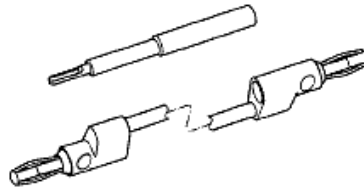


2007-08 HVAC

HVAC - TL

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07SAZ-001000A	Backprobe Set	2

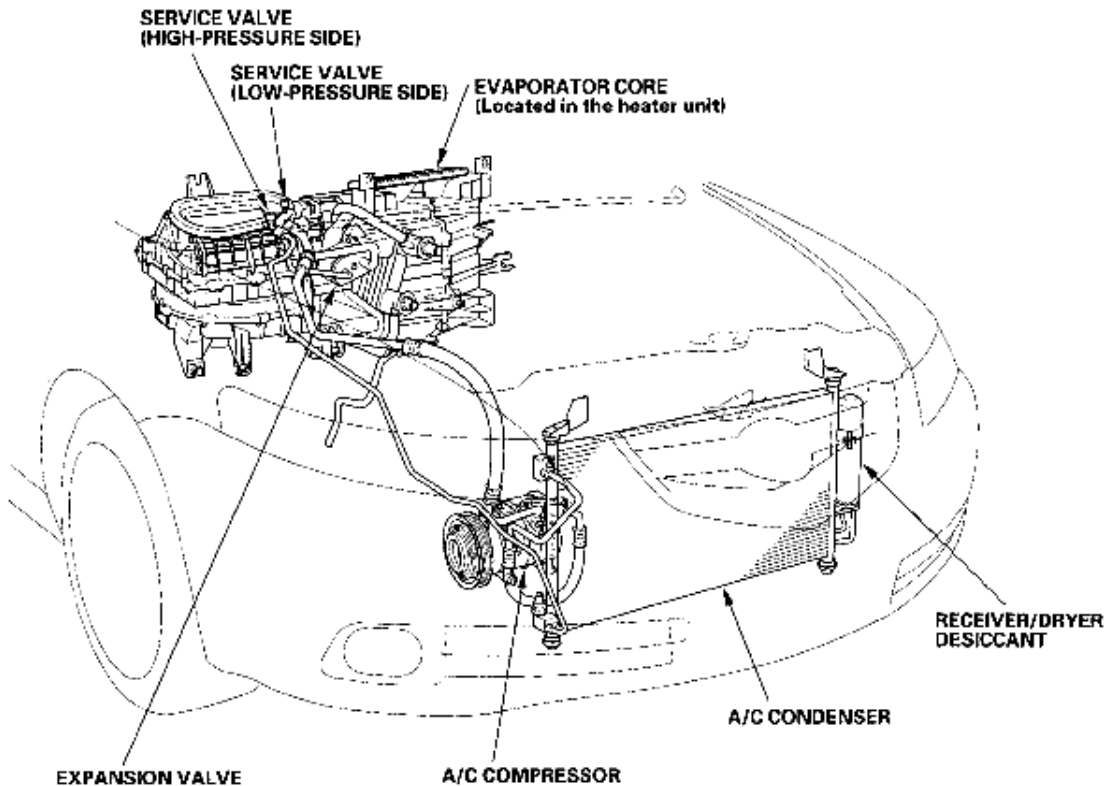


①

Fig. 1: Identifying Special Tools

Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

**Fig. 2: Identifying Climate Control Components Locations (1 Of 3)**

Courtesy of AMERICAN HONDA MOTOR CO., INC.

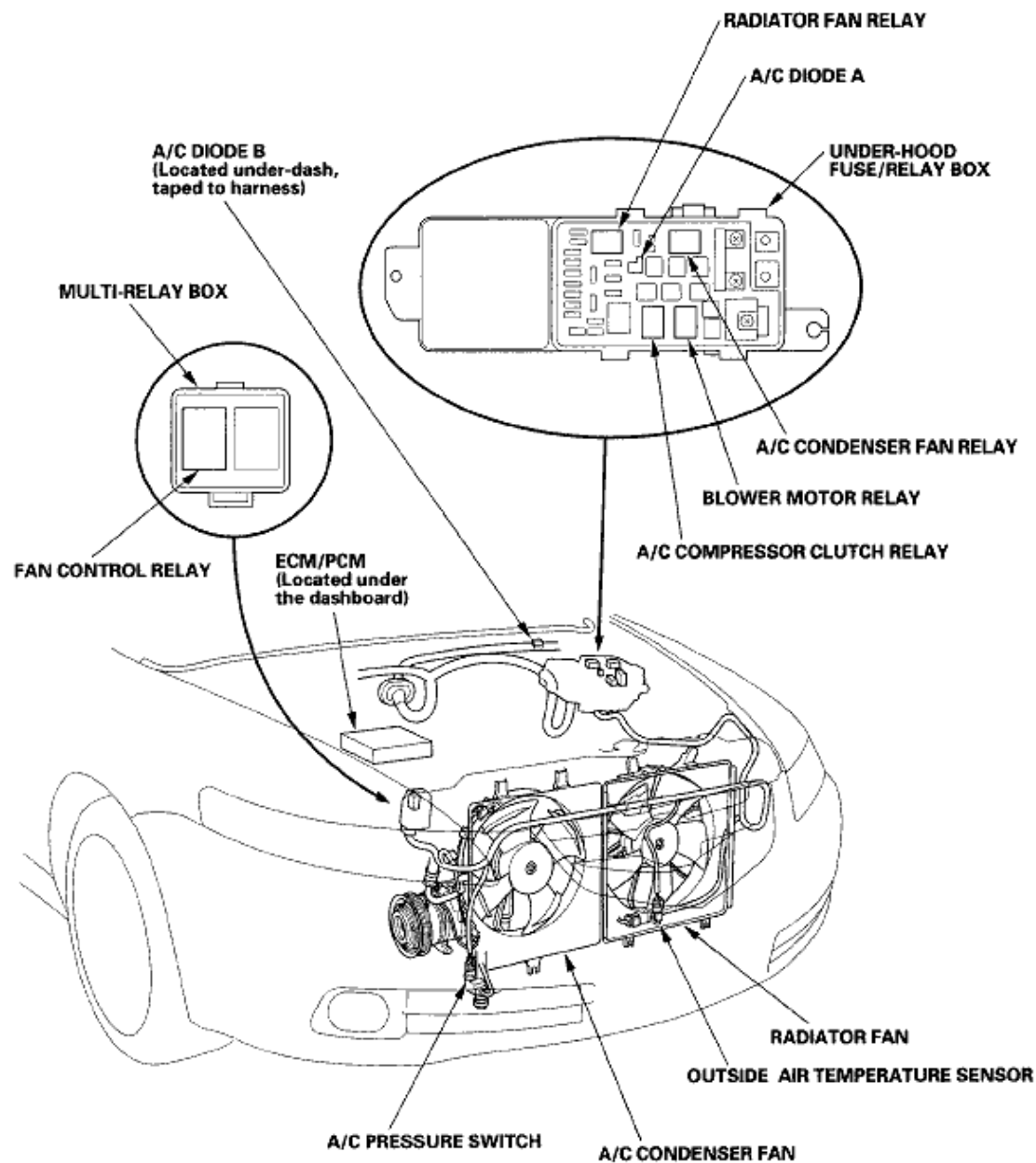


Fig. 3: Identifying Climate Control Components Locations (2 Of 3)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

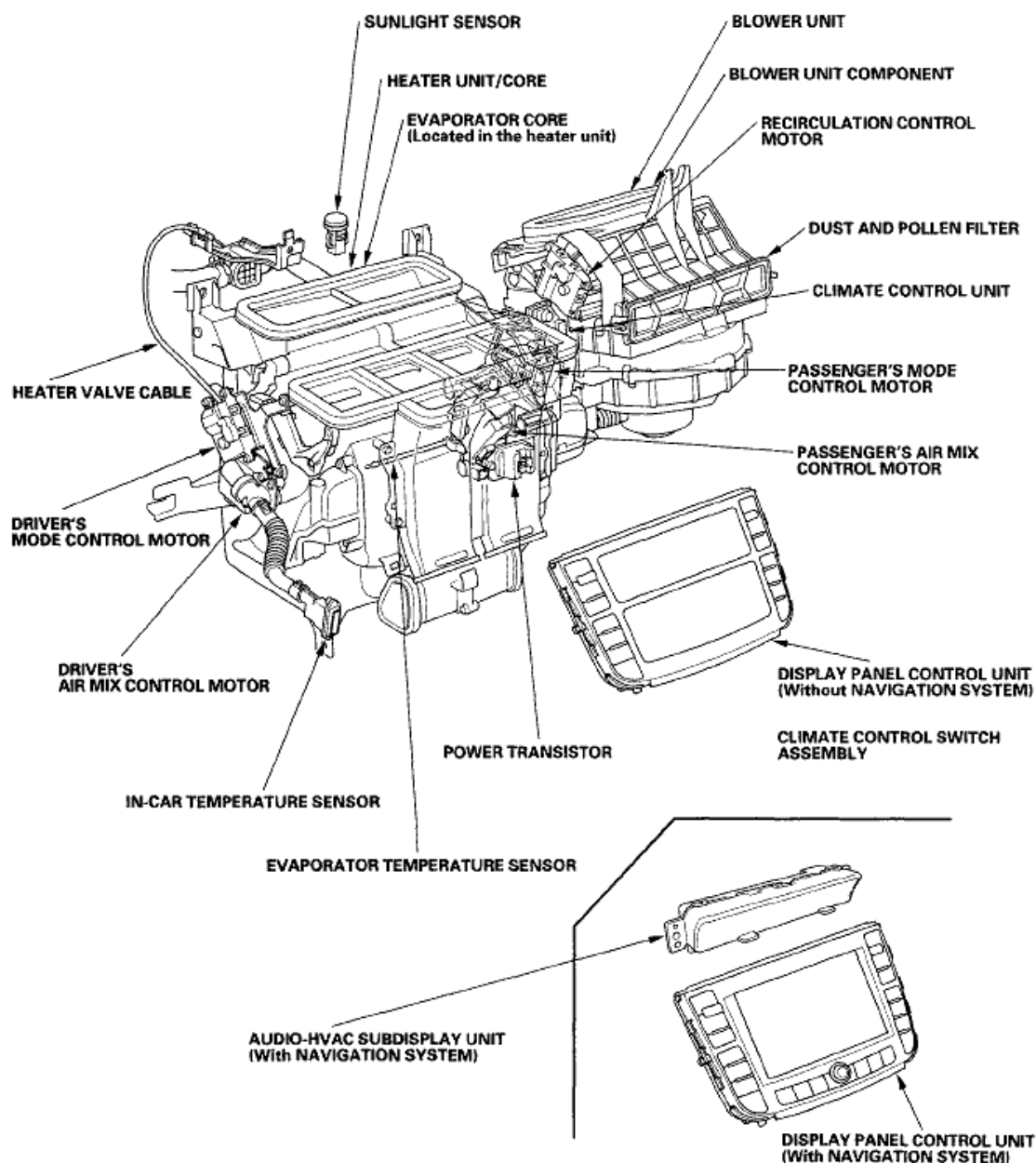


Fig. 4: Identifying Climate Control Components Locations (3 Of 3)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C SERVICE TIPS AND PRECAUTIONS

WARNING:

- Compressed air mixed with R-134a forms a combustible vapor.
- The vapor can burn or explode causing serious injury.
- Never use compressed air to pressure test R-134a service equipment or vehicle air conditioning systems.

CAUTION:

- Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.
- Be careful when connecting service equipment.

- **Do not breathe refrigerant or vapor.**

The air conditioning system uses HFC-134a (R-134a) refrigerant and polyalkyleneglycol (PAG) refrigerant oil, which are not compatible with CFC-12 (R-12) refrigerant and mineral oil. Do not use R-12 refrigerant or mineral oil in this system, and do not attempt to use R-12 servicing equipment; damage to the air conditioning system or your servicing equipment will result. Use only service equipment that is U.L.-listed and is certified to meet the requirements of SAE J2210 to remove R-134a from the air conditioning system.

If accidental system discharge occurs, ventilate the work area before resuming service.

R-134a service equipment or vehicle air conditioning systems should not be pressure tested or leak tested with compressed air.

Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

- Always disconnect the negative cable from the battery whenever replacing air conditioning parts.
- Keep moisture and dirt out of the system. When disconnecting any lines, plug or cap the fittings immediately; don't remove the caps or plugs until just before you reconnect each line.
- Before connecting any hose or line, apply a few drops of refrigerant oil to the O-ring.
- When tightening or loosening a fitting, use a second wrench to support the matching fitting.
- When discharging the system, use an R-134a refrigerant recovery/recycling/charging station; don't release refrigerant into the atmosphere.

A/C SYSTEM INSPECTION

Before troubleshooting any problem with the air conditioning system, do the following.

1. With the ignition switch in the LOCK (0) position, inspect the A/C components, pressure lines and hoses for stains that may indicate a refrigerant or a compressor oil leak.

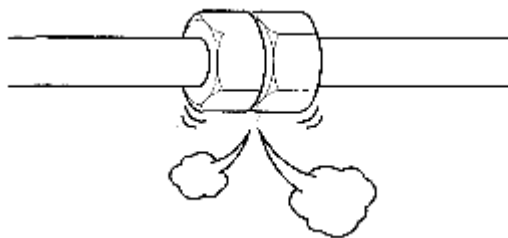


Fig. 5: Inspecting A/C Components, Pressure Lines And Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the condenser for material clogging the fins or for damage to the fins:
 - Carefully clean any material from the condenser fins with water and detergent.
 - Be sure to dry the condenser completely.

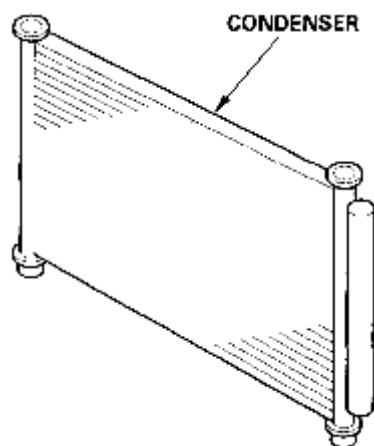


Fig. 6: Identifying Condenser

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Inspect the drive belt (see **DRIVE BELT INSPECTION**).
4. Make sure no material is blocking the airflow to the condenser.
5. Check the dust and pollen filter, and replace it if it is clogged (see **DUST AND POLLEN FILTER REPLACEMENT**).
6. Check the operation of the heater valve. Make sure the cable is adjusted properly (see **HEATER VALVE CABLE ADJUSTMENT**).
7. Start the engine, turn the air conditioning system on, and allow it to normalize for a few minutes:
 - Check that the A/C operates at each position of the blower fan switch (except OFF).
 - Check that the compressor clutch is engaged. The pressure plate should be rotating at the same speed as the pulley.
 - Check that the cooling fans operate when the compressor clutch is engaged.
 - Check that the engine idle speed is correctly maintained when the A/C is switched on and off and the compressor clutch is engaged and disengaged.

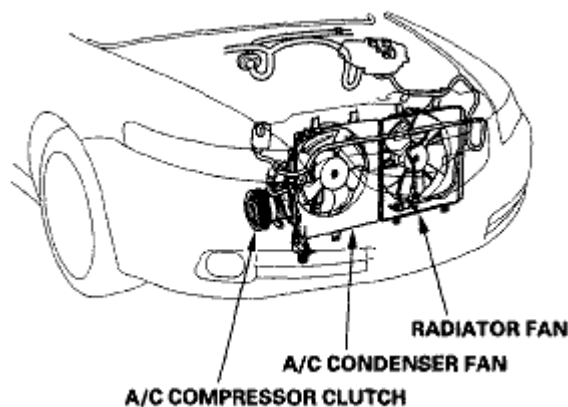


Fig. 7: Identifying Radiator Fan, A/C Condenser Fan And A/C Compressor Clutch

Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C REFRIGERANT OIL REPLACEMENT

Recommended PAG oil: DENSO ND-OIL 8

- P/N 38897-PR7-A01 AH: 120 mL (4 fl.oz)
- P/N38899-PR7-A01:40 mL (1 1/3 fl.oz)

Add the recommended refrigerant oil in the amount listed if you replace any of the following parts.

- To avoid contamination, do not return the oil to the container once dispensed, and never mix it with other refrigerant oils.
- Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
- Do not spill the refrigerant oil on the vehicle; it may damage the paint; if it gets on the paint, wash it off immediately.

A/C condenser25 mL (5/6 fl.oz)

Evaporator45 mL (1 1/2 fl.oz)

Line or hose10 mL (1/3 fl.oz)

Receiver/Dryer10 mL (1/3 fl.oz)

Leakage repair25 mL (5/6 fl.oz)

A/C compressorFor A/C compressor replacement, subtract the volume of oil drained from the removed A/C compressor from 120 mL (4 fl.oz), and drain the calculated volume of oil from the new A/C compressor: 120 mL (4 fl.oz) - Volume of removed A/C compressor = Volume to drain from new A/C compressor.

NOTE: Even if no oil is drained from the removed A/C compressor, don't drain more than 50 mL (1 2/3 fl.oz) from the new A/C compressor.

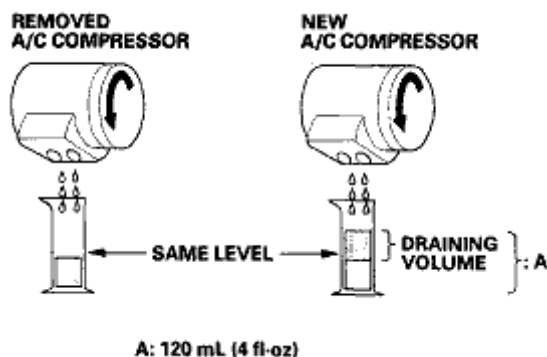
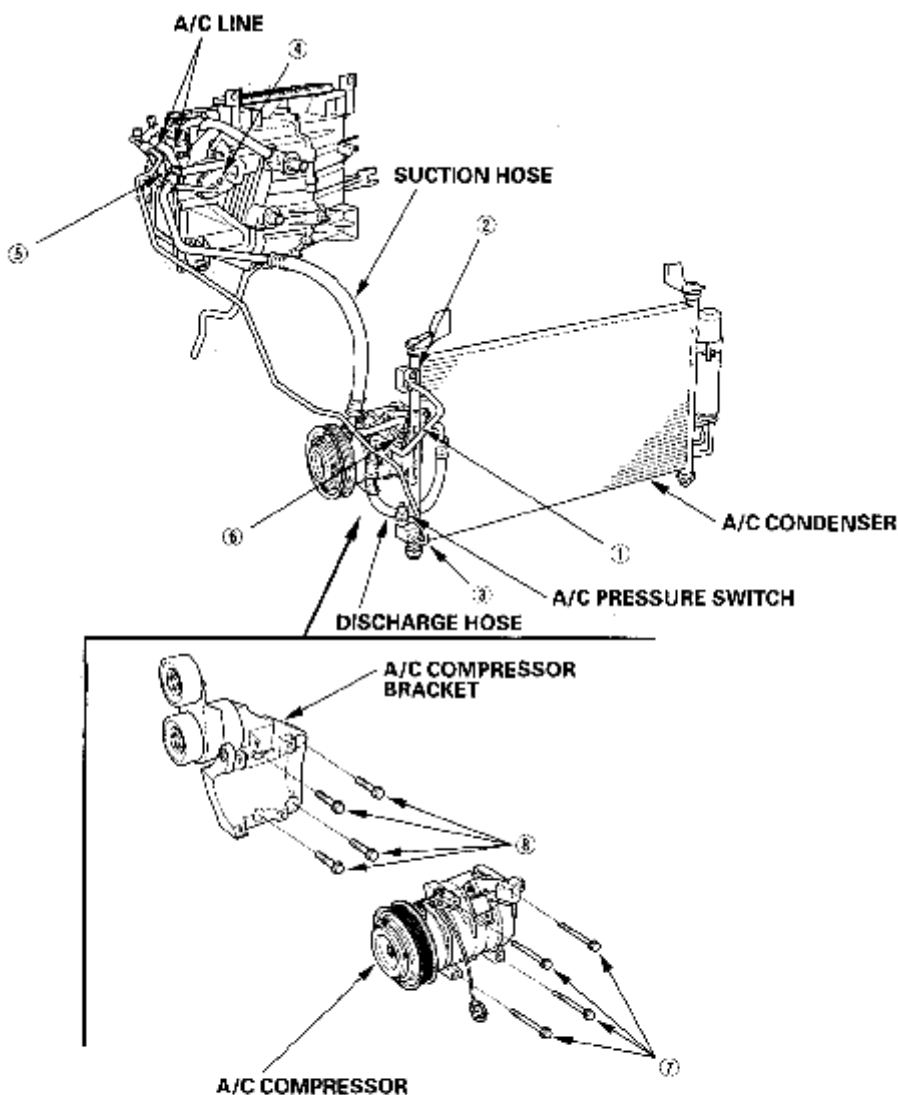


Fig. 8: Identifying A/C Compressor Replacement Procedure
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C LINE REPLACEMENT



- ① Discharge hose to the A/C compressor (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
 ② Discharge hose to the A/C condenser (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
 ③ A/C line to the A/C condenser (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
 ④ A/C line to the evaporator (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
 ⑤ A/C line to the suction hose: 32 N·m (3.3 kgf·m, 24 lbf·ft)
 ⑥ Suction hose to the A/C compressor (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
 ⑦ A/C compressor to the A/C compressor bracket (8 x 1.25 mm): 22 N·m (2.2 kgf·m, 16 lbf·ft)
 ⑧ A/C compressor bracket to the engine block (10 x 1.25 mm): 44 N·m (4.5 kgf·m, 33 lbf·ft)

Fig. 9: Identifying A/C Line Replacement Procedure With Torque Specifications

Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

HOW TO CHECK FOR DTCS WITH THE HDS

1. Make sure the ignition switch is in LOCK (0) position.
2. Connect the HDS to the data link connector (DLC) (A) located under the driver's side of the dashboard.

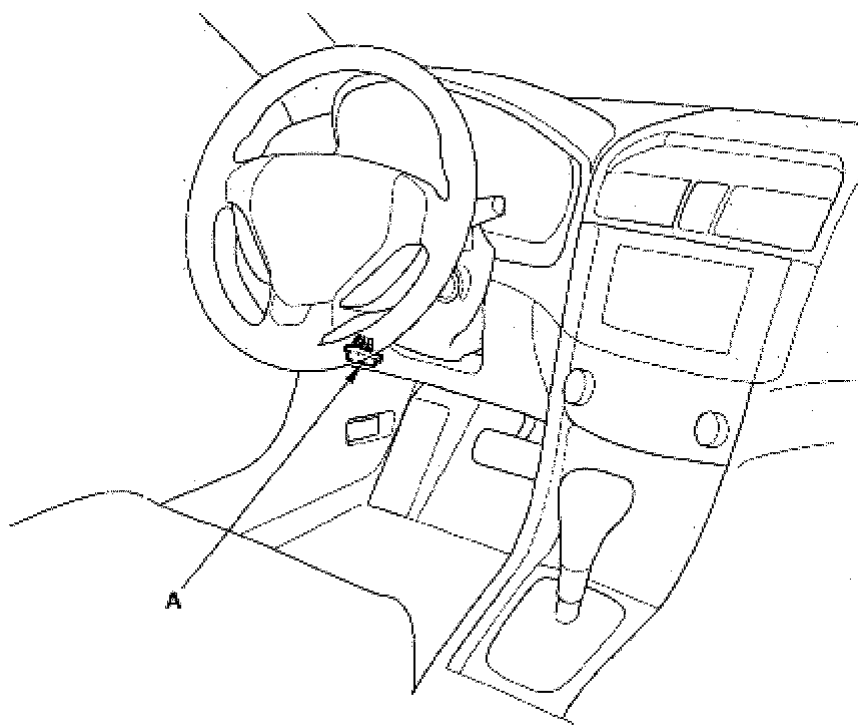


Fig. 10: Identifying Data Link Connector (DLC)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch to ON (II).
4. Make sure the HDS communicates with the vehicle and the climate control unit. If it doesn't, troubleshoot the DLC circuit (see **DLC CIRCUIT TROUBLESHOOTING (PART 2)**).
5. Select HVAC/CLIMATE CONTROL in the BODY ELECTRICAL menu.
6. Select DTCs in the HVAC/CLIMATE CONTROL menu.
7. Check for DTCs. If any DTCs are indicated, write down the DTCs, then go to the indicated **DTC TROUBLESHOOTING**. If no DTCs are indicated, refer to **SYMPTOM TROUBLESHOOTING**.

NOTE:

- After troubleshooting, clear the DTCs with the HDS.
- For specific operations, refer to the user's manual that came with the HDS.

HOW TO RETRIEVE A DTC (WITHOUT HDS)

The climate control unit has a self-diagnostic function. To run the self-diagnostic function, do the following:

NOTE: Before troubleshooting the climate control system, refer to B-CAN System Diagnosis Test Mode A Troubleshooting (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Turn the ignition switch to ON (II).
2. Press and hold the OFF button. While holding the OFF button, press the recirculation button five times within 10 seconds. Release the OFF button and the self-diagnosis begins.

NOTE: The blower motor can be run at any speed regardless of what the panel is displaying.

Without Navigation System

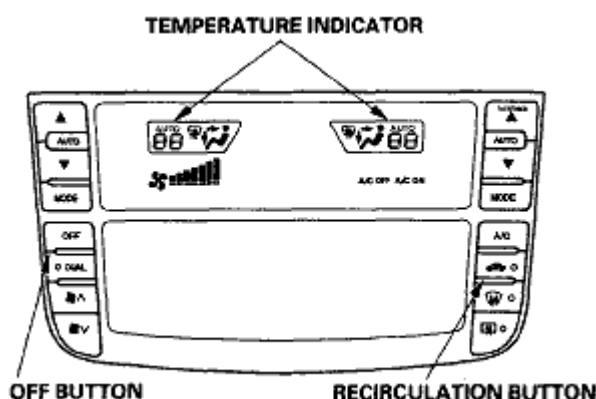


Fig. 11: Identifying Temperature Indicator, Off Button And Recirculation Button - Without Navigation System

Courtesy of AMERICAN HONDA MOTOR CO., INC.

With Navigation System

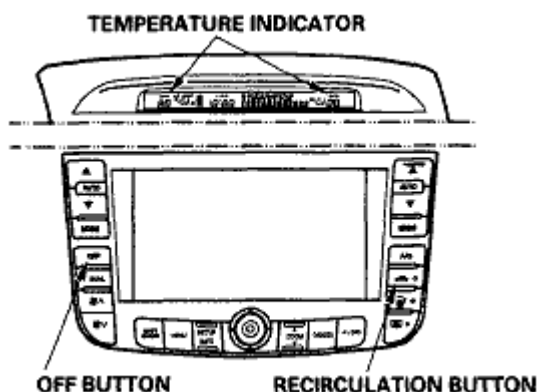


Fig. 12: Identifying Temperature Indicator, Off Button And Recirculation Button - With Navigation System

Courtesy of AMERICAN HONDA MOTOR CO., INC.

If there is any problem in the system, the temperature indicator will light up the segment (A through S) corresponding to the error. The temperature indicator will then alternate every second between displaying "88" (all segments lit) and the error code segment (A through S). To determine the meaning of the DTC, refer to the **DTC TROUBLESHOOTING INDEX**.

If there are no problems detected, the segments will not illuminate.

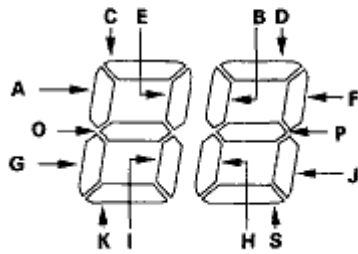
DRIVER'S SIDE TEMPERATURE INDICATOR

Fig. 13: Identifying Driver's Side Temperature Indicator
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

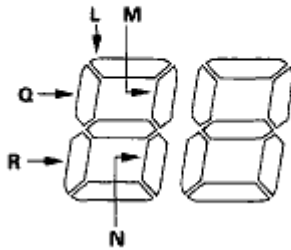
PASSENGER'S SIDE TEMPERATURE INDICATOR

Fig. 14: Identifying Passenger's Side Temperature Indicator
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Canceling the Self-diagnostic Function

3. Turn the ignition switch to LOCK (0) to cancel the self-diagnostic function. After completing repair work, run the self-diagnostic function again to make sure that there are no other malfunctions.

CHECKING DTCS BY DTC INDICATOR

NOTE: Before troubleshooting the climate control system, refer to B-CAN System Diagnosis Test Mode A Troubleshooting (see TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

To retrieve the DTC, you must run the self-diagnostic function. In the case of multiple problems, the respective indicator segments will come on. If indicator segments A, C, E, G, I, L, O and Q come on at the same time, there may be an open in the common ground wire.

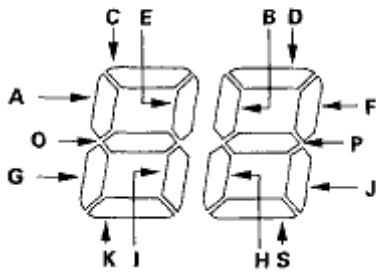
DRIVER'S TEMPERATURE INDICATOR

Fig. 15: Identifying Driver's Side Temperature Indicator
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

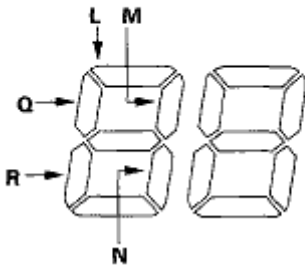
PASSENGER'S TEMPERATURE INDICATOR

Fig. 16: Identifying Passenger's Side Temperature Indicator
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC DETECTION ITEM REFERENCE CHART

DTC (Temperature Indicator Segment)	Detection Item
A	An open in the in-car temperature sensor circuit (see <u>DTC B1225 OR DTC INDICATOR A: AN OPEN IN THE IN-CAR TEMPERATURE SENSOR CIRCUIT</u>)
B	A short in the in-car temperature sensor circuit (see <u>DTC B1226 OR DTC INDICATOR B: A SHORT IN THE IN-CAR TEMPERATURE SENSOR CIRCUIT</u>)
C	An open in the outside air temperature sensor circuit (see <u>DTC B1227 OR DTC INDICATOR C: AN OPEN IN THE OUTSIDE AIR TEMPERATURE SENSOR CIRCUIT</u>)
D	A short in the outside air temperature sensor circuit (see <u>DTC B1228 OR DTC INDICATOR D: A SHORT IN THE OUTSIDE AIR TEMPERATURE SENSOR CIRCUIT</u>)
E	An open in the sunlight sensor circuit (see <u>DTC B1229 OR DTC INDICATOR E: AN OPEN IN THE SUNLIGHT SENSOR CIRCUIT</u>)
F	A short in the sunlight sensor circuit (see <u>DTC TROUBLESHOOTING DTC B1230 OR DTC INDICATOR F: A SHORT IN THE SUNLIGHT SENSOR CIRCUIT</u>)
	An open in the evaporator temperature sensor circuit (see <u>DTC B1231 OR</u>)

G	<u>DTC INDICATOR G: AN OPEN IN THE EVAPORATOR TEMPERATURE SENSOR CIRCUIT)</u>
H	A short in the evaporator temperature sensor circuit (see <u>DTC B1232 OR DTC INDICATOR H: A SHORT IN THE EVAPORATOR TEMPERATURE SENSOR CIRCUIT)</u>)
I	An open in the driver's air mix control motor circuit (see <u>DTC B1233 OR DTC INDICATOR I: AN OPEN IN THE DRIVER'S AIR MIX CONTROL MOTOR CIRCUIT)</u>)
J	A short in the driver's air mix control motor circuit (see <u>DTC B1234 OR DTC INDICATOR J: A SHORT IN THE DRIVER'S AIR MIX CONTROL MOTOR CIRCUIT)</u>)
K	A problem in the driver's air mix control linkage, door, or motor (see <u>DTC B1235 OR DTC INDICATOR K: A PROBLEM IN THE DRIVER'S AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR)</u>)
L	An open in the passenger's air mix control motor circuit (see <u>DTC B1236 OR DTC INDICATOR L: AN OPEN IN THE PASSENGER'S AIR MIX CONTROL MOTOR CIRCUIT)</u>)
M	A short in the passenger's air mix control motor circuit (see <u>DTC B1237 OR DTC INDICATOR M: A SHORT IN THE PASSENGER'S AIR MIX CONTROL MOTOR CIRCUIT)</u>)
N	A problem in the passenger's air mix control linkage, door, or motor (see <u>DTC B1238 OR DTC INDICATOR N: A PROBLEM IN THE PASSENGER'S AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR)</u>)
O	An open or short in the driver's mode control motor circuit (see <u>DTC B1239 OR DTC INDICATOR O: AN OPEN OR SHORT IN THE DRIVER'S MODE CONTROL MOTOR CIRCUIT)</u>)
P	A problem in the driver's mode control linkage, doors, or motor (see <u>DTC B1240 OR DTC INDICATOR P: A PROBLEM IN THE DRIVER'S MODE CONTROL LINKAGE, DOORS, OR MOTOR)</u>)
Q	An open or short in the passenger's mode control motor circuit (see <u>DTC B1242 OR DTC INDICATOR Q: AN OPEN OR SHORT IN THE PASSENGER'S MODE CONTROL MOTOR CIRCUIT)</u>)
R	A problem in the passenger's mode control linkage, doors, or motor (see <u>DTC B1243 OR DTC INDICATOR R: A PROBLEM IN THE PASSENGER'S MODE CONTROL LINKAGE, DOORS, OR MOTOR)</u>)
S	A problem in the blower motor circuit (see <u>DTC B1241 OR DTC INDICATOR S: A PROBLEM IN THE BLOWER MOTOR CIRCUIT)</u>)

DISPLAYING SENSOR INPUTS AT THE CLIMATE CONTROL UNIT

The climate control unit has a mode that displays sensor inputs it receives. This mode shows you what the climate control unit is receiving from each of the sensors, one at a time, and it can help you determine if a sensor is faulty.

CHECK THESE ITEMS BEFORE USING THE SENSOR INPUT DISPLAY MODE

1. Turn the ignition switch to ON (II), and check the recirculation door function; press the recirculation button to switch from FRESH to RECIRC. The air volume and sound should change slightly.
2. Set the temperature control knob to the desired test temperature. When selecting the test temperatures,

note these items:

- "Lo" temperature setting will default to MAX COOL, VENT, and RECIRC.
 - "Hi" temperature setting will default to MAX HOT, FLOOR, and FRESH.
 - 61 through 89°F settings will use the automatic climate control logic.
3. Turn the ignition switch to LOCK (0).

TO RUN THE SENSOR INPUT DISPLAY MODE, FOLLOW THESE STEPS

1. Turn the ignition switch to LOCK (0).
2. Press and hold both the passenger's AUTO and recirculation buttons, then start the engine.
3. After the engine starts, release the buttons. The display panel control unit will flash the sensor number and then the value for that sensor. Record the value displayed.
4. To advance to the next sensor, press the recirculation button.

SENSOR DISPLAY VALUE REFERENCE

Sensor	Item	Displayed Value
1	In-car Temperature	°C
2	Outside Air Temperature	°C
3	Solar Radiation Sensor Value: Dark = 00, Flashlight = 04, Cloudy =10, Sunny = 65	10 kcal/m ² .h
4	Engine coolant Temperature	°C
5	Evaporator Outlet Air Temperature	°C
6	Driver's Air Mix Opening (Low value indicates cooler air distribution, higher value indicates warmer air distribution)	% of opening
7	Passenger's Air Mix Opening (Low value indicates cooler air distribution, higher value indicates warmer air distribution)	% of opening
8	Vehicle Speed (Vehicle must be driven to display speed)	km/h
9	Vent Temperature Air Out (TAO)	°C

NOTE:

- The sensor values will be displayed in degrees Celsius (°C) or an alphanumeric code. Use the chart to convert the value to degrees Fahrenheit (°F).
- If the sensor value displays "Er", this indicates there is an open or short in the circuit or sensor. Check for DTCs using the HDS, or refer to **CHECKING DTCS BY DTC INDICATION**.
- If necessary, compare the sensor input display to a known-good vehicle under the same test conditions.
- If the sensor is out of the normal range, refer to the sensor test, or substitute the sensor with a known-good, and recheck.

5. To cancel the sensor input display mode, press the AUTO button, or turn the ignition off.

Celsius to Fahrenheit Conversion Table

CELSIUS TO FAHRENHEIT CONVERSION CHART

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0	32	10	50	20	68	30	86	40	104
1	34	11	52	21	70	31	88	41	106
2	36	12	54	22	72	32	90	42	108
3	37	13	55	23	73	33	91	43	109
4	39	14	57	24	75	34	93	44	111
5	41	15	59	25	77	35	95	45	113
6	43	16	61	26	79	36	97	46	115
7	45	17	63	27	81	37	99	47	117
8	46	18	64	28	82	38	100	48	118
9	48	19	66	29	84	39	102	49	120

CELSIUS TO FAHRENHEIT CONVERSION CHART

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
50	122	60	140	70	158	80	176	90	194
51	124	61	142	71	160	81	178	91	196
52	126	62	144	72	162	82	180	92	198
53	127	63	145	73	163	83	181	93	199
54	128	64	147	74	165	84	183	94	201
55	131	65	149	75	167	85	185	95	203
56	133	66	151	76	169	86	187	96	205
57	135	67	152	77	170	87	188	97	207
58	136	68	154	78	172	88	190	98	208
59	139	69	158	79	174	89	192	99	210

Alphanumeric Conversion Table

ALPHANUMERIC CONVERSION CHART

Display Reading (Alphanumeric)	°C	°F	%
A1 thru A9	-1 thru -9	30 thru 16	-1 thru -9
B0 thru B9	-10 thru -19	14 thru -2	-10 thru -19
C0 thru C9	-20 thru -29	-4 thru -20	-20 thru -29
D0 thru D9	-30 thru -39	-22 thru -38	-30 thru -39
E0 thru E9	-40 thru -49	-40 thru -58	---
F0 thru F9	-50 thru -59	-58 thru -74	+100 thru +109

DTC TROUBLESHOOTING INDEX

Checking the DTCs by HDS

DTC TROUBLESHOOTING CHART

DTC	Detection Item or Symptom	ECU	DTC Type
<u>B1202</u>	Climate control unit internal error	Climate control unit	Internal error

<u>B1225</u>	An open in the in-car temperature sensor circuit	Climate control unit	Signal error
<u>B1226</u>	A short in the in-car temperature sensor circuit	Climate control unit	Signal error
<u>B1227</u>	An open in the outside air temperature sensor circuit	Climate control unit	Signal error
<u>B1228</u>	A short in the outside air temperature sensor circuit	Climate control unit	Signal error
<u>B1229</u>	An open in the sunlight sensor circuit	Climate control unit	Signal error
<u>B1230</u>	A short in the sunlight sensor circuit	Climate control unit	Signal error
<u>B1231</u>	An open in the evaporator temperature sensor circuit	Climate control unit	Signal error
<u>B1232</u>	A short in the evaporator temperature sensor circuit	Climate control unit	Signal error
<u>B1233</u>	An Open in the driver's air mix control motor circuit	Climate control unit	Signal error
<u>B1234</u>	A short in the driver's air mix control motor circuit	Climate control unit	Signal error
<u>B1235</u>	A problem in the driver's air mix control linkage, door, or motor	Climate control unit	Signal error
<u>B1236</u>	An open in the passenger's air mix control motor circuit	Climate control unit	Signal error
<u>B1237</u>	A short in the passenger's air mix control motor circuit	Climate control unit	Signal error
<u>B1238</u>	A problem in the passenger's air mix control linkage, door, or motor	Climate control unit	Signal error
<u>B1239</u>	An open or short in the driver's mode control motor circuit	Climate control unit	Signal error
<u>B1240</u>	A problem in the driver's mode control linkage, doors, or motor	Climate control unit	Signal error
<u>B1241</u>	A problem in the blower motor circuit	Climate control unit	Signal error
<u>B1242</u>	An open or short in the passenger's mode control motor circuit	Climate control unit	Signal error
<u>B1243</u>	A problem in the passenger's mode control linkage, doors, or motor	Climate control unit	Signal error

B1726Display panel control unit
lost communication with
the climate control unitDisplay panel control
unit, Climate control
unit

Loss of communication

SYMPTOM TROUBLESHOOTING INDEX**SYMPTOM TROUBLESHOOTING CHART**

Symptom	Diagnostic procedure	Also check for
Recirculation control doors do not change between Fresh and Recirculate	Recirculation control motor circuit troubleshooting (see <u>RECIRCULATION CONTROL MOTOR CIRCUIT TROUBLESHOOTING</u>)	- HVAC DTCs (see <u>HOW TO CHECK FOR DTCS WITH THE HDS</u>) - Blown fuse No. 30 (7.5 A) in the under-dash fuse/relay box - Cleanliness and tightness of all connectors
Blower, heater controls, and A/C do not work	Climate control power and ground circuit troubleshooting (see <u>CLIMATE CONTROL POWER AND GROUND CIRCUIT TROUBLESHOOTING</u>)	- HVAC DTCs (see <u>HOW TO CHECK FOR DTCS WITH THE HDS</u>) - Blown fuse No. 30 (7.5 A) in the under-dash fuse/relay box - Poor ground at G503 and G601 - Cleanliness and tightness of all connectors
Both fans do not run at low speed with the A/C on (but the A/C compressor runs with the A/C on)	Radiator and A/C condenser fan low speed circuit troubleshooting (see <u>RADIATOR AND A/C CONDENSER FAN LOW SPEED CIRCUIT TROUBLESHOOTING</u>)	- HVAC DTCs (see <u>HOW TO CHECK FOR DTCS WITH THE HDS</u>) - Blown fuse No. 9 (30 A) in the under-hood fuse/relay box, and No. 30 (7.5 A) in the under-dash fuse/relay box - Poor ground at G301 - Cleanliness and tightness of all connectors
The A/C condenser fan does not run at high speed (but both fans run at low speed and the A/C compressor operates with the A/C on)	A/C condenser fan high speed circuit troubleshooting (see <u>A/C CONDENSER FAN HIGH SPEED CIRCUIT TROUBLESHOOTING</u>)	- HVAC DTCs (see <u>HOW TO CHECK FOR DTCS WITH THE HDS</u>) - Blown fuse No. 30 (7.5 A) in the under-dash fuse/relay box - Poor ground at G201 - Cleanliness and tightness of all connectors
Both fans do not run at high speed with the A/C on (but both fans run at	Radiator and A/C condenser fan high speed circuit troubleshooting (see <u>RADIATOR AND A/C CONDENSER</u>	HVAC DTCs (see <u>HOW TO CHECK FOR DTCS WITH THE HDS</u>)

low speed and the A/C compressor operates with the A/C on)	<u>FAN HIGH SPEED CIRCUIT TROUBLESHOOTING)</u>	• Cleanliness and tightness of all connectors
The A/C compressor clutch does not engage (but both fans run with the A/C on)	A/C compressor clutch circuit troubleshooting (see <u>A/C COMPRESSOR CLUTCH CIRCUIT TROUBLESHOOTING)</u>	• HVAC DTCs (see <u>HOW TO CHECK FOR DTCS WITH THE HDS)</u>) • Blown fuse No. 12 (7.5 A) in the under-hood fuse/relay box, and No. 30 (7.5 A) in the under-dash fuse/relay box • Cleanliness and tightness of all connectors
A/C system does not come on (both fans and the A/C compressor do not work); heater is OK	A/C pressure switch circuit troubleshooting (see <u>A/C PRESSURE SWITCH CIRCUIT TROUBLESHOOTING)</u>	• Body DTCs in B-CAN System Diagnosis Test Mode A Troubleshooting (see <u>TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A)</u>) • HVAC DTCs (see <u>HOW TO CHECK FOR DTCS WITH THE HDS)</u>) • Cleanliness and tightness of all connectors
Blower fan runs slower than expected in cold weather	ECT Troubleshooting: ECT sensor 2 circuit low voltage (see <u>DTC P2184: ECT SENSOR 2 CIRCUIT LOW VOLTAGE)</u>), ECT sensor 2 circuit high voltage (see <u>DTC P2185: ECT SENSOR 2 CIRCUIT HIGH VOLTAGE)</u>) NOTE: It is normal for the blower to run slowly until the engine coolant temperature begins to rise. If the blower continues to run slowly for an abnormal length of time, continue to troubleshoot the problem.	• Powertrain DTCs (see <u>GENERAL TROUBLESHOOTING INFORMATION)</u>)
Both fans run at high speed all the time with the A/C on	Radiator and A/C condenser fan high speed circuit troubleshooting (see <u>RADIATOR AND A/C CONDENSER FAN HIGH SPEED CIRCUIT TROUBLESHOOTING)</u>	• HVAC DTCs (see <u>HOW TO CHECK FOR DTCS WITH THE HDS)</u>) • Cleanliness and tightness of all connectors
HDS does not communicate with the climate control unit or the vehicle	Troubleshooting DLC circuit (see <u>DLC CIRCUIT TROUBLESHOOTING (PART 2))</u>	

Insufficient heating	1. Check the coolant level (see <u>COOLANT CHECK</u>). 2. Check the radiator cap (see <u>RADIATOR CAP TEST</u>). 3. Check the operation of the air mix control motor and door: driver's air mix control motor (see <u>DRIVER'S AIR MIX CONTROL MOTOR TEST</u>), passenger's air mix control motor (see <u>DRIVER'S AIR MIX CONTROL MOTOR REPLACEMENT</u>). 4. Check the coolant temperature. 5. Check the operation of the heater valve (see <u>HEATER VALVE CABLE ADJUSTMENT</u>). 6. Check the blower motor unit for obstructions. 7. Check for air leaks around the ducts and vents. 8. Check the inlet hose temperature. • If it COLD, check for restrictions in the hose a damaged or leaking thermostat, and a damaged or leaking water pump. • If it HOT, check for restrictions in the heater core. Back flush the heater core using standard commercially available equipment or replace the heater core.	Damaged cylinder head gasket
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SYSTEM DESCRIPTION

The air conditioning system removes heat from the passenger compartment by transferring heat from the ambient air to the evaporator. The evaporator cools the air with the refrigerant that is circulating through the evaporator. The refrigerant expands in the evaporator, and the evaporator becomes very cold and absorbs the heat from the ambient air. The blower fan pushes air across the evaporator where the heat is absorbed, and then it blows the cool air into the passenger compartment.

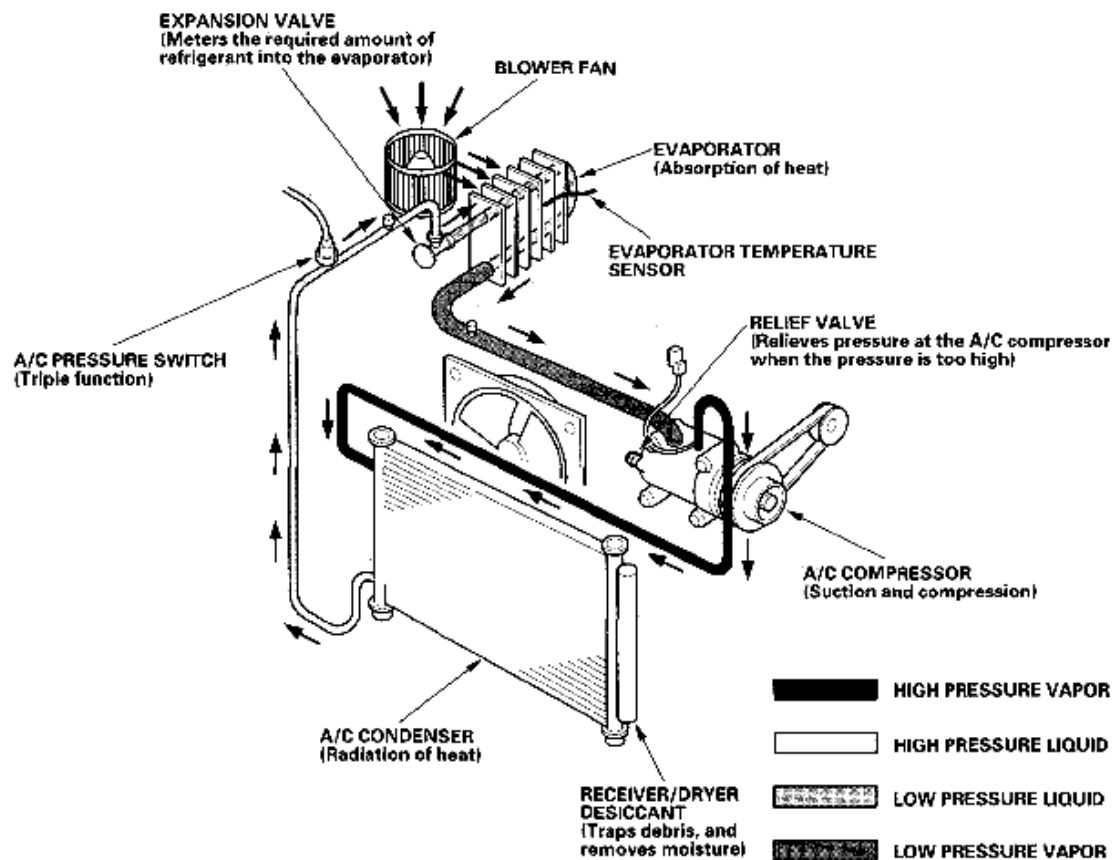


Fig. 17: Air Conditioning System Diagram

Courtesy of AMERICAN HONDA MOTOR CO., INC.

This vehicle uses HFC-134a (R-134a) refrigerant which does not contain chlorofluorocarbons. Pay attention to the following service items:

- Do not mix refrigerants CFC-12 (R-12) and HFC-134a (R-134a). They are not compatible.
- Use only the recommended polyalkyleneglycol (PAG) refrigerant oil (DENSO ND-OIL 8) designed for the R-134a A/C compressor. Intermixing the recommended (PAG) refrigerant oil with any other refrigerant oil will result in A/C compressor failure.
- All A/C system parts (compressor, discharge line, suction line, evaporator, A/C condenser, receiver/dryer, expansion valve, O-rings for joints) are designed for refrigerant R-134a. Do not exchange with R-12 parts.
- Use a halogen gas leak detector designed for refrigerant R-134a.
- R-12 and R-134a refrigerant servicing equipment are not interchangeable. Use only a recovery/recycling/charging station that is U.L.-listed and is certified to, meet the requirements of SAE J2210 to service R-134a air conditioning system.
- Always recover the refrigerant R-134a with an approved recovery/recycling/charging station before disconnecting any A/C fitting.

A/C PRESSURE SWITCH

The A/C pressure switch consists of a high-low pressure switch (A/C pressure switch A) and a middle pressure switch (A/C pressure switch B).

- High-low pressure switch

If the refrigerant pressure becomes too high (due to blockage or lack of airflow at the A/C condenser), or too low (due to leakage), the A/C pressure switch stops the A/C request signal to the ECM/PCM and the A/C compressor stops operating.

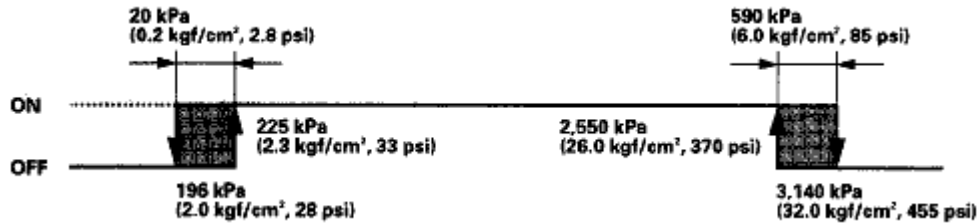


Fig. 18: Identifying High-Low Pressure Switch
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Middle pressure switch

If the refrigerant pressure goes above 1,520 kPa (15.5 kgf/cm², 221 psi), the A/C pressure switch closes to signal the ECM/PCM to change the speed of the A/C condenser fan and radiator fan to high. When the refrigerant pressure drops below 930 kPa (9.5 kgf/cm², 135 psi), the A/C pressure switch opens to signal the ECM/PCM to change the speed of the A/C condenser fan and radiator fan to low.

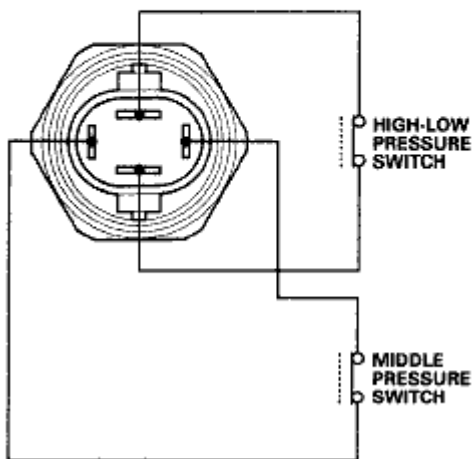
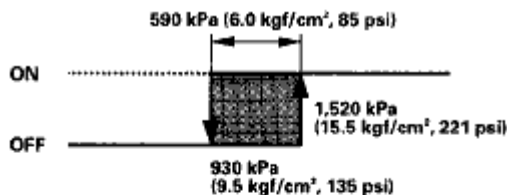


Fig. 19: Identifying Middle Pressure Switch
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

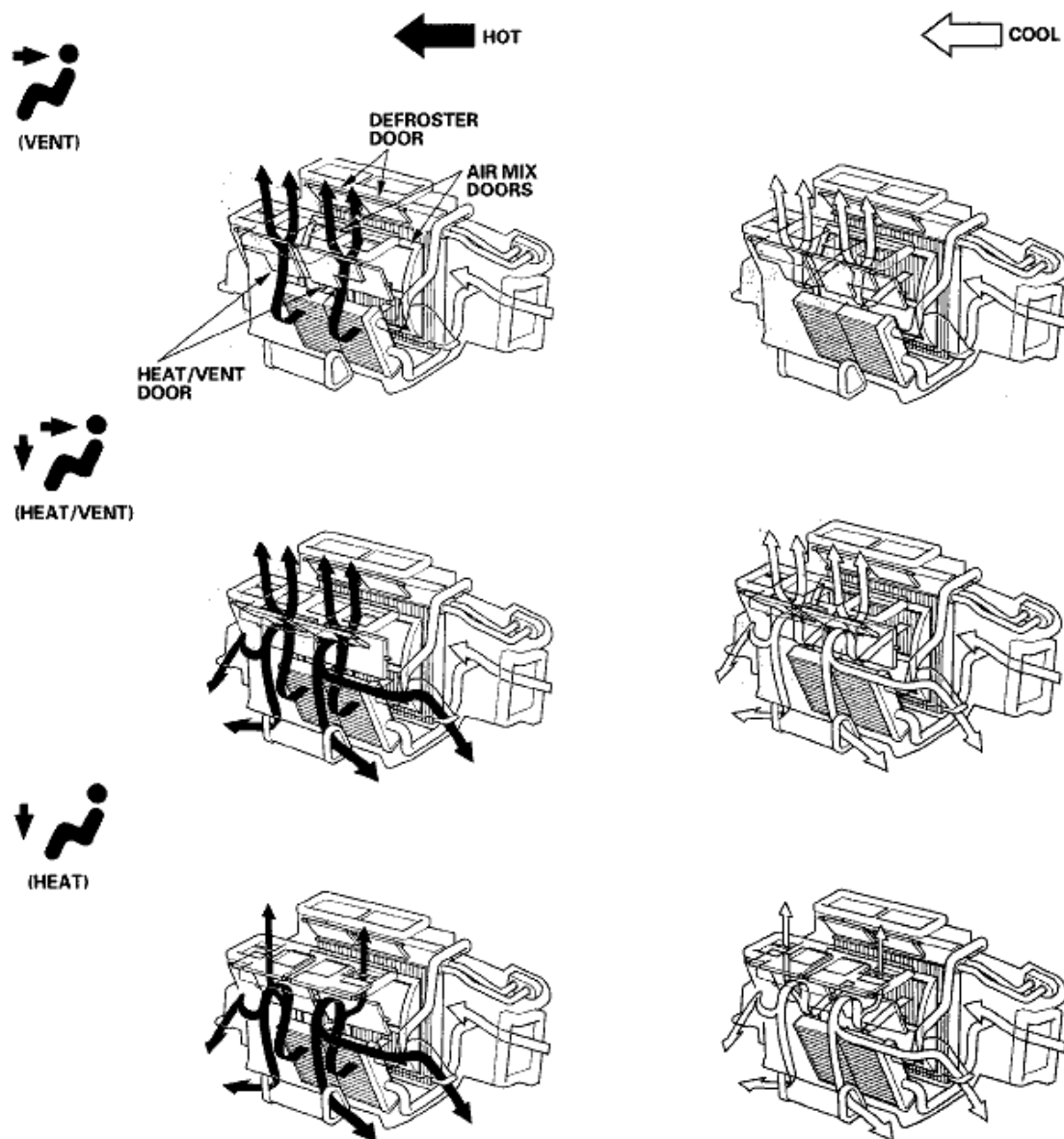


Fig. 20: Climate Control Door Positions (1 Of 2)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

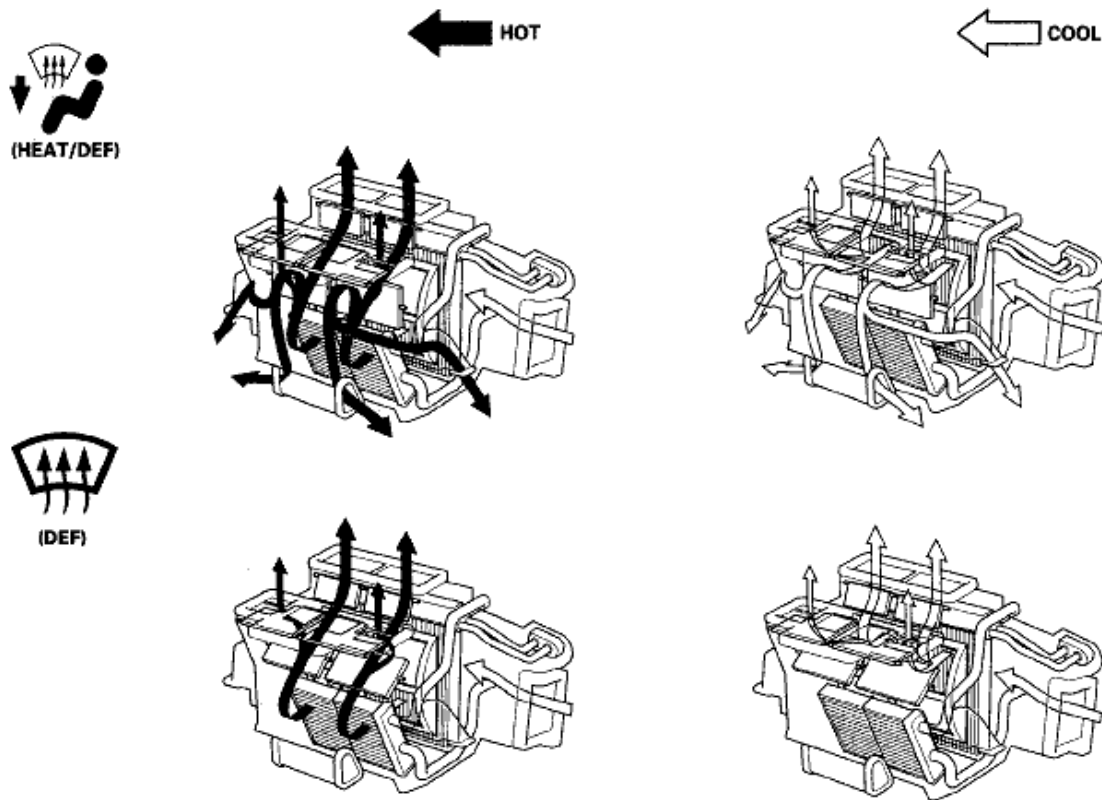


Fig. 21: Climate Control Door Positions (2 Of 2)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Dual Air Mix Control System

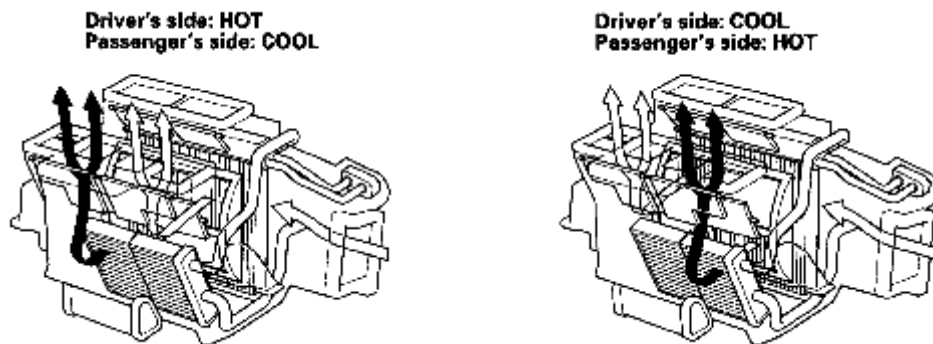


Fig. 22: Dual Air Mix Control System Diagram
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Dual Mode Control System

All modes (except defroster) can be controlled independently.

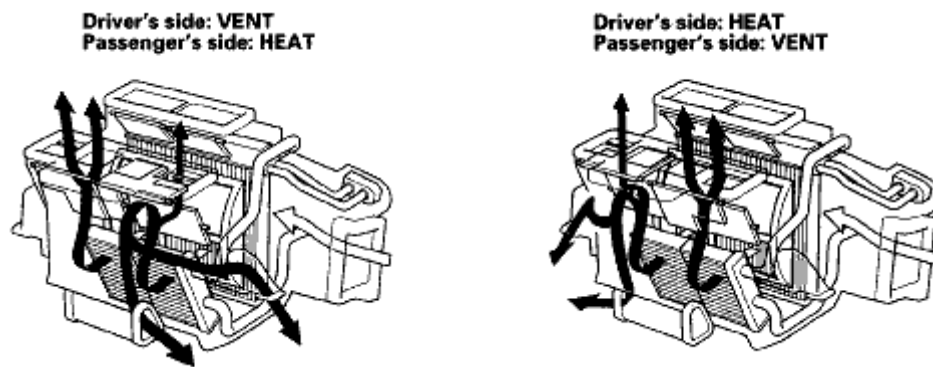


Fig. 23: Dual Mode Control System Diagram

Courtesy of AMERICAN HONDA MOTOR CO., INC.

I-DUAL CLIMATE CONTROL SYSTEM (WITH NAVIGATION SYSTEM)

This system automatically controls the temperature and the vent mode of the air direction to the driver and passenger's side depending on the angle of the sun, and the direction of the vehicle. It calculates information such as date, time, longitude, and latitude from the navigation system, as well as the irradiate strength of the sun from the sunlight sensor, to determine the appropriate mode position and temperature to be directed to each side.

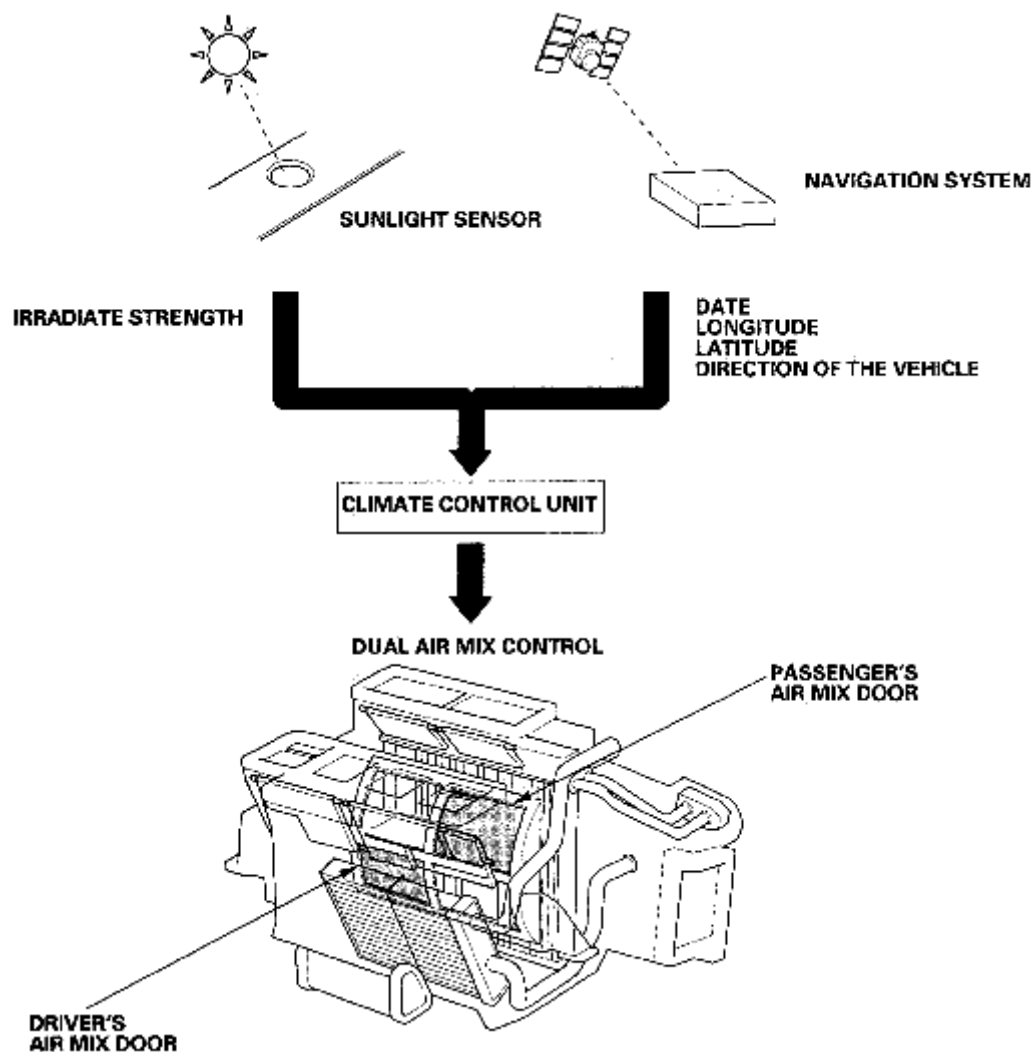


Fig. 24: I-Dual Climate Control System Diagram (With Navigation System)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

In the event that the navigation system malfunctions, or when driving in areas where the navigation cannot determine the vehicle position (non-coverage areas, tunnels, etc.), the climate control system will operate the same as a vehicle without navigation.

CLIMATE CONTROL UNIT INPUTS AND OUTPUTS

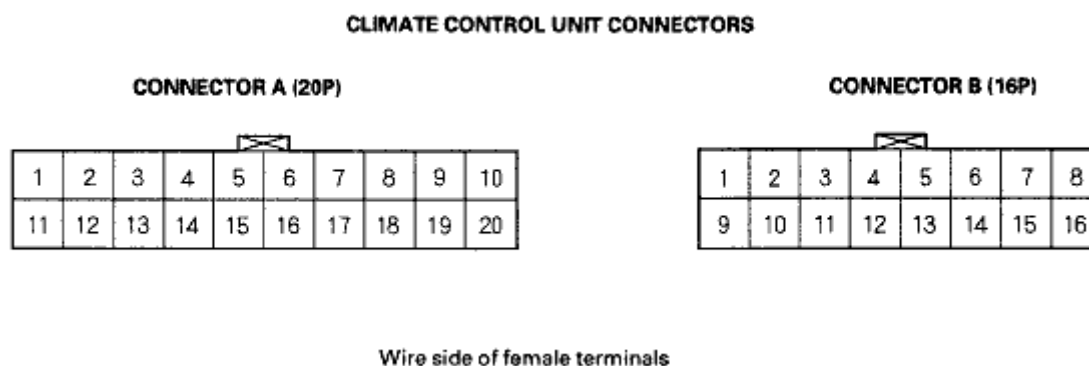


Fig. 25: Identifying Climate Control Unit Connector Terminals - Inputs And Outputs

Courtesy of AMERICAN HONDA MOTOR CO., INC.

CONNECTOR A

CONNECTOR A REFERENCE

Cavity	Wire color	Signal	
1	BLK/YEL	IG2 (Power)	INPUT
2	LT GRN	CPM RX	INPUT
3	BLK	GROUND (G503, G601) (Canada models)	INPUT
4	GRN	CPM GROUND	INPUT
5	RED/BLK	SENSOR COMMON GROUND	INPUT
6	BLK	GROUND (G503, G601)	INPUT
7	RED	BLOWER FEEDBACK	INPUT
8	BLU	POWER TRANSISTOR CONTROL	OUTPUT
9	PUR	RECIRCULATE	INPUT
10	BLU	DRIVER'S AIR MIX POTENTIAL	OUTPUT
11	WHT	CPM IG2	INPUT
12	BRN	CPM TX	OUTPUT
13	RED	FR DEF	OUTPUT
14	YEL	A/C PRESSURE SWITCH	INPUT
15	LT BLU	IN-CAR TEMPERATURE SENSOR	OUTPUT
16	PNK	OUTSIDE AIR TEMPERATURE SENSOR	OUTPUT
17	ORN	SUNLIGHT SENSOR	OUTPUT
18	BRN	EVAPORATOR TEMPERATURE SENSOR	OUTPUT
19	WHT	FRESH	INPUT
20	GRY	AIR MIX POTENTIAL +5 V	OUTPUT

CONNECTOR B

CONNECTOR B REFERENCE

Cavity	Wire color	Signal	
1	YEL	DRIVER'S MODE VENT	OUTPUT
2	LT GRN	DRIVER'S MODE DEF	OUTPUT
3	PNK	DRIVER'S AIR MIX HOT	OUTPUT
4	GRN	DRIVER'S AIR MIX COOL	OUTPUT
5	BLU	PASSENGER'S MODE VENT	OUTPUT
6	WHT	PASSENGER'S MODE DEF	OUTPUT
7	PUR	PASSENGER'S AIR MIX HOT	OUTPUT
8	BRN	PASSENGER'S AIR MIX COOL	OUTPUT
9	PUR	DRIVER'S MODE 3	OUTPUT
10	LT BLU	DRIVER'S MODE 4	OUTPUT
11	RED	DRIVER'S MODE 1	OUTPUT
12	BRN	DRIVER'S MODE 2	OUTPUT
13	WHT	PASSENGER'S MODE 3, 4	OUTPUT
14	ORN	PASSENGER'S MODE 2	OUTPUT

15	GRY	PASSENGER'S MODE 1	OUTPUT
16	YEL	PASSENGER'S AIR MIX POTENTIAL	OUTPUT

CIRCUIT DIAGRAM

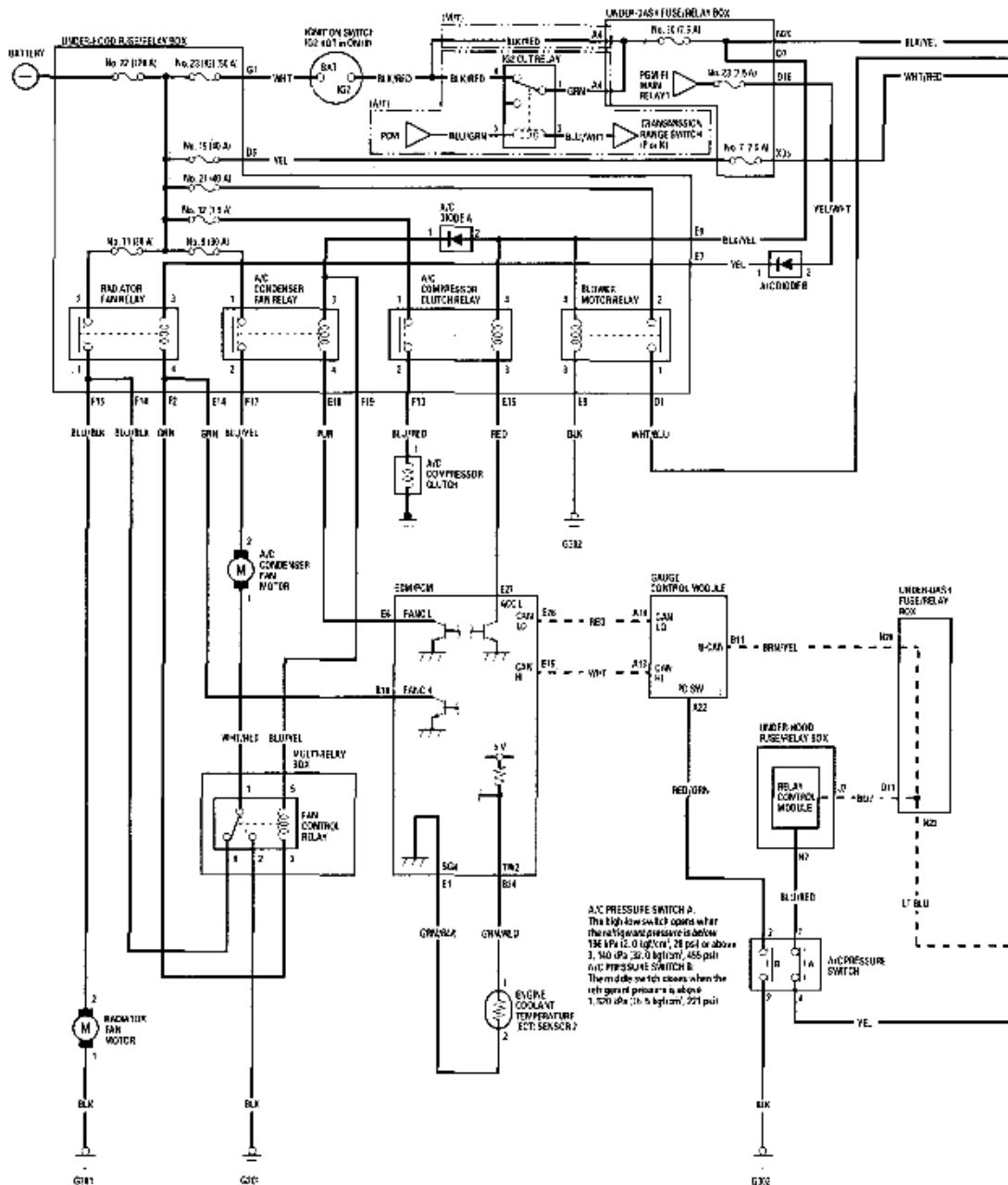


Fig. 26: Climate Control Unit Circuit Diagram (1 Of 2)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

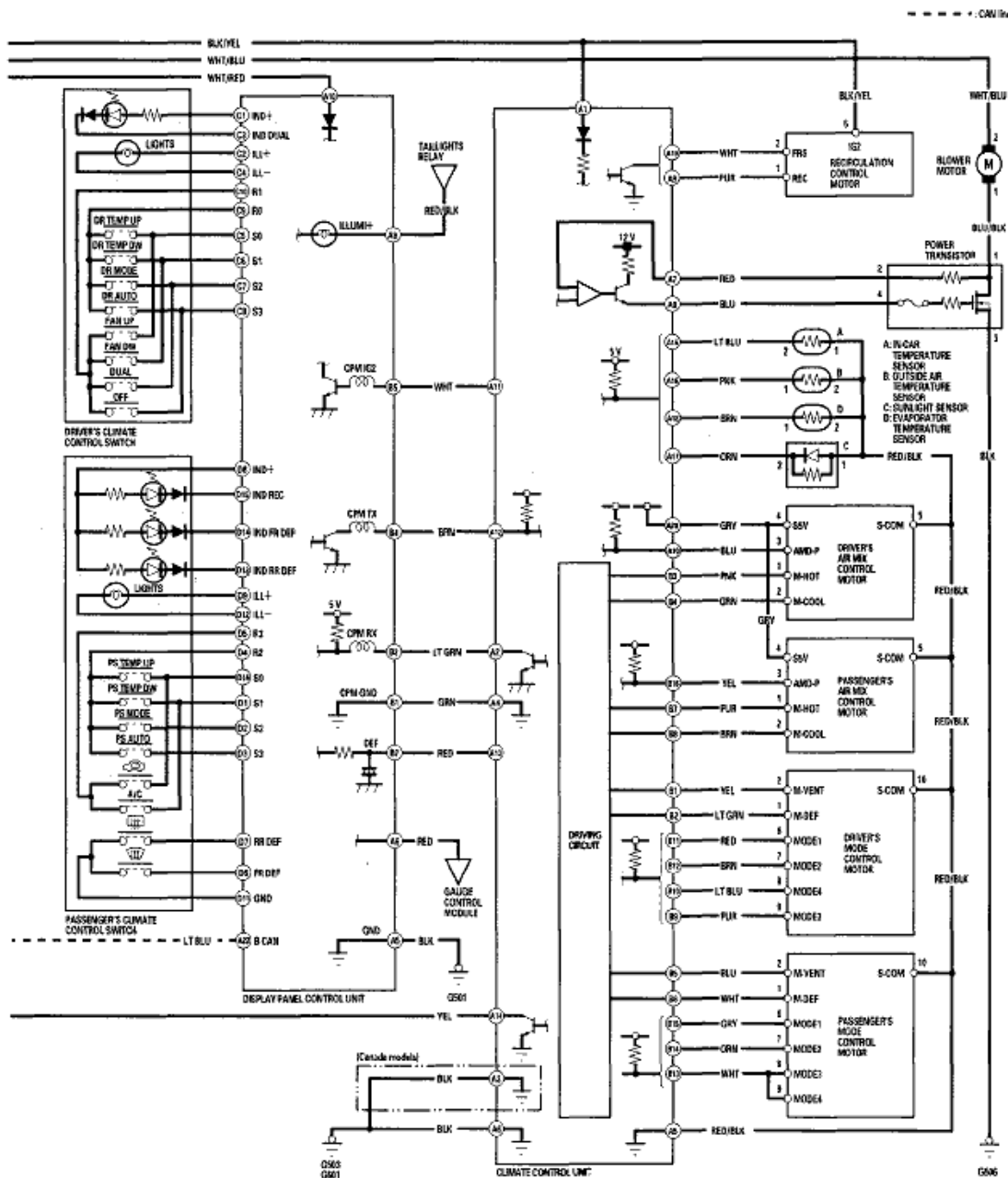


Fig. 27: Climate Control Unit Circuit Diagram (2 Of 2)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC B1225 OR DTC INDICATOR A: AN OPEN IN THE IN-CAR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1225 or A indicated?

YES -Go to step 4.

NO -Intermittent failure, check for loose wires or poor connections on the in-car temperature sensor circuit.

4. Turn the ignition switch to LOCK (0).
5. Remove the in-car temperature sensor (see **IN-CAR TEMPERATURE SENSOR REPLACEMENT**) and test it (see **IN-CAR TEMPERATURE SENSOR TEST**).

Is the in-car temperature sensor OK?

YES -Go to step 6.

NO -Replace the in-car temperature sensor.

6. Disconnect climate control unit connector A (20P).
7. Check for continuity between the No. 15 terminal of climate control unit connector A (20P) and the No. 2 terminal of the in-car temperature sensor 2P connector.

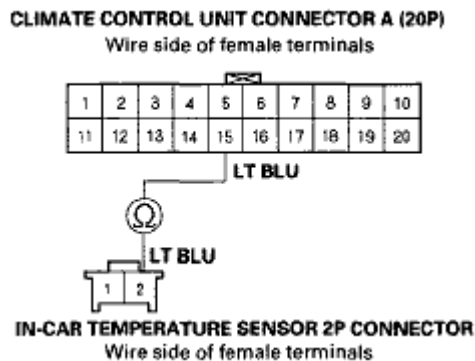


Fig. 28: Checking Continuity Between Terminals No. 15 And Terminals No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 8.

NO -Repair open in the wire between the climate control unit and the in-car temperature sensor.

8. Check for continuity between the No. 5 terminal of climate control unit connector A (20P) and the No. 1 terminal of the in-car temperature sensor 2P connector.

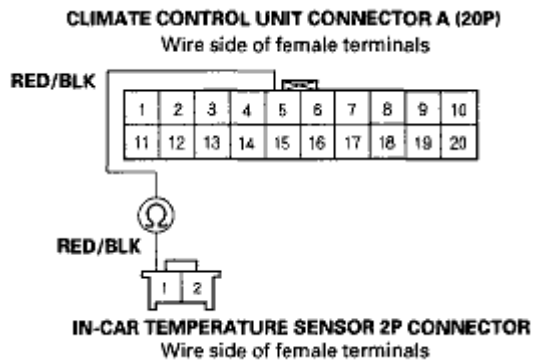


Fig. 29: Checking Continuity Between Terminals No. 5 And Terminals No. 1
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Check for loose wires or poor connections at climate control unit connector A (20P) and at the in-car temperature sensor 2P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/ indication goes away, replace the original climate control unit.

NO -Repair open in the wire between the climate control unit and the in-car temperature sensor.

DTC B1226 OR DTC INDICATOR B: A SHORT IN THE IN-CAR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1226 or B indicated?

YES -Go to step 4.

NO -Intermittent failure.

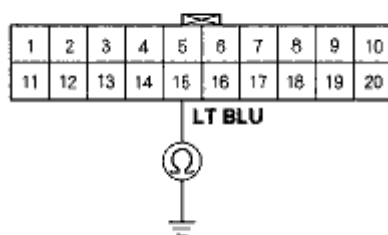
4. Turn the ignition switch to LOCK (0).
5. Remove the in-car temperature sensor (see **IN-CAR TEMPERATURE SENSOR REPLACEMENT**) and test it (see **IN-CAR TEMPERATURE SENSOR TEST**).

Is the in-car temperature sensor OK?

YES -Go to step 6.

NO -Replace the in-car temperature sensor.

6. Disconnect climate control unit connector A (20P).
7. Check for continuity between the No. 15 terminal of climate control unit connector A (20P) and body ground.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

Wire side of female terminals

Fig. 30: Checking Continuity Between No. 15 Terminal Of Climate Control Unit Connector A (20P) And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire between the climate control unit and the in-car temperature sensor.

NO -Go to step 8.

8. Check for continuity between the No. 5 terminal and the No. 15 terminal of climate control unit connector A (20P).

CLIMATE CONTROL UNIT CONNECTOR A (20P)

Wire side of female terminals

Fig. 31: Checking Continuity Between No. 5 Terminal And No. 15 Terminal Of Climate Control Unit Connector A (20P)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short in the wires between the climate control unit and the in-car temperature sensor.

NO -Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1227 OR DTC INDICATOR C: AN OPEN IN THE OUTSIDE AIR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).

2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1227 or C indicated?

YES -Go to step 4.

NO -Intermittent failure, check for loose wires or poor connections on the outside air temperature sensor circuit.

4. Turn the ignition switch to LOCK (0).
5. Remove the outside air temperature sensor (see **OUTSIDE AIR TEMPERATURE SENSOR REPLACEMENT**) and test it (see **OUTSIDE AIR TEMPERATURE SENSOR TEST**).

Is the outside air temperature sensor OK?

YES -Go to step 6.

NO -Replace the outside air temperature sensor.

6. Disconnect climate control unit connector A (20P).
7. Check for continuity between the No. 16 terminal of climate control unit connector A (20P) and the No. 1 terminal of the outside air temperature sensor 2P connector.

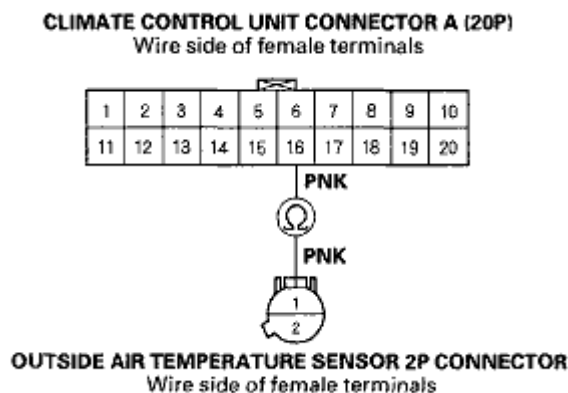


Fig. 32: Checking Continuity Between Climate Control Unit Connector Terminal And Outside Air Temperature Connector Terminal

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

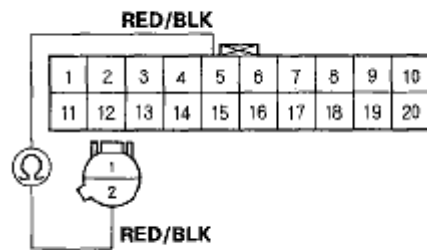
YES -Go to step 8.

NO -Repair open in the wire between the climate control unit and the outside air temperature sensor.

8. Check for continuity between the No. 5 terminal of climate control unit connector A (20P) and the No. 2 terminal of the outside air temperature sensor 2P connector.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

Wire side of female terminals

**OUTSIDE AIR TEMPERATURE SENSOR 2P CONNECTOR**

Wire side of female terminals

Fig. 33: Checking Continuity Between No. 5 Terminal Of Climate Control Unit (20P) And No. 2 Terminal Of Outside Air Temperature Sensor

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Check for loose wires or poor connections at climate control unit connector A (20P) and at the outside air temperature sensor 2P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/ indication goes away, replace the original climate control unit.

NO -Repair open in the wire between the climate control unit and the outside air temperature sensor.

DTC B1228 OR DTC INDICATOR D: A SHORT IN THE OUTSIDE AIR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1228 or D indicated?

YES -Go to step 4.

NO -Intermittent failure.

4. Turn the ignition switch to LOCK (0).
5. Remove the outside air temperature sensor (see **OUTSIDE AIR TEMPERATURE SENSOR REPLACEMENT**) and test it (see **OUTSIDE AIR TEMPERATURE SENSOR TEST**).

Is the outside air temperature sensor OK?

YES -Go to step 6.

NO -Replace the outside air temperature sensor.

6. Disconnect climate control unit connector A (20P).
7. Check for continuity between the No. 16 terminal of climate control unit connector A (20P) and body

ground.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

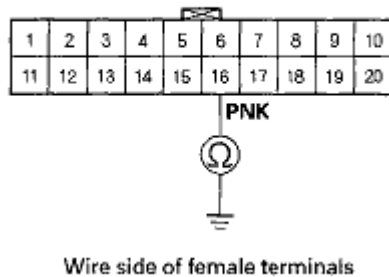


Fig. 34: Checking Continuity Between No. 16 Terminal Of Climate Control Unit Connector A (20P) And Body Ground
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire between the climate control unit and the outside air temperature sensor.

NO -Go to step 8.

8. Check for continuity between the No. 5 terminal and the No. 16 terminal of climate control unit connector A (20P).

CLIMATE CONTROL UNIT CONNECTOR A (20P)

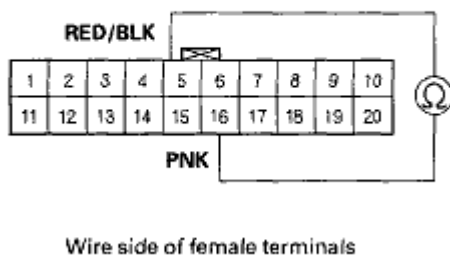


Fig. 35: Checking Continuity Between No. 5 Terminal And No. 16 Terminal Of Climate Control Unit Connector A (20P)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short in the wires between the climate control unit and the outside air temperature sensor.

NO -Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1229 or E indicated?

YES -Go to step 4.

NO -Intermittent failure, check for loose wires or poor connections on the sunlight sensor circuit.

4. Turn the ignition switch to LOCK (0).
5. Test the sunlight sensor (see **SUNLIGHT SENSOR TEST**).

Is the sunlight sensor OK?

YES -Go to step 6.

NO -Replace the sunlight sensor (see **SUNLIGHT SENSOR REPLACEMENT**).

6. Disconnect the sunlight sensor 2P connector.
7. Disconnect climate control unit connector A (20P).
8. Check for continuity between the No. 17 terminal of climate control unit connector A (20P) and the No. 2 terminal of the sunlight sensor 2P connector.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

Wire side of female terminals



ORN



ORN



SUNLIGHT SENSOR 2P CONNECTOR

Wire side of female terminals

Fig. 36: Checking Continuity Between No. 17 Terminal Of Climate Control Unit And No. 2 Terminal Of Sunlight Sensor 2P

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 9.

NO -Repair open in the wire between the climate control unit and the sunlight sensor.

9. Check for continuity between the No. 5 terminal of climate control unit connector A (20P) and the No. 1 terminal of the sunlight sensor 2P connector.

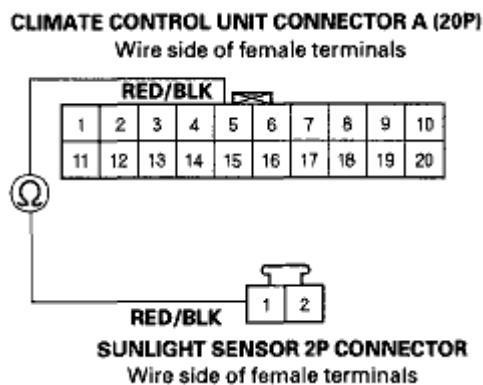


Fig. 37: Checking Continuity Between No. 5 Terminal Of Climate Control Unit And No. 1 Terminal Of Sunlight Sensor

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Check for loose wires or poor connections at climate control unit connector A (20P) and at the sunlight sensor 2P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO -Repair open in the wire between the climate control unit and the sunlight sensor.

DTC TROUBLESHOOTING DTC B1230 OR DTC INDICATOR F: A SHORT IN THE SUNLIGHT SENSOR CIRCUIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1230 or F indicated ?

YES -Go to step 4.

NO -Intermittent failure.

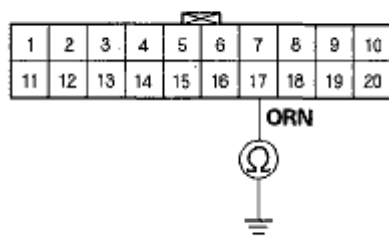
4. Turn the ignition switch to LOCK (0).
5. Test the sunlight sensor (see **SUNLIGHT SENSOR TEST**).

Is the sunlight sensor OK?

YES -Go to step 6.

NO -Replace the sunlight sensor (see **SUNLIGHT SENSOR REPLACEMENT**).

6. Disconnect the sunlight sensor 2P connector.
7. Disconnect climate control unit connector A (20P).
8. Check for continuity between the No. 17 terminal of climate control unit connector A (20P) and body ground.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

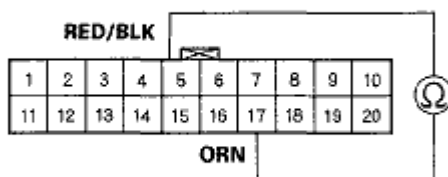
Wire side of female terminals

Fig. 38: Checking Continuity Between No. 17 Terminal Of Climate Control Unit Connector A (20P) And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

*Is there continuity?***YES** -Repair short to body ground in the wire between the climate control unit and the sunlight sensor.**NO** -Go to step 9.

9. Check for continuity between the No. 5 terminal and the No. 17 terminal of climate control unit connector A (20P).

CLIMATE CONTROL UNIT CONNECTOR A (20P)

Wire side of female terminals

Fig. 39: Checking Continuity Between No. 5 Terminal And No. 17 Terminal Of Climate Control Unit Connector A (20P)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

*Is there continuity?***YES** -Repair short in the wires between the climate control unit and the sunlight sensor.**NO** -Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.**DTC B1231 OR DTC INDICATOR G: AN OPEN IN THE EVAPORATOR TEMPERATURE SENSOR CIRCUIT**

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).

2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1231 or G indicated?

YES -Go to step 4.

NO -Intermittent failure, check for loose wires or poor connections on the evaporator temperature sensor circuit.

4. Turn the ignition switch to LOCK (0).
5. Remove the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**) and test it (see **EVAPORATOR TEMPERATURE SENSOR TEST**).

Is the evaporator temperature sensor OK?

YES -Go to step 6.

NO -Replace the evaporator temperature sensor.

6. Disconnect climate control unit connector A (20P).
7. Check for continuity between the No. 18 terminal of climate control unit connector A (20P) and the No. 1 terminal of the evaporator temperature sensor 2P connector.

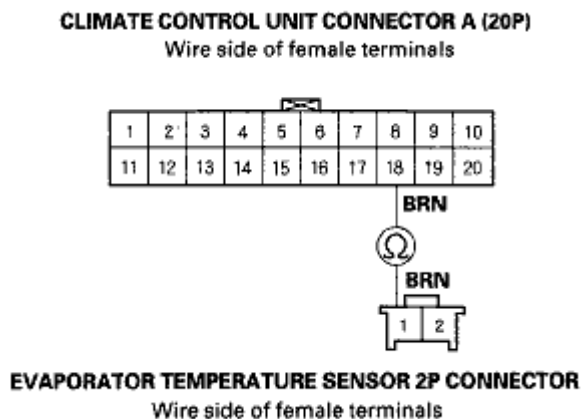


Fig. 40: Checking Continuity Between No. 18 Terminal Of Climate Control Unit And No. 1 Terminal Of Evaporator Temperature Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 8.

NO -Repair open in the wire between the climate control unit and the evaporator temperature sensor.

8. Check for continuity between the No. 5 terminal of climate control unit connector A (20P) and the No. 2 terminal of the evaporator temperature sensor 2P connector.

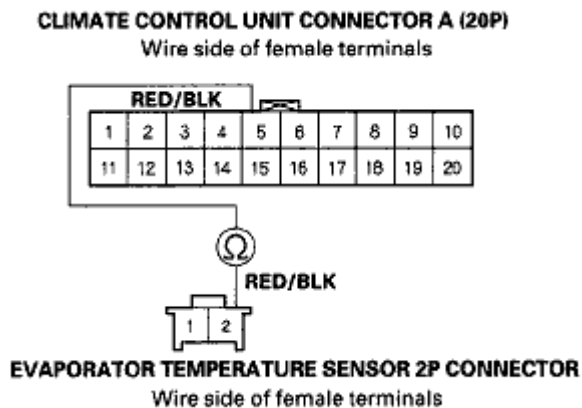


Fig. 41: Checking Continuity Between No. 5 Terminal Of Climate Control Unit And No. 2 Terminal Of Evaporator Temperature Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Check for loose wire or poor connections at climate control unit connector A (20P) and at the evaporator temperature sensor 2P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/ indication goes away, replace the original climate control unit.

NO -Repair open in the wire between the climate control unit and the evaporator temperature sensor.

DTC B1232 OR DTC INDICATOR H: A SHORT IN THE EVAPORATOR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnostic or HDS.

Is DTC B1232 or H indicated?

YES -Go to step 4.

NO -Intermittent failure.

4. Turn the ignition switch to LOCK (0).
5. Remove the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**) and test it (see **EVAPORATOR TEMPERATURE SENSOR TEST**).

Is the evaporator temperature sensor OK?

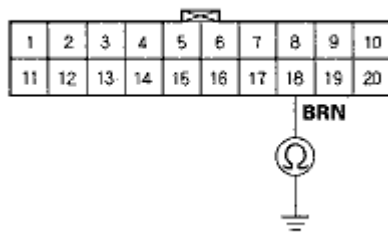
YES -Go to step 6.

NO -Replace the evaporator temperature sensor.

6. Disconnect climate control unit connector A (20P).

7. Check for continuity between the No. 18 terminal of climate control unit connector A (20P) and body ground.

CLIMATE CONTROL UNIT CONNECTOR A (20P)



Wire side of female terminals

Fig. 42: Checking Continuity Between No. 18 Terminal Of Climate Control Unit Connector A (20P) And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

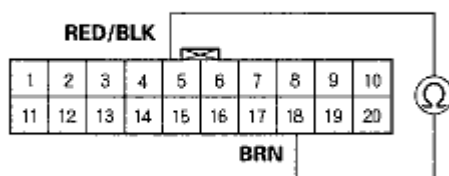
Is there continuity?

YES -Repair short to body ground in the wire between the climate control unit and the evaporator temperature sensor.

NO -Go to step 8.

8. Check for continuity between the No. 5 terminal and the No. 18 terminal of climate control unit connector A (20P).

CLIMATE CONTROL UNIT CONNECTOR A (20P)



Wire side of female terminals

Fig. 43: Checking Continuity Between No. 5 Terminal And No. 18 Terminal Of Climate Control Unit Connector A (20P)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short in the wires between the climate control unit and the evaporator temperature sensor.

NO -Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1233 OR DTC INDICATOR I: AN OPEN IN THE DRIVER'S AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1233 or I indicated?

YES -Go to step 4.

NO -Intermittent failure, check for loose wires or poor connections on the driver's air mix control motor circuit.

4. Turn the ignition switch to LOCK (0).
5. Test the driver's air mix control motor (see **DRIVER'S AIR MIX CONTROL MOTOR TEST**).

Is the driver's air mix control motor OK?

YES -Go to step 6.

NO -Replace the driver's air mix control motor (see **DRIVER'S AIR MIX CONTROL MOTOR REPLACEMENT**).

6. Disconnect the driver's air mix control motor 5P connector.
7. Disconnect climate control unit connector A (20P).
8. Check for continuity between the following terminals of climate control unit connector A (20P) and the driver's air mix control motor 5P connector.

20P: 5P:

No. 5 No. 5

No. 10 No. 3

No. 20 No. 4

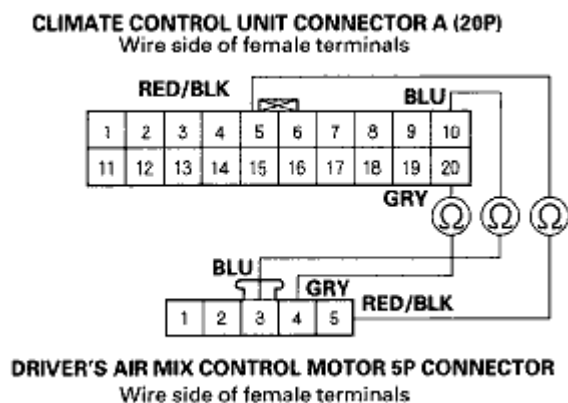


Fig. 44: Checking Continuity Between Terminals Of Climate Control Unit Connector And Driver's Air Mix Control Motor 5P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Check for loose wires or poor connections at climate control unit connector A (20P) and at the driver's air mix control motor 5P connector. If the connections are good, substitute a known-good climate control unit and recheck. If the symptom/ indication goes away, replace the original climate control unit.

NO -Repair open in the wire(s) between the climate control unit and the driver's air mix control motor.

DTC B1234 OR DTC INDICATOR J: A SHORT IN THE DRIVER'S AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1234 or J indicated?

YES -Go to step 4.

NO -Intermittent failure.

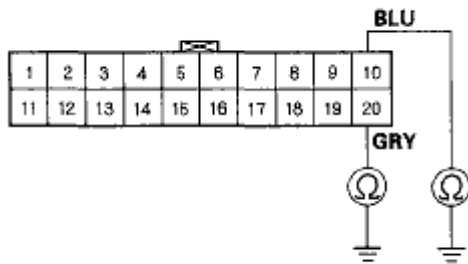
4. Turn the ignition switch to LOCK (0).
5. Test the driver's air mix control motor (see **DRIVER'S AIR MIX CONTROL MOTOR TEST**).

Is the driver's air mix control motor OK?

YES -Go to step 6.

NO -Replace the driver's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR TEST**).

6. Disconnect the driver's air mix control motor 5P connector.
7. Disconnect climate control unit connector A (20P).
8. Check for continuity between body ground and climate control unit connector A (20P) terminals No. 10 and 20 individually.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

Wire side of female terminals

Fig. 45: Checking Continuity Between Body Ground And Climate Control Unit Connector A (20P) Terminals No. 10 And 20**Courtesy of AMERICAN HONDA MOTOR CO., INC.***Is there continuity?***YES** -Repair short to body ground in the wire(s) between the climate control unit and the driver's air mix control motor.**NO** -Go to step 9.

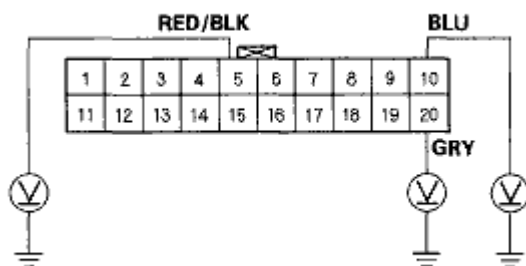
9. Check for continuity between the terminals of climate control unit connector A (20P) as follows.

CONNECTOR TERMINALS REFERENCE

Terminal	To terminals
A10	A5, A20
A20	A5

*Is there continuity between any of the terminals?***YES** -Repair the short in the wires.**NO** -Go to step 10.

10. Turn the ignition switch to ON (II), and measure the voltage at the same terminals.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

Wire side of female terminals

Fig. 46: Checking Continuity Between Terminals Of Climate Control Unit Connector A (20P)**Courtesy of AMERICAN HONDA MOTOR CO., INC.**

Are there any voltage?

YES -Repair short to power in the wire(s) between the climate control unit and the driver's air mix control motor. This short may also damages the climate control unit. Repair the short to power before replacing the climate control unit.

NO -Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1235 OR DTC INDICATOR K: A PROBLEM IN THE DRIVER'S AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1235 or K indicated?

YES -Go to step 4.

NO -Intermittent failure.

4. Turn the ignition switch to LOCK (0).
5. Test the driver's air mix control motor (see **DRIVER'S AIR MIX CONTROL MOTOR TEST**).

Is the driver's air mix control motor OK?

YES -Go to step 6.

NO -Replace the driver's air mix control motor (see **DRIVER'S AIR MIX CONTROL MOTOR REPLACEMENT**), or repair the driver's air mix control linkage or door.

6. Disconnect the driver's air mix control motor 5P connector.
7. Disconnect climate control unit connector B (16P).
8. Check for continuity between the following terminals of climate control unit connector B (16P) and the driver's air mix control motor 5P connector.

16P: 5P:

No. 3 No. 1

No. 4 No. 2

CLIMATE CONTROL UNIT CONNECTOR B (16P)

Wire side of female terminals

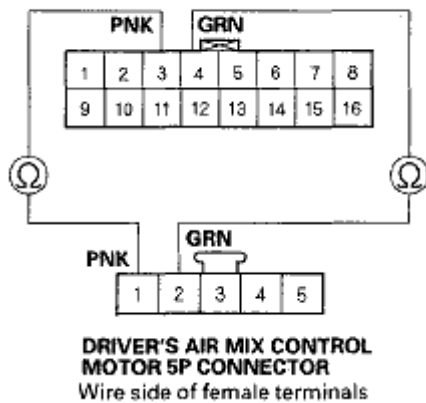


Fig. 47: Checking Continuity Between Climate Control Unit And Driver's Air Mix Control Motor Connector Terminals

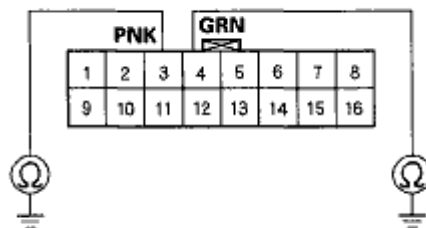
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 9.

NO -Repair open in the wire(s) between the climate control unit and the driver's air mix control motor.

9. Check for continuity between body ground and climate control unit connector B (16P) terminals No. 3 and No. 4 individually.

CLIMATE CONTROL UNIT CONNECTOR B (16P)

Wire side of female terminals

Fig. 48: Checking Continuity Between Body Ground And Climate Control Unit Connector B (16P) Terminals No. 3 And No. 4

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire(s) between the climate control unit and the driver's air mix control motor.

NO -Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1236 OR DTC INDICATOR L: AN OPEN IN THE PASSENGER'S AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1236 or L indicated?

YES -Go to step 4.

NO -Intermittent failure, check for loose wires or poor connections on the passenger's air mix control motor circuit.

4. Turn the ignition switch to LOCK (0).
5. Test the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR TEST**).

Is the passenger's air mix control motor OK?

YES -Go to step 6.

NO -Replace the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT**).

6. Disconnect the passenger's air mix control motor 5P connector.
7. Disconnect climate control unit connector A (20P) and B (16P).
8. Check for continuity between the following terminals of climate control unit connector A (20P) and B (16P) and the passenger's air mix control motor 5P connector.

20P: 5P:

No. 5 No.5

No. 20 No.4

16P: 5P:

No. 16 No.3

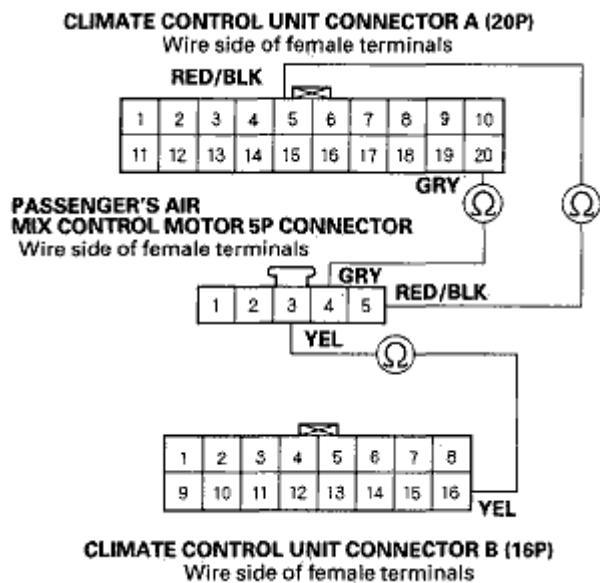


Fig. 49: Checking Continuity Between Terminals Of Climate Control Unit And Passenger's Air Mix Control Motor Connector Terminals

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Check for loose wires or poor connections at climate control unit connector A (20P) and B (16P) and at the passenger's air mix control motor 5P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO -Repair open in the wire(s) between the climate control unit and the passenger's air mix control motor.

DTC B1237 OR DTC INDICATOR M: A SHORT IN THE PASSENGER'S AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1237 or M indicated?

YES -Go to step 4.

NO -Intermittent failure.

4. Turn the ignition switch to LOCK (0).
5. Test the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR TEST**).

Is the passenger's air mix control motor OK?

YES -Go to step 6.

NO -Replace the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT**).

6. Disconnect the passenger's air mix control motor 5P connector.
7. Disconnect climate control unit connector A (20P) and B (16P).
8. Check for continuity between body ground and climate control unit connector A (20P) terminal No. 20, and between body ground and climate control unit connector B (16P) terminal No. 16.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

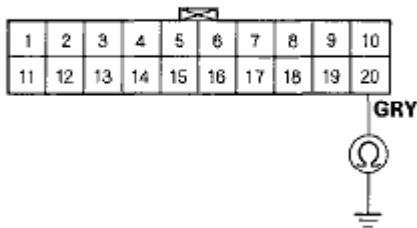


Fig. 50: Checking Continuity Between Climate Control Unit Connector A (20P) Terminal No. 20 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

CLIMATE CONTROL UNIT CONNECTOR B (16P)

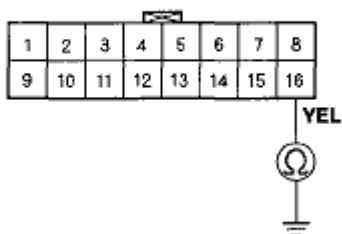


Fig. 51: Checking Continuity Between Climate Control Unit Connector Terminal No. 16 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire between the climate control unit and the passenger's air mix control motor.

NO -Go to step 9.

9. Check for continuity between the terminals of climate control unit connector A (20P) and B (16P) as follows.

CONNECTOR TERMINALS REFERENCE

Terminal	To terminals
B16	A5, A20
A20	A5

Is there continuity between any of the terminals?

YES -Repair the short in the wires.

NO -Go to step 10.

10. Turn the ignition switch to ON (II), and measure the voltage at the same terminals.

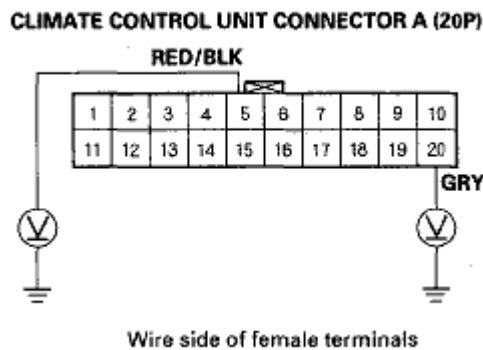


Fig. 52: Checking Continuity Between Climate Control Unit Connector Terminal 20 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

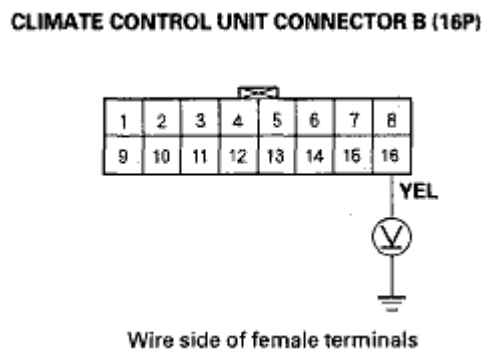


Fig. 53: Checking Continuity Between Climate Control Unit Connector Terminal 16 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are there any voltage?

YES -Repair short to power in the wire(s) between the climate control unit and the passenger's air mix control motor. This short may also damage the climate control unit. Repair the short to power before replacing the climate control unit.

NO -Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1238 OR DTC INDICATOR N: A PROBLEM IN THE PASSENGER'S AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1238 or N indicated?

YES -Go to step 4.

NO -Intermittent failure.

4. Turn the ignition switch to LOCK (0).
5. Test the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR TEST**).

Is the passenger's air mix control motor OK?

YES -Go to step 6.

NO -Replace the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT**), or repair the passenger's air mix control linkage or door.

6. Disconnect the passenger's air mix control motor 5P connector.
7. Disconnect climate control unit connector B (16P).
8. Check for continuity between the following terminals of climate control unit connector B (16P) and the passenger's air mix control motor 5P connector.

16P: 5P:

No. 7 No. 1

No. 8 No. 2

CLIMATE CONTROL UNIT CONNECTOR B (16P)
Wire side of female terminals

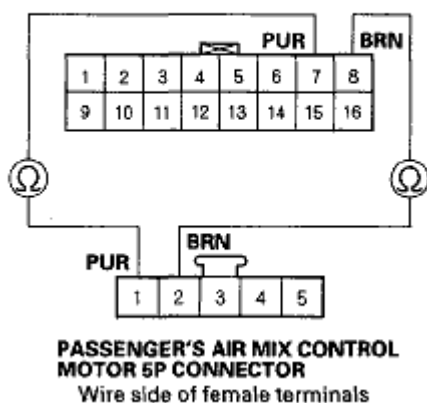


Fig. 54: Checking Continuity Between Climate Control Unit Connector Terminals And Passenger's Air Mix Control Motor

Courtesy of AMERICAN HONDA MOTOR CO., INC.

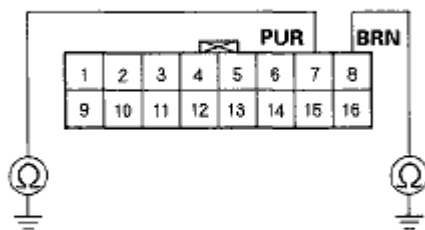
Is there continuity?

YES -Go to step 9.

NO -Repair open in the wire(s) between the climate control unit and the passenger's air mix control motor.

9. Check for continuity between body ground and climate control unit connector B (16P) terminals No. 7 and No. 8 individually.

CLIMATE CONTROL UNIT CONNECTOR B (16P)



Wire side of female terminals

Fig. 55: Checking Continuity Between Climate Control Unit Connector B (16P) Terminals No. 7 And No. 8 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire(s) between the climate control unit and the passenger's air mix control motor.

NO -Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1239 OR DTC INDICATOR O: AN OPEN OR SHORT IN THE DRIVER'S MODE CONTROL MOTOR CIRCUIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1239 or O indicated?

YES -Go to step 4.

NO -Intermittent failure, check for loose wires or poor connections on the driver's mode control motor

circuit.

4. Turn the ignition switch to LOCK (0).
5. Test the driver's mode control motor (see **DRIVER'S MODE CONTROL MOTOR TEST**).

Is the driver's mode control motor OK?

YES -Go to step 6.

NO -Replace the driver's mode control motor (see **DRIVER'S MODE CONTROL MOTOR REPLACEMENT**).

6. Disconnect the driver's mode control motor 10P connector.
7. Disconnect climate control unit connector A (20P) and B (16P).
8. Check for continuity between the following terminals of climate control unit connector A (20P) and B (16P) and the driver's mode control motor 10P connector.

20P: 10P:

No. 5 No. 10

16P: 10P:

No. 9 No. 9

No. 10 No. 8

No. 11 No. 6

No. 12 No. 7

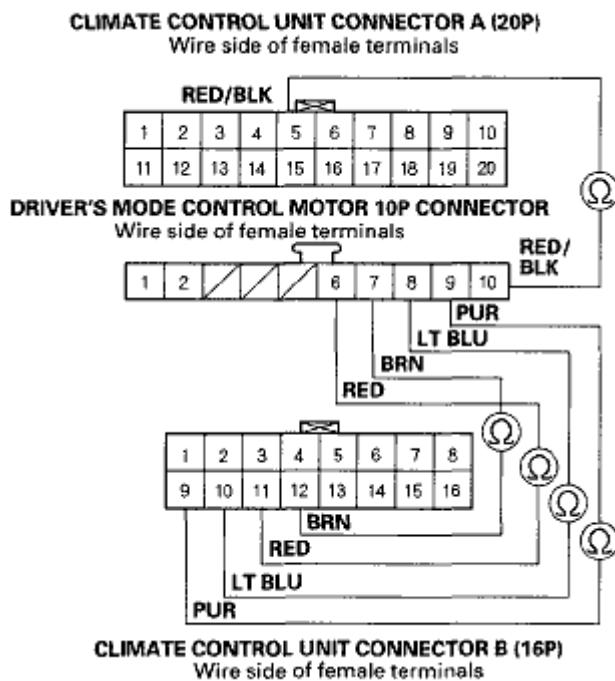


Fig. 56: Checking Continuity Between Climate Control Unit And Driver's Mode Control Motor Connector Terminals

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 9.

NO -Repair open in the wire(s) between the climate control unit and the driver's mode control motor.

9. Check for continuity between body ground and climate control unit connector B (16P) terminals No. 9, 10, 11, and 12 individually.

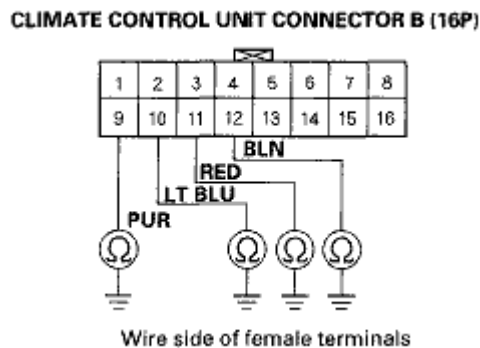


Fig. 57: Checking Continuity Between Climate Control Unit Connector Terminals No. 9, 10, 11, 12 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire(s) between the climate control unit and the driver's

mode control motor.

NO -Go to step 10.

10. Check for continuity between the terminals of climate control unit connector A (20P) and B (16P) as follows.

CONNECTOR TERMINALS REFERENCE

Terminal	To terminals
A5	B9, B10, B11, B12
B9	B10, B11, B12
B10	B11, B12
B11	B12

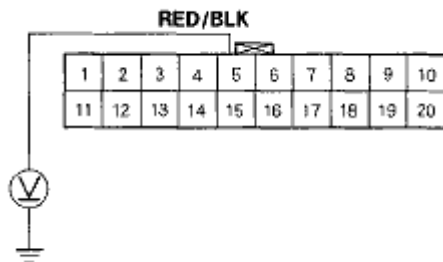
Is there continuity between any of the terminals?

YES -Repair the short in the wires.

NO -Go to step 11.

11. Turn the ignition switch to ON (II), and measure the voltage at the same terminals.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

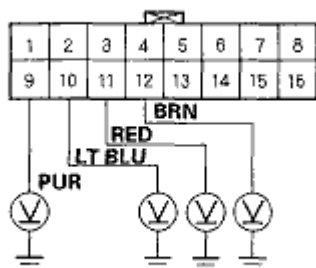


Wire side of female terminals

Fig. 58: Checking Continuity Between Climate Control Unit Connector Terminal No.5 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

CLIMATE CONTROL UNIT CONNECTOR B (16P)



Wire side of female terminals

Fig. 59: Checking Continuity Between Climate Control Unit Connector Terminal No. 9, 10, 11, 12 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are there any voltage?

YES -Repair short to power in the wire(s) between the climate control unit and the driver's mode control motor. This short may also damage the climate control unit. Repair the short to power before replacing the climate control unit.

NO -Check for loose wire or poor connections at climate control unit connector A (20P) and B (16P) and at the driver's mode control motor 10P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1240 OR DTC INDICATOR P: A PROBLEM IN THE DRIVER'S MODE CONTROL LINKAGE, DOORS, OR MOTOR

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1240 or P indicated?

YES -Go to step 4.

NO -Intermittent failure.

4. Turn the ignition switch to LOCK (0).
5. Test the driver's mode control motor (see **DRIVER'S MODE CONTROL MOTOR TEST**).

Is the driver's mode control motor OK?

YES -Go to step 6.

NO -Replace the driver's mode control motor (see **DRIVER'S MODE CONTROL MOTOR REPLACEMENT**), or repair the driver's mode control linkage or doors.

6. Disconnect the driver's mode control motor 10P connector.
7. Disconnect climate control unit connector B (16P).
8. Check for continuity between the following terminals of climate control unit connector B (16P) and the driver's mode control motor 10P connector.

16P: 10P:

No. 1 No. 2

No. 2 No. 1

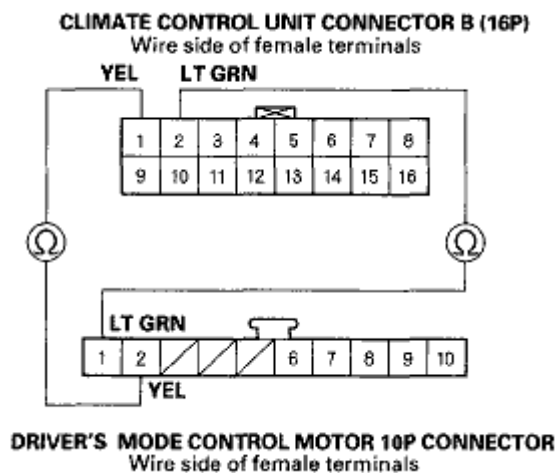


Fig. 60: Checking Continuity Between Climate Control Unit And Driver's Mode Control Motor Connector Terminals

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 9.

NO -Repair open in the wire(s) between the climate control unit and the driver's mode control motor.

9. Check for continuity between body ground and climate control unit connector B (16P) terminals No. 1 and No. 2 individually.

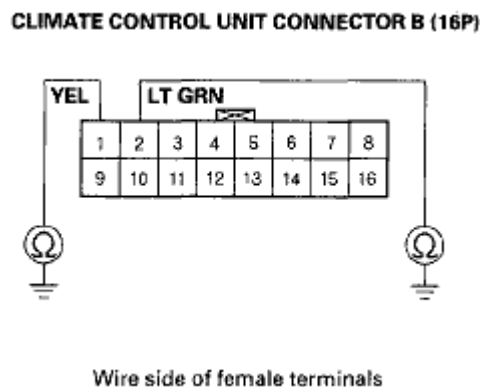


Fig. 61: Checking Continuity Between Climate Control Unit Connector B (16P) Terminals No. 1 And No. 2 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire(s) between the climate control unit and the driver's mode control motor.

NO -Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1242 OR DTC INDICATOR Q: AN OPEN OR SHORT IN THE PASSENGER'S MODE CONTROL MOTOR CIRCUIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1242 or Q indicated?

YES -Go to step 4.

NO -Intermittent failure, check for loose wires or poor connections on the passenger's mode control motor circuit.

4. Turn the ignition switch to LOCK (0).
5. Test the passenger's mode control motor (see **PASSENGER'S MODE CONTROL MOTOR TEST**).

Is the passenger's mode control motor OK?

YES -Go to step 6.

NO -Replace the passenger's mode control motor (see **PASSENGER'S MODE CONTROL MOTOR REPLACEMENT**).

6. Disconnect the passenger's mode control motor 10P connector.
7. Disconnect climate control unit connector A (20P) and B (16P).
8. Check for continuity between the following terminals of climate control unit connector A (20P) and B (16P) and the passenger's mode control motor 10P connector.

20P: 10P:

No. 5 No. 10

16P: 10P:

No. 13 No. 8,9

No. 14 No. 7

No. 15 No. 6

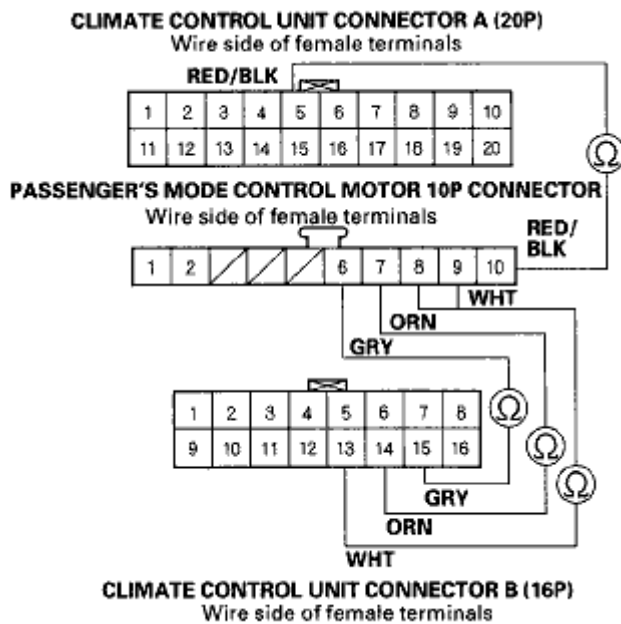


Fig. 62: Checking Continuity Between Climate Control Unit And Passenger's Mode Control Motor Connector Terminals

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 9.

NO -Repair open in the wire(s) between the climate control unit and the passenger's mode control motor.

9. Check for continuity between body ground and climate control unit connector B (16P) terminals No. 13, 14 and 15 individually.

CLIMATE CONTROL UNIT CONNECTOR B (16P)

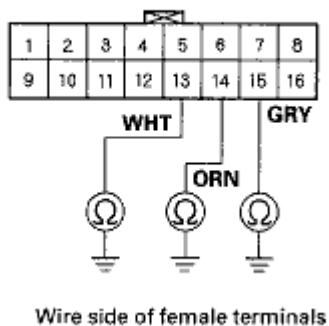


Fig. 63: Checking Continuity Between Climate Control Unit Connector B (16P) Terminals No. 13, 14, 15 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire(s) between the climate control unit and the passenger's

mode control motor.

NO -Go to step 10.

10. Check for continuity between the terminals of climate control unit connector A (20P) and B (16P) as follows.

CONNECTOR TERMINALS REFERENCE

Terminal	To terminals
A5	B13, B14, B15
B13	B14, B15
B14	B15

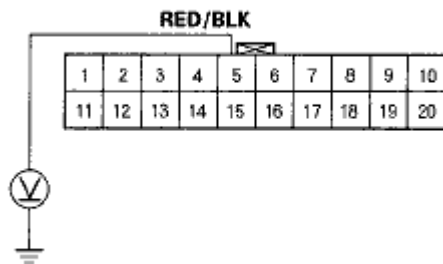
Are there continuity between any of the terminals?

YES -Repair the short in the wires.

NO -Go to step 11.

11. Turn the ignition switch to ON (II), and measure the voltage at the same terminals.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

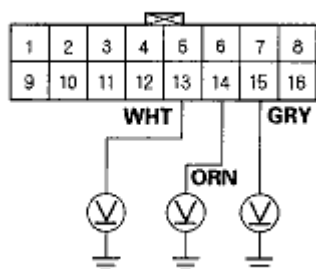


Wire side of female terminals

Fig. 64: Checking Continuity Climate Control Unit Connector Terminals No. 5 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

CLIMATE CONTROL UNIT CONNECTOR B (16P)



Wire side of female terminals

Fig. 65: Checking Continuity Climate Control Unit Connector Terminals No. 13, 14, 15 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are there any voltage?

YES -Repair short to power in the wire(s) between the climate control unit and the passenger's mode control motor. This short may also damage the climate control unit. Repair the short to power before replacing the climate control unit.

NO -Check for loose wire or poor connections at climate control unit connector A (20P) and B (16P) and at the passenger's mode control motor 10P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1243 OR DTC INDICATOR R: A PROBLEM IN THE PASSENGER'S MODE CONTROL LINKAGE, DOORS, OR MOTOR

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1243 or R indicated?

YES -Go to step 4.

NO -Intermittent failure.

4. Turn the ignition switch to LOCK (0).
5. Test the passenger's mode control motor (see **PASSENGER'S MODE CONTROL MOTOR TEST**).

Is the passenger's mode control motor OK?

YES -Go to step 6.

NO -Replace the passenger's mode control motor (see **PASSENGER'S MODE CONTROL MOTOR REPLACEMENT**), or repair the passenger's mode control linkage or doors.

6. Disconnect the passenger's mode control motor 10P connector.
7. Disconnect climate control unit connector B (16P).
8. Check for continuity between the following terminals of climate control unit connector B (16P) and the passenger's mode control motor 10P connector.

16P: 10P:

No. 5 No. 2

No. 6 No. 1

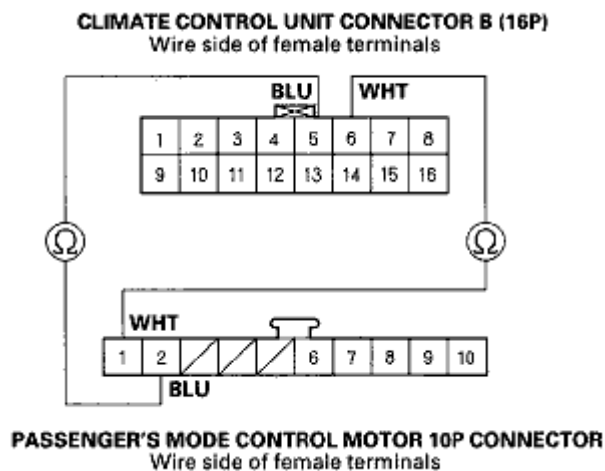


Fig. 66: Checking Continuity Between Climate Control Unit Connector Terminals And Passenger's Mode Control Motor Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 9.

NO -Repair open in the wire(s) between the climate control unit and the passenger's mode control motor.

9. Check for continuity between body ground and climate control unit connector B (16P) terminals No. 5 and No. 6 individually.

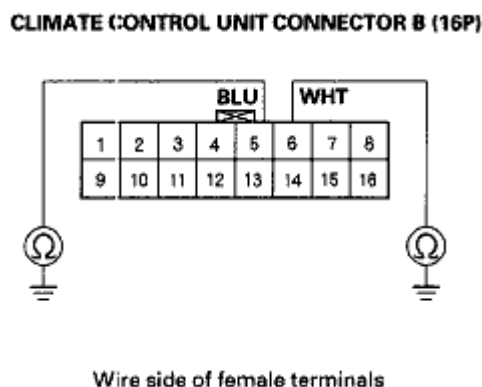


Fig. 67: Checking Continuity Between Climate Control Unit Connector Terminals (16P) Terminals No. 5 And No. 6 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire(s) between the climate control unit and the passenger's mode control motor.

NO -Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1241 OR DTC INDICATOR S: A PROBLEM IN THE BLOWER MOTOR CIRCUIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1241 or S indicated?

YES -Go to step 4.

NO -Intermittent failure, check for loose wires or poor connections on the blower motor circuit.

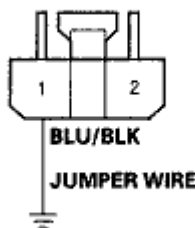
4. Turn the ignition switch to LOCK (0).
5. Check the No. 21 (40 A) fuse in the under-hood fuse/relay box, and the No. 30 (7.5 A) fuse in the under-dash fuse/relay box.

Are the fuses OK?

YES -Go to step 6.

NO -Replace the fuse(s), and recheck.

6. Connect the No. 1 terminal of the blower motor 2P connector to body ground with a jumper wire.

BLOWER MOTOR 2P CONNECTOR

Wire side of female terminals

Fig. 68: Connecting No. 1 Terminal Of Blower Motor 2P Connector To Body Ground With Jumper Wire

Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Turn the ignition switch to ON (II).

Does the blower motor run?

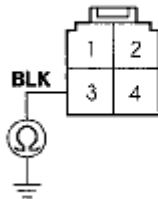
YES -Go to step 8.

NO -Go to step 23.

8. Turn the ignition switch to LOCK (0).
9. Disconnect the jumper wire.
10. Disconnect the power transistor 4P connector.

11. Check for continuity between the No. 3 terminal of the power transistor 4P connector and body ground.

POWER TRANSISTOR 4P CONNECTOR



Wire side of female terminals

Fig. 69: Checking Continuity Between No. 3 Terminal Of Power Transistor 4P Connector And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

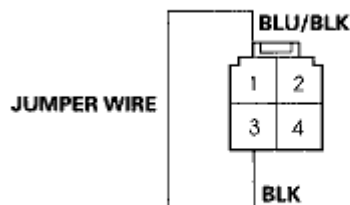
Is there continuity?

YES -Go to step 12.

NO -Check for an open in the wire between the power transistor and body ground. If the wire is OK, check for poor ground at G506.

12. Connect the No. 1 and No. 3 terminals of the power transistor 4P connector with a jumper wire.

POWER TRANSISTOR 4P CONNECTOR



Wire side of female terminals

Fig. 70: Connecting No. 1 And No. 3 Terminals Of Power Transistor 4P Connector With Jumper Wire

Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Turn the ignition switch to ON (II).

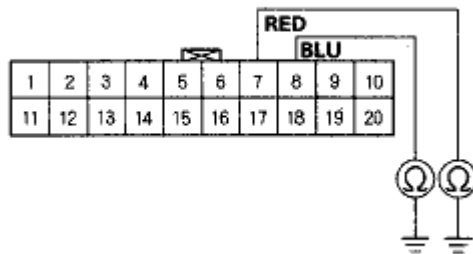
Does the blower motor run at high speed?

YES -Go to step 14.

NO -Repair open in the BLU/BLK wire between the power transistor and the blower motor.

14. Turn the ignition switch to LOCK (0).

15. Disconnect the jumper wire.
16. Disconnect climate control unit connector A (20P).
17. Check for continuity between the No. 7 and No. 8 terminals of climate control unit connector A (20P) and body ground individually.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

Wire side of female terminals

Fig. 71: Checking Continuity Between No. 7 And No. 8 Terminals Of Climate Control Unit Connector A (20P) And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire(s) between the climate control unit and the power transistor.

NO -Go to step 18.

18. Check for continuity between the following terminals of climate control unit connector A (20P) and power transistor 4P connector.

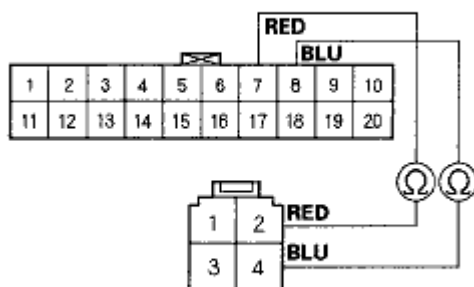
20P: 4P:

No. 7 No. 2

No. 8 No. 4

CLIMATE CONTROL UNIT CONNECTOR A (20P)

Wire side of female terminals

**POWER TRANSISTOR 4P CONNECTOR**

Wire side of female terminals

Fig. 72: Checking Continuity Between Climate Control Unit Connector Terminals A (20P) And Power Transistor 4P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

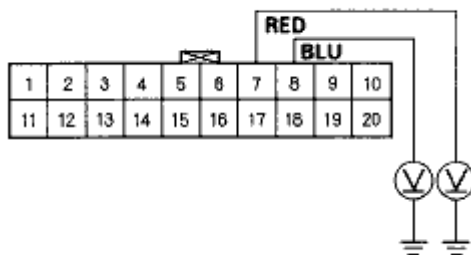
Is there continuity?

YES -Go to step 19.

NO -Repair any open in the wire(s) between the climate control unit and the power transistor.

19. Start the engine.
20. Measure the voltage between the No. 7 and No. 8 terminals of climate control unit connector A (20P) and body ground individually.

CLIMATE CONTROL UNIT CONNECTOR A (20P)



Wire side of female terminals

Fig. 73: Measuring Voltage Between No. 7 And No. 8 Terminals Of Climate Control Unit Connector A (20P) And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 1 V or more?

YES -Repair short to power in the wire(s).

NO -Go to step 21.

21. Reconnect climate control unit connector A (20P).
22. Test the power transistor (see **POWER TRANSISTOR TEST**).

Is the power transistor OK?

YES -Check for loose wire or poor connections at climate control unit connector A (20P) and at the power transistor 4P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO -Replace the power transistor.

23. Disconnect the jumper wire.
24. Disconnect the blower motor 2P connector.
25. Measure the voltage between the No. 2 terminal of the blower motor 2P connector and body ground.

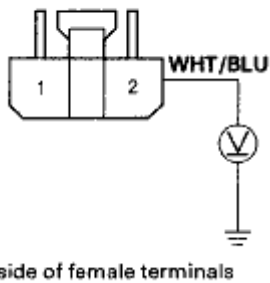
BLOWER MOTOR 2P CONNECTOR

Fig. 74: Measuring Voltage Between No. 2 Terminal Of Blower Motor 2P Connector And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Replace the blower motor.

NO -Go to step 26.

26. Turn the ignition switch to LOCK (0).

27. Remove the blower motor relay from the under-hood fuse/relay box, and test it (see **POWER RELAY TEST**).

Is the relay OK?

YES -Go to step 28.

NO -Replace the blower motor relay.

28. Measure the voltage between the No. 2 terminal of the blower motor relay 4P socket and body ground.

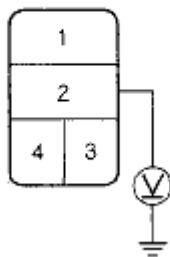
BLOWER MOTOR RELAY 4P SOCKET

Fig. 75: Measuring Voltage Between No. 2 Terminal Of Blower Motor Relay 4P Socket And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 29.

NO -Replace the under-hood fuse/relay box.

29. Turn the ignition switch to ON (II).
30. Measure the voltage between the No. 4 terminal of the blower motor relay 4P socket and body ground.

BLOWER MOTOR RELAY 4P SOCKET

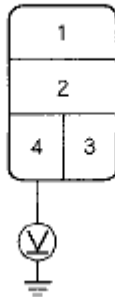


Fig. 76: Measuring Voltage Between No. 4 Terminal Of Blower Motor Relay 4P Socket And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 31.

NO -Repair open in the BLK/YEL wire between the No. 30 (7.5 A) fuse in the under-dash fuse/relay box and the blower motor relay.

31. Turn the ignition switch to LOCK (0).
32. Check for continuity between the No. 3 terminal; of the blower motor relay 4P socket and body ground.

BLOWER MOTOR RELAY 4P SOCKET



Fig. 77: Checking Continuity Between No. 3 Terminal Of Blower Motor Relay 4P Socket And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair open in the WHT/BLU wire between the blower motor relay and the blower motor.

NO -Check for an open in the BLK wire between the blower motor relay and body ground. If the wire is OK, check for poor ground at G302.

DTC B1726: DISPLAY PANEL CONTROL UNIT LOST COMMUNICATION WITH THE CLIMATE CONTROL UNIT

1. Clear the DTC by turning the ignition switch to LOCK (0), and then to ON (II).
2. Operate the climate control system in several modes.
3. Check for DTCs using the self-diagnosis or HDS.

Is DTC B1726 indicated?

YES -Go to step 4.

NO -Intermittent failure.

4. Turn the ignition switch to LOCK (0).
5. Disconnect the display panel control unit connector B (6P).
6. Disconnect climate control unit connector A (20P).
7. Check for continuity between the following terminals of display panel control unit connector B (6P) and climate control unit connector A (20P).

6P: 20P:

No. 1 No. 4

No. 2 No. 13

No. 3 No. 2

No. 4 No. 12

No. 5 No. 11

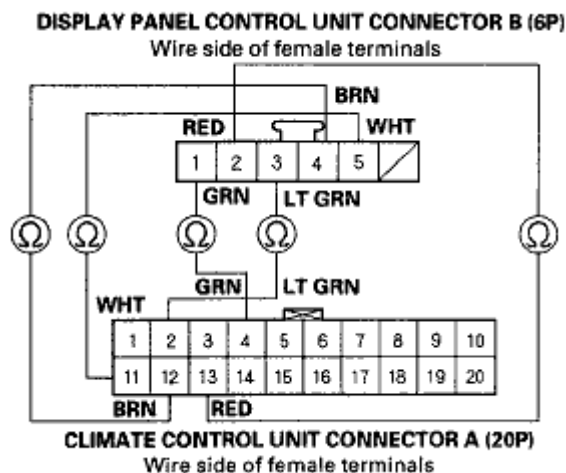


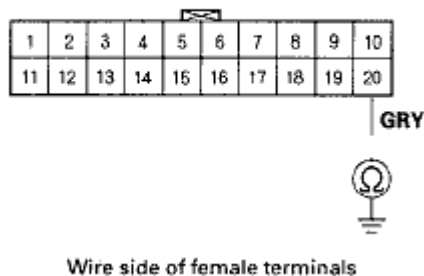
Fig. 78: Checking Continuity Between Display Panel Control Unit Connector Terminals B (6P)

And Climate Control Unit Connector A (20P)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

*Is there continuity?***YES** -Go to step 8.**NO** -Repair open in the wire(s) between the display panel control unit and the climate control unit connector.

8. Disconnect the driver's and passenger's air mix control motor connectors (5P).
9. Check for continuity between the No. 20 terminal of climate control unit connector A (20P) and body ground.

CLIMATE CONTROL UNIT CONNECTOR A (20P)**Fig. 79: Checking Continuity Between No. 20 Terminal Of Climate Control Unit Connector A (20P) And Body Ground**

Courtesy of AMERICAN HONDA MOTOR CO., INC.

*Is there continuity?***YES** -Repair short to body ground in the wire between the climate control unit and the driver's and passenger's air mix control motors.**NO** -Check for loose wires or poor connections at display panel control unit connector B (6P) and at climate control unit connector A (20P). If the connections are good, substitute a known-good display panel control unit and/or climate control unit, and recheck. If the symptom/indication goes away, replace the original display panel control unit and/or climate control unit.**DTC B1202: CLIMATE CONTROL UNIT INTERNAL ERROR****NOTE:**

- Check the battery condition (see **BATTERY TEST**) and the charging system (see **CHARGING SYSTEM INDICATOR CIRCUIT TROUBLESHOOTING**).
- If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN system diagnosis test mode A (see **TRUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Clear the DTCs using the HDS.
2. Turn the ignition switch to LOCK (0), then to ON (II).

3. Turn the climate control system on and operate several functions (A/C on/off, air mix and blend door operations, temperature settings etc.).
4. Check the DTCs by selecting the DTC MENU (DTCs) from the HDS.

Is DTC B1202 indicated?

YES -The climate control unit is faulty, replace the climate control unit.

NO -Intermittent failure, the climate control unit is OK at this time. Check for loose or poor connections at climate control unit connector A (20P) and B (16P).

RECIRCULATION CONTROL MOTOR CIRCUIT TROUBLESHOOTING

1. Check the No. 30 (7.5 A) fuse in the under-dash fuse/relay box.

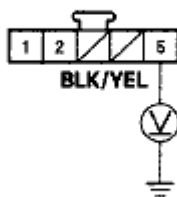
Is the fuse OK?

YES -Go to step 2.

NO -Replace the fuse, and recheck.

2. Disconnect the recirculation control motor 5P connector.
3. Turn the ignition switch to ON (II).
4. Measure the voltage between the No. 5 terminal of the recirculation control motor 5P connector and body ground.

**RECIRCULATION CONTROL MOTOR
5P CONNECTOR**



Wire side of female terminals

Fig. 80: Measuring Voltage Between No. 5 Terminal Of Recirculation Control Motor 5P Connector And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 5.

NO -Repair open in the wire between the No. 30 (7.5 A) fuse in the under-dash fuse/relay box and the recirculation control motor.

5. Turn the ignition switch to LOCK (0).

6. Test the recirculation control motor (see **RECIRCULATION CONTROL MOTOR TEST**).

Is the recirculation control motor OK?

YES -Go to step 7.

NO -Replace the recirculation control motor (see **RECIRCULATION CONTROL MOTOR REPLACEMENT**), or repair the recirculation control linkage or doors.

7. Disconnect climate control unit connector A (20P).
8. Check for continuity between the No. 9 and No. 19 terminals of climate control unit connector A (20P) and body ground individually.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

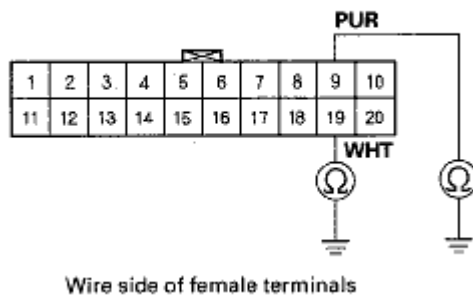


Fig. 81: Checking Continuity Between No. 9 And No. 19 Terminals Of Climate Control Unit Connector A (20P) And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire(s) between the climate control unit and the recirculation control motor.

NO -Go to step 9.

9. Turn the ignition switch to ON (II), and measure the voltage at the same terminals.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

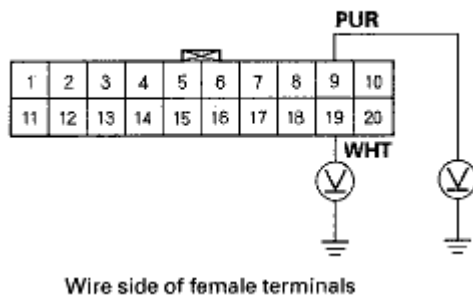


Fig. 82: Measuring Voltage Between Climate Control Unit Connector Terminals And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are there any voltage?

YES -Repair short to power in the wire(s) between the climate control unit and the recirculation control motor. This short may also damage the climate control unit. Repair the short to power before replacing the climate control unit.

NO -Go to step 10.

10. Turn the ignition switch to LOCK (0).
11. Check for continuity between the following terminals of climate control unit connector A (20P) and the recirculation control motor 5P connector.

20P: 5P:

No. 9 No. 1

No. 19 No. 2

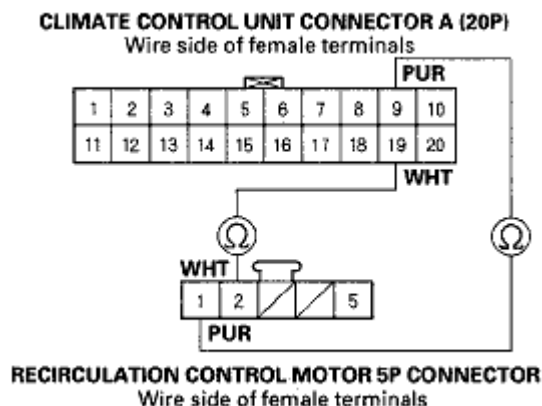


Fig. 83: Checking Continuity Between Climate Control Unit And Recirculation Control Motor Connector Terminals

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Check for loose wires or poor connections at climate control unit connector A (20P) and at the recirculation control motor 5P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO -Repair open in the wire(s) between the climate control unit and the recirculation control motor.

CLIMATE CONTROL POWER AND GROUND CIRCUIT TROUBLESHOOTING

1. Check the No. 30(7.5 A) fuse in the under-dash fuse/relay box.

Is the fuse OK?

YES -Go to step 2.

NO -Replace the fuse, and recheck.

2. Disconnect climate control unit connector A (20P).
3. Turn the ignition switch to ON (II).
4. Measure the voltage between the No. 1 terminal of climate control unit connector A (20P) and body ground.

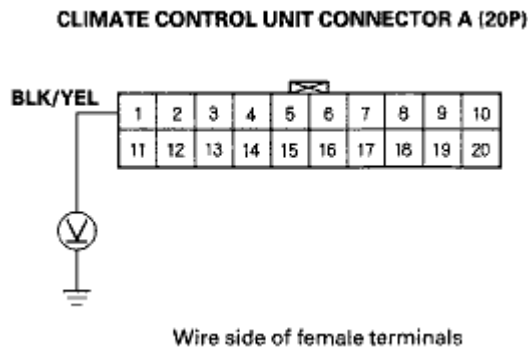


Fig. 84: Measuring Voltage Between No. 1 Terminal Of Climate Control Unit Connector A (20P) And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 5.

NO -Repair open in the wire between the No. 30 (7.5 A) fuse in the under-dash fuse/relay box and the climate control unit.

5. Turn the ignition switch to LOCK (0).
6. Check for continuity between the No. 3 (Canada models) or No. 6 terminal of climate control unit connector A (20P) and body ground.

Canada models

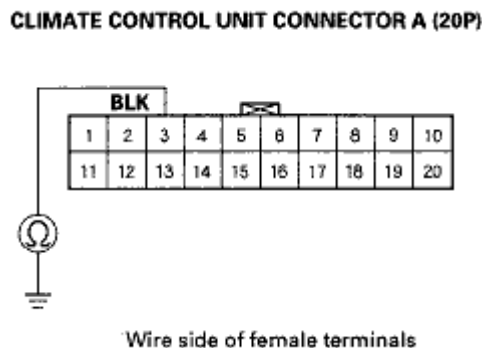
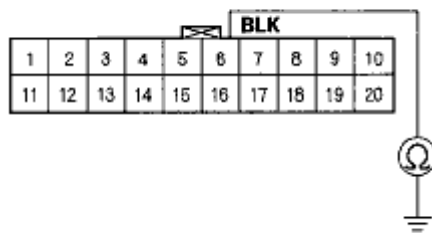


Fig. 85: Checking Continuity Between Climate Control Unit Connector Terminals No. 3 (Canada Models) And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

Wire side of female terminals

Fig. 86: Checking Continuity Between Climate Control Unit Connector Terminals No. 6 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Check for loose wires or poor connections at climate control unit connector A (20P). If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO -Check for an open in the wires between the climate control unit and body ground. If the wire is OK, check for poor ground at G503 and/or G601.

RADIATOR AND A/C CONDENSER FAN LOW SPEED CIRCUIT TROUBLESHOOTING

NOTE:

- Do not use this troubleshooting procedure if the A/C compressor is inoperative. Refer to the SYMPTOM TROUBLESHOOTING INDEX.
- Before doing symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).

1. Check the No. 9 (30 A) fuse in the under-hood fuse/relay box, and the No. 30 (7.5 A) fuse in the under-dash fuse/relay box.

Are the fuses OK?

YES -Go to step 2.

NO -Replace the fuse(s), and recheck.

2. Remove the A/C condenser fan relay from the under-hood fuse/relay box, and test it (see POWER RELAY TEST).

Is the relay OK?

YES -Go to step 3.

NO -Replace the A/C condenser fan relay.

3. Measure the voltage between the No. 1 terminal of the A/C condenser fan relay 4P socket and body ground.

A/C CONDENSER FAN RELAY 4P SOCKET

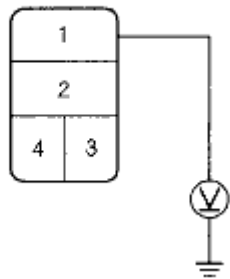


Fig. 87: Measuring Voltage Between A/C Condenser Fan Relay Terminal And Body Ground
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 4.

NO -Replace the under-hood fuse/relay box.

4. Connect the No. 1 and No. 2 terminals of the A/C condenser fan relay 4P socket with a jumper wire.

A/C CONDENSER FAN RELAY 4P SOCKET

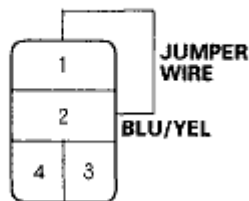


Fig. 88: Connecting No. 1 And No. 2 Terminals Of A/C Condenser Fan Relay 4P Socket With A Jumper Wire
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the A/C condenser fan run?

YES -Go to step 5.

NO -Go to step 13.

5. Disconnect the jumper wire.
6. Turn the ignition switch to ON (II).
7. Measure the voltage between the No. 3 terminal of the A/C condenser fan relay 4P socket and body ground.

A/C CONDENSER FAN RELAY 4P SOCKET

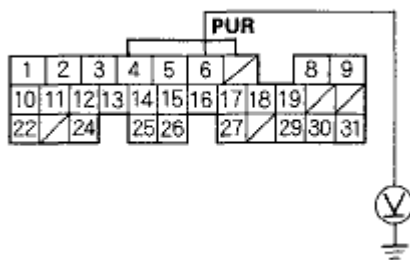
Fig. 89: Measuring Voltage Between A/C Condenser Fan Relay Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 8.

NO -Go to step 33.

8. Turn the ignition switch to LOCK (0).
9. Reinstall the A/C condenser fan relay.
10. Turn the ignition switch to ON (II).
11. Make sure the A/C switch to LOCK (0).
12. Measure the voltage between the No. 6 terminal of ECM/PCM connector E (31P) and body ground with the ECM/PCM connectors connected.

ECM/PCM CONNECTOR E (31P)

Wire side of female terminals

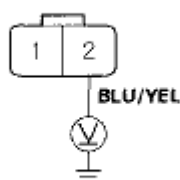
Fig. 90: Measuring Voltage Between No. 6 Terminal Of ECM/PCM Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Check for loose wires or poor connections at No. 6 terminal of the ECM/PCM connector E (31P). If the connections are good, substitute a known-good ECM/PCM, and recheck. If the symptom/indication goes away, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

NO -Repair open in the wire between the A/C condenser fan relay and the ECM/PCM.

13. Disconnect the jumper wire.
14. Reinstall the A/C condenser fan relay.
15. Turn the ignition switch to ON (II), then turn the A/C and blower fan switches ON.
16. Measure the voltage between the No. 2 terminal of the A/C condenser fan 2P connector and body ground.

A/C CONDENSER FAN 2P CONNECTOR

Wire side of female terminals

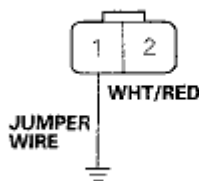
Fig. 91: Measuring Voltage Between A/C Condenser Fan Terminal No. 2 And Body Ground
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 17.

NO -Repair open in the wire between the A/C condenser fan relay and the A/C condenser fan.

17. Connect the No. 1 terminal of the A/C condenser fan 2P connector to body ground with a jumper wire.

A/C CONDENSER FAN 2P CONNECTOR

Wire side of female terminals

Fig. 92: Connecting No. 1 Terminal Of A/C Condenser Fan 2P Connector To Body Ground
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Turn the ignition switch to ON (II), then turn the A/C and fan switches ON.

Does the A/C condenser fan run?

YES -Go to step 19.

NO -Replace the A/C condenser fan motor.

19. Turn the A/C and fan switches OFF, then turn the ignition switch to LOCK (0).

20. Disconnect the jumper wire.
21. Remove the fan control relay from the multi-relay box, and test it (see **POWER RELAY TEST**).

Is the relay OK?

YES -Go to step 22.

NO -Replace the fan control relay.

22. Turn the ignition switch to ON (II), then turn the A/C and fan switches ON.
23. Measure the voltage between the No. 1 terminal of the fan control relay 5P socket and body ground.

FAN CONTROL RELAY 5P SOCKET

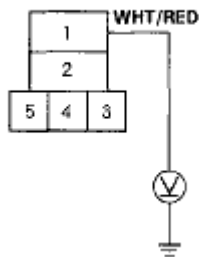


Fig. 93: Measuring Voltage Between No. 1 Terminal Of Fan Control Relay 5P Socket And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

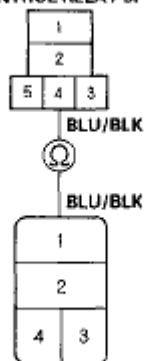
Is there battery voltage?

YES -Go to step 24.

NO -Repair open in the wire between the A/C condenser fan and the fan control relay.

24. Turn the A/C and fan switches OFF, then turn the ignition switch to LOCK (0).
25. Remove the radiator fan relay from the under-hood fuse/relay box.
26. Check for continuity between the No. 4 terminal of the fan control relay 5P socket and the No. 1 terminal of the radiator fan relay 4P socket.

FAN CONTROL RELAY 5P SOCKET

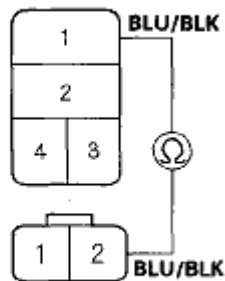


RADIATOR FAN RELAY 4P SOCKET

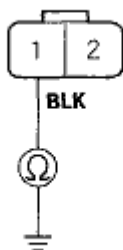
Fig. 94: Checking Continuity Between Fan Control Relay And Radiator Fan Relay Connector

Terminals**Courtesy of AMERICAN HONDA MOTOR CO., INC.***Is there continuity?***YES** -Go to step 27.**NO** -Repair open in the wire between the fan control relay and the radiator fan relay.

27. Disconnect the radiator fan 2P connector.
28. Check for continuity between the No. 1 terminal of the radiator fan relay 4P socket and the No. 2 terminal of the radiator fan 2P connector.

RADIATOR FAN RELAY 4P SOCKET**RADIATOR FAN 2P CONNECTOR**
Wire side of female terminals**Fig. 95: Checking Continuity Between Radiator Fan Relay And Radiator Fan 2P Connector****Courtesy of AMERICAN HONDA MOTOR CO., INC.***Is there continuity?***YES** -Go to step 29.**NO** -Repair open in the wire between the radiator fan relay and the radiator fan.

29. Check for continuity between the No. 1 terminal of the radiator fan 2P connector and body ground.

RADIATOR FAN 2P CONNECTOR

Wire side of female terminals

Fig. 96: Checking Continuity Between No. 1 Terminal Of Radiator Fan 2P Connector And Body Ground**Courtesy of AMERICAN HONDA MOTOR CO., INC.**

Is there continuity?

YES -Replace the radiator fan motor.

NO -Check for an open in the wire between the radiator fan and body ground. If the wire is OK, check for poor ground at G301.

30. Turn the ignition switch to LOCK (0).
31. Remove A/C diode A from the under-hood fuse/relay box.
32. Using the diode setting on a DVOM, check for current flow in both directions between the No. 1 and No. 2 terminals of A/C diode A.

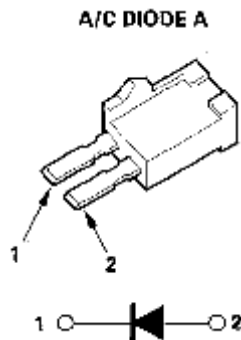


Fig. 97: Checking Current Flow In Directions Between No. 1 And No. 2 Terminals Of A/C Diode A

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there current flow in only one direction?

YES -Go to step 33.

NO -Replace A/C diode A.

33. Turn the ignition switch to ON (II).
34. Measure the voltage between the No. 2 terminal of A/C diode A 2P socket and body ground.

A/C DIODE A 2P SOCKET

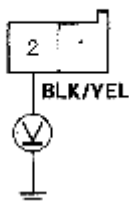


Fig. 98: Measuring Voltage Between A/C Diode A 2P Terminal No. 2 And Body Ground
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Replace the under-hood fuse/relay box.

NO -Repair open in the wire between the No. 30 (7.5 A) fuse in the under-dash fuse/relay box and A/C diode A pin 2.

A/C CONDENSER FAN HIGH SPEED CIRCUIT TROUBLESHOOTING

NOTE:

- Do not use this troubleshooting procedure if the radiator fan and/or the A/C compressor is inoperative. Refer to the **SYMPTOM TROUBLESHOOTING INDEX**.
- Before doing symptom troubleshooting, check for powertrain DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**).

1. Check the No. 30 (7.5 A) fuse in the under-dash fuse/relay box.

Is the fuse OK?

YES -Go to step 2.

NO -Replace the fuse, and recheck.

2. Remove the fan control relay from the multi-relay box, and test it (see **POWER RELAY TEST**).

Is the relay OK?

YES -Go to step 3.

NO -Replace the fan control relay.

3. Turn the ignition switch to ON (II).
4. Measure the voltage between the No. 5 terminal of the fan control relay 5P socket and body ground.

FAN CONTROL RELAY 5P SOCKET

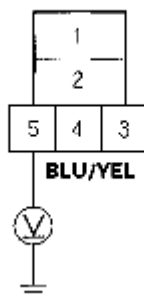


Fig. 99: Measuring Voltage Between Fan Control Relay 5P Socket Connector Terminals And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 5.

NO -Go to step 9.

5. Turn the ignition switch to LOCK (0).
6. Check for continuity between the No. 2 terminal of the fan control relay 5P socket and body ground.

FAN CONTROL RELAY 5P SOCKET

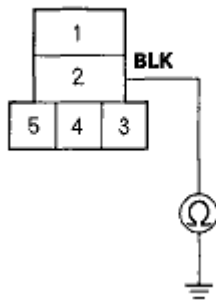


Fig. 100: Checking Continuity Between Fan Control Relay Terminal No. 2 And Body Ground
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

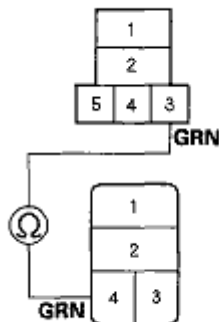
Is there continuity?

YES -Go to step 7.

NO -Check for an open in the wire between the fan control relay and body ground. If the wire is OK, check for poor ground at G201.

7. Remove the radiator fan relay from the under-hood fuse/relay box.
8. Check for continuity between the No. 3 terminal of the fan control relay 5P socket and the No. 4 terminal of the radiator fan relay 4P socket.

FAN CONTROL RELAY 5P SOCKET



RADIATOR FAN RELAY 4P SOCKET

Fig. 101: Checking Continuity Between Fan Control Relay Connector Terminals And Radiator Fan Relay Connector Terminals
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair open in the wire between the radiator fan relay terminal No. 4 and the ECM/PCM terminal B10.

NO -Repair open in the wire between the fan control relay and the radiator fan relay.

9. Turn the ignition switch to LOCK (0).
10. Remove A/C diode A from under-hood fuse/relay box.
11. Using the diode setting on a DVOM, check for current flow in both directions between the No. 1 and No. 2 terminals of A/C diode A.

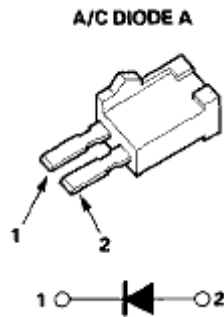


Fig. 102: Checking Current Flow In Both Directions Between No. 1 And No. 2 Terminals Of A/C Diode A

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there current flow in only one direction?

YES -Go to step 12.

NO -Replace A/C diode A.

12. Turn the ignition switch to ON (II).
13. Measure the voltage between the No. 2 terminal of A/C diode A 2P socket and body ground.

A/C DIODE A 2P SOCKET

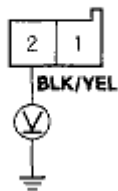


Fig. 103: Measuring Voltage Between No. 2 Terminal Of A/C Diode A 2P Socket And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Repair open in the BLU/YEL wire between A/C diode A and the fan control relay.

NO -Repair open in the wire between the No. 30 (7.5 A) fuse in the under-dash fuse/relay box and A/C diode A.

RADIATOR AND A/C CONDENSER FAN HIGH SPEED CIRCUIT TROUBLESHOOTING

NOTE:

- Do not use this troubleshooting procedure if only one fan is inoperative, or if the A/C compressor is inoperative. Refer to the SYMPTOM TROUBLESHOOTING INDEX.
- Before doing symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).
- The normal operating A/C pressure for the radiator and A/C condenser fans to run at high speed is 1,520 kPa (15.5 kgf/cm² , 221 psi).

1. Check the No. 9 (30 A) and the No. 11 (30 A) in the under-hood fuse/relay box, and the No. 30 (7.5 A) fuse in the under-dash fuse/relay box.

Are the fuses OK?

YES -Go to step 2.

NO -Replace the fuse(s), and recheck.

2. Connect the HDS to the DLC.
3. Using the HDS, confirm the following values in the PGM-FI Data List at idle at idle.

PGM-FI DATA LIST REFERENCE

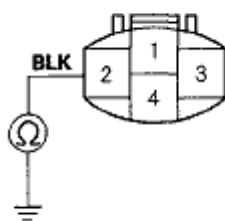
A/C SWITCH	ON
A/C CLUTCH	ON
Fan Low Speed	ON
Fan High Speed	ON

Are all the values OK?

YES -Go to step 4.

NO -Troubleshoot the value that is not the specifications.

4. Turn the ignition switch to LOCK (0).
5. Disconnect the A/C pressure switch 4P connector.
6. Check for continuity between the No. 2 terminals of the A/C pressure switch 4P connector and body ground.

A/C PRESSURE SWITCH 4P CONNECTOR

Wire side of female terminals

Fig. 104: Checking Continuity Between No. 2 Terminals Of A/C Pressure Switch 4P Connector And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 7.

NO -Check for an open in the wire between the A/C pressure switch and body ground. If the wire is OK, check for poor ground at G201.

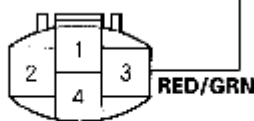
7. Check for continuity between the No. 22 terminal of the gauge control module connector A (30P) and the No. 3 terminal of the A/C pressure switch 4P connector.

GAUGE CONTROL MODULE CONNECTOR A (30P)

Wire side of female terminals



RED/GRN



RED/GRN

A/C PRESSURE SWITCH 4P CONNECTOR

Wire side of female terminals

Fig. 105: Checking Continuity Between Gauge Control Module Connector Terminals And A/C Pressure Switch

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

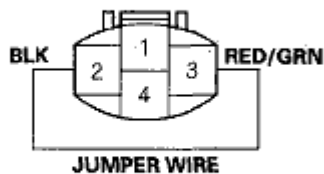
YES -Go to step 8.

NO -Repair open in the wire between the gauge control module and the A/C pressure switch.

8. Turn the ignition switch to ON (II).
9. Turn the A/C and blower fan switches on.

10. Connect the No. 2 and No. 3 terminals of the A/C pressure switch 4P connector with a jumper wire.

A/C PRESSURE SWITCH 4P CONNECTOR



Wire side of female terminals

Fig. 106: Connecting No. 2 And No. 3 Terminals Of A/C Pressure Switch 4P Connector With A Jumper Wire

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Do the radiator and A/C condenser fans run at high speed?

YES -Replace the A/C pressure switch.

NO -Check for loose wires or poor connections at gauge control module connector A (30P) and at the A/C pressure switch 4P connector. If the connections are good, substitute a known-good gauge control module, and recheck. If the symptom/indication goes away, replace the original gauge control module (see **REWRITING THE ODO DATA ON A NEW GAUGE CONTROL MODULE**).

A/C COMPRESSOR CLUTCH CIRCUIT TROUBLESHOOTING

NOTE:

- It is normal for the A/C compressor to turn off under certain conditions, such as low idle, high engine coolant temperature, or hard acceleration.
- Do not use this troubleshooting procedure if the fans are also inoperative with the A/C on. Refer to the **SYMPTOM TROUBLESHOOTING INDEX**.
- Before doing symptom troubleshooting, check for powertrain DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**).

1. Check the No. 12 (7.5 A) fuse in the under-hood fuse/relay box, and the No. 30 (7.5 A) fuse in the under-dash fuse/relay box.

Are the fuses OK?

YES -Go to step 2.

NO -Replace the fuse(s), and recheck.

2. Connect the HDS to the DLC.
3. Start the engine.
4. Turn on the A/C on the audio-HVAC display panel.
5. Using the HDS, confirm the following values in the PGM-FI Data List at idle.

PGM-FI DATA LIST REFERENCE

TP SENSOR	About 0.5 V
RPM	680 $\pm$ 50-750 $\pm$ 50
ECT SENSOR 2	176-212°F (80-100°C)
A/C SWITCH	ON
A/C CLUTCH	ON

Are all the values within specifications?

YES -Go to step 7.

NO -Troubleshoot the value that is not within the specifications.

6. Turn the ignition switch to LOCK (0).
7. Remove the A/C compressor clutch relay from the under-hood fuse/relay box, and test it (see **POWER RELAY TEST**).

Is the relay OK?

YES -Go to step 8.

NO -Replace the A/C compressor clutch relay.

8. Measure the voltage between the No. 1 terminal of the A/C compressor clutch relay 4P socket and body ground.

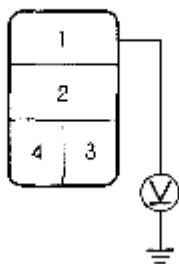
A/C COMPRESSOR CLUTCH RELAY 4P SOCKET

Fig. 107: Measuring Voltage Between A/C Compressor Clutch Relay Terminal No. 1 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 9.

NO -Replace the under-hood fuse/relay box.

9. Connect the No. 1 and No. 2 terminals of the A/C compressor clutch relay 4P socket with a jumper wire.

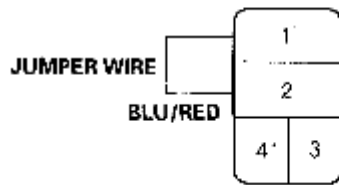
A/C COMPRESSOR CLUTCH RELAY 4P SOCKET

Fig. 108: Connecting No. 1 And No. 2 Terminals Of A/C Compressor Clutch Relay 4P Socket With Jumper Wire

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the A/C compressor clutch click?

YES -Go to step 10.

NO -Go to step 18.

10. Disconnect the jumper wire.
11. Turn the ignition switch to ON (II).
12. Measure the voltage between the No. 4 terminal of the A/C compressor clutch relay 4P socket and body ground.

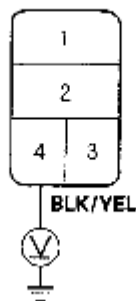
A/C COMPRESSOR CLUTCH RELAY 4P SOCKET

Fig. 109: Measuring Voltage Between A/C Compressor Clutch Relay Connector Terminals No. 4 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

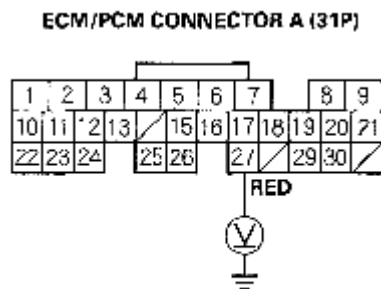
Is there battery voltage?

YES -Go to step 13.

NO -Repair open in the BLK/YEL wire between the No. 30 (7.5 A) fuse in the under-dash fuse/relay box and the A/C compressor clutch relay.

13. Turn the ignition switch to LOCK (0).
14. Reinstall the A/C compressor clutch relay.
15. Turn the ignition switch to ON (II).
16. Make sure the A/C switch to LOCK (0).

17. Measure the voltage between the No. 27 terminal of ECM/PCM connector E (31P) and body ground with the ECM/PCM connectors connected.



Wire side of female terminals

Fig. 110: Measuring Voltage Between ECM/PCM Connector Terminals No. 27 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Check for loose wires or poor connections at No. 27 terminal of ECM/PCM connector E (31P). If the connections are good, check the ECM/PCM grounds. If the grounds are good, substitute a known-good ECM/PCM, and recheck. If the symptom/indication goes away, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

NO -Repair open in the wire between the A/C compressor clutch relay and the ECM/PCM.

18. Disconnect the jumper wire.
 19. Disconnect the A/C compressor clutch 1P connector.
 20. Check for continuity between the No. 2 terminal of the A/C compressor clutch relay 4P socket and the No. 1 terminal of the A/C compressor clutch 1P connector.

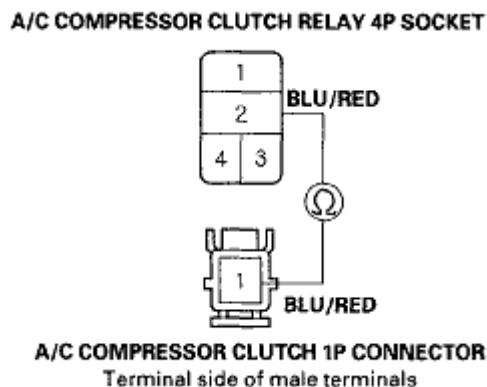


Fig. 111: Checking Continuity Between A/C Compressor Clutch Relay And A/C Compressor Clutch Connector Terminals

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Check the A/C compressor clutch clearance, and the A/C compressor clutch field coil (see **A/C**

COMPRESSOR CLUTCH CHECK). Repair as needed.

NO -Repair open in the wire between the A/C compressor clutch relay and the A/C compressor clutch.

A/C PRESSURE SWITCH CIRCUIT TROUBLESHOOTING

NOTE:

- If the blower motor does not run at all speeds, the A/C compressor will be inoperative, before doing this troubleshooting, check the DTC and repair the cause of the inoperative blower motor.
- Do not use this troubleshooting procedure if any of the following items are operative; A/C condenser fan, radiator fan, A/C compressor. Refer to the **SYMPTOM TROUBLESHOOTING INDEX**.
- Before doing symptom troubleshooting, check for power train DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**).

1. Check for body DTCs using B-CAN system diagnosis test mode A troubleshooting (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

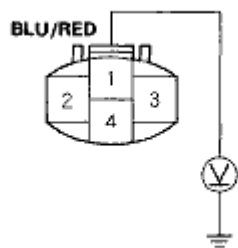
Are there any DTCs indicated?

YES -Do the appropriate troubleshooting for the DTC indicated.

NO -Go to step 2.

2. Disconnect the A/C pressure switch 4P connector.
3. Turn the ignition switch to ON (II).
4. Measure the voltage between the No. 1 terminal of the A/C pressure switch 4P connector and body ground.

A/C PRESSURE SWITCH 4P CONNECTOR



Wire side of female terminals

Fig. 112: Measuring Voltage Between A/C Pressure Switch Connector Terminals No. 1 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 5 V or more?

YES -Go to step 5.

NO -Repair open in the wire between the relay control module and the A/C pressure switch.

5. Turn the ignition switch to LOCK (0).
6. Check for continuity between the No. 1 and No. 4 terminals of the A/C pressure switch.

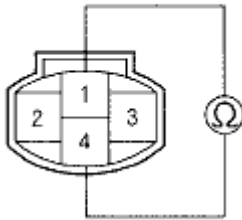
A/C PRESSURE SWITCH

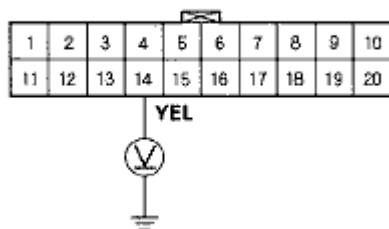
Fig. 113: Checking Continuity Between No. 1 And No. 4 Terminals Of A/C Pressure Switch
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 7.

NO -Go to step 16.

7. Reconnect the A/C pressure switch 4P connector.
8. Disconnect climate control unit connector A (20P).
9. Turn the ignition switch to ON (II).
10. Measure the voltage between the No. 14 terminal of climate control unit connector A (20P) and body ground.

CLIMATE CONTROL UNIT CONNECTOR A (20P)

Wire side of female terminals

Fig. 114: Measuring Voltage Between Climate Control Unit Connector Terminals No. 14 And Body Ground
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

is there 5 V or more?

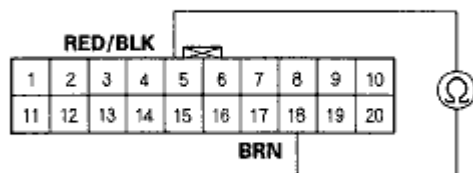
YES -Go to step 11.

NO -Repair open in the wire between the climate control unit and the A/C pressure switch.

11. Turn the ignition switch to LOCK (0).

12. Measure the evaporator temperature sensor resistance between the No. 5 and No. 18 terminals of climate control unit connector A (20P).

CLIMATE CONTROL UNIT CONNECTOR A (20P)



Wire side of female terminals

Fig. 115: Measuring Evaporator Temperature Sensor Resistance Between No. 5 And No. 18 Terminals Of Climate Control Unit Connector A (20P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance less than 24 kohms?

YES -Go to step 13.

NO -Repair cause of high resistance in the evaporator temperature circuit.

13. Reconnect climate control unit connector A (20P).
14. Turn the ignition switch to ON (II).
15. Check that blower motor operates at all speeds.

Does the blower motor operate at all speeds?

YES -Check for loose wires or poor connections at climate control unit connector A (20P) and at the A/C pressure switch 4P connector. If the connections are good, substitute a known-good climate control unit and recheck. If the symptom/ indication goes away, replace the original climate control unit.

NO -Repair the problem in the blower motor circuit.

16. Check for proper A/C system pressure.

Is the pressure within specifications?

YES -Replace the A/C pressure switch.

NO -Repair the A/C pressure problem.

IN-CAR TEMPERATURE SENSOR TEST

1. Remove the in-car temperature sensor (see **IN-CAR TEMPERATURE SENSOR REPLACEMENT**).
2. Check for a change in resistance by heating the sensor with a hair drier or cooling the sensor in a cool

cup of water.

3. Compare the resistance reading between the No. 1 and No. 2 terminals of the in-car temperature sensor with the specifications shown in the graph; the resistance should be within the specifications.

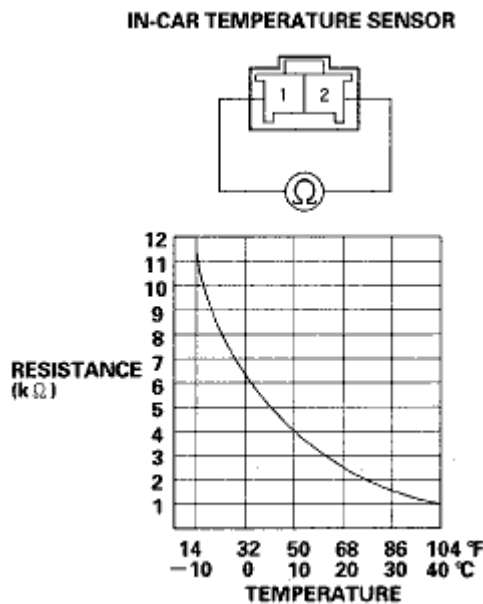


Fig. 116: In-Car Temperature Sensor Resistance Graph

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the resistance is not as specified, replace the in-car temperature sensor (see **IN-CAR TEMPERATURE SENSOR REPLACEMENT**).

IN-CAR TEMPERATURE SENSOR REPLACEMENT

1. Remove the driver's dashboard lower cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**).
2. Remove the self-tapping screws and the in-car temperature sensor (A) from the driver's dashboard lower cover (B).

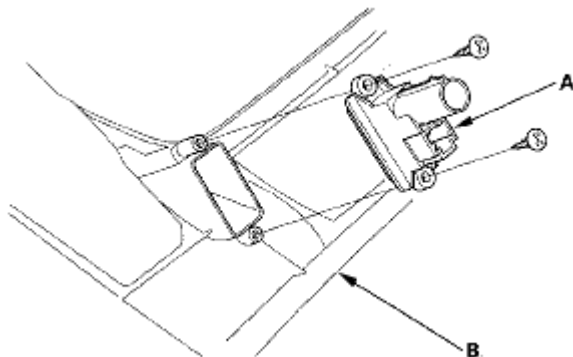


Fig. 117: Identifying In-Car Temperature Sensor And Driver's Dashboard Lower Cover

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the sensor in the reverse order of removal. Be sure to connect the air hose securely.

OUTSIDE AIR TEMPERATURE SENSOR TEST

1. Remove the outside air temperature sensor (see **OUTSIDE AIR TEMPERATURE SENSOR REPLACEMENT**).
2. Dip the sensor in ice water, and measure the resistance. Then pour warm water on the sensor, and check for a change in resistance.
3. Compare the resistance reading between the No. 1 and No. 2 terminals of the outside air temperature sensor with the specifications shown in the graph; the resistance should be within the specifications.

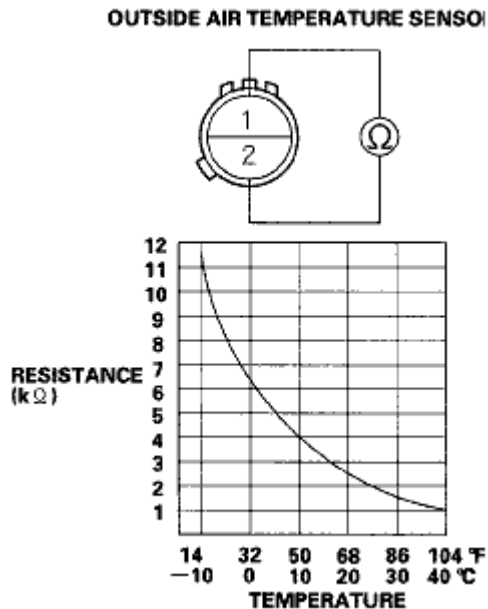


Fig. 118: Outside Air Temperature Sensor Resistance Graph
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the resistance is not as specified, replace the outside air temperature sensor (see **OUTSIDE AIR TEMPERATURE SENSOR REPLACEMENT**).

OUTSIDE AIR TEMPERATURE SENSOR REPLACEMENT

1. Lift the tab (A) to release the lock, then remove the outside air temperature sensor (B) from the back of the front bumper beam. Disconnect the 2P connector (C) from the outside air temperature sensor.

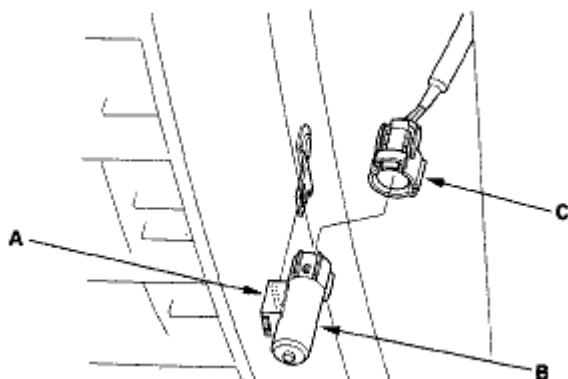


Fig. 119: Identifying Outside Air Temperature Sensor, 2P Connector And Tab
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the sensor in the reverse order of removal.

SUNLIGHT SENSOR TEST

1. Remove the sunlight sensor (A) from the dashboard (see **SUNLIGHT SENSOR REPLACEMENT**).

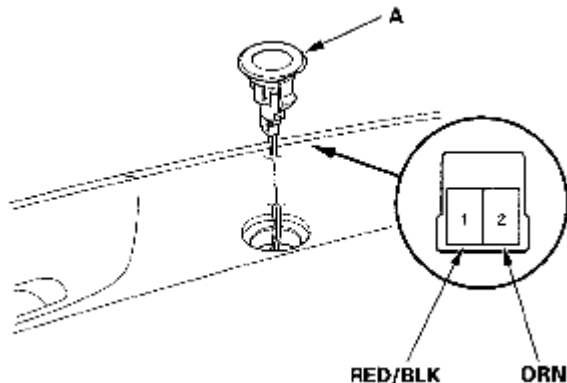


Fig. 120: Identifying Sunlight Sensor
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Turn the ignition switch to ON (II). Measure the voltage between the terminals with the (+) probe on the No. 2 terminal and the (-) probe on the No. 1 terminal with the 2P connector connected.

NOTE: The voltage readings will not change under the light of a flashlight or a fluorescent lamp. Voltage should be:

- 3.6-3.7 V or more with the sensor out of direct sunlight.
- 3.3-3.5 V or less with the sensor in direct sunlight.

3. If the voltage is not as specified, replace the sunlight sensor (see **SUNLIGHT SENSOR REPLACEMENT**).

SUNLIGHT SENSOR REPLACEMENT

1. Remove the sunlight sensor (A) from the sunlight sensor garnish (B), then disconnect the 2P connector (C). Be careful not to damage the sensor and the dashboard.

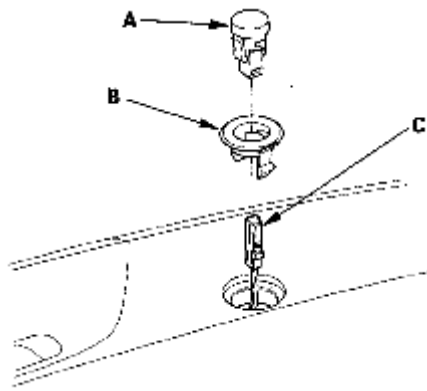


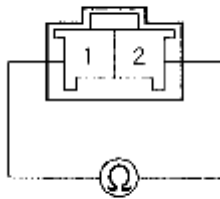
Fig. 121: Identifying Sunlight Sensor, Sunlight Sensor Garnish And 2P Connector
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the sensor in the reverse order of removal.

EVAPORATOR TEMPERATURE SENSOR TEST

1. Remove the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**).
2. Dip the sensor in ice water, and measure the resistance between its terminals.

EVAPORATOR TEMPERATURE SENSOR



Terminal side of male terminals

Fig. 122: Measuring Resistance Between Evaporator Temperature Sensor Terminals
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Then pour warm water on the sensor, and check for a change in resistance.
4. Compare the resistance readings with the specifications shown in the graph; the resistance should be within the specifications.

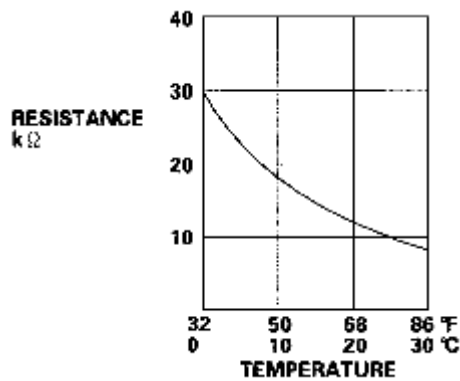


Fig. 123: Resistance And Temperature Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If the resistance is not as specified, replace the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**).

EVAPORATOR TEMPERATURE SENSOR REPLACEMENT

1. Remove the passenger's dashboard undercover (see **GLOVE BOX HOUSING REMOVAL/INSTALLATION**).
2. Disconnect the 4P connector (A) from the power transistor (B) then remove the self-tapping screws and carefully pull out the power transistor; Disconnect the 2P connector (C) from the evaporator temperature sensor (D), then remove the connector clip (E). Remove the self-tapping screw, and carefully pull out the evaporator temperature.

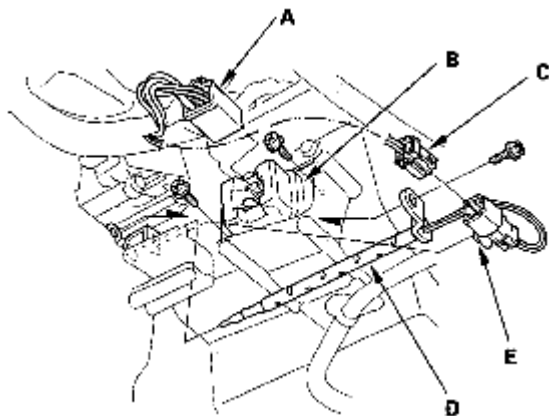


Fig. 124: Identifying 4P Connector, Power Transistor, 2P Connector, Evaporator Temperature Sensor And Connector Clip (E)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install in the reverse order of removal.

POWER TRANSISTOR TEST

1. Disconnect the 4P connector from the power transistor.
2. Measure the resistance between the No. 1 and No. 2 terminals of the power transistor. It should be about 1.5 kohms.

- If the resistance is within the specifications, go to step 3.
- If the resistance is not within the specifications, replace the power transistor.

NOTE: Also check the blower motor. Power transistor failure can be caused by a defective blower motor.

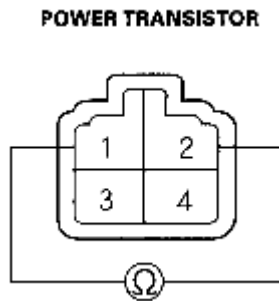


Fig. 125: Measuring Resistance Between No. 1 And No. 2 Terminals Of Power Transistor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Carefully release the lock tab on the No. 4 terminal (BLU) (A) in the 4P connector, then remove the terminal and insulate it from body ground.

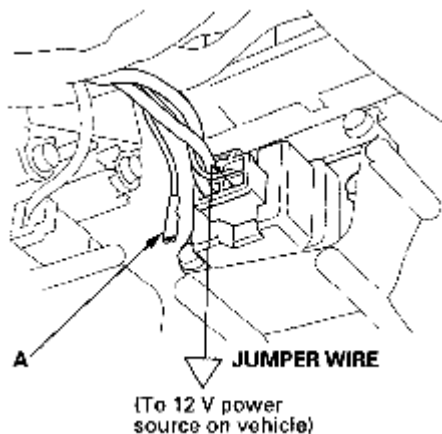


Fig. 126: Removing Terminal And Insulate From Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Reconnect the 4P connector to the power transistor.
- Make sure the BLU wire is completely isolated, then supply 12 volts to the No. 4 cavity with a jumper wire.
- Turn the ignition switch to ON (II), and check that the blower motor runs.
 - If the blower motor does not run, replace the power transistor.

NOTE: A faulty blower motor can cause the power transistor to fail. If the power transistor is replaced, also check the blower motor for binding, and replace it if necessary.

- If the blower motor runs, the power transistor is OK.

DRIVER'S AIR MIX CONTROL MOTOR TEST

Special Tools Required

Backprobe set 07SAZ-001000A

NOTE: Before testing, check for HVAC DTCs (see HOW TO CHECK FOR DTCS WITH THE HDS).

1. Disconnect the 5P connector from the driver's air mix control motor.

NOTE: Incorrectly applying power and ground to the driver's air mix control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 1 terminal of the driver's air mix control motor, and ground the No. 2 terminal; the driver's air mix control motor should run, and stop at Max Hot. If it doesn't, reverse the connections; the driver's air mix control motor should run, and stop at Max Cool. When the driver's air mix control motor stops running, disconnect the battery power immediately.
3. If the driver's air mix control motor did not run in step 2, remove it, then check the driver's air mix control linkage and door for smooth movement.
 - If the linkage and the door move smoothly, replace the driver's air mix control motor.
 - If the linkage or the door sticks or binds, repair them as needed.
 - If the driver's air mix control motor runs smoothly, go to step 4.

DRIVER'S AIR MIX CONTROL MOTOR

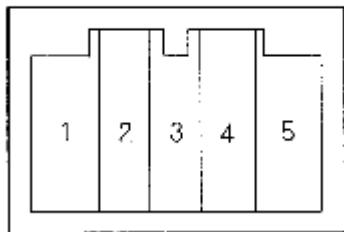


Fig. 127: Identifying Driver's Air Mix Control Motor Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the resistance-between the No: 4 and No. 5 terminals. It should be between 4.2 to 7.8 kohms.
5. Reconnect the driver's air mix control motor 5P connector, then turn the ignition switch to ON (II).
6. Using the backprobe set, measure the voltage between the No. 3 and No. 5 terminals.

Max Cool-about 1.0 V

Max Hot-about 4.0 V

7. If either the resistance or voltage readings are not as specified, replace the driver's air mix control motor.

DRIVER'S AIR MIX CONTROL MOTOR REPLACEMENT

1. Remove the driver's dashboard lower cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**).
2. Disconnect the 10P connector (A) from the driver's mode control motor. Disconnect the 5P connector (B) from the driver's air mix control motor (C). Remove the self-tapping screws and the driver's air mix control motor from the heater unit.

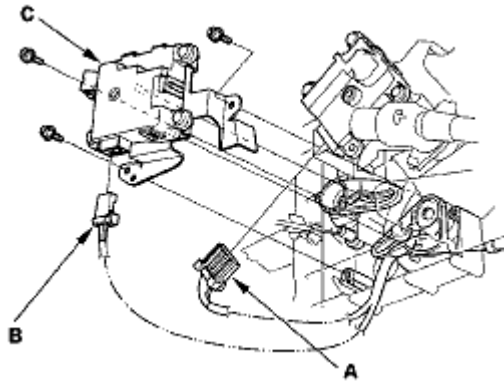


Fig. 128: Identifying 10P Connector, 5P Connector And Driver's Air Mix Control Motor
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

PASSENGER'S AIR MIX CONTROL MOTOR TEST

Special Tools Required

Backprobe set 07SAZ-001000A

NOTE: Before testing, check for HVAC DTCs (see **HOW TO CHECK FOR DTCS WITH THE HDS**).

1. Disconnect the 5P connector from the passenger's air mix control motor.

NOTE: Incorrectly applying power and ground to the passenger's air mix control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 1 terminal of the passenger's air mix control motor, and ground the No. 2 terminal; the passenger's air mix control motor should run, and stop at Max Hot. If it doesn't, reverse the connections; the passenger's air mix control motor should run, and stop at Max Cool. When the passenger's air mix control motor stops running, disconnect the battery power immediately.
3. If the passenger's air mix control motor did not run in step 2, remove it, then check the passenger's air mix control linkage and door for smooth movement.
 - If the linkage and the door move smoothly, replace the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT**).
 - If the linkage or the door sticks or binds, repair them as needed.

- If the passenger's air mix control motor runs smoothly, go to step 4.

PASSENGER'S AIR MIX CONTROL MOTOR

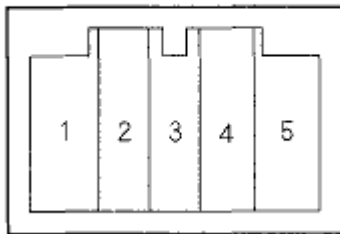


Fig. 129: Identifying Passenger's Air Mix Control Motor Connector Terminals
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the resistance between the No. 4 and No. 5 terminals. It should be between 4.2 to 7.8 kohms.
5. Reconnect the passenger's air mix control motor 5P connector, then turn the ignition switch to ON (II).
6. Using the backprobe set, measure the voltage between the No. 3 and No. 5 terminals.

Max Cool-about 1.0 V

Max Hot-about 4.0 V

7. If either the resistance or voltage readings are not as specified, replace the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT**).

PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT

1. Turn the ignition switch to LOCK (0).
2. Remove the glove box housing (see **GLOVE BOX HOUSING REMOVAL/INSTALLATION**).
3. Remove the throttle actuator control module (see **APP SENSOR REPLACEMENT**).
4. Remove the climate control unit (see **CLIMATE CONTROL UNIT REMOVAL/INSTALLATION**).
5. Disconnect the 10P connector (A) from the passenger's mode control motor. Remove the retainer (B) from the passenger's air mix control motor (C), then disconnect the 5P connector (D) from the passenger's air mix control motor. Remove the self-tapping screws and the passenger's air mix control motor from the heater unit.

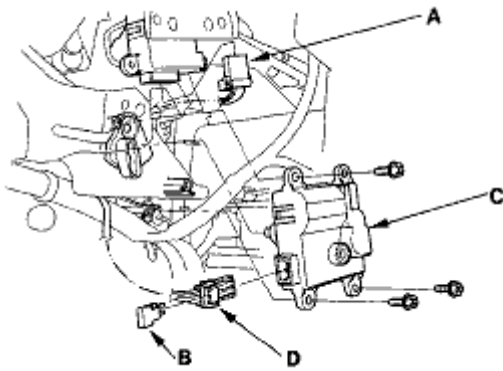


Fig. 130: Identifying 10P Connector, Retainer, Passenger's Air Mix Control Motor And 5P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

DRIVER'S MODE CONTROL MOTOR TEST

NOTE: Before testing, check for HVAC DTCs (see HOW TO CHECK FOR DTCS WITH THE HDS).

1. Disconnect the 10P connector from the driver's mode control motor.

NOTE: Incorrectly applying power and ground to the driver's mode control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 2 terminal of the driver's mode control motor, and ground the No. 1 terminal; the driver's mode control motor should run smoothly, and stop at Vent. If it doesn't, reverse the connections; the driver's mode control motor should run smoothly, and stop at Defrost. When the driver's mode control motor stops running, disconnect battery power immediately.

DRIVER'S MODE CONTROL MOTOR

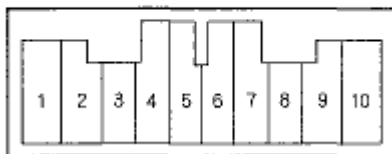


Fig. 131: Identifying Driver's Mode Control Motor Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the driver's mode control motor did not run in step 2, remove it, then check the driver's mode control linkage and doors for smooth movement.
 - If the linkage and doors move smoothly, replace the driver's mode control motor (see DRIVER'S MODE CONTROL MOTOR REPLACEMENT).
 - If the linkage or doors stick or bind, repair them as needed.

- If the driver's mode control motor runs smoothly, go to step 4.
- 4. Use a digital multimeter with an output of 1 mA or less at the 20 kohms range. With the driver's mode control motor running as in step 2, check for continuity between the No. 6, 7, 8, and 9 terminals and the No. 10 terminal individually. There should be continuity for a moment at each terminal as the motor moves past the switch's terminal.
- 5. If there is no continuity for a moment at each terminal, replace the driver's mode control motor (see **DRIVER'S MODE CONTROL MOTOR REPLACEMENT**).

DRIVER'S MODE CONTROL MOTOR REPLACEMENT

1. Remove the driver's dashboard undercover (see **DRIVER'S DASHBOARD UNDERCOVER REMOVAL/INSTALLATION**)
2. Disconnect the TOP connector (A) from the driver's mode control motor (B). Remove the self-tapping screws and the driver's mode control motor from the heater unit.

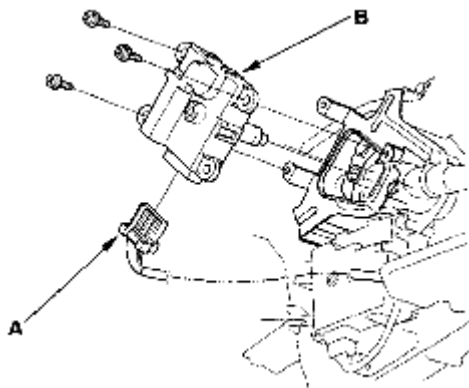


Fig. 132: Identifying Top Connector And Driver's Mode Control Motor
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. After installation, make sure the motor runs smoothly.

PASSENGER'S MODE CONTROL MOTOR TEST

NOTE: Before testing, check for HVAC DTCs (see **HOW TO CHECK FOR DTCS WITH THE HDS**).

1. Disconnect the 10P connector from the passenger's mode control motor.

NOTE: Incorrectly applying power and ground to the passenger's mode control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 2 terminal of the passenger's mode control motor, and ground the No. 1 terminal; the passenger's mode control motor should run smoothly, and stop at Vent. If it doesn't, reverse the connections; the passenger's mode control motor should run smoothly, and stop at Defrost. When the passenger's mode control motor stops running, disconnect battery power immediately.

PASSENGER'S MODE CONTROL MOTOR

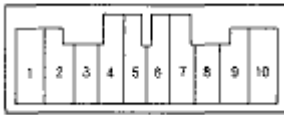


Fig. 133: Identifying Passenger's Mode Control Motor Connector Terminals
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the passenger's mode control motor did not run in step 2, remove it, then check the passenger's mode control linkage and doors for smooth movement.
 - If the linkage and doors move smoothly, replace the passenger's mode control motor (see **PASSENGER'S MODE CONTROL MOTOR REPLACEMENT**).
 - If the linkage or doors stick or bind, repair them as needed.
 - If the passenger's mode control motor runs smoothly, go to step 4.
4. Use a digital multimeter with an output of 1 mA or less at the 20 kohms range. With the passenger's mode control motor running as in step 2, check for continuity between the No. 6, 7, 8, and 9 terminals and the No. 10 terminal individually. There should be continuity for a moment at each terminal as the motor moves past the switch's terminal.
5. If there is no continuity for a moment at each terminal, replace the passenger's mode control motor (see **PASSENGER'S MODE CONTROL MOTOR REPLACEMENT**).

PASSENGER'S MODE CONTROL MOTOR REPLACEMENT

1. Turn the ignition switch to LOCK (0).
2. Set the passenger's mode to VENT.
3. Remove the glove box housing (see **GLOVE BOX HOUSING REMOVAL/INSTALLATION**).
4. Remove the throttle actuator control module (see **APP SENSOR REPLACEMENT**).
5. Remove the climate control unit (see **CLIMATE CONTROL UNIT REMOVAL/INSTALLATION**).
6. Disconnect the 10P connector (A) from the passenger's mode control motor (B). Remove the self-tapping screws and the passenger's mode control motor from the heater unit.

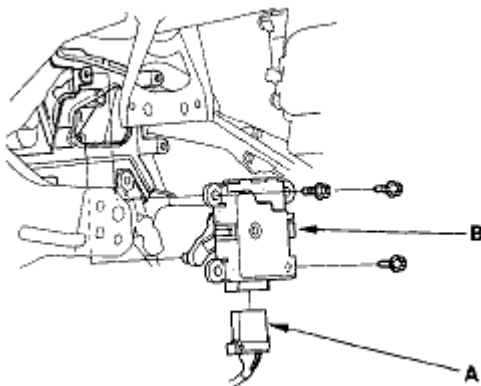


Fig. 134: Identifying 10P Connector And Passenger's Mode Control Motor
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the motor in the reverse order of removal. After installation, make sure the motor runs smoothly.

RECIRCULATION CONTROL MOTOR TEST

NOTE: Before testing, check for HVAC DTCs (see HOW TO CHECK FOR DTCS WITH THE HDS).

1. Disconnect the 5P connector from the recirculation control motor.

NOTE: Incorrectly applying power and ground to the recirculation control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 5 terminal of the recirculation control motor, and ground the No. 1 and No. 2 terminals; the recirculation control motor should run smoothly. To avoid damaging the recirculation control motor, do not reverse power and ground. Disconnect the No. 1 or No. 2 terminals from ground; the recirculation control motor should stop at Fresh (when the No. 1 terminal is disconnected) or Recirculate (when the No. 2 terminal is disconnected). Don't cycle the recirculation control motor for a long time.

RECIRCULATION CONTROL MOTOR

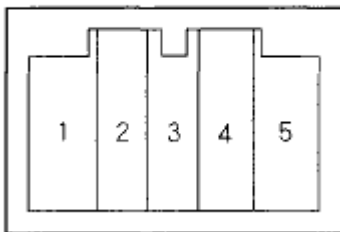


Fig. 135: Identifying Recirculation Control Motor Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the recirculation control motor did not run in step 2, remove it, then check the recirculation control linkage and doors for smooth movement.
 - If the linkage and doors move smoothly, replace the recirculation control motor (see RECIRCULATION CONTROL MOTOR REPLACEMENT).
 - If the linkage or doors stick or bind, repair them as needed.

RECIRCULATION CONTROL MOTOR REPLACEMENT

1. Turn the ignition switch to LOCK (0).
2. Remove the glove box housing (see GLOVE BOX HOUSING REMOVAL/INSTALLATION).
3. Remove the throttle actuator control module (see APP SENSOR REPLACEMENT).
4. Disconnect the 5P connector (A) from the recirculation control motor (B). Remove the self-tapping screws and the recirculation control motor from the blower unit.

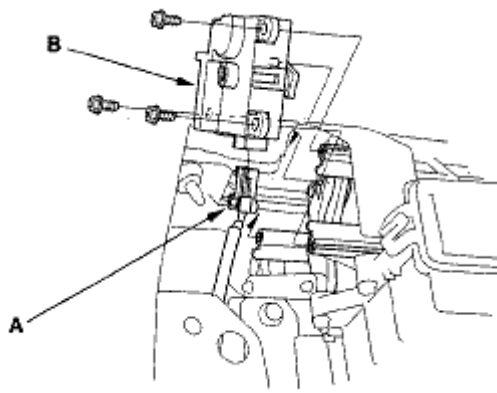


Fig. 136: Identifying 5P Connector And Recirculation Control Motor
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

CLIMATE CONTROL SWITCH ASSEMBLY REMOVAL/INSTALLATION

1. Remove the audio-HVAC display module assembly (see **AUDIO-HVAC DISPLAY MODULE ASSEMBLY REMOVAL/INSTALLATION**).
2. Remove the self-tapping screws and the audio unit (A) and bracket (B) from the display panel control unit (C).

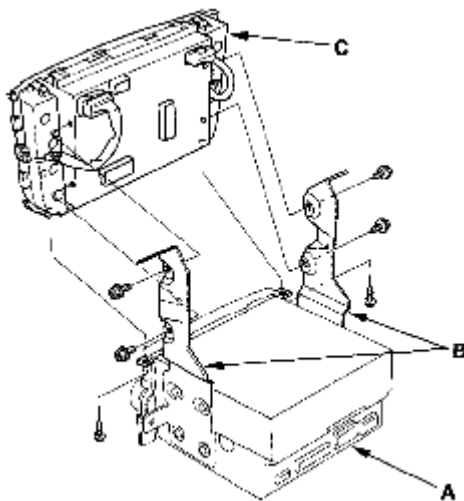


Fig. 137: Identifying Audio Unit, Bracket And Display Panel Control Unit
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect 10P connector (A) and 16P connector (B) from the display panel control unit (C). Remove the self-tapping screws and the climate control switch assemblies (D).

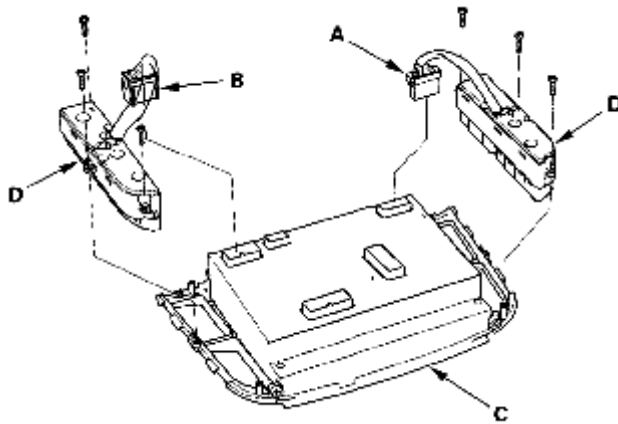


Fig. 138: Identifying 10P Connector, 16P Connector, Display Panel Control Unit And Climate Control Switch Assemblies

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the control switch assembly in the reverse order of removal. After installation, operate the control switch assembly controls to see if they work properly.
5. Run the self-diagnostic function to confirm that there are no problems in the system (see **HOW TO RETRIEVE A DTC (WITHOUT HDS)**).

CLIMATE CONTROL UNIT REMOVAL/INSTALLATION

1. Turn the ignition switch to LOCK (0).
2. Remove the glove box housing (see **GLOVE BOX HOUSING REMOVAL/INSTALLATION**).
3. Remove the throttle actuator control module (see **APP SENSOR REPLACEMENT**).
4. Disconnect the connectors (A) from the climate control unit (B), then remove the wire harness clip (C), the self-tapping screws and the climate control unit.

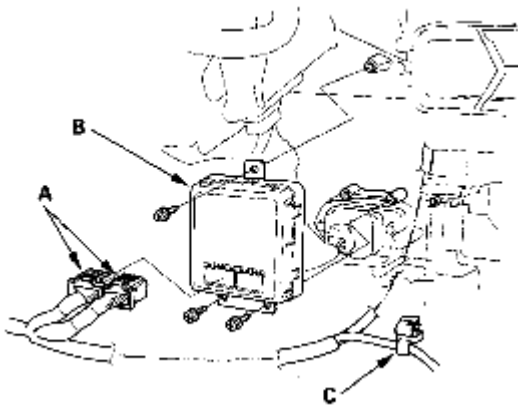


Fig. 139: Identifying Connectors, Climate Control Unit And Wire Harness Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the control unit in the reverse order of removal. After installation, operate the control switch assembly controls to see whether it works properly.
6. Run the self-diagnostic function to confirm that there are no problems in the system (see **HOW TO CHECK FOR DTCS WITH THE HDS**).

DUST AND POLLEN FILTER REPLACEMENT

1. Remove the glove box housing (see **GLOVE BOX HOUSING REMOVAL/INSTALLATION**).
2. Remove the dust and pollen filter assembly from the evaporator.

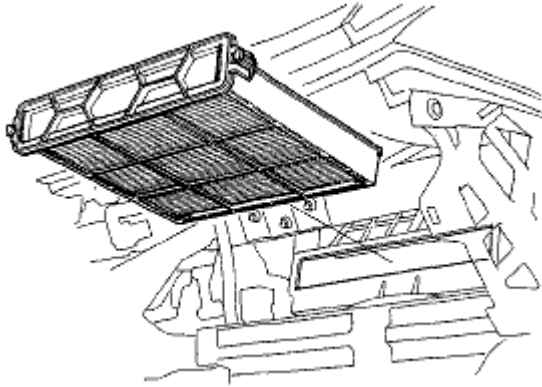


Fig. 140: Identifying Dust And Pollen Filter Assembly
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the filter (A) from the housing (B), and replace the filter.

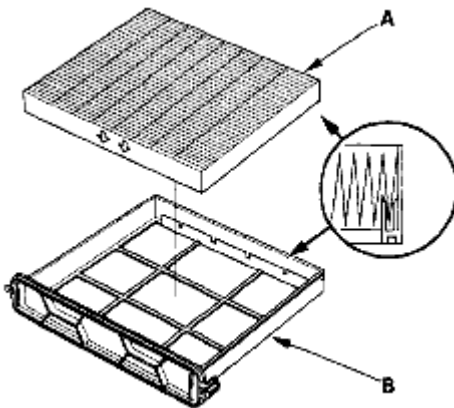


Fig. 141: Identifying Filter And Housing
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the filter in the reverse order of removal. Make sure that there is no air leaking out of the evaporator.

BLOWER UNIT REMOVAL/INSTALLATION

1. Remove the glove box housing (see **GLOVE BOX HOUSING REMOVAL/INSTALLATION**).
2. Remove the relays (A) and the wire harness clips (B), then remove the bolts and the glove box frame (C). Remove the self tapping screws, and the glove box striker (D).

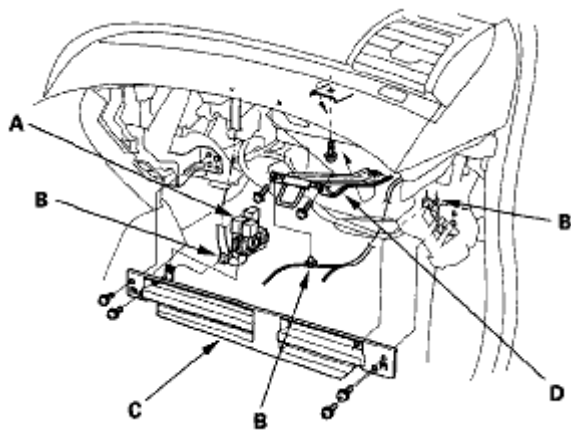


Fig. 142: Identifying Relays, Wire Harness Clips And Glove Box Frame
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the connectors (A) from the blower motor, and the recirculation control motor, then remove the wire harness clip (B) and the connector clip (C). Remove the mounting nuts, the mounting bolts and the blower unit (D).

NOTE: One of the upper nuts is hidden behind the sound insulation. Look for a cut-out in the sound insulation.

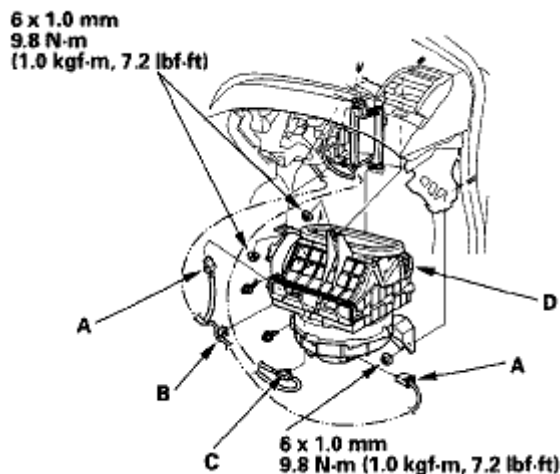


Fig. 143: Identifying Connectors, Wire Harness Clip, Connector Clip And Blower Unit With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the unit in the reverse order of removal. Make sure that there is no air leakage.

BLOWER UNIT COMPONENT REPLACEMENT

Note these items when overhauling the blower unit:

- The recirculation control motor (A), blower motor cooling hose (B), blower motor cover (C), the blower motor (D), and the dust and pollen filter (E) can be replaced without removing the blower unit.
- Before reassembly, make sure that the recirculation control linkage and doors move smoothly without

binding.

- After reassembly, make sure the recirculation control motor runs smoothly (see **RECIRCULATION CONTROL MOTOR TEST**).

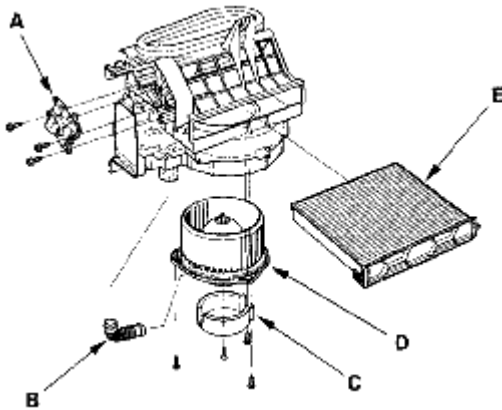


Fig. 144: Identifying Recirculation Control Motor, Blower Motor Cooling Hose, Blower Motor Cover And Blower Motor

Courtesy of AMERICAN HONDA MOTOR CO., INC.

EVAPORATOR CORE REPLACEMENT

1. Recover the refrigerant with a recovery/recycling/ charging station (see **REFRIGERANT RECOVERY**).
2. Remove the bolt, then disconnect the suction line (A) and the receiver line (B) from the evaporator core.

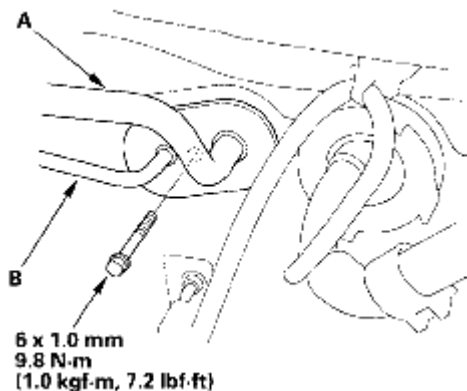


Fig. 145: Identifying Suction Line And Receiver Line With Torque Specifications

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the blower unit (see **BLOWER UNIT REMOVAL/INSTALLATION**).
4. Remove the throttle actuator control module (see **APP SENSOR REPLACEMENT**).
5. Remove the climate control unit (see **CLIMATE CONTROL UNIT REMOVAL/INSTALLATION**).
6. Disconnect the connector (A) from the power transistor, then remove, the wire harness clip (B) the self-tapping screws, and the expansion valve cover (C).

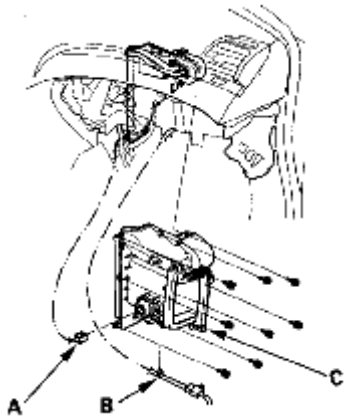


Fig. 146: Identifying Connector, Wire Harness Clip And Expansion Valve Cover
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Carefully pull out the evaporator core without bending the pipes.

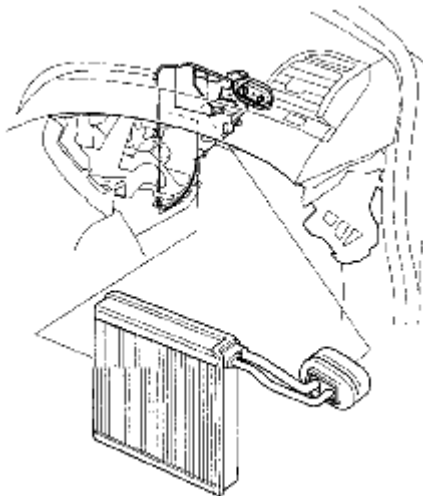


Fig. 147: Identifying Evaporator Core With Pipes
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the core in the reverse order of removal, and note these items:
 - If you're installing a new evaporator core, add refrigerant oil (DENSO ND-OIL 8) (see **A/C REFRIGERANT OIL REPLACEMENT**).
 - Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
 - Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
 - Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
 - Make sure that there is no air leakage.
 - Charge the system (see **SYSTEM CHARGING**).

EXPANSION VALVE REPLACEMENT

1. Recover the refrigerant with a recovery/recycling/ charging station (see **REFRIGERANT RECOVERY**).
2. Remove the evaporator core (see **EVAPORATOR CORE REPLACEMENT**).
3. Remove the expansion valve cover (A), and bolts, then replace the expansion valve (B) from the evaporator (C).

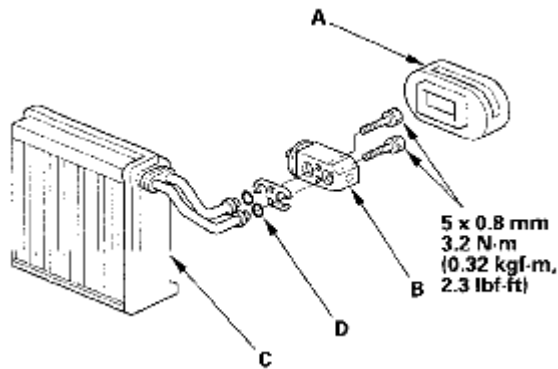


Fig. 148: Identifying Expansion Valve Cover, Expansion Valve And Evaporator With Torque Specifications

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the valve in the reverse order of removal, and note these items:
 - If you're installing a new expansion valve, add refrigerant oil (DENSO ND-OIL 8) (see **A/C REFRIGERANT OIL REPLACEMENT**).
 - Replace the O-rings (D) with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
 - Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
 - Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
 - Make sure that there is no air leakage.
 - Charge the system (see **SYSTEM CHARGING**).

HEATER UNIT/CORE REPLACEMENT

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**), and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before doing repairs or service.

1. Make sure you have the anti-theft codes for the audio system and the navigation system (if equipped).
2. Make sure the ignition is in LOCK (0), then disconnect the negative cable from the battery.
3. Disconnect the suction and receiver lines from the evaporator core (see **EVAPORATOR CORE REPLACEMENT**).
4. From under the hood, open the cable clamp (A), then disconnect the heater valve cable (B) from the heater valve arm (C). Turn the heater valve arm to the fully opened position as shown.

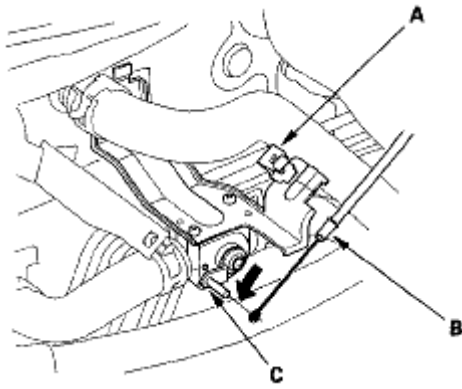


Fig. 149: Identifying Cable Clamp, Heater Valve Cable And Heater Valve Arm
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. When the engine is cool, drain the engine coolant from the radiator (see **COOLANT CHECK**).
6. Slide the hose clamps (A) back, then disconnect the inlet heater hose (B) and the outlet heater hose (C) from the heater unit. Engine coolant will run out when the hoses are disconnected; drain it into a clean drip pan. Be sure not to let coolant spill on the electrical parts or the painted surfaces. If any coolant spills, rinse it off immediately.

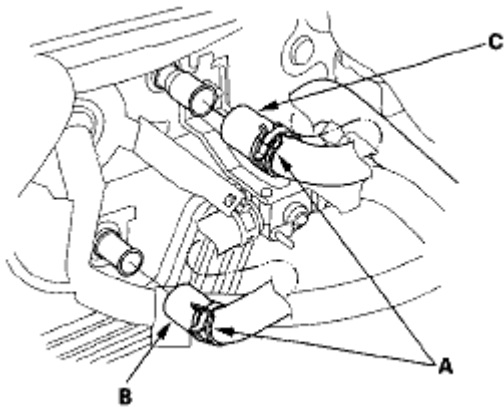


Fig. 150: Identifying Hose Clamps, Inlet Heater Hose And Outlet Heater Hose With Torque Specifications
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the mounting nut from the heater unit. Take care not to damage or bend the fuel lines and the brake lines, etc.

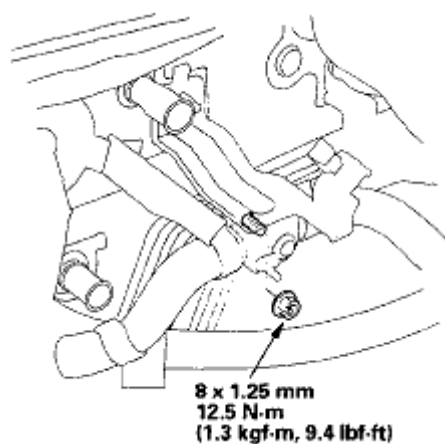


Fig. 151: Identifying Heater Unit Mounting Nut With Torque Specifications
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the dashboard (see **PASSENGER'S**).
9. Disconnect the connectors (A) from the driver's mode control motor, the driver's air mix control motor, the evaporator temperature sensor, the power transistor, the passenger's mode control motor, passenger's air mix control motor, and the recirculation control motor, then remove the wire harness clips (B), the wire harness (C), and the carpet clip (D).

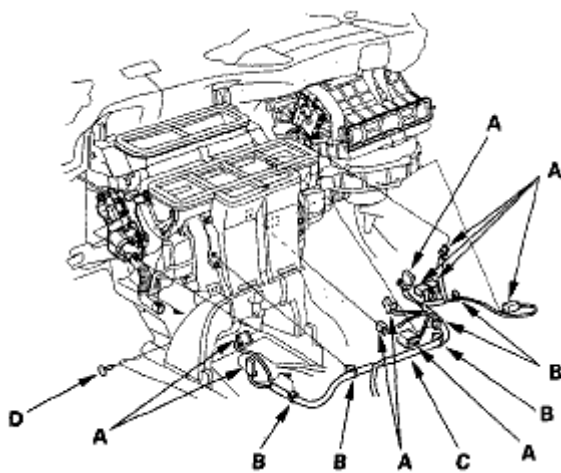


Fig. 152: Identifying Connectors, Wire Harness Clips, Wire Harness, And Carpet Clip
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the heater ducts (A), then remove the mounting nuts and the blower-heater unit (B).

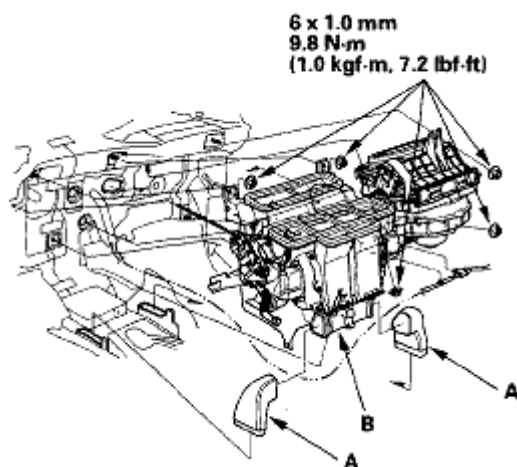


Fig. 153: Identifying Heater Ducts And Blower-Heater Unit With Torque Specifications
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the self-tapping screws, the evaporator temperature sensor (A) and the joint duct (B). Remove the self-tapping screws, then remove the passenger's heater outlet (C), and the heater core cover (D). Remove the self-tapping screws and the passenger's air mix control motor (E). Remove the self-tapping screws, the heater pipe brackets (F), the grommets (G) and carefully pull out the heater core (H) so you don't bend the inlet and outlet pipes.

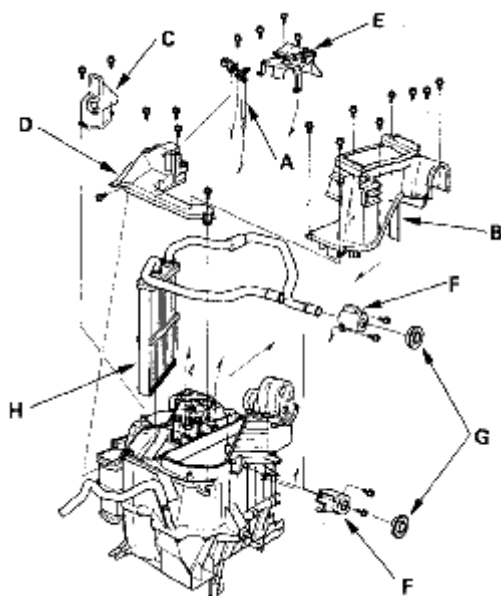


Fig. 154: Identifying Evaporator Temperature Sensor, Joint Duct, Passenger's Heater Outlet, Heater Core Cover And Heater Pipe Brackets
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install the heater core and the evaporator core in the reverse order of removal.
13. Install the heater unit in the reverse order of removal, and note these items:
 - Do not interchange the inlet and outlet heater hoses, and install the hose clamps securely.
 - Refill the cooling system with engine coolant (see **COOLANT CHECK**).
 - Adjust the heater valve cable (see **HEATER VALVE CABLE ADJUSTMENT**).

- Make sure that there is no coolant leakage.
- Make sure that there is no air leakage.
- Refer to step 8 on **EVAPORATOR CORE REPLACEMENT** .
- Enter the anti-theft codes for the audio system and the navigation system (if equipped).
- Set the clock (on vehicles without navigation).

HEATER VALVE CABLE ADJUSTMENT

1. From under the hood, open the cable clamp (A), then disconnect the heater valve cable (B) from the heater valve arm (C).

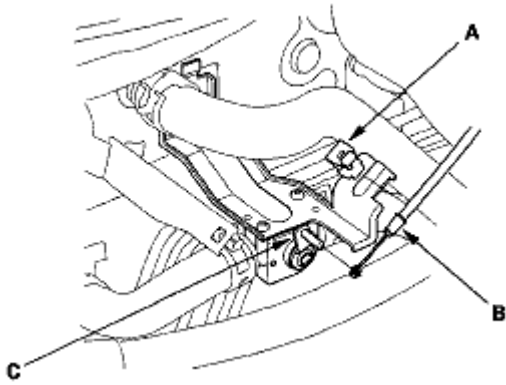


Fig. 155: Identifying Cable Clamp, Heater Valve Cable And Heater Valve Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. From under the dash, disconnect the heater valve cable housing from the cable clamp (A), and disconnect the heater valve cable (B) from the air mix control linkage (C).

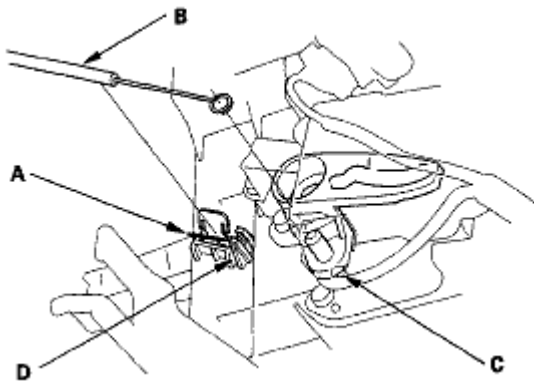


Fig. 156: Identifying Cable Clamp, Heater Valve Cable And Air Mix Control Linkage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. With the cable detached at both ends, make sure the cable moves freely with no binding. Replace the cable if it does not move freely.
4. Set the temperature control dial to Max Cool (Lo) with the ignition switch to ON (II).
5. Attach the heater valve cable to the air mix control linkage as shown in step 2. Hold the end of the heater valve cable housing against the stop (D), then snap the heater valve cable housing into the cable

clamp.

NOTE: Make sure the ring-end of the cable is pushed all the way to the base of the pin on air mix control linkage.

6. From under the hood, turn the heater valve arm (A) to the fully closed position as shown, and hold it. Attach the heater valve cable (B) to the heater valve arm, and gently pull on the heater valve cable housing to take up any slack, then install the heater valve cable housing into the cable clamp (C).

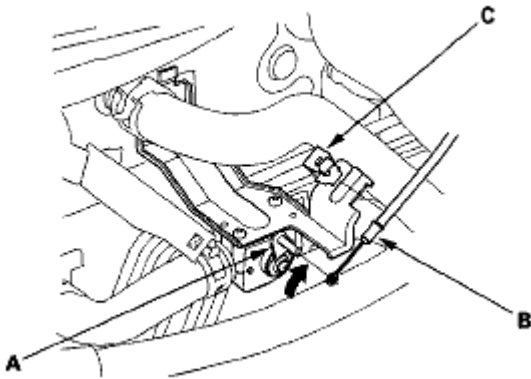


Fig. 157: Turning Heater Valve Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C COMPRESSOR REPLACEMENT

NOTE: Do not install an A/C compressor into a system unless you are completely sure that the system is free of contamination. Installing an A/C compressor into a contaminated system can result in premature A/C compressor failure.

1. If the A/C compressor is marginally operable, run the engine at idle speed, and let the air conditioning work for a few minutes, then shut the engine off.
2. Make sure you have the anti-theft codes for the audio system and the navigation system (if equipped).
3. Make sure the ignition is in LOCK (0), then disconnect the negative cable from the battery.
4. Recover the refrigerant with a recovery/recycling/charging station (see **REFRIGERANT RECOVERY**).
5. Remove the engine cover (see step 2 on **IGNITION COIL REMOVAL/INSTALLATION**), and the alternator (see **ALTERNATOR REMOVAL AND INSTALLATION**).
6. Remove the A/C compressor clutch connector (A) from the A/C condenser fan shroud (B). Disconnect the A/C condenser fan connector (C), then remove the wire harness clip (D) from the A/C condenser fan shroud. Remove the hose (E) from the radiator (F). Loosen the lower mounting bolt, then remove the upper mounting bolts and the radiator fan shroud. Be careful not to damage the radiator fins when removing the A/C condenser fan shroud.

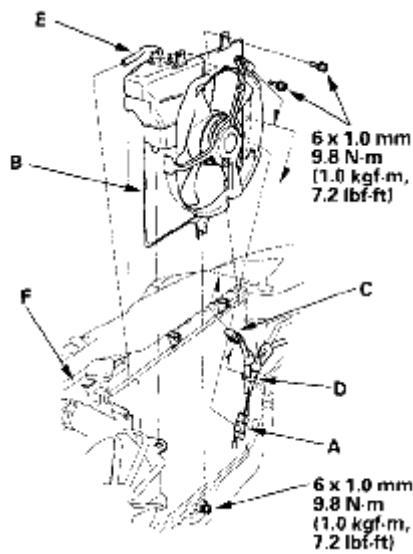


Fig. 158: Identifying A/C Compressor Clutch Connector, A/C Condenser Fan Shroud And A/C Condenser Fan Connector With Torque Specifications
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Disconnect the A/C compressor clutch connector (A). Remove the bolt and the nuts, then disconnect the suction line (B) and discharge line (C) from the A/C compressor. Plug or cap the lines immediately after disconnecting them to avoid moisture and dust contamination.

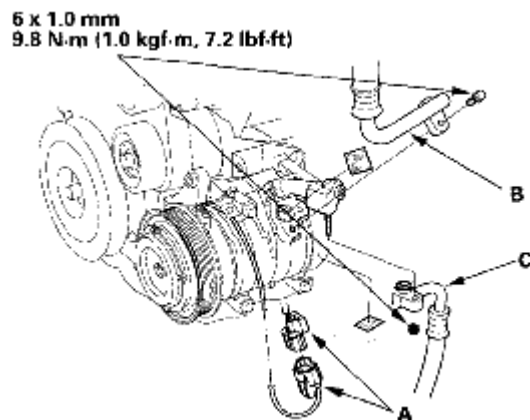


Fig. 159: Identifying A/C Compressor Clutch Connector, Suction Line And Discharge Line With Torque Specifications
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the mounting bolts and the A/C compressor. Be careful not to damage the radiator fins when removing the A/C compressor.

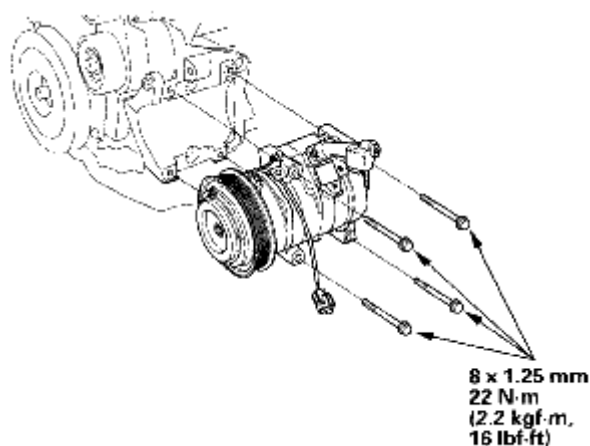


Fig. 160: Identifying A/C Compressor Mounting Bolts With Torque Specifications
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the A/C compressor in the reverse order of removal, and note these items:
 - Inspect the A/C lines for any signs of contamination. Purge the system if necessary before installing the A/C compressor.
 - If you're installing a new A/C compressor, you must calculate the amount of refrigerant oil to be removed from it (see **A/C REFRIGERANT OIL REPLACEMENT**). A new A/C compressor comes with a full charge of oil.
 - Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
 - Use refrigerant oil (DENSO ND-OIL 8) for HFC-134a DENSO piston type A/C compressor only.
 - To avoid contamination, do not return the oil to the container once dispensed, and never mix it with other refrigerant oils.
 - Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
 - Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
 - Be careful not to damage the radiator fins when installing the A/C compressor and the A/C condenser fan shroud.
 - Charge the system (see **SYSTEM CHARGING**).
 - Enter the anti-theft codes for the audio system and the navigation system (if equipped).
 - Set the clock (on vehicles without navigation).

A/C COMPRESSOR CLUTCH CHECK

1. Check the pressure plate for discoloration, peeling, or other damage. If there is damage, replace the clutch set (see **A/C COMPRESSOR CLUTCH OVERHAUL**).
2. Check the pulley bearing play and drag by rotating the pulley by hand. Replace the clutch set with a new one if it is noisy or has excessive play/drag (see **A/C COMPRESSOR CLUTCH OVERHAUL**).

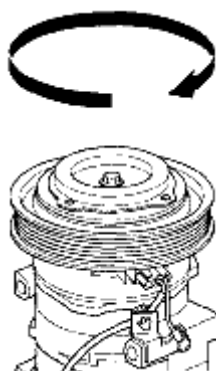


Fig. 161: Checking Pulley Bearing Play

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Measure the clearance between the rotor pulley (A) and the pressure plate (B) all the way around. If the clearance is not within specified limits, remove the pressure plate (see **A/C COMPRESSOR CLUTCH OVERHAUL**) and add or remove shims as needed to increase or decrease clearance.

Clearance: 0.35-0.60 mm (0.014-0.024 in.)

NOTE: The shims are available in three thicknesses: 0.1 mm, 0.3 mm and 0.5 mm.

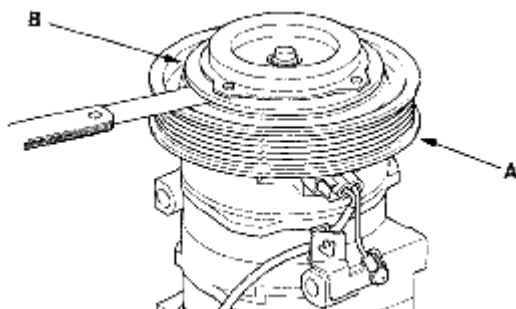


Fig. 162: Measuring Clearance Between Rotor Pulley And Pressure Plate

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check resistance of the field coil. If resistance is not within specifications, replace the field coil (see **A/C COMPRESSOR CLUTCH OVERHAUL**).

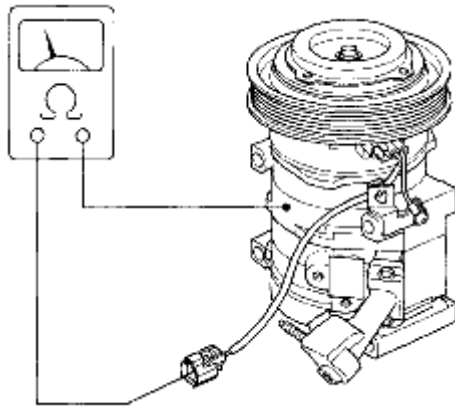


Fig. 163: Checking Resistance Of Field Coil
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C COMPRESSOR CLUTCH OVERHAUL

Special Tools Required

A/C clutch holder, Robin air 10204 or Kent-Moore J37872, or Honda Tool and Equipment KMT-J33939, or commercially available

1. Remove the center bolt (A) while holding the pressure plate with a commercially available A/C clutch holder (B).

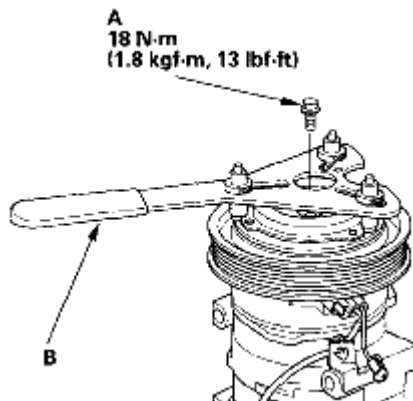


Fig. 164: Removing Center Bolt With Commercially Available A/C Clutch Holder With Torque Specifications
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the pressure plate (A) and shim(s) (B), taking care not to lose the shim(s). If the clutch needs adjustment, increase or decrease the number and thickness of shims as necessary, then reinstall the pressure plate, and recheck its clearance (see **A/C COMPRESSOR CLUTCH CHECK**).

NOTE: The shims are available in three thicknesses: 0.1 mm, 0.3 mm and 0.5 mm.

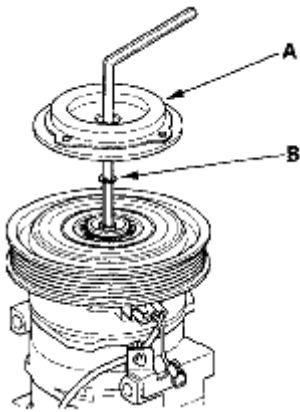


Fig. 165: Identifying Pressure Plate And Shim

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If you are replacing the field coil, remove the snap ring (A) with snap ring pliers, then remove the pulley (B). Be careful not to damage the pulley or the A/C compressor.

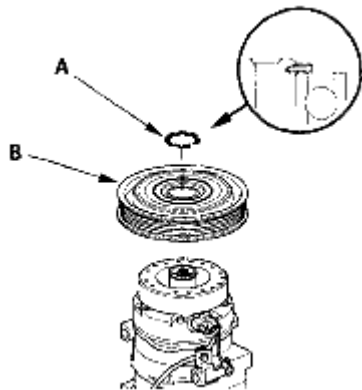


Fig. 166: Identifying Snap Ring And Pulley

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the screw from the field coil ground terminal (A), then remove the wire harness (B) and the bracket (C). Disconnect the field coil connector (D). Remove the snap ring (E) with snap ring pliers, then remove the field coil (F). Be careful not to damage the field coil or the A/C compressor.

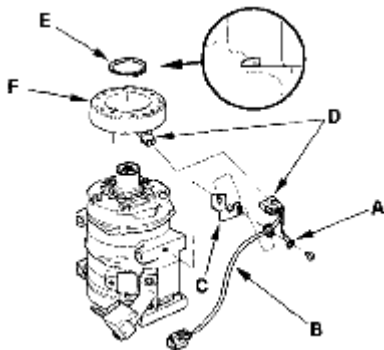


Fig. 167: Identifying Field Coil Ground Terminal, Wire Harness, Bracket, Field Coil Connector And Snap Ring

Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Reassemble the clutch in the reverse order of disassembly, and note these items:
 - Install the field coil with the wire side facing down, and align the boss on the field coil with the hole in the A/C compressor.
 - Clean the pulley and A/C compressor sliding surfaces with contact cleaner or other non-petroleum solvent.
 - Install new snap rings, note the installation direction, and make sure they are fully seated in the groove.
 - Make sure that the pulley turns smoothly after it's reassembled.
 - Route and clamp the wires properly or they can be damaged by the pulley.

A/C COMPRESSOR RELIEF VALVE REPLACEMENT

NOTE: If the A/C relief valve released refrigerant to the atmosphere, determine and correct the cause of the excessive system pressure, then replace the relief valve.

1. Recover the refrigerant with a recovery/recycling/ charging station (see **REFRIGERANT RECOVERY**).
2. Remove the relief valve (A) and the O-ring (B). Plug the opening to keep foreign matter from entering the system and the A/C compressor oil from running out.

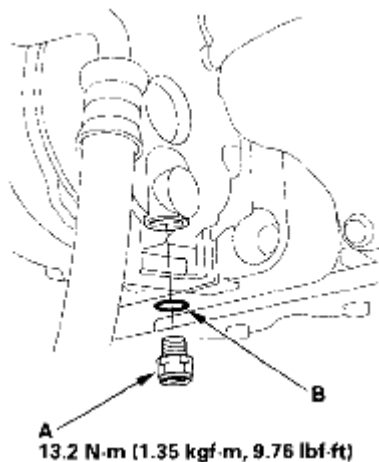


Fig. 168: Identifying Relief Valve And O-Ring With Torque Specifications
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Clean the mating surfaces.
4. Replace the O-ring with a new one at the relief valve, and apply a thin coat of refrigerant oil before installing it.
5. Remove the plug, and install and tighten the relief valve.
6. Charge the system (see **SYSTEM CHARGING**).

A/C CONDENSER REPLACEMENT

1. Make sure you have the anti-theft codes for the audio system and the navigation system (if equipped).

2. Recover the refrigerant with a recovery/recycling charging station (see **REFRIGERANT RECOVERY**).
3. Remove the front bulkhead cover (see **FRONT GRILLE LOWER MOLDING REPLACEMENT**).
4. Make sure the ignition is in LOCK (0), then remove the battery and the battery box.
5. Remove the clips (A), then remove the air intake cover (B).

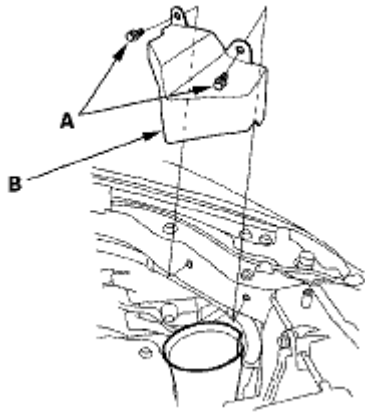


Fig. 169: Identifying Clips And Air Intake Cover
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the bolts and the radiator upper mount brackets.

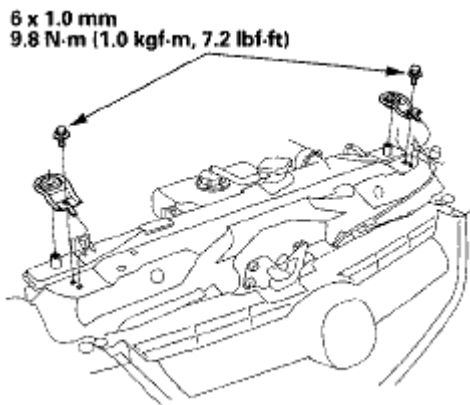


Fig. 170: Identifying Radiator Upper Mount Brackets Bolts With Torque Specifications
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the bolt, then disconnect the receiver line (A) from the A/C condenser. Disconnect the A/C pressure switch connector (B).

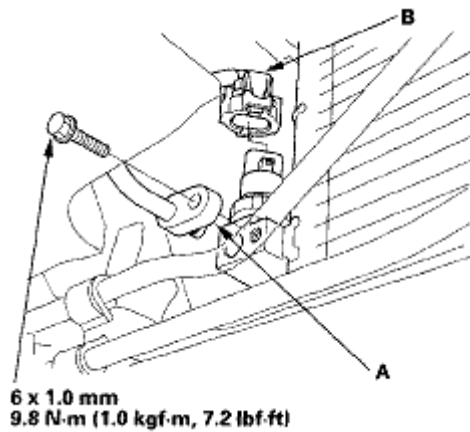


Fig. 171: Identifying Receiver Line And A/C Pressure Switch Connector With Torque Specifications

Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the bolts from the A/C condenser.

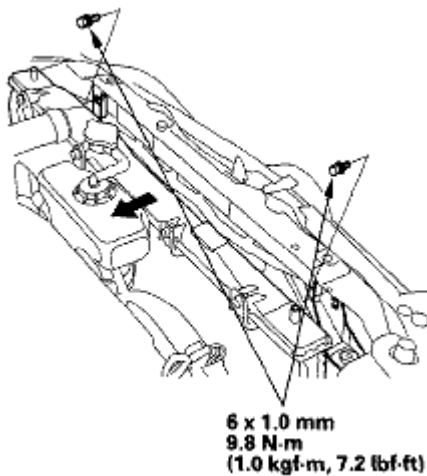


Fig. 172: Identifying A/C Condenser Bolts With Torque Specifications

Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the bolt, then disconnect the discharge line (A) from the A/C condenser (B).

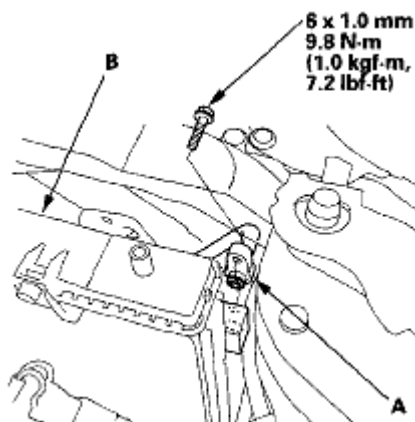


Fig. 173: Identifying Discharge Line And A/C Condenser With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the A/C condenser by lifting it up. Be careful not to damage the radiator and A/C condenser fins when removing the A/C condenser.

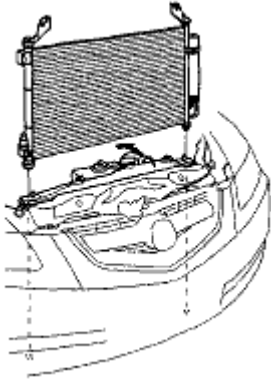


Fig. 174: Removing A/C Condenser
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the A/C condenser in the reverse order of removal, and note these items:
 - If you're installing a new A/C condenser, add refrigerant oil (DENSO ND-OIL 8) (see **A/C REFRIGERANT OIL REPLACEMENT**).
 - Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
 - Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
 - Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
 - Charge the system (see **SYSTEM CHARGING**).
 - Enter the anti-theft codes for the audio system and the navigation system (if equipped).
 - Set the clock (on vehicles without navigation).

RECEIVER/DRYER DESICCANT REPLACEMENT

NOTE: **Install the Receiver/Dryer as quickly as possible to preset the system from absorbing moisture from the air.**

1. Remove the A/C condenser (see **A/C CONDENSER REPLACEMENT**).
2. Remove the bolts from the A/C condenser, then remove the receiver/dryer (A), the bracket (B) and the O-rings (C).

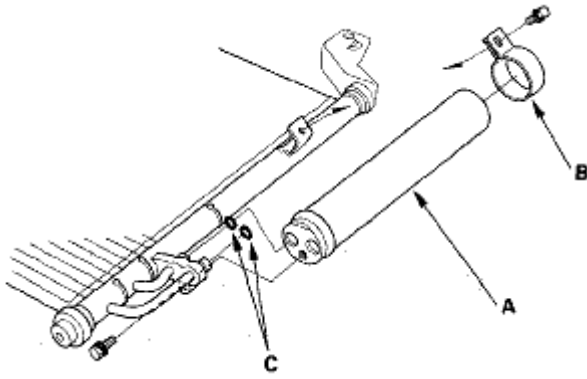


Fig. 175: Identifying Receiver/Dryer, Bracket And O-Rings
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the receiver/dryer in the reverse order of removal, and note these items:

Replace the O-rings with new ones, and apply a thin coat of refrigerant oil (DENSO ND-OIL 8) before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.

REFRIGERANT RECOVERY

CAUTION:

- Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.
- Be careful when connecting service equipment.
- Do not breathe refrigerant or vapor.

If accidental system discharge occurs, ventilate the work area before resuming service.

Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

1. Connect an R-134a refrigerant recovery/recycling/charging station (A) to the high-pressure service port (B) and the low-pressure service port (C), as shown, following the equipment manufacturer's instructions.

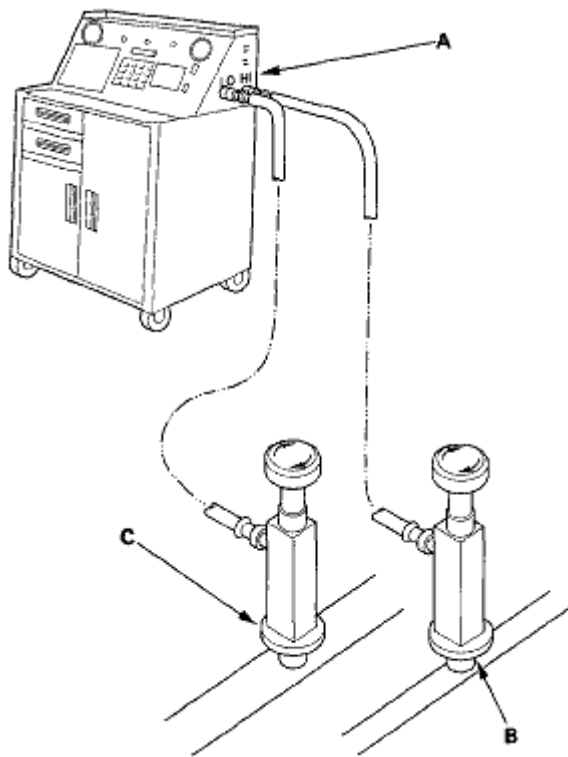


Fig. 176: Connecting R-134A Refrigerant Recovery/Recycling/Charging Station To High-Pressure Service Port And Low-Pressure Service Port
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the amount of refrigerant oil removed from the A/C system after the recovery process is completed. Be sure to put the same amount of new refrigerant oil back into the A/C system before charging.

SYSTEM EVACUATION

CAUTION:

- Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.
- Be careful when connecting service equipment.
- Do not breathe refrigerant or vapor.

If accidental system discharge occurs, ventilate the work area before resuming service.

Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

1. When an A/C system has been opened to the atmosphere, such as during installation or repair, it must be evacuated using an R-134a refrigerant recovery/recycling/charging station. (If the system has been open for several days, the receiver/dryer should be replaced, and the system should be evacuated for several hours.)
2. Connect an R-134a refrigerant recovery/recycling/ charging station (A) to the high-pressure service port (B) and the low-pressure service port (C), as shown, following the equipment manufacturer's instructions. Evacuate the system.

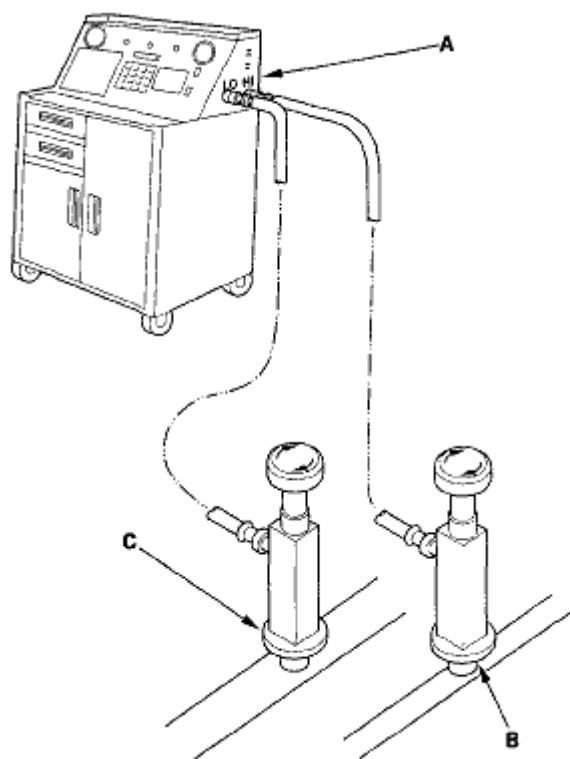


Fig. 177: Connecting R-134A Refrigerant Recovery/Recycling/ Charging Station To High-Pressure Service Port And Low-Pressure Service Port
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the low-pressure does not reach more than 93.3 kPa (700 mmHg/27.6 in. Hg) in 15 minutes, there is probably a leak in the system. Partially charge the system, and check for leaks (see step 3 on **REFRIGERANT LEAK TEST**).

SYSTEM CHARGING

CAUTION:

- Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.
- Be careful when connecting service equipment.
- Do not breathe refrigerant or vapor.

If accidental system discharge occurs, ventilate the work area before resuming service.

Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

1. Connect an R-134a refrigerant recovery/recycling/ charging station (A) to the high-pressure service port (B) and the low-pressure service port (C), as shown, following the equipment manufacturer's instructions.

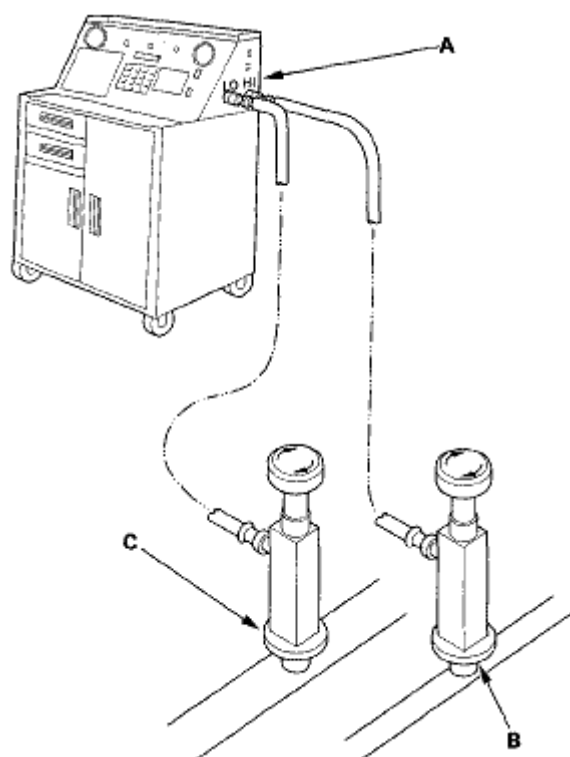


Fig. 178: Connecting R-134A Refrigerant Recovery/Recycling/ Charging Station To High-Pressure Service Port

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Evacuate the system (see **SYSTEM EVACUATION**).
3. Add the same amount of new refrigerant oil to the system that was removed during recovery. Use only DENSO ND-OIL 8 refrigerant oil.
4. Charge the system with the specified amount of R-134a refrigerant. Do not overcharge the system; the compressor will be damaged.

Select the appropriate units of measure for your refrigerant charging station.

Refrigerant Capacity:

500 to 550 g

0.50 to 0.55 kg

1.1 to 1.2 lbs

17.6 to 19.4 oz

5. Check for refrigerant leaks (see **REFRIGERANT LEAK TEST**).
6. Check for system performance (see **PERFORMANCE TEST**).

REFRIGERANT LEAK TEST

Special Tools Required

Leak detector, Honda Tool and Equipment YGK-H-10 PM commercially available

CAUTION:

- Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.
- Be careful when connecting service equipment.
- Do not breathe refrigerant or vapor.

NOTE:

- If accidental system discharge occurs, ventilate the work area before resuming service.
- Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

1. Connect an R-134a refrigerant recovery/recycling/ charging station (A) to the high-pressure service port (B) and the low-pressure service port (C), as shown, following the equipment manufacturer's instructions.

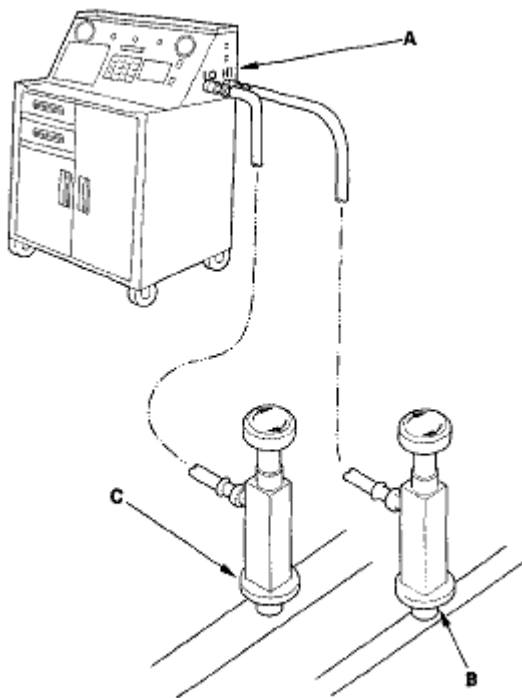


Fig. 179: Connecting R-134A Refrigerant Recovery/Recycling/ Charging Station To High-Pressure Service Port And Low-Pressure Service Port
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Open the high pressure valve to charge the system to the specified capacity, then close the supply valve, and disconnect the charging station fittings.

Select the appropriate units of measurement for your refrigerant charging station.

Refrigerant Capacity:

500 to 550 g

0.50 to 0.55 kg

1.1 to 1.2 lbs

17.6 to 19.4 oz

3. Check the system for leaks using an R-134a refrigerant leak detector with an accuracy of 14 g (0.5 oz) per year or better.
4. If you find leaks that require the system to be opened (to repair or replace hoses, fittings, etc.), do the refrigerant recovery of the system.
5. After checking and repairing leaks, the system must be evacuated.

A/C SYSTEM TEST

PERFORMANCE TEST

CAUTION:

- Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.
- Be careful when connecting service equipment.
- Do not breathe refrigerant or vapor.

The performance test will help determine if the air conditioner system is operating within specifications.

NOTE:

- If accidental system discharge occurs, ventilate the work area before resuming service.
- Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

1. Connect an R-134a refrigerant recovery/recycling/charging station to the high-pressure service port and the low-pressure service port, following the equipment manufacturer's instructions.
2. Determine the relative humidity and air temperature.
3. Remove the glove box housing (see **GLOVE BOX HOUSING REMOVAL/INSTALLATION**).
4. Insert a thermometer (A) in the center vent.

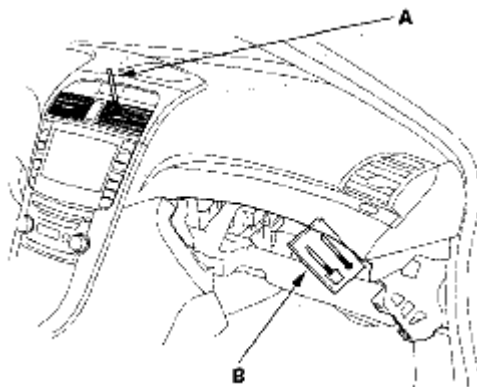


Fig. 180: Inserting Thermometer In Center Vent

Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Place a thermometer (B) near the blower unit's recirculation inlet duct.
6. Test conditions:
 - Avoid direct sunlight.
 - Open hood.
 - Open front doors.
 - Set the temperature control dial to LO and turn off the dual mode.
 - Hold the engine speed at 1,500 rpm.
 - No driver or passengers in vehicle.
7. After running the air conditioning for 10 minutes under the above test conditions, read the delivery temperature from the thermometer in the center vent, the intake temperature near the blower unit, and the discharge (high) and suction (low) pressures on the A/C gauges.
8. To complete the charts:
 - Mark the delivery temperature along the vertical line.
 - Mark the intake temperature (ambient air temperature) along the bottom line.
 - Draw a line straight up from the air temperature to the humidity.
 - From each point, draw a horizontal line across the delivery temperature.
 - The delivery temperature should fall between the two lines.
 - Complete the low-side pressure test and high-side pressure test in the same way.

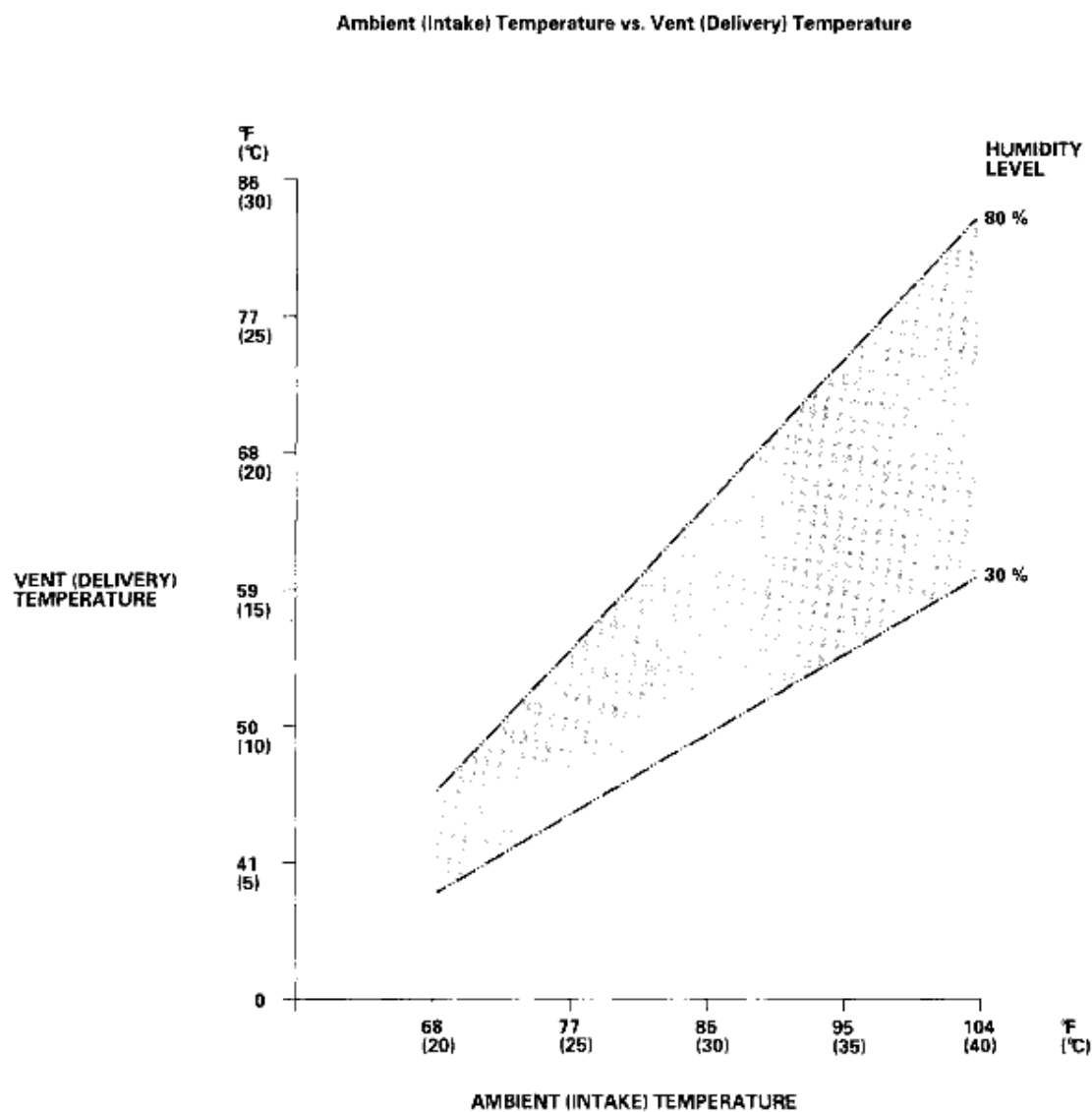


Fig. 181: Ambient Temperature (Intake) Vs. Vent (Delivery) Temperature Graph
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Ambient (Intake) Temperature vs. High Side (Discharge) Pressure

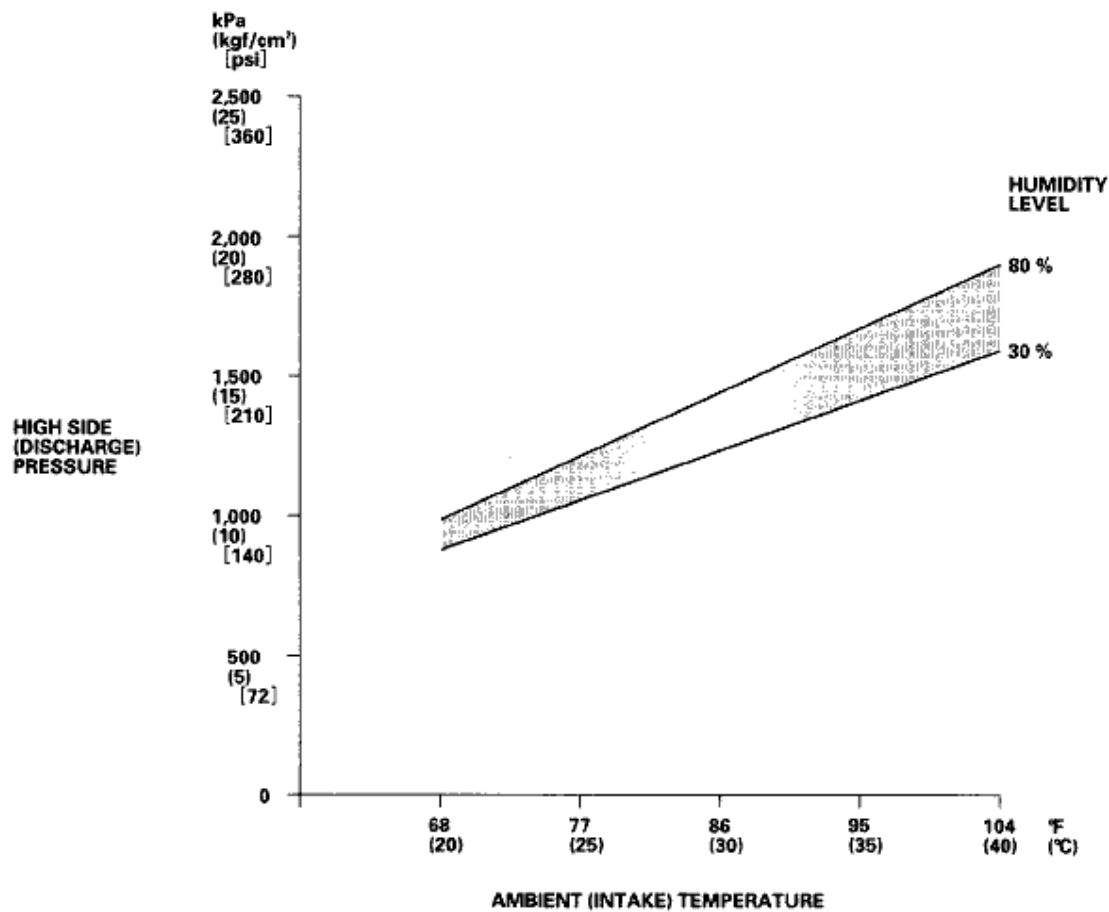


Fig. 182: Ambient Temperature (Intake) Vs. Temperature Graph
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

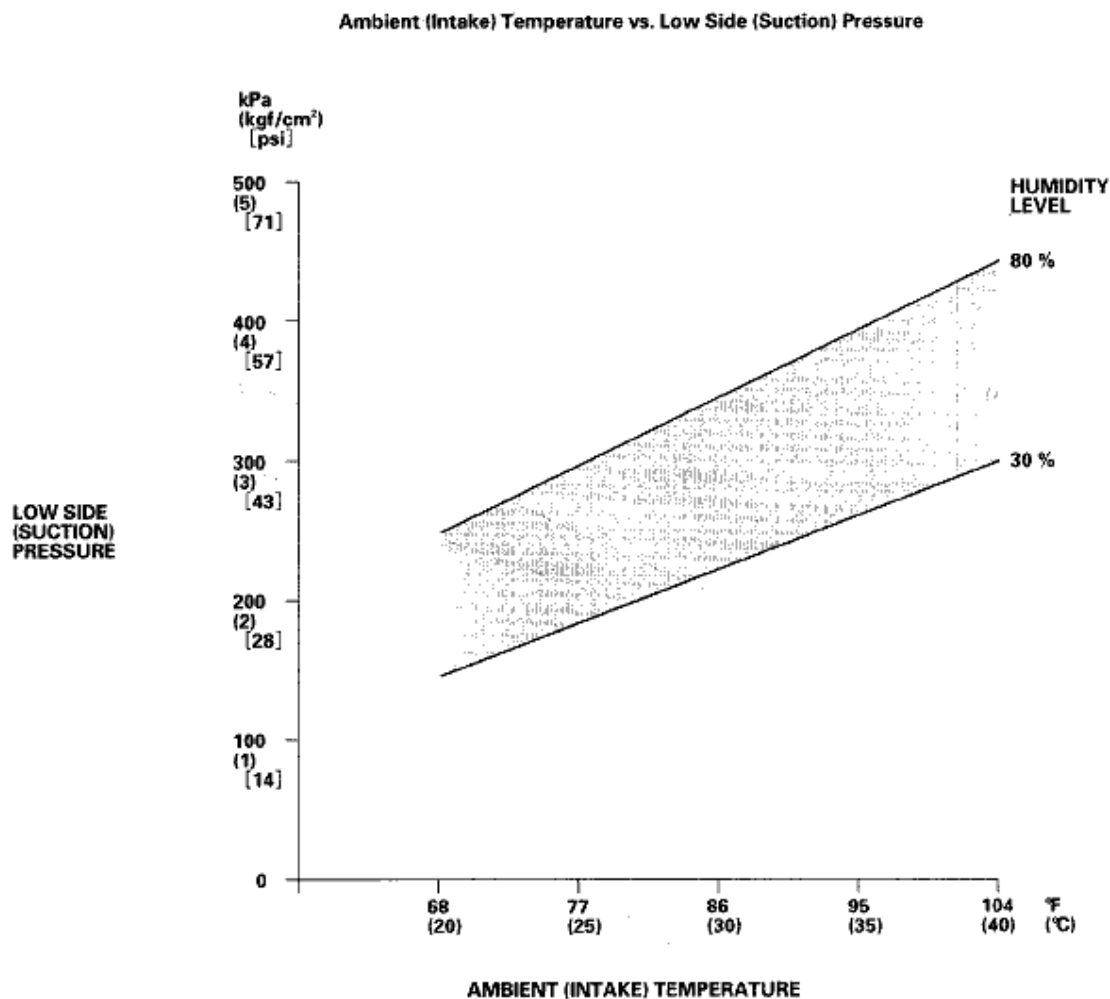


Fig. 183: Ambient Temperature (Intake) Vs. Low Side Temperature Graph
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

PRESSURE TEST

PRESSURE TEST REFERENCE

Test results	Related symptoms	Probable cause	Remedy
Discharge (high) pressure abnormally high	After stopping A/C compressor, pressure drops about 196 kPa (2.0 kgf/cm ² , 28 psi) quickly, and then falls gradually.	Air in system	Recover, evacuate (see SYSTEM CHARGING), and recharge with specified amount (see SYSTEM CHARGING).
	Reduced or no airflow through A/C condenser.	- Clogged condenser or radiator fins - Condenser or radiator fan not working properly	- Clean. - Check voltage and fan rpm. - Check fan direction.
	Line to A/C condenser is excessively hot.	Restricted flow of refrigerant in system	Restricted lines.

Discharge pressure abnormally low	High and low-pressures are balanced soon after stopping A/C compressor. Low side is higher than normal.	- Faulty compressor discharge valve - Faulty compressor seal	Replace the A/C compressor.
	Outlet of expansion valve is not frosted, low-pressure gauge indicates vacuum.	- Faulty expansion valve - Moisture in system	- Replace. - Recover, evacuate, and recharge with specified amount.
Suction (low) pressure abnormally low	Expansion valve is not frosted, and low-pressure line is not cold. Low-pressure gauge indicates vacuum.	- Frozen expansion valve (Moisture in system) - Faulty expansion valve	- Recover, evacuate, and recharge with specified amount. - Replace the expansion valve.
	Discharge temperature is low, and the airflow from vents is restricted.	Frozen evaporator	Run the fan with A/C compressor off, then check evaporator temperature sensor.
	Expansion valve is frosted.	Clogged expansion valve	Clean or replace.
Suction pressure abnormally high	Low-pressure hose and service port are cooler than the temperature around evaporator.	Expansion valve open too long	Repair or replace.
	Suction pressure is lowered when A/C condenser is cooled by water.	Excessive refrigerant in system	Recover, evacuate, and recharge with specified amount.
	High and low-pressures are equalized as soon as the A/C compressor is stopped, and both gauges fluctuate while running.	- Faulty gasket - Faulty high-pressure valve - Foreign particle stuck in high-pressure valve	Replace the A/C compressor.
Suction and discharge pressures abnormally high	Reduced airflow through A/C condenser.	- Clogged A/C condenser or radiator fins - A/C condenser or radiator fan not working properly	- Clean. - Check voltage and fan rpm. - Check fan direction.
Suction and discharge pressures abnormally low	Low-pressure hose and metal fittings are cooler than evaporator.	Clogged or kinked low-pressure hose parts	Repair or replace.
	Temperature around expansion valve is too low compared with that around	Clogged high-pressure line	Repair or replace.

	receiver/dryer.		
Refrigerant leaks	A/C compressor clutch is dirty.	A/C compressor shaft seal leaking	Replace the A/C compressor.
	A/C compressor bolt(s) are dirty.	Leaking around bolt(s)	Tighten bolt(s) or replace A/C compressor.
	A/C compressor gasket is wet with oil.	Gasket leaking	Replace the A/C compressor.
	A/C fitting is dirty.	Leaking O-ring	Clean the A/C fitting and replacing the O-ring.