

## NO.24 A/C IS ALWAYS ON OR A/C COMPRESSOR RUNS CONTINUOUSLY [ZJ, Z6]

B3E010318881W57

24	A/C IS ALWAYS ON OR A/C COMPRESSOR RUNS CONTINUOUSLY.
<b>DESCRIPTION</b>	The A/C compressor magnetic clutch does not disengage.
<b>POSSIBLE CAUSE</b>	<ul style="list-style-type: none"> <li>• Stuck engagement A/C compressor magnetic clutch</li> <li>• A/C relay is stuck closed.</li> <li>• Short to GND in wiring harness between A/C switch and PCM</li> <li>• Short to GND in wiring harness between A/C relay and PCM</li> <li>• Short to battery power in A/C relay to magnetic clutch circuit shorted to battery power</li> </ul>

### Diagnostic procedure

STEP	INSPECTION	RESULTS	ACTION
1	Connect the WDS or equivalent to the DLC-2. Retrieve any continuous memory, KOEO and KOER DTCs using WDS or equivalent. Are there any DTCs displayed?	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> Go to the next step.
2	Start the engine and idle it. Turn the A/C switch on. Remove the A/C relay. Does the A/C magnetic clutch disengage?	Yes	Inspect for the following: <ul style="list-style-type: none"> <li>• A/C relay is stuck closed.</li> <li>• Short to GND in wiring harness between A/C relay and PCM terminal 1AL.</li> </ul> If both items normal, go to the next step.
		No	Inspect if circuit between the A/C relay and the magnetic clutch shorts to battery power circuit. <ul style="list-style-type: none"> <li>• If circuit is normal, inspect the magnetic clutch stuck engagement or clearance.</li> </ul>
3	Connect the WDS or equivalent to the DLC-2. Access AC_REQ PID. Start the engine and turn the A/C switch on. Read AC_REQ PID while disconnecting the refrigerant pressure switch connector.  <b>Note</b>  <ul style="list-style-type: none"> <li>• AC_REQ PID should read Off when disconnecting connector. If AC_REQ PID remains On, short to GND may be present.</li> </ul> Does AC_REQ PID remain On?	Yes	Inspect for short to GND in wiring harness between the refrigerant pressure switch and the PCM terminal 1Q.
		No	Go to the next step.
	Reconnect the refrigerant pressure switch connector. Read AC_REQ PID while turning off the A/C switch.	Yes	Inspect following: <ul style="list-style-type: none"> <li>• Short to GND in wiring harness between A/C switch and A/C amplifier</li> </ul>

4	<p><b>Note</b></p> <ul style="list-style-type: none"> <li>AC_REQ PID should read Off when turning A/C switch off. If AC_REQ PID remains On, short to GND may be present.</li> </ul> <p>Does AC_REQ PID remain On?</p>		<ul style="list-style-type: none"> <li>Short to GND in wiring harness between A/C amplifier and refrigerant pressure switch</li> </ul>
		No	Inspect for stuck closed the A/C switch.
5	<p>Verify test results.</p> <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> <ul style="list-style-type: none"> <li>If vehicle repaired, troubleshooting completed.</li> <li>If vehicle not repaired or additional diagnostic information not available, replace the PCM. (See <a href="#">INTAKE-AIR SYSTEM REMOVAL/INSTALLATION [ZJ, Z6]</a>.)</li> </ul>		