

# Service Manual Trucks

Group 37

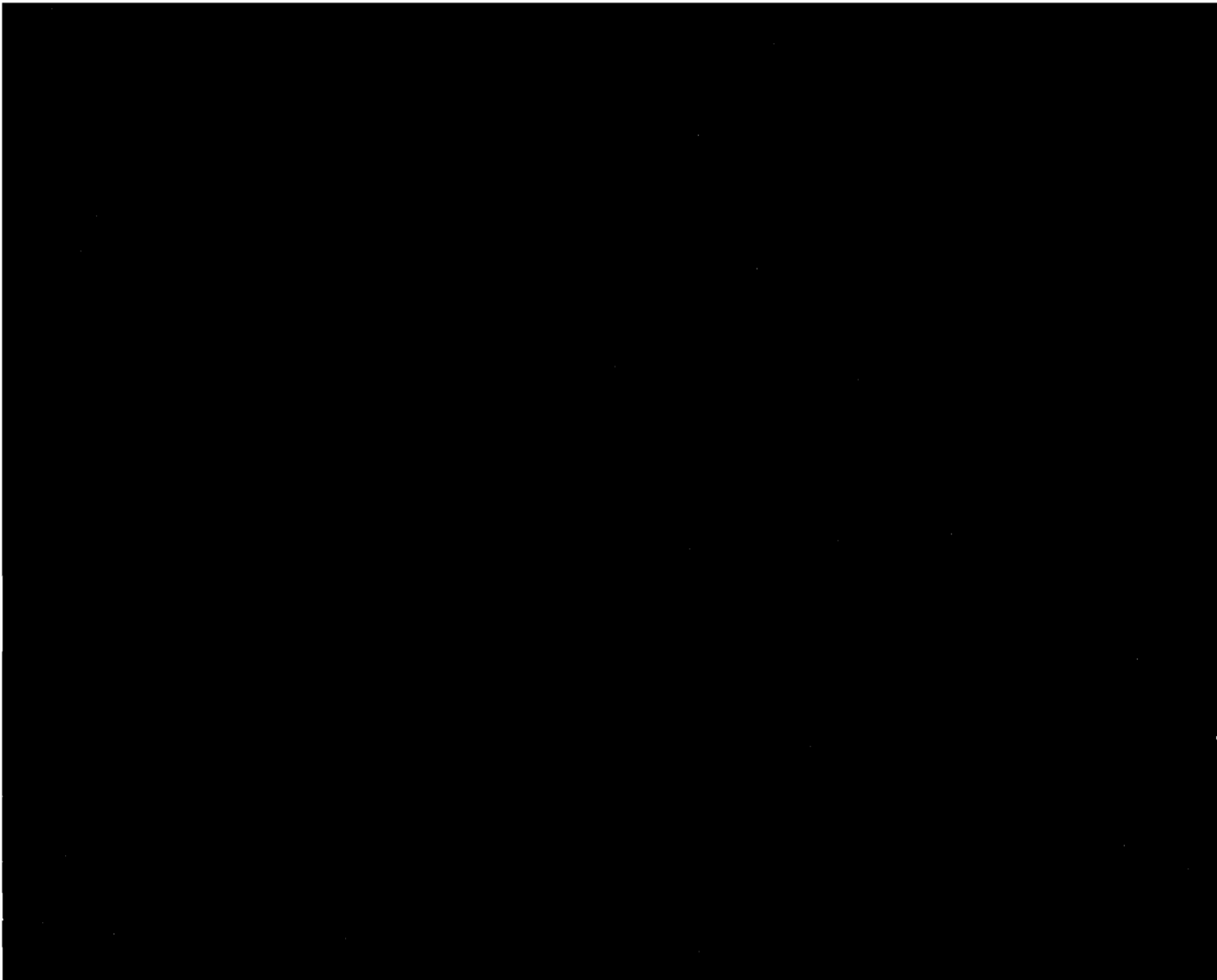
Electrical Schematic:

Exhaust Brake,

**VOLVO D7C**

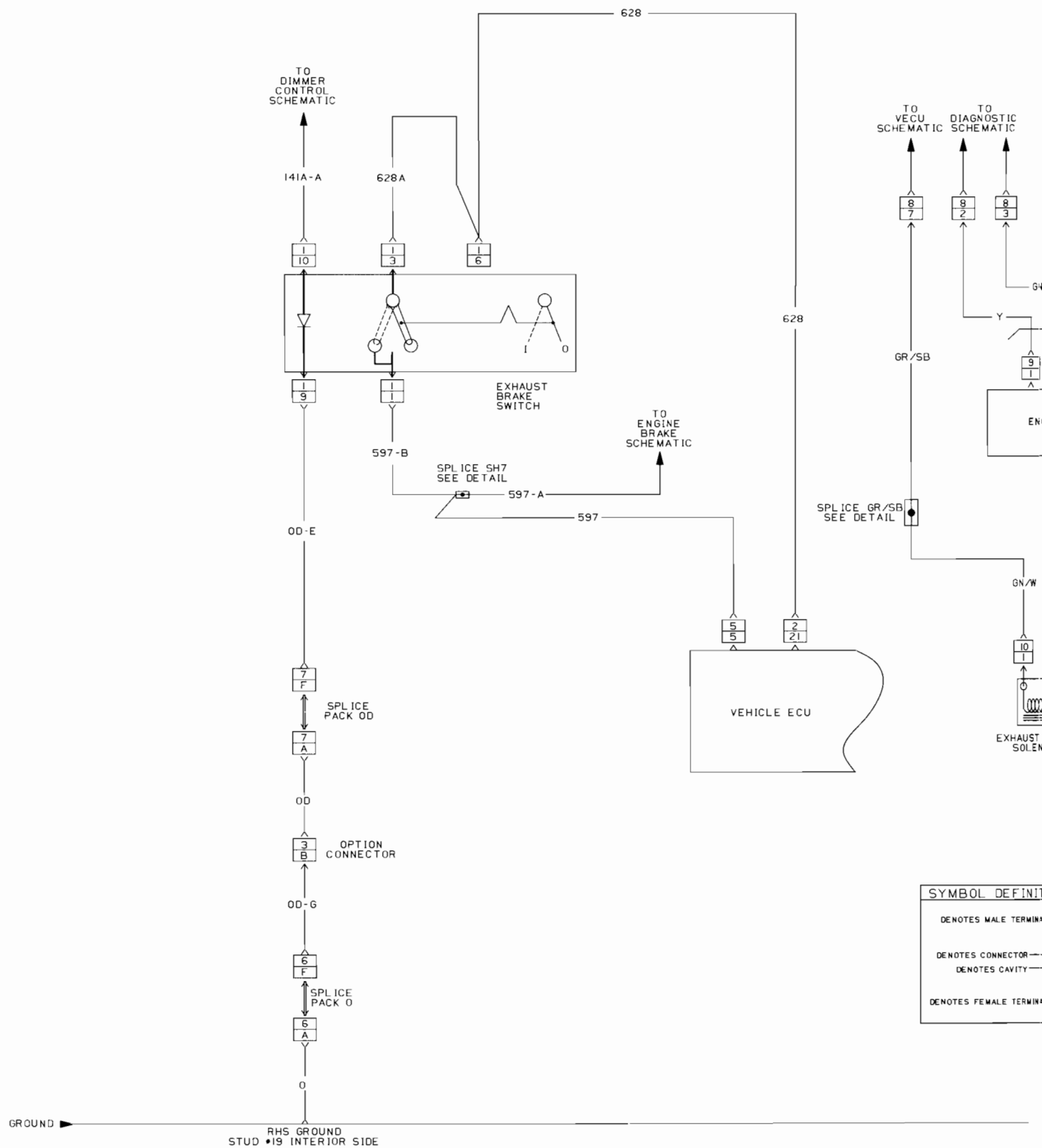
**VNL, VNM**

From Build Date 8.98

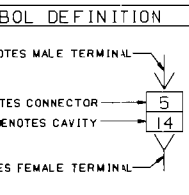
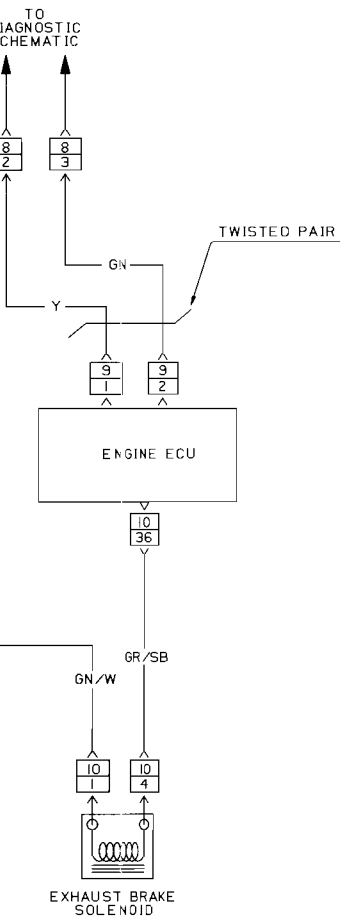


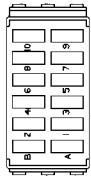
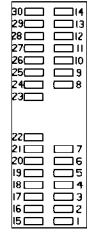
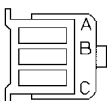
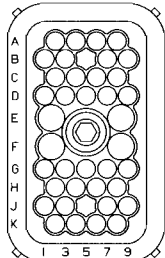
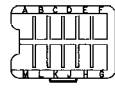
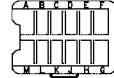
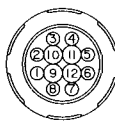
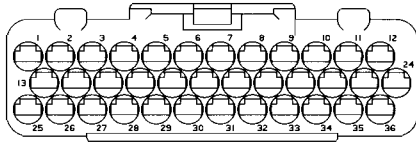
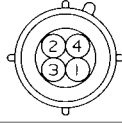
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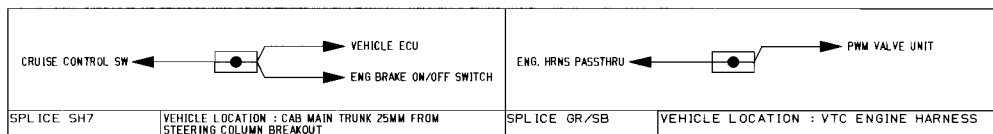
**VOLVO**



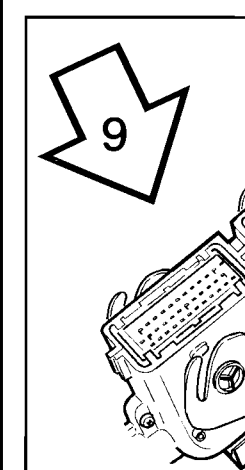
Exhaust Brake, VOLVO D7C - VNL, VNM



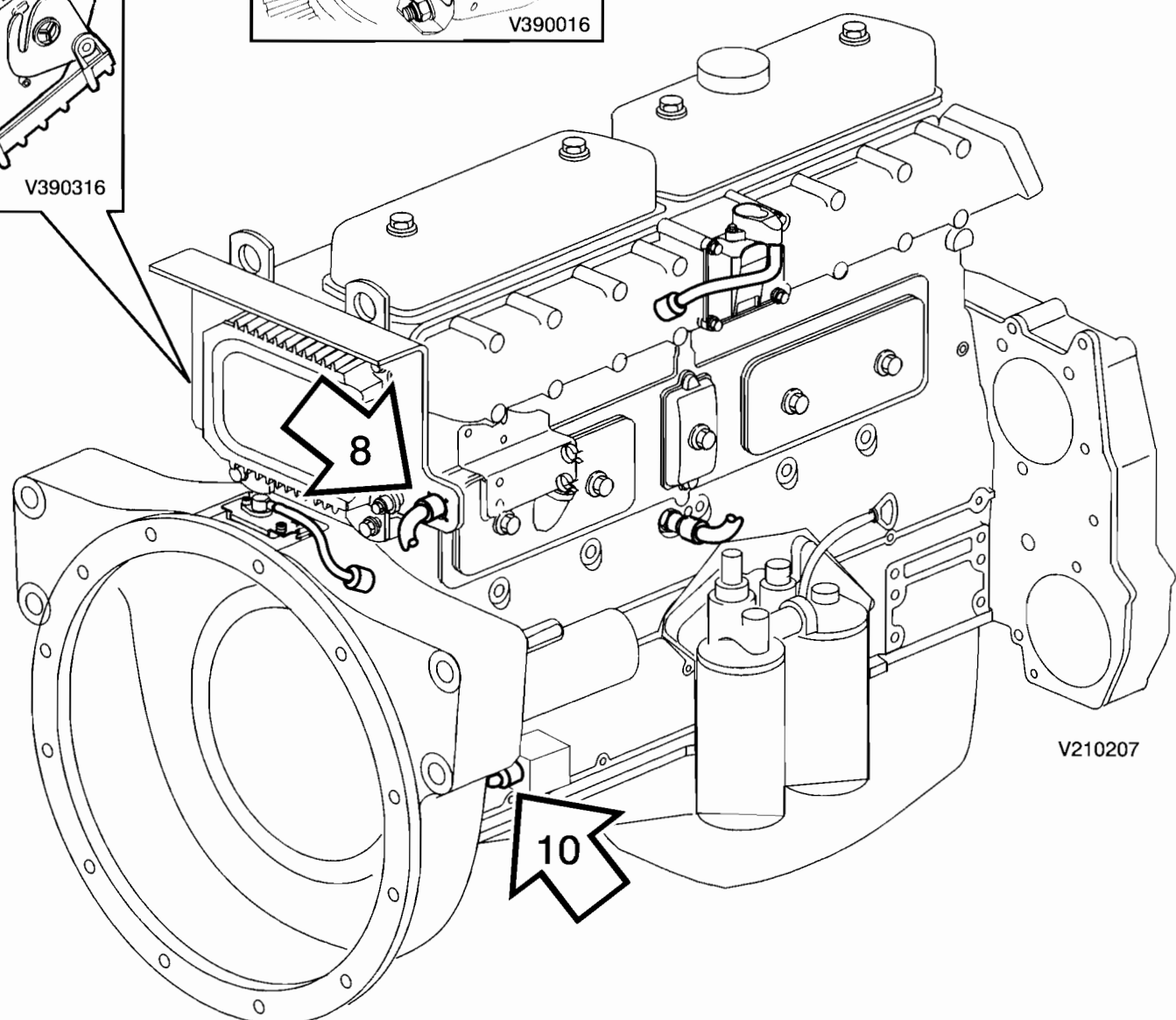
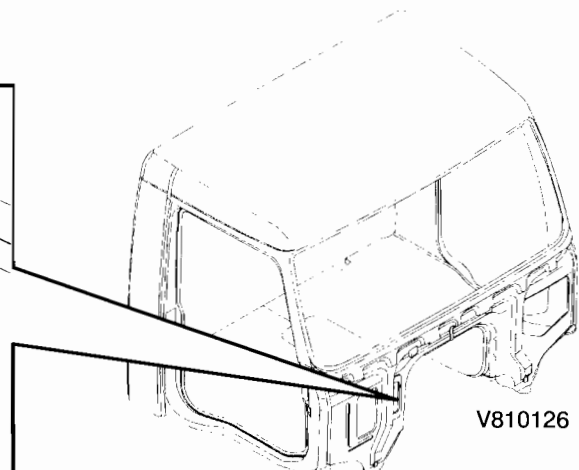
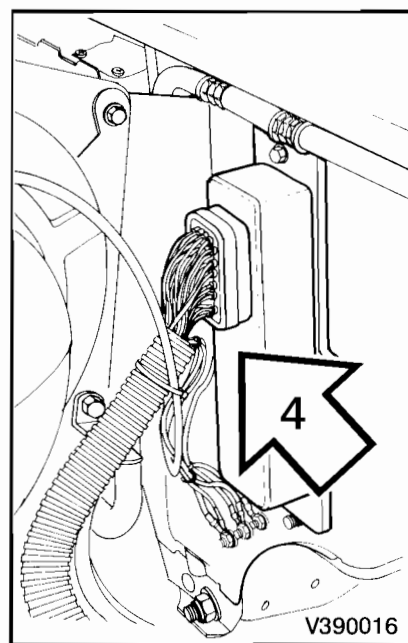
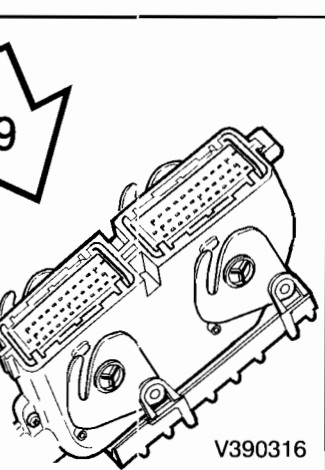
| CONNECTOR AND SPLICE INFORMATION<br>CONNECTORS VIEWED FROM CABLE ENTRY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |                      |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------|--------|---------|----------|----|-------|----------------------|----|-------|--------------------|----|----------|---------------------|---|------|--------|----|--------|-------------------|
|  <b>CONNECTOR 1<br/>EXHAUST BRAKE SWITCH</b><br><table border="1"> <thead> <tr> <th>CAVITY</th><th>CIRCUIT</th><th>FUNCTION</th></tr> </thead> <tbody> <tr><td>1</td><td>597-B</td><td>ON/OFF SWITCH FEED</td></tr> <tr><td>3</td><td>628A</td><td>EXHAUST BRAKE FEED</td></tr> <tr><td>6</td><td>628/628A</td><td>EXHAUST BRAKE FEED</td></tr> <tr><td>9</td><td>OD-E</td><td>GROUND</td></tr> <tr><td>10</td><td>141A-A</td><td>DASH ILLUMINATION</td></tr> </tbody> </table> |          |                      | CAVITY | CIRCUIT | FUNCTION | 1  | 597-B | ON/OFF SWITCH FEED   | 3  | 628A  | EXHAUST BRAKE FEED | 6  | 628/628A | EXHAUST BRAKE FEED  | 9 | OD-E | GROUND | 10 | 141A-A | DASH ILLUMINATION |
| CAVITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CIRCUIT  | FUNCTION             |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 597-B    | ON/OFF SWITCH FEED   |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 628A     | EXHAUST BRAKE FEED   |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 628/628A | EXHAUST BRAKE FEED   |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | OD-E     | GROUND               |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 141A-A   | DASH ILLUMINATION    |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
|  <b>CONNECTOR 2<br/>VEHICLE ELECTRONIC CONTROL UNIT (VECU) CONNECTOR A</b><br><table border="1"> <thead> <tr> <th>CAVITY</th><th>CIRCUIT</th><th>FUNCTION</th></tr> </thead> <tbody> <tr><td>21</td><td>628</td><td>EXHAUST BRAKE FEED</td></tr> <tr><td>28</td><td>772</td><td>TO ABS</td></tr> </tbody> </table>                                                                                                                                                              |          |                      | CAVITY | CIRCUIT | FUNCTION | 21 | 628   | EXHAUST BRAKE FEED   | 28 | 772   | TO ABS             |    |          |                     |   |      |        |    |        |                   |
| CAVITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CIRCUIT  | FUNCTION             |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 628      | EXHAUST BRAKE FEED   |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 28                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 772      | TO ABS               |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
|  <b>CONNECTOR 3<br/>ENGINE BRAKE INTERRUPT RELAY R2</b><br><table border="1"> <thead> <tr> <th>CAVITY</th><th>CIRCUIT</th><th>FUNCTION</th></tr> </thead> <tbody> <tr><td>B</td><td>OD</td><td>GROUND</td></tr> </tbody> </table>                                                                                                                                                                                                                                               |          |                      | CAVITY | CIRCUIT | FUNCTION | B  | OD    | GROUND               |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| CAVITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CIRCUIT  | FUNCTION             |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | OD       | GROUND               |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
|  <b>CONNECTOR 4<br/>CHASSIS HARNESS PASS THROUGH</b><br><table border="1"> <thead> <tr> <th>CAVITY</th><th>CIRCUIT</th><th>FUNCTION</th></tr> </thead> <tbody> <tr><td>D1</td><td>772</td><td>ABS INPUT</td></tr> </tbody> </table>                                                                                                                                                                                                                                            |          |                      | CAVITY | CIRCUIT | FUNCTION | D1 | 772   | ABS INPUT            |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| CAVITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CIRCUIT  | FUNCTION             |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| D1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 772      | ABS INPUT            |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
|  <b>CONNECTOR 5<br/>VEHICLE ELECTRONIC CONTROL UNIT (VECU) CONNECTOR B</b><br><table border="1"> <thead> <tr> <th>CAVITY</th><th>CIRCUIT</th><th>FUNCTION</th></tr> </thead> <tbody> <tr><td>5</td><td>597</td><td>BRAKE PRESSURE INPUT</td></tr> </tbody> </table>                                                                                                                                                                                                           |          |                      | CAVITY | CIRCUIT | FUNCTION | 5  | 597   | BRAKE PRESSURE INPUT |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| CAVITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CIRCUIT  | FUNCTION             |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 597      | BRAKE PRESSURE INPUT |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
|  <b>CONNECTOR 6<br/>SPLICE PACK 0</b><br><table border="1"> <thead> <tr> <th>CAVITY</th><th>CIRCUIT</th><th>FUNCTION</th></tr> </thead> <tbody> <tr><td>A</td><td>0</td><td>GROUND</td></tr> <tr><td>F</td><td>OD-G</td><td>GROUND</td></tr> </tbody> </table>                                                                                                                                                                                                                  |          |                      | CAVITY | CIRCUIT | FUNCTION | A  | 0     | GROUND               | F  | OD-G  | GROUND             |    |          |                     |   |      |        |    |        |                   |
| CAVITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CIRCUIT  | FUNCTION             |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0        | GROUND               |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | OD-G     | GROUND               |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
|  <b>CONNECTOR 7<br/>SPLICE PACK 0D</b><br><table border="1"> <thead> <tr> <th>CAVITY</th><th>CIRCUIT</th><th>FUNCTION</th></tr> </thead> <tbody> <tr><td>A</td><td>OD</td><td>GROUND</td></tr> <tr><td>F</td><td>OD-E</td><td>GROUND</td></tr> </tbody> </table>                                                                                                                                                                                                                |          |                      | CAVITY | CIRCUIT | FUNCTION | A  | OD    | GROUND               | F  | OD-E  | GROUND             |    |          |                     |   |      |        |    |        |                   |
| CAVITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CIRCUIT  | FUNCTION             |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | OD       | GROUND               |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | OD-E     | GROUND               |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
|  <b>CONNECTOR 8<br/>ENGINE HARNESS CONNECTOR</b><br><table border="1"> <thead> <tr> <th>CAVITY</th><th>CIRCUIT</th><th>FUNCTION</th></tr> </thead> <tbody> <tr><td>2</td><td>Y</td><td>J1939 CAN-H</td></tr> <tr><td>3</td><td>GN</td><td>J1939 CAN-L</td></tr> <tr><td>7</td><td>GR/SB</td><td>EMS "B" SUPPLY +12V</td></tr> </tbody> </table>                                                                                                                                 |          |                      | CAVITY | CIRCUIT | FUNCTION | 2  | Y     | J1939 CAN-H          | 3  | GN    | J1939 CAN-L        | 7  | GR/SB    | EMS "B" SUPPLY +12V |   |      |        |    |        |                   |
| CAVITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CIRCUIT  | FUNCTION             |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Y        | J1939 CAN-H          |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | GN       | J1939 CAN-L          |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | GR/SB    | EMS "B" SUPPLY +12V  |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
|  <b>CONNECTOR 9<br/>ENGINE HARNESS CONNECTOR</b><br><table border="1"> <thead> <tr> <th>CAVITY</th><th>CIRCUIT</th><th>FUNCTION</th></tr> </thead> <tbody> <tr><td>1</td><td>Y</td><td>J1939 CAN-H</td></tr> <tr><td>2</td><td>GN</td><td>J1939 CAN-L</td></tr> <tr><td>36</td><td>GR/SB</td><td>EPGI RETURN</td></tr> </tbody> </table>                                                                                                                                     |          |                      | CAVITY | CIRCUIT | FUNCTION | 1  | Y     | J1939 CAN-H          | 2  | GN    | J1939 CAN-L        | 36 | GR/SB    | EPGI RETURN         |   |      |        |    |        |                   |
| CAVITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CIRCUIT  | FUNCTION             |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Y        | J1939 CAN-H          |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | GN       | J1939 CAN-L          |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 36                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | GR/SB    | EPGI RETURN          |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
|  <b>CONNECTOR 10<br/>ENGINE HARNESS CONNECTOR</b><br><table border="1"> <thead> <tr> <th>CAVITY</th><th>CIRCUIT</th><th>FUNCTION</th></tr> </thead> <tbody> <tr><td>1</td><td>GN/W</td><td>+12 VOLT SUPPLY</td></tr> <tr><td>4</td><td>GR/SB</td><td>EPGI RETURN</td></tr> </tbody> </table>                                                                                                                                                                                 |          |                      | CAVITY | CIRCUIT | FUNCTION | 1  | GN/W  | +12 VOLT SUPPLY      | 4  | GR/SB | EPGI RETURN        |    |          |                     |   |      |        |    |        |                   |
| CAVITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CIRCUIT  | FUNCTION             |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | GN/W     | +12 VOLT SUPPLY      |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | GR/SB    | EPGI RETURN          |        |         |          |    |       |                      |    |       |                    |    |          |                     |   |      |        |    |        |                   |

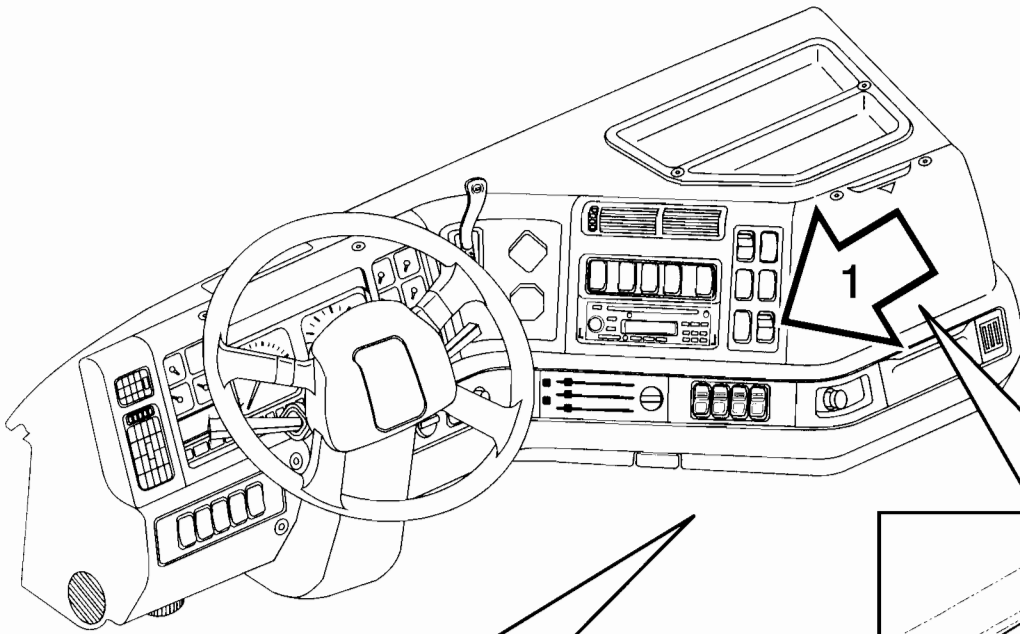


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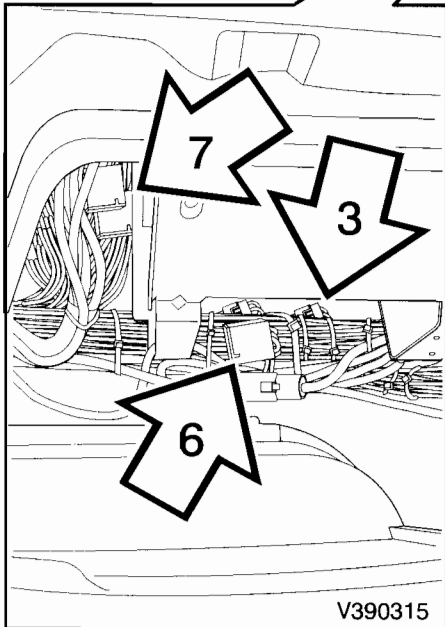


| CHANGE HISTORY |
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| DESCRIPTION    |
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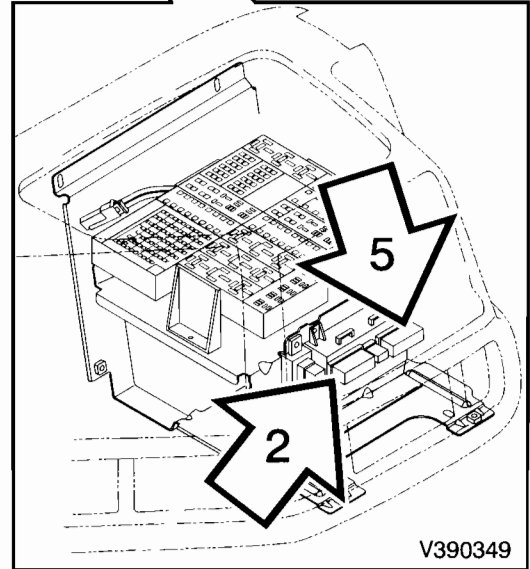




V850167



V390315



V390349