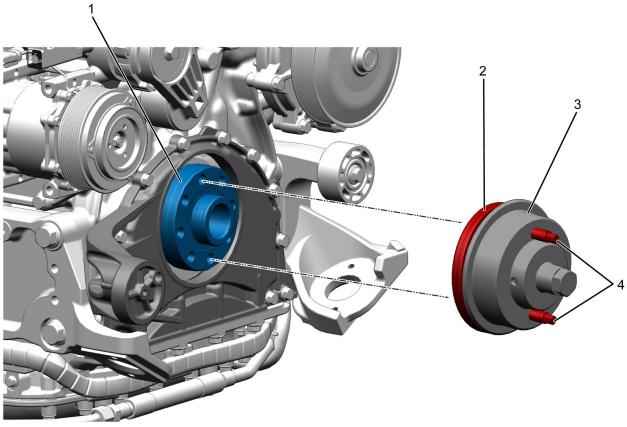


Figure 3. Crankshaft Seal Installation

- 1. Seal
- 2. Plate expanded
- Seal installed on plate

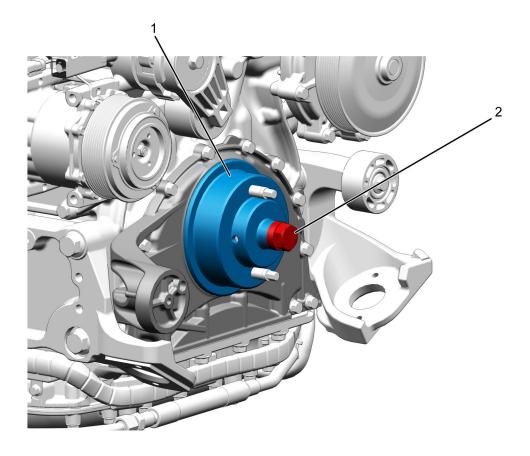
4. Install new seal (Figure 3, Item 1) onto expanded plate (Figure 3, Item 2) as shown in Figure 3.



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Figure 4. Crankshaft Seal Installation

- 1. Crankshaft front flange
- Crankshaft seal installer 3.
- 4. Mounting screw (2)
- 5. Mount crankshaft seal installer (Figure 4, Item 3) on crankshaft front flange (Figure 4, Item 1) and fully install two mounting screws (Figure 4, Item 4) into crankshaft front flange (Figure 4, Item 1).



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Figure 5. Crankshaft Seal Installer

- 1. Crankshaft seal installer
- 2. Center bolt
- 6. Gradually rotate center bolt (Figure 5, Item 2) clockwise to draw seal into front cover. Draw seal until outer diameter of tool is pressed flush against front cover. Do not overtighten.

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