

NO.24 A/C IS ALWAYS ON OR A/C COMPRESSOR RUNS CONTINUOUSLY [LF]

B3E010318881W26

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

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	DTC is displayed: Go to appropriate DTC inspection. (See DTC TABLE [LF] .)
		No	No DTC is displayed: 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 following: <ul style="list-style-type: none"> • The A/C relay is stuck closed. • Short to GND in wiring harness between A/C relay and PCM terminal 1AN. If both items normal, go to the next step.
		No	Inspect if circuit between the A/C relay and magnetic clutch shorts to battery power circuit. <ul style="list-style-type: none"> • If the circuit is normal, inspect for magnetic clutch stuck engagement or clearance.
3	Connect WDS or equivalent to DLC-2. Access AC_REQ PID. Start engine and turn A/C switch on. Read AC_REQ PID while disconnecting refrigerant pressure switch connector. Note <ul style="list-style-type: none"> • AC_REQ PID should read Off when disconnecting connector. If AC_REQ PID remains On, short to GND may be present. Does AC_REQ PID remain On?	Yes	Inspect for short to GND in wiring harness between refrigerant pressure switch and PCM terminal 1AP.
		No	Go to the next step.
	Reconnect refrigerant pressure switch connector. Read AC_REQ PID while turning off A/C switch. Note	Yes	Inspect the following: <ul style="list-style-type: none"> • Short to GND in wiring harness between the A/C switch and A/C amplifier

4	<ul style="list-style-type: none"> • AC_REQ PID should read Off when turning A/C switch off. If AC_REQ PID remains On, short to GND may be present. 		<ul style="list-style-type: none"> • Short to GND in wiring harness between the A/C amplifier and refrigerant pressure switch
	Does AC_REQ PID remain On?	No	Inspect for stuck closed A/C switch.
5	<p>Verify test results.</p> <ul style="list-style-type: none"> • If normal, return to diagnostic index to service any additional symptoms. (See ENGINE SYMPTOM TROUBLESHOOTING [LF].) • If malfunction remains, inspect related Service information perform repair or diagnosis. <ul style="list-style-type: none"> - If vehicle repaired, troubleshooting completed. - If vehicle not repaired or additional diagnostic information not available, replace the PCM. (See PCM REMOVAL/INSTALLATION [LF].) 		