

FRONT EXTERIOR**SECTION I. GRILLE, RADIATOR SUPPORT, AND FRONT SPLASH PANEL****1-1. Grille.**

- a. Working inside each front fender, remove the nuts and lockwashers from the grill studs.
- b. Remove two bolts and lockwashers holding the grille to the radiator support.
- c. Remove the bolt, lockwasher, and nut holding the grille to the splash panel.
- d. Remove two screws, lockwashers, and nuts holding top of grille to hood lock mounting bracket. Remove the grille and side gaskets. Inspect the grille and repair or replace if necessary.
- e. Inspect the hood lock nylon spring release bumper assembly and replace if necessary. Pry out the rubber hood bumpers and replace if necessary. Replace the side gaskets if necessary.
- f. To install the grille, reverse the removal procedure.

1-2. Radiator Support Assembly.

- a. Remove the radiator (see Group 9, Cooling and Heating).
- b. Working inside the fenders, remove three bolts,

nuts, and washers holding the radiator support to each inner front fender.

- c. Remove the two bolts, nuts, and washers holding the bottom of the radiator support to the vehicle frame. Remove the shims.
- d. Remove the rubber bumper insulator pushed through the radiator support at the frame contact point.
- e. Remove four screws and lockwashers holding the radiator support to the front splash panel.

1-3. Front Splash Panel.

- a. Remove the grille (see Section 1-1).
- b. Remove four screws and lockwashers holding the radiator support to the front splash panel.
- c. Working under front fenders, remove three bolts with washers and nuts securing splash panel at each inner fender, and two bolts with washers and nuts securing the splash panel to each outer fender.
- d. Remove the splash panel and seal. Remove the rubber bumpers if necessary.
- e. To install splash panel, reverse the order of removal, using new seals.

SECTION II. HOOD, HOOD LOCK, AND HINGES**2-1. Hood Removal.**

- a. Raise the hood. Remove the medallion assembly, if necessary, as follows:
 - (1) Remove two nuts and gaskets at the inside front center of the hood.
 - (2) Pull the medallion free from the outside of the hood. Replace parts as necessary.
- b. Position a protective pad on each front fender.
- c. Remove the hood to hood hinge mounting bolts and lockwashers.
- d. Remove the hood and repair or replace as necessary.

2-2. Hood Installation.

- a. Install the hood with the hood to hinge mounting bolts finger tight.
- b. Inspect the hood for alignment along the cowl

and inner fenders. Adjust as necessary. The hood to hinge mounting bolts may have to be loosened or tightened slightly to permit adjustment.

- c. Raise the hood carefully and tighten the mounting bolts.
- d. Close the hood and recheck alignment. Readjust if necessary.

2-3. Hood Hinges. See Fig. 1

- a. Remove and replace the hood hinge springs as necessary. The springs snap into position. It is not necessary to remove the hinges from the vehicle.
- b. Remove and disassemble the hinges as follows:
 - (1) Remove the hood from the vehicle.
 - (2) Remove two bolts holding each hinge bracket to the cowl.
 - (3) Remove the springs from the hinges.

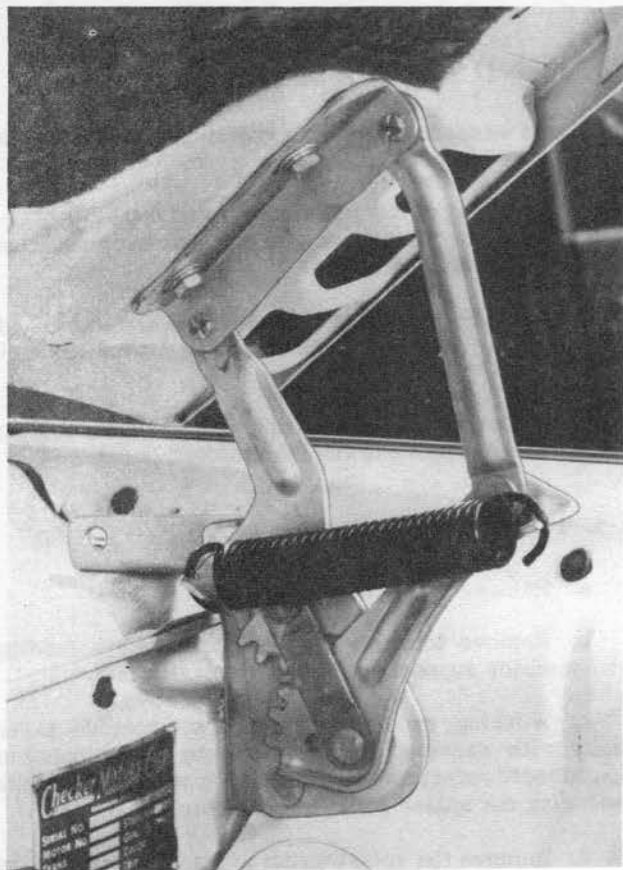


Fig. 1 - Hood Hinge

(4) Remove the hinge to hinge bracket nuts and washers.

(5) Repair or replace parts as necessary.

c. Reassemble and install the hood hinges by reversing the order of disassembly and removal.

2-4. Hood Lock.

a. Remove two screws, lockwashers, and nuts holding hood lock to mounting bracket (on grille). Remove the center nut.

b. Remove the hood lock and reinforcement assembly. Inspect the lock and repair or replace as necessary.

c. To install hood lock, reverse removal instructions.

SECTION III. FRONT FENDERS AND AIR DUCTS

3-1. Fender Moulding and Emblem.

a. Working inside the front fender outer panel, remove the side trim moulding mounting nut at each fender.

b. Pry the moulding from each fender.

c. Inspect the moulding retainers. Slide them from the moulding channel to replace as necessary.

d. Pry the emblem from each fender. Replace emblem or clips as necessary.

e. To replace emblem and moulding, reverse removal instructions.

3-2. Outer Fenders. See Fig. 2.

a. Remove the head lamp door, head lamp assembly and the parking and directional lamp assembly after disconnecting the wires at each front fender (see Group 30, Electrical, Body).

b. Working inside the fender, remove the seven bolts, lockwashers, and nuts holding the upper edge of each outer fender to each inner fender, and one bolt holding fender center bracket to cowl post.

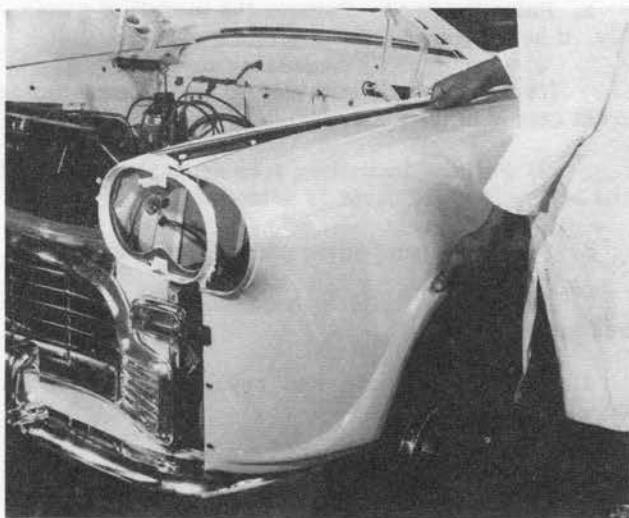


Fig. 2 - Front Outer Fender Removal

c. Remove the two nuts and lockwashers holding each outer fender to the grille.

d. Remove the four nuts, bolts, and washers holding the front of the outer fender to the inner fender.

e. Remove two bolts, washers, and nuts holding the front of each outer fender to the front splash panel.

f. Remove one bolt, lockwasher, and nut holding the front bottom of each outer fender to the front fender brace.

g. Working inside the vehicle under the cowl, remove the nut and washers holding the rear of the outer fender to the cowl top.

h. Remove two screws and lockwashers holding the rear top and bottom of each outer fender to the front body post, working with the door open (screw heads are concealed by the closed door).

i. Remove the nut, bolt, and lockwasher holding the rear of each outer fender to the underbody bracket.

j. Remove each outer fender. Repair or replace outer fenders as necessary.

k. Remove the front fender welt and moulding and replace if necessary.

l. Reverse removal instructions to install outer fenders.

3-3. Inner Fenders and Air Ducts.

a. Remove each outer fender, welt, and moulding.

b. To remove the left-hand inner front fender, remove the following units, working under the hood:

(1) Remove the two bolts, nuts, and washers and remove the horn assembly.

(2) Remove horn circuit breaker mounting screws and remove the circuit breaker.

(3) Remove two horn relay mounting screws and remove the relay.

(4) Remove the wiring harness from three fender mounting clips.

(5) If a Hydrovac power brake assembly and/or a starter solenoid is mounted on the fender, remove it.

c. To remove the right-hand inner front fender, remove the following units:

(1) Remove two sheet metal screws and remove the starter solenoid switch.

(2) Remove the battery carrier nuts, washers, and eyebolts (not applicable in the case of rear-mounted batteries).

(3) Remove one screw and remove the heater hose clip.

(4) Remove the wiring harness.

d. Remove the bolt and lockwasher holding the rear top of each inner fender to the front body post.

e. Remove the three bolts, nuts, and washers holding the inner fender to the radiator support.

f. Remove the clamps holding the air duct at the front and rear of each inner front fender.

g. Remove the bolts and nuts holding fender strap near the center of each inner fender. Remove the air duct from each fender.

h. Remove the bolts, washers, and nuts holding the rear of the inner fender to the underbody bracket.

i. Remove the bolts, nuts, and washers holding each inner fender to the front splash panel.

j. Remove inner fenders and repair or replace. Inspect hood bumpers and fender seals and replace as necessary.

k. Reverse removal instructions to install inner fenders.

SECTION IV. WINDSHIELD WIPERS AND WASHER

4-1. Trouble Shooting.

a. Wiper inoperative or slow with engine running.

(1) Disconnect the hose from the vacuum booster at the wiper motor and check for vacuum.

(a) No vacuum.

(1) Check vacuum hose for leaks or restrictions.

(2) Check fuel pump and repair.

(b) Vacuum available.

(1) Inspect wiper linkages for binding.

(2) Check wiper motor for leaks, broken valve parts.

b. Uneven wiper stroke.

(1) Wiper arms incorrectly attached. Pry off and reposition.

(2) Wiper motor incorrectly positioned. See Section 4-4b.

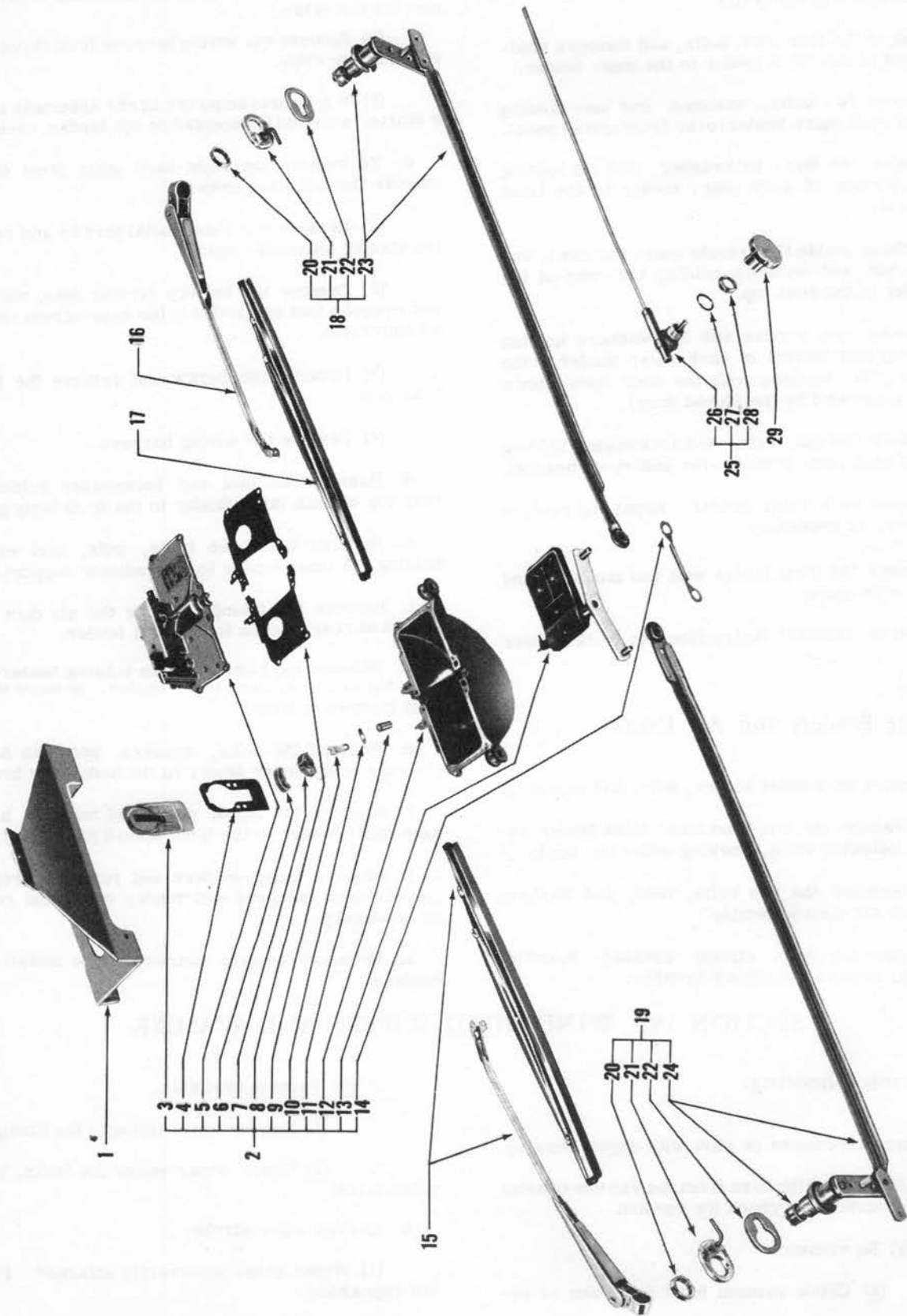


Fig. 3 - Windshield Wiper

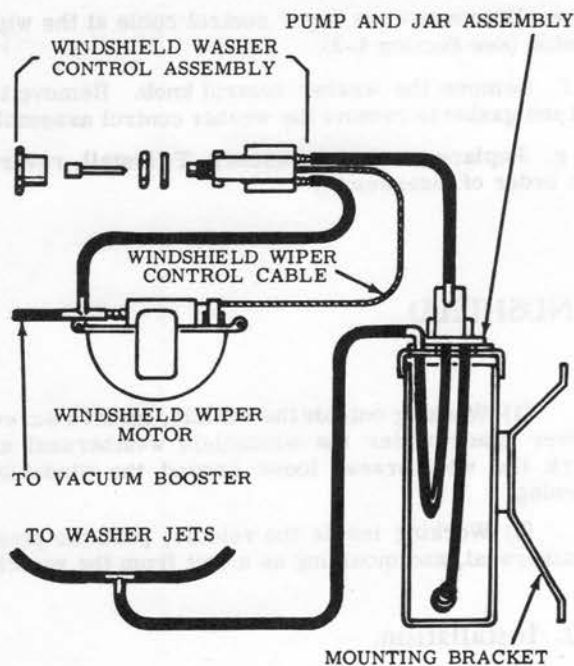


Fig. 4 - Windshield Washer

c. Wiper operates in one direction only. Check for broken or sticking parts in wiper motor.

d. Noisy wiper operation. Lubricate linkage with light penetrating oil.

e. Washer inoperative.

- (1) Check fluid level in jar.
- (2) Inspect all hoses for leaks or restrictions.
- (3) Replace pump and jar assembly.

4-2. Wiper Removal.

a. Pry both arm and blade assemblies from their pivot shaft and arm assemblies.

b. Remove the pivot shaft nut (3-20) from each shaft.

c. Remove the outer spacer assembly (3-21) and gasket (3-22) from each shaft.

d. Working under the cowl, remove the retainer plate assembly (3-14) from the studs of the floating paddle assembly (3-13).

e. Remove each pivot shaft and arm assembly (3-23, 24).

f. Disconnect the vacuum line or lines at the wiper motor. Remove the screws and lockwashers securing the wiper motor (3-2) to the mounting bracket (3-1).

g. Remove the wiper control cable retaining clip and screw from the motor housing.

h. If a windshield washer is installed, disconnect the vacuum line at the control cable assembly.

i. Remove setscrew from control cable knob and remove knob (3-29).

j. Remove the wiper cable control mounting nut (3-28) and gasket (3-27). Remove the control assembly (3-26).

4-3. Wiper Disassembly.

a. Remove the valve cover screws from the wiper motor and remove the valve cover assembly (3-3) and gasket (3-4). Remove internal parts and replace as necessary.

b. Remove the wiper motor cover screws and remove the wiper motor cover assembly (3-5) and gasket (3-8). Remove the floating paddle assembly (3-13) and replace if necessary.

c. Inspect the wiper arm and blade assemblies and replace as necessary.

d. Inspect the wiper control cable (3-26) for free movement and replace if necessary.

4-4. Wiper Reassembly and Installation.

a. Reverse the order of disassembly and removal. Turn the wiper motor to parked position before installing wiper arms.

b. Leave the wiper motor mounting screws loose after installing. Operate the wipers and then turn the control to park position. The wiper motor will automatically locate in the correct position. Tighten the mounting screws.

4-5. Windshield Washer. See Fig. 4.

a. Remove two hoses at the pump and jar assembly.

b. Lift the pump and jar assembly from the mounting bracket.

c. Remove three screws to remove the mounting bracket.

d. Working under the cowl, disconnect the washer hoses at the washer jets and the tee connector. Disconnect the vacuum hoses at the wiper motor and the washer control assembly.

e. Disconnect the wiper control cable at the wiper motor (see Section 4-2).

f. Remove the washer control knob. Remove the nut and gasket to remove the washer control assembly.

g. Replace parts as necessary. To install, reverse the order of disassembly.

SECTION V. WINDSHIELD

5-1. Removal. See Fig. 5.

a. Place a protective pad on the hood of the vehicle.

b. Remove the right- and left-hand windshield wiper arm assemblies (Section 4-2, steps a through e).

c. With A-11 model vehicles:

(1) Place a screwdriver in the groove on the face of the rubber weatherseal. Run out the weatherseal locking lip.



Fig. 5 - Windshield Glass Removal

(2) Working inside the vehicle, apply even pressure to the windshield glass, starting at a top corner. Push the glass from the weatherseal.

(3) Remove the weatherseal from its seat. Inspect weatherseal and clean or replace as necessary. Clean weatherseal seat.

d. With A-12 model vehicles:

(1) Working outside the vehicle, insert a screwdriver blade under the windshield weatherseal and work the weatherseal loose around the windshield opening.

(2) Working inside the vehicle, push the glass, weatherseal, and moulding as a unit from the vehicle.

5-2. Installation.

a. With A-11 model vehicles:

(1) Position the weatherseal in the windshield opening. Make certain it is properly seated all the way around the opening.

(2) Apply a coat of liquid soap to the glass groove in the weatherseal.

(3) Position the bottom edge of the windshield glass in the weatherseal groove. Using a wooden or plastic wedge, run the outer lip of the weatherseal over the glass.

(4) When the glass is properly seated, run the sealing lip into position with the wedge.

(5) Seal with adhesive.

b. All A-12 model vehicles:

(1) Position rubber weatherseal on windshield glass. Install metal moulding and caps.

(2) Run a string around the weatherseal, in the body groove. The loose ends should be at top center.

(3) Apply a coat of liquid soap to the weatherseal and to the windshield opening.

(4) Place the windshield assembly squarely in the windshield opening. Apply pressure from the outside of the vehicle. Inside the vehicle, pull both ends of the string from the groove, slowly and evenly.

(5) Tamp the assembly into position and seal with adhesive.