SECTION 11

ELECTRICAL

INDEX

BODY ELECTRICAL INTRODUCTION

The 1966 body electrical equipment for all body styles is grouped into sections of power windows and ventilators, power tail gate window (station wagon), power seats (horizontal, four-way and six-way) and electric folding top.

Each section combines all styles and series together which incorporate the power equipment unless stated otherwise in the procedure.

The circuit wiring is protected by a circuit breaker (40 ampere in most cases) and is located as follows:

DIVISION	STYLE	LOCATION
Chevrolet	Z	Engine compartment - Left body side rail

DIVISION	STYLE	LOCATION
	X	Left Shroud inner panel
	A	Left Shroud inner panel
	B	Under left end of instrument panel
Pontiac	A	Engine compartment - adjacent to fuse block
	B	Engine compartment bulkhead
Oldsmobile	A	Engine compartment - at horn relay
	B-C	Engine compartment - at horn relay
	E	Right Fender Filler Plate - at junction block stud
Buick	All Styles	In fuse block - plug-in type
Cadillac	C	In fuse block - plug-in type

POWER WINDOWS AND VENTILATORS

POWER OPERATED WINDOWS— ALL SERIES

Description

The wiring harness for the electrically operated windows consists of four major sections.

1. Front Cross-Over Harness
2. Feed Harness to Rear Door or Quarter Window
3. & 4. Left and Right Rear Door or Quarter Window Harnesses

Front Cross-Over Harness

This harness is installed beneath the instrument panel and completes the circuit from the right door to the left door windows on all styles except on Cadillac styles. (See Figs. 11-1, 11-2, 11-3, 11-4 and 11-6). On Cadillac styles the cross-over harness is installed on the floor pan - see Figure 11-5.

Feed Harness for Rear Doors or Quarter Windows

This harness of flat wire construction connects to the front cross-over harness on the left side of the shroud (fire wall) and extends rearward under the flat body wire harness.

In two door styles the quarter window harness divides at the rear of the rear seat on all styles except Cadillac styles, see Figures 11-7, 11-8, 11-9, 11-10, 11-11, 11-12, 11-13 and 11-14.

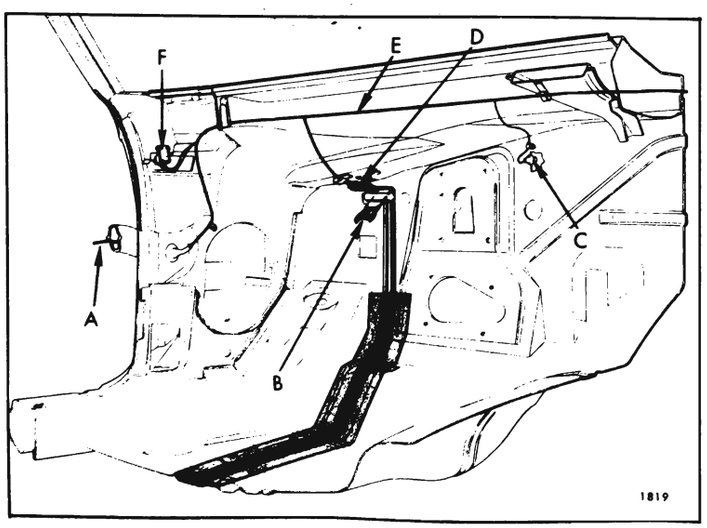


Fig. 11-1—Front End Power Window Wiring - Chevrolet "B"

A. Front Door Wiring
B. Body Wiring Connector
C. Feed Wire
D. Power Window Wiring Connector
E. Cross-Over Harness
F. Cricuit Breaker

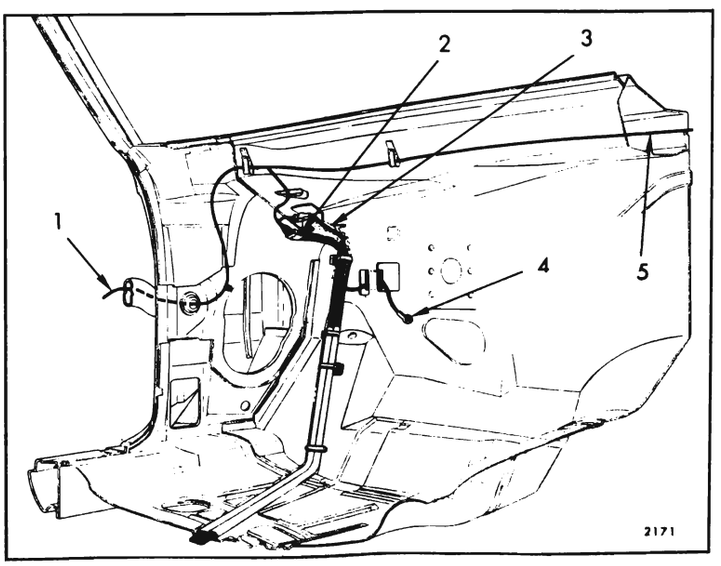


Fig. 11-2—Front End Power Window Wiring - Pontiac "B"

1. Front Door Wiring
2. Power Window Wiring Connector
3. Body Wiring Connector
4. To Curcuit Breaker
5. Cross-Over Harness

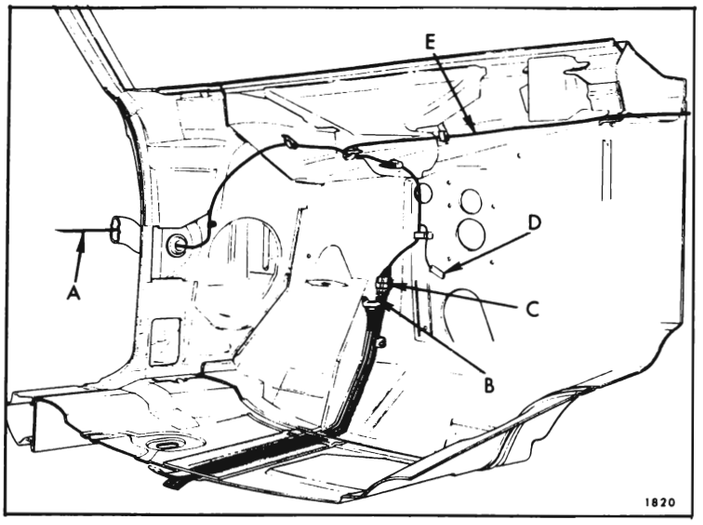


Fig. 11-3—Front End Power Window Wiring - Buick "B & C"

A. Front Door Wiring
B. Body Wiring Connector
C. Power Window Wiring Connector
D. To Fuse Block
E. Front Cross-Over Harness

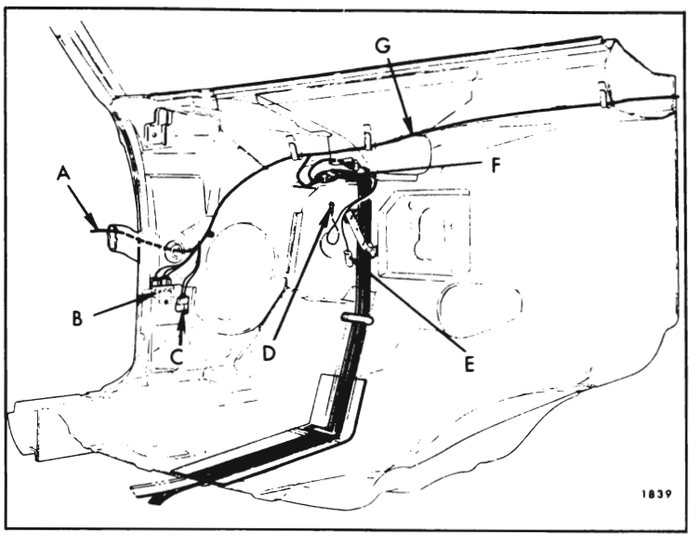


Fig. 11-4—Front End Power Window Wiring - Oldsmobile "B-C & E"

A. Front Door Wiring
B. Ignition Relay
C. Power Seat Feed on 38439-67 and 38669 only
D. To Circuit Breaker
E. To Fuse Block
F. Power Window Wiring Connector
G. Cross-Over Harness

On Cadillac styles the harness divides at the rear of the front seat (see Fig. 11-15).

The rear door window harness divides at rear of the front seat (see Figs. 11-16, 11-17, 11-18 and 11-19).

It is to be noted that the flat body wiring harness is positioned on top of the power window wire harness and the front connector of the body wire harness is in a lower position.

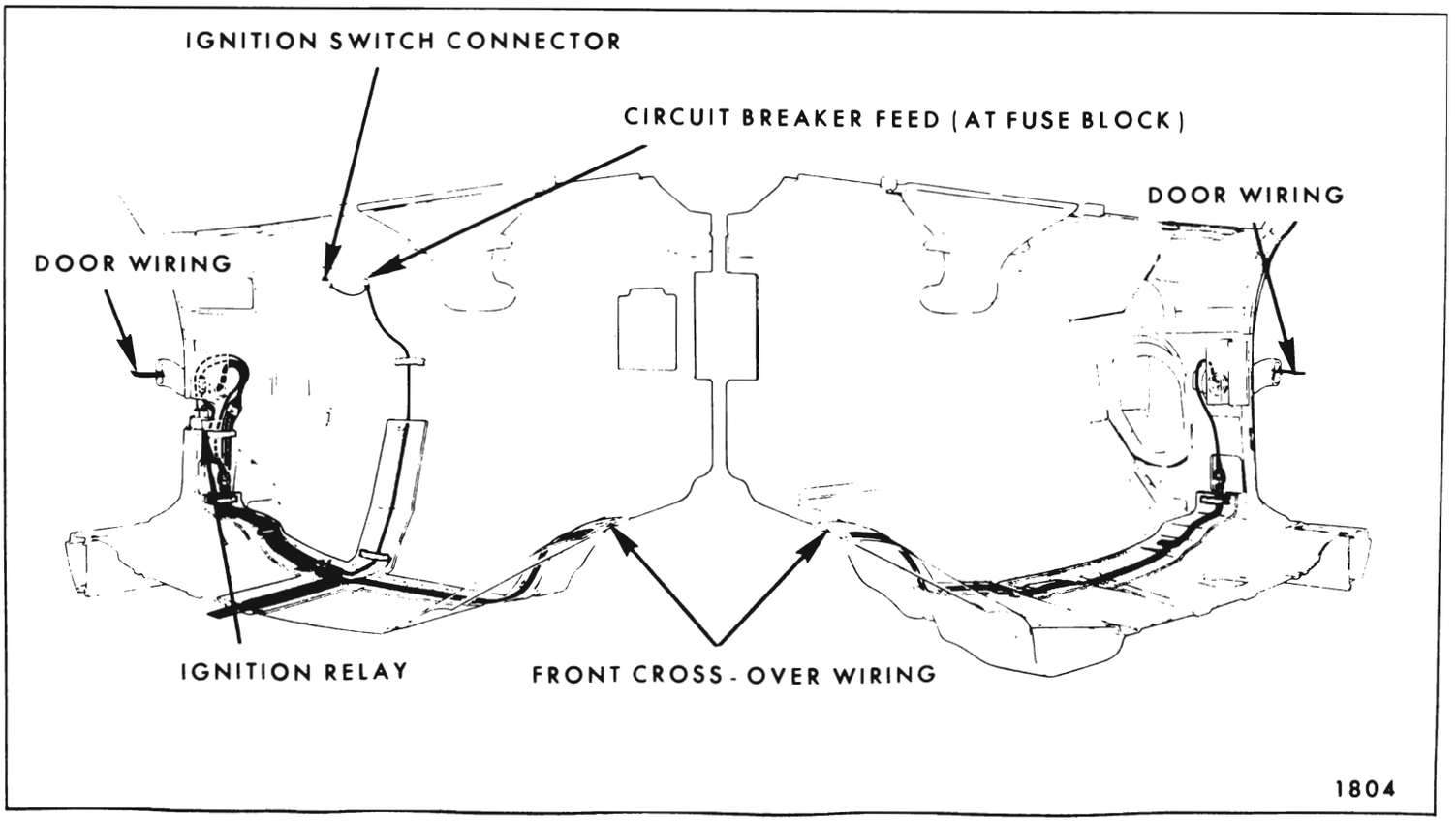


Fig. 11-5—Front End Power Window Wiring - Cadillac

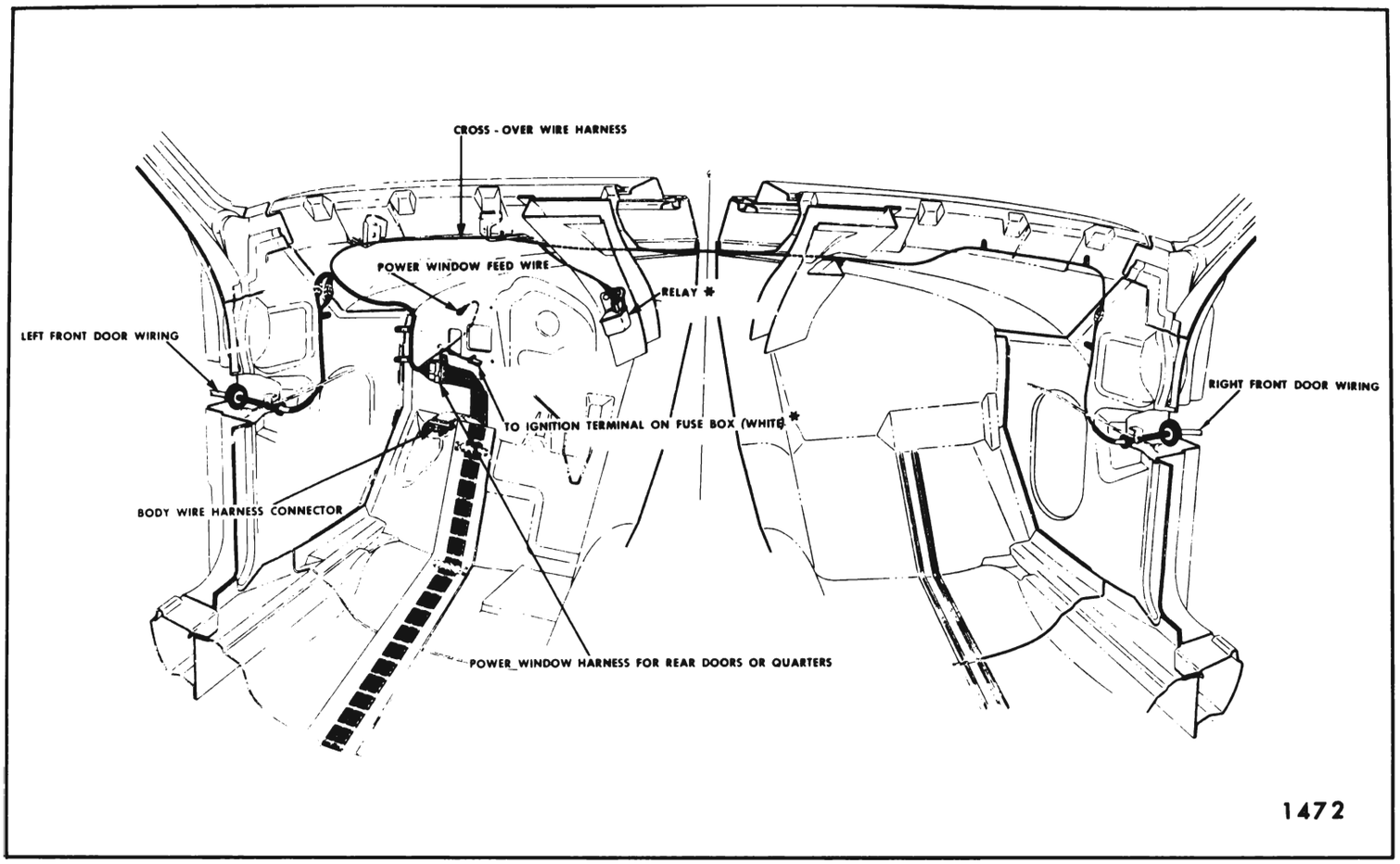


Fig. 11-6—Front End Power Window Wiring - All "A" Body Styles

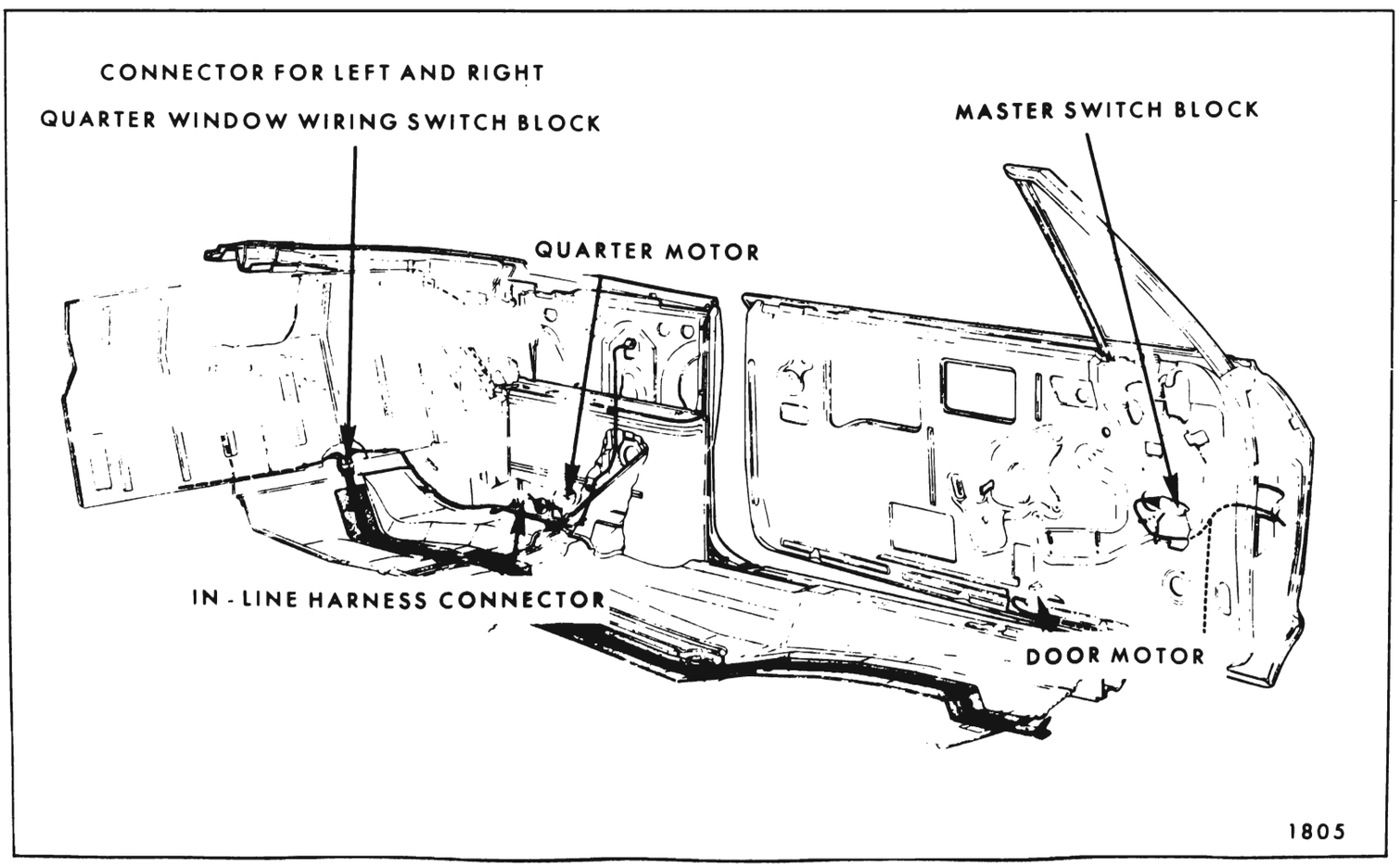


Fig. 11-7—Left Side Power Window Wiring - 67 "B & C" Styles

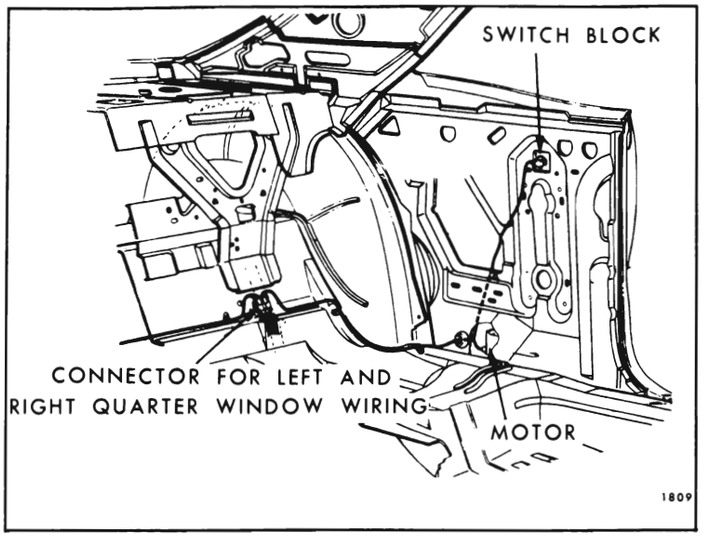


Fig. 11-8—Rear Quarter Power Window Wiring - "B & C" 37 Styles

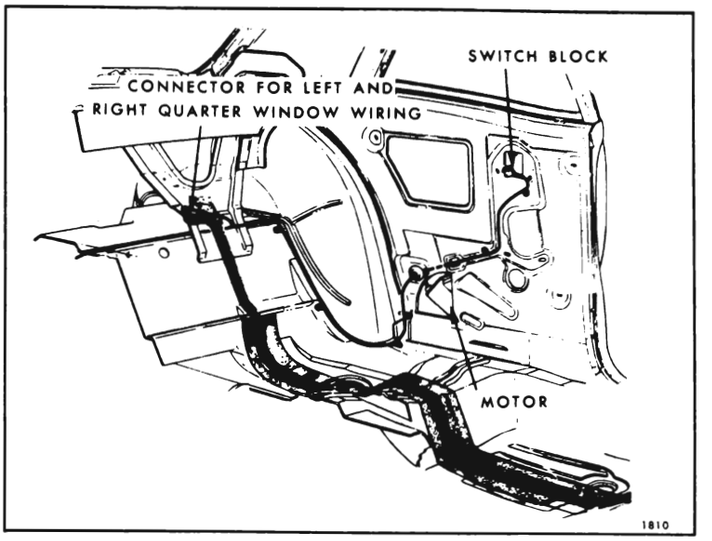


Fig. 11-9—Rear Quarter Power Window Wiring - "B-11" Style

Quarter Window Harness

The left and right round wire harness connects to the main flat feed harness behind the rear quarter arm rest foundation on convertible styles except on Cadillac series and under the rear seat cushion on "07-17 and 37" styles. On Cadillac, "57 and 67" styles the round wire harness connects to the flat wire at the forward end of the rear quarter arm rest assembly.

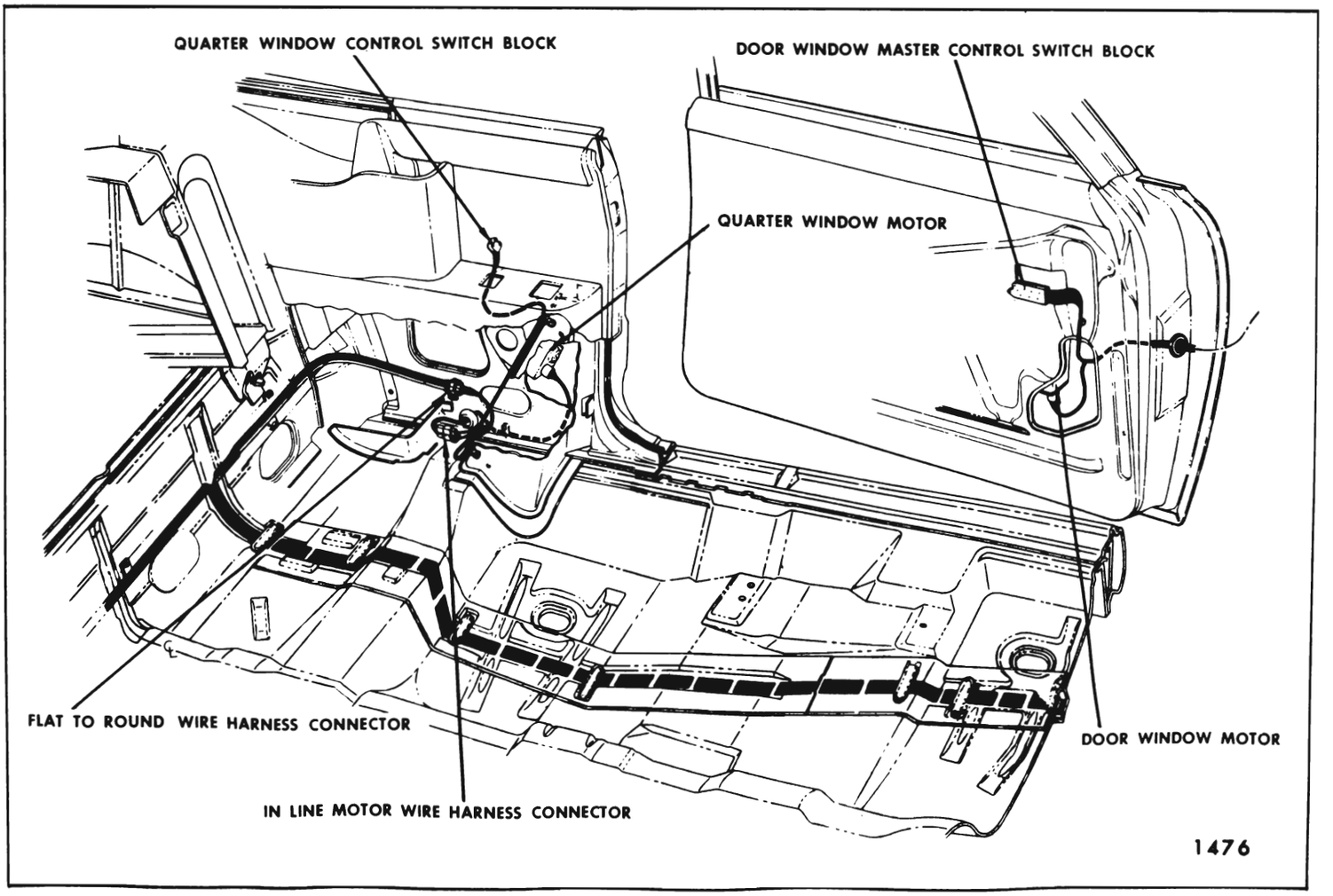


Fig. 11-10—Left Side Power Window Wiring - "A" 67 Styles

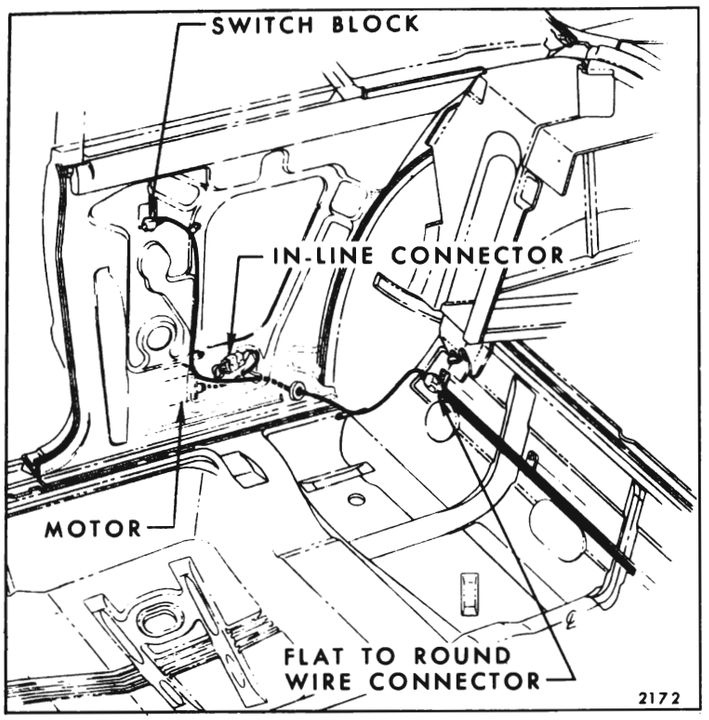


Fig. 11-11—Rear Quarter Window Wiring - "A" Coupe Less 67 Styles

Rear Door Window Harness

The left and right rear door harness connects to the main flat feed harness in the base of the center pillar. To disengage the connector, pull harness inboard at base of center pillar for accessibility.

Power windows are operated by a rectangular shaped 12 volt series-wound motor with an internal circuit breaker and a self-locking rubber coupled gear drive. The harness to the door window motor connector is designed with a locking embossment to insure a positive connection. When disengaging the harness connector from the door motor, it is necessary to depress the thumb release. When installing the harness, the thumb release must be held depressed until the embossment on the female connector is locked in the hole of the motor connector.

Some rear quarter window motors and ventilator motors are designed with a locking type connector which should not be disengaged. When testing or removing the motor, the in-line connector located inboard of the inner panel should be disengaged.

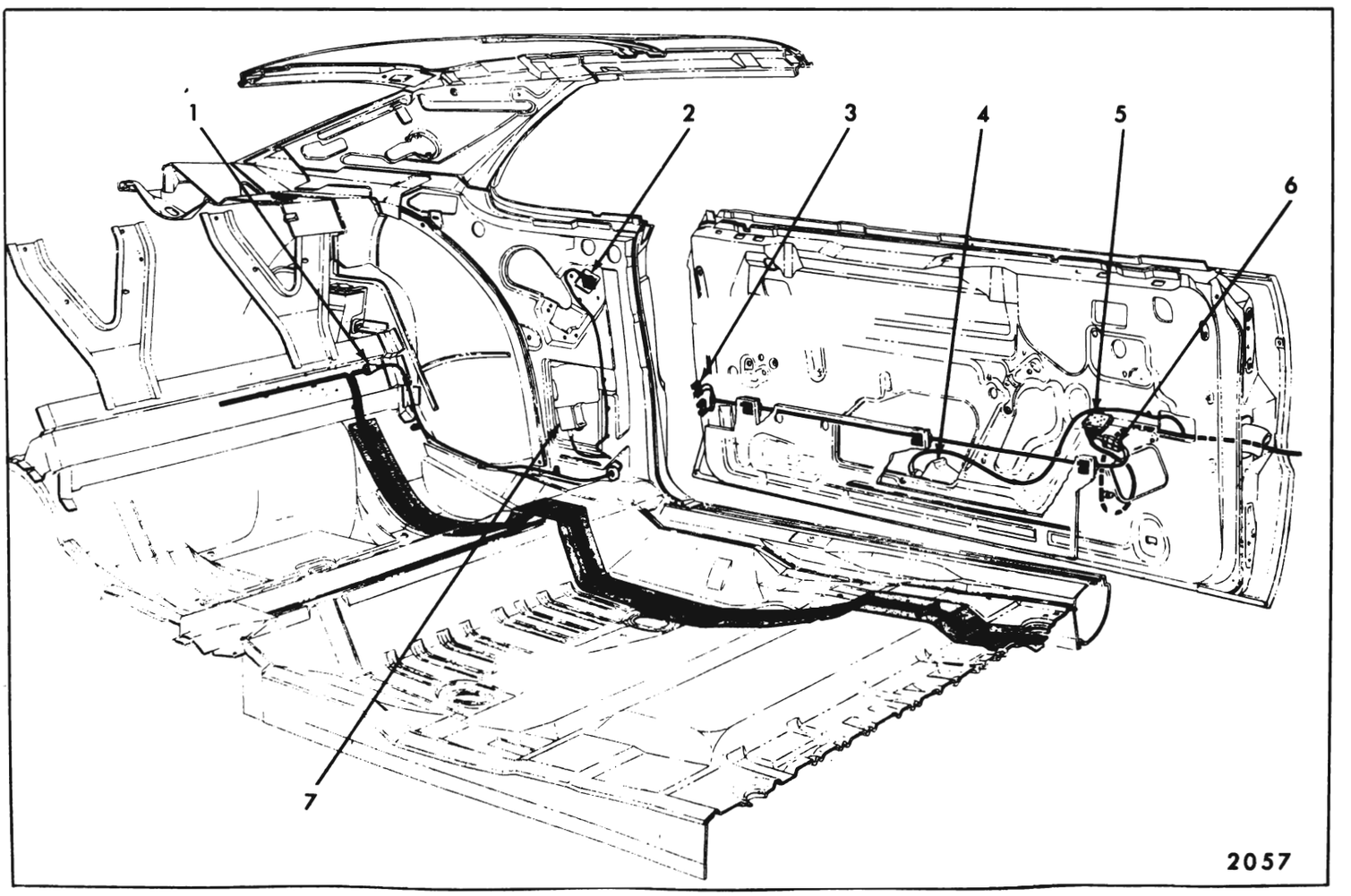


Fig. 11-12—Left Side Power Window Wiring - Oldsmobile "E" Optional

1. Flat to Round Wire Connector
2. Quarter Window Switch Block
3. Optional Door Courtesy Lamp
4. Door Window Motor
5. Master Control Switch Block
6. Door Courtesy Lamp Connector
7. Quarter Window Motor

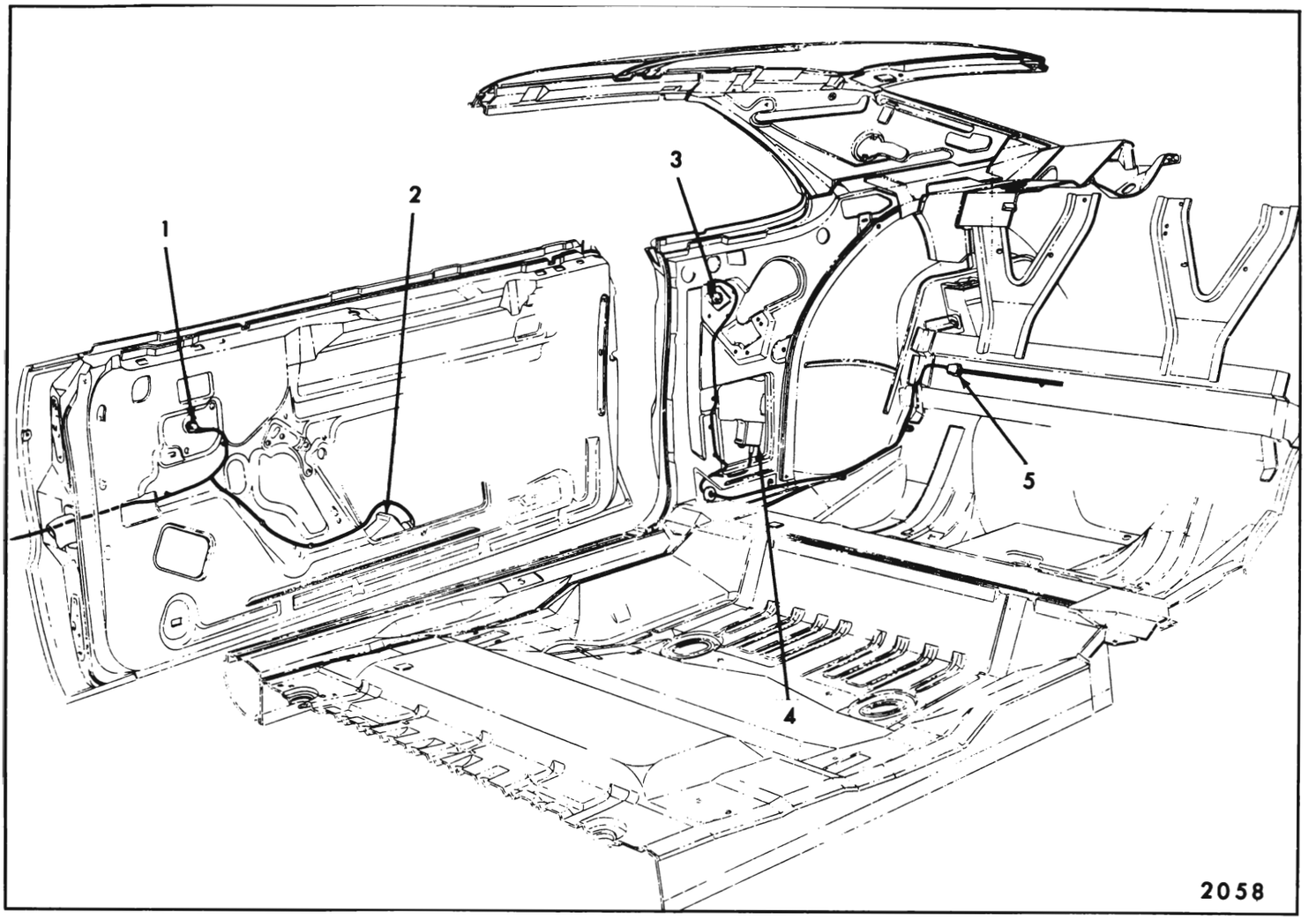


Fig. 11-13—Right Side Power Window Wiring - Oldsmobile "E" - Standard

1. Door Window Switch Block
2. Door Window Motor
3. Quarter Window Switch Block
4. Quarter Window Motor
5. Flat to Round Wire Connector

Tests are made at this location on those styles. The power window circuit is protected by a circuit breaker. Refer to electrical introduction for specific locations.

Relay

Oldsmobile and Cadillac styles only - In addition to the circuit breaker, a relay is used in the circuit. The relay prevents the operation of the power windows until the ignition switch is turned "on".

Cut-Out Switch

A cut-out switch (Cadillac styles only) installed on the left front door arm rest, is designed to temporarily by-pass the relay circuit so the windows may be operated only from the master control switch when the ignition is in the off position.

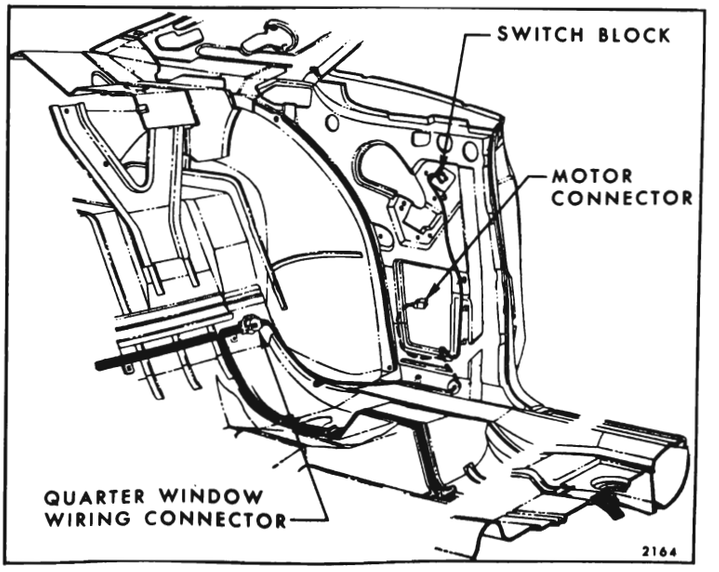


Fig. 11-14—Rear Quarter Power Wiring - Buick "E"

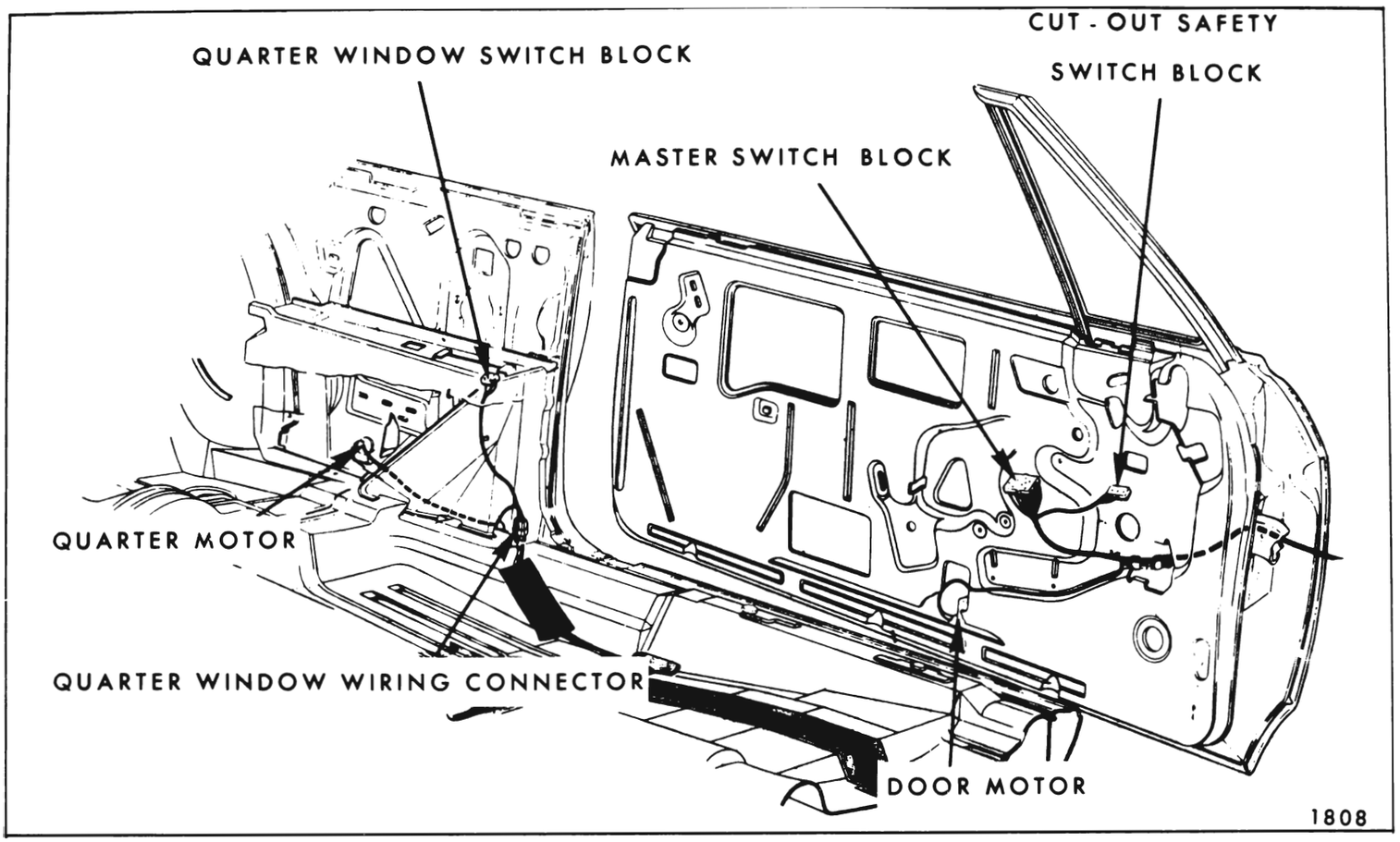


Fig. 11-15—Left Side Power Window Wiring - Cadillac "57" Styles

To perform this operation, the cut-out switch control button is held in the "EMERG" position while the master control switch buttons are actuated. When the cut-out button is released, the button will return to the "NORMAL" position.

The cut-out switch button should be set in the "LOCK" position when ignition switch is "ON" to permit normal operation of power windows from all switch locations. If the control button is left in the "NORMAL" position with the ignition switch on, the windows will operate only from the master control switch.

Power Window Circuit Checking Procedures

Failures in a circuit are usually caused by short circuits or open circuits. Open circuits are usually caused by breaks in the wiring, faulty connection or mechanical failure in a component such as a switch or circuit breaker. Short circuits are usually caused by wires from different components of the circuit contacting one another or by a wire or component grounding to the metal of the body due to a screw through the wire, insulation cut through by sharp metal edge, etc.

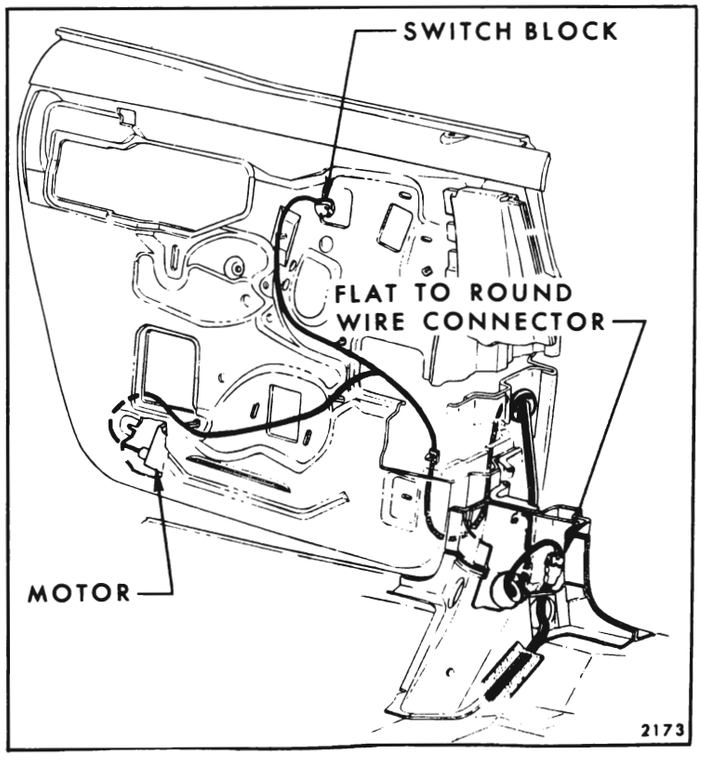


Fig. 11-16—Left Rear Door Power Window Wiring - "A"-39 Styles

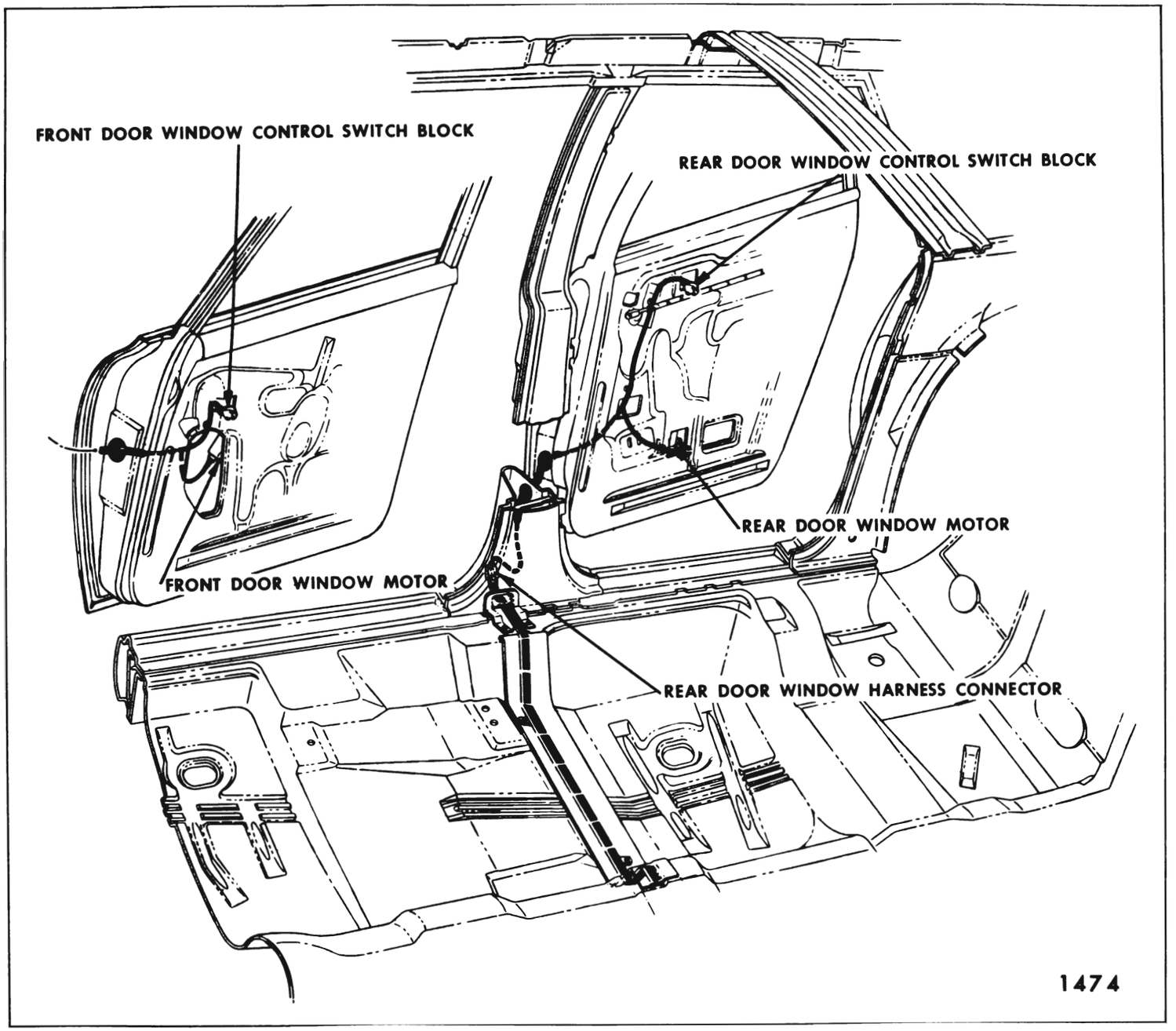


Fig. 11-17—Right Side Power Window Wiring "A" 35-55-65 and 69 Styles

It may be necessary to use only one or all of the procedures outlined to locate an electrical failure in the circuit. If the location of the failure is evident follow only the steps required to check the affected wire or component. If the location of the failure is not evident, follow the procedure as outlined. Be sure to check the harness connectors for proper engagement and become familiar with the typical circuit diagrams. (See Figs. 11-23 through 11-30).

Circuit diagram of 4 door styles is shown but basic circuitry and color code is similar on two door styles.

a. Checking Feed Circuit Continuity at Circuit Breaker

1. Connect one test light lead to battery side of circuit breaker and ground other lead. If tester does not light, there is an open or short circuit in feed circuit to breaker.

2. To check circuit breaker, disconnect the output feed wire (the wire opposite the power source feed to the breaker) from the breaker and with test light, check terminal from which wire was disconnected. If tester does not light, circuit breaker is inoperative.

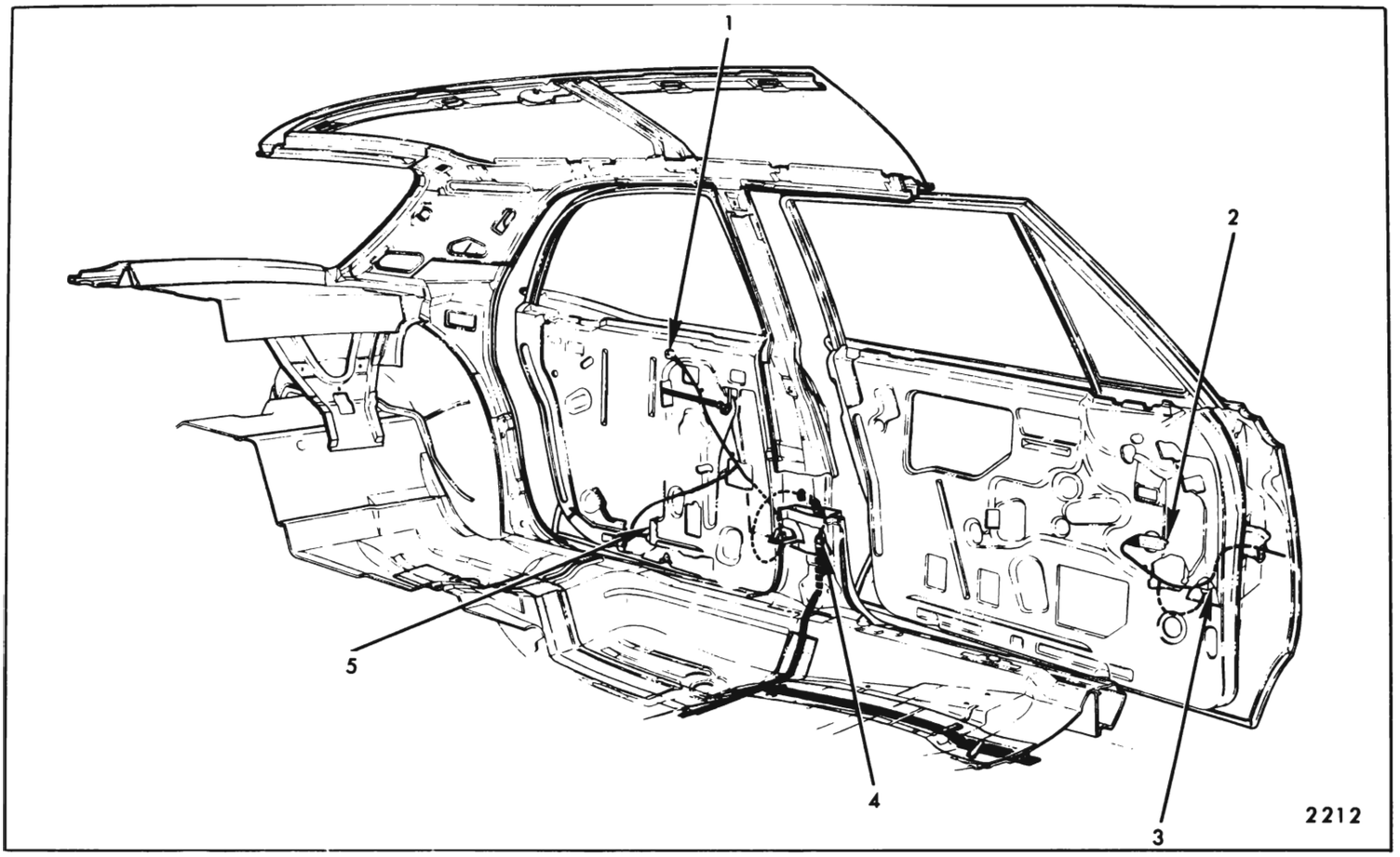


Fig. 11-18—Left Side Power Window Wiring - "B & C" Four Door Styles

1. Switch Block
2. Master Switch Block
3. Front Door Motor
4. Rear Door Window Wire Harness Connector
5. Rear Door Motor

b. Checking Relay Assembly at Shroud—Oldsmobile and Cadillac Only

1. With test light, check relay feed. If tester does not light, there is an open or short circuit between relay and circuit breaker.

2. Turn ignition switch on and with test light check output terminal of relay. If tester does not light, the relay is inoperative or there is a short or open circuit between ignition switch and relay assembly. (Check fuse at dash panel).

c. Checking for Current at Cut-Out Switch—Cadillac Only

1. Connect one test light lead to relay by-pass (over ride) terminal (orange-black stripe) of the switch block and ground other test lead.

2. If tester does not light, there is an open or short circuit between by-pass feed source and cutout switch.

NOTE: Current should be present whether ignition is "on" or "off".

3. With ignition switch on, connect one test light lead to the master window control switch feed terminal (red-white stripe) of the switch block and ground other test lead.

4. If tester does not light, there is an open or short circuit between the relay and cut-out switch.

d. Checking Cut-Out Switch—Cadillac Only

1. With ignition switch off, connect one end of a #12 gauge jumper wire to by-pass feed terminal (over-ride) (orange-black stripe) and the other end to the center terminal (master control switch feed - red-white stripe).

2. Operate master control switch. If windows operate with jumper wire but not with the cut-out switch, the by-pass side of the switch is defective.

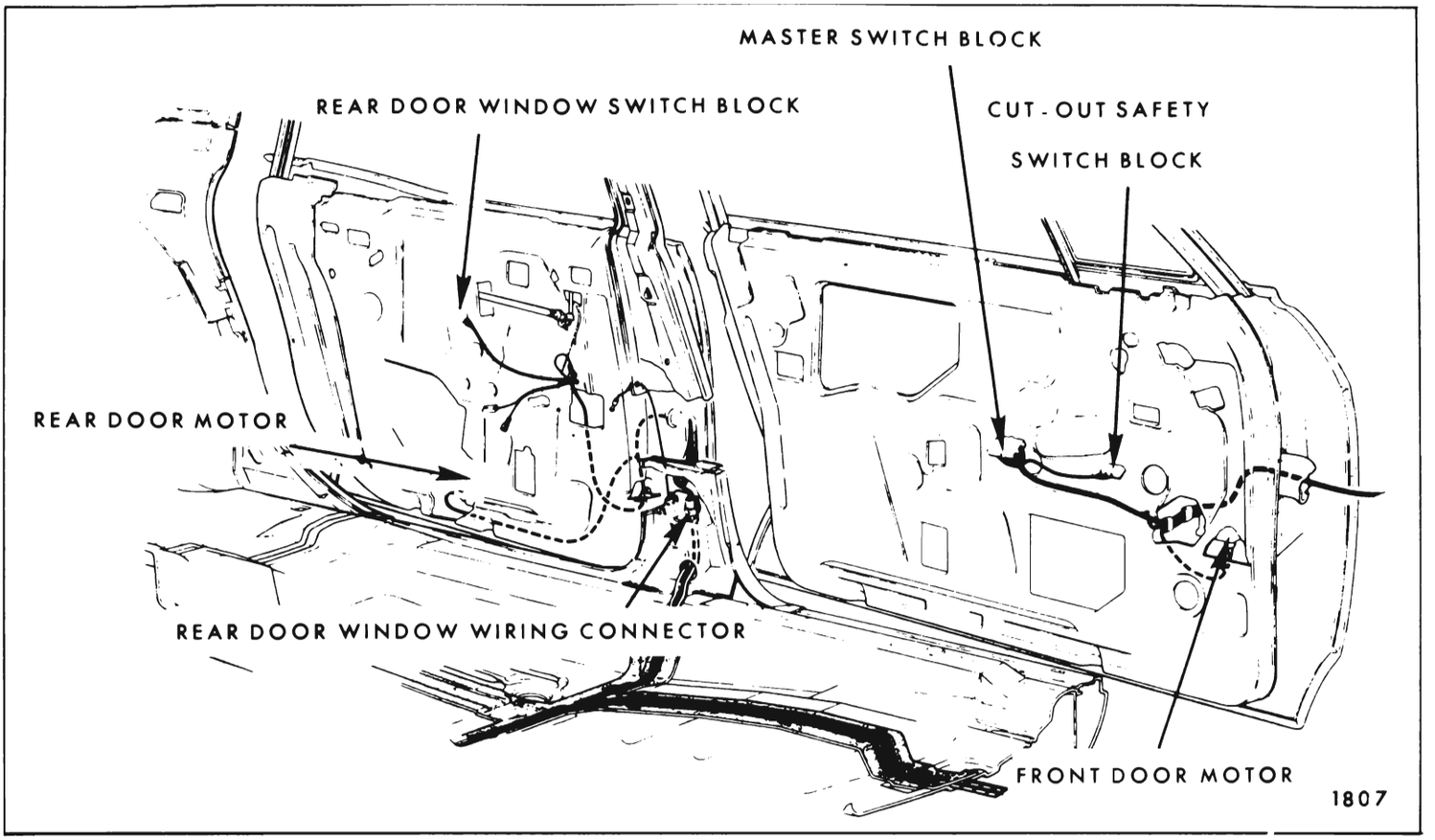


Fig. 11-19—Left Side Power Window Wiring - Cadillac "39-69" Styles

3. With the ignition switch on, connect one end of a #12 gauge jumper wire to center terminal (master control switch feed - red-white stripe) and the other end in the right and left rear quarter or door and right front door feed terminal (pink-black stripe).

4. Operate control switches. If any of the windows operate with the jumper but not with the cut-out switch, the switch is defective.

e. Checking Feed Circuit Continuity at Window Control Switch

1. Connect one test light lead to feed terminal of switch block and ground other tester lead to body metal (see Fig. 11-20).

2. If tester does not light, there is an open or short circuit between switch and power source.

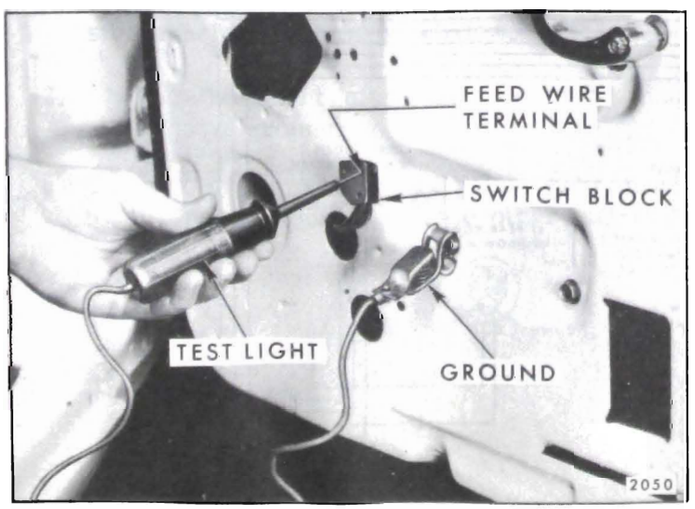


Fig. 11-20—Checking Feed Circuit

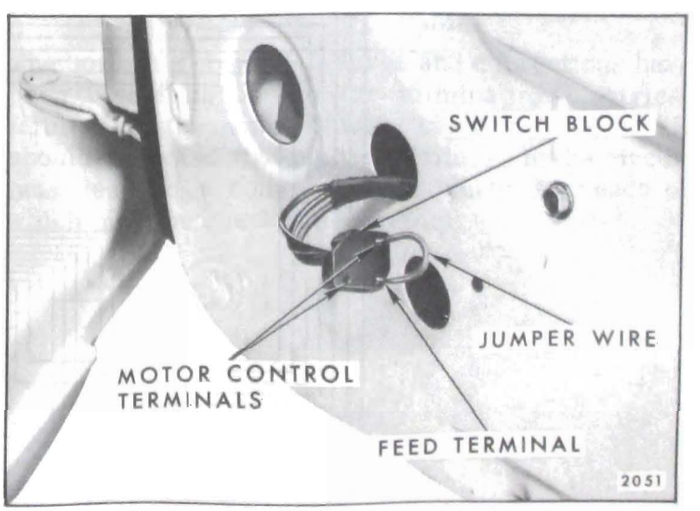


Fig. 11-21—Checking Window Control Switch

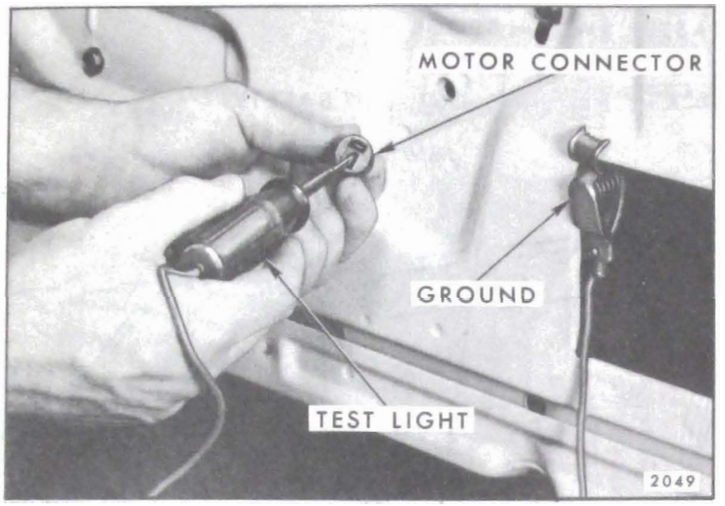


Fig. 11-22—Checking Circuit Between Switch and Motor

f. Checking Window Control Switch

1. Insert one end of a #12 gauge jumper wire to the switch feed terminal and the other end to one of the motor lead terminals in the switch block. Repeat this check on the remaining motor lead terminal (see Fig. 11-21).
2. If the window operates with the jumper wire, but does not operate with the switch, the switch is defective.

g. Checking Wires Between Door Window Switch and Door Window Motor

1. Disengage harness connector from window motor connector. The thumb release on the harness connector must be depressed before it can be disengaged from the motor.
2. Insert one end of a #12 gauge jumper wire to the switch feed terminal and the other end to one of the motor lead terminals in the switch block (see Figure 11-21).
3. With test light check for current at terminal being tested. If tester does not light, there is an open or short circuit in the harness between the control switch and motor connector (see Fig. 11-22).
4. Check other terminal.

h. Checking Wires Between Quarter Window Switch and Quarter Window Motor

1. Disengage the in-line connector located inboard of the quarter inner panel as required.
2. Insert one end of a #12 gauge jumper wire in the switch feed terminal and the other end in one of the motor lead terminals of the switch block (see Fig. 11-22).

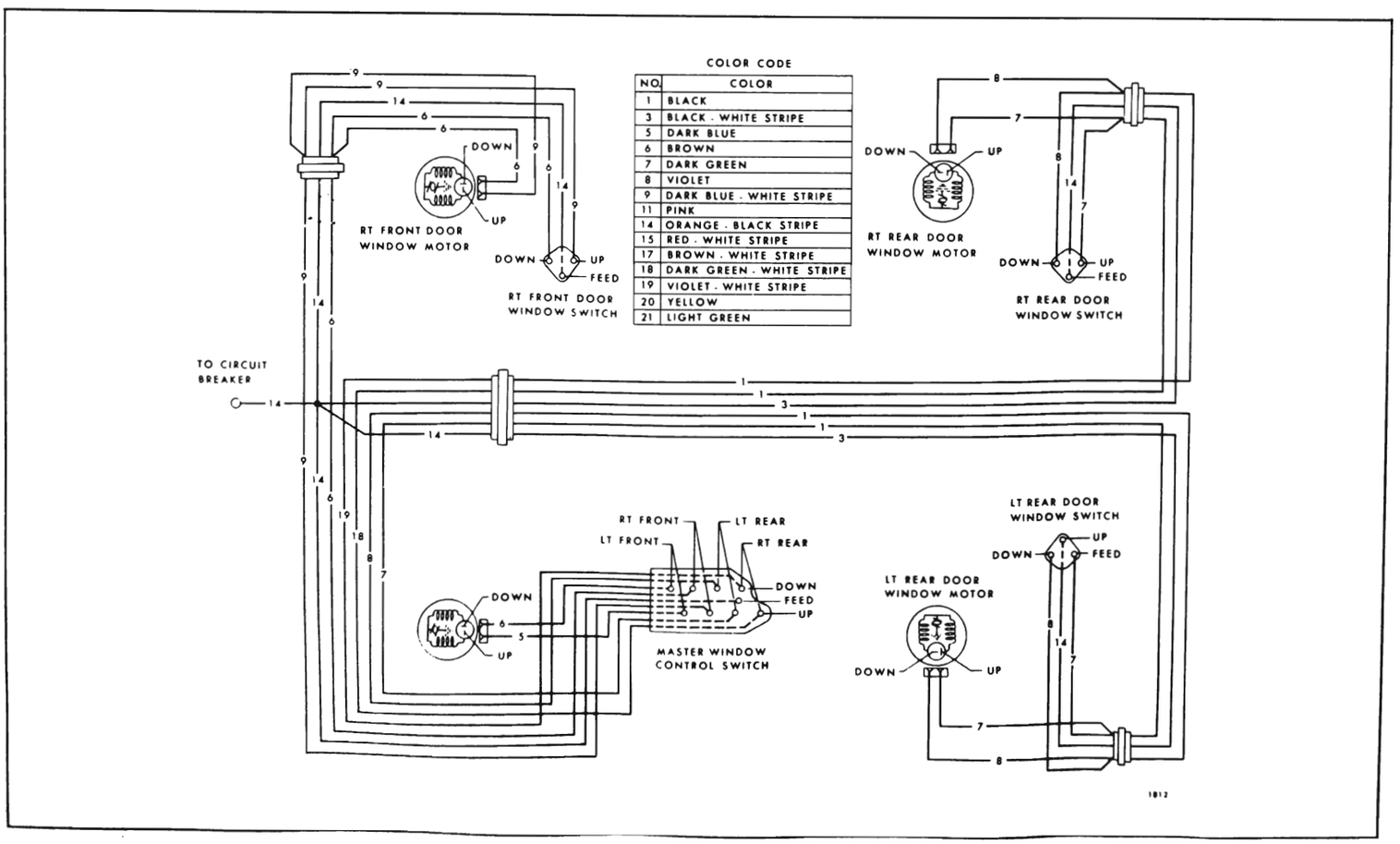


Fig. 11-23—Power Window Circuit Diagram - Chevrolet-Pontiac-Buick "B & C"

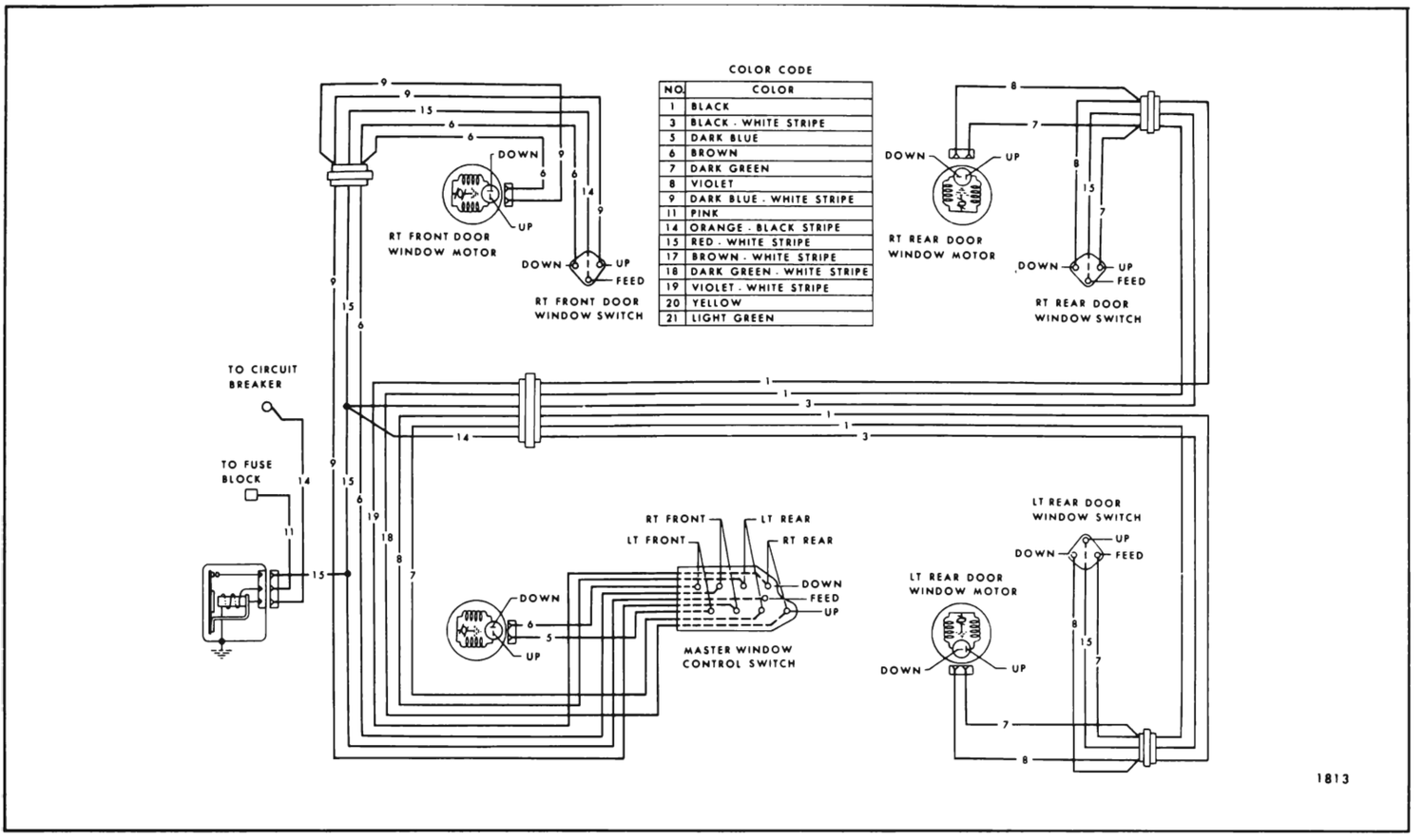


Fig. 11-24—Power Window Circuit Diagram - Oldsmobile "B & C"

3. With a test light, check for current at the corresponding terminal at the in-line motor connector. If tester does not light, there is an open or short circuit between control switch and motor connector.

4. Check other terminal.

i. Checking Window Motor

1. Check window regulator and channels for possible mechanical bind of window.

2. Check attachment of window motor to insure an effective ground.

3. Connect one end of a #12 gauge jumper wire to the power source and the other end to one of the terminals on the door window motor or the in-line connector for the quarter window motor.

4. If the motor fails to operate with a jumper wire, the motor is defective and should be repaired or replaced as required. Check the other motor lead in the same manner.

j. Typical Failures of Power Windows

The following typical failures and corrections have been listed as an aid for eliminating electrical failures in the power window electrical circuit. It should be noted that multiple failures in the circuit may lead to a combination of conditions, each of which must be checked separately.

CONDITION	CAUSE	CORRECTION
1. None of the windows will operate with ignition switch on.	Short or open circuit in power feed circuit.	A. Check circuit breaker operation. B. Check relay operation at left cowl. C. Check feed connection to power harness beneath instrument panel. D. Check the feed circuit wires for possible short or open circuit. E. Check cut-out switch.
2. Right rear door window does not operate from master control switch on left door or from control switches on right rear door. Left door window operates.	A. Short or open circuit between right rear door harness and power window front harness. B. Short or open circuit in affected window control switch or window motor circuit. C. Possible mechanical failure or bind in window channels. D. Defective window motor.	A. Check harness connectors beneath outer ends of instrument panel for proper installation. B. Check wires in power window front harness for possible short or open circuit. C. Check operation of rear door window control switch. D. Check circuit from window control switch to window motor for short or open circuit. E. Check window regulator and channels for possible mechanical failure or bind. F. Check operation of motor.
3. Right door windows will operate from left door master control switch but will not operate from right door control switches. Left door windows operate.	Open or short circuit in front harness feed wire circuit.	Follow up feed wire in front harness for possible short or open circuit.

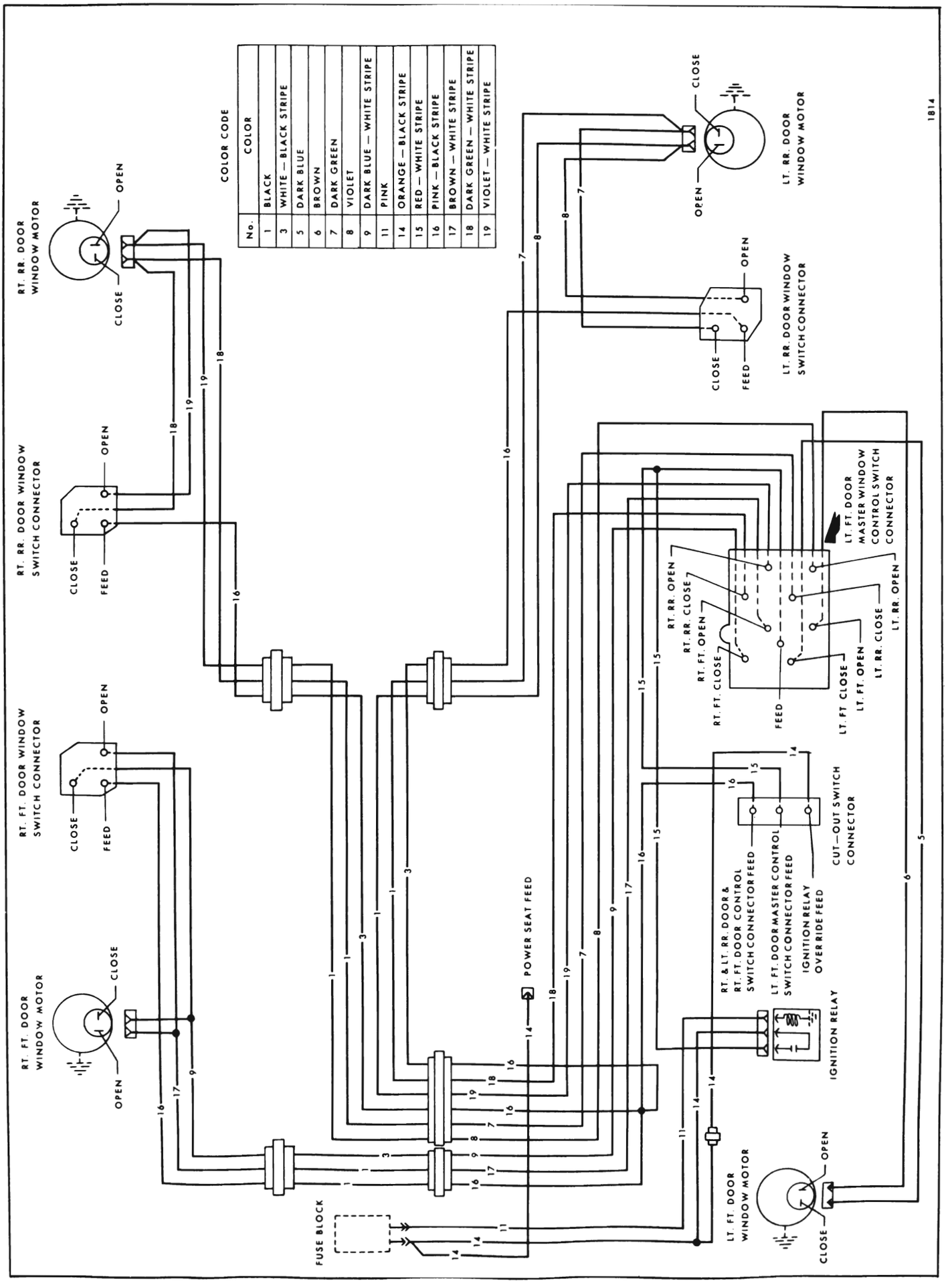


Fig. 11-25—Power Window Circuit Diagram - All Cadillac Except 68169

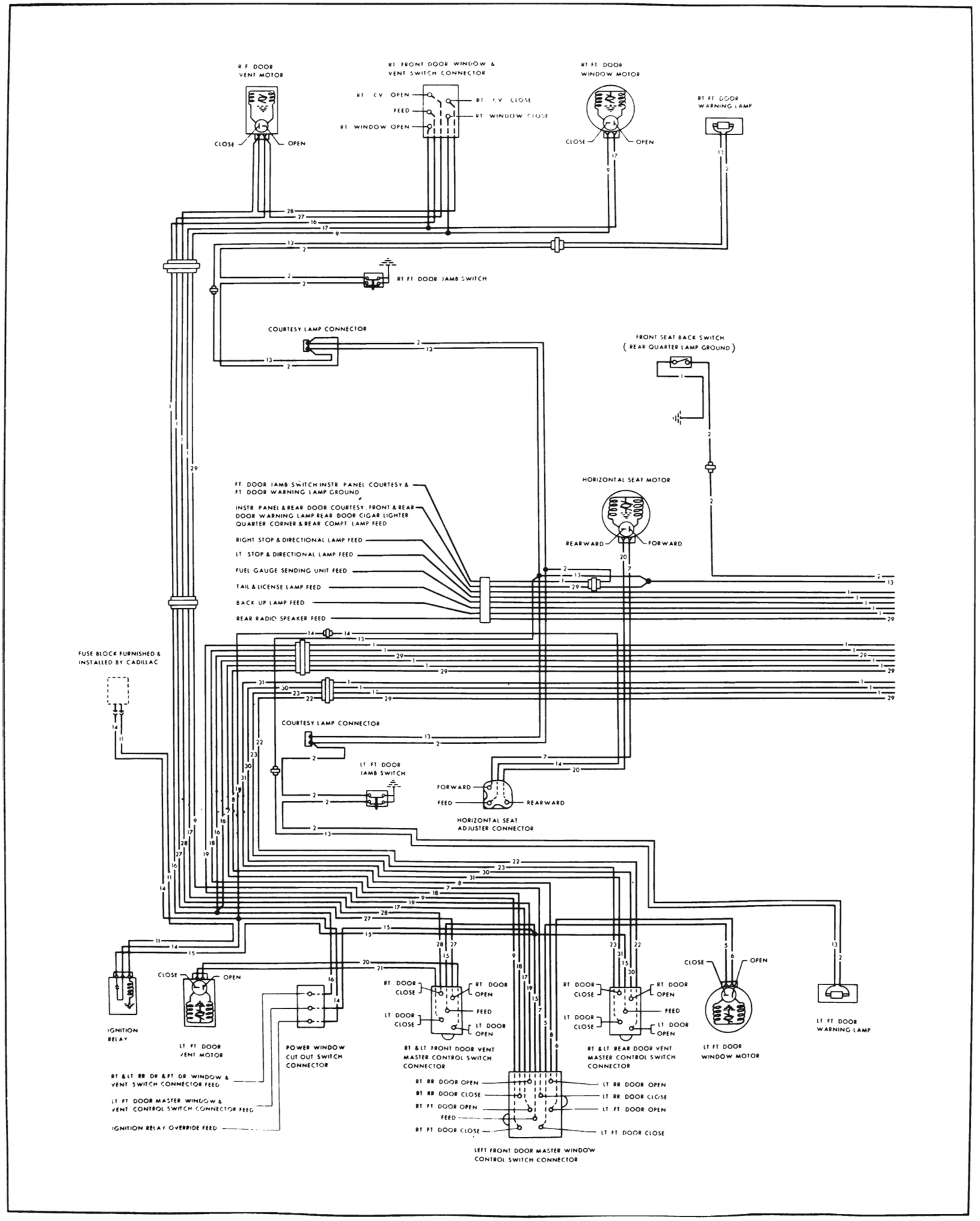
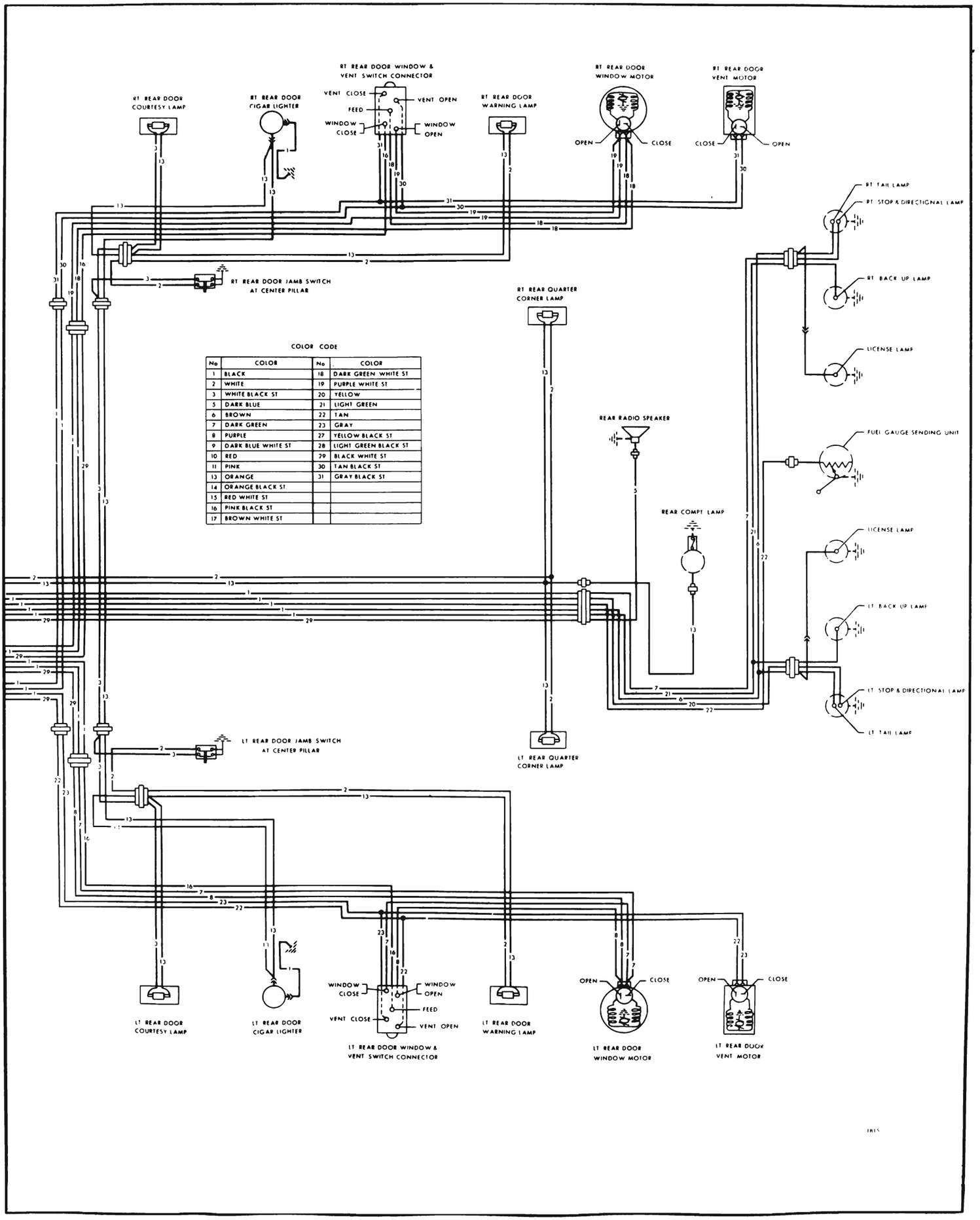


Fig. 11-26—Standard Body and Power Wiring Circuit Diagram - Cadillac 68169



COLOR CODE

No	COLOR	No	COLOR
1	BLACK	18	DARK GREEN WHITE ST
2	WHITE	19	PURPLE WHITE ST
3	WHITE BLACK ST	20	YELLOW
5	DARK BLUE	21	LIGHT GREEN
6	BROWN	22	TAN
7	DARK GREEN	23	GRAY
8	PURPLE	27	YELLOW BLACK ST
9	DARK BLUE WHITE ST	28	LIGHT GREEN BLACK ST
10	RED	29	BLACK WHITE ST
11	PINK	30	TAN BLACK ST
13	ORANGE	31	GRAY BLACK ST
14	ORANGE BLACK ST		
15	RED WHITE ST		
16	PINK BLACK ST		
17	BROWN WHITE ST		

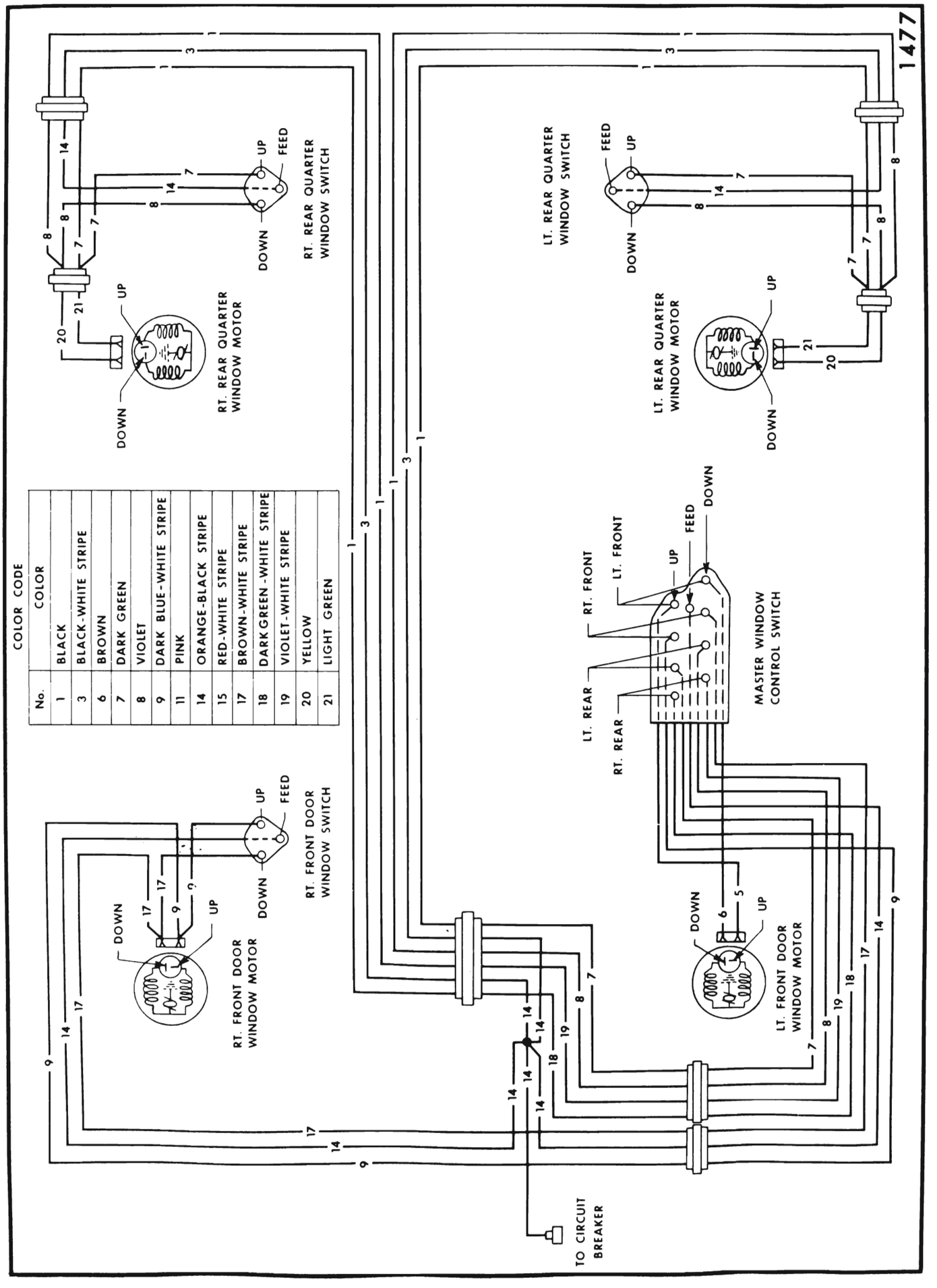


Fig. 11-27—Power Window Circuit Diagram - Chevrolet, Pontiac, Buick "A"

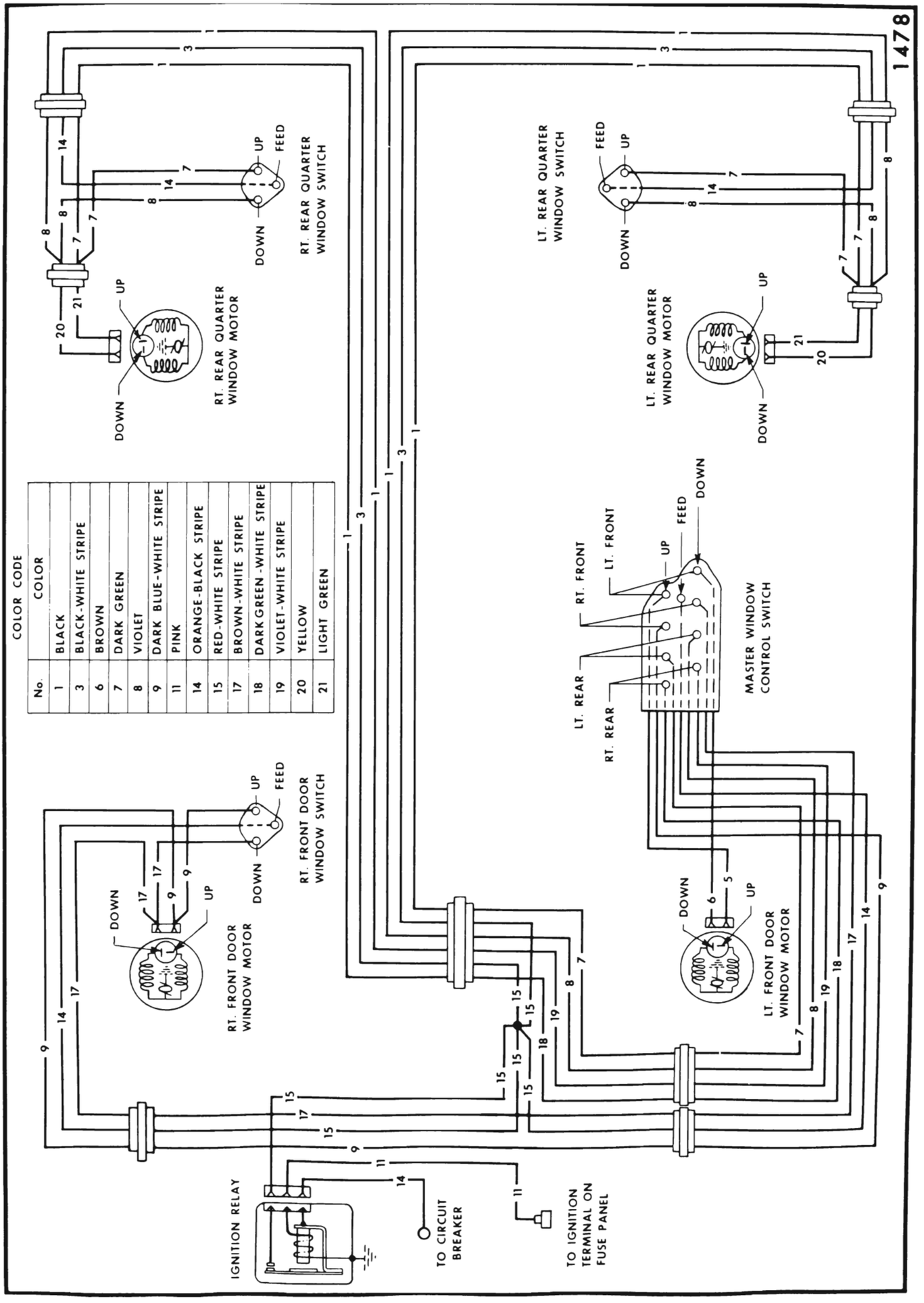


Fig. 11-28—Power Window Circuit Diagram - Oldsmobile "A"

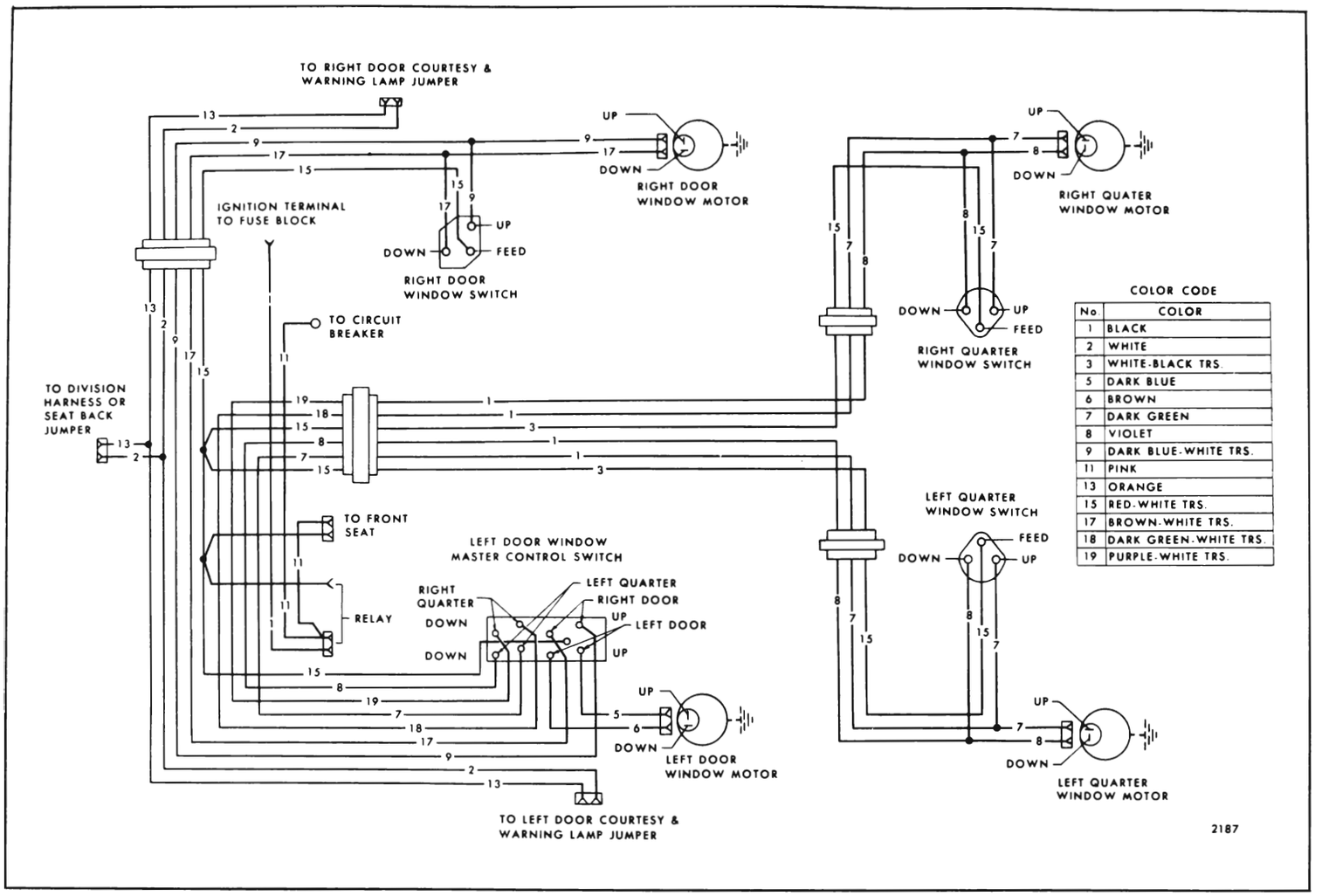


Fig. 11-29—Power Window Circuit Diagram - Oldsmobile "E"

POWER OPERATED VENTILATORS

The power ventilators are operated by a rectangular shaped 12 volt series-wound motor with an internal circuit breaker.

The power ventilator circuit is very similar to the power window circuit. The diagnosis outlined for the power windows may also be used in locating and correcting failures in the power ventilator circuit.

A typical illustration showing the ventilator installation is shown in Figure 11-31.

The harness for the ventilator circuit is separate in Pontiac styles. All other series the harness is an integral part of the power window harness.

Circuits for power ventilators are shown in Figures 11-32 and 11-33.

POWER OPERATED STATION WAGON TAIL GATE WINDOW

Electrical Tail Gate Window Circuit

The station wagon style power operated tail gate window is controlled by a window regulator assembly, equipped with a rectangular shaped, 12 volt D.C., reversible direction motor with an internal circuit breaker and a self-locking gear drive.

In addition to the internal circuit breaker the wiring circuit is protected by a 40 amp circuit breaker (see Electrical Introduction for locations).

Oldsmobile Styles - In addition to the circuit breaker, a relay is used in the circuit and installed at the shroud. The relay prevents the operation of the tail gate window from the instrument panel switch, until the ignition switch is turned "on".

The window may be operated from the instrument panel control switch, or from the tail gate window lock cylinder which rotates to raise or lower the window.

Chevrolet Styles - On the nine passenger station wagon styles, a tail gate window control switch is located at the rear of the left rear quarter inner trim panel (see Fig. 11-34).

NOTE: The "up" cycle wire is not engaged in the switch block but may be connected upon owner request.

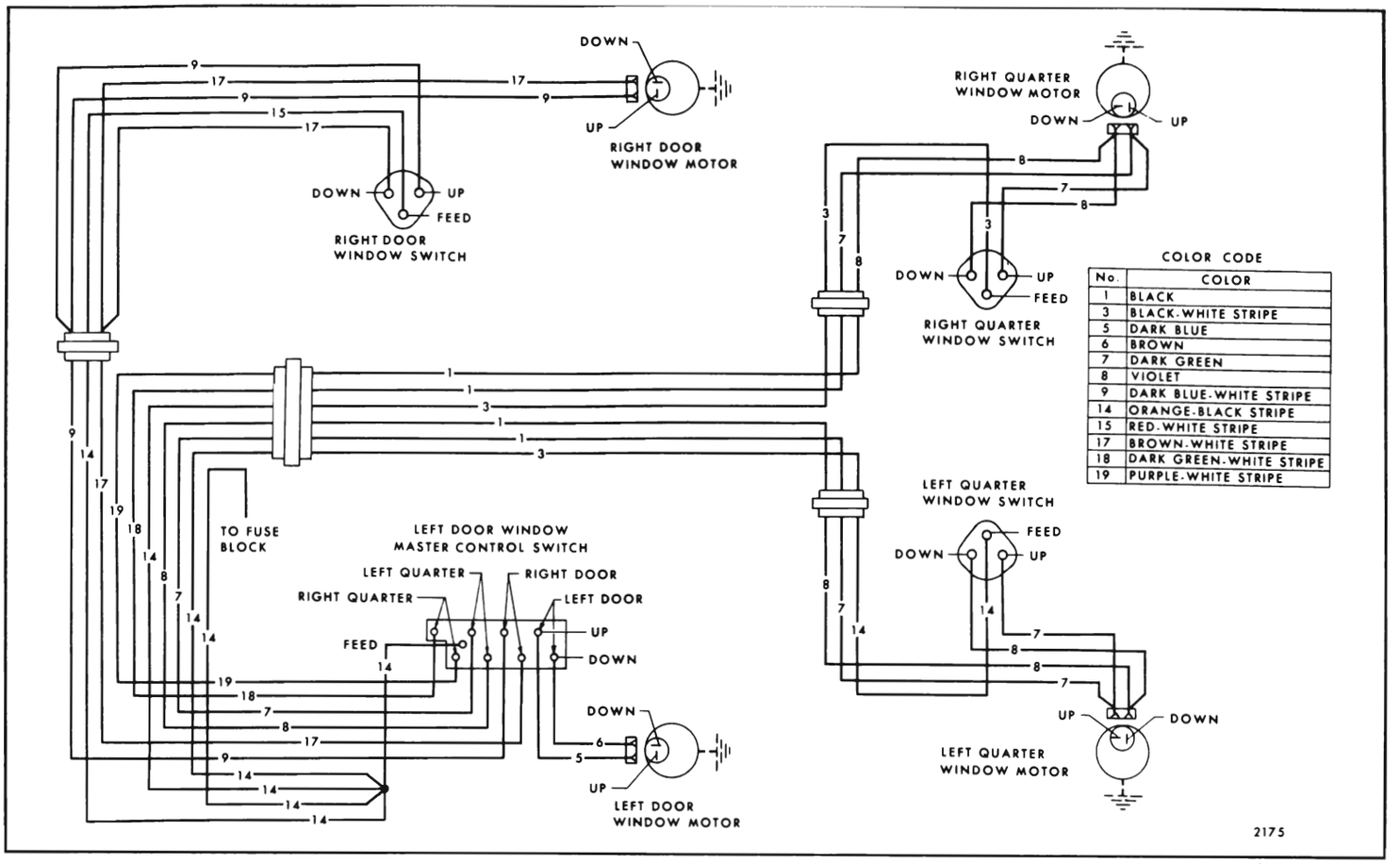


Fig. 11-30—Power Window Circuit Diagram - Buick "E"

To prevent the window from being operated to the up position when the tail gate has been lowered, a safety switch is located on the tail gate lock pillar. The safety switch opens the ground circuit of the tail gate window motor, making it inoperative. See tail gate views.

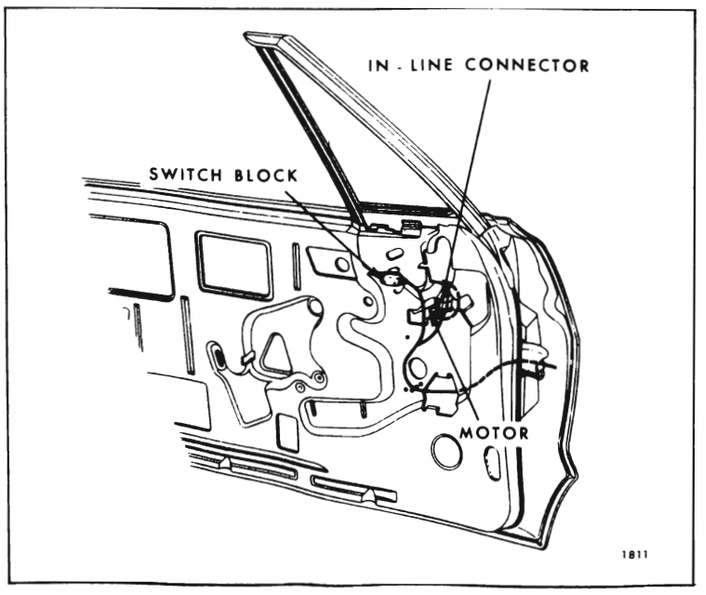


Fig. 11-31—Typical Power Ventilator Wiring

On all "A & B" Bodies - the tail gate window harness runs adjacent to the body wire and consists of two major sections. The front section of flat wire extends from the left center of the toe pan (Fig. 11-35 and 11-36), rearward and connects to the rear harness at the right rear quarter area (see Figs. 11-37, 11-38, 11-39). The rear cross bar wiring is shown in Figures 11-40, 11-41 and the tail gate wiring is shown in Figures 11-42, 11-43 and 11-44.

On Chevrolet "X" Bodies - The tail gate window harness is a component part of the body wiring harness which consists of two sections (front and rear) see Figures 11-45, 11-46, 11-47 and 11-48.

Checking Procedure

Before performing an intensive checking procedure to determine any failure of the circuit, check all the connectors for proper installation. The checking procedures below may be used to check the operation of a switch or motor after the cause of the electrical failure has been isolated to a particular part of the circuit. Refer to the circuit diagrams. See Figures 11-49, 11-50 and 11-51.

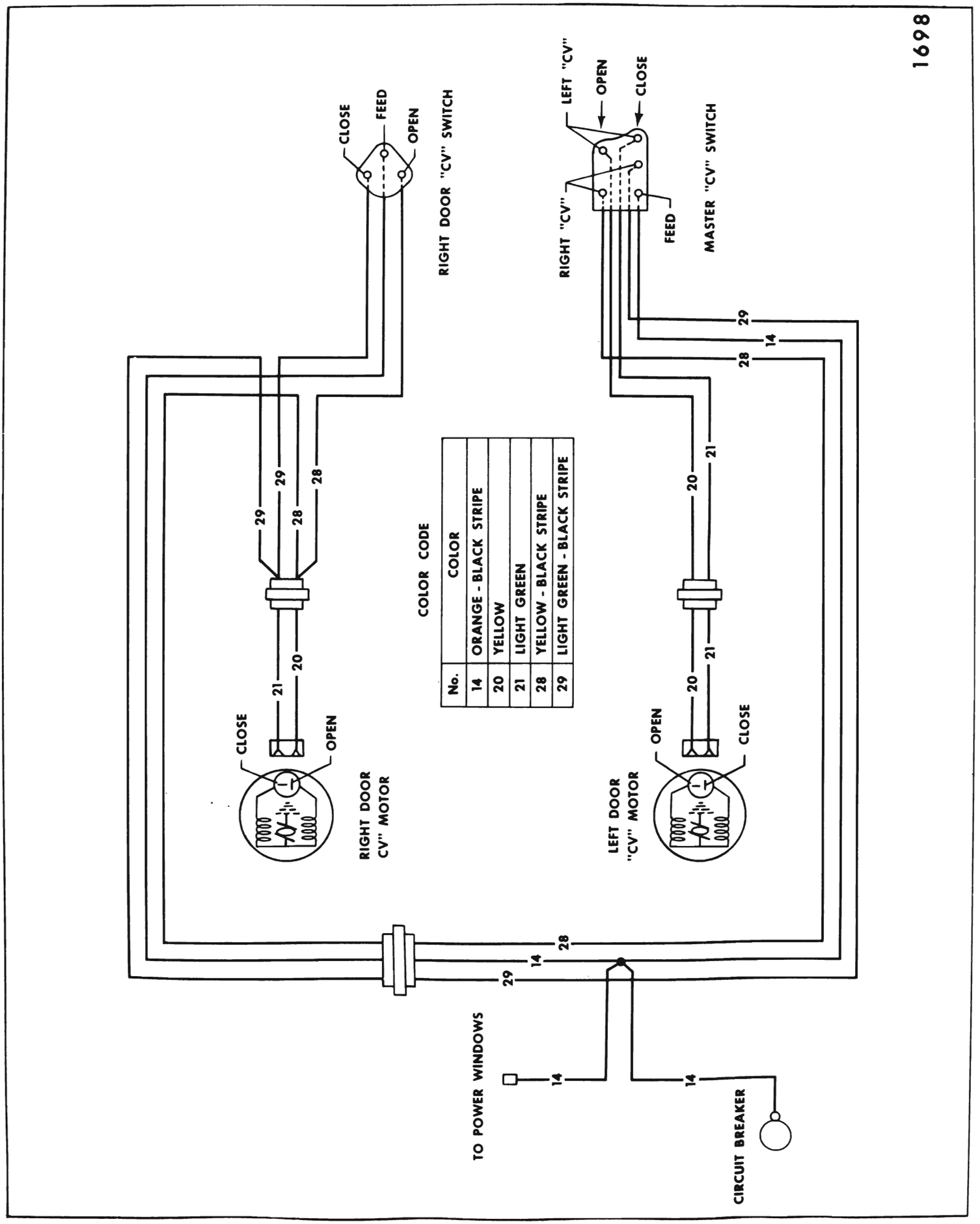


Fig. 11-32—Power Ventilator Circuit Diagram - Pontiac Style Shown

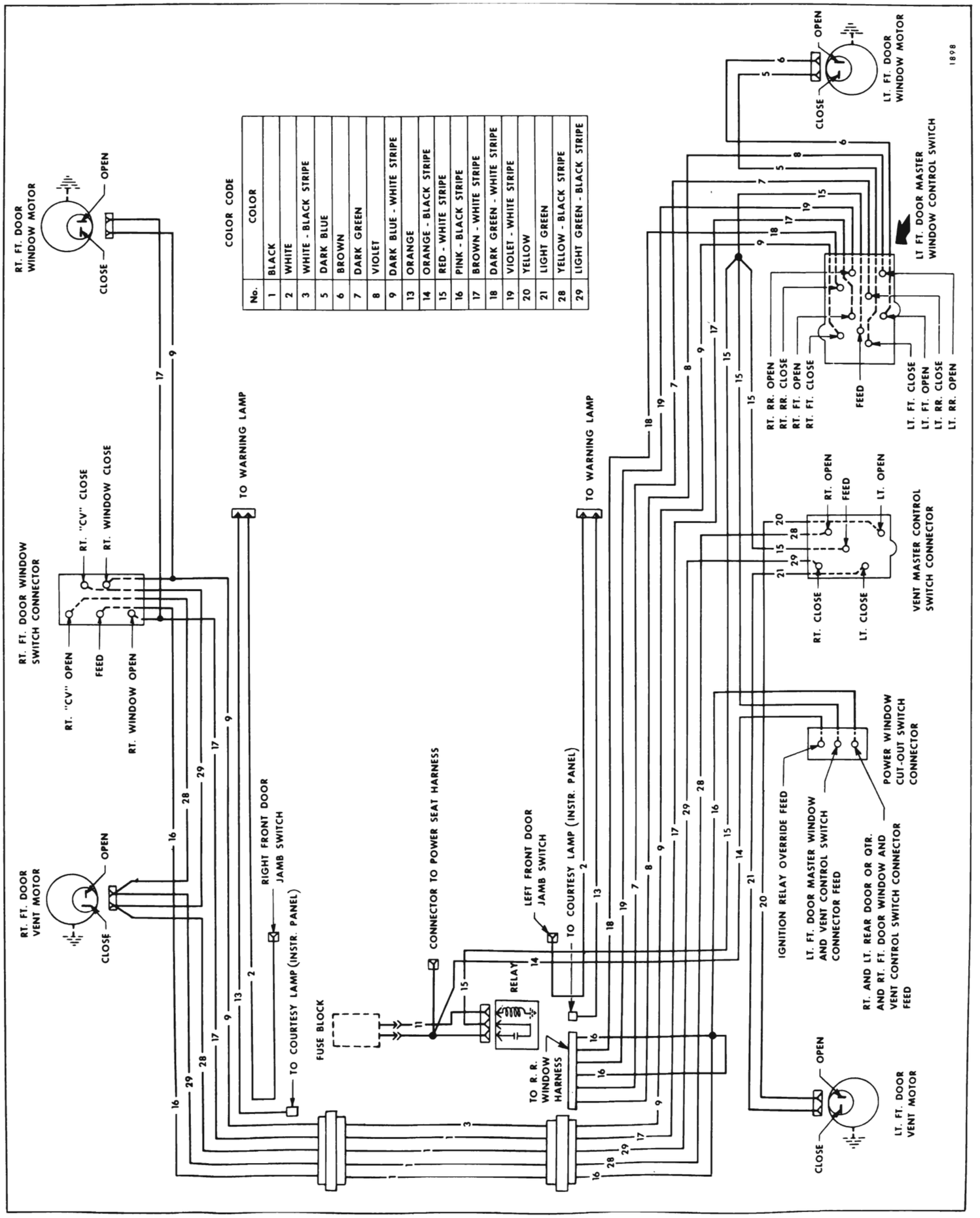


Fig. 11-33—Front Door Power Window and Ventilator Circuit Diagram - Cadillac

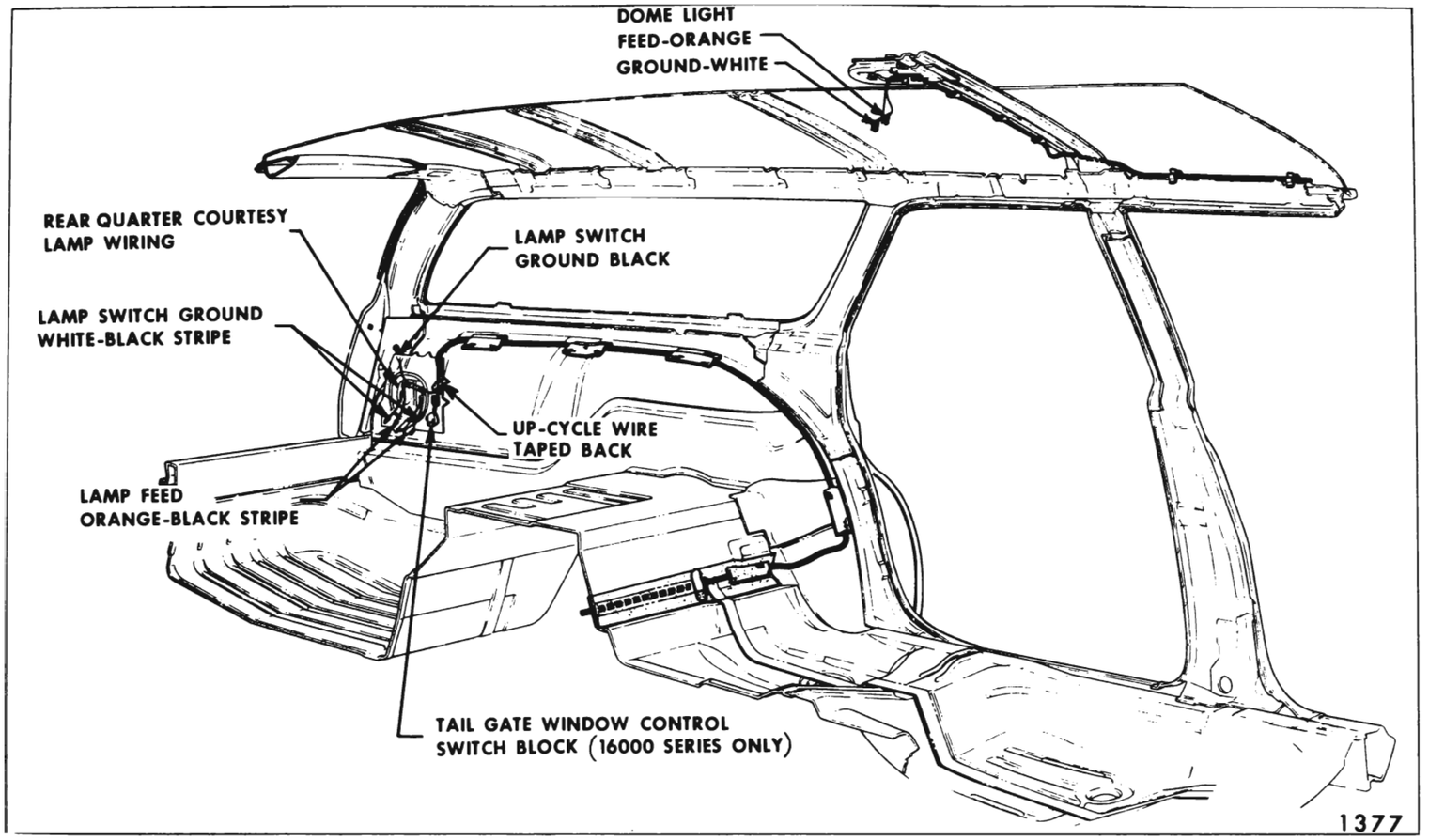


Fig. 11-34—Left Side Power Tail Gate Window and Body Wiring - Chevrolet, Pontiac "B" Bodies

a. Checking Feed Circuit Continuity at Circuit Breaker

1. Connect one test light lead to battery side of circuit breaker and ground other lead. If tester does not light, there is an open or short circuit in feed circuit to breaker.

2. To check circuit breaker disconnect the output feed wire (the wire opposite the power source feed to the breaker) from the breaker. Connect one test light lead to the output terminal and ground other lead. If tester does not light, circuit breaker is inoperative.

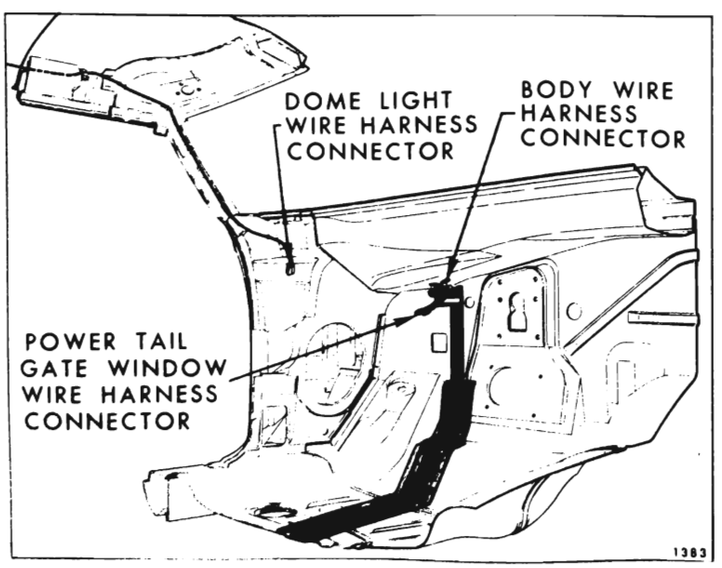


Fig. 11-35—Front End Wiring - Chevrolet, Pontiac "B" Body

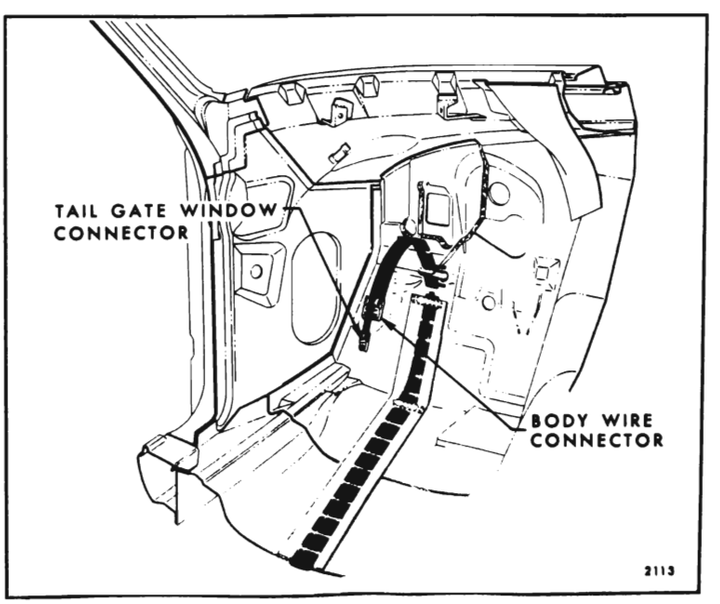


Fig. 11-36—Front End Wiring - All "A" Bodies

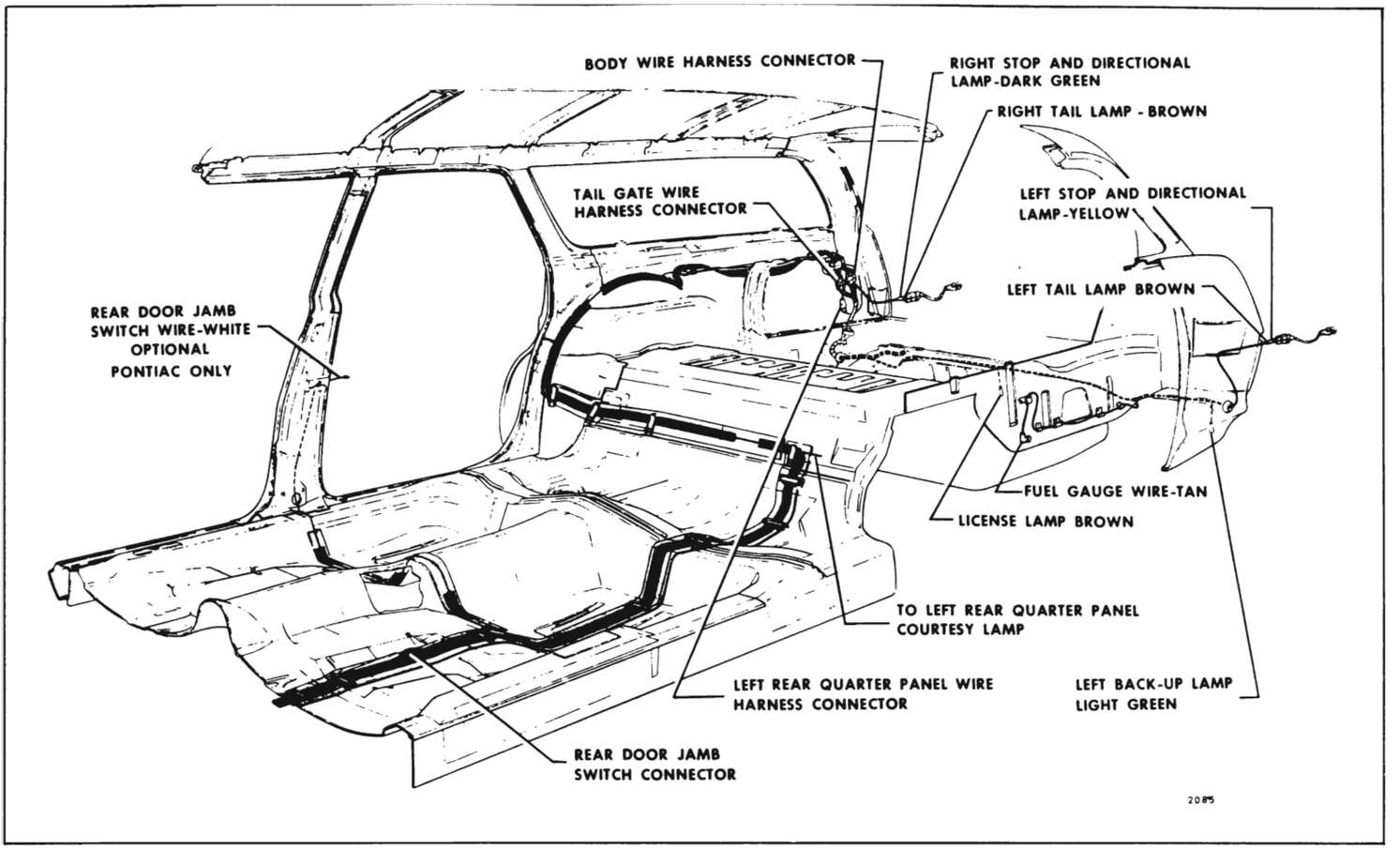


Fig. 11-37—Right Side and Rear End Wiring - Chevrolet, Pontiac "B" Bodies

b. Checking Relay Assembly at Shroud— Oldsmobile Styles Only

1. With test light check relay feed. If tester does not light, there is an open or short circuit between relay and circuit breaker.

2. Turn ignition switch on and with test light check output terminal of relay. If tester does not light, the relay is inoperative or there is a short or open circuit between ignition switch and relay assembly. (Check fuse at dash panel.)

c. Checking Feed Circuit Continuity at Control Switch on Instrument Panel

1. Disengage harness connector from switch. Connect one test light lead to feed terminal of switch connector and ground other test lead to body metal. If tester does not light, there is an open or short circuit between switch and power source.

d. Checking Control Switch at Instrument Panel

1. Disengage harness connector from switch.

2. Use a #12 gauge jumper wire and insert one end into the feed terminal and the other end into one of the other terminals. Tail gate window motor should operate.

3. Repeat procedure for the other terminal. If the tail gate window motor operates with the jumper wire but does not operate with the control switch, the switch is defective.

e. Checking Control Switch on Tail Gate

Remove tail gate switch and escutcheon as described in tail gate section. Disengage connector from switch and determine that there is current at terminal block; then, use a 12 gauge jumper and perform the same checking procedure as outlined for the control switch at the instrument panel.

f. Checking the Tail Gate Window Motor

1. Disconnect harness connector from motor.

2. Connect the positive side of power source to the light blue wire terminal (close cycle) on the motor connector and the negative lead to the white - dark green (ground) wire terminal. Motor should operate. To check the reverse operation of the motor connect the power

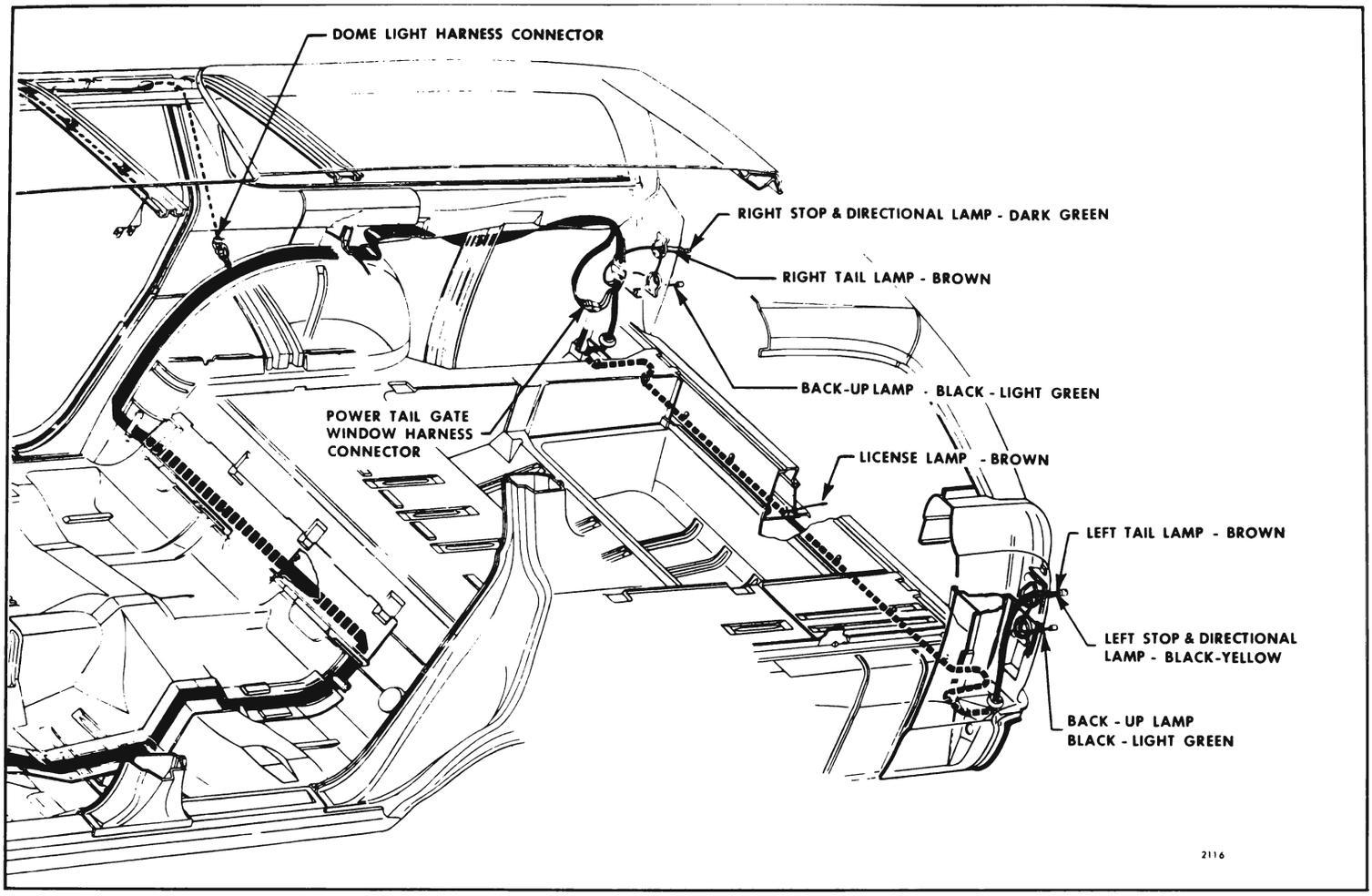


Fig. 11-38—Right Side and Rear End Wiring - Chevrolet, Pontiac, Oldsmobile "A" Bodies

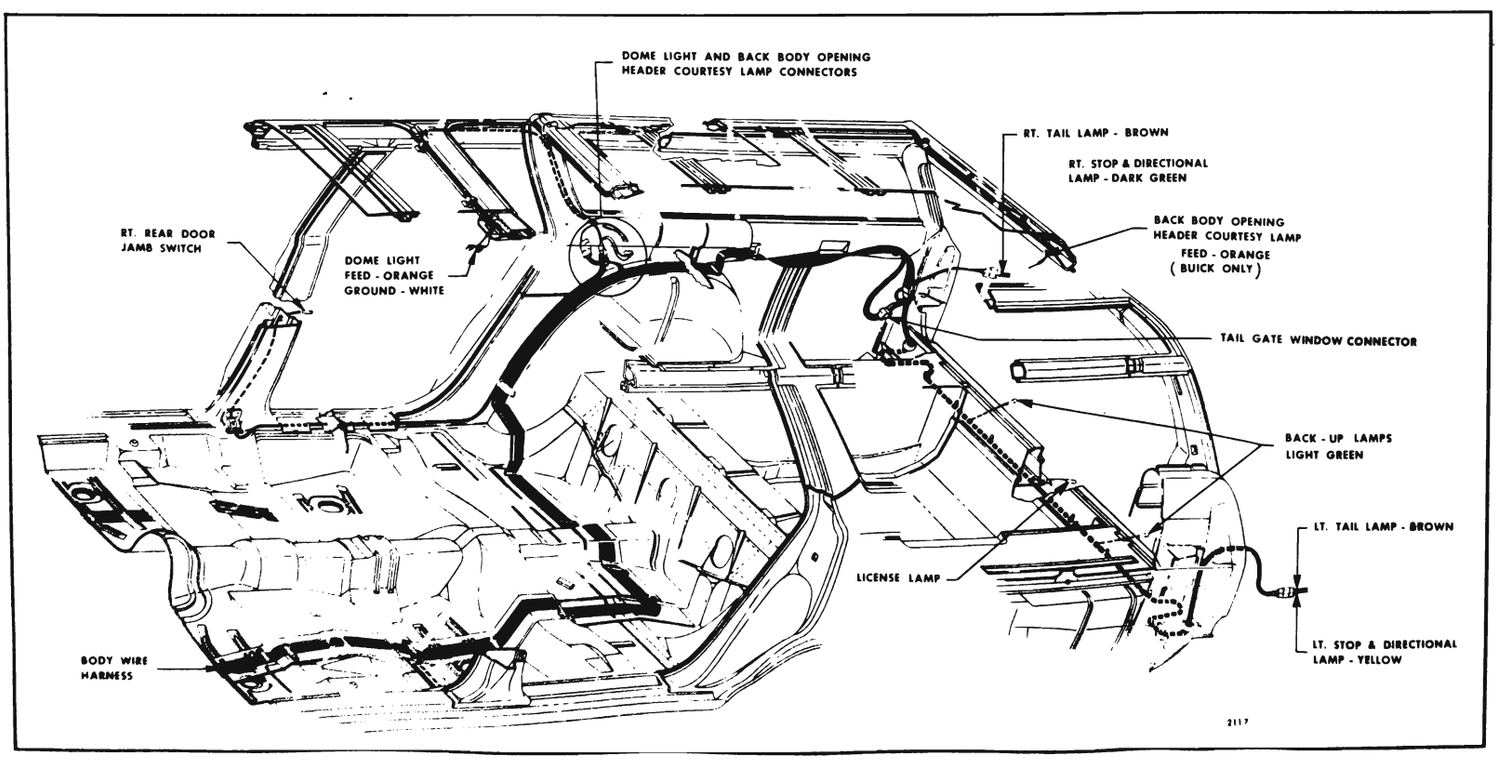


Fig. 11-39—Right Side and Rear Wiring - Buick "A" Body 55-65 Style

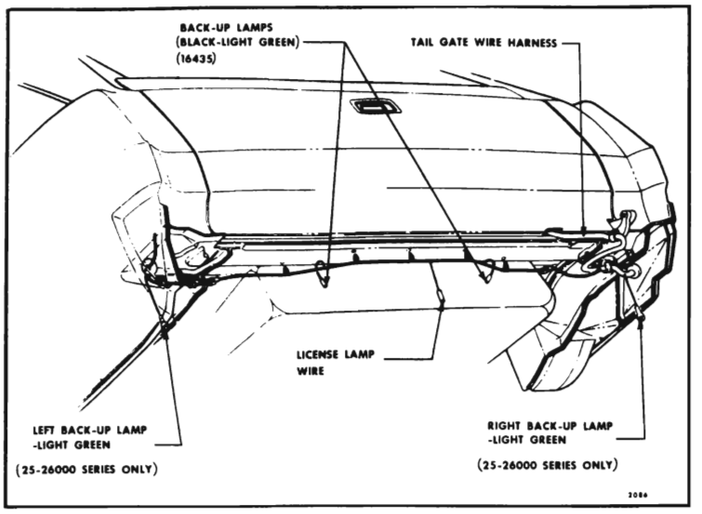


Fig. 11-40—Rear Cross Bar Wiring - Chevrolet, Pontiac "B" Bodies

source to the tan - white wire terminal (open cycle). If motor does not operate in both directions, repair or replace motor.

g. *Checking Operation of Safety Switch*

1. With tail gate open, depress switch arm to simulate the tail gate being closed on all "A & B" Styles. For Chevrolet "X" use jumper wire from open contact to body ground. Operate control switch. If motor does not operate, either switch is defective or the circuit is open from the motor to the switch.

2. To check for defective switch, connect one end of test light to a source of power and the other lead to the safety switch terminal. If the tester lights when the switch lever is actuated, the switch is operative.

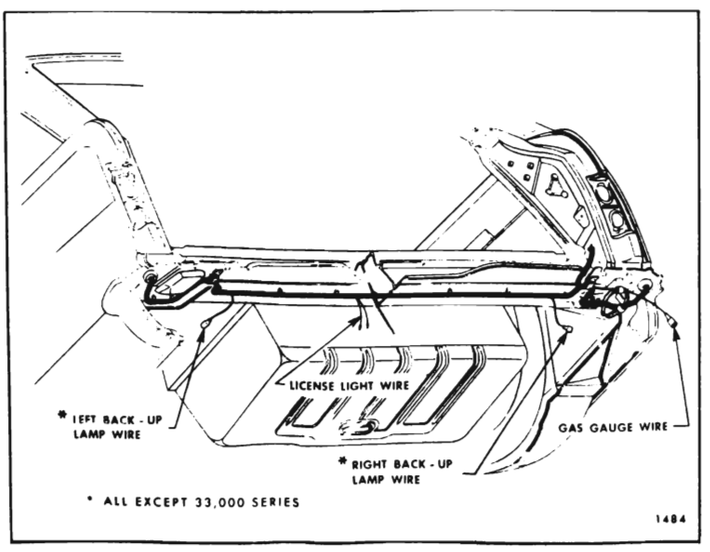


Fig. 11-41—Rear Cross Bar Wiring - All "A" Bodies

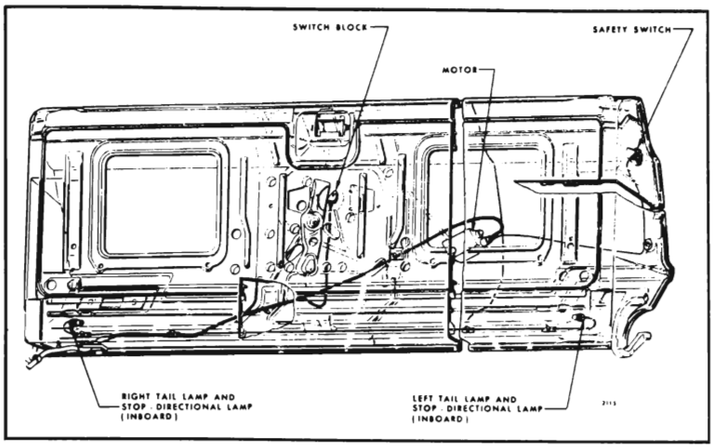


Fig. 11-42—Tail Gate Wiring - Chevrolet "B" Bodies

NOTE: Safety switch completes the ground circuit from the motor.

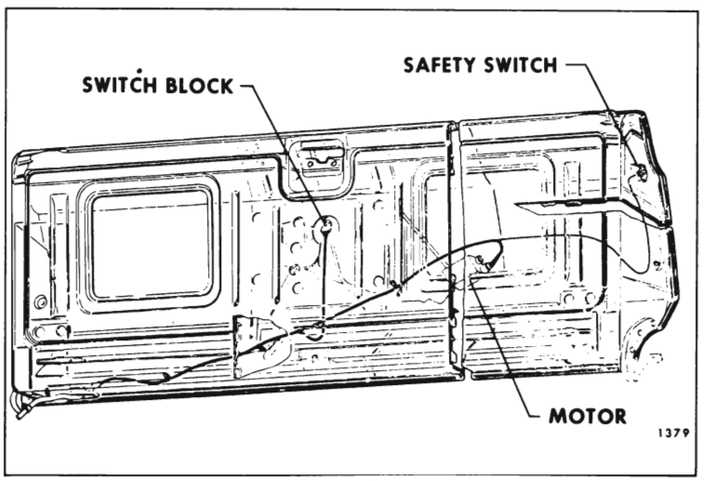


Fig. 11-43—Tail Gate Wiring - Pontiac "B" Bodies

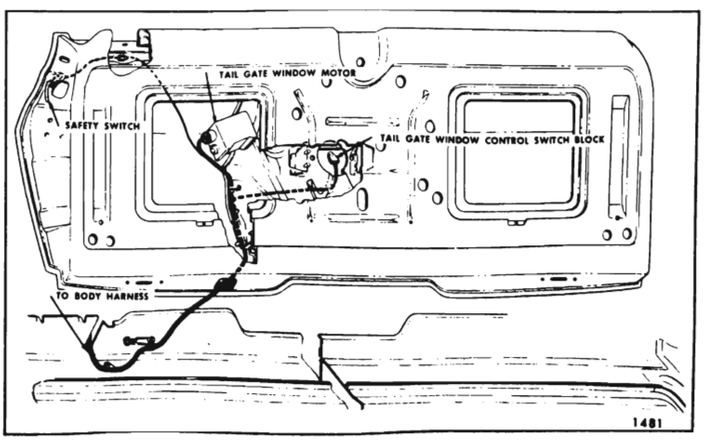


Fig. 11-44—Tail Gate Wiring - All "A" Bodies

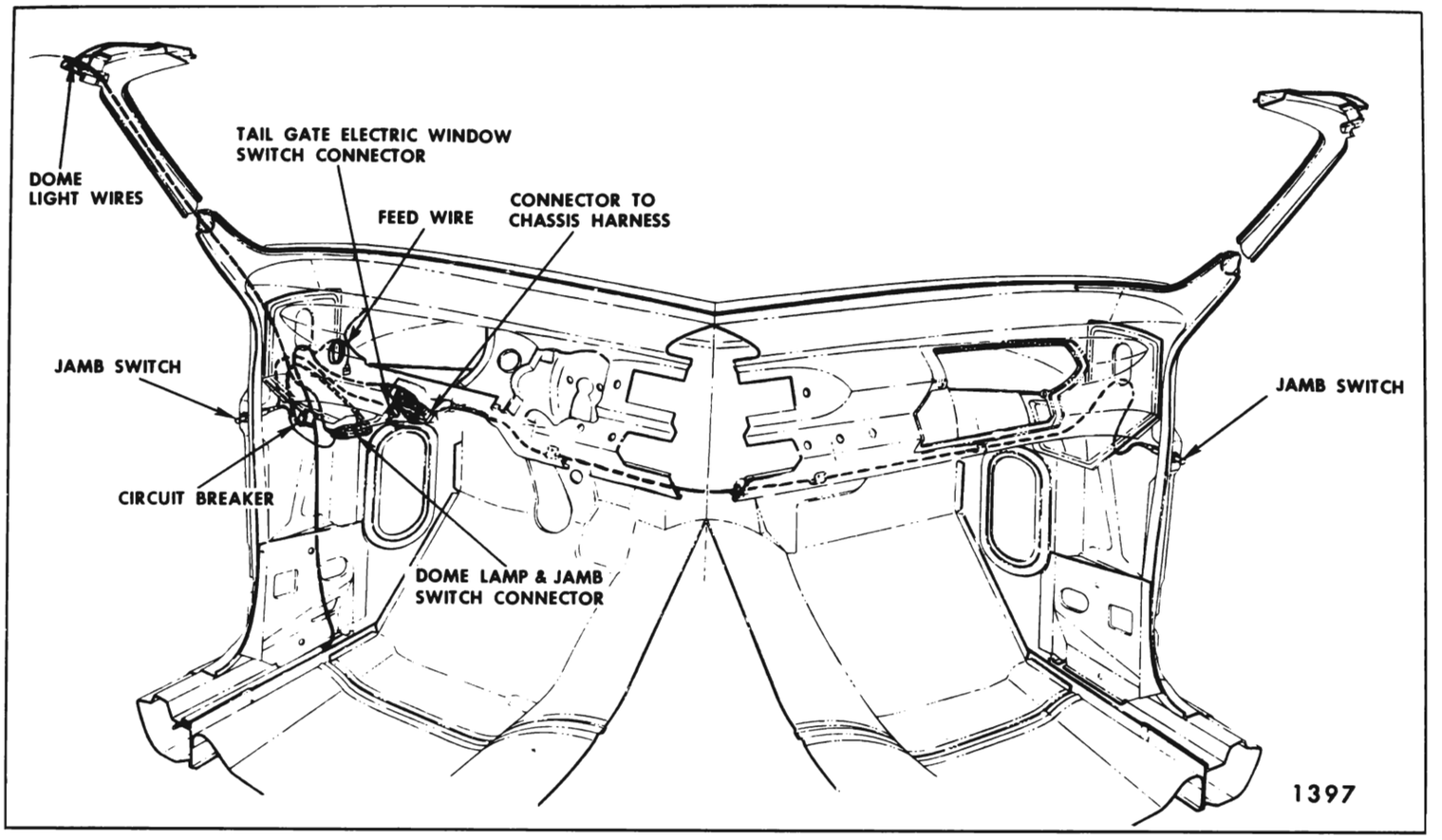


Fig. 11-45—Front End Wiring - Chevrolet "X" Bodies

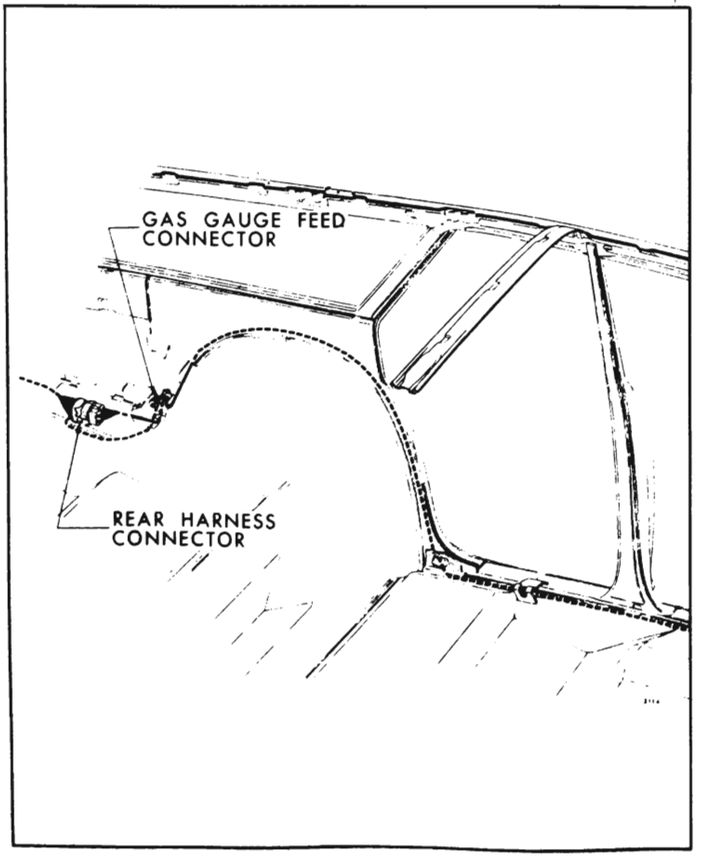


Fig. 11-46—Left Side Wiring - Chevrolet "X" Bodies

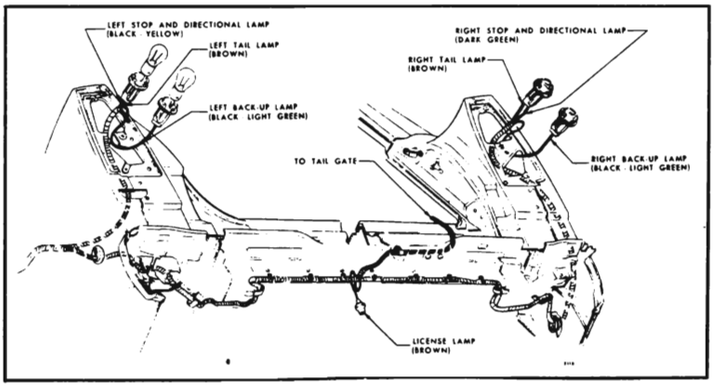


Fig. 11-47—Rear Cross Bar Wiring - Chevrolet "X" Bodies

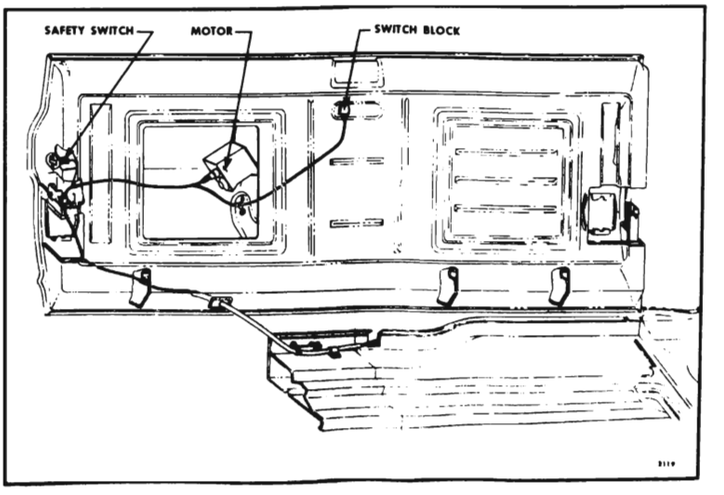


Fig. 11-48—Tail Gate Wiring - Chevrolet "X" Bodies

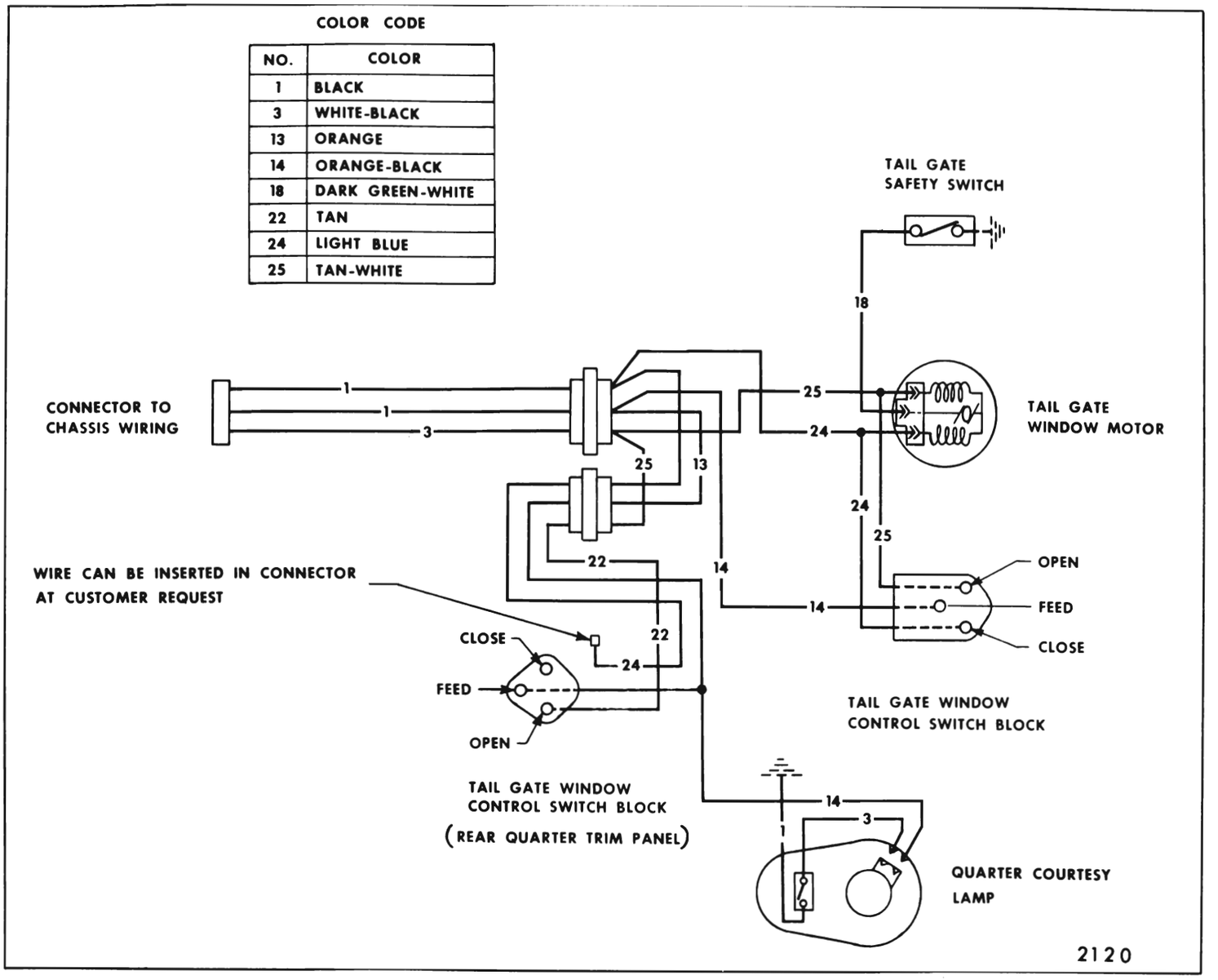
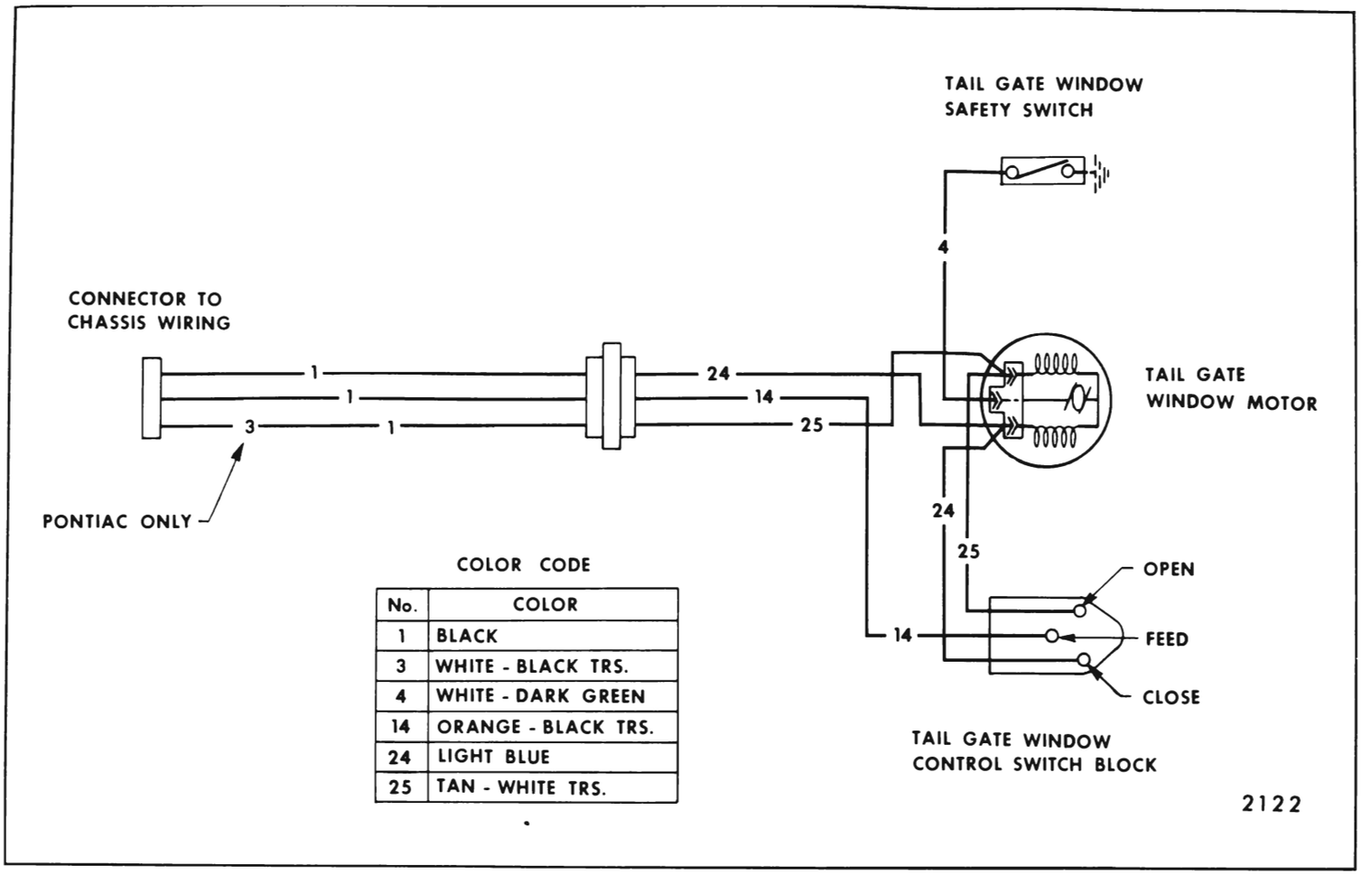


Fig. 11-49—Power Tail Gate Circuit - Chevrolet "B" 45 Styles



COLOR CODE

No.	COLOR
1	BLACK
3	WHITE - BLACK TRS.
4	WHITE - DARK GREEN
14	ORANGE - BLACK TRS.
24	LIGHT BLUE
25	TAN - WHITE TRS.

Fig. 11-50—Power Tail Gate Window Circuit - All "A & B" 35-55 and 65 Styles

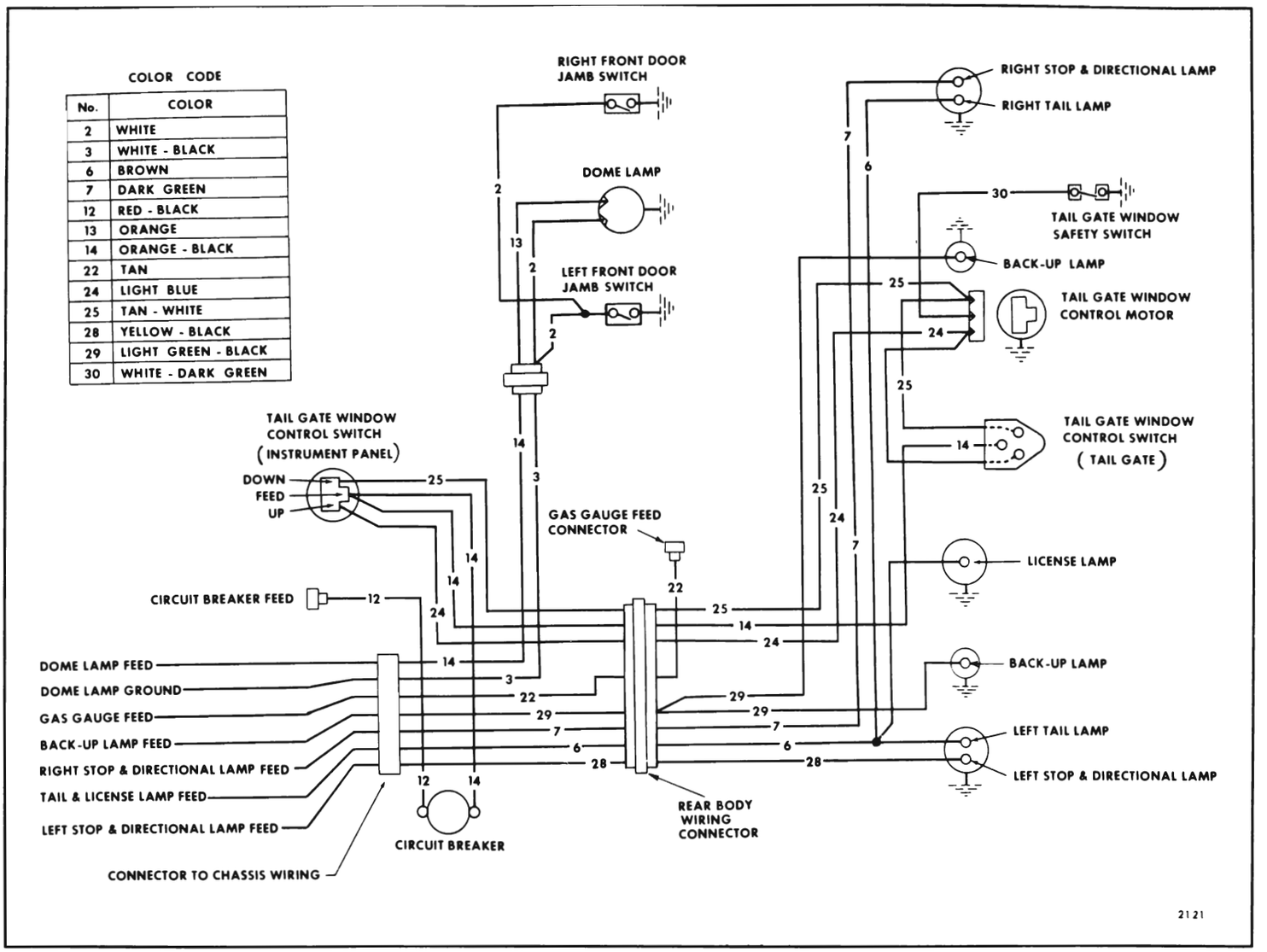


Fig. 11-51—Power Tail Gate Window Circuit - Chevrolet "X" Bodies

h. Trouble Shooting

CONDITION	CAUSE	CORRECTION
A. The tail gage window operates up and down from the tail gate switch but does not operate from the switch at the instrument panel.	1. Open or short circuit from power source to control switch at instrument panel.	1. Check affected wiring for open or short circuit and check connector at switch for proper installation.
	2. Defective or inoperative control switch.	2. Check operation of switch.
B. With the tail gate closed, the window operates downward but does not operate upward when the switch at the instrument panel or tail gate is actuated.	1. Open or short circuit in up cycle feed wire.	1. Check affected wiring for open or short circuit.
	2. Defective motor.	2. Check operation of motor.

CONDITION	CAUSE	CORRECTION
C. The window will not operate up or down from any of the control switches.	1. Open or short circuit in circuit from power source to switches or motor.	1. Check operation of circuit breaker.
	2. Safety switch not connected or poor ground.	2. Check affected circuit for open or short circuit.
	3. Mechanical bind or failure in tail gate window regulator mechanism.	3. Check connectors to safety switch and motor for proper engagement.
	4. Defective tail gate window regulator motor.	4. Check tail gate mechanical parts for bind or failure.
		5. Check operation of motor.

SEATS

HORIZONTAL SEATS

Description

The seat adjusters for the bench-type and bucket-type seat are actuated by a 12 volt series-wound motor located near the front left side of the seat bottom frame, and are energized through a control switch installed in the seat side panel or in the door arm rest. For typical wiring installations see Figure 11-52 for bucket-type seats and Figure 11-53 for bench-type seats.

For circuit diagrams see Figures 11-54 and 11-55.

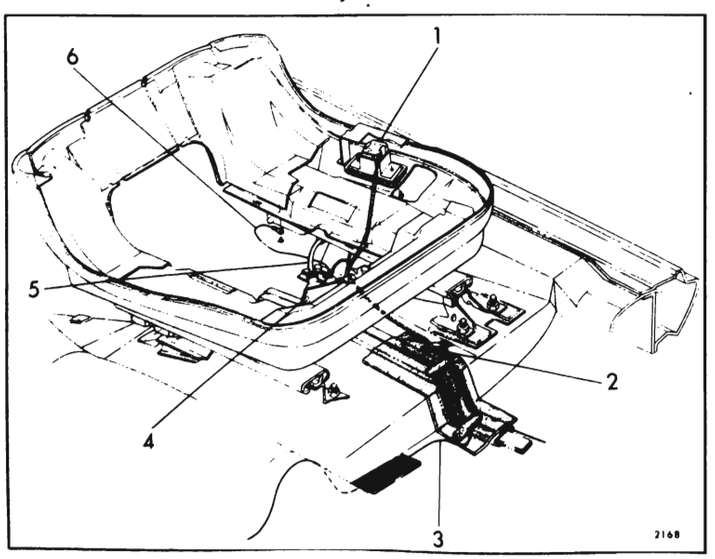


Fig. 11-52—Horizontal Bucket Seat Wiring

1. Control Switch
2. Feed Harness Connector
3. Feed Wire to Passenger Seat
4. Motor
5. Control Cable
6. Ground Wire

The horizontal seat circuit is protected by a circuit breaker (refer to Electrical Introduction for specific location).

Oldsmobile styles only - In addition to the circuit breaker a relay is used in the circuit which prevents the operation of the seat until the ignition switch is turned "on".

The trouble diagnosis chart will help locate typical problems which may occur.

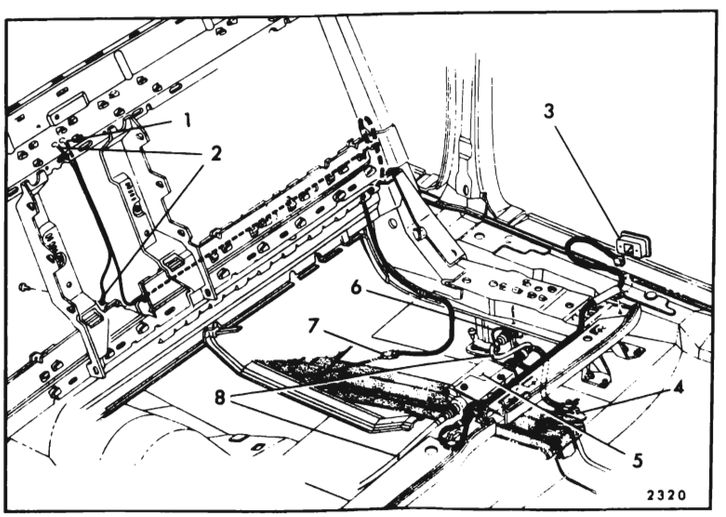


Fig. 11-53—Horizontal Bench Seat Wiring

1. Front Seat Back Switch Feed - White
2. Front Seat Back Switch Ground - Black
3. Control Switch
4. Harness Feed Connector
5. Motor
6. Ground Wire
7. Front Seat Back Courtesy Lamp Feed Connector (Cadillac Only)
8. Horizontal Control Cable

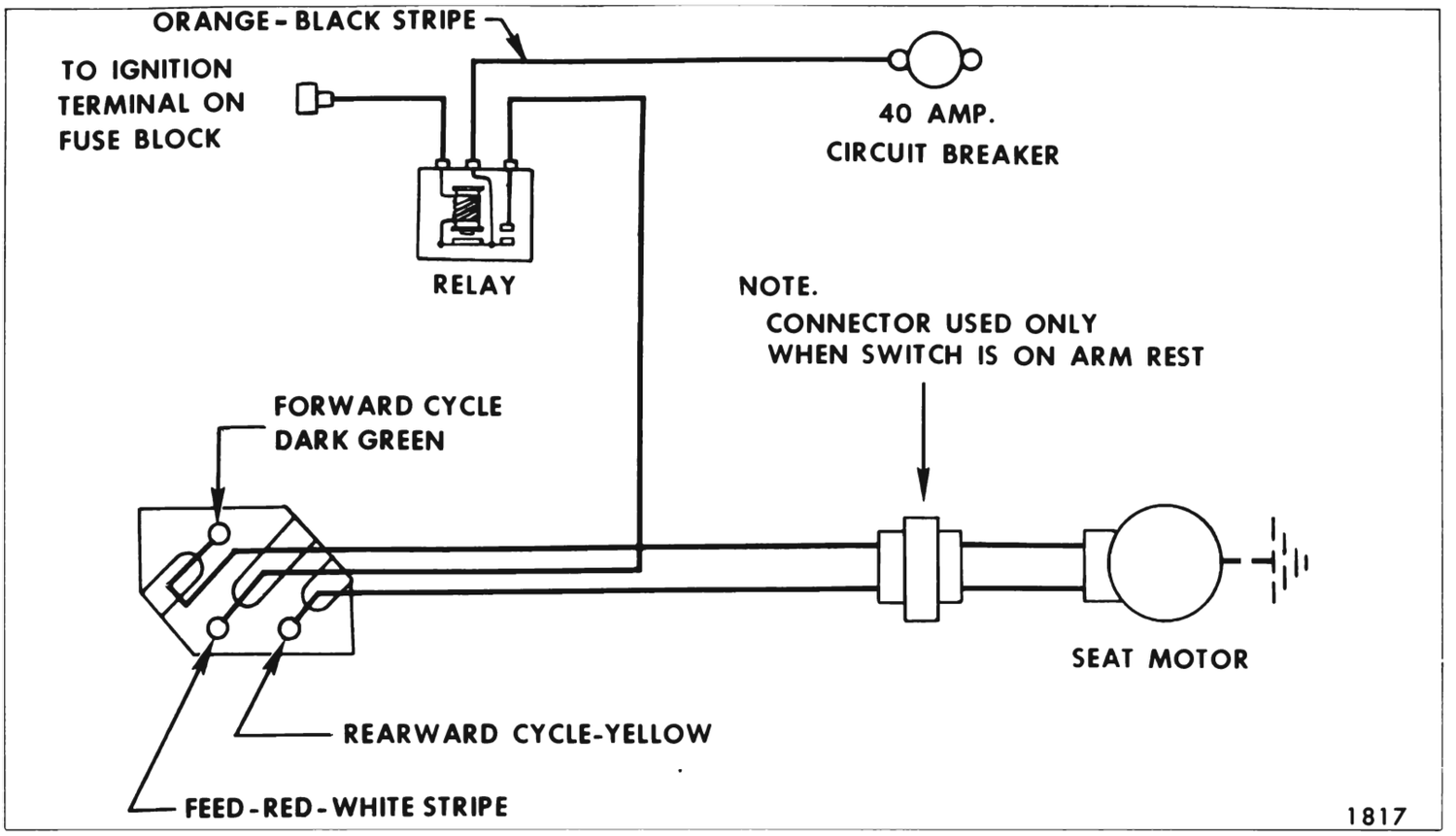


Fig. 11-54—Horizontal Seat Circuit - Oldsmobile Styles

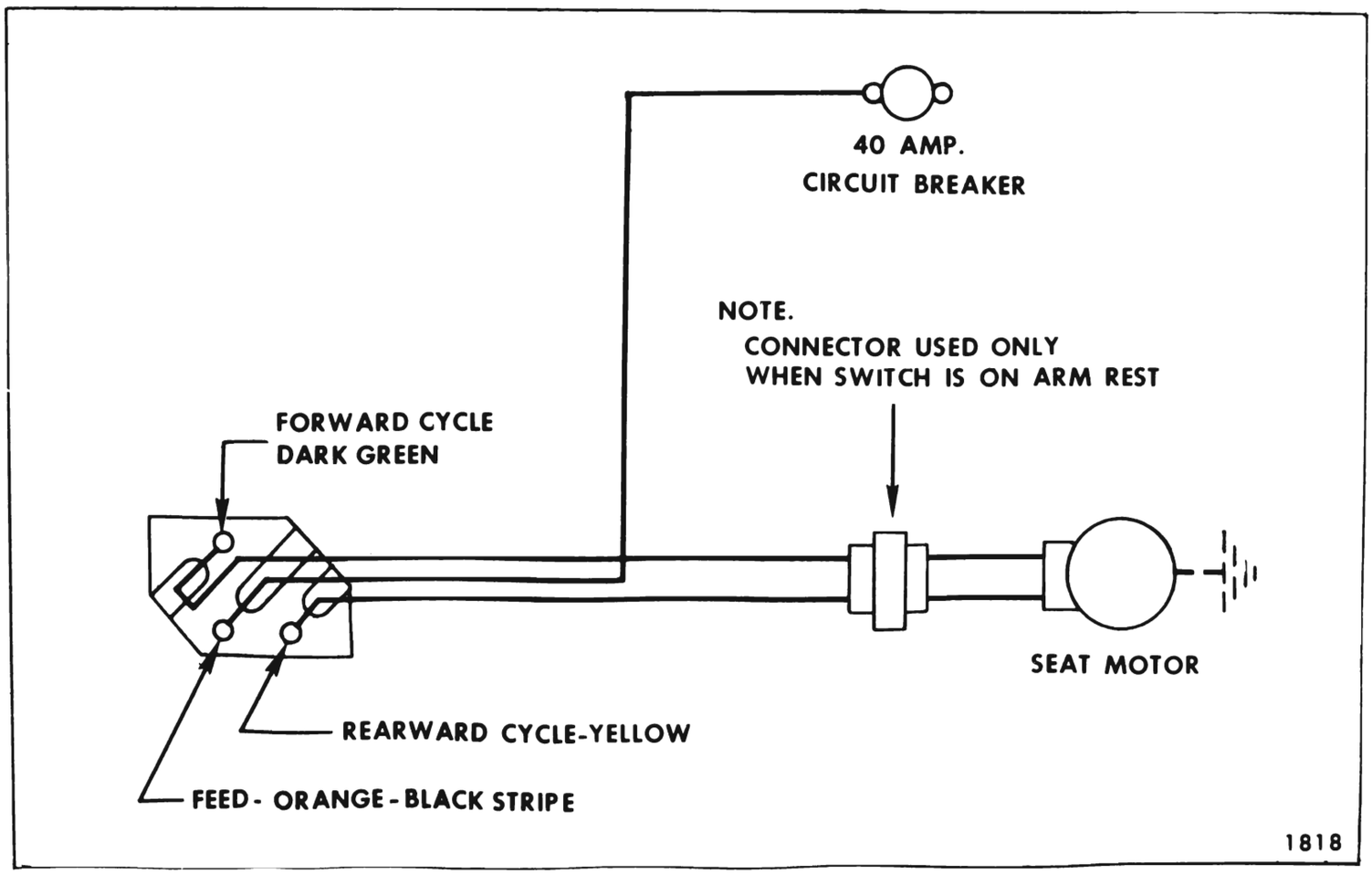


Fig. 11-55—Horizontal Seat Circuit - Buick, Cadillac Styles

Typical Failures and Corrections of Horizontal Seat Circuit

CONDITION	CAUSE	CORRECTION
The seat motor does not operate in either the forward or rearward direction.	a. Open or short circuit in feed harness.	a. Connect one test light lead to feed terminal of switch block and ground other tester lead to body metal. If tester does not light, there is an open or short circuit between switch and power source.
	b. Inoperative motor.	b. Check operation of seat control switch with jumper wire. See "Checking Door Window Control" for similar operation. c. Check circuit from control switch to motor for short or open circuit and check ground wire attachment at adjuster. d. Check operation of motor with #12 gauge jumper wire. Connect one end of jumper wire to power source and the other end to one of the seat motor terminals. Motor should operate. Perform same check at the other motor terminal. If motor does not operate, repair or replace motor as required.
The seat motor operates in only one direction.	a. Defective switch.	a. Check operation of seat control switch with jumper wire.
	b. Open or short circuit in motor feed wires.	b. Check circuit from control switch to motor for short or open circuit.
	c. Defective seat motor.	c. Check operation of motor with #12 gauge jumper wire. Connect one end of jumper wire to power source and the other end to one of the seat motor terminals. Motor should operate. Perform same check at the other motor terminal. If motor does not operate, repair or replace motor as required.

FOUR-WAY TILT SEAT

Description

The seat adjusters for the bench type and bucket type seats are actuated by a 12 volt, reversible, shunt-wound motor with a built-in circuit breaker. See Figures 11-56 and 11-57 for the bench seat installation and Figure 11-58 for the bucket seat installation.

The seat motor is energized by a toggle-type control switch installed in the left seat side panel. On 48467 style, the control switch is installed in the left front door arm rest.

The four way seat circuit is protected by a circuit breaker (refer to Electrical Introduction for specific location).

Oldsmobile styles only - In addition to the circuit breaker a relay is used in the circuit which prevents the operation of the seat until the ignition switch is turned "on".

The seat adjuster operating mechanism incorporates a transmission assembly which includes two solenoids and four drive cables on bench type seats and two drive cables on bucket seats, leading to the seat adjusters. One solenoid controls the rear

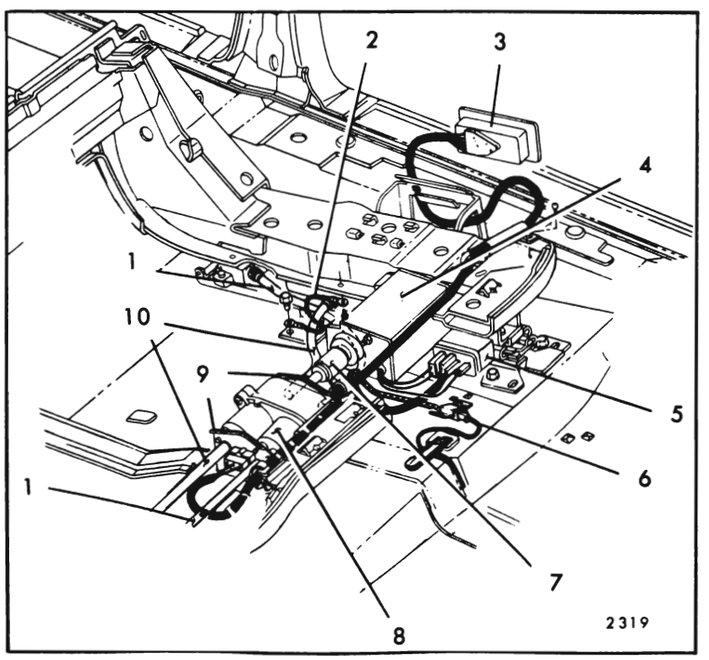


Fig. 11-56—Four-Way Bench Seat Wiring - "B & C" Body Styles

1. Vertical Control Cable (Yellow)
2. Ground Wire
3. Control Switch
4. Motor
5. Motor Control Relay
6. Harness Feed Connector
7. Rubber Coupler
8. Transmission Assembly
9. Transmission End Plates
10. Horizontal Control Cable (Black)

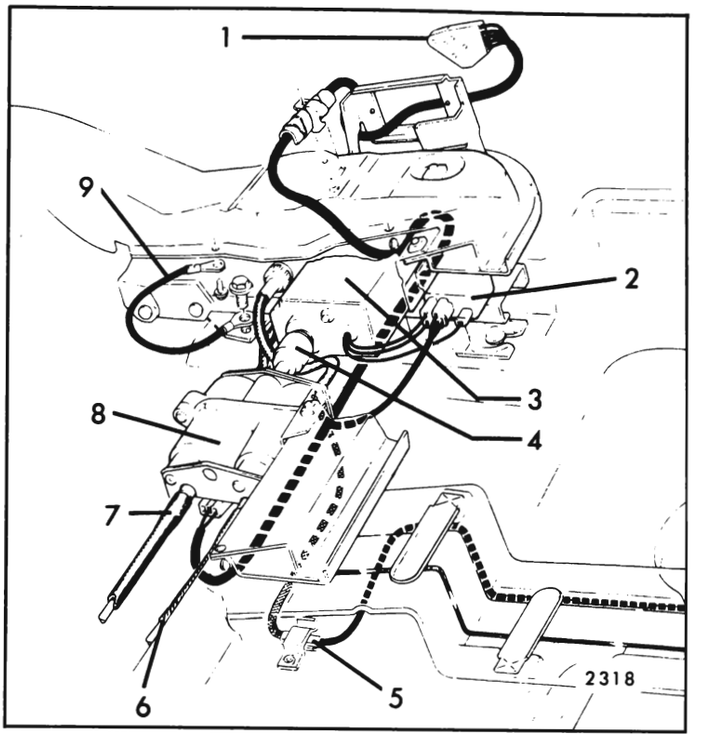


Fig. 11-57—Four-Way Bench Seat Wiring - "A" Body Styles

1. Control Switch Block
2. Motor Control Relay
3. Motor
4. Rubber Coupler
5. Harness Feed Connector
6. Vertical Drive Cable (Yellow)
7. Horizontal Drive Cable (Black)
8. Transmission Assembly
9. Seat Ground Wire

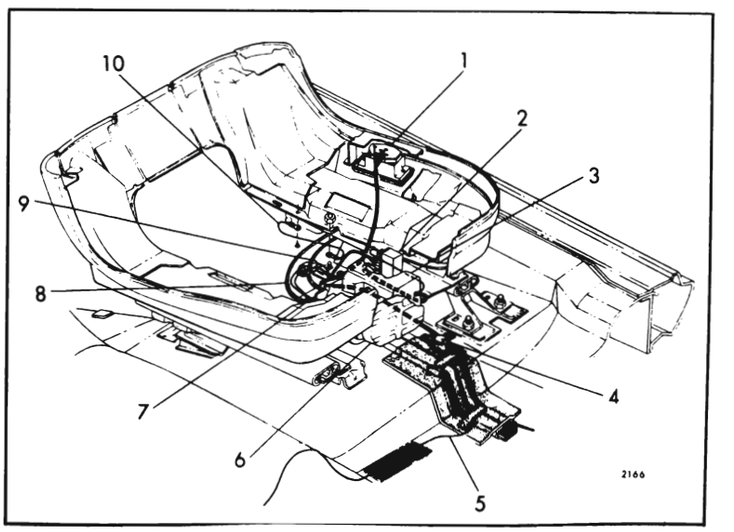


Fig. 11-58—Four-Way "Strato" Bucket Seat Wiring - All Styles

1. Control Switch
2. Motor Control Relay
3. Motor
4. Harness Feed Connector
5. Feed to Passenger Seat
6. Pulley Cover Plate
7. Transmission and Solenoid Assembly
8. Vertical Control Cable (Orange)
9. Horizontal Control Cable (Black)
10. Ground Wire

vertical movement of the seat while the other solenoid controls the horizontal movement of the seat. When the control switch is actuated, the motor and one of the solenoids are energized simultaneously. Then the solenoid plunger causes the shaft dog to engage with the large gear dog. Power is then transmitted through the transmission shaft on bench seats and through the pulleys on bucket seats, which in turn drives the actuator cables. When the adjusters reach their limit of travel, the drive cables stop their rotating action and torque is absorbed by the rubber coupler connecting the motor and transmission on bench seats. On bucket seats torque is absorbed through the belt on the pulley. When the control switch lever is released the switch contacts open, a spring returns the shaft dog and solenoid plunger to their original position disengaging the shaft dog from the large gear dog. See "Seat Section" for exploded view of transmission.

Checking Procedure

It may be necessary to use only one or all of the procedures outlined to locate an electrical failure in the circuit. If the location of the failure is evident follow only the steps required to check the affected wire or component. If the location of the failure is not evident, follow the procedures as outlined. Before performing any extensive check procedures, check the seat adjuster drive cables for proper attachment. In addition, study the seat circuit diagrams to become familiar with the seat circuit. (See Figs. 11-59 and 11-60).

a. Checking for Current at Circuit Breaker

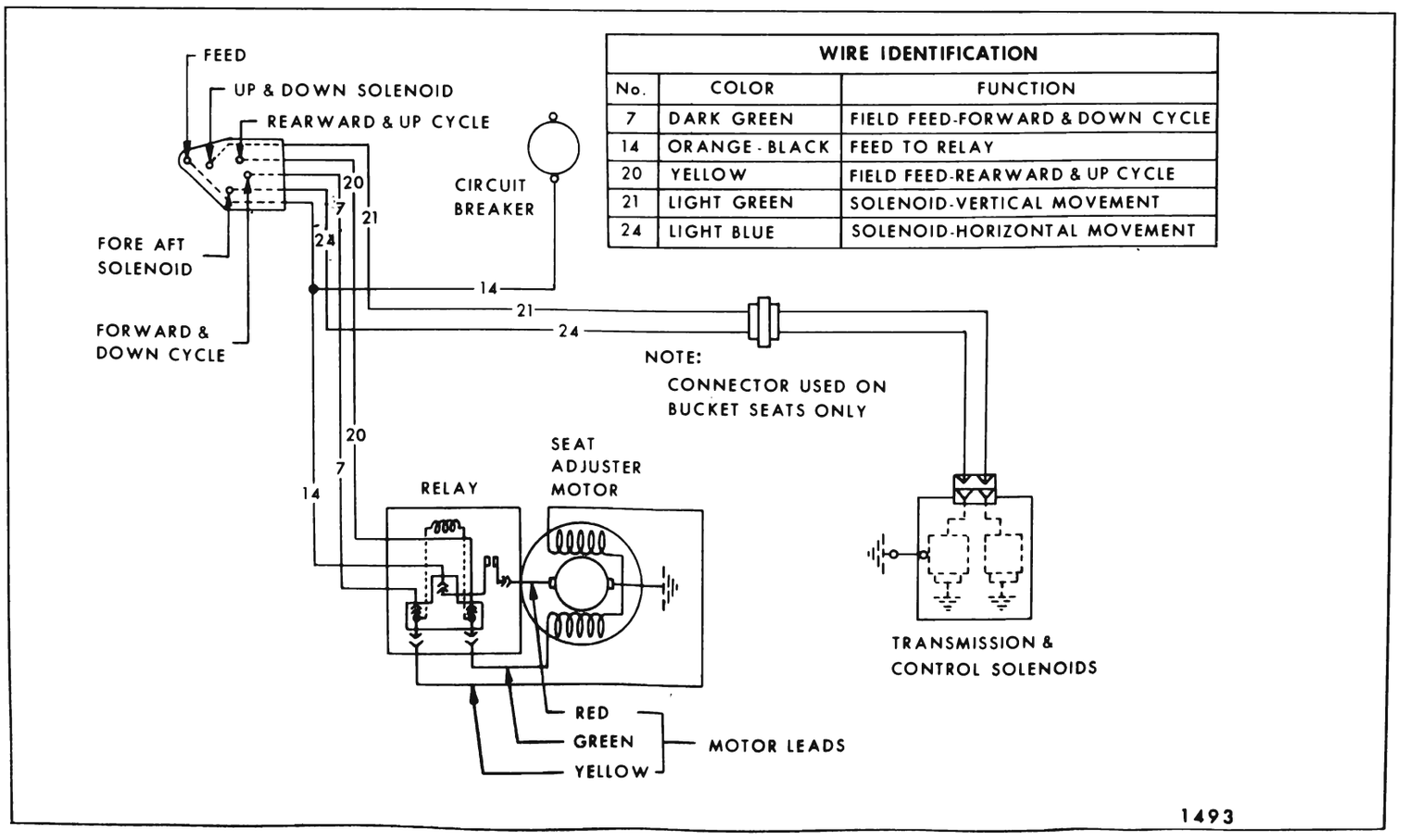
1. Connect one test light lead to battery side of circuit breaker. If tester does not light, there is no current at battery side of circuit breaker.

2. To check circuit breaker, disconnect switch feed wire from breaker, and with a test light check for current at switch side of circuit breaker. If tester does not light, there is no current flowing through circuit breaker.

b. Checking the Ignition Relay Assembly— Oldsmobile "B & E" Styles Only

1. With test light check for current at circuit breaker side of relay. If tester does not light, there is a short or open circuit between circuit breaker and relay assembly.

2. Turn ignition switch on and with a test light check for current at output side of relay. If



WIRE IDENTIFICATION		
No.	COLOR	FUNCTION
7	DARK GREEN	FIELD FEED-FORWARD & DOWN CYCLE
14	ORANGE-BLACK	FEED TO RELAY
20	YELLOW	FIELD FEED-REARWARD & UP CYCLE
21	LIGHT GREEN	SOLENOID-VERTICAL MOVEMENT
24	LIGHT BLUE	SOLENOID-HORIZONTAL MOVEMENT

Fig. 11-59—Four-Way Seat Circuit - All Styles except Oldsmobile "B & E" Styles

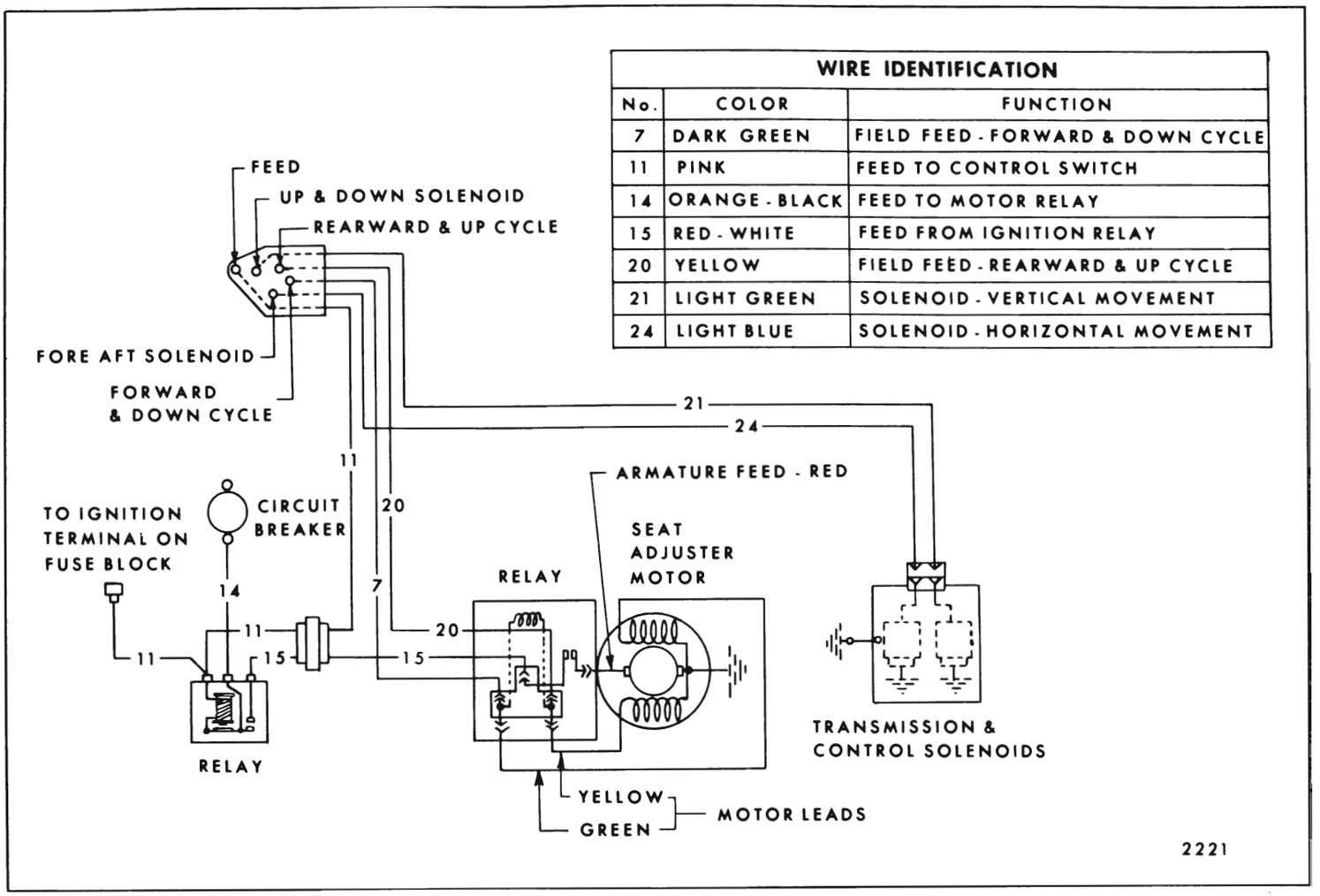


Fig. 11-60—Four-Way Seat Circuit - Oldsmobile "B&E" Styles

tester does not light, the relay is defective or there is a short or open circuit between ignition switch and relay assembly. Check wires before replacing relay.

NOTE: Oldsmobile "B & E" Styles Only - Ignition switch must be on for performing the remainder of checking procedure.

c. Checking Feed Circuit Continuity at Relay on Seat Motor—All Styles

1. Disengage three-way connector body from the seat motor relay.

2. Insert one test light lead into the relay power feed connector slot on the harness, and ground other tester lead.

3. If tester does not light, there is no current at end of feed wire. Failure is caused by an open or short circuit in feed circuit.

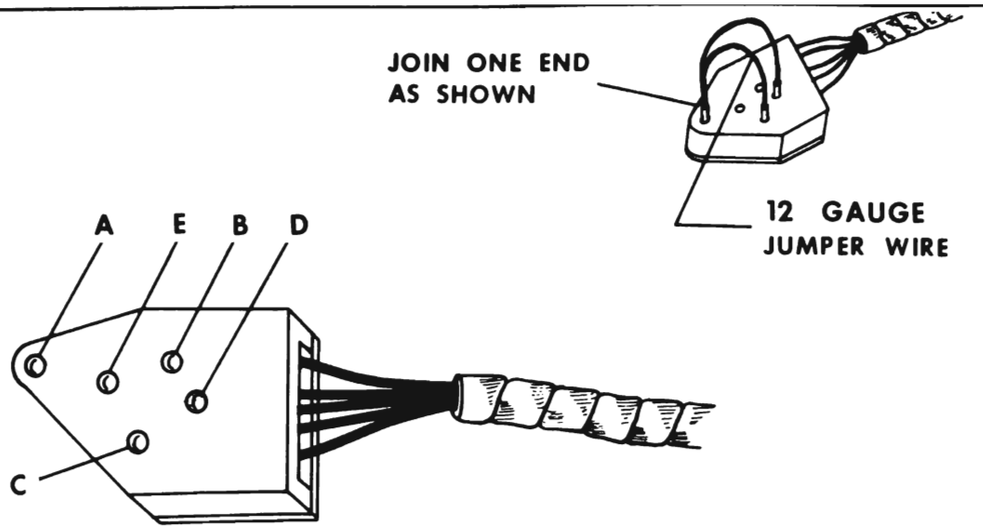
d. Checking for Current at Seat Control Switch

1. Connect one test light lead to feed terminal of switch block and ground other test light lead to body metal.

2. If tester does not light, there is no current at switch block. Failure is caused by an open or short circuit between switch block and power source.

e. Checking the Seat Control Switch

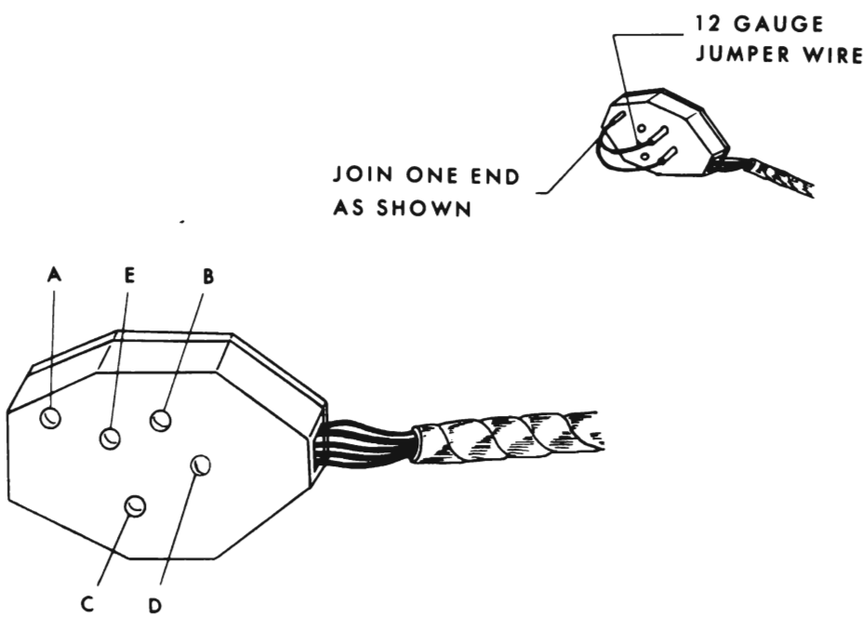
In the following operations which specify the seat control switch to be actuated, a switch that has been checked for proper operation may be connected to the switch block. If a switch is not available, a three-way jumper wire can be made to perform the switch function. The method of making the jumper wire and the switch locations to be connected to obtain a specific movement of the seat are shown in Figures 11-61 and 11-62. If a jumper wire is used, number the locations on the switch block as indicated in the illustration.



LOCATION	WIRE COLOR	FUNCTION
A	ORANGE - BLACK	SWITCH FEED
B	YELLOW	FIELD FEED-REARWARD & UP CYCLE
C	LIGHT BLUE	SOLENOID-HORIZONTAL MOVEMENT
D	DARK. GREEN	FIELD FEED-FORWARD & DOWN CYCLE
E	LIGHT GREEN	SOLENOID-VERTICAL MOVEMENT

1849

Fig. 11-61—Four-Way Seat Switch Block - All Styles Except Oldsmobile "B & E"



LOCATION	WIRE COLOR	FUNCTION
A	PINK	SWITCH FEED
B	YELLOW	FIELD FEED—REARWARD & UP CYCLE
C	LIGHT BLUE	SOLENOID—HORIZONTAL MOVEMENT
D	DARK GREEN	FIELD FEED—FORWARD & DOWN CYCLE
E	LIGHT GREEN	SOLENOID—VERTICAL MOVEMENT

1850

Fig. 11-62—Four-Way Seat Switch Block - Oldsmobile "B & E" Styles

NOTE: To make jumper wire, obtain two pieces of #12 gauge wire, each 4 1/2" long. Join one end of each wire as shown in diagram. The joined end can be inserted in the feed location in the switch block; one of the remaining ends can be inserted into one of the solenoid locations.

1. Obtain switch or jumper wire and connect to switch block.

2. Operate switch if used. If adjusters operate with switch or jumper wire, but did not operate with original switch, the original switch is defective or connector block was not sufficiently engaged.

   IMPORTANT: To obtain a seat movement using a three-way jumper wire at the switch block, the switch feed location, one of the motor field wire locations and one of the solenoid locations have to be connected simultaneously.

   The switch locations to be connected to obtain a specific seat movement are outlined as follows:

   (a) To raise seat, place jumper wire in locations A, B and E.

   (b) To lower seat, place jumper wire in locations A, D and E.

   (c) To operate seat forward, place jumper wire in locations A, C and D.

   (d) To operate seat rearward, place jumper wire in locations A, B and C.

f. Checking Wires Between Control Switch and Motor Relay

1. Disengage three-wire harness connector from relay at motor.

2. Insert one test light lead into the motor field connector slot on harness and ground other lead.

3. Actuate seat switch to energize field wire being tested.

4. If tester does not light, there is no current at end of wire. Failure is caused by an open or short circuit between end of wire and switch. Check other motor field wire in the same manner.

g. Checking the Relay Assembly

1. Disconnect three leads from relay assembly. These are the wires leading from the motor to the relay.

2. Connect one end of a jumper wire to one of the motor field feed studs on the relay and ground the other end of the jumper wire.

3. Connect one test light lead to motor armature feed stud on relay and groud other tester lead.

4. With jumper wire, energize the field stud which is not grounded.

   CAUTION: Do not energize grounded side. If tester does not light, the relay is defective.

h. Checking the Motor Assembly

1. Disconnect motor field feed wires from motor.

2. Connect one end of a #12 gauge jumper wire to battery positive pole and other end to one of the motor field and the armature wires.

3. If motor does not operate, motor is defective. Check the remaining motor field wire in the same manner.

i. Checking Wires Between Switch and Solenoids

1. Disconnect harness connector from transmission assembly.

2. Connect one test light lead to one terminal of power feed and ground other test light lead to body metal.

3. Operate switch to wire being tested. If tester does not light, there is no current at the end of harness wire. Failure is caused by an open or short circuit between end of wire and switch or defective switch.

4. Check other wire in same manner.

   NOTE: One wire in connector is a blank. Check wiring diagram for colors of wires actually used.

j. Checking the Solenoid

1. Check solenoid ground strap attachment for proper ground.

2. Connect one end of a #12 gauge jumper wire to the battery positive pole and the other end to the lead of the solenoid being checked.

   CAUTION: To prevent damaging the solenoid, do not energize solenoid for more than one minute.

3. Operate switch, actuate adjuster motor and solenoid being checked.

4. If adjusters do not operate and there is no mechanical failure of the adjusters, the solenoid is defective.

NOTE: If solenoid is functioning properly, a "click" may be heard when solenoid plunger operates.

k. Typical Electrical Failures

CONDITION	CAUSE	CORRECTION
1. Seat adjuster motor does not operate.	a. Short or open circuit between power source or switch and motor.	a. Check circuit from power source and switch to motor to locate failure.
	b. Defective motor relay.	b. Replace relay.
	c. Defective motor.	c. Check Motor. If defective repair or replace as required.
	d. Defective switch.	d. Replace switch.
	e. Defective circuit breaker.	e. Replace circuit breaker.
2. Seat adjuster motor operates in both directions but seat adjusters are not actuated.	a. Short or open circuit between switch and affected solenoid.	a. Check circuit from switch to solenoid to locate failure.
	b. Defective solenoid.	b. Check solenoid. If defective, repair or replace as required.
	c. Defective switch.	c. Replace switch.
3. Seat Adjuster motor operates in one direction only, seat moves down and forward, but does not move up and rearward.	a. Short or open circuit between one of the motor relay wires and seat control switch.	a. Check circuit between affected motor relay wire and seat switch.
	b. Defective field coil in motor.	b. Check motor. If defective repair or replace as required.
	c. Defective switch.	c. Replace switch.

SIX-WAY TILT SEATS

Description

The seat adjuster for the standard and "STRATO" type 6-way seats are actuated by a 12-volt motor installed at the left side of the seat assembly (see Figs. 11-63 and 11-64). The motor is energized by a three button-type control switch located in the left seat side panel.

On same "C-69" Styles, the control switch is installed in the left front door arm rest.

The power seat circuit is protected by a circuit breaker (refer to Electrical Introduction for location).

Oldsmobile Styles Only - In addition to the circuit breaker a relay is used in the circuit which prevents the operation of the seat until the ignition switch is turned "on".

The electrical portion of the six way seat operates as follows:

When the control switch is actuated, current flows to the transmission solenoid which controls the desired seat movement. The energizing of the solenoid coil results in the solenoid plunger dog engaging the gear mechanism to rotate the control cable. The same switch action which energized the solenoid produces a current flow through the motor

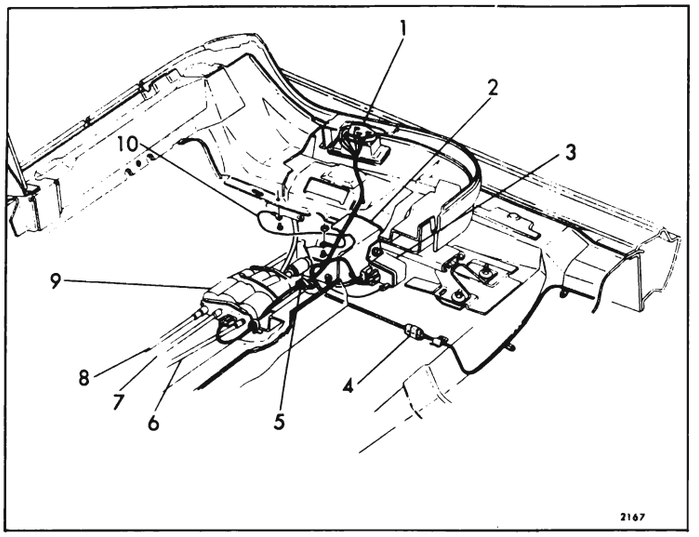


Fig. 11-63—Six-Way "Strato" Seat

1. Control Switch
2. Motor
3. Motor Control Relay
4. Harness Feed Connector
5. Rubber Coupler
6. Front Vertical Control Cable (Yellow)
7. Rear Vertical Control Cable (Blue)
8. Horizontal Control Cable (Black)
9. Transmission and Solenoid Assembly
10. Ground Wire

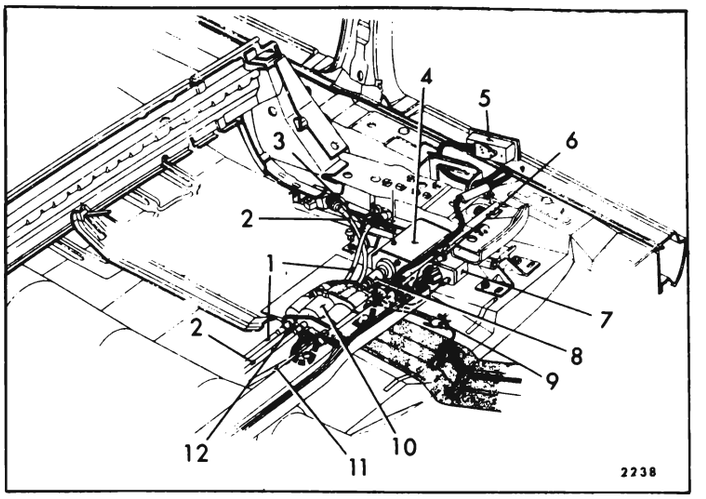


Fig. 11-64—Six-Way Standard Bench Seat

1. Horizontal Control Cable (Black)
2. Rear Vertical Control Cable (Blue)
3. Ground Wire
4. Motor
5. Control Switch
6. Front Vertical Control Cable (Yellow)
7. Motor Control Relay
8. Rubber Coupler
9. Harness Feed Connector
10. Transmission and Solenoid Assembly
11. Front Vertical Control Cable (Yellow)
12. Transmission End Plate

control relay to one of the motor field coils. The current flows through the relay, closes the contacts between the relay power source and the armature motor lead wire, and results in the operation of the seat motor. When the control switch lever is released, the switch contacts open, a spring returns the shaft dog and solenoid plunger to their original position disengaging them from the gear dog.

Circuit Checking Procedures

It may be necessary to use only one or all of the procedures outlined to locate an electrical failure in the circuit. If the location of the failure is evident, follow only the steps required to check the affected wire or component. If the location of the failure is not evident, follow the procedure as outlined. Before performing any extensive check procedures, check the seat adjuster drive cables for proper attachment. In addition, study the seat circuit diagrams to become familiar with the seat circuit. See Figures 11-65, 11-66 and 11-67.

a. Checking Feed Circuit Continuity at Circuit Breaker

1. Connect one test light lead to battery side of circuit breaker and ground other lead. If tester does not light, there is an open or short circuit in feed circuit to breaker.

2. To check circuit breaker, disconnect the output feed wire (the wire opposite the power source feed to the breaker) from the breaker and with test light check terminal from which the wire was disconnected. If tester does not light, circuit breaker is inoperative. Buick and Cadillac Styles - Check feed circuit continuity at fuse block.

b. Checking Relay Assembly at Shroud— Oldsmobile Styles

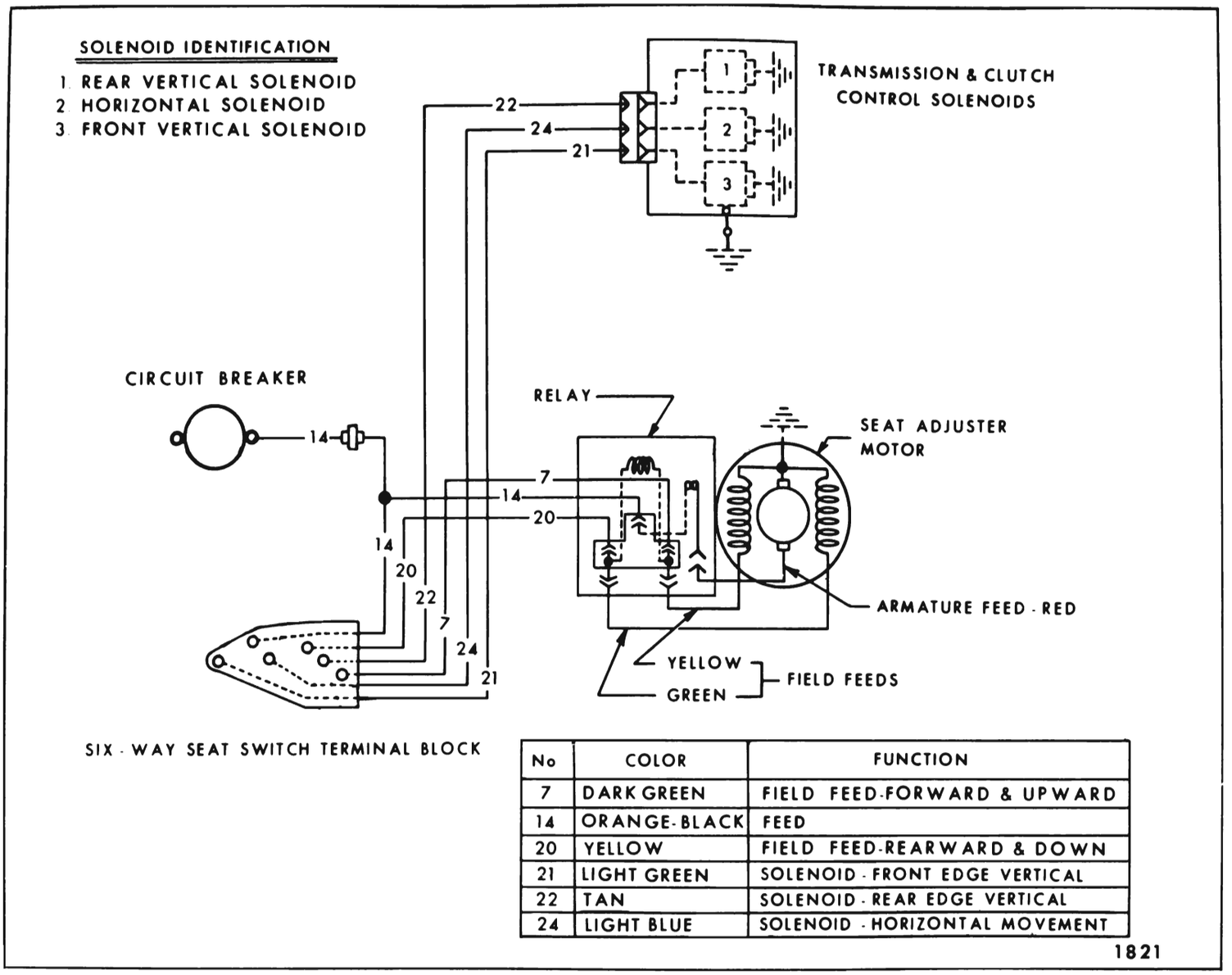
1. With test light check relay feed (orange-black stripe). If tester does not light, there is an open or short circuit between relay and circuit breaker.

2. Turn ignition switch on and with test light check output terminal of relay (red-white stripe). If tester does not light, the relay is inoperative or there is a short or open circuit between ignition switch (pink) and relay assembly. (Check fuse at dash panel).

c. Check Feed Circuit Continuity at Seat Control Switch

1. Connect one test light lead to feed terminal of switch block and ground other test lead to body metal.

2. If tester does not light, there is an open or short circuit between switch and power source.



No	COLOR	FUNCTION
7	DARK GREEN	FIELD FEED-FORWARD & UPWARD
14	ORANGE-BLACK	FEED
20	YELLOW	FIELD FEED-REARWARD & DOWN
21	LIGHT GREEN	SOLENOID - FRONT EDGE VERTICAL
22	TAN	SOLENOID - REAR EDGE VERTICAL
24	LIGHT BLUE	SOLENOID - HORIZONTAL MOVEMENT

Fig. 11-65—Six-Way Seat Circuit - All Except Oldsmobile Styles

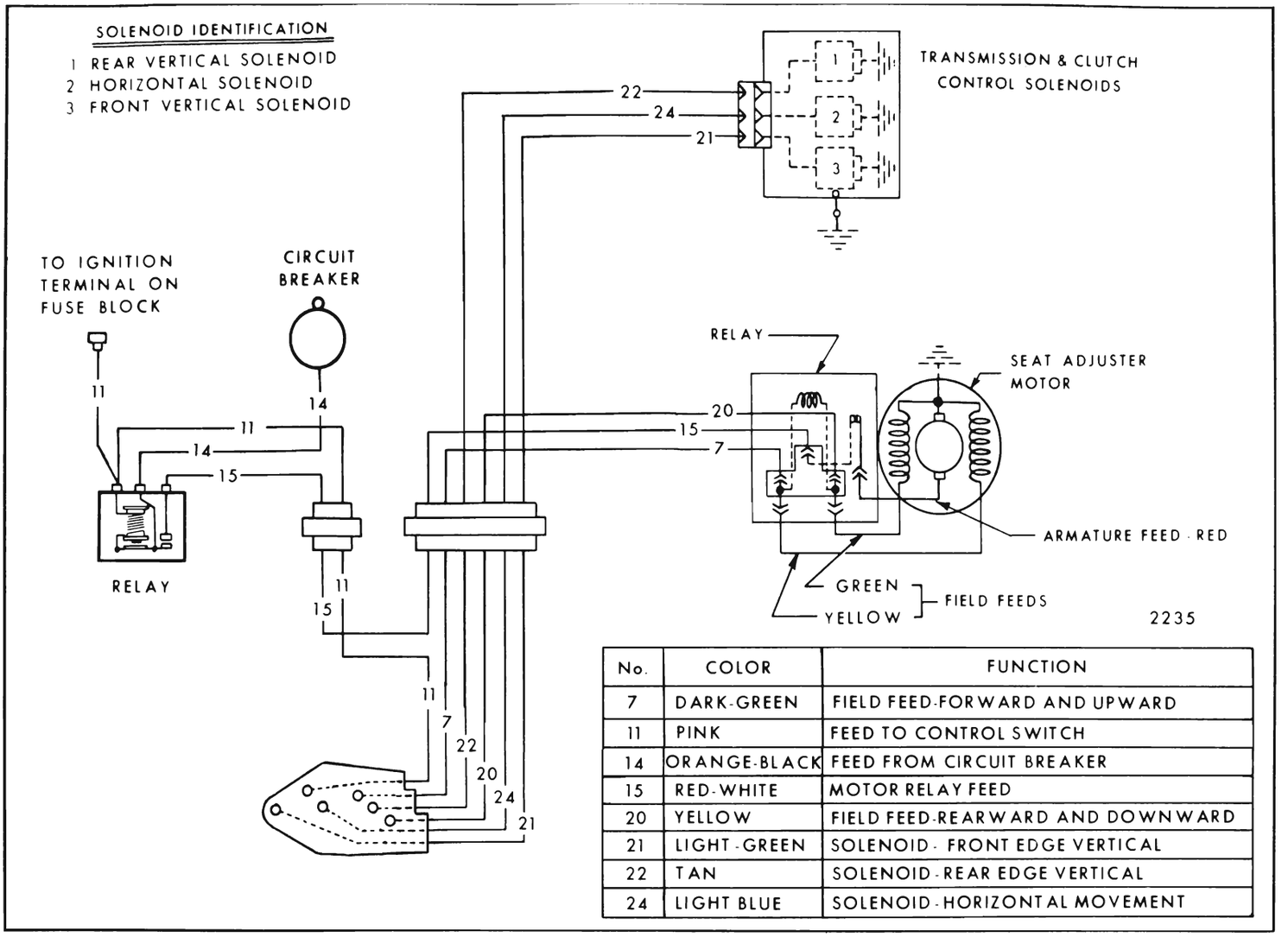
d. Checking the Seat Control Switch

NOTE: In the following operations which specify the seat control switch to be actuated, a switch that has been checked for proper operation may be connected to the switch block. If a switch is not available, a three-way jumper wire can be made to perform the switch function. The jumper wire and the switch locations to be connected to obtain a specific movement of the seat are shown in Figures 11-69 - Oldsmobile styles with switch in seat side panel; 11-70 - Oldsmobile styles with switch in arm rest; 11-68 - Chevrolet, Pontiac, Buick and Cadillac styles. If a jumper wire is used, letter the locations on the switch block as indicated in the illustration. Details outlining the making and use of the jumper wire follow the checking procedure.

1. Obtain switch or jumper wire and connect to switch block.
2. Operate switch. If adjusters operate with new switch or jumper wire, but did not operate with original switch, the original switch is defective.
3. Check all six movements of seat adjuster.

e. Checking Feed Circuit Continuity at Relay on Seat Motor

1. Disengage 3-wire connector body from the seat motor relay terminal.
2. Insert one test light lead into the relay power feed connector slot on the harness, and ground the other test light lead.



No.	COLOR	FUNCTION
7	DARK-GREEN	FIELD FEED-FORWARD AND UPWARD
11	PINK	FEED TO CONTROL SWITCH
14	ORANGE-BLACK	FEED FROM CIRCUIT BREAKER
15	RED-WHITE	MOTOR RELAY FEED
20	YELLOW	FIELD FEED-REARWARD AND DOWNWARD
21	LIGHT-GREEN	SOLENOID - FRONT EDGE VERTICAL
22	TAN	SOLENOID - REAR EDGE VERTICAL
24	LIGHT BLUE	SOLENOID - HORIZONTAL MOVEMENT

Fig. 11-66—Six-Way Seat Circuit - Switch in Arm Rest - Oldsmobile Styles

3. If tester does not light, there is no current at end of feed wire. Failure is caused by an open or short in feed circuit.

f. Checking Wires Between Control Switch and Motor Relay

1. Disengage 3-wire harness connector from relay at motor.

2. Insert one test light lead into the motor field connector slot on harness and ground the other lead.

3. Actuate seat switch to energize field wire being tested.

4. If tester does not light, there is no current at end of wire. Failure is caused by an open or short circuit between end of wire and switch. Check other motor field wire in the same manner.

g. Checking the Relay Assembly

1. Disconnect three motor leads from relay assembly. These are the wires leading from the motor to the relay.

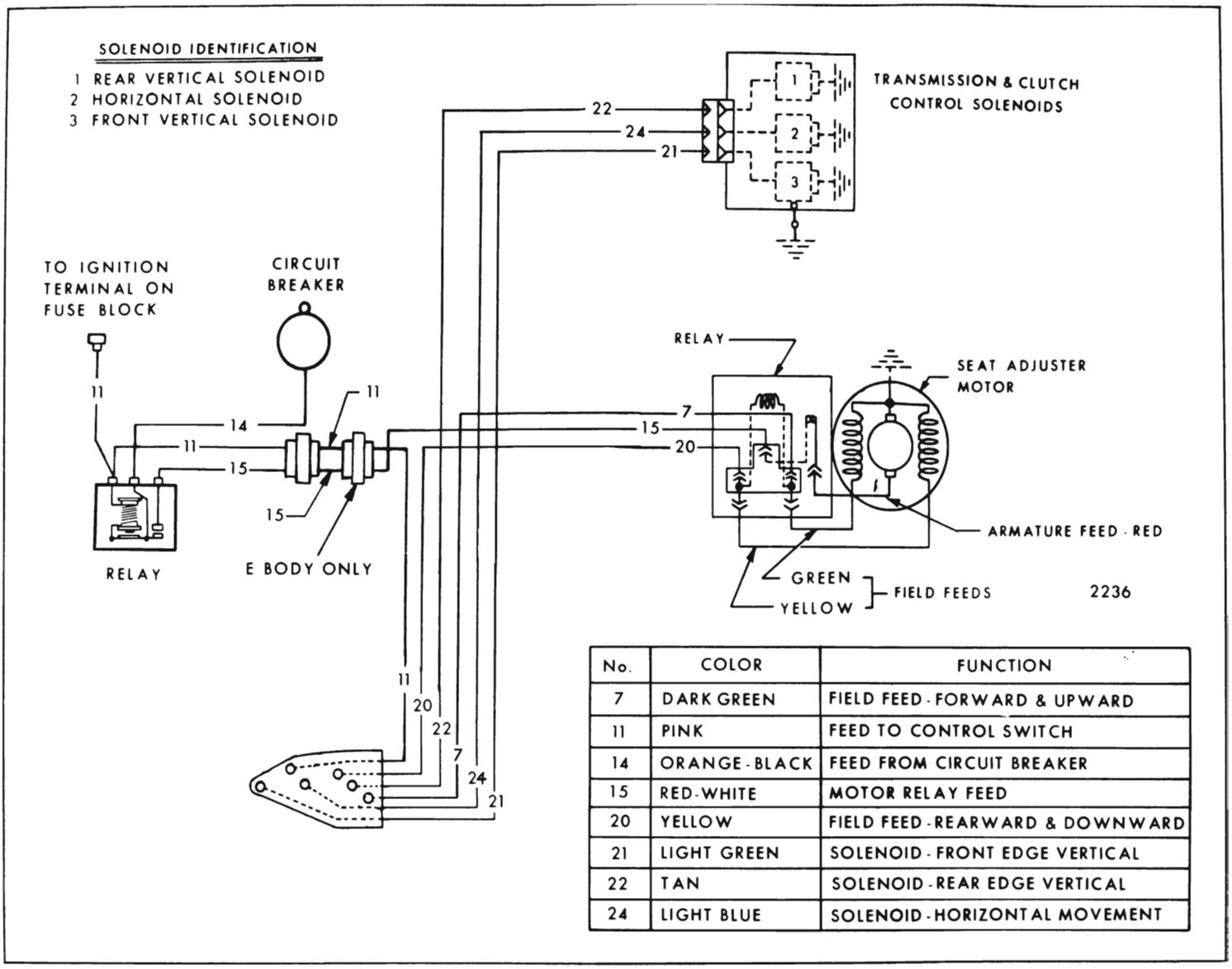
2. Connect one end of a jumper wire to one of the motor field feed studs on the relay and ground the other end of the jumper wire.

3. Connect one end of test light to motor armature feed stud on relay and ground other tester lead.

4. With a jumper wire, energize the field stud which is not grounded. If tester does not light the relay is defective.

h. Checking the Motor Assembly

1. Disconnect the motor armature feed lead and one of the motor field feeds from the relay assembly.



No.	COLOR	FUNCTION
7	DARK GREEN	FIELD FEED - FORWARD & UPWARD
11	PINK	FEED TO CONTROL SWITCH
14	ORANGE - BLACK	FEED FROM CIRCUIT BREAKER
15	RED - WHITE	MOTOR RELAY FEED
20	YELLOW	FIELD FEED - REARWARD & DOWNWARD
21	LIGHT GREEN	SOLENOID - FRONT EDGE VERTICAL
22	TAN	SOLENOID - REAR EDGE VERTICAL
24	LIGHT BLUE	SOLENOID - HORIZONTAL MOVEMENT

Fig. 11-67—Six-Way Seat Circuit - Switch in Seat Side Panel - Oldsmobile Styles

2. With a jumper wire, energize the armature feed and one of the field feeds.

3. If motor does not operate, it is defective. Check the other motor field feed in the same manner.

i. Checking the Wire Between the Solenoid and Switch

1. Disengage harness connector from transmission.

2. Connect one test light lead to end of harness wire being tested and ground other lead.

3. Operate switch to energize wire being tested. If tester does not light, there is no current at end of wire. Failure is caused by an open or short circuit between end of wire and switch.

j. Checking the Solenoid

1. Check solenoid ground strap attachment for proper ground.

2. Energize solenoid being checked with jumper wire.

NOTE: If solenoid is functioning, a "click" should be heard when solenoid plunger operates "in" and "out".

CAUTION: To prevent damaging the solenoid, do not energize solenoid for more than one minute.

3. With solenoid energized, actuate seat control switch to energize adjuster motor.

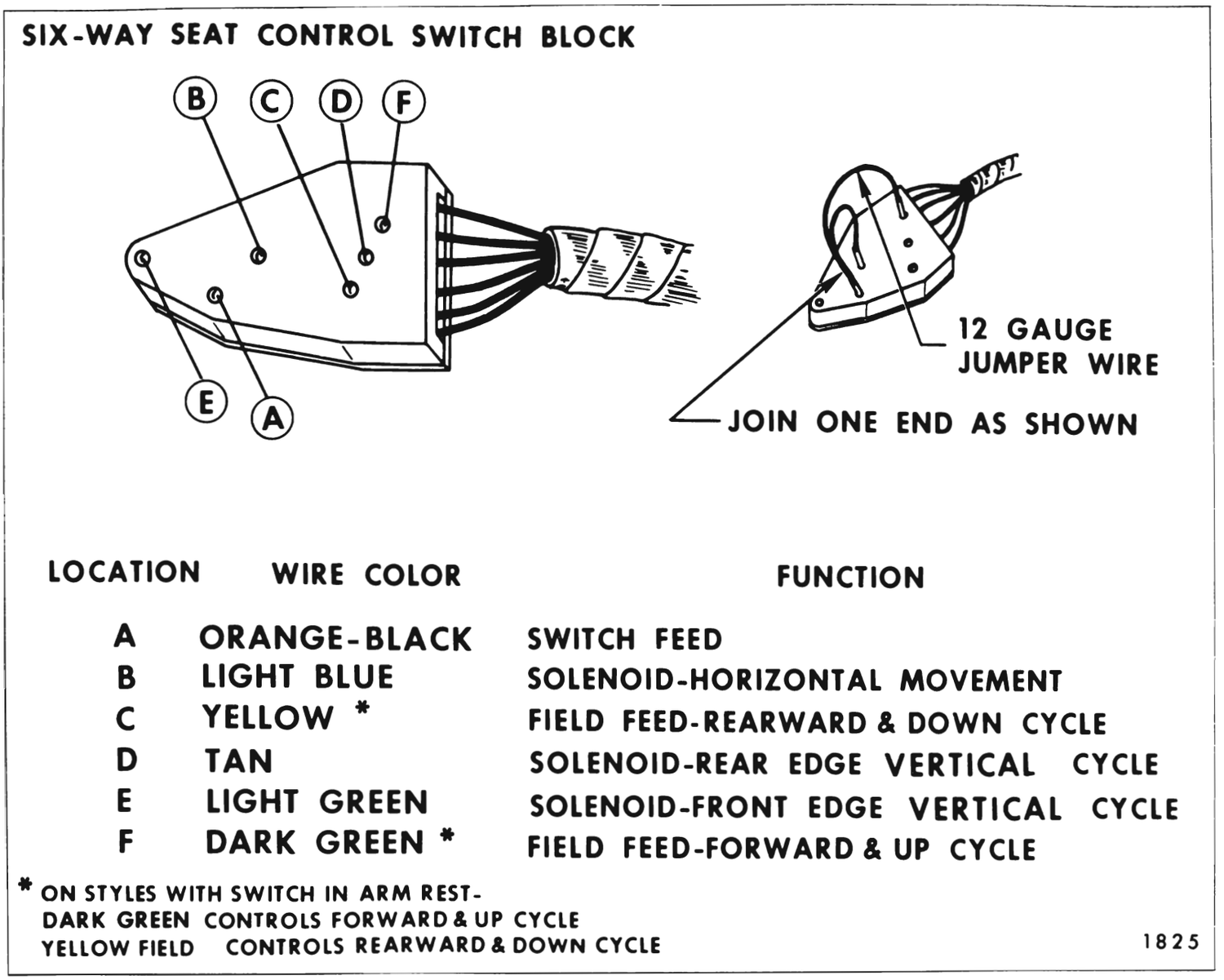


Fig. 11-68—Six-Way Seat Switch Block - All Styles Except Oldsmobile

4. If adjusters do not operate, and there is no mechanical failure in the seat unit, the solenoid is defective.

Three-Way Jumper Wire for Checking Seat Switch

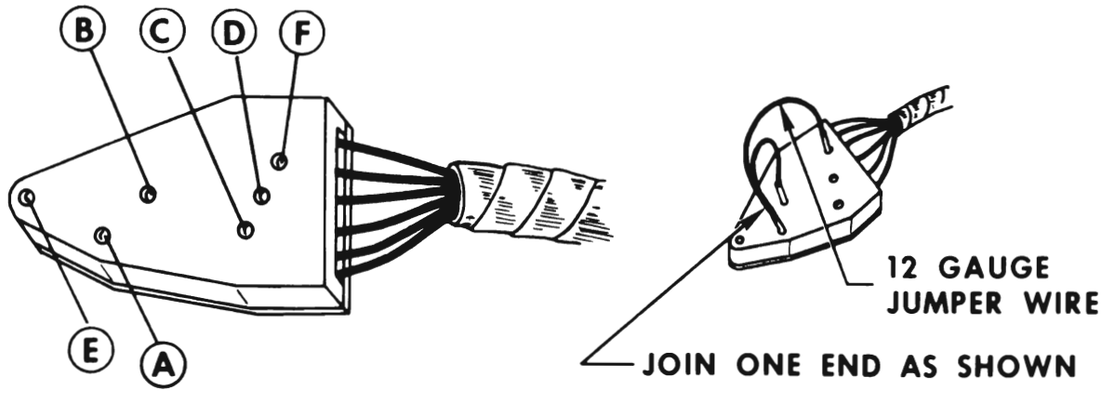
To make jumper wire, obtain two pieces of #12 gauge wire, each 4 1/2" long, join one end of each wire as shown in Figure 11-68. The joined end can be inserted in the feed location in the switch block; one of the remaining ends can be inserted into one of the field locations in the switch block; the other end can be inserted into one of the solenoid locations.

IMPORTANT: To obtain a seat movement using a 3-way jumper wire at the switch block, the switch feed location, one of the motor field wire locations and one of the solenoid locations must be connected simultaneously.

On Bodies with Switch in Seat Side Panel:

1. To raise front edge of seat, place jumper in locations, A, F and E.
2. To lower front edge of seat, place jumper in locations A, C and E.
3. To raise rear edge of seat, place jumper in locations A, F and D.
4. To lower rear edge of seat, place jumper in locations A, C and D.

SIX-WAY SEAT CONTROL SWITCH BLOCK

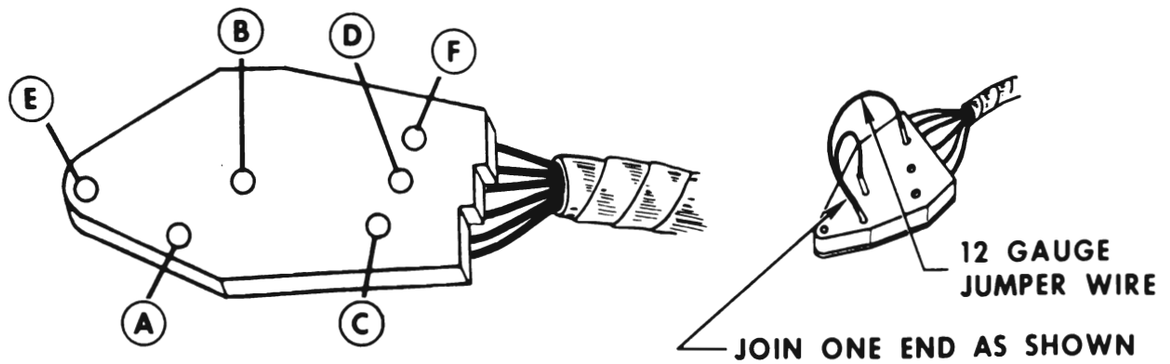


LOCATION	WIRE COLOR	FUNCTION
A	PINK	SWITCH FEED
B	LIGHT BLUE	SOLENOID-HORIZONTAL MOVEMENT
C	YELLOW	FIELD FEED-REARWARD & DOWN CYCLE
E	TAN	SOLENOID-REAR EDGE VERTICAL CYCLE
F	LIGHT GREEN	SOLENOID-FRONT EDGE VERTICAL CYCLE
D	DARK GREEN	FIELD FEED-FORWARD & UP CYCLE

1826

Fig. 11-69—Six-Way Seat Switch Block - Switch in Seat Side Panel - Oldsmobile

SIX-WAY SEAT CONTROL SWITCH BLOCK



LOCATION	WIRE COLOR	FUNCTION
A	PINK	SWITCH FEED
B	LIGHT BLUE	SOLENOID-HORIZONTAL MOVEMENT
C	DARK GREEN	FIELD FEED-FORWARD & UP CYCLE
D	TAN	SOLENOID-REAR EDGE VERTICAL CYCLE
E	LIGHT GREEN	SOLENOID-FRONT EDGE VERTICAL CYCLE
F	YELLOW	FIELD FEED-REARWARD & DOWN CYCLE

1827

Fig. 11-70—Six-Way Seat Switch Block - Switch in Arm Rest - Oldsmobile

5. To move seat forward, place jumper in locations A-B and F.

6. To move seat rearward, place jumper in locations A-C and B.

On Bodies with Switch in Arm Rest:

1. To raise front edge of seat, place jumper in locations A-C and E.

2. To lower front edge of seat, place jumper in locations A-F and E.

3. To raise rear edge of seat, place jumper in locations A-C and D.

4. To lower rear edge of seat, place jumper in locations A-F and D.

5. To move seat forward place jumper in locations A-C and B.

6. To move seat rearward, place jumper in locations A-F and B.

Typical Electrical Failures

CONDITION	CAUSE	CORRECTION
Seat adjuster motor does not operate.	a. Short or open circuit between power source or switch and motor. b. Defective motor.	a. Check circuit from power source and switch to motor to locate failure. b. Check ignition switch circuit through relay at left shroud - Oldsmobile styles only. c. Check motor. If defective, repair or replace as required.
Seat adjuster motor operates, but seat adjusters are not actuated. or Seat adjuster motor operates, front edge of seat moves up and down and seat moves forward and rearward. The rear edge of seat cannot be operated.	a. Short or open circuit between switch and affected solenoid. b. Defective solenoid.	a. Check circuit from switch to solenoid to locate failure. b. Check solenoid. If defective, repair or replace as required.
Seat adjuster motor operates and seat adjusters move front and rear edge of seat up and forward but will not move the seat down and rearward. or Seat adjuster motor operates and seat adjusters move front and rear of seat down and rearward, but will not move the seat up and forward.	a. Short or open circuit between one of the motor field wires and seat control switch. b. Defective field coil in motor.	a. Check circuit between affected motor field wire and seat switch. b. Check motor. If defective, repair or replace as required.

ELECTRIC FOLDING TOP—CORVAIR

DESCRIPTION

The electric folding top assembly is actuated by a 12 volt shunt-wound motor located under the folding top compartment bag (see Fig. 11-71).

The motor is energized by a control switch mounted on the left side of the instrument panel (see Fig. 11-72). For wiring installation from engine compartment to instrument panel (see Fig. 11-73).

Checking Procedure

Failures in a circuit are usually caused by short circuits or open circuits. Open circuits are usually caused by breaks in the wiring, faulty connection or mechanical failure in a component such as a switch or circuit breaker. Short circuits are usually caused by wires from different components of the circuit contacting one another or by a wire or component grounding to the metal of the body due to a screw through the wire, insulation cut through by sharp metal edge, etc.

It may be necessary to use only one or all of the procedures outlined to locate an electrical failure in the circuit. If the location of the failure is evident follow only the steps required to check the affected wire or component. If the location of the failure is not evident, follow the procedure as outlined. Be sure to check the harness connectors for proper engagement, become familiar with the typical circuit diagram (see Fig. 11-74) and disengage drive cables at motor actuator assembly to relieve any mechanical bind.

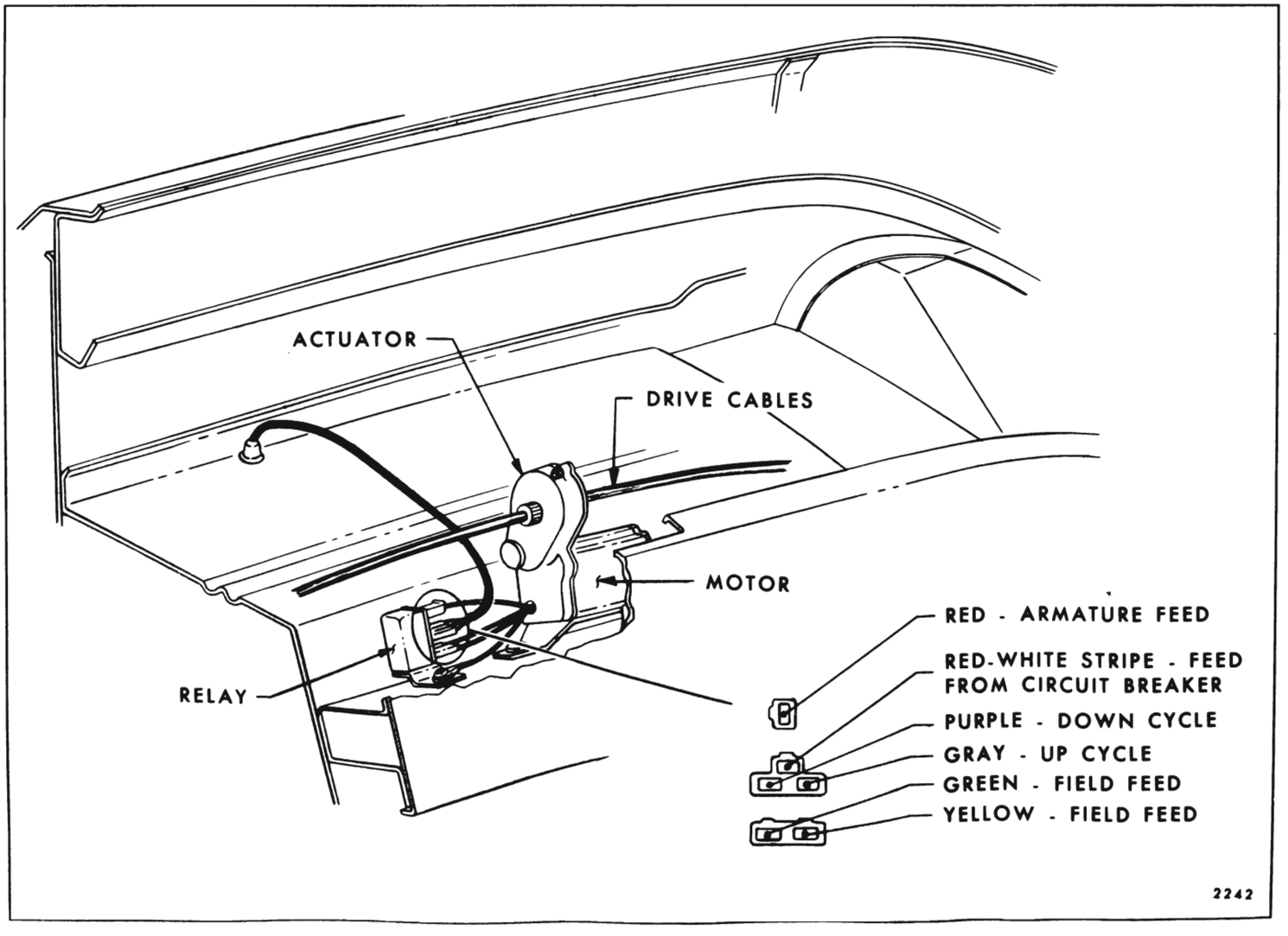


Fig. 11-71—Electric Folding Top Motor and Actuator - Corvair

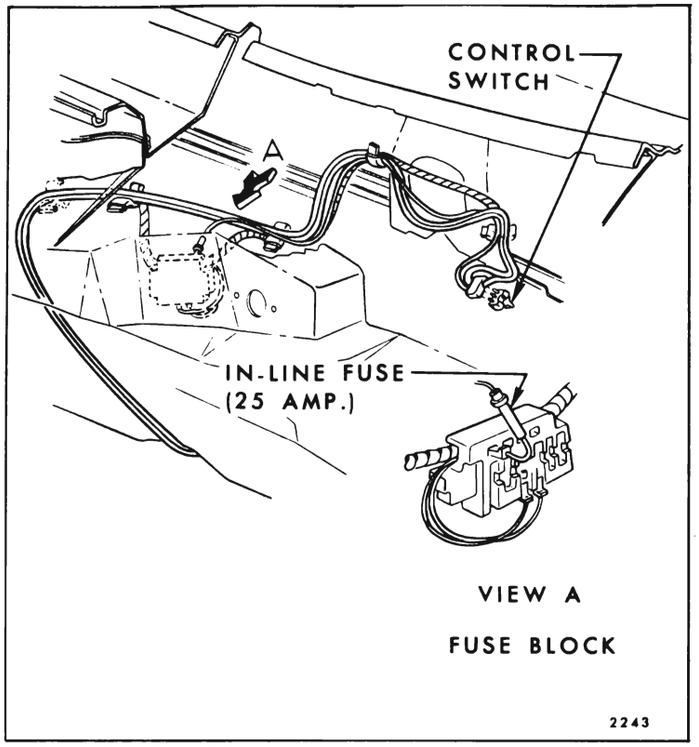


Fig. 11-72—Electric Folding Top Front End Wiring - Corvair

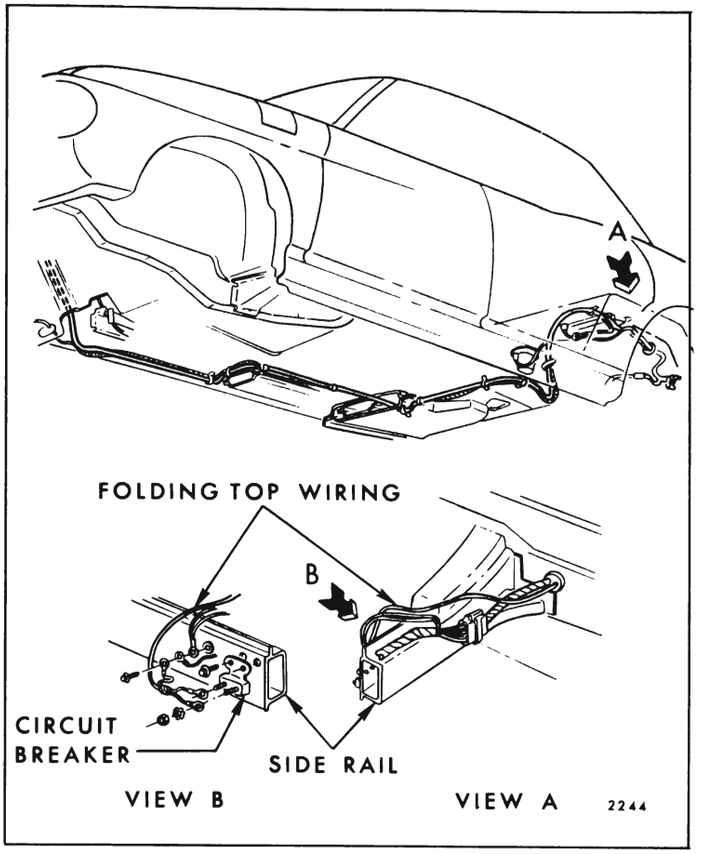


Fig. 11-73—Electric Folding Top Body Wiring - Corvair

a. *Checking Feed Circuit Continuity at Circuit Breaker*

1. Connect one test light lead to battery side of circuit breaker and ground other lead. If tester does not light, there is an open or short circuit in feed circuit to breaker.

2. To check circuit breaker disconnect the output feed wire (the wire opposite the power source feed to the breaker) from the breaker. Connect one test light lead to the output terminal and ground other lead. If tester does not light, circuit breaker is inoperative.

b. *Checking Feed Circuit Continuity at Control Switch on Instrument Panel*

1. Disengage harness connector from switch. Connect one test light lead to feed terminal of switch connector and ground other test lead to body metal. If tester does not light, there is an open or short circuit between switch and power source.

c. *Checking Control Switch at Instrument Panel*

1. Disengage harness connector from switch.

2. Use a #12 gauge jumper wire and insert one end into the feed terminal and the other end into one of the other terminals. Top motor should operate.

3. Repeat procedure for the other terminal. If the top motor operates with the jumper wire but does not operate with the control switch, the switch is defective.

d. *Checking Feed Circuit Continuity at Relay at Motor*

1. Disengage three-way connector body from the motor relay.

2. Insert one test light lead into the relay power feed connector slot on the harness, and ground other tester lead.

3. If tester does not light, there is no current at end of feed wire. Failure is caused by an open or short circuit in feed circuit.

e. *Checking the Relay Assembly*

1. Disconnect three leads from relay assembly. These are the wires leading from the motor to the relay. (Red, Green, Yellow, Fig. 11-71).

2. Connect one end of a jumper wire to one of the motor field feed studs on the relay and ground the other end of the jumper wire.

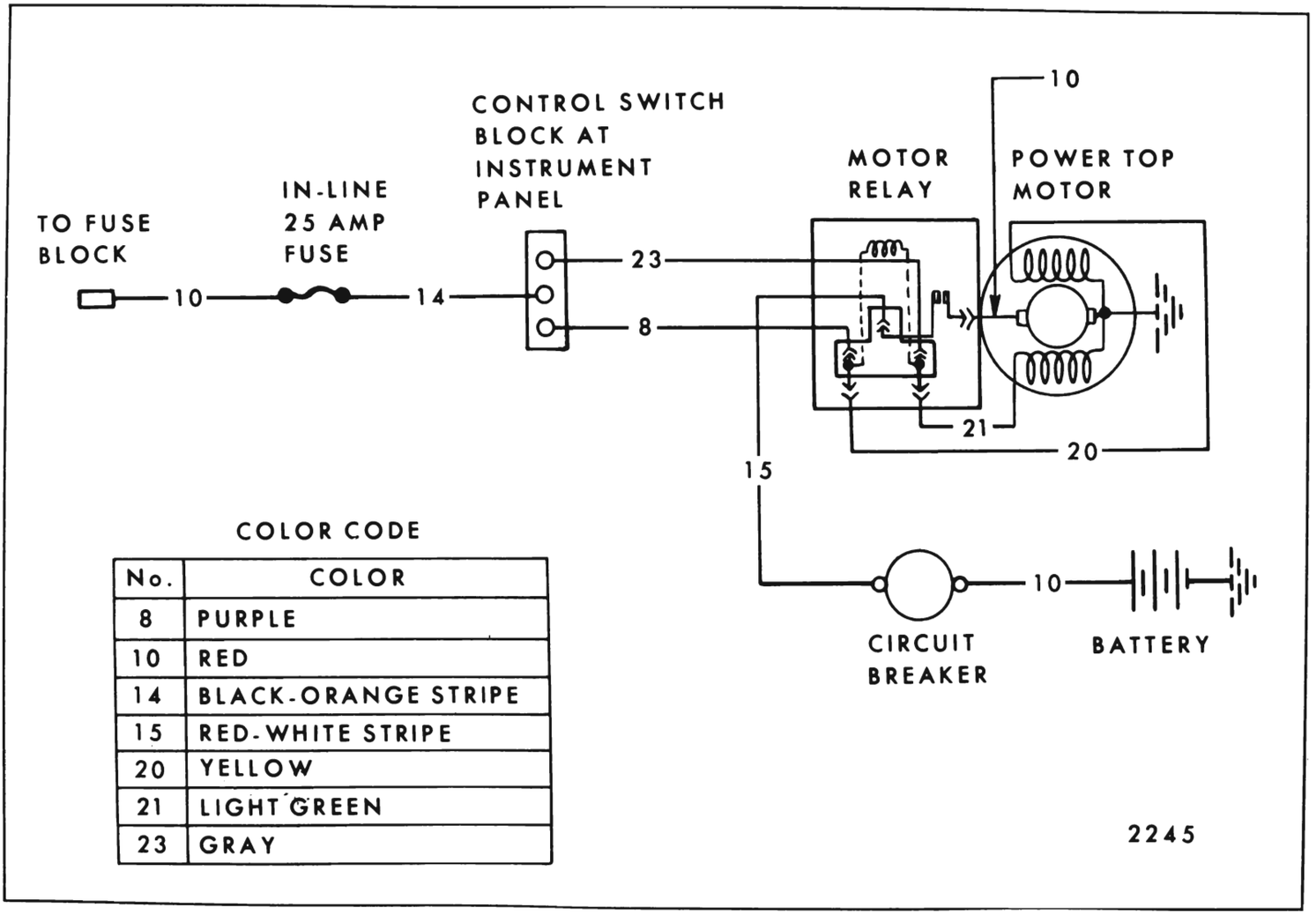
3. Connect one test light lead to motor armature feed stud on relay and ground other tester lead.

4. With jumper wire, energize the field stud which is not grounded.

CAUTION: Do not energize grounded side, if tester does not light, the relay is defective.

f. Checking the Motor Assembly

1. Disconnect motor field feed wires from motor (at relay).
2. Connect one end of a #12 gauge jumper wire to battery positive pole and other end to one of the motor field and the armature wires.
3. If motor does not operate, motor is defective. Check the remaining motor field wire in the same manner.



COLOR CODE

No.	COLOR
8	PURPLE
10	RED
14	BLACK-ORANGE STRIPE
15	RED-WHITE STRIPE
20	YELLOW
21	LIGHT GREEN
23	GRAY

Fig. 11-74—Electric Folding Top Wiring Circuit - Corvair

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Back Window Reveal Upper	All (except 67, 35, 55, 65)			X			Back Window Reveal Side	
Back Window Reveal Side	All (except 67, 35, 55, 65)			X			Back Window Reveal Lower	
Back Window Reveal Lower	All (except 67, 35, 55, 65)			X			Back Window Reveal Side	
Back Body Opening Upper Reveal	55, 65	X						Tailgate Glass Run Channel
Back Body Opening Side Reveal	55, 65	X						
Tailgate Window Lower Reveal	35, 55, 65	X			X			Tailgate Window and Regulator
Tailgate Outer Panel Belt	35, 55, 65					X		Tailgate Window and Regulator
Tailgate Outer Panel Upper	33600-33800 35, 55, 65				X			
Tailgate Outer Panel Lower	33600-33800 35, 55, 65				X			
Tailgate Outer Panel Nameplate and/or Emblem	35, 55, 65					X		

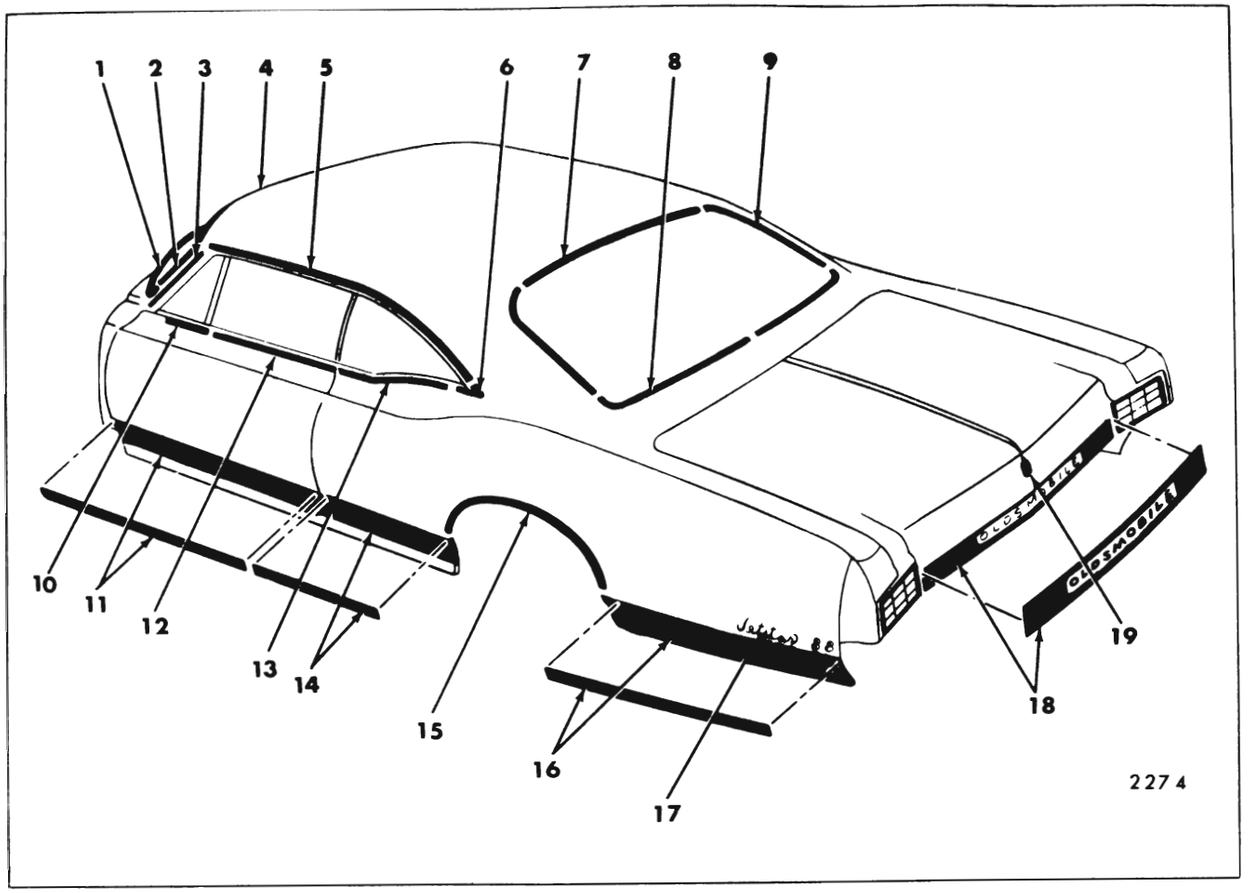


Fig. 12-25—Oldsmobile "B-37" Styles

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Pillar Drip Molding
4. Windshield Reveal Upper Molding
5. Roof Drip Molding Scalp
6. Rear Quarter Window Belt Reveal (Rear Corner) Molding
7. Back Window Reveal Upper Molding
8. Back Window Reveal Lower Molding
9. Back Window Reveal Side Molding
10. Front Door Window Belt Reveal (At Vent) Molding
11. Front Door Outer Panel Molding
12. Front Door Window Belt Reveal Molding
13. Rear Quarter Window Belt Reveal Molding
14. Front of Rear Wheel Opening Molding
15. Rear Wheel Opening Molding
16. Rear of Rear Wheel Opening Molding
17. Rear Quarter Outer Panel Nameplate
18. Rear End Panel Molding
19. Rear Compartment Lid Outer Panel Emblem

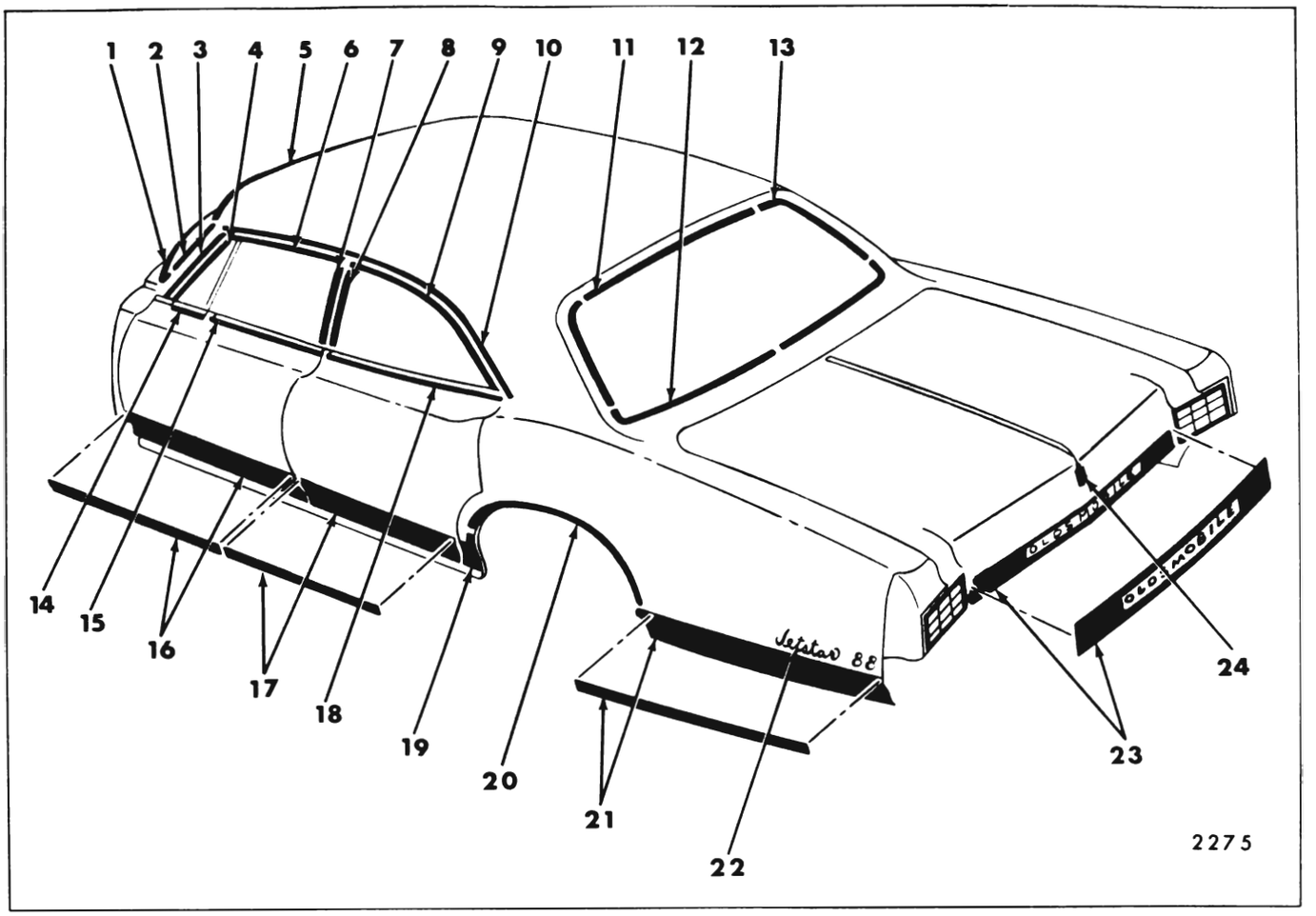


Fig. 12-26—Oldsmobile "B-69" Styles

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Pillar Drip Molding
4. Front Door Window Frame Front Scalp Molding
5. Windshield Reveal Upper Molding
6. Front Door Window Frame Upper Scalp Molding
7. Front Door Window Frame Rear Scalp Molding
8. Rear Door Window Frame Front Scalp Molding
9. Rear Door Window Frame Upper Scalp Molding
10. Roof Drip Molding Scalp
11. Back Window Reveal Upper Molding
12. Back Window Reveal Lower Molding
13. Back Window Reveal Side Molding
14. Front Door Window Belt Reveal (At Vent) Molding
15. Front Door Window Belt Reveal Molding
16. Front Door Outer Panel Molding
17. Rear Door Outer Panel Molding
18. Rear Door Window Belt Reveal Molding
19. Front of Rear Wheel Opening Molding
20. Rear Wheel Opening Molding
21. Rear of Rear Wheel Opening Molding
22. Rear Quarter Outer Panel Nameplate
23. Rear End Panel Molding
24. Rear Compartment Lid Outer Panel Emblem

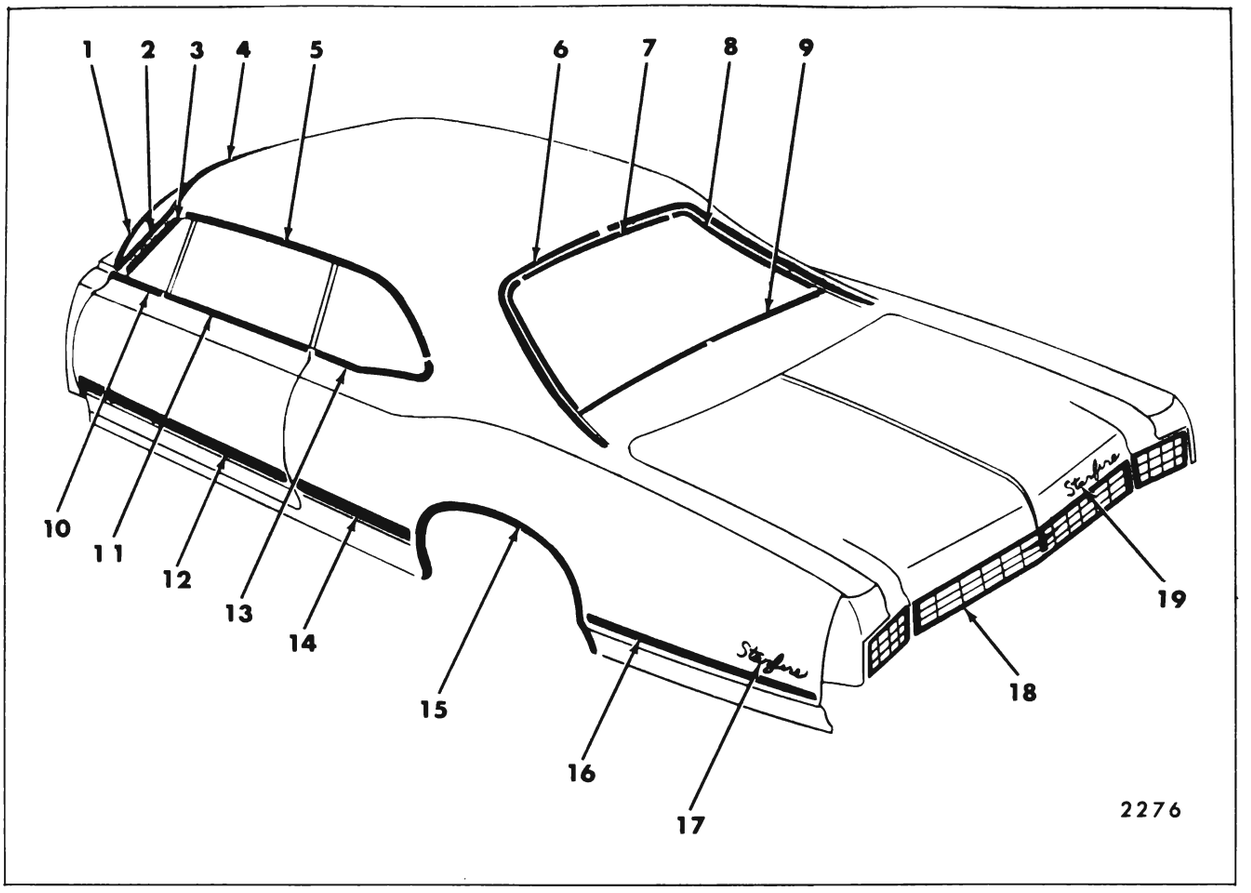


Fig. 12-27—Oldsmobile "B-57" Style

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Pillar Drip Molding
4. Windshield Reveal Upper Molding
5. Roof Drip Molding Scalp
6. Roof Panel At Back Window Molding
7. Back Window Reveal Upper Molding
8. Back Window Reveal Side Molding
9. Back Window Reveal Lower Molding
10. Front Door Window Belt Reveal (At Vent) Molding
11. Front Door Window Belt Reveal Molding
12. Front Door Outer Panel Molding
13. Rear Quarter Window Belt Reveal Molding
14. Front of Rear Wheel Opening Molding
15. Rear Wheel Opening Molding
16. Rear of Rear Wheel Opening Molding
17. Rear Quarter Outer Panel Nameplate
18. Rear End Panel Molding
19. Rear Compartment Lid Outer Panel Nameplate

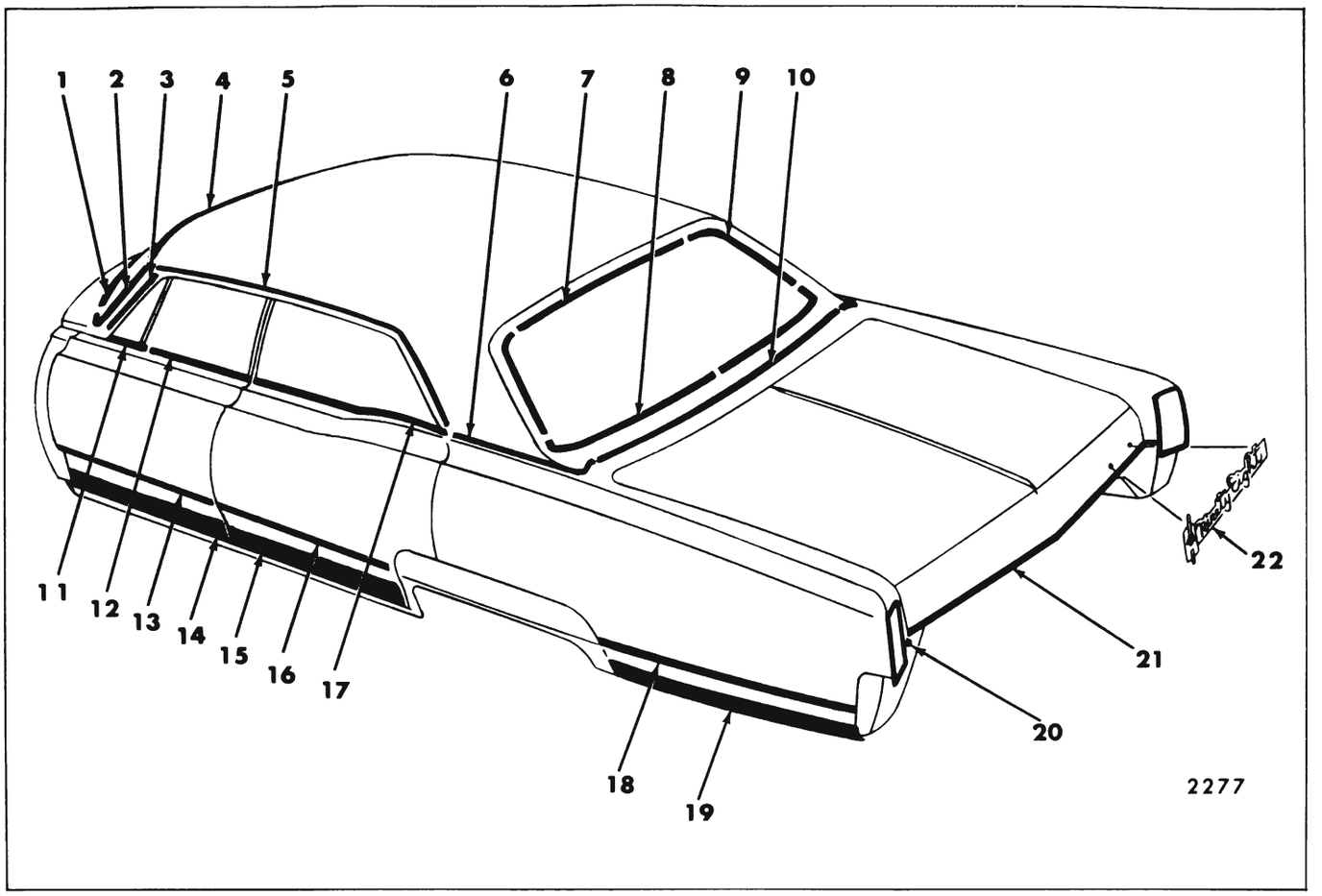


Fig. 12-28—Oldsmobile "C-69" Styles

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Pillar Drip Molding
4. Windshield Reveal Upper Molding
5. Roof Drip Molding Scalp
6. Rear Quarter Belt Reveal Molding
7. Back Window Reveal Upper Molding
8. Back Window Reveal Lower Molding
9. Back Window Reveal Side Molding
10. Rear End Belt Reveal Molding
11. Front Door Window Belt Reveal (At Vent) Molding
12. Front Door Window Belt Reveal Molding
13. Front Door Outer Panel Upper Molding
14. Front Door Outer Panel Lower Molding
15. Rear Door Outer Panel Lower Molding
16. Rear Door Outer Panel Upper Molding
17. Rear Door Window Belt Reveal Molding
18. Rear Quarter Outer Panel Upper Molding
19. Rear Quarter Outer Panel Lower Molding
20. Rear Compartment Lid Outer Panel Extension Molding
21. Rear Compartment Lid Outer Panel Molding
22. Rear Compartment Lid Outer Panel Nameplate

35200 - 35400 - 35600 - 35800 - 38400 - 38600 SERIES

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Windshield Reveal Upper	All			X			Windshield Reveal Side	
Windshield Reveal Side	All			X			Windshield Reveal Lower	
Windshield Reveal Lower	All			X				Cowl Air Intake Grille
Windshield Pillar Drip	All except 67	X						Weatherstrip and Weatherstrip Retainer at Windshield Pillar
Windshield Pillar Finishing	67	X					Windshield Side Reveal	Windshield Pillar Weatherstrip and Weatherstrip Retainer
Roof Drip Molding Scalp	All 69 35237, 35637 35837		X				Windshield Pillar Drip	
Roof Drip Molding Front Scalp	39, 57						Windshield Pillar Drip	
Roof Drip Molding Rear Scalp	39, 57	X 57 Style Only	X				Roof Drip Molding Front Scalp	
Roof Drip Molding Front Scalp	38437		X				Windshield Pillar Drip	

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Roof Drip Molding Rear Scalp	38437	X					Roof Drip Molding Front Scalp	
Roof Panel Emblem	38669					X		Headlining Rear Quarter Trim Panel
Front Door Window Frame Front Scalp	69		X					
Front Door Window Frame Upper Scalp	69		X				Front Door Window Frame Front Scalp	
Front Door Window Frame Rear Scalp	69		X				Front Door Window Frame Upper Scalp	
Front Door Window Belt Reveal (at vent)	All except 35000 69 styles	X						Front Door Trim Pad
Front Door Window Belt Reveal (at vent)	35000 69 styles	X						Front Door Vent Assembly
Front Door Window Belt Reveal	All	X						Rubber Bumper on Front Door Window Lower Stop
Center Pillar Scalp	38469, 38669	X						Front and Rear Side Roof Rail Weatherstrip at Center Pillar
Rear Door Window Frame Front Scalp	69		X				Rear Door Window Frame Upper Scalp	

35200 - 35400 - 35600 - 35800 - 38400 - 38600 SERIES (Cont'd.)

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Rear Door Window Frame Upper Scalp	69		X					
Rear Door Window Belt Reveal	39, 69	X						Rubber Bumper on Rear Door Window Lower Stop
Quarter Window Belt Reveal	37, 67	X					Quarter Window Reveal Escutcheon	Quarter Window Lower Stop
Quarter Window Belt Reveal Escutcheon	37		X				Quarter Window Reveal Roof Drip Molding Scalp	
Quarter Belt Reveal	37 Except 38000 Series	X		X	X			
Quarter Belt Reveal	38000, 37 & 39				X	X		Headlining Rear Quarter Trim Panel (37 Styles Only)
Rear End Belt Reveal	38000, 37 & 39					X	Quarter Belt Reveal	
Quarter Pinchweld Finishing Molding	67	X		X			Right Side Overlaps Left Side	
Front Door Outer Panel Upper	38400-38600	X		X				
Front Door Outer Panel	35200, 35600	X		X				
Front Door Outer Panel	35400, 35800	X				X		Front Door Trim

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Front Door Outer Panel Lower	38400-38600	X		X				
Rear Door Outer Panel Upper	38400-38600	X		X				
Rear Door Outer Panel	35200-35600	X		X				
Rear Door Outer Panel	35800	X				X		Door Trim Pad
Rear Door Outer Panel Lower	38400-38600	X		X				
Front of Rear Wheel Opening Upper	38400-38600			X				
Front of Rear Wheel Opening	35200-35600			X				
Front of Rear Wheel Opening	35400-35800					X		Quarter Trim
Front of Rear Wheel Opening Lower	38400-38600			X				
Rear Wheel Opening	35200-35400 35600-35800	X						
Rear of Rear Wheel Opening Upper	38400-38600			X				
Rear of Rear Wheel Opening	35600			X				
Rear of Rear Wheel Opening	35400-35800					X		
Rear of Rear Wheel Opening Lower	38400-38600			X				

35200 - 35400 - 35600 - 35800 - 38400 - 38600 SERIES (Cont'd.)

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Rear Quarter Outer Panel Nameplate	35200-35400					X		
Back Window Reveal Upper	All (except 67)			X			Back Window Reveal Side	
Back Window Reveal Side	All (except 67)			X			Back Window Reveal Lower	
Back Window Reveal Lower	All (except 67)			X			Back Window Reveal Side	
Rear Compartment Lid Outer Panel Nameplate	35400-38400 38600					X		
Rear Compartment Lid Outer Panel Emblem	35200-35400 35600-35800					X		
Rear Compartment Lid Outer Panel	38400-38600	X						
Rear Compartment Lid Outer Panel Extension	38400-38600	X						
Rear End Panel	35200-35400 35600-35800					X		

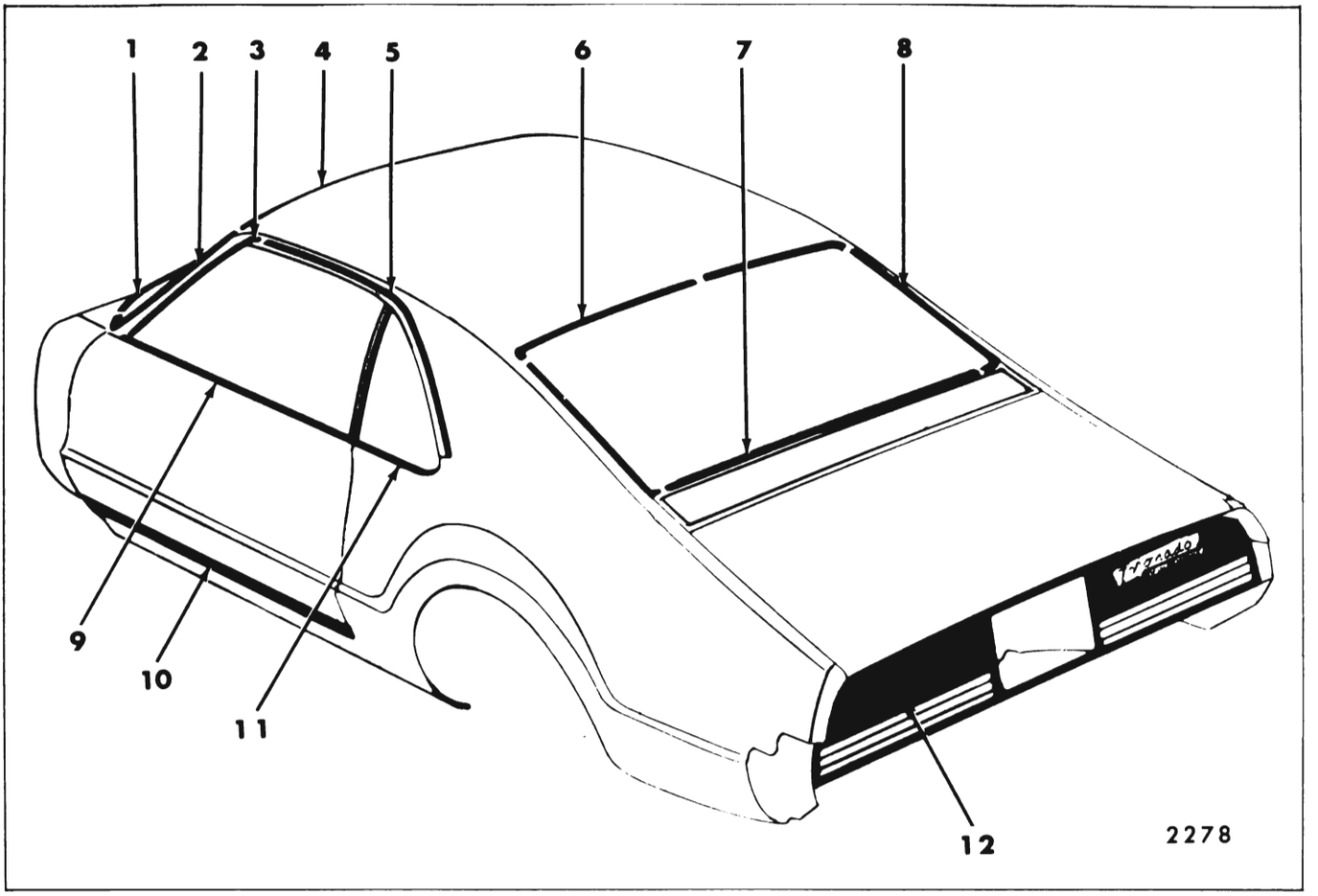


Fig. 12-29—Oldsmobile "E-87" Style

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Pillar Drip Molding Scalp
4. Windshield Reveal Upper Molding
5. Roof Drip Molding Scalp
6. Back Window Reveal Upper Molding
7. Back Window Reveal Lower Molding
8. Back Window Reveal Side Molding
9. Front Door Window Belt Reveal Molding
10. Front Door Outer Panel Molding
11. Rear Quarter Window Belt Reveal Molding
12. Rear End Panel Molding

39400 - 39600 SERIES

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Windshield Reveal Upper	All			X			Windshield Reveal Side	
Windshield Reveal Side	All			X			Windshield Reveal Lower	
Windshield Reveal Lower	All			X			Windshield Reveal Side	Cowl Air Intake Grille
Windshield Pillar Drip Molding Scalp	All		X				Roof Drip Molding Scalp	
Roof Drip Molding Scalp	All		X					
Front Door Window Belt Reveal	All	X				X		
Front Door Outer Panel	All			X				
Rear Quarter Window Belt Reveal	All	X			X			
Back Window Reveal Upper	All			X			Back Window Reveal Side	
Back Window Reveal Side	All			X			Back Window Reveal Lower	
Back Window Reveal Lower	All			X			Back Window Reveal Side	
Rear End Outer Panel	All					X		Loosen Rear Bumper

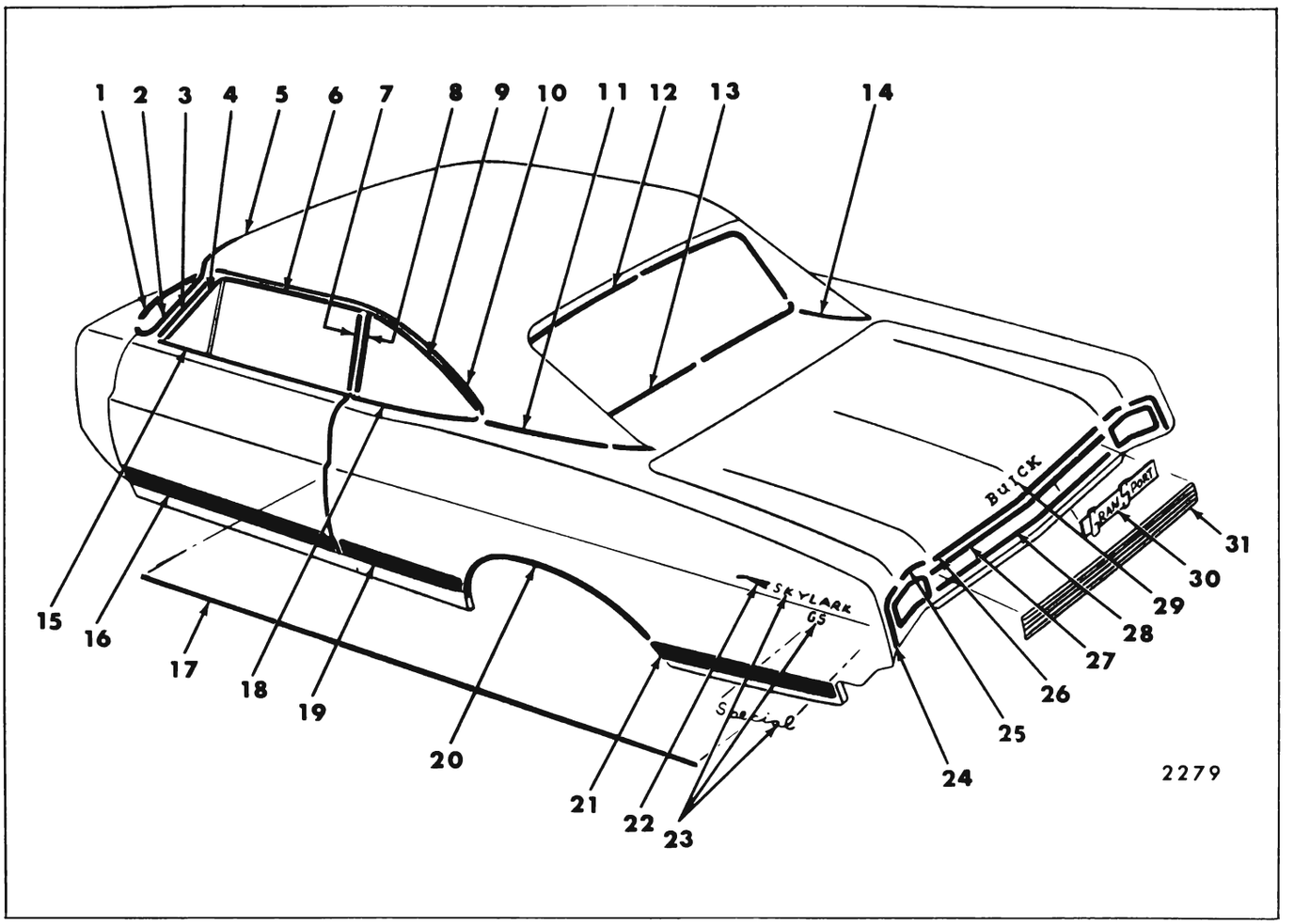


Fig. 12-30—Special "A-07" Styles

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Pillar Finishing Molding
4. Front Door Window Frame Front Scalp Molding
5. Windshield Reveal Upper Molding
6. Front Door Window Frame Upper Scalp Molding
7. Front Door Window Frame Rear Scalp Molding
8. Quarter Window Front Scalp Molding
9. Quarter Window Upper Scalp Molding
10. Roof Drip Molding Scalp
11. Rear Quarter Belt Reveal Molding
12. Back Window Reveal Upper Molding
13. Back Window Reveal Lower Molding
14. Rear Quarter Belt Reveal Rear Molding
15. Front Door Window Belt Reveal Molding
16. Front Door Outer Panel Molding
17. Rear Quarter Outer Panel Molding
18. Rear Quarter Window Belt Reveal Molding
19. Front of Rear Wheel Opening Molding
20. Rear Wheel Opening Molding
21. Rear of Rear Wheel Opening Molding
22. Rear Quarter Outer Panel Emblem
23. Rear Quarter Outer Panel Nameplate
24. Rear of Rear Quarter Outer Panel Molding
25. Rear Compartment Lid Outer Panel Extension Molding
26. Rear Compartment Lid Outer Panel Molding
27. Rear End Panel Upper Molding
28. Rear End Panel Lower Molding
29. Rear Compartment Lid Outer Panel Nameplate
30. Rear End Panel Nameplate
31. Rear End Panel Molding

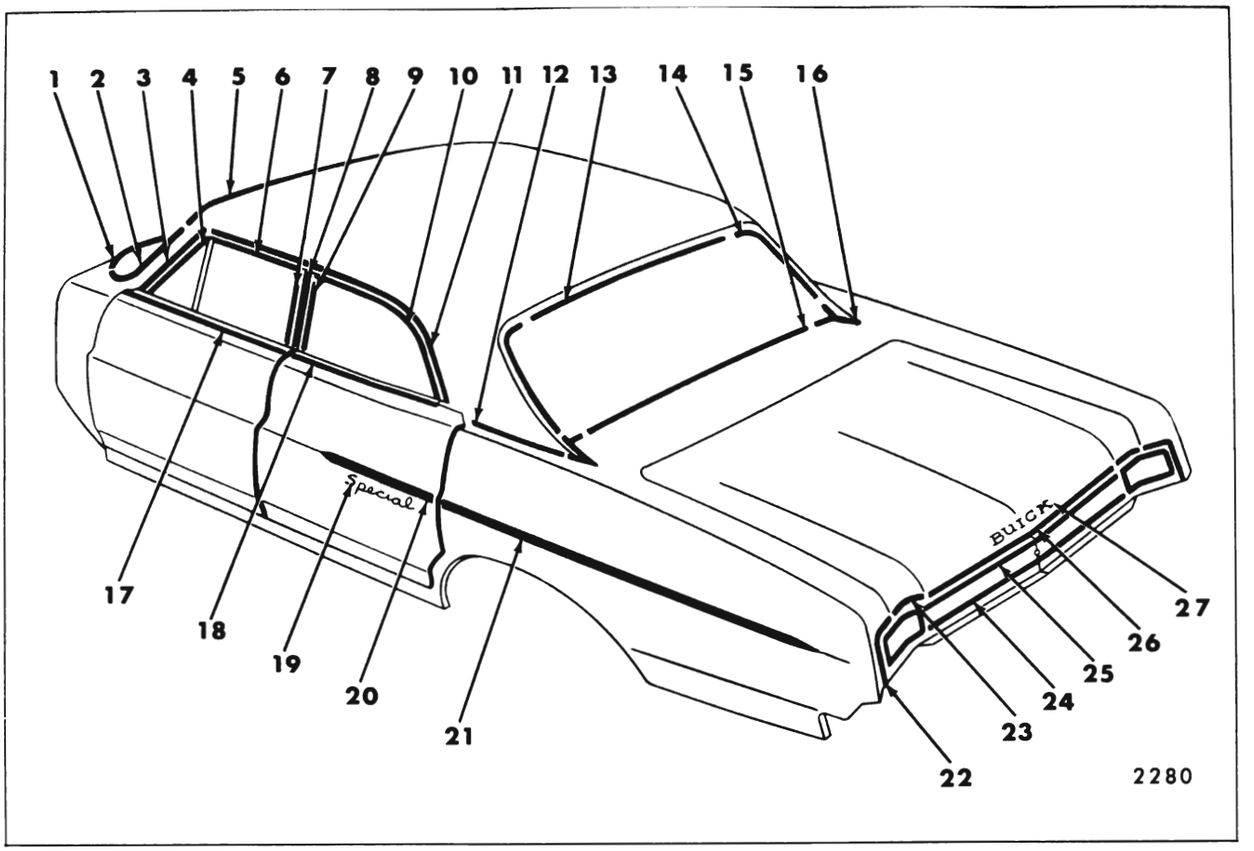


Fig. 12-31—Special "A-69" Styles

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Pillar Finishing Molding
4. Front Door Window Frame Front Scalp Molding
5. Windshield Reveal Upper Molding
6. Front Door Window Frame Upper Scalp Molding
7. Front Door Window Frame Rear Scalp Molding
8. Center Pillar Scalp Molding
9. Rear Door Window Frame Front Scalp Molding
10. Rear Door Window Frame Upper Scalp Molding
11. Roof Drip Molding Scalp
12. Rear Quarter Belt Reveal Molding
13. Back Window Reveal Upper Molding
14. Back Window Reveal Side Molding
15. Back Window Reveal Lower Molding
16. Rear Quarter Belt Reveal Rear Molding
17. Front Door Window Belt Reveal Molding
18. Rear Door Window Belt Reveal Molding
19. Rear Door Nameplate
20. Rear Door Outer Panel Molding
21. Rear Quarter Outer Panel Molding
22. Rear of Rear Quarter Outer Panel Molding
23. Rear Compartment Lid Outer Panel Extension Molding
24. Rear End Panel Lower Molding
25. Rear End Panel Upper Molding
26. Rear Compartment Lid Outer Panel Molding
27. Rear Compartment Lid Outer Panel Nameplate

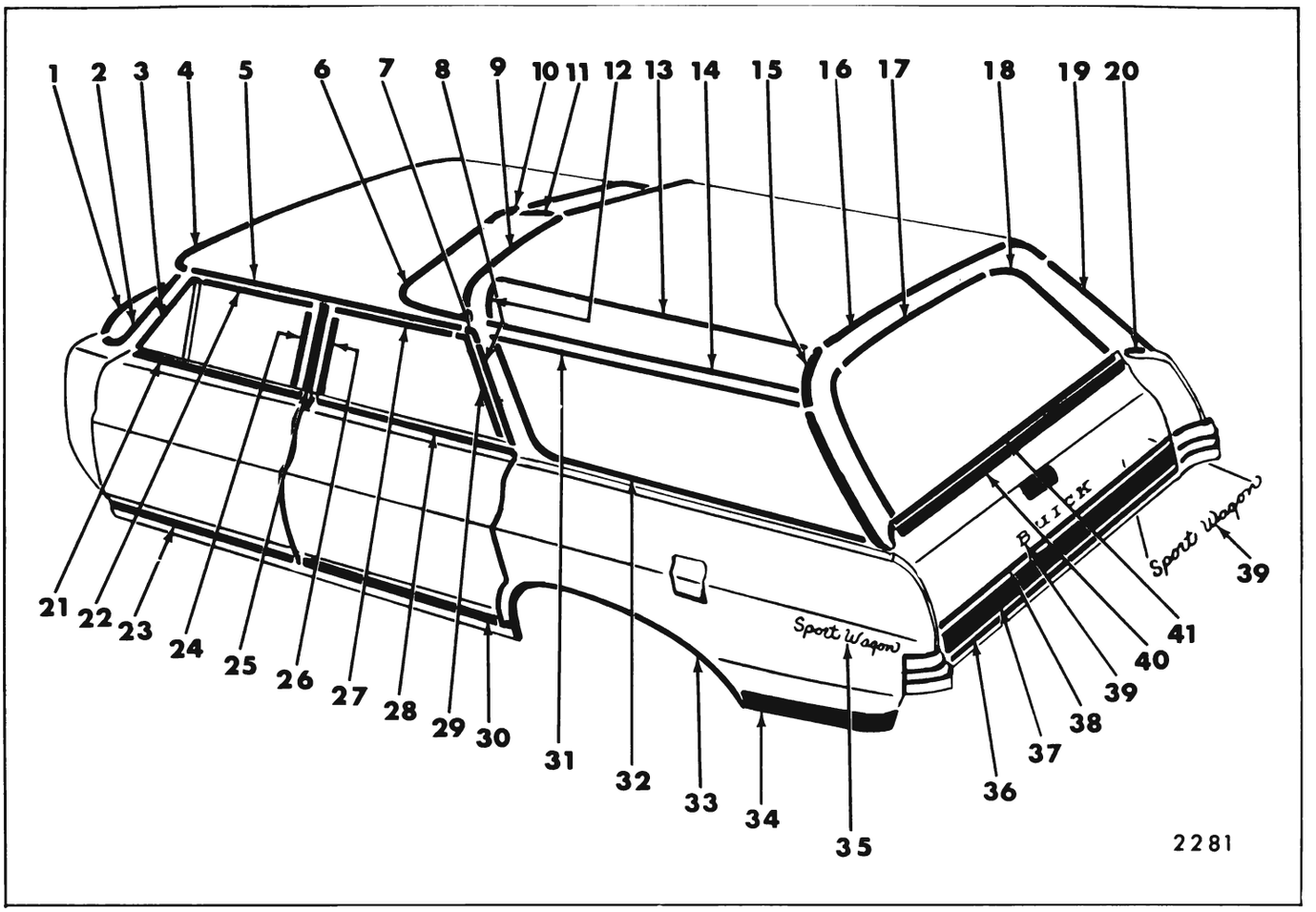


Fig. 12-32—Special "A-55-65" Styles

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Front Door Window Frame Front Scalp Molding
4. Windshield Reveal Upper Molding
5. Roof Drip Molding Front Scalp
6. Front Skylight Front Reveal Molding
7. Roof Drip Molding Scalp Escutcheon
8. Roof Drip Molding Rear Scalp
9. Front Skylight Rear Reveal Molding
10. Front Skylight Center Division Reveal Lower Escutcheon
11. Front Skylight Center Division Reveal Molding
12. Side Skylight Front Reveal Molding
13. Side Skylight Upper Reveal Molding
14. Side Skylight Lower Reveal Molding
15. Rear Upper Side Finishing Molding
16. Rear Upper Finishing Molding
17. Back Body Opening Upper Reveal Molding
18. Back Body Opening Side Reveal Molding
19. Rear Lower Side Finishing Molding
20. Back Body Pillar Belt Finishing Molding
21. Front Door Window Belt Reveal Molding
22. Front Door Window Frame Upper Scalp Molding
23. Front Door Outer Panel Molding
24. Front Door Window Frame Rear Scalp Molding
25. Center Pillar Scalp Molding
26. Rear Door Window Frame Front Scalp Molding
27. Rear Door Window Frame Upper Scalp Molding
28. Rear Door Window Belt Reveal Molding
29. Rear Door Window Frame Rear Scalp Molding
30. Rear Door Outer Panel Molding
31. Rear Quarter Window Reveal Upper Molding
32. Rear Quarter Window Reveal Lower Molding
33. Rear Wheel Opening Molding
34. Rear of Rear Wheel Opening Molding
35. Rear Quarter Outer Panel Nameplate
36. Tailgate Outer Panel Lower Molding
37. Tailgate Outer Panel Center Molding
38. Tailgate Outer Panel Upper Molding
39. Tailgate Outer Panel Nameplate
40. Tailgate Outer Panel Belt Molding
41. Tailgate Window Lower Reveal Molding

43400 - 43600 - 44200 - 44400 - 44600 SERIES

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Windshield Reveal Upper	All			X			Windshield Reveal Side	
Windshield Reveal Side	All			X			Windshield Reveal Lower	Windshield Reveal Upper
Windshield Reveal Lower	All			X			Windshield Reveal Side	Windshield Reveal Side
Windshield Pillar Finishing Molding	All	X						Windshield Pillar Weatherstrip and Weatherstrip Retainer (37 and 67 Styles Only)
Roof Drip Molding Scalp Front	07, 17, 35, 55, 65, 69		X				Roof Drip Molding Scalp Escutcheon	
Roof Drip Molding Scalp Rear	07, 17, 35, 55, 65, 69		X				Roof Drip Molding Scalp Escutcheon	
Roof Drip Molding Scalp Escutcheon	07, 17, 35, 55, 65, 69		X					
Front Door Window Frame Scalp Front	07, 69, 35, 55, 65		X					
Front Door Window Frame Scalp Upper	07, 69, 35, 55, 65		X				Front Door Window Frame Scalp Front	
Front Door Window Frame Scalp Rear	07, 69, 35, 55, 65		X				Front Door Window Frame Scalp Upper	
Rear Door Window Frame Scalp Front	35, 55, 65, 69		X				Rear Door Window Frame Scalp Upper	

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Rear Door Window Frame Scalp Upper	35, 55, 65, 69		X				Rear Door Window Frame Scalp Rear	
Rear Door Window Frame Scalp Rear	35, 55, 65, 69		X					
Center Pillar Scalp	35, 55, 65, 69	X						
Rear Quarter Window Scalp Molding Front	07		X				Rear Quarter Window Reveal Molding Upper	
Rear Quarter Window Scalp Molding Upper	07		X					
Quarter Pinchweld Finishing	67	X		X				Quarter and Rear End Trim Stick
Rear End Pinchweld Finishing	67	X		X			Quarter Pinchweld Finishing	Quarter and Rear End Trim Stick
Quarter Belt Reveal	07, 17 & 69				X	X		
Front Skylight Front Reveal	55, 65			X				
Front Skylight Rear Reveal	55, 65			X			Front Skylight Front Reveal	
Front Skylight Center Division Reveal Lower Escutcheon	55, 65			X			Front Skylight Front Reveal and Center Division Reveal	
Front Skylight Center Division Reveal	55, 65			X			Front Skylight Rear Reveal	
Side Skylight Front Reveal	55, 65			X			Side Skylight Lower Reveal	

43400 - 43600 - 44200 - 44400 - 44600 SERIES (Cont'd.)

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Side Skylight Upper Reveal	55, 65			X			Side Skylight Front Reveal	
Side Skylight Lower Reveal	55, 65			X				
Quarter Window Reveal Upper Corner Escutcheon	35			X			Quarter Window Reveal Upper	Loosen Quarter Window Reveal Upper and Lower at Corner
Quarter Window Reveal Upper	35			X			Quarter Window Reveal Upper and Lower Corner Escutcheon	Quarter Window Reveal Upper Corner Escutcheon
Quarter Window Reveal Lower	35			X			Quarter Window Reveal Upper and Lower Corner Escutcheon	Quarter Window Reveal Lower Corner Escutcheon
Quarter Window Reveal Lower Corner Escutcheon	35			X			Quarter Window Reveal Lower	Loosen Quarter Window Reveal Upper and Lower at Corner
Quarter Window Reveal Upper	55, 65			X				
Quarter Window Reveal Lower	55, 65			X				
Rear Upper Finishing	55, 65					X		Rear Roof Headlining Trim Finish Molding
Rear Upper Side Finishing	55, 65					X		
Rear Lower Side Finishing	55, 65				X			

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Front Door Outer Panel	44400-44600			X				
Rear Door Outer Panel	43600-44400 44600			X				
Rear Door Outer Panel Nameplate	43600					X		
Front of Rear Wheel Opening	44400-44600			X				
Rear Wheel Opening	44400-44600	X						
Rear of Rear Wheel Opening	44400-44600				X			
Rear Quarter Outer Panel	43600			X				
Rear Quarter Outer Panel Nameplate and/or Emblem	43400, 44400 44600					X		
Rear Compartment Lid Outer Panel	43600-44400 44600	X						
Rear Compartment Lid Outer Panel Nameplate	All					X		
Rear End Panel Upper	43600-46600					X		
Rear End Panel	44400					X		
Rear End Panel Lower	43600-46600					X		
Rear End Panel Nameplate	44600					X		
Back Window Reveal Upper	All (except 67, 35, 55, 65)			X			Back Window Reveal Side	

43400 - 43600 - 44200 - 44400 - 44600 SERIES (Cont'd.)

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Back Window Reveal Side	All (except 67, 35, 55, 65)			X			Back Window Reveal Lower	
Back Window Reveal Lower	All (except 67, 35, 55, 65)			X			Back Window Reveal Side	
Back Body Opening Upper Reveal	55, 65	X						Tailgate Glass Run Channel
Back Body Opening Side Reveal	55, 65	X						
Tailgate Window Lower Reveal	35, 55, 65	X			X			Tailgate Window and Regulator
Tailgate Outer Panel Belt	44455, 65					X		Tailgate Window and Regulator
Tailgate Outer Panel Upper	35, 55, 65				X			
Tailgate Outer Panel Center	55, 65	X						Tailgate Outer Panel Upper and Lower Moldings
Tailgate Outer Panel Lower	35, 55, 65				X			
Tailgate Outer Panel Nameplate	35, 55, 65					X		

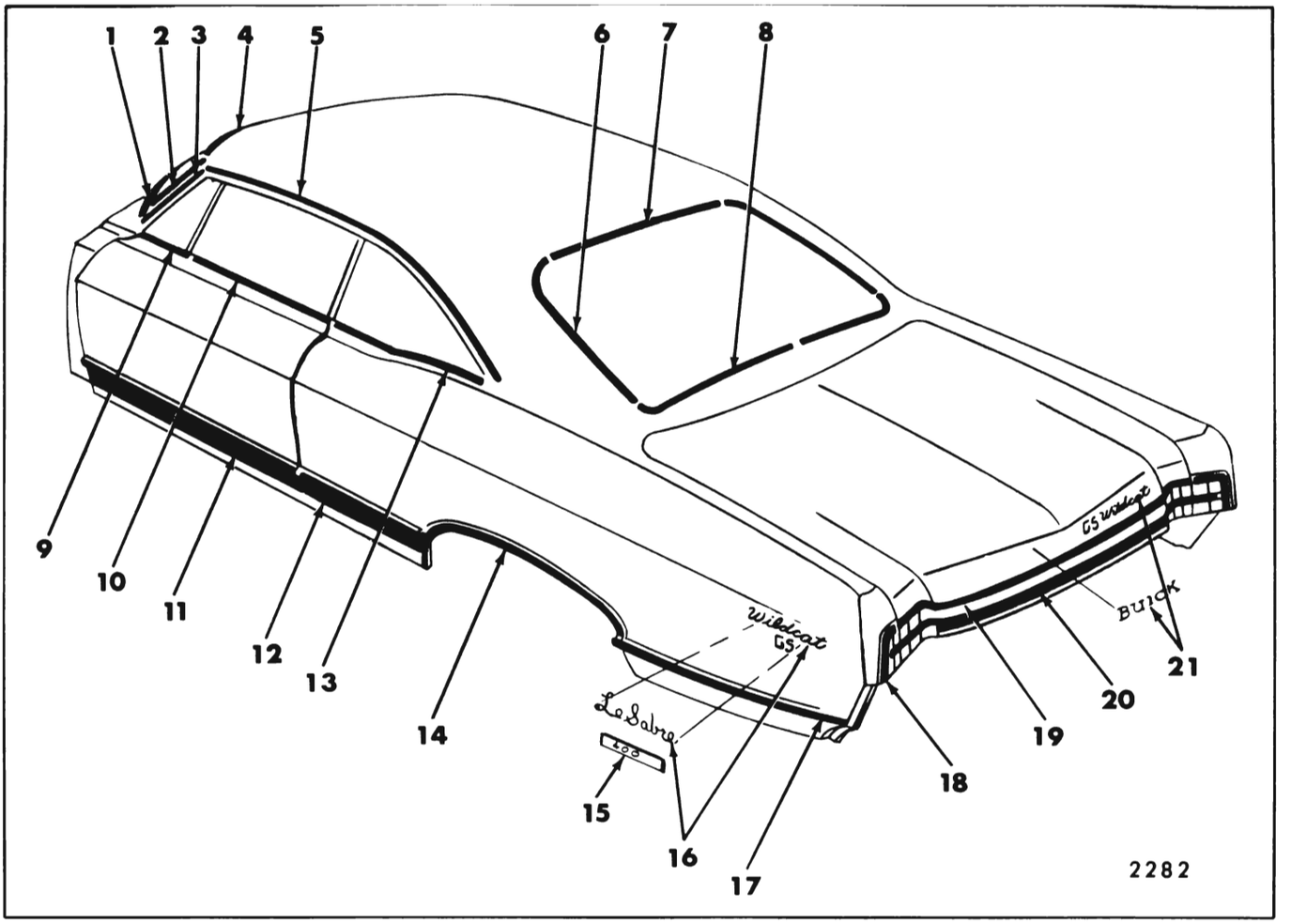


Fig. 12-33—Buick "B-37" Styles

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Pillar Drip Molding
4. Windshield Reveal Upper Molding
5. Roof Drip Molding Scalp
6. Back Window Reveal Side Molding
7. Back Window Reveal Upper Molding
8. Back Window Reveal Lower Molding
9. Front Door Window Belt Reveal (At Vent) Molding
10. Front Door Window Belt Reveal Molding
11. Front Door Outer Panel Molding
12. Front of Rear Wheel Opening Molding
13. Rear Quarter Window Belt Reveal Molding
14. Rear Wheel Opening Molding
15. Rear Quarter Outer Panel Emblem
16. Rear Quarter Outer Panel Nameplate
17. Rear of Rear Wheel Opening Molding
18. Rear of Rear Quarter Outer Panel Molding
19. Rear Compartment Lid Outer Panel Molding
20. Rear End Panel Molding
21. Rear Compartment Lid Outer Panel Nameplate

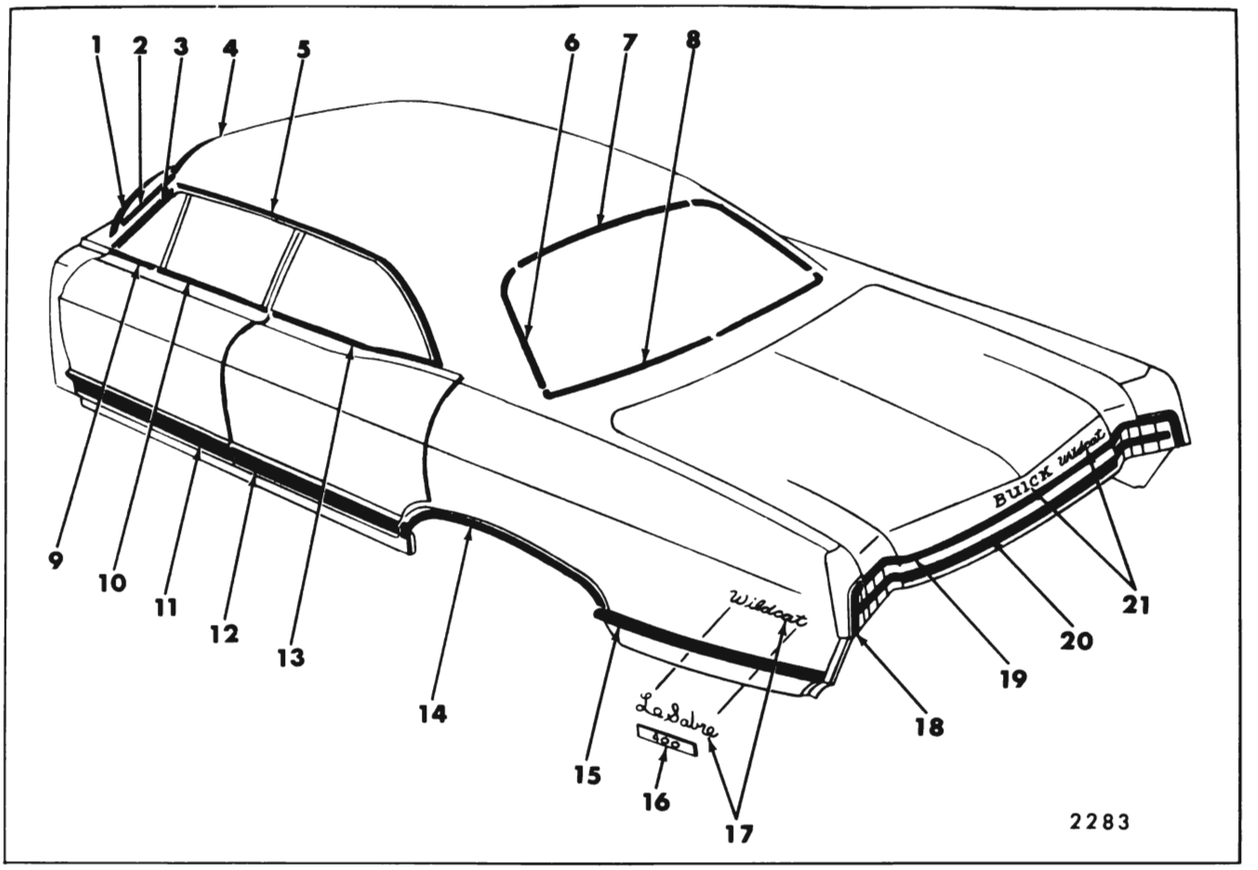


Fig. 12-34—Buick "B-69" Styles

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Pillar Drip Molding
4. Windshield Reveal Upper Molding
5. Roof Drip Molding Scalp
6. Back Window Reveal Side Molding
7. Back Window Reveal Upper Molding
8. Back Window Reveal Lower Molding
9. Front Door Window Belt Reveal (At Vent) Molding
10. Front Door Window Belt Reveal Molding
11. Front Door Outer Panel Molding
12. Rear Door Outer Panel Molding
13. Rear Door Window Belt Reveal Molding
14. Rear Wheel Opening Molding
15. Rear of Rear Wheel Opening Molding
16. Rear Quarter Outer Panel Emblem
17. Rear Quarter Outer Panel Nameplate
18. Rear of Rear Quarter Outer Panel Molding
19. Rear Compartment Lid Outer Panel Molding
20. Rear End Panel Molding
21. Rear Compartment Lid Outer Panel Nameplate

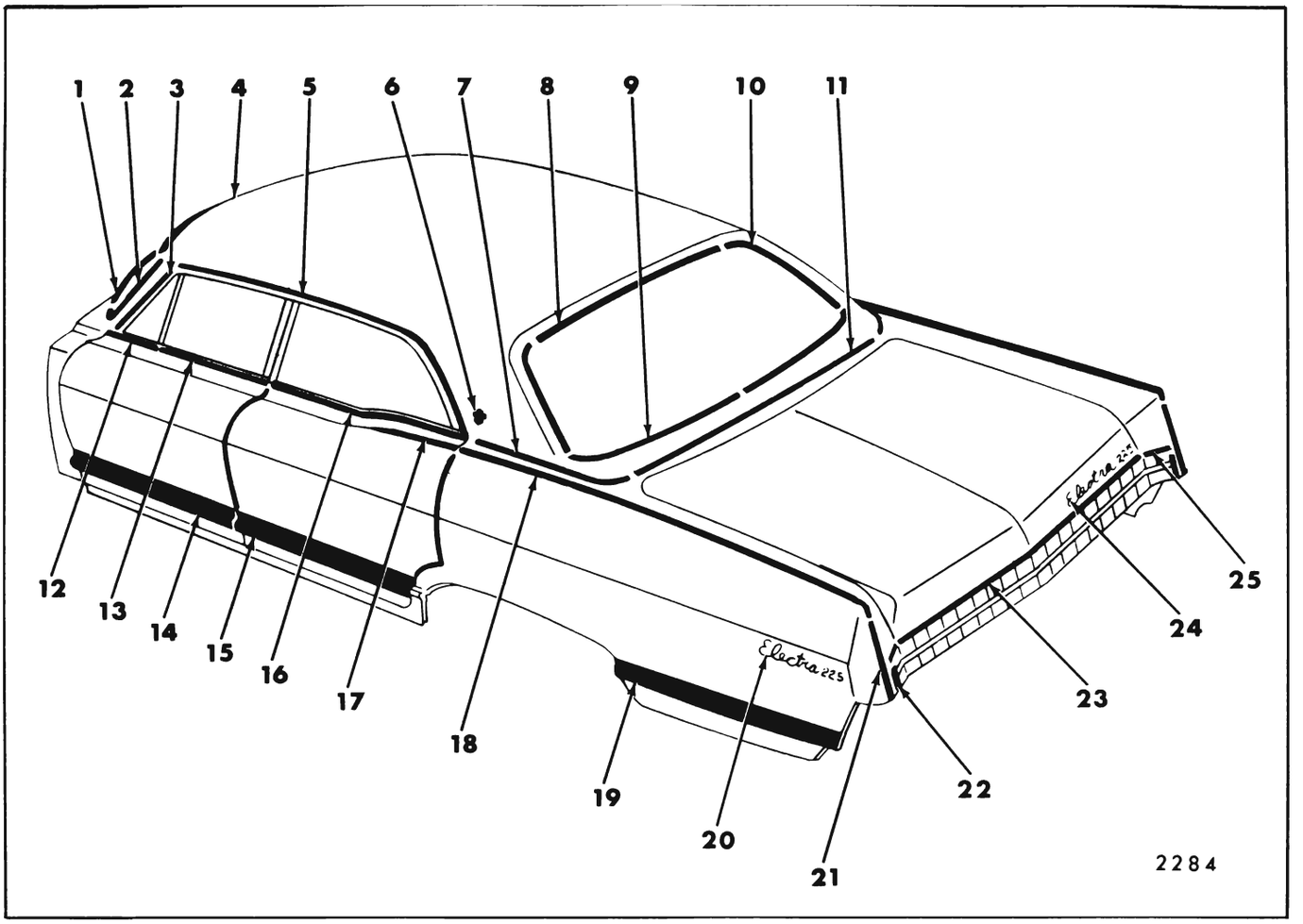


Fig. 12-35—Buick "C-69" Styles

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Pillar Drip Molding
4. Windshield Reveal Upper Molding
5. Roof Drip Molding Scalp
6. Roof Panel Emblem
7. Rear Quarter Belt Reveal Molding
8. Back Window Reveal Upper Molding
9. Back Window Reveal Lower Molding
10. Back Window Reveal Side Molding
11. Rear End Belt Reveal Molding
12. Front Door Window Belt Reveal (At Vent) Molding
13. Front Door Window Belt Reveal Molding
14. Front Door Outer Panel Molding
15. Rear Door Outer Panel Molding
16. Rear Door Window Belt Reveal Molding
17. Rear Door Outer Panel Peak Molding
18. Rear Quarter Outer Panel Peak Molding
19. Rear of Rear Wheel Opening Molding
20. Rear Quarter Outer Panel Nameplate
21. Rear of Rear Quarter Outer Panel Peak Molding
22. Rear of Rear Quarter Outer Panel Molding
23. Rear Compartment Lid Outer Panel Molding
24. Rear Compartment Lid Outer Panel Nameplate
25. Rear Compartment Lid Outer Panel Extension Molding

45200 - 45400 - 46400 - 46600 - 48200 - 48400 SERIES

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Windshield Reveal Upper	All			X			Windshield Reveal Side	
Windshield Reveal Side	All			X			Windshield Reveal Lower	
Windshield Reveal Lower	All			X				Cowl Air Intake Grille
Windshield Pillar Drip	All (except 67)	X						Weatherstrip and Weatherstrip Retainer at Windshield Pillar
Windshield Pillar Finishing Molding	67	X					Windshield Side Reveal	Windshield Pillar Weatherstrip and Weatherstrip Retainer
Roof Drip Molding Front Scalp	39			X			Windshield Pillar Drip	
Roof Drip Molding Rear Scalp	39	X (48239 48439 only)					Roof Drip Molding Front Scalp	
Roof Drip Molding Scalp	37, 69 (except 48237, 48437)		X				Windshield Pillar Drip	
Roof Drip Molding Front Scalp	48237, 48437		X				Windshield Pillar Drip	
Roof Drip Molding Rear Scalp	48237, 48437	X	X				Roof Drip Molding Front Scalp	

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Front Door Window Frame Front Scalp	69 (except 48000 Series)		X					
Front Door Window Frame Upper Scalp	69 (except 48000 Series)		X				Front Door Window Frame Front Scalp	
Front Door Window Frame Rear Scalp	69 (except 48000 Series)		X				Front Door Window Front Upper Scalp	
Front Door Window Belt Reveal (at vent)	All (except 45000 & 46000, 69 Styles)	X						Front Door Trim Pad
Front Door Window Belt Reveal	All	X					Front Door Window Reveal (at vent)	Rubber Bumper on Door Window Lower Stop
Front Door Window Belt Reveal (at vent)	45000, 46000 69 Styles	X						Front Door Vent Assembly
Center Pillar Scalp	48269, 48469	X						Side Roof Rail Weatherstrip Front and Rear at Center Pillar
Rear Door Window Frame Front Scalp	69 (except 48000 Series)		X				Rear Door Window Frame Upper Scalp	
Rear Door Window Frame Upper Scalp	69 (except 48000 Series)		X					
Rear Door Window Belt Reveal	39, 69	X						Rubber Bumper on Rear Door Window Lower Stop

45200 - 45400 - 46400 - 46600 - 48200 - 48400 SERIES (Cont'd.)

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Quarter Window Belt Reveal	37, 67	X						Quarter Window Lower Stop
Quarter Window Belt Reveal Escutcheon	37		X					Quarter Window Reveal Roof Drip Molding Rear Scalp
Quarter Belt Reveal	48239, 69 48439, 69			X	X	X		
Rear End Belt Reveal	48239, 69 48439, 69					X	Quarter Belt Reveal	
Quarter Belt Reveal	39 (except 48000 Series)			X	X	X		
Rear End Belt Reveal	39 (except 48000 Series)					X	Quarter Belt Reveal	
Quarter Belt Reveal	48237, 48437				X	X		Headlining Rear Quarter Trim Panel
Rear End Belt Reveal	48237, 48437					X	Quarter Belt Reveal	
Quarter Belt Reveal	37 (except 48000 Series)			X	X	X	Right Side Overlaps Left Side	
Quarter Belt Reveal	69 (except 48000 Series)			X	X			
Quarter Belt Pinchweld Finishing	67	X		X			Right Side Overlaps Left Side	
Front Door Outer Panel Lower	45200, 45400 46400, 46600	X		X				

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Front Door Outer Panel Lower	48200, 48400	X				X		Front Door Trim Pad
Rear Door Outer Panel Crown	48200, 48400	X				X		Rear Door Trim
Rear Door Outer Panel Lower	45200, 45400 46400, 46600	X		X				
Rear Door Outer Panel Lower	48200, 48400	X				X		Rear Door Trim
Rear Fender Outer Panel Crown	48200, 48400	X		X		X	Rear of Rear Fender Outer Panel Crown	Quarter Trim on (37, 67 Styles) Rear Compartment Side Trim
Rear of Rear Quarter Outer Panel Crown	48200, 48400	X				X		
Rear of Rear Quarter Outer Panel	45200, 45400 46400, 46600	X						Rear Quarter Extension
Rear of Rear Quarter Outer Panel	48200-48400					X		Rear Quarter Extension
Front of Rear Wheel Opening	48237,48437, 67					X		Quarter Trim
Rear of Rear Wheel Opening	48200-48400	X		X				Rear Compartment Side Trim Panel Compartment to Quarter Panel Filler Plug

45200 - 45400 - 46400 - 46600 - 48200 - 48400 SERIES (Cont'd.)

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Front of Rear Wheel Opening	45400-46400 46600			X		X	Rear Wheel Opening	Quarter Trim Pad
Rear Wheel Opening	45400-46400 46600	X					Front and Rear of Rear Wheel Opening (except Front on 39, 69 Styles)	Quarter Trim Pad Rear
Rear of Rear Wheel Opening	45400-46400 46600			X		X	Rear Wheel Opening	
Rear Quarter Outer Panel Name Plate	All					X		Rear Compartment Side Trim on 48000 Series
Back Window Reveal Upper	All (except 67)			X			Back Window Reveal Side	
Back Window Reveal Side	All (except 67)			X			Back Window Reveal Lower	
Back Window Reveal Lower	All (except 67)			X			Back Window Reveal Side	
Rear Compartment Lid Outer Panel	48200, 48400	X						
Rear Compartment Lid Outer Panel	All (Except 48000 Series)					X		
Rear Compartment Lid Outer Panel Name Plate	All					X		
Rear End Outer Panel	46200, 46400 46600					X		

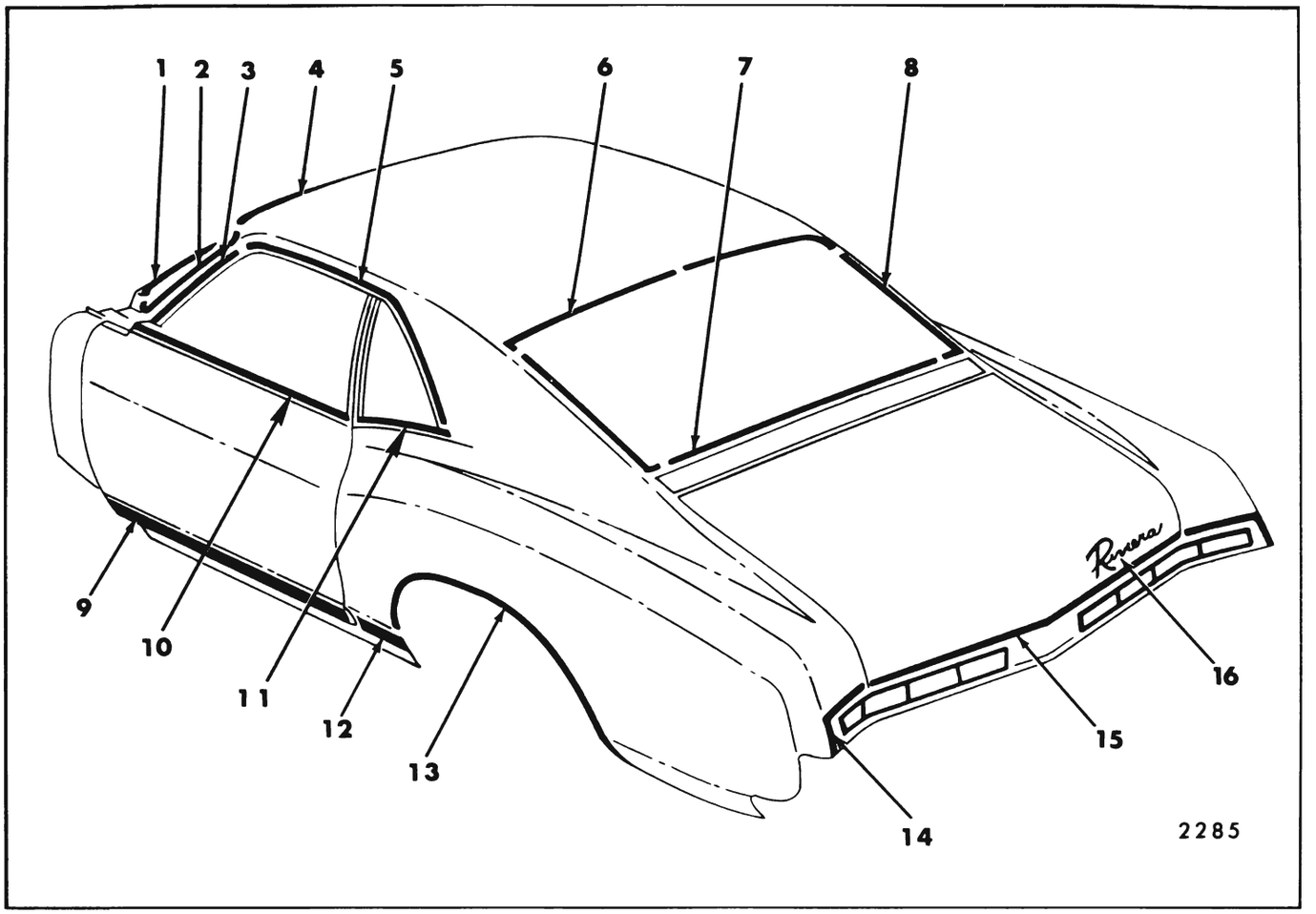


Fig. 12-36—Buick "E-87" Style

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Pillar Drip Molding Scalp
4. Windshield Reveal Upper Molding
5. Roof Drip Molding Scalp
6. Back Window Reveal Upper Molding
7. Back Window Reveal Lower Molding
8. Back Window Reveal Side Molding
9. Front Door Outer Panel Molding
10. Front Door Window Belt Reveal Molding
11. Rear Quarter Window Belt Reveal Molding
12. Front of Rear Wheel Opening Molding
13. Rear Wheel Opening Molding
14. Rear of Rear Quarter Outer Panel Molding
15. Rear Compartment Lid Outer Panel Molding
16. Rear Compartment Lid Outer Panel Nameplate

49400 SERIES

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Windshield Reveal Upper	All			X			Windshield Reveal Side	
Windshield Reveal Side	All			X			Windshield Reveal Lower	
Windshield Reveal Lower	All			X			Windshield Reveal Side	Cowl Air Intake Grille
Windshield Pillar Drip Molding Scalp	All		X				Roof Drip Molding Scalp	
Roof Drip Molding Scalp	All		X					
Front Door Window Belt Reveal	All	X						
Front Door Outer Panel	All			X				
Rear Quarter Window Belt Reveal	All	X						
Front of Rear Wheel Opening	All					X		
Rear Wheel Opening	All	X						
Back Window Reveal Upper	All			X			Back Window Reveal Side	
Back Window Reveal Side	All			X			Back Window Reveal Lower	
Back Window Reveal Lower	All			X			Back Window Reveal Side	
Rear Compartment Lid Outer Panel Nameplate	All					X		
Rear Compartment Lid Outer Panel	All					X		
Rear of Rear Quarter Outer Panel	All					X		Remove Tail Lamp Assembly

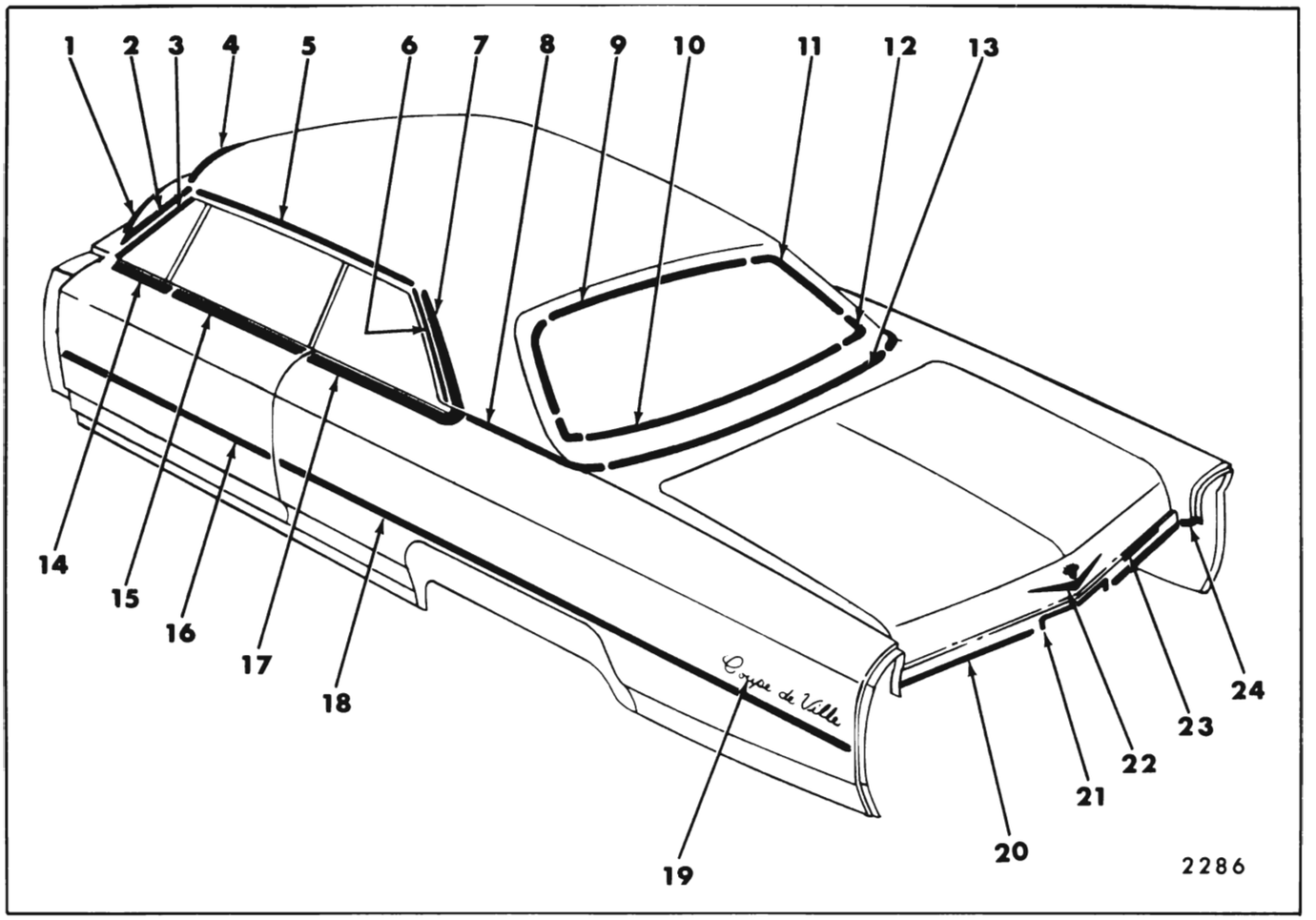


Fig. 12-37—Cadillac "C-57" Styles

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Pillar Drip Molding
4. Windshield Reveal Upper Molding
5. Roof Drip Molding Front Scalp
6. Roof Drip Molding Rear Scalp
7. Roof Panel Rear of Quarter Window Molding
8. Rear Quarter Belt Reveal Molding
9. Back Window Reveal Upper Molding
10. Back Window Reveal Lower Molding
11. Back Window Reveal Side Molding
12. Back Window Reveal Corner Escutcheon
13. Rear End Belt Reveal Molding
14. Front Door Window Belt Reveal (At Vent) Molding
15. Front Door Window Belt Reveal Molding
16. Front Door Outer Panel Molding
17. Rear Quarter Window Belt Reveal Molding
18. Rear Quarter Outer Panel Molding
19. Rear Quarter Outer Panel Nameplate
20. Rear Compartment Lid Outer Panel Side Molding
21. Rear Compartment Lid Outer Panel Center Molding
22. Rear Compartment Lid Outer Panel Emblem
23. Rear Compartment Lid Outer Panel Nameplate
24. Rear Compartment Lid Outer Panel Extension Molding

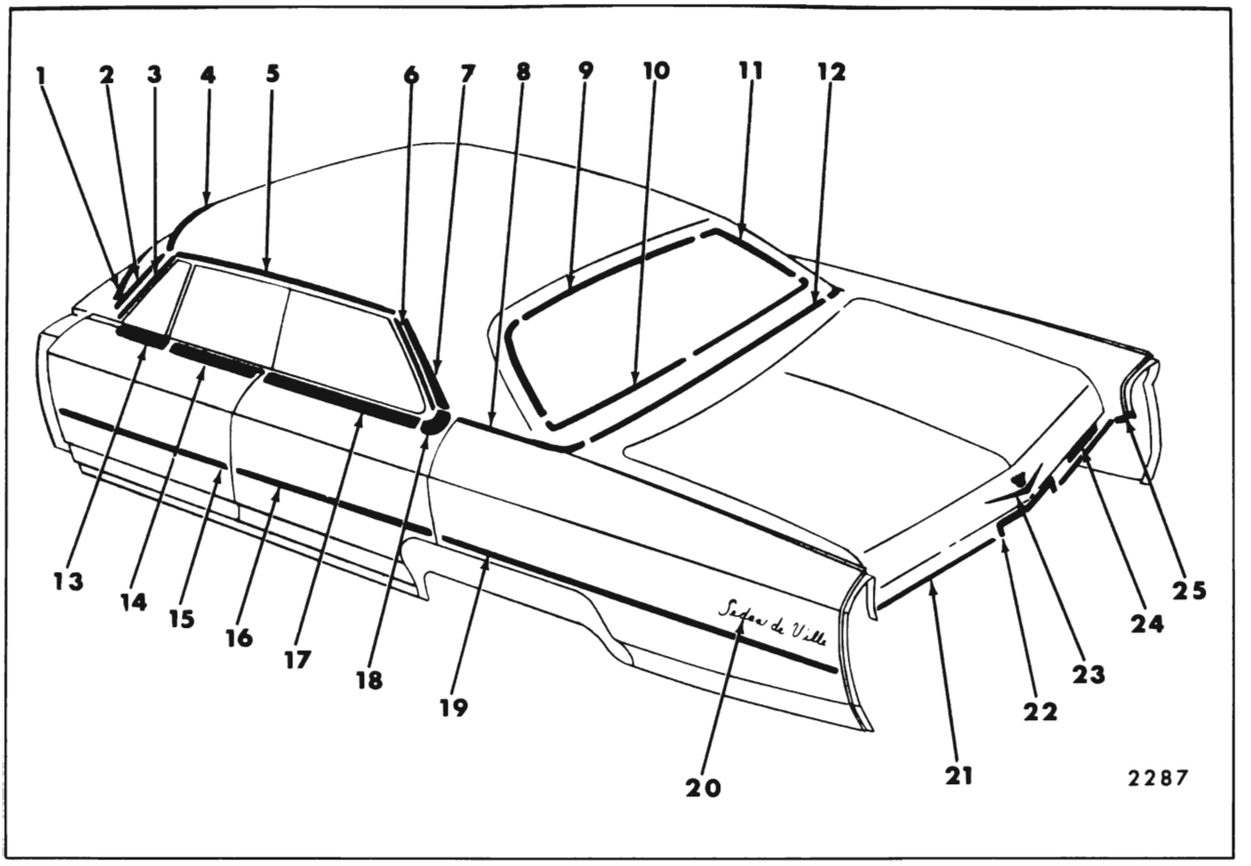


Fig. 12-38—Cadillac "C-39" Styles

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Pillar Drip Molding
4. Windshield Reveal Upper Molding
5. Roof Drip Molding Front Scalp
6. Roof Drip Molding Rear Scalp
7. Roof Panel Rear of Rear Door Window Molding
8. Rear Quarter Belt Reveal Molding
9. Back Window Reveal Upper Molding
10. Back Window Reveal Lower Molding
11. Back Window Reveal Side Molding
12. Recr End Belt Reveal Molding
13. Front Door Window Belt Reveal (At Vent) Molding
14. Front Door Window Belt Reveal Molding
15. Front Door Outer Panel Molding
16. Rear Door Outer Panel Molding
17. Rear Door Window Belt Reveal Molding
18. Rear Door Window Belt Reveal Escutcheon
19. Rear Quarter Outer Panel Molding
20. Rear Quarter Outer Panel Nameplate
21. Rear Compartment Lid Outer Panel Side Molding
22. Rear Compartment Lid Outer Panel Center Molding
23. Rear Compartment Lid Outer Panel Emblem
24. Rear Compartment Lid Outer Panel Nameplate
25. Rear Compartment Lid Outer Panel Extension Molding

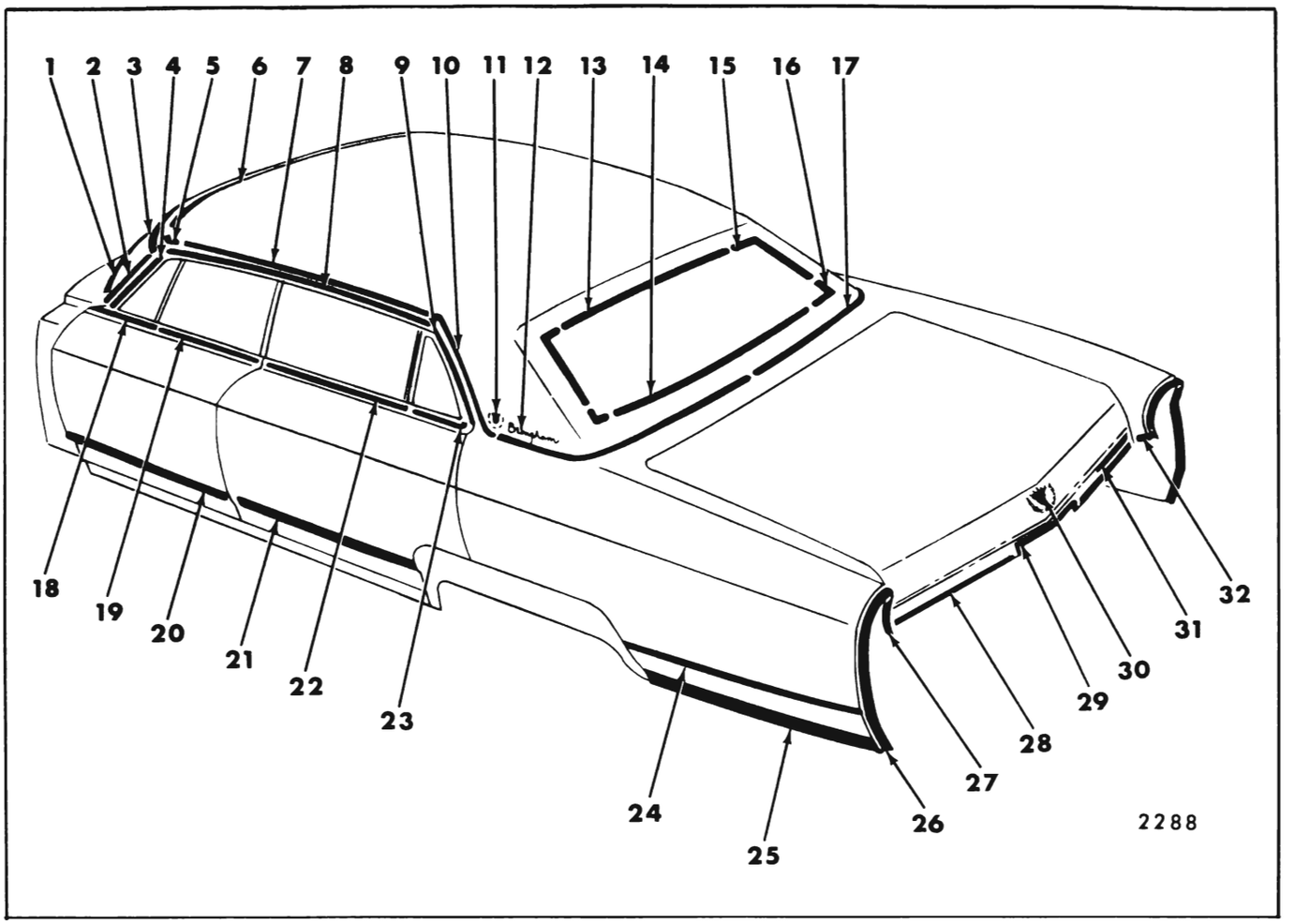


Fig. 12-39—Cadillac "C-69" Style

1. Windshield Reveal Lower Molding
2. Windshield Reveal Side Molding
3. Windshield Reveal Upper Molding
4. Windshield Pillar Drip Molding
5. Roof Panel Cover Front Finishing Escutcheon
6. Roof Panel Cover Front Finishing Molding
7. Roof Panel Cover Side Front Finishing Molding
8. Roof Drip Molding Front Scalp
9. Roof Drip Molding Rear Scalp
10. Roof Panel Cover Side Rear Finishing Molding
11. Roof Panel Emblem
12. Roof Panel Nameplate
13. Back Window Reveal Upper Molding
14. Back Window Reveal Lower Molding
15. Back Window Reveal Side Molding
16. Back Window Reveal Corner Escutcheon
17. Rear Quarter Belt Reveal Molding
18. Front Door Window Belt Reveal (At Vent) Molding
19. Front Door Window Belt Reveal Molding
20. Front Door Outer Panel Molding
21. Rear Door Outer Panel Molding
22. Rear Door Window Belt Reveal Molding
23. Rear Door Window Rear Belt Reveal Molding
24. Rear of Rear Wheel Opening Upper Molding
25. Rear of Rear Wheel Opening Lower Molding
26. Rear of Rear Quarter Panel Outer At Tail Lamp Molding
27. Rear of Rear Quarter Panel Inner At Tail Lamp Molding
28. Rear Compartment Lid Outer Panel Side Molding
29. Rear Compartment Lid Outer Panel Center Molding
30 Rear Compartment Lid Outer Panel Emblem
31. Rear Compartment Lid Outer Panel Nameplate
32. Rear Compartment Lid Outer Panel Extension Molding

68000 - 68100 - 68200 - 68300 - 68400 SERIES

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Windshield Reveal Upper	All			X			Windshield Reveal Side	
Windshield Reveal Side	All			X			Windshield Reveal Lower	
Windshield Reveal Lower	All			X				Cowl Air Intake Grille
Windshield Pillar Drip	All (Except 67)	X						Weatherstrip and Weatherstrip Retainer at Windshield Pillar
Windshield Pillar Finishing	67	X					Windshield Side Reveal	Windshield Pillar Weatherstrip and Weatherstrip Retainer
Roof Drip Molding Scalp	68269, 68369		X				Windshield Pillar Drip	
Rood Drip Molding Front Scalp	68069		X				Windshield Pillar Drip	
Roof Drip Molding Rear Scalp	68069		X				Roof Drip Molding Front Scalp	
Roof Drip Molding Front Scalp	39, 57		X				Windshield Pillar Drip	
Roof Drip Molding Rear Scalp	39, 57		X				Roof Drip Molding Front Scalp	
Roof Panel Rear of Quarter Window	68357		X				Roof Drip Molding Rear Scalp	

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Roof Panel Rear of Rear Door Window	68339		X				Roof Drip Molding Rear Scalp	
Roof Panel Cover Front Finish	68169	X		X			Roof Panel Cover Front Finish Escutcheon	Front Section of Headlining
Roof Panel Cover Front Finish Escutcheon	68169					X	Roof Panel Cover Side Front Finish	Front Section of Headlining
Roof Panel Cover Side Front Finish	68169			X		X	Roof Panel Cover Front Finish Escutcheon Roof Panel Cover Side Rear Finish	Headlining at Side Area
Roof Panel Cover Side Rear Finish	68169					X	Rear End Belt Cover Finish	Headlining at Rear Quarter Area
Roof Panel Emblem Assembly	68169					X		Headlining at Rear Quarter Area
Roof Panel Name Plate	68169					X		Headlining at Rear Quarter Area
Front Door Window Belt Reveal (at Vent)	All	X					Front Door Window Reveal	Front Door Trim
Front Door Window Belt Reveal (at Vent)	All				X		Front Door Window Reveal	Front Door Vent Assembly
Front Door Window Belt Reveal	All	X						Rubber Bumper on Door Window Lower Stop

68000 - 68100 - 68200 - 68300 - 68400 SERIES (Cont'd.)

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Center Pillar Scalp	69	X						Weatherstrips and Weatherstrip Retainer at Center Pillar
Rear Door Window Belt Reveal	All	X						Rubber Bumper on Rear Door Window Lower Stop
Rear Door Window Front Belt Reveal	68069, 68169	X						Rubber Bumper on Rear Door Window Lower Stop
Rear Door Window Rear Belt Reveal	68069, 68169	X					Rear Door Window Front Reveal	Rubber Bumper on Rear Door Window Lower Stop
Quarter Window Lower Belt Reveal	57, 67	X						Quarter Window Lower Stop
Quarter Belt Cover Finish	68300				X	X		
Rear End Belt Cover Finish	68300					X	Quarter Belt Cover Finish	
Rear End Belt Cover Finish	68169					X	Right Side Overlaps Left Side Roof Panel	Headlining at Rear Quarter Area
Quarter Pinchweld Finishing	67	X		X			Cover Side Rear Finish	
Rear End Pinchweld Finishing	67			X			Quarter Pinchweld Finishing	

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Back Window Reveal Upper	All (except 67)			X			Back Window Reveal Side	
Back Window Reveal Side	All (except 67)			X			Back Window Reveal Lower	
Back Window Reveal Lower	All (except 67)			X			Back Window Reveal Side	
Back Window Reveal Lower Corner Escutcheon	682-68357 680-68169			X				
Front Door Outer Panel Lower	All	X		X				
Rear Door Outer Panel Lower	39, 69	X		X				
Rear Quarter Outer Panel Lower	68200, 68300				X	X		Rear Compartment Side Trim Quarter Window Glass (37, 67 Styles Only) Tail Lamp Assembly Compartment Pan to Quarter Panel Filler Plug
Front of Rear Wheel Opening	68467				X	X		Quarter Trim Pad
Rear Quarter Outer Panel Emblem	68069, 68467					X		
Rear of Rear Wheel Opening Upper	68069, 68467			X	X	X		Rear Compartment Side Trim

68000 - 68100 - 68200 - 68300 - 68400 SERIES (Cont'd.)

Molding Name	Series Or Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Moldings	Studs With Attaching Nuts		
Rear of Rear Wheel Opening Lower	68069, 68467 68169	X						
Rear of Rear Fender Outer Panel Inner at Tail Lamp	68069, 68467 68169	X					Rear of Rear Fender Outer Panel Outer at Tail Lamp	
Rear of Rear Fender Outer Panel Outer at Tail Lamp	68069, 68467 68169	X					Rear of Rear Wheel Opening	
Rear of Rear Fender Outer Panel at Compartment Lid	All	X				X	Rear of Rear Fender Outer Panel Inner at Tail Lamp (68069, 68467 Styles Only)	
Rear Compartment Lid Outer Panel Lower Side	All	X						
Rear Compartment Lid Outer Panel Lower Side Extension	All	X						
Rear Compartment Lid Outer Panel Crest	All					X		
Rear Compartment Lid Outer Panel Wreath	68069, 68169 68467					X		