



TT00030

Thicker Head Gasket Option for 2007-2014 Mini Cooper 1.6L N12 Engines

S. B. International, Inc., offers the following information regarding an additional thickness head gasket for 2007-2014 Mini Cooper 1.6L N12 engines. This information should be considered any time the cylinder head is removed from above subject engines.

Before removing the cylinder head, loosen and re-torque each head bolt to ensure thread strength and integrity. There have been many instances of stripped head bolt hole threads in these aluminum cylinder blocks. Determining a complete repair during teardown is well advised rather than finding out during assembly procedures.

Before any surfacing operations are performed, a coolant pressure test is advised to detect coolant leaks from possible cracks or porosity conditions. Use the following data after sealing off all coolant holes.

1. Compressed air supply at regulator valve must not exceed 43.5 psi (3 bar).
2. Heat cylinder head to 140°F (60°C).
3. Submerge head in water bath and observe for bubble formation.

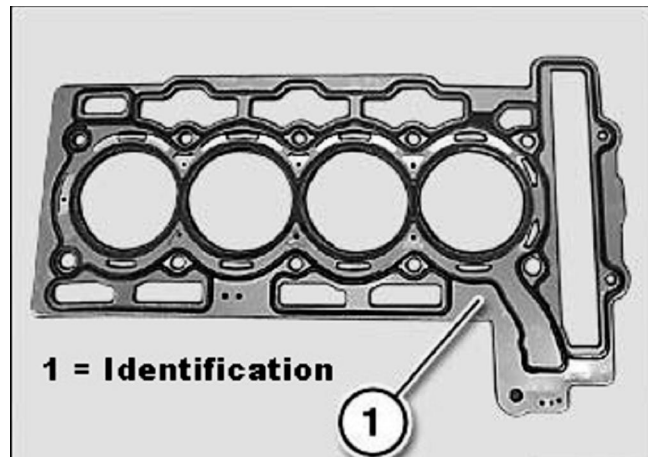
Measure the cylinder head flatness with a straight edge:

Maximum deviation from level, longitudinal is .00394ö (.100 mm)

Maximum deviation from level, transversal is .0020ö (.050 mm)

If the cylinder head deck is re-machined, a thicker coating + .012ö (.300 mm) is also available for service personnel.

Head Gasket	Thickness	Part Number
	.0354ö (.900 mm)	STD. 11127595139
	.0472ö (1.20 mm)	+ .012ö (.300 mm) O/S 11127570860



Important: Rubber coating on cylinder head gasket must not be damaged under any circumstances before or during installation. This engine requires all new head bolts to install the cylinder head. Follow the suggested torque values listed below and torque bolts in an outward pattern starting from the center with the 10 mm bolts first.

Bolt Description

10 mm X 145 mm

8 mm X 95 mm

Torque value

22 FT/LBS (30 Nm) +90° +90°

15 FT/LBS (15 Nm) +90° +90°

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