



THM 4L60-E NEW PARK/NEUTRAL SWITCH STRATEGY FOR SOME 2000 MODELS

CHANGE: Beginning at the start of production for 2000 model S/T Trucks, M Vans and C/K Trucks, equipped with the **4.3L engine "Only"**, the Vehicle Control Module (VCM) strategy was modified for the PNBUSwitch, which changes the vehicle harness, wire colors and all testing procedures for the PNBUSwitch.

REASON: Increased reliability, as the PNBUSwitch signals are now sent direct to the VCM, and the VCM responds with the appropriate action.

PARTS AFFECTED:

- (1) VEHICLE CONTROL MODULE - Strategy changes to enhance the overall system.
- (2) VEHICLE WIRING HARNESS - Wires are going to different components than the previous models and the wire colors have changed.

Refer to Figure 2 for 1996-1999 models only.

Refer to Figure 4 for 2000 model S/T Trucks, M Vans, C/K Trucks equipped with the 4.3L.

- (3) PARK/NEUTRAL BACK-UP SWITCH - There is now available from OEM parts sources, a revised PNBUSwitch that has improved sealing capabilities to help prevent water intrusion, and is available under OEM part number 29540479 (See Figure 3). High ambient heat may have caused the sealing compound in the switch to melt and flow into the connectors, sealing the connectors to the switch.

There is now available from OEM sources, service repair connectors for both the 7-way and the 4-way connectors under part numbers 15305887 and 15305925 (See Figure 3).

Note: The service connector pigtails use wires that are all the same color. Use the old connector as a pattern to ensure that the new wires are connected to the vehicle harness correctly. This switch is in a wet area, and it is *imperative* that the wires be soldered and heat-shrink tubing be used to insure water-tight connections. Refer to Figure 2 for a full wiring schematic of the 1996-1999 Park/Neutral Position Switch circuit for diagnostic purposes. Refer to Figure 4 for a full wiring schematic of the 2000 Park/Neutral Position Switch on models equipped with the 4.3L engine.

- (4) TESTING PROCEDURES - Testing procedures have also changed.
When testing the 1996-1999 models, the ohmmeter should indicate continuity between the connected dots when checking the specified range, as shown in Figure 1.
The 2000 and later models can be tested using the appropriate scanner. The VCM compares the actual voltage combination of the switch signals to a switch combination chart stored in memory. Refer to the chart found in Figure 4, for proper switch combinations in each range. Refer to Figure 5 for VCM location, Figure 6 for PNBUSwitch connector identification, Figures 7 and 8 for VCM connector identification and Figures 9 and 10 for underhood fuse block location and fuse block detail.

SERVICE INFORMATION:

Park/Neutral Position Switch (All Models, Tan in Color)	29540479
7-Way Repair Connector Assembly (Includes Heat-Shrink Connectors)	15305887
4-Way Repair Connector Assembly (Includes Heat-Shrink Connectors)	15305925

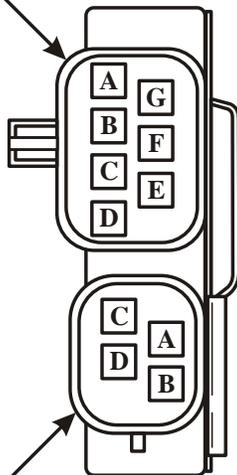
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PARK/NEUTRAL SWITCH CONTINUITY CHART

		RANGE SELECTED						
		P	R	N	O/D	D	2	1
C1 CONNECTOR	A	●		●				
	B	●		●				
	C	●	●	●				
	D	●	●	●	●	●	●	●
	E	●	●	●	●	●	●	●
	F	●	●	●	●	●	●	●
	G	●	●	●	●	●	●	●
C2 CONNECTOR	A	●	●	●	●	●	●	●
	B	●	●	●	●	●	●	●
	C	●	●	●	●	●	●	●
	D	●	●	●	●	●	●	●

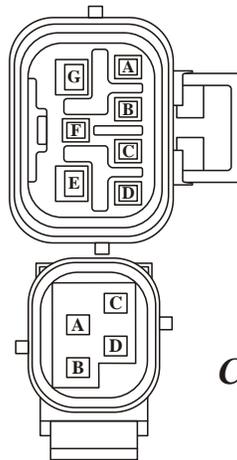
PARK/NEUTRAL SWITCH TERMINALS

7-Way PNBUS
Switch Receptacle
(Face View)



4-Way PNBUS
Switch Receptacle
(Face View)

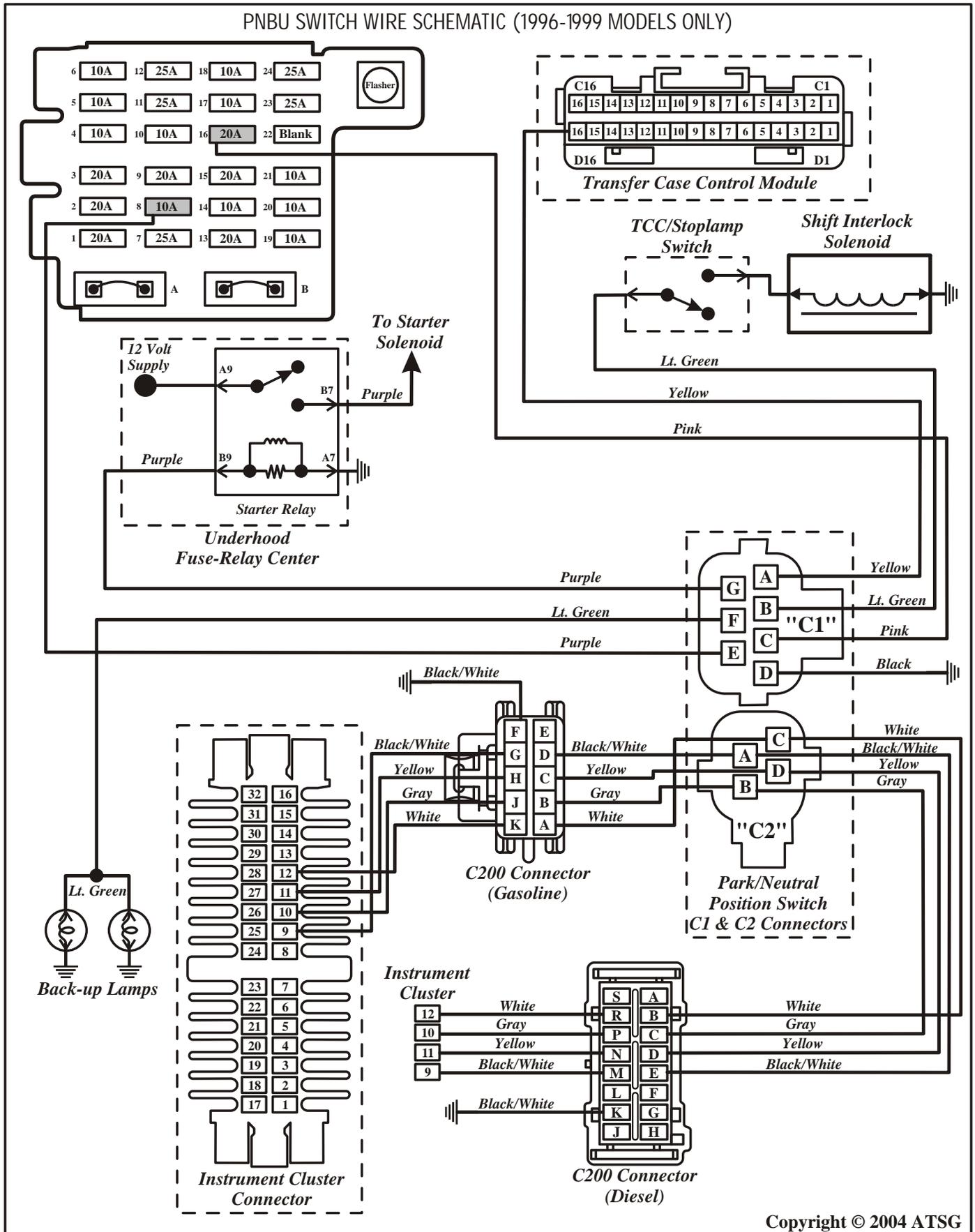
OHM METER SHOULD INDICATE CONTINUITY BETWEEN THE CONNECTED DOTS LISTED ABOVE WHEN CHECKING THE SPECIFIED RANGE



C1 CONNECTOR

C2 CONNECTOR

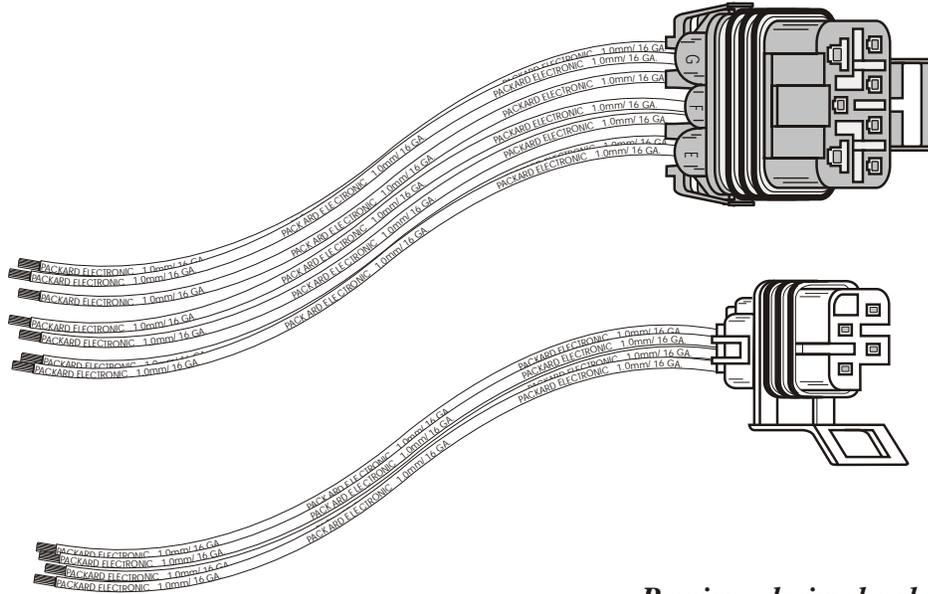
Figure 1



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Figure 2

PNBU SWITCH CONNECTOR REPAIR PACKAGES FOR ALL MODELS

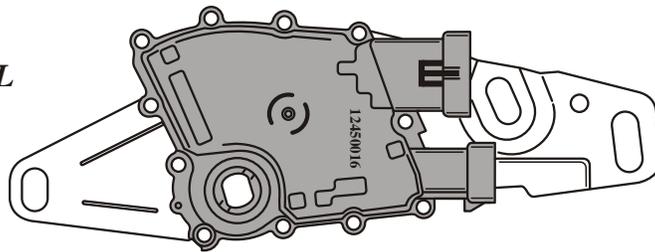


**PART NUMBER
15305887**

**PART NUMBER
15305925**

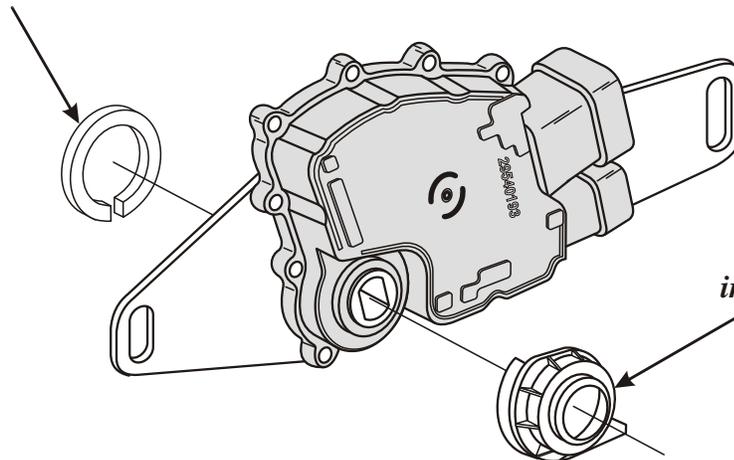
*Previous design level PNBU
Switch is "Black" in color.*

**"PREVIOUS"
DESIGN LEVEL**



*New PNBU Switch has
seal glued to back side.*

**"NEW"
DESIGN LEVEL**



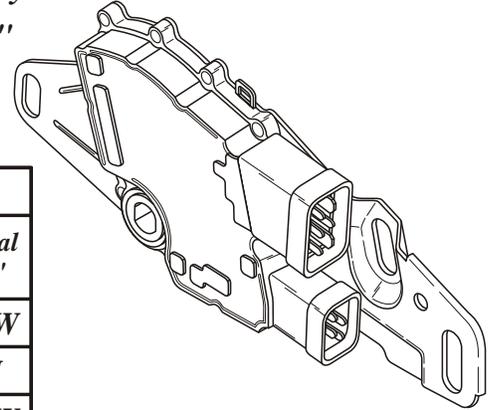
*New service package
includes cover for front
side of new switch.*

*New design level PNBU Switch is "Tan" in color,
and is available under OEM part number 29540479.*

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Figure 3

PNBU SWITCH WIRE SCHEMATIC
2000 "S/T" TRUCK, 4.3L "Only"
2000 "C/K" TRUCK, 4.3L "Only"
2000 "M" VAN, 4.3L "Only"



TRANSMISSION RANGE SWITCH LOGIC

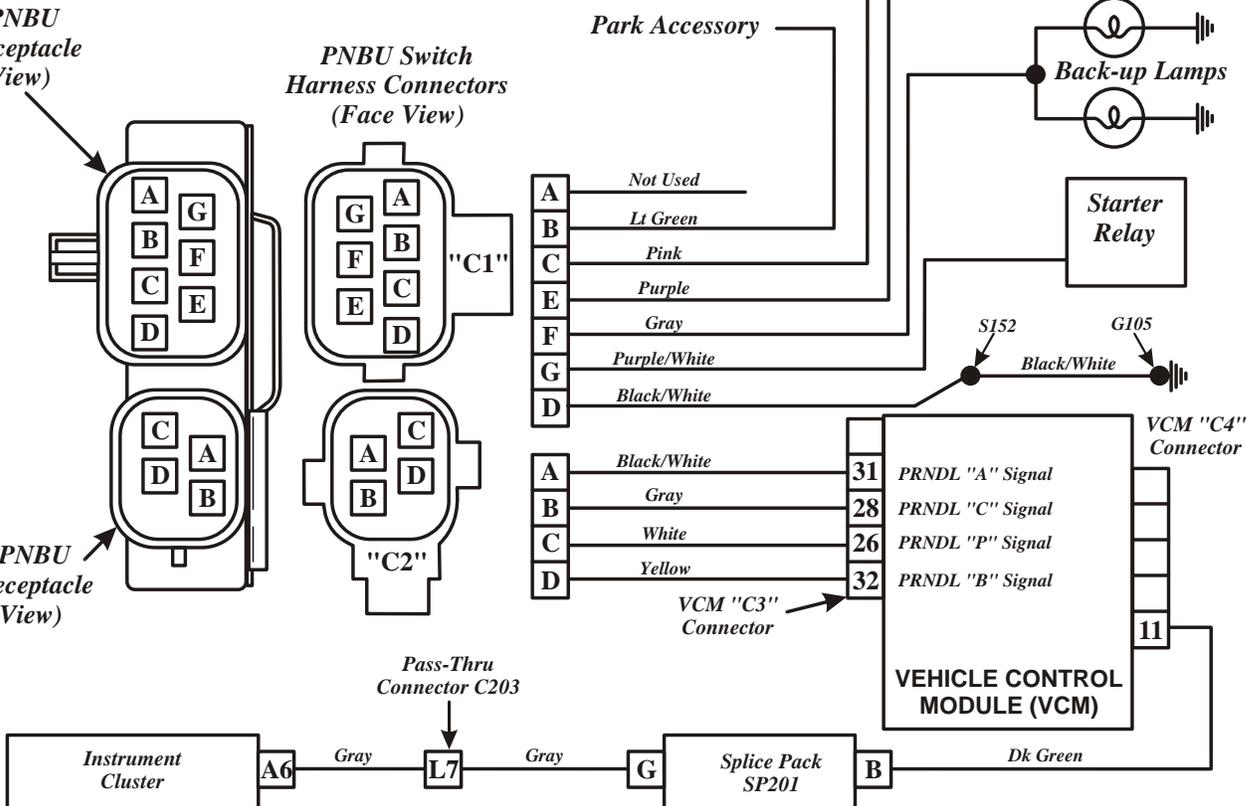
Gear Selector Position	Signal "A"	Signal "B"	Signal "C"	Signal "P"
Park (P)	LOW	HI	HI	LOW
Reverse (R)	LOW	LOW	HI	HI
Neutral (N)	HI	LOW	HI	LOW
Drive 4 (OD)	HI	LOW	LOW	HI
Drive 3 (3)	LOW	LOW	LOW	LOW
Drive 2 (2)	LOW	HI	LOW	HI
Drive 1 (1)	HI	HI	LOW	LOW

HI = Ignition Voltage
LOW = 0 Volts

7-Way PNBU Switch Receptacle (Face View)

PNBU Switch Harness Connectors (Face View)

4-Way PNBU Switch Receptacle (Face View)



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Figure 4

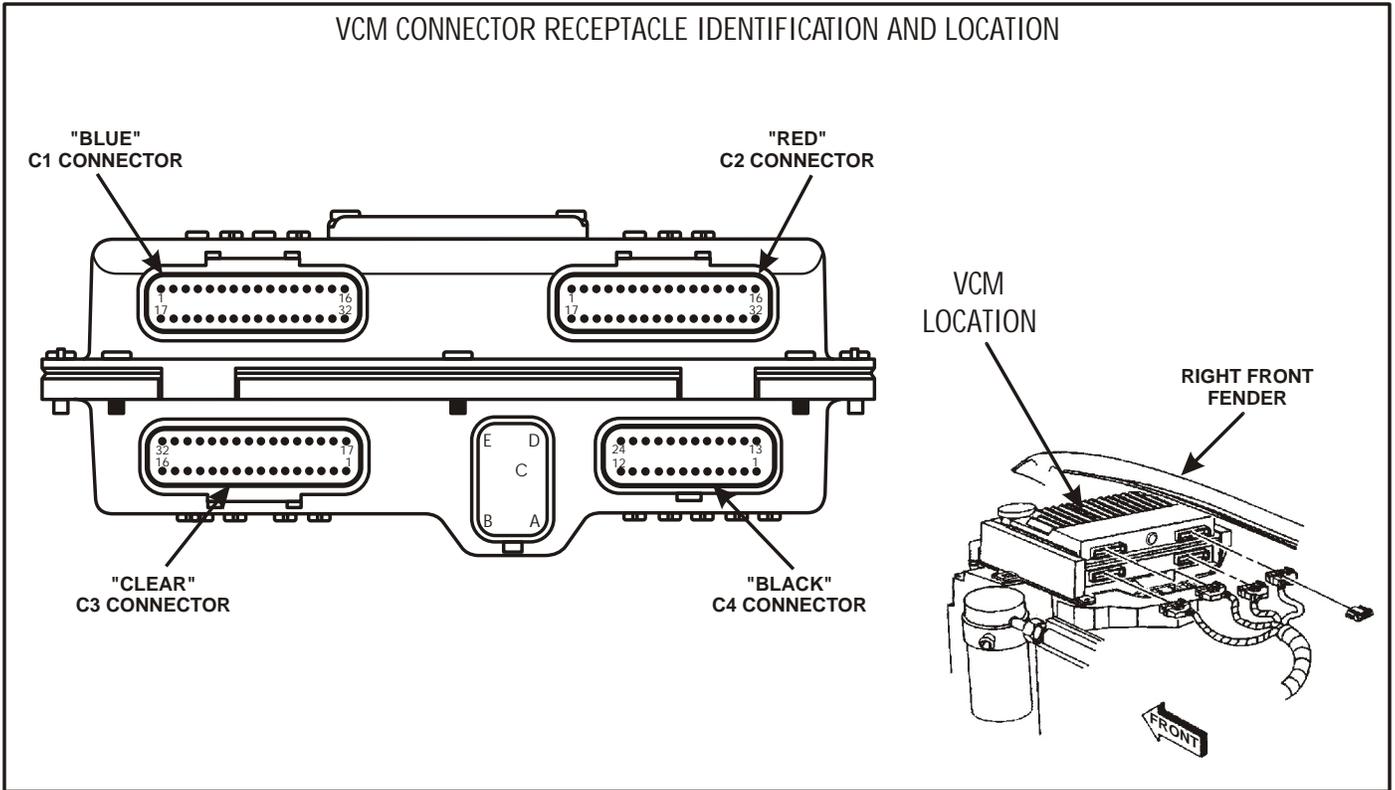


Figure 5

PNBU SWITCH CONNECTOR IDENTIFICATION AND PIN FUNCTION

**PNBU
"C1" CONNECTOR**

**PNBU
"C2" CONNECTOR**

<i>7 Pin PNBUSwitch "C1" Connector</i>		
<i>Pin</i>	<i>Wire Color</i>	<i>Function</i>
<i>A</i>	<i>----</i>	<i>Not Used</i>
<i>B</i>	<i>Lt Green</i>	<i>PNBUSwitch Output</i>
<i>C</i>	<i>Pink</i>	<i>Back-Up Lamps (Fused 25A)</i>
<i>D</i>	<i>Black/White</i>	<i>Ground</i>
<i>E</i>	<i>Purple</i>	<i>Ignition Switch (Fused 10A)</i>
<i>F</i>	<i>Gray</i>	<i>Feed To Back-Up Lamps</i>
<i>G</i>	<i>Purple/White</i>	<i>Feed To Starter Relay Coil</i>

<i>4 Pin PNBUSwitch "C2" Connector</i>		
<i>Pin</i>	<i>Wire Color</i>	<i>Function</i>
<i>A</i>	<i>Black/White</i>	<i>PRNDL "A" Signal</i>
<i>B</i>	<i>Gray</i>	<i>PRNDL "C" Signal</i>
<i>C</i>	<i>White</i>	<i>PRNDL "P" Signal</i>
<i>D</i>	<i>Yellow</i>	<i>PRNDL "B" Signal</i>

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Figure 6

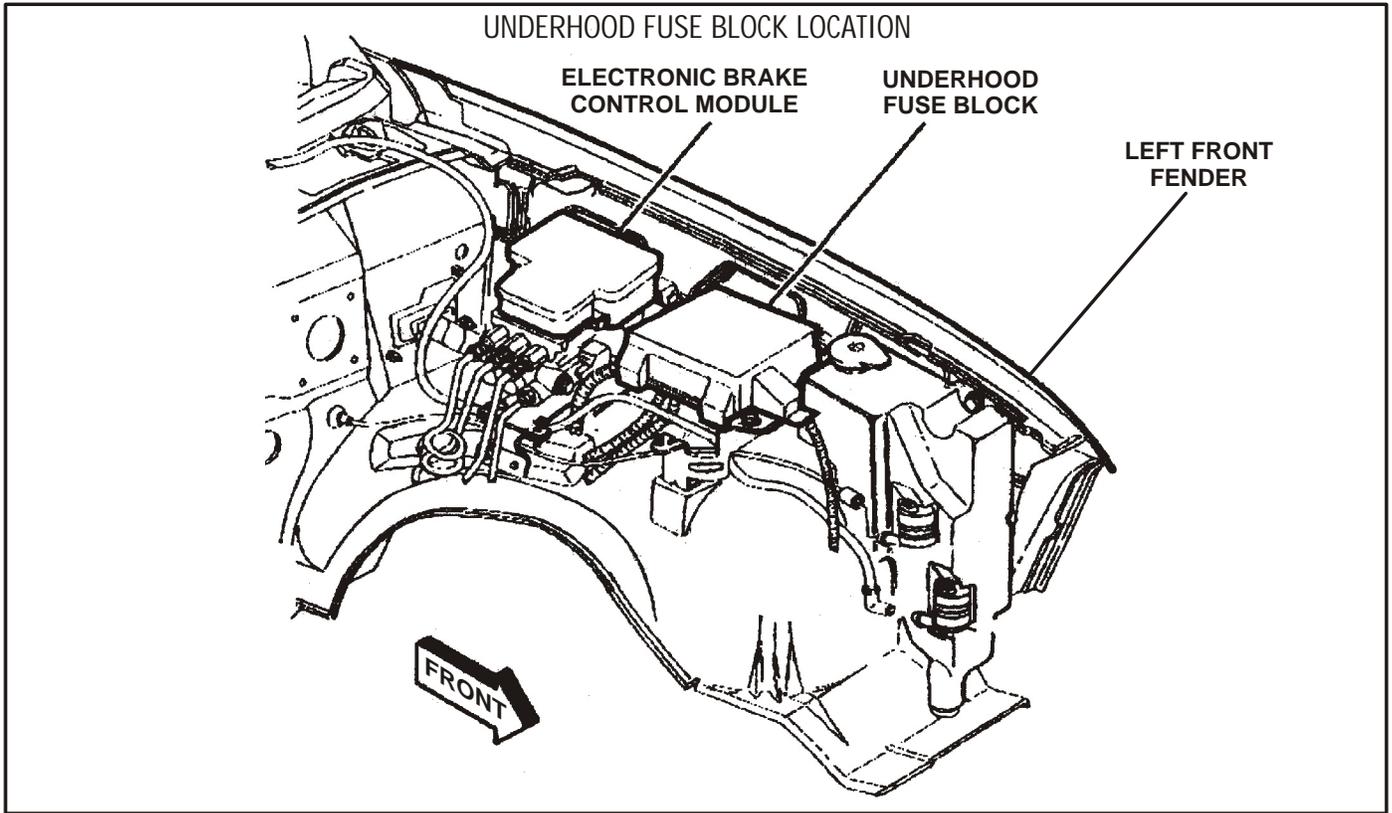
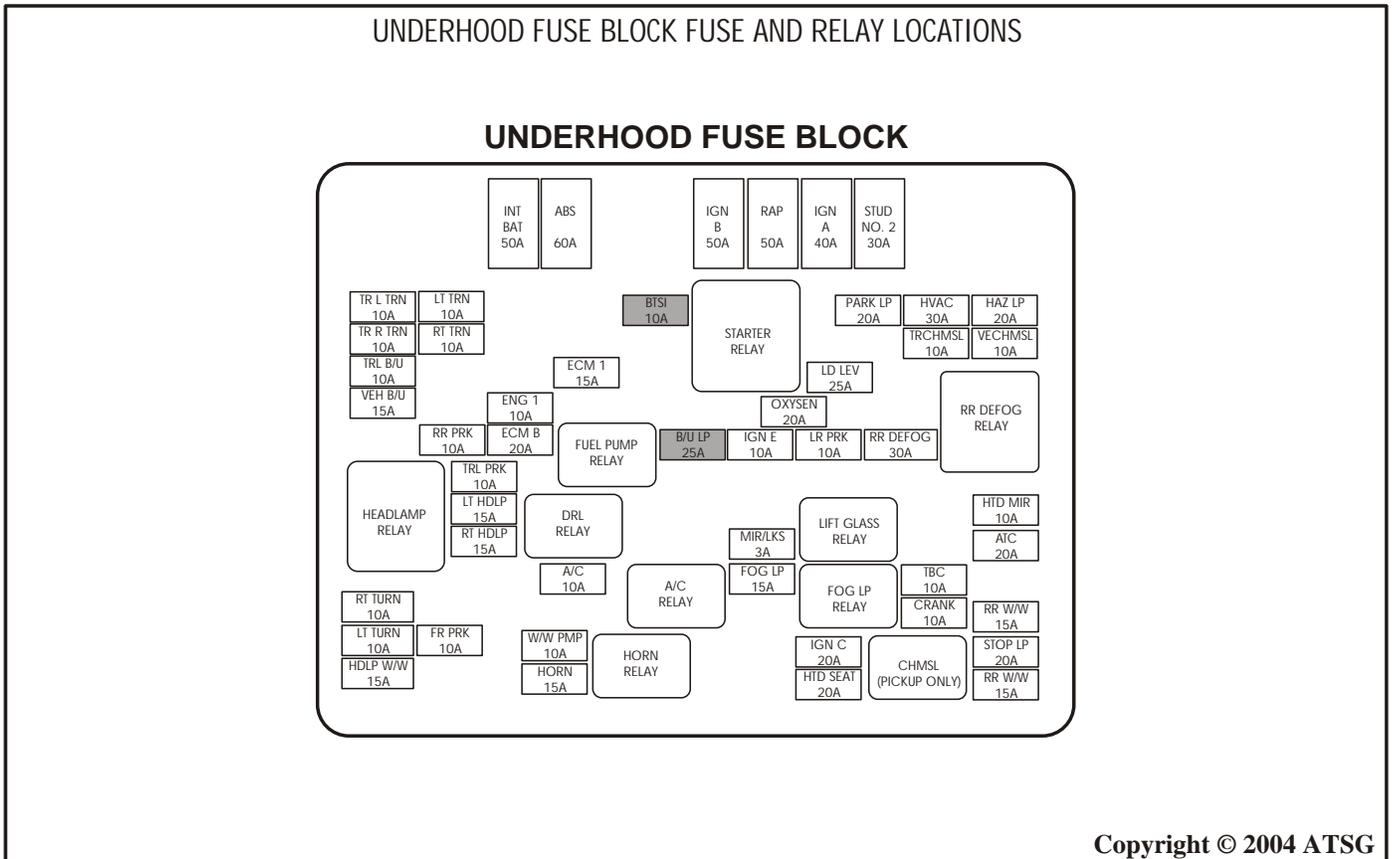


Figure 9



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Figure 10