

NO.23 A/C DOES NOT WORK SUFFICIENTLY [LF]

B3E010318881W25

| 23 | A/C DOES NOT WORK SUFFICIENTLY. |
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| DESCRIPTION | 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 circuit 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 appropriate DTC inspection. (See DTC TABLE [LF] .) |
| | | No | No DTC is displayed: Go to the next step. |
| 2 | Disconnect A/C compressor connector. Start engine and turn A/C switch on. Is there correct voltage A/C compressor magnetic clutch terminal? Specification More than 10.5 V | Yes | Inspect for GND condition of magnetic clutch on 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 terminal. Connect jumper wires between refrigerant pressure switch terminal. Connect the WDS or equivalent to the DLC-2. Access AC_REQ PID. Turn the ignition switch to the ON position. Turn A/C switch on and set blower fan at any speed. Does AC_REQ PID read On? | Yes | Inspect refrigerant pressure switch operation. • If 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 1AP • 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 refrigerant pressure switch. Start the engine and turn the A/C switch on. Does the fan operate? | Yes | Inspect for stuck open 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. | | |

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| 5 | <p>(See ENGINE SYMPTOM TROUBLESHOOTING [LF].)</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 PCM REMOVAL/INSTALLATION [LF].)</p> |
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