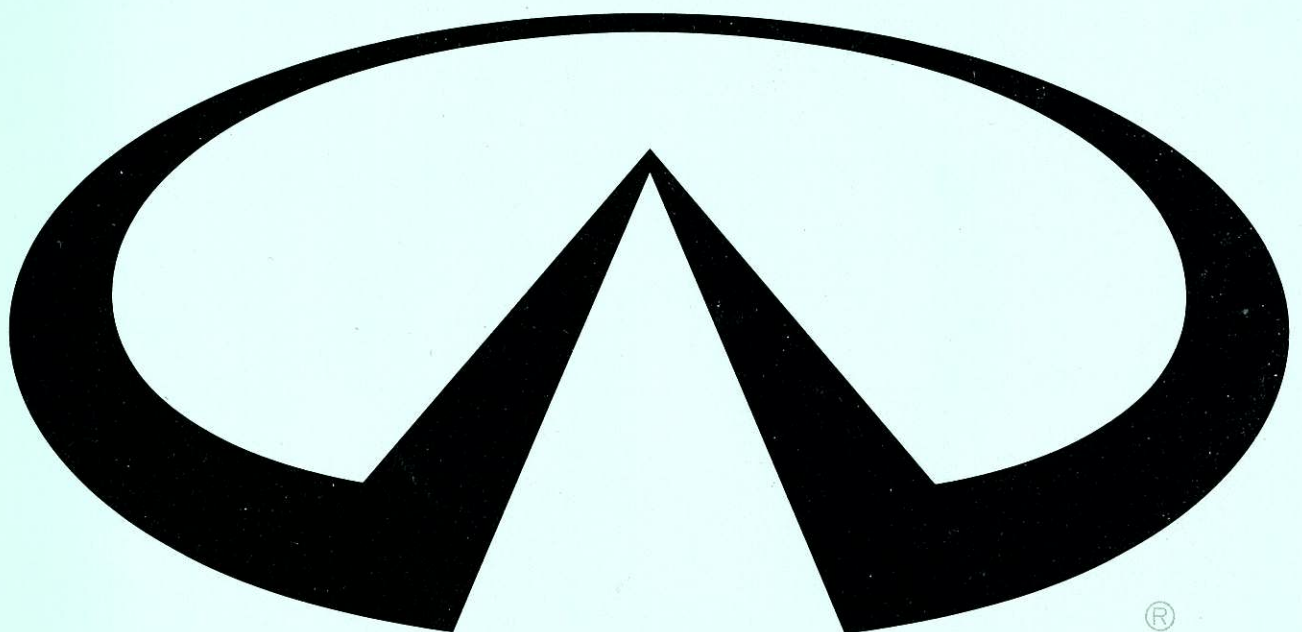


1991 M30 CONVERTIBLE SERVICE MANUAL SUPPLEMENT



FOREWORD

This Service Manual Supplement contains repair procedures for the 1991 INFINITI M30 Convertible. The Supplement covers Convertible matters only. If there are systems in common between the M30 Coupe and the M30 Convertible models, then the regular INFINITI M30 Service Manual is the best source of information. In order to assure your safety and the efficient functioning of the vehicle, refer to the applicable manual before and during the performance of any repair task.

This Service Manual Supplement is based on the latest product information available at the time of publication. INFINITI reserves the right to make changes in specifications, design or methods at any time without prior notice.

IMPORTANT SAFETY NOTICE

The proper performance of service is essential to the safety of the technician and the efficient functioning of the vehicle. The service methods in this Service Manual Supplement are described in such a manner that the service may be performed safely and accurately. If you choose to use service procedures, tools or parts not specifically recommended by INFINITI, you must first completely satisfy yourself that neither your safety nor the vehicle's safety will be jeopardized by the service method selected.

INFINITI M30 CONVERTIBLE SERVICE MANUAL SUPPLEMENT

TABLE OF CONTENTS

	Page
General Information	C-2
"Normal" Top-Down, Top-Up Operation	C-2
Convertible Top Stack Timing Sequence	C-5
Safety Information on Convertible Top Operation	C-6
Top and Rear Window Appearance Care	C-7
<u>Convertible Component Repair Information</u>	Section
Windshield Header Trim	1
Power Pull Down Actuators	2
Windshield Outer Moldings	3
Quarter Belt, Back Belt and Deck Lid Moldings	4
Rear Seat	5
Quarter Trim Panel	6
Seat Belts	7
Quarter Glass, Guide and Regulator	8
Side Guard Molding	9
Door, Guide Pin and Glass	10
Weatherstrips and Retainers	11
Headliner	12
Top Cover Assembly	13
Backlite Assembly	14
Stay Pads, Side and Rear	15
No. 1 Bow	16
No. 2 Bow	17
No. 3 Bow	18
No. 4 Bow	19
Deck Lid Spoiler and High Mount Stop Light	20
Deck Lid, Hinges	21
Hydraulic System, Pump/Motor and Cylinders	22
Electrical, Controls	23
Electrical, Troubleshooting	24
Electrical Wiring Diagrams	25
Body, Structural	26
Index	27

The M30 Convertible is equipped with a vehicle speed sensor that prevents operation of the convertible top while the vehicle is in motion. Safety features such as sensors and timers have been designed into this convertible to prevent the top from possible damage should an electrical or mechanical component fail or malfunction. Before lowering or raising the top using the "Top Down" or "Top Up" switch, the following conditions must be met. If one or more of the conditions is not met, the top lowering system will not operate.

- The vehicle must be at a complete stop.
- The transmission gear selector must be in the "P" position.
- The ignition switch must be in the "ON" position.
- The trunk lid must be closed.
- The manual release valve (see page 22-3) must be closed.

"Normal" Top-Down, Top-Up Operation

The following functions occur when lowering the top automatically using the "Top Down" switch:

Lowering the Top

To lower the top, press and hold the "TOP DOWN" switch on the instrument panel.

When the "TOP DOWN" switch is first pressed:

- The power pull down actuators turn to release the top from the windshield header.
- The side and quarter windows lower.
- Timer # 1 cycles for 4.3 seconds to activate the hydraulic system.

As Timer #1 begins its counting cycle, the top releases and trips the proximity switches, which:

- De-activate the power pull down actuator motors.
- Detect when the top has fully released from the windshield header.

As Timer # 1 completes its counting cycle of 4.3 seconds:

- The hydraulic pump is activated.
- The top starts to lower.
- Timer # 2 is activated and starts a cycle of 3.3 seconds. Timer # 2 is a secondary control for deactivating the hydraulic pump in the event that the proximity switches are not tripped when the top is released.

Once the top has contacted the down stops, it will not lower any further. To make sure the top has lowered completely, look for no noticeable further movement of the top stack. You should hear the sound of the hydraulic pump slowing down.

CAUTION: Do not press the “TOP DOWN” switch for more than 5 seconds after the top has lowered. Otherwise, damage to the pump may result.

Raising the Top

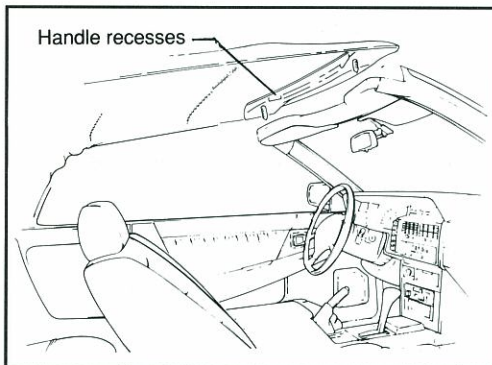
To raise the top, press and hold the “Top Up” switch on the instrument panel.

When the “Top Up” switch is pressed:

- The side and quarter windows lower.
- The hydraulic pump is activated.

Once the hydraulic pump is activated, the top will raise. When the top has completed the majority of its upward travel, the rear rails will trip the proximity switches, which will cause Timer # 3 to de-activate the hydraulic pump. The top will now drop forward and down toward the windshield header. Release the “Top Up” switch after the top drops forward and down.

Once the rear rails have tripped the proximity switches and Timer #3 has de-activated the hydraulic pump, the power pull down actuators and Timer #4 are ready for the final action.



First, in order for the top to secure to the windshield header, the front header bow must be manually pulled down. Use the handles recessed into the header bow and pull downward to engage both top pins into the power pull down actuators.

Now, secure the top to the windshield header by pressing again and holding the “Top Up” switch.

When the “Top Up” switch is pressed:

- The power pull down actuators are activated.
- Timer # 3 cycles for 1 second.
- Timer # 4 starts to cycle for 6.8 seconds.

(At the end of its cycle, Timer # 3 deactivates the hydraulic pump. Timer #4, at the end of its cycle, activates the electrical system for raising the side and quarter windows, but only after the top is completely raised.)

NOTE:

The “Top Up” switch must be held in order to continue the sequence for the power pull down actuators and the timers. If the switch is not held in, the sequence will be interrupted and will not continue until the switch is pressed again. The power pull down actuators will turn off automatically after the top is completely secured. Each power pull down actuator has an internal thermo-switch which turns off the actuator when it senses increased load.

Once the top is completely secured, the side and quarter windows may be raised to the desired height by either of two ways:

1. Hold the "Top Up" switch in for at least 6.0 seconds after the power pull down actuators have turned off. When the windows are raised to the desired height, release the switch.
2. Use the side and quarter window switches to raise the windows.

CONVERTIBLE REAR SEAT AND BELTS

The M30 Convertible is designed as a 4 passenger vehicle, with seating for two persons only in the rear seat.

WARNING:

1. Do not allow more than two persons to occupy the rear seat while the vehicle is in motion.
2. While driving, each occupant of the vehicle should be secured by the appropriate seat belt.
3. Do not allow more than one person to use the same seat belt. Failure to observe the above warnings could result in serious personal injury in the event of an accident.

TOP APPEARANCE CARE

CAUTION: Do not use harsh or abrasive cleaners or bleaching agents on the top material or damage may result.

Cloth Top:

1. Rinse top with fresh water. Wash using mild soap suds, lukewarm water (never hot) and a sponge. Finally, rinse the top with enough clean water to remove all traces of soap. Be careful to rinse any cleaner off the body as it may cause streaking if allowed to dry on the painted surfaces.
2. After cleaning, always be sure the top is completely dry before it is lowered. Lowering the top while it is wet or damp may cause interior water damage, water stains or mildew of the top and rear window material.

REAR WINDOW APPEARANCE CARE

This convertible has a flexible plastic rear window. Due to its material composition, the window is extremely susceptible to scratches and abrasions. To avoid damage to the rear window, clean it as follows:

1. Generously rinse the window with water to loosen all dust and dirt. Start at the top of the window, using a back and forth motion. Do not spray the top.
2. Gently wash the window with warm or cold (never hot) water and a mild neutral soap. Dip your cloth into the wash bucket frequently. Change the wash water frequently to reduce the possibility of water-borne dirt scratching the window. Do not rub hard. Let the soap and water remove the dirt.
3. Rinse the window thoroughly with fresh water. If any soap dries on the window, it may cause streaking.
4. Dry the window with a clean, soft cotton cloth. The main purpose of drying is to remove excess water so that the window will air dry without water spots. Do not rub or press hard, as this might scratch the window.
5. Before lowering the top, make sure to remove any water that may have accumulated during cleaning in the top stowage well behind the rear seat.

CAUTION:

- If the coating on the rear window is scratched or removed, the window will become hazed and may allow mildew to form. These conditions will rapidly degrade the rear window and possibly damage the top material also.
- Mildew may occur more rapidly if the top remains lowered for extended lengths of time under damp conditions. Mildew appears brownish in color and may give off an undesirable odor. No amount of cleaning can reverse this condition. If it occurs, the window must be replaced.

REAR WINDOW APPEARANCE CARE AND TOP OPERATION

- Do not use a dry cloth to remove even the slightest amount of dust. Use a soft cotton cloth saturated with water and gently wipe crosswise on the window.
- Do not use a scraper, de-icing chemicals or sprays to remove frost, snow or ice from the window. In an emergency, warm water (never hot) may be used. Hot water may cause permanent warping or shrinking of the window material.
- Do not use solvents, such as: alcohol, nail polish remover or paint thinners on the window.
- Do not use bleach, ammonia, window cleaner or all-purpose household cleaners on the window.
- Do not use surface protectants, beautifiers or silicone-based dressings on the window. These chemical solutions may remove the protective coating from the window.
- Do not use plastic cleaners, polishes or waxes on the window.
- Do not apply advertising stickers, gummed labels or adhesive tape to the window. Such items will damage the rear window.

CONVERTIBLE TOP OPERATION

WARNING:

1. When raising or lowering the top, keep hands clear from the hinges of the side roof rails and any part of the top linkage.
2. Keep hands and any part of the body away from moving parts such as power windows and the top of the windshield where the convertible top secures.
3. Before and during "up or down" operation of the top, make sure that your passengers are made aware of your intentions. Otherwise, personal injury may result from the side and quarter window unexpectedly raising or lowering.
4. The trunk lid must remain closed before and during lowering or raising, otherwise, the operation of the top will be interrupted. Closing the lid will resume operation.
5. The vehicle should never be driven with the top partially lowered. Make sure the top has been either fully secured to the windshield header or fully lowered and the boot installed before driving.
6. Before lowering the top, make sure to wipe dry the top stowage well behind the rear seat of any water that may have accumulated during cleaning or inclement weather.
7. Make sure the manual release valve on the pump assembly is closed before operating the top electrically.

CAUTION:

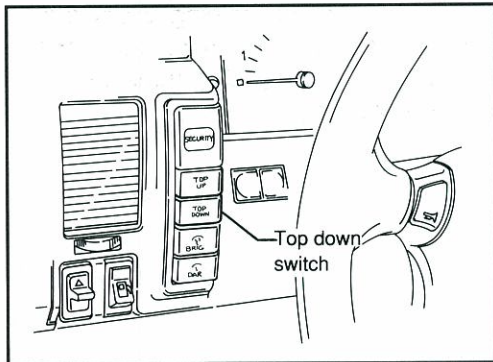
- Make sure there are no packages in the top stowage well when raising or lowering the convertible top. Even small items may interfere with top operation and can cause damage.
- Do not sit or place excessive weight on the top when the top is up or down. Damage to the top may result.
- Do not use an automatic car wash to clean your convertible. Damage to the convertible top may result.
- Do not raise or lower the top when the temperature is below 41°F (5°C). Damage to the top material and/or rear window may result.
- Do not lower the top when the rear window is dirty. Grit and accumulated foreign matter may scratch the window.
- Do not lower the top if the top is damp or wet. Interior water damage, water stains or mildew may result.

LOWERING THE CONVERTIBLE TOP

NOTE:

The trunk lid must remain closed before and during lowering or raising. Otherwise, the operation of the top will be interrupted. Closing the lid will resume operation.

1. Set the parking brake and put the transmission gear selector in the "P" position (automatic transmission).
2. Remove all items or packages from between the rear seat back and the top stowage well.
3. Turn the ignition switch "ON".
4. Detach the headliner retainers from inside the top rails.



5. Press the "TOP DOWN" switch to release top from the windshield header.

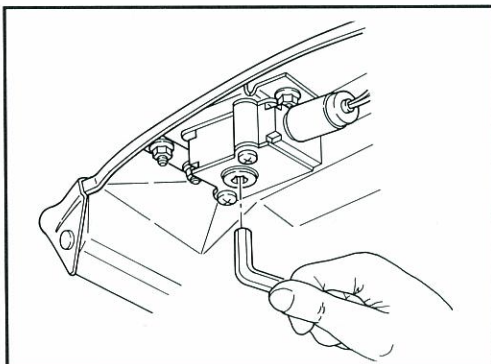
NOTE:

Before the top starts to lower, the side and quarter windows will lower automatically.

6. Continue pressing the "TOP DOWN" switch until the top is completely down, then release the switch.
7. If desired, raise the side and quarter windows.

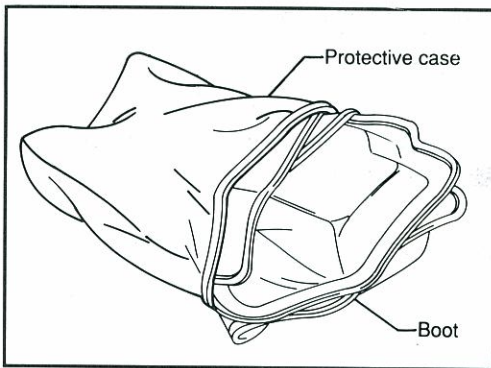
CAUTION:

To avoid damaging the top, do not sit or place excessive weight on the top when the top is in its lowered position.



NOTE:

If the vehicle's battery is discharged and the top is raised and secured, the top cannot be released and lowered automatically (electrically). The battery must be fully charged or the car must be started to release and lower the top automatically. If the battery cannot be charged or the car started, the header garnish must be removed and the power pull down actuators manually released.

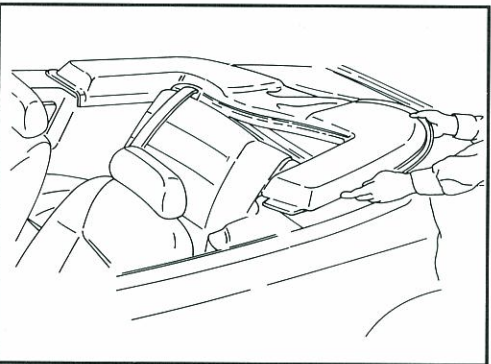
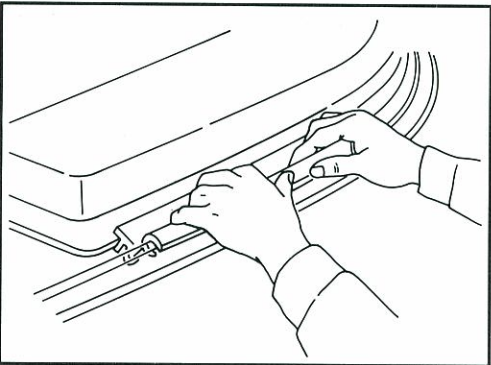
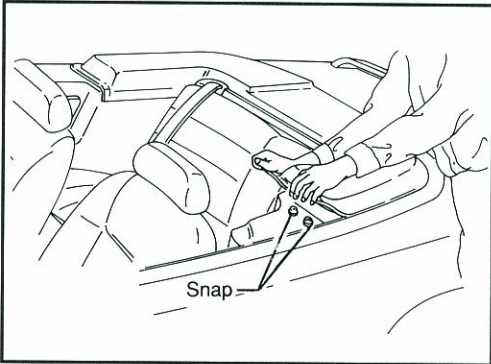


TOP BOOT

Installation

The top boot may be used to cover the convertible top when it is completely lowered.

1. Remove the boot from the protective case stored in the luggage compartment and close the trunk lid.
2. Place the boot in position over the lowered top.
3. Secure the boot snaps to the quarter trim panels.
4. Secure the boot rubber retainer to the trim molding. Starting at the center and working towards the outboard ends, secure the channel of the rubber retainer to the trim molding edge by squeezing the retainer onto the molding.



Removal

1. Un-snap the boot cover from the quarter trim panel, then, disengage the boot from the trim molding and place it in its protective case. Store the boot in the luggage compartment.

RAISING THE CONVERTIBLE TOP

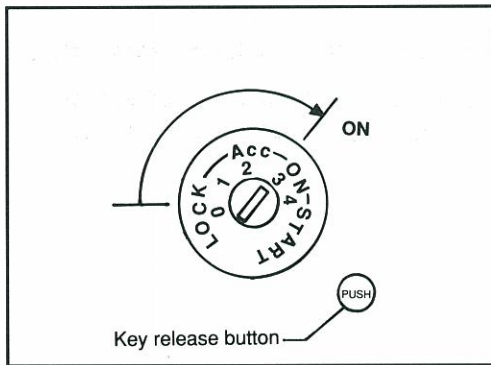
WARNING:

When raising the top, always make sure your head and the passenger's head are clear of the side rails of the top, as the side rails travel downward toward the windshield header.

NOTE:

The trunk lid must remain closed before and during lowering or raising. Otherwise, the operation of the top will be interrupted. Closing the lid will resume operation.

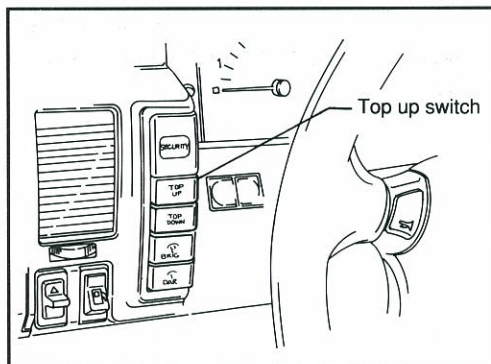
1. Set the parking brake and put the transmission gear selector in "P" (automatic transmission).
2. Remove the boot if it is installed over the lowered top. Store the boot in its protective case in the luggage compartment.



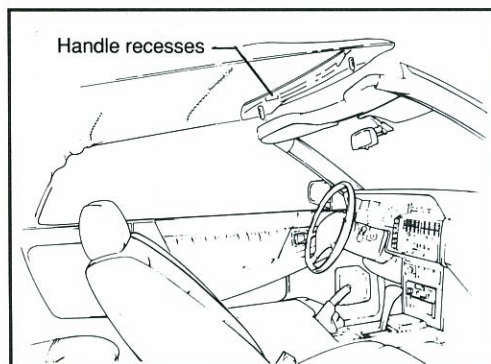
3. Turn the ignition switch "ON".

NOTE:

If windows are up before the top starts to raise, the side and quarter windows will lower automatically.



4. Press the "TOP UP" switch to raise the top until the top drops forward and down toward the windshield header; release the switch.



5. Reach up, and using the handle recessed in the header bow, pull the header bow downward to engage both of the top's pull down pins into the power pull down actuators.

RAISING THE CONVERTIBLE TOP (cont.)

6. Press the "TOP UP" switch to secure the top into the power pull down actuators located in the windshield header.

NOTE:

If the switch continues to be pressed after the top is completely secured, the side windows will raise automatically until the switch is released.

7. Re-attach the headliner retainers.
8. If desired, raise the side and quarter windows (if they were not raised in Step #4).

CAUTION:

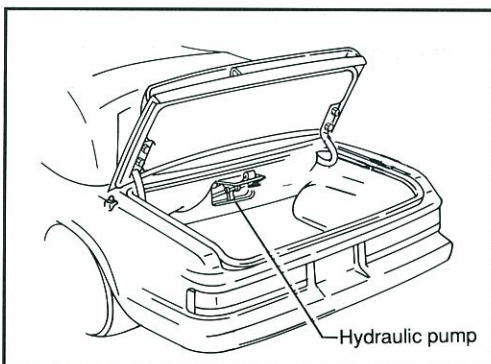
To avoid damaging the top, do not sit or place excessive weight on the top when it is in the raised position.

RAISING THE TOP MANUALLY

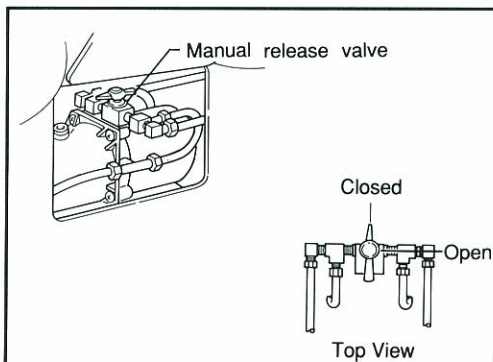
In the event of a hydraulic system and/or electrical system failure, you may raise the top manually by using the following procedure:

1. Make sure the parking brake is firmly set and the transmission is in "P" (automatic transmission).
2. Turn the ignition switch "ON".
3. Using the quarter and side window switches, lower the windows.

NOTE: If the battery is discharged and the windows cannot be lowered, open both doors before raising the top.



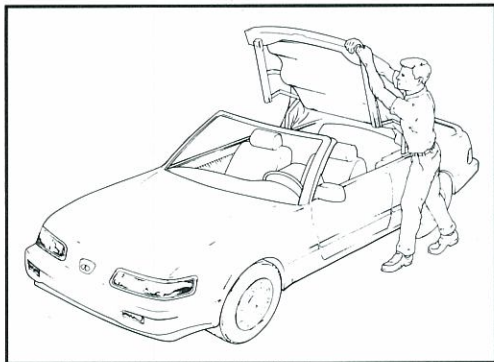
4. With the trunk lid raised, reach under the top stowage well fabric and pull the access door strap on the trunk trim panel to reveal the hydraulic pump assembly.



5. Open the manual release valve by turning the handle clockwise 90°.

RAISING THE TOP MANUALLY (cont.)

6. Kneel in the center of the rear seat and grasp the center of the top header bow.



7. Lift and slowly raise the top until it is partially raised in a vertical position.
8. Stand on either side of the vehicle and, with the palm of the hand, continue to push forward and down on the top until it contacts and engages into the power pull down actuators located in the windshield header.

NOTE:

You may find it necessary to pull the top down from inside the car, using the handle recesses in the top header bow, so that both pull down pins on the top engage into the power pull down actuators.

9. Close the manual release valve by turning the handle counter-clockwise 90°.
10. Close the access door and close the trunk lid.
11. If desired, raise the side and quarter windows.

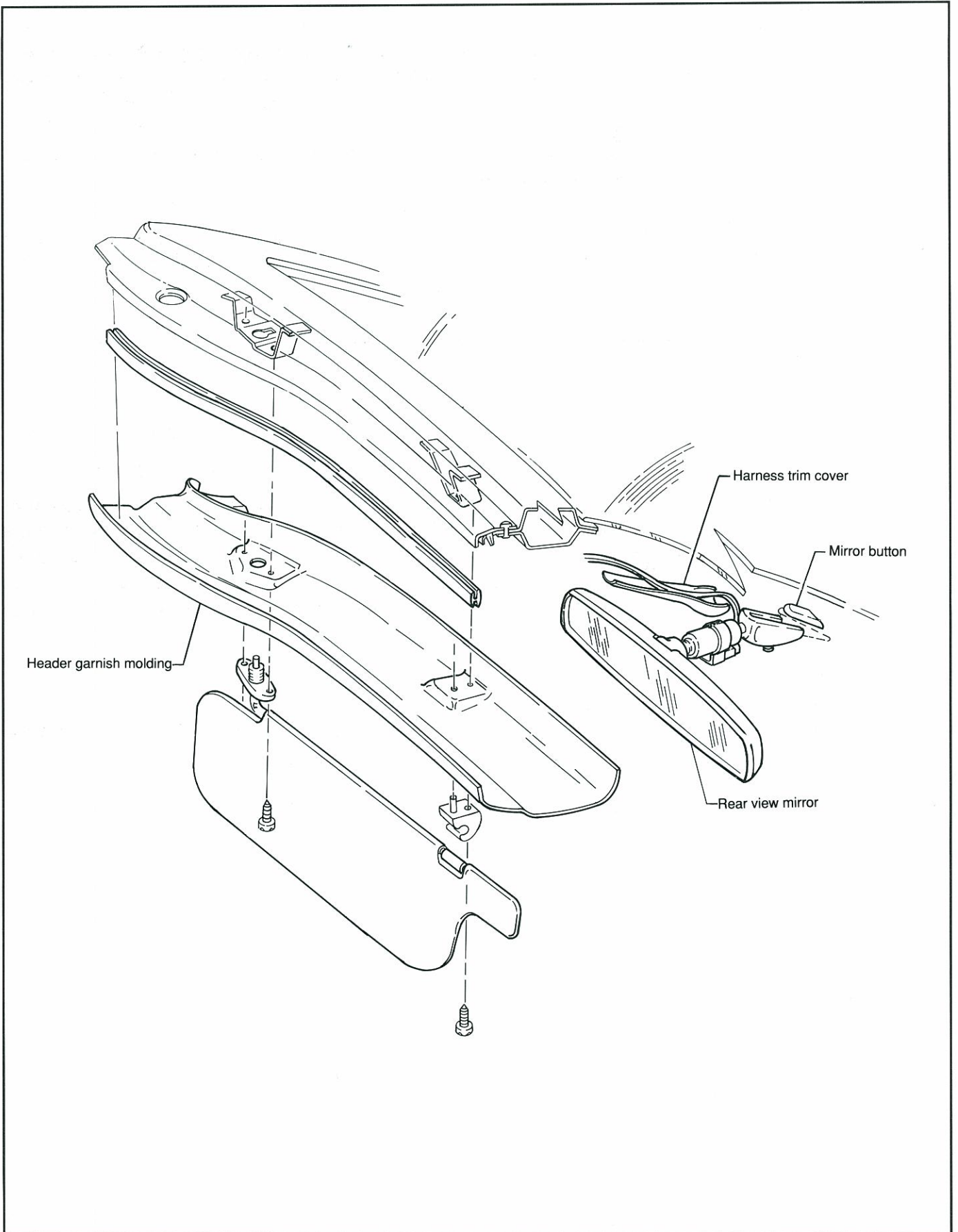
LOWERING THE TOP MANUALLY**NOTE:**

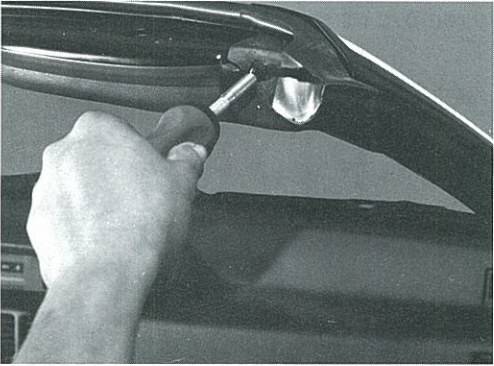
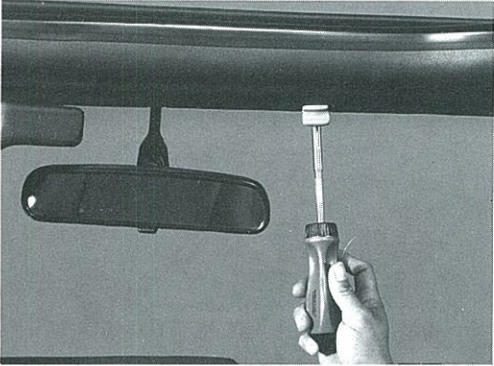
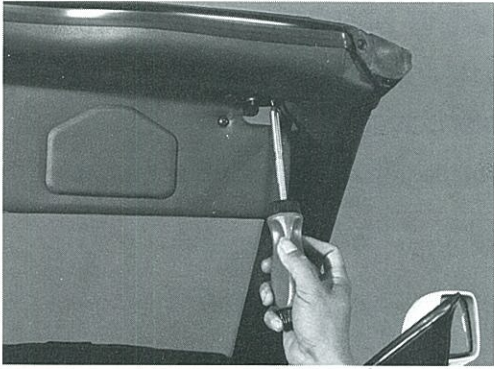
In the event of hydraulic system and/or electrical system failure, do not attempt to lower the top. The header garnish must be removed and the power pull down actuators must be released manually. To release the power pull down actuators, insert a 8mm allen wrench into the opening in the bottom of the power pull down actuator and turn clockwise one-eighth turn.

WINDSHIELD HEADER TRIM

	Page
WINDSHIELD HEADER TRIM - COMPONENTS	1-2
REMOVAL OF WINDSHIELD HEADER TRIM	1-3
INSTALLATION OF WINDSHIELD HEADER TRIM	1-3
REMOVAL OF REAR VIEW MIRROR	1-4
INSTALLATION OF REAR VIEW MIRROR	1-5
INSTALLATION OF REAR VIEW MIRROR BUTTON	1-6

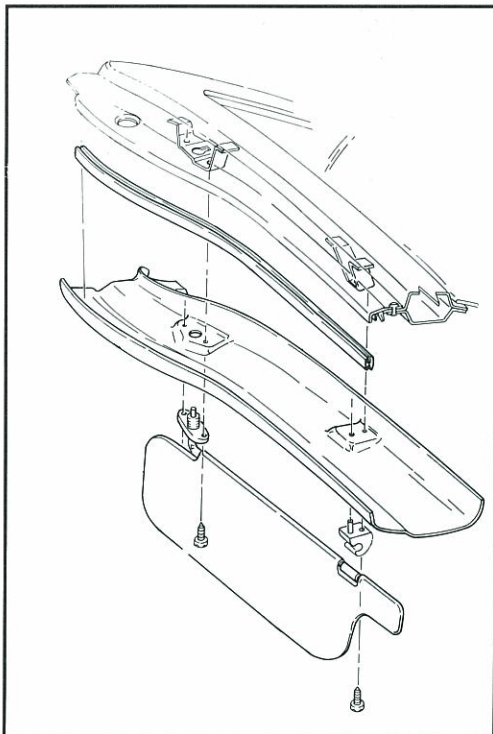
WINDSHIELD HEADER TRIM - COMPONENTS





REMOVAL OF WINDSHIELD HEADER TRIM

1. LOWER CONVERTIBLE TOP.
Remove the four (4) screws and the sun visors.
2. REMOVE SUN VISORS.
3. REMOVE SUN VISOR HOLDERS.
Remove the two (2) screws and the sun visor holders.
4. REMOVE WINDSHIELD HEADER GARNISH MOLDING.
Remove the two (2) screws attaching the windshield header seal at the "A" pillar and remove the windshield header garnish molding.



INSTALLATION OF WINDSHIELD HEADER TRIM IN THE FOLLOWING ORDER:

- (a) Windshield header garnish molding.
- (b) Sun visor holders.
- (c) Sun visors.

WINDSHIELD HEADER TRIM

1-4

REMOVAL OF REAR VIEW MIRROR

1. REMOVE WINDSHIELD HEADER TRIM (See 1-3).

2. REMOVE HARNESS TRIM COVER.

Grasp the upper portion of the trim cover and pull upward to remove.

3. REMOVE REAR VIEW MIRROR.

(a) Disconnect harness connector.

(b) Loosen set screw to remove mirror.

