

## NO.3 WILL NOT CRANK [ZJ, Z6]

B3E010318881W36

3	WILL NOT CRANK
DESCRIPTION	The starter does not work.
POSSIBLE CAUSE	<ul style="list-style-type: none"> <li>• Open starter circuit between ignition switch and starter</li> <li>• TR switch malfunction (ATX)</li> <li>• TR switch misadjustment (ATX)</li> <li>• Low or dead battery</li> <li>• Charging system malfunction</li> <li>• Starter malfunction</li> <li>• Seized/hydrolocked engine, flywheel or drive plate</li> <li>• Immobilizer system and/or circuit malfunction (if equipped)</li> <li>• Immobilizer system operating properly. (Ignition key is not registered.)</li> </ul>

### Diagnostic procedure

STEP	INSPECTION	RESULTS	ACTION
1	<p><b>Note</b></p> <ul style="list-style-type: none"> <li>• The following test should be perform for vehicles with immobilizer system. Go to Step 8 for vehicles without immobilizer system.</li> </ul> <p>Connect the WDS or equivalent to the DLC-2.</p> <p>Do the following conditions appear?</p> <ul style="list-style-type: none"> <li>• The engine is not completely started.</li> <li>• DTC P1260 is displayed.</li> </ul>	Yes	<p><b>Both conditions appear:</b></p> <p>Go to Step 4.</p>
		No	<p><b>Either or other condition appears:</b></p> <p>Go to the next step.</p>
2	Is the coil connector securely connected to the coil?	Yes	Go to the next step.
		No	Connect the coil connector securely. Return to Step 1.
3	Does the security light illuminate?	Yes	Go to the next step.
		No	Inspect the instrument cluster. (See <a href="#">INSTRUMENT CLUSTER INSPECTION.</a> )
4	<p>Connect the WDS or equivalent to the DLC-2 and retrieve DTC.</p> <p><b>DTC</b></p> <p><b>B1213, B1600, B1601, B1602, B1681, B2103, B2139, B2141, B2431, U2510</b></p>	Yes	Go to the appropriate DTC inspection. (See <a href="#">DTC TABLE [ZJ, Z6].</a> )
		No	Go to the next step.
5	<p>Inspect for the following wiring harnesses and connectors:</p> <ul style="list-style-type: none"> <li>• Between coil terminal A and instrument cluster terminal 2Q</li> <li>• Between coil terminal B and instrument cluster terminal 2S</li> </ul> <p>Is there any malfunction?</p>	Yes	Repair or replace suspected wiring harness and connector.
		No	Go to the next step.
	<p>Inspect for the following wiring harnesses and connectors:</p> <ul style="list-style-type: none"> <li>• Between PCM terminal 1W and instrument</li> </ul>	Yes	Repair or replace suspected wiring harness and connector.

6	cluster terminal 1O • Between PCM terminal 1S and instrument cluster terminal 1M Is there any malfunction?	No	Go to the next step.
7	Change the selector lever in the P or N position. (ATX) Is there continuity between the PCM terminal 1AB and the starter relay?	Yes	Go to the next step.
		No	Repair or replace the wiring harness.
8	Inspect following: • Battery connection • Battery condition • Transaxle is in Park or Neutral. (ATX) • Fuses Are all items normal?	Yes	Go to the next step.
		No	Service if necessary. Repeat Step 8.
9	Is clicking sound heard from the starter when the ignition switch is turned to START position?	Yes	Go to the next step.
		No	Go to Step 11.
10	Inspect the starting system. (See <a href="#">STARTER INSPECTION.</a> ) Is starting system normal?	Yes	Inspect for seized/hydrolocked the engine, flywheel or drive plate. (See <a href="#">FLYWHEEL INSPECTION.</a> )
		No	Repair or replace the components as required.
11	Do any other electrical accessories work?	Yes	Go to the next step.
		No	Inspect the charging system. (See <a href="#">BATTERY INSPECTION.</a> ) (See <a href="#">GENERATOR INSPECTION [ZJ, Z6].</a> )
12	<p><b>Note</b></p> <p>• The Following test should be performed on ATX only. For MTX, go to the next step.</p> <p>Connect the WDS or equivalent to the DLC-2. Access TR PID. Turn the ignition switch to the ON position. Is TR PID indicated P/N when selecting the P or N position?</p>	Yes	Go to the next step.
		No	Inspect the TR switch adjustment. (See <a href="#">TRANSAXLE RANGE (TR) SWITCH INSPECTION.</a> ) • If the TR switch is adjusted properly, inspect for open circuit between the TR switch and the PCM terminal 1X or starter.
13	Connect the WDS or equivalent to the DLC-2. Retrieve any continuous memory DTCs. Are there any continuous memory DTCs displayed?	Yes	<p><b>DTC is displayed:</b></p> <p>Go to the appropriate DTC inspection. (See <a href="#">DTC TABLE [ZJ, Z6].</a>)</p> <p><b>Communication error message is displayed:</b></p> <p>Inspect for following:</p> <ul style="list-style-type: none"> <li>• Open circuit in wiring harness between main relay and PCM terminal 1BF, or 1BG (ATX)</li> <li>• Open circuit in wiring harness between main relay terminal B and PCM terminal 1AW</li> <li>• The main relay is stuck open.</li> <li>• Open or poor GND circuit (PCM terminal 2BH, 2AZ or 2BD)</li> <li>• Poor connection of vehicle body GND</li> </ul>

		No	<b>No DTC is displayed:</b>  Inspect following: <ul style="list-style-type: none"> <li>• START circuit in ignition switch</li> <li>• Open circuit in wiring harness between ignition switch and starter</li> </ul>
14	Retrieve any KOEO DTCs using WDS or equivalent. Are there DTCs displayed during KOEO inspection?	Yes	<b>DTC is displayed:</b>  Go to the appropriate DTC inspection. (See <a href="#">DTC TABLE [ZJ, Z6]</a> .)
		No	<b>No DTC is displayed:</b>  Inspect following: <ul style="list-style-type: none"> <li>• START circuit in ignition switch</li> <li>• Open circuit in wiring harness between ignition switch and starter</li> </ul>
15	Verify test results. <ul style="list-style-type: none"> <li>• If normal, return to diagnostic index to service any additional symptoms.                (See <a href="#">ENGINE SYMPTOM TROUBLESHOOTING [ZJ, Z6]</a>.)</li> <li>• If malfunction remains, inspect related Service information perform repair or diagnosis.</li> </ul> - If vehicle repaired, troubleshooting completed. - If vehicle not repaired or additional diagnostic information not available, replace the PCM. (See <a href="#">INTAKE-AIR SYSTEM REMOVAL/INSTALLATION [ZJ, Z6]</a> .)		