GROUP 11A

ENGINE

CONTENTS

GENERAL DESCRIPTION

M2112000100233

The model 4G63-DOHC engine, based on the 4G63 single-overhead-camshaft engine has four valves per cylinder and two camshafts in the cylinder head (double-overhead-camshaft configuration).

GENERAL SPECIFICATIONS

ITEM		4G63-DOHC-T/C
Total displacement cc		1,997
Combustion chamber		Pent roof type
Bore $\times$ Stroke mm		85.0 $\times$ 88.0
Compression ratio		8.8
Camshaft arrangement		DOHC-16 valve
Valve timing	Intake opening	BTDC 17°
	Intake closing	ABDC 59°
	Exhaust opening	BBDC 57°
	Exhaust closing	ATDC 15°
Maximum output kW/rpm (HP/r/min)		202/6,500 (271/6,500)
Maximum torque N·m/rpm (lbs-ft/r/min)		37/3,500 (273/3500)
Lash adjuster		Equipped

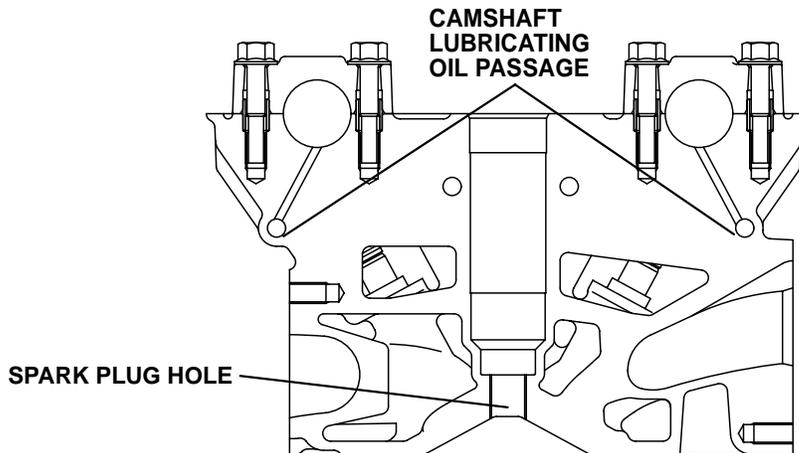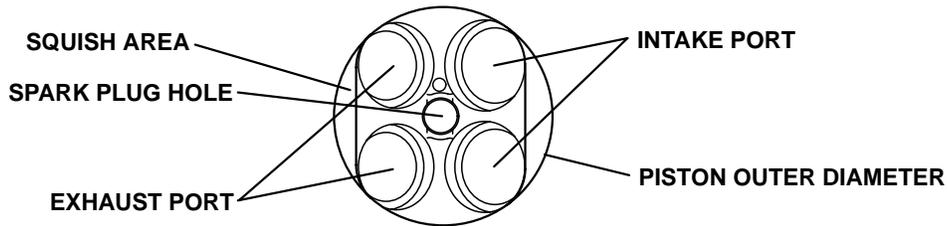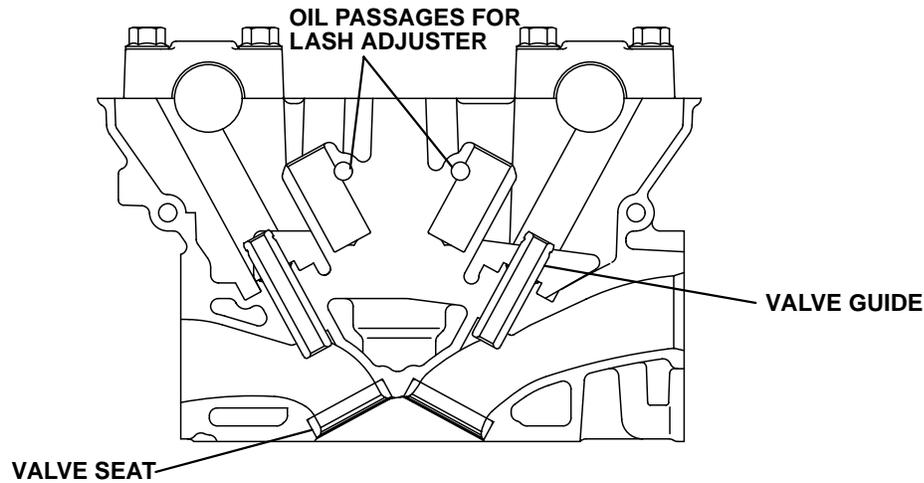# BASE ENGINE

M2112001000176

CYLINDER HEAD

The cylinder head is made of an aluminum alloy that is lightweight and offers outstanding cooling efficiency.

The combustion chamber is of the pent-roof type. The two intake and two exhaust ports are in a cross-flow arrangement. There is a squish area provided in the combustion chamber, which promotes turbulence, further mixing of the air-fuel mixture, and more efficient combustion.

The spark plugs are located at the center of the combustion cambers.

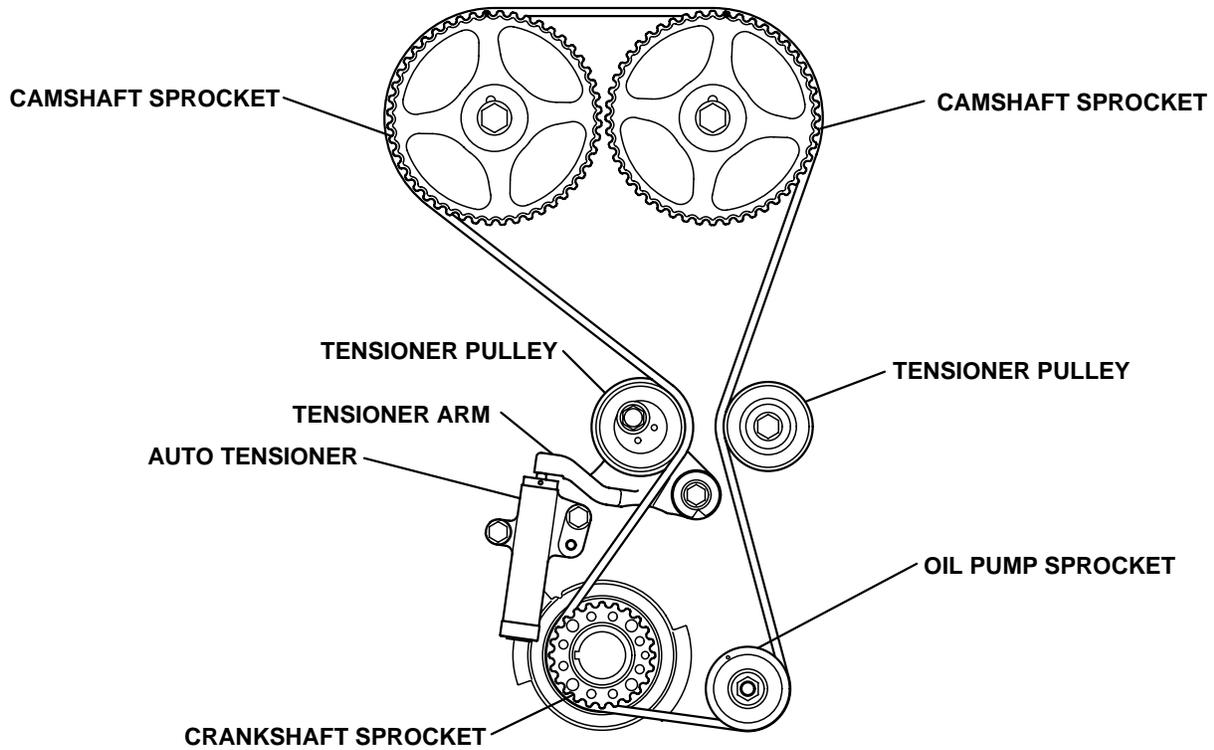The camshaft bearings are placed at six locations on the exhaust side.

AK204066AB

TIMING BELT TRAIN

The intake camshaft, exhaust, and the oil pump are driven by a single timing belt.

Timing belt tension varies at different engine temperatures and ages of the belt. The auto tensioner absorbs changes in belt tension to prevent the noise problem from getting worse and to improve durability.
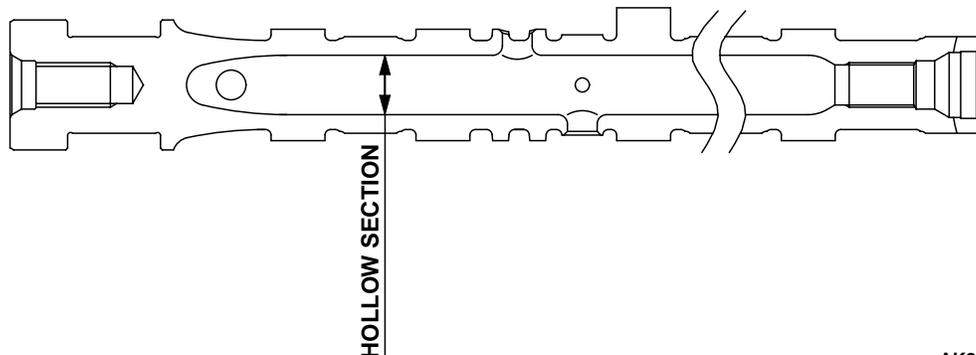
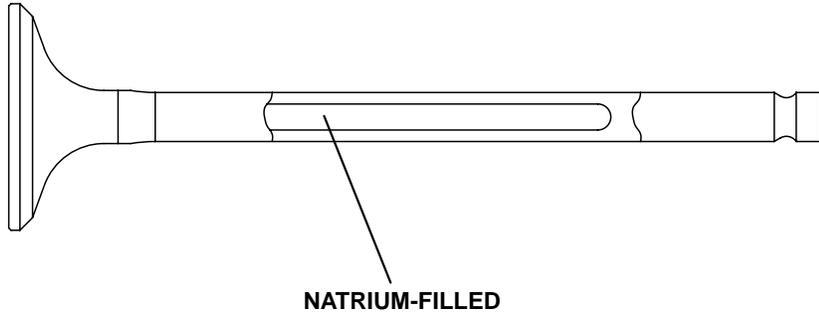All sprockets are made of a sintered alloy.

AK204067AB

CAMSHAFT

The change to a hollow-body (hollow cast) camshaft reduces weight.

AK204064AB

VALVE

The change to natrium-filled exhaust valves reduces
weight and assists in cooling the bell section.

NATRIUM-FILLED

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NOTES