INTERIOR TRIM, SEATS AND CONVERTIBLE TOP

GROUP 18

PART 18-1 INTERIOR TRIM

1 REMOVAL AND INSTALLATION

DOOR TRIM PANEL

REMOVAL AND INSTALLATION

1. Remove the inside lock and window regulator handles (Part 17-3).
2. Remove the lock inside push button.
3. Remove the weatherstrip retainer from the upper rear corner of the door. Remove the front and rear trim panel retainer and remove the trim. Disconnect the courtesy light wires (Fig. 1).
4. Transfer the trim panel mouldings and courtesy light to the new trim panel.
5. Install the trim panel (connecting the courtesy light wire) to the door and install the retainers and weatherstrip retainer.
6. Install the lock inside push button and inside window and lock handles.

QUARTER TRIM PANEL

REMOVAL AND INSTALLATION

1. Remove the quarter arm rest (Fig. 2).
2. Remove the rear seat cushion by lifting the front edge off the retainers and pulling forward. Remove the seat back retaining screws and pull the seat back downward off the retainers.
3. Remove the quarter trim retaining screws and the quarter trim (on manual window cars, the window handle must be removed before the trim (Part 17-3). Disconnect the window control switch wiring on cars with power windows.
4. Transfer the window switch to the new trim panel.
5. Install the quarter trim (connecting the window switch wires), and install the window handle on manual window cars.
6. Install the rear seat back, seat cushion and arm rest.

HEADLINING

REMOVAL AND INSTALLATION

1. Remove the sun visor assemblies, and the windshield side and upper garnish mouldings (Part 17-3). Pull the staples out of the windshield header tacking strip and loosen the headlining (Fig. 4).
2. Remove the back window garnish mouldings (Part 17-3). Then pull the staples out of the rear window tacking strip and loosen the headlining.
3. Remove the coat hooks and roof interior side mouldings (Fig. 3). Disconnect the battery and remove the dome light assembly and disconnect the light wires.
4. Remove the quarter arm rests, seat cushion, seat backs and package tray.
5. Pull the staples out of the roof side tacking strip and loosen the headlining.
6. Starting at the front of the car, remove the headlining supports. At the rear support, release the two rear support retainers from the roof rear rail.
7. If a new headlining is to be installed, lay both the old and new headlinings on a clean work table and transfer the supports in sequence to the new headliner listings (Fig. 4).

Roof bows are color coded at each end. When ordering new headlining supports, be sure to note the color at each end of the bow.

8. Install the rear support in the side rails, and hook the two rear support retainers to the support and the roof rear rail.
9. Install the other headlining supports workings from the rear toward the front of the car.
10. The headlining should be centered and the seams straight. Pull the headlining forward tight enough to remove all wrinkles, and staple the headlining to the windshield header tacking strip, starting at the center and working toward the sides. Cut off the excess material.
11. Staple the headlining around the rear window, starting at the center and working toward the sides. Pull the headlining just tight enough to remove the wrinkles. Cut off the excess material around the rear window.
12. Staple the headlining to the roof side tacking strip. Pull the

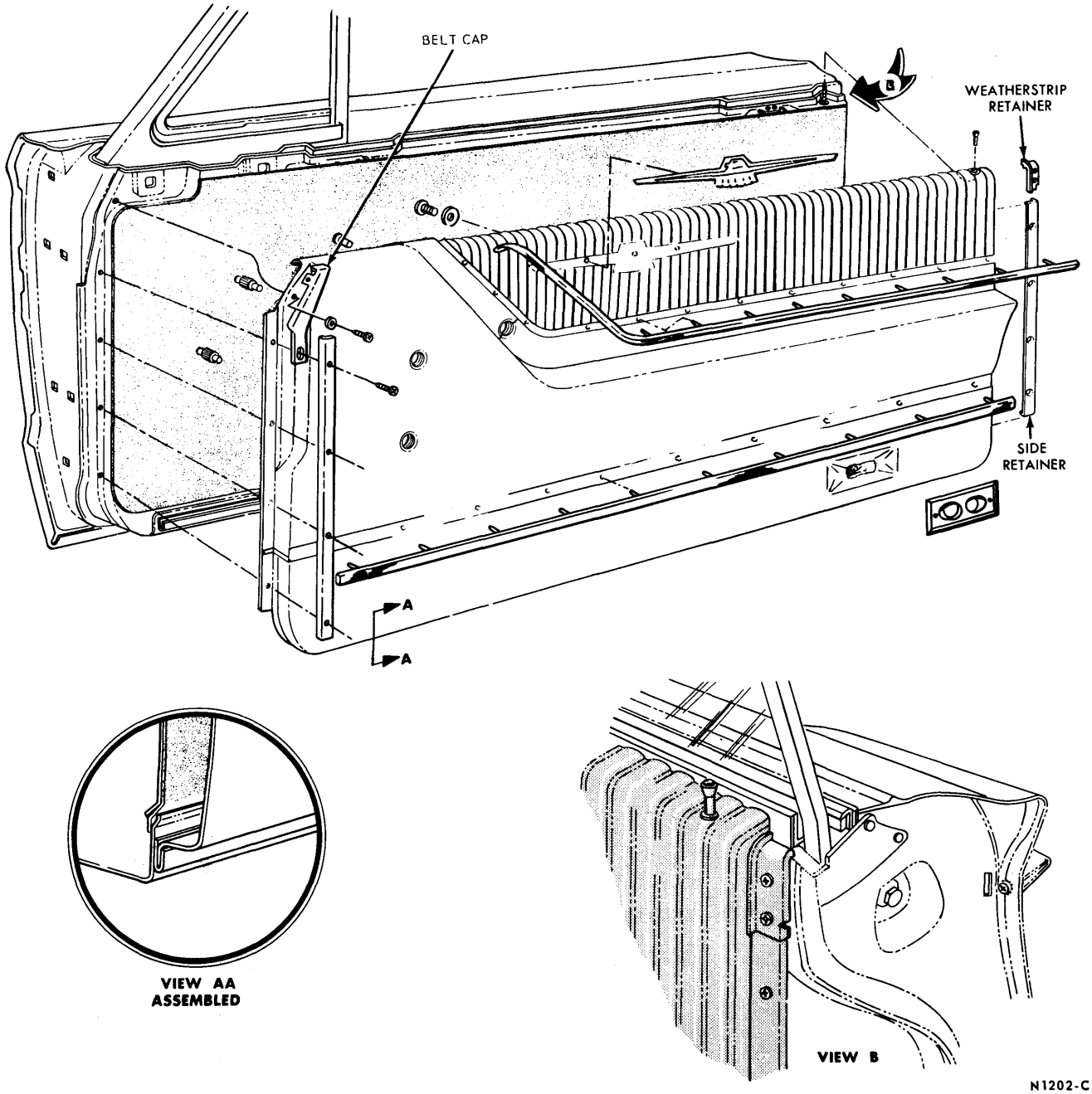


FIG. 1—Door Trim Panel

headlining just tight enough to remove wrinkles. Cut off the excess headlining.

13. Install the roof interior side mouldings, coat hooks, and garnish mouldings.

14. Install the windshield side and upper garnish mouldings, and the sun visor assemblies.

15. Install the package tray, rear seat backs, seat cushion and quarter arm rests.

16. Install the rear window garnish mouldings.

If the headlining is slightly wrinkled, spray steam through the dome light opening. As the headlining dries, it will shrink slightly, removing most wrinkles and sags.

17. Connect the wires to the dome light and install the assembly.

18. Connect the battery cable.

INSTRUMENT PANEL, SAFETY PAD

REMOVAL

1. Disconnect the battery.

2. Remove the windshield wiper arms and blades.

3. Remove the twelve cowl top vent grille retaining screws and remove the cowl top vent grille.

4. Remove the two instrument panel retaining screws from the center outer top cowl area (Fig. 5).

5. Remove the front seat track-to-floor retaining nuts from the underside of the floor and remove both front seat and track assemblies. (Disconnect power seat wiring con-

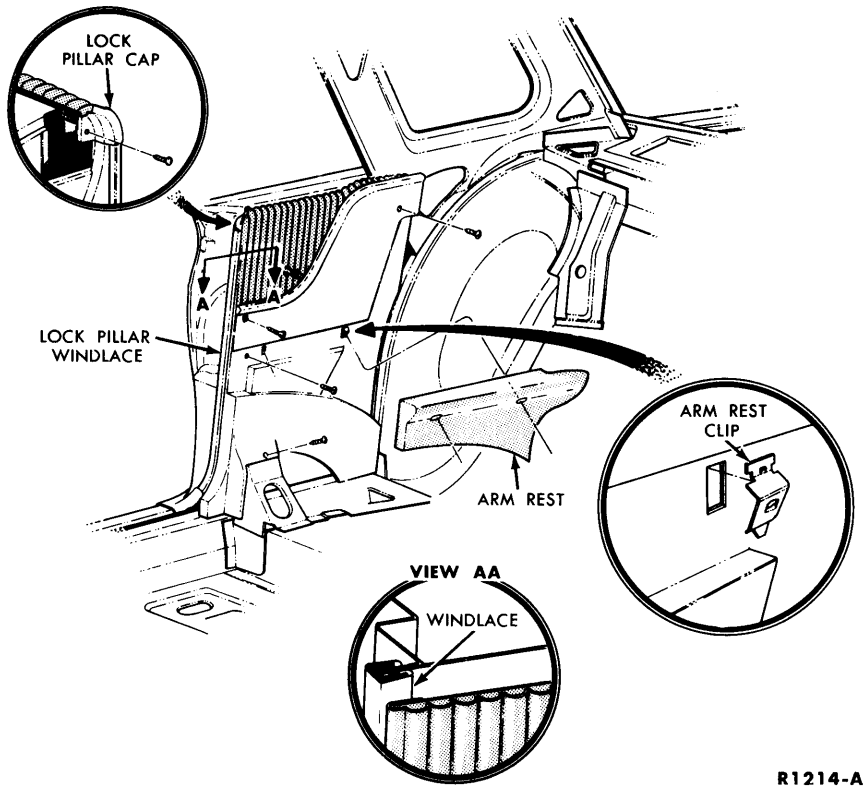


FIG. 2—Quarter Trim Panel

nectors on units so equipped).

6. Remove the two retaining screws from each console front moulding and remove the front console mouldings.

7. Remove the four retaining screws from each of the side front console moulding retainers and remove the moulding retainers (Fig. 5).

8. Remove the finish moulding cap retaining screws and remove the finish moulding cap.

9. Remove the radio knobs, bezel nuts and bezel.

10. Remove the air conditioning knobs (if so equipped) and heater control knobs.

11. Remove the six console finish panel retaining screws.

12. Disconnect the accessory switch and wiring connectors and remove the console finish panel.

13. Remove the headlight switch knob and bezel.

14. Remove the six instrument finish panel retaining screws and remove the instrument finish panel (Fig. 6).

15. Remove the five ignition switch and radio access panel retaining screws and remove the radio access panels.

16. Remove the ignition switch wiring connector retaining nut.

17. Remove the three left instrument finish panel extension retaining screws and remove the left instrument panel extension (Fig. 6).

18. Remove the console upper rear moulding retaining screws and remove the console upper rear moulding.

19. Remove the rear seat cushion.

20. Remove the three retaining screws from each lower edge moulding and remove the mouldings.

21. Remove the five retaining screws from each lower edge moulding retainer and remove the retainers.

22. Remove the right lower pad retainer moulding by pulling the moulding off its retainers.

23. Remove the two capscrews from each end of the lower lip of the right lower finish panel and three screws from the face of the right lower finish panel and remove the right lower finish panel.

24. Remove the four console-to-instrument panel retaining screws.

25. Remove the six console-to-floor retaining screws and slide the console back away from the instrument panel.

26. Remove the windshield wiper, windshield washer and the left and right air control knobs.

27. Remove the four clock hous-

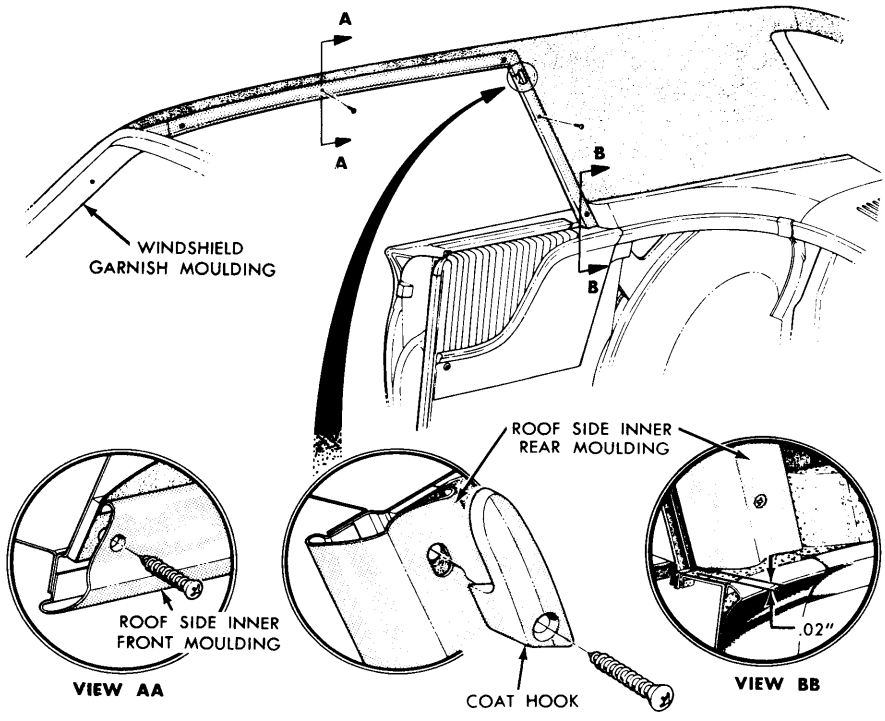
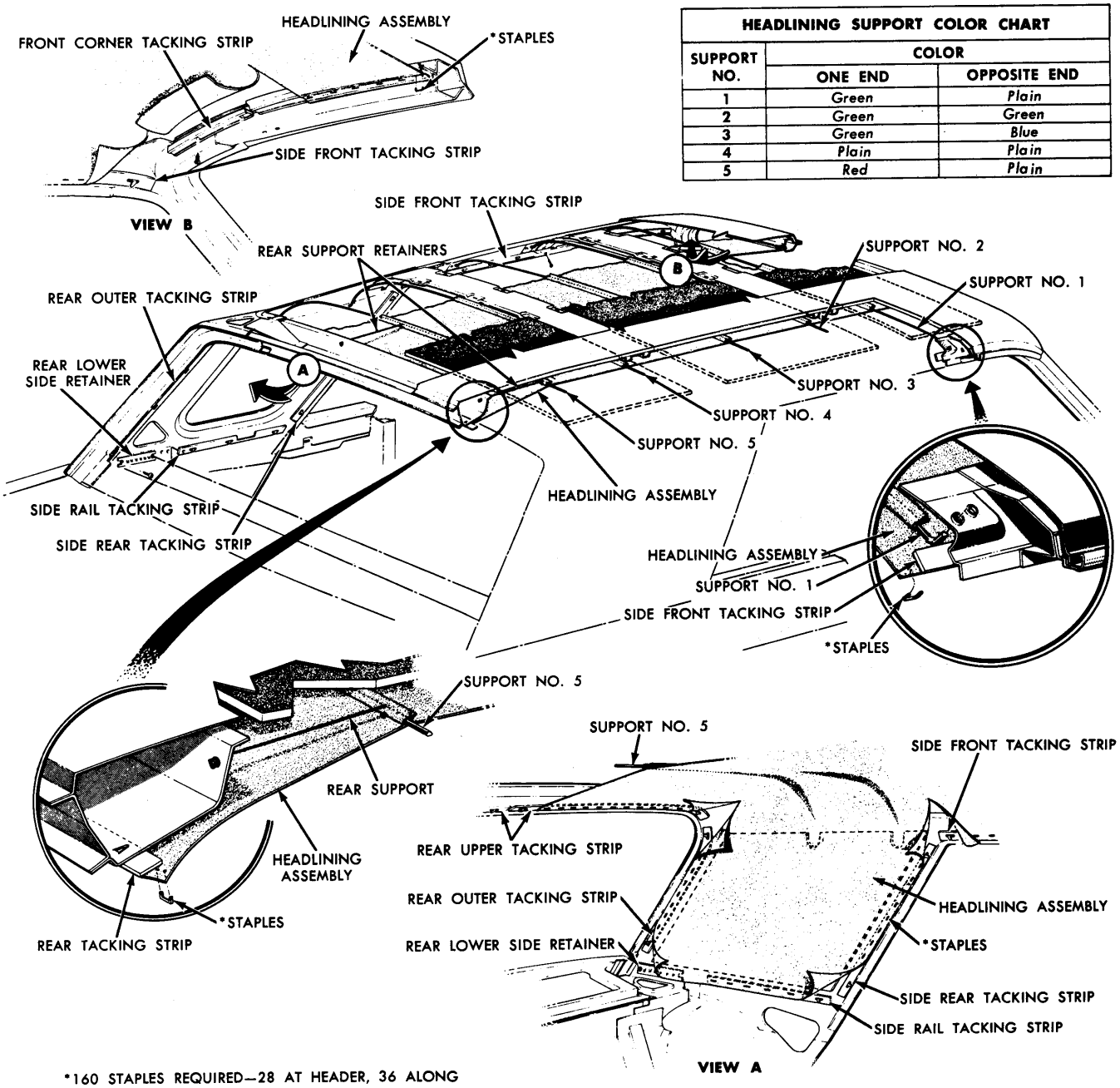


FIG. 3—Body Side Interior Mouldings

HEADLINING SUPPORT COLOR CHART		
SUPPORT NO.	COLOR	
	ONE END	OPPOSITE END
1	Green	Plain
2	Green	Green
3	Green	Blue
4	Plain	Plain
5	Red	Plain



*160 STAPLES REQUIRED—28 AT HEADER, 36 ALONG EACH SIDE RAIL, AND 60 AT BACK WINDOW

N1342-A

FIG. 4—Headlining Installation

ing retaining screws.

28. Disconnect the clock wiring connectors and remove the clock housing.

29. Remove the three screws retaining the Instrument panel and console moulding and remove the moulding.

30. Remove the right radio access panel retaining screw and remove the access panel.

31. Remove the windshield interior moulding retainer screws and remove the windshield interior mouldings.

32. Remove the three retaining screws from each side cowl panel and remove the side cowl panels.

33. Remove two bolts from the steering column face plate support bracket and two bolts from the face plates.

34. Remove two bolts from the upper steering column support bracket.

35. Position the steering column downward and cover it to prevent scratching the finish.

36. Remove the four air conditioning unit grille retaining screws and remove the grille.

37. Remove two air conditioning duct retaining screws and position the duct towards the firewall.

38. Disconnect the speedometer cable from the speedometer.

39. Remove the two instrument panel retaining screws located at the center inside of the upper cowl.

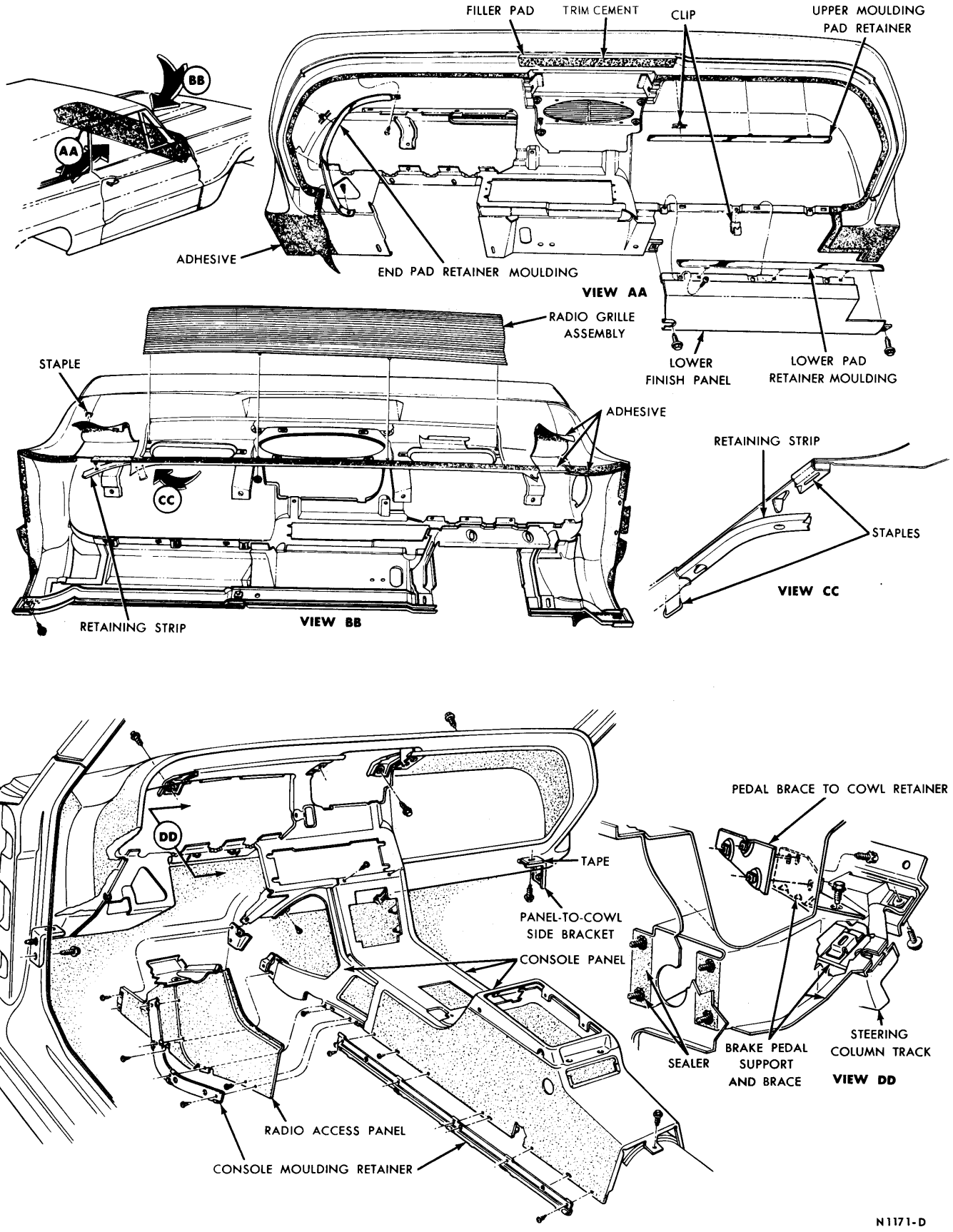


FIG. 5—Instrument Panel

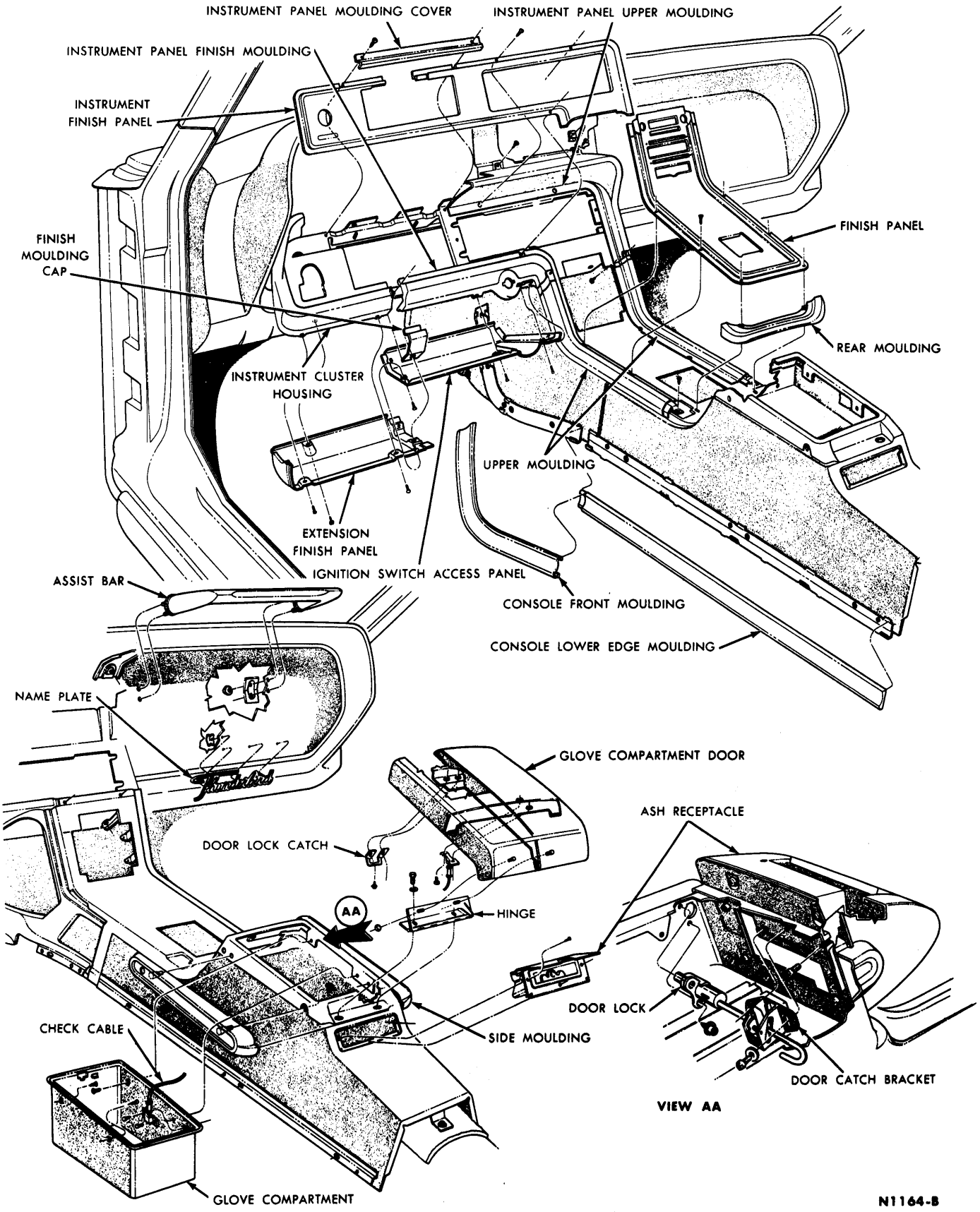


FIG. 6–Console and Finish Mouldings

40. Remove the radio speaker (four wing nuts).
41. Remove the windshield wiper, washer and left and right air control assembly bracket retaining screws.
42. Remove the one left instrument panel-to-pillar retaining bolts.
43. Disconnect the defroster hoses from their nozzles and disconnect the instrument panel wiring connectors.
44. Remove the instrument panel and place it on a bench.
45. Remove the upper right instrument panel pad retaining moulding.
46. Remove the eight instrument cluster retaining screws and position the cluster toward the center to provide access to the left end pad retainer moulding retaining screws.
47. Remove the left end pad retainer moulding.
48. Remove the six speaker grille retaining nuts and remove the speaker grille.
49. Pull the pad free from the adhesive and remove the pad.

INSTALLATION

1. Clean old adhesive from the instrument panel surface.
2. Apply adhesive to the instrument panel and position the new instrument panel pad in place.
3. Staple the pad to the pad retaining strips.
4. Install the radio speaker grille.
5. Install the left end pad retainer moulding.
6. Position the instrument cluster on the instrument panel and install the eight retaining screws.
7. Install the upper right instrument panel pad retainer moulding.
8. Carefully position the instrument panel assembly in the car.
9. Connect the wiring connectors and connect the defroster hoses to their outlet nozzles.
10. Install the two instrument panel retaining screws at the center inside upper cowl.
11. Connect the speedometer cable to the speedometer.
12. Install the radio speaker.
13. Install the windshield wiper, washer and air control assembly bracket.
14. Install the two upper instrument panel retaining screws from the upper outer cowl opening.
15. Install the left and right instrument panel to side cowl bracket retaining screws.
16. Position the console on the floor and to the instrument panel.
17. Install the console rear retainer.
18. Install the left and right console rear lower moulding retainers.
19. Install the console-to-instrument panel retaining screws.
20. Install the right lower finish panel.
21. Install the right lower pad retainer moulding.
22. Install the right radio access panel.
23. Install the right side front console moulding retainer.
24. Install the right side front console moulding.
25. Install the air conditioning duct.
26. Install the air conditioning grille and retaining screws.
27. Install the left and right side cowl panels.
28. Install the two bolts retaining the instrument panel to the steering column support bracket.
29. Install the steering column face plate support bracket four retaining bolts.
30. Install the steering column movable face plate and adjust.
31. Install the left radio access panel.
32. Install the left lower extension finish panel.
33. Install the left front console moulding retainer.
34. Install the left front console moulding.
35. Install the instrument cluster and console upper left moulding.
36. Install the ignition switch and access panel and connect the switch wiring connector.
37. Install the left lower finish moulding cap.
38. Connect the clock wiring and install the clock housing assembly.
39. Install the windshield wiper and air control knobs.
40. Install the console rear upper moulding.
41. Connect the console accessory switch wiring connectors and install the console finish panel.
42. Install the instrument finish panel.
43. Install the air conditioning and heater control knobs.
44. Install the headlight switch bezel and knob.
45. Connect the battery and check the instruments and controls for proper operation.
46. Install the outer cowl panel and windshield wiper bezels.
47. Install the windshield wiper arms and blades.
48. Install the windshield interior garnish mouldings.
49. Install the rear seat cushion.
50. Install the front seat and track assemblies and connect the seat control wiring connectors.

CARPETS

1. Remove the right and left quarter arm rests.
2. Remove the rear seat cushion from the car.
3. Remove the right and left front seat and seat track assemblies from the car.
4. Remove the seat belt anchor bolts and remove the seat belts.
5. Remove the right and left door scuff plates and remove the clips from the door sill pinch welds.
6. Remove the right and left cowl trim panels.
7. Unsnap the console right and left side mouldings (Fig. 6).
8. Remove the console right and left side moulding retainers.
9. Remove the carpet retaining screws and remove the carpet from the car (Fig. 7).
10. Position the carpet to the floor pan and cement it in place with trim cement C2AZ-19C525-A (Fig. 7).
11. Install the carpet retaining screws (Fig. 7).
12. Install the console side moulding retainers and mouldings.
13. Install the right and left cowl trim panels.
14. Install the clips on the door seal pinch weld and install the door scuff plates.
15. Install the seat belts.
16. Install the front seat and seat track assemblies.
17. Install the rear seat cushion and the right and left quarter arm rests.

LANDAU TOP

REMOVAL

1. Remove the roof side quarter ornament and belt moulding as described in Section 17-2.
2. Remove the back window side and top mouldings.
3. Remove the windshield (see Section 17-3).
4. Remove the sealer from the drip rails covering the top cover side retainers and rivets.
5. Using a 0.128-0.132 inch diameter drill, remove the pop rivets which attach the retainer strips to the right and left drip rails (Fig. 9).

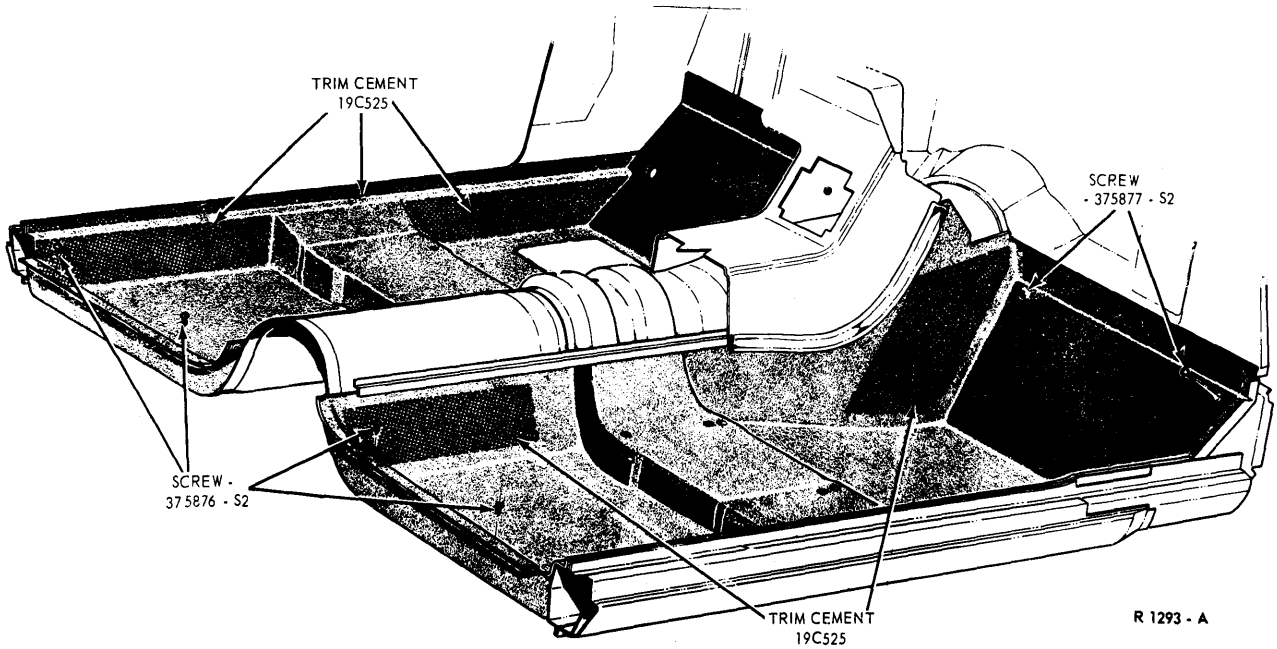


FIG. 7—Carpet Installation

Remove the retainer strips, and clean the sealer from the drip rails.

6. Remove all top cover retaining staples, screws and clips and remove the cover (Fig. 9).

7. If necessary to remove the cover pad from the roof, clean all old sealer from the roof panel.

8. Remove all old sealer and/or cement from the roof panel and drip rail areas with naphtha solvent or equivalent. **It is extremely important that the entire roof and drip rails are thoroughly cleaned. Also, use extreme safety precaution while using naphtha or equivalent.**

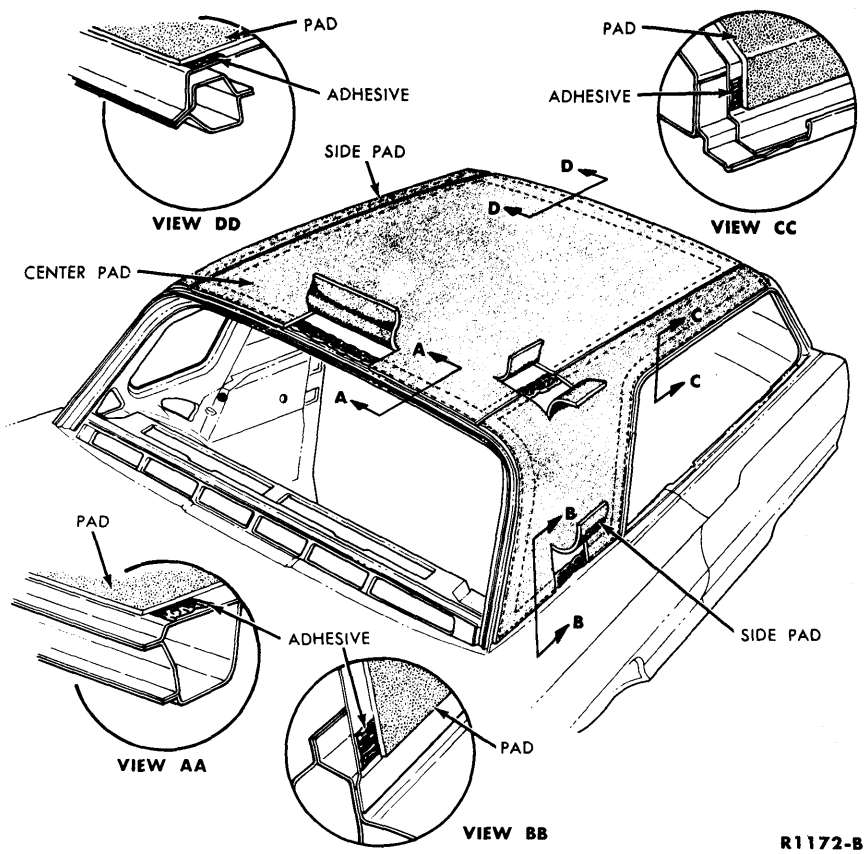


FIG. 8—Landau Top Cover Pad Installation

PAD INSTALLATION

Carefully locate and cement the center and side pads to the left panel. Adhesive should be applied to an area about ⅜-inch wide on the outside edge of the pads and to the corresponding area of the pad as shown in Fig. 8. After the pad is installed, trim off any excess material.

COVER INSTALLATION

It is recommended that the ⅛-inch oval head blind rivet Part No. 378906-S (Pop Rivet) be substituted for the staples.

The ⅛-inch oval head blind rivet Part No. 378906-S (Pop Rivet) and installing pliers (Mfg. Part No. PRP-26-A) can be procured from: Pop Rivet Division, United Shoe Machinery Corporation, Sheldon, Connecticut or from their local distributor.

Seal all unused holes with AB-19560-A Sealer. Seal staple holes with C1AZ-19627-A pressure sensitized tape.

1. Carefully position the outside cover on the pad and roof panel. Center punch marks, fore and aft, have been provided in the cover for centering purposes. Use adhesive

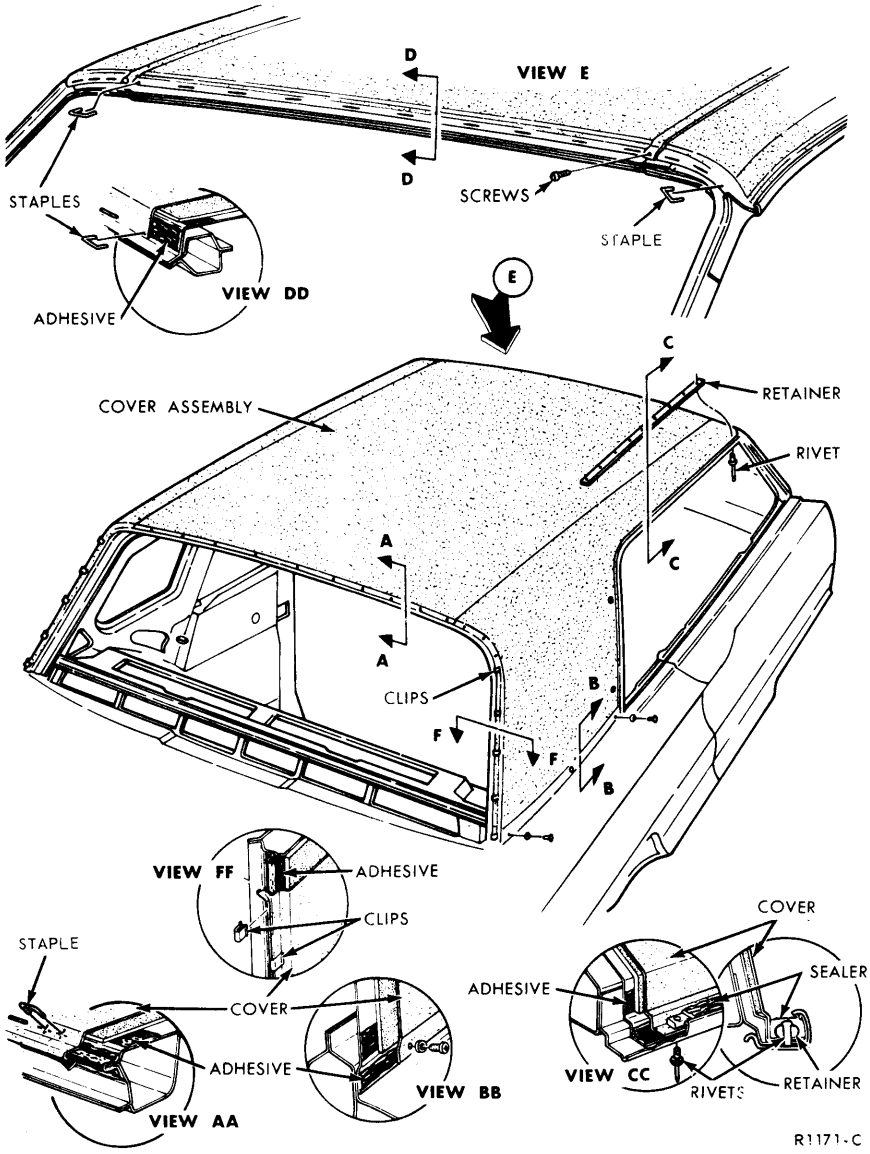


FIG. 9—Landau Top Cover Installation

C2AZ-19C525-A to cement the cover at the header and back window pinchweld flanges (Fig. 9). **The cover should be wrinkle free before installing. With the cover draping freely, a heat lamp application will remove the wrinkles. Do not overheat the cover.**

2. Apply trim cement around the edges of the cover and using a 0.128-0.132 inch drill, pierce the vinyl material and drill twenty eight holes at the approximate locations of the sealed staple holes. Install pop rivets in each hole.

3. Position both drip rail retainers and, using the same drill referred to above, pierce the vinyl at each of the holes. Install the pop rivets from the underside of the drip rail.

4. Repeat the riveting at the back window and along the belt line.

5. Trim excess cover material from around the entire perimeter.

6. Apply sealer C3AZ-19562-A (for white tops) or sealer C3AZ-15962-B (for black or darker colored tops) over the entire surface of the drip rail retainers. With the drip rail properly sealed, a minimum depth of ⅛ inch should be retained for adequate water drainage. **Place masking tape on the cover assembly for the entire length of the drip rail before applying sealer. After sealer has been applied, remove the tape. (Refer to Fig. 9).**

7. Install five flange clips along each side of the rear window (Fig. 9).

8. From the underside of the roof panel, pierce the roof outside rear center moulding retainer holes. Install the roof outside mouldings, exercising care to ascertain that all holes are adequately sealed.

9. Locate and install the roof quarter outside ornaments and belt mouldings.

10. Install the windshield (see Part 17-3).

PART 18-2 SEATS

1 POWER SEATS

DESCRIPTION AND OPERATION

The power seat mechanism consists of a reversible electric motor, control switch, motor control relay, gear housing and screw shaft, and two solenoid actuated nuts.

The gear housing and screw shaft consists of a driving worm gear and a driven gear which rotates the screw shaft. The driving worm gear is connected to the motor by a rubber coupling.

The horizontal and vertical nut and solenoid assemblies are meshed to the screw shaft and connected to the seat track assembly.

The horizontal and vertical nut and solenoid assemblies are identical in construction. Each assembly consists of an internally threaded nut coupled with a locking solenoid. When the solenoid is energized, the internally threaded nut is locked by the solenoid pawl (ball) engaging a notch on the nut. As the screw shaft is rotated through the locked nut, the nut and solenoid move along the shaft and move the seat track.

2 RECLINING SEAT

DESCRIPTION AND OPERATION

The reclining seat mechanism consists of a seat actuator and control cable assembly and a seat-adjusting handle. The seat actuator is located in the seat back. It is connected to the adjusting handle, located at the seat back right side pivot, by a control cable which is routed through the seat back (Fig. 4).

The seat back reclining operation is controlled by the adjusting handle. When the handle is raised, the control cable releases a clutch in the seat actuator, allowing the seat back to recline. When the handle is released, the clutch engages and locks the actuator, thereby locking the seat back in position.

3 DIAGNOSIS AND TESTING

SEAT WILL NOT OPERATE

If both front seats are power operated and one seat is inoperative, the source of trouble is between the junction block and the inoperative seat mechanism.

1. Disconnect the red-blue stripe and the black wires, under the seat, which lead to the junction block under the console panel.

With a self-powered test light check the black wire to see if the system is properly grounded. If the black wire is not grounded, remove the console panel (see Part 17-3) and check the connections at the junction block, and repair as necessary.

2. Check the red-blue stripe wire for voltage. If voltage is not available, use a voltmeter to check both terminals of the circuit breaker located in the fuse panel. If voltage is available on both sides of the circuit breaker, remove the console panel and check the terminal of the junction block for voltage. If voltage is available at this point, repair or replace the wire between the junction block and the seat assembly. If voltage is not available at the junction block, repair or replace the wire from the circuit breaker to the junction block.

If voltage is available at only one terminal of the circuit breaker, replace the circuit breaker.

3. If voltage is available at the red-blue stripe wire, under the seat assembly, check the connections from the red-blue stripe wire to the seat relay for broken or loose wires. Repair or replace the wires as necessary. If the wires are all right, check the black wire at the motor for proper connection.

4. Separate the seat control switch wire connectors enough to insert a voltmeter test lead and still leave the wire connector functional. Check for battery voltage at the black-white stripe wire. If voltage is not available, repair or replace the black-white stripe wire.

Connect a voltmeter from each of the switch terminals to ground and operate the switch. If voltage is not available at any one of the switch terminals when the switch is operated, replace the seat control switch.

5. Separate the motor green wire at the connector. Operate the seat control switch and test the relay green wire for voltage. Repair or replace the relay, wires, or motor.

MOTOR RUNS BUT SEAT DOES NOT MOVE

Check for the following:

1. Loose or broken motor coupling.
2. Defective seat regulator worm, gear, or screw shaft.
3. Broken or loose wires from control switch to solenoid.
4. Defective solenoid and nut assembly.

SEAT MOVES IN ONE PLANE ONLY

Check for the following:

1. Connect a voltmeter from each of the switch terminals to ground, and operate the switch. If voltage is not available at any one of the switch terminals when the switch is operated, replace the switch.
2. Check the inoperative circuit solenoid and limit switches for proper operation.

4 REMOVAL AND INSTALLATION

POWER SEAT MECHANISM

REMOVAL

1. From under the car, remove the seat track retaining nuts and washers from the 4 studs. Disconnect the wires under the seat which lead to the junction block and remove the seat assembly.
2. Place the seat assembly on a clean work area and remove the front seat track shields and the four bolts retaining the seat track to the seat assembly. Disconnect the wires at the seat control switch and remove the seat track mechanism.

INSTALLATION

1. Connect the control switch wires and place the seat track mechanism in position on the seat assembly. Install the retaining bolts.
2. Install the front seat track shields.
3. Place the seat assembly in the car and install the washers and nuts on the studs which retain the seat track to the floor panel. Connect the seat wires to the junction block wiring harness. Test the seat assembly for proper operation.

MOTOR

1. Remove the two nuts and washers retaining the motor to the drive assembly and remove the motor. Remove the rubber coupling from the motor shaft. Transpose the new motor leads for the defective motor leads.
2. Install the rubber coupling on the motor. Place the motor on the drive assembly, making sure that the rubber coupling is properly installed on the drive gear shaft, and install the motor retaining nuts with washers.

SEAT TRACK

1. Working under the car, remove the seat track retaining stud nuts and washers. Then remove the seat assembly from the car and place it in a clean work area.
2. Remove the screws which retain the seat track assembly to the seat cushion, and remove the track assembly.
3. Disconnect the seat track brace and latch release rod from the track being replaced, and connect these parts to the new track.
4. Loosely install the track-to-floor retaining studs in the seat track assembly (Fig. 1).
5. Install the track assembly on the seat cushion, and tighten the screws.
6. Position the seat in the car and, working under the car, install the washers and nuts on the retaining studs.

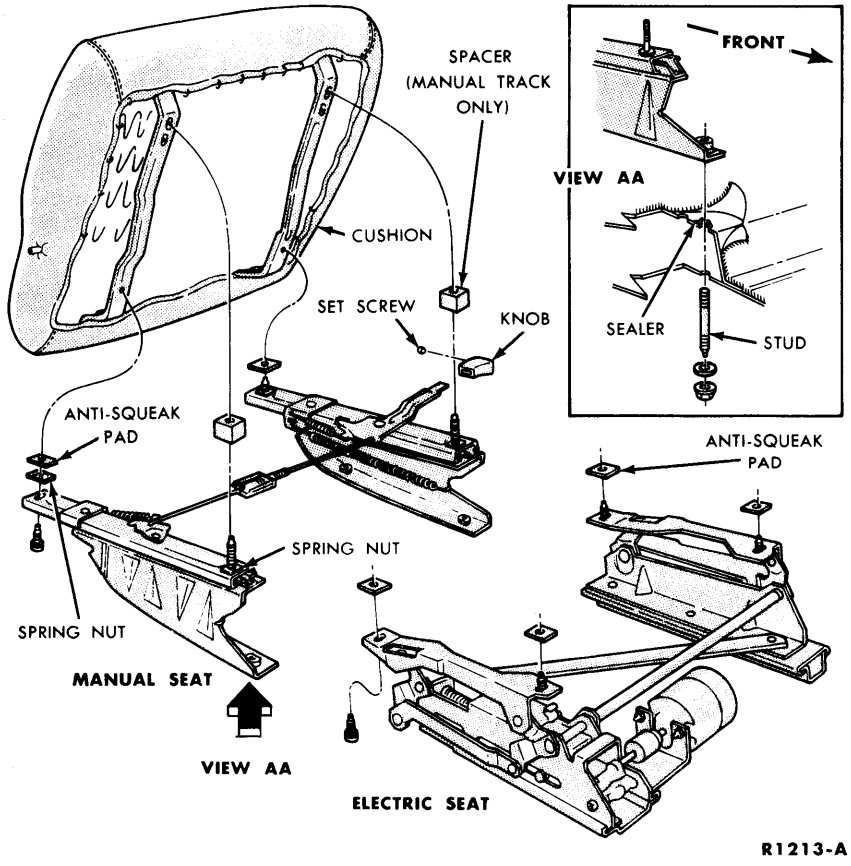


FIG. 1—Seat Track Installation

FRONT SEAT

REMOVAL

From underneath the car, remove the seat track retaining stud nuts and washers. Remove the seat assembly from the car and place it on a clean work area.

INSTALLATION

Adjust the seat stops as required. Place the seat assembly in the car and install the nuts and washers on the studs that retain the seat tracks to the floor panel.

REAR SEAT BACK

1. To remove the rear seat back, first remove the rear seat cushion. Remove the two screws that retain the bottom edge of the rear seat back to the body (Fig. 2).
2. Lift the bottom of the seat back slightly outward to allow the hanger wire to clear the retaining brackets. Remove the rear seat back.
3. Position the seat back so that the hanger wire engages the retaining brackets.
4. Install the lower retaining screws.
5. Install the rear seat cushion.

REAR SEAT BACK CENTER ARM REST

1. Lower the arm rest and remove the two screws attaching the arm rest trim flap to the package tray.
2. Remove the arm rest hinge screws and remove the arm rest.
3. Position the arm rest in place and install the hinge attaching screws.
4. Position the arm rest trim flap to the package tray and install the two attaching screws.

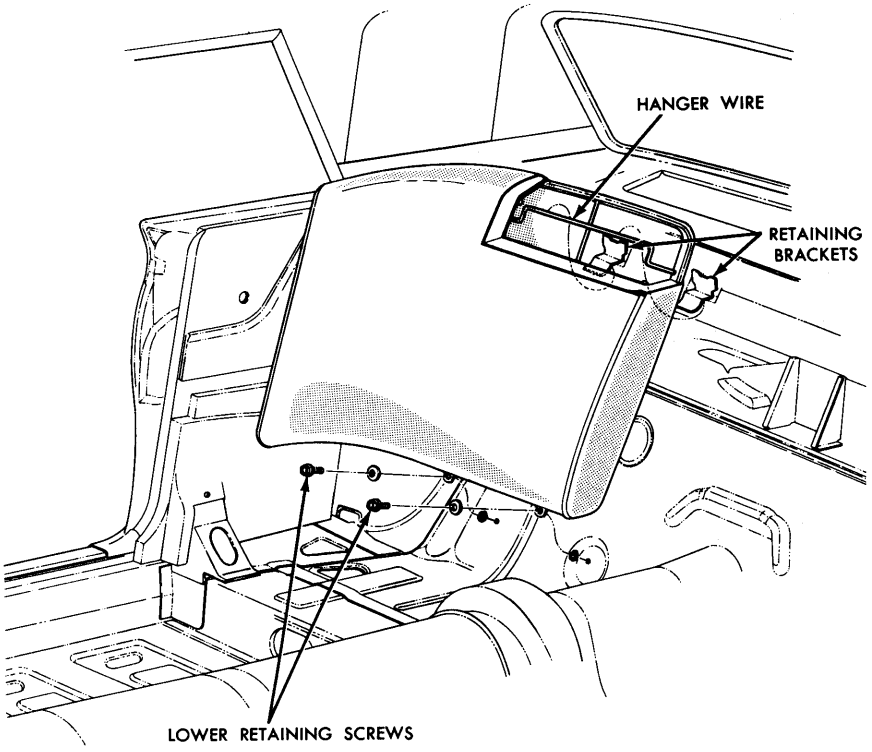


FIG. 2—Rear Seat and Arm Rest Installation

ADJUSTING ACTUATOR AND CABLE ASSEMBLY

REMOVAL

1. Remove the six seat back shield retaining screws and remove the seat back shield.
2. Remove the spring retainers from the lower ends of the headrest stabilizer rods and remove the headrest.
3. Remove the adjusting handle spring retainer and pull the handle off its shaft. Remove the speed clip which retains the control cable end to the adjusting handle (Fig. 3) and disengage the control cable end to the adjusting handle (Fig. 3) and disengage the control cable from the adjusting handle.
4. Unsnap the pivot side outer cover from the pivot side outer cover retainer (Fig. 3).
5. Remove the pivot side outer cover retainer attaching nuts (Fig. 3) and rotate the retainer clockwise sufficiently to gain access to the cable retaining clips.
6. Loosen the two retainer clip screws and disengage the control cable from the seat back pivot (Fig. 3).
7. Remove the headrest stabilizer rod upper right guide plate retaining screws (Fig. 4) and remove the guide plate.
8. Remove the seat back stops (Fig. 4).
9. Cut the hog rings from the seat back lower flap.
10. Remove the cotter pin and remove the hinge retaining pins from the seat back hinges.
11. Remove the roll pin from the actuator cylinder assembly at the hinge and remove the seat back assembly from the car.
12. Place the seat back assembly on a bench. Straighten the trim retaining tabs. Cut the hog rings at the top of the seat back trim and pull the trim cover away far enough to expose the actuator cylinder.
13. Remove the clevis pin from the upper actuator rod. Remove the hog rings which retain the cable assembly to the springs and remove the actuator assembly from the seat back.

INSTALLATION

1. Position the actuator assembly on the seat back spring assembly mounting brackets and insert the clevis pin in the upper actuator assembly rod. Install the self locking pin on the clevis pin. The metal spacer located between the control cable mounting bracket and the actuator lower mounting hole extends the over-all length of the actuator to provide for ease of installation. The spacer must remain intact during installation of the actuator.
2. With the actuator lower hole properly aligned with the mounting bracket, insert the retaining pin from the open side of the hole. If a new actuator assembly is being installed, the metal spacer will be driven out of the hole.
3. Position the cable assembly to the springs and install the two retaining hog rings.

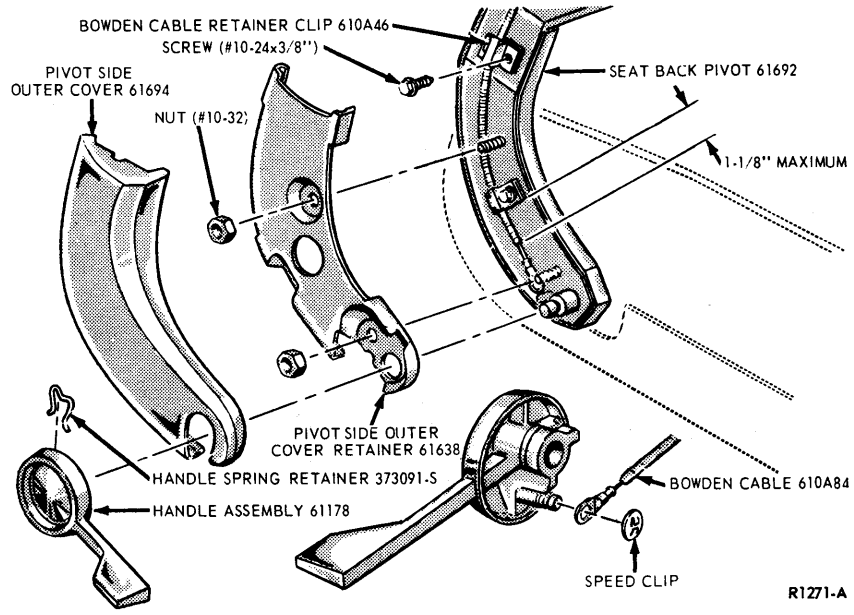


FIG. 3—Seat Adjusting Handle and Side Pivot—Disassembled

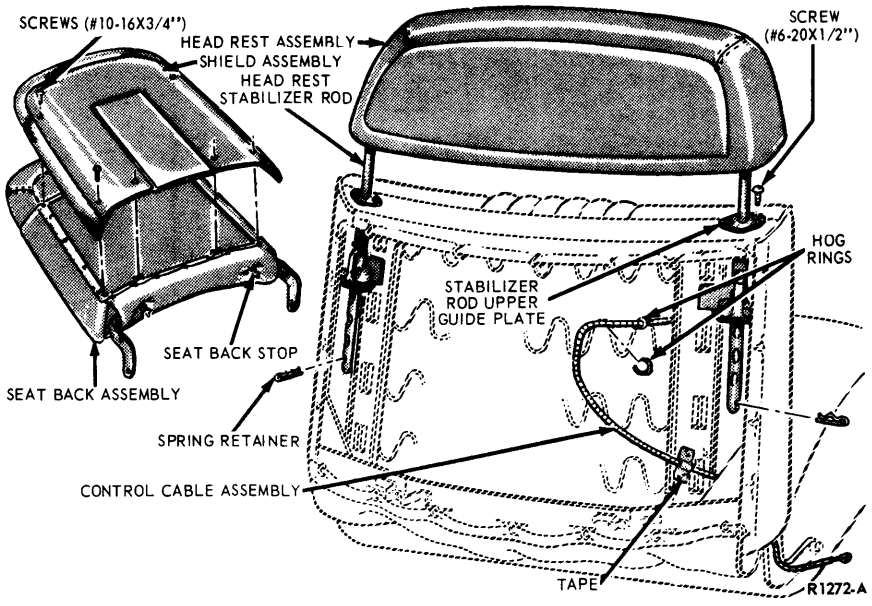


FIG. 4—Seat Back Shield and Headrest Assembly

4. Position the seat back trim over the tabs. Bend the tabs down and install new trim retaining hog rings.
5. Install the headrest stabilizer rod upper guide plate.
6. Position the seat back assembly to the seat cushion hinge assembly and install the roll pin which retains the lower actuator rod to the seat hinge.
7. Install the seat back hinge retaining pins and cotter pins.
8. Install new hog rings to retain the trim cover bottom flap.
9. Install the seat back stops.
10. Install the control cable under the two retaining clamps on the seat back pivot.
11. Position the control cable end on the adjusting handle and install the speed clip cable retainer.
12. Install the pivot side outer cover retainer.
13. Install the adjusting handle on the adjusting handle shaft.
14. Adjust the control cable, if necessary, and tighten the cable clamps.
15. Install the pivot side outer cover.
16. Position the headrest on the seat back assembly and install the headrest stabilizer rod lower spring retainers.
17. Position the seat back shield on the seat back and install the seat back shield retaining screws.

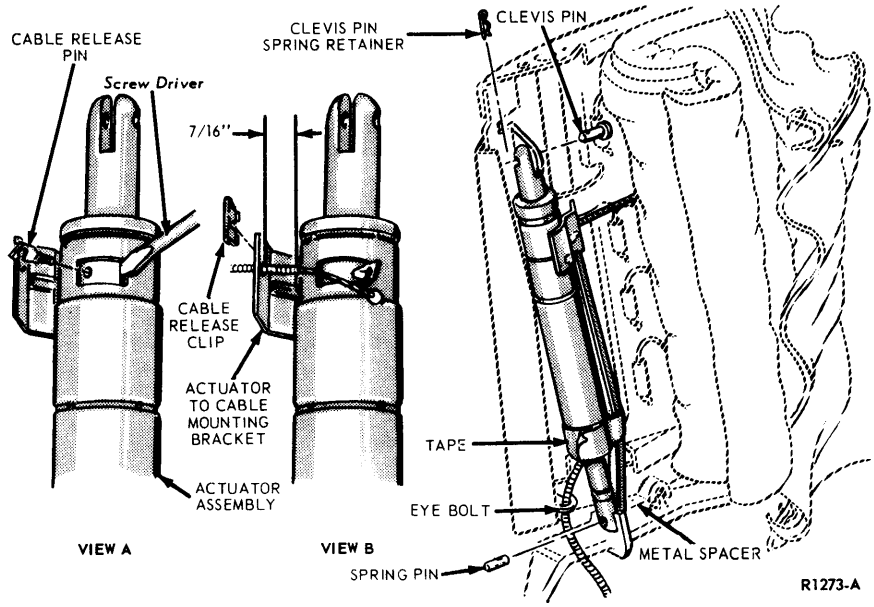


FIG. 5—Seat Actuator and Control Cable Assembly

ADJUSTING ACTUATOR CABLE

REMOVAL

1. Remove the six seat back shield retaining screws and remove the seat back shield.
2. Remove the spring retainers from the lower ends of the headrest stabilizer rods and remove the headrest.
3. Remove the adjusting handle spring retainer and pull the handle off its shaft. Remove the speed clip which retains the control cable end to the adjusting handle (Fig. 3) and disengage the control cable from the adjusting handle.
4. Unsnap the pivot side outer cover from the pivot side outer cover retainer (Fig. 3).
5. Remove the pivot side outer cover retainer attaching nuts (Fig. 3) and rotate the retainer clockwise sufficiently to gain access to the cable retaining clips.
6. Loosen the two retainer clip screws and disengage the control cable from the seat back pivot (Fig. 3).
7. Remove the headrest stabilizer rod upper right guide plate retaining screws (Fig. 4) and remove the guide plate.
8. Remove the seat back stops (Fig. 4).
9. Cut the hog rings from the seat back lower flap.
10. Remove the cotter pins and remove the hinge retaining pins from seat back hinges.
11. Remove the roll pin from the actuator cylinder assembly at the hinge and remove the seat back assembly from the car.
12. Place the seat back assembly on a bench. Straighten the trim retaining tabs. Cut the hog rings at the top of the seat back trim and pull the trim cover away far enough to expose the actuator cylinder.
13. Remove the hog rings which retain the cable assembly to the springs.
14. Remove the actuator-to-cable release clip (Fig. 5).
15. Open the split end of the cable release pin and remove the cable (Fig. 5).
16. Manually disengage the actuator clutch by forcing the release pin from right to left and retain the

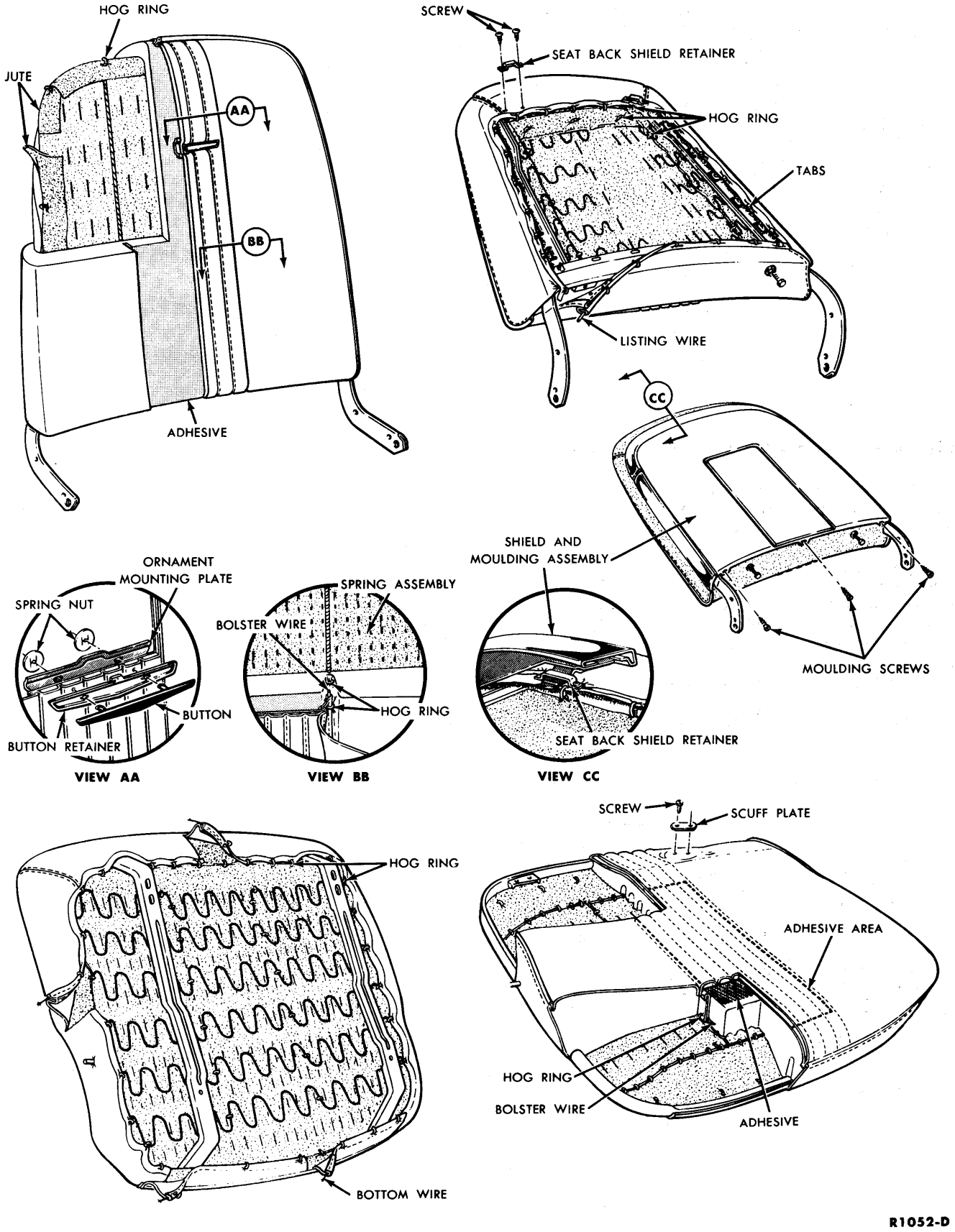


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FIG. 6—Front Seat Back and Cushion Trim Assembly

pin in the open position by inserting the blade of a screwdriver (Fig. 5, View A) in the exposed slot to the right of the pin.

17. Remove and discard the cable release pin.

INSTALLATION

1. Install a new cable release pin and remove the screwdriver which is used to hold the clutch open.
2. Position the new cable into the release pin and bend the release pin slot closed.
3. Install the cable release clip (Fig. 5).
4. Position the cable to the seat spring elements and retain it with two hog rings.
5. Position the seat back trim over the tabs. Bend the tabs down and install new trim retaining hog rings.
6. Install the headrest stabilizer rod upper guide plates.
7. Position the seat back assembly to the seat cushion hinge assembly and install the roll pin which retains the lower actuator rod to the seat hinge.
8. Install the seat back hinge retaining pins and cotter pins.
9. Install new hog rings to retain the trim cover bottom flap.
10. Install the seat back stops.
11. Install the control cable under the two retaining clamps on the seat back pivot.
12. Position the control cable end on the adjusting handle and install the speed clip cable retainer.
13. Install the pivot side outer cover retainer.
14. Install the adjusting handle on the adjusting handle shaft.
15. Adjust the control cable, if necessary, and tighten the cable clamps.
16. Install the pivot side outer cover.
17. Position the headrest on the seat back assembly and install the headrest stabilizer rod lower spring retainers.
18. Position the seat back shield on the seat back and install the seat back shield retaining screws.

FRONT SEAT CUSHION COVER

1. Remove the seat assembly, and then remove the cushion side shields and seat track assembly. From each side of the seat, remove the seat back retaining pin and retainer, and then remove the seat back.
2. Remove the seat back scuff plates and remove the hog rings retaining the seat cushion cover to the spring assembly (Fig. 6). Separate the bottom facing from the cushion cover top rear panel, and allow the facing to remain cemented to the foam rubber pad. Remove the cushion cover.
3. Inspect the pad and spring assemblies, and repair or replace as necessary.
4. Transfer the listing wires to the new cover.
5. Place the new cover assembly over the pad and seat spring assembly and secure it to the front bolster wire with hog rings. Apply cement to the bottom of the cushion cover top rear panel and to the old facing which was left cemented to the foam rubber pad.
6. Secure each side bolster wire to the seat spring assembly with hog rings.
7. The front and side edges of the cover assembly can now be secured to the bottom of the spring assembly with hog rings as shown in Fig. 6.
8. Secure the rear edge of the cover assembly to the bottom of the spring assembly with hog rings.
9. Install the two scuff plates on the cushion.
10. Install the cushion side shields, seat back, and seat tracks. Install the seat assembly.

FRONT SEAT BACK COVER

1. From each side of the seat, remove the seat back pivot arm retaining pin and retainer, and then remove the seat back. Remove the two seat back stops, seat back pivot arm covers, and remove the shield and moulding assembly from the seat back (Fig. 7). Remove the hog rings from the seat back assembly, bend the tabs up on the seat back, and remove the seat back cover. Inspect the pad and spring assemblies, and repair or replace as necessary.
2. Transfer the listing wires to the new cover.
3. Place the new cover over the pad and spring assembly, and with hog rings, secure the cover to the bolster wire (Figs. 6 and 8).
4. Pierce the cover over the side and bottom retaining tabs, and bend the side retaining tabs toward the center of the seat.

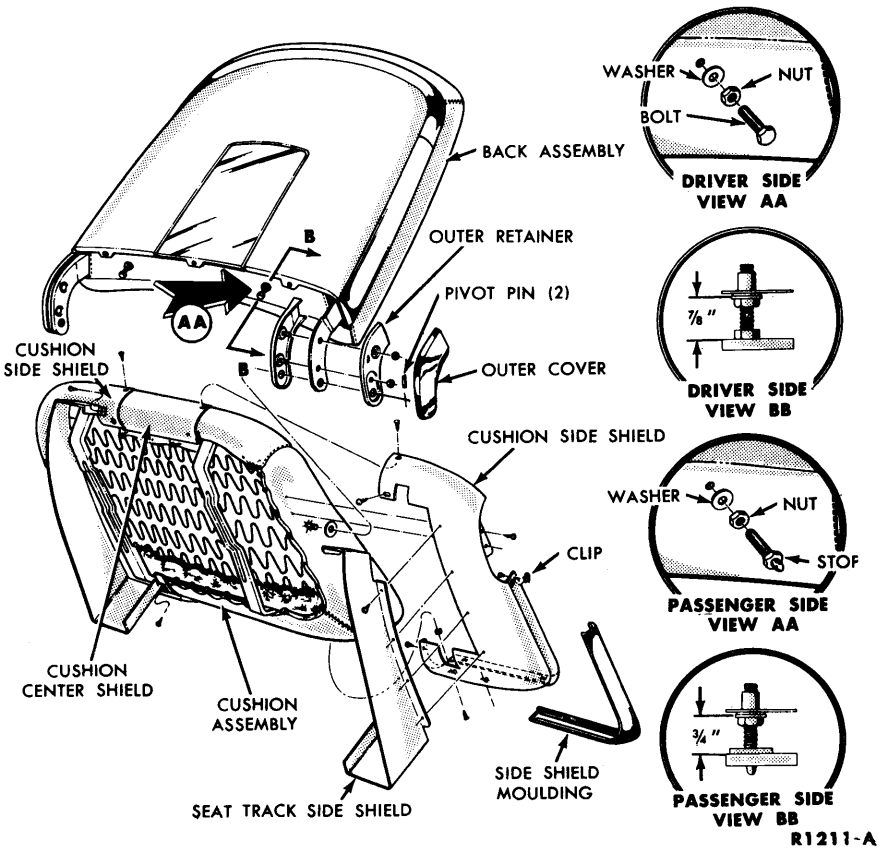

FIG. 7—Front Seat Back Installation

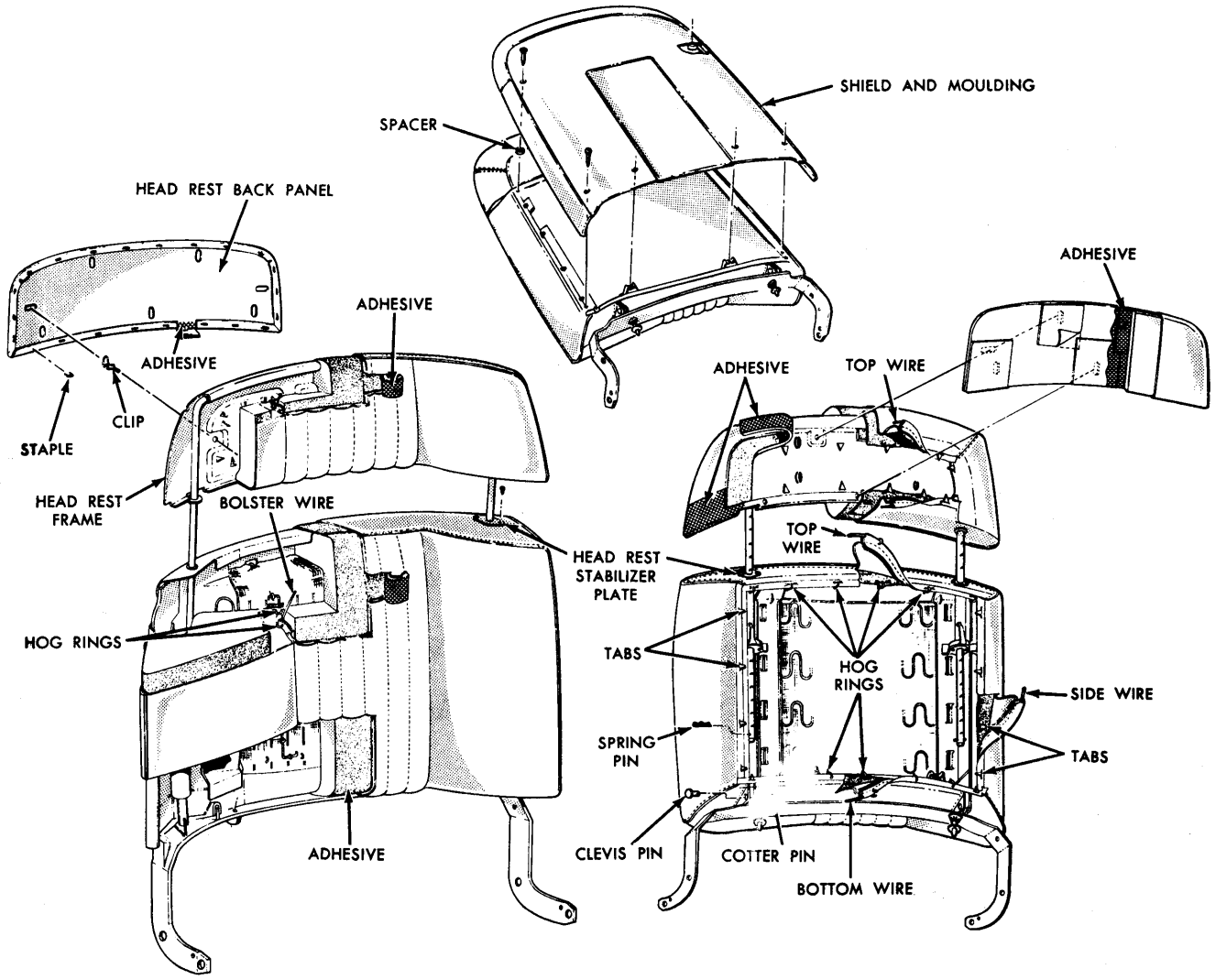

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FIG. 8—RPO Front Seat Back Trim

5. Pull the lower rear edge of the cover over the bottom of the spring assembly, and secure each side with hog rings (Figs. 6 and 8).

6. Pull the lower front edge of the cover over the bottom of the spring assembly, and secure to the lower rear edge of the cover with hog rings on each side (Figs. 7 and 8). Secure the lower listing of the cover assembly to the spring assembly with hog rings, pierce the cover over the bottom retaining tab, and bend each tab toward the top of the seat.

7. Secure the top rear edge of the cover assembly to the spring assembly with hog rings.

8. Install the seat back panel with the retaining clips, the seat back pivot arm covers, and the two seat stops to the seat back assembly.

9. Connect the seat back to the seat cushion and install the pivot arm retainers and retaining pins.

REAR SEAT CUSHION COVER

1. Raise the front of the rear seat cushion and lift the cushion assembly from the car. Place the cushion on a clean work area. Remove the hog rings retaining the cover to the spring assembly (Fig. 9).

2. Inspect the pad and spring assemblies, and repair or replace as necessary.

3. Transfer the listing wires to the new cover.

4. Place the new cover assembly over the spring and pad assemblies. Attach the cover at each center bolster wire with six hog rings.

5. Carefully turn the cushion upside down and with 87 hog rings attach the cover to the bottom of the spring assembly (Fig. 9). Install the seat cushion in the car.

REAR SEAT BACK COVER

1. Remove the rear seat cushion. Remove the two screws retaining the bottom edge of the seat back to the body (Fig. 2) and remove the assembly from the car. Place the seat back assembly on a clean work area.

2. Remove the hog rings retaining the cover to the spring assembly (Fig. 9) and remove the cover. Inspect the pad and spring assemblies, and repair or replace as necessary.

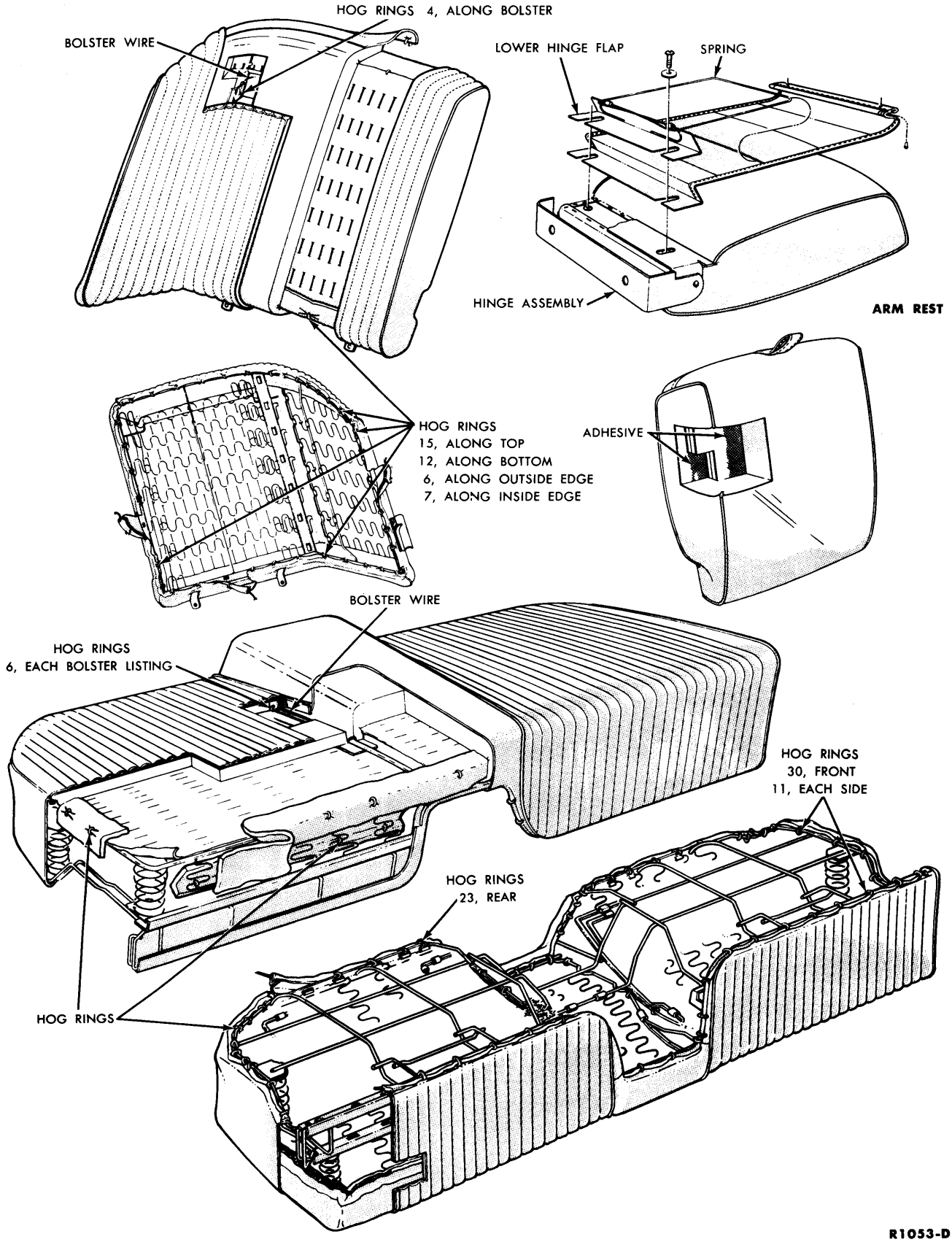

FIG. 9–Rear Seat Back, Cushion and Arm Rest Trim

3. Transfer the listing wire to the new cover.

4. Place the cover over the pad and spring assemblies. Turn the seat upside down and attach the cover along the top, sides, and bottom of the spring assembly with 44 equally spaced hog rings (Fig. 9).

5. Install the seat back assembly and the rear seat cushion.

REAR SEAT BACK CENTER ARM REST TRIM

The outer trim cover of the rear seat back center arm rest is held to the base with 24 staples as shown in Fig. 9.

PART 18-3 CONVERTIBLE TOP

1 DESCRIPTION AND OPERATION

The Thunderbird convertible top is lowered into and erected out of the luggage compartment. The cycles are automatic with the exception of manually locking or unlocking the windshield header clamps and opening or closing the rear window. The top operation is divided into two cycles, Top Retract Cycle and Top Erect Cycle.

The Top Retract Cycle is divided into six operations, Deck Lid Unlock, Deck Lid Open, Upper Back Panel Erect, Top Retract, Deck Lid Close, and Deck Lid Lock. The Top Erect Cycle is divided into six operations, Deck Lid Unlock, Deck Lid Open, Top Erect, Upper Back Panel Retract, Deck Lid Close, Deck Lid Lock.

Hydraulic pressure is used to raise and lower both the top and the deck lid (Fig. 1). The hydraulic pressure is produced by a reversible-electric motor and pump assembly and the top and deck lid linkages are actuated by the hydraulic cylinders. Three electric-solenoid valves are placed in the hydraulic lines to control the flow of fluid to the desired cylinders.

The deck lid is unlocked and locked by jack screws (Fig. 2). A reversible-motor is used to operate the two jack screws through drive cables.

The upper back panel is extended and retracted by a motor and transmission mounted to the deck lid.

The deck lock screw motor and upper back panel motor are protected by a 15-ampere circuit breaker in the ground circuit. The top and deck motor and pump (and the entire circuit) is protected by a 60-ampere circuit breaker in the feed circuit (Fig. 6).

All circuits are protected by non-cycling circuit breakers. This type of circuit breaker will not reset itself until the control switch is released or the short circuit removed.

The power is supplied to the motors and solenoids through eight relays (six of which are double-contact relays). The double-contact relays are used to close the power supply circuit to both a motor and the related solenoids (or the armature and field windings in the shunt-wound upper back panel motor).

The instrument panel top control switch activates the top assembly (Fig. 3). A neutral switch relay is used to prevent top operation unless the transmission selector is placed in the neutral or park position. The ignition switch must be in the ON or ACC position and the neutral switch closed to energize the neutral switch relay, and close the control switch circuit.

The top mechanism operation is controlled by seven limit switches. These switches, actuated mechanically by the various panels or linkage, complete the supply circuit from the top control switch to the control relay coil windings. The switch lead wires may be color coded violet and yellow, or red, white and yellow at the switch itself. However, the wire colors between connectors are as indicated in the circuit diagrams (Fig. 3 through 14).

A luggage compartment light is mounted on the deck lid and is on whenever the deck lid is unlocked. The power source for this light is at the cigar lighter socket terminal in the console. The lower contacts of the luggage compartment door closed (or deck closed) limit switch control the function of the light (Figs. 3 through 14).

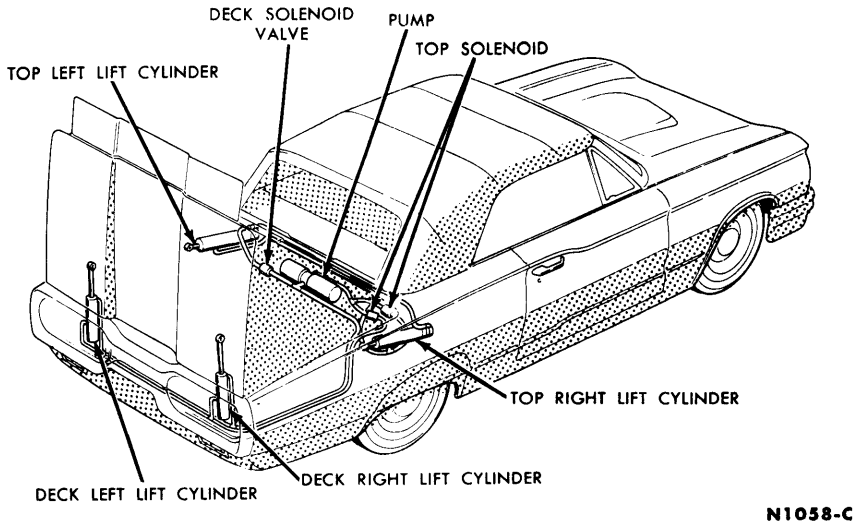

FIG. 1—Hydraulic System

TOP RETRACT CYCLE

This cycle starts with the top in the erected position and the deck lid closed and both locked. The top is manually unlocked, the rear window unfastened and rolled, and the top control switch is pressed and held. The transmission selector must be in the Neutral or Park position for top operation.

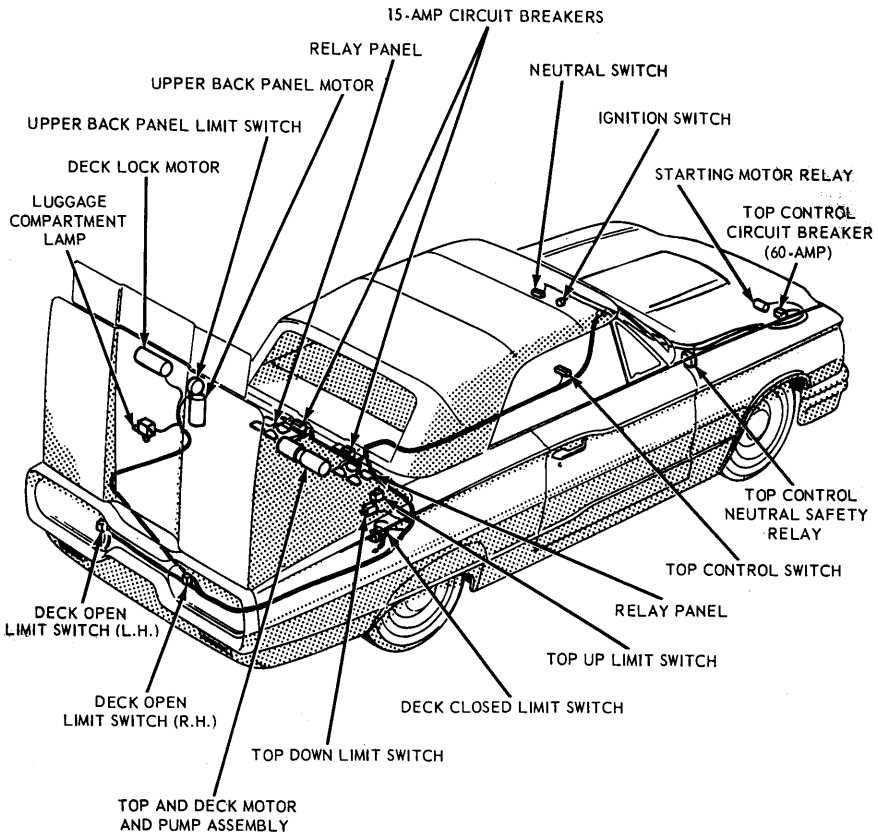

FIG. 2—Convertible Top Operating Parts and Locations

DECK LID UNLOCK

With the top control switch in the top down position, current flows from the top control switch, through the upper back panel retract limit switch, the deck open limit switch L.H., and the deck unlock relay coil to ground. The deck unlock relay coil is energized, closing the relay contacts which complete the power circuit from the 60-ampere circuit breaker, through the 15-ampere circuit breaker to the deck lock motor. The motor is energized and the deck lid is unlocked.

DECK LID OPEN

As soon as the deck lid is unlocked, the deck closed limit switch contacts are respositioned. The current now flows from the top control switch through the upper back panel limit switch through the deck open limit switch L.H., through the deck closed limit switch and the deck open relay coil to ground. This closes the deck open relay multiple contacts which complete the power circuits from the 60-ampere circuit breaker to the top-deck motor and the deck solenoid valve.

The deck solenoid valve is energized and the proper hydraulic lines are opened to the deck control cylinders. At the same time, the top-deck motor is energized and the deck lid is opened. **Deck locks continue to operate until the deck is completely open.**

UPPER BACK PANEL ERECT

When the deck lid is completely open, the plunger of the deck open limit switch L.H., is depressed and the switch contacts are repositioned. The current now flows from the top control switch, through the deck open switch L.H., the upper back panel limit switch, and the upper back panel erect relay coil to ground. The relay contacts close and the power circuit is completed from the 60-ampere circuit breaker, through the 15-ampere circuit breaker to the upper back panel motor. The motor is energized and the upper back panel is erected.

TOP RETRACT

The current now flows from the top control switch through the upper back panel limit switch, the top down limit switch, and the top down relay coil to ground. This closes the relay multiple contacts and completes the power circuits to the top-deck motor and the two top solenoid valves are energized and the proper hydraulic lines are opened to the control cylinders. At the same time the top-deck motor is energized and the top is lowered into the luggage compartment.

DECK LID CLOSE

When the top is stowed in the luggage compartment, the top down limit switch is actuated and the switch contacts are repositioned. The current now flows from the top control switch, through the top down limit switch, the deck closed limit switch, and the deck close relay coil to ground. The relay contacts are closed and the power circuit is complete to the top-deck motor and the deck control solenoid valve.

The deck control solenoid is energized and hydraulic lines are opened to the deck control cylinders. The top-deck motor is also energized and the deck lid is closed. This action is interrupted when the deck lid depresses the plunger on the deck closed limit switch.

DECK LID LOCK

At the same time the deck lid is closing, the deck lock motor is energized. This is accomplished by the current flowing from the top down limit switch through the deck lock relay to ground. This closes the relay contacts and completes the power circuit to the deck lock motor. The deck lock motor is energized until the top control switch is released.

TOP ERECT CYCLE

This cycle starts with the top in the luggage compartment and the deck lid closed and locked.

DECK LID UNLOCK

With the top control switch in the top up position, current flows from the top control switch, through the top down limit switch, the right-hand deck open limit switch, and the deck unlock relay coil to ground. The relay is energized, the contacts are closed, and the power circuit is completed to the deck lock motor. The motor is energized and the luggage compartment is unlocked.

DECK LID OPEN

As soon as the deck lid is unlocked, the deck closed limit switch contacts are repositioned. Now the current flows from the deck open limit switch R.H., through the deck closed limit switch, and the deck open relay to ground. The relay multiple contacts close the power circuits to the deck solenoid valve and the top-deck motor are completed. The deck solenoid valve is energized and the hydraulic lines are opened to the deck hydraulic control cylinders. The top-deck motor is energized and the deck lid is opened. **The deck lock motors will continue to run until deck is completely open.**

TOP ERECT

When the deck lid is completely opened, the deck open limit switch R.H. plunger is depressed and the switch contacts are repositioned. The current now flows from the top control switch, through the deck open limit switch R.H., the top up limit switch, and the top up relay to ground. The relay multiple contacts are closed and the power circuits are completed to the top deck motor and the two top control solenoid valves. The two top control solenoid valves when energized open the hydraulic lines to the top hydraulic control cylinders; at the same time the top-deck motor is energized and the top is erected.

UPPER BACK PANEL RETRACT

As soon as the top is in the full up position, the top up limit switch contacts are repositioned. This permits the current to flow from the top control switch through the upper back panel limit switch, the top up limit switch, and the upper back panel retract relay to ground. The relay contacts close, completing the power circuit to the upper back panel motors and the upper back panel is retracted.

DECK LID CLOSE

As soon as the upper back panel is retracted, the upper back panel limit switch is actuated and the switch contacts are repositioned. This stops the upper back panel motor. The current now flows from the top control switch, through the upper back panel limit switch, the deck closed limit switch, and the deck close relay to ground. The deck close relay multiple contacts close and the power circuits are complete to the deck control solenoid valve and the top-deck motor. The deck control solenoid valve and the top-deck motor are energized closing the deck lid.

DECK LID LOCK

At the same time the deck close relay is activated, the deck lock relay contacts are closed and the deck lock motor is activated. The deck lock motor continues to run while the deck lid is closing. When the deck lid closes the deck close limit switch plunger is depressed opening the circuit to the top and deck motor and pump. Deck lid movement stops.

The current now flows from the top control switch through the upper back panel limit switch to deck lock relay only. The deck lock relay contacts will remain closed and the deck lock motor will continue to run with the locks ratcheting after the deck is locked until the top control switch is released.

Release the top lock switch. Lock the windshield top header clamps and fasten the rear window.

2 DIAGNOSIS AND TESTING

To properly accomplish diagnosis and testing, the convertible top operating principles and sequence of operations should be thoroughly understood. There should also be an adequate power supply from the battery.

The most common operational failures will be due to maladjusted switches in the control circuit. The power circuits can be individually operated by energizing the correct power relay by means of a jumper wire. The following cautions must be observed:

1. Do not use an external power source. Extensive damage to electrical components could occur if an external power source is used.

2. When an individual component is cycled by means of a jumper wire, that component must be returned to its original position in the top cycle before proceeding. If this is not done, damage to the top, deck, and/or back panels could occur.

This method is applicable since it permits bypassing various limit switches and operating the motors directly. If bypassing a control circuit operates the motor, a continuity check should be made on the components of that particular control circuit. However, before this is attempted, the motor relay feed (power circuit) circuit breaker (50-ampere) must be checked and it must be ascertained that the motor is not jammed or stalled.

If bypassing the control circuit is not effective and no mechanical failure is evident, a failed relay, a failed motor, or an open circuit in the motor feed circuit is indicated. The relay can be bypassed to test the motor.

If at any point during the operation of the top, a motor continues to run after a cycle has been completed, and releasing the top control switch does not stop the motor, there is a probability of a stuck relay. Disconnect the battery to stop the motor; then, replace the applicable relay.

Before proceeding, the main power source circuit breaker, the top control neutral relay, and the top control switch should be tested, as they control the complete top circuit. If no voltage is available at the top control neutral relay, the control circuit 10-ampere circuit breaker or the neutral switch is at fault. **Don't overlook the hydraulic system. This system must be operating properly in order to obtain proper operation of the top.**

Sluggish operation of the top or deck lid assemblies is often accompanied by a loud and irregular pump noise. Very frequently this is caused by a low hydraulic fluid level. When this condition exists, cycle the top and then check the pump reservoir for the proper fluid level. The fluid level should be within ¼ inch of the filler plug hole with the deck lid and top in the raised position.

Before a systematic trouble-shooting procedure is attempted, a trouble-free source of electric current should be established at the top con-

trol switch and the service side of the 60-ampere circuit breaker. (Fig. 2).

POWER SUPPLY CHECK PROCEDURE

1. Check from the blue wire terminal of the 60-amp circuit breaker to ground, using a simple test lamp, a voltmeter or other appropriate test equipment, to determine that an adequate voltage supply is available at this point.

2. Check for full functioning of the neutral switch and top control neutral relay by placing the transmission selector lever in neutral and starting the engine. If any malfunction in this (starting) circuit is evident, check the circuit and make repairs.

3. With the starter circuit functioning properly, turn the ignition switch (key) to the ON or ACC position and check that an adequate voltage supply is available at the violet wire terminal of the top control switch. Use the same equipment as in 1 above.

4. In the event difficulties are encountered in the deck unlock and/or deck lid open phases of the top retract (top erect) cycle, check the voltage supply at the bus bar on the relay panel located back of the rear seat cushion. Use the same equipment as in 1 above. Also check the voltage supply at the service side of the two 15-ampere circuit breakers located in the same area.

5. The trouble-diagnosis guide following assumes an adequate voltage supply, for system operation purposes, at the top control switch, bus bar, and through the 15-ampere circuit breakers.

6. When using a self-powered test light for checking limit switches, disconnect the switch from the circuit.

TOP RETRACT CYCLE

All checks and tests detailed in the top retract cycle are to be performed with the top control switch (pressed down) (retract position). In the event of a stop in the cycle, release the control switch to avoid burning out a motor. If jamming is suspected, do not reactivate the control switch for over five seconds at one time until the condition is cleared.

TROUBLE DIAGNOSIS GUIDE—TOP RETRACT CYCLE—DECK LID UNLOCK (Fig. 3)

Malfunction	Probable Cause	Corrective Action
1 NO UNLOCKING ACTION—DECK UNLOCK RELAY NOT FUNCTIONING (NO AUDIBLE CLICK).	(a) Deck unlock relay defective.	(a) Move the top control switch to the up (erect) position, listen for ratcheting of the deck lid locks. Move the top control switch to the down position intermittently and listen for a click of the deck unlock relay. If there is no click, remove the rear seat back cushion and check for voltage at the orange-brown wire terminal. If the terminal is hot, the relay is defective. Replace the deck unlock relay.
	(b) No voltage at the relay orange-brown terminal.	(b) Bypass the relay by means of a jumper from the relay terminals as shown in Fig. 16 to activate the deck lock motor.
2 NO UNLOCKING ACTION—DECK UNLOCK RELAY FUNCTIONING (AUDIBLE CLICK).	(a) Maladjusted deck closed limit switch.	(a) A maladjusted deck closed limit switch will allow the top and deck motor and pump to operate and apply pressure to the deck lift cylinders and cause the lock screws to bind. Release the top control switch and unlock the deck lid as outlined in malfunction 1 (b). If this fails, the deck lid will have to be unlocked mechanically as detailed in Section 2.
	(b) Defective deck lock motor circuit or motor. Circuit and motor are inaccessible until deck is open.	(b) If a jumper is not effective in activating the deck lock motor, the deck lid will have to be unlocked mechanically to gain access to the deck lock motor and complete circuit (Section 2).

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TROUBLE DIAGNOSIS GUIDE—TOP RETRACT CYCLE—DECK LID UNLOCK (Fig. 3) Continued

Malfunction	Probable Cause	Corrective Action
3 NO UNLOCKING ACTION—DECK LOCK MOTOR RUNNING	(a) Broken flexible shaft or loose lock nuts, one or both sides.	(a) Unlock the deck lid mechanically as detailed in Section 2.
4 UNLOCKING ACTION—DECK LID JUMPS OFF LOCKS	(a) A maladjusted deck closed limit switch allows the top and deck motor and pump to operate early and apply pressure to the deck lid hydraulic cylinders before the locks are clear.	(a) When the deck lid has been opened, adjust the deck closed limit switch.

TROUBLE DIAGNOSIS GUIDE—TOP RETRACT CYCLE—DECK LID OPEN (Fig. 4)

Malfunction	Probable Cause	Corrective Action
1 NO DECK OPENING ACTION—DECK OPEN RELAY NOT FUNCTIONING	(a) Defective deck open relay (cycling stops as soon as deck lid locks clear).	(a) Check for voltage at the yellow-violet wire terminal of the deck open relay. If the terminal is hot, the relay is defective. Replace the deck open relay.
	(b) Defective circuit. Top control switch thru upper back panel limit switch, deck open limit switch L.H. and deck closed limit switch to yellow-violet wire terminal on deck open relay.	(b) If the yellow-violet wire terminal of the deck open relay is dead, use a jumper to bypass the deck open relay and activate the top and deck motor and pump and deck control solenoid to raise the deck lid. (Fig. 16).
	(c) Defective upper back panel limit switch.	(c) With the deck open for access, RELEASE THE TOP CONTROL SWITCH, using a self-powered test light check for an open circuit between the red-green wire terminal and the orange wire terminal of the six terminal group. If the light does not come on, the switch should be adjusted before deciding it is defective. Replace the defective upper back panel limit switch. At this time check the violet to yellow wire terminals of the six terminal group, and the grey to black-blue wire terminal of the 4-terminal group.
	(d) Defective deck open limit switch L.H. The deck lid must not be fully open to avoid repositioning of the switch terminals.	(d) TOP CONTROL SWITCH RELEASED. Using a self-powered test light, check for an open circuit between the yellow wire terminals of switch. If the test light fails to come on, the switch is defective. Also check the yellow wire terminals of deck open limit switch R.H. Replace the deck open limit switch(es) found defective.
	(e) Defective deck closed limit switch. Deck lid open for access.	(e) TOP CONTROL SWITCH RELEASED. Using a self-powered test light, check for an open cir-

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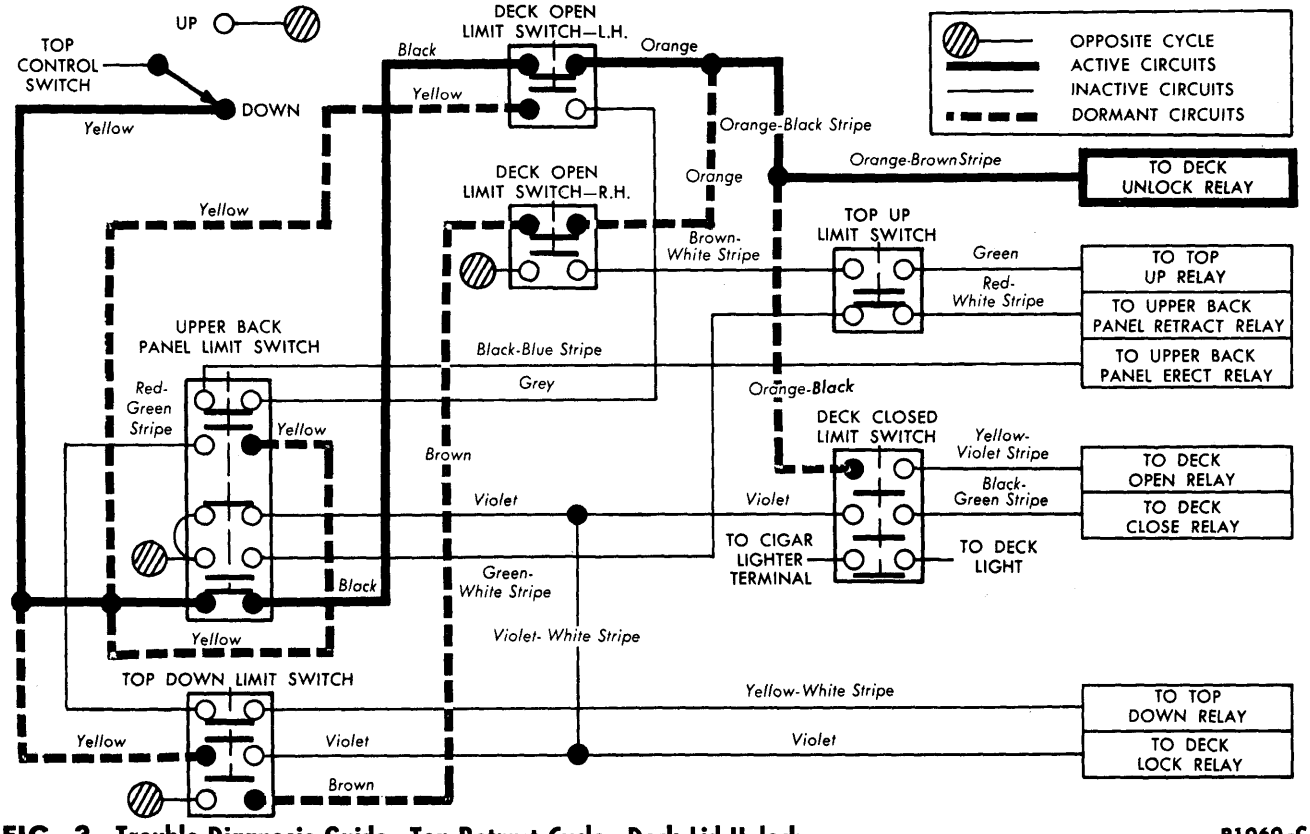

FIG. 3—Trouble Diagnosis Guide—Top Retract Cycle—Deck Lid Unlock P1060-C

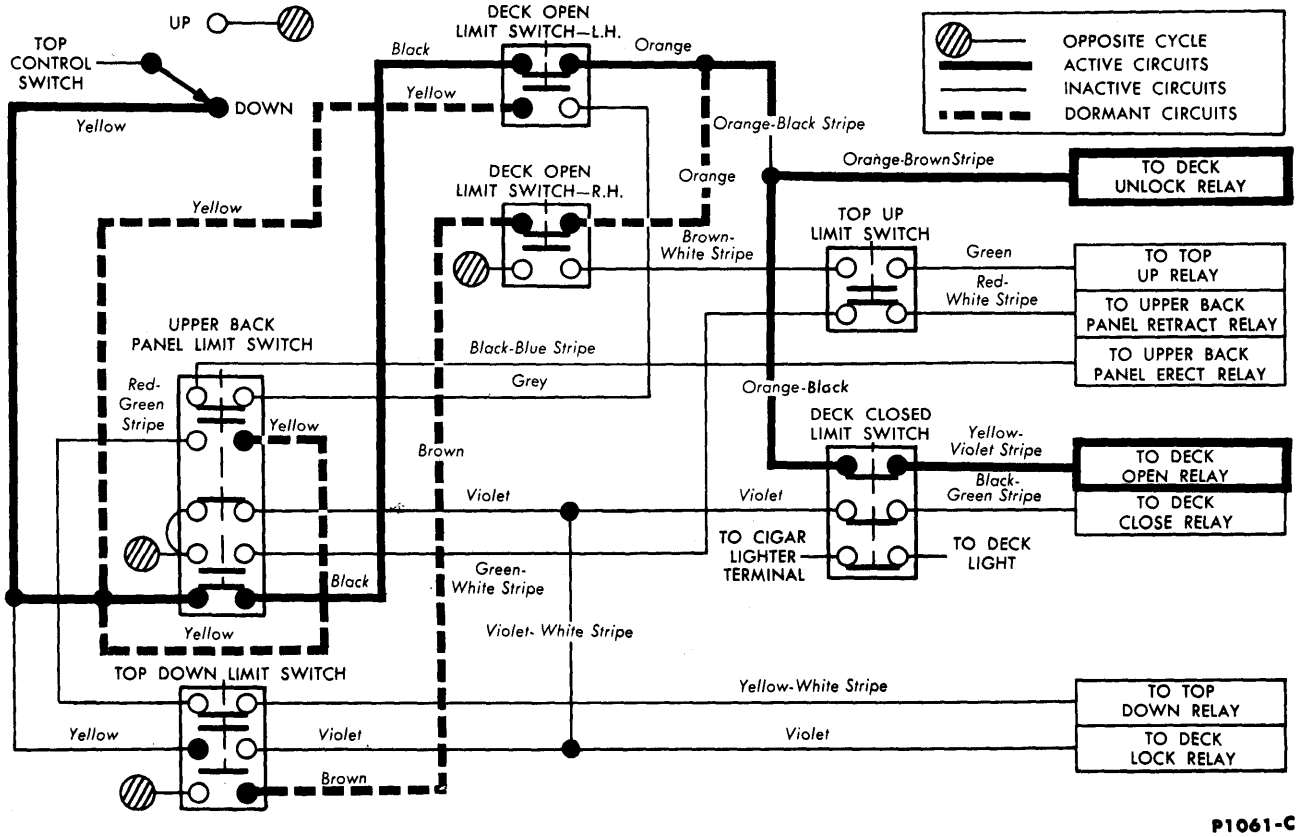

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FIG. 4—Trouble Diagnosis Guide—Top Retract Cycle—Deck Lid Open

TROUBLE DIAGNOSIS GUIDE—TOP RETRACT CYCLE—DECK LID OPEN (Fig. 4) Continued

Malfunction	Probable Cause	Corrective Action
1 NO DECK OPENING ACTION—DECK OPEN RELAY NOT FUNCTIONING (Continued)		cuit between the yellow wires, red wires, and white wires of the switch. If the test light fails to come on for any check, switch is defective. Replace deck closed limit switch.
2 NO DECK OPENING ACTION—DECK OPEN, RELAY NOT FUNCTIONING. DECK BUMPS UP AND DOWN ON LOCKS.	(a) Maladjusted deck closed limit switch.	(a) Raise the deck lid manually until the deck motor and pump become energized. After the deck lid is open, adjust the deck closed limit switch.
3 NO DECK OPENING ACTION—FUNCTIONING DECK OPEN RELAY.	(a) Defective power circuit to the top and deck motor and the pump or deck control solenoid.	(a) A defective power circuit or defective motor or solenoid will prevent the deck opening regardless of the relay function and will be evident when the relay jumper is applied. The deck lid must be opened mechanically to gain access for repairs (Section 2).
	(b) Defective deck lock motor circuit or motor.	(b) (1) TOP CONTROL SWITCH RELEASED. If the deck lock motor is not functioning, check the power circuit for voltage at the motor red-yellow wire terminal. The deck lid should be open sufficient for access only to avoid respositioning of the deck open limit switch L.H. If there is no voltage, repair the circuit. (2) If the terminal shows voltage, the motor is defective. Replace the deck lock motor.
	(c) Broken deck lock flexible shaft(s).	(c) TOP CONTROL SWITCH RELEASED. With the deck lid open, check the deck lid lock shafts and lock nuts. If the shaft(s) are broken, replace the shafts. Otherwise tighten the lock nuts.
	(d) Faulty deck control solenoid valve or top deck motor and pump assembly power circuits.	(d) Open the deck lid mechanically (Section 2). Check the solenoid and motor circuits. Repair the faulty circuit.
	(e) Faulty deck control solenoid valve.	(e) TOP CONTROL SWITCH RELEASED. Open the deck lid mechanically, sufficient for access. If the circuit shows voltage at blue-red terminal on the valve and the top deck motor and pump operate when the top control switch is momentarily depressed but there is not action at the deck opening cylinders, the solenoid valve is defective. Replace the valve.

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TROUBLE DIAGNOSIS GUIDE—TOP RETRACT CYCLE—DECK LID OPEN (Fig. 4) Continued

Malfunction	Probable Cause	Corrective Action
3 NO DECK OPENING ACTION—FUNCTIONING DECK OPEN RELAY. (Continued)	(f) Faulty top deck motor and pump assembly.	(f) TOP CONTROL SWITCH RELEASED. Open the deck lid mechanically, sufficient for access. If the circuit checks hot at the red wire terminal of the motor and pump assembly and the motor does not operate when the top control switch is momentarily depressed, the motor is defective. Replace the top deck motor and pump assembly.

TROUBLE DIAGNOSIS GUIDE—TOP RETRACT CYCLE—UPPER BACK PANEL ERECT (Fig. 5)

Malfunction	Probable Cause	Corrective Action
1 DECK OPEN—NO UPPER BACK PANEL ACTION—UPPER BACK PANEL ERECT RELAY NOT FUNCTIONING (NO AUDIBLE CLICK).	(a) Defective upper back panel erect relay.	(a) Depress the top control switch intermittently while listening for a click. If there is no click, check for voltage at the black-blue wire terminal on the relay. If the terminal shows voltage, the relay is defective. Replace the upper back panel relay.
	(b) Defective deck open limit switch L.H. to upper back panel erect relay circuit.	(b) Check out the circuit from the black-blue terminal on the upper back panel erect relay connector, through the upper back panel limit switch to the violet wire terminal on the deck open limit switch L.H. Repair the circuit.
	(c) Defective deck open limit switch L.H.	(c) Loosen the switch actuator, press the switch plunger all the way in and check between the violet wire terminals on the switch with a self-powered test light. If the light does not come on, the switch is defective. Also check the violet wire terminal(s) of the deck open limit switch R.H. Replace the defective deck open limit switch(es).
	(d) Defective upper back panel limit switch. If defective circuits are found at this switch after the switch terminals have been repositioned by erection of the upper back panel, check the red to black wire terminals of the six-terminal group and the Red to Brown-Green wire terminals of the four-terminal group.	(d) If the circuit check performed in (b) above showed an open circuit at the black-blue to grey terminals of the upper back panel limit switch, adjust the four-terminal section of the switch. If the adjustment does not close the circuit, the switch is defective. Replace the upper back panel limit switch.
	(e) Defective power circuit to upper back panel erect relay.	(e) Check between the ground and blue-white wire terminal on the upper back panel motor. If the terminal is dead, the circuit is open. Repair the circuit.

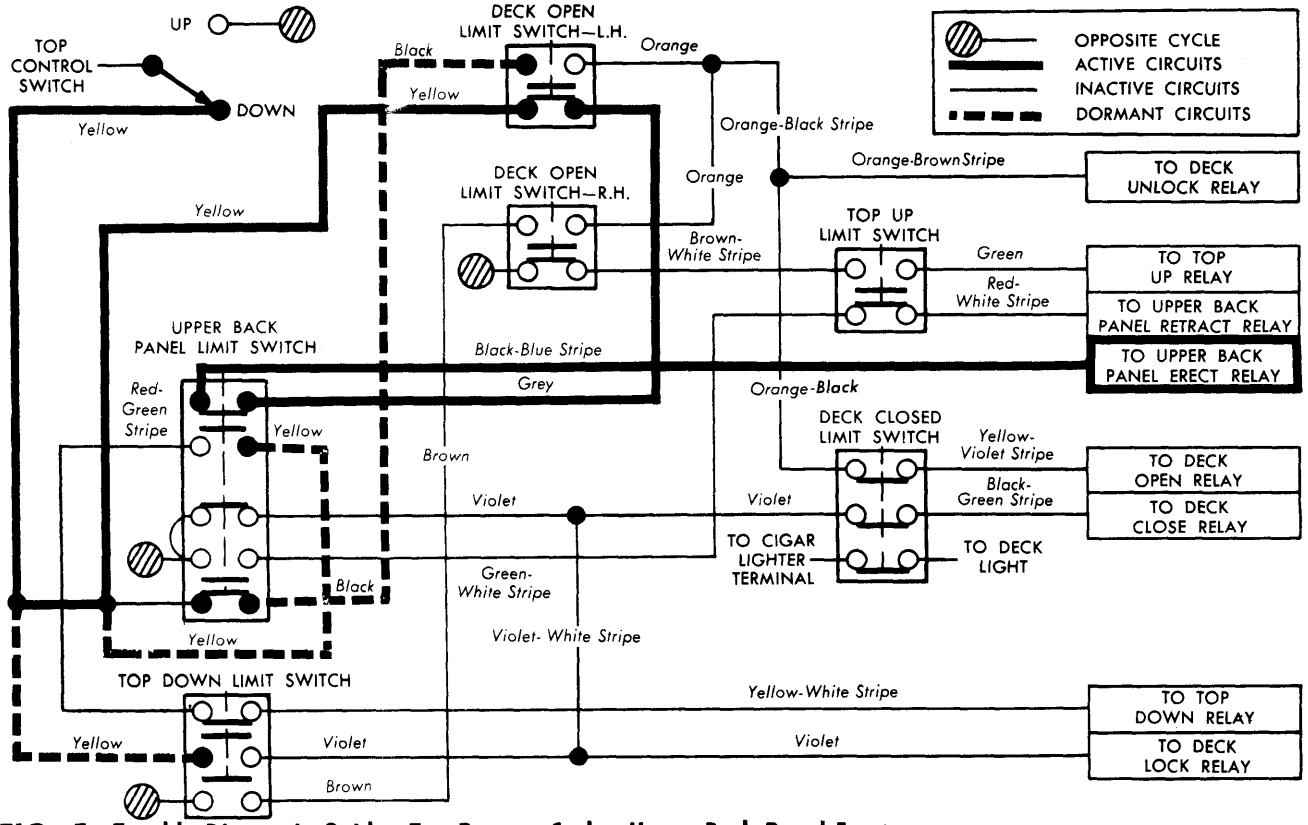
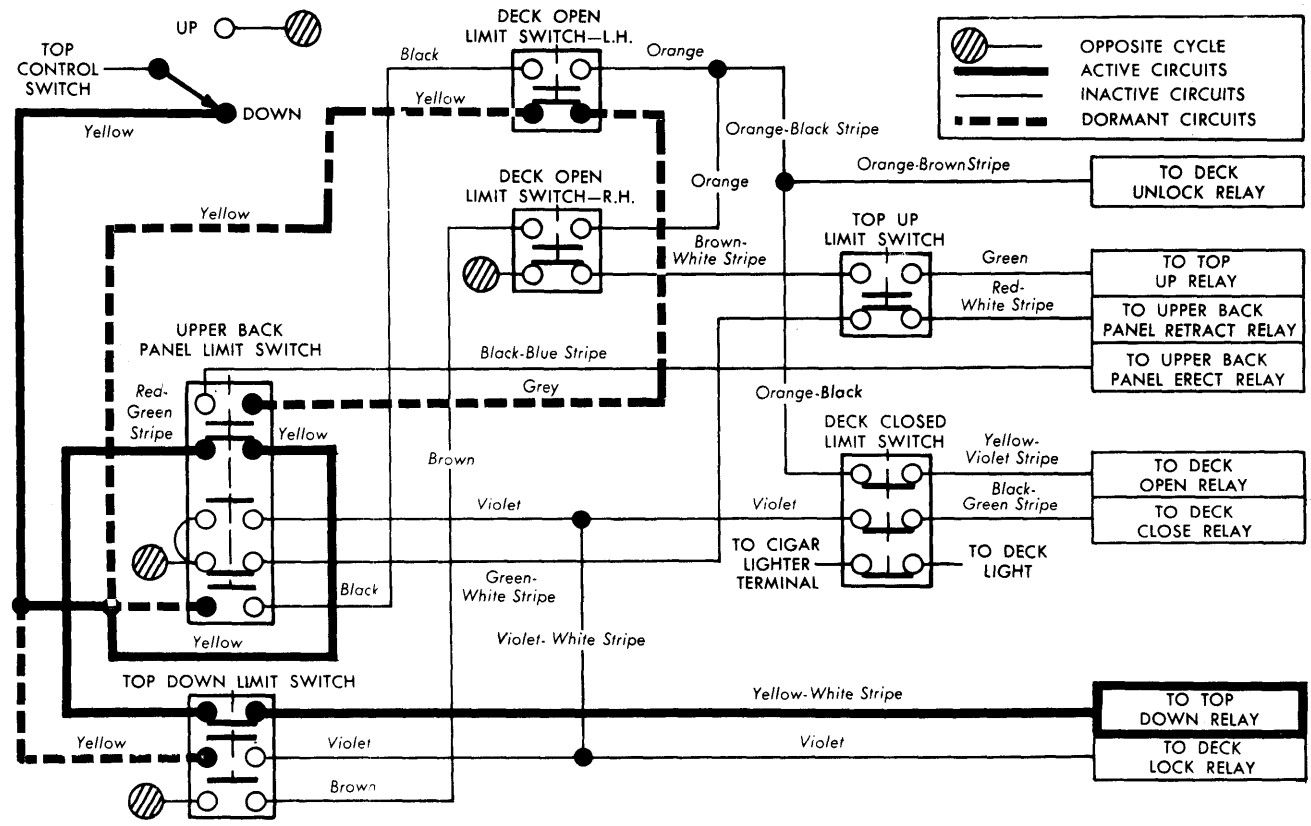


FIG. 5—Trouble Diagnosis Guide—Top Retract Cycle—Upper Back Panel Erect P1062-C



P1063-C

FIG. 6—Trouble Diagnosis Guide—Top Retract Cycle—Top Retract

TROUBLE DIAGNOSIS GUIDE—TOP RETRACT CYCLE—TOP RETRACT (Fig. 6)

Malfunction	Probable Cause	Corrective Action
1 TOP RETRACT—NO TOP ACTION—TOP DOWN RELAY NOT FUNCTIONING. (NO AUDIBLE CLICK).	(a) Defective top down relay.	(a) (1) Depress the top control switch intermittently and listen for the relay to click. If there is no click, bypass the relay with a jumper to activate the top and deck motor and the pump. Check for current at the yellow-white wire terminal on the relay. If the terminal shows voltage the relay is defective. Replace the top down relay. (2) If the yellow-white wire terminal is dead, check out the circuit from the top control switch to the relay (Fig. 6).
	(b) Defective top down relay to upper back panel limit switch circuit.	(b) Check out the circuit from the yellow-white wire terminal on the top down relay through the top down limit switch to the red-green wire terminal of the upper back panel limit switch connector. Repair the circuit.
	(c) Defective top down limit switch.	(c) Check between the yellow-white wire terminal and the violet-white wire terminal on the top down limit switch with a self-powered test lamp. If the lamp fails to come on, the switch is defective. Replace the top down limit switch.
2 NO TOP RETRACT ACTION—TOP DOWN RELAY FUNCTIONING (AUDIBLE CLICK) TOP AND DECK MOTOR AND PUMP ASSEMBLY OPERATING	(a) Defective top control solenoid valves.	(a) Check for voltage at the white-blue wire at the top control solenoid valves. If the wire shows voltage the solenoid valve is defective. If the wire is dead, check the power circuit and repair it.
3 NO TOP RETRACT ACTION—TOP DOWN RELAY FUNCTIONING (AUDIBLE CLICK) TOP AND DECK MOTOR AND PUMP ASSEMBLY NOT OPERATING.	(a) Defective top and deck motor and pump assembly or power circuit.	(a) Check for voltage at the yellow wire at the top and deck motor and pump assembly. If the wire shows voltage, the motor is defective. If the wire is dead, check the power circuit and repair it.

TROUBLE DIAGNOSIS GUIDE—TOP RETRACT CYCLE—DECK LID CLOSE AND LOCK (Figs. 7 & 8)

Malfunction	Probable Cause	Corrective Action
1 NO DECK CLOSE ACTION—DECK CLOSE RELAY NOT FUNCTIONING.	(a) Defective deck close relay.	(a) (1) Check for voltage at the black-green wire terminal on the relay. If the terminal shows voltage, the relay is defective. Replace the deck close relay. (2) If the black-green wire terminal is dead, proceed as in (b) below.

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TROUBLE DIAGNOSIS GUIDE—TOP RETRACT CYCLE—DECK LID CLOSE AND LOCK (Figs. 7 & 8)—(Cont'd)

Malfunction	Probable Cause	Corrective Action
1 NO DECK CLOSE ACTION—DECK CLOSE RELAY NOT FUNCTIONING. (Continued)	(b) Defective deck close relay to top down limit switch circuit.	(b) Check out the circuit from the black-green wire terminal on the deck close relay through the deck closed limit switch to the violet-white wire terminal on the top down limit switch. Repair the circuit.
	(c) Defective top down limit switch.	(c) Check between the violet-white wire terminal and the red wire terminal on the top down limit switch with self-powered test light. If the light fails to come on, the switch is defective. Replace the top down limit switch.
	(d) Defective deck closed limit switch.	(d) Check between the white wire terminals on the deck closed limit switch with a self-powered test light. If the light fails to come on, the switch is defective. Replace the deck closed limit switch.
2 NO DECK CLOSE ACTION—DECK CLOSE RELAY FUNCTIONING—TOP AND DECK MOTOR AND PUMP ASSEMBLY IS OPERATING.	(a) Defective deck control solenoid valve.	(a) Check for voltage at the deck control solenoid valve lead. If the wire shows voltage, the solenoid valve is defective. If the wire is dead check the power circuit and repair it.
3 NO DECK CLOSE ACTION—DECK CLOSE RELAY FUNCTIONING—TOP AND DECK MOTOR AND PUMP NOT OPERATING.	(a) Defective top deck motor and pump assembly or power circuit.	(a) Check the voltage at the yellow wire at the top and deck motor and pump assembly. If the wire shows voltage, the motor is defective. If the wire is dead, check the power circuit and repair it.
4 NO DECK LOCK ACTION—DECK LOCK MECHANISM NOT FUNCTIONING WHEN DECK LID STARTS TO CLOSE.	(a) Defective deck lock relay. The deck lock relay is activated simutaneously with the deck close relay.	(a) Check for voltage at the violet wire terminal of the relay. If the wire is hot, the deck lock relay is defective. If the wire terminal is dead, check for a break in the violet wire to violet-white wire circuit to the deck closed limit switch. Repair the circuit.
5 NO DECK LOCK ACTION—DECK LOCK RELAY FUNCTIONING.	(a) Open power circuit to top and deck lock motor or defective motor.	(a) When the deck lid starts to close, observe the deck lock mechanism. If the deck lock mechanism is not functioning, disconnect the motor leads at the motor. Use a jumper between the motor yellow-red lead and the yellow-blue wire receptacle of the deck lock relay connector. If the motor operates, the power circuit (yellow wire) is open. Repair the circuit. If the motor does not operate, the motor is defective. Replace the deck lock motor.

This completes the trouble shooting and tests for the top retract cycle. Release the top control switch.

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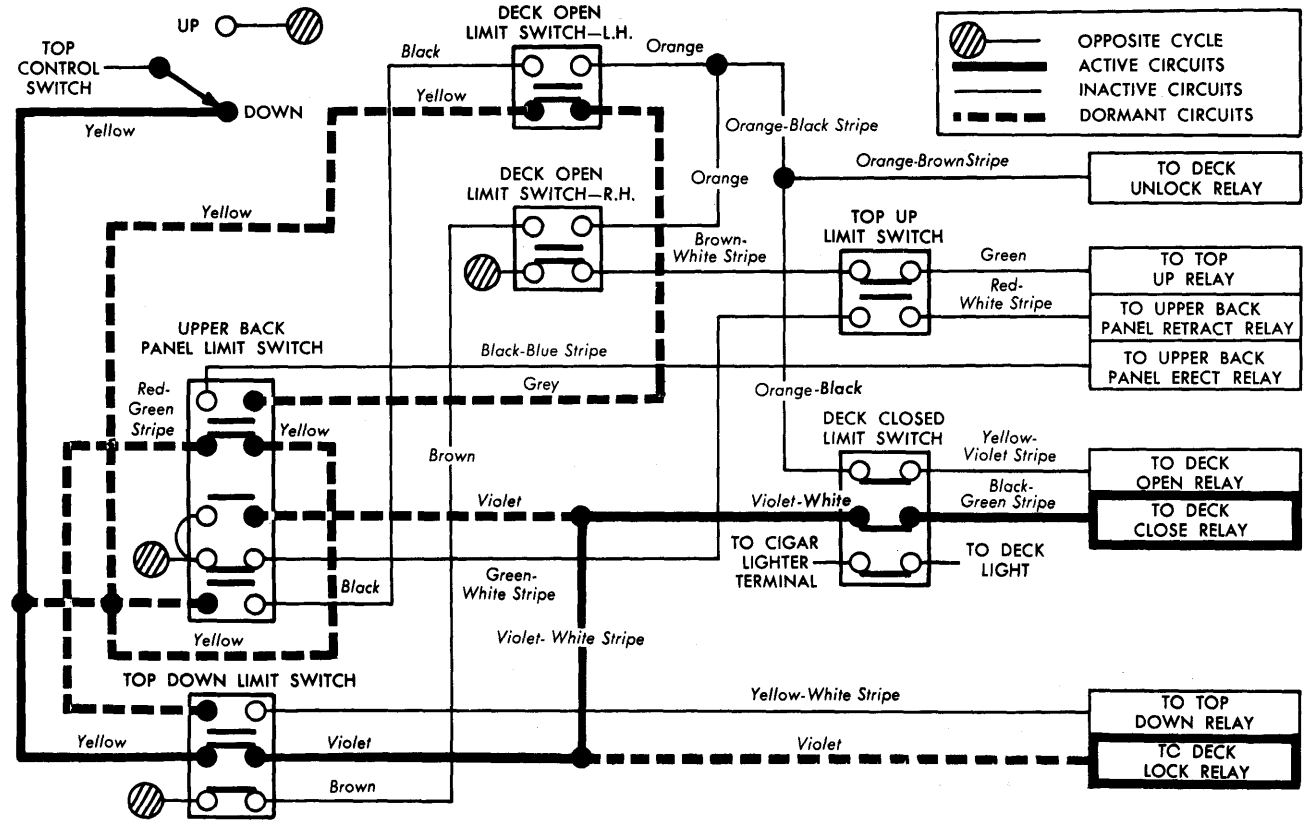
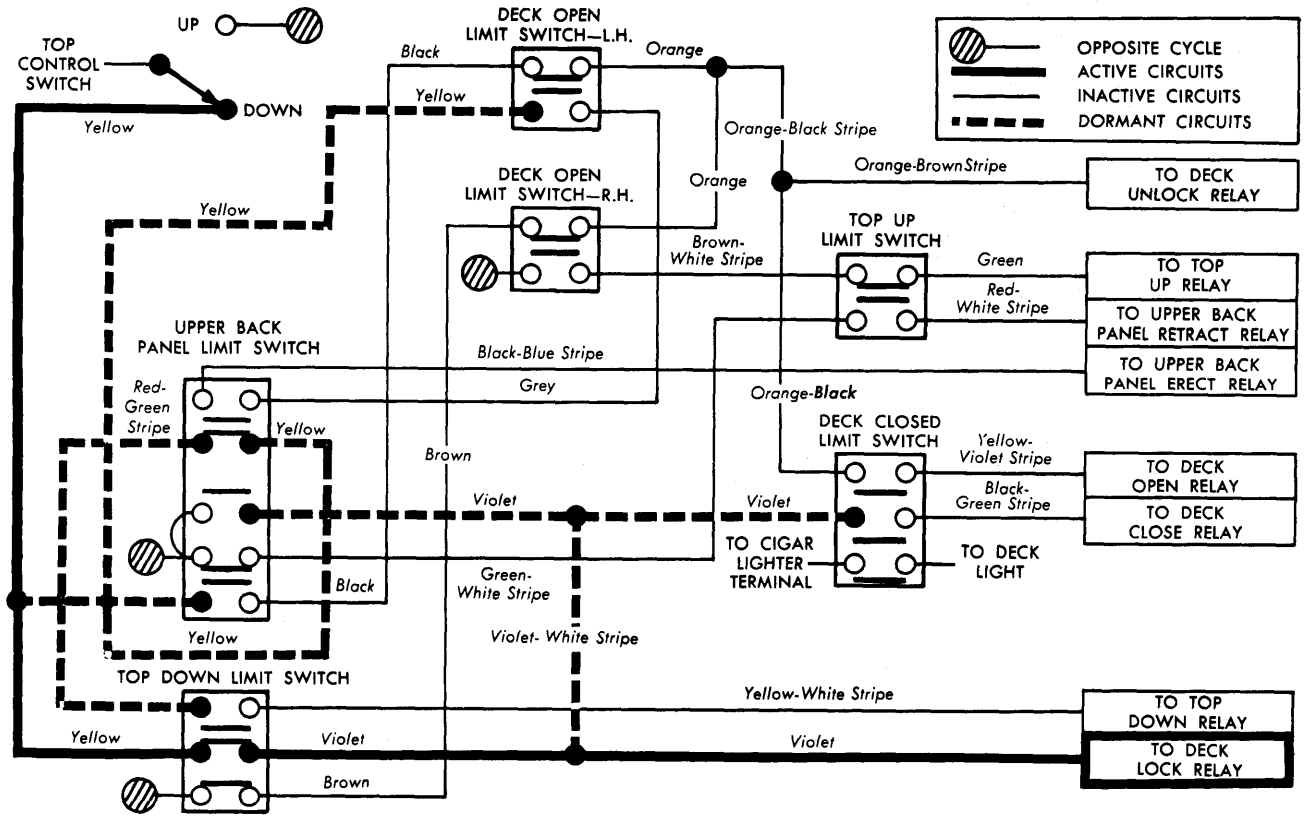


FIG. 7–Trouble Diagnosis Guide–Top Retract Cycle–Deck Lid Close P1064-C



P1065-C

FIG. 8–Trouble Diagnosis Guide–Top Retract Cycle–Deck Lid Lock

TOP ERECT CYCLE

The top erect cycle phases utilize the same motors as the top retract cycle phases. These motors, however, operate in the reverse direction of that for the retract cycle in the upper back panel retract and top erect phases. The circuits, switches, and/or switch positions differ in the various phases. All checks and tests detailed in this cycle are to be performed with the top control switch pushed up (erect position). In the event of a stop in the cycle, release the control switch to avoid burning out a motor. If jamming is suspected, do not reactivate the control switch for over five seconds at one time until condition is cleared.

TROUBLE DIAGNOSIS GUIDE—TOP ERECT CYCLE—DECK LID UNLOCK (Fig. 9)

Malfunction	Probable Cause	Corrective Action
1 NO UNLOCKING ACTION—DECK UNLOCK RELAY NOT FUNCTIONING (NO AUDIBLE CLICK).	(a) Deck unlock relay defective.	(a) Move the top control switch to the down (retract) position, listen for a ratcheting of the deck lid locks. Move the top control switch to the up (erect) position intermittently, and listen for a click of the deck unlock relay back cushion. If there is no click, remove the rear seat back cushion and check for voltage at the orange-brown terminal. If the terminal is hot, the relay is defective. Replace the deck unlock relay.
	(b) No voltage at the relay orange-brown terminal.	(b) Bypass the deck unlock relay by means of a jumper at the connector terminals as shown in Fig. 16, to activate the deck lock motor.
2 NO UNLOCKING ACTION—DECK UNLOCK RELAY FUNCTIONING (AUDIBLE CLICK).	(a) Maladjusted deck closed limit switch.	(a) A maladjusted deck closed limit switch will allow the top and deck motor and pump to operate and apply pressure to the deck lid cylinders and cause the lock screws to bind. Release the top control switch and unlock the deck lid as outlined in malfunction 1 (b). If this fails, the deck lid will have to be unlocked mechanically as detailed in Section 2.
	(b) Defective deck lock motor circuit or motors. (Circuit and motor are inaccessible until the deck is open).	(b) If the jumper is not effective in activating the deck lock motor, the deck lid will have to be unlocked mechanically to gain access to the deck lock motor and complete the circuit (Section 3).
3 NO UNLOCKING ACTION—DECK LOCK MOTOR RUNNING.	(a) Broken flexible shaft or loose lock nuts, one or both sides.	(a) Unlock the deck lid mechanically (Section 2).
4 UNLOCKING ACTION—DECK LID JUMPS OFF LOCKS.	(a) A maladjusted deck closed limit switch allows the top and deck motor and pump to operate too soon, and apply pressure to the deck lid hydraulic cylinders before the locks are clear.	(a) When the deck lid has been opened, adjust the deck closed limit switch.

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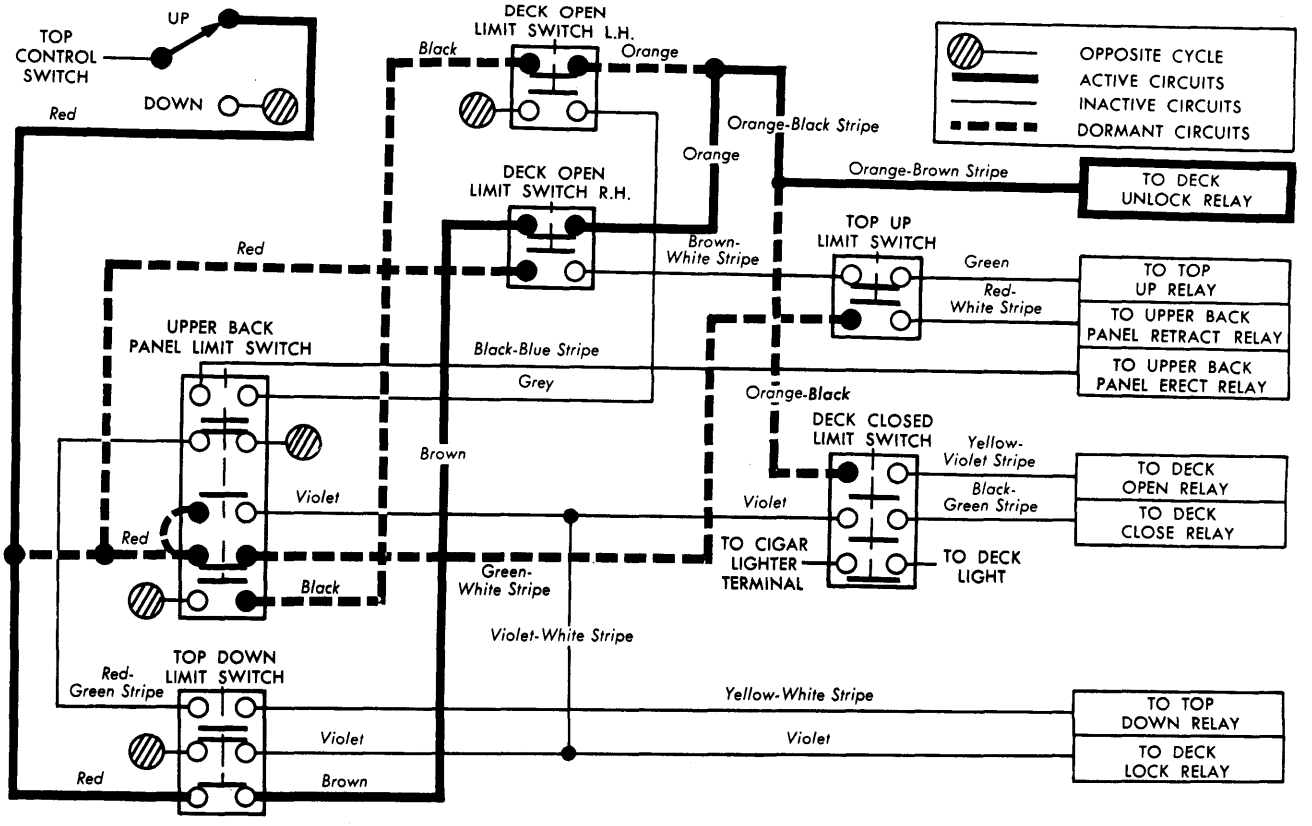

FIG. 9—Trouble Diagnosis Guide—Top Erect Cycle—Deck Lid Unlock P1066-C

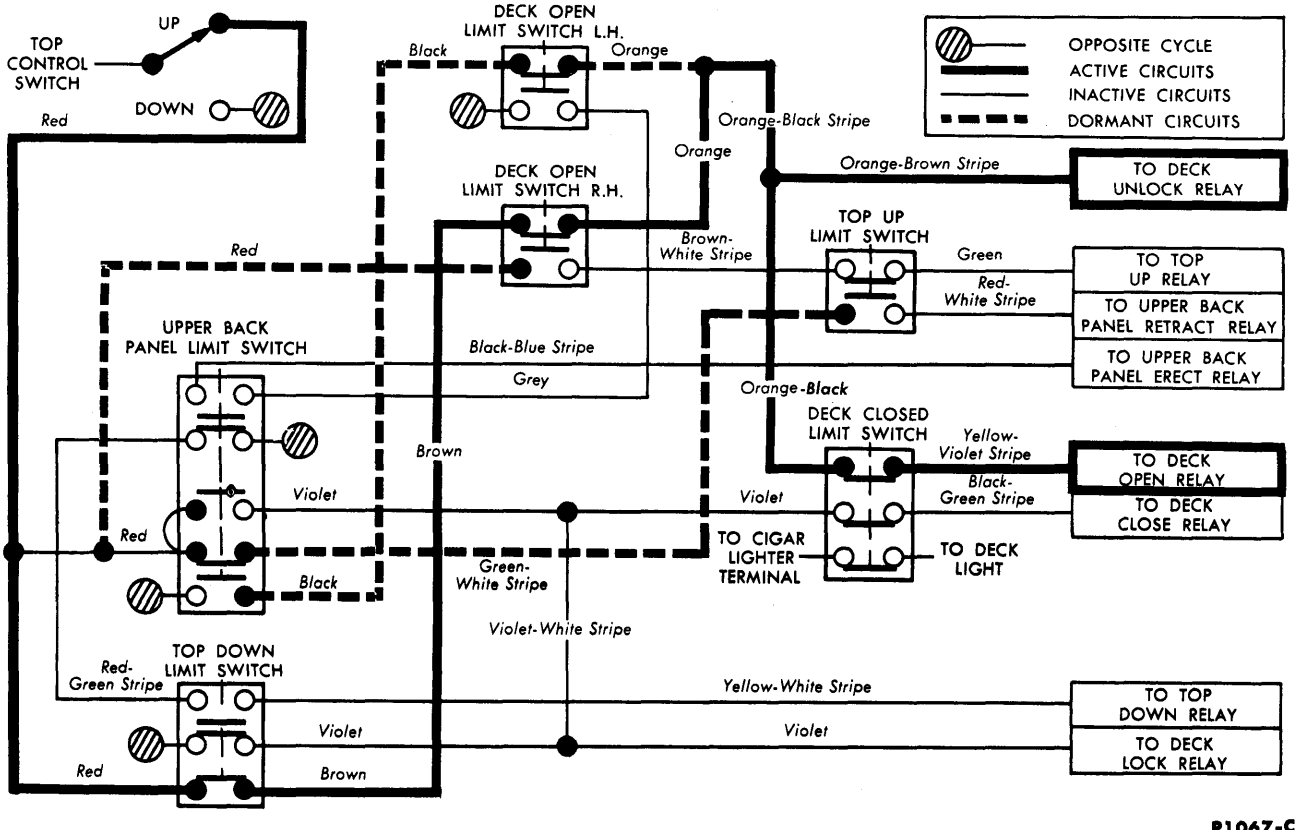

FIG. 10—Trouble Diagnosis Guide—Top Erect Cycle—Deck Lid Open P1067-C

TROUBLE DIAGNOSIS GUIDE—TOP ERECT CYCLE—DECK LID OPEN (Fig. 10)

Malfunction	Probable Cause	Corrective Action
1 NO DECK OPENING ACTION—DECK OPEN RELAY NOT FUNCTIONING.	(a) Defective deck open relay (cycling stops as soon as deck lid locks clear).	(a) Check for voltage at the yellow-violet wire terminal of the deck open relay. If the terminal shows voltage, the relay is defective. Replace the deck open relay.
	(b) Defective circuit, top control switch thru the top down limit switch, the deck open limit switch R.H. and the deck closed limit switch to the yellow-violet wire terminal on the deck open relay.	(b) If the yellow-violet wire terminal of the deck open relay is dead, use a jumper to bypass the deck open relay and activate the top and deck motor and pump and deck control solenoid to raise the deck lid (Fig. 16).
	(c) Defective top down limit switch.	(c) With the deck lid open for access only, use a self-powered test lamp to check the brown to yellow wire terminals of the top down limit switch. The light should come on. Also check the red to violet-white pair of wire terminals. The light should come on. If the light does not come on in either case, the switch is defective. Replace the top down limit switch.
	(d) Defective deck open limit switch R.H. (Deck lid must not be fully open to avoid repositioning of the switch terminals).	(d) TOP CONTROL SWITCH RELEASED. Using a self-powered test light, check for an open circuit between the yellow wire terminals of the switch. If the test light fails to come on, the switch is defective. Also check the yellow wire terminals of the deck open limit switch L.H. Replace the deck open limit switch(es) found defective.
	(e) Defective deck closed limit switch. (Deck lid open for access).	(e) TOP CONTROL SWITCH RELEASED. Using a self-powered test light, check for an open circuit between the yellow wires, red wires, and white wires of the switch. If the light fails to come on for any check, the switch is defective. Replace the deck closed limit switch.
2 NO DECK OPENING ACTION—DECK OPEN RELAY NOT FUNCTIONING. DECK BUMPS UP AND DOWN ON LOCKS.	(a) Maladjusted deck closed limit switch.	(a) Raise the deck lid manually until the deck motor and pump become energized. After the deck lid is open, adjust the deck closed limit switch.
3 NO DECK OPENING ACTION—DECK OPEN RELAY FUNCTIONING.	(a) Defective power circuit to the top and deck motor and pump or the deck control solenoid.	(a) A defective power circuit or defective motor or solenoid will prevent the deck opening regardless of the relay operation and will be evident when the relay jumper is applied. The deck lid must be opened mechanically to gain access for repairs (Section 2).

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TROUBLE DIAGNOSIS GUIDE—TOP ERECT CYCLE—DECK LID OPEN (Fig. 10) (Cont'd)

Malfunction	Probable Cause	Corrective Action
3 NO DECK OPENING ACTION—DECK OPEN RELAY FUNCTIONING (Continued)	(b) Defective deck lock motor circuit or motor.	(b) (1) TOP CONTROL SWITCH RELEASED. If the deck lock motor is not functioning, check the power circuit for voltage at the motor red-yellow wire terminal. The deck lid should be open sufficiently for access only to avoid repositioning of the deck open limit switches. If there is no voltage, repair the circuit. (2) If the terminal is hot, the motor is defective. Replace the deck lock motor.
	(c) Broken deck lock flexible shaft.	(c) TOP CONTROL SWITCH RELEASED. With the deck lid open, check the deck lid lock shafts and lock nuts. If the shaft(s) are broken, replace the shafts. Otherwise tighten the lock nuts.
	(d) Faulty deck control solenoid valve or the top deck motor and pump assembly power circuits.	(d) Open the deck lid mechanically. See Section 2. Check the solenoid and motor circuits. Repair the faulty circuit.
	(e) Faulty deck control solenoid valve.	(e) TOP CONTROL SWITCH RELEASED. Open the deck lid mechanically, sufficiently for access. If the circuit shows voltage hot at the blue-red terminal on the valve and the top-deck motor and pump operate when the top control switch is momentarily pushed up, but there is no action at the deck opening cylinders, the deck control solenoid valve is defective. Replace the valve.
	(f) Faulty top-deck motor and pump assembly.	(f) TOP CONTROL SWITCH RELEASED. Open the deck lid mechanically, sufficiently for access. If the circuit shows voltage at the red wire terminal of the top-deck motor and pump assembly and the motor does not operate when the top control switch is momentarily pushed up, the motor is defective. Replace the top-deck motor and pump assembly.

TROUBLE DIAGNOSIS GUIDE—TOP ERECT CYCLE—TOP ERECT PHASE (Fig. 11)

Malfunction	Probable Cause	Corrective Action
1 NO TOP ERECT ACTION—TOP UP RELAY NOT FUNCTIONING, (NO AUDIBLE CLICK).	(a) Defective top up relay.	(a) (1) Push the top control switch up intermittently, while listening for a click from the relay. If there is no click, check for voltage at the green wire ter-

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TROUBLE DIAGNOSIS GUIDE—TOP ERECT CYCLE—TOP ERECT PHASE (Fig. 11) (Cont'd)

Malfunction	Probable Cause	Corrective Action
1 NO TOP ERECT ACTION—TOP UP RELAY NOT FUNCTIONING, (NO AUDIBLE CLICK). (Continued)	(a) Continued	minal on the relay. If the terminal shows voltage, the relay is defective. Replace the top up relay. (2) If the green wire terminal is dead, proceed as in (b) below.
	(b) Defective circuit from the top control switch through the deck open limit switch R.H., the top up limit switch, to the top up relay.	(b) TOP CONTROL SWITCH RELEASED. Check out the circuit and switches using a self-powered test light.
	(c) Defective top up limit switch.	(c) TOP CONTROL SWITCH RELEASED. Check between the green and brown-white wire terminals of the switch. If the light fails to come on, the switch is defective. Replace the top up limit switch.
	(d) Defective deck open limit switch R.H.	(d) TOP CONTROL SWITCH RELEASED. Check between the violet wire terminals of the switch. If the light fails to come on, the switch is defective. Replace the deck open limit switch.
2 NO TOP ERECT ACTION—TOP UP RELAY FUNCTIONING.	(a) Defective top and deck motor and pump assembly.	(a) Disconnect the two wire connectors on the motor leads. Jumper from each motor lead in turn to the bus bar on the relay panel. If the motor is not activated, it is defective. Replace the top and deck motor and pump assembly. (Section 5).
	(b) Defective top and deck motor power circuit.	(b) If the motor will operate, reconnect the leads disconnected in (a) above and push the top control switch up. If the motor still does not operate, the motor power circuit is defective. Repair the defective circuit (red wire) or (yellow wire).
	(c) Defective top control solenoid valves power circuits.	(c) Disconnect the solenoid valve leads and with an ordinary test lamp, check for voltage from the lead terminal to ground. If either or both leads are defective, check and repair the wire circuit. (Fig. 16).
	(d) Defective top control solenoid valves.	(d) If the solenoid power lead(s) show voltage, the solenoid valve(s) is defective. Replace the top control solenoid valve.

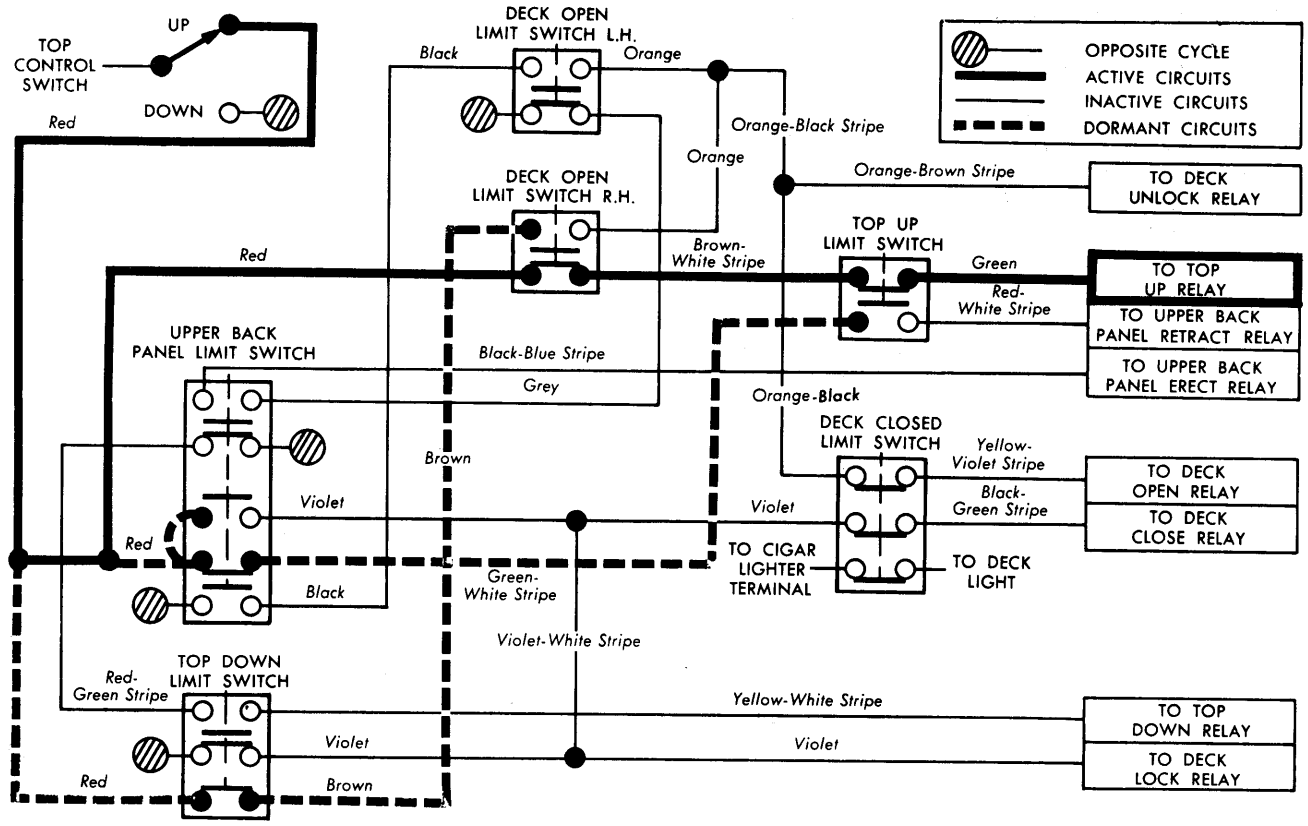

FIG. 11—Trouble Diagnosis Guide—Top Erect Cycle—Top Erect

P1068-C

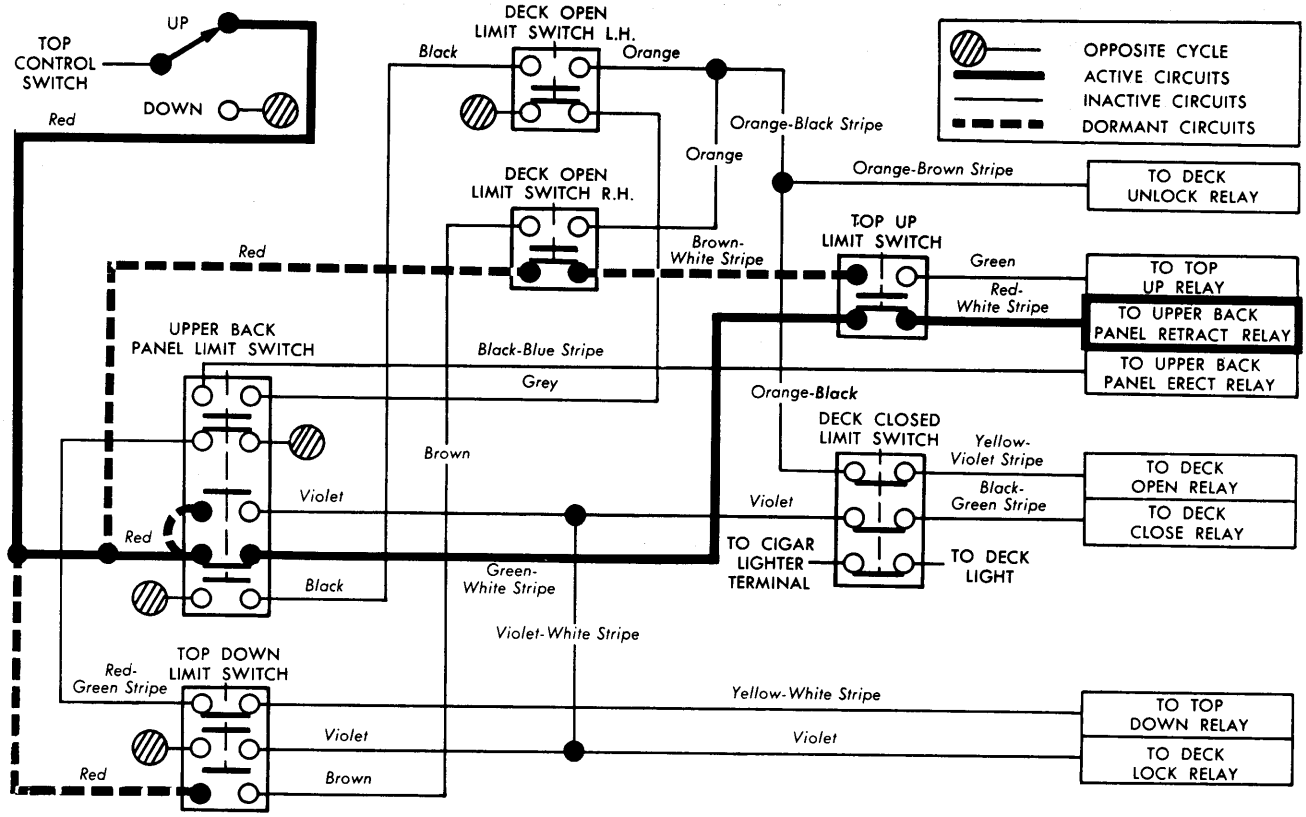

FIG. 12—Trouble Diagnosis Guide—Top Erect Cycle—Upper Back Panel Retract

P1069-C

TROUBLE DIAGNOSIS GUIDE—TOP ERECT CYCLE—UPPER BACK PANEL RETRACT (Fig. 12)

Malfunction	Probable Cause	Corrective Action
1 NO UPPER BACK PANEL RETRACT ACTION—RELAY NOT FUNCTIONING (NO AUDIBLE CLICK).	(a) Defective upper back panel retract relay.	(a) Push the top control switch up intermittently while listening for the relay to click. If there is no click, check for voltage at the red-white wire receptacle of the relay connector. If the circuit shows voltage, the relay is defective. Replace the upper back panel retract relay. If the circuit is dead, proceed as in (b) below.
	(b) Defective circuit from the top control switch through the upper back panel limit switch, the top up limit switch, and the upper back panel retract relay.	(b) TOP CONTROL SWITCH RELEASED. Check out the circuit wiring and switches using a self-powered test light.
	(c) Defective top up limit switch.	(c) Apply a test light between the red-white and green-white terminals of the switch. If the light does not come on, the switch is defective. Replace the top up limit switch.
	(d) Defective upper back panel limit switch.	(d) Using a self-powered test light, check between the black and the red wire terminals of the switch. If the light does not come on, make sure that the switch is properly adjusted before deciding it is defective.
	(e) Defective upper back panel motor or power circuit (Fig. 5).	(e) Disconnect the motor leads at the motor. Use a jumper between the blue-white motor lead and white-blue motor lead bus bar on the relay panel. If the motor does not operate, the motor is defective. Replace upper back panel motor. If the motor operates, check the power circuits back to the relay and the 15-ampere circuit breaker.

TROUBLE DIAGNOSIS GUIDE—TOP ERECT CYCLE—DECK LID CLOSE AND LOCK (Fig. 13 and 14)

Malfunction	Probable Cause	Corrective Action
1 NO DECK CLOSE ACTION—DECK CLOSE RELAY NOT FUNCTIONING.	(a) Defective deck close relay.	(a) (1) Check for voltage at the black-green wire terminal on the relay. If the terminal shows voltage, the relay is defective. Replace the deck close relay. (2) If the black-green wire terminal is dead, proceed as in (b) below.
	(b) Defective circuit from the top control switch through the upper back panel limit switch and the deck closed limit switch to the relay.	(b) TOP CONTROL SWITCH RELEASED. Check out the circuit wiring and switches using a self-powered test light.

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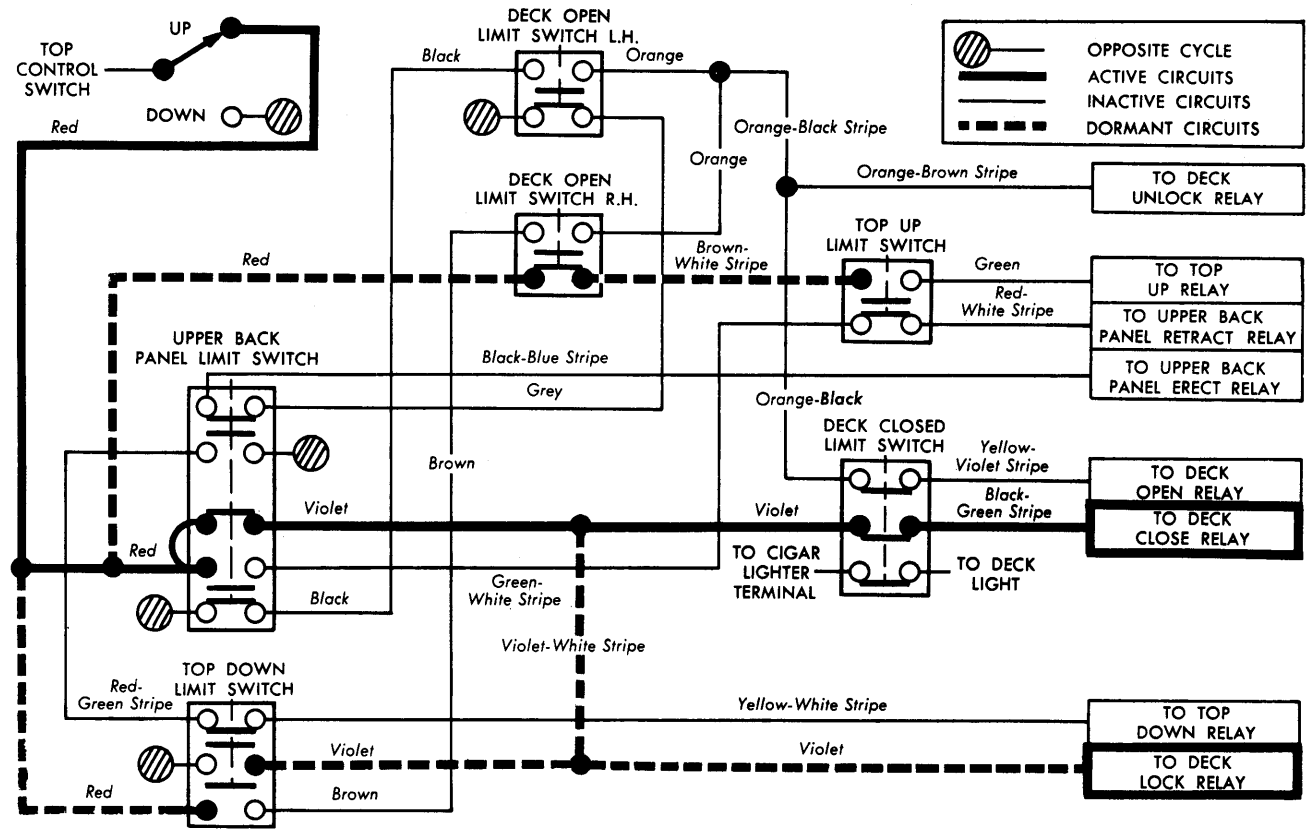

FIG. 13—Trouble Diagnosis Guide—Top Erect Cycle—Deck Lid Close P1070-C

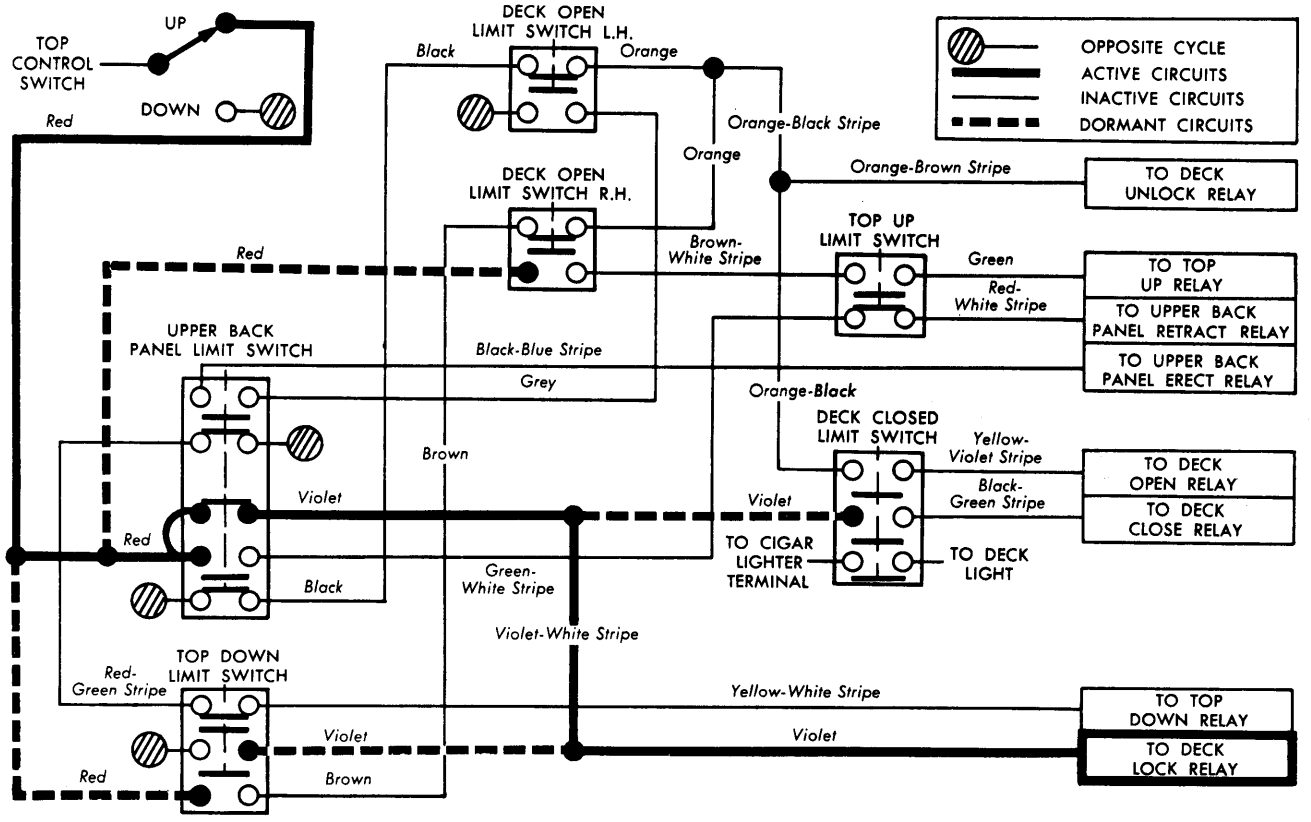

FIG. 14—Trouble Diagnosis Guide—Top Erect Cycle—Deck Lid Lock P1071-C

TROUBLE DIAGNOSIS GUIDE—TOP ERECT CYCLE—DECK LID CLOSE AND LOCK (Figs. 13 and 14) (Cont'd)

Malfunction	Probable Cause	Corrective Action
1 NO DECK CLOSE ACTION—DECK CLOSE RELAY NOT FUNCTIONING. (Continued)	(c) Defective upper back panel limit switch.	(c) Check between the violet and yellow wires of the switch. If the light does not come on, the switch is defective. Check the switch adjustment before replacing the switch.
	(d) Defective deck closed limit switch.	(d) Check between the white wire terminals on the deck closed limit switch with a self-powered test light. If the light fails to come on, the switch is defective. Replace the deck closed limit switch.
2 NO DECK CLOSE ACTION—DECK CLOSE RELAY FUNCTIONING—TOP AND DECK MOTOR AND PUMP ASSEMBLY IS OPERATING.	(a) Defective deck control solenoid valve.	(a) Check for voltage at the deck control solenoid valve lead. If the wire shows voltage, the solenoid valve is defective. If the wire is dead, check the power circuit and repair it.
3 NO DECK CLOSE ACTION—DECK CLOSE RELAY FUNCTIONING TOP AND DECK MOTOR AND PUMP NOT OPERATING.	(a) Defective top deck motor and pump assembly or power circuit.	(a) Check for voltage at the yellow wire at the top and deck motor and pump assembly. If the wire shows voltage, the motor is defective. If the wire is dead, check the power circuit and repair it.
4 NO DECK LOCK ACTION—DECK LOCK MECHANISM NOT FUNCTIONING WHEN DECK LID STARTS TO CLOSE.	(a) Defective deck lock relay. (Deck lock relay is activated simultaneously with the deck close relay).	(a) If the relay is not activated in the cycle, the relay is defective.
5 NO DECK LOCK ACTION—DECK LOCK RELAY FUNCTIONING.	(a) Open power circuit to deck lock motor or defective deck lock motor.	(a) When the deck lid starts to close, observe the deck lock mechanism. If the deck lock mechanism is not functioning, disconnect the motor leads at the motor. Use a jumper between the motor yellow-red lead and the yellow-blue wire receptacle of the deck lock relay connector. If the motor operates, the power circuit (yellow wire) is open. Repair the circuit. If the motor does not operate, the motor is defective. Replace the deck lock motor.

ELECTRICAL TESTING

Before attempting any trouble checks, read Section 1, Top Operation. The following over-all observations and checking procedures will assist in isolating the malfunction part.

SUPPLY CIRCUIT

A continuity light attached between ground and various points in the supply circuit will identify an inoperative or defective component. With the ignition switch in the ON or ACC position and the transmission selector in N or P, checks at the circuit breakers, neutral switch relay, actuator switch and relay power bus bar (in that order) will isolate the problem. Fig. 15 will assist in identifying the neutral switch relay terminals.

SWITCH CIRCUITS

The switch circuits can be checked by bypassing the various components with a jumper wire. A continuity light cannot be used as the current draw required by the light will not allow the relay coils to en-

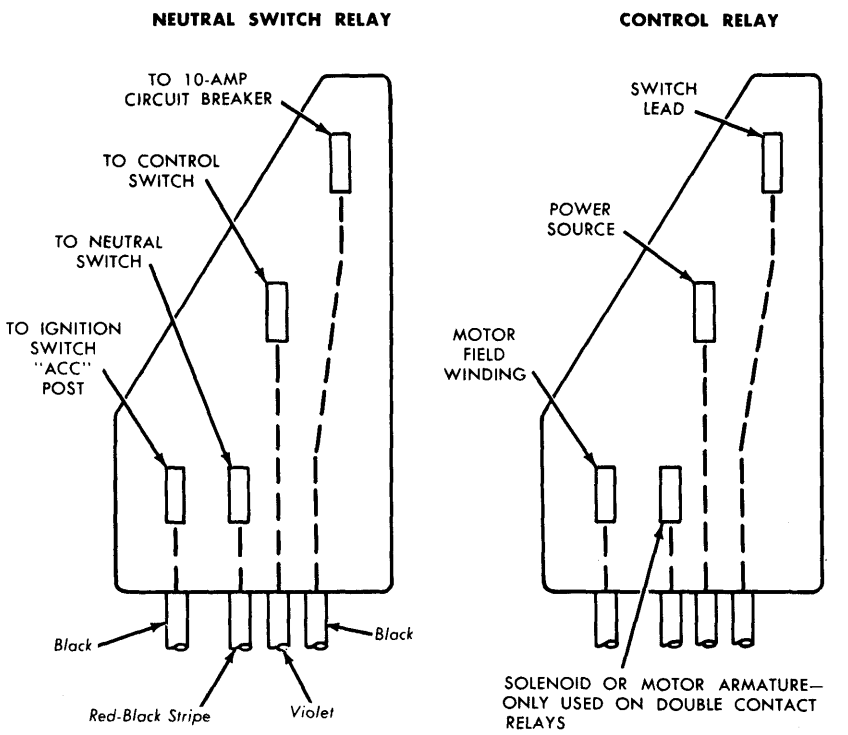

FIG. 15—Relay Wire Connector Terminal Identification

ergize. Fig. 3 through 14 should be referred to for identification of the wires. Fig. 15 will identify the control relay terminals.

Connecting the jumper wire between the relay bus bar and the relay coil terminal will bypass the switch circuit. If the motor or solenoid operates, the switch circuit can be checked to locate the inoperative or maladjusted switch, loose wire connector, or defective switch circuit wire. An audible click of the relay is another indication of switch circuit problems. If the component fails to operate and the relay is functional (the relay clicks) the motor or solenoid circuits are at fault. Moving the jumper wire to the relay motor terminal will determine if the relay is at fault. Should the motor or solenoid still fail to function, the motor or solenoid should be checked.

When the deck lid is opened, all switches are accessible for a direct check of their function. A malfunction of the top can be caused by a defective or improperly adjusted switch. A check for this condition should be made before making further tests. A switch can be checked by depressing the switch stem, if improperly adjusted, or bypassing the switch with a jumper wire directly at the switch contact terminals or wire connectors.

MOTOR OR SOLENOID CIRCUITS

Application of a 12-volt power source with a jumper wire directly to the motor or solenoid, or bypassing the motor ground circuit breaker will isolate the cause of the malfunction.

SWITCH ADJUSTMENT OR FUNCTION CHECKS

An ammeter (100-ampere scale) inserted in the motor feed circuit will aid in determining which of the electrical components is operating (both normally and abnormally). The ammeter should be connected between the main feed 60-ampere circuit breaker on the starter relay and the motor supply lead (No. 8 gauge blue wire) which supplies the control delay bus bars.

TABLE 1—Electrical Component Current Draw

Unlatch Rear Deck	20 amps
Raise Rear Deck	70 amps
Raise Package Tray	23-27 amps
Lower or Raise Top	65 amps
Lower Package Tray	22 amps
Latch Rear Deck	22 amps
Lower Rear Deck	70 amps

Should a switch be improperly adjusted and close the relay circuit for any functional cycle and yet not open the cycle just finishing, the ammeter reading will indicate the problem. Use Figs. 3 through 14 and Table 1 as a guide to the various components in use at each step of the top operation. The ammeter reading can be directly converted to a diagonsis of the problem.

MECHANICAL AND HYDRAULIC CHECKS

MECHANICAL CHECKS

Improper top operation can be caused by bent or misaligned linkage, binding linkage pins, and/or broken pivot bushings. Should the electrical and hydraulic systems be functionally correct and unsatisfactory operation of the top persists, check and adjust or replace the mechanical components as required.

HYDRAULIC CHECKS

Faulty hydraulic system operation can be caused by lack of fluid, air in the system, obstructions or kinks in the hoses, or faulty operation of a cylinder or the pump.

FLUID LEVEL CHECK

1. Erect the top.
2. Place absorbent cloths below the filler plug.
3. Remove the filler plug, and check the fluid level. It should be level with the bottom edge of the hole.
4. If the level is low, check the system for leaks, adding automatic transmission fluid Type A, Suffix A, as required.

LIFT CYLINDER OPERATION CHECK

Operate the top control switch and observe the operation of the lift cylinders for the following:

If the movement of the piston rods is sluggish or uneven, check the hoses from the pump to the cylinders for kinks.

If one piston rod moves more slowly than the other, the cylinder with the slower rod is defective and should be replaced.

If both rods move slowly, or do not move at all, disassemble and repair the pump.

3 EMERGENCY PROCEDURES

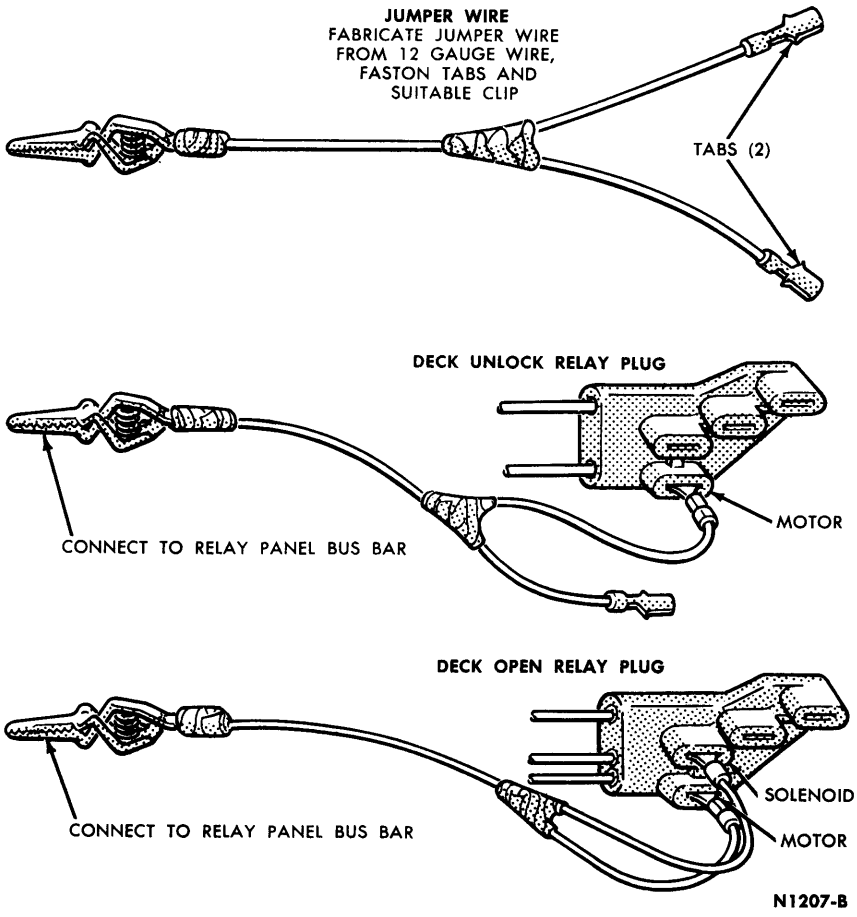

FIG. 16—Alternate Method of Opening Deck Lid—Jumper Fabrication

If a part of the electrical, mechanical, or hydraulic system of the deck lid does not work, the following manual procedures may be used to get at the malfunctioning part.

OPENING THE DECK LID WITH A JUMPER WIRE

When the deck lid will not open through the use of the top control switch, an alternate electrical method can be used to open the deck lid.

1. Remove the rear seat back to gain access to the deck unlock and open relays.

2. Remove the multiple plug from the deck unlock relay (Fig. 2).

3. Fabricate a jumper wire as shown in Fig. 16. Energize the deck unlock motor through the disconnected multiple plug and relay panel bus bar with the jumper wire (Fig. 16).

4. If the deck lid will not unlock, there is either an open wire to the motor or a failed motor. The deck lid will have to be manually unlocked.

5. If the deck lid will not open after being unlocked, remove the multiple plug from the deck open relay located behind the rear seat back. Energize the deck motor and pump assembly through the deck open relay plug with the use of the jumper wire (Fig. 16).

6. If the deck will not open, there is an open wire or a failed motor. If the motor operates but is under a heavy load, the solenoid could not be opening. It will be necessary to manually open the deck lid.

UNLOCKING DECK LID MANUALLY

1. Raise the car approximately 10 inches by placing a floor jack under the underbody rear cross member.

2. From the underside of each wheel housing, remove each deck lid lock retaining screw (Fig. 17).

3. After lifting the front edge of the deck lid about one inch, operate the top control switch to complete the opening of the deck lid.

4. When installing the lock nut housing retaining bolt, torque to 10-15 ft-lbs.

OPENING DECK LID MANUALLY

1. Unlock the deck lid by operating the top control switch or by using the preceding method for manually unlocking the deck lid.

2. From underneath the lower back panel, remove the deck cylinder bracket retaining bolts from each cylinder (Fig. 18).

3. Complete the opening of the deck lid manually. If the deck lid locks have been released from the wheel housings, the nut and housing portion of the locks will remain attached to the deck lid.

ERECTING TOP MANUALLY

If it becomes necessary to erect the top manually, proceed as follows:

1. Unlock and open the deck lid.

2. Energize both top solenoid valves, using suitable jumper wires

and a 12-volt source. It either valve is inoperative, disconnect the hydraulic line(s) connected to the valve(s) so that there will be no hydraulic block in the top cylinders.

3. Manually erect the top.

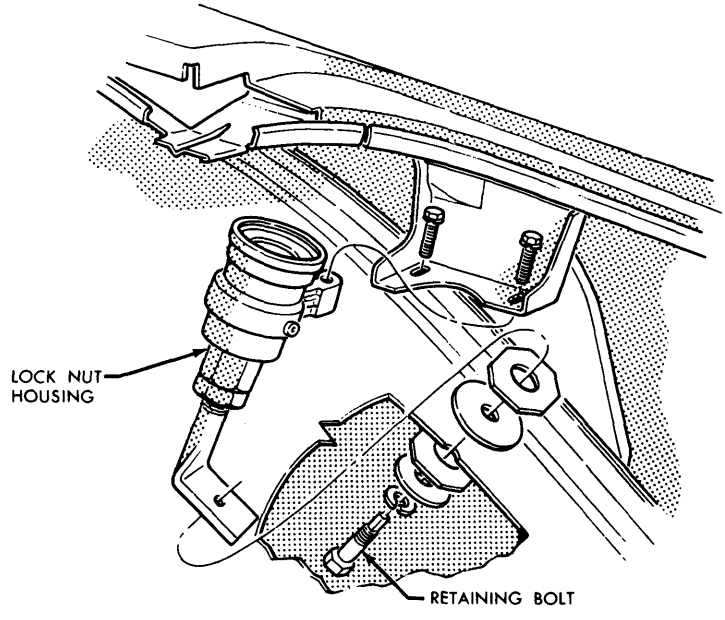

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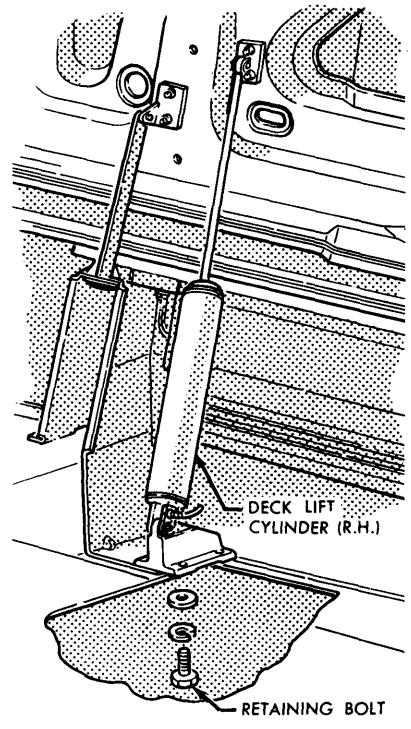
FIG. 17—Detaching The Deck Lid Locks



N1060-C

FIG. 18—Detaching the Deck Lift Cylinders

4 ADJUSTMENTS

LIMIT SWITCHES

Locations of the various limit switches are shown in Fig. 2.

TOP UP LIMIT SWITCH ADJUSTMENT

Raise the top until the package tray is aligned with the quarter panels and the rear seat back. Adjust the actuator to the switch plunger until the normally closed switch is open (Fig. 19).

TOP DOWN LIMIT SWITCH ADJUSTMENT

Lower the top until it is completely stowed in the luggage compartment. Adjust the actuator to the switch plunger until the normally closed switch is open at this point (Fig 20).

DECK OPEN LIMIT SWITCH ADJUSTMENT

Open the deck lid to the desired open position. Loosen the two screws retaining the switch bracket and rotate the switch bracket and actuator assembly toward the deck lid hydraulic cylinder until the normally closed switch is open at this point (Fig. 21).

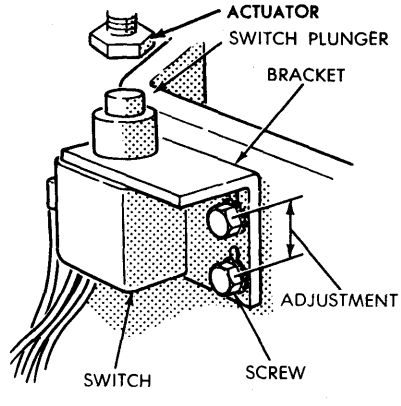


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FIG. 19—Top Up Limit Switch Adjustment

DECK CLOSED LIMIT SWITCH ADJUSTMENT

Set the deck closed limit switch at the mid point of the adjusting range. Close and lock the deck lid. Unlock the deck lid. The deck lid should become unlocked and start to open simultaneously. If the deck lid does not start to open, adjust the switch downward slightly. If the deck lid becomes energized before it is completely unlocked, adjust the switch

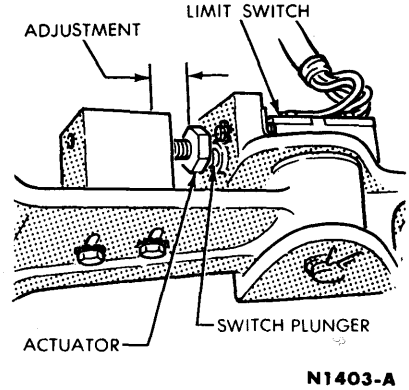

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FIG. 20—Top Down Switch Adjustment

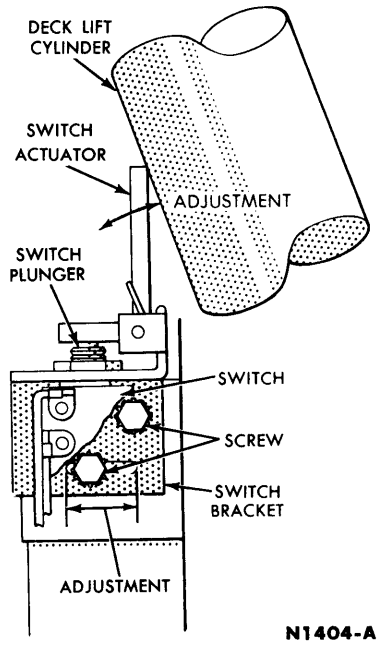

FIG. 21—Deck Open Limit Switch Adjustment

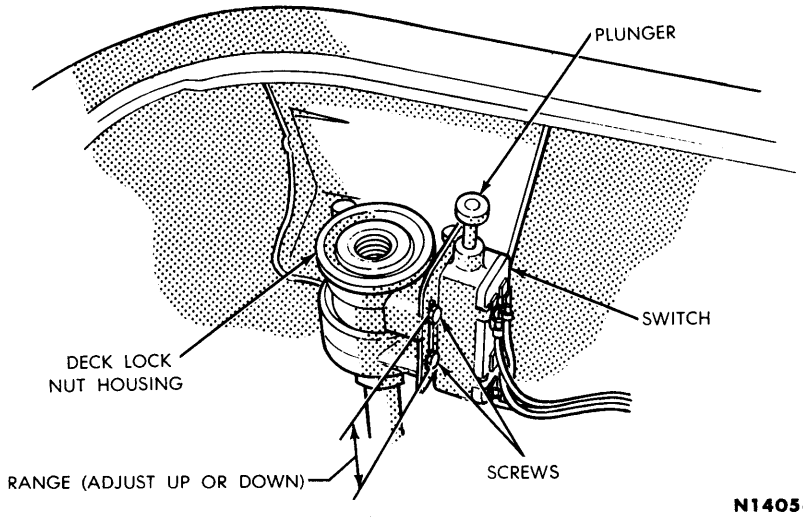

FIG. 22—Deck Closed Limit Switch Adjustment

upward slightly. Repeat until simultaneous operation.

UPPER BACK PANEL LIMIT SWITCH ADJUSTMENT

Loosen the switch retaining nuts C and switch adjustment screws D & E (Fig. 24). Operate the upper back panel to the desired extended position. Rotate the outer adjustment ring F until the normally closed switch contacts open at this point (grey and black with blue stripe wires) and tighten the adjustment screw D.

Retract the upper back finish panel until the rubber stops (Fig. 24), have been compressed 30 to 60% of normal. Rotate the inner adjustment ring G until the normally closed switch contacts open at this point (red-white stripe and green-white stripe and orange and red-green stripe wires) and tighten the adjustment screw E.

FOLDING TOP ADJUSTMENTS

If the top is misaligned, corrections should not be made until after a check has been made for bent linkage. All pivot points in the top linkage should be lubricated periodically with light engine oil.

Before aligning the top, visually determine if the trouble results from top misalignment and/or window misalignment. It may be necessary to align both the top and the windows because of the relationship between the two. Adjustments of the door and quarter windows must be checked and any necessary changes made before making top adjustments These windows must be fully closed to insure proper adjustment. Door and quarter window adjustments are outlined in Part 11-3.

If the stack has been replaced, the stack should be completely adjusted first, then the side glass adjusted to fit the stack.

There are 4 main adjustment areas for the top of the deck lid: the header area, the side rail area, the deck lid area, and the main pivot bracket area.

HEADER AREA ADJUSTMENTS

NO. 1 BOW ADJUSTMENT

The No. 1 bow can be adjusted fore and aft, to provide alignment with the header.

1. With a pencil, mark the present location of the joint between the No. 1 bow and the front side rail. This mark provides a measuring point for adjustment.
2. Raise the top to a satisfactory working level; prop it in position and remove the screws that hold the forward part of the front side rail weatherstrip retainer to the front side rail and the No. 1 bow (Item A—Fig. 23).
3. Using a putty knife, loosen the front part of the weatherstrip from the front side rail and the No. 1 bow. It is not necessary to remove the entire weatherstrip.
4. Loosen the two nuts (Item A—Fig 26) and move the No. 1 bow fore or aft to get the proper alignment at the header, and tighten the nuts.
5. Loosen the dowels in the No. 1 bow and lower the top to check their location and alignment with the striker plates in the header. See Dowel Adjustment below.
6. After proper alignment is achieved, carefully raise the top and tighten the dowels. Again lower the top and check the dowel alignment.

DOWEL ADJUSTMENT

The No. 1 bow dowels must be aligned with their striker plates in the header. After making any top adjustment check the dowel alignment and adjust as required. Access to the dowel adjusting screws is gained by removing the No. 1 bow weatherstrip and penetrating the sealer to turn the screws. The dowels can be moved after loosening the screws.

TOGGLE CLAMP ADJUSTMENT

The toggle clamps that hold the No. 1 bow against the header can be adjusted to provide a good seal.

1. Check the weatherstrip between the No. 1 bow and the header to determine which side is not sealing properly. It is not always necessary to adjust both toggle clamps.
2. Check for proper toggle hook

seating in the header slots (Fig. 26 Sectional View AA).

3. Release the toggle clamps by means of the handle. Thread the hook in or out by turning right to tighten, or left to loosen, to obtain a 15 to 20 pound effort to release the clamp by pulling down on the handle.

SIDE RAIL AREA ADJUSTMENTS

Adjustments in the side rail area are made as required to bring the top rails and weatherstrip in proper relationship with the previously adjusted door and quarter windows. See Fig. 23 for weatherstrip adjustment.

1. With the top locked to the windshield header, loosen two bolts (B, Fig. 26, D, Fig 25) and two nuts (A, Fig. 26), on each side of the top.

2. Slide the front side rail fore or aft in the No. 1 bow to obtain a constant parallel condition between the outside **front** edge of the rear side intermediate rail and the outside **rear** edge of the quarter window glass frame as shown in Fig. 26 Sectional View CC and View EE.

3. After adjustment, tighten nuts A and bolts B (Fig. 26).

4. Unlock the top at the header clamps. Raise the top sufficiently to check the position of the set screw E (Fig. 26 Sectional View DD). The set screw E must be flush with the end of the front side intermediate rail assembly on both sides of the top. Lock the top to the header.

5. Loosen two bolts C Fig. 26, on each side of the top. Lengthen or shorten the balance link to eliminate sag in the roof side rail at point W (Fig. 26), to obtain a constant parallel condition between windows and rails as shown in Fig. 26 Sectional View BB.

6. Excessive crown at point W of the side rails may be eliminated by backing off screw E (Fig. 26 View DD).

7. Operate the top mechanism to check all adjustments. Place the top in folded position and lock the adjustments by tightening the four screws (C Fig. 25).

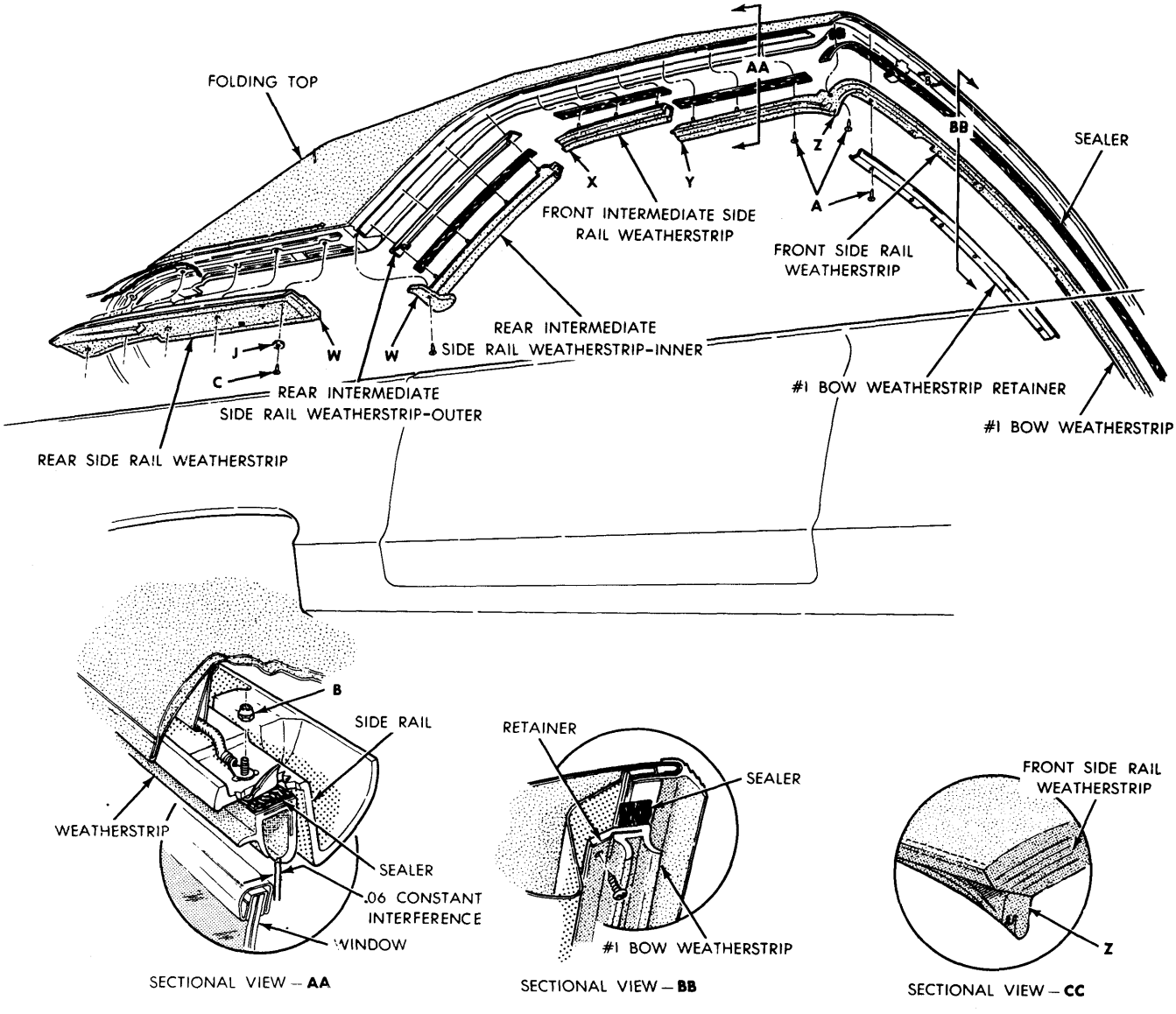

FIG. 23—Folding Top Weatherstrip Adjustment

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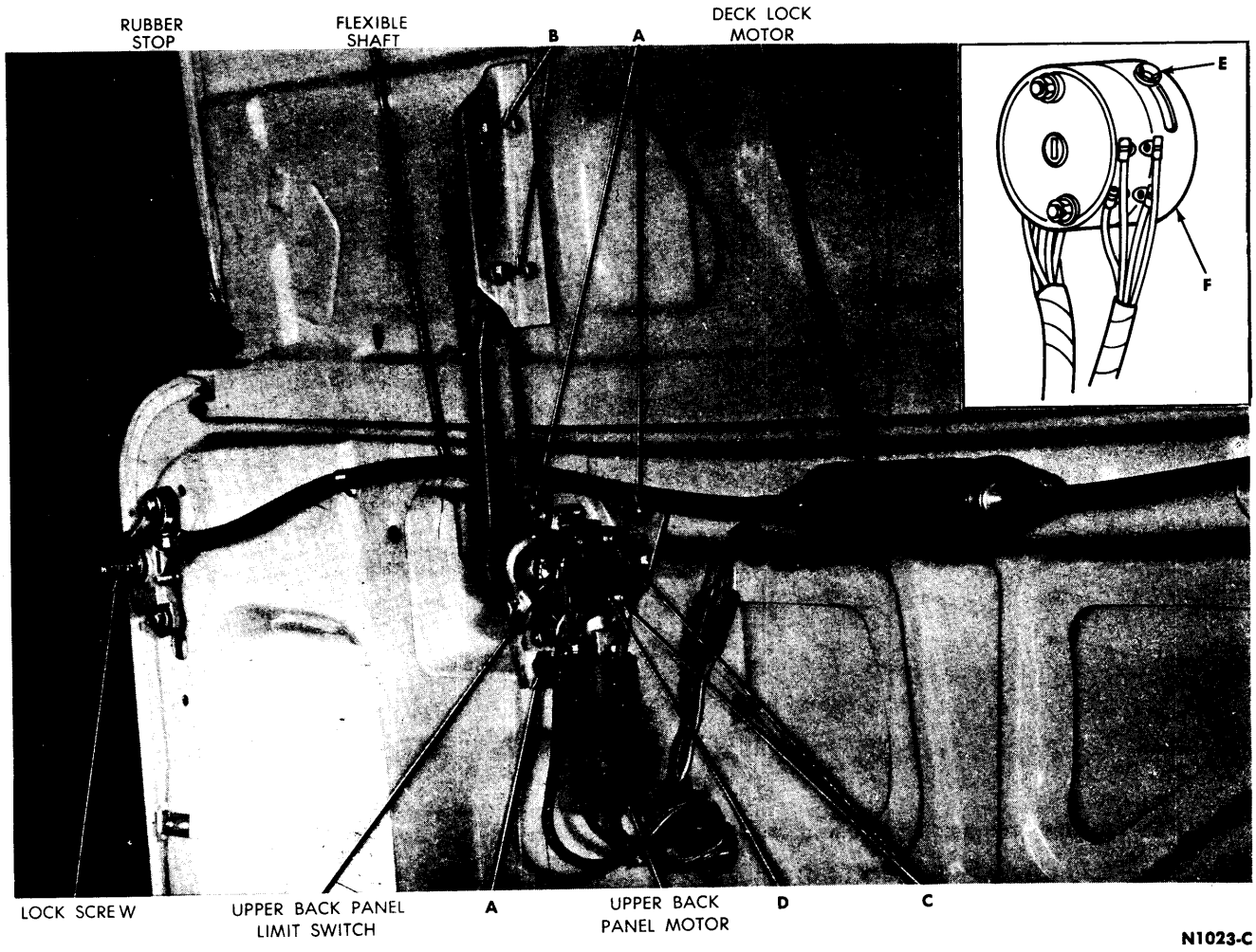

FIG. 24—Upper Back Panel Adjustment

FOLDING TOP WEATHERSTRIP ADJUSTMENT

The folding top weatherstrip adjustment will affect proper sealing between the folding top and the windshield header, door windows, rear quarter windows, and the rear quarter panel. Adjustment of the weatherstrip should not be attempted until the folding top mechanism has been completely adjusted. Inspect the weatherstripping fit around the complete joining areas of the top and adjust as required. Make a careful check and inspection of disturbed sealer and reseal where required for water-tight joints.

HEADER WEATHERSTRIP ADJUSTMENT

1. With the top up and locked, inspect the No. 1 bow weatherstrip for fit at the windshield header. (Passing a wooden shim or thin strip of plastic along the header under the weatherstrip will help to detect a loose fit.)

2. Raise the No. 1 bow sufficiently to loosen the weatherstrip retainer screws A, Fig. 23. Carefully loosen the weatherstrip from the seal. Adjust the weatherstrip fore or aft to align it parallel with the No. 1 bow forward edge. Reseal where the weatherstrip seal is loose or broken (Fig. 23 Sectional View BB).

3. Tighten the weatherstrip retainer screws (A Fig. 23). Lock the top to the header.

SIDE RAIL WEATHERSTRIP ADJUSTMENT

1. With the top up and locked and the door and quarter windows closed, inspect the weatherstrip interference fit at the inside surface of the window frames.

2. Lower the door and quarter windows and loosen the weatherstrip retaining nuts (B, Fig. 23 Sectional View AA), as required. Carefully loosen the weatherstrip.

3. Close the windows and move the weatherstrip fore or aft or in or out to obtain the proper watertight joints at points X, Y and Z and the 0.6 inch interference as shown in Fig. 23 Sectional View AA. Tighten nuts B.

REAR SIDE RAIL WEATHERSTRIP ADJUSTMENT

1. With the top up check the joint at point W (Fig. 23) for a watertight fit. With a pencil, mark the rear side rail and weatherstrip for a measuring point. Measure the gap at point W, either or both sides.

2. Lower the top to the stacked position and loosen the 5 screws (C, Fig. 23), either or both sides, and move the rear side rail weather-

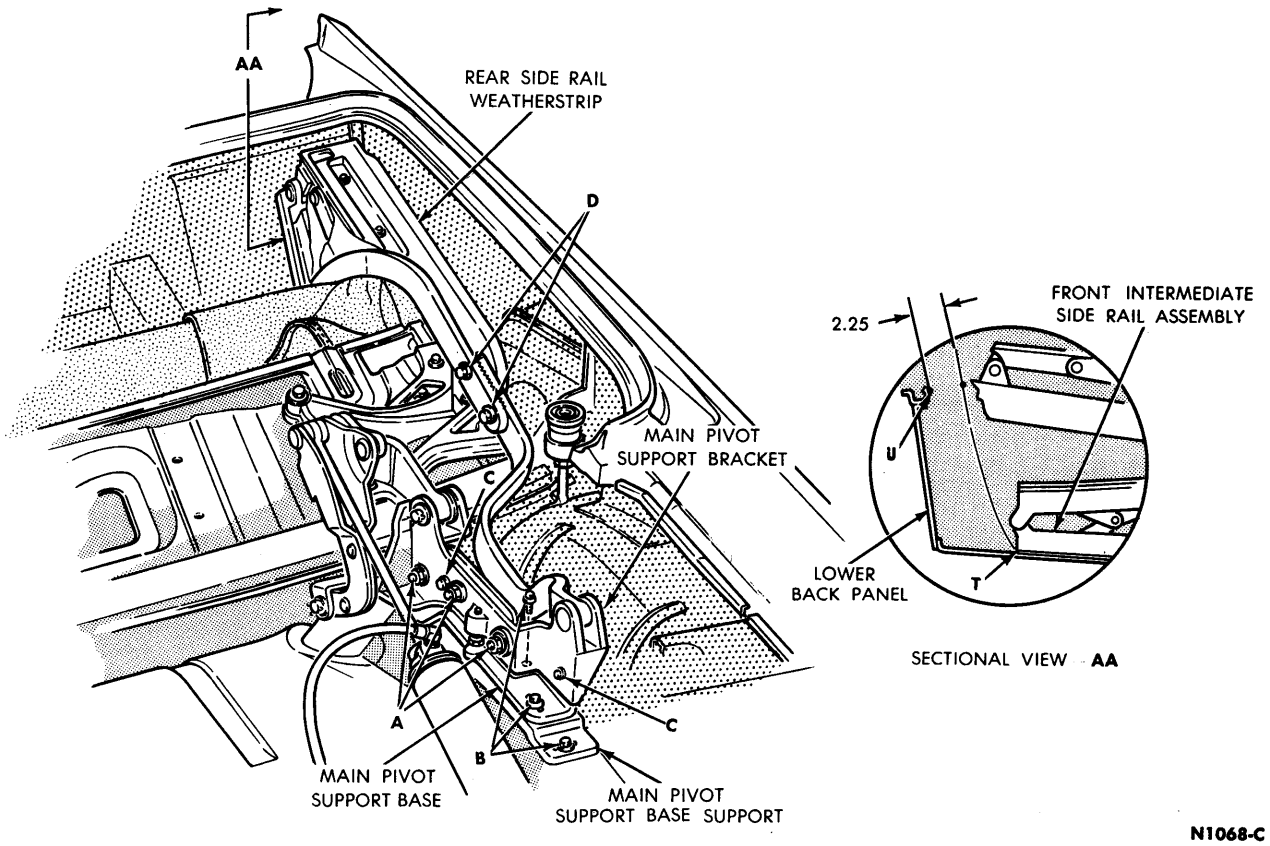

FIG. 25—Package Tray and Top Stacking Adjustment

strip fore or aft the distance of the gap width, as measured in step 1, above, to obtain a watertight joint at point W. Tighten screws C.

DECK LID AREA ADJUSTMENTS

Fore - And - Aft and Up - And - Down Adjustment of The Finish Panel. Adjust the space between the edges of the finish panel and the deck lid and/or the body and for a flush surface fit as follows:

1. Slightly loosen the hinge arm retaining bolts B at the panel (Fig. 24).
2. Shift the panel so that there is equal space between the edges of the finish panel, deck lid, and the rear seat back panel.
3. Raise or lower the upper back panel until the panel is flush with the surface of the deck lid, rear seat back panel, and the upper quarter panel. Make certain that the weatherstrip seal is not disturbed.
4. Tighten the retaining bolts and nuts B securely.

Lateral Deck Lid Adjustment.

1. Slightly loosen the hinge retaining bolts A at the deck lid (Fig. 24).
2. Shift the deck lid to the right or left in the enlarged holes, until there is equal clearance along the sides of the deck lid finish panel.
3. Tighten the hinge bolts securely.

MAIN PIVOT BRACKET AREA ADJUSTMENTS

Adjustments in this area affect the fit of the package tray, fit of rear rail, and top stacking. Fig. 25 locates the points of adjustment. The screws and bolts designed A, B, and C are more easily accessible for loosening with the top in the folded position. However, adjustments must be made with the top up, and the screws and bolts must be tightened to hold the adjustment before the top is again lowered.

1. Loosen 3 nuts (A), 6 screws (B), and 4 screws (C), on each side of the body (Fig. 25).
2. Operate the mechanism to place the top in the up position. As the top is rising, check the clearance between the rear end of the bottom rail (Point T) (front end of the front side intermediate rail assembly) and the top front edge (Point U) of the lower back panel (Fig. 25 Sectional View AA). Adjust for this clearance by moving the main pivot support base fore or aft on the main pivot support base support. Tighten the 3 screws sufficiently to hold the adjustment (Fig. 25).
3. Adjust the entire folding top assembly fore or aft, in or out, or up or down as required to obtain the correct margin between the package tray panel and the upper quarter panel at points D (Fig. 26). A flush condition must be obtained along the top surface of the body metal and along the vertical wall of the luggage compartment drain trough. The bottom surface of the rear rail weatherstrip must rest flush on the surface of the upper quarter panel. After adjustment, tighten six screws B, and three nuts A, each side.
4. Check the position of the No.1 bow in alignment with the header. Adjust, if required, as in Header Area Adjustments.

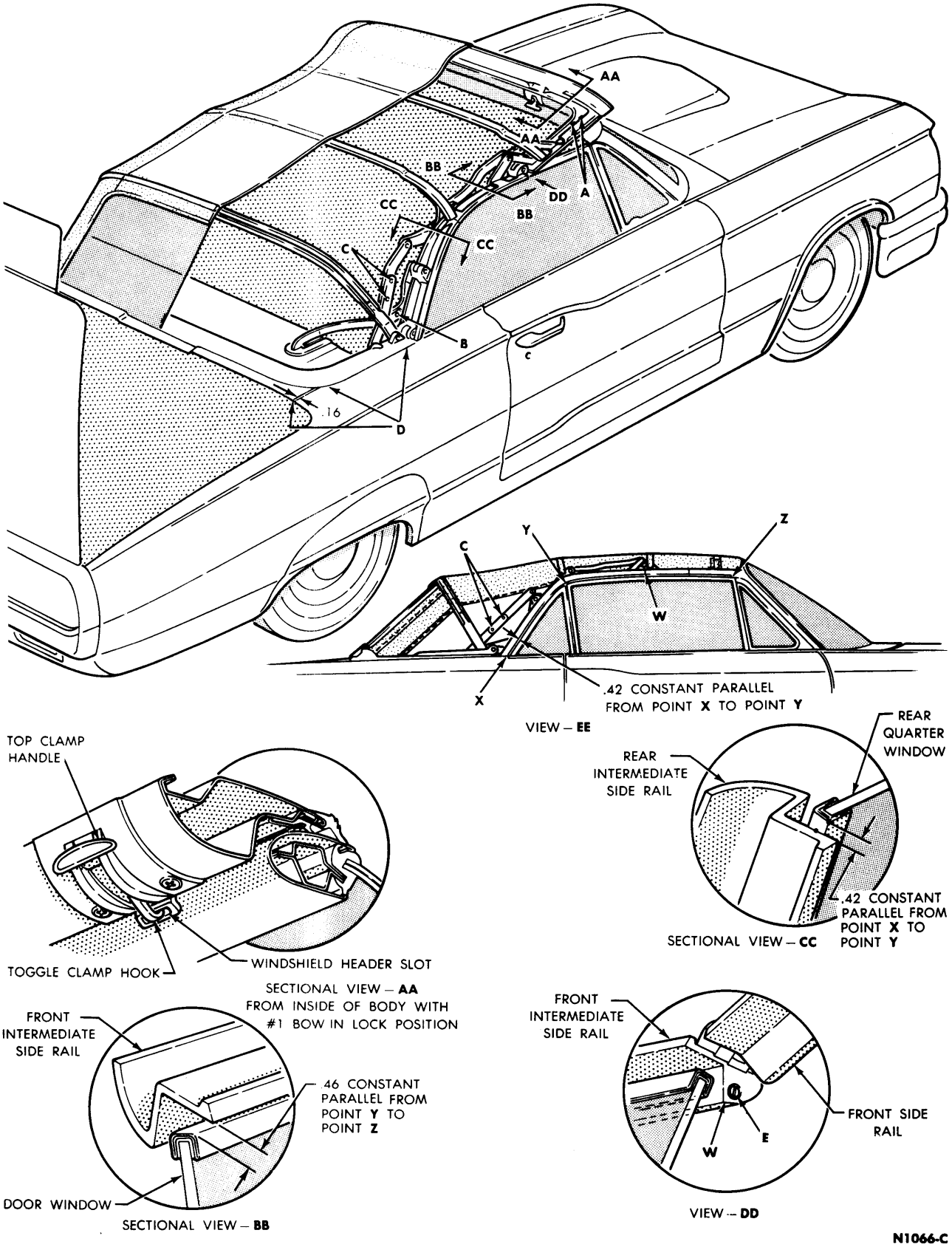

FIG. 26–Folding Top Mechanism Adjustment

DECK LOCK ADJUSTMENT

For an adequate seal, the deck lock screw assembly must be adjusted to engage properly with the lock nut assembly.

DECK LOCK SCREW ASSEMBLY

Loosen the two nuts retaining the lock screw assembly to the deck lid and adjust the assembly fore or aft to align with the lock nut housing assembly.

DECK LOCK NUT HOUSING SUPPORT

Loosen the two screws retaining the lock nut housing support to the quarter panel and adjust the support side to side to align with the lock screw (Fig. 27). Torque the screws to 7-12 ft-lbs.

DECK LOCK NUT SET SCREW

Loosen the set screw retaining the lock nut in the housing assembly and turn the lock nut in or out to the required position. Turn the lock nut, using tool T57P-53510-A, so that the lock screw will ratchet and the deck lid weatherstrip is compressed.

Do not attempt any trial locking of the deck unless the set screw is properly tightened.

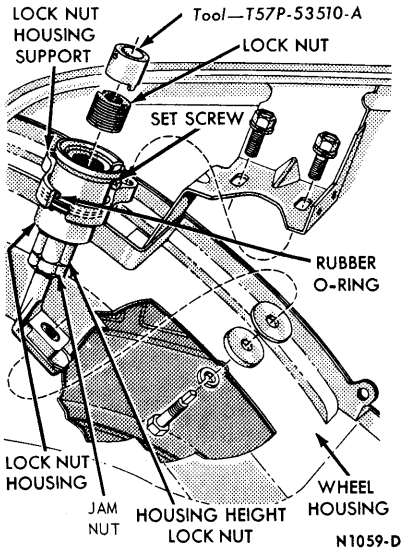

FIG. 27—Deck Lid Lock

DECK LOCK NUT HOUSING HEIGHT

The foot of the lock nut housing assembly may be adjusted up or down from the wheelhouse to insure the correct positioning of the O-ring. The O-ring should be centrally located in the housing support (Fig. 27). Adjustment is as follows:

Loosen the lock nut housing jam nut. Turn the housing height lock nut to move the housing up or down to obtain the correct position of the O-ring. Do not loosen the bolt attaching the lower end of the lock nut housing to the wheel housing to perform this adjustment.

5 REMOVAL AND INSTALLATION

MOTOR AND PUMP

A pump repair kit and a reservoir repair kit are available for service.

REMOVAL

1. Open the deck lid. (See Section 2 for manual opening, if required). Remove the fabric covering from the front of the rear compartment for access to the motor and pump, and solenoid.
2. Disconnect the motor leads at the two wire connector and the solenoid leads at the connectors (Fig. 28).
3. Using a jumper wire from the blue wire terminal at the relay feed bar (or a separate 12 volt power source), energize the top control solenoids to relieve pressure in the hydraulic lines.
4. Remove the motor ground from the left relay panel mounting bolt (Fig. 28).
5. Place absorbent cloths under the hose connection at the pump. Disconnect both hoses at the pump fittings. Plug the hose fittings (Fig. 28).
6. Remove the attaching nuts and washers at the forward ends of the motor and pump mounting bracket. Lift or pry the motor bracket fasteners from the holes in the floor pan bracket. Do not lose the mounting stud grommets when lifting the motor from the mounting (Fig. 29).

DISASSEMBLY

1. Remove the filler plug, and drain the fluid from the reservoir into a clean container (Fig. 30).
2. Scribe lines on the reservoir, pump body and reservoir cover so that these parts can be assembled properly (Fig. 31).
3. Remove the center bolt from the reservoir cover (Fig. 30).
4. Remove the cover and reservoir, and the O-ring seals at each end of the reservoir.
5. Remove the mounting bolts that hold the valve body on the pump body.
6. Place a cloth under the assembly, and carefully remove the valve body so that the check balls are not lost.
7. Remove both rotors from the motor shaft.

ASSEMBLY

When assembling the pump, use all the parts supplied in the pump repair kit (Fig. 30).

1. Install the inner rotor on the motor shaft.
2. Install the outer rotor, and place the check balls in the valve body channels.
3. Install the valve body on the pump body.
4. Install an O-ring seal in each end of the reservoir.
5. Install a new seal on the center bolt, and install the reservoir and cover on the valve body, using the lines previously scribed as guides (Fig. 31). The cover must be mounted with the embossed lines in a vertical and horizontal position and the filler plug at 10 o'clock in relation to the mounting bracket base line.
6. After positioning the assembly horizontally, fill the reservoir with automatic transmission fluid Type A, Suffix A to the level of the bottom of the filler plug hole. Install the filler plug and new seal.

INSTALLATION

1. Position the pump mounting grommets to the pump, and install the pump assembly mounting nuts (Fig. 29). Be sure that the motor ground lead is installed under the relay panel screw to a good electrical ground (Fig. 28).
2. Remove the plugs from the lines and fittings and connect both

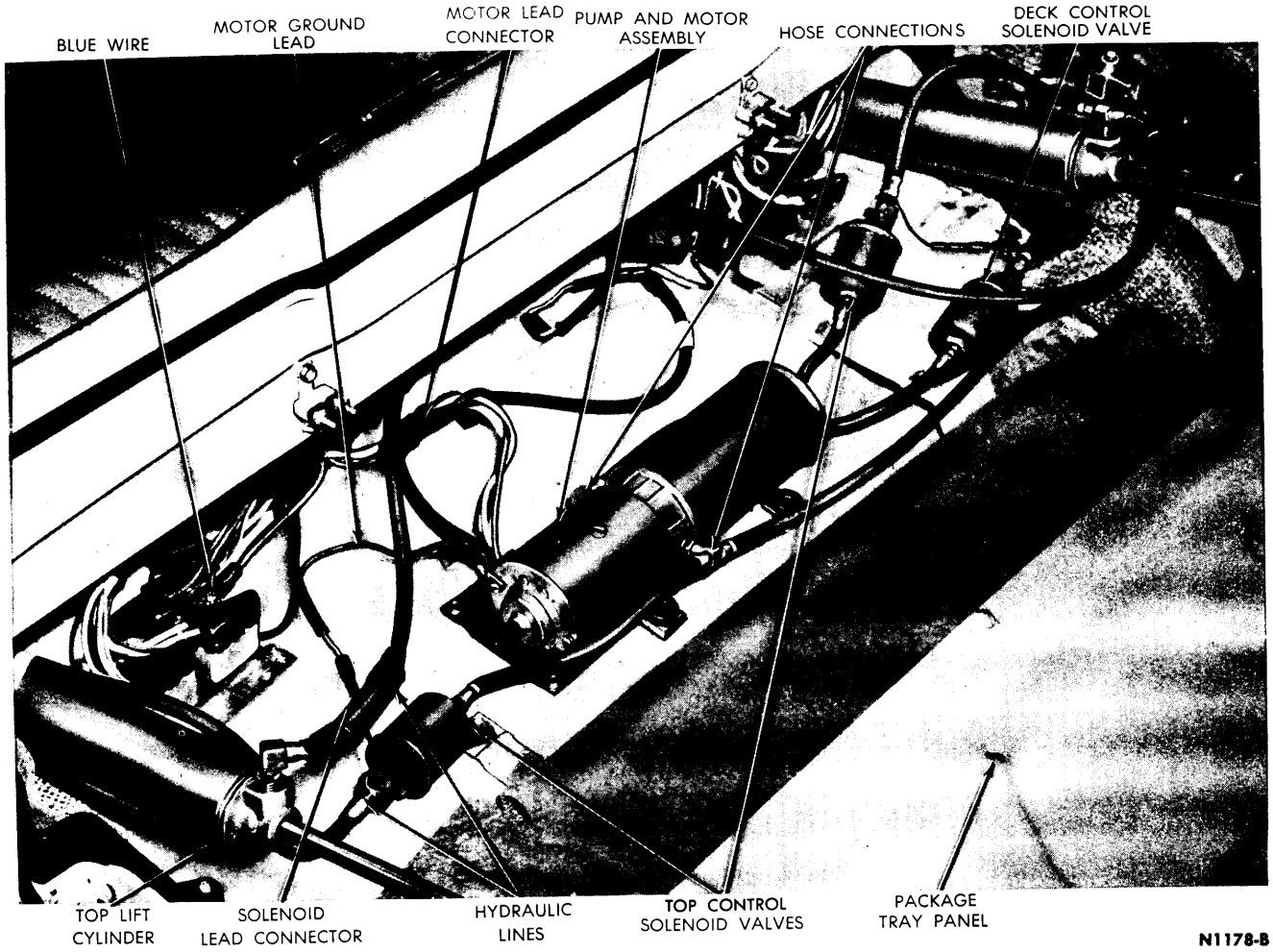

FIG. 28—Pump Assembly and Solenoid Valves Installed

lines to the pump assembly (Fig. 28).

3. Connect the motor leads at the connector (Fig. 28).

4. Bleed the system by operating the top 2 or 3 times, and check the fluid level. The top must be in the raised position when the fluid level is checked.

FOLDING TOP LIFT CYLINDER

1. Open the luggage compartment door.

2. Remove the rear seat cushion and seat back.

3. Remove the locking pin, washer, and clevis pin from the cylinder to body attaching bracket. Lift the cylinder out of the bracket and remove the grommets from the cylinder (Fig. 32).

4. Remove the locking pin, washers, clevis pin, and bushings from the lift cylinder to top mechanism pivot.

5. Lay the lift cylinder on the floor pan in a horizontal position on some absorbent rags and disconnect the hydraulic lines.

6. Cap the hydraulic lines and remove the cylinder from the car.

7. Lay the lift cylinder in the luggage compartment. Remove the caps from the hydraulic lines and connect the lines to the lift cylinder in the same location as they were removed.

8. Install the grommets in the cylinder lower pivot holes and position the cylinder to the lower pivot bracket. Install the clevis pin, washer, and locking pin.

9. Position the cylinder rod to the top linkage and install the bushings, clevis pin, washers, and locking pin.

10. Install the rear seat back and seat cushion.

11. Remove the filler plug from the top pump and motor reservoir and add type A automatic transmission fluid. The fluid level should not be more than ¼ inch below the bottom of the plug opening.

12. Operate the top with the filler plug loose to bleed air from the system. Then, add fluid as necessary and check for leaks.

LUGGAGE COMPARTMENT DOOR LIFT CYLINDER

1. Open the luggage compartment door.

2. Position the floor mat aside and remove the lift cylinder shield.

3. Support the luggage compartment door in the up position.

4. Remove the locking pin, washers, clevis pins, grommets and bushings from the cylinder lower pivot (Fig. 33).

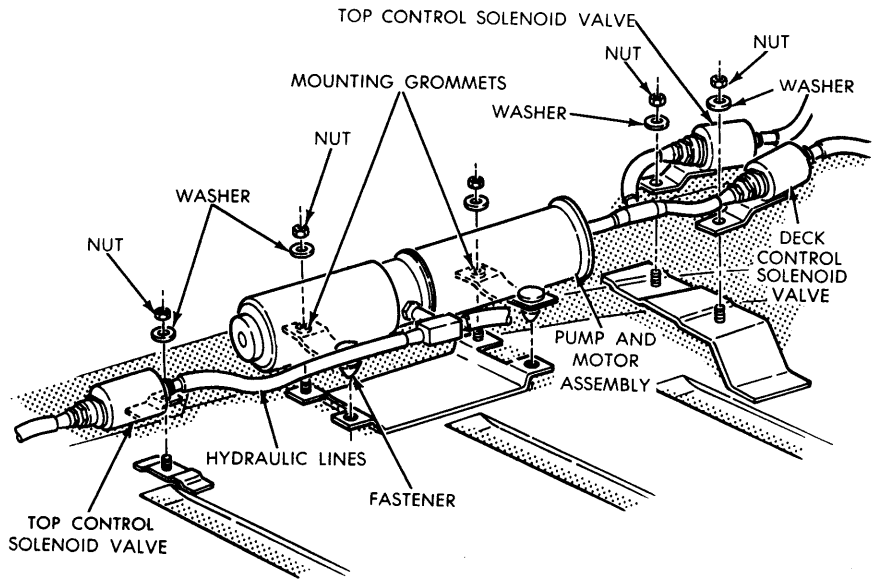

FIG. 29—Pump Assembly, Solenoid Valves and Attaching Parts

5. Remove the locking pin, washer, clevis pin, and bushings from the cylinder upper pivot.

6. Move the cylinder to a horizontal position and disconnect the hydraulic lines and cap them. **Place absorbent rags under the cylinder hose connections before removing them from the cylinder.**

7. Remove the hydraulic cylinder from the car.

8. Position the hydraulic cylinder to the lower pivot bracket and install the bushings, grommets, clevis pin, washers, and locking pin (Fig. 33).

9. Position the cylinder rod to the upper pivot bracket and install the bushings, clevis pin, washer, and locking pin.

10. Remove the caps from the hydraulic lines and connect the lines to the cylinder. Be sure that the lines are connected to the correct fittings.

11. Remove the support from the luggage compartment door.

12. Remove the reservoir filler plug and fill the reservoir to within ¼ inch of the bottom of the filler plug with Type A automatic transmission fluid.

13. Operate the top with the reservoir filler plug loose to bleed air from the system. Then, add fluid to the reservoir as necessary and check for hydraulic leaks. Tighten the reservoir filler plug.

14. Install the lift cylinder shield and reposition the floor mat. Then, close and lock the luggage compartment door.

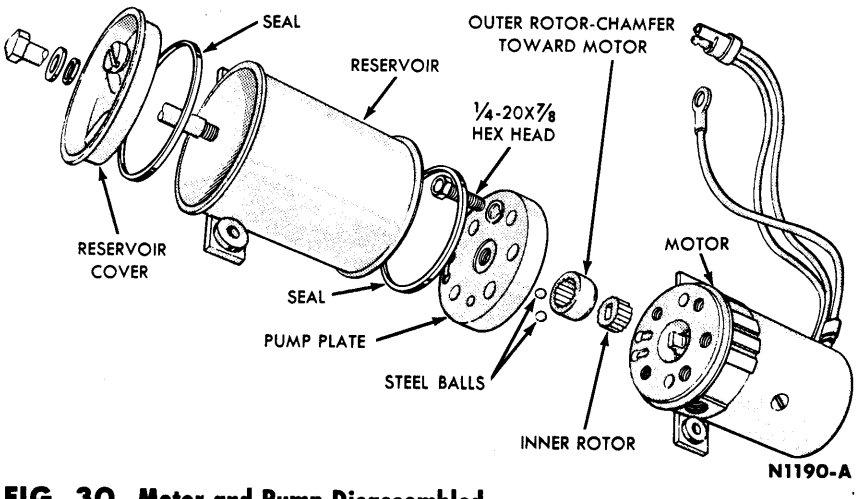

FIG. 30—Motor and Pump Disassembled

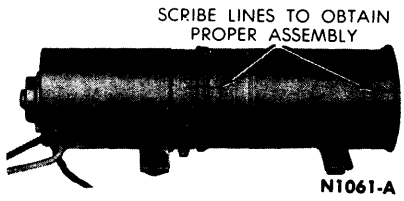

FIG. 31—Reservoir Marked Before Disassembly

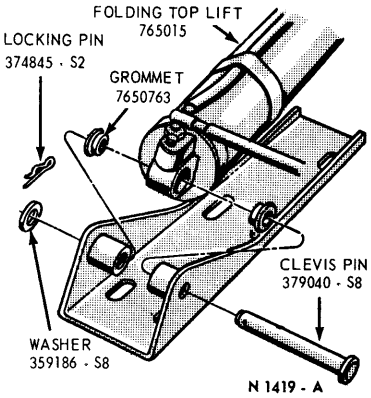

FIG. 32—Folding Top Lift Cylinder Lower Pivot

LUGGAGE COMPARTMENT DOOR HINGE

1. Open the luggage compartment door.

2. Remove the luggage compartment rear liningboard and disconnect the taillight wires at the connectors.

3. Remove the right and left taillight mouldings.

4. Remove 4 screws from each taillight and remove the right and left taillights.

5. Remove the rear bumper assembly.

6. Prop the luggage compartment door up and remove 2 bolts attaching the hinge to the luggage compartment door.

7. Remove 4 bolts attaching the hinge to the body and remove the hinge.

8. Position the hinge to the body

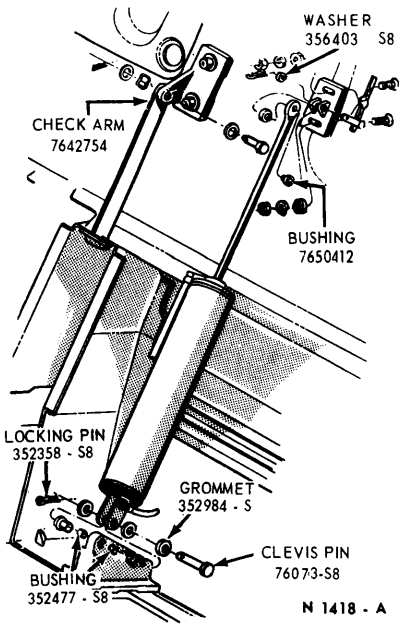

FIG. 33—Luggage Compartment Door Lift Cylinder Installation

and luggage compartment door and install the attaching bolts.

9. Lower the luggage compartment door and adjust as necessary (Section 4).

10. Install the rear bumper assembly.

11. Install the right and left taillight assemblies and mouldings.

12. Connect the taillight wires at the connectors and install the luggage compartment rear liningboard. Then, close and lock the luggage compartment door.

LUGGAGE COMPARTMENT DOOR LOCK NUT

1. Raise the rear of the car and remove the right and left deck lid locknut lower retaining screws located in the wheel housings.

2. Raise the luggage compartment door approximately one inch by hand to free the lock assemblies from the bracket. Then, operate the top switch to complete the deck-open cycle.

3. Remove the right and left lock nuts from the transmission lock screws.

4. Position the lock nuts in the brackets and install the lower retaining screws at the wheel housings. Torque the screws to 15-20 ft-lbs.

5. Loosen the locknut set screw and remove the lock nut from the housing with Tool T57P-53510-A.

6. Install the door lock nut in the housing using Tool T57F-53510-A. Then, close and lock the luggage compartment door and check the door closing height.

7. Open the luggage compartment door and adjust the nut up or down with Tool T57F-53510-A to obtain a flush surface when the luggage compartment door is closed.

LUGGAGE COMPARTMENT DOOR LOCK TRANSMISSION

REMOVAL

1. Raise the rear of the car and remove the right and left luggage compartment door lock nut lower retaining screws located in each wheel housing.

2. Raise the luggage compartment door approximately one inch by hand to free the lock assemblies from the bracket. Then, operate the top switch to complete the deck-open cycle.

3. Remove the right and left lock nuts from the transmission lock screws.

4. Position the lock nuts in the brackets and install the lower retaining screws at the wheel housing. Torque the scrws to 15-20 ft-lbs.

5. Scribe the location of the transmission on the luggage compartment door.

6. Loosen the 2 nuts retaining the transmission to the luggage compartment door (Fig. 34) and slide the bolts out of the slots in the door inner panel.

7. Loosen the transmission drive cable retaining screw and remove the transmission from the luggage compartment door.

INSTALLATION

1. Transfer the bolts, washers, sleeves, bushings, and nuts (Fig. 34) to the new transmission (also transfer the limit switch activator on the right transmission).

2. Position the drive cable in the transmission and install the transmission to the luggage compartment door inner panel. Torque the transmission rétaining nuts to 3-6 ft-lbs.

3. Tighten the screw retaining the drive cable in the transmission.

4. Carefully lower the luggage compartment door and check the alignment of the transmission with the lock nut.

5. Raise the luggage compartment door and adjust the transmission fore or aft as required for proper fore or aft alignment with the lock nut.

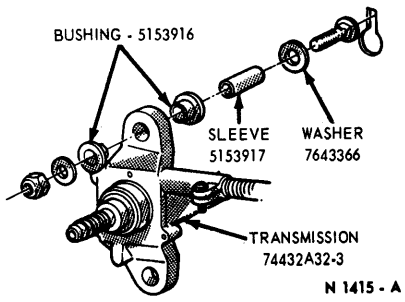

FIG. 34—Luggage Compartment Door Lock-Transmission Installation

6. Adjust the lock nut assembly side to side as required to align with the transmission.

7. Close the luggage compartment door and check for proper alignment and for a good weatherstrip seal.

8. Adjust the lock nut height as necessary for a flush luggage compartment door fit with Tool T57P-53510-A.

9. Adjust the luggage compartment door close limit switch and activator using Tool T57P-15780-A. Then, check the operation of the luggage compartment door locks and the switch adjustment.

LUGGAGE COMPARTMENT DOOR LOCK TRANSMISSION DRIVE CABLE AND HOUSING

1. Raise the rear of the car and remove the right and left luggage compartment door lock nut lower retaining screws located in each wheel housing.

2. Raise the luggage compartment door approximately one inch by hand to free the lock assemblies from the bracket. Then, operate the top switch to complete the deck-open cycle.

3. Remove the right and left lock nuts from the transmission lock screws.

4. Position the lock nuts in the brackets and install the lower retaining screws at the wheel housing. Torque the screws to 15-20 ft-lbs.

5. Remove the clip and screw retaining the cable and housing to the door inner panel.

6. Disconnect the drive cable and housing from the motor and transmission and remove the cable and housing.

7. Place the cable and housing in

the transmission and tighten the retaining screw.

8. Connect the drive cable and housing to the motor and retain it in place with the clip and screw.

UPPER BACK FINISH PANEL LIFT

REMOVAL

1. Open the luggage compartment door.

2. Remove the upper back panel motor and switch wires from the retaining clip; pull the wires out of the hole in the inner panel and disconnect at the connectors.

3. Scribe the location of the lift assembly on the upper back finish panel bracket; then, remove 2 bolts, nuts, and washers attaching the upper back finish panel to the lift assembly.

4. Remove 2 bolts attaching the lift assembly to the luggage compartment door inner panel. Remove the lift assembly.

5. Remove 2 switch retaining nuts and remove the switch from the transmission.

6. Remove 2 motor retaining nuts and remove the motor from the transmission.

7. Remove 4 bolts and 2 nuts and remove the transmission and arm from the mounting plate.

INSTALLATION

1. Position the mounting plate to the transmission and arm assembly and install the 4 bolts and 2 nuts.

2. Position the motor and rubber drive coupling to the transmission and install the 2 retaining nuts.

3. Position the switch to the transmission and install the 2 retaining nuts.

4. Position the lift assembly to the luggage compartment door inner panel and install the 2 attaching bolts.

5. Position the arm of the lift assembly to the upper back finish panel bracket and install the attaching bolts, nuts, and washers.

6. Connect the motor and switch wires to the harness. Push the wire connectors in the hole in the inner panel and install the harness retaining clip.

7. Check the upper back finish panel operation; adjust the hinges and adjust the upper back finish panel (deck open) limit switch. Refer to Adjustments in Section 4.

UPPER BACK FINISH PANEL HINGE

1. Open the luggage compartment door and remove the nuts, washers, and bolts attaching the hinge to the package tray.

2. Remove 2 hinge to luggage compartment door attaching bolts and remove the hinge.

3. Position the hinge to the luggage compartment door and install the retaining bolts.

4. Position the hinge to the package tray and install the bolts, washers, and nuts.

5. Adjust the upper back finish panel hinge. See Upper Back Finish Panel Adjustment in Section 4.

ROOF HOLD DOWN CLAMP

1. Unlatch the top and raise it off the windshield header.

2. Remove 2 screws attaching the hold down clamp to the No. 1 bow and remove the clamp.

3. Position the clamp to the No. 1 bow and install the attaching screws. Adjust the clamp hook to the proper length (Section 4).

DOWEL PIN

1. Lower the convertible top into the luggage compartment. **Do not allow the luggage compartment door to close.**

2. Remove 2 screws attaching the dowel to the No. 1 bow and remove the dowel.

3. Position the dowel to the No. 1 bow and install the retaining screws. Snug but do not tighten the screws so that the dowel will move when placed against the windshield header.

4. Raise the top to the windshield header to align the dowel pins with the header.

5. Lower the top and tighten the dowel pin attaching screws.

6. Raise the top and lock it to the windshield header.

DOWEL PIN STRIKER PLATE

1. Lower the top.

2. Remove the sun visor attaching screws and remove the right and left sun visors from the windshield header.

3. Remove 2 screws and remove the right and left windshield pillar weatherstrips (Fig. 35).

4. Remove the right and left windshield pillar weatherstrip retainers.

5. Remove the windshield pillar drip moulding attaching screws and remove the right and left drip rails.

6. Remove 2 screws attaching each windshield outside upper side moulding and remove the right and left moulding.

7. Remove the right and left top latch clamps from the header.

8. Remove the sun visor arm clip from the center of the windshield header.

9. Remove the windshield outside top moulding.

10. Remove the dowel pin striker plate.

11. Install the dowel pin striker plate and the windshield outside top moulding.

12. Install the sun visor retainer.

13. Install the right and left top latch clamps.

14. Install the right and left windshield upper side mouldings (Fig. 35).

15. Install the right and left windshield pillar drip mouldings.

16. Install the right and left windshield pillar weatherstrips.

17. Install the sun visors.

NO. 1 BOW WEATHERSTRIP

1. Unlatch the top and raise it from the windshield header.

2. Remove 2 bolts and nuts attaching the weatherstrip to the right and left side rails (Fig. 23).

3. Remove 2 screws from the weatherstrip right and left front corners.

4. Remove the weatherstrip front retainer attaching screws and remove the retainers.

5. Remove the No. 1 bow weatherstrip from the car.

6. Position the weatherstrip to the No. 1 bow and install the corner attaching screws.

7. Position the weatherstrip front retainers to the weatherstrip and No. 1 bow and install the attaching screws (Fig. 23).

8. Install the weatherstrip side rail attaching bolts and nuts.

9. Lower the top on the windshield header and latch it in place.

SIDE RAIL WEATHERSTRIPS

1. Unlatch the top and raise it up off the windshield header.

2. Remove 3 bolts and nuts attaching the front intermediate side

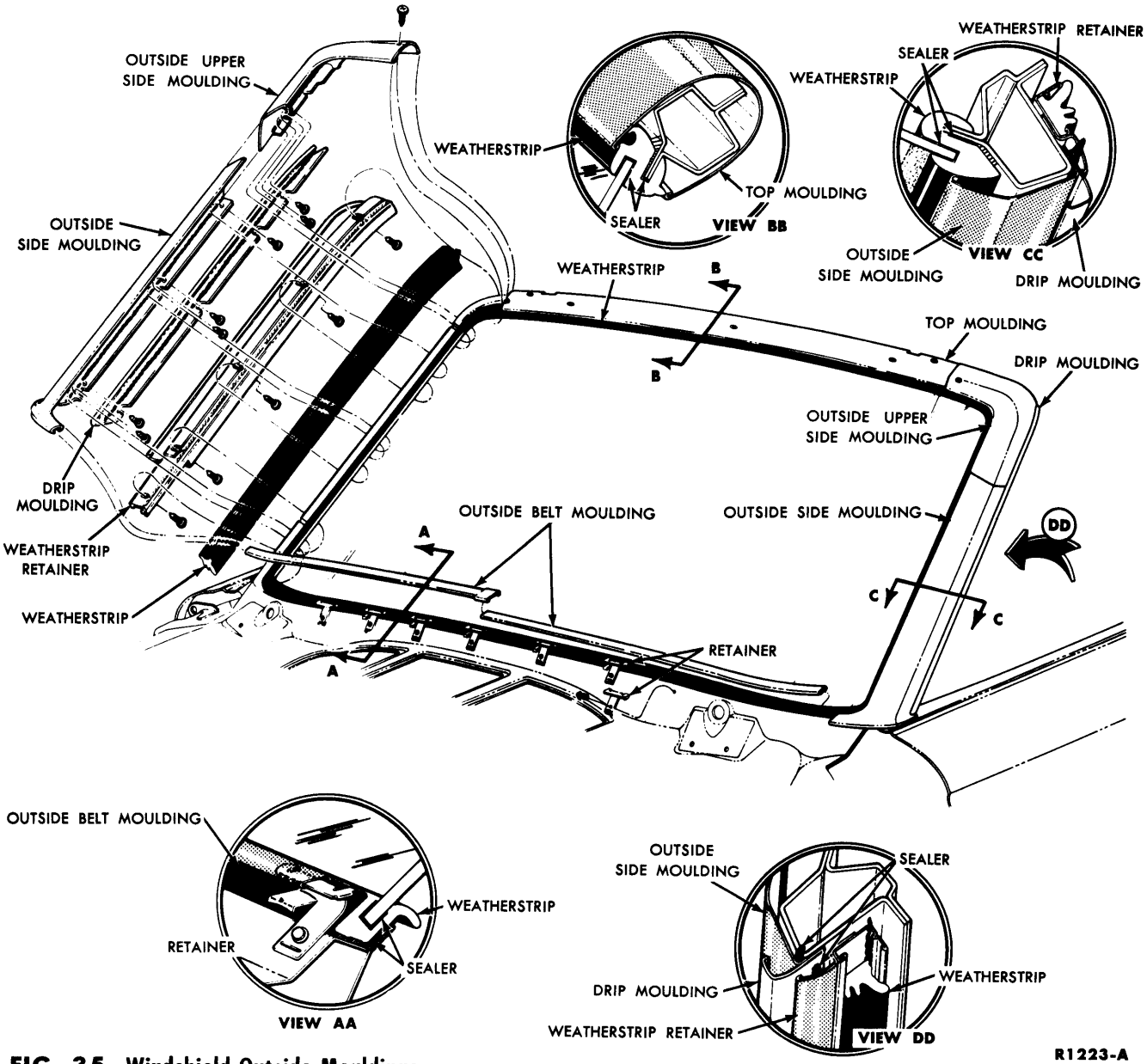

FIG. 35—Windshield Outside Mouldings

rail weatherstrip to the roof side rails and remove the weatherstrip (Fig. 23).

3. Remove 4 bolts and nuts and one screw attaching the rear intermediate side rail weatherstrips and remove the inner and outer weatherstrips.

4. Position the weatherstrips to the roof side rail and install the attaching bolts, nuts, and screw.

5. Lower the top to the windshield header and latch it in place. Then, adjust as necessary (Section 4).

REAR SIDE RAIL WEATHERSTRIP

1. Unlatch the top from the windshield header and lower the top. **Do not allow the luggage compartment door to close.**

2. Remove the rear side rail weatherstrip attaching screws and remove the weatherstrip (Fig. 23).

3. Position the weatherstrip to the rear roof rail and install the attaching screws.

4. Raise the top and latch it to the windshield header. Check for a good rear side rail weatherstrip seal.