

CHASSIS SHEET METAL

TABLE OF CONTENTS

Note Name	Note No.	Page No.	Note Name	Note No.	Page No.
Adjustment of Hood Locking Mechanism	1	4-1	Removal of Radiator Support Assembly	10	4-4
Removal of Hood Panel	2	4-1	Installation of Radiator Support Assembly	11	4-4
Installation of Hood Panel	3	4-2	Assembly of Radiator Grille	12	4-5
Hood Adjustments	4	4-2	Assembly of Radiator Grille to Front Bumper	13	4-5
Hood Panel to Cowl Adjustments	4a	4-2	Installation of Radiator Grille to Front Bumper Assembly	14	4-5
Adjustment of Fender to Hood and Doors	4b	4-3	Removal of Left Front Fender	15	4-5
Removal and Installation of Hood Spring	5	4-3	Installation of Left Front Fender	16	4-6
Removal of Radiator Grille and Front Bumper Assembly	6	4-3	Removal and Installation of Right Front Fender	17	4-6
Removal of Radiator Grille from Front Bumper Assembly	7	4-4	Removal and Installation of Rear Bumper	18	4-7
Disassembly of Radiator Grille	8	4-4	Disassembly and Assembly of Rear Bumper	19	4-7
Disassembly and Assembly of Front Bumper	9	4-4			

GENERAL DESCRIPTION

The hood top panel on 1954 Cadillac cars is hinged at the cowl and opens from the front. The hood lock pilot and safety catch are located on the hood lock plate which is attached to the radiator support; the safety latch and hood lock are located on the front hood reinforcement. The hood is unlocked by pulling a release lever which is accessible through the radiator grille opening just to the left of center. The lever first releases the pilot lock, then the safety latch, permitting the hood to be raised.

The front bumper assembly consists of four bolted-together sections; the outer impact bars, a center impact bar, and a bumper guard tie bar. The rear bumper assembly consists of three bolted-together sections. With this design, replacement of any one section may be made on either the front or rear bumper in case of damage.

The radiator grille assembly, consisting of closely spaced horizontal and vertical fins, is removable as an assembly with the front bumper. Horizontal or vertical fins may be replaced individually.

SERVICE INFORMATION

(1) Adjustment of the Hood Lock Mechanism

The hood lock catch plate is attached to the radiator support and center baffle by five mounting screws. Two elongated holes at the radiator support permit fore and aft adjustment of the hood lock catch plate, Fig. 4-1. The pilot lock plate on the front hood reinforcement has elongated holes for side to side adjustment, Fig. 4-2. The hood lock pilot is adjusted vertically by loosening the pilot locking nut, screwing the pilot up or down as required, and tightening the nut. In any case where the hood lock assembly or hood lock catch plate has been removed, the mounting screws loosened or the hood alignment changed, be sure the proper adjustment has been obtained before tightening the hood lock, hood lock plate mounting screws, and the pilot bolt.

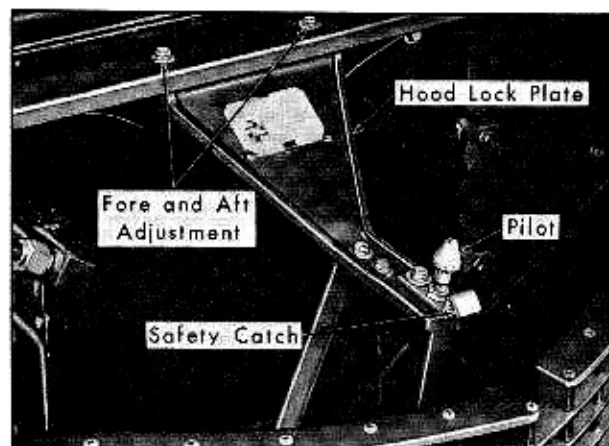


Fig. 4-1 Hood Lock Plate

(2) Removal of Hood Panel

1. Scribe hinge location on hood to aid in repositioning hood on installation.

2. Remove nut and bolt holding center of hood hinge assembly to hood panel guide.

3. Remove three screws holding each side of

CHASSIS SHEET METAL

hood hinge assembly to hood panel. Do not attempt to hold hood open beyond its counter-balancing point during removal.

4. Remove hood, being careful not to damage finish.

(3) Installation of Hood Panel

1. Place hood in position on hood hinge assembly and install three screws on each side loosely.

2. Position hood so that hinge lines up with scribe marks and tighten screws on each side.

3. Install nut and bolt holding center of hinge to hood panel guide.

4. Close hood and check alignment of hood at cowl fender, and grille openings.

5. Align hood to cowl if necessary, as explained in Note 4.

6. Up and down alignment of the front of the hood panel, in relation to fenders, may be adjusted by regulating height of hood rubber bumpers, fastened to fender front mounting bracket.

(4) Hood Adjustment

a. Hood Panel to Cowl Adjustment

1. Loosen hinge to cowl mounting screws, install a short 3/8" diameter pin in hole in hinge, and move hinge until pin will also enter hole in cowl. This will hold hinge in position at this point. Fig. 4-3.

2. Rotate hinge assembly upward and rearward around pin as far as possible and tighten screws.

3. Loosen three hinge to hood panel attaching

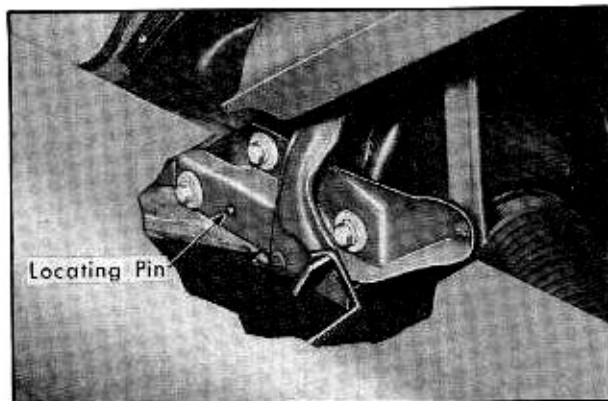


Fig. 4-3 Hood Hinge Adjustment

screws at each side. Elongated holes provide fore, aft, and side to side adjustment of the hood.

4. Loosen the hinge reinforcement to hood center moulding attaching nut.

5. Move hood forward or rearward until clearance between rear edge of hood panel and body cowl ledge is equal on both sides. See Fig. 3-18, in the Body Section.

6. Position rubber bumpers in channel along the top of the cowl ledge so that hood is 1/16 inch below cowl from center of car to 25 inches from centerline. From this point outward, the hood should taper from 1/16 inch to flush in relation to the cowl. Fig. 4-4.

NOTE: Variable thickness rubber bumpers are available from the Factory Parts Department.

7. Adjust hood rear guide, if necessary, to prevent hood from binding when opening, by loosening guide attaching nut and moving guide rearward or forward as required.

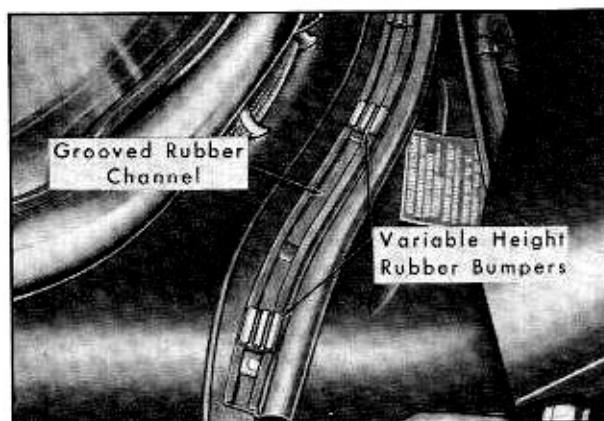


Fig. 4-4 Adjusting Hood to Cowl with Rubber Bumpers

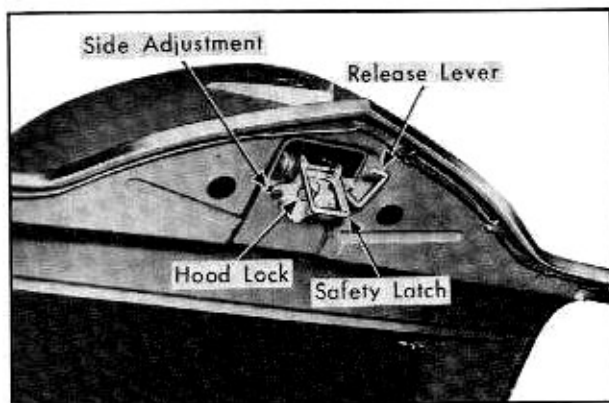


Fig. 4-2 Hood Lock

CHASSIS SHEET METAL

8. Felt pads may be cemented in position between hood reinforcement and hood panel to prevent rattle or looseness of hood.

9. Tighten hinge to hood screws on both sides and hinge reinforcement to center molding nut.

10. Loosen hinge to cowl screws on both sides and, with pins in locating holes, revolve hinges downward slightly, just enough to secure the tightness or "wrap" of the hood panel while maintaining an even spacing between cowl and rear edge of hood.

11. Tighten hinge to cowl screws.

12. Three notches in hood spring lower bracket provide additional adjustment of hood tightness or wrap at the cowl when the hood is closed. The notch closest to the front door gives the greatest tightness of the hood at the cowl. If hood is too tight in this position, the spring should be moved to the center or front notch, depending upon the fit desired.

b. Adjustment of Fenders to Hood and Doors

1. Loosen fender mounting screws at frame, radiator support, and cowl.

2. Position fender so that space between fenders and hood is equal at front and rear and that the hood and fender are at the same height in the area where the fender is attached to radiator support.

NOTE: The clearance between the door and fender at the top and bottom should also be checked and adjusted at the same time to prevent interference.

3. Tighten fender mounting screws.

4. Check the wedge shaped rubber bumpers attached to the fenders to see that they are supporting the hood when it is in a closed position to prevent metal to metal contact.

(5) Removal and Installation of Hood Spring

1. Open hood and prop as high as possible.

2. Using a pry bar of sufficient length to provide ease of leverage, and a strong wire or hook attached to the bar as shown in Fig. 4-5, place bar under frame, below hood spring, and engage hook or wire on lower loop of hood spring.

3. Disengage lower spring loop from bracket and

release pressure on pry bar slowly, until spring is loose, then unhook upper end of spring from hinge.

4. To install spring, engage upper end in position on hinge and reverse above steps.

(6) Removal of Radiator Grille and Front Bumper Assembly

1. Disconnect parking or fog lamp wires at junction block on fender support brackets.

2. From under side of front fenders, remove radiator grille extension to front fender hanger screws.

3. Remove four bumper mounting bar to frame bolts. Note the number of shims, if any, between the mounting bar and the frame so that the same number may be reinstalled.

4. Remove bumper and radiator grille assembly from the car, and place it upon a suitable padded covering.

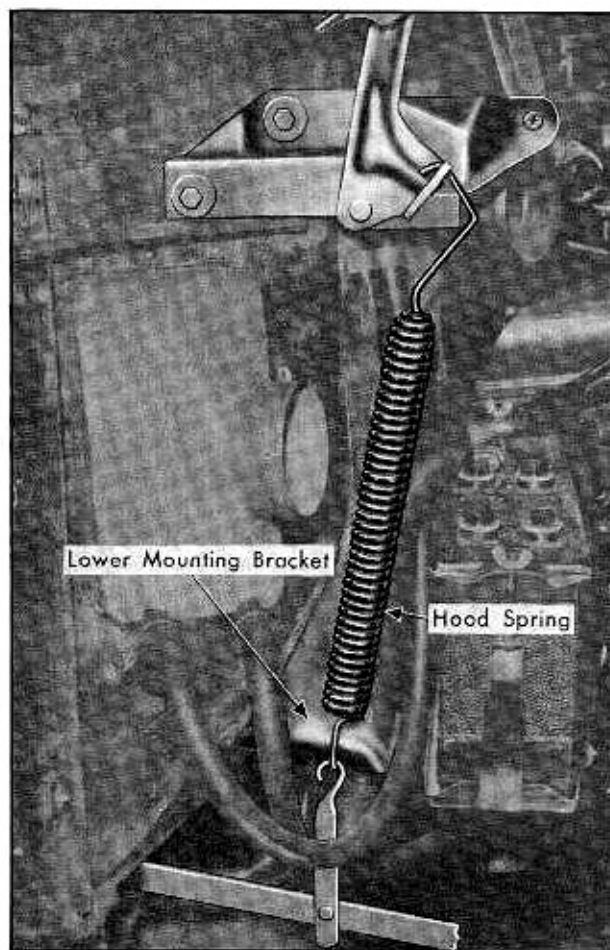


Fig. 4-5 Removing Hood Spring

CHASSIS SHEET METAL

(7) Removal of Radiator Grille From Front Bumper

1. Remove two bolts attaching vertical fin to bumper guards.
2. Remove three vertical fin to bumper guard tie bar bolts.
3. Remove two bolts attaching vertical fin to center impact bar.
4. Remove two vertical fin to outer impact bar bolts.
5. Remove two grille extension support bracket to bumper mounting bar bolts.
6. Remove four grille extension to outer impact bar bolts.
7. Remove grille assembly from bumper assembly.

(8) Disassembly of Radiator Grille

1. Remove two grille extension support bracket to extension bolts from each side of the assembly.
2. Remove grille extension to horizontal fin screws, six each side, and remove grille extensions.
3. Remove parking lamp or fog lamp attaching bolts and remove lamps from grille.
4. Remove vertical fin retainer by removing nineteen attaching screws.
5. Individual vertical or horizontal fins may be removed from the grille by releasing the horizontal fin from the two tangs at each vertical fin.

(9) Disassembly and Assembly of Front Bumper

1. Remove bumper guard tie bar to bumper guard bolts, two each side, and remove tie bar.
2. Remove outer impact bar to center impact bar bolts, three each side, and remove center impact bar.
3. Remove bumper mounting bar to outer impact bar bolts and remove mounting bars.
4. Remove bolt from bumper guard cap and remove cap.
5. To assemble front bumper, reverse above steps. See the end of this section for proper torque tightness for installing bolts.

(10) Removal of Radiator Support Assembly

1. Remove radiator grille and front bumper assembly as explained in Note 6.
2. On Air Conditioned equipped cars, proceed as follows:
 - a. Drain "Freon" from the system as described in Section 16A.
 - b. Disconnect and remove the condenser to receiver line, and the receiver to the sightglass line.
 - c. Disconnect and remove the condenser to compressor line.
3. Drain cooling system and remove radiator core assembly as explained in Section 13, Note 16.
4. Remove attaching screws from strut which extends from bracket to radiator support; remove both struts.
5. Disconnect battery cable, horn wire to horns and to horn relay; disconnect wires from voltage regulator.
6. Bend down clip securing wiring harness to hood lock catch plate, and remove harness from wiring holes in radiator support assembly.
7. Remove two radiator support to hood lock catch plate screws, and center baffle to air deflector screws.
8. Remove four air deflector screws, and remove air deflector with horns, hood lock catch plate and center baffle. On Air Conditioned cars, the receiver will still be mounted to the deflector.
9. On Air Conditioned equipped cars, remove condenser from radiator support.
10. Remove fender bracket to radiator support screws, two each side.
11. Remove right front fender as explained in Note 17.

12. Remove radiator support to frame bolt and note the number of shims removed so that the same number may be reinstalled.

13. Remove radiator support assembly.

(11) Installation of Radiator Support Assembly

1. Position radiator support on frame bracket and left fender bracket.
2. Install radiator support to frame bracket anchor bolt and nut making sure the same number of shims are installed as were removed.

CHASSIS SHEET METAL

3. Install two fender bracket to radiator support screws on left side of car.

4. Install right front fender as outlined in Note 17.

5. Install radiator core assembly. See Section 13, Note 16b.

6. On Air Conditioned equipped cars, install condenser to radiator support.

7. Position air deflector and install four mounting screws.

8. Install two radiator support to hood plate screws, and center baffle to air deflector screws.

9. Install wiring harness through harness holes in radiator support, and secure harness with clip on the hood lock plate.

10. Connect wire to horn relay and voltage regulator.

11. Connect wires to horn and connect battery cable.

12. Install struts from fender bracket to radiator support.

13. On Air Conditioned equipped cars, proceed as follows:

a. Install and connect the condenser to compressor line.

b. Install and connect the condenser to receiver line, and the receiver to the sight glass line.

c. Evacuate and charge the system. Section 16A.

14. Install radiator grille and bumper assembly as described in Note 14.

15. Adjust hood lock. See Note 1.

(12) Assembly of Radiator Grille

1. Insert vertical fins into horizontal fins.

2. Position vertical fin retainer on grille and install nineteen screws.

3. Install parking or fog lamps in grille.

4. Position grille extension with fins inserted in ends of horizontal grille fins and install six attaching screws. Install opposite grille extension.

5. Install grille extension support bracket on each side of extension assembly.

(13) Installation of Radiator Grille On Front Bumper

1. Position grille assembly on bumper, and install grille extension support bracket to bumper mounting bar.

2. Install vertical fin bolts to outer impact bars, center impact bar, bumper guard tie bar, and bumper guards.

3. Install grille extension to outer impact bar bolts, two each side.

(14) Installation of Radiator Grille and Front Bumper Assembly

1. Place assembly in position, and install the four bumper mounting bar to frame bolts, making certain the same number of shims are installed between the frame and bumper mounting bar as were removed. Do not tighten these bolts all the way until the next step in the procedure is performed.

2. Adjust assembly horizontally, vertically, and fore and aft as follows:

a. Bumper mounting bars are slotted horizontally for horizontal adjustment.

b. Assembly may be adjusted vertically by means of vertical slots in the frame.

c. Fore and aft adjustment is obtained by placing various thicknesses of shims between the frame and the bumper mounting bars.

3. Use any combination of the above methods until over-all alignment is obtained.

4. From under side of fenders, install grille extension to front fender screws.

5. Tighten bolts to 110 - 120 lbs.

6. Connect parking or fog lamp wires to junction on fender brackets.

(15) Removal of Left Front Fender

1. Disconnect positive battery cable.

2. Disconnect wire at junction block on fender bracket and remove harness from block on bracket.

3. Remove junction block by removing two attaching screws.

4. Disconnect wire from blower motor.

CHASSIS SHEET METAL

5. Disconnect ventilator flexible hoses from blower to air duct and blower to heater.

6. Remove two fender to radiator support strut bolts, and remove strut.

7. Remove radiator support and air deflector to fender screws.

8. Remove fender attaching screws at cowl.

9. Jack up car, and remove left front wheel.

10. Disconnect antenna lead from antenna on cars so equipped.

11. Working from the under side of fender, remove four screws which attach the Autronic Eye amplifier to the fender dust shield.

12. Working from top side of fender, remove Autronic Eye amplifier.

13. Disconnect wires from Autronic Eye Power relay.

14. Remove wire harness from retainer clips on fender, and move harness away from fender.

15. Working from under side of fender, remove grille extension to fender hanger screw.

16. Remove two bolts at rocker panel extension.

17. Remove rocker sill molding.

18. Remove three dust shield to frame bolts.

19. Remove two fender bracket to radiator support bolts.

20. Apply masking tape to front edge of door in order to avoid scratching finish when removing fender.

21. Remove fender from car by moving fender backward slightly and then upward and out.

(16) Installation of Left Front Fender

1. Place fender in position, and install fender to cowl attaching screw loosely.

2. Install two fender bracket to radiator support bolts loosely.

3. Install three dust shield to frame bolts loosely.

4. Install two fender to rocker panel extension bolts loosely.

5. Install air baffle and air deflector to fender bolts loosely.

6. Align fender to door, cowl, and hood, and tighten all bolts.

NOTE: Fender bolt holes are elongated to allow for alignment. To raise or lower the fender for alignment to hood or door, install or remove shims from fender tie bar support to radiator cradle bolts, or fender to cowl bolt as necessary.

7. Install rocker sill molding.

8. Connect antenna lead to antenna.

9. Install radiator grille extension to fender hanger screw.

10. Install Autronic Eye amplifier and power relay to fender dust shield.

11. Install left front wheel and lower car.

12. Connect ventilator flexible air hoses from blower to air duct and blower to heater.

13. Connect blower wire to blower motor.

14. Connect wires to Autronic Eye power relay.

15. Install junction block on fender bracket.

16. Install wire harness behind clip on fender, and insert loose end of harness through radiator support opening.

17. Connect all wires at junction block.

18. Install fender to radiator support strut.

19. Remove masking tape from edge of door.

20. Connect positive battery cable.

(17) Removal and Installation of Right Front Fender

The removal and installation procedure for the right fender is identical to the left, except for removing the wire harness from the fender, removing the Autronic Eye amplifier and relay, and disconnecting the Antenna lead. However, it will be necessary to remove the battery and battery mounting bracket in order to remove the right front fender. On cars equipped with Air Conditioning, remove the clip securing the line to the fender dust shield.

