

# SERVICE MANUAL INFORMATION

Group:	SERVICE MANUAL UPDATE
Bulletin No:	SB-16-027
Issue Date:	10-19-2016

## Subject: REVISION OF WORKSHOP MANUAL FOR J08 ENGINES Change in Tightening Torque for Rocker Arm Support Bolt

### RELEVANT ENGINE MODEL: J08E 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 J08E 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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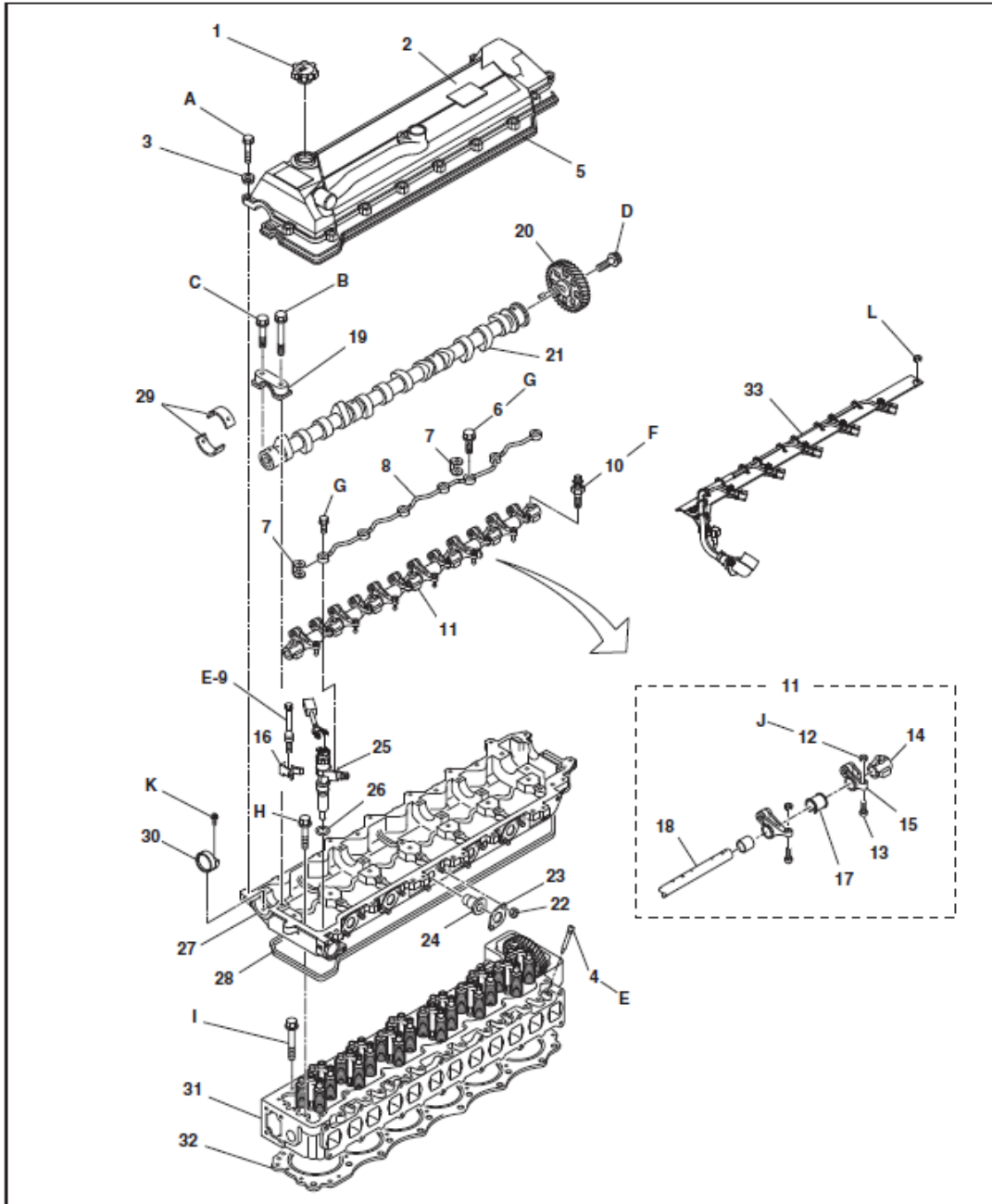
EN02-2

ENGINE MECHANICAL (J08E)

## CYLINDER HEAD

### COMPONENT LOCATOR

EN0110602D100001



5HT15011060200001



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## ENGINE MECHANICAL (J08E)

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1 Oil filler cap	18 Valve rocker shaft
2 Cylinder head cover	19 Camshaft bearing cap
3 Silent block	20 Camshaft gear
4 Heater plug	21 Camshaft
5 Head cover gasket	22 Nut
6 Union bolt	23 Plate
7 Gasket	24 Injection pipe oil seal
8 Leakage pipe	25 Injector
9 Injector clamp bolt	26 O-ring
10 Rocker arm support bolt	27 Camshaft housing
11 Rocker arm assembly	28 Camshaft housing gasket
12 Lock nut	29 Camshaft bearing
13 Adjust screw	30 Plug
14 Rocker arm support	31 Cylinder head assembly
15 Rocker arm	32 Cylinder head gasket
16 Injector clamp	33 Harness assy
17 Collar	

### Tightening torque

Unit: N·m {kgf·cm, lbf·ft}

A 28.5 {290, 21}	G 12.3 {126, 9}
B 31 {320, 23}	H 28.5 {290, 21}
C 31 {320, 23}	I 59 {600, 43.4}+90°+90°#
D 59 {600, 43.4}+90°#	J 25 {250, 18.1}
E 25 {250, 18.1}	K 6 {60, 4.3}
F <del>59 {600, 43.4}</del> 45 {459, 33.2} #	L 25 {250, 18.1}

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



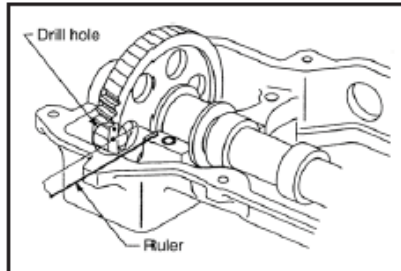
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EN02-14

ENGINE MECHANICAL (J08E)



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### 8. INSTALL THE CAMSHAFT.

- (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.

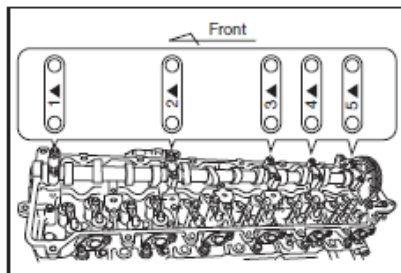
#### NOTICE

Engine adjustment - Refer to "PREPARATION OF CHECKING AND ADJUSTMENT".

- (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.

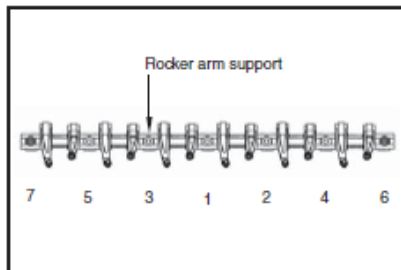


SH-TS011060200040

- (3) Install Camshaft bearing caps by fitting the position, in the stamped order of 1, 2, 3, 4 and 5, with each engraved mark headed toward engine front.

#### Tightening Torque:

31 N·m {320 kgf·cm, 23 lbf·ft}



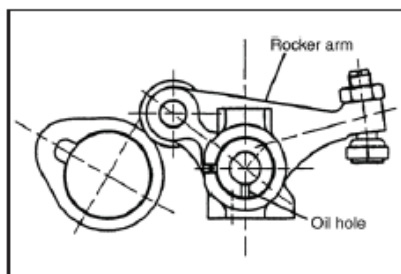
SH-TS011060200041

### 9. 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.



SH-TS011060200042

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

#### NOTICE

Make sure the oil hole is placed below.

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

#### Tightening Torque:

59 N·m {600 kgf·cm, 43.4 lbf·ft}

- (5) 45 459 33.2

- (4) Tighten the injector clamp bolt to the specified torque.

#### Tightening Torque:

25 N·m {250 kgf·cm, 18.1 lbf·ft}

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

- (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.



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