



GROUP 40

ELECTRICAL SYSTEM

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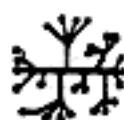
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ELECTRICAL SYSTEM



WARNING:

Before removing and installing any electrical component, read carefully the STANDARDS AND PRECAUTIONS at the beginning of each paragraph.

STANDARDS AND PRECAUTIONS

Before attempting any operation, ensure the Ignition key is in "park" position and battery negative lead is disconnected; in any case:

- Never connect control units output directly to the load.
- Never operate directly on devices with wires connected to "positive" or to ground unless the control unit has been disconnected.
- Never short system sensors, unless otherwise specified.
- Before attempting any electrical welding operation on the vehicle disconnect control units to avoid possible damage to electronic components caused by induced currents.

NOTE: - When working on the systems, foresee the eventual consequences and never carry-out any operation if the characteristics of the affected components are not perfectly known.

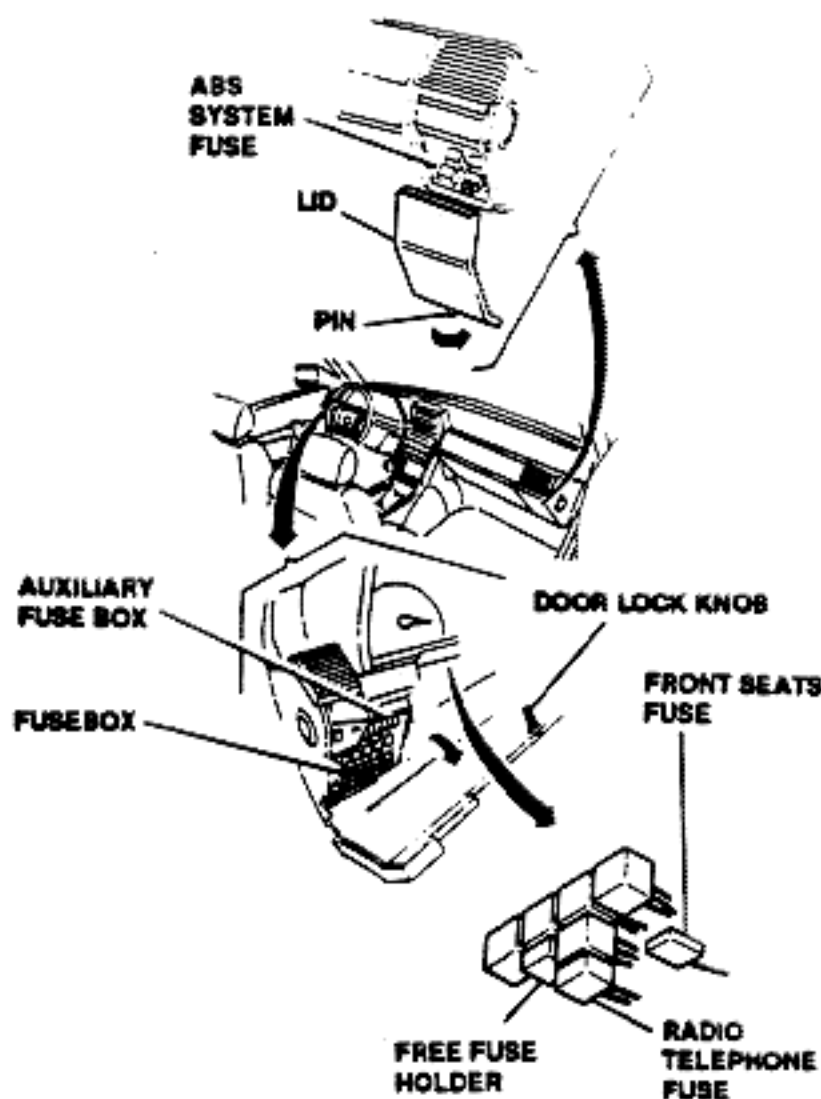
- When assembling and/or installing, reverse the order of procedure described for disassembly and/or removal, unless otherwise stated. Reconnect the battery.
- Upon eventual replacement of any component of the system, it is advisable to use only genuine Alfa Romeo parts.
- Use of non Alfa Romeo parts, having slightly different characteristics, can reduce the reliability and safety of the vehicle.
- Never touch with bare hands the halogen

bulbs glass (low beam high beam lamps). When replacing, always handle them always by the metal surface.

FUSES

LOCATION AND ACCESS WITHIN PASSENGER COMPARTMENT

1. Before removing cover, loosen lid lock knob that, when operation is completed, shall be tightly screwed back.
2. Open cover and gain access to faulty fuse.
3. To gain access to ABS system fuse, rotate lid lock pin, remove lid and gain access to fuse.
4. To gain access to following fuses, remove front mark, remove electronic panel (see Group 43) and work from below the steering wheel:
 - Free fuse holder (7.5 A)
 - Radio telephone fuse (15A)
 - Front seats fuse (20A)



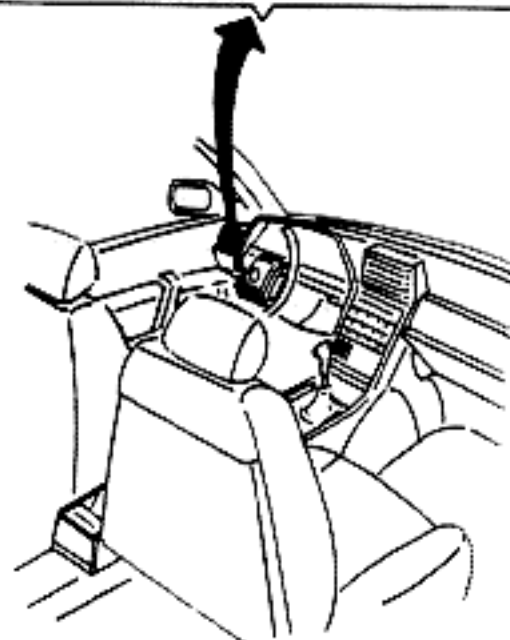
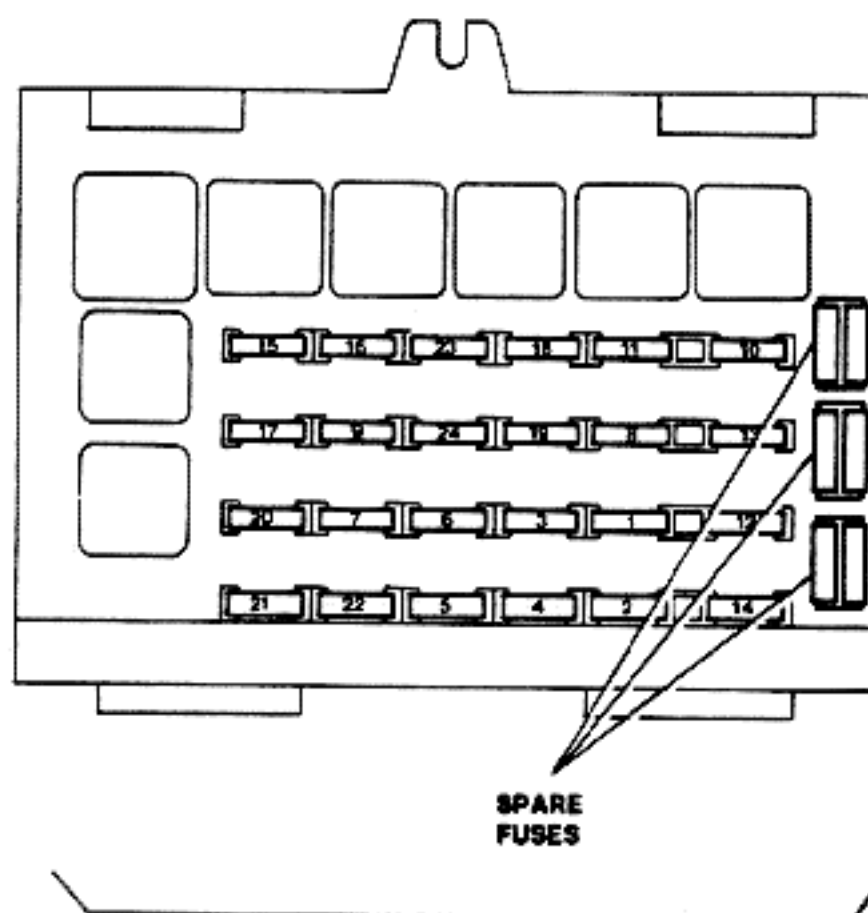


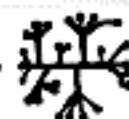
LOCATION WITHIN FUSEBOX

LEGEND FUSEL

No.	Val.	Function
1.	7.5	Right front and left rear position lamps license plate, underhood
2.	7.5	Left front and right rear position lamps, trunk, dome and panel switch, courtesy light
3.	10	Right low lamp (relay energized)
4.	10	Left low lamp (relay energized), warning lamp
5.	10	Right high lamp and warning lamp
6.	10	Left high lamp
7.	15	Front fog lamps and warning lamp
8.	7.5	Rear fog lamps and warning lamp
9.	10	External mirror defogging, rear window relay coil, warning lamp
10.	20	Back-up lamps, windshield washer
11.	7.5	Turn signal lamps, position lamps
12.	10	Air conditioning relay
13.	10	Rear cigar lighters
14.	7.5	Electric fan motor relay coil, test instrument, cruise control
15.	15	Stop lamps
16.	10	Electric door lock/unlock system
17.	20	Head lamps washer, hazard lamps
18.	30	Right front window lift
19.	30	Left front window lift

No.	Val.	Function
20.	30	Spare
21.	15	Front dome lamp, glovebox lamp, fuse box lamp, front cigar lighters
22.	15	Motor relay power
23.	20	Sun roof, head seat
24.	25	Spare

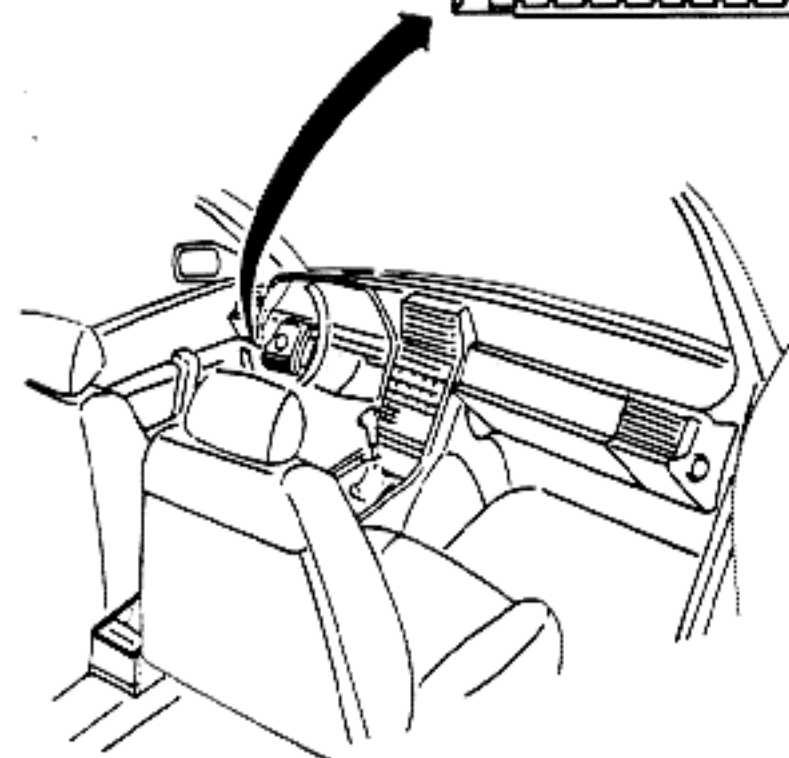




LOCATION WITHIN AUXILIARY FUSEBOX

FUSES TABLE

1. Control units direct power supply (7.5A)
2. Control units "Keyed" power supply-air mixing motor (7.5A)
3. Trunk opening (30A)
4. Spare (7.5A)
5. Ground illumination lamps, rear dome lamps, dome lamps relay (10A)
6. Dome lamps relay (7.5A)

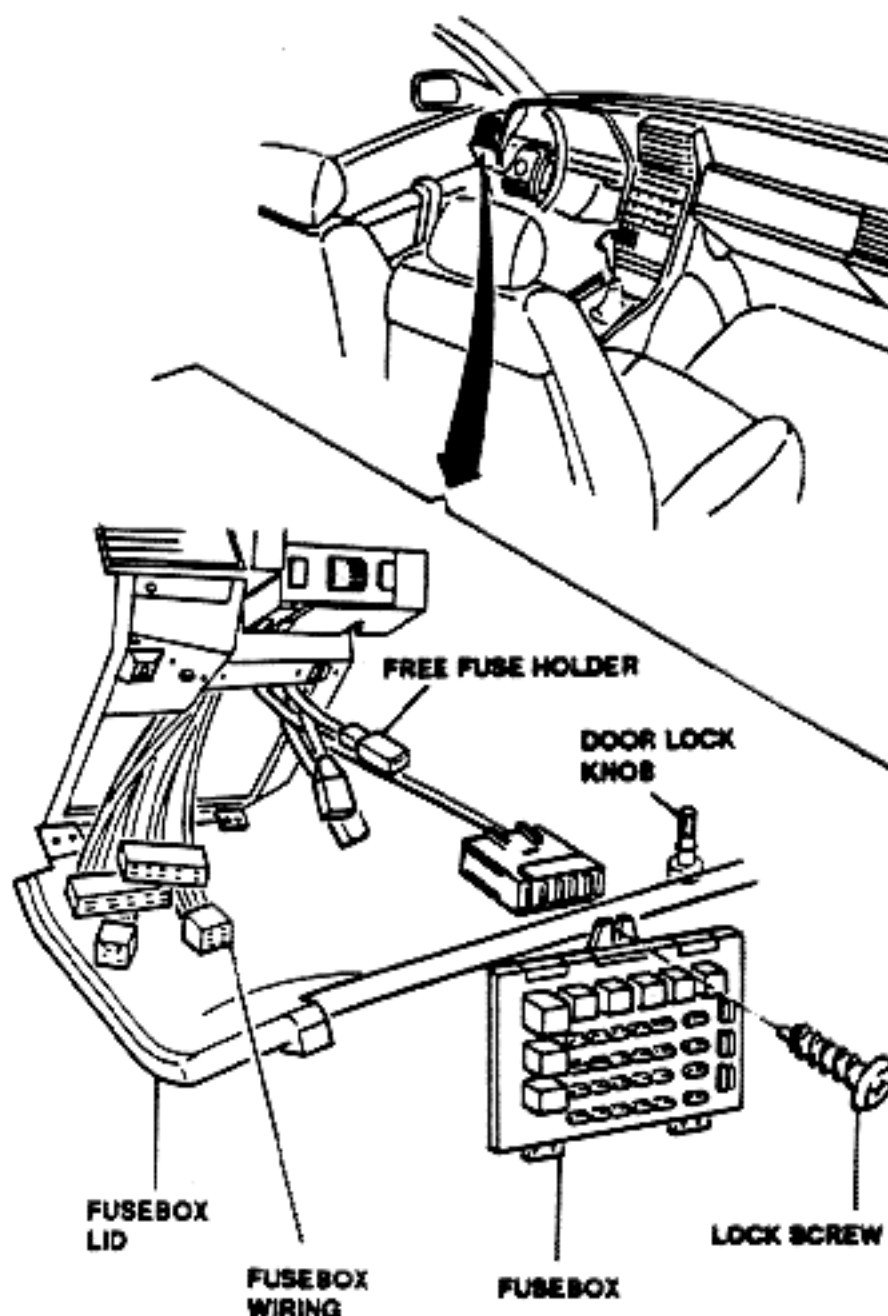


FUSEBOX REMOVAL/INSTALLATION

1. Open fusebox lid upon loosening of lock knob.
2. Loosen fusebox lock screw.
3. Disconnect cables of affected fusebox.
4. Remove fusebox.
5. Manually withdraw auxiliary fusebox.
6. Disconnect wiring of fusebox and remove it.



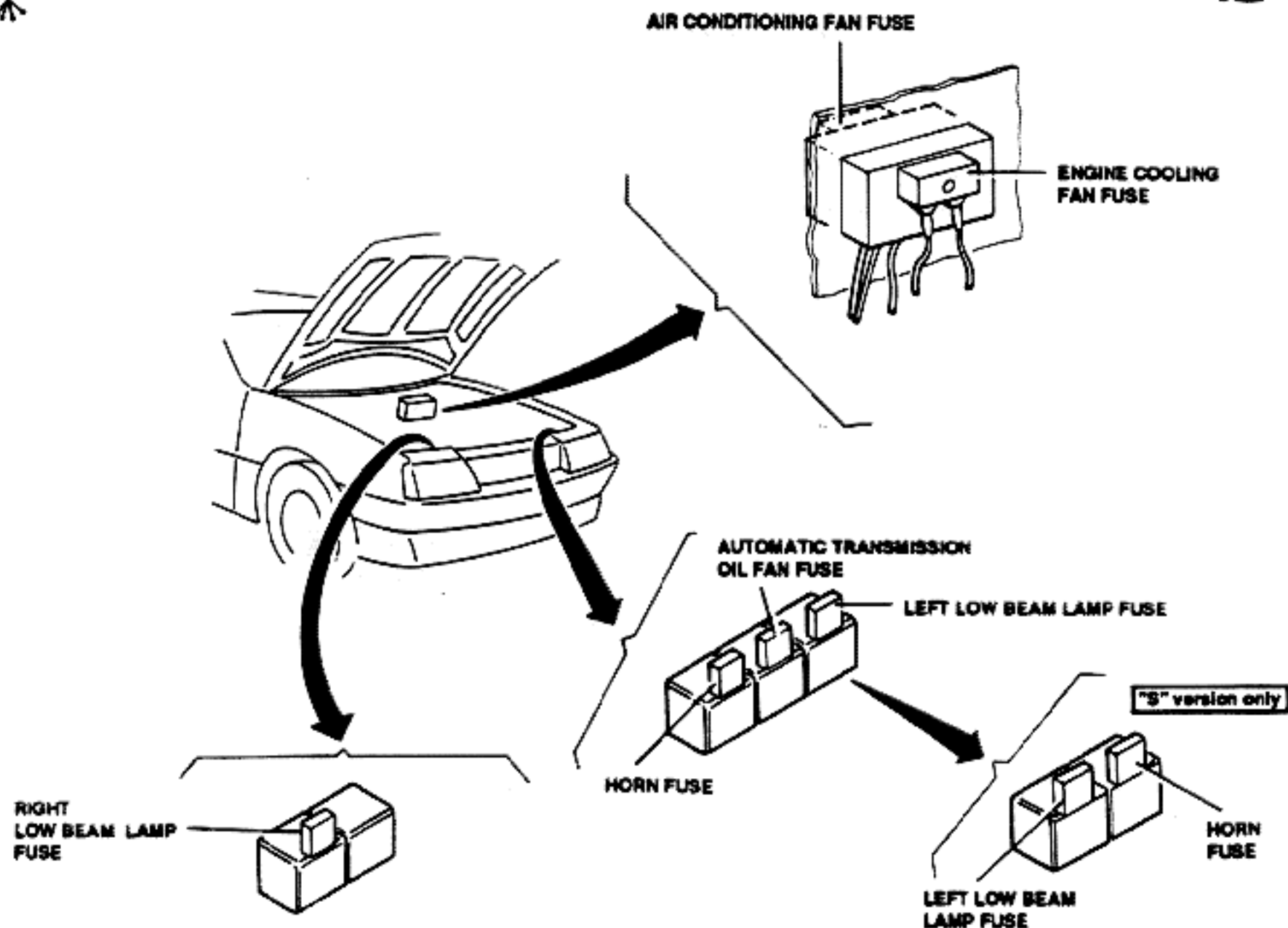
Install by reversing order of removal.



LOCATION WITHIN ENGINE COMPARTMENT

FUSES TABLE

1. Engine cooling fan (40A)
2. Horns (30A)
3. Air conditioner fan (40A)
4. Automatic transmission oil fan fuse

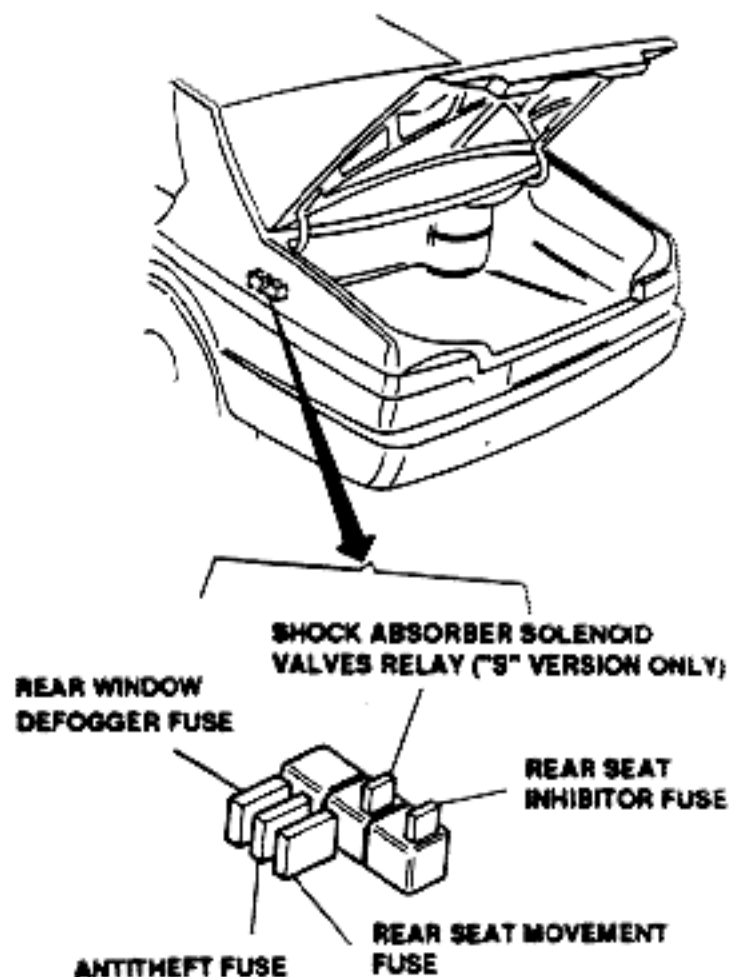


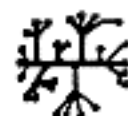
LOCATION WITHIN TRUNK

FUSES TABLE

1. Rear window defogger fuse (30A)
2. Antitheft fuse (15A)
3. Rear seat movement fuse (20A)
4. Rear seat inhibitor (30A)
5. Controlled damping suspensions relay ("S" version only) (20A)

NOTE: To gain access to fuses installed on relay, move trunk interior trim (see Group 66).





ELECTROMECHANICAL DEVICES AND FLASHER UNITS

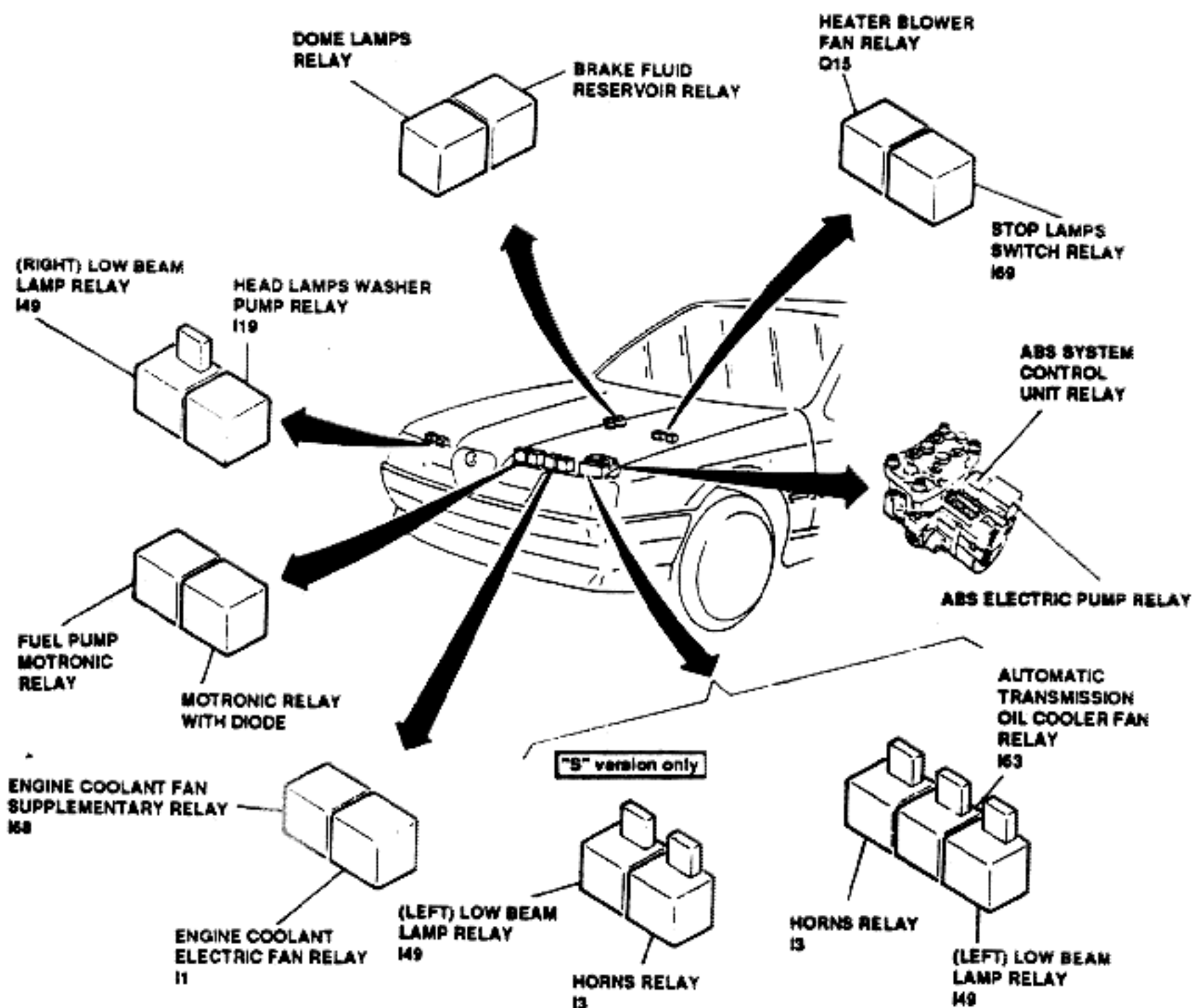
LOCATION AND ACCESS WITHIN ENGINE COMPARTMENT

ELECTROMECHANICAL DEVICES TABLE

1. Headlamps washer pump relay.
2. (Right) low beam lamp relay.
3. Horns relay.
4. (Left) low beam lamp relay.
5. Automatic transmission oil cooler fan relay.

6. Engine coolant fan relay (50A).
7. Engine coolant fan supplementary relay.
8. Brake fluid reservoir relay.
9. Dome lamps relay.
10. Heater blower fan relay.
11. Stop lamps switch relay.
12. Fuel pump Motronic relay.
13. Motronic relay with diode.
14. ABS system control unit relay.
15. ABS electric pump relay.

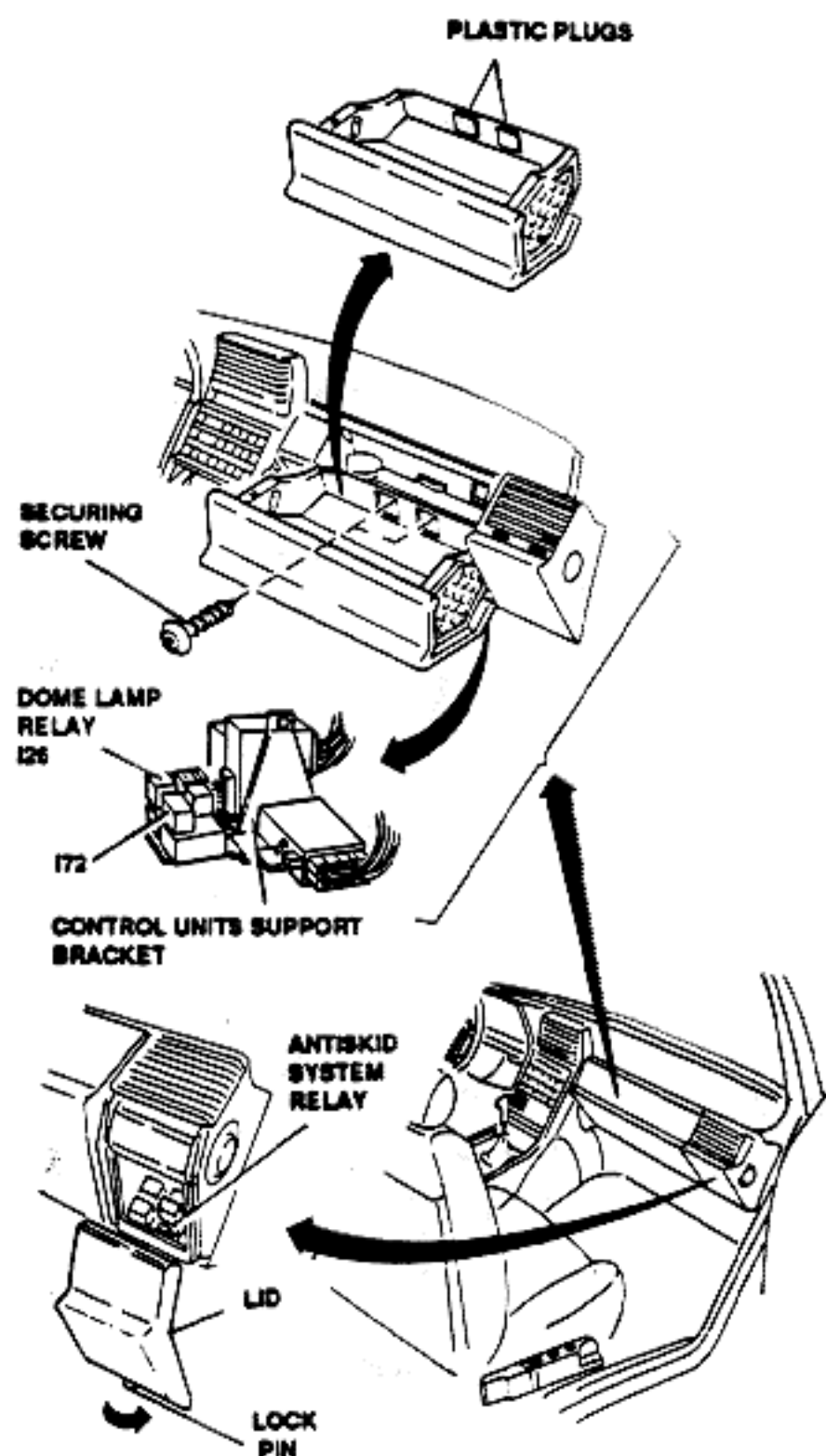
NOTE: To gain access to devices illustrated in figure, previously remove protection cover.





LOCATION AND ACCESS WITHIN PASSENGER COMPARTMENT

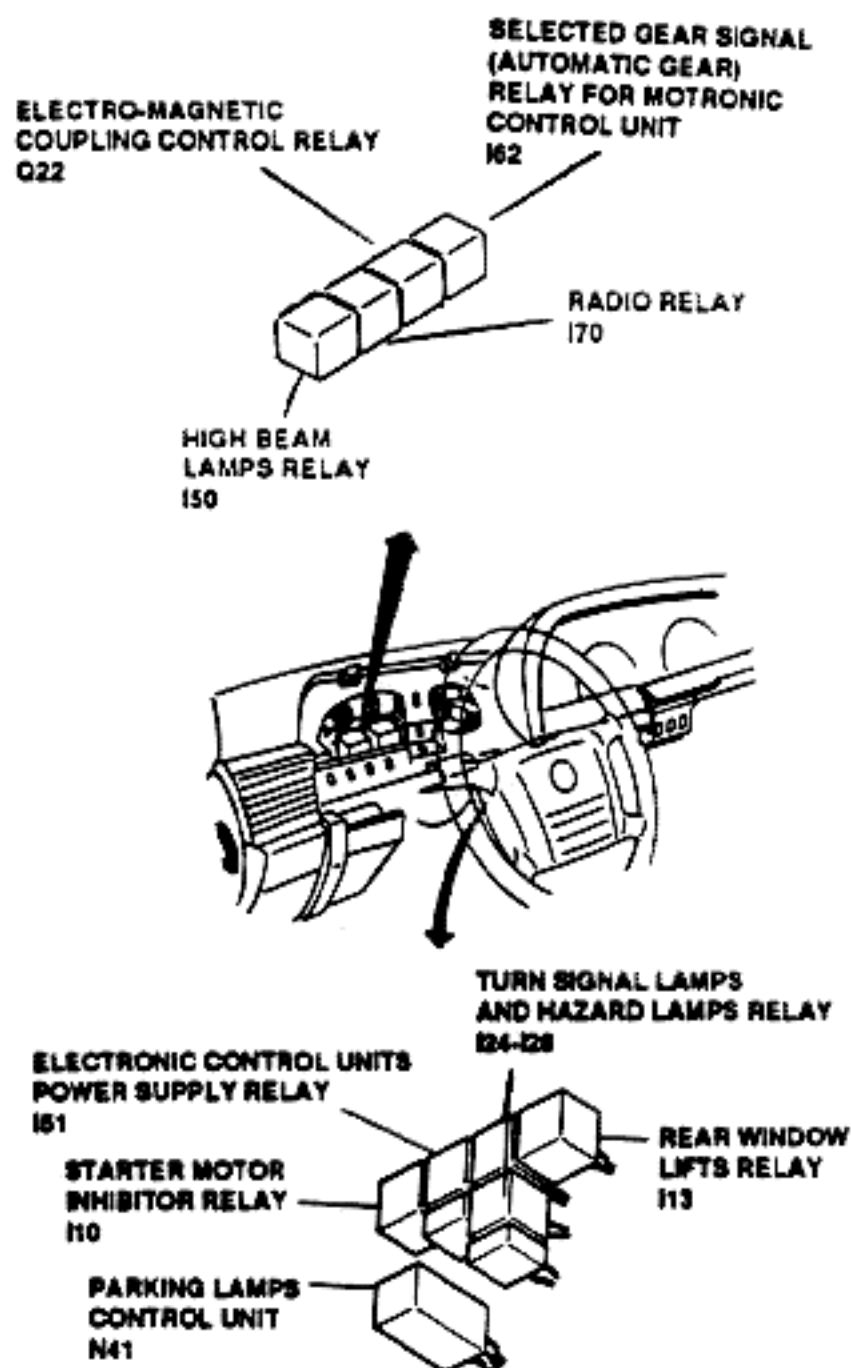
1. Open glovebox.
2. Manually remove plastic plugs at the back of internal bulkhead in order to gain access to control units support bracket securing screws.
3. Loosen both support bracket screws.
4. Manually lower the control units and safety belt buzzer support bracket.
5. Gain access to dome lamp relay.
6. Rotate door locking pin.
7. Remove door.
8. Gain access to antiskid system relay.



ELECTROMECHANICAL DEVICES TABLE

1. Radio relay.
2. Front window lifts relay.
3. Starter motor inhibitor relay.
4. High beam lamps relay.
5. Parking lamps control unit.
6. Selected gear signal (automatic transmission) relay for Motronic control unit.
7. Turn signal lamps relay and hazard lamps relay.
8. Rear window lifts relay.
9. Electro-magnetic coupling control relay.
10. Electronic control units power supply relay.
11. Power window lifts/sun roof relay.
12. Rear power window lifts/sun roof relay.

NOTE: To gain access to devices illustrated in figure, remove front mask and remove instrument panel (see Group 43).

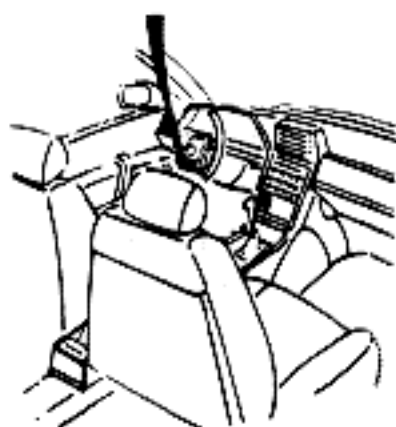
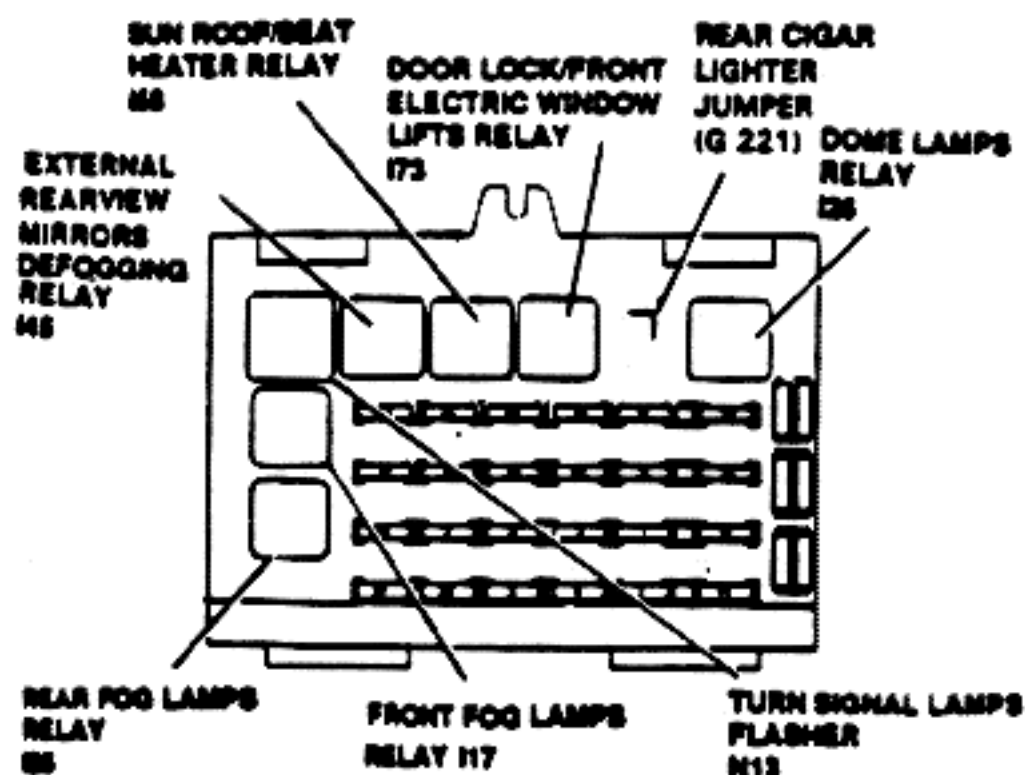




ELECTROMECHANICAL DEVICES TABLE

1. Rear fog lamps relay.
2. Fog lamps relay.
3. Turn signal lamps flasher.
4. Rear power window lifts relay.
5. External rear-view mirrors defogging relay.
6. Sun roof/Seats heater relay.
7. Front electric window lifts relay.
8. Dome lamps relay.

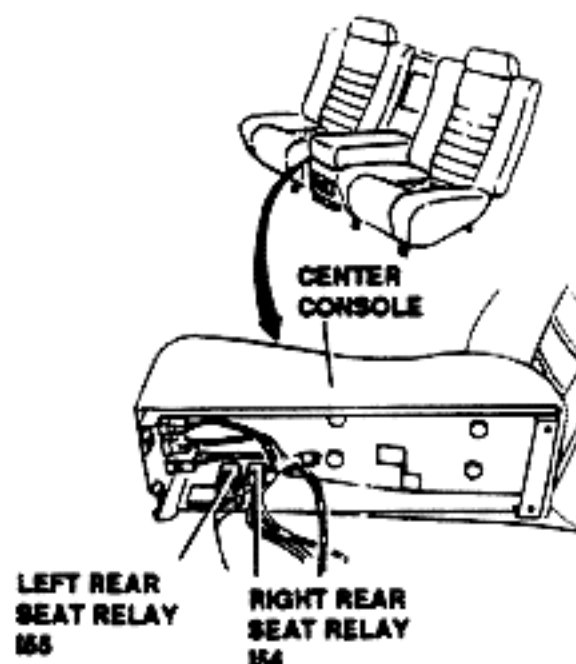
NOTE: To gain access to devices illustrated in figure, open fusebox door.



ELECTROMECHANICAL DEVICES TABLE

1. Rear right power seat relay.
2. Rear left power seat relay.

NOTE: To gain access to devices illustrated in figure, remove center console and work below it.

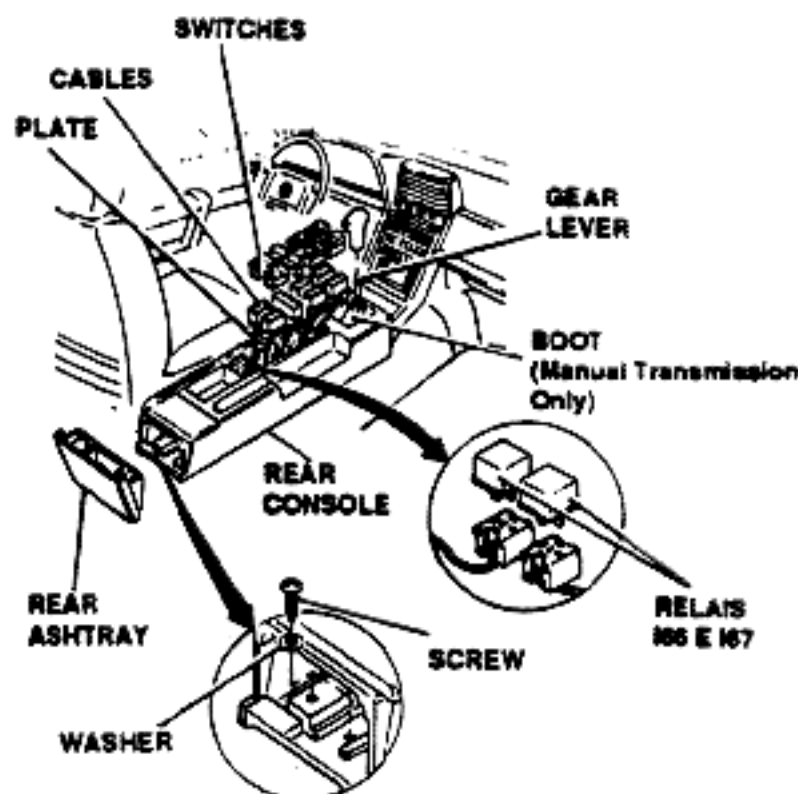


DAY-LIGHT RELAYS (canada version only)

1. Disconnect battery (-) lead.
2. Remove rear ashtray.
3. Remove two screws and washers securing rear console.
4. Withdraw switches.
5. Disconnect cables from switches.
6. Remove plate.
7. Open button of gear shift lever boot (Manual transmission versions only).
8. Remove gear shift lever knob.
9. Remove rear console.
10. Withdraw the relays from the relevant bases.



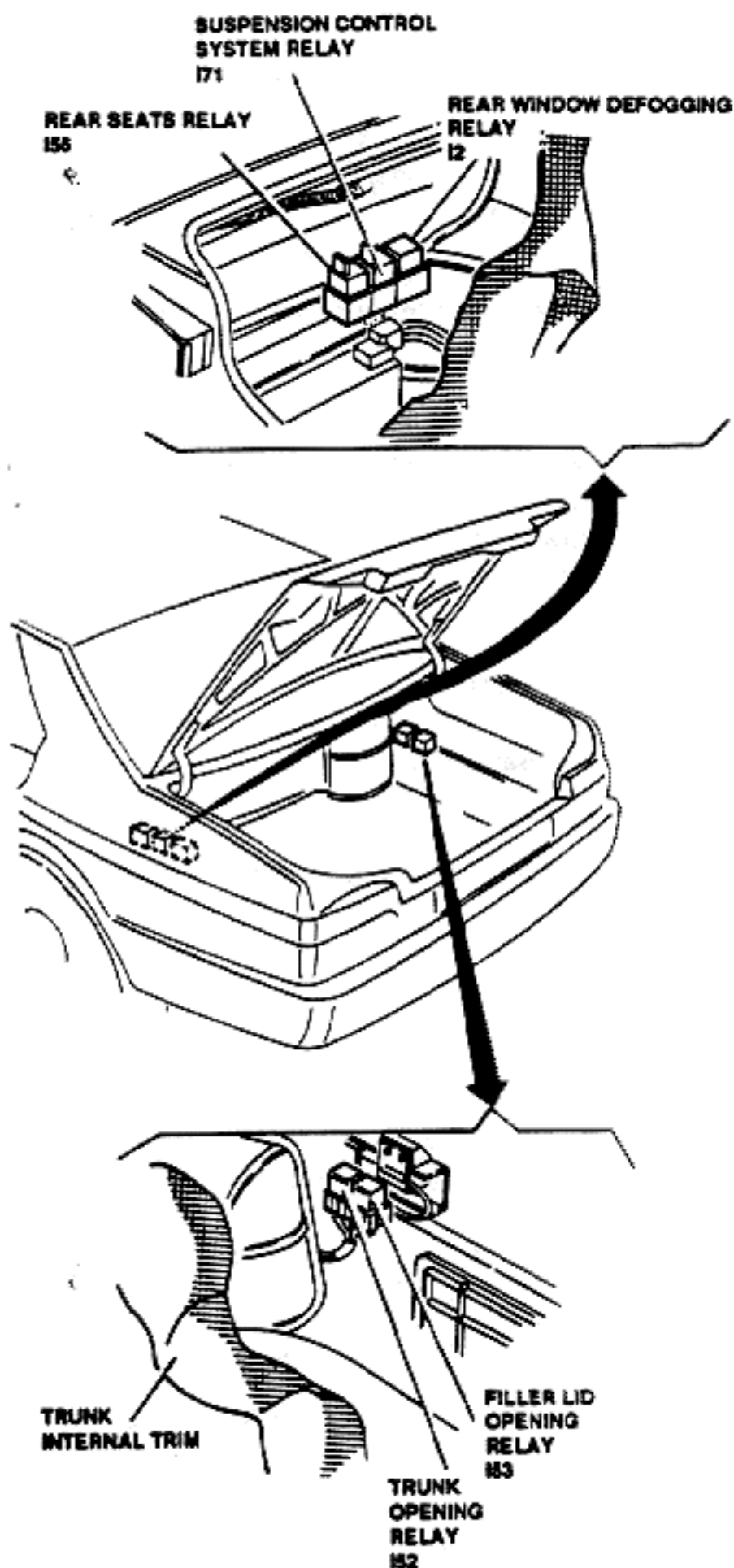
Install by reversing the order of removal.





4. Rear seats relay.
5. Suspension control system relay.

NOTE: To gain access to devices illustrated in figure, move trunk internal trim (see Group 66).



LIGHTING SYSTEM

The following table lists the various types of bulbs used in the lighting system, the power rating and use to which they are assigned.

Service	Power rating (W)	Type
Back-up lamps	21	B
Rear foglamps	21	B
License plate lamps	5	B
Side markers	3	D
Rear turnsignal lamps	21	B
Rear stop lamps	21	B
Tail lamps	10	B
H3 Foglamps	55	A
Front turnsignal lamps	21	B
Front parking lamps	-	D
H4 High/Low beam head lamps	-	A
Rear cargo lamp	5	C
Center stop lamp	21	B
Center stop lamp ("S" version)	5	C
Fusebox lighting lamp	5	C
Glovebox lamp	5	C
Courtesy mirror lamp	1.2	D
Front dome lights	5	C
Front and rear map lamps	1.2	D
Rear dome lamps	10	C
Door ground illumination lamps	5	C
Door open warning lamp	1.2	D
Front and rear cigar lighter lamps	1.2	D
Instrument panel lighting/warning Lamps	1.2	D
Switches	1.2	D

NOTE: When replacing, use bulbs of the same type.

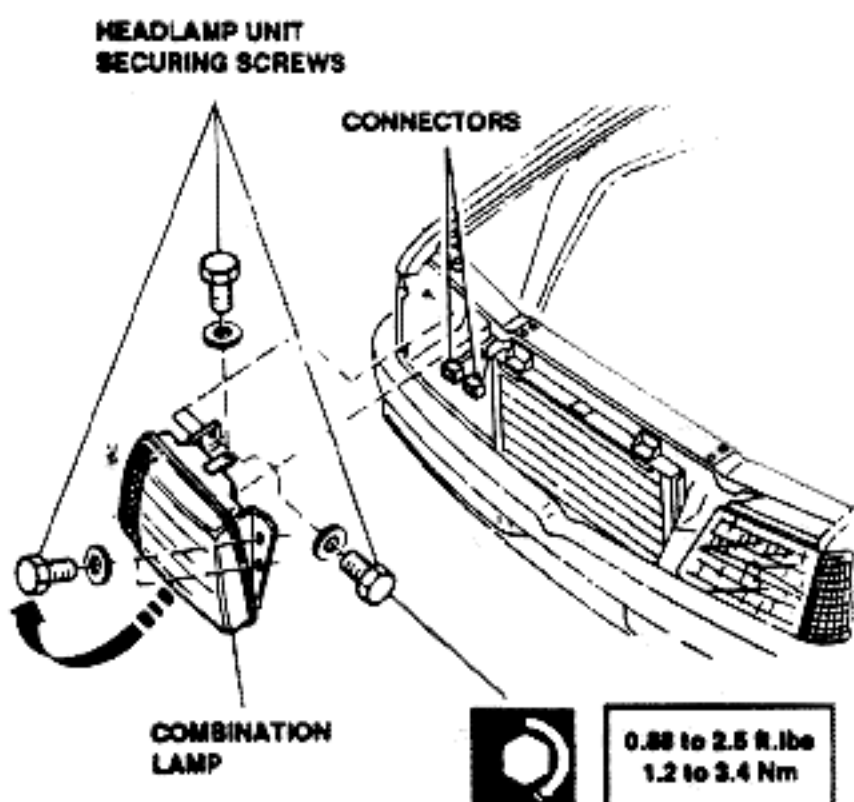


Name	Type		Removal Procedure
Halogen Bulb	A		- Remove connector - Remove retaining spring
Halogen Bulb	A'		- Remove contact double spring - Release from two fixed points
Bayonet Bulb	B		- Push bulb downward inside socket - Turn counter-clockwise
Cylindrical Bulb	C		- Pull bulb outward
All-glass Bulb	D		- Pull bulb outward

FRONT HEAD LAMP

COMBINATION LAMPS REPLACEMENT

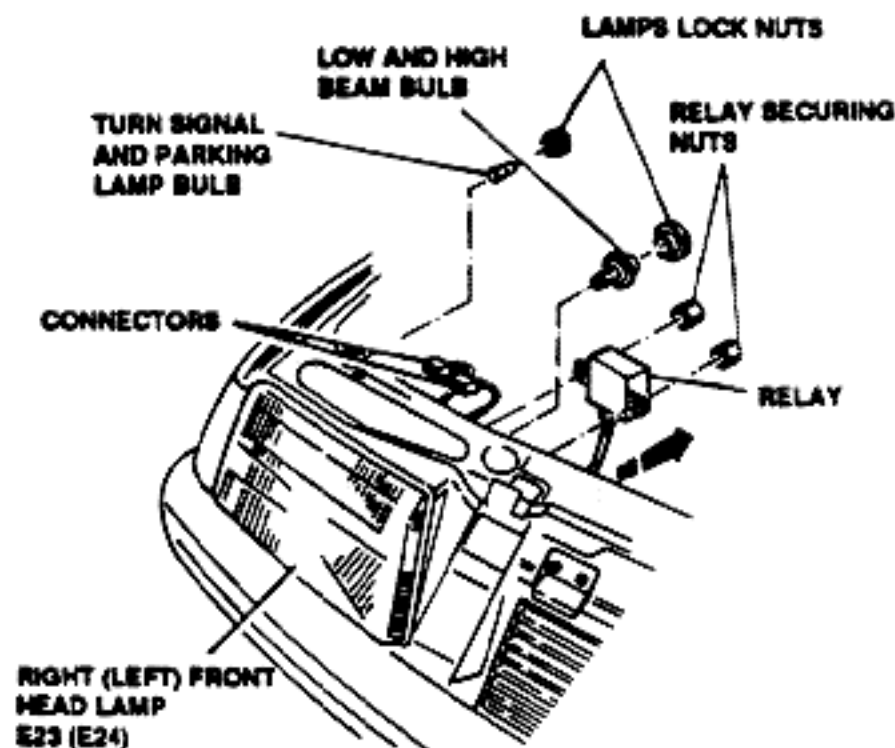
1. Loosen screws securing lamp to car body.
2. Withdraw assembly by rotating it upward.
3. Disconnect connectors.



REPLACEMENT OF PARKING, TURN SIGNAL, LOW AND HIGH BEAM LAMP BULBS

1. Loosen nuts securing relay assembly and remove it from head lamp unit.
2. Disconnect front head lamp unit connectors.
3. Remove bulbs locks.
4. Remove bulbs.

NOTE: The low and high beam lamp bulbs are of the halogen type. NEVER TOUCH BULB GLASS WITH BARE FINGERS OR WITH OBJECTS THAT CAN LEAVE FOREIGN MATTERS ON IT.

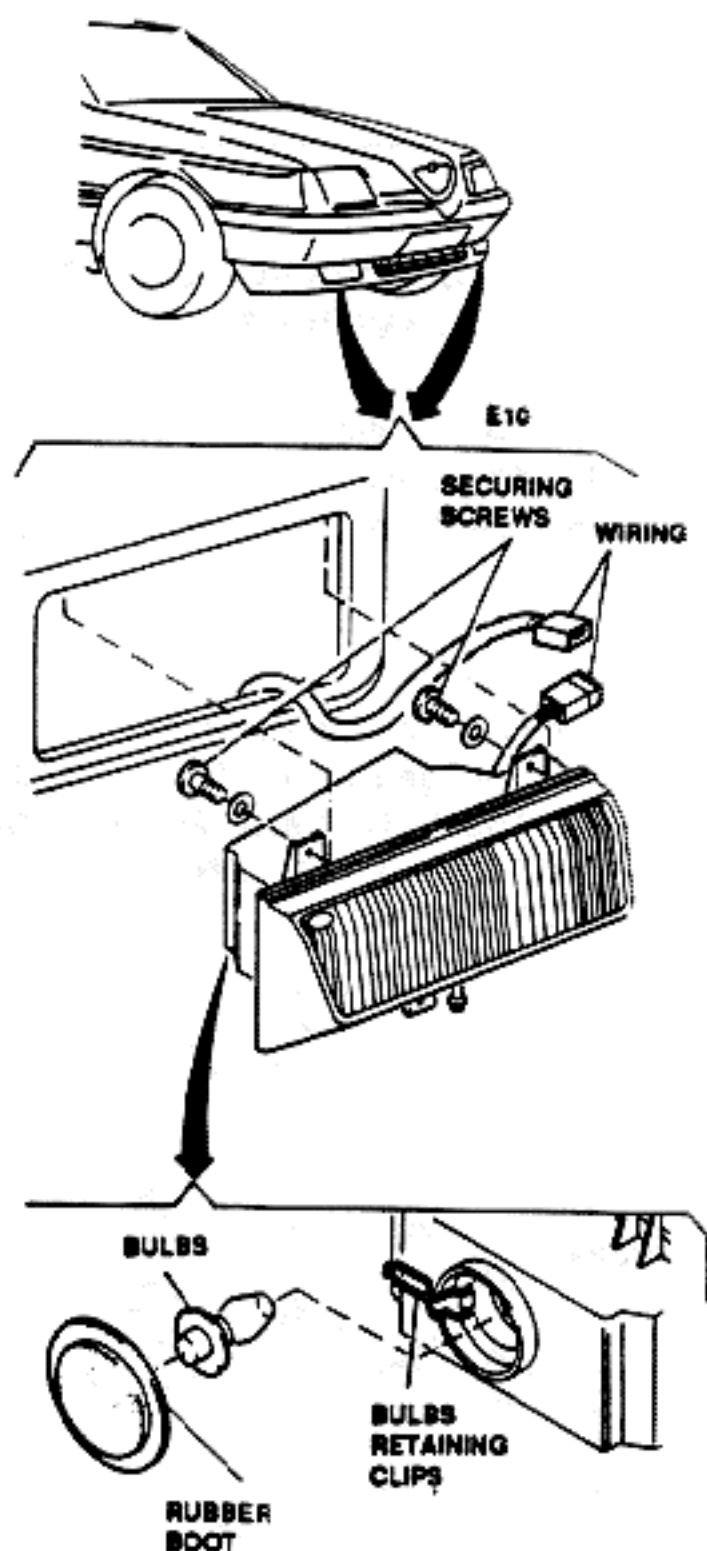




REPLACEMENT OF FOG LAMPS

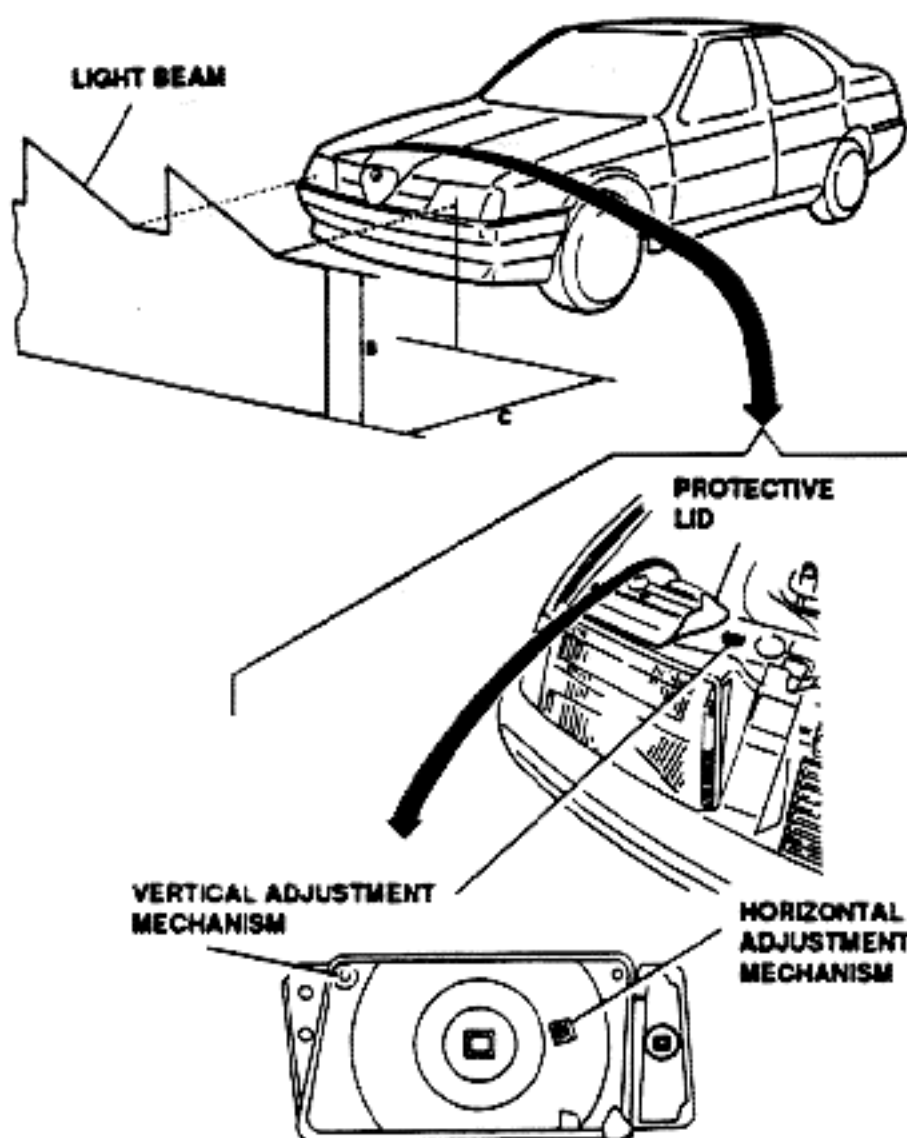
NOTE: To remove fog lamps assembly it is advisable to place vehicle on an auto lift.

1. Lift vehicle.
2. Disconnect wiring.
3. Loosen three screws securing fog lamps and withdraw them.
4. Manually remove rubber boot.
5. Manually disengage retaining clip of affected bulb and remove it.



HEAD LAMPS LOW BEAM ADJUSTMENT

1. Place vehicle on a level at distance "C" of 10 meters (32.81 ft) from a clear vertical surface.
2. Switch on low beam lamps and check that height "B" of beam is 500 mm (19.68 in).
If this condition is not met, adjust as follows:
3. Lift the lamp unit protective lid.
4. Work on adjustment mechanism till the correct adjustment is obtained.



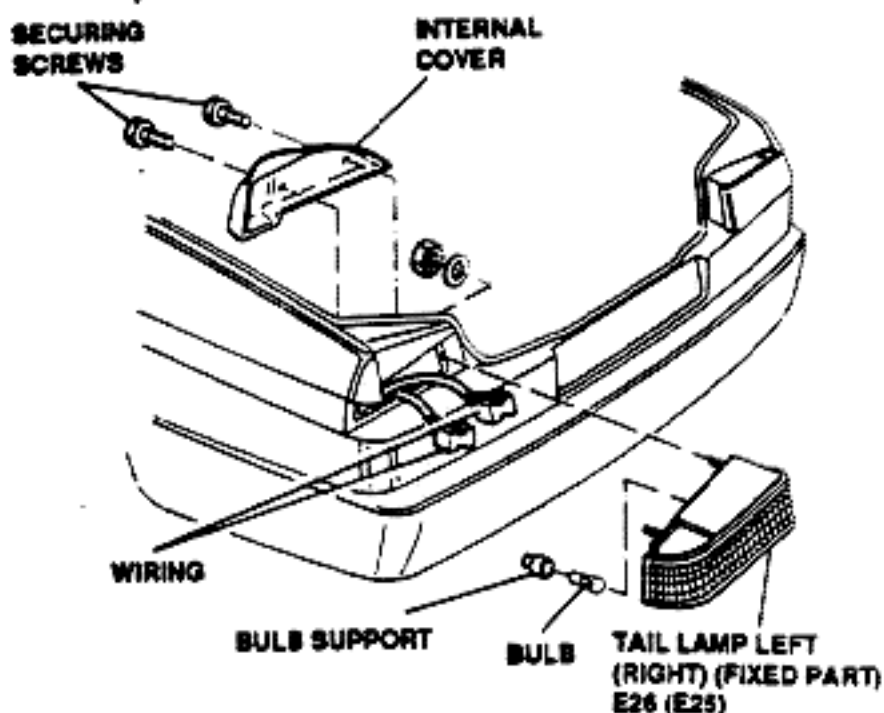
TAIL LAMP UNITS

REMOVAL OF FIXED PART

1. Loosen securing screws and remove lamp unit internal cover.
2. Loosen and remove lamp securing nuts.
3. Disconnect cables.
4. Withdraw tail lamp unit.
5. Withdraw bulb support.

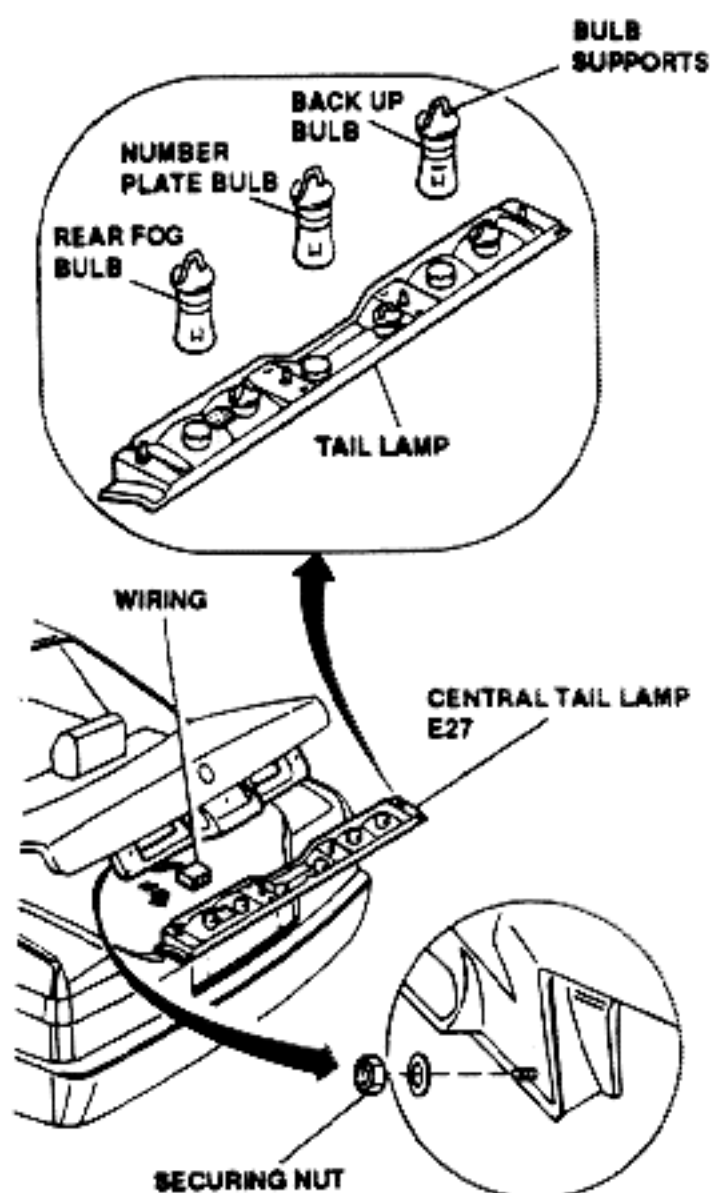


6. Replace bulb.



REMOVAL OF MOVABLE PART LEFT (RIGHT)

1. Loosen four nuts securing tail lamp unit.
2. Manually remove lamp unit and disconnect wiring.
3. Withdraw bulbs support.
4. Remove bulbs.

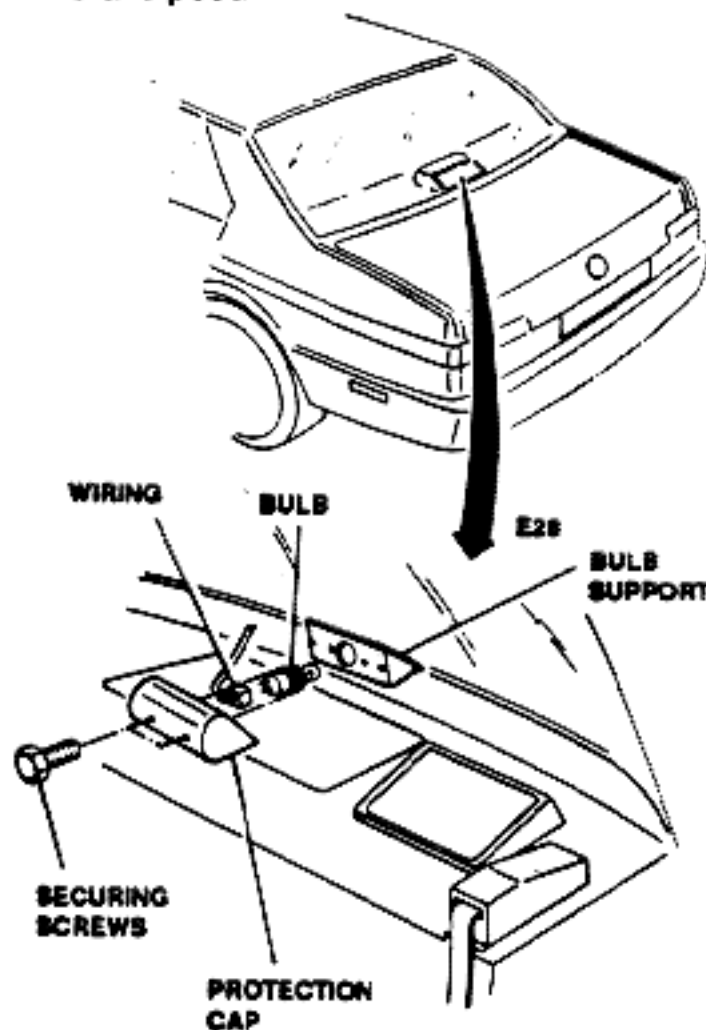


CENTER STOP LAMP REMOVAL

1. Loosen the fixing screws and remove the protection cap from the lamp-holder support of the 3rd stop lamp.
2. Considerably slacken (without removing) the two screws fixing the lamp-holder to the red transparent, in order to completely release the gasket from the load.
3. Carefully withdraw the lamp complete support, with its electric cables from the guide secured to the rear window glass
4. Remove the bulb.

CENTER STOP LAMP INSTALLATION

1. Position the lamp and insert in the guide the assy comprised of lamp-holder support, red transparent (with loosened screws) pay attention to the correct position of the gasket.
2. Tighten the two screws fixing the support to the transparent.
3. Install the protection cover and secure it to the support by means of the relevant screws.
4. Check the 3rd stop lamp lighting up by acting on the brake pedal.





CENTER STOP LAMP REMOVAL ("S" VERSION)

NOTE: To remove 3rd stop lamp, remove first spoiler on trunk lead (see Group 75).

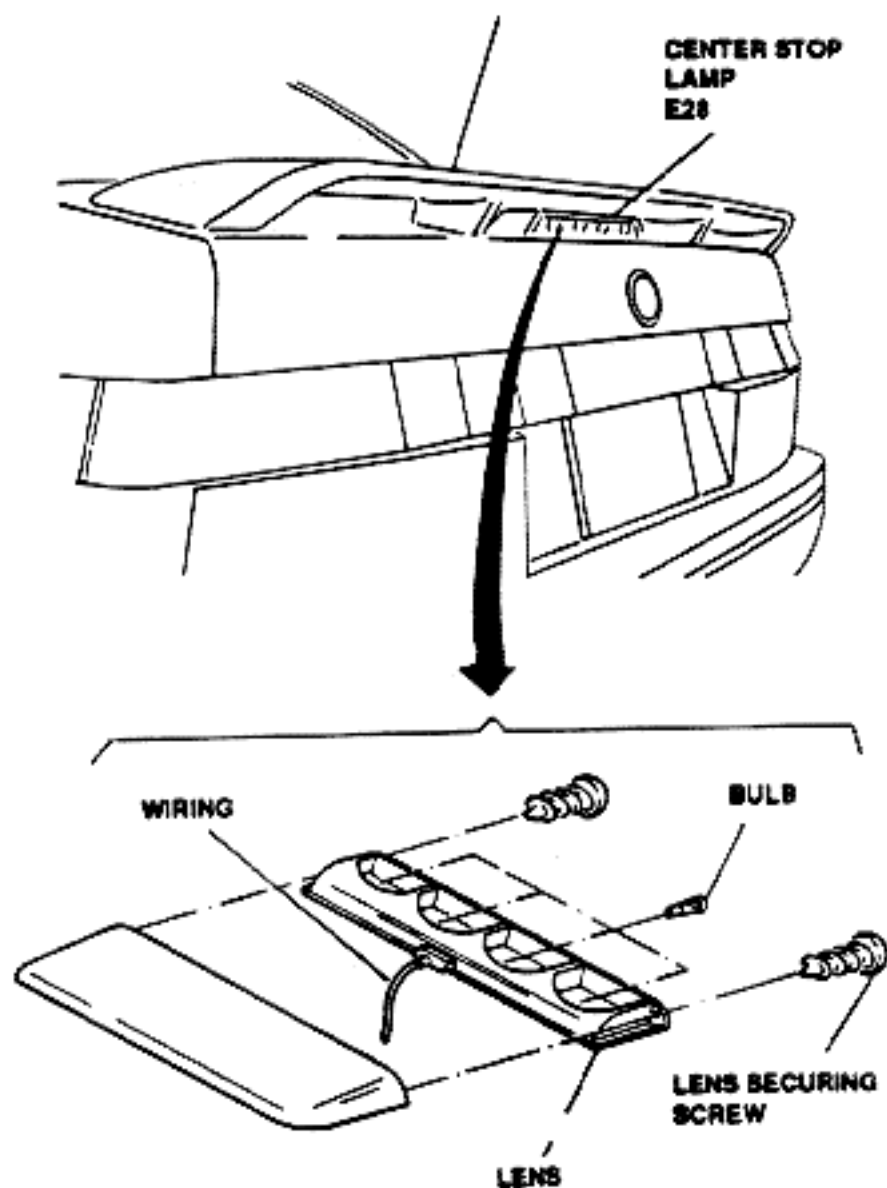
1. Loosen two screws securing lamp and remove it.
2. Loosen two screws securing lens to lamp.
3. Remove lens to gain access to bulbs.
4. Manually withdraw bulb.



Install by reversing the order of removal.

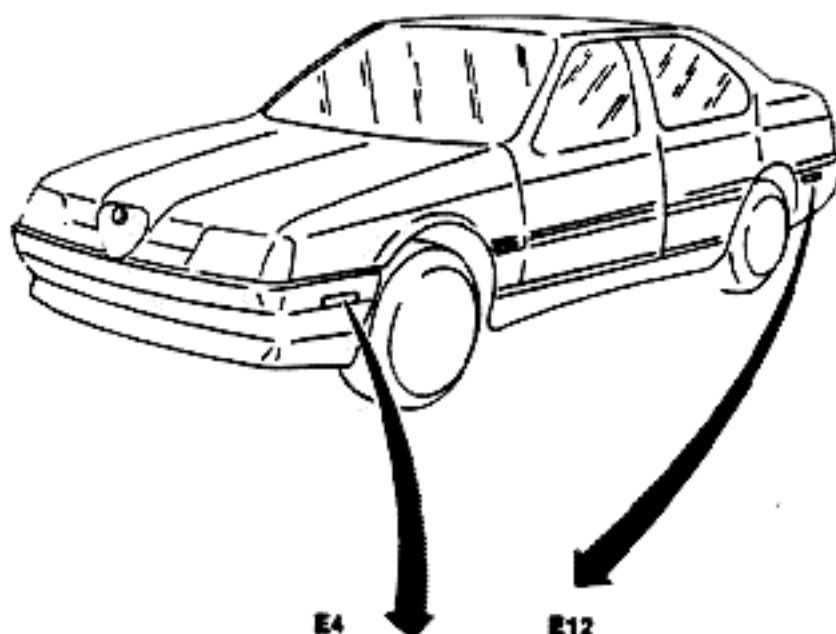
SPOILER

CENTER STOP
LAMP
E28



SIDE MARKER LAMPS REPLACEMENT

1. Remove side marker (grooved).
2. Disconnect cables.
3. Withdraw bulb from support by withdrawing rubber protection from cap.
4. Withdraw bulb.



WIRING

RUBBER
PROTECTION

BULB

PROTECTION

DOORS LAMPS

NOTE: To remove door lamps bulbs it is advisable to place vehicle on an auto lift.

Ground Illumination lamps:

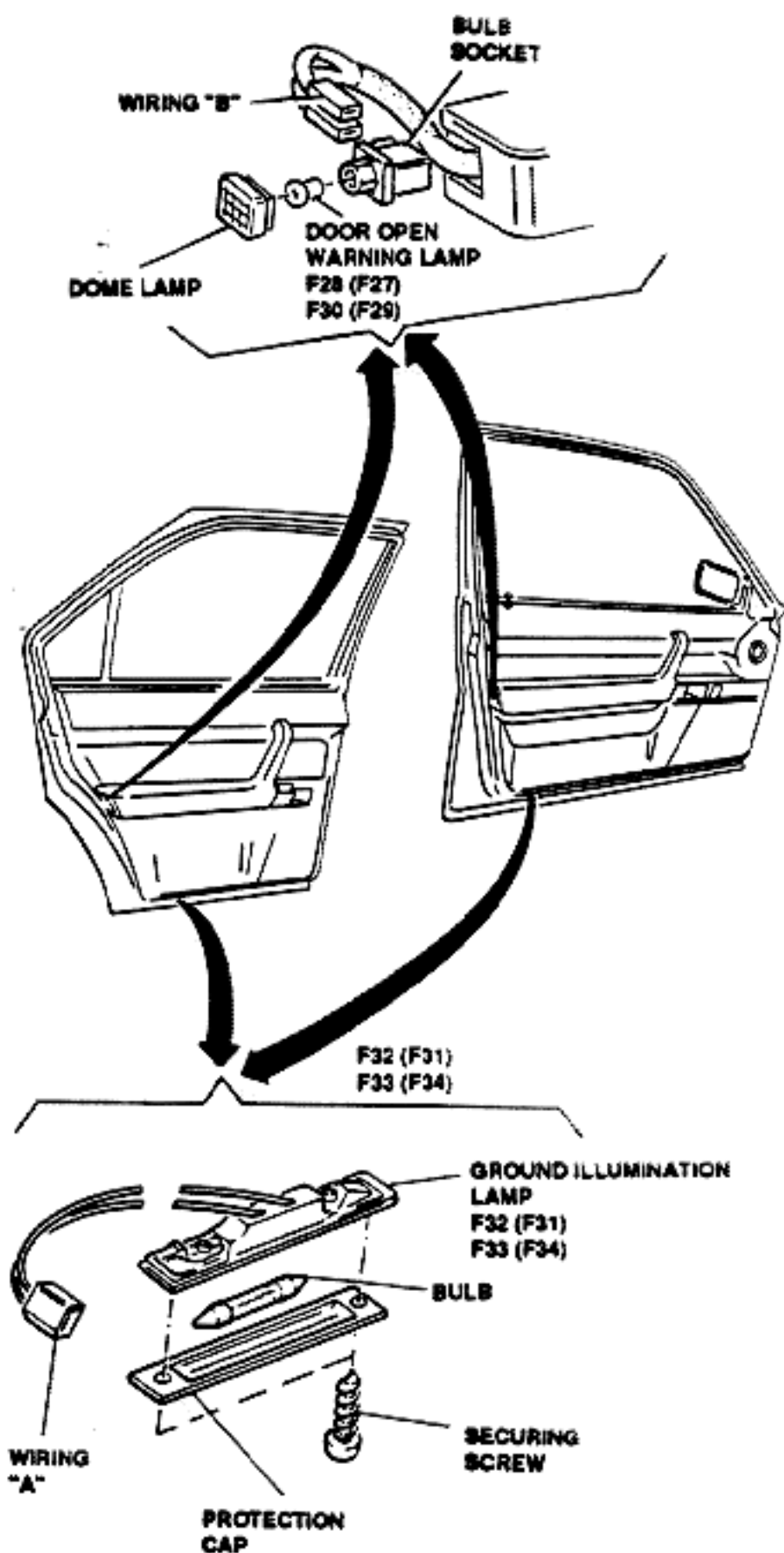
1. Loosen two screw securing protection cap and lamp to door support.
2. Withdraw lamp.
3. Disconnect wiring (A).
4. Separate protection cap from lamp support.
5. Withdraw lamp

Door open warning lamps

1. Manually withdraw lamp.

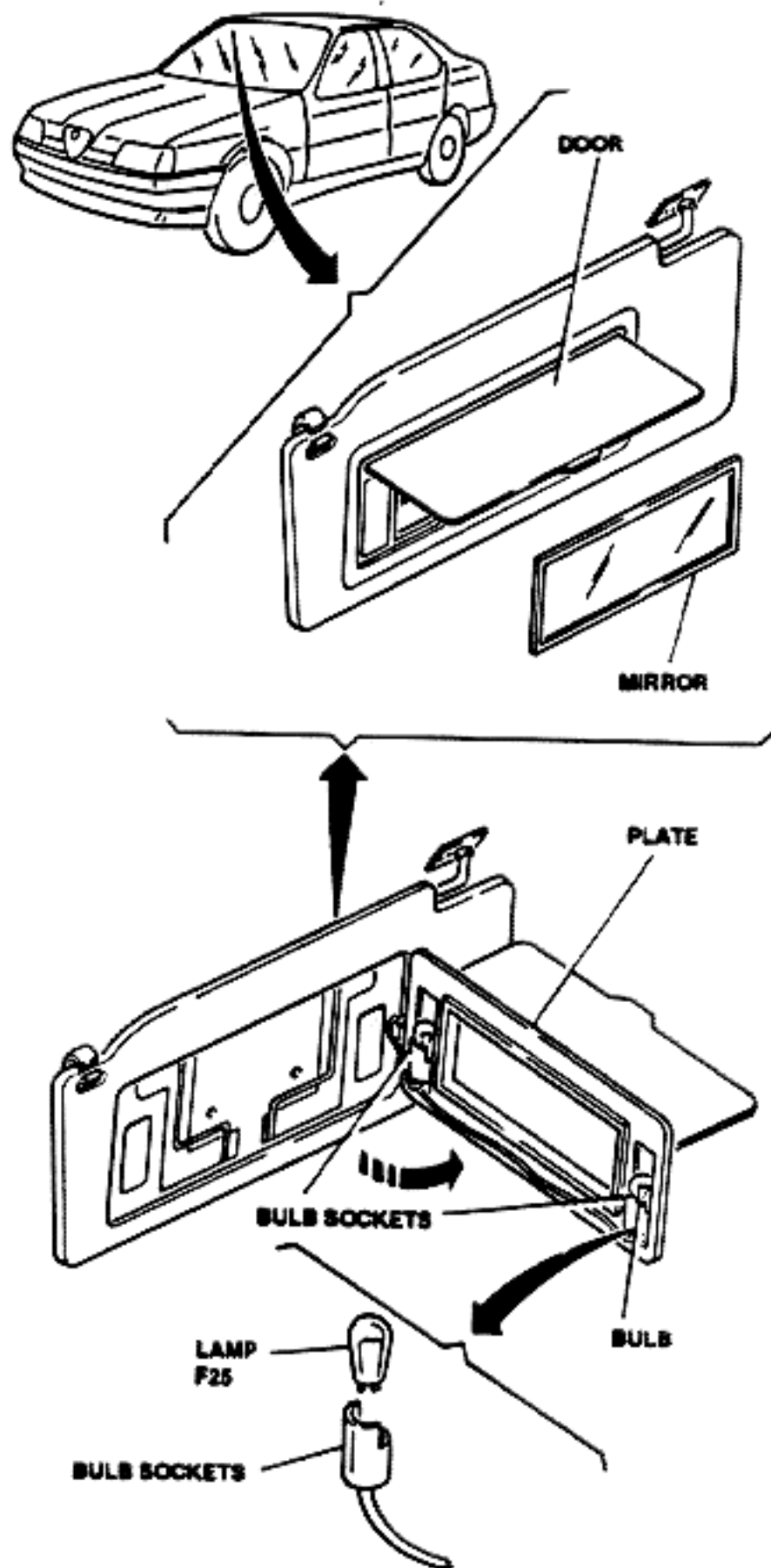


2. Disconnect wiring (B).
3. Manually withdraw lamp support.
4. Withdraw lamp.



COURTESY MIRROR ILLUMINATION LAMP

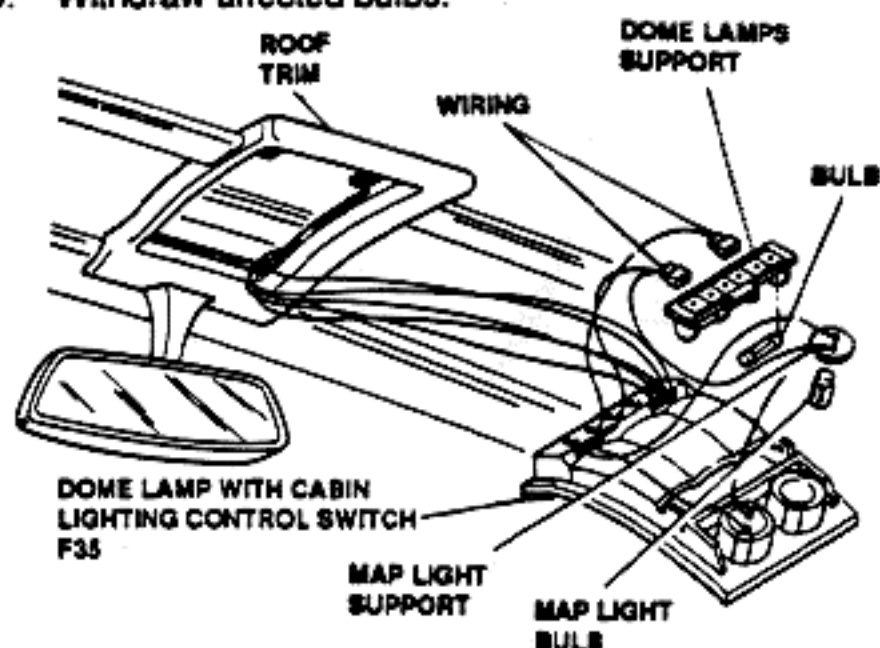
1. Move lid toward right to gain access to mirror.
2. Manually withdraw mirror, maintaining lamp support close to lid.
3. Carefully rotate plate clockwise to avoid any damage to switch cable.
4. Withdraw lamp support from the plate.
5. Withdraw affected bulb.





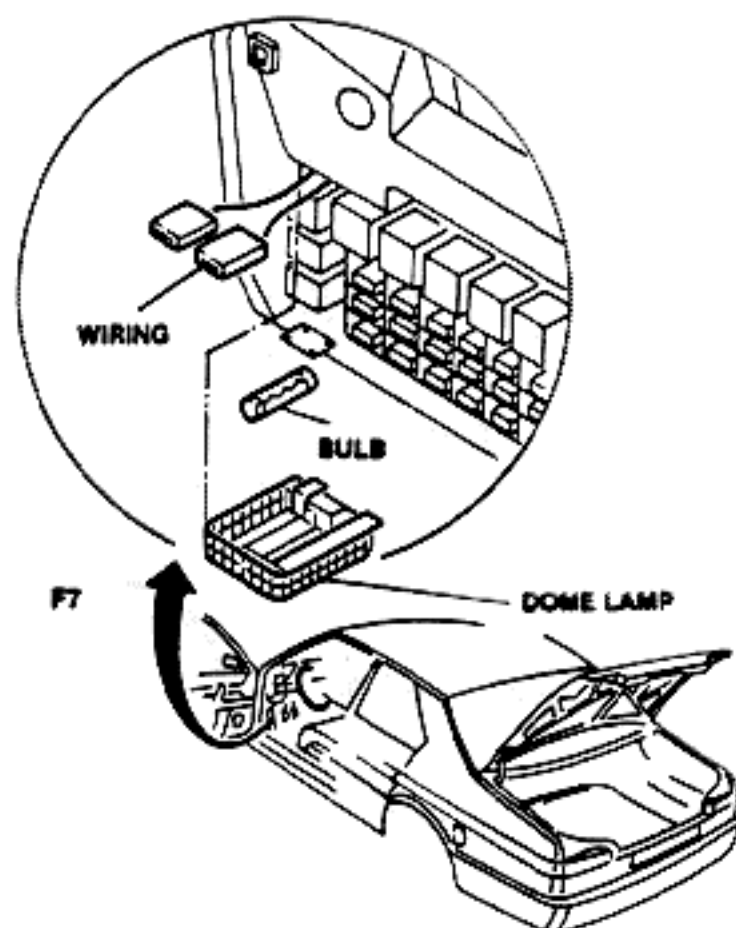
DOMELAMP WITH CABIN LIGHTING CONTROL SWITCH

1. Manually withdraw dome lamp assembly from roof trim.
2. Disconnect wiring.
3. Manually remove dome lamp support.
4. Rotate and lift map lamp support.
5. Withdraw affected bulbs.



FUSEBOX ILLUMINATION LAMP

1. Manually withdraw lamp.
2. Disconnect wiring.
3. Remove lamp.



GLOVEBOX AND SWITCH ILLUMINATION LAMP

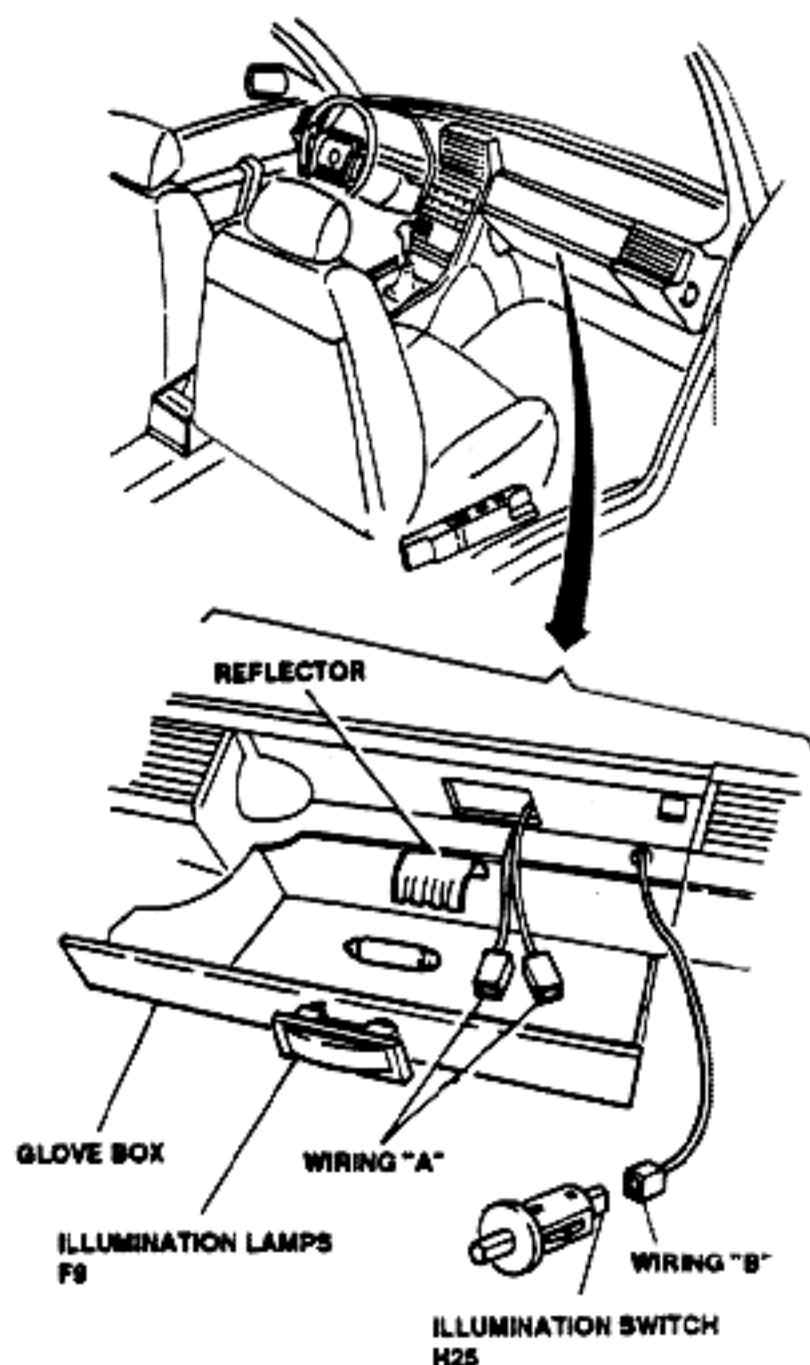
Glovebox illumination lamp

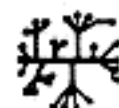
1. Manually open glovebox.
2. Manually withdraw lamp.
3. Disconnect wiring (A).
4. Manually withdraw reflector.
5. Withdraw lamp.

Glovebox illumination switch

NOTE: To gain access to glovebox illumination switch, remove control unit support bracket.

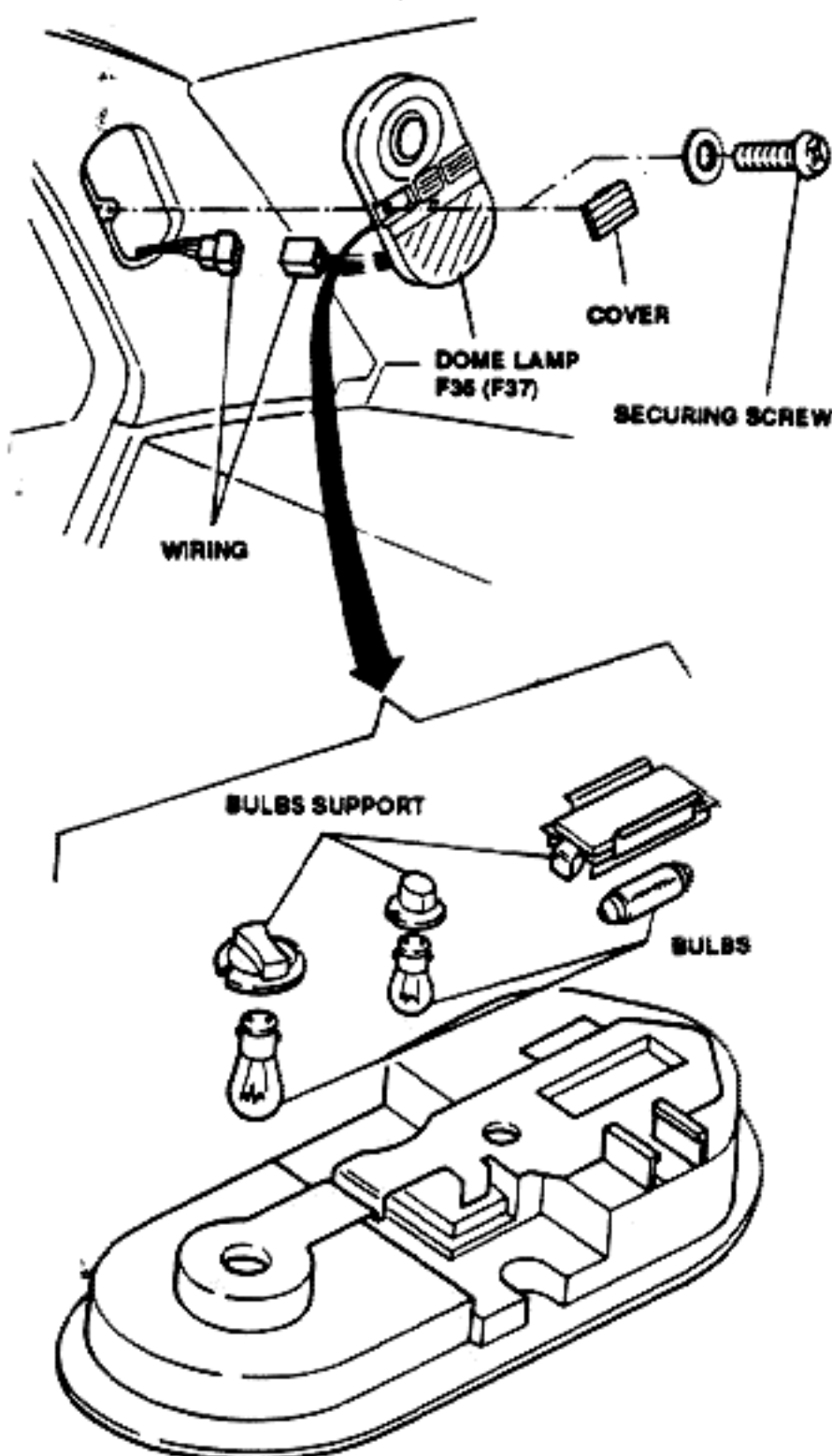
6. Working from below instrument panel, push switch toward box interior.
7. Disconnect wiring and remove switch.





DOME LAMPS, CONTROL SWITCH ON REAR POST

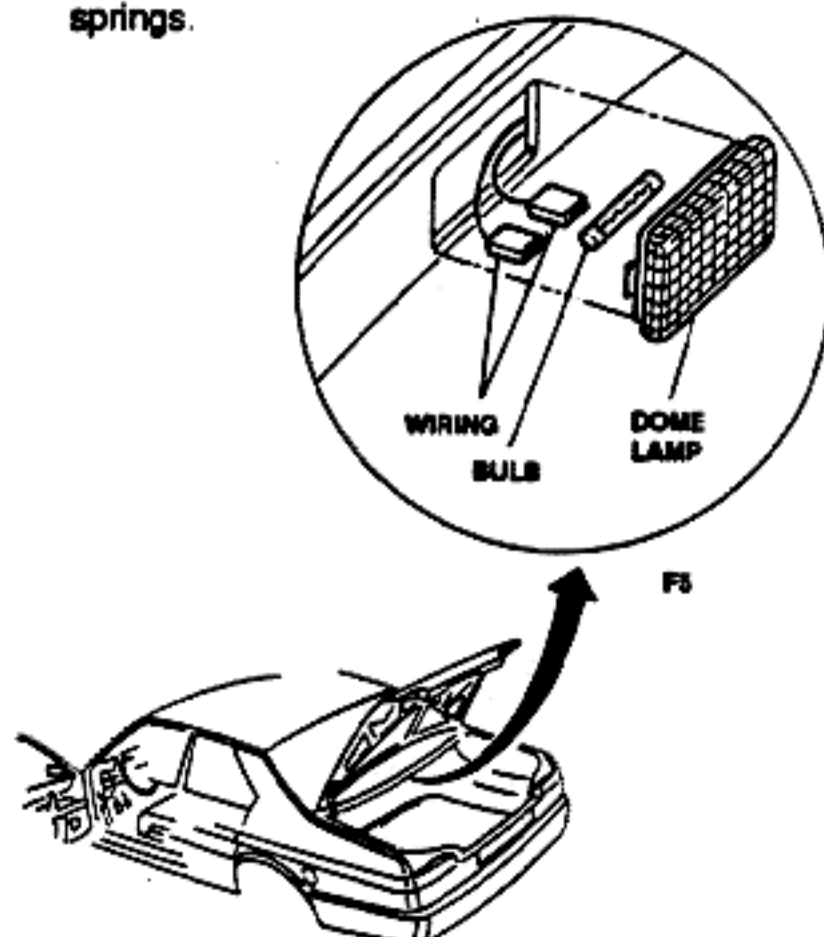
1. Remove cover
2. Loosen screw securing lamp.
3. Withdraw lamp.
4. Disconnect wiring.
5. Manually withdraw support of affected lamp.
6. Remove affected lamp.



REAR CARGO LAMP

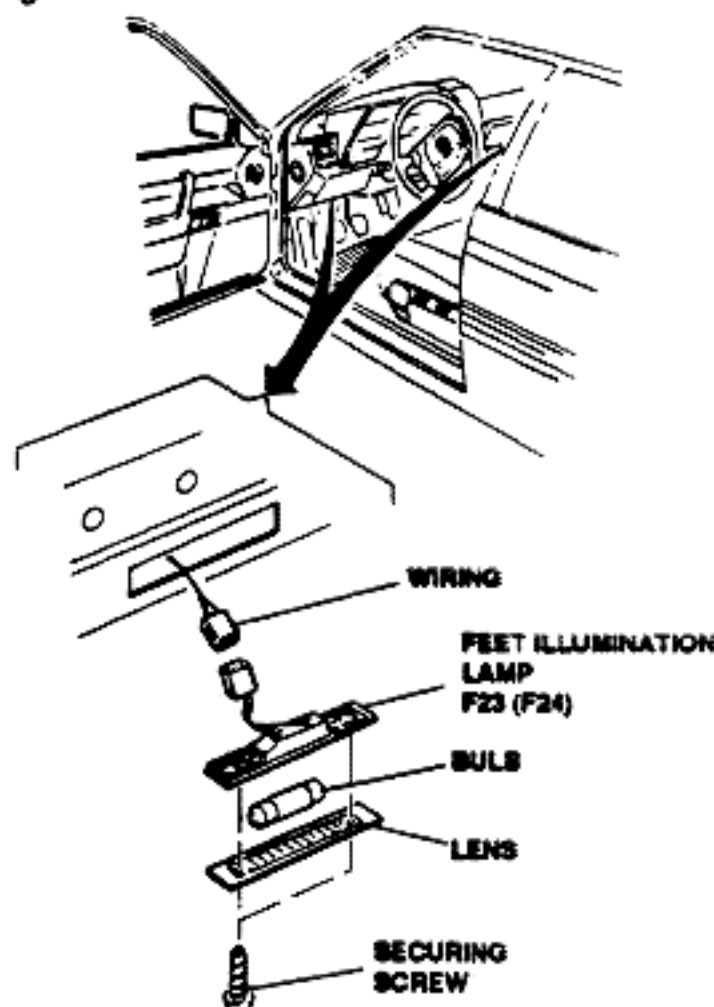
1. Push on lamp retaining tongue or working through the opening.
2. Manually clear lamp and withdraw it.

3. Replace bulb inserted between two retaining springs.



FEET ILLUMINATION LAMP, INTERIOR SIDE

1. Loosen two screw securing lens and remove it.
2. Remove bulb inserted between two retaining springs.



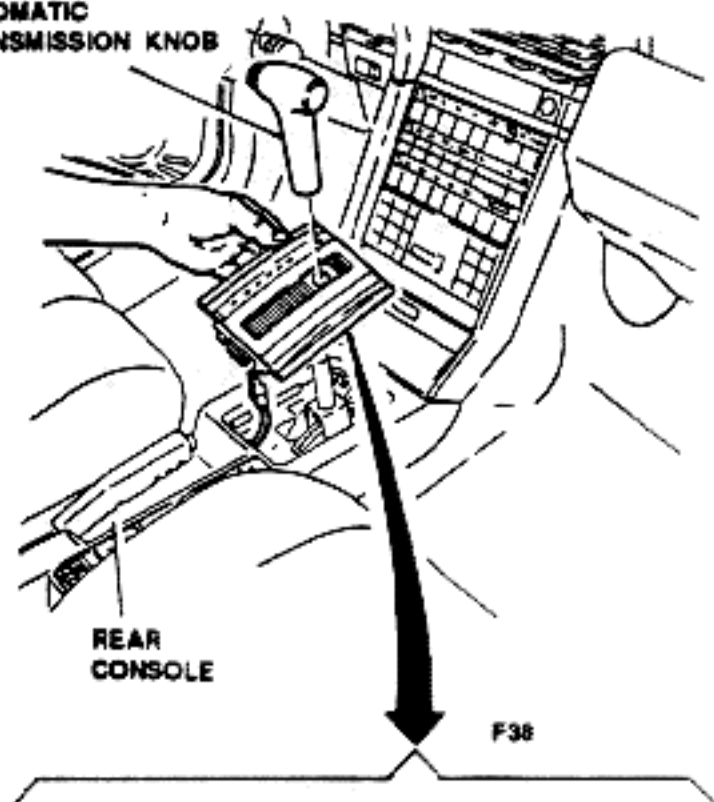


AUTOMATIC TRANSMISSION SELECTOR ILLUMINATION LAMP

NOTE: To gain access to the two illumination lamps, remove first rear console (see Group 66).

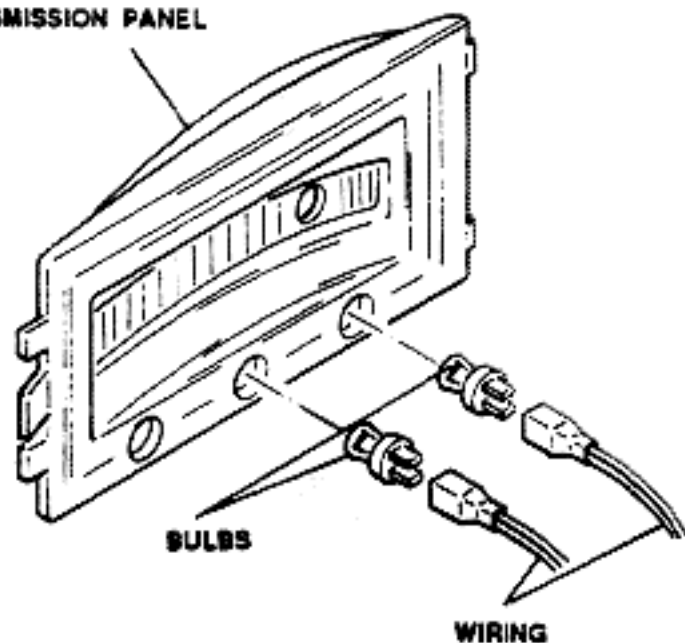
1. Move backward rear console.
2. Remove automatic transmission selector lever knob.
3. Lift automatic transmission panel.
4. Manually withdraw affected lamp pressure installed on the panel.
5. Disconnect wiring and replace bulb.

AUTOMATIC
TRANSMISSION KNOB



REAR
CONSOLE

AUTOMATIC
TRANSMISSION PANEL



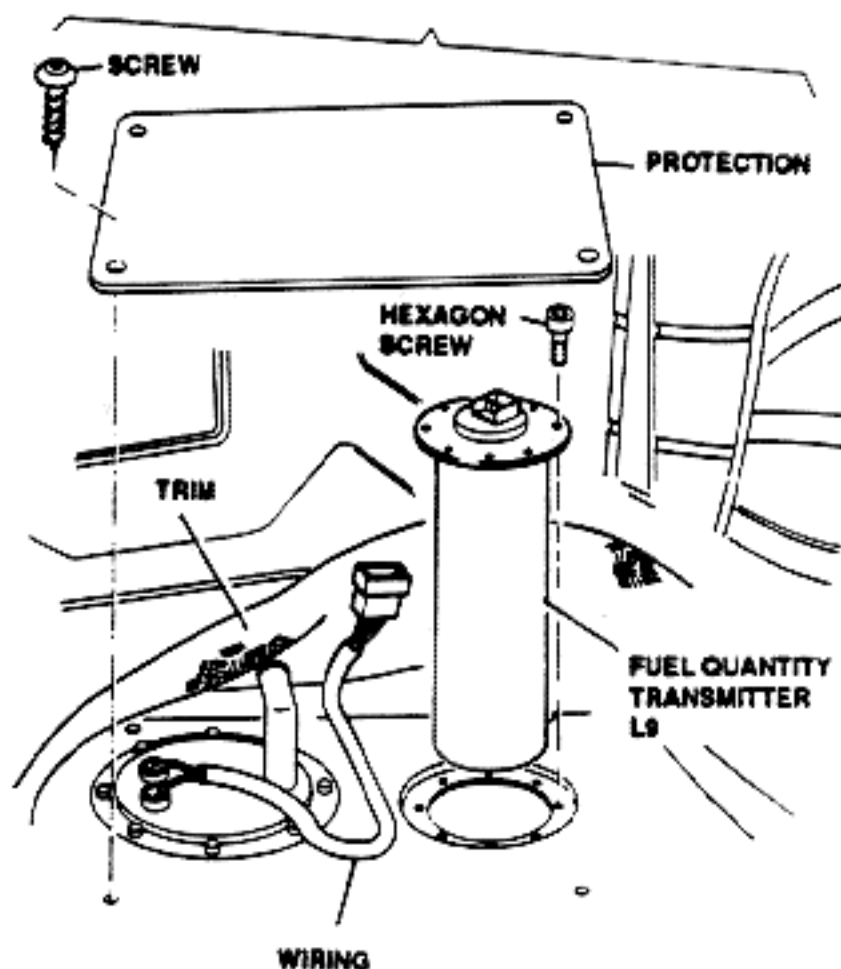
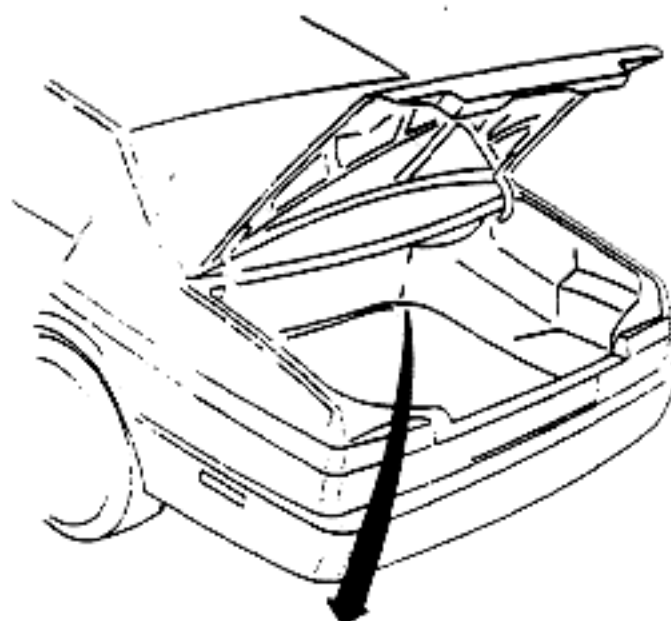
BULBS

WIRING

SENSORS AND TRANSMITTERS, WINDSHIELD WASHER AND WIPER, ELECTRICAL COMPONENTS

FUEL QUANTITY TRANSMITTER

1. Manually remove trunk trim.
2. Remove protection cover, by loosening four screws.
3. Disconnect wiring
4. Loosen right exagon screws securing fuel quantity transmitter.
5. Withdraw transmitter from fuel tank.

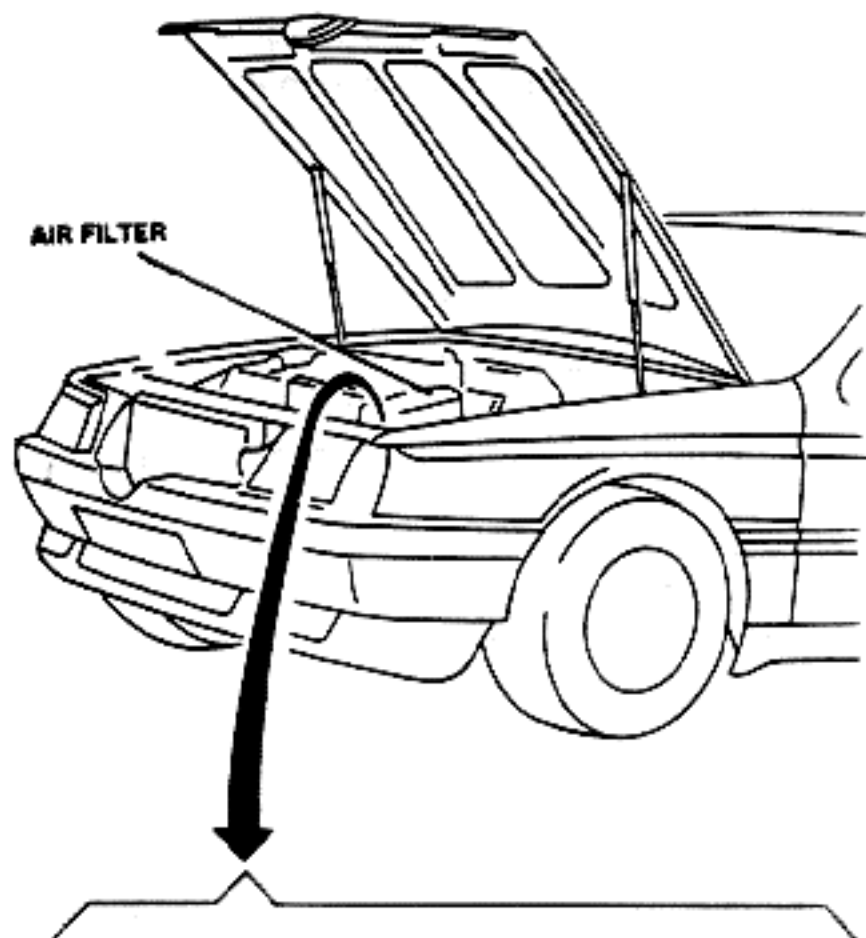




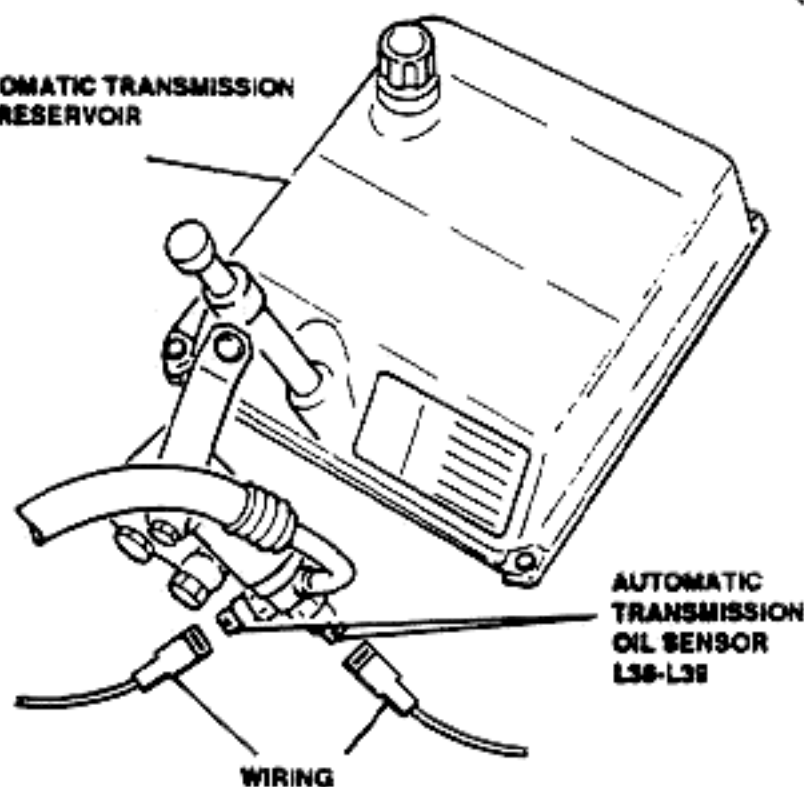
AUTOMATIC TRANSMISSION OIL TEMPERATURE SENSOR

NOTE: To gain access to sensor, first remove air cleaner and related support (see Group 04).

1. Disconnect wiring
2. Using a suitable wrench, loosen and remove affected sensor.



AUTOMATIC TRANSMISSION OIL RESERVOIR



FRONT DOOR SENSORS

NOTE: Sensors are installed inside door lock, together with door locking motors. To replace them it is necessary to replace the complete door lock assembly (refer to: "FRONT DOORS LOCK").

REAR DOOR SENSORS

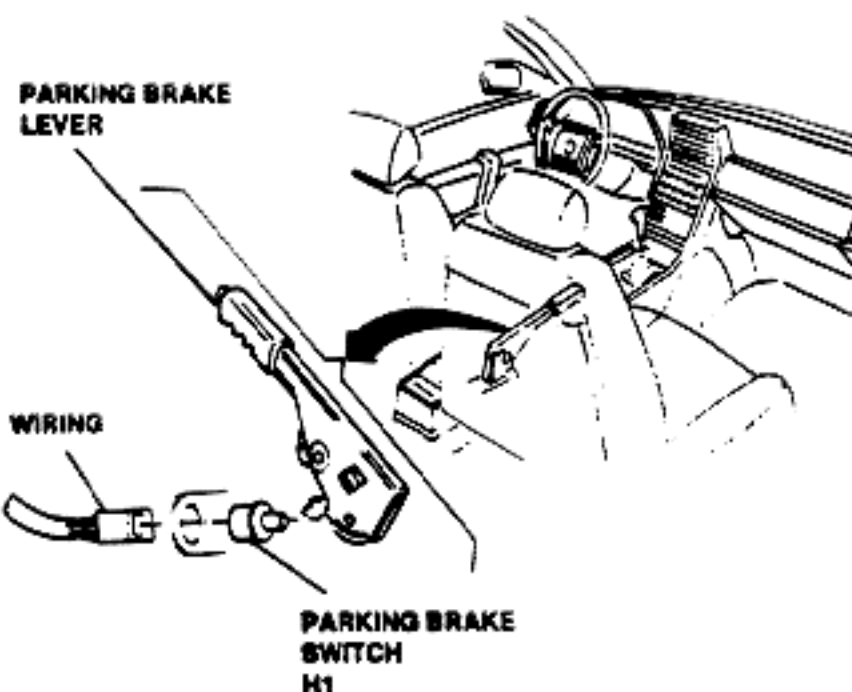
NOTE: Sensors are installed inside door lock, together with door locking motors. To replace them it is necessary to replace the complete door lock assembly (refer to: "REAR DOORS LOCK").

PARKING BRAKE SWITCH

1. Remove rear console.
2. Manually lift parking brake lever.
3. Disconnect wiring.
4. Manually withdraw switch.



Install by reversing the order of removal.

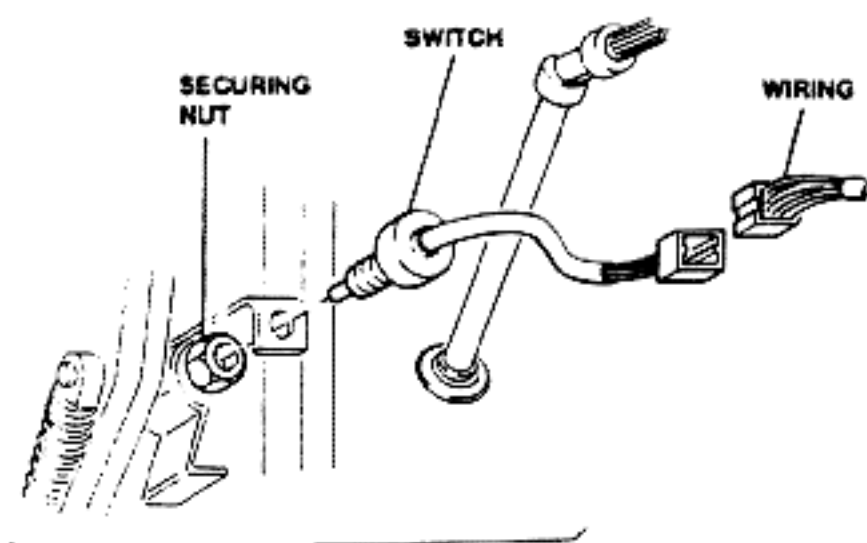




STOP LAMPS SWITCH

NOTE: To find switch position refer to: "CONTROL SWITCHES - BRAKE SWITCH FOR CRUISE CONTROL (AUTOMATIC TRANSMISSION) AND STOP LAMPS SWITCH", & "CONTROL SWITCHES - CLUTCH BRAKE SWITCH FOR CRUISE CONTROL (MANUAL TRANSMISSION VERSION) AND STOP LAMPS SWITCH".

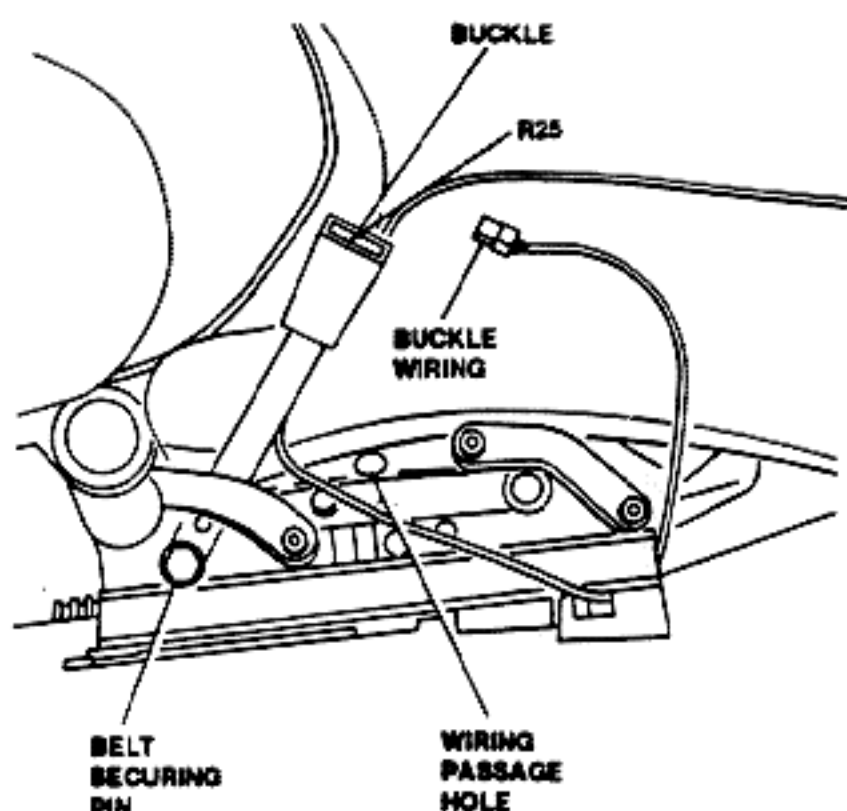
1. Disconnect wiring.
2. Loosen nut securing switch
3. Loosen and manually withdraw switch.



SAFETY BELT FASTENED SWITCH

NOTE: Switch is installed inside the buckle. To replace sensor it is necessary to replace the whole buckle.

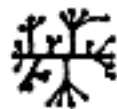
1. Disconnect seat and buckle wirings.
2. Remove seat from vehicle (see Group 66).
3. Loosen and remove buckle securing pin.
4. Withdraw buckle from guide allowing wiring to slide through the appropriate hole.



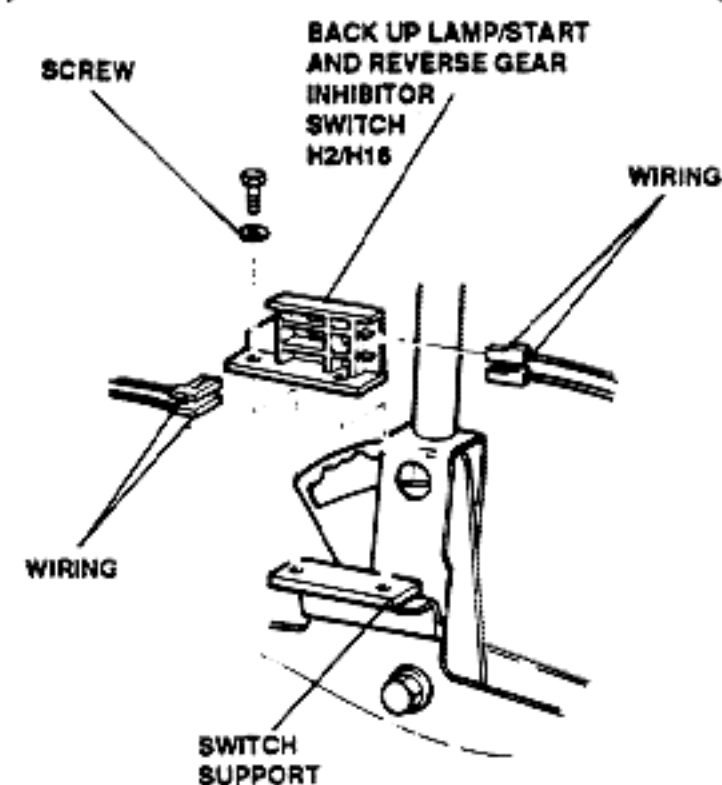
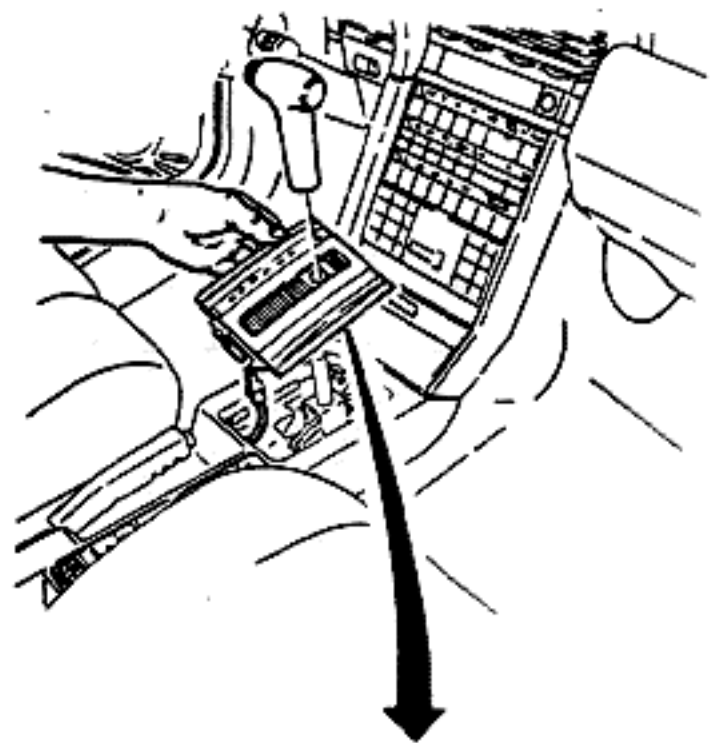
BACK-UP LAMP/START AND REVERSE GEAR INHIBITOR SWITCH (automatic transmission version)

NOTE: To gain access to switch, first remove gear lever knob move backward rear console (see Group 66) and remove gear selector panel.

1. Loosen and remove screws securing switch support.
2. Disconnect wiring.



3. Remove back up lamp/start and reverse gear inhibitor switch.



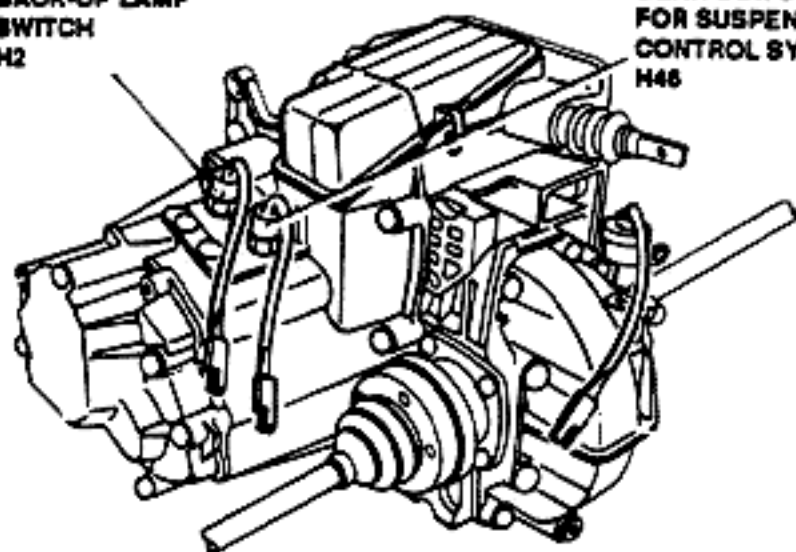
BACK-UP LAMPS (manual transmission version) AND GEARBOX SWITCH FOR SUSPENSION CONTROL SYSTEM ("S" version)

NOTE: To gain access to switch, first remove air filter (refer to Group 04).

1. Disconnect wiring.
2. Remove switch.

BACK-UP LAMP SWITCH H2

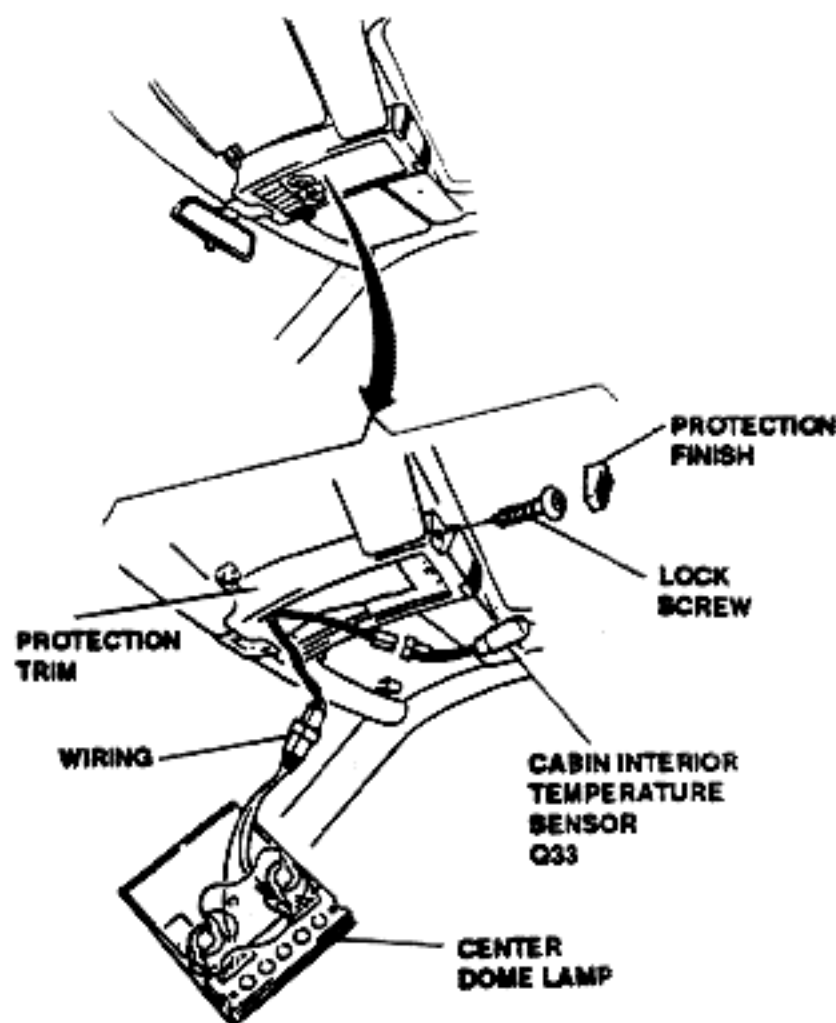
GEAR BOX SWITCH FOR SUSPENSION CONTROL SYSTEM H48



CABIN INTERIOR TEMPERATURE, OUTSIDE AIR TEMPERATURE AND MIXED AIR TEMPERATURE SENSOR

Cabin interior temperature sensor

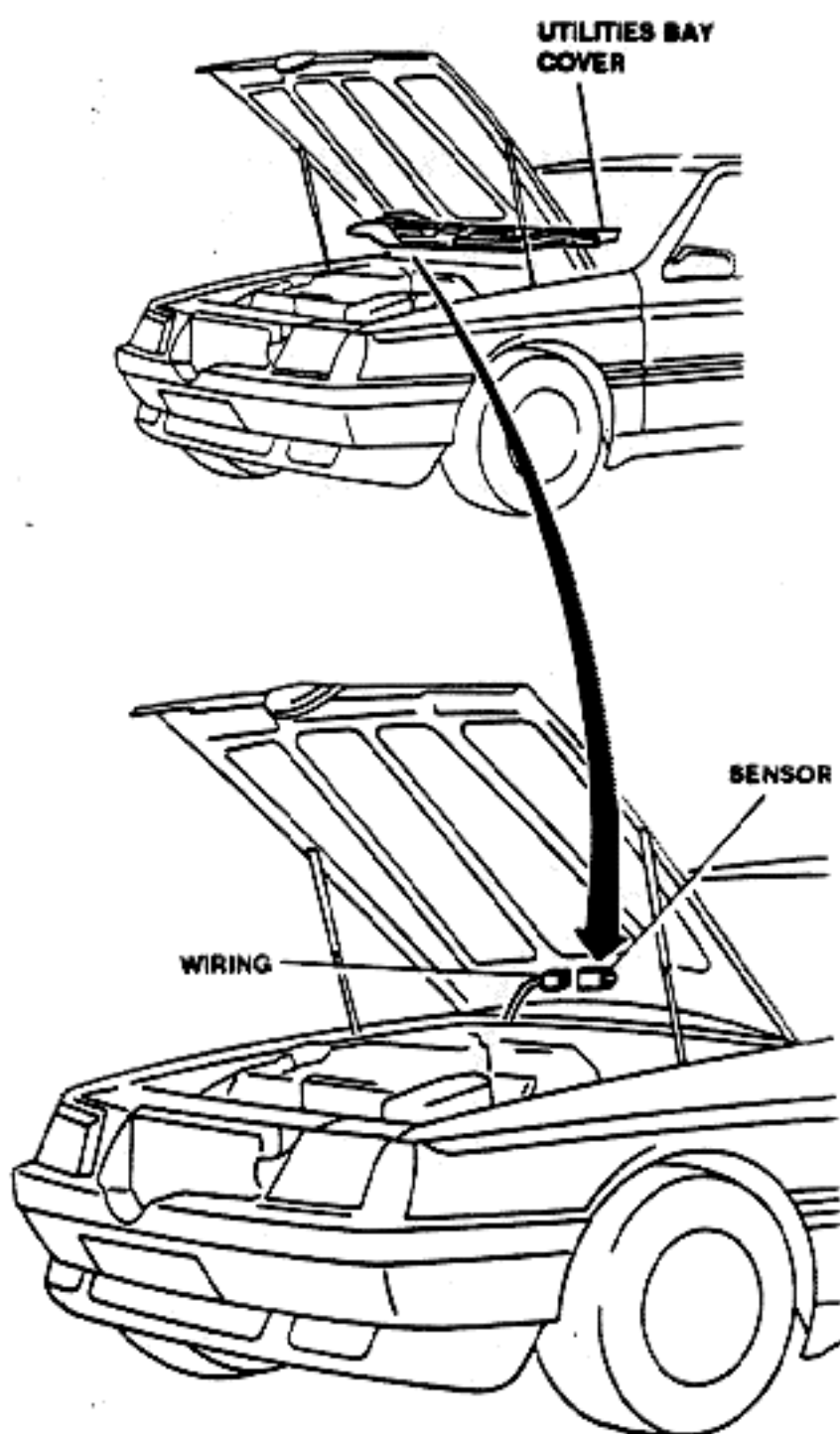
1. Manually remove protection finish, of center dome lamp, which protects sensor lock screw.
2. Loosen sensor lock screw.
3. Remove dome lamp, pressure installed, to gain access to sensor wiring.
4. Disconnect sensor wiring and remove it.





Outside air temperature sensor

5. Working in the engine compartment upon removal of services bay cover, manually disconnect sensor wiring.
6. Loosen two nuts securing sensor.
7. Remove sensor.

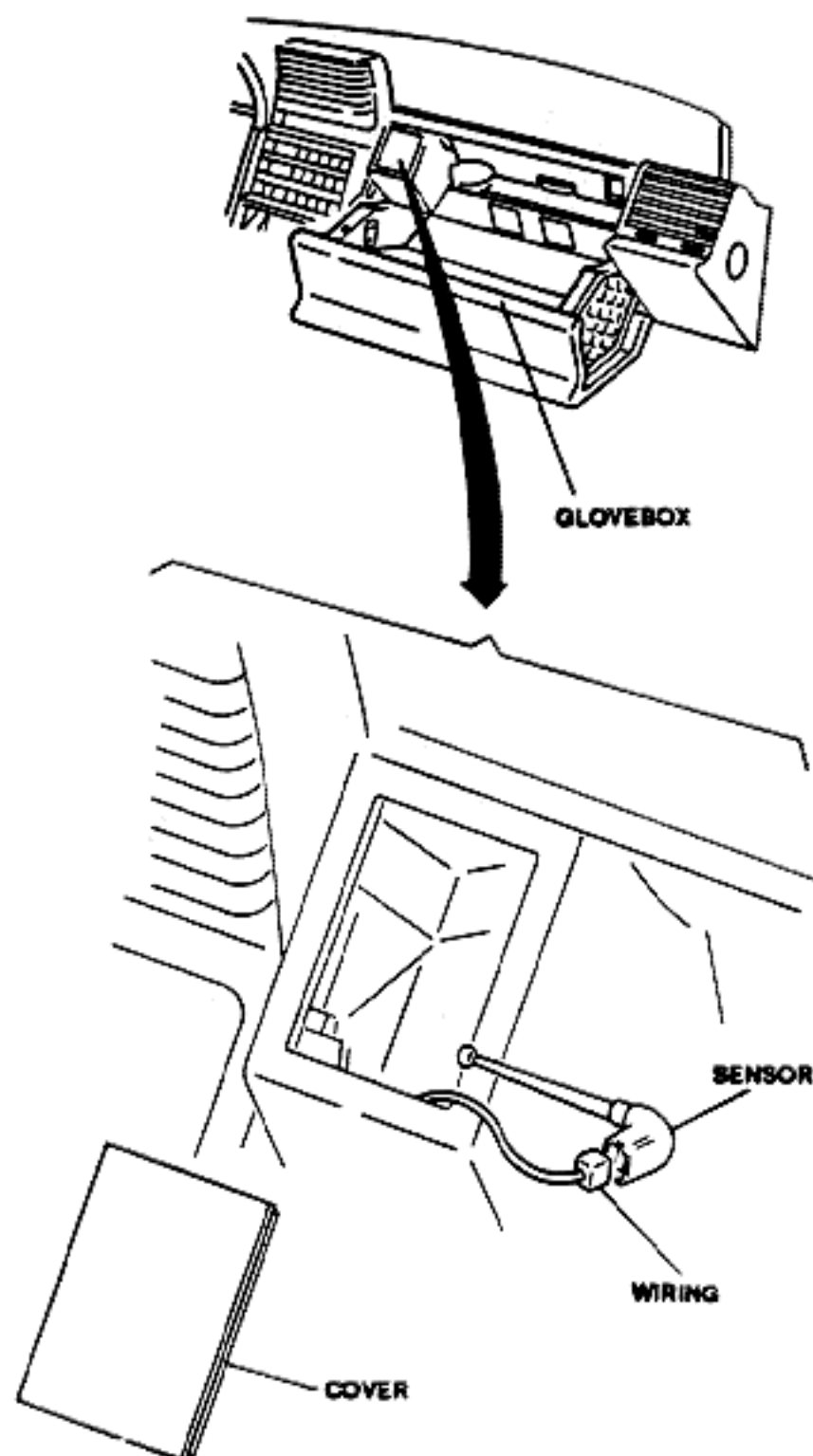


Mixed air temperature sensor

8. Open glovebox.
9. Manually open pance on left side of glovebox.
10. Manually remove sensor, pressure installed, working with a screwdriver.
11. Disconnect wiring.
12. Remove sensor.



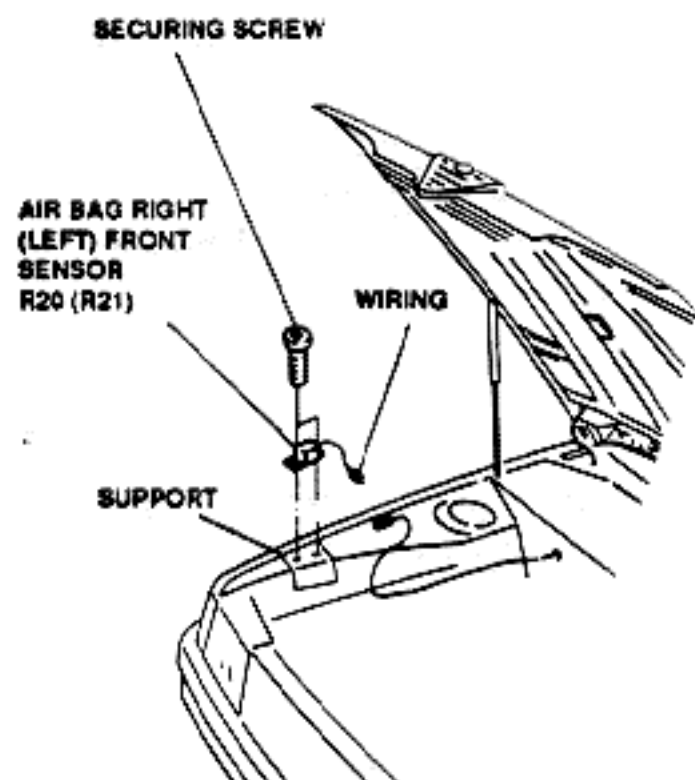
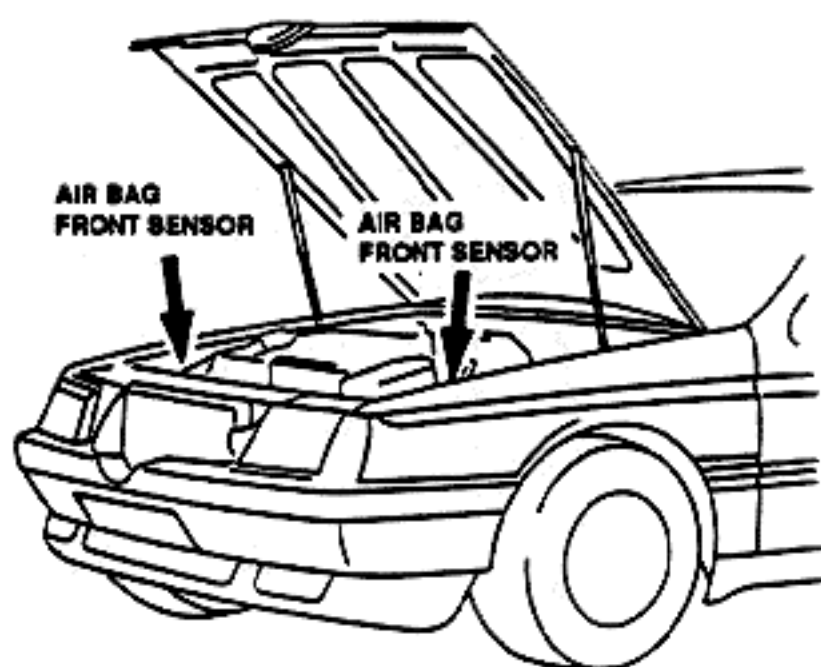
Install by reversing the order of removal.



AIR BAG FRONT SENSORS

1. Disconnect wiring.
2. Loosen two screws securing affected sensor.
3. Withdraw sensor from support.

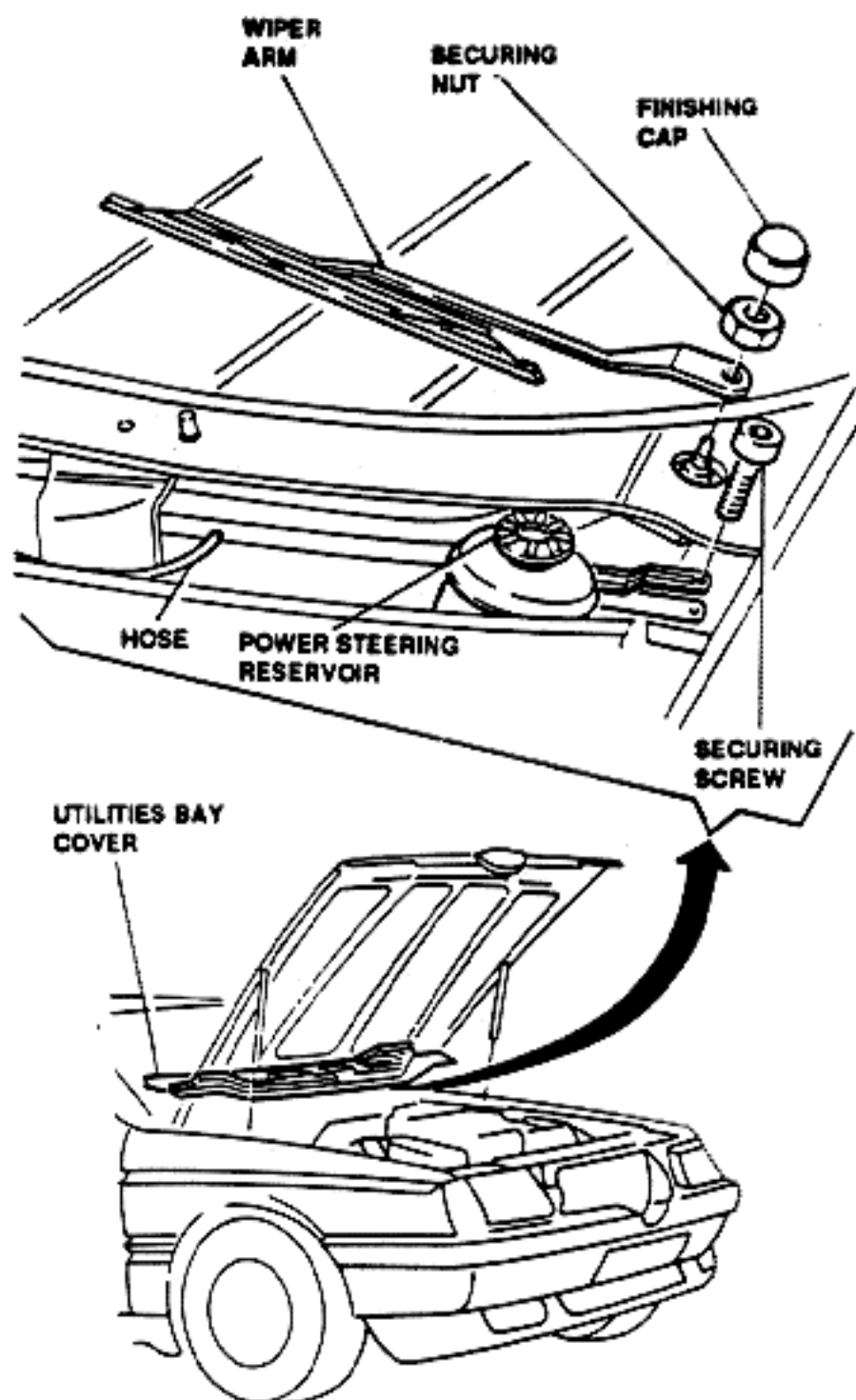
NOTE: Install by reversing the order of removal, ensuring that arrow labelled "FORWARDS" points toward vehicle front end.



WINDSHIELD WIPER ASSEMBLY

1. Remove utilities bay cover.
2. Manually remove finishing caps.
3. Loosen nuts securing wiper arms and remove them.

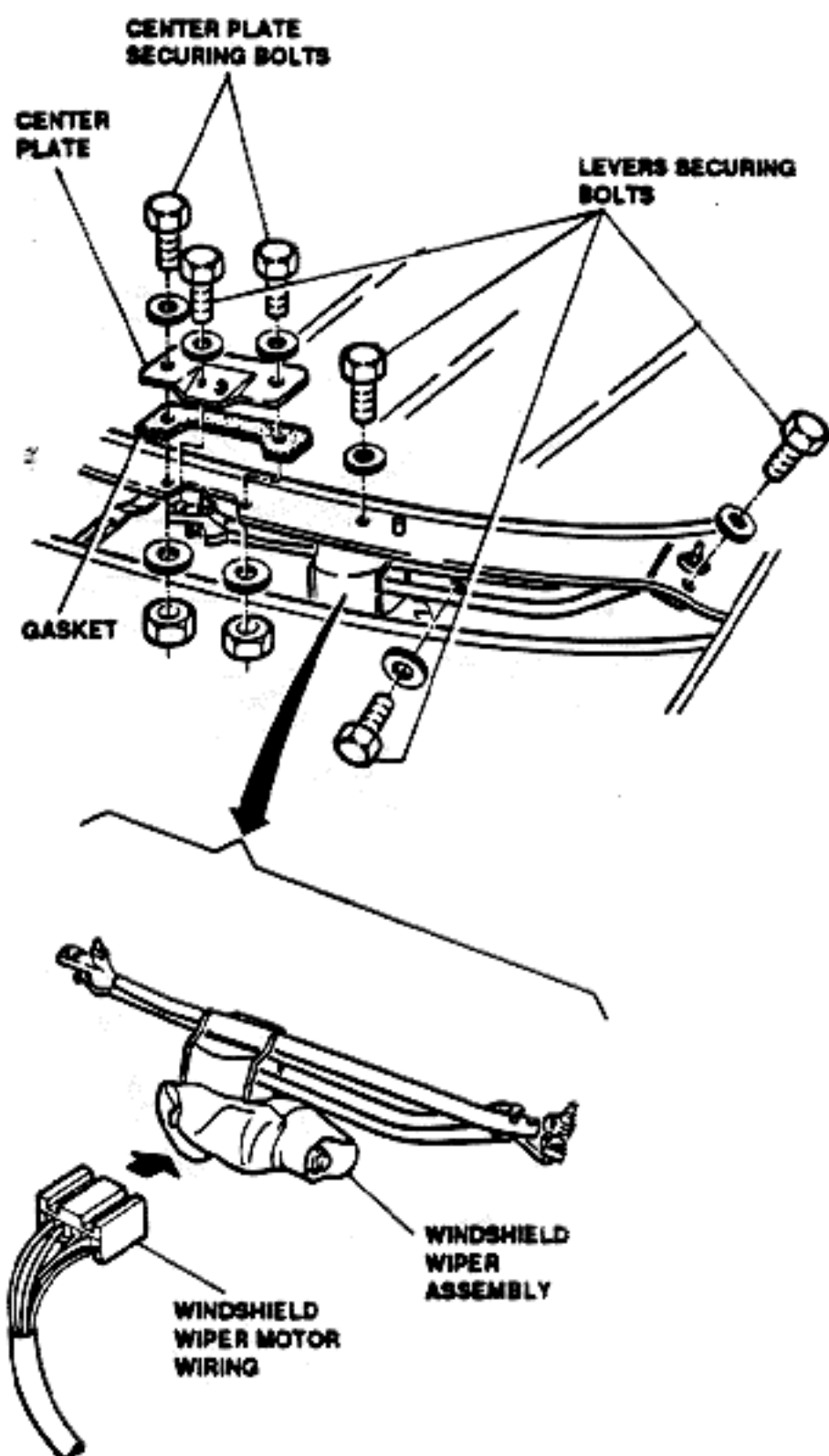
4. Manually disconnect hose for left windshield washer.
5. Loosen two screw securing power steering fluid reservoir as necessary to remove it from car body.



6. Loosen four bolts securing windshield wiper arms.
7. Loosen two screws securing center plate.
8. Remove center plate and related gasket.
9. Disconnect motor wiring.
10. Remove windshield wiper assembly.



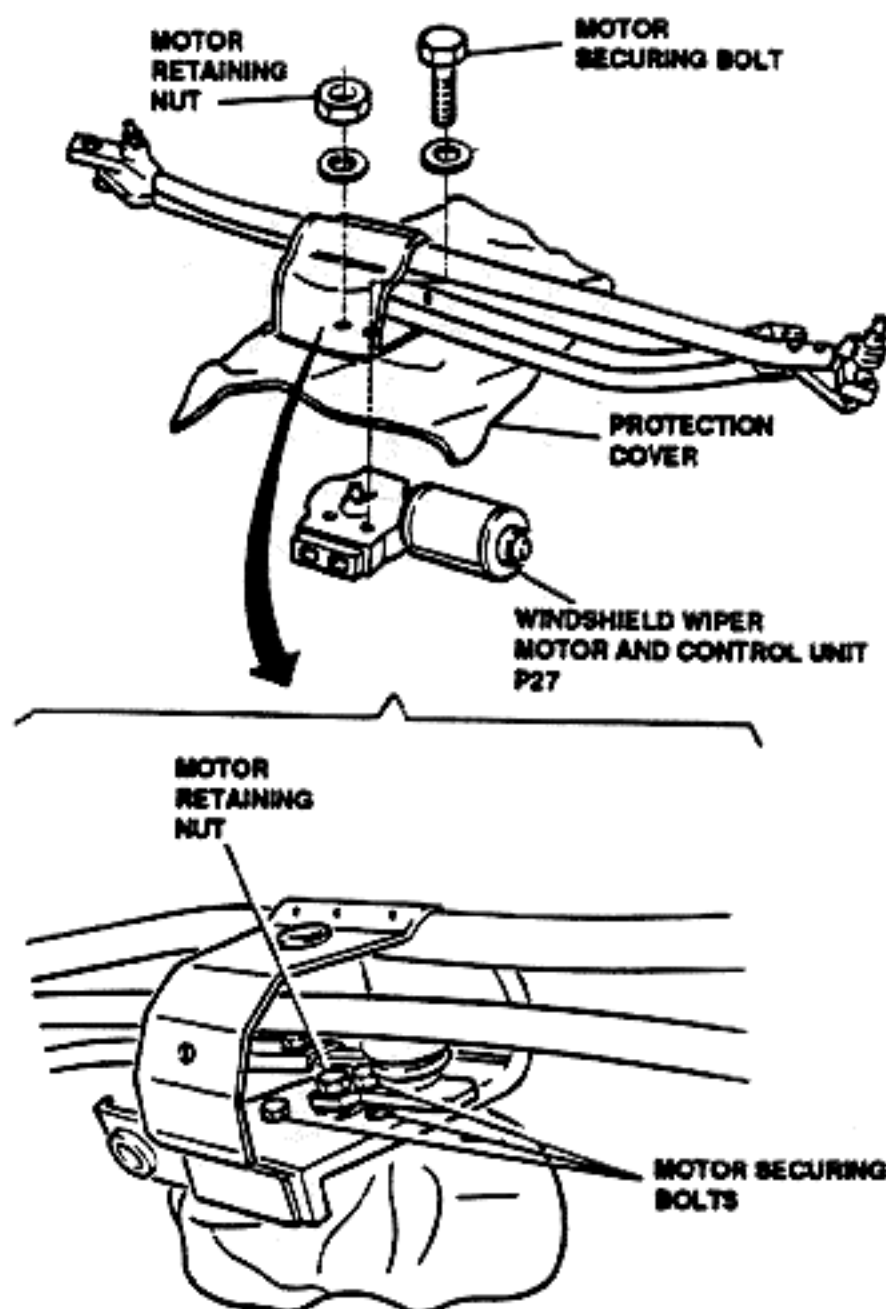
Install by reversing the order of removal.



WINDSHIELD WIPER MOTOR

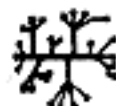
NOTE: In order to remove windshield wiper motors, first remove windshield wiper assembly as indicated in the previous paragraph.

1. Open protection cover.
2. Loosen motor retaining nut.
3. Loosen three bolts securing motor.
4. Remove motor.



WINDSHIELD WASHER FLUID TANK, PUMP AND HEADLAMPS WASHER FLUID LEVEL SENSOR AND PUMP

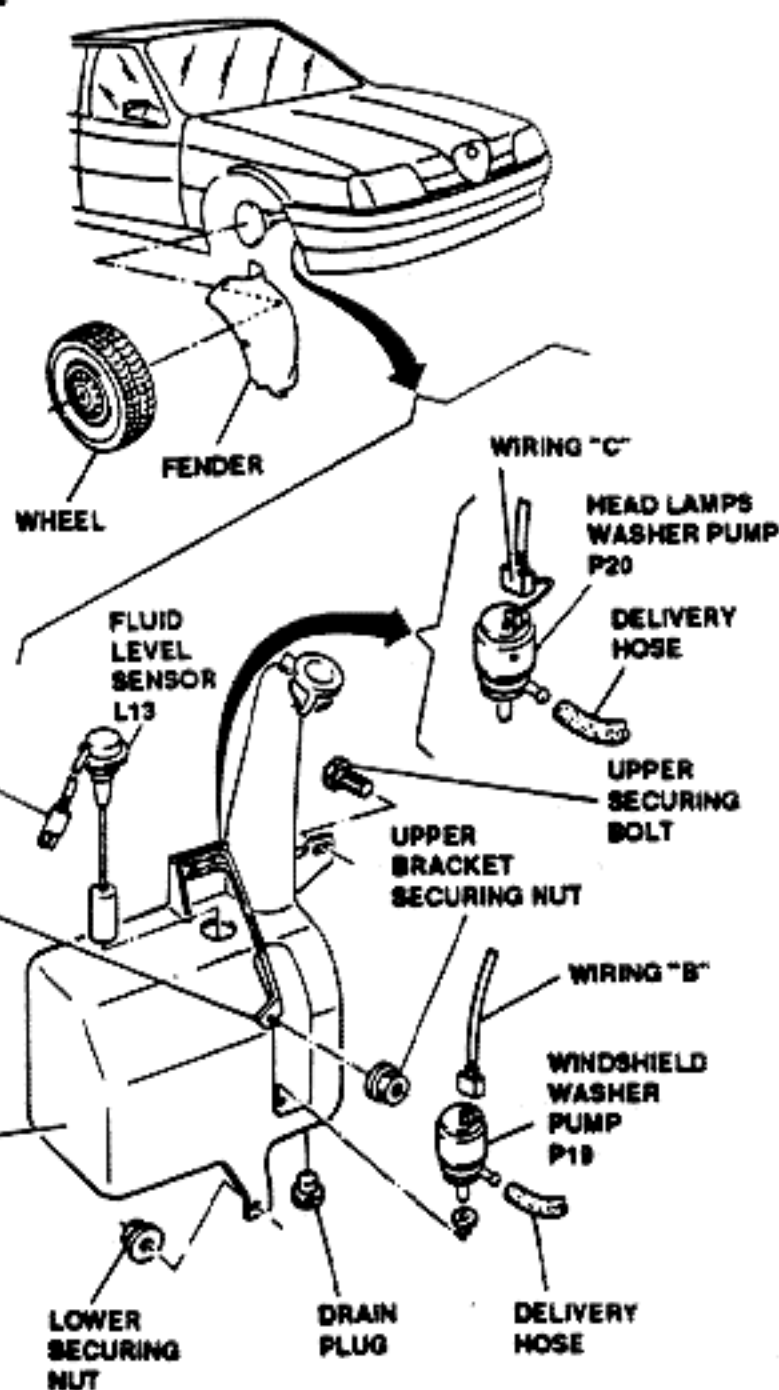
1. Place vehicle on auto.
2. Remove front right wheel and fender.
3. Manually remove drain plug and drain fluid, if any, from tank.
4. Disconnect level sensor wiring (A) and wiring of windshield washer pump (B) and of head lamps washer pump (C) located behind the tank.
5. Disconnect delivery hose from windshield washer and head lamp washer pumps.
6. Working from engine compartment, loosen nut securing upper retaining bracket.
7. Working from fender opening, loosen nut securing



- lower retaining bracket and loosen upper retaining bolt.
8. Remove windshield washer fluid tank.
9. If needed, manually remove windshield washer pump (pressure inserted).
10. If needed, manually remove fluid level sensor (pressure inserted).
11. If needed, manually remove headlamps washer pump (pressure inserted).



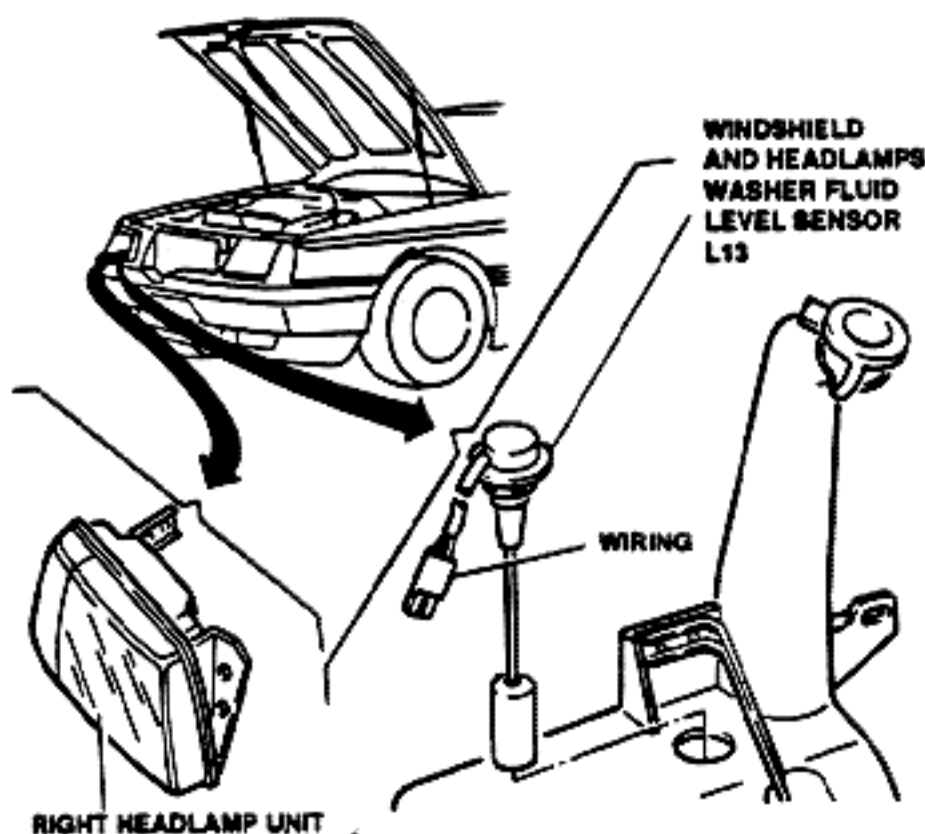
Install by reversing the order of removal.



WINDSHIELD AND HEADLAMPS WASHER FLUID LEVEL SENSOR

NOTE: The fluid level sensor may be removed without removing fluid tank as previously indicated in paragraph.

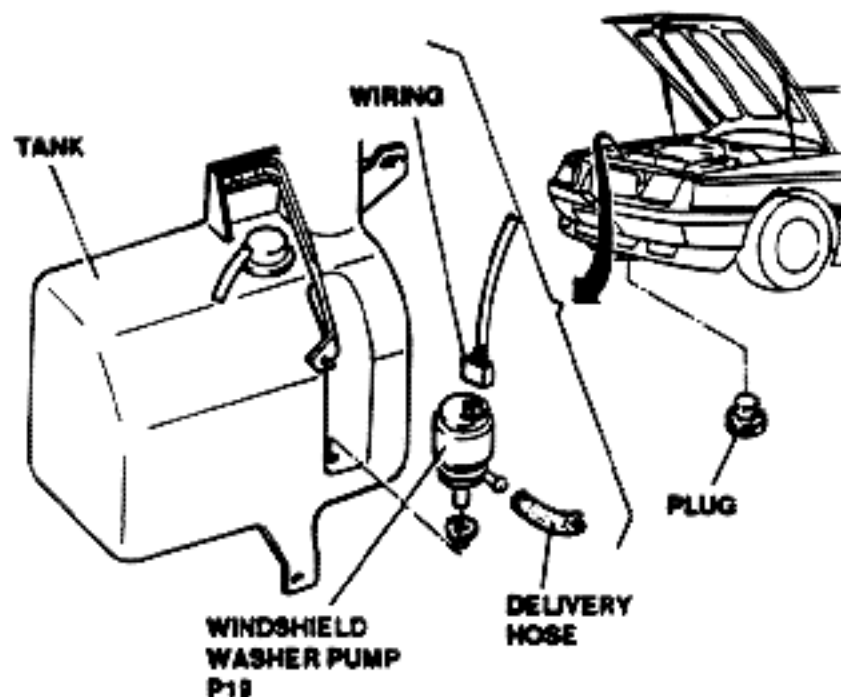
1. Remove right headlamp unit.
2. Working through headlamp unit seating, disconnect sensor wiring.
3. Manually remove pressure inserted sensor from tank.

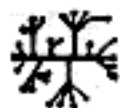


WINDSHIELD WASHER PUMP

NOTE: The pump may be removed without removing fluid tank.

1. Remove right headlamp unit.
2. Remove drain plug on the tank and drain fluid.
3. Working through hole on fender, disconnect pump wiring.
4. Disconnect delivery hose from pump.
5. Manually remove pump pressure inserted on tank.

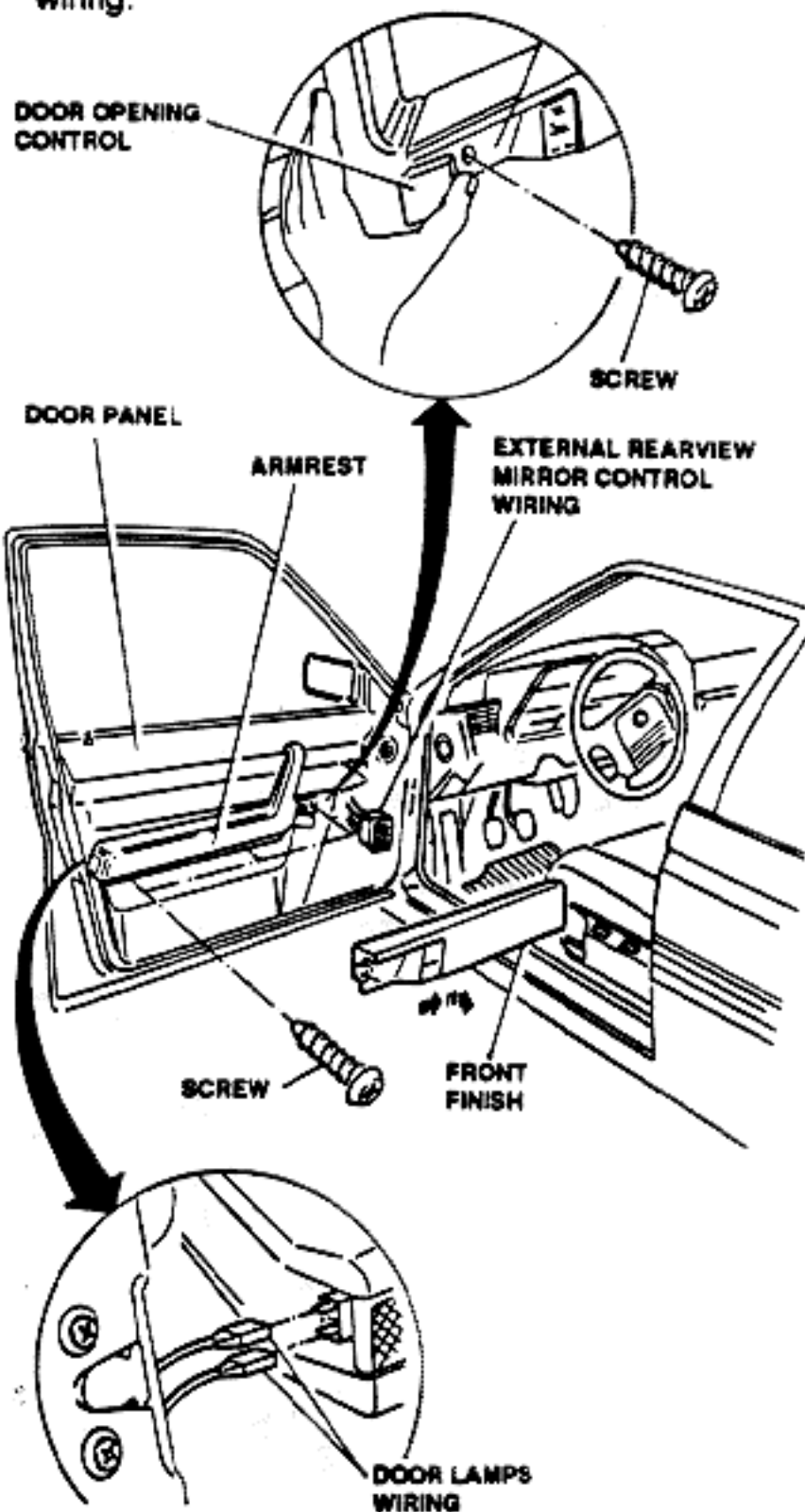




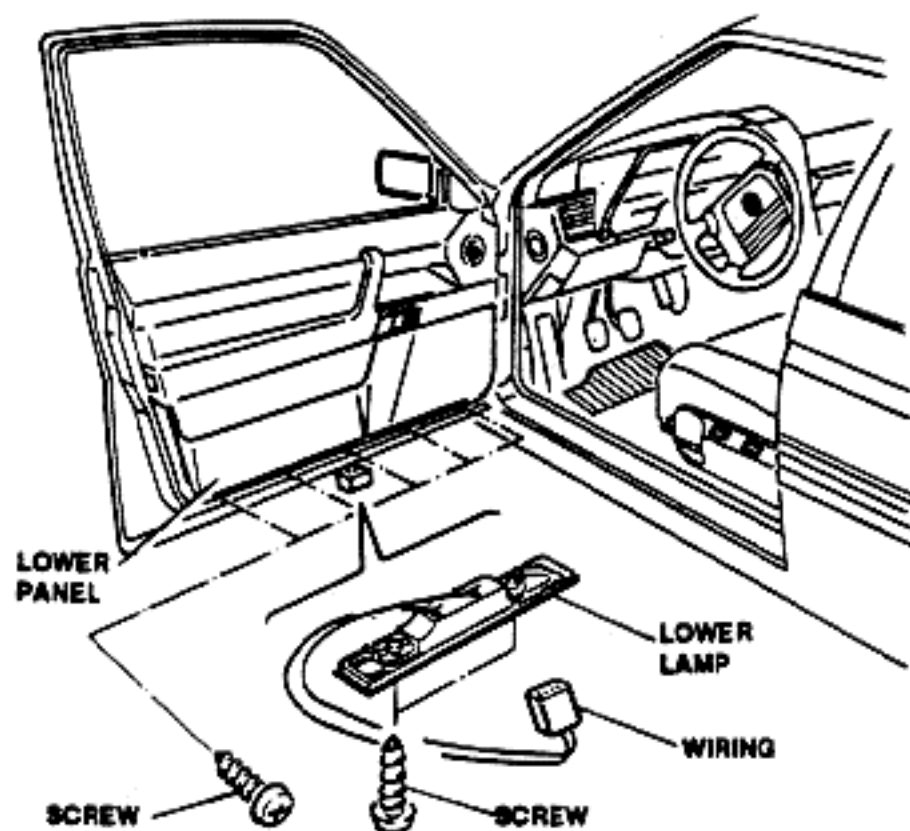
FRONT DOORS POWER WINDOW LIFT

NOTE: Lower window completely before starting any removal operation.

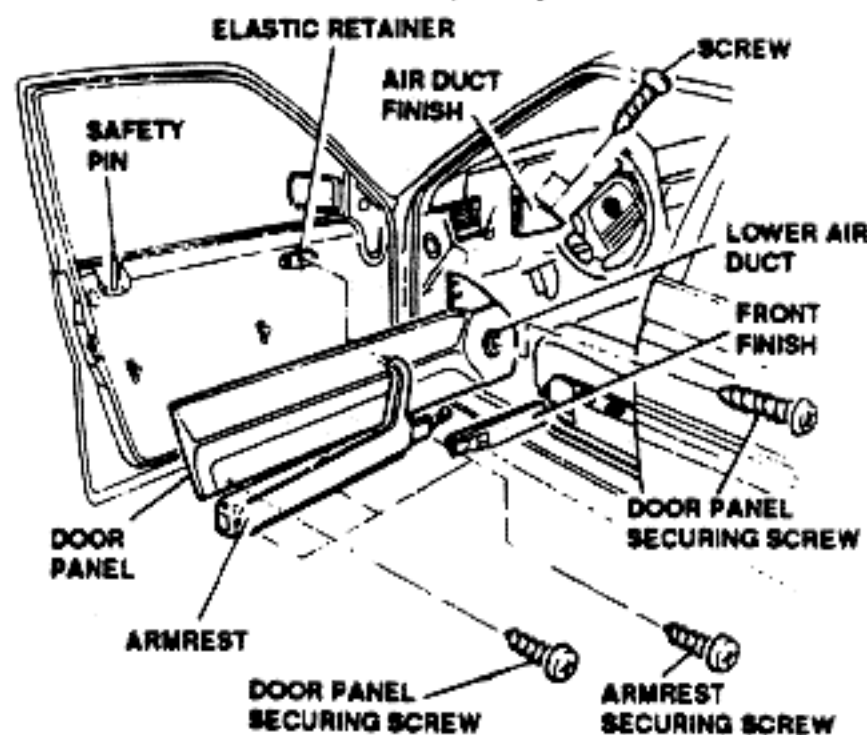
1. Loosen screw located below door opening control.
2. Slide forward front finish till it becomes free from rear retaining plastic pin.
3. Remove front finish.
4. Disconnect external rearview mirror wiring.
5. Remove three screws securing armrest.
6. Move backward armrest and disconnect door lamps wiring.



7. Loosen two screws securing ground illumination lamp.
8. Withdraw lamp and disconnect related wiring.
9. Remove lamp.
10. Loosen five screws securing lower panel.
11. Remove lower panel.



12. Loosen screw securing air ducts finish.
13. Remove air ducts finish.
14. Loosen aft screw securing door panel.
15. Loosen front screw located inside air duct, and securing door panel.
16. Lift armrest and door panel sliding it from elastic retainer and from safety pin.
17. Remove door panel completely.

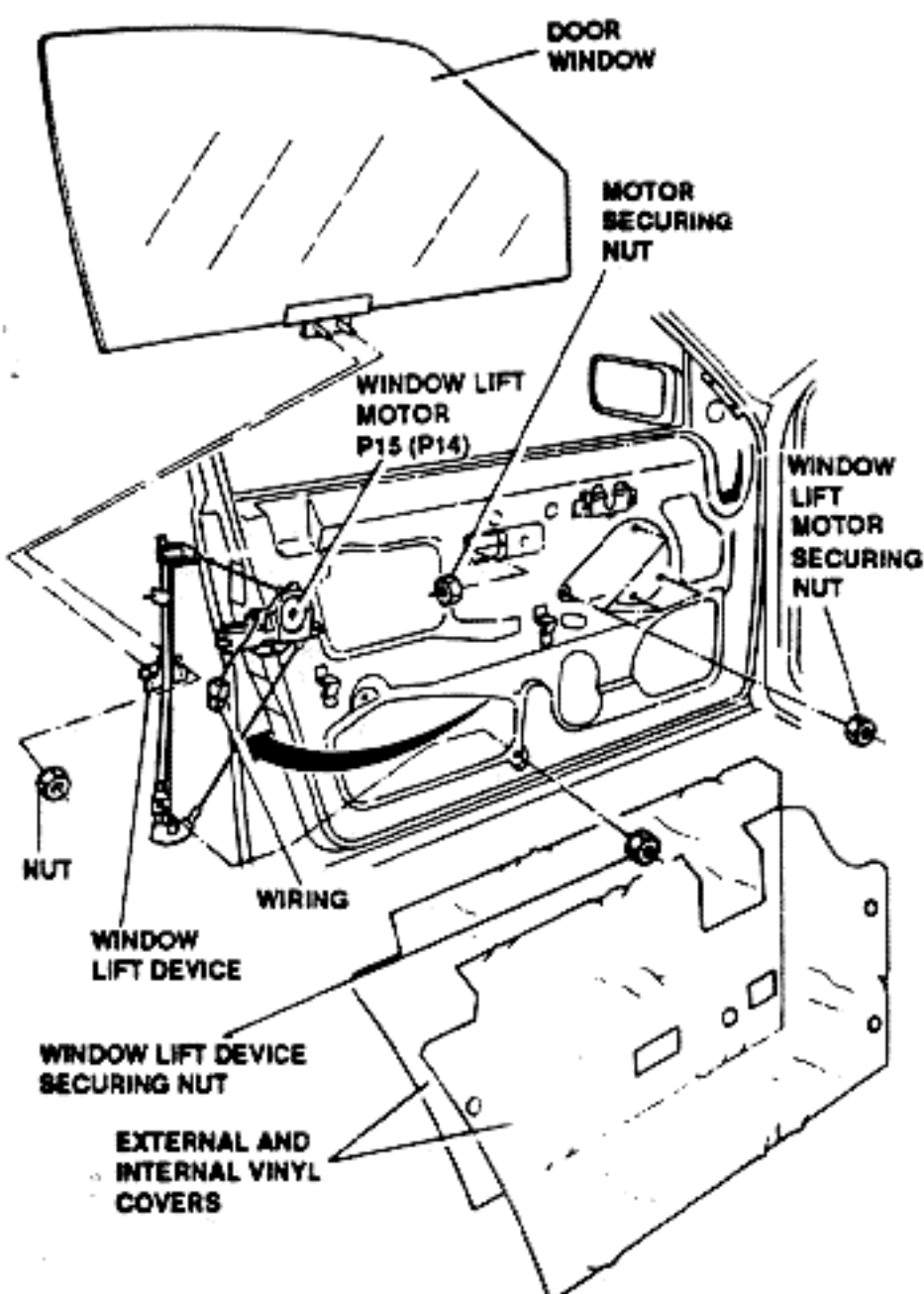




18. Remove internal and external vinyl protections.
19. Remove door window.
20. Disconnect lift motor wiring.
21. Loosen and remove five bolts securing window lift.
22. Loosen and remove lower nut locking window lift assembly.
23. Slide window lift assembly together with motor from door and gain access to motor.



Install by reversing the order of removal.

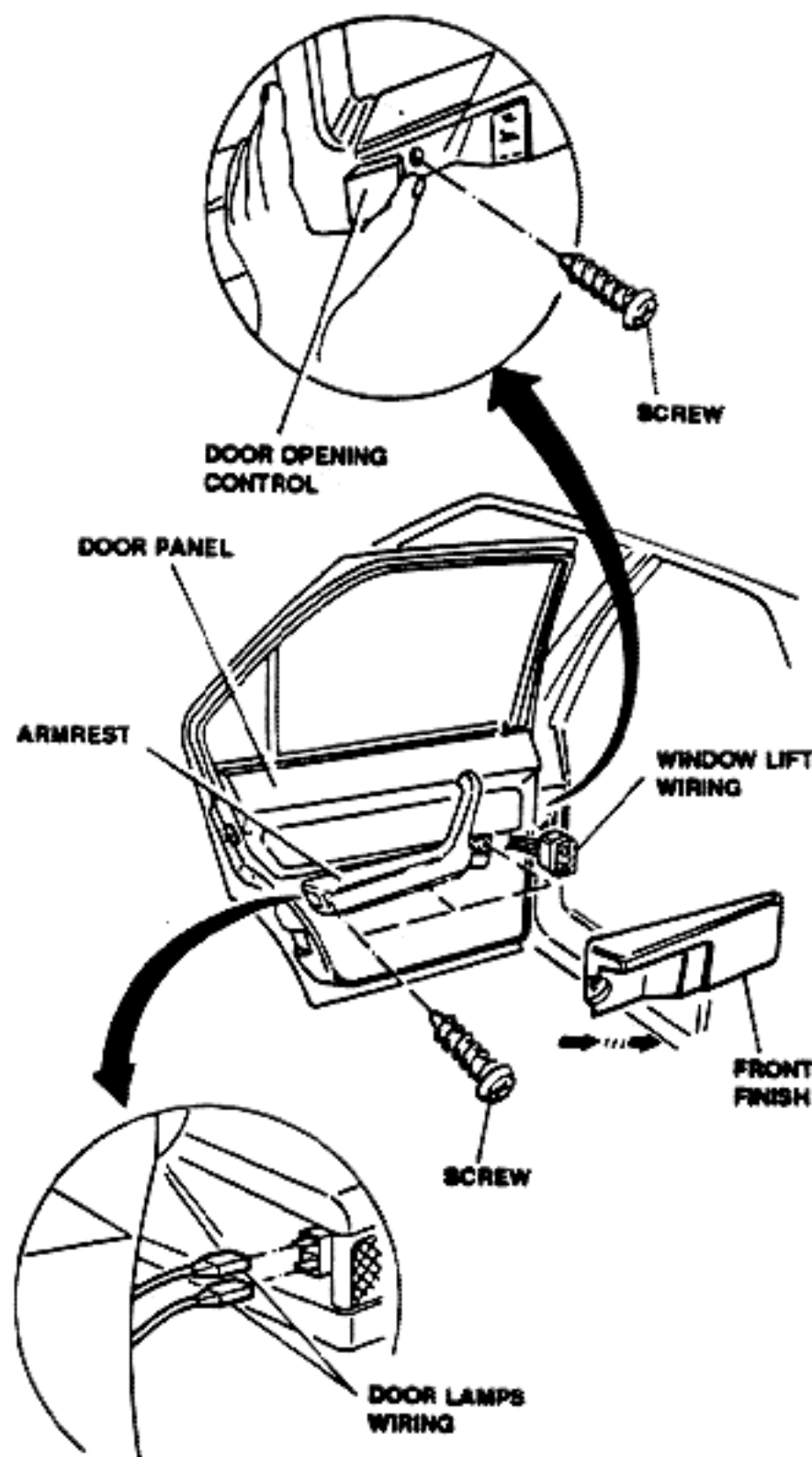


REAR DOORS ELECTRIC WINDOW LIFT

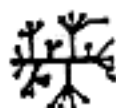
NOTE: Lower window completely before starting any removal operation.

1. Loosen screw located below door opening control.

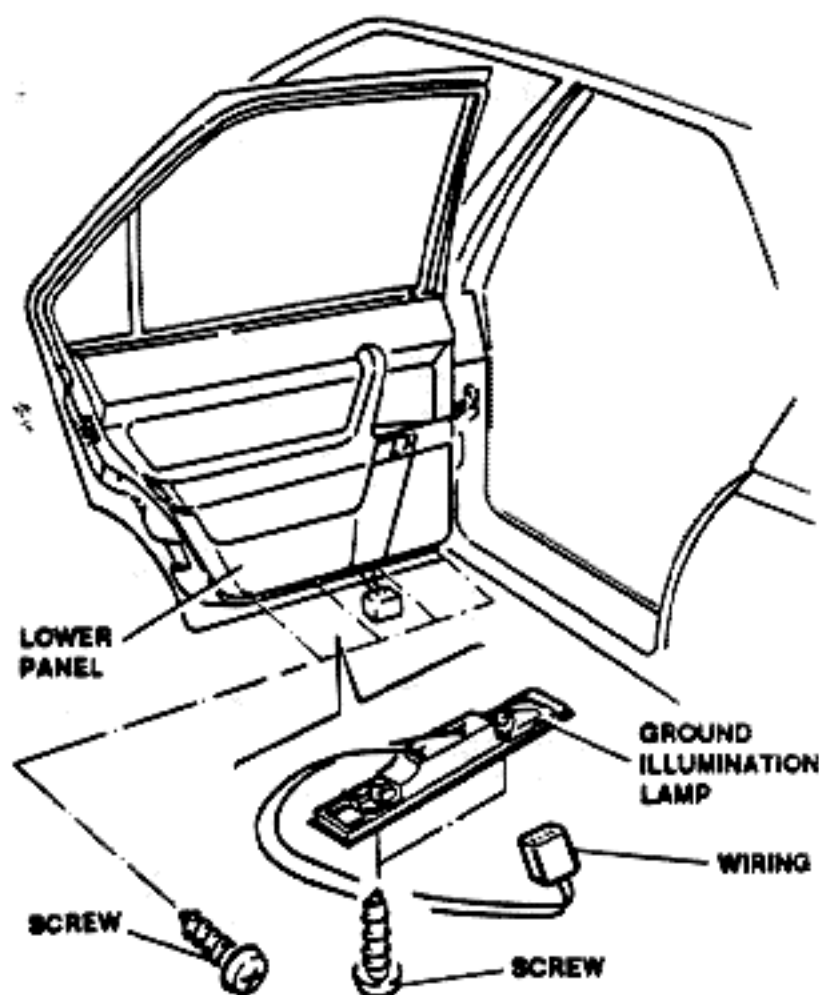
2. Slide forward front finish till it becomes free from rear retaining plastic pin.
3. Remove front finish.
4. Disconnect window lift wiring.
5. Remove three screws securing armrest.
6. Move backward armrest and disconnect door lamps wiring.



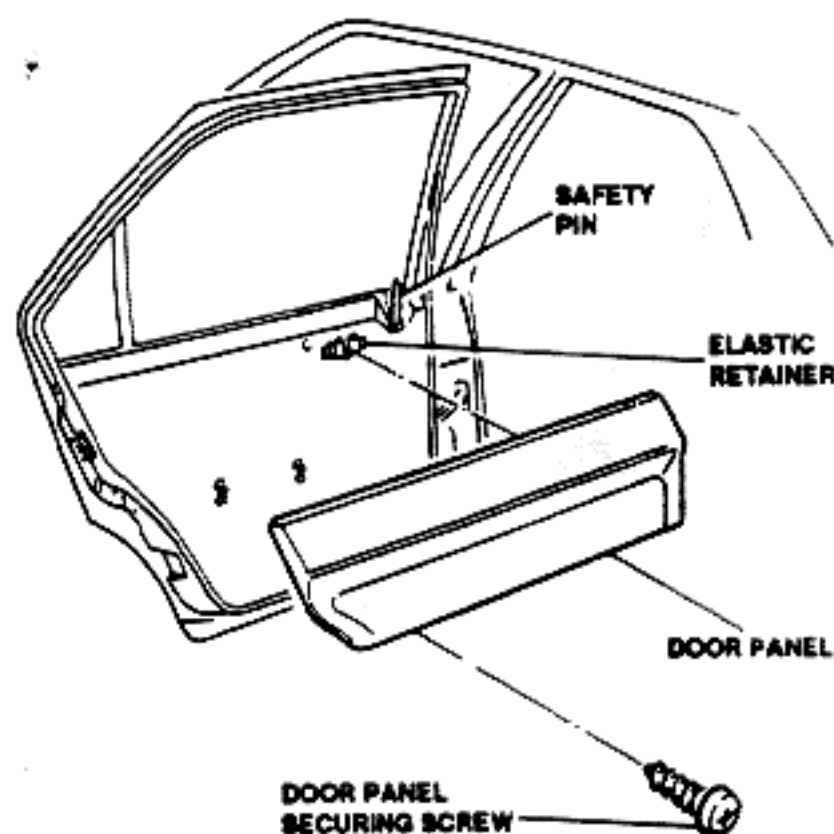
7. Loosen two screws securing ground illumination lamp.
8. Withdraw lamp and disconnect related wiring.



9. Loosen four screws securing lower panel.
10. Remove lower panel.



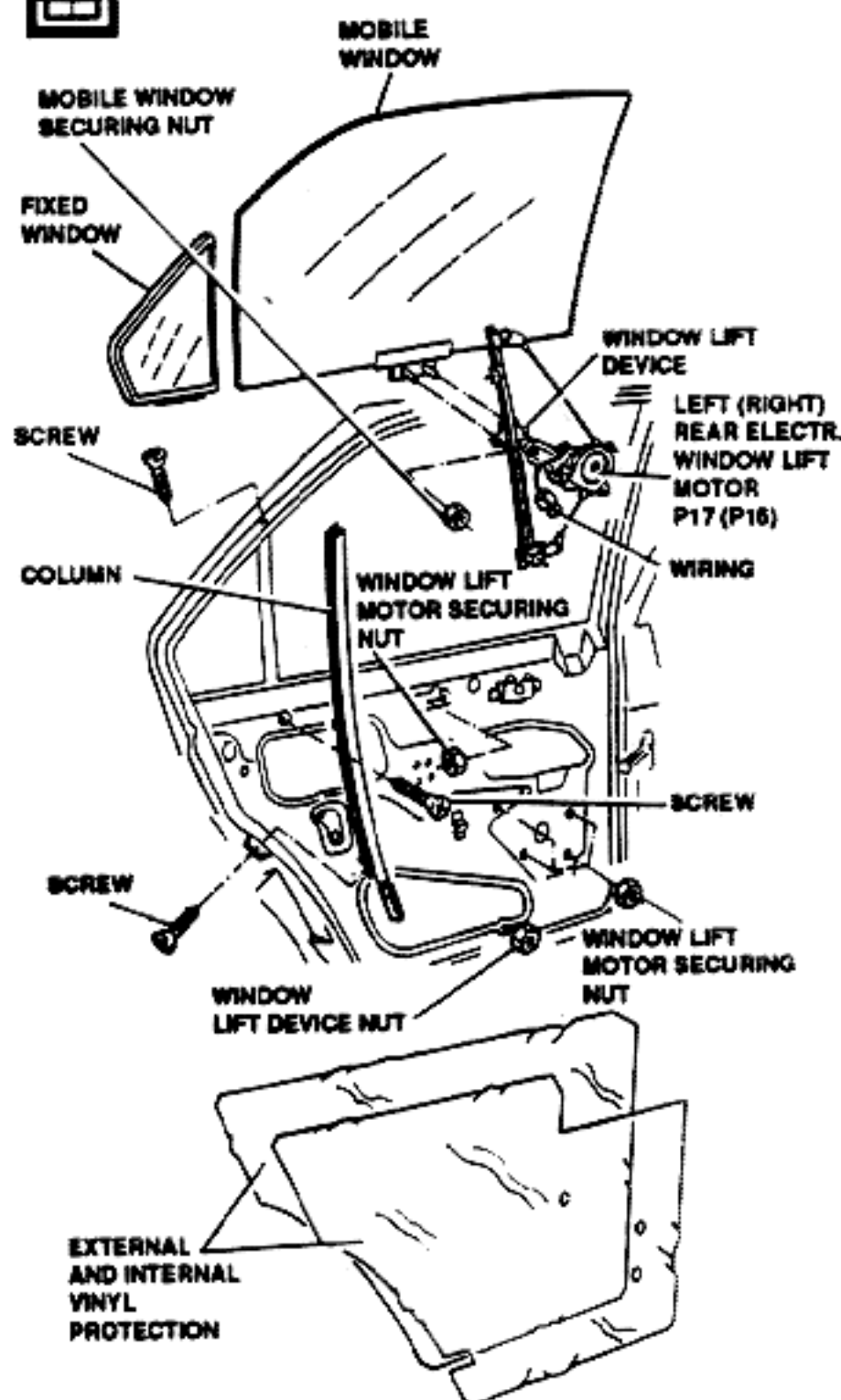
11. Loosen screw securing door panel.
12. Remove door panel withdrawing it from elastic retainer and from safety pin.



13. Remove internal and external vinyl protections.
14. Loosen three screws securing column.
15. Slide off column together with related gasket for mobile window.
16. Remove fixed window.
17. Remove mobile window (see Group 55).
18. Disconnect window lift motor wiring.
19. Loosen and remove five bolts securing window lift.
20. Loosen and remove lower nut locking window lift assembly.
21. Slide window lift assembly together with motor from door and gain access to motor.



Install by reversing the order of removal.

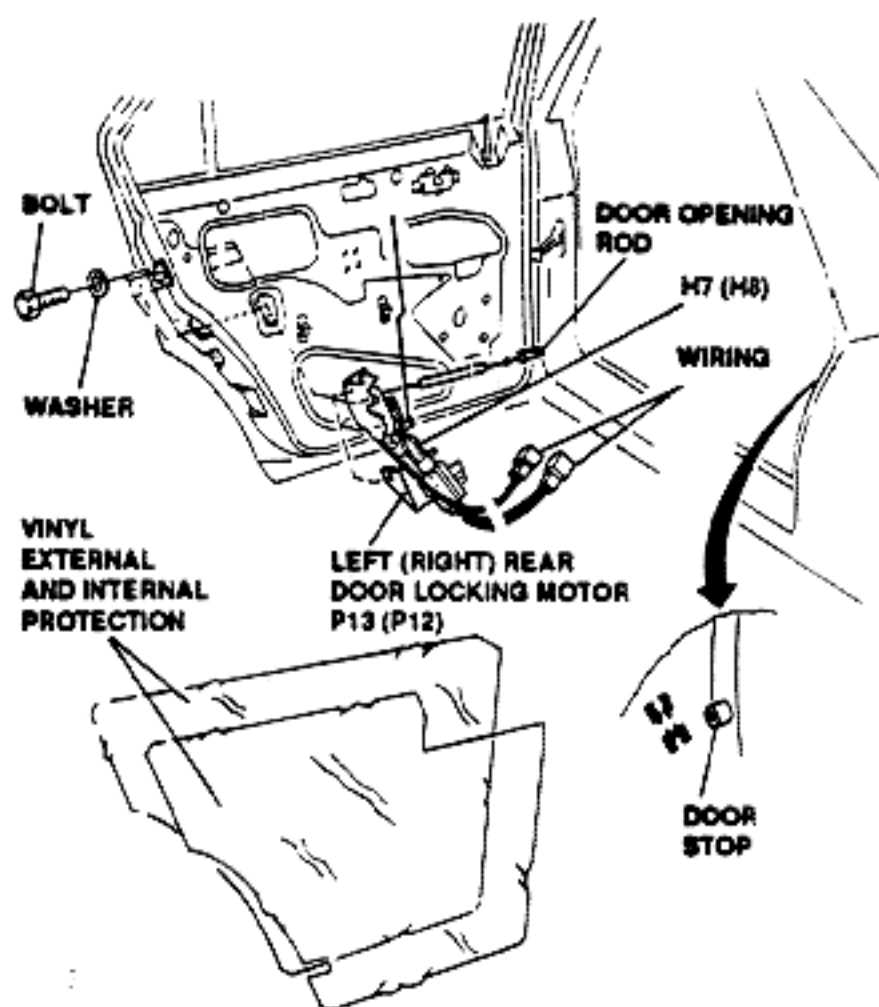




REAR DOORS LOCKING MOTOR

NOTE: To remove rear doors lock, first remove front trim, lower panel, door panel and armrest as indicated in paragraph.

1. Remove internal and external vinyl protections.
2. Disconnect door opening rod end from door attachment.
3. Disconnect lock assembly wiring.
4. Loosen four bolts securing lock assembly and remove them.
5. Slide downward lock assembly and remove it.



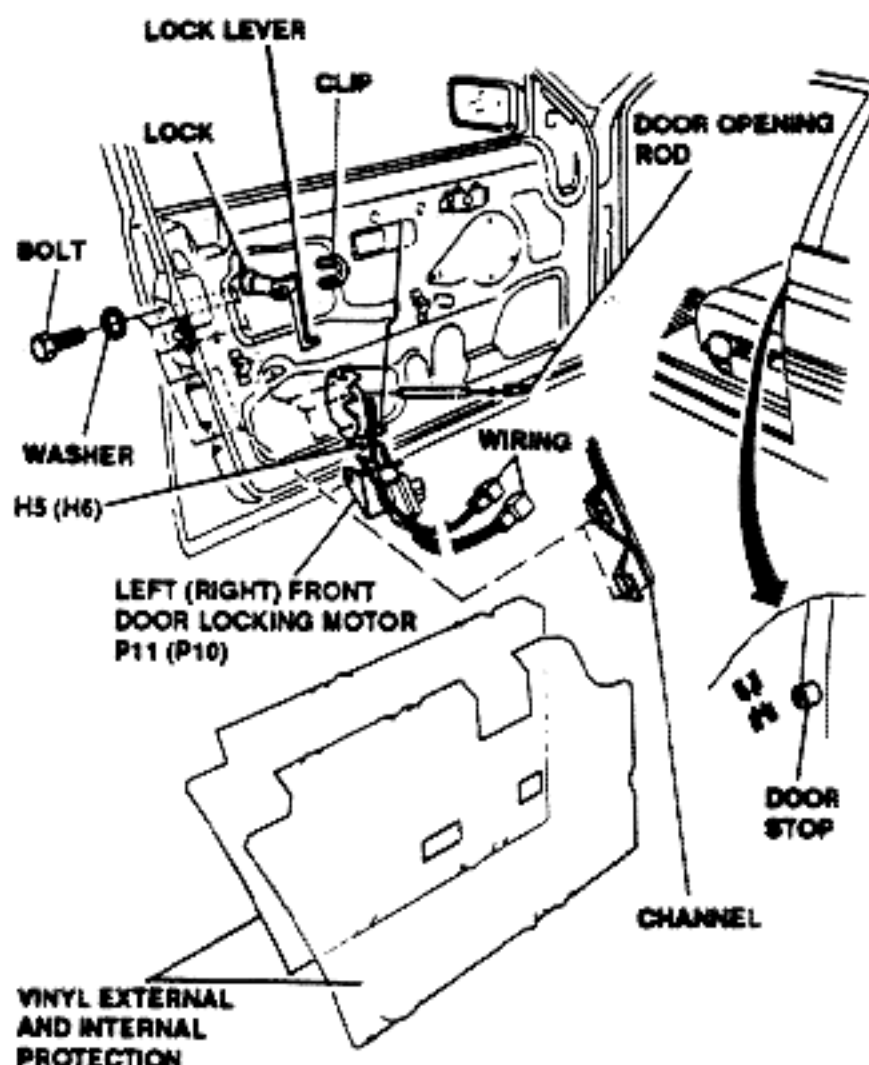
FRONT DOORS LOCKING MOTOR

NOTE: To remove front doors lock, first remove front trim, lower panel, door panel and armrest as indicated in paragraph : "FRONT DOORS POWER WINDOW LIFT"

1. Remove internal and external vinyl protections.
2. Slide off spring, securing door lock lever, from lock assembly.
3. Disconnect door opening rod end from door attachment.
4. Disconnect lock assembly wiring.
5. Loosen five bolts securing lock assembly and remove them.
6. Remove channel.
7. Slide downward lock assembly and remove it.



Install by reversing the order of removal.

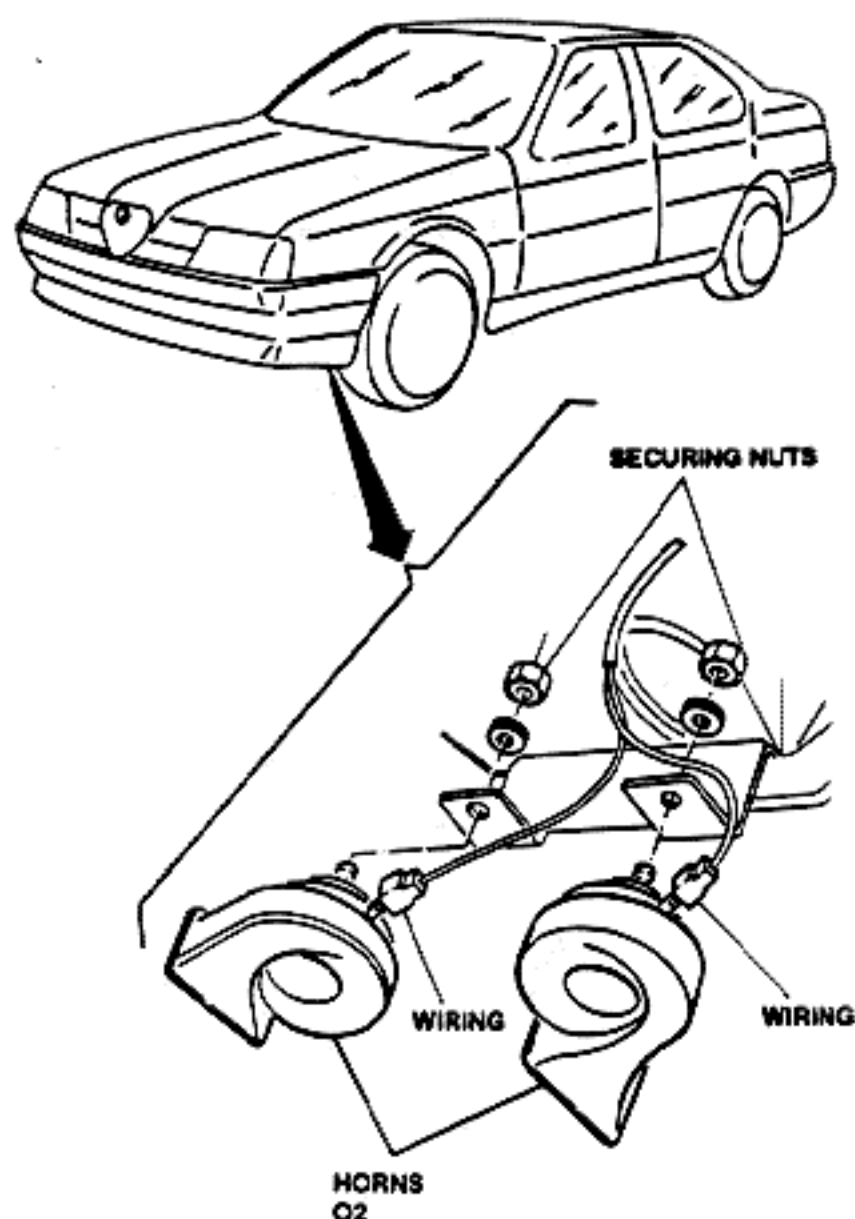


HORNS

NOTE: To carry-out this operation it is advisable to place vehicle on an auto lift.



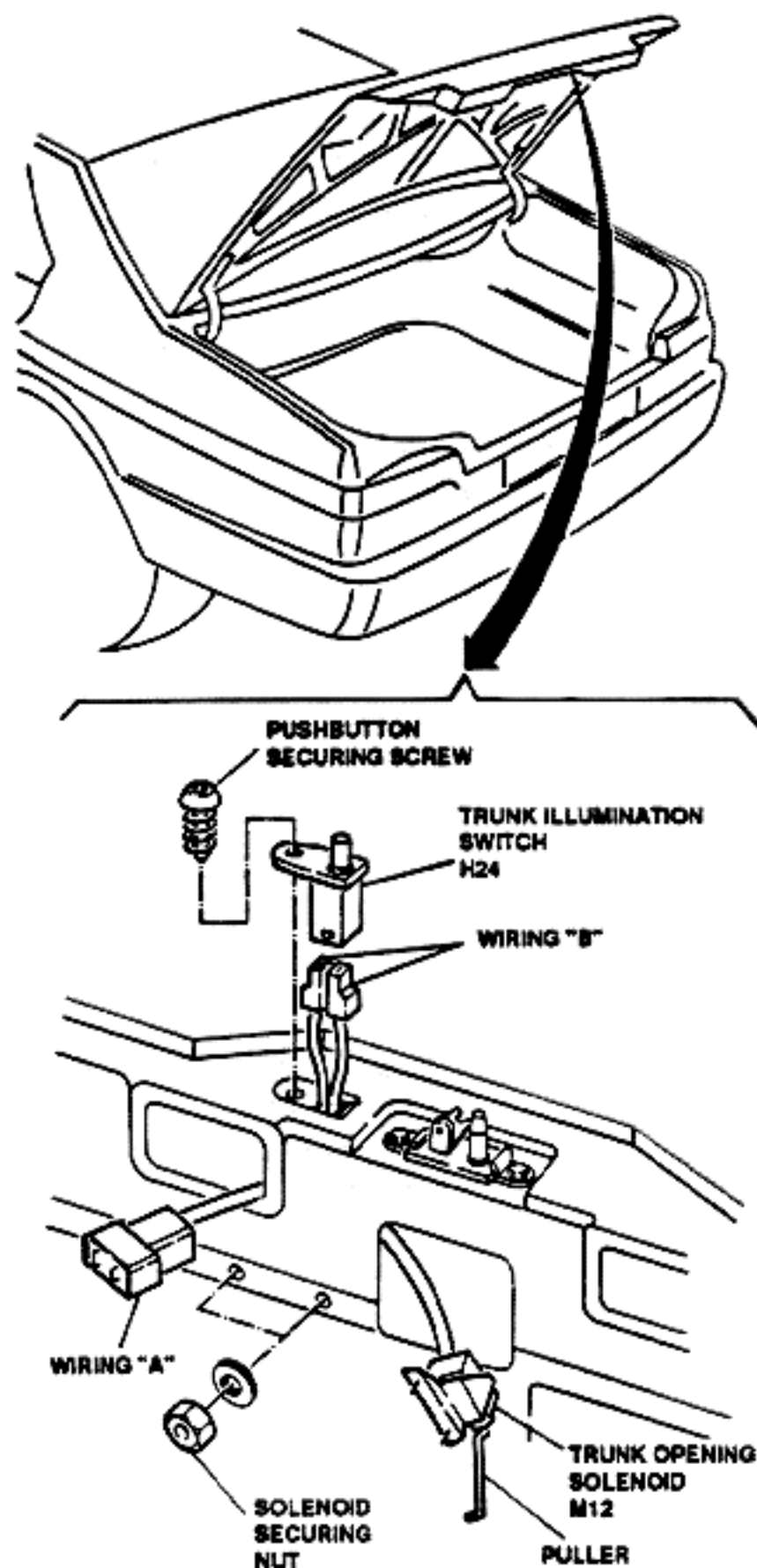
1. Disconnect horns wiring.
2. Loosen nuts securing horns and remove them.



TRUNK OPENING SOLENOID AND TRUNK ILLUMINATION SWITCH

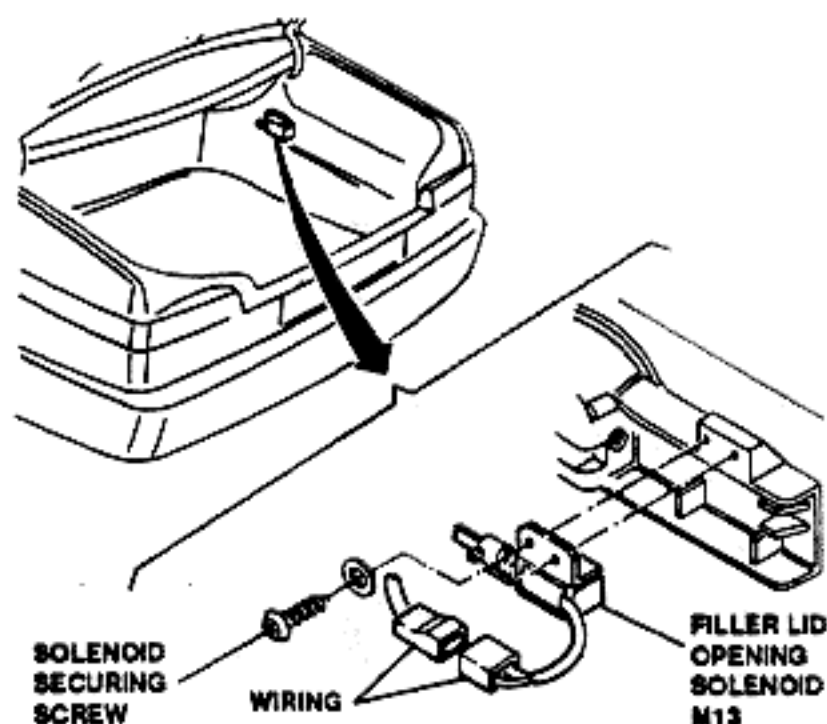
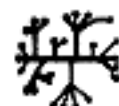
1. Remove trunk lid trim.
2. Loosen two nuts securing trunk opening solenoid.
3. Disconnect bracket securing solenoid.
4. Disconnect wiring (A).
5. Remove solenoid.
6. Loosen screw securing trunk illumination switch.
7. Remove wiring (B).

8. Remove illumination switch.



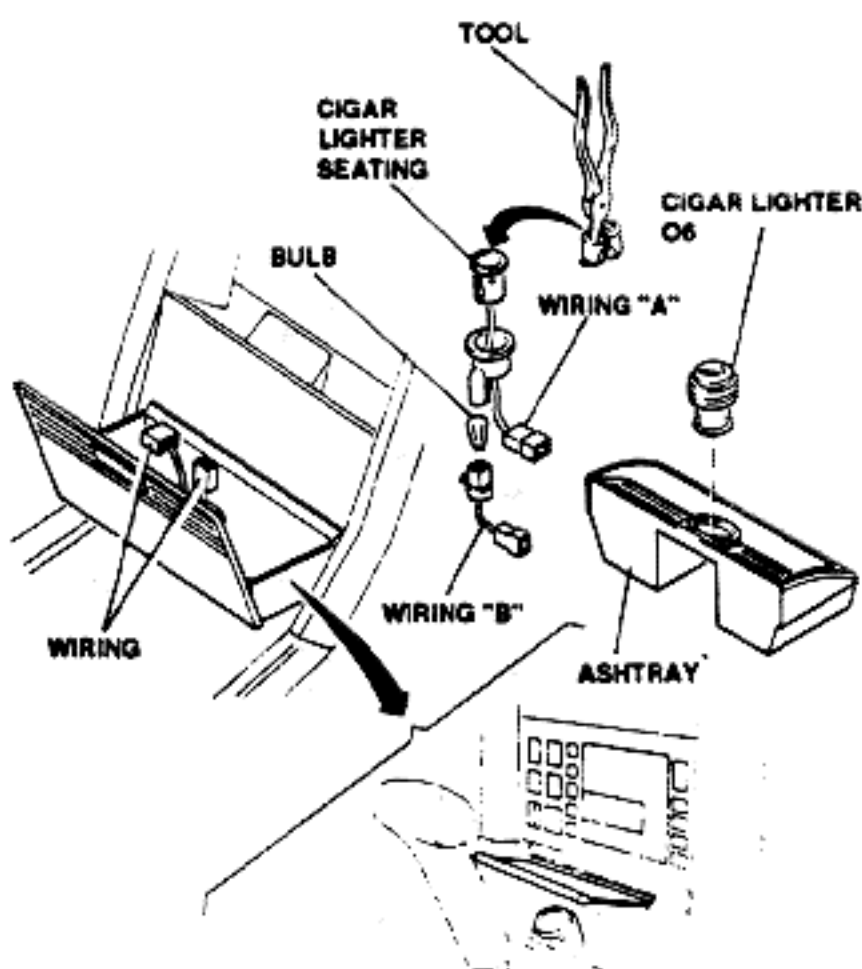
FILLER LID OPENING SOLENOID

1. Remove trunk side trim.
2. Disconnect wiring.
3. Loosen two screws securing fuel filler lid opening solenoid and remove it.



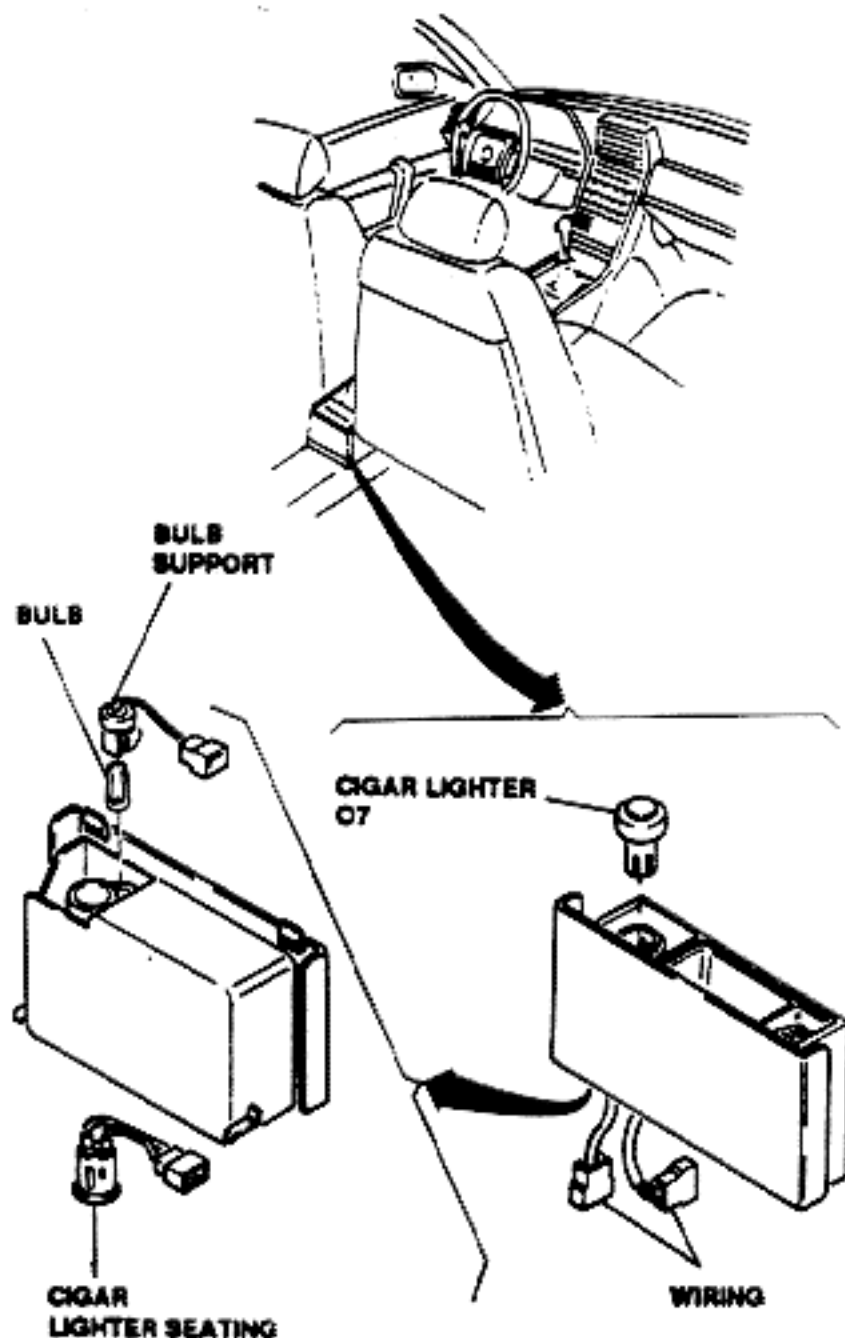
FRONT CIGAR LIGHTER AND ILLUMINATION LAMP

1. Open ashtray.
2. Remove cigar lighter and ashtray.
3. Using an appropriate tool rotate and withdraw cigar lighter.
4. Disconnect wiring (A).
5. Remove complete cigar lighter.
6. Disconnect wiring (B).
7. Manually withdraw lamp holder and bulb.



REAR CIGAR LIGHTER AND ILLUMINATION LAMP

1. Open and remove ashtray.
2. Disconnect wirings.
3. Manually withdraw cigar lighter.
4. Manually withdraw lamp holder.
5. Withdraw lamp.
6. Remove cigar lighter seat.



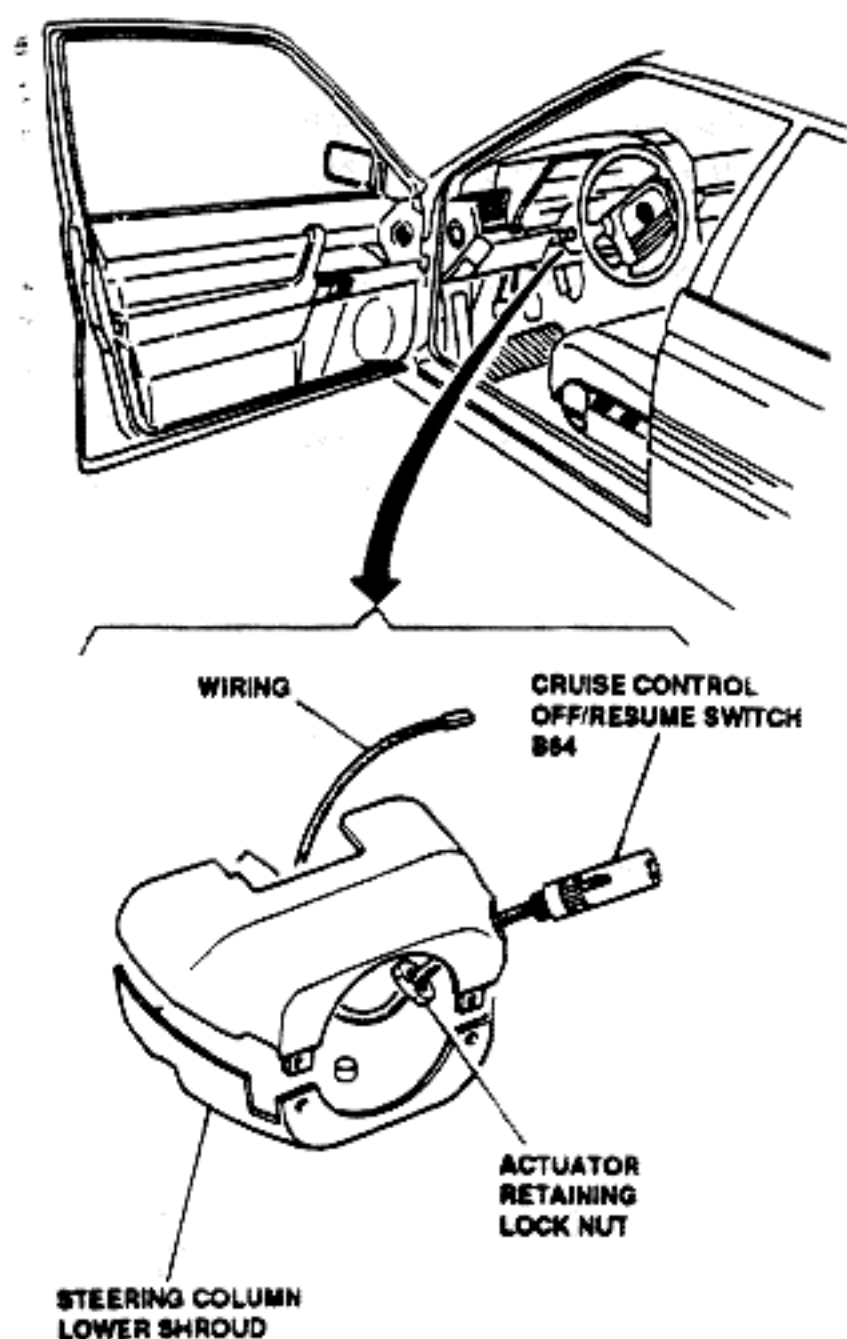
CRUISE CONTROL OFF/RESUME SWITCH

NOTE: To gain access to the off/resume switch first remove steering column shrouds (see Group 23).

1. Working from steering column lower shroud, loosen lever nut.



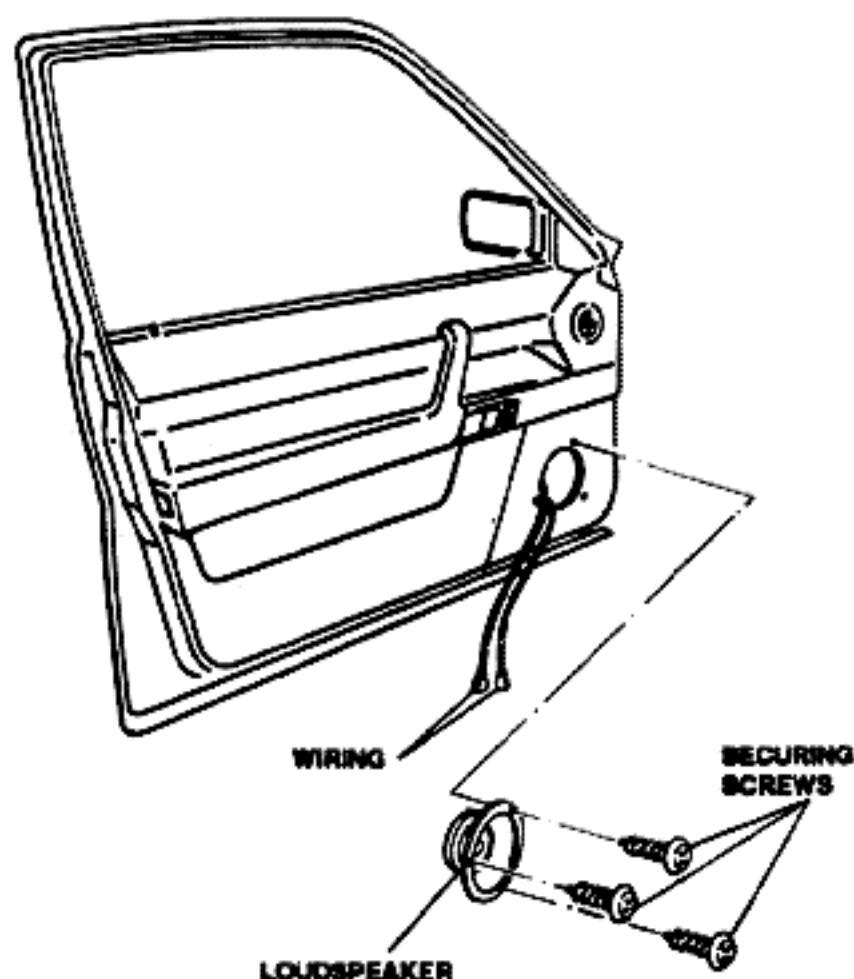
2. Manually withdraw lever from lower shroud.
3. Disconnect wiring and withdraw off/resume switch.



FRONT LOUDSPEAKERS

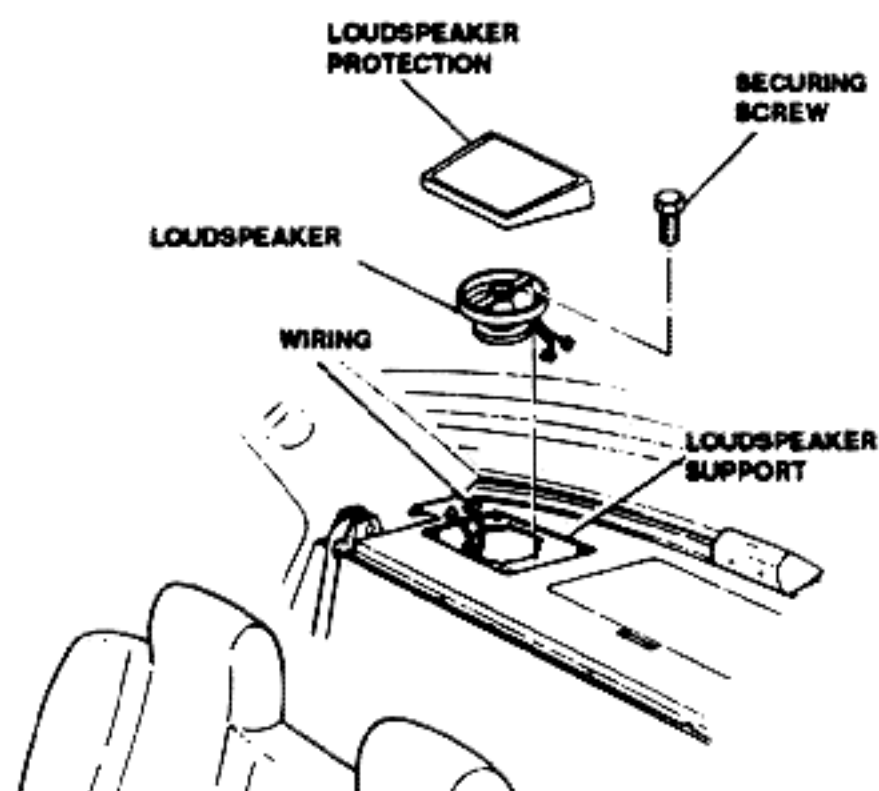
NOTE: To gain access to loudspeaker first remove lower panel.

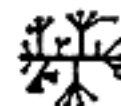
1. Loosen three screws securing loudspeaker and withdraw it from support.
2. Disconnect wiring and remove loudspeaker.



REAR LOUDSPEAKERS

1. Remove loudspeaker plastic protection by loosening securing screws.
2. Loosen three screws securing loudspeaker and withdraw it from support.
3. Disconnect wiring and remove loudspeaker.





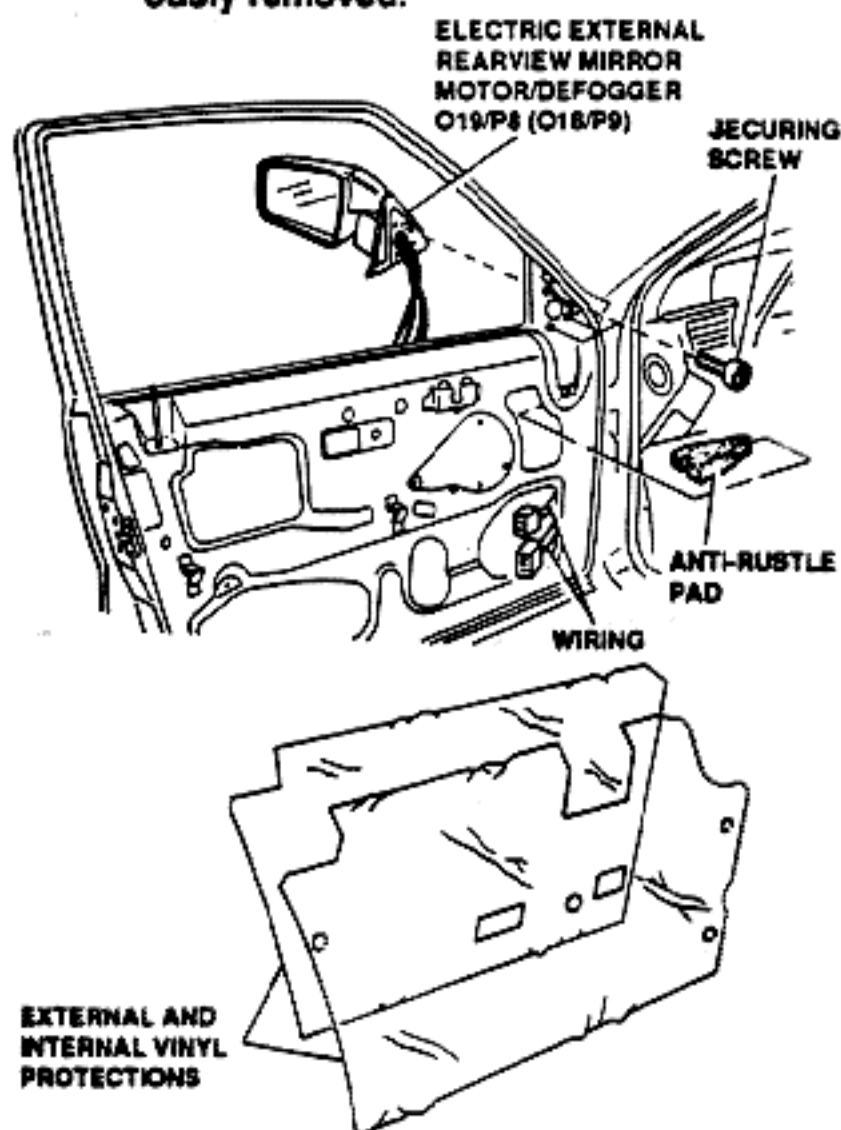
ELECTRIC EXTERNAL REARVIEW MIRRORS MOTORS

NOTE: Motors are installed inside external mirror body. If motors need replacement, the complete mirror assembly shall be replaced.

NOTE: To gain access to mirror securing screws and to related wiring, first remove front trim, armrest and lower panel (refer to: "FRONT DOORS POWER WINDOW LIFT").

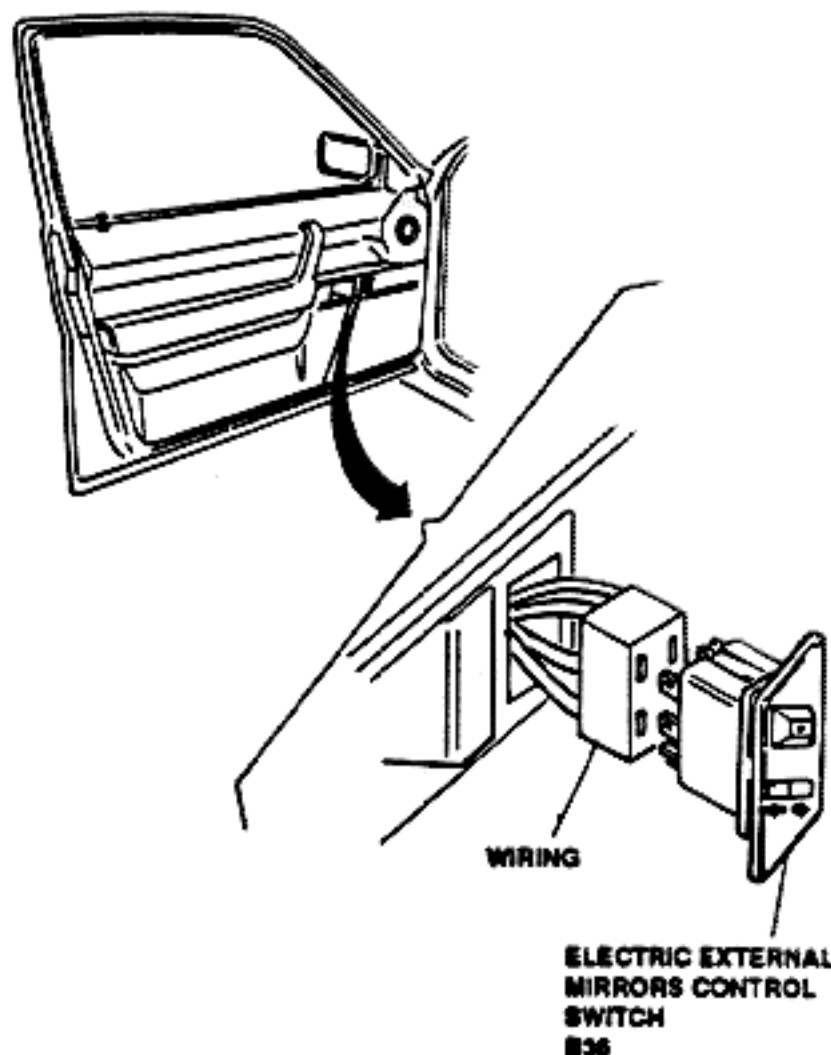
1. Remove internal and external vinyl protections to gain access to retaining clamps of mirror wiring.
2. Cut and remove affected clamps.
3. Disconnect wiring from mirror.
4. Working from inside, remove anti-rustle pad to free mirror wiring.
5. Loosen three screws securing mirror.
6. Remove mirror withdrawing wiring through its seat.

NOTE: Install by reversing the order of removal, taking care to install wiring clamps previously removed.



ELECTRIC EXTERNAL REARVIEW MIRRORS CONTROL SWITCH

1. Remove front finish.
2. Disconnect wiring.
3. Remove switch by pressing wings securing it inside lower finish.

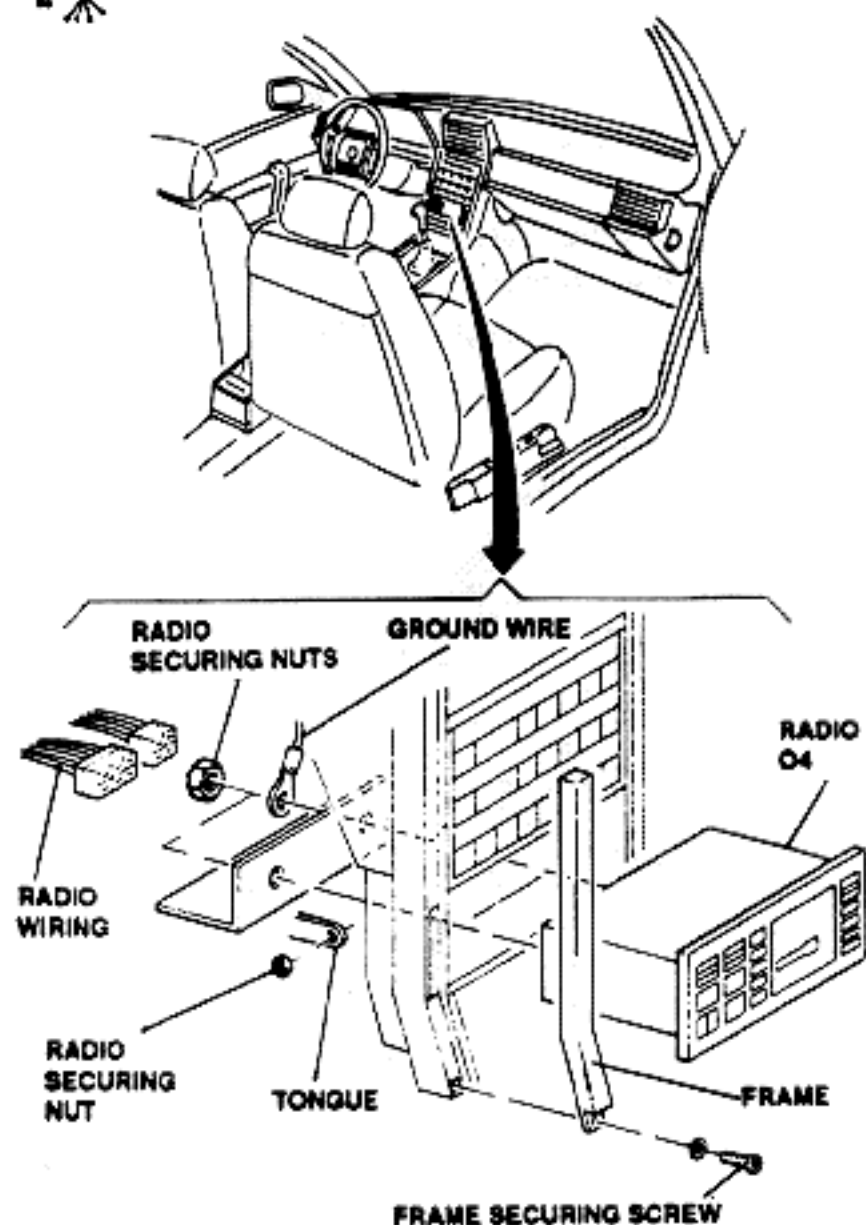


RADIO

1. Remove rear console and move it backward (see Group 66).
2. Remove tunnel left trim and lower finish to gain access to frame securing screw.
3. Loosen frame securing screw and remove frame.
4. Loosen nut securing radio lock and move it forward.
5. Loosen, working from behind radio, two nuts securing radio; ground is connected to one of them.
6. Remove ground wire and withdraw radio.
7. Disconnect radio wiring and remove it.



Install by reversing the order of removal, ensuring the ground wire is properly connected.



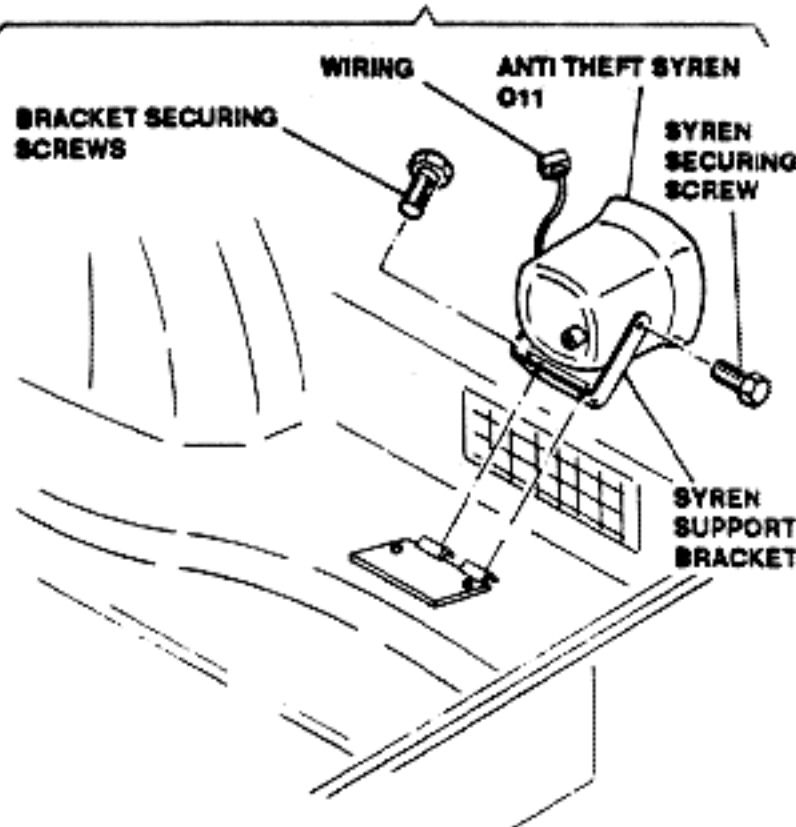
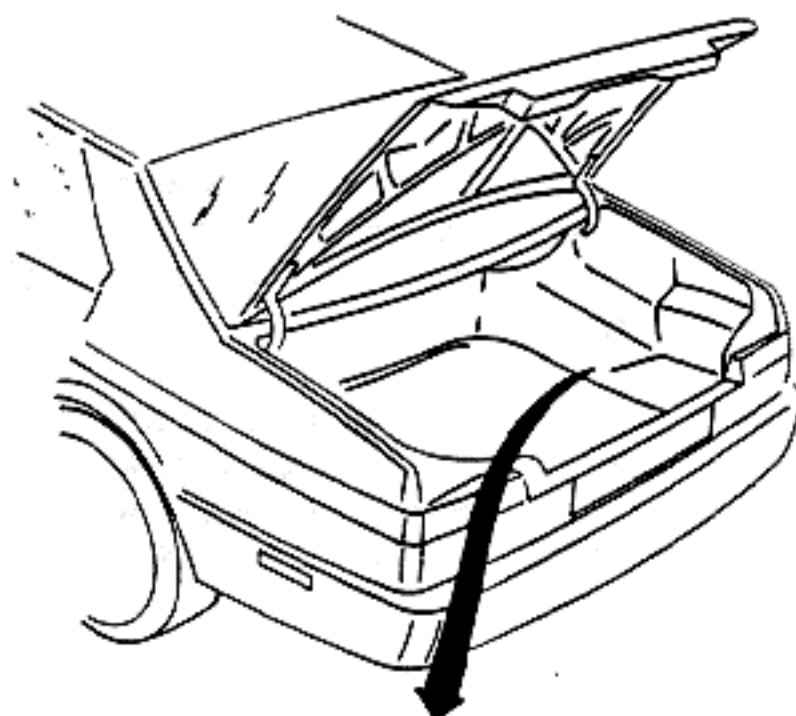
WINDSHIELD AND REAR WINDOW DE-FOGGERS

NOTE: To replace windshield and rear window, defoggers, it is necessary to replace complete windshield and/or rear window (see Group 75) upon disconnection of cables.

ANTITHEFT SYREN

NOTE: To gain access to antitheft syren first remove left side trim of trunk (see Group 66)

1. Loosen two screws securing syren support bracket.
2. Loosen syren wiring.
3. Loosen two screws securing syren to its support bracket and remove syren.



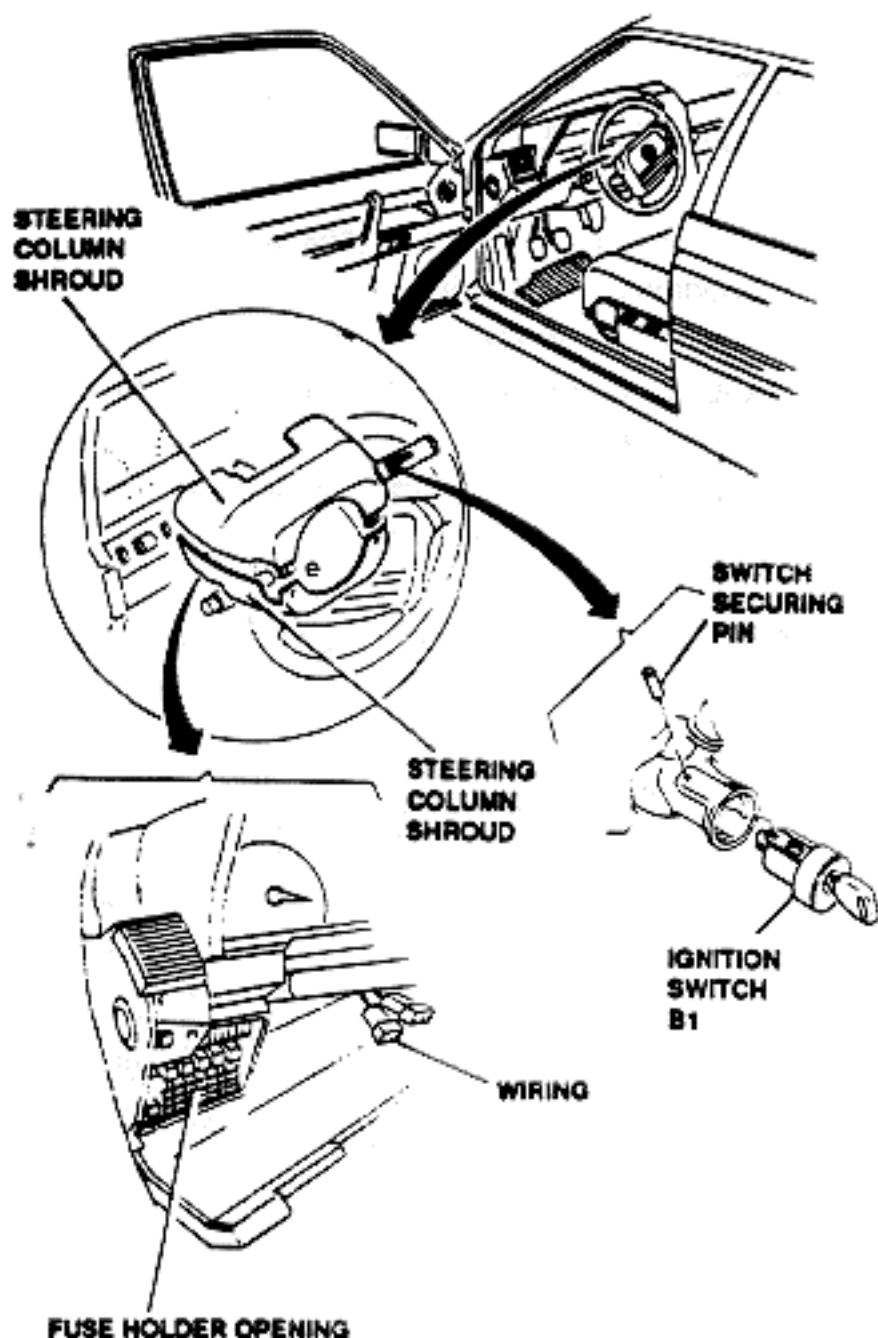
IGNITION SWITCH

NOTE: To gain access to switch first remove steering column shrouds (see Group 23).

1. Using pin and hammer loosen switch locking pin.
2. Disconnect wiring, working through fuse holder opening.

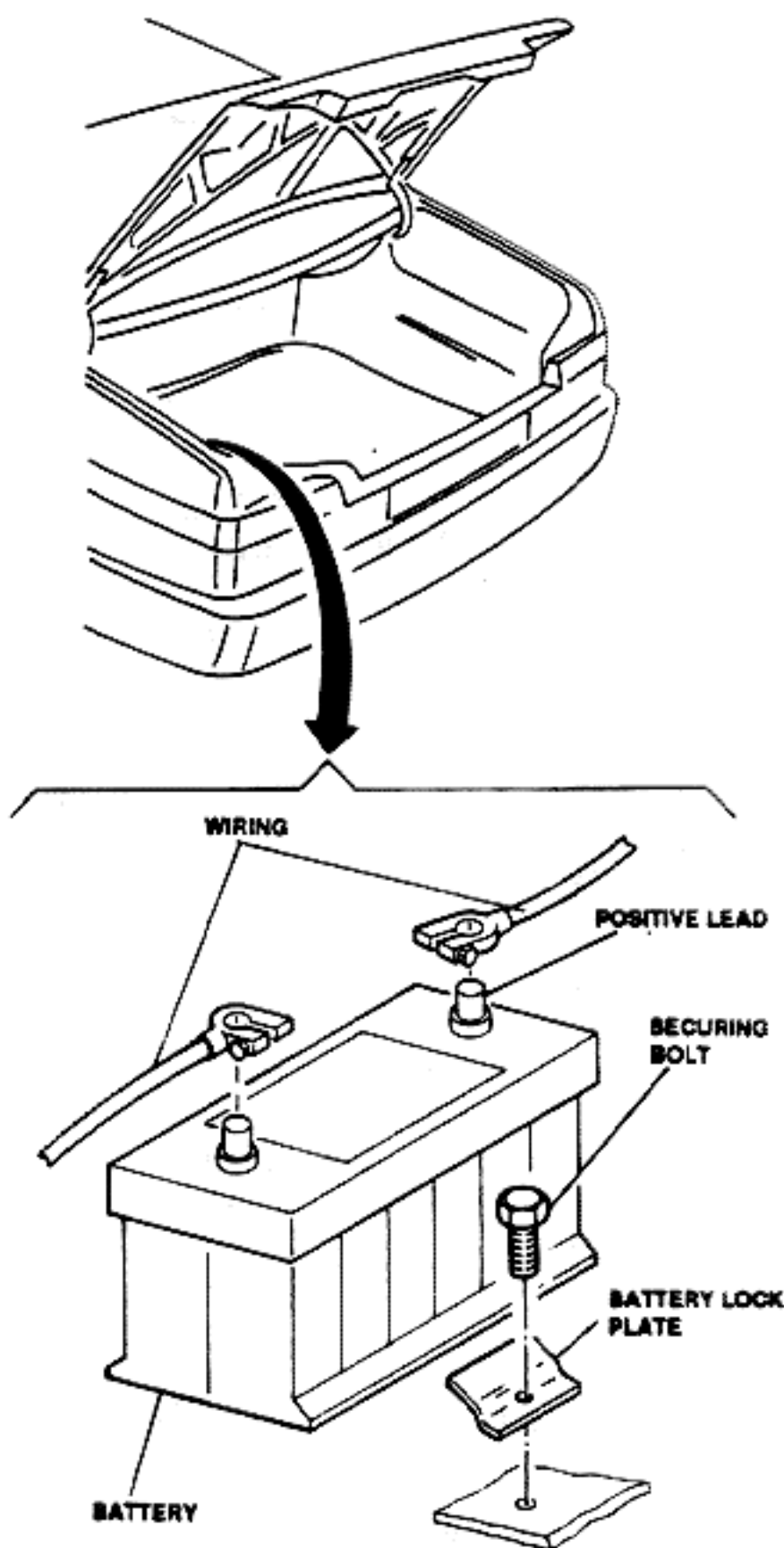


3. Withdraw switch and remove it.



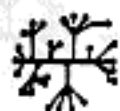
BATTERY

1. Move away trunk left side trim (see Group 66).
2. Disconnect both battery leads.
3. Loosen bolt securing battery lock plate.
4. Remove battery lock plate.
5. Remove battery.



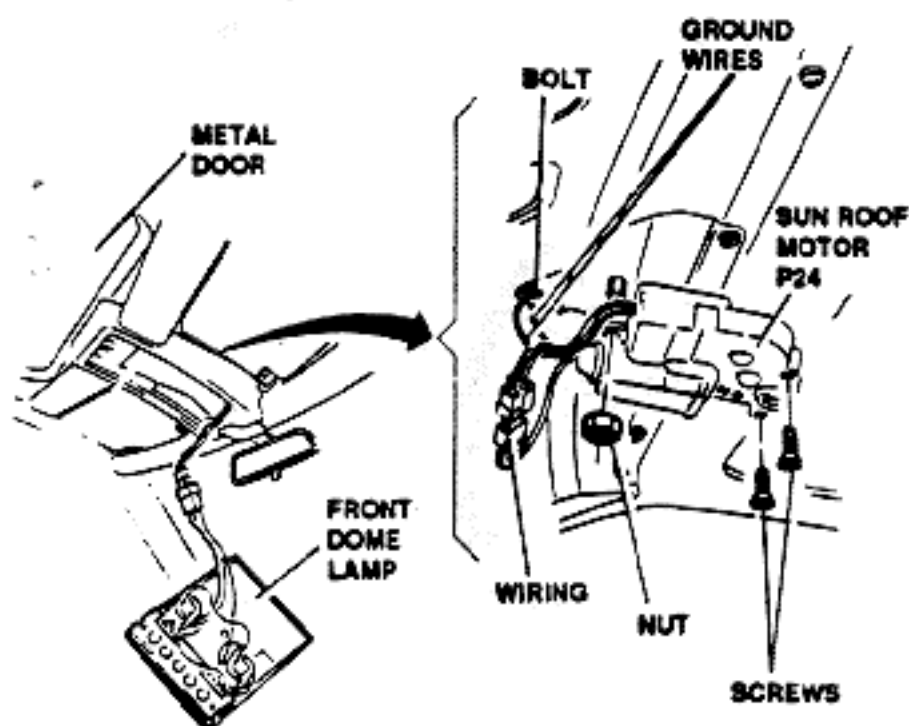
SUN ROOF MOTOR

1. Remove metal door (see Group 75).
2. Loosen two aft screws securing motor.
3. Loosen forward nut securing motor.
4. Loosen bolt securing motor ground wires.
5. Disconnect motor wiring and ground wires.

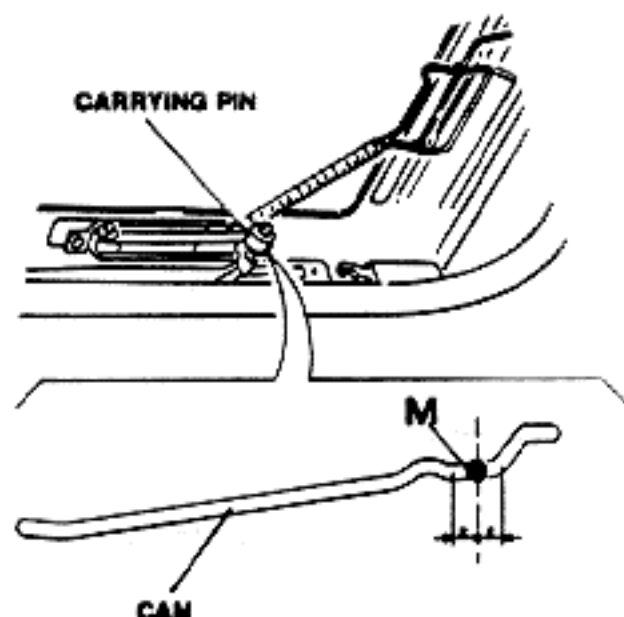


6. Remove motor.

NOTE: Install by reversing the order of removal then carry-out following motor adjustment procedure.



7. Check, by connecting it to a battery, that motor is completely extended (sun roof closed).
8. Manually place both cams, on which carrying pins are sliding, to position "M" indicated in figure.
9. Install motor.



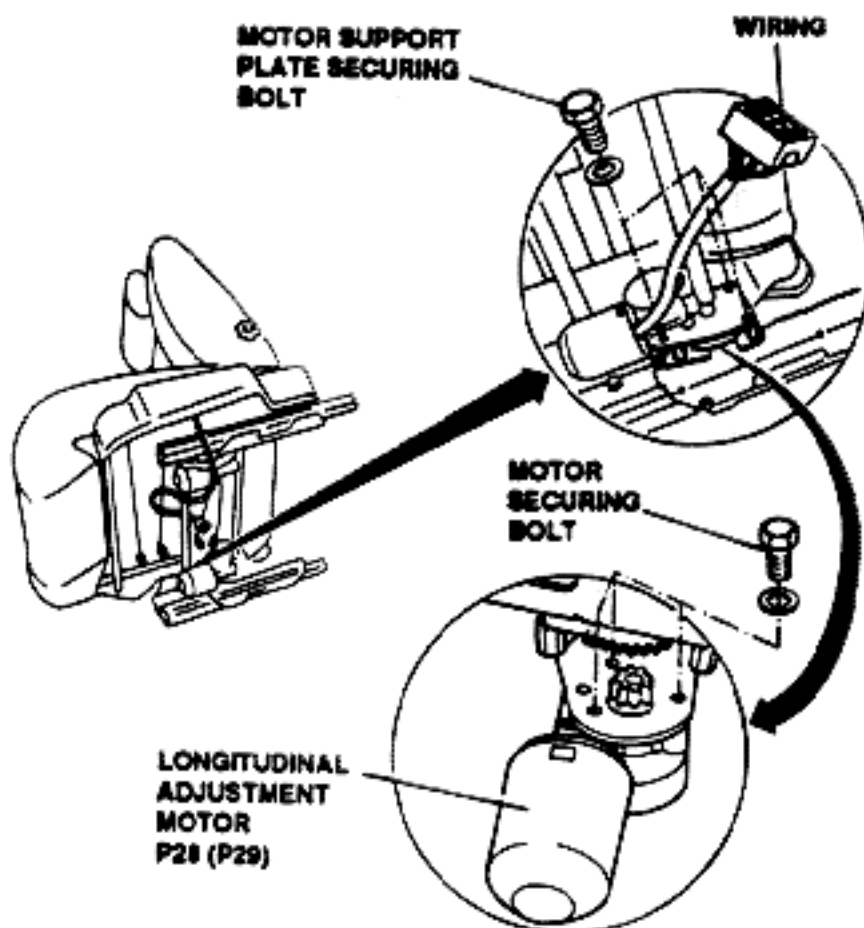
SEATS, CONTROL SWITCHES, ACCESSORIES

POWER FRONT SEATS - LONGITUDINAL ADJUSTMENT MOTOR

1. Remove seat from vehicle (see Group 66).
2. Disconnect motor wiring.
3. Loosen three screws securing motor support plate.
4. Manually rotate motor to gain access to related securing screws.
5. Loosen three screws securing motor and remove it from related support plate.



Install by reversing the order of removal.



POWER FRONT SEATS - HEIGHT ADJUSTMENT MOTOR

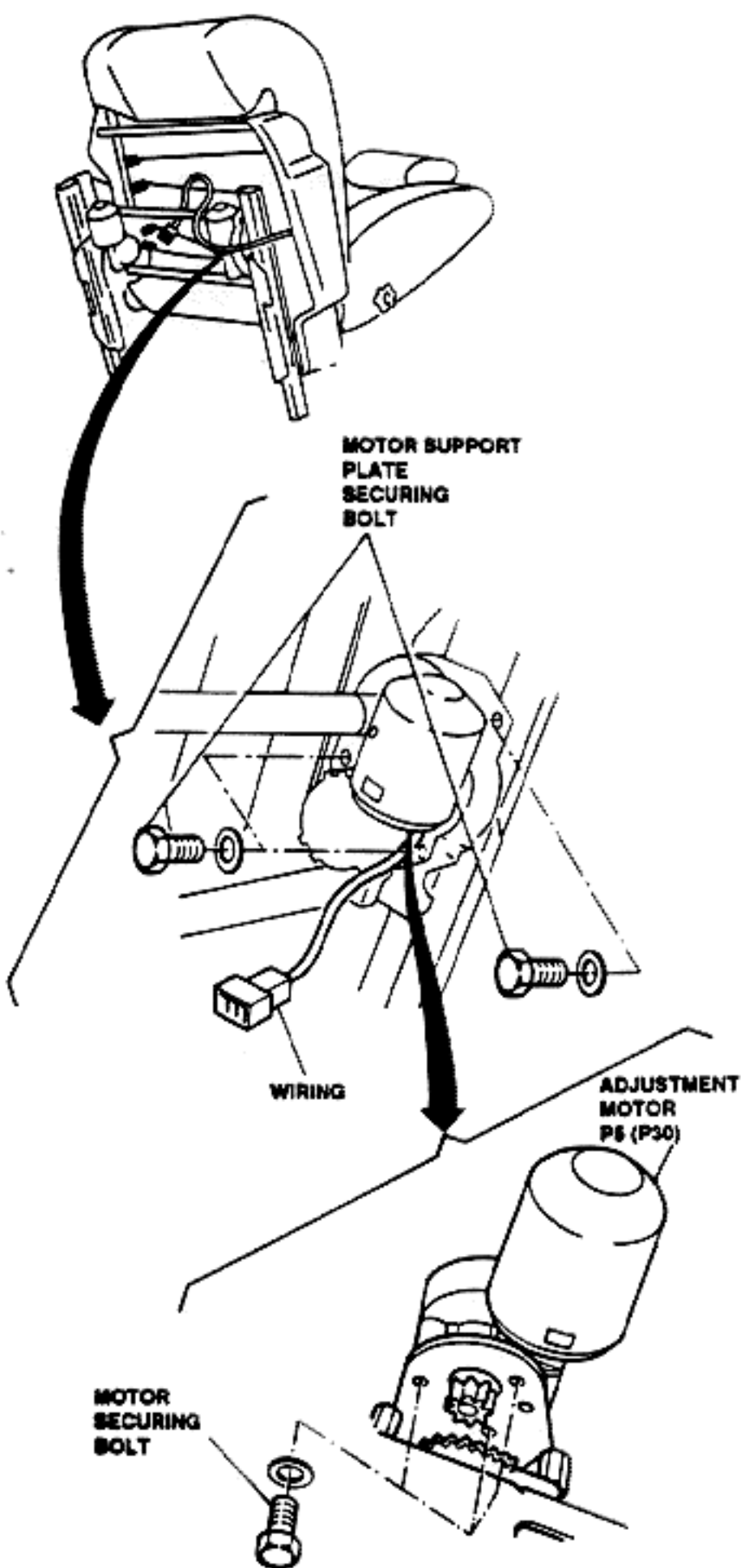
1. Remove seat from vehicle (see Group 66).
2. Disconnect motor wiring.
3. Loosen three screws securing motor support plate.
4. Manually rotate motor to gain access to related securing screws.



5. Loosen three screws securing motor to plate and remove it.

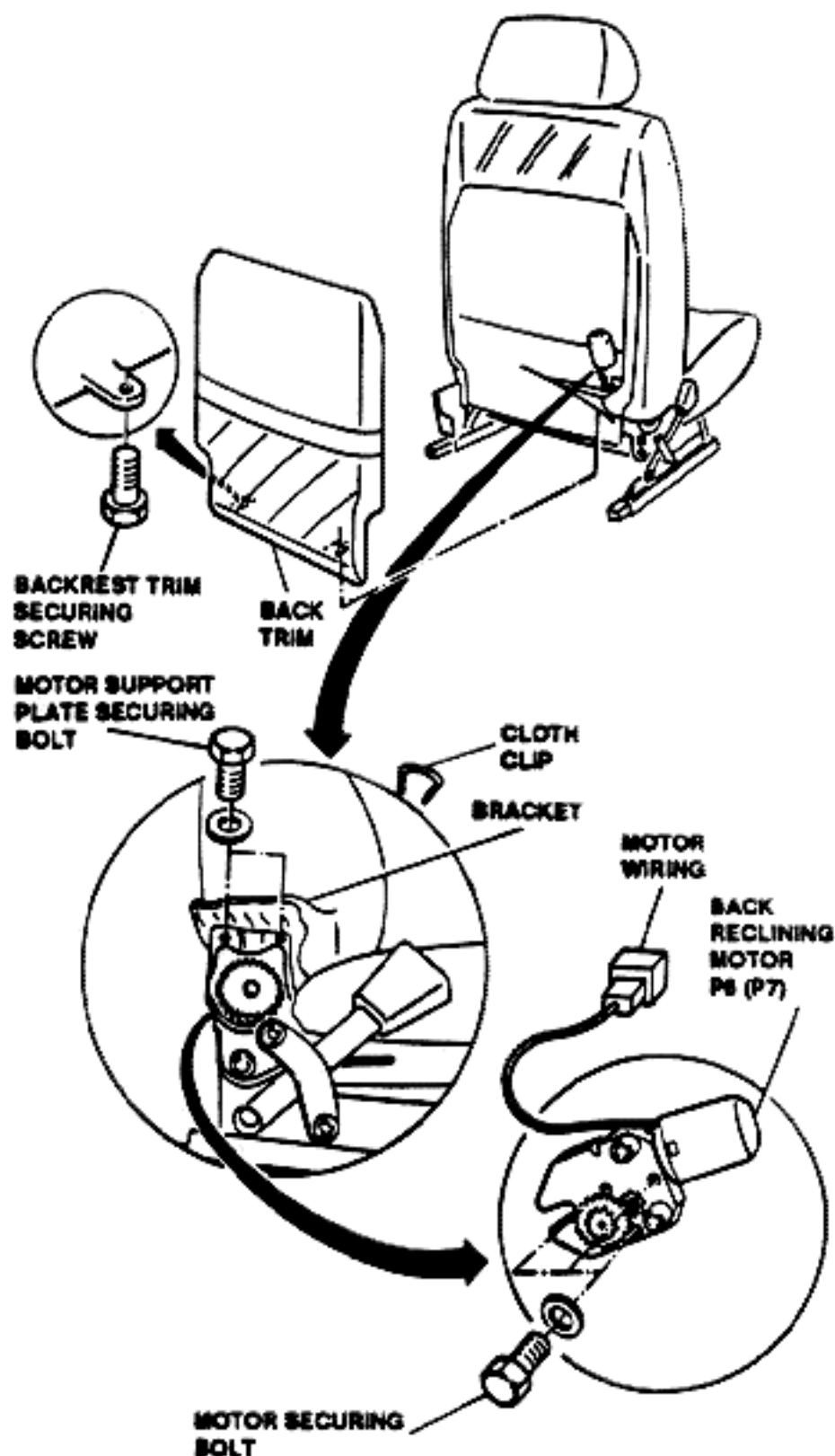


Install by reversing the order of removal.



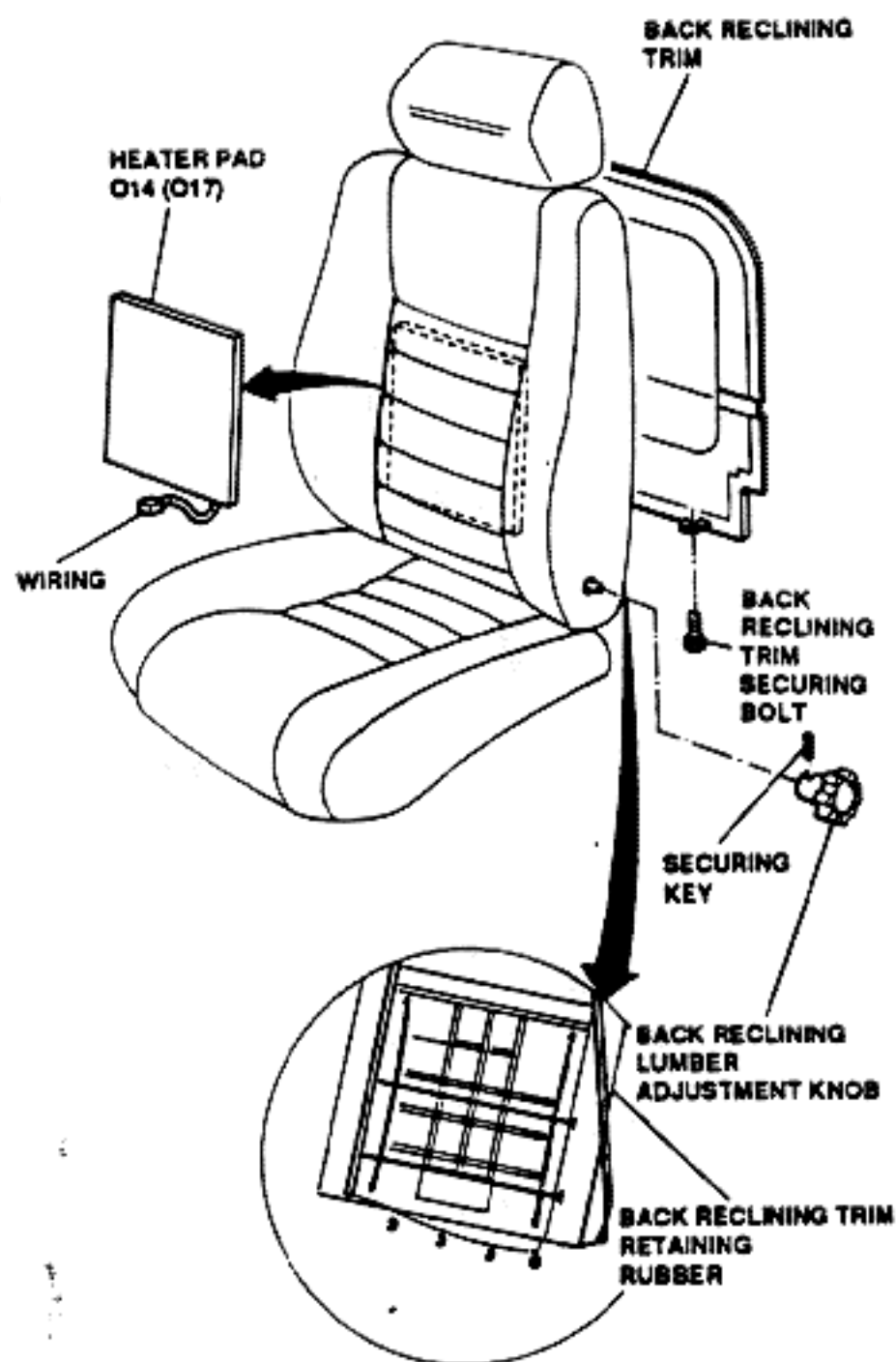
POWER FRONT SEATS - BACK RECLINING MOTOR

1. Remove seat from vehicle (see Group 66).
2. Loosen two screws securing seat back reclining trim and remove it.
3. Manually release cloth clips and move away cloth.
4. Disconnect motor wiring.
5. Loosen screws securing motor support plate and remove motor/plate assembly.
6. Loosen three screws securing motor to plate and remove it.

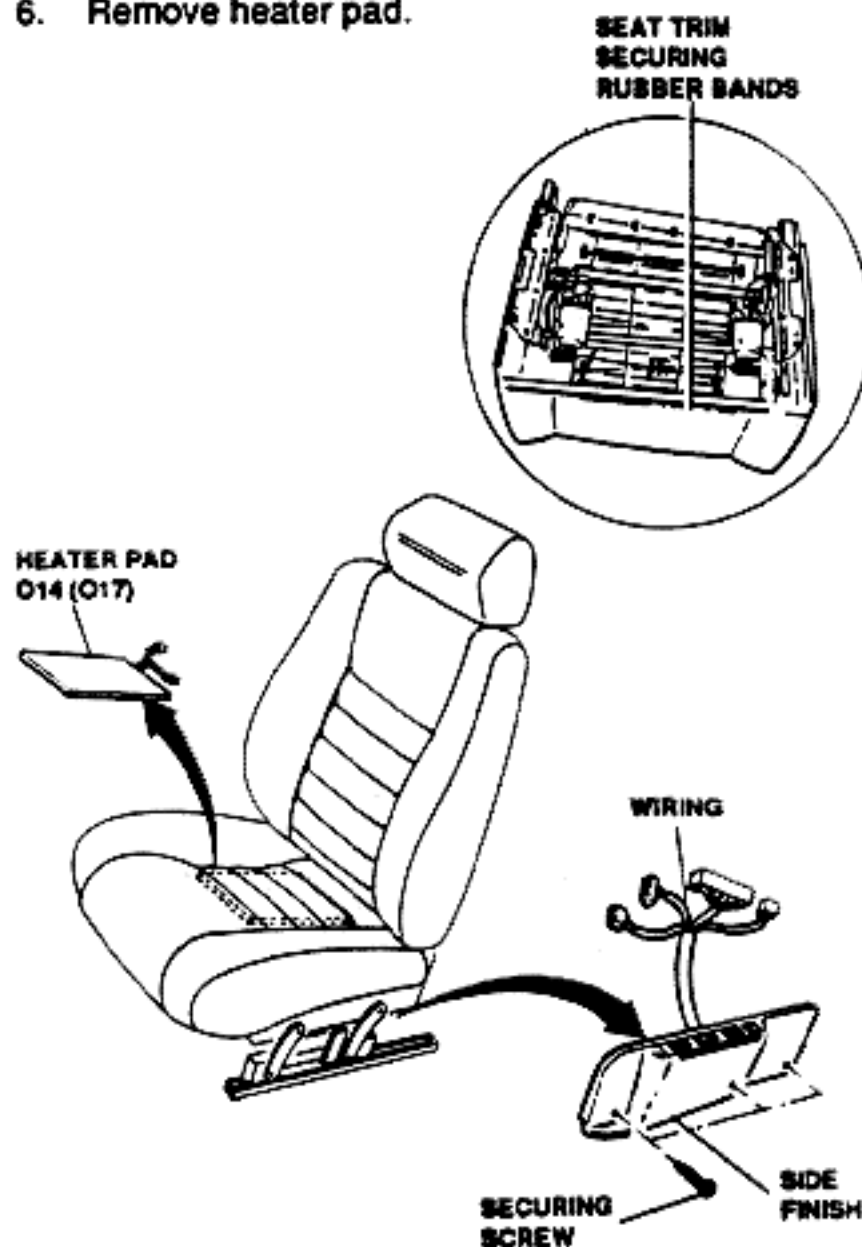


**POWER FRONT SEATS - HEATER PAD
(BACK RECLINING)**

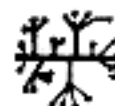
1. Remove seat from vehicle (see Group 66).
2. Loosen two screws securing back reclining trim and remove trim from seat.
3. Disconnect heat pad wiring.
4. Withdraw securing pin of seat back reclining lumbar adjustment knob and remove it.
5. Manually release clips, remove rubber bands from back trim.
6. Remove heater pad.

**POWER FRONT SEATS - HEATER PAD
(CUSHION)**

1. Remove seat from vehicle (see Group 66).
2. Working from under the seat disconnect heater pad wiring.
3. Loosen three screws securing side finish.
4. Remove side finish.
5. Remove rubber bands securing trim and remove it from seat.
6. Remove heater pad.

**SPLIT REAR SEATS - LONGITUDINAL
ADJUSTMENT MOTOR**

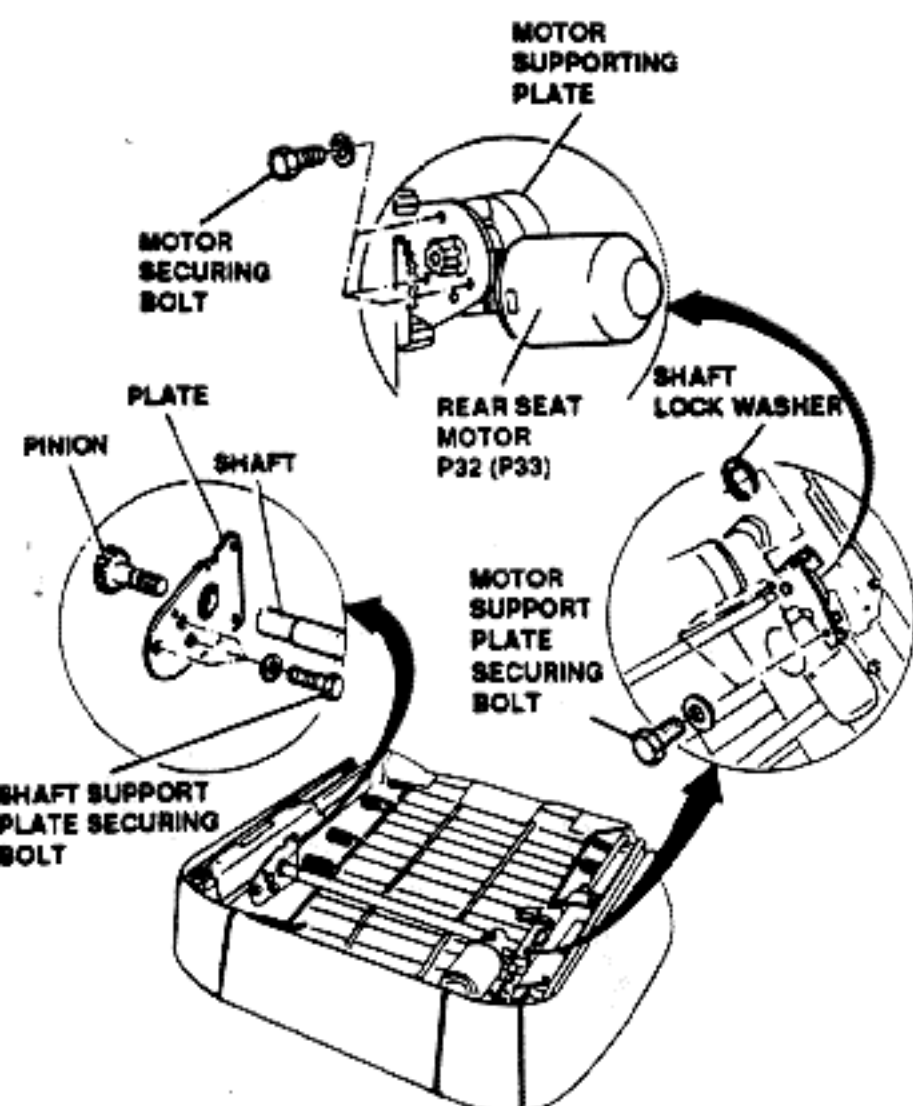
1. Remove seat from vehicle (see Group 66).
2. Loosen three bolts securing shaft support plate.
3. Remove, by means of appropriate tool, lockwasher securing shaft.
4. Remove plate together with pinion and shaft.
5. Loosen three bolts of motor support plate.



6. Manually rotate motor, secured to plate, to gain access to securing bolts.
7. Loosen three bolts securing motor and remove it.

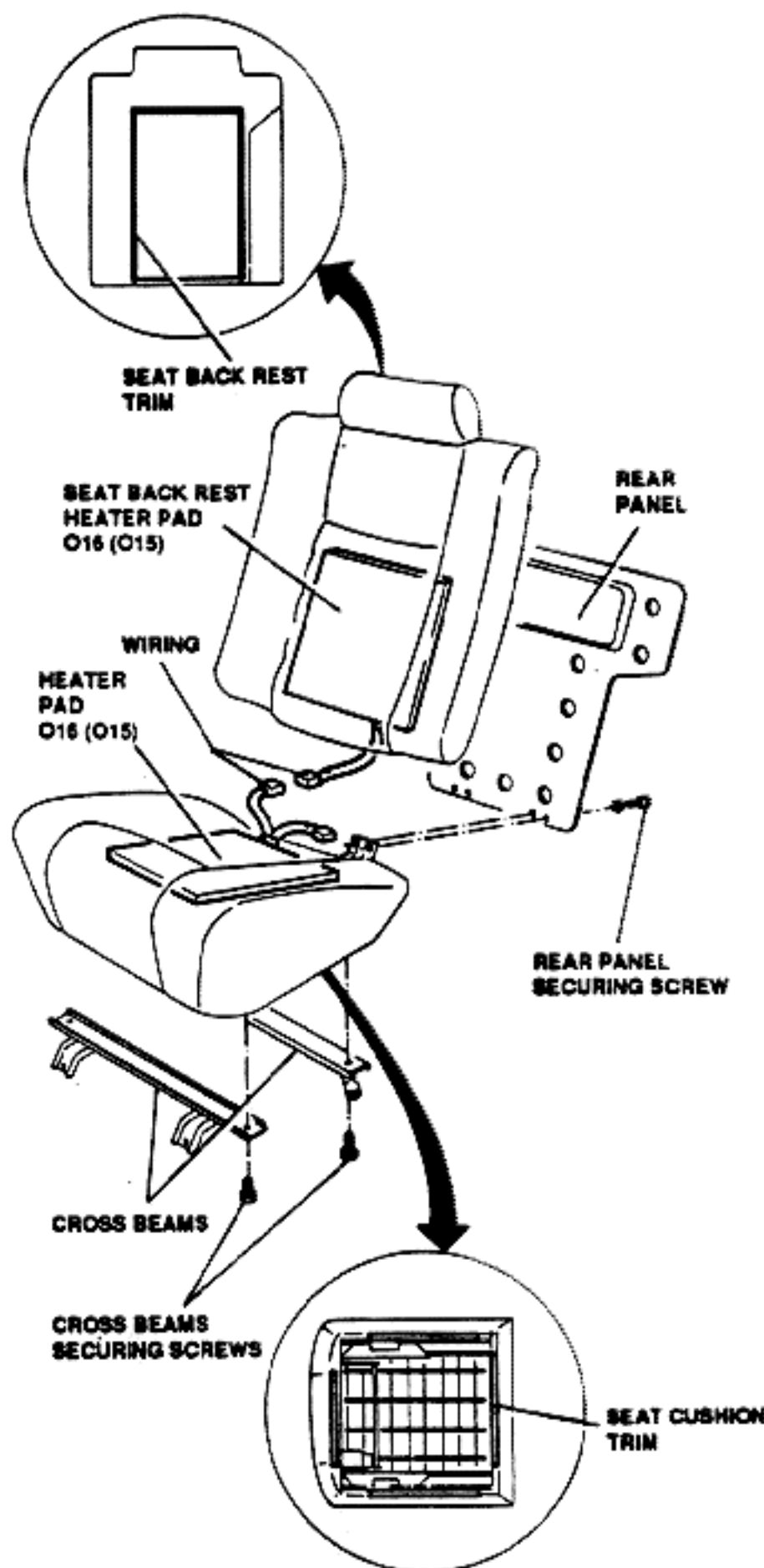


Install by reversing the order of removal.



SPLIT REAR SEATS - HEAT PADS

1. Remove seat from vehicle (see Group 66).
2. Disconnect affected heat pad wiring.
3. Loosen three screws securing rear panel.
4. Remove rear panel.
5. Remove trim from seat backrest.
6. Remove heat pad from seat backrest.
7. Working from under the seat, loosen four screws securing crossbeams.
8. Release clips and remove trim from seat.
9. Remove heat pad from seat cushion.

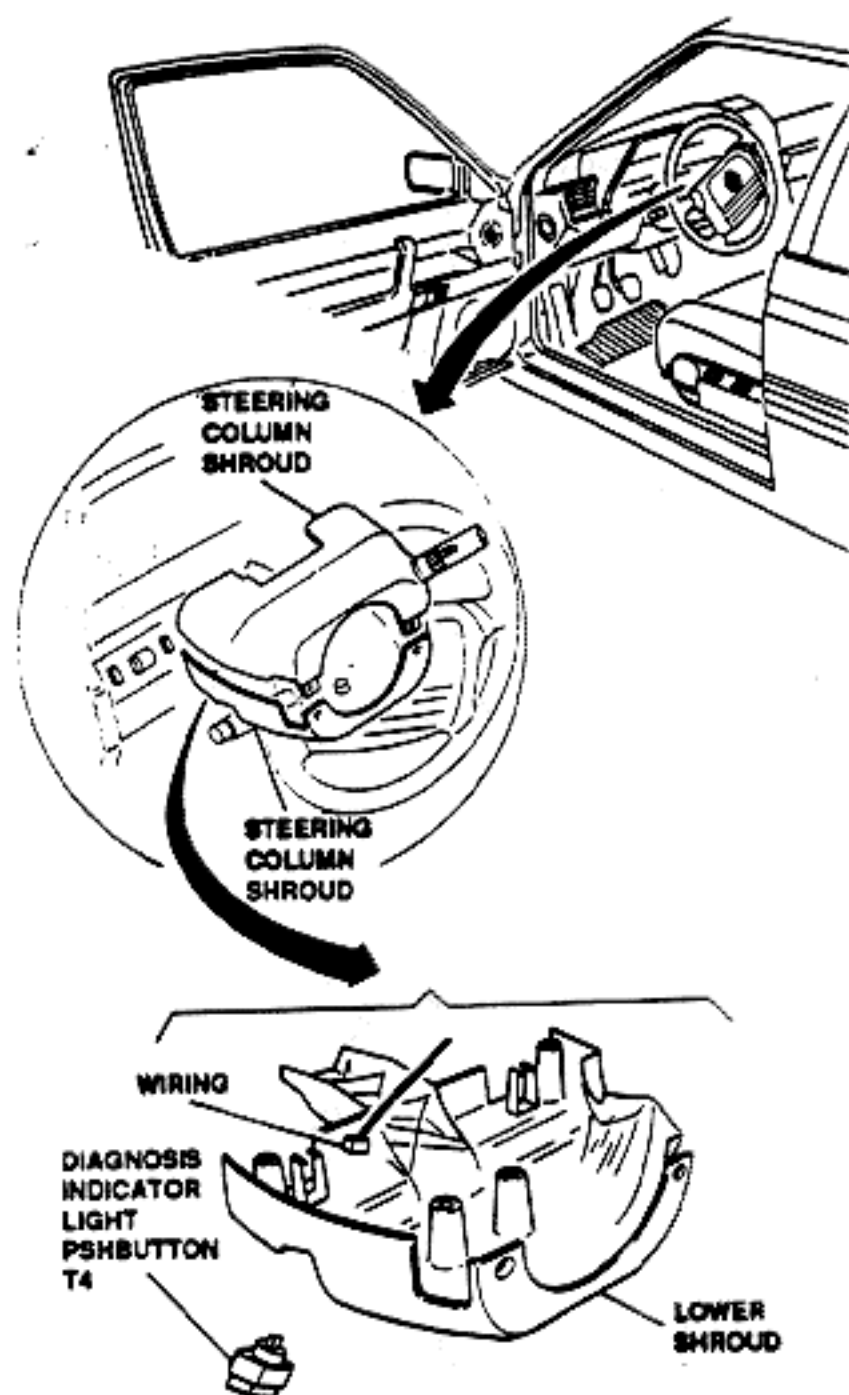


CONTROL SWITCHES - DIAGNOSIS INDICATOR LIGHT PUSHBUTTON

NOTE: To gain access to pushbutton first remove steering column shrouds (see Group 23).



1. Working on lower shroud, disconnect pushbutton wiring.
2. Withdraw pressure installed pushbutton, working inside the shroud.
3. Remove pushbutton.



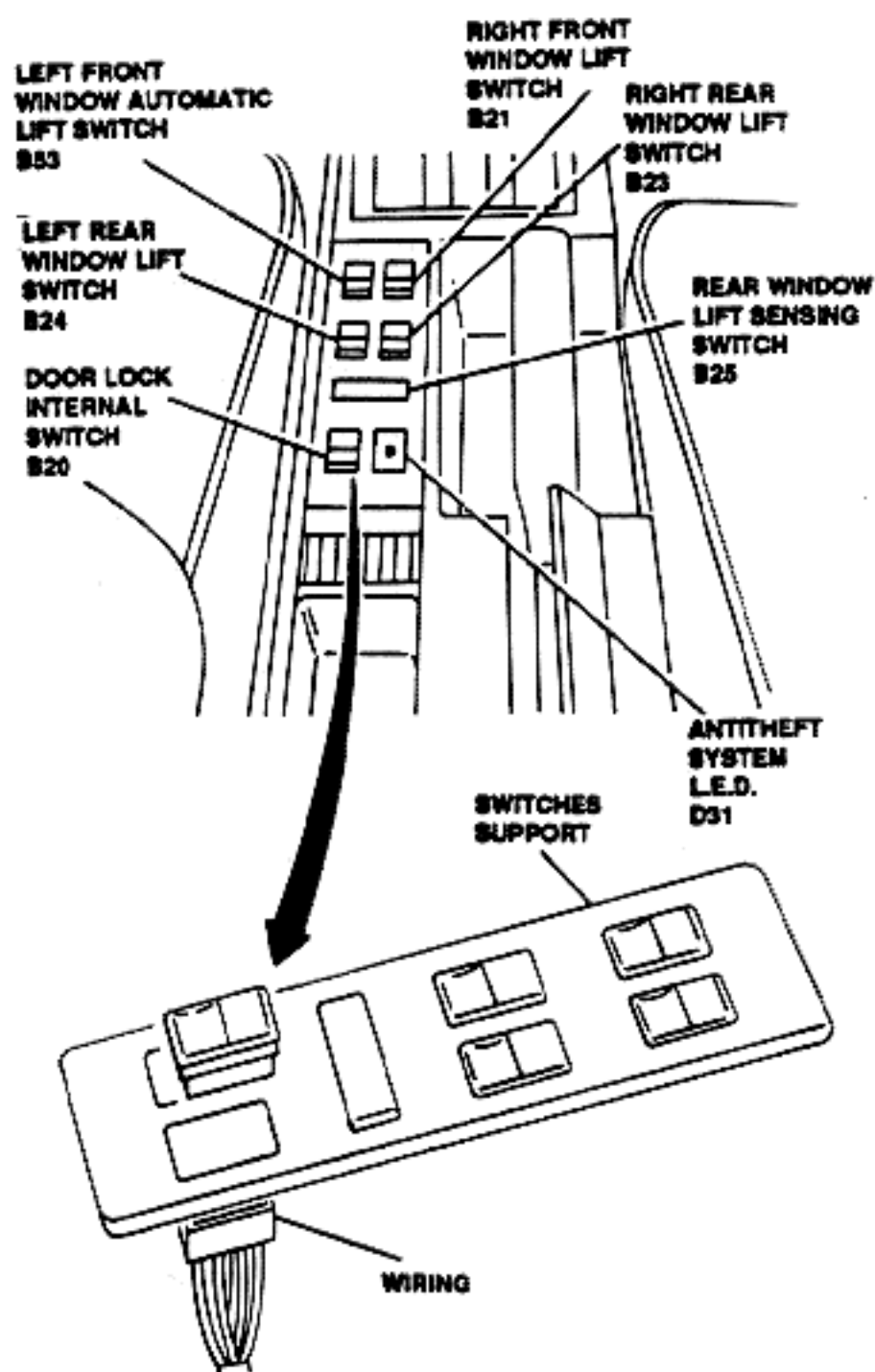
CONTROL SWITCHES - FRONT ELECTRIC WINDOW LIFT AND DOOR LOCK SWITCHES

NOTE: The affected switches are the following:

- Front windows lift.
- Rear windows lift.
- Rear windows lift sensing.
- Door lock internal.

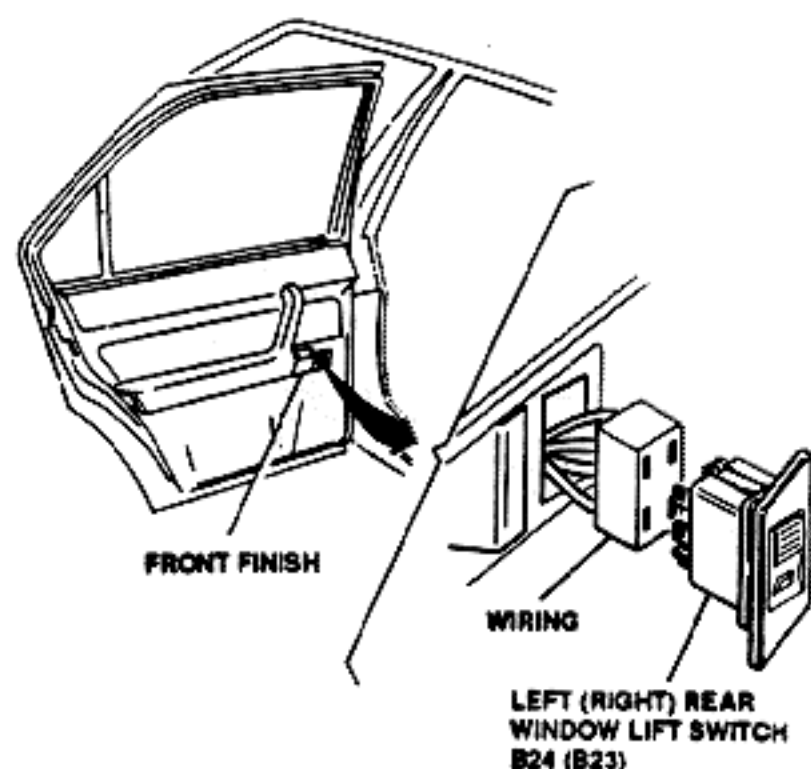
1. Manually lift switches support.
2. Disconnect wiring of affected switch.
3. Mechanically withdraw affected switch, (pressure installed) by pressing securing wings.
4. Remove switch.

Install by reversing the order of removal.



CONTROL SWITCHES - REAR ELECTRIC WINDOW LIFT

1. Remove front finish.
2. Disconnect switch wiring.
3. Remove, by pressing securing wings, switch located inside front finish.



CONTROL SWITCHES - FRONT SEATS ADJUSTMENT CONTROL SWITCHES

NOTE: The affected switches are the following.

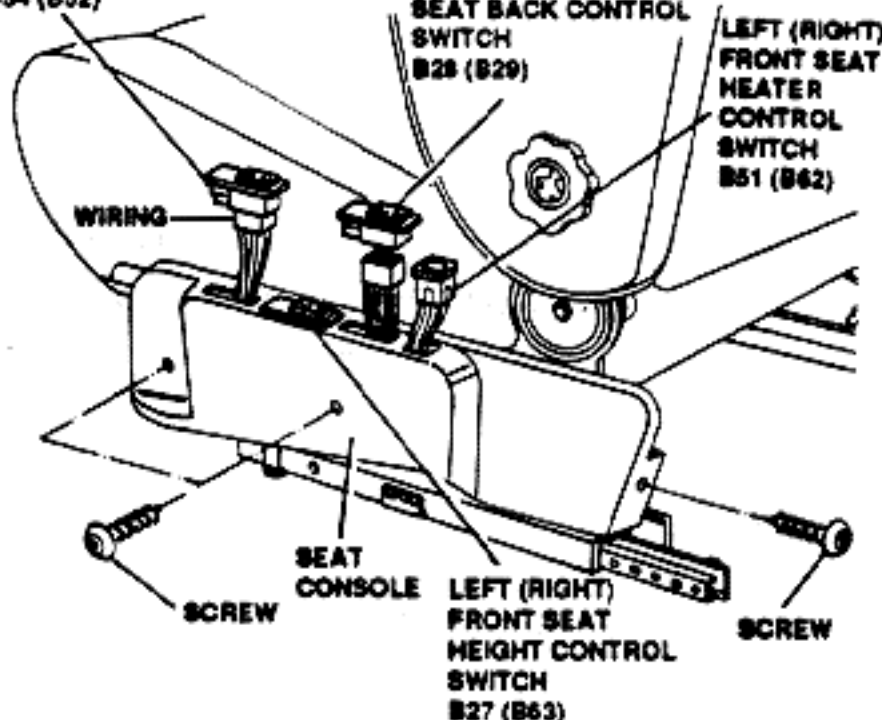
- Front seats back control switch.
- Front seats height control switch.
- Front seats heater control switch.

1. Loosen three screws securing seat console.
2. Disconnect wiring.
3. Remove affected switch by pressing two securing wings.

LEFT (RIGHT) FRONT
SEAT LONGITUDINAL
ADJUSTMENT SWITCH
B54 (B52)

LEFT (RIGHT) FRONT
SEAT BACK CONTROL
SWITCH
B28 (B29)

LEFT (RIGHT)
FRONT SEAT
HEATER
CONTROL
SWITCH
B51 (B62)



CONTROL SWITCHES - SPLIT REAR SEATS ADJUSTMENT SWITCHES

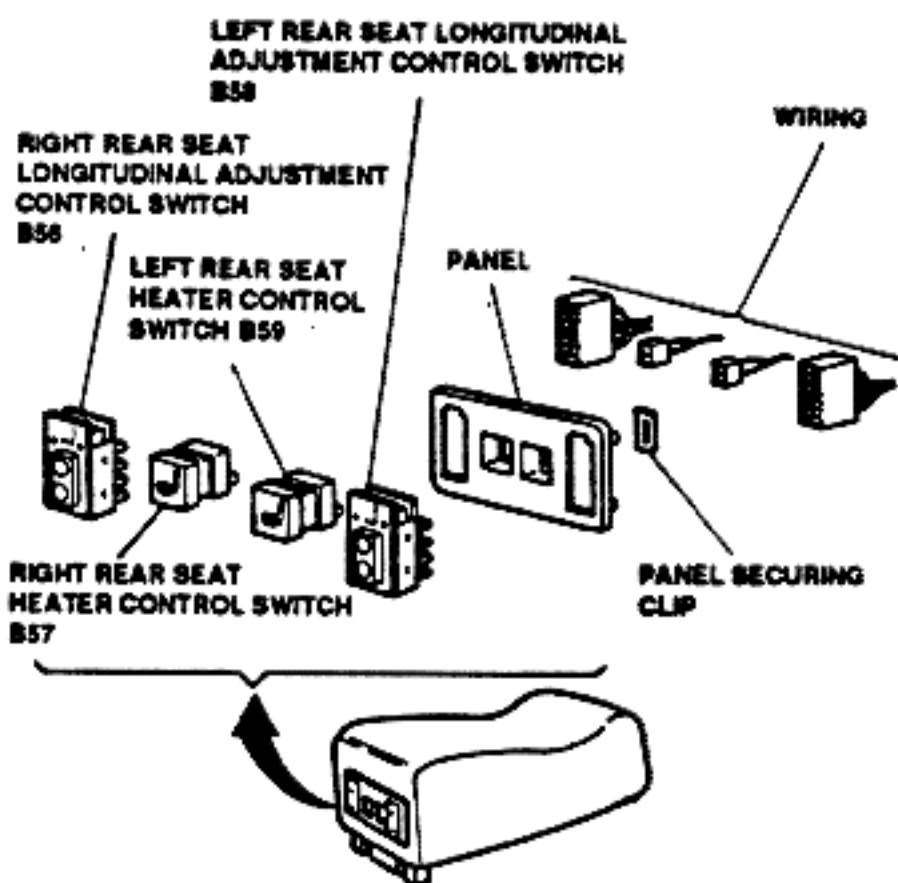
NOTE: The affected switches are the following:

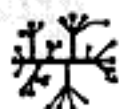
- Right rear seat heater control switch.
- Left rear seat heater control switch.
- Right seat longitudinal adjustment switch.
- Left seat longitudinal adjustment switch.

1. Remove rear console (see Group 66).
2. Remove switches securing springs working from inside console.
3. Disconnect affected switch wiring.
4. Manually withdraw switch.
5. Remove switch.



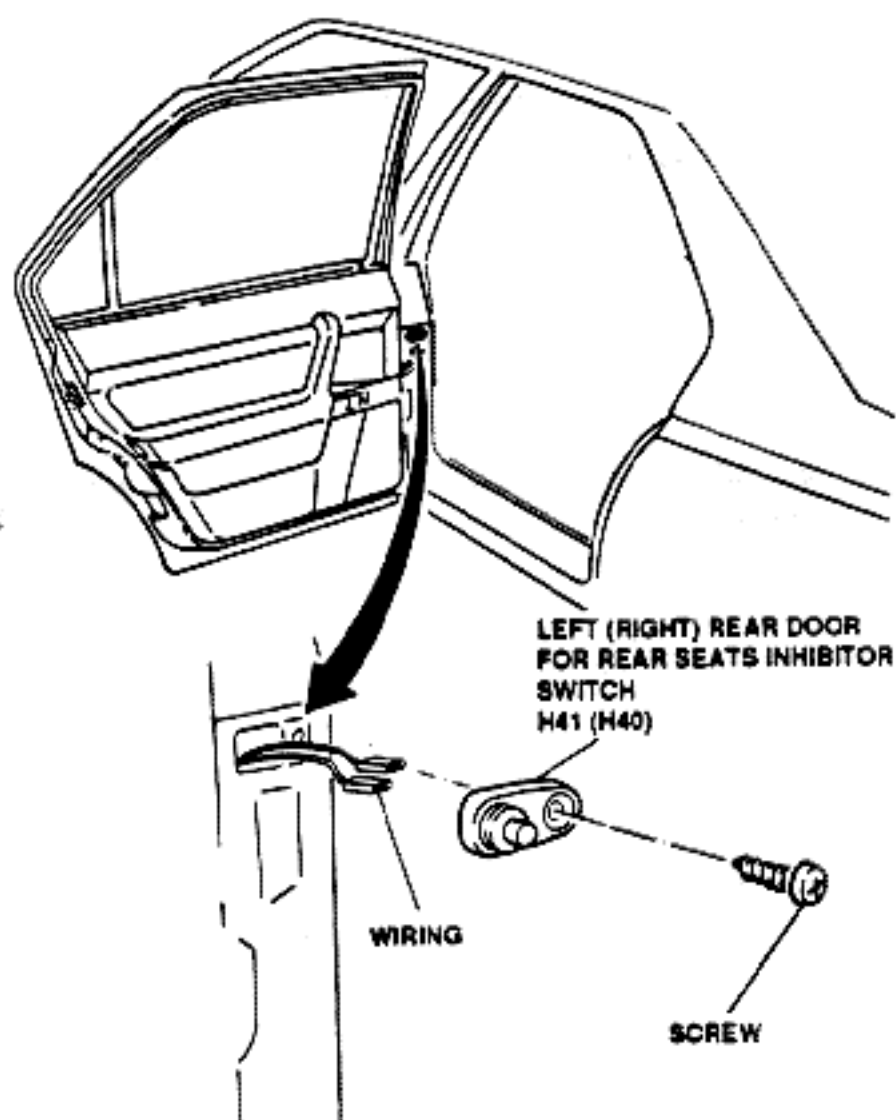
Install by reversing the order of removal.





CONTROL SWITCHES - REAR DOORS PUSHBUTTONS

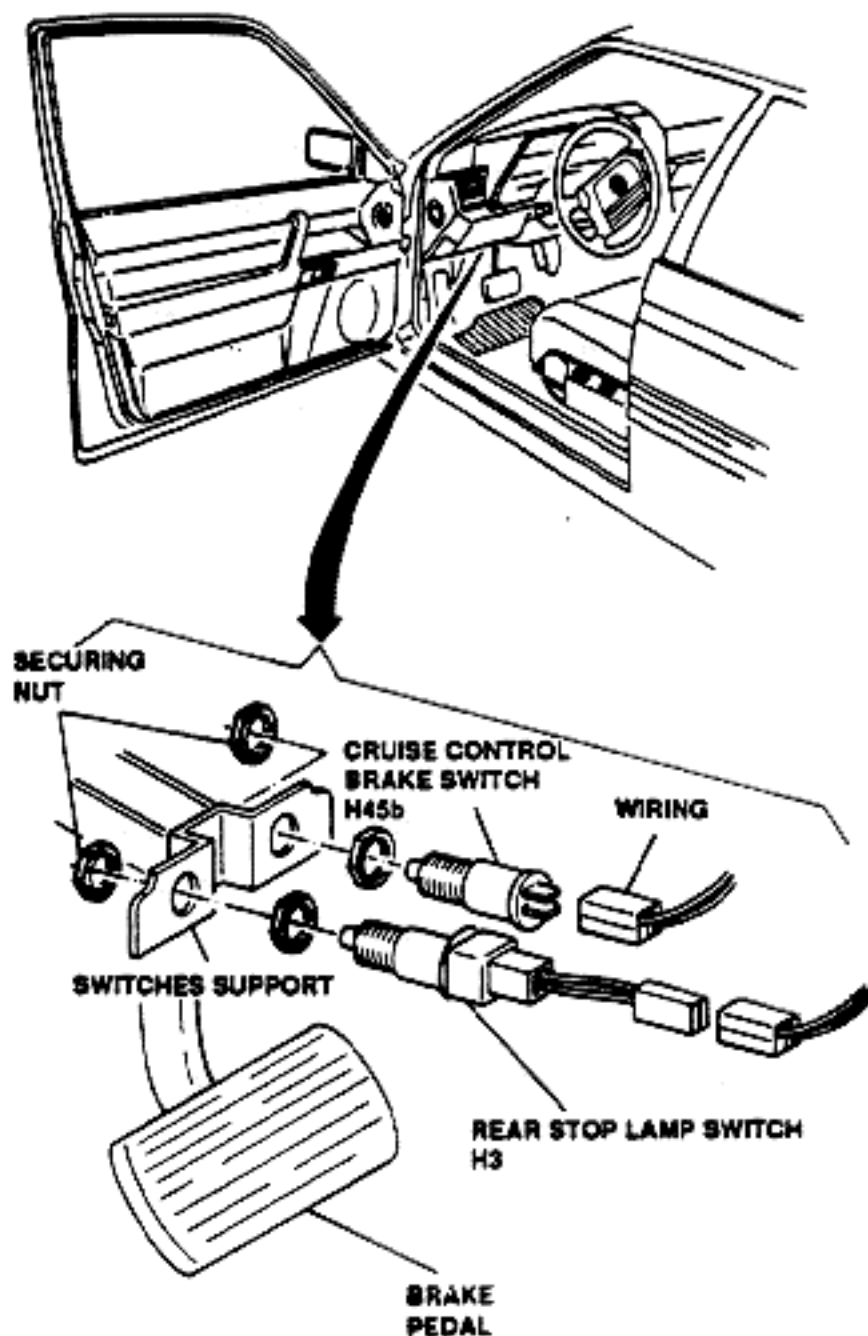
1. Loosen screw securing switch.
2. Withdraw switch.
3. Disconnect wiring.
4. Remove switch.



CONTROL SWITCHES - BRAKE SWITCH FOR CRUISE CONTROL (automatic transmission version) AND STOP LAMPS SWITCH.

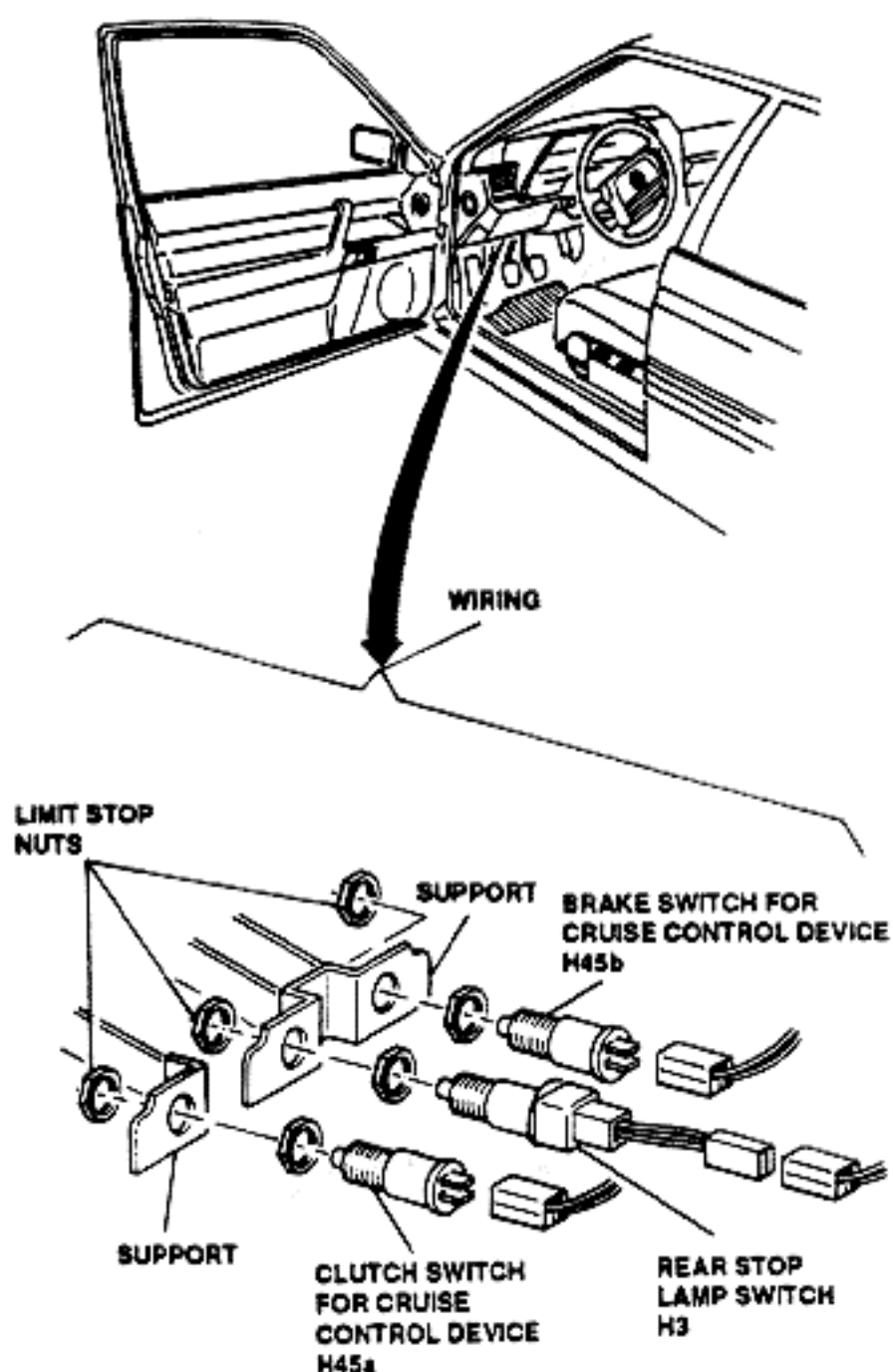
1. Working from under brake pedal, disconnect switch wiring.
2. Loosen nut securing affected switch and remove

switch from support.



CONTROL SWITCHES - CLUTCH BRAKE SWITCH FOR CRUISE CONTROL (manual transmission version) AND STOP LAMPS SWITCH

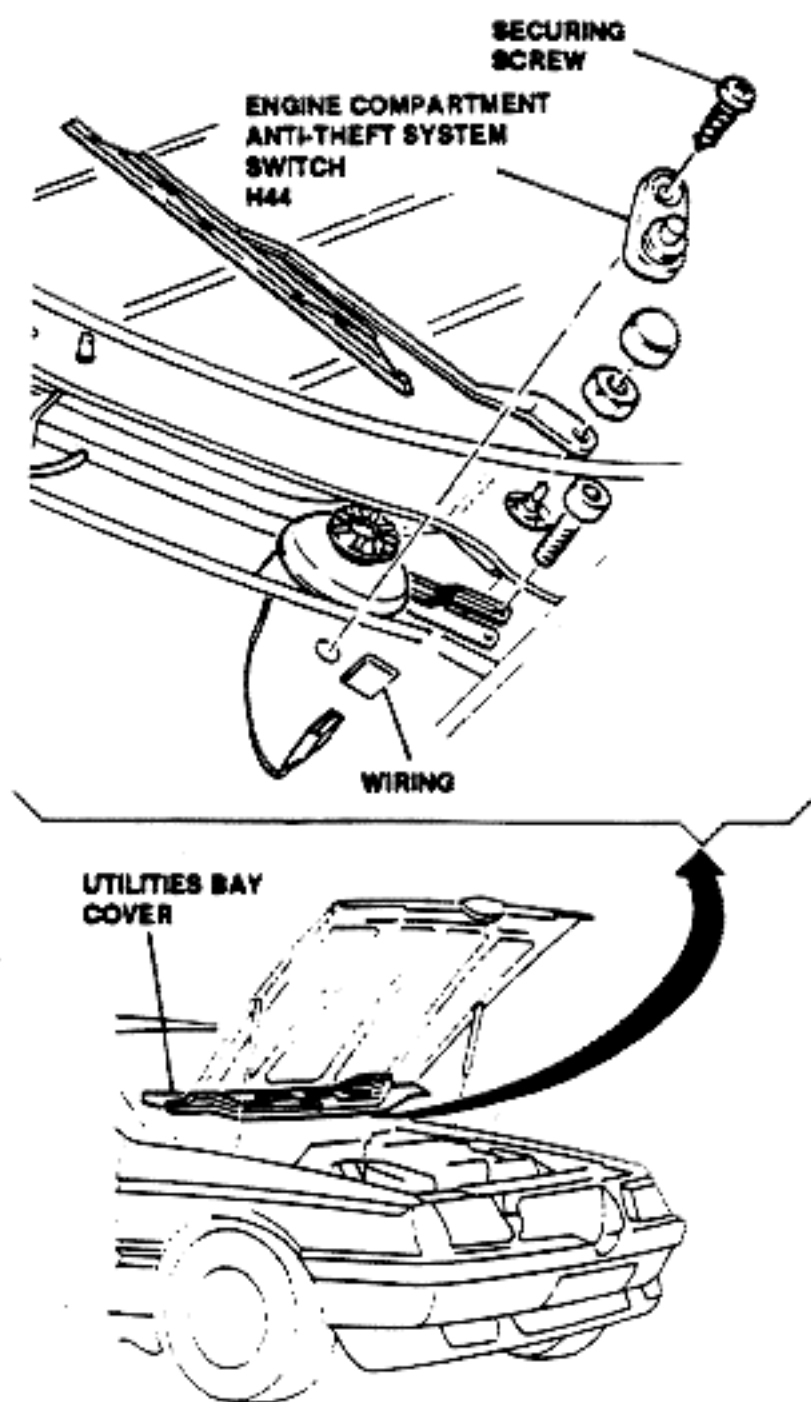
1. Working from under brake pedal, disconnect affected switch wiring.
2. Loosen nut securing affected switch and remove switch from support.



ACCESSORIES - ENGINE COMPARTMENT ANTI-THEFT SYSTEM SWITCH

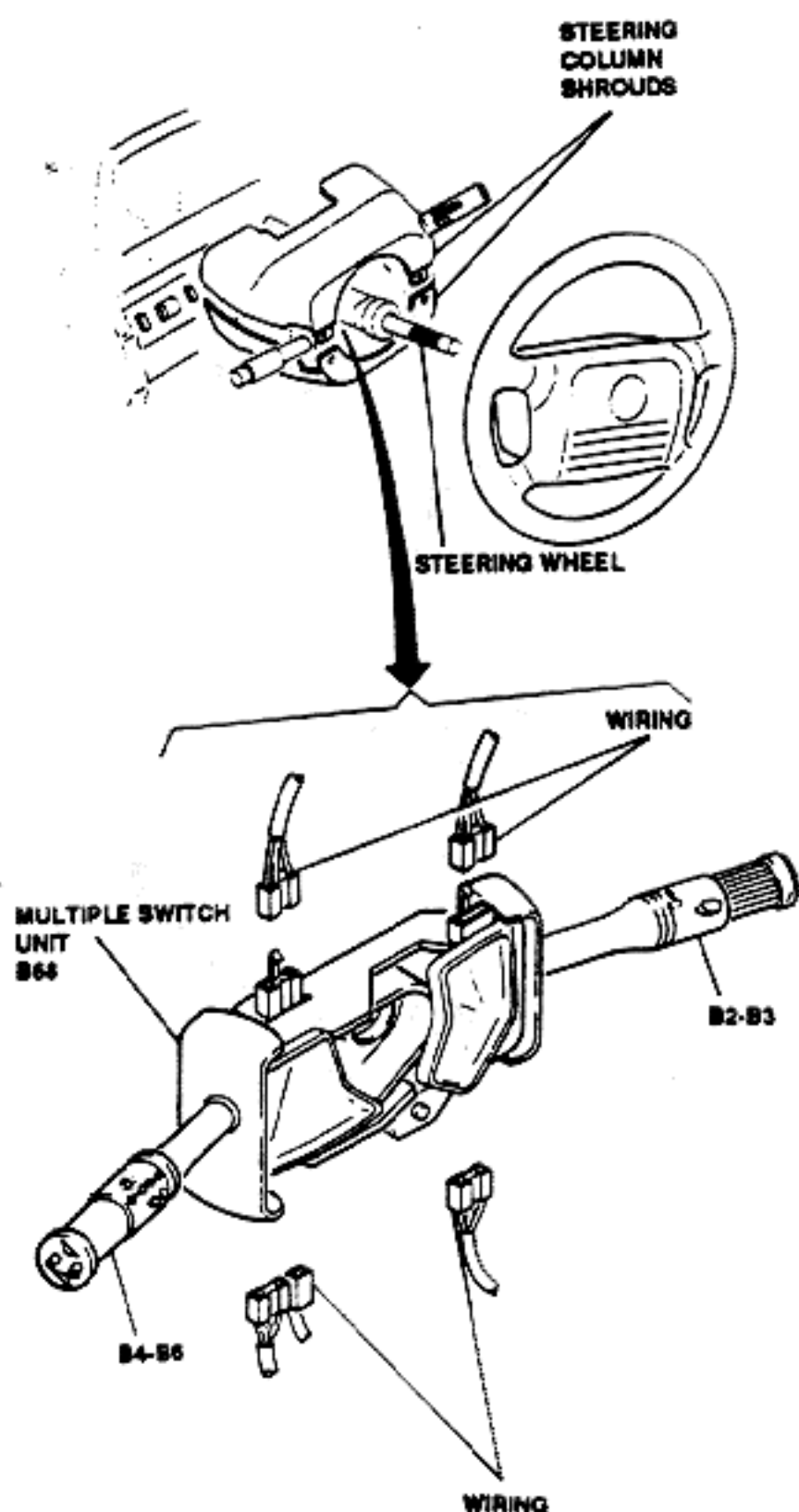
NOTE: To gain access to pushbutton first remove utilities bay cover in engine compartment.

1. Remove utilities bay cover to gain access to switch wiring.
2. Working from engine compartment, loosen screw securing switch and withdraw it from its support.
3. Disconnect switch wiring.
4. Remove switch.



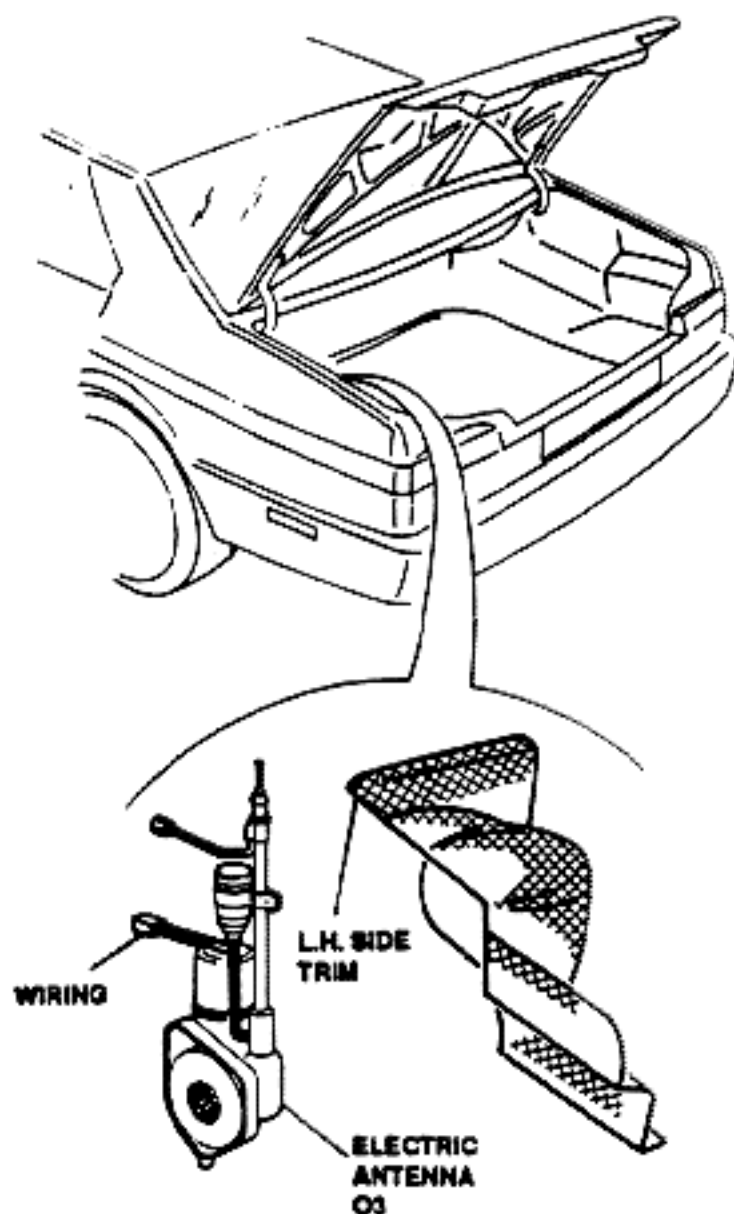
ACCESSORIES - MULTIPLE SWITCH UNIT

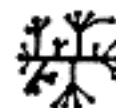
1. Remove steering wheel and steering column shrouds (see Group 23).
2. Disconnect multiple switch wiring.
3. Loosen two screw securing multiple switch.
4. Remove multiple switch unit.



ELECTRIC ANTENNA

1. Disconnect the battery negative cable (-).
2. By working in the trunk, remove the left-side.
3. Disconnect the wiring and remove the electric antenna from the trunk compartment.





TECHNICAL CHARACTERISTICS AND SPECIFICATIONS

TIGHTENING TORQUES

HEAD LAMP UNIT: screws securing projector retaining bracket	0.88 to 2.51 ft.lbs	1.2 to 3.4 Nm
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