GROUP 23

BODY AND SHEET METAL

The Unibody type construction is continued for the 1961 Chrysler model cars with changes in styling. The seven step corrosion and rust-proofing immersion and spraying operation covering the entire underbody internally and externally is continued on the 1961 models.

The conventional type body construction is continued for the Imperial models with changes in styling.

Major and minor body servicing, including body maintenance, sealing, windshield and window, door, headlining, remain the same as outlined in the 1960 Chrysler and Imperial Service Manual with the exception of: servicing the hood and latch assembly, bumpers, grilles and door lock system.

BUMPER (FRONT) (NEWPORT, WINDSOR MODELS) (Fig. 1)

Removal

(1) Remove the bumper assembly to frame mounting bolts and remove the bumper.

Installation

(1) Position the bumper against the frame and install the mounting bolts loosely.

(2) Align the bumper for correct spacing from side to side with the front fenders and tighten the mounting bolts securely.

BUMPER (FRONT) (NEW YORKER MODELS)

Removal

(1) Remove the bumper bar support bracket to frame mounting bolts and remove the bumper assembly.

(2) With the bumper assembly removed, remove the bumper bar and frame extensions.

Installation

(1) Install the bumper bar and frame extensions and tighten the mounting bolts securely.

(2) Position the bumper assembly against the frame reinforcements and install the mounting bolts loosely.

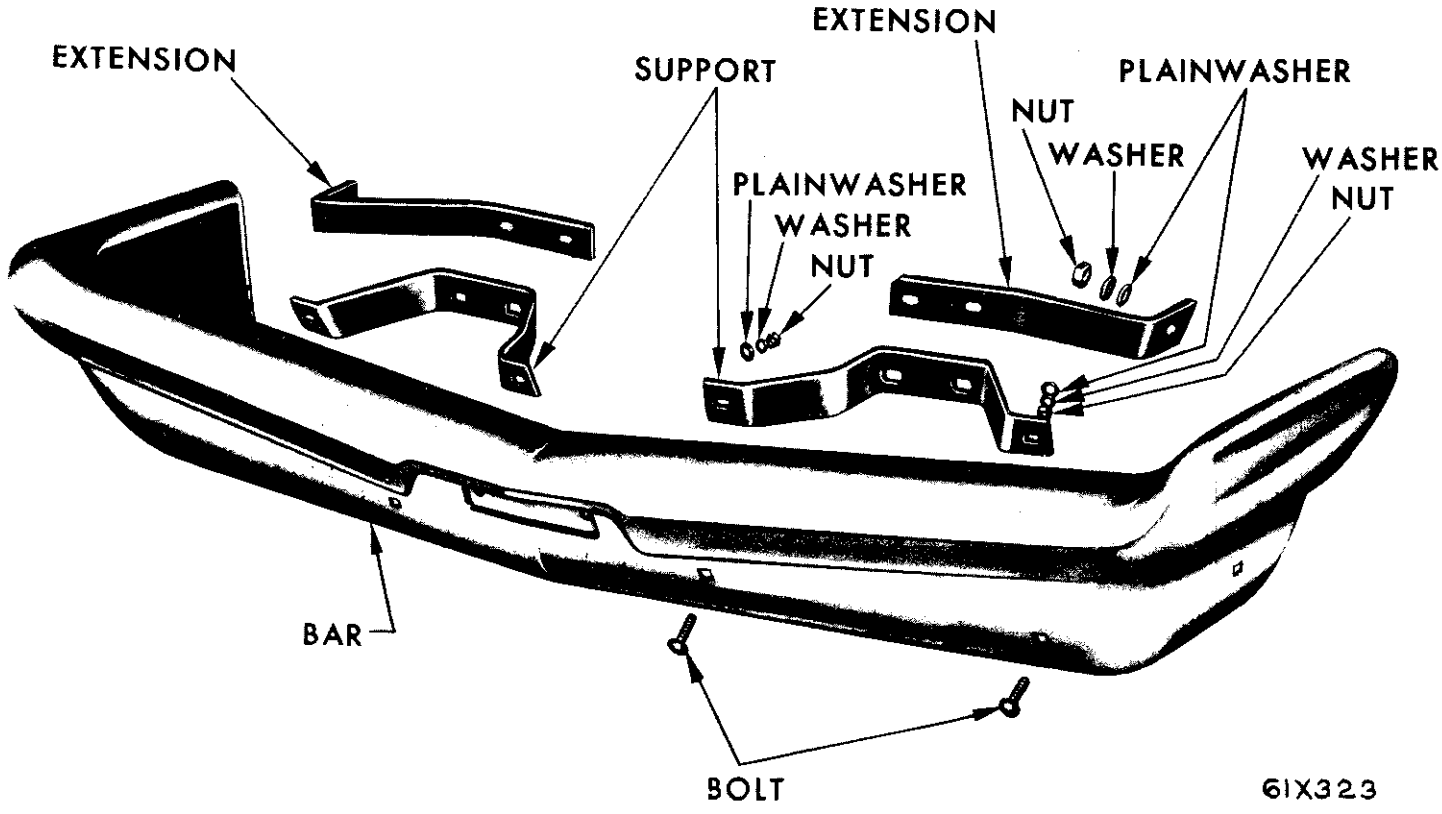

Fig. 1—Front Bumper (RC-1, RC-2)

(3) Align the bumper for correct spacing from side to side with the front fenders and tighten the mounting bolts securely.

BUMPER (FRONT) (IMPERIAL MODELS) (Fig. 2)

Removal

(1) Remove the inner and outer bumper bar to frame support extension mounting bolts and remove bumper assembly.

(2) With the bumper removed from vehicle, remove the inner and outer bumper bar to frame extensions.

Installation

(1) Install the bumper to frame extensions, stabilizers and mounting bolts.

(2) Position the bumper against frame and install the extension to frame attaching bolts.

(3) Align the bumper for correct spacing from side to side with the rear fender and tighten the mounting bolts securely.

BUMPER (REAR) (RC-1, RC-2 AND RC-3 MODELS)

Removal

(1) Remove the bumper bar to frame mounting bolts and remove the bumper assembly.

(2) Remove the extension to frame reinforcement plates.

(3) With the bumper removed from vehicle, remove the bumper, guards, stabilizers, extensions, and bumper guards.

Installation

(1) Install the bumper bar to frame extension, bumper stabilizers and guards onto the bumper bar assembly.

(2) Position the bumper assembly against the rear frame crossmember and install the mounting bolts loosely.

(3) Align the bumper for correct spacing from side to side with the rear fender and tighten the mounting bolts securely.

BUMPER (REAR) (IMPERIAL MODELS)

Removal

(1) Remove the support to frame upper and side bumper extensions from the rear crossmember and remove the bumper assembly.

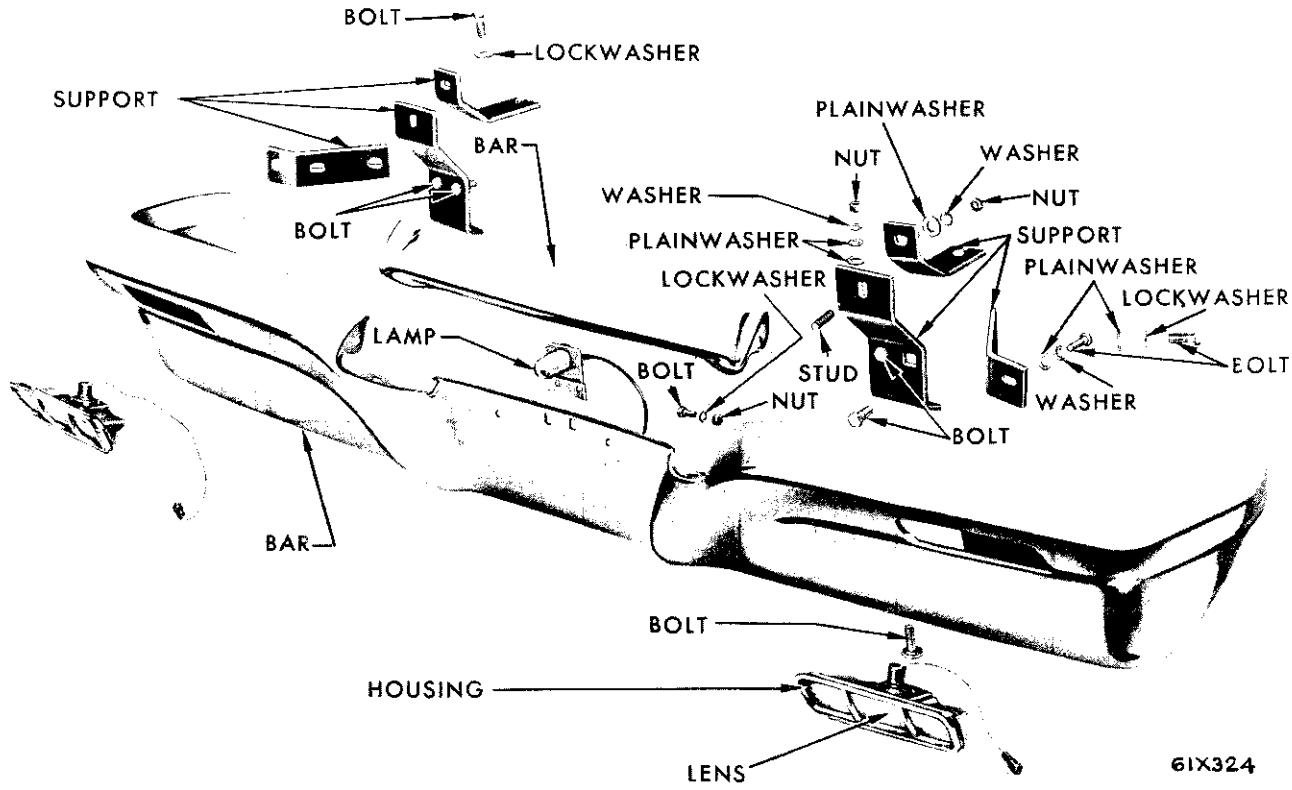

Fig. 2—Front Bumper (Imperial)

(2) With the bumper removed from vehicle, remove the tie bar and support brackets.

Installation

(1) Install the tie bar, support brackets, and mounting bolts.

(2) Position the bumper against the frame and install the mounting bolts.

(3) Align the bumper for correct spacing from side to side with the rear fenders and tighten the mounting bolts.

RADIATOR GRILLE (CHRYSLER) (Fig. 3)

Removal

(1) Remove the grille attaching stud nuts and washers from around the radiator grille opening and remove the grille assembly.

Installation

(1) Mount the grille to grille opening and install the attaching stud washers and nuts. **Make sure the grille is centered properly in the opening before tightening the nuts securely.**

RADIATOR GRILLE (IMPERIAL)

The radiator grille on the Imperial models are of two component designs with a center cap and can be removed individually.

Removal

(1) Remove the grille attaching stud nuts and washers around the radiator grille opening and remove the grille assembly.

Installation

(1) Mount the grille to the grille opening and install the attaching stud nut and washers. **Make sure the grille is centered properly in the grille opening before tightening the attaching nuts.**

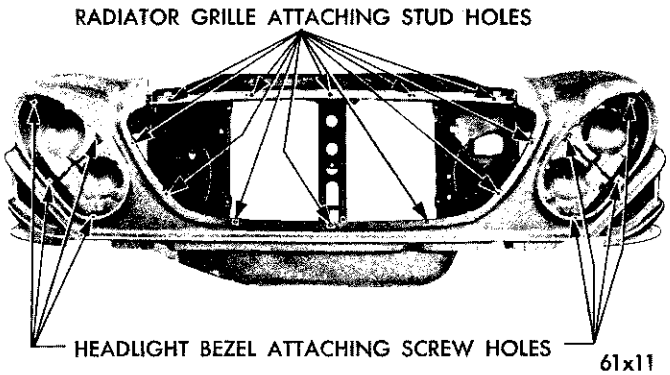

Fig. 3—Radiator Grille (Chrysler)

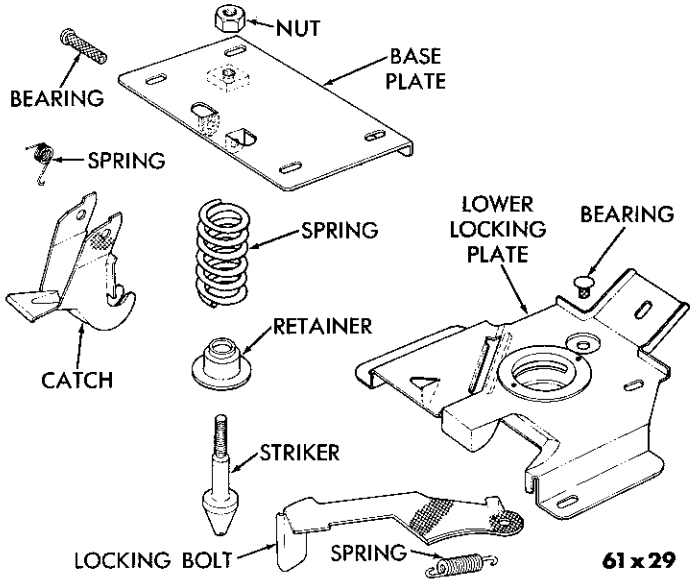

Fig. 4—Hood Lock Assembly

HOODLOCK, HOOD, AND HINGE ASSEMBLY (CHRYSLER)

The hoodlock is manually operated with the safety release catch located under the leading edge of the hood above the grille bar. In order to open the hood, the catch must be pulled forward enough to release the safety catch. After releasing the safety catch, the hood must be pushed down slightly while holding the catch in the release position to allow for the raising of the hood.

Removal (Fig. 4)

(1) Remove the striker assembly mounting bolts from the hood and radiator cross bar and bracket assembly and remove the lock and striker assembly.

Installation

(1) Mount the striker assembly to the hood and install the attaching bolts.

(2) Mount the lock assembly to the radiator cross bar and bracket and install the attaching bolts and nuts.

Adjustment of the Hood Striker and Lock Assembly

The hood striker assembly is mounted on a plate which is attached to the hood by four bolts. The bolt holes in the plate are elongated to allow the striker to be adjusted to front and rear. The hood-

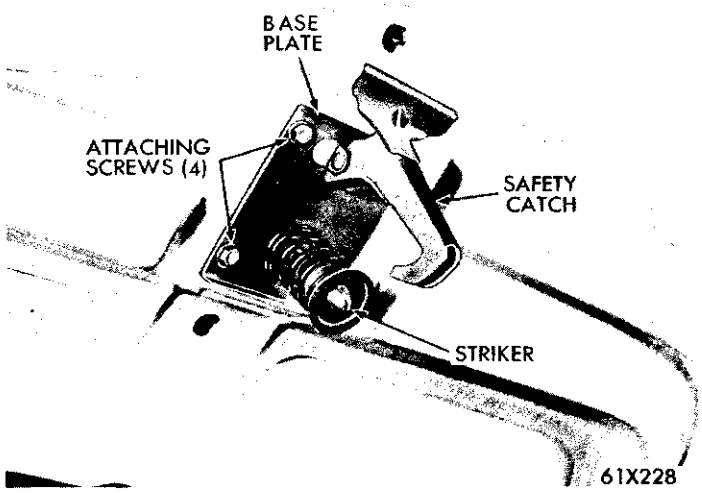

Fig. 5—Hoodlock (Imperial)

lock plate is fastened by four bolts, in slightly oversized holes, which allow the lockplate to be shifted slightly in any direction. The striker stud is threaded at the lockplate and is secured by a locknut.

To adjust the striker (to lengthen or shorten) loosen the locknut and turn the striker in or out with a screwdriver until the correct adjustment has been obtained. After making the new adjustment that requires a shifting of the hood or fender, always check the hood striker for correct length and the lockplate assembly for alignment.

HOODLOCK (IMPERIAL) (Fig. 5)

The hoodlock on the Imperial model is manually operated by a cable and wire assembly located under the instrument panel in the driver's compartment.

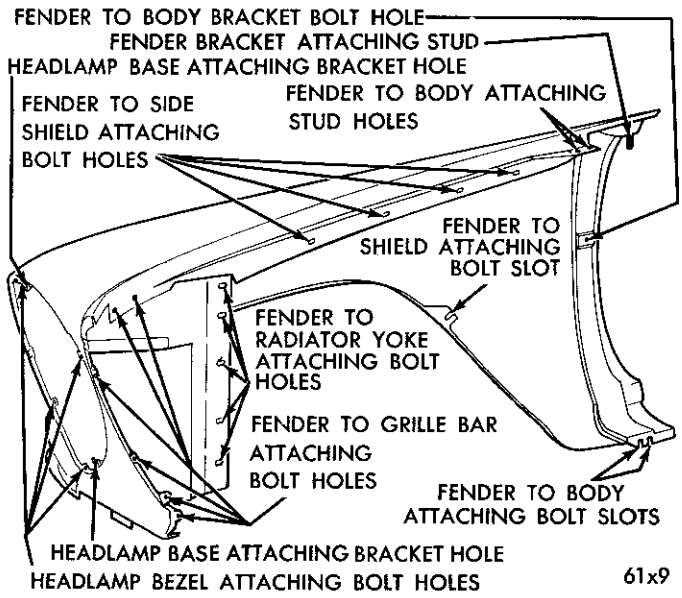

Fig. 6—Front Fender Attaching Points (Chrysler)

To unlock the hood, pull on the cable knob enough to allow hood to snap up to the safety catch. From the outside of the car, push down slightly on the hood to unlock the safety catch.

Removal

(1) Remove the striker assembly mounting bolts from the hood assembly and remove the striker assembly.

(2) Remove the latch assembly to grille bar and yoke bracket attaching bolts.

(3) Remove the latch lever cable and wire locking screw and remove the lock assembly.

Installation

(1) Mount the striker assembly to the hood and install the attaching bolts.

(2) Mount the latch assembly to the yoke bracket and grille bar and install and tighten the attaching bolts.

Adjustment of the Hood Striker and Lock Assembly

The hood latch assembly is attached to the radiator bar and yoke bracket assembly with four attaching bolts. To adjust the control cable and wire assembly, the control knob must be pushed all the way in to make sure the latch is in the released position before the hood latch adjustment is made. Shorten or lengthen the wire as the case may be, to release or lock hood assembly.

To adjust the striker (to lengthen or shorten) loosen the locknut and turn the striker in or out

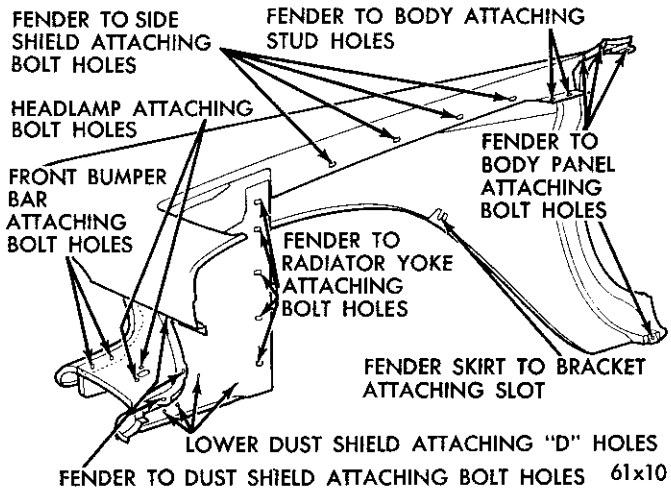

Fig. 7—Front Fender Attaching Points (Imperial)

with a screwdriver until the correct adjustment has been obtained. After making the new adjustment that requires a shifting of the hood or fender, always check the hood striker for correct length and the lockplate assembly for alignment.

FENDER (Figs. 6 and 7)

Removal and installation of the front fenders is performed as described in the 1960 Chrysler and Imperial Service Manual, except that the cowl to fender bracket studs and nuts should be removed to facilitate the removal of the fender assembly.

Removal

(1) Raise the hood.

(2) Tape the leading edge of the front doors and cowl to fender area to avoid damage to the finish.

(3) Remove the fender to splash shield, radiator yoke, grille bar, and fender to body attaching bolts.

(4) Remove the outside rear view mirror and antenna lead, if so equipped.

(5) Remove the headlamp, horns, and wires. Remove the fender assembly.

Installation

(1) Install the fender. Install the splash shield, yoke, grille body brackets attaching bolts.

(2) Install the headlamp, horn and antenna and outside mirror, if so equipped.

(3) Install the cowl quarter to fender bracket studs and nuts.

(4) Install the headlamp wires.

(5) Check the hood to fender and the fender to door alignment.

FENDER ALIGNMENT

Before aligning the front fenders, make sure the body bolts are tight and the rear edge of fender is even with the contour of the front door.

The procedures for aligning the front fenders remain the same as described in the 1960 Chrysler and Imperial Service Manual.

DOOR LOCKS

All Chrysler and Imperial model cars have a new design in the door locks. The major changes in the locks are the use of a six-tooth gear-type rotor without "take-up" and having "free wheeling" outside handles when the lock is locked. There is a plastic wedge, above the rotor, which slides on the top of the striker plate to prevent up and down movement of the door when it is latched.

FRONT DOOR

The front doors are locked from the outside with a key and locking the front doors from the inside can be accomplished by pushing the handle forward. In effect, both operations disconnects the outside door handle control linkage from the lock mechanisms so that in the locked position the **outside handle moves freely without releasing the lock.**

REAR DOOR

There is a separate lever on the rear doors of the inside surface which, when pressed down, locks the door and "free wheels" the outside handle thus blocking or preventing movement of the door lock inside remote control handle.

Service procedures for door locks are the same as outlined in the 1960 Chrysler and Imperial Service Manual.

DOOR LOCK SYSTEM LUBRICATION (Fig. 8)

An excess or lack of door lock and linkage lubrication can affect the lock operation. Cold weather sluggishness, improper latching (door bounces open when slamming, hard handle effort) and tendency to ice freezing are symptoms of improper lubrication.

Correct door lock and linkage lubrication can be accomplished as follows:

(1) Correct all lock system malfunctions which are not symptoms of improper lubrication.

(2) (a) On all front doors of all cars, the garnish moulding, trim panel, and water shield must be removed to lubricate the lock.

(b) On all Chrysler Newport and Windsor rear doors the lock can be lubricated by removing only the inside garnish moulding. On all Imperial and Chrysler New Yorker models, the trim panels and water shields must be removed.

(3) Lubrication should be done by applying MoPar Lubriplate, Part No. 1064768, to all lock pivot points, lock wearing surfaces, handle-to-lock ball joints, handle pivots, and in door lock key cylinder. (Apply light engine oil SAE 5W or 10W to all latch pivot points and wearing surfaces for extreme cold weather conditions.)

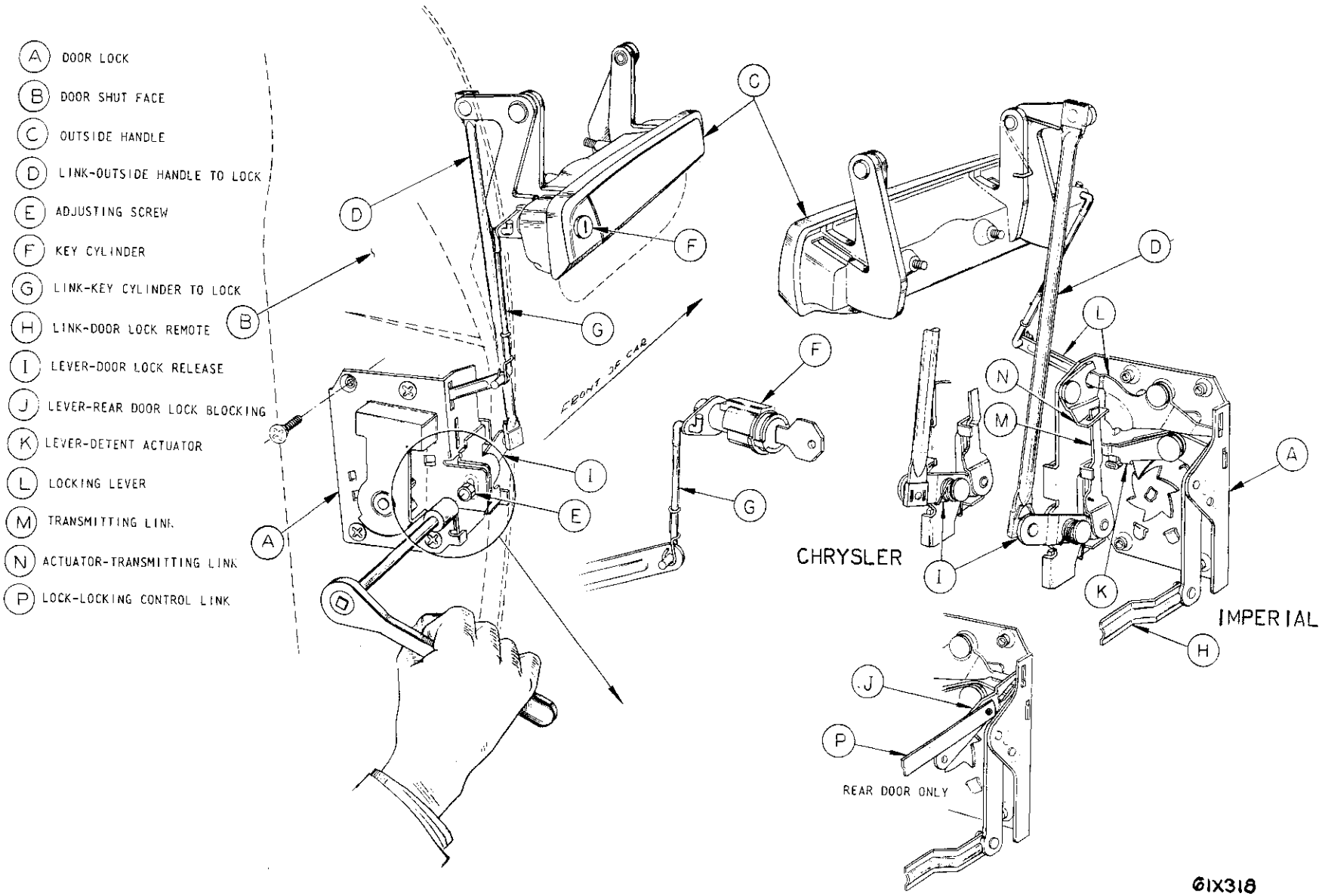

Fig. 8—Door Lock and Linkage

On those cars for which the trim panel was removed, it is recommended that the remote control assembly, the window regulator gears and pivot points, and glass guides also be lubricated with MoPar Lubriplate.

(4) When necessary, degrease the lock with clean mineral spirits or solvent applied with a thin long brush or through a long spout oil can, taking care not to get solvent on door trim panel. Residue will flow out the holes in bottom of door. Wipe off the door and sill with a clean cloth. For extreme cases of excess grease and dirt, the lock may have to be removed for a thorough cleaning, in which case the recommended service procedures for removing lock should be followed. Lubricate the lock as described above.

(5) Install the water shield and trim panel. Wipe off the excess lubricant on the outside surfaces.

(6) Apply MoPar Door Ease, Part No. 1064769, stick lubricant to the lock striker.

CAUTION

It is suggested that lubricants containing molybdenumdisulfide and graphite be avoided due to the potential staining of the trim panel or clothing.

VACUUM DOOR LOCKING SYSTEM (CHRYSLER MODELS)

There are no basic changes in the vacuum door locks except for the Service Diagnosis Procedure.

The vacuum door lock service procedures remain the same as outlined in the 1960 Chrysler and Imperial Service Manual.

DOOR LOCK AND LINKAGE

SERVICE DIAGNOSIS

Condition	Possible Cause	Correction
Door hard to open or sticks.	a. Striker rubbing on the door face or on the back rotor housing.	a. Add or remove shims in back of the striker to remove the interference.
	b. Lock striker not set at the correct angle or position.	b. Adjust the striker so that the top of the lock housing moves parallel to the bottom surface of the striker teeth and the door is not raised or pulled down as the lock engages the striker.
	c. Door mouldings or trim interfere with the door pillar.	c. Relocate moulding being sure the screw heads do not project.
Door is hard to close.	a. Door weatherstrips have high spots or other crowded conditions when the door is in the proper closed condition.	a. Correctly shim or adjust weatherstrips. Recement wherever necessary.
	b. Door rubber bumpers too thick.	b. Cut the bumpers down if they are too thick.
	c. Upper and lower hinges improperly aligned or lack lubrication.	c. Adjust and lubricate the hinges using MoPar Lubriplate.
	d. Striker not properly adjusted.	d. Adjust the striker so the lock engages in the second position when the door surface is flush with the pillar or adjoining sheet metal.
	e. Excessive side glass interference with roof rail weatherstrip.	e. Readjust door glass to reduce interference with roof rail but still maintaining proper seal.

SERVICE DIAGNOSIS — Continued

Condition	Possible Cause	Correction
	f. Excessive door upper frame (Imperial) interference with roof rail.	f. Readjust door upper frame (Imperial) to reduce interference but retain seal.
Outside handle does not return.	a. Handle interferes with the escutcheon.	a. Insert a screwdriver between the handle and escutcheon and pry in the desired direction to relieve the interference.
	b. Handle is free but does not return freely due to broken spring.	b. Replace the handle.
	c. Handle sluggish but shows no interference in the handle mechanism and the spring is operating correctly after removing the handle to lock link.	c. Inspect the lock mechanism for proper lubrication. Lubricate with MoPar Lubriplate. Test for interference in the pivot and spring of the lock release and links.
Remote control handle does not return to the neutral position.	a. Interference betwen the remote control handle and the slot in the arm rest.	a. Adjust the trim panel to provide proper clearance.
	b. Interference between the trim panel and the hub of the remote control handle. Test by pressing the trim panel away from the remote control handle.	b. Remove the tapered coil spring from the remote control handle shaft.
	c. Interference in the remote control mechanism.	c. Inspect for an excessively tight anti-rattle clip on the inner panel at the middle of the remote to lock link. Properly lubricate the remote control mechanism and the lock assembly, using MoPar Lubriplate.
Outside handle does not release the lock.	a. Lock adjustment set too high.	a. Properly adjust the lock adjusting screw.
	b. Outside handle to lock link disconnected.	b. Be sure the flattened end of the link is not too wide spreading the clip. File the edge of the flat so the clip fits freely. Install the link.
	c. Ineffective release lever spring or damaged transmitter or detent actuator.	c. Install a new lock.
Inside handle does not release lock on front doors.	a. Remote control assembly improperly adjusted.	a. Adjust the control mechanism until it will completely lock and release the lock.
Inside handle does not release the lock on the rear doors.	a. Remote control assembly improperly adjusted.	a. Loosen the remote control assembly attaching screws and, with the lock locked, move the remote control assembly forward as far as possible without forcing or bending the lock to control link. Tighten the remote control assembly attaching screws.

SERVICE DIAGNOSIS — Continued

Condition	Possible Cause	Correction
Inside handle does not lock the door.	a. Remote control assembly adjusted too far forward.	a. Adjust the remote control assembly rearward just enough to obtain proper lock operation.
	b. Bent or binding remote control to lock link.	b. Free-up or install a new link.
	c. Inoperative lock.	c. Properly lubricate the lock. Inspect for bent levers. Straighten the levers if necessary. Inspect for loose pivots. Install a new lock if necessary.
Key will not lock or unlock the front doors.	a. Key cylinder to lock link disconnected.	a. Connect the link.
	b. Key operation too stiff.	b. Properly lubricate the lock.
	c. Bent levers.	c. Straighten the levers.
Key will not unlock the door.	a. Improperly adjusted outside door handle to lock link.	a. Properly adjust the link.
	b. Sticking lock levers.	b. Properly lubricate and free-up the levers.
	c. Outside handle sticky.	c. Free-up the handle.
	d. Outside handle to lock link disconnected.	d. Connect the link.
Lock does not latch when the door is closed.	a. Sticking or improperly adjusted inside or outside handles.	a. Free-up and adjust the handles as required.
Lock does not latch in extreme cold weather.	a. Lubricant too heavy.	a. Remove the lock, clean with solvent and lubricate with medium engine oil.
Front door lock does not unlock when the door is closed after locking the door.	a. Improper outside door handles adjustment.	a. Adjust the handle linkage as necessary.
	b. Bent lock lever.	b. Straighten the lock lever.
	c. Lock levers bent and overriding each other.	c. Install a new lock.
Front door locks automatically when the door is closed.	a. Friction in the lock levers.	a. Lubricate and free-up the lock levers.
	b. Remote control improperly adjusted.	b. Properly adjust the remote control.
Rear door locking control does not lock or unlock the door.	a. Bent lock levers.	a. Straighten the lock levers.
	b. Loose or very tight pivot rivets in the lock control levers.	b. Install a new lock.
	c. Lever does not travel far enough to lock or unlock the lock.	c. Install a new lock.

SERVICE DIAGNOSIS — Continued

Condition	Possible Cause	Correction
Door lock does not hold door closed (false latching).	a. The rotor pawl or lever may be jammed or bent.	a. Install a new lock.
The whole door rattles or moves excessively when driving.	a. Door rubber bumpers missing on back of door flanges or pillar.	a. Install the bumpers where required.
	b. Improperly adjusted lock striker.	b. Adjust the striker.
	c. Loose rotor.	c. Re-rivet inside and outside rotors. Install a new lock if damaged.
	d. Welds broken and rotor cover loose.	d. Install a new lock.

VACUUM DOOR LOCKS

SERVICE DIAGNOSIS

Condition	Possible Cause	Correction
Vacuum door lock system is inoperative.	a. Main vacuum feed hose is pinched or blocked.	a. Inspect the main vacuum hoses from the intake manifold to the vacuum tank, and from the vacuum tank to the vacuum distributor. Refer to Figure 9. Inspect the hoses for short bends, kinks, or being pinched. Correct as required. Install new hoses if necessary.
	b. Manifold to vacuum tank hose disconnected.	b. Connect the manifold to vacuum tank hose.
	c. Vacuum tank to vacuum distributor hose disconnected.	c. Connect the vacuum tank to distributor hose. See Figure 9 and Figure 10.
	d. Vacuum distributor to control switch hose disconnected.	d. Connect the vacuum distributor to control switch hose. Be sure the hose marked "white" connects to the large diameter fitting marked "white" on the switch. See Figure 10.
	e. Vacuum distributor to main tee hose disconnected.	e. Connect the vacuum distributor to main tee hoses, according to the color code of the hoses and fittings. See Figure 10.
	f. Malfunctioning or faulty switch.	f. Remove the small diameter hoses from the switch. Start the engine, and operate the control switch. If there is no vacuum at the switch connections, the switch is at fault. Install a new switch.
	g. Faulty vacuum distributor.	g. Remove the distributor to main tee hose from the distributor connection. Start the engine. Operate the switch to "lock" and "unlock" positions. If no vacuum at the connections, the distributor is at fault. Install new distributor.

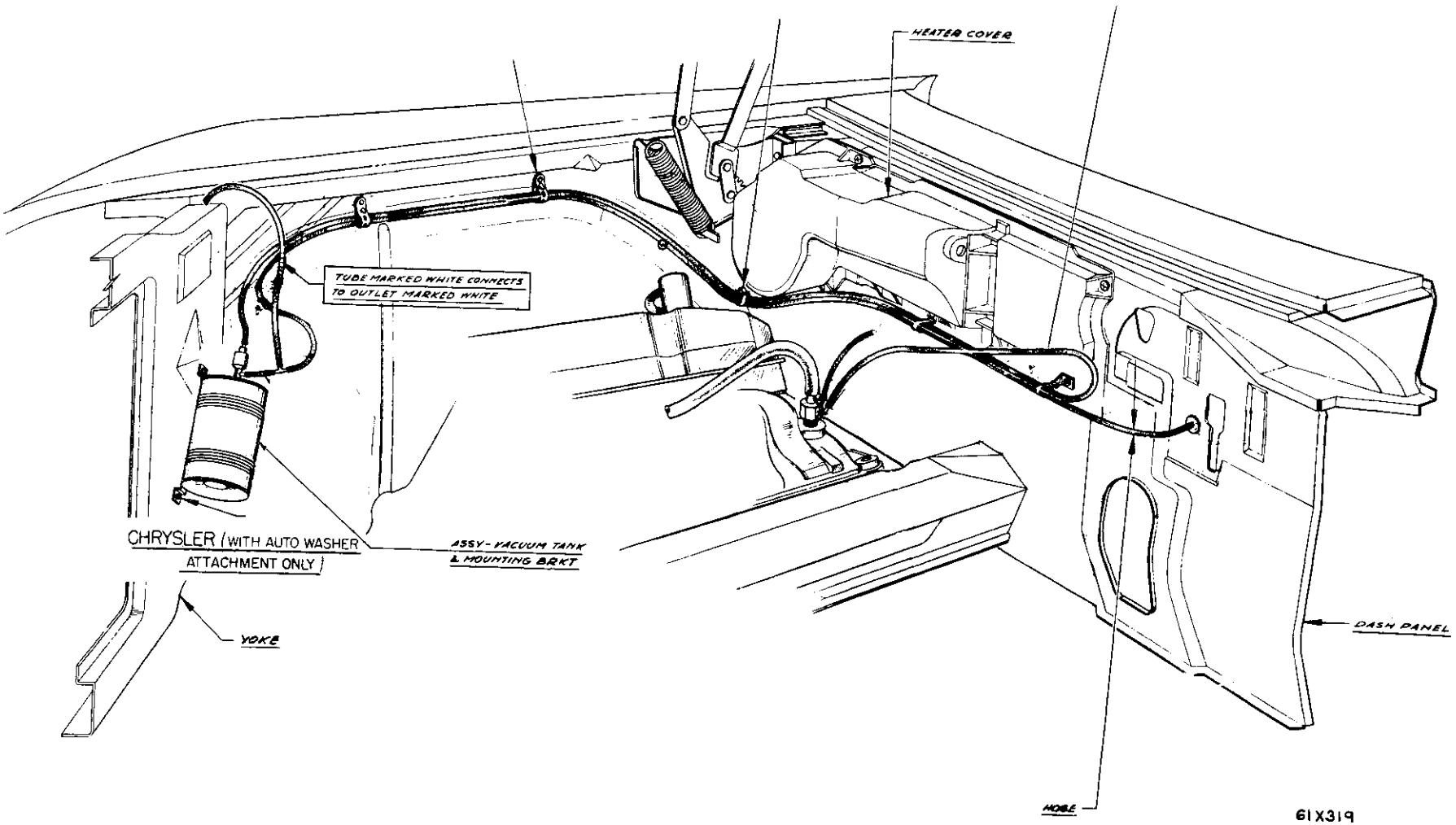

Fig. 9—Vacuum Door Lock Tubing Diagrams Engine Compartment

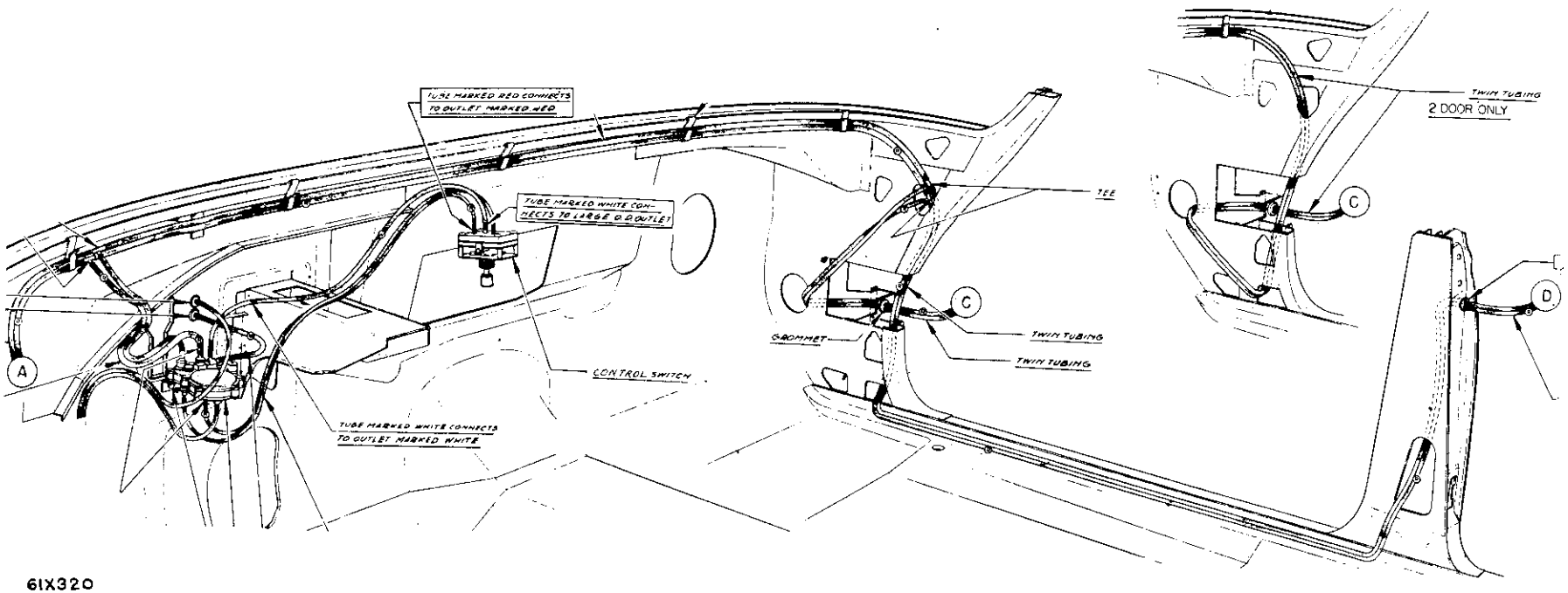

Fig. 10—Vacuum Door Lock Tubing Diagrams Passenger Compartment

SERVICE DIAGNOSIS — Continued

Condition	Possible Cause	Correction
Vacuum door lock system fails to lock. (Manual operation satisfactory. Vacuum unlock operation satisfactory.	a. Hose with "red" marking disconnected at the switch.	a. Connect the hose with the "red" marking to the switch fitting marked "red."
	b. Hose with "red" marking disconnected at the vacuum distributor.	b. Connect the hose with the "red" marking to the distributor fitting marked "red."
	c. Faulty control switch.	c. Disconnect the hose with the "red" marking at the switch. Start the engine. Move the control switch to the lock position. If no vacuum is felt at the "red" connection, the switch is at fault. Install a new switch.
	d. Faulty vacuum distributor. (Lock valve stuck.)	d. Remove the distributor to main tee hose marked "red," from the distributor connection. Start the engine. Operate the switch to the "lock" position. If no vacuum is felt at the connection, the distributor is at fault. Install a new distributor.
	e. Hose disconnected at any fitting in "red" hose system to the actuator.	e. Inspect all the connections in the "red" hose system to the actuator. Refer to Figure 10.
	f. Leak in hose to door.	f. Install a new hose.
	g. Broken hose connector on the actuator.	g. Remove the door inside trim panel. Inspect the actuator. Install a new actuator if the connector is broken.
Vacuum door lock system fails to unlock. (Manual operation satisfactory. Vacuum "lock" operation satisfactory.)	a. Hose disconnected at the control switch.	a. Connect the hose at the switch. See Figure 10.
	b. Hose disconnected at the vacuum distributor.	b. Connect the hose at the vacuum distributor. Refer to Figure 10.
	c. Faulty control switch.	c. Disconnect the hose with no marking at the switch. Start the engine. Move the control switch to the "unlock" position. If no vacuum can be felt at the connector, the switch is at fault. Install a new switch.
	d. Faulty vacuum distributor. (Unlock valve stock.)	d. Remove the distributor to main tee "unmarked" hose from the distributor connection; start the engine. Operate the switch to the "unlock" position. If no vacuum is felt at the connection, the distributor is at fault. Install a new distributor.
	e. Hose disconnected at any fitting in the "unmarked" hose system to the actuator.	e. Inspect all the hoses in the "unmarked" hose system to the actuator. Refer to Figure 10.
	f. Leak in the hose to the door.	f. Install a new hose.
	g. Broken hose connector on the actuator.	g. Remove the door inside trim panel. Inspect the actuator. Install a new actuator if the connector is broken. See Figure 11 and Figure 12.

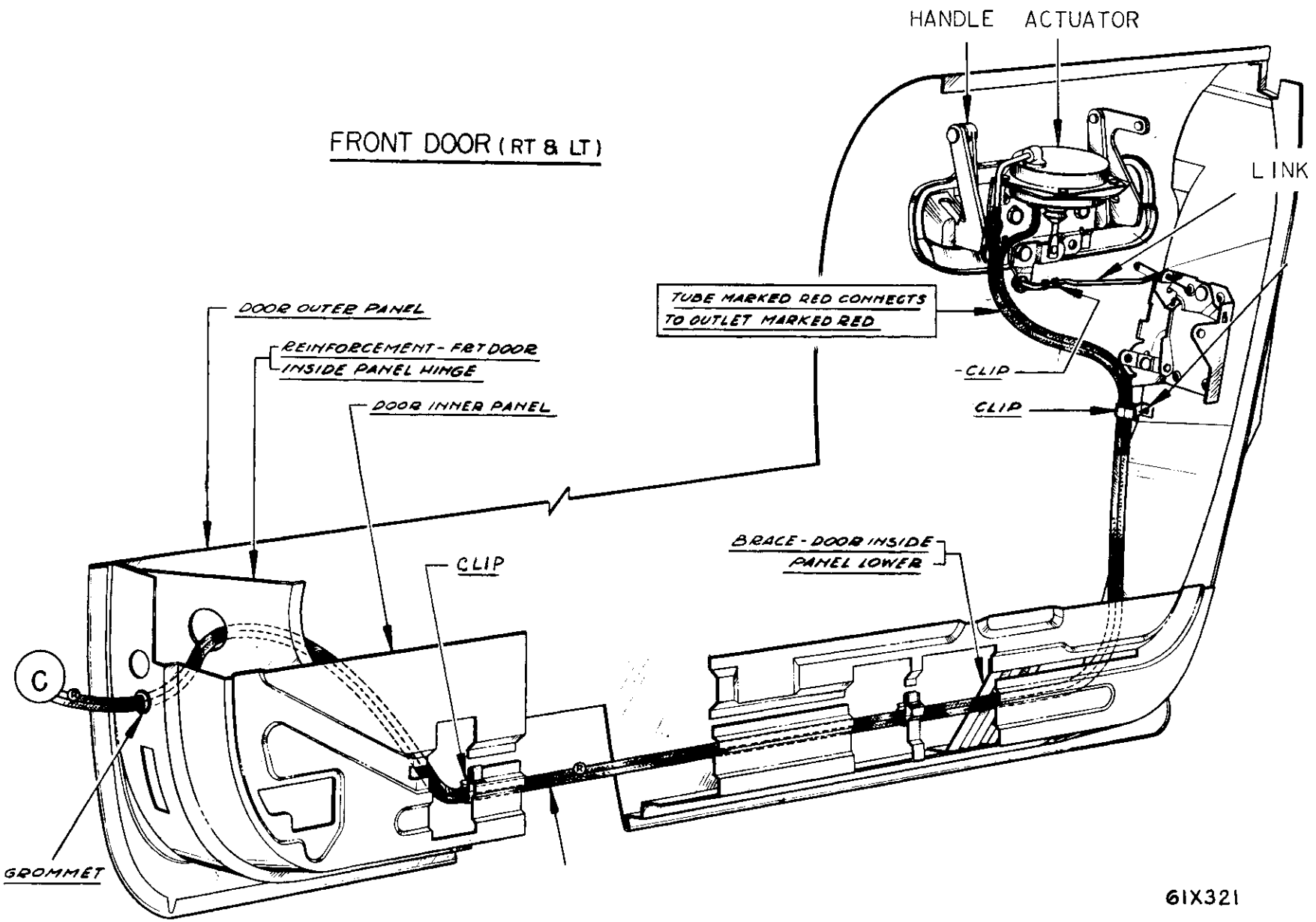

Fig. 11—Front Door Vacuum Lock

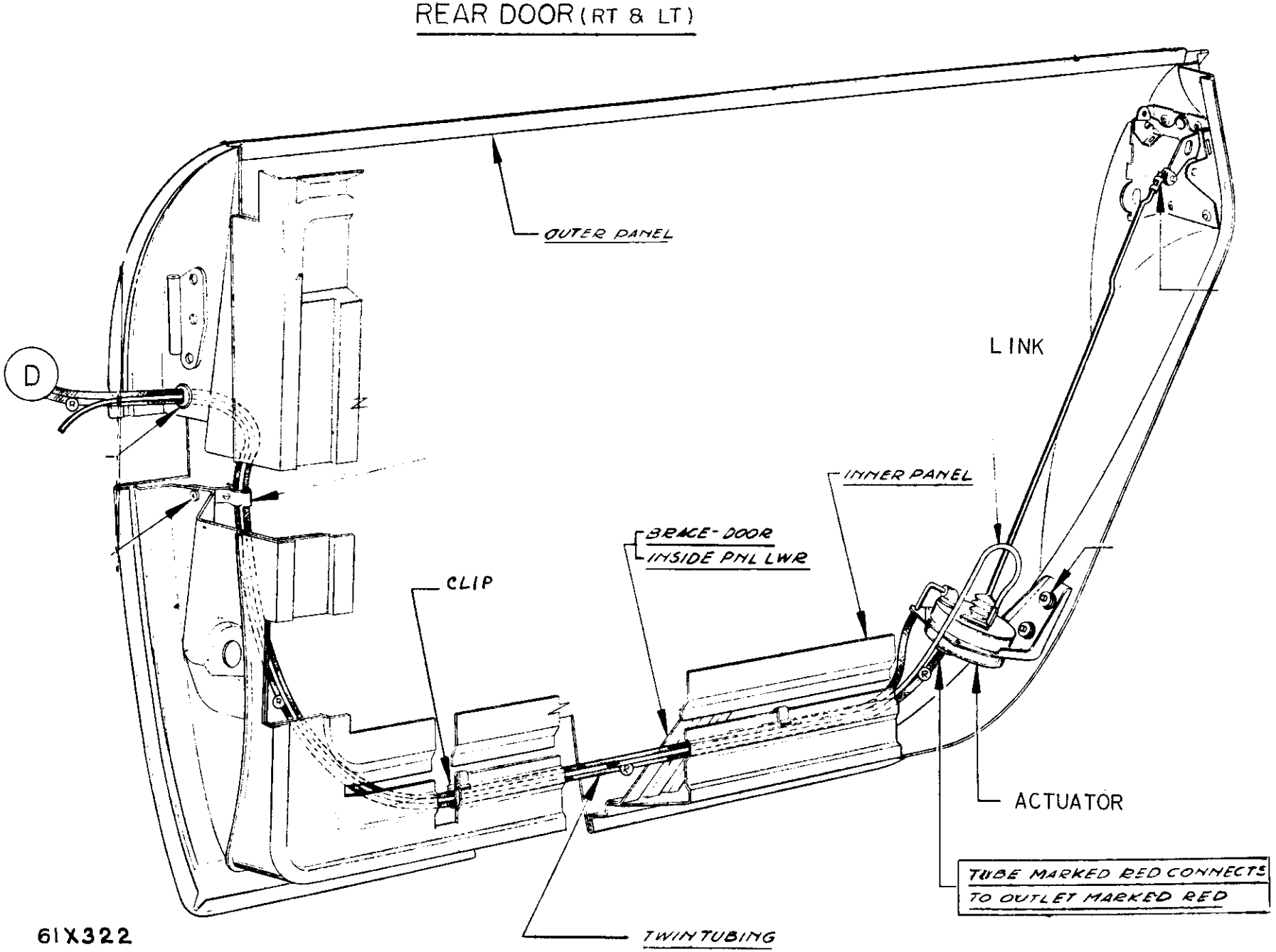

Fig. 12—Rear Door Vacuum Lock

SERVICE DIAGNOSIS Continued

Condition	Possible Cause	Correction
Door locks operate opposite to that of the switch operation.	a. Small hoses reversed on the control switch.	a. Connect the hoses correctly. Refer to Figure 10.
	b. Hoses reversed at the distributor connections.	b. Connect the hoses correctly at the distributor. Refer to Figure 10.
	c. Control switch mounted in reverse position.	c. Install and correctly connect the switch. See Figure 10.
Doors on one side lock, while the doors on the opposite side unlock.	a. Door hose lines incorrectly connected to the tee at the cowl side panels.	a. Correctly connect the hoses as shown in Figure 10.
One door lock operates opposite to the lock of the other doors.	a. Hoses improperly connected to the tee at the cowl side panel.	a. Connect the hoses correctly. See Figure 10.
	b. Hoses improperly connected at the door lock actuator.	b. Connect the hoses at the actuator correctly. Refer to Figure 11 and Figure 12.
One door vacuum lock fails to operate. (Manual operation satisfactory.)	a. Binding or malfunctioning door lock actuator linkage.	a. Remove the door inside trim panel. Inspect the actuator and linkage, correct as required. See Figure 11 and Figure 12.
	b. Faulty actuator.	b. Remove the door inside trim panel. Inspect the actuator and linkage. Install a new actuator if necessary.

GROUP 24

AIR CONDITIONING

DATA AND SPECIFICATIONS

COMPRESSOR

Location	Left of Center on Cylinder Block
Type	2 Cylinder "V" Type
Bore	$2\frac{5}{16}$ Inch
Stroke	$1\frac{1}{8}$ Inch
Displacement	9.45 Cubic Inches
Valve Type	Reed Type
Speed (depends on axle ratio and tire size)	Approximately 1250 rpm at 25 mph
Oil Capacity (Refrigerant Oil)	11 Ounces
Clutch	Stationary Coil
Muffler	In Compressor Discharge Line

CONDENSER

Location	Front of Radiator