

## Reading Single Circuit Electrical Schematics, VN

(Effective from October 1998)

This Service Bulletin gives detailed instructions for using the VN Series single circuit electrical schematics.

Since October 1998, the layout for new schematics has changed to include all vehicle variants for a particular component. In the past, a separate schematic was published for each variant.

Both types of schematics will continue to be used in troubleshooting, and will exist in the VN Schematics binder set. This bulletin gives tips for reading both the old and new style of vehicle schematics.

The following areas of the schematics are described:

“Connector Locations” page 2

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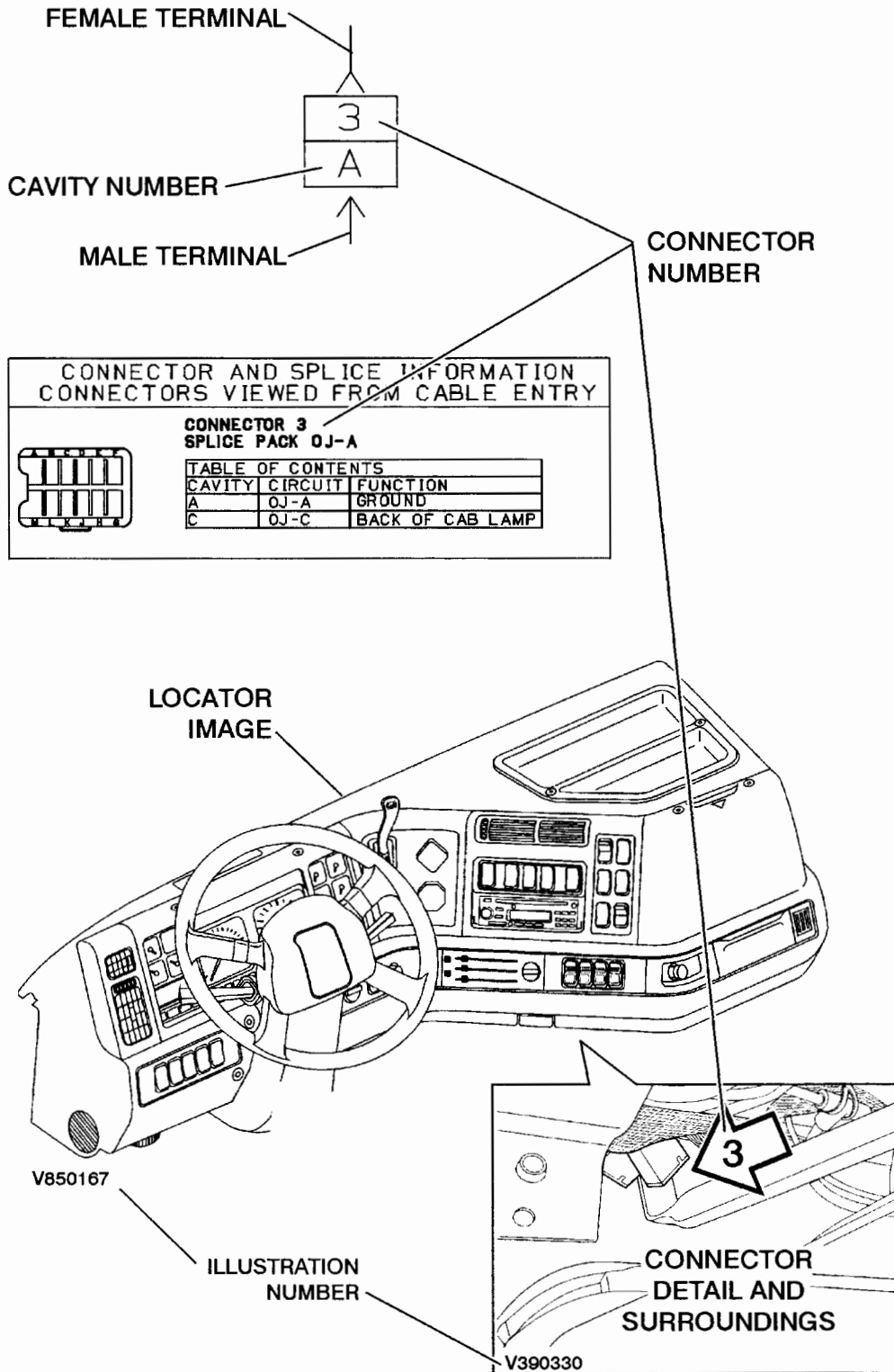
# Design and Function

## Connector Locations

The VN Series set of electrical schematics shows details on connectors used in the electrical system. The schematic also includes an illustration of each connector's location on the vehicle.

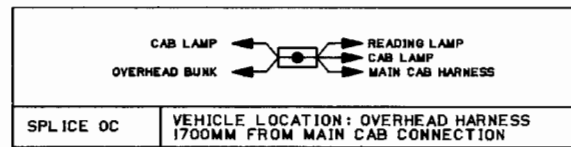
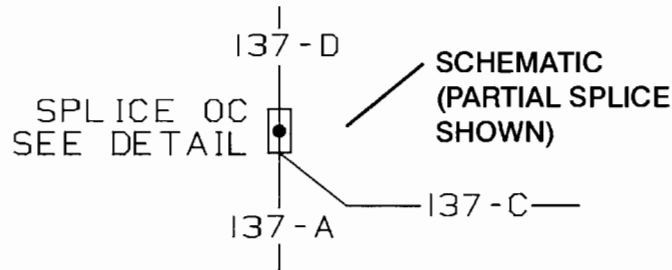
When referring to schematics that include all variants, pay close attention to the connector locations. Each illustration will be labeled according to the respective variant.

**Note:** All connector end-views show the wire insertion side.



## Splice Details

Circuit splices can be represented in two ways.

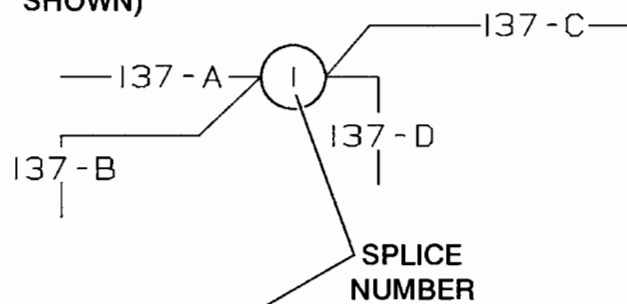


SPLICE DETAIL  
 (ENTIRE SPLICE SHOWN)

W3003499

Earlier schematics only show a partial splice in the circuit diagram. Only the wires pertaining to the schematic are shown. However, a detailed view of the entire splice is available, in a key located below or to the right of the circuit diagram.

SCHEMATIC  
 (ENTIRE SPLICE SHOWN)



SPLICE LOCATION CHART		
SPLICE	HARNESS	LOCATION
1	LAMP HARNESS	MAIN TRUNK
2	LAMP HARNESS	MAIN TRUNK

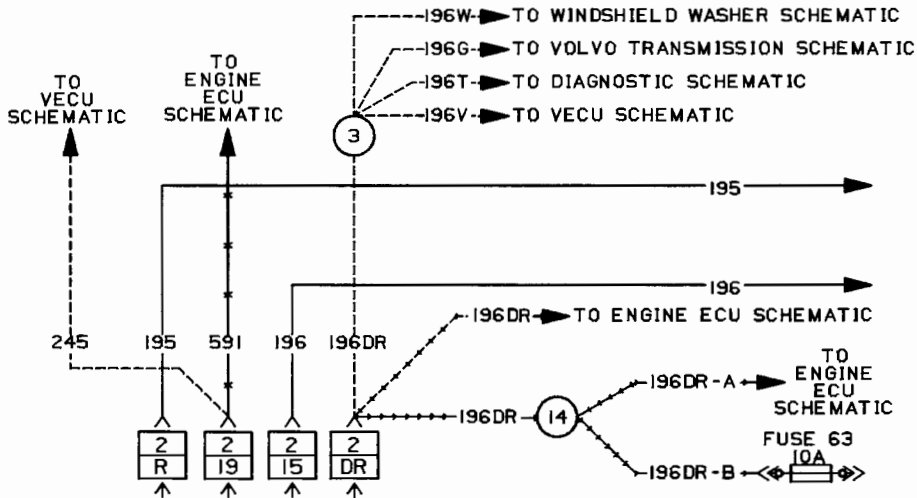
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In later schematics, an entire splice is represented in the circuit diagram. In this case, no splice detail is necessary. Instead, a splice location chart is provided, where each splice is represented by a number.

## Variant Information

Schematics printed in October 1998 and later will depict all variants available for a certain component. For example, the Vehicle Starting and Charging Schematic will show all engine variants available for the VN Series. Before this print date, separate circuit schematics were printed for each variant offered.

When referring to schematics that include all variants, be aware of the variants shown, their locations on the schematic, and how they are depicted. Often, the variant portions for these schematics are blocked off and labeled. Some schematics indicate variants by different line styles. See the example illustration.

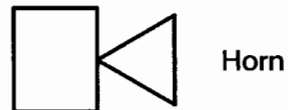
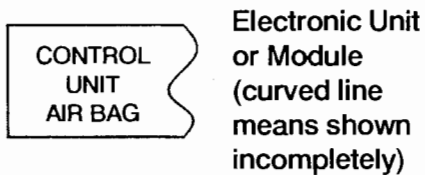
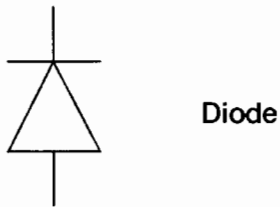
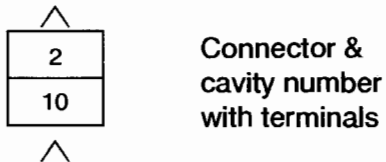
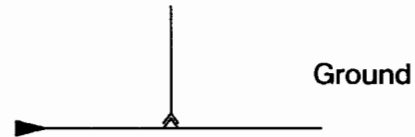
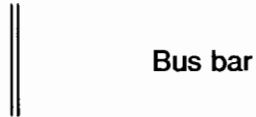
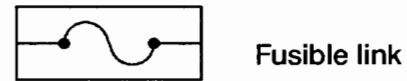
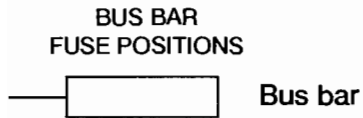
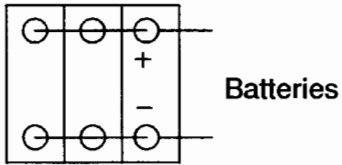
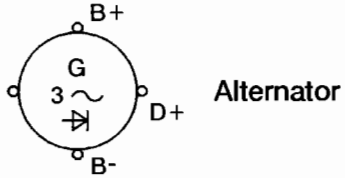
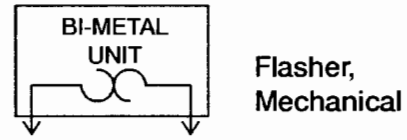
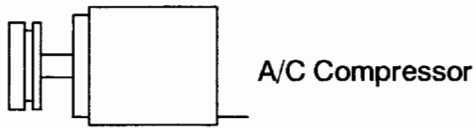


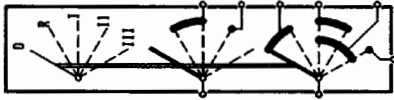
- |           |                                     |
|-----------|-------------------------------------|
| -----     | DENOTES VOLVO ENGINE ONLY           |
| - - - - - | DENOTES VENDOR ENGINE ONLY          |
| —*—       | DENOTES OPT. IDLE ENGINE ONLY       |
| -----     | DENOTES VENDOR ENGINE W/O AUTOSHIFT |
| -----     | DENOTES VENDOR ENGINE W/ AUTOSHIFT  |

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**Note:** Some schematics differentiate variants by line styles. In the example illustration, each engine is indicated by a different line style.

## Symbol List





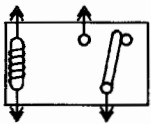
Ignition switch



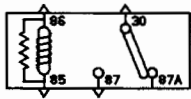
Lamp



Motor



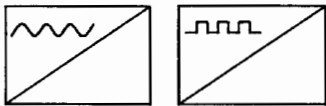
Power Relay



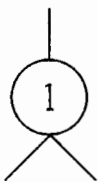
Relay



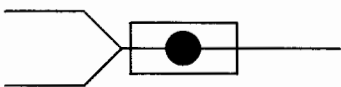
Resistor  
variable



Sensors



Splice  
(2 to 1 splice shown)



Splice  
(2 to 1 splice shown)