DTC P0721:00 [FW6A-EL, FW6AX-EL]

id050227904100

Caution

- **Vehicle specifications differ depending on the vehicle identification number (VIN).**
  - **— Type A VIN:**
    JM0 KE**** 100001—**
    JM6 KE**** 100001—**
    JM7 KE**** 100001—**
    JM8 KE**** 100001—**
    JMZ KE**** 100001—**
    KE10 100001—**
  - **— Type B VIN:**
    JM0 KE**** 200001—**
    JM6 KE**** 200001—**
    JM8 KE**** 200001—**
    JMZ KE**** 200001—**
    KE10 200001—**

DTC P0721:00	Output shaft speed sensor/sensor output range malfunction
DETECTION CONDITION	**Type A VIN** • Under the following conditions, the output shaft speed is **13,560 rpm or more** for **1 s**: — Engine is running. — Battery voltage is **10 V or more**. • Under the following conditions, the vehicle speed signal from the DSC HU/CM and the output shaft speed sensor signal differ by **520 rpm or more** for **1 s**: — Engine is running. — Battery voltage is **10 V or more**. — Vehicle speed signal related DTC is not recorded. — Vehicle speed is **16 km/h {9.9 mph} or more**. — Vehicle speed signal from DSC HU/CM and turbine/input shaft speed sensor signal do not differ. — Output shaft speed sensor signal is input. — Output shaft speed is **13,560 rpm or less**. **Type B VIN** • Under the following condition, the output shaft speed is **13,560 rpm or more** in forward or **2,000 rpm or more** in reverse for a continuous **1 s**: — Battery voltage is **8 V or more**. **Diagnostic support note** • The check engine light illuminates if the TCM detects the above malfunction condition during the first drive cycle. • The automatic transaxle warning light illuminates if the TCM detects the above malfunction condition during the first drive cycle. • PENDING CODE is available. • FREEZE FRAME DATA is available. • DTC is stored in the TCM memory.
FAIL-SAFE FUNCTION	• Inhibits learning control. • Inhibits manual mode. • Inhibits neutral idle control. • Inhibits i-stop control. • Inhibits AAS.
POSSIBLE CAUSE	• Output shaft speed sensor malfunction
SYSTEM WIRING DIAGRAM	Not applicable

Diagnostic procedure

STEP	INSPECTION		ACTION
1	**VERIFY DSC HU/CM DTC** • Perform the DSC HU/CM DTC inspection using the M-MDS. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].)
		No	Go to the next step.
2	**VERIFY INSTRUMENT CLUSTER REPAIR HISTORY** • Does the instrument cluster have a record of replacement?	Yes	Perform the instrument cluster configuration, then go to Step 6. (See INSTRUMENT CLUSTER CONFIGURATION (USING AS-BUILT DATA).)
		No	Go to the next step.
3	**VERIFY AUTOMATIC TRANSMISSION REPAIR HISTORY** • Does the automatic transmission (with control valve body) have a record of replacement?	Yes	Perform the TCM configuration. (See TCM CONFIGURATION [FW6A-EL, FW6AX-EL].)
		No	Go to the next step.
4	**VERIFY FREEZE FRAME DATA/SNAPSHOT DATA HAS BEEN RECORDED** • Has the freeze frame data/snapshot data been recorded on the repair order?	Yes	Go to the next step.
		No	Record the freeze frame data/snapshot data on the repair order, then go to the next step.
5	**VERIFY RELATED SERVICE INFORMATION AVAILABILITY** • Verify related Service Information availability. • Is any related Service Information available?	Yes	Perform repair or diagnosis according to the available Service Information. • If the vehicle is not repaired, replace the control valve body. (See CONTROL VALVE BODY REMOVAL/INSTALLATION [FW6A-EL, FW6AX-EL].) Go to the next step.
		No	Replace the control valve body, then go to the next step. (See CONTROL VALVE BODY REMOVAL/INSTALLATION [FW6A-EL, FW6AX-EL].)
6	**VERIFY DTC TROUBLESHOOTING COMPLETED** • Clear the DTC using the M-MDS. (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [FW6A-EL, FW6AX-EL].) • Perform the following procedure to ensure that the DTC has been resolved: 1. Drive the vehicle for **1 s or more** under the following condition: • Vehicle speed: **30 km/h {19 mph} or more** • Perform the DTC inspection using the M-MDS. (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [FW6A-EL, FW6AX-EL].) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [FW6A-EL, FW6AX-EL].)
		No	DTC troubleshooting completed.