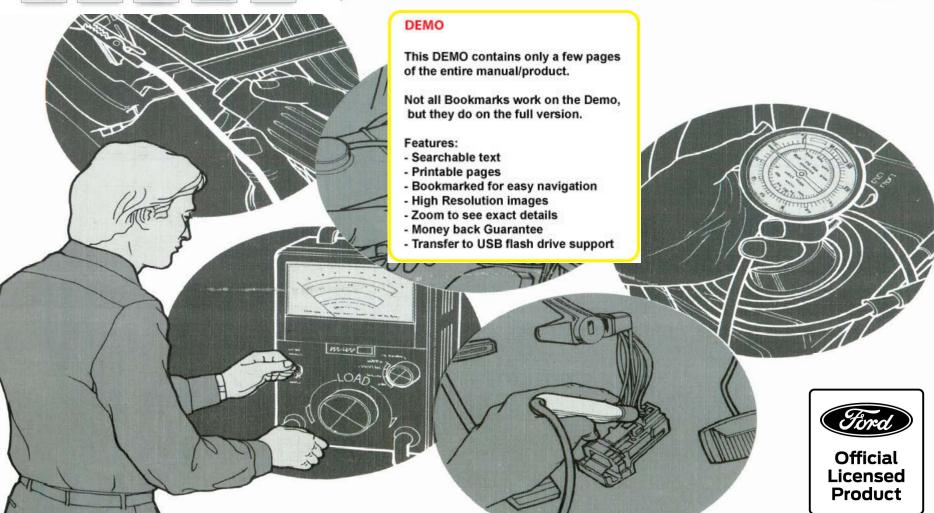
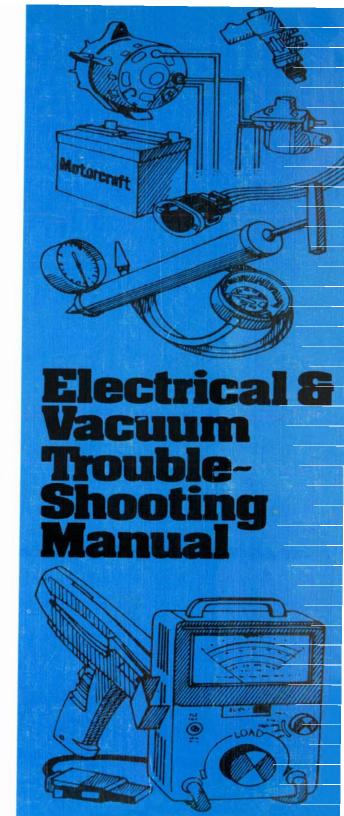


1988 MUSTANG



License #84356800





All Rights Reserved. No part of this book may be used or reproduced in any manner whatsoever without written permission of Forel Publishing Company, LLC. For information write to Forel Publishing Company, LLC, Woodbridge, VA 22192

1988 Mustang Electrical & Vacuum Trouble-Shooting Manual (EVTM) EAN: 978-1-60371-399-3 ISBN: 1-60371-399-9

Forel Publishing Company, LLC Woodbridge, VA 22192



This publication contains material that is reproduced and distributed under a license from Ford Motor Company. No further reproduction or distribution of the Ford Motor Company material is allowed without the express written permission of Ford Motor Company.

Note from the Publisher

This product was created from the original Ford Motor Company's publication. Every effort has been made to use the original scanned images, however, due to the condition of the material; some pages have been modified to remove imperfections.

Disclaimer

Although every effort was made to ensure the accuracy of this book, no representations or warranties of any kind are made concerning the accuracy, completeness or suitability of the information, either expressed or implied. As a result, the information contained within this book should be used as general information only. The author and Forel Publishing Company, LLC shall have neither liability nor responsibility to any person or entity with respect to any loss or damage caused, or alleged to be caused, directly or indirectly by the information contained in this book. Further, the publisher and author are not engaged in rendering legal or other professional services. If legal, mechanical, electrical, or other expert assistance is required, the services of a competent professional should be sought.

ELECTRICAL AND VACUUM TROUBLESHOOTING MANUAL

FPS — 12121 - 88

ORDER INFORMATION

Information on how to order additional copies of this publication or other Ford publications, may be obtained by writing to Helm Incorporated at the address shown below. Other publications available include:

- Shop Manuals
- Service Specification Books
- Car/Truck Wiring Diagram Books
- Engine/Emissions Diagnosis Manuals

Helm Incorporated P.O. Box 07150 Detroit, Michigan 48207

TABLE OF CONTENTS How to Find the Electrical Problem2 Symbols (Electrical)4 How to Find the Vacuum Problem 103 Instrument Panel Wiring117 **Component Testing** A/C-Heater Function Control124 I/P Dimmer Switch119 Ignition Switch120 Interval Wiper/Washer Switch122 Main Light Switch119 INDEX A/C-Heater (Vacuum)116 Cigar Lighter81 Convertible Top92 Liftgate/Decklid Release90 Electronic Engine Control (EEC)26 Gauges43 Ignition Key Warning78

| Lamps: | |
|---------------------------------|-------|
| Backup | 59 |
| Cargo | 62 |
| Courtesy | 62 |
| Dome | 63 |
| Exterior | |
| Fog Lamps | 49 |
| Glove Compartment | 62 |
| Hazard | 54 |
| Headlamps | |
| Instrument Illumination | 60 |
| License | 52 |
| Luggage Compartment | |
| Map | |
| Marker | |
| Park (Front) | |
| | |
| Rear Park (Tail) | 51 |
| Turn | |
| Underhood | |
| Vanity Mirror | 63 |
| Vanity Mirror | 03 |
| _umbar Seats | 76 |
| Main Light Switch | /0 |
| Power Distribution | 10 |
| Power Door Locks | 12 |
| Power Outside Mirrors | 00 |
| Power Windows (2-Door & 3-Door) | /4 |
| Power Windows (2-Door & 3-Door) | 70 |
| Power Windows (Convertible) | .0/1 |
| Radio (Stereo) | 94 |
| | |
| Radio (Stereo/Tape) | |
| Rear Window Defrost | 86 |
| Seatbelt Warning | 78 |
| Speed Control | . 104 |
| Start | |
| Acuum Distribution | . 101 |
| | |
| Wiper/Washer (Interval) | 83 |
| | |

IMPORTANT SAFETY NOTICE

Appropriate service methods and proper repair procedures are essential for the safe, reliable operation of all motor vehicles as well as the personal safety of the individual doing the work. This Manual provides general directions for accomplishing service and repair work with tested, effective techniques. Following them will help assure reliability.

There are numerous variations in procedures, techniques, tools, and parts for servicing vehicles, as well as in the skill of the individual doing the work. This Manual cannot possibly anticipate all such variations and provide advice or cautions as to each. Accordingly, anyone who departs from the instructions provided in this Manual must first establish that he compromises neither his personal safety nor the vehicle integrity by his choice of methods, tools or parts.

This manual contains the following diagnostic information:

- Electrical and Vacuum Schematics
- Component Location Indexes and Views
- Troubleshooting Hints
- Descriptions of Circuit Operation
- · Component Testing

The vehicle's entire electrical system is broken down into individual systems. There are also sections for the vehicle's ground and power distribution circuitry. Each system section begins with a wiring schematic. The Schematics should always be your starting point in using this manual. These schematics show the paths of electrical current during proper circuit operation. The source of voltage (circuit breaker or fuse) is shown at the top of the page. All wire, connectors, splices, switches, and motors are shown in the flow of current to ground at the bottom of the page. Connector end views of switches and other components are shown to help with bench testing. Each circuit component is named (underlined titles). Wire and connector colors are listed (standard Ford color abbreviations are used). These abbreviations are:

COLOR ABBREVIATIONS

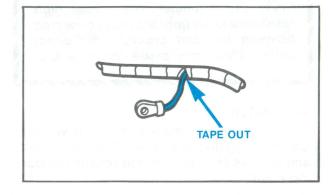
| BL | Blue | N | Natura |
|----|--------------------|----|--------|
| BK | Black | 0 | Orange |
| BR | Brown | PK | Pink |
| DB | Dark Blue | R | Red |
| DG | Dark Green | P | Purple |
| GR | Green | T | Tan |
| GY | Gray | W | White |
| LB | Light Blue | Y | Yellow |
| LG | Light Green | | |

Where two colors are shown for a wire, the first color is the basic color of the wire. The second color is the stripe marking.

The **Component Location** section of each system helps you locate the circuit's components in the vehicle. A brief statement of the location is given as well as a reference to an illustrative figure in the manual. There is also a full listing of connector, ground, and splice locations in the **Location Index** in the back of the manual.

OTHER ABBREVIATIONS

T/O (Tape Out) The point at which a harness branches to feed a component.



The **Troubleshooting Hints** offer shortcuts or tests that help you determine the cause of an electrical problem. They are not intended to be a rigid procedure for solving an electrical situation. Rather, Troubleshooting Hints represent a common-sense approach that is based on an understanding of the circuit.

A description of **How the Circuit Works** is written to help you understand the operation of the circuit as a whole. Emphasis is placed on how the components and circuitry interact in a properly working system.

A **Component Testing** section provides procedures to determine whether a component is good or bad.

Notes, Cautions, and Warnings appear in boxes on text pages and contain important car and mechanic safety information.

Notes give added information to help complete a particular procedure. Cautions are included to prevent making an error that could damage the vehicle. Warnings highlight areas where carelessness can cause personal injury. The following list contains some general Warnings that should be followed when working on a vehicle.

- Always wear safety glasses for eye protection.
- Use safety stands whenever a procedure requires being under a vehicle.
- Be sure that the **Ignition Switch** is always in the OFF position, unless otherwise required by the procedure.
- Set the parking brake when working on any vehicle. An automatic transmission should be in PARK. A manual transmission should be in NEUTRAL.
- Operate the engine only in a well-ventilated area to avoid the danger of carbon monoxide.
- Keep away from moving parts when the engine is running, especially the fan and belts.
- To prevent serious burns, avoid contact with hot metal parts such as the radiator, exhaust manifold, tail pipe, catalytic converter, and muffler.
- Do not allow flame or sparks near the battery. Gases are always present in and around the battery cell. An explosion could occur.
- Do not smoke.
- To avoid injury, always remove rings, watches, loose hanging jewelry, and loose clothing.

TROUBLESHOOTING STEPS

These six steps present an orderly method of troubleshooting:

Step 1. Verify the problem.

- Operate the complete system and see all symptoms for yourself in order to:
 - —check the accuracy and completeness of the customer's complaint.
 - learn more that might give a clue to the nature and location of the problem.

Step 2. Narrow the problem.

- Using the EVTM, narrow down the possible causes and locations of the problem in order to more quickly find the exact cause.
- Read the description of How the Circuit Works and study the wiring diagram. You should then know enough about the circuit operation to figure out where to check for this trouble.

Step 3. Test the cause.

- Use electrical test procedures to find the specific cause of the symptoms.
- Troubleshooting Hints will give some helpful ideas.
- The Component Location charts and the pictures will help you find components, grounds, and connectors.

Step 4. Verify the cause.

 Confirm the fact that you have found the correct cause through operating the parts of the circuit you think are good.

Step 5. Make the repair.

• Repair or replace the faulty component.

Step 6. Verify the repair.

 Operate the system as in Step 1 and check that your repair has removed all symptoms, and also has not caused any new symptoms.

Some engine circuits may need special test equipment and special procedures. See the *Shop Manual* and other service books for

details. You will find the circuits in this manual to be helpful with these special tests.

TROUBLESHOOTING TOOLS

JUMPER WIRE

This is a test lead used to connect two points of a circuit. A **Jumper Wire** can complete a circuit by bypassing an open.

Uses: Bypassing Switches or Open Circuits

WARNING

Never use a jumper wire across high resistance loads (motors, etc.) connected between hot and ground. This direct battery short may cause injury or fire.

VOLTMETER

A DC **Voltmeter** measures circuit voltage. Connect negative (- or black) lead to ground, and positive (+ or red) lead to voltage measuring point.

OHMMETER

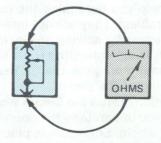


Figure 1 — Resistance Check

An **Ohmmeter** shows the resistance between two connected points (Figure 1).

TEST LAMP

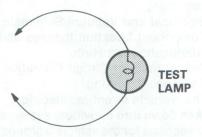


Figure 2-Test Lamp

A **Test Lamp** is a 12-volt bulb with two test leads (Figure 2).

Uses: Voltage Check. Short Check

SELF-POWERED TEST LAMP

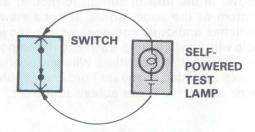


Figure 3-Continuity Check

The **Self-Powered Test Lamp** is a bulb, battery and set of test leads wired in series (Figure 3). When connected to two points of a continuous circuit, the bulb glows.

Uses: Continuity Check. Ground Check

CAUTION

When using a self-powered test lamp or ohmmeter, be sure power is off in circuit during testing. Hot circuits can cause equipment damage and false readings.

TROUBLESHOOTING CHECKS

SWITCH CIRCUIT CHECK

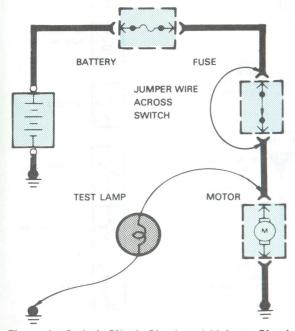


Figure 4-Switch Circuit Check and Voltage Check

In a bad circuit with a switch in series with the load, jumper the terminals of the switch to power the load. If jumping the terminals powers the circuit, the switch is bad (Figure 4).

CONTINUITY CHECK (Locating open circuits)

Connect one lead of **Self-Powered Test Lamp** or **Ohmmeter** to each end of circuit (Figure 3). Light will glow if circuit is closed. Switches and fuses can be checked in the same way.

VOLTAGE CHECK

Connect one lead of **Test Lamp** to a known good ground, or the negative (-) battery terminal. Test for voltage by touching the other lead to the test point. Bulb goes on when the test point has voltage (Figure 4).

SHORT CHECK (short to ground)

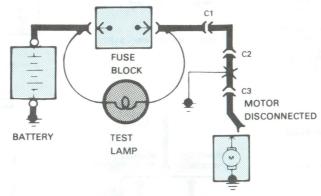


Figure 5 - Short Check

A fuse that repeatedly blows is usually caused by a short to ground. It's important to be able to locate such a short quickly (Figure 5).

- 1) Turn off everything powered through the fuse.
- 2) Disconnect other loads powered through the fuse:
 - Motors: disconnect motor connector.
 - Lamps: remove bulbs.
- 3) Turn **Ignition Switch** to RUN (if necessary) to power fuse.
- 4) Connect one **Test Lamp** lead to hot end of blown fuse. Connect other lead to ground. Bulb should glow showing power to fuse. (*This step is just a check to be sure you have power to the circuit.*)
- 5) Disconnect the **Test Lamp** lead from ground and reconnect it to the load side of the fuse.
 - If the Test Lamp is off, the short is in the disconnected equipment.
 - If the **Test Lamp** goes on, the short is in the wiring. You must find the short by disconnecting the circuit connectors one at a time until the **Test Lamp** goes out. For example: with a ground at X, the bulb goes out when C1 or C2 is disconnected, but stays on after disconnecting C3. This

means the ground is between C2 and C3.

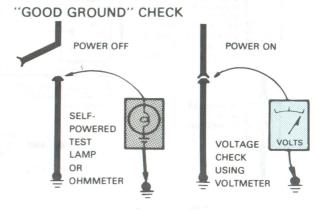


Figure 6-Grounds Checks

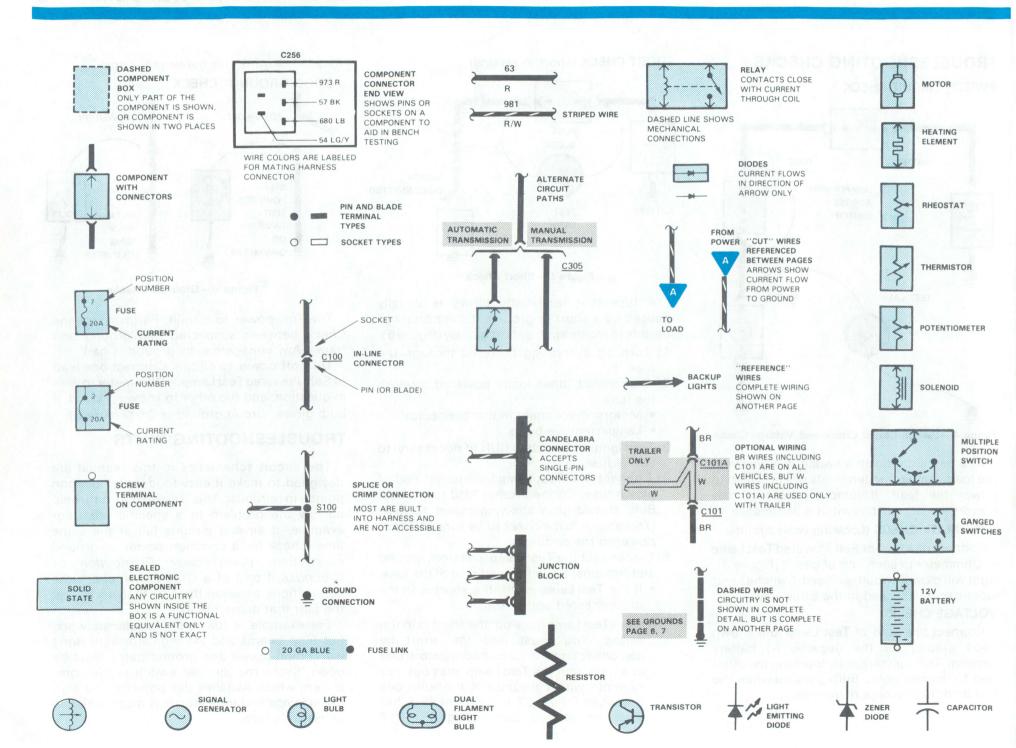
Turn on power to circuit. Perform Voltage Check between suspected bad ground and frame. Any voltage means ground is bad.

Turn off power to circuit. Connect one lead of Self-Powered Test Lampor Ohmmeter to wire in question, and the other to known ground. If bulb glows, circuit ground is OK (Figure 6).

TROUBLESHOOTING HINTS

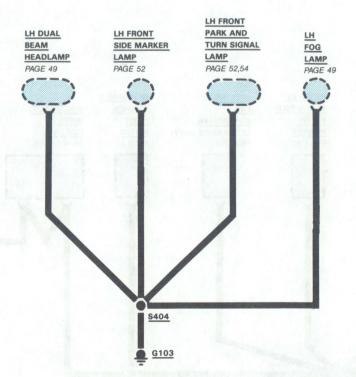
The circuit schematics in this manual are designed to make it easy to identify common points in circuits. This knowledge can help narrow the problem to a specific area. For example, if several circuits fail at the same time, check for a common power or ground connection. (See *Power Distribution* or *Grounds).* If part of a circuit fails, check the connections between the part that works and the part that doesn't work.

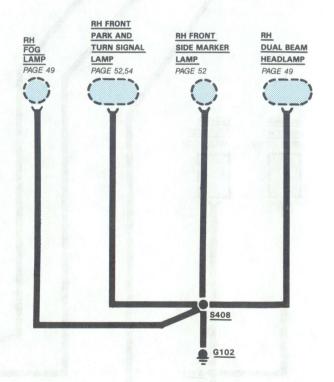
For example, if low beam headlamps work, but high beams and the indicator light don't work, then power and ground paths must be good. Since the dimmer switch is the component which switches this power to the high beam lamps and indicator, it is most likely the cause of failure.

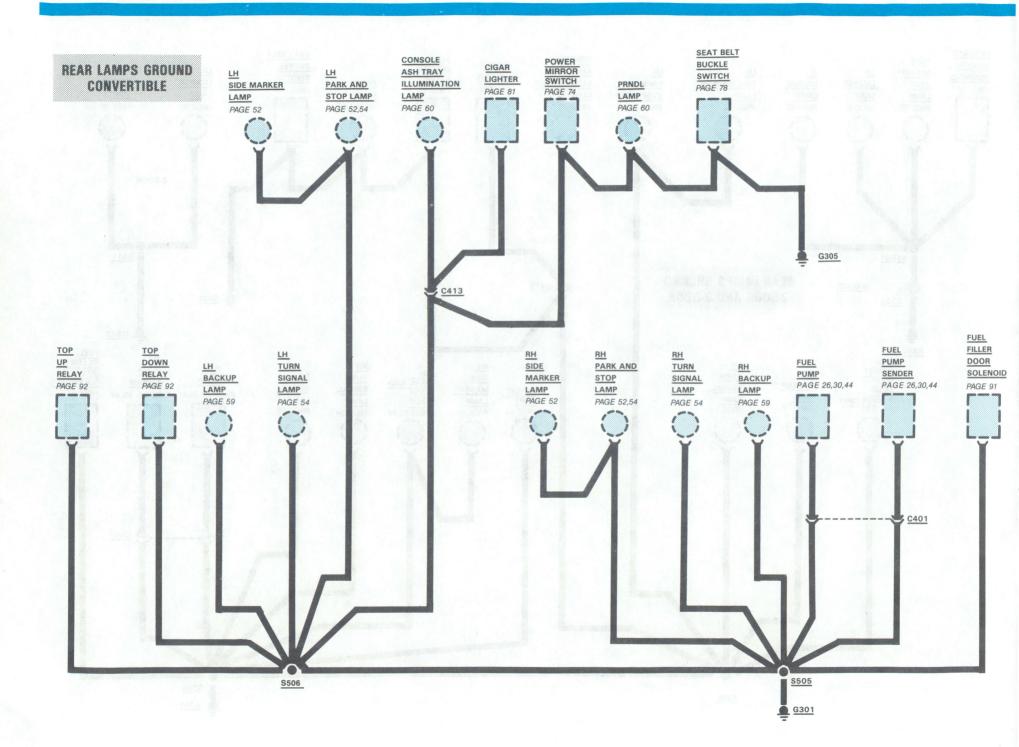


INSTRUMENT PANEL GROUND OIL DAY/NIGHT HAZARD LOW GLOVE COMPARTMENT MAIN ILLUMINATION FLUID INSTRUMENT WARNING INSTRUMENT HORN WARNING WARNING LIGHT CLUSTER CLUSTER SWITCH CHIME RELAY SWITCH MODULE LH INSTRUMENT LAMP SWITCH RELAY SWITCH A/C CONTROL PAGE 43 PAGE 43 PANEL COURTESY PAGE 81 PAGE 78 PAGE 60 PAGE 54 PAGE 45 PAGE 16 PAGE 44,45 PAGE 62 ILLUMINATION PAGE 62 PAGE 60 RH INSTRUMENT PANEL COURTESY 12 C247 LAMP PAGE 62 A/C REAR INTERVAL COOLING WINDSHIELD DUAL WINDSHIELD BRAKE WASHER WINDOW **SPEED** FAN WINDSHIELD DEFROST WARNING CONTROL **WIPER PUMP WIPER** BLOWER **BLOWER** CONTROLLER CONTROL RELAY **AMPLIFIER** MODULE (2.3L ENGINE ONLY) MOTOR MOTOR **SWITCH** RESISTORS **SWITCH** PAGE 83 PAGE 112 PAGE 83 PAGE 86 PAGE 107.109 PAGE 104 PAGE 83 PAGE 43 PAGE 107,109 S512 **S303 S302** G202 @ G100 G201

HEADLAMP GROUNDS







HOW THE CIRCUIT WORKS

The ground circuits shown here are complete, and connect several components together to screw terminal ground points. On other pages only parts of these circuits may be shown. Partial ground circuits are shown dashed on those pages.

All simple or component ground circuits are shown on the individual circuit pages, and are complete on those pages.

All wires are 57 BK unless otherwise noted.

COMPONENT LOCATION Page-**Figure** A/C Cooling Fan Controller Attached to I/P support Blower Resistors Under RH side of I/P Blower Switch **Dual Brake Warning** LH fender apron Behind center of I/P 80-1 Warning Chime Under RH tail lamp assembly Fuel Filler Door Solenoid... Fuel Pump Part of fuel sender assembly Fuel Pump Sender At fuel pump Interval Windshield Under LH side of I/P attached to shake brace Liftgate Release Part of liftgate latch assembly Solenoid Low Oil Warning Relay . . . On LH I/P shake brace On LH side of I/P left of steering Main Light Switch Rear Window Defrost LH side of I/P near fuse panel Control Relay Speed Control Amplifier . . Top Up And Top Down

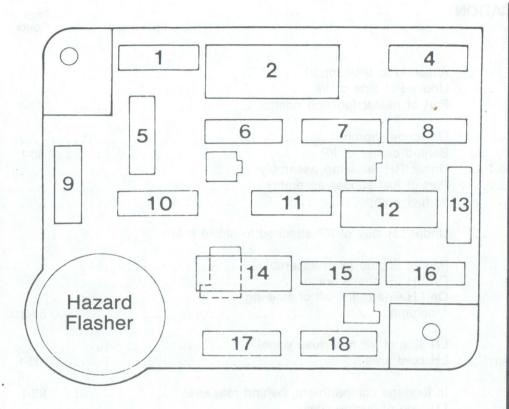
Refer to the **Location Index** in the back of the manual for connector, ground, and splice descriptions and locations.

Relays

Windshield Wiper Motor . .

In luggage compartment, behind rear seat 93-1

LH side of engine cowl



| Fuse Position | Amps | Circuits Protected |
|------------------|-----------|--|
| 1 | 15 | Stop/Hazard Lamps; Speed Control |
| 2 | 8.25 c.b. | Interval Wiper |
| 4 | 15 | Exterior Lamps; Instrument Illumination |
| 5 | 15 | Turn Lamps; Backup Lamps |
| 6 | 20 | Speed Control, Day/Night Illumination Relay; A/C; Decklid Release |
| 7 | nu-trans | (Not Used) |
| 8 | 15 | Courtesy Lamps; Dimmer Switch; Power Mirrors; Radio; Fuel Filler Door Release |
| 9 | 30 | Heater Blower ; A/C Blower |
| Material Bak | JiO Wout | |
| 10 | 20 | Headlamps; Low Oil Level Warning |
| 11 | 15 | Radio; Premium Sound; Graphic Equalizer |
| 12 | | (Not Used) |
| 13 | 5 | Instrument Illumination |
| 14 | 20 c.b. | Power Windows |
| 15 | 15 | Fog Lamps |
| 16 | 20 | Horn; Cigar Lighter |
| 17 | _ | (Not Used) |
| 18 | 15 | Seatbelt Buzzer; Warning Indicators; Low Coolant Switch; Low Fluid Monitor; Instrument Cluster |

| Fuse Value Amps | Color Code |
|-----------------------|---------------|
| 4 | Pink |
| 5 | Tan |
| 15 | Light Blue |
| 20 | Yellow |
| 25 | Natural |
| 30 | Light Green |

Power Distribution

The **Alternator** and **Battery** are connected together at the **Starter Relay** hot terminal. Other circuits originate at the **Starter Relay** hot terminal and are protected by fuse links. Low power circuits are also protected by fuses.

The Ignition Switch and Main Light Switch are powered at all times, as are Fuses 1, 4, 8, 10 and 16. The other fuses are powered through the Ignition Switch or the Main Light Switch.

Position 3 is not used, and is covered by Circuit Breaker 2.

REPLACEMENT OF FUSES/ CIRCUIT BREAKERS



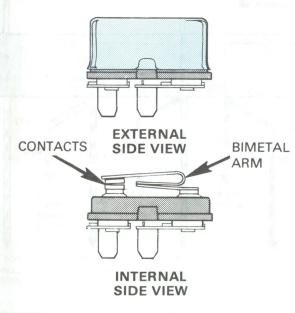


GOOD FUSE

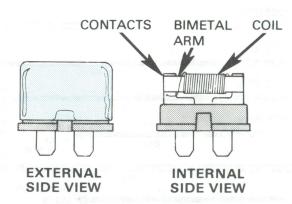
BLOWN FUSE

Fuses are mounted either in the **Fuse Panel** or in-line. They are identified by the numbered value in amperes, and by a color code. Some positions may have either a fuse with adapter or a circuit breaker. Be sure to replace a fuse or circuit breaker with the same kind of unit and with the same ampere rating. Remove fuses in order to check them.

CIRCUIT BREAKER OPERATION



Cycling Fuse Panel Type



Non-Cycling Fuse Panel Type

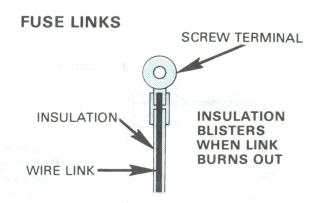


Cycling In-Line Type

Some circuits are protected by circuit breakers. (Abbreviated "c.b." in fuse chart.) They can be **Fuse Panel** mounted or in-line. Like fuses, they are rated in amperes.

Each circuit breaker conducts current through an arm made of two types of metal fastened together (bimetal arm). If the arm starts to carry too much current, it heats up. As one metal expands faster than the other the arm bends, opening the contacts. Current flow is broken. In the cycling type, the arm cools and straightens out. This closes the circuit again. This cycle repeats as long as the overcurrent exists, with power applied.

In the non-cycling type, there is also a coil wrapped around the bimetal arm. When an overcurrent exists and the contacts open, a small current passes through the coil. This current through the coil is not large enough to operate a load, but it does heat up both the coil and bimetal arm. This keeps the arm in the open position until power is removed.



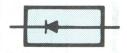
The fuse link is a short length of wire smaller in gage than the wire in the protected circuit. The wire is covered with a thick non-flammable insulation. An overload causes the link to heat and the insulation to blister. If the overload remains, the link will melt, causing an open circuit. The links are color coded for wire size as follows:

COLOR CODE

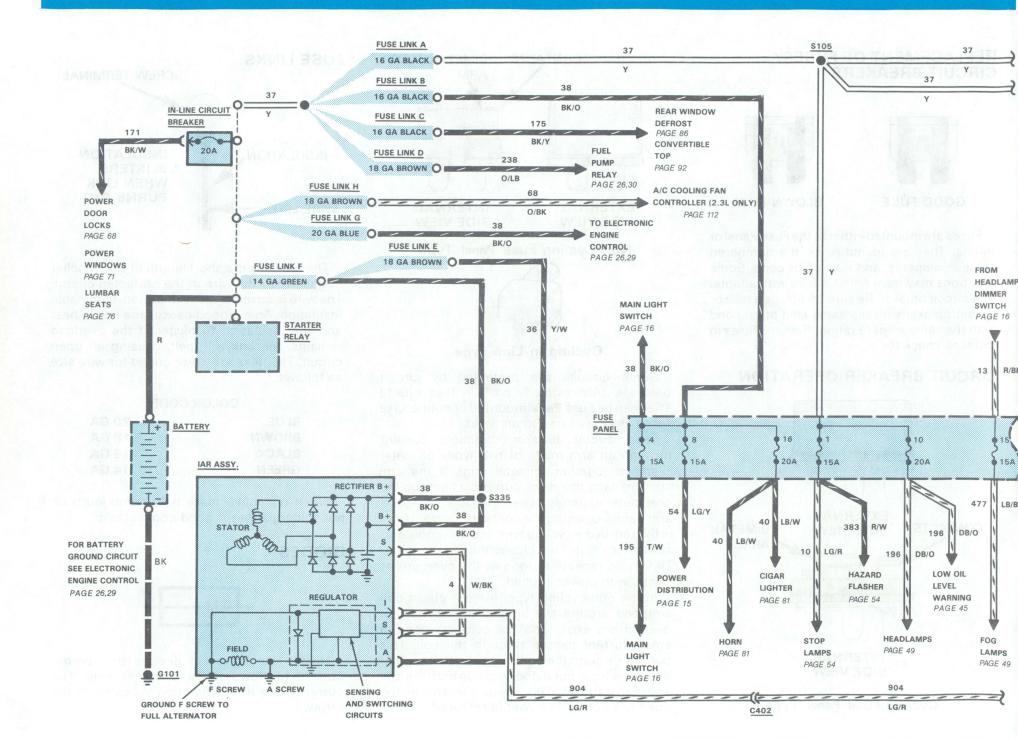
| BLUE | 20 GA |
|--------------|-------|
| BROWN | 18 GA |
| BLACK | 16 GA |
| GREEN | 14 GA |

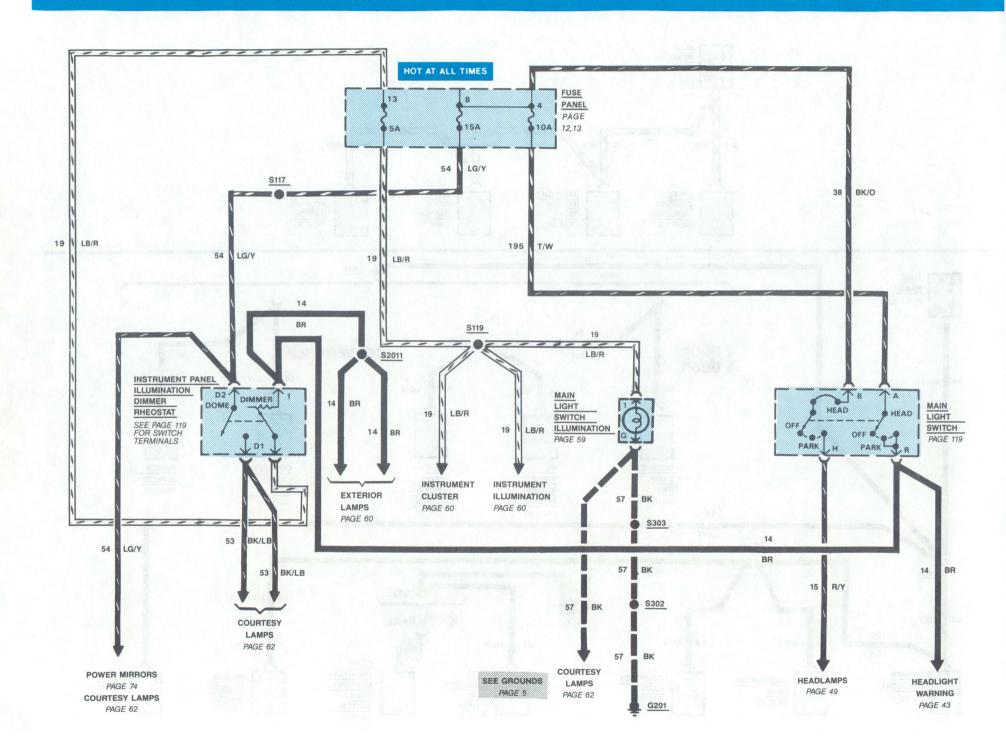
When replacing, make tight crimp joints or hot solder joints for good connections.

DIODES



Diodes are electrical devices that permit current to flow in one direction only. The current flows in the direction indicated by the arrow.





HOW THE CIRCUIT WORKS

The Battery, Alternator and Voltage Regulator make up the Charging System.

With Alternator Warning Indicator

With the **Ignition Switch** in RUN, **Battery** current flows into the **Voltage Regulator** at terminal I and to ground through the solid-state regulator circuits. If the electronic control measures a low voltage at regulator terminal A it closes the field switch. This applies **Battery** voltage to the field.

With current in the field and the rotor turning, the **Alternator** stator produces an AC voltage. This is converted to DC by the rectifier assembly and is fed to terminal B (to **Battery**) and terminal S (stator). (Voltage at S is one-half voltage at B).

A pre-set voltage at terminal S operates the electronic control to open the indicator switch which removes ground from the **Alternator Warning Indicator** (through the heated windshield control modules, on models so equipped).

The Alternator output is controlled by the current in the field. The average voltage on the field depends on the percentage of time the field switch is closed. The electronic control closes the field switch when the voltage at A is low, and opens the switch when the voltage at A is high.

The Voltage Regulator holds the system voltage at about 14 volts. The average Alternator output is then any required value between zero and full current depending on conditions sensed by the Voltage Regulator.

Refer to section 31-01 of the shop manual.

| COMPONENT LOCATION | 1 | Page- Figure |
|--------------------|------------------|-----------------|
| | At starter relay | |
| | At starter relay | |
| | LH fender apron | |
| | At starter relay | |
| | At starter relay | |
| | At starter relay | |
| Fuse Link H | At starter relay | 18-1 |

Refer to the **Location Index** in the back of the manual for connector, ground, and splice descriptions and locations.

TROUBLESHOOTING HINTS

| CONDITION | POSSIBLE CAUSE | ACTION | | |
|--|--|--|--|--|
| Improper Charging | Loose/worn alternator belt | Tighten/replace belt | | |
| | Defective/worn battery | Replace battery | | |
| | Fuse Link G open at starter relay | Visually check for open in link, replace | | |
| | Poor connection between battery terminals and cable clamps/damaged cables | Clean, tighten and/or replace | | |
| Alternator Warning Indicator remains on after initial start up | Poor connection on Alter- nator, Regulator, Starter Relay, and/or Alternator Output Control Relay | Make sure connections are tight and free of debris. | | |

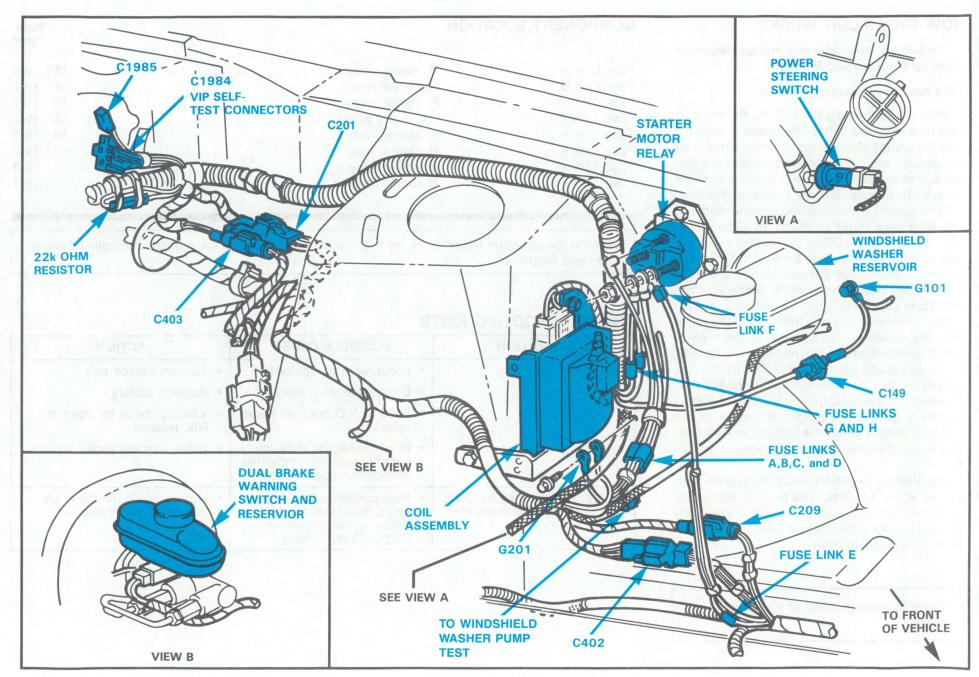


Figure 1- LH Fender Apron (2.3L)

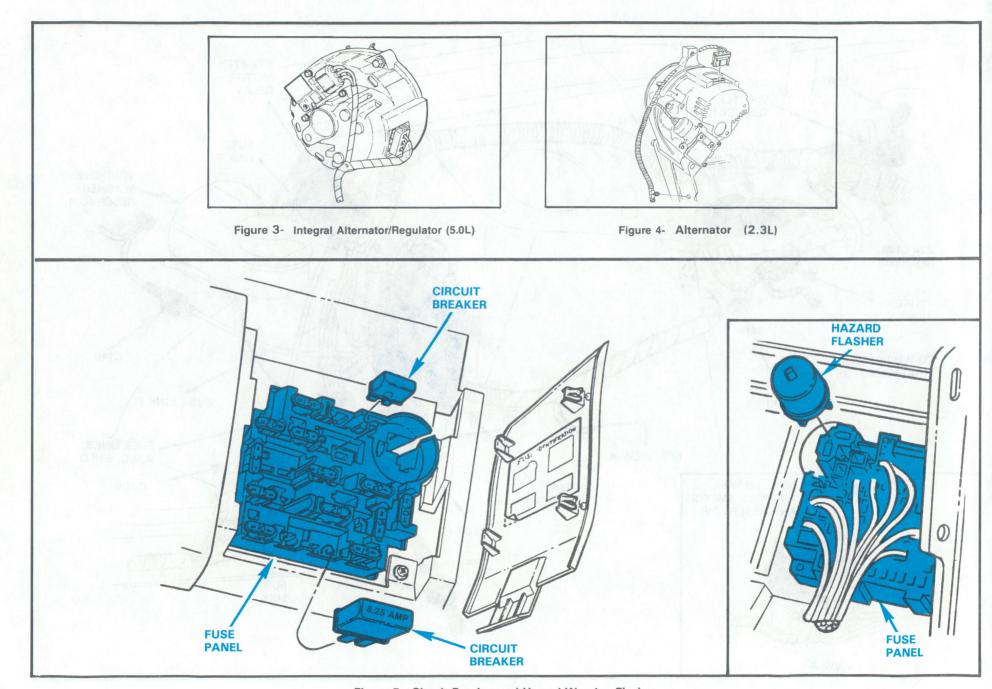


Figure 5- Circuit Breaker and Hazard Warning Flasher

COMPONENT TESTING: A/C HEATER FUNCTION CONTROL

Motor 3181

COMPONENT TESTING PROCEDURE

TERMINAL LOCATIONS 181 BR/O 249 DB/LG

348 LG/P

296 W/P

Connect Self Powered Test Lamp or Ohmmeter to **Terminals**

Move Switch to These **Positions**

A Good Switch Will Indicate

| A/C | Clutch |
|-------|--------|
| Swit | ch |
| Circu | rit |

296 W/P and 348 LG/P FLOOR/MIX

Heat Open Circuit Defrost Open Circuit

A/C Normal Closed Circuit Vent Open Circuit Hi/Lo Open Circuit

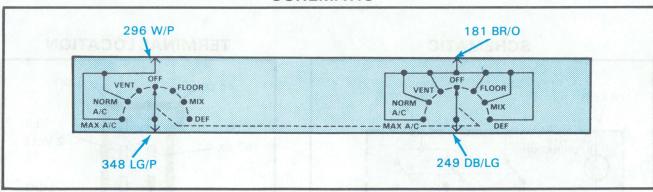
Open Circuit Closed Circuit

Blower Motor Control **Switch Circuit**

181 BR/O and 249 DB/LG

OFF..... Open Circuit All other positions Closed Circuit

SCHEMATIC



| CONNECTOR | | ge- gure Color | Terminals | COI | NNECTOR | LOCATION Page Figur | e Color | Terminal |
|-----------|--|-------------------|--|---------|---------|--|---------|----------|
| 0106 | Near LH headlamp | ВК | 2 | C314 | | RH cowl panel | ВК | 8 |
| C107 | LH side of transmission25 | -1.2 GY | 4 | | | LH cowl panel40-5 | BK | 8 |
| C117 | Behind RH side of I/P11 | | 2 | C350 | | LH cowl panel40-5 | BK | 8 |
| C135 | RH cowl panel | | 8 | C355 | | LH fender apron 18-1,19-2 | BK | 2 |
| C149 | Near battery | | 1 | C400 | | Near RH headlamp | GY | 2 |
| 2150 | Rear of engine | BR | 4 | C401 | | Near fuel pump and sender42-7 | BK | 4 |
| 2166 | Rear side of RH valve cover | BK | 4 | C402 | | Near starter motor relay 18-1,19-2 | BK | 4 |
| 2190 | At rear of engine | | 10 | C403 | | LH fender apron | GY | 8 |
| 2191 | Rear of engine | | 10 | C404 | | Rear of engine | BK | 8 |
| 2197 | At rear of engine | | 8 | C405 | | Above LH rear wheel well | BK | 8 |
| | | | 8 | C406 | | RH cowl side | BK | 2 |
| | LH fender apron | | 8 | | | In RH door | BR | 6 |
| | At back of radio | | 8 | | | In RH door | GY | 2 |
| 205A | At back of radio | GY | A STATE OF THE STA | C408 | | | | 2 |
| 209 | LH fender apron 18-1,19 | | 8 | C409 | | In LH door | BR | 2 |
| 211 | Attached to hazard switch | GY | 6 | | | At liftgate release solenoid | NAT | |
| 212 | Attached to multi-function switch | | 4 | | | At decklid release solenoid | GY | 1 |
| 216 | LH cowl panel40 | | 8 | | | Near RH headlamp | GY | 3 |
| 218 | At stoplamp switch | | 2 | | | LH door | GY | 8 |
| 219 | Near T/O to G100 | | 2 | | | RH door | BR | 6 |
| 220 | At speed control amplifier 10 | | 6 | | | LH cowl panel40-5 | BK | 6 |
| 228 | Lower LH cowl panel40 | | 12 | | | LH cowl panel40-5 | BK | 4 |
| 239 | At RH front I/P speaker97- | | 2 | | | LH door | GY | 8 |
| 240 | At LH front I/P speaker97- | | 2 | | | LH door | GY | 8 |
| 243 | Behind I/P above LH side of glove box 117 | 7-1 BK | 8 | C422 | | LH door | GR | 2 |
| 246 | RH rear of instrument panel117 | 7-1 GY | 14 | C423 | | RH door, at window motor | GR | 2 |
| 247 | LH rear of instrument cluster117 | 7-1 GY | 14 | C424 | | LH cowl panel, at window motor | GY | 8 |
| 248 | At wiper motor and switch | GY | 3 | C425 | | LH rear quarter panel, at window motor | GR | 2 |
| 249 | At wiper motor and switch | GY | 3 | C426 | | RH rear quarter panel, at window motor | GR | 2 |
| 250 | At premium sound amplifier96 | -2 GY | 8 | C427 | | In LH door | GY | 4 |
| 257 | Connected to fuse panel | NAT | 1 | C431 | | At RH power mirror | GY | 3 |
| 258 | Behind LH side of I/P attached to light | | | C432 | | At LH power mirror | GY | 3 |
| | switch51- | 2 GY | 6 | C433 | | | GY | 4 |
| 259 | LH cowl panel | -5 GY | 3 | C434 | | | GY | 4 |
| 261 | At premium sound amplifier96 | | 8 | C436 | | Under RH side of I/P87-1 | BR | 1 |
| 262 | Attached to dimmer rheostat | | 4 | C437 | | LH cowl at lower access hole | BR | 1 |
| 265 | At back of radio96 | | 8 | | | LH cowl panel | GY | 1 |
| 265A | At amplifier | GY | 8 | | | At graphic equalizer | GY | 12 |
| 275 | LH side of engine | | 2 | | | Under right front seat | | 2 |
| 279 | On steering column near ignition switch | | 4 | 1 7 7 7 | | Under front seat | BR | 2 |
| 281 | LH cowl panel | | 4 | C444 | | Under front seat | GY | 2 |
| 282 | At convertible top motor93 | | 2 | | | Under front seat | GY | 2 |
| | | GY | 3 | C446 | | Under front seat | BK | 2 |
| | LH quarter panel | | 1 | | | Under front seat | BK | 2 |
| | LH corner of luggage compartment 67- | | 3 | C448 | | | BR | 2 |
| 304 | LH front corner of luggage compartment 67- | | 2 | C448 | | Under front seat | BK | 4 |
| 308 | Attached to RH rear speaker10 | | | | | | | |

| CONNECTOR L | | Page- Figure | Color | Terminals | SPLICE LOCA | TION MOTEGODE GME | |
|--------------|---|-----------------|-------|-----------|-------------|--|--------|
| C452 | RH rear of engine (5.0L) | 41-6 | вк | 4 | S505 | Near T/O to G301 | |
| | LH quarter panel | | BK | 2 | S506 | LH corner of liftgate near LH park and stop lamp | |
| | LH fender apron | | GY | 6 | S511 | Near T/O to G303 | |
| | LH fender apron | | GY | 1 | S512 | Near T/O to A/C heater blower switch | |
| 01905 | Lit lender aproil | | Q1 | | S550 | Near LH front window control switch T/O | |
| | | | | | S600 | Near T/O to C259 | |
| SPLICE LOCAT | ION | | | | S601 | Near T/O to G233 | |
| | | | | | S602 | In LH door near grommet | |
| S105 | Near T/O to headlamp switch | | | | S603 | Near T/O to RH rear power window switch | |
| | Near to rear window defrost relay | | | | S605 | Near T/O to rear window defrost relay | |
| | Near LH cowl side | | | | S802 | Near T/O to G103 | |
| | Near T/O to instrument cluster | | | | S806 | Near T/O to G103 | |
| | On lower RH cowl | | | | | Near T/O to G303 | |
| | | | | | S1004 | Near A/C clutch field coil | |
| | Near T/O to EGR solenoid | | | | S2000 | | |
| | Near connector to battery ground terminal | | | | S2002 | Near idle speed actuator | |
| | Near T/O to EEC power relay | | | | S2003 | Near pin 21 — ECA | |
| | Near T/O to No. 1 and 4 injectors | | | | S2004 | Near to T/O to connector C247 | |
| | Near T/O to No. 2 and 3 injectors | | | | S2205 | Near ignition switch | |
| | Near injectors (2.3L) | | | | S2007 | Near 22K resistor, off EEC module | |
| | Near throttle air bypass valve solenoid | | | | S2008 | Near T/O to steering column | |
| | Near ECA T/O | | | | S2009 | Near T/O to wiper motor | |
| | Near C150 T/O | | | | S2010 | Near T/O to convertible top relays | |
| | Near C150 T/O | | | | S2011 | Near T/O to interval wiper governor | |
| | Near T/O to TFI module | | | | S2013 | Near T/O to LH license lamp | |
| S147 | Near connector to battery (2.3L) | | | | S2014 | Near fuse panel | |
| | In engine compartment, near battery | | | | S2015 | Near rear of radio | |
| | Near engine coolant temperature sensor | | | | S2017 | Near visor vanity mirrors | |
| | On lower RH cowl | | | | S2050 | Near T/O to RH headlamp | |
| S153 | Near injectors (5.0L) | | | | | | |
| S160 | Rear side of RH valve cover | | | | CDCUND LOC | DATION | |
| S161 | Near T/O to HEGO sensors | | | | GROUND LOC | | Page- |
| S190 | Near fuse panel T/O | | | | | | Figure |
| S201 | Near graphic equalizer T/O | | | | | | |
| S207 | Near T/O to C259 | | | | | | |
| S214 | Near T/O to RH I/P courtesy lamp | | | | G100 | A/C ground | |
| S218 | Near C405 T/O | | | | G101 | Engine ground | |
| | Near T/O to G201 | | | | G102 | Top RH side of radiator support above headlamp | |
| | Near windshield wiper T/O | | | | G103 | Top LH side of radiator support above headlamp | |
| | Near T/O to windshield wiper | | | | G116 | Body ground | |
| | Near T/O to RH door lock motor | | | | G118 | At electronic control assembly | |
| | Near T/O to RH door lock motor | | | | G119 | Near T/O to RH headlamp | |
| | Near T/O to G313 | | | | G122 | Engine ground, RH fender apron, near battery | |
| | Near IAR assembly | | | | G150 | On lower RH cowl | |
| _ | Near T/O to G103 | | | | G201 | LH fender apron | |
| | Near T/O to LH headlamp | | | | G202 | LH fender apron | |
| | Near T/O to RH headlamp | | | | G301 | Near LH backup lamp | |
| | Total 170 to fill floadiamp | | | | 3001 | Hou Ell buokup killip | |

| GROUND LO | CATION | Page- Figure |
|-----------|--|-----------------|
| | | |
| G303 | LH corner of liftgate | 88-2 |
| G304 | LH corner of liftgate | 89-3 |
| G305 | In console near parking brake lever | 3612 |
| G307 | (2 Dr) attached to RH package tray support | 0338 |
| G307 | (3 Dr) RH side of liftgate below window | |
| G309 | Near T/O to dome lamp | 65-4 |
| G313 | On LH door | 73-1 |
| G315 | Near convertible top motor | 93-1 |
| G320 | On LH I/P shake brace | |
| G321 | On LH door | 73-1 |
| G326 | Near T/O to dome lamp | |
| G330 | On instrument panel shake brace | |
| G331 | On instrument panel shake brace | |
| G340 | Under front seat | 50058 |
| G500 | Near park brake signal lamp switch | 50088 |
| G601 | Right rear of engine | |











