

2012 - Mazda6 - Engine

OIL PUMP REMOVAL/ INSTALLATION [MZR 2.5]

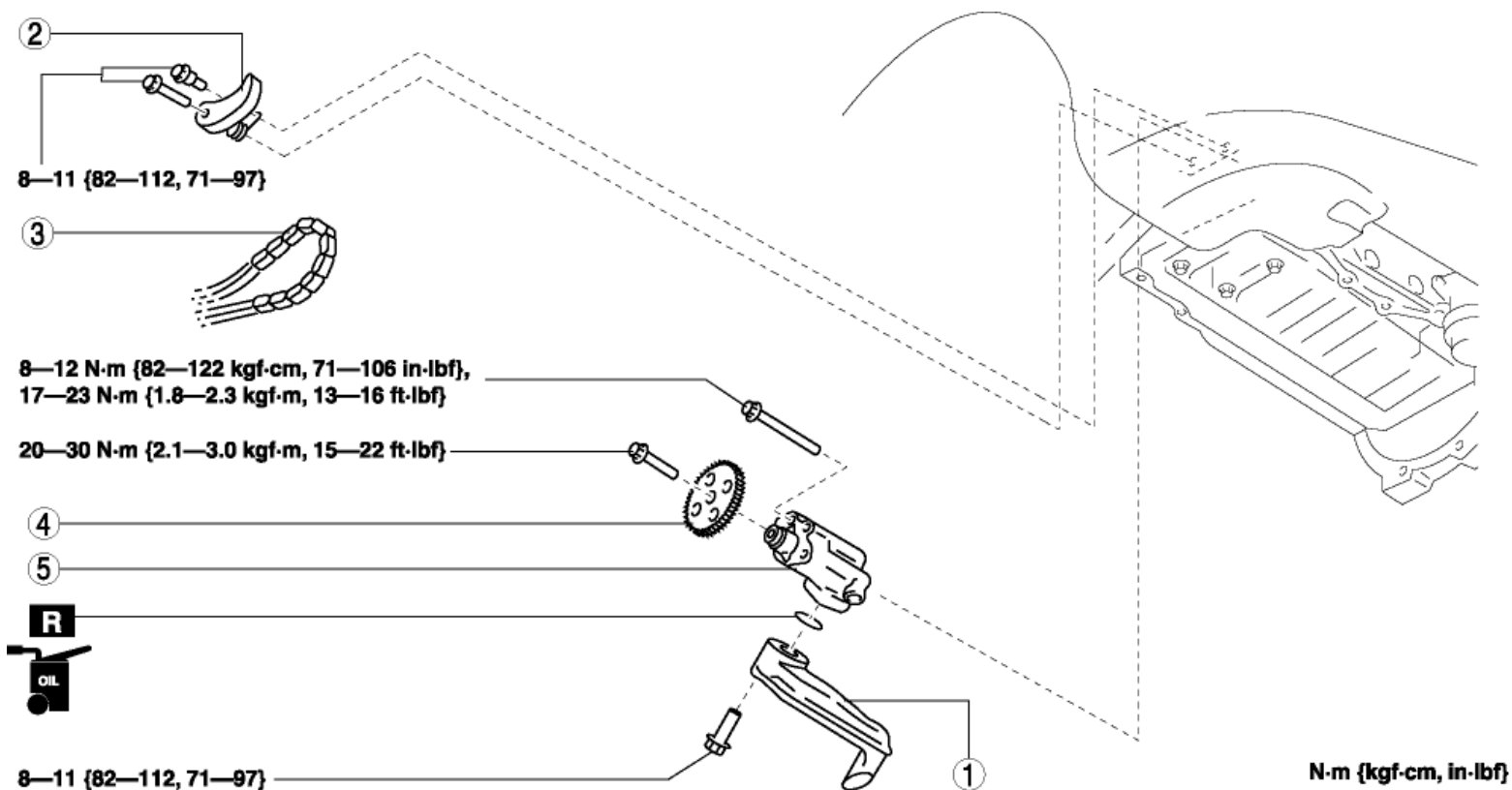
WARNING:

- Hot engines and engine oil can cause severe burns. Turn off the engine and wait until it and the engine oil have cooled.
- A vehicle that is lifted but not securely supported on safety stands is dangerous. It can slip or fall, causing death or serious injury. Never work around or under a lifted vehicle if it is not securely supported on safety stands.
- Continuous exposure to USED engine oil has caused skin cancer in laboratory mice. Protect your skin by washing with soap and water immediately after working with engine oil.

1. Disconnect the negative battery cable.
2. Remove the plug hole plate. (See [PLUG HOLE PLATE REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
3. Remove the ignition coils. (See [IGNITION COIL REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
4. Drain the engine oil. (See [ENGINE OIL REPLACEMENT \[MZR 2.5\]](#).)
5. Remove the ventilation hose. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
6. Disconnect the camshaft position (CMP) sensor connector.
7. Disconnect the oil control valve (OCV) connector.
8. Remove the front wheel and tire (RH). (See [GENERAL PROCEDURES \(SUSPENSION\)](#).)
9. Set the front mudguard (RH) out of the way. (See [FRONT MUDGUARD REMOVAL/ INSTALLATION](#).)
10. Remove the splash shield (RH).
11. Remove the aerodynamic under cover No.2. (See [AERODYNAMIC UNDER COVER NO.2 REMOVAL/ INSTALLATION](#).)
12. Loosen the water pump pulley bolts and remove the drive belt. (See [DRIVE BELT REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
13. Remove the crankshaft position (CKP) sensor. (See [CRANKSHAFT POSITION \(CKP\) SENSOR REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
14. Disconnect the drive shaft (RH) from joint shaft, set the drive shaft (RH) out of the way. (ATX) (See [DRIVE SHAFT REMOVAL/ INSTALLATION](#).)
15. Remove the coolant reserve tank. (See [COOLANT RESERVE TANK REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
16. Remove the P/S oil pump with the hoses and pipes still connected. (See [POWER STEERING OIL PUMP REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)

NOTE:

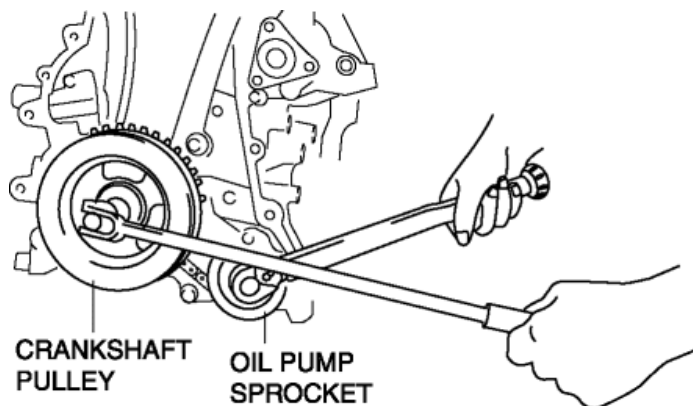
- Position and secure the P/S oil pump out of the way with a rope or wire.
17. Remove the engine front cover. (See [TIMING CHAIN REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
 18. Remove the oil pan. (See [OIL PAN REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
 19. Remove in the order indicated in the table.
 20. Install in the reverse order of removal.
 21. Refill with the specified type and amount of the engine oil. (See [ENGINE OIL REPLACEMENT \[MZR 2.5\]](#).)
 22. Start the engine and confirm that there is no oil leakage.
 - If there is oil leakage, repair or replace the applicable part.
 23. Inspect the oil level. (See [ENGINE OIL LEVEL INSPECTION \[MZR 2.5\]](#).)
 24. Inspect for the ignition timing and idle speed. (See [ENGINE TUNE-UP \[MZR 2.5\]](#).)
 25. Inspect the oil pressure. (See [OIL PRESSURE INSPECTION \[MZR 2.5\]](#).)



1	Oil strainer
2	Oil pump chain tensioner
3	Oil pump chain
4	Oil pump sprocket (See Oil Pump Sprocket Removal/ Installation Note.)
5	Oil pump (See Oil Pump Installation Note.)

Oil Pump Sprocket Removal/ Installation Note

1. Temporarily install the crankshaft pulley and crankshaft pulley lock bolt to the crankshaft, and lock the oil pump against rotation as shown in figure.



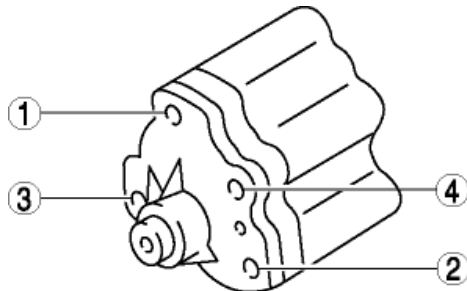
2. Remove/install the oil pump sprocket, and then remove the crankshaft pulley and crankshaft pulley lock bolt.

Tightening torque

- 20—30 N·m {2.1—3.0 kgf·m, 15—22 ft·lbf}

Oil Pump Installation Note

1. Tighten the oil pump bolts in two steps in the order shown in the figure.



Tightening torque

- Step 1: 8—12 N·m {82—122 kgf·cm, 71—106 in·lbf}
- Step 2: 17—23 N·m {1.8—2.3 kgf·m, 13—16 ft·lbf}

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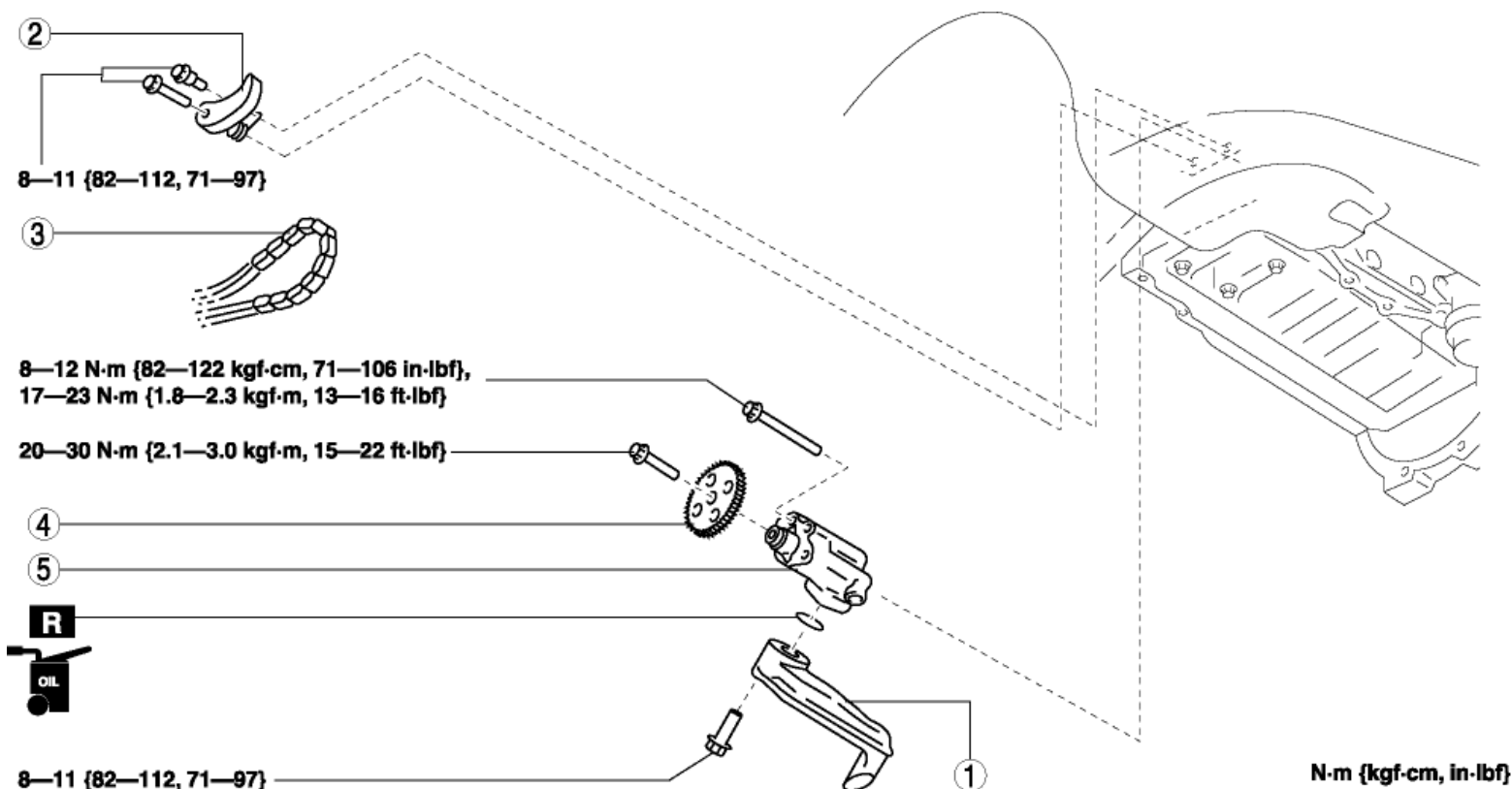
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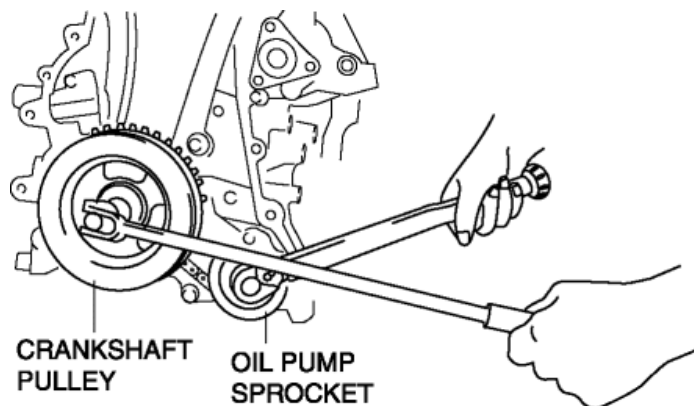
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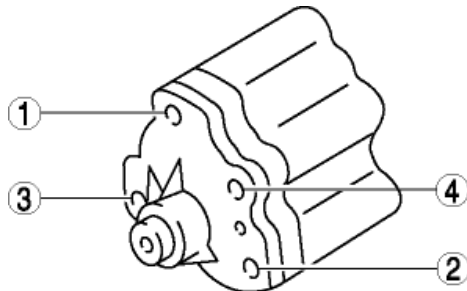
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