## DTC P0720:00 [GW6A-EL, GW6AX-EL]

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| DTC P0720:00 | Output shaft speed sensor range/performance problem |
|---|---|
| DETECTION CONDITION | • Under the following conditions, there is difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal for **1 s**:<br>— Engine is running.<br>— The vehicle is driven in D position or R position.<br>— Vehicle speed signal related DTC is not recorded.<br>— There is no difference between vehicle speed signal from DSC HU/CM and turbine/input shaft speed sensor signal.<br>— Output shaft speed sensor signal is input.<br>— Forward: Output shaft speed is **13,560 rpm or less**.<br>— Reverse: Output shaft speed is **2,000 rpm or less**.<br>**Diagnostic support note**<br>• The check engine light illuminates if the TCM detects the above malfunction condition during the first drive cycle.<br>• The automatic transaxle warning light illuminates if the TCM detects the above malfunction condition during the first drive cycle.<br>• PENDING CODE is available.<br>• FREEZE FRAME DATA is available.<br>• DTC is stored in the TCM memory. |
| FAIL-SAFE FUNCTION | • Inhibits learning control.<br>• Inhibits manual mode.<br>• Inhibits neutral idle control.<br>• Inhibits i-stop control.<br>• 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**<br>• Perform the DSC HU/CM DTC inspection using the M-MDS.<br>(See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].)<br>• Are any DTCs present? | Yes | Go to the applicable DTC inspection.<br>(See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) |
| | | No | Go to the next step. |
| 2 | **VERIFY INSTRUMENT CLUSTER REPAIR HISTORY**<br>• Does the instrument cluster have a record of replacement? | Yes | Perform the instrument cluster configuration, then go to Step 6.<br>(See INSTRUMENT CLUSTER CONFIGURATION (USING AS-BUILT DATA).) |
| | | No | Go to the next step. |
| 3 | **VERIFY AUTOMATIC TRANSMISSION REPAIR HISTORY**<br>• Does the automatic transmission (with control valve body) have a record of replacement? | Yes | Perform the TCM configuration.<br>(See TCM CONFIGURATION [GW6A-EL, GW6AX-EL].) |
| | | No | Go to the next step. |
| 4 | **VERIFY FREEZE FRAME DATA/SNAPSHOT DATA HAS BEEN RECORDED**<br>• 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**<br>• Verify related Service Information availability.<br>• Is any related Service Information available? | Yes | Perform repair or diagnosis according to the available Service Information.<br>• If the vehicle is not repaired, replace the control valve body.<br>(See CONTROL VALVE BODY REMOVAL/INSTALLATION [GW6A-EL, GW6AX-EL].)<br>Go to the next step. |
| | | No | Replace the control valve body, then go to the next step.<br>(See CONTROL VALVE BODY REMOVAL/INSTALLATION [GW6A-EL, GW6AX-EL].) |

| STEP | INSPECTION | | ACTION |
|---|---|---|---|
| 6 | **VERIFY DTC TROUBLESHOOTING COMPLETED**<br>• Clear the DTC using the M-MDS. (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [GW6A-EL, GW6AX-EL].)<br>• Perform the following procedure to ensure that the DTC has been resolved:<br>1. Drive the vehicle for **1 s or more** under the following condition:<br>• Vehicle speed: **30 km/h {19 mph} or more**<br>• Perform the DTC inspection using the M-MDS. (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [GW6A-EL, GW6AX-EL].)<br>• Are any DTCs present? | Yes | Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [GW6A-EL, GW6AX-EL].) |
| | | No | DTC troubleshooting completed. |