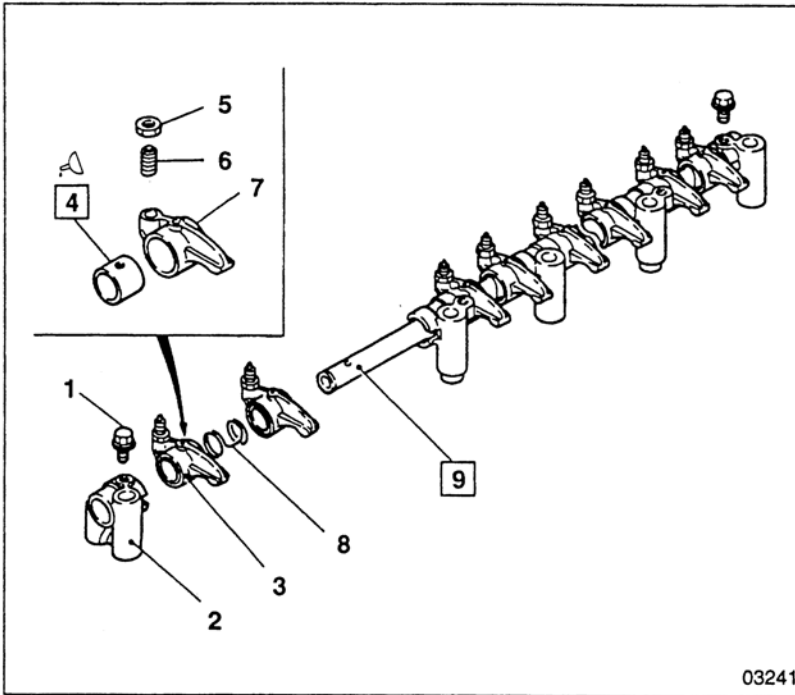


CYLINDER HEAD AND VALVE MECHANISM

Rocker and Bracket Assembly



● Disassembly sequence

- 1 Set bolt
- 2 Rocker shaft bracket
- 3 Rocker assembly
- 4 Rocker bushing
- 5 Lock nut
- 6 Adjusting screw
- 7 Rocker
- 8 Rocker shaft spring
- 9 Rocker shaft

● Assembly sequence

Reverse the order of disassembly.

Service standards

Unit: mm

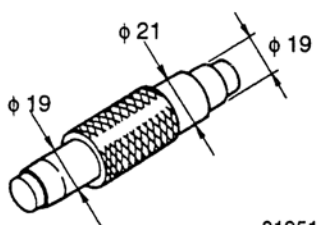
Location	Maintenance item	Standard value (Basic diameter in [])	Limit	Remedy
4, 9	Rocker bushing-to-rocker shaft clearance	[19] 0.06 to 0.11	0.2	Replace

Lubricants

Location	Points of application	Type	Quantity
4	Rocker bushing inner surface	Engine oil	As required

Special tools

Unit: mm

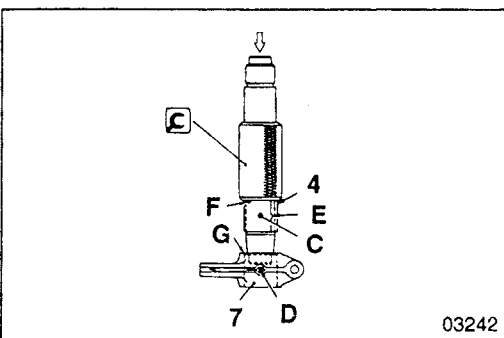
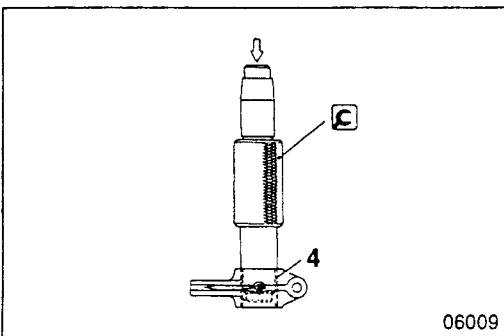
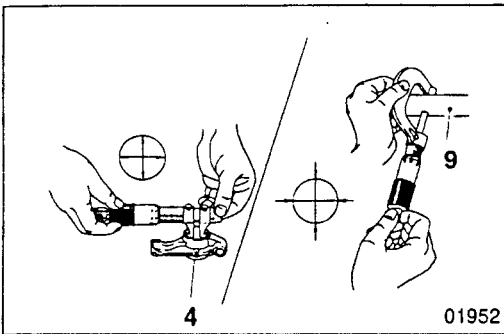
Location	Tool name and shape	Part No.	Application
4	Rocker Bushing Puller 	01951	Removing and installing rocker bushings

◆ Service procedure

4 9 Rocker bushing and rocker shaft

[Inspection]

If any clearance exceeds the specified limit, replace the defective part(s).



Rocker bushing

[Removal]

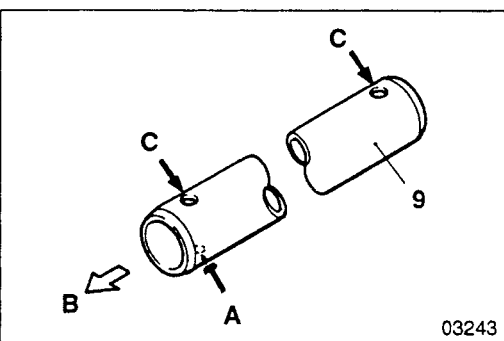
[Installation]

- Align the oil hole **A** in the rocker bushing **4** with the oil hole **D** in the rocker **7**.
- Position the notch **E** and seam **F** on the rocker bushing **4** as shown.
- Install the rocker bushing **4** into the rocker **7** from the chamfered side **G**.

9 Installing rocker shaft

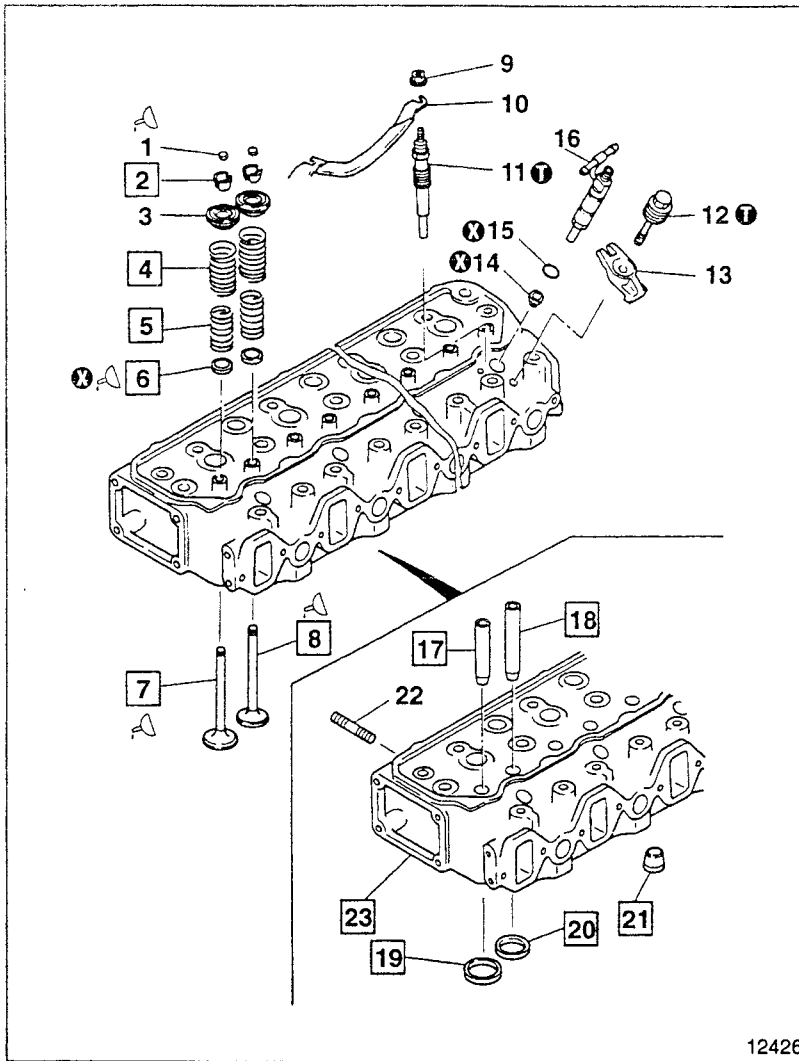
Install the rocker shaft **9** with the engine oil supply hole **A** (this is provided for lubrication) toward the front of the engine **B**.

C: Hole for set bolt **1**





CYLINDER HEAD AND VALVE MECHANISM

Cylinder Head and Valve Assembly



● Disassembly sequence

- 1 Valve cap
- 2 Valve cotter
- 3 Upper retainer
- 4 Outer valve spring
- 5 Inner valve spring
- 6 Valve stem seal
- 7 Inlet valve
- 8 Exhaust valve
- 9 Nut
- 10 Connecting plate
- 11 Glow plug  Gr 54
- 12 Bolt
- 13 Nozzle bridge
- 14 Nozzle tip gasket
- 15 O-ring
- 16 Injection nozzle  Gr 13
- 17 Inlet valve guide
- 18 Exhaust valve guide
- 19 Inlet valve seat
- 20 Exhaust valve seat
- 21 Water director
- 22 Stud
- 23 Cylinder head

⊗ : Non-reusable part

CAUTION

The injection nozzles 16 and glow plugs 11 project from the bottom surface of cylinder head 23. Take care not to damage them.

● Assembly sequence

Reverse the order of disassembly.

NOTE

Any valve stem seal 6 removed from an exhaust valve 8 or inlet valve 7 must be replaced.