



# CHEVROLET



1927 Chevrolet. Capitol, coach (with Alfred Sloan), JAC

**1927**



ORIGINAL



# SPECIFICATIONS 1927

CAPITOL MODELS  
JULY-1

# 1927 MOTOR SPECIFICATIONS

## VALVES

MODEL	BORE OF THROAT	LIFT	LASH	TAPPET	TIMING DIAGRAM
CAPITOL TOURING	$\frac{129}{64}$	$\frac{7}{32}$	.0135	$\frac{1}{4}$ DIA. SPHER. RADIUS ON CAM END	
CAPITOL ROADSTER					
CAPITOL SEDAN					
CAPITOL LANDAU					
CAPITOL COACH					
CAPITOL COUPE					
CAPITOL CBL					
CAPITOL IMP.					
CAPITOL SED. CHASSIS					
CAPITOL TOUR CHASSIS					
CAPITOL COM. CHASSIS					
CAPITOL "T.F.P. TRUCK					



# 1927 MOTOR SPECIFICATIONS

MODEL	HORSEPOWER		FAN			STARTING, LIGHTING AND IGNITION				GEAR RATIO				
	N. A. C. C.	MAX.	DIA.	NO. OF BLADES	BEARING	BELT	TYPE	SYSTEM	BATTERY					
CAPITOL TOURING														
CAPITOL ROADSTER														
CAPITOL SEDAN														
CAPITOL LANDAU														
CAPITOL COACH														
CAPITOL COUPE	21.7	26 <sup>3</sup> / <sub>4</sub>	15	2										
CAPITOL C.B.L.														
CAPITOL I.M.P.														
CAPITOL SED. CHASSIS														
CAPITOL TOUR CHASSIS														
CAPITOL COM. CHASSIS														
CAPITOL UT. EXP. TRUCK														
					DUREX COMPOSITION									
					VULCANIZED FABRIC									
					6 VOLT, SEPARATE UNITS HIGH TENSION DISTRIBUTOR SINGLE WIRE SYSTEM									
					REMY IGNITION REMY STARTER & GENERATOR									
					<table style="margin: auto; border: none;"> <tr> <td style="border: none;">WILLARD</td> <td rowspan="3" style="border: none; vertical-align: middle;">OPTIONAL</td> <td rowspan="3" style="border: none;">DOMESTIC AND EXPORT</td> </tr> <tr> <td style="border: none;">USL</td> </tr> <tr> <td style="border: none;">EXIDE</td> </tr> </table>					WILLARD	OPTIONAL	DOMESTIC AND EXPORT	USL	EXIDE
WILLARD	OPTIONAL	DOMESTIC AND EXPORT												
USL														
EXIDE														
					STARTER TO FLY WHEEL = 10 - 1									





## 1927 MOTOR SPECIFICATIONS

MODEL	CAMSHAFT BEARING			CRANKSHAFT BEARING			CRANKSHAFT CENTER TO TOP OF CYLINDERS	OIL - ING. SYSTEM	OIL CAPACITY QUARTS	TYPE OF WATER PUMP	WATER CAPACITY QUARTS
	FRONT	CENTER	REAR	FRONT	CENTER	REAR					
CAPITOL TOURING								SPLASH SYSTEM OIL CIRCULATED BY ROTOR PUMP IN CRANK CASE	5	CENTRIFUGAL	7 <sup>17</sup> / <sub>32</sub>
CAPITOL ROADSTER											
CAPITOL SEDAN											
CAPITOL LANDAU	1 <sup>5</sup> / <sub>16</sub> X 2 <sup>3</sup> / <sub>8</sub>	1 <sup>9</sup> / <sub>32</sub> X 2	1 <sup>1</sup> / <sub>4</sub> X 1 <sup>7</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>8</sub> X 2 <sup>5</sup> / <sub>16</sub>	1 <sup>11</sup> / <sub>16</sub> X 1 <sup>11</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>4</sub> X 3	12 <sup>3</sup> / <sub>8</sub>				
CAPITOL COACH											
CAPITOL COUPE											
CAPITOL CBL											
CAPITOL /MP											
CAPITOL SED. /MSSIS											
CAPITOL TOUR CHASSIS											
CAPITOL COM CHASSIS											
CAPITOL UT EXP. TRUCK											



# 1927 TRANSMISSION SPECIFICATIONS

MODEL	TYPE OF TRANS-MISSION	TYPE OF CLUTCH	AREA OF CLUTCH SURFACE	RATIO OF TRANS. GEAR SPEED			GEAR PITCH	WIDTH OF FACE	DRIVE SHAFT END ACROSS CORNER	TYPE	ACROSS FLATS
				FIRST	SECOND	THIRD					
CAPITOL TOURING	SELECTIVE SLIDING GEAR 3-SPEEDS FORWARD - 1-REVERSE	SINGLE PLATE-DRY	65.87	3.32-1	1.77-1	1-1 (DIRECT DRIVE)	7-9	$\frac{5}{8}$	$\frac{1}{16}$	SQUARE	$\frac{7}{8}$
CAPITOL ROADSTER											
CAPITOL SEDAN											
CAPITOL L. ANDRU											
CAPITOL COACH											
CAPITOL COUPE											
CAPITOL CBL											
CAPITOL IMP											
CAPITOL SED. CHASSIS											
CAPITOL TOUR CHASSIS											
CAPITOL COM. CHASSIS											
CAPITOL UT EXP. TRUCK											

# 1927 CHASSIS SPECIFICATIONS

MODEL	WHEEL BASE	TREND	TIRES	WHEELS	FRAME				STEERING WHEEL			
					OVERALL WID. H	OVERALL LEN. TH	SEC. ION	KICK UP	TYPE	ANGLE OF POST	DIA. OF POST	DIA. OF WHEEL
CAPITOL TOURING	103	56	29X440 BALLROOM 29X440	29X440 DISC	FRONT 25 <sup>55</sup> / <sub>64</sub>	146 <sup>1</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub> X 1 <sup>1</sup> / <sub>2</sub> X <sup>5</sup> / <sub>32</sub>	4 <sup>7</sup> / <sub>8</sub>	SEMI REVERSIBLE FULL WORM GEAR	4 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	17
CAPITOL ROADSTER												
CAPITOL SEDAN												
CAPITOL LANDAU												
CAPITOL COACH												
CAPITOL COUPE												
CAPITOL C.B.L.												
CAPITOL IMP.												
CAPITOL SED. CHASSIS												
CAPITOL TOUR CHASSIS												
CAPITOL COM. CHASSIS	124		29X440 BALLROOM 29X440	29X440 DISC	REAR 44 <sup>55</sup> / <sub>32</sub>	176 <sup>25</sup> / <sub>32</sub>	6 X <sup>3</sup> / <sub>4</sub> X <sup>5</sup> / <sub>32</sub>	24		49		
CAPITOL VTEP. TRUCK												

# 1927 CHASSIS SPECIFICATIONS

MODEL	FRONT AXLE					REAR AXLE										
	SECTION	STERING	NOM DIA OF SPINDLE	DIA OF KING BOLT	WHEEL BEARINGS	TYPE	DRIVE GEARS		FACE		DIA. OF AXLE INNER END					
				INNER	OUTER	RATIO	TEETH RING	PITCH PINION	PITCH							
CAPITOL TOURING	I BEAM	FORE AND AFT	$1\frac{3}{16}$	$\frac{9}{16}$	NEW DEPARTURE # 909002		NEW DEPARTURE # 909001		SEMI FLOATING		3.818-1	42	11	4.94	$1\frac{1}{8}$	$1\frac{1}{8}$
CAPITOL ROADSTER																
CAPITOL SEDAN																
CAPITOL LANDRAU																
CAPITOL COACH																
CAPITOL COUPE																
CAPITOL CAB																
CAPITOL IMP																
CAPITOL SED. CHASSIS																
CAPITOL TOUR CHASSIS																
CAPITOL COM. CHASSIS	5.43-1	38	7	3.455	$1\frac{5}{16}$	$1\frac{31}{64}$										
CAPITOL UT EXP. TRUCK																



# 1927 CHASSIS SPECIFICATIONS

MODEL	DIFFERENTIAL RADIAL AND THRUST BEARING	WHEEL BEARING	REAR AXLE		TYPE OF DRIVE	
			PROPPELLOR SHAFT DIR. OF SHAFT	FRONT BEARING		REAR BEARING
CAPITOL TOURING	NEW DEPARTURE # 902208	NEW DEPARTURE # 901307	$\frac{1}{8}$	NEW DEPARTURE # 900305	NEW DEPARTURE # 901307	EXTRA HEAVY SPIRAL CUT BEVEL GEAR
CAPITOL ROADSTER						
CAPITOL SEDAN						
CAPITOL LANDAU						
CAPITOL COACH						
CAPITOL COUPE						
CAPITOL C.B.L.						
CAPITOL IMP.						
CAPITOL SED. CHASSIS						
CAPITOL TOUR. CHASSIS						
CAPITOL CDM. CHASSIS	N. D. # 902211	N. D. # 901309	$\frac{1}{4}$	N. D. # 900307	N. D. # 901407	
CAPITOL UT EXP. TRUCK						

# 1927 CHASSIS SPECIFICATIONS

MODEL	SERVICE BRAKE				EMERGENCY BRAKE			
	TYPE OF REAR WHEEL BRAKE	DIA. OF DRUM	WIDTH OF BAND	AREA SQ. INCHES	TYPE OF REAR WHEEL BRAKE	DIA. OF DRUM	WIDTH OF BRAKE	AREA SQ. INCHES
CAPITOL TOURING	EXTERNAL CONTRACTING		2	$140 \frac{29}{32}$	INTERNAL EXPANDING		$1 \frac{3}{4}$	$116 \frac{45}{64}$
CAPITOL ROADSTER								
CAPITOL SEDAN								
CAPITOL LANDAU								
CAPITOL COACH								
CAPITOL COUPE								
CAPITOL C.B.L.								
CAPITOL IMP.								
CAPITOL SED. CHASSIS								
CAPITOL TOUR. CHASSIS								
CAPITOL COM. CHASSIS	$11$	$2$	$131 \frac{35}{64}$	$10 \frac{11}{16}$	$70$			
CAPITOL UT. EXPT. RUCK	$12 \frac{3}{8}$	$2$	$140 \frac{29}{32}$	$12$	$116 \frac{45}{64}$			

# 1927 CHASSIS SPECIFICATIONS

MODEL	CAPACITY OF GASOLINE TANK	GAS FEED	CROSS SECTION OF TANK	FRONT SPRING				REAR SPRING			
				TYPE	LENGTH EYE TO EYE	W. H	NUMBER OF LEAVES	TYPE	LENGTH EYE TO EYE	W. H	NO. OF LEAVES
CAPITOL TOURING	10 GALLONS	VACUUM TANK SYSTEM		SEMI ELLIPTIC	36	$1\frac{3}{4}$	7	SEMI ELLIPTIC	54	$1\frac{3}{4}$	7
CAPITOL ROADSTER											6
CAPITOL SEDAN											8
CAPITOL LANDAU											8
CAPITOL WAGON											8
CAPITOL COUPE											6
CAPITOL SEV.											7
CAPITOL MP											8
CAPITOL SED. CHASSIS											8
CAPITOL TOUR. CHASSIS											7
CAPITOL CONT. CHASSIS	GALLONS 10 1/2										8
CAPITOL UTEN. TRUCK											13



# 1927 COMPLETE CAR SPECIFICATIONS

MODEL	CAPACITY	DRIVE	CURB WEIGHT (CAR WEIGHT & OIL) (GASOLINE & WATER)			SHIPPING WEIGHT	ROAD CLEARANCE	MIN. TURNING RADIUS	TOP MATERIAL	OVERALL DIMENSIONS		
			FRONT	REAR	TOTAL					LENGTH TOP DOWN	WIDTH	HEIGHT TOP UP
CAPITOL -WINING	5 PASSENGERS	RIGHT AND LEFT	965	1070	2035	1965	$8\frac{1}{16}$	$18\frac{1}{4}$ FT	RUBBER FABRIC	1528	$66\frac{1}{2}$	72 $\frac{13}{16}$
CAPITOL WAGON	2 PASSENGERS		960	1000	1960	1890				148 $\frac{1}{16}$		69 $\frac{1}{16}$
CAPITOL SEDAN	5 PASSENGERS		1045	1300	2345	2275				148 $\frac{1}{16}$		72 $\frac{11}{16}$
CAPITOL LANDAU	5 PASSENGERS		1045	1295	2340	2270				148 $\frac{1}{16}$		72 $\frac{5}{8}$
CAPITOL COACH	5 PASSENGERS		1050	1210	2260	2190				148 $\frac{1}{16}$		72 $\frac{15}{16}$
CAPITOL COUPE	5 PASSENGERS		1050	1110	2160	2090				148 $\frac{1}{16}$		72 $\frac{1}{16}$
CAPITOL CBL.	2 PASSENGERS		1030	1175	2205	2135				148 $\frac{1}{16}$		71 $\frac{7}{16}$
CAPITOL IMP.	5 PASSENGERS		1040	1290	2330	2260				148 $\frac{1}{16}$		71 $\frac{3}{8}$
CAPITOL SED. CHASSIS	1000				1565							
CAPITOL TOUR CHASSIS	1000				1560							
CAPITOL COM. CHASSIS	1000			1550								
CAPITOL UT EXP. TRUCK	2000			2030		$8\frac{1}{2}$	$21\frac{1}{4}$ FT					

# FISHER BODY DATA

## 1926-1934

### The Construction and Service of Coupe Body Sills

The previous fifteen bulletins of Vol. 2 have included a complete description of the wood structure, the metal panels, the upholstery, the hardware, and the service requirements of sedan type Fisher bodies. In the forthcoming series, the construction and service requirements of the standard coupe bodies, including both business and sport types, will be similarly presented.

The present bulletin deals with that portion of the coupe body sills that extends back of the lock pillar including the upright members of the body proper, which are attached to it. The construction of the front half

and its adjoining members corresponds to the sedan type, already explained fully in *Bulletin No. 1, Vol. 2.*

ILLUSTRATION NO. 131

*Cut-out showing differences of construction of main body sills in sport coupe*

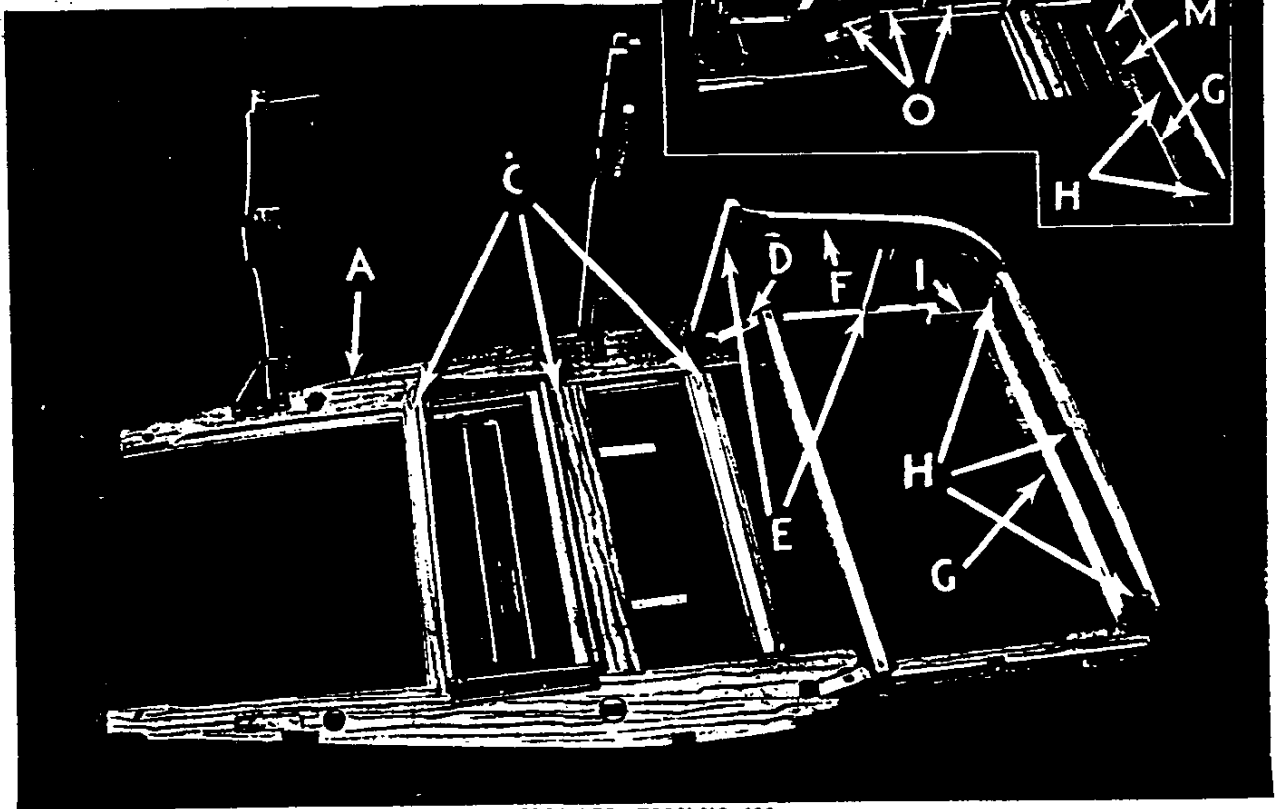
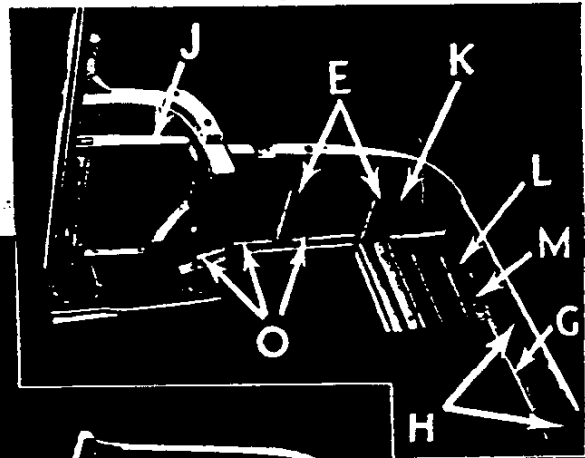


ILLUSTRATION NO. 130

*Shown above is construction of main body sill and attached wood members of business coupe (only right side shown)*

# Fisher Body Service Bulletin

VOLUME 2

Number 14

## The Removal and Replacement of Roof Coverings

No part of an automobile body is subjected to more wear or hard usage from the elements than roof coverings. Therefore, they must be selected from materials that will withstand the strains of road shock and weave, of wind and rain, as well as the expansion and contraction caused by quick changes in temperature. Moreover, with ordinary care these materials must remain waterproof over a satisfactory period.

The roof coverings used on Fisher bodies are of two different types: the coated, known as imitation leather, and the uncoated, called Burbank or Khaki material.

The uncoated type of roof covering is used chiefly on landaulets, cabriolets, sport sedans, roadsters, and touring cars, the installation of which will be treated in a later bulletin.

### COATED FABRIC

The coated fabric for Fisher body roof coverings is made up of two layers of cloth which are cemented together into one piece by means of a rubberized solution. The outside surface of this fabric is coated with a composition which is rolled and grained with a glazed finish. This treatment renders the texture unusually tough, elastic, and durable and of even greater tensile strength than leather. It is water-repellent and will not absorb the moisture even at the edges of the fabric.

Coated fabrics used for roof coverings are furnished only in black for bodies of present production, although colored fabrics may be procured from service stock for older models.

Other colors or color tones are obtained by applying Duco of the desired shade. These roof coverings may be obtained in varying widths. In the standard sedans of present production the average width of the roof covering is approximately 46 inches.

This bulletin deals with the removal, replacement, and care of coated fabric roof coverings for standard sedans of current production which have side roof rail cover panels and roof crown mouldings.

### REMOVAL AND INSTALLATION OF ROOF COVERINGS

**REMOVAL.** The first step is to remove the front roof crown moulding and then remove the adjoining side sections, working towards the rear. This operation is usually accomplished by prying off the moulding with a body spoon or chisel that is slightly turned up at the end. (See *Illustration No. 109.*) In this operation care should be taken to avoid damaging the side roof cover panel. Next, remove the tacks from the edges of the roof covering and

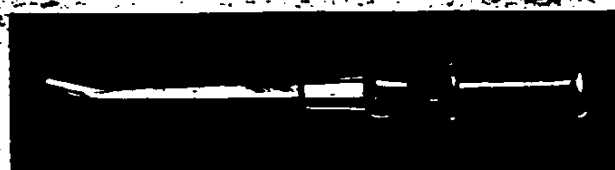


ILLUSTRATION NO. 109  
Shows body chisel

inspect the exposed edge of the steel roof panels for tightness, insulation, protruding nails, etc. Remove all tacks. Scrape off surplus cement and clean off thoroughly. Now that the roof covering is removed, see that the padding over the roof slats is smooth and in good condition.

As a part of additional service one should now drive the car, if possible, for a short distance to locate any roof noises, squeaks, or rattles. After the roof covering has been removed, annoyances such as these can be very easily eliminated at a slight extra cost to the owner. (See *Bulletin No. 4, Vol. 2, on the construction and service of the framework.*)

At the edges of the roof panels, where the covering was attached, it will be noted that oblong-shaped slots have been punched lengthwise through the panels at regular intervals in order that the tacks which hold the roof covering and the nails in the crown moulding may be easily driven into the wood roof rail. Therefore, as a preliminary step to installation, it is advisable to mark the center of each of these slots with a piece of chalk (See

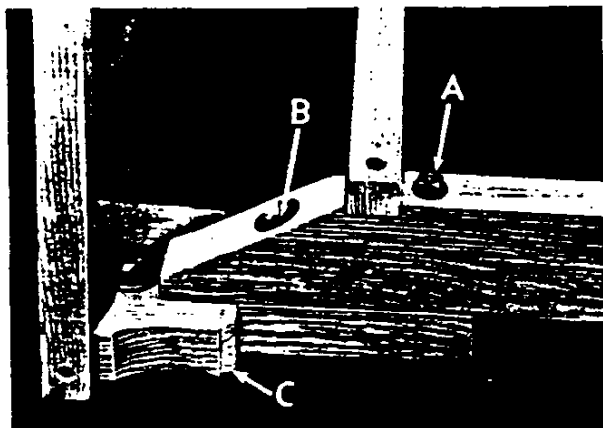


ILLUSTRATION NO. 133

Close-up of lap joint at kick-up section of main side sill assembly

### THE BODY SILL

**BUSINESS COUPE**—As in the sedan types, the main section of the side sill is milled in one piece (see *A* in *Ill. No. 130*). However, there are two sections of the complete side sill. The additional piece that is screwed, bolted, and glued to the main section forms a kick-up assembly which allows clearance for the rear axle.

There are three cross sills joined to the side sills at points where reinforcement is desirable (see *C* in *Ill. No. 130*). Also a rear cross sill (see *G* in *Ill. No. 130*) which has three strainers that extend to the deck lower bar (see *H* in *Ill. No. 130*). The deck side rail (see *F* in *Ill. No. 130*) has two wood strainers at point *E* in *Ill. No. 130*.

**SPORT COUPE**—While the general construction of the sport coupe corresponds to that of the business coupe, the cut-out (*Ill. No. 131*) shows the following differences in construction, namely: the side compartment frame (see *J* in *Ill. No. 131*); the positions of the two strainers that extend from the main side sill to the deck side rail (see *E* in *Ill. No. 131*); and the hinge bracket, to which the hinge of the rumble seat back is attached, this being bolted to the main side sill and deck side rail (see *K* in *Ill. No. 131*).

A wood cross member assembly in two pieces (see *L* in *Ill. No. 131*) is attached to the main side sills and is specially milled to act as a stop for the deck lid when it is raised into position as a rumble seat back. To this member and the rear cross sill is nailed a metal pan (see

*M* in *Ill. No. 131*) which provides drainage through grooved openings in the rear cross sill.

There are two strainers which extend from the rear cross sill to the deck lower bar (see *B* in *Ill. No. 135*).

Trim sticks, to which are attached the fibre board foundation of the deck compartment trim, are nailed to the top of the kick-up section of the sill at *O* in *Ill. No. 131*.

### JOINTS

In both the business and sport coupes the joints of the body sills and of the several wood members attached to them are scientifically designed to add supplementary strength to the whole body assembly. All joints are glued and screwed or bolted together in set-up body jigs (see *Bulletin No. 1*, Vol. 1, *Ill. No. 4*). They are further reinforced by specially designed metal braces which bind the framework together securely at vital points of strain or shock.

The main side sill assembly is constructed of two pieces, instead of three as in the sedan, and is joined by a full lap joint (see *D* in *Ill. No. 130* or close-up of *Ill. No. 132*). They are glued together and further secured at *A* and *B* by heavy bolts. This illustration also shows at *C* how the main side sill is milled to receive the wheel housing.

The construction of this joint as well as the next described are identical in both business and sport coupes.

A close-up (*Ill. No. 133*) shows the combination of lap

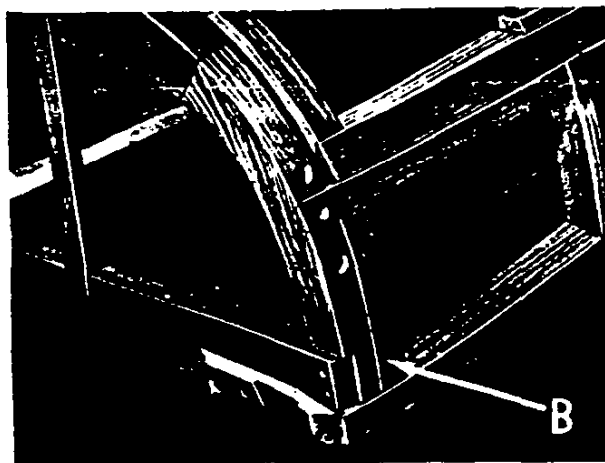


ILLUSTRATION NO. 133

Close-up of lap joints of rear and side sills and deck rail



joints which secures the main side sill to the rear cross sill and deck side rail. These joints are glued together and further secured by screws at both sides and bottom of the combined joint. This makes an exceptionally strong joint in the wood frame at a point that is subjected to unusual strains. The filler block to the right of the deck side rail on the business coupe body not only acts as a strainer but also serves as a foundation to which the deck lower panel is nailed (see *B in Ill. No. 133*).

The lower portion of this deck side rail is glued, bolted, and metal-braced to the rear and main side sills in a lap joint and united in a dovetail joint with its upper half at the point of greatest curve. This rail is milled in two pieces to secure the full strength of straight grained wood throughout the entire length of this member. This construction is identical in both coupe types. A view of this joint is shown in *Ill. No. 133*.

The cross sills are attached to the main side sills by mortise and tenon joints and are glued and further secured with wood screws.

In the sport coupe the lock pillar of the right side

compartment frame is glued and screwed to the main side sill (*A in Ill. No. 136*), as illustrated on page 4, the hinge pillar of the side compartment frame forming an integral part with the body lock pillar assembly (see *C in Ill. No. 136*).

A filler block which forms the bottom for the doorway frame of the side compartment is screwed and glued to the main side sill (see *B in Ill. No. 136*).

### BRACES

The coupe body pillar-to-sill braces are similar to those of the sedan type already described in *Bulletin No. 1, Vol. 2*. Other braces that are attached to the coupe body sill are the deck side rail to main side sill braces in the business coupe (see *I in Ill. No. 130*) and the deck side rail to rear cross sill braces in the sport coupe (see *A in Ill. No. 135*). The business coupe has additional support at the inside of the deck side rail in the wood filler block which is screwed to the rail (see *B in Ill. No. 133*).

The hinge bracket, on which the hinge of the rumble seat deck lid swings, also acts as a metal brace, being bolted to the main side sill and the deck side rail.

A metal plate is screwed to the lock pillar and the bottom board of the deck side compartment frame and acts both as a brace for these two members and as a stop for the door itself (see *Ill. No. 131*).

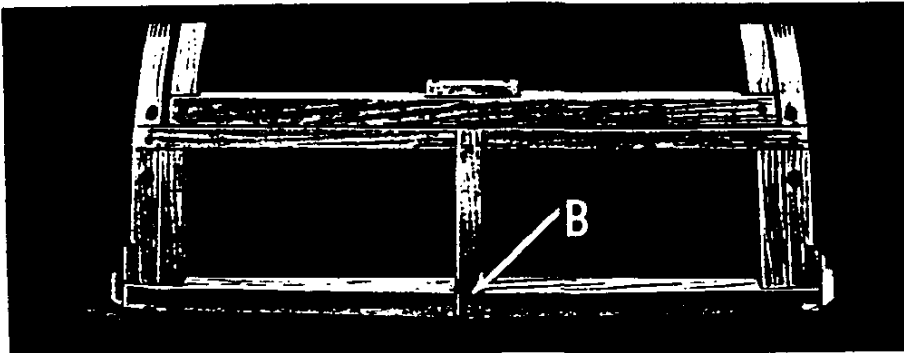


ILLUSTRATION NO. 133

Above—shows view of business coupe rear sill and attached members

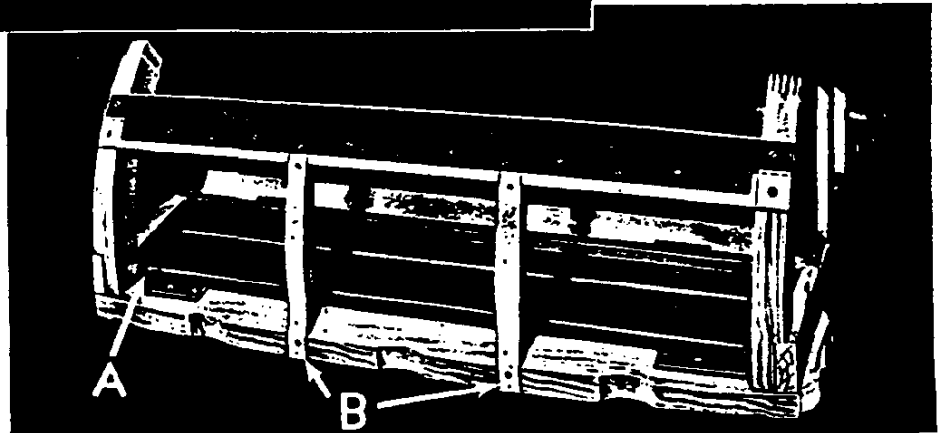


ILLUSTRATION NO. 135

At the right—shows view of sport coupe rear sill and attached members

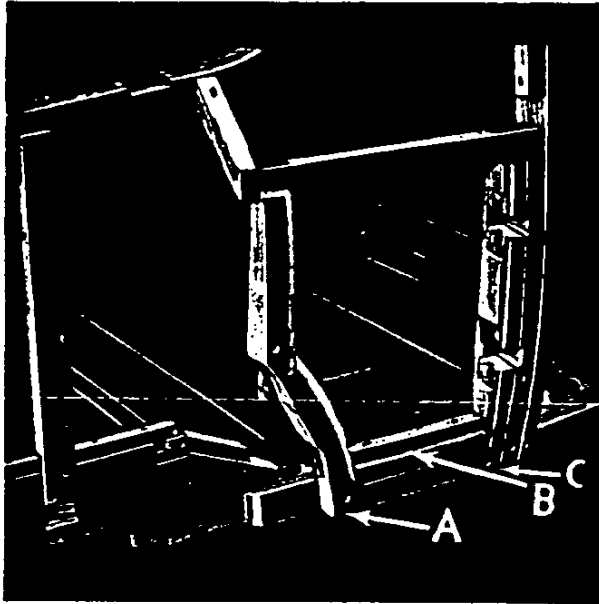


ILLUSTRATION No. 136

Section of side sill showing attachment of side compartment.

## SERVICE REQUIREMENTS

*In repair work be careful not to damage the electric lighting wires which are grooved into the sills and covered with metal strips.*

### Swelling of Floor Boards

Remove the floor board and plane off enough of the wood at the side of the board to allow clearance for friction tape. Apply tape on the edges of the floor board and restore the board to its original position.

### Loose Pillar to Sill Brace

Unscrew the brace and apply friction tape between it and the wood parts, then reinstall the brace, using larger size screws if necessary.

### Loose Joint at Rear Cross and Main Side Sills

Remove metal brace and insert a wood wedge, which has been covered with F. S. No. 604 friction paste, at the inside of deck side rail, driving the wedge outward until the joint is tight, then reinstall the brace, applying friction tape between the metal and wood. If necessary, use larger screws to fasten brace securely. In the sport coupe this brace is further reinforced by a bolt which extends through the deck side rail.

## Questions and Answers

**Question**—What should be used to thin R. & M. Roof Joint Compound?

**Answer**—Boiled linseed oil should be used to thin R. & M. Roof Joint Compound.

**Question**—Why do you recommend the use of turpentine on a file when metal-finishing solder or aluminum?

**Answer**—In metal finishing, turpentine is recommended for use on the blade of the file because it prevents the teeth from clogging with metal filings and consequently scratching the metal. Also, turpentine applied lightly on the metal panel saves considerable time in this operation.

**Question**—What is the best way to stop a noise at the front end of the two-piece drip moulding?

**Answer**—A noise at this point indicates that the moulding is loose and rubbing on the metal panels. To eliminate this trouble, drill one or more holes in the moulding, countersink, and insert nails or screws. Plug the holes with aluminum or solder wire, refinish, and touch up.

**Question**—How can a service station regain the metal garnish moulding?

**Answer**—It is not possible to satisfactorily regain this moulding. This work is done only by manufacturers having special dies, rolls, and equipment. It is always necessary to replace a damaged garnish moulding of this type.

**Question**—What would cause the cowl metal next to the sill to crack at the front?

**Answer**—A common reason is that the shim at the front body tie-down bolt extends out too far, permitting the cowl metal to ride on the shim. This pinches the metal and causes the panel to crack—(for details see Vol. 1, Bulletin No. 1). If investigation shows this shim to be free of the panel, the remaining cause is that the front body tie-down bolt has been pulled down so tightly as to create a severe strain at this point. Increase the thickness of the shim at this point and adjust the bolt as explained in Vol. 2, Bulletin No. 5.

# Fisher Body Service Bulletin

VOLUME 2



Number 17

## The Construction and Service of Coupe Decks and Rear Belt Rails

Having covered in the previous bulletin the foundation of the coupe wood structure, namely, the body sills and their adjoining members, the present number follows in logical order with a description of the deck and rear belt rail construction.

As the deck of the business coupe body is used exclusively for storage, whereas that of the sport coupe body may be used either for storage or for the accommodation of passengers, there are necessarily several differences in the construction of the two types, which are separately described and illustrated in this bulletin.

### THE BUSINESS COUPE DECK

*Illustration No. 137*, looking from the left into the deck assembly of the business coupe, shows the construction of the deck side rail (A) bolted to the rear belt rail assembly (at B); the deck lid (C) with its side rails and three cross bars, the lock bar (at D) being joined to the deck lid side rail by a lap joint, the center bar (at E) by a mortise-and-tenon joint, and the hinge bar (at F) by a

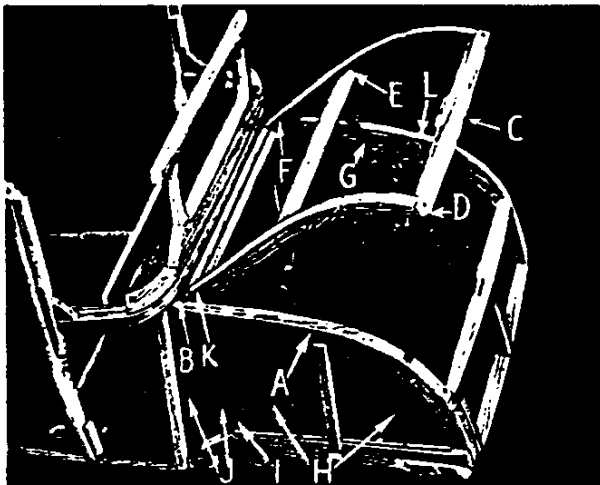


ILLUSTRATION NO. 137  
View of deck from the left side of business coupe

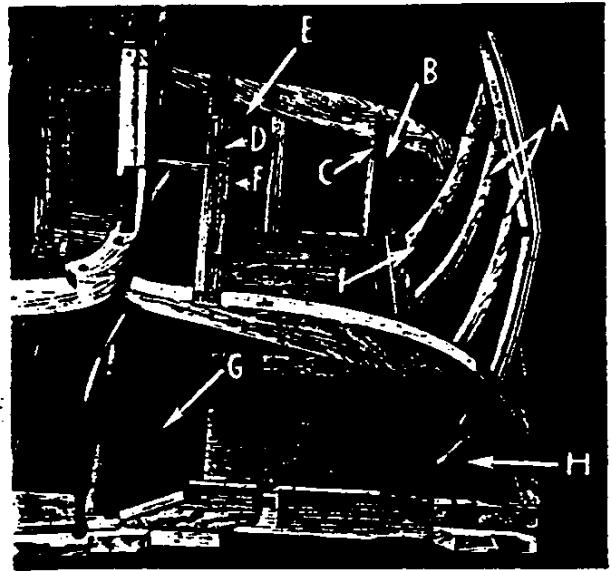


ILLUSTRATION NO. 138  
View of deck from the left side of sport coupe

lap joint. The deck lid hinge is screwed to the upper end of the deck side rail (at K). Near the center of the deck lid side rails, supporting arms are attached to brackets on the deck lid and the deck side rail (at G). A small metal stamping (at L) acts as a stop for the deck lid.

The floor boards (at H) are fitted together by lap joints and screwed to the main side sills. Two sheet metal floor pans (at J) are nailed across the bottom of the deck compartment in the space directly back of the seat assembly. These allow clearance as well as convenient access to certain parts of the chassis.

### THE SPORT COUPE DECK

*Illustration No. 138*, photographed in the same relative position as *No. 137*, shows clearly the differences in the deck construction between the sport coupe body and the business coupe body. This combination lid and rumble seat back has two supporting strainers (at A). The



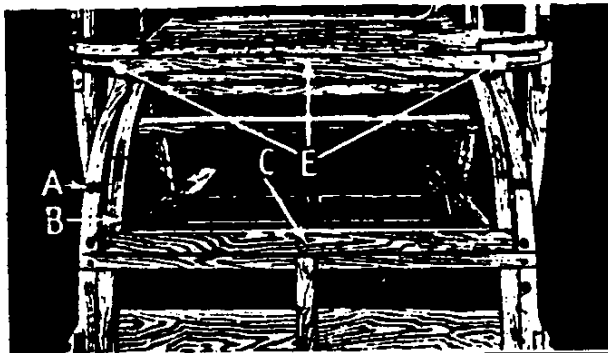
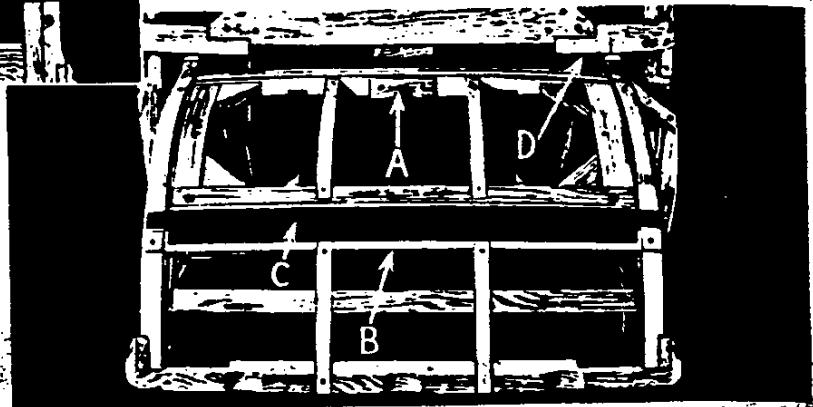


ILLUSTRATION NO. 139

Top—Rear view of business coupe deck

ILLUSTRATION NO. 140

Bottom—Same view of sport coupe showing difference in construction



deck lid swings on a pivot hinge (at B) which is bolted to an iron bracket (C) attached to the deck side rail and main side sill. These brackets also act as braces. The deck lid assembly is still further braced at the four corners by triangular blocks of wood glued and screwed to the frame of the lid (at I).

The deck lid lock bar is attached to the deck side rails by an open mortise (D in Illustration No. 138) and is braced at the center by a wood strainer to the back window frame. At the rear of the floor boards is nailed a metal drain pan (H) which extends to the rear cross sill.

Steel braces (at E in Illustration No. 138) that also serve as stops for the deck lid, are bolted to the deck side rails and lock bar. A striker plate for the deck lid lock is located at the center of the lock bar (at F). A metal section is nailed to the bottom of the deck as a flooring for the side compartment (at G). Metal, especially shaped, is used instead of boards to permit clearance for certain cross members of the chassis.

### THE REAR OF THE DECK STRUCTURE

**BUSINESS COUPE BODY.** A rear view of the deck assembly of the business coupe is shown in Illustration No. 139. Here may be seen clearly the dovetail joint (at A) in the deck side rail construction. Additional strength is acquired by having this type of joint, because the grain of the wood runs the entire length of the rail. A spline

performs a like function at approximately the same point in the deck lid side rail (at B). At C is shown the deck lid lock bar.

Illustration No. 139 also shows the construction of the back of the rear belt rail assembly (E) and its joints with the side rails.

**SPORT COUPE BODY.** Illustration No. 140 shows a rear

view of the sport coupe body which reveals several differences in construction with that of the business coupe body. The deck side rail is similar in construction to that of the business coupe body. But in this type the deck lock bar is at the top (A) and the deck lower bar (B) is covered by a flange iron (at C) over which the deck panel lower is flanged. The construction of the rear belt rail (D) is different, as the lower section of the back window frame in this assembly takes the place of the back section of the rear belt rail.

### JOINT OF THE REAR BELT RAIL AND DECK SIDE RAIL

Illustration No. 141 shows a close-up of the joint and the bolts that connect the deck side rail with the curved section of the rear belt rail assembly. The connecting members of the rear belt rail are joined solidly by a spline (A) by which the straight grain of the wood is preserved throughout this assembly.

A reinforcing member (C) is glued and bolted at this point, thereby doubling the strength of the rear belt rail.

The deck side rail is secured to these two wood members of the rear belt rail assembly by means of heavy bolts (at B).

## THE RIGHT SIDE DECK COMPARTMENT

An assembly that is also used exclusively in the construction of the sport coupe is the right side deck compartment (see *Illustration No. 142*). The compartment lock pillar (A) and its corresponding door lock pillar (B) are composed of two sections, each of which are screwed together in a lap joint, and shaped so as to permit clearance for the wheel housing. The lock pillar, the hinge pillar, and the header bar of the compartment frame are mortised, glued, and screwed together (see *points E*). The lock pillar of the compartment frame is supported to the deck side rail by a wood strainer (at C). The hinge pillar of the compartment frame is screwed to the lock pillar of the body (D). "Concealed" type hinges are used. The casings of the hinge (*points F*) are screwed to the compartment hinge pillar, then the hinge is bolted through the door hinge pillar. The wood members of the compartment door are connected by open mortise joints glued and then screwed together.

## SERVICE REQUIREMENTS

**BUSINESS COUPE BODY. (Deck hinges loose)**—Remove hinge pivot screws, lift off deck lid, and tighten hinges by installing larger wood screws. If the pivot screws are frozen by rust they may be started with a punch and hammer.

**Noise in the rear belt rail.** If a noise appears to come from the rear of a coupe body, at either corner, examine the joint between the deck side rail and the rear belt rail. If this joint seems to be loose remove the bolt at

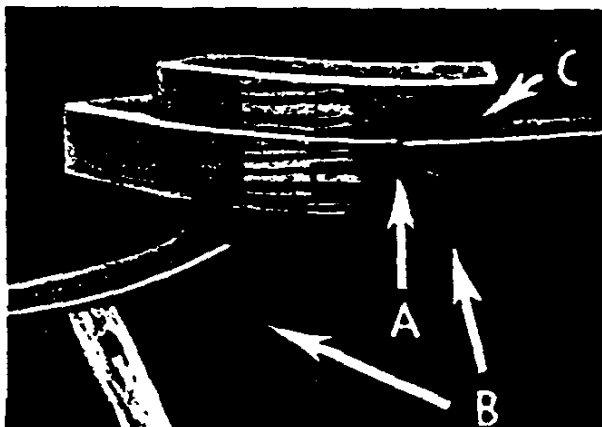


ILLUSTRATION NO. 141

Shows a close up of rear belt rail and deck side rail joint

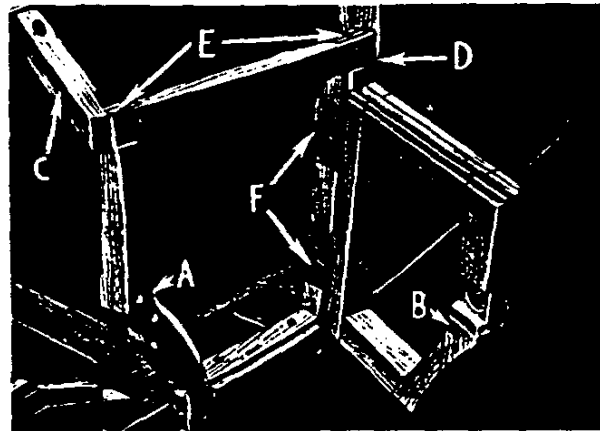


ILLUSTRATION NO. 142

Showing construction of right side compartment frame and door

this point. Separate the joint and insert friction tape between the deck side rail and the rear belt rail, then reinstall the bolt, being sure to draw the nut up tightly. The bolt should be dipped in R & M compound before reinstalling. (Noise such as described above may also have its source in the metal panels.)

## SPORT COUPE BODY

**ADJUSTMENT OF DECK LID.** If the deck lid rubs at either upper corner, remove the bolts of the hinge bracket (at B in *Illustration No. 138*) and change its position so that the lid will clear the framework. Reinstall the bolts, filling up the old holes with wood plugs or plastic wood.

**DECK LID STRIKING FLANGE IRON.** If the rear edge of the deck lid, when being opened, strikes the flange iron of the deck lower bar, insert several small wooden wedges between the inside of the flange and the wooden bar until the flange iron is forced upward to its original shape. This will allow the proper clearance for the deck lid.

**LOOSE HINGE PIVOT.** To tighten hinge pivot of deck lid loosen the safety set screw at the top of the hinge pivot. Then tighten the pivot hinge screw, inserting fibre washer between the hinge pivot and bracket if necessary.

**DECK COMPARTMENT DOOR SWELLING.** Remove the door and, with a rabbit plane or wood chisel, remove sufficient wood to allow clearance at that portion of the door which binds.

## Questions and Answers

**Question**—What causes the outside door handle and the inside safety screw to become loose?

**Answer**—Care should be taken when removing the inside safety screw so as not to allow the inner washer to fall down into the door bottom. This inside washer is found between the trim and the locking mechanism and can easily be held in place with a screwdriver while the replacement is being made. The absence of this washer is the immediate cause for the handle and safety screw to become loose.

**Question**—What is the best method of tightening the bolts in the front roof rail corner bracket if the nuts, which are under the front roof rail cover panel, turn with the bolts?

**Answer**—Drill through the bracket and the front roof rail in such a manner as to hit the washer on the bolt. Insert a nail or some pointed instrument and press firmly against this washer, turning the bolt head at the same time with a screwdriver. If this method fails because of the nut being frozen to the bolt, it may be necessary to make a small crosscut in the panel, folding back the four corners of the metal to uncover the nut. After the bolt is removed the metal may be pressed back in place, soldered, and refinished. No difficulty will be experienced on the present type of bodies, as an anchor plate, set in the wood, has been substituted for the nut that was formerly used.

**Question**—How is the window regulator handle removed?

**Answer**—There are three types of regulators and remote control handles. The one most commonly used today is removed in the following manner: press the escutcheon plate firmly against the upholstery of the door. This will reveal a small U-shaped retainer spring which may be removed by using a small pointed tool. The handle may then be pulled from the shaft but care should be taken not to lose the coil tension spring that is contained within the handle.

Another type of handle screws directly on to the shaft. A small notch is cut into the edge of the metal base. To remove, insert the special wrench which is contained in

the Emergency Tool and Repair Kit and turn the base until it is free of the threads on the shaft.

The third type is applied with a screw which goes directly through the face of the handle. Simply remove the screw and the handle may be slipped from its position.

**Question**—What causes windows to lower of their own accord when the car is in motion?

**Answer**—This condition may result from the teeth of the regulator gear being worn or sheared, permitting the mechanism to jump several teeth before again engaging. Replacement of the regulator is the quickest and most satisfactory method of correction.

A weak or broken spring in the regulator will usually permit the weight of the window to carry the glass downward for an inch or more, particularly if the position of the regulator handle is to the front of the car when the window is tightly closed. It is a false economy to attempt to replace the regulator spring. Replacement of the entire regulator assembly is always advisable.

**Question**—What may cause water to leak in over the top of a front door?

**Answer**—The drip moulding sometimes becomes loose, permitting water to enter behind it and be blown into the opening at the top of the door. If this should happen the over door weather strip, if properly adjusted, will prevent entrance of the water into the car. It is always possible for a water leak to occur if the over door weather strip is installed too high above the door opening. Refer to Vol. 1, Bulletin No. 15 for complete instructions in setting this weather strip lower to overcome the condition described.

**Question**—Should hinge pins be oiled?

**Answer**—The proper oiling of hinge pins at regular intervals is important. A small slot is provided for this purpose on the inside of the hinge, which is revealed when the door is open. Light lubricating oil should be applied regularly at this point in order to prevent the hinge pins from sticking or freezing in the hinges. This will allow the door to operate more easily.

# Fisher Body Service Bulletin

VOLUME 2



Number 18

## The Construction and Service of the Coupe Back Window and Roof Framework

The present bulletin, which completes the description of the coupe body wood structure, describes the back window frame, the seat compartment, and the roof assemblies, including many improvements in construction.

Except for size, the coupe roof differs but slightly in its construction from that of the sedan type, already described in *Vol. 2, Bulletin No. 4*. However, this bulletin will also explain in detail the new front and rear roof rail corner brackets and the metal crown roof rail support strainers, which are now standard on all the sedan and coupe bodies. As these are comparatively new installations they have not been described in any of the previous bulletins.

the greatest possible support to the rear belt rail and the roof structure (*see points B*). This is done to secure straight-grained wood at each rounded corner of the window opening (*see points A*).

**SPORT COUPE BODY.** In this body type the framework is similarly assembled and milled to the square shape of the window light opening (*see Ill. No. 144*). The lower portion of this framework is joined and screwed to the rear quarters of the rear belt rail assembly (*at points A*) and is milled to accommodate the back window regulator mechanism.

A metal drain pan is attached to the bottom of this assembly at *B* in *Ill. No. 144*.

### THE BACK WINDOW FRAME ASSEMBLY

**BUSINESS COUPE BODY.** A rear view of the back window framework is shown in *Ill. No. 143*. Unusual strength in this assembly is achieved by first assembling the wood members in a jig, where they are accurately fitted, glued and screwed together, and then milled to the exact contour of the stationary window opening, thus affording

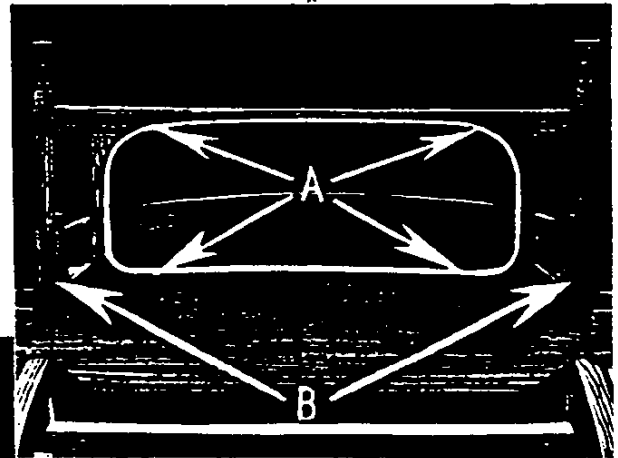


ILLUSTRATION NO. 143  
Shows rear view  
of back window framework  
in the business coupe

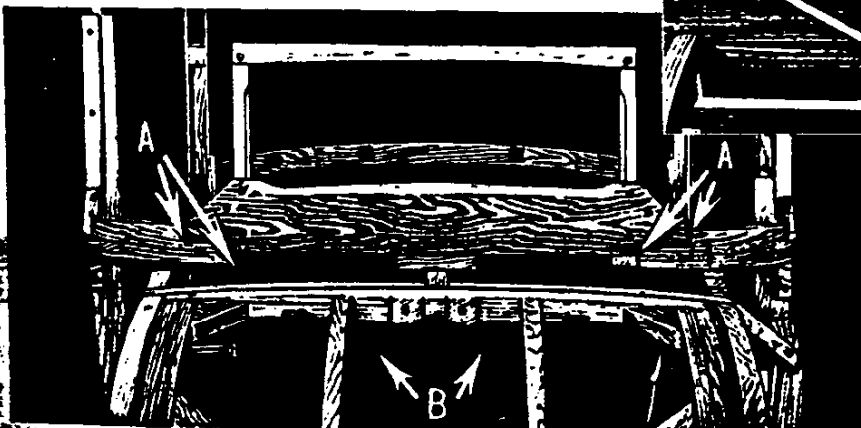


ILLUSTRATION NO. 144  
Shows similar view of the sport coupe

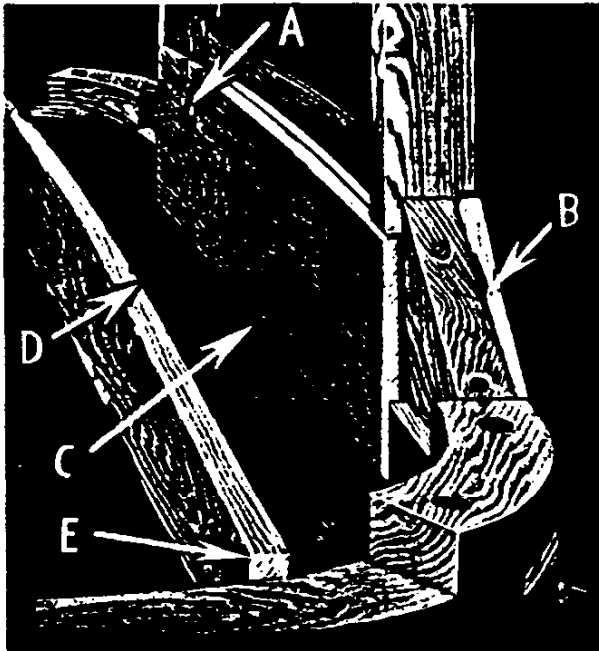


ILLUSTRATION NO. 145

Shows interior view of coupe seat compartment construction

coupe requires a window regulator (see A in Ill. No. 145). For this reason the sport coupe back window framework is milled to serve also as the back section of the rear belt rail.

Extra support is provided by separate corner blocks screwed to that part of the framework which is joined to the rear belt rail (see B in Ill. No. 145).

Below the window opening there are five filler strips on the inside of the frame which act as supports. These are also used as trim blocks for the seat compartment upholstery. The seat compartment in both types is formed by screwing a bottom board (C) to the underside of the rear belt rail. Another board (D) forms the front side of this compartment.

### THE ROOF ASSEMBLY

The construction of the coupe roof assembly is identical in both body types. Recent improvements have provided additional strength and durability, as well as a more convenient method of servicing this assembly.

The roof bows and slats are nailed and set together with slow-drying, cold fish glue. The cold glue does not

### COUPE SEAT COMPARTMENT

Inside views of the seat compartment and the back window frame of the coupe body are shown in Ill. No. 145.

The only difference in the construction of the two coupe body types is due to the fact that the adjustable back window of the sport

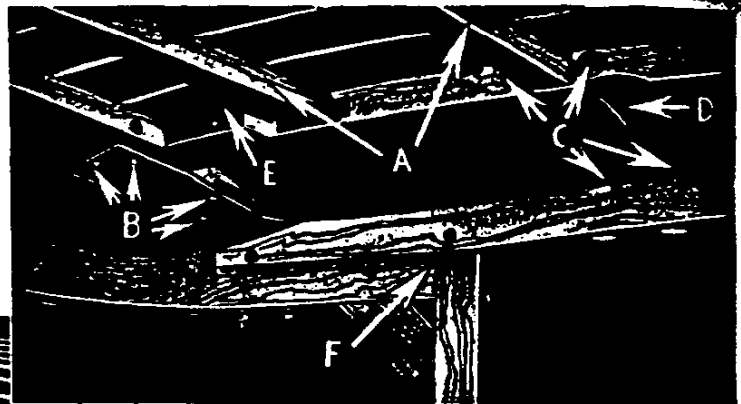


ILLUSTRATION NO. 147

Shows interior view of rear roof rail corner bracket

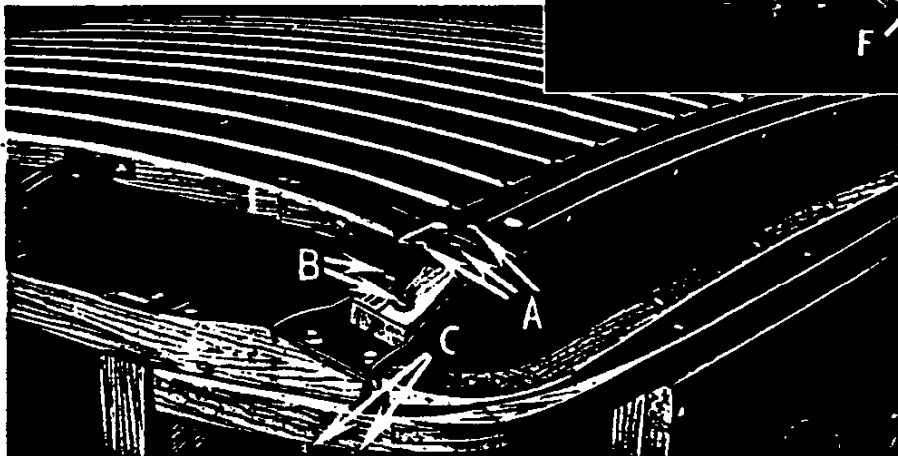


ILLUSTRATION NO. 146

Shows exterior view of rear roof rail corner bracket

until after the body is off the assembly line, consequently it provides a more rigid construction than the friction tape and quick-setting hot animal glue. This type of glue should be used in preference to quick-setting hot animal glue, because of its slow drying qualities, resulting in a more secure joint. If quick-setting hot animal glue is used, oftentimes the joint is fractured before the glue has set properly.

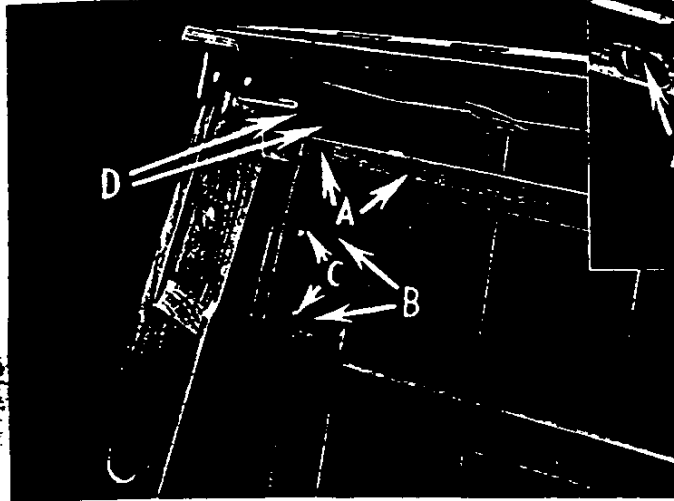


ILLUSTRATION NO. 148

Shows inside view of front roof rail corner bracket construction

### REAR ROOF RAIL CORNER BRACKET

Instead of being secured at their several joints by bolts and screws without further reinforcement, the rear members of the roof assembly are now anchored more rigidly by the addition of a specially designed corner bracket.

Ill. No. 146 shows how the joints of the rear roof bow and the crown roof rail are reinforced by being bolted together to the rear corner bracket (at points A). The rear roof bow is also bolted to this iron bracket (at points B) instead of being joined directly to the side and rear roof rails, as in the former construction. At C are indicated two long bolts that secure the bracket to the rear and side roof rails. This construction adds so much strength and resistance to weaving that the metal strainers which formerly extended from the rear roof bow to the rear roof rail are no longer required.

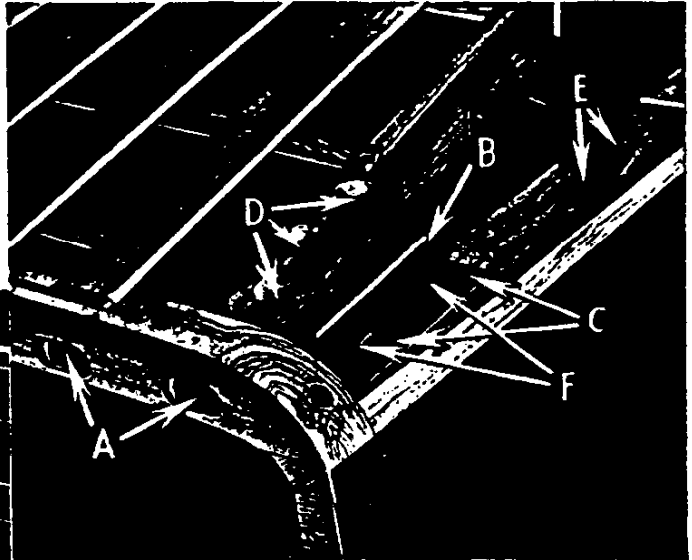


ILLUSTRATION NO. 149

Shows view from top of front corner roof rail bracket

Ill. No. 147 shows a view of the rear corner bracket from the inside of the body. It reveals how adjustments of bolts and nuts can be made after dropping the headlining. In this picture also are shown the bolts that secure the present type metal crown roof rail support strainers (C) and also the wood trim stick (D) to which the listing of the headlining is attached.

A new oblong corner block (see E) which is glued and bolted to the crown roof rail serves as a reinforcement, and replaces the triangular block formerly used. This block affords a straight-grained wood brace with more than twice the area of glued surface.

### THE FRONT ROOF RAIL CORNER BRACKET

The front roof rail corner bracket secures and braces the following seven members of both the sedan and coupe bodies: the front, the side, and the crown roof rails; the front body hinge pillar; the windshield header bar; the windshield regulator board; and the front roof bow.

Because this bracket performs more functions than any other bracing member of the body, it has been ingeniously designed in a single unit to insure exceptional strength and durability.

This new bracket which is now standard on all Fisher bodies shows many improvements. Looking at it from the underside of the roof, as in *Ill. No. 148*, it will be seen that it braces the front, the side, and the crown roof rails and is attached to each of the seven members at various strategic angles. At *A* are shown the bolts that fasten the bracket to the front roof bow and the crown roof rail, and at *B* are also bolts through this bracket to the crown roof rail. Two additional bolt holes are at *C* to make the bracket adaptable to any model. The bracket is provided with a flanged arm to which is attached the windshield regulator board at *D*.

A view of this bracket through the top of the roof shows two bolts set in anchor plates which are inserted in cut-out slots on the front roof rail (see *A* in *Ill. No. 149*). This improvement overcomes any possible difficulty of adjustment at this point that may have formerly been caused by the nuts turning with the bolts.

Another important change in the construction of the bracket is shown at point *B* in *Ill. No. 149*. In the earlier design this bracket extended downward and was

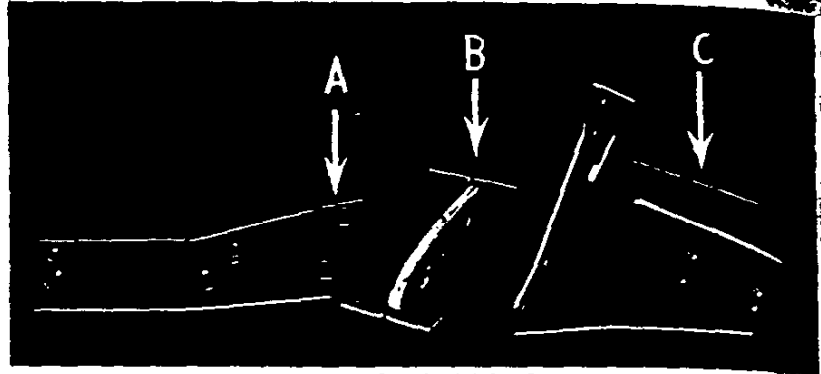


ILLUSTRATION NO. 150

Shows three improved brackets that greatly strengthen Fisher body roof construction, namely: *A*, rear roof rail bracket; *B*, crown roof rail support strainer; *C*, front roof rail corner bracket

bolted to the inside face of the side roof rail, instead of at the top as at points *C*. Furthermore, there are bolts at *F* which extend through the side roof rail. This new brace provides greater support to both side roof rails, and, in addition, increases the strength of the entire roof assembly.

*Ill. No. 149* also shows how the bolts are counter-drilled at points *D* in the crown rail so as not to interfere with the installation of the roof covering. *E* in *Ill. No. 149* clearly illustrates how the new metal strainers are secured to the side and the crown roof rails.

## Service Requirements

**Noise in seal compartment**—If the trouble is in the bottom board, loosen the screws by which the board is attached to the underside of the rear belt rail and insert friction tape. If the screw holes are oversize, insert wood plugs dipped in hot glue before reinstalling screws. If the trouble is in the upright front board, take out the screws which are inserted diagonally at both ends of the board, for they are usually the cause of squeaks at that point (*E* in *Ill. No. 145*). Dip the screws in friction paste F.S. No. 604 before replacing.

**Squeak at joint of body lock pillar and rear roof rail in coupe bodies**—This trouble is usually caused by these members rubbing against each other at point *F* in *Ill. No. 147*. The remedy, after making sure that the two bolts of the rear roof rail are tight, is to insert a soft wood wedge, covered with friction paste F.S. No. 604,

between the two members and drive it in far enough to make the joint firm. Do not place undue strain on either member. Sometimes it is also necessary to remove the screws that hold the corner block at this point and apply fresh glue to the end surfaces that adjoin these two members. In every case where glue is applied, at least two hours should be allowed for drying to insure a permanent connection.

**Crown roof rail support strainer**—Occasionally the ends of the bolts (see *E* in *Ill. No. 149*) may contact with the side roof rail cover panel, causing a noise to develop at this point.

This may be remedied by either deflecting the bolt to one side with a pair of pliers, by applying friction tape at the point of contact, or by cutting off a portion of the bolt with a back saw.

# Fisher Body Service Bulletin

VOLUME 2

Number 19

## The Construction and Service of Panels in the Coupe Body Construction

The present bulletin describing the metal panels concludes the structural description of Fisher coupe bodies. It deals only with the panels back of the body lock pillar, as the construction in the front section of the body is similar to that of the sedan type which has been explained fully in *Bulletins No. 6 to 8, Vol. 2*.

However, a separate study of those panels which are designed for use in coupe bodies exclusively is important.

### UPPER BACK PANEL

The upper back panel is stamped from one solid piece of best steel in a huge Fisher toggle press so as to conform accurately to the contour of the body framework. This stamping also includes the paneling of the back window reveal (see *A* in *Ill. No. 150*).

The upper back panel is nailed at the top to the rear roof bow (see *A* in *Ill. No. 151*) at the sides to the body lock pillar and around the bottom edges to the rear belt rail assembly. This panel is shown in *Ill. No. 150* without the aluminum rear quarter and back belt moulding which covers the joints between the upper back panel, the body lock pillar cover panel, and the rear quarter side panel (see *B* in *Ill. No. 150*). It is necessary to maintain a spacing between the panels to prevent any possibility of their rubbing together and causing a noise.

*Ill. No. 151 at C* shows a close-up of the joint of the upper back panel with the side roof rail cover panel. This joint is especially designed so as to give maximum strength and support. These panels are flash welded into one solid piece along the curved line at *C* in

*Ill. No. 151*. This weld is surfaced with solder, and then filed smooth to its proper contour. *Ill. No. 151 at D* shows where the side roof rail cover panel is cut out to provide for the curve of the roof crown moulding. It is nailed to the wood corner block at this point.

### REAR QUARTER SIDE PANEL

**BUSINESS COUPE BODY.** The rear quarter side panel of the business coupe (see *Ill. No. 152*) covers the wood frame from the body lock pillar to the rear cross sill. The moulding effect which extends from the body lock pillar to the joint of the deck side rail and rear belt rail is also included in this stamping at *A* in *Ill. No. 152*. A projection of this panel extends upward on the body lock pillar about five inches. A narrow strip of sheet steel is attached at this point extending to side roof rail cover panel (see *E* in *Ill. No. 152*). This rear quarter side panel is so stamped as to provide for the wheel housing and a moulding effect at the bottom where the panel is attached to the body sill (see *C* in *Ill. No. 152*). The panel is flanged over and nailed to the inside face of the deck

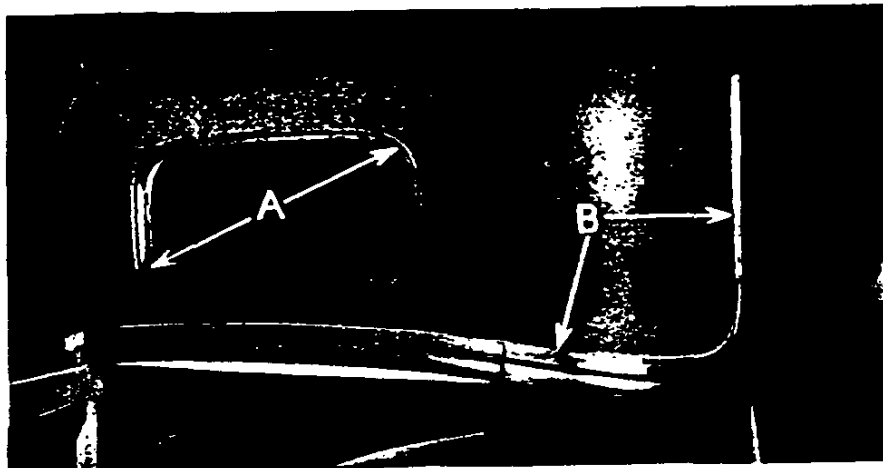


ILLUSTRATION NO. 150  
Shows upper back panel of coupe body



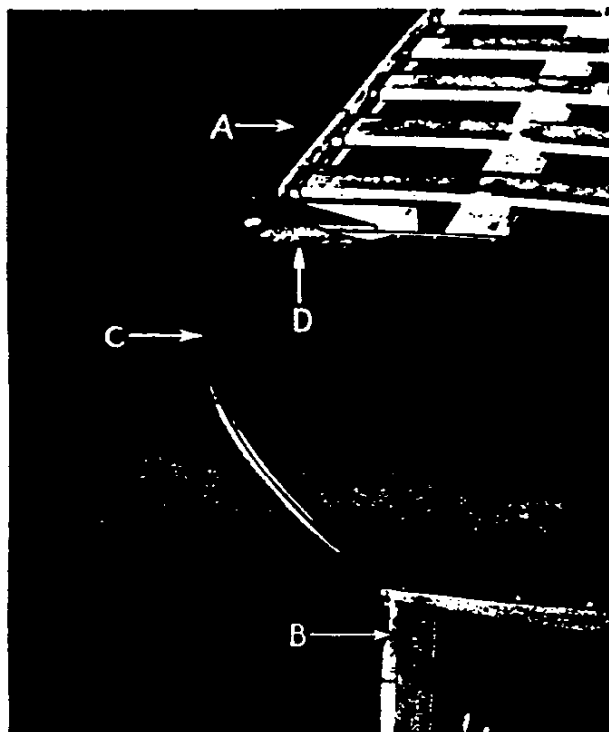


ILLUSTRATION NO. 151

Shows joint of upper back and side roof rail panel

side rail. At the lower edge it is flanged under and nailed to the main side sill (see *D* in *Ill. No. 152*). A flanged metal facing covers the inside of the deck side rails and also serves as a drain trough for the deck lid.

**SPORT COUPE BODY.** The construction of the rear quarter side panel in the sport coupe body is similar, except that an opening is provided for the right side compartment door (see *A* in *Ill. No. 153*). The panel for the door itself is clinched over flange irons which are attached to each member of the wood compartment door frame. This flange seals the opening between the door and the side compartment door frame.

### COUPE DECK PANELS

**BUSINESS COUPE BODY.** *A* in *Ill. No. 154* shows deck panel upper which covers the back section of the rear belt rail assembly of business coupe body. It also shows the deck lid panel that is located just below it (at *B* in *Ill. No. 154*). Below the deck lid is the deck panel lower (at *C* in *Ill. No. 154*) which is flanged over and nailed to

the top of the deck lock bar and flanged under at the bottom and nailed to the rear cross sill. The joint between the deck panel lower and the rear quarter side panel (at *D* in *Ill. No. 154*) is covered with an aluminum moulding.

**SPORT COUPE BODY.** The corresponding panels in the deck of the sport coupe show several changes due to differences in construction (see *Ill. No. 155*). The deck panel upper which covers the rear belt rail (at *A* in *Ill. No. 155*) also extends over a portion of the deck itself, as the deck lid (at *B*) in this type does not extend up as far as the rear belt rail. The deck panel lower of the sport coupe (at *C* in *Ill. No. 155*) is flanged over the top of the flange iron that is screwed to the deck lower bar. This serves to cover the joint of the deck lid with the deck panel lower. This flange iron protrudes on the left deck side rail at *D*. The lower edge of the deck panel lower is flanged under and nailed to the rear cross sill. An aluminum moulding is nailed on at *E* in *Ill. No. 155* to cover the joint of the rear quarter side panel with the upper and lower panels as well as the edge of the rear quarter side panel at the deck lid opening.

*Ill. No. 155* at *F* also shows the rear quarter and back belt moulding which is nailed over the joint of the rear quarter side panels, the upper deck, and upper back panels.

This is a solid aluminum moulding which starts at the joint of the upper back and side roof rail cover panel on one side, and is curved along the rear belt rail to the corresponding joint at the other side. Nail holes with a spun collar will be found at regular intervals along this moulding. It is installed by fitting it closely to the mouldings already stamped in the panels. After the moulding is securely nailed, the spun collars are swaged in over the heads of the nails and the surface filed to a smooth finish.

### SERVICE REQUIREMENTS

**Noise at top of upper back panel**—If a squeak occurs at the top of the upper back panel, loosen the roof crown moulding and the roof covering, then remove the nails from the edge of the upper back panel where it is nailed across the rear roof bow. Raise the edge of the metal enough to insert friction tape between the metal and the wood framework. Renail panel, using slightly larger nails, reinstall roof covering and roof crown moulding. If a reasonable amount of care is taken so as not to bend

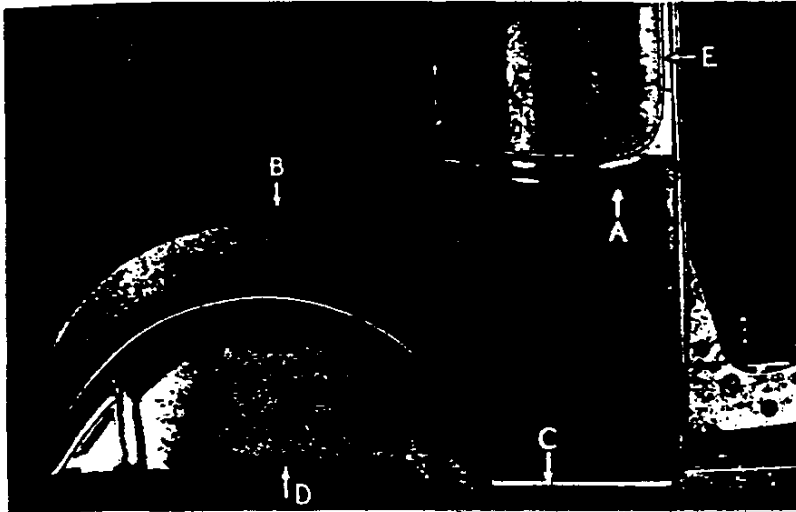


ILLUSTRATION NO. 152  
Shows rear quarter side panel  
of business coupe body

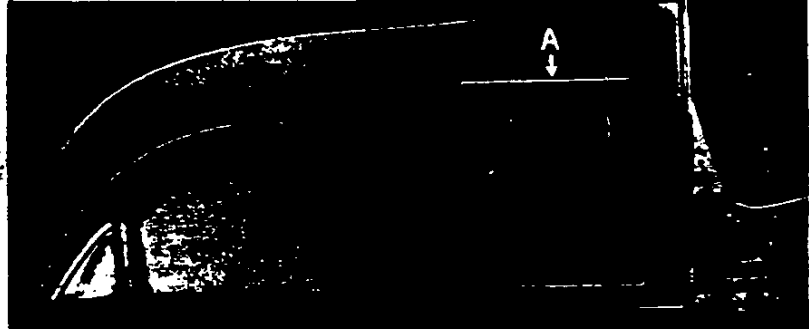


ILLUSTRATION NO. 153  
Shows rear quarter side panel  
of sport coupe body

or distort the roof crown moulding it can be reinstalled, but once it is twisted out of shape or kinked it is necessary to install a new moulding.

**Squeaks at either right or left corner of upper back panel**—Noise at this point is usually due to insufficient clearance between the wood and the metal. The remedy is to release the upper quarter trim and the headlining at that rear corner. Then, with a hack saw blade, cut away enough of this wood to allow clearance so that the metal will not rub against the wood. If the roof construction is of the new type which has a rear roof bow to side roof rail metal brace, make sure that the end of this brace is not rubbing against the panel. If such is the case, insert a thin wedge between the brace and the upper back panel to provide clearance through which may be inserted friction tape of sufficient thickness to prevent these metal parts from rubbing together. Then withdraw the wedge, taking care not to bulge or damage the metal panels.

**Squeaks along lower edge of upper back panel, rear belt**

**rail, and body lock pillar panels**—Remove rear belt rail moulding, loosen lower edge of the upper back panel, and insert friction tape, allowing the tape to lap over the edge of the rear quarter panel. Then when the rear belt moulding is reinstalled it will be insulated from the rear quarter panel. In locating this or any other apparent panel noise, test the body thoroughly to make sure that the noise actually has its source in the panels, before undertaking un-

necessary labor in removing the metal parts. If the noise is in the panels it can always be plainly felt, when riding the car, by placing your fingers over the metal. If you feel no vibration in the metal it would be better to look to the wood joints for the trouble.

**Noise along the top of the deck side rail in the sport coupe body**—Noise along the surface of the deck side rail is sometimes difficult to locate definitely. However, as it is invariably caused by the aluminum moulding that covers the edge along the deck side rail, the surest way to remedy it is to remove the entire moulding and re nail it securely.

**Squeaks along lower edge of rear quarter panel**—If the noise seems to come from points where the wheel housing portion of this panel joins the main side sill, drill three to five holes along the lower edge of the panel, evenly spaced. Install screws ( $1\frac{1}{2}$ " No. 12 flat-head steel) through the panel into the main side sill. This will draw the metal up tightly against the sill and will usually eliminate the noise permanently.

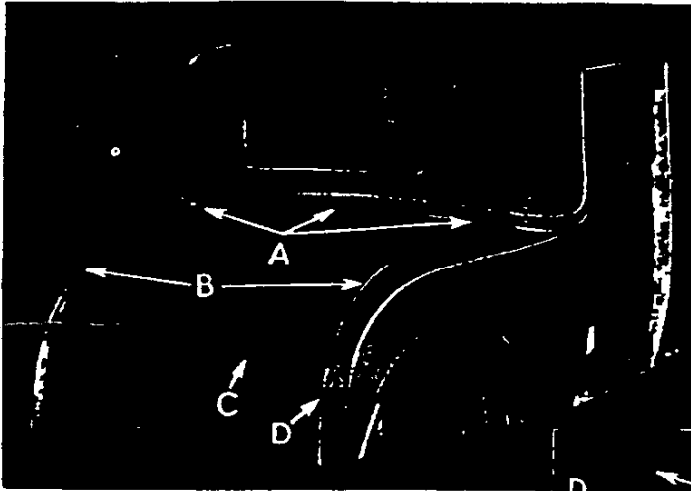


ILLUSTRATION NO. 154  
Shows rear view of business coupe body panels

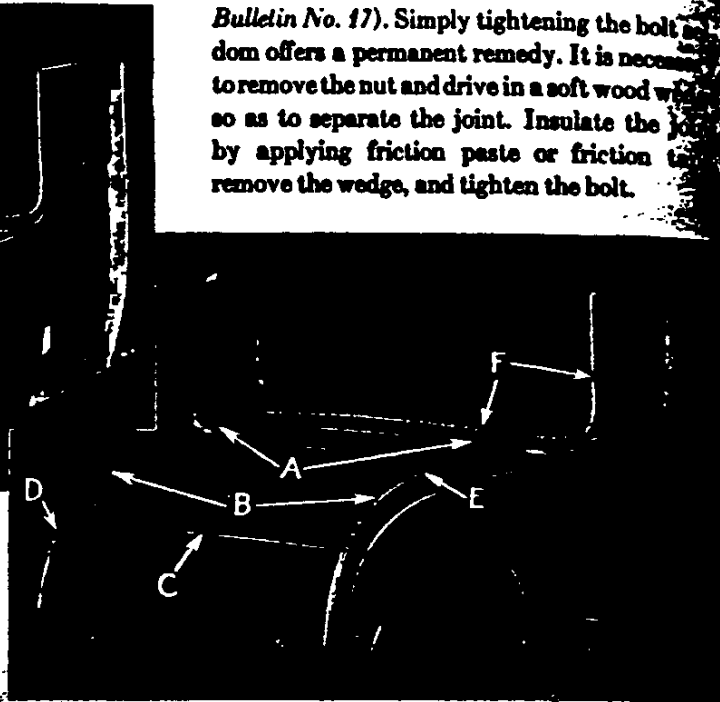


ILLUSTRATION NO. 155  
Shows rear view of sport coupe body panels

Bulletin No. 17). Simply tightening the bolt in the rear deck offers a permanent remedy. It is necessary to remove the nut and drive in a soft wood wedge so as to separate the joint. Insulate the joint by applying friction paste or friction tape. To remove the wedge, and tighten the bolt.

**Noise at joint of deck side rail and rear belt rail**—This is often the most difficult of all noises to locate. It may seem to originate in the upper back panel at the roof or at the rear quarter under the window, in fact almost anywhere in the rear section of the belt line or above it. This joint is secured by a large bolt extending down through the belt rail and the deck side rail (see B in Ill. No. 141,

To remove the bolt, first determine if the nut is accessible through the rear deck. If the head of the bolt is down it will be necessary to reach the nut from the inside of the body, which requires the loosening of the upper quarter trim assembly. Present type Fisher bodies have the bolts installed with the nuts down and are easily accessible through the rear deck.

## Questions and Answers

**Question**—What is the easiest method to remedy a noise at the rear corner of the roof caused by the rear roof rail corner bracket and the upper back panel rubbing together?

**Answer**—As this panel is welded at approximately this point it is almost impossible to gain the necessary clearance by the use of a hack saw blade. The simplest method is to carefully insert a wedge between the panel and the bracket, driving it in sufficiently far to force the panel upward to a point that will allow the insertion of friction tape between these points of contact.

**Question**—Explain how repairs are effected on the cross sills, should they become loose or broken?

**Answer**—The repair or replacement of the rear cross sill is fully covered in *Bulletin No. 1, Vol. 2*. The remaining cross sills referred to are joined to the main side sills by means of mortise-and-tenon joints (*Bulletin No. 1, Vol. 2*). No difficulty will be experienced with these cross sills becoming loose at the joint, but they may become broken through an accident or some other mishap. The easiest and most satisfactory method of repair is to splice in a piece of sufficient size to replace the damaged portion. Follow directions for making this splice as given in *Bulletin No. 13, Vol. 1*, making the angle of the cut as great as possible.

A  $\frac{1}{8}$ " x 1" strap of iron securely installed with screws at each side of cross sill will materially strengthen this joint.

# Fisher Body Service Bulletin

VOLUME 2

Number 20

## The Upholstery and Roof Coverings of Coupe Bodies

The present bulletin on upholstery and roof coverings completes the series on the construction and service of coupe bodies. As in the preceding bulletins, descriptions of coupe bodies will be confined to those assemblies which differ in their construction from the sedan type assemblies already described in *Vol. 2, Bulletins No. 11 to No. 15* inclusive.

In this connection, a careful review of these last mentioned bulletins is recommended. With the exception of the descriptions which immediately follow, the operations of removal, construction, and service are practically identical with the practice indicated for sedan bodies.

### SEAT COMPARTMENT TRIM WITH VALANCE

The trim for the rear of the seat compartment is formed at one side by the under back window trim, at both ends by the rear quarter trim, and at the bottom by a board which is covered with a piece of plain stretched

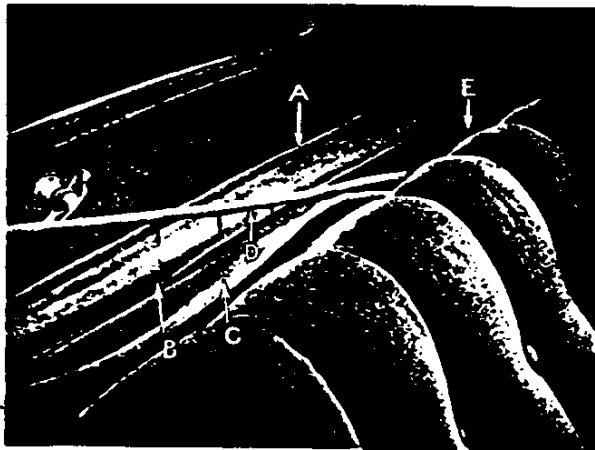


ILLUSTRATION NO. 156

Showing coupe seat valance extended for forward adjustment of seat and partially disassembled at left to show Randall moulding



ILLUSTRATION NO. 157

Coupe seat valance with skirt folded under

trim cut to fit and then tacked. The front side is also covered with plain stretched trim, tacked along its bottom edge and over the top edge of the section. *Ill. No. 156* shows the seat valance which is especially constructed to allow for the movement of the adjustable seat. This assembly is composed of a piece of buckram covered with upholstery and a "bellows skirt." The former piece is tacked to the upper edge of the front section of the seat compartment (at *A* in *Ill. No. 156*). To this is sewed a "bellows skirt" (at *C*) which is tacked to the top of the seat and covered with Randall moulding nailing strip (at *D* in *Ill. No. 156*). This skirt extends out flat to cover the space between the compartment and the seat, when the seat is adjusted to full forward position, as shown at *E* in *Ill. No. 156*. How the skirt folds under when the seat is moved back is shown in *Ill. No. 157*.

### REAR DECK COMPARTMENT TRIM

The rear deck compartment trim in the sport coupe is

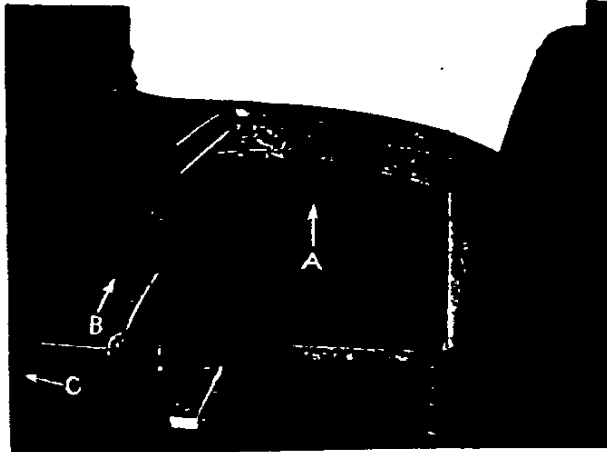


ILLUSTRATION NO. 158

Showing trim in rear deck compartment of sport coupe

made of embossed cardboard cut and fitted in four pieces to cover the insides of both the rear quarter side panels (A in Ill. No. 158), the right side compartment door (B in Ill. No. 158), and the back of the coupe seat in the direction of C in Ill. No. 158.

### ROOF COVERINGS

In the coupe body types which have upper back and side roof rail metal panels, the construction and application of the roof covering are exactly the same as the sedan type bodies. However, some of the coupe bodies

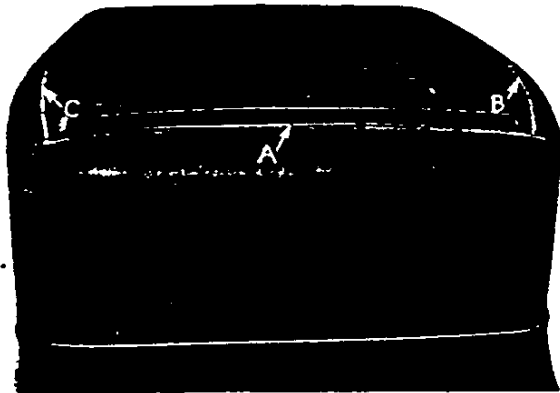


ILLUSTRATION NO. 159

Showing rear view of coupe with covering removed ready for installation of roof and outside quarters and back coverings

have leather outside quarters and backs, the installation of which is described in the following paragraphs.

### OUTSIDE QUARTERS AND BACK COVERINGS

A coupe body is shown in Ill. No. 159 with its original covering removed, but with the stitched roof pad in place. The back and rear quarters are shown stripped to the panels and covered with an application of trimmer's cement, F. S. No. 730. After the Repstick sealing compound, F. S. No. 714 is applied along the slotted grooves (A, B, and C in Ill. No. 159) and the blue Lenox

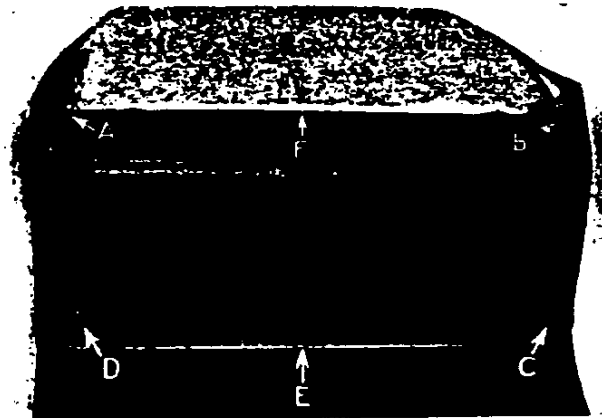


ILLUSTRATION NO. 160

Showing three-piece leather outside quarters and back covering stretched to place and stay-tacked

wadding is placed over the panels for a foundation, the body is ready for the installation of the coated fabric covering.

The covering assembly for the outside quarters and back is composed of three pieces. The back is sewed to the two rear quarters (at A to D and B to C in Ill. No. 160) and the juncture of these pieces is bound together by wings cut out of fibre board and shaped to the exact contour of the body.

This assembly is stretched over the panels and fitted for the stay-tacking operations in the following order (see Ill. No. 160): First, the exact centers at bottom (E) and top (F) are tacked, then each corner of the bottom edges at D and C and the top edges at A and B. Finally, it is tacked across the lower edge at the rear belt

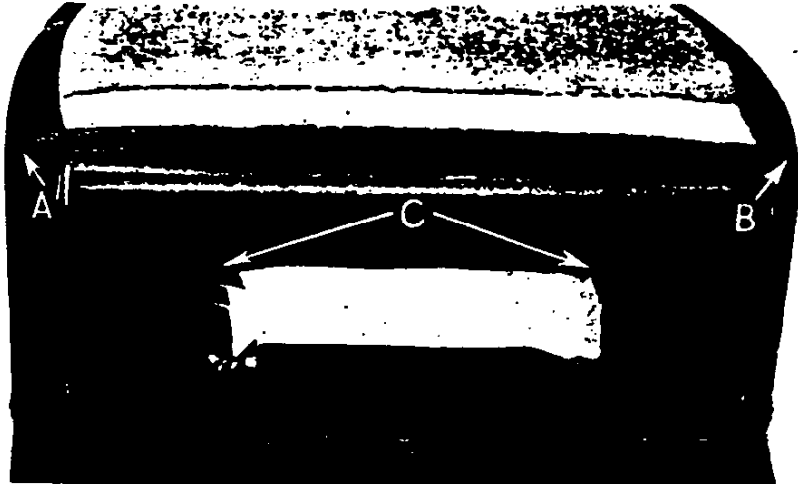
## ILLUSTRATION NO. 161

Showing final tacking of covering with cloth cut and notched for the window opening

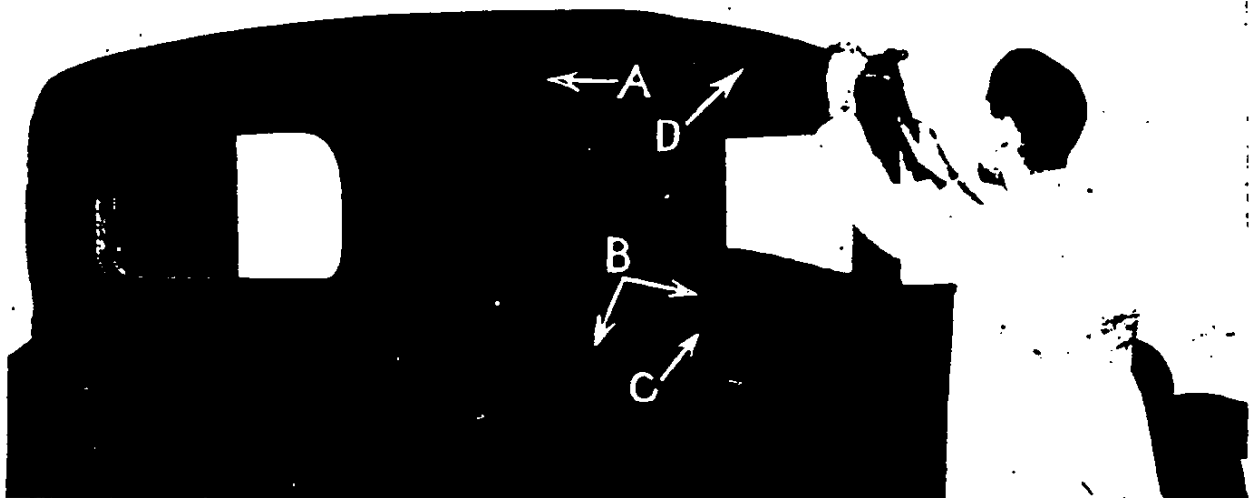
moulding, up the sides at the body lock pillar, and across the roof at the rear roof bow.

The next operation consists of stretching this assembly to eliminate all wrinkles of the covering, particularly at points *A* and *B* in *Ill. No. 160*. This is best accomplished as a two-man operation, as the covering must be pulled tightly and held taut, while the material is rubbed to a smooth fit by the trimmer. It may be necessary to repeat this operation several times before the desired smoothness is achieved. Then the cloth is securely tacked at points *A* and *B* in *Ill. No. 160*. The cloth is then slit on each side at points *A* and *B* in *Ill. No. 161*, to overcome the pucker in the covering at the curve of the roof.

The final tacking is now completed all around and the hole cut for the window opening (see *C* in *Ill. No. 161*). The fabric is cut at the corners in order to attain a smooth finish when the material is later turned in and



tacked to the inside of the window frame. The details of the next step, namely that of attaching the roof covering proper, are similar to those described in *Vol. 2, Bulletin No. 14*. The final operation is the installation of bindings and mouldings as follows (see *Ill. No. 162*): The Hidem binding which is finished off with an acorn metal tip and covers the joint across the rear roof bow (*A* in *Ill. No. 162*); the Hidem binding at the body lock pillar and around the rear belt moulding (*B* in *Ill. No. 162*) finished with a two-way metal "tip" to conceal the joint at *C*; and the roof drip moulding over the doors at *D* in *Ill. No. 162*.



## ILLUSTRATION NO. 162

Showing finished installation with applications of bindings and mouldings

## Questions and Answers

**Question**—Please state what conditions may cause water leaks at the windshield or around the cowl?

**Answer**—There are a number of reasons for this condition. Following is a list of conditions that may permit the entry of either water or wind: If water seems to be entering directly under the windshield, the glass may not be setting properly on the lower weather strip. To detect this, place three or four sheets of paper at various points across the weather strip and close the glass tightly. Pull the paper toward you, and if you find that it comes out freely the windshield regulator board requires adjustment at the point thus indicated. To remedy this, remove the regulator board and back out the adjusting screw that will be found on the top of this board at both ends. One full turn of this screw will lower the regulator board  $\frac{1}{8}$  inch and, accordingly, force the glass lower. Adjust the screw so as to obtain an even bearing entirely across the lower weather strip.

*The following conditions may exist. In each case they may be corrected by following the instructions given.*

If the front body hinge pillar cover outer is not sealed properly; or there is too large an opening between the top of the cover and the front roof cover panel; or between the bottom of the cover and the cowl and dash assembly, R & M Roof Joint Compound should be applied in the openings.

If there is too large an opening between the windshield header bar and front body hinge pillar assembly, R & M Roof Joint Compound should be applied in the openings.

If the windshield header bar is bowed, remove the garnish mouldings, regulator board, windshield glass, upper weather strip, and retainer. Then use a straight edge to determine the amount of bow in the header bar. Shim with  $\frac{3}{8}$ -inch strips of linoleum or waterproof cardboard to remedy this condition.

If the hole for the wiper tube is not properly sealed, apply R & M Roof Joint Compound or rubber dough inside the hole.

If the windshield rubber glass channels are cut too short, split, loose, worn, improperly installed, or improperly sealed at corners, they should be replaced or sealed with R. & M. Roof Joint Compound.

If the windshield lower weather strip is too short, cracked, worn, or improperly sealed, it should be replaced or sealed with R & M Roof Joint Compound.

If the windshield weather strip retainer is loose or im-

properly sealed, tighten, replace screws, or seal with R & M Roof Joint Compound.

If the windshield glass is not cut to the proper contour to fit the windshield lower weather strip, raise the glass and windshield lower weather strip sufficiently to permit the insertion of a shim between the windshield lower weather strip retainer and windshield lower weather strip. This shim should be of sufficient thickness to remedy any irregularity on the contour of the glass.

If the windshield glass has too much side play, move the side garnish mouldings forward or insert  $\frac{3}{4}$  of an inch friction tape, folded lengthwise, between the garnish moulding and the windshield glass run channel.

If the windshield glass has too much end play, remove the garnish mouldings, raise the glass, and loosen the glass run channels. Then insert a shim of waterproof cardboard between the windshield glass run channels and the front body pillars. Reseal the channel for at least 4 inches up from the bottom and retack to place.

If the screws are missing from the hood lacing on the cowl, they should be replaced. Holes that are improperly sealed should be resealed with R & M Roof Joint Compound.

If the cowl lamp moulding is loose; nuts and washers on moulding loose or missing; or the moulding not sealed properly, it should be tightened, replaced with new nuts and washers, or sealed.

If the holes for the cowl lamp conduit in the cowl are not properly sealed, apply R & M Roof Joint Compound.

If the grommet is missing, it should be replaced.

If the flash weld on top of the cowl is cracked, it should be welded, sunk, soldered, and refinished.

On early type bodies, if the cowl moulding below the windshield is loose, it should be sealed and renailed. On early models, if the cowl and dash is not properly sealed where it is nailed to the lower cross bar, remove the cowl moulding and renail the cowl flange. Then apply R & M Roof Joint Compound and replace cowl moulding.

If the bracket on the hood saddle is loose, tighten or replace missing bolts and washers. On models having a ventilator on top of the cowl, if the gasket is missing it should be replaced.

If the drain or drain hole is too small, drill out or replace with new drain pipe.

If the ventilator drain is pinholed on the edges, replace the ventilator drain assembly.