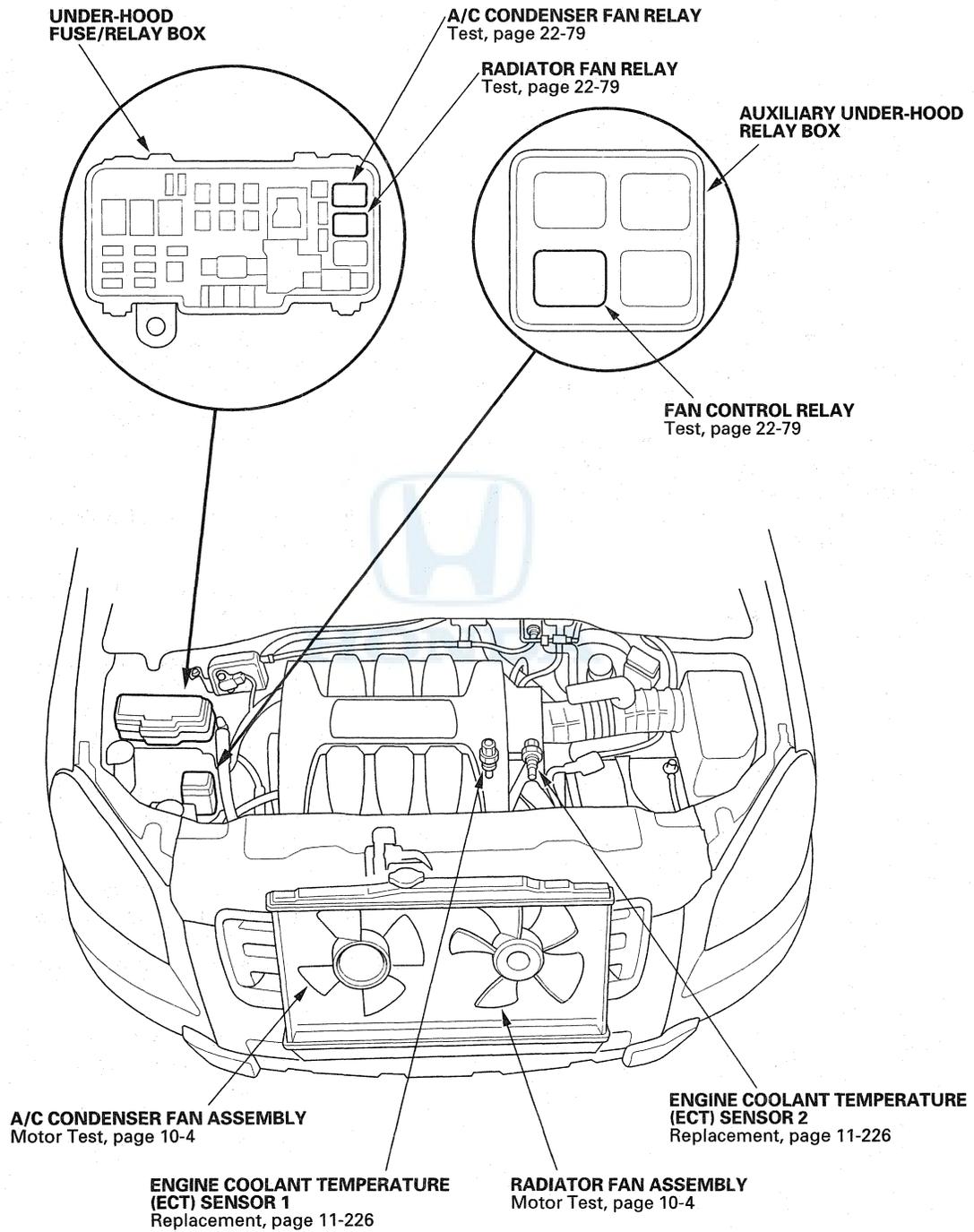


# Fan Controls

## Component Location Index



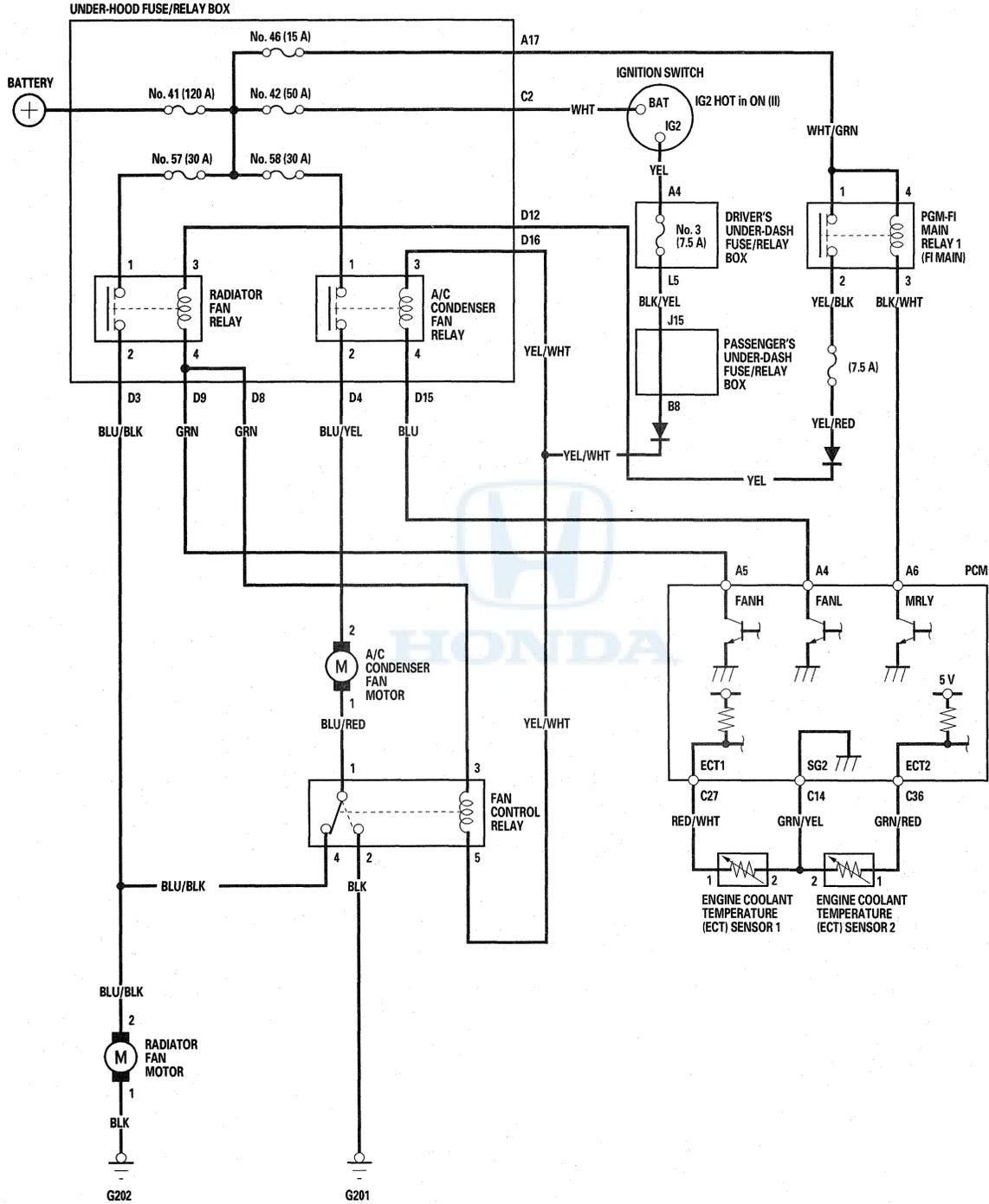


## Symptom Troubleshooting Index

Symptom	Diagnostic Procedure	Also check for
Engine overheats	<ol style="list-style-type: none"> <li>1. Check the coolant level.</li> <li>2. Check for any engine coolant leakage (from gaskets, hoses, O-rings, etc.).</li> <li>3. Check for dirt, leaves, or insects on radiator and A/C condenser.</li> <li>4. Check for deteriorated coolant.</li> <li>5. Check for a damaged or deformed fan shroud.</li> <li>6. Inspect the fan motors (see page 10-4) or fan control relays (see page 22-82).</li> <li>7. Check the radiator cap (see page 10-3).</li> <li>8. Check the thermostat (see page 10-4).</li> <li>9. Inspect the water pump (see page 10-5).</li> <li>10. Check for plugged or deteriorated radiator hoses.</li> <li>11. Check for plugged heater core or hoses.</li> <li>12. Check for a damaged cylinder head gasket.</li> </ol>	
The radiator fan runs at low speed, but it does not run at high speed when the engine coolant temperature is above 206 °F (97 °C)	Radiator fan high speed circuit troubleshooting (see page 10-19).	
With the A/C off and the engine coolant temperature at 206 °F (97 °C) or below, the A/C condenser fan runs at high speed and the radiator fan does not run. When the engine coolant temperature is above 206 °F (97 °C), both fans run at high speed	Remove the fan control relay, and test it. <ul style="list-style-type: none"> <li>• If the relay is faulty, replace it.</li> <li>• If the relay is OK, check for short in the wire between fan control relay 5P socket terminal No. 1 and A/C condenser fan motor 2P connector terminal No. 1.</li> </ul>	
Both the radiator fan and the A/C condenser fan run at high speed with the ignition switch ON (II), the A/C off, and the engine coolant temperature below 204 °F (95 °C)	Check for short in the wire between radiator fan relay 4P socket terminal No. 4 and PCM connector terminal A5.	
Both the radiator fan and the A/C condenser fan run at low speed with the ignition switch ON (II) and the A/C off	Check for short in the wire between A/C condenser fan relay 4P socket terminal No. 4 and PCM connector terminal A4.	
Both the radiator fan and the A/C condenser fan do not run at low speed with the A/C on	Radiator and A/C condenser fans low speed circuit troubleshooting (see page 21-29).	
The A/C condenser fan does not run at all. The radiator fan does not run at low speed, but it runs at high speed	A/C condenser fans low speed circuit troubleshooting (see page 21-29).	
Both the radiator fan and the A/C condenser fan do not run at high speed when the engine coolant temperature is above 206 °F (97 °C)	Check for open in the wire between radiator fan relay 4P socket terminal No. 4 and PCM connector terminal A5.	

# Fan Controls

## Circuit Diagram





## Radiator Fan High Speed Circuit Troubleshooting

1. Check the No. 57 (30 A) fuse and the No. 46 (15 A) fuse in the under-hood fuse/relay box.

*Are the fuses OK?*

**YES**—Reinstall the fuse, then go to step 2.

**NO**—Replace the fuse(s) and recheck. ■

2. Remove the radiator fan relay from the under-hood fuse/relay box and test it (see page 22-82).

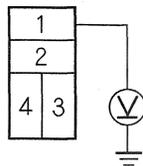
*Is the relay OK?*

**YES**—Go to step 3.

**NO**—Replace the radiator fan relay. ■

3. Measure the voltage between radiator fan relay 4P socket terminal No.1 and body ground.

**RADIATOR FAN RELAY 4P SOCKET**



Terminal side of female terminals

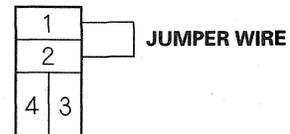
*Is there battery voltage?*

**YES**—Go to step 4.

**NO**—Replace the under-hood fuse/relay box. ■

4. Connect radiator fan relay 4P socket terminals No. 1 and No. 2 with a jumper wire.

**RADIATOR FAN RELAY 4P SOCKET**



Terminal side of female terminals

*Does the radiator fan run at high speed?*

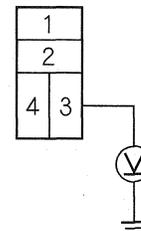
**YES**—Go to step 5.

**NO**—Repair open in the wire between radiator fan relay 4P socket terminal No. 2 and radiator fan motor 2P connector terminal No. 2. ■

5. Turn the ignition switch ON (II).

6. Measure the voltage between radiator fan relay 4P socket terminal No. 3 and body ground.

**RADIATOR FAN RELAY 4P SOCKET**



Terminal side of female terminals

*Is there battery voltage?*

**YES**—Repair open in the wire between radiator fan relay 4P socket terminal No. 4 and the powertrain control module (PCM). ■

**NO**—Repair open in the wire between radiator fan relay 4P socket terminal No. 3 and the PGM-FI main relay 1 4P socket terminal No. 2. ■