

2009 Kia Borrego LX

2009-10 ENGINE Cylinder Block - 4.6L - Borrego + 2010 Canadian

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CYLINDER BLOCK

COMPONENTS AND COMPONENTS LOCATION

Components

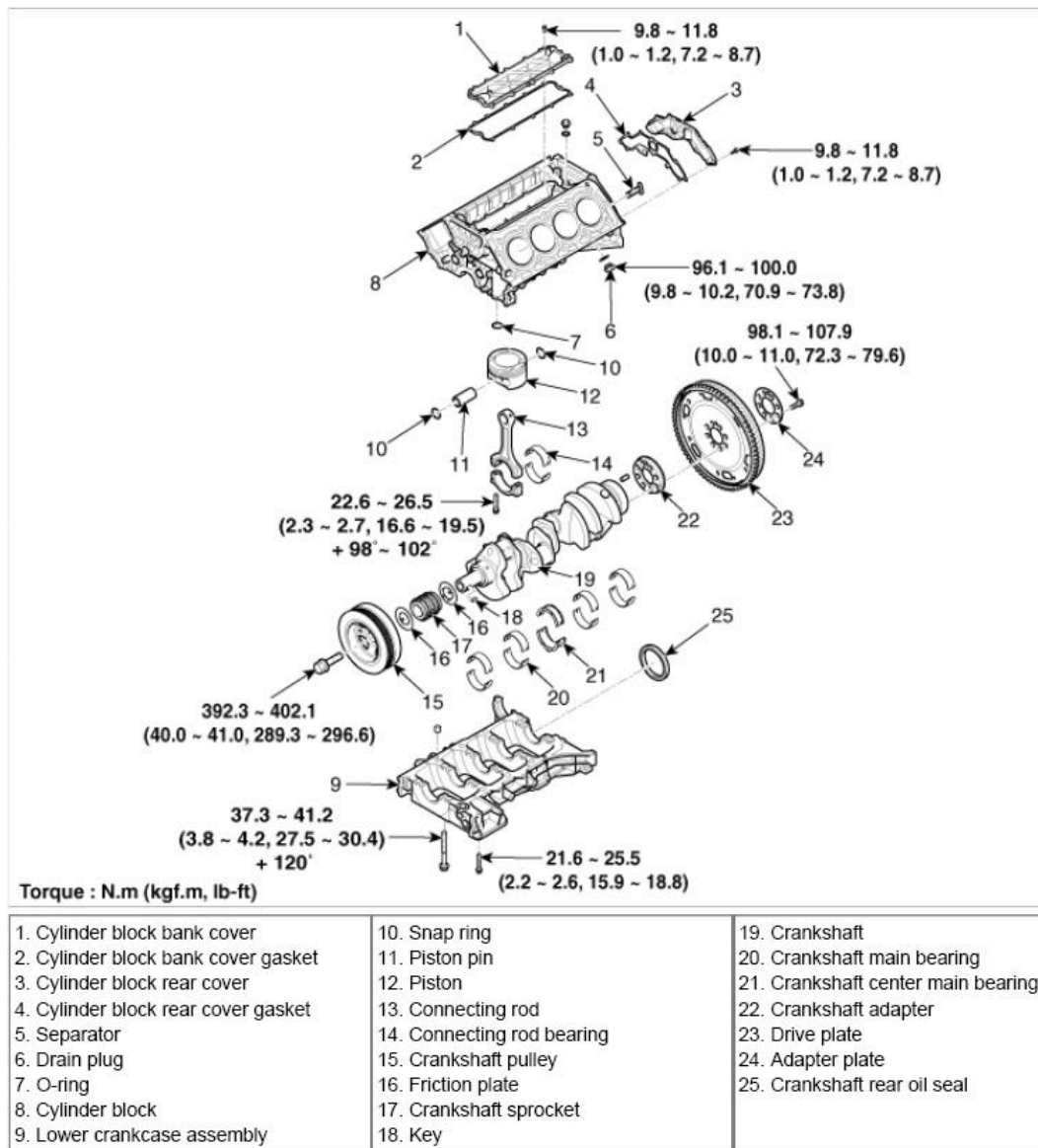


Fig. 1: Identifying Cylinder Block Components And Components Location With Torque Specifications
Courtesy of KIA MOTORS AMERICA, INC.

REPAIR PROCEDURES

DISASSEMBLY

- CAUTION:**
- Use fender covers to avoid damaging painted surfaces.
 - To avoid damage, unplug the wiring connectors carefully while holding the connector portion.

- NOTE:**
- Mark all wiring and hoses to avoid misconnection.
 - Inspect the timing chain before removing the cylinder head.
 - Turn the crankshaft pulley so that the No. 1 piston is at top dead center.
 - Engine removal is required for this procedure.

1. Remove the engine assembly from the vehicle. (Refer to ENGINE AND TRANSAXLE ASSEMBLY).
2. Install the engine to engine stand for disassembly.
3. Remove the intake manifold and exhaust manifold. (Refer to INTAKE AND EXHAUST SYSTEM - 4.6L).
4. Remove the cylinder head. (Refer to CYLINDER HEAD ASSEMBLY - 4.6L).
5. Remove the timing chain. (Refer to TIMING SYSTEM - 4.6L).
6. Remove the water temperature control assembly. (Refer to COOLING SYSTEM - 4.6L).
7. Remove the oil pump. (Refer to LUBRICATION SYSTEM - 4.6L).
8. Remove the adapter plate (A) and the drive plate (B).

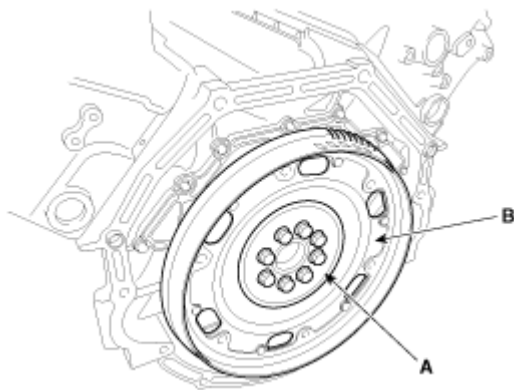


Fig. 2: Locating Adapter Plate And Drive Plate
Courtesy of KIA MOTORS AMERICA, INC.

9. Remove the crankshaft adapter (A).

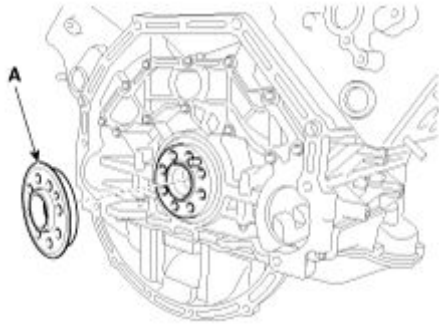


Fig. 3: Locating Crankshaft Adapter
Courtesy of KIA MOTORS AMERICA, INC.

10. Remove the cylinder block rear cover (A).

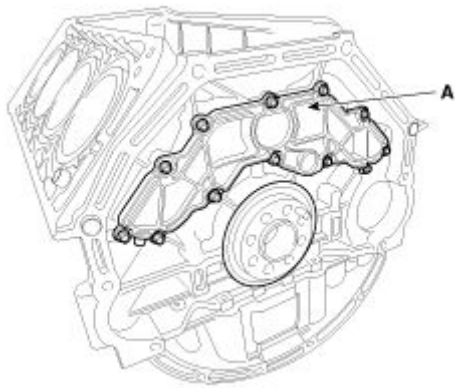


Fig. 4: Locating Cylinder Block Rear Cover
Courtesy of KIA MOTORS AMERICA, INC.

11. Remove the separator (A).

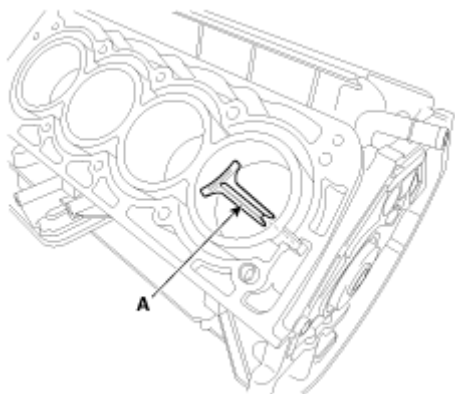
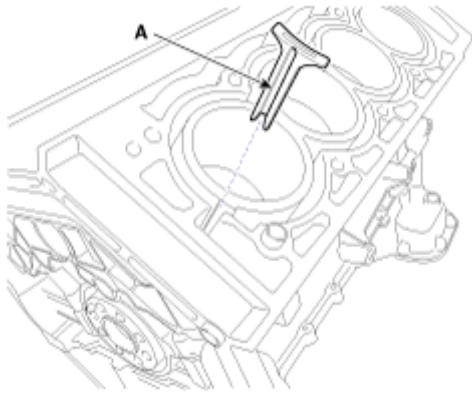
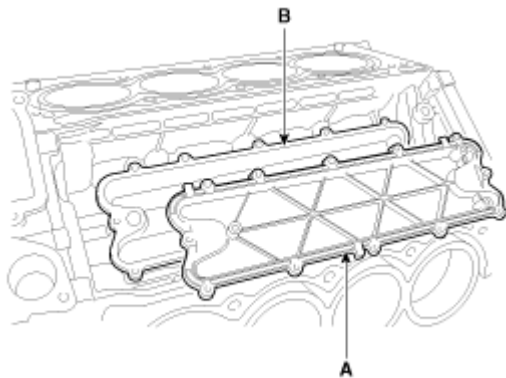


Fig. 5: Locating Separator (1 Of 2)
Courtesy of KIA MOTORS AMERICA, INC.

**Fig. 6: Locating Separator (2 Of 2)**

Courtesy of KIA MOTORS AMERICA, INC.

12. Remove the cylinder block bank cover (A) and the gasket (B).

**Fig. 7: Locating Cylinder Block Bank Cover And Gasket**

Courtesy of KIA MOTORS AMERICA, INC.

13. Check the connecting rod end play.
14. Check the connecting rod cap oil clearance.
15. Remove the piston and connecting rod assemblies.
 1. Using a ridge reamer, remove all the carbon from the top of the cylinder.
 2. Remove the connecting rod cap (A).