

**ATTENTION:**

GENERAL MANAGER  PARTS MANAGER   
CLAIMS PERSONNEL  SERVICE MANAGER

*IMPORTANT - All Service Personnel Should Read and Initial*




**SERVICE BULLETIN**

**APPLICABILITY:** 2001~2002MY H-6 Legacy Vehicles  
**SUBJECT:** Legacy H-6 Air Conditioner  
 Compressor Revolution Sensor

**NUMBER:** 10-74-02  
**DATE:** 09/01/02

**INTRODUCTION**

The purpose of this bulletin is to address a possible customer concern relating to insufficient cooling of the passenger compartment due to “short-cycling” of the air conditioner compressor. This condition occurs when the air conditioner compressor revolution sensor develops an open circuit. The modified revolution sensor part number is 73190AE000.

**VEHICLES INVOLVED**

2001 Legacy VDC and LL Bean Outback Models	All VINs, Sedan and Wagon
2002 Legacy VDC and LL Bean Outback Models	Sedan: All VINs <b>up to and including</b> 27212107 Wagon: All VINs <b>up to and including</b> 27645258

*continued...*

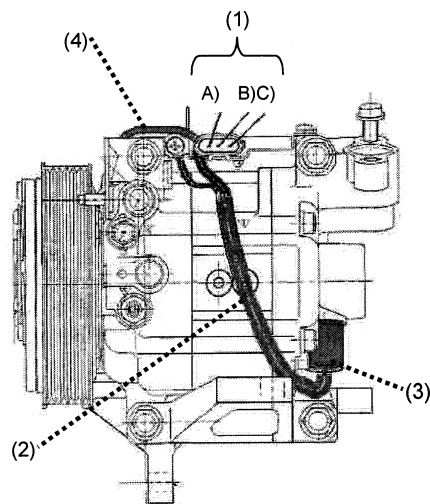


**CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.**

Subaru Service Bulletins are intended for use by professional technicians ONLY. They are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that this Service Bulletin applies to your vehicle, or that your vehicle will have that condition.



## DIAGNOSTIC PROCEDURE



- 1) Confirm customer's concern.
- 2) Disconnect the three (3) pole connector on top of the compressor.
- 3) Check the electrical continuity between (B) and (C) as shown in figure 1 above.
- 4) If no continuity exists, the circuit for the revolution sensor is suspected to be open and the revolution sensor assembly should be replaced.
- 5) Standard resistance can be confirmed by utilizing the table below:

Warmed up	Approximately 2K $\Omega$
Room temperature	Approximately 1.62K $\Omega$

## REPAIR PROCEDURE

The repair procedure is outlined as follows:

### REMOVAL

- 1) Conduct the following oil return operation to return the compressor oil in circulation with the refrigerant to the compressor.
  - a) Increase engine RPM to 1,500
  - b) Turn ON the climate control
  - c) Turn the temperature control switch to the lowest temperature setting
  - d) Put in RECIRC position
  - e) Turn the blower control switch to HIGH
  - f) Leave in this condition (at 1,500 RPM's) for ten (10) minutes then turn ignition switch off
- 2) Disconnect the GND (-) cable from the battery after noting the radio presets and their order.
- 3) Recover the air conditioner refrigerant using the proper recycling equipment.
- 4) Remove the air conditioner compressor from the vehicle after installing the compressor plugs provided in the kit and applying electrical tape over the ends of the high and low side hoses. This will prevent dirt, dust, moisture, and other foreign material from contaminating the system.

*continued...*

- 5) Clean the area around the revolution sensor.
- 6) Disconnect the grounding wire for the revolution sensor from its bracket and retain the screw for reuse.
- 7) Remove the revolution sensor connector from its bracket.
- 8) Remove the rear retaining clip (brown) from the connector and remove the black wire leading to the air conditioner compressor clutch from the connector. Note: perform this operation utilizing the appropriate electrical pin terminal removal tool.
- 9) Remove the rear retaining clip (brown) from the connector and remove the yellow and black terminal pins (leading to the revolution sensor) from the revolution sensor connector after taking note of their original positions.
- 10) Remove the revolution sensor from the compressor being careful not to damage the sealing surface of the compressor during removal.

#### **INSTALLATION**

Installation is the reverse of the removal process above. Please note the following precautions:

- 1) Thoroughly coat the replacement O-ring, supplied in the kit, with compressor oil and carefully install the O-ring onto the revolution sensor.
- 2) Confirm that the O-ring is fitted correctly and install the revolution sensor to the specified torque of 11.6 ft-lb./16 Nm.
- 3) After reinserting the two terminal pins back into the revolution sensor connector and ensuring their engagement, replace the rear retaining clip (brown) into the back of the connector with the one supplied in the kit.
- 4) Reinstall the connector to its bracket and ensure its engagement.
- 5) Connect the grounding wire of the revolution sensor to its original position and tighten to the specified torque of 2.2 ft-lb/3 Nm.
- 6) Charge the system with the proper amount of refrigerant and perform system performance test to confirm correct system operation.

#### **WARRANTY CLAIM INFORMATION**

<b>Labor Description</b>	<b>Operation Number</b>	<b>Failure Code</b>	<b>Labor Time</b>
A/C Compressor Revolution Sensor	A 014-008	DSC-39	2.0 Hours