

**RADIATOR FAN CONTROL**

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Fan control is accomplished three ways. The fan runs when the air conditioning pressure reaches a set pressure, refer to **RADIATOR FAN OPERATION** chart. In addition to this control, the fan is turned on by the temperature of the coolant which is sensed by the coolant temperature sensor which sends the message to the Powertrain Control Module (PCM). The PCM turns on the fan through a fan relay. On models equipped with automatic transmission, a transmission fluid thermister may have some influences on fan operation. See Wiring Diagrams Manual for circuitry and diagnostics provided.

The Powertrain Control Module (PCM) provides fan control for the following conditions:

- The fan will not run during cranking until the engine starts no matter what the coolant temperature is.
- Fan will run when the air conditioning clutch is engaged, and once set compressor head pressure is reached. See charts.
- Fan will run according to the following information charts.

**RADIATOR FAN OPERATION - 2.0L ENGINE**

Radiator Fan Control			A/C Pressure	
A/C Off	Low	High		
Fan On:	104°C (220°F)	110°C (230°F)	N/A	N/A
Fan Off:	99°C (210°F)	104°C (220°F)	N/A	N/A
A/C On	Low	High	Low	High
Fan On:	99°C (210°F)	110°C (230°F)	1,466 Kpa (209 psi)	1,717 Kpa (249 psi)
Fan Off:	93°C (200°F)	104°C (220°F)	1,172 Kpa (170 psi)	1,579 Kpa (229 psi)

EATX Fluid Temperature	Low Speed	High Speed
Fan On:	109°C (228°F)	111°C (232°F)
Fan Off:	104°C (220°F)	109°C (228°F)

**RADIATOR FAN OPERATION - 2.4L ENGINE**

Radiator Fan Control			A/C Pressure	
A/C Off	Low	High		
Fan On:	104°C (219°F)	110°C (230°F)	N/A	N/A
Fan Off:	99°C (210°F)	105°C (221°F)	N/A	N/A
A/C On	Low	High	Low	High
Fan On:	99°C (210°F)	110°C (230°F)	1,448 Kpa (210 psi)	1,718 Kpa (249 psi)
Fan Off:	93°C (199°F)	105°C (221°F)	1,207 Kpa (175 Psi)	1,585 Kpa (229 Psi)

<b>EATX Fluid Temperature</b>	<b>Low Speed</b>	<b>High Speed</b>
Fan On:	109°C (228°F)	111°C (232°F)
Fan Off:	104°C (220°F)	109°C (228°F)

### RADIATOR FAN OPERATION - 2.7L ENGINE

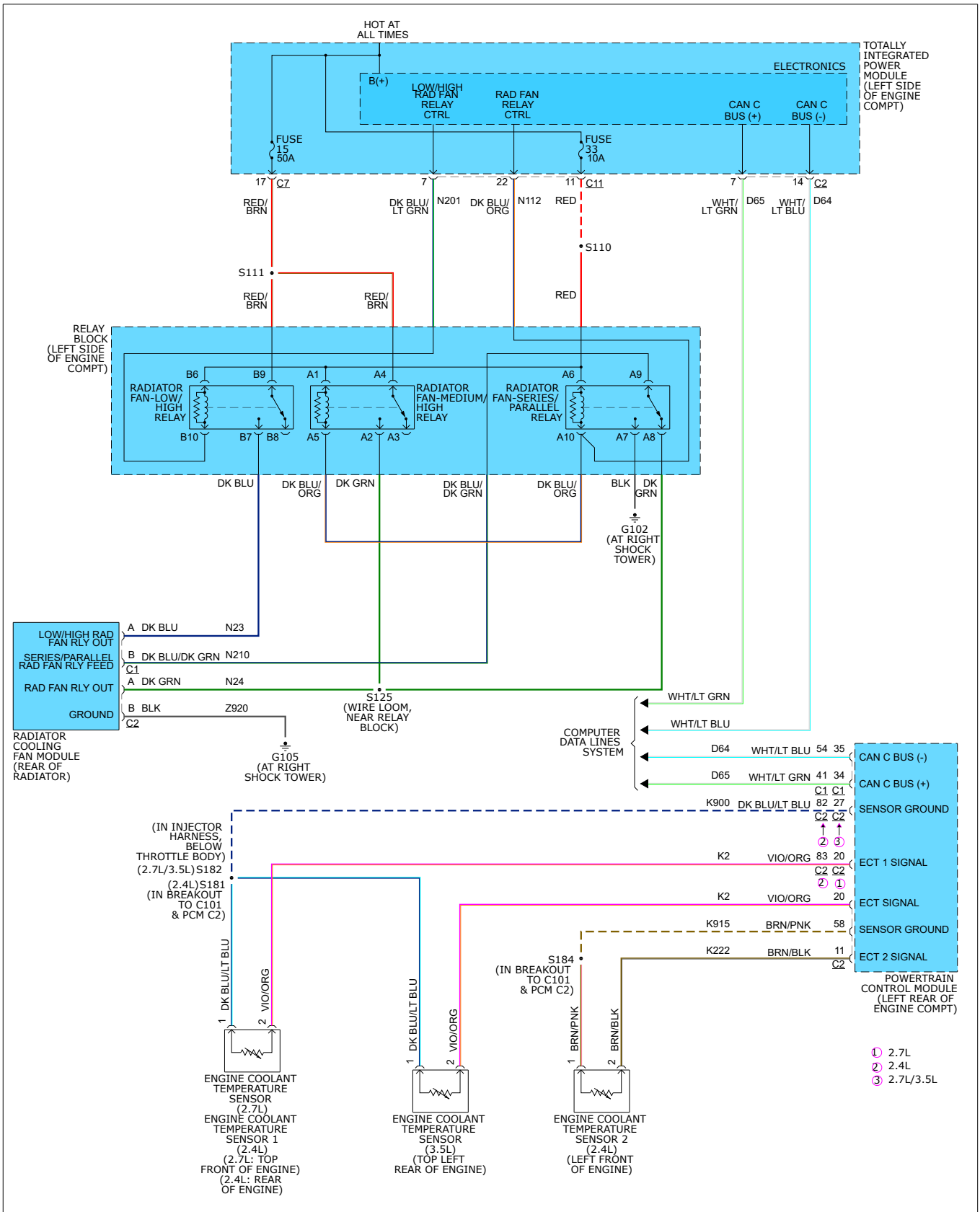
<b>Radiator Fan Control</b>			<b>A/C Pressure</b>	
<b>A/C Off</b>	<b>Low</b>	<b>High</b>	N/A	N/A
Fan On:	104°C (220°F)	110°C (230°F)	N/A	N/A
Fan Off:	98°C (208°F)	105°C (221°F)	N/A	N/A
<b>A/C On</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>
Fan On:	99°C (210°F)	110°C (230°F)	1,448 Kpa (210 psi)	1,718 Kpa (249 psi)
Fan Off:	93°C (199°F)	105°C (221°F)	1,207 Kpa (175 psi)	1,585 kpa (229 psi)

<b>EATX Fluid Temperature</b>	<b>Low Speed</b>	<b>High Speed</b>
Fan On:	109°C (228°F)	111°C (232°F)
Fan Off:	104°C (220°F)	109°C (228°F)

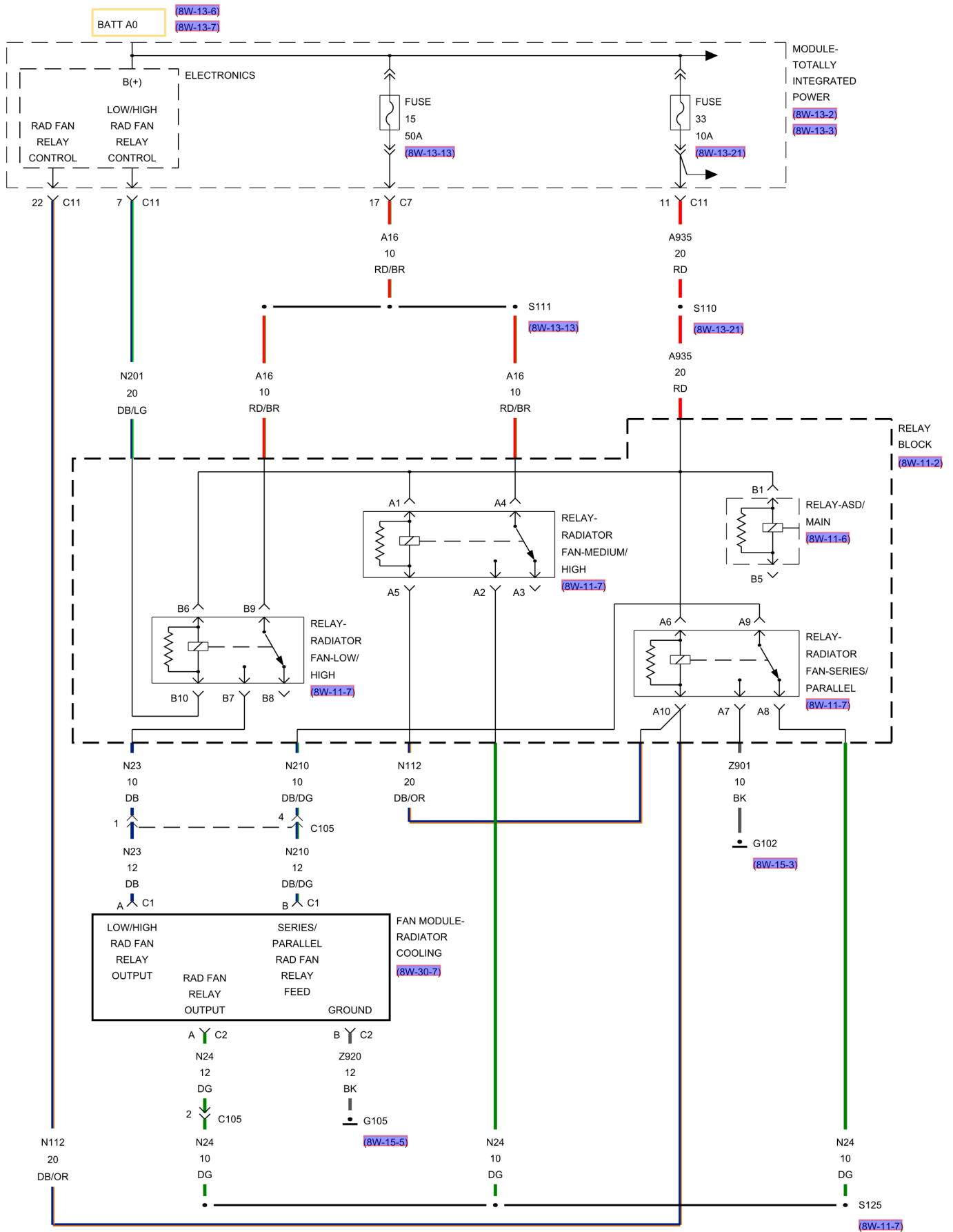
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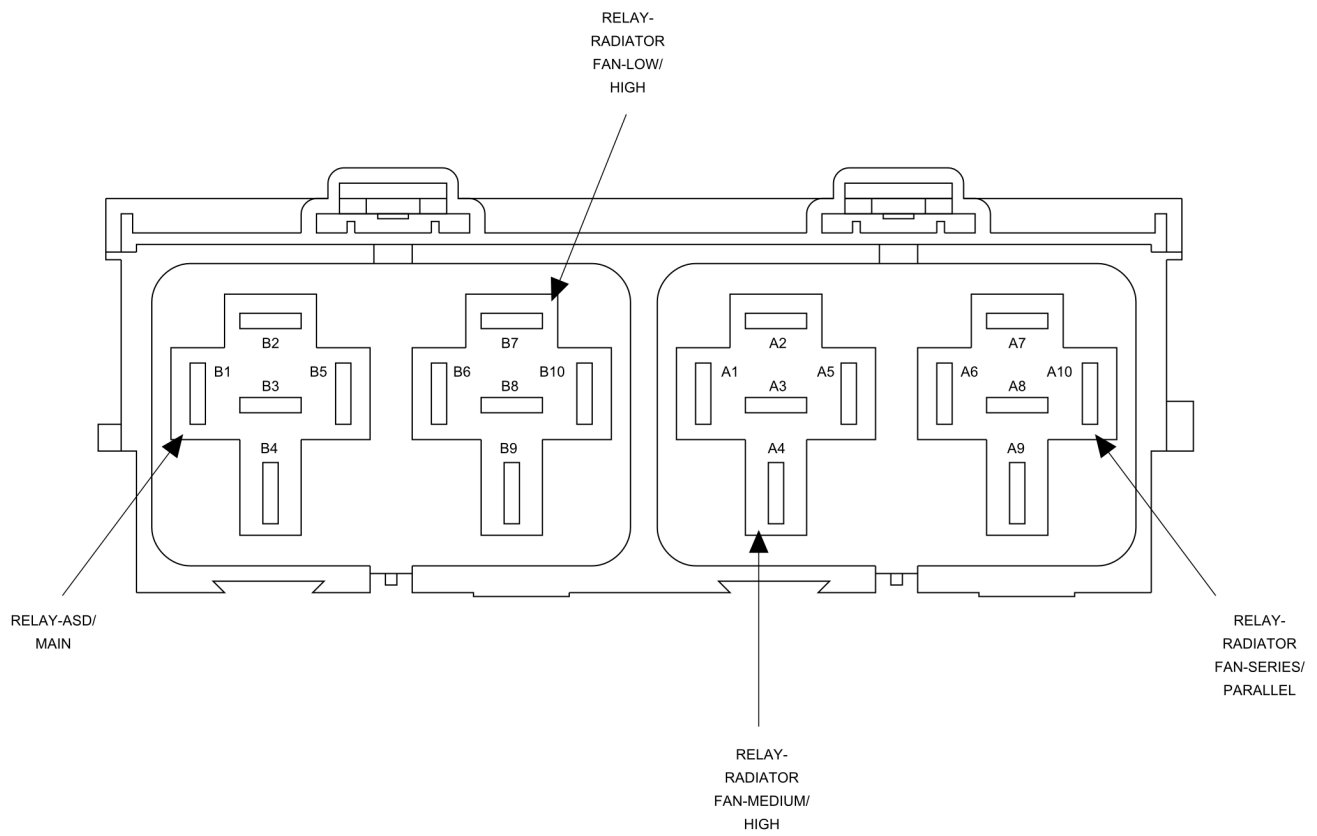
**Diagram 1 (2.7L/3.5L) (2.4L)**



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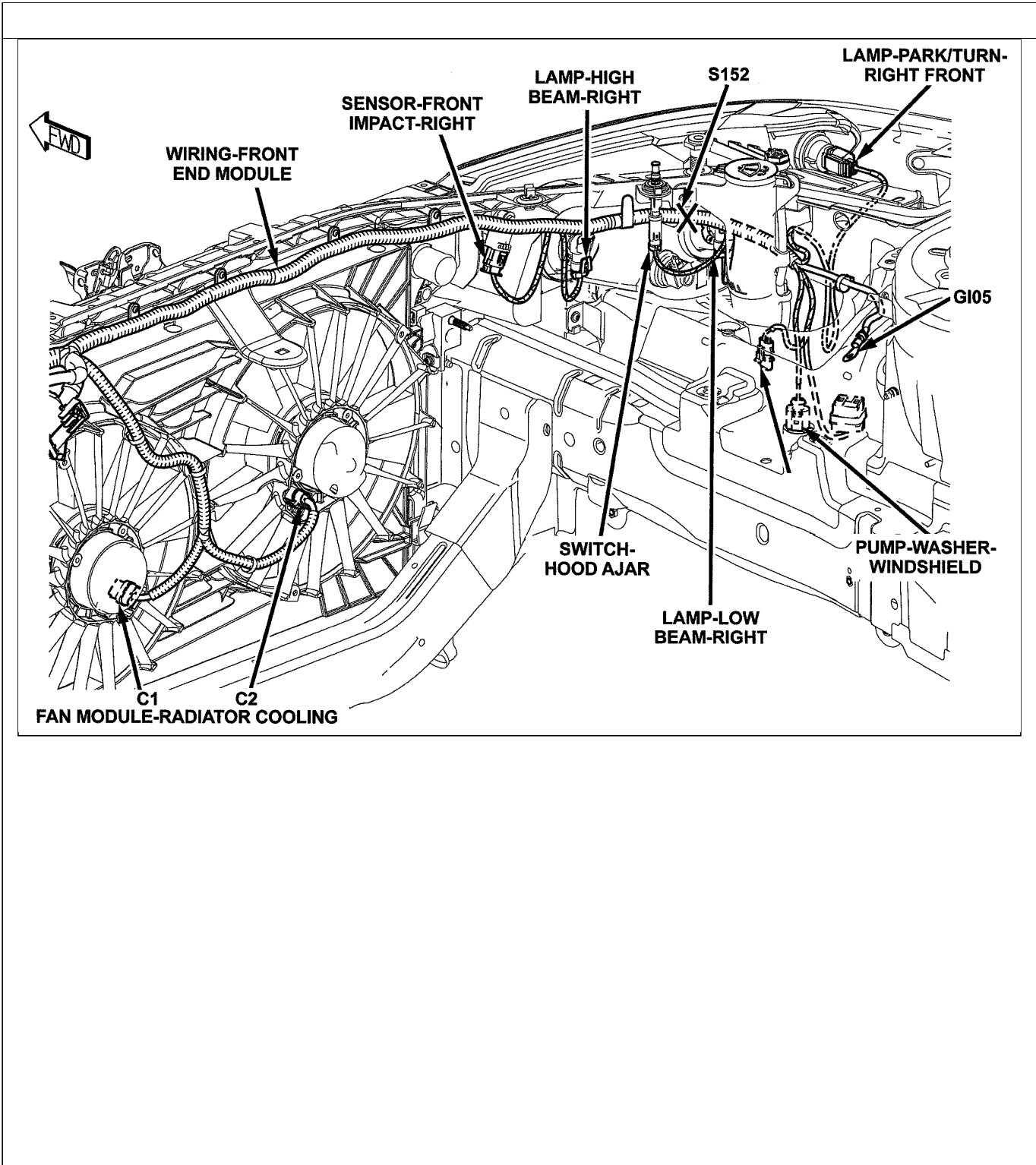


RELAY BLOCK



**Radiator Cooling Fan Module**

**MOTOR Component Location Images**  
**Engine Compartment**

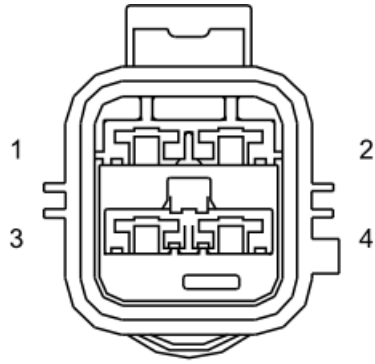


**Components On Image**

- |                           |                             |
|---------------------------|-----------------------------|
| Connector C1              | Connector C2                |
| Front End Module Wiring   | Ground G105                 |
| Hood Ajar Switch          | Radiator Cooling Fan Module |
| Right Front Impact Sensor | Right Front Park Lamp       |
| Right Front Turn Lamp     | Right High Beam Lamp        |
| Right Low Beam Lamp       | Splice S152                 |

Windshield Washer Pump

**CONNECTOR - (FRONT END MODULE...**



C105

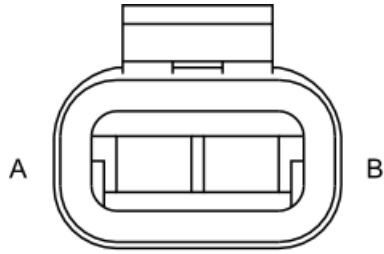
CAVITY	CIRCUIT	FUNCTION
1	N23 12DB	LOW/HIGH RAD FAN RELAY OUTPUT
2	N24 12DG	RAD FAN RELAY OUTPUT
3	Z901 16BK	GROUND
4	N210 12DB/DG	SERIES/PARALLEL RAD FAN RELAY FEED

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**CONNECTOR C1 - (FRONT END MOD...**



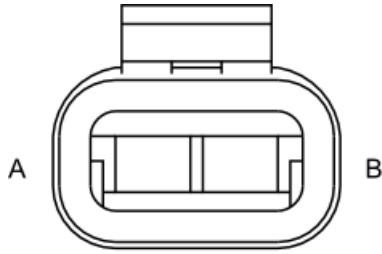
FAN MODULE-  
RADIATOR  
COOLING C1

CAVITY	CIRCUIT	FUNCTION
A	N23 12DB	LOW/HIGH RAD FAN RELAY OUTPUT
B	N210 12DB/DG	SERIES/PARALLEL RAD FAN RELAY FEED

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**CONNECTOR C2 - (FRONT END MOD...**



CAVITY	CIRCUIT	FUNCTION
A	N24 12DG	RAD FAN RELAY OUTPUT
B	Z920 12BK	GROUND

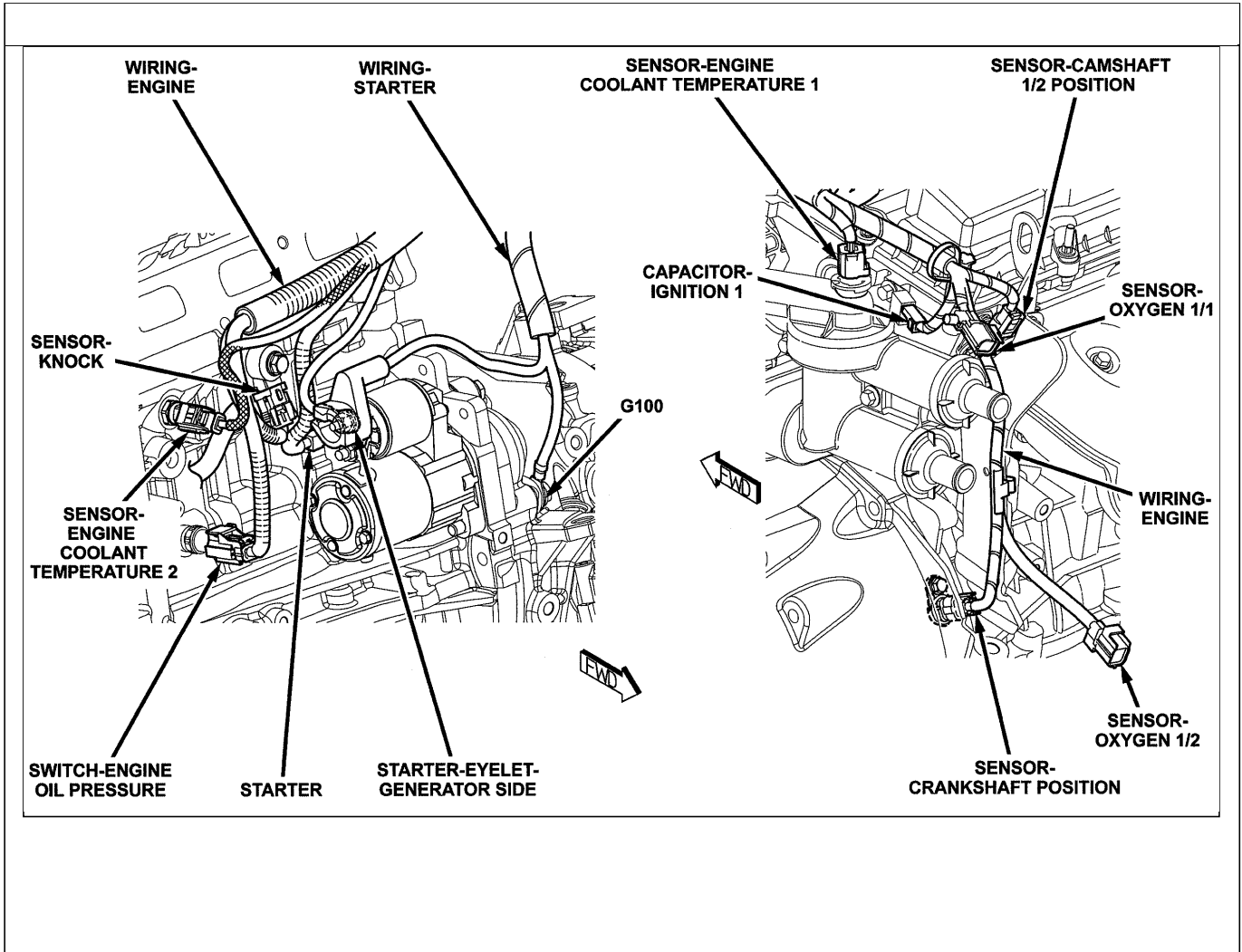
FAN MODULE-  
RADIATOR  
COOLING C2

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**Engine Coolant Temperature 1 Sensor**

**MOTOR Component Location Images**  
**Engine**

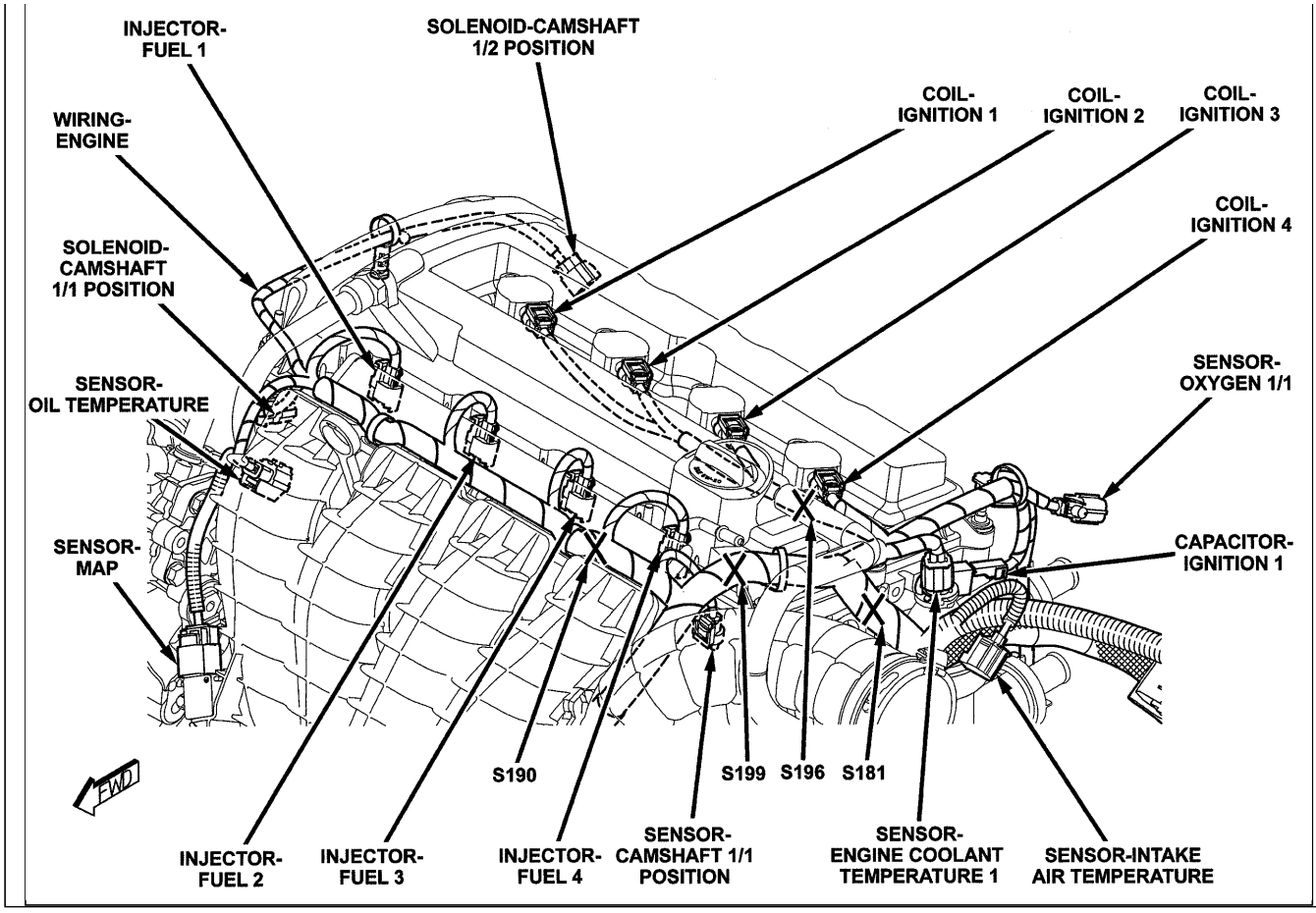


**Components On Image**

- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| Camshaft 1/2 Position Sensor        | Crankshaft Position Sensor          |
| Engine Coolant Temperature 1 Sensor | Engine Coolant Temperature 2 Sensor |
| Engine Oil Pressure Switch          | Engine Wiring                       |
| Generator Side Eyelet Starter       | Ground G100                         |
| Ignition 1 Capacitor                | Knock Sensor                        |
| Oxygen Sensor                       | Starter                             |
| Starter Wiring                      |                                     |

**Engine**





**Components On Image**

- |                                     |                                |
|-------------------------------------|--------------------------------|
| Camshaft 1/1 Position Sensor        | Camshaft 1/2 Position Solenoid |
| Engine Coolant Temperature 1 Sensor | Engine Wiring                  |
| Fuel Injector 1                     | Fuel Injector 2                |
| Fuel Injector 3                     | Fuel Injector 4                |
| Ignition 1 Capacitor                | Ignition Coil 1                |
| Ignition Coil 2                     | Ignition Coil 3                |
| Ignition Coil 4                     | Intake Air Temperature Sensor  |
| MAP Sensor                          | Oil Temperature Sensor         |
| Oxygen Sensor                       | Splice S181                    |
| Splice S190                         | Splice S196                    |
| Splice S199                         |                                |

**NHTSA Campaign # 07V473000****Vehicles:      Make/Models:      Model/Build Years:**

CHRYSLER/SEBRING 2007-2008

DODGE/AVENGER 2007-2008

**Defect:** ON CERTAIN VEHICLES EQUIPPED WITH 2.4 LITER ENGINES, THE ENGINE COOLANT MAY BE DRAWN INTO THE LEFT RADIATOR [COOLING FAN](#) MOTOR CONNECTOR.**Component Affected:** ENGINE AND ENGINE COOLING:COOLING SYSTEM:RADIATOR ASSEMBLY**Corrective Action:** DEALERS WILL INSPECT THE CONNECTOR FOR CONTAMINATION OR DAMAGE, INSTALL A WIRING HARNESS OVERLAY, AND REPLACE THE FAN MOTOR FREE OR CHARGE. THE RECALL BEGAN ON NOVEMBER 19, 2007. OWNERS MAY CONTACT DAIMLERCHRYSLER AT 1-800-853-1403.**Consequence:** THIS CAN CAUSE AN ELECTRICAL SHORT CIRCUIT AND RESULT IN AN ENGINE COMPARTMENT FIRE.**Mfr.** G39**Campaign #:****Mfr. Involved:** DAIMLERCHRYSLER CORPORATION**# Vehicles Affected:** 102042**File Date:** 10/10/2007

The vehicle you are working on may or may not be affected by this recall. Contact the vehicle manufacturer for clarification.