

HEATER

Blower Motor

REMOVAL AND INSTALLATION

1963-1967 With or Without A/C

1. It is not necessary to drain the cooling system to remove the heater blower. Remove the radiator expansion-tank retaining straps and move the tank from the work area.
2. Disconnect the ground cable from the battery.
3. Remove the blower motor leads.
4. Mark the blower motor mounting plate and blower motor assembly for correct reassembly.
5. Remove the five retaining screws and remove the blower assembly.
6. Reverse the removal procedure to reinstall, being careful to reposition the blower according to the marks previously made.

1968-1972 Without A/C

1. Disconnect the ground cable from the battery.
2. If so equipped, remove the radiator expansion tank retaining screws and move the tank out of the way.
3. Remove the blower motor leads.
4. Remove the case mounting screws and remove the blower assembly. Gently pry on the flange, should the sealer hold the motor in place.
5. Use the reverse procedure to install the motor.

1968-72 With A/C

1. Disconnect the battery ground cable.
2. Disconnect the blower motor wire and the rubber air cooling tube.
3. Remove the three sill plate molding

screws and pry it out to gain access to the right splash shield retaining bolts.

4. Remove the splash shield retaining bolts and remove the splash shield.

5. Remove the motor to case mounting screws and lower the motor through the splash shield opening.

6. It may be necessary to pry the flange gently if the sealer acts as an adhesive.

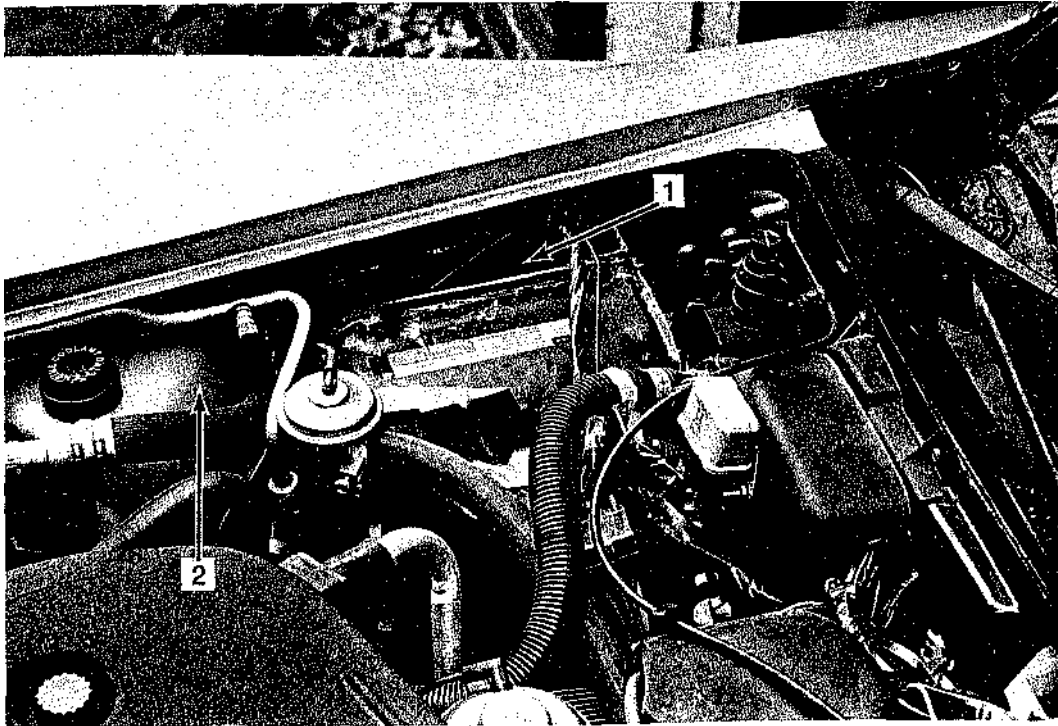
7. Reverse the above procedure to install the motor.

1973-82 With or Without A/C

1. Disconnect the negative battery cable at the battery.
2. On 1981-82 models, unbolt the A/C compressor and move the compressor out of the way. DO NOT disconnect the refrigerant lines from the compressor.
3. Remove the coolant recovery jar, if so equipped.
4. Disconnect the wiring from the motor and the cooling tube from the motor case, if so equipped.
5. Remove the mounting screws from the blower motor and remove the motor. If the motor sticks to the case due to the sealer, pry the motor GENTLY away from the case.
6. Installation is the reverse of the previous steps.

1984 and Later

1. Disconnect the negative battery cable.
2. Remove the front wheel house rear panel and move the wheel house seal aside.
3. Remove the motor cooling tube.
4. Remove the relay.
5. Remove the blower motor mounting screws.
6. Remove the blower motor and impeller as an assembly.



1. Blower motor location
2. On air conditioned models, the coolant recovery jar must be removed to gain access to the motor

ery jar must be removed to gain access to the motor

Typical blower motor location

7. Installation is the reverse of removal. Make sure all electrical connections are clean and tight.

Core

REMOVAL AND INSTALLATION

1963-1967 With or Without A/C

1. Drain the radiator, remove the radiator expansion-tank retaining straps, and move it from the work area.
2. Remove the battery.
3. Remove the water hoses from the heater assembly.
4. Remove the seven stud nuts attaching the blower and an inlet assembly to the fire wall. Remove the assembly.
5. Remove the glove compartment and panels on both sides of the console.
6. As a precaution, place a plastic sheet or other waterproof covering over the passenger-side carpet.
7. Remove the two control cables from the instrument panel.
8. Disconnect the wire leads from the lower switch and the resistor.

9. Carefully remove the heater assembly from under the dashboard.

10. Remove the four, core cover retaining screws.

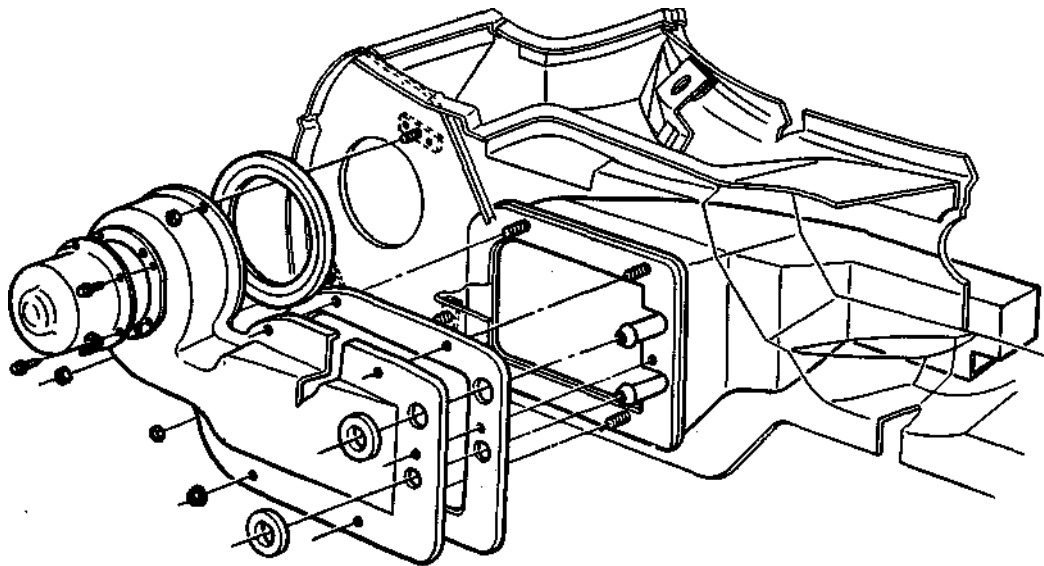
11. Loosen the four screws holding the core retaining yokes and the core to the retainer cover.

12. Remove the rear cover and core.

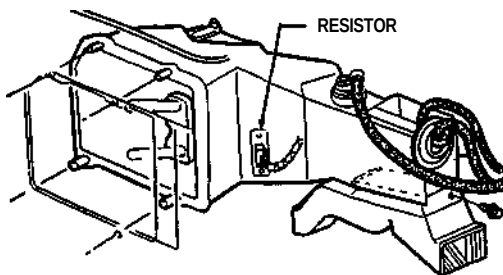
13. To install, reverse this procedure.

1968-1979 Without A/C

1. Disconnect the battery ground cable.
2. Drain the cooling system and remove and plug the water hoses from the heater connections.
3. Remove the air-distributor duct stud nuts on the firewall.
4. Remove the right instrument panel pad, right-hand dashboard braces, center dash console duct, and the floor outlet duct.
5. Remove the radio and center dashboard console.
6. Pull the distributor duct from the fire wall and remove the resistor wires when clearance is sufficient.
7. Remove the heater core retaining springs and remove the core.



Heater and blower assembly-wo/Ac—typical



Heater and distributor assembly—1968-79 wo/AC

8. Installation is the reverse of removal. If core-to-case sealer was damaged during removal, replace with new sealer.

1968-80 With A/C

1. Disconnect the battery ground cable.
2. Drain the cooling system. It is not necessary to evacuate the A. C. refrigerant.
3. Disconnect the heater hoses at the firewall and plug the pipes.
4. Remove the nuts from the distributor studs protruding through the firewall.
5. Remove the right side dash pad and center dash cluster (described under "Instruments").
6. Disconnect the right dash outlet from the center duct.
7. Remove the center duct from the selector duct.
8. Remove the selector duct to the dash panel and pull it to the right and to the rear.
9. Remove the cables and wiring connectors from the selector and remove it from the car.

10. Remove the temperature door
plate from the selector duct. cam
11. Remove the heater core and housing from the selector.
12. Reverse the removal procedure to install.

1981-82 All Models

1. Disconnect the negative cable at the battery.
2. Drain the coolant from the radiator.
3. Raise the right front of the vehicle and support it safely.
4. Disconnect the heater hoses at the heater core connections.
5. Remove the heater case retaining nut which is located on the top of the blower case.
6. Remove the glove box.
7. Remove the console side panels.
8. Remove the knobs and nuts from the radio shafts.
9. Remove the two screws which secure the console trim plate to the instrument cluster.
10. Remove the instrument cluster attaching screws.
11. Pull the cluster out slightly and disconnect the electrical connector from the rear of the cluster.
12. Remove the radio as outlined after this procedure.
13. Remove the right side windshield pillar trim panel.
14. Remove the right side dash panel re-

taining screws and pull the panel rearward to release the upper retaining clip.

15. Remove the following ducts:

- a. Right side vent
- b. Main vent distribution
- c. Lower heater deflector
- d. Heater-defroster distribution duct assembly (Disconnect the vacuum line).

16. Disconnect both the temperature cable and the vacuum line at the heater housing.

17. Remove the heater core from the housing.

18. Installation is the reverse of the previous steps.

1984 and Later

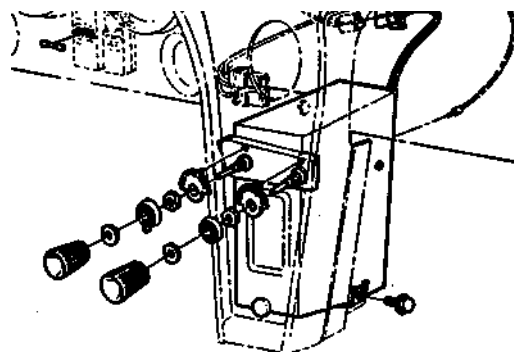
1. Disconnect the negative battery cable.
2. Remove the instrument cluster bezel including the tilt wheel lever and dash pad.
3. Remove the A/C air duct and disconnect the flex hose.
4. Remove the right side acoustic panel.
5. Remove the side window defroster flex hose.
6. Remove the side window defroster duct mounting screws and disconnect the extension.
7. Remove the temperature control cable and bracket assembly at the heater cover. Disconnect the heater door control shaft.
8. Remove the electronic control module (ECM) and disconnect the connectors. Make sure the ignition is switched OFF when removing ECM connectors.
9. Remove the tubular support brace from the door pillar to the instrument panel reinforcement brace.
10. Remove the heater core cover mounting screws.
11. Remove the heater pipe and the heater water control bracket attaching screws.
12. Cut the heater hose at the heater core inlet and outlet connection. The heater hoses should be replaced when installing the core.
13. Remove the heater core. Be careful of any coolant left in the core when handling.
14. Installation is the reverse of removal.

RADIO

REMOVAL AND INSTALLATION

1963-67

1. Remove both console side panels and trim strip(s).



1963-67 radio installation

2. Remove the radio knobs, washers, bezels, and nuts.
3. Disconnect the antenna lead-in, the radio-to-electrical harness, and radio-to-speaker connectors.
4. Remove the one attaching bolt located on the lower, right side of the radio.
5. Turn the radio on its side and remove it from the left side of the console.

1968-71 Coupe

1. Disconnect battery.
2. Remove right and left door sill plates and kick pads.
3. Disconnect right and left side radio-to-speaker connectors.
4. Remove right side dash pad.
5. Remove right and left console forward trim pads.
6. Remove bolt and remove the heater floor outlet duct by pulling it through left hand opening.
7. From front of console, tape radio push buttons in depressed position. From rear of console, disconnect electrical connector, brace and antenna lead-in.
8. Remove radio knobs and bezel retaining nuts. Push radio assembly forward and remove from rear through right side opening.
9. Install by reversing procedure above.

1969-71 Convertible

1. Disconnect battery.
2. Remove right instrument panel pad.
3. Disconnect speaker connectors.
4. Remove wiper switch trim plate screws

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to gain access to switch connector and remove connector and trim plate from cluster assembly.

5. Unclip and remove right and left console forward trim pads and remove forwardmost screw on right and left side of console.

6. Inserting a flexible drive socket between the console and metal horseshoe brace, remove the nuts from the two studs on the lower edge of the console cluster. Remove the remaining screws that retain the cluster assembly to the instrument panel.

7. From rear of console, disconnect electric connector, brace and antenna lead-in.

8. Remove radio knobs and bezel retaining nuts.

9. Pull radio assembly forward and remove through right side opening.

10. Install by reversing procedure above.

1972-76

1. Disconnect the negative battery cable and remove the right instrument panel pad.

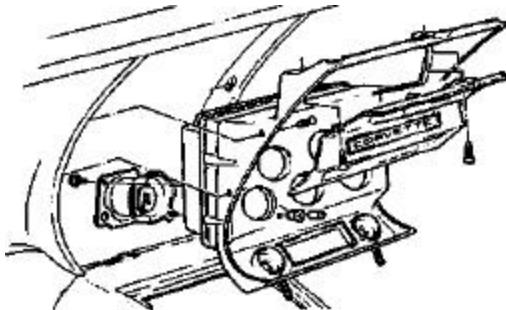
2. Disconnect the radio speaker connectors.

3. Remove the wiper switch trim plate screws and tip the plate forward to gain access to the switch connector. Remove the switch connector and trim plate from the dash.

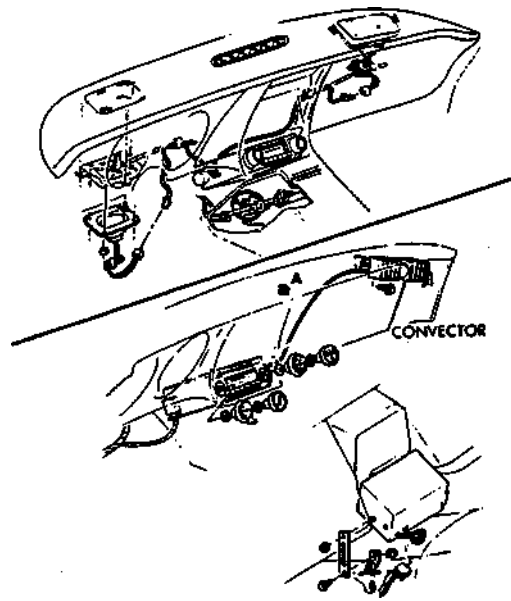
4. Unclip and remove the right and left forward console trim pads. Remove the forwardmost screw on the left and right sides of the console.

5. Working with a flexible drive socket between the console and the metal horseshoe brace, remove the nuts from the studs on the lower edge of the console cluster.

6. Remove the remaining console attaching screws and disconnect the radio electrical connectors, antenna wire and radio brace from the rear of the console. Remove the radio knobs and nuts.



1968-76 center instrument cluster



Typical 1974-82 radio mounting

7. Pull the top of the console rearward and separate the radio from the console and remove it from the right side opening.

NOTE: The center instrument cluster trim panel is designed to collapse under impact. Do not deflect the panel to gain access to the radio. Also, the remotely located radio heat sink should be removed with the radio when servicing is required.

1977-82

Disconnect the battery ground cable. Remove the console tunnel side panels. Pull the radio control knobs from the

- 1.
 - 2.
 - 3.
- shaft.
4. Remove the two screws that secure the console trim plate to the instrument cluster.
 5. Remove the rear defogger switch if so equipped.
 6. Remove the five screws from around the upper perimeter of the instrument cluster.
 7. Pull the instrument cluster enough to disconnect the electrical connector from the rear of the cluster.
 8. Remove the screw holding the radio bracket reinforcement to the floor pan.
 9. Pull the radio outward and disconnect the wiring from the back.

10. Installation is the reverse of removal. If a new radio is being installed, save the mounting bracket from the rear of the old one.

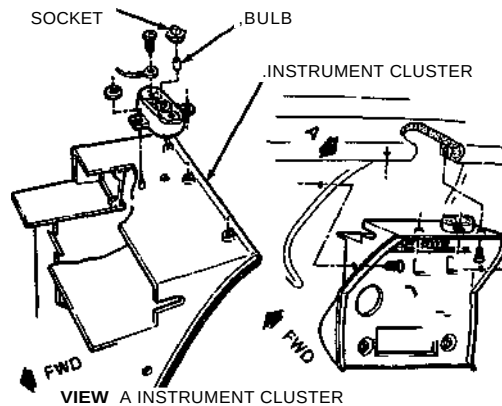
1984 and Later

There are several different types of radio and/or cassette sound system available in the 1984 Corvette. By removing the trim plate covering the radio, access can be gained to the mounting screws securing the assembly to the instrument panel. Once the mounting screws are removed, the radio should pull out far enough to disconnect the antenna, power and speaker connectors. One thing all 1984 sound systems have in common is ungrounded speakers. Installing add-on components that utilize the original speakers may cause damage to both the speakers and the added component. If additional access is required to reach a bracket, etc., there are additional trim pads located under the lower right side of the instrument panel, the right front and on the console. The accessory trim plate in the center of the dash, just above the console should provide all the access necessary. Remove the radio carefully and avoid the use of excessive force when pulling the unit forward to get at the connectors.

INSTRUMENT CLUSTER**REMOVAL AND INSTALLATION****1963-67**

AD instruments are contained in one cluster.

1. Disconnect the negative battery cable. Remove the instrument panel harness from the lower steering column switch and disconnect the switch.
2. Remove the steering wheel cap and the center nut and washer.
3. Pull off the steering wheel with a suitable puller.
4. Remove the steering column escutcheon screws and the nuts from the column support U-bolt.
5. Loosen the lower column clamp at the firewall.
6. Loosen the lower, spring stop-clamp and slide the stop and spring down on the shaft.
7. Paint or mark the steering shaft and coupling with chalk. Remove the upper coupling clamp bolt.
8. Pull the jacket and steering shaft assembly from the coupling and very carefully pull it out through the dash, at the same time sliding the lower spring stop, spring, bearing, and seat off the steering shaft.
9. Disconnect the tachometer drive ca-



Typical 1977-82 center instrument cluster

ble, cowl-vent control cable brackets, and headlight motor switch from the instrument cluster.

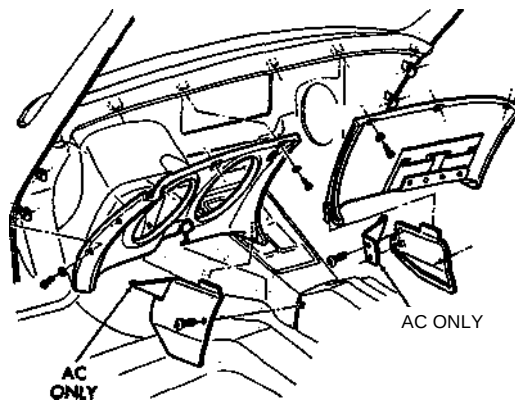
10. Disconnect the parking brake lever support bracket from the cowl crossmember.

11. Pull the headlight switch on. Reach under the instrument cluster and push in the detent pin on the switch; remove the knob and shaft.

12. Screw out the retaining nut with a wide bladed screwdriver. Remove the bezel and switch assembly from the instrument cluster. Disconnect the wiring connector from the switch.

13. Remove the lock cylinder from the ignition switch by turning it to the "Lock" position and inserting a wire in the small cylinder face hole. Push the wire in while turning the ignition key counterclockwise, until the lock cylinder can be removed.

14. Carefully remove ignition-switch escutcheon nut using a screwdriver held in the escutcheon slot and tapping it with a small hammer.



1968-76 Instrument panels and lower trim assembly

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15. Remove the ignition switch from the instrument cluster and remove all wiring connectors. Unsnap the two locking tangs with a screwdriver and unplug the ignition connector. Disconnect the ignition switch lamp support.

16. Disconnect the oil pressure line and the instrument and lamp lead wires. Disconnect the trip odometer cable.

17. Remove the cluster retaining screws and pull the cluster slightly forward for access to the speedometer and tachometer cables and the remaining wires.

18. Remove cluster. All instruments are now easily accessible for service. Installation uses a reverse of the removal procedure.

1968-77

1. To service instruments other than the speedometer and tachometer, follow radio removal procedures. Small instruments are easily removed, after the center cluster is removed from the console.

2. To remove the driver's-side instrument cluster, first disconnect the negative battery cable.

3. Lower the steering column.

4. Remove retaining screws and washers at the door opening, dash top, and leftside of the center panel.

5. Unclip and remove the left, front console trim-panel.

6. Pull the cluster slightly forward for access to speedometer and tachometer cables, headlight switch connectors, and lamp wires.

7. Remove the cluster. Speedometer and tachometer may now be serviced.

8. Install using a reversal of the removal procedure.

1978-82

NOTE: This procedure outlines the removal of the speedometer and tachometer cluster. Refer to the previous Radio Removal and Installation procedure to remove the center/console cluster.

1. Disconnect the negative battery cable.

2. Remove the left air distribution duct.

3. Remove the screws attaching the lens to the bezel and remove the lens.

4. Remove the cluster attaching screws and pull the cluster slightly forward.

5. Disconnect the speedometer cable and lamp connectors as necessary.

6. Installation is the reverse of removal.

1984 and Later

1. Disconnect the negative battery cable.

2. Remove the spring-loaded light switch knob and the light switch nut.

3. Remove the steering column trim cover.

4. Remove the two steering column attaching bolts and lower the steering column to provide access.

5. Remove the cluster bezel front and left side attaching screws.

6. Remove the cluster bezel from the instrument panel.

7. Remove the cluster to instrument panel attaching screws.

8. Pull the cluster carefully rearward to get at the cluster electrical connectors. Metal retaining clips are used at the back of connectors.

9. Remove the instrument cluster.

10. Installation is the reverse of removal. Make sure all electrical connections are tight and properly plugged together.

SPEEDOMETER CABLE REPLACEMENT

Reach behind the speedometer and depress the retaining clip. Pull the cable from the casing. If the cable is broken, raise the car and disconnect the cable at the transmission. Lubricate only the bottom % of the cable core with speedometer cable lubricant. Reconnect all parts.

WINDSHIELD WIPERS

Motor

REMOVAL AND INSTALLATION

1963-67

1. Remove the negative cable from the battery.

2. Remove distributor and left-side ignition shields. Remove the left-side, sparkplug wire bracket and position out of the way.

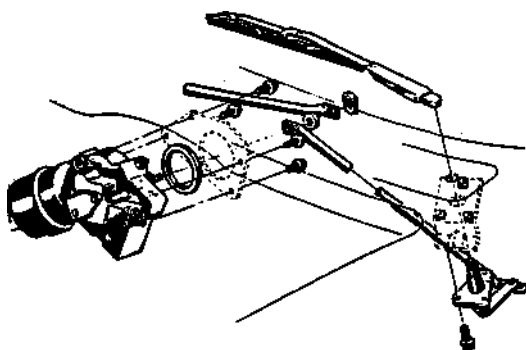
3. Disconnect the ballast resistor on the firewall, then remove washer inlet and outlet hoses at the pump valve assembly.

4. Remove the distributor cap and position one side.

5. Disconnect washer pump and wiper-motor lead wires.

6. Remove the glove compartment.

7. Ensure that the wipers and motor are parked, then remove the wiper linkage re-



1963-67 windshield wiper motor and linkage

twining clip and disconnect both linkage and spacer from the crank arm.

8. Remove the wiper motor-to-firewall bolts and remove the motor.

9. To install, have an assistant aid in positioning and mount the wiper motor to the firewall. Ensure that the motor is in the parked position.

10. Position the left linkage, spacer, and right linkage on the crank arm and install the retaining clip in the groove in the crank arm.

11. Install remaining parts in a reverse order of removal.

12. Connect battery and test wipers and washers.

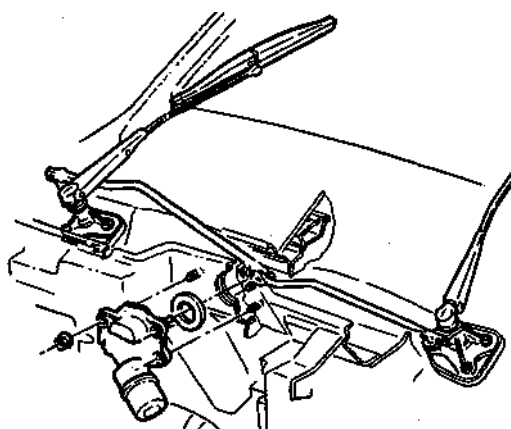
1968-82

1. Ensure that the wiper motor is in the Park position.

2. Disconnect washer hoses and wire leads from the motor.

3. Remove the plenum chamber grille.

4. Remove the crank arm-to-motor retaining nut.



1968-82 windshield wiper motor and linkage

5. Remove the ignition shielding and distributor cap.

6. Remove the three motor retaining screws or nuts and remove the motor.

7. Check gaskets and replace if necessary. Ensure that the motor is in Park position.

8. Reverse removal steps to install.

1984 and Later

1. Remove the wiper arms.

2. Remove the air inlet leaf screen.

3. Turn the ignition ON and activate the wiper switch. Allow the motor to rotate the crank arm to a position between 4 and 5 o'clock as viewed from the passenger compartment. Turn off the ignition to stop the crank arm in this position.

4. Disconnect the negative battery cable.

5. Disconnect the upper motor electrical connectors.

6. Remove the wiper motor mounting bolts.

7. With the crank arm in the position described above, the wiper motor may be easily removed from the vehicle. Disconnect the lower electrical connector as the motor is removed.

8. Installation is the reverse of removal.

Wiper Blades and Inserts

REMOVAL AND INSTALLATION

Refer to Chapter One for this information.

Wiper Transmission

REMOVAL AND INSTALLATION

1963-67

1. Remove the wiper block and arm assembly from the transmission.

2. Remove the glove box door and compartment assembly.

3. Remove the three transmission-to-cowl retaining screws.

4. Remove the wiper transmission retaining clip and remove the transmission from the crank arm.

5. Remove the transmission through the glove box opening.

6. To install, reverse the above procedure.

1968-72

1. Make sure the wiper is in the park position.

2. Open the hood and disconnect the battery ground cable.

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3. Remove the rubber plug from the front of the wiper door actuator, insert a screw driver and push the internal piston rearward to actuate the wiper door open.

4. Remove the wiper arm and blade as assemblies from the transmission.

5. Remove the plenum chamber air intake grille, or screen, if so equipped.

6. Loosen the nuts retaining the drive rod ball stud to the crank arm and detach the drive rod from the crank arm.

7. Remove the transmission retaining screws, or nuts, then lower the drive rod as assemblies into the plenum chamber.

8. Remove the transmission and linkage from the plenum chamber through the cowl opening.

9. To install reverse the above procedure. Make sure the wiper assemblies are installed in the park position.

1973-84

1. Make sure the wiper is in the park position.

2. Disconnect the battery ground cable.

3. Open the hood and remove the plenum chamber screen.

4. Loosen the nuts retaining the ball sockets to the crank arm and detach the drive rod from the crank arm.

5. Remove the transmission nuts, then lift the rod assemblies from the plenum chamber.

6. Remove the transmission linkage from the plenum chamber.

7. To install reverse the removal procedure. Make sure the wipers are in the park position.

Ignition Switch

REMOVAL AND INSTALLATION

1964-67

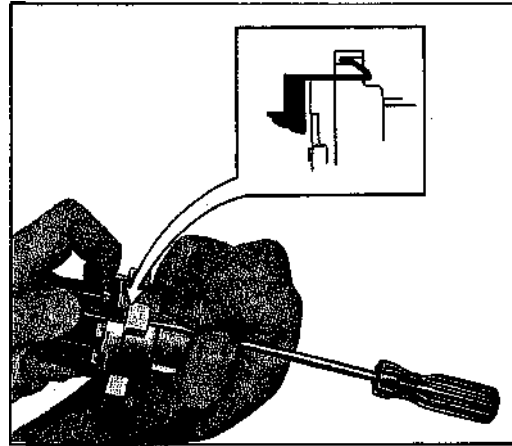
NOTE: See Chapter 8 for steering column switch removal.

1. Disconnect the ground cable from the battery.

2. Remove the cylinder by placing it in the lock position and inserting a stiff wire in a small hole to depress the plunger. Turn the cylinder counter-clockwise until the cylinder can be removed.

3. Remove the holding nut with Tool J-7607 or its equivalent.

4. Pull the switch from under the dash and remove the connector.



Unlocking the ignition switch connector—1964-68

5. Using a screwdriver, unsnap the locking tangs.

6. To install reverse the above procedures

1968

1. Open the battery storage compartment and disconnect the ground cable from the battery.

2. Remove the screws securing the "Corvette" cover plate in the top center of the cluster assembly.

3. Remove the ash tray and retainer.

4. Remove the radio and bracket.

5. Remove the lock cylinder by positioning the switch in the "ACC" position and inserting a wire in the cylinder face small hole. Push in on the wire to depress the plunger and continue turning the key counterclockwise until the lock cylinder can be removed.

6. Remove the ignition switch bezel nut and pull the ignition switch out from under the dash.

7. Using a screwdriver unsnap the "theft resistant" locking tangs on the connector and unplug the connector.

8. To install reverse the above procedure.

SEAT BELTS

Warning System

1972-73

The seat belt warning system consists of lap belt retractor switches, a pressure-sensitive switch underneath the right-hand front passenger's seat, a warning lamp and a buzzer.

On manual transmission-equipped cars, the circuit is wired through the ignition switch,

the parking brake warning light switch, and a relay, which is located between the instrument cluster wiring and the switch on the parking brake. A diode is used to prevent feedback into the parking brake warning circuit.

On cars having automatic transmissions, the seat belt warning circuit is wired through the ignition switch and the combination back-up lamp/neutral safety switch.

With the ignition key in the "RUN" position, a weight of 40-50 lbs. on the driver's or passenger's seat pressure-sensitive switch energizes the circuit when the parking brake is released (MAT) or the gear selector placed in a forward drive range (A/I).

A warning light will glow and a buzzer will sound with the circuit energized, unless the seat belts are withdrawn from the retractors and fastened over the kps of the two out-board front seat occupants.

Seat Belts/Starter Interlock System

As required by law, all 1974 and some 1975 Chevrolet passenger cars cannot be started until the front seat occupants are seated and have fastened their seat belts. If the proper sequence is not followed, e.g., the occupants fasten their seat belts and then sit on diem, the engine cannot be started.

If, after the car is started, the seat belts are unfastened, a warning buzzer and light will be activated in a similar manner to that described for 1972-73 models.

The shoulder harness and kp belt are permanently fastened together, so that they both must be worn. The shoulder harness uses an inertia-lock reel to allow freedom of movement under normal driving conditions.

NOTE: This type of reel locks up when the car decelerates rapidly, as during a crash.

The lap belts use the same ratchet-type retractors that the 1972-73 models use.

The switches for the interlock system have been removed from die kp belt retractors and placed in the belt buckles. The seat sensors remain the same as those used in 1972-73.

For ease of service, the car may be started from outside, by reaching in and turning the key, but without depressing the seat sensors.

In case of system failure or for service, an override switch is located under the hood. This is a "one start" switch and it must be reset each time it is used.

DISABLING THE INTERLOCK SYSTEM

Since the requirement for the interlock system was dropped during the 1975 model year, these systems may now be legally disabled. The seat warning light is still required.

1. Disconnect the battery ground cable.
2. Locate die interlock harness connector under die left-side of die instrument panel on or near die fuse block. It has orange, yellow, and green leads.
3. Cut and tape die ends of die green wire on die body side of die connector.
4. Remove die buzzer from die fuse block or connector.
5. Reconnect the battery ground cable.

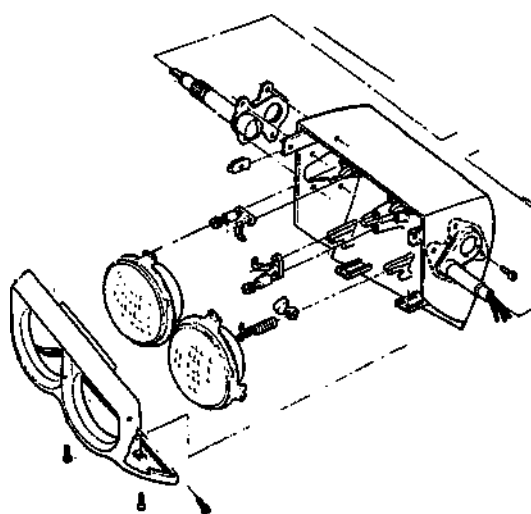
LIGHTING

Headlight Sealed Beams

REMOVAL AND INSTALLATION

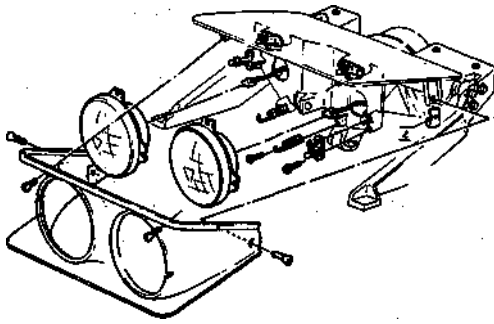
1. Open die headlight panel to die open position.
2. Remove die headlight bezel retaining screws and remove the bezel.
3. Disengage die spring from die retaining ring and remove die two attaching screws.

NOTE: Do not touch the adjusting screws. The retaining ring screws are the screws which go through the closed holes in the retaining ring. The adjusting screws go through the slotted open holes in the retaining ring and adjust the angle of the mounting ring behind the headlight sealed beam.



Headlamp assembly—1963-67

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Headlamp assembly—1968-82

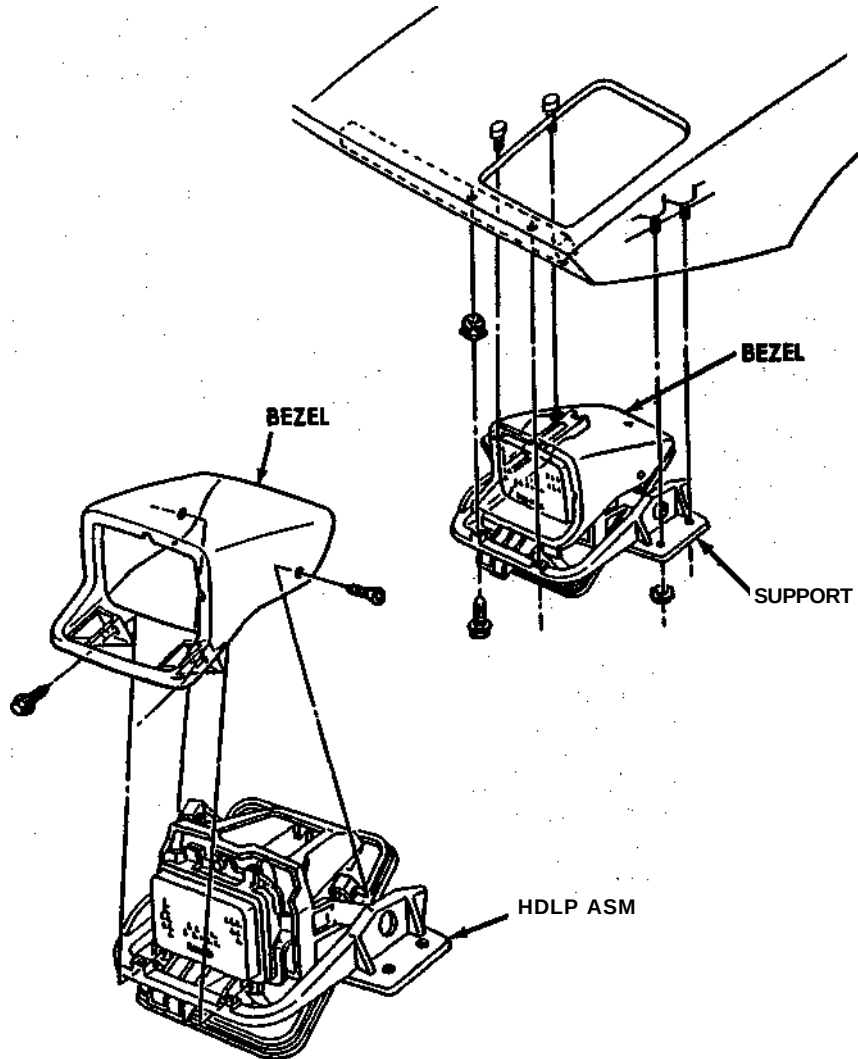
4. Remove the retaining ring and disconnect the sealed beam unit at the wiring connector. On 1984 models, rotate the right headlight clockwise and the left headlight counterclockwise to release it from the aiming pins.



Location of horizontal (1) and vertical (2) adjustment screws

5. When installing the sealed beam unit make sure the number which is moulded into the lens is at the top. The number 1 inboard unit takes a double connector plug and the number 2 outboard unit takes a triple connector plug.

NOTE: Disconnect the headlight motor



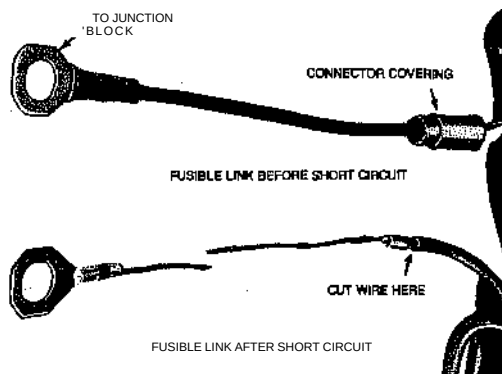
Headlamp assembly—1984 and later models

connector when raising the headlights manually.

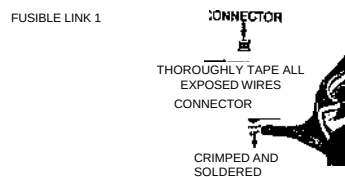
CIRCUIT PROTECTION

Fusible Links

In addition to fuses, the wiring harness incorporates fusible links to protect the wiring. Fusible links are sections of wire, with special insulation, designed to melt under electrical overload. There are four different gauge sizes used. The links are marked on the insulation with the wire gauge size because of the heavy insulation which makes the link appear a heavier, gauge than it actually is. Whenever it is necessary to splice a new wire in always bond the splice with rosin core solder then cover with electrical tape. Using acid core solder may cause corrosion. Tape and seal all splices with silicone to weatherproof repairs.



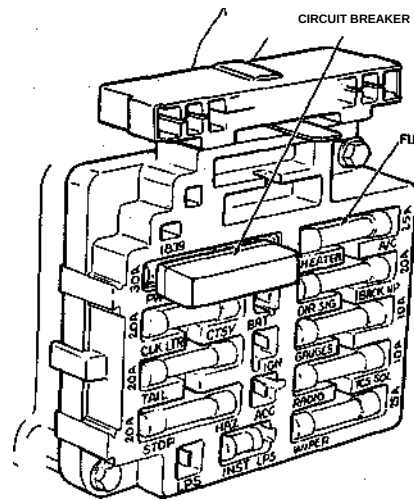
Fusible link (© Chevrolet Motor Division)



Fusible link replacement

Circuit Breakers

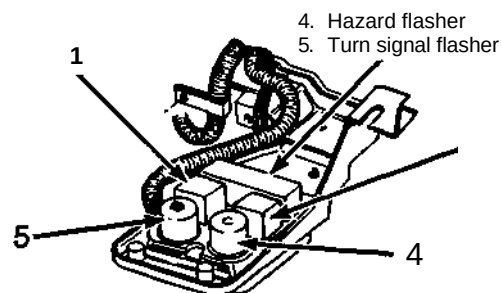
A circuit breaker is an electrical switch which breaks the circuit in case of an overload. The circuit breaker is located at the top of the fuse panel. The circuit breaker will remain open until the short or overload condition in the circuit is corrected. Refer to the chart at the end of this chapter to find which circuits are protected and how.



Fuse panel—typical

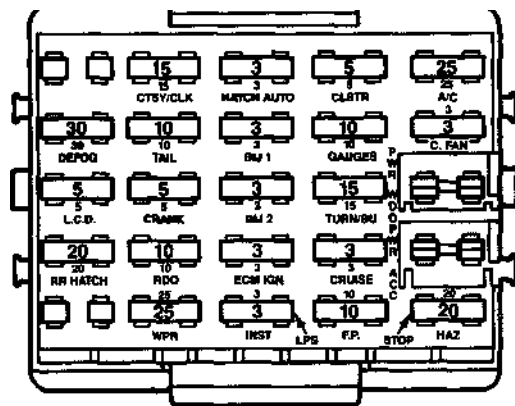
Fuses and Flashers

Fuses are located in the junction box below the instrument panel to the left of the steering column. The turn signal flasher and hazard warning flasher also plug into the fuse



1. Horn relay
2. Warning buzzer
3. Electric choke relay

Convenience center and components—typical



Fuse box on late models showing circuit codes and amp ratings on fuses

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block. Each *fuse* receptacle is marked as to the circuit it protects and the correct amperage of the fuse. In line fuses are also used. Refer to the Fuse Chart at the end of the chapter for their location. The fuse block on some models is a swing-down unit located in the underside of the instrument panel adjacent to the steering column. Access to the fuse block on some models is gained through the glove box opening. The Convenience Center on some models is a swing-down unit located on the underside of the instrument panel. The swing-down feature provides central location and easy access to buzzers, relays and flasher units. All units are serviced by plug-in replacement. Location of Convenience Center on specific models may vary.

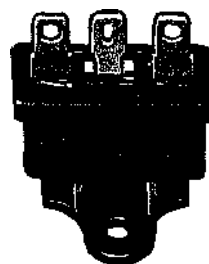
Thermal Limiter Fuse

1973 and Earlier

The thermal fuse consists of a temperature sensitive fuse link and a wire wound resistor

enclosed in a plastic housing. There are three spade-type electrical terminals which plug into an in-line connection at the wiring harness to the air conditioning compressor.

A blown thermal fuse indicates that the air conditioning system is either low or completely out of refrigerant charge, a malfunctioning POA or expansion valve or an improperly located thermal limiter.



Thermal limiter fuse

Circuit Protection Chart

Model Year	Protected Circuit	Type of Protection
1963-66	Headlamp circuit	15 amp circuit breaker
	Headlamp motors and power windows	40 amp circuit breaker
	Instrument, clock, and radio lamps	4 amp fuse
	Taillights	10 amp fuse
	Radio	2 ¹ / ₂ amp fuse
	Heater	10 amp fuse
	Stop, license, courtesy, and dome lamps	15 amp fuse (1963, 20 amp)
	Parking brake alarm, back-up lamp, and gas gauge	10 amp fuse
	Air conditioning	30 amp fuse
	AC high blower speed	30 amp fuse (in-line)
1967	Back-up lamp and gauges	10 amp fuse
	Heater and air conditioning	25 amp fuse
	Radio and wipers	20 amp fuse
	Instrument lamps	4 amp fuse
	Stop and taillights	20 amp fuse
	Clock, lighter, courtesy lamps, and flasher	20 amp fuse
	AC high blower speed	30 amp fuse
	Solenoid Bat terminal	14 gauge fusible link
	Horn relay	16 gauge fusible link
	Voltage regulator No. 3 terminal	20 gauge fusible link
	Voltage circuit (both sides of meter)	20 gauge fusible link
	Headlamp circuit	15 amp circuit breaker
	Headlamp motors and power windows	40 amp circuit breaker
1968-69	Headlamp circuit breaker	15 amp circuit breaker
	Power window circuit	30 amp circuit breaker
	Wiper/washer	25 amp fuse
	Back-up lights and turn signals	20 amp fuse
	Heater and air conditioning	25 amp fuse
	Radio and power windows	10 amp fuse
	Tail and side marker lamps	20 amp fuse
	Instrument lamps	5 amp fuse
	Gauges	10 amp fuse
	Stop light and flasher	20 amp fuse
	Clock, lighter, courtesy and dome lamps	20 amp fuse
	AC high blower speed	20 amp fuse
	Solenoid Bat terminal	30 amp fuse (in-line)
		14 gauge fusible link

Circuit Protection Chart (cont.)

Model Year	Protected Circuit	Type of Protection
1968-69	Horn relay Voltage regulator No. 3 terminal Ammeter circuit (both sides of meter)	16 gauge fusible link 20 gauge fusible link 20 gauge fusible link
1970	Headlamp circuit Power window circuit Wiper/washer Back-up lights, turn signal, heater Air conditioning and TCS solenoid Radio and power windows Taillights and side marker lights Instrument lamps Gauges Clock, lighter, courtesy and dome lights AC high blower speed Solenoid Bat Terminal Horn relay Voltage regulator No. 3 terminal Ammeter circuit (Both sides of meter)	15 amp circuit breaker 30 amp circuit breaker 25 amp fuse 25 amp fuse 25 amp fuse 10 amp fuse 20 amp fuse 5 amp fuse 20 amp fuse 20 amp fuse 30 amp fuse (in- line) 14 gauge fusible link 16 gauge fusible link 20 gauge fusible link 20 gauge fusible link
1971 -72	Headlamp circuit Power window circuit Radio, TCS system, and power windows Wiper/washer Stop lights and flasher Heater and air conditioning Directional signals, back-up lights, and AC blocking relay Instrument lamps Gauges Clock, lighter, courtesy and dome lights Anti-diesel control and anti-theft alarm Tail, side marker, and back-up lights AC high blower speed Solenoid Bat terminal Horn relay Voltage regulator No. 3 terminal Ammeter circuit (both sides of meter)	15 amp circuit breaker 30 amp circuit breaker 10 amp fuse 25 amp fuse 20 amp fuse 25 amp fuse 20 amp fuse 5 amp fuse 10 amp fuse 25 amp fuse 25 amp fuse 20 amp fuse 30 amp fuse (in-line) 14 gauge fusible link 16 gauge fusible link 20 gauge fusible link 20 gauge fusible link
1973-76	Headlamp circuit Power window circuit Back-up lamps and turn signals Power window relay Heater/air conditioning Radio, automatic trans, downshift switch, TCS solenoid, rear defogger Rear window defogger (low speed) Instrument lamps Taillamps (side marker and parking lamps) Clock, lighter, courtesy, anti-theft alarm Stop/hazard warning, key warning buzzer Gauges/telltale lamps, seat belt buzzer lamp High blower speed (air conditioning) Wipers/washers	circuit breaker 30 amp circuit breaker 25 amp AGC fuse 25 amp AGC fuse 25 amp 3AG fuse 20 amp AGC fuse 3 amp AGC fuse (in-line) 5 amp AGC fuse 20 amp SFE fuse 20 amp SFE fuse 20 amp SFE fuse 10 amp AGC fuse 30 amp AGC fuse (in-line) 25 amp AGC fuse
1977	Headlamp circuit Power window circuit Back-up lamp and turn signals Heater/air conditioner Radio, automatic trans., downshift switch, rear defogger Instrument lamps Tail lamps (side marker and parking lamps) Clock, lighter, courtesy, anti-theft alarm, glove box Stop/hazard warning, key warning buzzer Gauges/telltale lamps, seat belt buzzer lamp, and relays (power window relay) High blower speed (air conditioning) Wipers/washers	circuit breaker 30 amp circuit breaker 25 amp AGC fuse 25 amp 3AG fuse 20 amp AGC fuse 5 amp AGC fuse 20 amp SFE fuse 20 amp SFE fuse 20 amp SFE fuse 10 amp AGC fuse 30 amp AGC fuse (in line) 25 amp AGC fuse

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Circuit Protection Chart (cont.)

Model Year	Protected Circuit	Type of Protection
1978	Headlamp circuit Power window circuit Back-up lamp and turn signals Heater/air conditioner Radio, rear defogger Instrument lamps Tail lamps (side marker and parking lamps), underhood lamps Clock, lighter, courtesy, anti-theft alarm, glove box, dome Stop/hazard warning, key warning buzzer Gauges/telltale lamps, seat belt buzzer lamp, and relays (power window relay), cruise control Wipers/washers	circuit breaker 30 amp circuit breaker 20 amp AGO fuse 25 amp 3AG fuse 20 amp AGC fuse 5 amp AGC fuse 20 amp SFE fuse 20 amp SFE fuse 20 amp SFE fuse 10 amp AGC fuse 25 amp AGC fuse
1979	Headlamp circuit Power window circuit Back-up lamp and turn signals heater/air conditioning Radio Rear defogger Instrument lamps Tail lamps (side marker and parking lamps), underhood lamp Clock, lighter, courtesy, anti-theft alarm, glove box, dome Stop/hazard warning, key warning buzzer Gauges/telltale lamps, seat belt buzzer lamp and relays (power window relay), cruise control Auxiliary fan Wipers/washers	circuit breaker 30 amp circuit breaker 20 amp AGC fuse 25 amp 3AG fuse 20 amp AGC fuse 35 amp fuse 6 amp AGC fuse 20 amp SFE fuse 20 amp SFE fuse 20 amp SFE fuse 10 amp AGC fuse 30 amp fuse 25 amp AGC fuse
1980-81	Auxiliary fan Back-up lamp and turn signals Clock, lighter, courtesy, anti-theft alarm, glove box, dome, spare tire lamp, horn Electronic control module, anti theft alarm Gauges, telltale lamps, seat belt buzzer lamp, power window relay, cruise control Heater, air conditioning Instrument lamps Power window Radio Rear defogger Stop-hazard warning, key warning buzzer Tail lamps (incl. side marker, parking, and license) Windshield wipers and washers	30 amp fuse 20 amp fuse 20 amp fuse 10 amp fuse 20 amp fuse 25 amp fuse 25 amp fuse 30 amp circuit breaker 10 amp fuse 35 amp circuit breaker 20 amp fuse 20 amp fuse 25 amp fuse
1982	Anti-theft system (Theft) Auxiliary fan control (Elec fn) Back-up lamp and turn signals (Turn B/U) Clock, lighter, courtesy lamps, anti-theft alarm, glove box, key warning, vanity mirror, power antenna, dome lamp, spare tire lamp (Ctsy Clock) Electronic control module (ECM) Heater, air conditioning (A/C) Dash indicators, except warning lamps (Inst. Lps) Radio, theft horn control, power mirror, cruise control (Radio) Rear defogger (Defog) Stop, turn signal, and hazard warning lamps, and horn (Stop haz) Tail, side marker, and parking lamps (Tail Lp) TBI #1 control circuit (Inj-1) TBI #2 control circuit (Inj-2) TBI cranking circuit (Crank) Torque convertor clutch disengage circuit, TBI controls, dash warning lamps, courtesy control timer, gauges, seat belt lamp relay, rear window defogger (Gauges)	10 amp fuse 30 amp fuse 20 amp fuse 20 amp fuse 10 amp fuse 25 amp fuse 7.5 amp fuse 10 amp fuse 30 amp circuit breaker 20 amp fuse 20 amp fuse 3 amp fuse 3 amp fuse 5 amp fuse 20 amp

Circuit Protection Chart (cont.)

Model Year	Protected Circuit	Type of Protection
1984	Rear window defogger switch (Defog)	30 amp fuse
	L.C.D. speedometer cluster (L.C.D.)	5 amp fuse
	Hatch release relay (Rr Hatch)	20 amp fuse
	Center information cluster, under hood lamps, horn relay, courtesy lamps, map lamps—door, power door lock switches, radio clock, key warning & headlamp on chime, dome lamp timer, spare tire illumination, power antenna relay, cargo lamps, cigar lighter, console storage compartment lamp, vanity mirror lamp (Ctsy/Clk)	15 amp fuse
	Tail lamps (Tail)	10 amp fuse
	Fuel pump, oil pressure sender (Crank)	5 amp fuse
	Radio, theft deterrent module (Rdo)	10 amp fuse
	Wiper switch (Wpr)	25 amp fuse ®
	Hatch release switches—left door, right door, storage compartment (Hatch Auto)	3 amp fuse
	Injector 1 (Inj 1)	3 amp fuse
	Injector 2 (Inj 2)	3 amp fuse
	Electronic spark control module (ESC), electronic control module (ECM) (ECM Ign.)	3 amp fuse
	Instrument panel lamps (Inst/Lps)	3 amp fuse
	L.C.D. speedometer cluster (Clstr)	5 amp fuse
	Rear window defogger switch, center information cluster, canister purge, seat belt chime, auto trans converter clutch brake (TCC), EGR control, air switch, air control, dome lamp timer, "E" cell (Gauges)	10 amp fuse
	Turn signal flasher, fog lamp switch, back-up lamp switch—man trans neutral safety switch—auto trans (Tum/BU)	15 amp fuse
	Cruise engage switch rear view mirror adjuster switch (Cruise)	3 amp fuse
	Oil pressure switch, fuel pump relay, electronic control module (ECM) (P.P.)	10 amp fuse
	A/C control (A/C)	25 amp fuse
	Engine cooling fan relay (C Fan)	3 amp fuse
	Power window switches (Pwr Wdo)	Circuit Breaker©
	Power seat switch, power door lock relay (Pwr Ace.)	Circuit Breaker ®
	Hazard flasher, stop lamp switch (Stop/Haz)	20 amp fuse

© This circuit breaker is built into the main lighting switch and cannot be replaced independently of the switch.

© 30 amp, located in fuse panel

® 35 amp, located in fuse panel

® Wiper motor also has a circuit breaker

WIRING DIAGRAMS

Wiring diagrams have been left out of this book. As cars have become more complex, and available with longer and longer option

lists, wiring diagrams have grown in size and complexity also. It has become virtually impossible to provide a readable reproduction in a reasonable number of pages.