

Tool Instruction CYLINDER HEAD MOUNTING PLATES

4328407R2

Tool Number: 12-342-04



0000402005

Figure 1. 12-342-04 Cylinder Head Mounting Plates

Purpose

Essential tool utilized to mount cylinder head to an engine stand.

Application(s)

MaxxForce® 11 (EPA 10)

MaxxForce® 13 (EPA 10)

N13 (EPA 10)

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



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, 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 and / or death, always wear safe eye protection when performing vehicle maintenance.



WARNING: To prevent property damage, personal injury, or death, use a hoist rated for the weight of the cylinder head and follow the manufacturer's operative and safety instructions. Attach safety lifting hooks to the cylinder head lifting bracket and lifting eye.



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







WARNING: To prevent equipment damage, personal injury, and / or death, ENSURE cylinder head is properly secured to engine stand prior to removing hoist.



CAUTION: To prevent equipment damage, NEVER use power / impact tools to adjust lifting bracket.

Tool Contents

Table 1

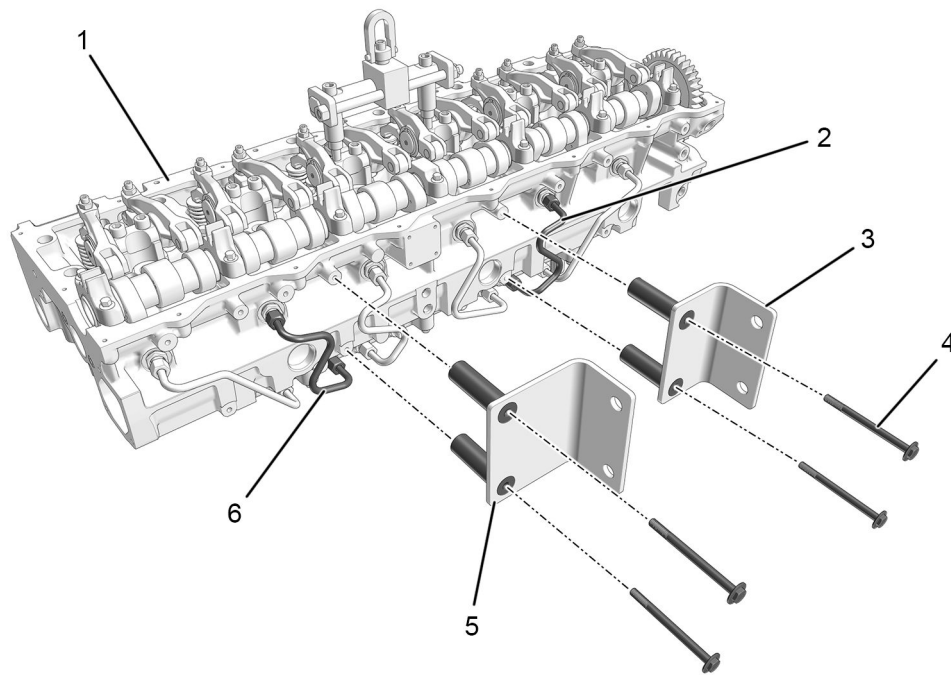
Image	Tool Number	Qty	Description
 <p>0000402006</p>	12-342-04-01	1	Cylinder Head Mounting Bracket (Small)
 <p>0000402065</p>	12-342-04-02	1	Cylinder Head Mounting Bracket (Large)
 <p>0000402082</p>	12-342-04-03	4	Bolt Kit
 <p>0000160075</p>	4328407R1	1	Tool Instruction

Instructions

INSTALLATION

1. Park vehicle on a flat surface.
2. Shift transmission to Park or Neutral and set parking brakes.
3. Install wheel chocks.
4. Unlatch and open hood.

Instructions (cont.)



0000402010

Figure 2. 12-342-04 Cylinder Head Mounting Plates

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|--|--|--|
| 1. Cylinder head | 3. 12-342-04-01 Cylinder Head Mounting Bracket | 5. 12-342-04-02 Cylinder Head Mounting Bracket |
| 2. Cylinder 5 high-pressure rail to injector tube assembly | 4. Mounting bolt (4) | 6. Cylinder 2 high-pressure rail to injector tube assembly |

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

NOTE: Do not remove cylinder head mounting bolts until instructed.

5. Access cylinder head (Figure 2, Item 1) and install 12-342-03 Cylinder Head Lifting Bracket (not included in this kit). Refer to appropriate service manual, service bulletin, or equivalent for detailed instruction.
6. Install mounting brackets:
 - A. Position 12-342-04-01 Cylinder Head Mounting Bracket (Figure 2, Item 3) onto cylinder head bosses located between cylinder 5 high-pressure rail to injector tube assembly (Figure 2, Item 2) and cylinder 4 high-pressure rail to injector tube assembly. Loosely install two mounting bolts (Figure 2, Item 4).

Instructions (cont.)

- B. Position 12-342-04-02 Cylinder Head Mounting Bracket (Figure 2, Item 5) onto cylinder head bosses located between cylinder 2 high-pressure rail to injector tube assembly (Figure 2, Item 6) and cylinder 3 high-pressure rail to injector tube assembly. Loosely install two mounting bolts (Figure 2, Item 4).
 - C. Using torque wrench, tighten bracket mounting bolts to 18 lb-ft (25 N•m).
7. Remove cylinder head bolts. Refer to appropriate service manual, service bulletin, or equivalent for detailed instruction.

! WARNING: To prevent property damage, personal injury, or death, use a hoist rated for the weight of the cylinder head and follow the manufacturer's operative and safety instructions. Attach safety lifting hooks to the cylinder head lifting bracket and lifting eye.

! CAUTION: To prevent equipment damage, NEVER use power / impact tools to adjust lifting bracket.

NOTE: The 12-342-03 Cylinder Head Lifting Bracket is equipped with an adjustment feature to level the cylinder head when lifting.

8. Using an appropriate hoist, lift cylinder head. Refer to appropriate service manual, service bulletin, or equivalent for detailed instruction.
9. Transfer to appropriate engine stand.

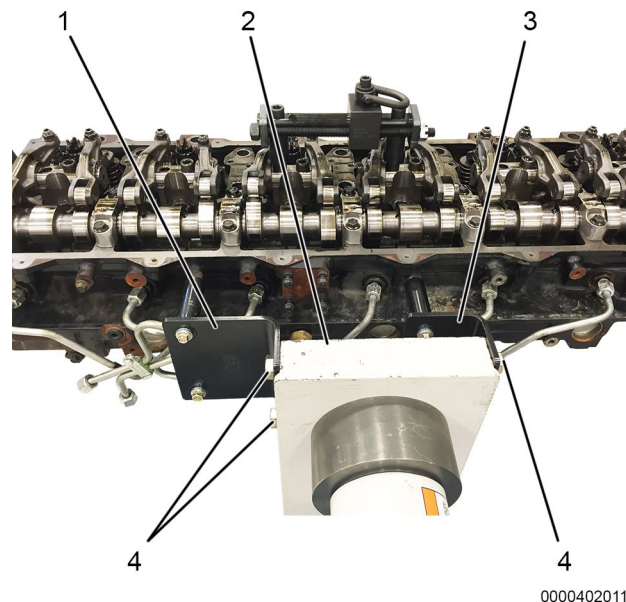


Figure 3. 12-342-04-01 and 12-342-04-02 Cylinder Head Mounting Brackets


- | | |
|--|--|
| 1. 12-342-04-02 Cylinder Head Mounting Bracket | 3. 12-342-04-01 Cylinder Head Mounting Bracket |
| 2. Engine stand | 4. Bolt (4) (1 not shown) |

10. Align cylinder head mounting bracket (Figure 3, Item 1) to engine stand (Figure 3, Item 2). Loosely install two mounting bolts (Figure 3, Item 4).

Instructions (cont.)

11. Align cylinder head mounting bracket (Figure 3, Item 3) to engine stand. Loosely install two mounting bolts (Figure 3, Item 4).
12. Using torque wrench, tighten mounting bolts (Figure 3, Item 4) to 75 lb-ft (102 N•m).

Instructions (cont.)

 **WARNING: To prevent equipment damage, personal injury, and / or death, ENSURE cylinder head is properly secured to engine stand prior to removing hoist.**

13. Lower and disconnect hoist from 12-342-03 Cylinder Head Lifting Bracket. If necessary, remove lifting bracket.

REMOVAL

1. If necessary, install 12-342-03 Cylinder Head Lifting Bracket and connect to appropriate engine hoist. Lift engine hoist enough to remove any slack in chain / hook assembly. Refer to appropriate service manual, service bulletin, or equivalent for detailed instruction.
2. Remove mounting bolts (Figure 3, Item 4) from engine stand.
3. Transfer cylinder head to appropriate engine.
4. Remove 12-342-03 Cylinder Head Lifting Bracket. Refer to appropriate service manual, service bulletin, or equivalent for detailed instruction.
5. Install cylinder head (Figure 2, Item 1). Refer to appropriate service manual, service bulletin, or equivalent for detailed instruction.
6. Remove cylinder head mounting brackets (Figure 2, Items 3 and 5).
7. When service is complete, close and latch hood.
8. 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).