

Tool Instruction Engine Barring Tool

4328761R1

Tool Number: 12-102-02



0000466990

Figure 1. 12-102-02 Engine Barring Tool

Purpose

Tool used to turn, rotate, or bar over the engine.

Application(s)

- 2007 and 2010 MaxxForce® 11 and 13 Engines
- 2013 and 2015 Navistar® N13
- 2017 and 2021 International® A26

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, or damage to property, vehicle batteries must be disconnected before using this tool to avoid the risk of the engine being started or cranked by the starter with the tool installed.






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>0000466989</p>	12-102-02	1	Engine Barring Tool
 <p>0000466994</p>	12-102-02-01	1	Hardware Kit
 <p>0000160075</p>	4328761R1	1	Tool Instruction

Instructions

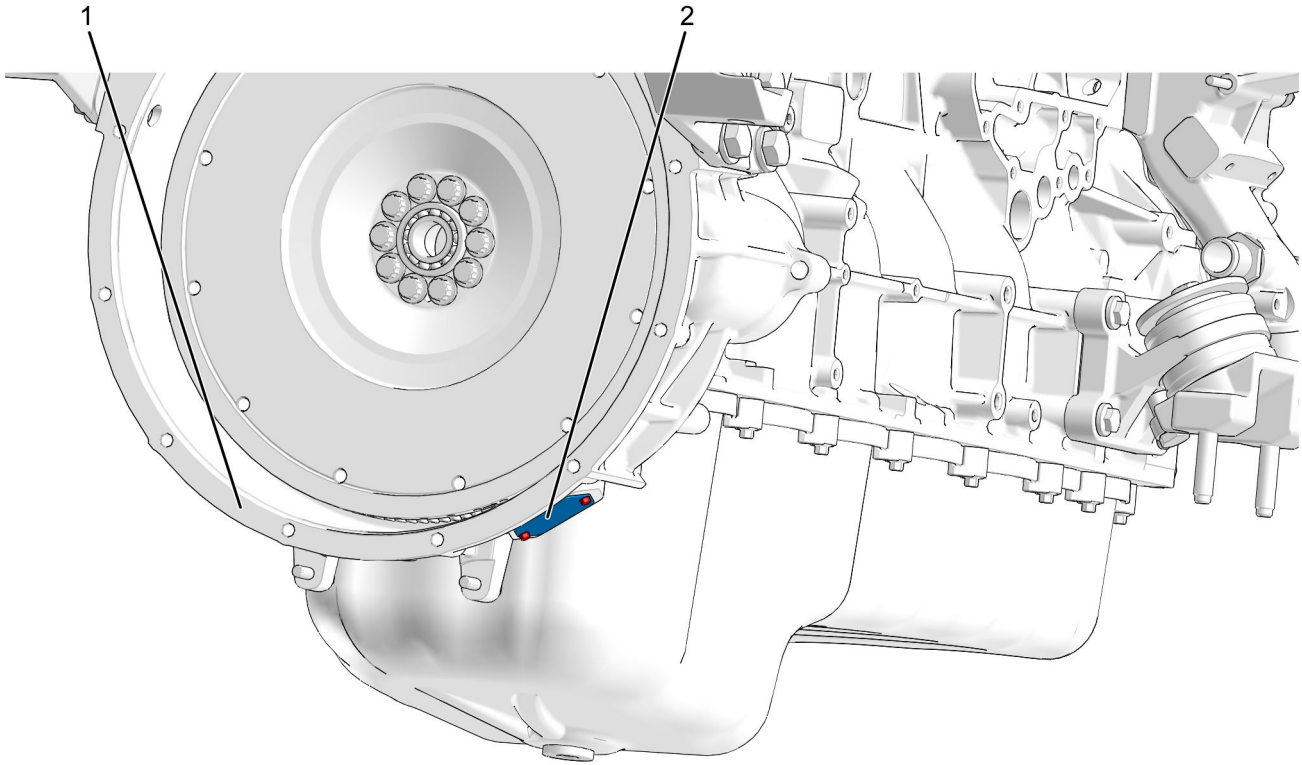
IMPORTANT: Please reference International® Service PortalSM regarding any possible revisions to this document.

NOTE: Graphics shown in this document depict installation on the International® A26 engine. For other applications, refer to the appropriate technician manual / service information.

Installation

1. Park vehicle on level surface.
2. Shift transmission into Park or Neutral and apply parking brake.
3. Turn ignition to Key OFF position.
4. Install wheel chocks.
5. Disconnect and isolate negative battery cable on main vehicle batteries.

Instructions (cont.)

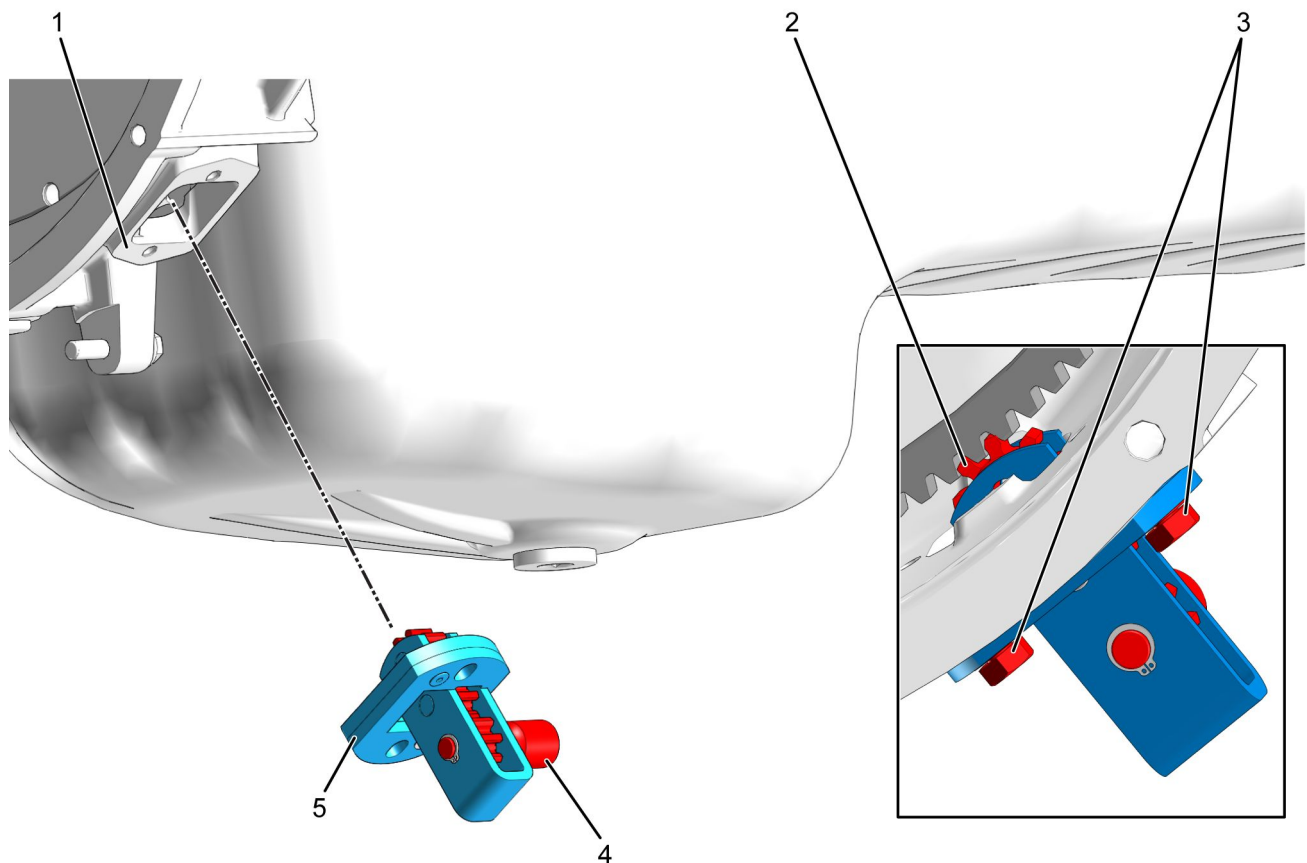


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Figure 2. Timing Window Cover Location

1. Flywheel housing
 2. Timing window cover
6. Access and clean timing window cover (Figure 2, Item 2) located on lower side of flywheel housing (Figure 2, Item 1). Refer to appropriate technician manual / service information for detailed instruction.
- NOTE: Save bolts for installation.**
7. Remove two bolts securing timing window cover (Figure 2, Item 2) and place on clean workbench.
 8. Carefully remove timing window cover (Figure 2, Item 2) and place on clean workbench.

Instructions (cont.)



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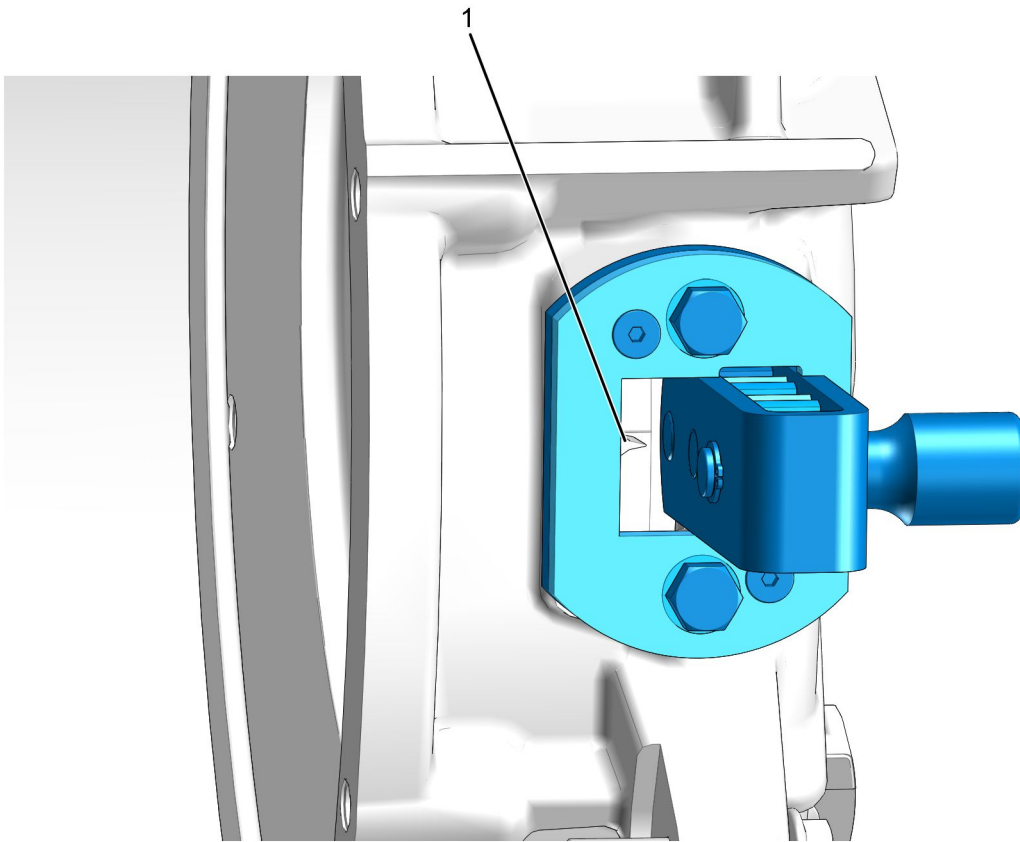
Figure 3. Engine Barring Tool

1. Timing window opening
2. Flywheel to tool contact view
3. Washer and bolt assembly (2)
4. 1/2-inch square drive
5. Engine barring tool

NOTE: Ensure teeth of barring tool mesh with teeth of flywheel and both mounting holes align with timing window mounting holes on flywheel housing.

9. Position tool (Figure 3, Item 5) into timing window opening (Figure 3, Item 1) with 1/2-inch square drive (Figure 3, Item 4) facing front of engine. Ensure teeth of barring tool mesh / align with teeth on flywheel (Figure 3, Item 2).
10. Using kit-supplied washers and bolts (Figure 3, Item 3) loosely install tool (Figure 3, Item 5) to flywheel housing.

Instructions (cont.)



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Figure 4. Flywheel Timing Mark

1. Timing mark

NOTE: Adjust tool if necessary.

11. Verify timing mark (Figure 4, Item 1) on flywheel is visible through engine barring tool window.
12. Tighten two bolts with washers to secure tool to flywheel housing.
13. Insert a 1/2-inch drive ratchet or breaker bar into square drive of tool. Turn until desired position is achieved. Refer to appropriate technician manual / service information for detailed instruction.

Removal

14. Remove 1/2-inch drive ratchet or breaker bar from tool.
15. Remove two bolts with washers securing tool to flywheel housing.
16. Remove tool from timing window in flywheel housing.
17. Using previously removed bolts, install timing window cover in flywheel housing. Refer to appropriate technician manual / service information for detailed instruction.

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).