
STEP 5. Check for open circuit in the wiring harness between the CVT control relay and the secondary pulley speed sensor connector.

Between A-15X CVT control relay (terminal No.3) and B-113 secondary pulley speed sensor connector (terminal No.1)

Q: Is the check result normal?

YES : Go to Step 6.

NO : Repair the wiring harness.

STEP 6. Secondary pulley speed sensor check

Visually check the tip of the sensor for foreign materials or damage.

Q: Is the check result normal?

YES : Go to Step 7.

NO : Repair.

STEP 7. Diagnosis code recheck after replacing the secondary pulley speed sensor**Q: Is the check result normal?**

YES : The inspection is complete.

NO : Replace TCM.

DTC P0725: Malfunction of Engine Speed

DIAGNOSTIC FUNCTION

TCM detects malfunction of engine speed received from the ECM by comparing the primary pulley speed with the secondary pulley speed.

DESCRIPTIONS OF MONITOR METHODS

- Locked up with the primary pulley speed of 1,000 r/min or more and with the engine speed of 450 r/min or less
- TCM detects the malfunction in the engine speed by comparing it with the primary pulley speed.
- CAN communication error occurs between ECM and TCM.

MONITOR EXECUTION

- Continuous

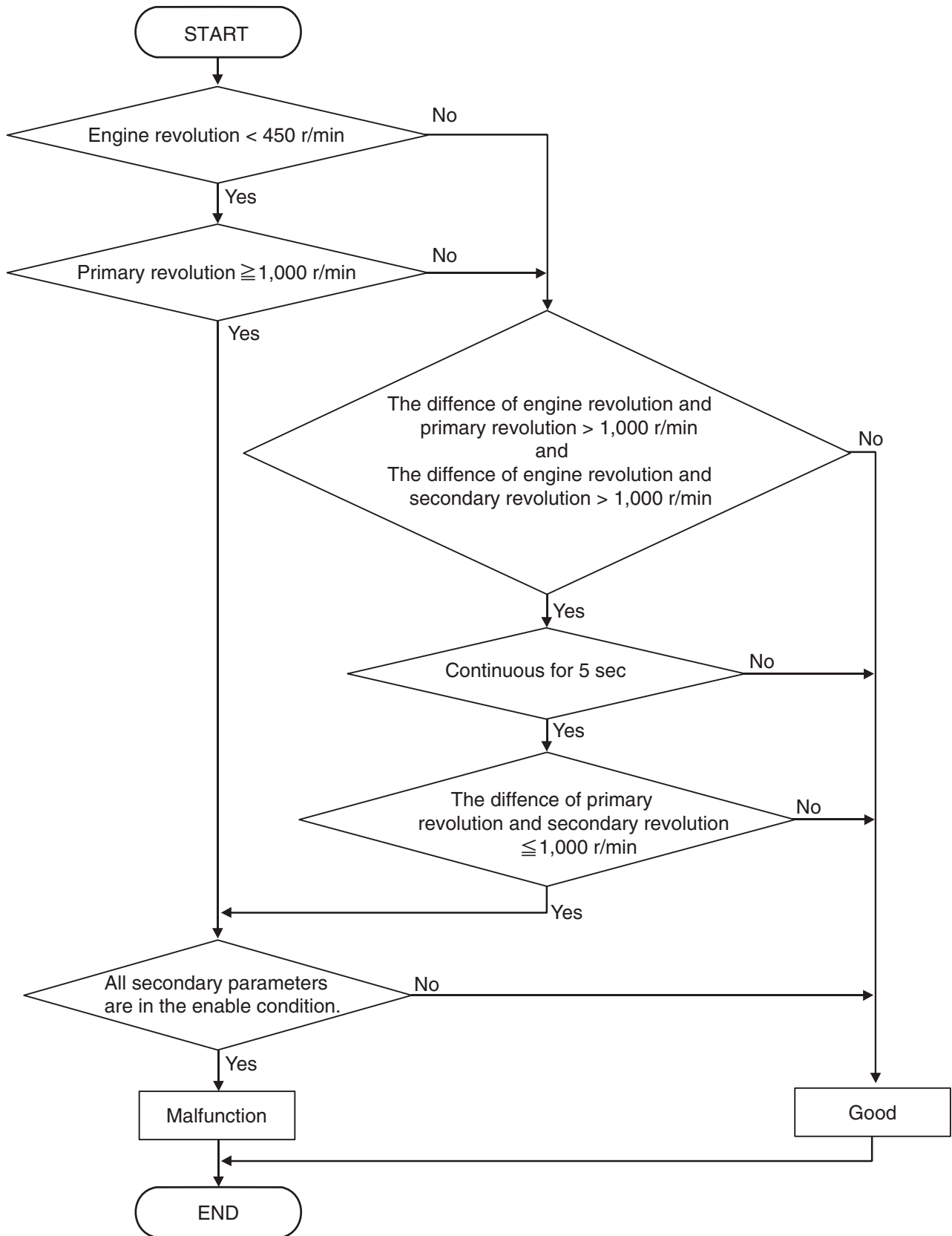
**MONITOR EXECUTION CONDITIONS
(OTHER MONITOR AND SENSOR)****Other Monitor (There is no temporary DTC stored in memory for the item monitored below)**

- P0705: Malfunction of transmission range switch
- P0715: Malfunction of primary pulley speed sensor
- P0741: Abnormality in lockup function
- P0746: Abnormality in hydraulic control system function
- P0841: Abnormality in line pressure sensor function
- P1706: Malfunction of throttle signal

Sensor (The sensor below is determined to be normal)

- Transmission range switch
- Primary pulley speed sensor
- Accelerator pedal position sensor

LOGIC FLOW CHARTS (Monitor Sequence)



AC609277

DTC SET CONDITIONS**Check Conditions**

- Transmission range switch position: D.
- Vehicle speed: 10 km/h (6.2 mph) or more.
- Throttle position: 1/8 or more.
- Engine speed: 450 r/min or more.
- Voltage of battery: 9 volts or more.
- Voltage of battery: 16 volts or less.
- Transmission range switch: normal.
- Primary pulley speed sensor: normal.
- Secondary pulley speed sensor: normal.
- Engine revolution: normal.
- Throttle position sensor: normal.

Judgement Criteria

- Engine revolution [primary pulley revolution: 1,000 r/min or more]: less than 450 r/min.
- The difference of engine revolution and primary revolution: more than 1,000 r/min. (5 seconds)

- The difference of engine revolution and secondary revolution: more than 1,000 r/min. (5 seconds)
- The difference of primary revolution and secondary revolution: 1,000 r/min or less.

OBD-II DRIVE CYCLE PATTERN

All the conditions below continue for 6 seconds.

- Transmission range switch: D
- Vehicle speed: 10 km/h (6.2 mph) or more
- Throttle position: 1/8 or more
- Engine speed: 450 r/min or more
- Transmission fluid temperature: 20° C (68° F) or more.
- Transmission fluid temperature: 99° C (210° F) or more.

PROBABLE CAUSES

- Malfunction of the CAN bus
- Malfunction of the engine system
- Malfunction of TCM

DIAGNOSTIC PROCEDURE**STEP 1. M.U.T.-III CAN bus diagnostics**

Use M.U.T.-III to perform the CAN bus diagnosis.

Q: Is the check result normal?

YES : Go to Step 2.

NO : Go to "CAN Troubleshooting."

STEP 2. M.U.T.-III diagnosis code

Check if the engine-related diagnosis code is set.

Q: Is the check result normal?

YES : Go to Step 3.

NO : Go to "Engine Troubleshooting."

STEP 3. Symptom recheck after erasing diagnosis code**Q: Is the check result normal?**

YES : Intermittent malfunction

NO : Replace TCM.