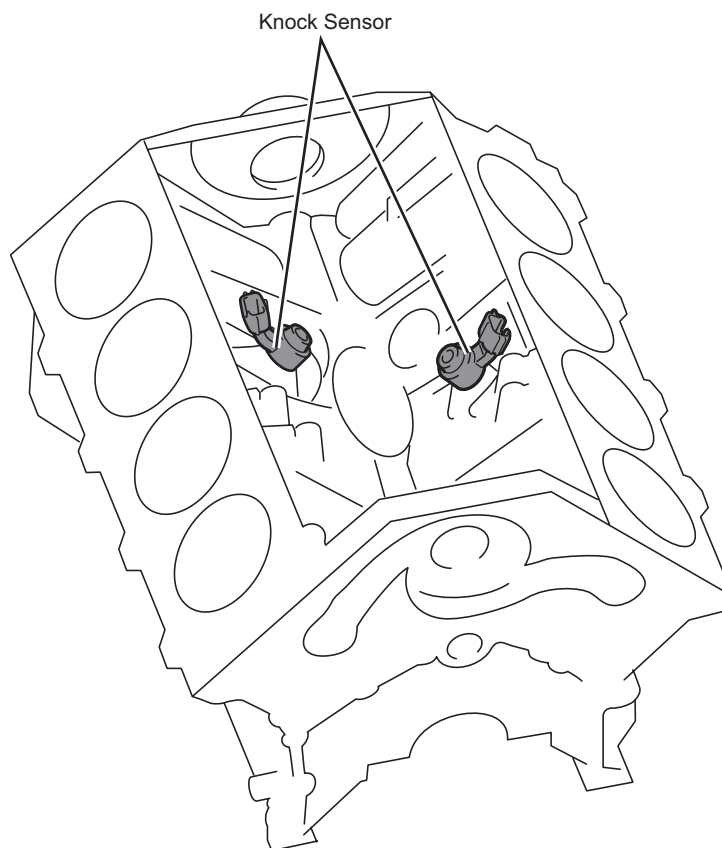


## Knock Sensor (Flat Type)

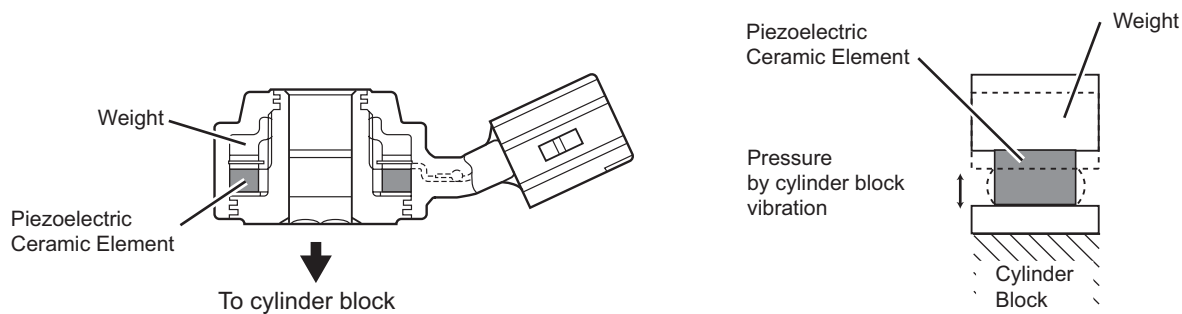
- Newly developed flat knock sensors are used.
- One sensor is provided on both the right and left inner sides of the V bank to ensure reliability.



A4270107P

### Knock Sensor Operation

- When the knock sensor receives vibrations from the cylinder block, a delayed movement of the weight occurs in the sensor due to the inertial force of the weight. This causes a pressure to be applied to a piezoelectric ceramic element, which is provided between the cylinder block and the weight, thus generating a voltage. The knock sensor has practically constant output characteristics in all frequency ranges. Therefore, the engine ECU can detect a target frequency to determine that knocking has occurred.



A4270108P