

Tool Instruction I-6 Engine Lifting Bracket

4328281R1

Tool Number: 12-000-02



Figure 1. Engine Lift Bar 12-000-02.

Purpose

The Engine Lift Bar 12-000-02 is designed to be used to aid in the removal or lifting of the engine, or the engine and transmission as a single unit, and can provide adjustability to the angle of the engine.

Application(s)

WorkStar®

DuraStar[®]

AC, BE, CE, FE, HC, RE Bus

Equipped with the following engines:

MaxxForce® DT466, DT570 and HT570 (EPA 04)

MaxxForce® DT, 9, and 10 (EPA 07)

MaxxForce® DT, 9, and 10 (EPA 10)

Navistar® N9

Navistar[®] N10

Read all safety instructions in the "Safety Information" section of the appropriate Engine Service or Diagnostic Manual. Follow all warnings, cautions, and notes.

1

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 property damage, personal injury, and / or death, read all safety instructions in the "Safety Information" section of the *Engine Service Manual* or *Engine Diagnostic Manual*.

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

Tool Contents

Table 1 Tool Information

Image	Tool Number	Qty	Description
0000356861	12-000-02	1	Lift Bar
0000356881	12-000-02-01	2	Shoulder Nut
0000160075	4328281R1	1	Instruction Sheet

Instructions

TOOL INSTALLATION

- 1. Bring vehicle into shop and park on flat surface.
- 2. Shift transmission to Park or Neutral and set parking brake.
- 3. Install wheel chocks.
- 4. Remove hood. If necessary, remove front bumper.
- 5. Prepare engine and / or engine with transmission for removal. Refer to appropriate service manual, service bulletin, or equivalent for detailed instruction.

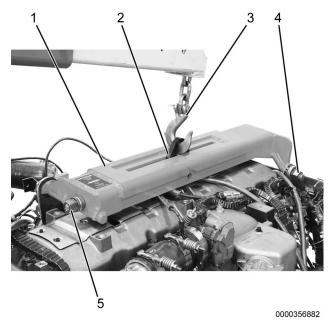


Figure 2. Lift Bar Assembly.

- 1. 12-000-02 Lift Bar
- 2. Lift hook
- 3. Lifting chain assembly
- 4. 12-000-02-10 Shoulder Nut (2) (one not shown)
- 5. Angle adjustment nut (2) (one not shown)
- 6. Position engine lift bar (Figure 2, Item 1) on engine and secure to front and rear engine lifting eyelets using shoulder nuts (Figure 2, Item 4). Using torque wrench, tighten shoulder nuts to 20 lb-ft (27 N•m).
- 7. Connect lifting chain assembly (Figure 2, Item 3) to lift hook (Figure 2, Item 2) located on engine lift bar.

NOTE: The lift bar is adjustable to change the angle of the engine or engine / transmission assembly.

- 8. If necessary, adjust lift angle using angle adjustment nuts (Figure 2, Item 5).
- 9. Using suitable engine hoist, lift engine out of vehicle and place on engine stand.

TOOL REMOVAL

1. Using suitable engine hoist, position engine into vehicle.

Instructions (cont.)

2. Prepare engine and / or engine with transmission for installation. Refer to appropriate service manual, service bulletin, or equivalent for detailed instruction.

WARNING: To prevent property / engine / vehicle damage, personal injury and / or death, make sure engine is properly secured prior to removing the lift chain.

- 3. Remove lifting chain assembly from engine lift bar.
- 4. Remove engine lift bar from engine.
- 5. Install hood. If necessary, install front bumper.
- 6. Remove wheel chocks.

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).