

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

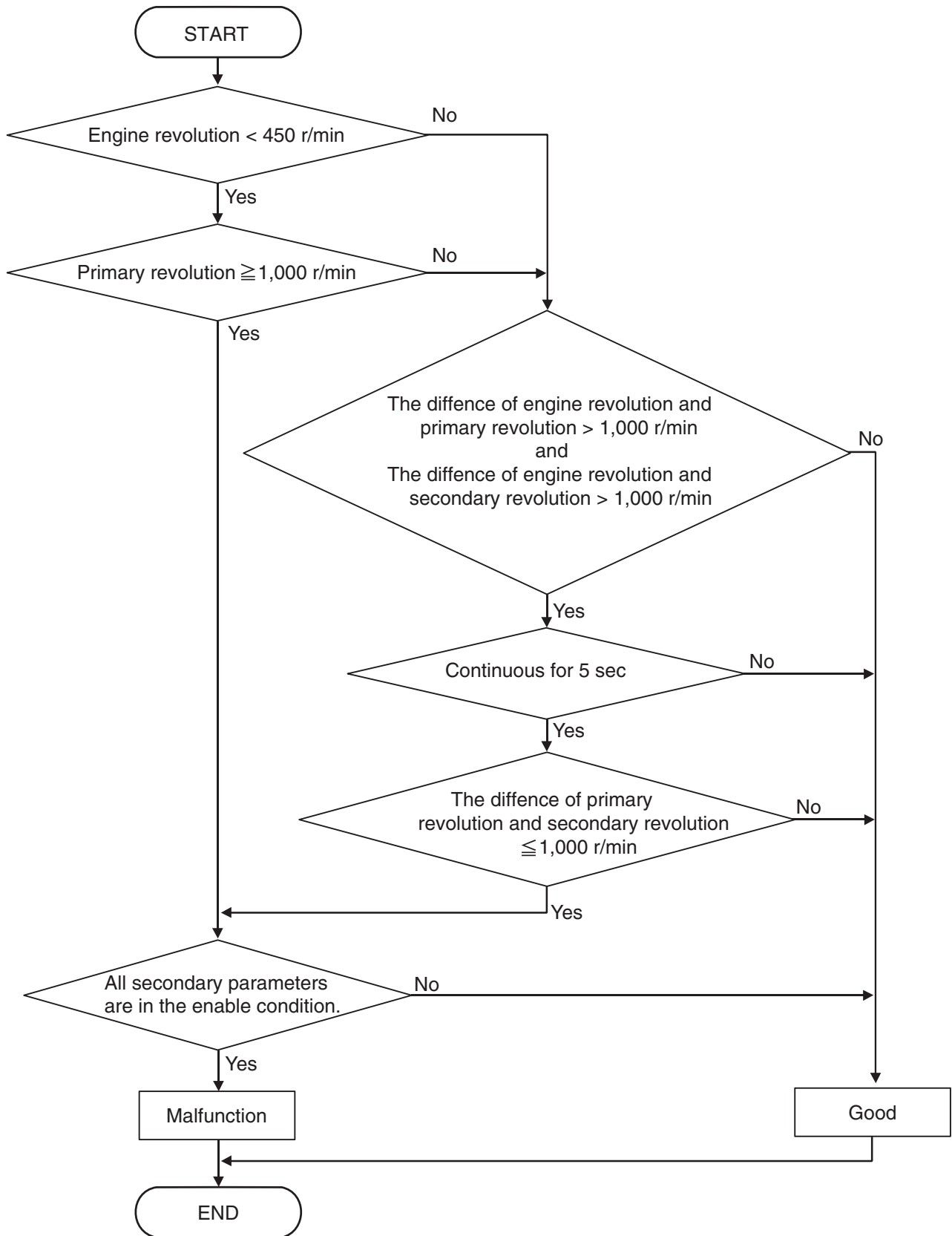
**MONITOR EXECUTION CONDITIONS
(OTHER MONITOR AND SENSOR)****Other Monitor (There is no temporary DTC stored in memory for the item monitored below)**

- 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.