

# NO.16 JUDDER UPON TORQUE CONVERTER CLUTCH (TCC) OPERATION

B3E050319090W20

16	Judder upon torque converter clutch (TCC) operation
DESCRIPTION	<ul style="list-style-type: none"> <li>• Vehicle jolts when TCC is engaged.</li> </ul>
POSSIBLE CAUSE	<p>• Poor TCC engagement due to either slippage because the TCC is stuck or the line pressure is low</p> <p><b>Caution</b></p> <ul style="list-style-type: none"> <li>• If the TCC is stuck, inspect it. In addition, inspect the oil cooler for foreign particles which may have mixed in with the ATF.</li> </ul> <ol style="list-style-type: none"> <li>1. Torque converter clutch piston slippage, burnt             <ul style="list-style-type: none"> <li>• Line pressure high</li> <li>• Shift solenoid A malfunction</li> <li>• Control valve body malfunction</li> <li>• Body GND malfunction</li> <li>• Pressure control solenoid malfunction</li> </ul> </li> <li>2. Signal malfunction             <ul style="list-style-type: none"> <li>• Vehicle speed sensor malfunction</li> <li>• Sensor GND malfunction</li> <li>• TFT sensor malfunction</li> <li>• TP sensor malfunction or mis-adjustment</li> <li>• Input/turbine speed sensor malfunction</li> </ul> </li> <li>3. Torque converter malfunction</li> </ol> <p><b>Note</b></p> <ul style="list-style-type: none"> <li>• Before following the troubleshooting steps, make sure that the Automatic Transaxle On-Board Diagnostic and Automatic Transaxle Basic Inspection are conducted.</li> </ul>

## Diagnostic procedure

STEP	INSPECTION	ACTION
1	Inspect the value at the following PCM PID using the WDS or equivalent. (See <a href="#">PCM INSPECTION [ZJ, Z6].</a> ) (See <a href="#">PCM INSPECTION [LF].</a> ) • TSS Is the PID value normal?	Yes Go to the next step.
		No Repair or replace any malfunctioning parts.
2	Disconnect the PCM connector. Is the resistance between the ground terminal at the PCM connector and the body ground <b>less than 5.0 ohms</b> ?	Yes Go to the next step.
		No Repair the open ground circuit.
3	Inspect the resistance between shift solenoid A control circuit at the PCM connector and control valve body connector. Inspect the resistance between shift solenoid A circuit at the PCM connector and control valve body connector. Are the resistances <b>less than 5.0 ohms</b> ?	Yes Go to the next step.
		No Repair the shift solenoid A circuit.

		Yes	Go to the next step.
4	Inspect the shift solenoid. (See <a href="#">SOLENOID VALVE INSPECTION</a> .) Is the solenoid valve operating properly?	No	Overhaul the control valve body and repair or replace any malfunctioning parts. (See ATX workshop manual (FN4A-EL).) If any problem remains, overhaul the transaxle and repair or replace any malfunctioning parts. (See ATX workshop manual (FN4A-EL).)
5	Inspect the LPS PID value. Is the LPS PID value normal? (See <a href="#">PCM INSPECTION [ZJ, Z6]</a> .) (See <a href="#">PCM INSPECTION [LF]</a> .)	Yes	Overhaul the control valve body and repair or replace any malfunctioning parts. (See ATX workshop manual (FN4A-EL).) If any problem remains, overhaul the transaxle and repair or replace any malfunctioning parts. (See ATX workshop manual (FN4A-EL).)
		No	Replace the PCM.
6	<ul style="list-style-type: none"> <li>• Verify the test results. <ul style="list-style-type: none"> <li>- If normal, return to the diagnostic index to service any additional symptoms.</li> <li>- If the malfunction remains, inspect the related Service information and perform repair or diagnosis. <ul style="list-style-type: none"> <li>• If the vehicle is repaired, troubleshooting is completed.</li> <li>• If the vehicle is not repaired or additional diagnostic information is not available, replace the PCM.</li> </ul> </li> </ul> </li> </ul>		