



**JAGUAR**

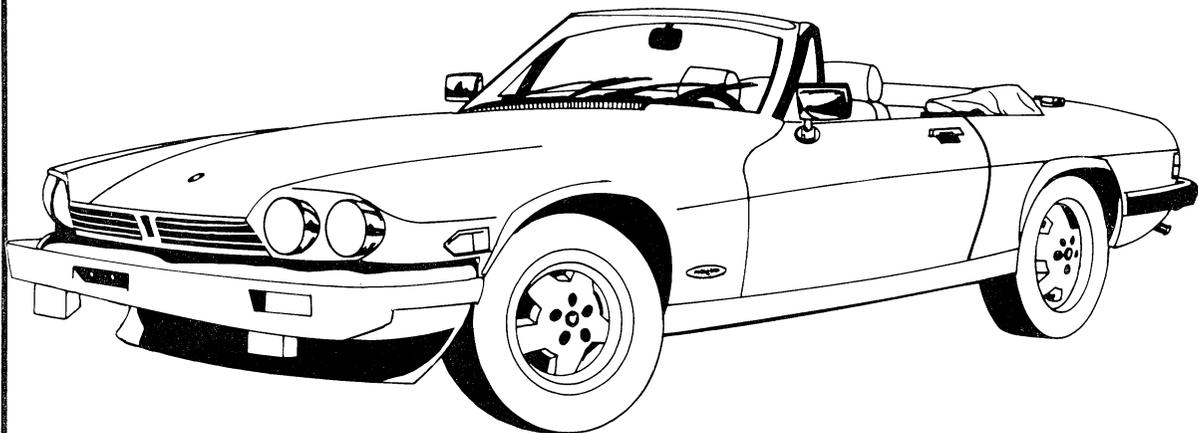
**XJ-S**

**CONVERTIBLE**

*by*

HESS & EISENHARDT

*Coachbuilders Est. 1876*



**Repair Operation Manual**

# HESS & EISENHARDT

## JAGUAR XJ-S CONVERTIBLE REPAIR OPERATION MANUAL

### FOREWORD

The purpose of this manual is to assist skilled mechanics in the efficient repair of the Jaguar XJ-S Convertible, by Hess & Eisenhardt. Using the appropriate service tools and carrying out the procedures as detailed will enable the operations to be completed safely in a reasonable amount of time.

The Convertible Repair Operations Manual and Parts Catalogue is a supplement to the XJ-S Coupe Repair Manual supplied by Jaguar. It explains repair techniques and illustrates repair parts to ensure a high standard of workmanship.

The Hess & Eisenhardt Company reserves the right to vary their specifications without notice.

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## INTRODUCTION

This manual provides repair operation instructions, including parts information for the Jaguar XJ-S Convertible, with coachwork by THE HESS & EISENHARDT CO. of Cincinnati, Ohio.

### REPAIRS AND REPLACEMENTS

When service parts are required it is essential that only genuine replacements supplied by Hess & Eisenhardt are used.

Attention is particularly drawn to the following points concerning repairs and the fitting of replacement parts and accessories.

1. Safety features embodied in the vehicle may be impaired if other than genuine parts are fitted. In certain territories, legislation prohibits the fitting of parts not to the vehicle manufacturer's specification.
2. Torque wrench setting figures given in this service manual must be strictly adhered to.
3. Locking devices, where specified, must be fitted. If the efficiency of a locking device is impaired during removal, it must be replaced.
4. Owners purchasing accessories while traveling abroad should ensure that the accessory and its fitted location on the vehicle conform to mandatory requirements existing in their country of origin.
5. The vehicle warranty may be invalidated by the fitting of other than genuine Jaguar or Hess & Eisenhardt parts.
6. Jaguar distributors and dealers are obliged to supply only genuine service parts supplied by The Hess & Eisenhardt Co.
7. Any part which has been modified, customized, manufactured, supplied, or repositioned by H & E for the Jaguar XJ-S Convertible must be replaced only thru the H & E parts department.

### LAYOUT

The repair operations manual illustrates all parts, assemblies and repair kits available for the vehicle and quotes the part number in the parts lists. Where a component is not part numbered individually, it is not available as a separate item. In such cases the assembly or kit must be fitted to

the vehicle. Part numbers quoted in the parts list are common to the model covered by the publication.

### **ORDERING**

Orders may be placed by mail, facsimile, transmission, or telex. Phone orders will be accepted, however written purchase orders are preferred.

When ordering replacement parts it is essential that the following points are noted.

1. Always quote the complete part number color and description.
2. Always quote the quantity required, noting that the quantities shown are those used in the application actually illustrated. Sometimes only minimum packaged quantities are available and these may well contain more parts than are actually required for a single job.
3. The listing or illustrating of an item does not guarantee availability of the part.

The policy of Hess & Eisenhardt is one of continued development and improvement. Consequently they reserve the right to change specifications without prior notice.

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H & E PART NO. 560517

# **SECTION I**

## **General Description**

# SECTION I

## General Description

### 1.1 INTRODUCTION

This manual provides repair operations instructions including parts information for the Jaguar XJ-S Convertible, with coachwork by The Hess & Eisenhardt Co. of Cincinnati, Ohio.

Section I of this manual provides a general description of the Jaguar XJ-S Convertible. Section II contains operating instructions. Section III contains maintenance and repair to the convertible and Section IV consists of the illustrated parts list. Section V covers the electrical conversion and Section VI is for troubleshooting.

### 1.2 DESCRIPTION

The Jaguar XJ-S Convertible design provides a "low stack" version of the "rocker type" rail control linkage. This offers the advantage of a low roof profile, together with constant operational effort throughout the range of operations.

All body attachments are grouped onto mounting plates on each side of the assembly, with the links located over and within the width of the rails. An inner headlining conceals all of the top mechanisms giving a smooth side appearance.

### 1.3 MODEL IDENTIFICATION

Service procedures covered in this manual are limited to the conversion of the Jaguar XJ-S Convertible by Hess & Eisenhardt and unless otherwise specified, all references to interfacing parts or groups in the Jaguar Repair Operations Manual will be made to the above model.

### 1.4 COMPONENT GROUPS

The convertible top addition consists of eight (8) major groups (See Figure 1-1)

- A) Door Assembly Group
- B) Quarter Glass Assembly Group
- C) Front Compartment Group
- D) Rear Compartment Group
- E) Trunk Group
- F) Body/Windshield Group
- G) Electrical/Hydraulic Components Group
- H) Convertible Top Assembly Group

### 1.5 DOOR ASSEMBLY GROUP

Door additions include window stop assemblies for the door glass and protective weatherstripping located at each of the front door lock pillars.

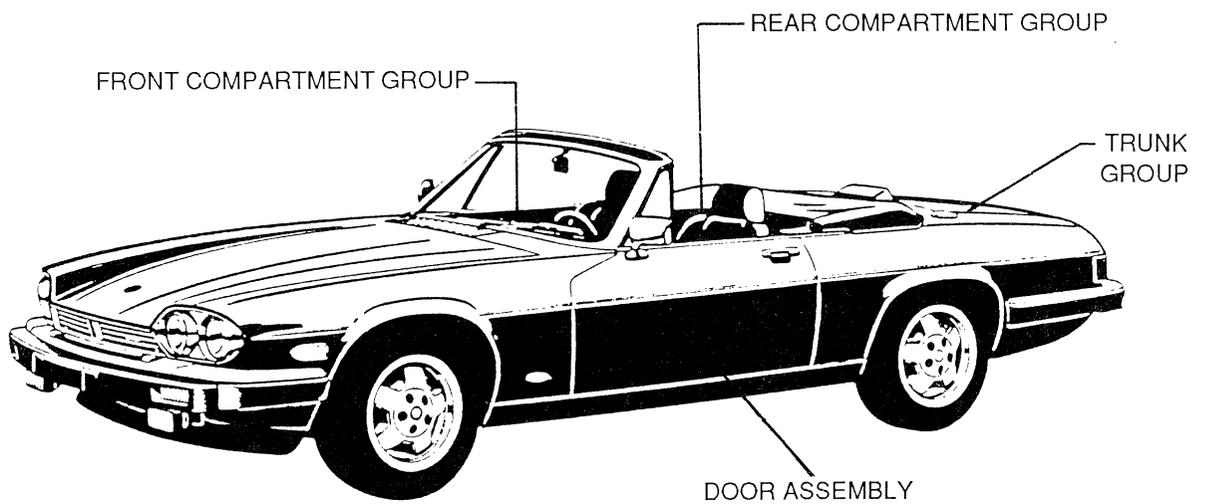
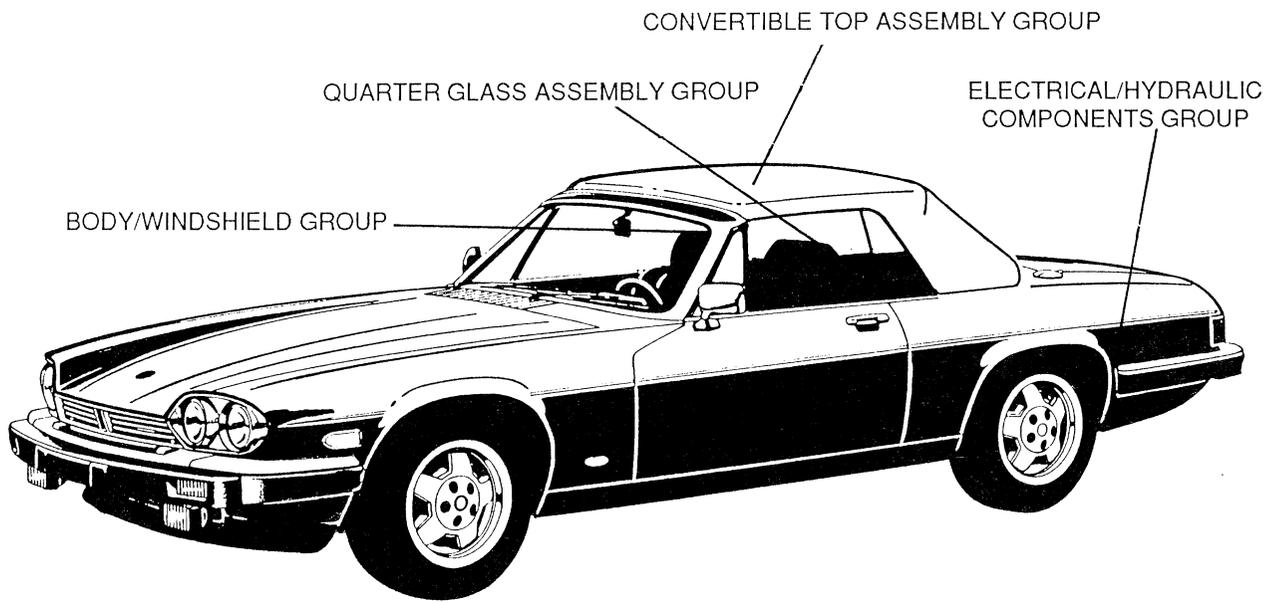


FIGURE 1-1- COMPONENT GROUPS

## **1.6 QUARTER GLASS ASSEMBLY GROUP**

A new electrically powered quarter window assembly has been added with the glass contoured to match the new roof line. Alterations have been made to provide room for the retractable window assembly, top lift cylinder and associated mechanism.

## **1.7 FRONT COMPARTMENT GROUP**

Additions to the front compartment includes carpet modification and console additions. The trim has been designed to complement the Jaguar interior design.

## **1.8 REAR COMPARTMENT GROUP**

The rear compartment includes the trim panel addition, seat belt modifications, lights, speaker, carpet trim details and luggage rail installation.

## **1.9 TRUNK GROUP**

The trunk group consists of the fuel system modifications with fuel gauges, sending units, pumps and associated hardware. Torsion rods have been added along with modified hinges to accept trunk alterations.

## **1.10 BODY/WINDSHIELD GROUP**

This area includes modifications to the windshield group which accepts the convertible top. trim, header, moulding and weatherstripping are included and designed to blend with Convertible top styling.

## **1.11 ELECTRICAL/HYDRAULIC COMPONENTS GROUP**

New wire harness assemblies and controls have been added for the convertible top, powered rear quarter windows, and the heated rear window. Operation of the top is powered by a hydraulic unit consisting of a "12 Volt DC reversible" motor/pump unit which is connected to two (2) double acting cylinders by an upper and lower hydraulic hose assembly.

## **1.12 CONVERTIBLE TOP ASSEMBLY GROUP**

The convertible top incorporates a one piece rear belt trimstick assembly and also utilizes a hold-down cable along the sides to minimize air leakage. Also included is an integral tempered glass rear window.

## **1.13 SAFETY PRECAUTIONS**

Proper service and repair is important for safe, reliable operation of all motor vehicles. The service procedures recommended by HESS & EISENHARDT and described in this service manual are effective methods of performing service operations.

It is important to note that this manual contains various warnings, cautions and notes which should be carefully read in order to minimize the risk of personal injury to service personnel or the possibility that improper service methods will be followed which may damage the vehicle or render it unsafe. It is also important to understand that these cautions and warnings are not exhaustive. HESS & EISENHARDT could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, HESS & EISENHARDT has not undertaken any such broad evaluation. Accordingly, anyone who uses a service procedure or tool which is not recommended by HESS & EISENHARDT must first satisfy himself thoroughly that neither his safety nor vehicle safety will be jeopardized by the service method he selects.

#### 1.14 SAFETY SYMBOLS

We at HESS & EISENHARDT are concerned about your safety as well as the long life of our equipment. With those ends in mind, we have incorporated in this manual, the following symbols to alert you:

##### **WARNING**

This symbol is used throughout this manual to warn of possible serious personal injury.

##### **CAUTION**

This symbol REFERS TO POSSIBLE EQUIPMENT DAMAGE.

##### **NOTE**

This symbol is used to highlight procedures.

Remember, electric equipment and moving parts present potential hazards that can result in serious personal injury. Take care and follow these recommended procedures.

#### 1.15 SAFETY CODES

All local, state and federal codes should be consulted and complied with.

##### **CAUTION**

This vehicle contains parts dimensioned in the metric system. Most fasteners, however, are in the English system. It is important to note that, during any vehicle maintenance procedures, replacement fasteners must have the same measurements as those removed, whether metric or customary. Mismatched or incorrect fasteners can result in vehicle damage or malfunction, or possibly personal injury. Therefore, fasteners removed from the vehicle should be saved for re-use whenever possible. Where the fasteners are not satisfactory for re-use, care should be taken to select a replacement that matches the original.

**CAUTION**

When service work is performed on a convertible where the car must be raised off the floor with a frame type lift, it is recommended that both car doors be closed, prior to lifting to prevent any lock damage from minute flexing of the car frame and body.

# **SECTION II**

## **Operating Instructions**

## SECTION II OPERATING INSTRUCTIONS

### 2.1 INTRODUCTION

This section provides information necessary for the safe and efficient operation of the convertible top. For additional operating information of interfacing parts and groups, refer to the Jaguar XJ-S Convertible Owner's Manual supplied with the car and furnished by The Hess & Eisenhardt Company, Cincinnati, Ohio.

### 2.2 DESCRIPTION OF OPERATION

The operation of the convertible top is controlled electrically by the top control switch and powered by a low pressure hydraulic system consisting of a 12 Volt, direct current, instant reversible motor-pump unit, two double acting cylinders and upper and lower hose assemblies.

During movement of the convertible top the integral tempered glass rear window, which is suspended in the top material, is held forward by the link controlled No. 3 rear bow so that the rear glass window can be stowed in a protective manner.

### 2.3 LOCATION OF CONTROLS

The top control switch is mounted at the left side of the console, as shown in Figure 2-1. This lowers and raises the top electrically.

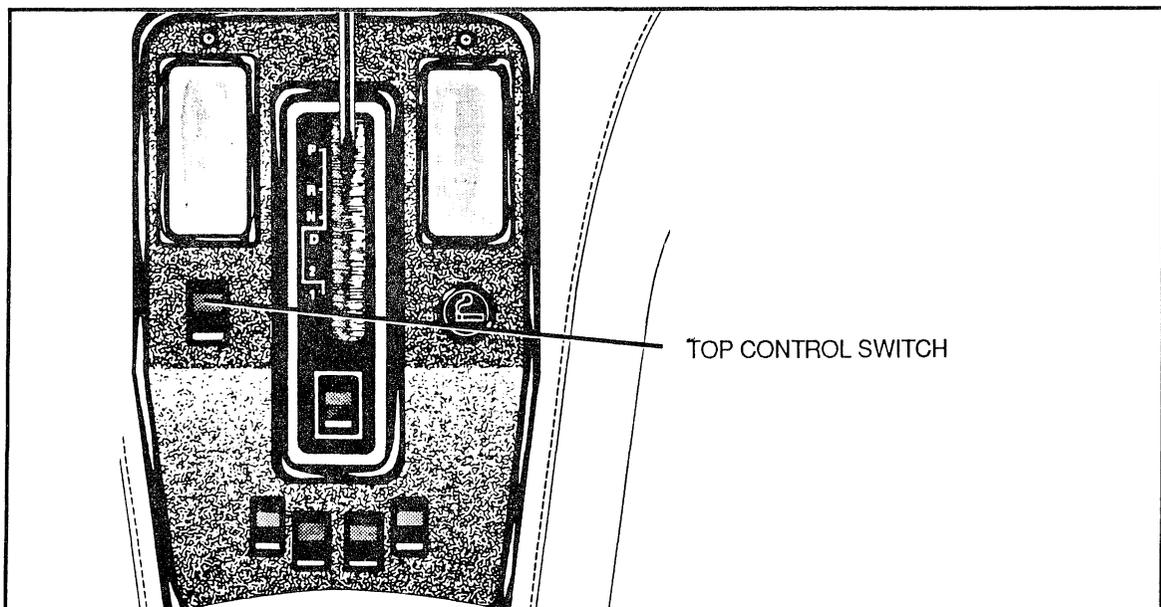


Figure 2-1 Top Control Switch

## 2.4 MANUAL CONVERTIBLE TOP LOWERING AND RAISING

In case of an electrical or hydraulic failure, a by-pass valve, reference Figure 2-2, can be used to manually lower or raise the convertible top.

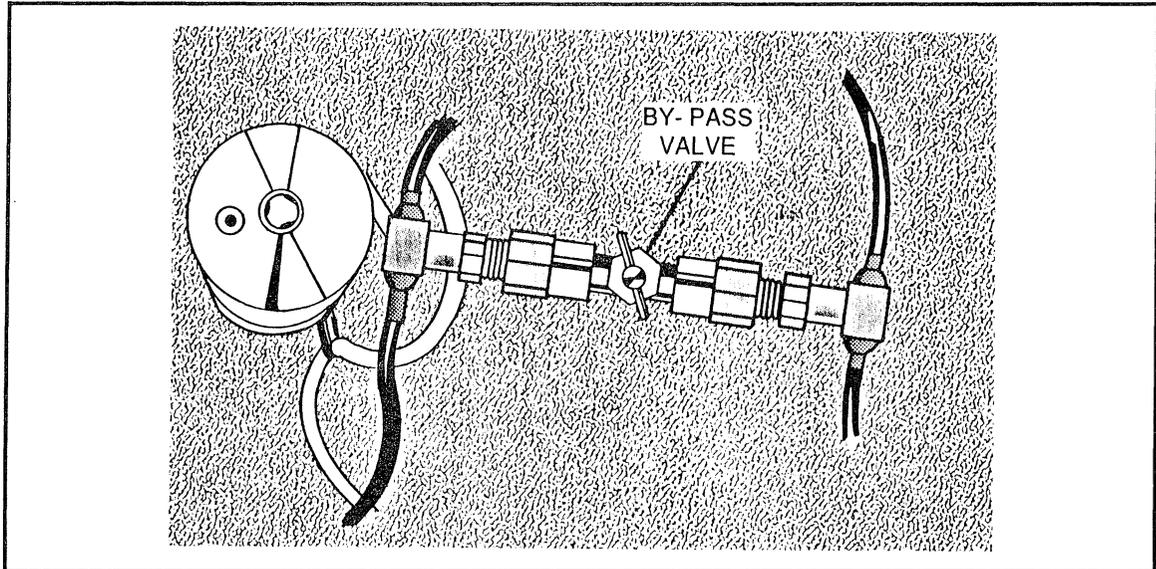


Figure 2-2 By-Pass Valve

Locate by-pass valve, at rear of left wheelhouse in trunk area. Turn by-pass valve counterclockwise to open. This by-passes the electric/hydraulic system. Move top to desired position, and then turn by-pass valve clockwise to close valve.

## 2.5 TOP LOCKING ASSEMBLIES

The two top lock handle assemblies, which secure the convertible top to the windshield header in the raised position, are located at each side of the windshield header as shown in Figure 2-3.

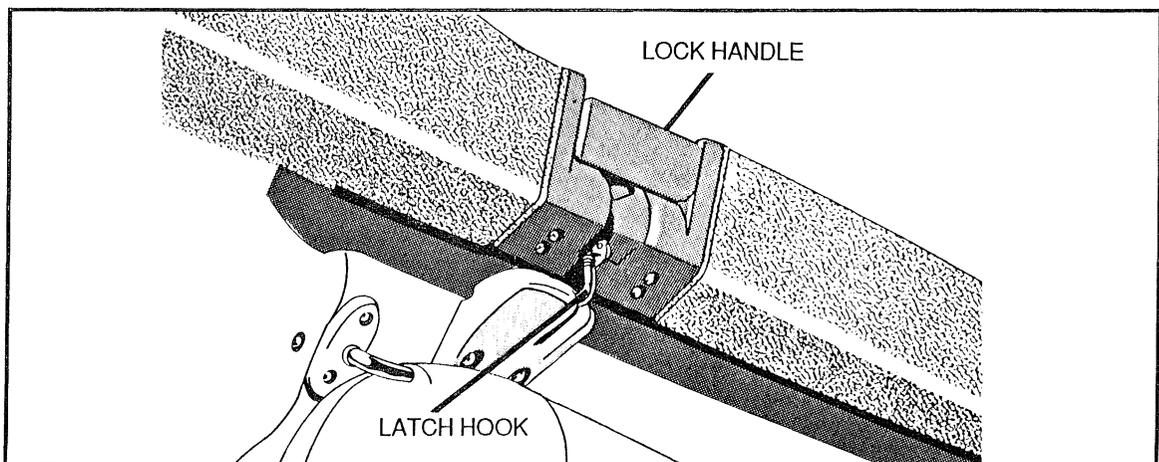


Figure 2-3 Top Lock Assembly

## 2.6 WINDOW CONTROL SWITCHES

The power quarter window control switches are mounted in the console and located near the door window switches (see Figure 2-4). Operation of these switches is the same as the door window switches.

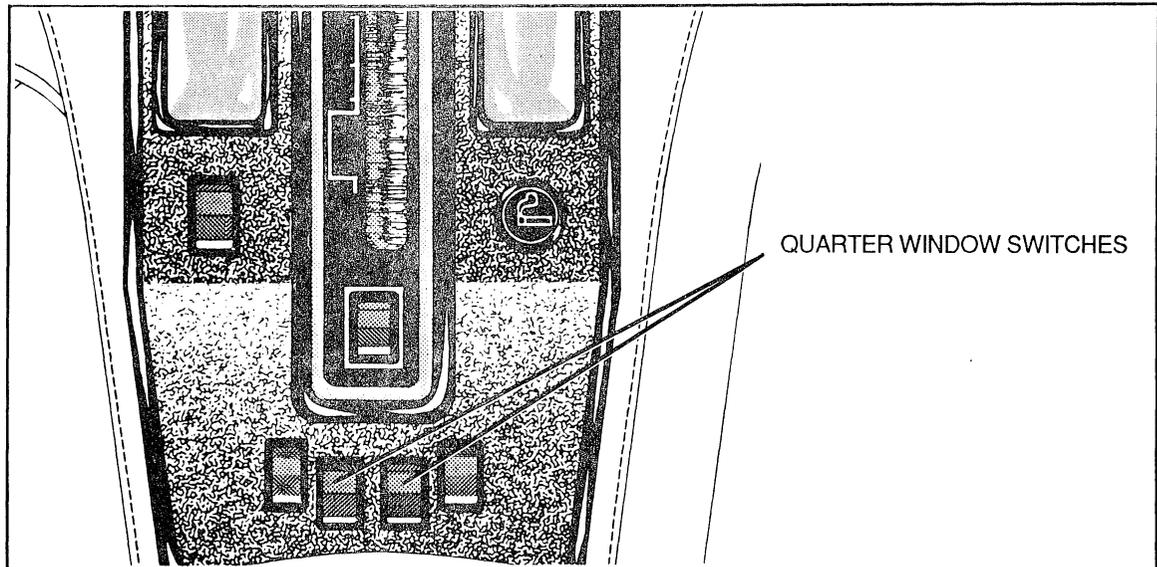


Figure 2-4 Quarter Window Switches

## 2.7 HEATED REAR WINDOW SWITCH (REAR WINDOW)

The convertible heated rear window uses the existing switch located on the instrument panel. The operation is the same as originally designed into the Jaguar and is used for the convertible top rear window.

## 2.8 MOTOR/PUMP (CONVERTIBLE TOP)

The motor/pump unit is mounted at the left side and to the rear on the left rear wheel house. Access to the motor/pump unit is obtained by removing the trim from the trunk area, see Figure 2-5, for identification.

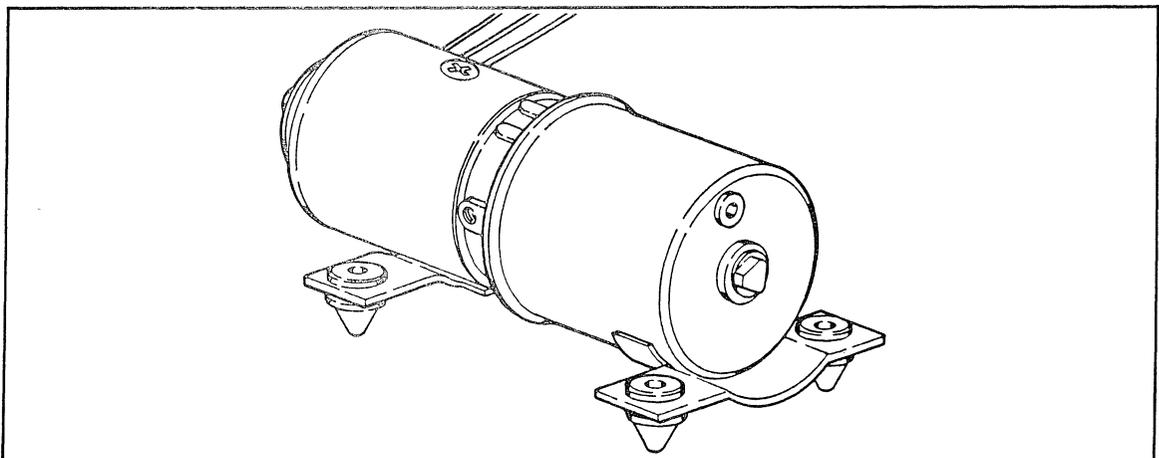


Figure 2-5 Motor/Pump Unit

## 2.9 DOUBLE ACTING LIFT CYLINDERS

The two double acting lift cylinders are located inboard of each quarter panel at each side of the car. Access to the cylinders is obtained by removing the trim panel, reference Figure 2-6, for identification.

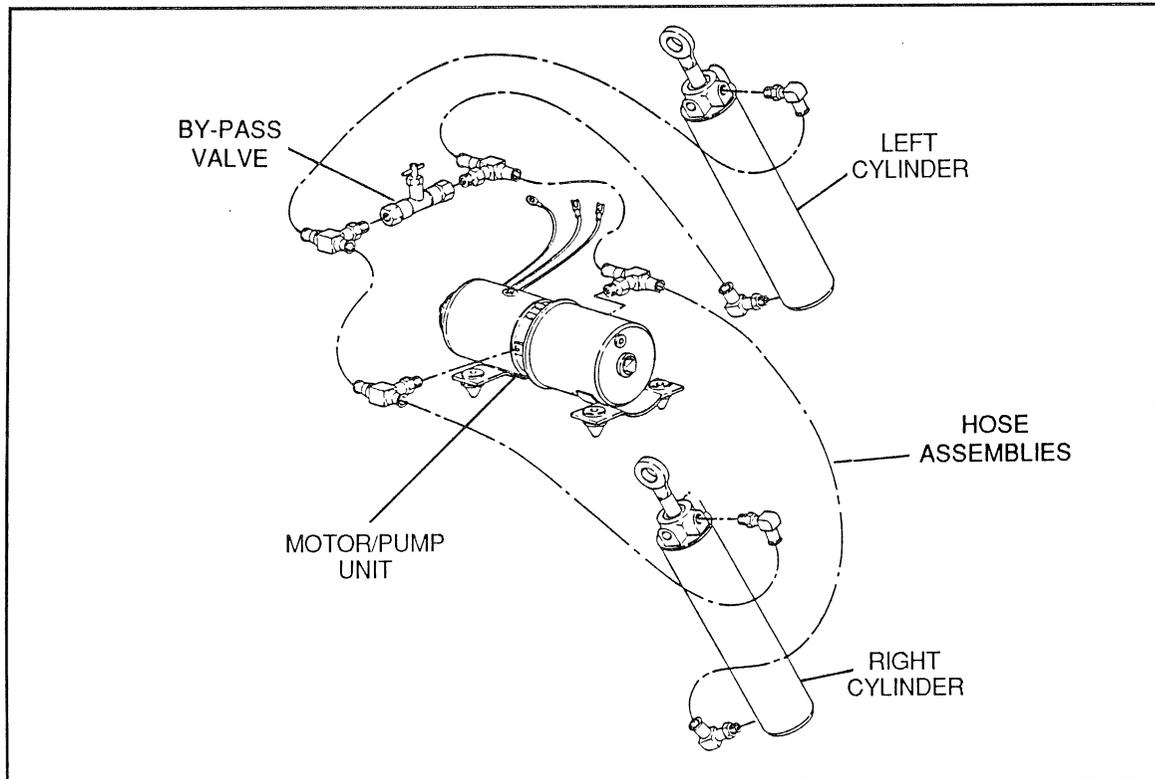


Figure 2-6 Cylinder Location

## 2.10 OPERATION OF CONVERTIBLE TOP

When the top control switch is activated to the "up" position the "up" circuit closes through the battery feed wire to the red motor lead and the motor/pump assembly operate to force the hydraulic fluid through the hoses to the lower ends of the double acting cylinder. The fluid forces the piston rods in the cylinders upward, thus raising the top. The fluid in the top cylinder returns to the pump for recirculation to the bottom of the cylinders. When the control switch is activated to the "down" position, the "down" circuit closes through the feed wire to the yellow motor lead and the motor/pump assembly operate in a reverse direction to force the hydraulic fluid through the hoses to the top of the cylinders. The fluid forces the piston rods in the cylinders downward, thus lowering the top. The fluid in the bottom of the cylinders return to the pump for recirculation to the top cylinders.

The cylinder piston rods move through a stroke of 162.5 mm (6.4 in.) between the fully raised and fully retracted position of the top.

**CAUTION**

Before lowering the top, check to see that all objects are removed from the folding top compartment. Failure to do so may result in breakage of rear window and/or damage the convertible folding top mechanism.

**CAUTION**

While lowering the top, care should be taken to see that the top material and liner are free of top mechanism until the top is fully lowered.

### **2.11 LOWERING THE CONVERTIBLE TOP**

- A. Switch on the ignition.
- B. Release both top lock assemblies which secure the convertible top to the windshield header.
- C. Press the top switch to "down" until the top is fully lowered; release the switch.
- D. Fit boot to protect the retracted top. When the boot is not in use it can be stored in a bag in the trunk. However, its use is recommended when the top is in the "down" position.

### **2.12 RAISING THE CONVERTIBLE TOP**

- A. Remove boot.
- B. Switch on the ignition.
- C. Press the convertible top switch to the "up" position, until the top is fully raised; release the switch.
- D. Fasten the two lock assemblies to secure the convertible top to the top of the windshield/header.

# **SECTION III**

## **REPAIR AND REFIT OPERATIONS**

## SECTION III

### Repair and Refit Operations

#### 3.1 INTRODUCTION

This section provides repair and refit operations for the Jaguar XJ-S Convertible. Included are the procedures for adjustment, removal, repair and service for all components which make-up the coachwork additions by The Hess & Eisenhardt Co. Of Cincinnati, OH.

#### 3.2 COMPONENT GROUPS (REPAIR)

Repairs covered in this section refer to the eight (8) major groups that comprise the coachwork addition to the Jaguar XJ-S.

Door Assembly Group	3.3
Quarter Glass Assembly Group	3.4
Front Compartment Group	3.5
Rear Compartment Group	3.6
Trunk Group	3.7
Body/Windshield Group	3.8
Electrical/Hydraulic Components Group	3.9
Convertible Top Assembly Group	3.10

**3.3 DOOR ASSEMBLY GROUP (REMOVE AND REFIT)**

Door Glass Assembly	3.3.1
Weatherstrip	3.3.2
Door Window Stop	3.3.3
Door Glass Stop Channel Assembly	3.3.4
Door Glass Channel Stop	3.3.5
Guide Strip	3.3.6

### 3.3.1 DOOR GLASS ASSEMBLY

#### Remove and Refit

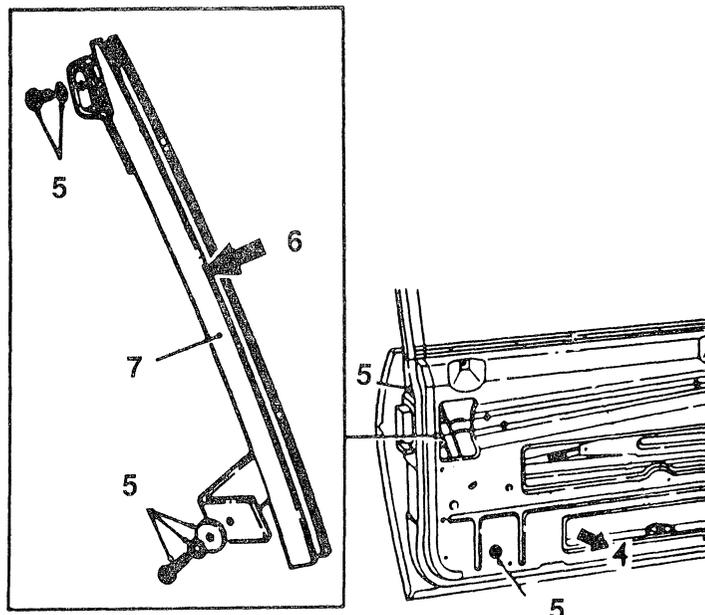
##### Removing

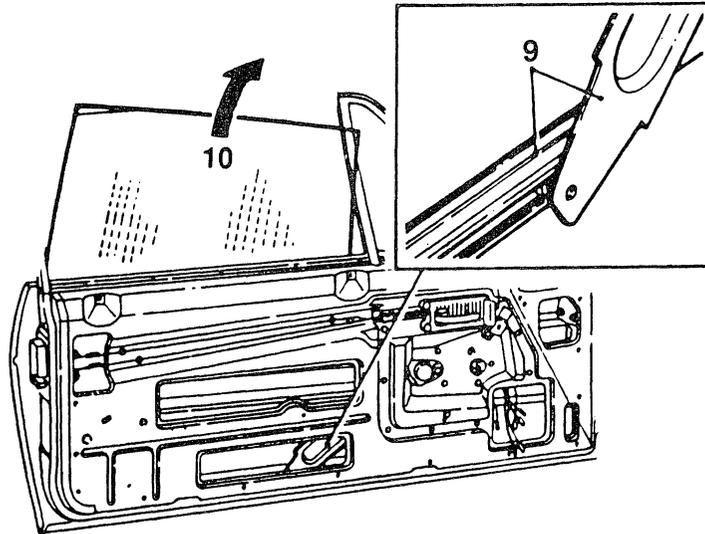
1. Position window in "up" position 1/2" from top.
2. Remove door trim panel
3. Remove door window stop, see 3.3.3.
4. Remove door glass channel stop, see 3.3.5.
5. With glass in raised position remove two (2) screws and washers securing window channel to door.
6. Ease rubber clear of channel.
7. Remove window channel.
8. Lower door glass.

#### NOTE

When lowering door glass care should be taken to guide glass by hand.

9. Disconnect window lift remote control mechanism from window glass by tilting glass forward.





10. With glass still in the tilted position, carefully lift clear of door.

#### Refitting

11. Reverse Operations 1 to 10.

### 3.3.2 WEATHERSTRIP

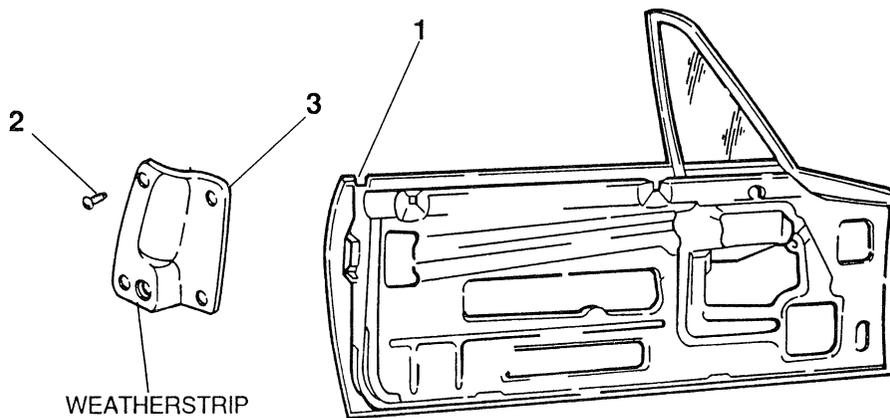
Remove and refit

Removing

1. Locate weatherstrip at rear of right or left door.
2. Remove four (4) screws.
3. Remove weatherstrip.

Refitting

4. Position new weatherstrip to door.
5. Align weatherstrip to door bolt pattern.
6. Secure with four (4) screws.

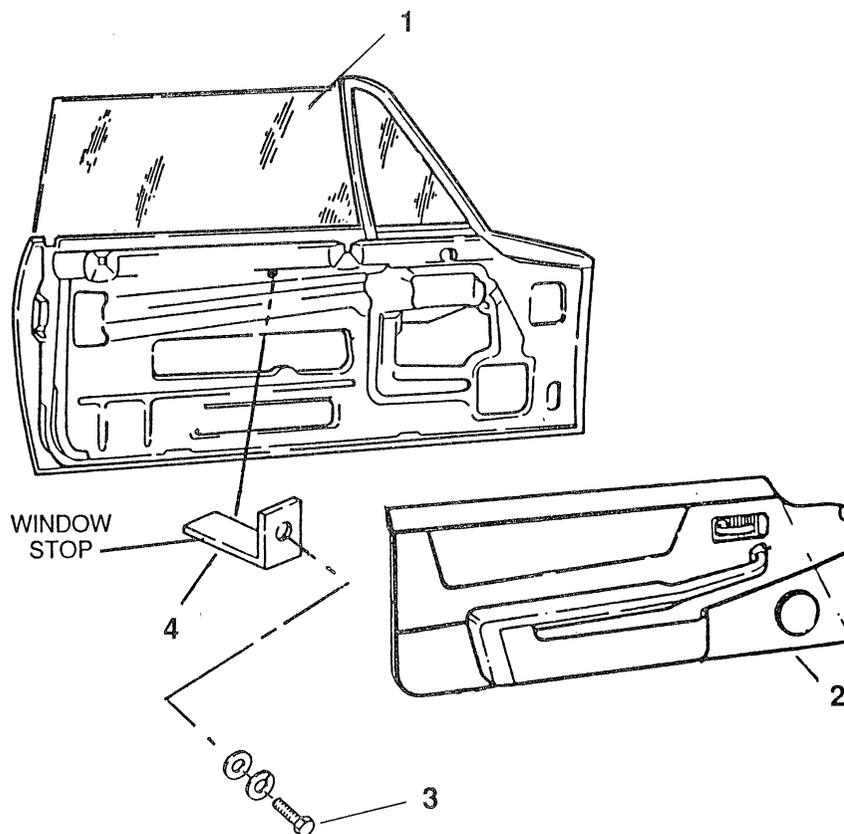


### 3.3.3 DOOR WINDOW STOP

Remove and refit

Removing

1. Position window in up position 1/2" from top.
2. Remove door trim panel, Reference Jaguar manual. See 76.34.01
3. Remove one (1) bolt, star washer and washer.
4. Remove window stop-door.



Refitting

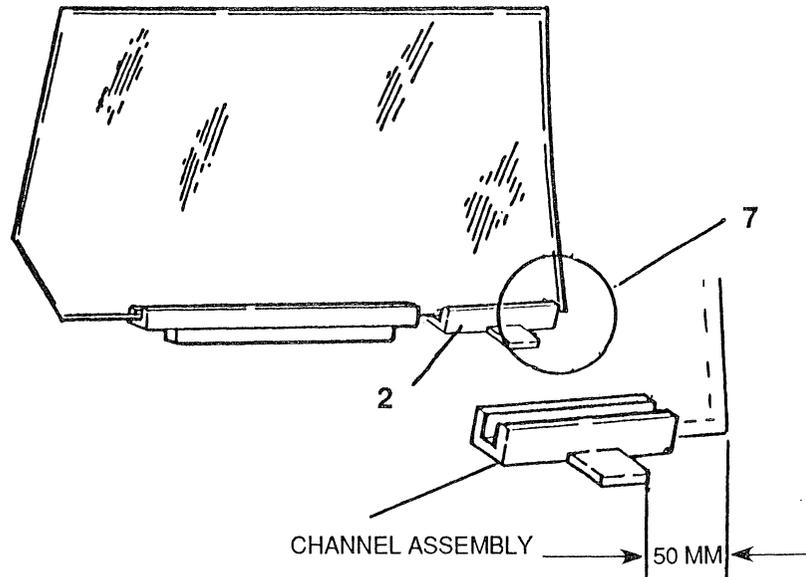
5. Install window stop-door to inside panel.
6. Secure with one (1) bolt, star washer and washer.
7. Install door trim panel.

### 3.3.4 DOOR GLASS STOP CHANNEL ASSEMBLY

Remove and refit

Removing

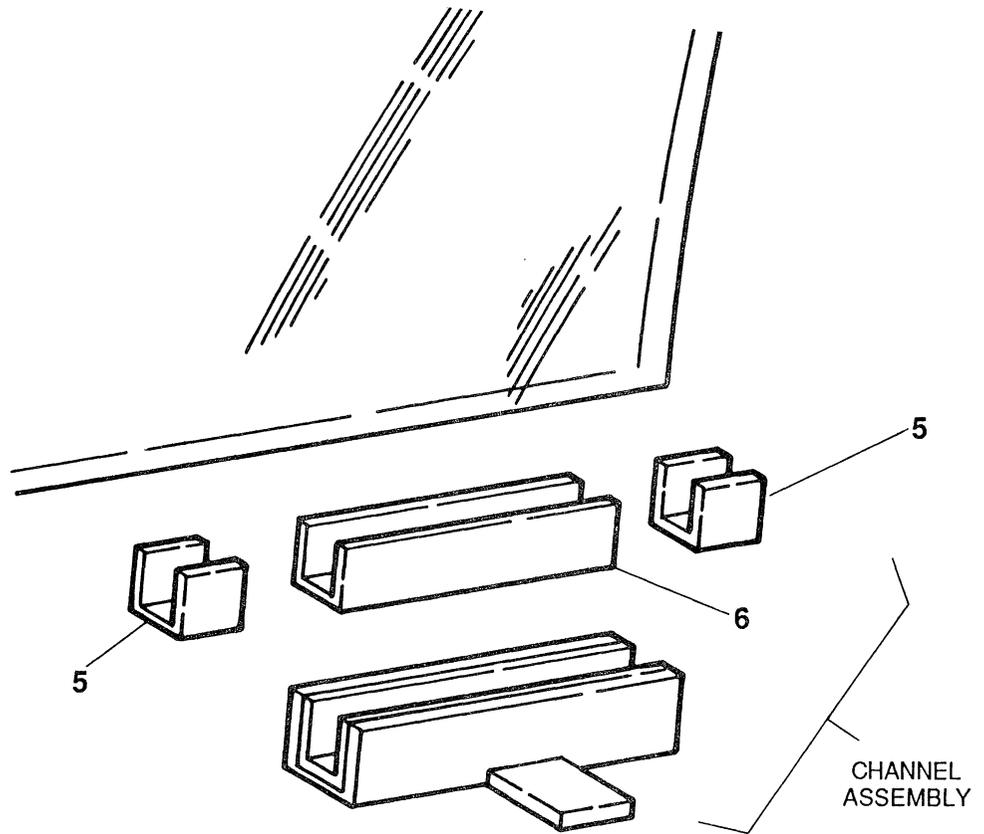
1. Remove door glass assembly, see 3.3.1.
2. Remove door glass stop assembly from door glass assembly by heating channel stop to 450 °.



Refitting

3. Clean glass thoroughly.
4. Prime glass at front lower area with #435.18 glass primer.
5. Install two (2) spacers into channel stop.
6. Install adhesive into channel stop.
7. Position channel stop assembly to glass 50 MM from front lower corner of glass, see detail 7.

8. Heat channel stop assembly to 450° for three (3) minutes to adhere channel stop assembly to glass.



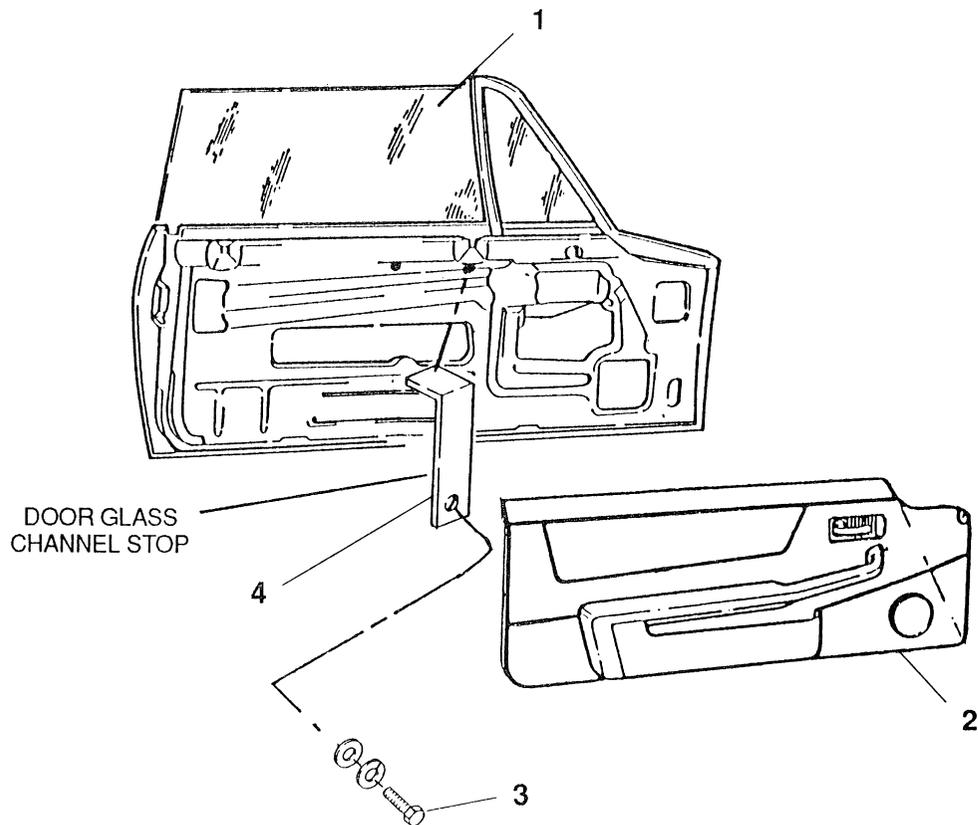
9. For refitting door glass assembly with door glass stop assembly installed, see 3.3.1.

### 3.3.5 DOOR GLASS CHANNEL STOP

Remove and refit

#### Removing

1. Position window in up position 1/2" from top.
2. Remove door trim panel, reference Jaguar Manual, see 76.34.01.
3. Remove one (1) bolt and two (2) washers.
4. Remove door glass channel stop.



#### Refitting

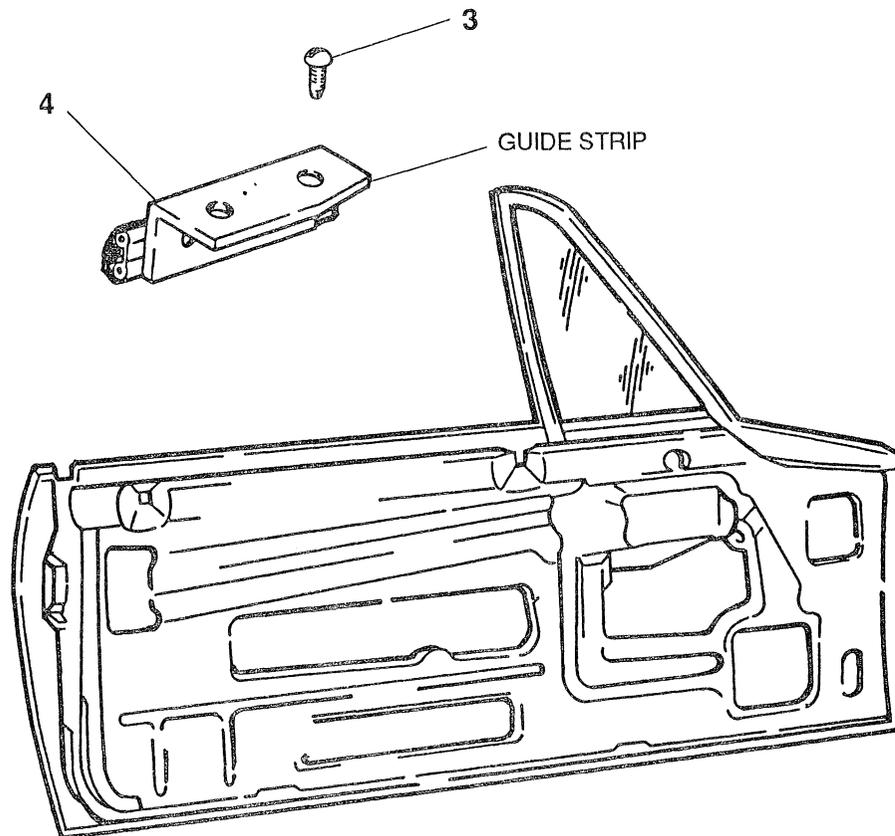
5. Install door glass channel stop to inside panel.
6. Secure with one (1) bolt and two (2) washers.
7. Install door trim panel.

### 3.3.6 GUIDE STRIP ASSEMBLY

Remove and refit

Removing

1. Remove door trim panel right or left door.
2. Lower door glass to "down" position.
3. Remove two (2) screws.
4. Remove guide strip assembly.



Refitting

5. Reverse operations 1 to 4.

### 3.4 QUARTER GLASS GROUP (REMOVE AND REFIT)

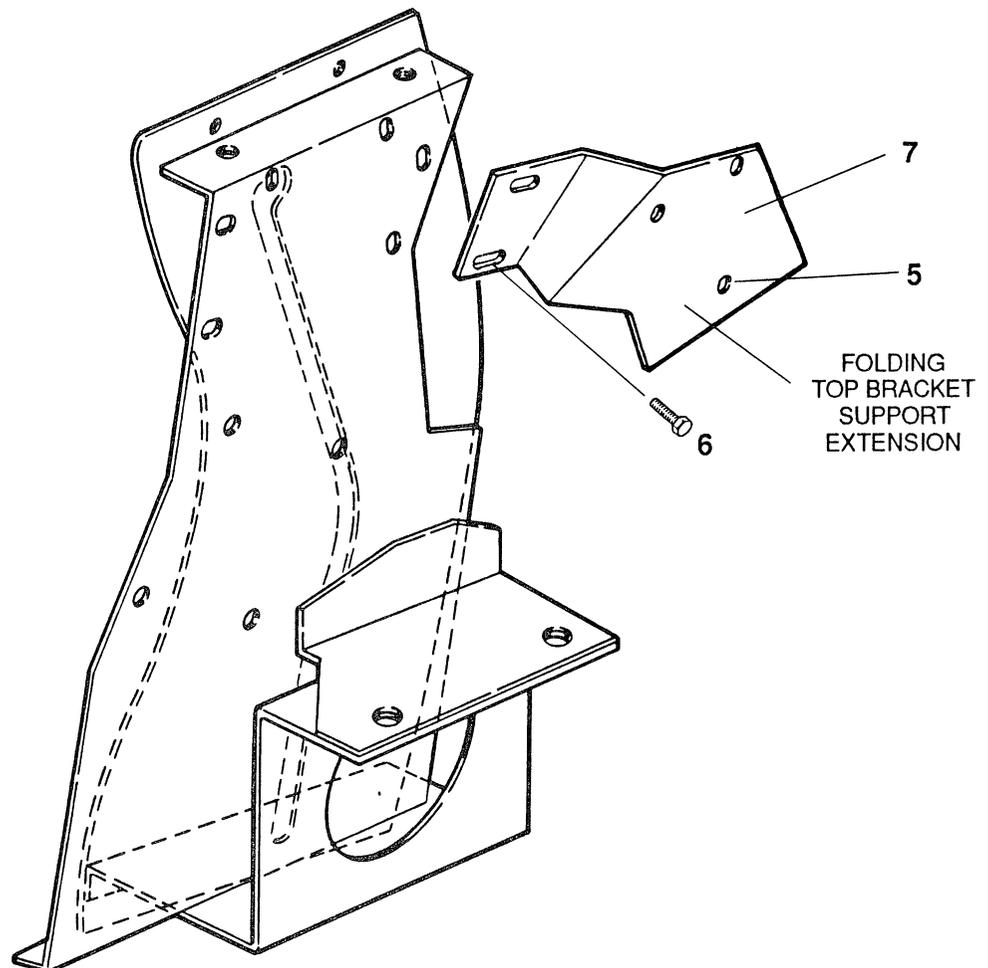
Folding Top Bracket Support Extension	3.4.1
Regulator Panel and Guide Plate Assembly	3.4.2
Quarter Window Regulator Panel Assembly	3.4.3
Quarter Window Regulator	3.4.4
Quarter Glass Assembly	3.4.5
Quarter Window Glass	3.4.6
Quarter Window Sash	3.4.7
Front Sash Channel Assembly	3.4.8
Front Sash Channel Sealing Strip	3.4.9
Guide Plate To Regulator Panel Bracket	3.4.10
Regulator Panel To Lock Pillar Bracket	3.4.11
Quarter Window Front "Up-Stop"	3.4.12
Quarter Window Rear "Up-Stop"	3.4.13

### 3.4.1 FOLDING TOP BRACKET SUPPORT EXTENSION

Remove and refit

Remove

1. Lower convertible top.
2. Remove trim panel, see 3.6.3.
3. Remove seat belt retractor stand assembly, see 3.6.1.
4. Lower quarter glass to fully down position.
5. Remove three (3) hex head bolts from top assembly.
6. Remove two (2) hex head bolts, washers, lockwashers and nuts.
7. Remove folding top bracket support extension.



Refitting

8. To refit folding top support extension reverse operations 1 to 7.

### 3.4.2 REGULATOR PANEL AND GUIDE PLATE ASSEMBLY

Remove and refit

#### Removing

1. Lower top to full "down" position.
2. Lower quarter glass to down position.
3. Remove trim panel, see 3.6.3.
4. Remove seat belt retractor stand assembly, see 3.6.1.
5. Remove guide plate bracket, see 3.4.10.
6. Remove regulator panel to lock pillar panel bracket, see 3.4.11.
7. Remove folding top bracket support extension, see 3.4.1.
8. Remove two (2) hex head bolts and hardware securing regulator panel and guide plate assembly to support.
9. Raise quarter window to full "up" position.
10. Disconnect electrical connection from window regulator to wire harness.
11. Remove regulator and guide plate assembly.

#### NOTE

Quarter glass assembly and window regulator are removed with this assembly.

12. Remove quarter glass assembly, see 3.4.5.
13. Remove (drill out) four (4) rivets to remove regulator assembly.

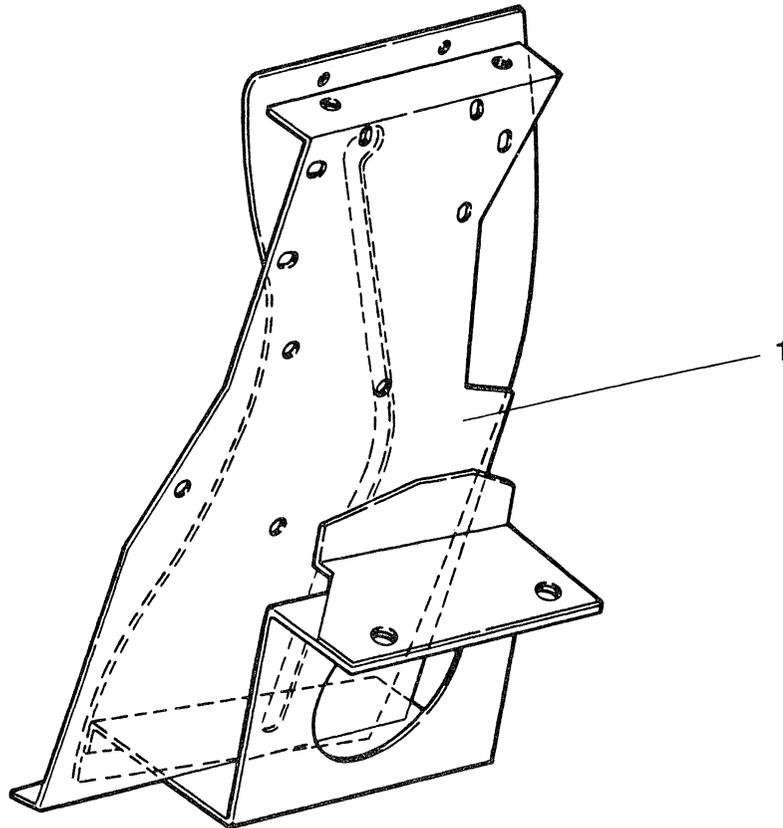


### 3.4.3 QUARTER WINDOW REGULATOR PANEL ASSEMBLY

Remove and refit

Removing

1. For removing and refitting quarter window regulator panel assembly, see 3.4.2 operations 1 to 11.



Refitting

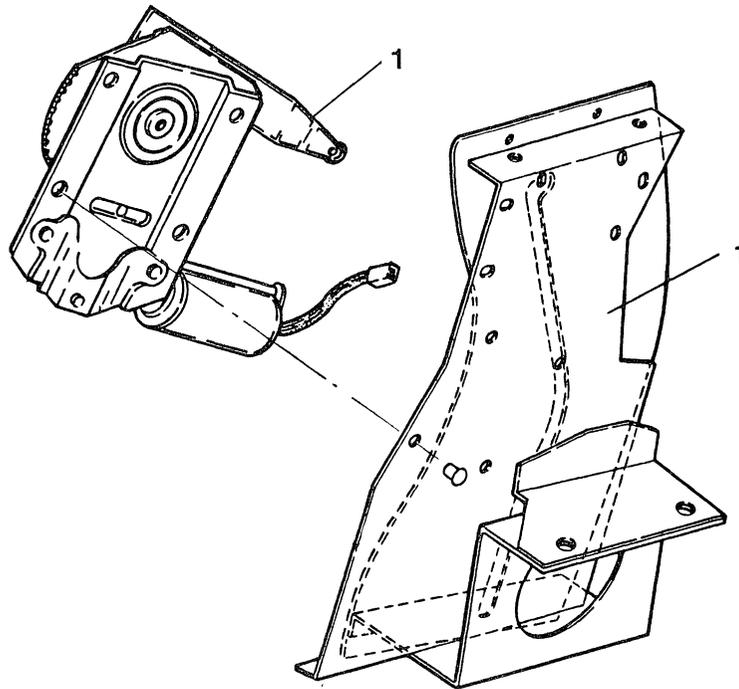
2. To install quarter window regulator panel assembly reverse operation 1 to 11 see 3.4.2

### 3.4.4 QUARTER WINDOW REGULATOR

Remove and refit

Removing

1. Reference 3.4.2, operations 1 to 14, for complete removing of a quarter window regulator.



Refitting

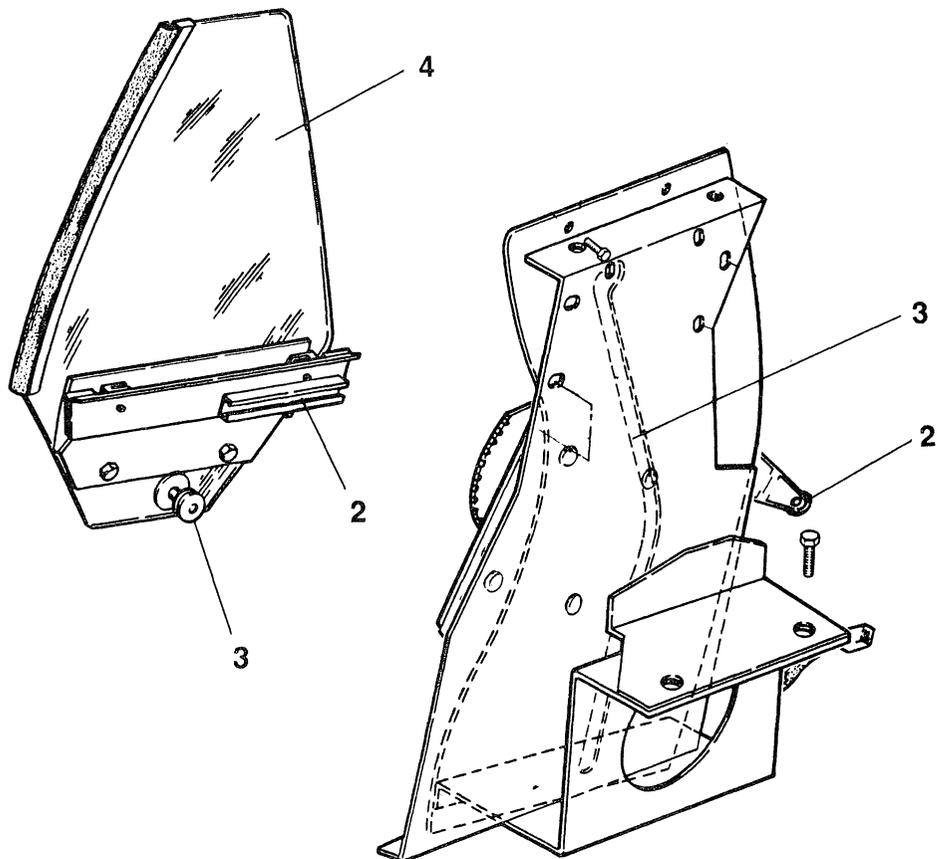
2. For refitting quarter window regulator, see 3.4.2 and reverse operations 1 to 14.

### 3.4.5 QUARTER GLASS ASSEMBLY

Remove and refit

Removing

1. Remove quarter glass assembly, see 3.4.2 operations 1 to 14.
2. Remove regulator arm from quarter glass assembly channel.
3. Remove roller assembly from regulator panel and guide plate assembly track.
4. Remove quarter glass assembly.



Refitting

5. For refitting quarter glass assembly reverse operations 1 to 4.

### 3.4.6 QUARTER WINDOW GLASS

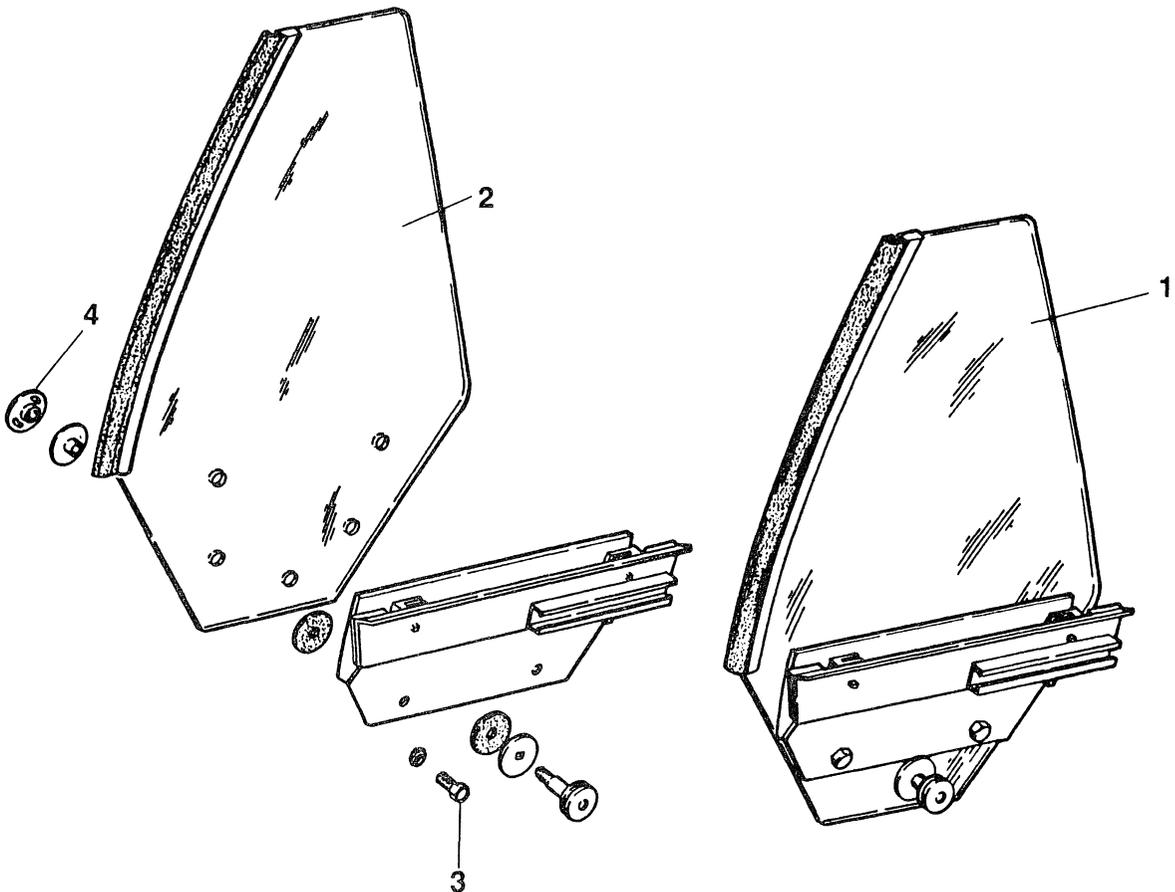
Remove and refit

Removing

1. Remove quarter window glass assembly, see 3.4.2 operations 1 to 14.
2. Remove quarter window glass, see 3.4.5.
3. Remove four (4) 1/4" bolts to remove sash assembly from glass.
4. Remove one (1) round nut with "spanner wrench" to remove roller assembly from glass.

#### NOTE

Do not remove rubber sealing strip or chrome channel assemblies from glass.



Refitting

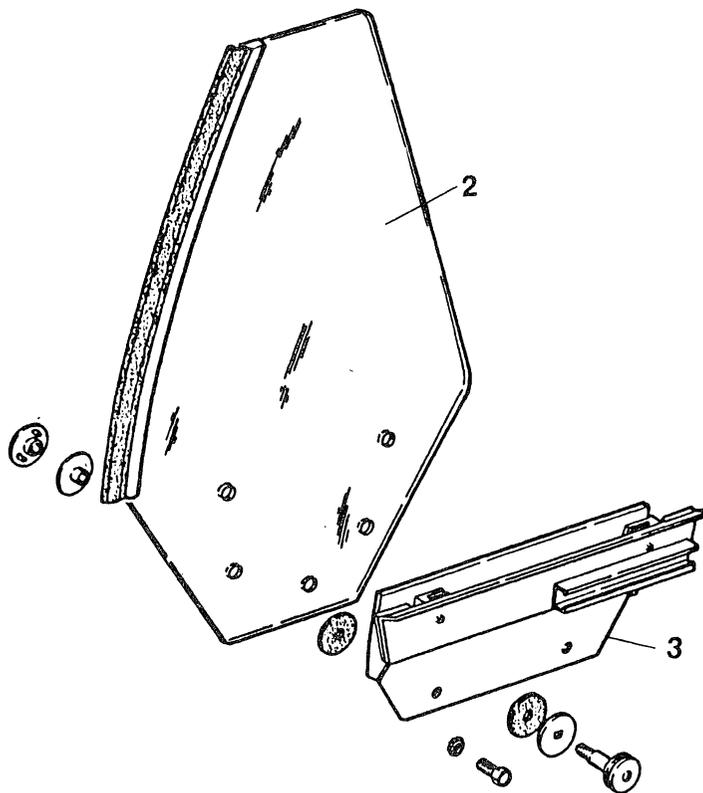
5. To refit new glass, reverse operations 1 to 14.

### 3.4.7 QUARTER WINDOW SASH

Remove and refit

Removing

1. Remove quarter window glass assembly, see 3.4.2.
2. Remove quarter window glass, see 3.4.5.
3. Reference 3.4.6 for quarter window sash operation 3 to 4.



Refitting

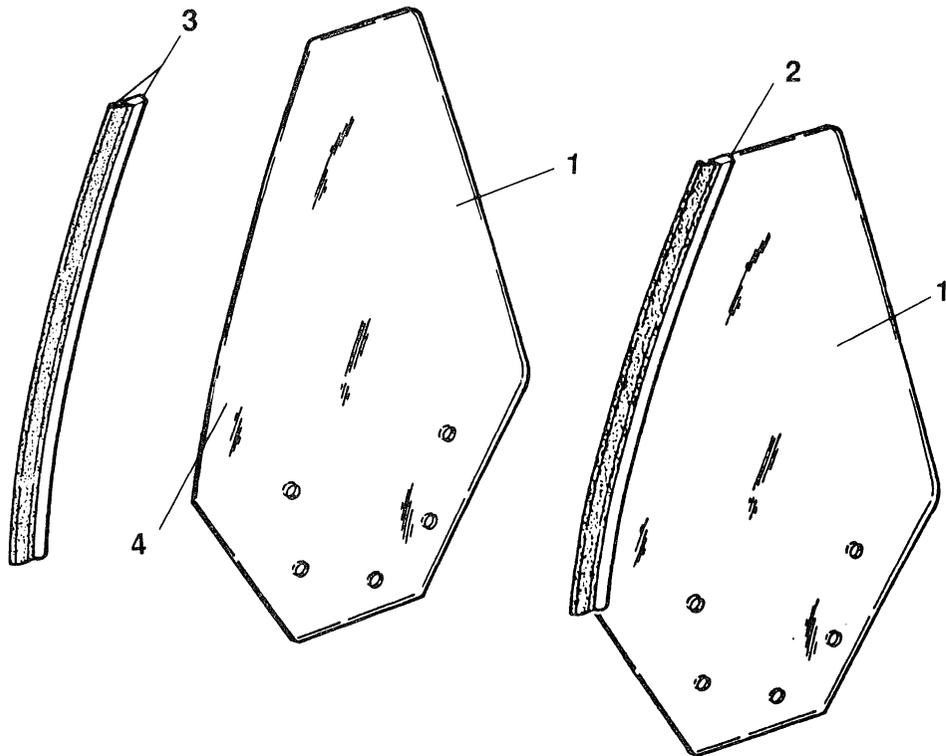
4. To refit quarter window sash reverse operations 1 to 3.

### 3.4.8 FRONT SASH CHANNEL ASSEMBLY (WITH SEALING STRIP)

Remove and refit

Removing

1. With quarter glass removed from car, see 3.4.7 remove front sash channel as follows.
2. Heat sash channel assembly to 450° for three (3) minutes to free bonding agent from glass.
3. Remove sash channel assembly.

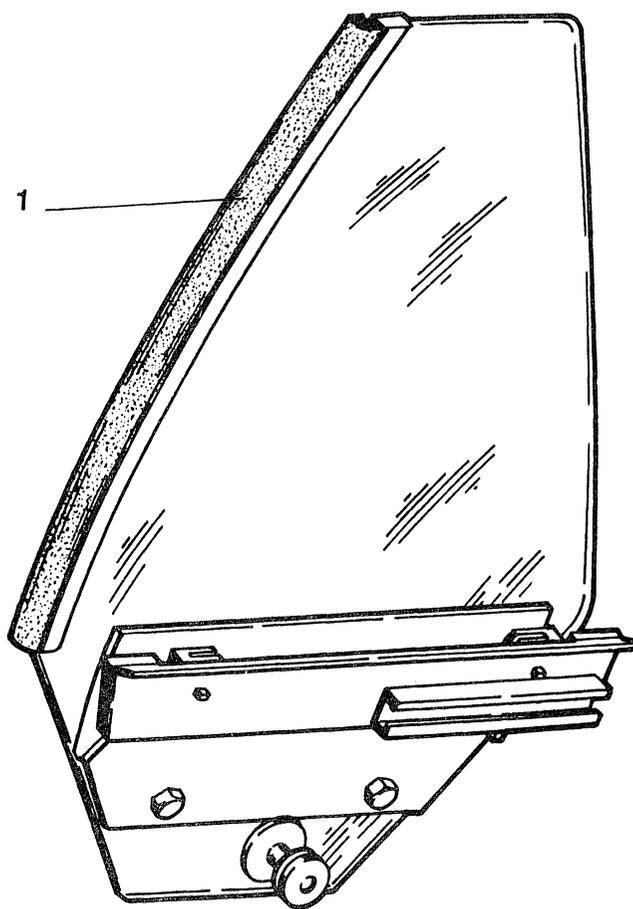


Refitting

4. Clean glass thoroughly.
5. Prime glass at front area with #435.18 glass primer.
6. Install adhesive into channel.
7. Position channel assembly to glass.
8. Heat channel assembly to 450° for three (3) minutes to adhere channel stop assembly to glass.

### 3.4.9 FRONT SASH CHANNEL SEALING STRIP

1. Non-replaceable part, part of front sash channel assembly, see 3.4.8.

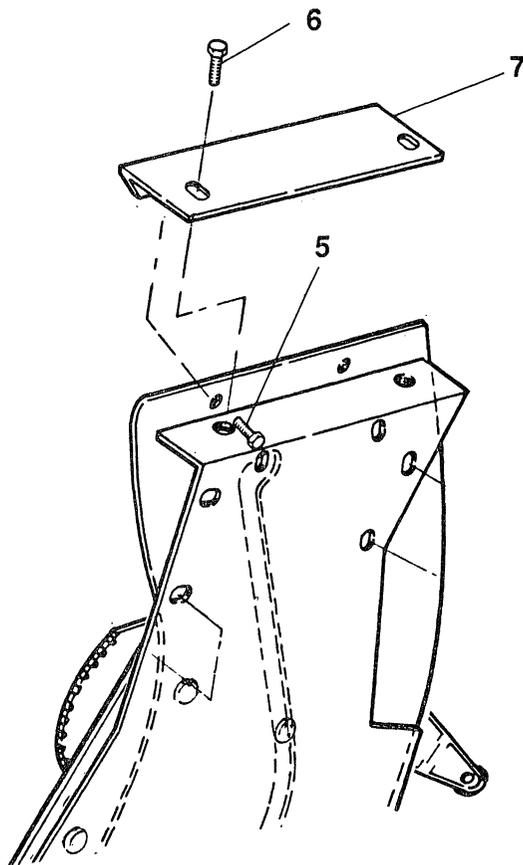


### 3.4.10 GUIDE PLATE TO REGULATOR PANEL BRACKET

Remove and refit

Remove

1. Lower top to full "down" position.
2. Lower quarter window to full "down" position.
3. Remove trim panel, see 3.6.3.
4. Remove seat belt retractor stand assembly, see 3.6.1.
5. Remove two (2) bolts securing guide bracket to guide plate.
6. Remove two (2) bolts securing guide bracket to regulator panel.
7. Remove guide plate bracket.



Refitting

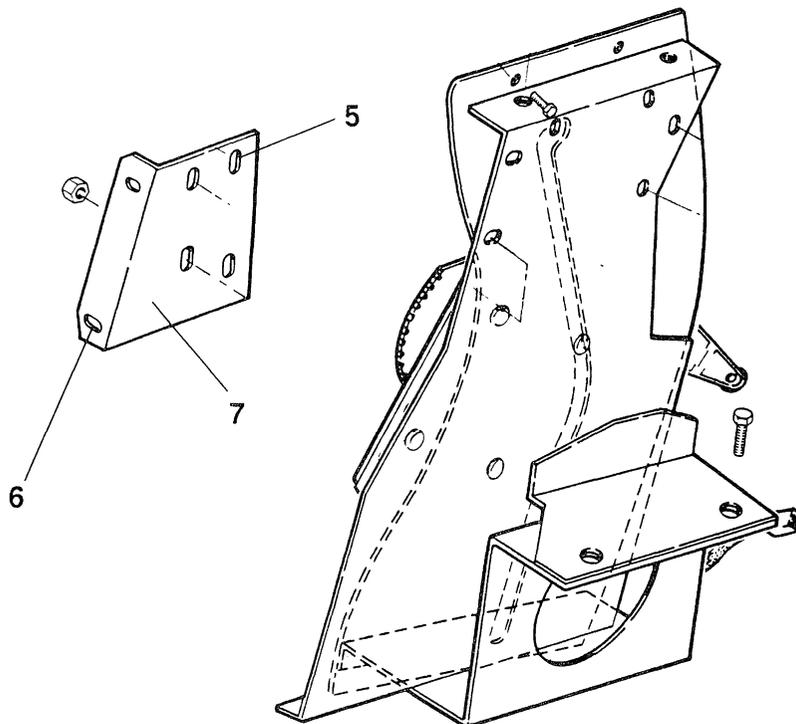
8. For refitting guide plate regulator bracket, reverse operations 1 to 7.

### 3.4.11 REGULATOR PANEL TO LOCK PILLAR BRACKET

Remove and refit

Remove

1. Lower top to full "down" position.
2. Lower quarter glass to "down" position.
3. Remove trim panel, see 3.6.3.
4. Remove seat belt retractor stand assembly, see 3.6.1.
5. Remove two (2) bolts securing regulator bracket to guide plate.
6. Remove two (2) bolts securing regulator bracket to lock pillar.
7. Remove regulator panel to lock pillar bracket.



Refitting

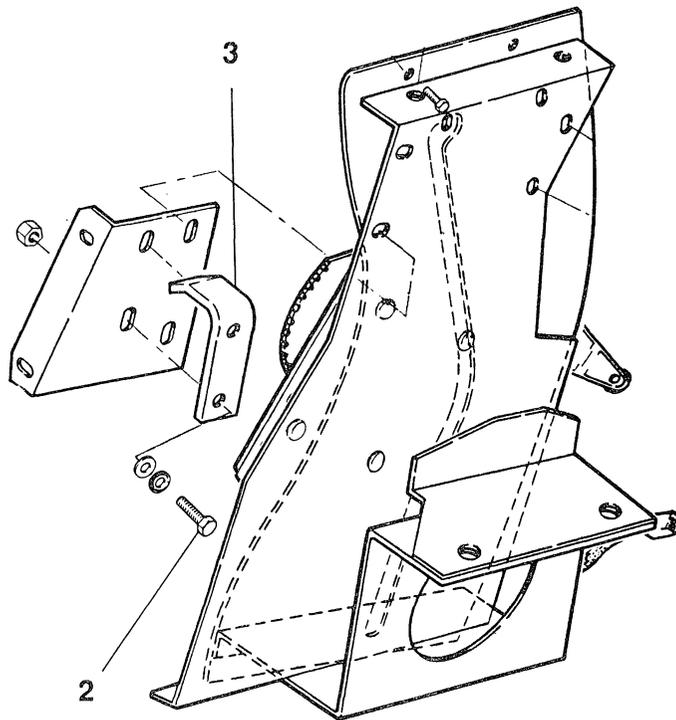
8. For refitting regulator panel to lock pillar bracket, reverse operations 1. to 7.

### 3.4.12 QUARTER WINDOW FRONT "UP-STOP"

Remove and refit

Remove

1. Remove trim panel, see 3.6.3 to expose "up-stop" at front of quarter window.
2. Remove two (2) hex head bolts, flat washers, and lockwashers.
3. Remove front "up-stop".



Refitting

4. To refit front "up-stop" reverse operations 1 to 3.

### 3.4.13 QUARTER WINDOW REAR "UP-STOP"

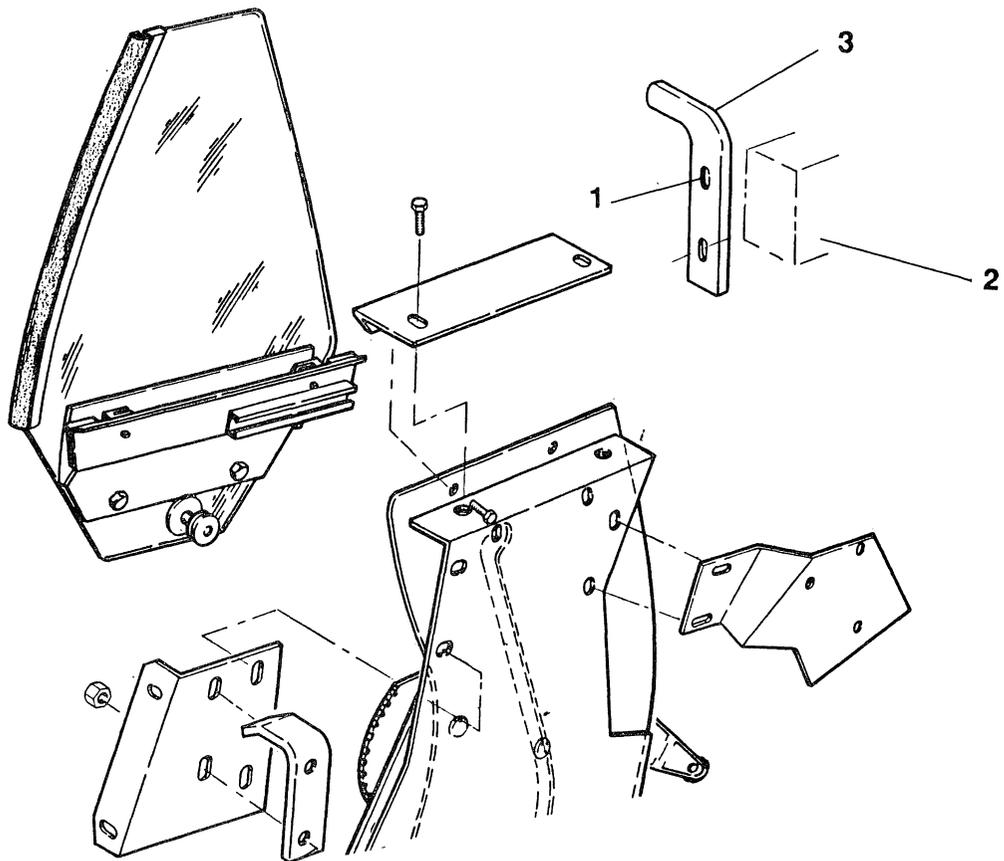
Removal and refit

Removing

**NOTE**

Do not remove trim panel for rear "up-stop" replacement.

1. Remove two (2) 1/4-20 hex head bolts.
2. Remove two (2) lockwashers and washers.
3. Remove rear quarter window "up-stop".



Refitting

4. To refitting of rear quarter window "up-stop" reverse operation 1 to 3.

### 3.5 FRONT COMPARTMENT GROUP (REMOVE AND REFIT)

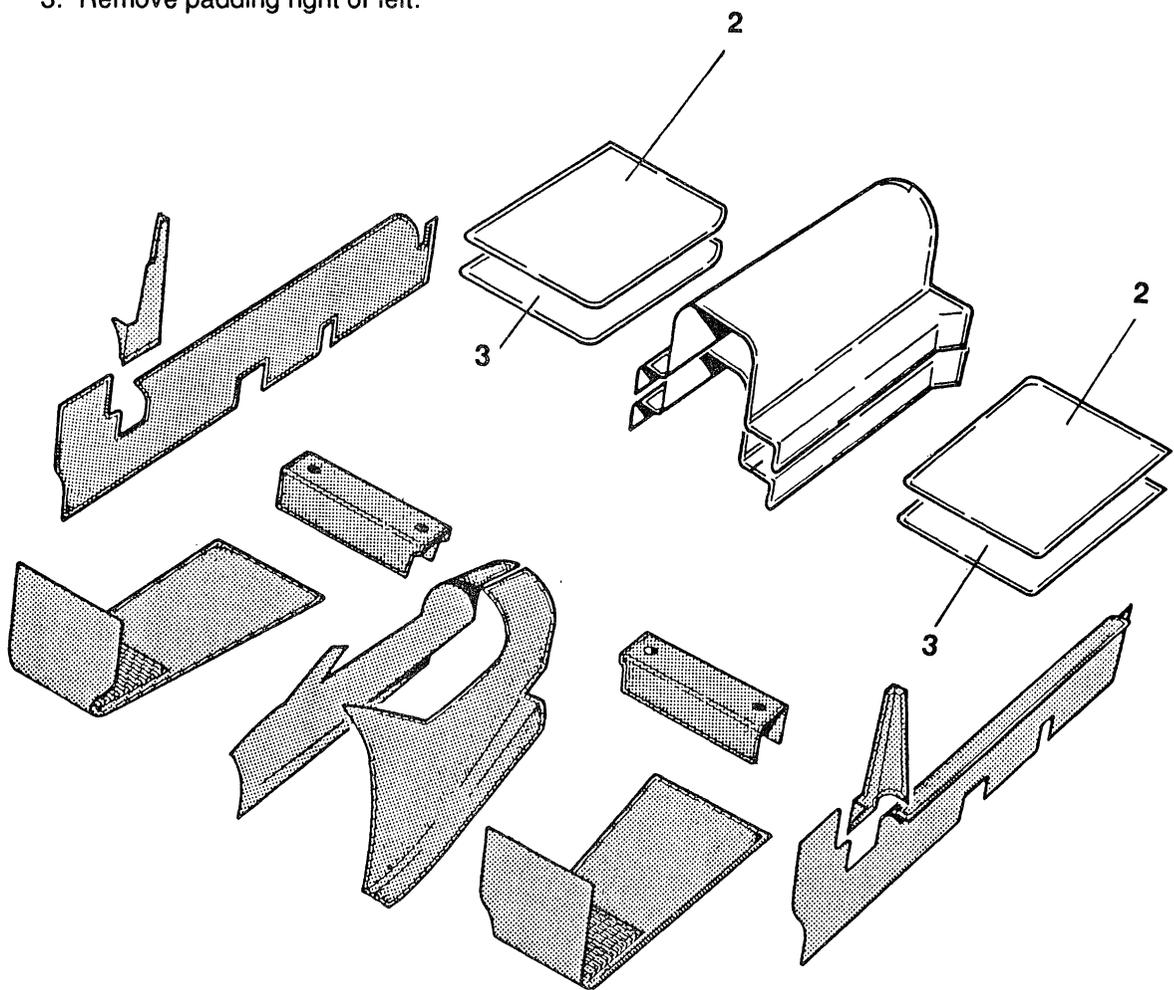
Front Compartment Carpet Padding (Right and left)	3.5.1
Front Compartment Carpet Padding (Center)	3.5.2
Front Compartment Carpet (Quarter) (Right and left)	3.5.3
Front Compartment Carpet (Center)	3.5.4
Console Face Panel	3.5.5

### 3.5.1 FRONT COMPARTMENT PADDING RIGHT AND LEFT.

Remove and refit

Removing

1. Position seats to full forward position.
2. Remove carpet right or left.
3. Remove padding right or left.



Refitting

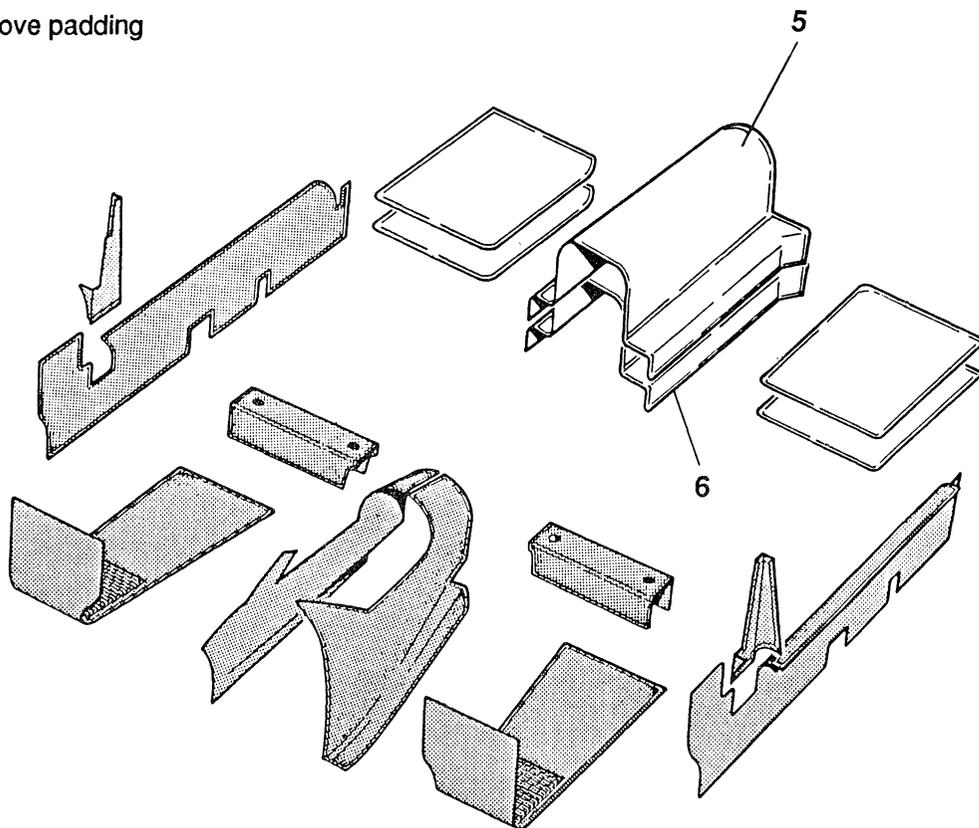
4. To install carpet padding reverse operations 1 to 3

### 3.5.2 FRONT COMPARTMENT CARPET PADDING-CENTER

Remove and refit

Removing

1. Position seats to full forward position.
2. Remove two (2) rear seat hold down bolts.
3. Remove two (2) seat bolt assemblies on each side of console.
4. Remove two (2) rear console screws.
5. Remove carpet from center console area.
6. Remove padding



Refitting

7. To install new padding reverse operations.

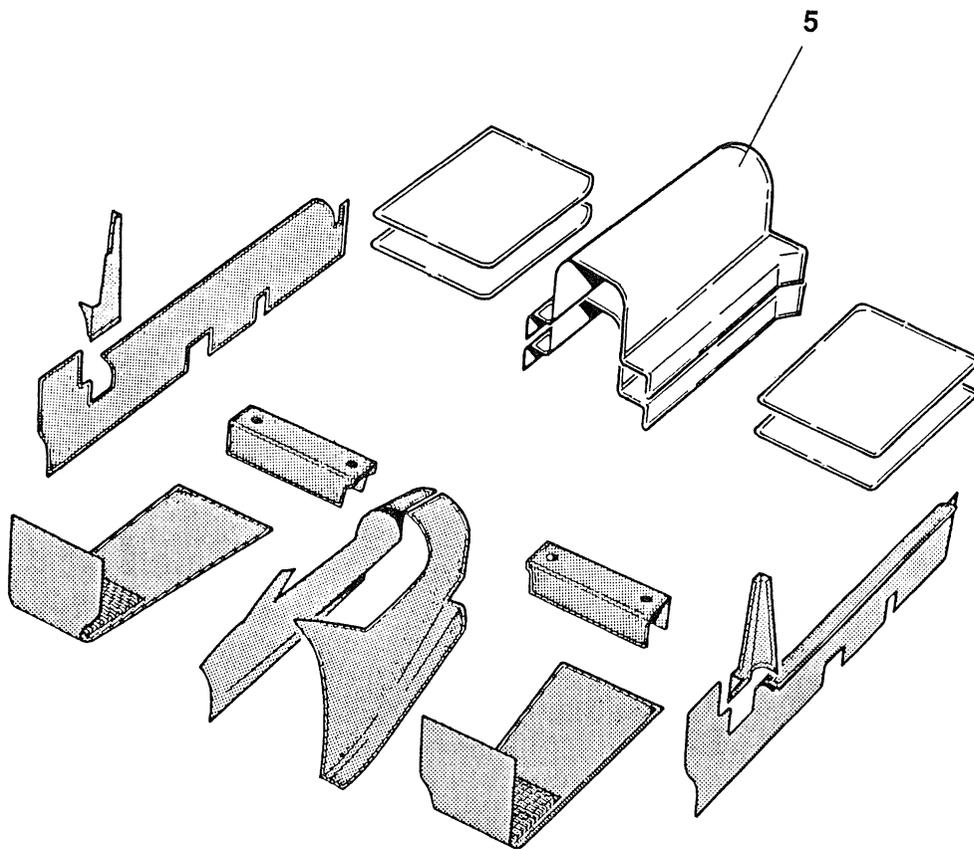


### 3.5.4 FRONT COMPARTMENT CARPET - CENTER

Remove and refit

Removing

1. Position seats to full forward position.
2. Remove two (2) rear seat hold down bolts.
3. Remove two (2) seat belt assemblies on each side of console.
4. Remove two (2) rear console screws.
5. Remove carpet from center console area.



Refitting

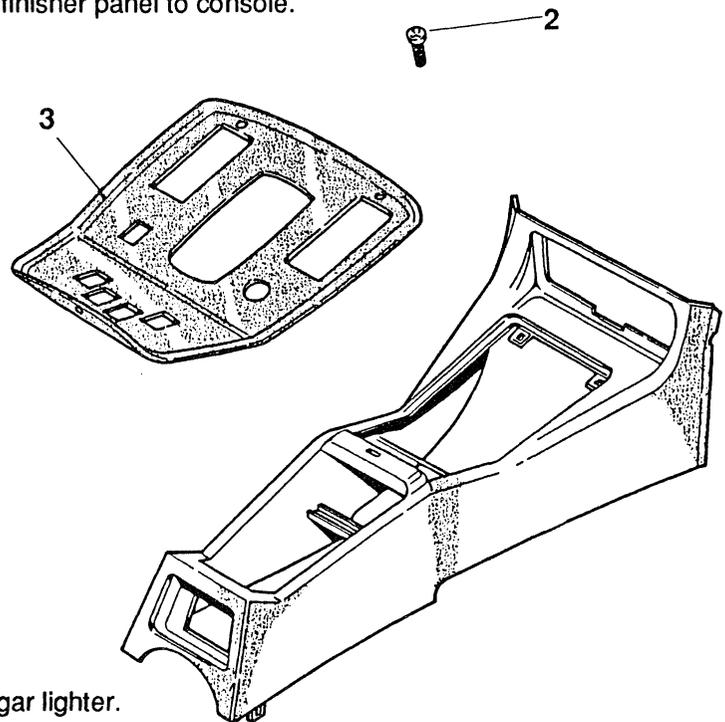
6. To install new padding reverse operations 1 to 5.

### 3.5.5 CONSOLE FACE PANEL

Remove and refit

#### Removing

1. Unscrew left and right hand sections of selector level handle.
2. Remove screws securing console finisher panel to console.
3. Raise panel from console.



4. Disconnect electrical leads from cigar lighter.
5. Ensuring leads to window switches and top switches are not detached lift panel over selector lever, lay panel to one side.
6. Disconnect leads from window and top switches.
7. Remove panel.
8. Remove cigar lighter and ash trays.
9. Remove window and top switches from panel.
10. Remove panel trim.

#### Refitting

11. To refit new panel reverse operations 1 to 10.

### 3.6 REAR COMPARTMENT GROUP (REMOVE AND REFIT)

Seat belt retractor stand assembly	3.6.1
Trim panel assembly rear	3.6.2
Rear trim panel	3.6.3
Courtesy light mounting plate	3.6.4
Courtesy light cover	3.6.5
Center-trim panel trim strip assembly	3.6.6
Seat belt trim ring	3.6.7
Cover leather	3.6.8
Sealing strip	3.6.9
Courtesy light	3.6.10
Interior lights wiring harness	3.6.11
Rear speaker assembly	3.6.12
Convertible top cover attach	3.6.13
Convertible top cover bag assembly	3.6.14
Rear compartment carpet assembly	3.6.15
Rear compartment wiring cover	3.6.16
Luggage compartment rail assembly	3.6.17
Rear compartment floor assembly	3.6.18
Rear floor inspection plate assembly	3.6.19
Pinch welt	3.6.20
Warning nameplate	3.6.21

### 3.6.1 SEAT BELT RETRACTOR STAND ASSEMBLY

Remove and refit

Removal

1. Remove trim panel, see 3.6.3
2. Remove seat belt anchor bolt from floor.
3. To remove seat belt retractor stand assembly remove two (2) bolts from base.
4. Remove seat belt from stand assembly.

**NOTE**

Torque all bolts to 40 ft/lbs at reassembly.

Refitting

5. To install seat belt retractor stand assembly, reverse operations 1 to 4.

### 3.6.2 REAR TRIM PANEL ASSEMBLY

**NOTE**

Refer to 3.6.3 for complete trim panel removal and refitting.

### 3.6.3 REAR TRIM PANEL

Remove and refit

Removal

1. Lower convertible top to full "down" position.
2. Lower all window glass to full "down" position.
3. Peel back rear trim panel carpet and remove six (6) screws.
4. Remove seat belt bolt assembly and slide bar from floor.
5. Remove seat belt bolt assembly from top of trim panel.
6. Remove carpet and luggage rack.
7. Disconnect speaker and courtesy light wiring.
8. Feed seat belt thru trim ring.
9. Remove trim panel.

Refitting

10. For refitting trim panel reverse operations 1 to 9.

### 3.6.4 COURTESY LIGHT MOUNTING PLATE

1. Non-replacement - part of trim panel.

### 3.6.5 COURTESY LIGHT COVER

Remove and refit

Removing

1. Locate screw driver access hole on side of courtesy light.
2. Carefully pry courtesy light cover lens from courtesy light.

Refitting

3. To refit courtesy light cover reverse operation 1 to 2.

### 3.6.6 CENTER-TRIM PANEL TRIM STRIP ASSEMBLY

Remove and refit

Removing

1. Position top in the full "up" position.
2. Remove three (3) screws from behind trim panel.
3. Carefully remove trim strip assembly.

Refitting

4. Align holes carefully with pick or similar object.
5. Reverse procedure 1 to 3 for assembly.

### 3.6.7 SEAT BELT TRIM RING

Remove and refit

Removing

1. Remove cap and bolt assembly securing seat belt slide bar to floor.
2. Feed seat belt assembly from top seat swivel and secure seat belt.
3. Remove cover at top seat belt swivel.
4. Rotate top swivel assembly to rear.
5. Bend tabs on seat belt trim ring and remove.
6. Slide trim ring from seat belt.

Refitting

7. Feed trim ring (tabs towards trim panel) to seat belt assembly.
8. Position trim ring to trim panel.
9. Secure by bending tabs to trim panel.
10. Rotate swivel assembly to front.
11. Feed seat belt thru swivel and refit cover.
12. Pull seat belt to floor and install to seat belt slide bar.
13. Secure seat belt slide bar with belt assembly.
14. Install cap to bolt.

### 3.6.8 COVER LEATHER (TRIM PANEL)

Remove and refit

Removing

Note: This assembly consists of 3 pieces.

A. Right hand assembly.

B. Left hand assembly,

C. Center trim stick.

1. Remove trim panel, see 3.6.3
2. Remove velcro stripping.
3. Remove cat whisker.
4. Remove radio speaker, courtesy light, seat belt guide.
5. Remove leather.
6. Remove rubber (foam) padding.

Refitting

7. Reverse procedure 1 to 6 for refitting.

#### **NOTE**

The entire trim panel does not have to be replaced to replace an individual leather piece providing the fiber glass has not been damaged. The left hand or right hand piece can be ordered already sewn, ready for replacement. (Padding would also be included in this kit).

### 3.6.9 SEALING STRIP

Remove and refit

Removing

(Located on either side of trim panel)

1. Unscrew the four (4) securing screw (Phillips head)
2. Remove sealing strip

Refitting

3. To refit sealing strip reverse operations 1 to 2.

### 3.6.10 COURTESY LIGHTS

Remove and refit

Note: There are two (2) lights in this assembly

Removing

1. Unclip securing clips with fine screw driver and extend as needed.

Note: Do not pull or stress the power and ground wires.

2. Remove courtesy light from harness.

Refitting

3. To refit courtesy light, reverse operations 1 to 2.

### 3.6.11 INTERIOR LIGHT WIRING HARNESS

Remove and refit

#### Removing

1. Remove trim panel, see 3.6.3.
2. Trim backing off trim panel to free wire.
3. Un-plug from main wiring harness.
4. Unthread as necessary.

#### Refitting

5. Reverse procedure 1 to 4 for refitting interior light wiring harness.

### 3.6.12 REAR SPEAKER ASSEMBLY

Remove and refit

#### Removing

1. Place top in full up position.
2. Reach behind trim panel and remove the four (4) holding nuts.
3. Remove H & E supplied speaker assembly cover.
4. Speaker then can be removed by disconnecting from wire harness.

#### Refitting

5. Reverse procedure 1 to 4 for refitting.

### 3.6.13 CONVERTIBLE TOP COVER ATTACH (VELCRO)

Remove and refit

Removing

1. Peel existing velcro from rear of trim panel.
2. Clean area where velcro strip was removed.

Refitting

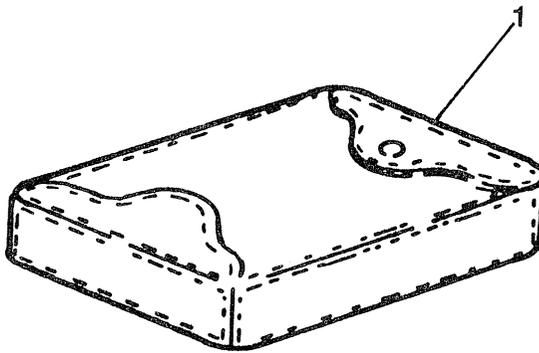
3. Cement new velcro strip.
4. Apply to trim panel clip and press in place.

### 3.6.14 CONVERTIBLE TOP COVER BAG ASSEMBLY

Remove and refit

**NOTE**

When reordering, specify top trim color and interior leather color as each bag is customized to match these colors.



### 3.6.15 REAR COMPARTMENT CARPET ASSEMBLY

Remove and refit

Set contains A. Left hand floor carpet

B. Right hand floor carpet

C. Trim panel carpet

D. Center drive shaft carpet

These are modified Jaguar parts

Removing (the trim panel carpet)

1. Remove luggage rail.
2. Remove warning lable.
3. Unfasten velcro.
4. Remove front carpet (a wide putty knife is suggested).

Refitting

5. Spray adhesive on capret and press into positon.

### 3.6.16 REAR COMPARTMENT WIRING COVER

Covered as part of insulating assembly

Re: Irregularly shaped triangle insulation 7" x 7" x 7" for sheet metal rear compartment wiring cover.

#### Removing

1. Remove trim panel carpet from bottom. (no need to remove luggage rack).
2. Take-up rear compartment carpet.
3. Remove 6 small Phillips head sheet metal screws (on each side, 2 pieces to this set.)

#### Refitting

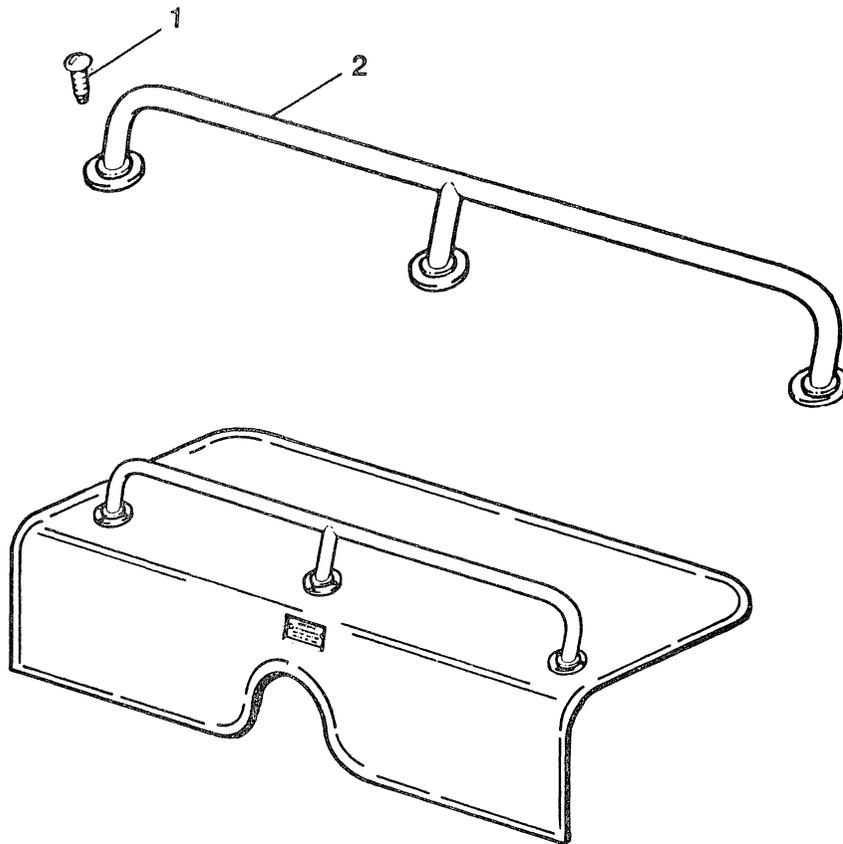
4. Reverse procedure 1 to 3 for refitting.

### 3.6.17 LUGGAGE COMPARTMENT RAIL ASSEMBLY

Remove and refit

Removing

1. Unscrew the nine (9) Phillips head screws.
2. Remove luggage rail.



Refitting

2. Reverse procedure 1 to 2 for refitting luggage rail.

### 3.6.18 REAR COMPARTMENT FLOOR ASSEMBLY

Remove and refit

This consist of:

- A. Transfer fuel line cover.
- B. Two (2) inspection covers.
- C. Main gas tank cover.

Removing

1. Remove trim panel, see 3.6.3.
2. Remove luggage rack, see 3.6.17.
3. Remove warning label.
4. Peel back carpeting.
5. Peel back material on boot well.
6. Remove mounting hardware.

#### **WARNING**

These pieces are cemented in place by silicone caulking. They must be loosened by prying with aid of pry bar, screw driver etc. Also the main gas tank cover must be removed from the back as it is held in place in the front by a securing lip. It is recommended that before reinstllation you remove all old silicone caulking, clean completely and cement in place with similar caulking.

#### **WARNING**

All sealants or caulking must be replaced to ensure proper seal between fuel tank compartment and passenger compartment.

### 3.6.19 REAR FLOOR INSPECTION PLATE ASSEMBLY

**NOTE**

If only these plates are to be replaced, it is not necessary to remove the trim panel.

1. Reference 3.6.18 for replacement.

### 3.6.20 PINCH WELT (PROTECTS TRANSFER GAS HOSE)

Remove and refit

Removing

1. Remove trim panel, see 3.6.3.
2. Remove transfer tube cover.
3. Remove two (2) additional pinch welt pieces.

Refitting

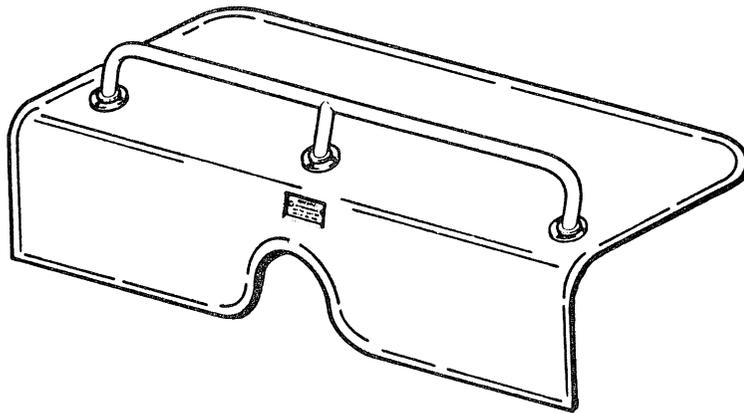
4. Reverse procedure 1 to 3 for refitting.

### 3.6.21 WARNING NAME PLATE

Remove and refit

Remove

1. Unscrew the two (2) small Phillips head screws.



Refitting

2. Reverse operation for refitting new name plate.

3.7 TRUNK GROUP-FUEL SYSTEM (REMOVE AND REFIT)

Fuel System	
Tank Assembly Upper Complete	3.7.1
Vent Tube Asm-Fuel System	3.7.2
Fuel System Pressure Test	3.7.3
Filler Tube Asm-Upper Tank-Nrp	3.7.4
Filler Neck-Upper Tank Top-Nrp	3.7.5
Gauge and Send Unit-Asm-Upper Tank	3.7.6
Tank Assembly-Lower	3.7.7
Submerged Pump Mounting Ring-Nrp	3.7.8
Lower Tank-Top Filler Tube-Nrp	3.7.9
Gauge and Send Unit Asm-Lower Tank Asm	3.7.10
Submersible Pump and Bracket Asm	3.7.11
Submersible Fuel Pump	3.7.12
Submersible Pump Strainer	3.7.13
Fuel Transfer Hose	3.7.14
Submersible Pump Gasket	3.7.15
Hose-Interconnecting Uptr to Lwr Fuel Tank	3.7.16
Vapor Separator	3.7.17
Vapor Separator Hose	3.7.18
Cover-Fuel Tank Interconnecting Hose	3.7.19

3.7.A TRUNK GROUP-MISC. (REMOVE AND REFIT)

Upper Fuel Tank Strap	3.7.20
Fuel Tank Strap (Lower)	3.7.21
Strap Assembly Pad	3.7.22
Fuel Tank Lower Pad	3.7.23
Insulation-Drive Shaft Tunnel	3.7.24
Insulation-Lower Tank Area	3.7.25
Trim Panel Buttress Reinforcement	3.7.26
Deck Lid Hinge Assembly	3.7.27

## JAGUAR XJ-S CONVERTIBLE FUEL SYSTEM DESCRIPTION

The split sectional fuel system is described in the following paragraphs.

The fuel system is comprised of two (2) fuel sections: an upper section of approximately 14 gallon capacity, connected to a lower section providing an additional 11 gallon (approximate) capacity. The upper section is a Jaguar fuel tank lower subassembly modified by altering baffles, tubing and seam welding it with a new stamped sloping top. The lower fuel section is new and sized to fit within the structural reinforcement area, forward of and below, the upper fuel section. The two (2) fuel sections are connected by a 1-1/2 inch diameter hose, which provides a path for fuel filling of lower section, transfer of liquid to upper section, and vents vapor from the lower section into the upper section. The additional submerged electric fuel pump is mounted in the lower section with a strainer on the inlet side.

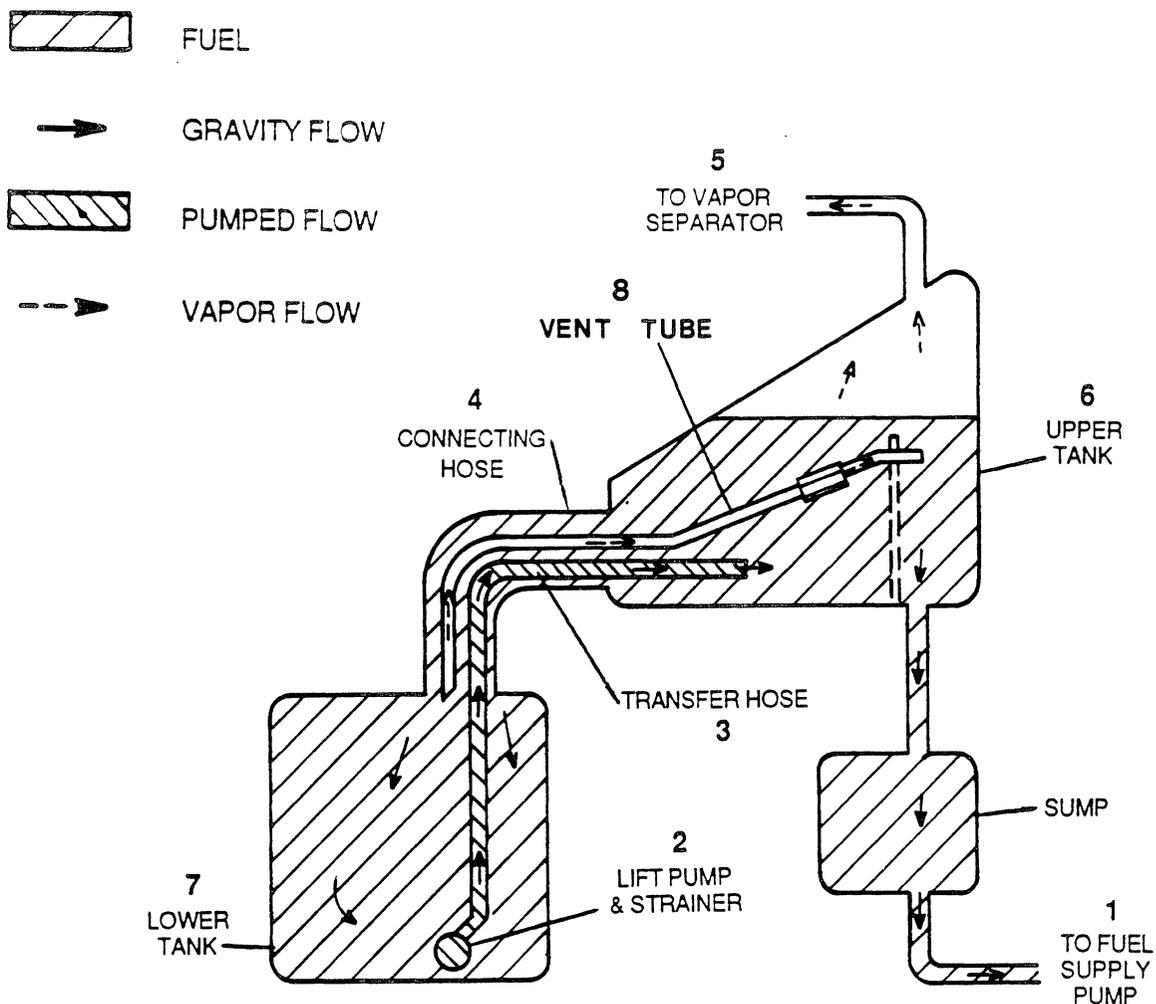
Fuel from the lower section is pumped to the upper section during the operation of the vehicle through a 5/16 inch I.D. diameter hose inside the 1-1/2 inch diameter fill/transfer hose connecting the two (2) sections. The fuel pumped from the lower section is either retained in the upper section reserve to drain into the original equipment fuel supply sump; or is returned to the lower section by gravity through the 1-1/2 inch diameter connection hose.

With the fuel level at 5/8 full or greater the lower fuel section and connecting hose are completely filled, and fuel is constantly cycled by the lift pump. At 1/4 full the lift pump is still cycling continuously, but the connecting hose between the two fuel sections is

not completely filled. Venting of vapor is taking place between the two fuel sections, as well as in the upper section. Transfer of fuel stops when the lower section is empty. The connecting hose between the two fuel sections is functioning as a vent, and all remaining fuel is delivered from the upper fuel section.

The fuel gauge receiver is an unmodified instrument panel mounted unit. This unit receives a fuel level voltage signal and displays total usable fuel in the system minus an offset (reserve capacity). However, instead of a single sender the new system uses two (2) level transmitters, one in the upper section and one in the lower section. The level transmitters are connected in series, such that their combined signal represents the total usable fuel in the system. The low fuel circuit sums the two (2) fuel signals and turns on the low fuel warning light when the usable fuel level reaches approximately six (6) gallons remaining in the system. The lower section fuel pump is controlled through the O.E.M. on-board computer and ignition. The pump runs whenever the ignition is on and the O.E.M. pump is running. This allows all O.E.M. safety features to operate.

## FUEL TANK SYSTEM FLOW SCHEMATIC



### NOTE

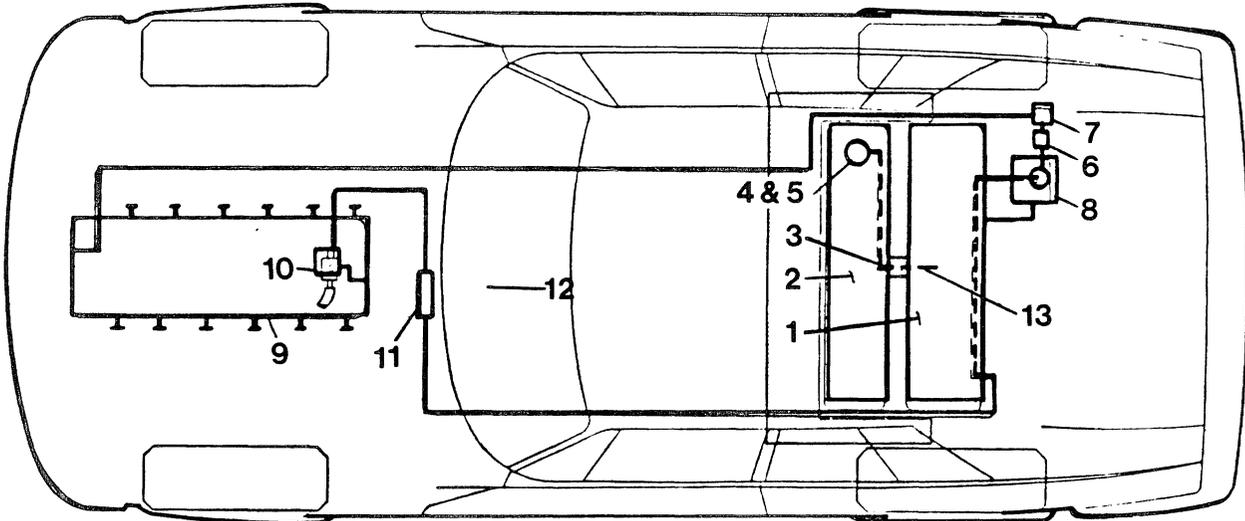
The fuel supply pump 1 is constantly fed from the lower pump and strainer 2 by means of the transfer hose 3 inside the connecting hose 4.

The vapor escapes to the vapor separator 5 from the upper tank 6. The lower tank 7 is gravity fed, and the low fuel light is activated at six (6) gallons of fuel.

The vent tube assembly 8 allows air to escape from the lower fuel tank to the upper fuel tank.

## FUEL FLOW SCHEMATIC

### FUEL SYSTEM SUBMERSIBLE PUMP



1. UPPER SECTION
2. LOWER SECTION
3. HOSE, TRANSFER
4. PUMP, LOWER
5. FILTER, LOWER
6. PUMP, HIGH PRESSURE
7. FILTER, MAIN
8. SUMP
9. FUEL INJECTION RAIL
10. PRESSURE REGULATOR
11. FUEL COOLER
12. LOW FUEL LIGHT
13. VENT TUBE

NOTE: THE LOW FUEL LIGHT IS ENERGIZED AT APPROXIMATELY SIX (6) GALLONS. THE LOW FUEL LIGHT IS ACTIVATED WHEN BOTH GAUGES INDICATE 3.47 PLUS OR MINUS .02 OR HIGHER FOR 10 SECONDS.

### 3.7.1 TANK ASSEMBLY UPPER COMPLETE

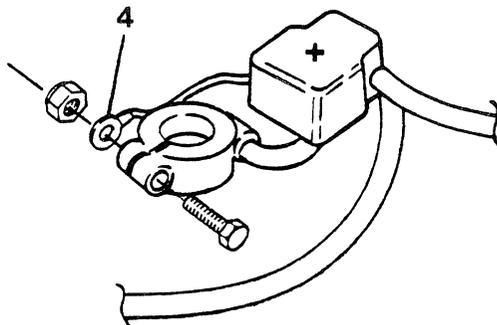
#### REMOVE AND REFIT

#### REMOVING

NOTE: POSITION TOP IN THE DOWN POSITION.

1. REMOVE BATTERY COVER BY RELEASING TWO (2) DZUS FASTENERS AND EASE COVER FROM BENEATH RETAINING FOLD ON BATTERY CLAMP.
2. REMOVE TWO (2) CLIPS AND THE TWO (2) SCREWS TO REMOVE LOWER BATTERY COVER PLATE.
3. EASE BACK BATTERY TERMINAL COVER FROM TERMINALS.
4. REMOVE NEGATIVE (-) CLAMP FIRST AND THEN REMOVE POSITIVE (+) CLAMP.

CAUTION: DO NOT DAMAGE RING TERMINAL ON POSITIVE (+) CLAMP.

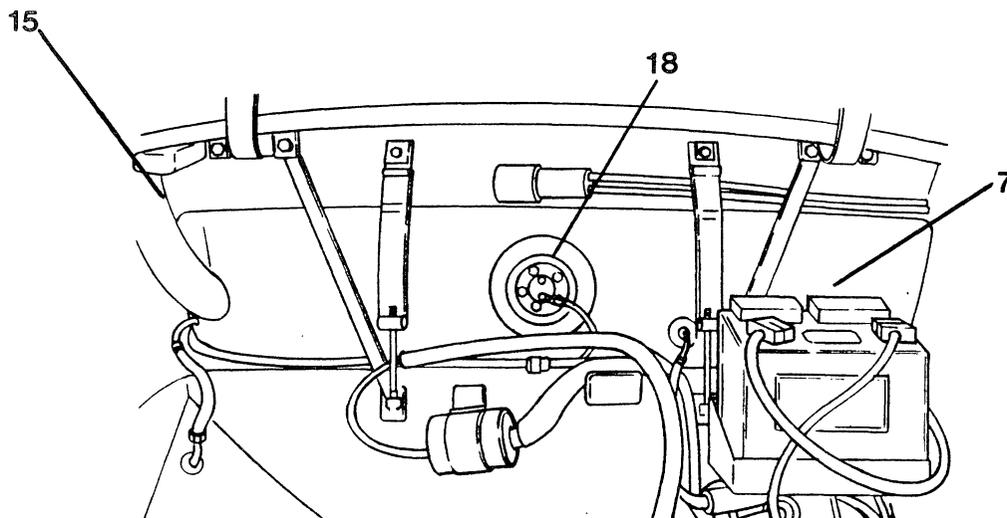


5. RELEASE BATTERY FILLER COVER SECURING STRAP AND REMOVE FILLER COVER.
6. RELEASE BATTERY CLAMP SECURING NUTS AND REMOVE CLAMP.
7. REMOVE BATTERY FROM MOUNTING TRAY.
8. REMOVE SPARE WHEEL ASSEMBLY BY REMOVING THE KNOB SECURING WHEEL TO TRUNK.
9. REMOVE BOOT BAG AND TRUNK EQUIPMENT FROM TRUNK AREA.
10. REMOVE TRIM COVERS FROM THE RIGHT, LEFT AND CENTER OF TRUNK AREA.
11. UNPLUG INTERFACE UNIT AND CONNECTOR FROM MOUNTING PLATE.
12. REMOVE FUEL INJECTION RELAYS AND CONNECTIONS FROM MOUNTING PLATE.

CAUTION: PROTECT ALL WIRING DURING TANK REMOVAL.

13. REMOVE LEFT HAND BUTTRESS REINFORCEMENT.
14. PROTECT REMAINING TRUNK TRIM PAD FROM FUEL SPILLAGE DAMAGE.

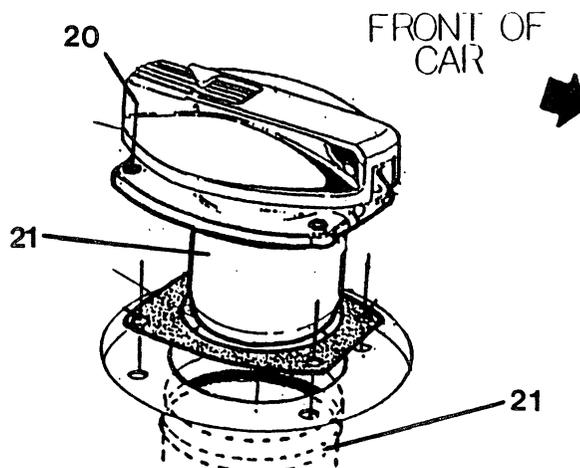
15. DEPRESSURIZE FUEL SYSTEM BY OPENING FUEL FILLER CAP.
16. ATTACH GROUND WIRE FROM THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM FILLER OPENING.
17. INSERT FUEL CADDY HOSE INTO FILLER CAP OPENING.
18. MANUALLY PUMP FUEL CADDY UNTIL UPPER FUEL TANK IS DRAINED.  
NOTE: UPPER FUEL TANK IS DRAINED WHEN THE SENDING UNIT INDICATOR IS AT 1 O'CLOCK.



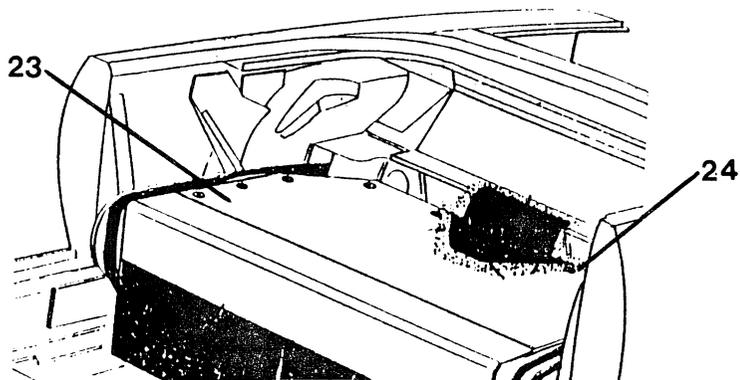
19. REMOVE FUEL PUMP CADDY AND DISCONNECT GROUND WIRE.
20. REMOVE FOUR (4) SCREWS SECURING FUEL FILLER CAP ASSEMBLY TO BODY.
21. CAREFULLY PULL WITH A TWISTING MOTION TO REMOVE THE FILLER CAP FROM THE UPPER FUEL TANK.

CAUTION: DO NOT USE CAP FOR LEVERAGE.

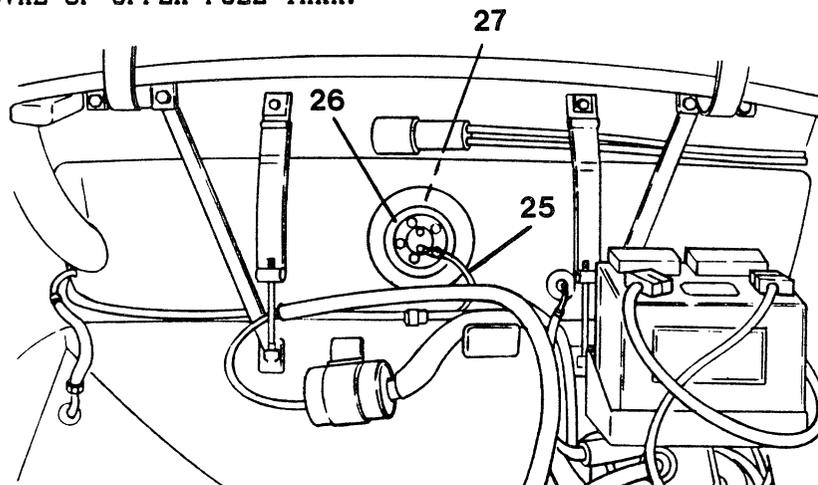
NOTE: DISCARD THE O-RING FROM FILLER TUBE AND STORE THE GASKET AT THE FILLER CAP FOR RE-ASSEMBLY.



22. REMOVE THE CARPET AND THE LUGGAGE RAIL FROM THE TRIM PANEL AREA.
23. REMOVE THE TRIM PANEL, SEE 3.6.3.
24. REMOVE TWO (2) SCREWS SECURING THE INTERCONNECTING HOSE COVER.
25. REMOVE ELECTRICAL LEADS AT SENDING UNIT IN UPPER TANK AND TAG FOR RE-INSTALLATION.
26. REMOVE UPPER FUEL TANK SENDING UNIT AND DISCARD THE GASKET.
27. FOR REMOVAL OF UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
28. INSTALL GROUND WIRE OF THE FUEL TANK CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.



29. FEED SIPHON HOSE THROUGH OPENING AT UPPER SENDING UNIT AND INTO LOWER FUEL TANK THROUGH INTERCONNECTING HOSE.
  30. MANUALLY PUMP THE FUEL CADDY UNTIL THE LOWER FUEL TANK IS DRAINED.
  31. REMOVE HOSE FROM LOWER TANK AND DISCONNECT GROUND WIRE.
  32. NOTE POSITION AND REMOVE CLAMP AT UPPER END OF INTERCONNECTING HOSE.
- NOTE: DO NOT DAMAGE INTERCONNECTING HOSE OR TRANSFER HOSE DURING REMOVAL OF UPPER FUEL TANK.



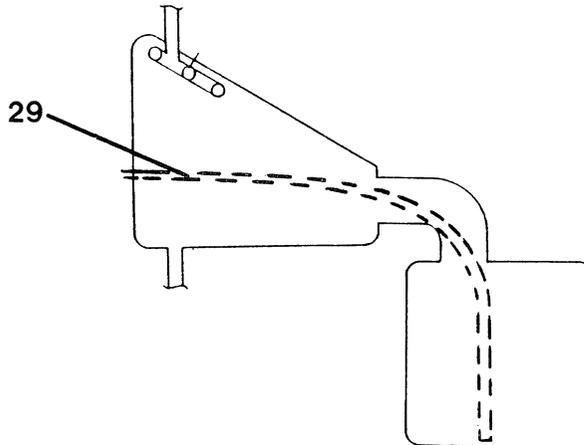
33. PULL INTERCONNECTING HOSE FROM UPPER FUEL TANK.

34. DRAIN FUEL SUMP FROM THE BOTTOM PETCOCK.

35. DISCONNECT ALL FUEL HOSES AND TAG FOR RE-INSTALLATION (VENT, RETURN, AND SUPPLY).

WARNING: CAP OFF OR SEAL ALL FUEL CONNECTIONS AND TANK OPENINGS TO PREVENT FUEL AND VAPOR FROM DAMAGING TRUNK AREA.

36. REMOVE TWO (2) REINFORCEMENT BARS FROM TULIP PANEL AND LOWER BODY STRUCTURES. REMOVE TWO (2) BOLTS PER BAR AT RT AND LT SIDES.



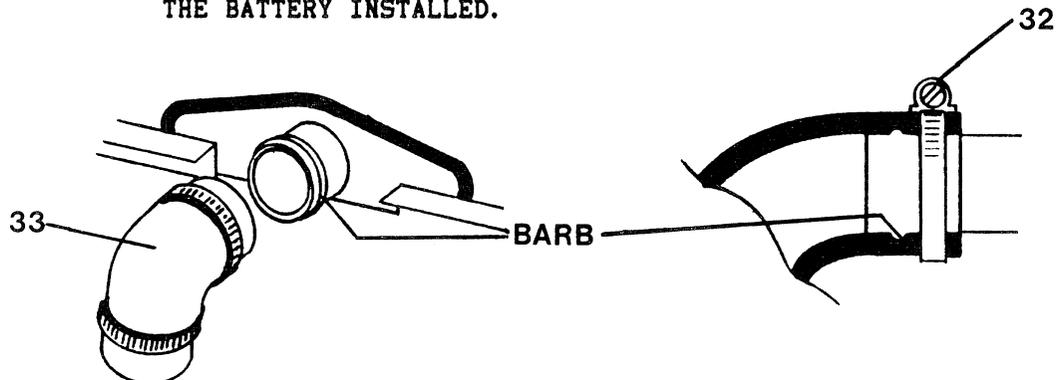
37. REMOVE TWO (2) FUEL TANK STRAPS BY REMOVING LONG BOLT FROM THREADED CYLINDER (ONE PER EACH RT AND LT FUEL TANK STRAP).

38. REMOVE UPPER TANK AND PADDING FROM TRUNK AREA.

WARNING: WHEN WORKING WITH THE FUEL TANK, USE EXTREME CARE TO PROTECT AGAINST FUEL AND VAPOR LEAKS.

NOTE: PROTECT TRUNK AREA AND REAR COMPARTMENT FROM FUEL LEAKS.

WARNING: DO NOT CONNECT OR DISCONNECT ELECTRICAL LEADS WITH THE BATTERY INSTALLED.

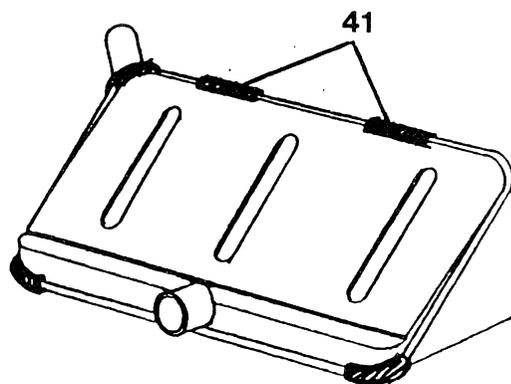
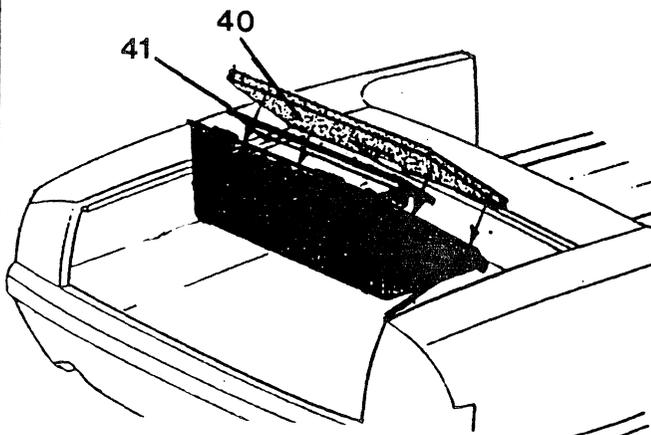


## REFITTING

39. INSPECT UPPER TANK CAVITY TO INSURE THAT ALL HOSES, LINES, WIRES AND COMPONENTS ARE IN THEIR PROPER POSITION.
  40. INSURE LARGE FOAM PAD IS POSITIONED TO TOP OF UPPER FUEL TANK.
  41. POSITION SMALL STRIP OF PADDING TO TOP OF LARGE PAD.
- NOTE: INSURE PINCH WELTS ARE INSTALLED TO FUEL TANK.
42. INSTALL TANK.

CAUTION: INTERCONNECTING HOSE AND TRANSFER TUBE SHOULD BE ALIGNED DURING THIS OPERATION.

43. ALIGN UPPER FUEL TANK FILLER NECK TO THE FILLER CAP OPENING OF BODY AND TRIAL FIT THE FILLER CAP TO TANK. POSITION OPENINGS SO THAT THEY ARE EXACTLY ALIGNED WITH EACH OTHER.
44. SECURE REINFORCEMENT STRAP AT TULIP PANEL WITH ONE (1) BOLT FOR THE RT AND THE LT STRAPS (TOP LOCATION ONLY). RT AND LT STRAPS ARE NOT INTERCHANGEABLE.
45. POSITION REINFORCEMENT STRAP AT LOWER TRUNK STRUCTURE WITH BOTTOM BRACKET AND SECURE WITH ONE (1) BOLT FOR THE RT AND LT STRAPS.
46. SECURE TOP OF THE HINGE STRAPS (RT AND LT ARE NOT INTERCHANGEABLE) WITH ONE (1) BOLT EACH.
47. INSURE PINCH WELT IS PROTECTING STRAP FROM TANK. INSTALL



TWO (2) FUEL TANK STRAPS BY THREADING LONG BOLTS TO  
THREADED CYLINDER, ONE PER RT AND LT FUEL TANK STRAP.

CAUTION: DO NOT PINCH HOSE. THE TANK STRAP SHOULD RETAIN  
HOSE WITHOUT CRIMPING.

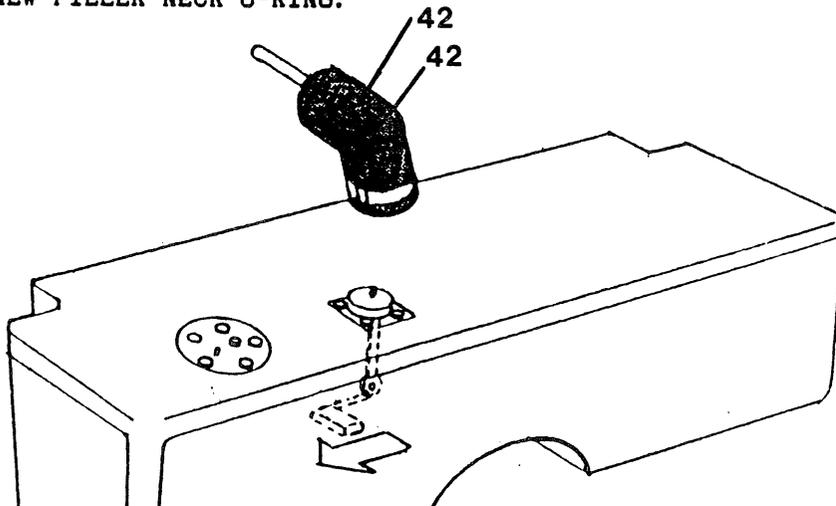
NOTE: BEFORE SECURING HINGE STRAP BOTTOM BOLT, CHECK FUEL  
FILLER NECK ALIGNMENT TO THE FILLER CAP OPENING.

48. TIGHTEN BOTH THE RT AND THE LT BOLTS AFTER FINAL FUEL  
FILLER AND FILLER CAP OPENING ALIGNMENT HAS BEEN MADE.

CAUTION: DO NOT OVER TIGHTEN AS TANK DEFORMATION CAN OCCUR.

49. POSITION RUBBER GASKET TO THE BODY FUEL FILLER OPENING.

50. INSTALL NEW FILLER NECK O-RING.



51. LIGHTLY LUBRICATE FUEL FILLER CAP AT NECK WITH PETROLEUM JELLY.  
CAREFULLY POSITION FILLER CAP THROUGH THE BODY OPENING  
(WITH GASKET) AND SLIDE INTO THE UPPER FUEL TANK FILLER NECK.  
INSURE THAT THE O-RING IS PROPERLY SEATED IN THE FUEL TANK NECK.  
WARNING: USE EXTREME CARE WHILE INSTALLING FILLER CAP TO AVOID  
DAMAGING O-RING.

52. INSTALL UNLEADED FUEL TAG TO THE REAR TWO (2) HOLES AND INSTALL FOUR  
(4) SCREWS TO SECURE FUEL FILLER CAP TO THE BODY STRUCTURE.

53. INSTALL VAPOR SEPARATOR HOSE (TOP) TO CHECK VALVE. HOSE  
MUST BE FED UNDER TANK STRAP AND UNDER REINFORCEMENT ARM.

54. INSTALL VAPOR SEPARATOR HOSE (BOTTOM) TO TOP RIGHT VAPOR TUBE

ON TANK. HOSE MUST FEED UNDER TANK STRAP AND UNDER REINFORCEMENT ARM.

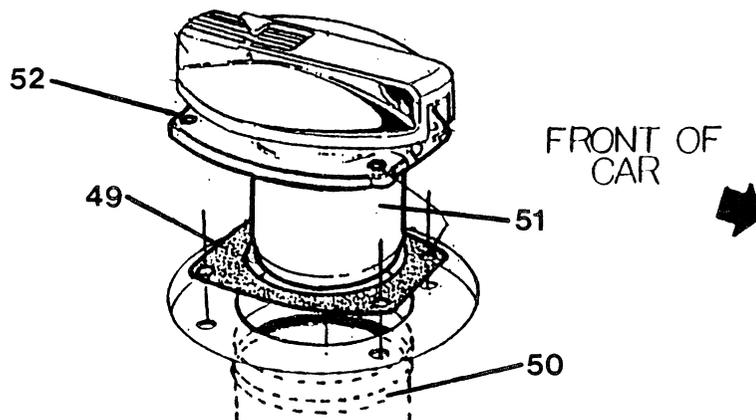
CAUTION: BOTH HOSES SHOULD CLEAR HINGE ARM WHEN TRUNK IS CLOSED.

USE TIE STRAPS TO SECURE HOSES IN PLACE.

55. CONNECT UPPER FUEL RETURN HOSE TO TANK RETURN OUTLET AT LOWER LEFT.

56. CONNECT UPPER FUEL SUPPLY HOSE AT CENTER OF TANK TO THE FUEL OUTLET ON THE FUEL SUMP TANK SIDE.

57. CONNECT UPPER FUEL TANK OVERFLOW HOSE FROM FUEL TANK TO SUMP TANK TOP.



58. INSURE TRANSFER HOSE FROM LOWER TANK TO UPPER TANK IS INSERTED INTO THE UPPER TANK.

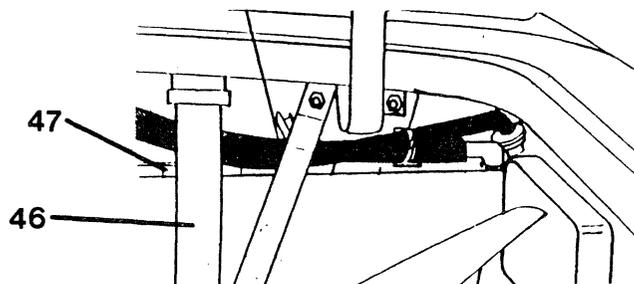
59. INSTALL INTERCONNECTING HOSE PAST THE BARB OF THE NECK OF THE UPPER TANK OUTLET NECK.

60. SECURE WITH CLAMP AND TORQUE CLAMP SCREW TO 30 IN/LBS.

WARNING: BE SURE HOSE AND CLAMP ARE SEATED BEHIND THE BARB ON THE UPPER TANK OUTLET TO MAINTAIN PROPER SEAL.

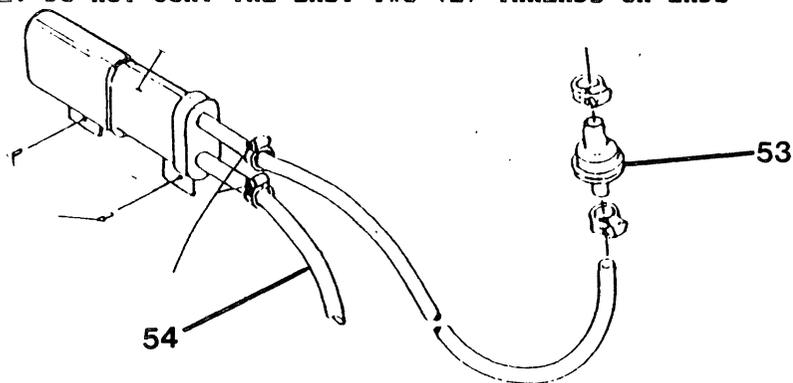
61. FOR INSTALLATION OF UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.

62. INSTALL UPPER FUEL TANK SENDING UNIT TO UPPER TANK:



- A. CLEAN SEALING FLANGE ON UPPER TANK WITH ISOPROPYL ALCOHOL.
- B. COAT THE THREADS ONLY OF THE FIVE (5) MOUNTING SCREWS FOR THE SENDING UNIT WITH A COAT OF PERMATEX #1.

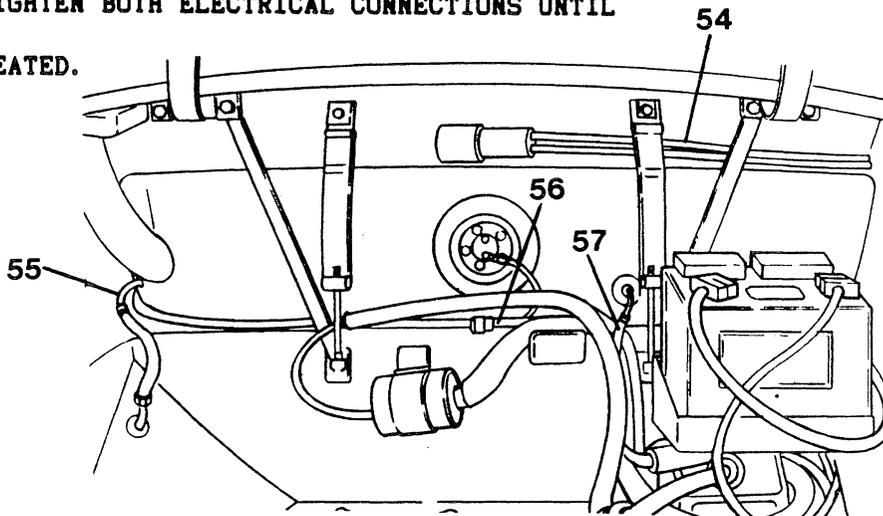
NOTE: DO NOT COAT THE LAST TWO (2) THREADS OR ENDS



OF THE MOUNTING SCREWS.

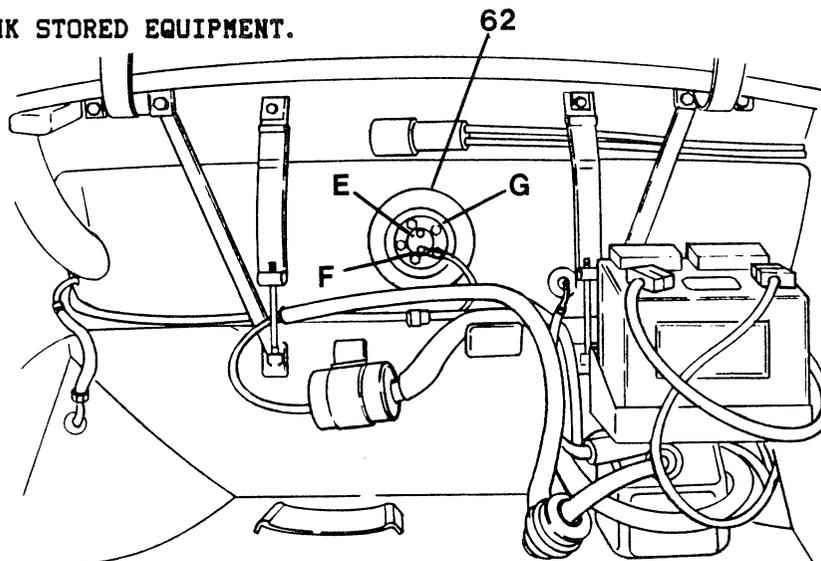
- C. INSTALL NEW GASKET TO THE SENDING UNIT WITH ALIGNMENT BARB OF SENDING UNIT ALIGNED WITH THE ALIGNMENT HOLE OF GASKET.
- D. INSTALL FIVE (5) SCREWS INTO SENDING UNIT AND ALIGN MOUNTING HOLES TO PERMIT RED INDICATOR TO READ 1 O'CLOCK.
- E. TIGHTEN FIVE (5) SCREWS TO 20 IN/LBS.
- F. CONNECT POSITIVE (+) WHITE/RED LEAD FOR UPPER SENDING UNIT TO THE STUD AT THE BOTTOM OF THE SENDING UNIT.
- G. CONNECT NEGATIVE (-) BLACK LEAD FOR UPPER SENDING UNIT TO THE SCREW LOCATED AT 1 O'CLOCK.

CAUTION: TIGHTEN BOTH ELECTRICAL CONNECTIONS UNTIL FULLY SEATED.



H. PRESSURE TEST THE FUEL SYSTEM, SEE 3.7.3.

63. CLEAN OFF OLD SEALANT AND APPLY A 3/8" UNBROKEN BEAD OF PERMATEX #1 TO INTERCONNECTING HOSE COVER.
64. INSTALL INTERCONNECTING HOSE COVER WITH TWO (2) SCREWS.
65. INSTALL TRIM PANEL ASSEMBLY, SEE 3.6.3.
66. INSTALL REAR COMPARTMENT CARPET AND PRESS INTO PLACE.
67. INSTALL BUTTRESS REINFORCEMENT.
68. INSTALL INTERFACE UNIT.
69. INSTALL FUEL INJECTION RELAYS.
70. INSTALL TRIM COVER TO LEFT HAND BUTTRESS REINFORCEMENT.
71. INSTALL SPARE WHEEL ASSEMBLY.
72. INSTALL BATTERY TO MOUNTING TRAY AND SECURE THE POSITIVE (+) FIRST AND THEN THE NEGATIVE (-) TERMINAL.
73. INSTALL BATTERY FILLER COVER AND SECURE STRAP.
74. POSITION TWO (2) CLIPS AND TWO (2) SCREWS TO SECURE LOWER BATTERY COVER PLATE.
75. SECURE BATTERY TRIM COVER BY ROTATING TWO (2) DZUS FASTENERS AFTER ALIGNING COVER TO THE RETAINING FOLD ON THE BATTERY CLAMP.
76. INSTALL REMAINING TRIM COVERS AND REPLACE TACK, BOOT BAG, AND TRUNK STORED EQUIPMENT.



### 3.7.2 VENT TUBE ASSEMBLY (FUEL SYSTEM)

#### REMOVE AND REFIT

#### REMOVING

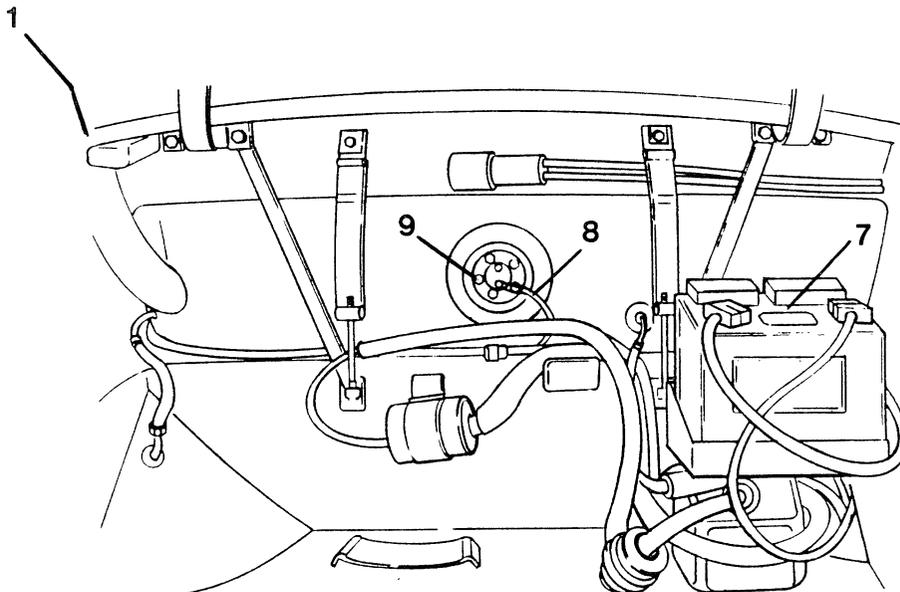
1. DEPRESSURIZE FUEL SYSTEM BY OPENING FUEL FILLER CAP.
2. ATTACH GROUND WIRE FROM THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
3. INSERT FUEL CADDY HOSE INTO FILLER CAP OPENING.
4. MANUALLY PUMP FUEL CADDY UNTIL UPPER TANK IS DRAINED.

NOTE: UPPER FUEL TANK IS DRAINED WHEN THE SENDING UNIT INDICATES 1 O'CLOCK.

5. REMOVE FUEL PUMP CADDY AND DISCONNECT GROUND WIRE.
6. REMOVE SPARE WHEEL, BATTERY COVER AND FABRIC TRIM FROM UPPER FUEL TANK.
7. REMOVE THE NEGATIVE (-) CLAMP FIRST AND THEN THE POSITIVE (+) CLAMP.

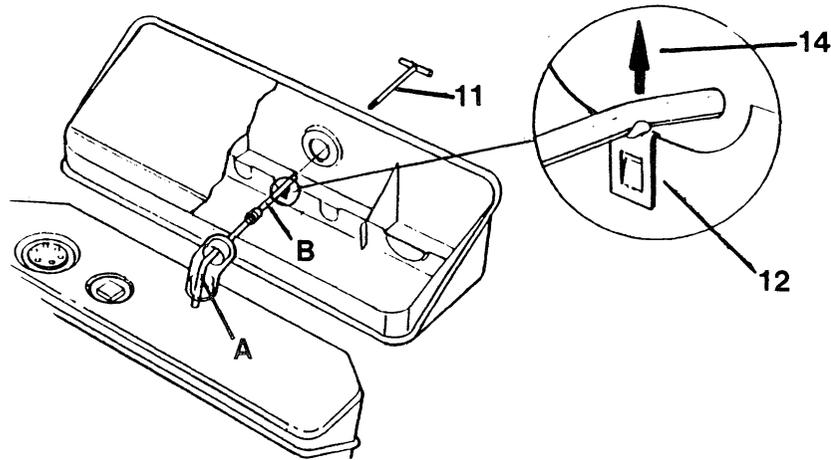
NOTE: DO NOT DAMAGE THE RING TERMINAL ON THE POSITIVE (+) CLAMP.

8. REMOVE TWO (2) ELECTRICAL LEADS FROM THE UPPER SENDING UNIT AND TAG FOR RE-INSTALLATION.



9. REMOVE FIVE (5) MOUNTING SCREWS THAT SECURE THE UPPER FUEL SENDING UNIT TO THE UPPER TANK.
10. REMOVE SENDING UNIT AND THE GASKET BY ROTATING THE SENDING UNIT CAREFULLY OUT OF THE TANK AND DISCARD GASKET.

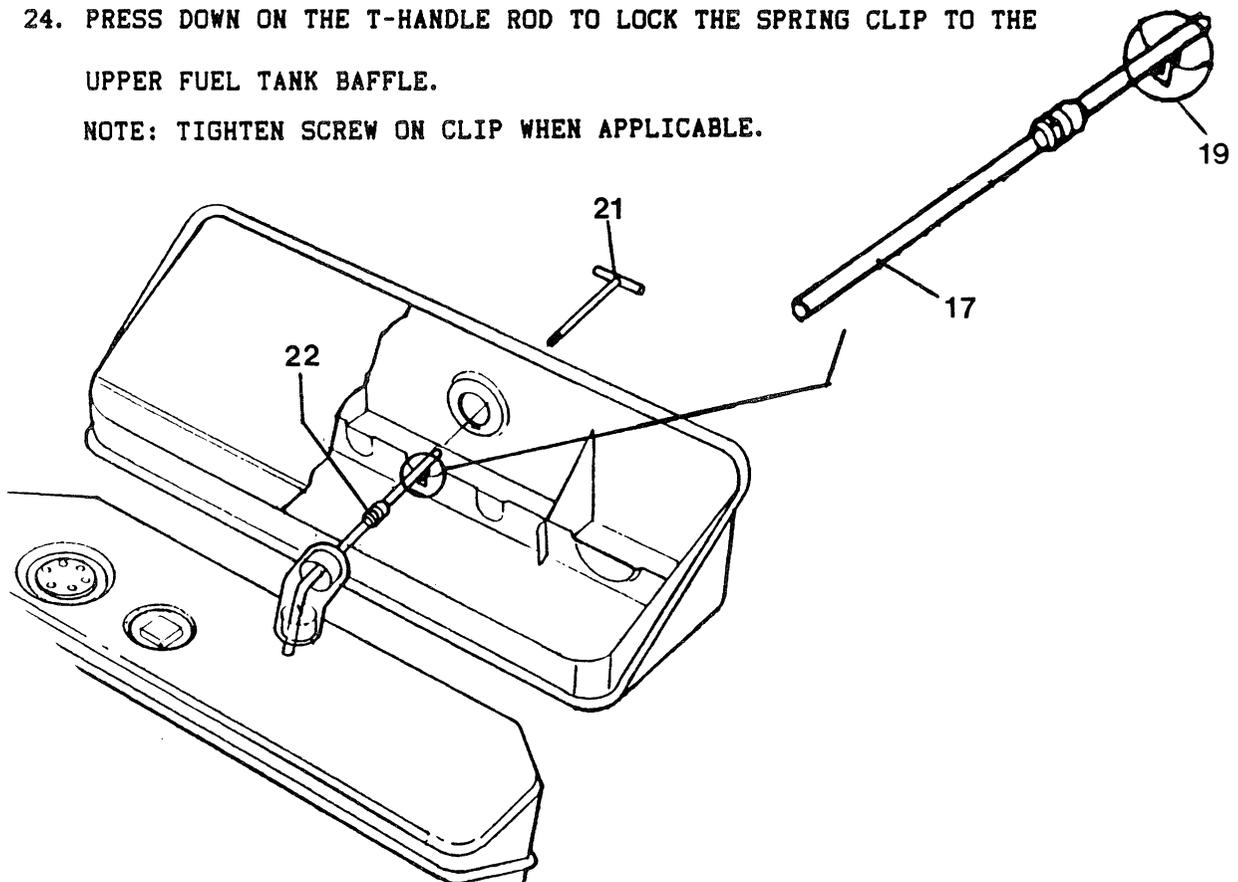
NOTE : PROTECT TRUNK AREA FROM FUEL AND VAPOR LEAKS.  
DO NOT CONNECT OR DISCONNECT ELECTRICAL LEADS  
WITH THE FUEL SYSTEM OPEN.



11. INSERT T-HANDLE TOOL (H&E # 920215) INTO UPPER FUEL TANK SENDING UNIT OPENING.
  12. USE FLASHLIGHT TO LOCATE VENT TUBE ASSEMBLY MOUNTED ON BAFFLE OF THE UPPER FUEL TANK.
  13. ATTACH T-HANDLE TOOL TO THE END OF THE VENT TUBE.
- NOTE: BACK OFF SCREW IN CLIP WHEN APPLICABLE.
14. WITH VENT TUBE ASSEMBLY SECURED TO END OF THE T-HANDLE TOOL, PRY UP THREADED CLIP AND REMOVE VENT TUBE ASSEMBLY FROM BAFFLE.
  15. RETRACT T-HANDLE TOOL WITH THE VENT TUBE ASSEMBLY ATTACHED.
  16. DISASSEMBLE VENT TUBE ASSEMBLY:
    - A. RETRACT PLASTIC RING CLIP OF THE UNION AND PULL THE NYLON VENT TUBE FROM THE UNION.
    - B. RETRACT PLASTIC RING CLIP OF THE OPPOSITE END ON THE UNION AND PULL THE TUBE ASSEMBLY FROM THE UNION.

REFITTING

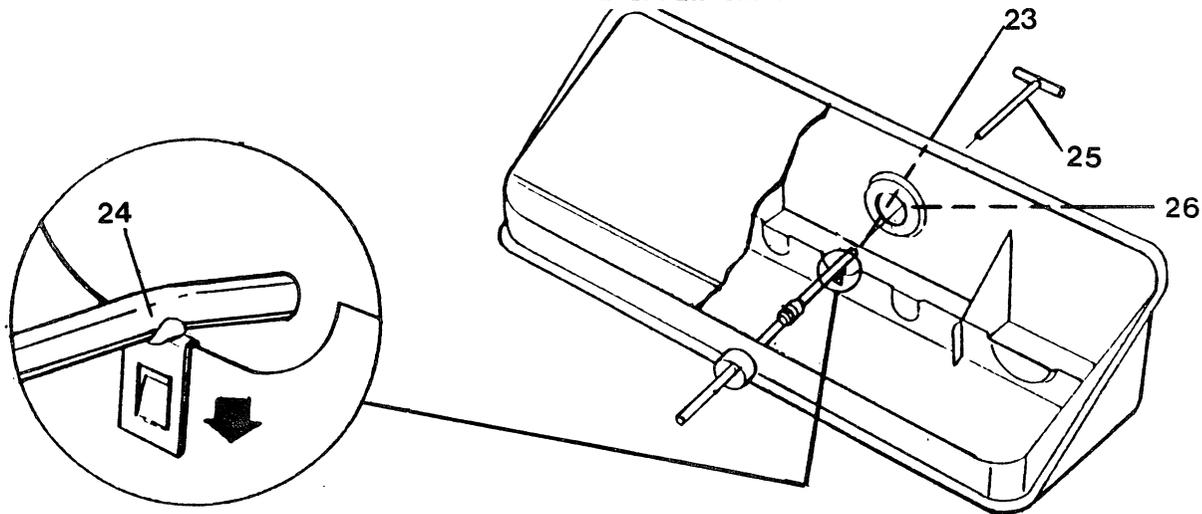
17. INSERT NYLON TUBE INTO UNION.
  18. PUSH NYLON TUBE FIRMLY INTO UNION AND CHECK FOR SECURE FIT BY PULLING.
  19. INSERT TUBE ASSEMBLY INTO OPPOSITE END OF UNION.
  20. PUSH TUBE ASSEMBLY FIRMLY INTO UNION AND CHECK FOR SECURE FIT BY PULLING.
  21. ATTACH T-HANDLE TOOL TO THE VENT TUBE ASSEMBLY.
  22. FEED VENT TUBE ASSEMBLY (ATTACHED TO T-HANDLE) INTO UPPER TANK AT THE SENDING UNIT OPENING.
- WARNING: THE TUBE OF THE VENT TUBE ASSEMBLY MUST BE POSITIONED SO THE NYLON TUBE IS INSERTED INTO THE INTERCONNECTING HOSE TO PERMIT PROPER VENTING OF THE FUEL SYSTEM.
23. USE FLASHLIGHT TO INSURE VENT TUBE ASSEMBLY CLIP IS POSITIONED ON THE UPPER FUEL TANK BAFFLE.
  24. PRESS DOWN ON THE T-HANDLE ROD TO LOCK THE SPRING CLIP TO THE UPPER FUEL TANK BAFFLE.
- NOTE: TIGHTEN SCREW ON CLIP WHEN APPLICABLE.



25. REMOVE T-HANDLE TOOL FROM VENT TUBE ASSEMBLY AND RETRACT FROM UPPER TANK.

CAUTION: INSPECT FOR PROPER INSTALLATION. REPEAT PROCEDURE IF NECESSARY.

26. INSTALL UPPER TANK SENDING UNIT TO THE UPPER TANK:



A. CLEAN SEALING FLANGE ON THE UPPER TANK WITH ISOPROPYL ALCOHOL.

B. COAT THE THREADS ONLY OF THE FIVE (5) MOUNTING SCREWS FOR THE SENDING UNIT WITH A COAT OF PERMATEX #1.

NOTE: DO NOT COAT THE LAST TWO (2) THREADS OR ENDS OF THE MOUNTING SCREWS.

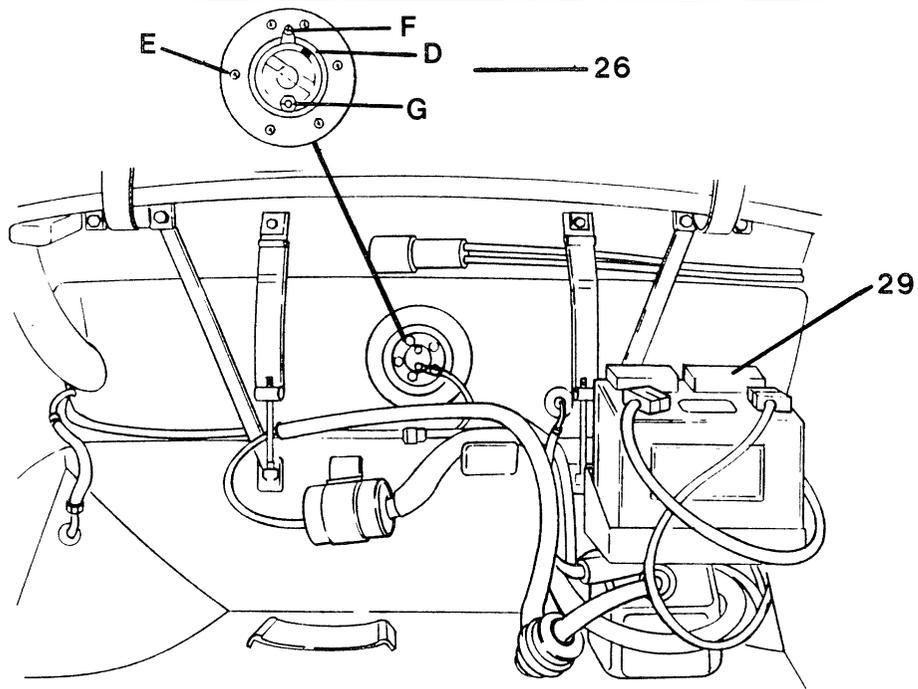
C. INSTALL THE NEW GASKET TO THE SENDING UNIT WITH THE ALIGNMENT NIB OF THE SENDING UNIT ALIGNED WITH THE ALIGNMENT HOLE OF THE GASKET.

D. INSTALL FIVE (5) SCREWS INTO THE SENDING UNIT AND ALIGN MOUNTING HOLES TO PERMIT RED INDICATOR TO READ 1 O'CLOCK.

E. TIGHTEN FIVE (5) SCREWS TO 20 IN\LBS.

F. CONNECT POSITIVE (+) WHITE/RED LEAD FOR UPPER SENDING UNIT TO THE STUD AT THE BOTTOM OF THE SENDING UNIT.

G. CONNECT NEGATIVE (-) BLACK LEAD FOR UPPER SENDING UNIT TO THE SCREW LOCATED AT 1 O'CLOCK.



**CAUTION: TIGHTEN BOTH ELECTRICAL CONNECTIONS UNTIL FULLY SEATED.**

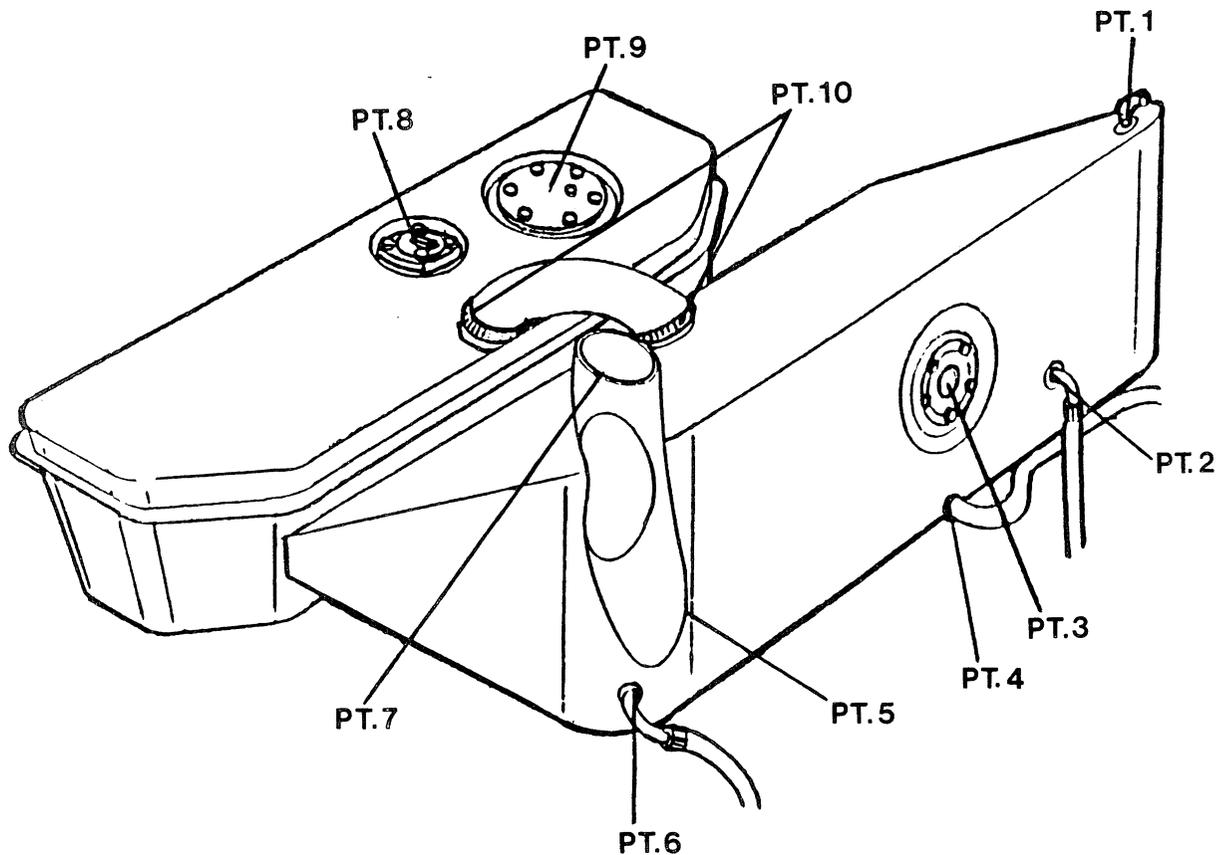
**H. PRESSURE TEST THE FUEL SYSTEM, SEE 3.7.3.**

- 27. INSTALL FABRIC TRIM TO THE REAR OF THE UPPER FUEL TANK.**
- 28. INSTALL SPARE WHEEL.**
- 29. CONNECT BATTERY BY SECURING THE POSITIVE (+) FIRST AND THEN THE NEGATIVE (-) TERMINAL.**
- 30. SECURE BATTERY COVER.**

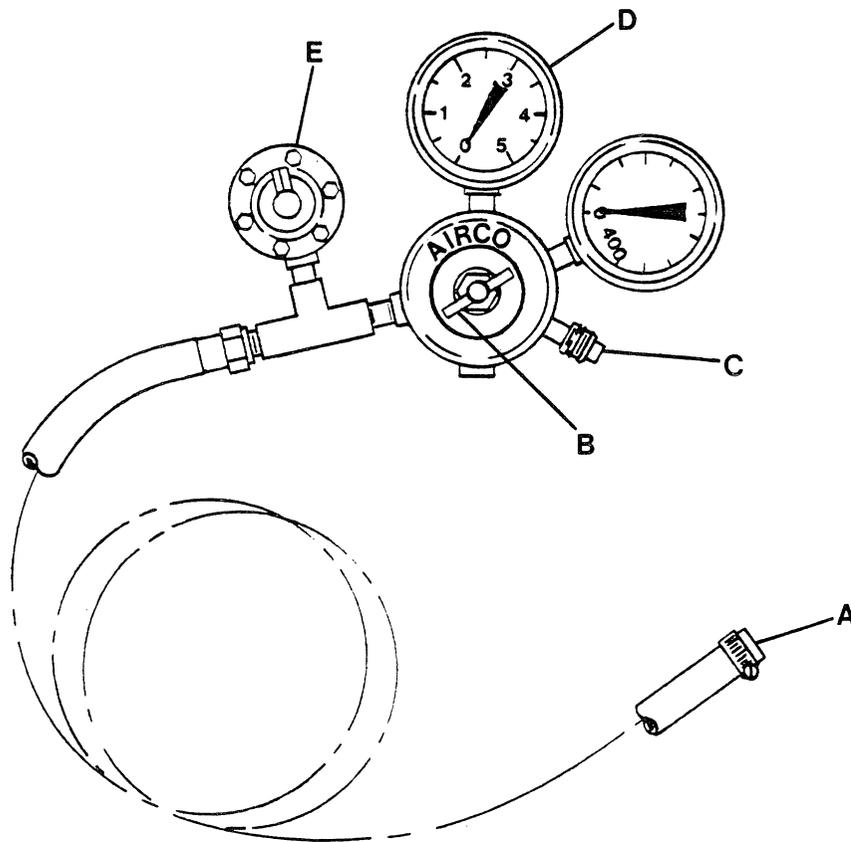
### 3.7.3 FUEL SYSTEM PRESSURE TEST

1. The Fuel System Pressure Test must be performed whenever a fuel connection has been disconnected.
2. Secure all fuel connections and check each fuel connection for correct torque specification as follows:

Point	1. Vent -	Fully Seated
	2. Overflow -	Fully Seated
	3. Upper Gauge -	20 In/Lbs
	4. Drain -	Fully Seated
	5. Filler Neck -	Welded
	6. Return -	Fully Seated
	7. Cap -	Fully Seated
	8. Lower Gauge -	20 In/Lbs
	9. Pump -	25 In/Lbs
	10. Interconnect Hose -	30 In/Lbs
3. Loosen hose clamp and remove vapor separator hose at vent tube.
4. Install hose (Ref "A") of Pressure Test Gauge Assembly #920289 to vent tube.
5. Tighten clamp until fully seated.



6. Pump four (4) gallons of fuel into fuel tank and close filler cap.
  7. Turn the regulator handle (Ref "B") counterclockwise to prevent air surge.
  8. Connect air supply to the coupling (Ref "C") of the Pressure Test Gauge Assembly #920289.
  9. Slowly turn the regulator handle (Ref "B") clockwise until the 0 to 5 Lb. gauge (Ref "D") indicates 2 P.S.I.
- NOTE: The Pressure Test Gauge Assembly #920289 is supplied with a relief valve (Ref "E") set at 3 P.S.I.
10. Time the pressurized fuel system for 15 minutes with the gauge (Ref "D") set at 2 P.S.I.



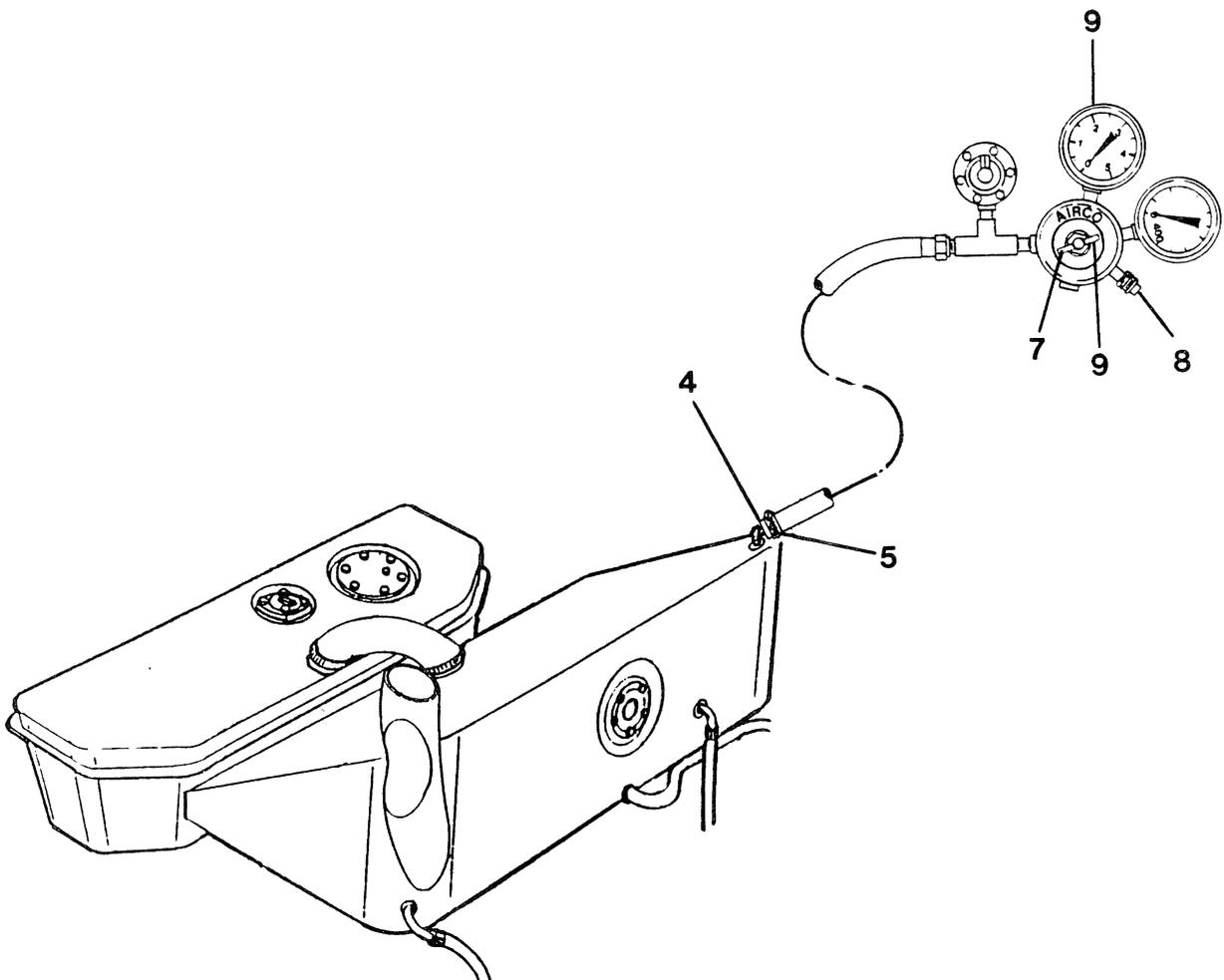
11. Examine each fuel system connection with a sniffer for ten (10) seconds.

WARNING: Reading from sniffer must not exceed 2 at any fuel connection.

12. If any connection reads above 2 on the sniffer after 10 seconds, refer to the Service Instructions for proper re-installation.
13. Re-check all points after connections have been reworked.
14. Remove air supply from coupling (Ref "C").
15. Depressurize fuel system by turning regulator handle (Ref "B") clockwise.

NOTE: Air supply must be removed.

16. Remove clamp and hose (Ref "A") from vent tube.
17. Connect vent hose from vapor separator.
18. Tighten clamp until fully seated.



3.7.4 FILLER TUBE ASSEMBLY - UPPER TANK

1. NON-REPLACEABLE - PART OF WELDED TANK ASSEMBLY.

3.7.5 FILLER NECK - UPPER TANK TOP

1. NON-REPLACEABLE - PART OF WELDED TANK ASSEMBLY.

### 3.7.6 GAUGE AND SEND UNIT (UPPER TANK)

#### REMOVE AND REFIT

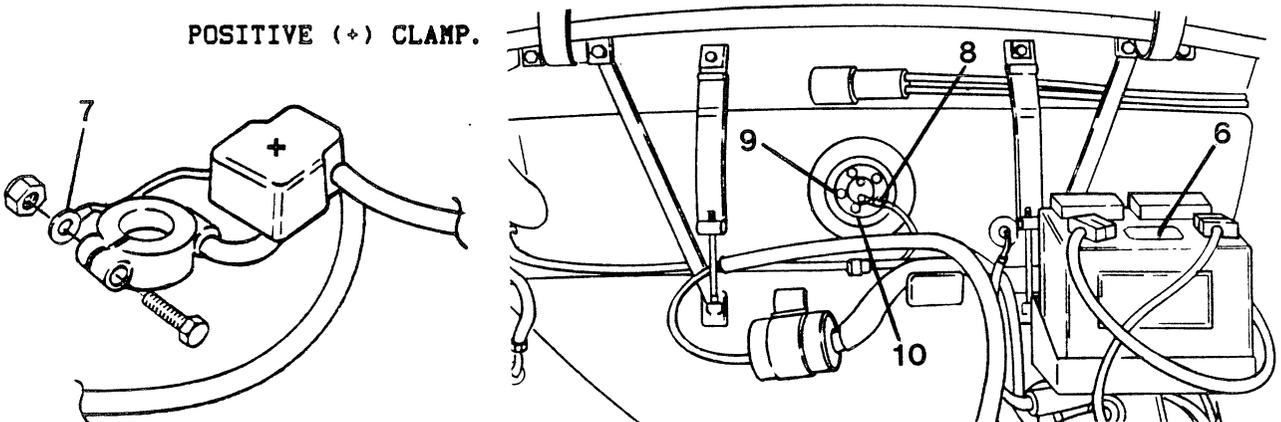
#### REMOVING

1. DEPRESSURIZE FUEL SYSTEM BY OPENING FUEL FILLER CAP.
2. ATTACH GROUND WIRE FROM THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
3. INSERT FUEL CADDY HOSE INTO FILLER CAP OPENING.
4. MANUALLY PUMP FUEL CADDY UNTIL UPPER TANK IS DRAINED.

NOTE: UPPER FUEL TANK IS DRAINED WHEN THE SENDING UNIT INDICATES 1 O'CLOCK.

5. REMOVE FUEL PUMP CADDY AND DISCONNECT GROUND WIRE.
6. REMOVE SPARE WHEEL, BATTERY COVER AND FABRIC TRIM FROM UPPER FUEL TANK.
7. REMOVE THE NEGATIVE (-) CLAMP FIRST AND THEN THE POSITIVE (+) CLAMP.

NOTE: DO NOT DAMAGE THE RING TERMINAL ON THE POSITIVE (+) CLAMP.



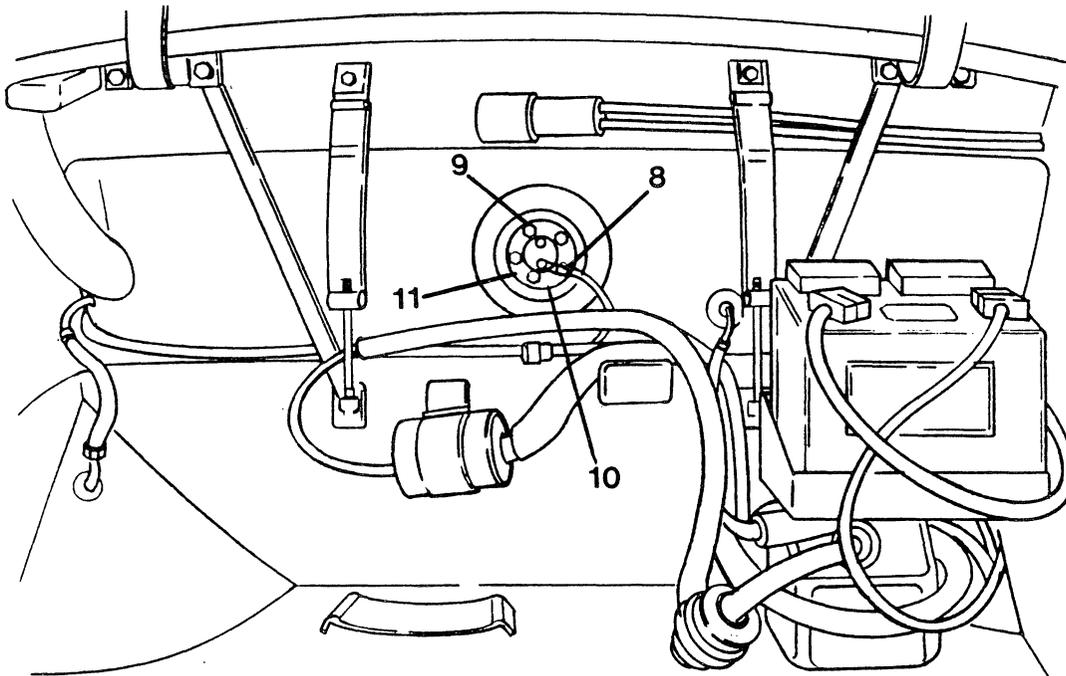
8. REMOVE TWO (2) ELECTRICAL LEADS FROM THE UPPER SENDING UNIT AND TAG FOR RE-INSTALLATION.
9. REMOVE FIVE (5) MOUNTING SCREWS THAT SECURE THE UPPER FUEL SENDING UNIT TO THE UPPER TANK.
10. REMOVE SENDING UNIT AND THE GASKET BY ROTATING THE SENDING UNIT CAREFULLY OUT OF THE TANK AND DISCARD GASKET.

NOTE : PROTECT TRUNK AREA FROM FUEL AND VAPOR LEAKS.

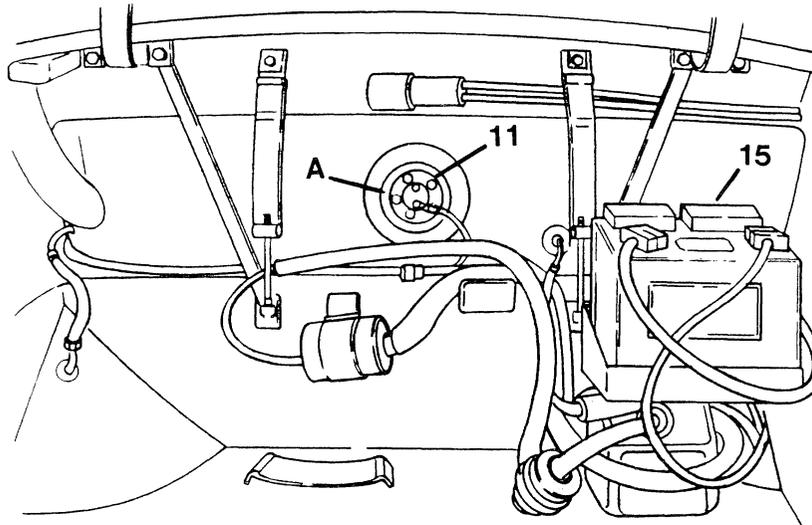
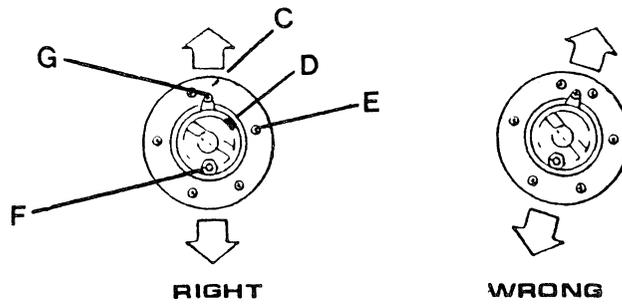
DO NOT CONNECT OR DISCONNECT ELECTRICAL LEADS  
WITH THE FUEL SYSTEM OPEN.

REFITTING

11. INSTALL UPPER TANK SENDING UNIT TO THE UPPER TANK:



- A. CLEAN SEALING FLANGE ON THE UPPER TANK WITH ISOPROPYL ALCOHOL.
- B. COAT THE THREADS ONLY OF THE FIVE (5) MOUNTING SCREWS FOR THE SENDING UNIT WITH A COAT OF PERMATEX #1.  
NOTE: DO NOT COAT THE LAST TWO (2) THREADS OR ENDS OF THE MOUNTING SCREWS.
- C. INSTALL THE NEW GASKET TO THE SENDING UNIT WITH THE ALIGNMENT NIB OF THE SENDING UNIT ALIGNED WITH THE ALIGNMENT HOLE OF THE GASKET.
- D. INSTALL FIVE (5) SCREWS INTO THE SENDING UNIT AND ALIGN MOUNTING HOLES TO PERMIT RED INDICATOR TO READ 1 O'CLOCK.
- E. TIGHTEN FIVE (5) SCREWS TO 20 IN\LBS.



F. CONNECT POSITIVE (+) WHITE/RED LEAD FOR UPPER SENDING UNIT TO THE STUD AT THE BOTTOM OF THE SENDING UNIT.

G. CONNECT NEGATIVE (-) BLACK LEAD FOR UPPER SENDING UNIT TO THE SCREW LOCATED AT 1 O'CLOCK.

CAUTION: TIGHTEN BOTH ELECTRICAL CONNECTIONS UNTIL FULLY SEATED.

H. PRESSURE TEST THE FUEL SYSTEM, SEE 3.7.3.

12. INSTALL FABRIC TRIM TO THE REAR OF THE UPPER FUEL TANK.

13. INSTALL SPARE WHEEL.

14. CONNECT BATTERY BY SECURING THE POSITIVE (+) FIRST AND THEN THE NEGATIVE (-) TERMINAL.

15. SECURE BATTERY COVER.

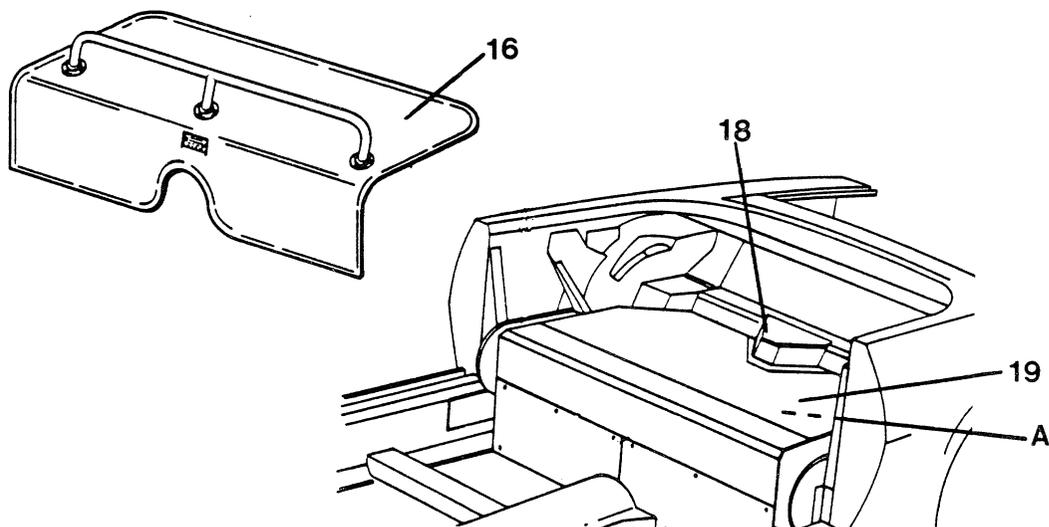


10. REMOVE THE FIVE (5) MOUNTING SCREWS FROM THE SENDING UNIT AND DISCARD GASKET.

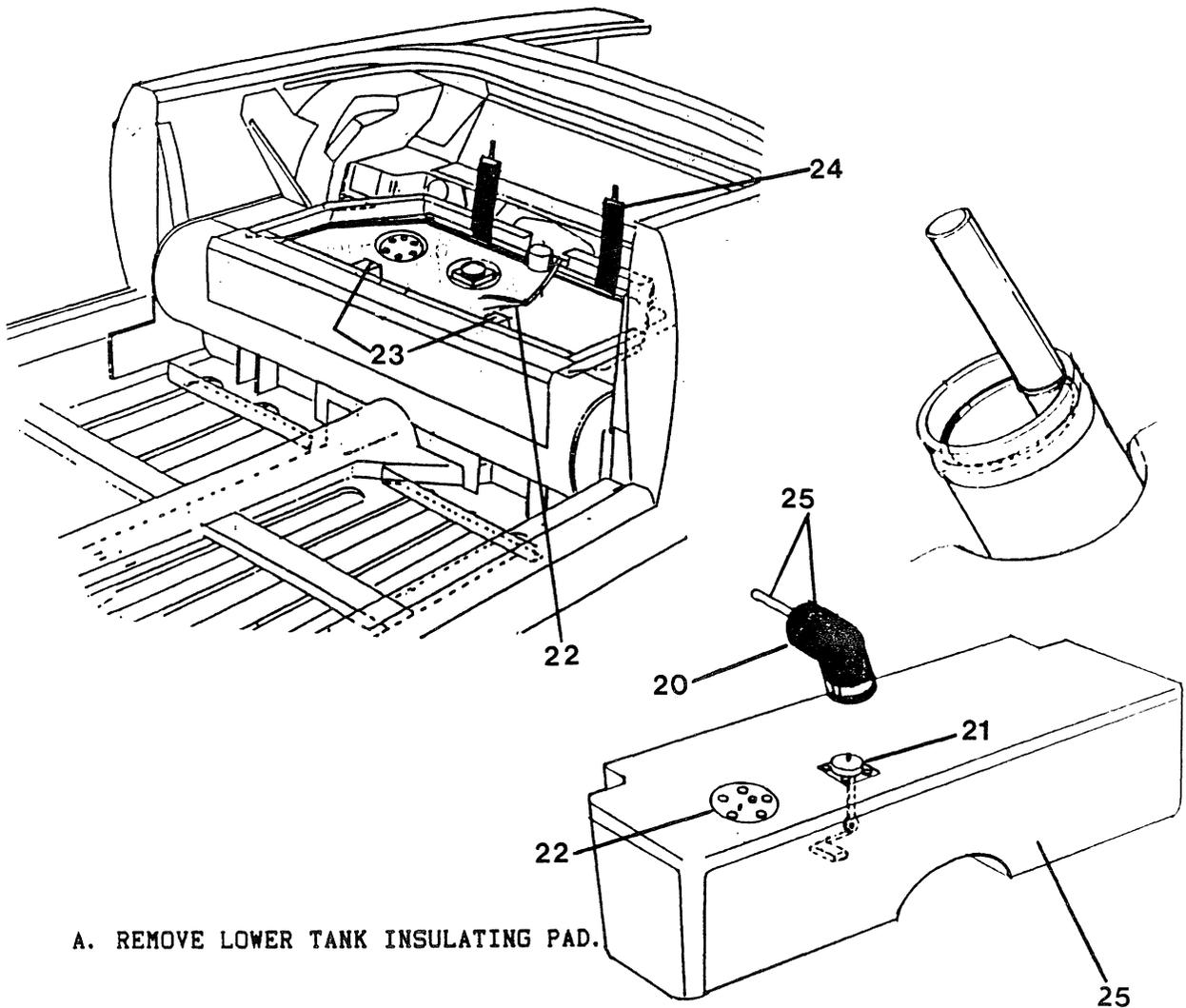
WARNING: PROTECT TRUNK AREA FROM FUEL AND VAPOR LEAKS.

DO NOT CONNECT OR DISCONNECT ELECTRICAL LEADS WITH THE FUEL SYSTEM OPEN.

11. FOR REMOVAL OF UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
12. INSTALL GROUND WIRE OF THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
13. FEED SIPHON HOSE THROUGH OPENING AT THE UPPER SENDING UNIT AND INTO THE LOWER FUEL TANK THROUGH THE INTERCONNECTING HOSE.



14. MANUALLY PUMP THE FUEL PUMP CADDY UNTIL THE LOWER TANK IS DRAINED.  
CAUTION: DRAIN FUEL SUMP FROM THE BOTTOM PETCOCK.
15. REMOVE HOSE FROM LOWER TANK AND DISCONNECT THE GROUND WIRE.
16. REMOVE REAR CARPET AND LUGGAGE RACK.
17. REMOVE TRIM PANEL ASSEMBLY, SEE 3.6.3.
18. REMOVE INTERCONNECTING HOSE COVER BY REMOVING TWO (2) SCREWS.
19. REMOVE LOWER TANK COVER BY REMOVING TWELVE (12) SCREWS AND CAREFULLY PRYING UP COVER FROM REAR. PULL COVER REARWARD TO RELEASE FORWARD LIP.



A. REMOVE LOWER TANK INSULATING PAD.

20. DISCONNECT THE UPPER CLAMP OF THE INTERCONNECTING HOSE AND CAREFULLY PULL THE INTERCONNECTING HOSE LOOSE FROM THE UPPER TANK.
  21. DISCONNECT TWO (2) ELECTRICAL LEADS FROM THE SENDING UNIT AND TAG FOR RE-INSTALLATION.
  22. DISCONNECT THE TWO (2) ELECTRICAL LEADS FROM THE FUEL PUMP AND TAG FOR RE-INSTALLATION.
- CAUTION: PLACE WIRING HARNESS OUT OF THE WAY WHEN REMOVING TANK.
23. REMOVE TWO (2) NUTS AND WASHERS FROM THE LOWER TANK STRAPS.
  24. LIFT UP TWO (2) STRAPS AND POSITION TO REAR OF TANK.
  25. REMOVE LOWER FUEL TANK.

NOTE: TAKE CARE NOT TO KINK TRANSFER HOSE DURING REMOVAL PROCESS.

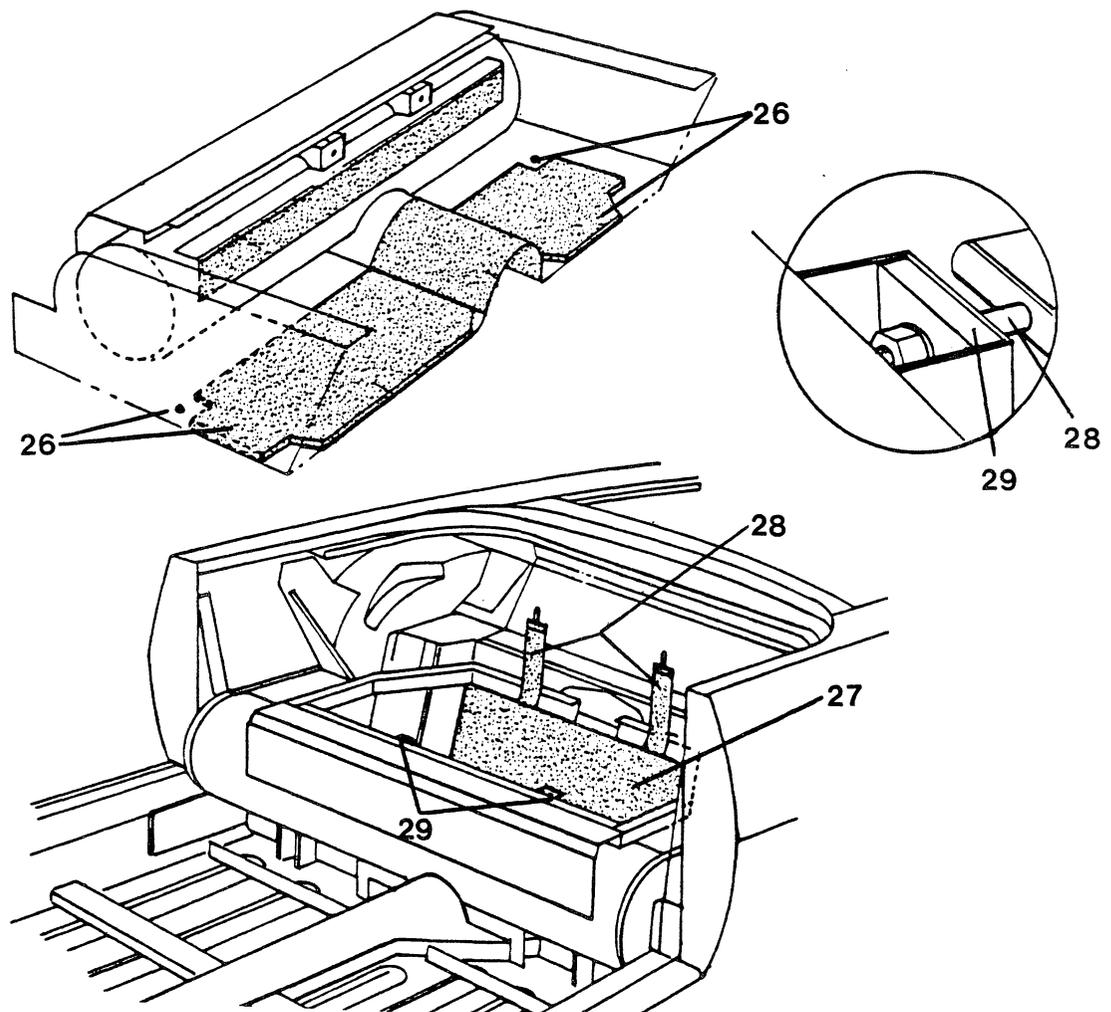
## REFITTING

NOTE: THIS PROCEDURE COVERS INSTALLATION OF THE LOWER FUEL TANK ASSEMBLY COMPLETE, (FUEL TANK, SUBMERSIBLE PUMP, SENDING UNIT, AND TRANSFER HOSE) INSTALLED TO THE VEHICLE AS A COMPONENT ASSEMBLY.

26. INSTALL LOWER FUEL TANK PADDING TO THE LOWER FUEL COMPARTMENT TAKING CARE NOT TO COVER VENT HOLES.
27. POSITION LOWER FUEL TANK ASSEMBLY TO THE LOWER FUEL COMPARTMENT.
28. SECURE LOWER FUEL TANK WITH TWO (2) STRAPS SECURED AT THE REAR.

NOTE: CHECK FOR INSTALLATION OF THE STRAP PADDING BEFORE SECURING STRAPS TO LOWER TANK COMPARTMENT.

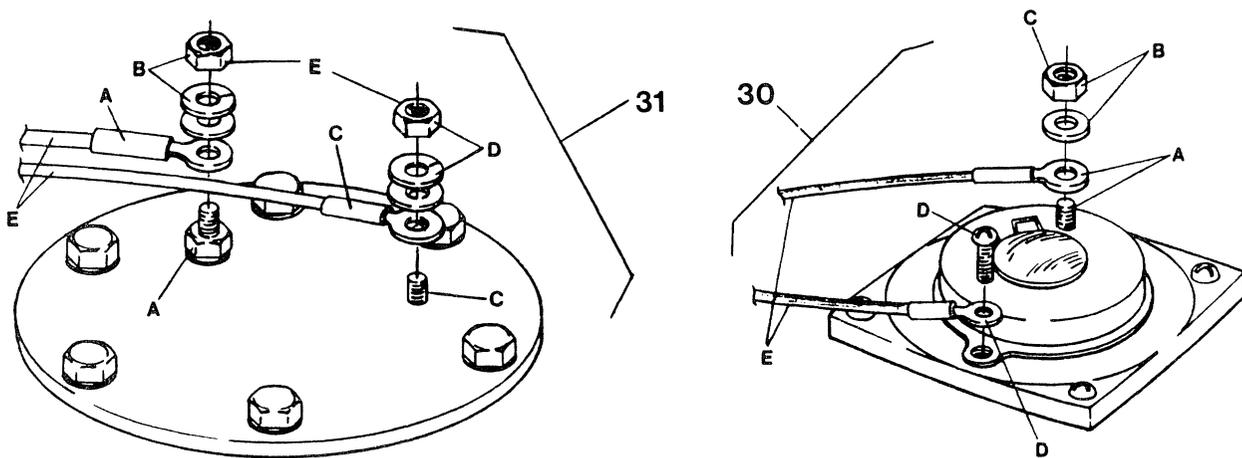
29. INSTALL TWO (2) WASHERS AND NUTS TO THE LOWER TANK STRAP BOLT.



**30. LOWER FUEL TANK SENDING UNIT ELECTRICAL CONNECTIONS:**

- A. CONNECT WHITE/RED NEGATIVE (-) WIRE TO THE MOUNTING STUD.
- B. INSTALL ONE (1) WASHER AND NUT TO MOUNTING STUD.
- C. TIGHTEN UNTIL FULLY SEATED.
- D. CONNECT GREEN/ORANGE POSITIVE (+) WIRE TO SENDING UNIT MOUNTING SCREW OPPOSITE THE NEGATIVE MOUNTING STUD.
- E. TIGHTEN UNTIL FULLY SEATED.

**WARNING: ROUTE WIRING HARNESS AWAY FROM LOWER TANK COVER AND TRIM PANEL MOUNTING SCREWS.**



**31. LOWER FUEL TANK SUBMERSIBLE PUMP ELECTRICAL CONNECTIONS:**

**WARNING: RED WIRE POSITIVE (+) TO INSULATED TERMINAL.**

**BLACK WIRE NEGATIVE (-) TO WELD STUD TERMINAL.**

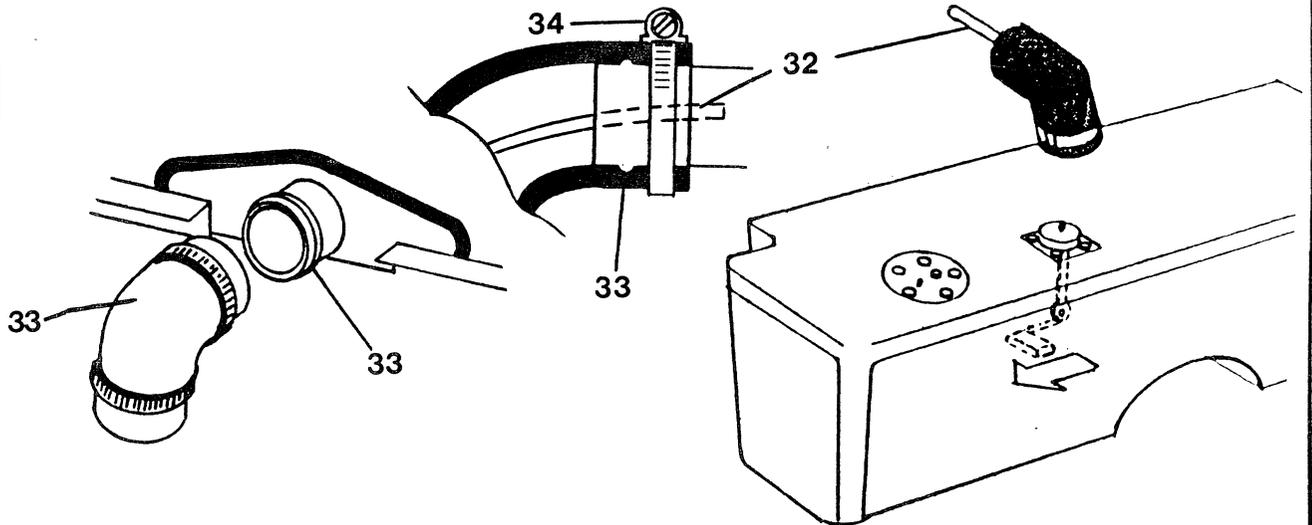
- A. CONNECT RED WIRE TO THE POSITIVE (+) INSULATED TERMINAL.
- B. INSTALL ONE (1) WASHER AND NUT TO POSITIVE (+) INSULATED TERMINAL.
- C. CONNECT BLACK WIRE NEGATIVE (-) TO WELD STUD TERMINAL.
- D. INSTALL ONE (1) WASHER AND NUT TO NEGATIVE (-) WELD STUD.
- E. TIGHTEN BOTH ELECTRICAL CONNECTIONS UNTIL FULLY SEATED.

**WARNING: ROUTE WIRING HARNESS AWAY FROM LOWER TANK COVER AND TRIM PANEL MOUNTING SCREWS.**

32. ROUTE TRANSFER HOSE FROM LOWER FUEL TANK THROUGH INTERCONNECTING HOSE AND INTO UPPER FUEL TANK.

33. POSITION INTERCONNECTING HOSE TO UPPER TANK OUTLET AND PAST OUTLET BARB, AND SECURE WITH CLAMP.

CAUTION: CHECK TO INSURE THAT INTERCONNECTING HOSE IS



PROPERLY SECURED AND NOT KINKED.

34. TORQUE BOTH UPPER AND LOWER CLAMPS TO 30 IN/LBS.

35. FOR INSTALLATION OF UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.

36. INSTALL UPPER SENDING UNIT TO UPPER FUEL TANK:

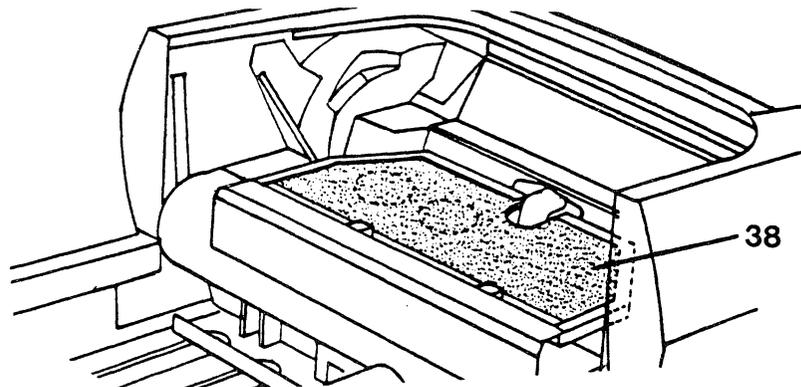
A. REFERENCE 3.7.1 FOR COMPLETE UPPER SENDING UNIT

INSTALLATION STEP 62, A THROUGH H.

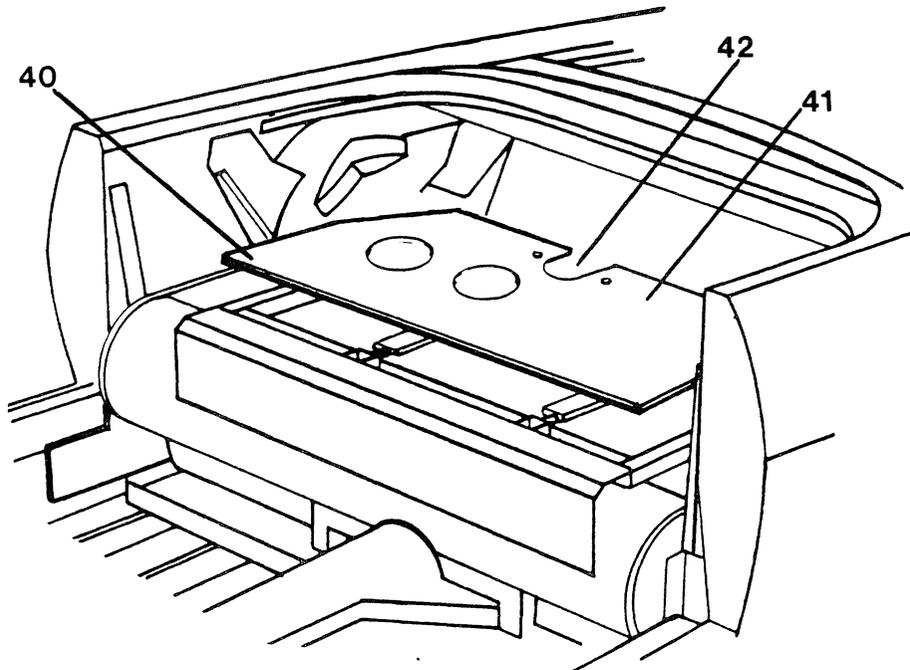
37. PRESSURE TEST THE FUEL SYSTEM, SEE 3.7.3.

38. INSTALL LOWER TANK PADDING.

39. CLEAN LOWER TANK COVER WITH ISOPROPYL ALCOHOL.



40. APPLY AN UNBROKEN 1/4" BEAD OF PERMATEX #1 TO LOWER TANK SEALING AREA.
41. INSTALL LOWER TANK COVER WITH TWELVE (12) SCREWS.
42. APPLY AN UNBROKEN 3/8" BEAD OF PERMATEX #1 TO THE INTER-CONNECTING HOSE COVER.
43. INSTALL HOSE COVER WITH TWO (2) SCREWS.
44. INSTALL TRIM PANEL, SEE 3.6.3.
45. INSTALL REAR COMPARTMENT CARPET.
46. INSTALL LUGGAGE RACK.
47. INSTALL SPARE WHEEL AND FABRIC TRIM TO TRUNK AREA.
48. CONNECT BATTERY TERMINALS, POSITIVE (+) FIRST AND THEN THE NEGATIVE (-).



3.7.8 SUBMERGED PUMP MOUNTING RING

1. NON-REPLACEABLE - PART OF WELDED TANK ASSEMBLY.

3.7.9 LOWER TANK - TOP FILLER TUBE.

1. NON-REPLACEABLE - PART OF WELDED TANK ASSEMBLY.

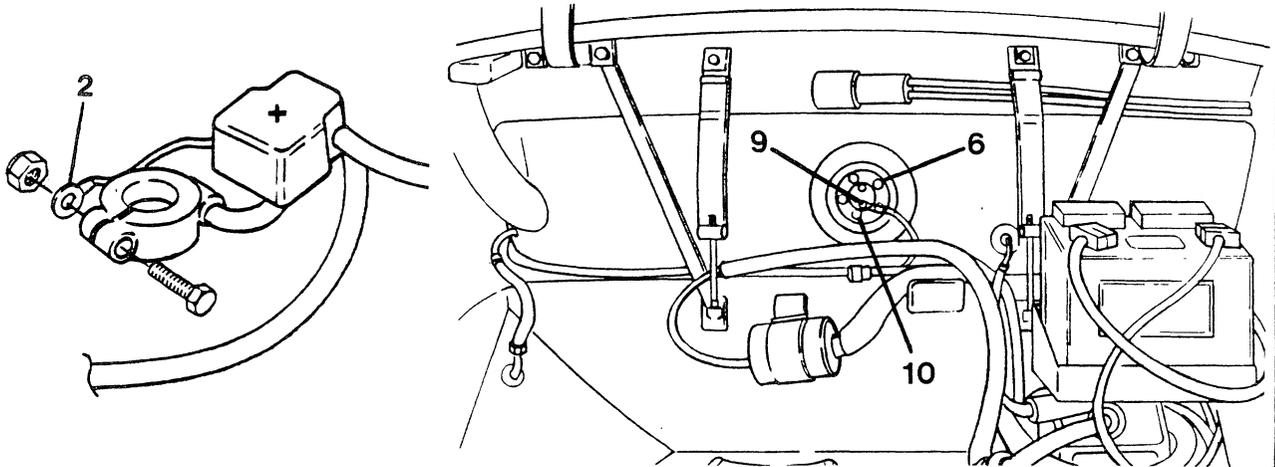
### 3.7.10 GAUGE AND SEND UNIT (LOWER TANK)

#### REMOVE AND REFIT

#### REMOVE

1. LOWER CONVERTIBLE TOP TO FULLY LOWERED POSITION.
2. REMOVE THE NEGATIVE (-) CLAMP FIRST AND THEN REMOVE THE POSITIVE (+) CLAMP.

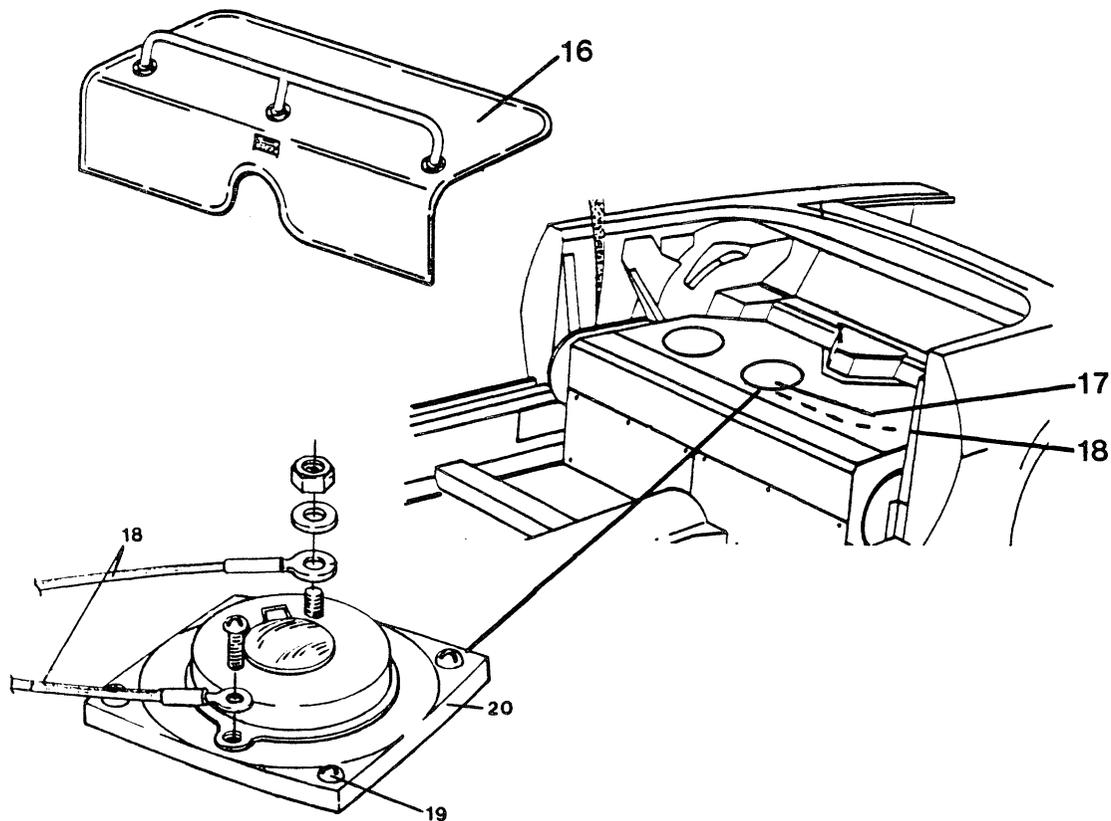
CAUTION: DO NOT DAMAGE THE RING TERMINAL ON THE POSITIVE CLAMP.



3. DEPRESSURIZE FUEL SYSTEM BY OPENING FUEL FILLER CAP.
4. ATTACH GROUND WIRE FROM THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
5. INSERT FUEL CADDY HOSE INTO FILLER CAP OPENING.
6. MANUALLY PUMP FUEL CADDY UNTIL UPPER FUEL TANK IS DRAINED.

NOTE: UPPER FUEL TANK IS DRAINED WHEN THE SENDING UNIT INDICATOR IS AT 1 O'CLOCK.

7. REMOVE FUEL PUMP CADDY AND DISCONNECT GROUND WIRE.
8. REMOVE SPARE WHEEL ASSEMBLY BY REMOVING THE KNOB SECURING WHEEL TO TRUNK. PEEL BACK CENTER FABRIC TRIM TO LOCATE UPPER SENDING UNIT.
9. REMOVE ELECTRICAL LEADS AT SENDING UNIT IN UPPER TANK AND TAG FOR RE-INSTALLATION.



10. REMOVE THE FIVE (5) MOUNTING BOLTS FROM THE SENDING UNIT AND DISCARD GASKET.

**WARNING: PROTECT TRUNK AREA FROM FUEL AND VAPOR LEAKS.**

**DO NOT CONNECT OR DISCONNECT ELECTRICAL LEADS WITH THE FUEL SYSTEM OPEN.**

11. FOR REMOVAL OF UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
12. INSTALL GROUND WIRE OF THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
13. FEED SIPHON HOSE THROUGH OPENING AT THE UPPER SENDING UNIT AND INTO THE LOWER FUEL TANK THROUGH THE INTERCONNECTING HOSE.
14. MANUALLY PUMP THE FUEL PUMP CADDY UNTIL THE LOWER TANK IS DRAINED.  
**CAUTION: DRAIN FUEL SUMP FROM THE BOTTOM PETCOCK.**
15. REMOVE HOSE FROM LOWER TANK AND DISCONNECT THE GROUND WIRE.
16. REMOVE REAR CARPET AND LUGGAGE RACK.

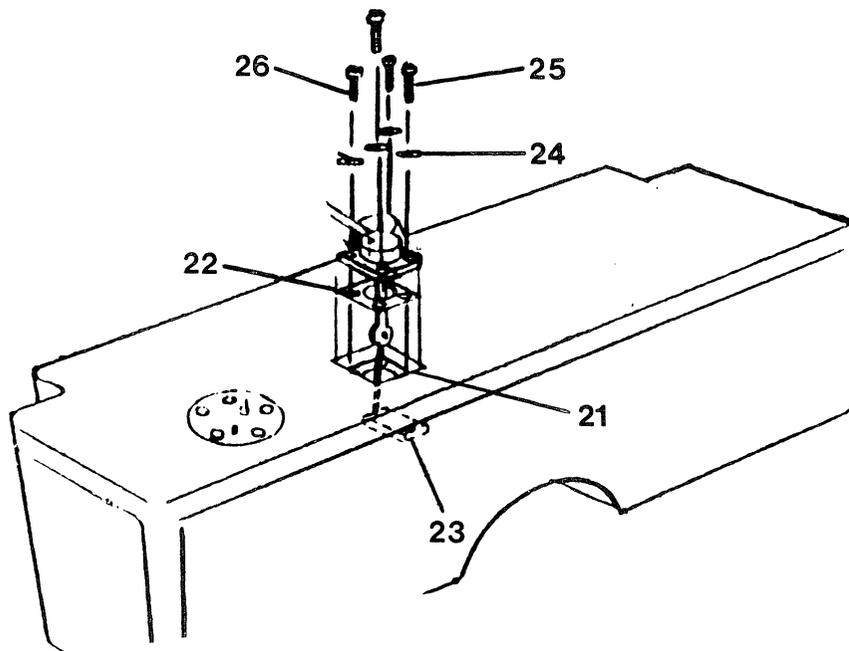
17. REMOVE THE INSPECTION COVER NEAREST THE CENTER OF THE VEHICLE BY REMOVING ONE (1) BOLT AND CAREFULLY PRYING UP AND SLIDING THE COVER REARWARD.

18. DISCONNECT TWO (2) ELECTRICAL LEADS FROM THE SENDING UNIT AND TAG FOR RE-INSTALLATION.

CAUTION: PLACE WIRING HARNESS AWAY FROM SENDING UNIT.

19. REMOVE FOUR (4) MOUNTING BOLT TO REMOVE SENDING UNIT.

20. CAREFULLY GUIDE SENDING UNIT OUT OF THE LOWER TANK AND DISCARD GASKET AND SEALING WASHERS.



#### REFITTING

NOTE: THIS PROCEDURE COVERS INSTALLATION OF THE LOWER FUEL TANK ASSEMBLY SENDING UNIT.

21. CLEAN THE LOWER TANK FLANGE, GASKET AND SENDING UNIT WITH ISOPROPYL ALCOHOL.

22. ALIGN NEW GASKET TO THE SENDING UNIT FLANGE AND CHECK FOR BOLT HOLE ALIGNMENT.

23. INSTALL SENDING UNIT IN LOWER TANK OPENING. POSITION FLOAT TOWARDS THE SUBMERSIBLE PUMP.

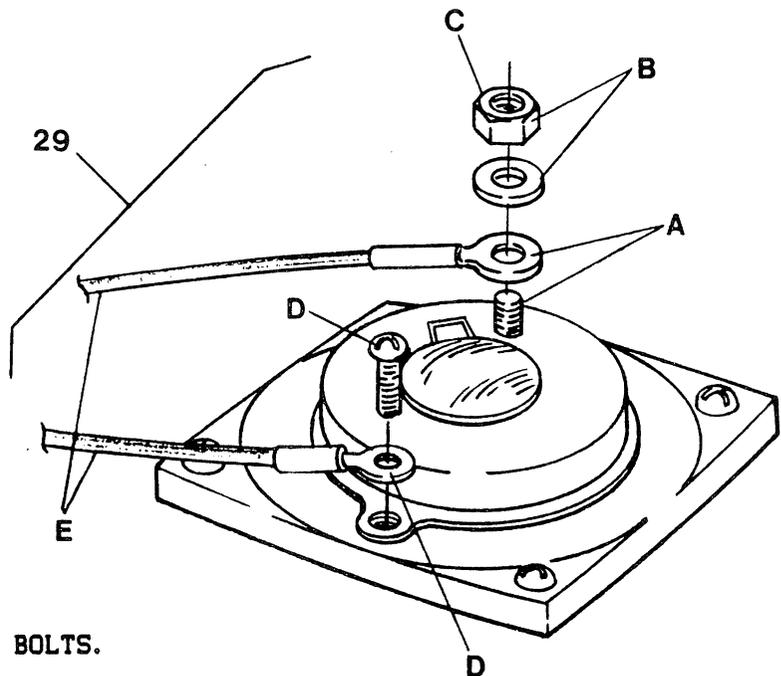
NOTE: CHECK TO INSURE THE LOWER SENDING UNIT RED INDICATOR READS 7 O'CLOCK WHEN VIEWING VEHICLE FROM THE DRIVERS SIDE LOOKING INTO THE VEHICLE.

24. ALIGN NEW GASKET AND SENDING UNIT HOLES TO MATCH THE LOWER TANK FLANGES.

25. PLACE FOUR (4) NEW SEALING WASHERS ONTO THE FOUR (4) BOLTS THAT MOUNT THE SENDING UNIT TO THE LOWER TANK.

26. COAT THE THREADS ONLY OF THE FOUR (4) MOUNTING BOLTS WITH A COAT OF PERMATEX #1.

NOTE: DO NOT COAT THE LAST TWO (2) THREADS OR ENDS OF THE MOUNTING BOLTS.



27. HAND TIGHTEN THE FOUR (4) BOLTS.

28. PATTERN TORQUE THE FOUR (4) BOLTS TO 10 IN/LBS.

29. LOWER FUEL TANK SENDING UNIT ELECTRICAL CONNECTIONS:

A. CONNECT WHITE/RED NEGATIVE (-) WIRE TO THE MOUNTING STUD.

B. INSTALL ONE (1) WASHER AND NUT TO MOUNTING STUD.

C. TIGHTEN UNTIL FULLY SEATED.

D. CONNECT GREEN/ORANGE POSITIVE (+) WIRE TO SENDING UNIT

MOUNTING SCREW OPPOSITE THE NEGATIVE MOUNTING STUD.

E. TIGHTEN UNTIL FULLY SEATED.

WARNING: ROUTE WIRING HARNESS AWAY FROM LOWER TANK COVER  
AND TRIM PANEL MOUNTING SCREWS.

30. CLEAN THE INSPECTION COVER WITH ISOPROPYL ALCOHOL.
31. APPLY AN UNBROKEN 1/8" BEAD OF PERMATEX #1 TO THE  
INSPECTION COVER.
32. SECURE THE INSPECTION COVER TO THE LARGE LOWER TANK INSPECTION  
COVER WITH ONE (1) BOLT.
33. INSTALL THE REAR COMPARTMENT CARPET.
34. INSTALL THE LUGGAGE RACK.
35. FOR INSTALLATION OF UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
36. INSTALL THE UPPER FUEL SENDING UNIT TO THE UPPER TANK.
  - A. REFERENCE 3.7.1 FOR COMPLETE UPPER SENDING UNIT  
INSTALLATION STEP 62, A THROUGH H.
37. PRESSURE TEST THE FUEL SYSTEM, SEE 3.7.3.
38. INSTALL SPARE WHEEL AND FABRIC TRIM TO TRUNK AREA.
39. CONNECT BATTERY TERMINALS, POSITIVE (+) FIRST AND  
AND THEN NEGATIVE (-).

### 3.7.11 SUBMERSIBLE PUMP AND BRACKET ASSEMBLY

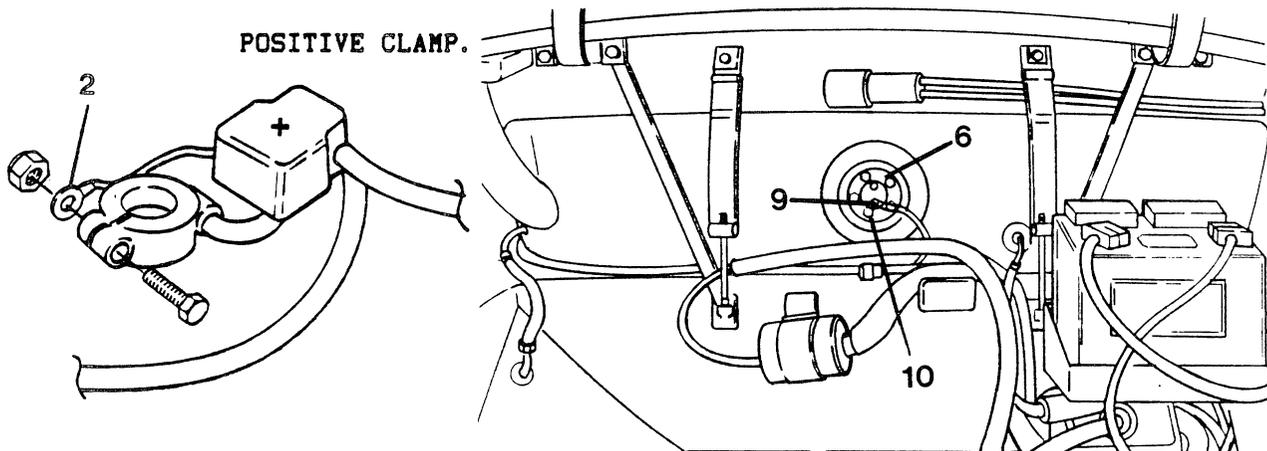
#### REMOVE AND REFIT

#### REMOVING

1. LOWER CONVERTIBLE TOP TO THE FULLY LOWERED POSITION.
2. REMOVE THE NEGATIVE (-) CLAMP FIRST AND THEN REMOVE THE POSITIVE (+) CLAMP.

CAUTION: DO NOT DAMAGE THE RING TERMINAL ON THE

POSITIVE CLAMP.

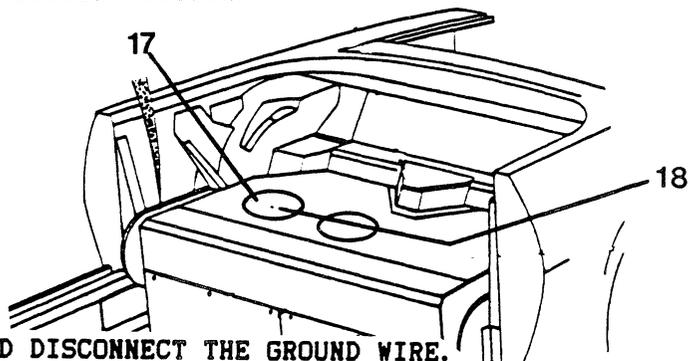
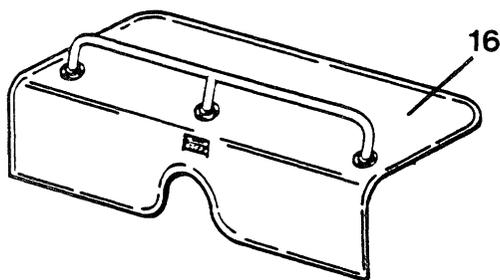


3. DEPRESSURIZE THE FUEL SYSTEM BY OPENING THE FILLER CAP.
4. ATTACH GROUND WIRE FROM THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
5. INSERT FUEL CADDY HOSE INTO FILLER CAP OPENING.
6. MANUALLY PUMP FUEL PUMP CADDY UNTIL UPPER FUEL TANK IS DRAINED.  
NOTE: UPPER FUEL TANK IS DRAINED WHEN THE SENDING UNIT INDICATOR IS AT 1 O'CLOCK.
7. REMOVE FUEL PUMP CADDY AND DISCONNECT GROUND WIRE.
8. REMOVE SPARE WHEEL ASSEMBLY BY REMOVING THE KNOB SECURING WHEEL TO TRUNK. PEEL BACK CENTER FABRIC TRIM TO LOCATE UPPER SENDING UNIT.
9. REMOVE ELECTRICAL LEADS AT SENDING UNIT IN UPPER TANK AND TAG FOR RE-INSTALLATION.
10. REMOVE THE FIVE (5) MOUNTING SCREWS FROM THE SENDING UNIT AND DISCARD GASKET.

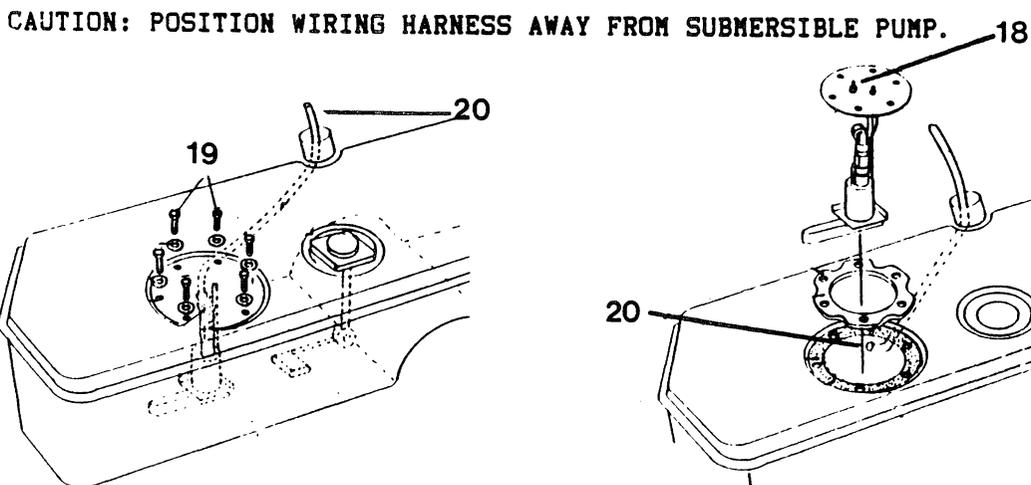
WARNING: PROTECT TRUNK AREA FROM FUEL AND VAPOR LEAKS.

DO NOT CONNECT OR DISCONNECT ELECTRICAL LEADS  
WITH THE FUEL SYSTEM OPEN.

11. FOR REMOVAL OF THE UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
12. INSTALL GROUND WIRE OF THE FUEL CADDY TO A GOOD CHASSIS  
GROUND AWAY FROM THE FILLER OPENING.
13. FEED SIPHON HOSE THROUGH OPENING AT THE UPPER SENDING UNIT  
AND INTO THE LOWER FUEL TANK THROUGH THE INTERCONNECTING HOSE.
14. MANUALLY PUMP THE FUEL PUMP CADDY UNTIL THE LOWER TANK IS DRAINED.  
CAUTION: DRAIN FUEL SUMP FROM BOTTOM PETCOCK.



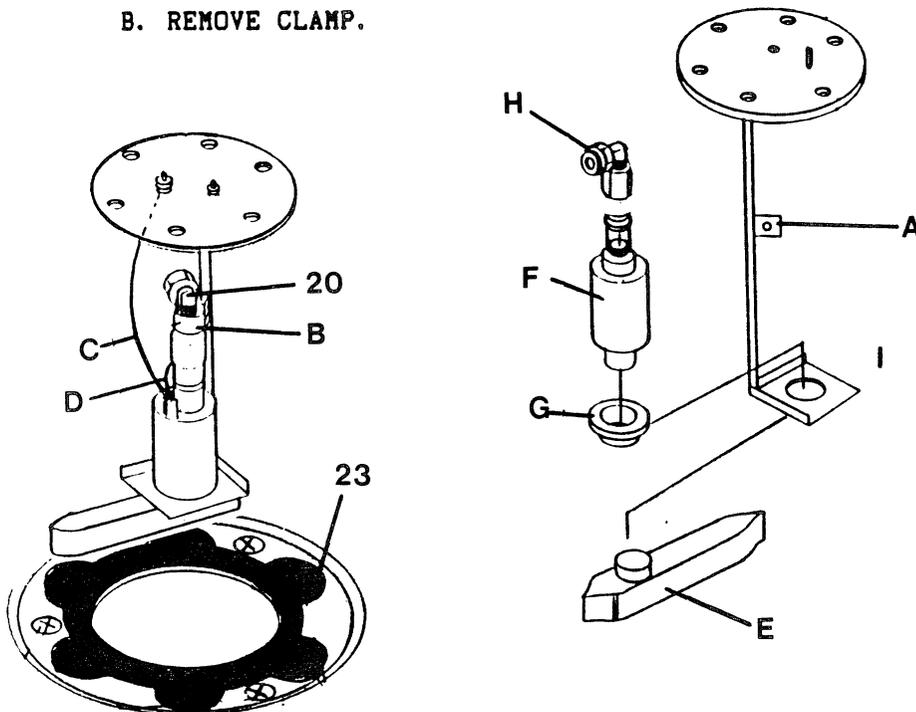
15. REMOVE HOSE FROM LOWER TANK AND DISCONNECT THE GROUND WIRE.
16. REMOVE REAR CARPET AND LUGGAGE RACK.
17. REMOVE THE INSPECTION COVER NEAREST THE RIGHT SIDE OF THE  
VEHICLE BY REMOVING ONE (1) SCREW AND CAREFULLY PRYING UP  
AND SLIDING COVER REARWARD.
18. DISCONNECT TWO (2) ELECTRICAL LEADS FROM THE SUBMERSIBLE  
PUMP AND TAG FOR RE-INSTALLATION.



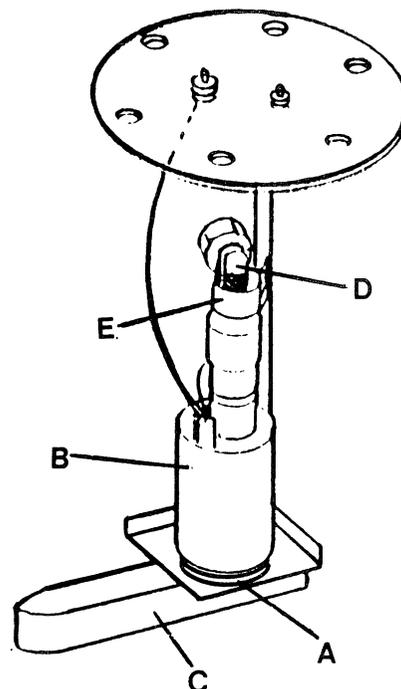
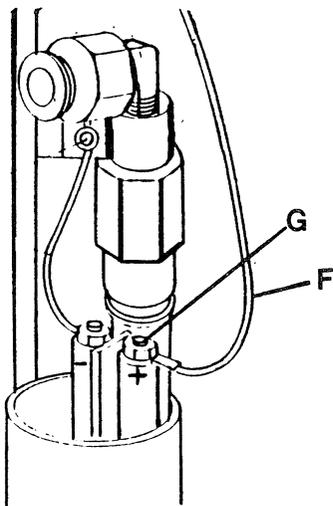
19. REMOVE SIX (6) MOUNTING SCREWS TO REMOVE SUBMERSIBLE PUMP AND GASKET.
20. CAREFULLY GUIDE SUBMERSIBLE PUMP OUT OF THE LOWER TANK.  
CAUTION: DO NOT PULL THE TRANSFER HOSE OUT OF THE UPPER TANK. LIFT THE SUBMERSIBLE PUMP ASSEMBLY UP JUST ENOUGH TO REMOVE THE TRANSFER HOSE FROM THE ELBOW ON THE SUBMERSIBLE PUMP ASSEMBLY.
21. RETRACT SUBMERSIBLE PUMP ELBOW RELEASE TO REMOVE THE TRANSFER HOSE FROM THE ELBOW.
22. PULL TRANSFER HOSE FROM THE ELBOW AND SECURE THE END OF THE HOSE TO THE OPENING IN THE LOWER TANK.  
NOTE: DO NOT ALLOW THE TRANSFER HOSE TO DROP INTO THE LOWER TANK.
23. REMOVE SUBMERSIBLE PUMP ASSEMBLY AND DISCARD GASKET AND SEALING WASHERS.

DISASSEMBLY OF SUBMERSIBLE PUMP ASSEMBLY:

- A. DRILL OUT THE RIVET AT THE CLAMP SUPPORTING THE FUEL ELBOW.
- B. REMOVE CLAMP.



- C. REMOVE THE 7" FUEL RESISTANT WIRE FROM THE SUBMERSIBLE FUEL PUMP.
- D. REMOVE THE 3" FUEL RESISTANT WIRE FROM THE SUBMERSIBLE FUEL PUMP.
- E. REMOVE THE FUEL FILTER.
- F. REMOVE THE FUEL PUMP.
- G. REMOVE THE RUBBER WASHER AND DISCARD.



- H. REMOVE FUEL ELBOW FROM FUEL PUMP CONNECTOR.

NOTE: CONNECTOR AND FUEL PUMP ARE AN ASSEMBLY.

DO NOT ATTEMPT TO SEPARATE.

RE-ASSEMBLY OF THE SUBMERSIBLE PUMP AND BRACKET:

- A. INSTALL WASHER TO THE BRACKET BOTTOM PLATE (SMALL COLLAR FACING DOWN).
- B. POSITION FUEL PUMP ASSEMBLY DOWN INTO WASHER.
- C. PRESS FILTER TO BOTTOM OF THE FUEL PUMP (PRESS FIT) WITH NEW FILTER POINTING TO THE OUTSIDE OF THE TANK AT FINAL ASSEMBLY.
- D. CONNECT FUEL ELBOW TO THE TOP OF THE FUEL PUMP ASSEMBLY.
- E. PLACE CLAMP TO THE FUEL ELBOW. DO NOT RIVET TO THE FUEL PUMP BRACKET AT THIS TIME.

PUMP WIRING FOR THE POSITIVE (+) TERMINAL (FUEL PUMP)

F. CONNECT THE #6 CONNECTOR END OF THE 7" FUEL RESISTANT WIRE TO THE POSITIVE (+) FUEL PUMP TERMINAL.

G. SECURE WITH ONE (1) #6 NUT.

PUMP WIRING FOR NEGATIVE (-) TERMINAL (FUEL PUMP)

H. CONNECT THE #6 CONNECTOR END OF THE 3" FUEL RESISTANT WIRE TO THE NEGATIVE (-) FUEL PUMP TERMINAL.

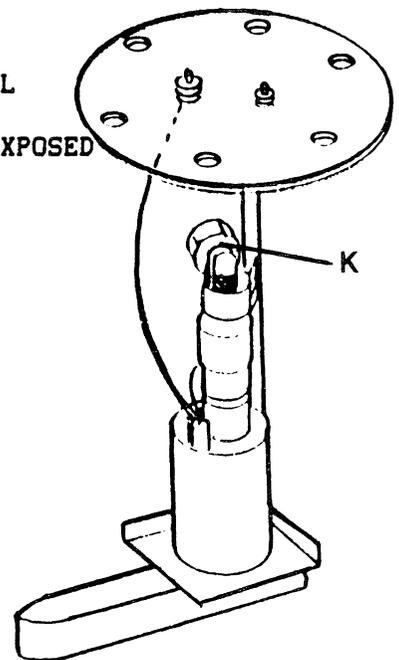
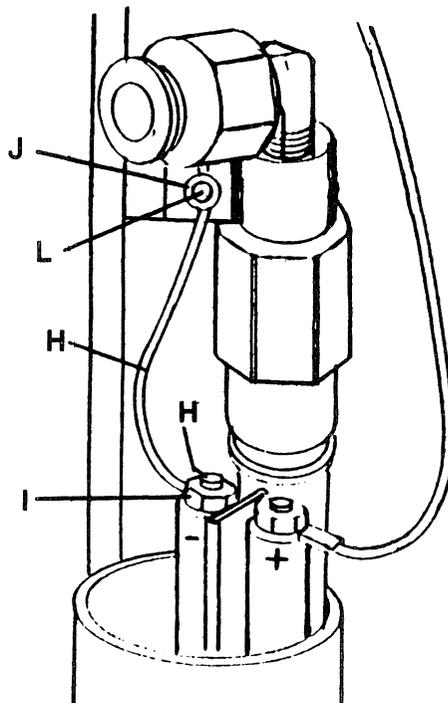
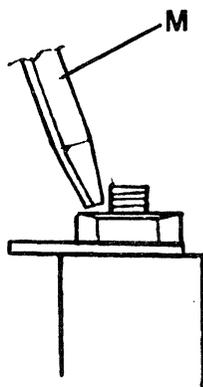
I. SECURE WITH ONE (1) #6 NUT.

J. POSITION THE #10 CONNECTOR OF THE FUEL RESISTANT WIRE TO THE FUEL ELBOW CLAMP RIVET.

K. POSITION ELBOW AND CLAMP AS SHOWN IN ILLUSTRATION.

L. RIVET THE 3" FUEL RESISTANT WIRE #10 CONNECTOR AND THE FUEL CLAMP TO THE ROD BRACKET.

M. PEEN THE POSITIVE (+) AND THE NEGATIVE (-) FUEL TERMINALS TO SECURE THE NUTS. (PEEN THE LAST EXPOSED THREAD OF EACH TERMINAL.)



NOTE: THE FUEL PUMP AND BRACKET ASSEMBLY IS NOW READY  
FOR INSTALLATION.

REFITTING

24. CLEAN THE LOWER TANK FLANGE, NEW GASKET AND SUBMERSIBLE PUMP WITH ISOPROPYL ALCOHOL.

25. BRUSH A LIGHT COAT OF PERMATEX HY-TACK ON TANK MOUNTING FLANGE AND ALLOW 15 MINUTES DRYING TIME.

26. ALIGN GASKET TO THE SUBMERSIBLE PUMP FLANGE AND CHECK FOR BOLT HOLE ALIGNMENT.

27. CHECK TO SEE THAT THERE ARE NO SPOT WELDS UNDER THE GASKET WHEN THE GASKET IS PLACED ON THE FLANGE.

NOTE: SPOT WELDS MUST NOT BE UNDER GASKET. DO NOT ALLOW ANY PART OF THE WELD TO BE COVERED BY THE GASKET.

28. THE TANK IS ACCEPTABLE IF WELDS DO NOT INTERFERE WITH THE GASKET.

WARNING: DO NOT USE FUEL TANK IF THE WELDS INTERFERE WITH GASKET MOUNTING SURFACE.

29. POSITION SUBMERSIBLE PUMP THRU LOWER TANK OPENING AND CONNECT TRANSFER HOSE TO ELBOW. PUSH NYLON TUBE FIRMLY INTO ELBOW AND CHECK FOR SECURE FIT BY PULLING.

NOTE: GASKET MUST BE POSITIONED TO THE LOWER TANK FLANGE.

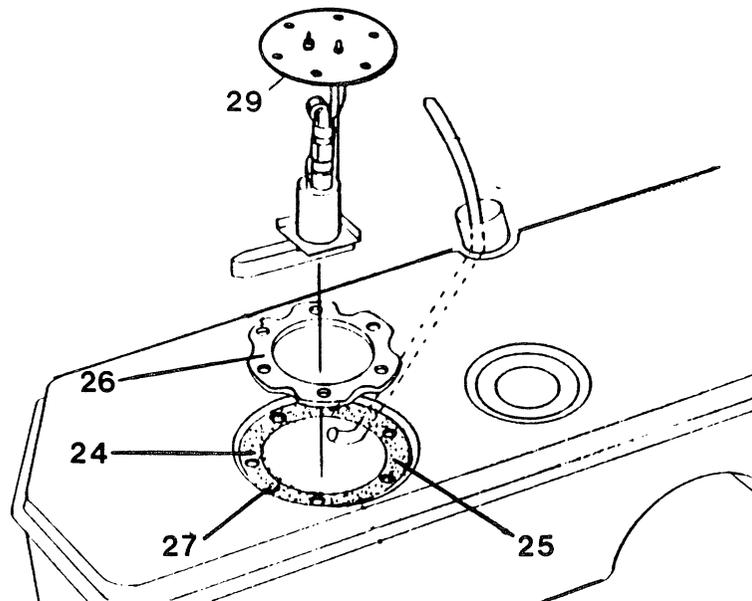
30. POSITION THE SUBMERSIBLE PUMP ASSEMBLY DOWN INTO THE LOWER TANK WITH THE FILTER POINTING TO THE OUTSIDE (AWAY FROM THE FUEL TANK CENTER HUMP).

CAUTION: THE POSITIVE (+) TERMINAL MUST BE AT 12 O'CLOCK (VIEWING THE VEHICLE FROM THE DRIVERS SIDE).

31. ALIGN THE SUBMERSIBLE PUMP BRACKET PLATE AND THE GASKET CAREFULLY WITH THE BOLT HOLES.

32. PLACE ONE (1) NEW SEALING WASHER ON EACH OF THE SIX (6) BOLTS.

WARNING: USE ONLY HESS & EISENHARDT APPROVED SEALING WASHERS.

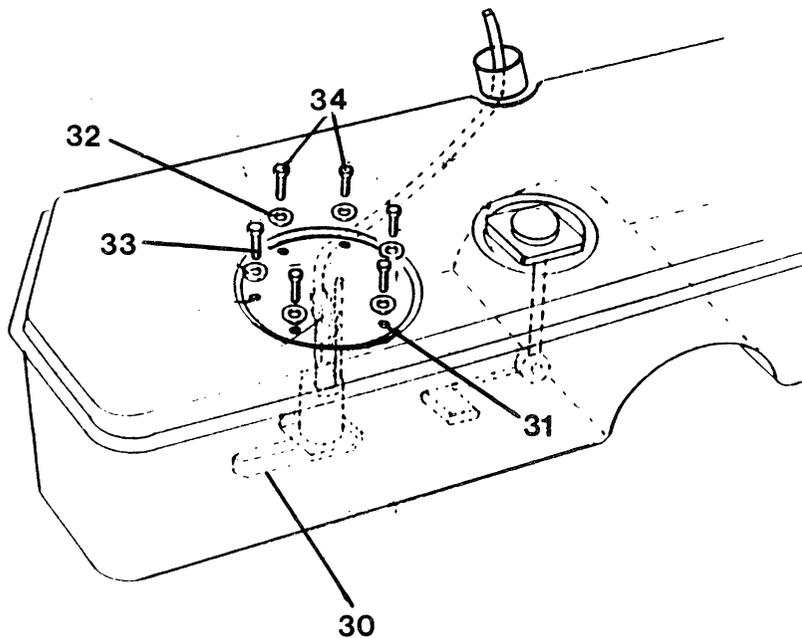


33. COAT THE THREADS ONLY OF THE SIX (6) MOUNTING SCREWS OF THE SUBMERSIBLE PUMP WITH A COAT OF PERMATEX #1.

NOTE: DO NOT COAT THE LAST TWO (2) THREADS OR ENDS OF THE MOUNTING SCREWS.

34. INSTALL THE SIX (6) BOLTS BY HAND.

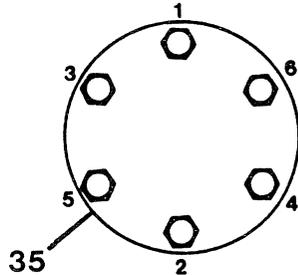
NOTE: PRESSURE SHOULD BE APPLIED TO THE BRACKET ASSEMBLY



TO HOLD THE GASKET IN PLACE WHILE INSTALLING BOLTS.

WARNING: THE TORQUE SPECIFICATIONS MUST BE FOLLOWED.

DO NOT VARY FROM THE TORQUE PATTERN OR SPECIFICATIONS.



35. TORQUE THE SIX (6) BOLTS USING THE TORQUE PATTERN AND IN\LBS AS FOLLOWS:

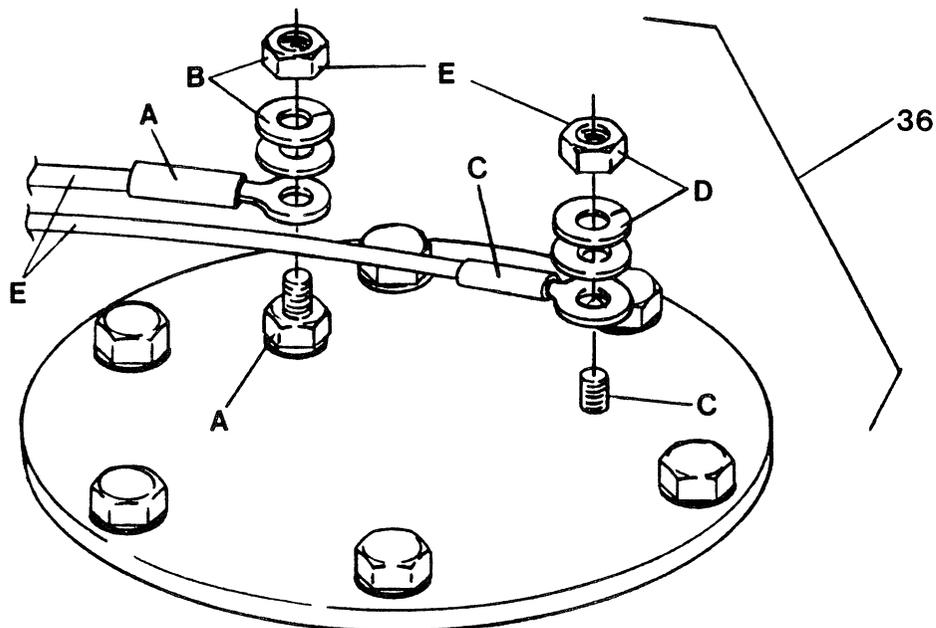
- A. TORQUE ALL BOLTS TO 10 IN\LBS.
- B. TORQUE ALL BOLTS TO 20 IN\LBS.
- C. TORQUE ALL BOLTS TO 25 IN\LBS.

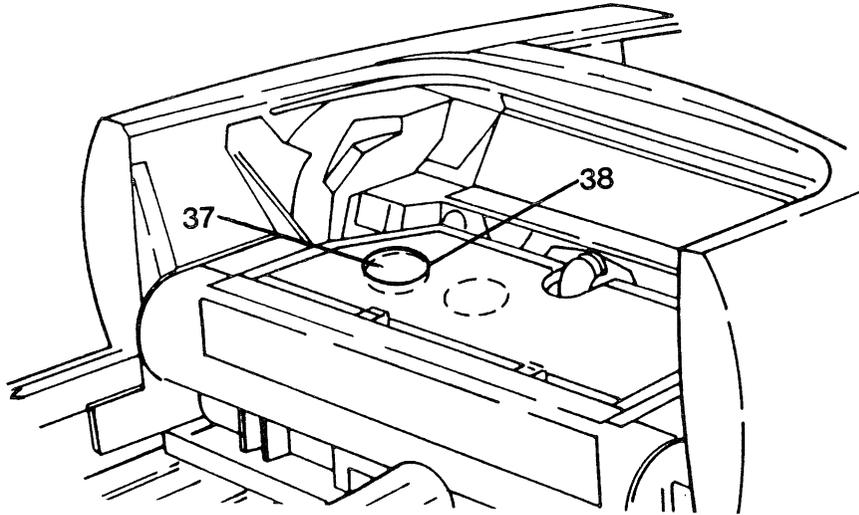
36. LOWER FUEL TANK SUBMERSIBLE PUMP ELECTRICAL CONNECTIONS:

WARNING: RED WIRE POSITIVE (+) TO INSULATED TERMINAL.

BLACK WIRE NEGATIVE (-) TO WELD STUD.

- A. CONNECT RED WIRE TO THE POSITIVE (+) INSULATED TERMINAL.
- B. INSTALL ONE (1) WASHER AND NUT TO THE POSITIVE (+)





INSULATED TERMINAL.

C. CONNECT BLACK WIRE NEGATIVE (-) TO WELD STUD TERMINAL.

D. INSTALL ONE (1) WASHER AND NUT TO THE NEGATIVE (-)  
WELD STUD.

E. TIGHTEN BOTH ELECTRICAL CONNECTIONS UNTIL FULLY SEATED.

WARNING: ROUTE WIRING HARNESS AWAY FROM LOWER

TANK COVER AND TRIM PANEL MOUNTING SCREWS.

37. CLEAN THE INSPECTION COVER WITH ISOPROPYL ALCOHOL.

38. APPLY A 1/8" UNBROKEN BEAD OF PERMATEX #1 TO THE INSPECTION COVER.

39. SECURE THE INSPECTION COVER TO THE LARGE LOWER TANK INSPECTION  
COVER WITH ONE (1) SCREW.

40. INSTALL THE REAR COMPARTMENT CARPET.

41. INSTALL THE LUGGAGE RACK.

42. FOR INSTALLATION OF THE UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.

43. INSTALL THE UPPER FUEL SENDING UNIT TO THE UPPER TANK:

A. REFERENCE 3.7.1 FOR COMPLETE UPPER SENDING UNIT

INSTALLATION, SEE STEP 62, LINES A THROUGH H.

44. INSTALL SPARE WHEEL AND FABRIC TRIM TO THE UPPER TRUNK AREA.

45. CONNECT BATTERY TERMINALS, POSITIVE (+) FIRST AND THEN  
THE NEGATIVE (-).

### 3.7.12 SUBMERSIBLE FUEL PUMP

#### REMOVE AND REFIT

##### REMOVING

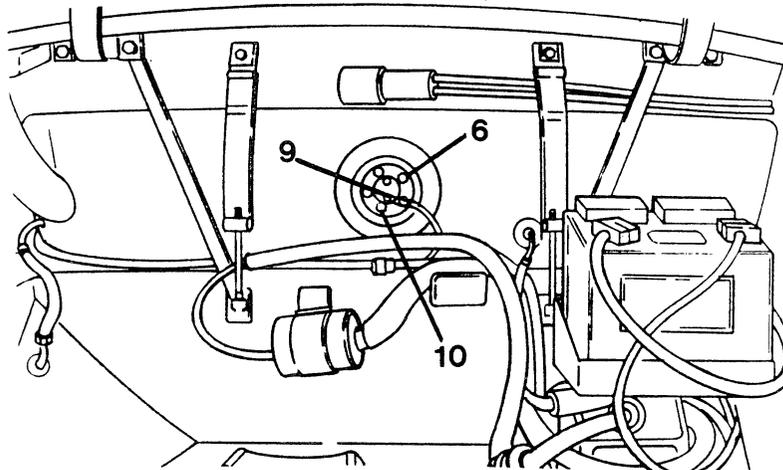
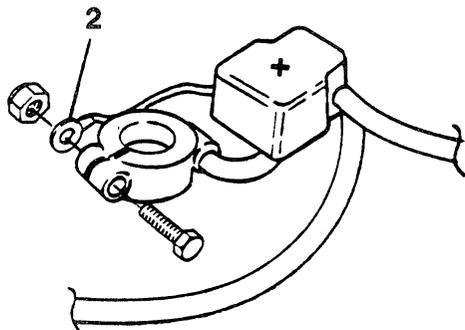
1. LOWER CONVERTIBLE TOP TO THE FULLY LOWERED POSITION.
2. REMOVE THE NEGATIVE (-) CLAMP FIRST AND THEN REMOVE THE POSITIVE (+) CLAMP.

CAUTION: DO NOT DAMAGE THE RING TERMINAL ON THE POSITIVE CLAMP.

3. DEPRESSURIZE THE FUEL SYSTEM BY OPENING THE FILLER CAP.
4. ATTACH GROUND WIRE FROM THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
5. INSERT FUEL CADDY HOSE INTO FILLER CAP OPENING.
6. MANUALLY PUMP FUEL PUMP CADDY UNTIL UPPER FUEL TANK IS DRAINED.

NOTE: UPPER FUEL TANK IS DRAINED WHEN THE SENDING UNIT INDICATOR IS AT 1 O'CLOCK.

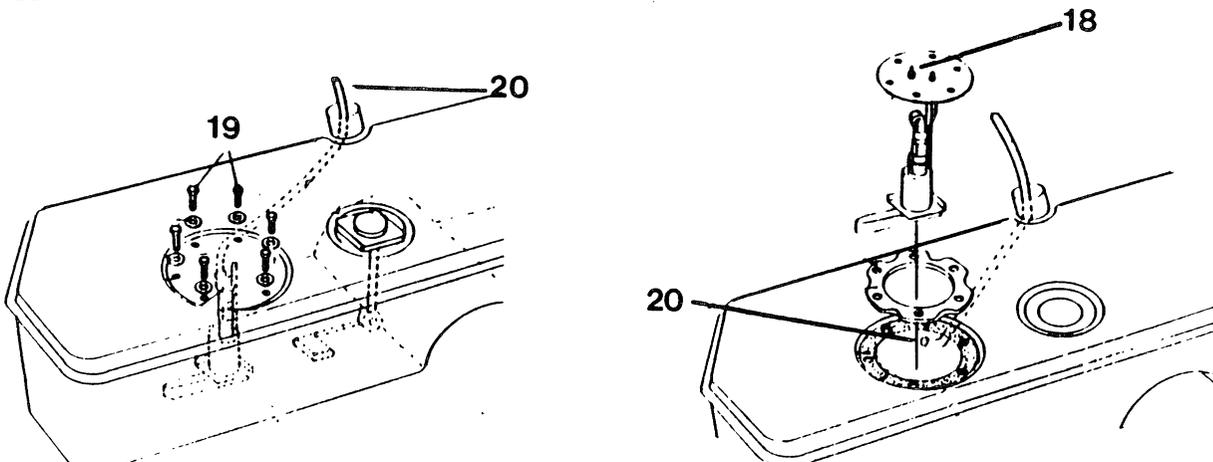
7. REMOVE FUEL PUMP CADDY AND DISCONNECT GROUND WIRE.
8. REMOVE SPARE WHEEL ASSEMBLY BY REMOVING THE KNOB SECURING WHEEL TO TRUNK. PEEL BACK CENTER FABRIC TRIM TO LOCATE UPPER SENDING UNIT.
9. REMOVE ELECTRICAL LEADS AT SENDING UNIT IN UPPER TANK AND TAG FOR RE-INSTALLATION.
10. REMOVE THE FIVE (5) MOUNTING SCREWS FROM THE SENDING UNIT AND DISCARD GASKET.



WARNING: PROTECT TRUNK AREA FROM FUEL AND VAPOR LEAKS.

DO NOT CONNECT OR DISCONNECT ELECTRICAL LEADS  
WITH THE FUEL SYSTEM OPEN.

11. FOR REMOVAL OF THE UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
12. INSTALL GROUND WIRE OF THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
13. FEED SIPHON HOSE THROUGH OPENING AT THE UPPER SENDING UNIT AND INTO THE LOWER FUEL TANK THROUGH THE INTERCONNECTING HOSE.
14. MANUALLY PUMP THE FUEL PUMP CADDY UNTIL THE LOWER TANK IS DRAINED.  
CAUTION: DRAIN FUEL SUMP FROM BOTTOM PETCOCK.
15. REMOVE HOSE FROM LOWER TANK AND DISCONNECT THE GROUND WIRE.
16. REMOVE REAR CARPET AND LUGGAGE RACK.



17. REMOVE THE INSPECTION COVER NEAREST THE RIGHT SIDE OF THE VEHICLE BY REMOVING ONE (1) SCREW AND CAREFULLY PRYING UP AND SLIDING COVER REARWARD.
18. DISCONNECT TWO (2) ELECTRICAL LEADS FROM THE SUBMERSIBLE PUMP AND TAG FOR RE-INSTALLATION.  
CAUTION: POSITION WIRING HARNESS AWAY FROM SUBMERSIBLE PUMP.
19. REMOVE SIX (6) MOUNTING SCREWS TO REMOVE SUBMERSIBLE PUMP AND GASKET.
20. CAREFULLY GUIDE SUBMERSIBLE PUMP OUT OF THE LOWER TANK.  
CAUTION: DO NOT PULL THE TRANSFER HOSE OUT OF THE UPPER TANK. LIFT THE SUBMERSIBLE PUMP ASSEMBLY UP JUST

ENOUGH TO REMOVE THE TRANSFER HOSE FROM THE ELBOW  
ON THE SUBMERSIBLE PUMP ASSEMBLY.

21. RETRACT SUBMERSIBLE PUMP ELBOW RELEASE TO REMOVE THE TRANSFER  
HOSE FROM THE ELBOW.

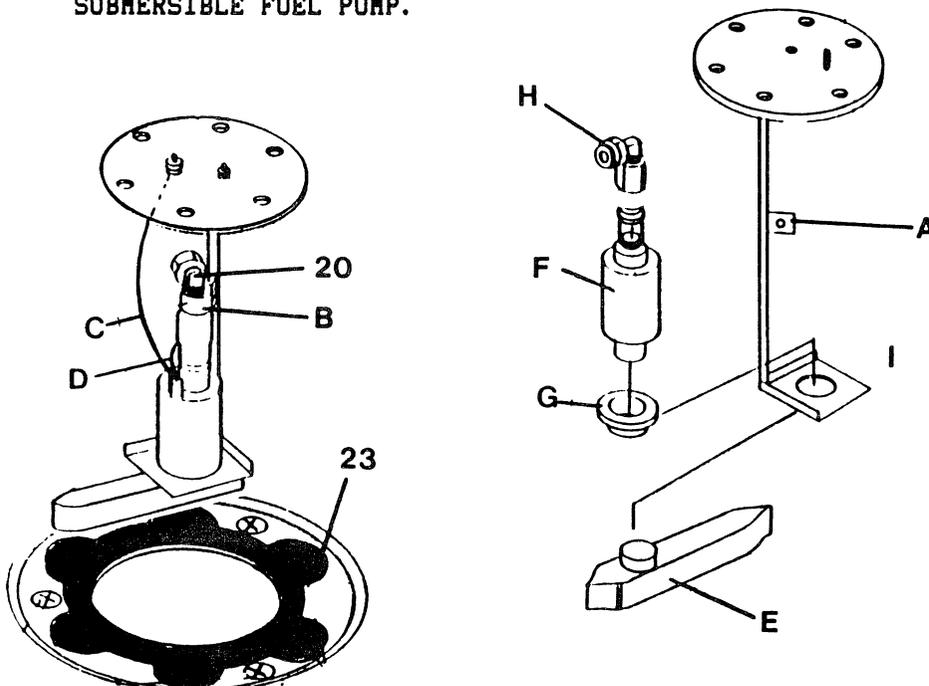
22. PULL TRANSFER HOSE FROM THE ELBOW AND SECURE THE END OF THE  
HOSE TO THE OPENING IN THE LOWER TANK.

NOTE: DO NOT ALLOW THE TRANSFER HOSE TO DROP INTO THE LOWER  
TANK.

23. REMOVE SUBMERSIBLE PUMP ASSEMBLY AND DISCARD GASKET AND  
SEALING WASHERS.

DISASSEMBLY OF SUBMERSIBLE PUMP ASSEMBLY:

- A. DRILL OUT THE RIVET AT THE CLAMP SUPPORTING THE  
FUEL ELBOW.
- B. REMOVE CLAMP.
- C. REMOVE THE 7" FUEL RESISTANT WIRE FROM THE  
SUBMERSIBLE FUEL PUMP.



D. REMOVE THE 3" FUEL RESISTANT WIRE FROM THE  
SUBMERSIBLE FUEL PUMP.

E. REMOVE THE FUEL FILTER.

F. REMOVE THE FUEL PUMP.

G. REMOVE THE RUBBER WASHER AND DISCARD.

H. REMOVE FUEL ELBOW FROM FUEL PUMP CONNECTOR.

NOTE: CONNECTOR AND FUEL PUMP ARE AN ASSEMBLY.

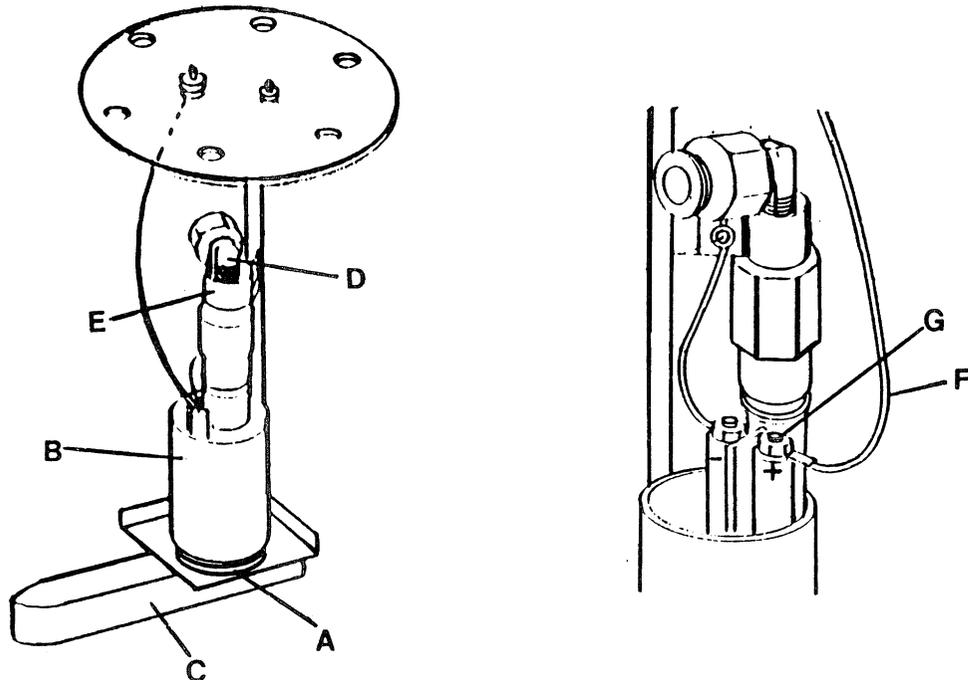
DO NOT ATTEMPT TO SEPARATE.

RE-ASSEMBLY OF THE SUBMERSIBLE PUMP AND BRACKET:

A. INSTALL WASHER TO THE BRACKET BOTTOM PLATE (SMALL COLLAR FACING DOWN).

B. POSITION FUEL PUMP ASSEMBLY DOWN INTO WASHER.

C. PRESS FILTER TO BOTTOM OF THE FUEL PUMP (PRESS FIT) WITH NEW FILTER POINTING TO THE OUTSIDE OF THE TANK AT FINAL ASSEMBLY.



D. CONNECT FUEL ELBOW TO THE TOP OF THE FUEL PUMP ASSEMBLY.

E. PLACE CLAMP TO THE FUEL ELBOW. DO NOT RIVET TO THE FUEL PUMP BRACKET AT THIS TIME.

PUMP WIRING FOR THE POSITIVE (+) TERMINAL (FUEL PUMP)

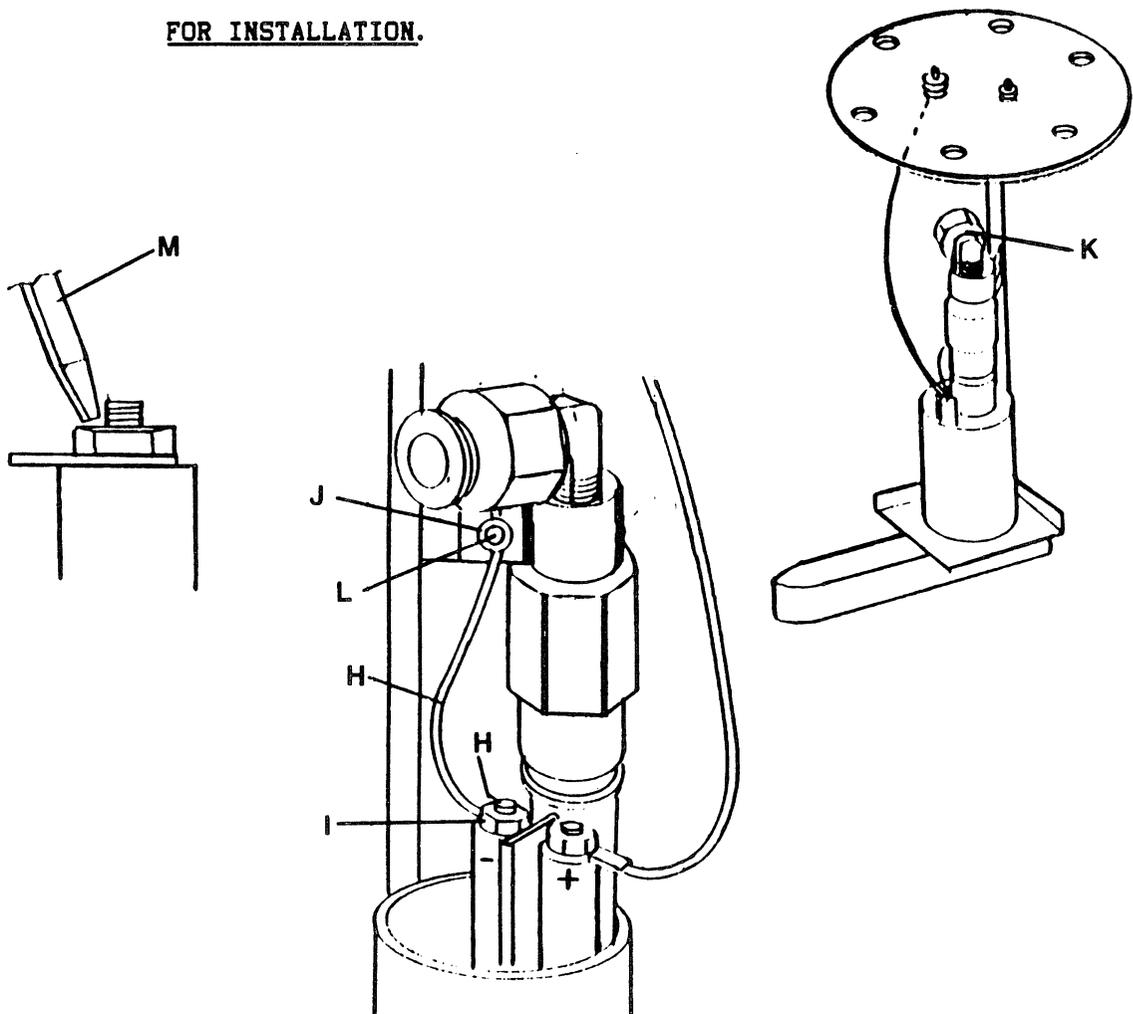
F. CONNECT THE #6 CONNECTOR END OF THE 7' FUEL RESISTANT WIRE TO THE POSITIVE (+) FUEL PUMP TERMINAL.

G. SECURE WITH ONE (1) #6 NUT.

PUMP WIRING FOR NEGATIVE (-) TERMINAL (FUEL PUMP)

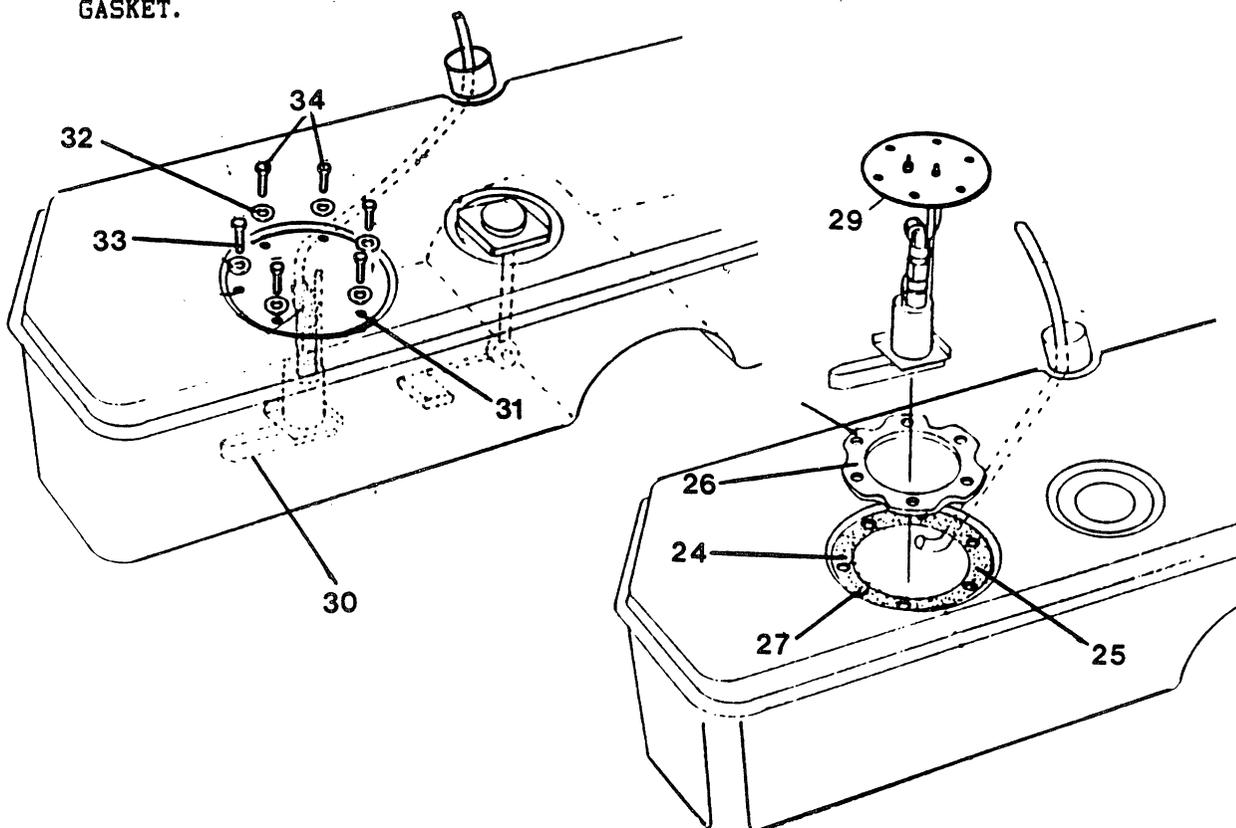
- H. CONNECT THE #6 CONNECTOR END OF THE 3° FUEL RESISTANT WIRE TO THE NEGATIVE (-) FUEL PUMP TERMINAL.
- I. SECURE WITH ONE (1) #6 NUT.
- J. POSITION THE #10 CONNECTOR OF THE FUEL RESISTANT WIRE TO THE FUEL ELBOW CLAMP RIVET.
- K. POSITION ELBOW AND CLAMP AS SHOWN IN ILLUSTRATION.
- L. RIVET THE 3° FUEL RESISTANT WIRE #10 CONNECTOR AND THE FUEL CLAMP TO THE ROD BRACKET.
- M. PEEN THE POSITIVE (+) AND THE NEGATIVE (-) FUEL TERMINALS TO SECURE THE NUTS. (PEEN THE LAST EXPOSED THREAD OF EACH TERMINAL).

NOTE: THE FUEL PUMP AND BRACKET ASSEMBLY IS NOW READY FOR INSTALLATION.



## REFITTING

24. CLEAN THE LOWER TANK FLANGE, NEW GASKET AND SUBMERSIBLE PUMP WITH ISOPROPYL ALCOHOL.
  25. BRUSH A LIGHT COAT OF PERMATEX HY-TACK ON TANK MOUNTING FLANGE AND ALLOW 15 MINUTES DRYING TIME.
  26. ALIGN GASKET TO THE SUBMERSIBLE PUMP FLANGE AND CHECK FOR BOLT HOLE ALIGNMENT.
  27. CHECK TO SEE THAT THERE ARE NO SPOT WELDS UNDER THE GASKET WHEN THE GASKET IS PLACED ON THE FLANGE.
- NOTE: SPOT WELDS MUST NOT BE UNDER GASKET. DO NOT ALLOW ANY PART OF THE WELD TO BE COVERED BY THE GASKET.
28. THE TANK IS ACCEPTABLE IF WELDS DO NOT INTERFERE WITH THE GASKET.



**WARNING: DO NOT USE FUEL TANK IF THE WELDS INTERFERE WITH GASKET MOUNTING SURFACE.**

29. POSITION SUBMERSIBLE PUMP THROUGH LOWER TANK OPENING AND CONNECT TRANSFER HOSE TO ELBOW. PUSH NYLON TUBE FIRMLY INTO ELBOW AND CHECK FOR SECURE FIT BY PULLING.

NOTE: GASKET MUST BE POSITIONED TO THE LOWER TANK FLANGE.

30. POSITION THE SUBMERSIBLE PUMP ASSEMBLY DOWN INTO THE LOWER TANK WITH THE FILTER POINTING TO THE OUTSIDE (AWAY FROM THE FUEL TANK CENTER HUMP).

CAUTION: THE POSITIVE (+) TERMINAL MUST BE AT 12 O'CLOCK (VIEWING THE VEHICLE FROM THE DRIVERS SIDE).

31. ALIGN THE SUBMERSIBLE PUMP BRACKET PLATE AND THE GASKET CAREFULLY WITH THE BOLT HOLES.

32. PLACE ONE (1) NEW SEALING WASHER ON EACH OF THE SIX (6) BOLTS.  
WARNING: USE ONLY HESS & EISENHARDT APPROVED SEALING WASHERS.

33. COAT THE THREADS ONLY OF THE SIX (6) MOUNTING SCREWS OF THE SUBMERSIBLE PUMP WITH A COAT OF PERMATEX #1.

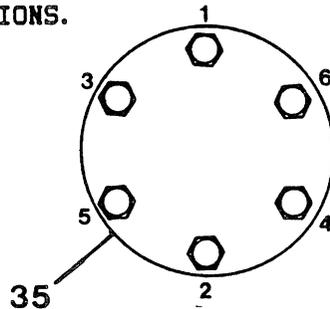
NOTE: DO NOT COAT THE LAST TWO (2) THREADS OR ENDS OF THE MOUNTING SCREWS.

34. INSTALL THE SIX (6) BOLTS BY HAND.

NOTE: PRESSURE SHOULD BE APPLIED TO THE BRACKET ASSEMBLY TO HOLD THE GASKET IN PLACE WHILE INSTALLING BOLTS.

WARNING: THE TORQUE SPECIFICATIONS MUST BE FOLLOWED.

DO NOT VARY FROM THE TORQUE PATTERN OR SPECIFICATIONS.



35. TORQUE THE SIX (6) BOLTS USING THE TORQUE PATTERN AND IN\LBS AS FOLLOWS:

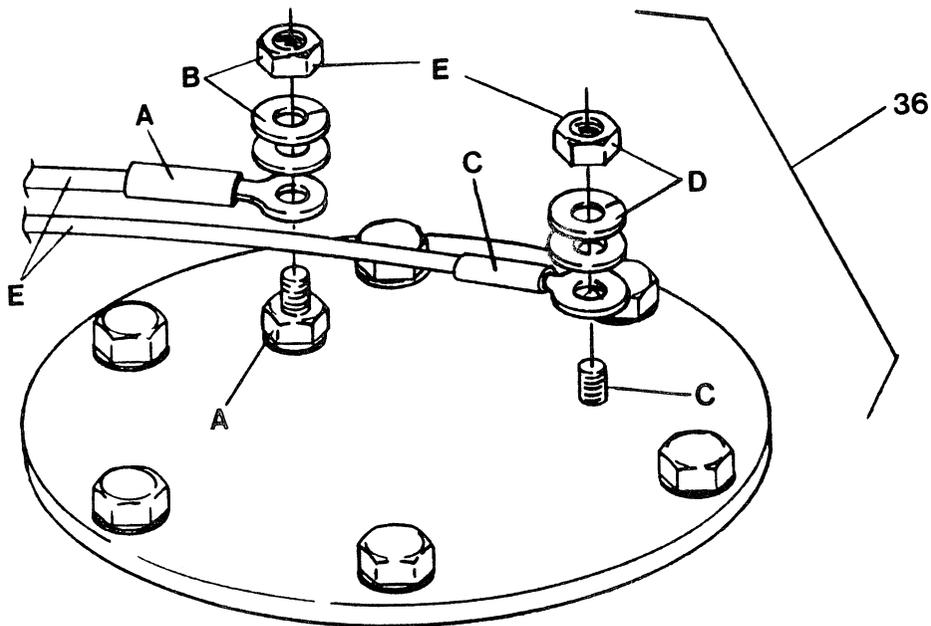
- A. TORQUE ALL BOLTS TO 10 IN\LBS.
- B. TORQUE ALL BOLTS TO 20 IN\LBS.
- C. TORQUE ALL BOLTS TO 25 IN\LBS.

36. LOWER FUEL TANK SUBMERSIBLE PUMP ELECTRICAL CONNECTIONS:

WARNING: RED WIRE POSITIVE (+) TO INSULATED TERMINAL.

BLACK WIRE NEGATIVE (-) TO WELD STUD TERMINAL.

- A. CONNECT RED WIRE TO THE POSITIVE (+) INSULATED TERMINAL.
- B. INSTALL ONE (1) WASHER AND NUT TO THE POSITIVE (+) INSULATED TERMINAL.
- C. CONNECT BLACK WIRE NEGATIVE (-) TO WELD STUD TERMINAL.
- D. INSTALL ONE (1) WASHER AND NUT TO THE NEGATIVE (-) WELD STUD.
- E. TIGHTEN BOTH ELECTRICAL CONNECTIONS UNTIL FULLY SEATED.



WARNING: ROUTE WIRING HARNESS AWAY FROM LOWER TANK COVER AND TRIM PANEL MOUNTING SCREWS.

37. CLEAN THE INSPECTION COVER WITH ISOPROPYL ALCOHOL.
38. APPLY A 1/8" UNBROKEN BEAD OF PERMATEX #1 TO THE INSPECTION COVER.
39. SECURE THE INSPECTION COVER TO THE LARGE LOWER TANK INSPECTION COVER WITH ONE (1) SCREW.
40. INSTALL THE REAR COMPARTMENT CARPET.
41. INSTALL THE LUGGAGE RACK.
42. FOR INSTALLATION OF THE UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.

43. INSTALL THE UPPER FUEL SENDING UNIT TO THE UPPER TANK:

A. REFERENCE 3.7.1 FOR COMPLETE UPPER SENDING UNIT

INSTALLATION, SEE STEP 62, LINES A THROUGH H.

44. INSTALL SPARE WHEEL AND FABRIC TRIM TO THE UPPER TRUNK AREA.

45. CONNECT BATTERY TERMINALS, POSITIVE (+) FIRST AND THEN

THE NEGATIVE (-).

### 3.7.14 FUEL TRANSFER HOSE

#### REMOVE AND REFIT

#### REMOVING

1. LOWER CONVERTIBLE TOP TO THE FULLY LOWERED POSITION.
2. REMOVE THE NEGATIVE (-) CLAMP FIRST AND THEN REMOVE THE POSITIVE (+) CLAMP.

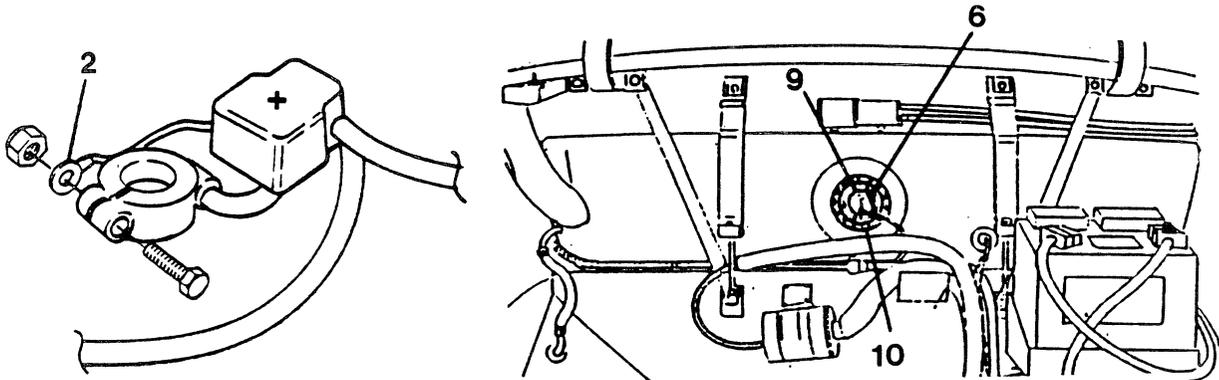
CAUTION: DO NOT DAMAGE THE RING TERMINAL ON THE POSITIVE CLAMP.

3. DEPRESSURIZE THE FUEL SYSTEM BY OPENING THE FILLER CAP.
4. ATTACH GROUND WIRE FROM THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
5. INSERT FUEL CADDY HOSE INTO FILLER CAP OPENING.

6. MANUALLY PUMP FUEL PUMP CADDY UNTIL UPPER FUEL TANK IS DRAINED.

NOTE: UPPER FUEL TANK IS DRAINED WHEN THE SENDING UNIT INDICATOR IS AT 1 O'CLOCK.

7. REMOVE FUEL PUMP CADDY AND DISCONNECT GROUND WIRE.



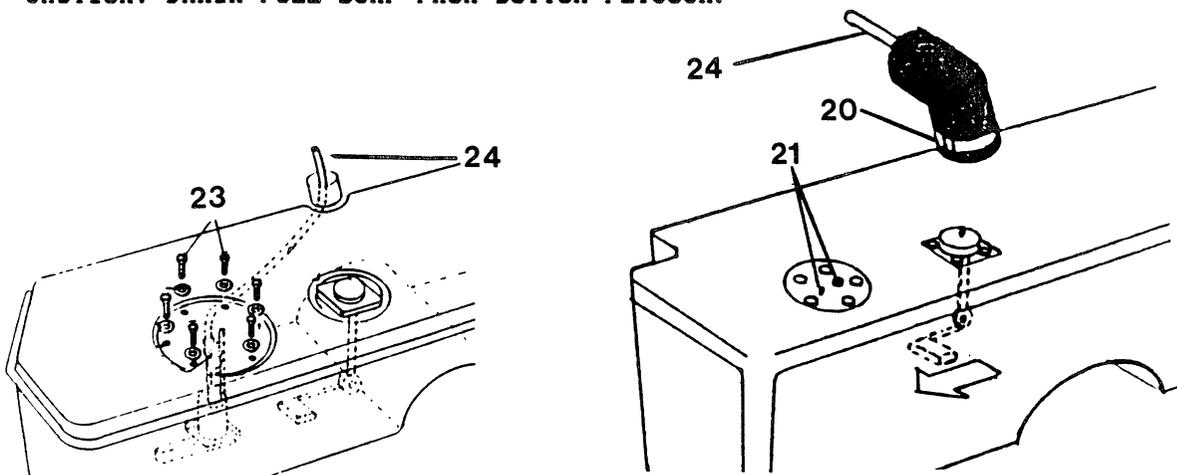
8. REMOVE SPARE WHEEL ASSEMBLY BY REMOVING THE KNOB SECURING WHEEL TO TRUNK. PEEL BACK CENTER FABRIC TRIM TO LOCATE UPPER SENDING UNIT.
9. REMOVE ELECTRICAL LEADS AT SENDING UNIT IN UPPER TANK AND TAG FOR RE-INSTALLATION.
10. REMOVE THE FIVE (5) MOUNTING SCREWS FROM THE SENDING UNIT AND DISCARD GASKET.

**WARNING: PROTECT TRUNK AREA FROM FUEL AND VAPOR LEAKS.**

**DO NOT CONNECT OR DISCONNECT ELECTRICAL LEADS  
WITH THE FUEL SYSTEM OPEN.**

11. FOR REMOVAL OF THE UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
12. INSTALL GROUND WIRE OF THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
13. FEED SIPHON HOSE THROUGH OPENING AT THE UPPER SENDING UNIT AND INTO THE LOWER FUEL TANK THROUGH THE INTERCONNECTING HOSE.
14. MANUALLY PUMP THE FUEL PUMP CADDY UNTIL THE LOWER TANK IS DRAINED.

**CAUTION: DRAIN FUEL SUMP FROM BOTTOM PETCOCK.**

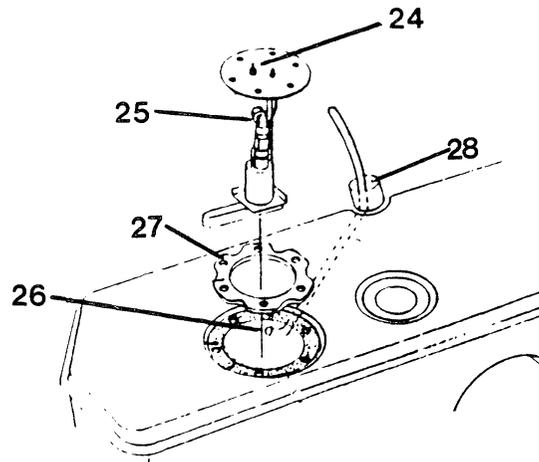


15. REMOVE HOSE FROM LOWER TANK AND DISCONNECT THE GROUND WIRE.
16. REMOVE REAR CARPET AND LUGGAGE RACK.
17. REMOVE TRIM PANEL ASSEMBLY, SEE 3.6.3.
18. REMOVE INTERCONNECTING HOSE COVER BY REMOVING TWO (2) SCREWS.
19. REMOVE LOWER TANK COVER BY REMOVING TWELVE (12) SCREWS AND CAREFULLY PRYING UP COVER.
  - A. REMOVE LOWER TANK INSULATING PAD.
20. DISCONNECT THE LOWER CLAMP OF THE INTERCONNECTING HOSE AND CAREFULLY PULL THE INTERCONNECTING HOSE LOOSE FROM THE LOWER TANK.

**CAUTION: DO NOT KINK TRANSFER HOSE.**
21. DISCONNECT THE TWO (2) ELECTRICAL LEADS FROM THE FUEL PUMP AND TAG FOR RE-INSTALLATION.

22. POSITION WIRING AWAY FROM SUBMERSIBLE PUMP AREA.

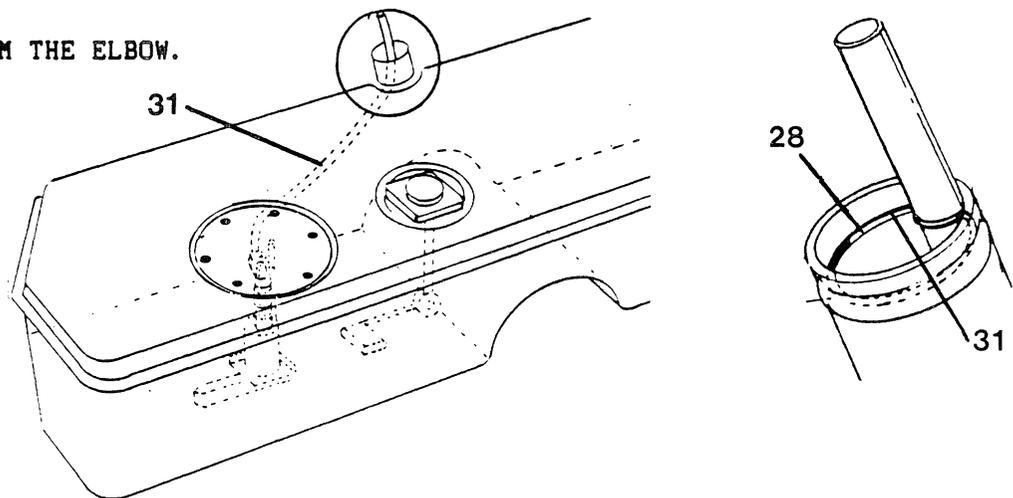
23. REMOVE SIX (6) MOUNTING SCREWS TO REMOVE SUBMERSIBLE PUMP AND GASKET.



24. CAREFULLY GUIDE SUBMERSIBLE PUMP OUT OF THE LOWER TANK.

CAUTION: DO NOT PULL THE TRANSFER HOSE OUT OF THE UPPER TANK. LIFT THE SUBMERSIBLE PUMP ASSEMBLY UP JUST ENOUGH TO REMOVE THE TRANSFER HOSE FROM THE ELBOW ON THE SUBMERSIBLE PUMP ASSEMBLY.

25. RETRACT SUBMERSIBLE PUMP ELBOW RELEASE TO REMOVE THE TRANSFER HOSE FROM THE ELBOW.



26. PULL TRANSFER HOSE FROM THE ELBOW AND SECURE THE END OF THE HOSE TO THE OPENING IN THE LOWER TANK.

NOTE: DO NOT ALLOW THE TRANSFER HOSE TO DROP INTO THE LOWER TANK.

27. REMOVE SUBMERSIBLE PUMP ASSEMBLY AND DISCARD GASKET AND SEALING WASHERS.

28. REMOVE RETAINING CLIP FROM LOWER TANK TRANSFER NECK.

NOTE: DISCARD RETAINING CLIP.

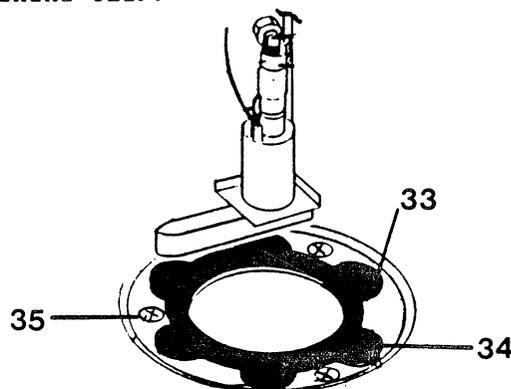
#### REFITTING

29. CONNECT THE OLD TRANSFER HOSE TO THE NEW TRANSFER HOSE WITH TAPE AND PULL THE END OF THE OLD TRANSFER HOSE FROM THE TANK.

NOTE: THIS FEEDS THE NEW TRANSFER HOSE INTO PROPER POSITION.

30. SECURE THE NEW TRANSFER HOSE AT OPENING OF THE SUBMERSIBLE PUMP.

31. SECURE OPPOSITE END OF THE TRANSFER HOSE AT THE LOWER TANK OUTLET USING THE NEW RETAINING CLIP.



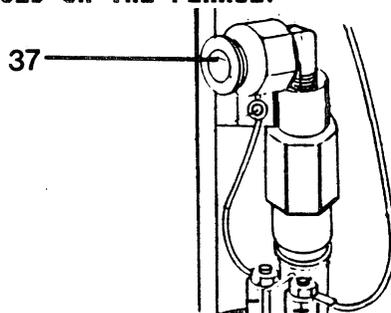
NOTE: CHECK TO SEE THAT THE TRANSFER HOSE IS THREADED THROUGH THE RETAINING CLIP AT THE UPPER TANK OPENING AS ILLUSTRATED.

32. CLEAN THE LOWER TANK FLANGE, NEW GASKET AND SUBMERSIBLE PUMP WITH ISOPROPYL ALCOHOL.

33. BRUSH A LIGHT COAT OF PERMATEX HY-TACK ON TANK MOUNTING FLANGE AND ALLOW 15 MINUTES DRYING TIME.

34. ALIGN GASKET TO THE SUBMERSIBLE PUMP FLANGE AND CHECK FOR BOLT HOLE ALIGNMENT.

35. CHECK TO SEE THAT THERE ARE NO SPOT WELDS UNDER THE GASKET WHEN THE GASKET IS PLACED ON THE FLANGE.



NOTE: SPOT WELDS MUST NOT BE UNDER GASKET. DO NOT ALLOW ANY PART OF THE WELD TO BE COVERED BY THE GASKET.

36. THE TANK IS ACCEPTABLE IF WELDS DO NOT INTERFERE WITH THE GASKET.

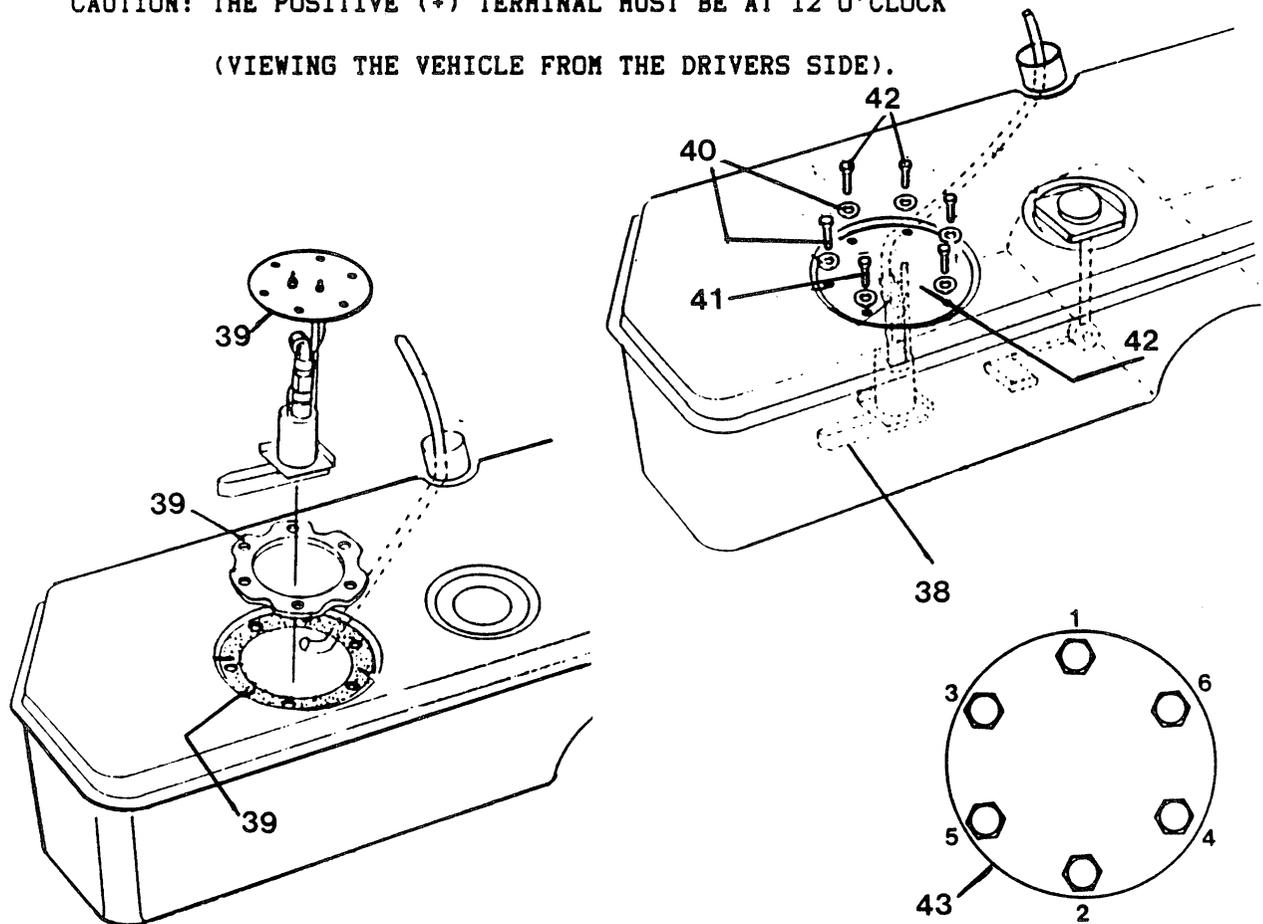
WARNING: DO NOT USE FUEL TANK IF THE WELDS INTERFERE WITH GASKET MOUNTING SURFACE.

37. POSITION SUBMERSIBLE PUMP THRU LOWER TANK OPENING AND CONNECT TRANSFER HOSE TO ELBOW. PUSH NYLON TUBE FIRMLY INTO ELBOW AND CHECK FOR SECURE FIT BY PULLING.

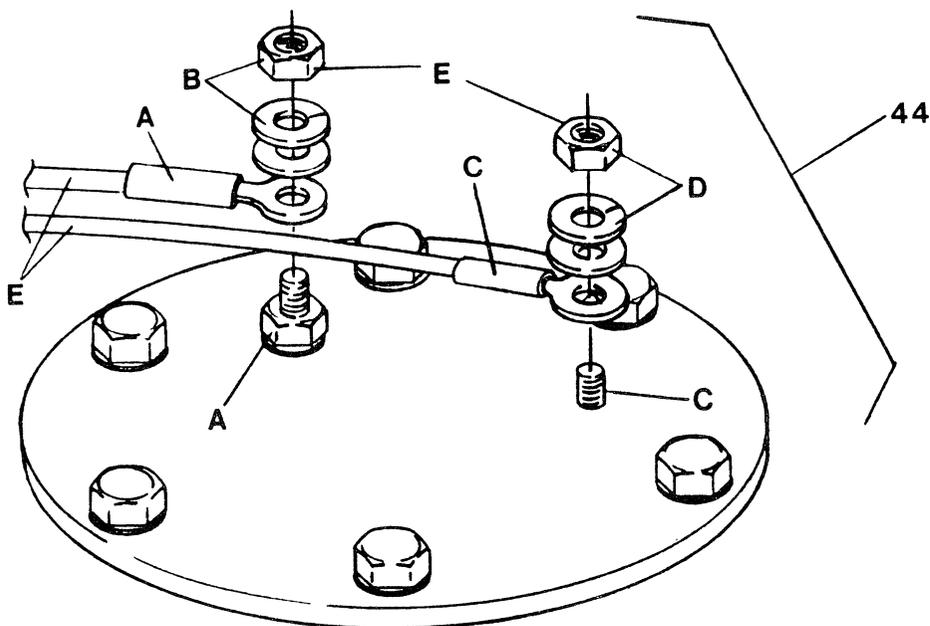
NOTE: GASKET MUST BE POSITIONED TO THE LOWER TANK FLANGE.

38. POSITION THE SUBMERSIBLE PUMP ASSEMBLY DOWN INTO THE LOWER TANK WITH THE FILTER POINTING TO THE OUTSIDE (AWAY FROM THE FUEL TANK CENTER HUMP).

CAUTION: THE POSITIVE (+) TERMINAL MUST BE AT 12 O'CLOCK (VIEWING THE VEHICLE FROM THE DRIVERS SIDE).



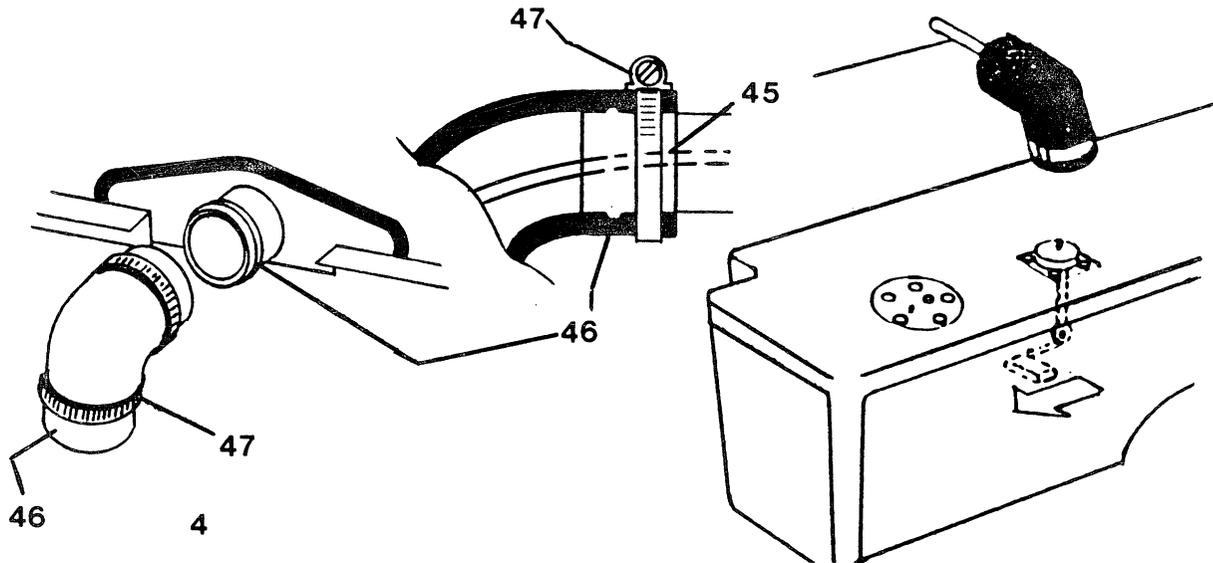
39. ALIGN THE SUBMERSIBLE PUMP BRACKET PLATE AND THE GASKET CAREFULLY WITH THE BOLT HOLES.
40. PLACE ONE (1) NEW SEALING WASHER ON EACH OF THE SIX (6) BOLTS.  
WARNING: USE ONLY HESS & EISENHARDT APPROVED SEALING WASHERS.
41. COAT THE THREADS ONLY OF THE SIX (6) MOUNTING BOLTS.  
OF THE SUBMERSIBLE PUMP WITH A COAT OF PERMATEX #1.  
NOTE: DO NOT COAT THE LAST TWO (2) THREADS OR ENDS OF THE MOUNTING BOLTS.
42. INSTALL THE SIX (6) BOLTS BY HAND.



NOTE: PRESSURE SHOULD BE APPLIED TO THE BRACKET ASSEMBLY TO HOLD THE GASKET IN PLACE WHILE INSTALLING BOLTS.  
WARNING: THE TORQUE SPECIFICATIONS MUST BE FOLLOWED.  
DO NOT VARY FROM THE TORQUE PATTERN OR SPECIFICATIONS.

43. TORQUE THE SIX (6) BOLTS USING THE TORQUE PATTERN AND IN\LBS AS FOLLOWS:
  - A. TORQUE ALL BOLTS TO 10 IN\LBS.
  - B. TORQUE ALL BOLTS TO 20 IN\LBS.
  - C. TORQUE ALL BOLTS TO 25 IN\LBS.

44. LOWER FUEL TANK SUBMERSIBLE PUMP ELECTRICAL CONNECTIONS:



**WARNING: RED WIRE POSITIVE (+) TO INSULATED TERMINAL.**

**BLACK WIRE NEGATIVE (-) TO WELD STUD TERMINAL.**

- A. CONNECT RED WIRE TO THE POSITIVE (+) INSULATED TERMINAL.
- B. INSTALL ONE (1) WASHER AND NUT TO THE POSITIVE (+) INSULATED TERMINAL.
- C. CONNECT BLACK WIRE NEGATIVE (-) TO WELD STUD TERMINAL.
- D. INSTALL ONE (1) WASHER AND NUT TO THE NEGATIVE (-) WELD STUD.
- E. TIGHTEN BOTH ELECTRICAL CONNECTIONS UNTIL FULLY SEATED.

**WARNING: ROUTE WIRING HARNESS AWAY FROM LOWER**

**TANK COVER AND TRIM PANEL MOUNTING SCREWS.**

45. ROUTE TRANSFER HOSE FROM LOWER FUEL TANK THROUGH INTERCONNECTING HOSE AND INTO UPPER FUEL TANK.
46. POSITION INTERCONNECTING HOSE TO LOWER TANK OUTLET AND PAST OUTLET BARB, AND SECURE WITH CLAMP.

**CAUTION: CHECK TO INSURE THAT INTERCONNECTING HOSE IS PROPERLY SECURED AND NOT KINKED.**

47. TORQUE BOTH THE UPPER AND LOWER CLAMPS TO 30 IN/LBS.

48. FOR INSTALLATION OF UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
49. INSTALL UPPER SENDING UNIT TO UPPER FUEL TANK:
  - A. REFERENCE 3.7.1 FOR COMPLETE UPPER SENDING UNIT  
INSTALLATION STEP 62, A THROUGH H.
50. PRESSURE TEST THE FUEL SYSTEM, SEE 3.7.3.
51. INSTALL LOWER TANK PADDING.
52. CLEAN LOWER TANK COVER WITH ISOPROPYL ALCOHOL.
53. APPLY AN UNBROKEN 1/4" BEAD OF PERMATEX #1 TO LOWER TANK  
SEALING AREA.
54. INSTALL LOWER TANK COVER WITH TWELVE (12) SCREWS.
55. APPLY AN UNBROKEN 3/8" BEAD OF PERMATEX #1 TO THE  
INTERCONNECTING HOSE COVER.
56. INSTALL HOSE COVER WITH TWO (2) SCREWS.
57. INSTALL TRIM PANEL, SEE 3.6.3.
58. INSTALL REAR COMPARTMENT CARPET.
59. INSTALL LUGGAGE RACK.
60. INSTALL SPARE WHEEL AND FABRIC TRIM TO TRUNK AREA.
61. CONNECT BATTERY TERMINALS, POSITIVE (+) FIRST AND THEN  
THE NEGATIVE (-).

### 3.7.15 SUBMERSIBLE PUMP GASKET

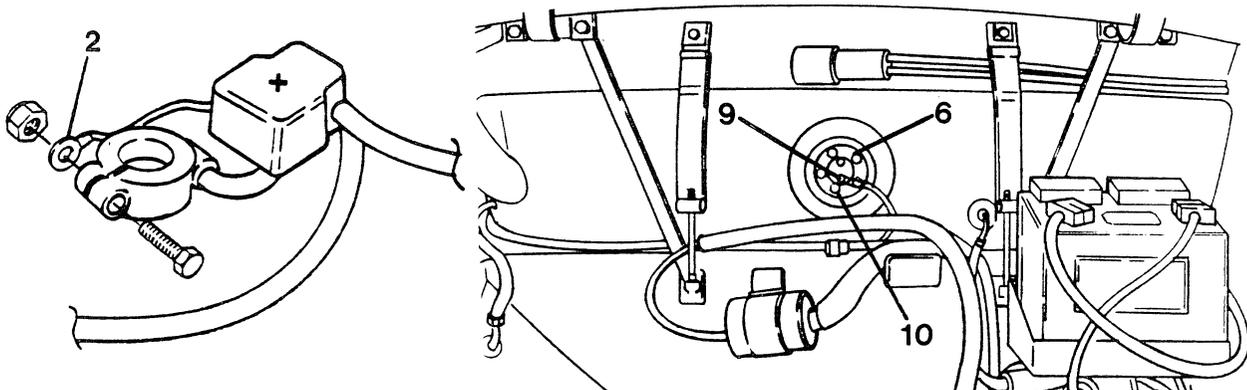
#### REMOVE AND REFIT

#### REMOVING

1. LOWER CONVERTIBLE TOP TO THE FULLY LOWERED POSITION.
2. REMOVE THE NEGATIVE (-) CLAMP FIRST AND THEN REMOVE THE POSITIVE (+) CLAMP.

CAUTION: DO NOT DAMAGE THE RING TERMINAL ON THE POSITIVE CLAMP.

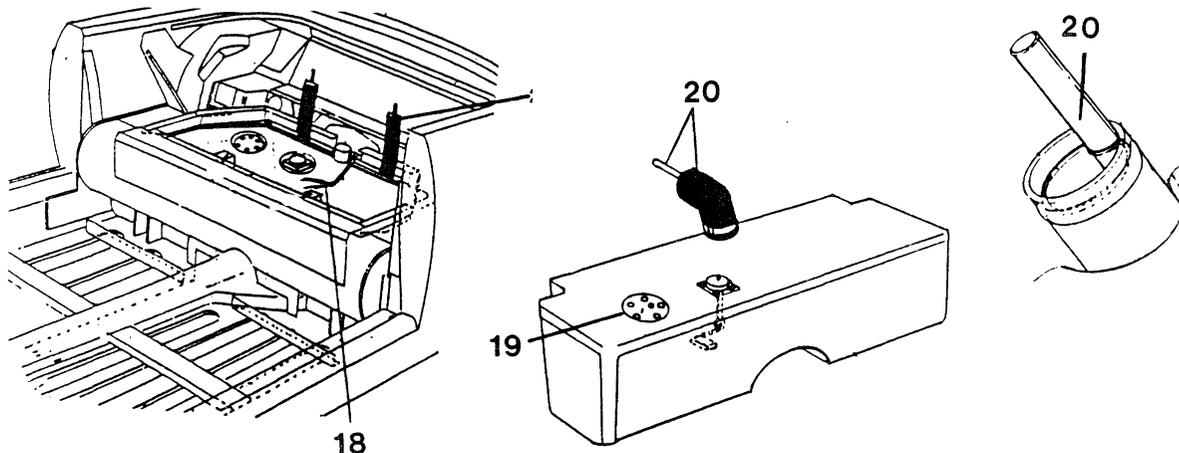
3. DEPRESSURIZE THE FUEL SYSTEM BY OPENING THE FILLER CAP.
4. ATTACH GROUND WIRE FROM THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
5. INSERT FUEL CADDY HOSE INTO FILLER CAP OPENING.
6. MANUALLY PUMP FUEL PUMP CADDY UNTIL UPPER FUEL TANK IS DRAINED.  
NOTE: UPPER FUEL TANK IS DRAINED WHEN THE SENDING UNIT INDICATOR IS AT 1 O'CLOCK.
7. REMOVE FUEL PUMP CADDY AND DISCONNECT GROUND WIRE.
8. REMOVE SPARE WHEEL ASSEMBLY BY REMOVING THE KNOB SECURING WHEEL TO TRUNK. PEEL BACK CENTER FABRIC TRIM TO LOCATE UPPER SENDING UNIT.
9. REMOVE ELECTRICAL LEADS AT SENDING UNIT IN UPPER TANK AND TAG FOR RE-INSTALLATION.
10. REMOVE THE FIVE (5) MOUNTING SCREWS FROM THE SENDING UNIT AND DISCARD GASKET.



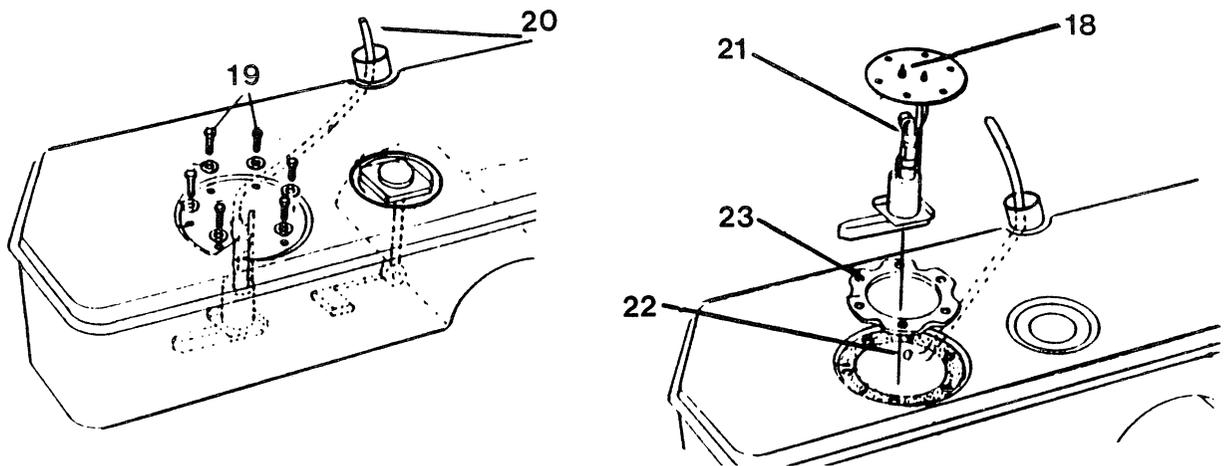
WARNING: PROTECT TRUNK AREA FROM FUEL AND VAPOR LEAKS.

DO NOT CONNECT OR DISCONNECT ELECTRICAL LEADS  
WITH THE FUEL SYSTEM OPEN.

11. FOR REMOVAL OF THE UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
12. INSTALL GROUND WIRE OF THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
13. FEED SIPHON HOSE THROUGH OPENING AT THE UPPER SENDING UNIT AND INTO THE LOWER FUEL TANK THROUGH THE INTERCONNECTING HOSE.
14. MANUALLY PUMP THE FUEL PUMP CADDY UNTIL THE LOWER TANK IS DRAINED.  
CAUTION: DRAIN FUEL SUMP FROM BOTTOM PETCOCK.
15. REMOVE HOSE FROM LOWER TANK AND DISCONNECT THE GROUND WIRE.
16. REMOVE REAR CARPET AND LUGGAGE RACK.
17. REMOVE THE INSPECTION COVER NEAREST THE RIGHT SIDE OF THE VEHICLE BY REMOVING ONE (1) SCREW AND CAREFULLY PRYING UP AND SLIDING COVER REARWARD.



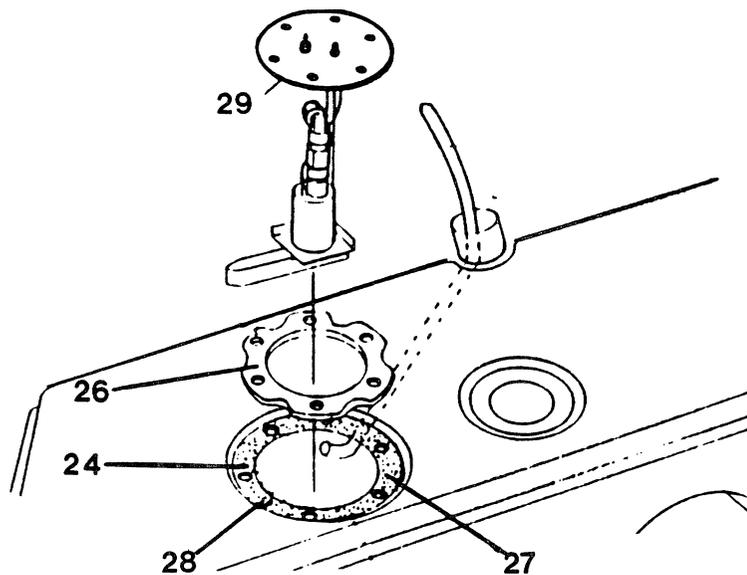
18. DISCONNECT TWO (2) ELECTRICAL LEADS FROM THE SUBMERSIBLE PUMP AND TAG FOR RE-INSTALLATION.  
CAUTION: POSITION WIRING HARNESS AWAY FROM SUBMERSIBLE PUMP.
19. REMOVE SIX (6) MOUNTING SCREWS TO REMOVE SUBMERSIBLE PUMP AND GASKET.
20. CAREFULLY GUIDE SUBMERSIBLE PUMP OUT OF THE LOWER TANK.



**CAUTION: DO NOT PULL THE TRANSFER HOSE OUT OF THE UPPER TANK. LIFT THE SUBMERSIBLE PUMP ASSEMBLY UP JUST ENOUGH TO REMOVE THE TRANSFER HOSE FROM THE ELBOW ON THE SUBMERSIBLE PUMP ASSEMBLY.**

21. RETRACT SUBMERSIBLE PUMP ELBOW RELEASE TO REMOVE THE TRANSFER HOSE FROM THE ELBOW.
22. PULL TRANSFER HOSE FROM THE ELBOW AND SECURE THE END OF THE HOSE TO THE OPENING IN THE LOWER TANK.

**NOTE: DO NOT ALLOW THE TRANSFER HOSE TO DROP INTO THE LOWER TANK.**



23. REMOVE SUBMERSIBLE PUMP ASSEMBLY AND DISCARD GASKET AND SEALING WASHERS.

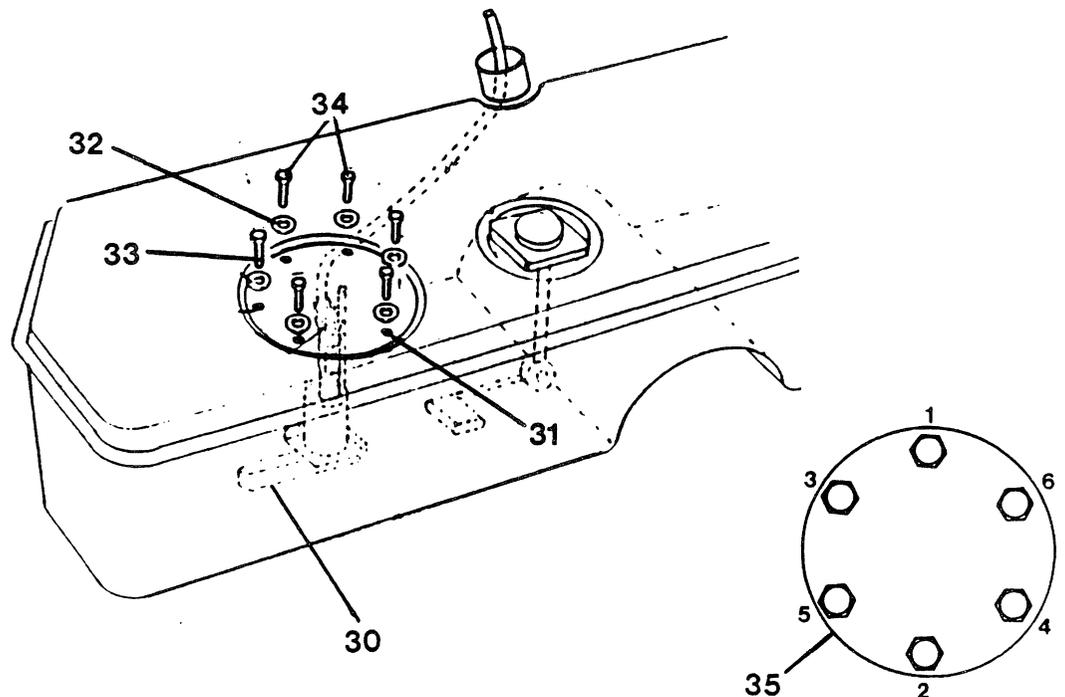
REFITTING

24. CLEAN THE LOWER TANK FLANGE, NEW GASKET AND SUBMERSIBLE PUMP WITH ISOPROPYL ALCOHOL.
25. BRUSH A LIGHT COAT OF PERMATEX HY-TACK ON TANK MOUNTING FLANGE AND ALLOW 15 MINUTES DRYING TIME.
26. ALIGN GASKET TO THE SUBMERSIBLE PUMP FLANGE AND CHECK FOR BOLT HOLE ALIGNMENT.
27. CHECK TO SEE THAT THERE ARE NO SPOT WELDS UNDER THE GASKET WHEN THE GASKET IS PLACED ON THE FLANGE.

NOTE: SPOT WELDS MUST NOT BE UNDER GASKET. DO NOT ALLOW ANY PART OF THE WELD TO BE COVERED BY THE GASKET.

28. THE TANK IS ACCEPTABLE IF WELDS DO NOT INTERFERE WITH THE GASKET.

WARNING: DO NOT USE FUEL TANK IF THE WELDS INTERFERE WITH GASKET MOUNTING SURFACE.



29. POSITION SUBMERSIBLE PUMP THRU LOWER TANK OPENING AND CONNECT TRANSFER HOSE TO ELBOW. PUSH NYLON TUBE FIRMLY INTO ELBOW AND CHECK FOR SECURE FIT BY PULLING.

NOTE: GASKET MUST BE POSITIONED TO THE LOWER TANK FLANGE.

30. POSITION THE SUBMERSIBLE PUMP ASSEMBLY DOWN INTO THE LOWER TANK WITH THE FILTER POINTING TO THE OUTSIDE (AWAY FROM THE FUEL TANK CENTER HUMP).

CAUTION: THE POSITIVE (+) TERMINAL MUST TO THE RIGHT SIDE OF THE VEHICLE.

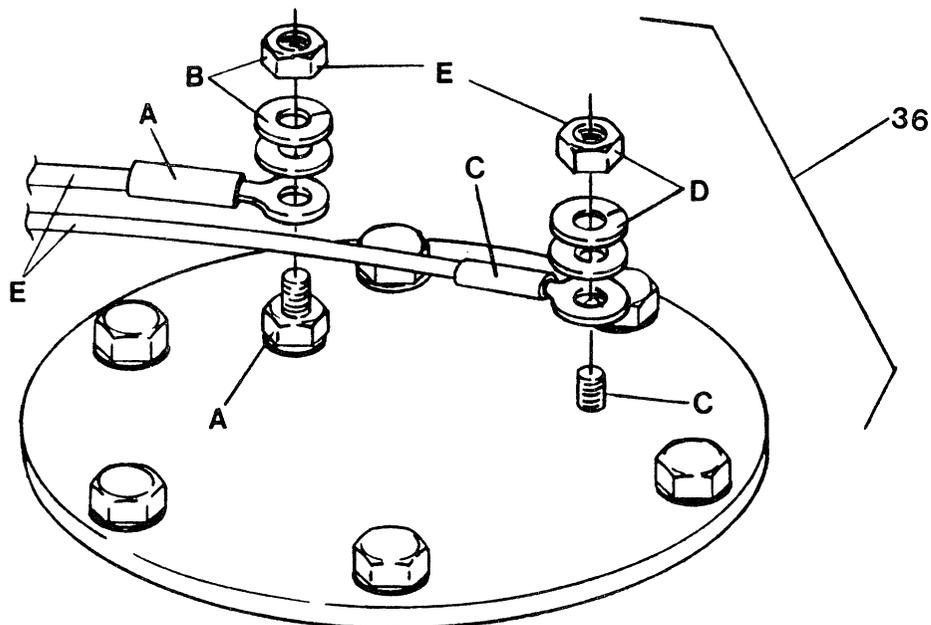
31. ALIGN THE SUBMERSIBLE PUMP BRACKET PLATE AND THE GASKET CAREFULLY WITH THE BOLT HOLES.

32. PLACE ONE (1) NEW SEALING WASHER ON EACH OF THE SIX (6) BOLTS. WARNING: USE ONLY HESS & EISENHARDT APPROVED SEALING WASHERS.

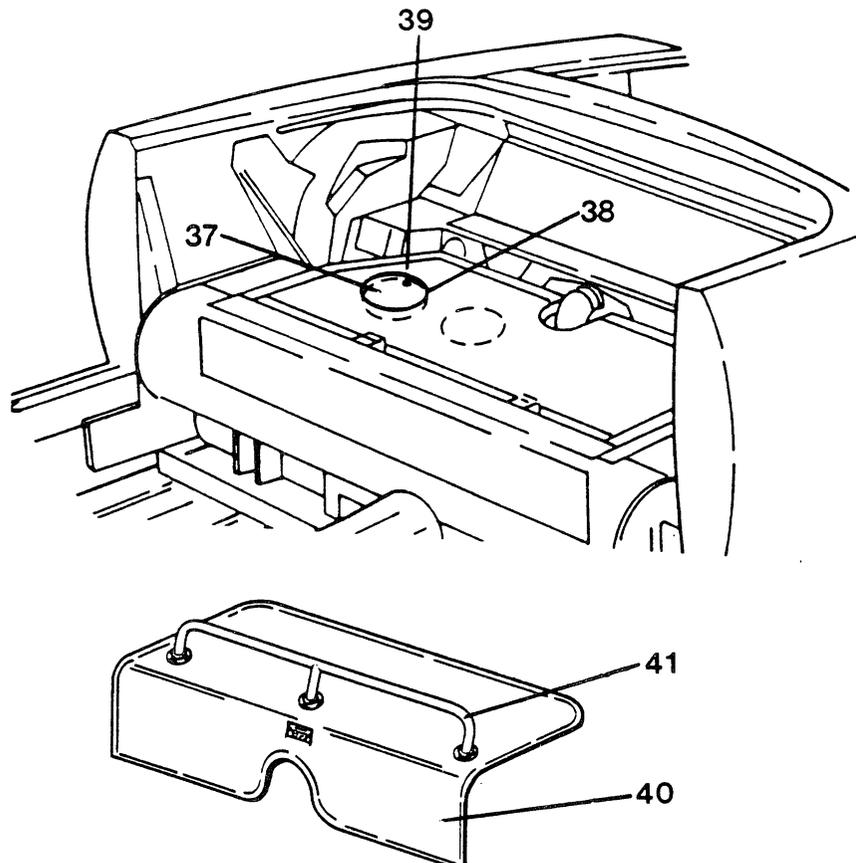
33. COAT THE THREADS ONLY OF THE SIX (6) MOUNTING SCREWS OF THE SUBMERSIBLE PUMP WITH A COAT OF PERMATEX #1.

NOTE: DO NOT COAT THE LAST TWO (2) THREADS OR ENDS OF THE MOUNTING SCREWS.

34. INSTALL THE SIX (6) BOLTS BY HAND.



NOTE: PRESSURE SHOULD BE APPLIED TO THE BRACKET ASSEMBLY  
TO HOLD THE GASKET IN PLACE WHILE INSTALLING BOLTS.



WARNING: THE TORQUE SPECIFICATIONS MUST BE FOLLOWED.  
DO NOT VARY FROM THE TORQUE PATTERN OR  
SPECIFICATIONS.

35. TORQUE THE SIX (6) BOLTS USING THE TORQUE PATTERN AND IN\LBS  
AS FOLLOWS:

- A. TORQUE ALL BOLTS TO 10 IN\LBS.
- B. TORQUE ALL BOLTS TO 20 IN\LBS.
- C. TORQUE ALL BOLTS TO 25 IN\LBS.

36. LOWER FUEL TANK SUBMERSIBLE PUMP ELECTRICAL CONNECTIONS:

WARNING: RED WIRE POSITIVE (+) TO INSULATED TERMINAL.

BLACK WIRE NEGATIVE (-) TO WELD STUD TERMINAL.

- A. CONNECT RED WIRE TO THE POSITIVE (+) INSULATED TERMMINAL.
- B. INSTALL ONE (1) WASHER AND NUT TO THE POSITIVE (+)  
INSULATED TERMINAL.

C. CONNECT BLACK WIRE NEGATIVE (-) TO WELD STUD TERMINAL.

D. INSTALL ONE (1) WASHER AND NUT TO THE NEGATIVE (-)  
WELD STUD.

E. TIGHTEN BOTH ELECTRICAL CONNECTIONS UNTIL FULLY SEATED.

WARNING: ROUTE WIRING HARNESS AWAY FROM LOWER  
TANK COVER AND TRIM PANEL MOUNTING SCREWS.

37. CLEAN THE INSPECTION COVER WITH ISOPROPYL ALCOHOL.

38. APPLY A 1/8" UNBROKEN BEAD OF PERMATEX #1 TO THE INSPECTION COVER.

39. SECURE THE INSPECTION COVER TO THE LARGE LOWER TANK INSPECTION  
COVER WITH ONE (1) SCREW.

40. INSTALL THE REAR COMPARTMENT CARPET.

41. INSTALL THE LUGGAGE RACK.

42. FOR INSTALLATION OF THE UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.

43. INSTALL THE UPPER FUEL SENDING UNIT TO THE UPPER TANK:

A. REFERENCE 3.7.1 FOR COMPLETE UPPER SENDING UNIT  
INSTALLATION, SEE STEP 62, LINES A THROUGH H.

44. INSTALL SPARE WHEEL AND FABRIC TRIM TO THE UPPER TRUNK AREA.

45. CONNECT BATTERY TERMINALS, POSITIVE (+) FIRST AND THEN  
THE NEGATIVE (-).

### 3.7.16 HOSE INTERCONNECTING (UPPER TO LOWER FUEL TANK)

#### REMOVE AND REFIT

#### REMOVING

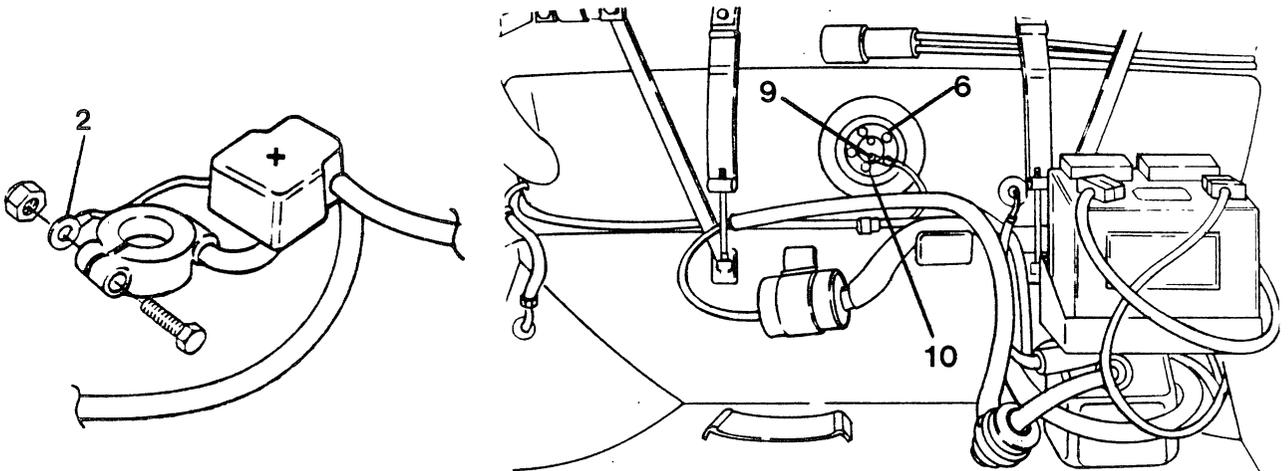
1. LOWER CONVERTIBLE TOP TO THE FULLY LOWERED POSITION.
2. REMOVE THE NEGATIVE (-) CLAMP FIRST AND THEN REMOVE THE POSITIVE (+) CLAMP.

CAUTION: DO NOT DAMAGE THE RING TERMINAL ON THE POSITIVE CLAMP.

3. DEPRESSURIZE THE FUEL SYSTEM BY OPENING THE FILLER CAP.
4. ATTACH GROUND WIRE FROM THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
5. INSERT FUEL CADDY HOSE INTO FILLER CAP OPENING.
6. MANUALLY PUMP FUEL PUMP CADDY UNTIL UPPER FUEL TANK IS DRAINED.

NOTE: UPPER FUEL TANK IS DRAINED WHEN THE SENDING UNIT INDICATOR IS AT 1 O'CLOCK.

7. REMOVE FUEL PUMP CADDY AND DISCONNECT GROUND WIRE.



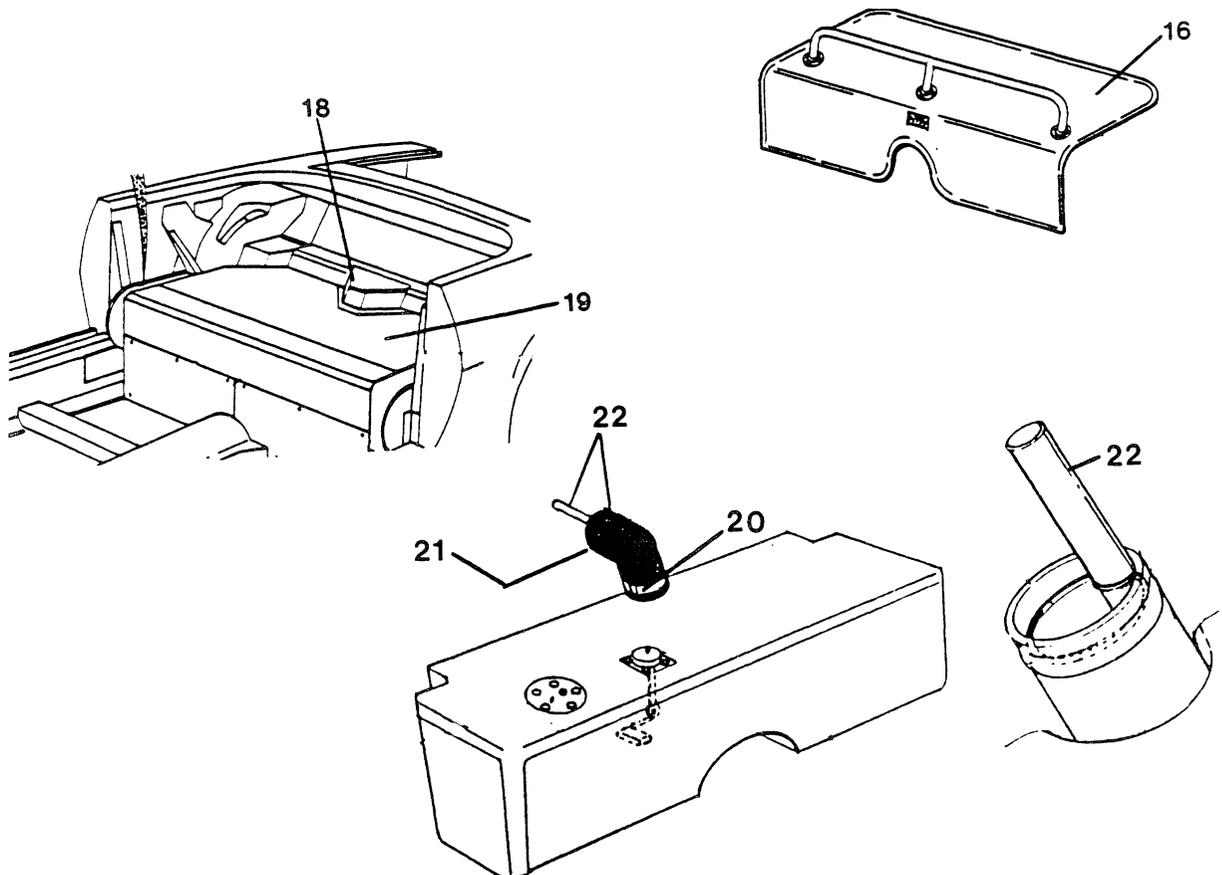
8. REMOVE SPARE WHEEL ASSEMBLY BY REMOVING THE KNOB SECURING WHEEL TO TRUNK. PEEL BACK CENTER FABRIC TRIM TO LOCATE UPPER SENDING UNIT.
9. REMOVE ELECTRICAL LEADS AT SENDING UNIT IN UPPER TANK AND TAG FOR RE-INSTALLATION.

10. REMOVE THE FIVE (5) MOUNTING SCREWS FROM THE SENDING UNIT AND DISCARD GASKET.

WARNING: PROTECT TRUNK AREA FROM FUEL AND VAPOR LEAKS.

DO NOT CONNECT OR DISCONNECT ELECTRICAL LEADS WITH THE FUEL SYSTEM OPEN.

11. FOR REMOVAL OF THE UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
12. INSTALL GROUND WIRE OF THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
13. FEED SIPHON HOSE THROUGH OPENING AT THE UPPER SENDING UNIT



AND INTO THE LOWER FUEL TANK THROUGH THE INTERCONNECTING HOSE.

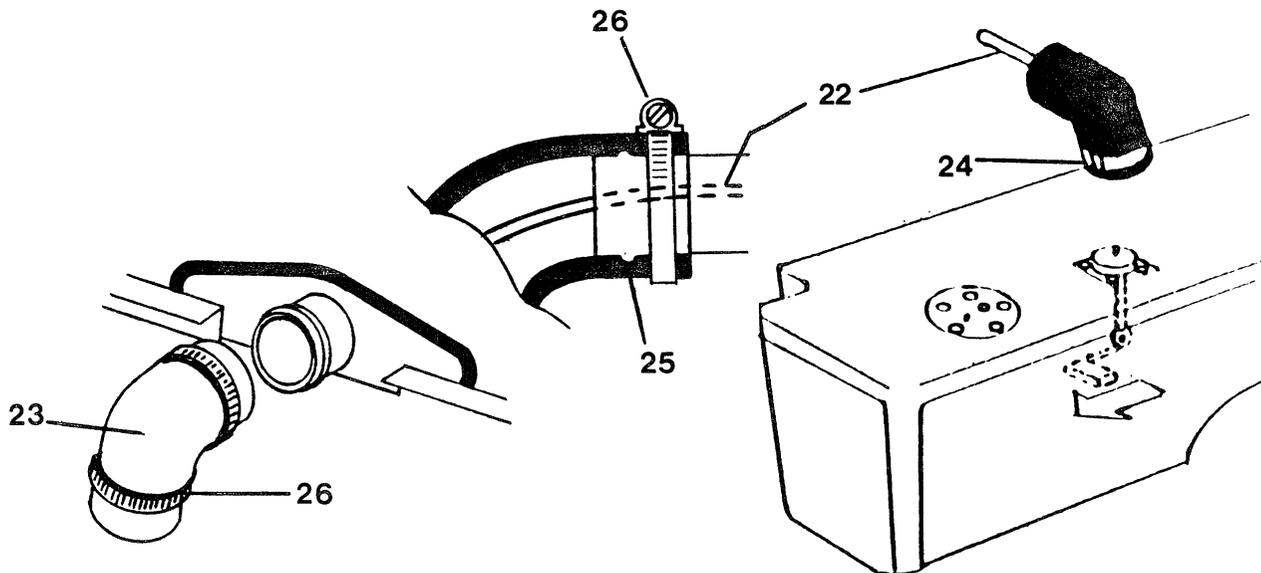
14. MANUALLY PUMP THE FUEL PUMP CADDY UNTIL THE LOWER TANK IS DRAINED.
- CAUTION: DRAIN FUEL SUMP FROM BOTTOM PETCOCK.
15. REMOVE HOSE FROM LOWER TANK AND DISCONNECT THE GROUND WIRE.
16. REMOVE REAR CARPET AND LUGGAGE RACK.
17. REMOVE TRIM PANEL ASSEMBLY, SEE 3.6.3.
18. REMOVE INTERCONNECTING HOSE COVER BY REMOVING TWO (2) SCREWS.

19. REMOVE LOWER TANK COVER BY REMOVING TWELVE (12) SCREWS  
AND CAREFULLY PRYING UP COVER.

20. DISCONNECT THE LOWER CLAMP OF THE INTERCONNECTING HOSE  
AND CAREFULLY PULL THE INTERCONNECTING HOSE LOOSE  
FROM THE LOWER TANK.

CAUTION: DO NOT KINK TRANSFER HOSE.

21. DISCONNECT THE UPPER CLAMP OF THE INTERCONNECTING HOSE AND



CAREFULLY PULL INTERCONNECTING HOSE LOOSE FROM UPPER TANK.

DISCARD THE INTERCONNECTING HOSE.

22. DO NOT LET THE TRANSFER HOSE DROP FROM THE RETAINING CLIP  
INTO THE LOWER TANK.

#### REFITTING

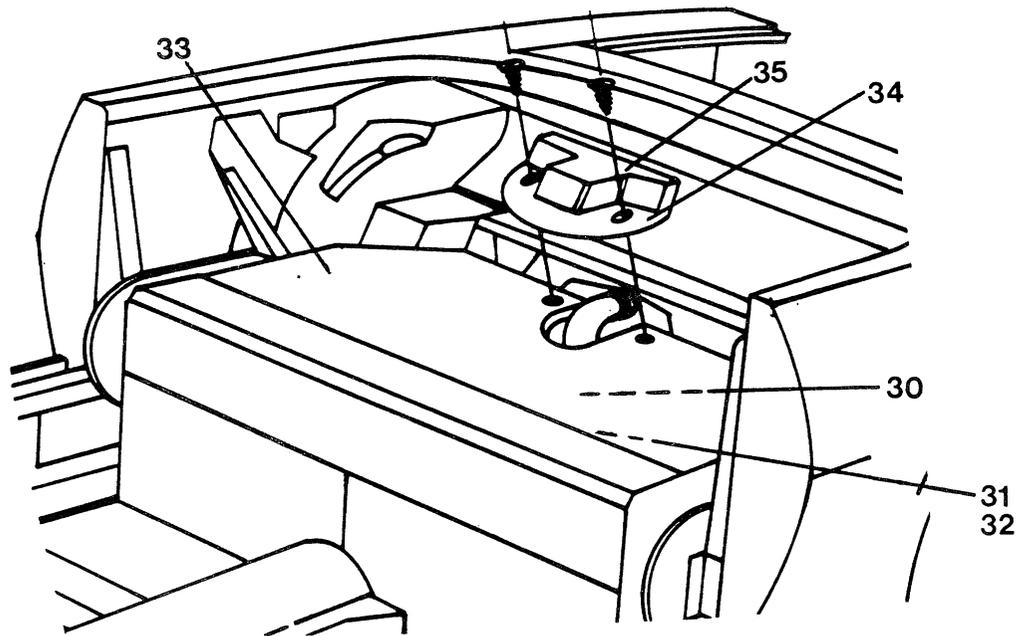
NOTE: CHECK TO SEE THAT THE TRANSFER HOSE IS THREADED  
THROUGH THE RETAINING CLIP AT THE UPPER TANK  
OPENING.

23. ROUTE TRANSFER HOSE FROM LOWER FUEL TANK RETAINING CLIP  
THROUGH THE NEW INTERCONNECTING HOSE AND INTO UPPER FUEL TANK.

CAUTION: LONG END OF THE INTERCONNECTING HOSE MUST BE ATTACHED

TO THE UPPER FUEL TANK OUTLET AND THE SHORT END MUST  
BE CONNECTED TO THE LOWER FUEL TANK OUTLET.

24. POSITION INTERCONNECTING HOSE TO LOWER TANK OUTLET AND PAST  
OUTLET BARB AND SECURE WITH CLAMP.
25. POSITION INTERCONNECTING HOSE TO UPPER TANK OUTLET AND PAST  
OUTLET BARB, AND SECURE WITH CLAMP.



CAUTION: CHECK TO INSURE THAT INTERCONNECTING HOSE IS PROPERLY  
SECURED AND NOT KINKED.

26. TORQUE BOTH THE UPPER AND LOWER CLAMPS TO 30 IN/LBS.
27. FOR INSTALLATION OF UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
28. INSTALL UPPER SENDING UNIT TO UPPER FUEL TANK:
  - A. REFERENCE 3.7.1 FOR COMPLETE UPPER SENDING UNIT  
INSTALLATION STEP 62, A THROUGH H.
29. PRESSURE TEST THE FUEL SYSTEM, SEE 3.7.3.
30. INSURE LOWER TANK PADDING IS IN POSITION.
31. CLEAN LOWER TANK COVER WITH ISOPROPYL ALCOHOL.
32. APPLY AN UNBROKEN 1/4" BEAD OF PERMATEX #1 TO LOWER TANK  
SEALING AREA.

33. INSTALL LOWER TANK COVER WITH TWELVE (12) SCREWS.
34. APPLY AN UNBROKEN 3/8" BEAD OF PERMATEX #1 TO THE INTERCONNECTING HOSE COVER.
35. INSTALL HOSE COVER WITH TWO (2) SCREWS.
36. INSTALL TRIM PANEL, SEE 3.6.3.
37. INSTALL REAR COMPARTMENT CARPET.
38. INSTALL LUGGAGE RACK.
39. INSTALL SPARE WHEEL AND FABRIC TRIM TO TRUNK AREA.
40. CONNECT BATTERY TERMINALS, POSITIVE (+) FIRST AND THEN THE NEGATIVE (-).

### 3.7.17 VAPOR SEPARATOR

#### REMOVE AND REFIT REMOVING

1. RAISE CONVERTIBLE TOP TO THE FULL UP POSITION.
2. OPEN FILLER CAP TO DEPRESSURIZE FUEL SYSTEM.
3. REMOVE SPARE WHEEL.
4. REMOVE FABRIC TRIM AT UPPER FUEL TANK AREA TO EXPOSE VAPOR SEPARATOR.
5. CAREFULLY DRILL OUT THE TWO (2) RIVETS FROM THE VAPOR SEPARATOR MOUNTING TABS.

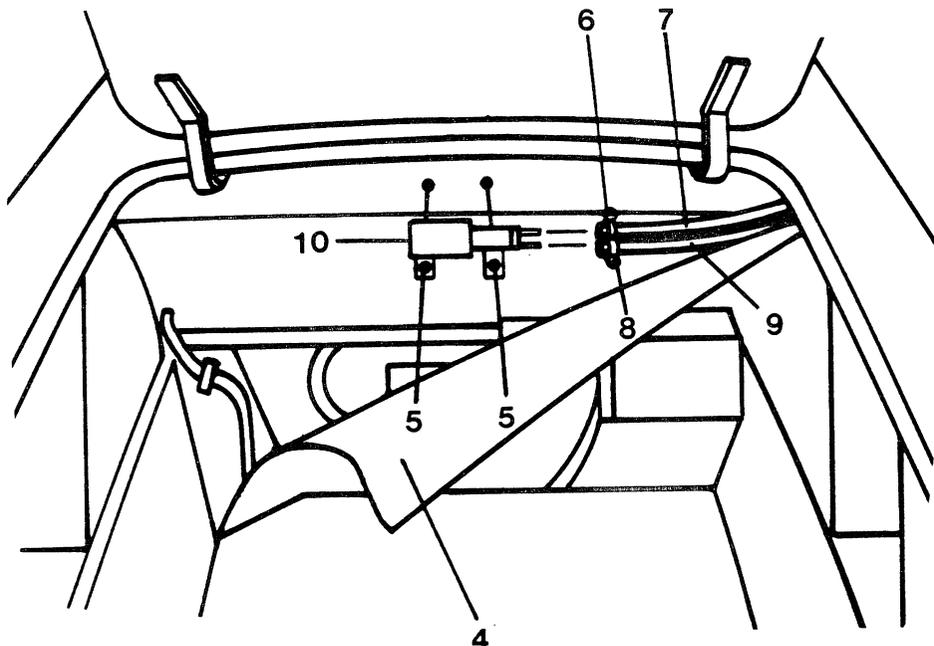
WARNING: A. DO NOT DRILL PAST THE RIVET HEAD WHEN DRILLING OUT THE RIVET.

B. A DRILL STOP MUST BE USED WHEN DRILLING OUT THE RIVET.

6. REMOVE UPPER CLAMP AT THE VAPOR SEPARATOR.
7. REMOVE HOSE FROM END OF VAPOR SEPARATOR.

NOTE: UPPER HOSE CONNECTS THE VAPOR SEPARATOR TO THE ROLL-OVER VALVE.

8. REMOVE LOWER CLAMP AT THE VAPOR SEPARATOR.



9. REMOVE HOSE FROM END OF VAPOR SEPARATOR.

NOTE: LOWER HOSE CONNECTS THE VAPOR SEPARATOR TO THE FUEL TANK.

10. REMOVE VAPOR SEPARATOR.

#### REFITTING

11. RIVET VAPOR SEPARATOR IN POSITION WITH TWO (2) RIVETS.

12. CONNECT UPPER HOSE FROM ROLL-OVER VALVE TO THE UPPER HOSE CONNECTION ON THE VAPOR SEPARATOR.

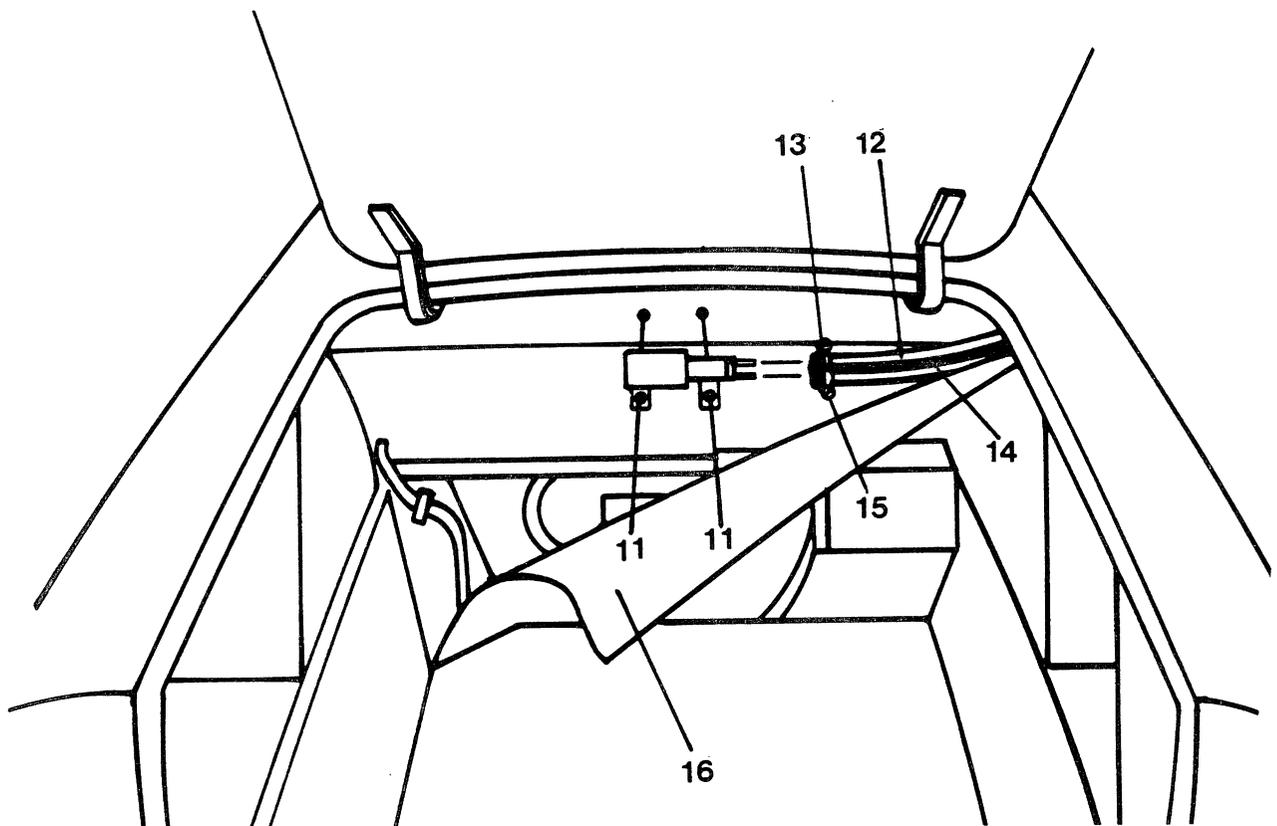
13. SECURE WITH CLAMP.

14. CONNECT LOWER HOSE FROM THE FUEL TANK TO THE LOWER HOSE CONNECTION ON THE VAPOR SEPARATOR.

15. SECURE WITH CLAMP.

16. REPLACE FABRIC TRIM TO THE UPPER FUEL TANK AREA.

17. INSTALL SPARE WHEEL.



### 3.7.18 VAPOR SEPARATOR HOSE (UPPER AND LOWER)

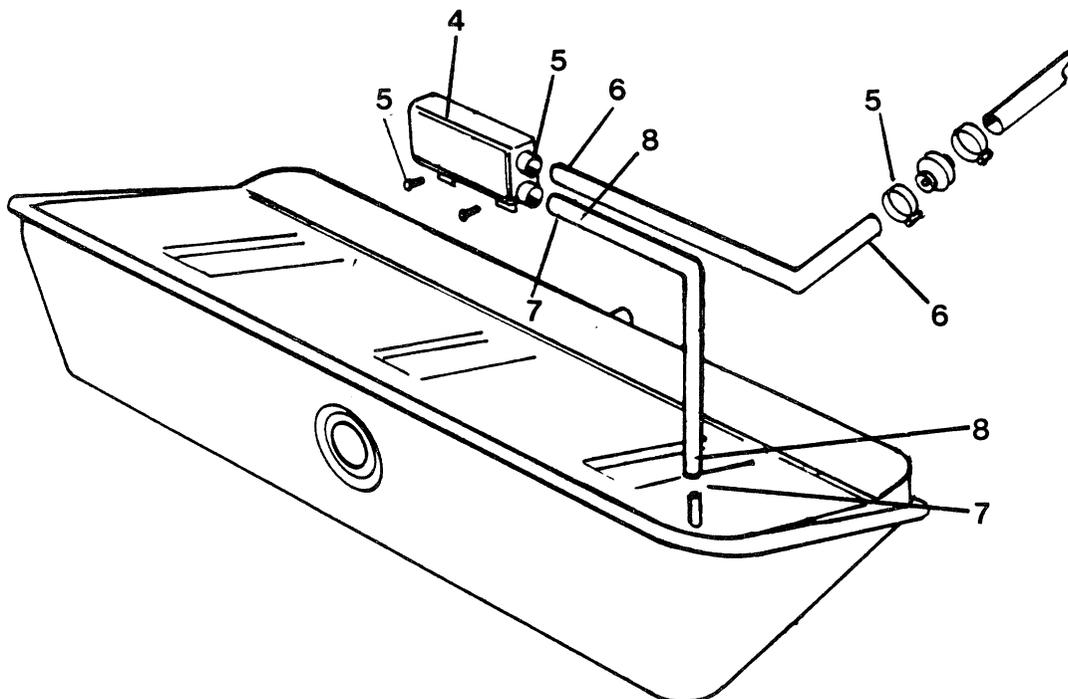
#### REMOVE AND REFIT

#### REMOVING

1. RAISE CONVERTIBLE TOP TO THE FULL UP POSITION.
2. OPEN FILLER CAP TO DEPRESSURIZE FUEL SYSTEM.
3. REMOVE SPARE WHEEL.
4. REMOVE FABRIC TRIM AT UPPER FUEL TANK AREA TO EXPOSE VAPOR SEPARATOR.
5. REMOVE UPPER CLAMP AT THE VAPOR SEPARATOR AND CLAMP AT ROLL-OVER VALVE.

NOTE: IT MAY BE NECESSARY TO REMOVE VAPOR SEPARATOR TO REMOVE CLAMPS.

6. REMOVE HOSE FROM END OF VAPOR SEPARATOR AND END OF ROLL-OVER VALVE.
7. REMOVE LOWER CLAMP AT THE VAPOR SEPARATOR AND CLAMP AT THE FUEL TANK VENT.
8. REMOVE HOSE FROM THE END OF THE VAPOR SEPARATOR AND THE FUEL TANK VENT.

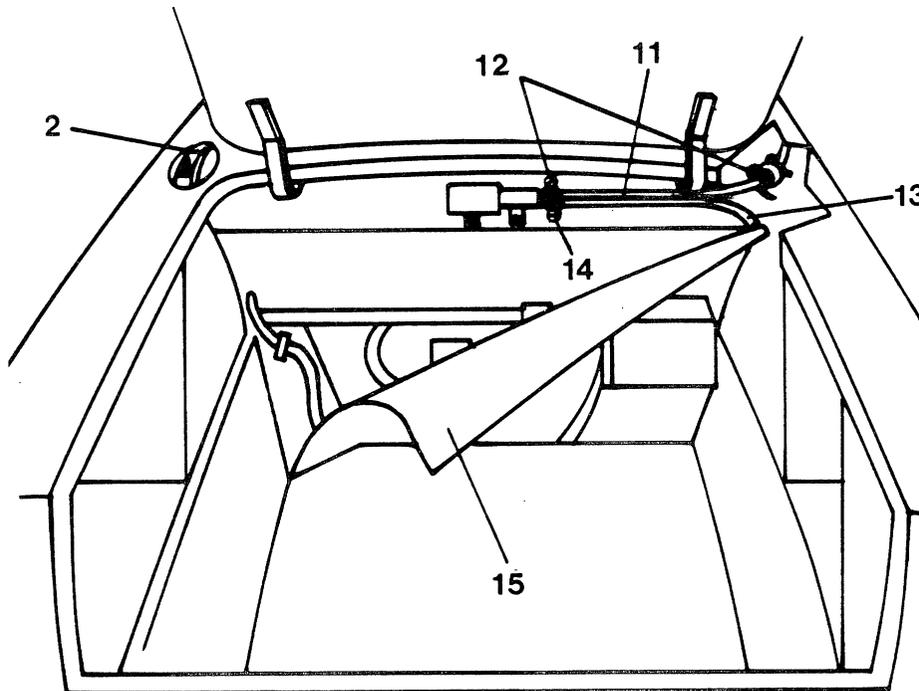


NOTE: UPPER HOSE CONNECTS THE VAPOR SEPARATOR TO THE  
ROLL-OVER VALVE.

NOTE: LOWER HOSE CONNECTS THE VAPOR SEPARATOR TO THE  
FUEL TANK VENT.

#### REFITTING

11. CONNECT UPPER HOSE FROM ROLL-OVER VALVE TO THE UPPER HOSE CONNECTION ON THE VAPOR SEPARATOR.
12. SECURE BOTH ENDS WITH CLAMPS AND TIGHTEN UNTIL FULLY SEATED.
13. CONNECT LOWER HOSE FROM THE FUEL TANK TO THE LOWER HOSE CONNECTION ON THE VAPOR SEPARATOR.
14. SECURE BOTH ENDS WITH CLAMPS AND TIGHTEN UNTIL FULLY SEATED.
15. REPLACE FABRIC TRIM TO THE UPPER FUEL TANK AREA.
16. INSTALL SPARE WHEEL.

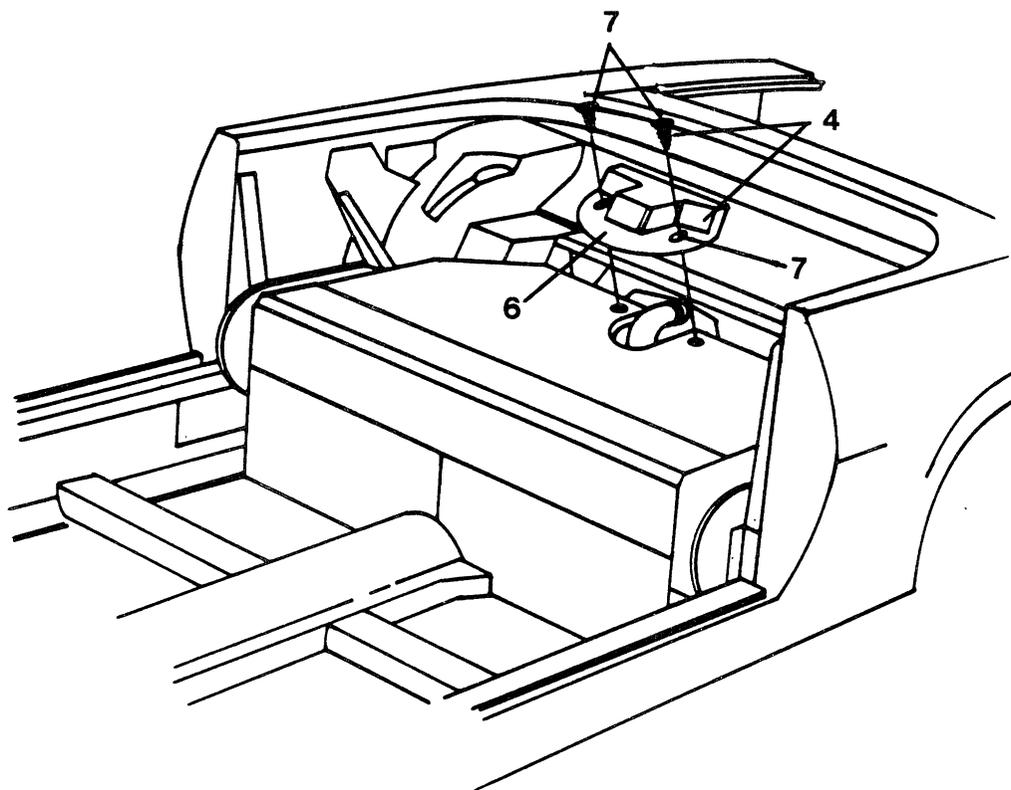


### 3.7.19 COVER (FUEL TANK INTERCONNECTING HOSE)

#### REMOVE AND REFIT

##### REMOVING

1. LOWER CONVERTIBLE TOP TO THE FULLY LOWERED POSITION.
2. REMOVE THE REAR COMPARTMENT CARPET AND LUGGAGE RACK.
3. REMOVE TRIM PANEL ASSEMBLY, SEE 3.6.3.
4. REMOVE INTERCONNECTING HOSE COVER BY REMOVING TWO (2) SCREWS.



##### REFITTING

5. CLEAN THE INTERCONNECTING HOSE COVER WITH ISOPROPYL ALCOHOL.
6. APPLY A 3/8" UNBROKEN BEAD OF PERMATEX #1 TO THE INTERCONNECTING HOSE COVER.
7. INSTALL HOSE COVER WITH TWO (2) SCREWS.
8. INSTALL TRIM PANEL, SEE 3.6.3.
9. INSTALL THE REAR COMPARTMENT CARPET.
10. INSTALL THE LUGGAGE RACK.

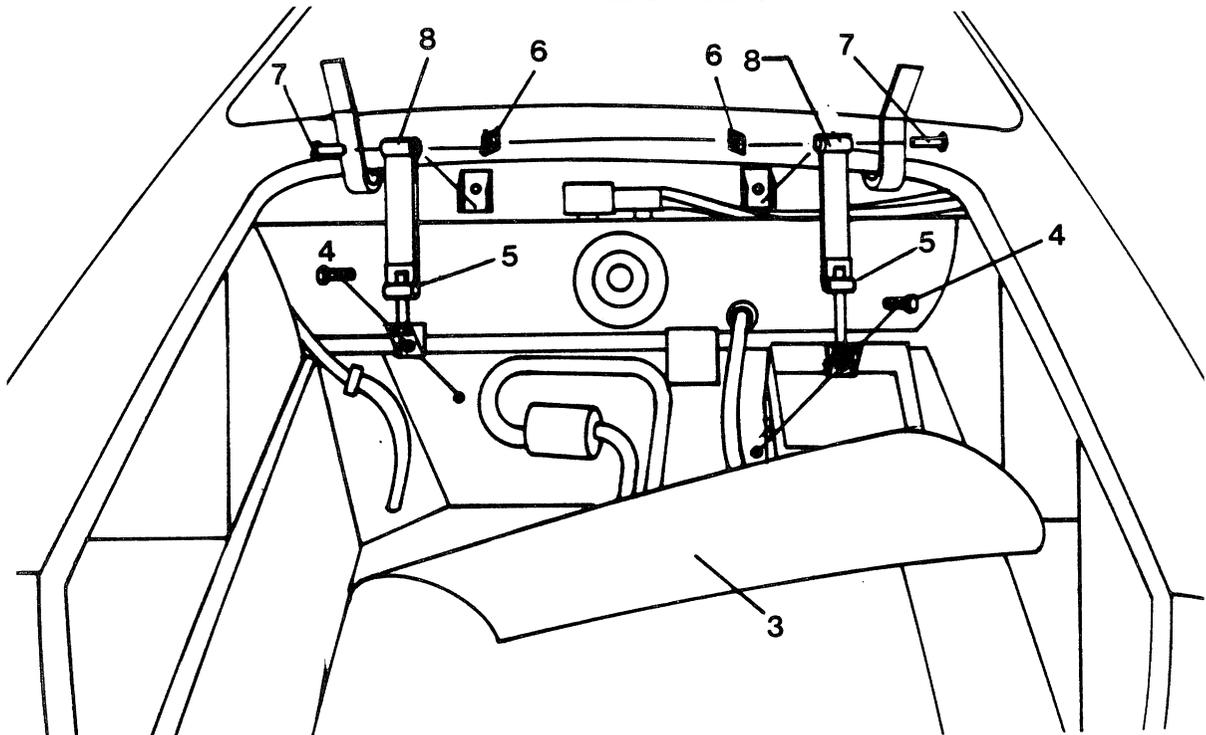
### 3.7.20 UPPER FUEL TANK STRAPS

#### REMOVE AND REFIT

#### REMOVING

NOTE: THE TWO (2) STRAPS PER EACH TANK INCLUDES ONE (1) STANDARD LENGTH LEFT HAND STRAP AND ONE (1) MODIFIED (SHORTENED) RIGHT HAND STRAP.

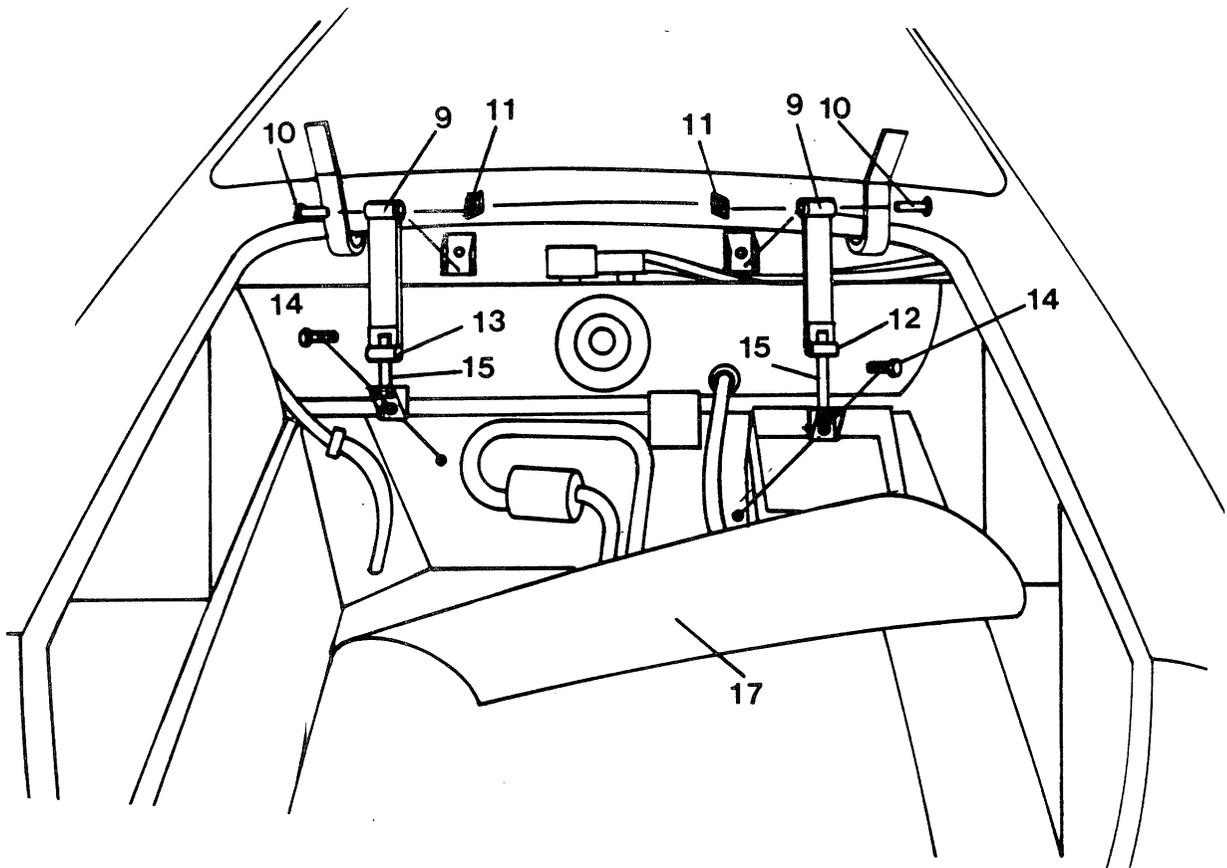
1. REMOVE THE SPARE WHEEL.
2. REMOVE BATTERY BY REMOVING THE NEGATIVE (-) CLAMP FIRST AND THEN REMOVING THE POSITIVE (+) CLAMP.  
CAUTION: DO NOT DAMAGE THE RING TERMINAL ON THE POSITIVE CLAMP.
3. REMOVE FABRIC TRIM AT UPPER FUEL TANK AREA.
4. REMOVE BOLT FROM BOTTOM OF STRAP.
5. SLIDE THREADED CYLINDER FROM BOTTOM OF STRAP.
6. REMOVE TOP RETAINING CLIP FROM UPPER PIVOT PIN.
7. SLIDE UPPER PIVOT PIN FROM TOP BRACKET.
8. REMOVE UPPER FUEL TANK RETAINING STRAP.



## REFITTING

NOTE: BEFORE INSTALLING UPPER FUEL TANK STRAPS, INSURE THAT PROTECTIVE WELT IS AT BOTH POSITIONS WHERE THE TANK STRAPS CONTACT THE UPPER FUEL TANK.

9. POSITION UPPER TANK STRAP TO UPPER BRACKET.
10. INSERT UPPER RETAINING PIVOT THROUGH BRACKET AND STRAP.
11. SECURE RETAINING PIN WITH RETAINING CLIP.
12. PLACE FUEL STRAP INTO POSITION AT BOTTOM AREA OF TANK.
13. INSERT THREADED CYLINDER INTO THE BOTTOM OF STRAP.
14. INSTALL BOLT THROUGH LOWER TANK SUPPORT BRACKET.
15. TIGHTEN BOLT UNTIL THE TANK IS SECURED INTO POSITION.
16. INSTALL BATTERY BY CONNECTING THE POSITIVE (+) FIRST AND THE THE NEGATIVE (-).
17. INSTALL FABRIC TRIM TO UPPER TANK.
18. INSTALL SPARE WHEEL.



### 3.7.21 FUEL TANK STRAPS (LOWER)

REMOVE AND REFIT

REMOVE

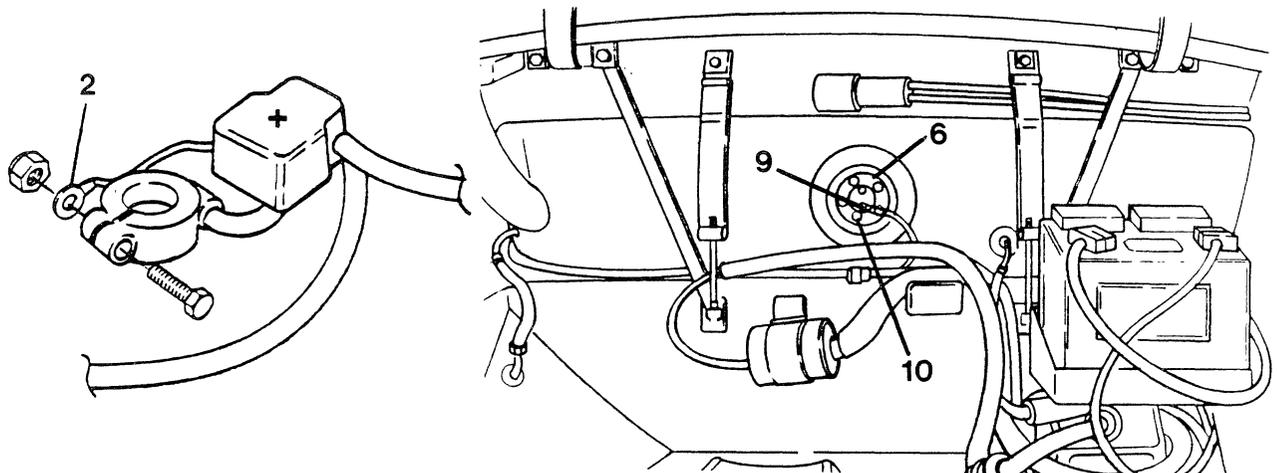
1. LOWER CONVERTIBLE TOP TO FULLY LOWERED POSITION.
2. REMOVE THE NEGATIVE (-) CLAMP FIRST AND THEN REMOVE THE POSITIVE (+) CLAMP.

CAUTION: DO NOT DAMAGE THE RING TERMINAL ON THE POSITIVE CLAMP.

3. DEPRESSURIZE FUEL SYSTEM BY OPENING FUEL FILLER CAP.
4. ATTACH GROUND WIRE FROM THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
5. INSERT FUEL CADDY HOSE INTO FILLER CAP OPENING.
6. MANUALLY PUMP FUEL CADDY UNTIL UPPER FUEL TANK IS DRAINED.

NOTE: UPPER FUEL TANK IS DRAINED WHEN THE SENDING UNIT INDICATOR IS AT 1 O'CLOCK.

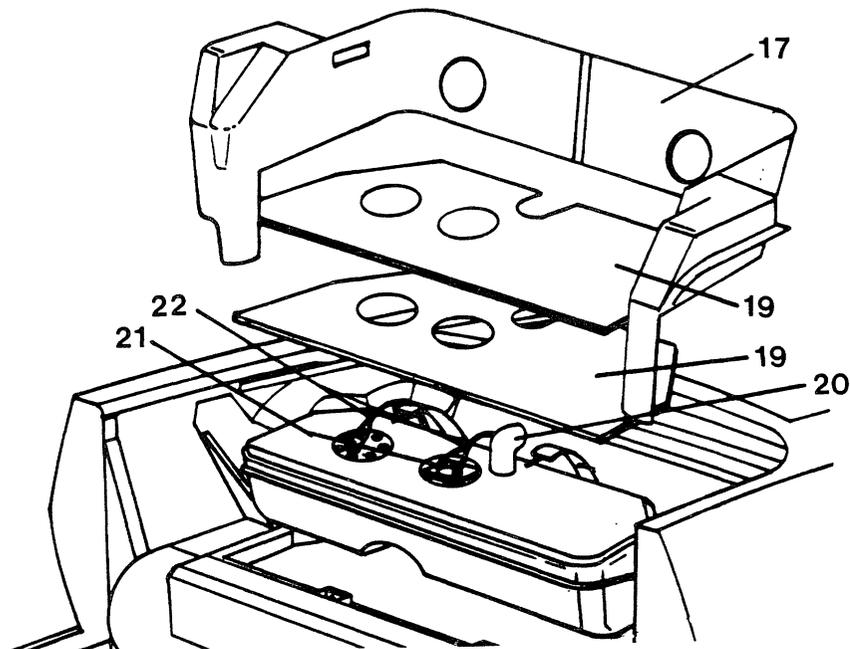
7. REMOVE FUEL PUMP CADDY AND DISCONNECT GROUND WIRE.
8. REMOVE SPARE WHEEL ASSEMBLY BY REMOVING THE KNOB SECURING WHEEL TO TRUNK. PEEL BACK CENTER FABRIC TRIM TO LOCATE UPPER SENDING UNIT.
9. REMOVE ELECTRICAL LEADS AT SENDING UNIT IN UPPER TANK AND TAG FOR RE-INSTALLATION.



10. REMOVE THE FIVE (5) MOUNTING SCREWS FROM THE SENDING UNIT AND DISCARD GASKET.

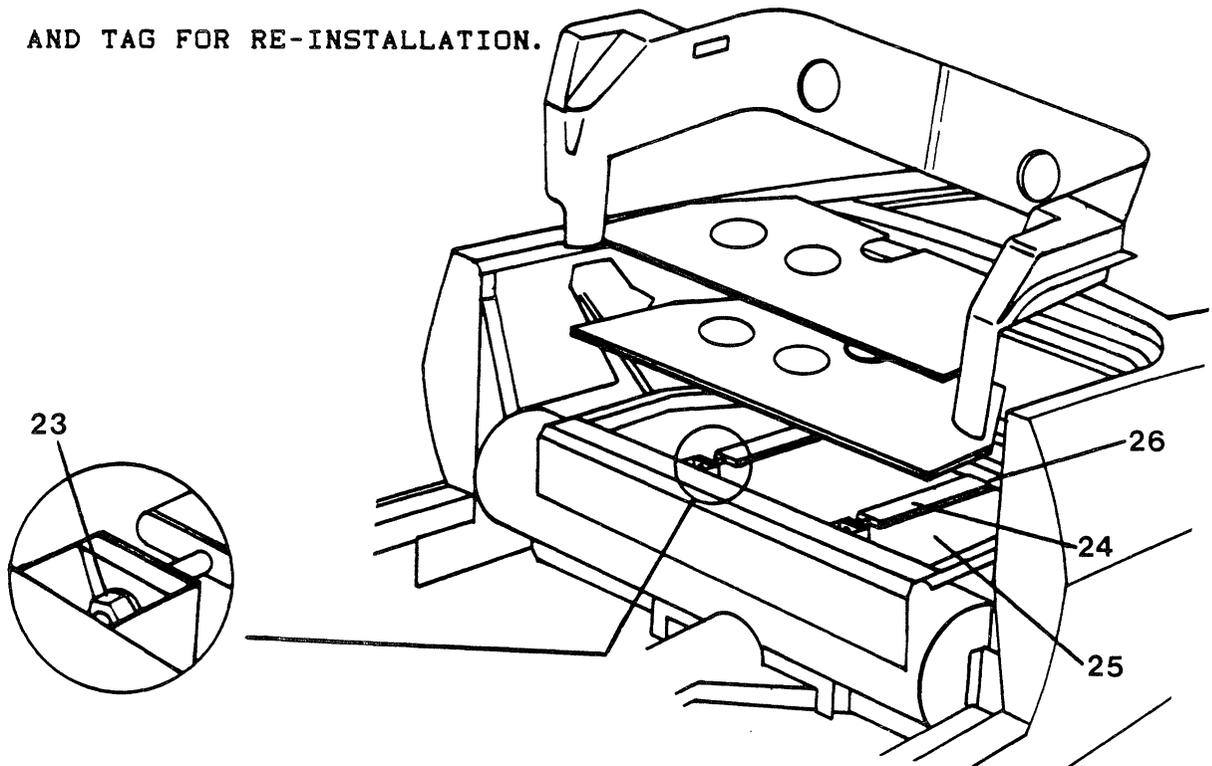
WARNING: PROTECT TRUNK AREA FROM FUEL AND VAPOR LEAKS.  
DO NOT CONNECT OR DISCONNECT ELECTRICAL LEADS  
WITH THE FUEL SYSTEM OPEN.

11. FOR REMOVAL OF UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
12. INSTALL GROUND WIRE OF THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.



13. FEED SIPHON HOSE THROUGH OPENING AT THE UPPER SENDING UNIT AND INTO THE LOWER FUEL TANK THROUGH THE INTERCONNECTING HOSE.
14. MANUALLY PUMP THE FUEL PUMP CADDY UNTIL LOWER TANK IS DRAINED.  
CAUTION: DRAIN FUEL SUMP FROM THE BOTTOM PETCOCK.
15. REMOVE HOSE FROM LOWER TANK AND DISCONNECT THE GROUND WIRE.
16. REMOVE REAR CARPET AND LUGGAGE RACK.
17. REMOVE TRIM PANEL ASSEMBLY, SEE 3.6.3.
18. REMOVE INTERCONNECTING HOSE COVER BY REMOVING TWO (2) SCREWS.
19. REMOVE LOWER TANK COVER BY REMOVING TWELVE (12) SCREWS AND CAREFULLY PRYING UP COVER.
  - A. REMOVE LOWER TANK INSULATING PAD.

20. DISCONNECT THE UPPER CLAMP OF THE INTERCONNECTING HOSE AND CAREFULLY PULL THE INTERCONNECTING HOSE LOOSE FROM THE UPPER TANK.
21. DISCONNECT TWO (2) ELECTRICAL LEADS FROM THE SENDING UNIT AND TAG FOR RE-INSTALLATION.
22. DISCONNECT THE TWO (2) ELECTRICAL LEADS FROM THE FUEL PUMP AND TAG FOR RE-INSTALLATION.



CAUTION: PLACE WIRING HARNESS OUT OF THE WAY WHEN REMOVING TANK.

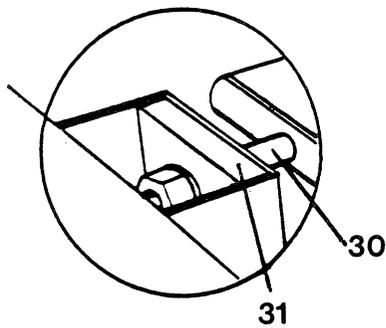
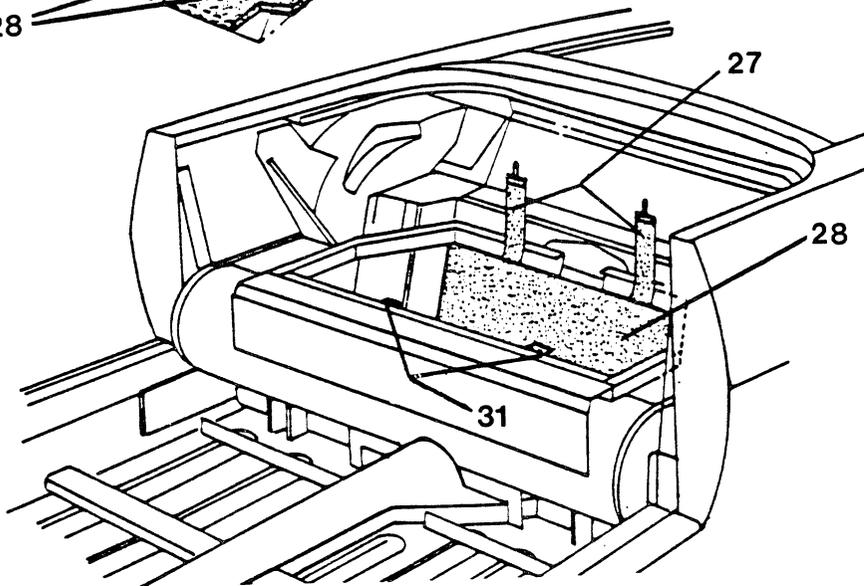
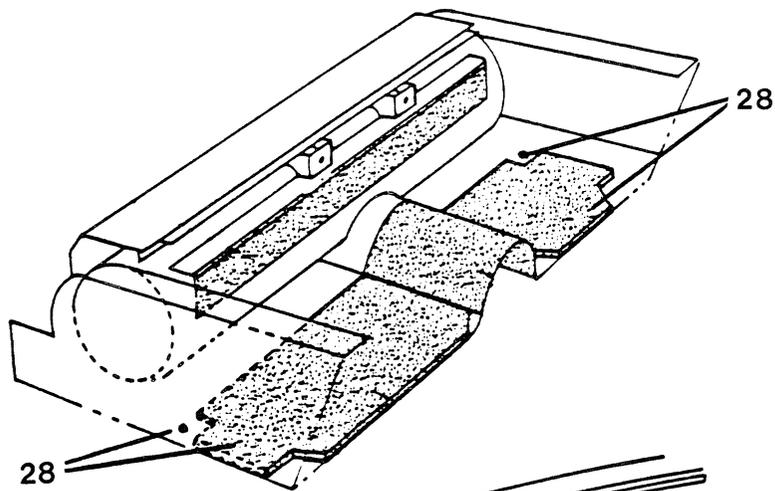
23. REMOVE TWO (2) NUTS AND WASHERS FROM THE LOWER TANK STRAPS.
24. LIFT UP TWO (2) STRAPS AND POSITION TO REAR OF TANK.
25. REMOVE LOWER FUEL TANK.

NOTE: TAKE CARE NOT TO KINK TRANSFER HOSE DURING REMOVAL PROCESS.

26. REMOVE TWO (2) LOWER TANK STRAPS BY REMOVING ONE (1) BOLT FROM EACH STRAP AT REAR OF LOWER TANK COMPARTMENT.

#### REFITTING

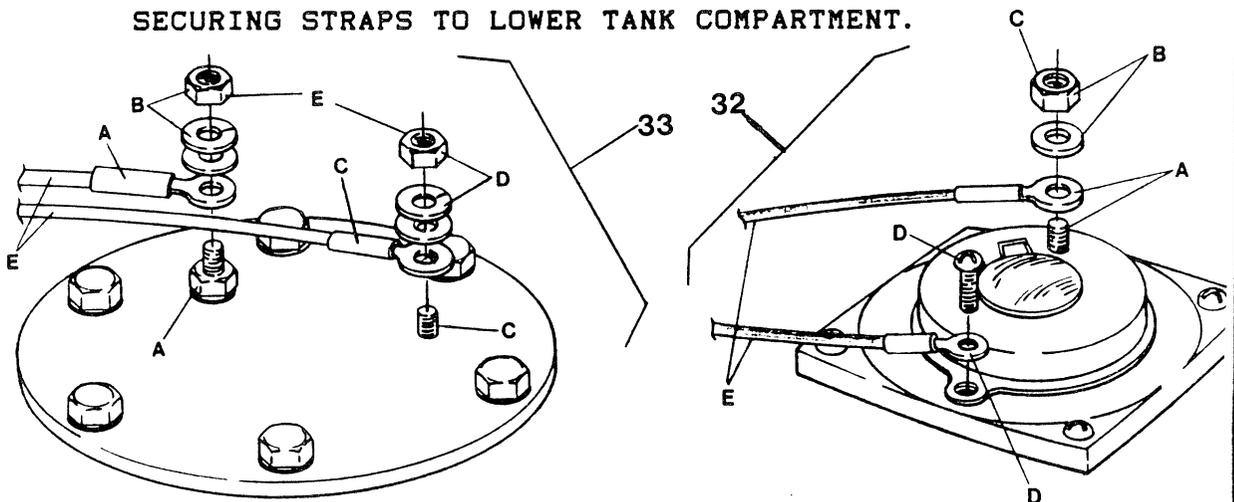
NOTE: THIS PROCEDURE COVERS INSTALLATION OF THE LOWER FUEL TANK ASSEMBLY COMPLETE, (FUEL TANK, SUBMERSIBLE PUMP,



SENDING UNIT, AND TRANSFER HOSE) INSTALLED TO THE VEHICLE AS A COMPONENT ASSEMBLY.

27. INSTALL TWO (2) LOWER TANK STRAPS BY SECURING EACH STRAP WITH ONE (1) BOLT AT REAR OF LOWER TANK COMPARTMENT.
28. INSTALL LOWER FUEL TANK PADDING TO THE LOWER FUEL COMPARTMENT TAKING CARE NOT TO COVER VENT HOLES.
29. POSITION LOWER FUEL TANK ASSEMBLY TO THE LOWER FUEL COMPARTMENT.
30. SECURE LOWER FUEL TANK WITH TWO (2) STRAPS SECURED AT THE REAR.

NOTE: CHECK FOR INSTALLATION OF THE STRAP PADDING BEFORE SECURING STRAPS TO LOWER TANK COMPARTMENT.



31. INSTALL TWO (2) WASHERS AND NUTS TO THE LOWER TANK STRAP BOLT.
32. LOWER FUEL TANK SENDING UNIT ELECTRICAL CONNECTIONS:
  - A. CONNECT WHITE/RED NEGATIVE (-) WIRE TO THE MOUNTING STUD.
  - B. INSTALL ONE (1) WASHER AND NUT TO MOUNTING STUD.
  - C. TIGHTEN UNTIL FULLY SEATED.
  - D. CONNECT GREEN/ORANGE POSITIVE (+) WIRE TO SENDING UNIT MOUNTING SCREW OPPOSITE THE NEGATIVE MOUNTING STUD.
  - E. TIGHTEN UNTIL FULLY SEATED.

WARNING: ROUTE WIRNG HARNESS AWAY FROM LOWER TANK COVER AND TRIM PANEL MOUNTING SCREWS.

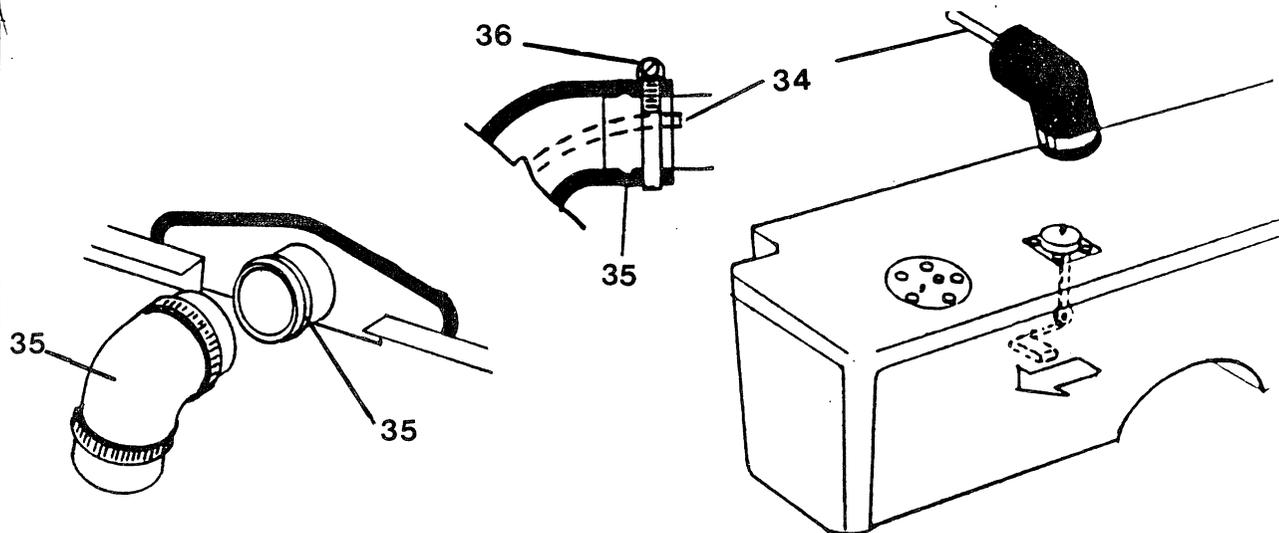
33. LOWER FUEL TANK SUBMERSIBLE PUMP ELECTRICAL CONNECTIONS:

WARNING: RED WIRE POSITIVE (+) TO INSULATED TERMINAL.  
BLACK WIRE NEGATIVE (-) TO WELD STUD TERMINAL.

- A. CONNECT RED WIRE TO THE POSITIVE (+) INSULATED TERMINAL.
- B. INSTALL ONE (1) WASHER AND NUT TO POSITIVE (+) INSULATED TERMINAL.
- C. CONNECT BLACK WIRE NEGATIVE (-) TO WELD STUD TERMINAL.
- D. INSTALL ONE (1) WASHER AND NUT TO NEGATIVE (-) WELD STUD.
- E. TIGHTEN BOTH ELECTRICAL CONNECTIONS UNTIL FULLY SEATED.

WARNING: ROUTE WIRING HARNESS AWAY FROM LOWER TANK COVER AND TRIM PANEL MOUNTING SCREWS.

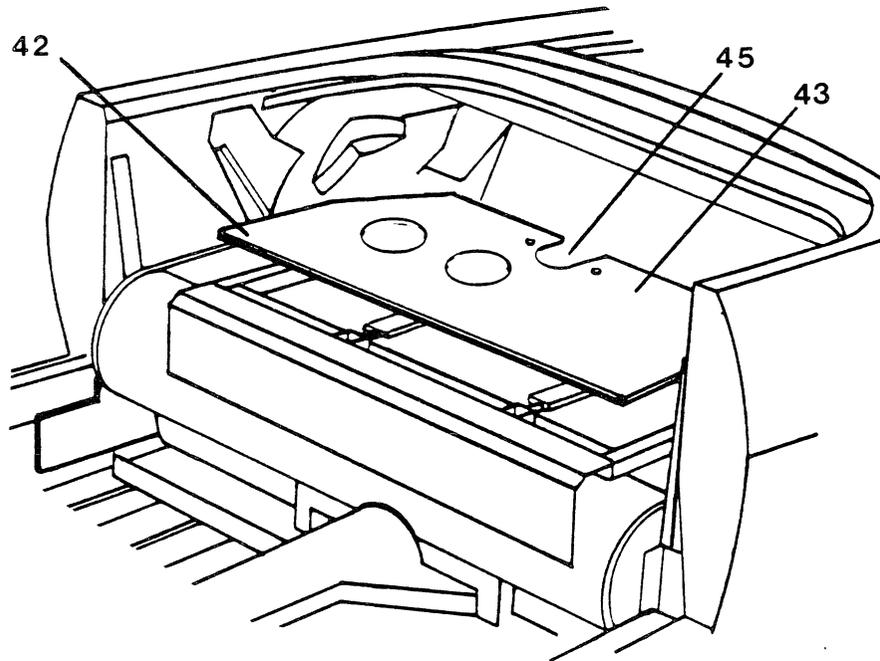
- 34. ROUTE TRANSFER HOSE FROM LOWER FUEL TANK THROUGH INTERCONNECTING HOSE AND INTO UPPER FUEL TANK.



- 35. POSITION INTERCONNECTING HOSE TO UPPER TANK OUTLET AND PAST OUTLET BARB, AND SECURE WITH CLAMP.

CAUTION: CHECK TO INSURE THAT INTERCONNECTING HOSE IS PROPERLY SECURED AND NOT KINKED.

- 36. TORQUE BOTH UPPER AND LOWER CLAMPS TO 30 IN/LBS.
- 37. FOR INSTALLATION OF UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
- 38. INSTALL UPPER SENDING UNIT TO UPPER FUEL TANK:
  - A. REFERENCE 3.7.1 FOR COMPLETE UPPER SENDING UNIT INSTALLATION STEP 62, A THROUGH H.



39. PRESSURE TEST THE FUEL SYSTEM, SEE 3.7.3.
40. INSTALL LOWER TANK PADDING.
41. CLEAN LOWER TANK COVER WITH ISOPROPYL ALCOHOL.
42. APPLY AN UNBROKEN 1/4" BEAD OF PERMATEX #1 TO LOWER TANK SEALING AREA.
43. INSTALL LOWER TANK COVER WITH TWELVE (12) SCREWS.
44. APPLY AN UNBROKEN 3/8" BEAD OF PERMATEX #1 TO THE INTERCONNECTING HOSE COVER.
45. INSTALL HOSE COVER WITH TWO (2) SCREWS.
46. INSTALL TRIM PANEL, SEE 3.6.3.
47. INSTALL REAR COMPARTMENT CARPET.
48. INSTALL LUGGAGE RACK.
49. INSTALL SPARE WHEEL AND FABRIC TRIM TO TRUNK AREA.
50. CONNECT BATTERY TERMINALS, POSITIVE (+) FIRST AND THEN THE NEGATIVE (-).

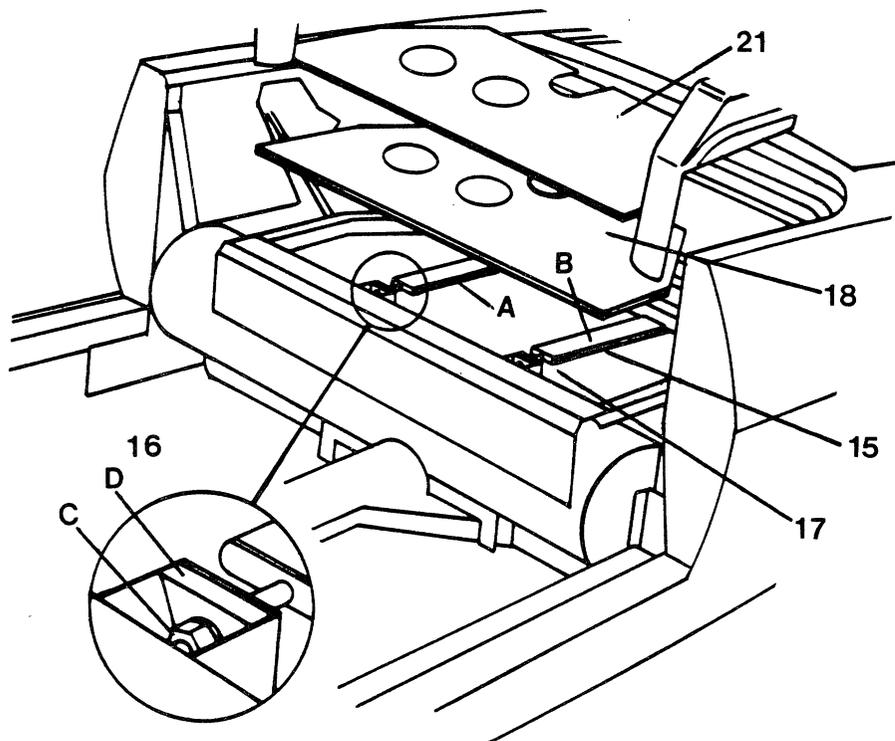


WARNING : DO NOT DAMAGE OR CRIMP WIRING HARNESS DURING  
REMOVAL OF LOWER TANK STRAPS.

12. LIFT UP TWO (2) STRAPS AND POSITION TO REAR OF TANK.
13. LOWER TANK STRAPS ARE SECURED TO THE REAR COMPARTMENT  
AREA OF THE LOWER TANK WITH ONE (1) SCREW PER STRAP.  
FOR REMOVAL OF THE LOWER TANK STRAP (REAR) SEE 3.7.7.
14. REMOVE STRAP ASSEMBLY PAD.

#### REFITTING

15. PLACE ONE (1) PAD AT EACH TANK STRAP LOCATION TO TOP OF THE  
THE LOWER TANK.
16. SECURE LOWER FUEL TANK WITH TWO (2) STRAPS SECURED TO THE  
REAR OF THE LOWER FUEL TANK COMPARTMENT.
  - A. POSITION TANK STRAP PADS TO LOWER TANK.
  - B. PLACE TANK STRAPS IN POSITION AND ADJUST PADS  
SO THAT THE STRAPS ARE CENTERED ON THE PADS.
  - C. INSTALL BOLT THROUGH THE LOWER FRONT BRACKET.
  - D. INSERT SQUARE WASHER INTO LOWER BRACKET.



E. INSTALL WASHER AND NUT TO EACH BOLT.

F. TIGHTEN NUTS TO SECURE STRAPS.

17. SECURE WIRING HARNESS TO STRAP AREA WITH TY-STRAP.

WARNING: ROUTE WIRING HARNESS AWAY FROM LOWER TANK  
COVER AND TRIM PANEL MOUNTING SCREWS.

18. INSTALL LOWER TANK PADDING.

19. CLEAN LOWER TANK COVER WITH ISOPROPYL ALCOHOL.

20. APPLY AN UNBROKEN 1/4" BEAD OF PERMATEX #1 TO LOWER TANK  
SEALING AREA.

21. INSTALL LOWER TANK COVER WITH TWELVE (12) SCREWS.

22. APPLY AN UNBROKEN 3/8" BEAD OF PERMATEX #1 TO THE INTER-  
CONNECTING HOSE COVER.

23. INSTALL HOSE COVER WITH TWO (2) SCREWS.

24. INSTALL TRIM PANEL, SEE 3.6.3.

25. INSTALL REAR COMPARTMENT CARPET.

26. INSTALL LUGGAGE RACK.

27. CONNECT BATTERY TERMINALS, POSITIVE (+) FIRST AND  
THEN THE NEGATIVE (-).

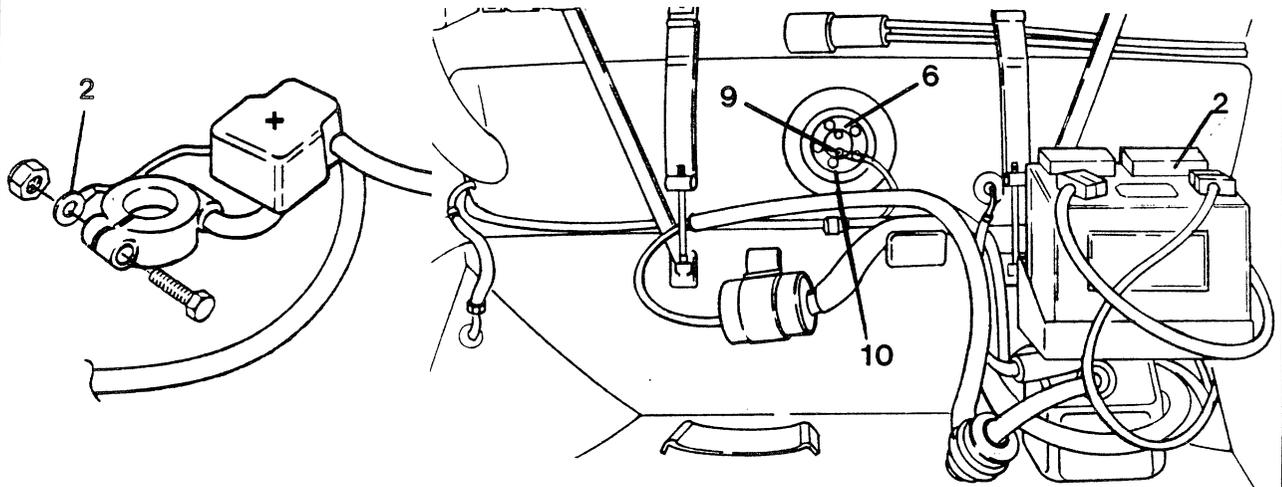
### 3.7.23 FUEL TANK LOWER PADS (LOWER FUEL TANK)

REMOVE AND REFIT

REMOVE

1. LOWER CONVERTIBLE TOP TO FULLY LOWERED POSITION.
2. REMOVE THE NEGATIVE (-) CLAMP FIRST AND THEN REMOVE THE POSITIVE (+) CLAMP.

CAUTION: DO NOT DAMAGE THE RING TERMINAL ON THE POSITIVE CLAMP.



3. DEPRESSURIZE FUEL SYSTEM BY OPENING FUEL FILLER CAP.
4. ATTACH GROUND WIRE FROM THE FUEL CADDY TO A GOOD CHASSIS GROUND AWAY FROM THE FILLER OPENING.
5. INSERT FUEL CADDY HOSE INTO FILLER CAP OPENING.
6. MANUALLY PUMP FUEL CADDY UNTIL UPPER FUEL TANK IS DRAINED.

NOTE: UPPER FUEL TANK IS DRAINED WHEN THE SENDING UNIT INDICATOR IS AT 1 O'CLOCK.

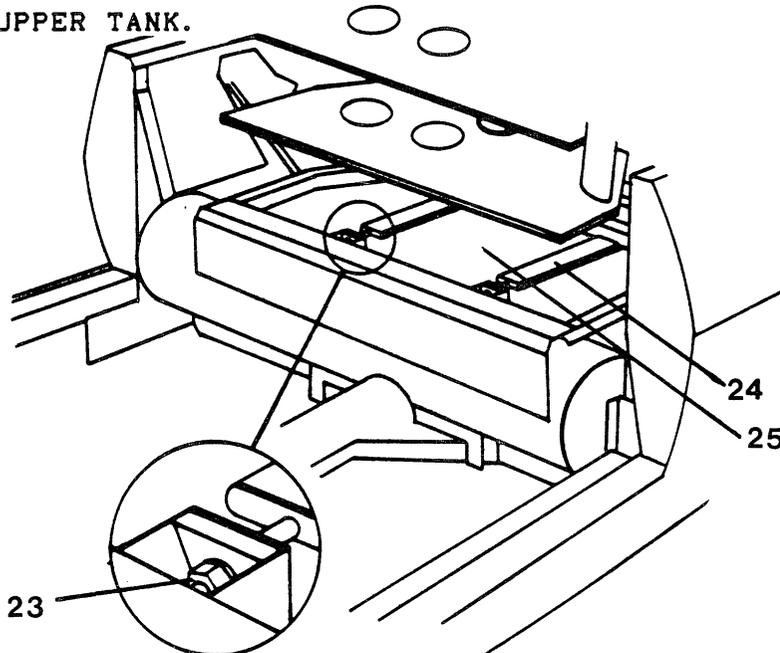
7. REMOVE FUEL PUMP CADDY AND DISCONNECT GROUND WIRE.
8. REMOVE SPARE WHEEL ASSEMBLY BY REMOVING THE KNOB SECURING WHEEL TO TRUNK. PEEL BACK CENTER FABRIC TRIM TO LOCATE UPPER SENDING UNIT.
9. REMOVE ELECTRICAL LEADS AT SENDING UNIT IN UPPER TANK AND TAG FOR RE-INSTALLATION.



19. REMOVE LOWER TANK COVER BY REMOVING TWELVE (12) SCREWS AND CAREFULLY PRYING UP COVER.

A. REMOVE LOWER TANK INSULATING PAD.

20. DISCONNECT THE UPPER CLAMP OF THE INTERCONNECTING HOSE AND CAREFULLY PULL THE INTERCONNECTING HOSE LOOSE FROM THE UPPER TANK.



21. DISCONNECT TWO (2) ELECTRICAL LEADS FROM THE SENDING UNIT AND TAG FOR RE-INSTALLATION.

22. DISCONNECT THE TWO (2) ELECTRICAL LEADS FROM THE FUEL PUMP AND TAG FOR RE-INSTALLATION.

CAUTION: PLACE WIRING HARNESS OUT OF THE WAY WHEN REMOVING TANK.

23. REMOVE TWO (2) NUTS AND WASHERS FROM THE LOWER TANK STRAPS.

24. LIFT UP TWO (2) STRAPS AND POSITION TO REAR OF TANK.

25. REMOVE LOWER FUEL TANK.

NOTE: TAKE CARE NOT TO KINK TRANSFER HOSE DURING REMOVAL PROCESS.

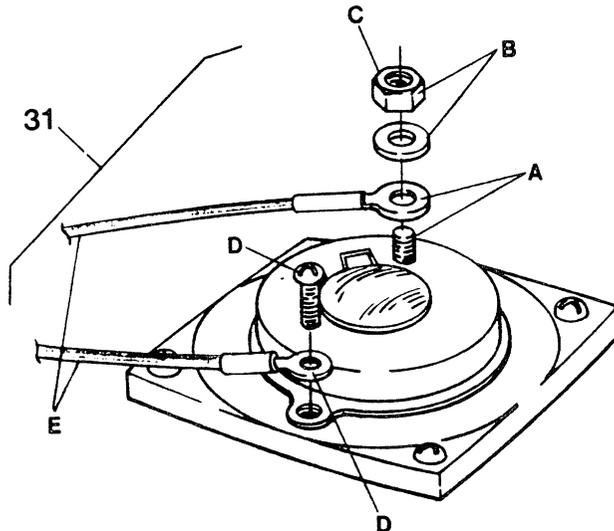
26. REMOVE LOWER TANK PADDING FROM REAR, FRONT, AND BOTTOM (RIGHT, LEFT, AND CENTER) OF THE LOWER TANK COMPARTMENT.

#### REFITTING

NOTE: THIS PROCEDURE COVERS INSTALLATION OF THE LOWER FUEL TANK ASSEMBLY COMPLETE, (FUEL TANK, SUBMERSIBLE PUMP, SENDING UNIT, AND TRANSFER HOSE) INSTALLED TO THE

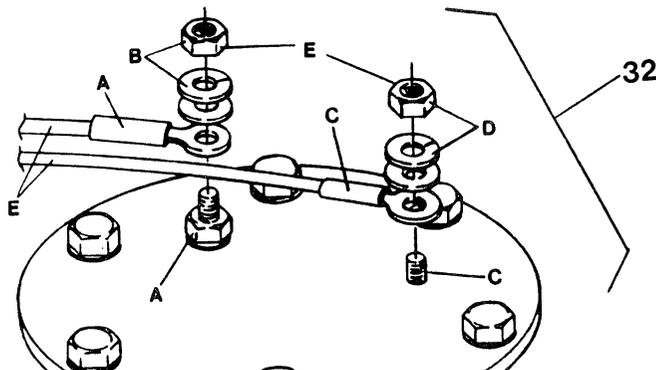
VEHICLE AS A COMPONENT ASSEMBLY).

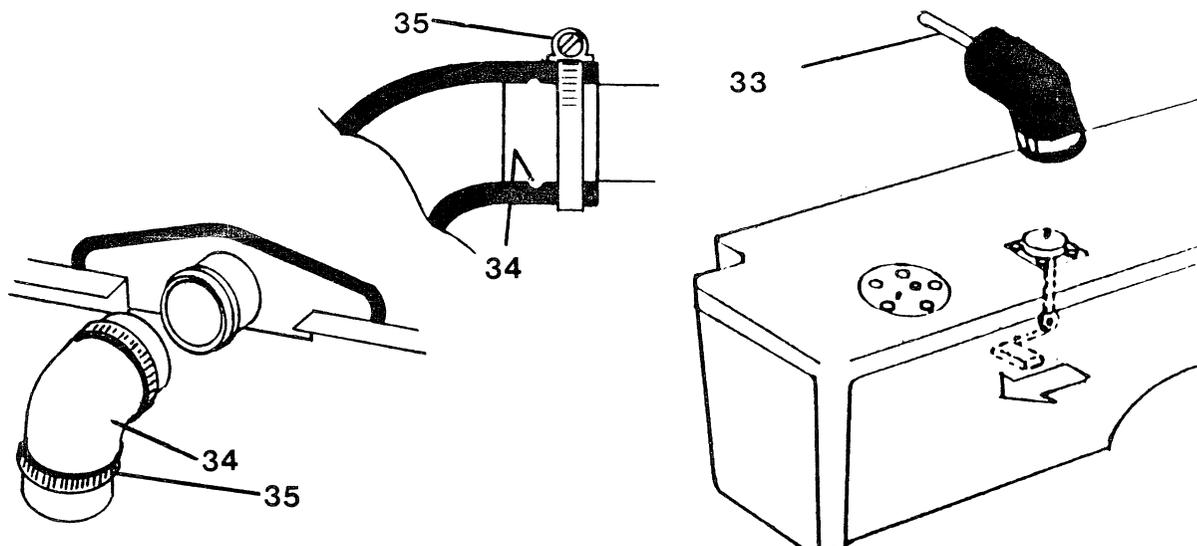
27. INSTALL LOWER FUEL TANK PADDING TO THE LOWER FUEL COMPARTMENT, REAR, FRONT, AND BOTTOM (RIGHT, LEFT AND CENTER) TAKING CARE NOT TO COVER VENT HOLES.
28. POSITION LOWER FUEL TANK ASSEMBLY TO THE LOWER FUEL COMPARTMENT.
29. SECURE LOWER FUEL TANK WITH TWO (2) STRAPS SECURED AT THE REAR.  
NOTE: CHECK FOR INSTALLATION OF THE STRAP PADDING BEFORE



SECURING STRAPS TO LOWER TANK COMPARTMENT.

30. INSTALL TWO (2) WASHERS AND NUTS TO THE LOWER TANK STRAP BOLT.
31. LOWER FUEL TANK SENDING UNIT ELECTRICAL CONNECTIONS:
  - A. CONNECT WHITE/RED NEGATIVE (-) WIRE TO THE MOUNTING STUD.
  - B. INSTALL ONE (1) WASHER AND NUT TO MOUNTING STUD.
  - C. TIGHTEN UNTIL FULLY SEATED.
  - D. CONNECT GREEN/ORANGE POSITIVE (+) WIRE TO SENDING UNIT MOUNTING SCREW OPPOSITE THE NEGATIVE MOUNTING STUD.
  - E. TIGHTEN UNTIL FULLY SEATED.





WARNING: ROUTE WIRING HARNESS AWAY FROM LOWER TANK COVER AND TRIM PANEL MOUNTING SCREWS.

32. LOWER FUEL TANK SUBMERSIBLE PUMP ELECTRICAL CONNECTIONS:

WARNING: RED WIRE POSITIVE (+) TO INSULATED TERMINAL.

BLACK WIRE NEGATIVE (-) TO WELD STUD TERMINAL.

A. CONNECT RED WIRE TO THE POSITIVE (+) INSULATED TERMINAL.

B. INSTALL ONE (1) WASHER AND NUT TO POSITIVE (+) INSULATED TERMINAL.

C. CONNECT BLACK WIRE NEGATIVE (-) TO WELD STUD TERMINAL.

D. INSTALL ONE (1) WASHER AND NUT TO NEGATIVE (-) WELD STUD.

E. TIGHTEN BOTH ELECTRICAL CONNECTIONS UNTIL FULLY SEATED.

WARNING: ROUTE WIRING HARNESS AWAY FROM LOWER TANK COVER AND TRIM PANEL MOUNTING SCREWS.

33. ROUTE TRANSFER HOSE FROM LOWER FUEL TANK THROUGH INTERCONNECTING HOSE AND INTO UPPER FUEL TANK.

34. POSITION INTERCONNECTING HOSE TO UPPER TANK OUTLET AND PAST OUTLET BARB, AND SECURE WITH CLAMP.

CAUTION: CHECK TO INSURE THAT INTERCONNECTING HOSE IS PROPERLY SECURED AND NOT KINKED.

35. TORQUE BOTH UPPER AND LOWER CLAMPS TO 30 IN/LBS.

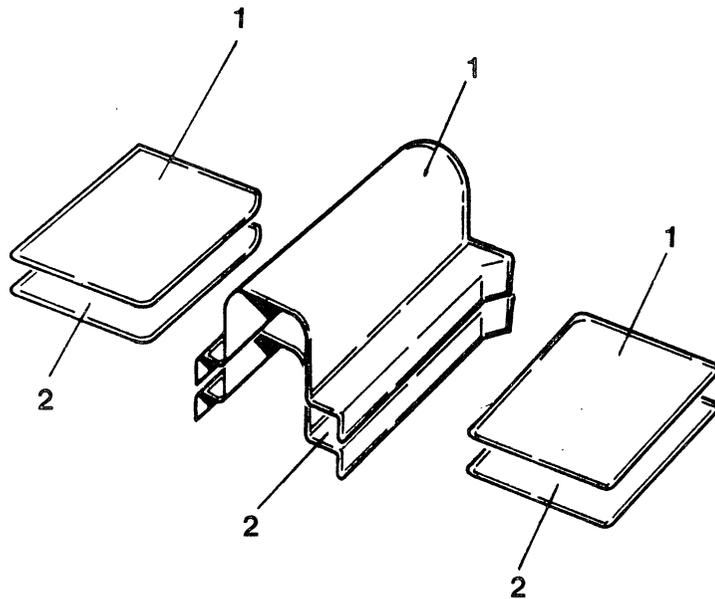
36. FOR INSTALLATION OF UPPER FUEL TANK VENT ASSEMBLY, SEE 3.7.2.
37. INSTALL UPPER SENDING UNIT TO UPPER FUEL TANK:
  - A. REFERENCE 3.7.1 FOR COMPLETE UPPER SENDING UNIT  
INSTALLATION STEP 62, A THROUGH H.
38. PRESSURE TEST THE FUEL SYSTEM, SEE 3.7.3.
39. INSTALL LOWER TANK PADDING.
40. CLEAN LOWER TANK COVER WITH ISOPROPYL ALCOHOL.
41. APPLY AN UNBROKEN 1/4" BEAD OF PERMATEX #1 TO LOWER TANK  
SEALING AREA.
42. INSTALL LOWER TANK COVER WITH TWELVE (12) SCREWS.
43. APPLY AN UNBROKEN 3/8" BEAD OF PERMATEX #1 TO THE INTER-  
CONNECTING HOSE COVER.
44. INSTALL HOSE COVER WITH TWO (2) SCREWS.
45. INSTALL TRIM PANEL, SEE 3.6.3.
46. INSTALL REAR COMPARTMENT CARPET.
47. INSTALL LUGGAGE RACK.
48. INSTALL SPARE WHEEL AND FABRIC TRIM TO TRUNK AREA.
49. CONNECT BATTERY TERMINALS, POSITIVE (+) FIRST AND  
THEN THE NEGATIVE (-).

### 3.7.24 INSULATION- DRIVE SHAFT TUNNEL (REAR OF CONSOLE)

#### REMOVE AND REFIT

##### REMOVING

1. PEEL BACK CARPETING.
2. REMOVE PADDING.
3. CLEAN OFF ANY EXCESS PADDING FROM DRIVE SHAFT TUNNEL.



##### REFITTING

4. APPLY ADHESIVE TO DRIVE SHAFT TUNNEL INSULATION.
5. APPLY ADHESIVE TO DRIVE SHAFT TUNNEL.
6. INSTALL INSULATION TO DRIVE SHAFT TUNNEL.
7. REPLACE CARPETING.

### 3.7.25 INSULATION (LOWER TANK AREA)

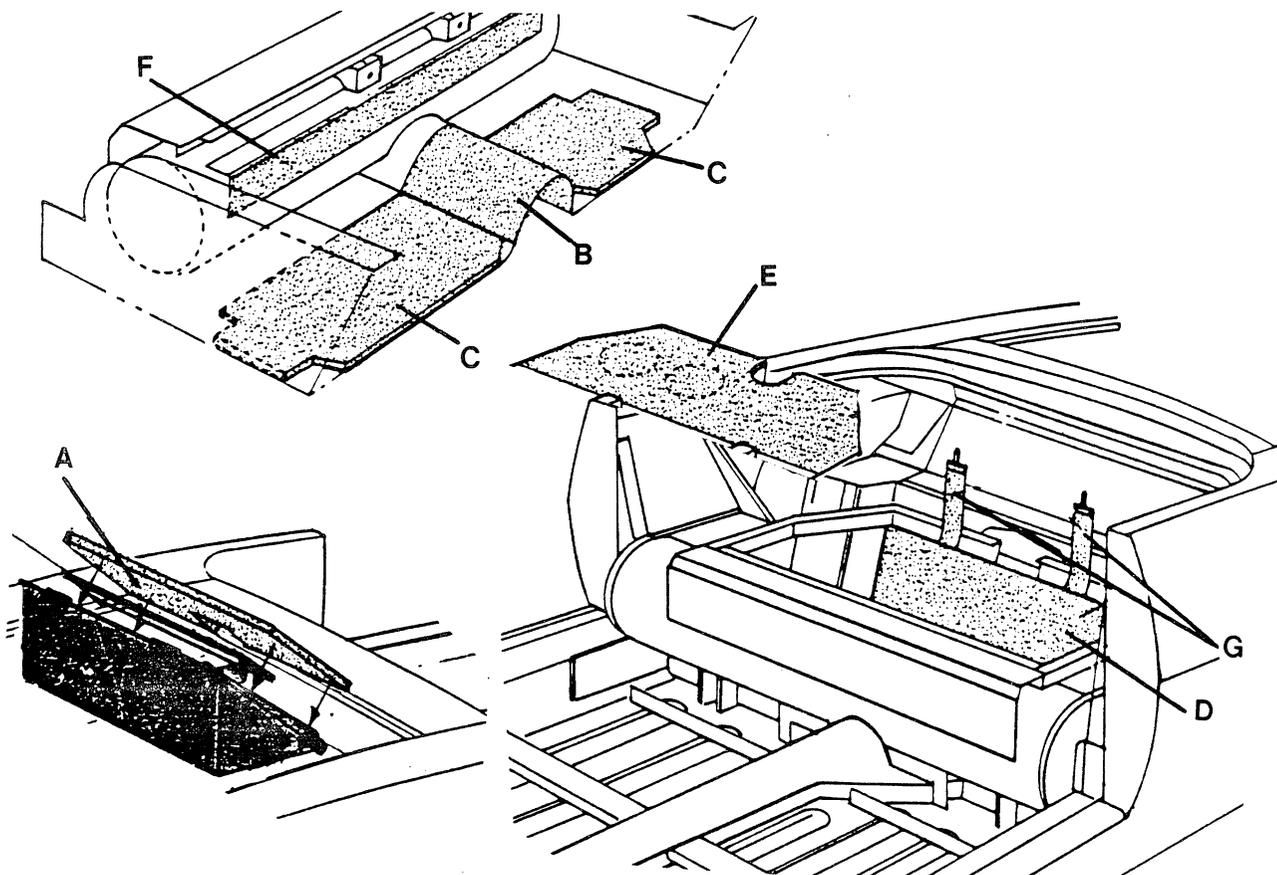
#### REMOVE AND REFIT

##### REMOVING

1. FOR REMOVAL OF THE INSULATION, SEE 3.7.23 AND FOLLOW THE EXACT INSTRUCTIONS AS LISTED.
2. THE INSULATION INCLUDED IN THIS OPERATION CONSISTS OF:
  - A. UPPER FUEL TANK FRONT
  - B. DRIVE SHAFT TUNNEL
  - C. LOWER FUEL TANK FLOOR
  - D. LOWER FUEL TANK REAR
  - E. LOWER FUEL TANK TOP
  - F. LOWER FUEL TANK UPPER
  - G. LOWER FUEL TANK STRAPS

##### REFITTING

3. FOR REASSEMBLY OF THE INSULATION, SEE 3.7.23 AND FOLLOW THE EXACT INSTRUCTIONS.

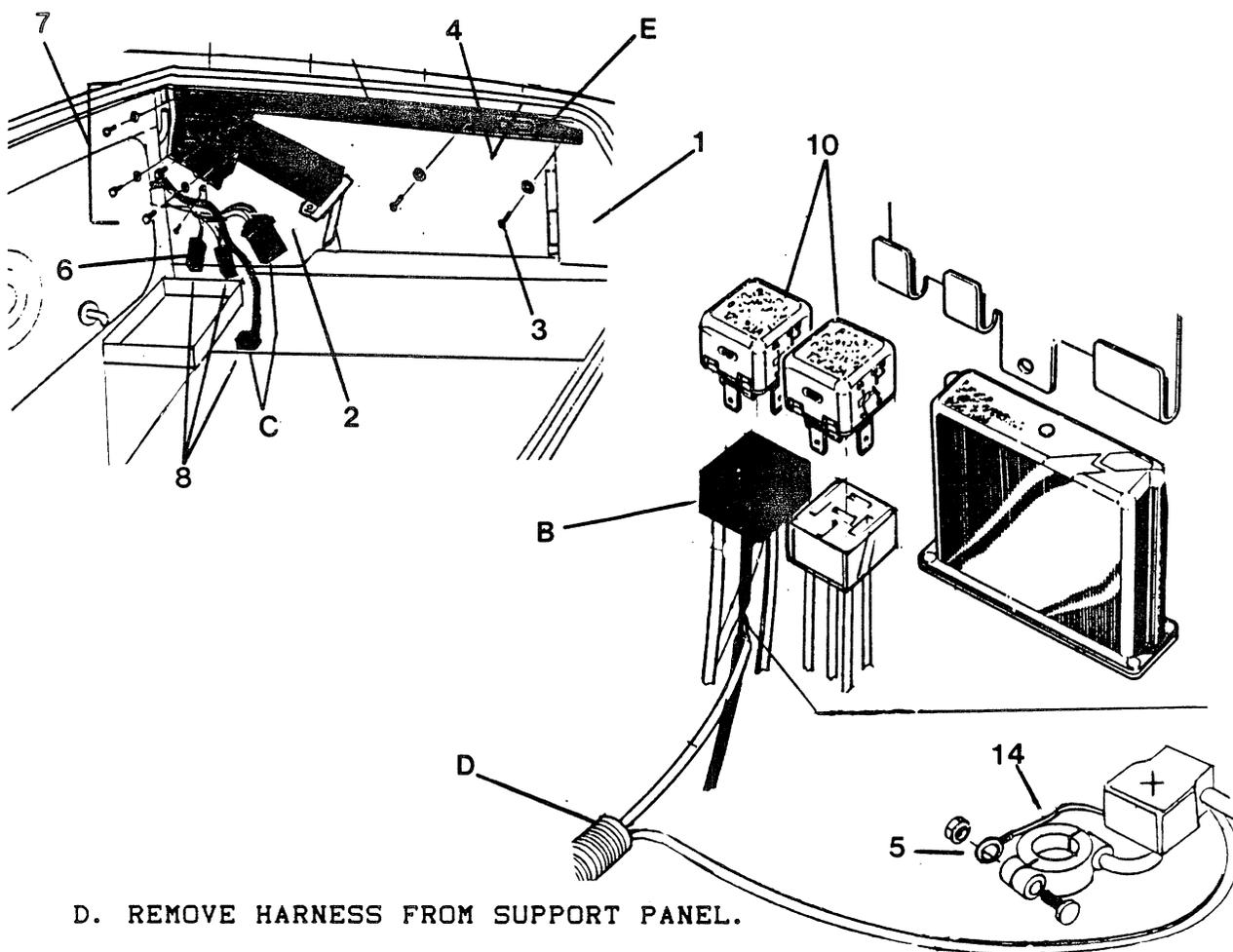


### 3.7.26 TRIM PANEL BUTTRESS REINFORCEMENT (RIGHT AND LEFT SIDE)

#### REMOVE AND REFIT

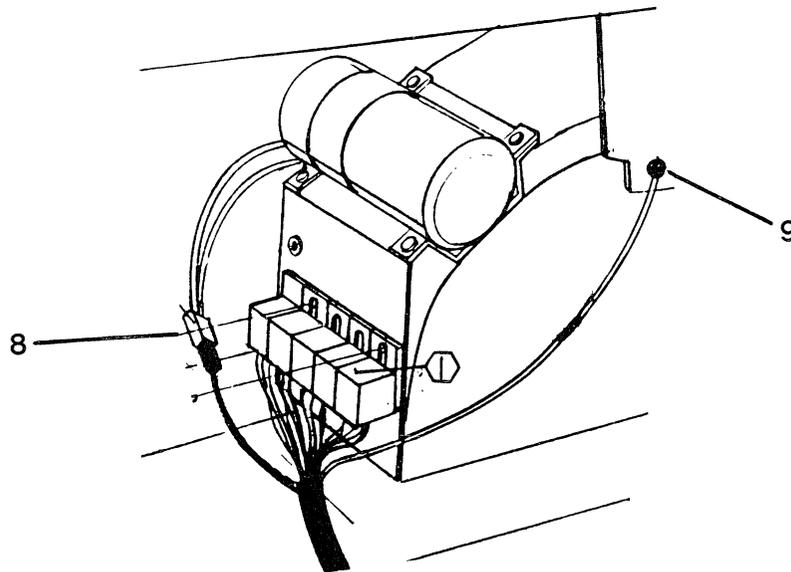
#### REMOVING

1. REMOVE REAR FABRIC TRIM PANEL.
2. REMOVE FRONT FABRIC TRIM PANEL.
3. REMOVE TWO (2) PHILLIPS HEAD SCREWS.
4. REMOVE FOUR (4) NUTS FROM MOUNTING STUDS.
5. DISCONNECT BATTERY, NEGATIVE (-) FIRST AND THEN THE POSITIVE (+).
6. ELECTRICAL CONNECTIONS:
  - A. REMOVE WIRING FOR HYDRAULIC PUMP (LEFT SIDE).
  - B. REMOVE RELAY MOUNTING BRACKET (LEFT SIDE).
  - C. DISCONNECT WIRING CONNECTIONS AND TAG FOR REASSEMBLY.



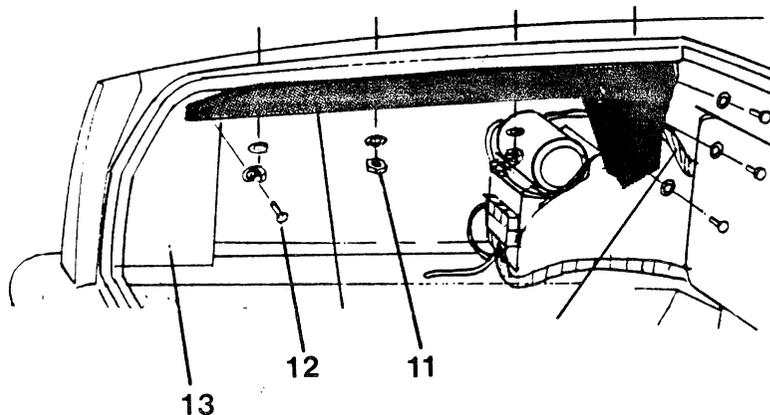
D. REMOVE HARNESS FROM SUPPORT PANEL.

E. REMOVE BUTTRESS REINFORCEMENT.



REFITTING

7. INSTALL HARNESS TO BUTTRESS REINFORCEMENT.
8. CONNECT ALL WIRING CONNECTIONS.
9. CONNECT HYDRAULIC PUMP GROUND (LEFT SIDE).
10. CONNECT RELAY MOUNTING BRACKET (RIGHT SIDE).
11. SECURE BUTTRESS REINFORCEMENT TO TRUNK AREA WITH FOUR (4) NUTS.
12. SECURE FRONT AND REAR OF BUTTRESS REINFORCEMENT WITH TWO (2) SCREWS.
13. INSTALL FRONT AND REAR FABRIC TRIM PANELS.
14. CONNECT BATTERY POSITIVE (+) FIRST AND THEN NEGATIVE (-).

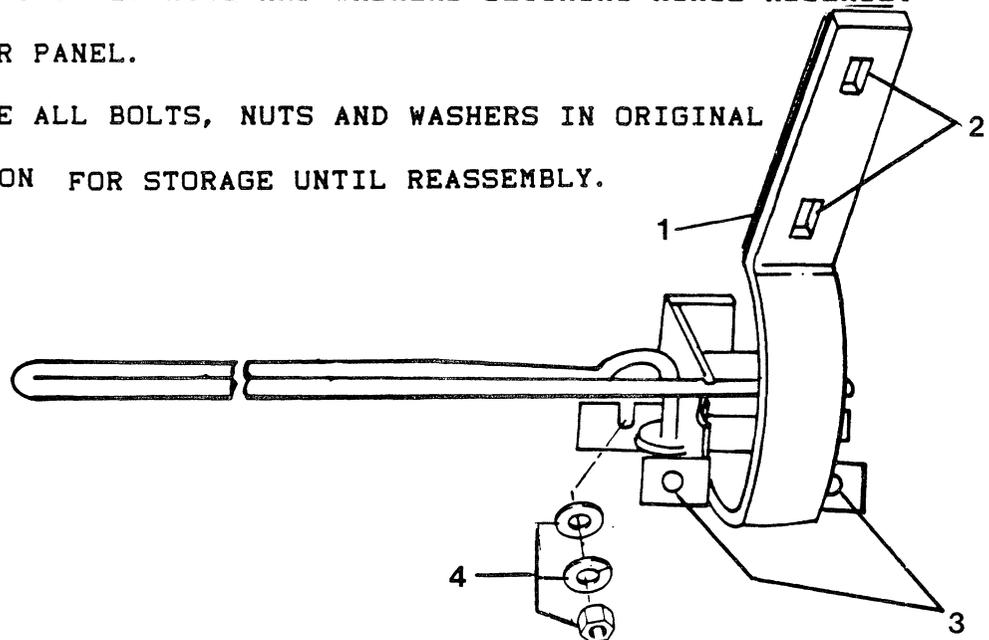


### 3.7.27 DECK LID HINGE ASSEMBLY

#### REMOVE AND REFIT

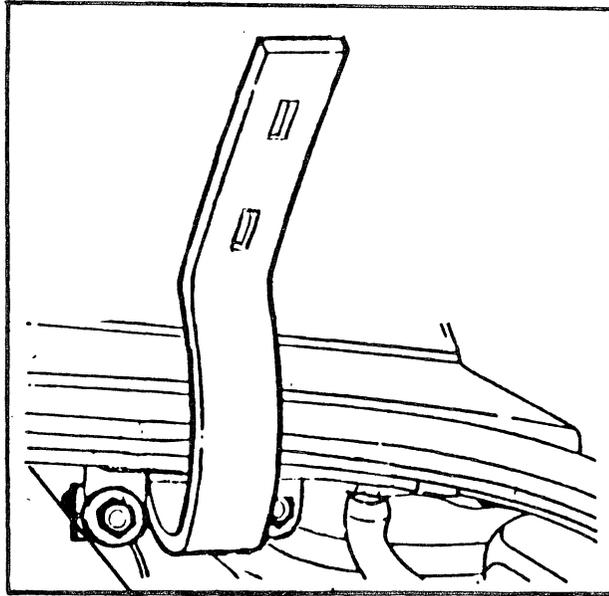
##### REMOVING

1. WITNESS MARK POSITION OF HINGE ASSEMBLY TO THE DECK LID.
2. REMOVE TWO (2) BOLTS AND WASHERS SECURING DECK LID TO EACH HINGE ASSEMBLY.
3. REMOVE TWO (2) BOLTS AND WASHERS SECURING HINGE ASSEMBLY TO TULIP TABS.
4. REMOVE TWO (2) NUTS AND WASHERS SECURING HINGE ASSEMBLY TO REAR PANEL.
5. REPLACE ALL BOLTS, NUTS AND WASHERS IN ORIGINAL POSITION FOR STORAGE UNTIL REASSEMBLY.



##### REFITTING

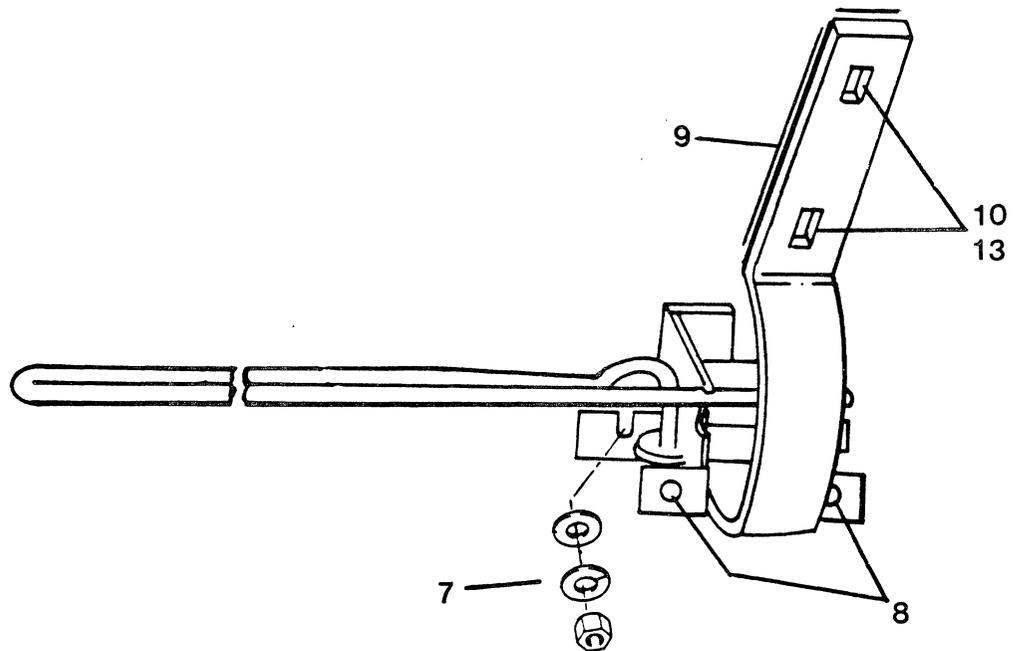
6. SLIDE HINGE ASSEMBLY UP AND UNDERNEATH TULIP PANEL.
7. ALIGN HINGE ASSEMBLY ARM AND SECURE REAR TABS WITH TWO (2) WASHERS AND NUTS TO REAR BACK PANEL.
8. INSTALL TWO (2) BOLTS AND WASHERS TO TULIP PANEL TABS AND SECURE.
9. MOUNT DECK LID TO HINGE ARMS AND ALIGN TO MATCH MARKS.
10. INSERT TWO (2) BOLTS AND WASHERS TO EACH HINGE ARM AND TIGHTEN.
11. CAREFULLY CLOSE DECK LID AND CHECK FOR PROPER POSITION TO DECK LID OPENING.



6

12. REPOSITION IF NECESSARY.

13. AFTER FINAL ALIGNMENT SECURE THE TWO (2) DECK LID HINGE ARMS TO THE DECK LID BY SECURING FOUR (4) BOLTS.



### 3.8 BODY/WINDSHIELD GROUP (REMOVE AND REFIT)

Header Cap Moulding	3.8.1
Welt Assembly	3.8.2
Top Lock Striker	3.8.3
Top Belt Opening Moulding	3.8.4
Body Lock Pillar Weather Stripping	3.8.5
Quarter Window Belt Moulding	3.8.6
Quarter Belt Moulding Weatherstrip	3.8.7
"A" Pillar Moulding Cap	3.8.8
Windshield Garnish Upper Trim Assembly	3.8.9
Sunvisor	3.8.10
Rear View Mirror	3.8.11
Windshield Garnish Moulding Cap Assembly	3.8.12
Windshield Garnish Moulding Cover	3.8.13
Filler Cap Assembly	3.8.14
Label-Manufacturer Alter	3.8.15
Label-Rear Seat Restriction	3.8.16
"H & E" Side Medallion	3.8.17
Front Stabilizer Bar	3.8.18
Weight Counter Balance	3.8.19

### 3.8.1 HEADER CAP MOULDING

Remove and refit

#### Removing

1. Remove two (2) Phillips head screws.
2. Gently cut under cap to break silicone seal. Be careful not to damage.
3. Clean off all the silicone on moulding and body.

#### Refitting

4. Apply bead or silicone sealer.
5. Install header cap moulding.
6. Secure with two (2) Phillip head screws.

3.8.2 WELT ASSEMBLY  
Remove and refit

Removing

1. Remove header cap moulding, see 3.8.1.
2. Unglue welt assembly.
3. Check condition of thin rubber.
4. Seal and replace if necessary.

Refitting

4. Reverse operations 1 to 4 for refitting.

### 3.8.3 TOP LOCK STRIKER

Remove and refit

#### Removing

1. Remove two (2) #2 Phillips screws.
2. Remove top lock striker.

#### NOTE

Strikers can be adjusted side to side but not front to rear.

#### NOTE

There are two (2) strikers on each vehicle.

#### Refitting

3. To refit top lock striker, reverse operations 1 to 2.

#### 3.8.4 TOP BELT OPENING MOULDING (TWO PIECE SET)

**NOTE**

This is a very difficult piece to replace and should be preserved and protected as dilligently as possible.

Remove and refit

Removing

1. Position top to full up position.
2. Remove trim stick.
3. Remove twenty four (24) screws.
4. Maintain proper spacing not to damage boot cover.

**NOTE**

The top belt opening moulding does not fit directly on the body. Use spacers to maintain 1/16" gap.

Refitting

3. Left side must be put on first, then the right (which overlaps the left).

### 3.8.5 BODY LOCK PILLAR WEATHERSTRIPPING

**NOTE**

This is one (1) continuous piece.

Remove and refit

Removing

1. Pull out of channel using hand pressure only.

Refitting

2. Using tongue depressor-type tool, press the weather stripping into position.

### 3.8.6 QUARTER WINDOW BELT MOULDING

Remove and refit

Removing

1. Remove trim panel, see 3.6.3.
2. Remove quarter window, see 3.4.5.
3. Remove four (4) Phillips head screws.

#### NOTE

The quarter window belt weatherstripping will come off with the moulding as both are glued together. To separate, unglue very carefully.

Refitting

4. Reverse operations 1 to 4 for refitting quarter window belt moulding.

3.8.7 QUARTER BELT MOULDING WEATHERSTRIP

NOTE

See 3.8.6 for refitting quarter belt moulding weatherstrip.

### 3.8.8 "A" PILLAR MOULDING CAP

Remove and refit

Removing

1. Remove chrome trim by drilling out pop rivets.
2. Remove silicone sealants.
3. Unbend cap ears if necessary.
4. Remove cap.
5. Clean off silicone from cap.

Refitting

6. Reverse procedure 1 to 5 for refitting "A" pillar moulding cap.

**NOTE**

Cap must align with header moulding.

### 3.8.9 WEATHERSTRIPPING GARNISH UPPER TRIM ASSEMBLY

**NOTE**

For refitting windshield garnish moulding, see 3.8.12.

### 3.8.10 SUN VISOR

#### Remove and refit

##### Removing

1. Unscrew the two (2) Phillips screws on the pivot side and the one (1) Phillips screw on the lock mechanism.

##### NOTE

Be careful to preserve the H & E spacers on both sun visor attachments.

2. Remove sun visor assemblies.

##### Refitting

3. Reverse procedure 1 to 2 for refitting sun visor assemblies.

### 3.8.11 REAR VIEW MIRROR

#### Remove and refit

##### Removal

1. Remove three (3) screws from rear view mirror assembly.
2. Remove rear view mirror.
3. Remove spacer.

##### Refitting

4. To refit rear view mirror, reverse operations 1 to 3.

### 3.8.12 WINDSHIELD MOULDING CAP ASSEMBLY

#### Remove and refit

##### Removing

1. Remove header cap by removing two (2) screws.
2. Remove sun visor and clips, six (6) screws. Sec 3.8.11.
3. Remove rear view mirror, three (3) screws. See 3.8.11.
4. Remove two (2) screws securing "A" post cover.
5. Remove material securing cap assembly.
6. Pull foam back to expose windshield garnish moulding cap assembly.
7. Remove five (5) securing screws.
8. Remove trim material.

#### NOTE

Preserve trim material and foam padding during removal.

##### Refitting

9. To refit windshield garnish moulding cap assembly, reverse operations 1 to 8.

### 3.8.13 WINDSHIELD GARNISH MOULDING

**NOTE**

For refitting windshield garnish moulding, see 3.8.12.

### 3.8.14 FILLER CAP ASSEMBLY

#### Remove and refit

##### Removing

1. Remove four (4) securing screws.
2. Pull fuel filler cap up and out of filler neck.
3. Remove fuel label.

#### NOTE

Do not damage "O" ring. If "O" ring is removed, lubricate and reinstall.

4. Remove gasket.

#### NOTE

Position of fuel filler cap is with key slot to rear on cap.

##### Refitting

5. To refit filler cap, reverse operations 1 to 4.

### 3.8.15 LABEL - MFG ALTER

**NOTE**

(Located on left door jamb)

This should not be removed under any circumstance.

A new label can be ordered directly from H & E. It is very important to record the date written on the label as this date must be given to H & E to generate a proper new label.

### 3.8.16 LABEL (REAR SEAT RESTRICTION)

#### Remove and refit

#### Removal

1. Unscrew the two (2) small Phillips screws.
2. Remove plate.

#### Refitting

3. Reverse procedure 1 to 2 for refitting new label.

### 3.8.17 "H & E" SIDE MEDALLION

**NOTE**

Removal of this item is not suggested.

Installation: Peel off pressure sensitive packing and apply. Location is 4" ahead of door opening and 2" up from crease in bottom of fender.

**NOTE**

For exact positioning, mark the medallion while on the car, remove, then replace with new medallion.

### 3.8.18 FRONT STABILIZER BARS

#### Remove and refit

##### Removal

1. Remove lower grille by removing two (2) Phillips head screws.
2. Remove one (1) bolt and hardware securing diagonal stabilizer bar.
3. Remove two (2) bolts and hardware securing horizontal stabilizer bar.
4. Remove bars.

##### NOTE

Retain clips for lower grille installation.

##### Refitting

5. To refit stabilizer bars reverse operations 1 to 4.

### 3.8.19 COUNTER WEIGHT REMOVAL

#### Remove and refit

##### Removal

1. Remove headlight trim ring by removing three (3) screws. Raise hood for removal of one (1) screw.
2. Remove headlight brackets by removing six (6) screws.

#### NOTE

Do not remove headlights from bracket assembly.

3. Unplug wiring harness.
4. Remove inspection cover by releasing clips and screws.
5. Remove two (2) nuts and washers.
6. Remove counter balance from headlight cavity.

##### Remitting

7. For refitting counter balance weight reverse operations 1 to 6.

### 3.9 ELECTRICAL/HYDRAULIC GROUP (REMOVE AND REFIT)

#### Kit Motor/Pump And top Cylinder With By-Pass Valve

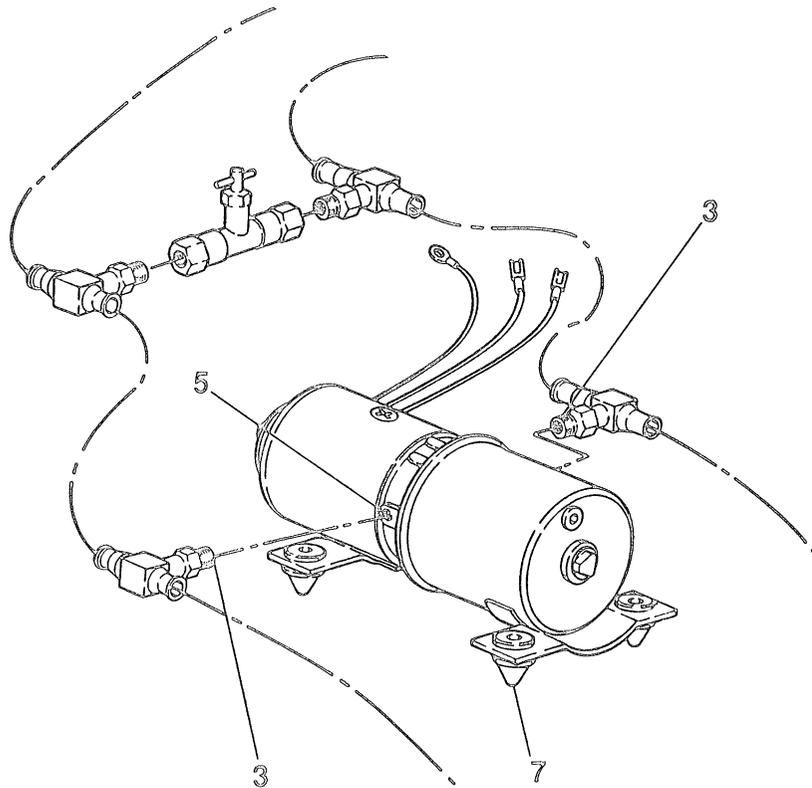
Motor/Pump	3.9.1
Top Cylinder	3.9.1-A
By-Pas Valve	3.9.1-B
High Mount Stop Light Lamp Assembly	3.9.2
Quarter Window Switch	3.9.3
Convertible Top Control Switch	3.9.4
Wiring Harness (Main)	3.9.5
Low Fuel Board	3.9.6
Relay	3.9.7

### 3.9.1 MOTOR/PUMP AND TOP CYLINDER WITH BY-PASS VALVE

Remove and refit

Removing (Motor/pump)

1. Open trunk and locate left wheelhouse trim cover.
2. Remove trim cover.
3. Disconnect hose assembly from front and rear sides of motor/pump unit.
4. Cap each hose assembly end connection.
5. Cover connections at motor/pump unit, front and rear.
6. Disconnect battery and the wiring connections ground-top "up"- top "down" from motor/pump unit.
7. Remove motor/pump assembly from mounting bracket.



Refitting (Motor/Pump)

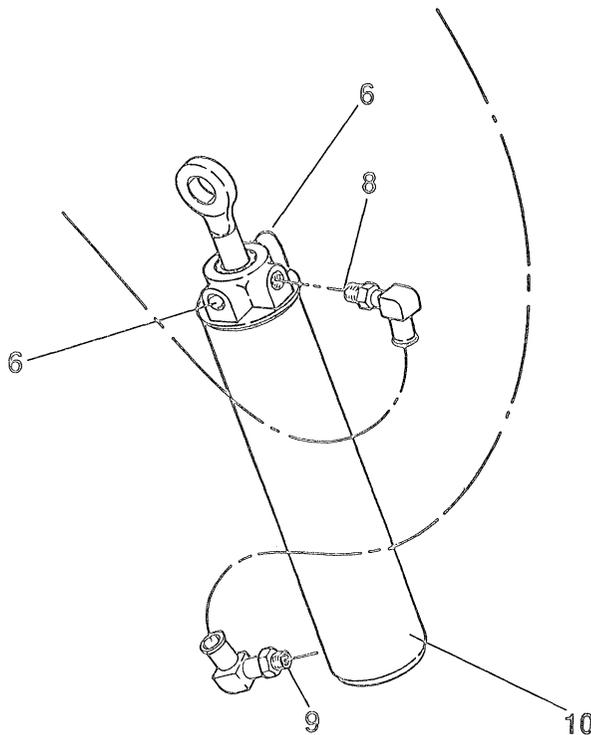
8. To refit new motor/pump assembly reverse operations 1 to 7.

### 3.9.1-A MOTOR/PUMP AND TOP CYLINDER WITH BY-PASS VALVE

Remove and refit

Removal (Top Cylinder)

1. Lower top.
2. Disconnect battery, negative first.
3. Remove luggage rack, see 3.6.17.
4. Remove rear carpet, see 3.6.18.
5. Remove trim panel, see 3.6.3.
6. Remove two (2) nut/washers from top cylinder mounting bracket.
7. Remove top cylinder from lower quarter area.
8. Disconnect top cylinder top fitting and label for refitting.
9. Disconnect top cylinder bottom fitting and mark for refitting.
10. Remove cylinder.



Refitting

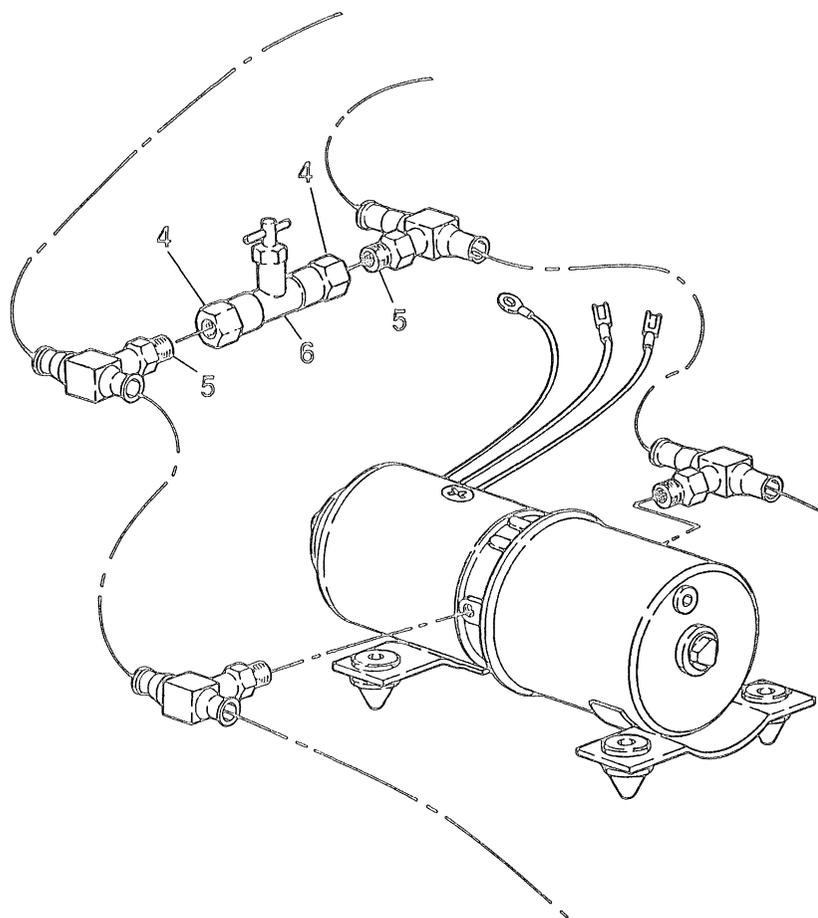
11. To refit new cylinder reverse operations 1 to 10.

### 3.9.1-B MOTOR/PUMP AND TOP CYLINDER WITH BY-PASS VALVE

Remove and refit

Remove (By-pass valve)

1. Open trunk and locate wheelhouse trim cover, left side.
2. Remove trim cover.
3. Disconnect battery, negative first
4. Disconnect by-pass valve connections from the two (2) hose assemblies connections.
5. Cap each hose assembly end connections.
6. Remove by-pass valve assembly.



Refitting (by-pass valve assembly)

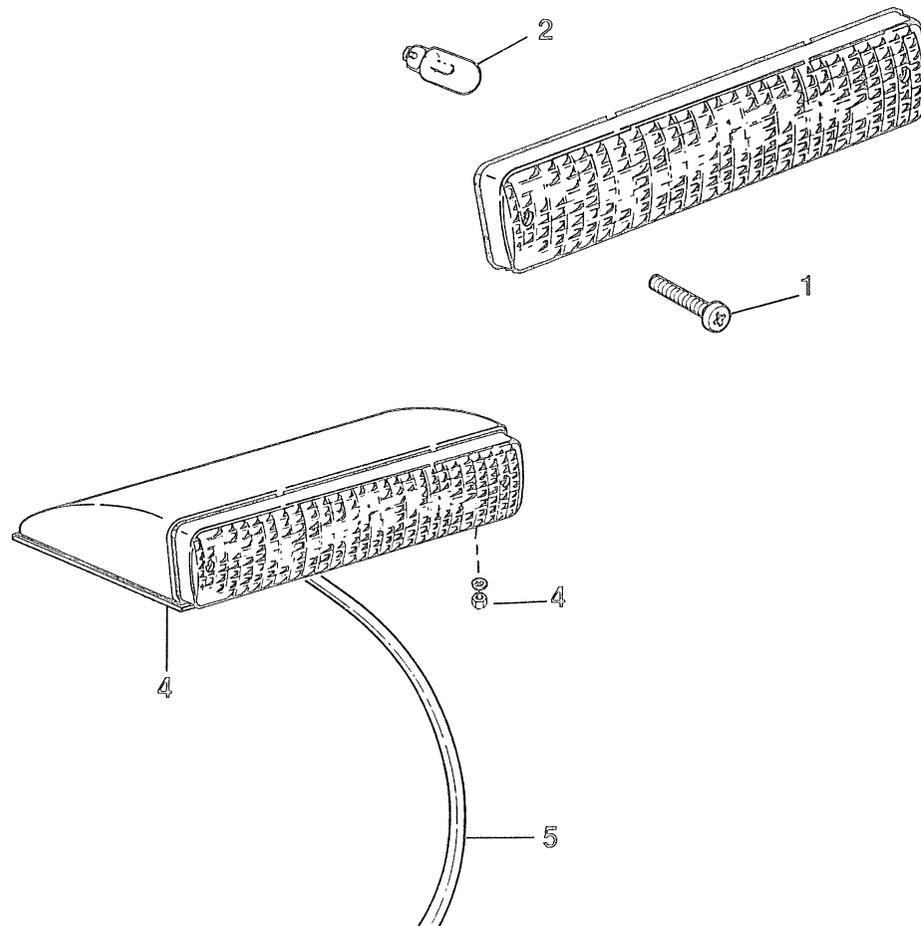
8. To refit new by-pass valve assembly reverse operations 1 - 6.

### 3.9.2 HIGH MOUNT STOP LIGHT LAMP

#### Remove and refit

#### Remove

1. Remove two (2) screws securing the lens to the high mount stop light assembly.
2. Unplug each of the four (4) lights in the high mount stop light and check bulbs.
3. Replace defective bulb.
4. For further removal, open trunk and remove two (2) nuts and washers securing high mount stop lamp to trunk.
5. Remove wire connection from wire harness.



#### Refitting

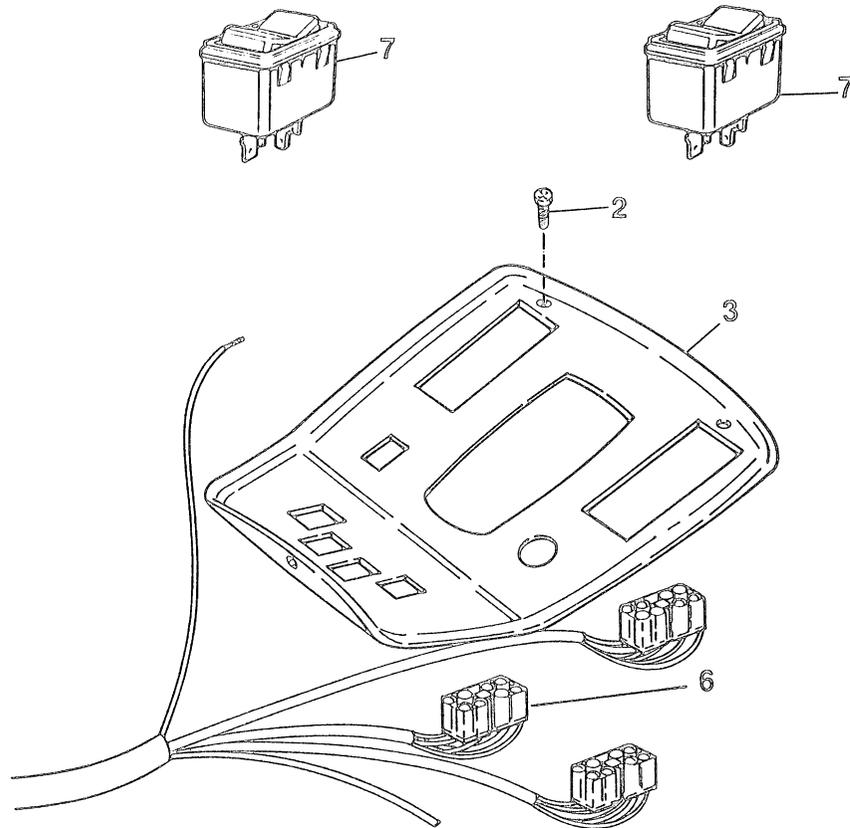
6. To install new high mount stop light lamp assembly reverse operations 1 to 5.

### 3.9.3 QUARTER WINDOW SWITCH

#### Remove and refit

#### Remove

1. Unscrew left and right hand sections of selector lever handle.
2. Remove screws securing console finisher panel to console.
3. Raise panel from console.



4. Disconnect electrical leads from cigar lighter.
5. Ensuring leads to window switches and top switches are not detached lift panel over selector lever, lay panel to one side.
6. Disconnect leads from window switch.
7. Remove window switch from panel.

#### Refitting

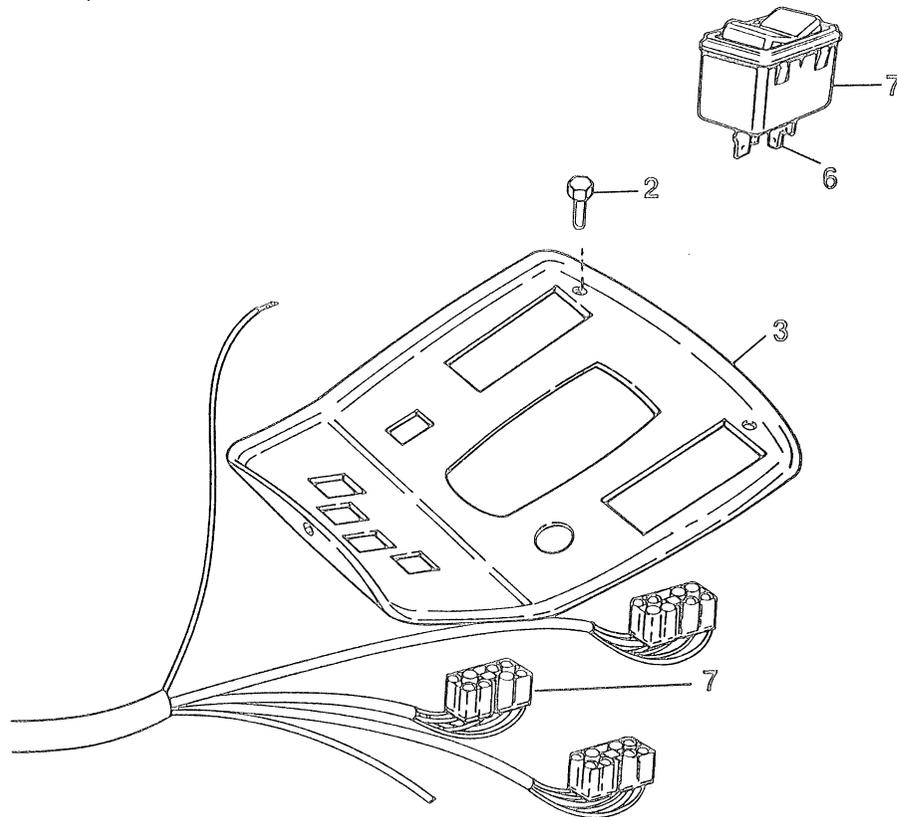
8. To refit new window switches reverse operations 1 - 7.

### 3.9.4 CONVERTIBLE TOP CONTROL SWITCH

Remove and refit

Remove

1. Unscrew left and right hand sections of selector lever handle.
2. Remove screws securing console finisher panel to console.
3. Raise panel from console.



4. Disconnect electrical leads from cigar lighter.
5. Ensuring leads to window switches and top switches are not detached lift panel over selector lever, lay panel to one side.
6. Disconnect leads from top control switch.
7. Remove top control switch from panel.

Refitting

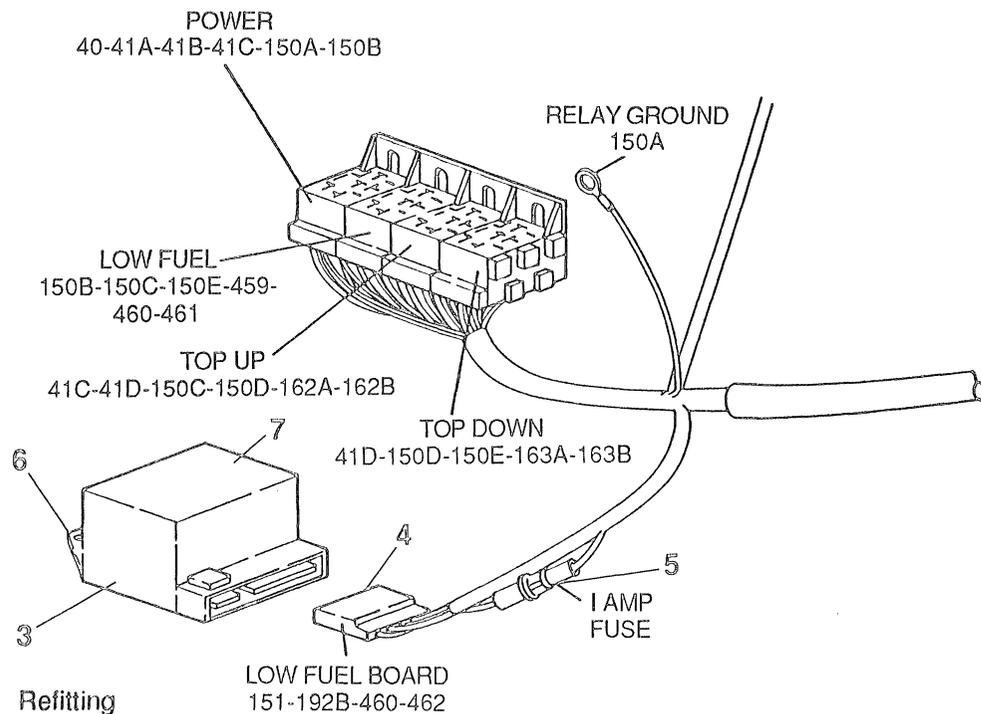
8. To refit new top control switch reverse operations 1 - 7.

### 3.9.6 LOW FUEL BOARD

Remove and refit

Remove

1. Open trunk to locate one (1) low fuel board.
2. Remove trim cover at left wheelhouse.
3. Locate low fuel board mounted to left wheelhouse.
4. Unplug wire connector from low fuel board.
5. Check 1 amp fuse.
6. Remove one (1) screw securing low fuel board to mounting.
7. Remove low fuel board.



Refitting

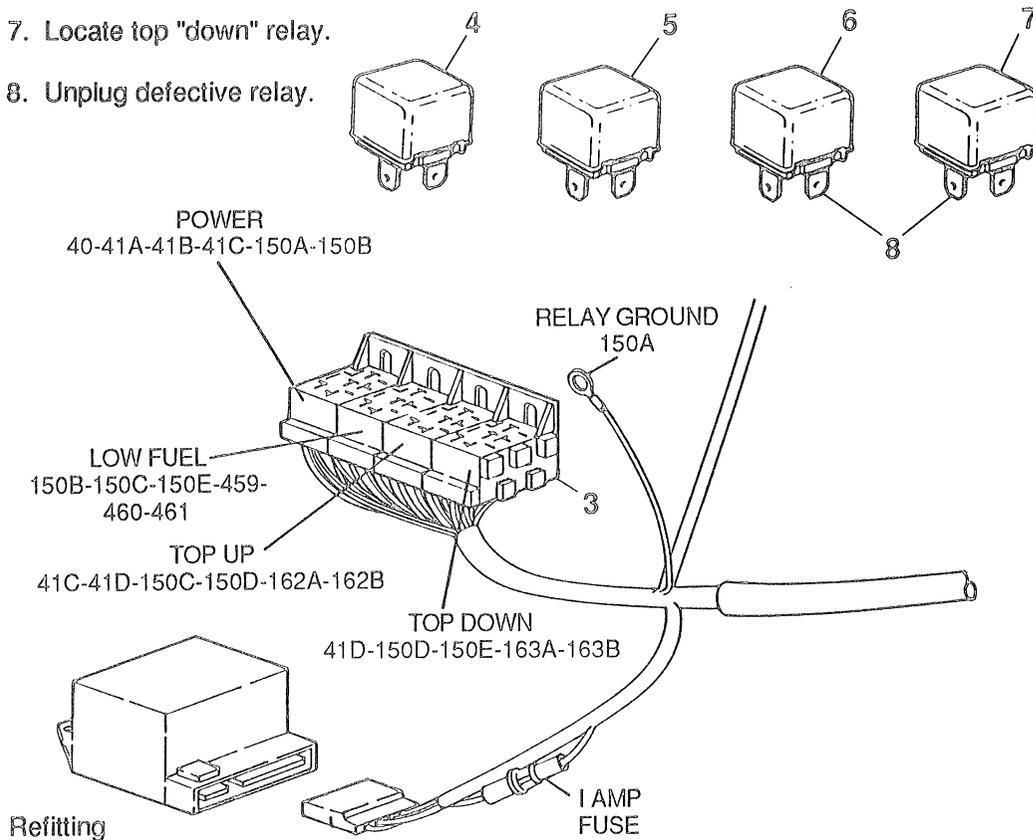
8. Replace 1 amp fuse if required.
9. To refit new low fuel board reverse operations 1 to 7.

### 3.9.7 RELAY - (POWER-LOW FUEL-TOP "UP"-TOP "DOWN")

Remove and refit

Remove

1. Open trunk to locate four (4) relays.
2. Remove trim cover at left wheelhouse.
3. Locate relays mounted to wheelhouse.
4. Locate power relay.
5. Locate low fuel relay.
6. Locate top "up" relay.
7. Locate top "down" relay.
8. Unplug defective relay.



9. To refit new relay reverse operations 1 to 8.

### 3.10 CONVERTIBLE TOP ASSEMBLY GROUP (REMOVE AND REFIT)

Convertible Top Assembly (Painted)	3.10.1
Lock Assembly	3.10.2
Trim Stick Assembly	3.10.3
Curtain Assembly (With Window)	3.10.4
Top Fabric Assembly	3.10.5
Cable Assembly	3.10.6
Weatherstripping Assemblies	3.10.7
Bows	3.10.8
Header	3.10.9

### 3.10.1 CONVERTIBLE TOP ASSEMBLY (PAINTED)

Remove and refit

Removing:

1. Remove chrome luggage rack nine (9) Phillips screws.
2. Note: Do not remove carpeting. It is held down by velcro and can be simply peeled back.
3. Remove the eleven (11) screws holding in the fiberglass trim panel.
4. Remove top and bottom bolts one (1) each both left and right sides securing seat belt stations.
5. Move trim panel forward.
6. Unplug radio speakers and courtesy lights.
7. Remove trim panel.
8. Peel up boot well fabric to access wires for rear window/heater: Plug on hot side: Screw on ground.
9. Disconnect hydraulic system from top frame.
10. Note: The securing bolt must be replaced exactly as it is removed. Nut side towards the interior of car. Preserve the white neoprene bushing securing the top loop of the hydraulic piston shaft.
11. Remove the five (5) bolts holding each side to body: The three (3) 9/16" bolts on the main pivot and the two (2) 1/2" bolts in the trim stick area.
12. Note: It is important to protect the chrome moulding and rear paint. To assure this, tape the moulding and cover the rear of the vehicle with suitable cover.
13. Removal of top assembly requires assistance from several persons.

Refitting

14. To reassemble convertible top reverse operations 1 to 13.

### 3.10.2 LOCK ASSEMBLY

Remove and refit

Removing

**NOTE**

This lock assembly has two (2) parts:

- A. The striker plate assembly on the windshield header.
  - B. Latch hook assembly on the convertible top assembly
- A. Striker Plate:
- 1. Remove the two (2) #2 Phillips head 3/4" oval head screws both left side and right side.
- B. Securing Hook
- 1. Remove the six (6) Allen head screws, two (2) on top side and four (4) on bottom side, both right side and left side.
  - 2. When refitting the latch hook be sure it is properly adjusted to correct direction and depth before tightening the Allen locking screw.

**NOTE:**

There is no need to trim the clear plastic anti-rattle collar as this will move into correct position as the securing hook is adjusted.

### 3.10.3 TRIM STICK ASSEMBLY

**NOTE**

For removal and refitting refer to convertible top assembly (painted) for procedures, see 3.10.1.

### 3.10.4 CURTAIN ASSEMBLY (WITH WINDOW)

Remove and refit

Removing

1. Remove weatherstripping and retainer on folding pillar.
2. Uncement trim and remove.
3. Remove trim stick bolts (1/2")
4. There is no need to remove trim panel, however you must protect the leather trim and painted surfaces with tape and appropriate coverings.
5. Remove staples from top.
6. Unzip window portion.
7. Peel top fabric forward to access staples securing window in place.
8. Remove exposed staples.
9. Disconnect two (2) heated rear window wires
10. Remove curtain assembly with glass.

*Operation  
# 3-10-4*

*4-5 hours*

Refitting

11. Old curtain assembly must be used as template pattern for marking location of staples for new assembly.
12. Mark center line on window using as guides: center mark on trim stick and center of top bow.
13. Staple top and bottom.
14. Install curtain assembly.

15. Staple top to trim stick.
16. Reconnect two (2) heated rear window wires.
17. Install trim stick assembly and tighten both bolts.
18. Cement top into folding pillar.
19. Reinstall all retainers and weatherstrippings.

### 3.10.5 TOP FABRIC ASSEMBLY

#### Remove and refit

Notes: 1. Keep existing top for use as template measurement.

2. Check distance of last bow. It must be exactly 10 3/8" from middle bow. Lock and secure into place.

3. Insulating pads should be changed one at a time.

1. While the existing fabric is still on the car, establish existing staple line and mark with chalk. For bottom, establish margin line and mark with chalk.
2. Remove existing fabric.
3. Removal of top insulating pads is to be one (1) pad at a time.
4. Remove all staples in back.
5. Peel pad forward to expose underside.
6. Drill out the four (4) rivets.
7. Remove metal retainer from sleeve in old pads.

#### Refitting

8. Insert metal retainers in sleeves in new pads.
9. Drill four (4) new holes 1/8" for rivets.
10. Rivet to front assembly. Note: Use only 1/8" x 3/8" rivets.
11. Hold critical dimension of 10 3/8" between last two bows as rear bow is a non-stationary bow.
12. Open up assembly and unfold pads. Cement in natural white cotton wadding making sure the cotton is cut short of final rear bow to assure proper fitment.
13. Staple padding to bows.
14. Install curtain (and boot well if necessary).
15. Use staple marking from existing top fabric for template.
16. Zip curtain into place.
17. Tack securely into trim stick.

18. Secure trimstick to vehicle.
19. Pull fabric forward and cement into header.
20. Staple to plastic tack strip.
21. Attach wind cord and staple and cement.
22. Glue and attach folding pillar trim.
23. Replace weatherstripping retainers and weatherstripping.
24. Reinsert metal securing strips into fabric pockets for bows 1 and 2 and screw securely.

### 3.10.6 CABLE ASSEMBLY

Remove and refit

Removal:

Note: Top must be in 1/2 down position.

1. Free cable at keyplate end.
2. Pull cable from tension spring end to complete removal.

Keyplate type only

Refitting

3. Slide ball of cable end thru key towards interior of car to secure.
4. Slide end of cable thru fabric cable pocket.
5. Weave end of cable thru top, outermost hole at rear convertible top frame.
6. Slide red anchoring sleeve onto cable end.
7. Insert straight end of tension spring thru red sleeve.
8. Pull cable thru spring exposing 5/8" to 3/4" of extra cable at end.
9. Using #3 hole on crimping tool, crimp sleeve to secure cable and spring.
10. Hook circular end of spring over pillar hook.
11. Fasten down hook to secure tension.

### 3.10.7 WEATHER STRIPPING ASSEMBLIES

FOR HEADER: (Includes weatherstripping for header and front windows).

Installation:

1. Glue wind lace fabric onto header.
2. With cylinder-shaped bolting towards front, insure a proper seal across top of windshield.
3. Staple underneath.
4. Install metal, pre-drilled header weather strip retainer into place.
5. Install the two (2) front weather stripping retainers into place.
6. Feed weatherstripping into position on header and two (2) side positions.

FOR PILLAR INSTALLATION:

1. Install retainer.
2. Feed weatherstripping into place.

FOR REAR RAIL INSTALLATION:

1. Install retainer.
2. Feed weatherstripping into place.

Removal: Reverse procedure.

Note: Center screw in retainer for best alignment. Make sure weatherstripings meet properly to insure a proper seal.

### 3.10.8 INDIVIDUAL BOW

Remove and refit

Refitting

1. Drill four (4) 1/8" holes in bow using the pre-drilled flat bow slide as a guide.
2. Trim the new bow in matching fabric.
3. Put the bow in position and fasten the door (4) Phillips screw two (2) on each side.
4. Secure the insulating pad to the new bow.

Removing

5. Unscrew the four (4) securing screws which hold the flat bow slat.
6. Remove the four (4) 1/4" Phillips screws from sides (two (2) on each side.)
7. Remove the staples holding the pad in place.
8. Remove the damaged bow.

### 3.10.8 INDIVIDUAL BOW

#### Installation:

1. Drill four 1/8" holes in bow using the pre-drilled flat bow slide as a guide.
2. Trim the new bow in matching fabric.
3. Put the bow in position and fasten the four (4) Phillips screws (two (2) on each side).
4. Secure the insulating pad to the new bow.

#### Removal:

1. Unscrew the four (4) securing screws which hold the flat bow slat.
2. Remove the four (4) 1/4" Phillips screws from sides (two (2) on each side).
3. Remove the staples holding the pad in place.
4. Remove the damaged bow.

### 3.10.9 HEADER

Remove and refit

Removal

1. Screw the two (2) inboard and two (2) outboard Phillips head screws.
2. Glue top into position.
3. Screw in weatherstripping retainer.
4. Insert weatherstripping.
5. Attach wind lace and all fabric trim.

**NOTE**

You may have to replace the wind lace. Be sure to check the condition of all weatherstripping before reusing.

Refitting

6. To refit header reverse operations 1 to 5.



JAGUAR

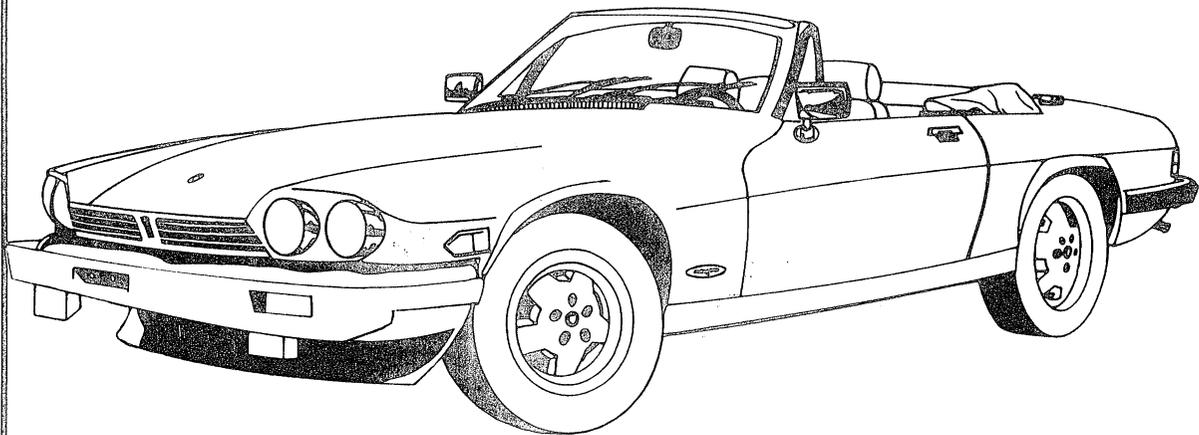
XJ-S

CONVERTIBLE



HESS & EISENHARDT

*Coachbuilders · Est. 1876*



**Repair Operation Time Index**

# JAGUAR XJ-S CONVERTIBLE REPAIR OPERATIONS TIME INDEX

## INTRODUCTION

The purpose of this index is to provide repair times for repairs categorized in the Jaguar XJ-S Convertible Repair Operation Manual. When a skilled mechanic uses the appropriate service tools and carries out the procedures detailed in the Repair Operations Manual, the repair time will be within the time stated in this index.

## TIMES

All operation times are in decimal hours.

## OPERATION NUMBERING

The indexing and numbering of repair operations listed in this index are exclusive for coachwork additions made by Hess & Eisenhardt. When submitting warranty claims to Hess & Eisenhardt, care must be taken to use the repair operation index codes and times listed in this manual. Do not identify repairs utilizing Jaguar Cars, Inc.'s repair operation codes or times.

Each operation number listed in this index can be cross-referenced to the Repair Operations Manual. Each operation has been assigned a numerical code such as 3.9.1. The three parts of the code respectively identify the following:

- Repair Operation Manual's Section Number
- The Component Groups
- The specific operation

Both the Repair Operation Manual and the Repair Operation Time Index are laid out in numerical sequence allowing for quick reference between manuals.

## USING THE INDEX

The index is arranged by the component group that makes up the coachwork by Hess & Eisenhardt, as follows:

- 3.3 Door Assembly Group
- 3.4 Quarter Glass Group
- 3.5 Front Compartment Group
- 3.6 Rear Compartment Group
- 3.7 Trunk Group
- 3.8 Body/Windshield Group
- 3.9 Electrical/Hydraulic Group
- 3.10 Convertible Top Assembly Group

Each repair within these groups is laid out in the following format:

Index No.	Description of Repair	Time In Hours
3.9.1	Motor/Pump (R & R)	.8

The code, description, and time used in the index should be used when completing a warranty claim for the repair. In the event a repair and time are not listed in the index, identify the repair with a brief description accompanied by a section and group number as well as the actual time of the repair. If an unlisted repair operation is a part of a listed operation, the repair time should not exceed the listed operation's time. The time listed for each operation is complete in itself unless otherwise stated.

The following have been allowed for in the operational times:

- (a) "Wrench time," including time taken to carry out intermediate operations such opening and closing the hood, fitting and removing fender covers, the use of jacks and lifts, draining and refilling units, and cleaning.
- (b) Time taken to drive the vehicle in and out of the parking area and to place the vehicle in position for repair.
- (c) Time taken for evaluation and receiving instructions concerning the operations.
- (d) Time taken to obtain appropriate parts from store.
- (e) Time taken to carry out associated clerical work.
- (f) Time taken for final test and quality checks.

No allowance has been included for inaccessibility through damage, adjustments, removing extras, special fitments, freeing seized parts, removing rusted or broken studs or bolts, or subsequent repairs after test. Straight time will be allowed where appropriate.

Allowances are made within the final time to change over ancillaries from the removed part or component and to fit them onto the new part or component.

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### 3.3 DOOR ASSEMBLY GROUP

HOURS

3.3.1	Door Glass Assembly	.3
3.3.2	Weatherstrip	.2
3.3.3	Door Window Stop	.3
3.3.4	Door Glass Stop Channel Assembly	1.0
3.3.5	Door Glass Channel Stop	.3
3.3.6	Guide Strip	.3

### 3.4 QUARTER GLASS GROUP

3.4.1	Folding Top Bracket Support Extension	2.5
3.4.2	Regulator Panel and Guide Plate Assembly	3.5
3.4.3	Quarter Window Regulator Panel Assembly	3.5
3.4.4	Quarter Window Regulator	3.5
3.4.5	Quarter Glass Assembly	3.8
3.4.6	Quarter Window Glass	3.8
3.4.7	Quarter Window Sash	3.8
3.4.8	Front Sash Channel Assembly	4.0
3.4.9	Front Sash Channel Sealing Strip	.5
3.4.10	Guide Plate to Regulator Panel Bracket	3.5
3.4.11	Regulator Panel to Lock Pillar Bracket	3.5
3.4.12	Quarter Window Front "Up-Stop"	1.5
3.4.13	Quarter Window Rear "Up-Stop"	.3

### 3.5 FRONT COMPARTMENT GROUP

3.5.1	Front Compartment Carpet Padding (Right and Left)	.3
3.5.2	Front Compartment Carpet Padding (Center)	.3
3.5.3	Front Compartment Carpet (Quarter, Right and Left)	.3
3.5.4	Front Compartment Carpet (Center)	.3
3.5.5	Console Face Panel	.3

### 3.6 REAR COMPARTMENT GROUP

3.6.1	Seat Belt Retractor Stand Assembly	2.0
3.6.2	Trim Panel Assembly, Rear	1.5
3.6.3	Rear Trim Panel	1.5
3.6.5	Courtesy Light Cover	.2
3.6.6	Center Trim Panel Trim Strip Assembly	.3
3.6.7	Seat Belt Trim Ring	.2
3.6.8	Cover Leather	6.0
3.6.9	Sealing Strip	.3
3.6.10	Courtesy Light	.3
3.6.11	Interior Lights Wiring Harness	2.0
3.6.12	Rear Speaker Assembly	.5
3.6.13	Convertible Top Cover Attachment	.5
3.6.15	Rear Compartment Carpet Assembly	1.5
3.6.16	Rear Compartment Wiring Cover	.8
3.6.17	Luggage Compartment Rail Assembly	.5

## HOURS

3.6.18	Rear Compartment Floor Assembly	3.5
3.6.19	Rear Floor Inspection Plate Assembly	.2
3.6.21	Warning Nameplate	.2

### 3.7 TRUNK GROUP - FUEL SYSTEM

3.7.1	Tank Assembly Upper Complete	6.0
3.7.6	Gauge and Send Unit Assembly - Upper Tank	.5
3.7.7	Tank Assembly - Lower	5.5
3.7.10	Gauge and Send Unit Assembly - Lower Tank Assembly	.5*
3.7.11	Submersible Pump and Bracket Assembly	.5
3.7.12	Submersible Fuel Pump	.5*
3.7.13	Submersible Pump Strainer	.5*
3.7.14	Fuel Hose	3.5
3.7.15	Submersible Pump Gasket Assembly	.5*
3.7.16	Hose - Fuel Tank Upper to Lower	3.0*
3.7.17	Vapor Separator	.3
3.7.18	Hose - Vapor Separator to Vent	.3
3.7.19	Cover - Fuel Tank Strap	1.5
3.7.20	Upper Fuel Tank Strap	.3
3.7.21	Fuel Tank Strap (Lower)	5.0
3.7.22	Strap Assembly Pad	2.5
3.7.23	Fuel Tank Lower Pad	5.0
3.7.24	Insulation - Drive Shaft Tunnel	.5
3.7.25	Insulation - Lower Tank Area	5.5
3.3.27	Deck Lid Hinge Assembly	1.5

### 3.8 BODY/WINDSHIELD GROUP

3.8.1	Header Cap Moulding	1.0
3.8.2	Welt Assembly	.3
3.8.3	Top Lock Striker	.3
3.8.4	Top Belt Opening Moulding	3.5
3.8.5	Body Lock Pillar Weatherstripping	.2
3.8.6	Quarter Window Belt Moulding	.3
3.8.7	Quarter Belt Moulding Weatherstrip	.3
3.8.8	"A" Pillar Moulding Cap	.2
3.8.9	Windshield Garnish Upper Trim Assembly	1.5
3.8.10	Sunvisor	.2
3.8.11	Rear View Mirror	.2

\*Reference 3.7.11, use 3.5 hours when lower tank is full of fuel.

**HOURS**

3.8.12	Windshield Garnish Moulding Cap Assembly	1.0
3.8.13	Windshield Garnish Moulding Cover	1.0
3.8.14	Filler Cap Assembly	1.0
3.8.15	Label - Manufacturer's Alteration	.2
3.8.16	Label - Rear Seat Restriction	.2
3.8.17	"H & E" Size Medallion	.2
3.8.18	Front Stabilizer Bar	.8
3.8.19	Weight Counterbalance	1.0

**3.9 ELECTRICAL/HYDRAULIC GROUP**

## Kit Motor/Pump and Top Cylinder with Bypass Valve

3.9.1	Motor/Pump	.8
3.9.2	High-Mount Stop Light Lamp Assembly	.3
3.9.3	Quarter Window Switch	.3
3.9.4	Convertible Top Control Switch	.3
3.9.5	Wiring Harness (Main)	4.5
3.9.6	Low Fuel Board	.5
3.9.7	Relay	.3
3.9.8	Top Cylinder	2.0
3.9.9	Bypass Valve	.5

**3.10 CONVERTIBLE TOP ASSEMBLY GROUP**

3.10.1	Convertible Top Assembly (Painted)	4.5
3.10.2	Lock Assembly	.3
3.10.3	Trim Stick Assembly	3.0
3.10.4	Curtain Assembly (with Window)	4.5
3.10.5	Top Fabric Assembly	8.0
3.10.6	Cable Assembly	1.0
3.10.7	Weatherstripping Assemblies Less Adjustment	1.0
3.10.8	Bows No. 1 and 2 Only	1.5
3.10.9	Header	4.0
3.10.10	Bow No. 3	4.0

SECTION IV

Illustrated Parts List

## SECTION IV

### Illustrated Parts List

#### 4.1 INTRODUCTION

Section IV lists and illustrates assemblies of the Jaguar XJ-S Convertible by Hess & Eisenhardt which are divided into eight (8) component groups.

#### 4.2 USE OF PARTS LIST

A. The general view shown in Figure 4-1 references the major assemblies by line item to assist in locating the desired illustration and required part(s).

B. Turn to the specific figure illustration and cross reference the desired part number with the corresponding nomenclature.

#### 4.3 ORDERING PARTS

A. to order parts, have the following information available:

1. Your order number.
2. The serial number, model, year and mileage of the vehicle.
3. The specific part(s) needed as identified by the Section IV figure number, manual page, nomenclature, and corresponding Hess & Eisenhardt part number (s).

B. Call or send your order to:

The Hess & Eisenhardt Company  
8959 Blue Ash Road  
Cincinnati, Ohio 45242  
Telephone (513) 791-8888  
Cable Address: HESECO  
Telex: 21-4365  
Fax: (513) 791-4965  
Attn: Manager Parts & Service

#### 4.4 TERMS AND CONDITIONS

Hess & Eisenhardt Company's terms and conditions are as follows:  
Terms: Net

Warranty parts: Invoice will be sent to dealer and credit will be issued upon receipt of defective parts. Contact Hess & Eisenhardt to find out if parts should be returned.

Figure and Index Number	Description	Part Number	Qty. Per Asm
4-1	Jaguar XJ-S Convertible	NPN	REF
4-2	Door Hardware And Trim	NPN	REF
4-3	Quarter Glass Hardware And Trim	NPN	REF
4-4	Front Compartment Interior Hardware and Trim	NPN	REF
4-5	Rear Compartment Interior Hardware and Trim	NPN	REF
4-6	Trunk Hardware And Trim	NPN	REF
4-7	Body/Windshield Hardware And Trim	NPN	REF
4-8	Electrical/Hydraulics	NPN	REF
4-9	Convertible Top Hardware And Trim	NPN	REF

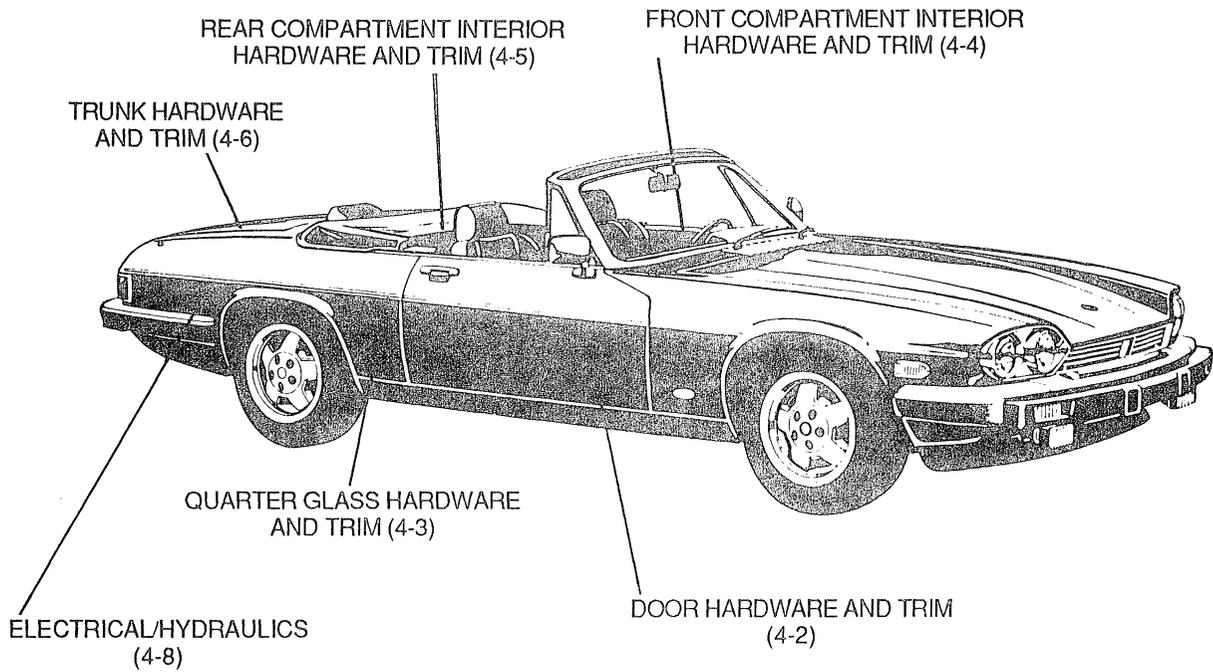
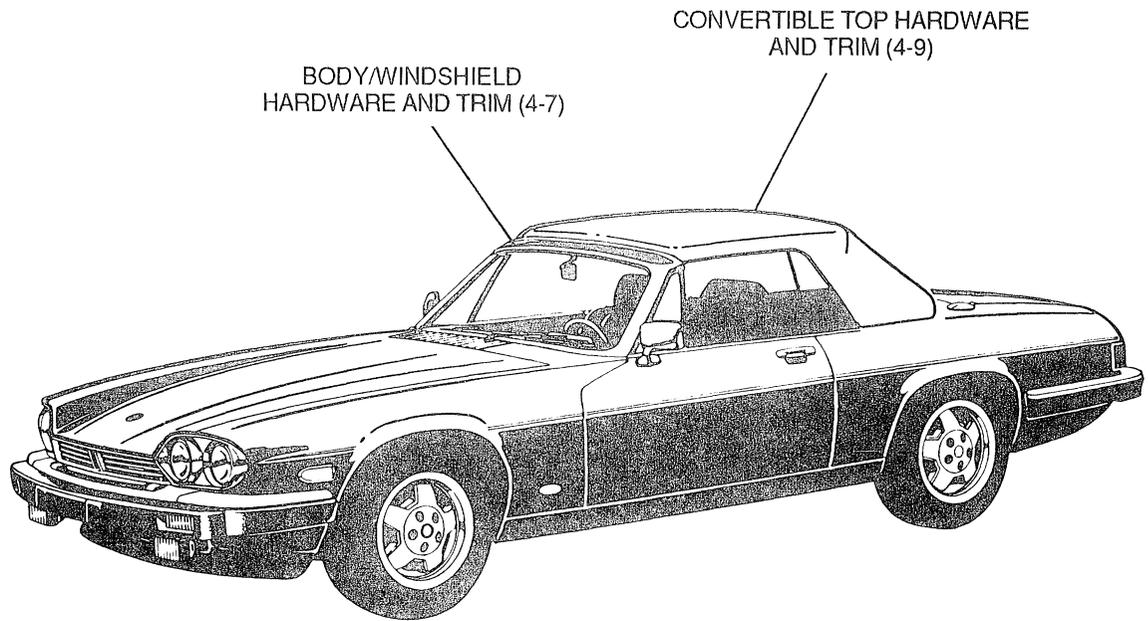


FIGURE 4-1 JAGUAR XJ-S CONVERTIBLE COMPONENT GROUPS

Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-2	Door hardware and trim	-----	200A	----
4-2-1	Window stop-door	470101	200A	2
4-2-2	Weather strip-front door lock pillar right	370690	200A	1
4-2-3	Weather strip-front door lock pillar left	370691	200A	1
4-2-4	Screw-weatherstrip - front door lock pillar	790253	200A	4
4-2-5	Glass-door asm right	450046	200A	1
4-2-6	Glass-door asm left	450047	200A	1
4-2-7	Channel asm-door glass stop	470100	200A	2
4-2-8	Stop-door glass channel	470098	200A	2
4-2-9	Guide strip asm	470105	200A	2
4-2-10	Screw-guide strip asm #8 X 1/2 bh p.k.	790537	200A	2

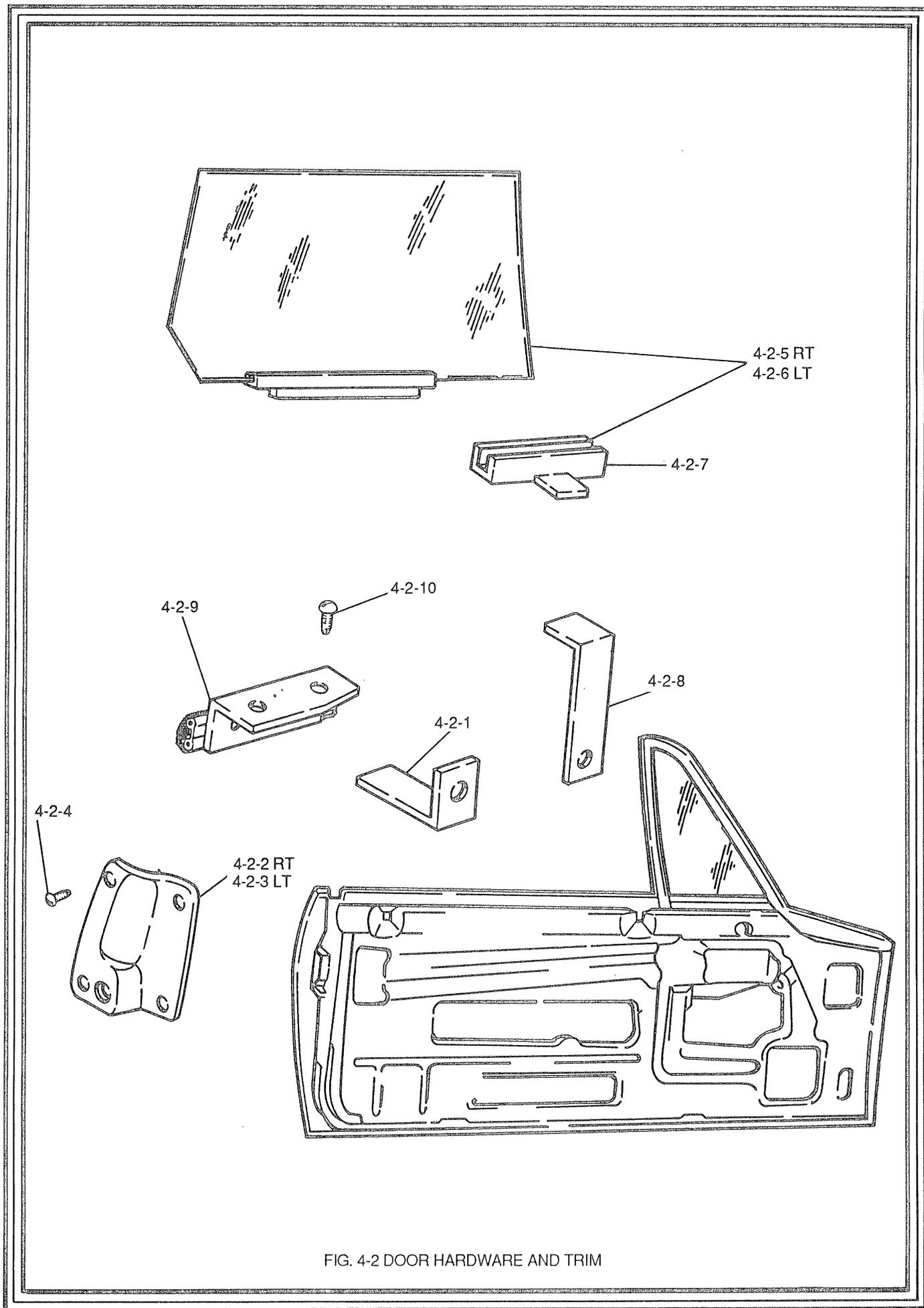


FIG. 4-2 DOOR HARDWARE AND TRIM

Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-3	Quarter glass hardware and trim	-----	200B	----
4-3-1	Extension folding top bracket support	560476	200B	1
4-3-2	Extension folding top bracket support	560477	200B	1
4-3-3	Regulator panel and guide plate assembly-right	560436	200B	1
4-3-4	Regulator panel and guide plate assembly-left	560437	200B	1
4-3-5	Panel assembly-quarter window regulator-right	560478	200B	1
4-3-6	Panel assembly-quarter window regulator-left	560479	200B	1
4-3-7	Regulator-quarter window-right	560460	200B	1
4-3-8	Regulator-quarter window-left	560461	200B	4
4-3-9	Rivet-regulator to regulator panel assembly	890014	200B	1
4-3-10	Glass assembly-quarter trim-right	560574	200B	1
4-3-11	Glass assembly-quarter trim-left	560575	200B	1
4-3-12	Glass-quarter window-right	560388	200B	1
4-3-13	Glass-quarter window-left	560389	200B	1
4-3-14	Sash assembly-quarter window-right	560398	200B	1
4-3-15	Sash assembly-quarter window-left	560399	200B	5
4-3-16	Filler-quarter window	560524	200B	4
4-3-17	Bolt-1/4"-20 X 3/4" hex hd	790531	200B	4
4-3-18	Washer-lock-1/4"	790532	200B	4
4-3-19	Bushing-quarter window sash assembly	400495	200B	4
4-3-20	Nut-quarter window sash assembly	400497	200B	1
4-3-21	Roller assembly-quarter window lower guide	560113	200B	1
4-3-22	Bushing-quarter window lower guide	400495	200B	1
4-3-23	Nut-quarter window lower guide	400497	200B	1
4-3-24	Channel assembly-front sash-right	650090	200B	1
4-3-25	Channel assembly-front sash-left	650091	200B	1
4-3-26	Sealing strip-front sash channel-right	650088	200B	1
4-3-27	Sealing strip-front sash channel-left	650089	200B	1

Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-3-28	Adhesive Sealer	690047	200B	A/R
4-3-29	Adhesive activator	690048	200B	A/R
4-3-30	Bracket-guide plate to regulator panel right	560602	200B	1
4-3-31	Bracket-guide plate to regulator panel left	560603	200B	1
4-3-32	Screw-truss hd 1/4" - 20 X 1/2"	790585	200B	4
4-3-33	Screw-flat hd1/4" - 20 X 3/8"	790550	200B	2
4-3-34	Bracket-regulator panel to lock pillar-right	560426	200B	1
4-3-35	Bracket-regulator panel to lock pillar-left	560427	200B	1
4-3-36	"Up-stop"-quarter window front	560522	200B	1
4-3-37	"Up-stop"-quarter window rear	560523	200B	1
4-3-38	Bolt'1/4" - 20 X 1/2"	560534	200B	10
4-3-39	Washer-star locking 1/4"	790532	200B	10
4-3-40	Washer-flat 1.4"	790526	200B	10
4-3-41	Nut-1/4" - 20	790533	200B	10
4-3-42	Bolt-1/4" - 20 X 3/4"	790531	200B	2

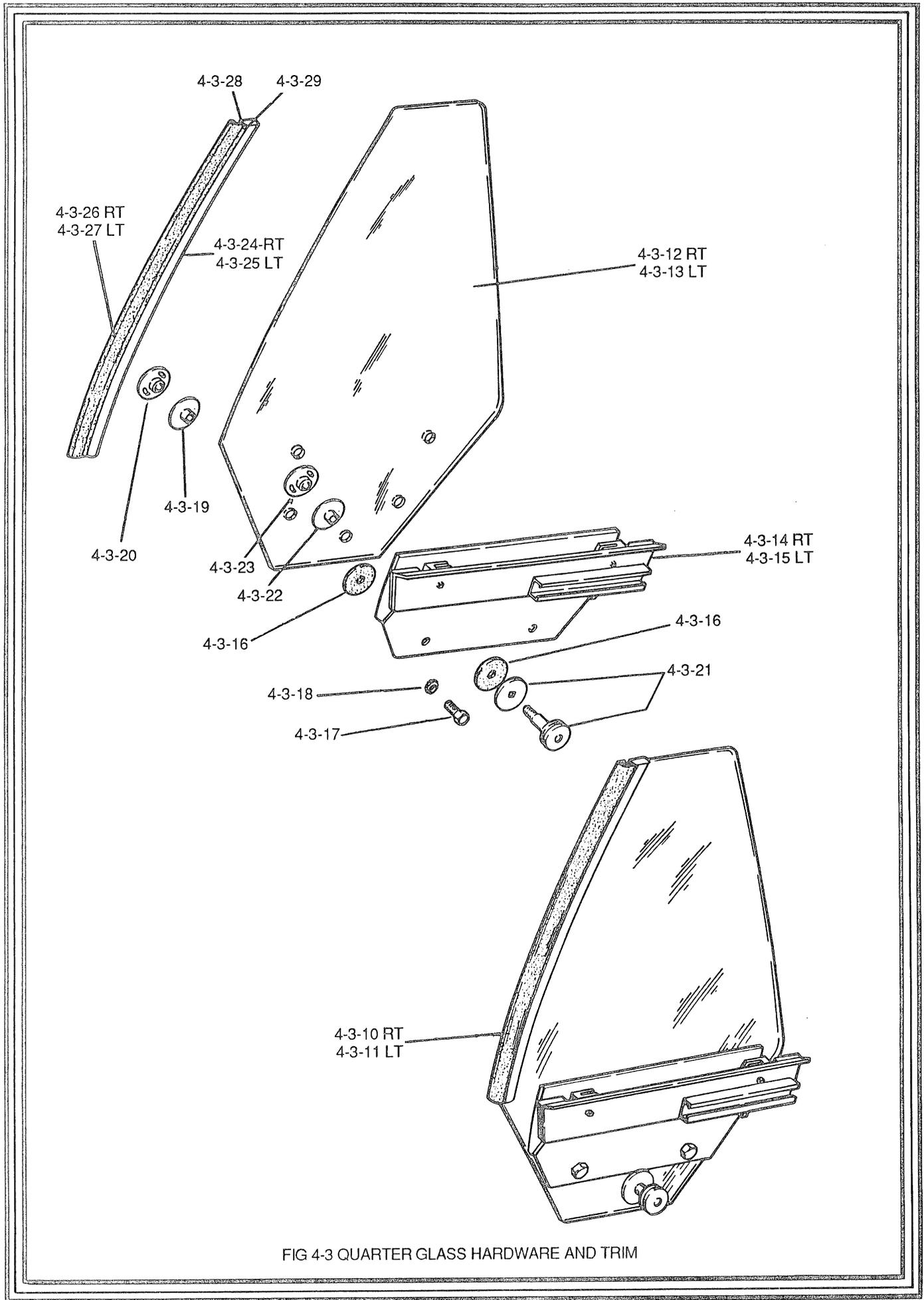


FIG 4-3 QUARTER GLASS HARDWARE AND TRIM

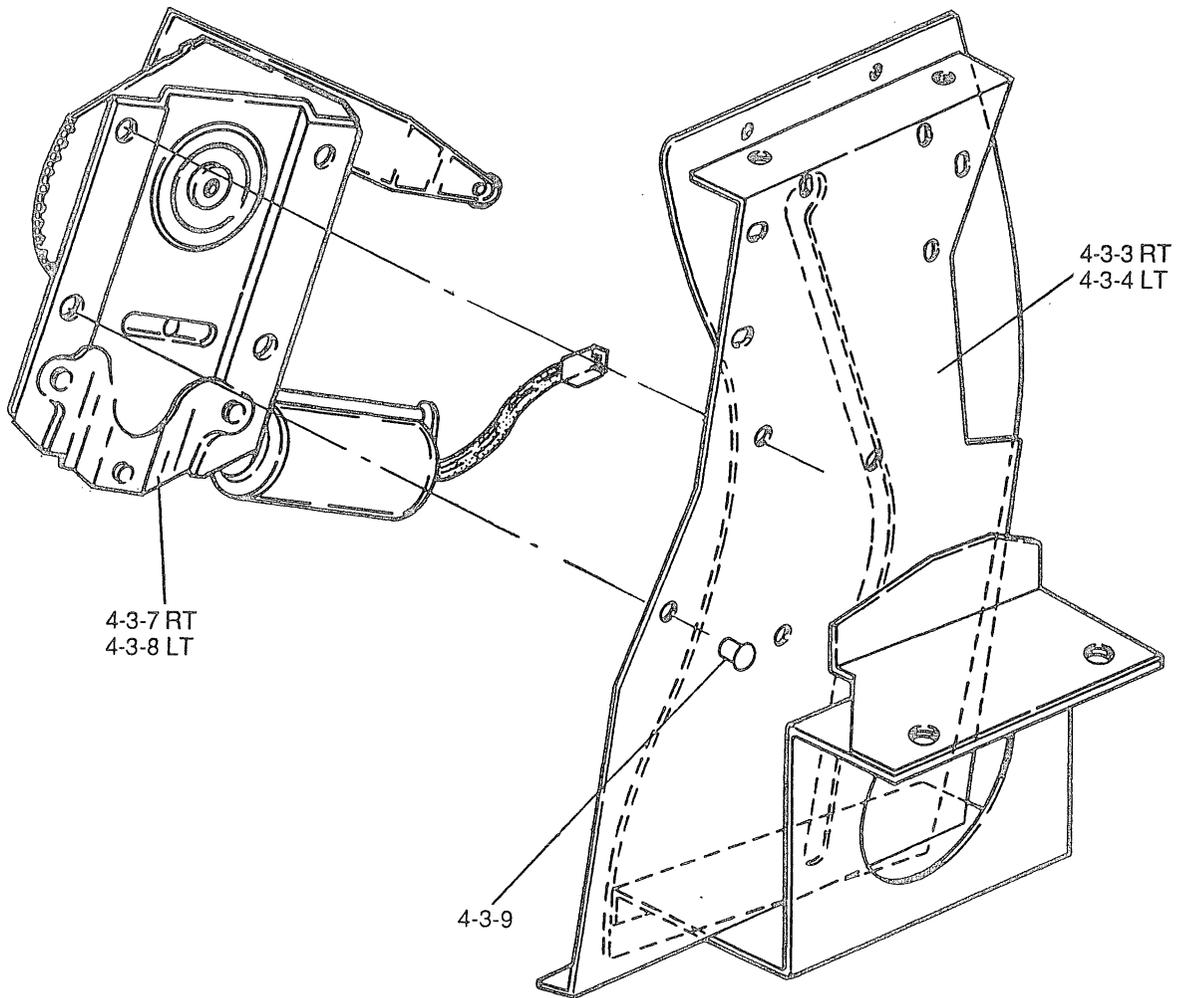


FIG 4-3 A QUARTER GLASS HARDWARE AND TRIM

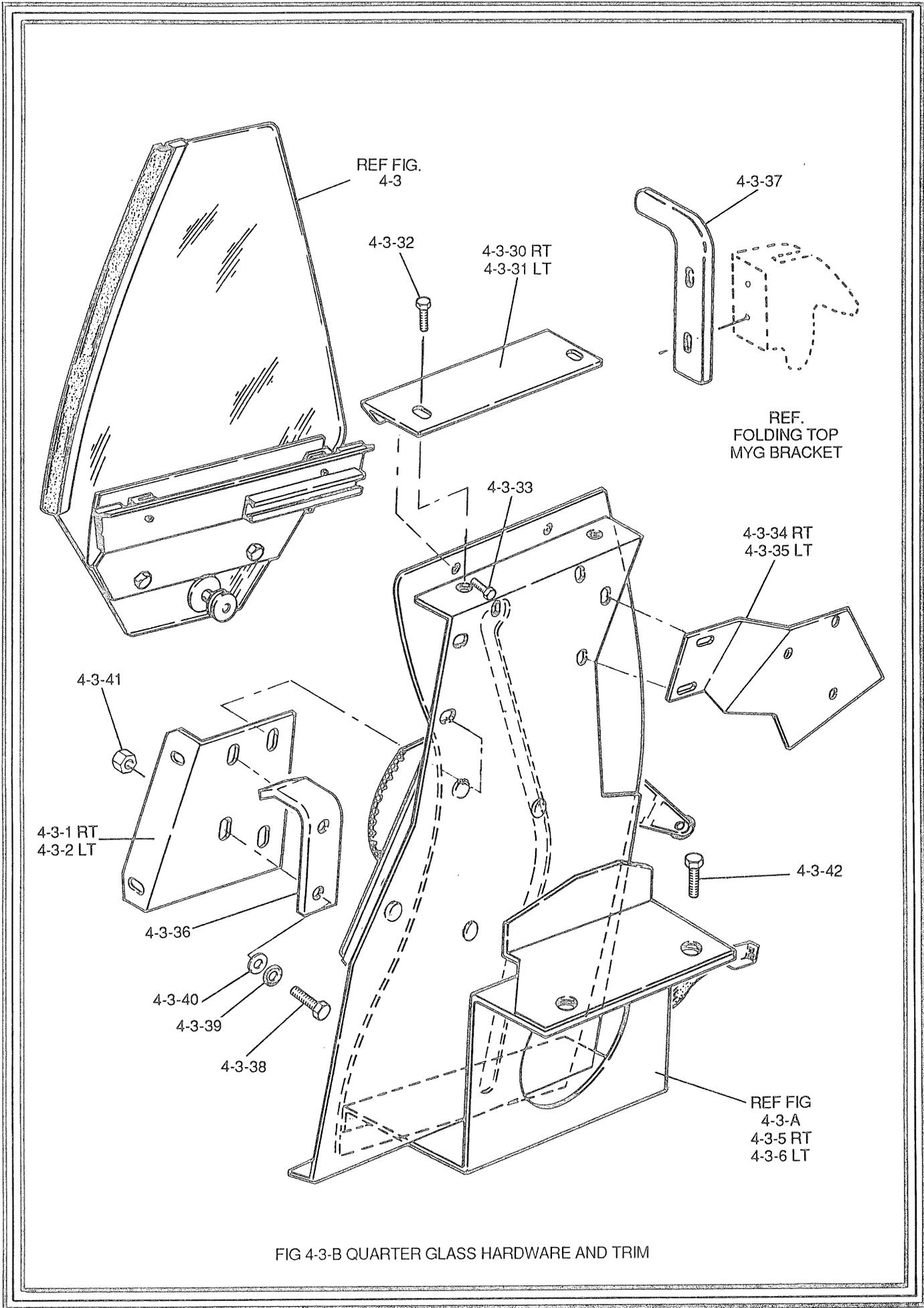


FIG 4-3-B QUARTER GLASS HARDWARE AND TRIM

Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-4	Front compartment interior hardware and trim	----	200C	----
4-4-1	Padding-carpet-front compartment-right	370734	200C	1
4-4-2	Padding-carpet-front compartment-left		200C	1
4-4-3	Padding-carpet-front compartment-center		200C	1
4-4-4	Carpet-front compartment quarter right			
	"Wine red"		200C	1
	"Slate"		200C	1
	"Gray"		200C	1
	"Rattan"		200C	1
	"Mink"		200C	1
4-4-5	Carpet-front compartment quarter-left			
	"Mink"		200C	1
	"Wine red"		200C	1
	"Slate"		200C	1
	"Grey"		200C	1
	"Rattan"		200C	1
4-4-6	Carpet-front compartment-center			
	"Wine red"		200C	1
	"Slate"		200C	1
	"Gray"		200C	1
	"Rattan"		200C	1
	"Mink"		200C	1
4-4-7	Face panel-console	560473	200C	1

■ — SHADED AREAS ARE JAGUAR PARTS (NOT MODIFIED)

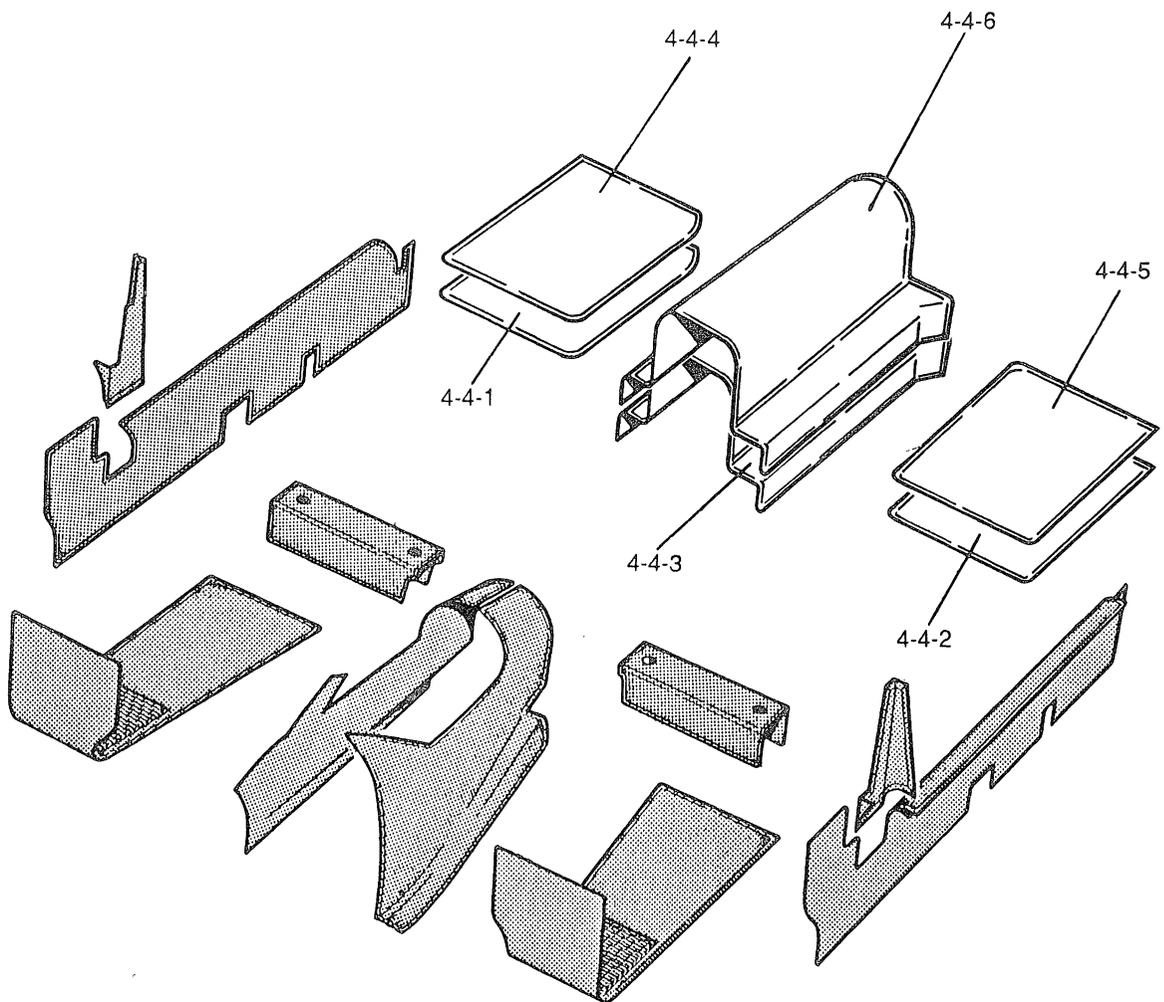


FIG. 4-4 FRONT COMPARTMENT INTERIOR HARDWARE AND TRIM

4-4-7

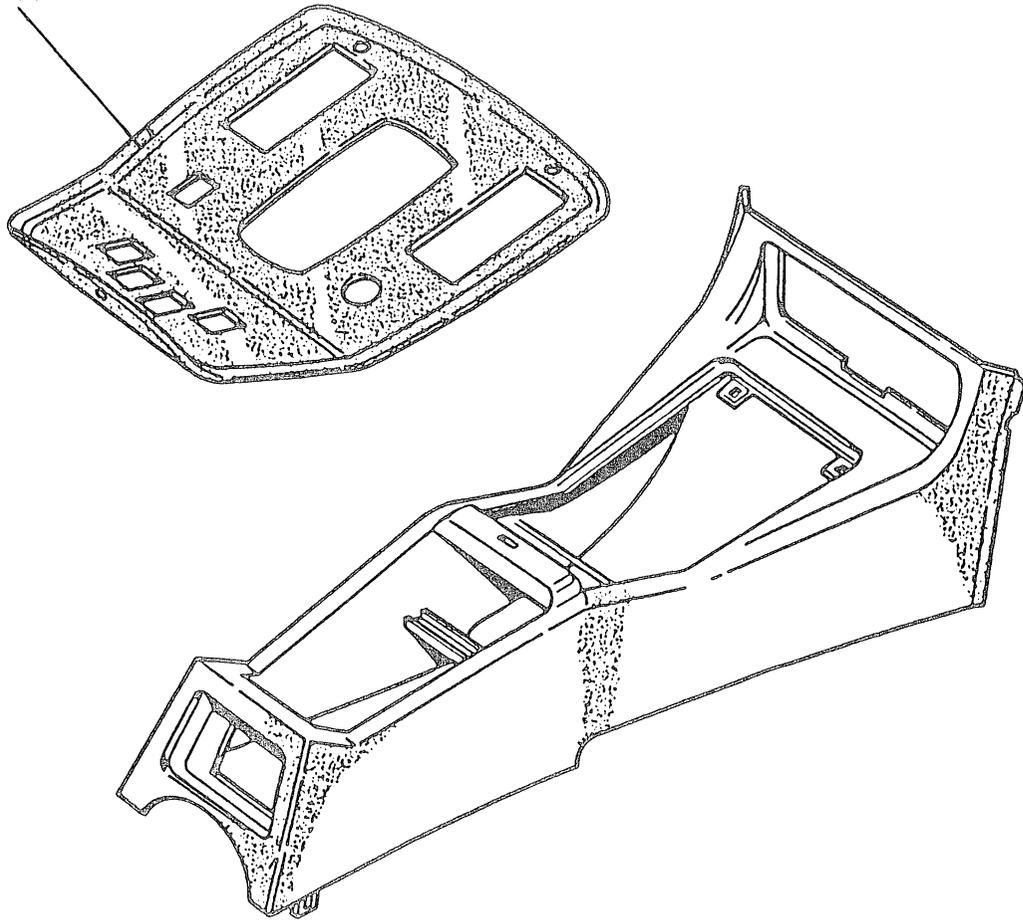


FIG. 4-4-A FRONT COMPARTMENT INTERIOR HARDWARE AND TRIM

Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-5	Rear compartment interior hardware and trim	----	200D	----
4-5-1	Stand assembly-seat belt retractor-right	560464	200D	1
4-5-2	Stand assembly-seat belt retractor-left	560465	200D	1
4-5-3	Screw hex hd 7/16-20 X 3/4" L G (Grade 5)	790639	200D	4
4-5-4	Trim Panel assembly rear			
	"Biscuit"	370737	200D	1
	"Black"	370801	200D	1
	"Buckskin"	370802	200D	1
	"Isis Blue"	370803	200D	1
	"Mulberry"	370804	200D	1
	"Savile"	370805	200D	1
4-5-5	Panel-rear trim	370798	200D	1
4-5-6	Courtesy light mounting plate	560598	200D	2
4-5-7	Courtesy light cover	560601	200D	2
4-5-8	Trim strip asm-center-trim panel			
	"Biscuit"	370809	200D	1
	"Black"	370818	200D	1
	"Buckskin"	370819	200D	1
	"Isis Blue"	370820	200D	1
	"Mulberry"	370821	200D	1
	"Savile"	370822	200D	1
4-5-9	Screw trim strip asm	790253	200D	3
4-5-10	Ring-seat belt trim	560542	200D	2
4-5-11	Padding-3/16 foam	370739	200D	1
4-5-12	Leather-cover			
	"Biscuit"	370740	200D	1
	"Black"	370719	200D	1

Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-5-12 CONT.	"Buckskin"	370720	200D	1
	"Isis Blue"	370721	200D	1
	"Mulberry"	370722	200D	1
	"Savile"	370723	200D	1
4-5-13	Sealing strip "Black"	370799	200D	2
4-5-14	Screw-#6 w/#4 HD X 1/2 P.K, flat head	790586	200D	26
4-5-15	Light-courtesy	560543	200D	2
4-5-16	Wiring harness-interior lights	560548	200D	2
4-5-17	Speaker assembly-rear	560544	200D	2
4-5-18	Speaker cover	560620	200D	2
4-5-19	Trim assembly-convertible top cover attach complete	370754	200D	1
4-5-20	Bag assembly-convertible top cover (boot)			
	"Black"	370758	200D	1
	"Buckskin"	370823	200D	1
	"Isis blue"	370824	200D	1
	"Mulberry"	370825	200D	1
	"Savile"	370826	200D	1
4-5-21	"Biscuit"	370827	200D	1
	Carpet assembly-rear compartment			
	"Mink"	370759	200D	1
	"Wine red"	370707	200D	1
	"Slate"	370708	200D	1
	"Gray"	370709	200D	1
4-5-22	"Rattan"	370310	200D	1
	Cover-rear compartment wiring	560492	200D	1
4-5-23	Screw-wiring harness cover #8 X 1/2 bh pk	790537	200D	10

Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-5-24	Rail assembly-luggage compartment	560546	200D	1
4-5-25	Rail-luggage compartment	560504	200D	1
4-5-26	Base	560507	200D	3
4-5-27	Screw-basse to rail-5/6-24 X 3/8 F.H.	790640	200D	3
4-5-28	Screw-rail assembly to floor 10-24 x 3/4 Q.H.	790592	200D	9
4-5-29	Floor assembly-rear compartment	560568	200D	1
4-5-30	Screw-Phillips truss head 5/16-18 x 1/2	790627	200D	12
4-5-31	Plate assembly-rear floor inspection	560565	200D	2
4-5-32	Screw-rr floor inspection 8-32 x 3/16 right head	790636	200D	2
4-5-33	Pinch welt 76.Omm lg	560607	200D	2
4-5-34	Pinch welt 85.Omm lg	560608	200D	2
4-5-35	Pinch welt 273.Omm lg	560609	200D	1
4-5-36	Pinch welt 191.Omm lg	560610	200D	1
4-5-37	Warning nameplate	370835	200D	1

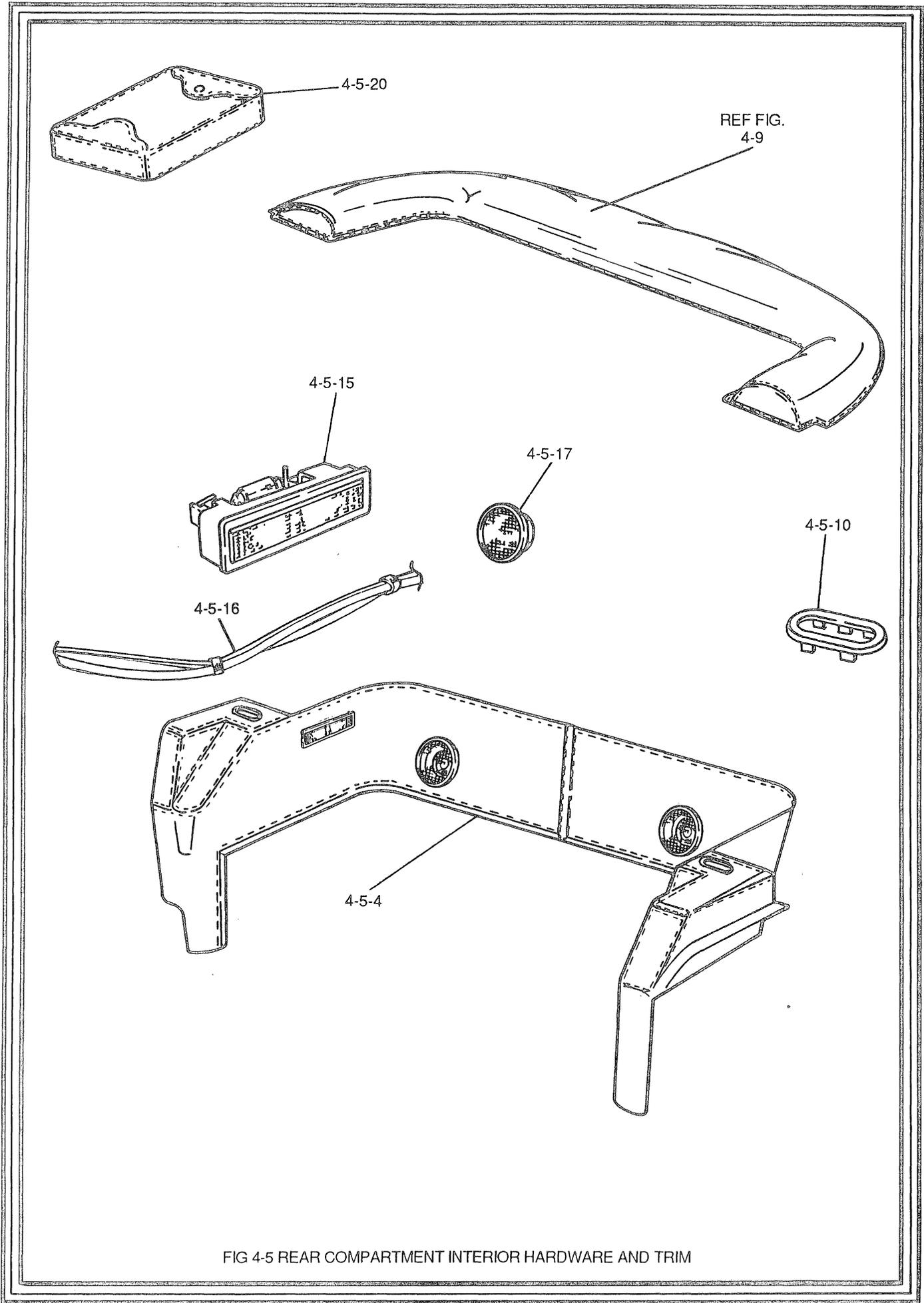


FIG 4-5 REAR COMPARTMENT INTERIOR HARDWARE AND TRIM

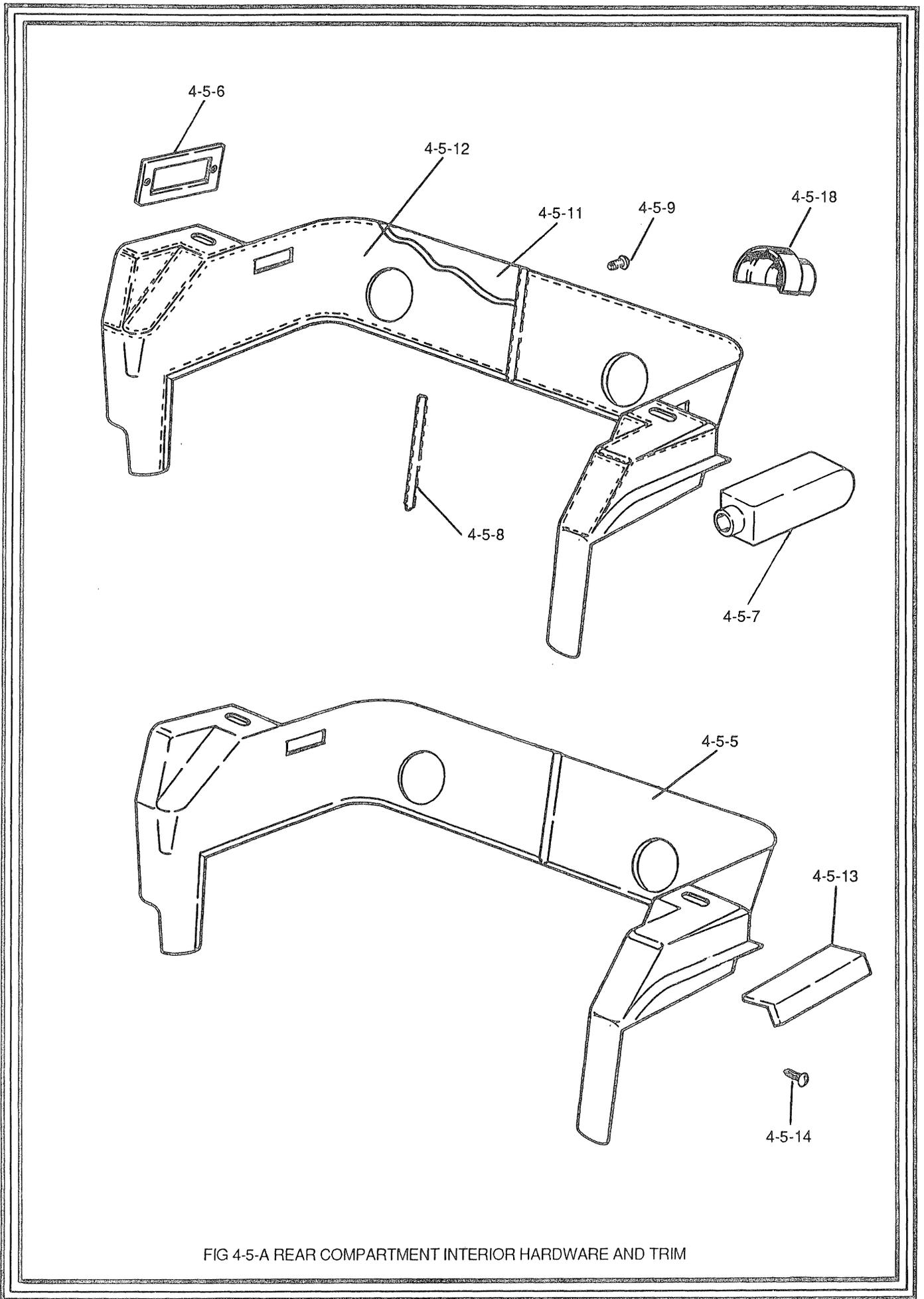


FIG 4-5-A REAR COMPARTMENT INTERIOR HARDWARE AND TRIM

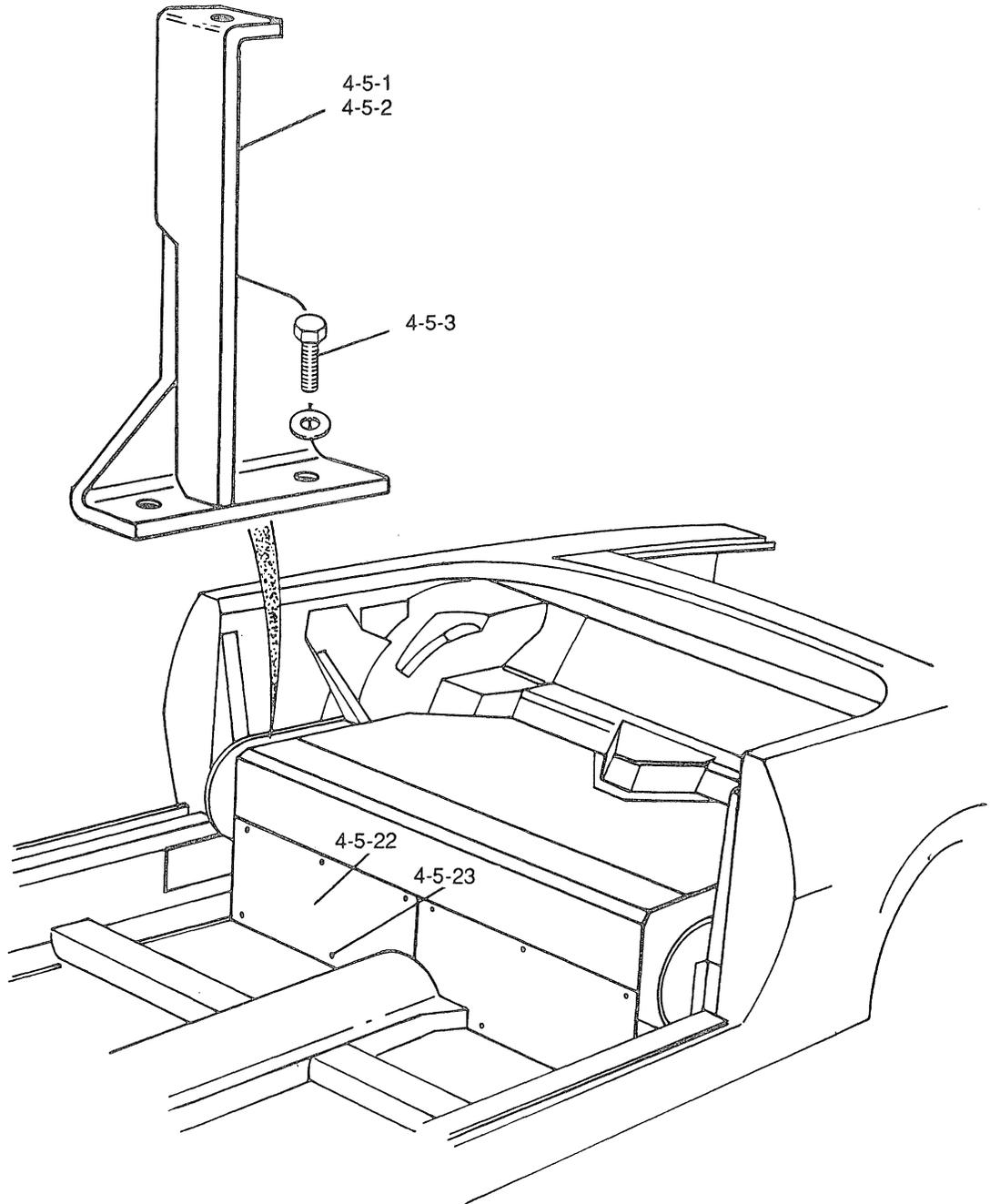


FIG 4-5-B

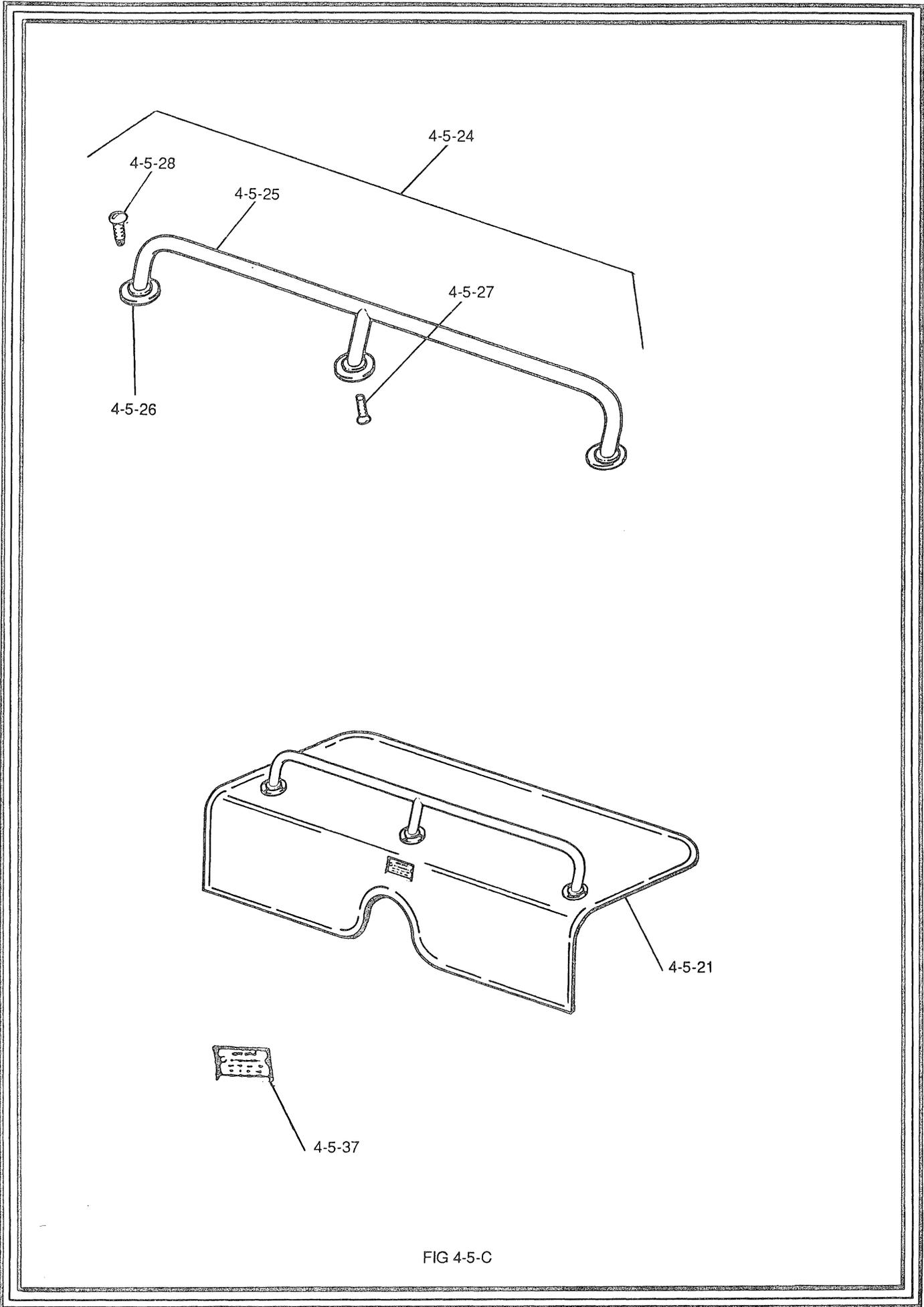


FIG 4-5-C

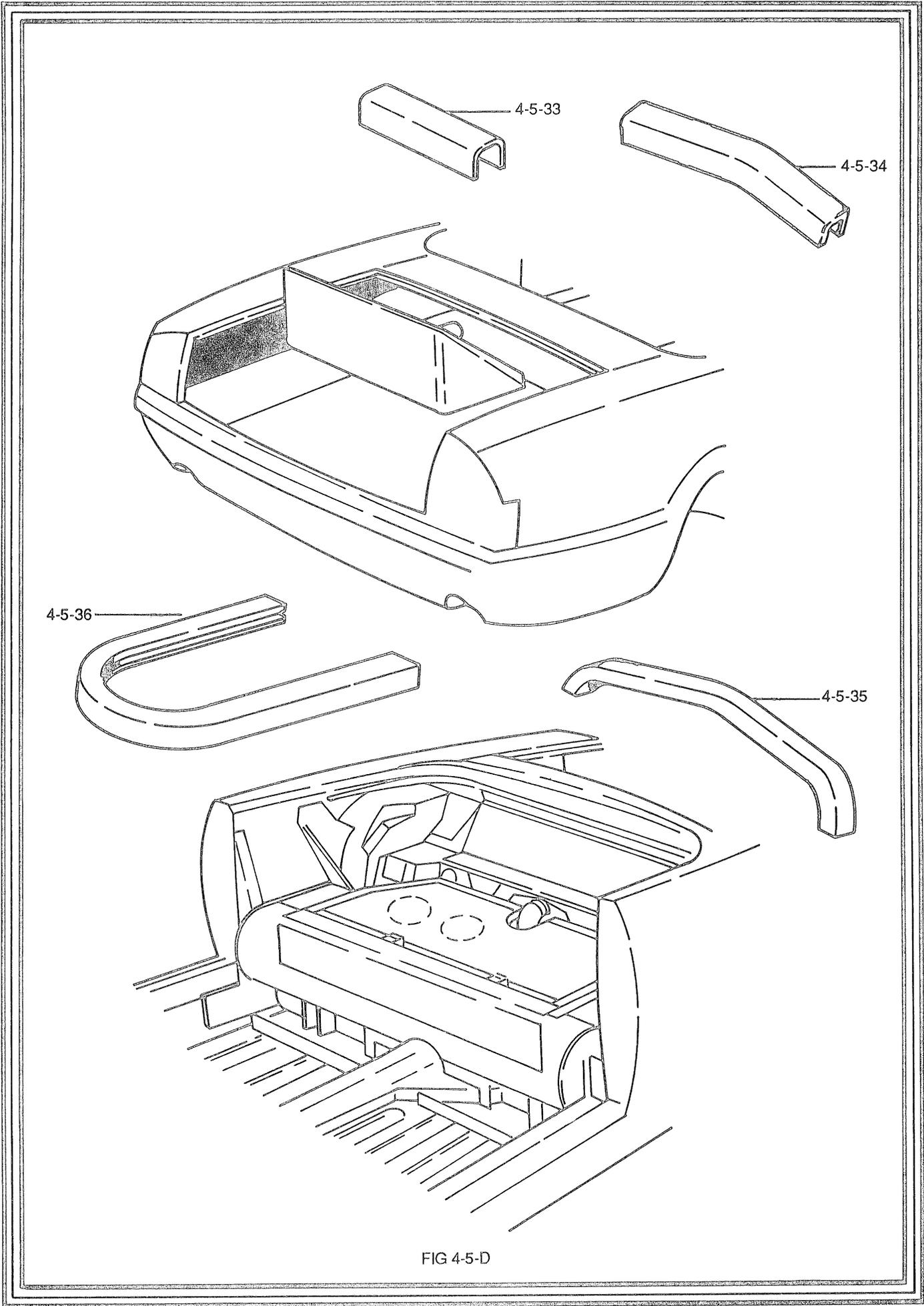


FIG 4-5-D

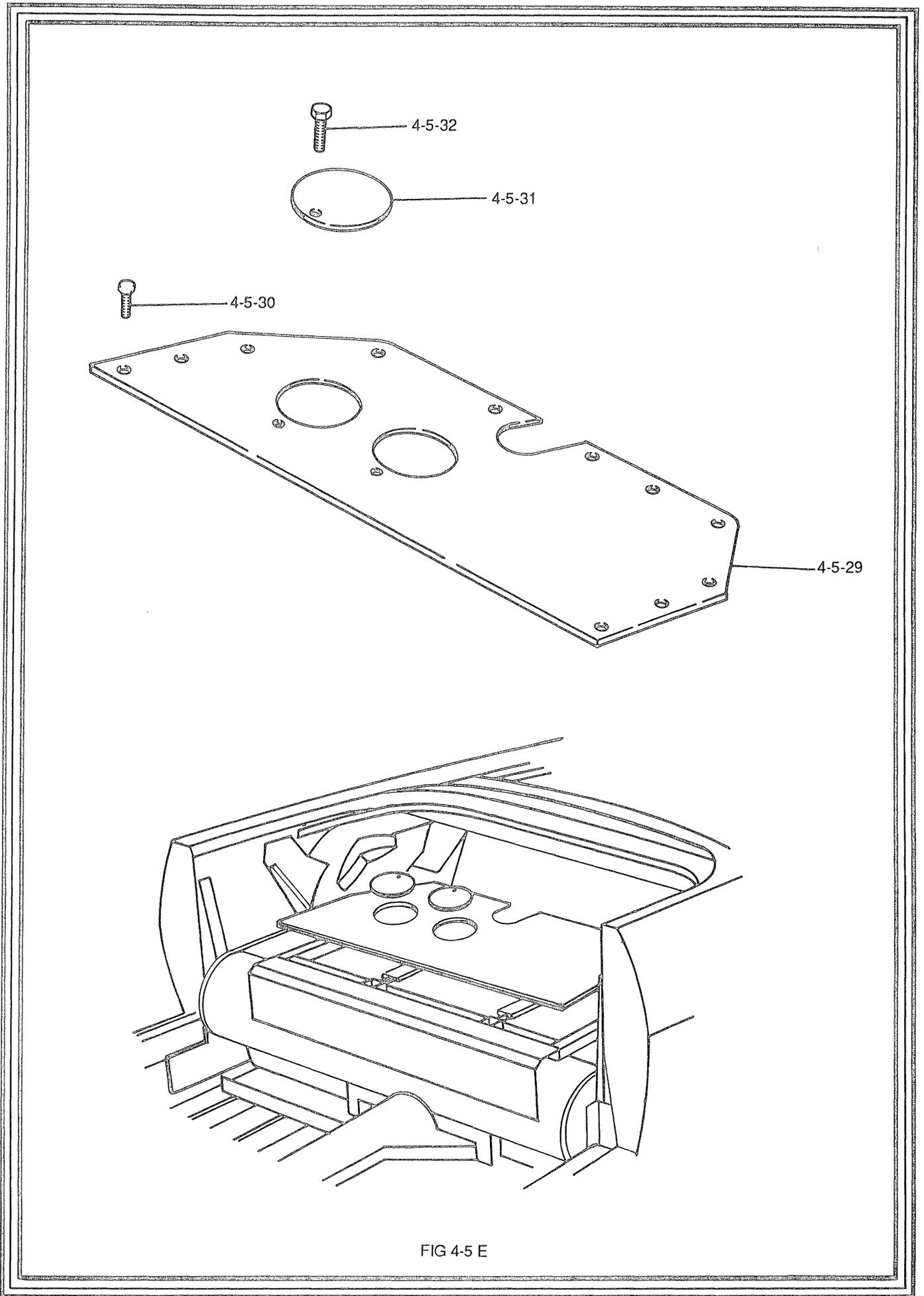
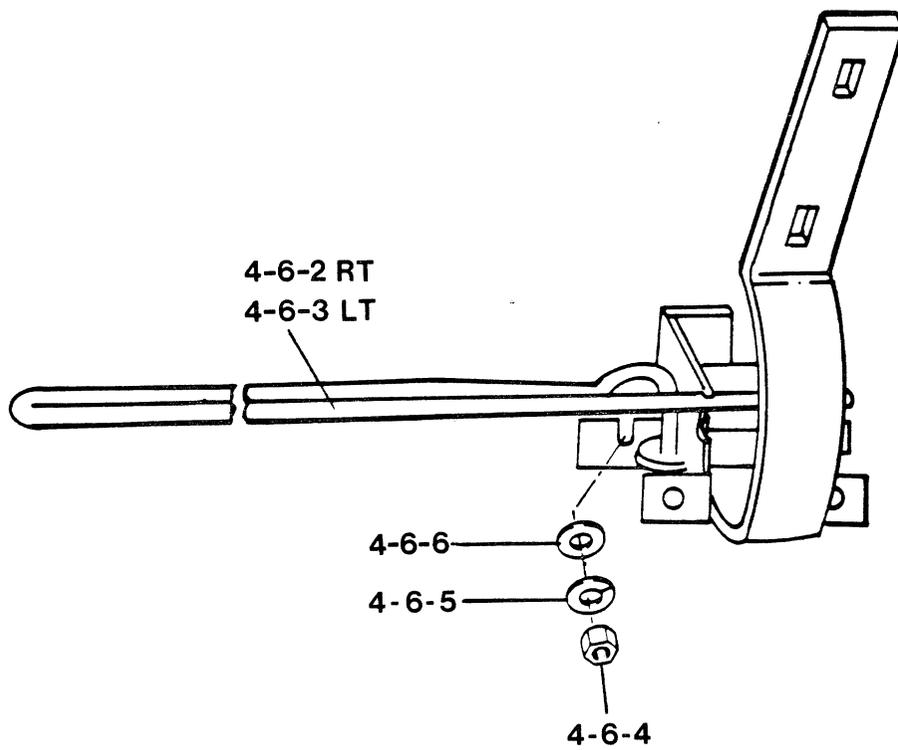
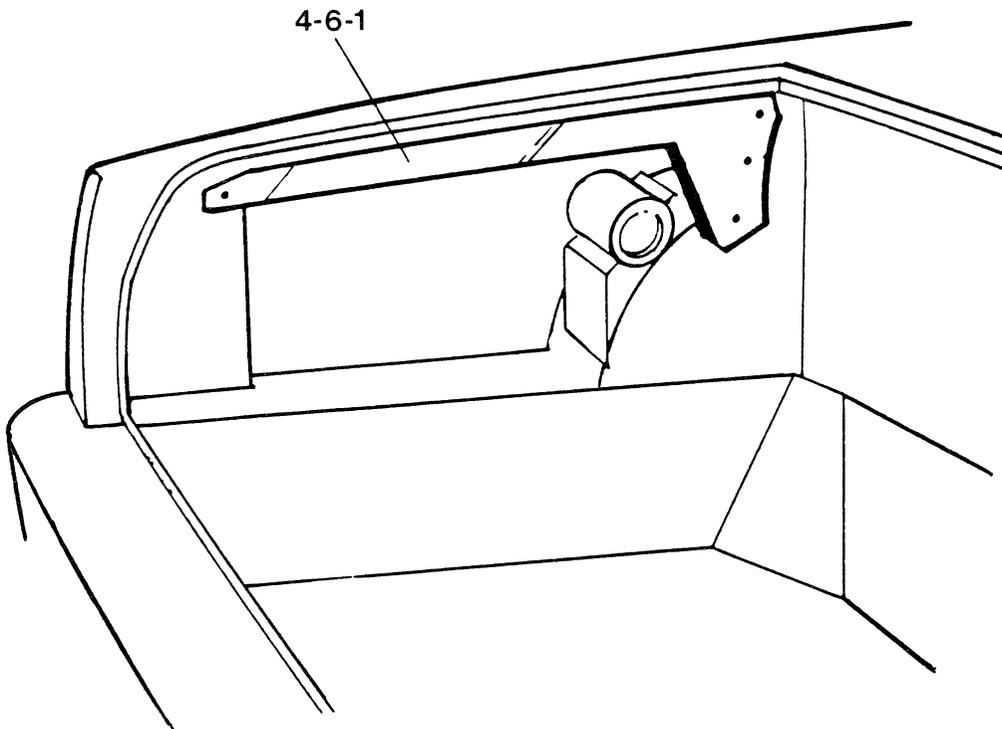


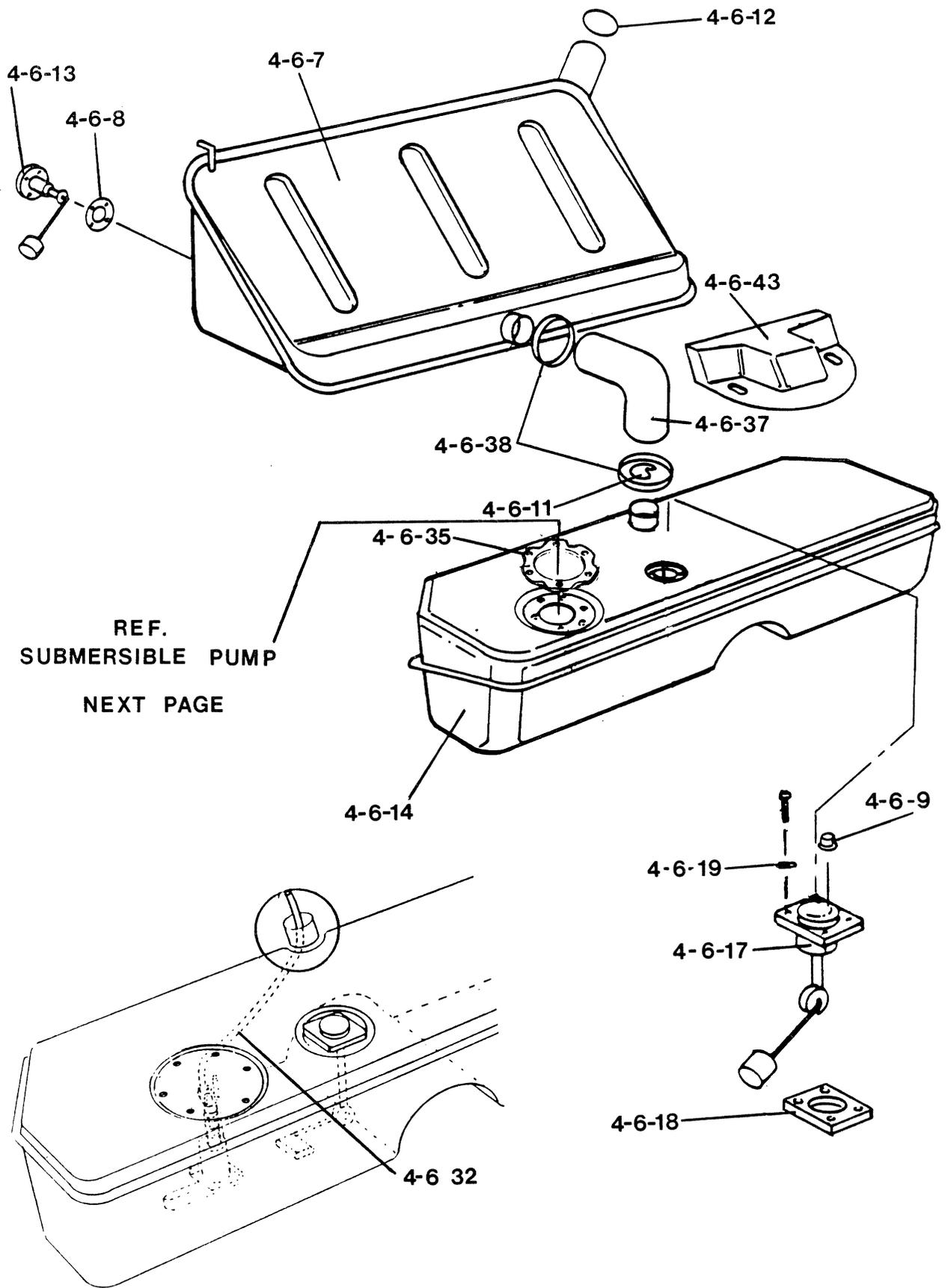
FIG 4-5 E

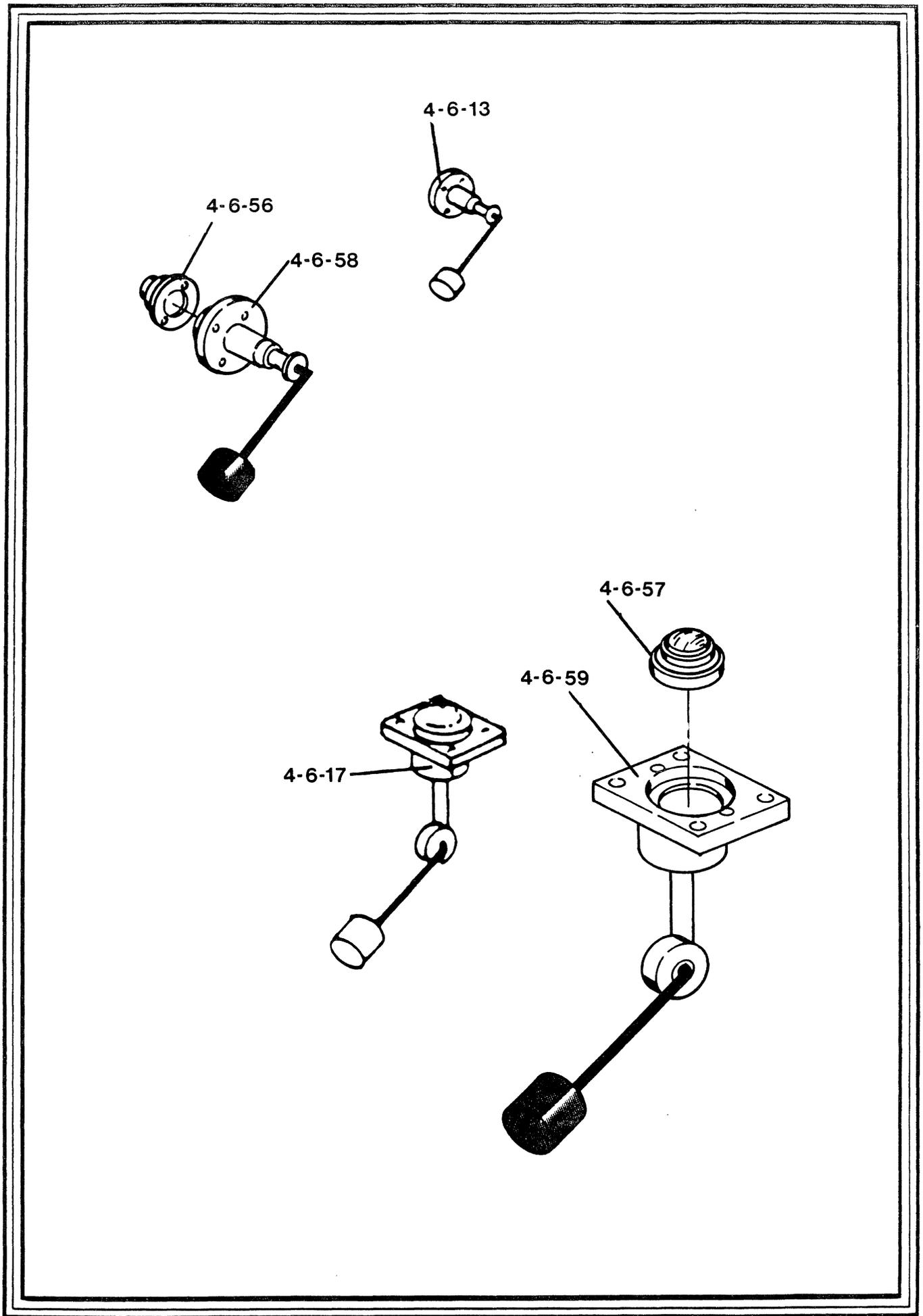
Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-6	Trunk hardware and trim	---	200E	---
4-6-1	Reinforcement-Trim panel support	560556	200E	1
4-6-2	Hinge assembly-deck lid-right	560622	200E	1
4-6-3	Hinge assembly-deck lid-left	560623	200E	1
4-6-4	Hex nut-hinge assembly	790648	200E	2
4-6-5	Lock washer-hinge assembly	790591	200E	2
4-6-6	Flat washer	790590	200E	2
4-6-7	Tank assembly upper complete	560569	600A	1
4-6-8	Gasket sent unit upper	560647	600A	1
4-6-9	Cap-insulating cover	560723	600A	1
4-6-10	Bolt 1/4-20 x 1/2 Lg	560724	600A	1
4-6-11	Clip-tubing filler neck	560680	600A	1
4-6-12	"O" ring-filler tube	560539	600A	1
4-6-13	Gauge and send unit-assembly-upper tank	560540	600A	1
4-6-14	Tank assembly-lower	560570	600A	1
4-6-15	Tank pad-upper	560638	600A	1
4-6-16	Insulation-upper fuel tank	560629	600A	1
4-6-17	Gauge and send unit assembly-lower tank asm	560545	600A	1
4-6-18	Gasket send unit lower	560649	600A	1
4-6-19	Sealing washer	560541	600A	4
4-6-20	Submersible pump bracket assembly	560710	600A	1
4-6-21	Rivet-Dome Hd 1/4 long	560589	600A	1
4-6-22	Hex nut #6-32	560591	600A	2
4-6-23	Fuel pump-submersible	560528	600A	1
4-6-24	Strainer-submersible pump	560529	600A	1
4-6-25	Washer-rubber	560509	600A	1
4-6-26	Insulator-fuel pump connector	560535	600A	1
4-6-27	Bolt-10-32 hex hd	560557	600A	1

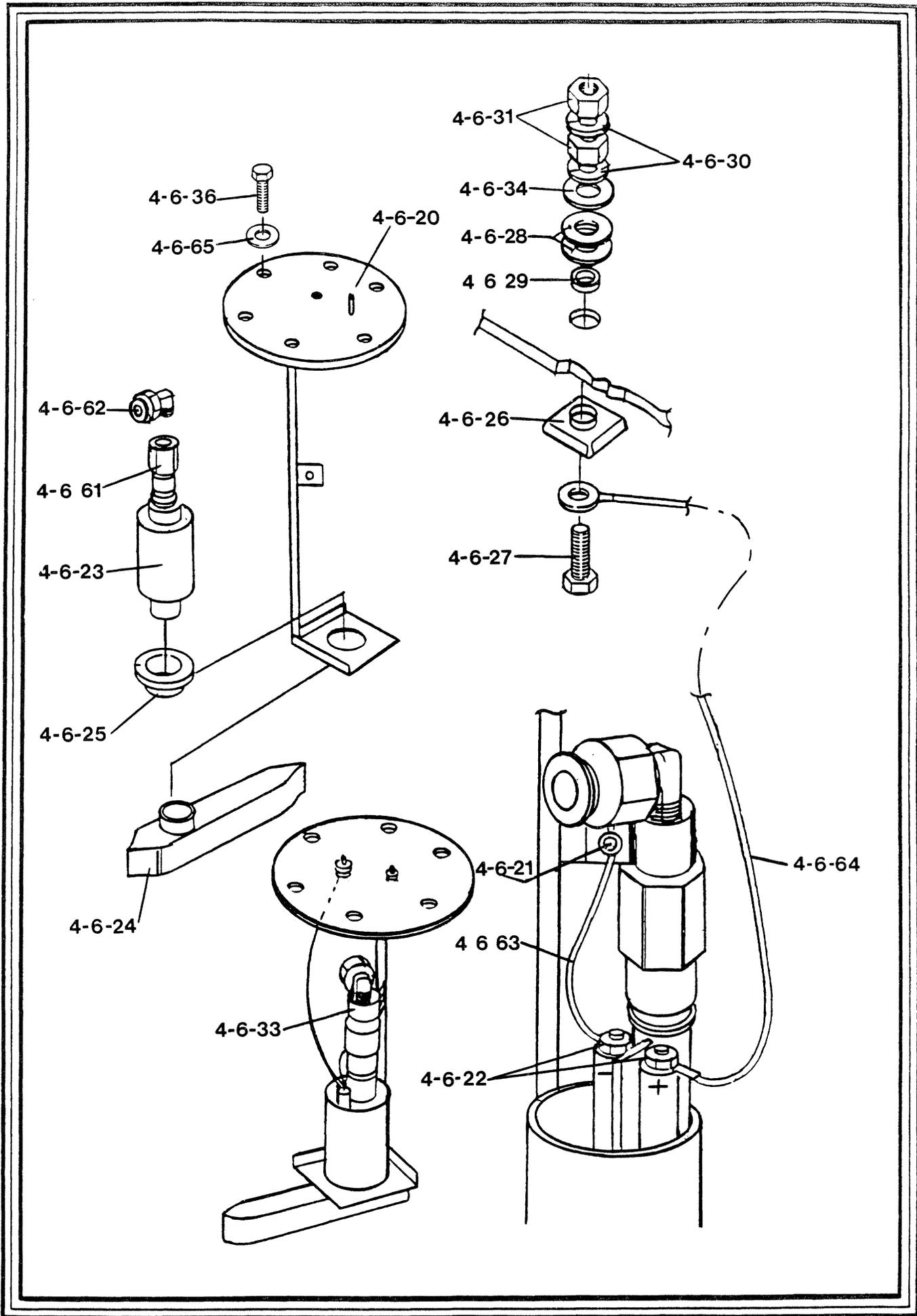
Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-6-28	Washer-insulator	560558	600A	1
4-6-29	Gasket	560559	600A	1
4-6-30	#10 lockwasher	790624	600A	4
4-6-31	Hex nut #10-32	790625	600A	3
4-6-32	Hose-fuel transfer	560698	600A	1
4-6-33	Clamp hose support	560590	600A	1
4-6-34	#10 flat washer	790635	600A	1
4-6-35	Gasket-submersible pump assembly	560672	600A	1
4-6-36	Bolt 5/16-24 x 5/8 pump to tank	790628	600A	6
4-6-37	Hose-fuel tank upper to lower	560513	600A	1
4-6-38	Clamp	560560	600A	2
4-6-39	Vapor separator	560536	600A	1
4-6-40	Rivet	890105	600A	2
4-6-41	Hose-vapor separator	560580	600A	2
4-6-42	Clamp-vapor separator	560706	600A	4
4-6-43	Cover-fuel tank hose	560582	600A	1
4-6-44	Insulation-drive shaft tunnel	560593	600A	1
4-6-45	Insulation-lower tank floor	560594	600A	2
4-6-46	Insulation-lower tank rear wall	560595	600A	1
4-6-47	Insulation-lower tank top-right Insulation-lower tank top-left	560596 560705	600A 600A	1 1
4-6-48	Strap assembly-gas tank retaining	560533	600A	2
4-6-49	Bolt 3/8-16 x 2 "T" bolt	790607	600A	2
4-6-50	Washer-cage strap	560532	600A	2
4-6-51	Screw-7/16-20 x 3/4	790609	600A	2
4-6-52	Pad-strap assembly	560695	600A	2
4-6-53	Pad-fuel tank lower	560592	600A	1
4-6-54	Strap-upper fuel tank	560599	600A	1

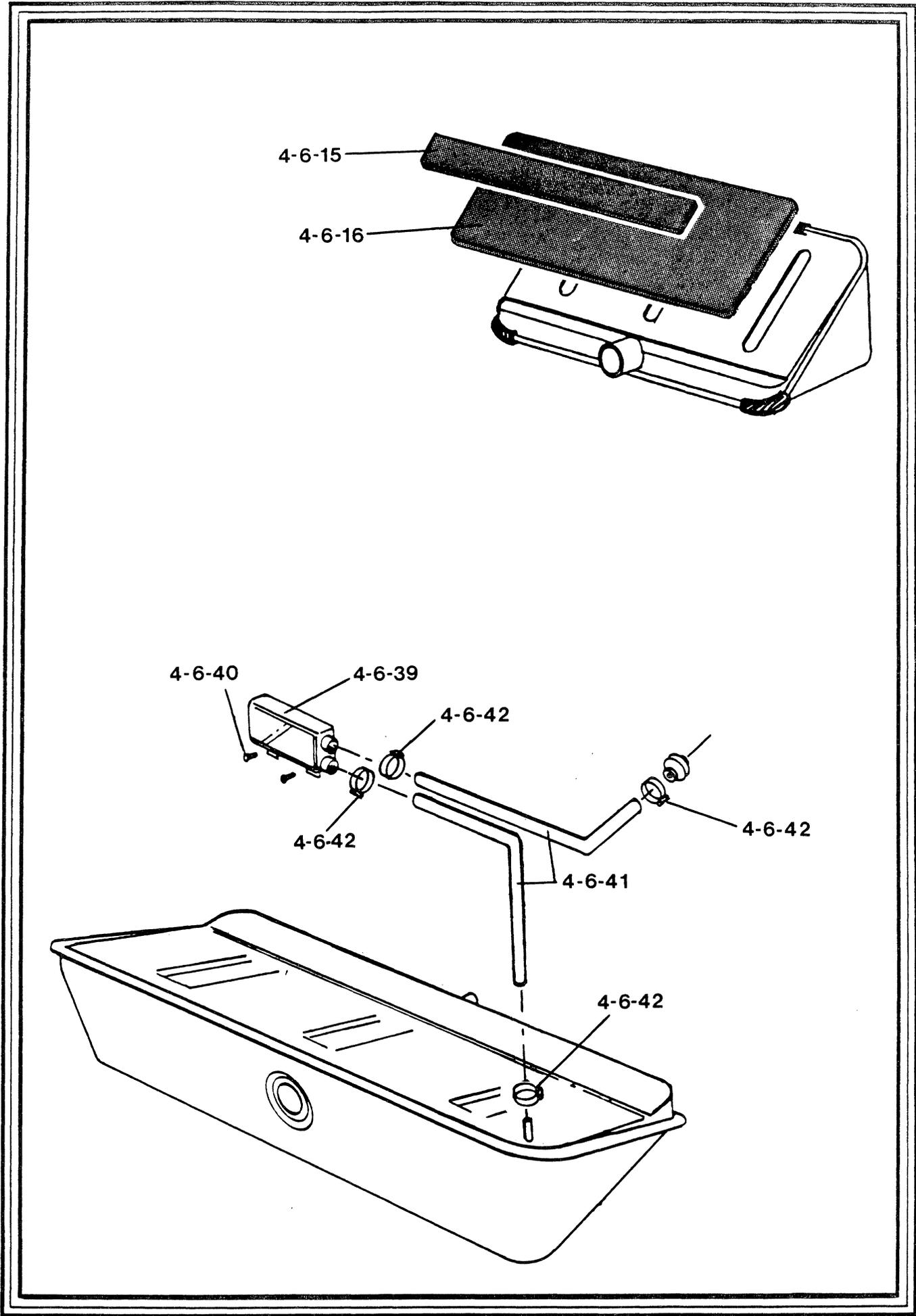
Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-6-55	Bolt-fuel tank strap	790637	600A	1
4-6-56	Sending unit-upper tank	560648	600A	1
4-6-57	Sending unit-lower tank	560650	600A	1
4-6-58	Gauge assembly-upper tank	560651	600A	1
4-6-59	Gauge assembly-lower tank	560652	600A	1
4-6-60				
4-6-61	Prestolok female connector	560697	600A	1
4-6-62	Prestolok male 90° elbow	560696	600A	1
4-6-63	Wire s/a fuel pump 3" lg	560699	600A	1
4-6-64	Wire harness	560586	600A	1
4-6-65	Sealing washer	560669	600A	6
4-6-66	Washer 3/8 lock	790569	600A	2
4-6-67	Nut 3/8-16	790588	600A	2
4-6-68	Vent tube assembly	560687	600A	1
4-6-69	Tube sub-assembly	560688	600A	1
4-6-70	Union-vent tube	560691	600A	1
4-6-71	Nylon tubing	560692	600A	1

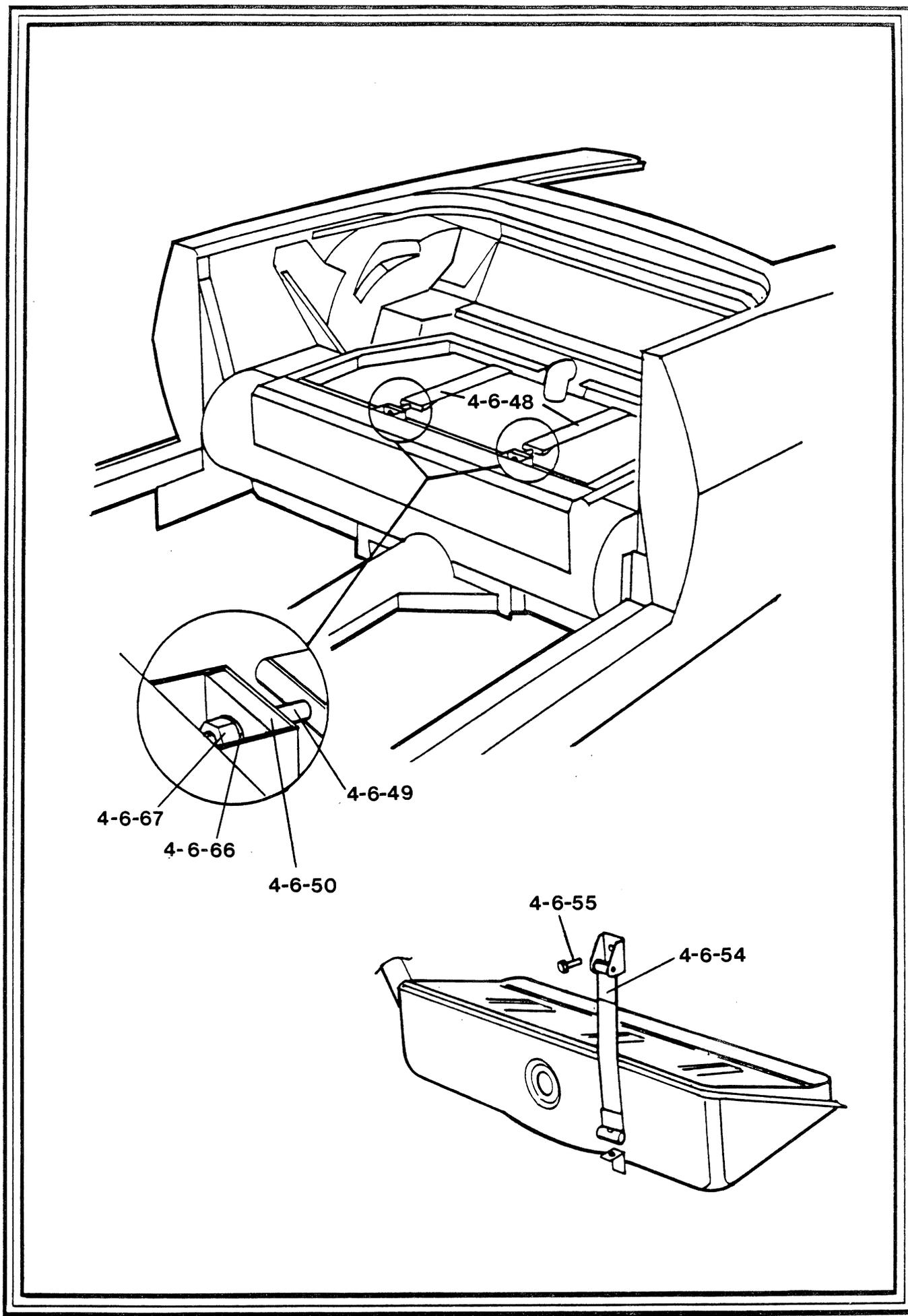


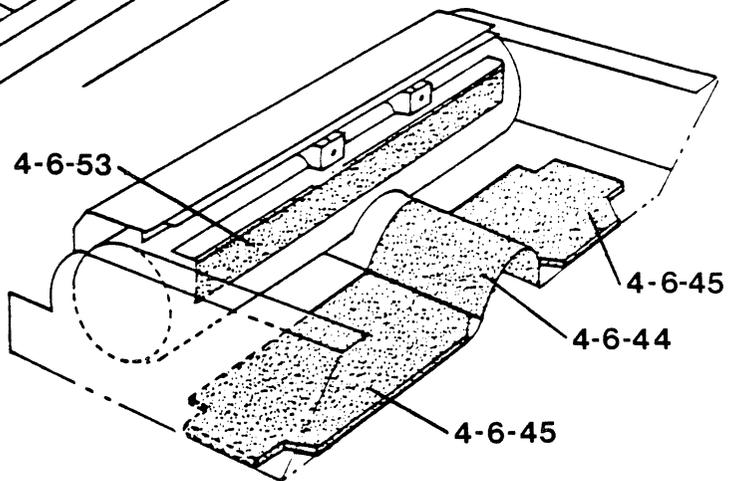
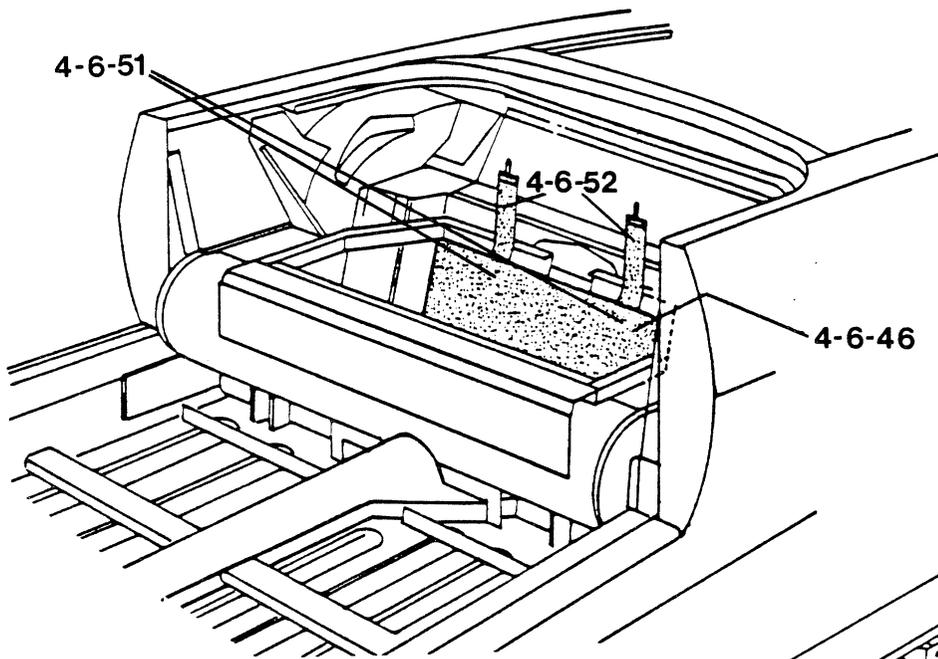
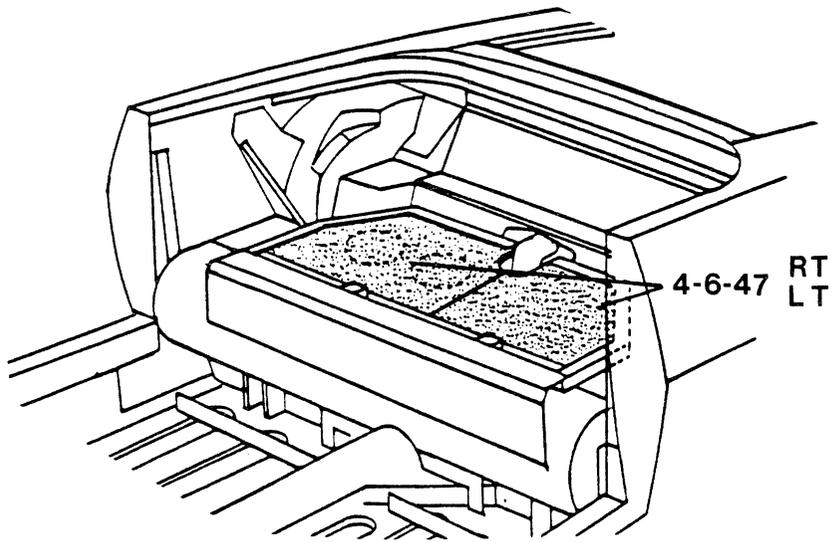












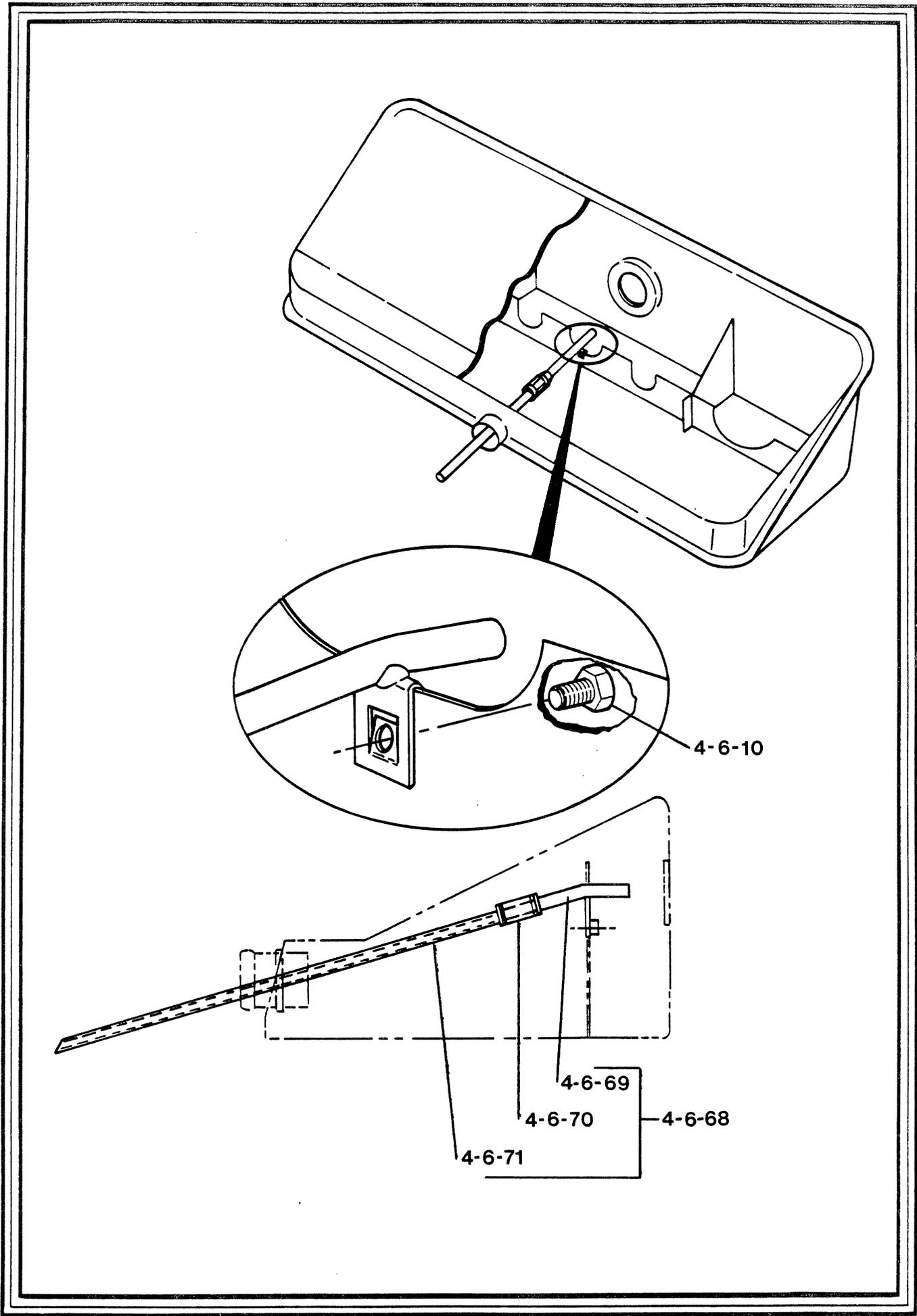


Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-7	Body and windshield hardware and trim	----	200F	----
4-7-1	Moulding-header cap	670074	200F	1
4-7-2	Header cap-"P" strip	690056	200F	1
4-7-3	Tape double-stick	690055	200F	1
4-7-4	Sealer-header cap moulding	690057	200F	1
4-7-5	Welt-assembly	370762	200F	1
4-7-6	Striker-top lock right	560630	200F	1
4-7-7	Stroker-top lock left	560631	200F	1
4-7-8	Screw 1/4-20 x 3/4	790641	200F	2
4-7-9	Moulding-top belt opening-right	670076	200F	1
4-7-9A	Moulding-top belt opening-left	670077	200F	1
4-7-10	Screw #4 X 1/4	790579	200F	9
4-7-11	Weather stripping-body lock pillar-right	370692	200F	1
4-7-12	Weather stripping-body lock pillar-left	370693	200F	1
4-7-13	Screw-with strip-body lock pillar	790253	200F	6
4-7-14	Moulding-quarter window belt-right	670078	200F	1
4-7-15	Moulding-quarter window belt-left	670079	200F	1
4-7-16	Weatherstrip-quarter belt moulding-right	670080	200F	1
4-7-17	Weatherstrip-quarter belt moulding-left	670081	200F	1
4-7-18	Screw #6 with #4 heading x 1/2	790586	200F	3
4-7-19	Cap-"A" pillar moulding-right	670072	200F	1
4-7-20	Cap-"A" pillar moulding-left	670073	200F	1
4-7-21	Trim assembly-weatherstripping garnish upper	370765	200F	1
4-7-22	Sunvisor-right "black"	370838	200F	1
4-7-23	Sunvisor-left "black"	370839	200F	1
4-7-24	Clips-sunvisor-"black"	370840	200F	1
4-7-25	Spacer-sunvisor mount	370641	200F	1

Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-7-26	Spacer-sun visor clip	370678	200F	1
4-7-27	Spacer-rear view mirror	370679	200F	1
4-7-28	Screw-mirror spacer-#8 w/#6 head 1 1/4	790638	200F	3
4-7-29	Cap assembly-windshield garnish moulding -right	370768	200F	1
4-7-30	Cap assembly-windshield garnish moulding-left	370769	200F	1
4-7-31	Cover-windshield garnish moulding	370771	200F	1
4-7-32	Filler cap assembly-fuel system	560584	200F	1
4-7-33	Plug 1/8 npt	560585	200F	1
4-7-34	Gasket-filler cap assembly	560503	200F	1
4-7-35	Screw-filler cap assembly 10-32 x 1/2	790631	200F	4
4-7-36	Washer-lock #10	790624	200F	4
4-7-37	Tag - "unleaded fuel"	560553	200F	1
4-7-38	Label-manufactured alter	660177	200F	1
4-7-39	Platic overlay	660179	200F	1
4-7-40	Label-rear seat restriction	370835	200F	1
4-7-41	"H & E" side medallion	370834	200F	2
4-7-42	Bar-ft stabilizer	170525	200F	1
4-7-43	Spacer-bar ft stabilizer	170526	200F	2
4-7-44	Bolt - 3/8-24 x 1 1/2	790642	200F	1
4-7-45	Nut-3/8-24	790643	200F	1
4-7-46	Weight-counter balance-front end	560552	200F	2
4-7-47	Clamp-underbody lines	560616	200F	2

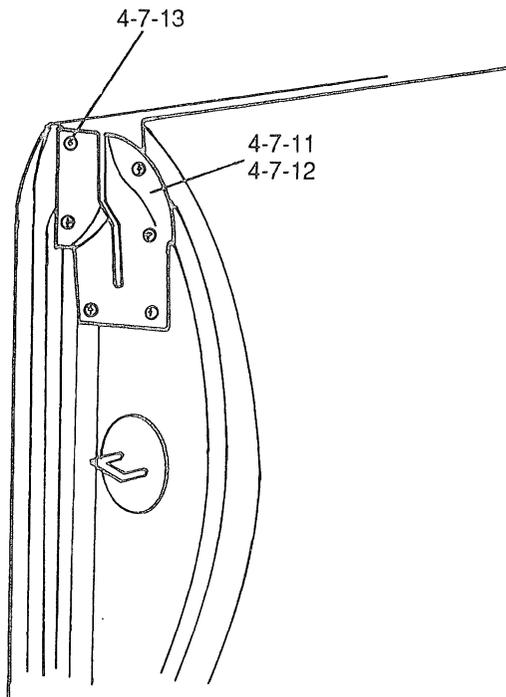
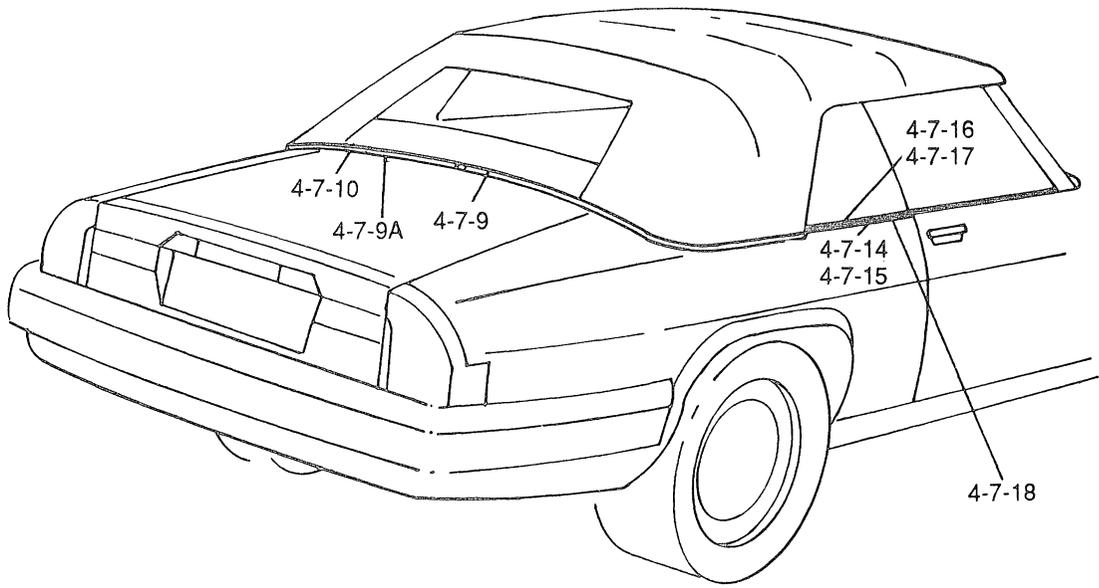
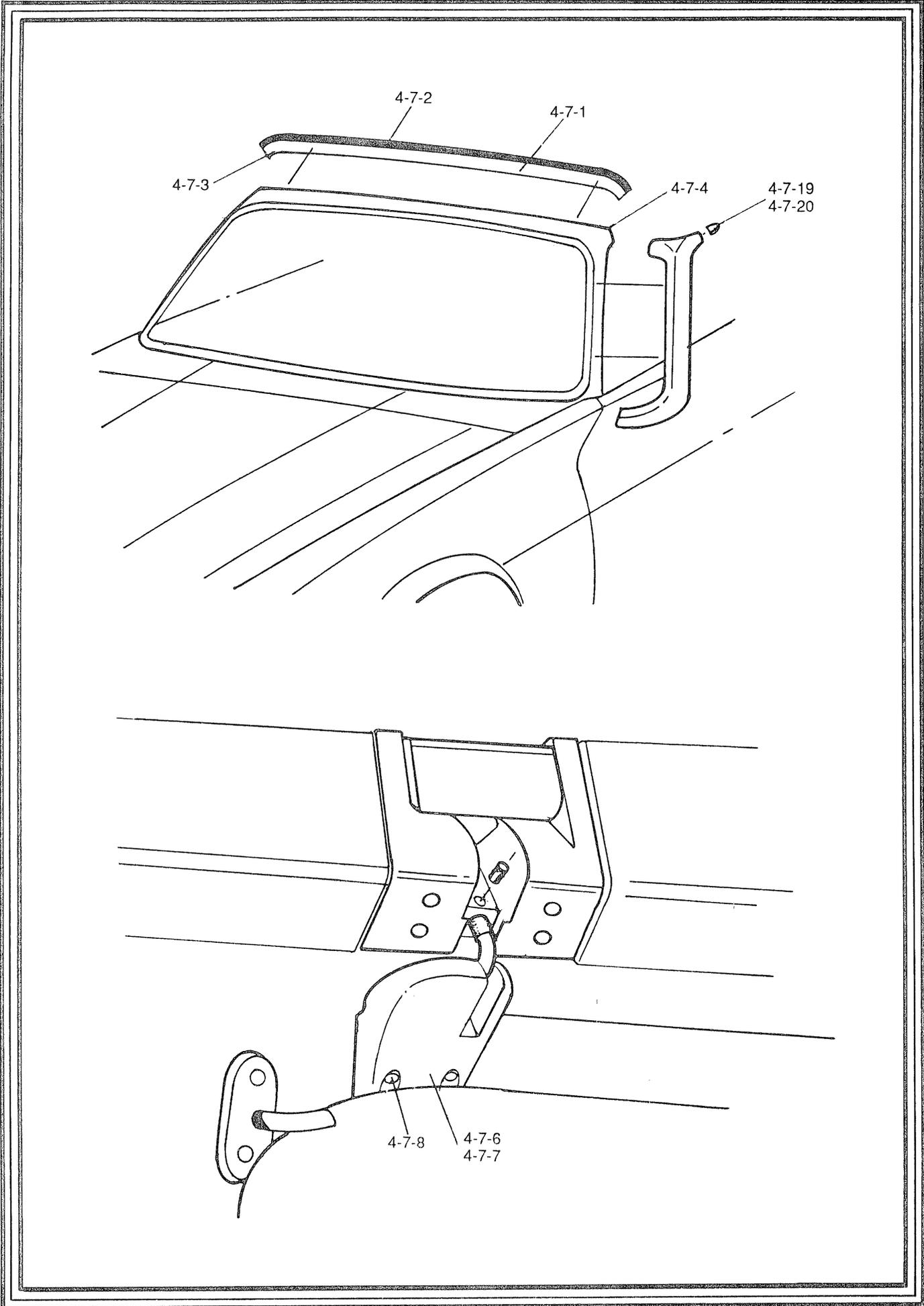
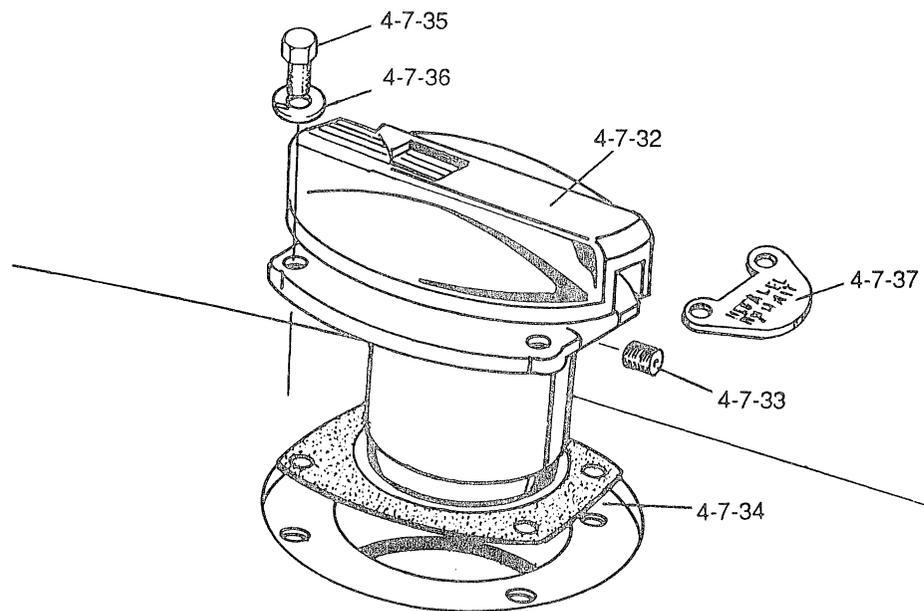
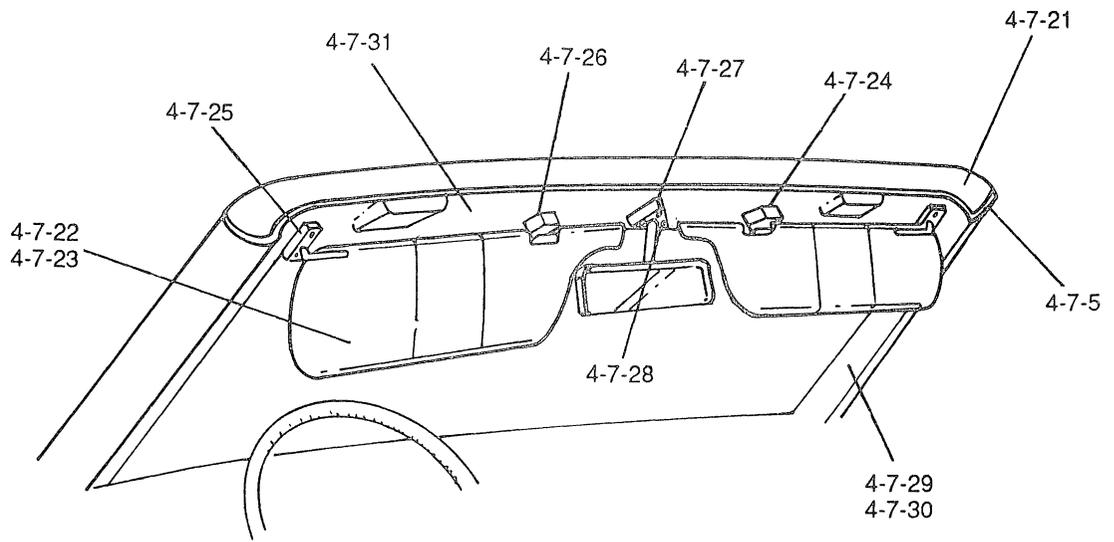
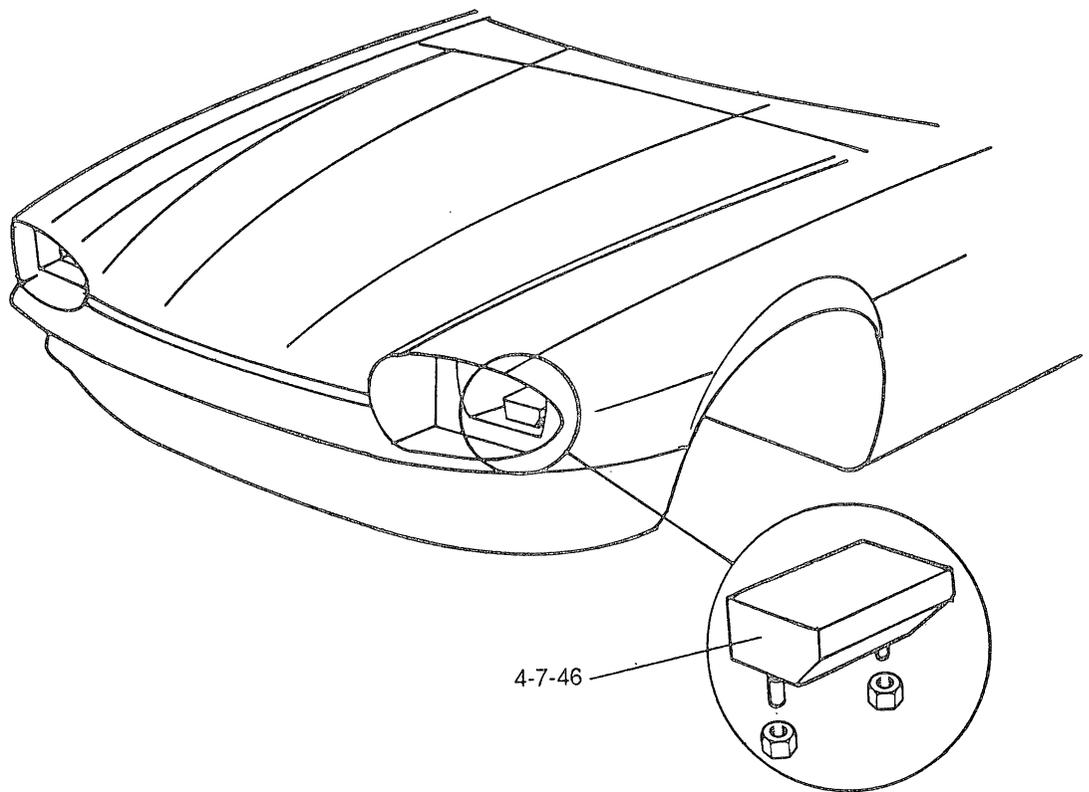
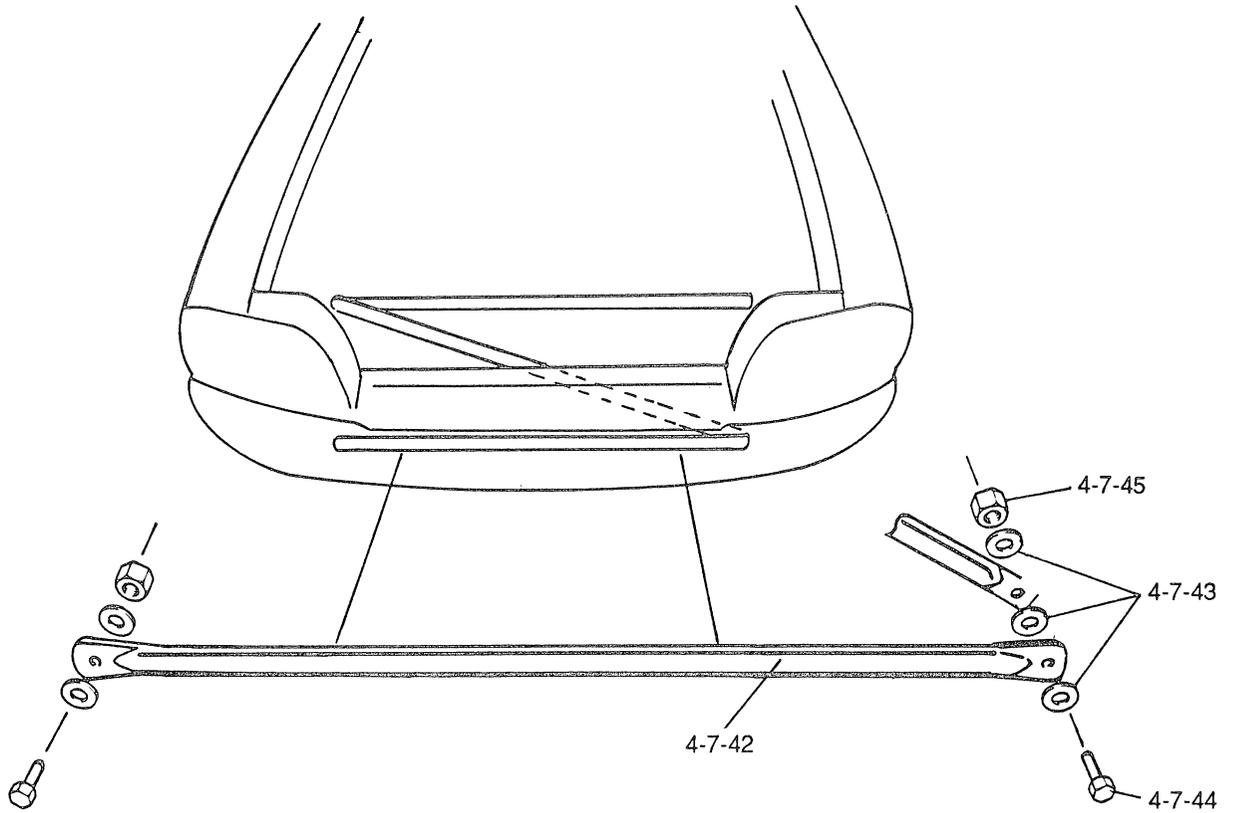
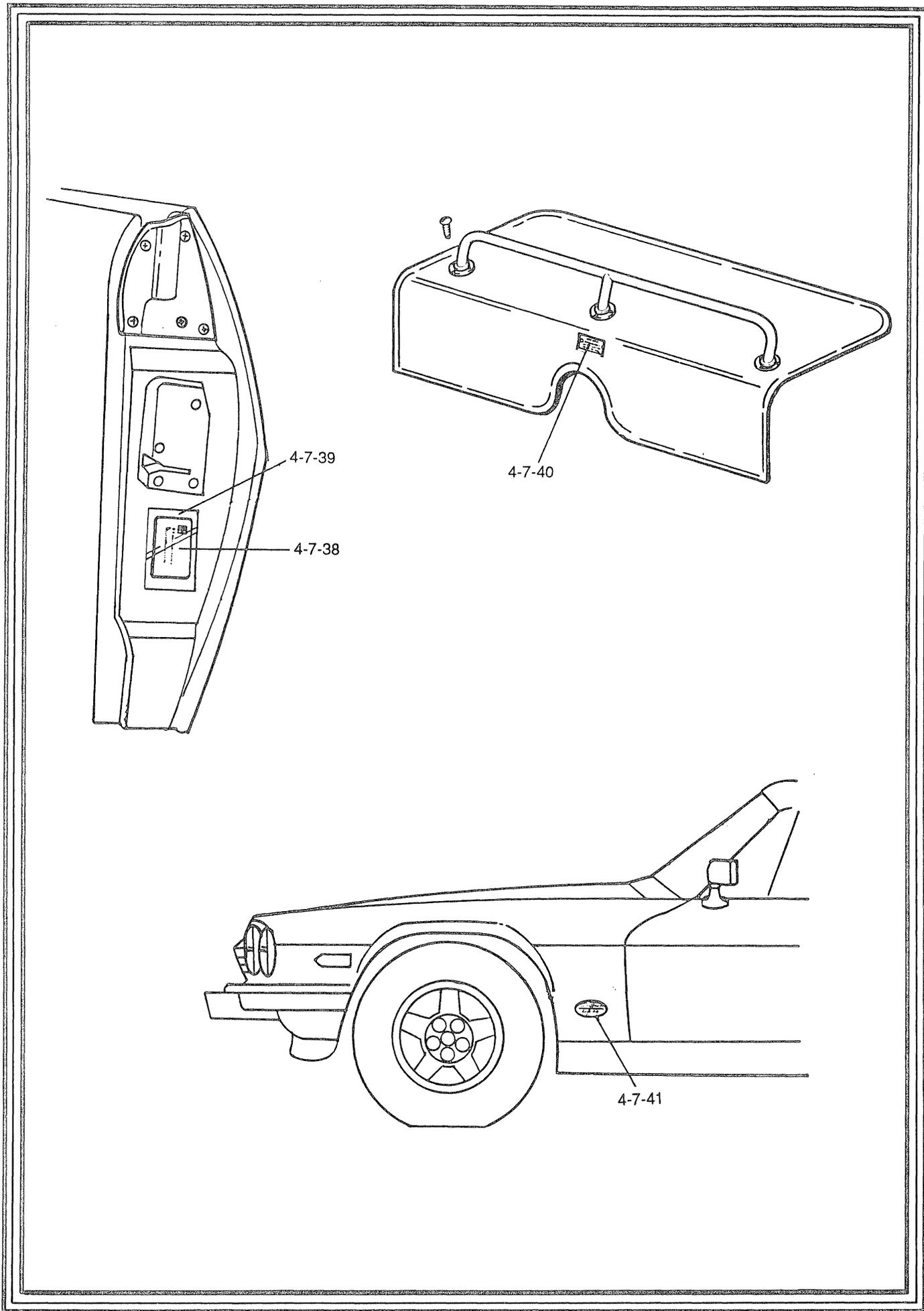


FIG. 4-7 BODY/WINDSHIELD HARDWARE AND TRIM









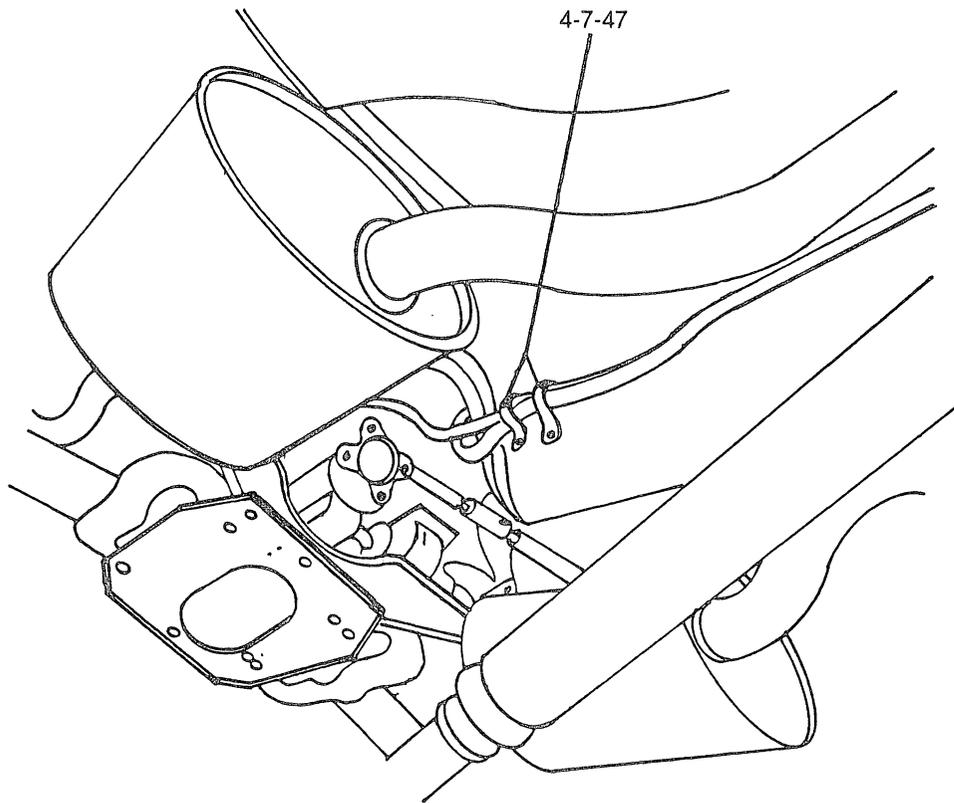


Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-8	Electrical/hydraulics	----	300A	----
4-8-1	Kit-motor/pump and top cylinder With by-pass valve	560505	300A	1
4-8-2	Light mount stop lamp assembly	560417	300A	1
4-8-3	Switch-quarter window	560455	300A	2
4-8-4	Switch-convertible top control	560455	300A	1
4-8-5	Wiring harness (main)	560547	300A	1
4-8-6	Low fuel board	560550	300A	4
4-8-7	Relay	560549		1

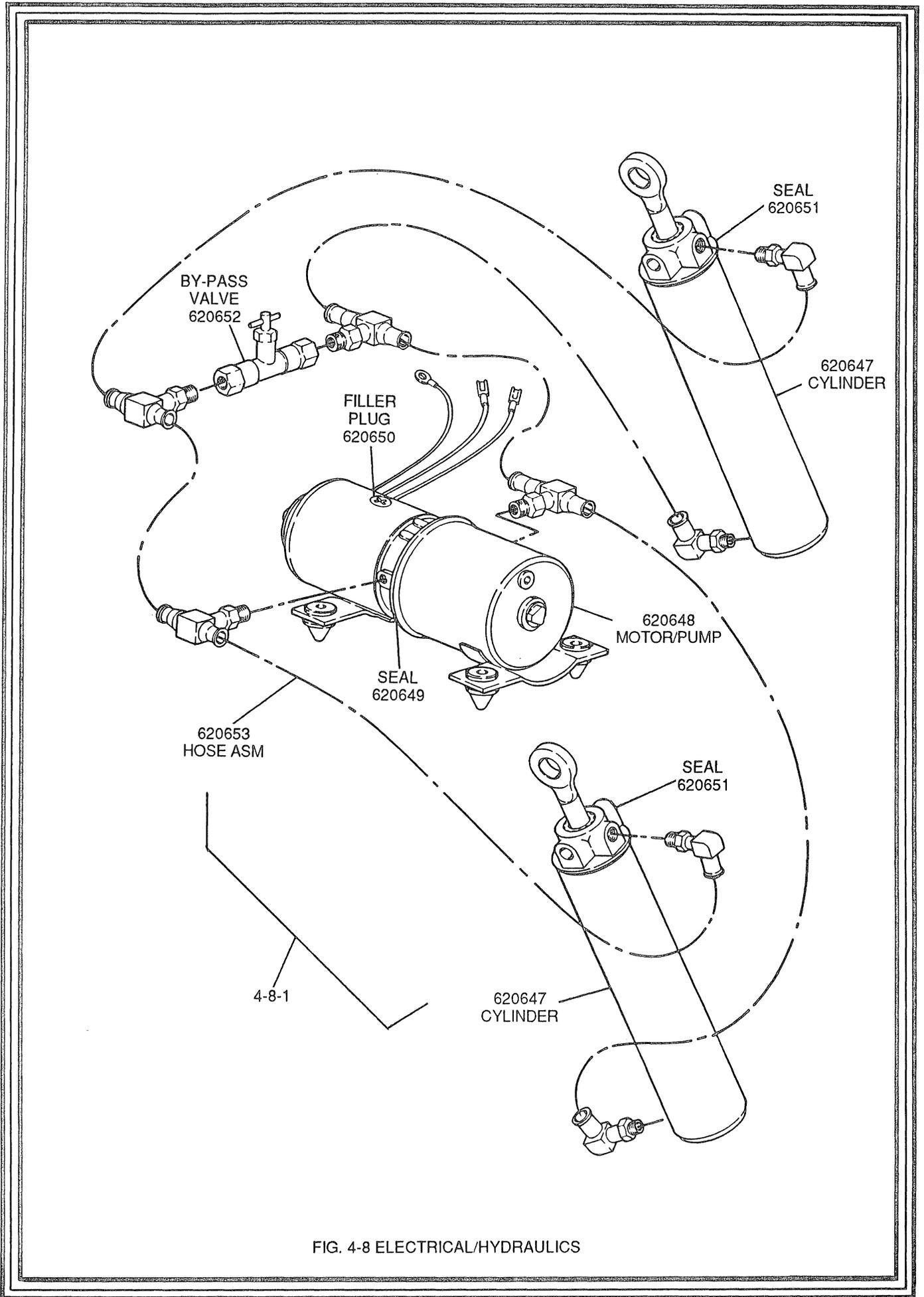
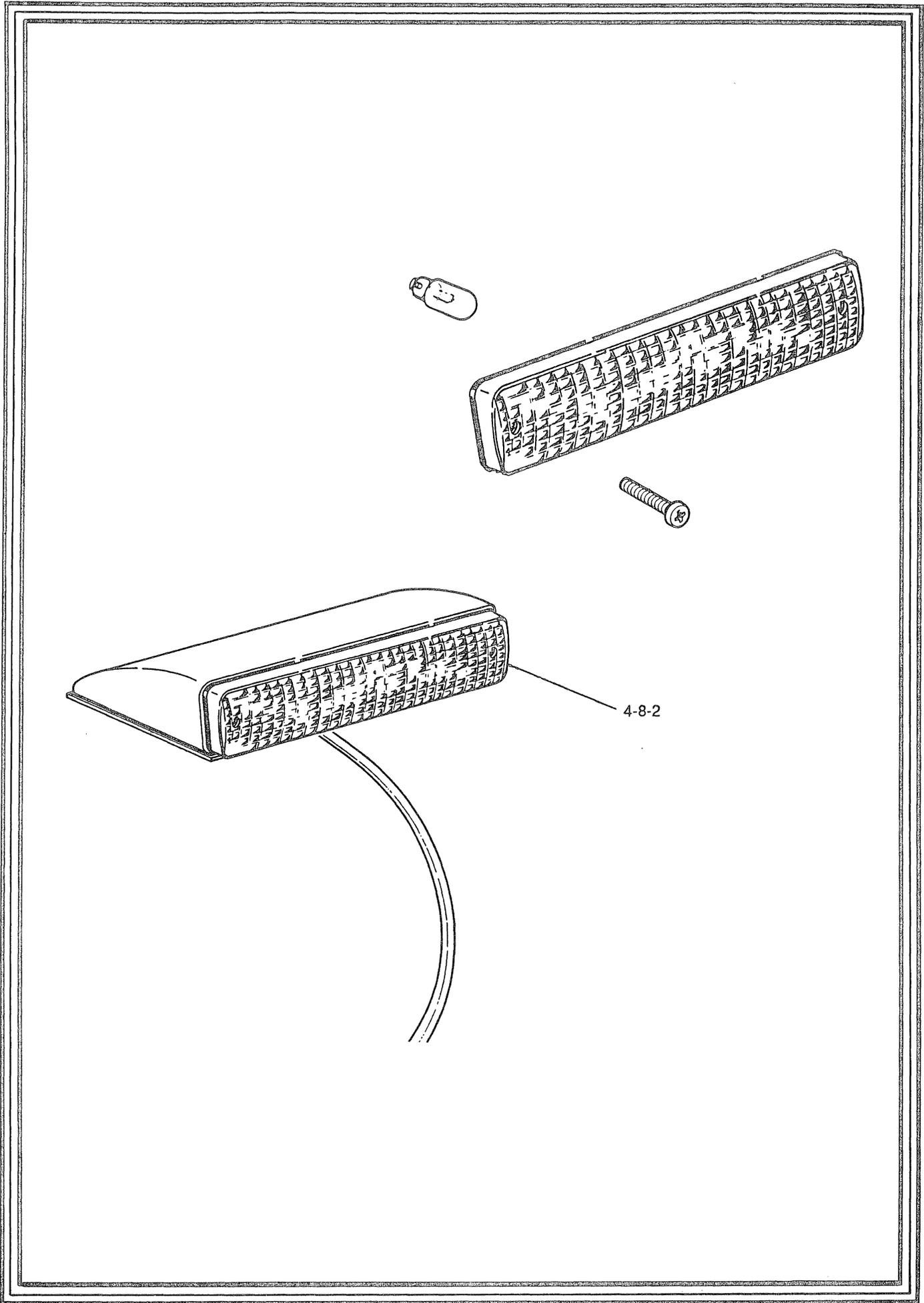
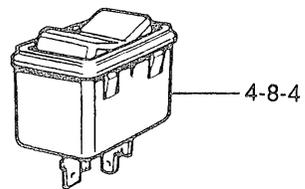
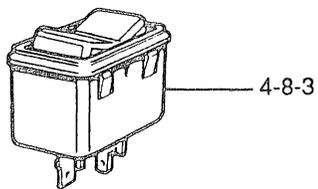


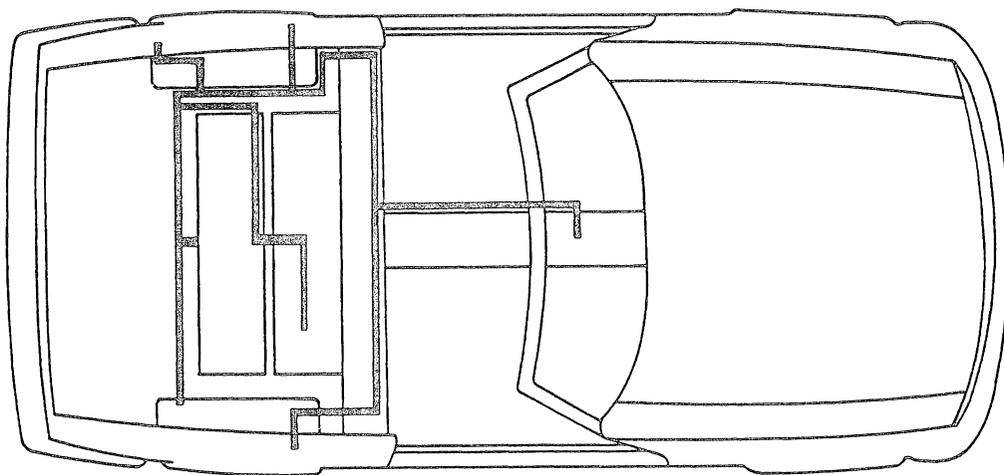
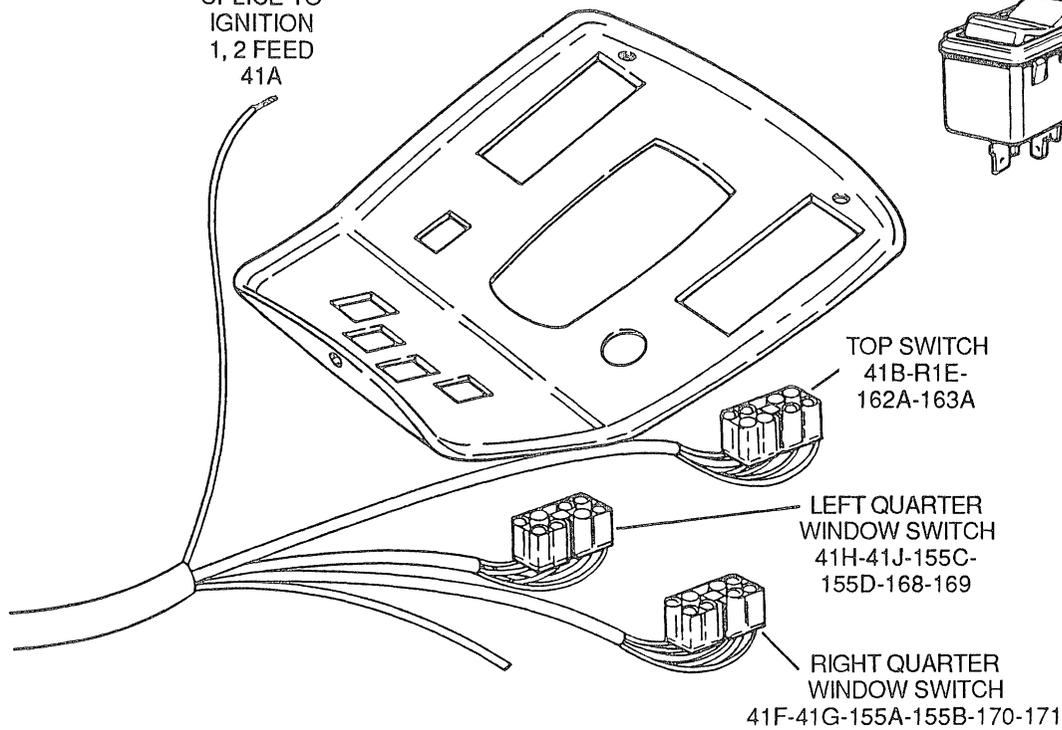
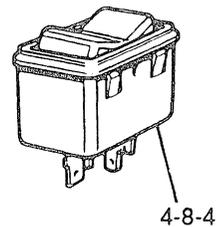
FIG. 4-8 ELECTRICAL/HYDRAULICS



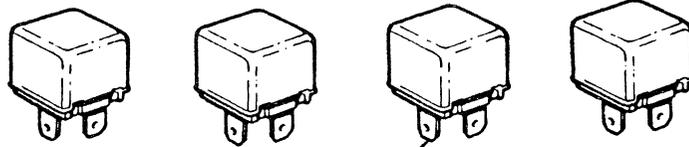
4-8-2



SPLICE TO  
IGNITION  
1, 2 FEED  
41A







4-8-7

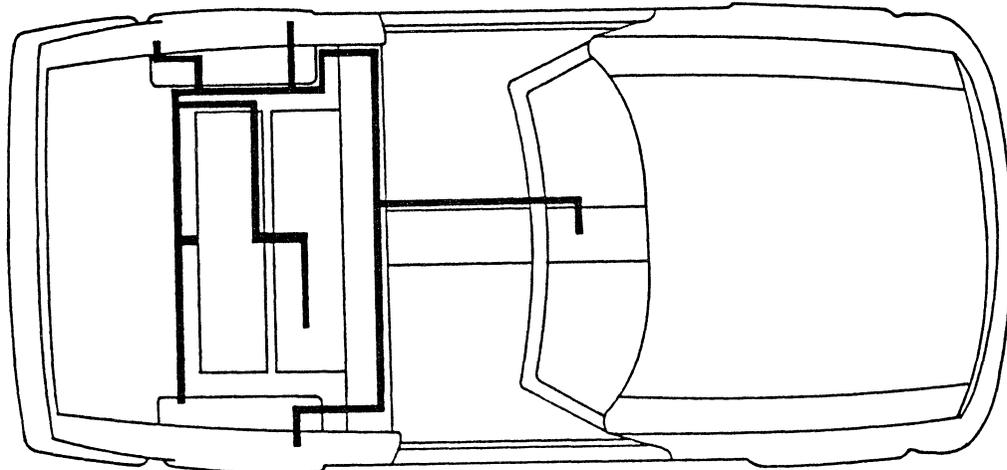
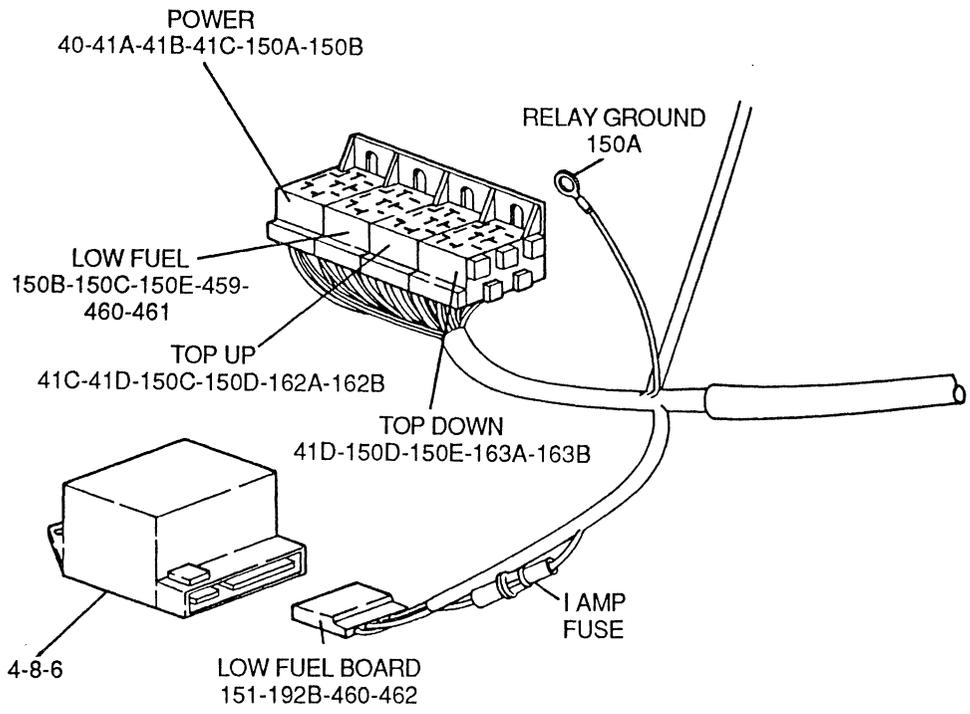


Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-9	Convertible top assembly hardware and trim	-----	500A	-----
4-9-1	Top assembly-convertible (painted)	620620	500A	1
4-9-2	Lock assembly-folding top	620614	500A	2
4-9-3	Screw-8-32 x 3/4	790644	500A	6
4-9-4	Dowel-top lock	620618	500A	2
4-9-5	Trim stick assembly	620604	500A	1
4-9-6	Bolt 3/8-16 x 3/4	790536	500A	3
4-9-7	Washer 3/8	790587	500A	6
4-9-8	Lock washer 3/8	790569	500A	3
4-9-9	Nut 3/8-16	790588	500A	3
4-9-10	Screw 5/16-18 x 3/4	790589	500A	1
4-9-11	Washer 5/16	790590	500A	1
4-9-12	Lock washer 5/16	790591	500A	2
4-9-13	Top assembly kit			
	"Black"	370772	500A	1
	"Tan"	370773	500A	1
	"Blue"	370774	500A	1
		370778	500A	1
4-9-14	Curtain assembly	370782	500A	1
4-9-15	Wind cord assembly-header	620639	500A	1
4-9-19	Plate-cable assembly-mounting	890100	500A	1
4-9-20	Rivet-cable assembly	620629	500A	1
4-9-21	Cable assembly with spring	620632	500A	1
4-9-22	Cable assembly			
4-9-23	Cover assembly-convertible top			
	"Black"	370741	500A	1
	"Tan"	370742	500A	1
	"Blue"	370743	500A	1

Figure and Index Number	Description	Part Number	Group No.	Qty. Per Asm
4-9-24	Trim assembly-boot well "black"	370785	500A	1
4-9-25	Retainer-weatherstrip side rail front right	370602	500A	1
4-9-26	Retainer-weatherstrip side rail front left	670603	500A	1
4-9-27	Screw-weatherstrip retainer #6 x 3/8	790253	500A	3
4-9-28	Weatherstrip assembly-front rail and header	370675	500A	1
4-9-29	Screw-weatherstrip retain #6 x 3/8	790253	500A	7
4-9-30	Weatherstrip assembly-front rail and header	370680	500A	1
4-9-31	Retainer-weatherstrip side rail rear-right	370604	500A	1
4-9-32	Retainer-weatherstrip side rail rear-left	370605	500A	1
4-9-33	Screw weatherstrip retainer #6 x 3/8	790253	500A	3
4-9-34	Weatherstrip assembly-rear rail right	370696	500A	1
4-9-35	Weatherstrip assembly-rear rail left	370697	500A	1
4-9-36	Retainer-weatherstrip folding pillar-right	370600	500A	1
4-9-37	Retainer-weatherstrip folding pillar-left	370601	500A	1
4-9-38	Screw-weatherstrip retainer #6 x 3/8	790253	500A	3
4-9-39	Weatherstrip assembly folding pillar right	370686	500A	1
4-9-40	Weatherstrip assembly folding pillar left	370687	500A	1
4-9-41	Screw-weatherstrip retainer #6 x 5/8	790254	500A	3

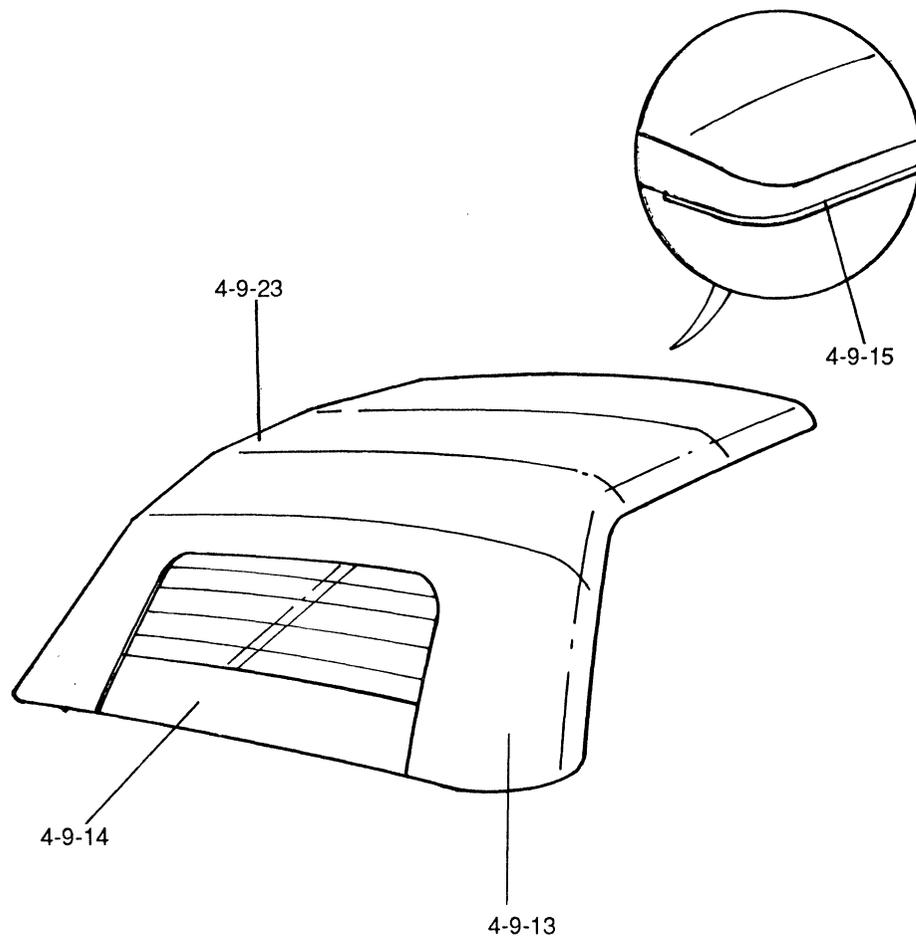
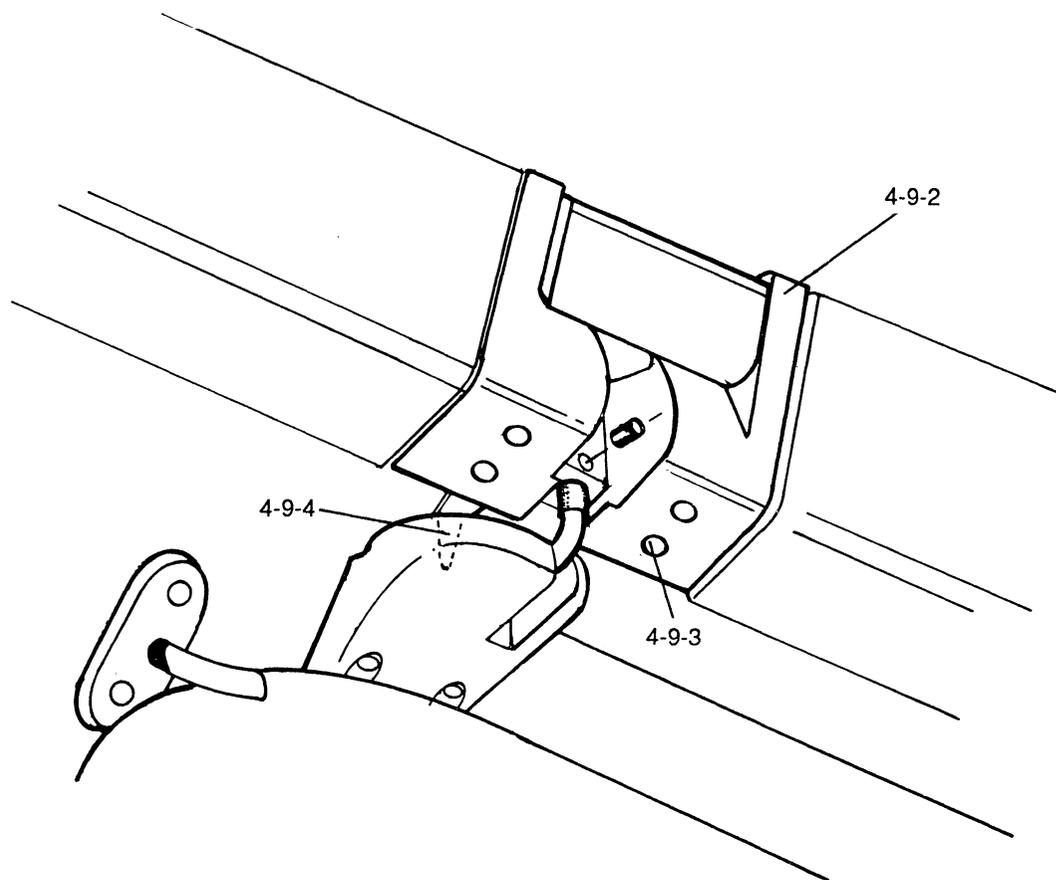
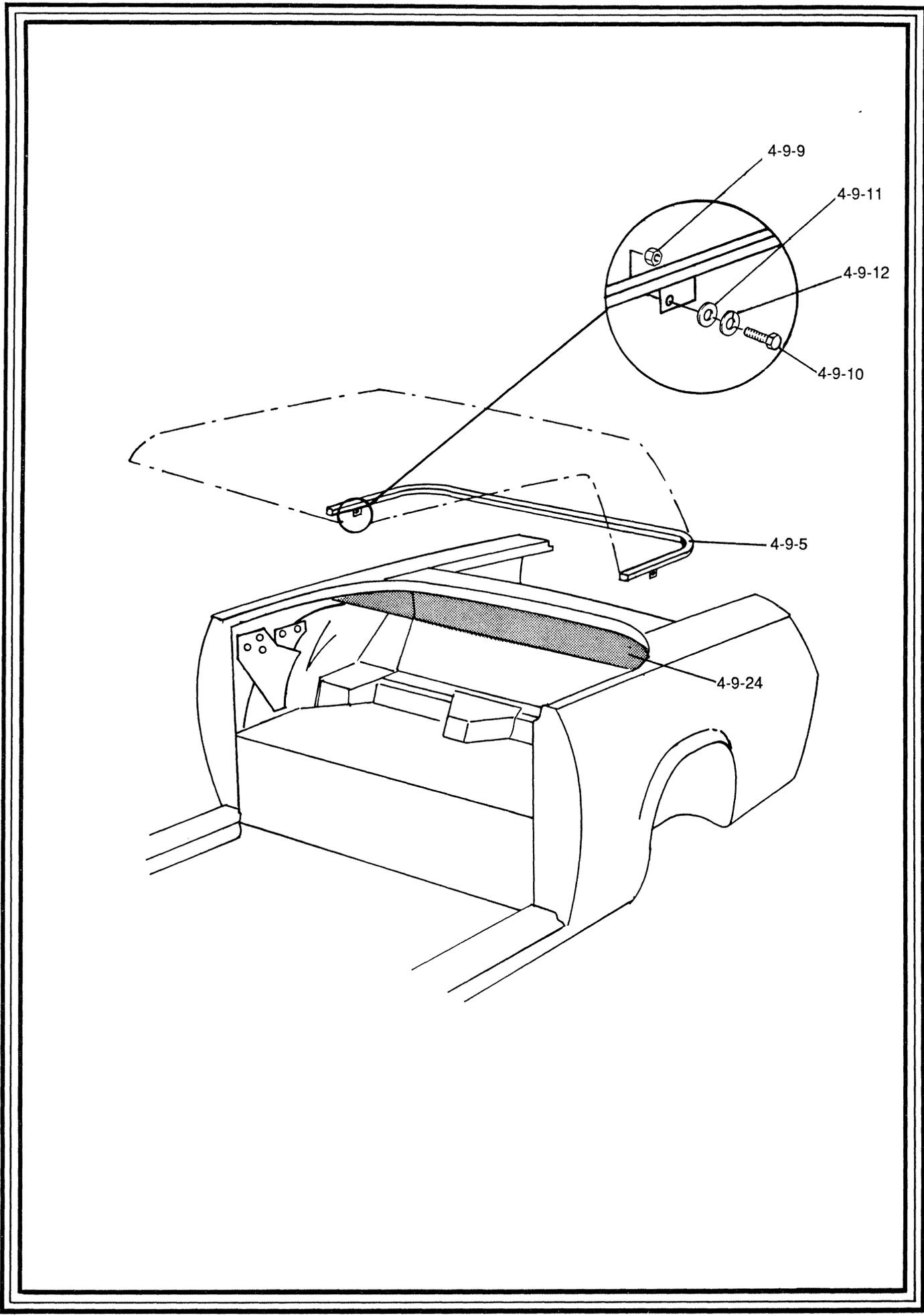
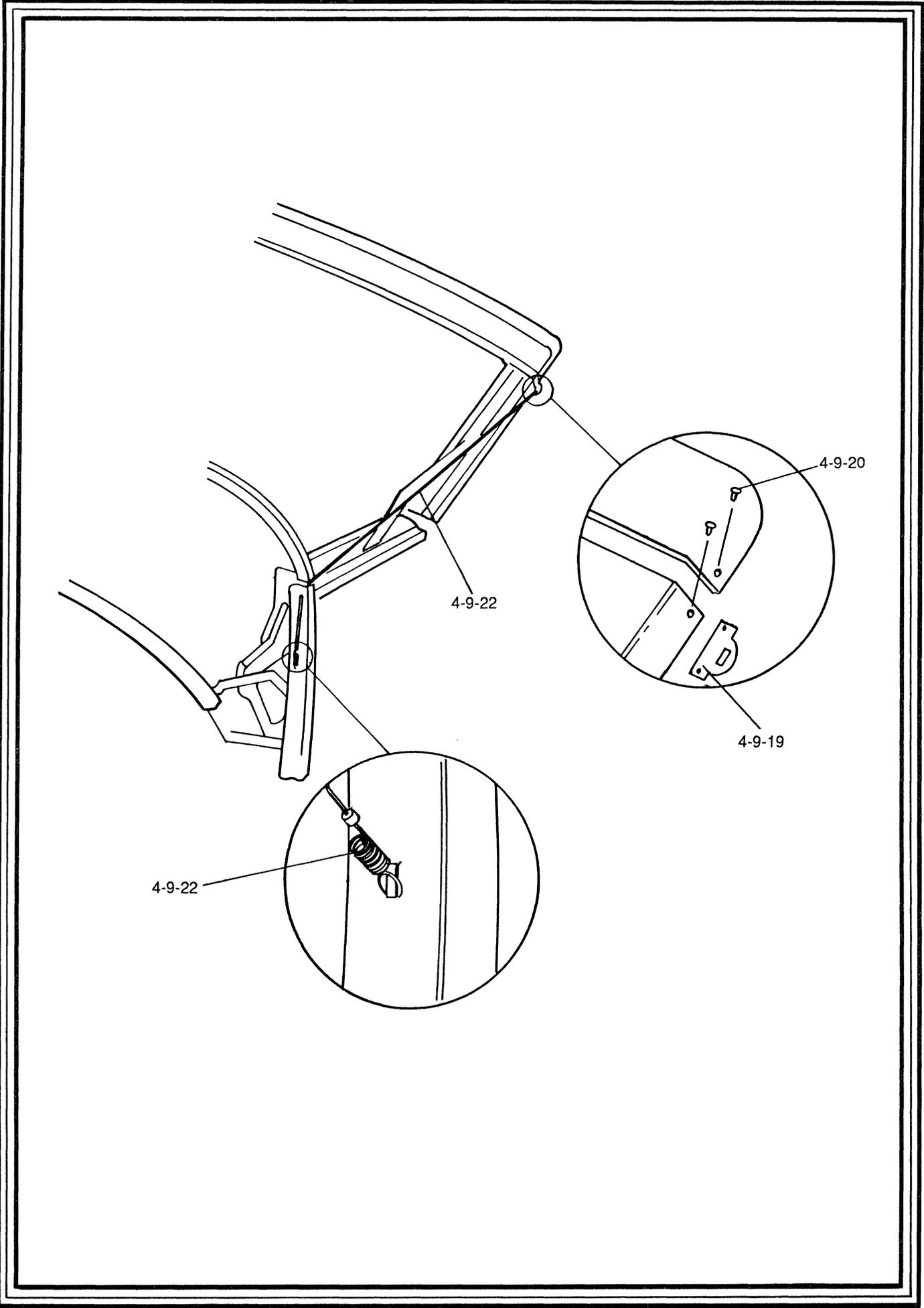


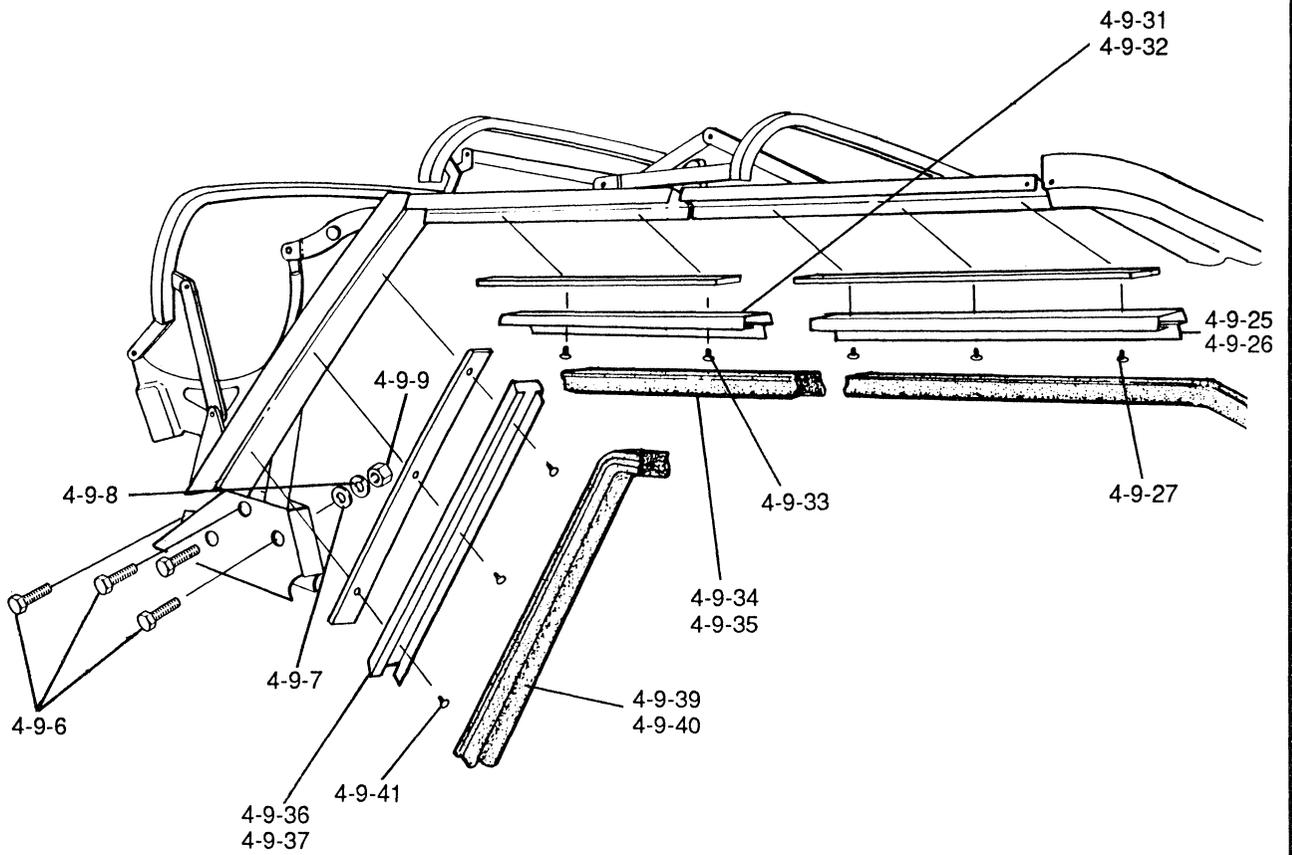
FIG. 4-9 CONVERTIBLE TOP ASSEMBLY

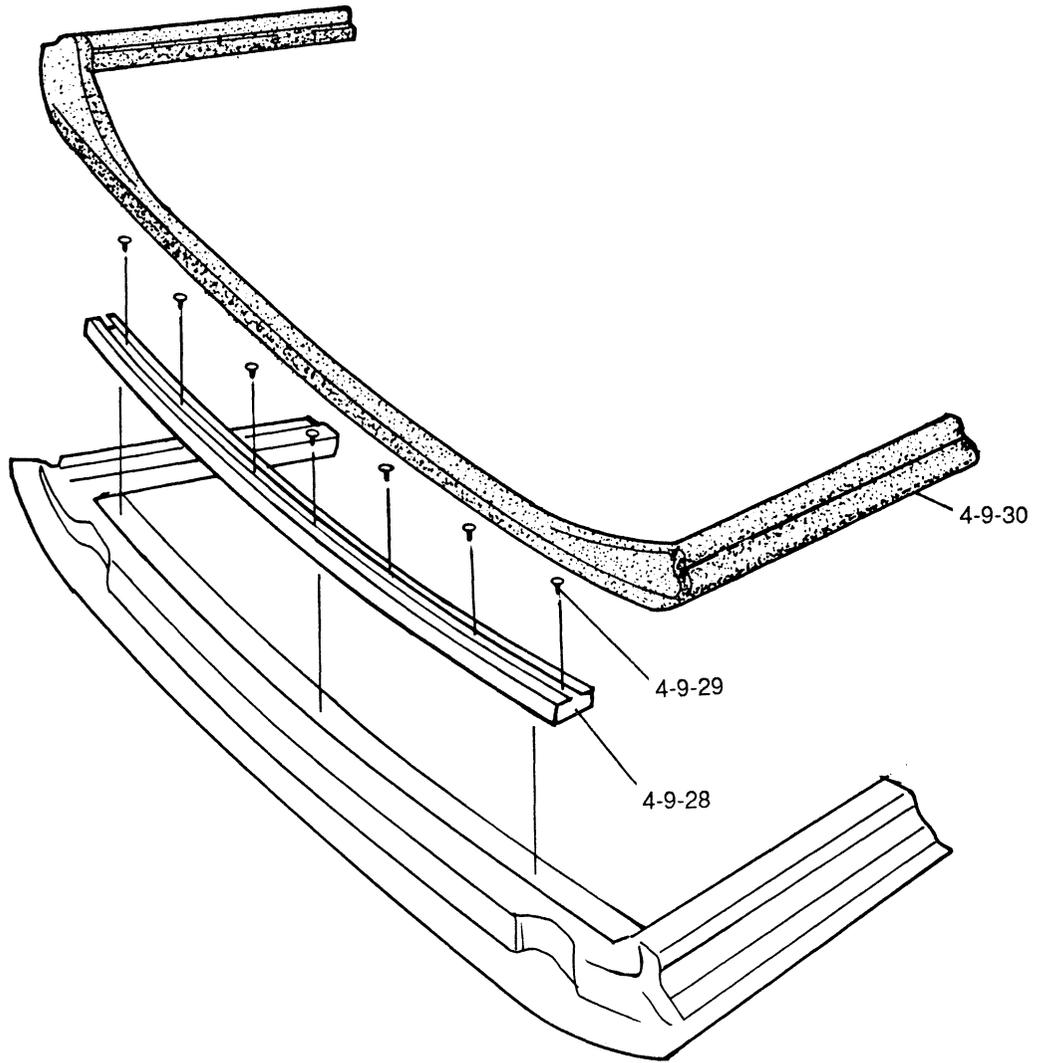






(4-9-1)





**SECTION V**

**ELECTRICAL**

## **INTRODUCTION TO THE ELECTRICAL SYSTEM**

TO INITIATE POWER: By turning the ignition to the "On" or "Accessory" position, the coil of the power relay is energized. This supplies current to the power top relays, as well as, the power window switches.

The fuel pump receives power from the on-board O.E.M. relay (black connector). The low fuel receives current from the low fuel board and activates for ten (10) seconds when the ignition is in the "On" or "Accessory" position or when the fuel level drops below approx. three (3) gallons.

### **POWER TOP**

With the ignition in the "On" or "Accessory" position, the top relays and top switch have power available thru their respective 41 (brown) circuits. When the console switch for the power top is "toggled" up, the "up" relay coil is energized pulling the N.O. (Normally Open) contact to the common, and power flows thru the "up" wire on the hydraulic pump. Similarly, when the top switch is toggled "down", voltage is supplied to the "down" wire.

### **POWER WINDOWS**

Power passes from the battery, thru the 30 amp fuse via the orange 12 ga. wire to the common terminal of the power relay. When the ignition is on the "On" or "Accessory" position, the power relay is energized and power passes from the common terminal to the "N.O." terminal. The "N.O." terminal energizes the brown wires passing to both of the power window switches. When at rest, the power window switch has both output terminals (purple & green wires) at ground potential, thru the two black wires in the switch connector.

When toggled, the switch causes one, or the other, of the ground potential wires to be connected to an energized brown wire. This causes the window lift motor to operate.

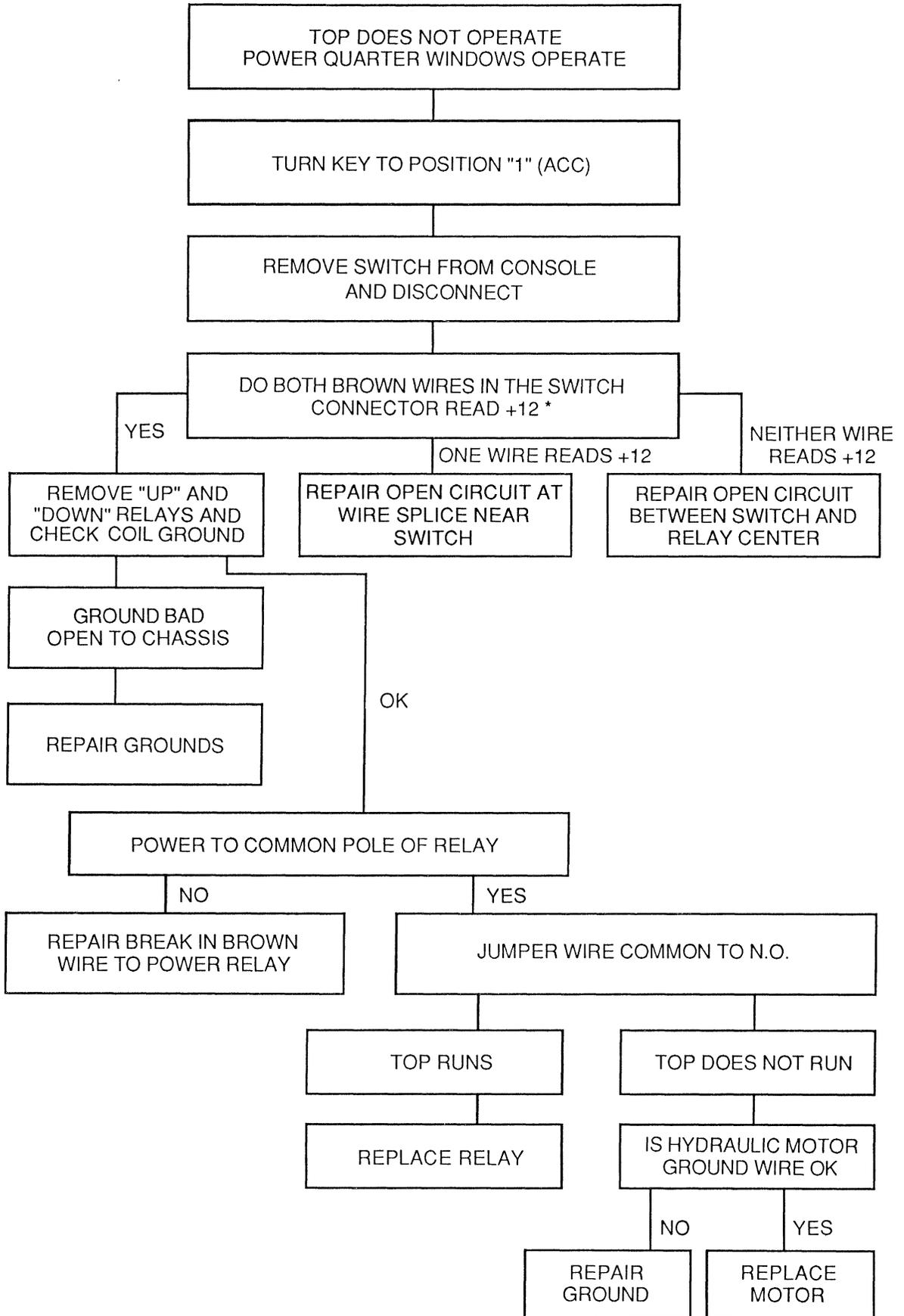
### **FUEL PUMP**

The lower fuel pump runs in parallel with the upper pressure pump and is energized by the brain box thru a relay.

### **LOW FUEL LIGHT**

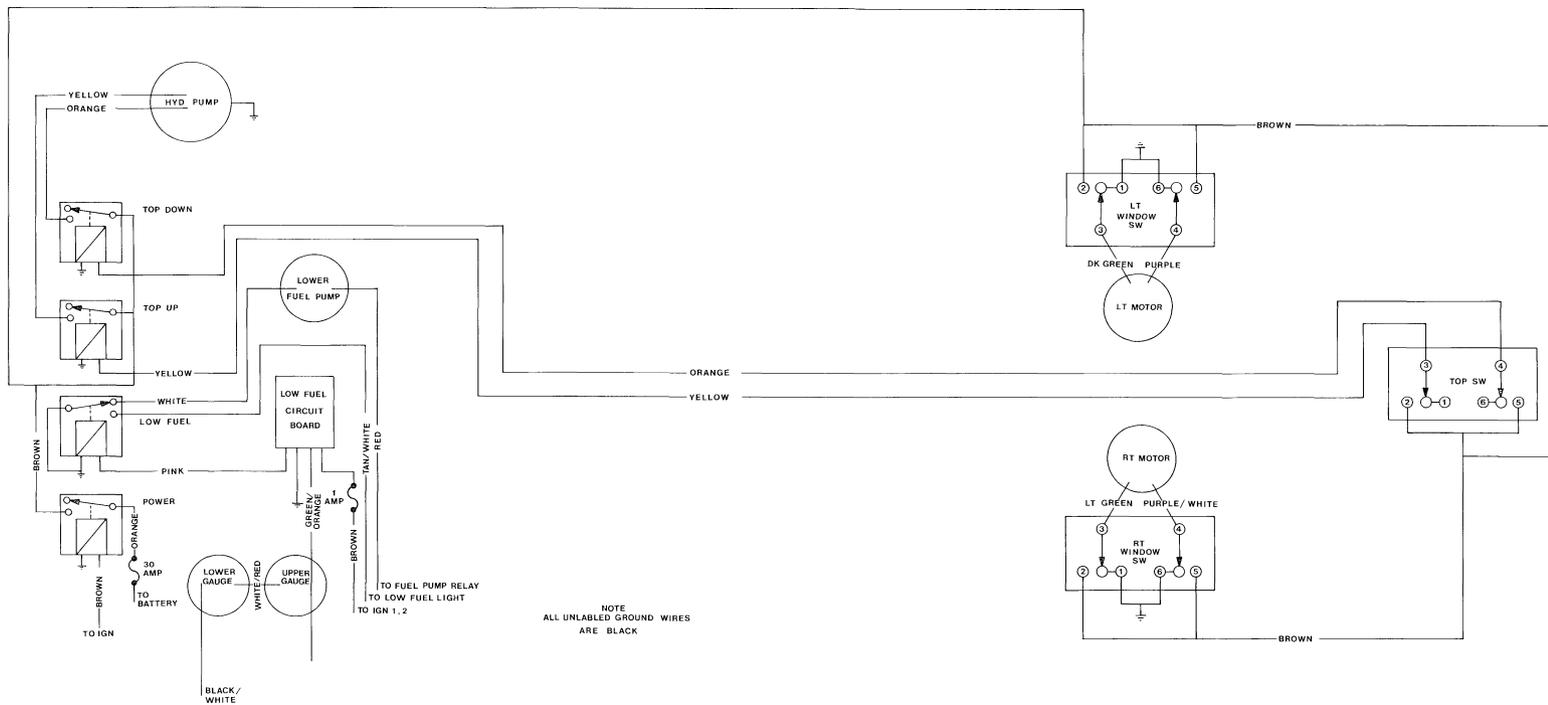
The low fuel light is activated by the low fuel circuit. The low fuel circuit is activated by a key on the signal (bulb test) or by the fuel level.

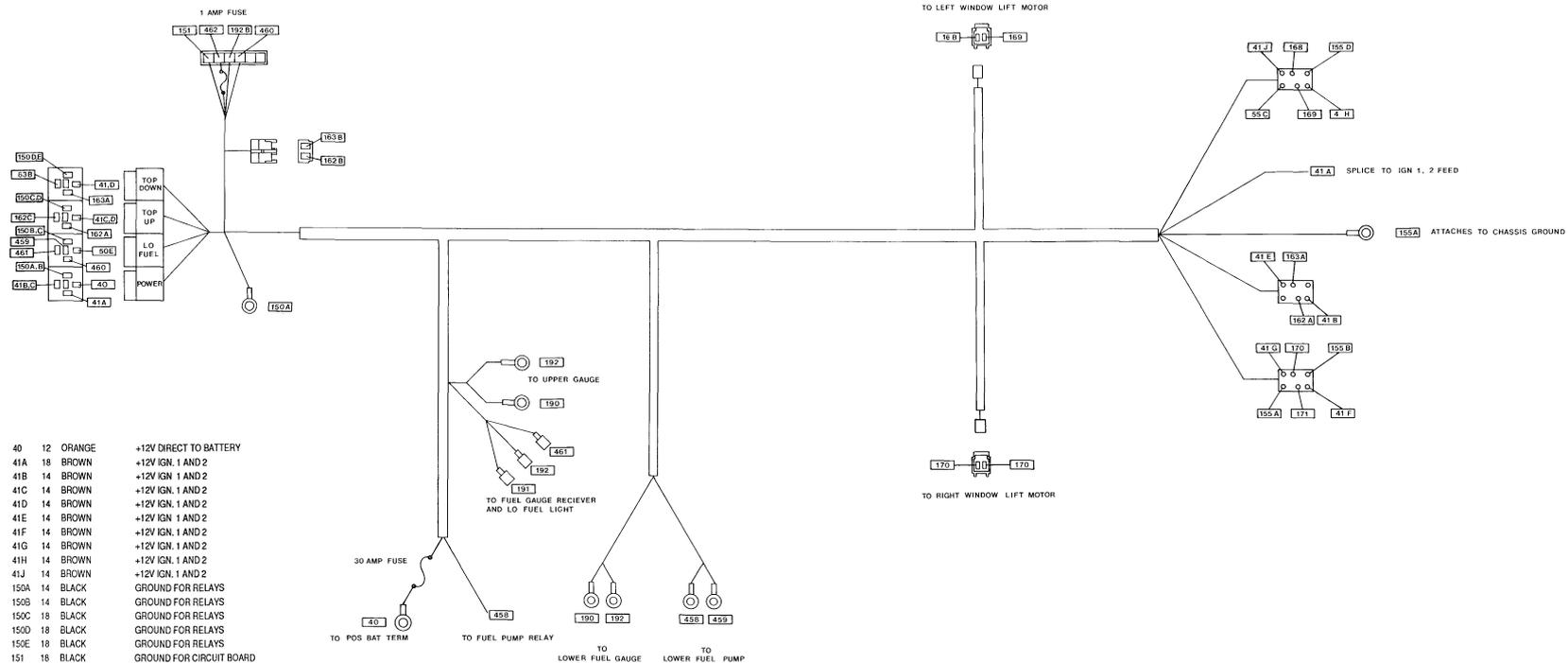
# POWER TOP



\* WITH RESPECT TO CHASSIS GROUND







- |      |    |              |                                    |
|------|----|--------------|------------------------------------|
| 40   | 12 | ORANGE       | +12V DIRECT TO BATTERY             |
| 41A  | 18 | BROWN        | +12V IGN. 1 AND 2                  |
| 41B  | 14 | BROWN        | +12V IGN. 1 AND 2                  |
| 41C  | 14 | BROWN        | +12V IGN. 1 AND 2                  |
| 41D  | 14 | BROWN        | +12V IGN. 1 AND 2                  |
| 41E  | 14 | BROWN        | +12V IGN. 1 AND 2                  |
| 41F  | 14 | BROWN        | +12V IGN. 1 AND 2                  |
| 41G  | 14 | BROWN        | +12V IGN. 1 AND 2                  |
| 41H  | 14 | BROWN        | +12V IGN. 1 AND 2                  |
| 41J  | 14 | BROWN        | +12V IGN. 1 AND 2                  |
| 150A | 14 | BLACK        | GROUND FOR RELAYS                  |
| 150B | 14 | BLACK        | GROUND FOR RELAYS                  |
| 150C | 14 | BLACK        | GROUND FOR RELAYS                  |
| 150D | 14 | BLACK        | GROUND FOR RELAYS                  |
| 150E | 18 | BLACK        | GROUND FOR RELAYS                  |
| 151  | 18 | BLACK        | GROUND FOR CIRCUIT BOARD           |
| 155A | 14 | BLACK        | GROUND FOR WINDOW SWITCHES         |
| 155B | 18 | BLACK        | GROUND FOR WINDOW SWITCHES         |
| 155C | 14 | BLACK        | GROUND FOR WINDOW SWITCHES         |
| 155D | 18 | BLACK        | GROUND FOR WINDOW SWITCHES         |
| 162A | 18 | YELLOW       | TOP UP                             |
| 162B | 12 | YELLOW       | TOP UP                             |
| 163A | 18 | ORANGE       | TOP DOWN                           |
| 163B | 12 | ORANGE       | TOP DOWN                           |
| 168  | 14 | DK. GREEN    | LEFT WINDOW UP                     |
| 169  | 14 | PURPLE       | LEFT WINDOW DOWN                   |
| 170  | 14 | LT. GREEN    | RIGHT WINDOW UP                    |
| 171  | 14 | PURPLE/WHITE | RIGHT WINDOW DOWN                  |
| 190  | 14 | WHITE/RED    | FUEL GAUGE INTERCONNECT            |
| 191  | 14 | BLACK        | FUEL GAUGE RECEIVER +              |
| 192A | 16 | GREEN/ORN.   | FUEL GAUGE RECEIVER GROUND         |
| 192B | 18 | GREEN/ORN    | FUEL GAUGE RECEIVER GROUND         |
| 458  | 14 | RED          | SWITCHED HOT FROM UPPER PUMP       |
| 459  | 14 | BLACK        | SWITCHED GROUND FROM LO FUEL RELAY |
| 460  | 18 | PINK         | CONTROL LINE FROM LO FUEL CIRCUIT  |
| 461  | 18 | TAN/WHITE    | +12 FOR LO FUEL LIGHT ON           |
| 462  | 18 | BROWN        | +12 IGNITION LO FUEL BOARD         |

# **SECTION VI**

## **TROUBLESHOOTING**

# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

MODEL: XJ-S CONVERTIBLE  
SUBJECT: PROCEDURE FOR INSTALLING VENT  
FLOOR HOSES TO EXISTING VENT  
TUBES  
REPAIR OPERATION INDEX CODE: 6-7-14  
REPAIR OPERATION INDEX TIME: .4

KEY POINTS: REPLACEMENT OF FLOOR  
VENT TUBES

3/29/88

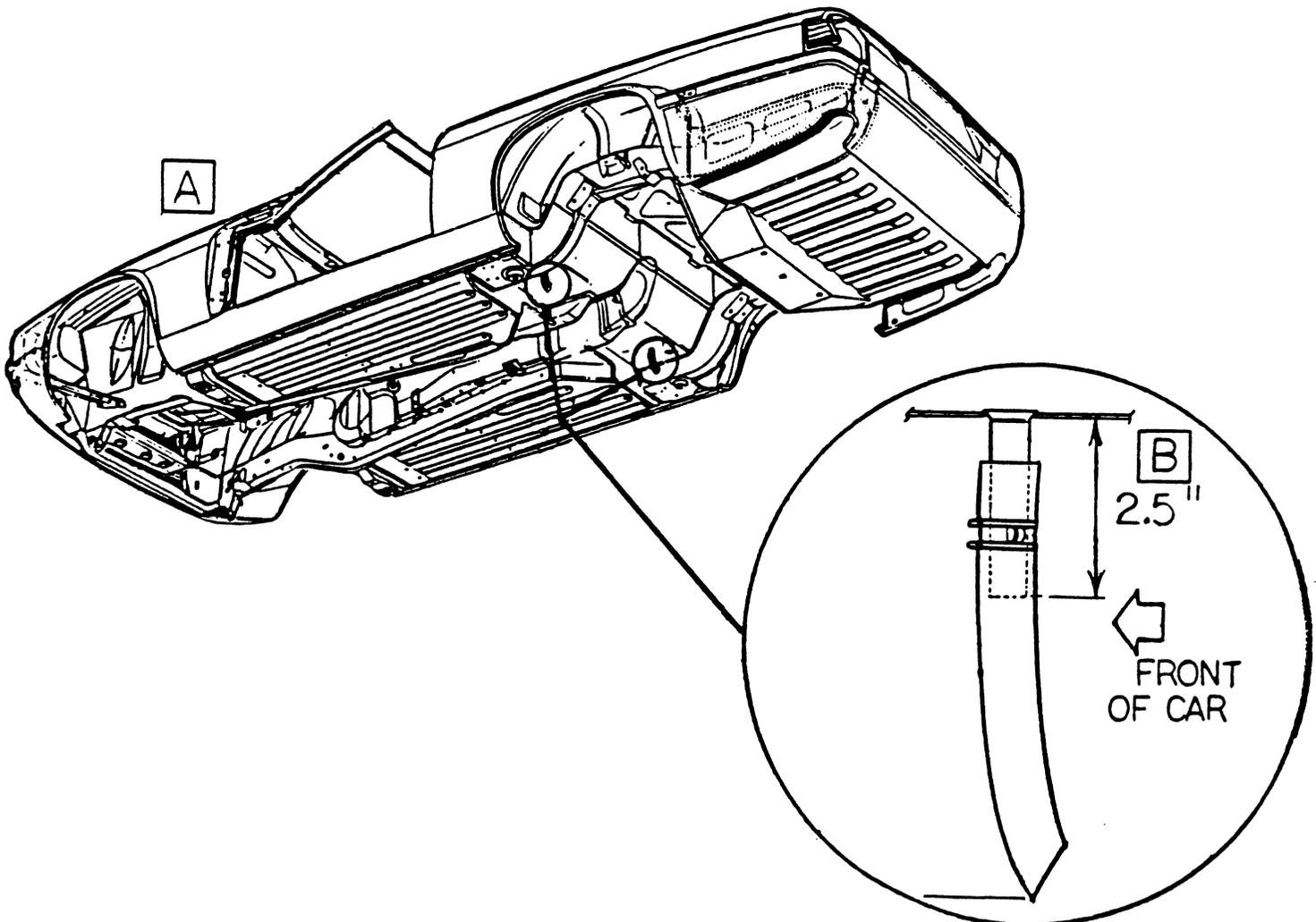
SOME VEHICLES ASSEMBLED PRIOR TO 6/87 WERE ASSEMBLED WITH RIGID LOWER FLOOR VENT TUBES. THESE TUBES ARE DESIGNED TO VENTILATE THE LOWER FUEL TANK CAVITY. POTENTIAL CONTACT OF THESE VENTS WITH ROAD HAZARDS COULD REDUCE THEIR EFFECTIVENESS. REPLACEMENT OF THESE RIGID TUBES WITH FLEXIBLE HOSE IS REQUIRED WHEN OBSERVED.

## INSTALLATION OF THE LOWER FLOOR VENT HOSES

- 1 RAISE THE CAR ONTO A LIFT AND LOCATE THE VENT TUBES AS SHOWN.  
REF A
- 2 FROM UNDER THE CAR MEASURE DOWN FROM THE FLOOR 2.5" ON THE VENT TUBES.
- 3 CUT THE TUBES USING A TUBE CUTTER AND DEBURR.
- 4 SLIDE THE RUBBER HOSES (HESS & EISENHARDT # 560685 ) ONTO THE VENT TUBES.
- 5 SECURE THE RUBBER HOSE ONTO THE VENT TUBE USING A SPRING CLIP  
HESS & EISENHARDT #560683.

NOTE: THE HOSES SHOULD HANG 1" BELOW THE MUFFLER WITH THE SLANTED END FACING TOWARDS THE REAR OF THE CAR AS SHOWN REF B

CAUTION: IF THE HOSE IS NOT POSITIONED AS SPECIFIED, IT WILL NOT PROPERLY VENT THE LOWER FUEL CELL CAVITY.



# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

MODEL : JAGUAR XJ-S CONVERTIBLE  
SUBJECT : RE-GROUNDING OF THE LOWER FUEL  
TANK PUMP IN THE REAR TRUNK RELAY  
BOARD AREA  
REPAIR OPERATIONS INDEX CODE 6-7-13  
REPAIR OPERATIONS INDEX TIME .3

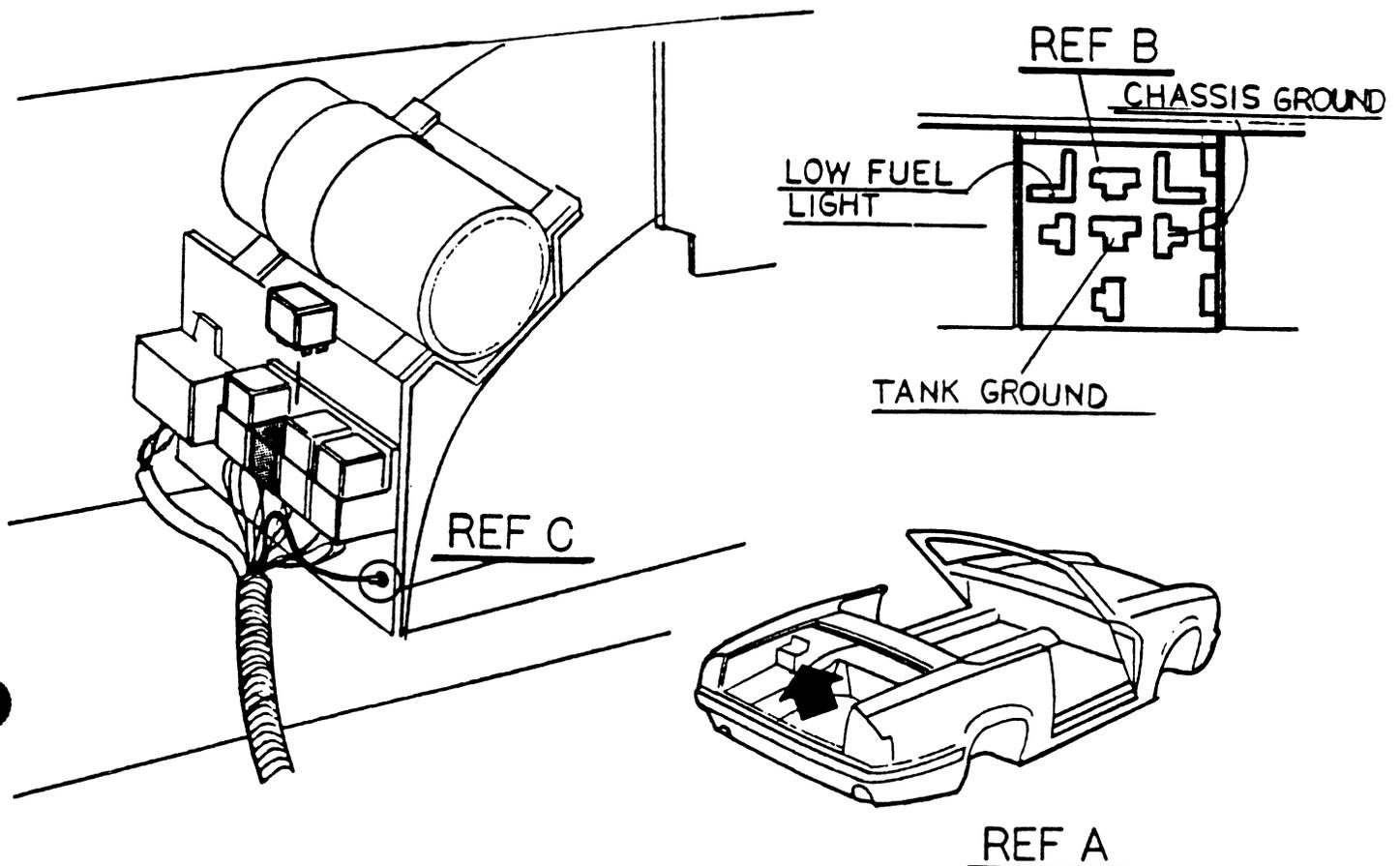
KEY POINTS : INOPERATIVE LOWER FUEL TANK  
PUMP COMMONLY DIAGNOSED AS  
INACCURATE FUEL GAUGE.  
3/29/88

THIS PROCEDURE IS FOR THE 1987 JAGUAR XJ-S CONVERTIBLES THAT RUN OUT OF FUEL WITH HALF OF A TANK OF FUEL REGISTERED ON THE GAS GAUGE. THIS MAY BE CAUSED BY THE LOSS OF THE PRIMARY GROUND TO THE LOWER FUEL TANK PUMP. THE PROBLEM IS CORRECTED BY RE-ESTABLISHING THE PRIMARY GROUND TO THE LOWER FUEL TANK PUMP.

WARNING: DO NOT REPLACE THE LOWER FUEL TANK PUMP OR ANY GAUGE ASSEMBLIES WITHOUT FIRST VERIFYING THE GROUND WITH THE FOLLOWING PROCEDURE. DO NOT BREAK ANY SEALED SURFACES IN THE FUEL SYSTEM.

## RE-GROUNDING THE LOWER FUEL CELL.

1. REMOVE THE TRIM FINISHER INSIDE OF THE TRUNK ON THE LEFT SIDE, LOCATE THE RELAY BOARD ON THE WHEEL ARCH AS SHOWN REF A.
2. REMOVE THE LOW FUEL RELAY, IT IS THE RELAY WITH THE PINK 14 GAUGE WIRE LEADING TO IT.
3. EXTRACT THE GROUND WIRE AND TERMINAL FROM THE LOW FUEL RELAY CONNECTOR REF B.
4. CUT OFF THE TERMINAL AND STRIP A 1/4" OFF OF THE WIRE END. CRIMP ON AN INSULATED NO #10 RING TERMINAL.
5. DRILL A HOLE THRU THE HYDRAULIC PUMP MOUNTING BRACKET WITH A #29 DRILL BIT AS SHOWN REF C.
6. ATTACH THE NEW GROUND WIRE WITH A #8 SCREW.



# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

MODEL: XJ-S JAGUAR CONVERTIBLE  
SUBJECT: PLACING PINCH WELT ON THE LOWER  
PASSENGER 'A' PILLAR REINFORCEMENT  
REPAIR OPERATION INDEX CODE: 6-5-15  
REPAIR OPERATION TIME: .3

KEY POINTS: PROTECTIVE WELT FOR HARNESS COMING  
BY THE 'A' PILLAR

3/29/88

\*\*\*\*\*  
VEHICLES EFFECTED ARE ALL 1987 XJ-S JAGUAR CONVERTIBLES BUILT  
PRIOR TO 6/87  
\*\*\*\*\*

THIS PROCEDURE IS FOR EARLY XJ-S JAGUAR CONVERTIBLE MODELS  
THAT DO NOT HAVE A PROTECTIVE PINCH WELT ON THE LOWER PASSENGER  
'A' PILLAR REINFORCEMENT . THESE VEHICLES WERE MANUFACTURED  
PRIOR TO 6/87

CHECK THE CONVERTIBLE TO SEE IF THE WELT IS PRESENT.

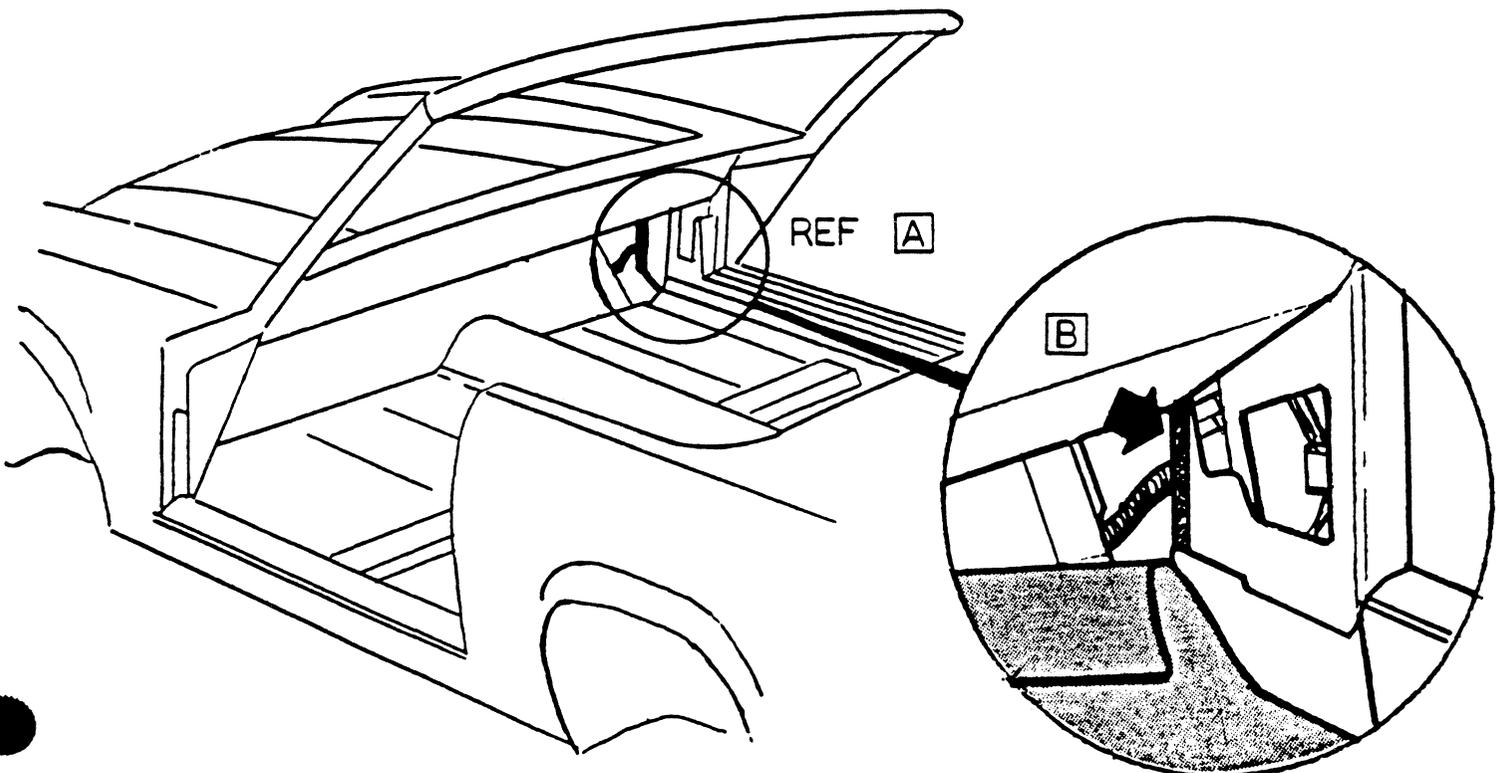
PEEL BACK THE CARPET ON THE FRONT LOWER PASSENGER COMPARTMENT  
DOWN WHERE THE 'A' PILLAR MEETS THE FIREWALL.

NOTE: THIS IS FOR THE PASSENGER SIDE ONLY.

INSPECT THE SIDE REINFORCEMENT PLATE ON THE LOWER 'A' PILLAR  
THE REINFORCEMENT PLATE IS ON THE WALL TOWARDS THE FRONT FIREWALL  
REF A THE EDGE IN QUESTION IS WHERE THE WIRE HARNESS COMES  
OUT FROM THE SIDE WALL AND TOUCHES THE REINFORCEMENT PLATE THIS  
EDGE MUST HAVE A WELT TO PROTECT THE HARNESS. REF B

IF A WELT IS PRESENT REPLACE THE CARPET.  
IF NO WELT IS FOUND PLACE H & E PART # 560607 PINCH WELT  
ON THE FRONT REINFORCEMENT EDGE TO PROTECT THE HARNESS  
FROM CHAFFING.

REPLACE THE CARPET.



# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

MODEL: XJS CONVERTIBLE  
SUBJECT: ENGINE PERFORMANCE  
REPAIR OPERATION INDEX CODE: 6-6-21  
REPAIR OPERATION INDEX TIMES: 3.5

KEY POINTS: ENGINE HESITATES, CUTS-OUT OR  
STALLS DUE TO FUEL STARVATION.  
PAGE 1 OF 10 4/8/88

THE FOLLOWING REPAIR PROCEDURES HAVE APPLICATION TO HESS & EISENHARDT XJS CONVERTIBLES BUILT PRIOR TO APRIL 1, 1988 THAT ARE REPORTED AS HAVING ENGINE HESITATION, CUT OUT OR STALLING PROBLEMS. THESE PROBLEMS MAY BE ATTRIBUTED TO TWO DISTINCT OPERATING CONDITIONS THAT COULD RESULT IN AN INADEQUATE QUANTITY OF FUEL BEING DELIVERED TO THE SURGE TANK.

THE FIRST CONDITION IS WHEN THE JAGUAR XJS V12 FUEL COOLER IS NOT BEING OPERATED. WITH THE A/C ON, THIS COOLER HELPS ELIMINATE HIGH FUEL TEMPERATURES RETURNING TO THE SURGE TANK.

WHEN OPERATING AN XJS CONVERTIBLE IN HIGH AMBIENT TEMPERATURES, IT IS NECESSARY TO HAVE THE AIR CONDITIONING IN OPERATION. THIS HELPS ENSURE THAT FUEL RETURNING TO THE SURGE TANK IS COOLED. IF THE FUEL COOLER IS NOT OPERATED IT IS POSSIBLE FOR THE FUEL TEMPERATURE TO RISE HIGH ENOUGH FOR THE VEHICLE TO EXPERIENCE SYMPTOMS OF FUEL VAPORIZATION. (REFERENCE JAGUAR CARS, INC.'S, PRODUCT QUALITY UPDATE #2-007 DATED 6-22-87). THESE VAPORS, WHEN PRESENT IN THE SURGE TANK, ALSO CREATE BACK PRESSURE ON FUEL DRAINING FROM THE UPPER FUEL TANK. CONSEQUENTLY UNDER CERTAIN OPERATING CONDITIONS AN INADEQUATE AMOUNT OF FUEL IS BEING DELIVERED TO THE SURGE TANK.

SECONDLY THE HESS & EISENHARDT CONVERTIBLE FUEL SYSTEM IS DESIGNED TO MAINTAIN THE INTEGRITY OF THE XJS COUPES FUEL HANDLING SYSTEM AND TANK CAPACITY. FUEL IS DELIVERED TO THE SURGE TANK FROM THE UPPER TANK. FUEL IS MAINTAINED IN A UPPER TANK RESERVOIR BY PUMPING FUEL FROM THE LOWER TANK.

WHEN OPERATING THE XJS CONVERTIBLE WITH FUEL GAUGE LEVELS AT OR BELOW A HALF OF TANK, THE HEAD PRESSURE OF FUEL DRAINING INTO THE SURGE TANK IS MINIMAL. UNDER CERTAIN DOWNHILL DRIVING CONDITIONS, THE FUEL SUPPLY FROM THE UPPER TANK CAN BE DISRUPTED, LEAVING THE SYSTEM DEPENDENT UPON THE FUEL IN THE SURGE TANK AND RETURNING FROM THE ENGINE. VAPOR WITHIN THE SURGE TANK AND /OR EXTENDED DOWNHILL DRIVING CAN LEAD TO THE DEPLETION OF THIS LIMITED SUPPLY OF FUEL.

WHEN A VEHICLE IS EXPERIENCING A FUEL STARVATION PROBLEM WHILE BEING OPERATED IN THE ABOVE DESCRIBED CONDITIONS, THE ENGINE HESITATION, CUT OUT OR STALLING MAY OCCUR WHEN ONE OR ALL OF THE FOLLOWING DRIVING CONDITIONS EXIST.

- THE VEHICLE IS BEING OPERATED IN HIGH AMBIENT TEMPERATURES.
- THE AIR CONDITIONING SYSTEM IS OFF.
- THE FUEL GAUGE LEVEL IS AT OR BELOW A HALF OF TANK.
- THE VEHICLE IS BEING DRIVEN ON A DOWNHILL GRADE.
- THE DRIVER IS MAKING A LEFT HAND TURN.
- THE DRIVER IS MAKING A HARD ACCELERATION.

SHOULD THE VEHICLE STALL, WHILE OPERATING UNDER THESE CONDITIONS, IT WILL BE DIFFICULT TO RESTART.

# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

MODEL: XJS CONVERTIBLE  
SUBJECT: ENGINE PERFORMANCE  
REPAIR OPERATION INDEX CODE: 6-6-21  
REPAIR OPERATION INDEX TIMES: 3.5

KEY POINTS: ENGINE HESITATES, CUTS-OUT OR  
STALLS DUE TO FUEL STARVATION.  
PAGE 2 OF 10 4/8/88

THIS BULLETIN PROVIDES A REPAIR PROCEDURE THAT WILL COMPENSATE FOR THE PREVIOUSLY MENTIONED OPERATING CONDITIONS AS THEY RELATE TO FUEL STARVATION. IT SHOULD BE NOTED HOWEVER, THAT OWNERS BE ADVISED TO CONTINUE TO OPERATE THE AIR CONDITIONING SYSTEM WHEN OPERATING THEIR VEHICLE IN HIGH AMBIENT TEMPERATURES. IN DOING SO THE JAGUAR XJS V12 FUEL COOLER WILL OPERATE AS DESIGNED.

## PARTS, TOOLS & REFERENCE MATERIAL REQUIRED:

NUMBER	DESCRIPTION	PRICE
560805	KIT AUXILIARY TRANSFER TUBE UPPER TANK (INCLUDES FLANGE TUBE #560804, COPPER TUBE #560799, PREST-O-LOCK CONNECTOR #560691, HEX HEAD BOLT 1/4 x 20 #560724.)	\$28.08
560513	HOSE - FUEL TANK UPPER TO LOWER (INTERCONNECTING HOSE)	\$5.64
*920215	T-HANDLE TOOL	\$25.77
920326	SPRING LOAD TOOL (AVAILABLE BUT NOT REQUIRED)	\$30.50
*920289	FUEL SYSTEM PRESSURE KIT (TEST GAUGE)	\$470.88
*920324	GAS CAP/TANK PRESSURE TESTER ASY.	\$30.00
*560668	REPAIR OPERATIONS MANUAL	\$87.72

\*THESE ITEMS HAVE BEEN MADE AVAILABLE PRIOR TO THE RELEASE OF THIS BULLETIN AND MAY ALREADY BE IN YOUR POSSESSION.

## REPAIR PROCEDURE:

\*\*\*\*\*  
WARNING: FUEL VAPORS WILL BE PRESENT WHEN PERFORMING THIS REPAIR  
PROCEDURE. EXERCISE THE DUE CARE AND CAUTION CUSTOMARY  
IN HANDLING COMBUSTIBLE FUELS. PERFORM THE REPAIR IN A  
WELL-VENTILATED AREA. READ THIS REPAIR PROCEDURE ENTIRELY  
BEFORE BEGINNING.  
\*\*\*\*\*

1. REMOVE THE REAR TRUNK INTERIOR  
A. SPARE TIRE C. BATTERY COVER  
B. FLOOR CARPET D. TANK CARPET
2. LOWER THE FUEL LEVEL SO A MAXIMUM OF A 1/4 OF  
A TANK OF FUEL EXIST IN THE LOWER TANK.  
FOLLOW THE REPAIR PROCEDURE 3.7.7. STEPS 1-15 OF  
THE REPAIR OPERATIONS MANUAL.

NOTE: UPON COMPLETING THESE 15 STEPS THE UPPER TANK  
GAUGE AND SENDING UNIT ASSEMBLY AND VENT TUBE  
ASSEMBLY WILL HAVE BEEN REMOVED.

3. RAISE THE FRONT END OF THE VEHICLE APPROXIMATELY 10-12"
4. REMOVE THE INTERIOR TRIM ASSEMBLY  
REFERENCE: 3.6.3. OF THE REPAIR OPERATIONS MANUAL.
5. REMOVE THE INTERCONNECT HOSE COVER BY REMOVING THE TWO  
SECURING SCREWS AND BREAKING THE SEAL BY LIFTING UP ON  
ONE EDGE OF THE COVER WITH A PRY BAR.

MODEL: XJS CONVERTIBLE  
SUBJECT: ENGINE PERFORMANCE  
REPAIR OPERATION INDEX CODE: 6-6-21  
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KEY POINTS: ENGINE HESITATES, CUTS-OUT OR  
STALLS DUE TO FUEL STARVATION.  
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6. INSPECT THE INTERCONNECT HOSE FOR KINKS. IT WILL BE NECESSARY TO CORRECT THIS CONDITION DURING RE-ASSEMBLY IF IT EXISTS.  
REFERENCE: ILLUSTRATION # 1

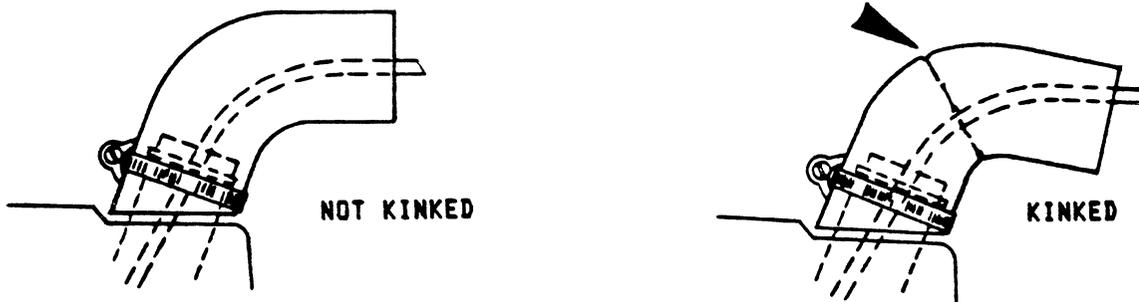


ILLUSTRATION # 1

7. TO REMOVE THE INTERCONNECT HOSE.  
A. REMOVE THE TWO (2) HOSE CLAMPS.  
B. PULL INTERCONNECTING HOSE FROM THE UPPER TANK.  
C. REMOVE HOSE FROM LOWER TANK AND SAVE.

NOTE: WHEN REMOVING INNER CONNECTOR HOSE, DO NOT PRY ON THE FILLER OPENING OF THE UPPER OR LOWER TANKS,

8. EASE THE TRANSFER HOSE FROM THE LOWER TANK FILLER NECK OUT AS FAR AS POSSIBLE WITHOUT KINKING THE HOSE OR PULLING IT LOOSE FROM THE RETAINING CLIP.

NOTE: THE TRANSFER HOSE MUST BE A TRANSLUCENT WHITE NYLON TUBE, IF THE TRANSFER HOSE IS MADE OF BLACK NEOPRENE RUBBER IT MAY BE NECESSARY TO REPLACE THE TRANSFER HOSE,  
CONTACT HESS & EISENHARDT CO.  
(513) 791-8888 SERVICE DEPT.

9. CUT THE END OF THE TRANSFER HOSE AT A 45 DEGREE ANGLE.  
REFERENCE: ILLUSTRATION # 2

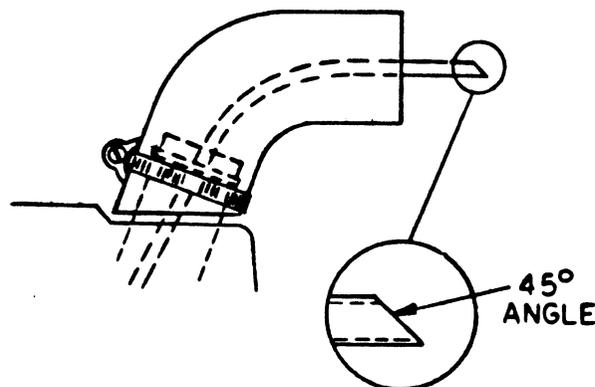


ILLUSTRATION # 2

MODEL: XJS CONVERTIBLE  
SUBJECT: ENGINE PERFORMANCE  
REPAIR OPERATION INDEX CODE: 6-6-21  
REPAIR OPERATION INDEX TIMES: 3.5

KEY POINTS: ENGINE HESITATES, CUTS-OUT OR  
STALLS DUE TO FUEL STARVATION.  
PAGE 4 OF 10 4/8/88

10. COMPARE THE SIZE OF THE OLD INTERCONNECTING HOSE AND THE NEW INTERCONNECTING HOSE.
  - A. IF THE OLD INTERCONNECTING HOSE IS SHORTER THAN THE NEW INTERCONNECTING HOSE, USE A HACKSAW TO CUT THE NEW HOSE TO MATCH THE OLD
  - B. IF THE OLD INTERCONNECTING HOSE WAS KINKED WHEN INSPECTED IN STEP 6, IT MAY BE NECESSARY TO TRIM ADDITIONALLY.  
REFERENCE: ILLUSTRATION # 3

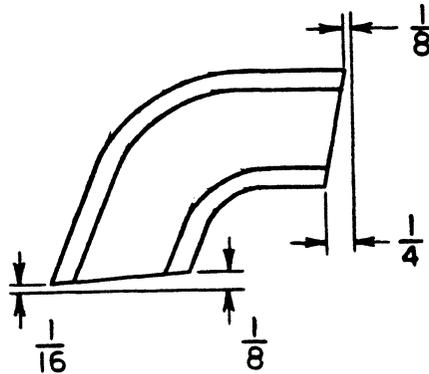


ILLUSTRATION # 3

11. INSTALL THE NEW INTERCONNECTING HOSE OVER THE TRANSFER HOSE AND ONTO THE LOWER TANK FILLER OPENING.
12. INSERT THE TRANSFER HOSE INTO THE UPPER TANK FILLER OPENING. DO NOT CONNECT THE INTERCONNECT HOSE TO THE UPPER TANK AT THIS TIME. PUSH THE INTERCONNECT HOSE TO THE RIGHT SIDE OF THE UPPER TANK FILLER OPENING.  
REFERENCE: ILLUSTRATION # 4

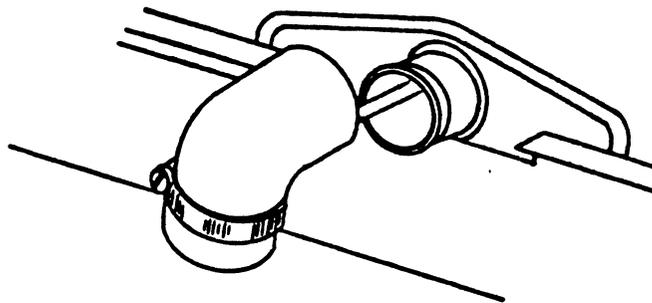


ILLUSTRATION # 4

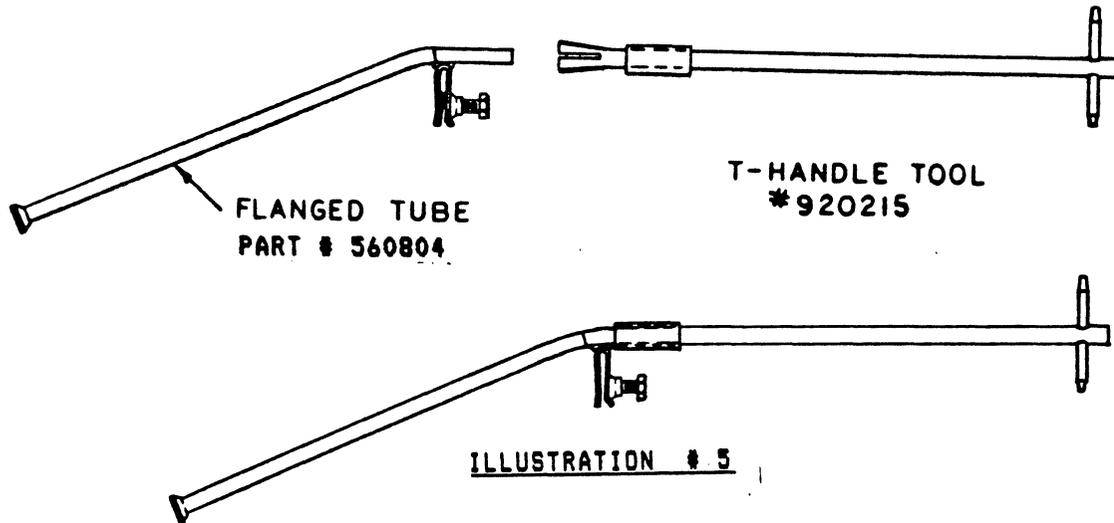
# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

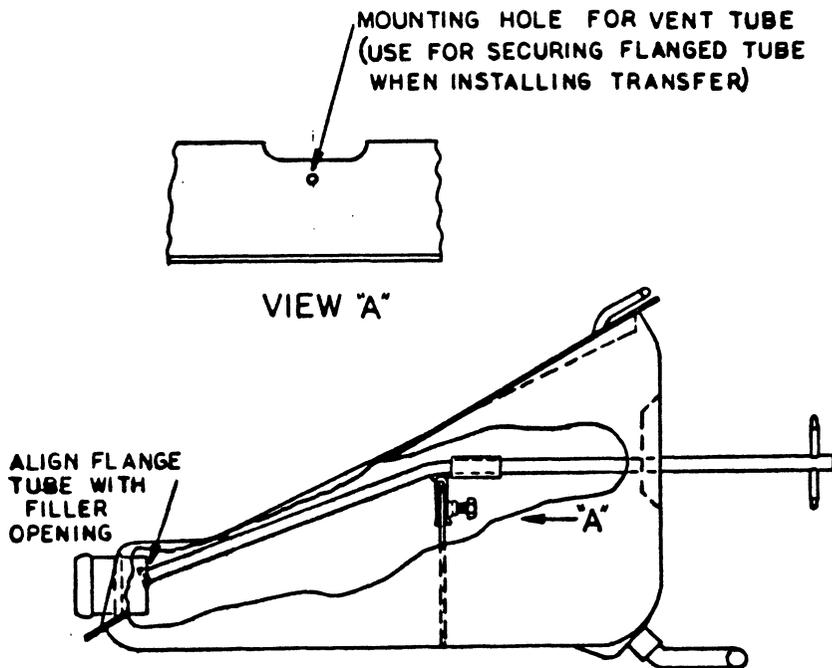
MODEL: XJS CONVERTIBLE  
SUBJECT: ENGINE PERFORMANCE  
REPAIR OPERATION INDEX CODE: 6-6-21  
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KEY POINTS: ENGINE HESITATES, CUTS-OUT OR  
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13. USING YOUR T-HANDLE TOOL, PART # 920215, INSERT THE FLANGED TUBE PART # 560804 INTO THE UPPER TANK THROUGH THE GAUGE OPENING. REFERENCE: ILLUSTRATION # 5



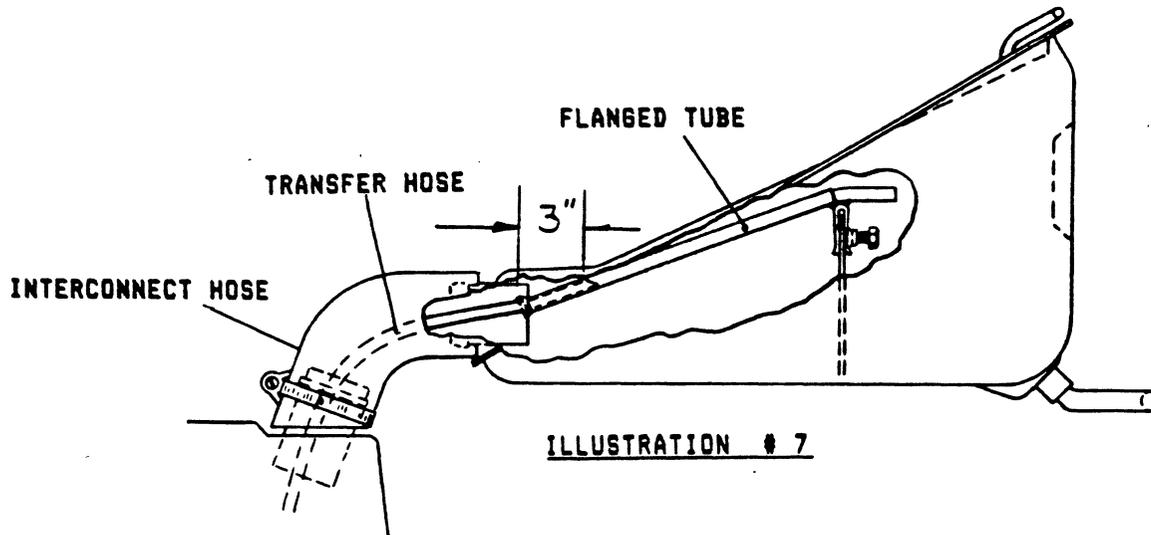
14. LOOKING THROUGH THE UPPER GAUGE OPENING, ALIGN THE FLANGED TUBE WITH THE FILLER OPENING. SLIDE THE CLIP OF THE FLANGED TUBE OVER THE BAFFLE ALIGNING THE MOUNTING BOLT WITH THE CENTER OF THE CUTOUT OR BAFFLE HOLE. SECURE INTO PLACE. REFERENCE: ILLUSTRATION # 6



MODEL: XJS CONVERTIBLE  
SUBJECT: ENGINE PERFORMANCE  
REPAIR OPERATION INDEX CODE: 6-6-21  
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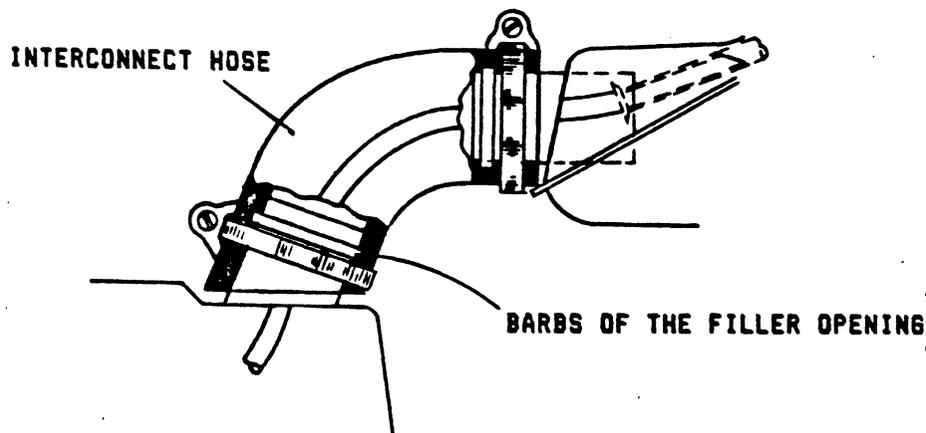
KEY POINTS: ENGINE HESITATES, CUTS-OUT OR  
STALLS DUE TO FUEL STARVATION.  
PAGE 6 OF 10 4/8/88

15. USING A PAIR OF LONG NEEDLE NOSE PLIERS. INSERT THE TRANSFER HOSE INTO THE FLANGE TUBE AS FAR AS POSSIBLE APPROXIMATELY 3" BUT NO LESS THAN 1 1/2"  
THIS CAN BE DONE BY:
1. LUBRICATING THE FLANGE TUBE WITH WD40 OR 3 IN 1 OIL
  2. MEASURE AND MARK THE TRANSFER HOSE SO YOU CAN DETERMINE THE AMOUNT OF TRANSFER HOSE PENETRATION INTO THE FLANGE TUBE. REFERENCE ILLUSTRATION # 7



16. INSTALL THE INTERCONNECT HOSE ONTO THE UPPER TANK FILLER OPENING AND SECURE BOTH HOSE CLAMPS IN PLACE. TORQUE TO 30 INCH LBS. REFERENCE: ILLUSTRATION # 8

NOTE: MAKE SURE THAT YOU DO NOT KINK THE INTERCONNECT HOSE, OR CROSS THE HOSE CLAMP OVER THE BARB ON THE FILLER TUBE.  
REFERENCE: ILLUSTRATION # 1 AND 8



MODEL: XJS CONVERTIBLE  
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REPAIR OPERATION INDEX CODE: 6-6-21  
REPAIR OPERATION INDEX TIMES: 3.5

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STALLS DUE TO FUEL STARVATION.  
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17. LOOSEN THE MOUNTING BOLT HOLDING THE FLANGED TUBE IN PLACE. SLIDE THE TUBE TO THE THE RIGHT OF THE VEHICLE APPROXIMATELY 1 1/4".  
REFERENCE: ILLUSTRATION # 9  
BEFORE INSTALLING THE COPPER TUBING PART # 560799.

VERIFY FUEL FLOW THROUGH THE FLANGED TUBE BY OPERATING THE LOWER SUBMERSIBLE PUMP.

CAUTION: PARTIALLY COVER THE UPPER GAUGE OPENING SO THAT THE FUEL DOES NOT SPRAY OUT OF THE OPENING INTO THE TRUNK AREA.

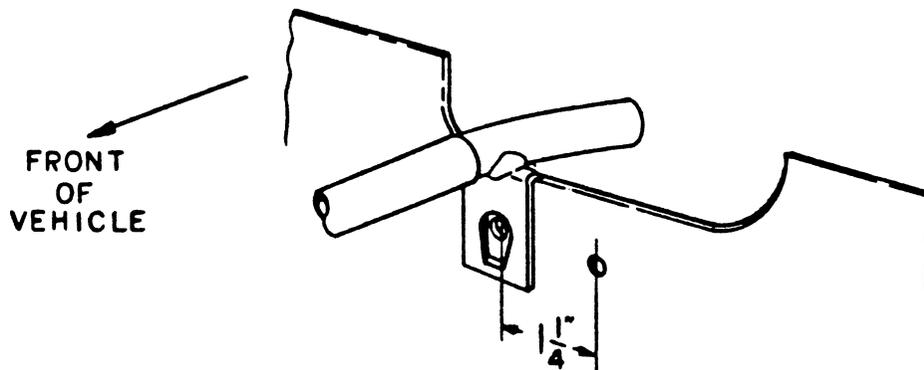


ILLUSTRATION # 9

18. THE PRESTO-LOCK CONNECTOR PART# 560691 SHOULD BE ATTACHED TO THE COPPER TUBE BEFORE INSERTING INTO THE UPPER TANK. SLIDE THE COPPER TUBE PART # 560799 INTO THE UPPER TANK COMPLETELY ANGLED END IN FIRST. HOLD IN PLACE OVER THE GAUGE OPENING, USING A SPRING LOADED TOOL, PART # 920326 OR LONG NEEDLE NOSE PLIERS. LOCK ONTO THE COPPER TUBE APPROXIMATELY 1/4" BELOW THE FIRST BEND.  
REFERENCE: ILLUSTRATION 10

19. POSITION THE ANGLED END OF THE COPPER TUBE SO THAT IT IS ALIGNED WITH THE MAIN DRAIN OPENING. SLIDE THE COPPER TUBE INTO THE MAIN DRAIN OPENING.  
REFERENCE: ILLUSTRATION 10, VIEW - A

NOTE: USE A MIRROR AND LIGHT TO MAKE SURE THAT THE COPPER TUBING IS POSITIONED INTO THE MAIN DRAIN OPENING.

20. ALIGN THE PRESTO-LOCK CONNECTOR WITH THE FLANGED TUBE AND SLIDE TOGETHER LOCKING THE COPPER TUBE INTO PLACE.

NOTE: WHEN INSTALLED CORRECTLY THE COPPER TUBE AND FLANGE TUBE WILL NOT SEPARATE WITHOUT FIRST RELEASING THE LOCKING MECHANISM OF THE PRESTO-LOCK CONNECTOR. THE PRESTO LOCK CONNECTOR IS A ONE-WAY CONNECTION. TO RELEASE THE CONNECTOR AND REMOVE THE COPPER TUBING, PUSH THE GRAY RING FORWARD TOWARD THE BRASS FITTING.

# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

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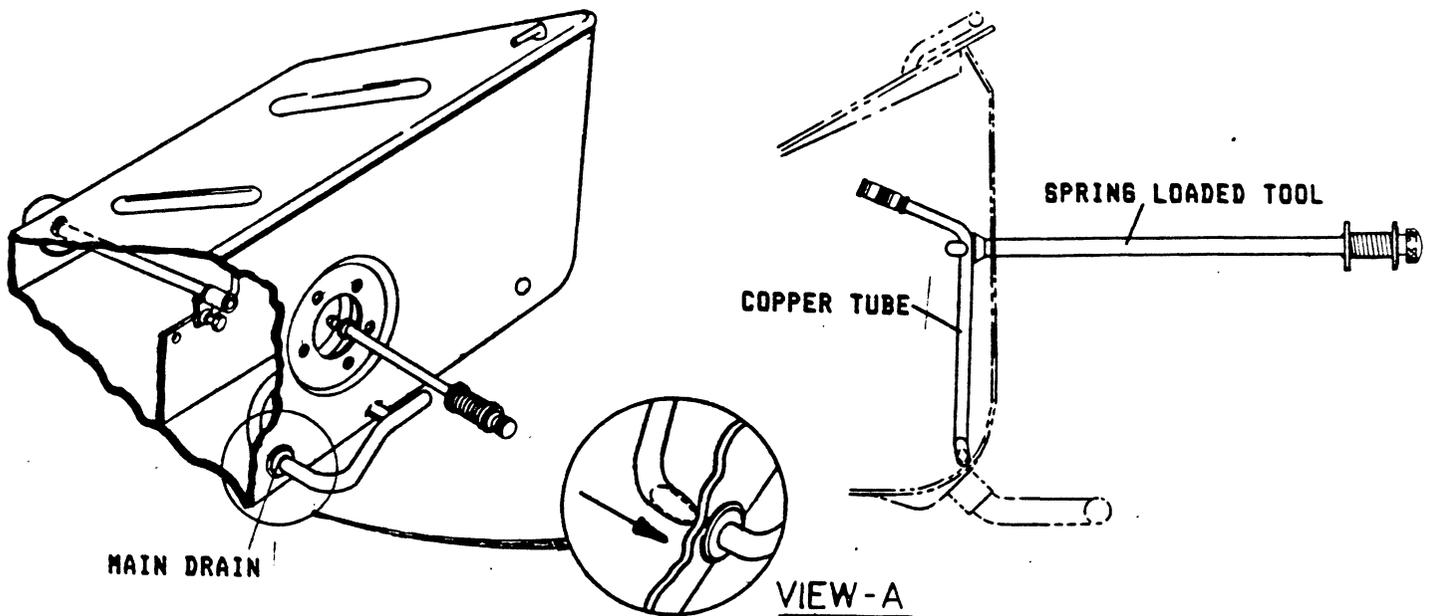


ILLUSTRATION # 10

21. CHECK THE RETURN FUEL LINE AT THE LOWER RIGHT CORNER ON THE INSIDE OF THE UPPER FUEL TANK.  
REFERENCE: ILLUSTRATION # 11 -12
- A. IF THE RETURN LINE IS CUT, AS ILLUSTRATED IN # 11,  
CONTINUE WITH THE STEP-BY-STEP PROCEDURES  
STARTING AT STEP 22.  
REFERENCE: ILLUSTRATION # 11

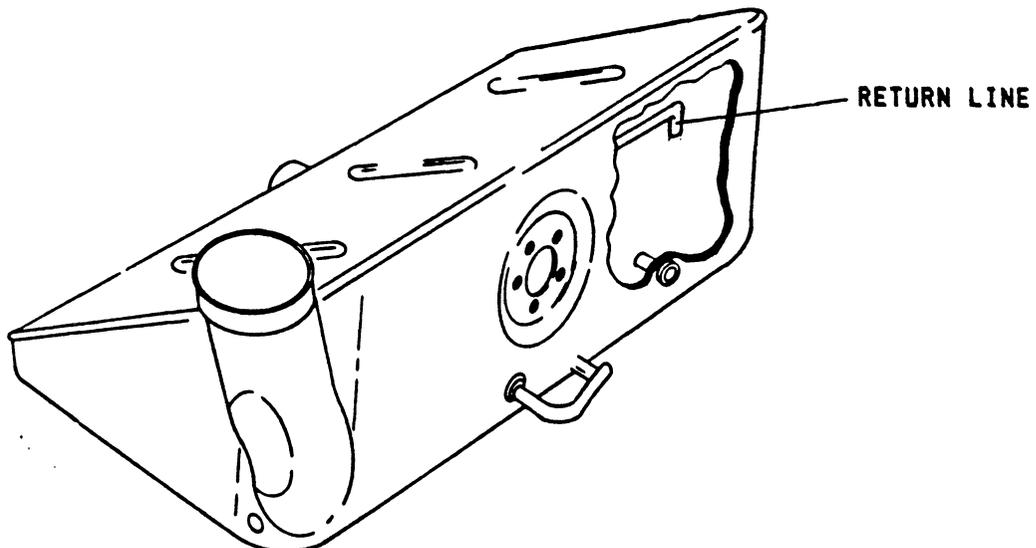


ILLUSTRATION # 11

# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

MODEL: XJS CONVERTIBLE  
SUBJECT: ENGINE PERFORMANCE  
REPAIR OPERATION INDEX CODE: 6-6-21  
REPAIR OPERATION INDEX TIMES: 3.5

KEY POINTS: ENGINE HESITATES, CUTS-OUT OR  
STALLS DUE TO FUEL STARVATION.  
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- B. IF THE RETURN LINE IS NOT CUT  
DISCONNECT THE SUMP LINE PART # CAC1648 FROM THE UPPER TANK  
SUMP LINE FITTING.  
REFERENCE: ILLUSTRATION # 12

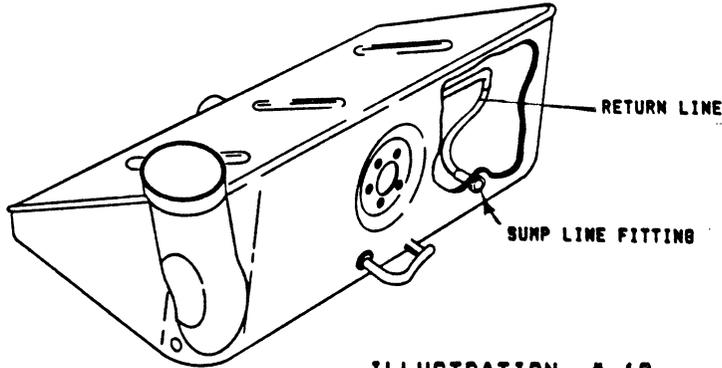


ILLUSTRATION # 12

\*\*\*\*\*  
**WARNING:** FUEL VAPORS ARE PRESENT. AVOID CREATING HEAT OR  
SPARKS. DO NOT USE A HIGH-SPEED AIR DRILL MOTOR  
OR ANY TYPE OF AC-POWERED DRILL MOTOR TO PERFORM  
THE FOLLOWING OPERATION. USE LOW RPM'S WHEN  
DRILLING.  
\*\*\*\*\*

- C. USING THE SUMP LINE FITTING AS A GUIDE, DRILL A 1/4" HOLE  
IN THE RETURN LINE.  
USE A LOW SPEED CORDLESS DC POWER DRILL MOTOR  
AND A NEW 1/4" DRILL BIT.  
REFERENCE: ILLUSTRATION # 13

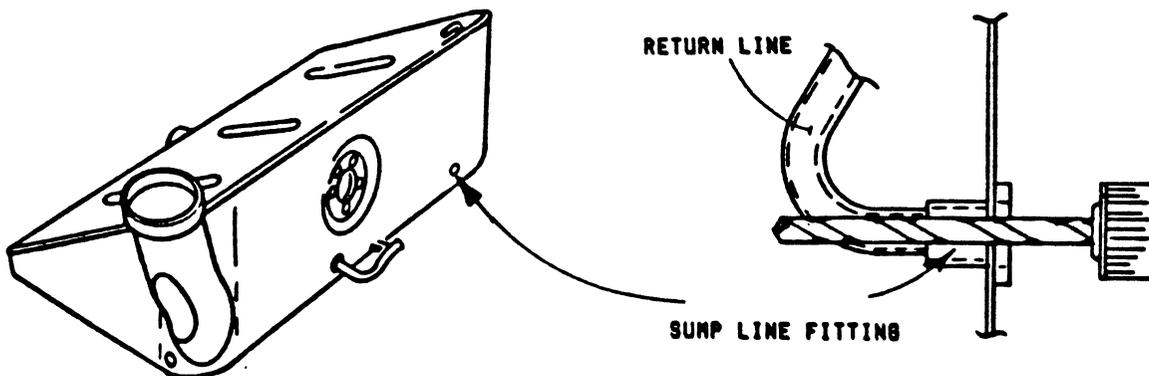


ILLUSTRATION # 13

- D. USE A SMALL MAGNET SUCH AS SNAP-ON PART # BLUE POINT PT5A,  
TO PICK UP ALL METAL SHAVINGS. THIS CAN BE DONE THROUGH  
THE GAUGE OPENING AND RETURN LINE OPENING.  
E. REINSTALL THE SUMP LINE PART # CAC1648 TO THE UPPER TANK.

# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

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22. REINSTALL THE VENT TUBE ASSEMBLY  
REFERENCE 3.7.2 STEPS 17-25 REPAIR OPERATION MANUAL.
23. REINSTALL THE UPPER GAUGE AND SENDING UNIT ASSEMBLY  
REFERENCE: 3.7.6 REPAIR OPERATIONS MANUAL
24. PRESSURE TEST FUEL SYSTEM  
REFERENCE: 3.7.3 REPAIR OPERATIONS MANUAL.
25. REINSTALL INTERCONNECT HOSE COVER BY USING PERMATEX # 1  
AROUND THE COMPLETE EDGE OF THE COVER, AND PLACE THE COVER  
OVER THE INTERCONNECTING HOSE OPENING AND SECURE WITH TWO  
(2) SCREWS.
26. REINSTALL INTERIOR  
REFERENCE: 3.6.3 REPAIR OPERATIONS MANUAL.

# TECHNICAL SERVICE BULLETIN

MODEL: XJ-S CONVERTIBLE  
SUBJECT: ADJUSTING THE FOLDING "B"  
PILLAR IN THE TOP ASSEMBLY.  
REPAIR OPERATION INDEX CODE 6-7-12  
REPAIR OPERATIONS INDEX TIME .5

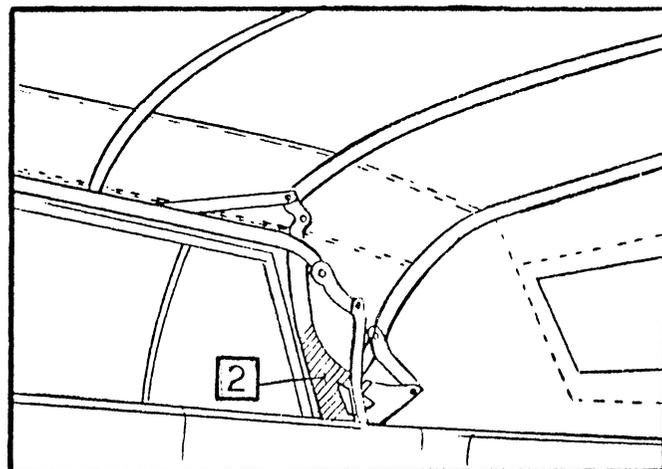
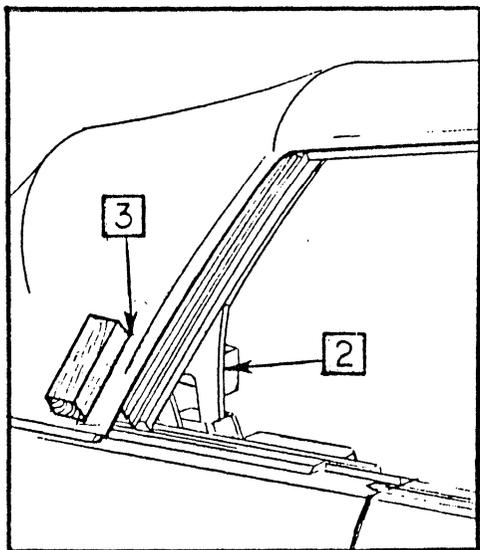
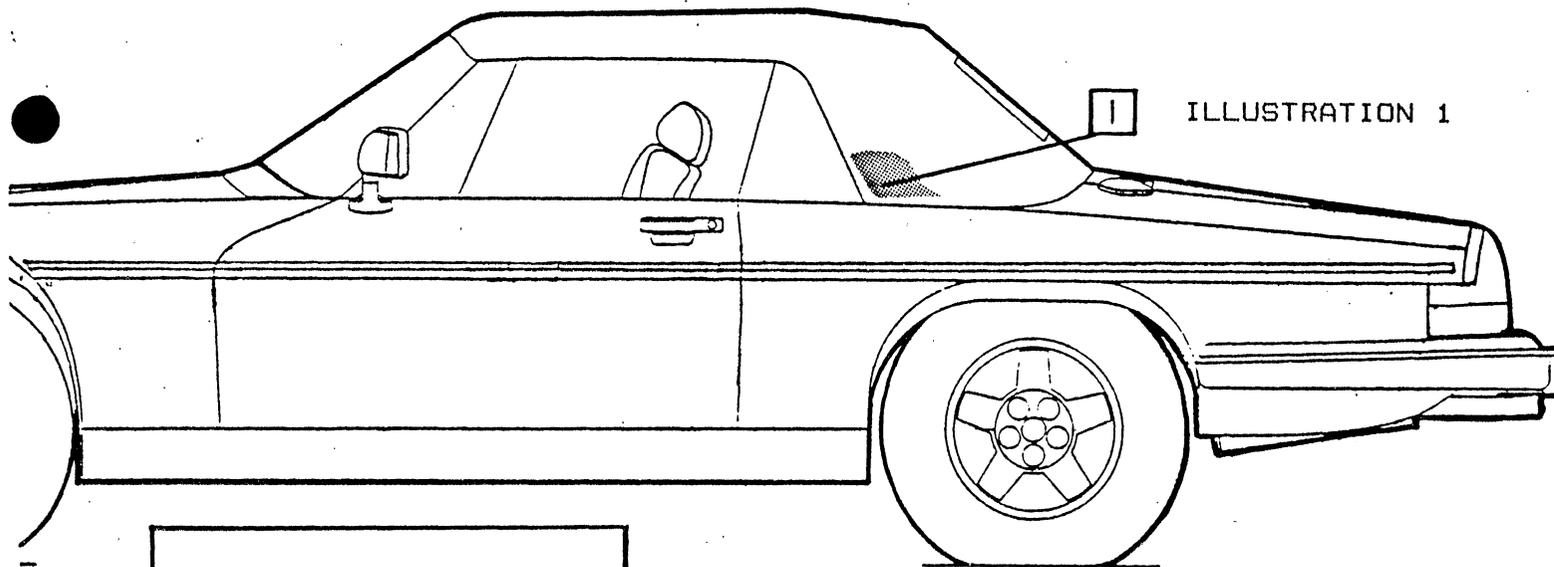
KEY POINTS: ADJUSTING FOLDING "B"  
PILLAR TO AVOID EXCESSIVE  
WEARING OF THE TOP MATERIAL.  
8-17-87 PAGE 1 OF 3

\*\*\*\*\*  
THIS SERVICE BULLETIN ONLY EFFECTS THE 1987 AND 1988 XJ-S CONVERTIBLES  
THAT EXHIBIT EXCESS WEARING OF TOP MATERIAL AT THE FOLDING "B" PILLARS.  
\*\*\*\*\*

A FEW VEHICLES HAVE EXHIBITED A WEARING OF THE TOP MATERIAL  
AT POINT REF. 1 (ON ONE OR BOTH SIDES), SEE ILLUSTRATION 1.  
TO PREVENT FURTHER DAMAGE, THE FOLDING "B" PILLAR MUST BE  
ADJUSTED AWAY FROM THE BELT MOLDING UNTIL THE TOP MATERIAL NO  
LONGER MAKES CONTACT WITH THE BELT MOLDING WHILE THE TOP IS IN  
OPERATION. SEE STEPS A - F FOR ADJUSTING PROCEDURE.

NOTE: IF THE TOP MATERIAL IS TO BE REPLACED, ADJUSTMENT SHOULD  
BE MADE BEFORE THE TOP MATERIAL IS REPLACED.

A PLACE A BLOCK OF WOOD AND A CLEAN DRY CLOTH AGAINST THE METAL  
ARM OF THE TOP BRACKET AT REF. 2 , A BLOCK OF WOOD AND A  
CLEAN DRY CLOTH AGAINST THE FOLDING "B" PILLAR OF THE TOP ASM  
AT REF. 3 . THE WOOD BLOCKS SHOULD BE 1"x 2"x 4". SEE  
ILLUSTRATIONS 2 AND 3.



# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

MODEL: XJ-S CONVERTIBLE  
SUBJECT: ADJUSTING THE FOLDING "B"  
PILLAR IN THE TOP ASSEMBLY.  
REPAIR OPERATION INDEX CODE 6-7-12  
REPAIR OPERATIONS INDEX TIME .5

KEY POINTS: ADJUSTING FOLDING "B"  
PILLAR TO AVOID EXCESSIVE  
WEARING OF THE TOP MATERIAL.  
8-17-87 PAGE 2 OF 3

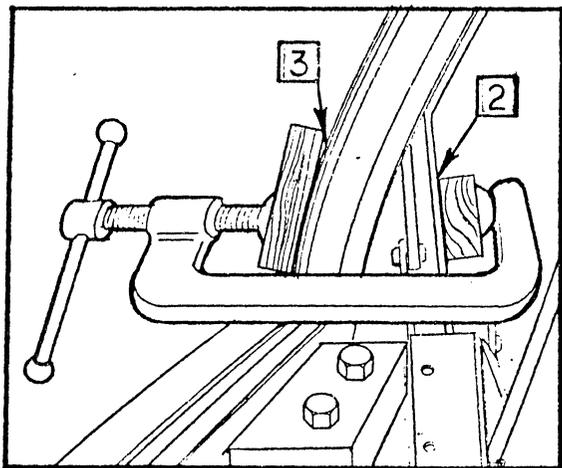


ILLUSTRATION 4

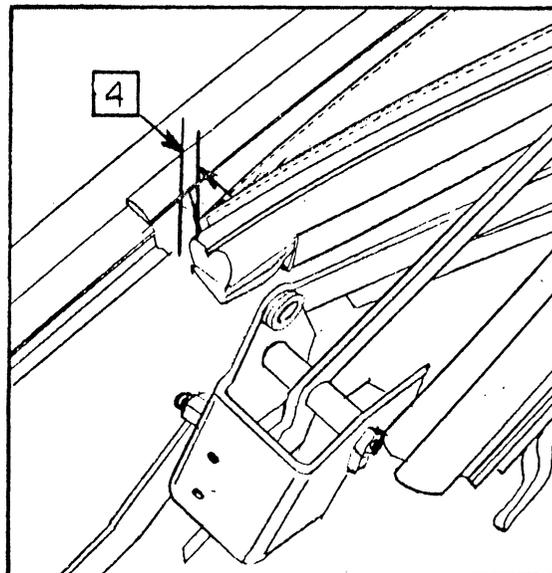


ILLUSTRATION 5

**NOTE:** LOCATE BLOCK OF WOOD AT THE BACK EDGE OF THE PILLAR REF. 3 TO AVOID BENDING THE PILLAR.

**NOTE:** THE USE OF WOOD BLOCKS AND THE CLEAN DRY CLOTH IS TO AVOID SCRATCHING THE PAINT AND TEARING THE TOP MATERIAL.

B USING A "C" CLAMP (6"- 8"), CLAMP THE BLOCKS OF WOOD TO REF. 2 AND REF. 3 , SEE ILLUSTRATION 4.

C USING THE FORCE OF THE CLAMP, ADJUST THE FOLDING "B" PILLAR REF. 3 CLOSER TO THE METAL ARM REF. 2 , SEE ILLUSTRATION 4. ONLY MOVE THE PILLAR SMALL AMOUNTS. CHECK THE DISTANCE REF. 4 OFTEN, SEE ILLUSTRATION 5. MAKE SURE NOT TO BEND OR MOVE THE PILLAR TOO FAR . MAKE ADJUSTMENTS TILL THE "B" PILLAR IS CLEAR OF ANY OBSTRUCTIONS OR CONTACTS.

**NOTE:** YOU MUST HAVE A MINIMUM CLEARANCE OF 2 mm BETWEEN THE BELT MOLDING AND THE FOLDING "B" PILLAR, SEE REF. 4 OF ILLUSTRATION 5. ADJUSTMENT WILL PROBABLY BE LESS THAN 2 mm .

\*\*\*\*\*  
WARNING! DO NOT ADJUST THE FOLDING "B" PILLAR TOWARD THE TOP BRACKET TOO MUCH OR TOP MATERIAL MAY GET TORN AND CAUSE QUARTER WINDOW DAMAGE.  
\*\*\*\*\*

# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARD  
COMPANY

MODEL: XJ-S CONVERTIBLE  
SUBJECT: ADJUSTING THE FOLDING "B"  
PILLAR IN THE TOP ASSEMBLY.  
REPAIR OPERATION INDEX CODE 6-7-12  
REPAIR OPERATIONS INDEX TIME .5

KEY POINTS: ADJUSTING FOLDING "B"  
PILLAR TO AVOID EXCESSIVE  
WEARING OF THE TOP MATERIAL.  
8-17-87 PAGE 3 OF 3

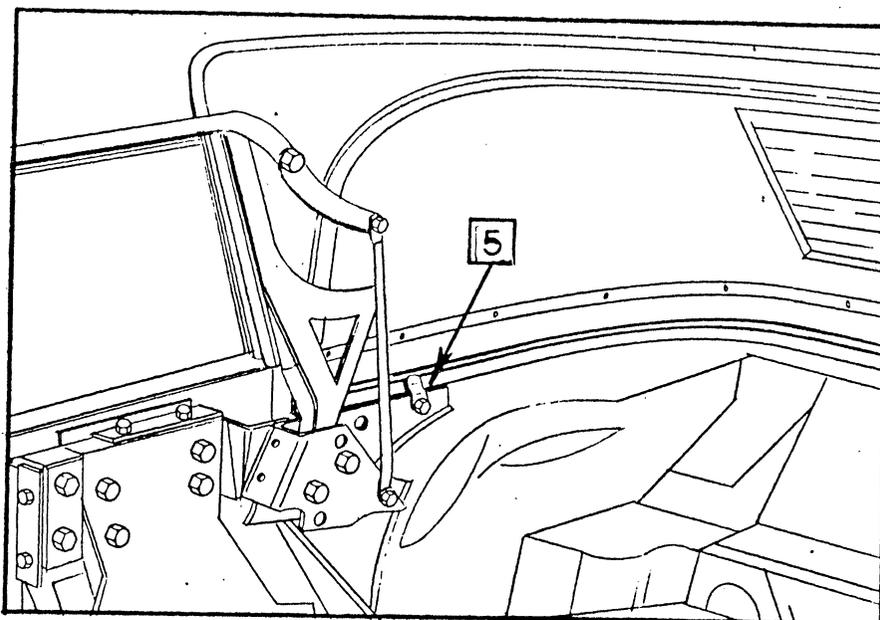


ILLUSTRATION 6

NOTE: THE TRIMSTICK MUST BE KEPT AGAINST THE BODY. ONLY ADJUST THE TRIMSTICK IF NEEDED. THE TRIMSTICK WILL WEAR AND TEAR TOP MATERIAL IF IT ISN'T AGAINST THE BODY.

- D ADJUSTMENT OF THE TRIMSTICK CAN BE COMPLETED BY MOVING THE BRACKET MOUNT, SO THAT THE TRIMSTICK IS AGAINST THE BODY, SEE REF. 5 , ILLUSTRATION 6.
- E REMOVE THE "C" CLAMP AND WOOD BLOCKS FROM CAR.
- F REPEAT STEPS A - F ON OPPOSITE SIDE OF THE CAR.

# TECHNICAL SERVICE BULLETIN

MODEL: JAGUAR XJ-S CONVERTIBLE

SUBJECT: WIRE HARNESS INSPECTION AND REWORK

REPAIR OPERATION INDEX CODE 6.7.2.

REPAIR OPERATION INDEX TIME 4 HOURS

KEY POINTS: THIS IS A DESCRIPTION OF THE  
PROPER PROCEDURE FOR WIRE HARNESS  
ROUTING AND WIRE SPLICING

PAGE 1 OF 8

REMOVING THE REAR TRIM PANEL:  
FOR BELOW PROCEDURE, REF. ILLUSTRATION A, B

- 1 DISCONNECT THE BATTERY TERMINALS USING THE FOLLOWING PROCEDURES:
  - 1 REMOVE THE BATTERY COVER.
  - 2 EASE BACK THE TERMINAL INSULATED COVER.
  - 3 SLACKEN THE CLAMP BOLT.
  - 4 LIFT THE CONNECTOR FROM THE TERMINAL POST.
- 2 REMOVE THE LUGGAGE RAIL HELD BY NINE (9) SCREWS.
- 3 REMOVE THE WARNING LABEL HELD BY TWO (2) SCREWS.
- 4 PEEL THE CARPET BACK COMPLETELY.
- 5 REMOVE SIX (6) SCREWS HOLDING THE TRIM PANEL TO THE FLOOR.
- 6 FOLLOW THE SEAT BELT SHOULDER HARNESS TO THE FLOOR IN FRONT OF THE TRIM PANEL, RIGHT AND LEFT. UNBOLT THE SEAT BELT BAR AND SLIDE THE SEAT BELT HARNESS FREE.
- 7 REMOVE THE SEAT BELT BOLT ASSEMBLY FROM THE TOP OF THE TRIM PANEL (RIGHT AND LEFT). FEED THE SEAT BELTS THROUGH THE TRIM RINGS.
- 8 DISCONNECT THE SPEAKER AND COURTESY LIGHT WIRING ON THE REAR OF THE TRIM PANEL.
- 9 CLEAR A DRY CLEAN AREA THAT THE TRIM PANEL CAN BE SET ON.
- 10 REMOVE THE TRIM PANEL UP AND OUT OF THE CAR. TWO PEOPLE ARE REQUIRED.

REMOVING THE CONNECTING HOSE COVER:  
FOR BELOW PROCEDURE, REF. ILLUSTRATION B

PEEL THE PADDING AWAY FROM THE EDGES OF THE CONNECTING HOSE COVER. (THIS IS IN THE REAR OF THE FUEL TANK COVER PLATE.) REMOVE TWO (2) SCREWS.

- 11 NOTE: THIS CONNECTING HOSE COVER IS HELD IN PLACE WITH SEALER. A PUTTY KNIFE MIGHT BE USED TO PRY IT UP. BE CAREFUL NOT TO SCRAPE OR DAMAGE THE CONNECTING HOSE COVER OR THE FUEL TANK COVER PLATE, AND THE HOSE THEY PROTECT.
- 12 REMOVE THE FUEL TANK COVER PLATE (NOT THE SMALL ROUND INSPECTION COVERS BUT THE WHOLE COVER PLATE) HELD BY TEN (10) SCREWS. THE FUEL TANK COVER PLATE MUST BE REMOVED FROM THE BACK FIRST. IT IS HELD IN THE FRONT BY A LIP.

NOTE: THIS FUEL TANK COVER PLATE IS HELD INTO PLACE WITH SEALER. A PUTTY KNIFE MIGHT BE USED TO PRY IT UP. BE CAREFUL NOT TO DAMAGE THE METAL SURFACES OR CONNECTING HOSE.

# TECHNICAL SERVICE BULLETIN

MODEL: JAGUAR XJ-S CONVERTIBLE

SUBJECT: WIRE HARNESS INSPECTION AND REWORK

KEY POINTS: THIS IS A DESCRIPTION OF THE  
PROPER PROCEDURE FOR WIRE HARNESS  
ROUTING AND WIRE SPLICING

PAGE 2 OF 8

INSPECTION AND REPAIR OF THE WIRE HARNESS:  
FOR BELOW PROCEDURE, REF. ILLUSTRATION C,D

- 13 REMOVE THE INSULATION AND STORE IN A DRY, DIRT-FREE LOCATION.
- 14 LOCATE THE WIRE HARNESS. INSPECT IT FOR THE PROPER ROUTING AND/OR DAMAGE. THE WIRES MUST BE FREE OF BREAKS OR ABRASIONS (REF. ILLUSTRATION D.) THE WIRES CAN BE REMOVED FROM THE PLASTIC HARNESS THROUGH THE SLIT.
- 15 IF THE HARNESS AND WIRES ARE FOUND TO BE DAMAGED, FOLLOW THE BELOW REPAIR (IF THE WIRING IS NOT DAMAGED, PROCEED TO STEP 16.) FOLLOW THIS PROCEDURE EXACTLY FOR SPLICING.

(SEE ILLUSTRATION SHEET C FOR BELOW PROCEDURE.

- 1 CUT OUT THE DAMAGED WIRE AND CUT THE ENDS EVEN. PEEL THE INSULATION BACK 1/4" FROM THE ENDS, REF. A.
- 2 SLIDE A PIECE OF HEAT SHRINK TUBING ONTO ONE END OF THE WIRE, MAKING SURE IT IS LONG ENOUGH TO COVER THE JOINT AREA. USING A BUTT CONNECTOR, INSERT BOTH ENDS OF THE WIRE CRIMP, AND SOLDER INTO PLACE WITH 60-40 ROSIN CORE SOLDER.
- 3 COVER THE WIRE ONCE IT IS SOLDERED WITH A HIGH-TEMPERATURE CLOTH TAPE, ONE FULL TURN.

NOTE: DO NOT FLAG THE END OF THE TAPE, REF. B.

- 4 SLIDE THE HEAT SHRINK TUBING OVER THE JOINT AREA, MAKING SURE IT IS AT LEAST 1/2" BEYOND THE SOLDERED JOINTS ON BOTH ENDS. HEAT SHRINK IT TIGHT AROUND THE JOINT.

CAUTION: A HARNESS WITH MORE THAN 4 REPAIRS OVER A 1-FOOT  
SPAN SHOULD HAVE THE ENTIRE WIRE HARNESS REPLACED.

PROPER ROUTING OF THE WIRE HARNESS:  
FOR BELOW PROCEDURE, REF. ILLUSTRATION D

- 16 AFTER THE WIRE HARNESS HAS BEEN INSPECTED AND/OR REPAIRED, IT MUST BE CORRECTLY ROUTED. SEE ROUTING INSTRUCTIONS BELOW:
  - 1 GO TO WHERE THE WIRE HARNESS IS PULLED THROUGH THE CONNECTING HOSE OPENING AND FOLLOW THIS PROCEDURE EXACTLY FOR PROPER ROUTING.
  - 2 PULL THE WIRE HARNESS STRAIGHT OUT FROM THE CONNECTING HOSE OPENING IN THE REAR OF THE TANK ON THE DRIVERS SIDE, REF. I.
  - 3 LAY THE WIRE HARNESS ACROSS THE FRONT OF THE TANK, REF. J, AND STOP AT THE TANK STRAP, REF. K.
  - 4 WITH A NYLON TIE, ATTACH THE WIRE HARNESS TO THE TANK STRAP AT THE POINT SHOWN, REF. L. DO NOT PULL THE TIE TIGHT. IT SHOULD HANG LOOSELY AROUND THE WIRE HARNESS.

CAUTION: PULLING THE NYLON TIE TIGHT COULD PINCH  
THE WIRES INSIDE THE HARNESS.

# TECHNICAL SERVICE BULLETIN

MODEL: JAGUAR XJ-S CONVERTIBLE  
SUBJECT: WIRE HARNESS INSPECTION AND REWORK

KEY POINTS: THIS IS A DESCRIPTION OF THE  
PROPER PROCEDURE FOR WIRE HARNESS  
ROUTING AND WIRE SPLICING

PAGE 3 OF 8

REINSTALLING THE FUEL TANK COVER PLATE:  
FOR BELOW PROCEDURE, REF. ILLUSTRATION A

17 AFTER THE WIRE HARNESS HAS BEEN INSPECTED, REPAIRED, AND  
ROUTED PROPERLY, THE FUEL TANK AREA SHOULD BE INSPECTED TO  
BE SURE THE HARNESS IS FREE FROM ALL SHARP EDGES.

18 CLEAN ALL OLD SEALERS OFF, LEAVING A SMOOTH DRY AREA FOR  
NEW SEALER TO BE APPLIED.

19 APPLY NEW SEALER (A CLEAR SILICON) AROUND THE EDGE OF THE  
TOP FLANGE WHERE THE OLD SEALER WAS REMOVED.

CAUTION: ALL OLD SEALER MUST BE REMOVED TO INSURE A  
PROPER SEAL.

20 PUT THE INSULATION BACK ON TOP OF THE LOWER FUEL TANK.

21 PLACE THE FUEL TANK COVER PLATE DOWN ONTO THE LOWER TANK.  
ALIGN THE HOLES AND SCREW INTO PLACE.

22 CLEAN ALL THE OLD SEALERS OFF OF THE FUEL TANK COVER PLATE  
TOP AND THE REAR PANEL WHERE THE CONNECTING HOSE COVER  
SCREWS INTO PLACE.

CAUTION: ALL OLD SEALER MUST BE REMOVED TO INSURE A  
PROPER SEAL.

23 APPLY NEW SEALER (CLEAR SILICON) AROUND THE TOP EDGES OF  
THE FUEL TANK COVER PLATE AND THE REAR PANEL WHERE THE OLD  
SEALER WAS REMOVED.

24 ALIGN THE CONNECTING HOSE COVER TO THE FUEL TANK COVER  
PLATE, SEAL AND SCREW IT INTO PLACE, AND REPLACE THE  
PADDING AROUND THE EDGES.

REINSTALLING THE TRIM PANEL:  
FOR BELOW PROCEDURE, REF. ILLUSTRATION A, B

25 PLACE THE TRIM PANEL INTO THE CAR, TWO PEOPLE REQUIRED.

26 FEED THE SEAT BELT THROUGH THE TRIM RING ON THE RIGHT AND  
LEFT SIDES OF THE TRIM PANEL.

27 REASSEMBLE THE BOLTS ON TOP OF THE TRIM PANEL PER  
ILLUSTRATION B. THIS PROCEDURE MUST BE FOLLOWED EXACTLY.

28 SLIDE THE SHOULDER HARNESS THROUGH THE FLOOR RODS RIGHT  
AND LEFT AND HOOK AND BOLT THEM INTO PLACE

CAUTION: TORQUE THE SEAT BELT BOLTS TO 40 FT LBS EXACTLY.

29 ALIGN THE TRIM PANEL WITH THE HOLES IN THE FUEL TANK COVER  
PLATE AND SCREW IT INTO PLACE WITH SIX (6) SCREWS.

# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

MODEL: JAGUAR XJ-S CONVERTIBLE  
SUBJECT: WIRE HARNESS INSPECTION AND REWORK

KEY POINTS: THIS IS A DESCRIPTION OF THE  
PROPER PROCEDURE FOR WIRE HARNESS  
ROUTING AND WIRE SPLICING

PAGE 4 OF 8

- 30 REPLACE THE CARPET. ALIGN THE LUGGAGE BAR WITH THE HOLES IN THE COVER PLATE AND SCREW IT INTO PLACE THROUGH THE CARPET USING NINE (9) SCREWS.
- 31 ALIGN THE WARNING LABEL WITH THE HOLES IN THE FRONT OF THE TUBE PLATE AND SCREW IT INTO PLACE THROUGH THE CARPET USING TWO (2) SCREWS.
- 32 RECONNECT THE BATTERY USING THE FOLLOWING PROCEDURES:
- 1 REPLACE THE CONNECTOR ON THE TERMINAL POST.
  - 2 TIGHTEN THE CLAMP BOLT.
  - 3 EASE BACK THE TERMINAL INSULATED COVER.
  - 4 REPLACE THE BATTERY COVER.

# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

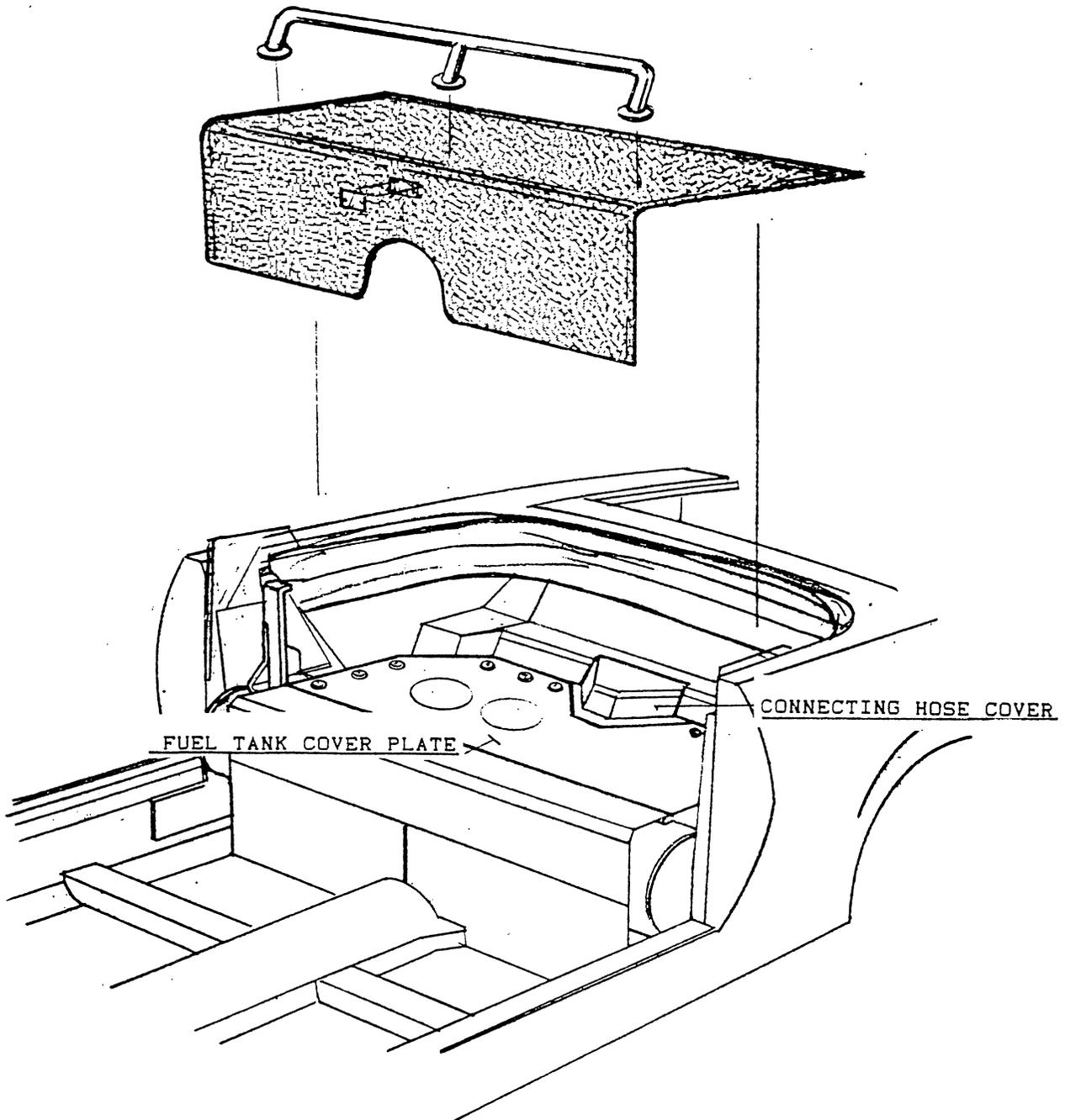
MODEL JAGUAR XJ-S CONVERTIBLE

SUBJECT: REMOVING THE FUEL COVER PLATE  
AND THE CONNECTING HOSE COVER

KEY POINT: REMOVING THE FUEL COVER PLATE  
AND CONNECTING HOSE COVER

PAGE 5 OF 8

ILLUSTRATION A  
DATE: FEB 27



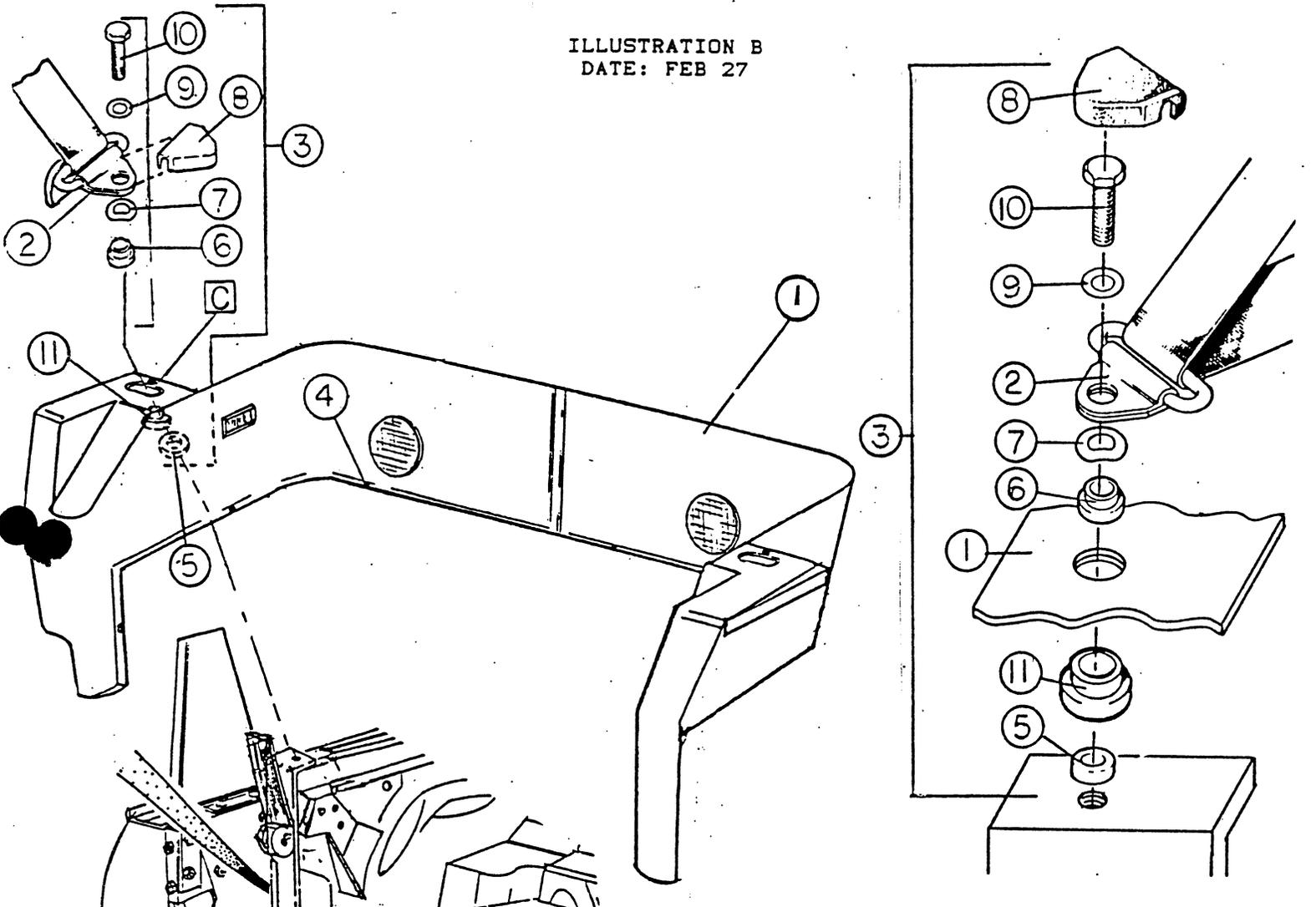
# TECHNICAL SERVICE BULLETIN

MODEL: JAGUAR XJ-S CONVERTIBLE  
SUBJECT: SEAT BELT BOLTING PROCEDURE

KEY POINTS: PROPER SEAT BELT BOLTING  
PROCEDURE, MUST BE FOLLOWED  
EXACTLY

PAGE 6 OF 8

ILLUSTRATION B  
DATE: FEB 27



- ① 370737-801-05 TRIM PANEL ASM
- ② SEAT BELT ASM
- ③ SEAT BELT BOLT ASM
- ④ 790586 SCREW
- ⑤ 1/4" SPACER 3/4" O.D. X 7/16" I.D.
- ⑥ 1/2" COLLAR SPACER 3/4" O.D. X 7/16" I.D.
- ⑦ SPRING WASHER 7/8" O.D. X 5/8" I.D. (BRONZE)
- ⑧ COVER
- ⑨ 1/32" WASHER 3/4" O.D. X 7/16" I.D. (BRONZE)
- ⑩ BOLT 2½" LENGTH, 1½" GRIP, (CHROME, CADMIUM, OR BRONZE PLATE) CLASS 5 OR BETTER.
- ⑪ 5/16" COLLAR SPACER 1" O.D. X 7/16" I.D.

# TECHNICAL SERVICE BULLETIN

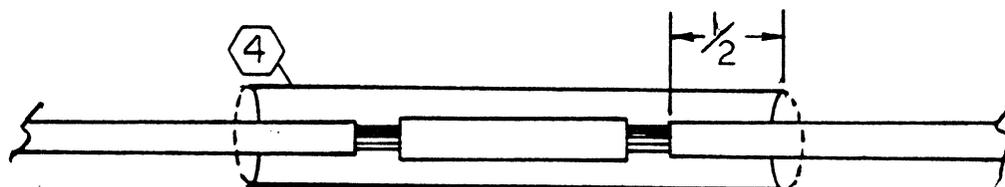
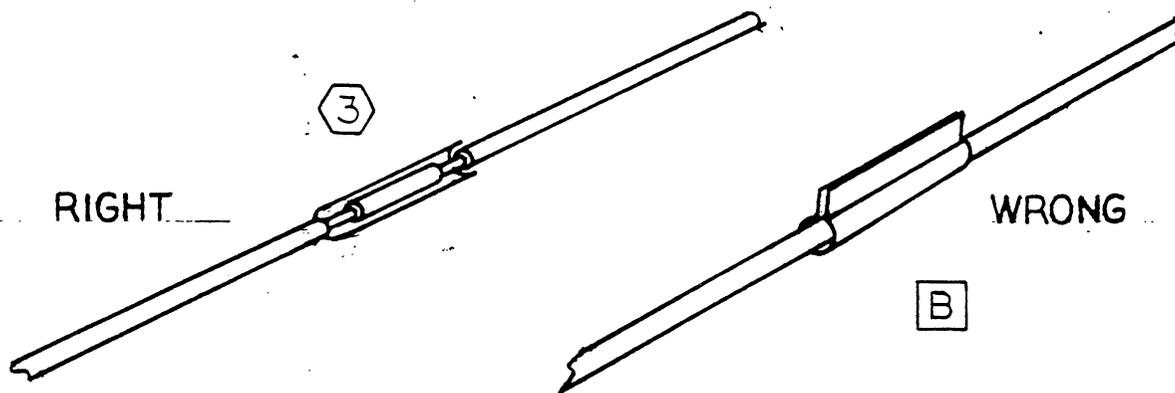
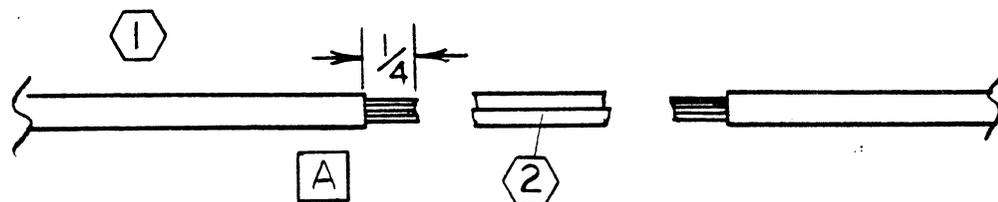
THE HESS & EISENHARDT  
COMPANY

MODEL: JAGUAR XJ-S CONVERTIBLE  
SUBJECT: WIRE HARNESS SPLICING PROCEDURE

KEY POINTS: THE WIRE HARNESS MUST BE SPLICED  
BY THIS PROCEDURE ONLY

PAGE 7 OF 8

ILLUSTRATION C  
DATE: FEB 27



# TECHNICAL SERVICE BULLETIN

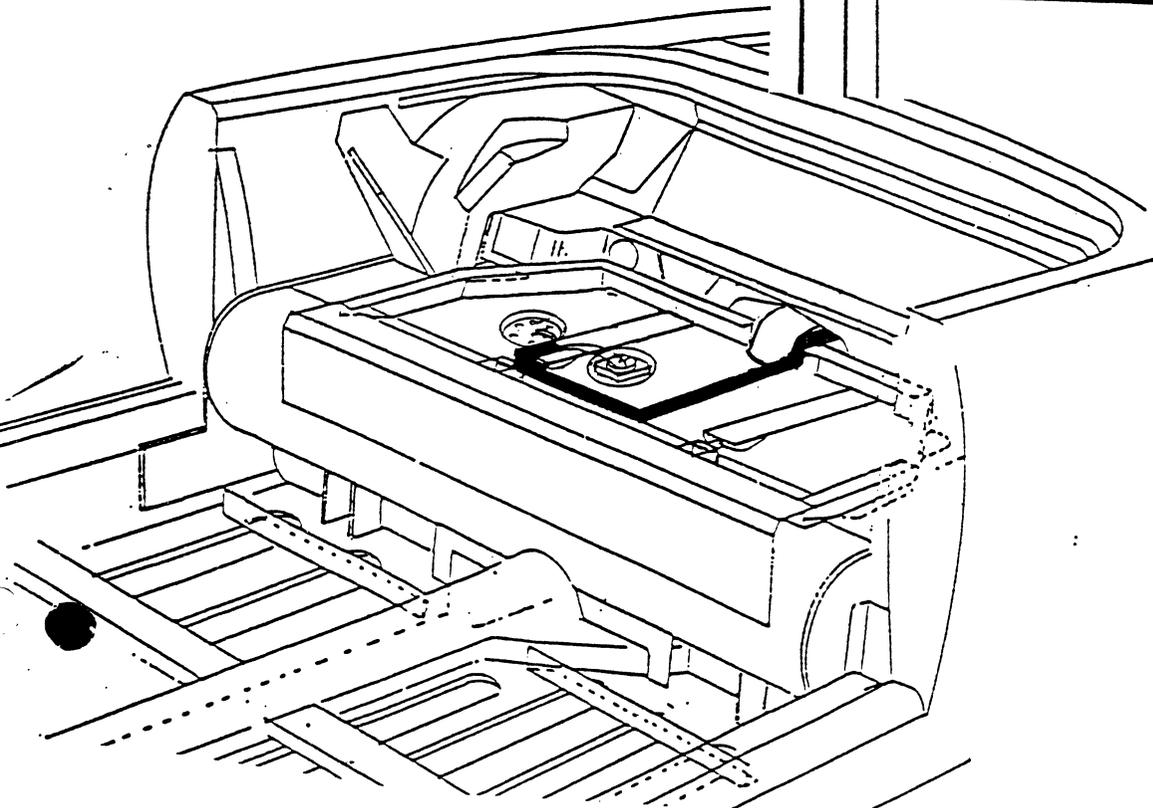
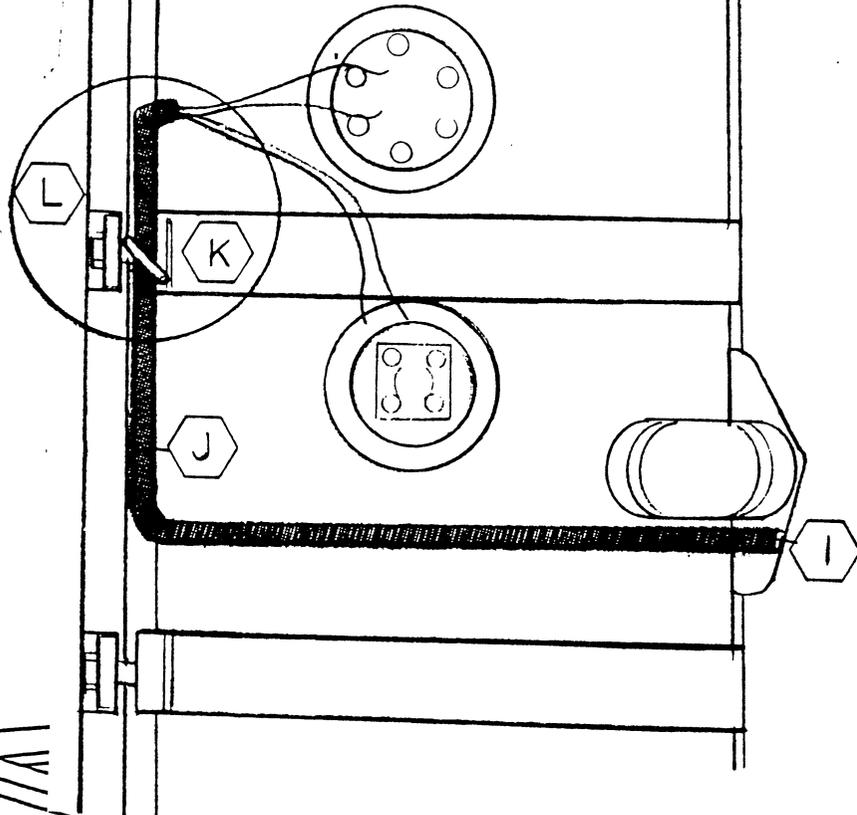
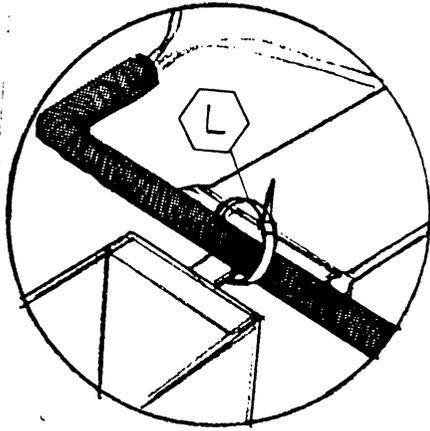
MODEL JAGUAR XJ-S CONVERTIBLE

SUBJECT: WIRE HARNESS ROUTING LOCATION

KEY POINTS: THIS IS THE PROPER WIRE HARNESS  
ROUTING AS SHOWN BELOW

PAGE 8 OF 8

ILLUSTRATION D  
DATE FEB 27



# TECHNICAL SERVICE BULLETIN

MODEL: XJ-S CONV.  
SUBJECT: INSTALLATION OF THE NEW  
3/8" SHOULDER (PIVOT) BOLT. PART #790668  
REPAIR OPERATION INDEX CODE 6.7.3.  
REPAIR OPERATION INDEX TIME .3 EACH SIDE:

KEY POINTS: REPLACING A BOLT IN THE  
CONVERTIBLE TOP FRAME .  
ILLUSTRATION 1 6.7.3.

SERVICE BULLETIN: 6.7.3  
DATE: 4/2/87  
ATTN: JAGUAR DEALER  
FROM: HESS & EISENHARDT SERVICE DEPT.  
SUBJECT: PIVOT BOLT FOR CONVERTIBLE FRAME

A check of cars completed to date reveal some units may have an incorrect bolt in the pivot of the convertible frame. This bolt could come loose or possibly break.

In order to correct this condition Dealers are to inspect the installed Pivot Bolt to determine if bolt replacement is required. See illustration 1-6.7.3. attached for instructions.

Flat Rate time is noted below. Replacement bolts are enclosed.

You have authorization to proceed as necessary. Submit your claim referencing this Service bulletin.

Part information: Part #790668 - 3/8" Socket Shoulder Bolt

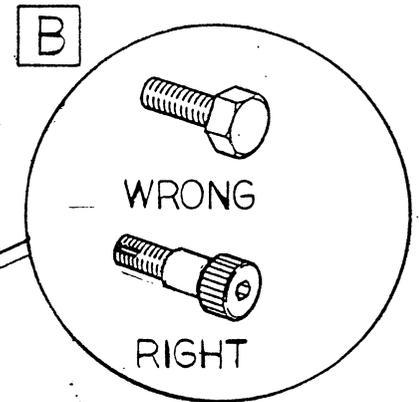
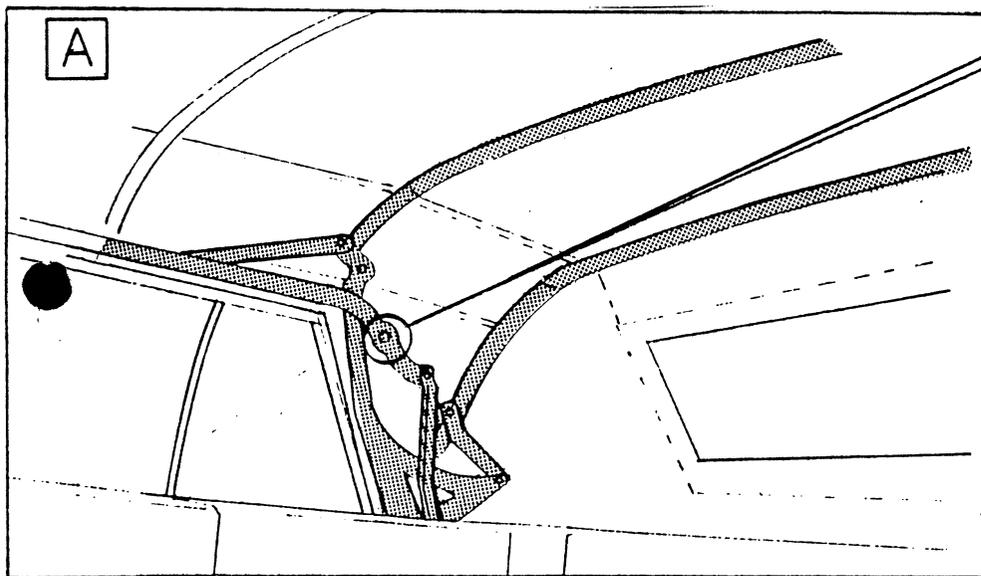
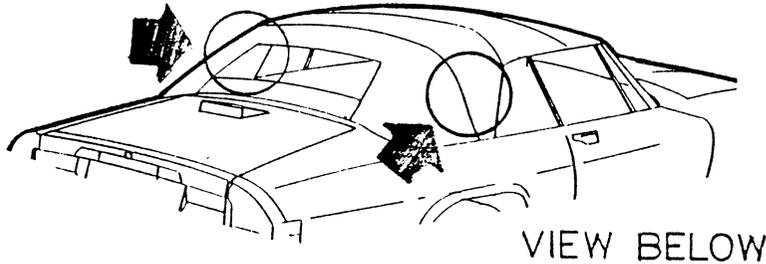
Labor Time: .3 Hr. Per Side

# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

- MODEL: XJ-S CONV.
- SUBJECT: INSTALLATION OF THE NEW 3/8" SHOULDER (PIVOT) BOLT. PART #790668
- REPAIR OPERATION INDEX CODE 6.7.3.
- REPAIR OPERATION INDEX TIME .3 EACH SIDE

KEY POINTS: REPLACING A BOLT IN THE CONVERTIBLE TOP FRAME .  
ILLUSTRATION 1 6.7.3.



- 1 PUT THE TOP IN THE FULL UP POSITION WITH THE LATCHES LOCKED.
  - 2 LOCATE THE BOLTS IN THE TOP FRAME SEE ILLUSTRATION REF **A** (RIGHT AND LEFT)
  - 3 CHECK TO SEE IF THE BOLT IS A HEX NUT IF IT IS FOLLOW THE BELOW PROCEDURE. IF IT IS A ALLEN HEAD THE BOLT DOES NOT HAVE TO BE REPLACED REF **B**
  - 4 SUPPORT THE TOP WHILE REMOVING THE BOLT (TWO PEOPLE REQUIRED)  
WARNING: WORK ON ONLY ONE SIDE AT A TIME DONOT REMOVE MORE THAN ONE BOLT.
  - 5 INSTALL THE NEW 3/8" SOCKET SHOULDER (PIVOT) BOLT PART #790668
- NOTE: PART SUPPLIED BY HESS & EISENHARDT

# TECHNICAL SERVICE BULLETIN

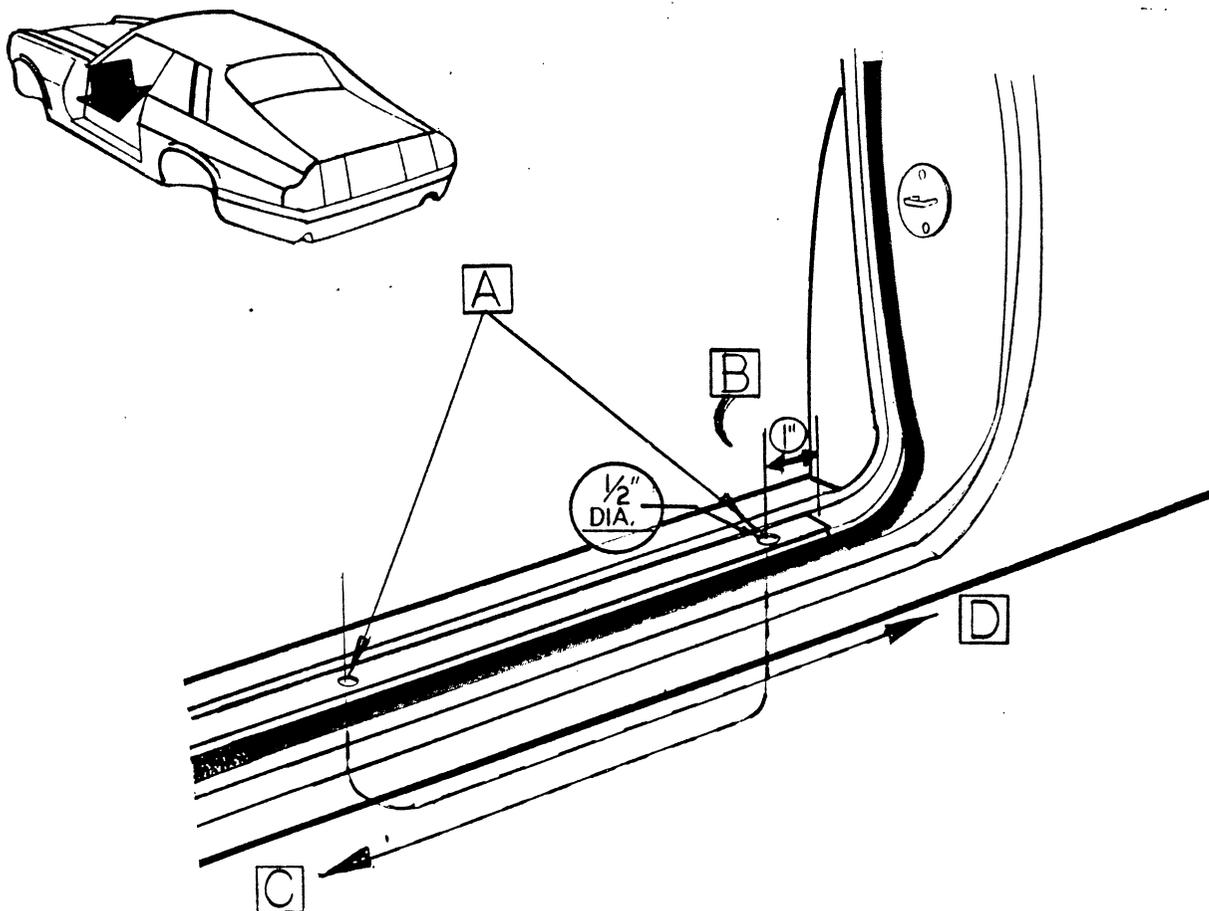
THE HESS & EISENHARDT  
COMPANY

MODEL: XJ-S CONV.  
SUBJECT: SEALING ROCKERS AND  
QUARTER WINDOW WELLS  
REPAIR OPERATION INDEX CODE: 6.7.5.  
REPAIR OPERATION INDEX TIME: 6.0

KEY POINTS: THIS IS A PROCEDURE FOR INSPECTING  
AND SEALING THE ROCKER PANELS FOR  
POSSIBLE WATER LEAK PROBLEMS.  
PAGE 1 OF 3 MAY 29, 1987

NOTE: THIS PROCEDURE LISTED BELOW SHOULD BE DONE  
WHEN WATER HAS BEEN FOUND IN THE CARS INTERIOR  
ON THE FLOOR.

1. REMOVE THE SILL PLATES FROM THE ROCKERS RIGHT  
AND LEFT. LOOK FOR THE TWO HOLES REF [A].  
IF THERE ARE TWO HOLES AS SHOWN PROCEED TO  
STEP 2.  
IF THE REAR HOLE IS NOT PRESENT DRILL AS SHOWN  
REF [B]
2. USING QUAKER STATE METAL-GARD SEALER INSERT  
A 360 DEGREE FLEX WAND INTO THE REAR HOLE IN THE  
SILL AND PUSH ALL THE WAY TO THE FRONT OF THE ROCKER  
SPRAY WHILE PULLING WAND. REF [C]  
THEN INSERT WAND INTO THE FRONT HOLE IN THE SILL  
AND PUSH ALL THE WAY TO THE BACK OF THE ROCKER.  
SPRAY WHILE PULLING WAND. REF [D]



# TECHNICAL SERVICE BULLETIN

MODEL: JAGUAR XJ-S CONVERTIBLE  
SUBJECT: SEALING QUARTER WINDOW WELLS  
AND ROCKERS.

KEY POINTS: THIS IS A PROCEDURE FOR SEALING  
QUARTER WINDOW WELL AREAS  
WHEN A WATER LEAK IS FOUND.  
PAGE 2 OF 3                      MAY 29, 1987

3.

REMOVE THE QUARTER WINDOWS ( REFER TO HESS & EISENHARDT JAGUAR CONVERTIBLE REPAIR OPERATION MANUAL 3.4.5.) AND CLEAN OUT ALL DEBRIS AND EXCESS MATERIAL INSIDE OF THE QUARTER WINDOW WELLS. SEAL INSIDE OF THE WELLS BY SPREADING A COAT OF SEAM SEALER ( WITH A 1" BRUSH ) TAKING CARE NOT TO PLUG UP THE DRAIN HOLES. EXTRA AMOUNTS OF SEALER SHOULD BE USED IN AREAS MARKED WITH A "x" . BE SURE THAT ALL FLANGES, HOLES AND CORNERS ARE FILLED. (BOTTOM 3" OF THE WINDOW WELLS MUST BE WATER TIGHT.)

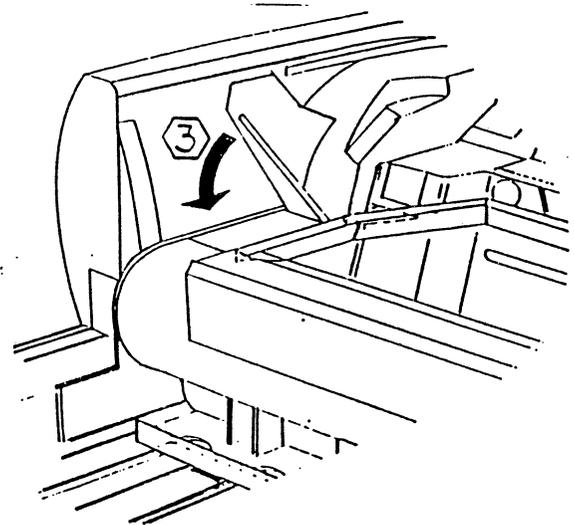
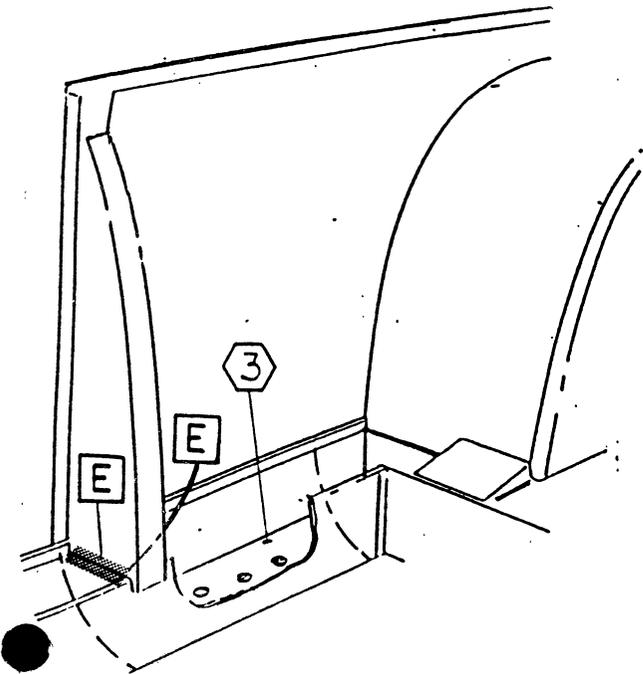
4.

SEAL ACROSS THE BOTTOM OF THE 'B' PILLAR INSIDE AND OUT USING SEAM SEALER AS SHOWN. REF [E]

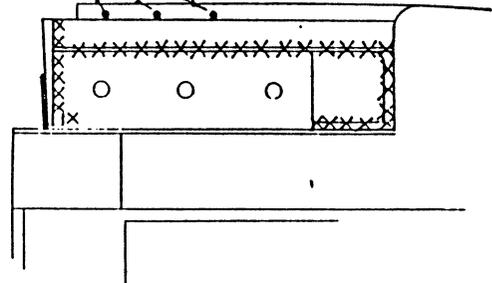
5.

CHECK THAT THE BOTTOM 3 HOLES ARE CLEAN AND FREE OF DEBRIS.

WARNING : DO NOT SEAL UP QUARTER WINDOWS UNTIL DRAIN HOLES HAVE BEEN INSPECTED TO BE SURE THEY ARE CLEAR.  
CAR SHOULD SIT FOR 24 HOURS BEFORE EXPOSED TO MOISTURE.



DRAIN HOLES



# TECHNICAL SERVICE BULLETIN

THE HESS & EISENHARDT  
COMPANY

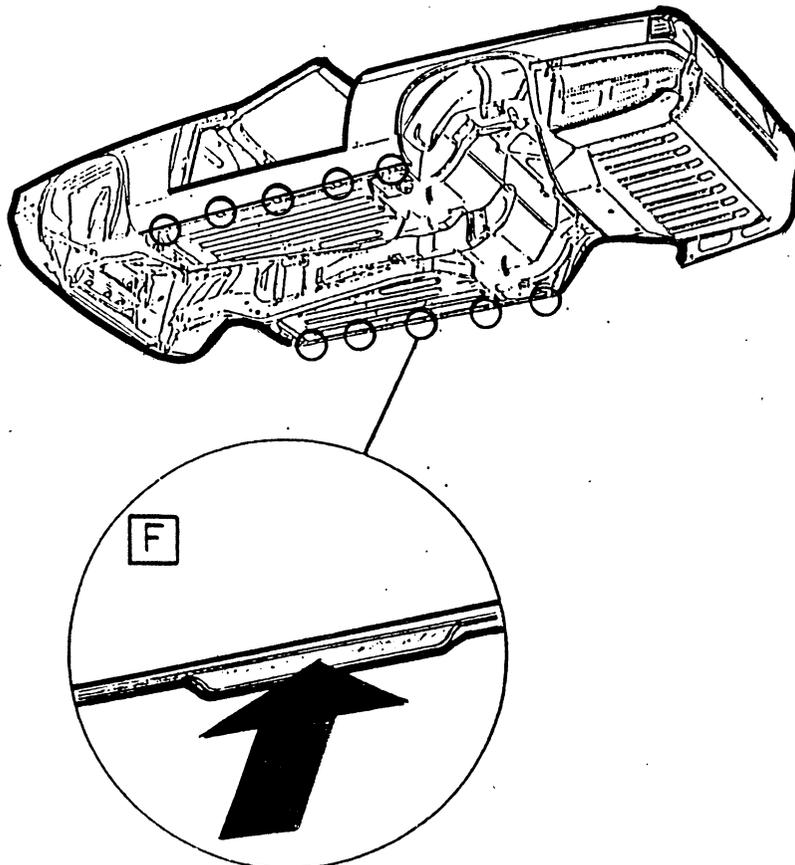
MODEL : XJ-S JAGUAR CONVERTIBLE  
SUBJECT : INSPECTING AND CLEARING THE  
LOWER ROCKER DRAIN HOLES

KEY POINTS: THIS IS A PROCEDURE FOR CLEARING  
AND INSPECTING THE LOWER ROCKER  
DRAIN HOLES.  
PAGE 3 OF 3                      MAY 29.1987

6.

RAISE THE CAR ON A LIFT. LOCATE THE LOWER DRAIN HOLES  
REF **F** WITH A TONGUE DEPRESSOR OR ANOTHER FLAT THIN STICK  
INSERT INTO THE DRAIN HOLES AND CLEAR OF ANY RUSTPROOFING  
BLOCKING THE OPENING. MAKE SURE HOLES ARE OPEN AND CLEAN.

NOTE: IF THE HOLES ARE NOT OPENED AND PINCHED SHUT  
SLIDE A LARGE FLAT BLADED SCREW DRIVER OR CHISEL  
INTO THE OPENING AND ENLARGE.



MODEL: XJ-S CONV.

SUBJECT: VAPOR SEPARATOR HOSES

REPAIR OPERATION INDEX CODE 6.7.1

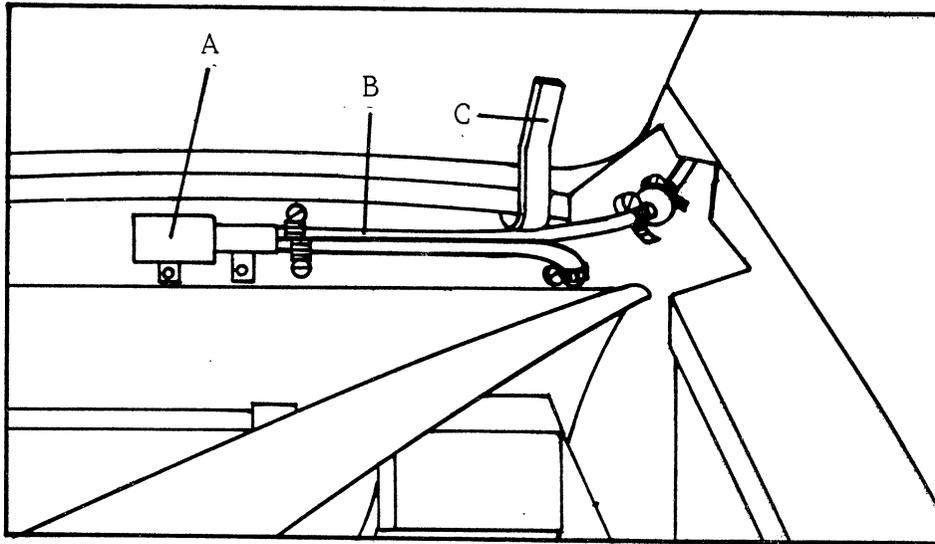
REPAIR OPERATION INDEX TIME .3 HOURS

KEY POINTS: CHECK FOR HOSES

BECOMING PINCHED BEHIND TRUNK HINGES

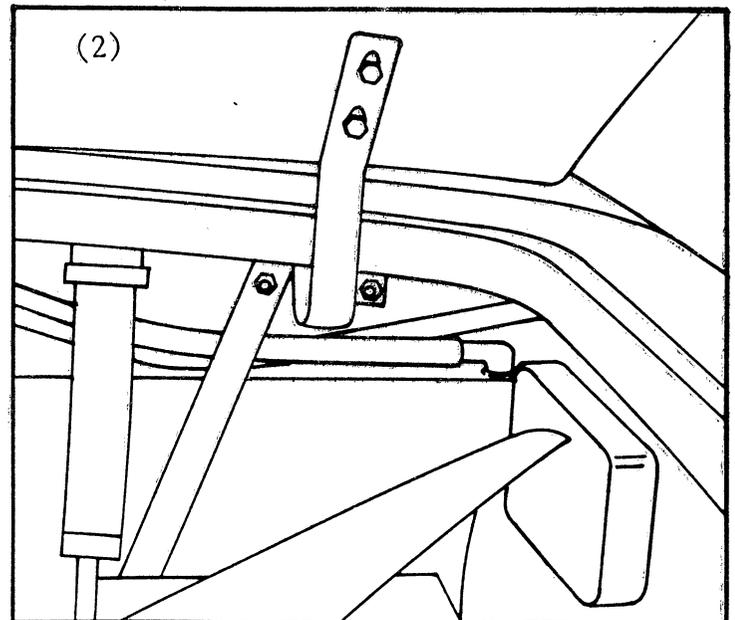
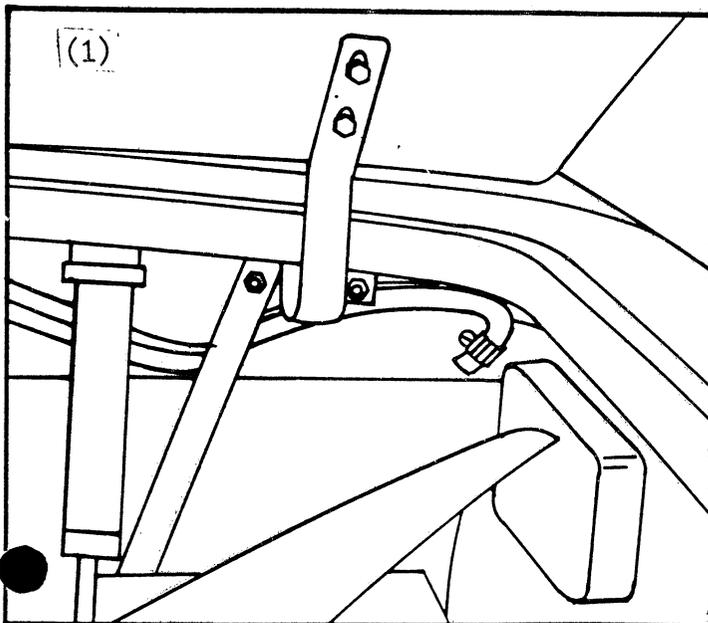
DATE: JAN. 87

There exists a possible problem associated with the two hoses leading from the vapor separator (A) located on the rear wall inside the trunk. When closing the trunk, one of the hoses (B) leading from the vapor separator may get pinched behind the trunk hinge (C).



This problem may be more common in vent design (1) than in the later design (2), but this condition can occur in either design, so both should be checked carefully.

Should pinching occur, the condition may be repaired using parts provided in the Campaign Kit.



MODEL: XJ-S CONV.

KEY POINTS: INSTRUCTIONS FOR

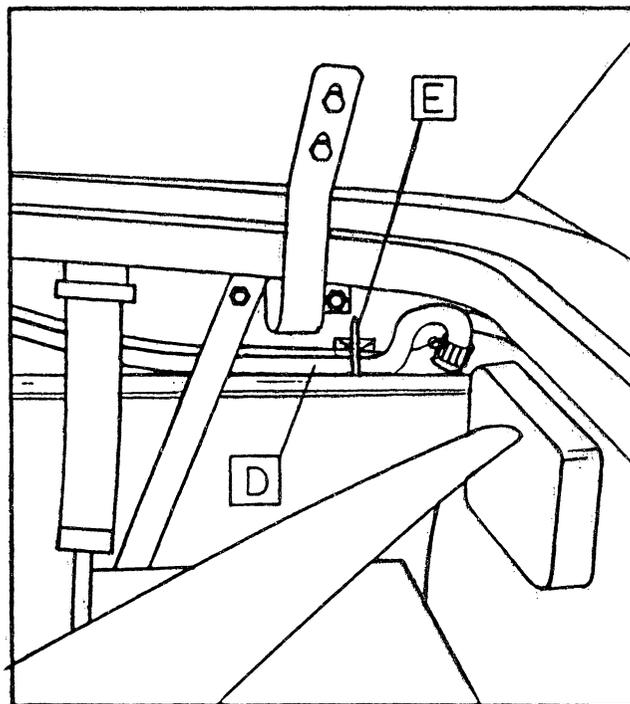
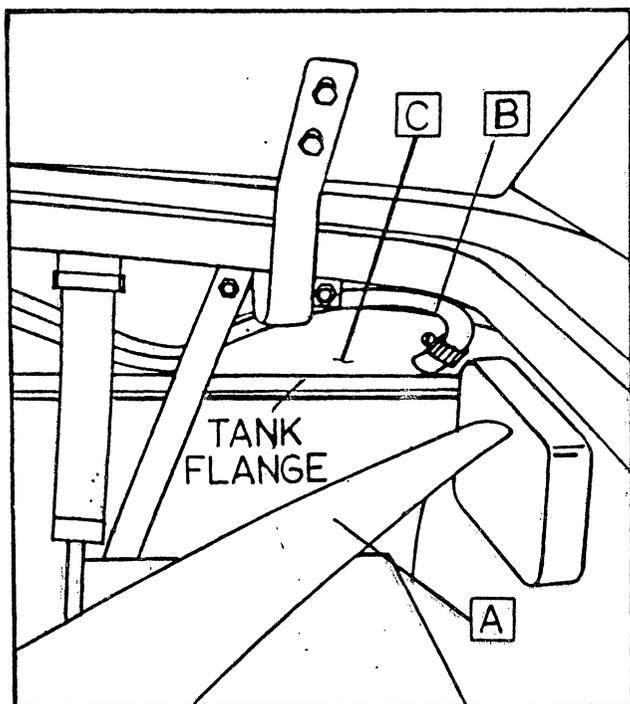
SUBJECT: VAPOR SEPARATOR HOSES

HOSE ROUTING CORRECTION

DATE: JAN. 87

SELF ADHESIVE TIE BRACKET INSTALLATION  
PART NUMBER 560661

1. Remove spare.
  2. Peel back the center position of the trunkliner. REF A
  3. Locate the vent hose REF B check to see if the hose has been damaged or punctured, if the hose has been damaged replaced it with a new hose.
  4. Clean the rear wall area REF C with alcohol, along the upper flange between the hinge and vent connecting tube.
  5. The hose is to be routed REF D along the tank flange to insure that it is below and clear of the deck hinge.
  6. Remove paper backing from self adhesive tie bracket. Apply the bracket to the area half way between the edges of the hinge and vent connecting tube REF E. It should be against the tank flange
- NOTE : Donot apply the bracket to the tank flange directly  
 it should be on the trunk wall just above the flange.



MODEL: XJ-S CONV.

SUBJECT: VAPOR SEPARATOR HOSES

KEY POINTS: INSTRUCTIONS FOR

HOSE ROUTING CORRECTION

DATE: JAN. 87

- 7 Route the hose along the upper edge of the tank flange keeping it below the deck hinge. Place the hoses into the tie bracket and pull tight.  
WARNING: Donot pull the tie to tight it could collapse the hoses. Make sure hoses are against the upper flange and pulled tight with no slack. This will keep the hoses from curling up behind the hinge
- 8 When hoses are tied into position. Close the deck lid a number of times to see if the hinge pinches the hosing. (The hinge should not mar or pinch the hose in anyway.)
- 9 Replace the trunkliner over the hoses, Then close the deck lid again. Peel back liner and check to see if hoses are still free and clear of the hinge  
NOTE: If the hoses are pinched or kinked in any of the above procedures reroute the hoses again until it is clear of the hinge.

# TECHNICAL SERVICE BULLETIN

MODEL: XJ-S CONVERTIBLE  
SUBJECT: PROCEDURE FOR SEALING THE REAR  
CURTAIN TO PREVENT WATER LEAKS.  
REPAIR OPERATION INDEX CODE: 6.7.6  
REPAIR OPERATION INDEX TIME: .5

KEY POINTS: THIS IS A PROCEDURE FOR SEALING  
THE REAR CURTAIN USING SEALER ON  
THE STITCHING AND MATERIAL EDGE  
WHEN A WATER LEAK IS SUSPECTED.  
PAGE 1 OF 1 MAY 29 . 1987

NOTE: THIS PROCEDURE SHOULD BE DONE IF WATER IS FOUND  
IN THE REAR UPPER TRIM PANEL AREA.  
BUT BE SURE IF WATER IS FOUND ON THE FLOOR  
THAT IT DID'NT ORIGINATE SOMEWHERE ELSE (SUCH AS THE TOP).



RELEASE THE TOP AND LOWER IT HALF WAY.  
(OR RAISE HALF-WAY)  
PULL THE UPPER TOP MATERIAL AWAY FROM THE REAR GLASS  
EXPOSING THE STITCHING ON THE REAR CURTAIN AREA AS SEEN  
BELOW.

APPLY \* TOP GRIP AM-142 SEALER ( ALONG THE STITCHES  
AS SHOWN REF [G] AND ALONG THE MATERIAL EDGE REF [H])  
STRAIGHT FROM THE TUBE RUNNING A SMALL EVEN CONTINUOUS  
BEAD ALONG EACH SEAM AND EDGE.  
APPLY (2) COATS LEAVING 20 MINUTES DRYING TIME BETWEEN  
EACH COAT.

NOTE: DO NOT PUT SEALER ANYWHERE ELSE BUT ON  
THE PLACES AS SHOWN

LEAVE TOP IN THE HALF WAY POSITION FOR 1 HOUR  
BEFORE CLOSING OR OPENING COMPLETELY.

\*TOP GRIP AM-142 ADHESIVE AND SEALER  
MANUFACTURED BY TACC INTERNATIONAL CORP.  
AIR STATION INDUSTRIAL PARK.  
P.O. BOX 390  
ROCKLAND. MASS. 02670

