

BULLETIN: 03D-J-128 LINE: 15

# SERVICE BULLETIN

#### TO: ALL DISTRIBUTORS AND JOBBERS

DATE: SEPTEMBER 26, 2003

#### FROM: S. D. CHRISTOPHERSEN, PRODUCT SERVICE & TRAINING

### SUBJECT: AIR CONDITIONING (A/C) INOPERATIVE/INTERMITTENT, A/C BLOWS WARM AIR (REPLACE A/C LOW PRESSURE CYCLING SWITCH)

#### **DESCRIPTION:**

Air Conditioning (A/C) Inoperative/Intermittent, A/C Blows Warm Air (Replace A/C Low Pressure Cycling Switch)

2003 Cadillac Escalade, Escalade EXT, Escalade ESV 2002-2003 Chevrolet TrailBlazer, TrailBlazer EXT 2003 Chevrolet Avalanche, Silverado, Suburban, Tahoe 2002-2003 GMC Envoy, Envoy XL 2003 GMC Sierra, Yukon, Yukon XL 2002-2003 Oldsmobile Bravada 2003 HUMMER H2

# **CONDITION:**

Some customers may comment that the A/C system is intermittently inoperative or blows warm air.

# CAUSE:

An intermittent inoperative (open) A/C low pressure cycling switch may be the cause. This is an intermittent condition, and temperatures may play a critical role if the vehicle is in the failed mode or operating as designed.

# **CORRECTION:**

Follow the diagnosis and service procedure below to correct this condition:

- 1. Park the vehicle inside or in the shade.
- 2. Open the windows in order to ventilate the interior of the vehicle.
- 3. If the A/C system was operating, allow the A/C system to equalize.
- 4. Turn OFF the ignition.

# **CORRECTION Continued:**

- 5. Open the hood and install fender covers.
  - Caution:
  - Avoid breathing the A/C Refrigerant 134a (R-134a) and the lubricant vapor or the mist. Exposure may irritate the eyes, nose, and throat. Work in a well-ventilated area. In order to remove R-134a from the A/C system, use service equipment that is certified to meet the requirements of SAE J 2210 (R-134a recycling equipment). If an accidental system discharge occurs, ventilate the work area before continuing service. Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.
  - For personal protection, goggles, and gloves should be worn and a clean cloth wrapped around fittings, valves, and connections when doing work that includes opening the refrigerant system. If R-134a comes in contact with any part of the body, severe frostbite and personal injury can result. The exposed area should be flushed immediately with cold water and prompt medical help should be obtained.

Notice:

- R-134a is the only approved refrigerant for use in this vehicle. The use of any other refrigerant may result in poor system performance or component failure.
- To avoid system damage use only R-134a dedicated tools when servicing the A/C system.
- Use only Polyalkylene Glycol Synthetic Refrigerant Oil (PAG) for internal circulation through the R-134a A/C system and only 525 viscosity mineral oil on fitting threads and O-rings. If lubricants other than those specified are used, compressor failure and/or fitting seizure may result.
- R-12 refrigerant and R-134a refrigerant must never be mixed, even in the smallest of amounts, as they are incompatible with each other. If the refrigerants are mixed, compressor failure is likely to occur. Refer to the manufacturer instructions included with the service equipment before servicing.
- 6. Install the J 43600 ACR 2000 Air Conditioning Service Center or equivalent equipment.

Important:

- The ambient temperature must be at least 16°C (60°F).
- Do not induce additional airflow across the front of the vehicle during the test.
- 7. Record the ambient temperature displayed on the J 43600.

# **CORRECTION Continued:**

- 8. Record readings of the low and high side STATIC pressures. The pressures should be within the specifications listed below.
  - Above 16°C (60°F): 345 kPa (50 psi)
  - Above 24°C (75°F): 483 kPa (70 psi)
  - Above 33°C (90°F): 690 kPa (100 psi)
  - If the static pressures are within specification, continue with Step 12.
  - If the static pressures are NOT within specifications, refer to Leak Testing in the appropriate service information.
- 9. Apply the parking brake.
- 10. Place the transaxle/transmission in PARK.
- 11. Start the engine.
- 12. Turn on the A/C system.
- 13. Inspect the A/C compressor to see if it is operating properly.



1 – Accumulator 2 – Low Pressure Cycling Switch

- 14. If the compressor is not operating as designed, tap on the low pressure cycling switch with a small hand tool. The compressor should start operating correctly.
- 15. If the compressor does not operate correctly after tapping on the low pressure cycling switch, disconnect the switch and jumper the lower pressure cycling switch connector with a fused jumper. If the compressor still does not operate properly, refer to HVAC Compressor Clutch Does Not Engage in the appropriate service information.

<u>Important</u>: DO NOT USE A/C low-pressure cycling switch P/N 15-5715 (1132749) or P/N 15-5720 (15035084) on the vehicles listed above.

### **CORRECTION Continued:**

- 16. If the compressor does operate correctly after tapping on the switch or jumping the low pressure cycling switch connector, replace the low pressure cycling switch, P/N 89040362. Refer to Air Conditioning (A/C) Low Pressure Switch Replacement in the appropriate service information.
- 17. Perform the Air Conditioning (A/C) System Performance Test in the appropriate service information.
- 18. Disconnect the J 43600 ACR 2000 Air Conditioning Service Center or equivalent equipment.
- 19. Remove the fender covers and close the hood.

#### **PARTS INFORMATION:**

# ImportantPart NumberDescriptionQty15-50156 (89040362)Switch, Pressure Cycling1

Parts are currently available from ACDelco/GMSPO.

ACDelco service bulletins are intended for use by professional technicians, NOT a "do-ityourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely.

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