

SECTION R

CHASSIS

General.

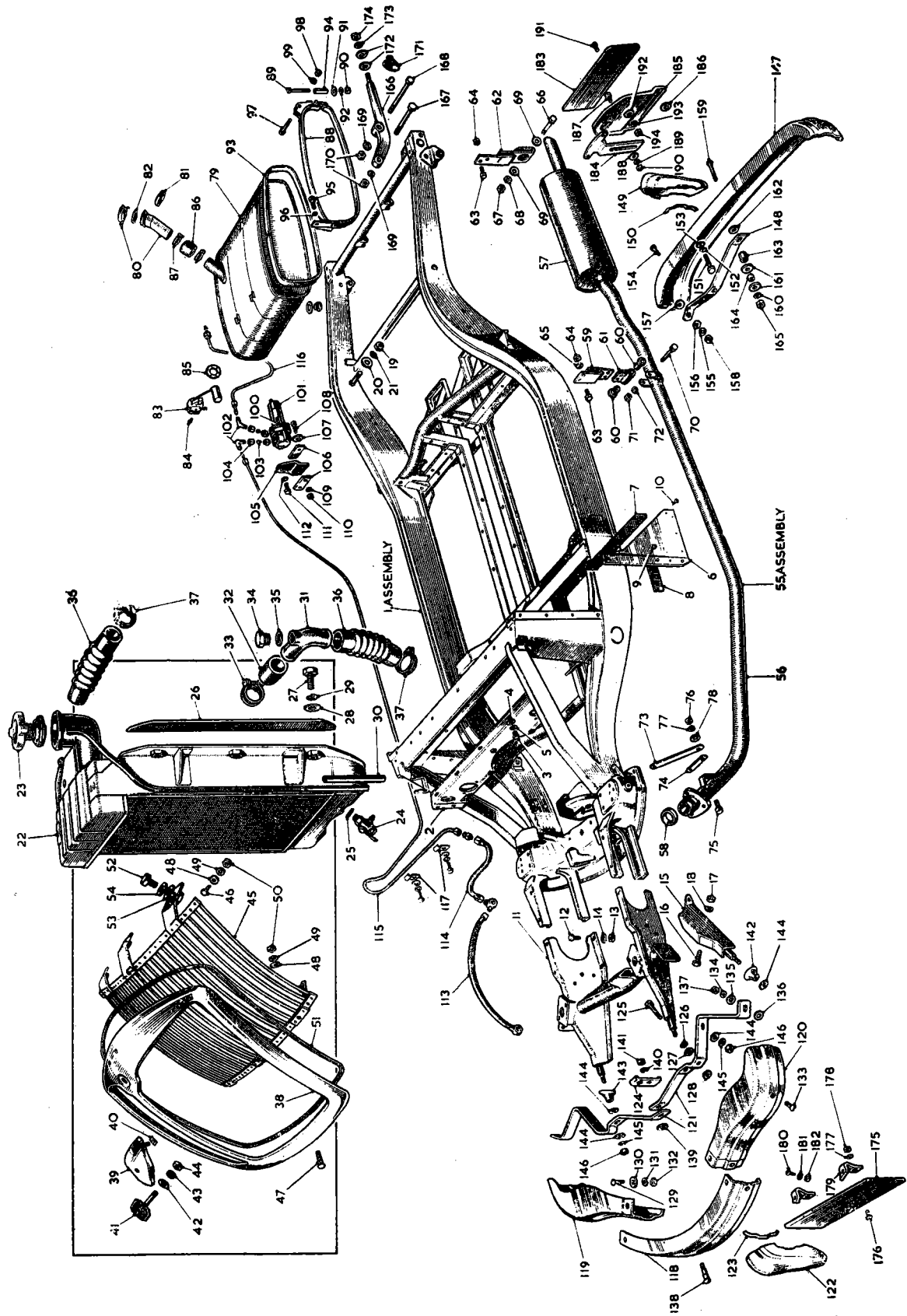
Section No. R.1 Frame repairs.

Section No. R.2 Investigation of damaged chassis.

Section No. R.3 A twisted frame.

Section No. R.4 Diagonal frame check (complete car).

THE CHASSIS, RADIATOR, EXHAUST AND FUEL SUPPLY COMPONENTS



KEY TO THE CHASSIS, RADIATOR, EXHAUST AND FUEL SUPPLY COMPONENTS

No.	Description	No.	Description	No.	Description	No.	Description
1.	Chassis frame complete.	50.	Nut—grille studs.	100.	Pump.	146.	Nut—bumper support stud.
2.	Toe-board support plate assembly.	51.	Piping—grille.	101.	Cover—pump.	147.	Bar.
3.	Screw—toe-board plate to goalpost.	52.	Screw—case grille to body.	102.	Elbow—petrol pump.	148.	Mainspring.
4.	Washer—plain—plate to post screw.	53.	Washer—plain—case/grille to body.	103.	Olive—petrol pump.	149.	Over-rider assembly.
5.	Washer—spring—plate to post screw.	54.	Washer—spring—case/grille to body.	104.	Nut—petrol pump olive.	150.	P.V.C. moulding.
6.	Cover plate L/H—goalpost.	55.	Exhaust pipe assembly.	105.	Bracket—pump to frame bracket.	151.	Bolt—over-rider to bumper bar.
7.	Felt seal—cover plate—lower.	56.	Pipe—front.	106.	Rubber—bracket.	152.	Washer—spring—over-rider to bumper.
8.	Felt seal—cover plate—upper.	57.	Silencer and tail pipe.	107.	Washer—special large—pump mounting.	153.	Washer—special—over-rider to bumper.
9.	Screw—cover plate to post (vertical).	58.	Packing—exhaust pipe.	108.	Bolt—pump mounting.	154.	Bolt—outer—mainspring to bar.
10.	Screw—cover to post stay.	59.	Mounting—exhaust—intermediate.	109.	Nut—pump mounting.	155.	Washer—spring—mainspring to bar.
11.	Front extension assembly.	60.	Bush—intermediate exhaust mounting.	110.	Locknut—pump mounting.	156.	Washer—plain—mainspring to bar.
12.	Screw—extension to frame bracket.	61.	Housing—intermediate exhaust housing.	111.	Screw—pump to bracket.	157.	Washer—special plain—mainspring to bar.
13.	Nut—extension to frame bracket screw.	62.	Mounting—exhaust—rear.	112.	Washer—spring—pump to bracket.	158.	Nut—mainspring to bar.
14.	Washer—spring.	63.	Screw—mountings to frame.	113.	Pipe—flexible—between carburetters.	159.	Bolt—inner—mainspring to bar.
15.	Bracket assembly L/H—bumper support stud.	64.	Nut—mountings screw.	114.	Pipe—flexible—main pipe to carburetter.	160.	Washer—spring—mainspring to bar.
16.	Screw—bracket assembly to front extension.	65.	Washer—spring.	115.	Pipe assembly—pump to carburetters.	161.	Washer—plain—mainspring to bar.
17.	Nut—bracket to front extension screw.	66.	Bolt—rear mounting and tail pipe.	116.	Pipe assembly—tank to pump.	162.	Washer—special plain—mainspring to bar.
18.	Washer—spring.	67.	Nut—rear mounting bolt.	117.	Clip—petrol pipe to bulkhead.	163.	Distance piece—mainspring to bar.
19.	Nut—rebound strap spindle.	68.	Washer—spring.	118.	Centre bar.	164.	Distance tube—mainspring to bar.
20.	Washer—plain—rebound strap spindle.	69.	Washer—plain.	119.	Corner bar—R/H.	165.	Nut—mainspring to bar.
21.	Washer—spring—rebound strap spindle.	70.	Bolt—bush and housing to pipe.	120.	Corner bar—L/H.	166.	Bracket L/H—rear bumper mounting.
22.	Radiator block assembly.	71.	Nut—bush and housing bolt.	121.	Main spring.	167.	Bolt—bracket to frame.
23.	Cap—filler.	72.	Washer—spring.	122.	Over-rider assembly.	168.	Bolt—bracket to frame.
24.	Tap—drain.	73.	Strap—upper front mounting.	123.	P.V.C. moulding.	169.	Washer—spring.
25.	Washer—tap.	74.	Strap—lower front mounting.	124.	Bracket—starting handle.	170.	Nut—bracket to frame bolt.
26.	Packing piece—block to body.	75.	Screw—strap to front pipe.	125.	Bolt—over-rider to bumper bar.	171.	Rubber grommet—bracket.
27.	Screw—block to body.	76.	Nut—strap screw.	126.	Washer—spring—over-rider to bumper.	172.	Washer—plain—bracket and bumper.
28.	Washer—plain—block to body.	77.	Washer—spring.	127.	Washer—plain over-rider to bumper.	173.	Washer—spring—bracket and bumper.
29.	Washer—spring—block to body.	78.	Washer—plain.	128.	Washer—special plain—over-rider to bumper.	174.	Nut—bracket and bumper.
30.	Drain tube.	79.	Petrol tank.	129.	Bolt—corner bar to centre bar.	175.	Front number-plate.
31.	Pipe—water pump connector.	80.	Filler extension.	130.	Washer—special plain—corner to centre bar.	176.	Screw—plate to bracket.
32.	Hose—connector pipe.	81.	Sealing ring.	131.	Washer—spring—corner to centre bar.	177.	Washer—spring—plate to bracket.
33.	Clip—hose.	82.	Ferrule—filler extension.	132.	Nut—centre bar to corner bars.	178.	Nut—plate to bracket screw.
34.	Plug—connector pipe.	83.	Tank unit attachment.	133.	Bolt—mainspring to corner bar.	179.	Bracket L/H—number-plate.
35.	Washer—plug.	84.	Screw—unit to tank.	134.	Bolt—mainspring to corner bar.	180.	Screw—brackets to bumper.
36.	Hose—top and bottom.	85.	Gasket—cork—tank attachment.	135.	Washer—plain—mainspring to corner bar.	181.	Washer—spring—brackets to bumper.
37.	Clip—1 1/8" dia. hose (top and bottom).	86.	Hose—filler connection.	136.	Washer—special plain.	182.	Nut—brackets to bumper.
38.	Case sub-assembly.	87.	Clip—hose.	137.	Nut—mainspring to centre bar.	183.	Rear number-plate.
39.	False nose assembly.	88.	Strap and mounting assembly.	138.	Bolt—mainspring to centre.	184.	Lamp bracket.
40.	Speed fix (3/8")—nose to case.	89.	Bolt.	139.	Washer—spring—mainspring to centre.	185.	Bracket—number-plate mounting.
41.	Badge.	90.	Nut.	140.	Washer—special plain—mainspring to centre.	186.	Rubber washer—number-plate.
42.	Washer—plain—badge.	91.	Washer—plain.	141.	Nut—mainspring to centre.	187.	Screw—lamp bracket to mounting bracket.
43.	Washer—double coil—badge.	92.	Washer—spring.	142.	Grommet—outer stud.	188.	Washer—plain—bracket to bracket.
44.	Nut—badge.	93.	Packing strap—tank mounting.	143.	Grommet—inner stud.	189.	Washer—spring—bracket to bracket.
45.	Grille assembly.	94.	Distance piece—rear mounting.	144.	Washer—plain.	190.	Locknut—bracket to bracket.
46.	Stud—grille retaining.	95.	Screw—front mounting.	145.	Washer—spring.	191.	Screw—number-plate to bracket.
47.	Stud—grille lower fixing.	96.	Washer—spring—front mounting.			192.	Washer—plain—plate to bracket.
48.	Washer—grille lower fixing stud.	97.	Bolt—rear mounting.			193.	Washer—spring—plate to bracket.
49.	Washer—spring—grille studs.	98.	Nut—rear mounting.			194.	Nut—plate to bracket.
		99.	Washer—spring—rear mounting.				

GENERAL

This section deals with the repair of the M.G. type of box-sectioned chassis frame damaged in accident, where the facilities as used by frame manufacturers are not available. The manufacturers, naturally, have the benefit of their production equipment, but the methods adopted by them, particularly in regard to the use of assembly jigs and welding equipment, are out of reach of the average repair organization.

These instructions will therefore deal mainly with methods of repairing damage to chassis frames without dismantling the component parts, i.e. breaking down welds, any more than is absolutely necessary to eliminate torn or badly buckled metal or deformed cross-members which are beyond economic repair.

Repairs carried out in this manner fall into two categories:—

- (a) Repair of the frame in position in the vehicle, which may be regarded as an emergency repair, and
- (b) Repair of the frame out of the vehicle, in which complete rectification of the chassis frame is attempted.

In general terms it may be stated that chassis frames with considerable damage may be recovered sufficiently to be serviceable units, but, naturally, the skill and experience of the repairer and the extent of the equipment available will determine whether any particular frame is repairable, bearing in mind that there are certain fundamental accuracies to be restored, also that the cost of labour and material involved in effecting a complete repair will not always be economically justified if it exceeds the cost to the user of replacing the entire frame assembly.

Damage to a frame is usually a combination of torn and buckled metal, either in side-members or cross-members, and lateral or vertical displacement of side-members, causing misalignment. The resultant repair is concerned with elimination of the local damage by smoothing or renewal of parts—generally both—and the recovery of alignment of the frame as a whole.

In practice, this result is achieved by carrying out the local repairs to the metal and applying the necessary corrective loads to the side-members, coupled with the judicious use of heat to the strains to permit the members to recover their natural positions.

Section R.1

FRAME REPAIRS

As the heating of the frame plays a vital part in its repair, it is essential that a good gas-welding equipment is available. At certain points spot and arc welding are

preferable, but a skilled gas welder will be able to make effective welds with the use of a gas-welding torch only.

A screw or hydraulic jack is then required, with a few adaptors to make it of universal application. A selection of bending irons, some metal-straightening equipment, such as dolly blocks, spoons, levers and hammers, will complete the equipment necessary. If a suitable hydraulic press is available, this in conjunction with hardwood reaction blocks would be more preferable than some of the methods detailed later, using jacks.

When the frame is heated for straightening, the area affected should be maintained at a cherry-red throughout the entire straightening operation.

When an acetylene torch is used for heating, a "neutral" flame should be employed and played over the entire area to be heated until the metal has reached a uniform cherry-red. Never heat the metal beyond a cherry-red as it will seriously weaken the steel. It is good practice to frequently check the temperature of the heated metal with a dry pine stick, while it is being worked, to maintain it at the proper state of ductility and avoid burning. Touching a dry pine stick to metal that has been heated to a cherry-red will cause the stick to glow and char, but not to ignite. The heated area of the frame should be protected from draughts to prevent sudden cooling of the metal.

An important point to observe here, prior to commencing repairs, is in regard to the front suspension cross-member. Correct alignment of the front suspension is of such vital importance that if there is appreciable distortion of this member it should be renewed, due to the fact that it is a very difficult operation to re-form it to its exact shape.

Note.—We do not recommend that this operation be carried out by the Distributor or Dealer unless adequate assembly fixtures are available, but that the frame be returned to the Service Department, The M.G. Car Co. Ltd., Abingdon, Berks.

Section R.2

INVESTIGATION OF DAMAGED CHASSIS

Although in most cases of accident the resultant primary damage to the frame is readily apparent, there are cases where the damage may only be slight and is masked by the wings and body structure, and in such cases it may be necessary to carry out a complete check of chassis alignment, including front suspension and rear axle, to determine the full extent of the damage.

When checking cars damaged in accident, it is most essential to do the checking on a flat surface large enough to receive the complete car. It is preferable to use a large iron slab, but a concrete slab carefully

CHASSIS DIMENSIONAL DRAWING

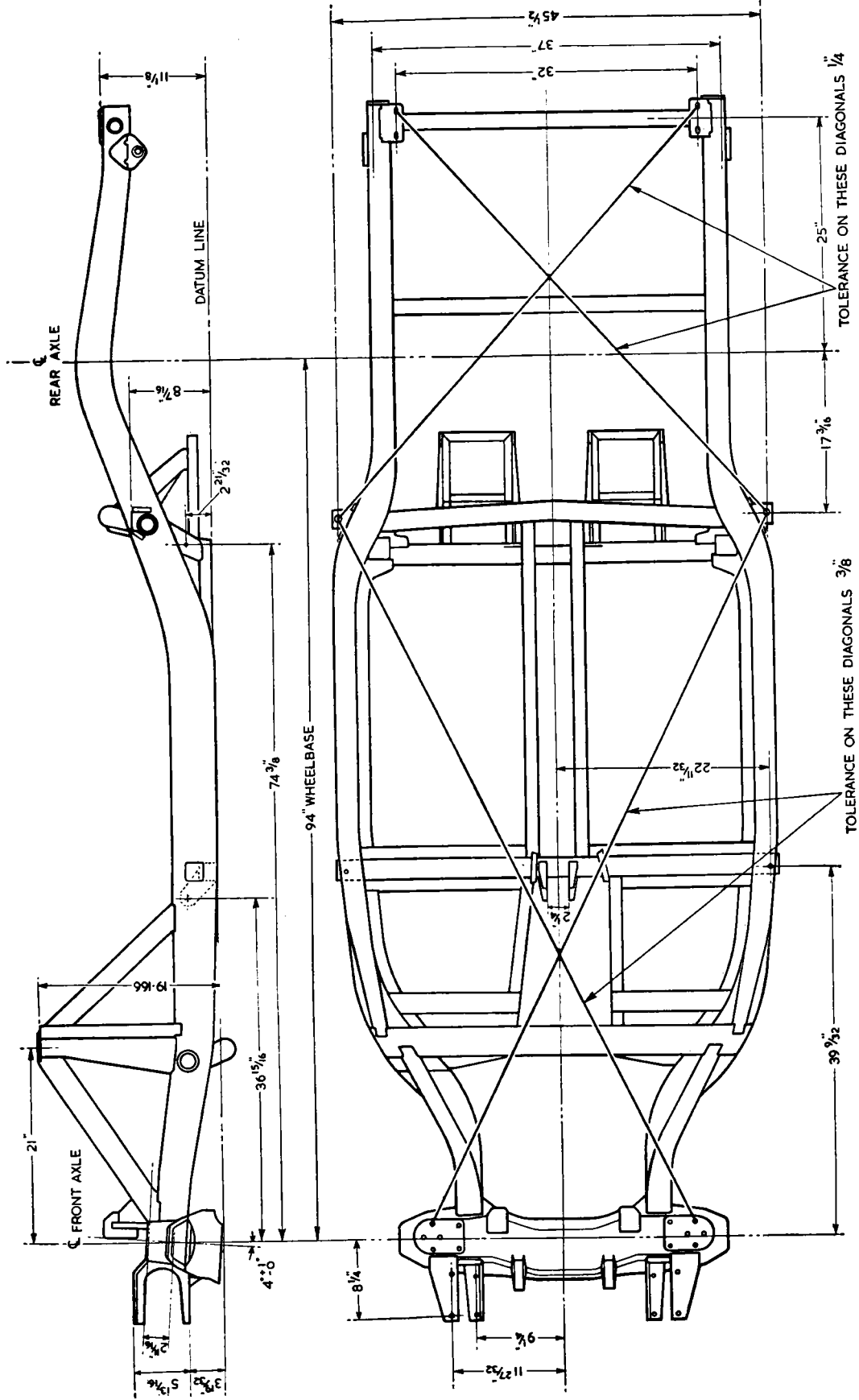


Fig. R.1.
Chassis frame dimensions and the recommended triangulation points for a diagonal check.

prepared and hand-surfaced will be suitable. The car may then be directly checked by comparative measurements or a centre line dropped down from the front and rear centre of the frame and parallel track lines laid out. From these lines the squareness of the car may easily be checked.

Section R.3

A TWISTED FRAME

Checking the alignment of the frame bare is relatively a simple matter, especially if the frame can be set up on a large flat surface or face plate. It involves establishing a datum or centre line, from which all measurements can be taken. Diagonals are checked from suitable fixed locating points, which can be cross-checked at the centre line on which the diagonals should cross, as detailed in chassis dimensional drawing Fig. R.1. The angle of the front cross-member should be 4° but may be given an allowance of $+1^\circ$ or -0° . Diagonal measurements quickly determine which section of the frame is bent.

Accuracies of side-members are usually checked with suitable straight-edges, and squareness of side rails is checked with straight-edge and square. Twist is checked visually against straight-edges laid transversely across the frame at suitable points.

In the event of the frame being twisted, this condition can be corrected by anchoring the frame to a fixed trestle and by using a suitable lever or a stout beam of timber. The frame can then be sprung back with effort applied at the end of the lever.

If necessary apply a well-spread heat at the twisted section.

The frame being completely dismantled, it is possible to remove all signs of damage by cutting out holes for access in the inner liner plates with the welding torch, hammering out bulges, dents or buckled areas, and closing the holes by welding in the piece previously

removed. The welds can be cleaned up and the repair is then invisible.

When any adjustment to the frame is carried out do not forget the light gauge of the material.

Final checking of the frame should be carried out in accordance with the dimensions and diagonals indicated.

Comparative vertical measurements should reveal any frame twist.

Check the wheel camber, castor angle, king-pin angle and front wheel alignment.

Section R.4

DIAGONAL FRAME CHECK (COMPLETE CAR)

In checking the frame for distortion, diagonal measurements may be taken without removing the body from the chassis by using a plumb-bob as follows:—

Place the car on a level surface and block up the car equally at each wheel approx. 12 in. (30 cm.) high with all tyres properly inflated.

Perform the measuring with accuracy and care.

Suspend the plumb-bob from various corresponding points on the frame, such as indicated by the diagonal lines in Fig. R.1. The plumb-bob should be suspended slightly above the floor. When the plumb-bob comes to rest, mark the floor directly underneath it. The marks made on the floor will represent various points of the frame to be checked diagonally.

Measure the diagonal distance between the points; this distance should agree within $\frac{1}{4}$ to $\frac{3}{8}$ in. (6.5 to 10 mm.).

Care must be taken to see that any two diagonals compared represent exactly corresponding points on each side of the frame.

Upon the result of this preliminary investigation a decision can be taken whether the frame can be repaired in position or whether the frame must be stripped out completely.

SECTION S

BODY

- Section No. S.1 Removing a door lock.
- Section No. S.2 Removing the windshield.
- Section No. S.3 Removing the front bumper.
- Section No. S.4 Removing the rear bumper.
- Section No. S.5 Removing the hood.
- Section No. S.6 Removing a rear wing.
- Section No. S.7 Removing a front wing.
- Section No. S.8 Removing the body.
- Section No. S.9 Fitting the optional heating and demisting equipment.
- Section No. S.10 Cold air ventilation equipment.
- Section No. S.11 Maintenance of bodywork and upholstery.
- Section No. S.12 Reglazing the windshield.
- Section No. S.13 Removing the windshield (Coupé).
- Section No. S.14 Removing and replacing the rear light (Coupé).
- Section No. S.15 Removing a door lock or window regulator (Coupé).
- Section No. S.16 Removing the head liner (Coupé).
- Section No. S.17 Sealing hood seams.
- Section No. S.18 Sliding sidescreens.
- Section No. S.19 Use of adhesives.
- Section No. S.20 Paint refinishing instructions.
- Section No. S.21 Seat belt anchorage fitting instructions.

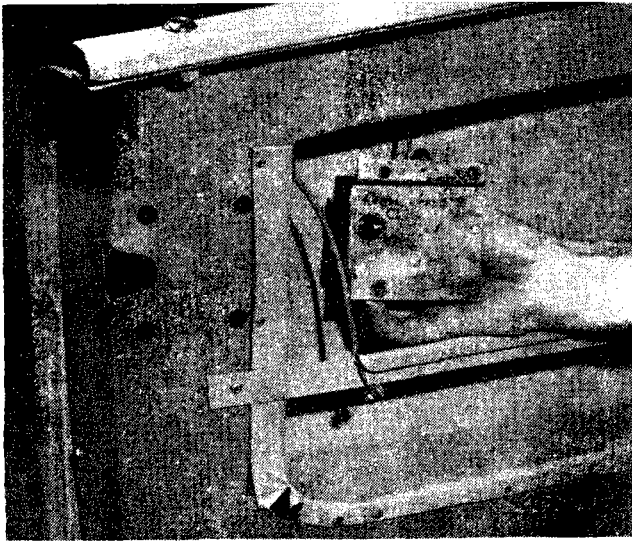


Fig. S.1
Withdrawing a door lock

Section S.1

REMOVING A DOOR LOCK

Take out the three securing screws and remove the sidescreen clamp plate.

Unscrew the 10 recessed-headed screws securing the trim panel to the door. Lower the trim panel downwards to free it from the lipped rail along the bottom edge of the pocket.

Remove the nut and bolt securing the door lock cable to the bracket in the top forward corner of the pocket. Note which one of the four holes is used in the bracket to secure the cable.

Take out the four screws securing the lock to the door panel and withdraw the lock through the opening at the top of the door pocket, at the same time feeding the cable through the grommet.

Reassembly is a reversal of the dismantling procedure.

Section S.2

REMOVING THE WINDSHIELD

Unscrew the six recessed-headed screws securing the interior trim panel on either side of the car, forward of the doors.

Remove the two pieces of sealing material which cover the windshield securing bolt holes and unscrew the bolts, taking care not to drop the plain and spring washers between the two body panels.

Take out the three screws securing the windshield frame to the hand-grip on each side and lift away the windshield.

S.2

Reassembly is a reversal of the dismantling procedure. Replace the pieces of sealing material with Bostik.

Section S.3

REMOVING THE FRONT BUMPER

The front bumper is secured to four mounting brackets attached to the front frame extension assembly. Remove the four nuts and spring and plain washers.

If necessary, release one of the outer bumper mounting brackets from the frame extension by unscrewing the three nuts and bolts.

The bumper may now be withdrawn forward from the brackets.

One bolt secures each over-rider to the bumper. Unscrew the bolt and the over-rider will become detached.

Section S.4

REMOVING THE REAR BUMPER

The rear bumper is secured to two mounting brackets attached to the rear of the frame.

Remove the two bumper securing nuts and spring and plain washers.

Disconnect the wiring to the rear number-plate light. Withdraw the bumper from the mounting brackets.

Each over-rider is secured to the bumper by one bolt.

Section S.5

REMOVING THE HOOD

Place the hood in the folded position.

Remove from one side the three recessed-headed screws securing the hood frame to the body. With an assistant holding the free end, remove the three screws securing the hood on the opposite side.

The hood may now be lifted away.

Section S.6

REMOVING A REAR WING

Disconnect the wiring to the rear lamps (see Section N).

Remove from inside of the rear wing the five bolts and spring and plain washers securing the wing to the body. Five more bolts are situated behind the baffle panel inside the rear of the wing.

Remove the bolt securing the baffle panel to the wing flange.

Gently ease away the rear portion of the trim panel situated behind the seats and remove the bolt securing the upper corner of the wing.

Remove the two nuts and bolts from the forward end of the wing on the underside.

Remove the three recessed-headed screws securing the wing to the door striker panel.

Remove the wing rearwards to disengage it from the flange of the door striker panel.

Reassembly is a reversal of the dismantling procedure.

When refitting the wing ensure that the piping is correctly and neatly positioned before finally tightening the wing bolts.

Section S.7

REMOVING A FRONT WING

Disconnect the wiring to the lamps (see Section N).

Remove the four nuts and bolts from the rear underside of the front wing, also the six bolts, spring and plain washers securing the baffle panel to the body. Remove the panel.

Take out the three bolts situated just above and to the outside rear of the front bumper.

Remove from inside of the wing the nine bolts, spring and plain washers securing the wing to the body and also two more situated under the bonnet in the rear corner.

Remove the trim panel from inside the car forward of the doors (see Section S.2) and take out the two bolts situated at the top. Remove the four remaining bolts running down the side of the body panel and the wing may be lifted away.

Have an assistant to bear the weight of the wing while the securing bolts are being removed.

Reassembly is a reversal of the dismantling procedure.

When refitting the wing ensure that the piping is correctly and neatly positioned before finally tightening the wing bolts.

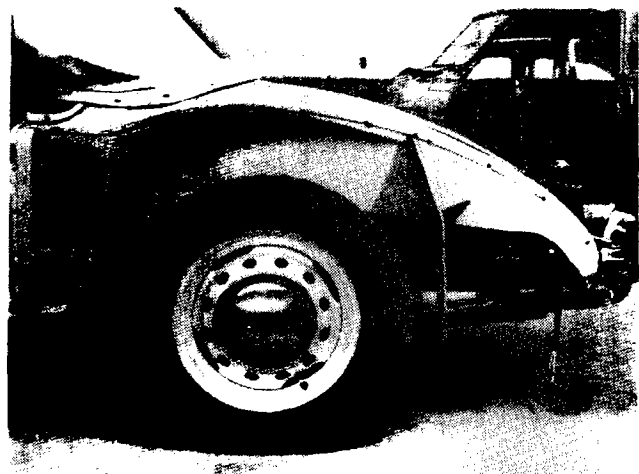


Fig. S.2.

Showing the rear wing attachment points.

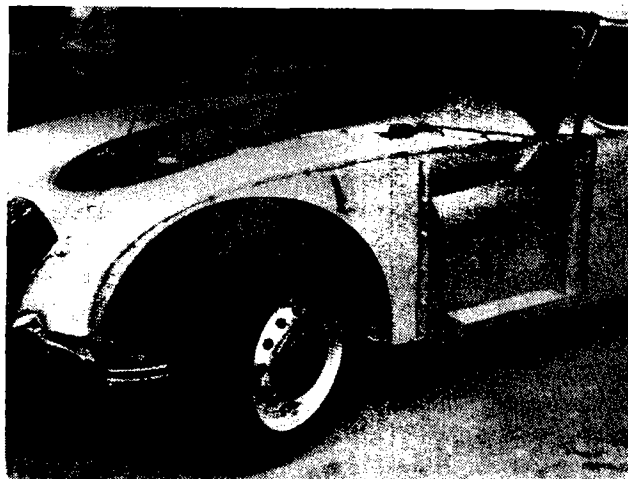


Fig. S.3.

The front wing attachment points.

Section S.8

REMOVING THE BODY

The following items must be disconnected or dismantled when removing the body.

Wiring

Disconnect the positive lead from the battery.

Disconnect the horn wires and the wires from the dynamo and "SW" connection on the coil. Disconnect the low-tension lead from the starter solenoid and finally the snap-connectors situated at the rear of the front wheel arch.

Pipes, Controls, etc.

Unscrew the oil-gauge pipe union nut from the flexible hose adaptor.

Disconnect the hydraulic clutch pipe from the flexible hose union, and detach the brake pipe from the three-way connector on the frame.

Disconnect the speedometer cable from the gearbox, the cable clip on the engine bulkhead, and the tachometer drive cable from the engine.

Unscrew the gland-nut and remove the thermal transmitter from the engine. Release the clip securing the thermo-coupling to the right-hand side of the cylinder head.

Release the mixture control cable from the carburetters.

Unscrew the bolts and remove both the air-cleaners.

Drain and remove the radiator (see Section C.4).

Remove the front and rear bumpers (see Sections S.3 and S.4). The rear bumper support brackets must be removed by undoing the two nuts and bolts securing

them to the chassis at either side. Three nuts and bolts secure each outer front bumper support bracket to the front extension, and these bolts and brackets must be removed.

Remove the fuel tank (see Section D.1).

Remove the nut and bolt securing the top steering column clamp to the body bracket and release the clamp.

Unscrew the nine bolts situated along the top forward edge of the engine bulkhead, and also the four bolts securing the brake and clutch pedal assembly bracket to the bulkhead cross-member. These four bolts are situated inside the car, two on either side of the pedals.

Body Mounting Points

Remove the front small nut and bolt securing the baffle plate to the bottom flange of the wing and the seven bolts securing each baffle plate inside the front wings.

Take out the four bolts each side securing the body valances to the frame goalpost on the chassis frame.

Undo the two nuts and bolts on each side at the front, gaining access between the radiator and the grille.

Remove the trim panels from inside of the car forward of each door, and lift off the loose trimming covers which envelop the body mounting bracket at this point. Take out the bolt each side, which secures the body bracket to the chassis frame.

Gaining access from underneath the car, remove the bolt from each side just forward of the rear wheel arch.

Working from inside the boot, remove from each rear corner the two bolts which secure the rear of the body to the chassis.

The body may now be lifted from the chassis. As the body is lifted it must be manoeuvred slightly forward to disengage it from the two remaining front bumper mounting brackets which protrude through the body.

Before replacing the body by reversing the dismantling procedure, ensure that the laminated cork on each body mounting point is in good condition and squarely mounted, also check the rubber strips along the chassis longitudinal members, the engine bulkhead cross-member and the cross-member forward of the battery boxes.

Section S.9

FITTING THE OPTIONAL HEATING AND DEMISTING EQUIPMENT

Drain the water from the radiator and engine (see Section C.2).

Disconnect the battery lead from the positive terminal.

Remove the brass blanking plug from the bottom

radiator hose elbow and fit the water union and washer. Fit the hose and secure with a clip to the water union.

Slide the two cleats onto the water return pipe. Remove the two nuts and spring washers securing the accelerator cable abutment bracket to the inlet manifold and fit the water return pipe to the two studs. Slide a second hose clip over the hose on the water union, insert the water return pipe in the hose and tighten the clip. Refit the nuts and spring washers to the studs on the manifold and tighten up to secure the water return pipe.

Remove the blanking plate from the right-hand side of the cylinder block. Fit the water control valve assembly, with the hose connection pointing to the rear of the car, using the new gasket. Refit the thermo-couple clip to the lower bolt.

Remove the blanking plate from the air hose connector on the right-hand side of the radiator.

Insert the air hose between the radiator and the grille and fit the chamfered end onto the connector.

Secure the front end of the air hose to the valance tie-plate behind the grille with the cleat, screw, spring washer and nut, through the hole provided.

Fit one end of the air hose to the connector and secure it in position with the clip.

Secure the hose to the valance, using the second cleat and bolt through the hole in the valance which is blanked off with a nut and bolt.

Remove the blanking plate, secured by eight screws, on the engine bulkhead shelf, and fit the heater assembly, using the rubber seal fitted under the blanking plate. Secure with the screws removed from the blanking plate.

Fit the air intake to the connector on the heater assembly.

Fit one end of the water inlet hose to the water control valve connector and secure with one of the clips. Fit the other end of the water hose to the connector on the heater assembly which is adjacent to the air intake hose and secure with a second clip.

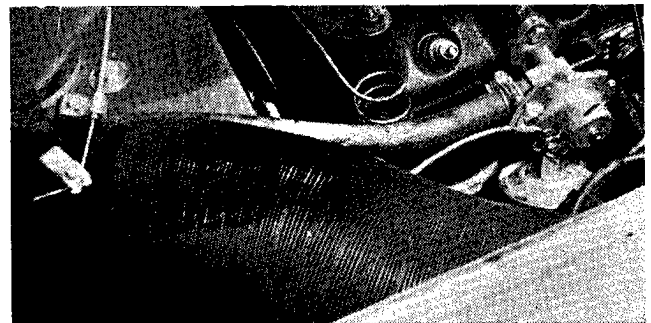


Fig. S.4.

The position of the water valve lever with the control pulled out to the "Min." position. The air flap lever may also be seen with the flap fully open.

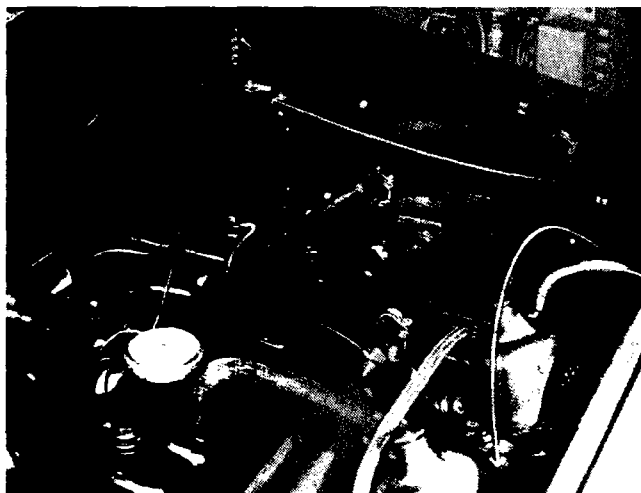


Fig. S.5.

A general view of the under-bonnet installation showing the arrangement of the components.

Fit one end of the water outlet hose to the return pipe on the engine and the other end to the second hose connection on the heater assembly. Secure the hose with the clips.

Fit onto the rear of the heater assembly, from inside the car, the two demister flanged tubes, securing with the six screws provided. Slide the rubber adaptors onto each of the ducts below the facia panel.

On the left-hand duct and over the adaptor fit the 14 in. (355.6 mm.) air hose. Connect the other end to the left-hand demister tube on the heater.

On the right-hand duct and over the adaptor fit the 25 in. (635.4 mm.) air hose. Connect the other end to the right-hand demister tube on the heater.

Fit one end of the temperature control cable to the quadrant on the lever control assembly, securing the outer cable under the clamp plate and using the trunnion to secure the inner cable.

Remove from the underside of the facia the two screws which secure the radio mounting rails. Having removed the fibre bolt retainers from the lever control assembly fit the assembly underneath the facia, screwing the bolts into the radio mounting rails.

Special sealing grommets are fitted in the scuttle which may easily be pierced to allow the entry of the control cables. Pass the temperature control cable through the grommet on the right-hand side of the scuttle (Fig. S.6).

With the control knob in the "Min." position, connect the inner cable to the water valve lever with the trunnion supplied and with the water valve lever right back (close to outer clamp). Secure the outer cable under the clamp.

Pass the air control cable through the special grommet on the left-hand side of the scuttle and, with the air knob

pulled fully out, connect the inner cable to the air control flap lever with the trunnion. When connecting the cable, the control flap must be held fully closed with the flap lever close to the outer cable clamp. Secure the outer cable under the clamp. Strap the air control cable to the water inlet pipe, using the rubber clip.

Connect the demister control cable to the demister flap on the heater box, passing the inner cable through the hole in the flap box (close to outer cable clamp) and also through the slot in the flap. Tighten the trunnion screw with the control knob pulled fully out and with the flap tightly shut.

Under the facia panel and behind the speaker fret, two wires (green and green with red) will be found to be connected together by a snap connector. Disconnect these two wires and reconnect them to the black wires from the switch on the lever control assembly, using the existing snap-connector and the one fitted to one of the switch wires.

Connect the black wires from the blower motor to the two wires (black and green with red) situated in the centre of the scuttle under the bonnet. Snap connectors are fitted to these two wires.

Reconnect the battery lead and switch on the blower motor (with the ignition switched on) and check that it is working.

See that both drain taps are closed (handles in line with the taps) and fill the cooling system with water.

Switch on the ignition and start the engine, letting it run at a fast idling speed.

Move the temperature lever to the "Max." position. After the engine has been run for a few minutes, both

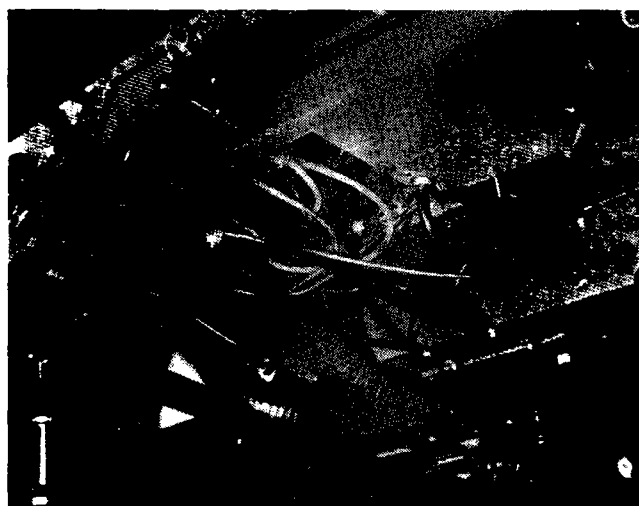
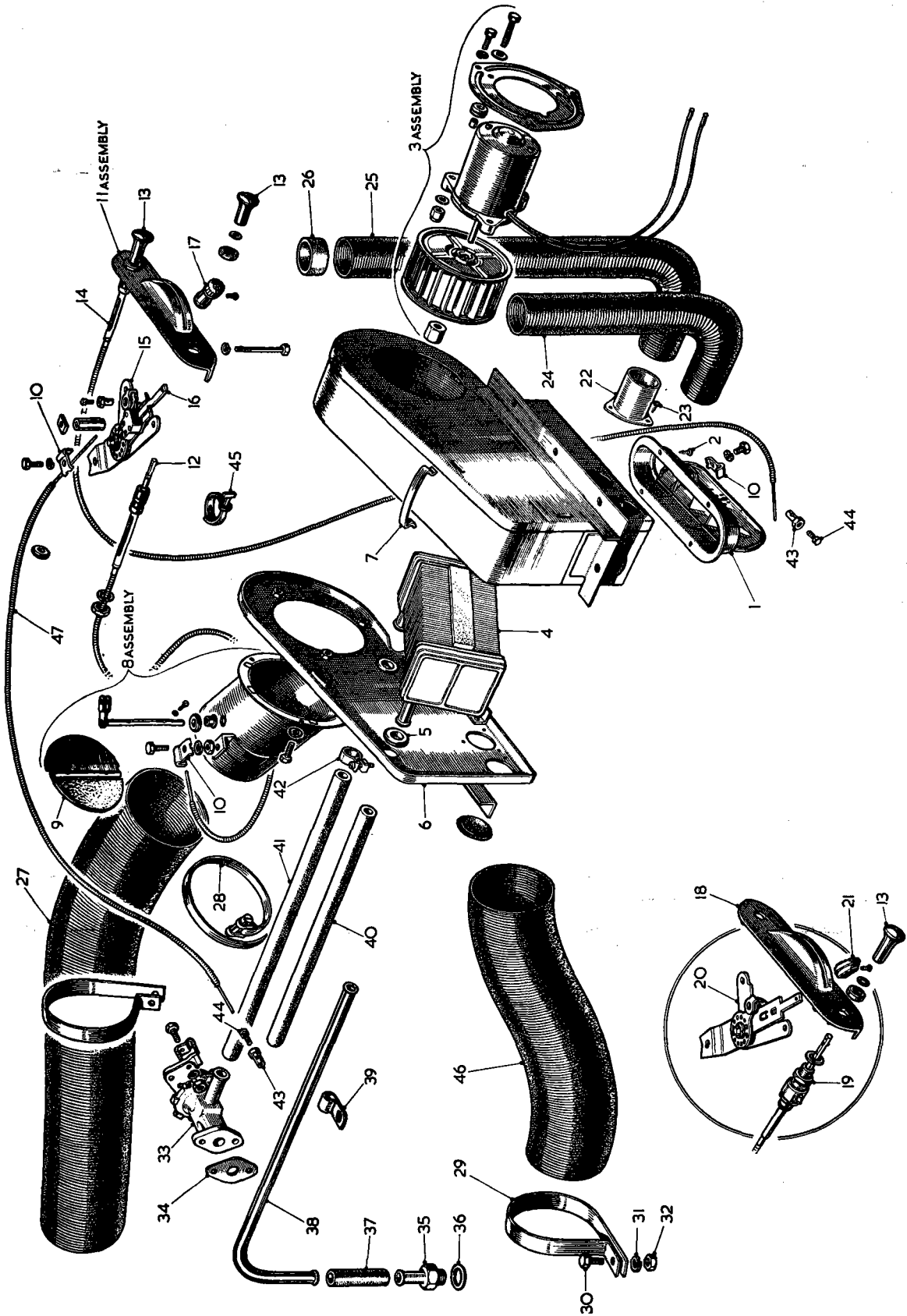


Fig. S.6.

Showing the general layout of the heater controls and demister tubes inside the car.

THE HEATER AND DEMISTER COMPONENTS



KEY TO THE HEATER AND DEMISTER COMPONENTS

<i>No.</i>	<i>Description</i>	<i>No.</i>	<i>Description</i>	<i>No.</i>	<i>Description</i>
1.	Outlet door assembly.	17.	Knob.	33.	Water valve assembly.
2.	Screw—outlet door.	18.	Lever control assembly.	34.	Gasket.
3.	Motor and runner.	19.	Air push cable.	35.	Water union.
4.	Radiator.	20.	Lever control.	36.	Washer.
5.	Grommet.	21.	Knob.	37.	Water pipe—2½ in. (63.5 mm.).
6.	Side cover—heater.	22.	Demister tubes.	38.	Water return pipe.
7.	Clip—side cover.	23.	Screw—cadmium-plated.	39.	Clip.
8.	Flap valve assembly.	24.	Air hose—14 in. (355.6 mm.).	40.	Water hose—12½ in. (317.5 mm.).
9.	Flap.	25.	Air hose—25 in. (635 mm.).	41.	Water hose—14 in. (355.6 mm.).
10.	Clamp—cable.	26.	Adaptors.	42.	Hose clip.
11.	Lever control assembly.	27.	Air hose—31 in. (787.4 mm.).	43.	Trunnion.
12.	Air push-pull cable.	28.	Clip.	44.	Screw—cadmium-plated.
13.	Knob.	29.	Clip—large.	45.	Cable clip.
14.	Demister cable.	30.	Screw—hexagon head.	46.	Air hose.
15.	Lever control sub-assembly.	31.	Washer—spring.	47.	Wire cable assembly.
16.	Lever and switch assembly.	32.	Nut.		

the rubber pipes leading to the heater should become warm, indicating that the system is working satisfactorily.

If one or both of the pipes do not warm up this indicates an air lock in the heater circuit which can be cleared by disconnecting the flexible rubber hose connected to the rear of the copper return pipe on the engine, while the engine is ticking over.

After a few moments water should flow from the hose, which should be reconnected quickly and the hose clip tightened. If necessary, replenish the radiator with water.

The heating and demisting equipment is available as a complete kit, Part No. AHH5422.

Section S.10

COLD AIR VENTILATION EQUIPMENT

A cold air ventilation kit, Part No. AHH5532, is available which merely provides fresh cold air to the car interior.

The fittings for this installation are similar to those of the heater kit, bearing in mind the fact that there are no water or demister fittings or connections. The control switch, for the blower motor, is mounted on the fascia panel by the air control (pull/push) switch.

Section S.11

MAINTENANCE OF BODYWORK AND UPHOLSTERY

It is advisable to wash the coachwork of the car with an abundant quantity of water to remove all traces of dust, mud and traffic film. Polish the paintwork frequently with a good-quality car polish which is free from abrasive.

Metal polish must not be used to clean chromium, plastic, stainless steel, or anodized aluminium bright parts. Wash them frequently with soap and water, and when the dirt has been removed polish the surface with a clean, dry cloth or chamois-leather until bright. Never use an abrasive.

A slight tarnish may be found on stainless steel that has not been washed regularly, and this can be removed with impregnated wadding such as is used on silverware.

Surface deposits on chromium parts may be removed with a chromium cleaner.

An occasional application of wax polish or light oil to metal trim will help to preserve the finish, particularly during winter, when salt has been applied to the roads, but these protectives should not be applied to plastic finishers.

When cleaning windshields it is advisable to use methylated spirits (de-natured alcohol) to remove tar

spots and other stains. It has been found that the use of some silicon- and wax-based polishes for this purpose can be detrimental to the windshield wiper blades.

The upholstery of the car should be cleaned periodically by wiping over with a damp cloth. Accumulations of dirt, if left too long, eventually work into the pores of the leather, giving a soiled appearance. A little neutral soap may be used, but detergents, caustic soaps or spirits of any kind must not be used.

When necessary, the hood cloth may be cleaned with water applied with a brush. Soaps and detergents must not be used.

Section S.12

REGLAZING THE WINDSHIELD

To detach the frame from the body

Remove the three cap nuts and screws attaching each grab handle to the windshield frame flange. Remove the four screws and lift the frame forward and upward away from the body. Note that of these four screws on each side the three top screws are $\frac{5}{8}$ in. (15.9 mm.) long and the bottom screw $\frac{3}{4}$ in. (19.1 mm.) long.

To remove the glass from the frame

Remove the two screws at the top and bottom corners of the frame side rails which screw into the angle bracket in the frame channel at the mitred corners. The frame may now be pulled apart and the glazing rubber removed.

To reglaze

Check the frame top and bottom rails with the curvature of the glass and set where necessary to suit any variation. A tolerance of $\frac{1}{8}$ in. (3.2 mm.) is permitted.

The rails can be set by placing the rear face over a soft wood block. Grip the rails with the hands on each side of the block, about 12 in. (305 mm.) apart, and gently slide from side to side over the block, exerting sufficient graduated pressure to shape the rail to the desired curvature.

When the curvature of the rails is correct reassemble the windshield by reversing the order for extracting the glass, taking care that the mitred corners are correctly aligned and all the screws are tight. Replace the frame on the body, using the correct screws as detailed above.

Section S.13

REMOVING THE WINDSHIELD (COUPÉ)

Extract the two screws securing the driving mirror and remove the mirror.

Remove the windshield wiper arms.

Unscrew the seven screws at each side securing the R.H. and L.H. side fillets. Remove the fillets.

Withdraw the five screws retaining the front windshield fillet and remove the fillet.

Press the glass from the inside of the car, commencing at one corner, and carefully ease the sealing rubber from the metal edge of the windshield housing.

Before attempting to refit the windshield glass to the body it should be assembled into the rubber channel. Make sure that the glass is right home in the channel.

To facilitate the assembly of the windshield to the car body and the outside finisher to the glass, lengths of cord each about 15 feet (4.6 m.) long should be threaded around the rubber channel. Insert one length of cord into the channel to be fitted over the metal edge of the windshield housing and the other into the finisher channel on the outer side. It is convenient to have the ends of the inner cord at the bottom of the windshield and the ends of the outer cord at the top.

Threading the cords is easily carried out if one end of a cord is threaded through approximately 6 in. (15 cm.) of small-diameter tubing—brake pipe is ideal (see Fig. S.7). Radius one end of the tube inside and out and bell out the opposite end. Allow 6 in. (15 cm.) of the cord to protrude from the plain end of the tube and then press that end of the tube into the channel to which the cord is to be fitted. Run the tube around the channel, allowing the cord to flow freely through it until it surrounds the windshield and the free ends overlap and

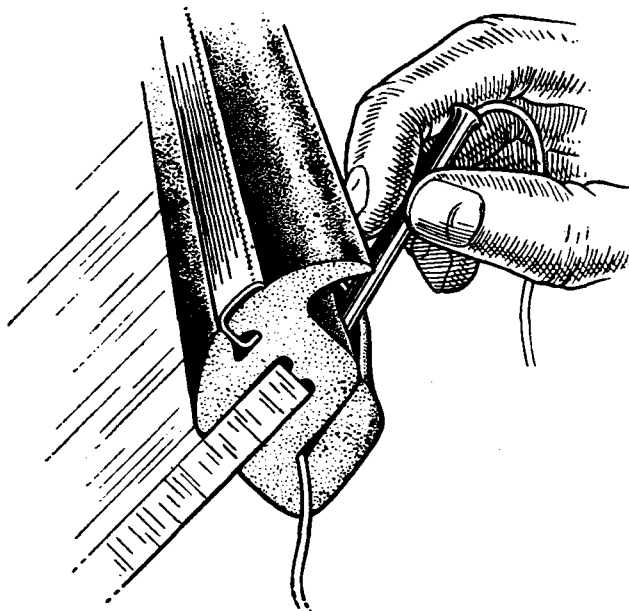


Fig. S.7

Inserting the cord in the outside lip of the rubber channel after fitting the plated finisher

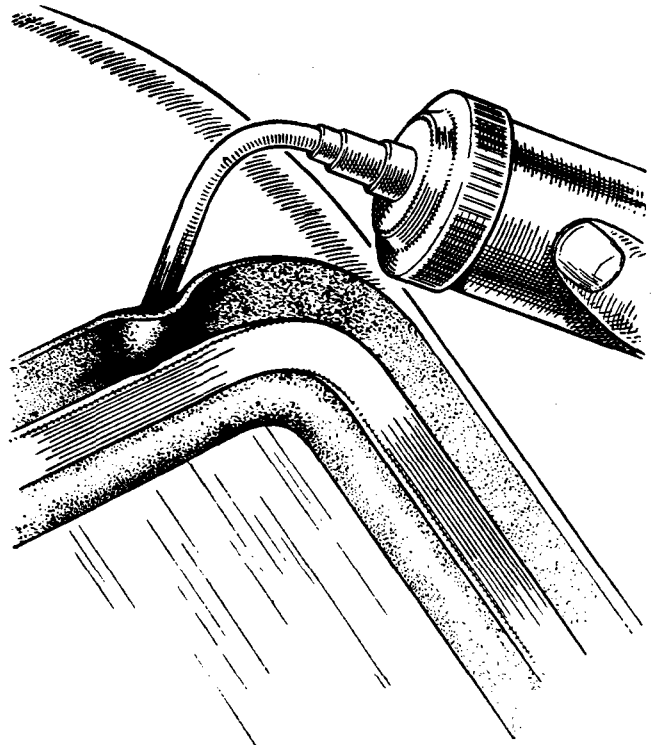


Fig. S.8

Showing the use of a pressure gun to apply Seelastik

hang from the channel. The ends should be long enough to allow a good pull when the windshield is fitted.

Insert one edge of an external finisher into the channel in the rubber, press in position, and finally position by withdrawing the string. Insert the second finisher in the same manner and fit the upper and lower cappings.

To fit the windshield to the body it must be offered to the windshield aperture from outside the car. With the assembly pressed into position from the outside the inner cord must be pulled away progressively round the aperture to draw the inside lip of the rubber channel over the flange.

Use a rubber mallet round the outside edge of the windshield to ensure complete seating of the assembly.

Seelastik sealing compound should be injected between the outer lip of the rubber seal and the body and between the seal and the glass. The application must be evenly distributed round the windshield. To ensure this the outside lip should be firmly pressed down, with the fingers or a wooden roller, to spread the sealing compound under the rubber seal.

Fig. S.8 shows the method of applying Seelastik sealing compound between the channel lip and body flange, using an Expandite pressure applicator gun, if possible, fitted with a special $\frac{3}{16}$ in. (4.5 mm.) bore brass tube nozzle.

Refit the driving mirror.

Section S.14

REMOVING AND REPLACING THE REAR LIGHT (COUPÉ)

Push the glass, and rubber seal, towards the outside of the car until it is free.

To replace, fit the rubber seal round the glass. Thread a length of cord along the inner flange of the rubber seal with the ends protruding.

With the aid of a second operator to apply hand pressure to the outside of the glass draw the string from the rubber seal so that the flange is lifted over the metal edge of the window opening.

Seelastik sealing compound should be injected between the outer lip of the rubber channel and the body flange. The application must be evenly distributed right round the glass. To ensure this the outside lip should be firmly pressed down, with the fingers or a wooden roller, to spread the sealing compound under the rubber seal.

Section S.15

REMOVING A DOOR LOCK OR WINDOW REGULATOR (COUPÉ)

Extract the three securing screws and remove the top finisher panel. Remove the three retaining screws from the door-pull and plate.

Push the inner escutcheons clear of the shanks of the door lock handle and the window regulator handle and push out the exposed retaining pins to release the handles.

Remove the eight recessed-headed screws securing the trim panel to the door. Remove the door aperture sealing material.

Extract the two recessed-headed screws securing the window channel top brackets, one either side, to the top of the door. Lift the felt from the bottom of the channel and remove the screws from the bottom brackets.

With the glass fully raised, remove the self-locking nut and tension spring from the ventilator window through the aperture in the door. Lift out the ventilator window.

Unscrew the two barrel nuts securing the window frame to the door.

Withdraw the three screws securing the waist rail finisher to the outside of the door and prise the finisher up and out away from the door.

Extract the screw securing the wooden glass stop to the top rear inner face of the door. Raise the glass and withdraw the quadrant arm from the window lift channel and remove the glass.

Lift out the window frame assembly.

To remove the door lock

Take out the three screws securing the remote control to the door and the four screws in the shut face of the

door securing the lock. The lock, remote control, and remote control link can then be withdrawn from the door.

To remove the window regulator

Extract the six screws securing the regulator to the inner door panel and lift out the regulator.

Reassembly is a reversal of the dismantling procedure.

Replace the piece of sealing material with rubber cement.

Section S.16

REMOVING THE HEAD LINER (COUPÉ)

Unscrew the seven screws at each side securing the R.H. and L.H. side fillets and the five screws securing the front fillet and remove the fillets.

Remove the rear light as detailed in Section S.14.

Carefully ease the head liner away from the roof above the windshield, rear light, and above the doors; the head liner is attached to the roof with rubber cement.

Extract the two screws from each side of the three head liner lists and remove the head liner complete with lists.

Reassembly is a reversal of the dismantling procedure.

When resticking the head liner to the roof with rubber cement work from the rear to the front and from the centre to the sides.

Section S.17

SEALING HOOD SEAMS

Commencing at Car No. 16101, a new hood is introduced with the seams stitched, lapped, and welded. On cars prior to this commencing number trouble may be experienced with water seeping through the stitch holes. These hood seams can be sealed with stitch sealing solution (Part No. 17H9663), available in one-pint tins.

The solution must be applied in a well-ventilated place and a dry atmosphere is essential. Normal fire precautions must be taken as the solution is inflammable.

The hood seams should be painted both on the inside and outside with two thin coatings of solution, with 10 minutes' drying time allowed between each coat. The hood should be left for 24 hours after the application of the solution before it is used.

Section S.18

SLIDING SIDESCREENS

From Car No. 68851 aluminium de-luxe sliding side-screens are available as an optional extra on the 'MGA 1600'.

Section S.19

USE OF ADHESIVES

The following adhesives are recommended for resticking leathercloth, rubber, carpet, etc., to various surfaces. Metal must be clean and free from grease before being treated.

Particular attention must be paid to these recommendations in tropical climates, where difficulty may be experienced if alternatives are used.

<i>Materials</i>	<i>Adhesive</i>	<i>Method of application</i>
Rubber to bare, primed, or painted metal	Dunlop S.79	Opposing surfaces to be treated with a uniform coating of adhesive and allowed to become tacky (almost dry). Press firmly together
Carpet to primed metal		
Carpet to hardboard or millboard		
Rubber-backed needleloom felt to metal (rubber side to metal)		
Polyurethane foam to primed metal		Apply an even coating to metal. Press the foam firmly on to the metal immediately
Needleloom felt to primed metal	Goodliff G2	Apply to metal surface only and stick the felt on immediately
Leathercloth to primed or painted metal	Dunlop S758	Opposing surfaces to be treated with a uniform coating of adhesive and allowed to become tacky (almost dry). Press firmly together
Leathercloth to hardboard		
Leathercloth to leathercloth		
Leathercloth to phosphated metal		
P.V.C.-coated felt to bitumastic compound coated surfaces	Flintkote 833 N	Apply to both surfaces and press firmly together after five minutes

PAINT REFINISHING INSTRUCTIONS

<i>Operation</i>	<i>Material</i>	<i>Thinning</i>	<i>Drying times</i>	<i>Application</i>	<i>Instructions</i>
Stripping original paint	Water-soluble paint remover, e.g. Sunbeam Anti-corrosives 'Stripolene 799'	—	—	Brush	Remove the original finish with a scraper after allowing paint-strip 10 minutes to react (repeat if necessary). Wash off thoroughly with cold water, rubbing with wire wool. Dry. Blow out crevices with compressed air. Strip a small area at a time to enable correct neutralizing of the stripper
Metal abrading	Emery-cloth, e.g. Howarth Blue Twill, grade 1½ M	—	—	Hand or disc	Paper thoroughly to ensure satisfactory key. Wipe with cleaner solvent or white spirits
Acid etching	Apply Deoxidine 125 (I.C.I.)	1 part Deoxidine, 1 part water	—	Brush	Apply solution generously and rub in with wire wool. Do not allow Deoxidine solution to dry off before the wash-off operation. Allow approximately five minutes to complete reaction. Wash thoroughly with cold water to remove all traces of Deoxidine solution, followed by a hot rinse. Thoroughly dry surfaces with a clean cloth and blow out crevices with compressed air
Priming	Synthetic primer G.I.P. No. S3178 or Grey cellulose primer G.I.P. C3971 MOD	6 to 1 with Z1048 50/50 with 2045M	½-hour to 4 hours ½-hour	Spray Spray	Apply one thin coat of synthetic primer (recommended for superior adhesion) or one thin coat of cellulose primer (recommended for good adhesion). The use of a primer coat enhances adhesion and gives the system a much greater safety factor
Applying stopper	Stopper Grey G.I.P. 824D or Stopper Brown G.I.P. 1543	—	6-8 hours, or overnight if possible	Glazing knife	Apply stopper in thin layers, allowing 15-20 minutes' drying between applications. Heavy layers result in insufficient drying, with subsequent risk of cracking
Filling	Primer Filler Grey G.I.P. C3663M	50/50 with 2045M	3-4 hours	Spray	Apply two or three full coats, allowing 15-25 minutes' drying time between coats

BODY

Wet-sanding	Abrasive paper 280 grade	—	—	—	—	Rub down wet until smooth; a guide coat (a weak contrasting colour) may be used to ensure that the whole surface is rubbed level. Wash off thoroughly with water, sponge all sludge, wash off, dry with clean sponge. Dry off. Minimum of paint should be removed consistent with a satisfactory surface. Film thickness after rubbing should be .0025 in. (.06 mm.) min.
Applying sealer or undercoat	Sealer Grey or Sealer White or Red undercoat (see B.M.C. Paint Scheme schedule)	50/50 with 2045M	15-20 minutes	Spray	Apply one coat, flash off	
Dry-sanding or de-nibbing as required	320 grade paper	—	—	—	De-nib or dry-sand with 320 paper. Clean with white spirit. The grade of paper quoted is from the 3M Company (Minnesota Mining and Mfg. Co. Ltd.); the grade of paper may vary according to manufacture	
Applying colour coats	B.M.C. body finishes (see B.M.C. Paint Scheme schedule)	50/50 with 2045M	5-10 minutes' flash between coats. Overnight dry	Spray	Apply two double coats with a 5-10-minute flash between coats. Overnight dry	
Flattening	320 or 400 paper (dependent on conditions)	—	—	Hand	Flat with 320 or 400 paper, dependent on conditions	
Applying final colour coat	B.M.C. body finishes (see B.M.C. Paint Scheme schedule)	50/50 with 2045M	Overnight dry	Spray	Spray final double colour coat	
Polishing	Cut and polish (see B.M.C. Paint Scheme schedule)	—	—	Hand or machine	The colour coat must be thoroughly dry before polishing. After cutting, burnish to a high gloss with a clean mop, and finally clean with a liquid polish, e.g. Apollo liquid polish	

NOTE.—(1) For faster drying of undercoats or local repairs G.I.P. thinners 1523 may be used.
 (2) Under extreme circumstances of heat and/or humidity retarder G.I.P. Z1694 can be used added to the 2045M thinners.

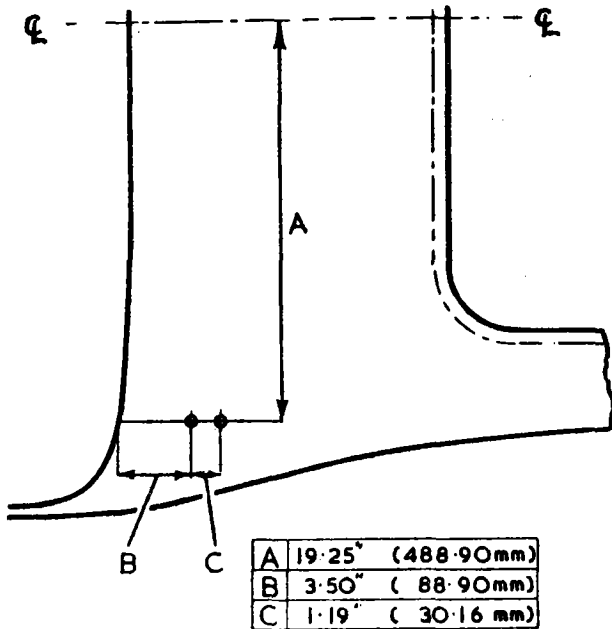


Fig. S.9

A5302W

The tonneau panel anchorage point

Section S.21

SEAT BELT ANCHORAGE FITTING INSTRUCTIONS

Seat belt kits complete with anchorage fittings are available under Part Nos. AHH6141 (R.H.) and AHH6193 (L.H.) for fitting to the driver's or passenger's seats on both Tourer and Coupé cars.

The harness comprises a long and a short belt, both of which are adjustable. When in use a tongue on the long belt engages a quick-release buckle on the short belt; the positions of the tongue and buckle may be adjusted to suit individual users.

The upper end of the long belt is fitted to the tonneau panel and the lower end of the belt to the chassis side-member. The lower end of the short belt is fitted to the side of the drive shaft tunnel adjacent to the seat being equipped.

The fitting instructions are as follows.

Tonneau panel

- (1) Mark off and drill two $\frac{1}{2}$ in. (7.73 mm.) holes in the tonneau panel in the position shown in Fig. S.9.
- (2) Place the two spring washers on the two pan-head screws, pass the screws through the top end bracket of the long belt, and position the bracket on top of the tonneau panel.

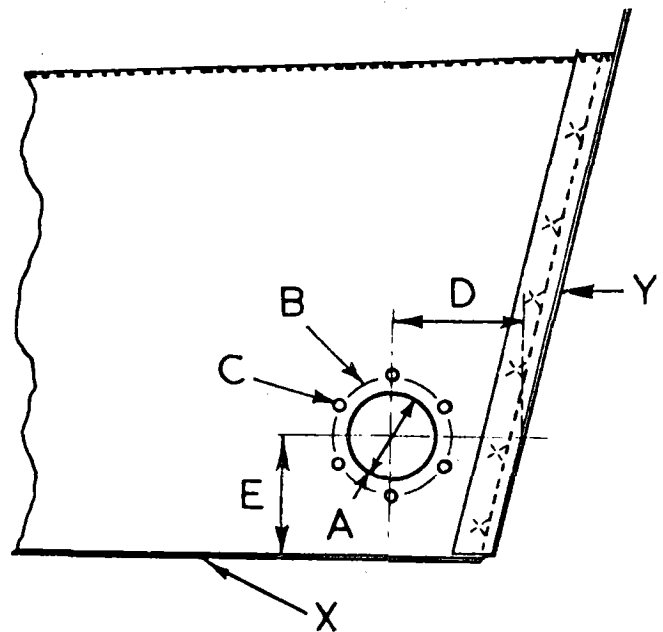
- (3) Place the tapped reinforcement plate under the tonneau panel and secure with the two pan-head screws.

Side-member

- (1) Remove the carpet from the side-member and sill. Place the anchor bracket on the side-member with the centre of the rear hole $4\frac{3}{4}$ in. (12.0 cm.) forward of the rear floor panel.
- (2) Ensure that the anchor plate weld nuts face outwards, and then securely arc-weld the plate to the chassis side-member.
- (3) Place the spring washers on the hexagon-headed screws and secure the quick-release bracket to the anchor plate.
- (4) Secure the lower end of the long belt to the quick-release bracket with the pin provided. Ensure that the head of the pin faces the centre of the car and that it is correctly locked.

Drive shaft tunnel

- (1) Remove the tunnel trim. Mark out and cut a $1\frac{1}{2}$ in. (38.1 mm.) diameter hole 2 in. (50.8 mm.) from the



A	1.500" (38.10 mm)
B	2.00" (50.80mm)
C	.203" (5.16 mm)
D	2.125" (53.97 mm)
E	2.00" (50.80 mm)

A5304W

Fig. S.10

The drive shaft tunnel anchorage point

floor and $2\frac{1}{8}$ in. (53.97 mm.) from the heelboard on the side of the tunnel adjacent to the seat being equipped.

- (2) Using the centre bracket as a template, mark out and drill six equally spaced holes $\frac{1}{4}$ in. (5.16 mm.) diameter on a pitch circle diameter of 2 in. (50.8 mm.).
- (3) Position the centre bracket inside the tunnel and secure it with the six No. 10 UNF. pan-head screws. The heads of the screws must be inside the

tunnel and the spring washers and nuts inside the car.

- (4) Cut a 1 in. (25.4 mm.) hole in the carpet to coincide with the middle of the centre bracket.
- (5) To the $\frac{7}{16}$ in. (11.11 mm.) hexagon-headed screw fit the plain washer, anti-rattle washer (concave face to belt bracket), belt bracket, and distance piece (large diameter to tunnel). Pass the bolt through the centre-piece and secure it with the spring washer and nut.

SECTION SS

BODY

(MGA 1600 and MGA 1600 [Mk. II])

- Section No. SS.1 Fitting a Fibreglass hard-top.
- Section No. SS.2 Seat belts.
- Section No. SS.3 Seat belt anchorage fitting instructions.

Section SS.1

FITTING A FIBREGLASS HARD-TOP

To fit the Fibreglass hard-top, fold and stow the hood or remove it completely from the car. If the hood is removed fit attachment brackets to the body sides in place of the hood frame pivot plates to form anchorage points for the hard-top retaining clips.

Lower the front of the hard-top onto the top of the windshield so that the two pins on the windshield surround locate in their respective housings in the hard-top. Allow the rear end of the hard-top to seat on the tonneau panel and ensure that the rubber moulding around the base of the hard-top is a good fit all round. Secure the front of the hard-top with the two thumbscrews provided.

Remove the cap nuts and knurled thumbscrews from the retaining clips, pass the clips through the brackets on the sides of the hard-top, and engage the hooked ends of the clips in the hood frame pivot plates or the attachment plates; secure the clips with the knurled thumbscrews and refit the cap nuts.

The aluminium de-luxe sliding sidescreens for use with the Fibreglass hard-top are then fitted in the normal way.

Section SS.2

SEAT BELTS

From Car No. 100352 the body of the car incorporates anchorage points to facilitate the fitting of B.M.C. seat belts (Part No. AHH6122) to the driver's seat and to the passenger's seat. The fitting of the belts to the car should be carried out by an Authorized M.G. Distributor or Dealer.

The anchorage points are located one on each frame side-member, one on each side of the tunnel, and one

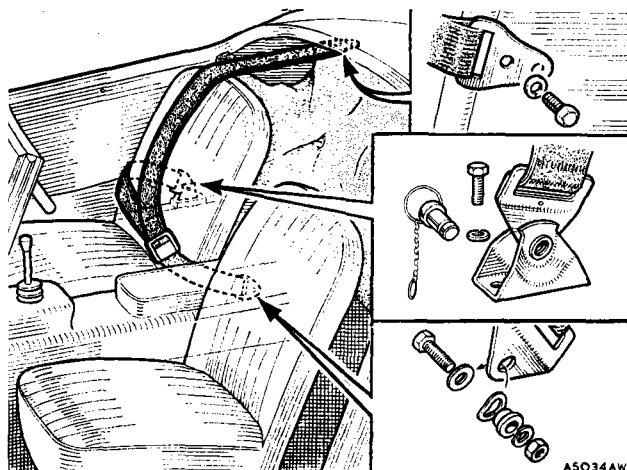


Fig. SS.1

The seat belt attachment points and fittings (Tourer)

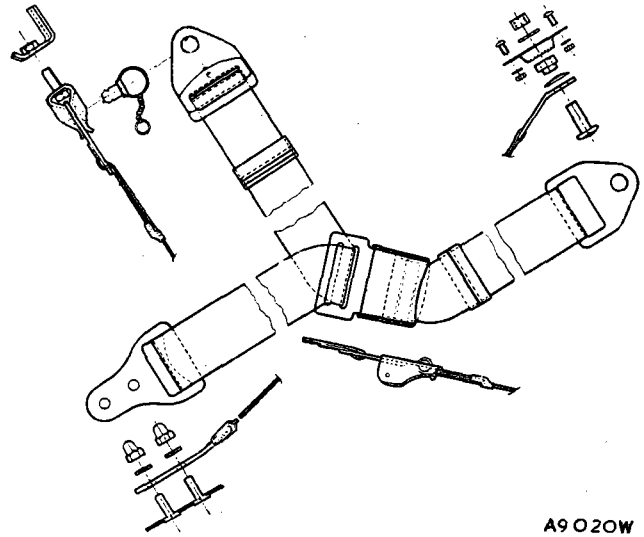


Fig. SS.2

The seat belt and anchorage fittings (Coupe)

each under the left-hand and right-hand sides respectively of the tonneau panel (Tourer) and rear wheel arch (Coupe). The seat belt is made up of a long and a short belt, each of which is adjustable. When in use the two belts are connected by a quick-release buckle.

To fit the belts to the car, bolt the end bracket of the long belt (having two holes) to the under side of the tonneau panel, using the spring washers and set screws provided. Cut the trim covering the frame member locating points to obtain metal-to-metal contact and use the spring washers and set screws provided to secure the anchor plate to the side-member. Secure the remaining end bracket of the long belt to the anchor plate with the quick-release pin and circlip; insert the pin from the inside of the bracket. Cut the trim covering the tunnel locating point and remove the grommet from the tunnel. Place the anti-rattle washer and the under side of the short belt end bracket over the distance piece and pass the set screw through the plain washer, distance piece, and the tunnel so that the large diameter of the distance piece is adjacent to the tunnel. Secure the set screw with the spring washer and nut.

NOTE.—It is important that the short belt is secured to the side of the tunnel next to the wearer.

Section SS.3

SEAT BELT ANCHORAGE FITTING INSTRUCTIONS

Seat belt kits complete with anchorage fittings are available under Part No. AHH6141 (R.H.) and AHH6193 (L.H.) for Tourer cars up to Car No. 100351

and Part No. AHH6175 (R.H.) and AHH6194 (L.H.) for Coupé cars up to Car No. 100351.

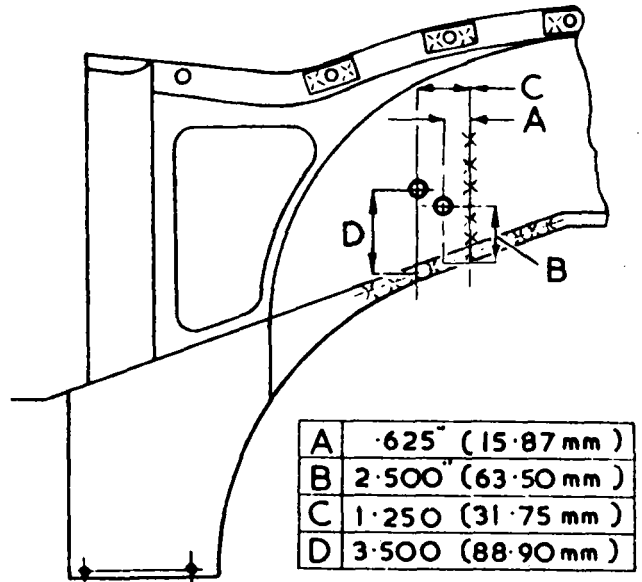
The description and fitting instructions are as detailed in Section S.21, with the exception of the upper end of the long belt, which is fitted to the rear wheel arch instead of the tonneau panel on Coupé cars only.

The fitting instructions are as follows.

Rear wheel arch

- (1) Remove the rear road wheel.
- (2) Using the vertical spot-welds securing the bulkhead to the wheel arch as a datum line, mark out and drill an $\frac{1}{2}$ in. (8.73 mm.) hole $\frac{3}{8}$ in. (15.87 mm.) forward of the datum mark and $2\frac{1}{2}$ in. (6.35 cm.) up from the spot-welds securing the floor to the wheel arch.
- (3) Mark out a second hole $1\frac{1}{4}$ in. (31.75 mm.) forward from the datum line and $3\frac{1}{2}$ in. (8.89 cm.) up from the spot-welds securing the floor to the wheel arch.
- (4) Position the reinforcement plate over the first hole and drill a second hole $\frac{1}{2}$ in. (8.73 mm.) diameter.
- (5) Pass the bolts attached to the reinforcement plate through the holes in the wheel arch and secure the

upper end of the long belt to the bolts with the spring washers and cap nuts provided.

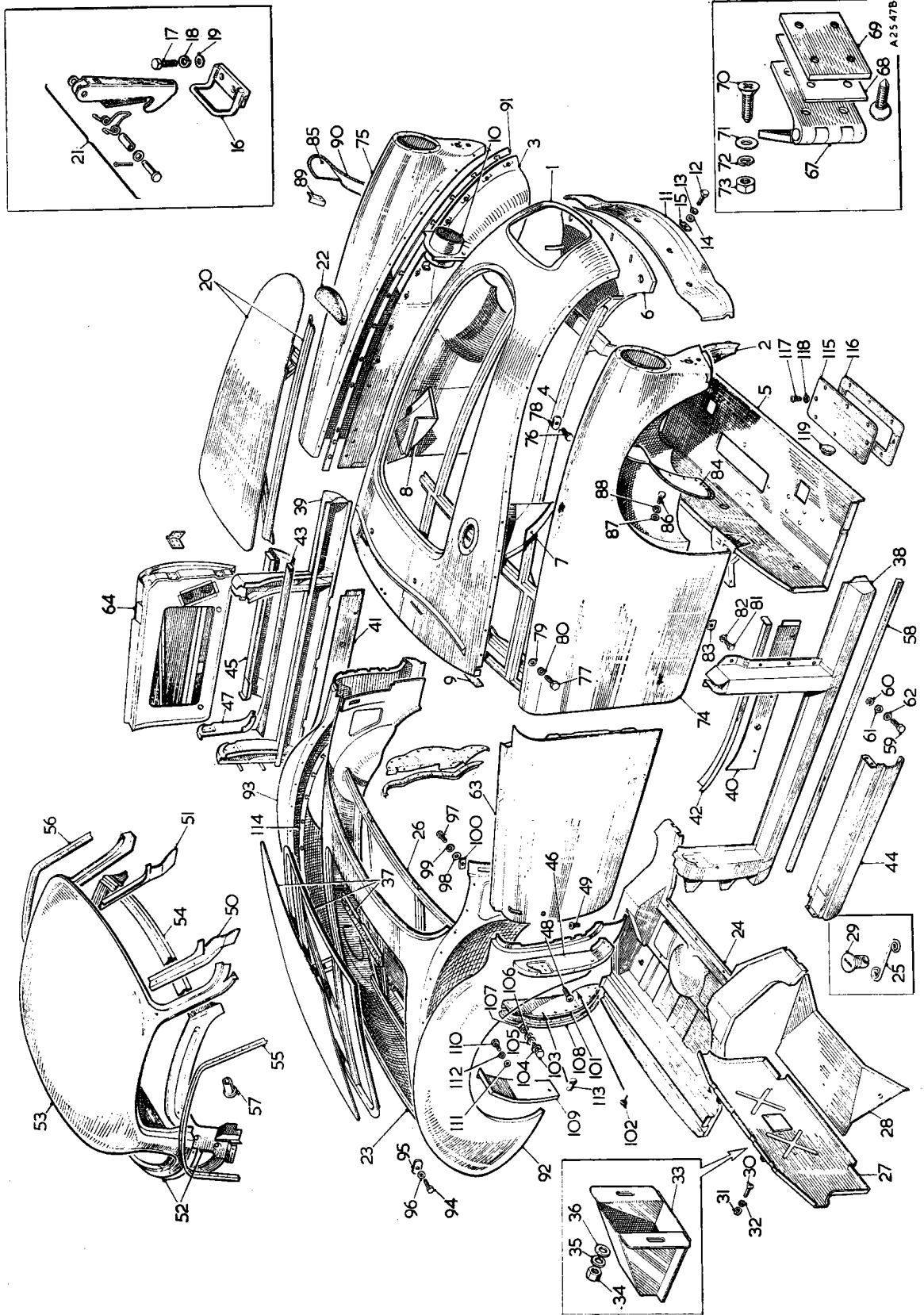


A5303W

Fig. SS.3

The rear wheel arch anchorage point (Coupé only)

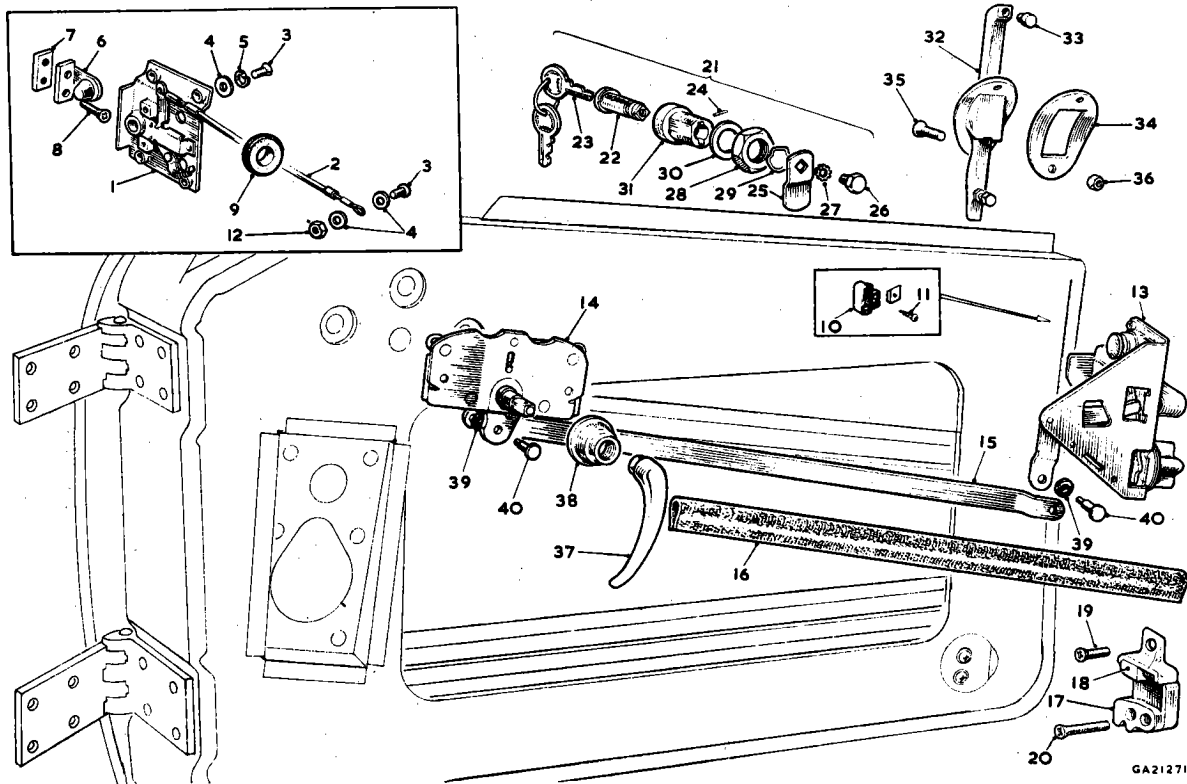
THE BODY SHELL (COUPÉ)



KEY TO THE BODY SHELL (COUPÉ)

No.	Description	No.	Description	No.	Description
1.	Panel assembly—bonnet surround.	40.	Panel—sill inner—R.H.	81.	Screw—front wing to sill.
2.	Front side assembly—R.H.	41.	Panel—sill inner—L.H.	82.	Washer—spring—for screw.
3.	Front side assembly—L.H.	42.	Plate—sill sealing—R.H.	83.	Washer—plate—for screw.
4.	Bonnet surround reinforcement.	43.	Plate—sill sealing—L.H.	84.	Splash plate—R.H. front wing.
5.	Panel assembly—front bulkhead.	44.	Panel—sill outer—R.H.	85.	Splash plate—L.H. front wing.
6.	Panel—radiator duct.	45.	Panel—sill outer—L.H.	86.	Screw fixing plate.
7.	Box assembly—R.H. air duct.	46.	Panel—R.H. shut pillar facing.	87.	Washer—plain—for screw.
8.	Box assembly—L.H. air duct.	47.	Panel—L.H. shut pillar facing.	88.	Washer—spring—for screw.
9.	Strip—front bulkhead packing.	48.	Screw—facing panel—side.	89.	Bracket assembly—splash plate.
10.	Tube—air duct.	49.	Screw—facing panel—bottom.	90.	Seal—L.H. front splash plate (rubber).
11.	Panel—front valance.	50.	Pillar reinforcement—windscreen—R.H.	91.	Piping—front wing.
12.	Screw fixing panel.	51.	Pillar reinforcement—windscreen—L.H.	92.	Wing assembly—R.H. rear.
13.	Washer—spring—for screw.	52.	Roof assembly.	93.	Wing assembly—L.H. rear.
14.	Washer—plain—for screw.	53.	Panel assembly—roof.	94.	Screw—rear wing to body.
15.	Washer—plate—for screw.	54.	Reinforcement assembly—roof panel.	95.	Washer—plate—for screw.
16.	Bracket—bonnet lock safety catch.	55.	Dripway—door opening—R.H.	96.	Washer—plain—for screw.
17.	Screw fixing bracket.	56.	Dripway—door opening—L.H.	97.	Screw—rear wing to sill.
18.	Washer—spring—for screw.	57.	Rivet—dripway to roof panel.	98.	Washer—plain—for screw.
19.	Washer—plain—for screw.	58.	Finisher—sill lower.	99.	Washer—spring—for screw.
20.	Panel assembly—bonnet lid.	59.	Bolt for sill finisher (special).	100.	Washer—plate—for screw.
21.	Catch assembly—safety.	60.	Nut for bolt.	101.	Splash plate—rear wing—front—L.H.
22.	Batten—bonnet lid stiffening.	61.	Lock washer for nut.	102.	Screw fixing plate.
23.	Tonneau panel.	62.	Washer—plain—for nut.	103.	Screw fixing plate.
24.	Floor assembly—boot.	63.	Door assembly—R.H.	104.	Washer—plain—for screw.
25.	Dzus spring.	64.	Door assembly—L.H.	105.	Washer—plain—for screw.
26.	Reinforcement assembly—tonneau.	67.	Hinge—door.	106.	Washer—spring—for screw.
27.	Panel assembly—rear bulkhead.	68.	Packing—door hinge.	107.	Nut for screw.
28.	Panel assembly—battery cover.	69.	Plate—tapping.	108.	Seal—R.H. rear splash plate (rubber).
29.	Dzus fastener.	70.	Screw fixing hinge.	109.	Splash plate—rear wing—rear—R.H.
30.	Screw—rear bulkhead panel.	71.	Washer—plain—for screw.	110.	Screw fixing plate.
31.	Nut for screw.	72.	Washer—spring—for screw.	111.	Washer—plain—for screw.
32.	Washer—spring—for screw.	73.	Nut for screw.	112.	Washer—spring—for screw.
33.	Bracket assembly—spare wheel.	74.	Wing assembly—R.H. front.	113.	Rivet—rubber seal to plate.
34.	Nut for bracket.	75.	Wing assembly—L.H. front.	114.	Piping—rear wing.
35.	Washer—spring—for nut.	76.	Screw—front wing to body.	115.	Cover—plate—heater aperture.
36.	Washer—plain—for nut.	77.	Screw—front wing to body.	116.	Gasket—heater sealing.
37.	Lid assembly—boot.	78.	Washer—plate—for screw.	117.	Screw—cover-plate.
38.	Sill reinforcement and pillar assembly—R.H.	79.	Washer—plain—for screw.	118.	Washer—spring—for screw.
39.	Sill reinforcement and pillar assembly—L.H.	80.	Washer—spring—for screw.	119.	Grommet—blanking heater valve control hole.

THE DOOR FITTINGS



No. Description

Tourer

1. Lock assembly—door—R.H.
2. Cable—operating.
3. Screw fixing lock.
4. Washer—plain—for screw.
5. Washer—spring—for screw.
6. Plate—striking.
7. Plate—striker tapping
8. Screw fixing striker.
9. Grommet—door release (rubber).
10. Buffer assembly—door.
11. Screw fixing buffer.
12. Nut—door lock cable.

Coupé

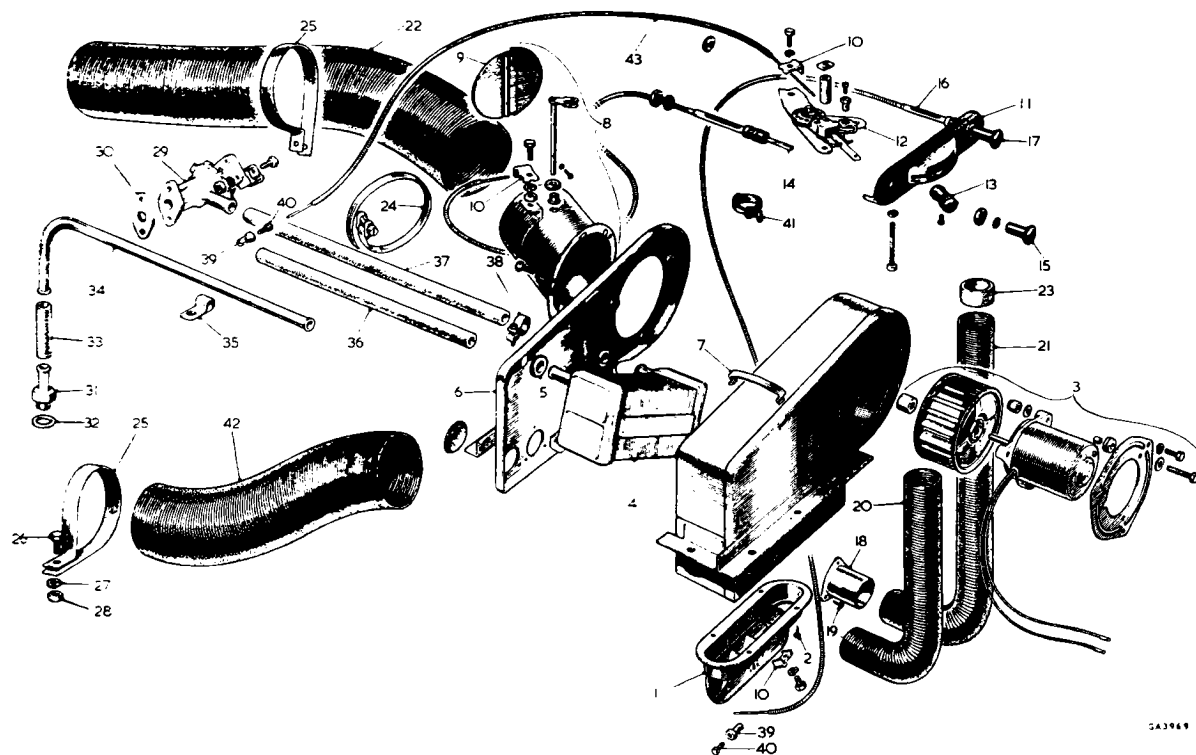
13. Lock—R.H.
14. Remote-control mechanism—R.H.
15. Link—connecting.
16. Sleeve—anti-rattle.
17. Plate—striker—R.H.
18. Plate—striker tapping.
19. Screw fixing striker.

No. Description

20. Screw fixing striker.
21. Lock assembly—private.
22. Cylinder—lock—with keys.
23. Key.
24. Peg—retaining.
25. Latch.
26. Bolt—latch.
27. Washer for bolt.
28. Locknut.
29. Washer—waved.
30. Washer—seating.
31. Housing—lock.
32. Handle—door.
33. Insert—door handle (rubber).
34. Washer—seating.
35. Screw fixing handle.
36. Nut for screw.
37. Handle—remote-control.
38. Escutcheon assembly—handle.
39. Washer (rubber).
40. Rivet.

GA21271

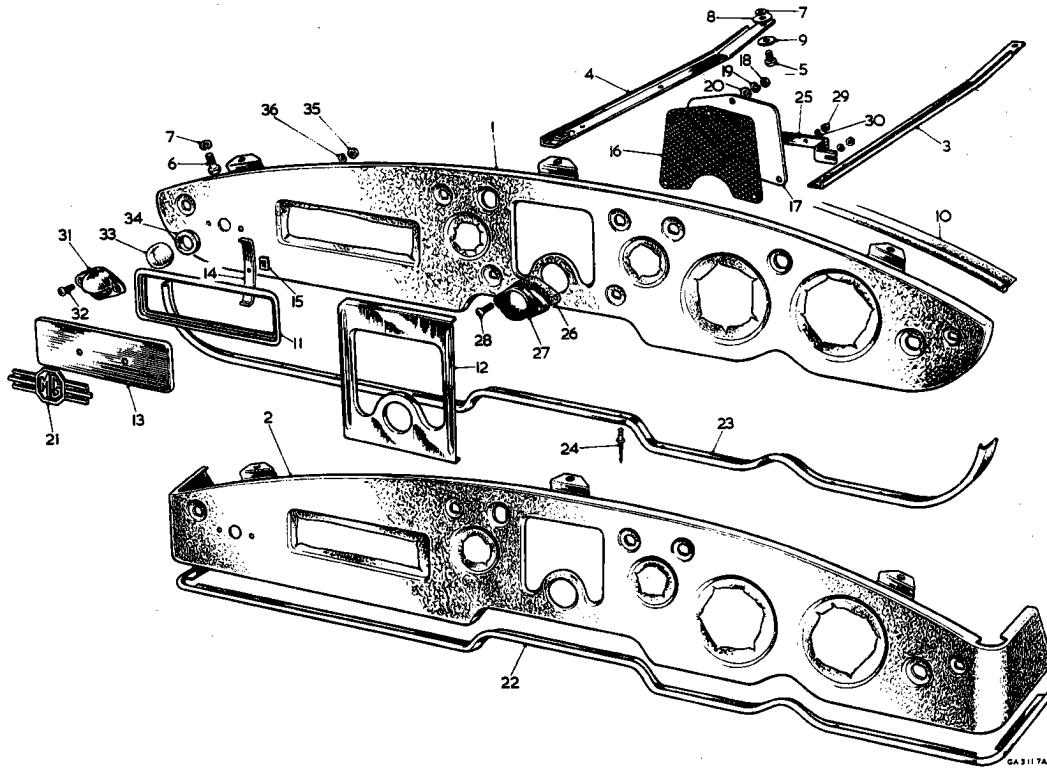
THE HEATER COMPONENTS



No.	Description
1.	Door assembly—outlet.
2.	Screw fixing outlet door.
3.	Motor and runner.
4.	Radiator.
5.	Grommet.
6.	Cover (side).
7.	Clip—side cover.
8.	Valve assembly—flap.
9.	Flap.
10.	Clamp for cable.
11.	Escutcheon—heater control unit.
12.	Lever control sub-assembly.
13.	Knob.
14.	Control cable and knob—air.
15.	Knob.
16.	Control cable and knob—demist.
17.	Knob.
18.	Tube—demister.
19.	Screw—fixing demister tube.
20.	Hose—air (14 in.).
21.	Hose—air (25 in.).
22.	Hose—air (31 in.).

No.	Description
23.	Adaptor.
24.	Clip.
25.	Clip (large).
26.	Screw for clip.
27.	Washer—spring—for screw.
28.	Nut for screw.
29.	Valve assembly—water.
30.	Gasket—water valve.
31.	Union—water.
32.	Washer.
33.	Pipe—water (2½ in.).
34.	Pipe return—water.
35.	Clip.
36.	Hose—water (12½ in.).
37.	Hose—water (14 in.).
38.	Clip—hose.
39.	Trunnion.
40.	Screw for trunnion.
41.	Clip—cable.
42.	Hose—air.
43.	Cable assembly.

THE FASCIA PANELS



- | <i>No.</i> | <i>Description</i> |
|------------|--------------------------------------|
| 1. | Panel assembly—fascia. |
| 2. | Panel assembly—fascia. |
| 3. | Support angle assembly—R.H. |
| 4. | Support angle assembly—L.H. |
| 5. | Screw—support angle. |
| 6. | Screw—support angle. |
| 7. | Washer—spring—for screw. |
| 8. | Washer—plain—for screw. |
| 9. | Washer—plain—for screw. |
| 10. | Piping—fascia panel. |
| 11. | Bezel—radio aperture. |
| 12. | Bezel—radio speaker. |
| 13. | Plate—blinking—radio aperture. |
| 14. | Clip—blinking plate to fascia. |
| 15. | Nut—clip (Spire). |
| 16. | Grille—radio speaker. |
| 17. | Plate—blinking—radio speaker grille. |
| 18. | Nut—blinking plate to panel. |

- | <i>No.</i> | <i>Description</i> |
|------------|----------------------------------|
| 19. | Washer—spring—for nut. |
| 20. | Washer—plain—for nut. |
| 21. | Motif—'M.G.'. |
| 22. | Finisher—fascia panel lower. |
| 23. | Finisher—fascia panel lower. |
| 24. | Rivet—finisher and radio bezel. |
| 25. | Bracket—horn-push. |
| 26. | Insulating piece—horn-push. |
| 27. | Horn-push. |
| 28. | Screw—push to bracket. |
| 29. | Nut for screw. |
| 30. | Washer—spring—for screw. |
| 31. | Cover assembly—map light. |
| 32. | Screw—map light cover to fascia. |
| 33. | Glass—map light. |
| 34. | Rubber—map light glass. |
| 35. | Nut for screw. |
| 36. | Washer—spring—for screw. |