



Chery S11 Engine Management System Trouble shooting with Diagnostic Trouble Code 2004-01-09

Supplying value.

TPS trouble shooting with DTC

Sensor Input DTC

Throttle position sensor

Cam position sensor

Crank position sensor

Vehicle speed sensor

TMAP sensor

Coolant temp. sensor

Knock sensor

O2 sensor

AC evap. temp. sensor

System voltage problem

Actuator output DTC

O2 sensor heater circuit

Fuel pump circuit

Injector circuit

IG coil circuit

Purge control valve circuit

Idle speed actuator

MIL circuit

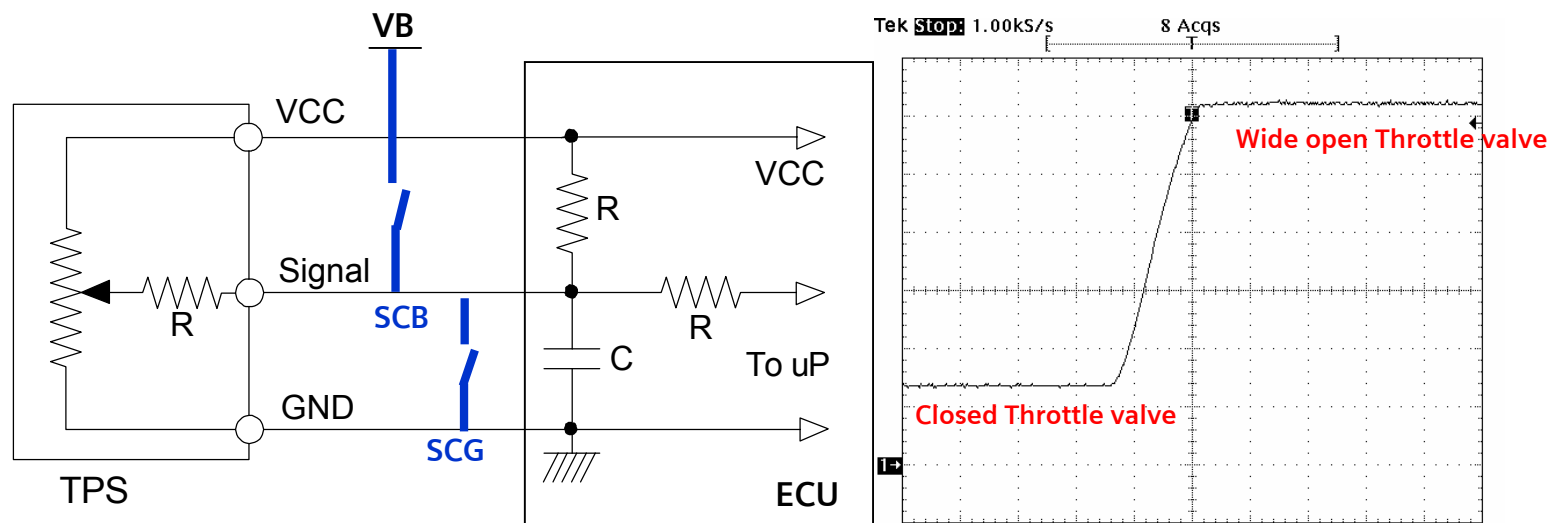
A/C relay/switch circuit

Cooling fan relay

DTC number (MIL is On)

P0123 : Throttle / Pedal position circuit high input – SCB or OC

P0122 : Throttle / Pedal position circuit high input – SCG



Detection Condition

: The sensor signal is stuck in high or low level by SCG, OC, SCB in circuit during calibrated time.

Cam position sensor trouble shooting with DTC

Sensor Input DTC

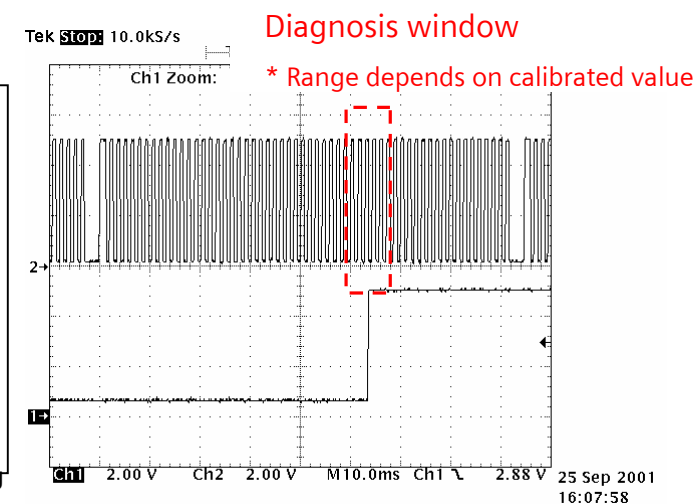
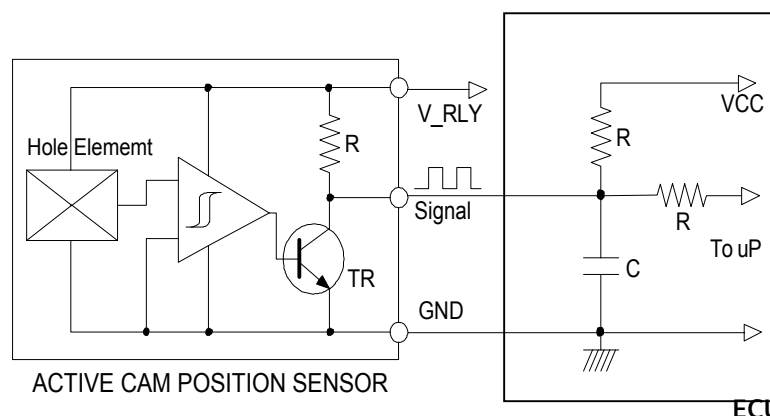
Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is On)

P0340 : Camshaft position sensor circuit malfunction



Detection Condition

- 1) The sensor signal is stuck in high or low level by SCG, OC, SCB in circuit during calibrated rotation.
- 2) No signal or invalid signal is generated after 1st cylinder synchronization under the condition of No Crank sensor error during calibrated rotation.

Crank position sensor trouble shooting with DTC

Sensor Input DTC

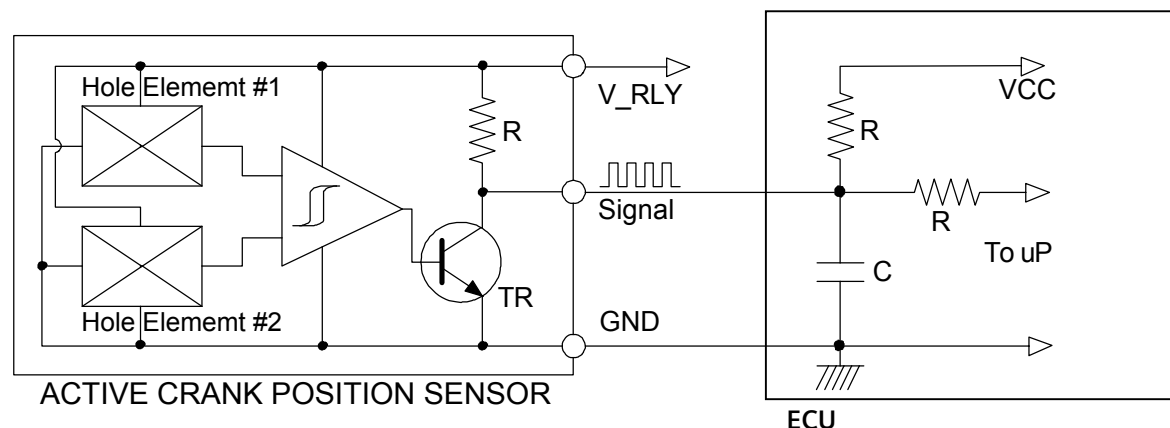
Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is On)

P0335 : Crankshaft position sensor circuit malfunction



Detection Condition

- 1) The sensor signal is stuck in high or low level by SCG, OC, SCB in circuit during calibrated rotation.
- 2) No signal or invalid signal is generated under the condition of no CAM sensor error during calibrated rotation.

Vehicle speed sensor trouble shooting with DTC

Sensor Input DTC

Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is Off)

P0501 : Vehicle speed sensor Range / Performance

Detection Condition

: Not valid signal is generated under calibrated condition.

* Calibrated condition : RPM & MAF & TCO > calibrated value for calibrated time.

TMAP sensor trouble shooting with DTC

Sensor Input DTC

Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

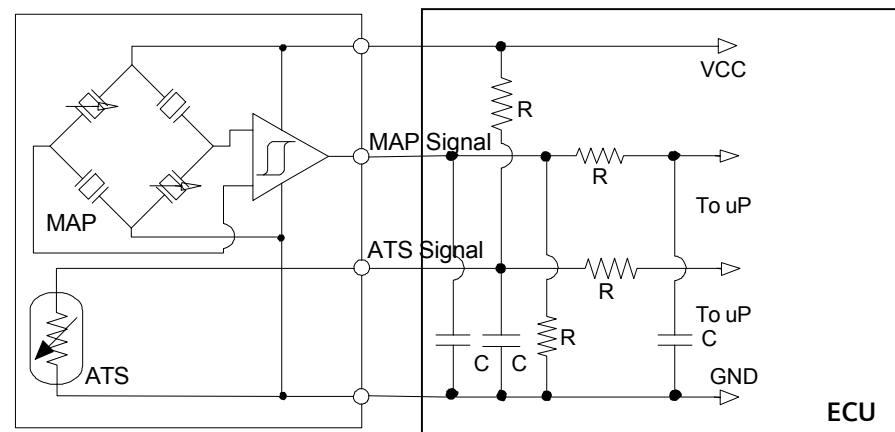
DTC number (MIL is On)

P0112 : Intake air temperature circuit low input – SCG

P0113 : Intake air temperature circuit low input – SCB, OC

P0107 : Manifold absolute pressure circuit low input – SCG or OC

P0108 : Manifold absolute pressure circuit high input – SCB or GND OC



Detection Condition

- 1) The sensor signal is stuck in high or low level by SCG, OC, SCB in circuit during calibrated time.
- 2) No MAP sensor signal is generated during calibrated time.

Coolant temperature sensor trouble shooting with DTC

Sensor Input DTC

Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

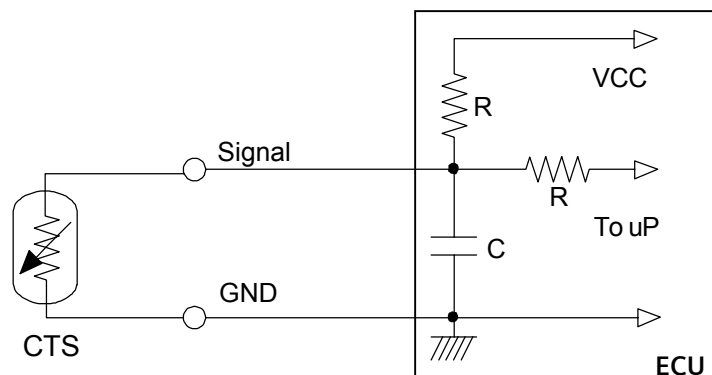
Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is On)

P0117 : Engine coolant temperature circuit low input - SCG

P0118 : Engine coolant temperature circuit high input – SCB or OC



Detection Condition

: The sensor signal is stuck in high or low level by SCG, OC, SCB in circuit during calibrated time.

Knock sensor trouble shooting with DTC

Sensor Input DTC

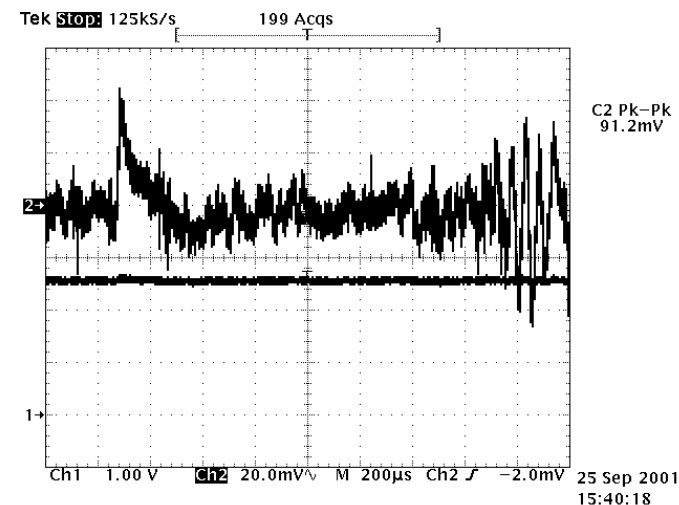
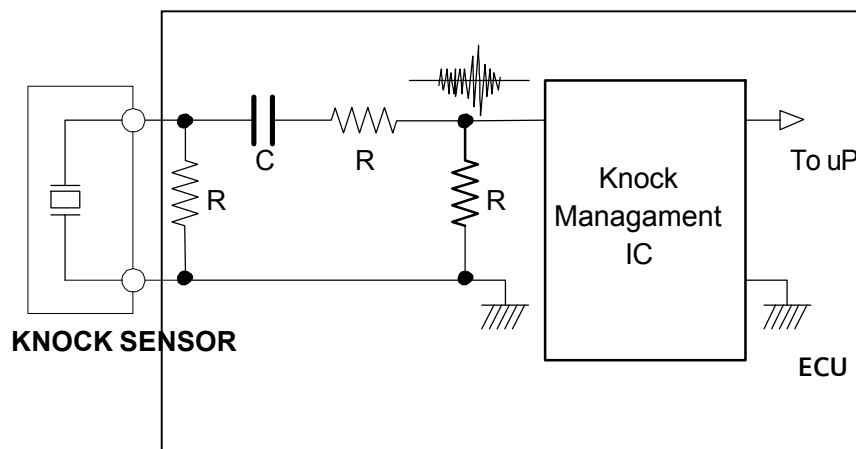
Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is On)

P0325 : Knock sensor 1 circuit malfunction



Detection Condition

: Abnormal signal is generated by SCG, OC, SCB in circuit.

O2 sensor trouble shooting with DTC

Sensor Input DTC

Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

Actuator output DTC

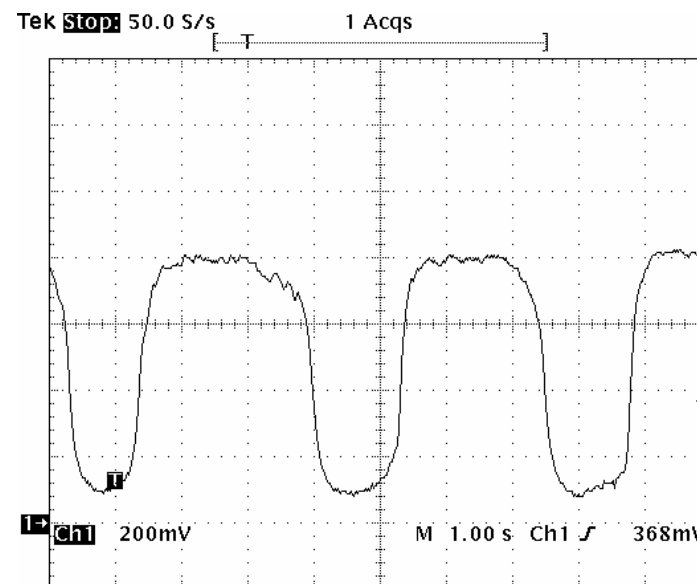
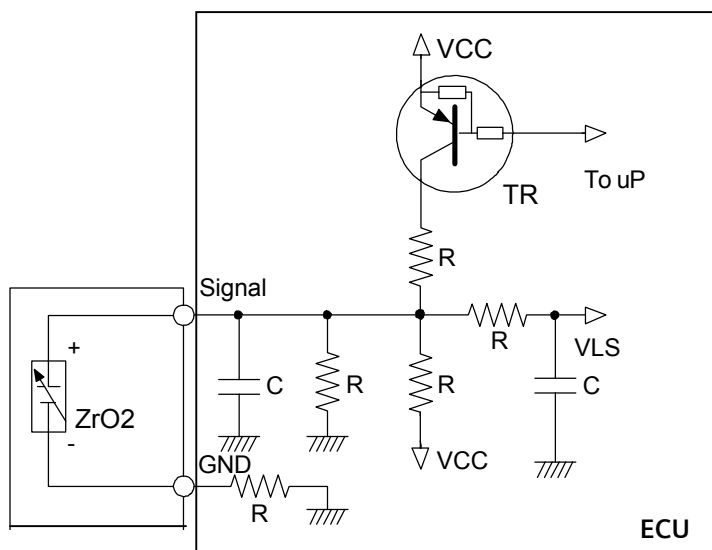
O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is On)

P0130 : O2 sensor circuit malfunction - OC

P0132 : O2 sensor circuit high voltage - SCG

P0131 : O2 sensor circuit low voltage - SCB



Detection Condition

- 1) The sensor signal is stuck between calibrated value (around 450mV) during calibrated time by OC under no O2 heater error
- 2) The sensor signal is stuck in high or low level by SCB or SCG under no purge control valve error.

AC evaporator temp. sensor trouble shooting with DTC

Sensor Input DTC

Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

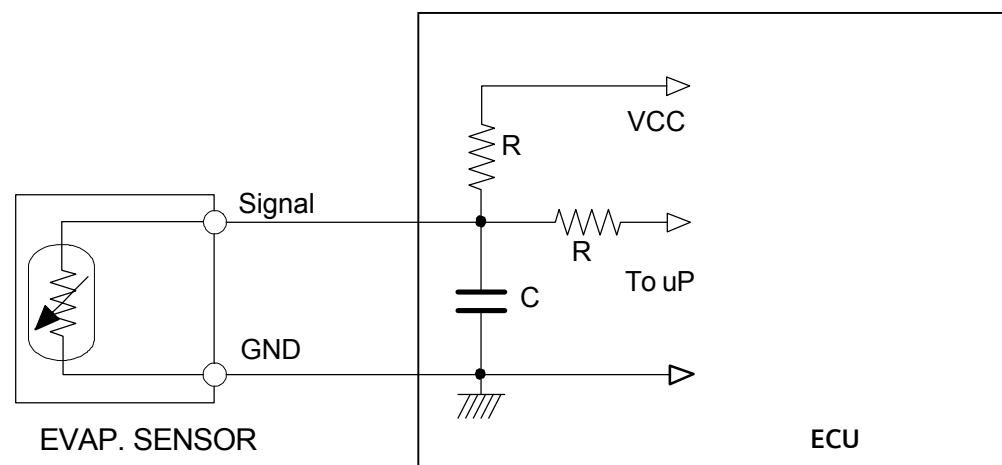
Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is Off)

P1535 : AC evaporator temperature circuit high input – SCB or OC

P1536 : AC evaporator temperature circuit low input - SCG



Detection Condition

: The sensor signal is stuck in high or low level by SCG, OC, SCB in circuit.

System voltage trouble shooting with DTC

Sensor Input DTC

Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is Off)

P0560 : System voltage problem

Detection Condition

: The electrical voltage after Main relay is lower than calibrated voltage in IG Key-on state or higher than calibrated voltage in IG Key-off state after power latch period.

* Direct battery voltage should be higher than calibrated value.

O2 sensor heater trouble shooting with DTC

Sensor Input DTC

Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

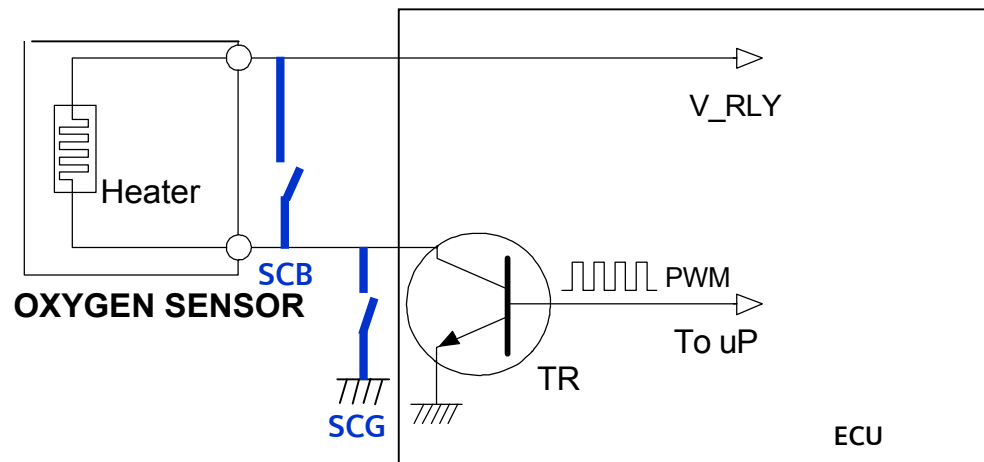
Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is Off)

P0031 : O2 sensor heater circuit low - SCG

P0032 : O2 sensor heater circuit high - SCB or OC



Detection Condition

: The output signal is stuck in high or low level by SCG, OC, SCB in circuit.

Fuel pump circuit trouble shooting with DTC

Sensor Input DTC

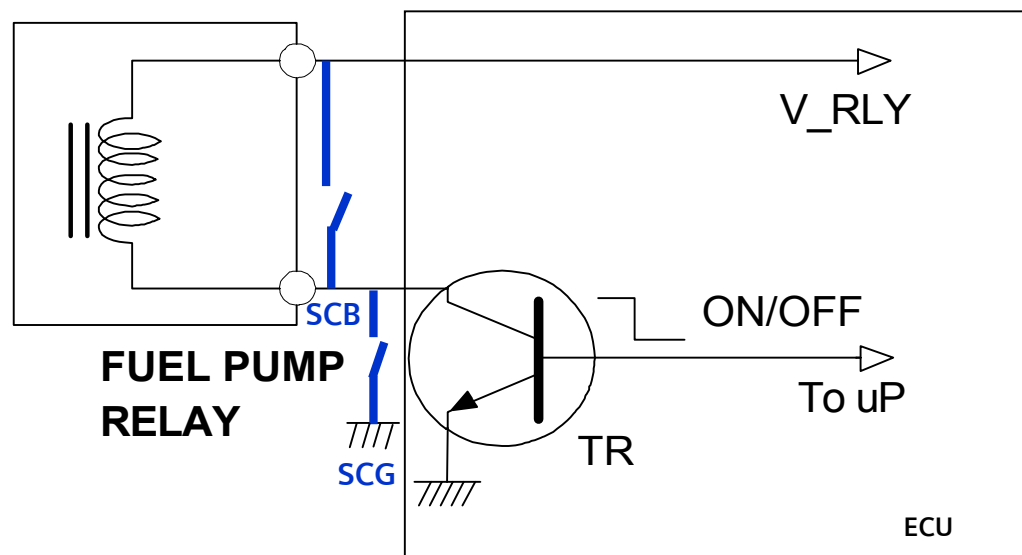
Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is On)

P0230 : Fuel pump relay circuit malfunction - SCG or OC or SCB



Detection Condition

: The output signal is stuck in high or low level by SCG, OC, SCB in circuit.

Injector circuit trouble shooting with DTC

Sensor Input DTC

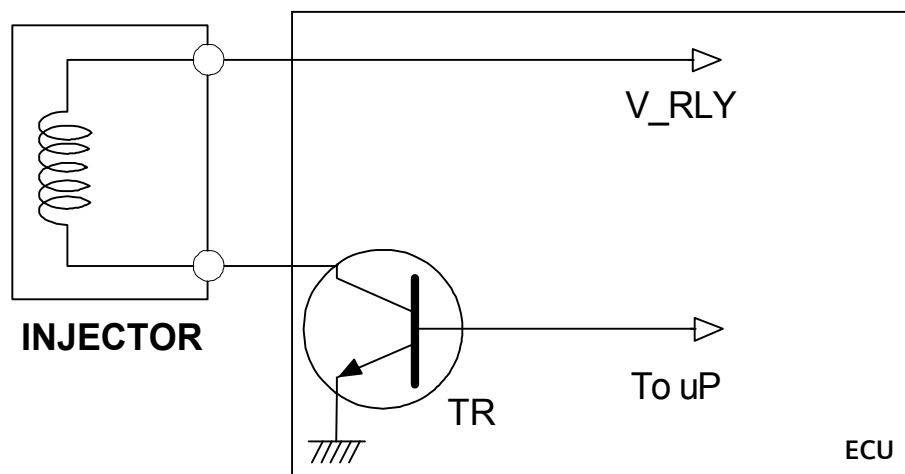
Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is On)

P0261 : Cylinder1 – Injector circuit low - SCG P0262 : Cylinder1 – Injector circuit high - SCB or OC
P0264 : Cylinder2 – Injector circuit low - SCG P0265 : Cylinder2 – Injector circuit high - SCB or OC
P0267 : Cylinder3 – Injector circuit low - SCG P0268 : Cylinder3 – Injector circuit high - SCB or OC



Detection Condition

: The output signal is stuck in high or low level by SCG, OC, SCB in circuit.

IG coil circuit trouble shooting with DTC

Sensor Input DTC

Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

Actuator output DTC

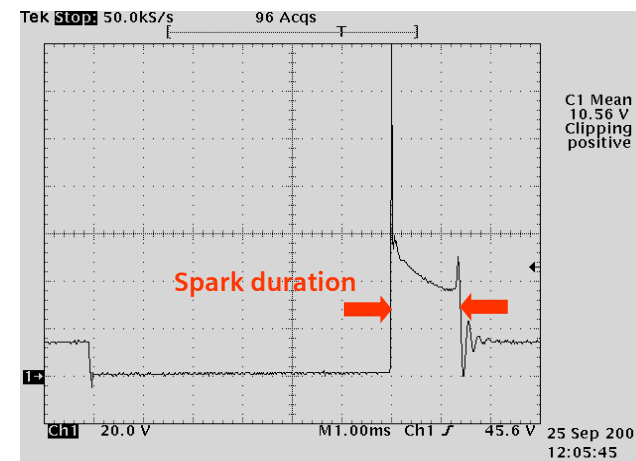
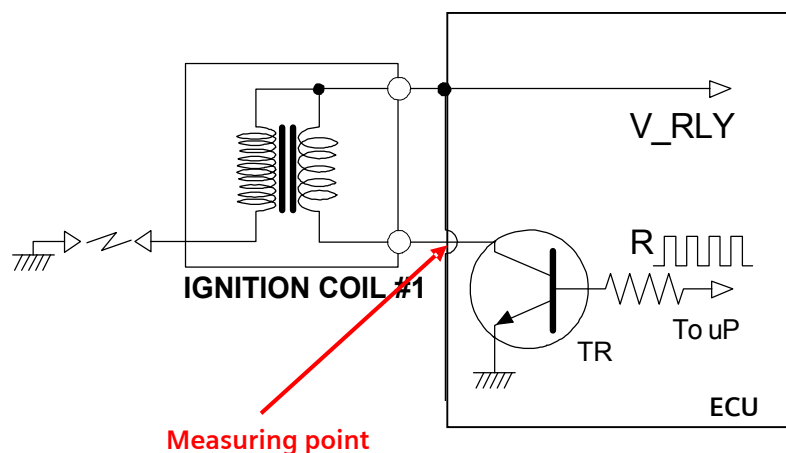
O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is On)

P0351 : Ignition coil 'A' primary secondary circuit malfunction

P0352 : Ignition coil 'B' primary secondary circuit malfunction

P0353 : Ignition coil 'C' primary secondary circuit malfunction



Detection Condition

: Spark duration is not generated or it is shorter than calibrated value.

Purge control valve circuit trouble shooting with DTC

Sensor Input DTC

Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

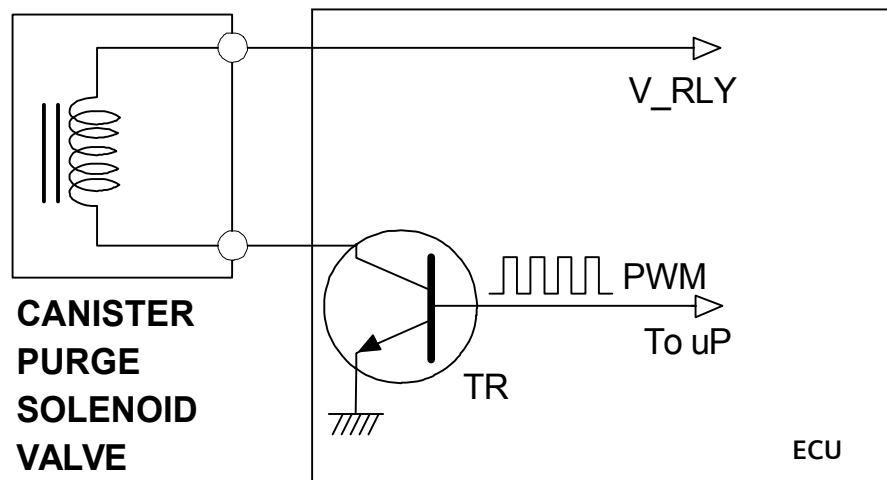
Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is Off)

P0444 : Evaporative emission control system, Purge control valve circuit - OC

P0445 : Evaporative emission control system, Purge control valve circuit - SCG or SCB



Detection Condition

: The output signal is stuck in high or low level by SCG, OC, SCB in circuit.

Idle speed actuator circuit trouble shooting with DTC

Sensor Input DTC

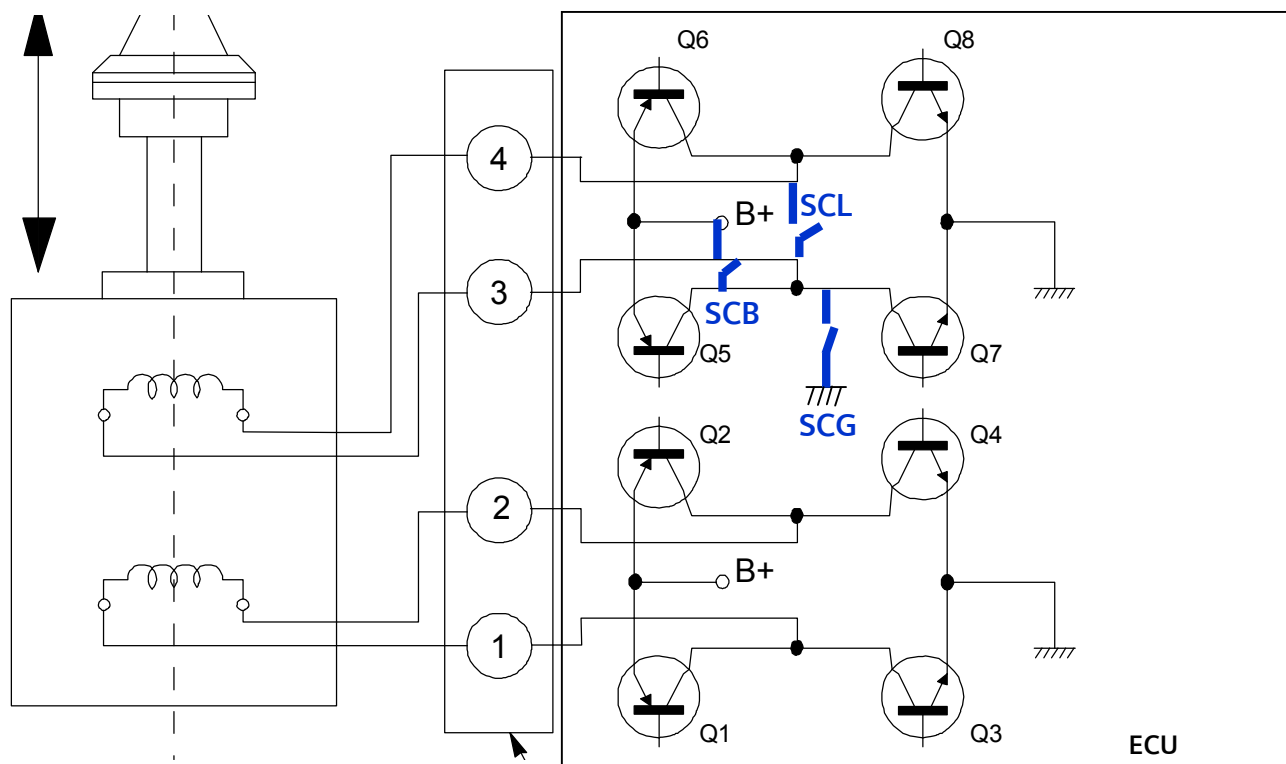
Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is On)

P0505 : Idle speed actuator command signal incorrect - SCG or OC or SCB or SCL



Detection Condition

: The output signal is stuck in high or low level by SCG, OC, SCB, SCL in circuit.

Malfunction indicate lamp trouble shooting with DTC

Sensor Input DTC

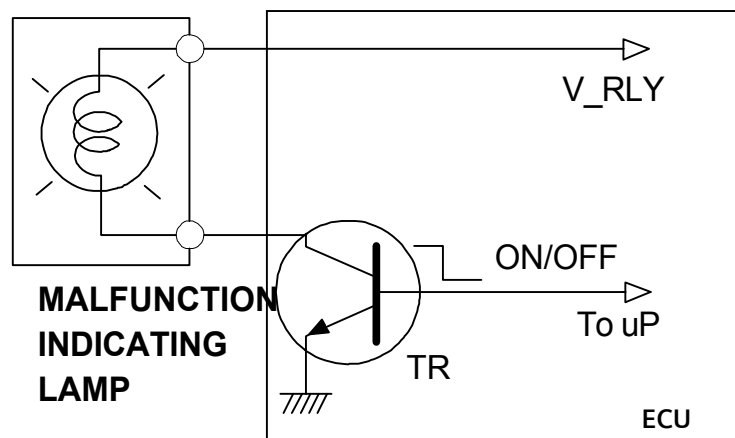
Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number

P0650 : Malfunction indicator lamp (MIL) control circuit -



Detection Condition

: The output signal is stuck in high or low level by SCG, OC, SCB in circuit.

Air conditioner compressor relay trouble shooting with DTC

Sensor Input DTC

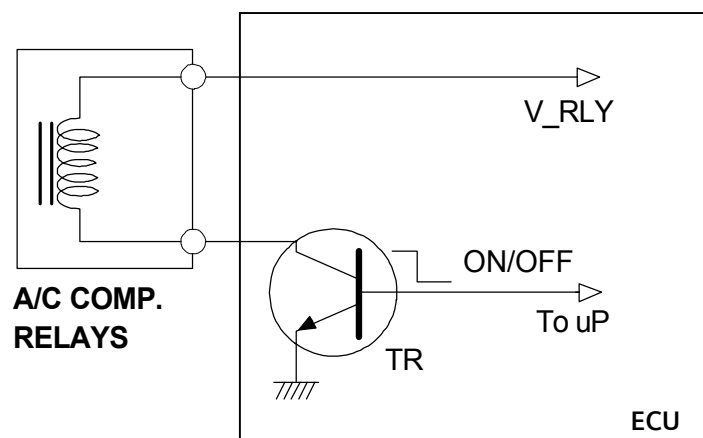
Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is Off)

P1545 : A/C high pressure switch or A/C clutch relay circuit malfunction



Detection Condition

: The output signal is stuck in high or low level by SCG, OC, SCB in circuit.

Cooling fan & A/C fan relay trouble shooting with DTC

Sensor Input DTC

Throttle position sensor
Cam position sensor
Crank position sensor
Vehicle speed sensor
TMAP sensor
Coolant temp. sensor
Knock sensor
O2 sensor
AC evap. temp. sensor
System voltage problem

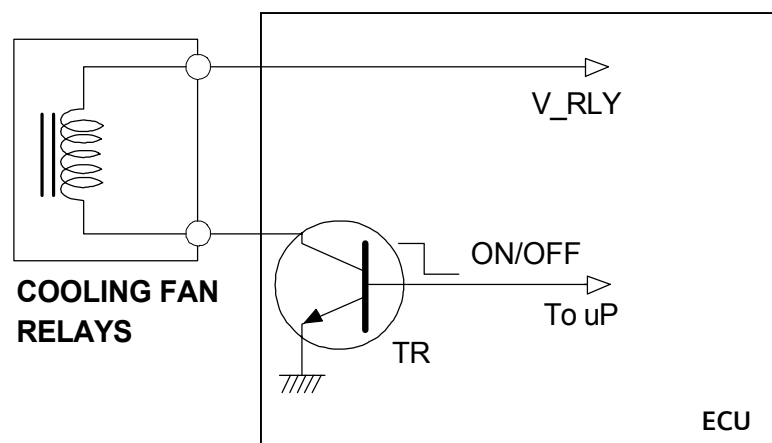
Actuator output DTC

O2 sensor heater circuit
Fuel pump circuit
Injector circuit
IG coil circuit
Purge control valve circuit
Idle speed actuator
MIL circuit
A/C relay/switch circuit
Cooling fan relay

DTC number (MIL is Off)

P1624 : Cooling fan relay - circuit malfunction

P1625 : A/C condenser fan relay - circuit malfunction



Detection Condition

: The output signal is stuck in high or low level by SCG, OC, SCB in circuit.