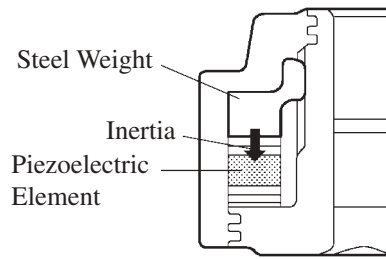


3. Operation

The knocking vibration is transmitted to the steel weight and its inertia applies pressure to the piezoelectric element. The action generates electromotive force.

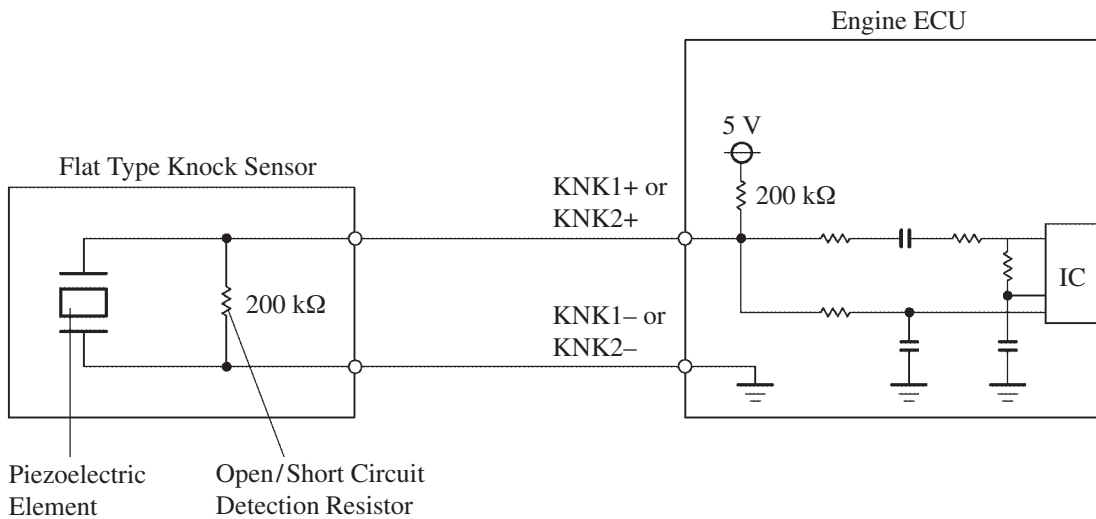


214CE08

4. Open/Short Circuit Detection Resistor

During ignition ON, the open/short circuit detection resistor in the knock sensor and the resistor in the engine ECU keep the voltage at the terminal KNK1+ or KNK2+ constant.

An IC (Integrated Circuit) in the engine ECU is always monitoring the voltage of the terminal KNK1+ or KNK2+. If the open/short circuit occurs between the knock sensor and the engine ECU, the voltage of the terminal KNK1+ or KNK2+ will change and the engine ECU detects the open/short circuit and stores DTC (Diagnostic Trouble Codes) P0325.



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Service Tip

In accordance with the adoption of an open/short circuit detection resistor, the inspection method for the sensor has been changed. For details, see the LEXUS LS430 Repair Manual Supplement (Pub. No. RM1049E).