

SERVICE MANUAL INFORMATION

Group:	SERVICE MANUAL UPDATE
Bulletin No:	SB-16-028
Issue Date:	10-19-2016

Subject: REVISION OF WORKSHOP MANUAL FOR J05 ENGINES Change in Tightening Torque for Rocker Arm Support Bolt

RELEVANT ENGINE MODEL: J05C Engine

The following is to inform you of the above caption. This service data should be attached to the relevant pages of the workshop manuals for maintenance and to use for servicing.

OVERVIEW:

Change in tightening torque and tightening method of the rocker arm support bolt.

RELEVANT MANUALS:

Workshop manual for J05C engine.

	Current	New
Tightening Torque	59 Nm (43 lb-ft)	45 Nm (33 lb-ft)
Tightening Method	-	Apply engine oil to the seat surface and thread of the bolt.



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EN02-2

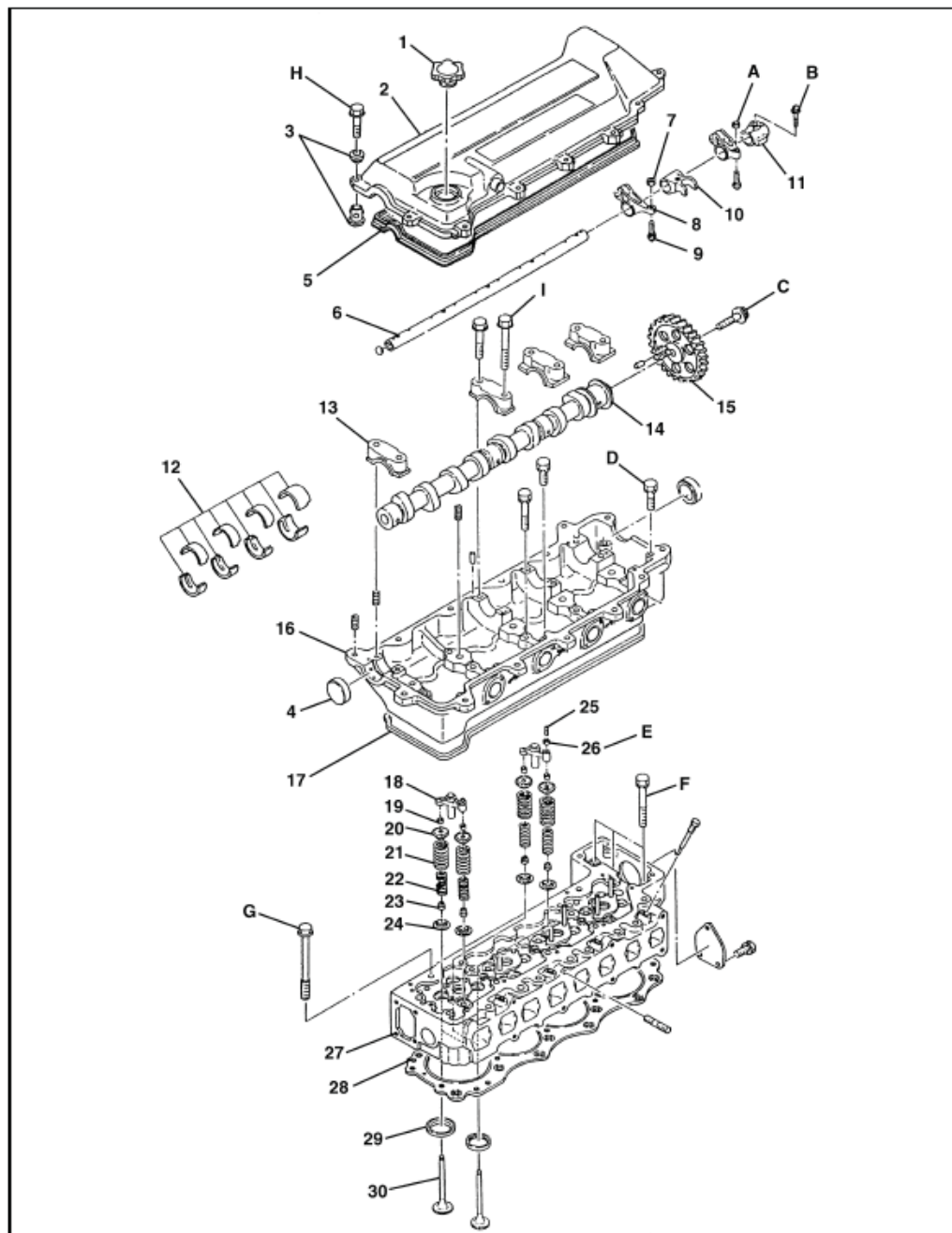
ENGINE MECHANICAL (J05C)

CYLINDER HEAD

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COMPONENT LOCATOR

EN0110202D100001



SHITS011020200001



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ENGINE MECHANICAL (J05C)

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1 Oil filter cap	11 Rocker arm support	21 Valve spring outer
2 Cylinder head cover	12 Camshaft bearing	22 Valve spring inner
3 Silent block	13 Camshaft bearing cap	23 Valve stem seal
4 Camshaft housing plug	14 Camshaft	24 Valve spring seat lower
5 Head cover gasket	15 Camshaft drive gear	25 Cross head adjusting screw
6 Valve rocker shaft	16 Camshaft housing	26 Lock nut
7 Lock nut	17 Camshaft housing gasket	27 Cylinder head assembly
8 Rocker arm	18 Cross head	28 Cylinder head gasket
9 Adjusting screw	19 Valve spring retainer	29 Valve seat
10 Nozzle clamp	20 Valve spring seat upper	30 Valve

Tightening torque

Unit: N·m {kgf·cm, lbf·ft}

A 25 {250, 18}	F 59 {600, 43}
B 45 {459, 33}# CHANGE	G 59 {600, 43}+90°+90°#
C 59 {600, 43}+90°#	H 28.5 {290, 20}
D 23 {230, 16}	I 31 {320, 23}
E 25 {250, 18}	

#=Apply oil to the threads and seat surfaces before tightening.



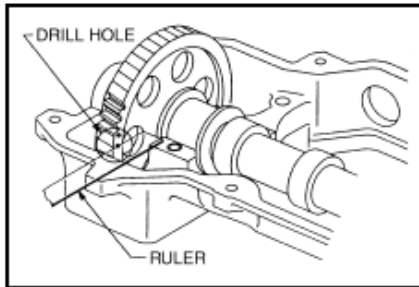
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ENGINE MECHANICAL (J05C)



7. INSTALL THE CAMSHAFT.

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- (1) Align the mark on the flywheel with the flywheel housing pointer to set the No.1 piston to top dead center of the compression stroke.

NOTICE

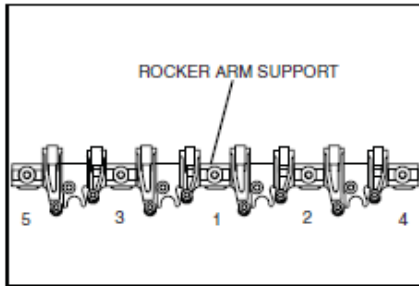
Engine adjustment - Refer to "PREPARATION OF CHECKING AND ADJUSTMENT" in the section "ENGINE TUNEUP" in the chapter "ENGINE INTRODUCTION (J08C)".

- (2) Install the camshaft into the cam housing.

NOTICE

Two drill holes on the camshaft gear should be located at left side and lower drill hole should match with the camshaft housing upper surface.

- (3) Install the camshaft bearing cap, and tighten the bolts.



8. INSTALL THE ROCKER ARM ASSEMBLY.

- (1) Make sure that the cross head is on each valve.

NOTICE

If the cross head is assembled whilst off the valve, the upper seat will be pressed, resulting in a loose valve.

- (2) Make sure that the adjusting screw at the end of the rocker arm is completely screwed in.

- (3) Apply engine oil to the seat surface and thread of the rocker arm mounting bolt and tighten the bolt by 1 or 2 threads with hand to set the position.

ADD

- (4) Tighten the rocker arm support bolt as shown in the figure to the specified torque.

Tightening Torque:

45 N·m (459 kgf·cm, 33 lbf·ft)

CHANGE

- (5) Tighten the nozzle clamp bolt to the specified torque.

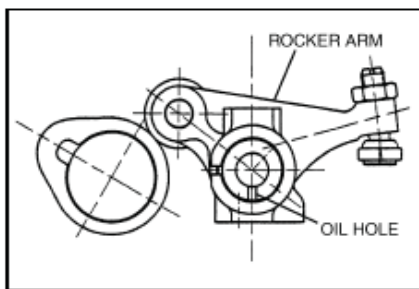
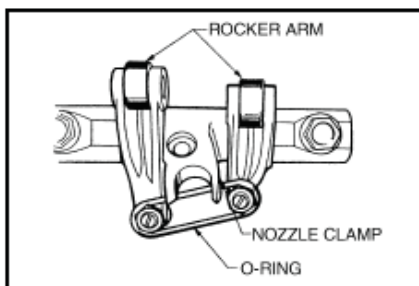
Tightening Torque:

25 N·m (250 kgf·cm, 18 lbf·ft)

- (6) Make sure that the rocker arm moves smoothly.

HINT

When assembling the rocker arm assembly, fix the arm and nozzle clamp with an O-ring as shown in the figure to facilitate installation.



NOTICE

When the rocker arm shaft that has oil holes on only one side is installed, make sure the oil hole is placed below.



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