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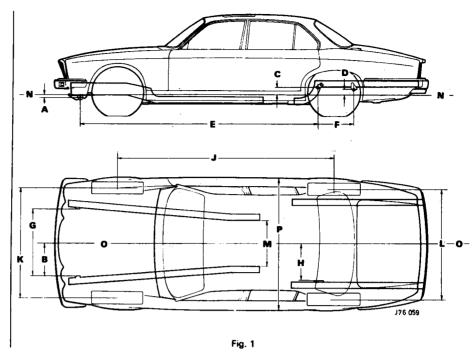
ALIGNMENT CHECK

Service tool: Body alignment jig 700 Adaptors: J700-11; J700-18; J700-24; J700-35; J700-401; J700-402; J700-1148; S700-1111/2 J700-37

Data check

76.10.01

NOTE: The datum line is established by positioning the car (unladen, correct tyre pressures and fuel tanks full) on a flat surface and rolling the car forward approximately 12 m (40 ft). The datum line being 33,3 cm (13.12 in) above ground level at front and 33,8 cm (13.31 in) at rear, each measurement being taken through the centre line of wheel hubs.



SYMBOL	MEASUREMENT TAKEN FROM		in
А	Front suspension mounting point to datum line	7,7	3.05
В	Inner face of front suspension mounting point to centre line of car	39,0	15.56
С	Rear suspension front lower mounting point to datum line	11,5	4.54
D	Rear suspension rear lower mounting point to datum line	11,0	4.34
E	Front suspension, front mounting point to rear suspension front lower mounting point	306,1	120.54
F	Rear suspension, front lower mounting point to rear suspension rear lower mounting point	33,05	13.06
G	Distance between inner faces of front suspension mounting points	79,4	31.12
н	Distance between inner face of rear suspension front mounting bracket and centre line of car	49,7	19.53
J	Wheelbase	288,5	112.87
• к	Track (front)	147,0	58.0
L	Track (rear)	149,1	58.66
М	Distance between inner faces at rear of front chassis members	34,1	13.43
N	Horizontal datum line	— ·	_
o	Centre line of car		_
Р	Overall width of car	176,3	69.6

SUN VISOR

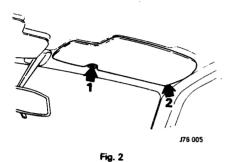
Remove and refit

76.10.47

Removing

Disengage the visor from the retaining clip (1, Fig. 2).

Remove the screws (2, Fig. 2) securing the visor; withdraw the visor.



Refitting

Place the visor in position and refit the retaining screws; engage the visor in the retaining clip.

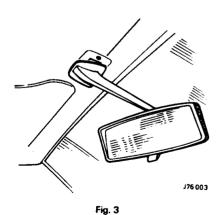
INTERIOR MIRROR

Remove and refit

76,10,51

Removing

Grasp stem of mirror and pull rearwards to disengage retaining clip.



Refitting

Position front of mirror stem in the mounting and strike underside of stem sharply with a rubber mallet to engage the retaining clip.

EXTERIOR MIRROR— MANUALLY OPERATED

Remove and refit

76.10.52

Removing

Adjust the mirror until access to the retaining screws is obtained.

Remove the two screws (1, Fig. 4) securing the adjusting lever surround to the door crash roll. Partially withdraw the surround (2, Fig. 4) complete with operating lever away from the door crash roll.

Slacken the set screws (3, Fig. 4) securing the operating lever and withdraw lever from surround.

Remove the two screws (4, Fig. 4) securing the mirror to the door.

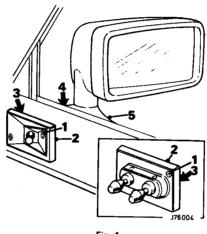


Fig. 4

Remove mirror and mounting pad (5, Fig. 4), carefully withdrawing the operating cable through the crash roll and door panel.

Refitting

Carefully feed the operating cable through the door panel and crash roll.

Refit the mirror and mounting pad.

Refit the lever to the surround and screw the assembly to the crash roll.

Test the mirror for correct operation.

EXTERIOR MIRROR— ELECTRICALLY OPERATED

Remove and refit

76.10.52

NOTE: Prior to carrying out this operation on Vanden Plas cars it will first be necessary to remove the door arm-rest and trim casing as described in operations 76.35.22 and 76.34.01.

Removing

Adjust the mirror until access to the retaining screws is obtained.

Disconnect the battery.

Remove the two screws (1, Fig. 4) securing the adjusting lever surround to the door crash roll (door pocket—Vanden Plas).

Partially withdraw the surround (2, Fig. 4) complete with operating levers and remove the setscrews (3, Fig. 4) securing the surround to the levers.

Remove the two screws (4, Fig. 4) securing the mirror to the door.

Vanden Plas only

Carefully feed operating levers into the door.

All Care

Remove mirror and mounting pad (5, Fig. 4), carefully withdrawing the wiring harnesses and levers through the door panel.

Refitting

Carefully feed the operating levers and harnesses through the door panel and crash roll (door pocket—Vanden Plas).

Refit the mirror and mounting pad.

Refit the liners to the surround and screw the assembly to the crash roll/door pocket.

Vanden Plas only

Refit the door trim pad and arm-rest.

All Cars

Connect the battery and test mirror for correct operation.

FRONT TRIM CASING

Remove and refit

76.13.01

Removing

Remove the screws securing the tread plate (1, Fig. 5) to the sill; lift off the tread plate and packing piece.

Remove the underscuttle casing (2, Fig. 5) as described in operation 76.46.11.

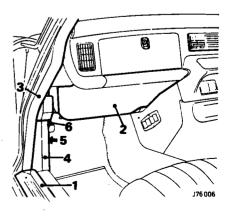


Fig. 5

Carefully prise approximately 200 mm (8.0 in) of draught welt (3, Fig. 5) off the flange adjacent to the trim casing.

Carefully peel edge of trim (4, Fig. 5) from tip of door aperture.

Remove two screws (5, Fig. 5) securing trim casing to side of footwell.

Disengage the casing from the air vent regulator control (6, Fig. 5) and withdraw casing from car.

Refitting

Coat lip of door aperture with suitable trim solution. Place trim casing in position and secure with two screws.

Fix edge of trim to lip of door aperture and clip draught welt to flange.

Refit the underscuttle casing, tread plate and packing piece.

'B' POST TRIM CASING—UPPER

Remove and refit

76.13.08

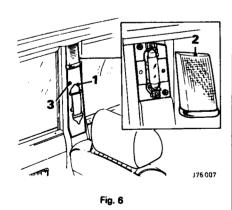
Removing

Prise the top edge of the plastic cover from the safety belt mounting; withdraw the cover (1, Fig. 6).

Remove the bolt, washers and spacer securing the safety belt mounting to the 'B' post.

Prise the interior light lens (2, Fig. 6) from the light fitting

Starting at the bottom, carefully prise the trim casing from the 'B' post (3, Fig. 6).



Refitting

Ensure that the trim clips align with the holes in the 'B' post and refit the trim casing. Clip the interior light lens into the light fitting. Refit the safety belt mounting ensuring that the belt webbing is not kinked or twisted and refit the plastic cover.

'A' POST TRIM CASING AND CANTRAIL

Remove and refit

76.13.10

Removing

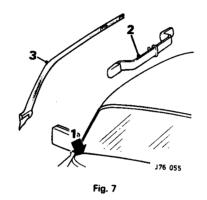
Remove two screws securing the escutcheon to the end of the crash roll; withdraw escutcheon (1, Fig. 7).

Prise draught welt away from the flange to gain access to the lower edge of the cant rail.

Carefully prise chrome finishers from ends of grab handle and remove the screws securing grab handle to cant rail (2, Fig. 7).

Remove screw and metal plate securing end of cant rail to body.

Working from rear of front of car, carefully prise off cant rail (3, Fig. 7).



Refitting

Check that trim clips and holes in body are in alignment and clip cant rail to body.

Refit screw and metal plate to secure end of cant rail

Refit grab handle and chrome finishers.

Clip draught welt to flange and refit the escutcheon to the crash roll.

'B' POST TRIM CASING—LOWER

Remove and refit

76.13.29

Removing

Prise plastic cover (1, Fig. 8) off lower safety belt mounting bolt.

Remove the bolt, spacer and washer (2, Fig. 8) securing the belt mounting.

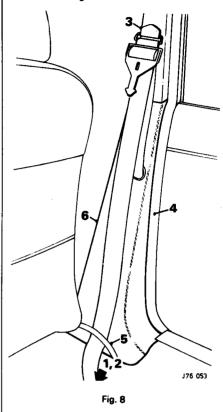
Prise the top edge of the plastic cover (3, Fig. 8) from the upper safety belt mounting; withdraw the cover.

Remove the bolt, washers and spacer securing the upper mounting to the 'B' post.

Prise the draught welt (4, Fig. 8) adjacent to the trim casing off the flange and remove the safety belt retaining strap (5, Fig. 8).

Starting from the bottom, prise the casing (6, Fig. 8) off the 'B' post.

Feed the safety belt through the slot and withdraw the casing.



Refitting

Ensuring that safety belt webbing is the correct way round, feed the belt through the slot in the trim casing.

Refit the trim casing and draught welt.

Attach the safety belt to the upper and lower mountings, refit the plastic covers and the retaining strap.

BONNET

Remove and refit

76.16.01

Removing

Place suitable protective material on the front humper

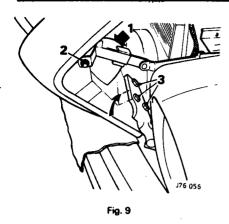
Disconnect the battery and the headlamp harnesses (1, Fig. 9) at the snap connectors.

Mark the relative positions of the bonnet and hinges

Remove the nut and bolt (2, Fig. 9) securing the stay to the bonnet.

CAUTION: The bonnet must be adequately supported after removal of the stay.

Remove the bolts, spring and plain washers (3, Fig. 9) securing the bonnet to the hinge; lift off the bonnet.



Refitting

Position the bonnet on the hinges and fit but do not fully tighten the bolts, spring and plain washers.

Refit the bonnet stay and align the reference marks.

Tighten the securing bolts, close the bonnet and check fit of bonnet in aperture. If necessary, open the bonnet and reposition to obtain correct fit.

NOTE: The correct procedure for closing the bonnet is as follows:

Stand facing the front of the vehicle and grasp each end of the top of the radiator grille.

Lift front of bonnet smoothly; bonnet should now close. If difficulty is experienced however, reference should be made to operations 76.16.20 and 76.16.28.

Remove the protective covering from the front humper

Reconnect the headlamp harnesses and the battery; test the headlamps for correct operation.

BONNET HINGE

Remove and refit 76.16.12

Prior to carrying out this operation it will first be necessary to remove the bonnet and bonnet

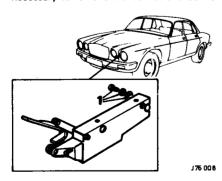


Fig. 10

assist spring(s) as detailed in operations 76.16.01 and 76.16.13.

Removing

Remove self-locking nuts, spacing washers and bolts (1, Fig. 10) securing the hinge; lift off the hinge.

Refitting

Place hinge in position and refit bolts, spacing washers and nuts.

Refit the bonnet assist spring(s) and the bonnet.

BONNET ASSIST SPRING

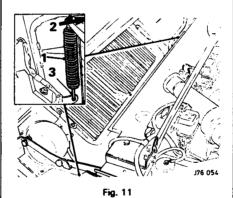
Remove and refit

76.16.13

Removing

Open the bonnet and place washers of suitable thickness between the spring coils (1, Fig. 11). Remove the bolt, spring and plain washer (2, Fig. 11) securing the spring retaining bracket to the right- or left-hand wing valance.

Remove the retaining bracket and disengage the spring from the lower bracket (3, Fig. 11). DO NOT remove the washers from the spring unless a new spring is to be fitted.



Refitting

NOTE: If a new spring is to be fitted, it is advisable to pre-tension the spring by inserting washers of 1,6 mm (0.062 in) thickness between the coils of the spring.

Locate end of spring in lower bracket and refit the retaining bracket to the right-hand wing valance

Remove the washers from the spring.

BONNET LOCK

Adjust

76.16.20

Slacken the locknut (1, Fig. 12) at the base of the striker peg (2, Fig. 12).

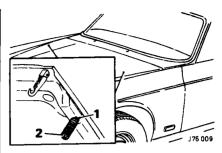


Fig. 12

Screw the peg in or out as required until, when closed, the bonnet is correctly positioned. Tighten the locknut and repeat for the other lock if necessary.

NOTE: The correct procedure for closing the bonnet is as follows:

Stand facing the front of the vehicle and grasp each end of the top of the radiator grille. Lift front of bonnet smoothly; bonnet should now close. If difficulty is experienced however, reference should be made to operations 76.16.20 and 76.16.28.

BONNET LOCK

Remove and refit

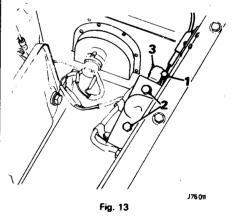
76.16.21

Removing

Slacken the clamp bolt (1, Fig. 13) securing the operating cable to the release lever on the bonnet lock platform.

Remove the bolts (2, Fig. 13), spring and plain washers securing the lock to the mounting bracket

Disconnect the return spring from the release lever (3, Fig. 13) and withdraw the lock assembly.



Refitting

Position the lock under the mounting bracket and connect the return spring.

Bolt the lock to the mounting bracket and connect the operating cable to the release lever. Check that when operating lever is guilled, the

Check that when operating lever is pulled, the holes in the release lever and mounting plate are in alignment.

If holes do not align, refer to operation 76.16.28.

BONNET LOCK CONTROL CABLE

Adjust

76.16.28

Slacken the clamp bolt (1, Fig. 14) securing the operating cable to the release lever (2, Fig. 14) and push the lever forwards.

Tighten the clamp bolt and check the operation of the lock.

NOTE: A weak return spring will impair operation of the lock and if correct operation cannot be obtained by adjustment, the spring should be renewed.

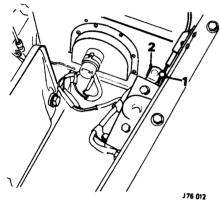


Fig. 14

After adjustment, check that when the operating lever is pulled, the holes in the release lever and mounting plate are in alignment; re-adjust as necessary.

BONNET LOCK CONTROL CABLE

Remove and refit

76.16.29

Removing

Slacken the clamp bolt (1, Fig. 15) securing the operating cable to the release lever on the bonnet lock platform. Repeat for other side.

Long operating cable only

Remove the cable bracket from the wing valance.

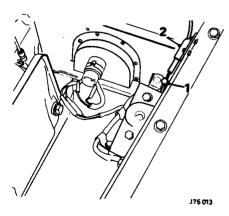


Fig. 15

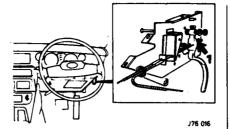


Fig. 16

Both cables

Withdraw the operating cable (1, Fig. 16) into the car; detach cables from lever.

Refitting

Ensure that clamping ends of operating cables are clean and that there are no loose strands of wire

Feed cables through the operating lever and into the outer sleeves; pull cables taut and push operating lever forwards.

Long operating cable only

Refit the cable bracket to the wing valance.

Both cables

Connect the cables to the release levers, push the levers towards front of car and tighten the clamp bolts. Check that when operating lever is pulled, the holes in both release levers and mounting plate are in alignment. If holes do not align, refer to operation 76.16.28.

BONNET SAFETY CATCH

Remove and refit

76.16.34

Removing

Note fitted position of the catch return spring and remove the clevis pin retainer (1, Fig. 17). Withdraw the clevis pin (2, Fig. 17) followed by the safety catch (3, Fig. 17) return spring and washers.

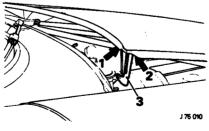


Fig. 17

Refitting

Locate the safety catch and spring in the attachment point; refit the clevis pin, washers and retainer.

Check that catch returns to the retaining position when released.

BOOT LID

Remove and refit

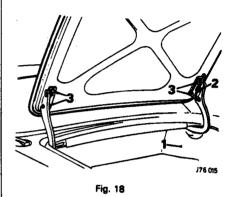
76.19.01

Removing

Disconnect the battery. Carefully prise the side trim casing from the boot and disconnect the harnesses at the snap connectors (1, Fig. 18). Attach strong string to the end of each harness, release each harness from the retaining clip (2, Fig. 18).

Carefully draw each harness through the grommets and detach the strings.

Mark the relative positions of the hinges to the boot lid mounting brackets, support the lid and remove the bolts, nuts, spring and plain washers (3, Fig. 18) securing the hinge to the brackets; lift off the lid.



Refitting

Place boot lid in position and fit, but do not fully tighten, the retaining bolts.

Align reference marks and check that boot closes with 'push effort' only and is correctly positioned in the aperture.

Adjust boot lid if necessary by means of the slots in the hinge and mounting plates.

Tighten the securing bolts fully.

Attach each harness to the drawstring and carefully pull harness into position.

Clip harnesses to boot, remove the drawstring hinges and re-make the connections.

Re-connect the battery and check all rear lights for correct operation.

Refit the boot lid trim casing.

BOOT LID SEAL

Remove and refit

76.19.06

Removing

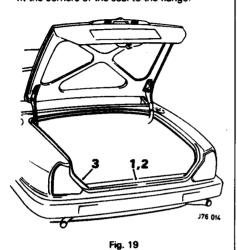
Remove the screws (1, Fig. 19) securing the sill cover-plate and ease seal off the flange. Remove tape (2, Fig. 19) joining ends of seal and ease remainder of seal off the flange (3, Fig. 19).

Refitting

Position ends of seal in the centre of the boot sill and press approximately 15 cm (6.0 in) of each portion of seal on the lower flange.

Join ends of seal with adhesive tape.

Position seal equally around boot aperture and fit the corners of the seal to the flange.



Fit the remaining portion of the seal onto the flange taking care not to stretch the seal and ensuring that it is correctly bedded down.

Refit the screws to secure the sill cover-plate. Cover the seal with french chalk and close boot. Check for transfer of chalk from seal to boot lid.

Where no transfer of chalk is evident, adjust the boot lid or striker, see operations 76.19.01. or 76.19.12.

BOOT LID HINGE

Remove and refit

76.19.07

NOTE: Prior to removing the hinges, it will first be necessary to remove the boot lid as detailed in operation 76.19.01.

Removing

Remove four bolts, spring and plain washers securing the hinge to the body; withdraw the hinge.

Refitting

Place the hinge in position and secure with the four bolts, plain and spring washers.

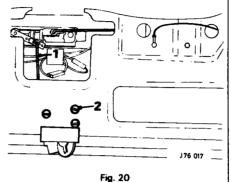
BOOT LID LOCK

Remove and refit

76.19.11

Removing

Release the clip (1, Fig. 20) securing the control link rod to the lock lever and detach the rod. Remove the three screws (2, Fig. 20) securing the lock to the boot lid; withdraw the lock.



Refitting

Position the lock in the boot lid and fit the securing screws.

Connect the control link rod to the lock lever and fit the retaining clip.

Check the lock for correct operation and that boot lid closes with 'push effort' only.

If boot does not close correctly, adjust the striker plate as detailed in operation 76.19.12.

BOOT LID LOCK STRIKER

Remove and refit

76.19.12

Removing

Remove the screws securing the rear boot floor; lift out the floor.

Mark relative position (1, Fig. 21) of the striker to the clamp plate.

Slacken the bolts (2, Fig. 21) and remove the striker from the clamp plate.

Refitting

Position the striker in the clamp plate and check

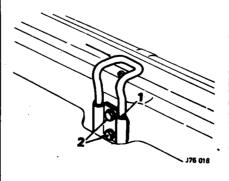


Fig. 21

that reference marks made during the dismantling procedure are in alignment.

Tighten the retaining bolts ensuring that the relative positions of striker and clamp plate remain unchanged.

Check that boot lid closes with 'push effort' only

If boot does not close correctly, adjust the striker and re-check boot lid closure.

Refit the rear boot floor.

FRONT BUMPER

Remove and refit—European cars only 76.22.08

Removing

Disconnect the battery.

Remove the nuts, spring and plain washers (1, Fig. 22) securing the chrome finisher to the side mounting brackets.

Prise up plastic covers (2, Fig. 22) located beneath each inner headlamp and remove the bolts, spring and plain washers (3, Fig. 22) securing the finisher to the inner mounting brackets; lift off finisher and recover upper apron.

Remove clips securing the rubber finishers (4, Fig. 22) to the bumper beam; withdraw the finishers.

Disconnect the light units by rotating the connector (5, Fig. 22) in an anti-clockwise direction.

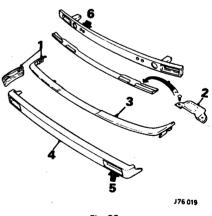


Fig. 22

Remove the bolts and spring washers (6, Fig. 22) securing the bumper beam to the mounting brackets; lift off the beam.

Refitting

Position the bumper beam on the mounting brackets and fit the retaining nuts and washers. Connect the light units.

Refit the rubber and chrome finishers. Connect the battery and check lights for correct operation.

FRONT BUMPER

Remove and refit—Non-European cars 76.22.08

Removing

Disconnect the battery.

Remove the nuts, spring and plain washers (1, Fig. 23) securing the chrome finisher to the side mounting brackets.

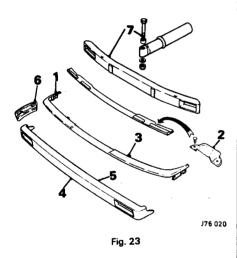
Prise up plastic covers (2, Fig. 23) located beneath each inner headlamp and remove the bolts, spring and plain washers (3, Fig. 23) securing the finisher to the inner mounting brackets; lift off finisher and recover upper apron

Remove the bolts and washers (4, Fig. 23) securing the lower edge of rubber finisher to the energy absorbing beam and the trim clips (5, Fig. 23) securing the upper edge. Withdraw the finisher.

Remove the nuts and spring washers (6, Fig. 23) securing the side finishers to the mounting brackets; withdraw the finishers.

Disconnect the light units by rotating the connectors in an anti-clockwise direction.

Remove the nuts, bolts and washers (7, Fig. 23) securing the energy absorbing beam; lift off the beam.



Refitting

Position beam on the energy absorbing struts, refit the nuts, bolts and washers.
Connect the light units.

Refit the rubber and chrome finishers.

Connect the battery and check lights for correct operation.

REAR BUMPER CENTRE SECTION

Remove and refit—All cars 76.22.12

Removing

On cars fitted with rear fog guard lights, disconnect the battery.

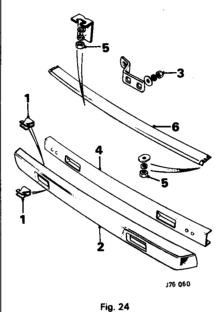
Remove clips (1, Fig. 24) securing rubber buffer (2, Fig. 24) and remove buffer.

Remove nuts and washers securing the rear beam (3, Fig. 24) to the body mounting brackets.

Remove the beam (4, Fig. 24).

Remove the nuts and washers securing rear blade to the side blades and the body (5, Fig. 24).

Remove the blade (6, Fig. 24) and recover the sealing strips.



Refitting

Position rear beam on mounting brackets/ energy absorbing strut and fit retaining nuts and washers.

Conect fog guard lights (if fitted).

Refit rubber and chrome finishers ensuring that rubber sealing strips are interposed between centre and side finishers.

Connect the battery and check fog guard lights for correct operation.

REAR BUMPER SIDE SECTION

Remove and refit---All cars 76.22.13

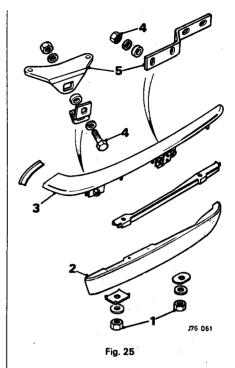
Removing

Remove rear bumper beam as detailed in operation 76.22.12

Remove the nuts and washers (1, Fig. 25) securing the rubber buffer (2, Fig. 25) to the quarter blade (3, Fig. 25).

Remove the nuts, washers and bolts (4, Fig. 25) securing the quarter blade to the body mounting brackets (5, Fig. 25).

Remove the blade (3, Fig. 25).



Refitting

Refit rubber and chrome finishers ensuring that rubber sealing strips are interposed between the side and centre chrome finishers.

ENERGY ABSORBING STRUT—FRONT

Remove and refit

76.22.31

Removing

Remove front energy absorbing beam.

Open bonnet and remove nut and flat washer (1, Fig. 26) securing strut to mounting tube.

Position energy absorbing beam mounting bolt (2, Fig. 26) in strut locating hole.

Gently tapping bolt head with hammer, remove strut from mounting tube.

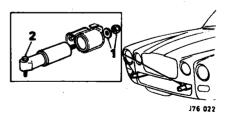


Fig. 26

Inspection

Examine rubber sleeve in strut mounting tube for any signs of damage or deterioration. Reposition strut in mounting tube and check for

Reposition strut in mounting tube and check for any radial movement. If rubber sleeve is damaged or radial movement between strut and sleeve exists, a new rubber sleeve must be fitted.

Refitting

Place the beam mounting bolt in the strut locating hole. Position strut in the mounting and gently tap the bolt head until strut is correctly located in the mounting tube.

Refit the nut and flat washer.

Refit the energy absorbing beam.

ENERGY ABSORBING STRUT—REAR

Remove and refit

76.22.32

Removing

Remove rear energy absorbing beam.
Remove tail pipe and rear silencer.
Remove nut and plain washer (1, Fig. 27) securing strut to mounting tube.
Position energy absorbing beam mounting bolt (2, Fig. 27) in strut locating hole.
Gently tapping bolt head with hammer, remove strut from mounting tube.

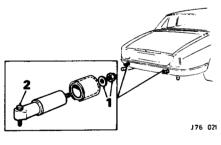


Fig. 27

Inspection

Examine rubber sleeve in strut mounting tube for signs of damage or deterioration.

Reposition strut in mounting tube and check for any radial movement.

If rubber sleeve is damaged or radial play between strut and sleeve exists, a new sleeve must be fitted.

Refitting

Place the beam mounting belt in the strut locating hole.

Position strut in the mounting and gently tap the bolt head until strut is correctly located in the mounting tube.

Refit the nut and flat washer

Refit the energy absorbing beam, tail pipe and rear silencer.

CONSOLE ASSEMBLY

Remove and refit

76.25.01

Removing

WARNING: Throughout the following operations it is imperative that the fitted positions of electrical harnesses and connections are noted prior to them being disconnected.

Disconnect the battery.

Remove the screws securing the ventilation louvres and side trim casings.

Pull each casing forward until it can be withdrawn.

Pull heater and ventilation knobs off the control spindles.

Remove threaded locking rings from heater and ventilation controls, withdraw panel sufficiently to gain access to centre parcel shelf securing screws; remove screws.

NOTE: Take care not to damage fibre optic

Remove screws securing top of centre parcel shelf; withdraw shelf slightly and disconnect the sensor pipe.

Remove the cigar lighter and ashtrays.

Remove the screws securing the control escutcheon. Raise the escutcheon slightly and disconnect the cigar lighter, door lock and window switch harnesses. Lift off the escutcheon. Remove the front seat cushions as described in operation 76.70.02.

Move both seats fully forwards.

Remove screws securing the rear window switch panel. Raise panel slightly and disconnect the wires from the switches and cigar lighter (where fitted). Remove the panel.

Remove the screws securing rear of the console to the transmission tunnel.

Disconnect the multi-plug connector at the rear of the console.

Raise rear of console and remove screws securing the wiring harness to the air duct

Slide console towards rear of car until access to the electrical harness clipped to the front of the console is obtained. Release the harness from the clips

Pass radio and ventilation panel through aperture in console at the same time sliding console away from the fascia.

CAUTION: Ensure that radio is adequately supported.

Disconnect the air ducting from the ventilation outlet.

Lift console over the transmission selector/gear lever.

Refitting

Position console over transmission selector/ gear lever

Connect air ducting to ventilation outlet.

Refit radio and panel.

Clip harness to front of console.

Slide console forwards until it is correctly positioned.

Raise rear of console slightly and attach the wiring harness to the air duct.

Connect the multi-plug and secure console to the transmission tunnel.

Connect rear window switches and cigar lighter (where fitted); refit the switch panel.

Refit the front seat cushions and move seats rearwards.

Connect window, door lock and cigar lighter harnesses; refit the control escutcheon.

Refit the centre parcel shelf; secure panel with locking rings.

Refit the heater and ventilation knobs.

Refit the side trim casings and ventilation louvres.

Connect the battery and test cigar lighter(s), window and door lock switches for correct operation.

CONSOLE SIDE CASING

Remove and refit

76.25.02

Removing

Remove two screws securing side casing and ventilation louvres (1, Fig. 28) slide casing towards front of car until it can be withdrawn.

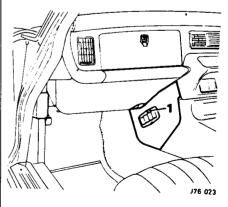


Fig. 28

Refitting

Place casing towards front of footwell and slide casing rearwards until securing screw holes are in alignment; refit the ventilation louvre and securing screws.

AUTOMATIC TRANSMISSION SELECTOR QUADRANT

Remove and refit

76.25.08

Removing

Disconnect the battery.

Remove the screws securing the control escutcheon. Raise the escutcheon slightly and note the fitted position of the door lock, electric window and cigar lighter leads, disconnect the harnesses. Lift off the escutcheon.

Remove four nuts and washers securing quadrant cover to mounting plate (1, Fig. 29).

NOTE: Position of cable clips and electrical leads on quadrant cover mounting studs should be noted

Detach cable feeding quadrant cover illumination bulb at snap connector.

Unscrew left- and right-hand sections of selector lever handle (2, Fig. 29).

Withdraw quadrant cover over selector lever (3, Fig. 29).

Noting location, detach electrical leads from reverse switch, inhibitor switch and seat belt warning switch (when fitted).

Remove screws securing fibre optic unit to bracket (4, Fig. 29).

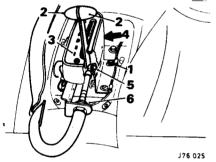


Fig. 29

Remove split pin and washer securing transmission operating cable to selector quadrant lever (5, Fig. 29), detach cable from mounting. Remove forward locknut securing operating cable to quadrant extension bracket (6, Fig. 29).

NOTE: Position of quadrant bracket on mounting studs should be marked for reference when refitting.

Remove three bolts and washers securing quadrant assembly to transmission tunnel cover.

Remove quadrant assembly from car.

Refitting

Place selector quadrant on transmission tunnel and fit the securing bolts.

Connect selector cable and check cable adjustment as detailed in operation 44.15.08.

Re-connect leads to starter inhibitor, reverse light and seat belt warning switches (when fitted)

Connect the quadrant illumination bulb.

Refit the quadrant cover, selector lever knob and control escutcheon.

Connect battery and test operation of cigar lighter, door lock and window switches.

FRONT DOOR

Remove and refit

76.28.01

Removing

Disconnect the battery.

Remove the door trim casing as detailed in operation 76.74.01 and the door pocket (Vanden Plas cars only), see operation 76.34.19. If radio speaker is fitted, remove four screws securing speaker to door (1, Fig. 30). Noting position, detach leads from speaker unit, lift speaker from door—Not Vanden Plas cars.

Recover loom located in speaker mounting aperture.

Noting position of each electrical lead, detach leads from snap connectors.

Prise loom protective cover (2, Fig. 30) from forward face of door and 'A' post.

Withdraw loom and radio speaker cables through hole in forward face of door.

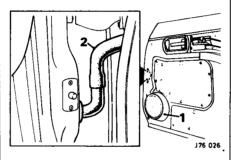


Fig. 30

Adequately supporting door, remove bolts securing door to hinges.

Remove door from hinges, recover packing pieces located between hinges and door.

Refitting

Fit bolts in hinges and place packing pieces over bolts, ensure door earthing strap is located behind one door securing bolt.

Fit door to hinges; do not fully tighten bolts. Close door to correctly position and align with surrounding body.

Open door and fully tighten door mounting bolts.

Refit wiring loom, speaker cables and protective cover.

Refit radio speaker and door trim casing.
Connect the battery and test radio speaker,
door lock and window switches for correct
operation.

REAR DOOR

Remove and refit

76.28.02

Removing

Disconnect the battery and door trim casing as described in operation 76.34.04.

Locate cable loom inside door casing; noting fitted position, separate cables at snap connectors.

Prise loom protective cover from forward face of door.

Withdraw loom and radio speaker cables through hole in forward face of door.

Ensuring door is adequately supported, remove six bolts securing door to hinges.

Lift door from car.

Refitting

Fit bolts on hinges; ensure door earthing strap is located behind head of top inner hinge securing bolt.

Offer door to hinges, slightly tighten securing bolts.

Close door; ensure door fully closes and locks. Tighten door mounting bolts.

Refit wiring loom and speaker cables.

Insert loom cover into door panel.

Connect the battery, refit the door trim casing and radio speaker.

Check radio speaker, door lock and window switches for correct operation.

FRONT DOOR HINGES

Remove and refit

76.28.42

Removing

Remove door as detailed in operation 76.28.01.

Jack up front of car and position wheels on full left or right lock.

Remove five bolts and washers securing wheel arch diaphragm panel to wing and 'A' post, remove panel from car (1, Fig. 31).

Remove two bolts located inside wheel arch securing lower section of wing to sill (2, Fig. 31)

Remove two bolts between door hinges securing wing to 'A' post, recover door earthing strap fitted behind top bolt (3, Fig. 31).

Remove bolts, flat washers and spring washers securing top edge of wing to valance.

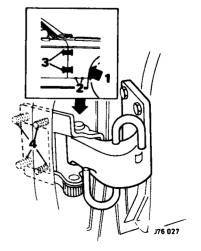


Fig. 31

Using suitable size wedge, separate lower portion of wing from body.

Remove eight bolts securing upper and lower hinges to 'A' post, lift hinges from car (4, Fig. 31).

Refitting

Coat mating faces of hinges with Bostik Sealant

Refit hinges to body.

Bolt top edge of wing to valance.

Bolt wing to 'A' post and wheel arch.

Refit diaphragm panel, coat panel with underseal

Refit the door

REAR DOOR HINGES

Remove and refit

76.28.43

Removing

CAUTION: Throughout the following operation the door should be adequately supported in the closed position.

Remove bolts (1, Fig. 32) securing hinges to door and 'B—C' post, recover door earthing strap fitted to top hinge securing bolts. Lift hinges (2, Fig. 32) from door.

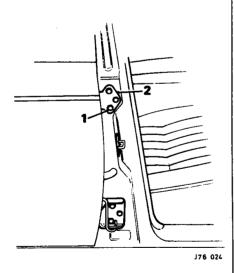


Fig. 32

Refitting

Coat mating faces of door hinges with Bostik Sealant.

Refit hinges and door.

Check that door closes correctly. If not, slacken hinge securing bolts, re-position door and re-tighten the bolts.

REAR DOOR GLASS

Remove and refit

76.31.02

Removing

Remove rear door trim casing as detailed in operation 76.34.03.

Prise chrome trim free from door glass frame. Remove screw securing inner chrome trim to door glass frame, prise trim from frame (1, Fig. 34).

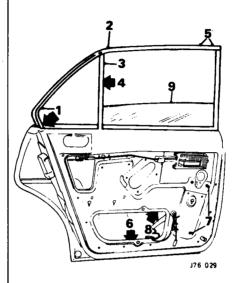


Fig. 34

Release rubber seal from door glass frame (2, Fig. 34).

Lower door glass and release upper portion of felt channel fitted to quarter-light (3, Fig. 34). Remove screws exposed by removal of felt channel (4, Fig. 34).

Remove two screws adjacent to 'B-C' post securing vertical door glass frame to top glass frame and gently tap top glass frame free; lift frame from door (5, Fig. 34).

Remove screws securing glass buffer stop to door panel, lift buffer stop from door (6, Fig. 34)

Remove screw securing window lift mechanism to door panel (7, Fig. 34).

Disengage window lift arm from glass guide bracket (8, Fig. 34).

Withdraw glass from door (9, Fig. 34). Remove guide bracket and seal from glass.

Refitting

Cut the Everseal strip (Part No. BD 47937) to make it 38 to 50 mm (1½ to 2 in) shorter than the bottom channel.

Thoroughly clean mating surfaces of channel, Everseal strip and door glass.

Fit the Everseal strip midway in the channel, i.e. with 19 to 25 mm (¾ to 1 in) between each end of the strip and the end of the channel.

Replace bottom channel, complete with strip, on door glass.

Fill the ends of the channel with Dow Corning Silastik 732 or a similar silicone sealant, using a hand-gunned cartridge. Allow time for sealant to cure before refitting door glass.

Locate new seal in correct position over glass. Position lift arm guide bracket over seal; using mallet gently tap either side of guide until seal and guide are firmly secured to glass.

Refit guide bracket.

Position glass inside door.

Engage window lift arm in glass bracket.

Fit screw to secure lift mechanism to door panel.

Refit buffer stop.

Refit glass frame and felt channel.

Refit rubber seal and chrome trim.

Refit trim casing

REAR DOOR QUARTER-LIGHT

Remove and refit

76.31.31

Removing

Remove rear door trim casing as detailed in operation 76.34.04.

Prise chrome trim free from quarter-light frame (1, Fig. 35).

Prise chrome beading from base of quarter-light (2, Fig. 35).

Remove screw securing inner chrome trim to door glass frame, prise trim from quarter-light frame (3, Fig. 35).

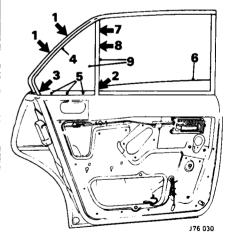


Fig. 35

Release section of door seal fitted to quarterlight frame (4, Fig. 35).

Remove three screws securing base of quarter-light to door (5, Fig. 35).

Lower door glass to full extent (6, Fig. 35). Release upper portion of felt channel fitted to

quarter-light (7, Fig. 35). Remove screws exposed by removal of quarter-light channel (8, Fig. 35).

Prise chrome trim from quarter-light vertical post, lift quarter-light from door (9, Fig. 35).

Refitting

Position quarter-light in door.

Fit chrome trim to quarter-light vertical post. Fit upper portion of channel to quarter-light and raise door glass.

Refit screws to secure quarter-light

Refit door seal and chrome trim.

Using suitable sealing compound, seal area between base of quarter-light and chrome beading.

FRONT DOOR TRIM CASING

Remove and refit

76.34.01

Removing

Remove the arm-rest. For Vanden Plas see 76.34.22.

Carefully prise lower edge and sides of trim i casing from door (1, Fig. 36).

Release upper edge of casing from crash roll (2, Fig. 37).

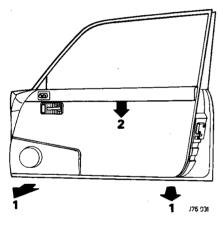


Fig. 36

Refitting

Align trim clips on casing and door. Engage upper edge of casing with crash roll; refit the casing Refit the arm-rest.

REAR DOOR TRIM CASING

Remove and refit

76.34.04

Removing

Remove rear door arm-rest as detailed in operation 76.34.23

Carefully prise lower edge and sides of trim casing from door.

Release upper edge of casing from crash roll.

Refitting

Align trim clips on casing and door.

Engage upper edge of casing with the door crash roll; refit the casing.

Refit the arm-rest.

DOOR CRASH ROLL

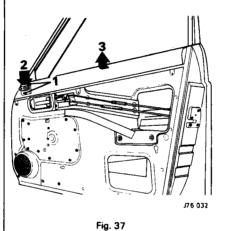
Remove and refit

76.34.17

Removing

Remove door trim casing as detailed in operations 76.34.01-Front or 76.34.04-Rear Remove screws securing mirror remote control operating lever surround (1, Fig. 37). Withdraw surround slightly and remove setscrews securing control lever to surround (2, Fig. 37) (not Vanden Plas cars).

Unclip crash roll (3, Fig. 37) and lift it over the control lever assembly.



Refitting

Clip crash roll to door casing.

Refit remote control lever assembly and surround

Refit door trim casing.

Test remote control mirror for correct operation

DOOR POCKET

Remove and refit - Vanden Plas only (early models) Daimler (later models) 76.34.19

Prior to carrying out this operation it will first be necessary to remove the arm-rest and door trim casing as described in operations 76.34.22 and 76.34.01.

Removing

Disconnect the battery.

Remove two screws securing the remote mirror control surround to the door pockets and partially withdraw the assembly until access to the lever locking setscrew is obtained.

Remove the setscrew and withdraw the surround.

Remove the screws securing the door pocket; withdraw the pocket slightly and disconnect the loudspeaker harness at the snap connectors

Refitting

Connect the loudspeaker harness at the snap connectors and feed connectors back into the door casing.

Refit the door pockets.

Secure the remote mirror control to the surround and refit the surround.

Refit the door trim casing and arm-rest

Reconnect the battery and check warning lamp and radio for correct operation.

FRONT DOOR ARM-REST

Remove and refit-Vanden Plas 76.34.22 only

Removing

Disconnect the battery and remove the screw securing the warning lamp lens to the arm-rest. Slide the lens rearwards and remove the warning lamp bulb (1, Fig. 38).

Remove the screw adjacent to the bulb holder securing the rear of the arm-rest to the door (2. Fig. 38).

Remove the screw from beneath front of armrest (3, Fig. 38) and slide top portion of armrest towards rear of door.

Remove screws securing arm-rest to door; withdraw arm-rest slightly.

Note fitted position of the two electrical leads and disconnect the leads at the snap connectors.

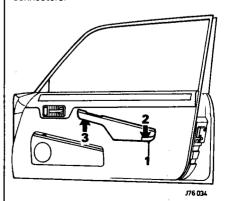


Fig. 38

Refitting

Connect the warning lamp harness at the snap connectors and feed connectors back into the door casing

Position arm-rest on door and secure with the self-tapping screws.

Refit top portion of arm-rest by sliding it forwards over the two raised screws.

Refit the screw to secure upper portion of arm-rest

Refit the warning lamp bulb and lens.

Reconnect the battery and check the warning lamp for correct operation.

REAR DOOR ARM-REST

Remove and refit-Vanden Plas 76.34.23 only

Removing

Disconnect the battery and remove the screw securing the warning lamp lens to the arm-rest. Slide the lens rearwards and remove the warning lamp bulb (1, Fig. 39).

Remove the screw adjacent to the bulb holder securing the rear of the arm-rest to the door (2, Fig. 39).

Remove the screw from beneath front of armrest (3, Fig. 39) and slide top portion of armrest towards rear of door.

Remove screws securing arm-rest to door; withdraw arm-rest carefully, ensuring that the warning lamp harness is not disconnected as the snap connectors are pulled through the grommet.

Note fitted positions of the warning lamp and loudspeaker wiring harnesses and disconnect the leads at the snap connectors.

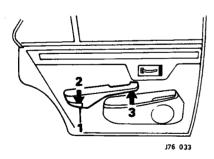


Fig. 39

Refitting

Connect the wiring harness at the snap connectors and ensuring that the grommet in the door casing is not displaced, feed snap connectors through grommet and into the door casing.

Refit the arm-rest to the door and secure with the self-tapping screws.

Refit top portion of arm-rest by sliding it forwards over the two raised screws.

Refit the screw to secure the upper portion of arm-rest

Refit the warning lamp bulb and lens. Reconnect the battery and check warning lamp and radio for correct operation.

DOOR LOCK

Adjust

76.37.01

WARNING: If any of the following symptoms become evident, immediate remedial action must be taken as outlined below:

- A. Door fails to fully close.
- B. Door fails to open on operation of inside
- C. Door opens upon initial movement of inside handle.
- D. Door fails to lock upon operation of inside lock lever
- E. Door fails to open with inside lock lever in unlocked position.
- 1. Remove door trim casing as detailed in operations 76.34.01-Front, 76.34.04-Rear.

NOTE: When symptoms A, B or C are evident, proceed as follows:

- 2. Squeeze inside handle link-rod spring connector and slightly operate handle, release spring connector. Close door and check for evidence of symptoms A, B or C.
- Continue operation 2, adjusting link-rod to left or right of spring connector until door fully closes and opens. Check that inside handle opens door when handle is threequarters operated.

NOTE: If symptoms D or E are evident, proceed as follows:

- 4. Squeeze spring connector joining lock lever link-rods, slightly operate lock lever and release spring connector. Close door and check for evidence of symptoms D or E.
- 5. Continue operation 4, adjusting link-rod to left or right of spring connector until door locks with lever in rear position and opens with lever in forward position.
- 6. Refit door trim casing.

remote control rod to latch lever mechanism detach rod from lever (1, Fig. 40).

Release spring clip securing inside lock lever remote control rod to latch lever mechanism, detach rod from lever (2, Fig. 40).

Release spring clip securing outside door handle remote control rod to latch lever mechanism, detach rod from lever (3, Fig. 40).

Release spring clip securing key lock remote control rod to latch lever mechanism, detach rod from lever (4, Fig. 40).

Remove screw securing lower section of window channel to door casing.

Remove four screws securing latch outer unit and latch mechanism to door shut face, recover latch mechanism from behind window channel (5, Fig. 40).

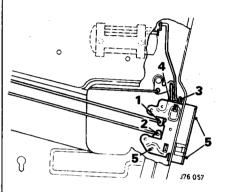


Fig. 40

Refitting

Check that inside lock lever and corresponding lever on latch mechanism are in forward position

Ensure that latch outer unit is in open position. Offer latch mechanism and outer unit to door shut face, secure with Phillips-head screws

Connect inside and outside handle/lock remote control rods to latch mechanism levers, secure with retaining clips.

Check operation of inside and outside door operating mechanism in 'lock' and 'unlocked' position, adjust as detailed in operation 76.37.01

Secure lower section of window changel to

Refit door trim casing.

REAR DOOR LOCK

Remove and refit

76.37.13

Removing

Ensure that window is fully closed.

Remove rear door trim casing as detailed in operation 76.34.04.

Release spring clip securing inside handle remote control rod to latch lever mechanism, detach rod from door (1, Fig. 41).

Remove and refit

76.37.12

Removing

Remove door trim casing as detailed in operation 76.34.01.

Ensure window is fully closed.

DOOR LOCK—FRONT

Release spring clip securing inside handle

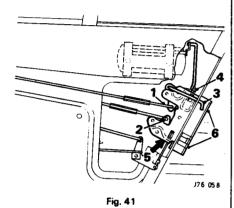
Release spring clip securing inside lever lock remote control rod to latch lever mechanism, detach rod from lever (2, Fig. 41).

Prise child safety link from latch lever mechanism, withdraw operating link from door shut face (3, Fig. 41).

Release spring clip securing outside handle remote control rod to latch lever mechanism; detach rod from lever (4, Fig. 41).

Release spring clip securing solenoid remote control rod to latch lever mechanism, detach rod from lever (5, Fig. 41).

Remove four screws securing latch outer unit and latch mechanism to door shut face; recover latch mechanism from inside door (6, Fig. 41).



Refitting

Check inside lock lever and corresponding lever on latch mechanism are in forward position. Ensure latch outer unit is in open position.

Refit latch outer unit and mechanism to door shut face.

Connect solenoid control rod to lever.

Connect remote control rod to latch lever mechanism.

Refit child safety link and remote control mechanism.

Check door lock for correct operation in 'lock', and 'unlock' position. If adjustment is required, refer to operation 76.37.01.

Refit door trim casing.

FRONT DOOR LOCK STRIKER PLATE

Remove and refit

76.37.23

Removing

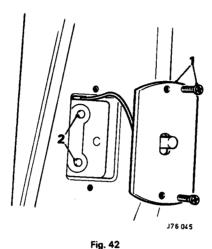
Remove the screws (1, Fig. 42) securing the access plate to the rear of 'B-C' post; withdraw the plate.

Remove the screws (2, Fig. 42) securing striker plate to 'B-C' post; lift striker plate clear of striker.

CAUTION: Hold rear of striker assembly to prevent any components falling inside the 'B-C' post.

Withdraw striker assembly through rear of 'B-C' post.

Remove all traces of sealing compound from striker plate and 'B-C' post.



Refitting

Coat rear of striker plate with suitable sealing compound.

Place striker assembly in position, refit plate and secure with the two screws; DO NOT tighten screws fully.

Close the door by pushing it firmly, open door carefully and ensuring that the striker and plate are not disturbed, tighten the striker plate securing screws.

Close door in the normal manner, door must close without undue effort and be correctly located in the aperture.

Refit the access plate to the rear of the 'BC' post.

Remove all traces of sealing compound from striker plate and `B-C' post.

DOOR LOCK REMOTE CONTROL

Remove and refit

76.37.31

Removing

Remove the door inside handle as detailed in operation 76.58.18.

Release spring clip (1, Fig. 43) securing remote control link to door lock, detach control rod from lock lever.

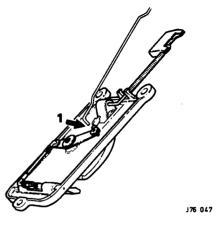


Fig. 43

Refitting

Refit remote control link and secure with spring clip.

Refit the door inside handle.

DOOR SEAL

Remove and refit

76.40.01

Removing

Pull seal from door channel and ensure that all traces of dirt are removed from the channel.

Refitting

Coat new seal and door channel with a solution of soft-soap.

Locate corners and ends of seal in the channel, DO NOT stretch the seal.

Locate remainder of seal in channel, clean off all traces of the soft-soap solution.

Ensure that seal is perfectly dry and dust inside face of seal with french chalk.

Close door firmly, open door and check that transfer of chalk from door seal to aperture has taken place.

Where no transfer of chalk is evident, either dress the channel or adjust the striker plate.

DRIP MOULDING BEADING

Remove and refit

76.43.11

Removing

Prise clip (1, Fig. 44) off beading. Remove the Pop rivets securing the beading to the body flange, lift beading off the flange.

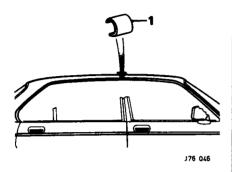


Fig. 44

Refitting

Lightly coat edge of beading with suitable sealing compound.

Locate beading on the body flange and secure with Pop rivets.

Refit the clip.

Remove all traces of sealing compound from beading and bodywork.

FASCIA PANEL

Remove and refit

76.46.01

Removina

Remove the crash roll (1, Fig. 45) as detailed in operation 76.46.04.

Remove the driver's underscuttle casing (2, Fig. 45) as detailed in operation 76.46.11.

Remove four screws securing fascia to screen rail (3, Fig. 45).

Remove two nuts and washers securing outer ends of fascia to lower mounting brackets (4, Fig. 45).

Pull off heater and ventilation control knobs and remove the two locking rings securing the radio panel (5, Fig. 45).

Withdraw radio panel (6, Fig. 45) forward sufficient to allow access to centre tray securing screws; ensure that radio is adequately supported. Care must be taken not to damage fibre optic elements.

Remove four screws securing centre shelf to console (7, Fig. 45).

Detach temperature air sensor pipe from centre parcel tray and position tray clear of fascia.

Remove two nuts, flat washers and spring washers securing fascia to heater/air conditioning unit.

Slacken clamp screws securing ignition and light switch shrouds.

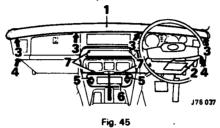
Withdraw shrouds and mounting clamps from switches, detach fibre optic from rear of shrouds and switches.

Slacken steering column upper mounting bolts. Care must be taken not to fully remove bolts. Remove three screws securing indicator switch assembly shroud, lift off shroud.

Ease fascia panel forward and disconnect electrical block connectors feeding instruments.

Disconnect speedometer cable from rear of speedometer.

Carefully lift fascia assembly from car. It should be noted that fascia air vent ducting is removed with fascia assembly.



Refitting

NOTE: For ease of refitting air vent ducts to demister outlets, slacken four nuts securing demister outlets to screen rail.

Position fascia in car and reconnect the speedometer and electrical harnesses.

Refit indicator switch shroud.

Tighten the upper steering column mounting bolts.

Refit ignition switch and light switch shrouds. Refit nuts, plain and spring washers to secure fascia to heater/air conditioning unit.

Refit sensor pipe and centre parcel tray.
Refit radio panel, heater and ventilation knobs.
Fit nuts and washers to secure ends of fascia.
Fit screws to secure fascia to screen rail.
Refit underscuttle casing and crash roll.

FASCIA CRASH ROLL

Remove and refit

76.46.04

Removina

Disconnect the battery.

Prise demister air direction vents (1, Fig. 46) from crash roll.

Remove four screws (2, Fig. 46) securing front of crash roll to screen rail.

Prise map light (3, Fig. 46) from housing in crash roll.

Remove in-car sensor

Detach Lucar connectors (4, Fig. 46) from map light.

Lift crash roll from car.

Refitting

Position crash roll on fascia. Refit map light and in-car sensor.

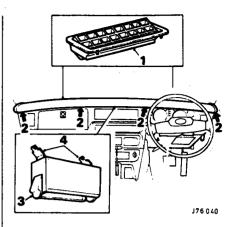


Fig. 46

Secure crash roll to fascia with four screws. Push demister vents into crash roll. Reconnect battery and test map light for correct operation.

PASSENGER'S UNDERSCUTTLE CASING

Remove and refit

76.46.11

Removing

Open glovebox (1, Fig. 47).

Remove two screws (2, Fig. 47) located adjacent to glovebox lid hinges securing underscuttle casing to fascia.

Remove two screws (3, Fig. 47) securing casing and quarter panel to fascia support bracket. Manœuvre underscuttle casing (4, Fig. 47) past footwell fresh air control, lift casing from car. Remove quarter panel (5, Fig. 47) from car.

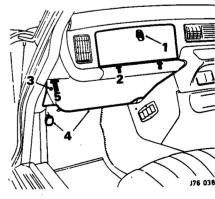


Fig. 47

Refitting

Refit quarter panel.

Manœuvre underscuttle casing past fresh air control and secure casing to fascia support with two screws.

Refit screws adjacent to glovebox hinges; close glovebox lid.

DRIVER'S UNDERSCUTTLE CASING

Remove and refit

76.46.14

Removing

Disconnect the battery.

Unscrew locking ring (1, Fig. 48) securing speedometer trip to underscuttle casing.

Remove two screws (2, Fig. 48) securing casing and quarter panel to fascia support bracket

Lower top of casing sufficient to allow access to rheostat.

Noting fitted position, detach leads from rheostat (3, Fig. 48).

Withdraw underscuttle casing (4, Fig. 48) and quarter panel from car.

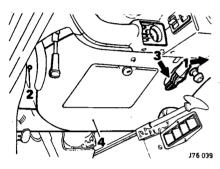


Fig. 48

Refitting

Place casing and quarter panel in car, feed speedometer trip through panel.

Reconnect the rheostat.

Secure casing and quarter panel with two screws.

Refit locking ring to secure speedometer trip cable to casing.

Reconnect the battery and check rheostat for correct operation.

GLOVEBOX LID AND LOCK

Remove and refit

76.52.02

Removing

Remove screws securing sliding stay to fascia frame.

Remove the screws securing the glovebox lid to the frame, withdraw the lid.

Remove the six screws (1, Fig. 49) securing the tray liner to the lid; lift off the liner.

Remove the two screws (2, Fig. 49) securing the lock retaining plate.

Unscrew the retaining ring (3, Fig. 49) and withdraw the lock, lid pull and mounting plate.

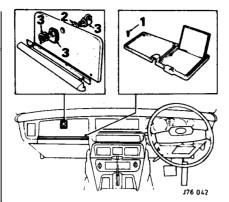


Fig. 49

Refitting

Refit the mounting plate, lid pull and lock; ensure that key aperture in lock is vertical and tighten the locking ring.

Refit the lid liner.

Place lid in position and tighten the securing screws.

Refit the sliding stay, check that lid closes properly and check lock for correct operation.

NOTE: Position of lid in fascia can be altered by repositioning the hinges on the fascia frame.

GLOVEBOX

Remove and refit

76.52.03

Prior to carrying out this operation it will be necessary to remove the underscuttle casing as detailed in operation 76.6.11.

Removing

Remove six screws (1, Fig. 50) securing glovebox to fascia.

Remove two screws (2, Fig. 50) securing sliding bracket to fascia.

Remove glovebox (3, Fig. 50) from rear of fascia through aperture exposed by removal of underscuttle casing.

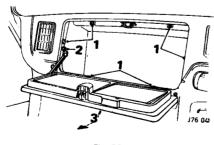


Fig. 50

Refitting

Insert glovebox into fascia through aperture in underscuttle casing.

Refit the securing screws and the sliding stay. Refit the underscuttle casing.

RADIATOR GRILLE

Remove and refit

76.55.03

Removing

Remove the nuts, plain and spring washers securing the grille to the bonnet. Withdraw grille from bonnet.

Refitting

Position grille in bonnet aperture. Ensuring that grille is centralized in aperture, refit the nuts, plain and spring washers.

DOOR OUTSIDE HANDLE

Remove and refit

76.58.01

Prior to carrying out this operation it will be necessary to remove the door trim casings as detailed in operations 76.34.01—Front or 76.34.04—Rear.

Removing

Ensure that door glass is fully closed.

Release spring clip (1, Fig. 51) securing link rod to latch lever mechanism; detach <code>Jod</code> from lever

Remove nuts and washers (2, Fig. 51) securing door handle surround retaining bracket (3, Fig. 51) to the door.

Withdraw surround and handle (4, Fig. 51); recover and discard the gasket.

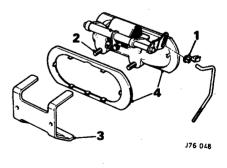


Fig. 51

Refitting

Position door handle and surround in door handle; use a new gasket.

Refit the retaining bracket.

Reconnect the link rod

Check the door handle for correct operation and refit the door trim casing.

DOOR INSIDE HANDLE

Remove and refit

76.58.18

Prior to carrying out this operation it will first be necessary to remove the door crash roll as detailed in operation 76.34.17.

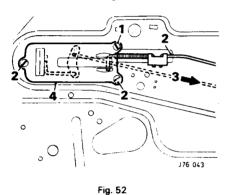
Removing

Disconnect the long section of outer link rod at the nylon connector (1, Fig. 52).

Remove screws (2, Fig. 52) securing inside handle to door casing

Squeeze lower portion of link connector (3, Fig. 52) and slide rod and connector free of adjoining link.

Withdraw handle (4, Fig. 52) from door.



Refitting

Ensure locking lever and corresponding lever on latch mechanism are in open position. Refit handle to door.

Connect rear link

Connect outer link at nylon connector. Refit the door crash roll.



Remove and refit

76.64.01

Removing

WARNING: This operation should not be attempted by persons known to be allergic to glass fibre (fibreglass). Should skin areas develop a rash or if itching occurs, wash affected area with water and seek medical advice immediately. Always wear gloves, face mask and goggles when handling headlining.

IOTE: A strip of Velcro approximately 30,4 :m (12 in) long and 5 cm (2 in) wide should be used to assist in removing and refitting of headlining.

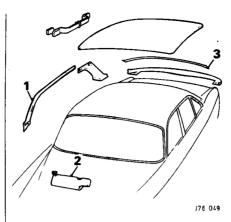


Fig. 53

Remove 'A' post cant rail trim (1, Fig. 53) as detailed in operation 76.13.10.

Remove interior mirror as detailed in operation 76, 10,51.

Remove sun visors (2, Fig. 53) as detailed in operation 76 10.47

Prise back-light and windscreen upper trim panels free from roof rail (3, Fig. 53).

Attach Velcro strip to headlining

Pull headlining forward and carefully disengage rear of headlining from locating recess.

Move headlining to right and disengage lefthand side of headlining from locating recess. Move headlining to left, disengaging right-hand side of headlining from locating recess.

Pull headlining to rear and withdraw from car.

Refitting

CAUTION: Ensure that outer edge of headlining is of equal thickness. Thick sections must be trimmed with a sharp knife. Failure to observe this warning will result in extreme difficulty when refitting.

Fit rear right-hand corner of headlining in locating recess.

Position right-hand side of headlining in locating recess.

Attach Velcro strip to headlining

Move headlining to rear and locate in recess. Move headlining to left and locate in recess.

Move headlining forward and locate in screen rail.

Refit windscreen and back-light upper trim panels.

Refit sun visors, interior mirrors and cant rail trim.

CENTRE PARCEL SHELF

Remove and refit

76.67.03

Removing

Remove the clock (1, Fig. 54) as detailed in operation 76.67.03.

Pull off the heater and ventilation controls (2, Fig. 54).

Remove the threaded locking rings securing the radio panel.

Withdraw the panel (3, Fig. 54) slightly and remove parcel shelf securing screws (4, Fig. 54).

Remove screws (5, Fig. 54) securing upper portion of shelf to fascia.

Withdraw shelf slightly and detach air sensor pipe.

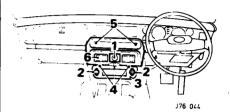


Fig. 54

Refitting

Attach air sensor pipe to parcel shelf. Refit shelf and secure with four screws. Refit the radio panel and control knobs. Refit the clock

REAR PARCEL SHELF

Remove and refit

76.67.06

Removing

Remove rear seat cushion and squab. Carefully prise plastic escutcheon (1, Fig. 55) from rear of inertia mechanism.

CAUTION: Ensure that disengagement of retaining lugs is gradual and that escutcheon is not hinged too far forwards.

Remove bolt, spring washer, spacer and chrome washer (2, Fig. 55) securing inertia mechanism; lift mechanism clear of parcel shelf

Remove inertia mechanism from opposite side of parcel shelf. Carefully prise rear parcel shelf (3, Fig. 55) away from panel.

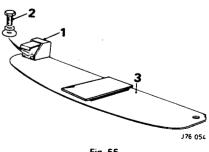


Fig. 55

Refitting

Clip parcel shelf to panel and refit the inertia reels. Road test car and check inertia mechanisms for correct operation.

FRONT ASHTRAY

Remove and refit

76.67.13

Removing

Open ashtray cover and withdraw ash container.

Remove two screws securing ash container holder to console.

Withdraw holder and securing bracket from console.

Refitting

Slightly secure bracket with one screw to holder unit.

Fit holder and bracket to console, turn bracket securing screw, do not fully tighten.

Align unsecured portion of bracket with hole in holder. Fit remaining bracket securing screw. Fully tighten bracket securing screws.

Fit ash container to holder.

REAR ASHTRAY

Remove and refit

76.67.14

Removing

Open the ashtray.

Push the ashtray down against spring pressure and lift it out of the holder.

Refitting

Holding the ashtray in the horizontal position, i.e. open end facing away from the holder, push ashtray into holder against spring pressure, then raise ashtray into the open position.

Close the ashtray.

FRONT SEAT

Remove and refit

76.70.01

Removing

Cars fitted with seat belt warning and/or electric seat height adjustment—Disconnect the battery.

Remove Phillips head screw securing front of cushion to bracket, remove bracket from underside of cushion.

Position squab in reclining position.

Raise front of cushion and pull it forward. On cars fitted with seat belt warning and/or electric height adjustment, disconnect electrical connectors fitted to underside of cushion.

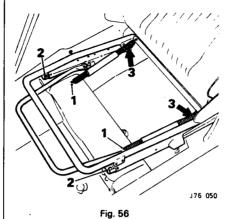
Lift cushion from seat frame.

Unlock seat runners, return springs (1, Fig. 56) from forward runner supports.

Remove two nuts, spring washers and spacers (2, Fig. 56) securing front runners to mounting brackets.

Slide seat forward to full extent.

Remove nuts and spring washers (3, Fig. 56) securing rear of runners to mounting bracket. Remove seat assembly from car.



Refitting

Position seat in car and fit rear retaining nuts and washers.

Re-connect wiring harnesses (if fitted).

Fit front runner retaining nuts and washers.

Connect seat return springs.

Position cushion in seat frame

Connect seat belt warning and/or electric height adjustment wiring harness.

Secure cushion to seat frame with bracket and screw.

Connect the battery and test seat belt warning and/or electric height adjustment for correct operation.

FRONT SEAT CUSHION

Remove and refit

76.70.02

Removing

Cars fitted with seat belt warning and/or electric seat height adjustment—Disconnect the battery.

Remove Phillips head screw securing front of cushion to bracket, remove bracket from underside of cushion.

Position squab in reclining position.

Raise front of cushion and pull it forward. On cars fitted with seat belt warning and/or electric height adjustment, disconnect electrical connectors fitted to underside of cushion.

Lift cushion from seat frame.

Refitting

Position cushion in seat frame.

Connect seat belt warning and/or electric height adjustment wiring harness.

Secure cushion to seat frame with bracket and screw.

Connect the battery and test seat belt warning and/or electric height adjustment for correct operation.

HEAD-REST

Fit

76.70.29

Remove head-rest guide blanking plug from front seat squab.

Locate head-rest slide in guide.

Adjust head-rest to required height.

REAR SEAT CUSHION

Remove and refit

76.70.37

Removing

Adjust front seats to fully forward position. Remove screw either side of transmission tunnel securing cushion to seat pan crossmember.

Draw cushion forward and remove from car.

Refitting

Place cushion in seat pan and refit retaining screws.

REAR SEAT SQUAB

Remove and refit

76.70.38

Removing

Adjust front seats to fully forward position. Remove screw either side of transmission tunnel securing cushion to seat pan crossmember

Draw seat forward and remove from car. Remove two bolts and shakeproof washers

securing lower section of squab to rear of seat pan.

Push squab upwards and disengage rear of squab from retaining clips.

Remove squab from car.

Refitting

Position the squab over the retaining clips and push firmly downwards.

Refit the bolts and washers to secure lower portion of squab.

Refit the seat cushion.

REAR SEAT ARM-REST

Remove and refit

76.70.39

Removing

Adjust front seats to fully forward position.

Remove screw either side of transmission tunnel securing cushion to seat pan cross-member

Draw seat forward and remove from car.

Remove two bolts and shakeproof washers securing lower section of squab to rear of seat pan.

Push squab upwards and disengage rear of squab from retaining clips.

Remove squab from car

Remove four bolts and flat washers securing arm-rest to seat squab frame.

Remove six clips securing arm-rest trim to squab frame

Withdraw arm-rest from squab

Refitting

Position arm-rest in squab and refit the trim clips to secure trim to the frame.

Refit the bolts and washers to secure the arm-rest.

Position the squab over the retaining clips and push firmly downwards.

Refit the bolts and washers to secure lower portion of squab.

Refit the seat cushion

FRONT SAFETY BELT

Remove and refit

76.73.10

Prior to carrying out this operation it will be necessary to remove the lower 'B' post trim casing as detailed in operation 76.13.29.

Removing

Remove the bolt, spring and plain washers (1, Fig. 57) securing the inertia reel mechanism to the 'B' post.

Prise plastic finisher from buckle assembly securing bolt.

Remove bolt, plain washer, anchor plate and spacer (2, Fig. 57) securing buckle assembly; withdraw assembly.

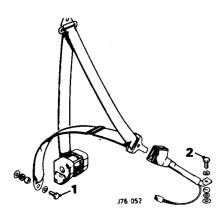


Fig. 57

Refitting

Refit the inertia reel mechanism ensuring that it is in the vertical position.

Refit the lower 'B' post trim casing.

Smear threads of buckle assembly securing bolt with Bostik Sealant; refit buckle assembly. Road test car and check inertia mechanism for correct operation.

REAR SAFETY BELT

Remove and refit

76.73.18

Removing

Slide front seats forward

Remove screws securing rear seat cushion, draw cushion forward and remove from car.

Remove two bolts and shakeproof washers securing lower section of seat squabs to seat pan.

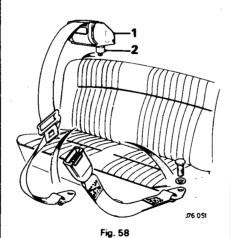
Push squab upwards and disengage rear of squab from retaining clips.

Carefully prise plastic escutcheon (1, Fig. 58) from rear of inertia mechanism.

CAUTION: Ensure that disengagement of retaining lugs is gradual and that escutcheon is not hinged too far forwards.

Remove bolt, spring washer, spacer and chrome washer (2, Fig. 58) securing inertia mechanism.

Remove bolts, plain washers and spacers securing lower mounting and buckle assemblies to the seat pan.



Refitting

Smear threads of lower mounting buckle assembly securing bolts with Bostik Sealant; refit buckle assembly.

Refit inertia mechanism, clip plastic escutcheon to reel holder.

Refit rear seat squab and cushion.

Road test car and check inertia mechanism for correct operation.

SILL TREAD PLATE

Remove and refit

76.76.01

Removing

Remove the screws securing the tread plate to the sill.

Lift off the tread plate and packing piece.

Refitting

Position packing piece and tread plate on sill and refit the retaining screws.

FRONT DOOR GLASS

Remove and refit

76.31.01

Removing

Open the bonnet and disconnect the battery. Remove the door trim casing, as detailed in Operation 76.34.01, and the front door crash rail, as detailed in Operation 76.34.17. Remove the door outer weather strip.

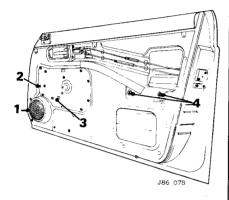


Fig. 59

Remove the door speaker (1, Fig. 59). Remove the screws securing the window lift motor mounting plate (2, Fig. 59) and remove the stop peg (3, Fig. 59) from the mounting plate. Remove the window lower channel securing bolts.

Remove the distance piece from the rear of the mounting plate.

Remove the regulator outer slide channel securing bolts (4, Fig. 59) and remove the channel.

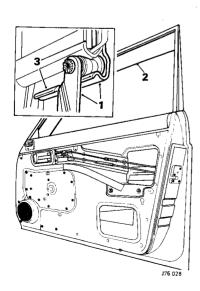


Fig. 60

Remove the motor from the mounting plate and disconnect the electrical feed cables.

Lower the motor to the bottom of the door. Slide the door glass forward and disengage the lift motor operating arm from the guide channel (1, Fig. 60). Withdraw the glass (2, Fig. 60) from the door.

Remove the guide channel and seal (3, Fig. 60) from the door glass.

Refitting

Locate a new guide channel seal in position over the door glass.

Position the guide channel over the seal and gently tap either side of the guide until the seal and the guide are firmly secured to the door glass.

Refit the glass to the door, engage the lift motor operating arm with the guide channel.

Refit the motor to the mounting plate, reconnect the electrical feed cables.

Refit the outer slide channel and secure with the bolts.

Refit the distance piece to the rear of the mounting plate. Refit the window lower channel securing bolts.

Refit the stop peg to the mounting plate and refit the window lift motor mounting plate, secure with the screws.

Refit the door speaker, outer weather strip, front door crash rail, and door trim casing.

Reconnect battery and check operation of window lift mechanism.

WINDSCREEN — FRONT AND REAR

Remove and refit

76.81.01 76.81.11

Description

Two different methods of direct glazing have been used on Series III Saloons.

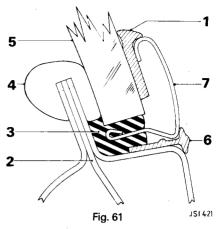
The 'SOLBIT THERMO ELECTRICAL' method on the early cars and the 'BETASEAL' cold cure method on later cars, which is the only one now used as a service replacement.

The 'SOLBIT' method requires the use of an electrical transformer to heat wires embedded in the seal. The 'BETASEAL' method relies on the moisture in the air as a curing agent, the more humid the atmosphere the shorter the curing period.

Identification

To check which method of sealing has been used, remove the stainless steel finishers at each top comer of the screen. Carefully cut the seal and check for the end of the wire, if no wires are found, then the 'BETASEAL' method has been used.

Water leaks cannot be cured on screens employing the 'SOLBIT' method of sealing. The screen must be removed and refitted using the 'BETASEAL' process.



- 1. Outer Plastic Finisher
- 2. Pillar
- 3. Solbit Sealer
- 4. Flange Finisher
- 5. Screen
- 6. Inner Plastic Finisher
- 7. Finisher

Removing

On screens fitted with the 'SOLBIT' process there are two methods of removal. One is by using a transformer to produce heat which softens the seal sufficiently for the screen to be pushed out. The other method which also is common to 'BETASEAL' is to cut through the seal using a cheese wire.

Method 1 — 'SOLBIT' only

Service Tool: Transformer, Churchill TI Pt No MS 82.

Remove the windscreen wiper arm and blade assemblies.

Apply masking tape around the windscreen aperture paying particular attention to the top corner of the roof where the 'SOLBIT' wire ends are located.

Carefully remove the black plastic finishers by pulling away from the stainless steel trim.

Damaged plastic finishers must be renewed. Remove and discard the inner flange rubber.

Pull the 'SOLBIT' heating wires clear of the windscreen, and connect the transformer leads to the bared heating wires. Ensure that the wires do not touch

Set the transformers to No. 2 and switch on, allow ten minutes re-heat time at 24 volts, 11.5 amps to soften the seal.

Whilst the 'SOLBIT' is being heated, fit protective covers to the front seals, cover the centre console and front carpets with paper and mask the heater defrost vents with suitable tape.

Push the front seats fully back; place a board (or plank) between the B/C posts resting on the seats, to use as a secure backrest when pushing out the screen.

When the 'SOLBIT' has softened, ease the seal away from the outside of the glass into the aperture.

Push out the screen using the feet. Sit in each front seat alternately with the feet against the screen, and the back supported by the board (or plank).

An assistant is required outside the car to receive the screen and ease away the seal.

NOTE: If the screen is to be refitted, protect it from scratches by either wrapping rags around normal working footwear, or wearing soft soled shoes

If the screen is to be replaced with a new one, carefully cut out the stainless steel trims.

If the screen is to be refitted, place on a cloth covered table. Using a sharp knife, carefully cut out the stainless steel trims and remove the 'SOLBIT' from the class.

Clean the screen and store safely prior to refitting.

Removing

Method 2 — 'SOLBIT' or 'BETASEAL'

Service Tool: Cheese wire with handles.

The cheese wire is supplied in the 'BETASEAL' replacement kit. One end is connected to a piece of wooden dowel $150 \times 20 \text{ mm}$ (6 in $\times \frac{3}{4}$ in) for use outside the car, and the other end to a hole drilled in the blade of an old screwdriver, for use inside the car. Proprietary handles such as Gas-ex may be used as an alternative to the above.

Pierce a hole through the seal at the top righthand corner of the windscreen (Fig. 62). Thread the wire through to an assistant inside the car and connect each end to the handles (screwdriver inside the car).

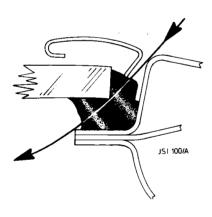


Fig. 62

Hold the outside handle approximately 150 mm (6 in) from the point where it is threaded through the screen and position the screwdriver a little distance from the same point (Fig. 63). Hold the wire taut, with the screwdriver handle close to the glass and the blade wedged into the seal for added purchase towards the inner handle, cutting with a narrow angle running parallel to the line of the seal. Reposition the inner handle (screwdriver) and repeat the procedure. DO NOT use short fast strokes otherwise the wire will overheat and break. Use this method for the top and sides of the screen seal.

Because of the possibility of damaging the fascia when using the wire to cut the bottom of the screen seal, it is recommended that the lower seal is released by hinging the screen carefully backwards and forwards.

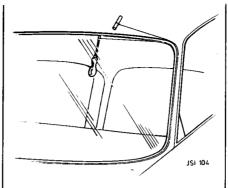


Fig. 63

If the screen is to be replaced with a new one, carefully cut out the stainless steel trims.

If the screen is to be refitted, place on a cloth covered table. Using a sharp knife carefully cut out the stainless steel trims and remove all traces of the old seal from the glass.

Body Preparation

Clean the screen aperture, any bare metal must be primed, before refitting the windscreen. Prime using International Paints 'Double One' primer base reference number 6900 P 3000R1 and catalyst reference number 20007 0219. Mix equal quantities of primer base and catalyst, leave for 20 minutes before using. Allow between 1 to 2 hours drying time, depending on the ambient temperature.

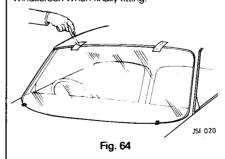
Fitting the Windscreen

Service Tools: Rubber sucker glazing aids, Betaseal Kit.

Place a protective cover over the bonnet.

Position the support blocks, supplied in the kit, on the bottom of the windscreen aperture and rest the glass on them. Carefully centralize the glass in the aperture.

Stick two strips of masking tape, from the top of the glass, across the gap, to the body (Fig. 64). Mark the tape to facilitate correct location of the windscreen when finally fitting.



Cut through the tape, between the glass and the body, and lift out the windscreen (Fig. 64).

Fit the inner rubber finisher (6, Fig. 61) to the aperture flange, with the joint at the centre of the top of the aperture.

If the original windscreen is to be re-used, it must be thoroughly cleaned and prepared using the Wipe No. 4, supplied in the kit. Wipe on using a lint free cloth and immediately wipe off with a clean dry cloth. Remove any dust or dirt from the aperture flange with a clean dry cloth.

Shake well the two tins of primer. Apply the metal primer part number 435-46 to the flange. Apply the glass primer part number 84132-11, to a width of 10 mm, to the glass.

Allow ten minutes for the primer to dry.

Remove the bottom from the adhesive sealant cartridge.

Remove all the desiccant. If the desiccant is blue then the adhesive can be safely used, if it is pink then the shelf life of the adhesive has expired and it should be discarded and a new tube of adhesive used. Pierce the membrane, screw on the pre-cut nozzle and introduce the cartridge into the gun.

Run a continuous bead of adhesive sealant around the inside perimeter of the windscreen using the edge of the windscreen and the shape of the nozzle as a guide.

Position the support blocks on the bottom half of the aperture about 20 cm (8 in) from each corner. Fit the windscreen in the aperture, the use of rubber sucker glazing aids will greatly assist. Line up the marks of the adhesive tapes.

NOTE: Fit the windscreen within 10 minutes of applying the adhesive sealant.

Press gently all round the edge of the windscreen to ensure perfect adhesion of the adhesive sealant to the body.

Carry out a water leak test. If a leak is found, mark the spot and dry using compressed air. Squeeze out a small amount of adhesive sealant, and smooth into the affected area with a wet spatula. Carry out another water leak test and rectification (if required)

Offer up the stainless trims to the windscreen and adjust for the best fit.

Apply a bead of adhesive sealant to the space between the windscreen and the aperture. Fit the stainless trims and the outer plastic finisher, hold in place with masking tape.

Using a soft lead pencil mark around the inside of the windscreen against the flange finisher. This will cut through any excess adhesive sealant extruded during the fitting process. When cured this excess adhesive sealant can easily be peeled away from the windscreen. Any excess adhesive sealant on the outside of the vehicle can also be removed by this method.

When the stainless trims are firm, remove the masking tape and clean the windscreen. Fit the inner plastic finisher.

Refit the wiper arms and blades.

Leave the vehicle in a humid atmosphere for at least two hours, before driving.

SUNROOF MANUAL OPERATION

Where a sunroof motor has failed and the panel is stuck partially open, manual operation can be carried out by attaching a small handle (A, Fig. 65), supplied with the tool kit, to a shaft protruding from the base of the sunroof motor. To gain access to the motor, remove boot front trim panel by releasing 2 quarter turn fasteners. (Details are given in the Drivers Handbook).

CAUTION: Where manual operation is to be carried out on a sunroof stuck in the FULLY OPEN or CLOSED position, it is important that the handle is rotated in the correct direction or damage to the motor wheelbox may result.

NOTE: Direction of rotation when viewing from UNDERNEATH the motor.

To open — rotate handle anti-clockwise.

To close — rotate handle clockwise (shown Fig. 65).

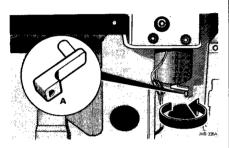


Fig. 65

If the sliding panel cannot be moved because the motor has seized, then the following emergency action can be taken.

Remove the rear seat cushion and squab, refer to operation 76.70.37/38.

Remove the two nuts securing the wheelbox cover, and remove the cover.

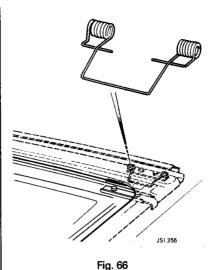
Remove the rack tubes from the wheelbox. Grasp the sliding roof panel and move it in the desired direction.

Open the sunroof panel 15 to 23 cm (6 to 9 in). Remove the four screws from the front flange of the panel.

Move the sunroof to the closed position, lifting the front of the panel.

Lift the panel clear of the vehicle by pulling forward to release the two spring clips at the rear of the panel (Fig. 66).

To refit the panel reverse the above procedure.



SLIDING PANEL SEAL

Renew

76.82.15

Remove the sliding roof panel following the procedure detailed previously.

Remove the screws securing the two nylon lifting brackets and remove the brackets (A, Fig. 67).

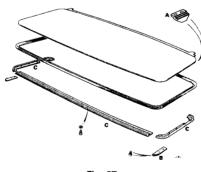


Fig. 67

Remove the screws securing the two wind deflector brackets and remove the brackets (B, Fig. 67).

Remove the screws and remove the seal retaining brackets (C, Fig. 67).

Remove the seal at the front and sides of the panel, and from the channel at the rear.

Apply soft soap to the seal channel at the rear of the panel

Insert the new seal into the channel ensuring that it is fully seated.

Position the seal at the front and sides of the panel.

Refit the seal retaining brackets and secure with the screws.

Refit the sliding roof panel.

SLIDING ROOF PANEL RETAINING SPRING(S)

Renew

76.82.29

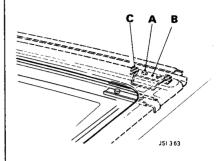


Fig. 68

Remove the sliding roof panel for access, refer to operation 76.82.05.

Fully close the under panel.

Slacken, but do not remove, the two nuts (A, Fig. 68) securing the spring retaining bracket (B, Fig. 68) sufficiently to allow the spring (C, Fig. 68) to be removed.

NOTE: The spring brackets are located at the rear of the sunroof aperture, between the undertray and the roof panel.

Fit the new spring; ensure that the bracket is correctly positioned before tightening the nuts. Refit the sliding roof panel.

WIND DEFLECTOR

Renew

76.82.07

Open the sliding roof panel and mark the position of the wind deflector.

Undo and remove the two allen screws and remove the deflector.

If a new deflector is being fitted, position the screws in the mounting bracket prior to fitting to the vehicle.

Position the deflector to the marks previously made, fit but do not fully tighten the screws.

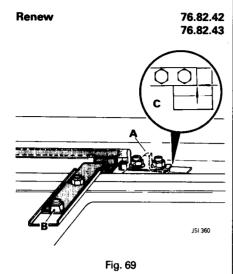
Operate the sliding roof panel to check that the wind deflector operates correctly.

Adjust as required and tighten the screws.

To adjust the alignment of the sliding panel to roof profile refer to the 'adjusting copy' in the previous procedure.

To ensure correct centralisation of the sliding panel in the aperture, refer to the previous operation.

SLIDING ROOF RACK



Remove the roof sliding panel for access, refer to operation 76.82.05.

Fully close the under panel.

Remove the rear seat cushion and squab, refer to operation 76.70.37/38.

Remove the nuts securing the wheelbox cover and remove the cover.

Move the racks away from the housing.

Remove the black plastic lifting block (A, Fig. 69). Bend back the lock tabs (B, Fig. 69) and remove the two nuts, lockplates, spring plates and rack mounting plate.

Mark the position of the rack stop (C, Fig. 69). Remove the two nuts securing the rack stop and remove the stop from the rack tube.

Withdraw the rack from the tube and clear of the vehicle.

NOTE: Take care as the rack may be heavily greased.

Grease the rack as necessary and insert it into the tube. Ensure that the rack enters the second tube adjacent to the motor wheelbox.

Refit the rack stop and secure with the two nuts. Refit the rack plate, spring plates, lockplates and secure with the two nuts. Bend up the locking tabs.

Refit the lifting block.

Fully close the under panel by hand ensuring that full travel of the sliding roof is obtained.

Refit the racks to the wheelbox housing. Fit the cover and secure with the nuts.

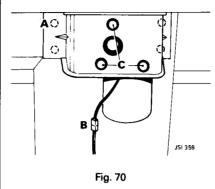
Operate the sunroof electrically to ensure that the fully open and closed positions can be obtained.

Refit the sliding roof panel.

Refit the seat squab and cushion.

SUNROOF MOTOR/WHEELBOX/DRIVE GEAR

Renew 76.82.45 76.82.44



Remove the rear seat cushion and squab, refer to operation 76.70.37/38.

Remove the two nuts securing the wheelbox cover and remove the cover.

Remove the racks from the housing.

Remove the four nuts securing the motor mounting bracket to the rear bulkhead (A, Fig. 70).

Open the boot lid and remove the front trim panel to gain access to the motor.

Disconnect the electrical harmess (B, Fig. 70). Remove the motor and mounting bracket assembly.

Remove the three hexagon headed screws securing the motor to the bracket (C, Fig. 70) and remove the motor.

MOTOR

Renew 86.76.01

Reverse instructions above.

WHEELBOX/DRIVE GEAR

Renew 76.82.44 76.82.45

Remove the four screws securing the wheelbox to the motor (A, Fig. 71).

If the drive gear (B, Fig. 71) is to be renewed it should be done prior to the refitting of the wheelbox.

Refit or renew the wheelbox (C, Fig. 71) securing with the four screws.

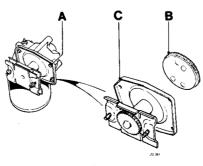


Fig. 71

SUNROOF ASSEMBLY

Renew

76.82.01

Remove the sun visors, interior mirror, reading lights (where fitted), passenger grab handles, roof aperture flange finisher and necessary door finishers, side cantrail trim rolls, and rear seat cushion and squab.

Move the rear seat belt inertia mechanism (where fitted) away from the rear panel shelf.

Remove the rear parcel shelf trim panel, rear quarter trim panels, headlining rear trim roll and headlining.

Cut the plastic straps securing the drain tubes and release the tubes.

Remove the wheelbox cover securing nuts and remove the cover.

Release the cable clips from the bulkhead and 'D' post.

Remove the racks from the wheelbox housing. Tape the tubes together to prevent the possibility of grease marks.

Mark the position of the sunroof mounting brackets to the body and remove the setscrews. Remove the nuts securing the brackets to the sunroof and remove the brackets.

Lower the sunroof assembly into the car. Rotate through 90 degrees and remove diagonally through the sunroof aperture.

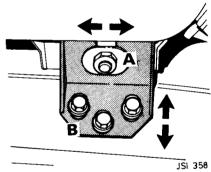


Fig. 72

Lower the sunroof, diagonally through the roof aperture, turn through 90 degrees and lift into position. Ensure that the inner seal is correctly fitted

Fit the mounting brackets to the sunroof. Fit but do not tighten the securing nuts.

Fit but do nut fully tighten the setscrews securing the mounting brackets to the cantrail.

Reposition the rack tubes, fit the clips to the bulkhead and 'D' post. Fit but do not fully tighten the securing screws.

Ensure that the sunroof panel is fully closed and refit the rack cables. Refit the wheelbox cover and secure with the nuts.

Tighten the cable clip securing screws.

Reconnect the drain tubes and secure with the ratchet clips.

Refit the sliding roof panel.

Align the sliding panel to the roof profile and tighten the mounting bracket setscrews (B, Fig. 72).

Ensure that the sunroof is correctly aligned in the roof aperture and tighten the mounting bracket nuts (A, Fig. 72).

Reverse the remaining operations.

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BODY PANELS

Description

77.00.00

This section gives only body panel replacement details of use in repairing superficial damage. Repairing damage that may structurally alter the vehicle's driving geometry will require that the alignment check in Section 76 is carried out prior to and subsequent to repairs.

It is possible to carry out a repair using a variety of methods ranging from straightening procedures to the replacement of either individual parts or panel assemblies. The repairer is responsible for choice of repair method and this choice will normally be based on a balance between the economics of labour and material costs, and the available repair facilities.

It must be accepted that a repairer will choose the best and most economic repair he can, using the equipment available but, if a car is to be sold as new, the repairer must consider the legal implications of repair methods which differ from original production.

The instructions contained in this section are intended to assist skilled body repairers by explaining approved procedures for replacing panels so that a car body may be restored to a safe running condition. This does not necessarily mean that the car will be restored to new condition; repair facilities cannot always reproduce methods of construction used during production.

Damage may make it impossible or unnecessary to remove some of the mechanical and electrical components before carrying out a body repair, but when the components are being removed or refitted refer to the appropriate section for detailed instructions.

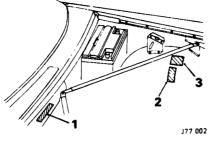
Legal requirements

'E' mark approved label

This label is attached to the L.H. valance. If it becomes detached or damaged, or if the valance is renewed, a new label should be ordered giving the vehicle chassis, commission body shell, and engine numbers. Attach the new label to the L.H. valance.

Preparation and techniques

To reduce the cost of repair, certain individual panels are available. The whole of each panel can be used but this may be found uneconomic due to the necessity for additional brackets, clips etc., and, in some cases, the complicated nature of the joints involved. The value of a separate panel is in the variety of ways with which it enables a repair to be made. With certain exceptions the panel can be cut at the most convenient point and only part of it need be used, leaving the remainder for possible future use. If damage is such that a complete new assembly is necessary, it is usually advisable to use the appropriate assembly rather than build it up from separate panels.



- 1. Chassis number-plate
- 2. 'E' mark label
- 3. V.I.N. Plate

Fig. 1

Types of weld

Spot weld (in this manual the term 'spot-weld' refers to resistance spot weld unless otherwise stated)—suitable for lap, double lap and flange joints; can be used in single or double (staggered) rows.

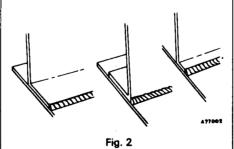
Single row—space the spot welds 15 to 25 mm (% to 1 in) apart.

Double row—space the spot welds 22 to 31 mm (% to 1% in) apart.

External examination gives little indication of the quality of a spot weld. Make a test joint using similar material and then split the test pieces apart. If the metal tears or the weld pulls a hole in one piece, the joint was satisfactory. Repeat this test each time the electrodes are re-dressed or changed and each time a change of metal gauge is encountered.

Fusion weld—suitable for butt and lap joints, and should be used where possible to reinforce corners and notches in flanges.

If it is necessary to fusion weld a flange joint, care must be taken to preserve the designed strength of the joint. A fusion weld along the toe of a flange is not generally acceptable unless the flange is cut back.



NOT ACCEPTABLE

Plug weld—To make a plug weld, drill a 5 to 8 mm (% to % in) hole through the accessible component and weld the components together through the hole.

To clamp the components together use drive screws at intervals and plug weld between them, then remove the drive screws and plug weld the remaining holes.

Types of joint Butt joint Lap joint Double lap joint Flange joint

Fig. 3

177 012

Removal of spot welded components

Centre punch each spot weld securing the component to be removed. Adjust a spot weld cutter so that it cuts just through the thickness of the material to be removed. Holding the cutter square to the material, cut through each spot weld.

If the new joint is to be made with spot welds, cut the old spot welds from the component which is to be discarded.

If the new joint is to be made with plug welds, cut the old spot welds from the component which is to be retained and use the holes for plug welding.

Preparation

Remove all traces of sealer from the area of the joint likely to be affected by heat. Clean, to bare metal, both sides of the welding areas on old and new panels.

Grind old welds smooth and dress the panels or flanges to ensure that the welding faces fit closely. Mask the welding areas and paint any areas which will be inaccessible after the panels are fitted. Remove the masking.

Where spot welding is to be used apply zincrich welding primer to both mating surfaces and spot weld while the primer is moist.

Finishing

Grind smooth the plug welds and butt welds. Fill and smooth the surface where necessary. Clean and repair for sealing and painting.

Sealing

After fitting the panel(s) seal the joints. Apply underseal where required.

THIS SECTION WAS COMPILED IN CONJUNCTION WITH THE MOTOR INSURANCE REPAIR RESEARCH CENTRE AT THATCHAM. JAGUAR CARS LTD. WISH TO ACKNOWLEDGE AND THANK THEM FOR THEIR CO-OPERATION AND ASSISTANCE GIVEN IN THIS PUBLICATION.

REPAIR NOTES

During repair, all old and new panel surfaces to be resistance spot welded together have the existing primer removed and are then treated with zinc-rich, weld-through primer to provide corrosion protection in the weld area.

The vehicle is undersealed in production. Jaguar Cars Ltd. recommend the use of 'Unipart' underseal material (Part No. GAC 1003) in repair

A Welding Diagram and a Welding Table, which show the location and type of each welded joint, are included where applicable with each method description.

The weld nugget produced by the resistance spot welding equipment available to the motor vehicle repair trade is smaller than that produced by production equipment. In the Welding Tables, the expression 'single row of resistance spot welds' is used. This means that resistance spot welds should be spaced 16 mm (% in) to 25 mm (1 in) apart which will usually mean that more resistance spot welds will be replaced in the repair joint than were removed from the factory joint.

To remove resistance spot welds, a resistance spot weld cutter such as the Dormer Roto-Bor or Sykes-Pickavant Zipcut should be used. If the new joint is to be MIG plug welded, the old resistance spot welds should be cut from the panel that is to be retained, whenever possible, and the holes used for plug welding. Alternatively, holes may be drilled for this purpose.

It must be emphazised that all safety precautions must be observed and protective equipment used when carrying out welding and grinding operations, etc.

SYMBOLS

The following symbols are used on the illustrations in this section to indicate cutting areas and types of weld required.

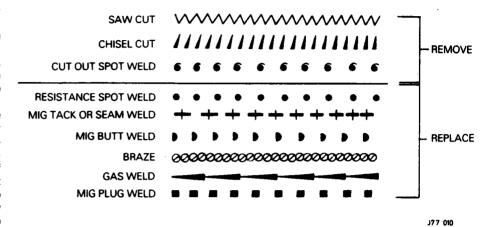


Fig. 4

TOOLS AND EQUIPMENT

The tools used to carry out the repairs detailed in this section are listed below:

General equipment

Air line
Asbestos blankets
Axle stands

Fume extractor Petrol storage unit Trolley jack

Power tools and attachments

Air drill
Belt driven sander
Cengarette saw
Cone grinder 1 inch diameter
Grinderette

Spray guns
Rotary wire brush
Random orbital sander
Zipcut resistance spot weld cutters

Welding/heating equipment

ARO N179 spot welder ARO arms 242A, 100737, 103402, 105010, 105492 Flat foot electrode

Flat foot electrode
ARO electrode tip trimmer

MIG welder Oxy-acetylene plant Propane gas torch Transformer

DOOR PANEL

Front 77.70.16 Rear 77.70.19

Remove and strip the door as detailed in Section 76:

Remove panel.

Grind off door-skin edges and MIG welds at window frame. Remove metal remnants. Separate and remove door-skin from frame.

Clean old and new panel joint edges. Expose resistance spot welds at upper stiffener on old panel. Centre-punch and cut out resistance spot welds. Separate and remove stiffener. Clean joint surfaces on stiffener and new panel for resistance spot welding. Apply weld-through primer to all surfaces to be resistance spot welded. Offer up stiffener to new panel, align and clamp in position. Resistance spot weld stiffener to new panel; fit anti-drum pad to inner surface of new panel.

Offer up new panel; align and clamp in position. Resistance spot weld new panel to frame, MIG weld new panel to window frame at either end. Turn over door-skin flanges, MIG weld at inner surfaces of lower corners and at upper joint; dress MIG welds.

Rebuild and refit door.

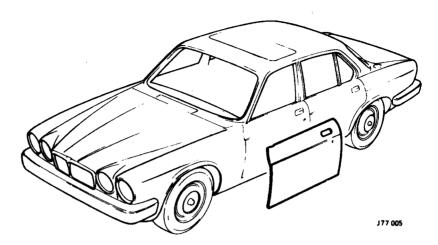
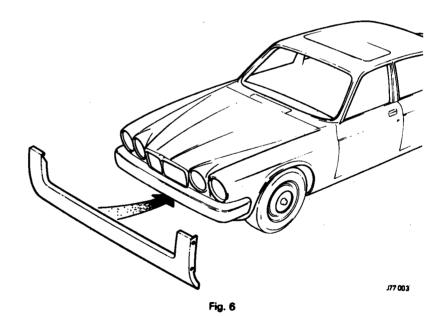


Fig. 5

LOWER PANEL

Front 77.28.26

Disconnect battery. Remove flasher lamps, bumper side mounting bolts; horns; upper mounting bolt grommets R.H. and L.H., chrome finisher and plastic apron assembly; centre iron-to-bumper mounting bolts R.H. and L.H. and remove front bumper assembly; remove lower air intake grille and retaining clips. Jack up vehicle and place on axle stands. Remove eight mounting bolts from front wings R.H. and L.H. and at cross-member. Separate and remove panel and grommets from panel. Refit grommets to panel. Offer up new panel, align, replace and tighten eight mounting bolts to cross-member and to front wings R.H. and L.H. Removal axle stands and lower vehicle. Replace parts in reverse order of removal, reconnect battery, test those electrical items that have been removed and replaced.



LOWER PANEL

Rear 77.61.65

Disconnect battery and alternator. Remove spare wheel cover, spare wheel, fuel pump cover and rear boot trim assembly; scuff plate; boot aperture weatherseal; tail lamp assemblies R.H. and L.H. and rear wiring loom; radio aerial cover-plate. Disconnect wiring. Remove aerial drive unit. Disconnect earth wiring and aerial socket. Remove aerial, separate aerial at lower joint, remove inner cable, reassemble unit and place aside. Remove upper finisher support brackets. Lay aside boot carpets. Remove data labels, boot lid striker, insulation R.H. and L.H., grommets, petrol tanks R.H. and L.H., petrol pump assembly.

Protect vehicle, expose resistance spot welds at points 1 (inside boot), 2, 4, 5, 6, 7, and 8 in Welding Diagram. Centre punch and cut out, cut panel at point 'Z' and 'Y', R.H. and L.H., separate and remove bulk of panel and metal remnants. Remove solder and brazes at point 3, remove surplus material. Grind off and retain bumper mounting reinforcement plates.

Clean old and new panel joint edges. Apply weld-through primer to joint edges to be resistance spot welded.

Offer up new panel, align with boot lid and clamp in position. Resistance spot weld at points 2, 5, 6, 7 and 8. MIG plug weld at points 1 and 4. MIGtack weld at point 11. MIG weld at points 9 and 10, braze at point 3. Dress welds and brazes. Prepare and apply solder to rear wings at flanges above bumper mountings, shape and dress soldered joints. Apply weld-through primer to exposed surfaces. Apply joint sealant using applicator gun and tube to edges of new and existing panels. Apply underseal to boot floor and to wheel arches. Remove protective covering, axle stands and lower vehicle.

Replace parts in reverse order of removal, reconnect battery, alternator, test those mechanical and electrical items that have been removed and replaced.

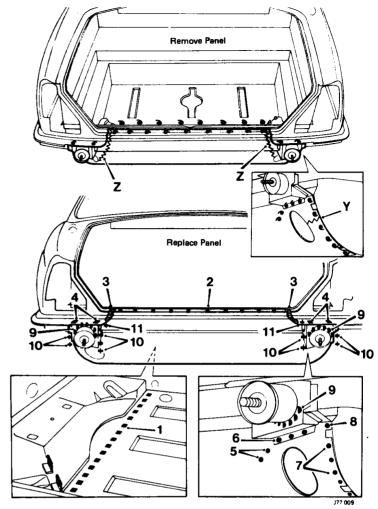


Fig. 7

NO.	LOCATION	FACTORY JOINT	REPAIR JOINT
1	To boot floor at front edge	15 resistance spot welds	15 MIG plug welds
2	To inner rear panel at boot drain channel	19 resistance spot welds	Single row of resistance spot welds ARO arms 242A
3	To rear wings R.H. and L.H. above flange	Braze each side	Braze each side
4	To rear wings R.H. and L.H. above bumper	1 resistance spot weld either side of mounting each side	MIG plug weld either side of mounting each side
5	To inner rear panel below bumper mountings R.H. and L.H.	2 resistance spot welds each side	2 resistance spot welds each side ARO arms 242A
6	To inner rear panel at bumper mountings R.H. and L.H.	3 resistance spot welds each side	3 resistance spot welds each side ARO arms 242A
7	To inner lower rear wings R.H. and L.H.	6 resistance spot welds each side	Single row of resistance spot welds each side ARO arms 242A
8	To inner rear panel and inner lower rear wings R.H. and L.H.	1 resistance spot weld each side	1 resistance spot weld each side ARO arms 242A
9	To bumper mountings R.H. and L.H	Continuous MIG weld each side	Continuous MIG weld each side
10	To bumper mountings R.H. and L.H. at edges	Continuous MIG weld run either side of each bumper mounting	Continuous MIG weld run either side of each bumper mounting
11	To rear wings R.H. and L.H. at inner corner of flanges	MIG tack weld each side	MIG tack weld each side

SILL PANEL

77.70.70

Disconnect battery and alternator. Remove rear seat cushion, squab and front seat cushion.

Disconnect seatbelt warning lamp wiring. Remove front seat frame, front and rear tread plates and clips; front and rear carpets and underfelts; upper and lower seat belt mountings; 'B' post front and rear aperture weatherseals/finishers; 'B' post courtesy lamp glass, 'B' post upper and lower trim sections, seat belt inertia reel. Release air volume control lever. Partially remove 'A' post weatherseal/finisher. Remove 'A' post lower trim section; inner sill carpet and underfelt. Disconnect and remove courtesy lamp switch; earth and wiring from 'A' post. Lay aside rear seat carpeting. Partially remove 'C' post aperture weatherseal/finisher and wheel arch lower trim. Remove rear wiring loom cover (L.H. only). Disconnect and lay aside radio aerial and wiring. Jack up vehicle, place on axle stands and remove front and rear road wheels and rear mud flap.

Remove front wing, see 77.28.29. Remove front door with hinges and rear door (see Section 76).

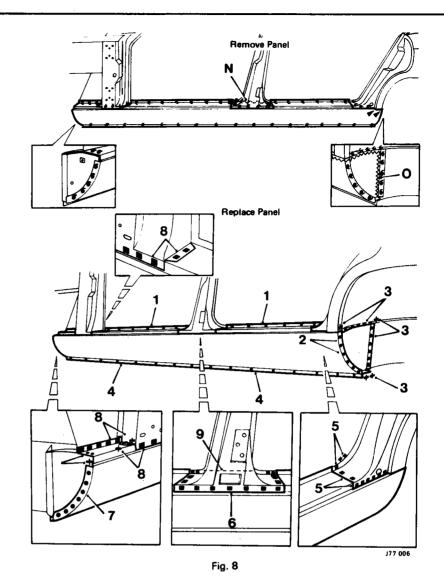
Protect vehicle interior, expose resistance spot welds at points 1, 2, 3, 4, 5, 6, 7 and 8 in Welding Diagram. Centre punch and cut out resistance spot welds. Cut sill panel and closing plate at points 'N' and 'O'. Separate and remove panels, remove metal remnants, including joint a

Clean old and new panel joint edges, drill holes in new panel for MIG plug welding at point 8 ahead of 'A' post. Clean joint edges on new rear closing plate. Apply weld-through primer to joint edges to be resitance spot welded.

Offer up new sill panel, align and clamp in position. Offer up front and rear doors, check alignment, remove doors. Resistance spot weld at points 1, 4, 7, MIG plug weld at points 5, 6 and 8. MIG tack weld at points 5 and 7. Dress MIG welds and resistance spot welds. Offer up rear closing plate, adjust. MIG tack weld at point 3. Resistance spot weld at points 2 and 3. Dress MIG welds and resistance spot welds. Prepare 'B' post and 'C' post joints. Apply solder to joints, shape and dress soldered joints. Apply joint sealant using applicator and tube to edges of new and existing panels. Remove protective covering. Replace front and rear road wheels, remove axle stands and lower vehicle.

Replace rear door, front door with hinges, replace front wing and adjust.

Replace parts in reverse order of removal, reconnect battery and alternator, test those mechanical and electrical items that have been removed and replaced, align headlamps if necessary.



NO.	LOCATION	FACTORY JOINT	REPAIR JOINT
1	To inner sill at upper flange at front and rear door aperture	42 resistance spot welds	Single row of resistance spot welds ARO arms 242A
2	To rear closing plate	7 resistance spot welds	Single row of resistance spot welds ARO arms 100737
3	Closing plate to outer wheelarch panel and chassis leg closing panel	10 resistance spot welds 3 MIG tack welds	Single row of resistance spot welds ARO arms 105492 Single row of reistance spot welds ARO arms 100737 4 MIG tack welds
4	To inner sill at lower flange	60 resistance spot welds 4 MIG tack welds	Single row of resistance spot welds ARO arms 103402
5	To base of 'C' post	10 resistance spot welds 3 MIG tack welds	10 MIG plug welds 3 MIG tack welds
6	To base of 'B' post and closing panel	17 resistance spot welds	17 MIG plug welds
7	To front wheel arch	9 resistance spot welds	2 single rows of resistance spot welds ARO arms 100737 1 MIG tack weld
8	To 'A' post	18 resistance spot welds	18 MIG plug welds
9	To inner sill, behind 'B' post inner closing panel	2 resistance spot welds 2 MIG tack welds	No access for welding See Repair Note 4, page 77—3

SILL PANEL—SECTION

Disconnect battery and alternator. Remove front seat cushion. Disconnect seat belt warning lamp. Remove front seat frame; front treadplate and retaining clips; front footwell carpet and underfelt. Release air volume control lever. Remove inner sill carpet section and underfelt. Jack up vehicle and place on axle stands.

Remove front door, (see Section 76).

Protect vehicle interior, expose resistance spot welds at points 2 and 3 in Welding Diagram. Centre punch and cut out resistance spot welds. Cut panels at points 'P' and 'R', remove panel and metal remnants.

Clean old panel joint edges, cut a section from new panel to form approximate fit, clean new panel joint edges.

Offer up new panel section, align and clamp in position. Cut through old and new panels to form butt joints. Remove new panel section and metal remnants. Clean old and new panels at butt joints. Apply weld-through primer to joint edges to be resistance spot welded. Offer new panel, align and clamp in position. Offer up front door, check alignment and remove door. MIG butt weld and dress at points 1 and 4. Resistance spot weld at points 2 and 3. Prepare and apply solder at points 1 and 4, shape and dress soldered joints. Apply joint sealant using applicator gun and tube to edges of new and existing panels. Remove protective covering, and axle stands and lower vehicle.

Replace front door. Replace parts in reverse order of removal, reconnect battery and alternator, test those electrical items that have been removed and replaced.

NO.

2

3

4

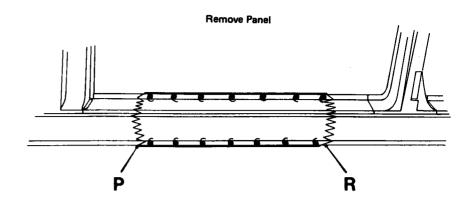
end

LOCATION

To upper flange

To lower flange

To existing panel at rear



Replace Panel

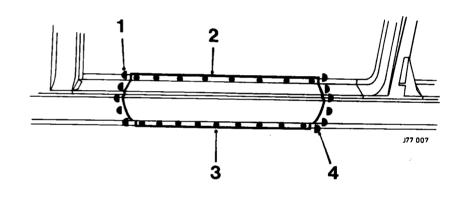


Fig. 9

FACTORY JOINT REPAIR JOINT To existing panel at front Continuous MIG butt weld Single row of resistance 11 resistance spot welds spot welds ARO arms 103402 17 resistance spot welds Single row of resistance spot welds ARO arms 103402

Continuous MIG butt weld

WINGS

Front 77.28.29

Disconnect battery. Remove flasher lamps, bumper side mounting bolts, horns, upper mounting bolt grommets R.H. and L.H., chrome finisher and plastic apron assembly; centre fron-to-bumper mounting bolts R.H. and L.H. and remove front bumper assembly; remove outer headlamp bezel; wiring loom cover, fusebox (L.H. only), headlamp inner casing and tensioning spring. Pull aside wiring loom and disconnect from main loom. Remove headlamp casing with wiring and spire nuts. Remove flasher repeater assembly and grommet at flitch inside front of wing. Jack up vehicle, place on axle stands and remove front road wheel. Release front splashguard and remove rear splashguard and washers from wing, and bonnet counter-balancing spring.

Remove mounting bolts to flitch front and upper flanges, 'A' post, lower front panel and sill. Separate and remove wing.

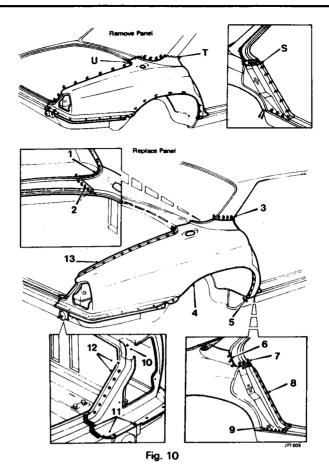
Apply underseal to panel interior.

Offer up new panel, align, replace and tighten all mounting bolts. Re-secure front splash-guard. Replace rear splashguard and front road wheel. Remove axle stands and lower vehicle. Replace parts in reverse order of removal except outer headlamp bezel. Reconnect battery, test those mechanical and electrical items that have been removed and replaced. Remove other headlamp bezel. Align headlamps. Replace headlamp bezels.

WINGS

Rear 77.70.67

Disconnect battery and alternator. Remove spare wheel cover, spare wheel, fuel pump cover and rear boot trim assembly, scuff plate, boot aperture weatherseal, radio aerial coverplate. Disconnect wiring. Remove aerial drive unit. Disconnect earth wiring and aerial socket. Remove aerial, separate aerial at lower joint, remove inner cable, re-assembly unit and place aside (L.H. only). Disconnect rear wiring loom and lay aside. Jack up vehicle and place on axle stands. Remove rear road wheel, petrol tanks R.H. and L.H., petrol pump assembly. Move aside boot courtesy lamp wiring and water drain tube. Remove breather pipes, rear seat cushion and squab, rear parcel shelf, rear inner and outer treadplates. Partially remove felt finisher at upper quarter. Release rear end of passenger grab handle. Remove upper quarter trim pad, rear screen lower padding. Disconnect and remove rear screen and finishers. Remove wheel arch trim. Lay aside rear seat cushion insulation felt and carpet. Remove wiring loom cover. Disconnect and lay aside wiring loom below squab. Remove rear retaining clips from treadplate, rear door striker plate, rear drip rail finisher, rear door impact buffer and boot lid.



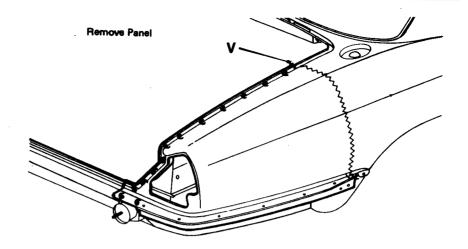
N	D. LOCATION	FACTORY JOINT	REPAIR JOINT
	To lower corner of screen aperture	13 resistance spot welds	Single row of resistance spot welds ARO arms 242A (modified) See Repair Note 7, page 77—3)
	? To rear screen panel	Continuous MIG weld	Continuous MIG weld
	To upper quarter	Continuous MIG weld	Continuous MIG butt weld
	To wheel arch flange	40 resistance spot welds	Single row of resistance spot welds ARO arms 105010
	To rear of sill at wheel arch	2 resistance spot welds	1 X 20 mm MIG weld
(To outer edge of door aperture at waist	3 MIG tack welds	3 MIG tack welds
	To inner face of door aperture at waist	4 resistance spot welds MIG weld	4 MIG plug welds MIG weld
	To 'D' post flange below waist	26 resistance spot welds	Single row of resistance spot welds ARO arms 242A
٤	To sill	8 resistance spot welds	Single row of resistance spot welds ARO arms 242A 6 MIG plug welds
10	To inner rear wing inside tail lamp aperture	MIG weld	MIG weld
1	To bumper mounting and rear panel	2 resistance spot welds MIG tack weld Braze	2 resistance spot welds ARO arms 242A MIG tack weld Braze
12	To inner rear wing at drain channel lower section	6 resistance spot welds MIG weld	Single row of resistance spot welds ARO arms 242A MIG weld
13	To inner rear wing at drain channel	31 resistance spot welds	Single row of resistance spot welds ARO arms 242A

Protect vehicle, expose resistance spot welds at points 1, 4, 5, 7, 8, 9, 11 and 13 in Welding Diagram. Centre punch and cut out resistance spot welds. Remove solder and brazes at points 2 and 11. Cut panel at points 'S', 'T' and 'U'. Separate and remove bulk of panel. Remove metal remnants.

Clean old panel joint edges, cut new panel to form approximate fit.

Offer up new panel, align and clamp in position. Cut old and new panels to form butt joint at upper quarter. Remove new panel and metal remnants, clean old and new panel joints.

Apply weld-through primer to joint edges to be resistance spot welded. Apply joint sealant to outer edges of wheel arch. Offer up new panel, align and clamp in position. Replace boot lid hinge. Refit boot lid. Offer up rear screen, check alignment and remove screen, boot lid and hinge. MIG butt weld and dress at point 3. Resistance spot weld at points 1, 4, 8, 9, 11, 12 and 13. MIG weld at points 2, 5, 7, 10 and 12. MIG tack weld at points 6 and 11. Drill and MIG plug weld at points 7 and 9. Braze at point 11. Dress welds and braze. Prepare and apply solder to upper quarter, screen panel, sill and rear panel, inner face of door aperture at waist. Shape and dress soldered joints. Remove protective covering. Apply joint sealant using applicator gun and tube to edges of new and existing panels. Apply underseal. Replace road wheel, remove axle stands and lower vehicle. Replace boot lid. Replace parts in reverse order of removal, reconnect battery and alternator, test those mechanical and electrical items that have been removed and replaced and rear screen for water leaks.



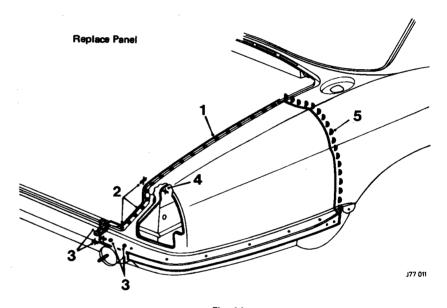


Fig. 11

NO.	LOCATION	FACTORY JOINT	REPAIR JOINT
1	To inner rear wing at drain channel	31 resistance spot welds	Single row of resistance spot welds ARO arms 242A
2	To inner rear wing at drain channel section	6 resistance spot welds MIG weld	Single row of resistance spot welds ARO arms 242A MIG weld
3	To bumper mounting and rear panel	2 resistance spot welds MIG tack weld Braze	2 resistance spot welds ARO arms 242A MIG tack weld Braze
4	To inner rear wing inside tail lamp aperture	MIG weld	MIG weld
5	To existing panel		Continuous MIG butt weld