

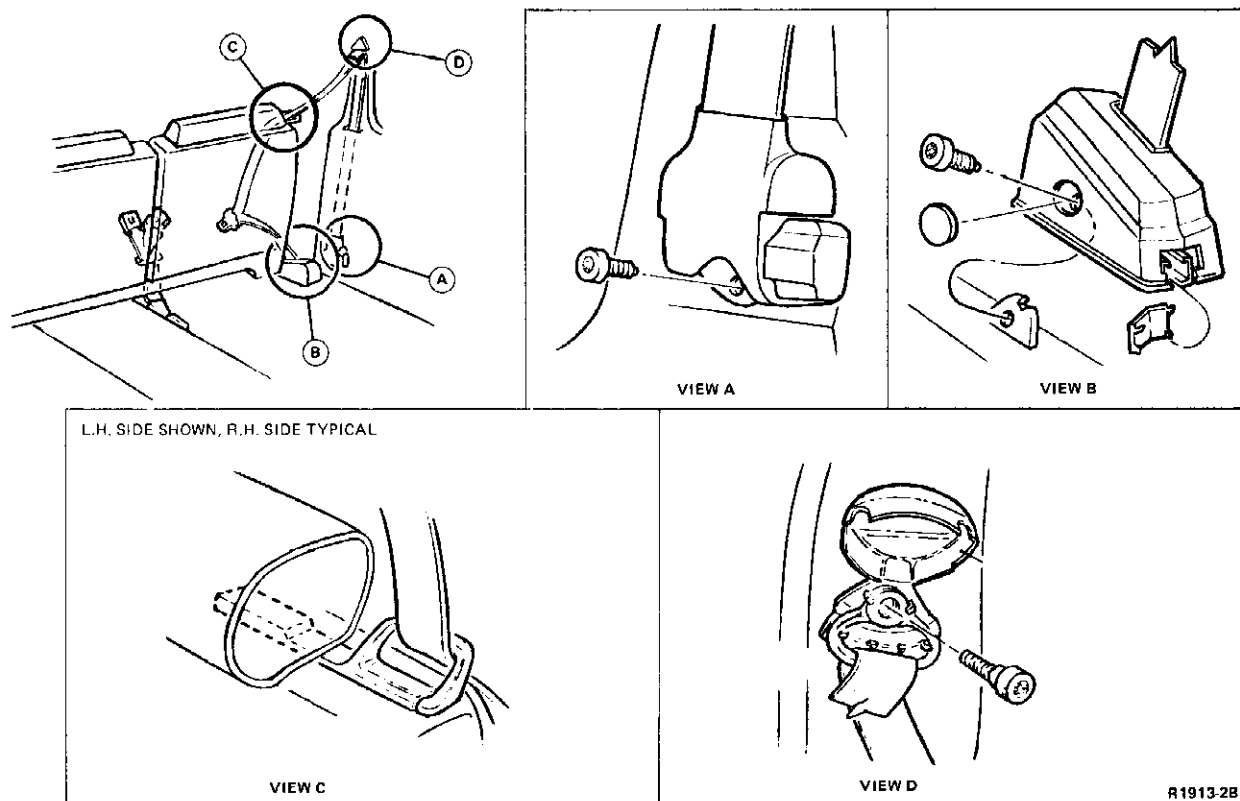


FIG. 9 Front Seat Belt Assemblies—Ford—2-Door Models

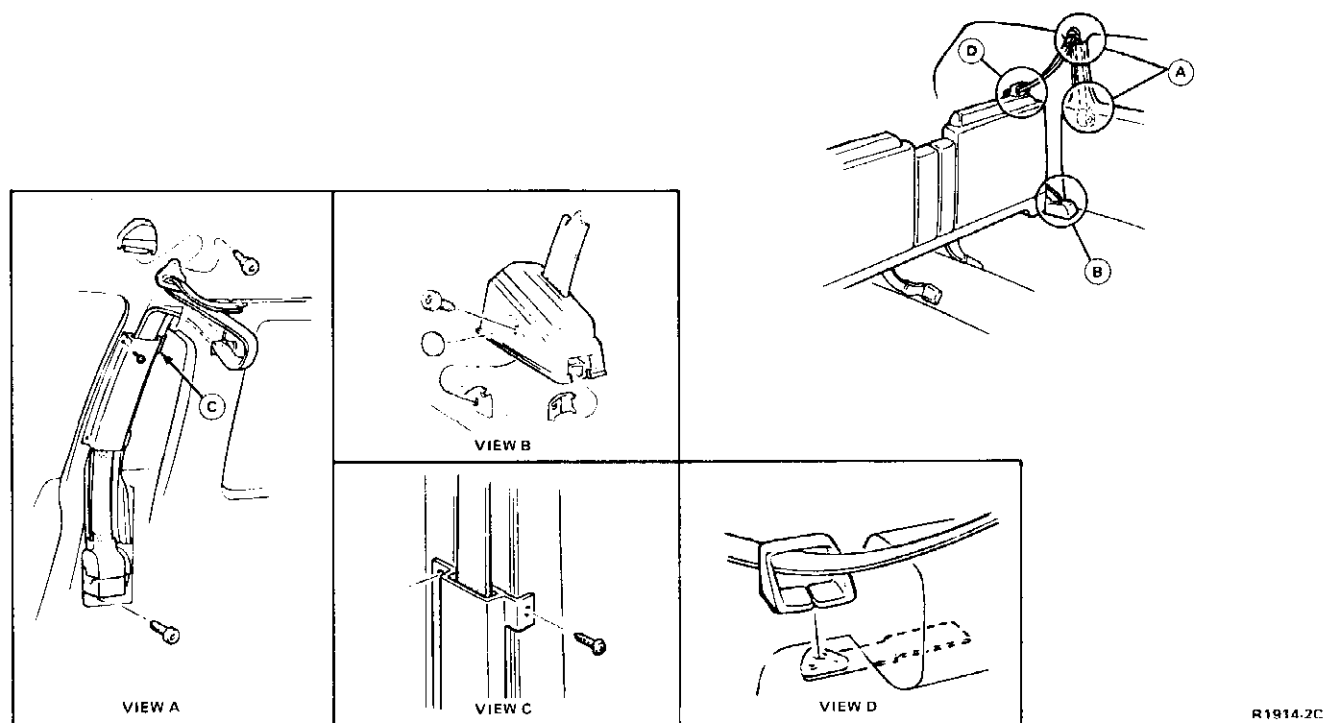


FIG. 10 Front Seat Belt Assemblies—Lincoln Continental—All Models

15. Install the "B" pillar retractor assembly and tighten to specification.
16. Lincoln Continental Only—Install the seat belt guide with four (4) retaining screws.
17. Install quarter trim panels.
18. Install the shoulder harness and bolt to the "B" pillar and "D" ring attachment and tighten to specification. Make sure there is no twist in the webbing.
19. Install seat belt loop retainer to top of seat assembly.

VERSAILLES OUTBOARD FRONT SEAT BELT RETRACTOR AND HARNESS ASSEMBLIES

Removal

1. Remove the bolt attaching the shoulder harness "D" ring on "B" pillar.
2. Remove the front seat assembly (Part 41-01).
3. Remove the scuff plate.
4. Remove "B" pillar trim covers.
5. Remove shoulder harness retractor attaching bolt and disconnect wiring connector.
6. Remove shoulder harness retractor from "B" pillar and place on rear floor.
7. Remove the screw from the lap belt retractor cover.
8. Free the retractor cover. Unthread the belt from the cover and remove the lap belt retractor assembly (two bolts). Thread the retractor through the hole in the carpet.
9. Disconnect the electrical connector at the retractor cover on the driver's side only.
10. Remove the outboard seat belt retractors and harness assembly from the vehicle.

Installation

1. To assemble, reverse the preceding steps.
2. Torque all attaching bolts to 22-32 ft-lbs. Cycle the system several times to assure proper operation of the retractor. Make sure the webbing is not twisted.

VERSAILLES INBOARD FRONT SEAT BELT ASSEMBLY

Removal

1. Adjust the seat full forward.
2. On bucket seats, lift the lower end of the seat and remove the seat belt attaching bolt. (See Fig. 11 View EE1.) On flight bench seats, slide the seat belt cover from over the attaching bolt (Fig. 11 View EE2) and remove the seat belt bolt.
3. Remove the inboard belt assembly from the vehicle.

Installation

1. To assemble, reverse the preceding steps.
2. Torque all attaching bolts to specification.
3. Cycle the system several times to assure proper operation of the buckle.

FAIRMONT AND ZEPHYR—2-DOOR MODELS

Removal and Installation

1. Remove quarter trim panel and position seat belt components as shown in Fig. 12.
2. Install anchor bolt and thread shoulder belt through the slot in the quarter trim panel. Install trim panel.

FAIRMONT AND ZEPHYR—4-DOOR MODELS

1. Move seat to forward position. Position all seat belt components as shown in Fig. 13.
2. Thread the buckle end anchor through the seat cavity. Slip half the boot over the anchor end. Install the anchor bolt and slip the boot on. Connect buckle.
3. Position washer to seat belt anchor and install anchor bolt.
4. Open the "O" ring cover, slip it behind the "O" ring and install the anchor bolt. Snap cover closed.

REAR SEAT BELT RETRACTOR ASSEMBLY AND/OR CENTER SEAT BELT

2-Door Pinto, Bobcat and Mustang II

Removal

1. Remove the left scuff plate assembly.
2. Remove the rear seat cushion and back assembly as shown in Part 41-14 or Part 41-20 (whichever is applicable).
3. Remove the seat belt bezel from the quarter trim panel (Fig. 14).
4. Remove the quarter trim panel. See Part 45-03.
5. Remove the retractor assembly and/or center seat belt assembly and anchor bolts.

Installation

1. Reverse removal procedure.
2. Position center seat belt assembly, if removed, and torque anchor bolts to 22-32 ft-lbs.

FAIRMONT AND ZEPHYR (Except Wagons)

1. Remove the lower rear seat cushion. Position all seat belt components as shown in Fig. 16. Install all anchor bolts to 22-32 ft-lbs torque.
2. All seat belt anchorages for front and rear seat belt assemblies are built-in. The anchor tabs have to be positioned according to specification.

FAIRMONT AND ZEPHYR (Station Wagon)

1. Remove rear seat cushion.
2. Slide retractor assembly under the trim panel and thread the torque through the opening in the trim panel.
3. Install the anchor bolt and tighten to 22-32 ft-lbs torque.
4. Slip the seat belt bezel over the seat belt tongue and insert the bezel in the trim panel.
5. Reinstall the rear seat.

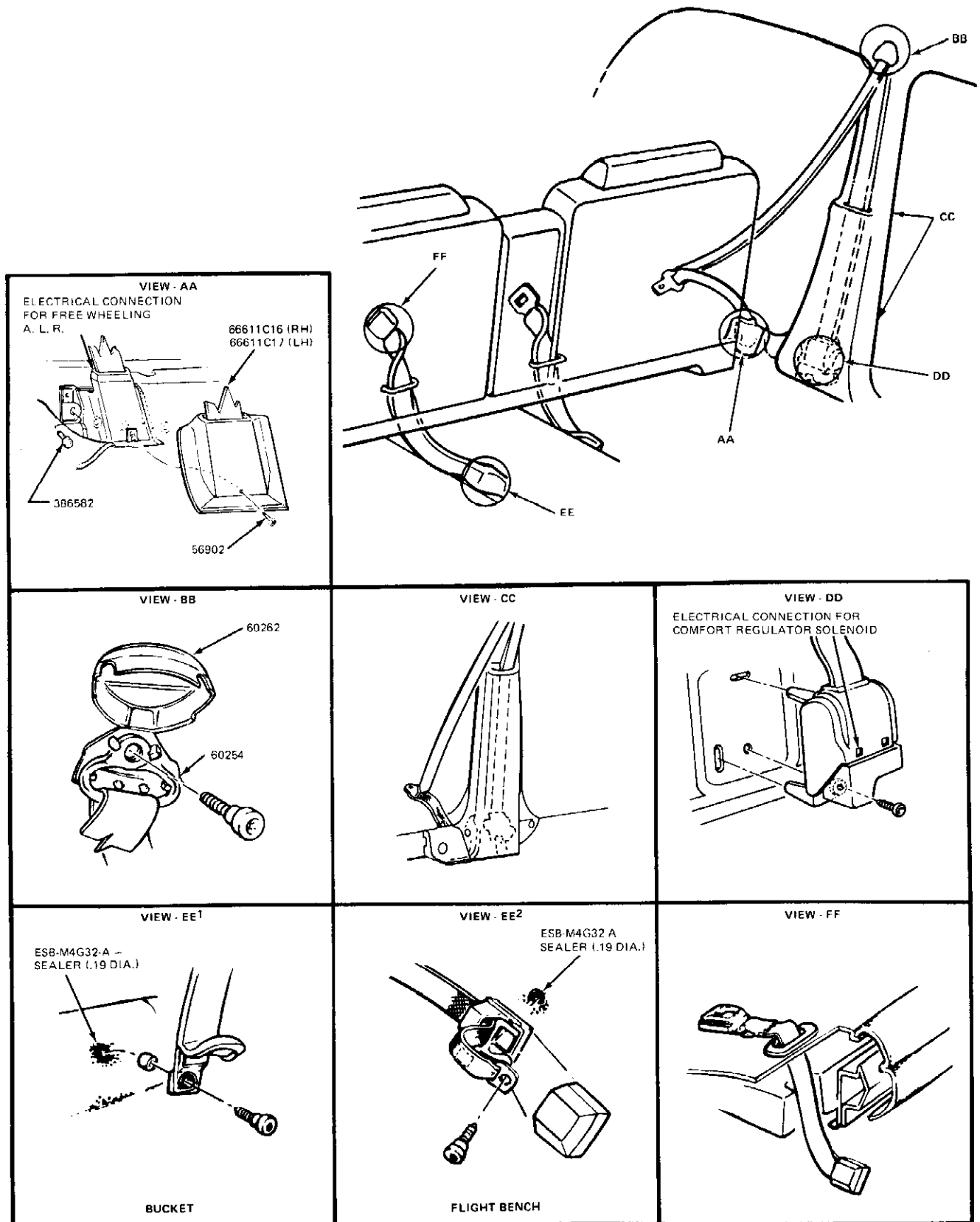
ALL EXCEPT PINTO, BOBCAT, MUSTANG II, FAIRMONT AND ZEPHYR

Removal

To remove the rear seat belt retractor and/or seat belt assembly it will be necessary to remove the rear seat cushion and back assembly (Fig. 15). Refer to Part 41-14. Then, remove the seat belt and/or retractor bolt and remove the assembly.

Installation

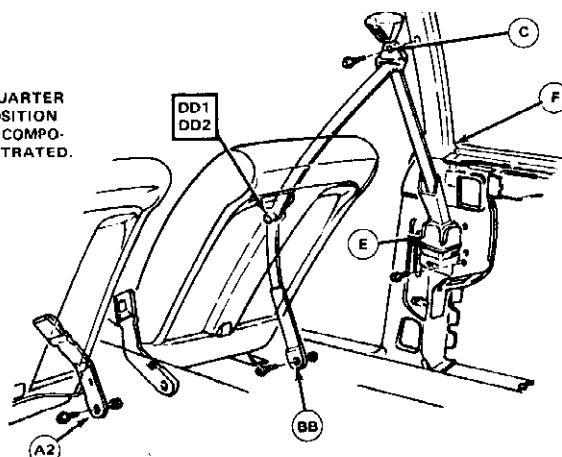
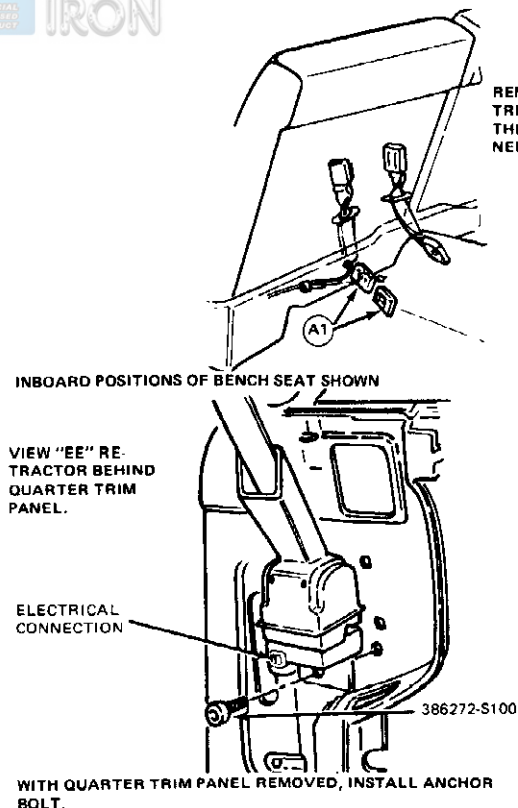
1. Position the retractor assembly, install the attaching bolts and tighten to specification. The anchor tabs have to be positioned according to general specifications. Torque anchor bolts to 22-32 ft-lbs.



N4080-2B

FIG. 11 Front Seat Belt Assembly—Versailles

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BUCKET SEATS SHOWN, SHOULDER BELT ATTACHMENTS ARE THE SAME FOR BENCH SEAT. L.H. & R.H. SYMMETRICALLY OPPOSITE.

SLOT

VIEW "FF" QUARTER TRIM PANEL

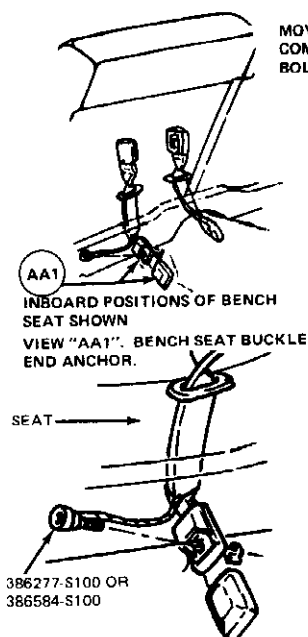
THREAD THE SHOULDER BELT THROUGH THE SLOT IN THE QUARTER TRIM PANEL. INSTALL THE TRIM PANEL. REFER TO SHOP MANUAL, VOL. 4, GROUP 41-14 THROUGH 20 AND 45-03. 1 THROUGH 14 FOR TRIM PANEL AND REAR SEAT REMOVAL AND INSTALLATION.

N4305-2A

FIG. 12 Front Seat Belt Assembly—Fairmont and Zephyr—2-Door Models

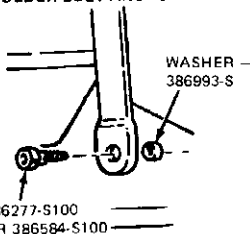
**FRONT SEAT AND SHOULDER BELT INSTALLATION INSTRUCTIONS
CONTINUOUS LOOP SEAT BELT SYSTEM
FAIRMONT/ZEPHYR 4-DOOR - 1978**

MOVE THE SEAT TO THE FORWARD POSITION FOR SEAT BELT INSTALLATION. POSITION ALL SEAT BELT COMPONENTS AS ILLUSTRATED AND INSTALL ALL SEAT BELT ANCHOR BOLTS. TORQUE ALL ANCHOR BOLTS 22 32 FOOT-POUNDS.

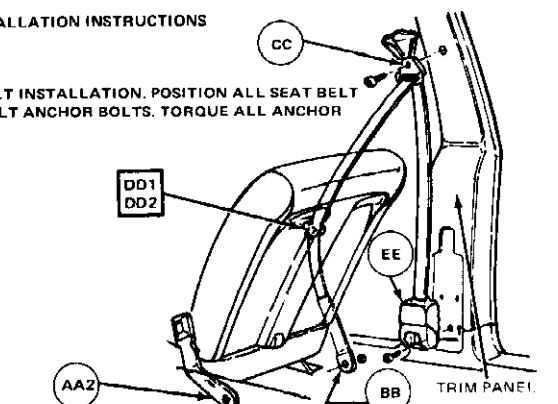


THREAD THE BUCKLE END ANCHOR THROUGH THE SEAT CAVITY. SLIP $\frac{1}{2}$ THE BOOT OVER THE ANCHOR END AND INSTALL THE ANCHOR BOLT. SLIP THE BOOT ON. (L.H. ONLY, CONNECT BUZZER).

VIEW "AA2" AND "BB". OUTBOARD BUCKLE END ANCHOR FOR BUCKET SEATS AND SHOULDER BELT ANCHOR.

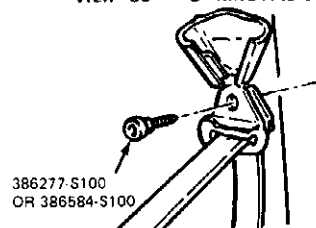


POSITION WASHER AND SEAT BELT ANCHOR. INSTALL ANCHOR BOLT.



BUCKET SEATS SHOWN, SHOULDER BELT ATTACHMENTS ARE THE SAME FOR BENCH SEAT. L.H. AND R.H. SYMMETRICALLY OPPOSITE.

VIEW "CC" - "D" RING AND COVER.



OPEN THE "D" RING COVER. SLIP IT BEHIND THE "D" RING AND INSTALL ANCHOR BOLT. SNAP COVER CLOSED.

N4306-2A

FIG. 13 Front Seat Belt Assembly—Fairmont and Zephyr—4-Door Models

MAJOR SERVICE OPERATIONS

SEAT AND SHOULDER BELTS

The seat belts and shoulder belts are factory installed in their proper locations. If the belts are removed for any reason, they should be installed as shown in Figs. 3 through 16. Sealer should be placed around all seat belt anchor bolt holes in the floor pan. Tighten the anchor bolts to specification, shown at the end of this Part.

SEAT BELT WITH NO ANCHOR PLATE THREAD DAMAGE

1. Remove the damaged bolt for the anchor reinforcement and discard.
2. Install a new bolt with the same part number as indicated at the end of this Part and tighten to specification.

SEAT AND SHOULDER HARNESS BELT WITH DAMAGED ANCHOR PLATE THREADS

1. Remove the broken or stripped bolt and discard.
2. Drill out the internal threads in the seat belt anchor plate with a 27/64 inch drill. (Shoulder belt 13/32 inch drill.)
3. Re-thread the anchor plate with a 1/2-13 tap (seat belt).
4. Blow out the chips.
5. Install the attachment parts in the sequence shown in Figs. 3 through 16, whichever is applicable. Tighten the replacement bolt to specification, as shown at the end of this Part. Original parts are to be replaced with the repair parts indicated in the seat belt parts replacement charts at the end of this Part. Unless specified in the chart, use original parts.

6. When repairing a multiple belt and attachment, install nut (382599-S100) to the bolt in the tunnel area from the underside of the floor pan. Tighten to specification, shown at the end of this Part.

CLEANING

Seat and Shoulder Belt Webbing

Clean the belt webbing with any mild soap solution recommended for cleaning upholstery or carpets; follow instructions provided with soap. **Do not bleach or re-dye the webbing because it may weaken it.**

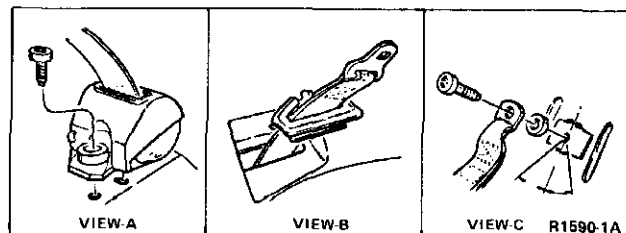
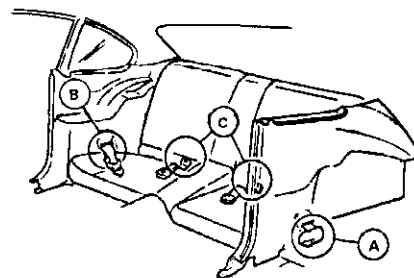
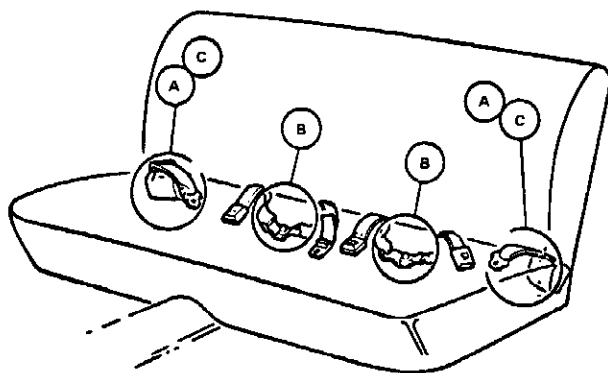
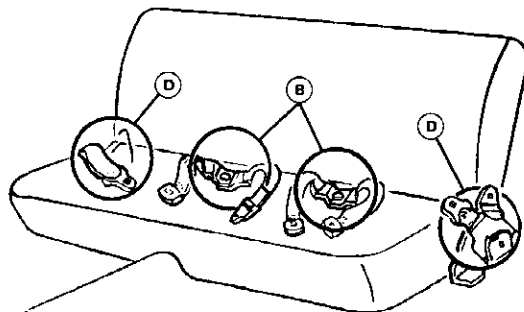


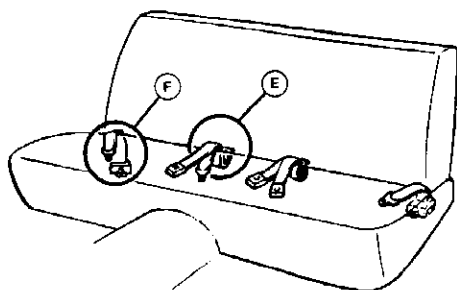
FIG. 14 Rear Seat Belt Assemblies—Mustang II, Pinto and Bobcat—2-Door Models



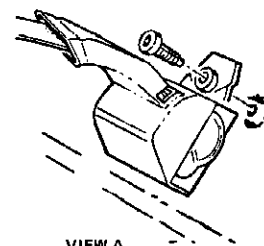
ALL SEDANS AND HARDTOPS
EXCEPT GRANADA AND MONARCH
FAIRMONT, ZEPHYR, AND VERSAILLES



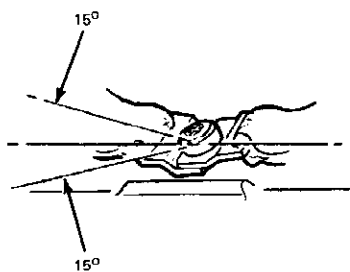
ALL STATION WAGONS EXCEPT PINTO,
BOBCAT, FAIRMONT AND ZEPHYR



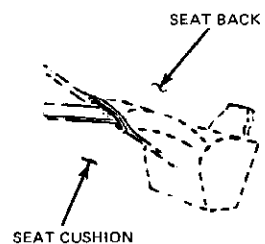
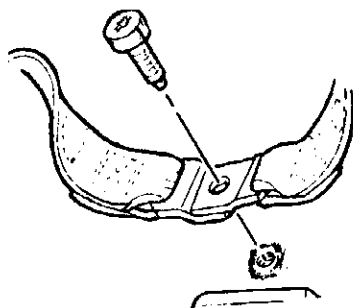
GRANADA, MONARCH, FAIRMONT,
ZEPHYR AND VERSAILLES



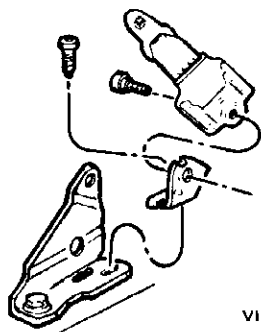
VIEW A



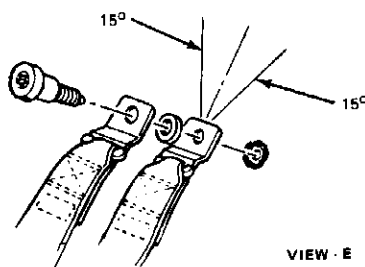
VIEW B



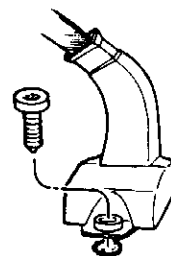
VIEW C



VIEW D



VIEW E



VIEW F

R1592-2C

FIG. 15 Rear Seat Belt Assemblies—Typical—Except Mustang II, Pinto and Bobcat

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REAR SEAT BELT INSTALLATION INSTRUCTIONS
FAIRMONT/ZEPHYR – 1978

REMOVE THE LOWER REAR SEAT CUSHION, POSITION ALL SEAT BELT COMPONENTS AS ILLUSTRATED AND INSTALL ALL SEAT BELT ANCHOR BOLTS. TORQUE ALL ANCHOR BOLTS 22-32 FOOT-POUNDS.

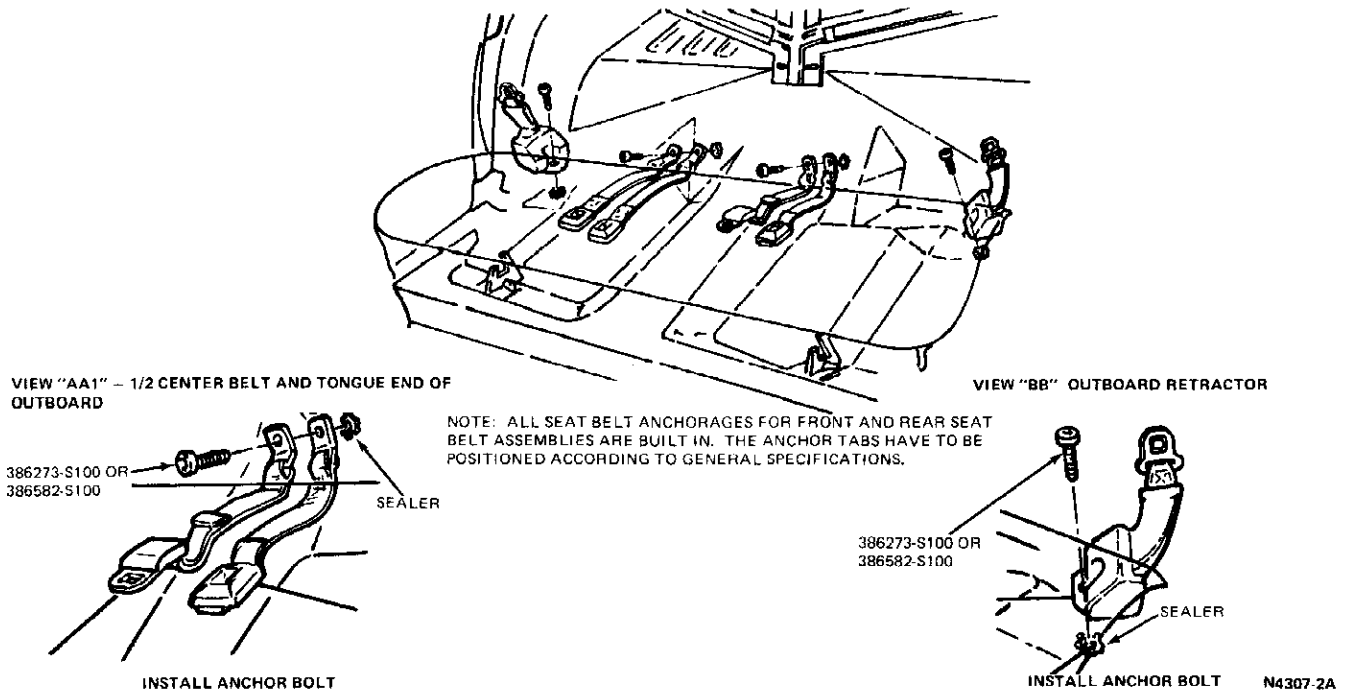


FIG. 16 Rear Seat Assembly—Fairmont and Zephyr (Except Wagon)

SPECIFICATIONS

PARTS REPLACEMENT CHART – SEAT AND SHOULDER BELT WITH DAMAGED WELD NUT ANCHOR PLATE THREADS

ORIGINAL PARTS – SEAT BELT			REPLACEMENT PARTS – SEAT BELT		
Part No.	① Code Letter	Part Name	Part No.	① Code Letter	Part Name
386273-S100	IA	Bolt – 7/16-20 x 1.38 Pan Head Tapping	383531-S36	X	Bolt – 1/2-13 x 1.38 Pan Locking
386274-S100	IB	Bolt – 7/16-20 x 1.75 Pan Head Tapping (.50 Shoulder)	383753-S36	Y	Bolt – 1/2-13 x 1.75 Pan Locking (.50 Shoulder)
D2AB-65612A16-AA	—	Spacer – Serrated 1/2 x .30	382553-S100	—	Washer 9/16 Flat To Be Used With Repair of 386274-S100 Bolt Only When Required.
382629-S100	—	Washer – .463/.443 I.D. Plate (1.80 Dia. .190 Thick)	382522-S100	—	Washer – 1/2 Flat (1.30 Dia. .190 Thick)
382583-S100	—	Washer – 1/2 Serrated (.18 Thick)	382533-S100	—	Washer – 1/2 Flat (.25 Thick)
3862702-S100	IF	Bolt – 7/16-20 x .88 Pan Head Tapping	383437-S36	W	Bolt – 1/2 x 13 Pan Locking
386276-S100	IL	Bolt – 7/16-20 x 1.75 Pan Shoulder Tapping (.75 Shoulder)	383754-S36	Z	Bolt – 1/2-13 x 2.25 Pan Locking (.88 Shoulder)
386277-S100	IK	Bolt – 7/16-20 x 1.38 Pan Shoulder Tapping (.50 Shoulder)	385709-S36	T	Bolt – 1/2-13 x 1.38 Pan Head Shoulder Locking
REPLACEMENT PARTS – SHOULDER BELT			ORIGINAL PARTS – SHOULDER BELT		
Part No.	① Code Letter	Part Name	Part No.	① Code Letter	Part Name
386278-S100	ID	Bolt – 3/8-16 x 1.50 Pan Head Tapping	386274-S100	IC	Bolt – 7/16-20 x 1.75 Pan Head Tapping

① Identification letter on top of bolt head or face of spacer.

NOTE: Bolt torque must be maintained at 20-30 ft.-lbs. Replacement parts – 22-32 ft.-lbs.

CR1112-2H

Seat Trim

PART
41-60

SUBJECT	PAGE	SUBJECT	PAGE
GENERAL INFORMATION	60-1	REMOVAL AND INSTALLATION (Cont'd.)	
REMOVAL AND INSTALLATION		Center Arm Rest Cover — Front Seat	60-2
Back Cover — Bench Type Front Seat	60-2	Center Arm Rest Cover — Rear Seat	60-2
Back Cover — Bucket and/or Split		Cushion Cover — Bench Type Front Seat	60-1
Bench Front Seat	60-1	Cushion Cover — Rear Seat	60-2
Back Cover — Rear Seat	60-2	High Back Cover — Bucket Seat	60-1
Center Arm Rest — Front Seat	60-2		

CR2020-2B

GENERAL INFORMATION

The following seat trim removal and installation procedures generally apply to all car lines.

If some of the steps do not apply to the particular vehicle being serviced, proceed to the next step and review the appropriate illustrations shown. Unless otherwise noted, the illustrations shown in this section are **typical of all bucket, bench and split bench**

(front seat assemblies), arm rests (front and rear), and rear seat cushion and back assemblies.

See appropriate Figs. 1 through 21. Seat trim replacement requires removal and installation of seat components such as seat tracks, seat assemblies and head restraints. Refer to the applicable Shop Manual Parts in Group 41 for these procedures.

REMOVAL AND INSTALLATION

BACK COVER-BUCKET AND/OR SPLIT BENCH FRONT SEAT

1. Tilt the seat back forward, remove the seat back pivot covers and remove the bolts and/or pins and retainers from the seat back assembly pivot arm.
2. Remove the seat back latch handle and escutcheon.
3. Remove the seat back assembly (lift outboard side and pull seat back out of inboard pin socket), and place on clean bench.
4. Remove the seat back trim robe panel, moulding and shields (retained by trim clips and/or tabs and screws) from the seat back (if so equipped).
5. Cut the hog rings and/or disengage the plastic retainers from the seat back frame assembly flange and remove the cover.
6. Transfer all bolster tie-down wires to their listings in the new cover assembly.
7. Install the cover assembly.
8. Install the hog rings that retain the cover or attach the plastic retainers to the frame assembly flange.
9. Install the seat back trim panel, shield and mouldings to the seat back assembly.

10. Install the seat back latch handle and escutcheon.
11. Position the seat back assembly to the seat cushion and install the retaining bolts, pins and retainers and the pivot covers.
12. Check the seat back latch operation to be sure that the seat back assembly holds in the locked position.

HIGH BACK COVER-BUCKET SEAT

To replace the Pinto/Bobcat high back cover (bucket seat), follow the procedures outlined for Back Cover Bucket and Split Bench in this Section and refer to the illustrations shown. The removal and installation procedures are typical.

CUSHION COVER-BENCH TYPE FRONT SEAT

Remove the seat and track assembly from the vehicle as outlined in the applicable seat section (Group 41). Remove the seat back from the cushion. To replace the cushion cover, follow the cushion cover removal and installation procedures under Rear Seat Cushion and

Front Seat Arm Rest Removal and Installation in this Section. The procedures are typical.

BACK COVER-BENCH TYPE FRONT SEAT

Remove the seat and track assembly from the vehicle as outlined in the applicable seat section (Group 41). Remove the seat back from the cushion. To replace the seat back cover, follow the Seat Back Cover Removal and Installation procedures in this Section. The procedures are typical.

CENTER ARM REST-FRONT SEAT

The front seat center arm rest on the Lincoln Continental requires removal of the hog rings retaining the arm rest cover to the seat cushion assembly. Cut the hog rings from underneath the front seat cushion assembly. Then, lift the flap and remove the screw retaining the arm rest assembly to the seat cushion. Remove the arm rest assembly.

On the LTD II, Cougar, Thunderbird and Continental Mark V, remove the arm rest pivot covers to gain access to the bolts attaching the arm rest to the seat cushion assembly. Then, remove the two attaching bolts and remove the arm rest assembly.

On the Mercury remove front seat back from cushion and seat back shields to get at hog rings to remove arm rest. Then, remove the hog ring(s) retaining the flap assembly to gain access to the retaining nuts. Remove the four nuts retaining the back and strainer assembly to the seat back frame assembly and remove the arm rest.

CENTER ARM REST COVER-FRONT SEAT

Disengage the hog rings and the cover from the retainers (staples) on Lincoln Continental. Then, remove the arm rest cover.

The arm rest cover on the LTD II, Granada, Monarch, Fairmont, Versailles, Zephyr, Cougar, Ford, Mercury, Thunderbird and Continental Mark V, is retained with a zipper. Unzip the zipper and remove the arm rest cover assembly.

CUSHION COVER-REAR SEAT

1. Remove the rear seat cushion from the vehicle. See Group 41.
2. Disengage the button assemblies from their respective retainers and remove the buttons. **The retainers will be damaged upon removal and should be discarded.**
3. Cut the hog rings from the cushion cover and/or disengage the plastic retainers from the seat cushion flange and remove the cover.
4. Transfer all bolster tie-down wires to their respective listings in the new cover assembly.

5. Position the cover over the cushion assembly. Secure the plastic retainers to the seat flange assembly (if so equipped).
6. Install the necessary hog rings, buttons and (new) retainers and install the cushion assembly into the vehicle.

BACK COVER-REAR SEAT

1. Remove the rear seat cushion and rear seat back assembly from the vehicle, and remove the center arm rest (if so equipped) from the rear seat back as outlined in the removal procedure under Center Arm Rest Cover-Rear Seat.
2. Disengage the button assemblies from their respective retainers on the rear side of the seat back and remove the buttons.
3. With the front side down on a bench, cut the hog rings that retain the cover to the spring assembly and/or disengage the plastic retainers from the seat cushion flange assembly.
4. Remove the cover from the seat back assembly.
5. Transfer all bolster tie-down wires to their respective listings in the new cover assembly.
6. Position the cover over the cushion assembly.
Position the plastic retainer(s) over the spring flange assembly.
7. Install the necessary hog rings, buttons and (new) retainers and install the rear arm rest to the seat back assembly (if so equipped).
8. Install the seat back and seat cushion into the vehicle.

CENTER ARM REST COVER-REAR SEAT

1. Remove the rear seat cushion and rear seat back assembly from the vehicle as outlined in Group 41.
2. Cut the retaining hog rings and remove the rear cover from the arm rest opening in the seat back.
3. Cut the hog rings that attach the arm rest flap to the rear seat back.
4. Remove the four bolts that attach the arm rest link and vertical strainer assembly to the rear seat back and remove the arm rest assembly.
5. Remove the flap-to-arm rest staples, the cover-to-arm rest staples and slip the cover off the pad and base assembly.
6. Slip the new cover over the pad and base assembly and install the arm rest staples and hog rings.
7. Assemble the center arm rest to the rear seat back and install the four vertical strainer-to-seat back attaching screws.
8. Fasten the arm rest flap to the rear seat back with hog rings.
9. Install the rear seat back assembly and the rear seat cushion in the vehicle.

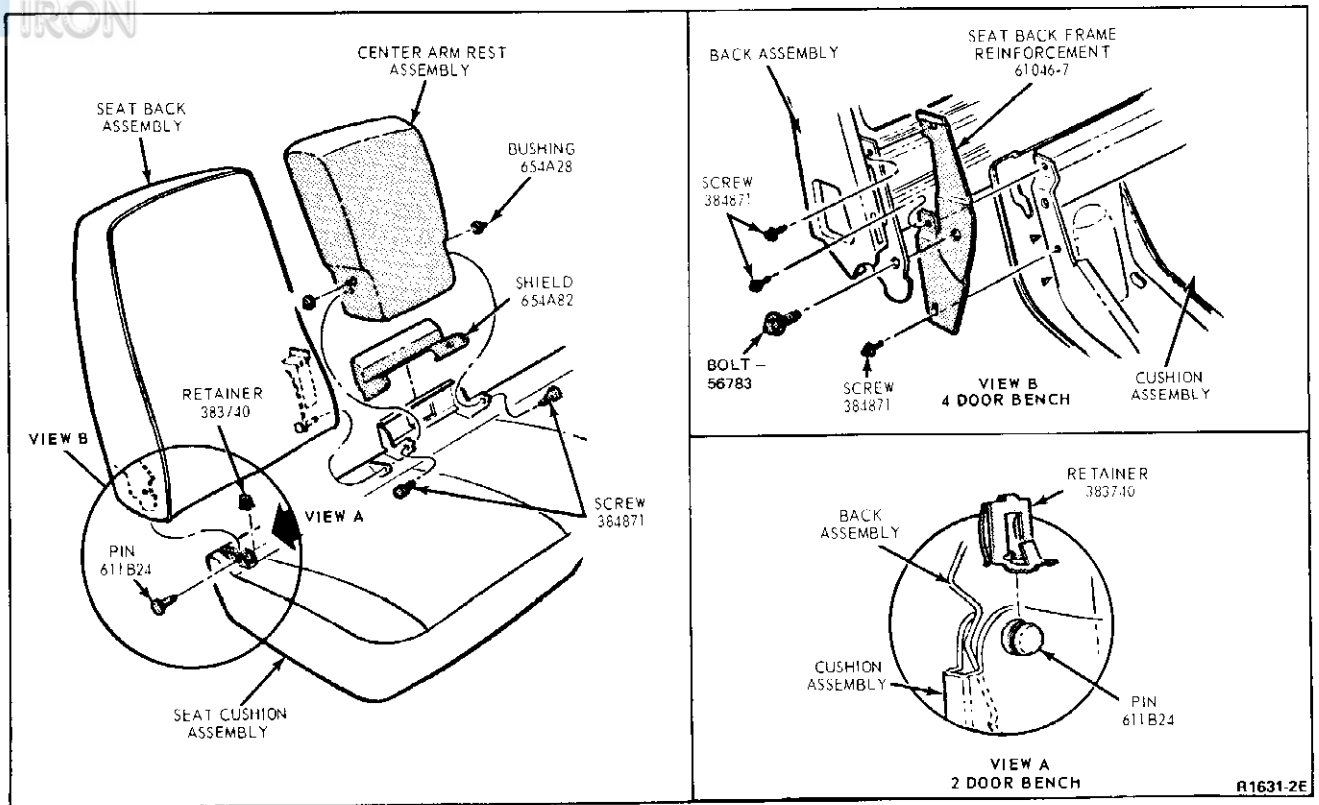


FIG. 1 Front Seat Back and Center Arm Rest—Split Bench—Thunderbird, Continental Mark V, LTD II and Cougar

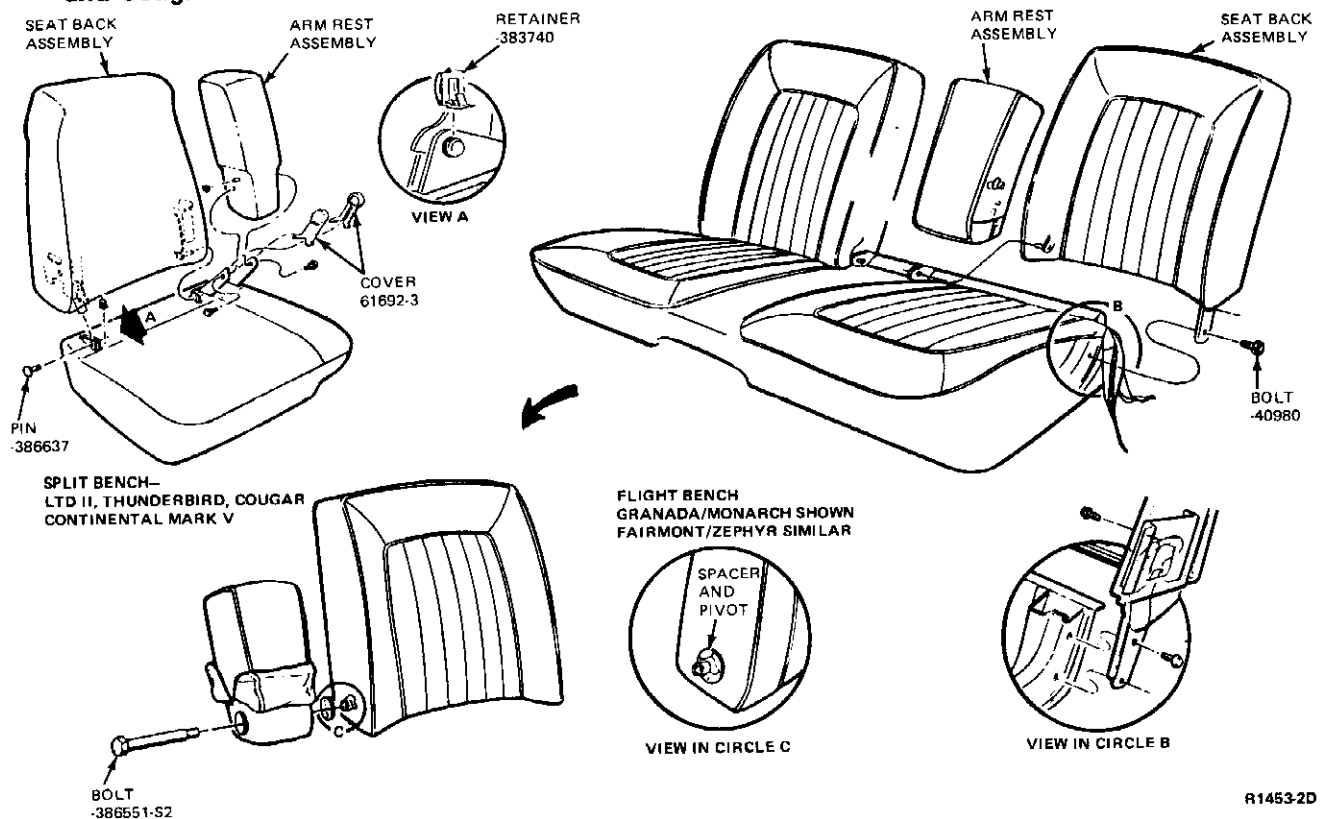


FIG. 2 Front Seat Back and Center Arm Rest—Split Bench—Thunderbird, Continental Mark V, LTD II and Cougar

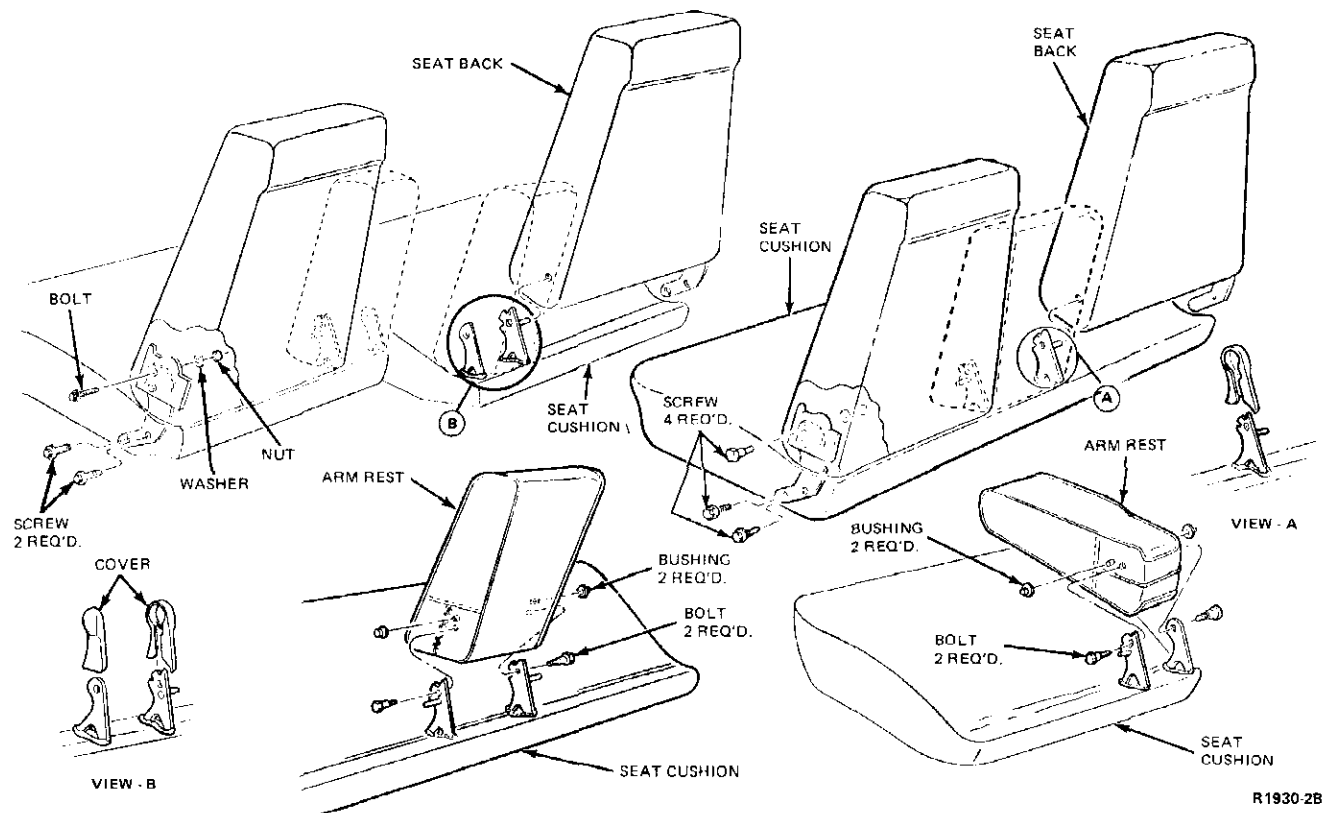


FIG. 3 Front Seat Back and Center Arm Rest—Flight-Bench and Split-Bench—Ford and Mercury

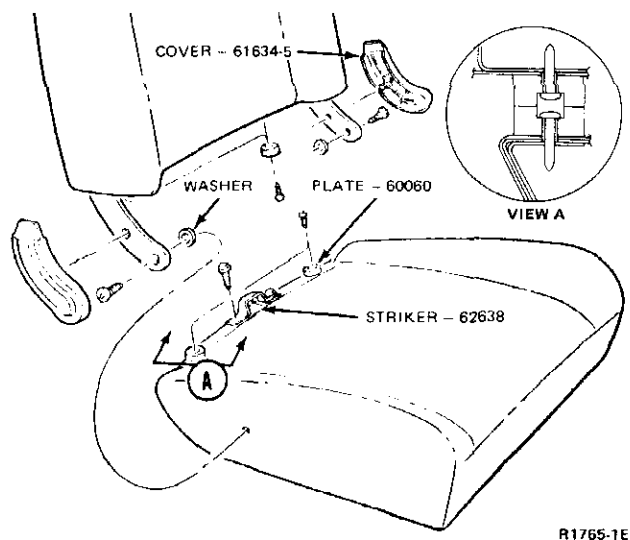


FIG. 4 Front Seat Back and Cushion Assembly—Pinto, Bobcat and Mustang II

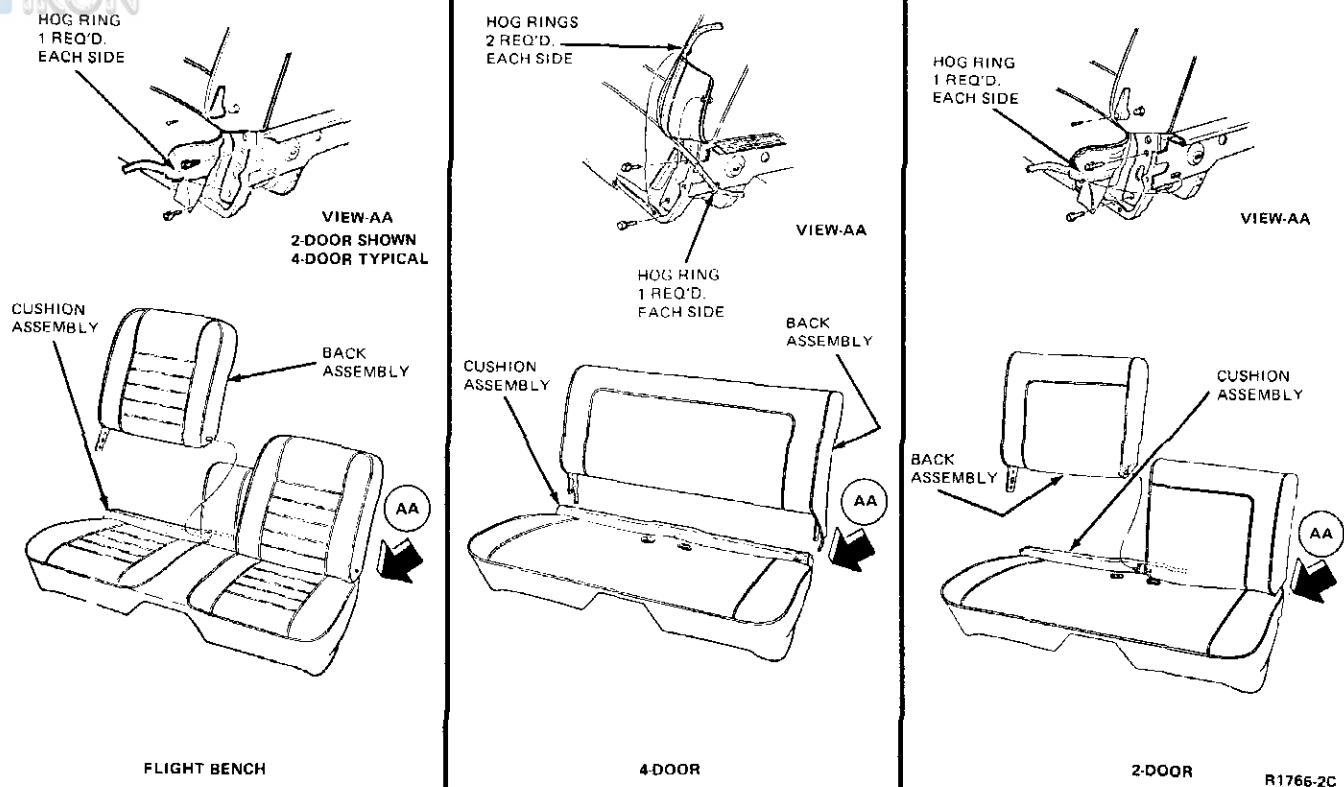


FIG. 5 Front Seat Back-to-Cushion —Fairmont and Zephyr

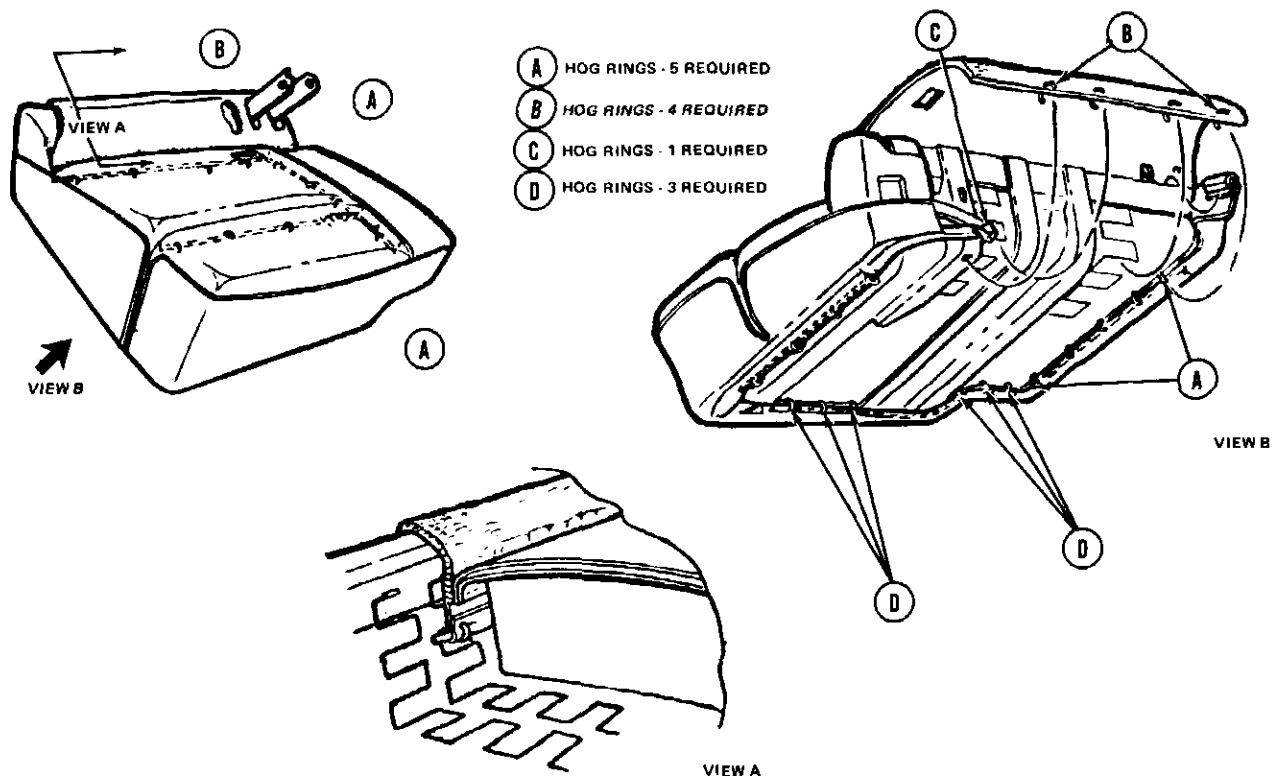
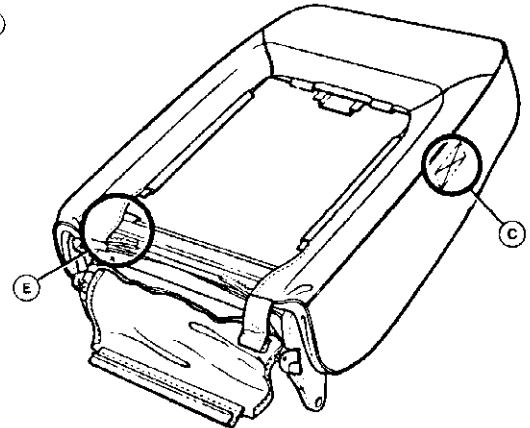
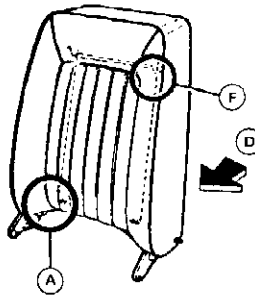
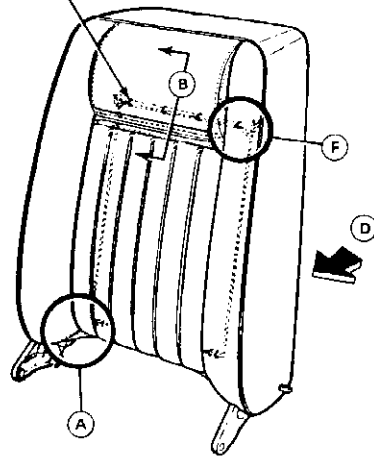
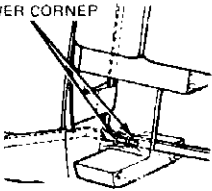


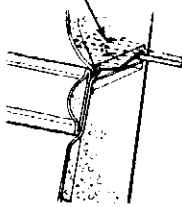
FIG. 6 Front Seat Cushion Cover Installation—Split Bench—Thunderbird and Continental Mark V Shown—Typical

HOG RINGS
4 REQUIRED

VIEW - D

HOG RINGS
2 REQUIRED
EACH FRONT
LOWER CORNER

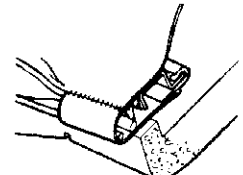
VIEW - A

HOG RINGS
4 REQUIRED

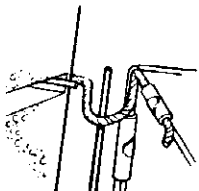
VIEW - B

SLIT IN COVER
FOR FRONT SEAT
BACK LATCH BEZEL
AND KNOB

VIEW - C



VIEW - E



VIEW - F

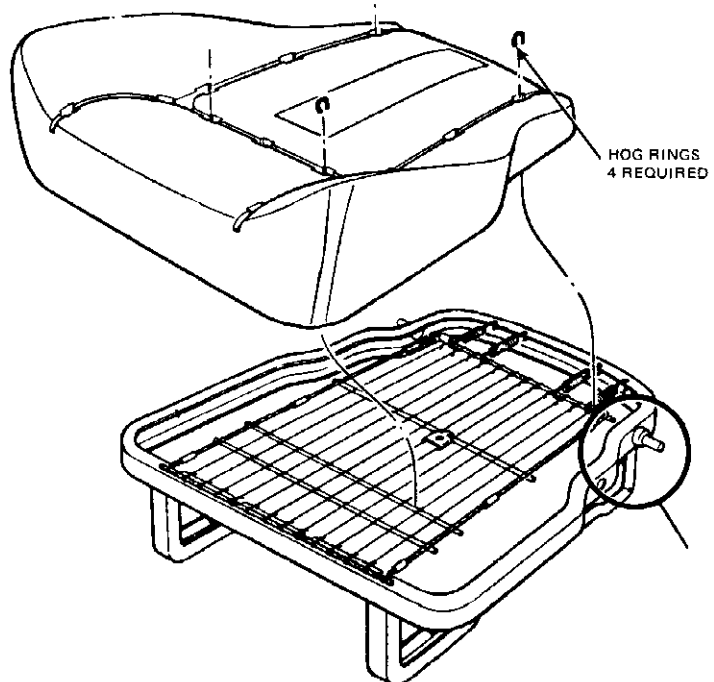
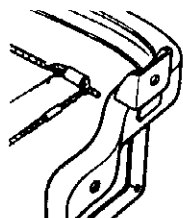
HOG RINGS
4 REQUIRED

FIG. 7 Front Bucket Seat Cushion and Seat Back Installation—Fairmont, Zephyr, Granada, Monarch and Versailles—Typical

R1931.2A

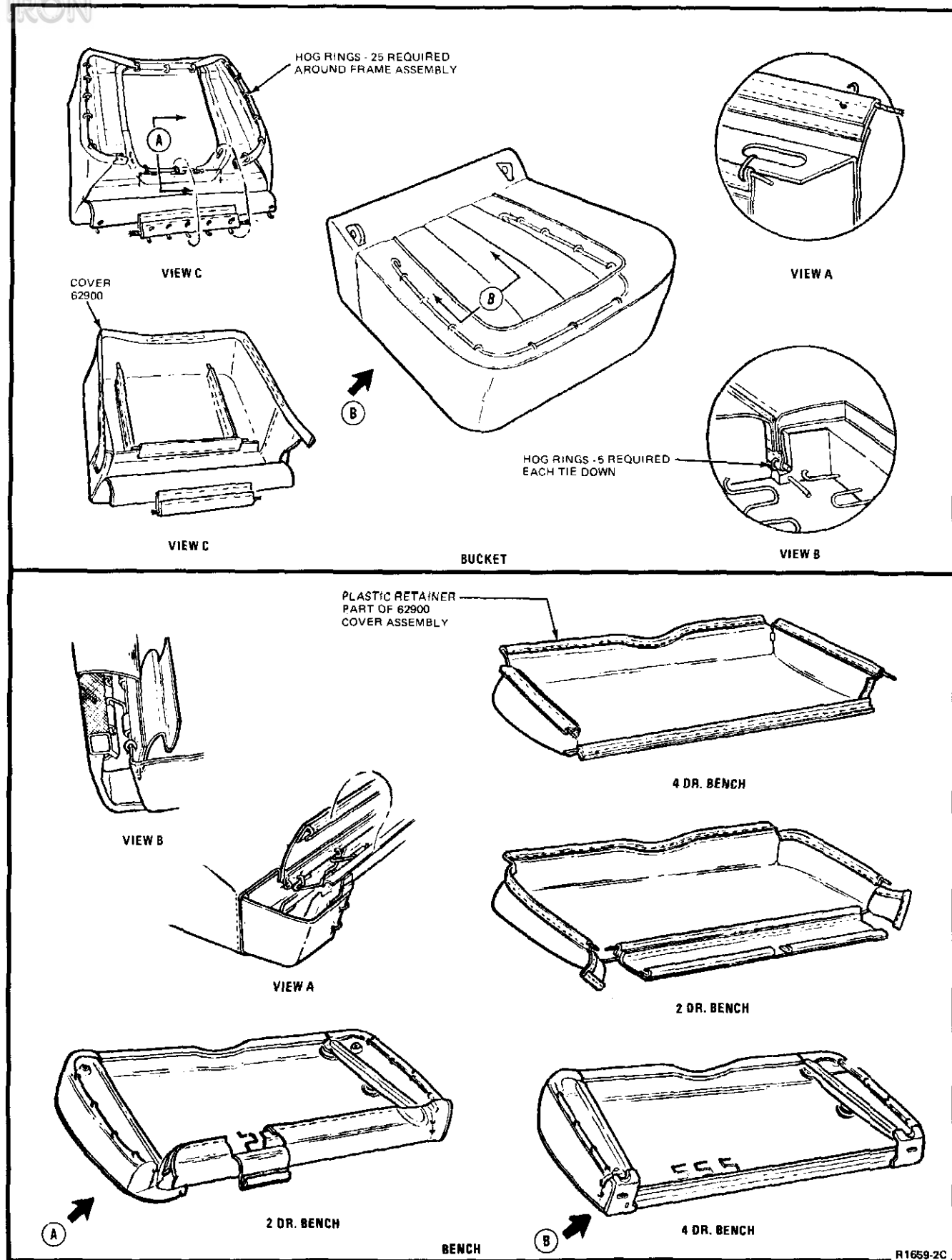
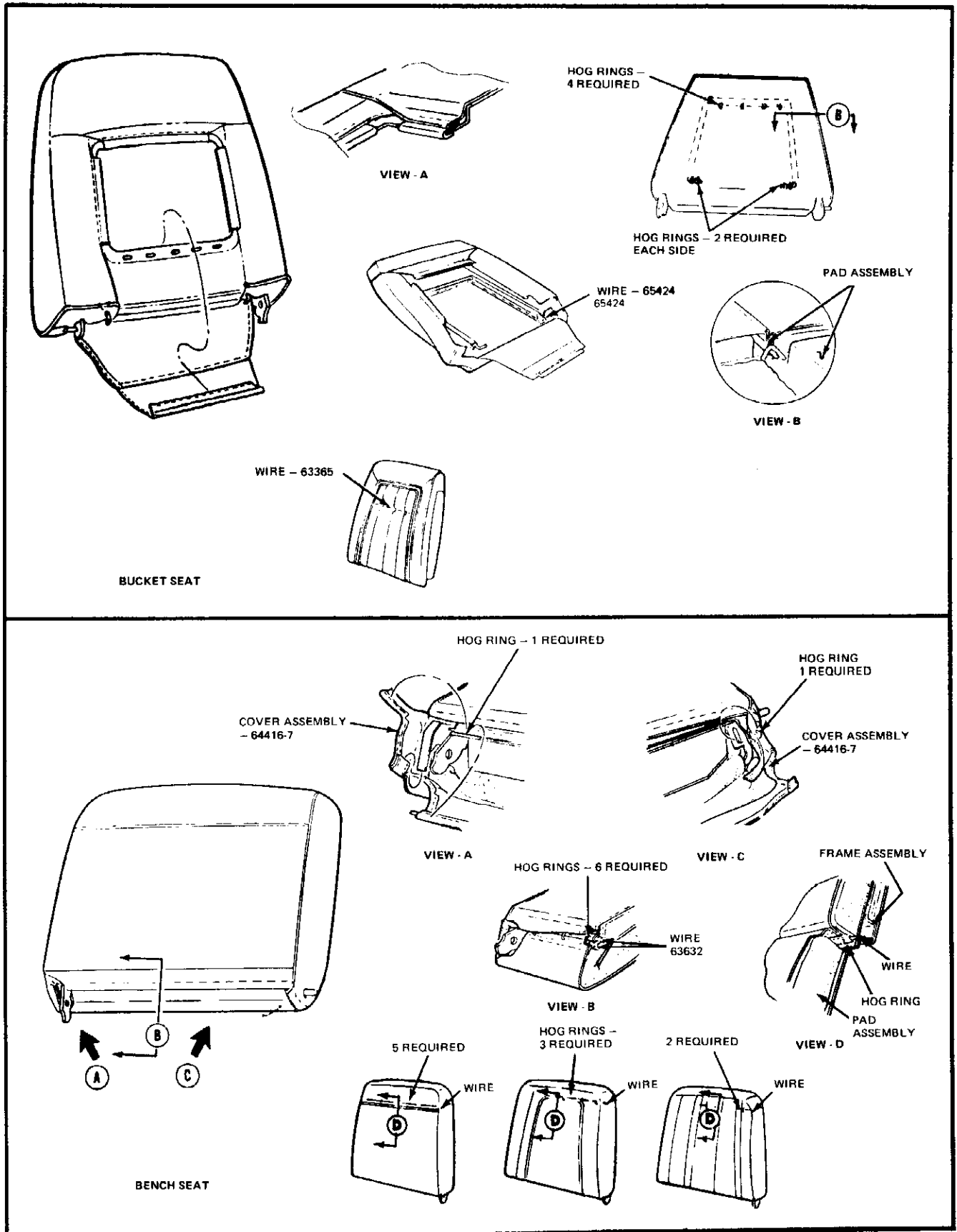


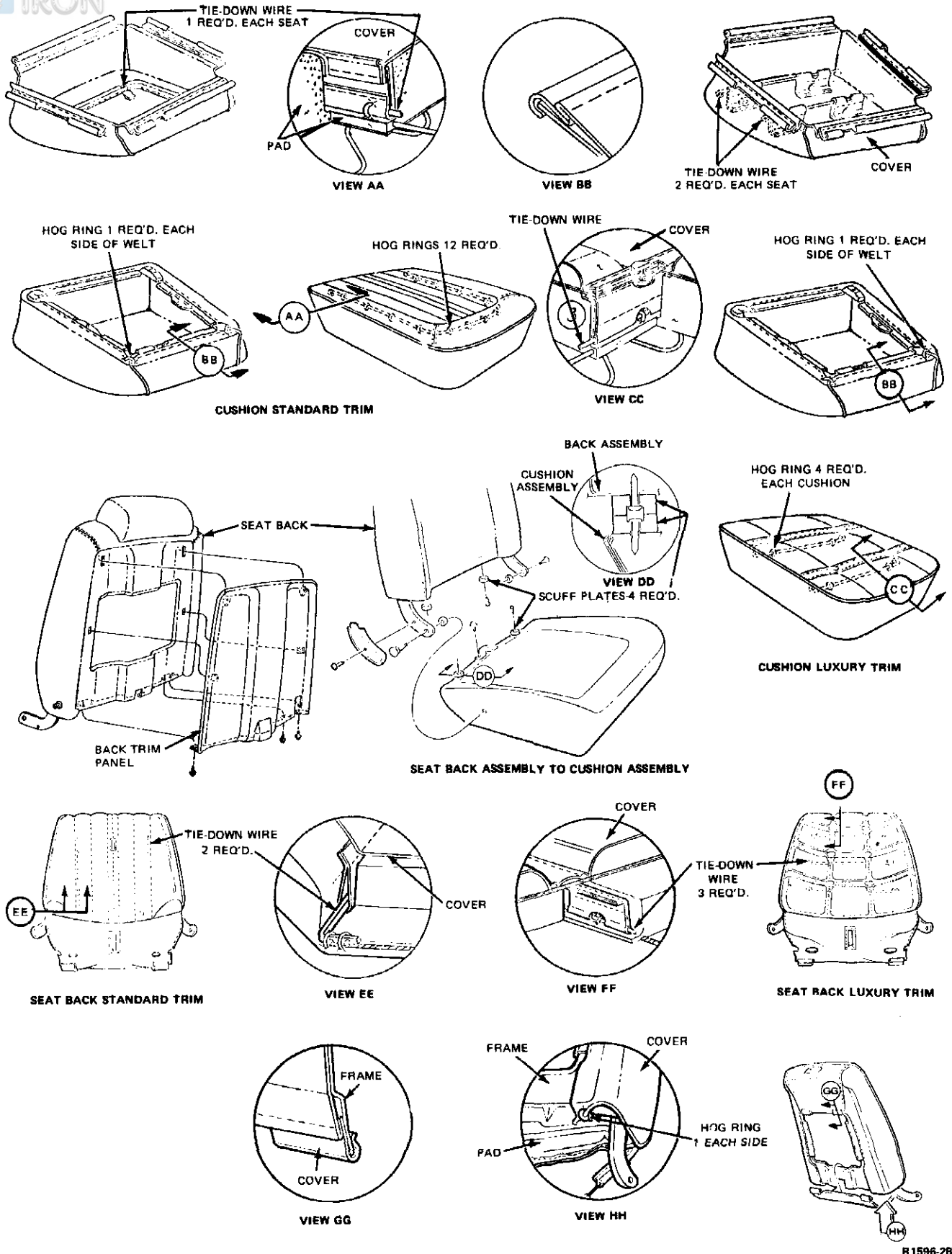
FIG. 8. Front Seat Cushion Cover Installation—Bucket and Bench Seat—LTD II, Thunderbird and Cougar—Typical



R1456-2F

FIG. 9 Front Seat Back Cover Installation—Bench and Bucket—LTD II, Thunderbird and Cougar

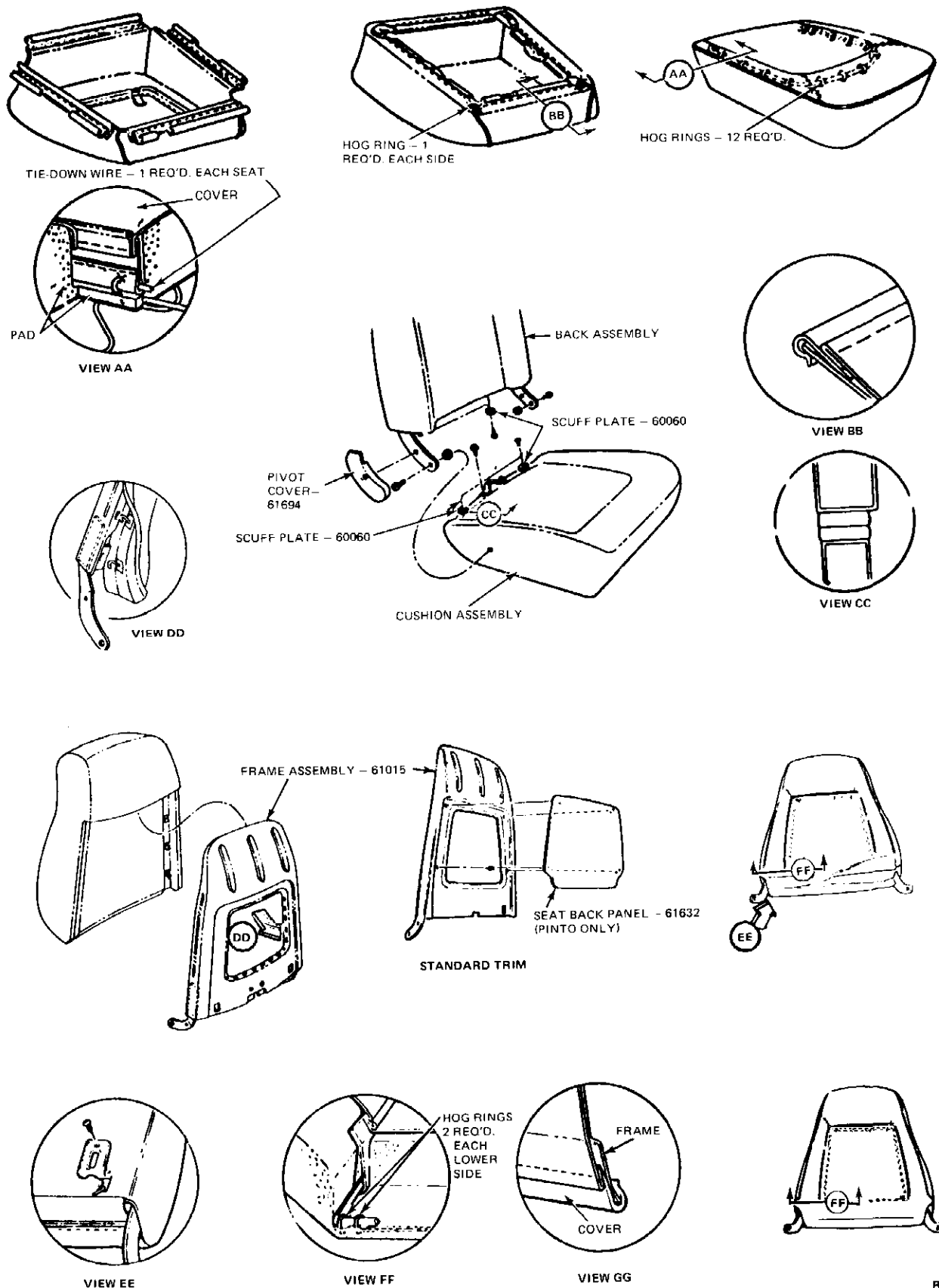
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R1596-2B

FIG. 10 Front Seat Assembly—Mustang II, Bobcat and Pinto

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R1597-2C

FIG. 11 Front Seat Assembly—Pinto and Bobcat

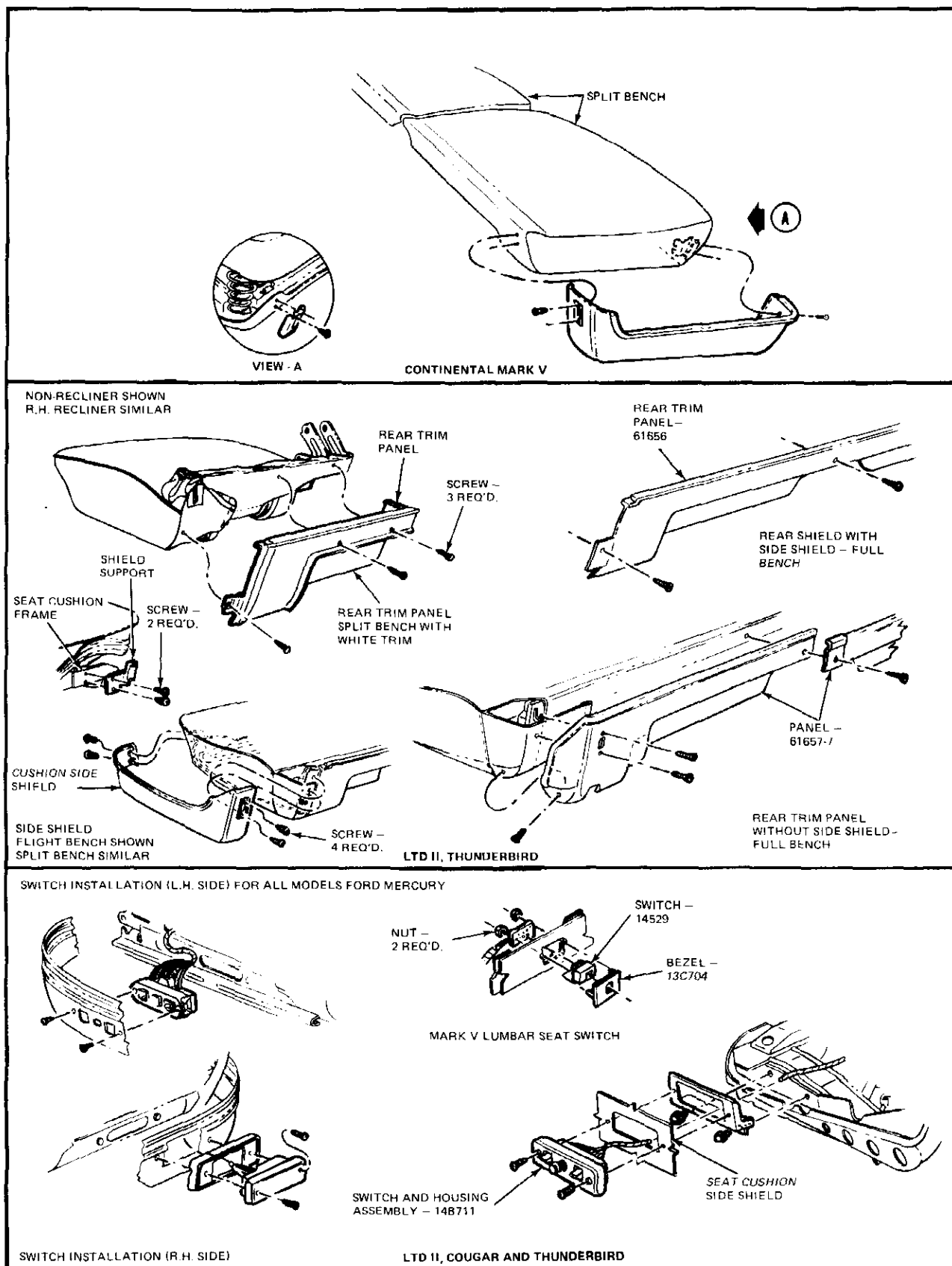


FIG. 12 Seat Shields—LTD II, Cougar, Ford, Mercury, Thunderbird and Continental Mark V

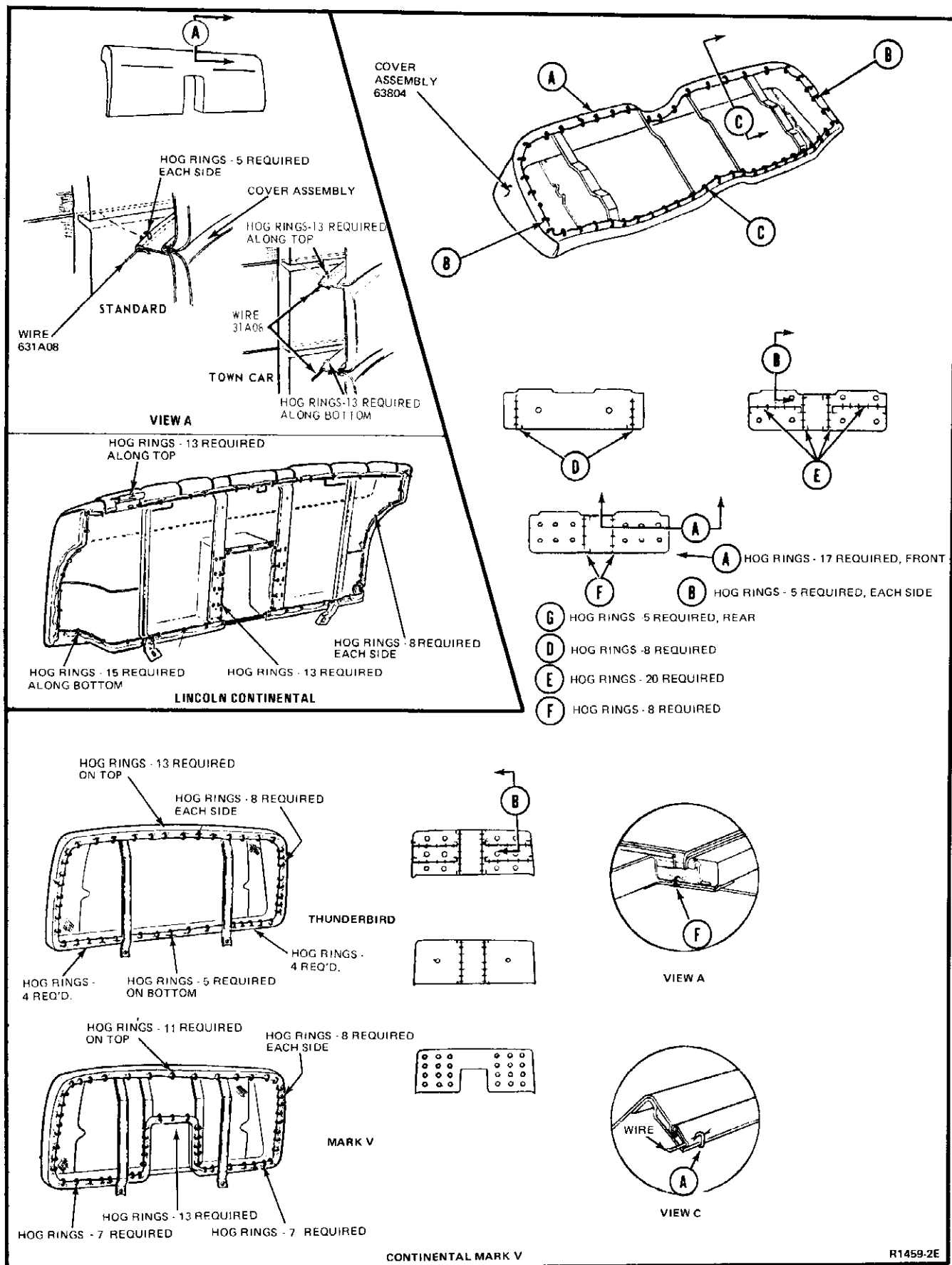
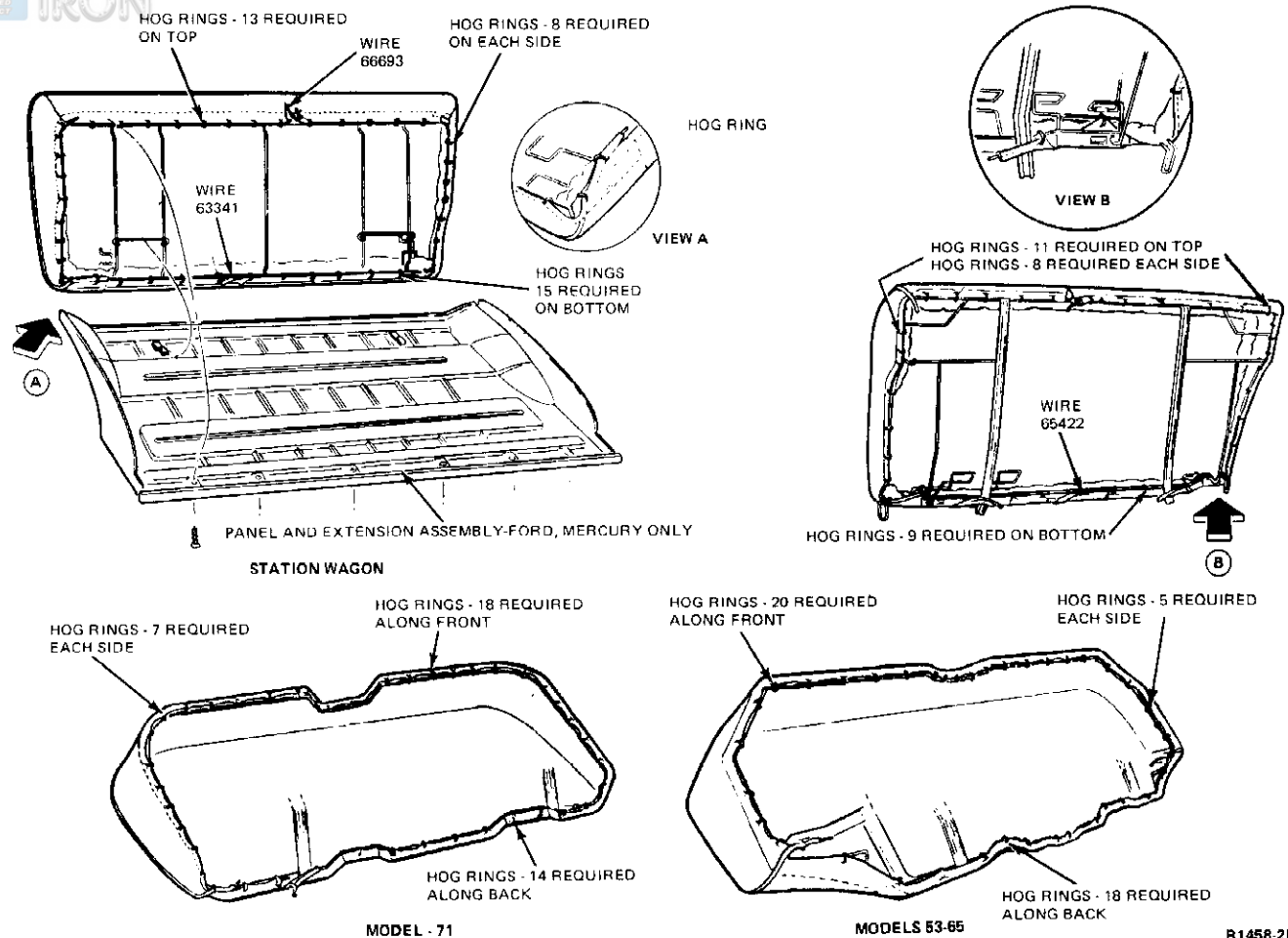


FIG. 13 Rear Seat Cover Installation—Lincoln Continental and Continental Mark V



R1458-2F

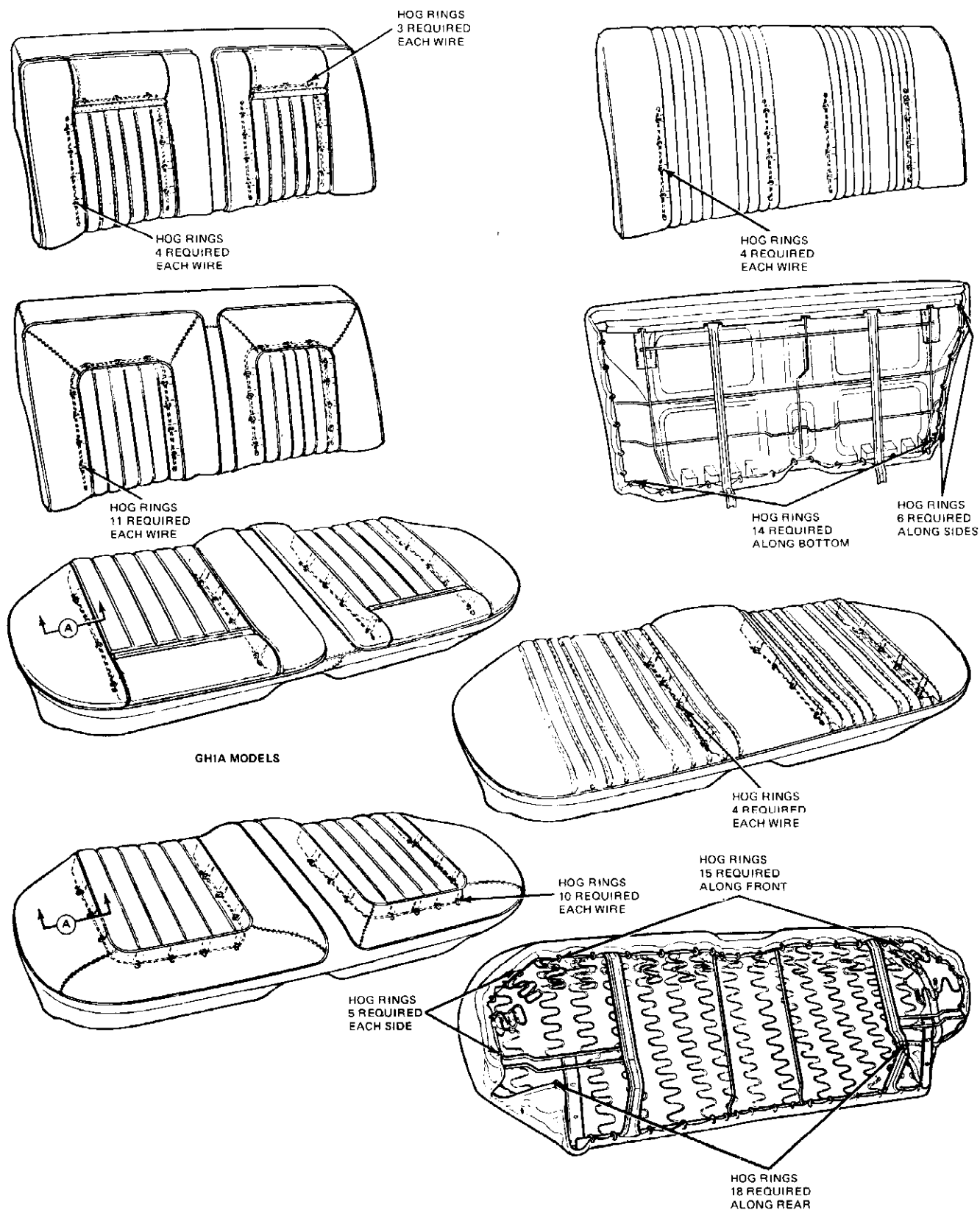
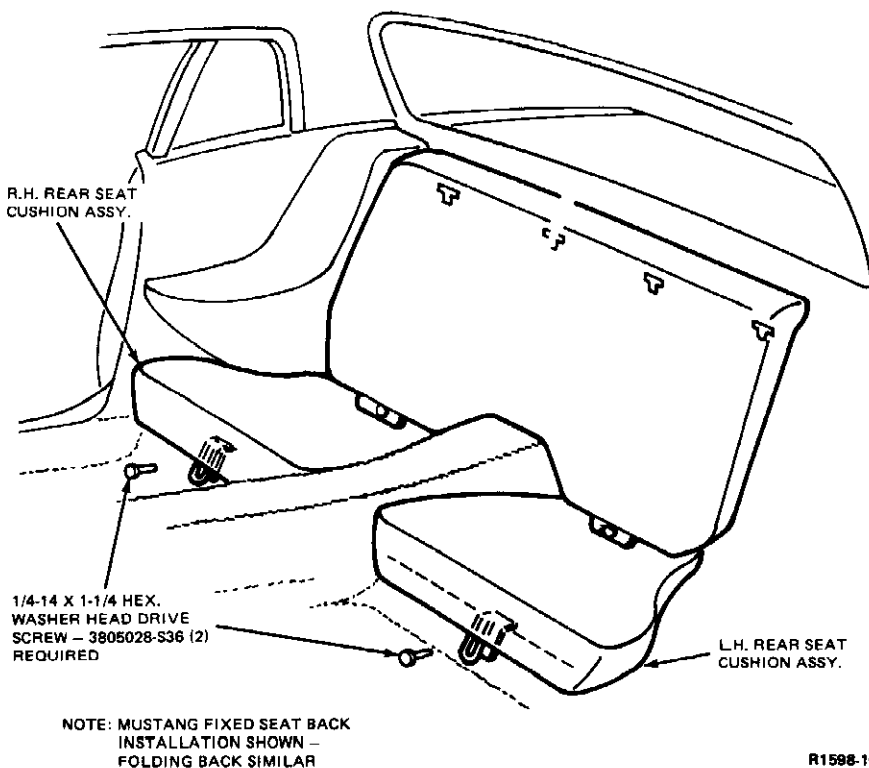
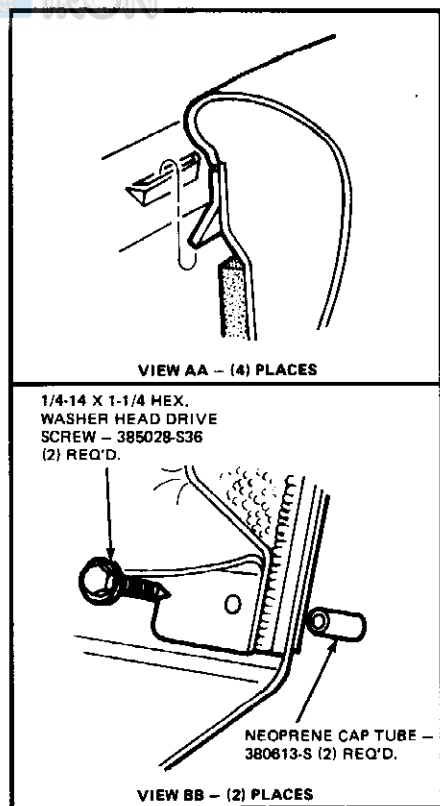
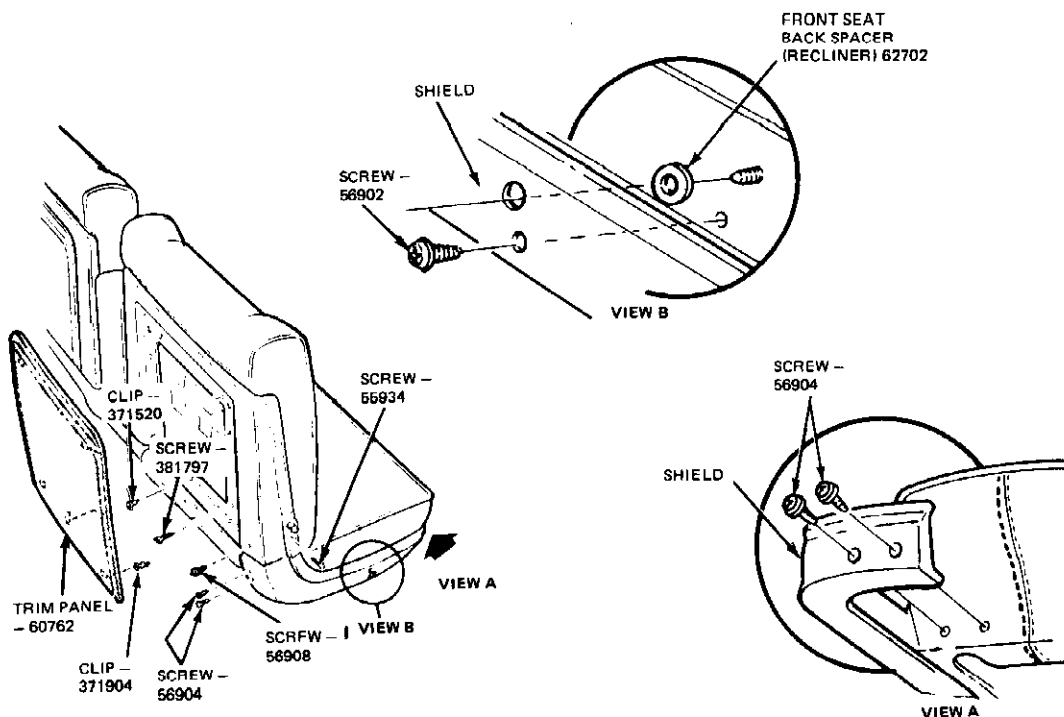


FIG. 15 Rear Seat Cushion and Seat Back Cover Installation—Granada, Monarch and Versailles



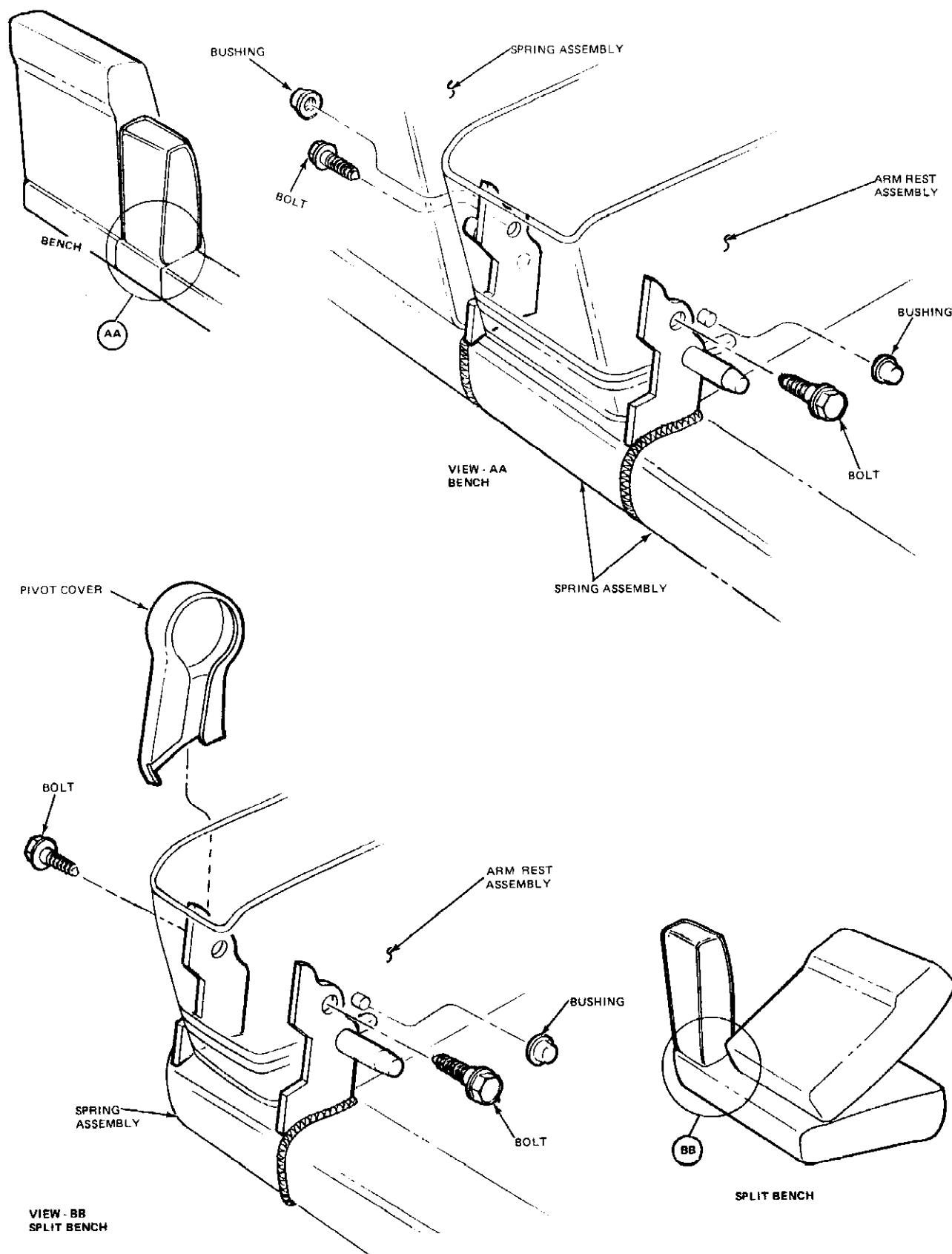
R1598-1C

FIG. 16 Rear Seat Cushion Cover Installation—Mustang II, Bobcat and Pinto—Typical



R1808-2D

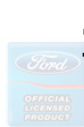
FIG. 17 Front Seat Back—Trim Panel Installation—Typical



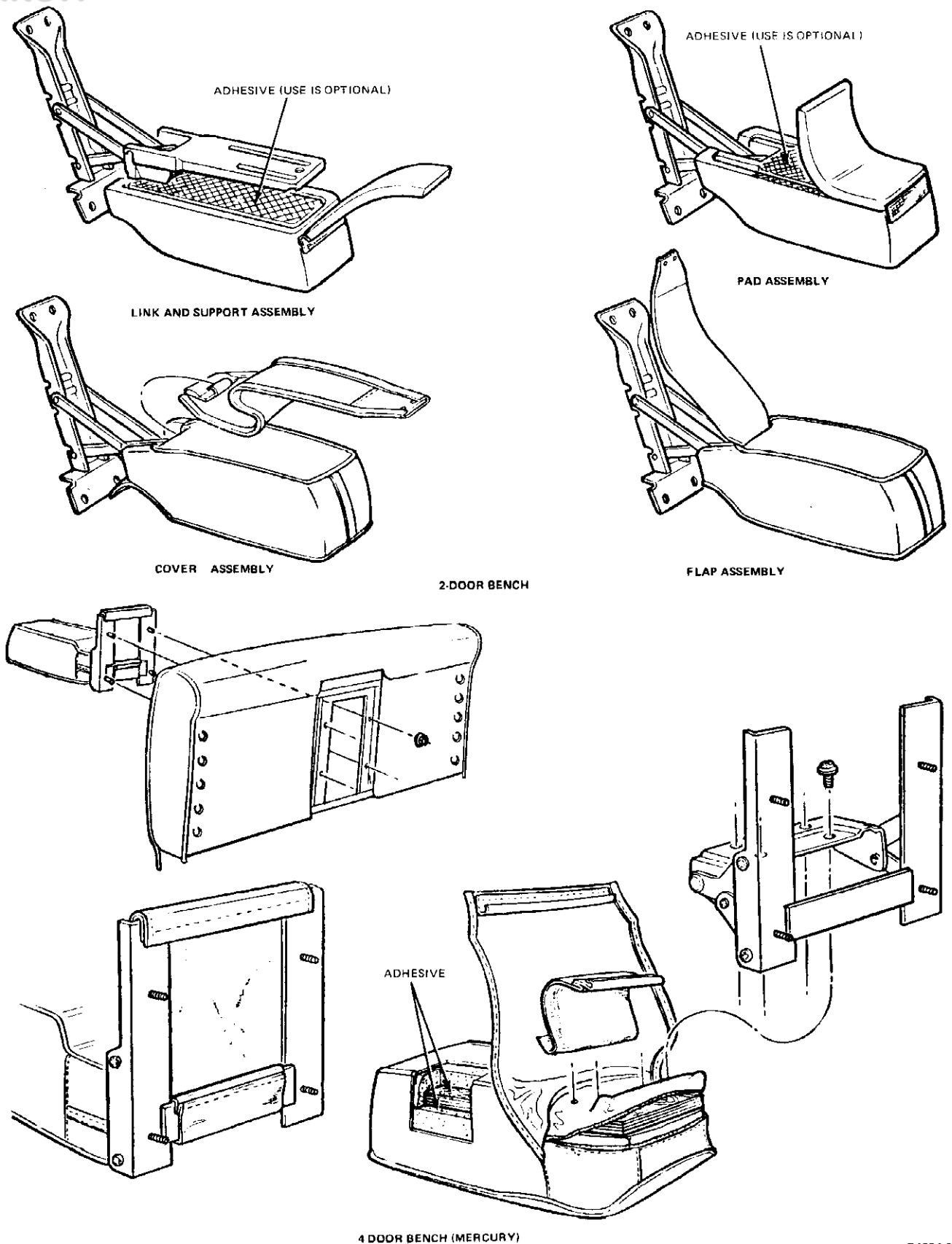
R1933-2C

FIG. 18 Front Seat Arm Rest Installation—Lincoln Continental

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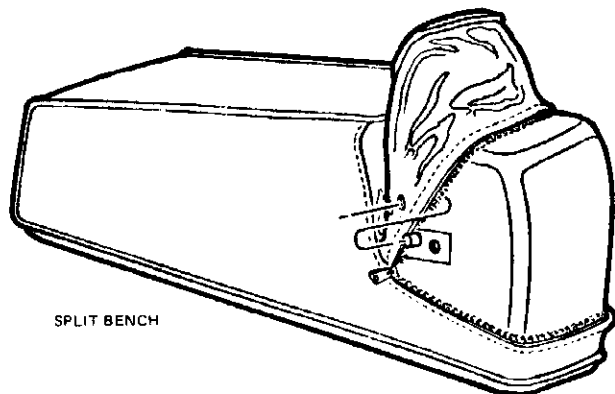


DETROIT
IRON

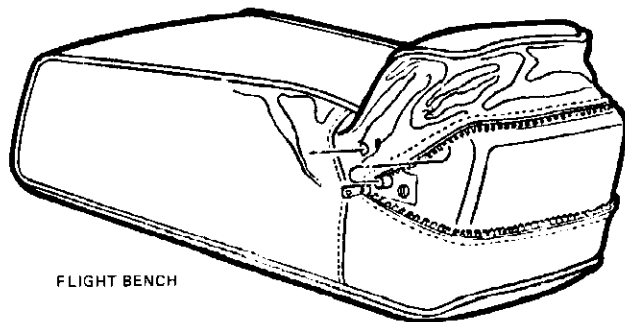


R1934-2B

FIG. 19 Front Seat Center Arm Rest Installation—Ford and Mercury



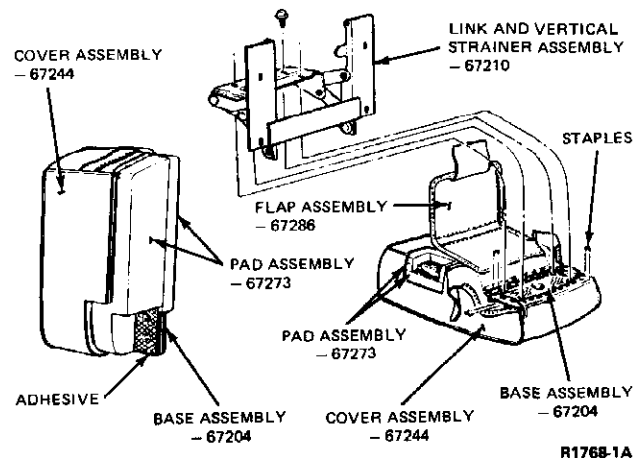
SPLIT BENCH



FLIGHT BENCH

R1935-1A

FIG. 20 Front Seat Center Arm Rest Cover Installation—LTD II, Cougar, Lincoln, Ford, Thunderbird and Continental Mark V



R1768-1A

FIG. 21 Rear Seat Center Arm Rest Installation—Lincoln Continental Shown—Typical



WINDOW GLASS AND MECHANISMS

**GROUP
42**

PART TITLE	PART NO.	PART TITLE	PART NO.
Dual U-Run Front Door Window Mechanism	42-03	Stationary Quarter Window Glass	42-38
Mini-Vent Window Mechanism	42-08	Tailgate Window Glass and Mechanism	
Pivot Type Quarter Window	42-33	– Dual Action Gate	42-41
Single Tubular Run Front Door Window		Window Glass and Mechanisms	
Mechanism	42-07	General Service	42-01
Single Tubular Run Rear Door Window			
Mechanism	42-24		

CR2003-2B

Window Glass and Mechanisms General Service

**PART
42-01**

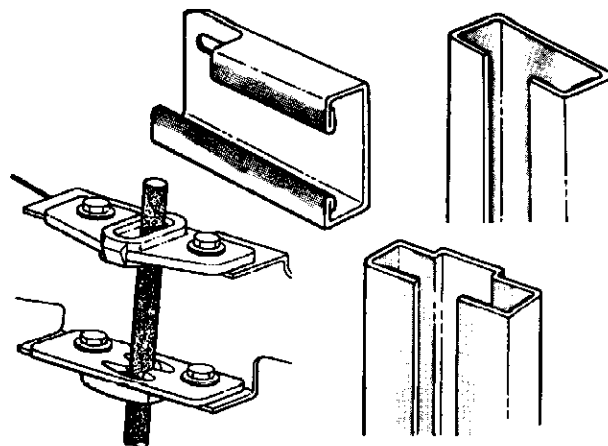
SUBJECT	PAGE	SUBJECT	PAGE
GENERAL INFORMATION	01-1	REMOVAL AND INSTALLATION	
TESTING		Power Window Relay	01-4
Power Window Motor Test	01-2	Power Window Switch	01-4
Power Window Switch Tests	01-2	Power Window Switch Connector Wire	01-4
		SPECIFICATIONS	01-8

CR2021-2B

GENERAL INFORMATION

The door window mechanism should be well lubricated to provide ease of operation. The window glass mechanism should be lubricated whenever the glass channel or window regulator is removed or excessive effort is required to operate the windows. To

lubricate a door window mechanism, apply an even coating of Polyethylene grease (19584) or equivalent to the window regulator rollers, shafts and the entire length of the roller guides as illustrated by the shaded areas in Fig.1.



APPLY AN EVEN COATING OF POLYETHYLENE GREASE C4AZ-19584-A TO ALL WINDOW REGULATOR ROLLERS, SHAFTS AND THE ENTIRE LENGTH OF ROLLER GUIDES AS ILLUSTRATED BY THE SHADED AREAS.

N1607-1D

FIG. 1 Window Mechanism Lubrication Points

TESTING

POWER WINDOW MOTOR TEST— PERMANENT MAGNET TYPE

To test the current draw of a power window motor, remove the motor and drive assembly from the vehicle. Refer to the specific part of Group 42 for the removal procedure.

Test Procedure

1. Connect an external power source (power-pac or a fully charged battery) to the motor with an ammeter in series as shown in Fig. 2.

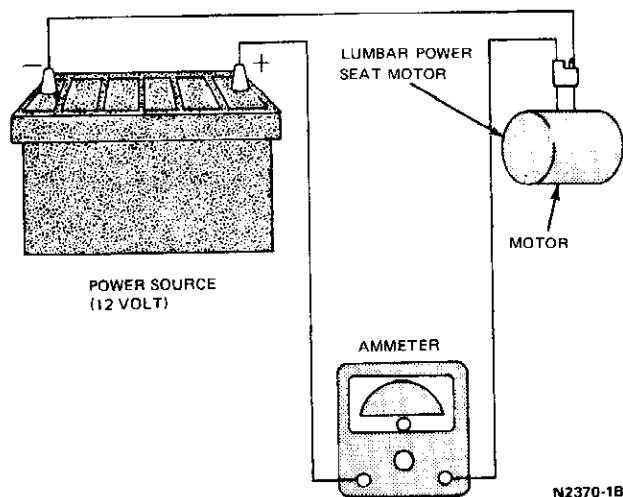


FIG. 2 Power Window Motor Current Draw Test—Permanent Magnet Motor

2. Operate the motor and observe the current draw. The current draw for the no-load test should not exceed specification (at end of this part) and should not fluctuate. Reversal of the motor wire connections will reverse the direction of motor

rotation. Replace the motor if the current draw exceeds specification.

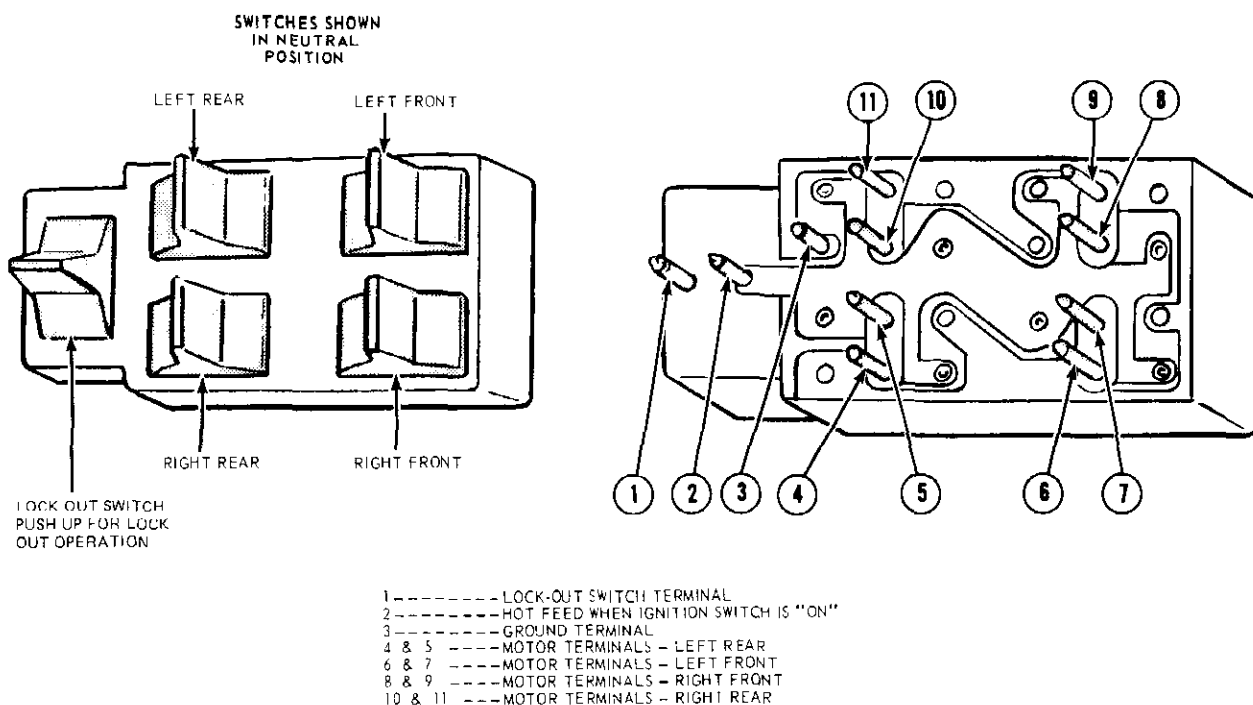
POWER WINDOW SWITCH TESTS

MASTER SWITCH—WITH REAR DOOR WINDOWS

Testing of the power window master switch should be performed with the switch removed from the vehicle. Use a self-powered test light or an ohmmeter.

Test Procedure

1. Clip one test lead probe on pin No. 3 (Fig. 3) which is grounded.
2. With all switches in the neutral position, pins No. 4 through 11 should have continuity to pin No. 3.
3. Push any one or all four window switches forward (toward front of car when in installed position). All odd numbered pins of the switch(es) pushed forward should lose continuity to pin No. 3.
4. Push any or all four window switches rearward (toward rear of car when in installed position). All even numbered pins (4 through 11) of the switch(es) pushed rearward should lose continuity to pin No. 3.
5. Remove the test lead from pin No. 3 and connect it to pin No. 2 (hot feed pin). With all switches in the neutral position, only pin No. 1 should have continuity to pin No. 2.
6. Push any one or all four switches forward and hold in that position. All odd numbered pins of switches pushed forward should have continuity to pin No. 2.
7. Pull any one or all four switches rearward and hold in that position. All even numbered pins of switches pulled rearward should have continuity to pin No. 2.
8. If any one switch does not test as stated, replace the complete switch assembly.



N2313-2A

FIG. 3 Power Window Master Switch Pin Connections and Locations—4 Door Models—Lincoln, Ford, Mercury, LTD II, Cougar, Granada, Monarch and Versailles

Single Switch—All Models With Power Windows

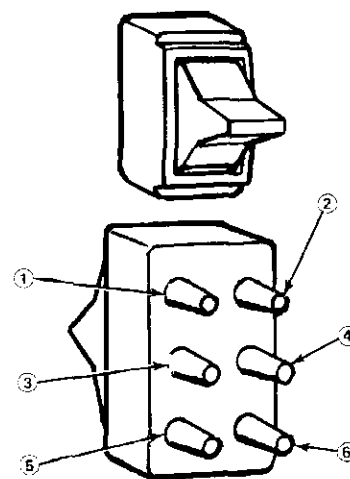
The Thunderbird, LTD II and Cougar 2-door models use two of the single switches as a master switch instead of the multiple master switch. They should be tested in the same way as the standard single switch.

Test Procedure

1. Use a self-powered test light or an ohmmeter, to test the power window switch.
2. With the switch in the neutral position, there should be continuity between terminals 1 and 3, 2 and 5, and 4 and 6. (Fig. 4).
3. With the switch toggle pushed downward, there should be continuity between terminals 2, 4 and 5, and 1 and 3. Terminal 6 should be disconnected from any other terminal.
4. With the toggle switch pushed upward, there should be continuity between terminals 2, 3 and 5, and 4 and 6. Terminal 1 should be disconnected from any other terminal.
5. If the switch does not test as stated, replace the switch.

MASTER SWITCH—WITHOUT QUARTER WINDOWS

The quarter window switches were deleted from the rear seat area and from the left front multiple switch and housing—Lincoln Continental, Thunderbird, Continental Mark V and Mercury. Refer to Fig. 7 for test procedures.



SINGLE POWER WINDOW SWITCH TEST

- ① POWER FEED, OR GROUND FROM DRIVERS SWITCH (ALLOWS OPERATION OF INDIVIDUAL WINDOWS FROM L.F. DOOR)
- ② HOT FEED FOR SINGLE SWITCH (BUS BAR TO PIN NO. 5)
- ③ MOTOR TERMINAL - UP
- ④ MOTOR TERMINAL - DOWN
- ⑤ HOT FEED
- ⑥ POWER FEED, OR GROUND FROM DRIVERS SWITCH (ALLOWS OPERATION OF INDIVIDUAL WINDOWS FROM L.F. DOOR)

N2468-1C

FIG. 4 Power Window Single Switch Pin Locations—All Models

The Granada, Monarch and Versailles door switches are shown in Fig. 8 and the test procedures are shown in Figs. 3 and 4.

REMOVAL AND INSTALLATION

POWER WINDOW RELAY

THUNDERBIRD, LTD II AND COUGAR

Removal

1. Disconnect the ground cable from the battery.
2. Remove one screw attaching the relay to the left-hand cowl, behind the trim panel.
3. Disconnect the wires from the relay and remove the relay.

Installation

1. Connect the wires to the relay.
2. Position the relay to the L.H. cowl on LTD II and Cougar and install the one attaching screw.
3. Connect the battery ground cable, and check the operation of the power window.

GRANADA, MONARCH AND VERSAILLES

1. Disconnect the battery ground cable and locate the relay on the R.H. end panel.
2. Disconnect the connector from the relay and remove the retaining screw. Remove the relay.
3. Install the relay to the R.H. end panel and connect the multiple connector.
4. Connect the battery ground cable.

FORD AND MERCURY

1. Disconnect the battery ground cable and locate the relay at the #1 crossmember, under the driver's seat.
2. Disconnect the connector from the relay and remove the retaining screws. Remove the relay.
3. Install the relay to the No. 1 crossmember and connect the multiple connector.
4. Connect the battery ground cable.

LINCOLN CONTINENTAL

1. Locate the relay on the headlamp switch cover.
2. Disconnect the multiple connector and remove the relay retaining screws. Remove the relay.
3. Install the relay on the head lamp switch cover and connect the multiple connector.

POWER WINDOW SWITCH

Ford, Mercury, Lincoln Continental and Continental Mark V

1. Remove the screw from the front end of the bezel and lift the bezel and switch away from the arm rest (Fig. 5).
2. Remove the bezel and nut from the mirror remote control (left front door only).
3. Remove two nuts (screws for Mark V and Lincoln) from the bezel studs and separate the switch(es) from the bezel.
4. Pull the switch from the switch connector.
5. Position the switch to the connector and press together firmly.

6. Position the switch(es) to the bezel and install the two retaining (screws for Mark V and Lincoln) nuts.
7. Install the bezel and nut on the outside mirror remote control.
8. Position the switch and bezel to the arm rest and install the retaining screw.

LTD II, Thunderbird, Granada, Monarch, Versailles and Cougar

1. Remove the switch bezel retaining screw from the bottom side of the switch. Then, pivot the lower edge of the bezel out and up to remove the bezel.
2. The switch is held in place by the electrical contact pins. To remove the switch, carefully pry the switch from the connector with a small screwdriver.
3. Position the switch to the connector and press firmly into place.
4. Install the bezel on the switch and install the bezel retaining screw.
5. Install the switch in the vehicle.

POWER WINDOW SWITCH CONNECTOR WIRE REMOVAL

If replacement of the switch connector or a wire leading to the connector is necessary, the wire(s) can be removed from the connector without disassembling the connector.

To remove a wire from the connector, insert a needle-like tool in the edge of the pin hole (Fig. 6), and bend the terminal in. Then, pull the wire and terminal from the connector. To install the terminal in the connector, open the terminal and insert it into the wire hole.

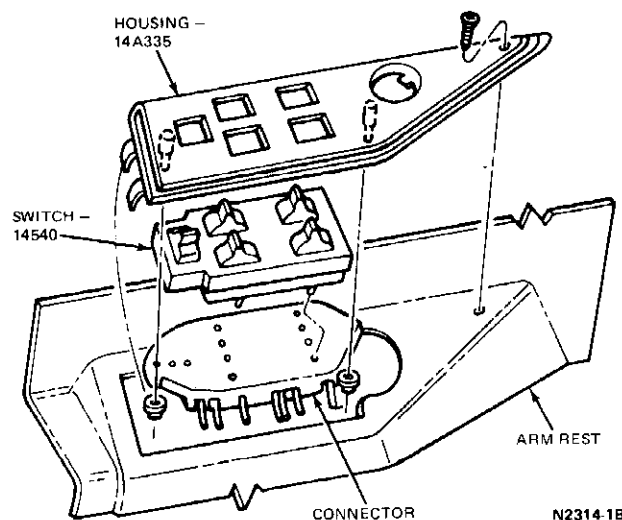


FIG. 5 Typical Arm Rest Mounted Power Window Switch Installation—Ford and Mercury

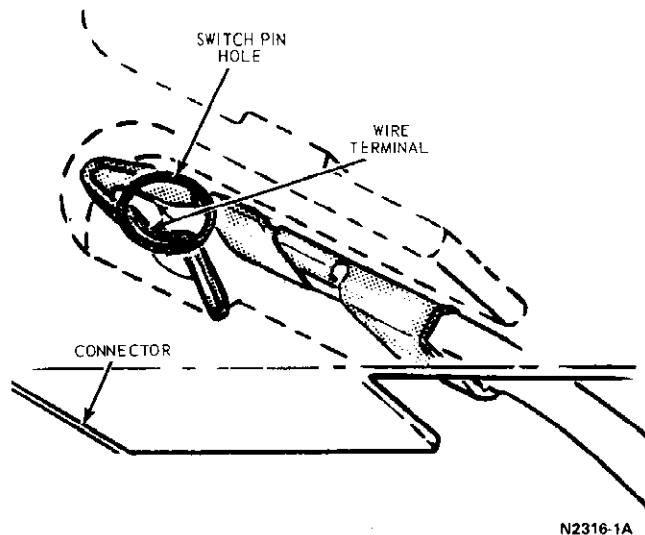
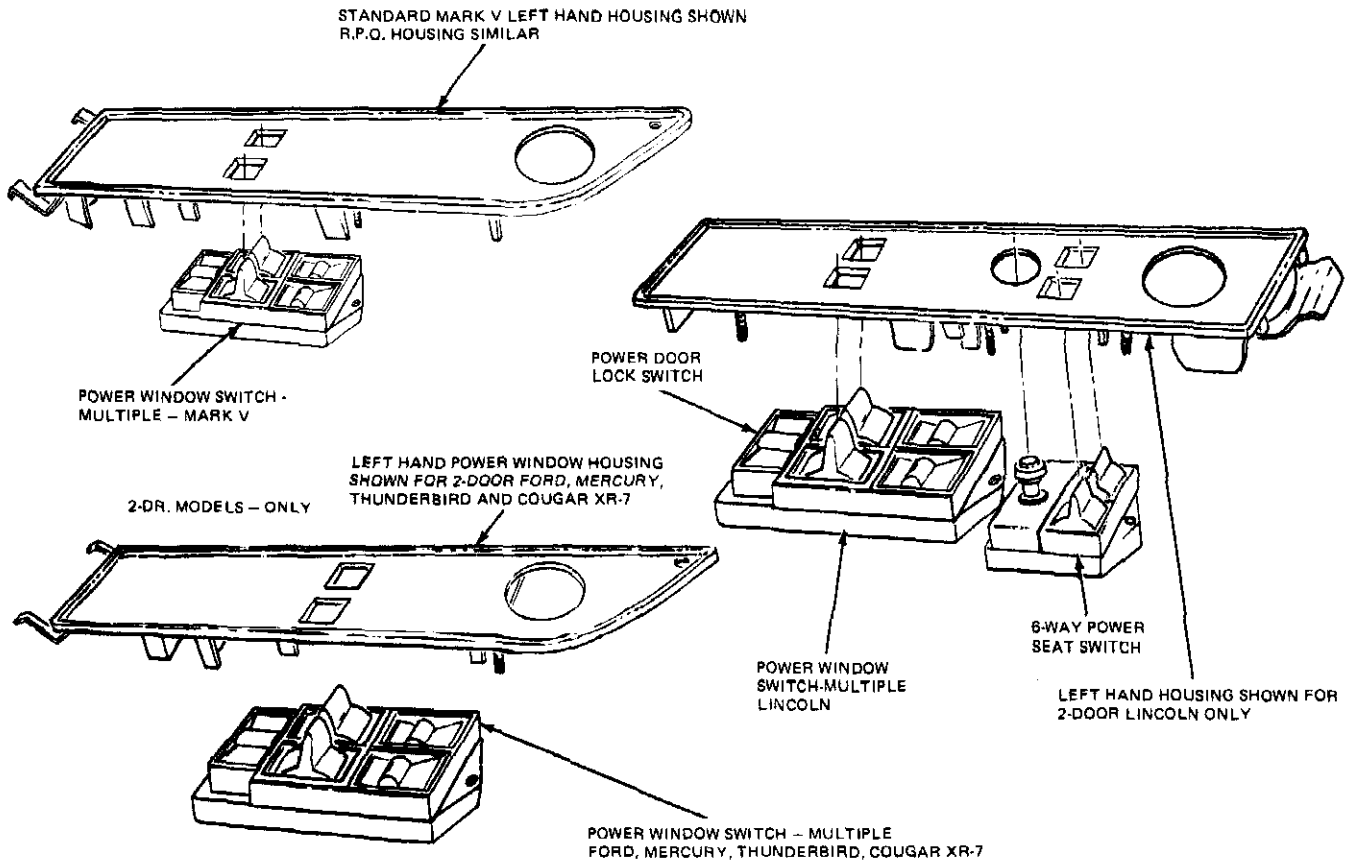
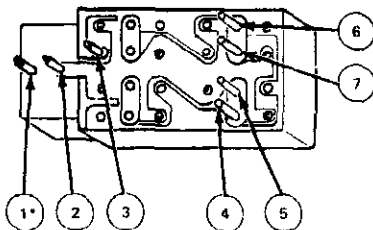


FIG. 6 Power Window Switch Connector Wire Terminal Removal



MULTIPLE POWER WINDOW SWITCH TEST - THUNDERBIRD AND LINCOLN CONTINENTAL



CONNECT ONE SIDE OF AN OHMMETER OR TEST
LIGHT TO TERMINAL #2 (BATTERY TERMINAL)

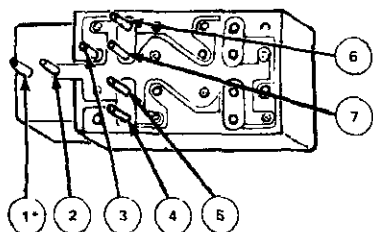
WINDOW SWITCH POSITION	CONTINUITY BETWEEN TERMINALS
NEUTRAL	#2 ONLY
BOTH SWITCHES FORWARD	#2 & 5-7
BOTH SWITCHES REARWARD	#2 & 4-6

*THE LOCKOUT SWITCH WILL HAVE CONTINUITY BETWEEN TERMINALS #1 AND #2 WHEN THE SWITCH IS IN THE CENTER POSITIONS.

CONNECT ONE SIDE OF AN OHMMETER OR TEST
LIGHT TO TERMINAL #3 (GROUND TERMINAL)

WINDOW SWITCH POSITION	CONTINUITY BETWEEN TERMINALS
NEUTRAL	#3 & 4-5-6-7
BOTH SWITCHES FORWARD	#3 & 4-6
BOTH SWITCHES REARWARD	#3 & 5-7

MULTIPLE POWER WINDOW SWITCH TEST - FORD AND MERCURY



CONNECT ONE SIDE OF AN OHMMETER OR TEST
LIGHT TO TERMINAL #2 (BATTERY TERMINAL)

WINDOW SWITCH POSITION	CONTINUITY BETWEEN TERMINALS
NEUTRAL	#2 ONLY
BOTH SWITCHES FORWARD	#2 & 5-7
BOTH SWITCHES REARWARD	#2 & 4-6

*TERMINAL #1 REMAINS IN THE MULTIPLE SWITCH ASSEMBLY BUT IS NOT ELECTRICALLY CONNECTED (DO NOT TEST FOR CONTINUITY).

CONNECT ONE SIDE OF AN OHMMETER OR TEST
LIGHT TO TERMINAL #3 (GROUND TERMINAL)

WINDOW SWITCH POSITION	CONTINUITY BETWEEN TERMINALS
NEUTRAL	#3 & 4-5-6-7
BOTH SWITCHES FORWARD	#3 & 4-6
BOTH SWITCHES REARWARD	#3 & 5-7

R1968-23

FIG. 7 Power Window Master Switch Pin Connections and Locations Thunderbird, Lincoln Continental, Continental Mark V, Ford, Mercury and Cougar XR7



DETROIT
IRON

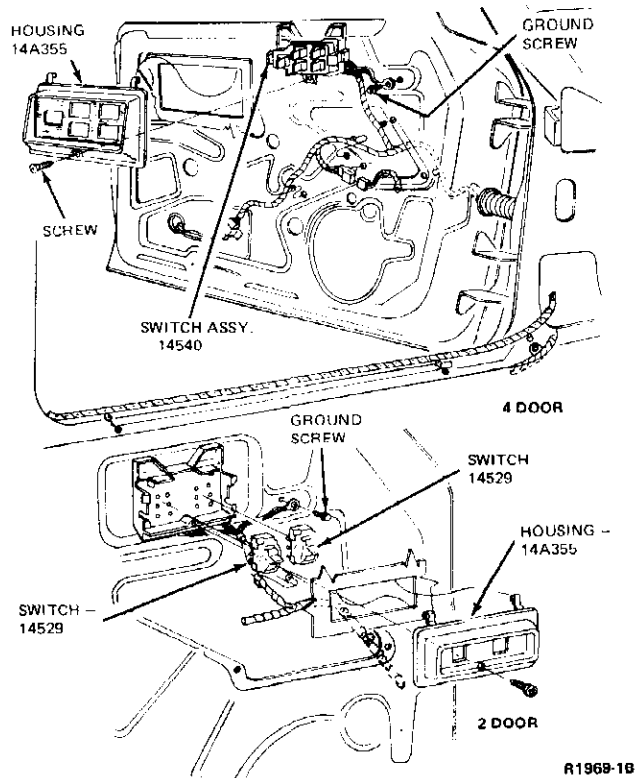


FIG. 8 Power Window Master Switch—LTD II, Cougar, Granada and Monarch

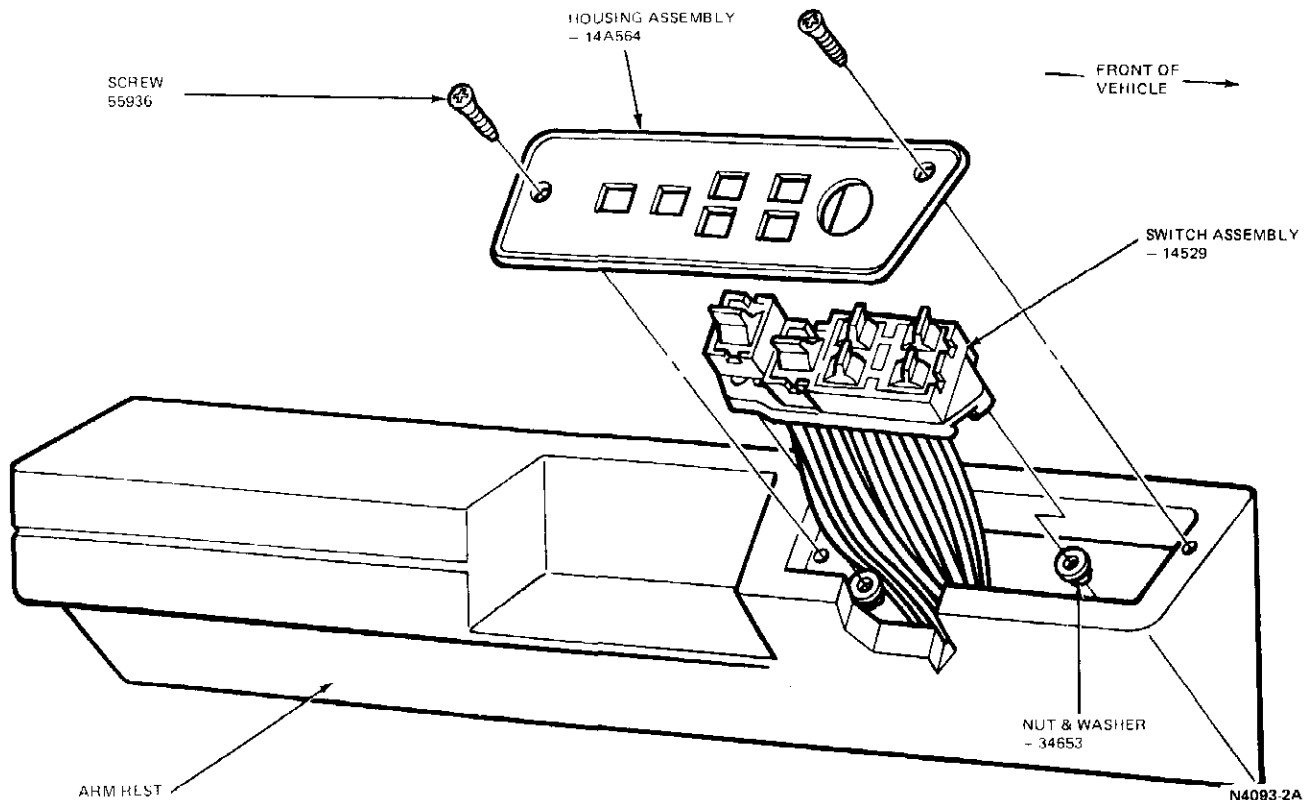


FIG. 9 Power Window Master Switch—Versailles

SPECIFICATIONS

WINDOW MOTOR CURRENT DRAW

No Load	5 amperes or less at 12.8 volts
---------------	---------------------------------

CN2433-2A

Dual U-Run Front Door Window Mechanism

PART
42-03

Pinto and Bobcat Only

SUBJECT	PAGE	SUBJECT	PAGE
ADJUSTMENTS	03-1	REMOVAL AND INSTALLATION (Cont'd.)	
		Glass Run	03-2
REMOVAL AND INSTALLATION		Window Regulator	03-2
Belt Weatherstrip	03-3	SPECIFICATIONS	03-3
Glass	03-1		

CR2022-2B

ADJUSTMENTS

See Fig. 1.

PINTO AND BOBCAT

To obtain proper alignment of the glass to the door glass runs and the door frame follow the adjustments in the order given.

1. Cycle the window to the full up position.
2. Remove the door trim panel and watershield (Fig. 1).
3. Loosen the upper and lower guide attaching screw and nut (Items C and A).
4. Loosen the glass run adjusting screw (Item B).
5. Position the glass firmly into the upper rear corner and rear edge of the door window frame run. Hold glass in this position and tighten the lower guide attaching screw and then the upper guide attaching nut (Items A and C).
6. Assure that the glass is in the outboard position within the glass run and tighten the bracket assembly glass run adjusting screw (Item B).
7. Lower the door glass so the top edge of glass is flush with the door belt opening. Position the door window upper front stop assembly to the quadrant and tighten securely.

8. Cycle the glass and check for binds. If no binds are found install the watershield and door trim panel.

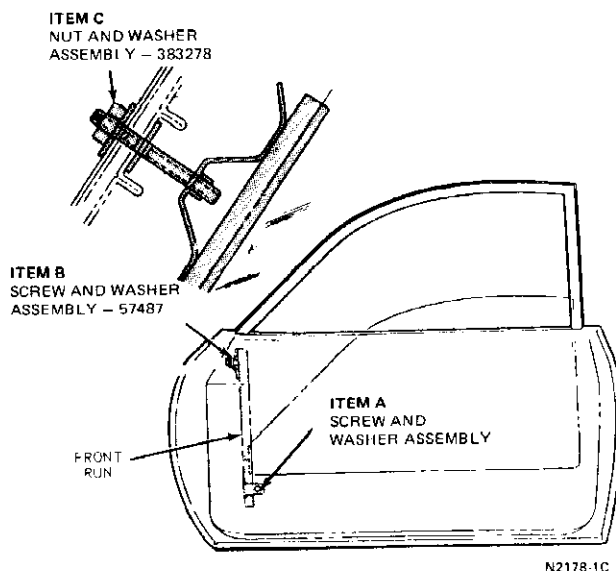


FIG. 1 Front Door Window Mechanism Adjustment—Pinto and Bobcat

REMOVAL AND INSTALLATION

GLASS

PINTO AND BOBCAT

Removal

1. Remove the trim panel and watershield from the door.
2. Lower the glass until the bracket rivets to the glass are visible at the access hole in the door inner panel.
3. Remove the center pins of the two rivets attaching the door glass to the glass bracket with a drift

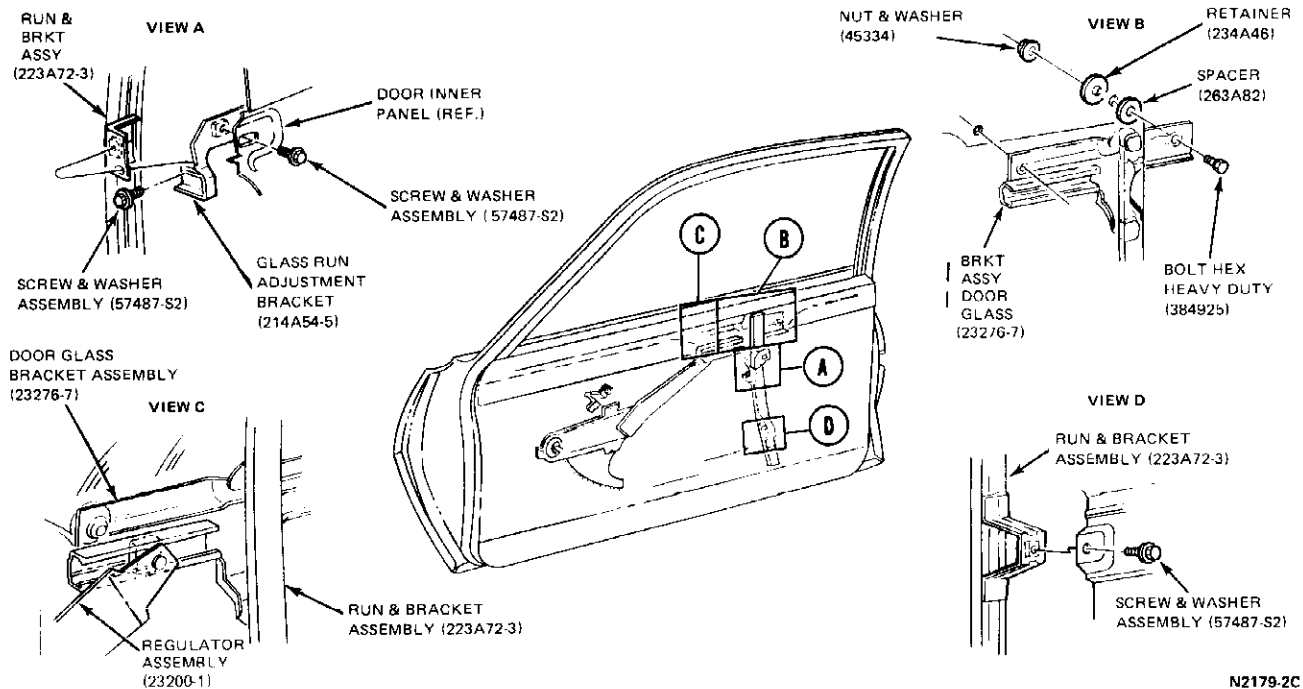
punch. Then remove the rivets by drilling the head from the rivet with a 1/4 inch drill.

DO NOT ATTEMPT TO PRY THE RIVETS OUT AS DAMAGE TO THE GLASS AND GLASS BRACKET COULD RESULT.

4. Push the (2) rivets from the glass and glass bracket and lift the glass up and out of the door.

Installation

1. Install the Spacer (263A82) and Retainer Assy. (234A46) into the two 1/2 inch dia. holes in the



N2179-2C

FIG. 2 Front Door Window Mechanism—Pinto and Bobcat

Door Glass (21410-1) and install the glass through the door belt opening (Install glass front end first).

- Position the glass to the door glass bracket and install (2) 1/4"-20 x 1" bolts 384925-S36 & (2) 1/4"-20 nut and washer assemblies (45334-S2) to attach the glass to glass bracket. Tighten to 6-11 ft-lb torque.
- Install the watershield and door trim panel.

WINDOW REGULATOR

PINTO AND BOBCAT

Removal

- Remove the door trim panel and watershield and support the glass in the up position.
- Remove the center pin from the (3) regulator attaching rivets with a drift punch. Then, drill the head from each rivet using a 1/4 inch drill and remove the rivet.
- Disengage the regulator arm from the glass bracket, and remove the regulator from the door.

Installation

- Position the regulator in the door and insert the roller into the glass bracket channel.
- Position the regulator to the inner panel and install (3) 1/4"-20 x 1/2" screw and washer assemblies (Part 57487-S2) to attach the regulator to the inner panel. Tighten the screws securely with (3) 1/4"-20 nut and washer assemblies (45334-S2).
- Check the operation of the window mechanism and install the watershield and door trim panel.

GLASS RUN

Pinto and Bobcat Removal

- Remove the door trim panel and watershield.
- Support the glass in the up position.
- Remove the (2) rivets attaching the glass to the glass bracket. Remove the center pin from the rivet with a drift punch. Then drill the head from each rivet using a 1/4 inch drill and remove the rivet.
- Remove the (2) screw and washer assemblies attaching the glass run to the inner panel. Tilt the upper portion of the run rearward to disengage the window bracket from the regulator arm roller.
- Remove the run and bracket assembly and the glass bracket from the door access hole.

Installation

- Assemble the glass bracket, and the glass run adjusting bracket on the run and bracket assy. and lubricate the run and roller/guides with a thin coating of Polyethylene Grease (C4AZ-19584-A). Assure that all the rollers and guides are evenly coated with Polyethylene Grease or equivalent prior to installing.
- Install the run and bracket assembly, glass bracket and glass run adjusting bracket through the access hole in the door inner panel and position the glass bracket guide on the regulator arm roller.
- Loose assemble the run and bracket assembly upper and lower attaching screws to the door inner panel.
- Remove the glass support and install the glass to the glass bracket using (2) 1/4"-20 x 1" Bolt Hex Head (384925-S36) or equivalent.

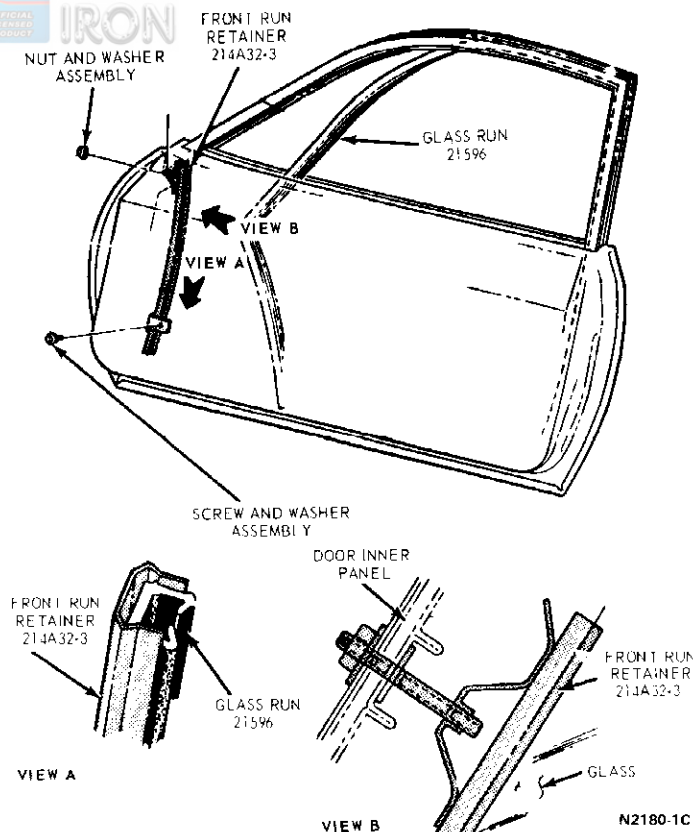


FIG. 3 Door Glass Run—Typical

5. Tighten upper and lower run and bracket assembly screws.
6. Adjust the glass as outlined in the adjustment section of this procedure.
7. Install watershield and door trim panel.

BELT WEATHERSTRIP

1. Lower the window.

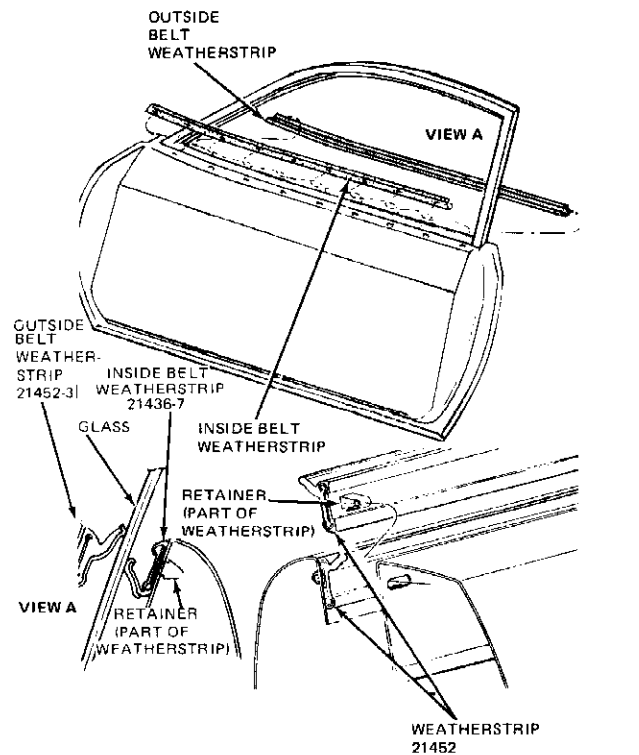


FIG. 4 Door Belt Weatherstrip

2. Pry the weatherstrip retainers out of the retainer holes in the glass opening flange (Fig. 6), and remove the weatherstrip. Use care not to chip the paint at the glass opening flange.
3. To install, position the weatherstrip to the door and push the retainers firmly into the holes.

SPECIFICATIONS

DUAL U-RUN FRONT DOOR WINDOW MECHANISM TORQUE SPECIFICATIONS

Description	Torque — Pinto, Bobcat
Glass Run Retainer Attaching Screws	6-11 ft.-lbs.
Window Regulator Attaching Screws — 2-Door	6-11 ft.-lbs. with 1/4 x 20 x 1/2 Inch Screw
— 4-Door	—
Equalizer Arm to Door Inner Panel	6-11 ft.-lbs.

CN2434-2C

Single Tubular Run Front Door Window Mechanism

**PART
42-07**

SUBJECT	PAGE	SUBJECT	PAGE
ADJUSTMENTS	07-1	REMOVAL AND INSTALLATION (Cont'd.)	
REMOVAL AND INSTALLATION		Window Drive	07-5
Glass	07-2	Window Motor	07-5
Guide	07-5	Window Regulator	07-4
Run	07-5	SPECIFICATIONS	07-5

CR2023-2B

ADJUSTMENTS

ALL MODELS EXCEPT FAIRMONT, ZEPHYR, GRANADA, MONARCH AND VERSAILLES

Separate adjustment steps are given for each adjustment so that a partial glass adjustment can be performed. If a complete glass adjustment is required, follow the adjustments in the order given. All window mechanism adjustments must be performed with the door trim panel and watershield removed. After the adjustment(s) are completed, install the watershield and trim panel.

Glass Position—Fore and Aft

It is necessary to reposition the glass in the opening if the glass has been removed or if extreme door hinge adjustments are performed. To reposition the glass, remove the trim panel and watershield. Then, loosen the upper attaching screw and upper guide (Item A, Fig. 1), and reposition the glass. Position the upper guide and tighten the upper run attaching screw after glass is moved to desired position.

Stabilizer Adjustment

The stabilizers are used to support the glass at the belt line. The trim panel must be removed to adjust the stabilizers. Then, with the glass in the up position, push the front stabilizer firmly against the glass surface and tighten the attaching screw (Item B, Fig. 1). Repeat the procedure for the rear stabilizer.

Glass In-Out

The in-out adjustment is used to obtain a good seal with the weatherstrip at the top edge of the glass. This adjustment is made by repositioning the guides with respect to the glass bracket. To adjust the in-out of the glass, loosen the two lower guide attaching screws (Items C, Fig. 1), and move the top edge of the glass inward or outward as required to obtain a good seal with the weatherstrip; then, tighten the lower guide attaching screws. **On the right door, tighten the lower guide rear screw first and then tighten the front screw.** After the guide attaching screws have

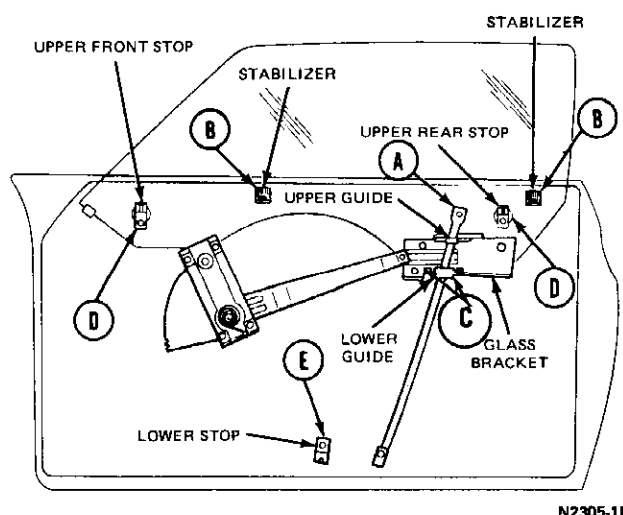


FIG. 1 Single Tubular Run Front Door Window Mechanism Adjustment—All Except Granada and Monarch

been tightened, again check the glass-to-weatherstrip fit for a good seal. Readjust the in and out tilt of the glass if a good air tight seal is not achieved.

Upper Stop Adjustment

The upper stop adjustments are used to limit the up travel of the glass to maintain a constant glass height when the glass is raised to the full closed position. The door trim panel must be removed to adjust the up stops. To adjust the stops, raise the window to the up position. Check to be sure that there is no interference when the door is opened. Then, position the up stop brackets down against the glass stops, and tighten the stop bracket attaching screw (Item D, Fig. 1). Use this procedure for both the front and rear upper stops.

Lower Stop Adjustment

The lower stop is used to control the depth the glass can be lowered into the door. To adjust the lower stop, remove the door trim panel. Loosen the lower stop retaining screw (Item E, Fig. 1), and lower the glass until

the top edge is flush to 1/4 inch above the outer panel. Then, lift the stop against the glass bracket and tighten the retaining screw.

Granada, Fairmont, Zephyr Sporty Coupe, Monarch and Versailles (Fig. 2 and 3)

1. Loosen attaching hardware until lower guide and rear retainer lower attachments are loose.

2. Raise glass with window regulator into glass run. If necessary, position glass manually forward and rearward to obtain a proper sealed glass edge.
3. Tighten tube nut (top) to 6-11 ft-lbs torque.
4. Tighten lower tube attaching bolt to inner panel. Tighten lower guide bolts (2).
5. Lower window half way and tighten lock side retainer attachment (2-door models only).

REMOVAL AND INSTALLATION

GLASS—GRANADA AND MONARCH

Removal

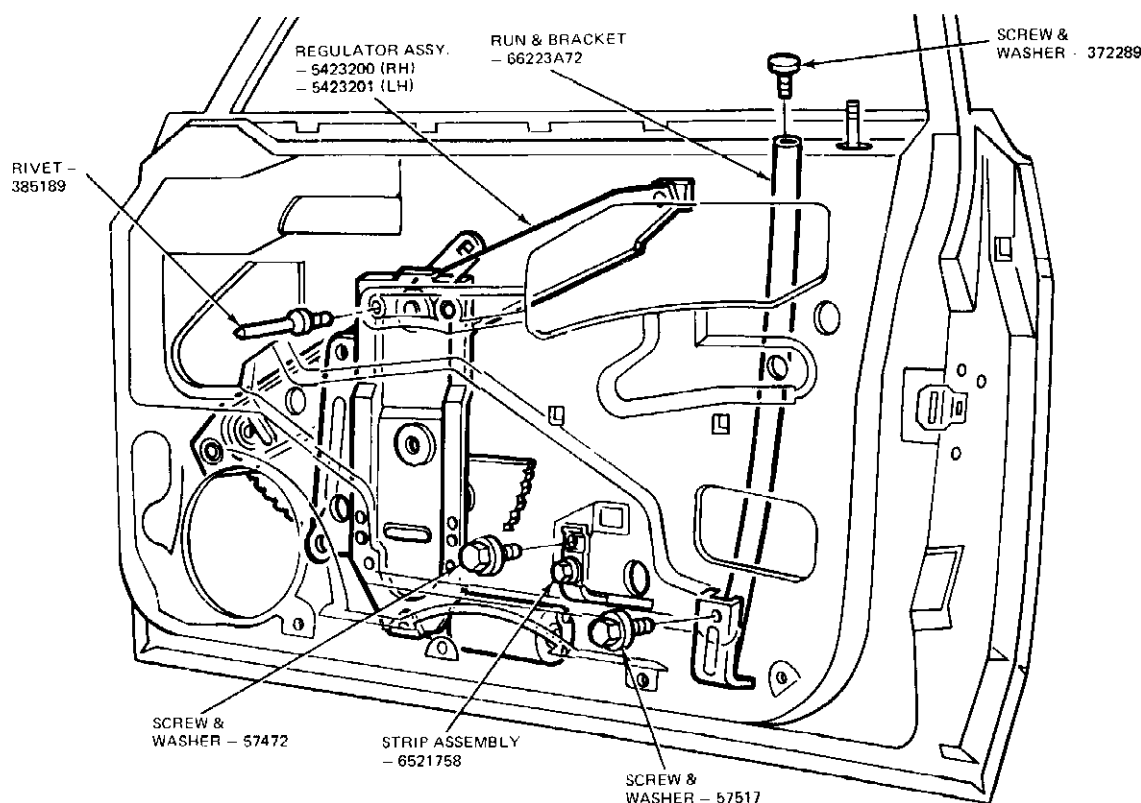
1. Remove the door trim panel and watershield.
2. Remove one screw attaching each glass stabilizer to the inner panel, and remove the stabilizers (Fig. 4).
3. Remove the upper front and rear stop brackets from the door inner panel (Fig. 4).
4. Remove the center pin from the rivets attaching the glass bracket to the glass (Figs. 2, 3 and 4) with a drift punch. Then, remove the rivets by drilling the head from the rivet with a 1/4 inch drill. **Do not attempt to pry the rivets out as damage to the window mechanism could result.**
5. Push the rivets from the glass and glass bracket. Move the glass forward in the door until the rear upper stop is aligned with the access notch in the inner panel at the belt line. Lift the rear of the glass up and out of the door. Then, move the glass

rearward until the front upper stop is aligned with the access hole, and remove the glass.

6. Remove the rivets from the upper stops following the procedure given in steps 4 and 5 for rivet removal. Then, remove the stops from the glass.

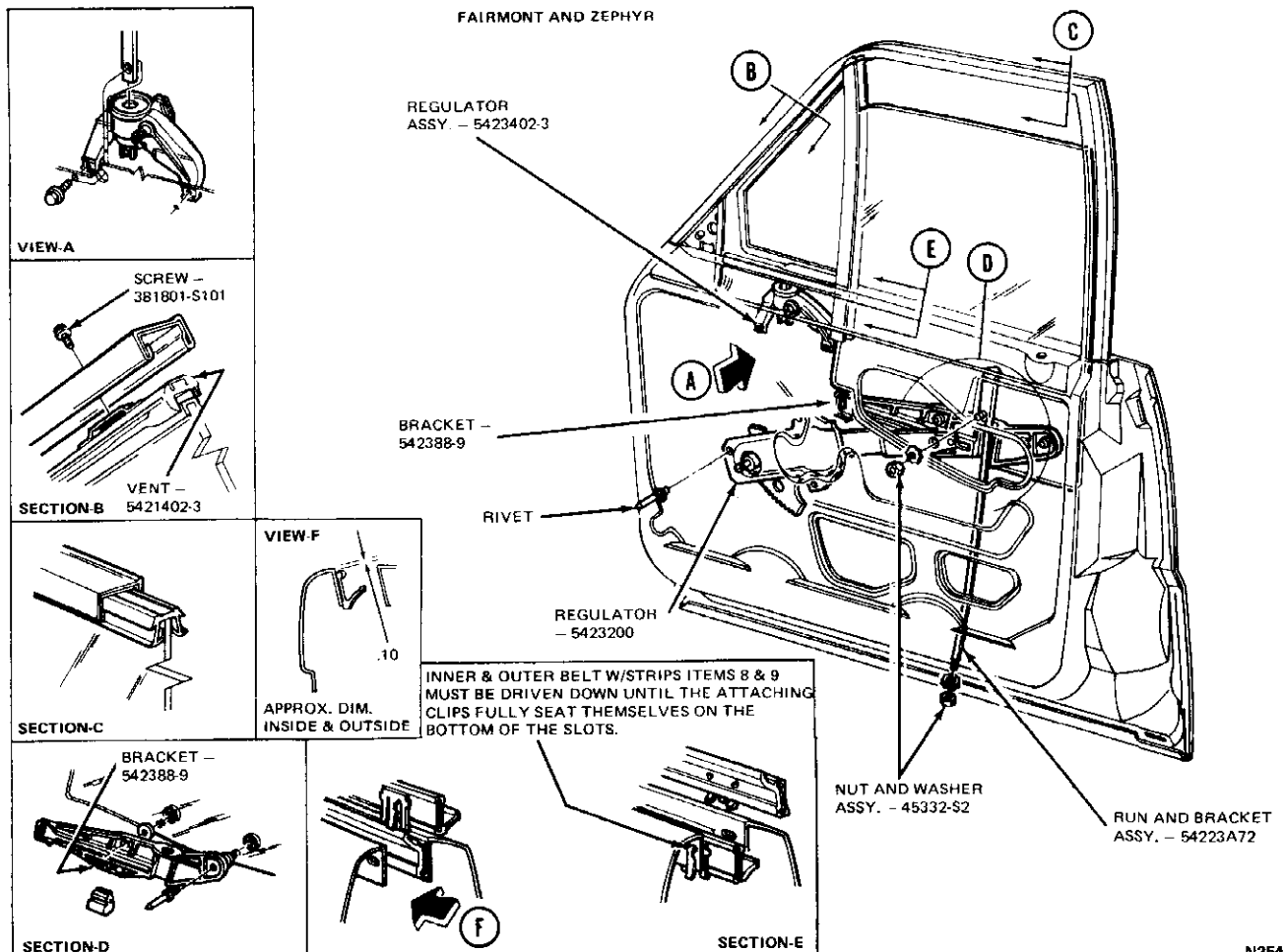
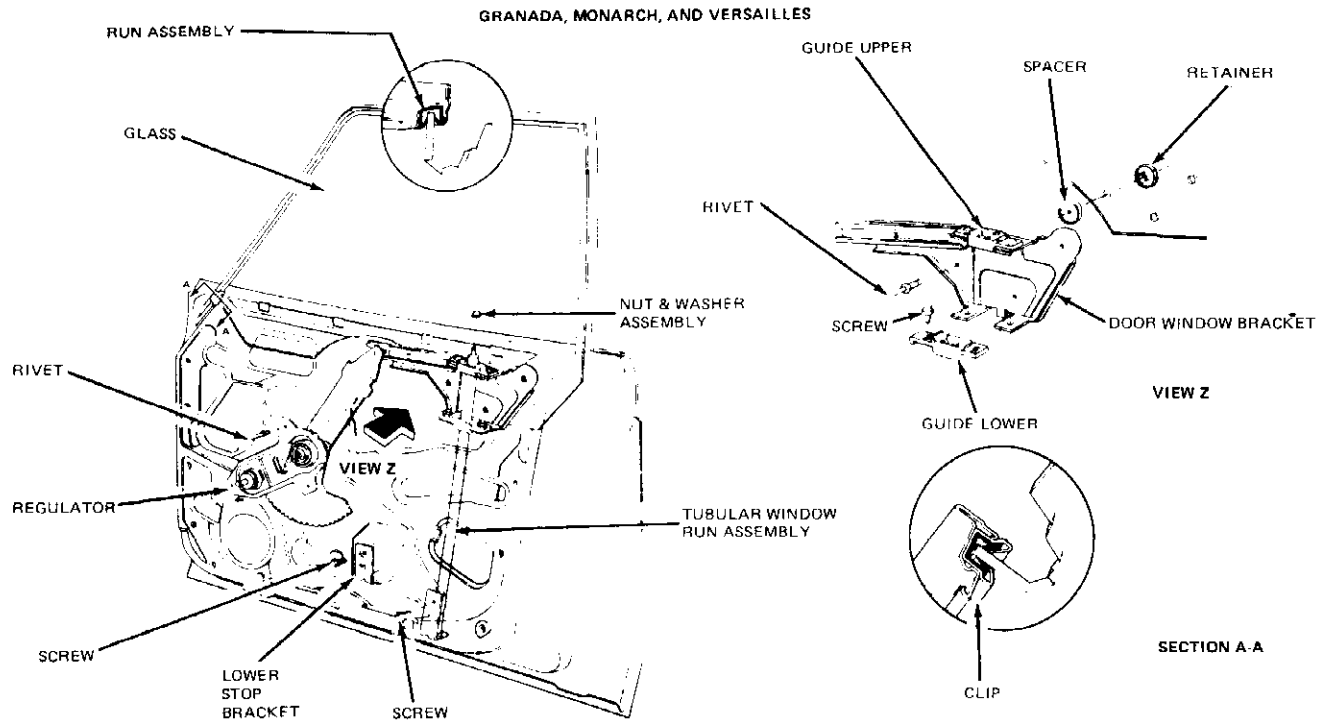
Installation

1. Position the upper stops to the glass and install each stop on the glass with a 1/4-20 x 1 inch hex bolt and a 1/4-20 nut and washer assembly. Tighten the nut to 6-11 ft-lb torque.
2. Insert the glass into the door using the access notch for clearance of the upper stops.
3. Position the glass to the glass bracket and install three 1/4-20 x 1 inch bolts and three 1/4-20 nuts to attach the glass to the glass bracket. Tighten the nut to 6-11 ft-lb torque.



N4098-2A

FIG. 2 Adjustment Points—Granada, Fairmont, Zephyr, Monarch and Versailles Door (2-Door Models)



N2541-2B

FIG. 3 Adjustment Points—Granada, Fairmont, Zephyr, Monarch and Versailles Front Door (4-Door Models)

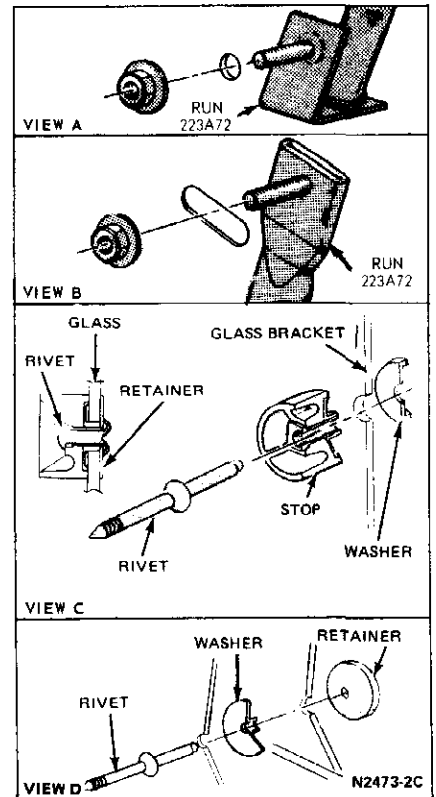
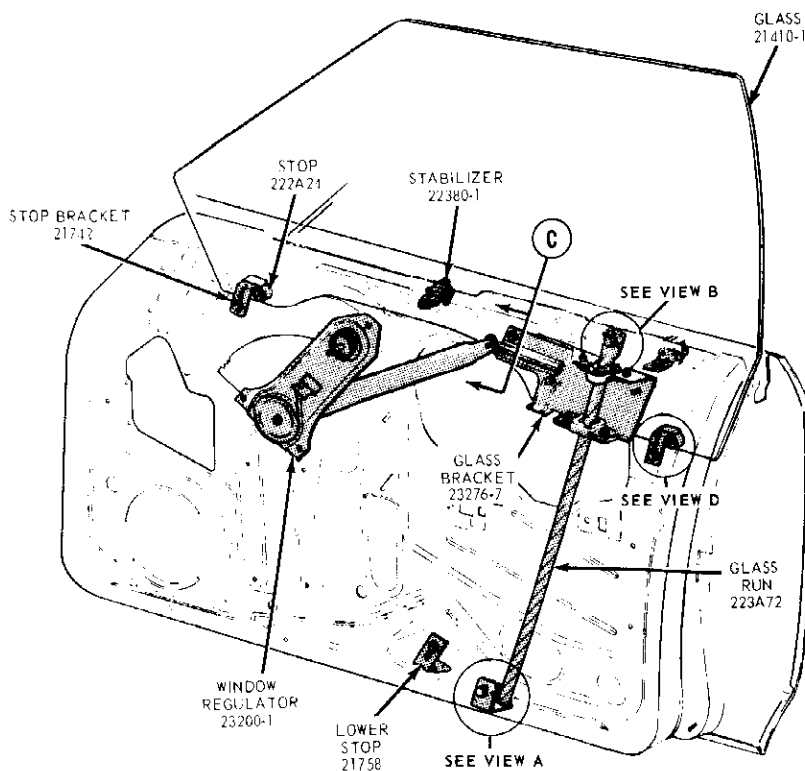


FIG. 4 Typical Front Door Window Mechanism for Frameless Glass

4. Install the upper front and rear stop brackets (Fig. 4).
5. Install the glass stabilizers and adjust the glass, stabilizers and upper stops as outlined in the Adjustment Section.
6. Install the watershield and door trim panel.

GLASS—FAIRMONT AND ZEPHYR

Removal

1. Remove the window regulator handle (1 screw), the door arm rest (3) screws, the inside door handle escutcheon cup (1 screw) and the vent window knob handle (1 screw).
2. Remove the door trim panel and water shield.
3. Raise the door glass to full up position and remove the (3) screws retaining the vent window regulator.
4. Lower the door glass to the full down position and remove the door weatherstrip from the vent window division bar and the top of the door frame.
5. Remove the (3) screws retaining the vent window frame to the door frame and tilt the top of the vent frame rearward and upward to remove from the door.

NOTE: It is not necessary to remove the inner and outer door belt weatherstrips however, use care when removing and installing the vent frame to eliminate possible damage to the ends of the belt weatherstrips. An application of silicone or soap

solution will facilitate the removal and installation of the vent frame to its proper position.

Installation

1. Reverse removal procedure.

WINDOW REGULATOR

Removal

1. Remove the door trim panel and watershield and support glass in up position.
2. If equipped with electric windows (except Ford, Mercury, Thunderbird, Lincoln Continental and Continental Mark V), remove the center pin from the motor bracket-to-inner panel attaching rivet with a drift punch. Then, drill the head from the rivet with a 1/4 inch drill and remove the rivet. Disconnect the motor wires at the connector.
3. Remove the center pin from the regulator attaching rivets with a drift punch. Then, drill the head from the regulator attaching rivets with a 1/4 inch drill.
4. Disengage the regulator arm from the glass bracket, and remove the regulator from the door.
5. If equipped with electric windows, mount the regulator assembly in a vise. Drill a 5/16 inch hole through the regulator sector gear and the regulator plate. Install a 1/4 inch bolt and nut in the hole to prevent the sector gear from moving when the motor and drive assembly is removed. Remove the motor assembly from the regulator and install it on a new regulator.

Installation

1. Lubricate the window mechanism as outlined in Part 42-01.

2. Install nut and retainer assemblies on the regulator mounting plate and motor support bracket at the rivet attaching holes.
3. Position the regulator in the door and insert the roller into the glass bracket channel.
4. Position the regulator to the inner panel and install 1/4-20 x 1/2 inch screw and washer assemblies to attach the regulator to the inner panel. Tighten the screws securely.
5. If equipped with electric windows, install a 1/4-20 x 1/2 inch screw and washer assembly to attach the motor bracket to the inner panel (except Ford, Mercury, Thunderbird, Lincoln Continental and Continental Mark V). Connect the motor wires at the connector.
6. Check the operation of the window mechanism, and install the watershield and door trim panel.

WINDOW MOTOR AND/OR DRIVE

Removal

1. Remove the trim panel and watershield.
2. Remove any door mounted radio speakers, (if so equipped).
3. All models except Ford, Mercury, Thunderbird, Lincoln Continental and Continental Mark V have holes punched in the door panel for motor and drive removal. On models without access holes, use the dimples located on the inner door panel to drill three 3/4 inch holes in the door for access to the motor and drive attaching screws.

The holes should be drilled with the glass in the UP position. The hole saw pilot drill should be as short as possible, about 1/4 inch beyond the saw.

4. Disconnect the motor wires at the multiple connector.
5. Working through the 3/4 inch holes, remove the three motor and drive-to-regulator attaching screws. Then, remove the motor and drive from the door.

Installation

1. Position the motor and drive to the regulator and install the three screws **just snug-not tight**.
2. Connect the motor wires at the connector and cycle the glass to assure gear engagement. After the gears are engaged, tighten the three motor and drive attaching screws.
3. Install body tape over the drilled hole on Ford, Mercury, Thunderbird, Continental Mark V and Lincoln Continental models.
4. Install the radio speaker (if so equipped and removed).
5. Check the window operation. Then, install the watershield and trim panel.

GUIDES AND/OR RUN

Removal

1. Remove the door trim panel and watershield.
2. Support the glass in the UP position.
3. Remove the two attaching screws from the upper and lower guides.
4. Remove the glass run upper and lower attaching screw (Figs. 2, 3 and 4), and remove the run and guides from the door.
5. Remove the guides from the top end of the run.

Installation

1. Install the guides on the run and lubricate the run as shown in Part 42-01.
2. Position the run and guides into the door, and install the run upper and lower attaching screws (Figs. 2, 3 and 4).
3. Position the guides to the glass bracket and install the attaching screws.
4. Remove the glass support and adjust the window mechanism as outlined in the Adjustment Section of this Part.
5. Install the watershield and door trim panel.

SPECIFICATIONS

**SINGLE TUBULAR RUN FRONT DOOR WINDOW
MECHANISM TORQUE SPECIFICATIONS**

Description	Torque
Glass Stop Attaching Screw	6-11 ft-lbs
Run Attaching Screws	6-11 ft-lbs
Stabilizer Attaching Screws	6-11 ft-lbs
Upper Stop Bracket	6-11 ft-lbs
Regulator-to-Inner Panel	6-11 ft-lbs
Guide-to-Glass Bracket	6-11 ft-lbs

CN2437-1B

Power Mini-Vent Window

**PART
42-08**

SUBJECT	PAGE	SUBJECT	PAGE
DESCRIPTION	08-1	REMOVAL AND INSTALLATION	
ADJUSTMENTS		Drive	08-15
Lincoln Continental		Door Glass Assembly	08-11
Main Glass	08-1	Door Window Guide	08-15
Vent Glass	08-7	Door Window Run	08-15
Thunderbird and Mark V		Motor	08-15
Main Glass	08-7	Vent Glass Assembly	08-11
Mini-Vent	08-8	Vent Window Guide	08-15
Vent Glass	08-7	Window Regulator	08-12
		SPECIFICATIONS	08-16

CR2024-2B

DESCRIPTION

Continental Mark V mini-vent systems operate in the same manner as the Lincoln Continental; however, the internal control mechanisms are quite different. The adjustments for the door glass are similar; however, the adjustment for the mini-vent window assembly is entirely different.

The mini-vent front door window electric mechanism has a single tubular run with a slidedown vent glass. One switch controls the operation of both the vent and main side glass. When the window switch is moved to

the lower position, the vent lowers into the door first. When the vent is completely down, the main glass lowers into the door. The glass and vent operates in reverse (glass and then vent) when raising the window. The vent or main glass may be stopped in any position between open and closed.

NOTE: To ensure proper Mini-Vent Window operation, remember to apply the special Mini-Vent lubricant to all areas shown in Fig. 19.

ADJUSTMENTS

LINCOLN CONTINENTAL ONLY— MAIN GLASS ADJUSTMENT (REFER TO FIGS. 1 THROUGH 4)

The main glass of the system shifts slightly as the vent reaches the end of its cycle. Therefore, if you check the door window adjustments with the vent window down, you will find that they change after the vent window is raised. **Always make sure that the vent window is fully raised when checking any adjustment.**

Fore and Aft Adjustment

Both fore and aft and equalizer adjustments are used in combination to get a good fit of the door glass along the A-post (parallel to weatherstrip retainer) and the top of the door glass. It is important that any fore and aft adjustment of the run is accompanied by an upper guide tilt adjustment to maintain a good fit to the A-post. **Do not try to adjust the glass parallel to the B-pillar.**

When re-adjusting the system, with the tilt or fore and aft, the rear up-stop should be loosened and the last component secured.

To adjust the glass forward or rearward, loosen the glass run upper attaching screw (Fig. 1), and the rear up-stop. Then, position the glass forward or rearward as required, and tighten the glass run upper attaching

screw. To tilt the glass forward or rearward, loosen the screws attaching the upper guides to the guide plate (Fig. 1). Then, rock or tilt the glass forward or rearward as necessary, and tighten the attaching screws. Adjust the rear up-stop if no other adjustments are to be performed.

Glass In-Out Tilt

The in-out tilt adjustment is used to obtain a good seal against the weatherstrip along the top edge of the glass. This adjustment can be made by loosening the screws attaching the lower plastic guide to the guide plate bracket (Fig. 1). Then, move the glass top edge in or out to obtain a good seal with the roof rail weatherstrip, and tighten the guide attaching screws. The rear up-stop should be loose during this adjustment.

Up Adjustment

With the main glass in the full UP position, cycle the vent glass until the vent window cap is raised above the door belt line. Loosen the regulator arm roller attachment and both up-stops. Manually lift the door glass bracket assembly until the top edge of the door

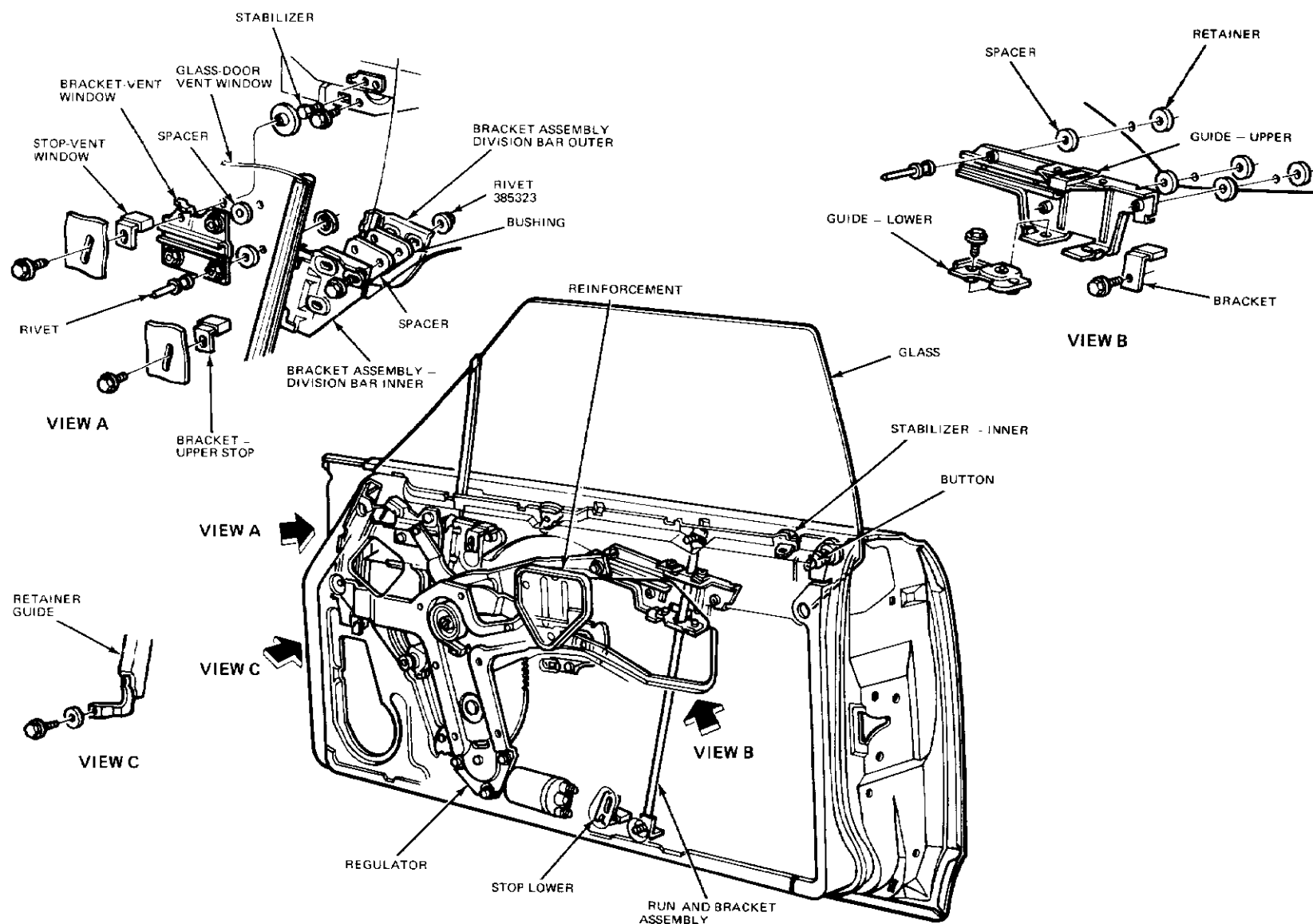
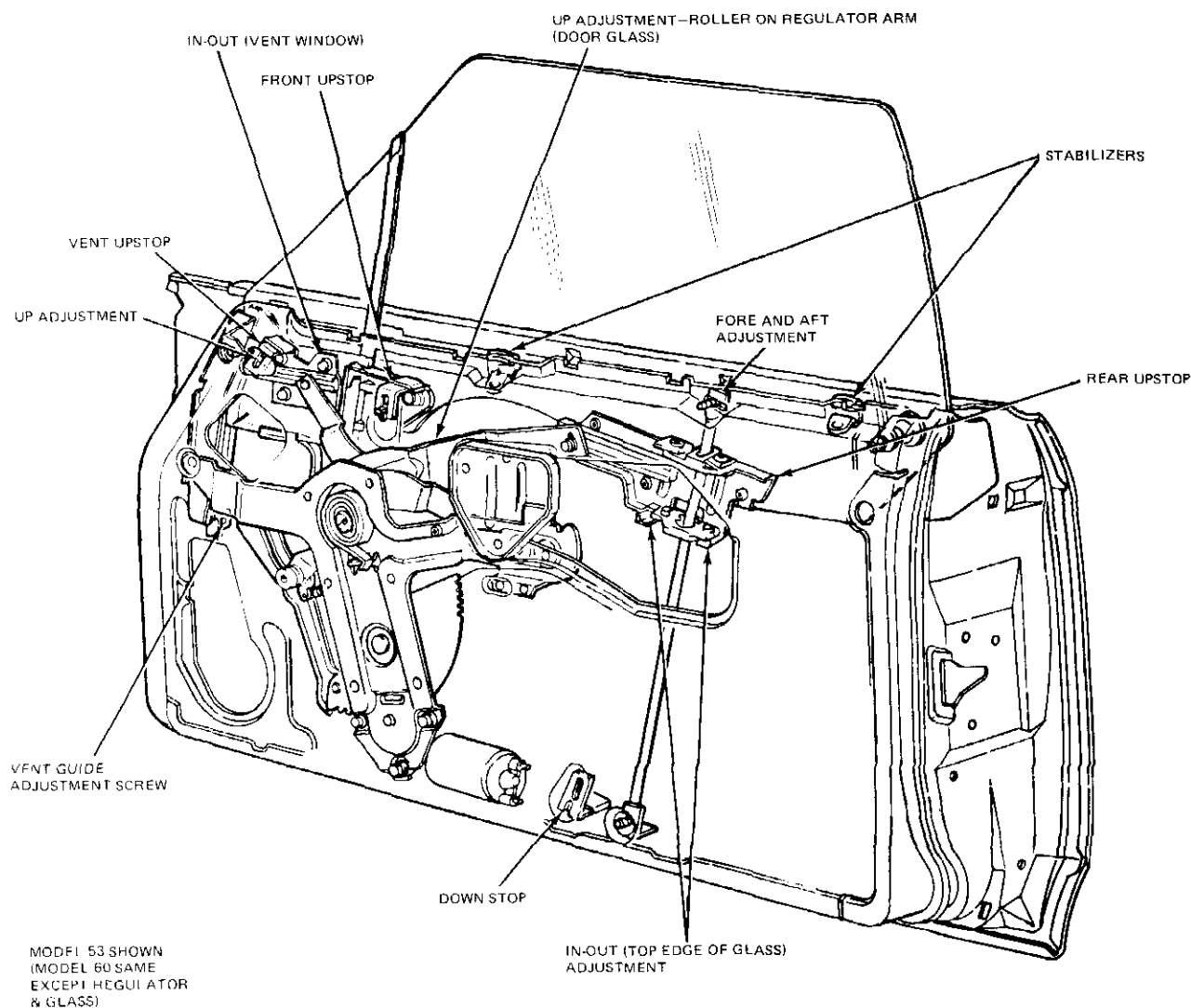


FIG. 1 Mini-Vent Window System Lincoln Continental 4-Door Shown—2-Door Typical



N2516-2A

FIG. 2 Door Glass Adjustments—Lincoln Continental

glass seats into the weatherstrip sufficiently to obtain a good seal, especially at the upper rear corner of the glass. Tighten all attachments to 6-11 ft-lbs torque. **If the UP position of the glass must be re-adjusted, both door glass stops must be loose and the up or down adjustment made with the regulator arm roller only.**

Upper Stop Adjustment

Raise the glass to the UP position, checking to be sure that the top edge of the glass contacts the weatherstrip sufficiently to provide a good seal. Then, position the upper front stop bracket down against the glass stop and tighten the attaching screw. Position the upper rear stop down against the glass bracket and tighten the attaching screw.

Stabilizer Adjustment

The stabilizers are used to support the glass at the door belt line. To adjust, raise the glass to the full UP

position. Loosen the stabilizer attaching screw and rotate the stabilizer against the glass. Tighten the stabilizer attaching screws.

Down Stop Adjustment

The down stop should be adjusted so that the main glass is between flush and 1/4 inch above the belt weatherstrip with the window in the full DOWN position.

Front Door Vent Window Guide Adjustment

The front guide is held in position by a retainer attached to the door hinge pillar by a screw. To adjust the front guide, loosen the screw and lower the door window and vent glasses. The front guide locates itself in the adjustment slot. Before tightening the retainer screw check the vent glass for proper installation into the front guide.

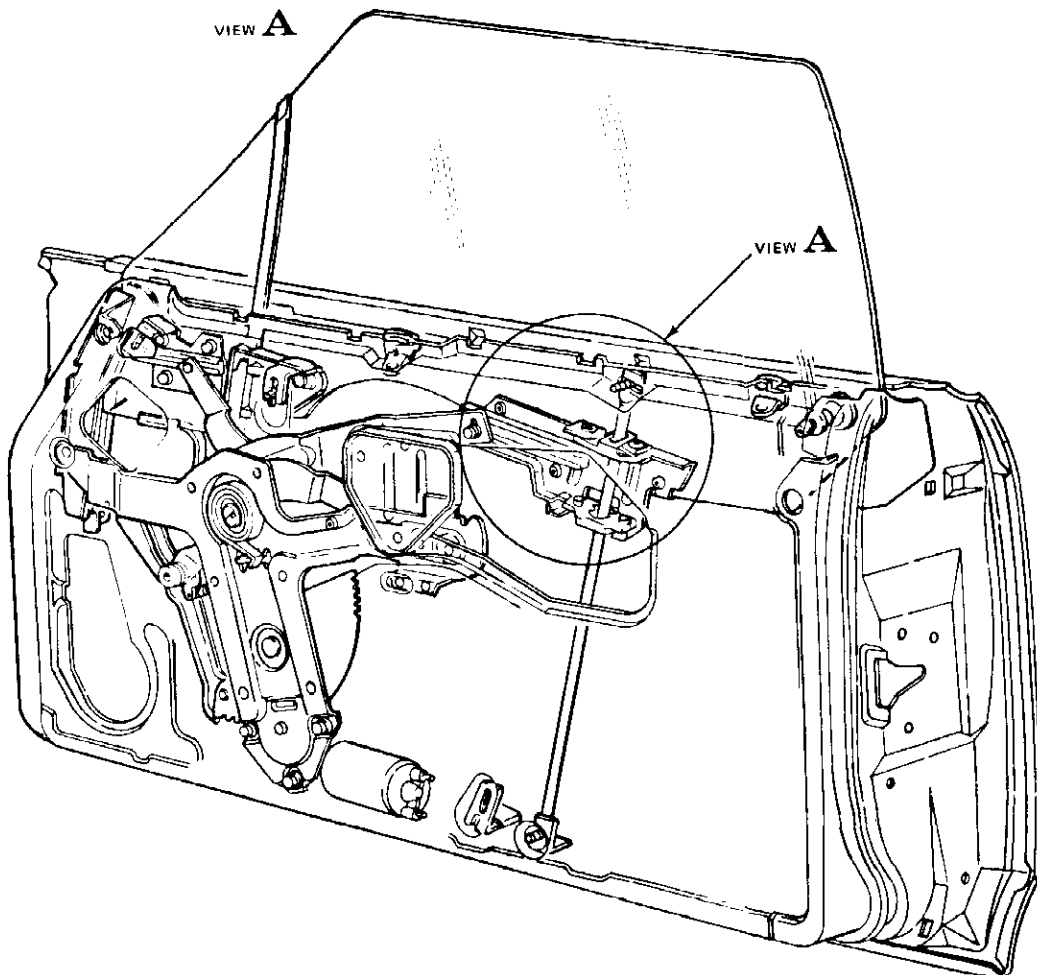
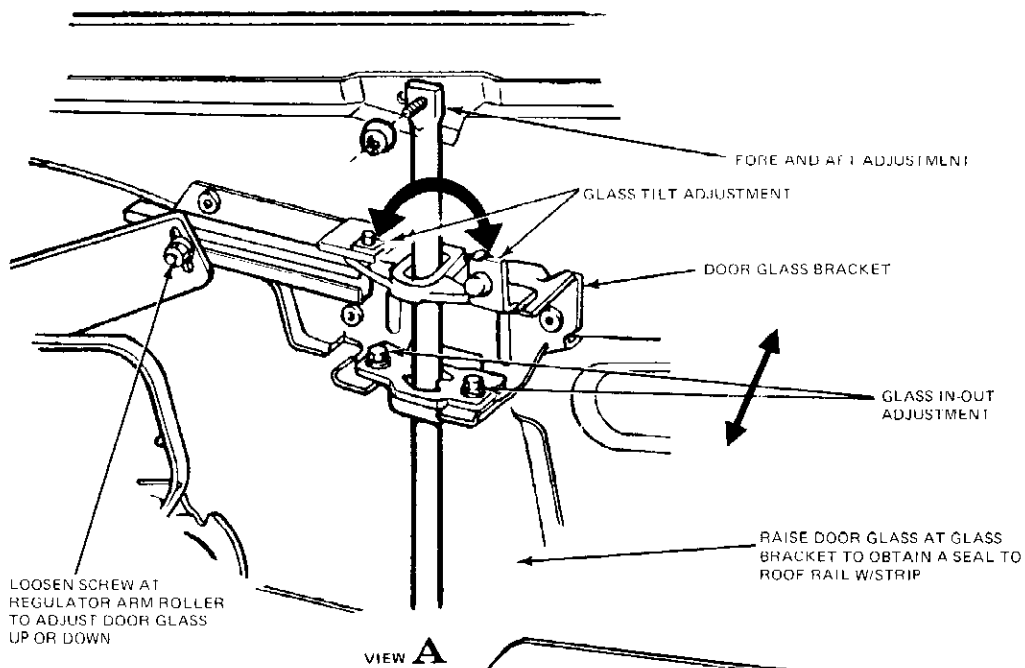
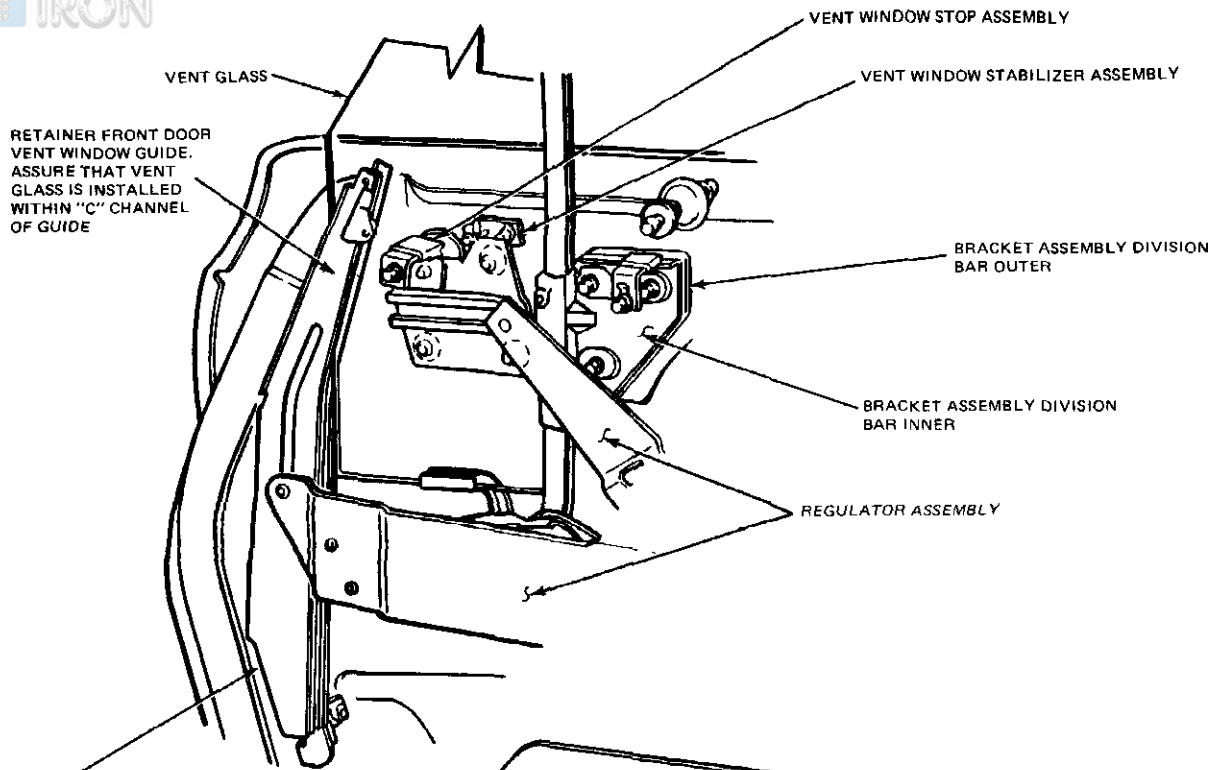


FIG. 3 Door Glass Adjustments—Lincoln Continental



DO NOT TIGHTEN RETAINER ASSEMBLY GUIDE SCREW AND WASHER ASSEMBLY UNTIL VENT WINDOW AND DOOR GLASS ARE CYCLED TO FULL DOWN POSITION

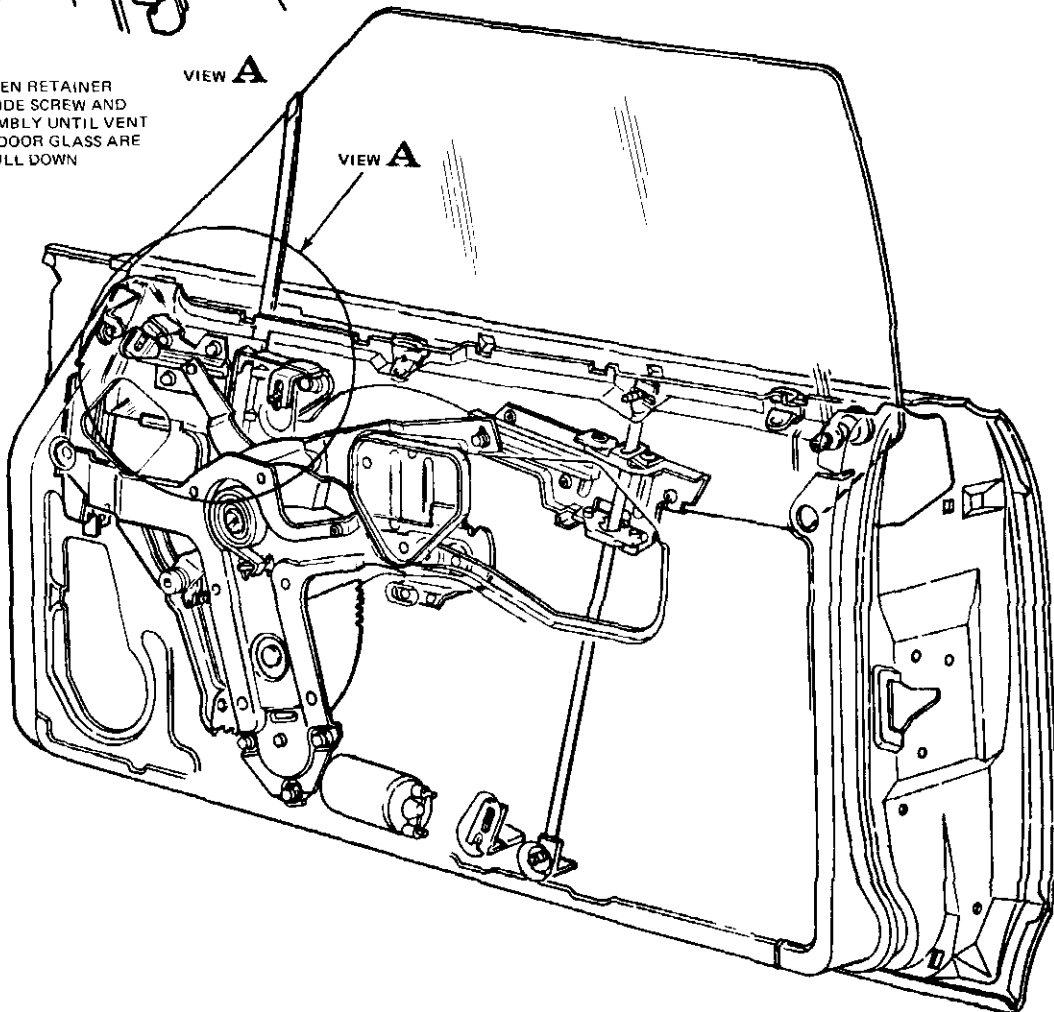


FIG. 4 Mini-Vent Glass Adjustment—Lincoln Continental

N2518-2A

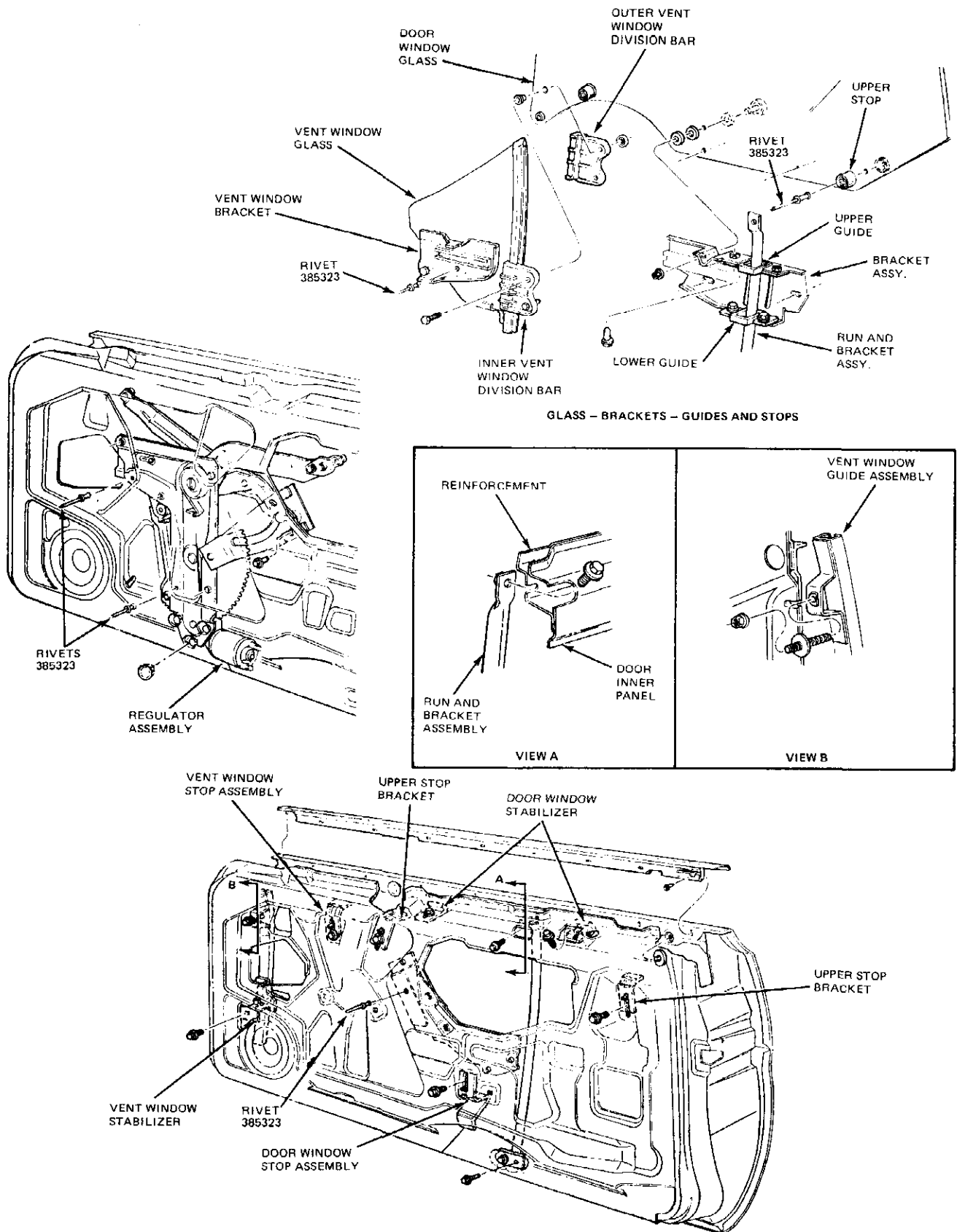


FIG. 5 Mini-Vent Window System—Continental Mark V

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VENT GLASS ADJUSTMENT

There are two basic vent window adjustments; an in-out adjustment and an up-stop adjustment.

In-Out Adjustment

To adjust the vent window in or out at the belt line, first remove the weatherstrip end cap from the front edge of the door. With the weatherstrip end cap removed, insert a 7/16 inch open end wrench through the access opening in the door and adjust the acorn-head adjusting bolt as necessary. Turning the adjusting bolt in or out will move the mini-vent in and out. The vent assembly should be adjusted so that a parallel dimension is obtained between the door outside belt and the vent glass assembly. However, in some instances, it may be necessary to position the vent glass inboard to secure a good seal to the A-post.

This is the only adjustment that can be performed on a mini-vent window system without removing the trim panel. If the vent is adjusted inboard with the acorn bolt, make sure that the vent glass raises full UP when cycled. If the vent does not go full UP, remove the trim panel and adjust the vent up-stop.

Up-Stop Adjustment

The vent up-stop can be adjusted up or down through an access hole in the door inner panel. The up-stop should be adjusted so that the vent glass is flush with the leading top edge of the door glass. The division bar cap will extend slightly above the two pieces of glass when they are flush.

Re-check the in-out adjustment after adjusting the up-stop. If a main glass re-adjustment is performed, the vent up-stop may have to be re-positioned to maintain flushness to the main glass.

CONTINENTAL MARK V MAIN AND VENT GLASS ASSEMBLY ADJUSTMENTS (REFER TO FIGS. 5 THRU 8)

The door trim panel and watershield must be removed prior to any adjustment.

Fore and Aft Adjustment

The fore and aft adjustment of the entire door glass and mini-vent assembly can be made by loosening the front vent channel attachment and the 3 bolts in the glass bracket (Fig. 6). Then, position the glass fore or aft as required.

It will also be necessary to adjust the equalizer assembly to obtain a proper glass-to-weatherstrip relationship.

NOTE: If sluggish or binding window operation develops, loosen the front vent channel upper attachment lock nut and cycle the system. The vent channel may not be properly set with the tube upper channel.

Equalizer Adjustment

This adjustment pertains to the relationship of the glass-to-weatherstrip at the roof rail and the windshield "A" post.

If the glass system is "tilted" in the opening, where the forward or rearward ends of the glass are low to its respective weatherstrip, the system can be rotated in the opening by loosening the upper plastic guide attachments on the main glass brackets, and rocking the glass on the tubular run (Fig. 7).

Flipper Arm Adjustment

An adjustable "flipper arm" at the end of the main glass drive arm is provided to establish the full up position of the main glass assembly.

If you find, after you have adjusted the equalizer, that you are unable to get the top edge of the glass into the weatherstrip, check the "up-stops" to make sure they are not improperly positioned. Next, loosen the (2) bolts retaining the flipper arm to the drive arm, and adjust the flipper arm upward to obtain the needed height (Fig. 7).

CAUTION: This is a very critical adjustment. Improper adjustment could cause sluggish or slow operation of the entire system. Allow from 1/8" to 3/16" of slot opening above the bolt washer for proper set (see Fig. 7).

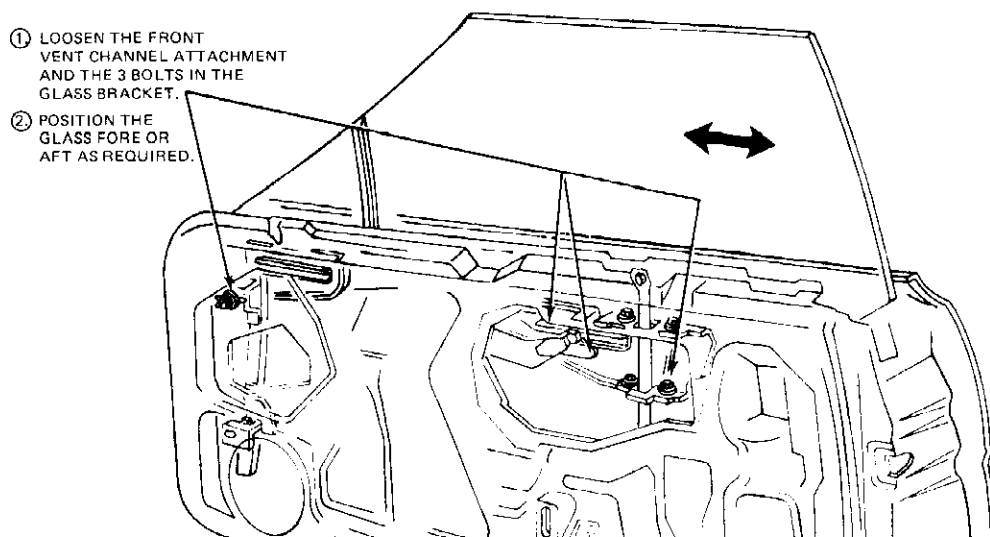


FIG. 6 Main and Vent Glass Fore-Aft Adjustment—Continental Mark V

In-Out Adjustment

Make the "in-out" adjustment by loosening the screws attaching the lower plastic guide to the guide plate bracket and moving the window assembly in or out at the roof rail weatherstrip. The glass should be off the stops to make this adjustment (Fig. 8).

Stabilizer Adjustment

There are two stabilizers on the main glass assembly (Fig. 8). One stabilizer is mounted forward of the tube and one rearward.

Raise the window to the full-up position, loosen the retaining bolt on the stabilizer and slide in or out to a finger tight fit to the glass.

MINI-VENT ADJUSTMENTS

Refer to Figs. 9 thru 12

There are three adjustments for the mini-vent assembly; an up-stop, in-out and a vent full-up adjustment.

Also, it's important that the lower mini-vent channel blade attachment be properly positioned in the fork retainer.

Vent-Up-Stop-Adjustment

1. To obtain a parallel fit of the leading edge of the mini-vent glass to the main glass assembly, loosen the vent up-stop attachment and position up or down as required (Fig. 9).

In-Out Adjustment

1. To adjust the in-out relationship of the mini-vent glass to the main glass assembly, loosen the mini-

vent channel upper adjustable attachment lock nut (Fig. 10).

2. Using a 9/32" Allen wrench, turn the adjustable screw right (inboard) or left (outboard) to obtain a parallel relationship of the mini-vent glass to the main glass assembly.

NOTE: It's a good idea to sight down the glass assemblies from the rear of the door, to make sure that the mini-vent and main glass assemblies are parallel.

This will prevent improper inboard/outboard channel adjustment that can cause the mini-vent to be out of line with the main glass assembly. This condition may bind the vent brackets and result in a mini-vent that will lower, but not raise.

Vent Full-Up Position Adjustment

1. Loosen the two bolts retaining the vent arm cam plate on the regulator assembly and position the moveable cam plate to the lowest side of the attaching slots on the door inner panel (Fig. 11).
2. If you are unable to get the mini-vent assembly raised to the full-up position by adjusting the stops and the cam plate, you may have to elongate the lower adjustment slot in the door inner panel at the regulator cam plate attachment.

Channel Blade Attachment Position

The lower mini-vent channel blade attachment **must** be properly positioned between the two fork rubber prongs. The prongs are designed with a specified clearance between them, to allow the lower channel to "float" during window operation (Fig. 12). If not properly positioned, the mini-vent may bind-up, causing it to lower but not raise.

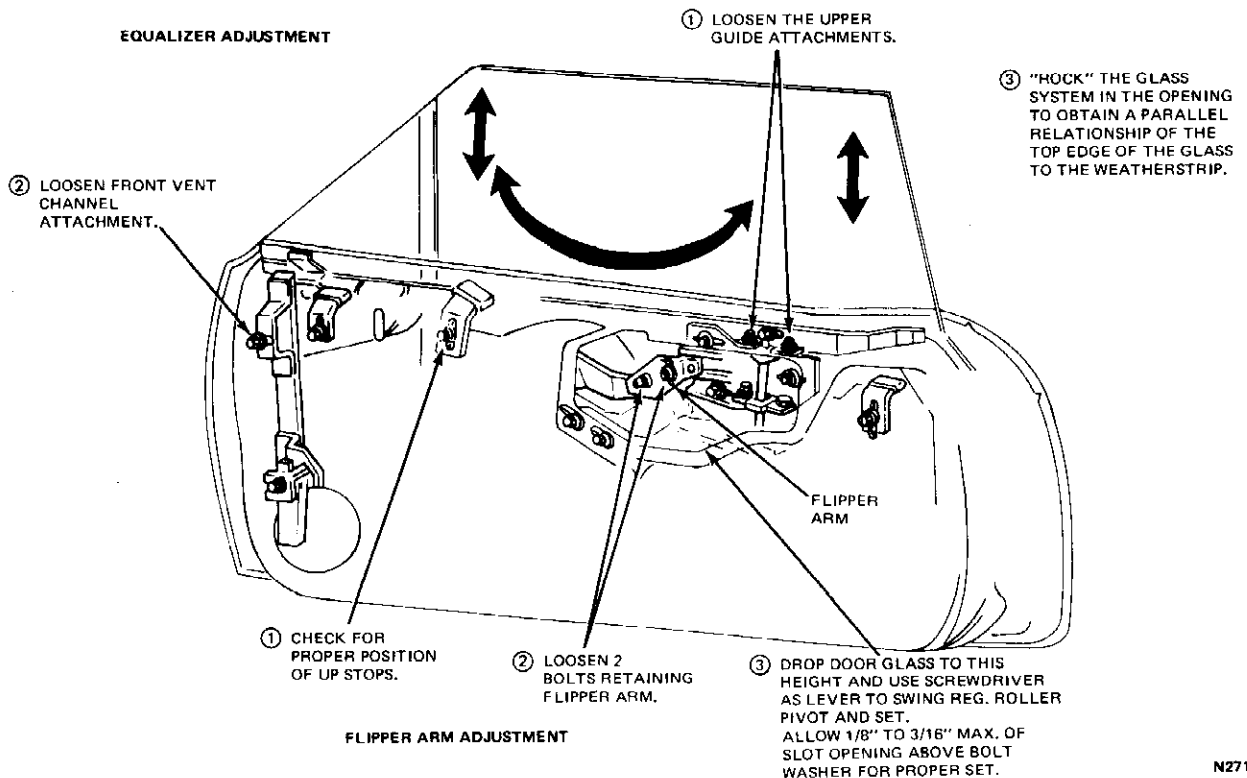
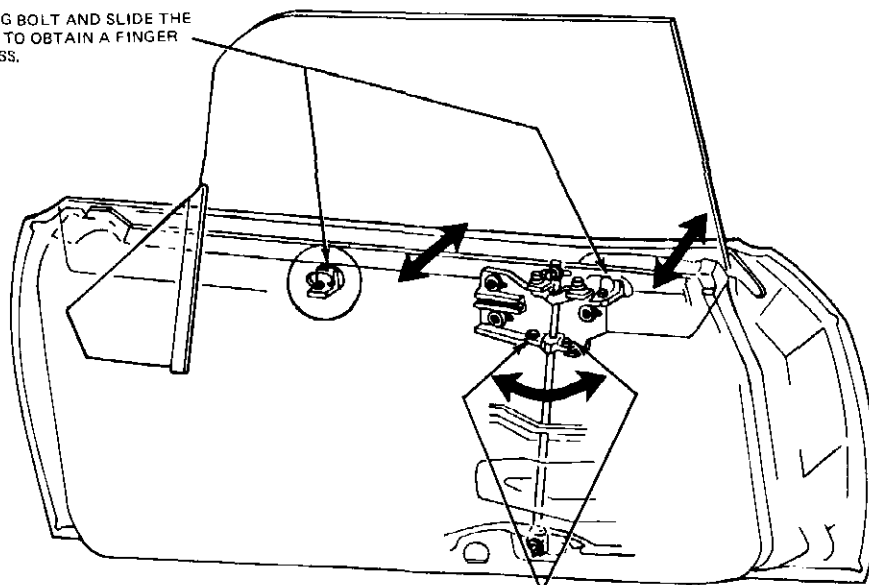


FIG. 7 Main and Vent Glass—Equalizer Adjustment and Flipper Arm Adjustment—Continental Mark V

STABILIZER ADJUSTMENT

LOOSEN THE RETAINING BOLT AND SLIDE THE STABILIZER IN OR OUT TO OBTAIN A FINGER TIGHT FIT TO THE GLASS.

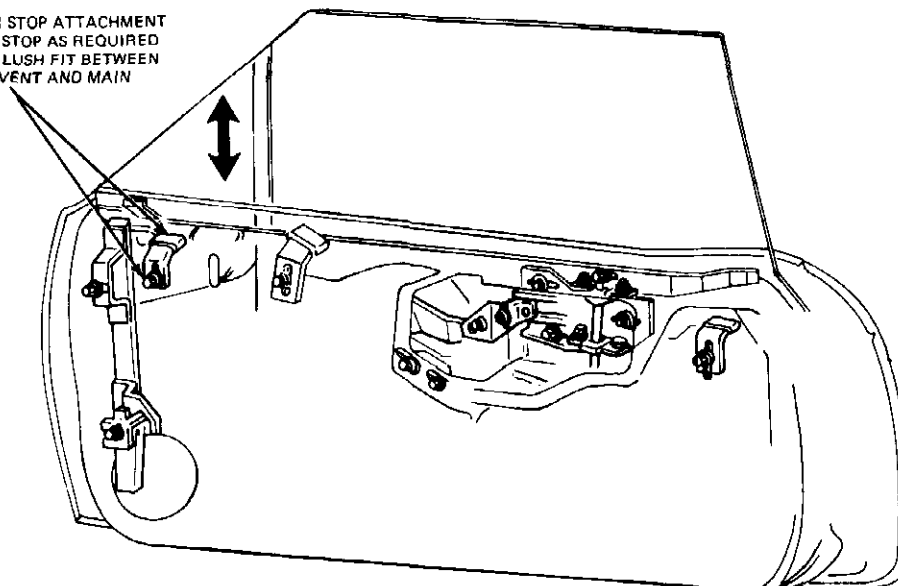
**IN-OUT ADJUSTMENT**

LOOSEN THE 2 BOLTS THAT RETAIN LOWER GUIDE ATTACHMENTS. TILT THE UPPER EDGE OF THE GLASS INBOARD OR OUTBOARD AS REQUIRED.

N2717-2A

FIG. 8 Main and Vent Glass Stabilizer Adjustment and In-Out Adjustment—Thunderbird and Continental Mark V

LOOSEN UPPER STOP ATTACHMENT AND POSITION STOP AS REQUIRED TO OBTAIN A FLUSH FIT BETWEEN EDGE OF MINI-VENT AND MAIN GLASS.



N2718-2A

FIG. 9 Mini-Vent Up Stop Adjustment—Continental Mark V

LOOSEN LOCK NUT USING A 9/32" ALLEN WRENCH, TURN THE ADJUSTING SCREW TO THE LEFT TO MOVE THE FRONT OF THE VENT OUTBOARD. TURN THE ADJUSTABLE SCREW RIGHT TO MOVE VENT INBOARD.

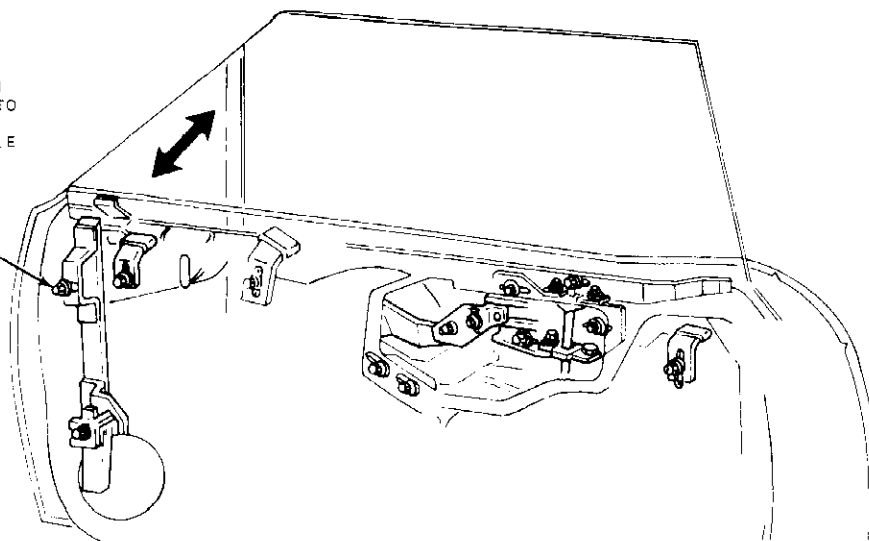
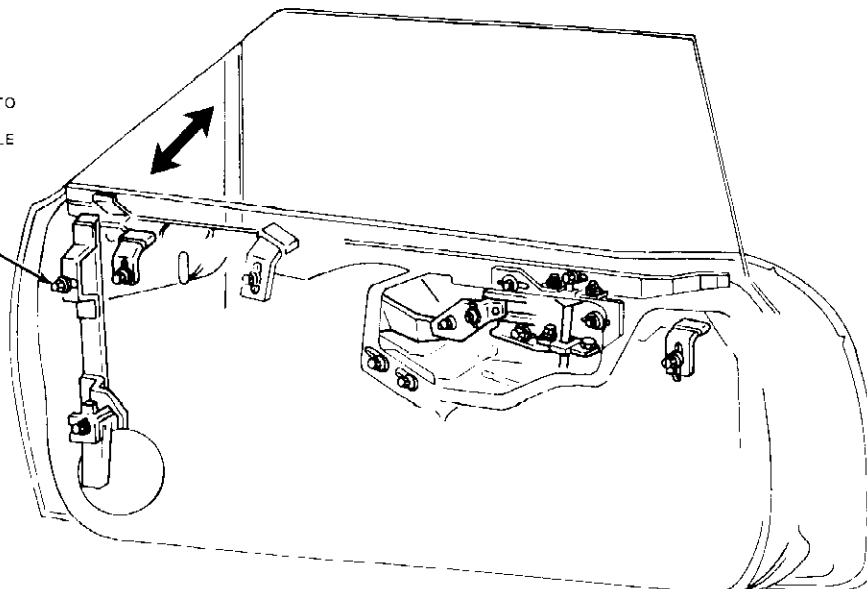
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FIG. 10 Mini-Vent In-Out Adjustment—Continental Mark V

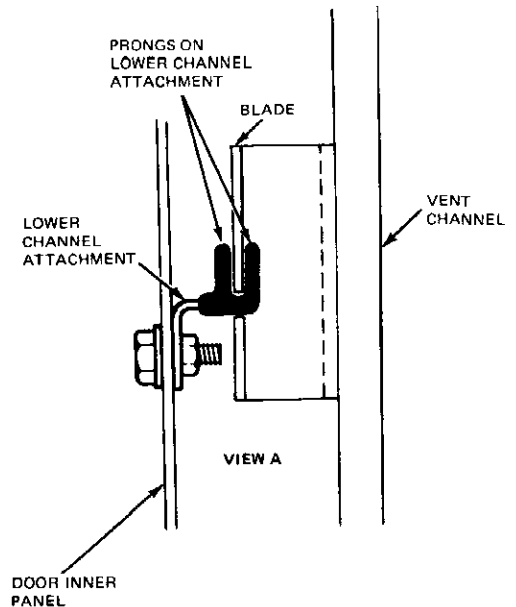
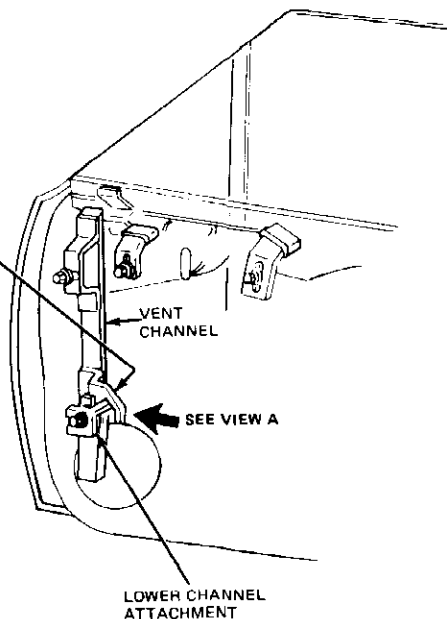
LOOSEN LOCK NUT USING A 9/32" ALLEN WRENCH, TURN THE ADJUSTING SCREW TO THE LEFT TO MOVE THE FRONT OF THE VENT OUTBOARD. TURN THE ADJUSTABLE SCREW RIGHT TO MOVE VENT INBOARD.



N2719-2B2

FIG. 11 Mini-Vent Full Up Position Adjustment—Continental Mark V

THE BLADE MUST BE POSITIONED BETWEEN THE 2 PRONGS ON THE LOWER ATTACHMENT. IF THE BLADE IS OUTBOARD OR INBOARD OF THE "FORK", THE VENT WILL NOT OPERATE.



N2721-2A

FIG. 12 Mini-Vent Channel Blade Attachment

REMOVAL AND INSTALLATION

DOOR AND VENT GLASS ASSEMBLY

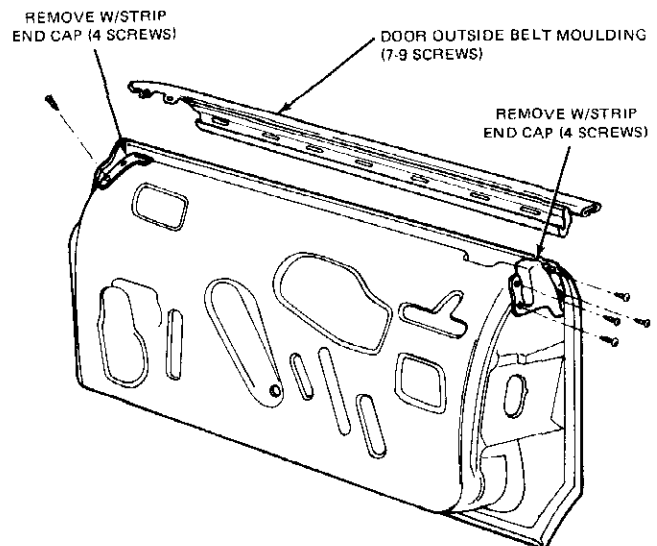
The door and vent glass are to be removed from the vehicle as a single unit. Refer to Figs. 1, 13 and 14.

Removal

1. Remove the door trim panel and watershield.
2. Remove the screws attaching the weatherstrip end-caps at the rear and front end of the door.
3. Remove the door outside belt moulding. (Loosen the door glass down-stops to gain access to the screw attachments).
4. Loosen the stabilizer attaching screws and remove the stabilizers.
5. Remove the front and rear upper stop brackets.
6. Cycle the vent to the full down position and remove the vent roller from the vent guide. Also lower the door glass sufficiently to remove its attaching rivets from the bracket (approximately 3 inches).
7. Remove the three (3) door glass-to-glass bracket retaining rivets. When removing the rivets, first knock out the center pin or mandrel of the rivet with a drift punch or similar tool.

Then, drill out the remainder of the rivet using a 1/4 inch drill. DO NOT ATTEMPT TO BREAK OR PRY OUT THE RIVET, AS THIS WILL BREAK THE GLASS.

8. Rotate and lift the door glass and vent up and out at the rear of the door, as an assembly.



NOTE: BELT MOULDING REMOVAL AIDED BY HAVING GLASS IN FULL DOWN POSITION WITH DOWN STOP LOOSE OR REMOVED.

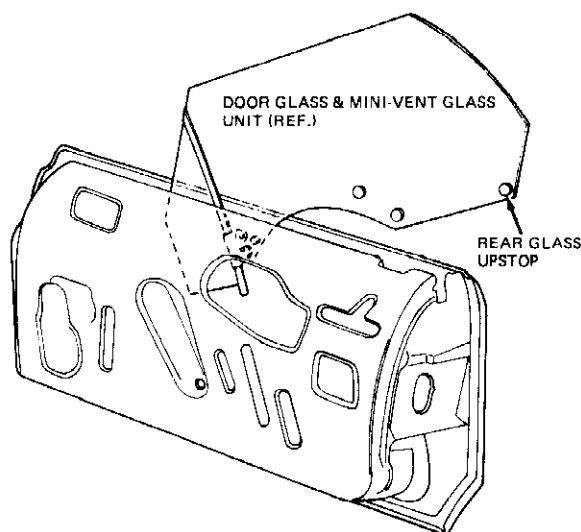
N2519-1A

FIG. 13 Door and Vent Glass Removal

WINDOW REGULATOR

Removal

Refer to Figs. 1, 17 and 18.



REMOVE THE DOOR GLASS AND MINI-VENT GLASS AS A UNIT. GUIDE THE REAR GLASS UPSTOP THROUGH THE OPENING AT THE REAR OF THE DOOR AS SHOWN (NOTE: THE DOOR W/STRIP END CAPS AND DOOR OUTER BELT MOULDING MUST BE REMOVED FOR ADEQUATE CLEARANCE FOR GLASS REMOVAL)

N2520-1A

FIG. 14 Removing Door and Mini-Vent Glass

Installation

Refer to Figs. 15 and 16.

The vent and door glass are pre-assembled and installed as a unit, as shown in Fig. 15. Sliding efforts must also be checked prior to installation, as shown in Fig. 16.

1. Lower the vent glass prior to loading, so that the vent cap is 3 to 4 inches above the vent brackets. Be sure that the vent glass is positioned within the front window guide retainer assembly and that the vent roller is in the C-channel of the vent window bracket.
2. Feed the regulator roller into the glass bracket C-channel and assemble the door glass to the regulator glass bracket using (3) 1/4-20 x 1 inch bolts, nuts and washers to replace the original rivets. Drop the regulator arm approximately one to two inches for clearance, and use one bolt as a drift to assure proper glass position when installing the other two bolts to the glass. Run the glass to the full UP position to complete installation. Torque the bolts to 6-11 ft-lbs.
3. Install the door outside moulding.
4. Install the front and rear up-stop brackets.
5. Install the two stabilizers (leave loose until the glass adjustment is made).
6. Install the weatherstrip front and rear end-caps.
7. Adjust the system following the procedures under Adjustment.
8. Install the watershield and the door trim panel.

1. Remove the glass and vent from the door, as outlined in this Section.
2. Remove the door glass run upper and lower attaching screws, and remove the run, glass bracket and guides from the door. **Do not loosen the upper and lower guides on the bracket.**
3. Disconnect the regulator motor wires at the connector.
4. Using a drift punch, remove the center pin from the (4) rivets attaching the door and regulator reinforcement and the (9) rivets attaching the regulator and motor support to the door inner panel.
5. Finish removing the (13) rivets with a 1/4 inch drill.
6. Remove the reinforcement plate from the door inner panel.
7. Remove the regulator from the door through the upper rear opening, motor end first.
8. Remove the rivets and drillings from inside the door.
9. Mount the regulator in a vise. Drill a 5/16 inch diameter hole through the regulator sector gear and the regulator plate. Install a 1/4 inch bolt and nut in the hole to prevent the sector gear from moving when the motor and drive are removed. Remove the motor and drive assembly.

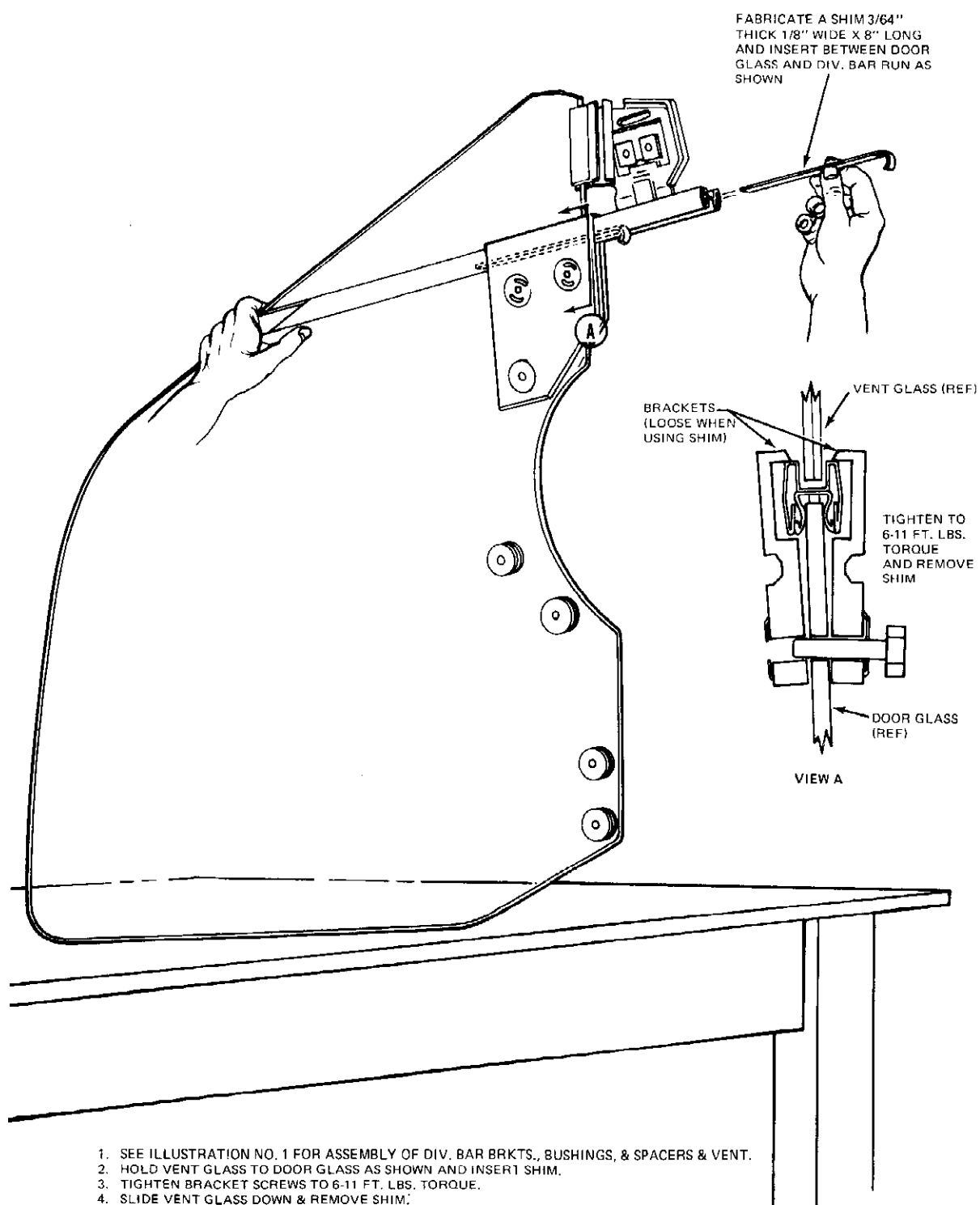
Installation

NOTE: Hand tools capable of setting 1/4 inch blind rivets are available to dealers or can be obtained from Townsend-Textron or USM Corp. or an equivalent supplier. If blind rivet hand tools are available, reinstall rivets instead of screw and washer assemblies.

1. Position the regulator arm as shown in Fig. 17 and insert the regulator into the large access hole in the door upside down, gradually turning the regulator to the upright position as it is installed.
2. Install (5) 1/4-20 x 1/2 inch screw and washer assemblies into the five holes across the top of regulator and through the door inner panel. Install the matching nuts and washers, but do not tighten.
3. Connect the regulator motor wires and cycle the regulator quadrant gear as required, to install the remaining (4) 1/4-20 x 1/2 inch screw and washer assemblies. Tighten all (9) attaching screws to 6-11 ft-lbs torque.

All nine screw and washer assemblies must be installed with the head of the screw on the regulator and motor support panel side of the door panel. This will prevent the screw thread from interfering with links, gears, etc.

4. Install the door and window regulator reinforcement using (4) 1/4-20 x 5/8 inch screw and washer assemblies for retention.
5. Install the run, glass bracket and guides in the door.
6. Install the glass and vent assembly into the door.
7. Adjust the window mechanism as outlined in the Adjustment section of this Part.



1. SEE ILLUSTRATION NO. 1 FOR ASSEMBLY OF DIV. BAR BRKTS., BUSHINGS, & SPACERS & VENT.
2. HOLD VENT GLASS TO DOOR GLASS AS SHOWN AND INSERT SHIM.
3. TIGHTEN BRACKET SCREWS TO 6-11 FT. LBS. TORQUE.
4. SLIDE VENT GLASS DOWN & REMOVE SHIM.
5. SLIDE VENT GLASS UP & DOWN TO CHECK FOR BINDS.
6. LUBRICATE DIV. BAR AND BRACKETS WITH MINI VENT LUBE (D3AZ-19553-A).

N2521-2B

FIG. 15 Pre-Assembling Door and Mini-Vent Glass

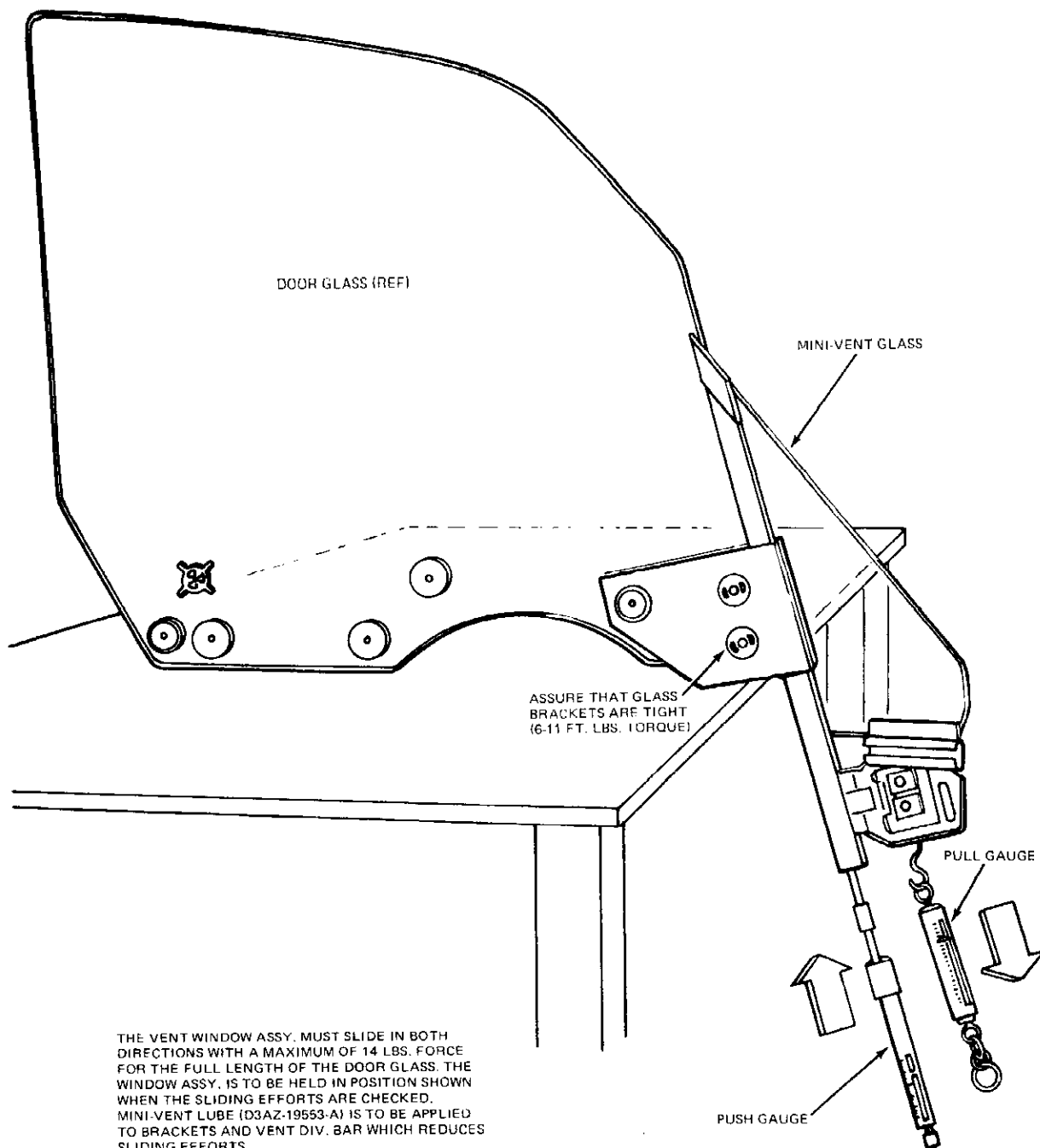


FIG. 16 Checking Sliding Efforts—Mini-Vent

VENT WINDOW GUIDE

Removal

1. Remove the vent glass and door glass from the door as an assembly.
2. Using a punch and 1/4 inch drill, remove the rivet attaching the guide to the door panel.
3. Remove the guide adjusting screw located on the hinge face of the door.
4. Remove the guide.

Installation

1. Position the vent window guide in the door and attach to the inner panel using a 1/4-20 x 1/2 inch screw and washer assembly and a matching nut and washer.
2. Install the vent guide adjusting screw into the hinge face of the door. Do not tighten this screw until the glass installation is complete and the entire glass system is cycled to the down position.
3. Install the vent and door glass assembly and adjust the system.

DOOR WINDOW RUN AND/OR GUIDE

Removal

1. Remove the door trim panel and watershield.
2. Remove the (3) glass-to-glass bracket retaining rivets.
3. Support the glass and remove the run upper and lower attaching screws.
4. Disengage the glass from the glass bracket and remove the run, glass bracket and guide from the door as an assembly.
5. Remove the run from the guides, and the guide from the glass bracket.

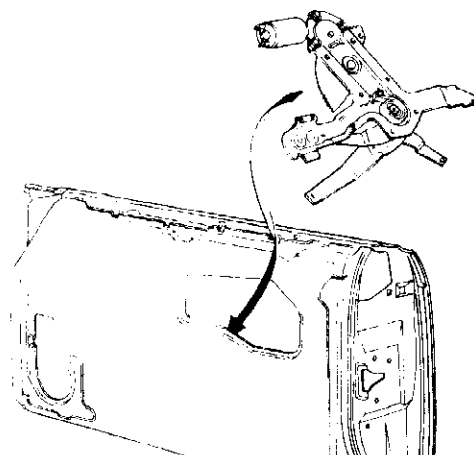
Installation

1. Assemble the glass bracket, guide and glass run.
2. Position the glass run in the door and install the two attaching screws after feeding the regulator roller into the glass bracket C-channel.
3. Position the glass-to-glass bracket and assemble with (3) 1/4-20 x 1 inch bolts and matching nuts and washers. The regulator arm can be moved to gain access to the attaching points. Tighten the nuts to Specification.
4. Adjust the run and guide as outlined in the Adjustment Section of this Part.
5. Install the watershield and the door trim panel.

DRIVE AND/OR MOTOR

Removal

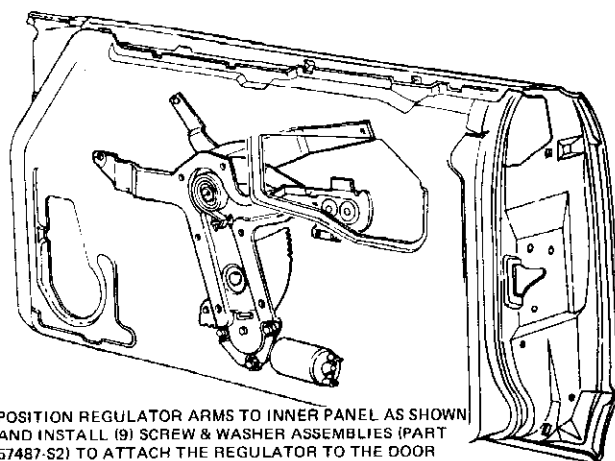
1. Remove the door trim panel and watershield.
2. Drill a 3/4 inch diameter hole at the dimple located near the bottom edge of the door opposite the window motor drive. **The hole saw pilot should be as short as possible, about 1/4 inch beyond the saw.**



POSITION THE REGULATOR ARMS AS SHOWN AND INSERT THE REGULATOR THROUGH THE ACCESS HOLE IN THE DOOR INNER PANEL UPSIDE DOWN AND GRADUALLY TURN TO UPRIGHT POSITION DURING INSTALLATION.

N2523-1A

FIG. 17 Inserting Window Regulator Into Door—Lincoln Continental



POSITION REGULATOR ARMS TO INNER PANEL AS SHOWN AND INSTALL (9) SCREW & WASHER ASSEMBLIES (PART 57487-S2) TO ATTACH THE REGULATOR TO THE DOOR INNER PANEL. NOTE: ALL (9) SCREW AND WASHER ASSEMBLIES MUST BE INSTALLED WITH THE HEAD OF THE SCREW ON THE REGULATOR AND MOTOR SUPPORT PANEL SIDE OF THE DOOR INNER PANEL.

N2524-1A

FIG. 18 Installing Window Regulator—Lincoln Continental

3. Disconnect the motor wires at the connector.
4. Working through the two existing holes and the drilled hole, remove the three (3) motor and drive-to-regulator attaching screws. Separate the motor and drive from the regulator and remove the motor and drive from the door.

Installation

1. Position the motor and drive in the door and to the regulator. Install the three attaching screws just snug, not tight.
2. Connect the motor wires at the connector and cycle the glass to be sure of gear engagement. When the gears are engaged, tighten the three motor and drive attaching screws.
3. Install the watershield and the door trim panel.

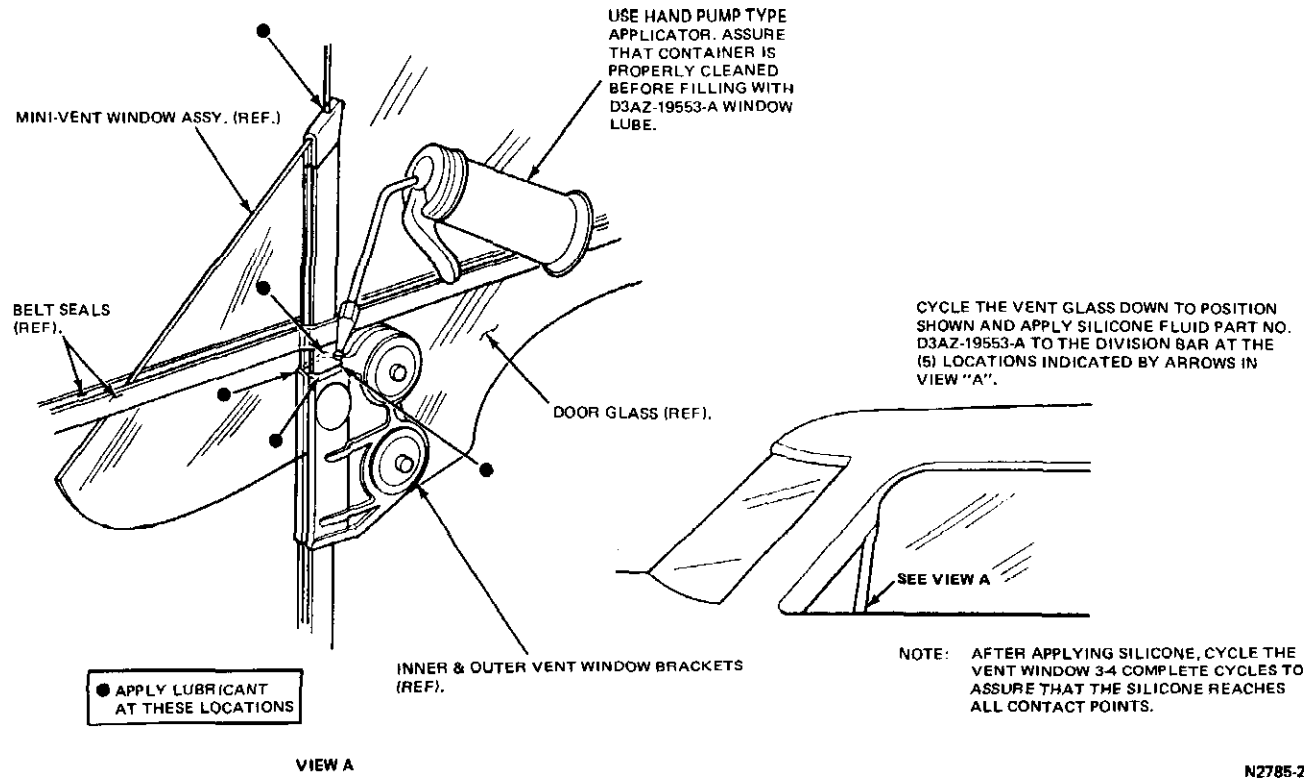


FIG. 19 Mini-Vent Window Lubrication

SPECIFICATIONS

Description	Torque	Description	Torque
Glass Stop Attaching Screw ①	6-11 ft-lb	Motor Bracket-to-Motor	13-32 in-lb
Run Attaching Screws	6-11 ft-lb	Motor Bracket and/or Regulator-to-Inner Panel ①	6-11 ft-lb
Stabilizer Attaching Screws	6-11 ft-lb	Guide-to-Glass Bracket	6-11 ft-lb
Regulator Arm Roller Attachment	6-11 ft-lb	Glass-to-Glass Bracket ①	6-11 ft-lb
Upper Stop Bracket	6-11 ft-lb		

① Riveted in Production.

Single Tubular Run Rear Door Window Mechanism

**PART
42-24**

SUBJECT	PAGE	SUBJECT	PAGE
ADJUSTMENTS	24-1	REMOVAL AND INSTALLATION (Cont'd.)	
REMOVAL AND INSTALLATION		Run	24-7
Glass	24-2	Window Drive	24-6
Guides	24-7	Window Motor	24-6
Regulator	24-2	SPECIFICATIONS	24-7

CR2026-2B

ADJUSTMENTS

LTD II, COUGAR, FORD, MERCURY AND LINCOLN CONTINENTAL

Separate adjustment steps are given for each adjustment so that a partial glass adjustment can be performed. If a complete glass adjustment is required, follow the adjustments in the order given. All window mechanism adjustments must be performed with the door trim panel and watershield removed. After the adjustment(s) are completed, install the watershield and trim panel.

Glass Position—Fore and Aft

It is necessary to reposition the glass in the opening if the glass has been removed or if extreme door hinge adjustments are performed. To reposition the glass, loosen the run upper attaching screw (Item A, Fig. 1), and reposition the glass. Tighten the screw after glass is moved to desired position.

Stabilizer Adjustment

The stabilizers are used to support the glass at the belt line. The trim panel must be removed to adjust the stabilizers. Then, with the glass in the UP position, push the front stabilizer firmly against the glass surface and tighten the attaching screw (Item B, Fig. 1). Repeat the procedure for the rear stabilizer.

Glass In-Out

The in-out adjustment is used to obtain a good seal with the weatherstrip at the top edge of the glass. This adjustment is made by repositioning the lower guide with respect to the glass bracket. To adjust the in-out of the glass, loosen the two guide lower attaching screws (Item C, Fig. 1), and move the top edge of the glass inward or outward as required to obtain a good seal with the weatherstrip. Then, tighten the guide attaching screws to 6-11 ft-lbs torque.

Upper Stop Adjustment

The upper stop adjustment is used to limit the up travel of the glass to maintain a constant glass height when the glass is raised to the full closed position. The

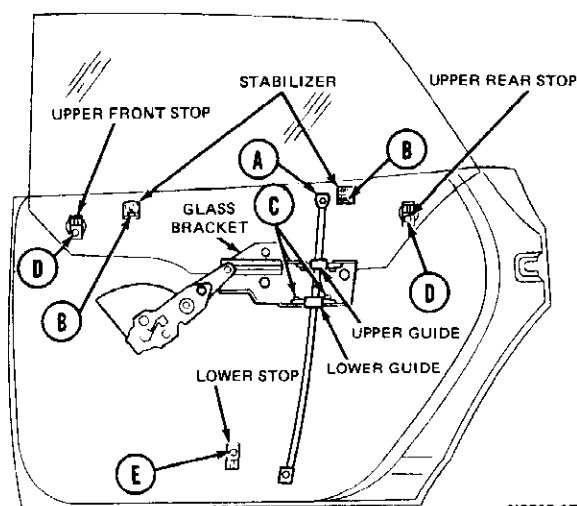


FIG. 1 Single Tubular Run Rear Door Window Mechanism Adjustment

door trim panel must be removed to adjust the up stops. To adjust the stops, raise the window to the UP position. Check to be sure that there is no interference when the door is opened. Then, position the up stop brackets down against the glass stops, and tighten the stop bracket attaching screw (Item D, Fig. 1). Use this procedure for both the front and rear upper stops.

Lower Stop Adjustment

The lower stop is used to control the depth the glass can be lowered into the door. To adjust the lower stop, remove the door trim panel. Loosen the lower stop retaining screw (Item E, Fig. 1), and lower the glass until the top edge is flush to 1/4 inch above the outer panel. Then, lift the stop against the glass bracket and tighten the retaining screw.

GRANADA, MONARCH AND VERSAILLES

1. Secure upper and lower division bar attachment after it is positioned as far rearward as possible (Fig. 2).
2. Run glass into frame to the full UP position.

3. Secure nut and washer assembly at top of run assembly. Torque to 6-11 ft-lbs.
4. Secure nut and washer assembly at bottom of run assembly. Torque to 6-11 ft-lbs.
5. Run glass down and up to check for binding.
6. If binding occurs, loosen bottom attachment of tube, run glass to 1 inch from **UP** position. Adjust bottom attachment inboard or outboard (in opposite direction of binds) to remove binds. Secure all attachments.

REMOVAL AND INSTALLATION

GLASS—EXCEPT FAIRMONT AND ZEPHYR

Removal

1. Remove the door trim panel and watershield.
2. Remove the upstops from the door inner panel.
3. Support the glass and remove the glass-to-glass bracket attaching rivets. Remove the center pin from the rivets with a drift punch. Drill the head from each rivet with a 1/4 inch drill. Remove the rivets and glass-to-glass bracket. (See Figs. 2, 3, 4 and 5.)
4. Loosen the front and rear stabilizer attaching screws, and move the stabilizers away from the glass. (Figs. 3, 4 and 5.)
5. Remove the glass support and remove the glass from the door.

Installation

1. Position the glass in the door, and position the glass bracket to the glass. Install 1/4-20x1 inch hex head bolts and 1/4-20 hex nuts to attach the glass bracket to the glass. Tighten the bolts and nuts to specification. (See specifications at end of this Part.)
2. Install the upper front and rear stops on the inner panel with attaching bolts with 1/4-20x1 inch hex head bolts and 1/4-20 hex nuts. Tighten the bolts and nuts to specification.
3. Adjust the glass to fit the opening and adjust the stabilizers as outlined in the Adjustment Section.
4. Install the watershield and trim panel on the door.

GLASS—FAIRMONT AND ZEPHYR

Removal

1. Remove the door trim panel and watershield.
2. Remove the glass to glass bracket attaching rivets. Remove the center pin from the rivets with a drift punch. Drill the head from each rivet with a 1/4" drill. Lower glass 5 to 6" and let it rest in door well.
3. Remove the retainer and division bar glass run attaching screw and washer assembly.
4. Remove the screw and washer assembly at the top of the division bar at door frame. Tilt the division bar and main glass forward and remove the weatherstrip from the top of the door frame.
5. Remove the stationary vent glass and weatherstrip from the door frame.
6. Position the retainer and division bar and main glass in an upright position. Pull the main glass and division bar above and outside the door frame. Swing the two assemblies (glass and division bar) 90° from the door frame and work the glass and

division bar upward and out of the door channel between the belt moldings.

Installation

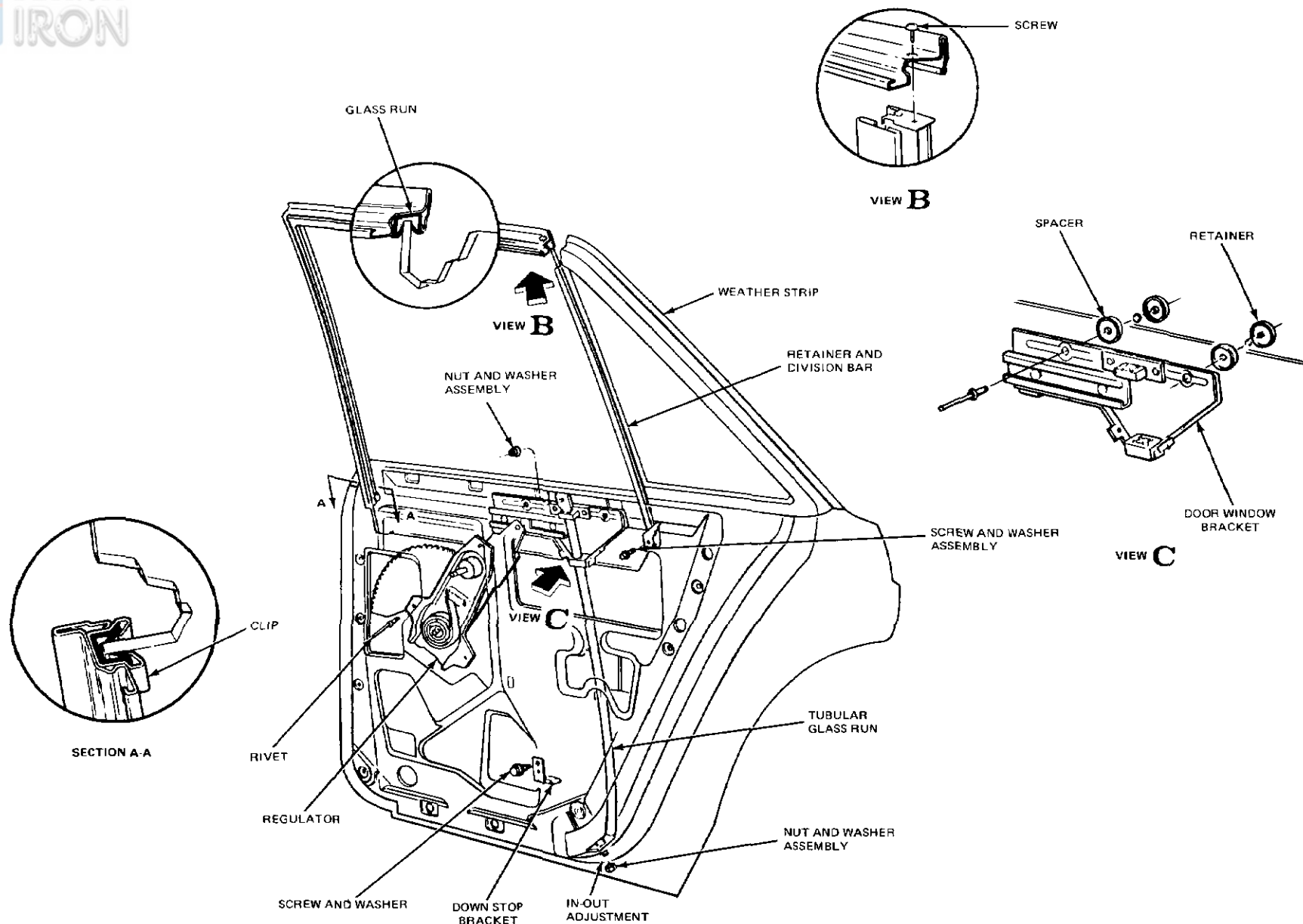
The Rear Door Glass, Rear Door Window Glass Channel, Division Bar Glass Run, and Retainer and Division Bar Assembly are pre-assembled prior to installing into the vehicle. Pre-assemble as follows:

1. Install glass channel to the glass using glass everseal tape (.065" thick x 3/4" wide x 17-3/4" long). Be sure to align the notches in the glass with the cutouts within the glass channel. Clear the tape from the channel cutouts for installing glass guides. (Step 2).
 2. Install the nylon front guide and lower guide into the glass channel slots and snap the mylar flocked glass run over the glass channel.
 3. Place the Retainer and Division Bar Assembly over the nylon guides and slide over the glass channel.
 4. Holding the rear door glass and retainer and division bar at 90° from the door, insert the retainer and division bar between the door belt weatherstrip, swing glass inboard to the belt and install loose in door channel.
- NOTE: Lubricate the belt weatherstrip with silicone or soapy solution for easier installation.**
5. Install stationary vent glass and weatherstrip firmly into rear of door frame.
 6. Install Run Assembly into door frame (front and top of door).
 7. Set the main glass and retainer and division bar into position and install top screw and washer assembly. Assure that sealer at screw head covers holes for tight seal.
 8. Install retainer and division bar attaching screw.
 9. Install (2) glass to glass bracket rivets or use 1/4" x 20 x 1" Hex head bolts and 1/4" x 20 nuts.
 10. Install door watershield and trim panel.

WINDOW REGULATOR—EXCEPT FAIRMONT AND ZEPHYR

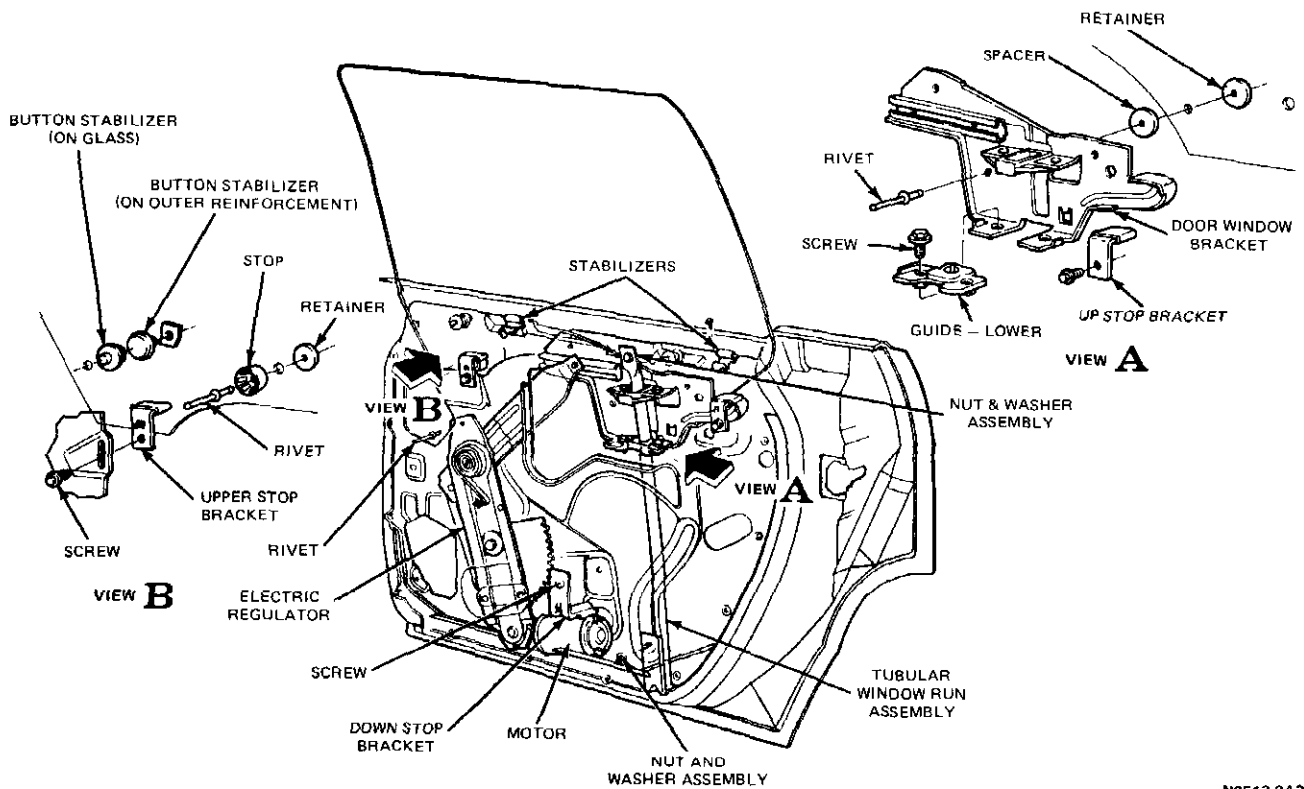
Removal

1. Remove the door trim panel and watershield and support the glass in the UP position.
2. If equipped with electric windows (except Ford, Mercury, Thunderbird, Lincoln Continental and Continental Mark V), remove the center pin from the motor bracket to inner panel attaching rivet with a drift punch. Then drill the head from the rivet with a 1/4 inch drill and remove the rivet. Disconnect the motor wires at the connector.



N2514-2C

FIG. 2 Adjustment Points—Granada and Monarch Rear Door



N2513-2A2

FIG. 3 Rear Door Window Mechanism—Lincoln Continental

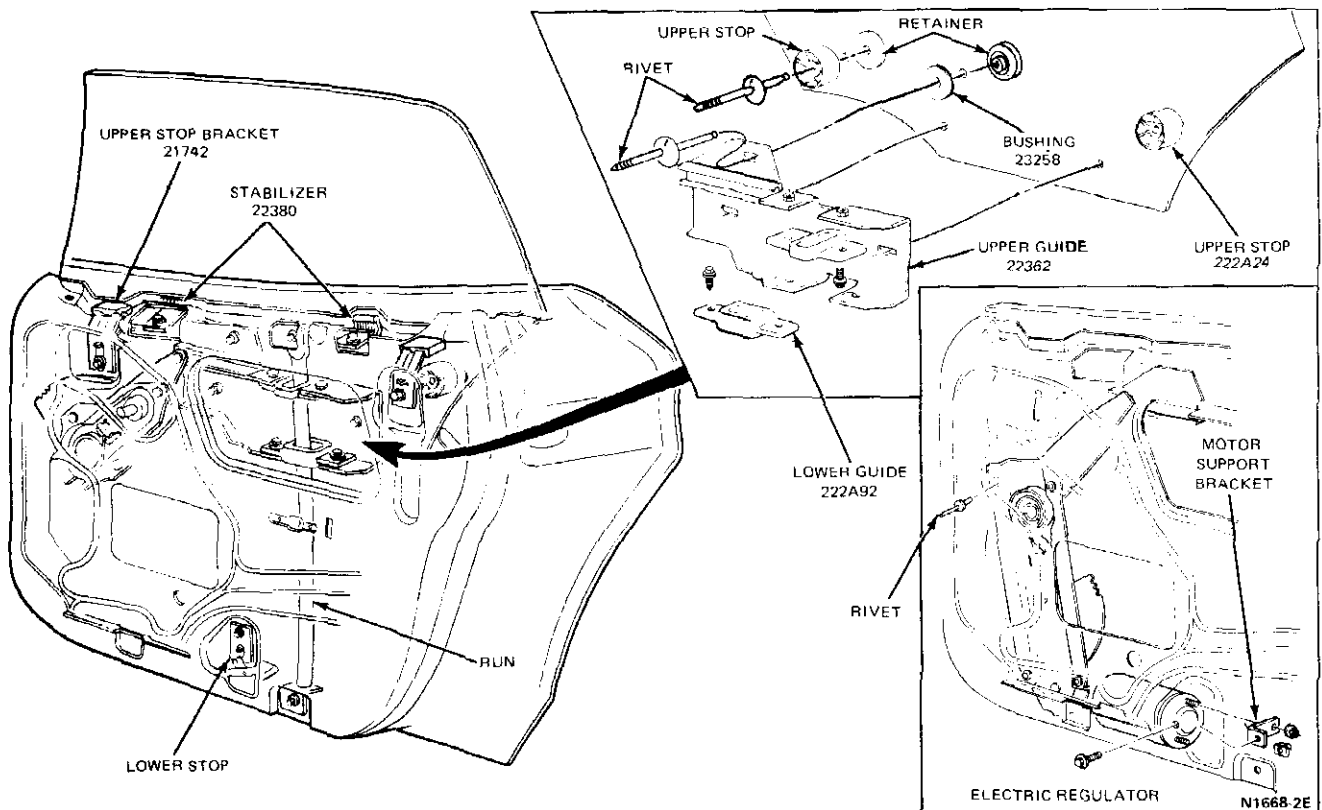
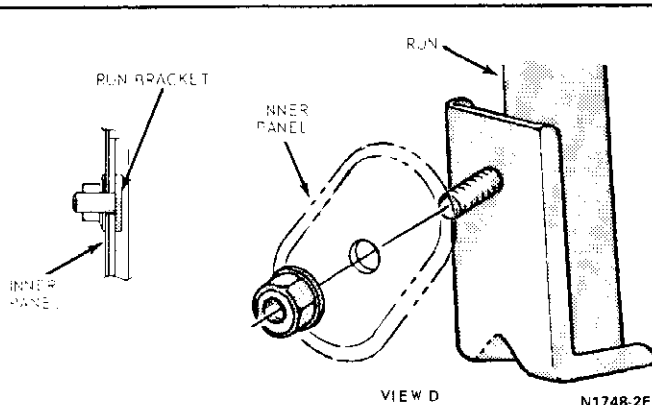
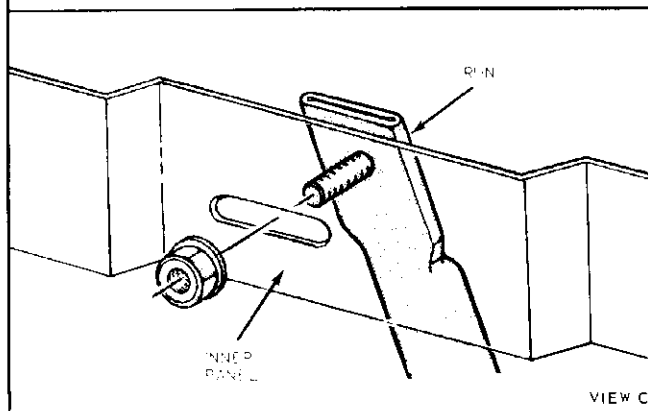
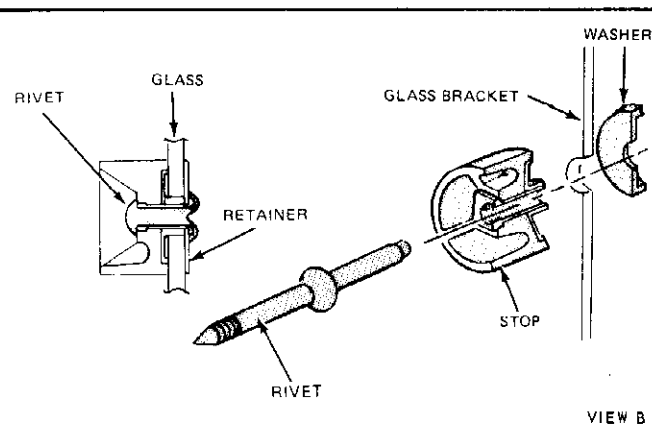
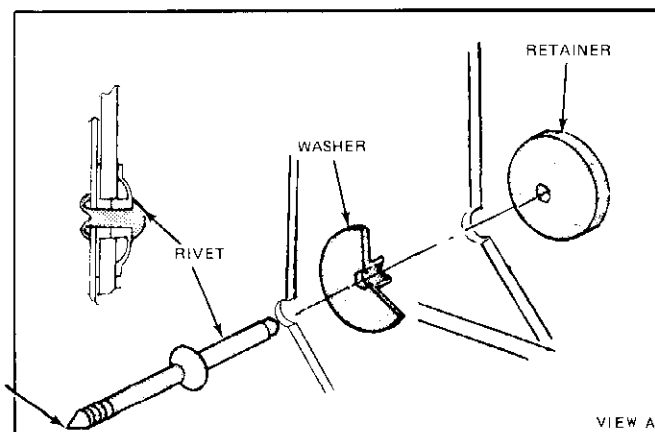
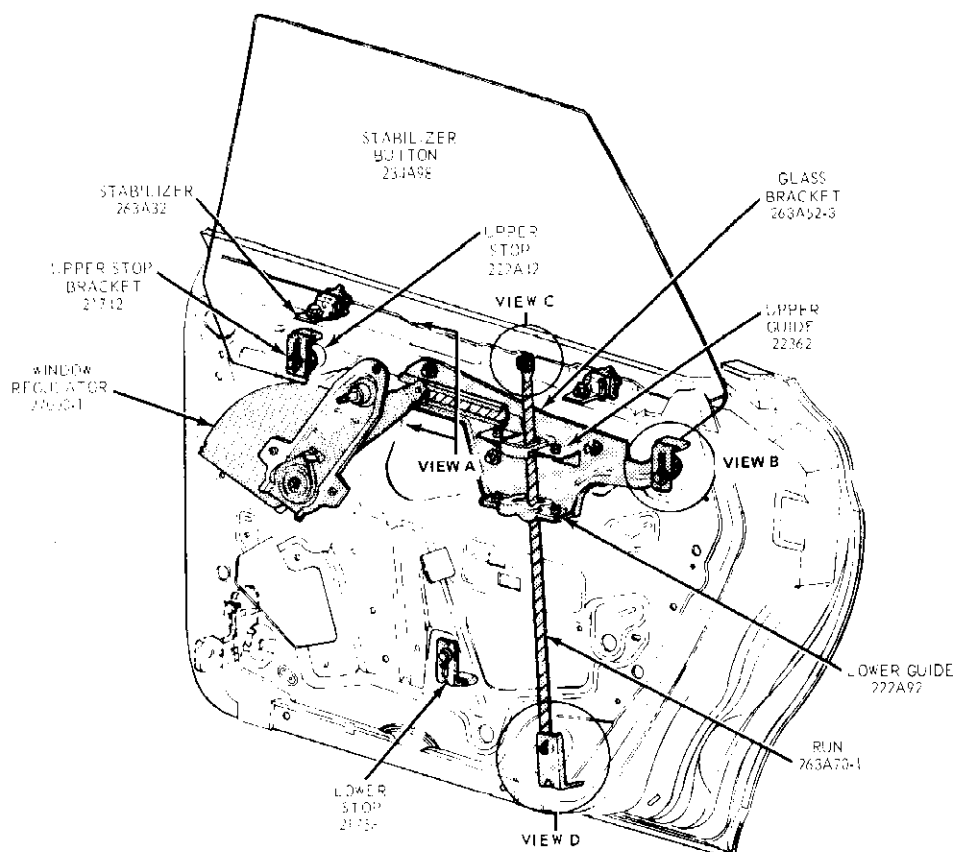
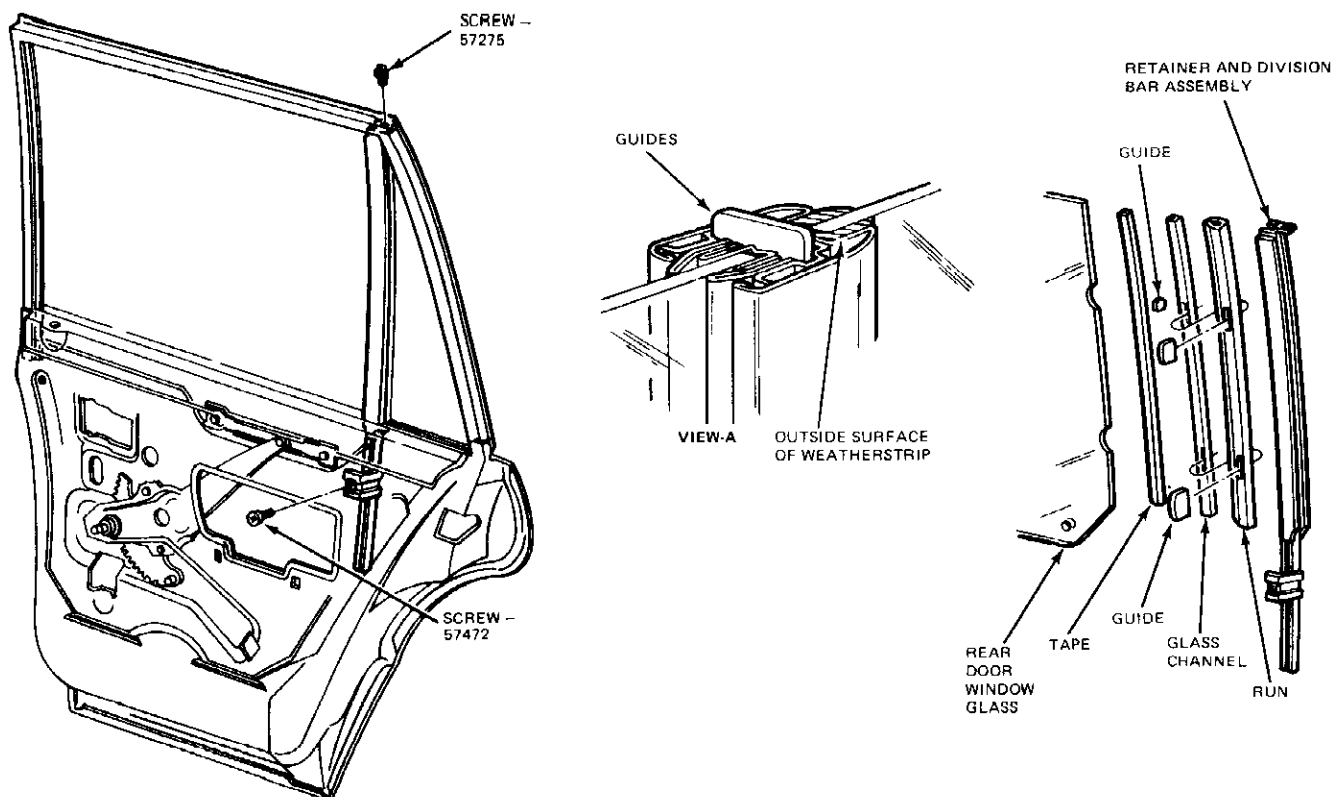


FIG. 4 Rear Door Window Mechanism—LTD II and Cougar



N1748-2F

FIG. 5 Rear Door Window Mechanism—Ford and Mercury



N2513-2A1

FIG. 6 Rear Door Window Mechanism—Fairmont and Zephyr

3. Remove the center pin from the regulator attaching rivets with a drift punch. Then drill the head from the regulator attaching rivets with a 1/4 inch drill.
4. Disengage the regulator arm from the glass bracket, and remove the regulator from the door.
5. If equipped with power windows, mount the regulator assembly in a vise. Drill a 5/16 inch hole through the regulator sector gear and the regulator plate. Install a 1/4 inch bolt and nut in the hole to prevent the sector gear from moving when the motor and drive assembly is removed. Remove the motor and drive from the regulator. Install the motor and drive on a new regulator.

Installation

1. Lubricate the window mechanism as outlined in Part 42-01.
2. Install nut and retainer assemblies on the regulator mounting plate and motor support bracket at the rivet attaching holes.
3. Position the window regulator into the door and insert the regulator arm roller into the glass bracket channel.
4. Position the regulator to the inner panel, and install 1/4-20x1/2 inch screw and washer assemblies to attach the regulator to the inner panel. Tighten the screws securely.
5. If equipped with electric windows, install a 1/4-20x1/2 inch screw and washer assembly to attach the motor bracket to the inner panel (except Ford, Mercury, Thunderbird, Lincoln Continental and Continental Mark V). Connect the motor wires at the connector.

6. Check the operation of the window mechanism. Then, install the watershield and trim panel on the door.

WINDOW REGULATOR—FAIRMONT AND ZEPHYR

Removal

1. Remove rear door trim panel and water shield.
2. Remove (3) attaching rivets. Remove the center pin from the rivets with a drift punch. Drill out the head of the rivet using 1/4" drill. Be carefull not to route or enlarge sheet metal holes during drilling.
3. Remove regulator arm roller from the glass bracket channel and remove the regulator from the door.

Installation

1. Lubricate the window mechanism as outlined in Part 42-01.
2. Install regulator into access hole in the inner panel.
3. Position the regulator arm roller into the glass bracket channel.
4. Install (3) rivets attaching the regulator to door inner panel (1/4"-20 x 1/2" bolt and 1/4"-20 nut and washer assemblies may be used as alternate).

WINDOW MOTOR AND/OR DRIVE

Removal

1. Remove the trim panel and watershield.
2. Disconnect the motor wires at the multiple connector.
3. All models except Ford, Mercury, Thunderbird, Lincoln Continental and Continental Mark V have

holes punched in the door panel for motor and drive removal. On models without access holes, use the dimples located on the inner door panel to drill three 3/4 inch holes in the door for access to the motor and drive attaching screws. The holes should be drilled with the glass in the **UP** position. The hole saw pilot drill should be as short as possible, about 1/4 inch beyond the saw.

- Working through the 3/4 inch holes, remove the three motor and drive-to-regulator attaching screws. Remove the motor and drive from the door.

Installation

- Position the motor and drive to the regulator and install the three screws **just snug—not tight**.
- Connect the motor wires at the connector and cycle the glass to assure gear engagement. After the gears are engaged, tighten the three motor and drive attaching screws.
- Check the window operation and install body tape over the drilled hole (Ford, Mercury, Thunderbird, Lincoln Continental and Continental Mark V). Then, install the watershield and trim panel.

RUN AND/OR GUIDES

Removal

- Remove the trim panel and watershield from the door.
- Support the glass and remove four screws attaching the upper and lower guides to the glass bracket (Figs. 2, 3, 4 and 5).
- Remove the run upper and lower attaching screws, and remove the run and guides from the door.
- Remove the guides from the run (Figs. 2, 3, 4 and 5).

Installation

- Assemble the guides on the run making sure they are in the correct order (Figs. 2, 3, 4 and 5).
- Position the run in the door and the guides to the glass bracket.
- Install the run upper and lower attaching screws, and the guide attaching screws.
- Adjust the run and guides as outlined in the Adjustment Section.
- Install the watershield and door trim panel.

SPECIFICATIONS

SINGLE TUBULAR RUN REAR DOOR WINDOW MECHANISM TORQUE SPECIFICATIONS	
Description	Torque
Glass Stop Attaching Screw ①	6-11 ft-lb
Run Attaching Screws	6-11 ft-lb
Stabilizer Attaching Screws	6-11 ft-lb
Upper Stop Bracket	6-11 ft-lb
Motor Bracket-to-Motor	13-32 in-lb
Motor Bracket and/or Regulator-to-Inner Panel ①	6-11 ft-lb
Guide-to-Glass Bracket	6-11 ft-lb
Glass-to-Glass Bracket ①	6-11 ft-lb

① Rivets are used in production.