



# Technical Service Information

## HONDA ODYSSEY LOSS OF SOLENOID POWER

**COMPLAINT:** A 1999 - 2001 Honda Odyssey comes in with a P1753 indicating an electrical circuit problem with the TCC solenoid circuit (other solenoid codes may also be stored). After running the O.E.M. suggested diagnostics which leads the technician to checking the solenoids and the related wiring where it finally states: "Substitute a good known PCM". When the technician checks the TCC Solenoid circuit at the time TCC should be commanded ON, no power was being sent to the solenoid. As a side note a P1298 for the ELD unit was also stored.

**CAUSE:** Instead of replacing the PCM which would seem to be the likely suspect, the technician consulted a wiring diagram and noticed that solenoid power came from a fused circuit to the PCM and then out of the PCM to the solenoid. The wiring diagram indicated the #6 fuse in the under-dash driver side fuse box is the solenoid power supply and this fuse was blown. After replacing the #6 fuse, it didn't take very long for it to blow again.

There are some fuse numbers molded into the fuse box housing. The # 6 fuse can be seen in figure 1 which is the 15 amp fuse that is blowing. Looking at the inside fuse box cover, it should identify this fuse as: "ECU/Cruise Control". This power supply wire is located at PCM in connector D5 for 1999 to 2000 models and in connector B24 for 2001 models (figure 2). The PCM location can be seen in figure 3.

The #6 fuse not only supplies power to the PCM for the transmission solenoids but to the ELD Unit also, which is why code P1298 set. This circuit also powers up the EVAP System, Cruise Control, Engine Mount Control System and the Navigation System - Vehicle Speed Pulsar.

The component that caused the #6 Fuse to blow was the Vehicle Speed Pulsar (VSP) Sensor. This sensor is located where a VSS would normally be in these vehicles. This type of sensor is used ONLY if the vehicle has the optional navigation system. The sensor and it's wiring have shorted which caused the #6 fuse to blow. Use the numbers from the old VSP Sensor to search for a new one as shown in figure 4.

The wiring diagram and PCM connector terminal identification for the 1999 to 2000 models can be seen in figure 5.

The wiring diagram and PCM connector terminal identification for the 2001 model can be seen in figure 6.

The wiring diagram for the 1999 to 2001 model navigation system showing the vehicle speed pulsar can be seen in figure 7. Notice that the VSP Sensor is providing the vehicle speed signal for the PCM to distribute where needed.

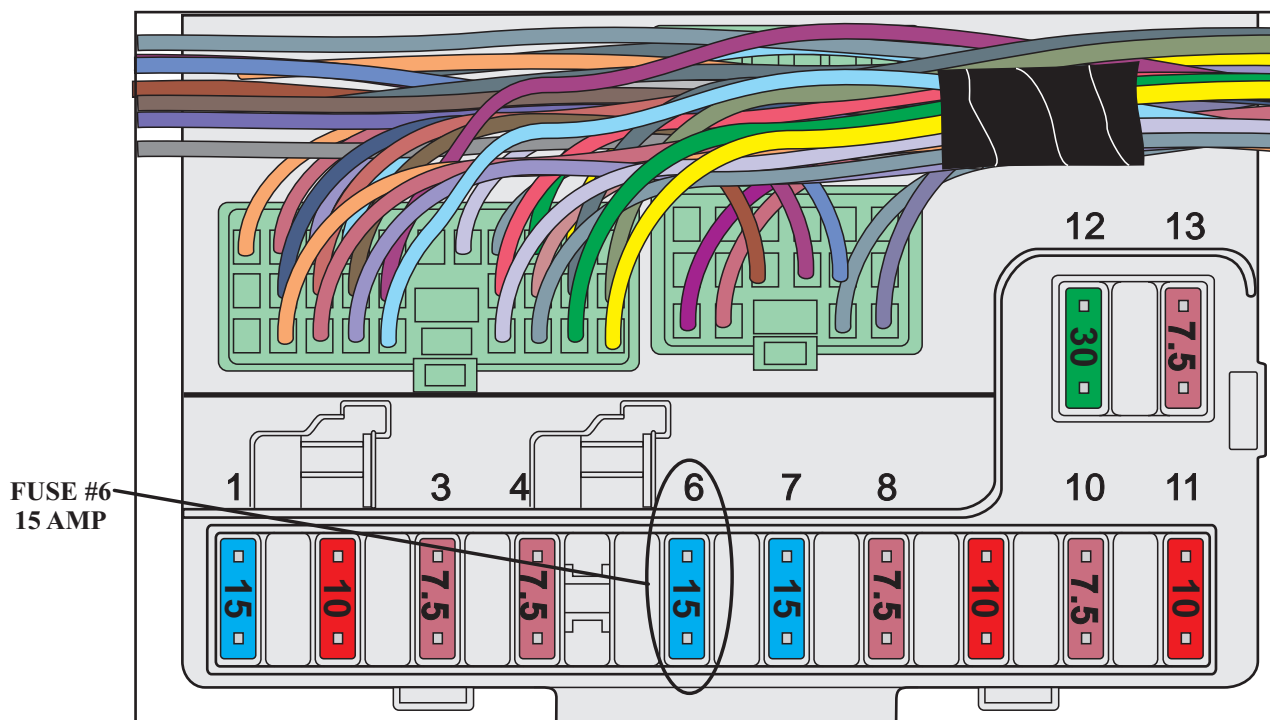
If the vehicle does not have a navigation system, then the vehicle speed signal will be provided by the PCM using Countershaft Speed Sensor input.

**CORRECTION:** Replace the VSP Sensor and repair it's wiring which should allow the related trouble codes to be erased and restore solenoid power to the PCM.

*A special thank you to Ralph from R&M Transmission for the information and photos.*

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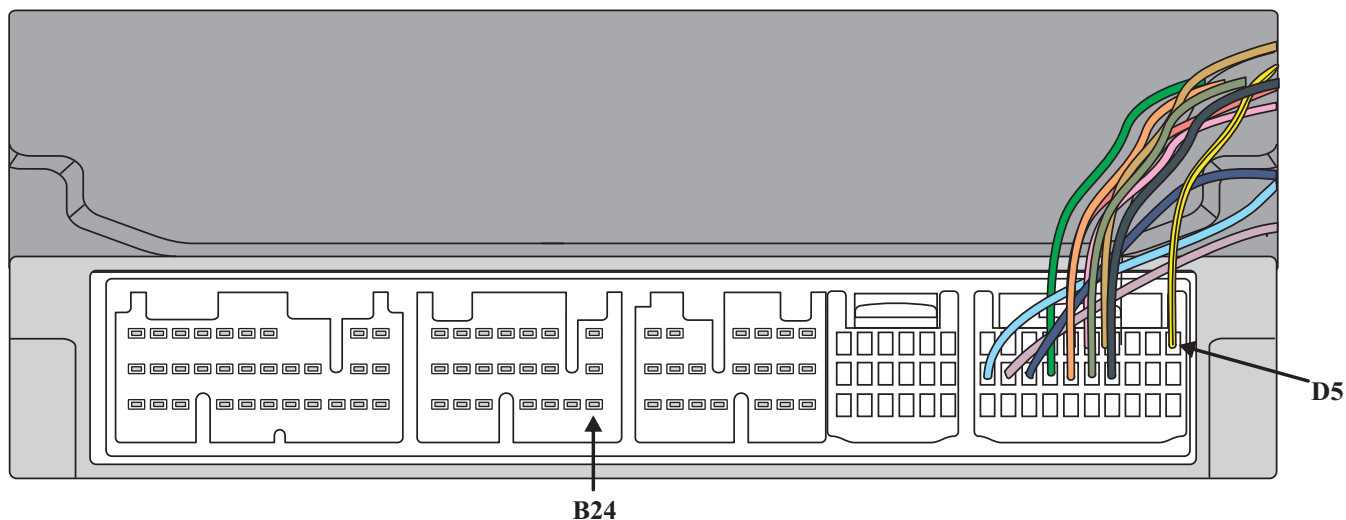
### DRIVER'S SIDE UNDER-DASH FUSE BOX



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Figure 1

### PCM CONNECTOR "D" - 1999 - 2000 PCM CONNECTOR "B" - 2001



PCM LOCATION: IN FRONT OF CONSOLE UNDER HEATER BOX

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Figure 2

## HONDA ODYSSEY LOSS OF SOLENOID POWER

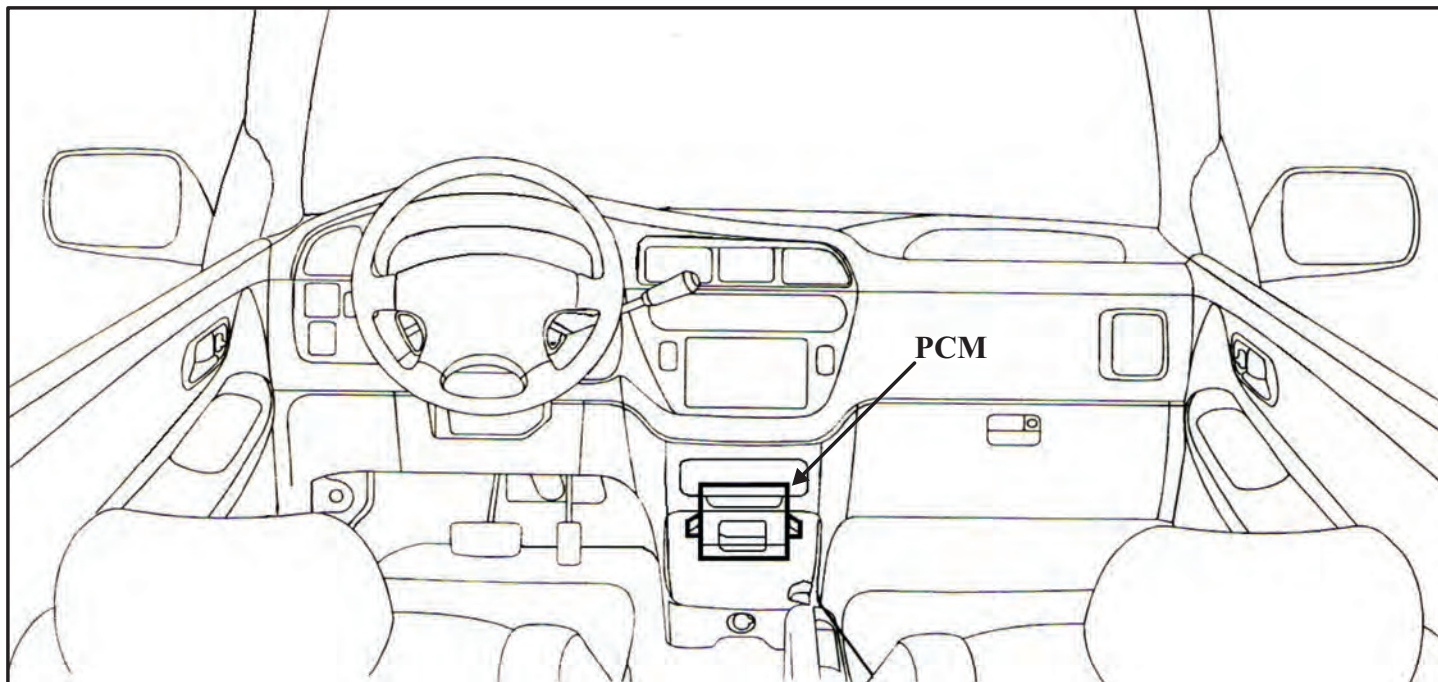


Figure 3

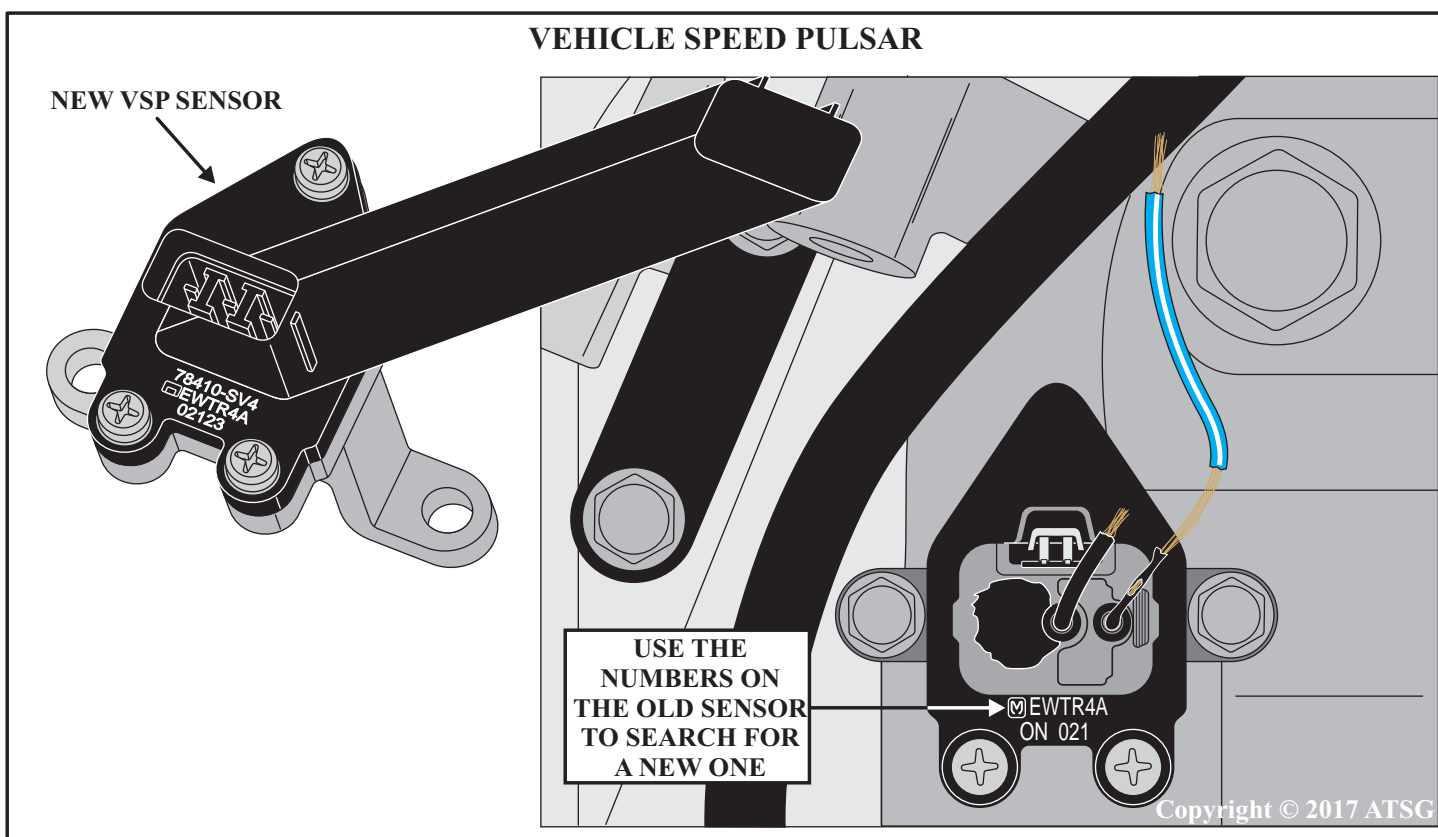
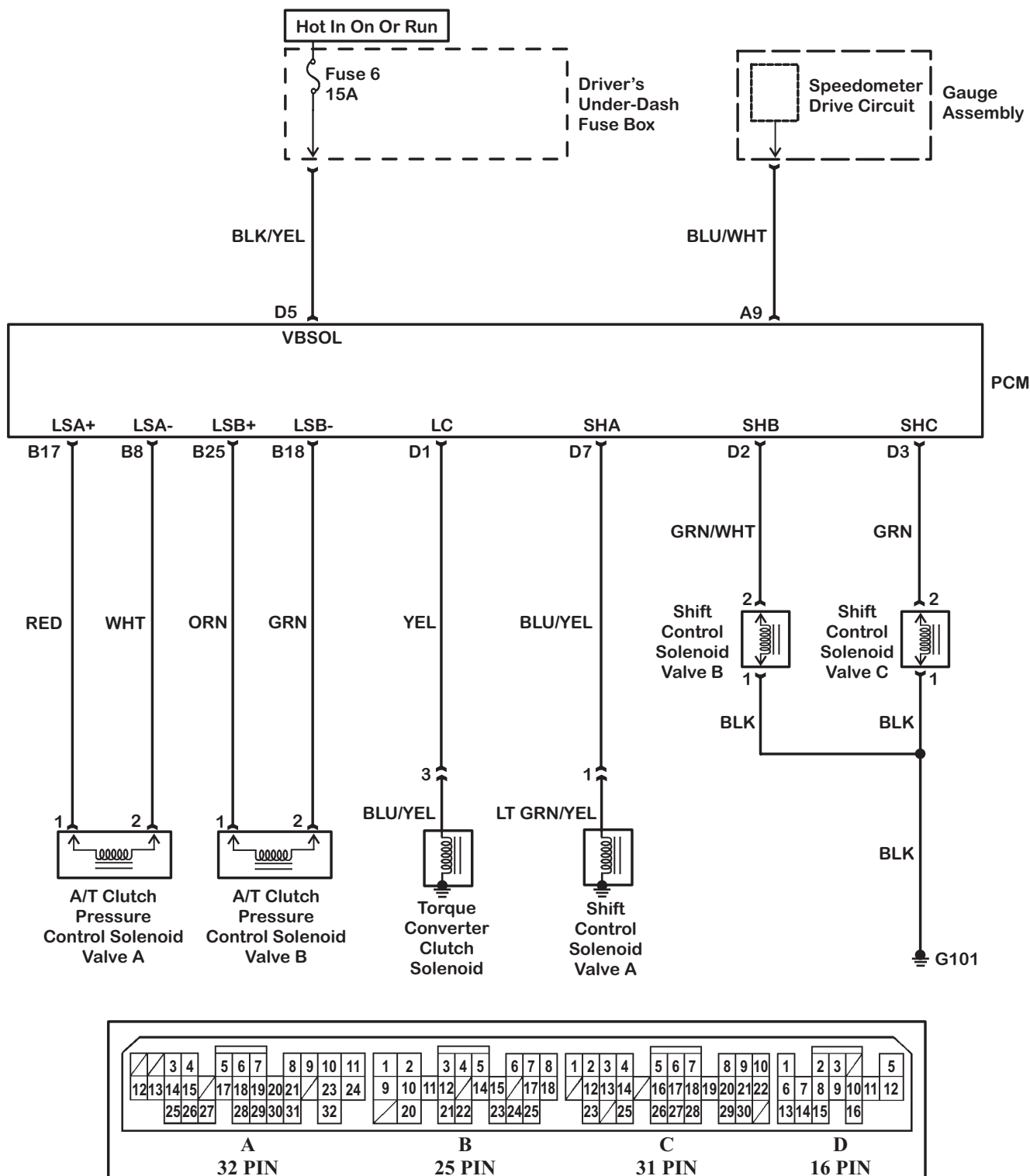


Figure 4

## HONDA ODYSSEY

### LOSS OF SOLENOID POWER

#### 1999 - 2000 HONDA ODYSSEY PCM

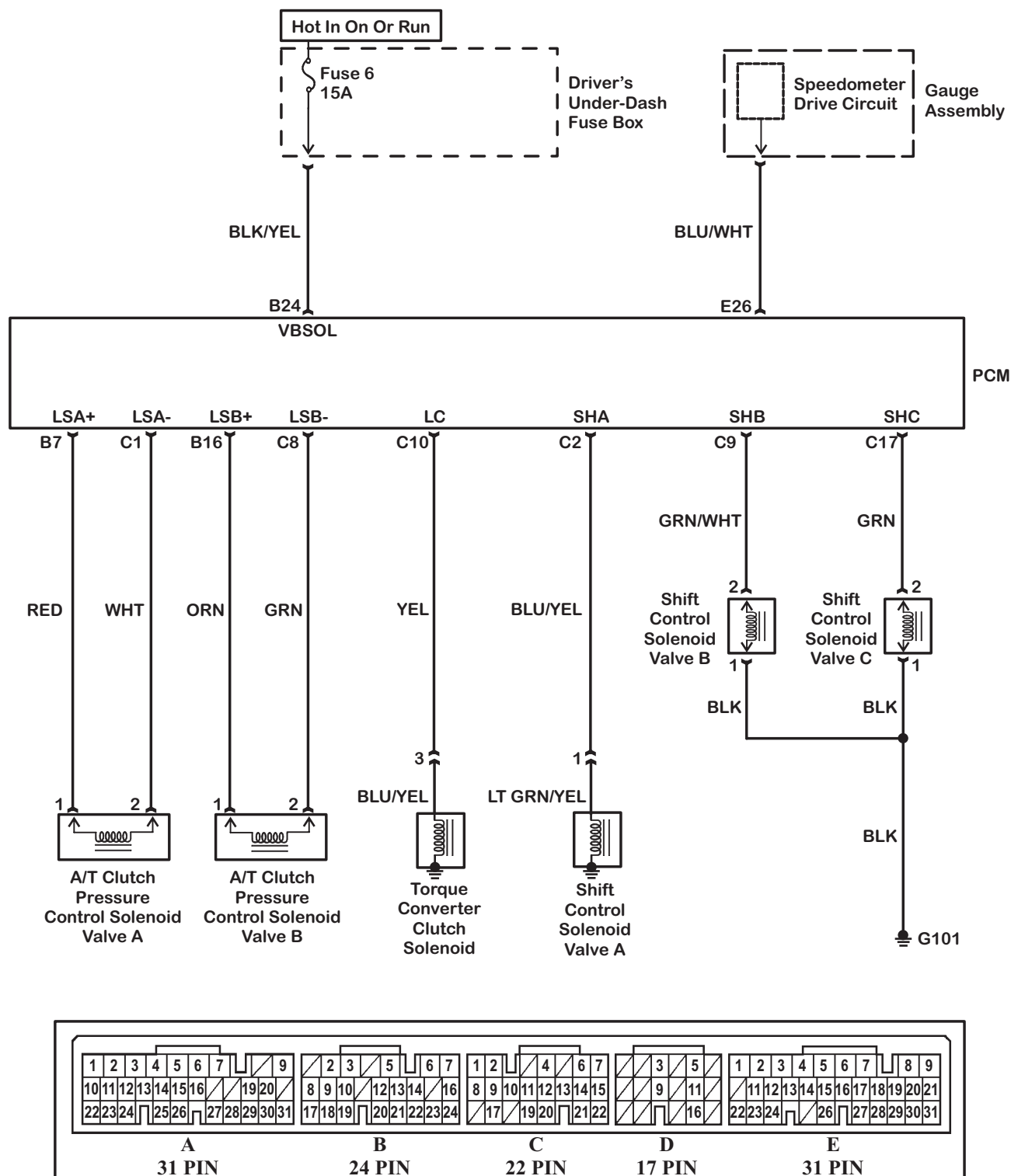


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Figure 5

## HONDA ODYSSEY LOSS OF SOLENOID POWER

### 2001 HONDA ODYSSEY PCM

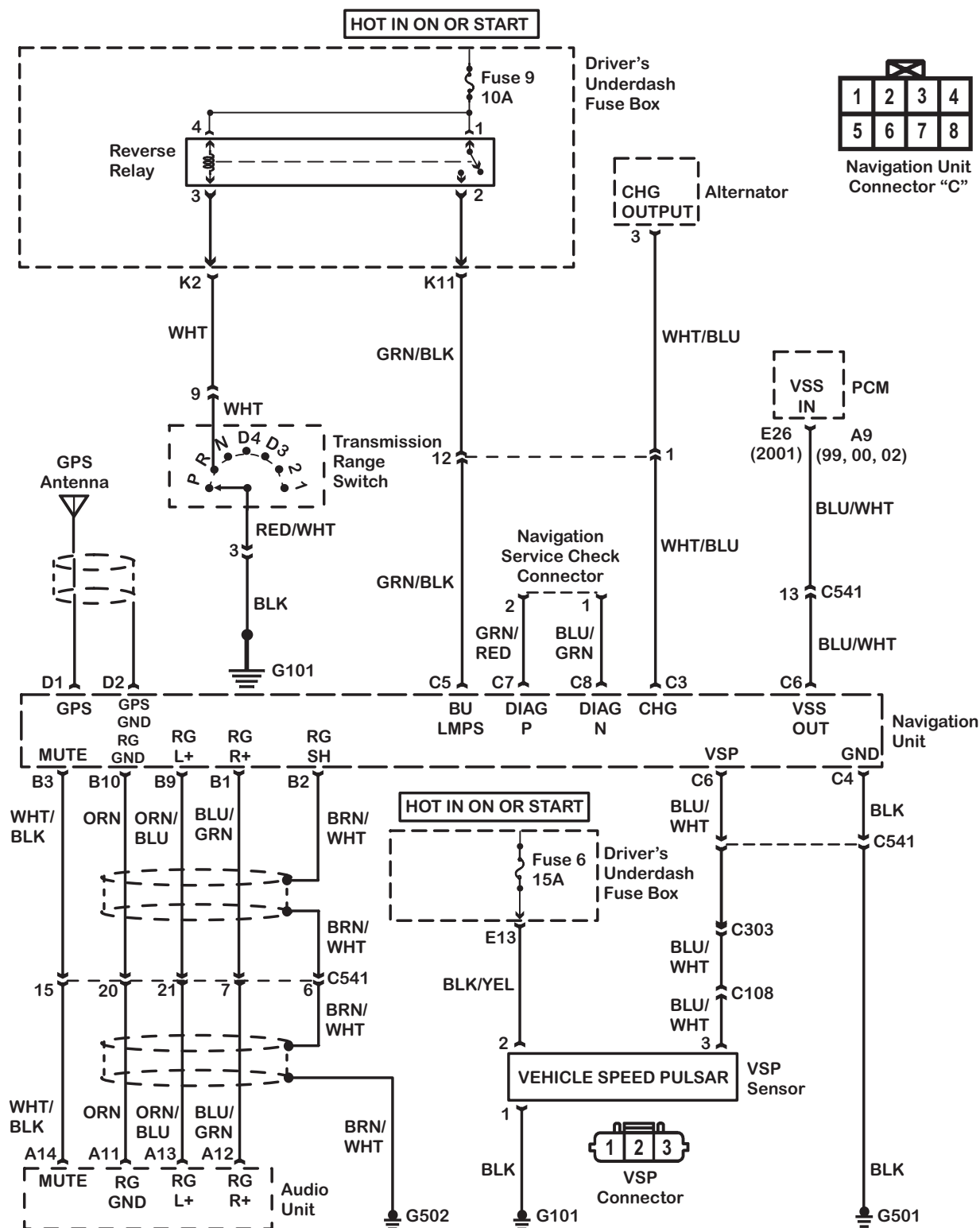


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Figure 6

## HONDA ODYSSEY LOSS OF SOLENOID POWER

### 1999 - 2001 HONDA ODYSSEY NAVIGATION SYSTEM



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Figure 7