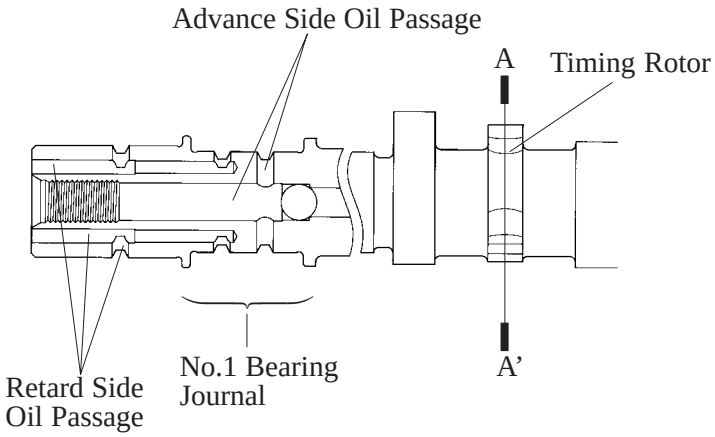
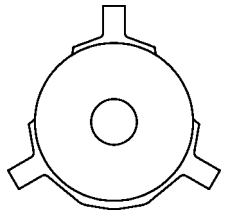
■VALVE MECHANISM

1. Intake Camshaft

- In conjunction with the adoption of the VVT-i system, an oil passage is provided in the intake camshft in order to supply engine oil to the VVT-i system.
- In conjunction with the use of the DIS, the intake camshaft is provided with timing rotor to trigger the camshaft position sensor.



150EG15



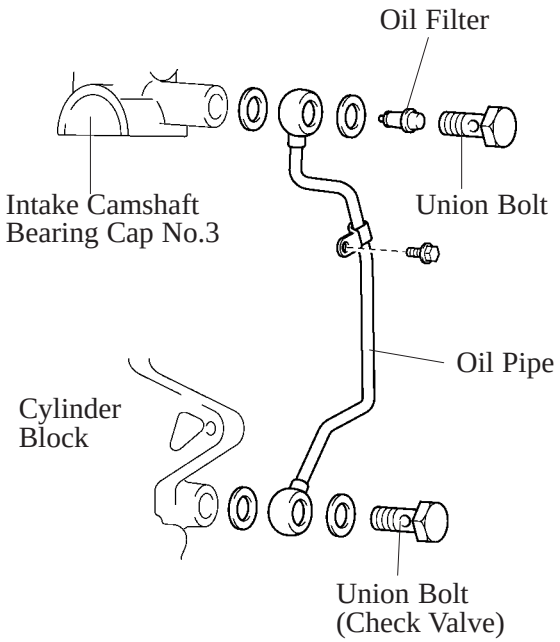
A-A' Cross Section

150EG24

■LUBRICATION SYSTEM

1. General

- An oil pipe is provided between the intake camshaft bearing cap No.3 and the cylinder block in order to supply oil to the VVT-i system.
- A check valve is enclosed inside the union bolt on the side of the cylinder block.



150EG16

2. Check Valve

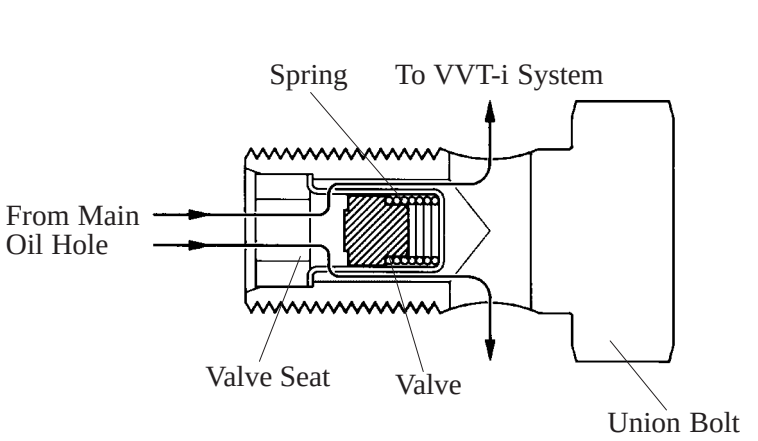
The function of the check valve is to prevent the fall of the oil pressure on the VVT-i system side when the engine is stopped.

a. Engine is operated.

The oil that flows from the main oil hole in the cylinder block overcomes the spring pressure, pushes the valve down and flows into the oil valve.

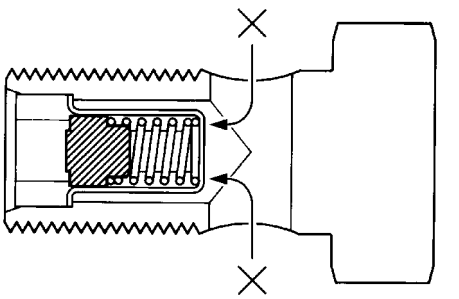
b. Engine is stopped.

If there is no oil pressure applied by the main oil hole, the valve is pressed against the valve seat by the spring, thus preventing the oil from flowing down from the VVT-i system. As a result of this function, the initial VVT-i system operation is properly ensured during engine starting.



Engine is Operated

150EG17



Engine is Stopped

150EG18