DI9SS–01

CIRCUIT INSPECTION

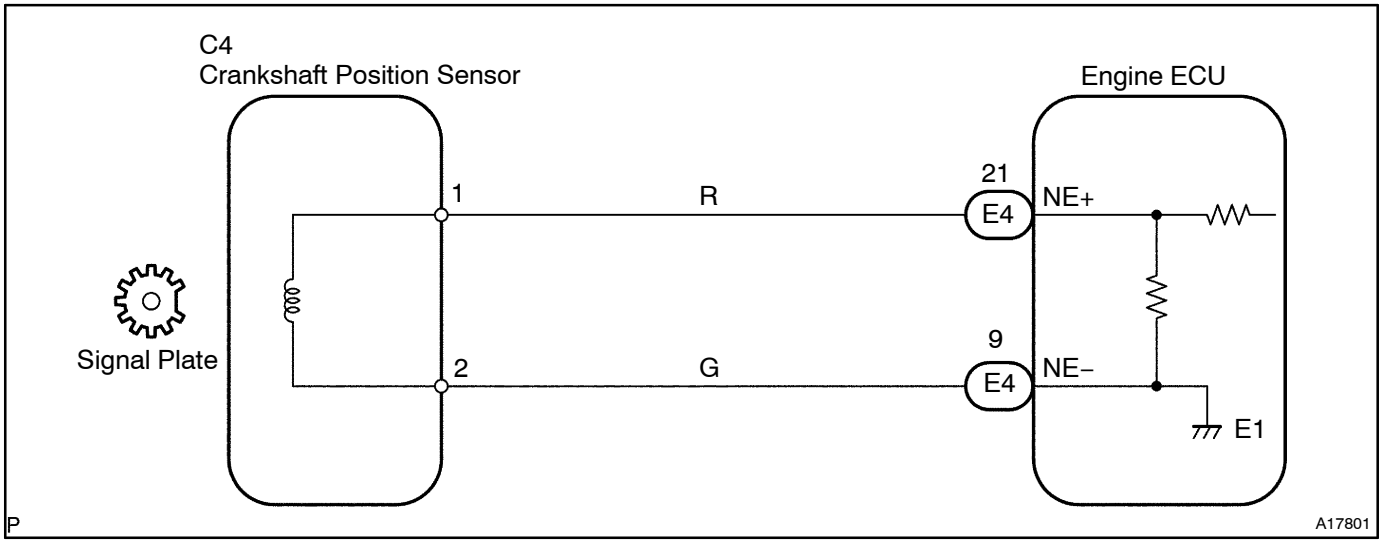
DTC	12	Crankshaft Position Sensor Circuit

CIRCUIT DESCRIPTION

Crankshaft position sensor (NE signal) consist of a signal plate and pickup coil.
The NE signal plate has 34 teeth and is mounted on the crankshaft. The NE signal sensor generates 34 signals of every engine revolution. The engine ECU detects the engine speed by the NE signal.

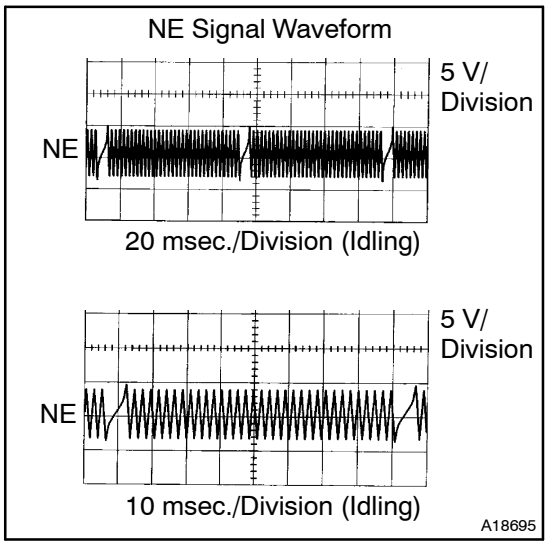
DTC No.	DTC Detection Condition	Trouble Area
P0335/12	No crankshaft position sensor signal to engine ECU during cranking	• Open or short in crankshaft position sensor circuit • Crankshaft position sensor • Signal plate • Engine ECU
	Open in NE– circuit	

WIRING DIAGRAM



INSPECTION PROCEDURE

1	Check resistance of crankshaft position sensor (See Pub. No. RM584E).



Reference: INSPECTION USING OSCILLOSCOPE
During cranking or idling, check the waveform between terminals NE+ and NE– of the engine ECU connector.
HINT:
The correct waveforms are as shown.

NG	Replace crankshaft position sensor.

OK

2	Check for open and short in harness and connector between engine ECU and crankshaft position sensor (See page IN–19).

NG → Repair or replace harness or connector.

OK

3	Inspect sensor installation and teeth of signal plate.

NG → Tighten the sensor. Replace signal plate.

OK

Check and replace engine ECU (See page IN–19).