

Body

Body

List of Contents

	PAGE
BODY STRUCTURE	
General	3
Panelling	3
Wing Stowage Compartments	3
Replacements	3
Valance Door Assembly	3
Type 404 Body Structure - Front View	4
Body Structure - R.H. Front View	5
Type 404 Body Structure - Rear View	6
Type 405 Body Structure - Rear View	7
SPARES ILLUSTRATIONS	
Panelling	8 & 9
Wing Valance Safety Catch	10
Type 405 Bonnet Locking - Hinge and Stay	13
BONNET	
Removing and Refitting the Bonnet	15
Bonnet Panel Assembly	15
To Fit a Bonnet Panel	15
Bonnet Lock	15
Replacing a Bonnet Release Cable	15
SPARES ILLUSTRATIONS	
Bonnet Panel Assembly	16
Bonnet Lock	17
Type 404 Door Fittings	19
Type 405 Door Glass and Fittings	20
DOORS	
Replacements	21
Door Locks	21
Servicing the Door Locks	21
Removing and Refitting Door Locks	
Type 404 Cars	21 & 22
Type 405 Cars	
Front Doors... ..	22
Rear Doors	22
Removing and Refitting External Door Handles	
Type 404 and the Front Doors Only on Type 405	22
Type 405 Rear Doors	22

List of Contents

	PAGE
DOORS (Cont.)	
Removing and Refitting Door Check	22
Removing and Refitting Door Upholstery	22
WINDOW WINDER	
Type 404 Cars	
To Fit a Winder Cable	22 & 23
SERVICING	
Window Regulator - Type 405 Cars	
Removing and Refitting Window Regulators	24
Fitting a Door Window Glass	
Type 404 Cars	24
Front Doors and Rear Doors	
Type 405 Cars	24
Fitting a Quarter Light Glass	
Type 404 Cars	24
Removing and Refitting Front Door Ventilator - Type 405 Cars	24
Front Ventilator Closing Catch	24 & 25
Wind Deflectors	25
Removing and Refitting Rear Quarter Light	25
Removing and Refitting Rear Quarter Light Toggle Catch	25
Draught Reflectors - Type 404 Cars	25
Removing and Refitting the Windscreen Glass	25 & 26
Removing and Refitting the Rear Window	
Type 404 Cars	26
Removing and Refitting Back Light Glasses	
Type 405 Cars	26 & 27
SPARES ILLUSTRATIONS	
Type 405 Boot Door Fittings	29
Type 405 Boot Door Assembly	30
BOOT DOOR - TYPE 405	
Replacements	31
Hinges	31
Locks	31
Telescopic Stay Unit	31
SPARES ILLUSTRATIONS	
Type 404 Front and Rear Bumpers	33
Type 405 Front and Rear Bumpers	34
Type 404 Stoneguard, Wing Flash etc.	35
Type 405 Stoneguard, Wing Flash etc.	36
Bumpers	37
Removing and Refitting Stoneguard from Air Intake Aperture	37
Removing and Renewing the Escutcheon Starting Handle Guide	37
Wing Flash and Door Flash	37

Body

Body Structure

General

The basic body structure comprises of three sub-sections which are assembled to the chassis frame, the complete assembly becoming integral.

These sub-sections are the front and rear metal steel structures and a wood canopy. The wood is mainly ash and in most instances it is laminated.

Fig.221 shows the front view of the structure and Fig.222 shows a R.H. side view of the front structure. These front views are applicable to the Type 404 and Type 405 cars.

Fig.223 shows the rear view of the Type 404 Car structure and Fig.224 shows the rear view of the Type 405 structure.

Panelling

The aluminium alloy panels are made up of various sections as shown in Figs.225, 226, 227 and 228.

These sections can be obtained individually as spares or in assemblies which should be clearly stated when ordering.

During manufacture strips are cut from the actual material for welding rod and 'Uniflux' is used as a flux.

The joins in the panels should be fitted before welding so that no tension is used to connect them. If the joins are strained together there is a likelihood that they will crack or separate after dressing the surface.

Wing Stowage Compartments

To the rear of each front wheel arch is a compartment for stowage purposes. The left hand compartment houses the spare wheel while the right hand side houses the battery.

Each compartments hinged valance is of light alloy with spring loaded hinges which steady the valance in the fully open position Fig.229.

On later Type 404 Cars and on all Type 405 Cars the valance is fastened by a toggle fastener and a safety catch is fitted to the rear, see Fig.230.

Replacements

In the event of damage a complete valance panel is supplied, fitted with its stiffeners and ready for the aperture.

Valance Door Assembly Fig.231.

Three different methods for locking the valance door have been used on Type 404 Cars. The early method is a cable release operated from inside the car, the intermediate is a budget lock operated with a standard squared key, the later method is by toggle fastener on the lower edge. All Type 405 Cars have the later toggle fastener.

The valance doors can be detached by opening to the full extent, detaching the tension springs and removing the screws attaching the hinges to the panel.

In the event of hinges requiring replacement the rear hinges are supplied fully drilled and ready to screw into place. The front hinges, however, are supplied drilled on the body location but are not drilled or set (joggled) for the valance location. The joggle would have to be made to suit the body and valance locations and the existing holes in the valance scribed through to give the hole drilling positions.

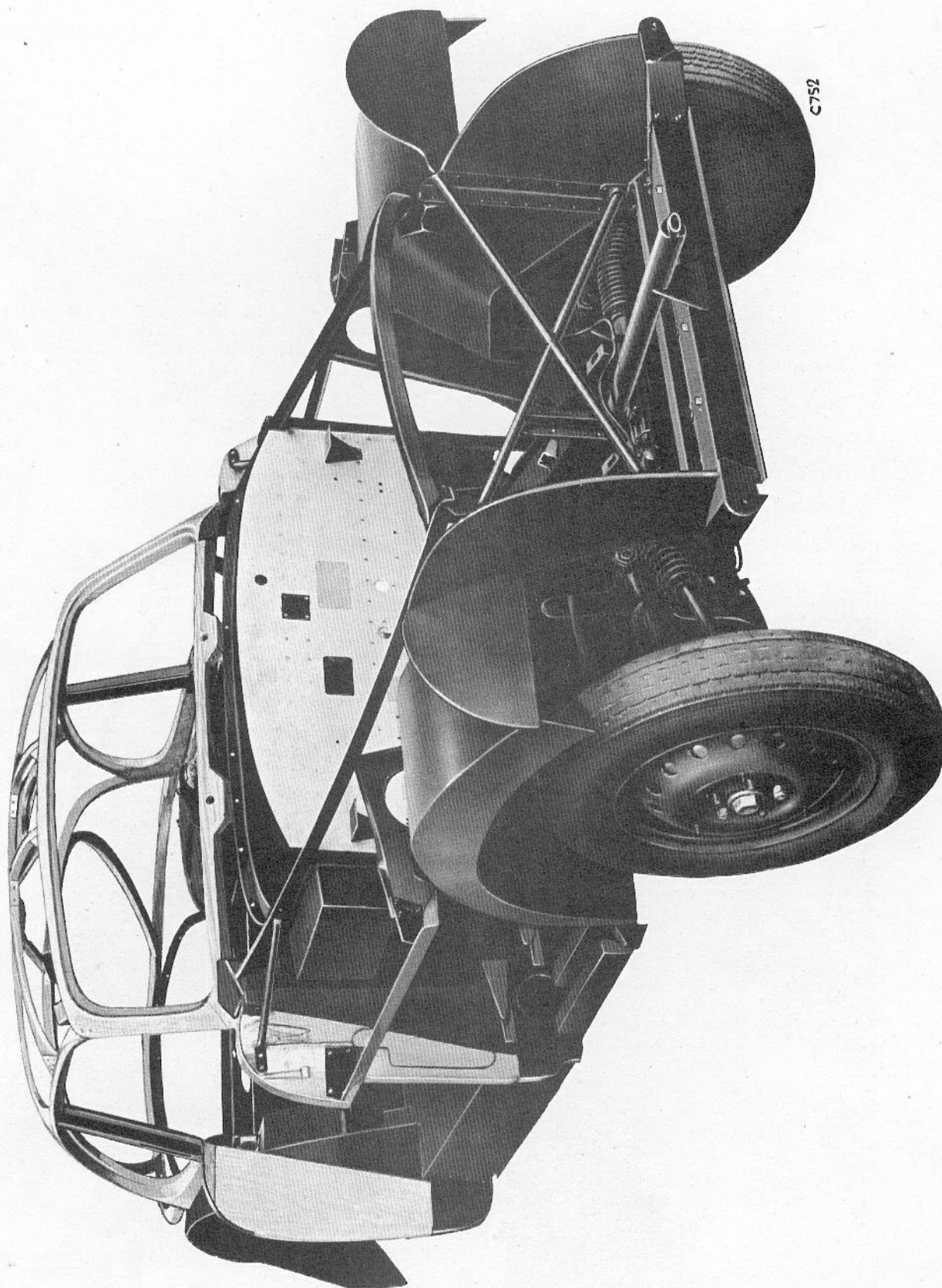


Fig. 221. Type 404 body structure - front view

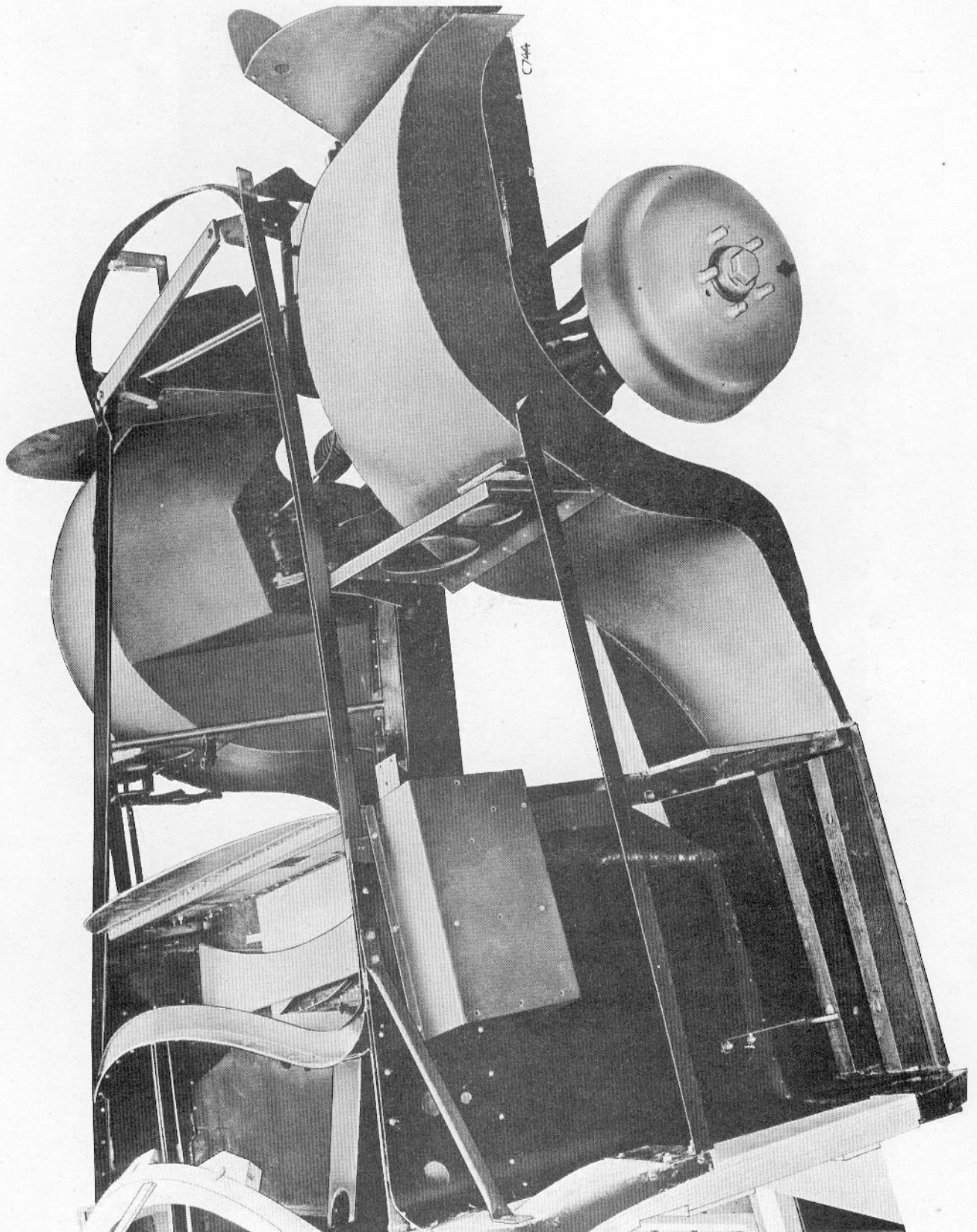


Fig. 222. Body structure - front R.H.



Fig. 223. Body structure - rear - Type 404

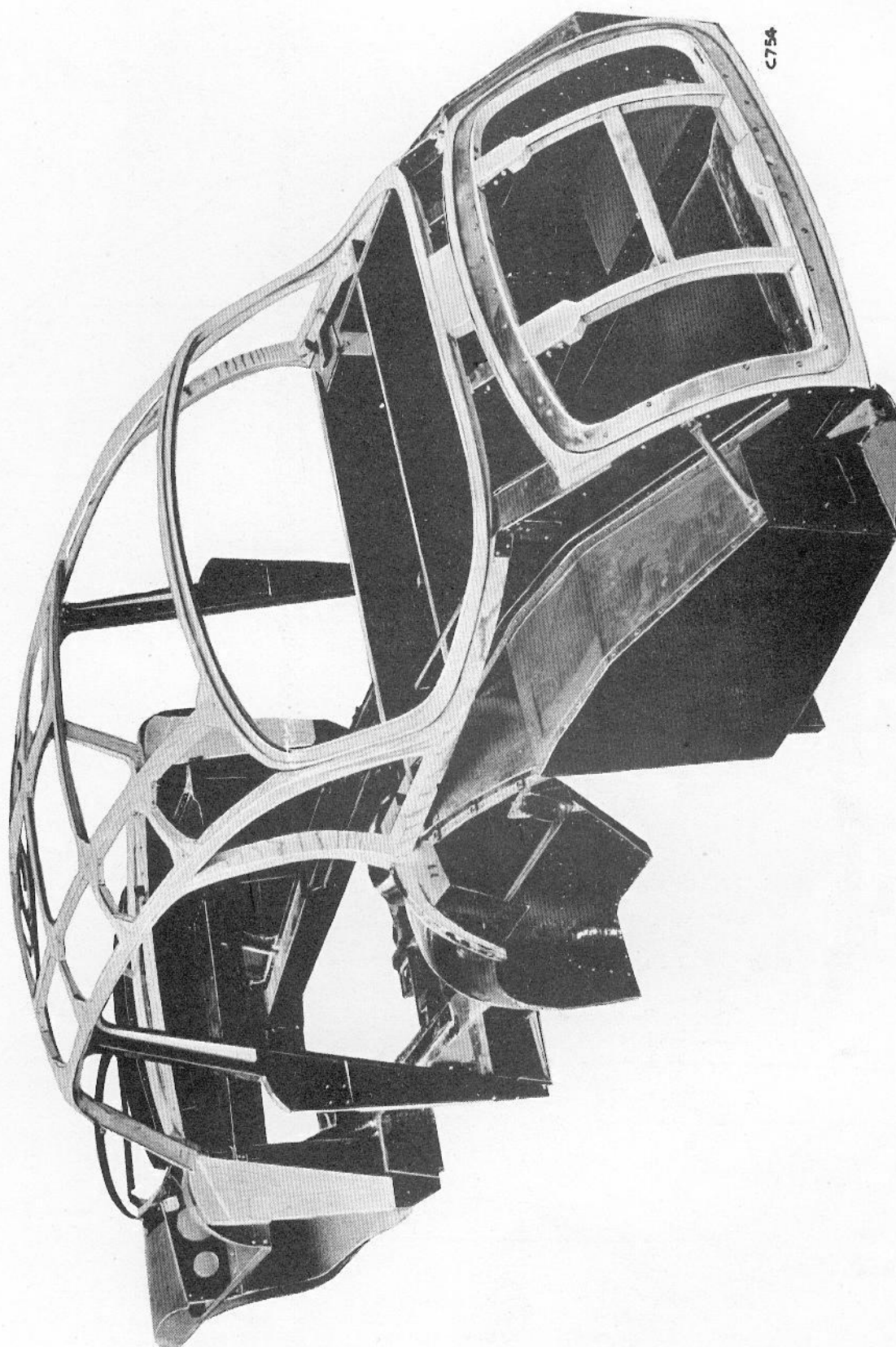


Fig. 224. Body structure - rear - Type 405

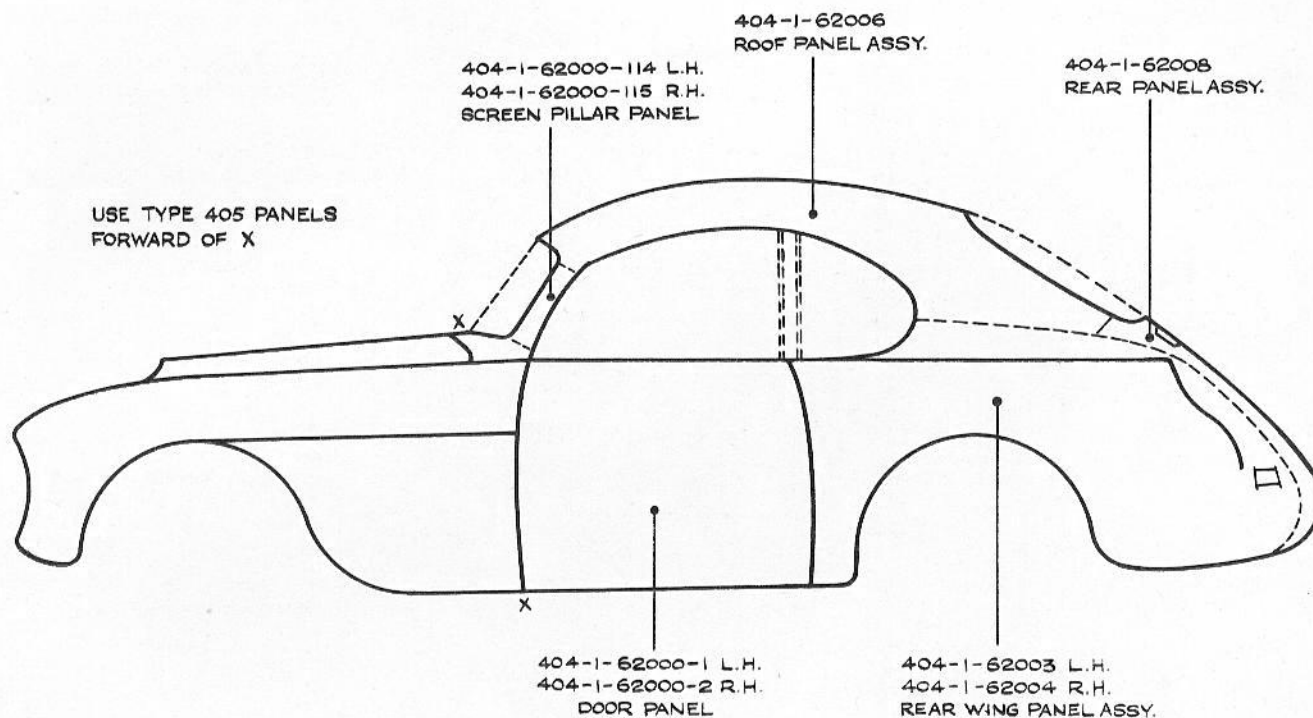


Fig. 225. Panelling - side view - Type 404

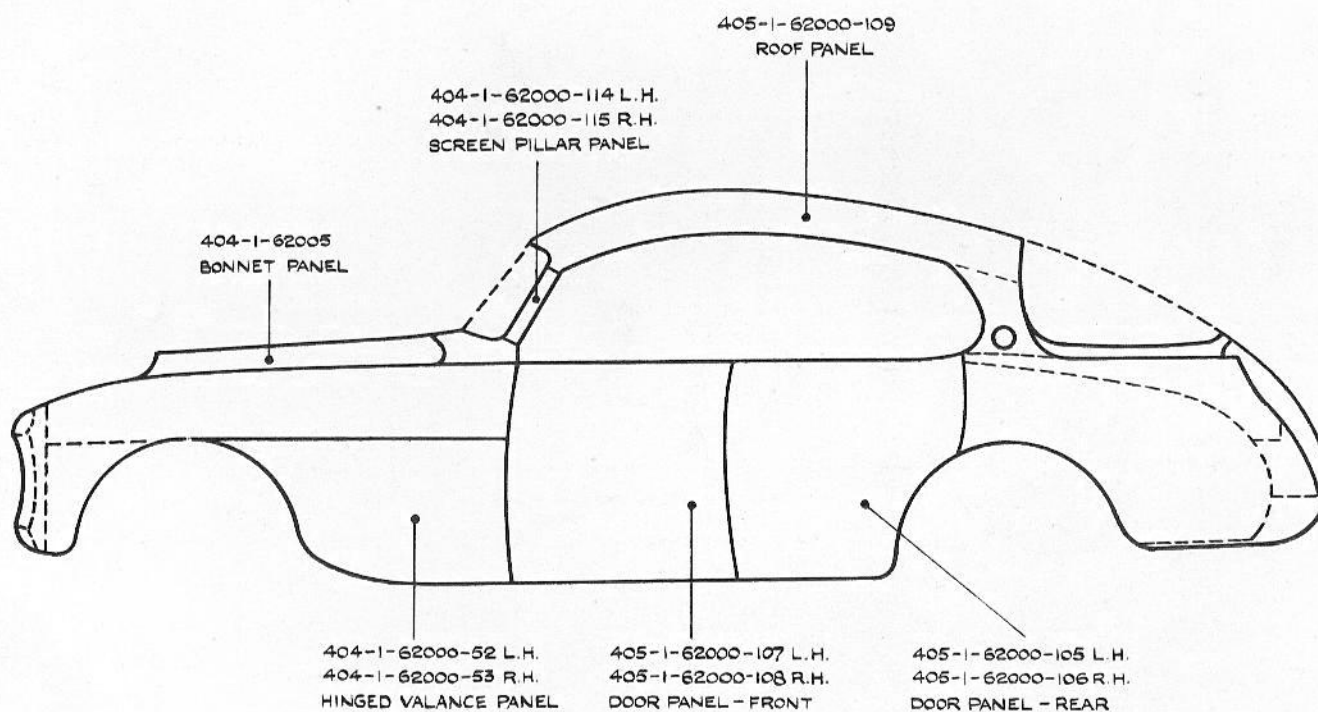


Fig. 226. Panelling - side view - Type 405

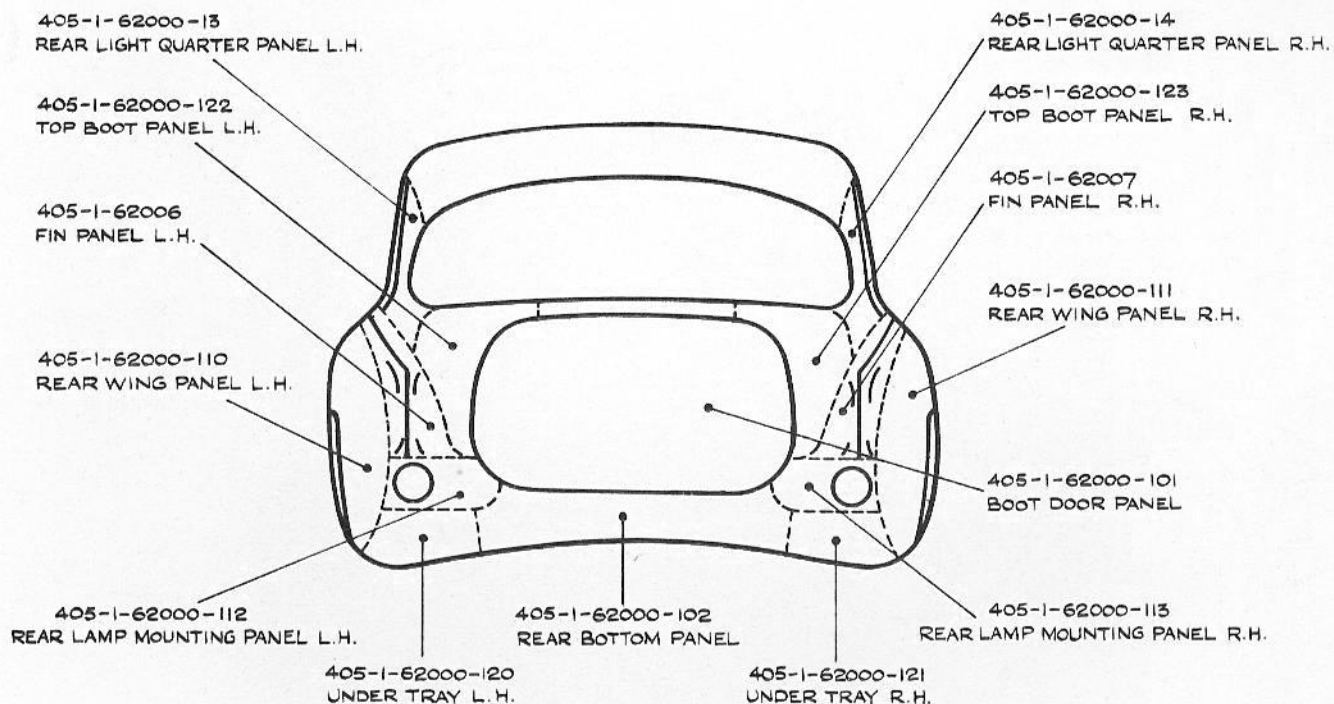


Fig. 227. Panelling - rear view - Type 405

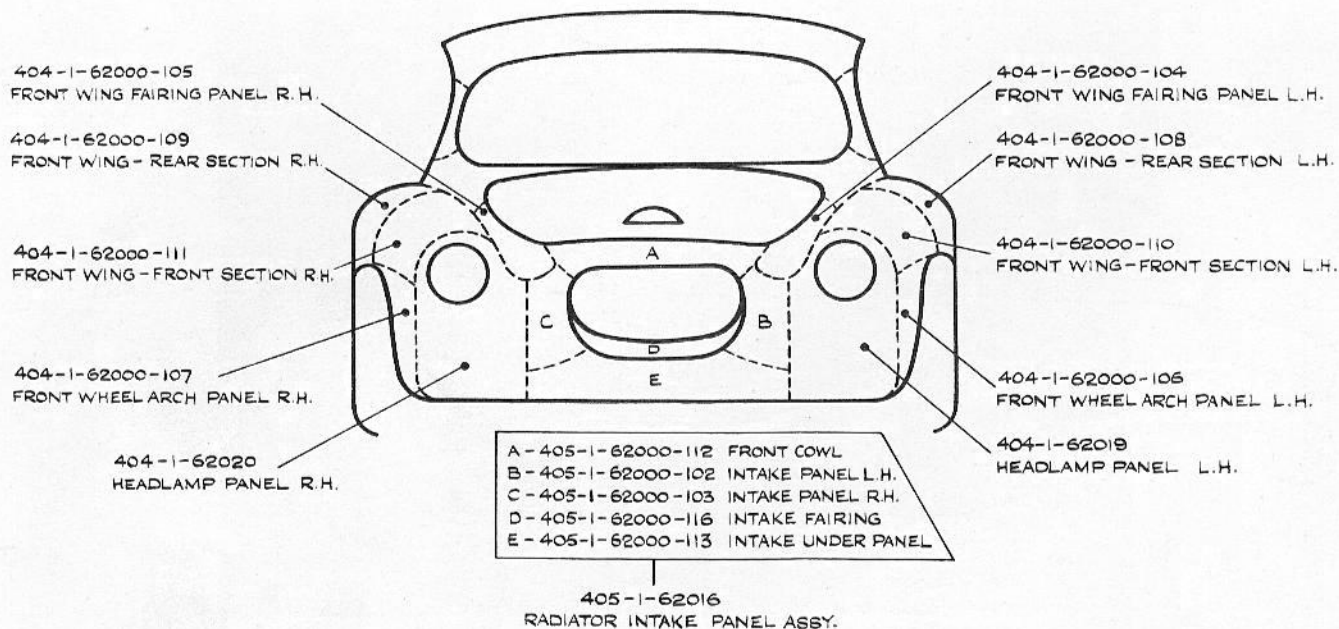


Fig. 228. Panelling - front view - Types 404-405

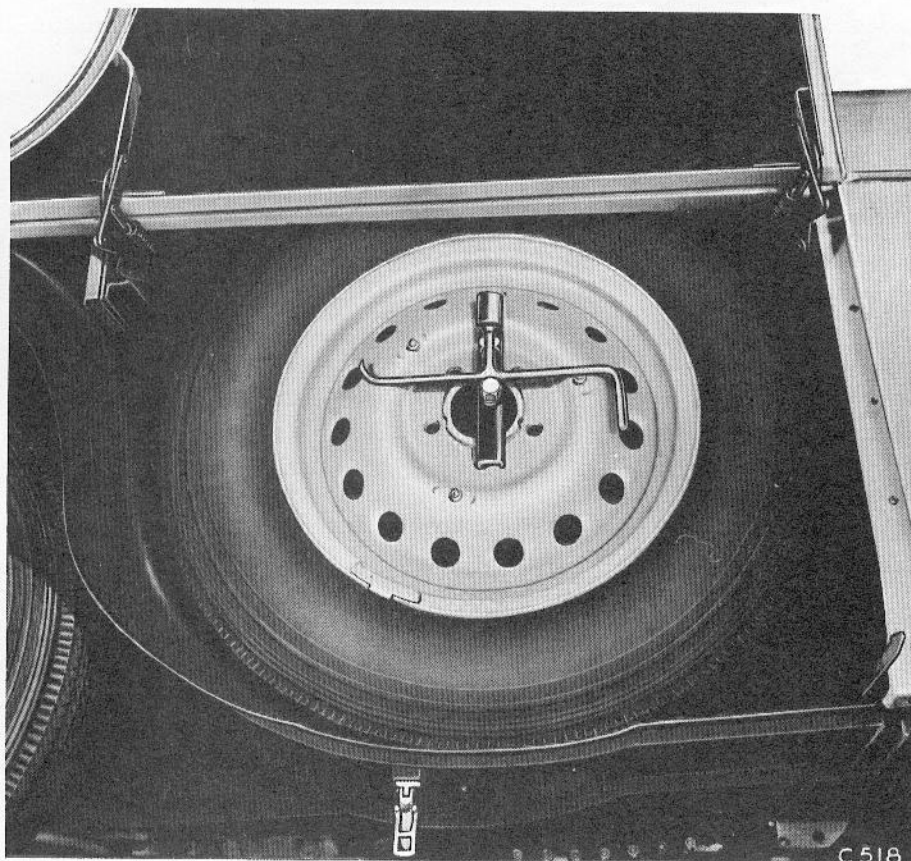


Fig. 229. Wing valance

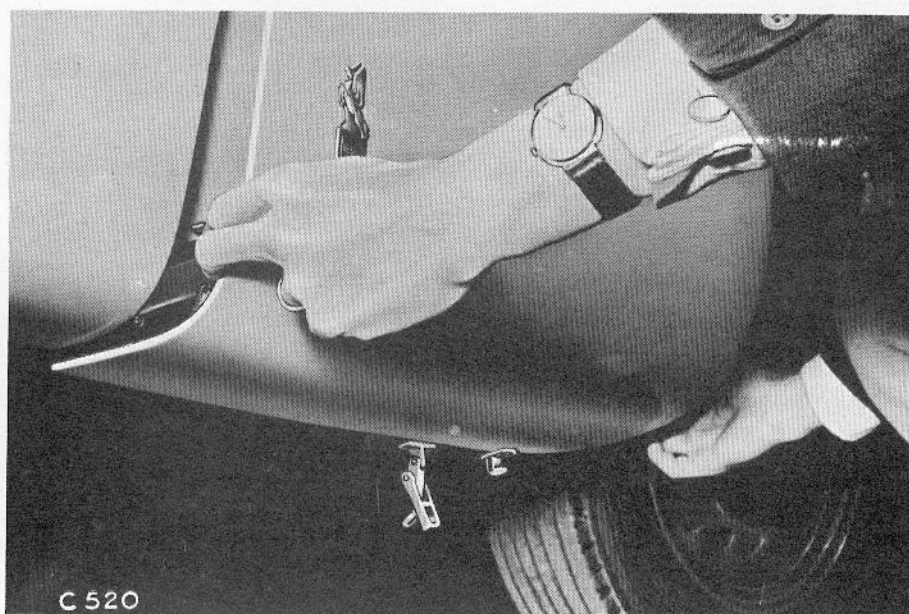


Fig. 230. Wing valance safety catch

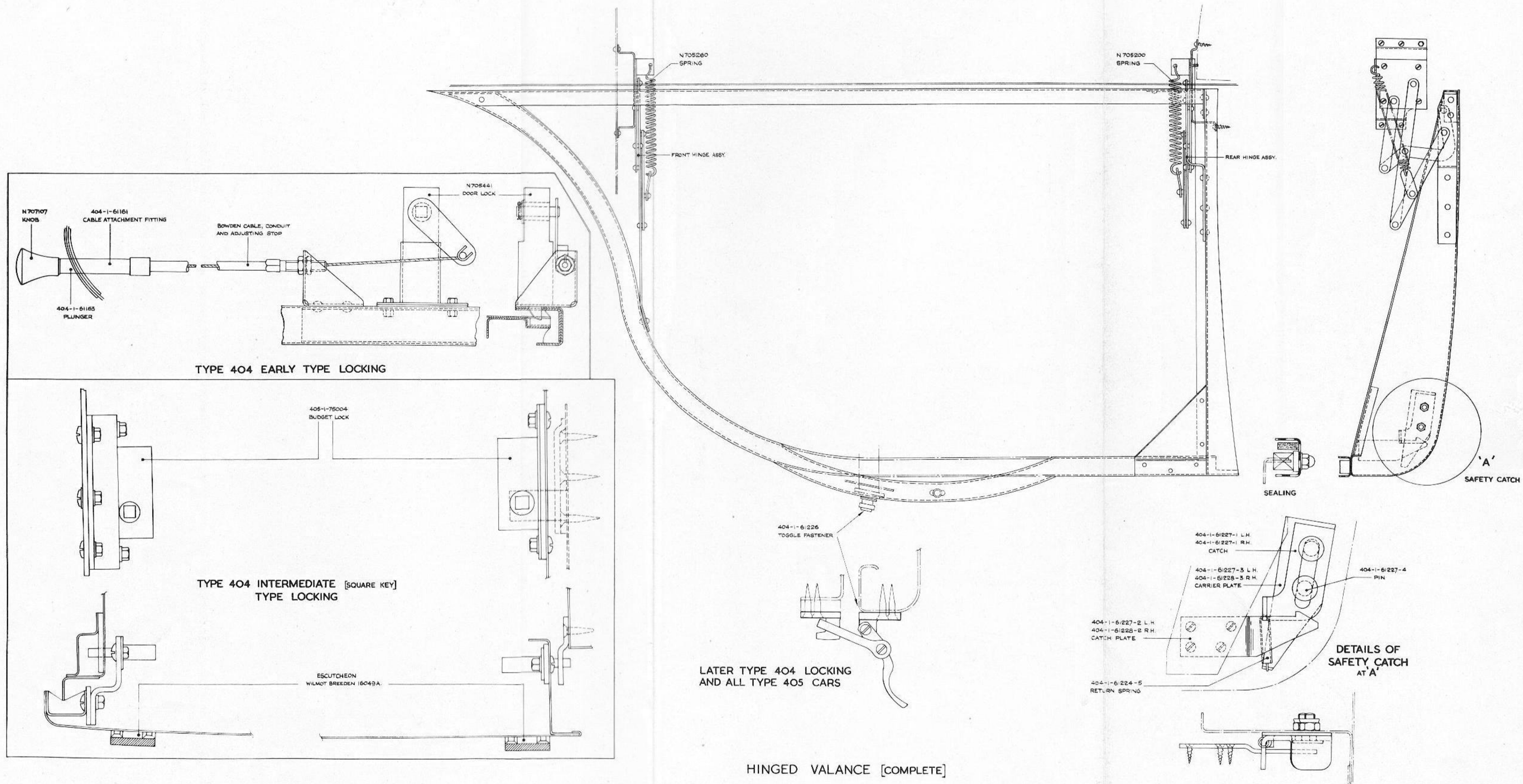
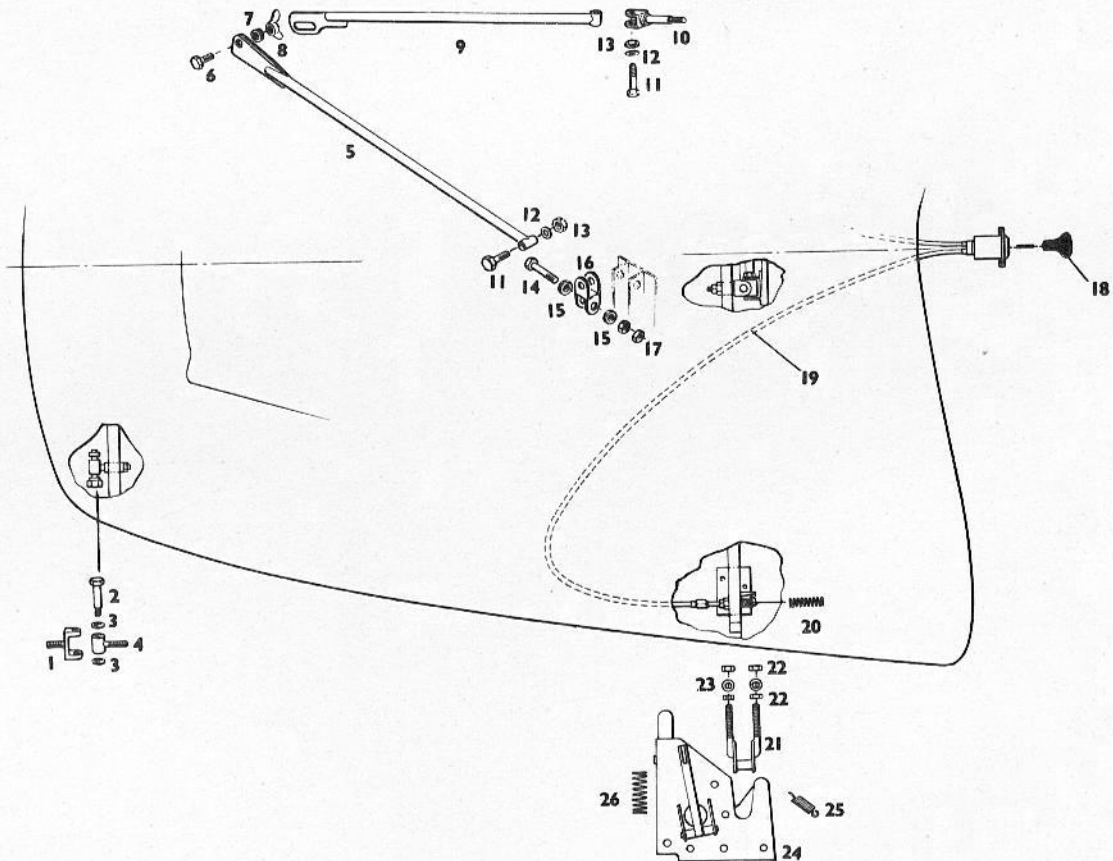


Fig. 231. Wing door assembly

TYPE 405. BONNET LOCKING - HINGE & STAY.

Part No.	Item	Description	No. off per car	Part No.	Item	Description	No. off per car
404-1-71023	1	Fork End	2	AGS.586/D	15	Double Spring Washer	2
404-1-71024	2	Bolt	2	404-1-71019	16	Universal Bracket	1
AS 470G	3	Washer	8	-	17	Locknut 1/4" BSF	1
404-1-71022	4	Hinge Bearing	2	N.707107	18	Operating Knob	1
404-1-71018	5	Bonnet Stay - Short	1	404-1-71010	19	Cable and Fittings complete	2
FS.104/7D	6	Setcrew 1/4" BSF	1	404-1-71012	20	Spring	2
AGS.163/D	7	Double Spring Washer	1	404-1-71021	21	Bonnet Catch	2
-	8	Wing Nut 1/4" BSF	1	FN.105/K	22	Nut 5/16" BSF	8
404-1-71017	9	Bonnet Stay - Long	1	-	23	Washer 5/16" Shakeproof	8
404-1-71020	10	Fork End	1	404-1-71001	24	Bonnet Lock LH	1
FB.104/10D	11	Bolt 1/4" BSF 1 1/4" long	1	404-1-71002	-	Bonnet Lock RH	1
-	12	Washer 1/4" Shakeproof	1	-	25	Tension Spring for Swinging Catch - Bonnet Lock	2
FN.104/K	13	Nut 1/4" BSF	1	-	26	Compression Spring for Square Plunger - Bonnet Lock	2
FB.104/12D	14	Bolt 1/4" BSF 1 1/2" long	1				



Bonnet

The bonnet Fig.232 is mainly constructed of aluminium with steel cross tubes. It has adjustable hinges at the front and locking catches at the rear which are cable operated and released by a press button in the centre lower edge of the dashboard.

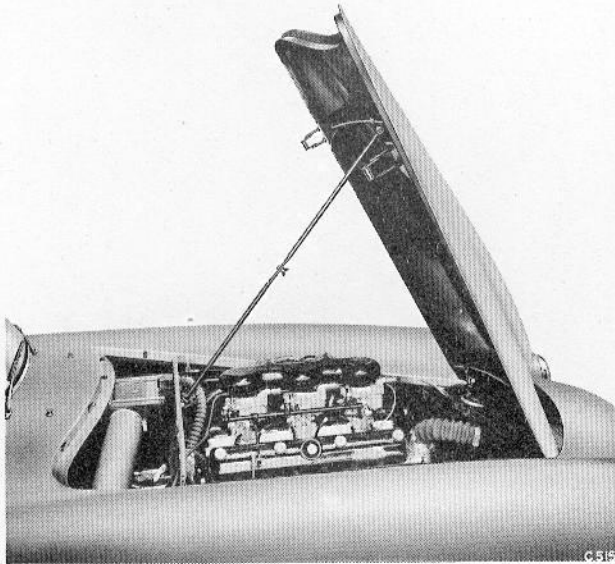


Fig. 232. Bonnet

Removing and Refitting the Bonnet

Press the release knob, raise the bonnet fully and support with the stay.

Unscrew the two front hinge bolts but do not remove them. With assistance, support the bonnet and disconnect the stay, then withdraw the hinge bolts and lift the bonnet clear of the car.

To refit reverse the removing procedure. Some provision has been made at the hinge bearings for adjustment.

Bonnet Panel Assembly Fig.233.

During manufacture the bonnet panel is fitted to each individual car due to variations in the aperture. Replacement bonnet panels are therefore supplied untrimmed with the air intake finished but without the intake gauze fitted.

To Fit a Bonnet Panel

With the bonnet stops in position mark temporary centre lines on the car and bonnet panel and trim the panel to the aperture giving a clearance of 1/8 inch at the edges.

Fit the side angles, rear angle and front piece to the edges and trim the ends to fit neatly together. At the same time the cross tube assemblies should be trial fitted between the side angles to control the width. Spot weld the angles and front piece to the panel. Weld together the joints between the angles and front piece.

Position the cross tubes correctly to the dimensions given and drill and rivet them into position on the side angles. Fit the stiffeners to the front tube on the centre line and spot weld them to the panel.

Using the air intake gauze as a template drill the holes in the flange of the panel with a No.25 drill and secure the gauze with Parker Kalon screw and spire nuts.

Fit the bonnet catches and hinges both of which have adjustment for final setting.

Bonnet Lock Fig.234.

These parts need little attention except occasional cleaning and oiling. Adjustment is provided on the bonnet catches and on the cable to ensure that both sides lock and unlock together.

To close the bonnet, lower it to approximately nine inches of the scuttle and release it. Its own weight should be sufficient to lock it.

To adjust the catches release the lock nuts as shown in Fig.233 the cable adjustment being shown in Fig.235.

Replacing a Bonnet Release Cable

Should a cable be broken with the bonnet locked open the appropriate side valance and release the bonnet lock by reaching through into the engine compartment and pressing the release lever towards the bonnet lock.

Referring to Fig.235 unscrew the adjusters and disconnect the cables at the bonnet locks, at the same time retaining the return spring.

From beneath the dashboard, remove the two screws securing the stop plate at the rear of the plunger assembly and manipulate the cable nipples from the slots. If necessary remove any clips and withdraw the complete cable and conduit.

Prepare a new length of cable to correspond with the old and solder the appropriate nipple to one end only. Well lubricate the cable and pass it through the conduit. Solder the nipple to the other end.

Thread the completed cable through the scuttle, and beneath the dashboard, fit the ferrule housing and cable locking plate over the ends. Manipulate the nipples into their slots in the plunger housing and insert the two screws to retain this assembly.

At the other end, fit the return spring over the end and fit the nipple into the release lever. With the cable passing through the bonnet lock screw in the cable adjusters.

With the conduit clipped into position adjust the cables so that both bonnet locks open simultaneously.

Finally check with the bonnet that the locking and releasing is correct.

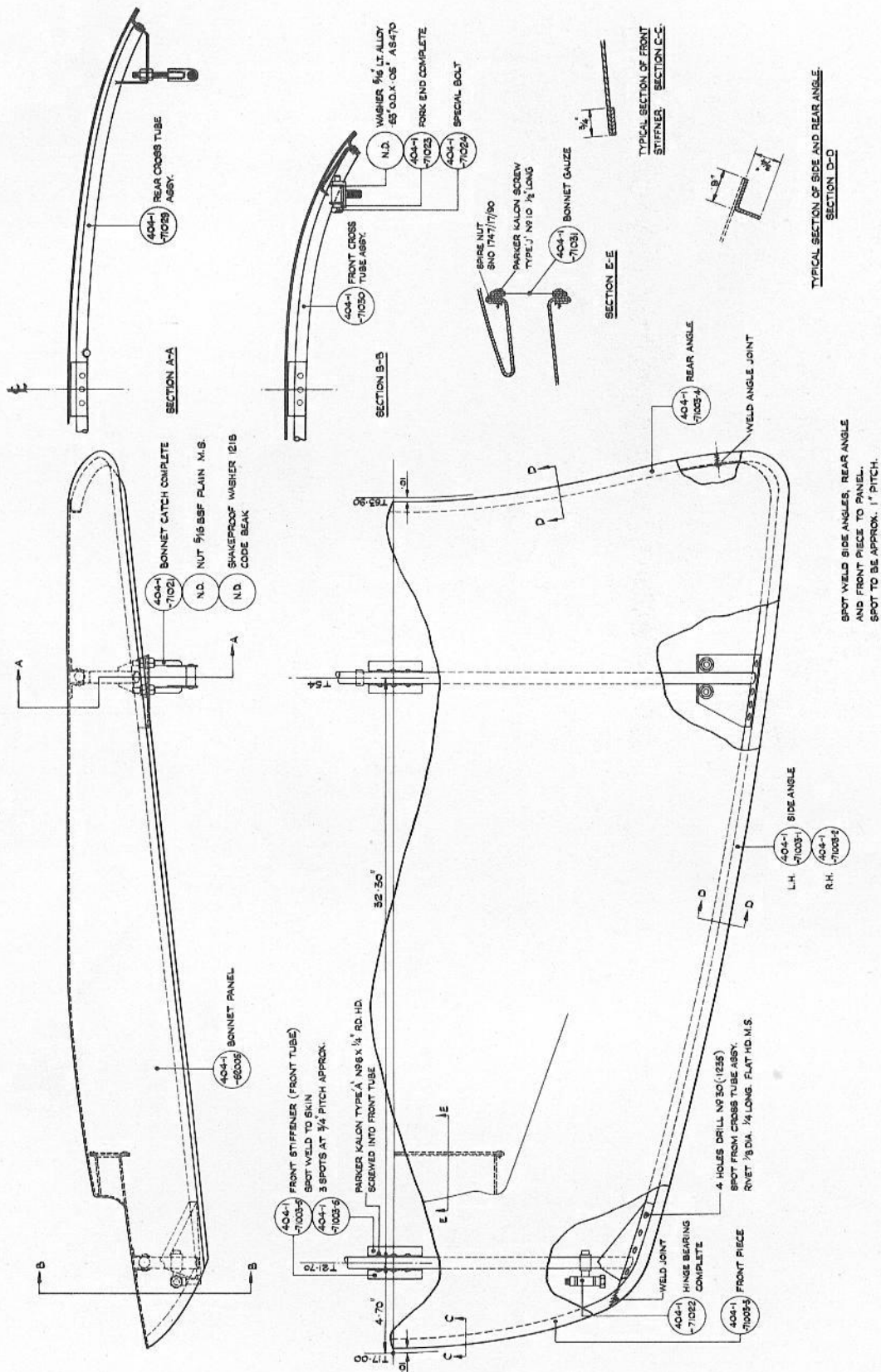


Fig. 233. Bonnet panel assembly

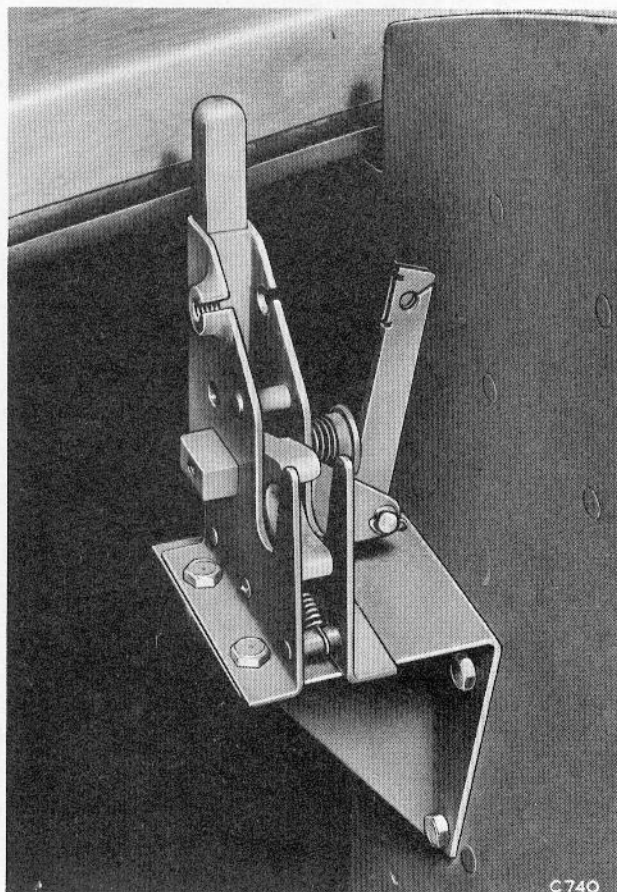


Fig. 234. Bonnet lock

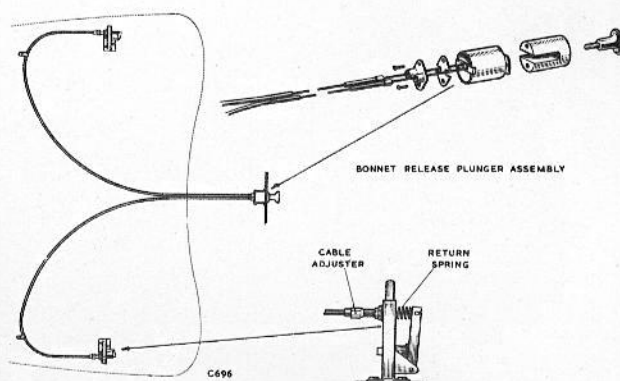
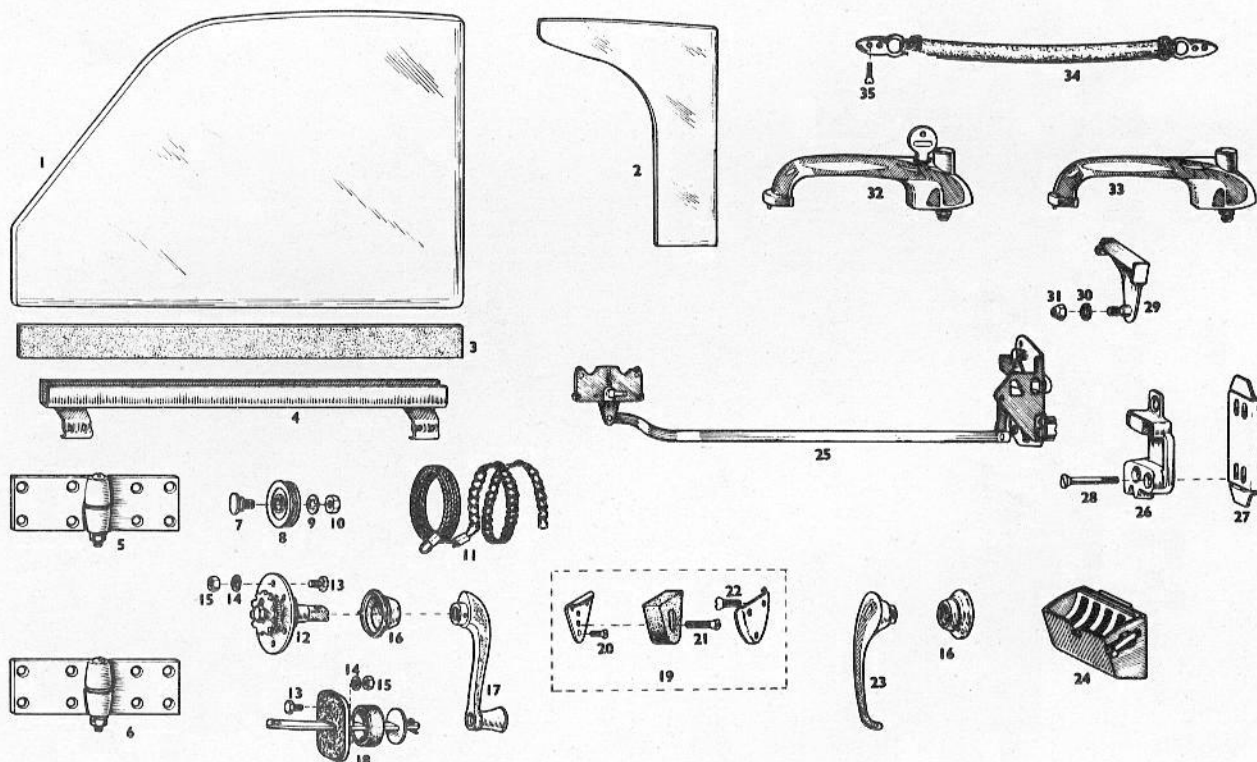


Fig. 235. Bonnet release mechanism

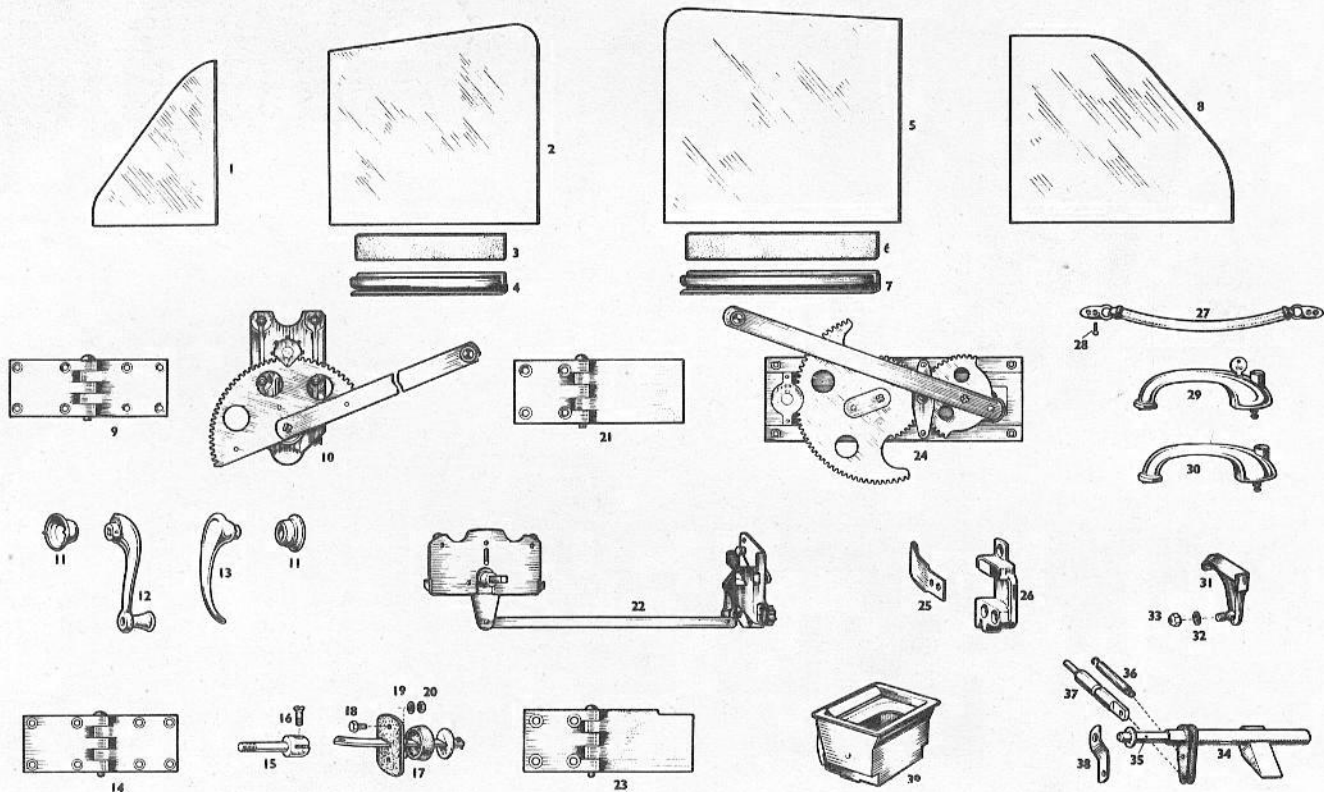
TYPE 404. DOOR FITTINGS.

Part No.	Item	Description	No. off per car	Part No.	Item	Description	No. off per car
404-1-65008	1	Window Glass	2	404-1-65012	18	Door Check	2
404-1-65048	2	Draught Deflector - Perspex	2	N.592471	19	Door Buffer	2
-	3	Rubber Strip 2" x 1/16" x 28" long	2	-	20	Screw 4BA x 3/8" long Csk. Hd.	6
404-1-65030	4	Window Glazing Channel	2	-	21	Screw 4BA x 3/4" long. Raised Head - Chrome	4
404-1-65057	5	Door Hinge L.H. Top & Bottom (Chassis 2001 to 2029)	2	-	22	Screw - Phillips No.4 1/2" long Type Z	6
404-1-65011	-	Door Hinge - Top - LH) Chassis 2030	1	404-1-65017	23	Inside Door Handle	2
405-1-65012	-	Door Hinge - Top - RH) onwards	1	-	-	Used on Chassis 2001 to 2036	-
404-1-65058	6	Door Hinge RH - Top & Bottom (Chassis 2001 to 2029)	2	404-1-65083	-	Inside Door Handle	2
404-1-65071	-	Door Hinge - Bottom - LH) Chassis 2030	1	-	-	Used on Chassis 2037 onwards	-
405-1-65072	-	Door Hinge - Bottom - RH) onwards	1	N.705624	24	Ashtray - Black - Interior only	2
404-1-65029	7	Window Regulator Pin	10	-	-	Used on Chassis 2001 to 2038	-
404-1-65028	8	Window Regulator Pulley	10	404-1-65052	25	RR Lock and RC Mechanism LH	1
-	9	Washer 1/4" Shakeproof	10	404-1-65053	-	RR Lock and RC Mechanism RH	1
-	10	Nut 1/4" ANF. Hex Plain	10	404-1-66005	26	Door Striker LH	1
404-1-65027	11	Window Regulator - Chain & Cable	2	404-1-66006	-	Door Striker RH	1
404-1-65026	12	Clutch & Sprocket	2	404-1-66027	27	Adjustable Backplate for Striker	2
-	13	Screw 2BA Hex. Hd 1/2" long	6	-	28	Screw 1/4" BSF x 2 1/4" long Csk. Hd.	6
-	14	Washer 1/4" dia. Shakeproof	6	404-1-65022	29	Swinging Link LH	1
-	15	Nut 2BA Plain	6	404-1-65023	-	Swinging Link RH	1
N.705098	16	Escutcheon	2	-	30	Washer 1/4" Plain	2
N.705093	17	Window Winding Handle complete Used on Chassis 2001 to 2036	2	-	31	Nut 1/4" BSF Aerotight EA1	2
404-1-65084	-	Window Winding Handle complete Used on Chassis 2037 onwards	2	404-1-65019	32	Push Button - Handle - Locking with 2 Keys	1
				404-1-65018	33	Push Button Handle - Plain	1
				404-1-65043	34	Door Pull	2
				-	35	Screw 2BA x 3/4" long Phillips Raised Head	8



TYPE 405. DOOR GLASS AND FITTINGS

Part No.	Item	Description	No. off per car	Part No.	Item	Description	No. off per car
405-1-65098	1	Ventilator Glass LH	1	405-1-65073	22	R.R. Lock and R.C. Mechanism. LH Front	1
405-1-65099	-	Ventilator Glass RH	1	405-1-65074	-	R.R. Lock and R.C. Mechanism. RH Front	1
405-1-65054	2	Front Drop Glass	2	405-1-65075	-	R.R. Lock and R.C. Mechanism. LH Rear	1
-	3	Glazing Rubber 2" wide 1/16" thick 1' long	2	405-1-65076	-	R.R. Lock and R.C. Mechanism. RH Rear	1
405-1-65017	4	Glazing Channel - Front	2	405-1-65063	23	Door Hinge LH - Bottom - Rear	1
405-1-65055	5	Rear Drop Glass	2	405-1-65064	-	Door Hinge RH - Bottom - Rear	1
-	6	Glazing Rubber 2" wide 1/16" thick 14" long	2	405-1-65015	24	Window Regulator LH - Rear	1
405-1-65018	7	Glazing Channel - Rear	2	405-1-65016	-	Window Regulator RH - Rear	1
405-1-65025-2	8	Quarter Light Glass	2	405-1-66019	25	Striker Ramp LH - Rear Door	1
405-1-65011	9	Door Hinge LH - Top - Front	1	405-1-66020	-	Striker Ramp RH - Rear Door	1
405-1-65012	-	Door Hinge RH - Top - Front	1	404-1-66005	26	Door Striker LH	2
405-1-64013	10	Window Regulator - Front - LH	1	404-1-66006	-	Door Striker RH	2
405-1-65014	-	Window Regulator - Front - RH	1	405-1-65020	27	Door Pull	4
N.705098	11	Escutcheon	8	-	28	Screw 2BA Raised Hd. Chromed - 3/4" long	16
405-1-65084	12	Window Winding Handle	4	404-1-65019	29	Push Button Handle - Locking with 2 Keys	1
405-1-65083	13	Inside Door Handle	4	404-1-65018	30	Push Button Handle - Plain	3
405-1-65071	14	Door Hinge LH Bottom - Front	1	405-1-65069	31	Swinging Link LH - Front Door	1
405-1-65072	-	Door Hinge RH Bottom - Front	1	405-1-65070	-	Swinging Link RH - Front Door	1
404-1-61030	15	Anchor Bolt - Door Check Front Doors	2	-	32	Washer 1/4" Plain	2
405-1-65107	-	Anchor Bolt - Door Check Rear Doors	2	-	33	Nut 3/4" BSF Aerotight EA.1	2
-	16	Screw 2BA Csk. Hd. 1/2" long	4	405-1-65091	34	Swinging Link LH - Rear Door	1
404-1-65012	17	Door Check	4	405-1-65092	-	Swinging Link RH - Rear Door	1
-	18	Screw 2BA Hex Hd. 1/2" long	8	405-1-65094	35	Spindle	2
-	19	Washer 2BA Shakeproof	8	404-1-65087-1	36	Tension Spring	2
-	20	Nut 2BA	8	405-1-65106	37	Link	2
405-1-65067	21	Door Hinge LH - Top - Rear	1	405-1-65095	38	Spring Clip	2
405-1-65068	-	Door Hinge RH - Top - Rear	1	404-II-63083	39	Ashtray	3



Doors

The welded steel door frames are externally covered by an aluminium panel Fig.236 and Fig.237.

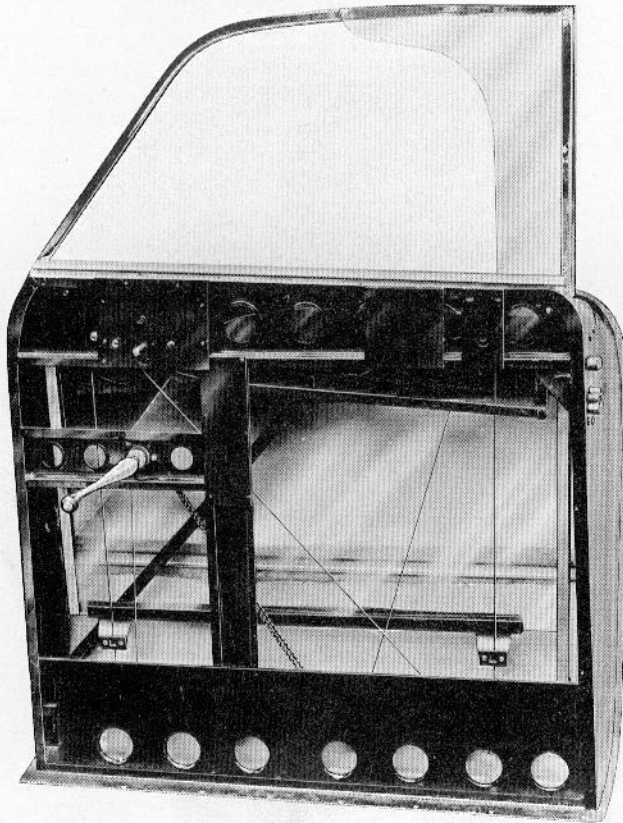


Fig. 236. Door structure - Type 404

Replacements

Due to variations in the door apertures during manufacture each door is individually fitted consequently a complete door cannot be supplied. In the event of damage it is recommended that the panel should be removed and the structure repaired and swung on its hinges. When this is satisfactory a new panel should be fitted to suit the aperture.

Door Locks

The locks are the rotary-ratchet type Fig.238 operated externally by a press button release and internally by a remote control door handle. As the door is closed, the teeth of the striker plate revolves the external star wheel of the door lock which in turn revolves a ratchet wheel inside the lock, therefore the door cannot be re-opened until the ratchet release is operated to allow the ratchet wheel to work in reverse. The passengers doors are locked by turning the internal handles downward to their full extent while the driver's door is locked with a key.

Servicing the Door Locks

The lock operated mechanism is thoroughly greased

when initially assembled however it is well worth the trouble, should the lock fail to act smoothly, to strip down the door upholstery panel, clean away any rust caused by water seepage and well greasing and lubricating.

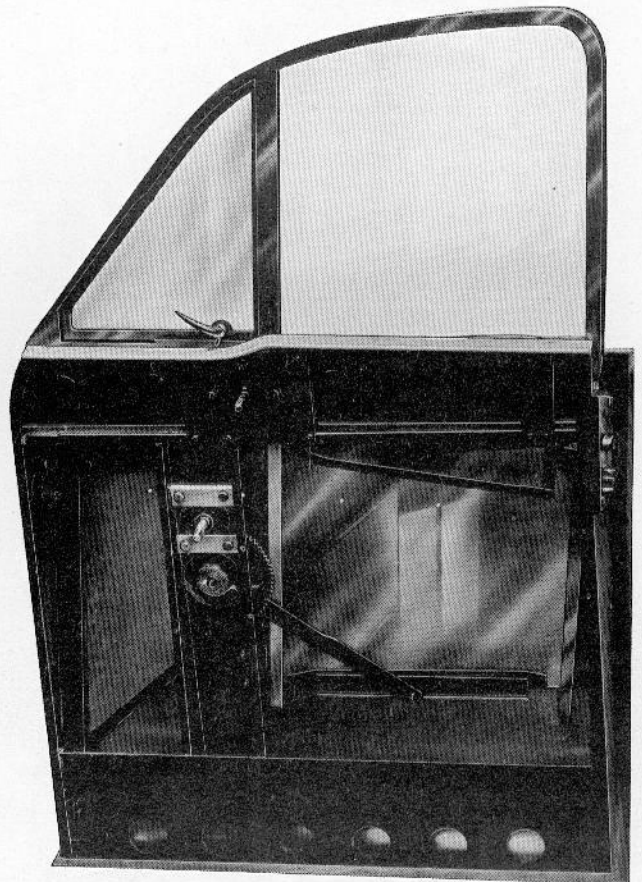


Fig. 237. Door structure - Type 405

Occasionally push back the spring-loaded bronze wedge of the door striker plate and lubricate with oil. Clean away any surplus.

In time it may become necessary to adjust the door catch and striker plate. To adjust, loosen the two securing screws sufficiently to allow the plate to be moved in or out or up and down.

Removing and Refitting Door Lock

Type 404 Cars.

Carry out the procedure for removing the window glass and then remove the window frame.

Remove the four screws securing the lock to the door face and the three screws attaching the remote control mechanism to the door structure and remove the complete assembly.

Check the condition and free operation of the swinging link Fig.239 which is secured by a 1/4 BSF Aerotight nut. After well greasing fit the mechanism back into the door and screw in and tighten the screws. Check thor-

oughly for freedom of movement and that the door will lock securely.

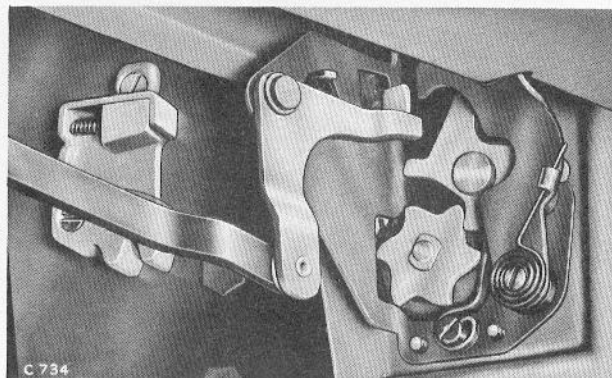


Fig. 238. Rotary door lock

Refit all the removed parts to the procedure given.

Removing and Refitting Door Lock

Type 405 Cars.

Front Doors

Remove the door upholstery panel, the wood sill, the window regulator and the window frame complete with glass.

Detach the remote control mounting plate from the door frame and remove the four screws securing the lock to the door frame. Remove the complete lock assembly.

Check the swinging link. See Type 404.

If a new door lock assembly is to be fitted the remote control mounting plate must be transferred.

To refit reverse the removal procedure. Well grease the mechanism.

Rear Doors

Remove the door upholstery panel, the door pull bracket, the channel rail with window toggle and sill.

Disconnect the link and spring from the swinging link. Remove the four screws securing the lock to the door face and the three screws securing the remote control to the door structure and take away the complete lock assembly.

Before refitting the lock assembly check that the swinging link Fig.239 is in order and lubricated. To remove this link lift and swing the spring clip away and withdraw the spindle complete.

To refit the parts reverse the removal procedure well greasing all parts.

Removing and Refitting External Door Handles

Type 404 and the Front Doors Only on Type 405

Remove the screw just inside the edge of the door, lift the handle and slide it clear of its front location. To remove the front location of the handle remove the upholstery panel.

New handles are supplied complete with the front location.

Type 405 Rear Doors

A hole is provided in the wheel arch of the door to insert a screwdriver to release the door handle. It is advisable however to remove the upholstery panel in order to prevent the screw from dropping into the bottom of the door when it is released. It would also be difficult to insert the screw without removing the panel.

Removing and Refitting Door Check Fig.240.

Remove the upholstery panel from the door. Remove the screw securing the flat bar of the door check to the fork end and from inside the door remove the two 2BA bolts and take out the door check.

Should the fork end need replacing it is bolted through the front door pillar and secured with a ferrule while on the rear doors it is secured by a nut which is made easily accessible by lifting the valance door.

When refitting check the full extent of the door opening before attaching the door upholstery panel. Should the door open too far, fit plain steel washers between the rubber buffer and the retaining split pin until the opening is satisfactory.

Removing and Refitting Door Upholstery

Press back the escutcheon on the door lock and window winder handles and push out the pin retaining the handle.

Remove the chromium embellishers at each edge of the door and level with the window sill and remove the metal finisher. Remove the door pull.

On Type 405 Cars remove the arm rest.

Remove the upholstery panel screws and lift away the panel.

To refit reverse the procedure.

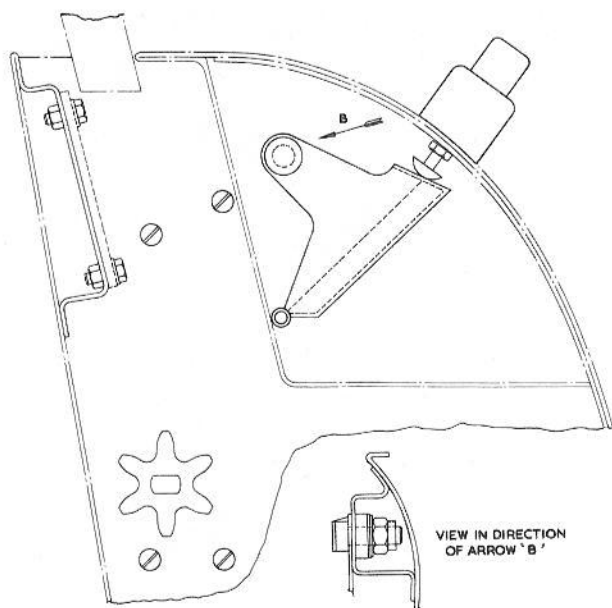
Window Winder

Type 404 Cars.

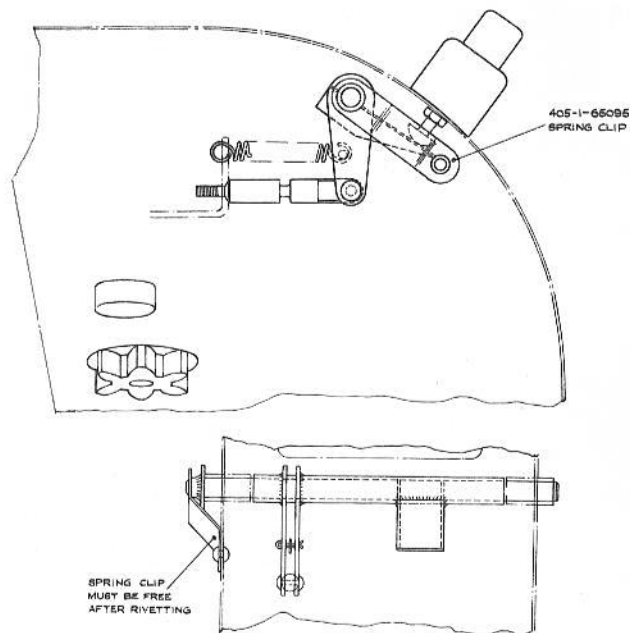
This is a cable and chain system as shown in Fig.236.

To Fit a Winder Cable

Remove the door upholstery and lower the window to the stops.



SWINGING LINK
TYPE 404 AND 405
FRONT DOORS



SWINGING LINK
TYPE 405
REAR DOOR

Fig. 239. Door lock - swinging link

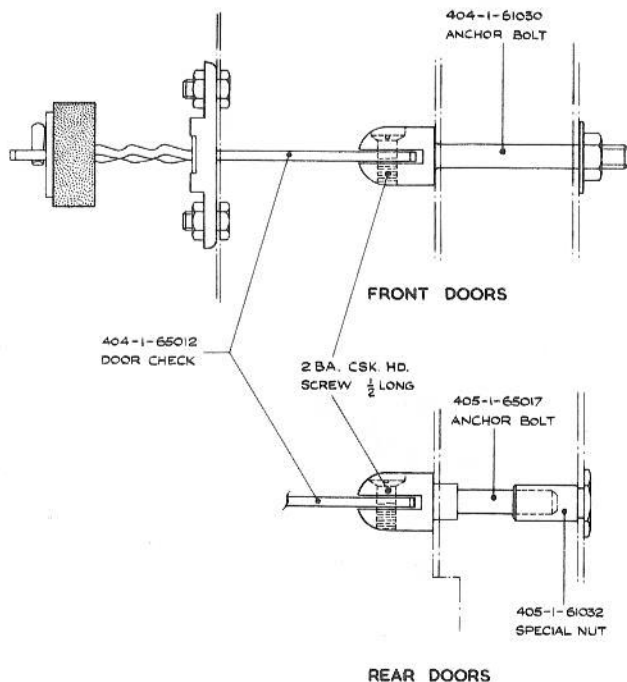


Fig. 240. Door check and anchorage

Referring to Fig.241.remove the window channel cable clamps and loosen the nuts of the three lower pulleys, this will allow the cable and chain to be lifted off.

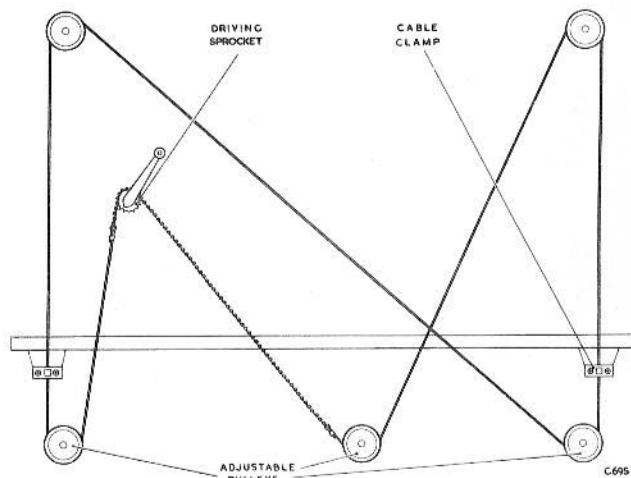


Fig. 241. Window winder cable

Fit a new cable and chain over the pulley wheels, positioning the chain on the sprockets with the remaining links towards the centre pulley.

Adjust the three lower pulley wheels by pressing them downwards and tightening the nuts.

Refit the clamps to the window channel and tighten. Test the winder and if satisfactory well lubricate.

Refit the door upholstery.

Servicing

With the door upholstery panel removed periodically lubricate the pulley wheels and sprocket with oil and smear light grease over the cable and chain.

Check the cable for tension; too much slack in the cable will result in lost movement at the winding handle. To tighten a cable, lower the window to the stops and adjust each of the lower pulley wheels in turn.

Window Regulator

Type 405 Car.

This is the gear quadrant and arm type as shown in Fig.237.

Removing and Refitting Window Regulators

Remove the door panel upholstery.

Support the window and remove the screws securing the regulator to the door. Slide the arm out of the window glass channel and lower the glass to its stops.

To refit, reverse the removing procedure and lubricate the gear quadrant and window channel with light grease.

Fitting a Door Window Glass

Type 404 Cars.

Remove the door upholstery panel. Remove the Perspex draught deflector.

Remove the wood window sill and the furflex sealing.

Lower the window to its lowest position and remove the window channel cable clamps.

Carefully tip the glass forward and guide the rear edge up through the door frame and out through the window frame. Transfer the window channel from the removed glass to the new, using the rubber insertion between the glass and channel.

To refit the glass, carefully guide the forward edge down through the door frame and onto its runner, turn the glass and guide the rear end onto its runner. Lower the glass to its lowest position.

Checking that the tension of the cable is correct and also the position of the chain on the sprocket refit and tighten the window channel cable clamps.

Check that the window works freely and smoothly and to its limit in both directions then refit the furflex sealing and window seal, refit the draught excluder and fit the door upholstery panel.

Type 405 Cars.

Front Doors

Remove the door upholstery panel and the wood sill and furflex sealing. Detach the bolts securing the lower parts of the window frame and remove the window regulators as described.

Carefully guide the window glass up through the door

frame and out through the window frame.

Transfer the window channel from the removed glass to the new, using the rubber insertion between the glass and the channel.

To refit reverse the procedure and lightly grease the mechanism.

Rear Doors

Remove the door upholstery panel and the wood sill. Remove the arm rest plate and the window regulator. Take out the screws and bolts securing the window frame and lift out the window frame complete with the glass.

Transfer the window channel from the removed glass to the new, using the rubber insertion between the glass and the channel.

To refit reverse the procedure and lightly grease the mechanism.

Fitting a Quarter Light Glass

Type 404 Car.

Remove the two screws securing the toggle catch to the quarter light frame.

Open the quarter light fully, remove the screws attaching the hinge to the body and take away the quarter light. Remove the screws holding the two parts of the frame together and separate the frame.

Clean out the channel of the frame and fit the new glass using glazing rubber. Assemble the frame and refit the screws. Check that the sealing rubber is in good condition; fit new if necessary.

Refit the quarter light to the body and reconnect the toggle catch.

Removing and Refitting Front Door Ventilator

Type 405 Car.

Remove the chrome embellishers at each end of the metal finisher, fitted along the top of the upholstery and remove the metal finisher. Remove the wood sill.

Slacken the clamping bolts securing the lower pivot sufficiently to release the pivot. Remove the upper pivot screw and lift out the ventilator complete.

If a new glass is to be fitted remove the screws holding the frame together and separate the frame. Fit a new glass using glazing rubber.

Check the sealing rubber and fit new if necessary. To refit the ventilator reverse the removal procedure, tightening the lower pivot clamp sufficiently to obtain an easy push operation.

Front Ventilator Closing Catch

In the event of the handle breaking away from the front ventilators it is not possible to obtain a complete replacement frame and glass.

In many instances the hinge positions have been altered and in all instances the ventilator to the door frame is not interchangeable.

If the bracket has broken away from the door frame it will be necessary to make a brass angle piece to the dimensions shown in Fig.242. Remove the glass from the frame attach the new angle and have the frame replated.

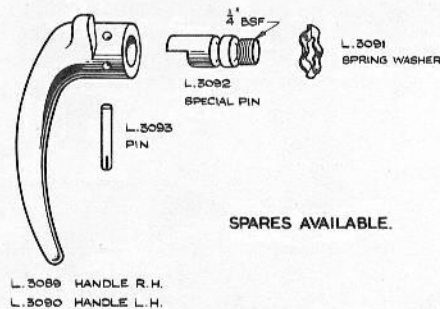
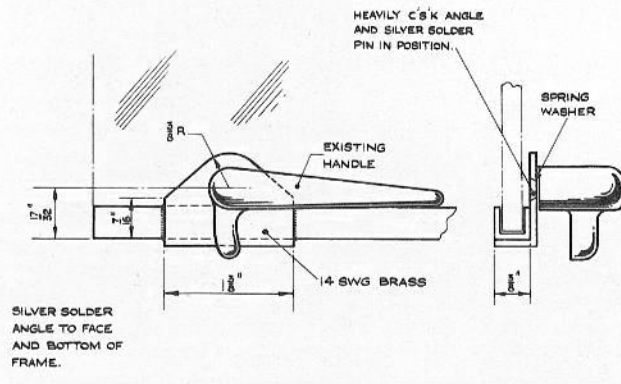


Fig. 242. Front ventilator closing catch

If the handle only has broken away then the glass should be removed and the existing bracket deeply countersunk in order to silver solder the pin back into position. If this is carefully carried out no replating is necessary.

Should the handle have dropped off and been lost spares are available as shown in Fig.242.

Wind Deflectors

To eliminate wind noise chromium plated angle pieces were attached to the window frame forward of the front ventilators as shown in Fig.243. These deflectors were not fitted to earlier cars and they can be obtained from the Spares Department.

Removing and Refitting Rear Quarter Light

Open the quarter light and remove the screw securing the quarter light to the toggle lever. Remove the screws securing the quarter light hinge to the window glass frame and lift away the quarter light complete.

If a new glass is to be fitted, remove the screws securing the hinge to the frame, separate the frame and remove the glass.

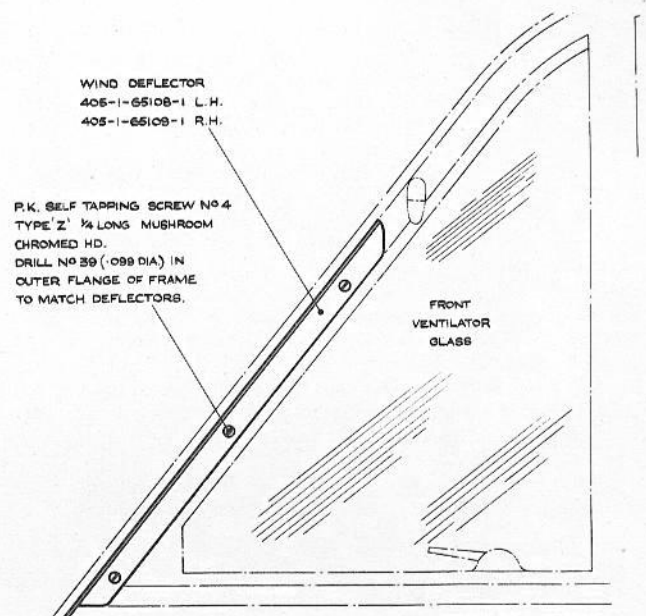


Fig. 243. Wind deflectors

Fit the new glass using glazing rubber and re-assemble the frame.

Check the sealing rubber for condition and replace if necessary.

To refit, reverse the removal procedure.

Removing and Refitting Rear Quarter Light Toggle Catch

Open the quarter light and remove the screw on the toggle lever securing the quarter light.

Remove the chrome embellishers and the metal finisher at the window sill.

Remove the two screws securing the toggle catch to the window sill.

To refit reverse the removal procedure.

Draught Deflectors

Type 404 Cars.

Perspex draught deflectors were fitted to later cars as shown in Fig.236 the perspex being held in position by two chrome plated strips and six self-tapping screws.

Removing and Refitting the Windscreen Glass

Special tools are required for fitting the 'Beclatite' rubber sections.

To remove and fit a windscreen glass first remove the wiper arms and blades complete.

Break the join in the rubber section and with the glass held, carefully pull out the rubber section all round and take away the glass. Remove the sealing from the windscreen aperture.

If the chromed glazing section is suspected for water leakage it should be removed by taking out the screws securing it to the windscreen aperture and carefully prised out bearing in mind that it was fitted with sealing compound.

Clean off all the old sealing compounds and apply a coat of 'Seelastic' to the frame and fit back into position, cleaning away the surplus sealing compound.

Offer the windscreen glass to the aperture and check the form of the glass in relation to its wood seating. This should be reasonable with no undue effort being necessary for the glass to seat. If there should be too much gap try another glass or shave away the wood. This is important as any undue strain will result in a broken glass even though the glazing operation may be carried out without immediately cracking the glass.

When the seating is satisfactory fit the inner glazing strip (Prestik sealer strip) to the aperture face.

Fit the windscreen glass and locate it by fitting short strips (about 2 inches) of sealing rubber at different points around the frame.

The sealing rubber for the Type 404 Windscreen is Beclatite R201 and for the Type 405 Windscreen Beclatite R206.

Using a special tool as shown in Fig. 244 which must be appropriate to the rubber section being fitted, start on the top centre of the windscreen and gradually fit the section taking out the temporary pieces in turn. Use a rubber lubricant with the tool. Having glazed to the joint cut the rubber allowing 1/8 inch extra for compression. Insert the end against the joint and press the surplus which is formed into place with the thumb.

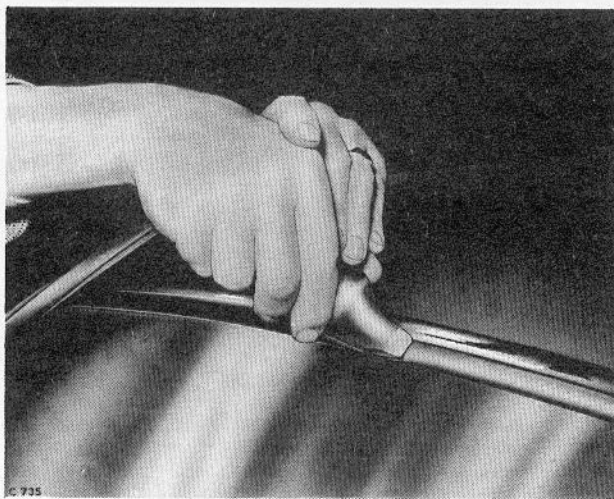


Fig. 244. Fitting windscreen rubber

Removing and Refitting the Rear Window

(See Fig. 245.)

Type 404 Car.

The rear window is removed and refitted in almost the same way as the windscreen, the difference being that the

rear window is of Perspex instead of glass.

In the event of a new rear window being fitted a flat form cut to template will be supplied which should be carefully fitted to the aperture. As the window supplied is flat it will also be necessary to use more small pieces of rubber section at smaller intervals to retain it in position for final sealing.

The sealing rubber is Beclatite R201.

Removing and Refitting Back Light Glasses

(See Fig. 246.)

Type 405.

Remove the two chromium plate finishers which are lipped into the rubber section.

Break the join in the rubber section at the top and in the centre of the centre glass and with the glasses supported draw out the rubber section from all around the backlight. Separate and remove the glasses.

Remove the sealing from the backlight aperture. If the chromed glazing section is suspected of water leakage it should be removed by taking out the screws securing it to the aperture and carefully prised out bearing in mind that it was fitted with sealing compound. Clean off all the old sealing compound and apply a coat of 'Seelastic' to the frame and fit back into position cleaning away the surplus compound.

To refit the glasses fit the inner glazing strip (Prestik sealer strip) to the aperture face.

Locate the centre glass in the aperture by using short lengths (about 2 inches) of rubber section fitted at different points at the top and bottom of the glass.

Prepare the two lengths of rubber used between the glasses by:-

(A) Using the removed rubber.

(B) Using new rubber sections Claytonrite A5168 and A5018 and trim them identically to the removed rubber.

Fit these two sections, without the centre core rubber, and fit each backlight corner glass to the aperture locating them with the short sections of rubber.

The sealing rubber for the backlight is Beclatite R201.

Using a special tool as shown in Fig. 244 which must be appropriate to the rubber section being fitted, start on the top centre of the centre glass and gradually fit the section unbroken around the three glasses. Use a rubber lubricant with the tool. Having glazed to the joint cut the rubber allowing 1/8 inch extra for compression. Insert the end against the joint and press the surplus which is formed into place with the thumb.

Fit the core rubber into the two sections between the glasses and see that the trimmed ends of the main central rubber are a good fit with the outer edge sealing rubber.

Finally refit the two chromium plated finishers. To help to do this, fit string under one lip of the rubber section, insert one edge of the chromium finisher under

the other lip and keeping pressure on the finisher carefully pull away the string which should lift the lip of the rubber over the section.

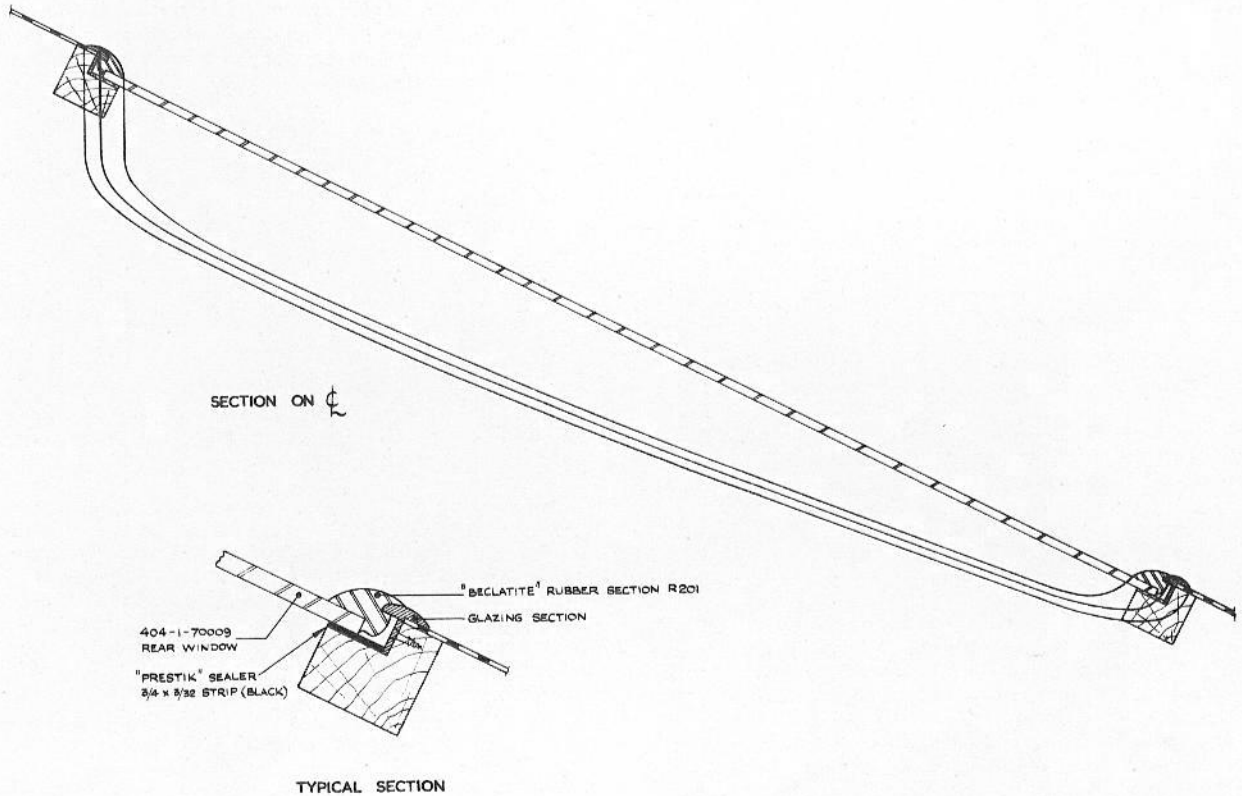


Fig. 245. Rear window assembly - Type 404

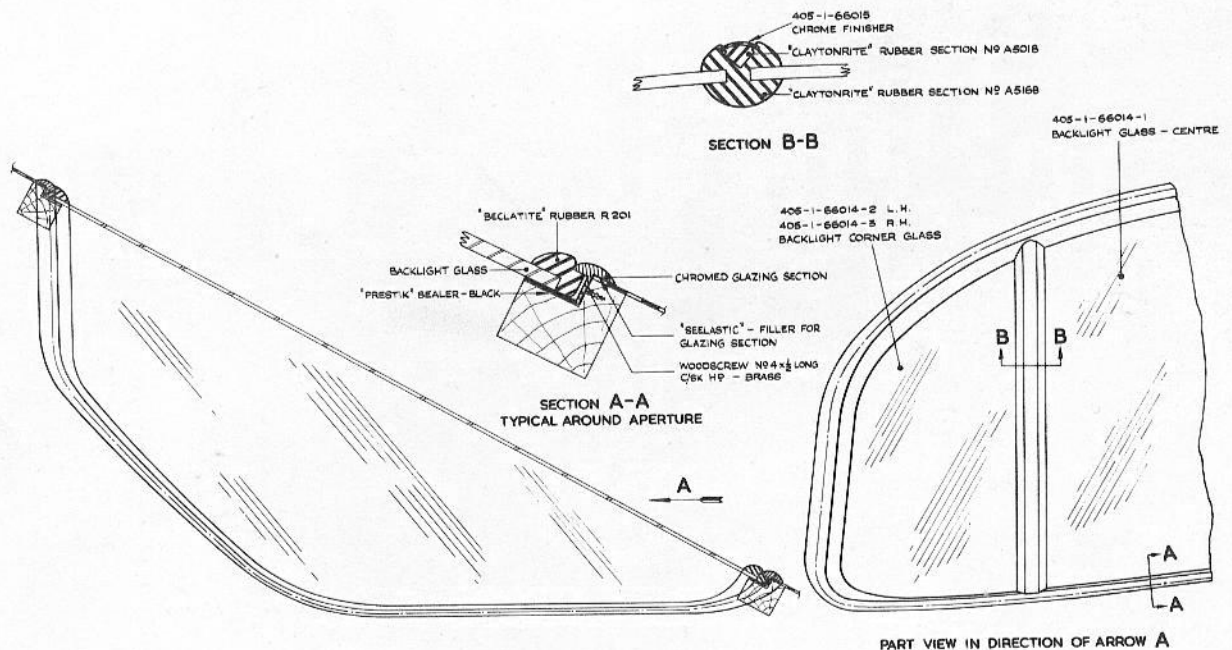
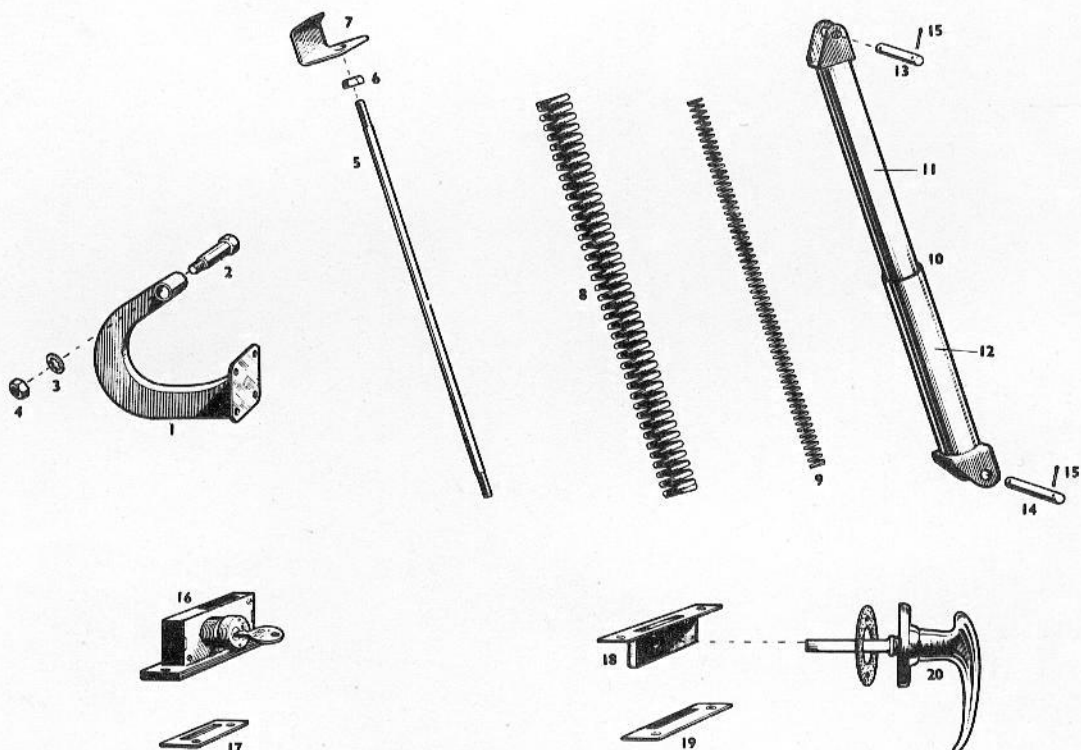


Fig. 246. Backlight glass assembly - Type 405

TYPE 405. BOOT DOOR FITTINGS.

Part No.	Item	Description	No. off per car	Part No.	Item	Description	No. off per car
N.701336	1	Hinge Bracket	2	N.705679	10	Boot Door Spring Unit complete	1
N.701320	2	Pivot Bolt	2	N.705533	11	Inner Telescopic Tube	1
-	3	Washer 1/4" Shakeproof	2	N.705532	12	Outer Telescopic Tube	1
FN.104/K	4	Nut 1/4" BSF	2	N.705536-1	13	Pin - long	1
N.705680	5	Adjusting Rod	1	N.705536-2	14	Pin - short	1
-	6	Nut 2BA Plain	4	-	15	Split Pin 1/16" dia. 1/2" long	4
405-1-75006	7	Striker Plate	1	405-1-75003	16	Mortice Lock with 2 Keys	1
		Used up to Chassis 4136		405-1-69025	17	Striker Plate	1
N.705531	8	Spring	1	405-1-75004	18	Budget Lock	2
SKN.3878	9	Spring - Inner	1	405-1-69026	19	Latch Plate	2
		Used up to Chassis 4136		405-1-75005	20	Boot Door Handle	2



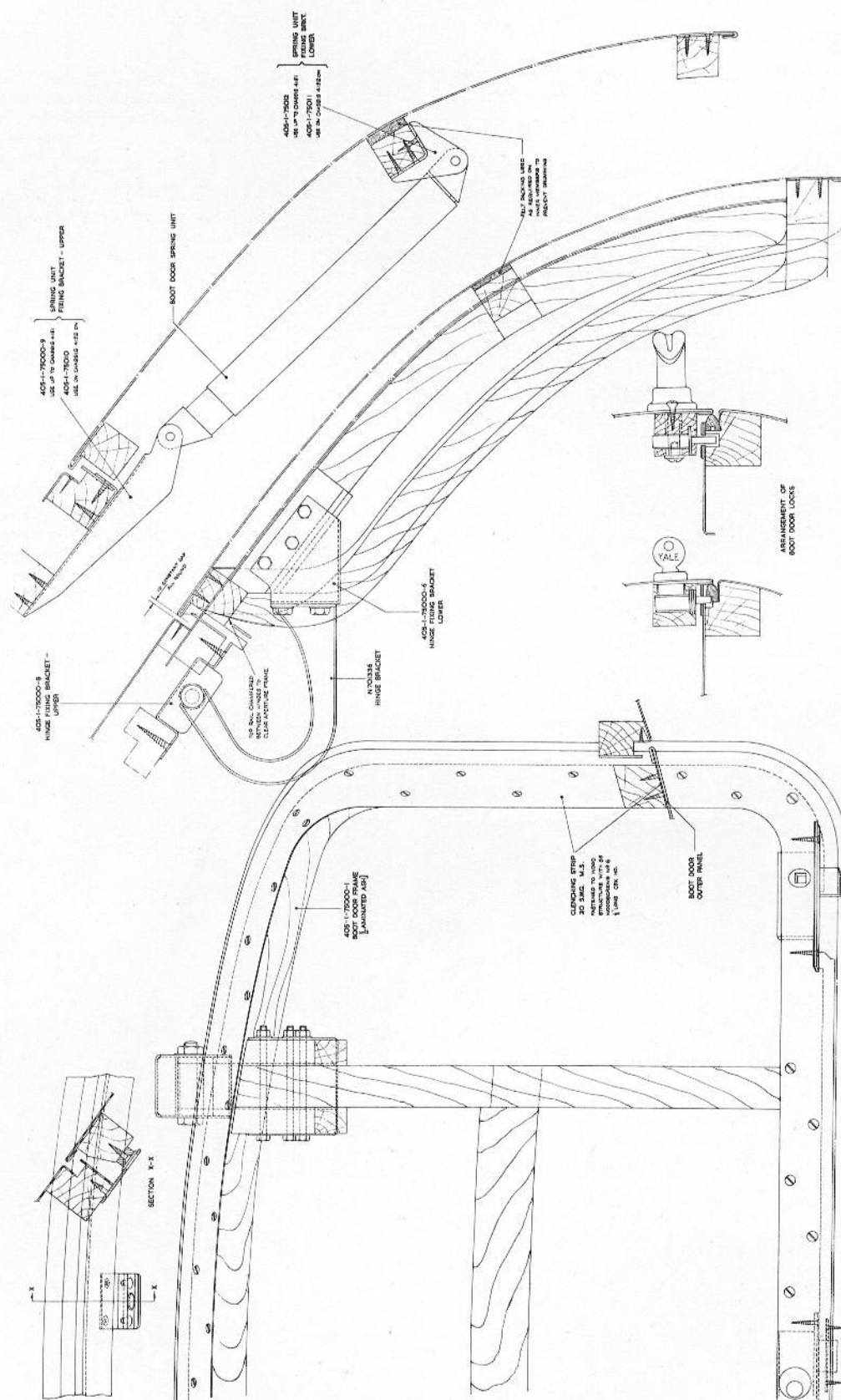


Fig. 247. Boot door assembly - Type 405

Type 405 Boot Door

The wooden door frame with its clenching strip see Fig.224 is externally covered by an aluminium panel.

Replacements

Due to variations in the boot door aperture during manufacture each door is individually fitted, consequently a complete replacement cannot be supplied. In the event of damage a wooden door frame complete with clenching strip would be supplied and a separate outer panel. The wood door frame should be swung on the hinges and should clear the inner aperture by approximately 3/16 inch all round. The edges of the clenching strip should be trimmed to give approximately 5/32 inch of clearance with the outer aperture.

When the outer panel has been clenched to the clenching strip there should be a gap of .10 inch all round. See Fig.247.

Hinges

The special hinges require little attention except to occasionally oil the hinge pins.

Locks

Three budget locks are fitted into the boot door frame Fig.247, two are operated by external handles while the central lock is locked with a Yale type key. Occasionally

oil the locks.

To remove a handle operated lock take out the two Phillips screws from the escutcheon, open the door and from the back of the handle take out the screw and washer and withdraw the handle. On the lower edge of the door take out the two woodscrews and withdraw the lock.

To remove the centre lock, open the boot door, remove the small screw in the lock face, allowing the lock barrel to be unscrewed. Remove the two woodscrews securing the lock in the door frame and withdraw the lock.

Telescopic Stay Unit

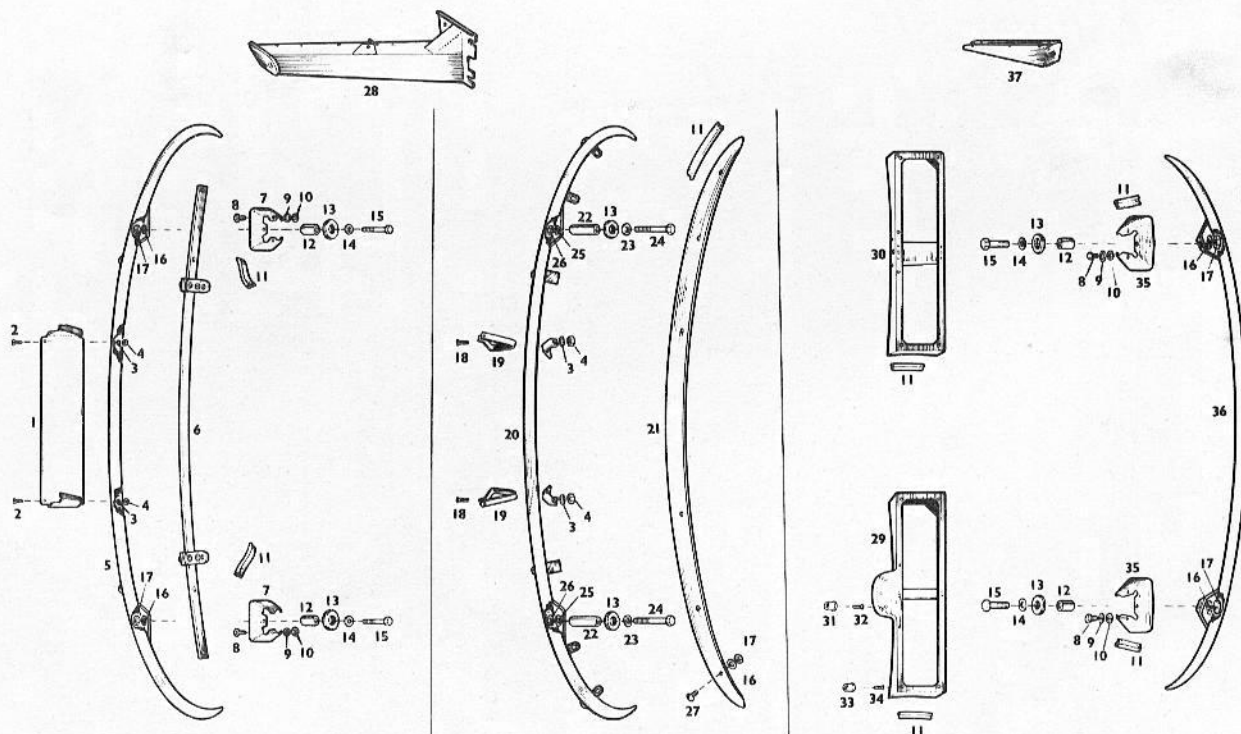
This spring unit should allow the door to balance evenly when opening and shutting. On earlier cars this was not satisfactory and an aluminium packing piece was inserted into the telescopic unit to give additional spring pressure. This was also unsatisfactory and at Chassis 4137 the brackets locating the telescopic unit were re-positioned which corrected the balance.

For cars previous to 4137 an inner spring SKN.3878 was introduced which will fit inside of the existing spring. This inner spring can be obtained from the Spares Department and care should be taken to see that the aluminium packing piece is removed from inside the unit when the inner and outer spring are removed.

The telescopic unit can be removed by taking out the split pins and withdrawing the top and bottom hinge pins. Release the centre bolt of the unit carefully as it is under spring pressure.

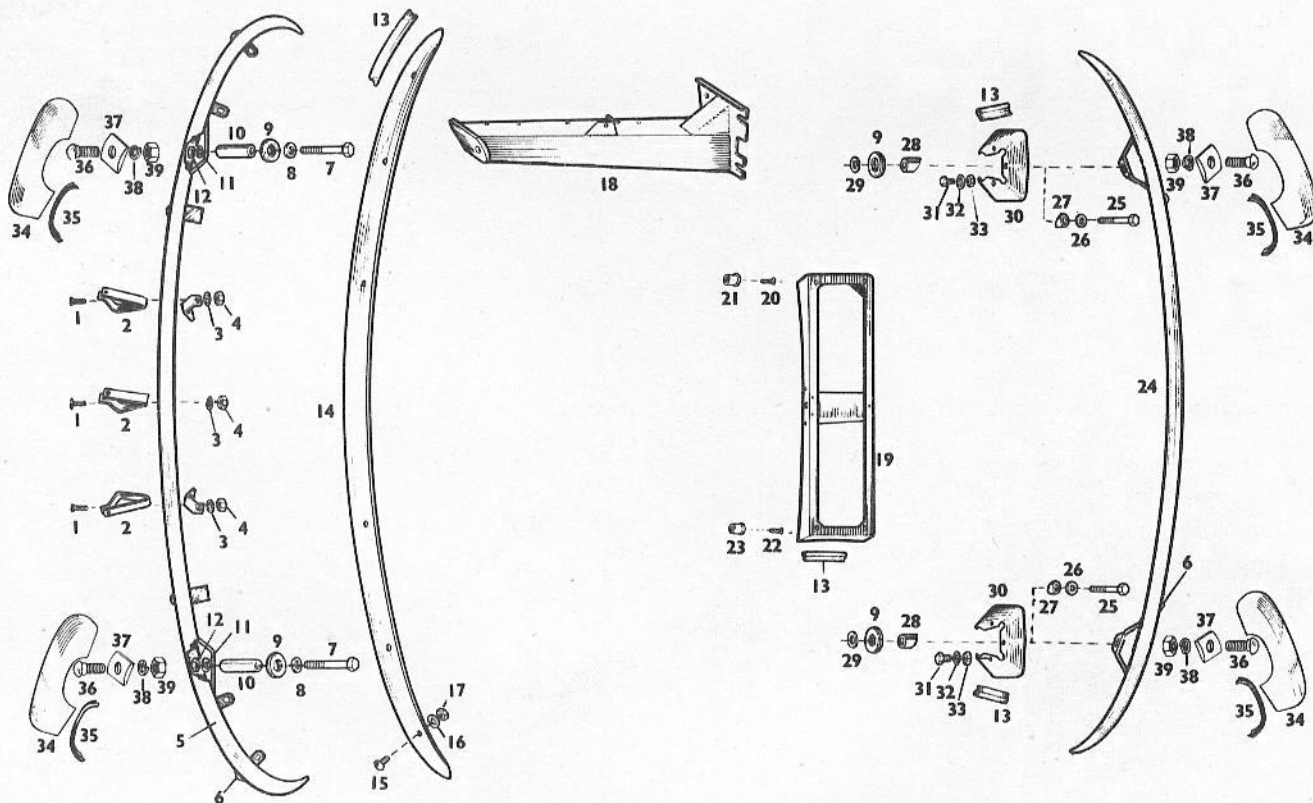
TYPE 404. FRONT AND REAR BUMPERS.

Part No.	Item	Description	No. off per car	Part No.	Item	Description	No. off per car
404-1-66011	1	Mounting for Front Number Plate	1	404-II-66030	20	Front Bumper Bar Assy.	Used on 1
-	2	Screw 1/4" Csk. Hd. 1/2" long	2	404-II-66031	21	Apron	1
-	3	Washer 1/4" Shakeproof	2	404-II-66044	22	Distance Bush	2
FN.104/L	4	Nut 1/4" BSF	2	404-II-66045	23	Backing Washer	and as reqd.
404-1-66007	5	Front Bumper Bar Assy.	1	FB.107/32D	24	Bolt 7/16" BSF Hex. Hd. 4" long	from 2
404-II-66043	6	Fog Lamp Mounting Bar	1	-	25	Washer 7/16" Single Spring	Chassis 2
404-1-66009	7	Shroud for Front Bumper Mounting Bracket	2	FN.107/L	26	Nut 7/16" BSF	2
-	8	Bolt 4BA Hex. Hd. 1/2" long	12	404-II-66039	27	Bolt - Rd. Hd. Chrome Plated	2052 6
-	9	Washer 4BA Shakeproof	12	404-1-61095	28	Front Bumper Support Bracket LH	1
-	10	Nut 4BA	12	404-1-61096	-	Front Bumper Support Bracket RH	1
N.705598	11	Piping 1/8" Bead	as reqd.	404-1-66017	29	Rear Number Plate Fairing	1
404-1-66020	12	Distance Bush	2	-	-	Used up to Chassis 2051	
-	13	Grommet SIC.3716	4	404-II-66046	30	Rear Number Plate Fairing	1
-	14	Washer 3/8" Plain	4	-	-	Used on and from Chassis 2052	
FB.106/18D	15	Bolt 3/8" BSF Hex. Hd. 2 1/4" long	4	-	31	Rawlnut Type 5/C	4
-	16	Washer 3/8" Single Spring	4	-	32	Screw 2BA Csk. Hd. 7/8" long	4
FN.106/L	17	Nut 3/8" BSF	4	-	33	Rawlnut Type 3/B	4
-	18	Screw 1/4" BSF Csk Hd. 3/4" long	2	-	34	Screw 4BA Csk. Hd. 7/8" long	4
404-II-66038	19	Mounting for Front Number Plate	1	404-1-66010	35	Shroud for Rear Mounting Bracket	2
				404-1-66008	36	Rear Bumper Bar Assy	1
				404-1-61084	37	Rear Bumper Mounting Bracket	2



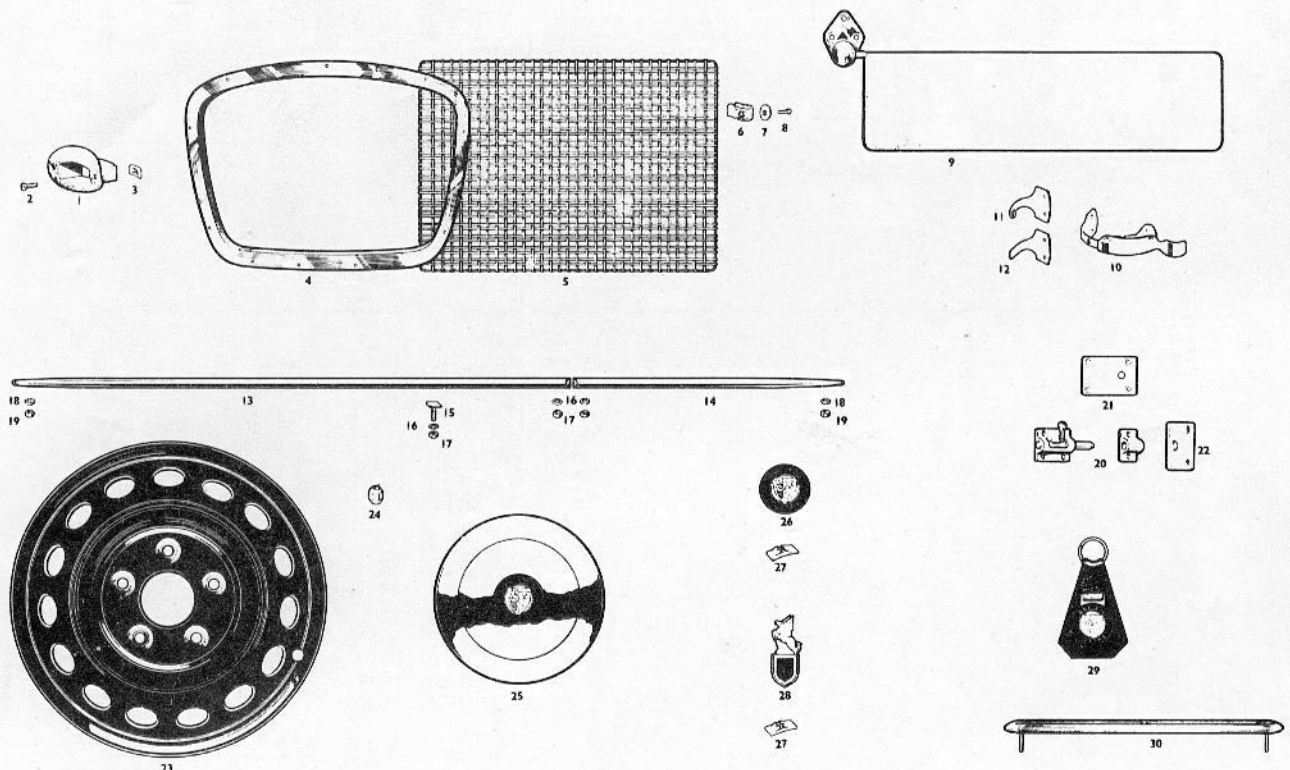
TYPE 405. FRONT AND REAR BUMPERS.

Part No.	Item	Description	No. off per car	Part No.	Item	Description	No. off per car
-	1	Screw 1/4" BSF Csk. Hd. 3/4" long	3	-	20	Screw 2BA Csk. Hd. 1 1/2" long	2
404-11-66038	2	Mounting for Front Number Plate	3	-	-	Screw 2BA Csk. Hd. 1" long	1
-	3	Washer 1/4" dia. Shakeproof	3	-	21	Rawlnut - Type 5C	3
FN.104/L	4	Nut 1/4" BSF Plain	3	-	22	Screw 4BA Csk. Hd. 7/8" long	4
404-11-66030	5	Front Bumper Assy.) Used up to	1	-	23	Rawlnut - Type 3B	4
404-11-66030-2	-	Front Bumper Bar only) Chassis 4047	-	404-1-66008	24	Rear Bumper Assy.) Used up to	1
405-1-66034	-	Front Bumper Assy.) Used on and after	1	404-1-66008-2	-	Rear Bumper Bar only) Chassis 4047	1
405-1-66034-1	-	Front Bumper Bar only) Chassis 4080	-	405-1-66035	-	Rear Bumper Assy.) Used on and after	1
404-1-66053	6	Bumper Bolt - Chromed - RS31-51	6	405-1-66035-1	-	Rear Bumper Bar only) Chassis 4048	1
FB.107/32D	7	Bolt 7/16" Hex Hd. 4" long	2	FN.106/18D	25	Bolt 3/8" BSF 2 1/2" long	2
404-11-66045	8	Packing Washer	as reqd.	405-1-66029-2	26	Washer 3/8" Single Spring	2
-	9	Grommet SIC 3716	4	405-1-66029-1	27	Tapered Washer	2
404-11-66044	10	Distance Piece	2	-	28	Tapered Distance Bush	2
-	11	Washer 7/16" Single Spring	2	404-1-66010	29	Washer 3/8" Plain	2
FN.107/L	12	Nut 7/16" BSF Plain	2	-	30	Shroud for Rear Mounting Bracket	2
N.705598	13	Piping 1/8" Bead	as reqd.	-	31	Bolt 4BA Hex. Hd. 1/2" long	6
404-11-66031	14	Apron	1	-	32	Washer 4BA Shakeproof	6
N.705722	15	Bolt - Chromed - RS31 - 9	6	405-1-66035-2	33	Nut 4BA Plain	6
-	16	Washer 3/8" Single Spring	6	-	34	Over-rider	4
FN.106/L	17	Nut 3/8" BSF	6	-	35	P.V.C. Moulding RS 65-2 (4 1/2" each)	3ft.
404-1-61095	18	Front Bumper - Support Bracket LH	1	-	36	Bolt - RS31-62	4
404-1-61096	-	Front Bumper - Support Bracket RH	1	-	37	Packing Piece 0'2475'	4
405-1-66002	19	Rear Number Plate Carrier	1	UFN/106A	38	Washer 3/8" Single Spring	4
					39	Nut 3/8" dia. RS11-12	4



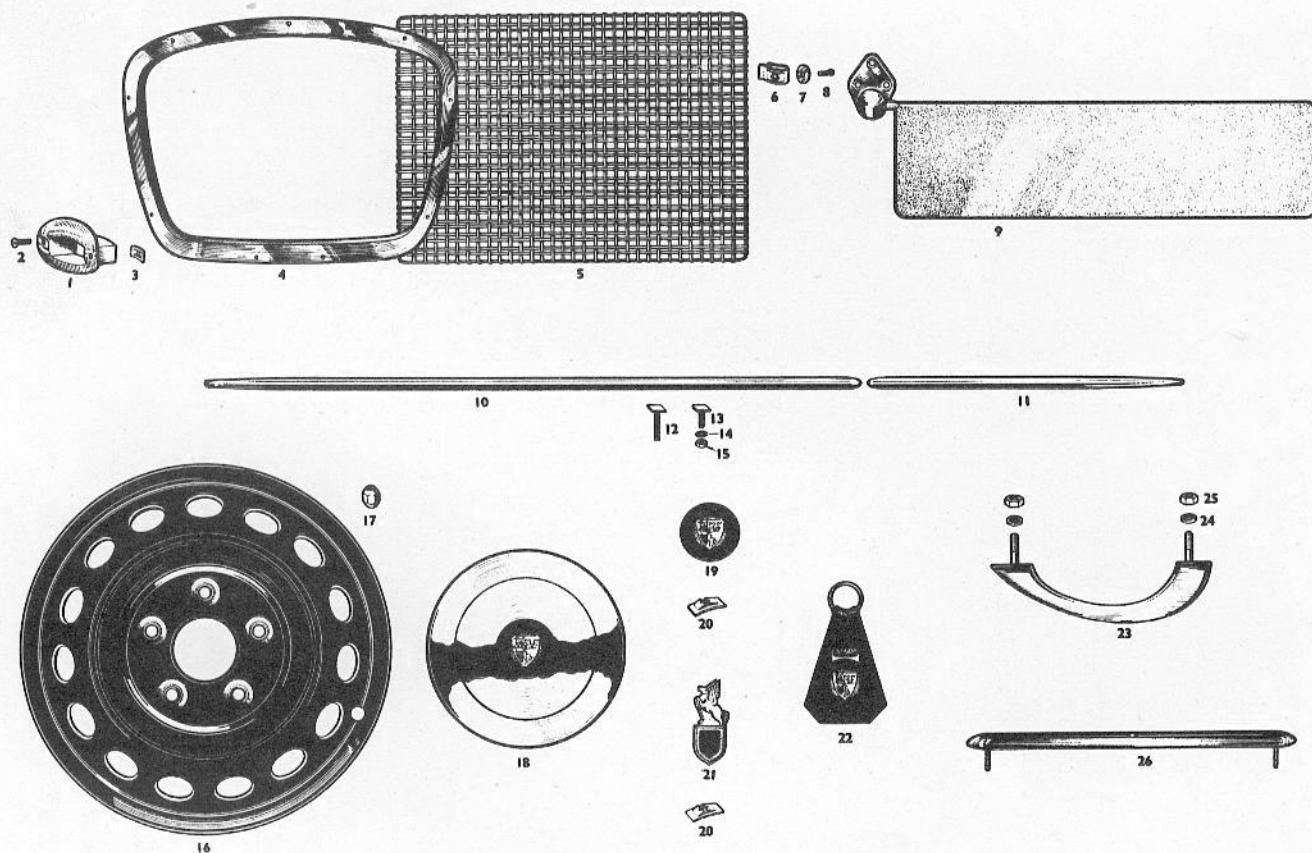
TYPE 404 STONEGUARD , WING FLASH ETC.

Part No.	Item	Description	No. off per car	Part No.	Item	Description	No. off per car
404-1-66026	1	Escutcheon - Starting Handle Guide Tube	1	ND	16	Washer 2BA Shakeproof	10
ND	2	Screw 2 BA ½" long	2	ND	17	Nut 2BA Plain	10
ND	3	Spire Nut SNP.0164/17/8/0	2	ND	18	Washer 4BA Shakeproof	4
404-1-66023	4	Finisher for Radiator Aperture	1	ND	19	Nut 4BA Plain	4
404-1-66022	5	Stoneguard for Radiator Aperture	1	404-1-67030	20	Spring Bolt	2
ND	6	Spire Nut SNU 1219/17/9/0	14	404-1-67028	21	Striker Plate - Top	2
AGS157/B	7	Washer 4BA x 1" o/d x 1/16" thickness	14	404-1-67029	22	Striker Plate - Lower	2
ND	8	Screw No. 6 PK. Type J ½" long	14	404-1-20127	23	Road Wheel	5
404-1-67007	9	Sun Visor	2	N.580031	24	Wheel Nut	20
N.705818A	10	Quarter Light Toggle Fastener LH	1	N.704207	25	Snap on Cap with Medallion	4
N.705818B	-	Quarter Light Toggle Fastener RH	1	N.705800	26	Medallion	6
N.705574	11	Main Spring - Attachment Bracket	2	-	27	Fixing Plate SFP./0212/17/9/0	16
N.705817	12	Secondary Spring - Attachment Bracket	2	N.705799	28	'Bristol' Coachwork Insignia	2
404-1-66024-1	13	Wing Flash	2	N.707147	29	Key Ring	1
404-1-66024-2	14	Door Flash	2	404-1-67008	30	Demist Finisher	2
404-1-66025	15	Fixing Plate	6				



TYPE 405 STONEGUARD, WING FLASH ETC.

Part No.	Item	Description	No. off per car	Part No.	Item	Description	No. off per car
404-1-66026	1	Escutcheon - Starting Handle Guide Tube	1	ND	14	Washer 2BA Shakeproof	26
ND	2	Screw 2BA 1/2" long	2	ND	15	Nut 2BA Plain	26
ND	3	Spire Nut SNPO164/17/9/0	2	404-1-20127	16	Road Wheel	5
404-1-66023	4	Finisher for Radiator Aperture	1	N.580031	17	Wheel Nut	20
404-1-66022	5	Stoneguard for Radiator Aperture	1	N.580371	18	Snap on Cap with Medallion	4
ND	6	Spire Nut SNU1219/17/9/0	14	N.580021	19	Medallion	6
AGS.157/B	7	Washer 4BA x 1" o/d x 1/16" thickness	14	-	20	Fixing Plate SFP/0212/17/9/0	16
ND	8	Screw No. 6 PK Type J 1/2" long	14	N.705456	21	'Bristol' Coachwork Insignia	2
404-1-67007	9	Sun Visor	2	N.707117	22	Key Ring	1
404-1-66050-1	10	Wing Flash	2	404-1-63037	23	Grab Handle	1
404-1-66050-2	11	Door Flash	2	-	24	Washer 1/4" Shakeproof	2
404-1-66051	12	Fixing Plate - long	2	FN.104/L	25	Nut 1/4" BSF	2
404-1-66052	13	Fixing Plate - short	24	404-1-67008	26	Demist Finisher - Up to Chassis 4136	2
				405-1-67031	-	Demist Finisher - Chassis 4137 on	2



Bumpers

Attachment of the bumpers is by straightforward bolting to the chassis attachment brackets.

Marchal type fog lamps are fitted beneath the front bumper on the Type 405 Cars and are bolted to the bumper bar.

On later Type 405 Cars over-riders are fitted.

A narrow aluminium apron is fitted between the front bumper and the body on Type 405 Cars. Should a replacement be required it is supplied not drilled and not painted.

Removing and Refitting Stoneguard from Air Intake Aperture

Remove the bonnet, then remove the securing screws and plain washers from the grille and chromium frame.

To refit, position the spire type nuts correctly over the holes, fit the chromium frame, position the grille and secure with the Parker Kalon screws and plain washers.

Removing and Renewing the Escutcheon. Starting Handle Guide

Early escutcheons have two studs brazed to the inner face and attached by shakeproof washers and nuts, while later escutcheons have two countersunk holes and are attached by Phillips 2BA Chromed Screws and Spire Nuts. The later type only is supplied as a spare.

To obtain access to the nuts it will be necessary to remove the bonnet.

During manufacture each escutcheon is fitted to the car to suit the contour and finally plated. This is considered impracticable for spares and they are supplied fully finished. It may be necessary however to alter the shape carefully to suit the car without damaging the plating.

Wing Flash and Door Flash

Type 404 Cars and early Type 405 Cars are fitted with tapering flashes. Later Type 405 Cars are fitted with parallel flashes. This was for economy reasons.

In the event of damage to the earlier cars it is recommended that a complete set of the smaller parallel type are fitted.

To remove the door flash the upholstery panels have to be removed. To remove the wing flash, lift the wing valance.