

NO.23 A/C DOES NOT WORK SUFFICIENTLY [ZJ, Z6]

B3E010318881W56

23	A/C DOES NOT WORK SUFFICIENTLY.
DESCRIPTION	The A/C compressor magnetic clutch does not engage when the A/C switch is turned on.
POSSIBLE CAUSE	<ul style="list-style-type: none"> • Improper refrigerant charging amount • Open A/C magnetic clutch • Open circuit in wiring harness between A/C relay and A/C magnetic clutch • Poor GND of A/C magnetic clutch • Refrigerant pressure switch is stuck open. • A/C relay is stuck open. • Seized A/C compressor • Open circuit in wiring harness between A/C switch and PCM through both refrigerant pressure switch and A/C amplifier

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 the appropriate DTC inspection. (See DTC TABLE [ZJ, Z6].)
		No	No DTC is displayed: Go to the next step.
2	Disconnect the A/C compressor connector. Start the engine and turn the A/C switch on. Is there correct voltage at the A/C compressor magnetic clutch terminal? Specification 0.5-1.5 mm {0.02-0.05 in}	Yes	Inspect for GND condition of the magnetic clutch on the A/C compressor. • If GND condition is normal, inspect for open circuit magnetic clutch coil.
		No	Go to the next step.
3	Disconnect the refrigerant pressure switch connector. Connect jumper wire between A/C high-pressure switch terminals. Connect jumper wires between refrigerant pressure switch terminals. Connect WDS or equivalent to DLC-2. Access AC_REQ PID. Turn the ignition switch to the ON position. Turn the A/C switch on and set the blower fan at any speed. Does AC_REQ PID read On?	Yes	Inspect the refrigerant pressure switch operation. • If the switch is normal, go to the next step.
		No	Inspect for following: • A/C switch is stuck open. • Open circuit in wiring harness between refrigerant pressure switch and PCM terminal 1Q • Open circuit of blower motor fan switch and resistor (if blower motor does not operate) • Evaporator temperature sensor and A/C amplifier
4	Remove jumper wire from the switch connector. Reconnect connector to the refrigerant pressure switch. Start the engine and turn the A/C switch on. Does the fan operate?	Yes	Inspect for stuck open the A/C relay. Replace if necessary.
		No	Inspect following and repair or replace if necessary: • Refrigerant charging amount • A/C compressor for being seized
	Verify test results. • If normal, return to diagnostic index to service any additional symptoms.		

5	<p>(See ENGINE SYMPTOM TROUBLESHOOTING [ZJ, Z6].)</p> <ul style="list-style-type: none">• If malfunction remains, inspect related Service information perform repair or diagnosis. <p>- If vehicle repaired, troubleshooting completed.</p> <p>- If vehicle not repaired or additional diagnostic information not available, replace the PCM.</p> <p>(See INTAKE-AIR SYSTEM REMOVAL/INSTALLATION [ZJ, Z6].)</p>
---	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------