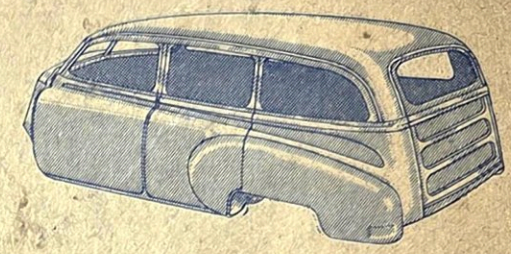
BODY BY

Fisher Station Wagon



· 1949 ·

SERVICE & CONSTRUCTION MANUAL

FISHER BODY SERVICE DIVISION
GENERAL MOTORS CORPORATION
DETROIT, MICHIGAN

1949

FISHER BODY

STATION WAGON BODIES

CHEVROLET—PONTIAC

Foreword

Fisher built Station Wagon bodies for the year 1949 are designed under two classifications:

All-Metal Station Wagon, Style "No. 62" and "No. 62D".
Wood and Metal Station Wagon, Style "No. 61" and "No. 61D".

As the name implies, the All-Metal Station Wagon body with the exception of the grained wood interior finishing panels, is composed entirely of steel. The Wood and Metal Station Wagon is a composite type body having doors and rear quarters which are composed of wood from the fender crease line up to the roof. The tail gate and lift gate at the rear of the body are also composed of wood.

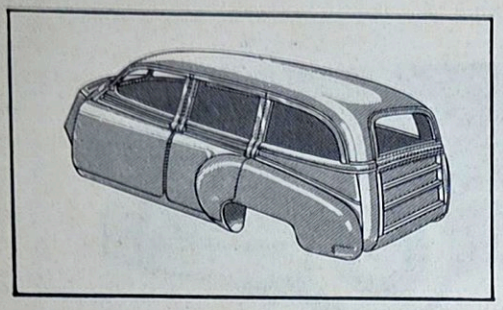
All Station Wagon bodies use a one-piece steel roof panel. The body front end assembly including the windshield is the same as used on the 1949 closed bodies under this classification.

This Station Wagon edition outlines the construction and service features of each station wagon style under separate chapter heads. Also, included is a complete description of the application of Di-Noc transfers to the outside panelling on the All Steel Station Wagon bodies.

FISHER BODY SERVICE DIVISION
GENERAL MOTORS CORPORATION
DETROIT MICHIGAN

STATION WAGON STYLES

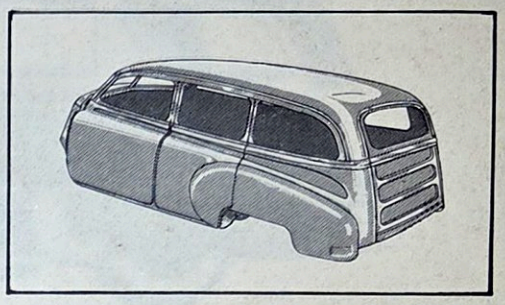
WOOD AND METAL CONSTRUCTION

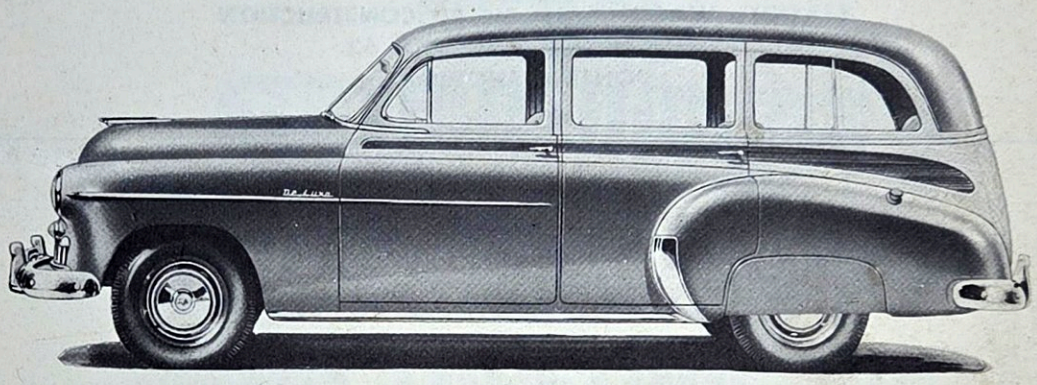


CHEVROLET—1062
PONTIAC—2562-2562D

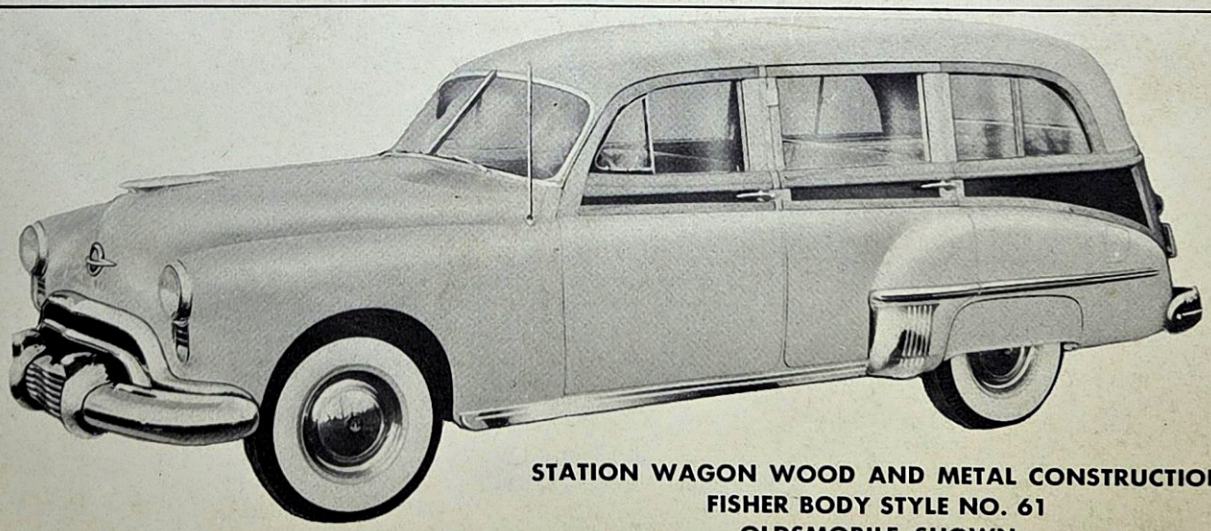
CHEVROLET—1061
PONTIAC—2561-2561D
OLDSMOBILE—3561D

ALL METAL CONSTRUCTION

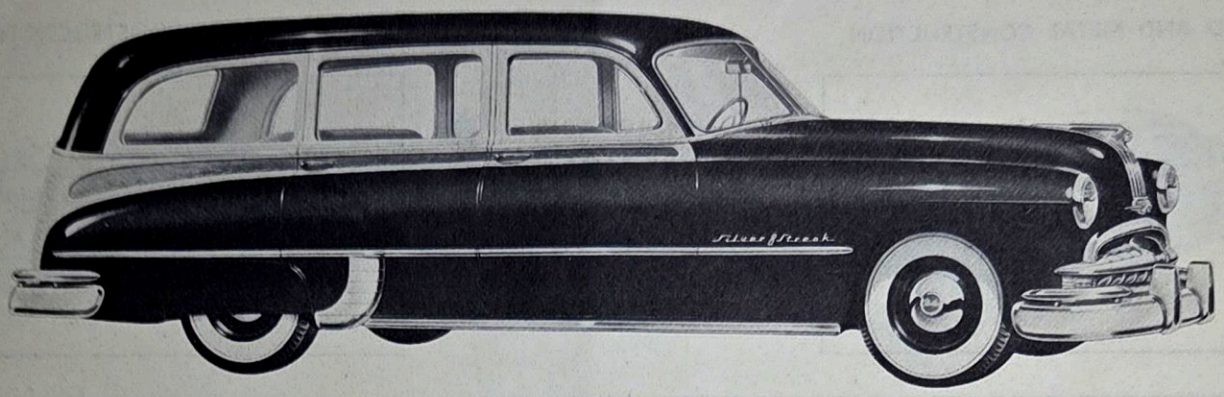




STATION WAGON ALL METAL CONSTRUCTION
FISHER BODY STYLE NO. 62
CHEVROLET SHOWN



STATION WAGON WOOD AND METAL CONSTRUCTION
FISHER BODY STYLE NO. 61
OLDSMOBILE SHOWN



STATION WAGON ALL METAL CONSTRUCTION
FISHER BODY STYLE NO. 62
PONTIAC SHOWN

1949

METAL STATION WAGON

BODY CONSTRUCTION

CHEVROLET—PONTIAC

VISUAL INDEX - DESCRIPTION 1949 ALL METAL STATION WAGON - REAR VIEW

SEE PAGE 5 OPPOSITE

DOORS

1. FRONT DOOR ASSEMBLY.
2. REAR DOOR ASSEMBLY.
3. LIFT GATE ASSEMBLY.
4. TAIL GATE ASSEMBLY.

SEATS

5. FRONT SEAT ASSEMBLY.
6. CENTER SEAT ASSEMBLY.
7. REAR SEAT ASSEMBLY.

UNDERBODY

8. FLOOR PAN ASSEMBLY.
9. ROCKER PANEL ASSEMBLY.
10. REAR COMPARTMENT PANEL.

FRONT END

11. INSTRUMENT PANEL.
12. COWL PANEL ASSEMBLY.
13. DASH PANEL ASSEMBLY.
14. FRONT BODY HINGE PILLAR.
15. WINDSHIELD INNER FRAME.

REAR QUARTER

16. REAR QUARTER OUTER.
17. REAR QUARTER INNER.
18. WHEELHOUSE ASSEMBLY.
19. REAR END PANEL.

ROOF

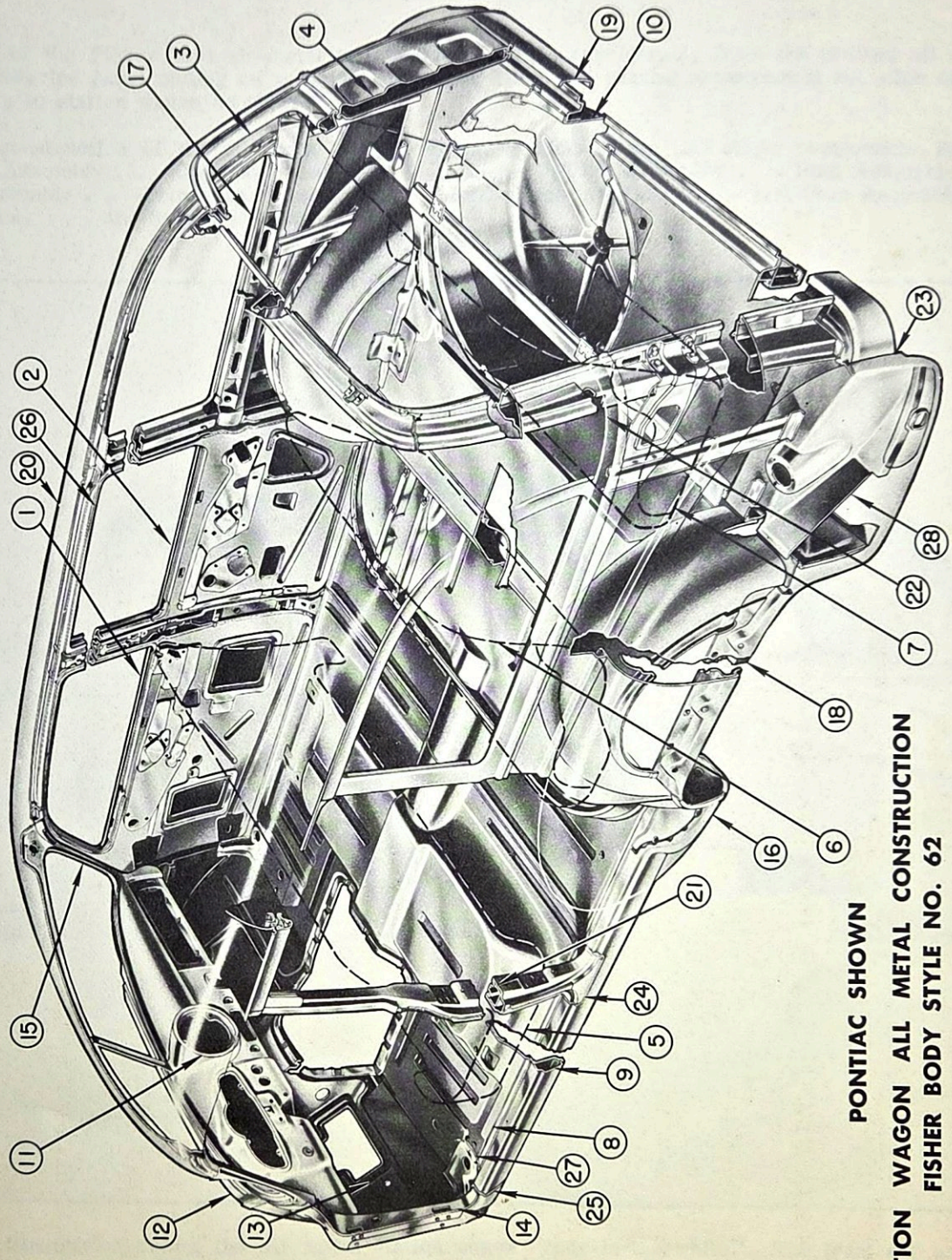
20. ROOF PANEL ASSEMBLY.

CENTER PILLAR

21. CENTER PILLAR ASSEMBLY.

JUNCTION OF METAL PANEL ASSEMBLIES

22. ROOF TO REAR QUARTER.
23. REAR QUARTER TO REAR END.
24. CENTER PILLAR TO ROCKER PANEL.
25. FRONT BODY HINGE PILLAR TO ROCKER PANEL.
26. ROOF SIDE RAIL TO ROOF.
27. BRACE - FRONT BODY HINGE PILLAR TO FLOOR PAN.
28. EXTENSION REAR COMPARTMENT PAN.



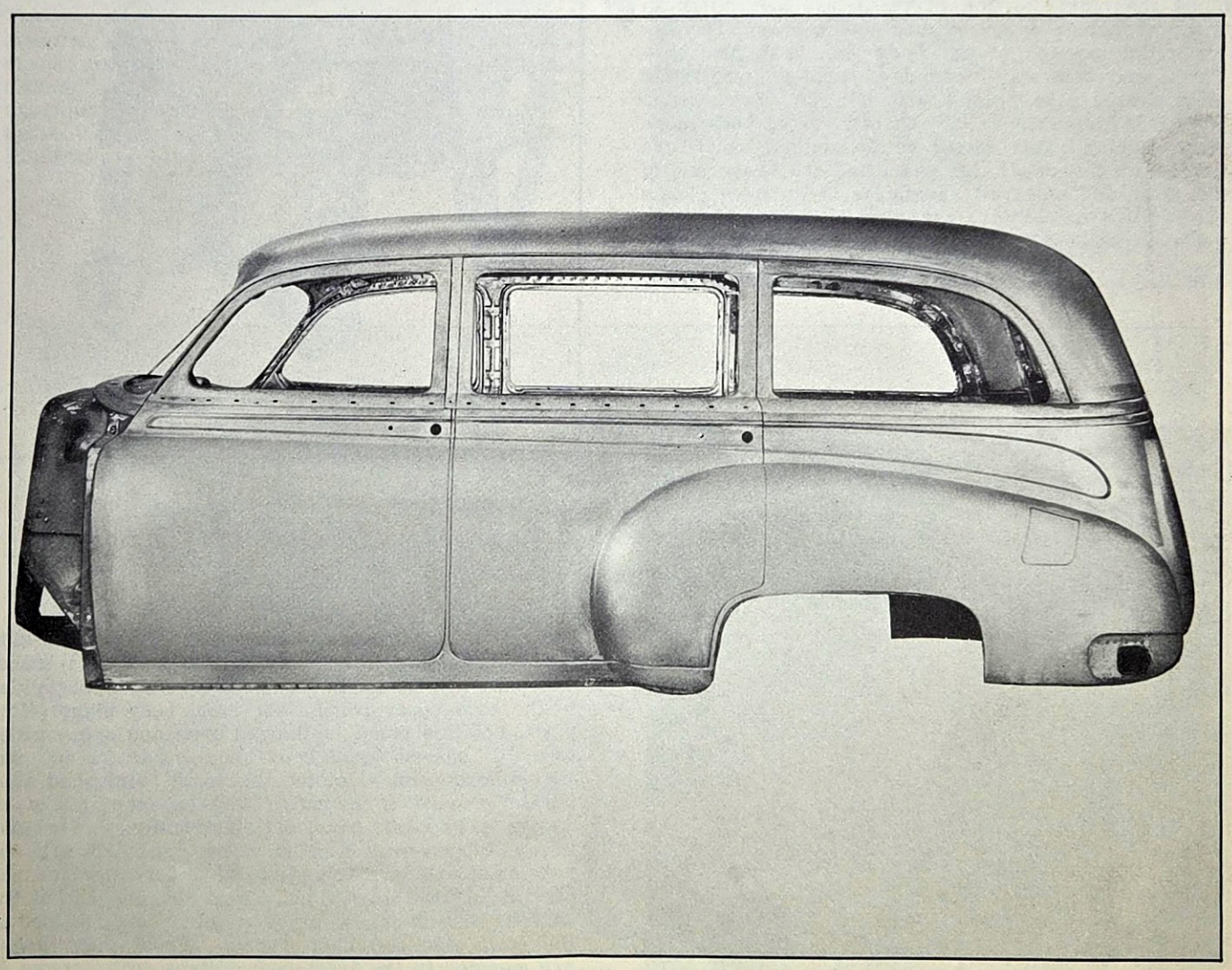
PONTIAC SHOWN

STATION WAGON ALL METAL CONSTRUCTION
FISHER BODY STYLE NO. 62

GENERAL CONSTRUCTION

The design of the Fisher built all-metal station wagon differs considerably from the present all steel closed body. The exterior panel styling as well as the interior floor and seating arrangement are also different and peculiar only to station wagon construction.

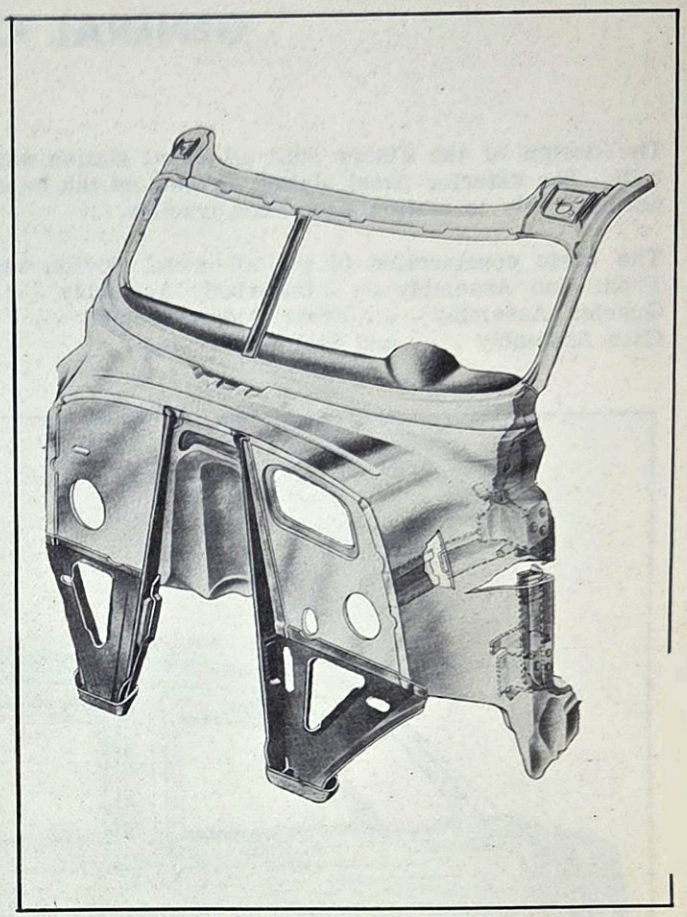
The basic construction of the all metal station wagon, consists of ten (10) major components, namely, . . . Front End Assembly . . . Underbody Assembly . . . Center Pillar Assembly . . . Roof Assembly . . . Rear Quarter Assembly . . . Front Door Assembly . . . Rear Door Assembly . . . Lift Gate Assembly . . . Tail Gate Assembly . . . and Seat Assemblies.

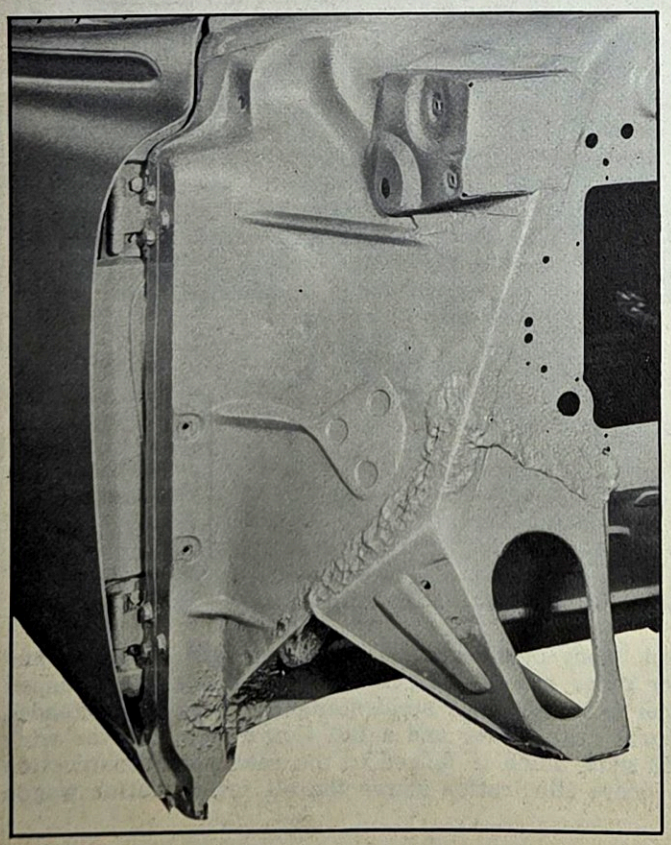


The above illustration shows the all metal station wagon "body-in-the-white". The front end assembly and door inner panels are similar to closed body styles. Door outer panels and rear quarter panels are stamped with an embossment along the belt section. The roof panel is a one-piece steel stamping, while the extended quarter panel as shown, incorporates the use of an integral rear fender and a full length rear quarter window. The rear section of the body is provided with a lift gate which is hinged to the rear roof construction and a tail gate which is hinged to the rear floor. The above illustration shows the all metal station wagon body as used by Pontiac.

FRONT END

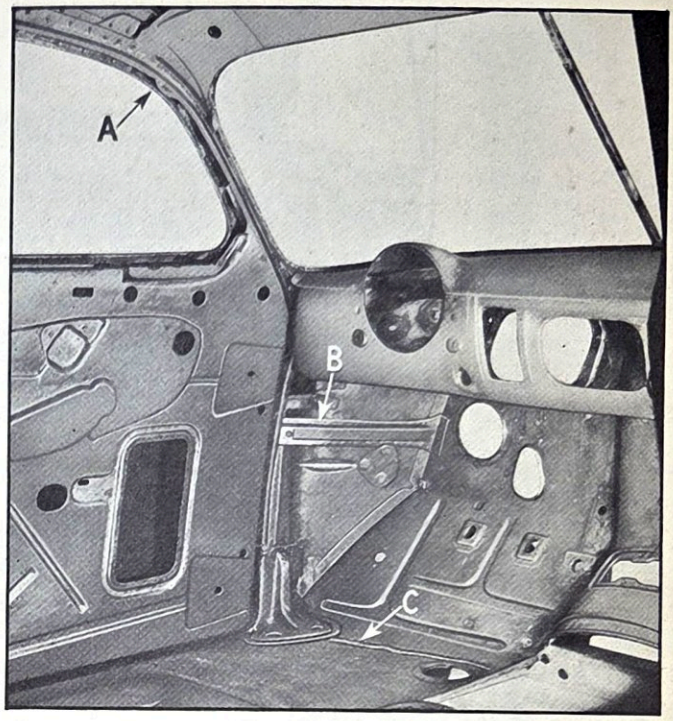
The 1949 All Metal Station Wagon front end assembly consists primarily of a cowl and dash assembly -- front body hinge pillar facing assembly (R. and L.) -- front end side rail assembly (R. and L.) -- windshield inner frame upper -- windshield inner frame division reinforcement -- dash to chassis frame brace assembly (R. and L.) -- and an instrument panel assembly. The cowl upper panel does not include the outer portion of the front body pillar as used on former cowl and dash assemblies. The upper pillar portion of the front end is formed by a "front end side rail assembly" and a "windshield inner frame side reinforcement." The lower pillar portion is formed by a "U" shaped "front body hinge pillar facing" and pillar reinforcement which are welded to the cowl side panel and the lower end of the front end side rail assembly. Instrument panels are welded directly to the cowl upper panel at the lower windshield opening.



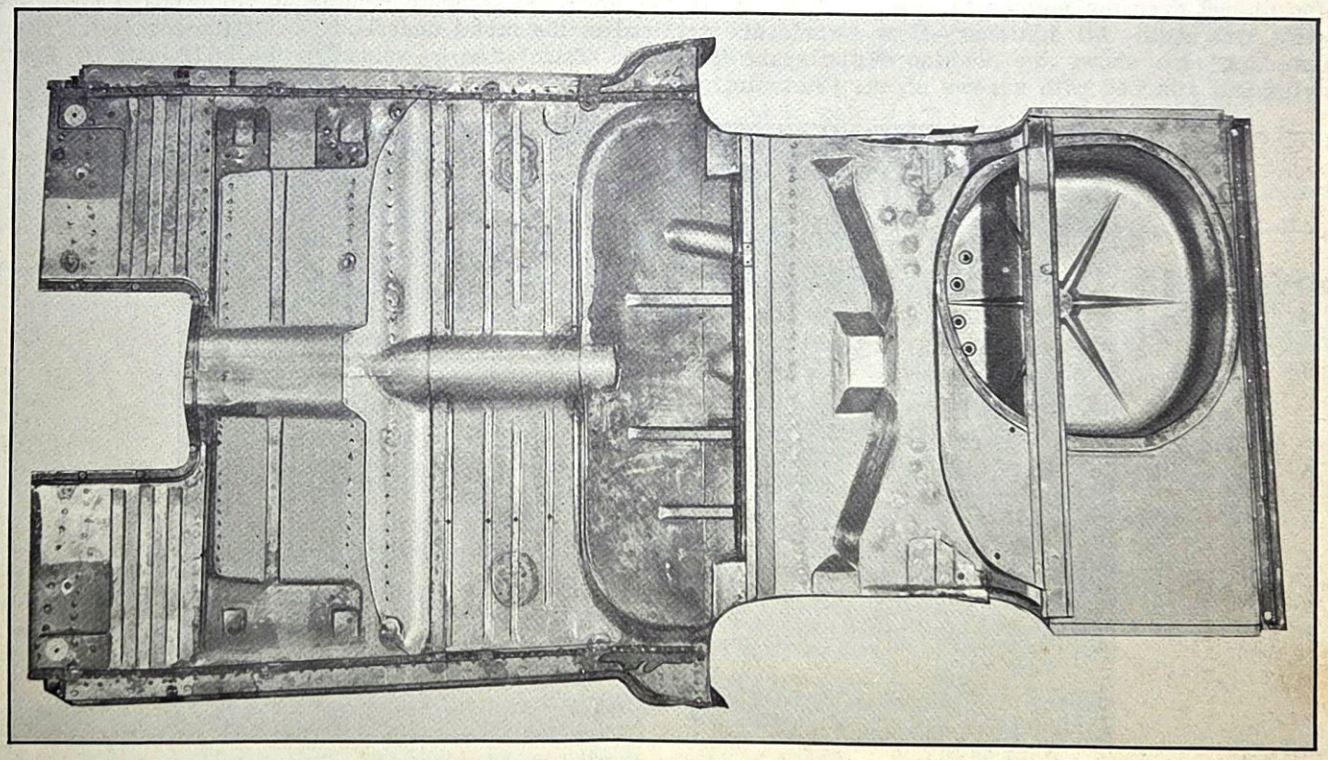


This illustration shows the formation of the cowl side panel, dash panel, and dash to chassis frame brace. The cowl side panel is lapped under and spot-welded to the cowl upper panel. The front body hinge pillar portion of this panel is flanged over and spot-welded to a "U" shaped "front body hinge pillar facing" and its reinforcement which together with reinforced supports, provide a mounting for the front doors as shown. The dash panel is electrically spot-welded to the lapped-over flanges of the cowl side and upper panels and is stamped so as to form the toe pan section of the steel floor. Note the position of the dash to chassis frame brace which is spot-welded to the cowl side and dash panels. Front door hinges are mounted to the front body pillars with screws installed through the side facing of the pillar, the same as on conventional 1949 "A" closed styles.

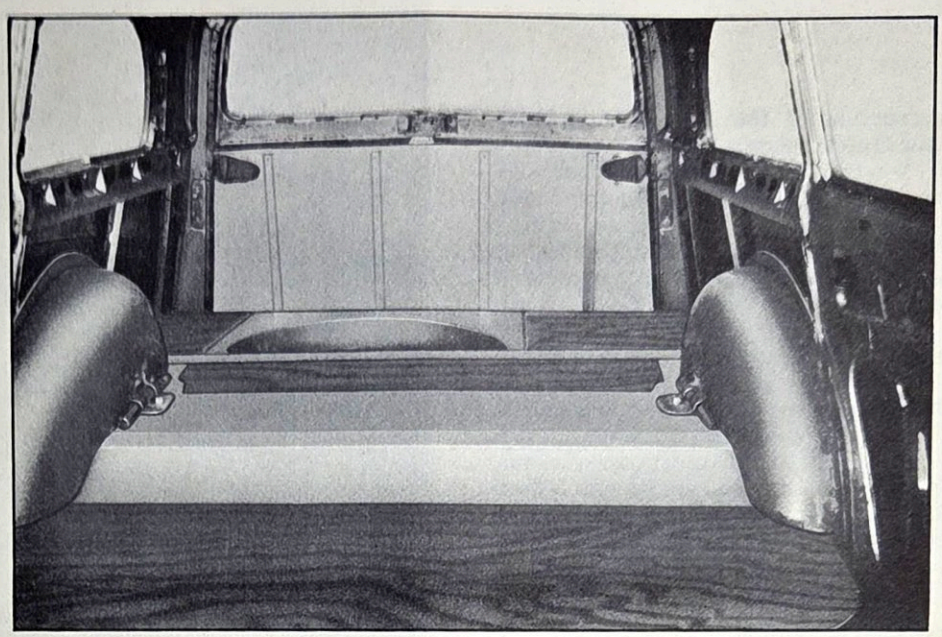
The interior construction of the body front end assembly as here illustrated, shows the junction in the area "A" of the "windshield inner frame upper" -- the "windshield inner frame side" -- and the "side roof rail". The windshield inner frame upper, which forms the upper portion of the windshield opening, is broad in dimensions and is lapped under and welded to the upper flanged end of the windshield inner frame side, as shown. "B" indicates the cowl panel reinforcement at the check link while "C" indicates the welded junction of the dash panel to the floor pan. Narrowness of the pillar section of the windshield opening, coupled with curved windshield glass allows more visibility. The windshield glass and rubber channel assembly as well as the windshield wiper transmission and motor assemblies are similar to those used on conventional 1949 "A" closed bodies. Illustration shows Chevrolet construction.



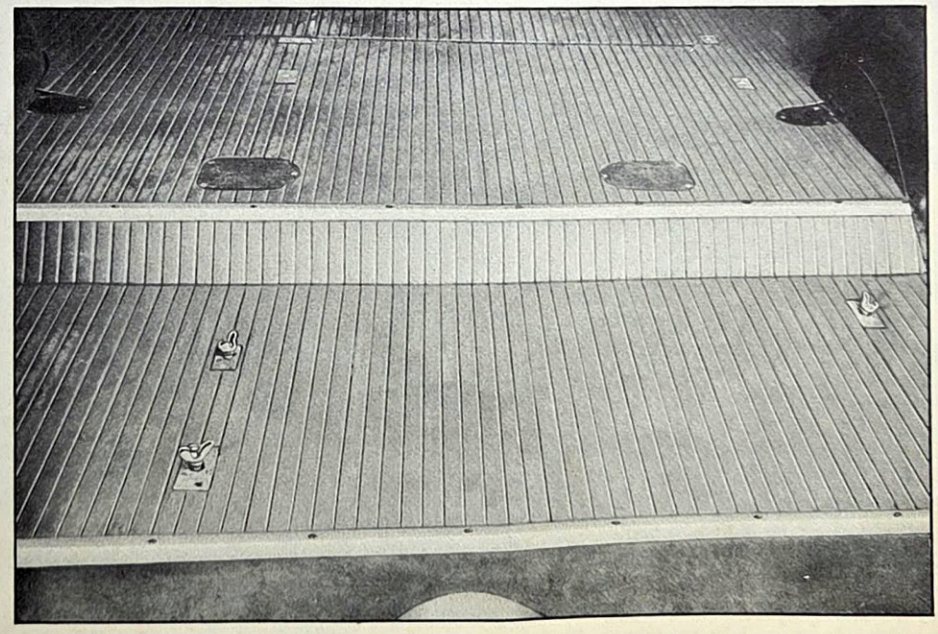
UNDERBODY



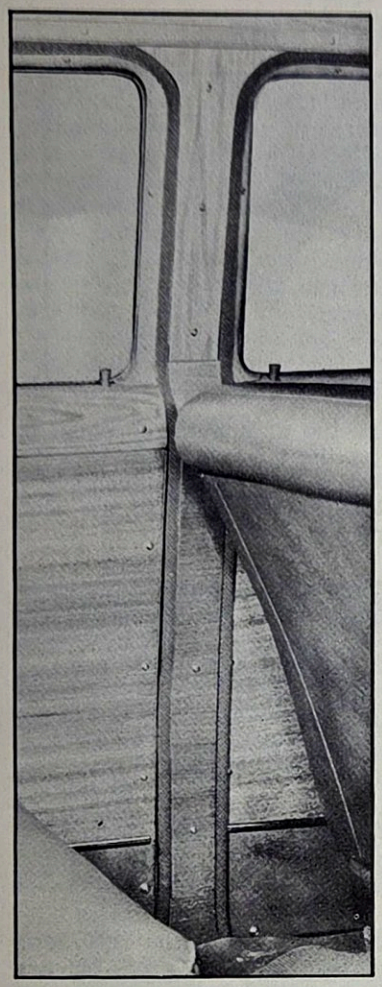
The steel floor or underbody on the all metal station wagon has, with a few exceptions, basically the same construction as comparable 1949 "A" closed body conventional styles. The rear compartment pan assembly, however, is adapted particularly to station wagon requirements, serving as an elevated rear floor to accommodate the rear passenger seat and also to provide space below the floor surface for a tire well to carry the spare tire in a horizontal position. Also, forward of the rear compartment pan assembly, a center seat floor board support (not shown) is welded across the floor pan to provide the forward end or step for the raised wood floor which is later added.



The station wagon rear floor area is formed in step fashion as illustrated above. A metal riser is welded to the underbody to form the first step just forward of the center seat location. Over this riser, a plywood floor is added which extends back to meet the rise of the metal rear underbody. Wooden floor boards are also placed over the metal underbody at the rear of the floor. A separate removable floor board covers the spare tire well. All stationary floor boards are screwed to the metal underbody and trim covered. The illustration also shows the position of the spare tire well. This latter is welded to the underbody on Pontiac styles and attached with screws on the Chevrolet.



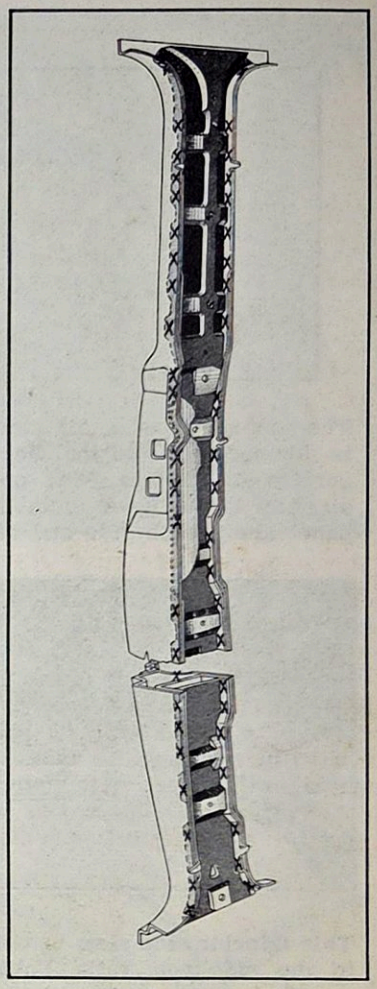
This illustration shows the covered rear floor area of the underbody on standard styles. The laminated wood floor is assembled over the metal supporting structure so as to form a double step design. The front metal floor riser is covered with an imitation leather heel kick trim. Linoleum is used to cover the rear floor area on standard styles, while carpet is used on Pontiac deluxe style, over the entire front floor and rear floor area. Note the attaching points for the center and rear seats as well as the spare tire compartment section of the rear floor. Chrome finishing moldings, which are attached with screws, are used along the edges of floor risers as shown.

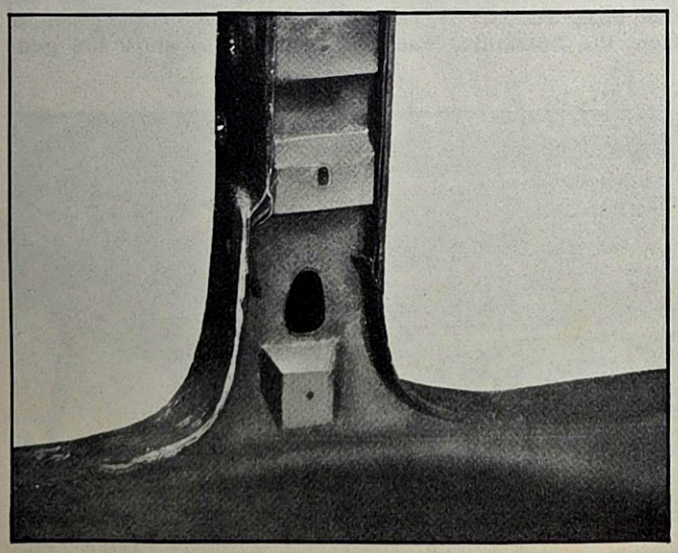


CENTER PILLAR

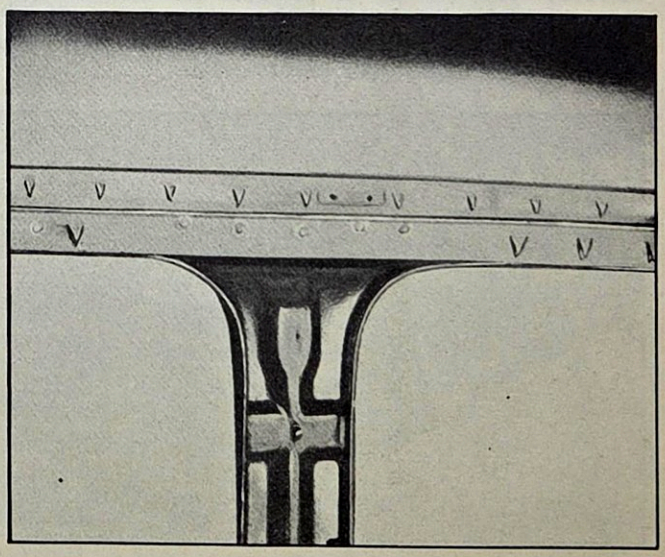
The center pillar assembly on the all metal station wagon is composed primarily of a center pillar outer panel assembly, a center pillar outer panel reinforcement assembly, and a center pillar inner panel assembly, all welded together as shown in this drawing.

The center pillar serves as a lock pillar for the front door and a hinge pillar for the rear door. This view shows the center pillar with trim installed. Windhose is first sewed to a waterproof cardboard foundation. This trim assembly is then secured to the metal pillar by tabs, after which a plywood inner trim panel in three sections is screwed to the inside of the pillar. On Pontiac styles, a small section of chrome molding is installed on the outside of the center pillar at the crease line. This molding is secured to the pillar by a bolt and nut assembly. For removal, access to the crease molding attaching nut is gained by removing the center pillar trim.



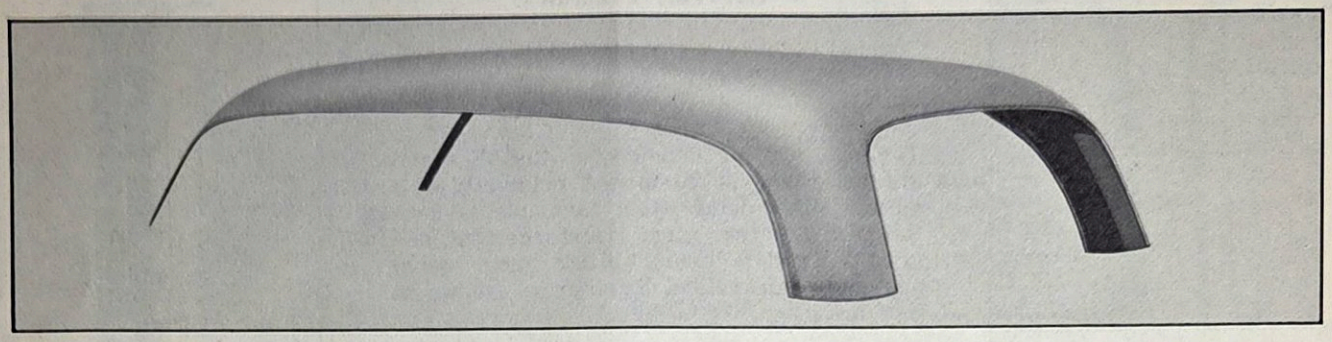


This illustration shows the inner construction of the station wagon center pillar where welded to the floor pan and rocker panel.

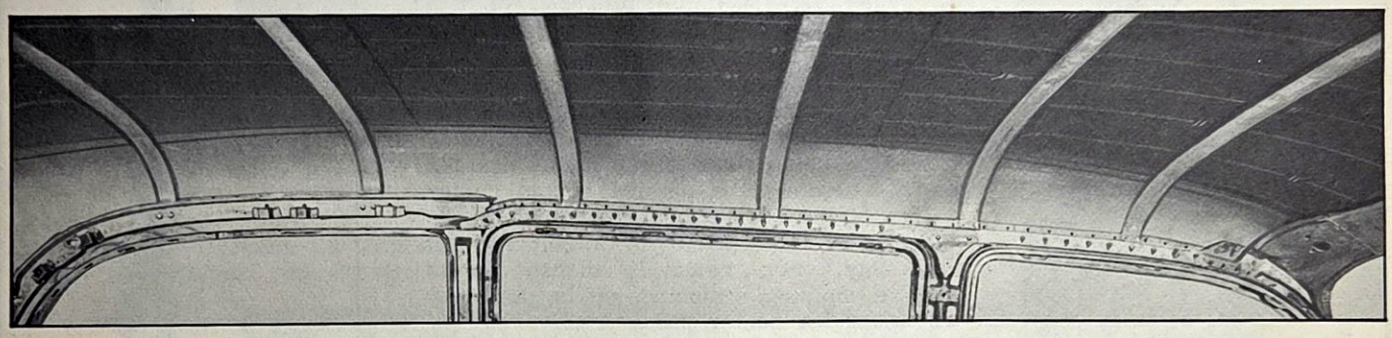


Shown here is the inner construction of the center pillar where welded to the underside of the side roof rail.

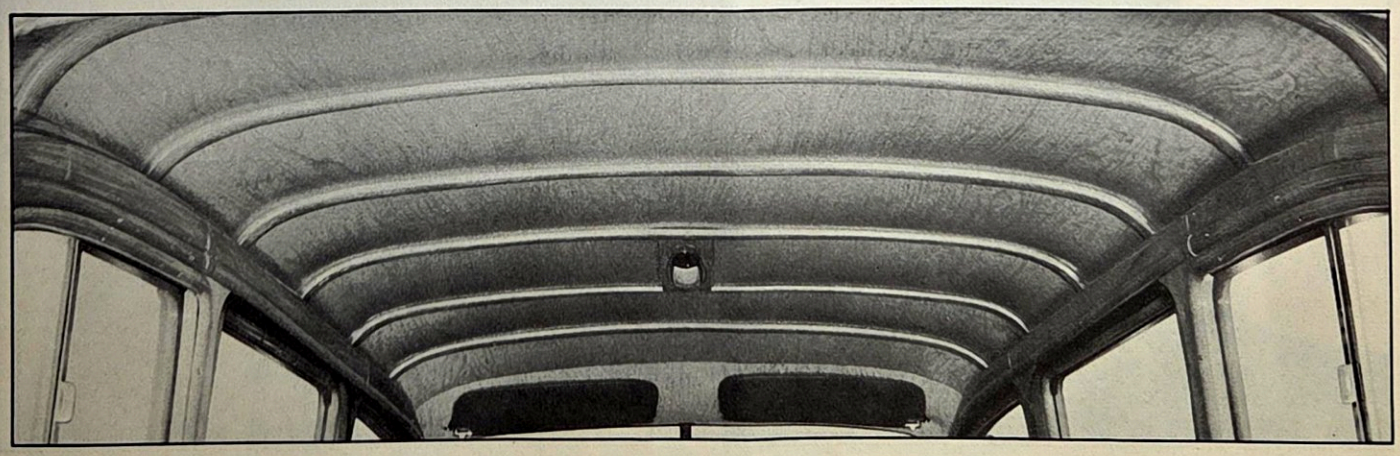
ROOF ASSEMBLY



The roof panel is of all steel construction and covers the complete roof section of the station wagon body. It is formed so as to include the upper portion of the windshield opening, as well as the quarters and lift gate portion of the rear end opening. All roof panels are insulated with panel deadening felt which is cemented directly to the inner metal surface with "3M Felt Pad Adhesive". Roof drip moldings are welded to the roof panel along each side and along the rear end portion surrounding the lift gate opening.



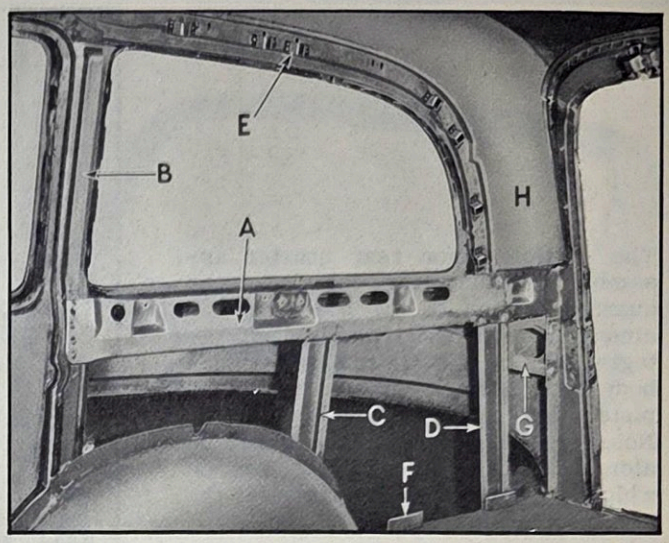
This interior side view of the all metal station wagon roof construction shows the attachment of the roof bows to the side roof rail. Unlike conventional closed bodies, these roof bows are not welded in position, but are attached with screws to the roof rail inner construction after the headlining has been installed, thus serving to support and form the headlining from below. The dome lamp support is readily detachable in the event of headlining and roof bow removal. In the above illustration, the headlining has been omitted to show the general interior metal roof construction.

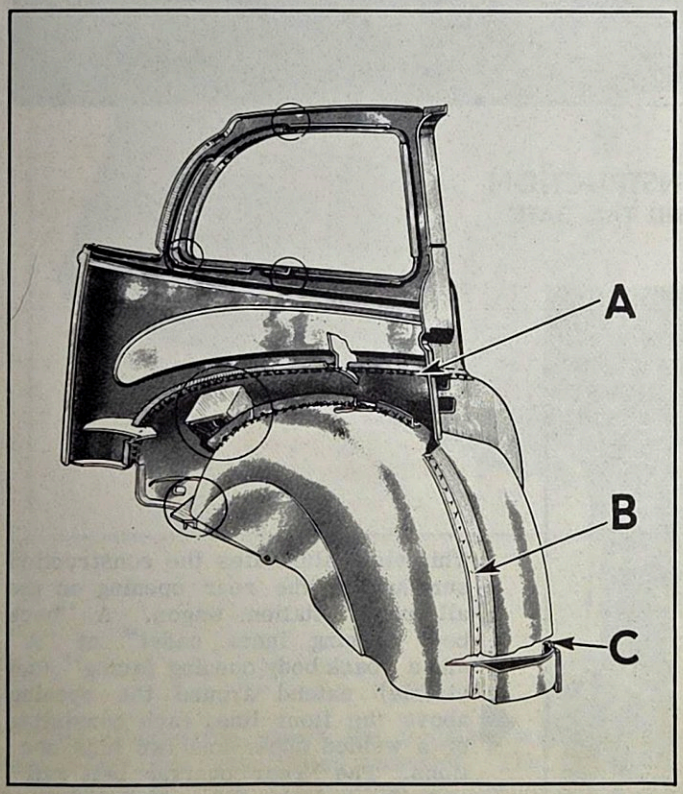


This interior forward view shows the headlining and roof bows installed. Note the wood roof rail covers which are attached along each side with screws. These covers serve to finish off the attaching areas for the headlining and body pillar trim. In addition to roof bows, the headlining is supported from above by three listing wires. The headlining itself is a plastic material with a fabric backing.

REAR QUARTER

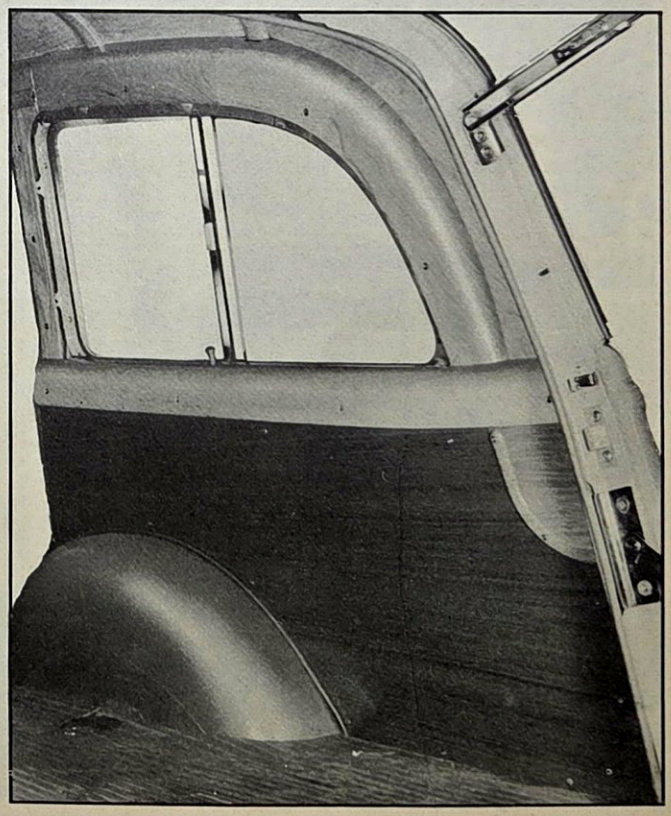
The basic rear quarter metal construction consists primarily of a rear quarter side outer panel sub-assembly which is welded to the underbody and roof structure. Braces and supports, as shown in this illustration, are welded to this assembly to serve as "tie-ins" to the underbody for additional strength and rigidity, as well as to provide a mounting for the inner trim panel. "A" denotes the Rear Quarter Window Belt Rail, "B" the Body Lock Pillar Inner Panel, "C" the Rear Quarter Belt Rail to Wheelhouse Brace, "D" the Rear Quarter Belt Rail to Floor Pan Brace, "E" the Roof Rail, "F" the Rear Quarter Inner Trim Panel Support, and "G" the Back Body Opening Facing Reinforcement. "H" indicates that portion of the Roof Panel extending around the rear quarter window and lift gate openings.



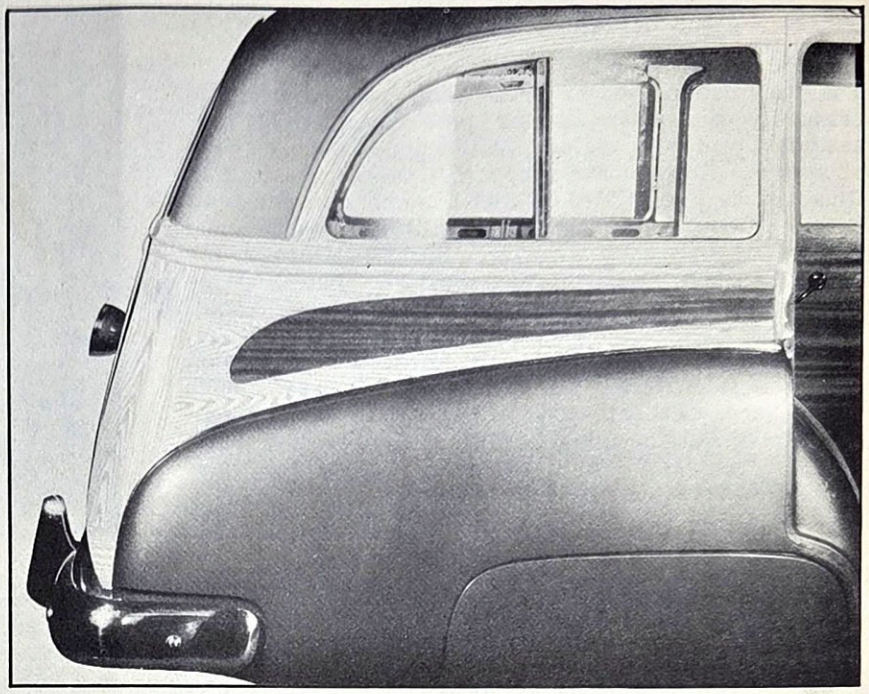


This drawing shows the detailed construction of the Rear Quarter Side Outer Panel Sub-Assembly. The rear quarter side outer upper and lower panels are welded together along "A". The Rear Body Lock Pillar Outer Panel is welded to the Wheelhouse Panel on its inner surface along "B" and on its outer surface along "C". The Wheelhouse Panel is also welded to the Rear Quarter Side Outer Lower Panel above the fender wheel cutout (not visible in this illustration).

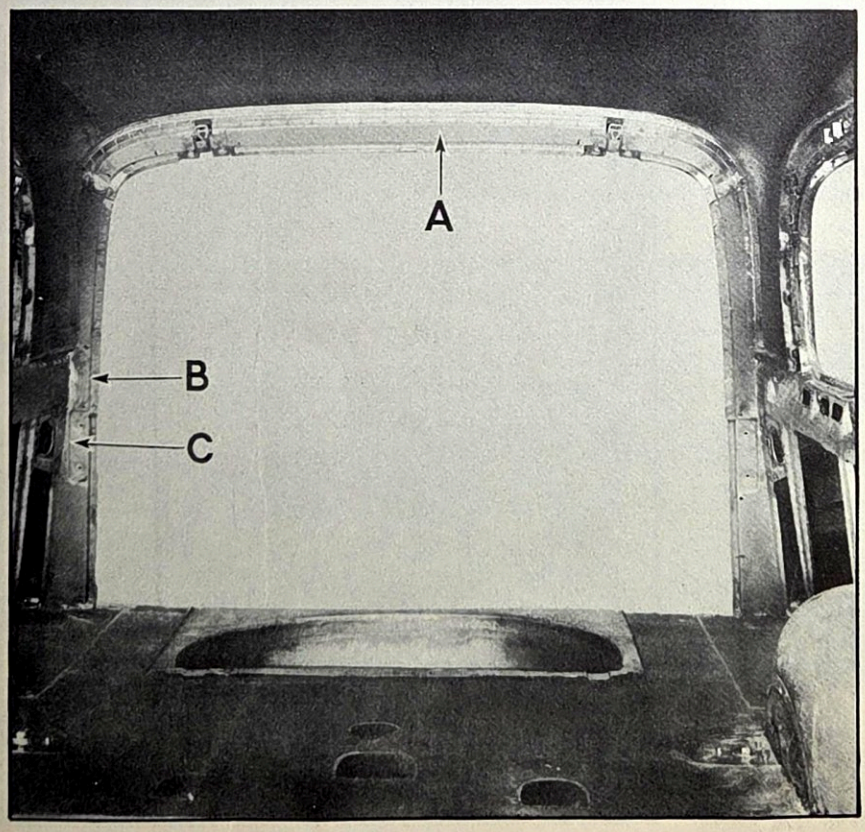
This view of the interior rear quarter area shows the trim installed. All wood trim finish is secured to the metal structure with screws and is easily removed (See Removal Operations Section).



The station wagon rear quarter assembly embraces the complete rear quarter section of the body, and includes the rear fender which is an integral part of this assembly, the rear body lock pillar, and also the complete rear quarter window opening. Note the formation of the panelling along the belt and quarter section which is designed to accommodate the grained transfer finish.

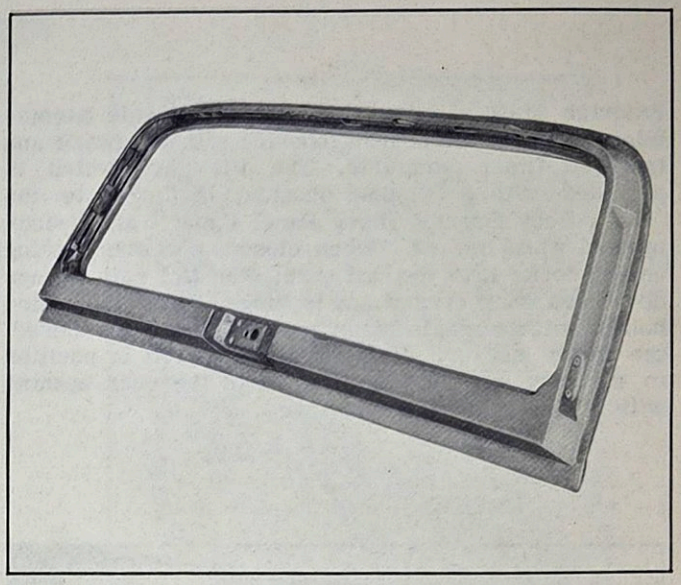


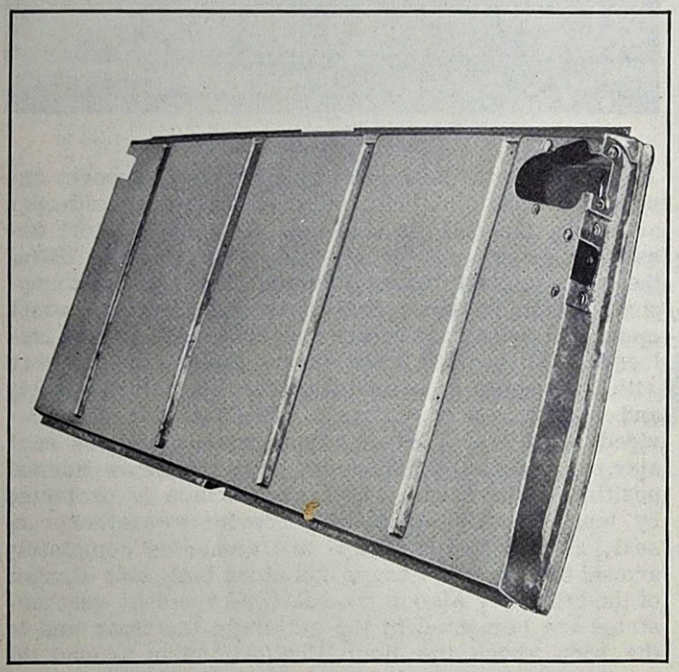
REAR END CONSTRUCTION
(INCLUDING LIFT AND TAIL GATE)



This view illustrates the construction surrounding the rear opening on the all metal station wagon. A "back body opening inner panel" at "A" and a "back body opening facing" (not visible) extend around the opening above the floor line, each consisting of a welded upper and two side sections. The "rear quarter belt rail" and "back body gate opening facing reinforcement" are welded to the inner panel at "B" and "C" respectively.

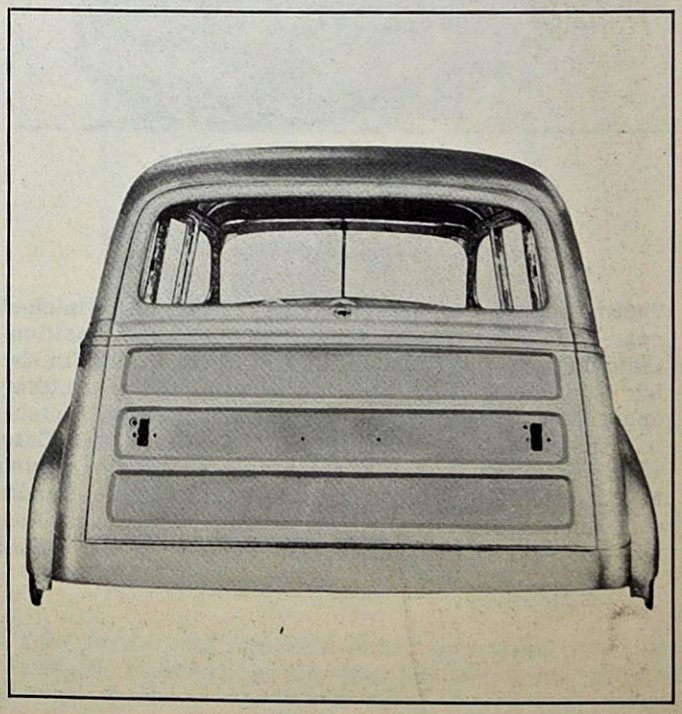
The lift gate construction consists primarily of inner and outer panels spot-welded together along their flanges. The four-piece inner panel, consisting of an upper, lower and two side sections, is welded into a single unit and then joined to a one-piece outer panel as described.



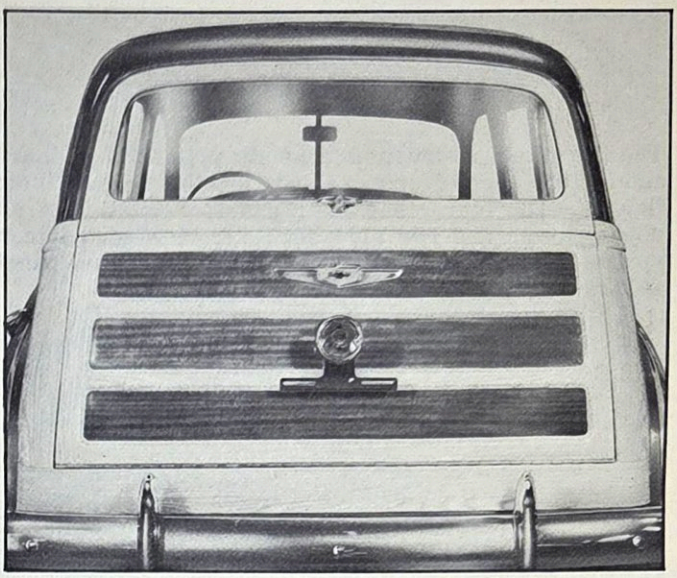


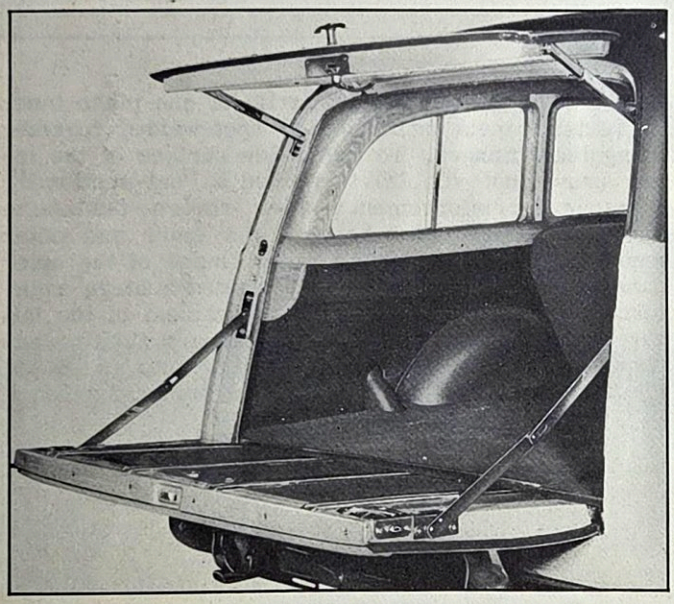
The tail gate consists primarily of one-piece inner and outer panels hemmed and spot-welded together along their flanges. To the inside surface of the inner panel (not visible) is welded a "hat-sectioned" horizontal reinforcement which covers the entire span of the tail gate between the inner and outer panels. Also, to the entire lower flange of the outer panel on its inside surface, is welded a hinge reinforcement for the lower hinge attachment of the tail gate along the floor area. Cut-outs and floating anchor nuts are provided in the inner panel as shown, for installing tail gate lock and support assemblies.

This illustration shows the complete metal lift gate and tail gate assemblies installed. The outer panel surfaces of these assemblies are designed so as to simulate wood construction. The wood graining effect is accomplished by the application of transfers along the areas as indicated in the next illustration. (Pontiac shown.)



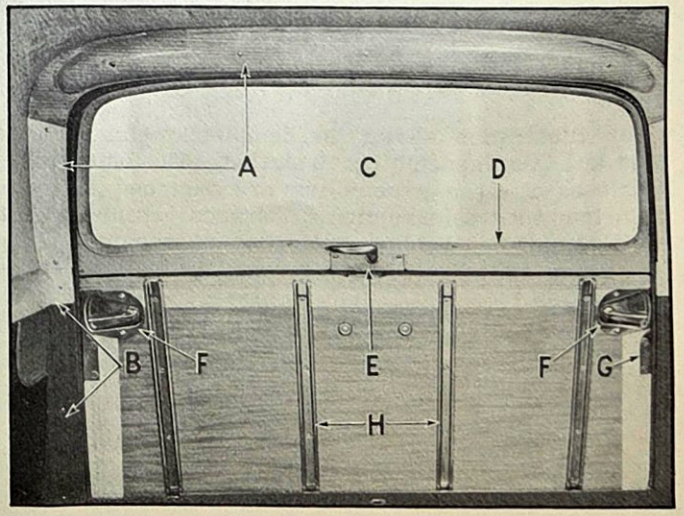
Exterior view showing the lift and tail gate assemblies installed to the back opening with hardware and transfer finish complete. The lift gate, which is provided with a window opening, is hinged to the "Back Body Opening Inner Panel Upper" and swings upward when opened. When closed, a center locking handle locks it to the tail gate. The tail gate swings downward when opened and is hinged along the entire bottom with a single piano type hinge. When closed, the upper corners of this lid are locked in position to strikers on the inner facing of the rear opening with lift gate lock assemblies.



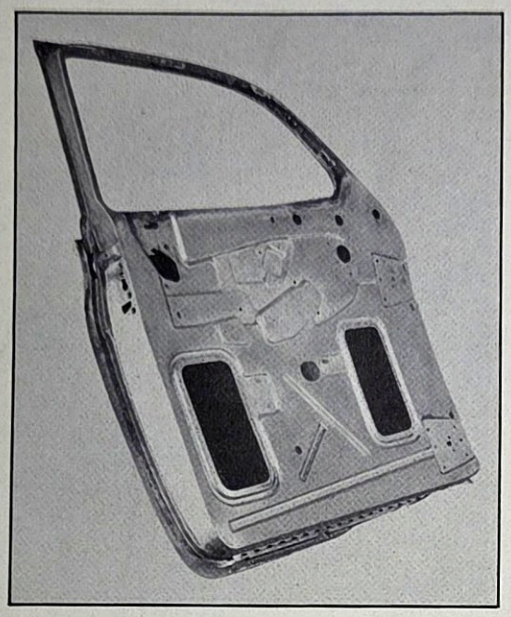


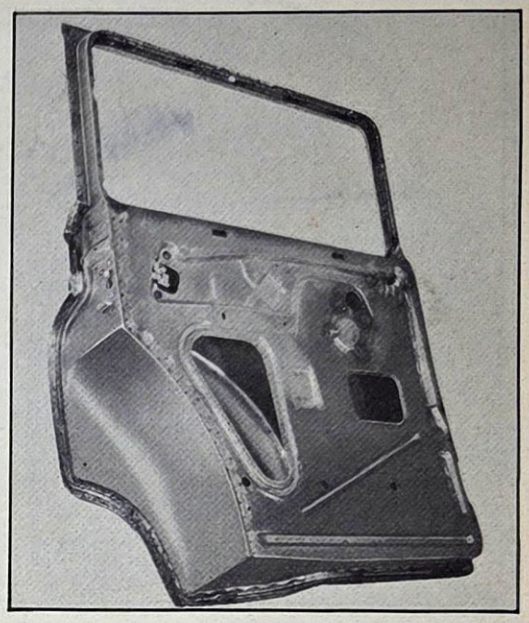
The lift gate is held open by telescopic support assemblies which automatically engage in a hold-open action in the full up position. The left support assembly is released from hold-open by first lifting the gate slightly before lowering, but the right support assembly incorporates a safety catch, which must first be tripped before the hold-open can be released. Mating lift gate wedge plates are attached with screws to the facings of the lift gate assembly and the back body opening. The tail gate is provided with a single hinge type support arm on each side to prevent the gate from dropping below normal position when open. The inner surface is protected by four (4) skid strips. To provide a weatherproof seal, rubber weatherstrips are cemented completely around the lift gate flanges and along both side flanges of the tail gate. Also at the rear end opening, weatherstrips are cemented in the gutter in the floor and to the body above the floor line, extending around the opening between the lower corners.

Shown here is an interior view of the trim finished rear end with lift and tail gates in a closed position. Indicated are the following hardware and trim finishing parts: "A" Lift Gate Opening Finishing Molding upper and lower . . . "B" Tail Gate Opening Finishing Molding upper and lower . . . "C" Lift Gate Window Glass . . . "D" Lift Gate Window Garnish Molding Assembly . . . "E" Lift Gate Inside Handle and Lock Assembly . . . "F" Tail Gate Lock Assembly . . . "G" Support Assembly . . . "H" Skid Strips

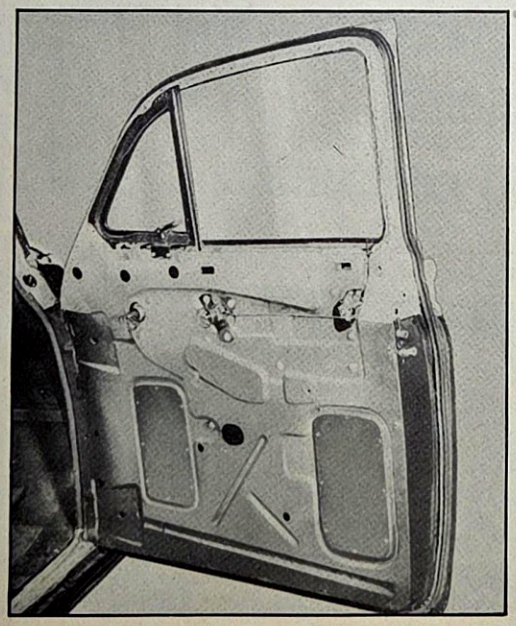


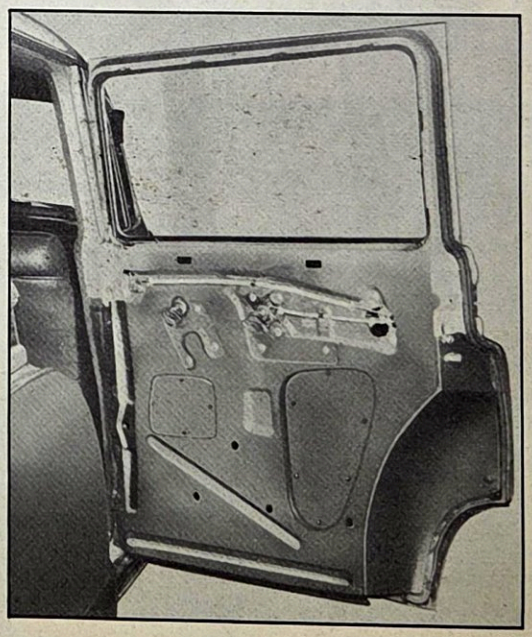
DOORS



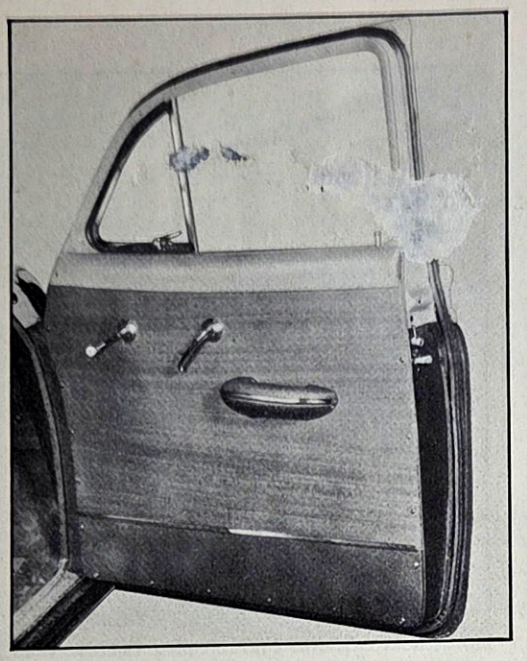


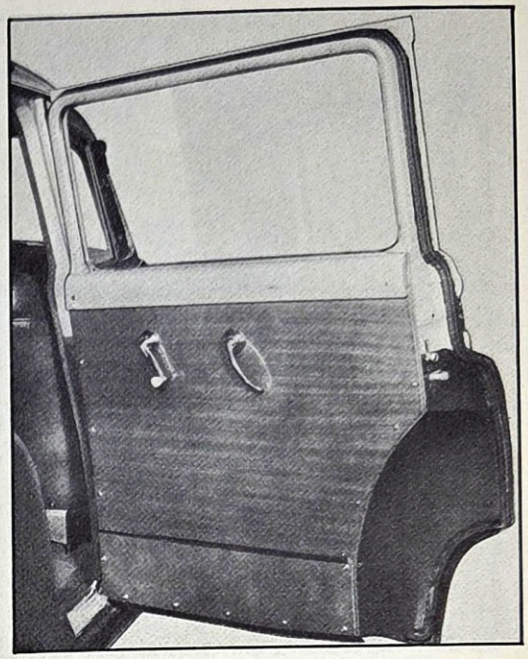
These views illustrate the metal construction of the front and rear doors, which consist primarily of inner and outer panel assemblies welded together along their flanged edges. In addition, on rear doors only, a separate deep drawn section serving as the wide lock pillar face of the door inner panel is spot-welded along its flanges to the inner and outer panels. This section known as the "rear door inner panel extension" covers the forward portion of the rear body lock pillar when the door is closed. The door inner panels are deep drawn and are provided with loading holes, supports and reinforcements, for the installation of the various hardware parts. Also, along the flanges of the bottom door facings and rear door inner panel extension, weatherstrip retainers with scalloped flanges are welded in position. These flanges are crimped over the weatherstrip after it has been cemented into place.



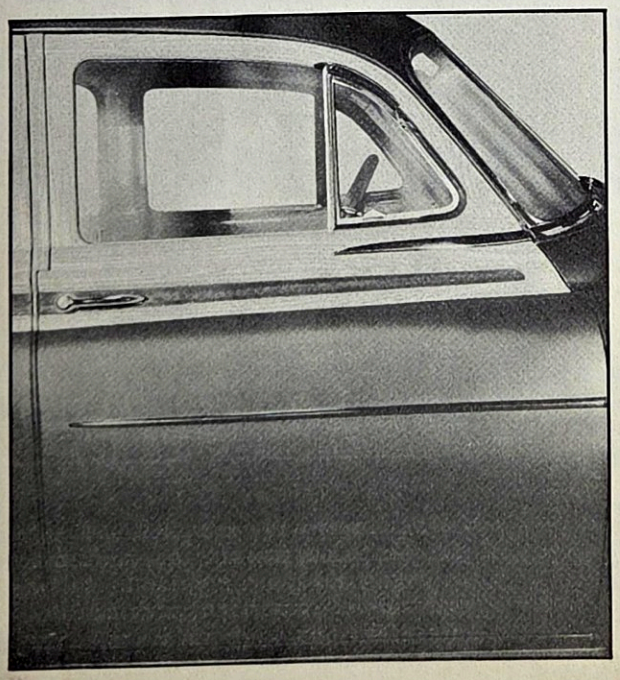


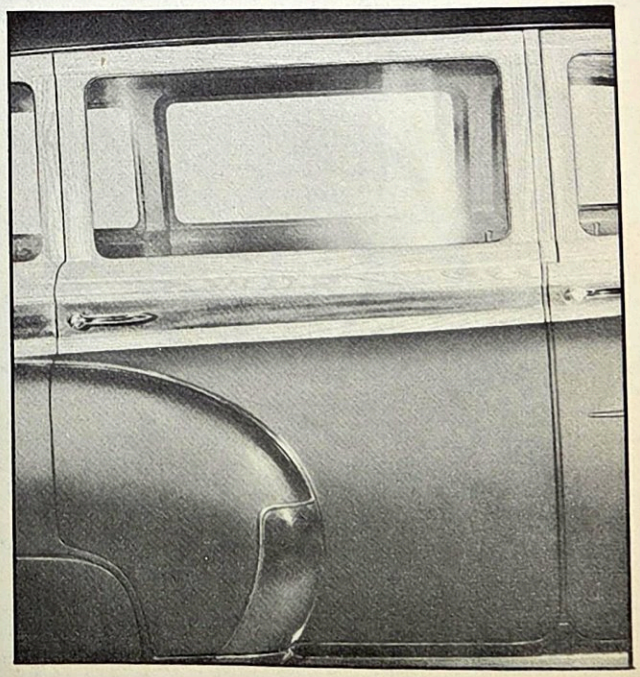
The above illustrations show the station wagon front and rear doors with complete door inner panel hardware secured in position prior to installing the door trim panel, inside handles, and garnish and belt finish molding assemblies. The installation and operation of door hardware parts is similar to other closed body styles.



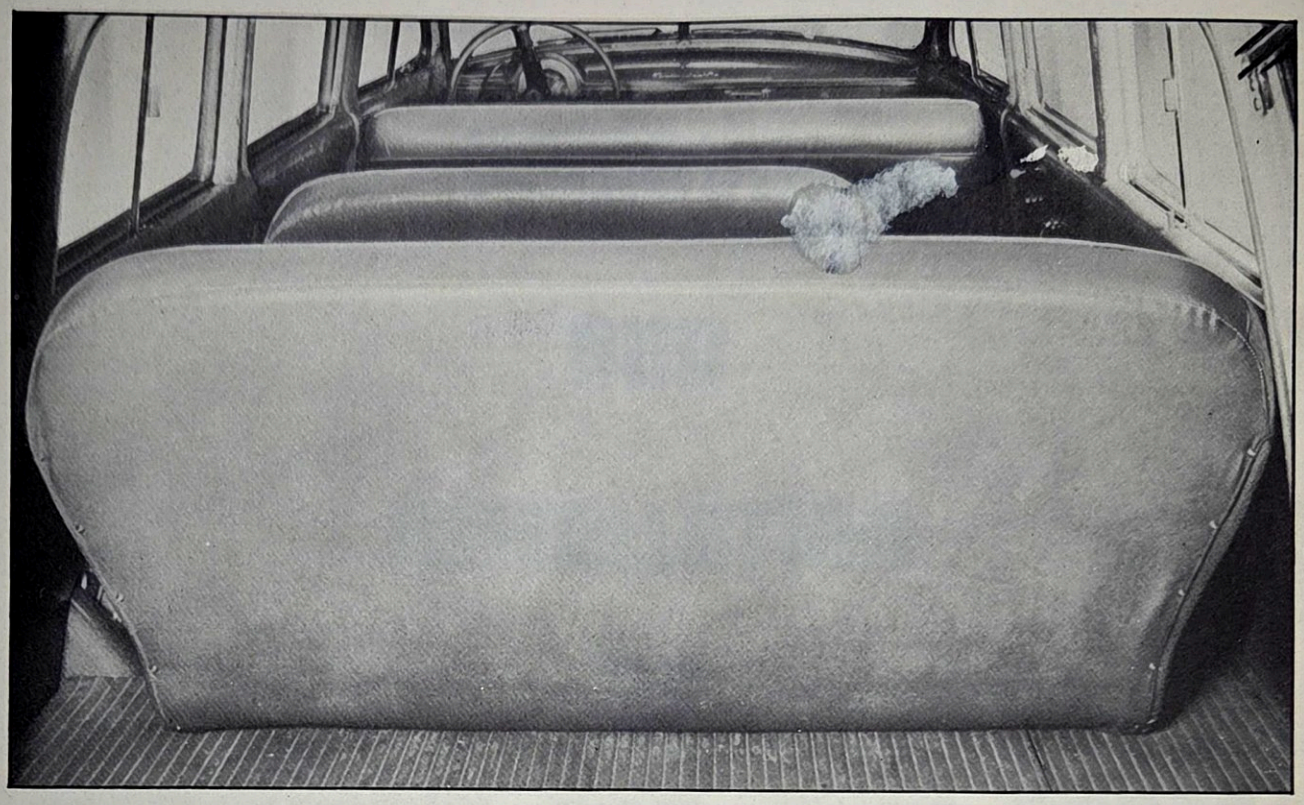


Shown above are views of the station wagon front and rear doors with trim panels, arm rest (front door only), moldings and inside handles installed in position. The plywood trim panels are attached to the door inner panel with screws. In addition, extended pieces of trim panel welt are tacked to the inner panel at the upper corners. The front door arm rest is the three piece type as found on conventional 1949 "A" styles. Access to the arm rest attaching screws is gained by first removing the lower finishing cover attaching screws and cover shown. The upper metal garnish molding and lower wood belt finish molding are retained by screws while the inside handles are installed with escutcheons and "horseshoe" clips similar to previous station wagon styles.





These Chevrolet exterior front and rear door views are typical of door outside hardware installations on the all metal station wagon. Door handles, lower outer panel moldings, fender shields and moldings generally follow the same installation as on the respective Car Division 1949 "A" conventional styles.

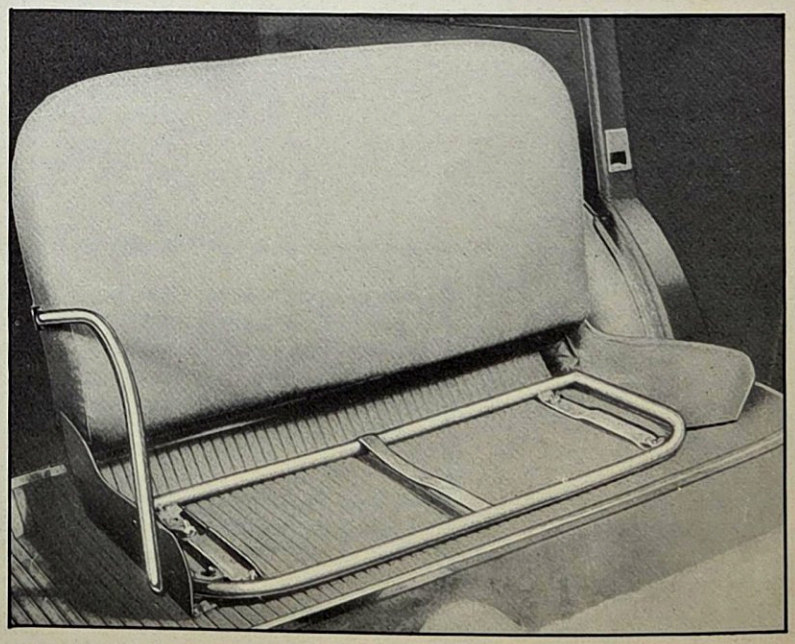


The seating arrangement of the station wagon consists of the conventional 1949 "A" style adjustable front seat assembly with "zig-zag" spring construction, a two-passenger center seat assembly, and a full width rear seat assembly.

The center and rear seats are of metal tubular frame construction with metal panels spot-welded to the tubing frame in the seat back section. Seat back spring supports are also welded to the frame for supporting the seat back spring.

The full width rear seat and the two-passenger center seat are readily removable and interchangeable. The front and rear of each seat is fastened to the floor with thumbscrews. Four thumbscrews are used per seat assembly.

The center seat with seat cushion removed to show attachment of seat cushion frame to floor. Center and rear seats may be removed entirely to provide full length storage space.



REMOVAL AND INSTALLATION OF HARDWARE AND TRIM PARTS

The removal and installation of parts as described in this chapter are applicable only to Metal Station Wagon construction. For a description of the removal of parts such as windshields, sun visors, door hardware, etc., which are general to all Fisher Body "A" construction, refer to the 1949 "A" Series Fisher Body Service and Construction Manual.

In the removal of inside Station Wagon trim parts, such as panels and moldings, extreme care should be used to avoid marring the grained finish of these parts.

OPERATION NO. 1
DOOR AND REAR QUARTER INSIDE MOLDINGS AND DOOR FINISHING PANELS

On station wagons, the removal and installation of all door and rear quarter interior moldings and finishing panels are essentially the same. The size and length of screws used to hold these moldings to the doors should also be noted and reinstalled again in their original location. Be careful using screw drivers. In order to avoid a "chewed" appearance of the exposed screws, select the proper size screw driver bit to fit the head of the screw. Slippage of a screwdriver can also cause serious damage to the grained finish of inside moldings and finishing panels.

REMOVAL

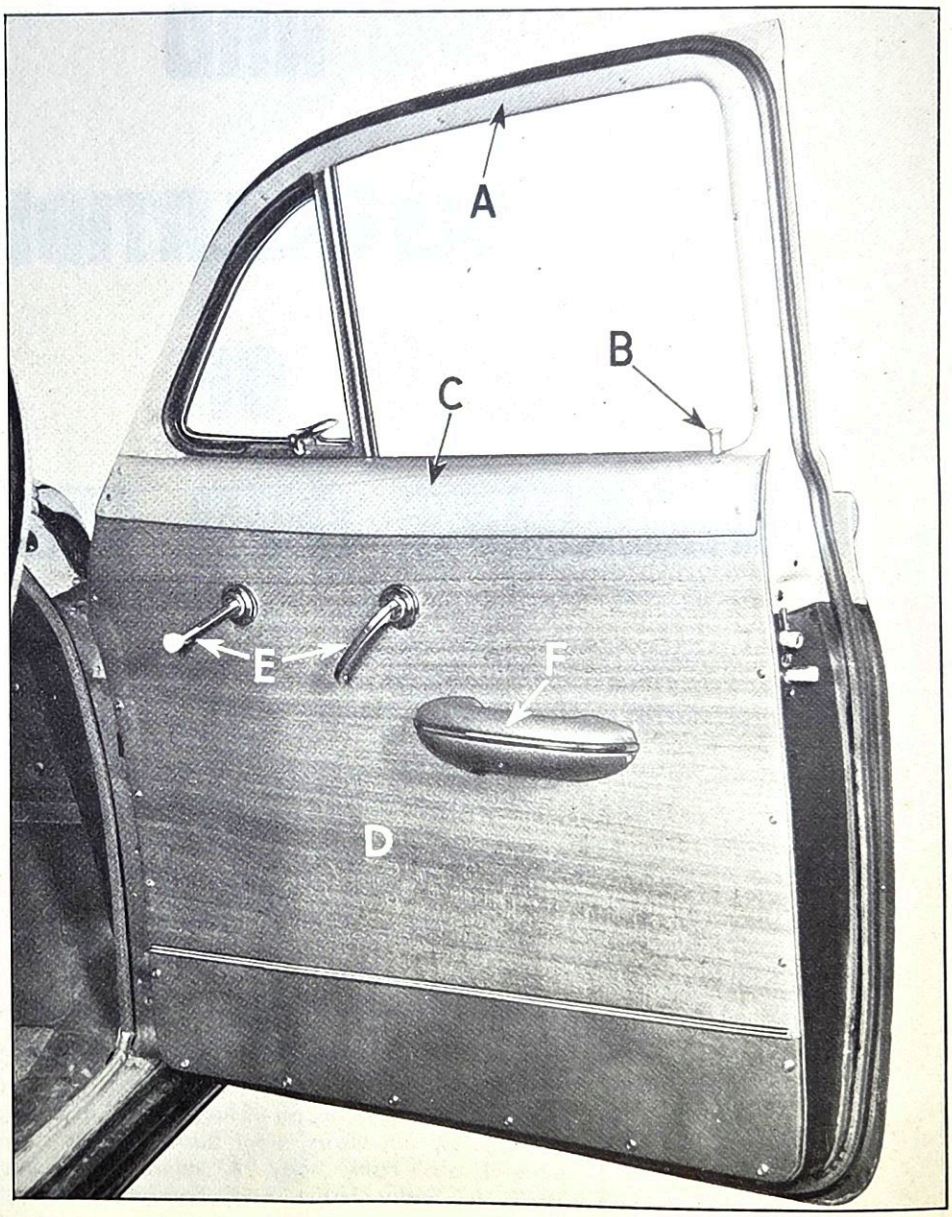
INSIDE WINDOW MOLDINGS

1. Remove screws holding upper metal garnish molding "A" to window opening and remove molding.
2. Remove inside locking rod knob "B".
3. Remove screws and washers retaining lower wood finish molding "C" to inner panel below window opening.
4. Remove this finish molding by lifting up to disengage clips from inner panel. NOTE: On rear quarter finishing moldings, it will be necessary first to loosen or remove the rear section of the metal side roof rail cover finishing molding to obtain sufficient clearance (See Operation No. 9 on Headlining Removal).

DOOR FINISHING PANEL

To remove the door lower trim finish panel "D", first remove the inside moldings as described above, then . . .

1. Remove inside handles "E" on doors by removing inside handle retaining spring (horseshoe clip) from each handle.
2. On front doors only, remove door arm rest "F" by removing cover plate screws and cover plate. Then remove arm rest retaining screws same as 1949 "A" conventional styles.
3. Remove the complete door finishing panel by removing retaining screws along each side and bottom as illustrated.



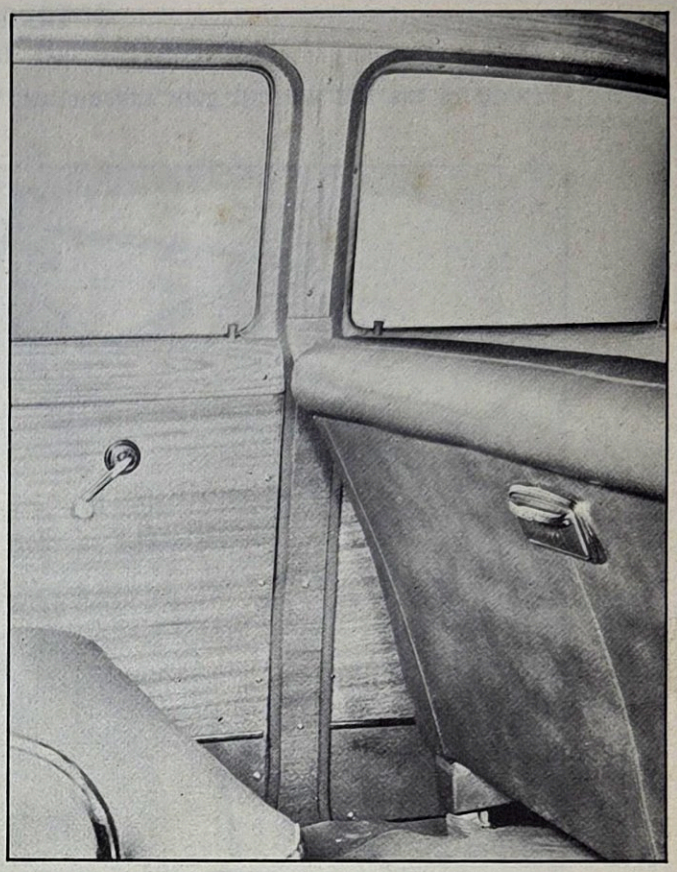
INSTALLATION

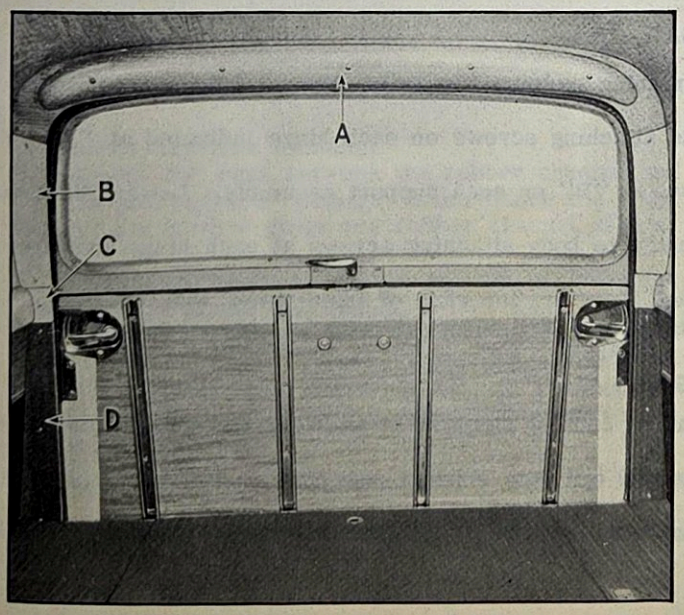
To install, reverse the above procedure. NOTE: Inasmuch as station wagon inner door construction and its hardware parts are similar to standard 1949 closed styles, for a description of the removal of door inside hardware, including glass assemblies, locks, etc., refer to the recently issued 1949 Fisher "A" body service manual.

OPERATION NO. 2
CENTER PILLAR AND REAR BODY PILLAR INNER TRIM PANELS

The center pillar laminated inner trim panel assembly, which is made in three sections, and the single piece rear body pillar inner trim panel located along the rear body pillar just forward of the rear quarter window openings, are basically the same in their removal and installation procedure. The illustration shows the center pillar inner trim panel.

1. Loosen the roof rail cover finishing molding along the side roof rail above the pillar inner trim panel.
2. Remove screws and washers retaining the entire three-piece trim panel to the pillar.
3. At the rear quarter only, remove garnish and finish moldings around window opening (Operation No. 1), then remove rear quarter inner trim panel.
4. To install, reverse this procedure.





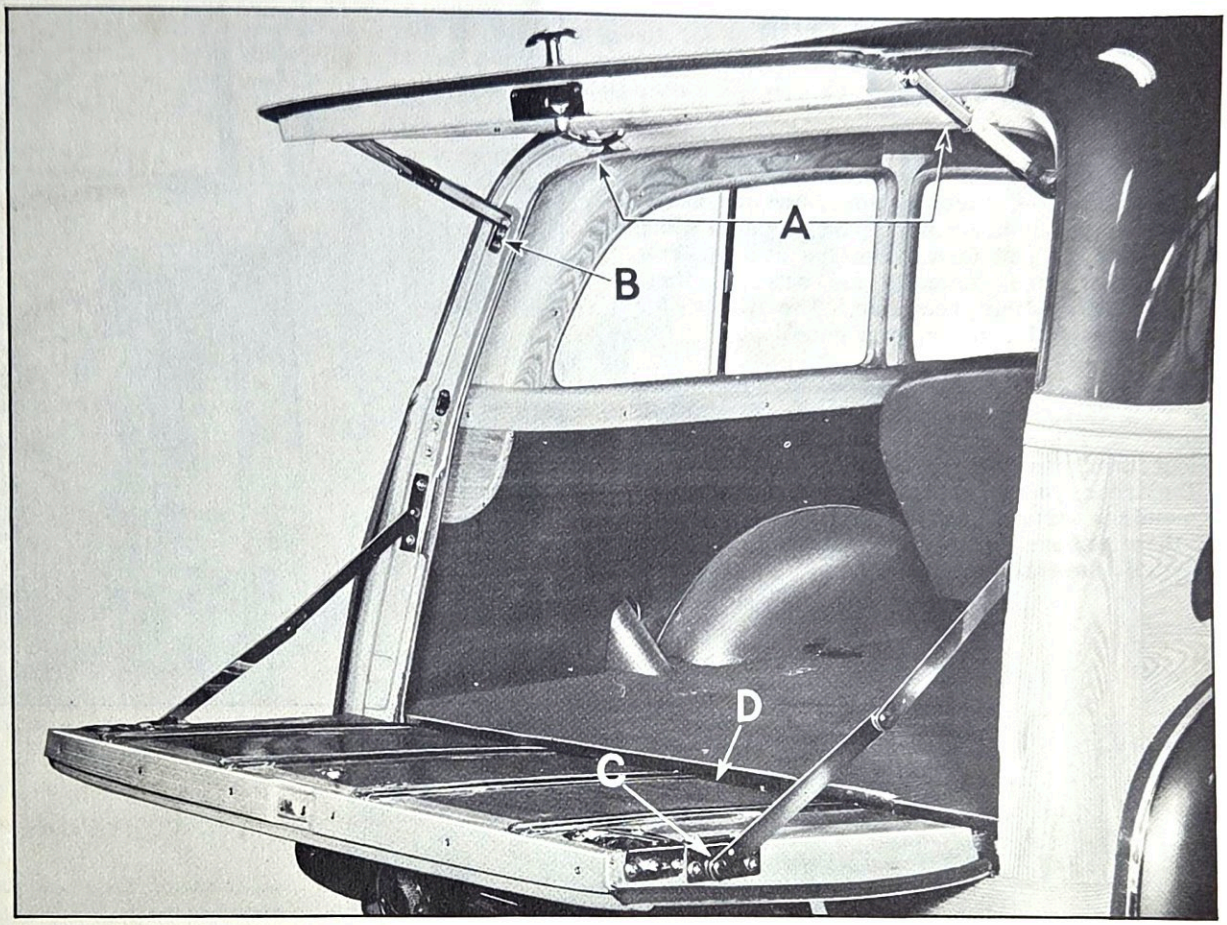
OPERATION NO. 3
REAR END INSIDE MOLDINGS

The rear end inside moldings consist of a Lift Gate Opening Finishing Molding Upper "A", a Lift Gate Opening Finishing Molding Lower "B", a Tail Gate Opening Finishing Molding Upper "C", and the Tail Gate Opening Finishing Molding Lower "D". Only the upper molding "A" is of metal construction, while the remaining moldings shown are of laminated construction.

1. To remove any of the rear end inside finishing moldings described, remove the retaining screws shown and remove the molding. On wood moldings, also remove loose washers.
2. To install, reverse this procedure.

OPERATION NO. 4
LIFT GATE AND TAIL GATE ASSEMBLIES

In the removal of the lift and tail gate assemblies, it is recommended that a helper be used to assist in this operation.



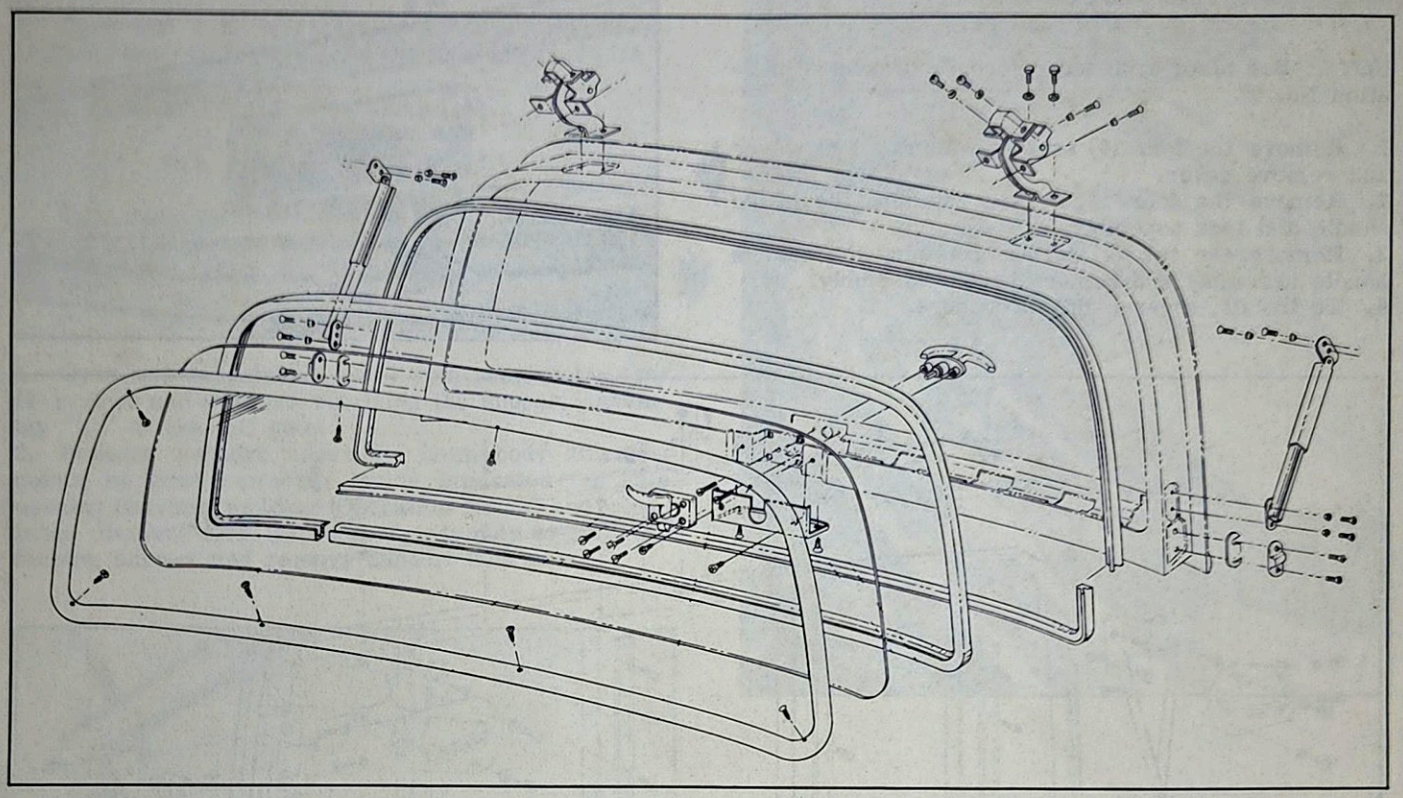
LIFT GATE

1. Remove the inside upper lift gate opening metal finishing molding (Operation No. 3) and windhose under molding.
2. Open lift gate and remove only two of the four hinge attaching screws on each hinge indicated at "A" in this illustration.
3. Remove the two (2) support assembly attaching screws at "B" on each support assembly. Lower lift gate to closed position.
4. From inside of body, remove the remaining two (2) hinge to body attaching screws at each hinge indicated at "A" and carefully remove lift gate assembly.
5. To install, reverse this procedure. It is recommended however, for ease of installation, that all lift gate hinge to body attaching screws be installed but not driven home, until after lift gate has been centered properly in its opening.

TAIL GATE

1. Detach the tail light electrical feed wires and rotational control mechanism at lower tail gate to body attaching points.
2. With tail gate open and supported, remove the four (4) tail gate support assembly to tail gate attaching screws at "C".
3. Remove the tail gate piano hinge attaching screws and washers along "D" indicated in the illustration, and remove tail gate.
4. To replace, reverse this procedure.

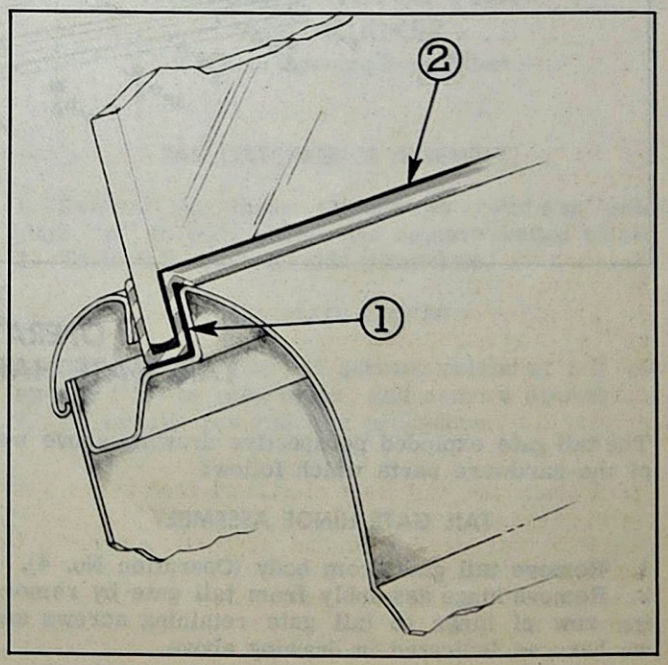
OPERATION NO. 5
LIFT GATE HARDWARE ASSEMBLIES



The lift gate exploded perspective drawing above may be used as a reference for the removal and installation of the lift gate hardware assemblies. The procedure for the removal of these parts is obvious . . . just simply a matter of removing the screws attaching each part to its respective location.

LIFT GATE WINDOW GLASS

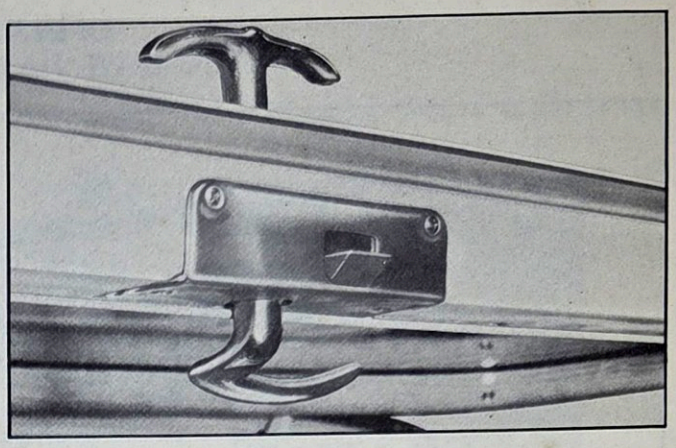
1. Remove garnish molding.
2. Loosen the seal between the rubber channel and the lift gate window opening. From inside the body, remove the window glass and rubber channel assembly.
3. Remove glass from rubber channel by loosening seal between glass and channel.
4. To install, reverse this procedure. Apply "3M Weatherstrip Cement" between glass and channel and between channel and outer rabbet of opening, as shown at "1" and "2" respectively, prior to installing.

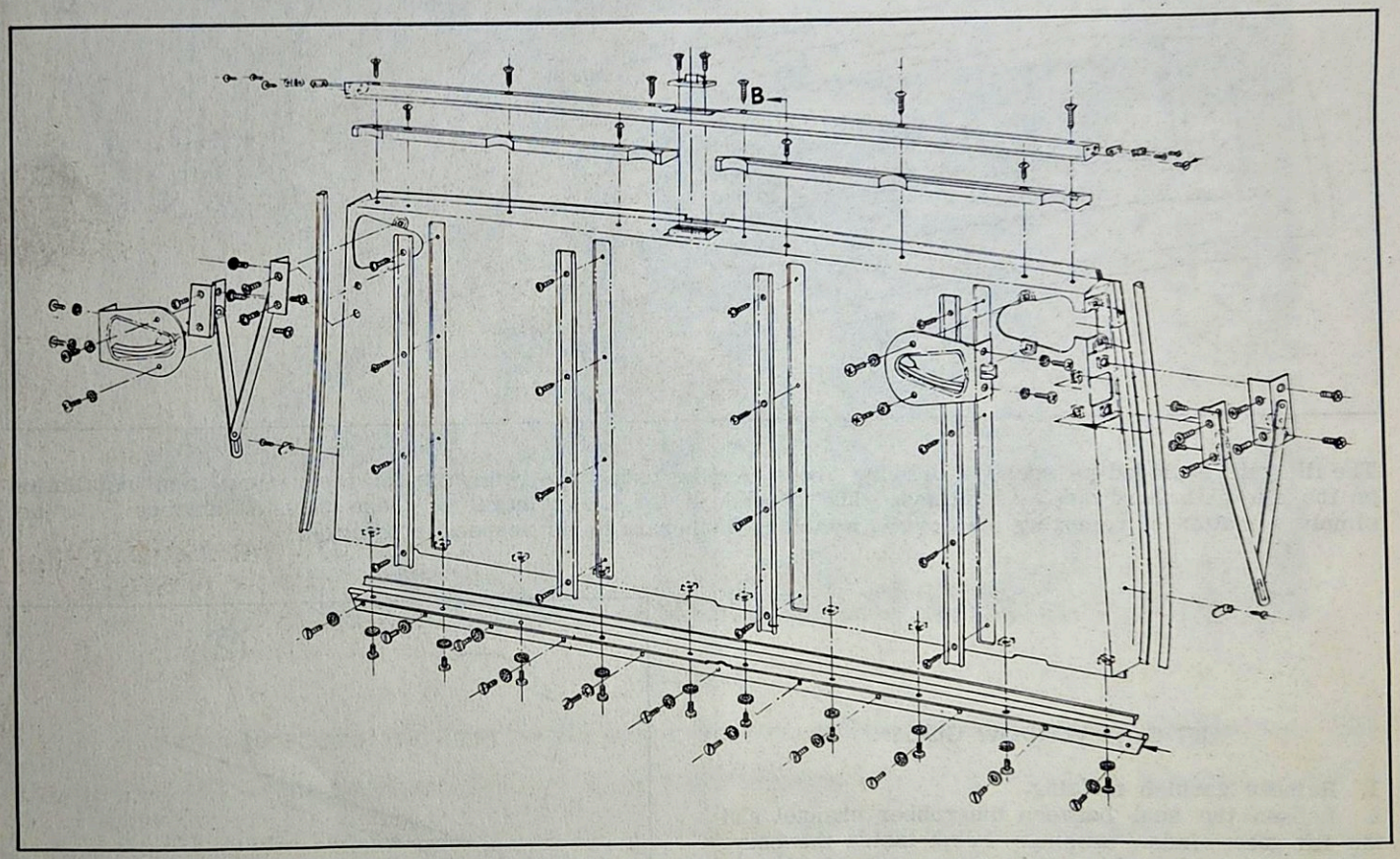


LIFT GATE INSIDE AND OUTSIDE HANDLE AND LOCK ASSEMBLY

NOTE: See also, exploded reference drawing (Operation No. 5).

1. Remove the four (4) screws retaining lock cover and remove cover.
2. Remove the four (4) screws retaining the inside handle and lock assembly.
3. Remove the two (2) screws retaining the outside handle assembly and remove handle assembly.
4. To install, reverse this procedure.





OPERATION NO. 6
TAIL GATE HARDWARE ASSEMBLIES

The tail gate exploded perspective drawing above may be used as a reference for the removal and installation of the hardware parts which follow:

TAIL GATE HINGE ASSEMBLY

1. Remove tail gate from body (Operation No. 4).
2. Remove hinge assembly from tail gate by removing row of hinge to tail gate retaining screws and washers as indicated in drawing above.

MISCELLANEOUS TAIL GATE HARDWARE

As indicated in drawing above, the removal of the cover assembly, support, skid strips and bumper involves removing the respective hardware part tail gate attaching screws shown.

TAIL GATE LOCK ASSEMBLY

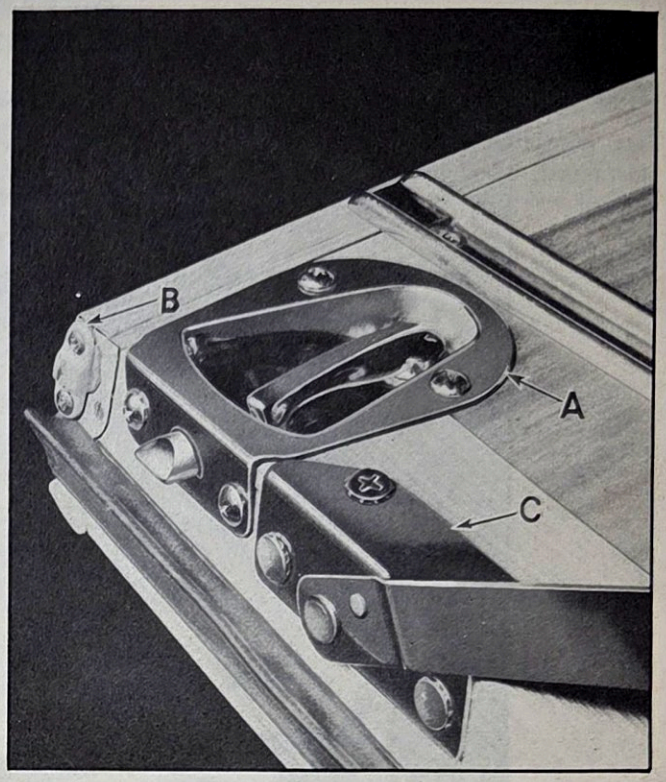
1. Open tail gate and remove the four (4) screws and washers shown retaining the lock assembly "A". Remove lock assembly.
2. To install, reverse this procedure.

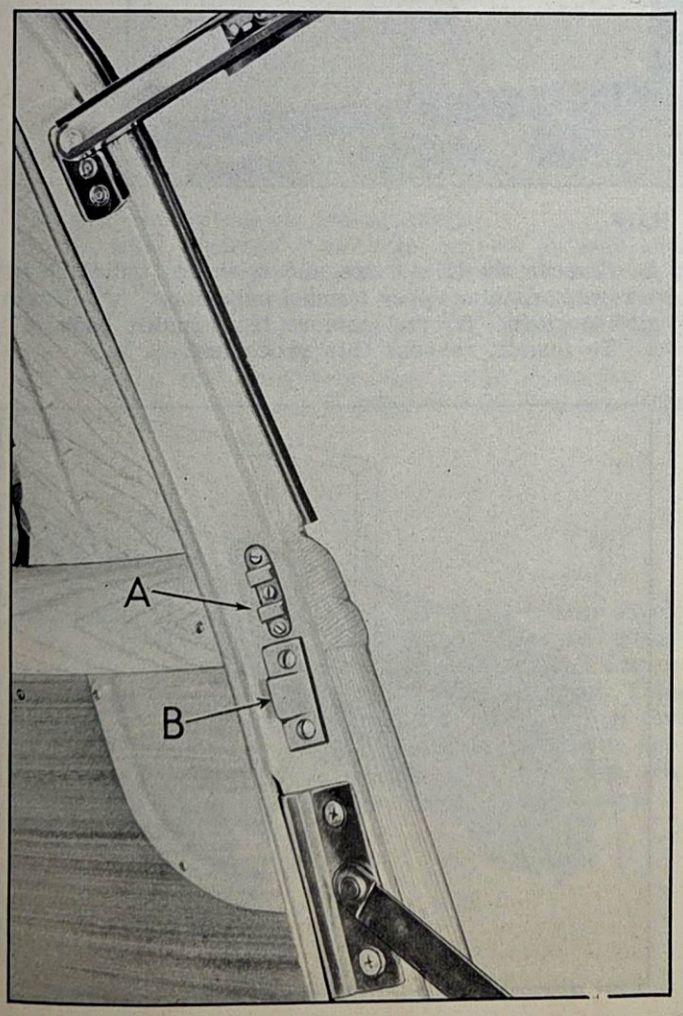
TAIL GATE WEDGE ASSEMBLY

1. Open tail gate and remove two (2) screws retaining wedge plate "B". Remove wedge plate.
2. To install, reverse this procedure.

TAIL GATE SUPPORT ASSEMBLY

1. Open and support tail gate, then remove the four (4) screws and washers retaining the support assembly "C" to the tail gate.
2. Remove support assembly from body attaching points by first removing inside laminated tail gate opening finishing molding (Operation No. 3) and windlace. Remove four (4) support assembly to body attaching screws and remove support assembly.





OPERATION NO. 7
TAIL GATE WEDGE PLATE AND STRIKER
(On Rear Opening Body Pillar)

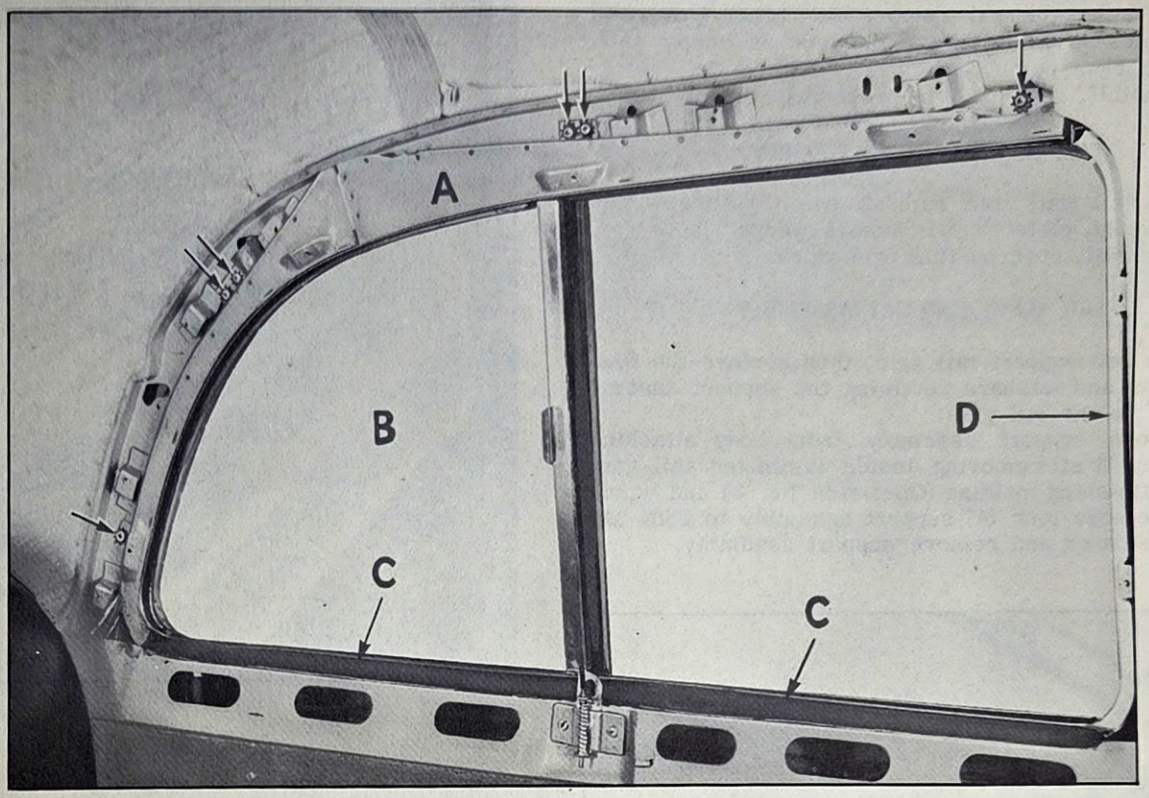
TAIL GATE WEDGE ASSEMBLY

1. Remove the three (3) screws retaining wedge plate "A" to body pillar, and remove wedge plate.
2. To install, reverse this procedure.

TAIL GATE STRIKER

1. Remove the two (2) screws retaining tail gate striker "B" to body pillar, and remove striker.
2. To install, reverse this procedure.

OPERATION NO. 8
REAR QUARTER WINDOW ASSEMBLY



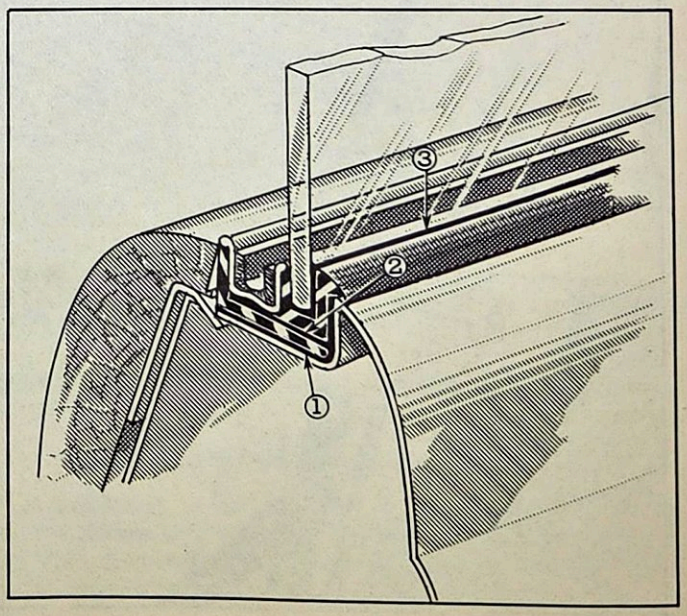
SLIDING HALF

1. Remove rear quarter window garnish and belt finish molding (Operation No. 1).
2. Remove wood roof rail cover along rear and upper area of window opening (See Operation No. 9 on headlining removal).

STATIONARY HALF

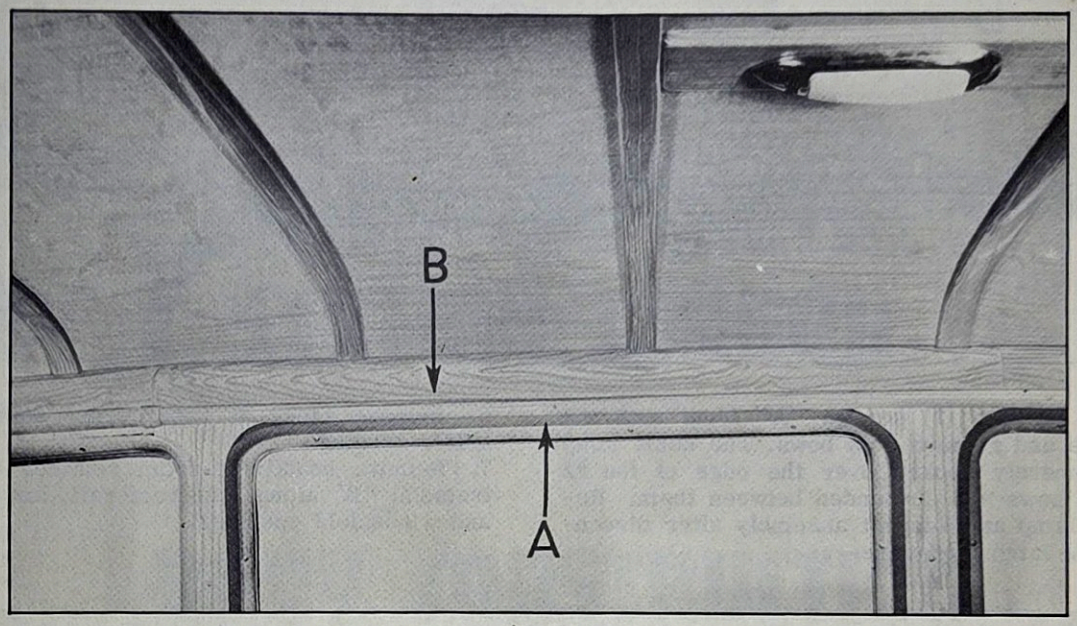
1. Remove sliding glass as described above.
2. Remove the lower glass run channel assembly "C" by removing the four (4) retaining screws down in the valley of this channel and carefully prying the channel loose from sealer along its base.
3. Remove two (2) screws retaining vertical pillar molding "D" and remove molding.
4. With a putty knife, loosen the stationary glass rubber channel where cemented to the rabbet around the opening. Remove the stationary glass and rubber channel assembly from inside the body.
5. Remove glass from channel, first loosening seal between glass and channel.
6. To install, reverse this procedure. Clean old cement from around opening. If sealing strip has been disturbed from rabbet along lower window opening, re-cement to position as shown at "1", using "3M-Weatherstrip Cement". Also, apply this cement in rabbet completely around window opening as shown at "2". Proceed to install glass, applying cement between glass and channel as shown at "3".

3. Remove six (6) screws and washers, indicated by arrows, retaining upper channel assembly "A". Grasp sliding glass "B" and remove from inside body.
4. To install, reverse this procedure.



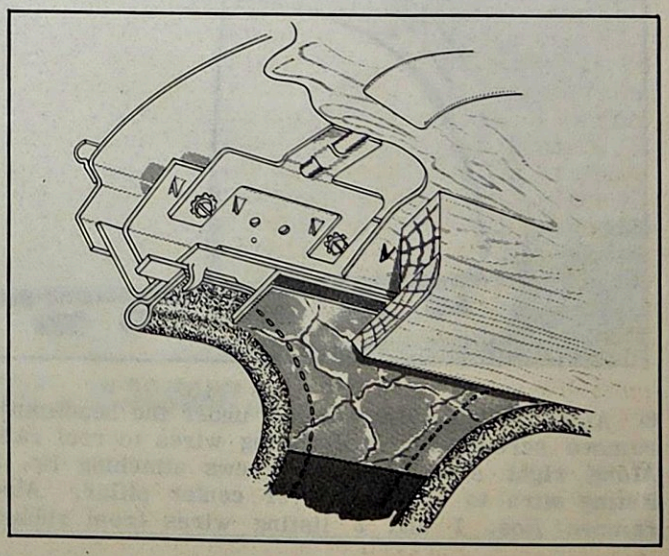
OPERATION NO. 9
HEADLINING ASSEMBLY

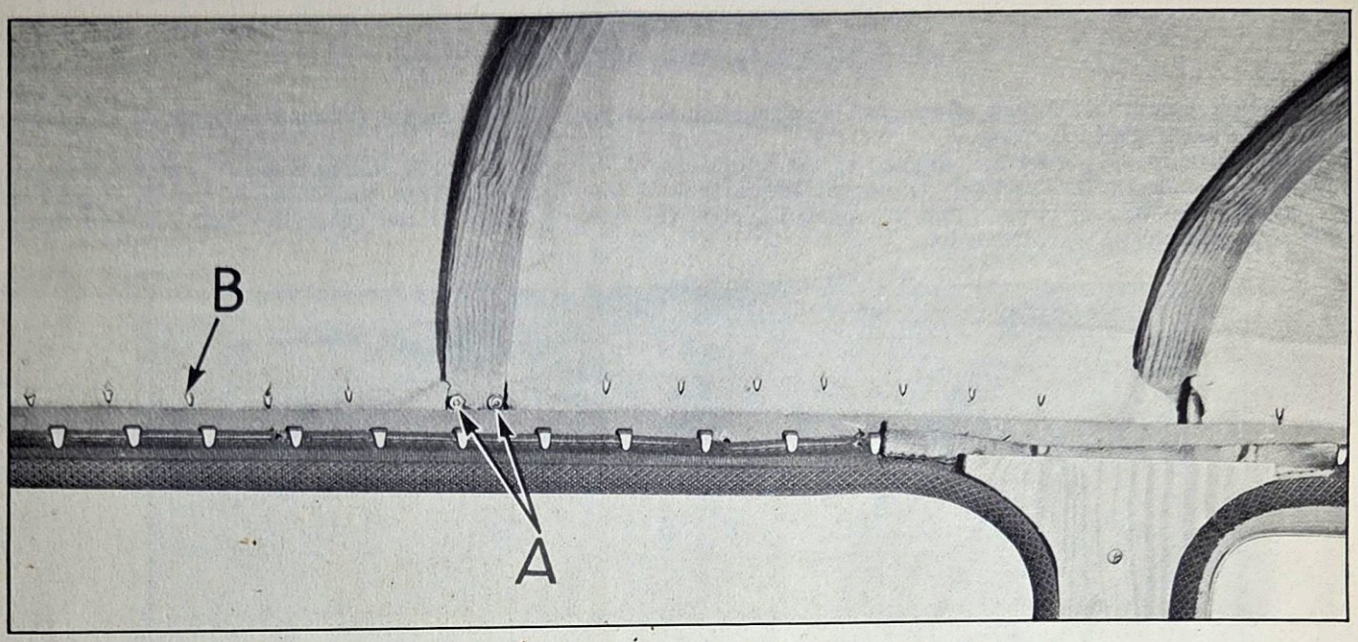
The station wagon headlining which has a simulated wood grain design on its finished surface, is of plastic material with a fabric backing.
The headlining is supported and formed to the curvature of the roof by three listing support wires which are inserted through listing pockets on the upper surface of the material. This headlining is further supported by exposed metal roof bows which are placed across the under surface of the headlining and attached to the side roof rails as illustrated below.



1. Remove sunshades and brackets.
2. Remove windshield and rear quarter garnish moldings and rear quarter belt finish molding. Also remove the upper finishing moldings and windhose covering headlining attaching tabs at the back window opening.
3. Along the side roof rail remove the narrow metal roof rail cover finishing molding assembly "A" by removing the retaining screws shown. This molding is installed in two sections, the rear section lapping over the front section.
4. Remove the wood roof rail cover assembly "B" by removing the retaining screws exposed by the removal of the finishing molding in step 3 above. This cover assembly consists of three sections as illustrated.

Depending on their location, headlining listing wires vary in their attachment to the side roof rails. Some listing wires with off-set ends are attached with a single screw directly to the left side roof rail. This cut-away sectional view shows the attachment at the No. 2 roof bow. After the wood roof rail cover assembly is removed and headlining is loosened, the removal of these listing wires is self-explanatory.

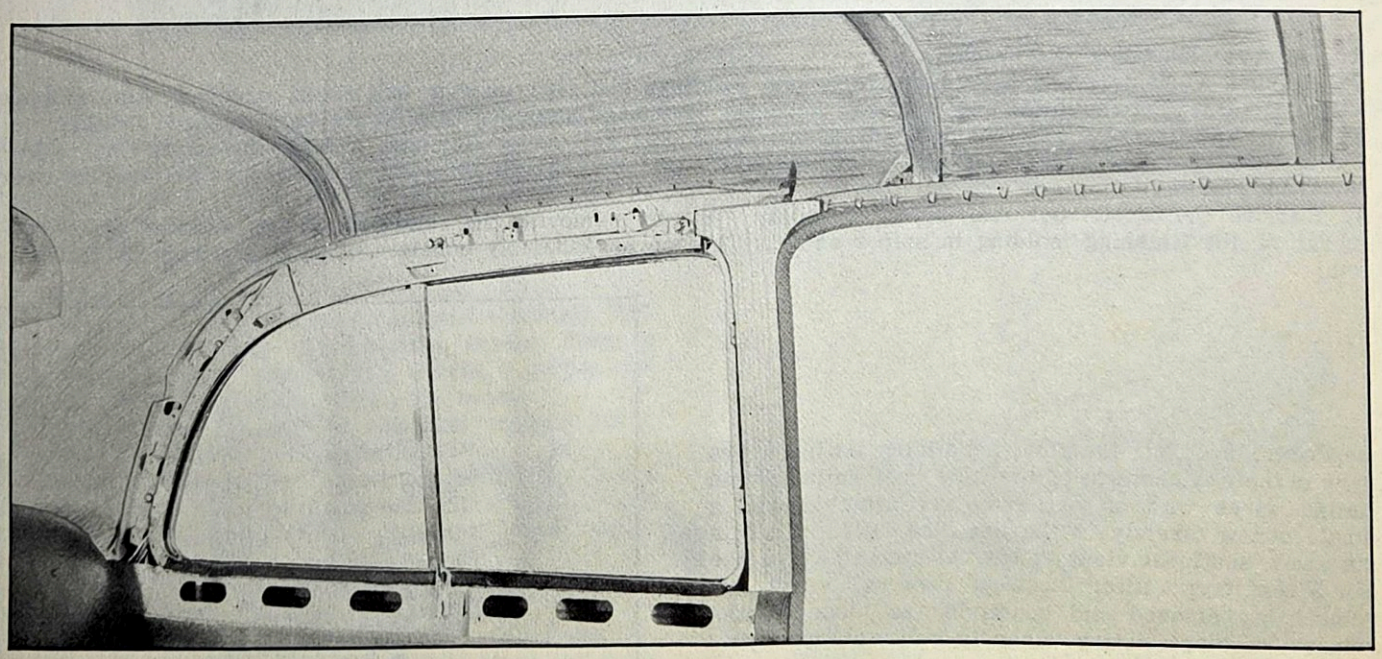




5. Remove the two (2) screws "A" from each end of roof bows and remove roof bows. The dome lamp support is merely hooked over the edge of the #2 and #3 roof bows and suspended between them. Remove dome lamp and support assembly after disconnecting dome lamp feed wire.

6. Remove tacks at upper front corners of windshield opening.

7. Remove headlining from retainer tabs as illustrated at "B" along side roof rail, and over lift gate and windshield openings.



8. Along the left side roof rail under the headlining, remove screws attaching listing wires to roof rail. Along right side, remove screws attaching No. 2 listing wire to roof rail over center pillar. Also remove Nos. 1 and 3 listing wires from rubber grommets and remove headlining. This illustration shows the headlining and roof bow attachment along the rear quarter section of the body.

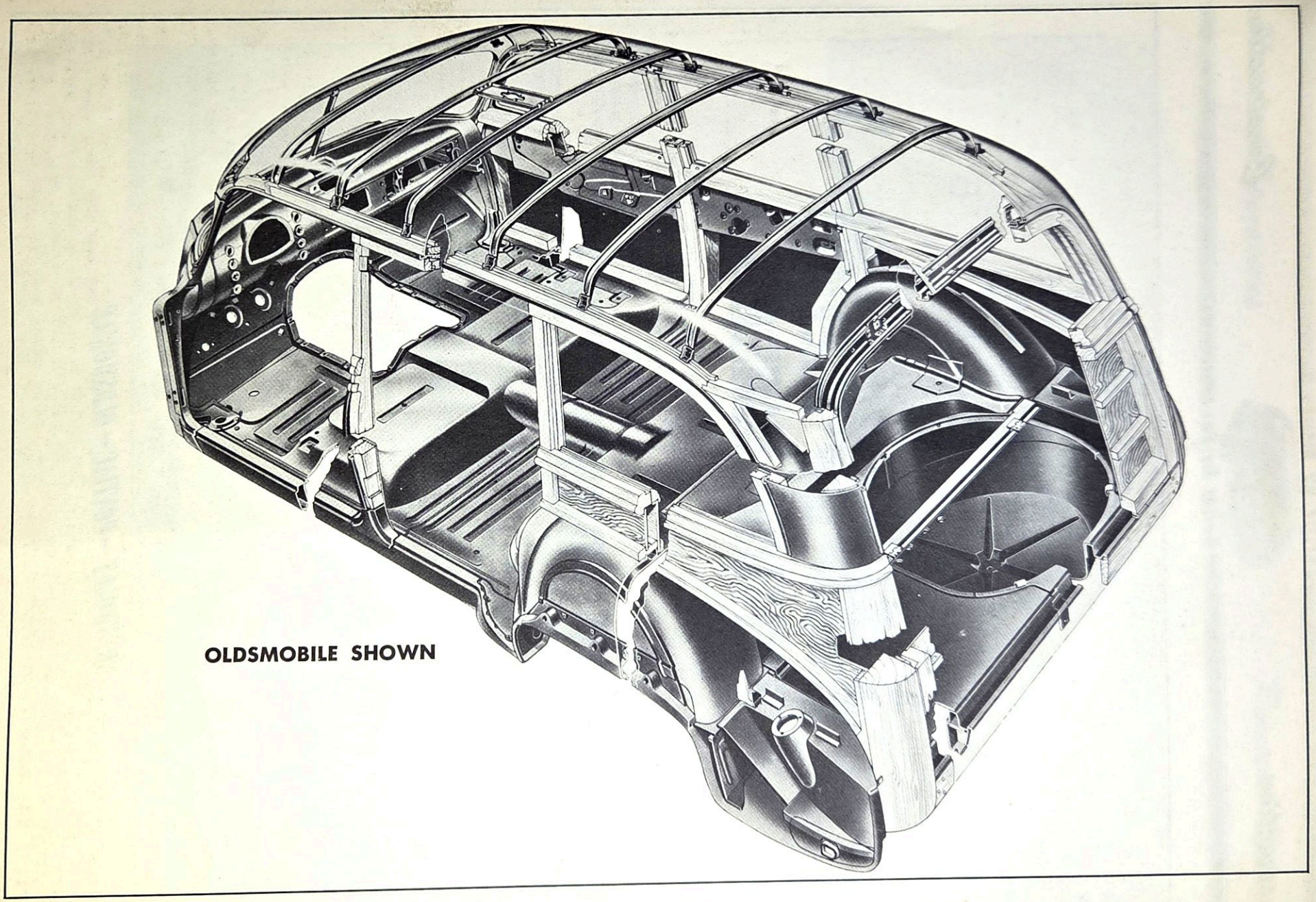
9. To install the headlining, reverse this procedure.

1949

WOOD and METAL STATION WAGON

BODY CONSTRUCTION

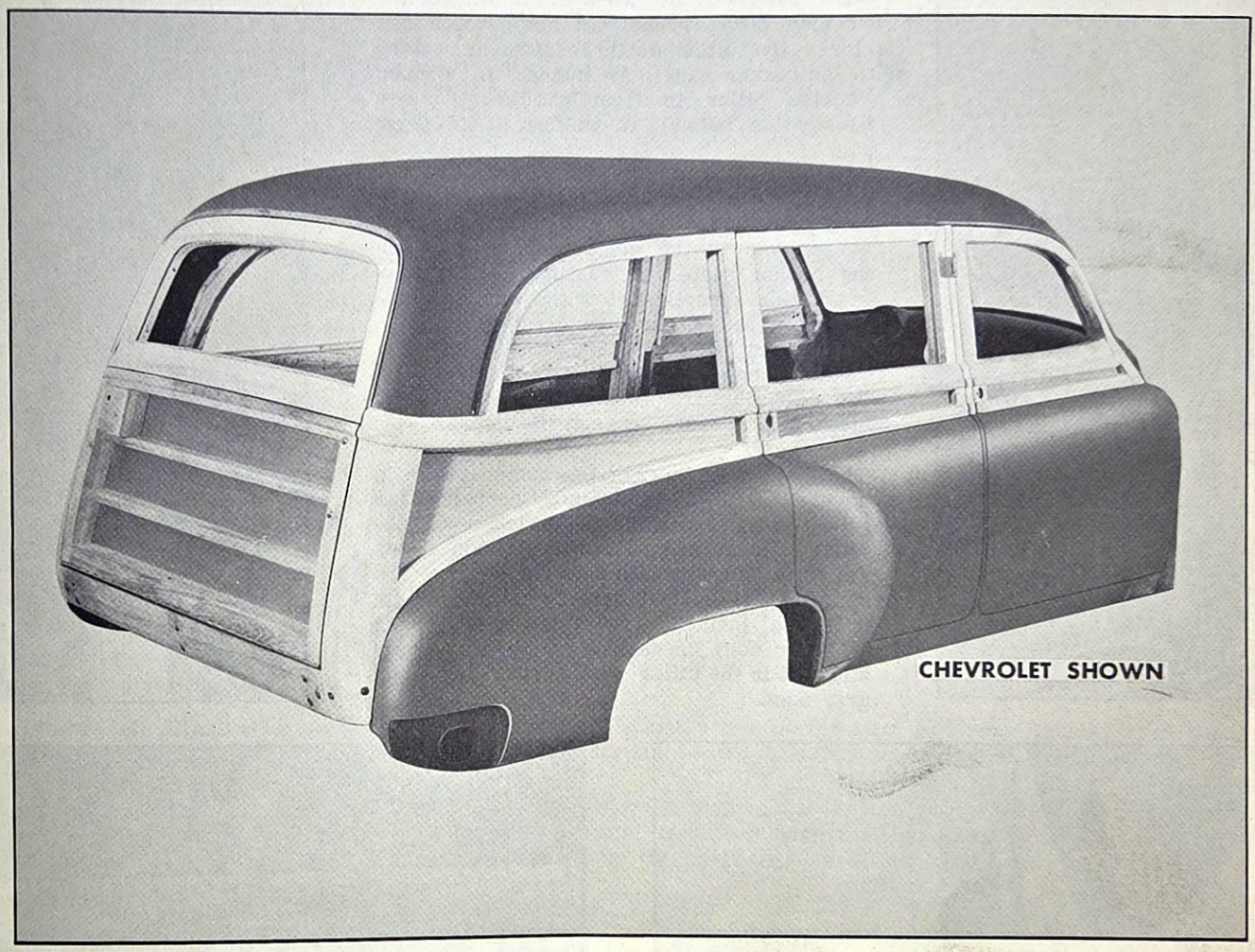
CHEVROLET—PONTIAC—OLDSMOBILE



Phantom view of the Wood and Metal Station Wagon body as used by Chevrolet, Pontiac and Oldsmobile. The illustration particularly shows the formation of the wood assemblies peculiar to this style of body.

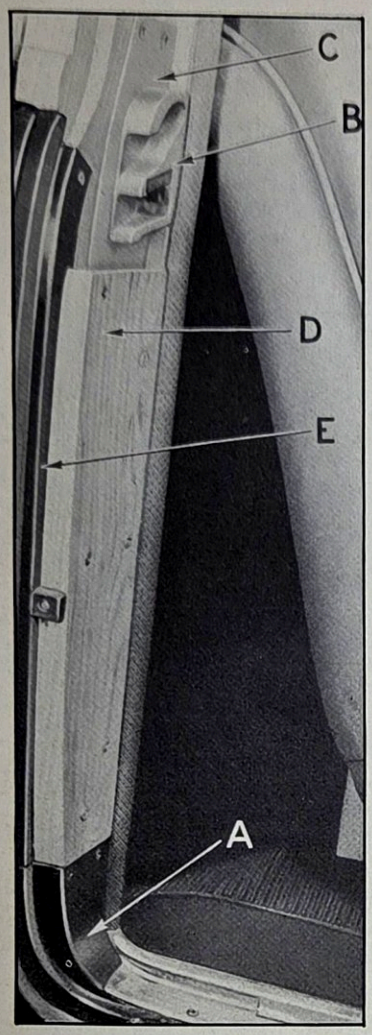
GENERAL CONSTRUCTION

This section illustrates and describes the 1949 "61" series Fisher built wood and metal station wagon and includes the construction as well as the removal and replacement of parts pertaining to this body style. Inas much as many of the parts in this composite type body, including the body front end, roof, and steel underbody, are so similar to the All Metal Station Wagon which has already been described, no repeat description of these parts is given other than to describe the construction actually pertaining only to the wood and metal body



The 1949 "61" series wood and metal station wagon, as shown in the above illustration, is made up of twelve (12) major assemblies, namely, ---Front End Assembly---Underbody Assembly---Center Pillar assembly---Roof Assembly---Side Roof Rail Assembly---Rear Quarter Assembly---Rear Cross Bar Assembly ---Front Door Assembly---Rear Door Assembly---Lift Gate Assembly---Tail Gate Assembly---and Seat Assemblies.

The front end, underbody (including stepped rear floor construction), roof, and seat assemblies are basically the same as those on the "62" series all metal station wagon included in the first section of this manual. However, the front and rear door and rear quarter assemblies are of composite wood and metal construction. As shown in the above view, the metal on these assemblies extends from the underbody up to the fender crease line, while the wood extends from this crease line up to the roof panel. The rear section of the body is provided with all-wood lift and tail gates which are hinged to the rear roof and floor construction respectively. Wood roof rails, center pillars and rear cross bar assemblies complete the major components of this station wagon. A metal "protector strip" covers the lower outside portion of the wood center pillar.



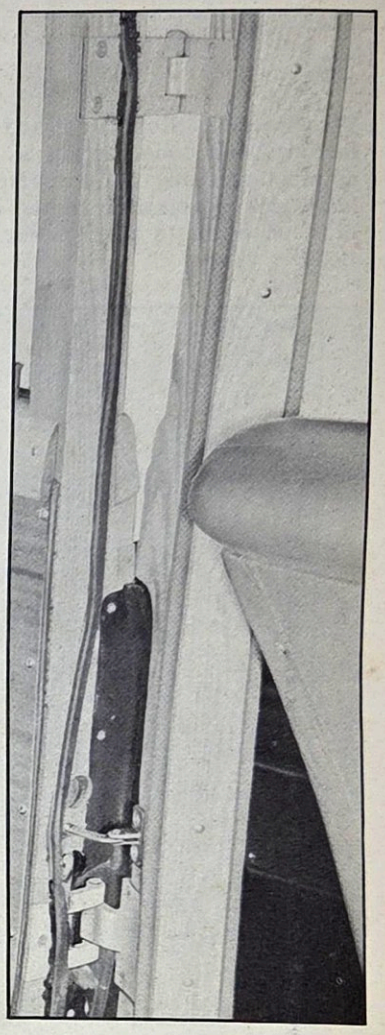
CENTER PILLAR

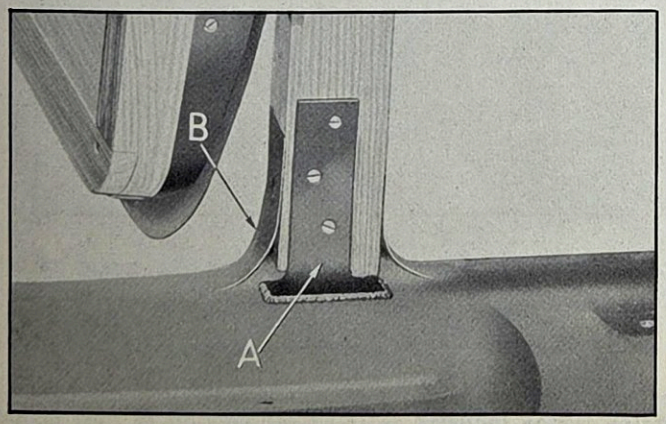
The center body pillar serves as a lock pillar for the front door and a hinge pillar for the rear door. The upper end of this pillar is mortised into the side roof rail and secured at this point with a "center pillar to roof rail brace" and screws.

The lower end of the pillar rests on the floor construction and is secured to the steel underbody by two braces. An outside "center pillar brace" at "A" which encloses the pillar on three sides is welded to the rocker panel. An inside "L" shaped "center pillar to floor pan brace" (see illustration below) is welded to the floor pan.

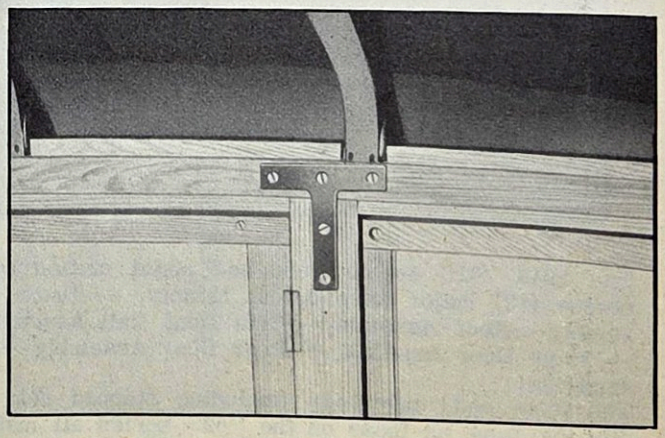
The lock striker "B" is mounted to the center pillar over a metal "center pillar facing assembly" "C". This facing, which is screwed to the center pillar, contains the anchor plate for seating the striker. In addition, directly below the striker plate a "center body pillar jamb" shown at "D", is secured to the pillar with screws. A metal "center pillar protector strip" at "E" is likewise installed to the lower face of the pillar, between the doors.

The inside surface of the center pillar is covered with a laminated "center pillar trim panel", which is attached to the pillar with screws. This illustration shows the trim panel installed to the pillar. The windhose is tacked directly to the pillar prior to installing the trim panel. Note the rear door check link support, which is attached to the pillar with screws and wood grip nuts.



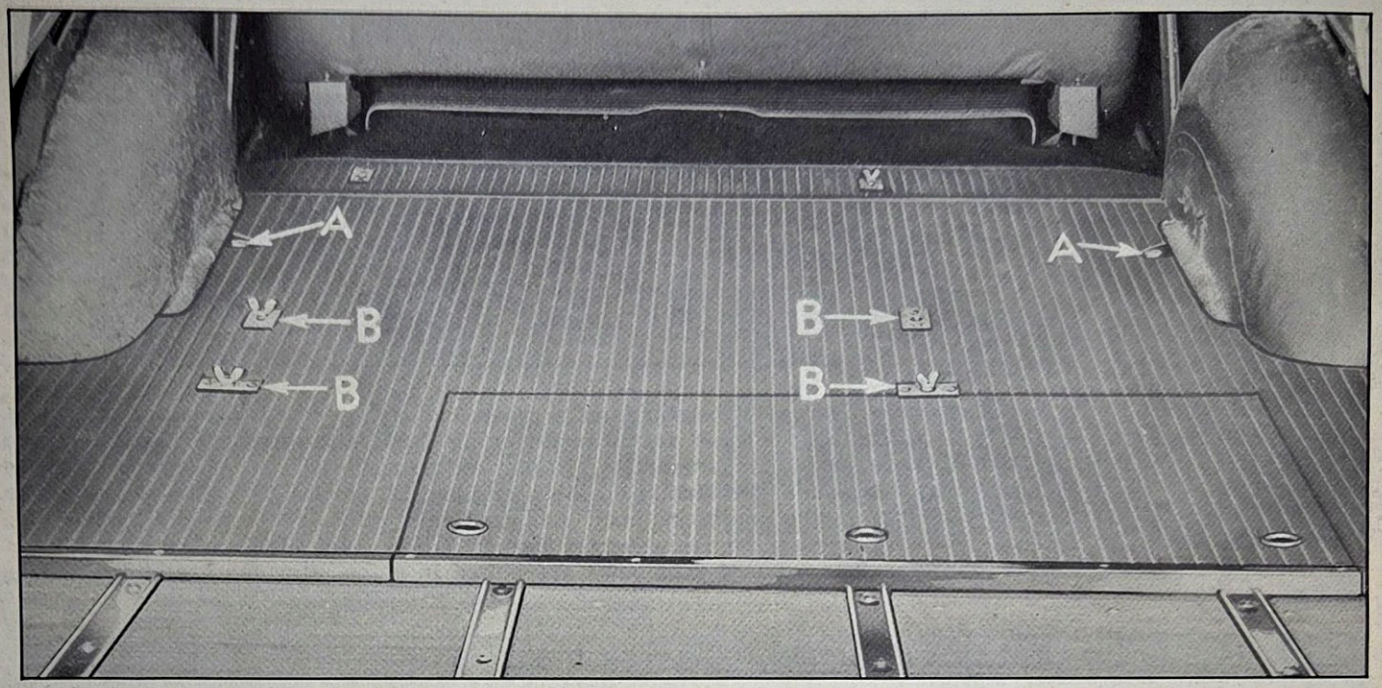


This close-up view shows the lower attachment of the center pillar to the underbody. The "center pillar to floor pan brace" with attaching screws is indicated at "A", while the sides of the center pillar brace" can be seen at "B". Both of these braces are welded to the underbody.



The top of the center pillar is mortised into the side roof rail. Before installation, the tenon of the pillar is insulated with caulking compound, then inserted into the mortise of the side roof rail and secured with a "center pillar to side roof rail brace", as illustrated above.

UNDERBODY

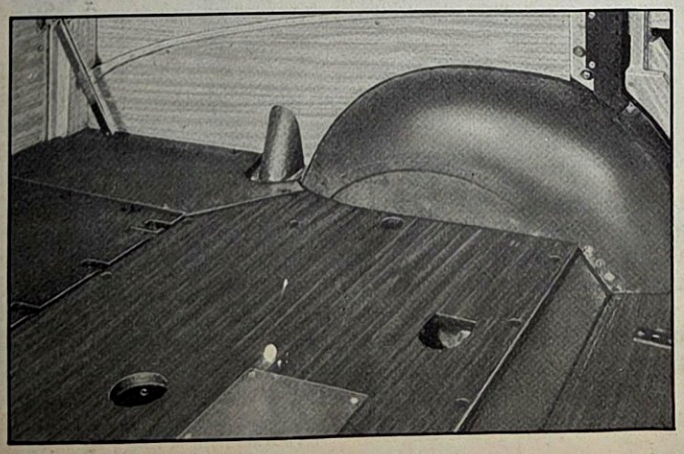


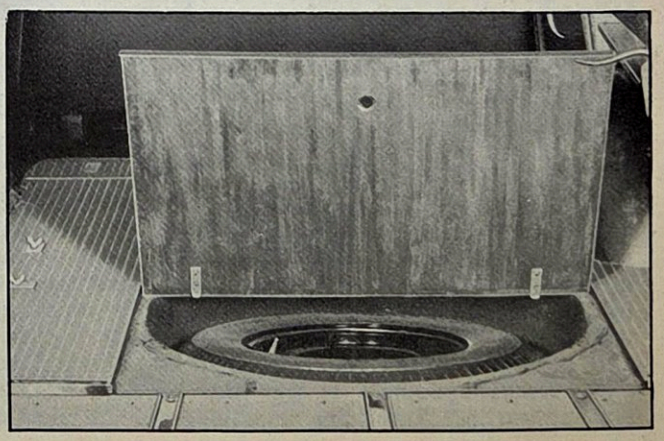
The rear floor area is formed in double step construction similar to that on the "62" series all metal station wagon. The laminated wood floor boards which are attached to the steel underbody with screws are trim covered with either linoleum or carpet. On some styles chrome finishing strips are also installed to the exposed edges of the floor boards after trim installation.

The above illustration shows the linoleum covered rear floor on the standard station wagon styles. Body bolt clearance holes are indicated at "A" and seat anchor plate and thumb screws at "B". The Oldsmobile deluxe station wagon incorporates a tool compartment with removable cover, located in the floor just aft of the front riser. In addition, the Oldsmobile station wagon rear floor is carpeted and protected by metal skid strips.

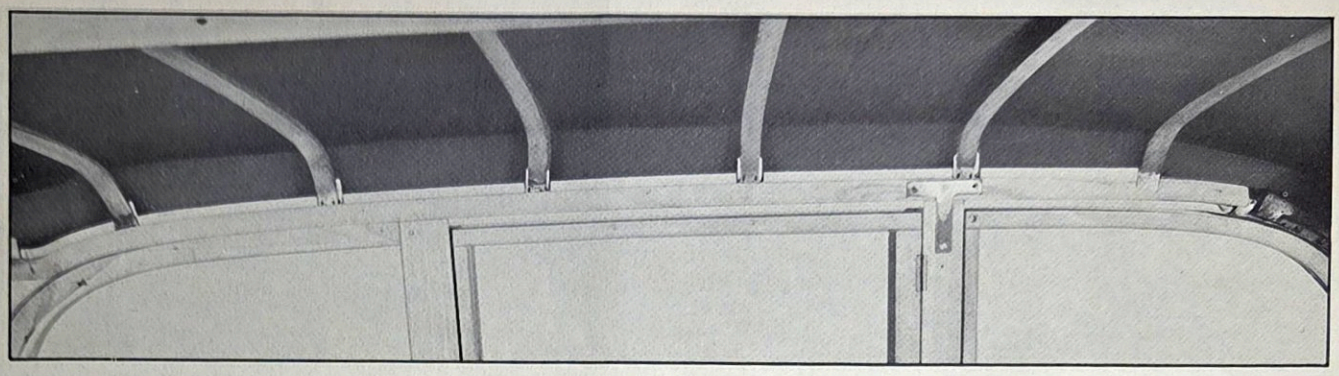
The lower left illustration shows the laminated floor construction at the rear and rear quarter area before the floor covering is installed. Note the attaching screws seated in counter-sunk holes, which secure edges of the floor board sections to the metal underbody.

The lower right illustration shows the spare tire storage well of the station wagon with removable cover. The drum shaped well is designed to carry the spare tire in a horizontal position. Access to this spare tire is gained by lowering the tail gate and lifting up the spare tire cover as illustrated.

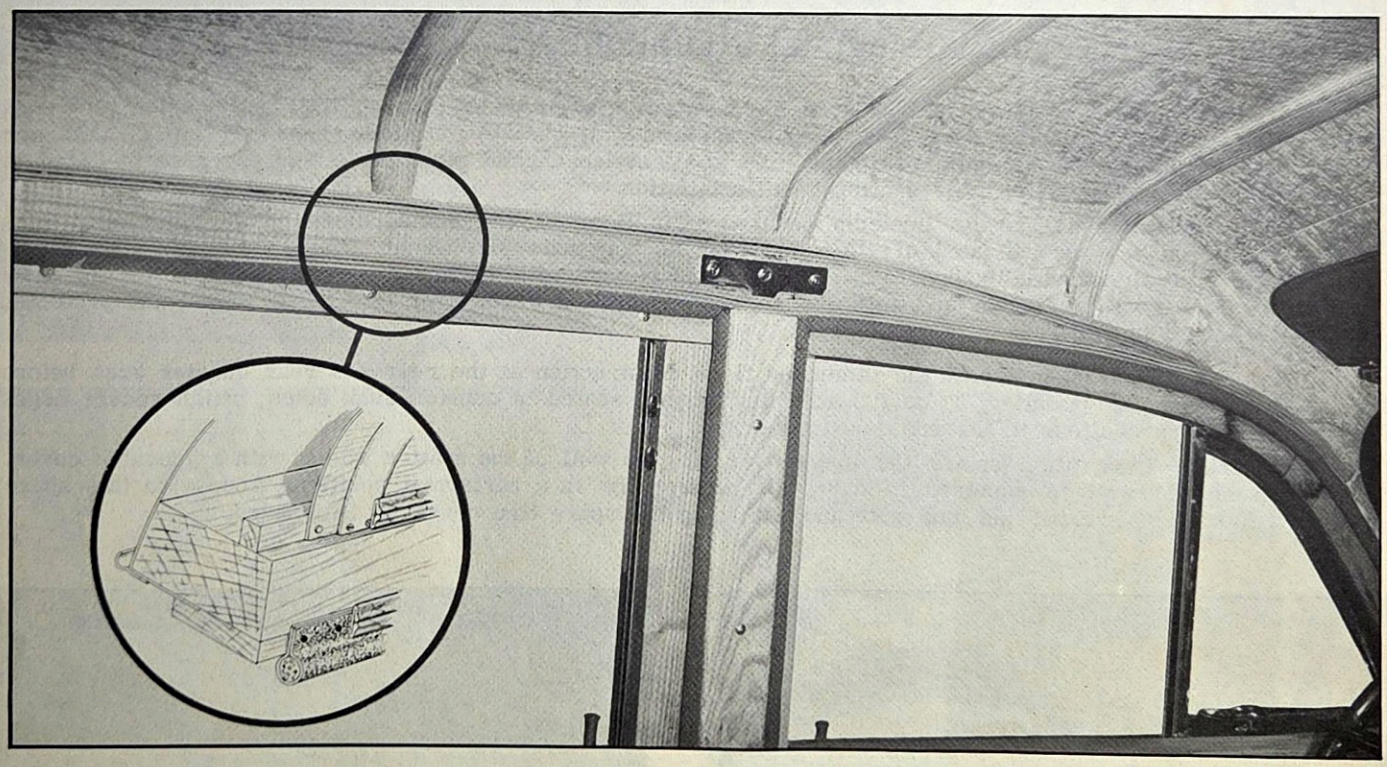




ROOF ASSEMBLY



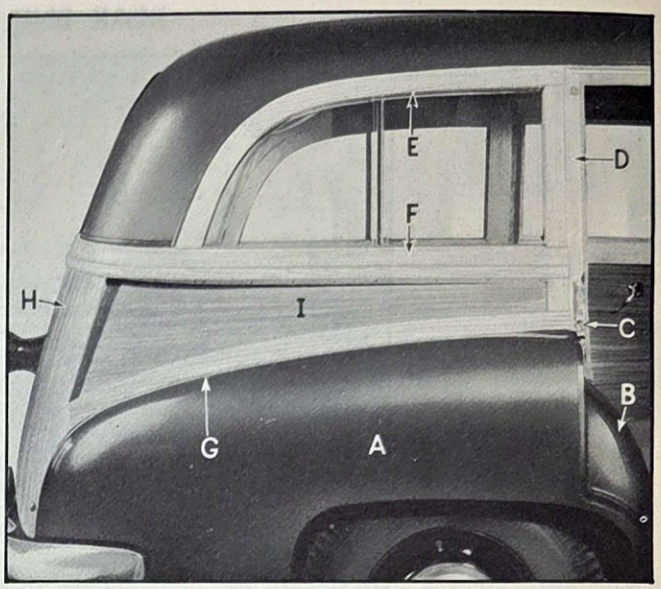
The construction of the roof assembly which is a combination of wood and metal, consists mainly of a one-piece metal roof panel, which is welded to the inner frame upper of the front end assembly, and one-piece right and left wood side roof rails. These major assemblies, couples with insulating felt, braces, roof bows and supports, form the entire roof structure to which later the headlining is added. The illustration above shows the attachment of the roof bows to the one-piece wood side roof rail which is bolted to the roof rail front corner brace and extends rearward across the rear quarter header to the filler block at the lower rear corner of the quarter window opening. The exposed roof bows are bolted in place after the headlining is installed.

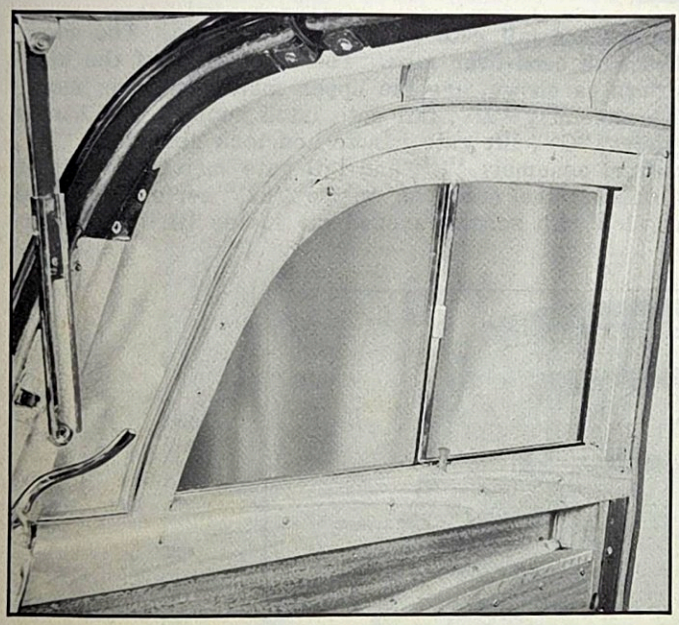


The installation of the headlining is somewhat similar to that used on the "62" series all metal station wagon described in the first section of this manual. However, due to the wood construction of the side roof rail and rear corner post, actual attachment of the headlining to these parts is accomplished with trimmers tacks. It is secured to metal tabs above the windshield and rear end openings and held up by headlining listing support wires. The four support wires used, are attached with screws to the side roof rails along both sides. With the headlining secured in position with support wires, tacks, and metal tabs, the roof bows are installed to the roof bow supports with two screws at each end to form the headlining. The dome lamp and support assembly is installed between Nos. 2 and 3 roof bows in the same manner as on the all metal station wagon. For trim finishing, "hidem binding" is tacked over the headlining to roof rail tacking area.

REAR QUARTER

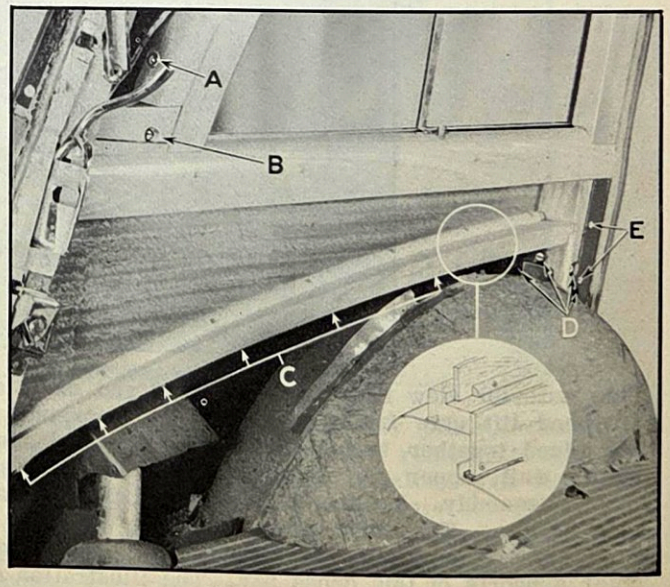
The rear quarter assembly is of composite wood and metal construction. The lower metal sub-assembly is comprised primarily of a lower rear quarter side outer panel "A", a rear body lock pillar outer panel "B", a rear body lock pillar facing "C", and a wheelhouse panel, all spotwelded together. The fender becomes an integral part of the welded rear quarter metal construction and therefore cannot be detached as on previous models. The upper rear quarter wood sub-assembly extends from the fender line up to the roof panel, and is comprised primarily of a rear quarter pillar "D", a header rail "E", an upper belt rail "F", a lower belt rail "G", a corner post "H" and an outside trim panel "I". This wood sub-assembly is attached to the lower metal rear quarter structure, to the roof header rail, and to the roof panel with screws and bolts. Cord welt is installed between wood to metal contact surfaces along wheelhouse and fender contours.



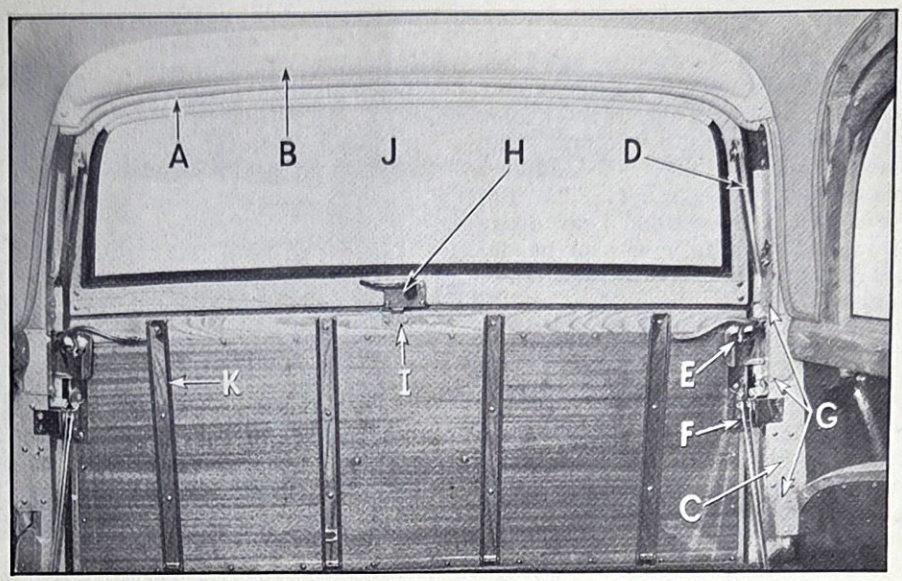


View of the upper rear quarter assembly showing the inner trim and hardware installed. Removable upper header garnish and lower belt finishing moldings are secured to the window opening with attaching screws. The rear quarter window assembly consists of two glass sections, a forward stationary section and a rear sliding section, which are assembled in channels to the window opening. Screws, inserted through the upper glass channel groove of the header rail prior to installation of the window assembly, secure the rear quarter assembly to the side roof rail.

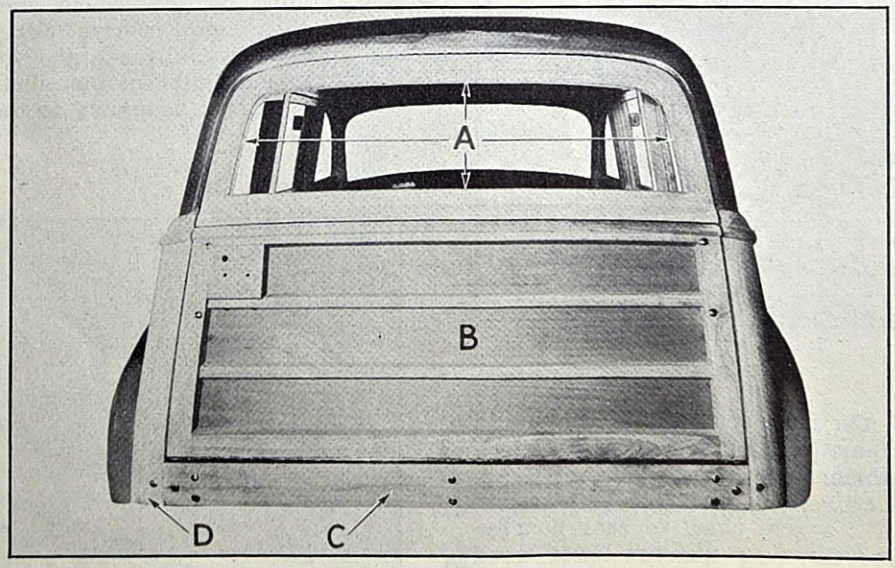
This lower view of the rear quarter assembly with inner trim panel removed, further illustrates the wood to metal attachment in the rear quarter area. A rear quarter header rail to side roof rail anchor nut is indicated at "A", a roof panel to rear quarter filler block and nut at "B", rear quarter lower wood belt rail to metal fender lag screws along "C", rear body pillar to wheelhouse panel retaining screws and bolts at "D", and rear body lock pillar metal facing to pillar attaching screws at "E". To complete the interior rear quarter trim, wood trim panels are installed with attaching screws to the lower rear quarter and rear body pillar areas.



REAR END CONSTRUCTION

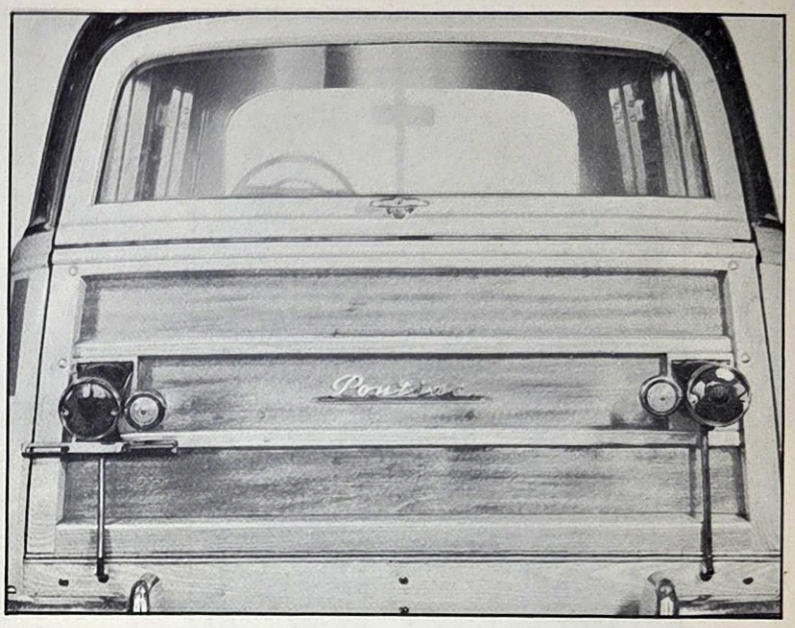


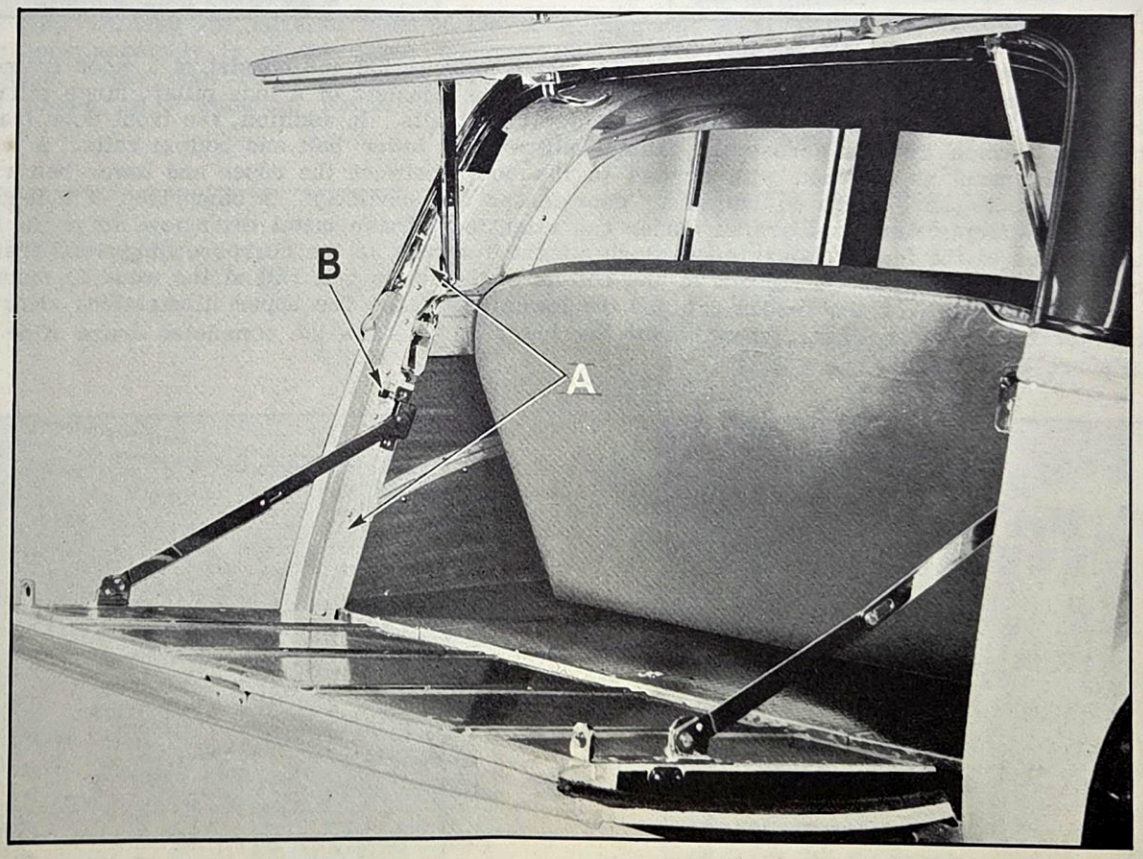
Interior view of the rear end construction with complete lift and tail gate assemblies installed. The windlace along the upper opening indicated at "A" is attached with bend-over tabs. The remainder of the visible trim and hardware parts, which are attached with screws as shown, are the upper metal finishing molding "B", lower wood trim panel "C", lift gate support assembly "D", tail gate latch support and handle assembly "E", tail gate support assembly "F", cover plates "G", lift gate handle and lock assembly "H", lift gate lock striker "I", lift gate glass and rubber channel assembly "J", and tail gate metal skid strips "K". Both lift and tail gates are hinged to the body opening the same as on the "62" series all metal station wagon. A four-piece lift gate glass molding is installed with screws around the inside lift gate opening to retain the glass and channel assembly.



This exterior view illustrates the wood and metal station wagon rear end construction minus hardware. The all wood lift gate frame assembly "A" consists of a top, bottom, and two side rails, which are mortised and glued together to form a single permanent assembly. The tail gate "B" consists primarily of top rail, bottom rail, upper and lower center rails, and side rails, all wood glued together to form a complete frame assembly. To the inner face of this frame assembly, a removable laminated wood panel is attached with screws. The wood rear cross bar assembly "C" is bolted to supports which are welded to the metal rear compartment pan rear cross bar. The lower end of the corner posts are also bolted at "D" to the outer supports of this cross bar. The illustration shows Chevrolet tail gate and lift gate installation.

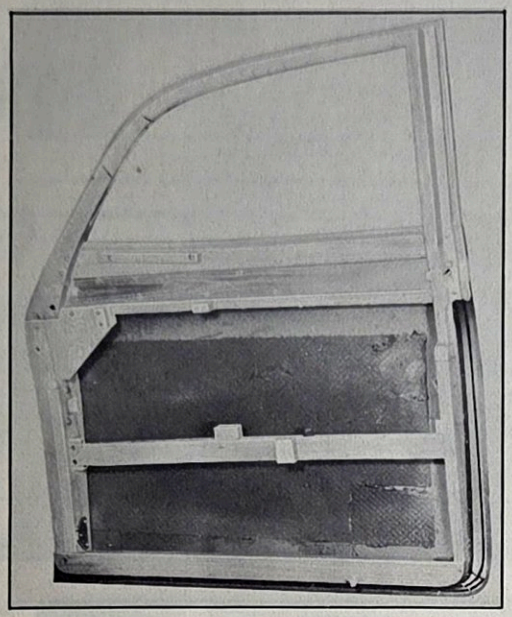
Close-up of lift gate and tail gate assemblies on a Pontiac wood and metal station wagon, showing the installation of outer hardware parts. The position of the light fixtures vary with each Car Divisions body model. The back window is a single light of glass without division bar. Note the tail gate piano type hinge spanning the lower opening above the rear cross bar assembly.

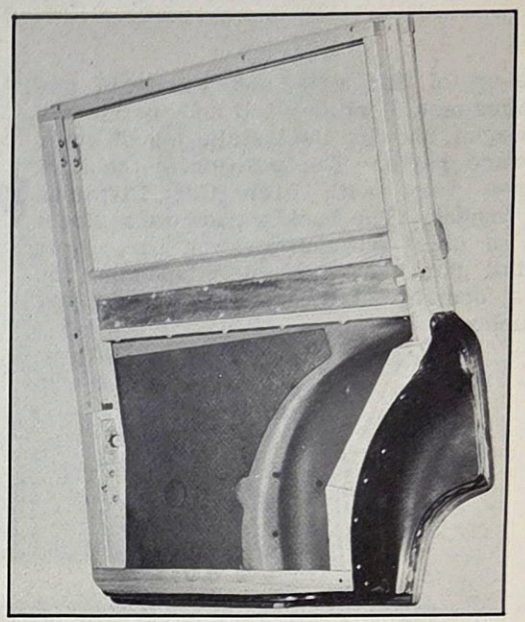




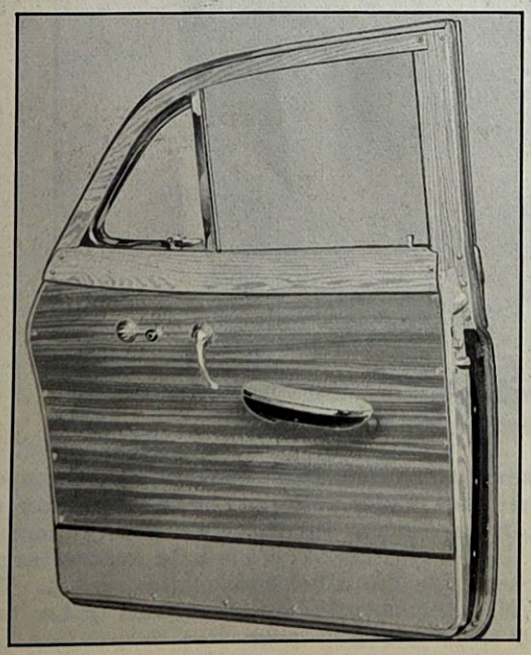
This shows the lift gate and tail gate in an open position. Visible along the rear body pillar facing are the upper and lower wood "jambs" "A", and the tail gate wedge plate "B", which are retained to the corner posts by screws. Rubber weatherstrips are cemented completely around the lift gate, along both sides of the tail gate, and to the body around the rear end opening above the floor line. The lift gate support arms are provided with a hold-open feature and a safety release the same as on the all metal station wagon. The tail gate inner surface is protected by four (4) metal skid strips. When closed, the upper corners of the tail gate are locked in position with toggle fasteners to latches mounted on each corner post.

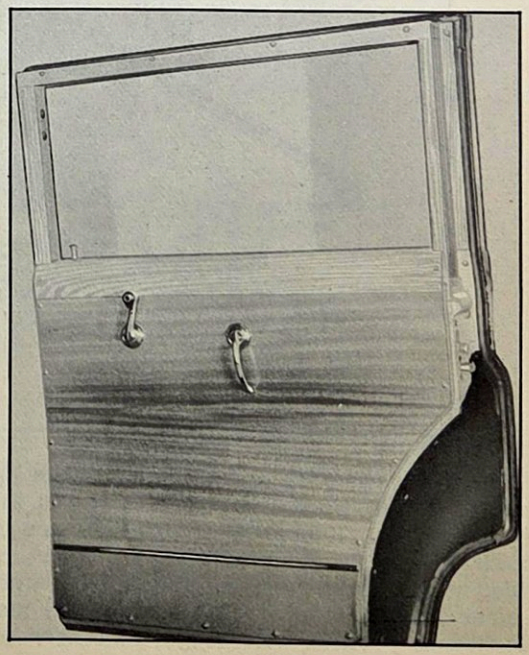
DOORS

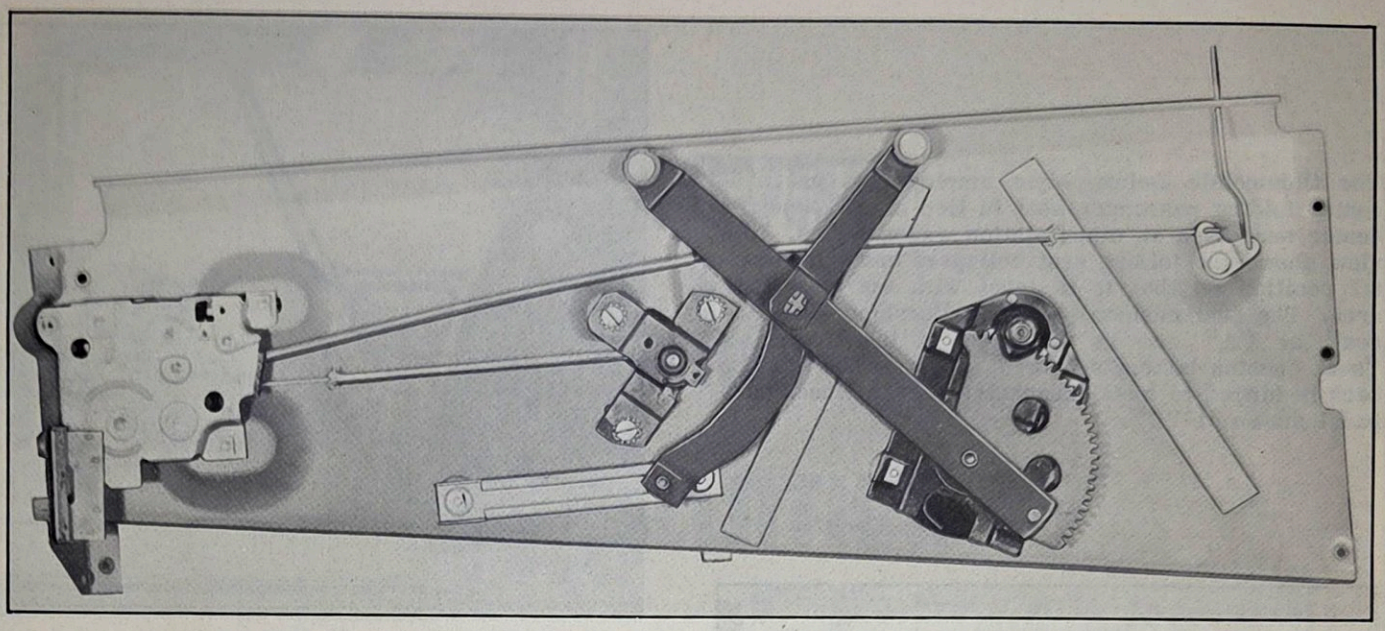




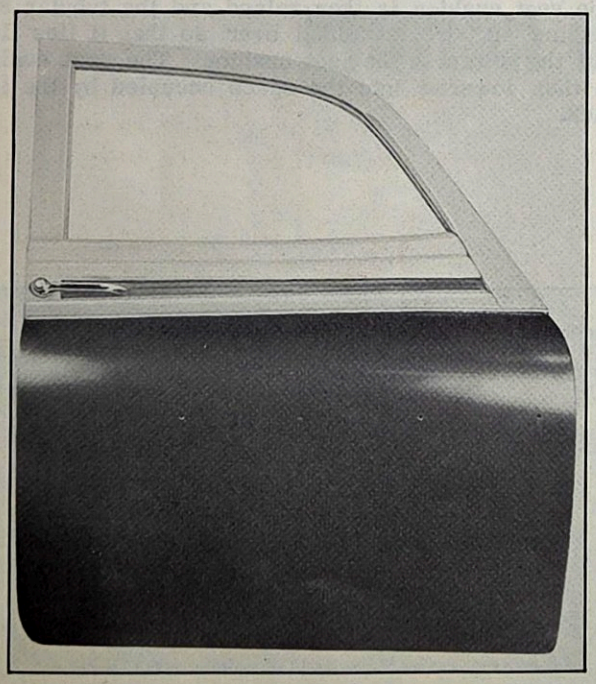
Front and rear doors are of composite wood and metal construction and consist of a wood frame sub-assembly and a door metal outer lower panel. The wood frame consists of a lock pillar, hinge pillar, bottom rail, header rail inner and outer, and upper and lower belt rails. In addition, the front door frame has a wood "strainer" which extends across the frame between the lower belt and bottom rails. A wood laminated outer trim panel is attached with screws to the doors between the upper and lower belt rails. The complete metal door panel which is called a "door fender cap assembly" is comprised of a fender cap to which are welded front, rear, and bottom fender cap extensions. These metal extensions form the pillar and bottom rail flanges of the fender cap through which attaching screws to the corresponding wood frame members are installed. Cord welt is tacked to the bottom of the lower belt rail at the wood to metal junction between the upper flange of the fender cap and the lower belt rail. The upper illustrations show the inner construction of the front and rear doors, while the lower views show the completed doors after laminated trim panels are installed.

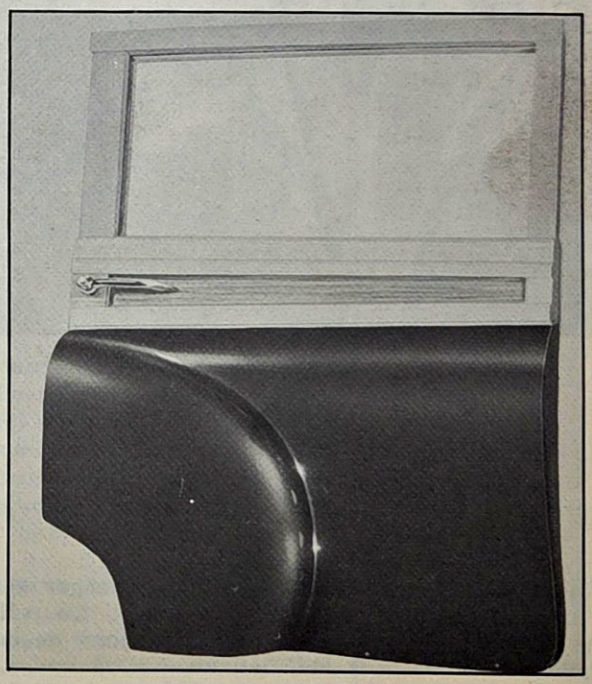






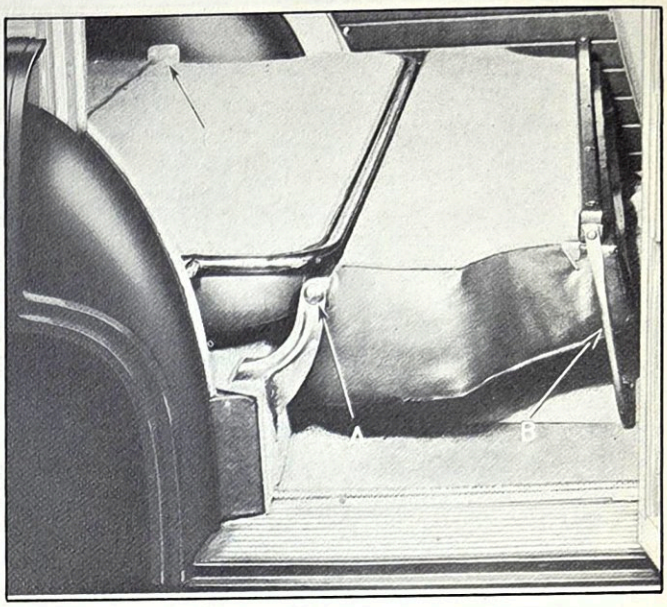
Close-up view showing the reverse side of the door regulator inner panel with hardware parts attached. The door lock assembly is of the same design as that on conventional "A" style and "62" series station wagon bodies. Rear door locks are equipped with a "free-wheeling" adjustment. The remainder of the hardware shown is of standard Fisher Body design as used on previous conventional and station wagon bodies.

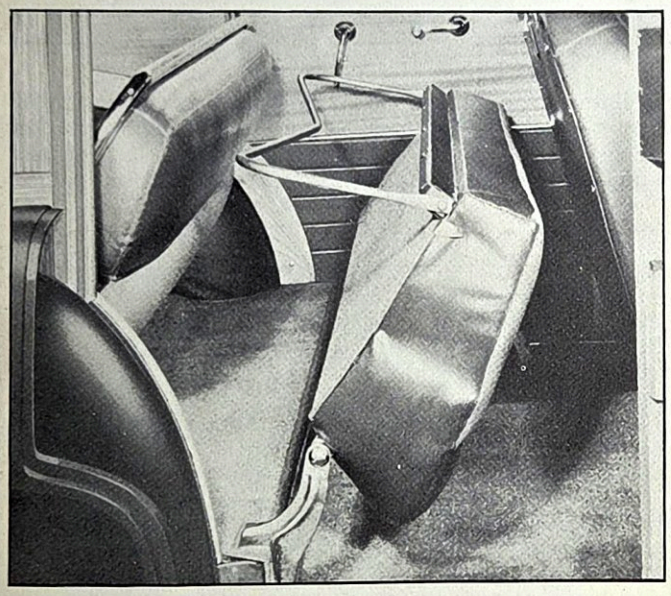




The above exterior views of the front and rear door assemblies further illustrate the wood and metal door construction. Although the door outside handles are of the same push button design as those on the conventional "A" body and "62" series station wagon styles, they are attached to the upper wooden structure with three bolts and retaining nuts in place of the retaining plate employed on the doors of the all metal construction.

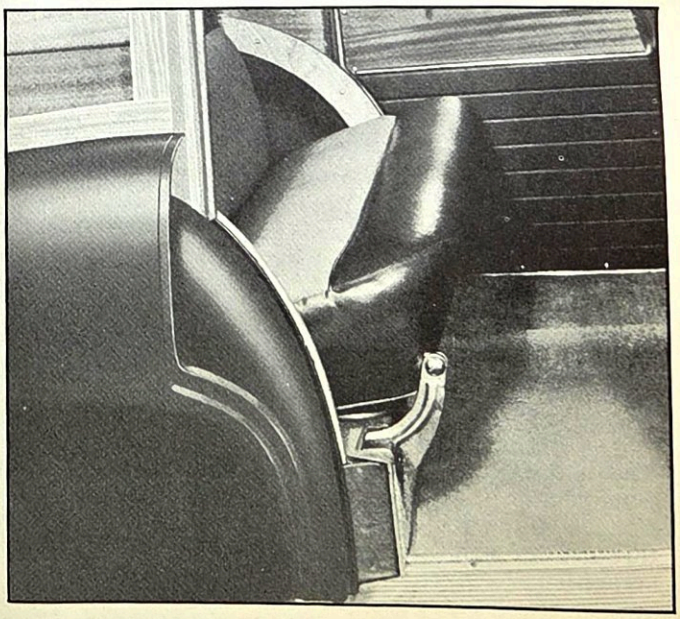
The Oldsmobile Deluxe style employs the use of a center folding passenger seat in lieu of the standard center seat used on other station wagon styles. This view shows the folding seat collapsed into a horizontal position so that it is level with the rear floor area. The seat cushion pivots on "cushion side hinges" at "A" and is supported at the front by a "seat cushion bottom support" at "B". The cushion back is hinged to metal brackets on each wheelhouse panel shown at "C".





This shows the folding seat partially raised. The seat back is lifted and folded to a vertical position. The seat cushion is then raised and the tubular seat cushion support is folded over so that it lies flush with the bottom of the seat cushion. The seat cushion is then lowered into the space occupied by the seat back.

This illustration shows the folding passenger seat in a normal position ready for occupancy. To collapse the seat, simply reverse the operations described above.



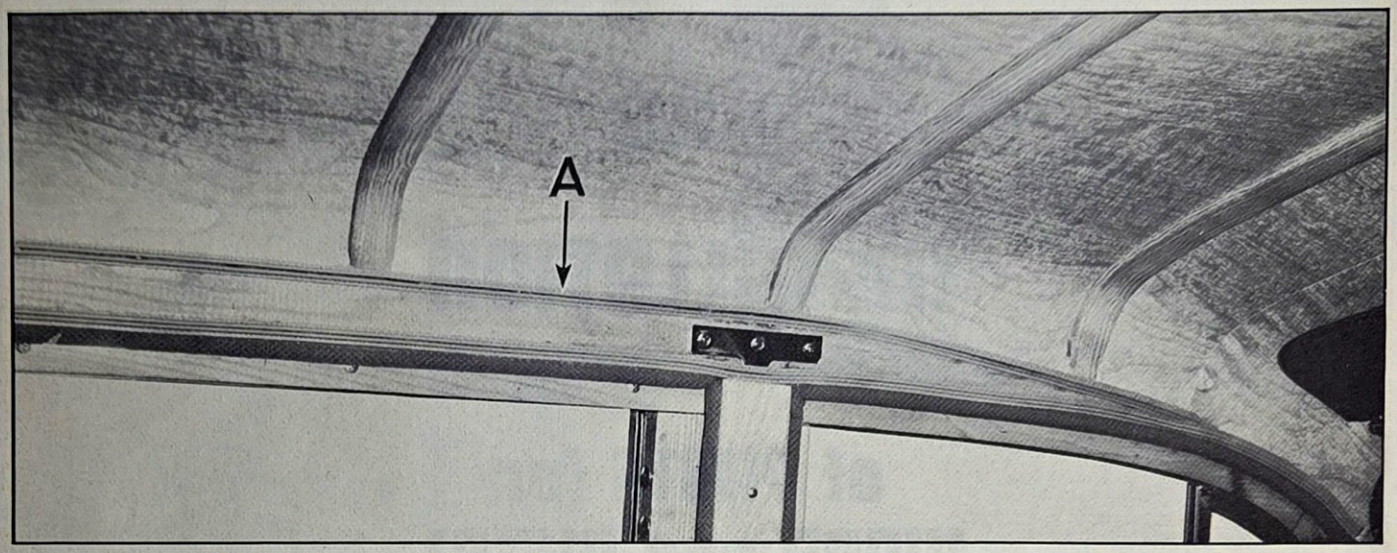
REMOVAL and INSTALLATION of PARTS for WOOD and METAL STATION WAGON BODIES

The removal and installation of parts as described in this chapter, are applicable only to the "61" series wood and metal station wagon construction. For a description of the removal of parts which are either general to all Fisher Body "A" construction or are common to parts used on the "62" series all metal station wagon, reference should be made either to the 1949 "A" body Fisher Service and Construction Manual or to the "62" series station wagon section of this manual, whichever applies.

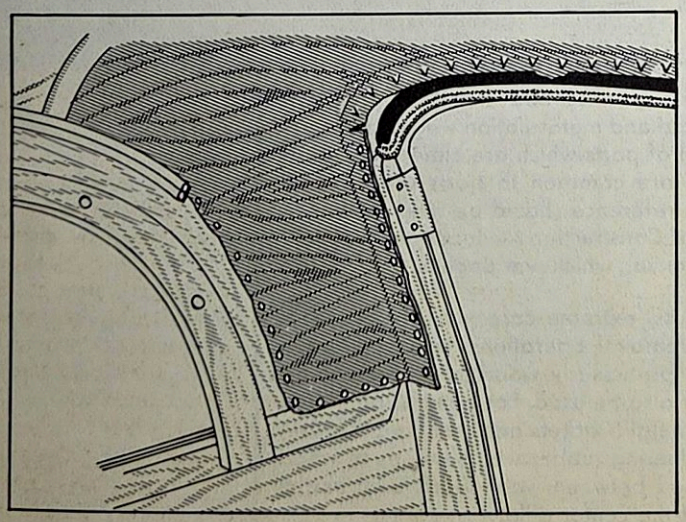
In the removal of station wagon parts, extreme care must be used not to scratch or mar the finish during removal operations. Likewise, in the replacement of station wagon parts, particularly wood parts, the proper sealing and insulating materials must also be used. For general use, "3-M Auto Body Sealer" is used between metal brackets and wood parts, "3-M Weatherstrip Cement" is used for adhering rubber weatherstrips to wood parts, and caulking compound is used between wood parts such as the mortise and tenon joint at the top of the center pillar.

OPERATION NO. 1
HEADLINING

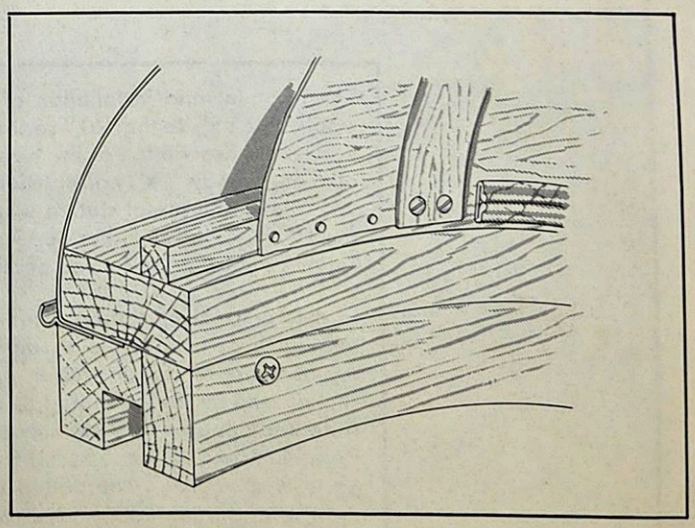
The headlining, which has a simulated wood grain color on its finished surface, is composed of plastic material with a fabric backing. It is suspended by four listing wires across its top surface and is attached to metal tabs over the windshield and rear body opening. Tacks are used along both sides to hold the headlining to the tacking strip along the top of the side roof rail. In addition, tacks are also used for headlining attachment at the rear quarter wood filler block and corner post.



1. Remove sunshades and brackets, windshield garnish molding and upper metal finishing molding over rear end opening.
2. Remove upper hidem binding "A" along edge of headlining at side roof rails and rear corner area.
3. Remove the two (2) screws from each end of roof bows and remove roof bows. The dome lamp support is merely hooked to the edge of the #2 and #3 roof bows and suspended between them. Disconnect wire and remove dome lamp and support assembly.
4. Remove the headlining tacks at upper outer corners of windshield opening, along side roof rails and at rear quarter filler block and corner post.
5. Disengage headlining from metal tabs over windshield and rear end openings.
6. Loosen or remove the listing wire attaching screws along each side roof rail and remove the four listing wires and headlining.
7. To install, reverse this procedure.



Drawing showing the attachment of the headlining above rear body lift gate opening and at upper rear quarter area.

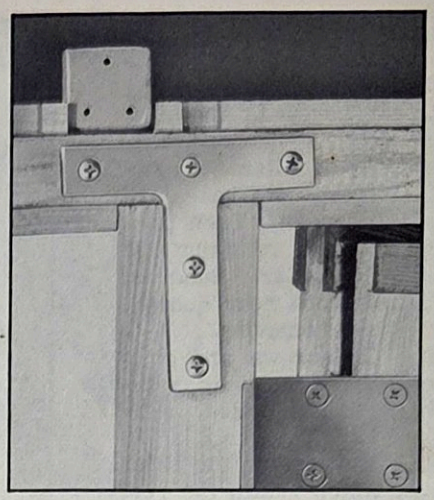


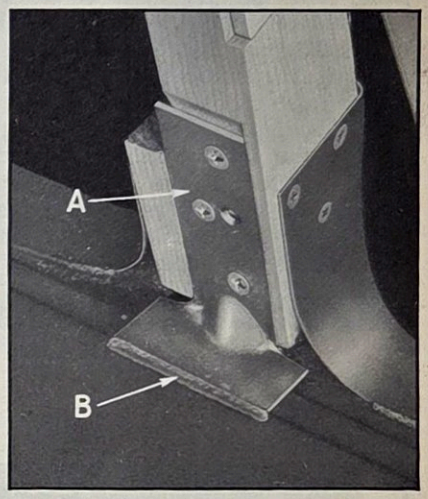
This drawing shows the headlining and hidem binding attachment along the side roof rail.

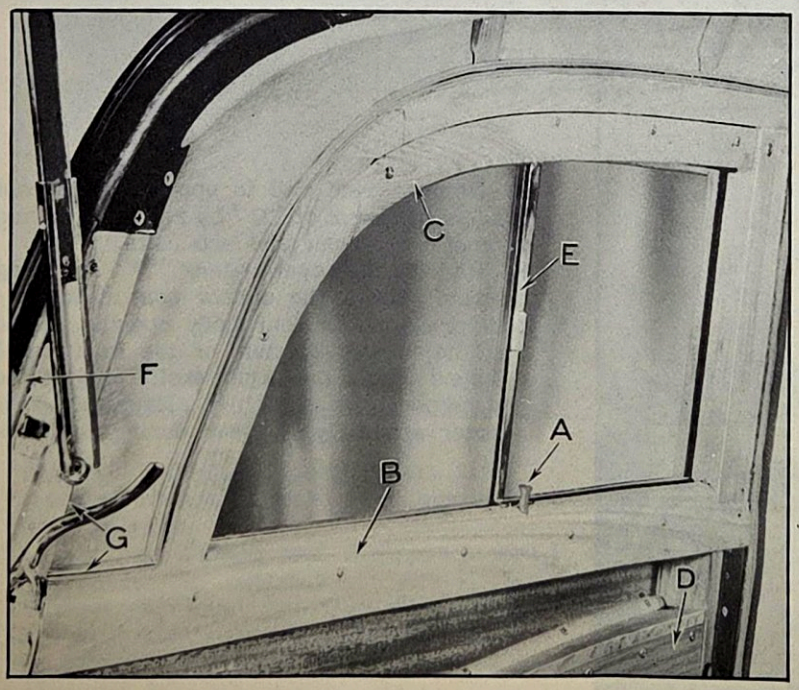
OPERATION NO. 2
CENTER PILLAR

1. Remove front seat and rear door.
2. Remove center pillar laminated trim panel which covers the inner face of the pillar.
3. Loosen and turn back out of position the "hidem" binding along side roof rail adjacent to the "T" brace at the upper end of the pillar.
4. Remove upper "T" brace and its attaching screws.
5. At the bottom of the pillar, remove the screws holding the cup shape center pillar brace to each side of the pillar.
6. At the bottom, on the inside, remove the screws attaching the "L" shaped "center pillar to floor pan brace" to the inner face of the pillar, indicated at "A". In addition, with a sharp chisel, cut this brace loose from its welded attachment on the floor pan at "B".
7. Carefully pull bottom of the pillar outward from its position on the floor, then rock gently back and forth until the tenon at the top of the pillar is released from the roof rail.
8. To install, first apply a quantity of caulking compound to the upper tenon end of pillar. Also apply a quantity to the brace attaching surfaces at the bottom of the pillar. Place pillar in position and reverse the procedure in steps 1 through 6.

CAUTION: Before tightening screws, close the front door and check the alignment of door and center pillar.



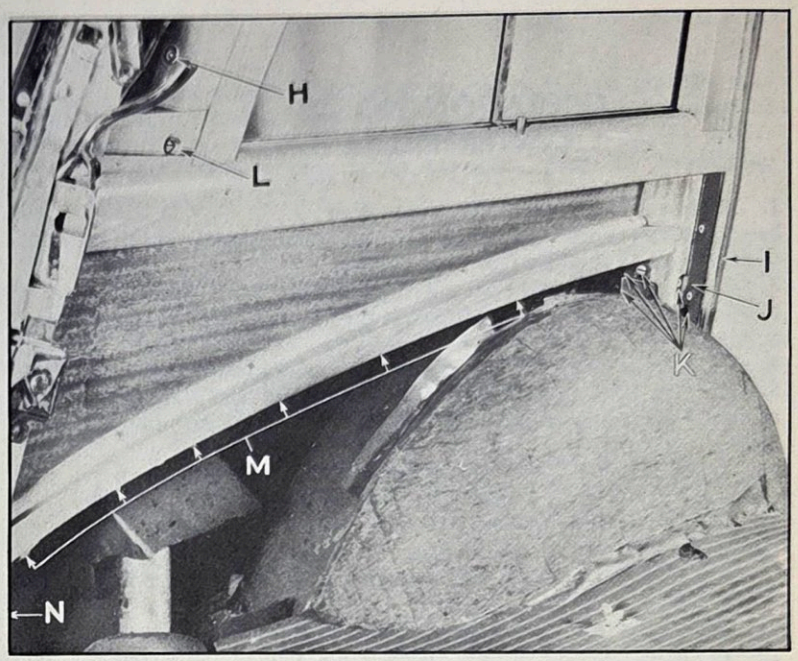


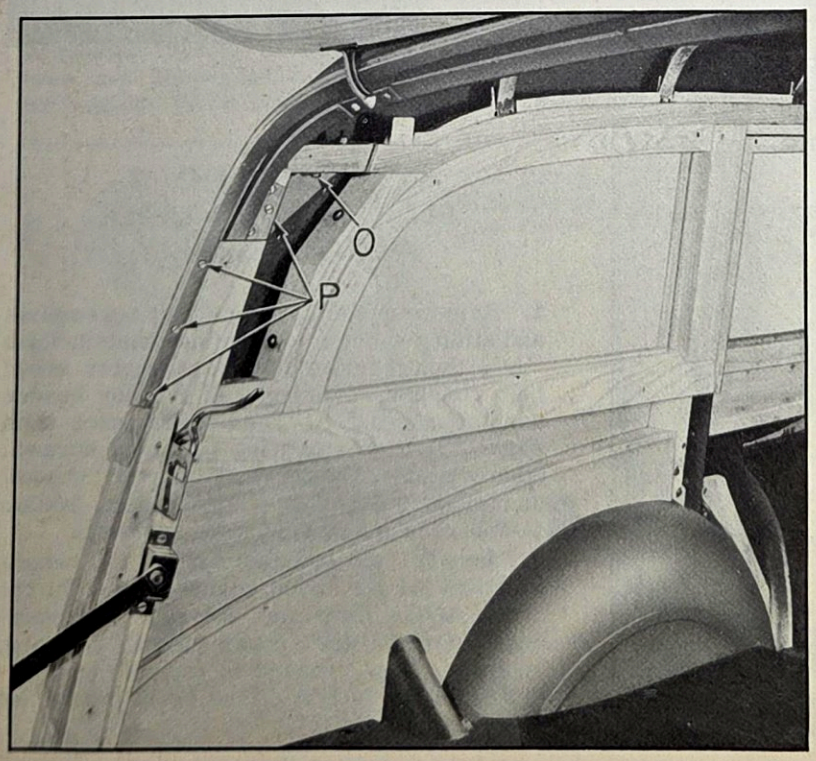


OPERATION NO. 3
REAR QUARTER UPPER WOOD ASSEMBLY

1. Remove center and rear seat assemblies and sliding window locking mechanism knob "A", then remove the rear quarter lower belt finishing molding "B", upper header garnish molding "C", and lower inner trim panel "D" by removing retaining screws. Also remove entire rear quarter window assembly "E" (See "62" series station wagon rear quarter window removal).
2. Loosen the weatherstrip "F" where attached to the wood corner post. On the inside of the body over the rear end opening, remove the upper metal finishing molding, then proceed to loosen the headlining where tacked to the corner post and filler block at "G".

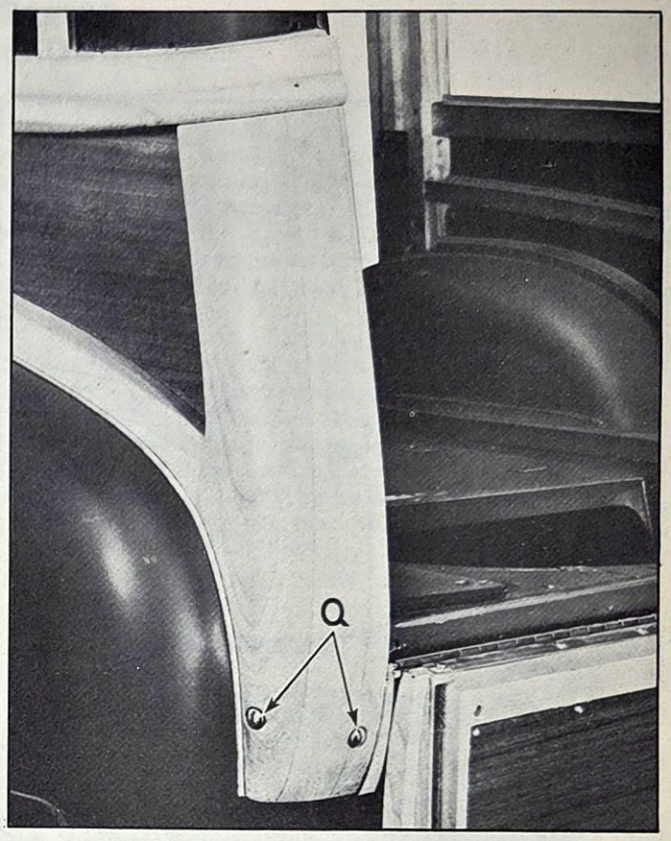
3. Remove the roof rail to rear quarter header rail screws through the quarter window upper channel groove. The retaining nut for the lower rear screw is shown at "H".
4. On the rear body lock pillar "I", remove the "hidem" binding, windhose, and narrow lower inner trim panel. Then proceed to remove all screws retaining the metal facing "J" to the pillar. Bend out facing enough to allow wood rear quarter assembly clearance when removing.
5. Remove the five (5) screws and bolts shown at "K" which secure the rear quarter pillar to the metal brace bolted to the wheelhouse.
6. Remove the three (3) nuts on the filler block and corner post which retain the roof panel rear molding bolts to the rear quarter assembly. Only the filler block nut "L" is visible in this illustration. The rear molding may be removed from the outside lower edge of roof panel.
7. Remove the lag screws along "M" retaining the lower belt rail to metal outer panel portion of the rear quarter. Along this line of lag screws at lower inside rear corner post near floor level, indicated by "N", remove screw retaining fender to lower belt rail.



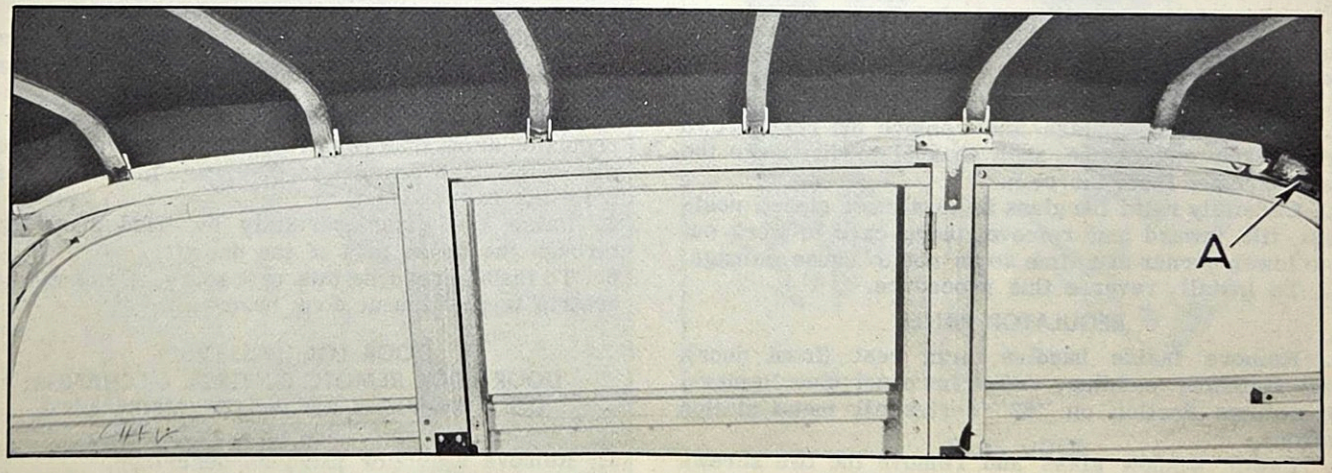


8. Remove roof rail to upper corner post brace attachment at "O" by removing brace to roof rail screw and two bolts.
9. Remove the screws along "P" retaining the roof panel to the corner post at the upper corner of the rear body opening. Bend out the metal portion of the roof panel wrapped around the upper inside end of the corner post just enough to allow wood rear quarter assembly to clear during removal.

10. From outside of body at lower rear corner, remove the two bolts "Q" retaining corner post to supports on the rear compartment pan rear cross bar. The nuts are accessible under the rear body structure at this point. From under the body in this same area, remove the two (2) lower outer panel metal to corner post wood attaching screws.
11. From inside the body, remove the upper center pillar to roof rail "T" brace (See Center Pillar Removal). Also remove lift and tail gate supports where attached to corner post. The lift gate may be removed if desired.
12. Raise the rear end of the roof panel approximately two inches, or enough to obtain clearance in removing the rear quarter assembly. Place a brace between floor and roof panel to support roof in this raised position. Use caution to avoid damaging roof panel and headlining.
13. Grasp the rear quarter wood assembly along its upper header rail and pull towards inside of body. At the same time lift up, so that the groove in the lower belt rail of this assembly clears the metal flange along the rear fender portion of the quarter outer panel. Remove assembly.
14. To install, first apply caulking compound to all surfaces of wood and metal contact as a means of sealing and to prevent frictional noises. Reinstall wood quarter assembly, reversing the procedure as given. Use care during installation not to damage the "welt" which is attached to the lower belt rail of upper wood sub-assembly.

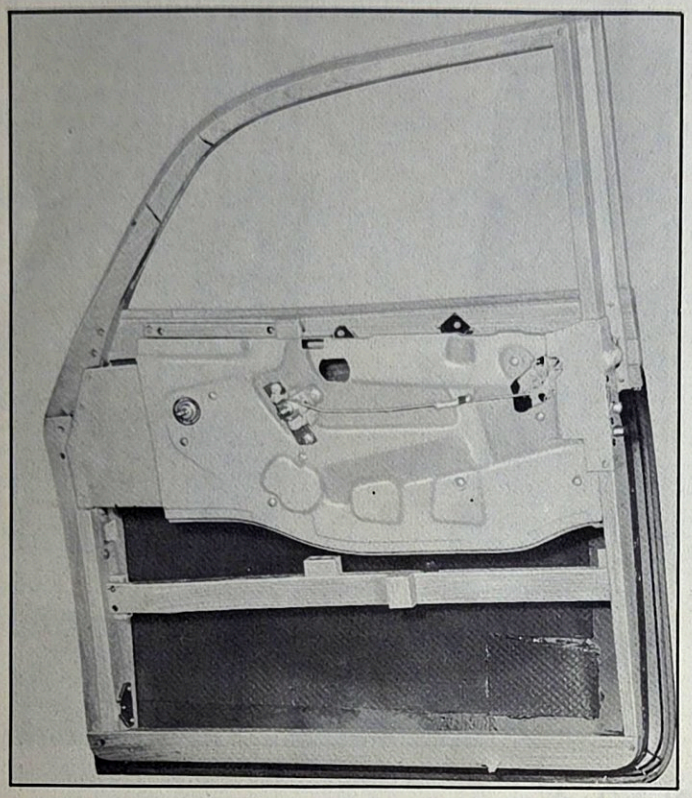


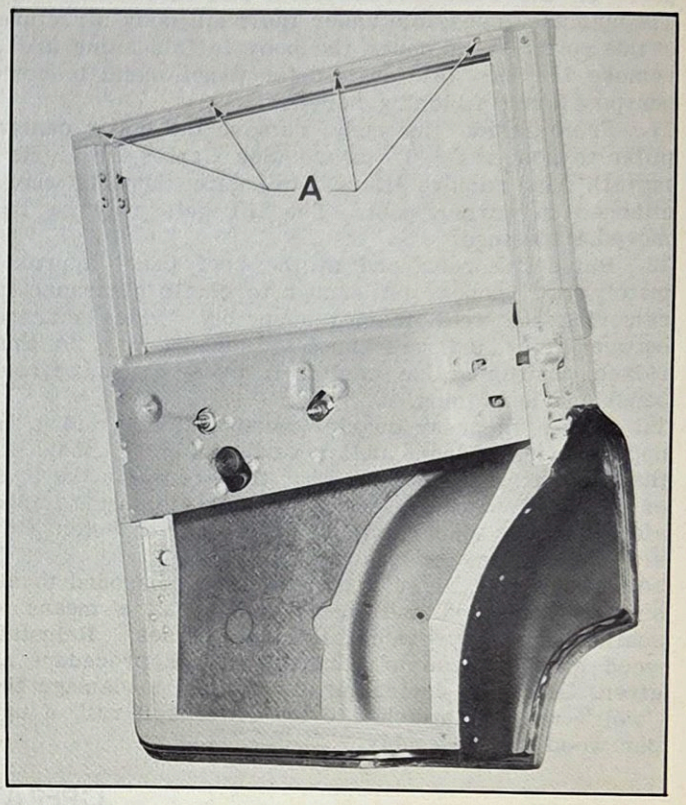
OPERATION NO. 4
SIDE ROOF RAIL ASSEMBLY



1. Remove headlining (Operation No. 1).
2. Remove the upper wood rear quarter assembly (Operation No. 3).
3. Remove all binding and windhose tacked to roof rail above door openings.
4. Remove the front and rear door jambs screws and door jambs at upper door openings.
5. Remove the two bolts at the forward end of the side roof rail indicated at "A".
6. Remove center pillar (Operation No. 2).
7. From the under side of the upper door openings, remove the roof panel to side roof rail screws.
8. Remove the side roof rail by pulling toward inside of the body.
9. To install, reverse this procedure. Apply caulking compound to all points of wood to metal contact.

OPERATION NO. 5
DOOR HARDWARE





DOOR WINDOW GLASS
(FRONT DOOR)

1. Remove arm rest, inside handles, belt finish molding and trim panel (See Removal Section on "62" series station wagon.)
2. Remove ventilator division channel.
3. Lower window glass and remove the two screws from each end of the sash channel to disengage the sash channel from the cam.
4. Carefully raise the glass to an almost closed position, tilt inward and remove, using care to work out one lower corner at a time so as not to cause damage.
5. To install, reverse this procedure.

REGULATOR PANEL

1. Remove inside handles, arm rest (front door), belt finishing molding, and trim panel (See Removal Operations Section on "62" series all metal station wagon).
2. Lower window glass and remove the two screws from each end of the sash channel to disengage the sash channel from the can.
3. Remove screws retaining ends of regulator panel to door pillars and remove regulator panel.

To install, reverse this procedure.

DOOR WINDOW GLASS
(REAR DOOR)

1. Remove the inside handles, belt finish molding and trim panel (See Removal Operations Section on "62" series station wagon.
2. Carefully loosen and remove the rubber weatherstrip across the top of the rear door header.
3. Remove the four screws "A" holding door inner header rail to top of door, and remove inner header rail.
4. Regulate the window downward so as to expose the regulator arms, then remove the two screws from each end of the sash channel to disengage the sash channel from the cam.
5. Raise the glass carefully by hand and remove through the upper part of the door.
6. To install, reverse this procedure. Cement weatherstrip to position at door header.

DOOR LOCK ASSEMBLY
DOOR LOCK REMOTE CONTROL MECHANISM
DOOR WINDOW REGULATOR MECHANISM

1. Remove regulator panel as described.
2. Remove hardware parts as required by removing screws attaching parts to regulator panel.
3. To install, reverse this procedure.

NOTE: It is possible to remove certain items of door hardware, such as the front door lock remote control mechanism, without removing the regulator panel. However, as a general rule, it will prove to advantage to remove the regulator panel prior to removing any of its attached hardware parts.

OPERATION NO. 6
DOORS

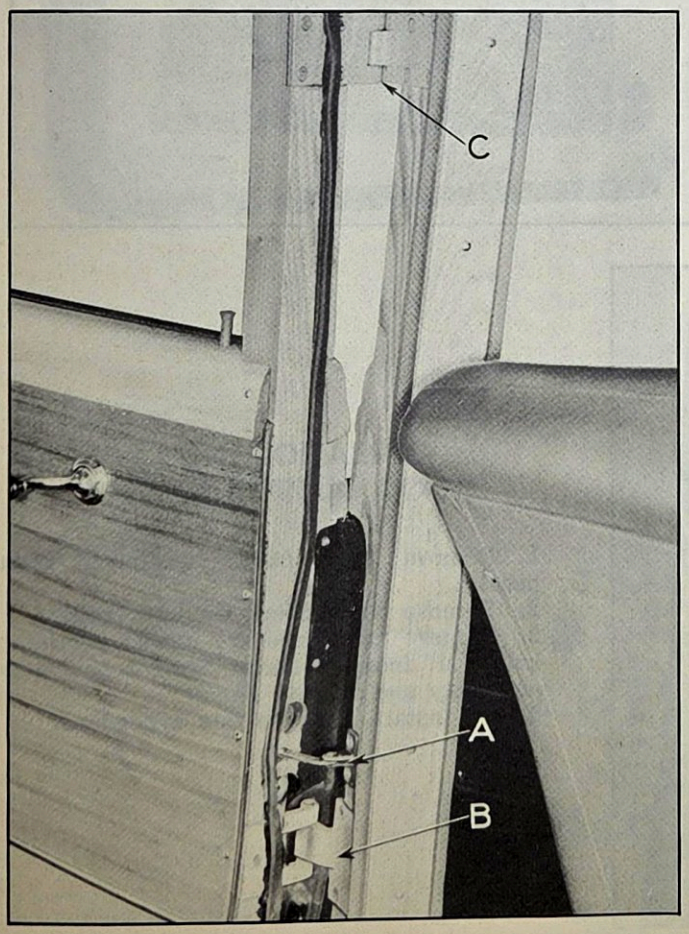
FRONT DOOR

NOTE: This operation is applicable to both the all steel and the wood and steel station wagon bodies. The front body hinge pillar and door hinge pillar from the belt line down on station wagon bodies is equipped with a front body hinge pillar rubber sealing strip, as shown in the adjacent drawings. This strip, which covers the lower pillar area, is cemented to both door hinge pillar and the body pillar, as well as attached to the latter with screws and retainers. In the removal of a front door, it is first necessary to remove the sealing strip. The following front door removal information outlines the procedure to be used for each Car Division's body style.

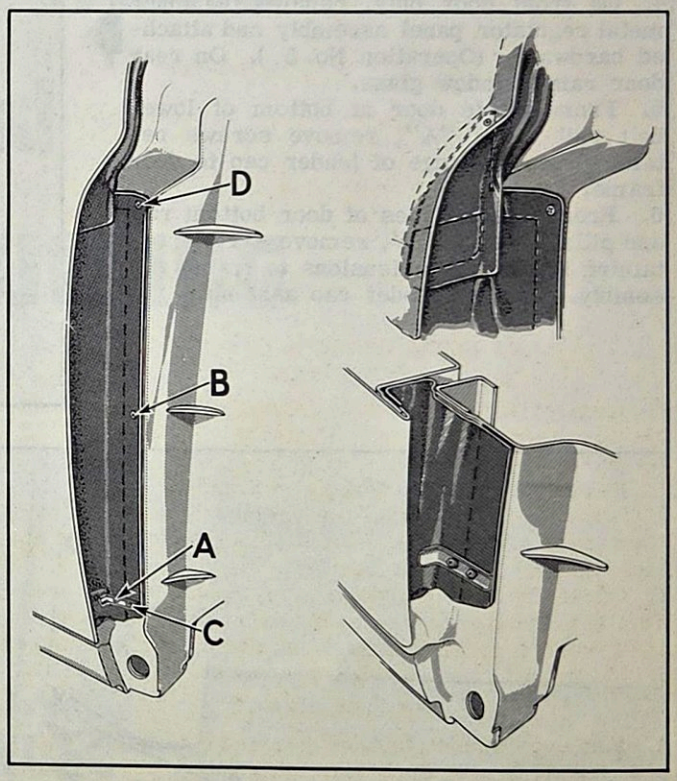
1. With door in open position remove screws "A" and "B" in adjacent drawing. Note: The following operations are performed from underneath the car. For convenience, a car hoist may be used.
2. CHEVROLET - Remove the horizontal baffle between frame and fender in area at base of pillar.

PONTIAC - Remove the vertical baffle attached to front face of body hinge pillar.

OLDSMOBILE - (a) Remove the "Futuramic" molding from fender (b) Remove fender to body attaching bolts at top and bottom of fender (c) Remove baffle to body hinge pillar bolts (d) Remove fender baffle to fender bolts (e) Loosen one end of the heater air intake tube (f) Pull rear of fender out to expose the sealing strip.



3. Remove screw "C" (see adjacent drawing).
4. Loosen sealing strip with putty knife up to screw "D", and then pull strip loose from screw "D".
5. Remove door hinge attaching bolts at body pillar.
6. Rotate the door towards the closed position until the curved end of the check link strap disengages the check link support. Remove door.



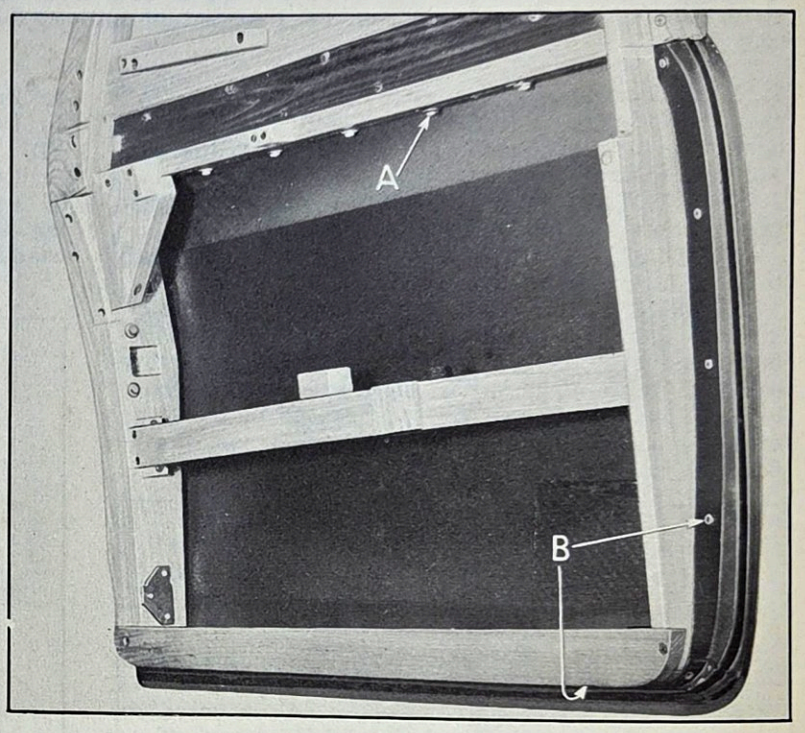
REAR DOOR

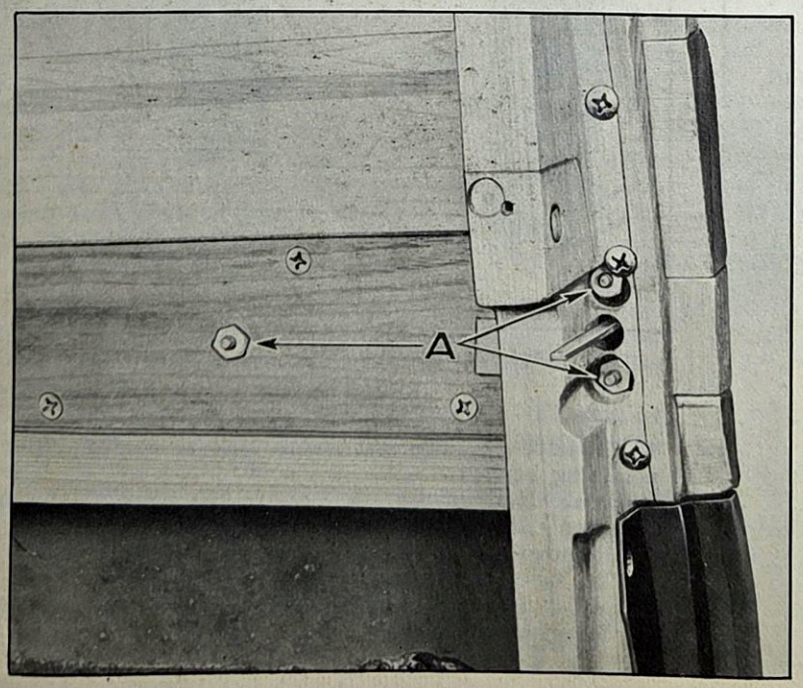
1. Remove the two (2) check link to center pillar retaining screws "A".
2. With door supported, remove the three (3) lower hinge to center pillar attaching screws "B".
3. Remove upper hinge pin "C" and remove door.
4. To install, first apply caulking compound to center pillar at lower hinge attaching point, then reverse the foregoing procedure.

OPERATION NO. 7
FENDER CAP ASSEMBLY

The door fender cap assembly is the name applied to the lower outside metal portion of the door structure. It consists of the fender cap proper to which are welded flanges or extensions along the sides and bottom. When assembled to the wood door frame, the upper flange of the fender cap fits under the lower belt rail, while the fender cap extensions lap over the outside of the door frame. Screws through all metal flanges to the door secure this assembly in position.

1. Remove arm rest (front door), inside handles, belt finish molding, and trim panel (See Removal Operations Section on the "62" series all metal station wagon).
2. Remove door (Operation No. 6).
3. On front door remove both hinges from door pillar. On rear door remove only lower hinge.
4. On front door only, remove the inner metal regulator panel assembly and attached hardware. (Operation No. 5). On rear door raise window glass.
5. From inside door at bottom of lower belt rail along "A", remove screws retaining upper flange of fender cap to door frame.
6. From outside faces of door bottom rail and pillars along "B", remove screws retaining fender cap extensions to frame assembly. Remove fender cap assembly.





OPERATION NO. 8
DOOR OUTSIDE HANDLE

1. Remove door inside laminated trim panel.
2. Remove door metal regulator panel.
3. Remove the three (3) handle retaining nuts "A" from the inner wood door frame assembly and remove handle.
4. To install, reverse this procedure.

STATION WAGON

SERVICE ITEMS and BODY WIRING

PONTIAC

CHEVROLET

OLDSMOBILE

SERVICE ON STATION WAGONS

CARE OF FINISH

The finish on the grained wood portions of the wood and metal station wagon might be compared to the finish on a boat or a piece of furniture exposed to the outside elements. If through neglect or damage the outside clear finish on these wood parts becomes worn, allowing moisture to seep into the unprotected wood surfaces, particularly "end grain" wood, then discoloration of the natural wood and resultant damage will occur. The following are good points to remember in caring for the grained wood finish on wood and metal station wagons.

1. The body should be wiped off and kept clean, and as conditions warrant, the wood portions of the body should be refinished.

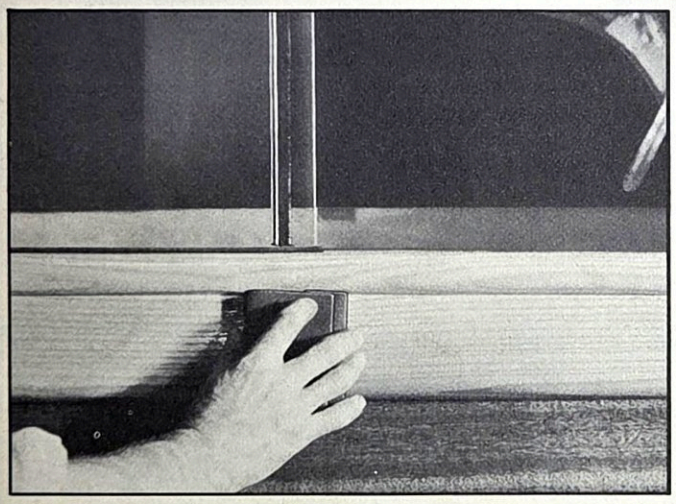
2. The junction or joints of all wood parts on the outside of the body should be inspected frequently. Slight cracks or openings appearing at these joints should be filled with wood filler, then "touched-up" to blend with surrounding surfaces.

3. When re-finishing natural wood surfaces, sand "with the grain", not cross-grain.

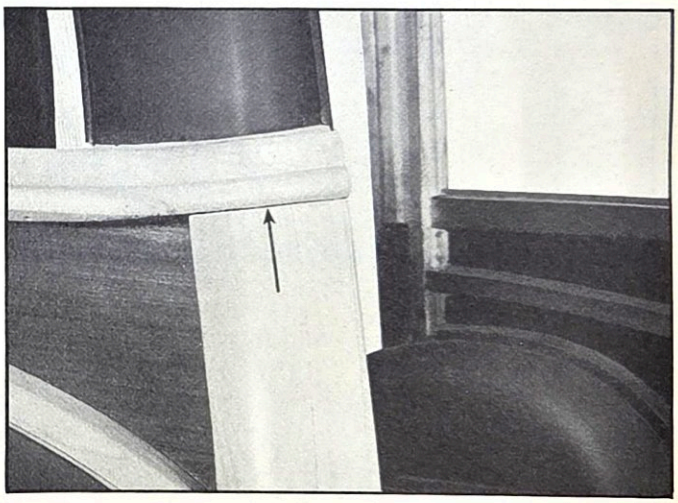
4. Be careful on mahogany panels. Sand very lightly with the grain. If portions of the stained mahogany panels are sanded through and then restained, the restained area will show "off-color".

5. Be careful using screw drivers. Select the proper size screw driver to fit the head of the screw, otherwise slippage may occur, resulting in damage to the exposed screw head and adjacent wood finish.

6. Deep scratches in mahogany panels are next to impossible to remove. If the panel is sanded to eliminate the scratch, then the mahogany stain is cut through to the lighter wood and, when restained, will show "off-color". If the deep scratch only is restained over, a dark "off-color" streak will also result. If deep scratches are prominent and objectionable, the best thing to do is replace the panel.



When refinishing wood parts, sand "with the grain" as shown in this illustration.



When refinishing, inspect and "wood fill" the junction and crevices of wood parts as indicated in this illustration.

REFINISHING

1. Before refinishing do not wash a station wagon wood body unless absolutely necessary. If the body is water washed, it must be THOROUGHLY DRIED before any refinishing work is done. This usually requires approximately 72 hours under ideal conditions to free air dry the wood if any bare part of the wood has been exposed.

2. Clean panel or panels to be refinished with a good wax and polish remover such as "Prep-sol" a Du-Pont product, "Pre-Kleano" a Rinshed Mason product or any similar wax remover.

3. Sand all parts to be refinished. Sand with the grain of the wood at all times. Use block sanding wherever possible. NOTE: Care should always be used to prevent sanding on the mahogany panels while sanding any adjoining parts. No. 320 sandpaper is recommended.

4. Any openings in joints should be filled with a good wood filler. After the filler has dried it should be sanded to a smooth finish to match the adjoining surface.

5. After sanding and before applying finishing coats "tack off" the part or parts to be refinished. (Tack Rags are sold commercially).

6. Brush or spray part or parts to be refinished with an air dry alkyd type varnish such as RA-190 Dulux Exterior Clear. When sprayed, two coats are required. The second coat may be applied in not less than 15 minutes and not more than 30 minutes. If it is not possible to apply the second coat within 30 minutes, the first coat should dry 15 hours. When brushed, the second coat if required, should not be applied in less than 15 hours after the first coat. When applying this type of finish with a brush, the refinishing should be done by individual parts and panels. If this is not done, brush marks, sags, etc. may develop.

7. If the wood parts have blackened spots which cannot be removed by sanding, the parts can sometimes be bleached. Bleaching should only be attempted by experienced wood refinishers. Panels may also be stained if required. Staining, likewise, should be left to experienced wood refinishers.

CEMENTS AND SEALERS

(WHAT TO USE)

The same types and kinds of cements and sealers as used for conventional closed passenger bodies, may also be used for station wagon service work. The 3-M cements and sealers as recommended here are manufactured by the Minnesota Mining and Manufacturing Company and are obtainable through their distributors throughout the country.

3-M WEATHERSTRIP CEMENT

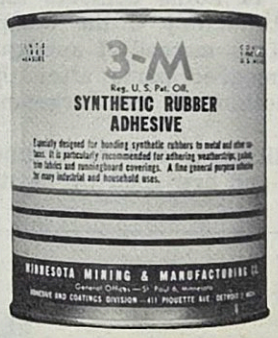
This cement is a rather viscous adhesive, black in color, and is used for cementing rubber to wood, metal, glass, or other rubber surfaces. It is a general purpose flowable cement, ideally suited for cementing rubber weatherstrips to doors, tail gates and lift gates, and for cementing rubber channels to the windshield, rear quarter, and lift gate glasses. When cementing weatherstrips in position, it should be applied with a brush or light cement gun to both the rubber and the wood or metal surfaces and allowed to dry until "tacky", before pressing rubber to place.

3-M AUTOBODY SEALER

This compound is a black, medium-heavy, flexible rubber sealer for general use in sealing welded body seams along the floor and side panel areas inside the body. It is also used for sealing body moldings. It is non-drying, and the ability to stay in place without flowing makes this sealer useful for many purposes. It is available in quart and gallon containers.

3-M SYNTHETIC RUBBER ADHESIVE

This cement is a synthetic rubber base adhesive developed especially for bonding synthetic rubbers to metal and wood surfaces, such as rubber weatherstrip to door flanges. This adhesive forms a permanent leakproof bond which will not dry out or chip. It can be applied with a brush or pressure gun. This cement is used primarily for synthetic rubber and is available in tubes, pint, quart or gallon containers. NOTE: This adhesive can be used for cementing rubber weatherstrips on bodies built since 1946. For cementing rubber weatherstrips on bodies prior to 1946, use 3-M Weatherstrip Cement.



3-M TRIM CEMENT

This colored adhesive is used for cementing floor carpets, trim fabrics to metal panels, etc. This cement has the "quick tack" and "wet strength" to permit cementing the trim in place quickly and securely. It is especially developed to adhere to fabrics without bleeding through to cause discoloration.

3-M FELT PAD ADHESIVE

This is a heavy black cement used for attaching all types of deadener pads to the metal surfaces of roofs, doors, and other panels. Applied with a brush, spreader or knife, it resists extremes of temperature, remaining plastic and high in adhesive strength, whether exposed to heat or cold. It is available in quart and gallon containers.

3-M UNDERSEAL

This sealer is a sprayable brown coating for use on the metal body surfaces underneath the car. It acts as an insulator against extremes of temperature and noise, and is especially adaptable to sealing all welded seams and crevices against entrance of dust and water thrown up by the wheels of the car. This flexible sealer can be applied with a brush or spreader or for economy may be used in a spray gun. It is available in 5 gallon pails or 55 gallon drums.

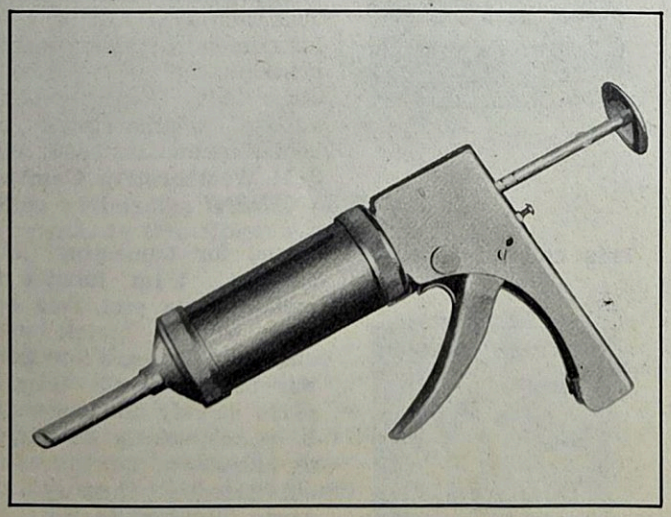
CAULKING COMPOUND

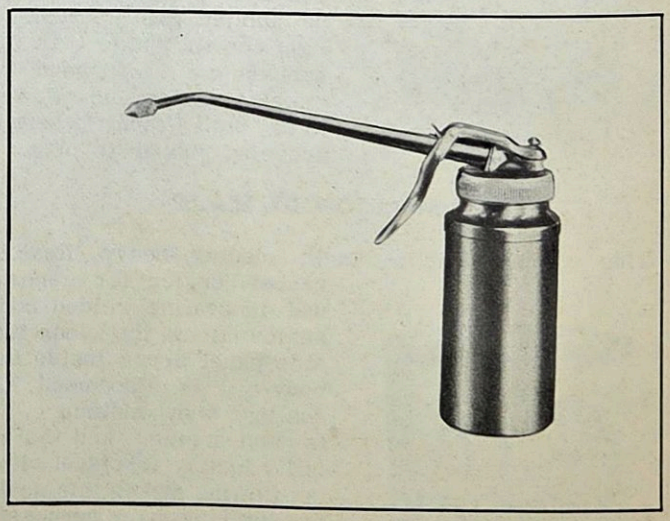
This compound, sold commercially as "Kalk Kord", is a gray putty like compound remaining pliable after application and is used for anti-friction and sealing purposes on end grain wood, between wood and wood, between wood and metal surfaces.

SEALING GUNS AND THEIR USE

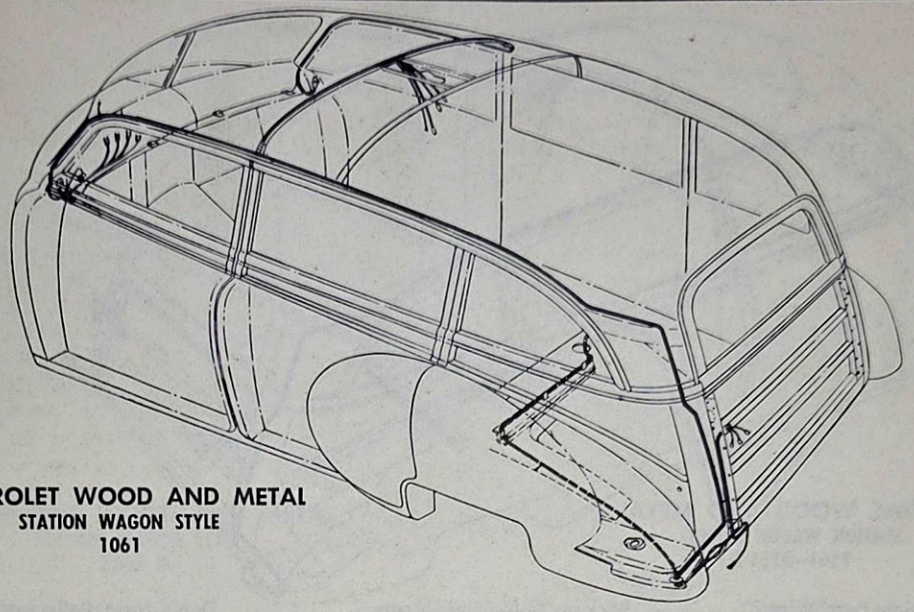
Due to the adhesive power of some cements and sealers, the application of these compounds to the body parts is most always unsatisfactory if the compounds are applied with a flat stick, the end of a screw driver, or a putty knife. This method of application is not only wasteful, but valuable time is lost cleaning up excess compound and smeared parts after the job is completed. There is also the likelihood that the compound may get on the clothing of the workman and eventually on the trimmed parts of the car.

For economy, ease of application, and as a time saver, sealing guns should be used for work of this kind. These guns are inexpensive and are used by most modern body shops throughout the country.





The larger gun, seen in the left illustration above, has a flow adjustment and is used for heavy bodied compounds such as "Autobody Sealer". The smaller, trigger type gun, right, is used for light bodied cements such as "Weatherstrip Cement". The guns are obtainable at most any auto supply or jobber in your locality.



CHEVROLET WOOD AND METAL
STATION WAGON STYLE
1061

Tail and License Light Feed Wire
Natural with Black Cr. Tr.

Stop Light Wire
Natural with Black and Green Cr. Tr.

Dome Lamp Feed Wire
Natural with Red Cr. Tr.

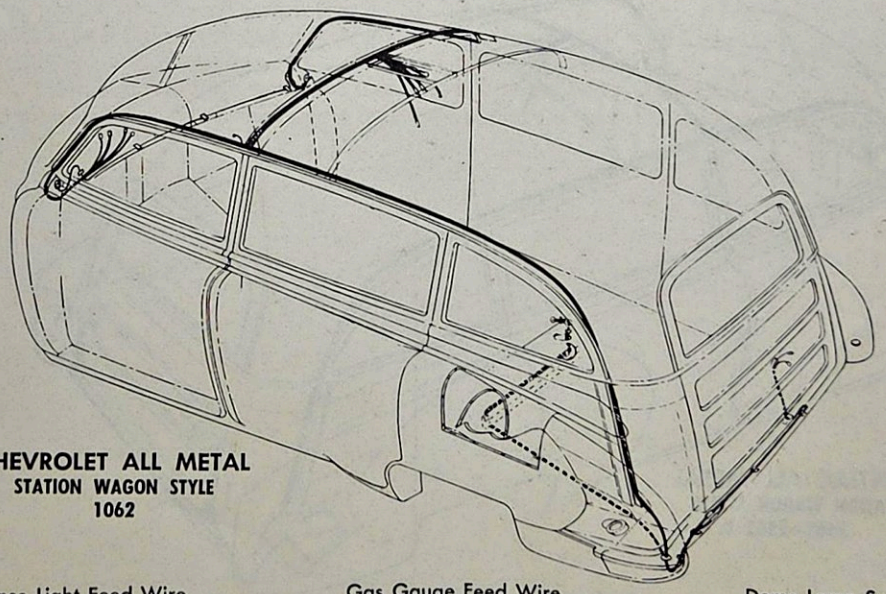
Gas Gauge Feed Wire
Natural with Black Tr.

Dome Lamp Reflector Ground Wire
Natural with Green Tr.

Dome Lamp Ground Wire
Natural

Dome Lamp Switch Ground Wire
Natural

Ground Wire
Black



CHEVROLET ALL METAL
STATION WAGON STYLE
1062

Tail and License Light Feed Wire
Natural with Black Cr. Tr.

Stop Light Wire
Natural with Black and Green Cr. Tr.

Dome Lamp Feed Wire
Natural with Red Cr. Tr.

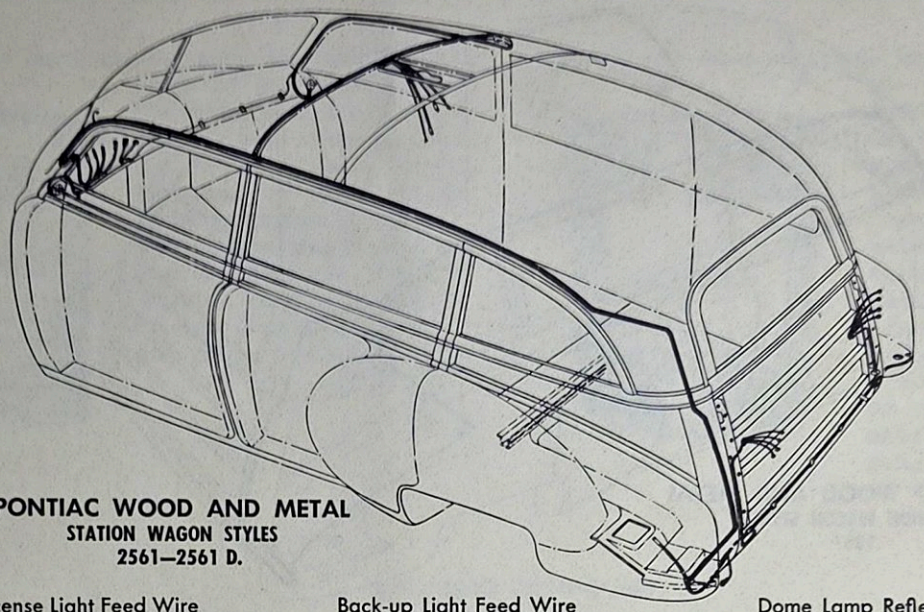
Gas Gauge Feed Wire
Natural with Black Tr.

Dome Lamp Reflector Ground Wire
Natural with Green Tr.

Dome Lamp Ground Wire
Natural

Dome Lamp Switch Ground Wire
Natural

Ground Wire
Black



PONTIAC WOOD AND METAL
STATION WAGON STYLES
2561—2561 D.

Tail and License Light Feed Wire
Natural with Black Cr. Tr.

Left Stop and Directional Light Feed Wire
Grey with Red Tr.

Right Stop and Directional Light Feed Wire
Grey with Black Tr.

Dome Lamp Feed Wire
Natural with Red Cr. Tr.

Back-up Light Feed Wire
Natural with Black and Red Cr. Tr.

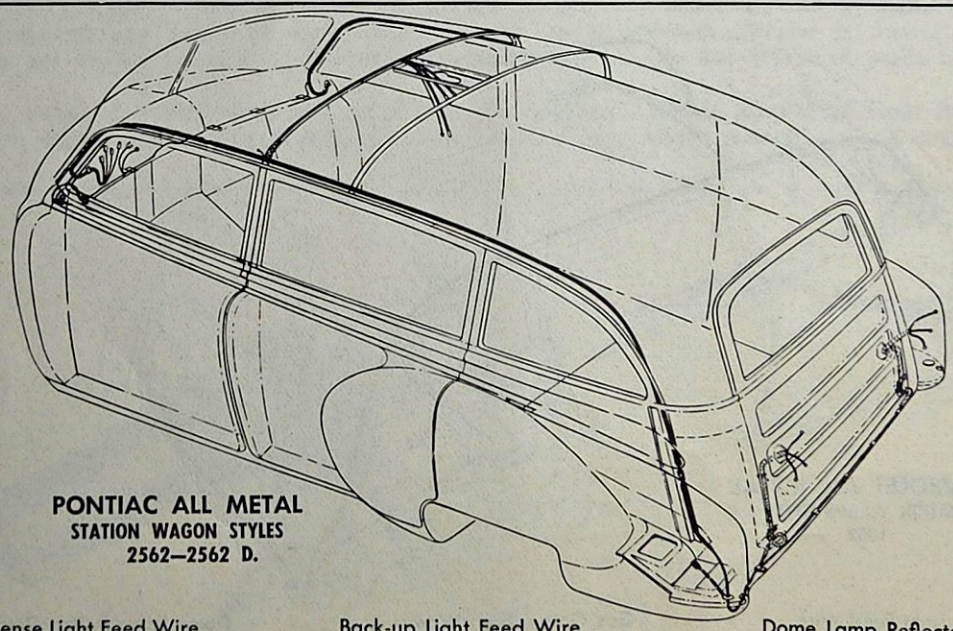
Gas Gauge Feed Wire
Black

Dome Lamp Ground
Natural

Dome Lamp Switch Ground
Natural

Dome Lamp Reflector Ground Wire
Natural with Green Tr.

Ground Wire
Black



PONTIAC ALL METAL
STATION WAGON STYLES
2562—2562 D.

Tail and License Light Feed Wire
Natural with Black Cr. Tr.

Left Stop and Directional Light Feed Wire
Grey with Red Tr.

Right Stop and Directional Light Feed Wire
Grey with Black Tr.

Dome Lamp Feed Wire
Natural with Red Cr. Tr.

Back-up Light Feed Wire
Natural with Black and Red Cr. Tr.

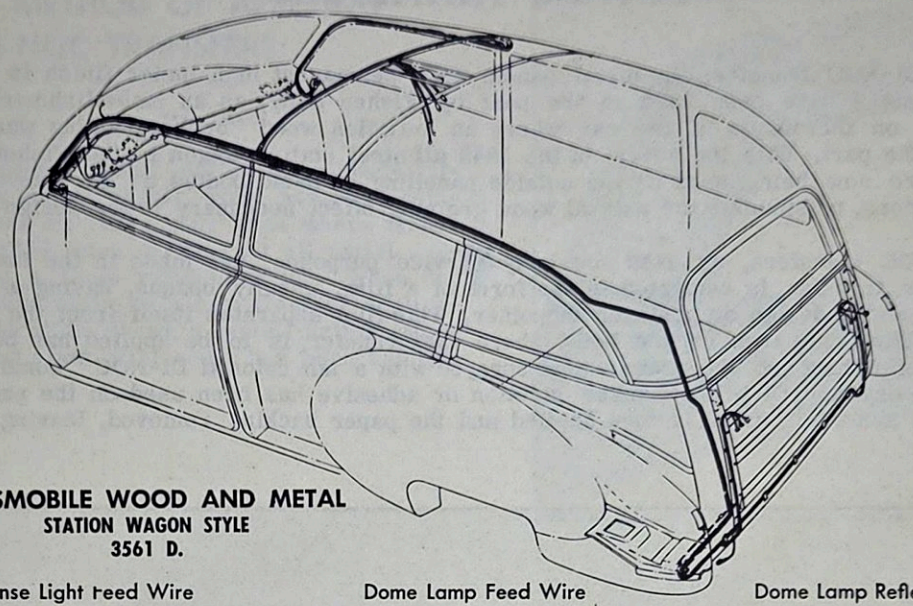
Gas Gauge Feed Wire
Black

Dome Lamp Ground
Natural

Dome Lamp Switch Ground
Natural

Dome Lamp Reflector Ground Wire
Natural with Green Tr.

Ground Wire
Black



OLDSMOBILE WOOD AND METAL
STATION WAGON STYLE
3561 D.

Tail and License Light Feed Wire
Natural with Black Cr. Tr.

Left Stop and Directional Light Feed Wire
Natural with Green and Black Cr. Tr.

Right Stop and Directional Light Feed Wire
Natural with Green Cr. Tr.

Dome Lamp Feed Wire
Natural with Red Cr. Tr.

Dome Lamp Ground Wire
Natural

Dome Lamp Switch Ground Wire
Natural

Dome Lamp Reflector Ground Wire
Natural with Green Tr.

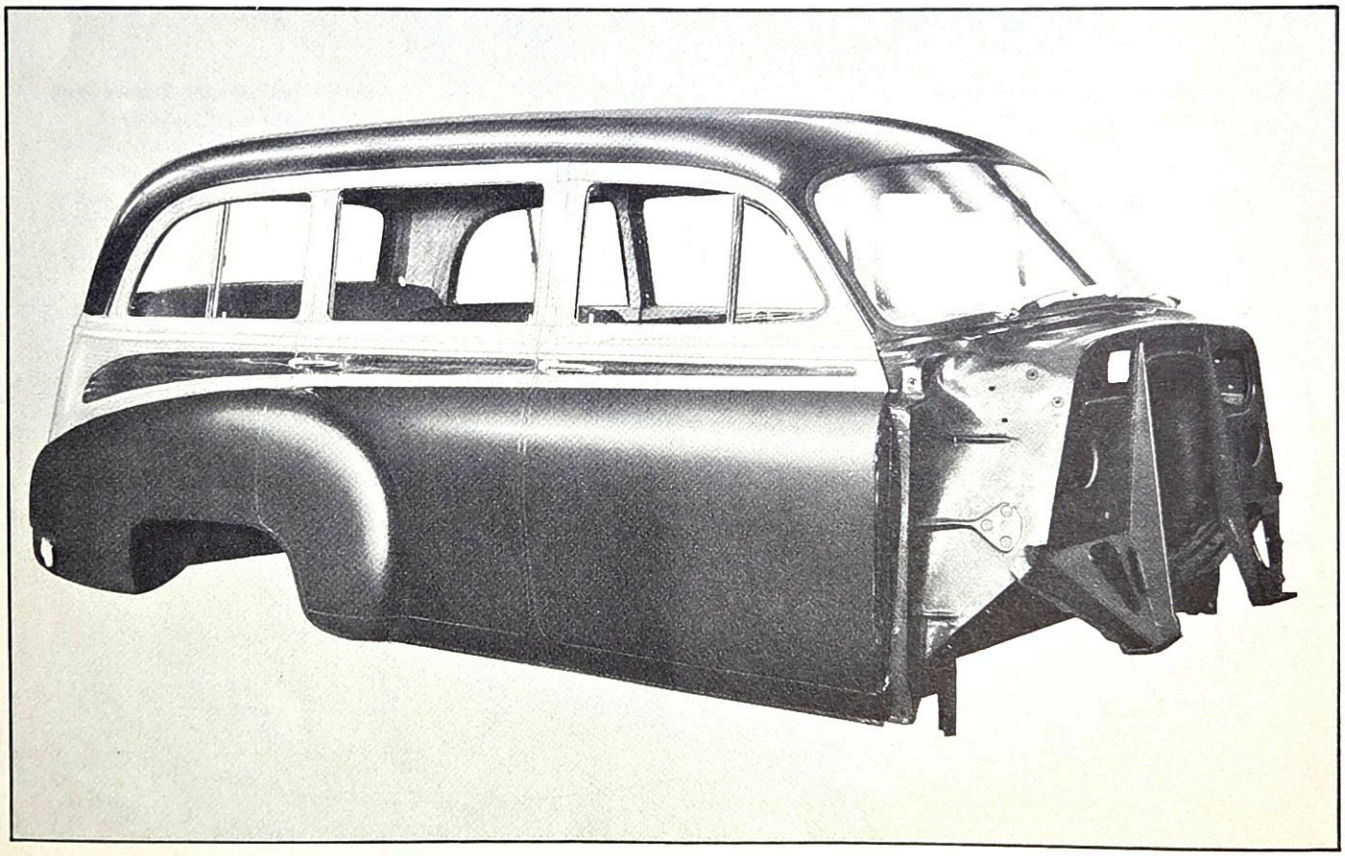
Gas Gauge Feed Wire
Natural with Black Tr.

Ground Wire
Black

DI-NOC TRANSFERS

The application of DI-NOC transfers to metal panels as a permanent high luster finish is not a new principle. DI-NOC transfers have been used in the past by Fisher Body, as an embellishment for instrument panels and moldings on the inside of the car where an imitation wood "burl" graining was desired to enhance the beauty of the part. With the advent of the 1949 all steel station wagon in the Fisher line of bodies, DI-NOC transfers are now being used on the outside panelling of these bodies on the doors, rear quarters, lift and tail gate sections, to simulate the natural wood graining effect necessary in the design of these bodies.

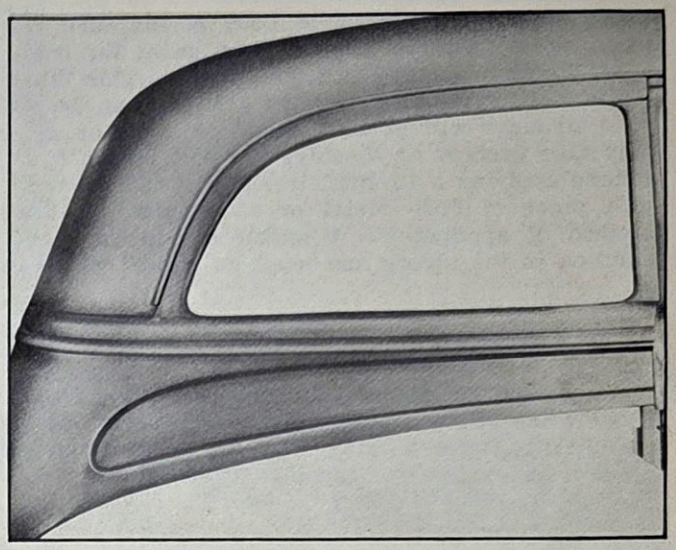
In composition DI-NOC transfers, as used for body service purposes, are made in the form of a sheet of paper onto which the transfer is cemented in the form of a film, usually opaque, having a ground color on one side of the film and a design or grain on the other. This film separates itself from the paper when immersed in water. After the area on the body where the transfer is to be applied has been prime-coated similar to a Duco refinishing job, the area is then sprayed with a tan colored DI-NOC "bonding coat." After the bonding coat is dry and DI-NOC transfer solution or adhesive has been used on the panel according to directions, the water soaked transfer is then applied and the paper backing removed, leaving only the transfer film.

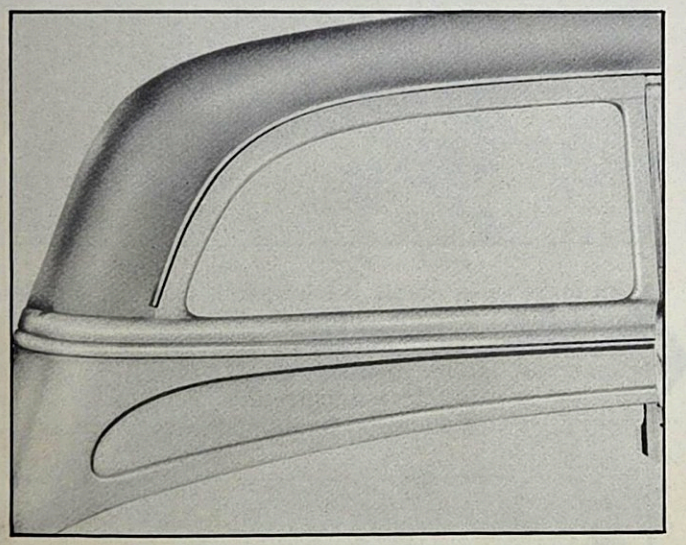


In servicing or repairing the grained finish on all steel station wagon bodies, DI-NOC transfers are available in sheets approximately 32x55 inches or 21x48 inches, depending on the grained design. The transfer on each sheet is paper covered and designed with an over-all simulated wood graining effect which includes straight graining of varying widths, also "crotch" graining. In addition to white ash graining, dark and medium mahogany graining is also available for panel inlay work. By holding the sheet before a strong light, the graining effect can be readily noted, and the portion needed to match the design for the repair can be cut out and applied to the body panel, using the outline as specified in the procedure which follows. From a body service standpoint, the application of DI-NOC transfers to body panels is not a difficult operation, with a little practice, a body refinisher can do a remarkably fine looking job.

SERVICE METHOD OF APPLYING DI-NOC TRANSFERS

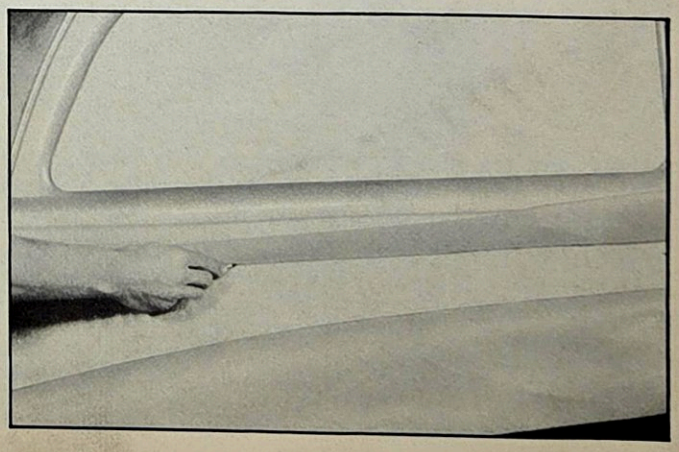
To refinish a damaged metal station wagon body, after all damaged metal repair work has been completed, first "mask off" the repair area where transfer is to be applied, then prime-coat all metal surfaces similar to a Duco refinishing job. When dry sand smooth preparatory to a new transfer application. This illustration shows a metal station wagon rear quarter panel after prime-coat has been applied.





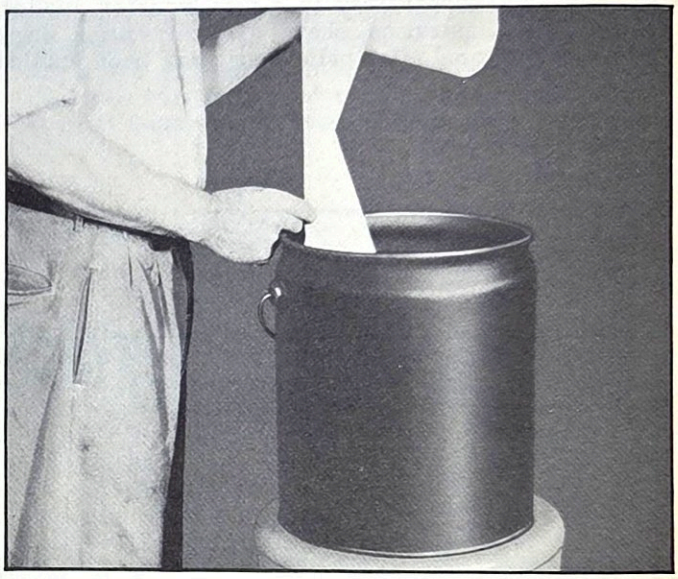
Over the primed surface of the repair area, spray on the recommended DI-NOC transfer bonding coat No. K-36 (See Car Divisions part list). This is a tan colored coat which acts as a binder or base for the DI-NOC transfer adhesive. CAUTION: Be sure and use the bonding coat as recommended. Let bonding coat air dry approximately one hour. If infra lights are used, allow twenty minutes drying time. Infra lights should be located nine inches from the body panel. When dry, lightly wet sand bonding coat and wipe clean. This illustration shows transfer area of the outside panelling after bonding coat has been applied.

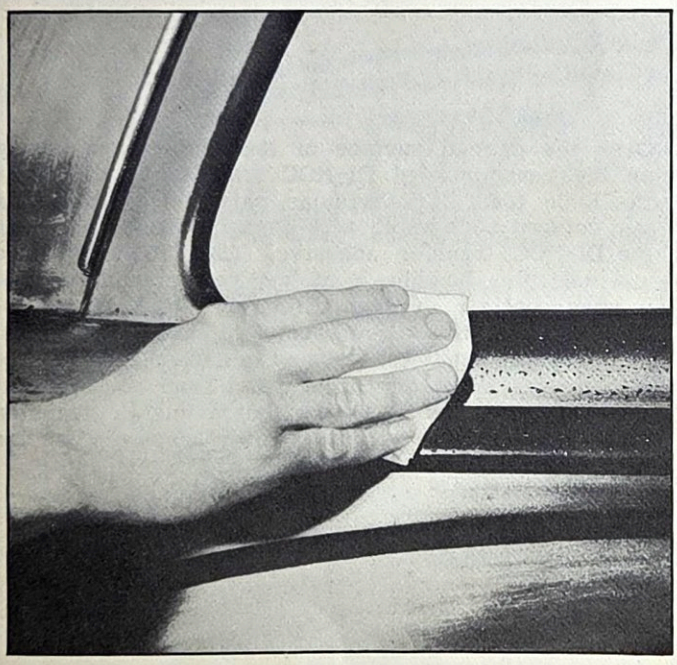
Next, using the new transfer, select the proper grain character to match the grain character on the original finish of the station wagon. This can be accomplished by holding the new transfer in front of a bright light so that graining can be observed through the paper backing. To determine the size of transfer to be used, make a paper template to fit the damaged area, then apply the template to the selected portion of the new transfer sheet and cut accordingly. NOTE: Allow about 1/2" extra material around edge of transfer to allow for variation in matching and trimming. This illustration shows operator preparing a template to fit the inlay panelling of the quarter panel.



For cementing transfers to body panels, use transfer adhesive DI-NOC No. A-1171 Welding Solution (this is an amber colored cement sold under the trade name of Welding Solution). Mix up a solution of 20% DI-NOC Welding Solution and 80% water. This diluted solution allows for moving or shifting the transfer after it has been applied so that the graining can be matched. If pure adhesive is used without water dilution, the pure adhesive will be too "tacky" to shift or move the transfer after it is applied and the strong adhesive may also destroy or dissolve the film on the transfer. Be sure and dilute the adhesive as specified. NOTE: Before applying a DI-NOC transfer, it is recommended that a trial sample of transfer and solution be applied to a piece of body metal or old fender, until the operator becomes familiar with the proper solution and method of application. If unable to pull the piece of transfer off the panel after two minutes, the transfer solution is too strong and must be diluted with more water.

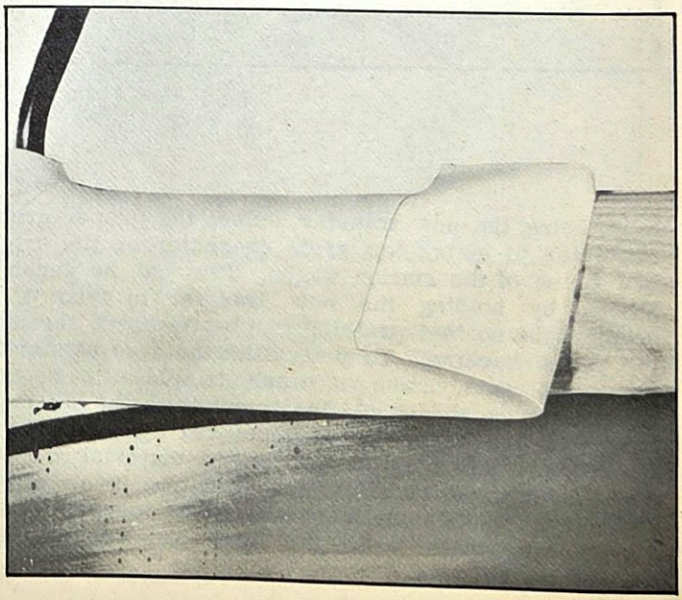
Immerse the cut transfer in tepid water for approximately one minute so as to loosen the paper backing. CAUTION: Paper backing must not be removed until after transfer has been applied to body.



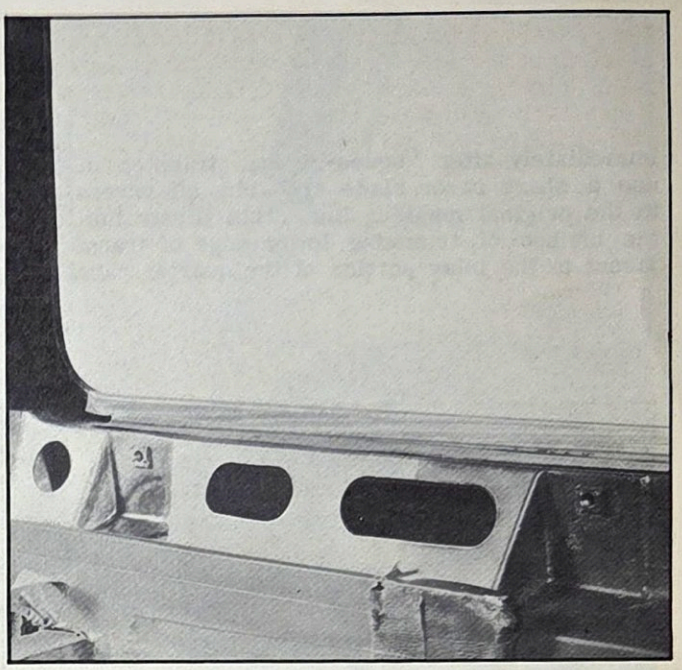


Next, make up a small cheese cloth pad and dip into the DI-NOC solution, diluted as explained. Apply saturated pad with solution to the body panel where transfer is to be applied. CAUTION: Any excess adhesive solution that accidentally runs down on to adjacent body panels must be immediately wiped away.

Apply wet transfer to adhesive on body panel, paper side out. After carefully adjusting transfer to match graining character on adjoining original finish, carefully remove the paper backing.

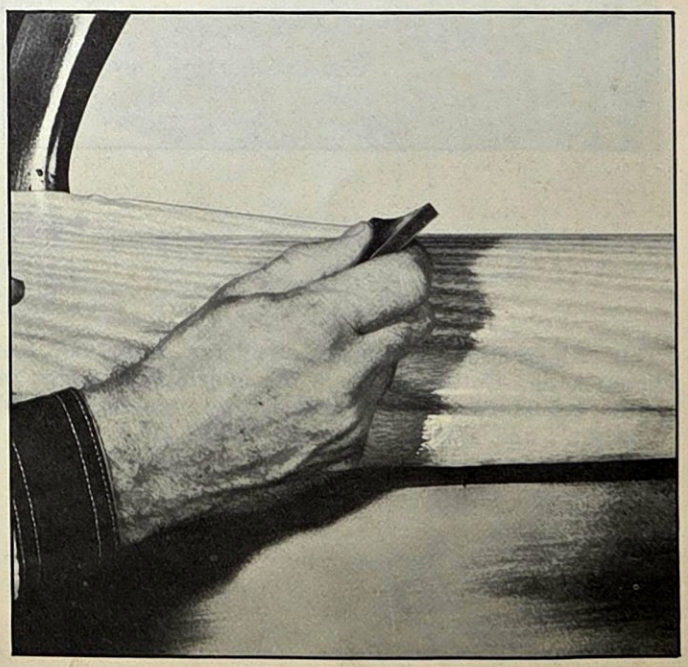


Around window openings, transfer must be of sufficient width so that it can be lapped-over and cemented to the inner flange of the window opening as shown in this illustration.

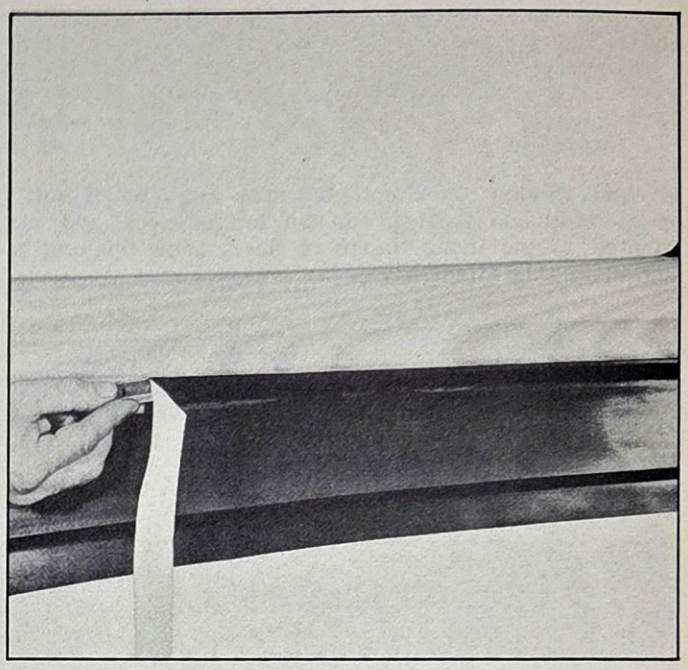


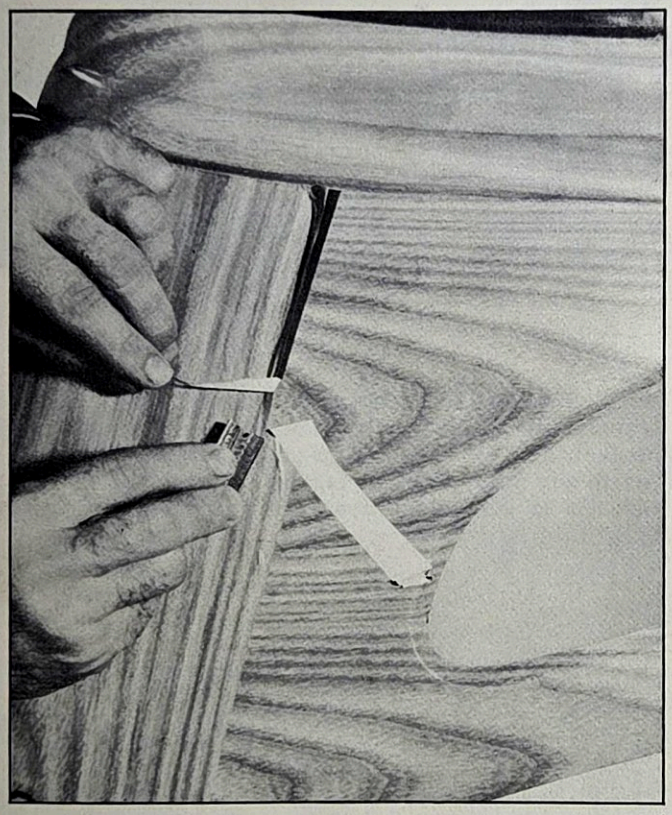
With clean water, sponge all areas of the applied transfer to remove all traces of paper backing adhesive. NOTE: Once the operation of applying transfer to the body panel is started, it must be followed through to its completion before adhesive begins to set.

After transfer is in place, use a rubber "squee-gee" bevelled at one end (Size 1/4" x 2" x 3") and with an over-lapping stroking motion, level off the transfer from the center or high point of metal panel towards its outer edges so as to remove all air bubbles and wrinkles. The "squee-gee" should be particularly used around the panel creases and panel edges so as to insure a firm bond. As a lubricant for the "squee-gee" use plain water.



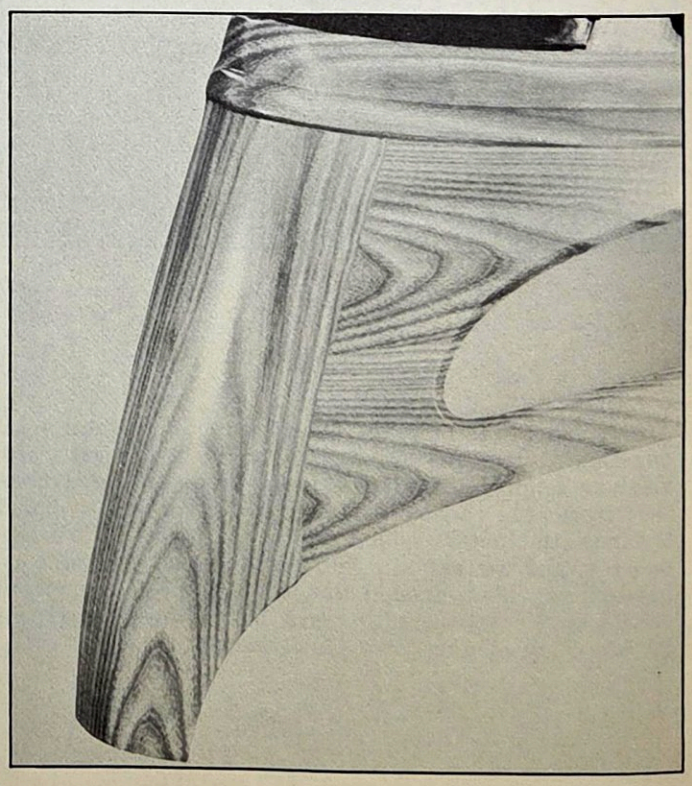
Immediately after "squee-geeing" transfer in place, use a sharp razor blade and trim off excess edges to the original masking line. This illustration shows the method of trimming lower edge of transfer adjacent to the inlay portion of the quarter panel.



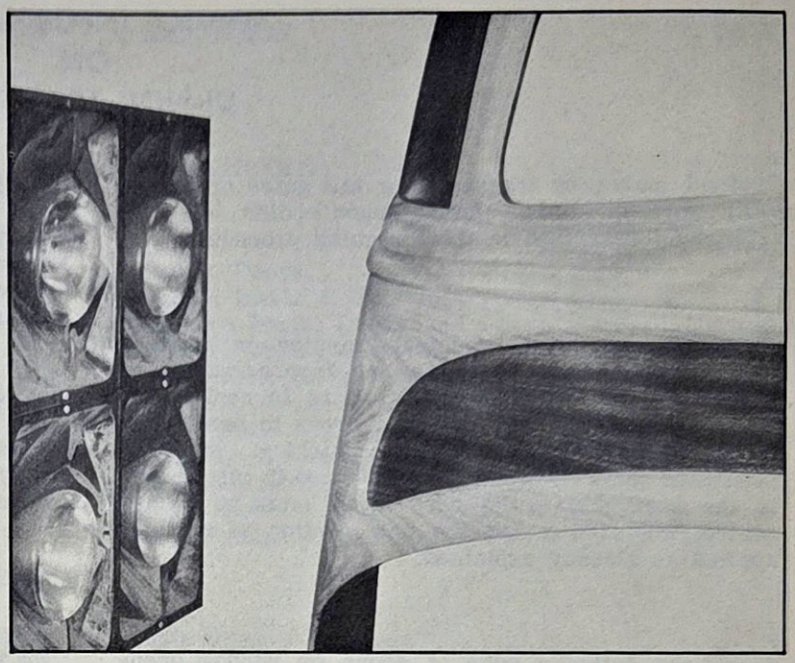


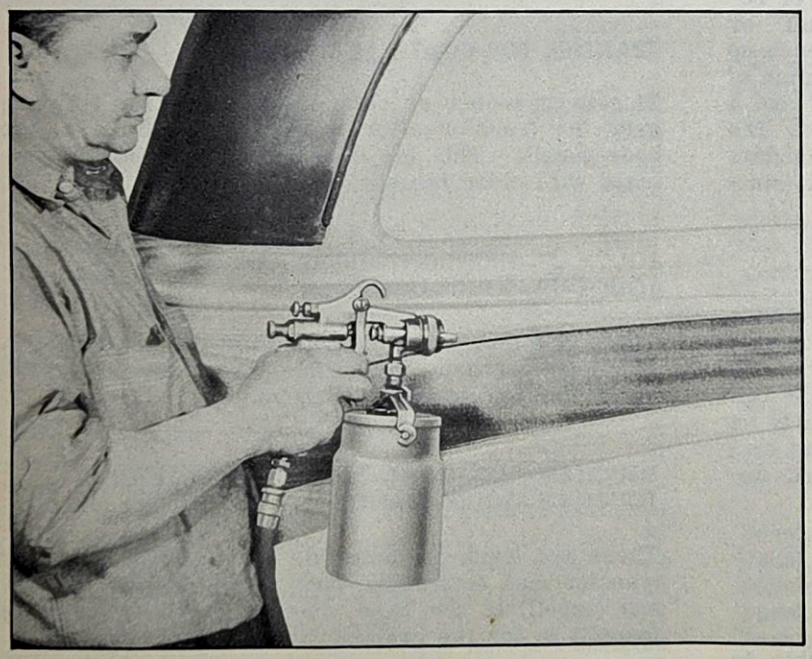
At the extreme rear quarter, the transfer is applied so that the graining runs vertically. Apply this section of transfer so that it overlaps the side section. Then, after establishing a junction point at the top and bottom, cut vertically through the overlapping edges of both transfers with a razor blade. Turn back transfer and remove surplus.

This illustration shows the transfer after cut has been made. Cutting through the overlapping edges of both transfers as described, eliminates raised "seams" and allows a perfect "butt" fit.



Wash the transfer carefully with clear water and dry with a chamois. Pierce any blister or small air bubbles as they appear, then press the pierced area with the fingers to squeeze out air and excess solution. If infra lights are used for drying, place these lights approximately nine inches from the panel at a temperature of 160 degrees for approximately twenty minutes.





To complete the operation, when transfer is dry, spray on a coat of Transfer Top Coat R.M. XP-2857 (See service number in Car Divisions parts book). This sealer is used as a further protective coating for the applied transfer. CAUTION: DO NOT USE CLEAR LACQUER. After spraying, apply drying lights as previously explained.

SERVICE INFORMATION ON DI-NOC TRANSFERS

Grained mahogany transfers for tail gates and panel inlay work on metal station wagon bodies are also applied as described in the foregoing procedure.

If the damage to the original transfer on the body panel is extensive, consisting of deep scratches or abrasions, the best thing to do is to replace the complete damaged section from break to break with a new transfer, in preference to patching. The deep scratches must be "feather-edged" and if cut through to the bare metal, the bare metal must be prime-coated, wet sanded and the new section of transfer applied as already explained.

Along the extreme edge of doors or window openings, minor chips or abrasions can be satisfactorily taken care of by a brush or touch-up method of repair. Chipped areas must first be "levelled off" or "feather-edged" before touch-up begins. Touch-up material for this purpose, depending on the color of the transfer, comes in two colors, a light and a dark. The light color is used as the base coat. The dark color is used with a pencil brush to simulate the graining effect over the lighter base coat (similar to "stippling").

For service repair of DI-NOC transfers, a service repair kit consisting of bonding coat, adhesive, "squee-gees," top coat and touch-up material, is available. In addition, these items may also be ordered separately. The part numbers of the parts as listed, may be identified in each Car Divisions current parts list under the following names and description:

TRANSFER—EXTERIOR BODY—ASH

This is a light ash grained transfer available in sheets approximately 32x55 inches. Each sheet is designed with straight graining, curved graining and "crotch" graining. These designs can be cut to match the graining of the repair.

TRANSFER—EXTERIOR BODY—MAHOGANY (SAPELI)

This is a dark mahogany grained transfer for exterior panel inlay work, which comes in sheets approximately 21x48 inches. This transfer can also be cut apart to obtain the grain design needed.

TRANSFER—INTERIOR BODY—MAHOGANY (AFRICAN)

This is a light mahogany grained transfer for body interior use on tail gates and interior panelling. This comes in sheets, size 21x48 inches similar to the dark mahogany.

BONDING COAT MATERIAL K-36

This is a tan colored sprayable liquid for use on body panels after they are prime-coated and before transfer adhesive is applied.

WELDING SOLUTION A-1171

This is an amber colored adhesive used for cementing transfers to body panels. It must be thinned with water in the proportion as specified, before using.

TRANSFER TOP COAT R.M. XP-2857

This is an amber or clear sealer used for spraying over the transfer after it has been applied to the body panels. This top coat sealer must not be confused with clear lacquer.

TOUCH-UP—HIGHLIGHT—LIGHT ASH
TOUCH-UP—SOLID—LIGHT ASH

These are touch-up materials for the ash transfer. The highlight ash is for the base coat. The solid ash is for the graining touch-up.

TOUCH-UP—HIGHLIGHT—MAHOGANY (SAPELI)
TOUCH-UP—SOLID—MAHOGANY (SAPELI)

These are touch-up materials for the dark mahogany transfer used outside the body. The highlight mahogany (sapeli) is the base coat. The solid mahogany (sapeli) is for the graining touch-up.

TOUCH-UP—HIGHLIGHT—MAHOGANY (AFRICAN)
TOUCH-UP—SOLID—MAHOGANY (AFRICAN)

These are touch-up materials for the light mahogany transfers used inside the body. The highlight mahogany (African) is the base coat. The solid mahogany (African) is for the graining touch-up.

Notes