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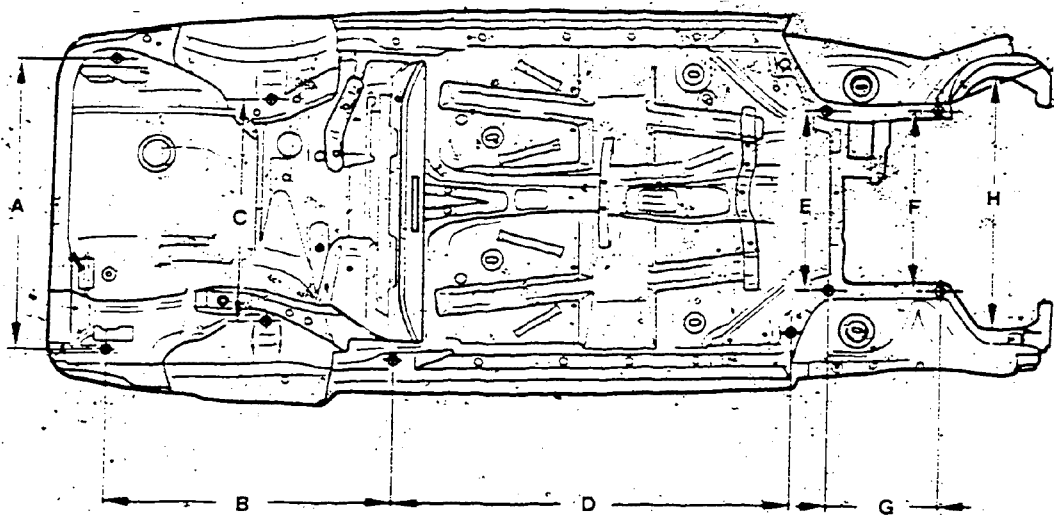
- painting procedure 50.18

Plastic parts

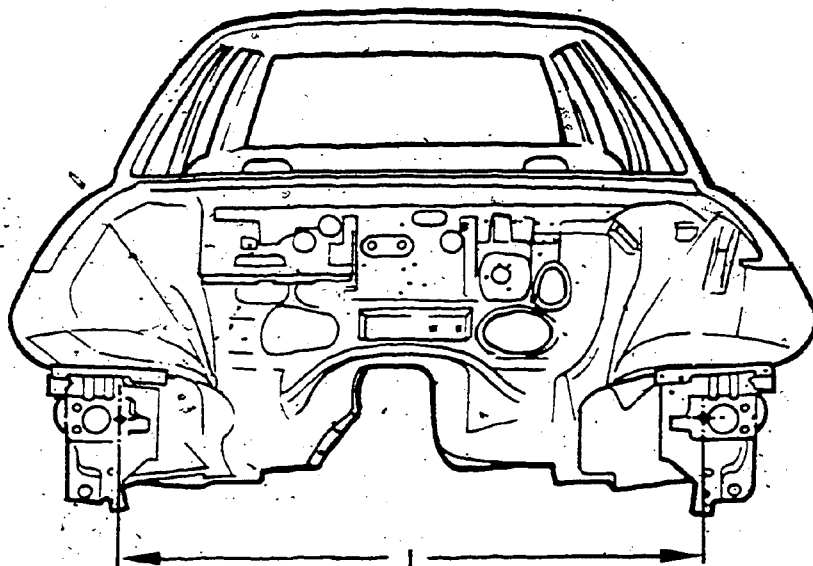
- painting 50.18

Note

If not specifically mentioned, all tolerances are $\pm 2.0\text{mm}$ (5/64 in.).



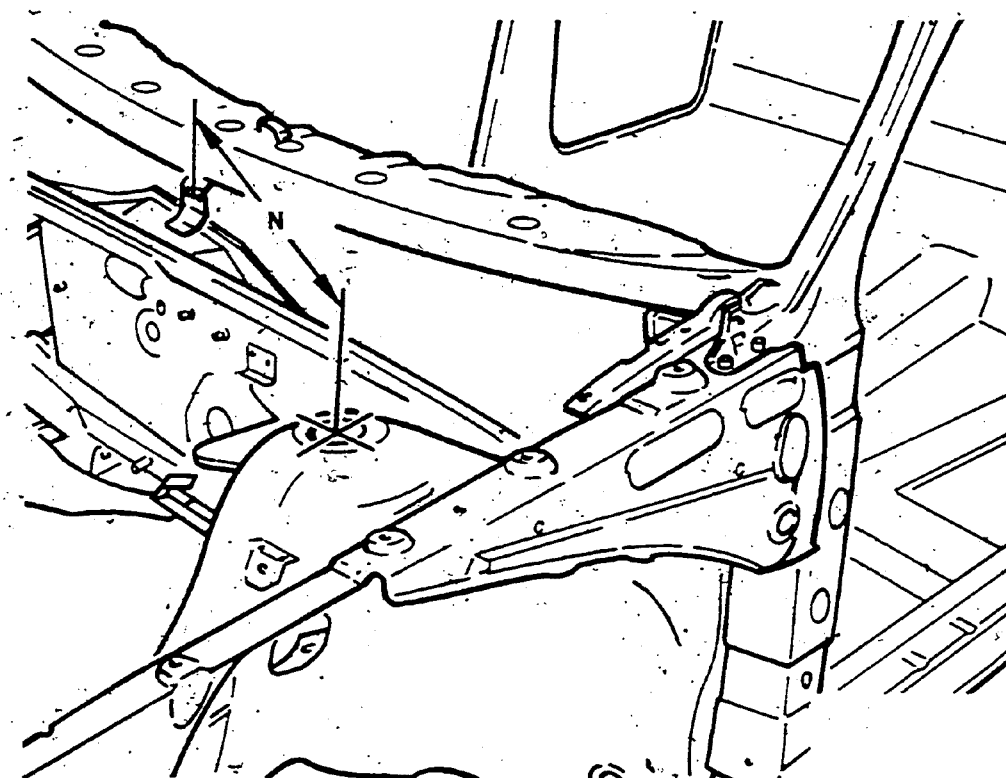
00-1000



00-1001

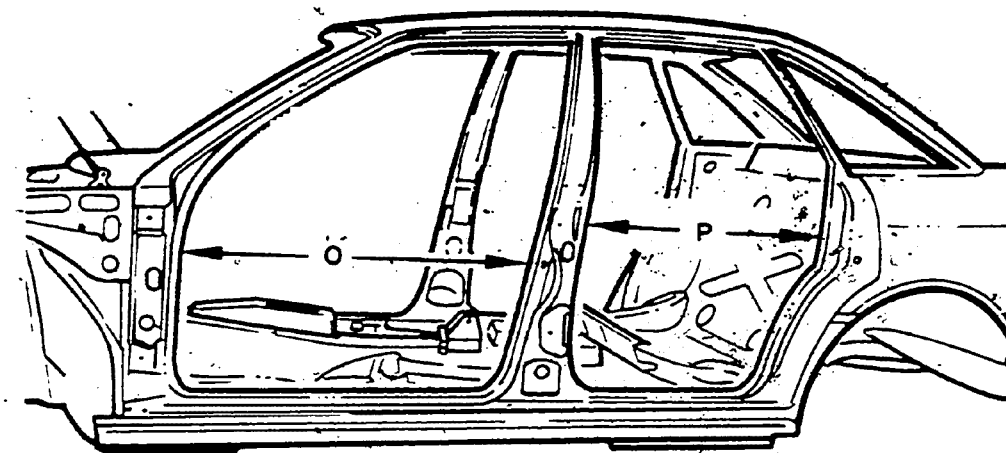
A = 1200mm (46 13/16 in.)
 B = 1143mm (44 5/8 in.)
 C = 952 $\pm 1.0\text{mm}$ (37 1/8 $\pm 3/64$ in.)
 D = 1555mm (57 5/8 in.)
 E = 721 $\pm 1.0\text{mm}$ (28 1/8 $\pm 3/64$ in.)

F = 734 $\pm 3.0\text{mm}$ (27 9/32 $\pm 1/8$ in.)
 G = 452 $\pm 2.0\text{mm}$ (17 5/8 $\pm 5/64$ in.)
 H = 1050 $\pm 1.0\text{mm}$ (40 5/8 $\pm 3/64$ in.)
 I = 1022 $\pm 1.0\text{mm}$ (39 7/8 $\pm 3/64$ in.)



00P1006

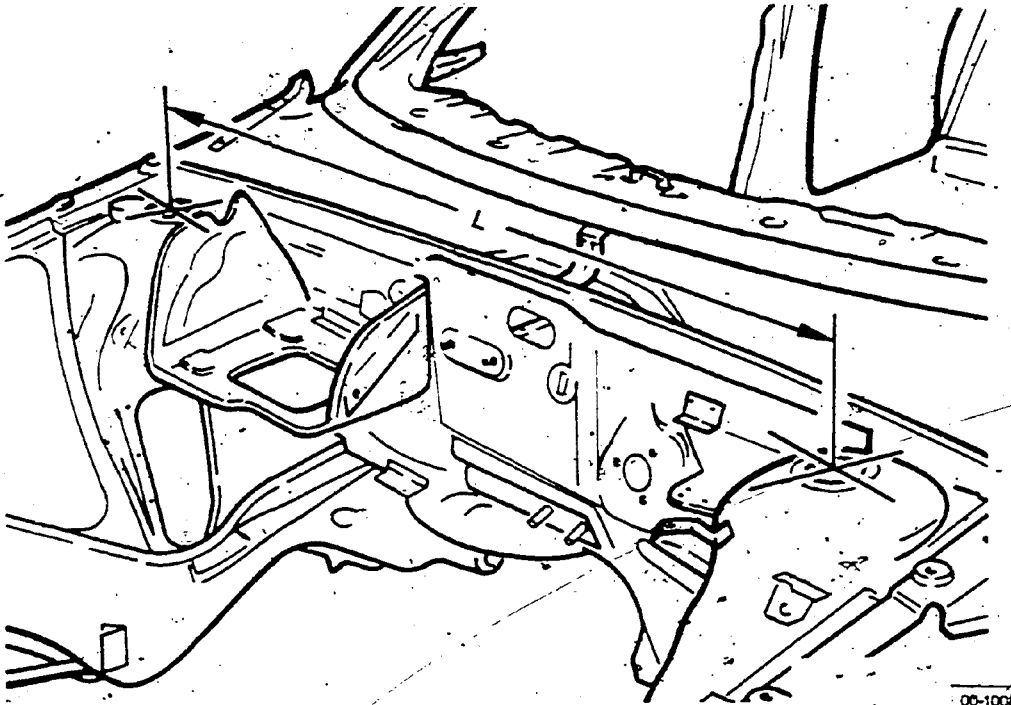
N = 601 ± 1.0mm (23 7/16 ± 3/64 in.)



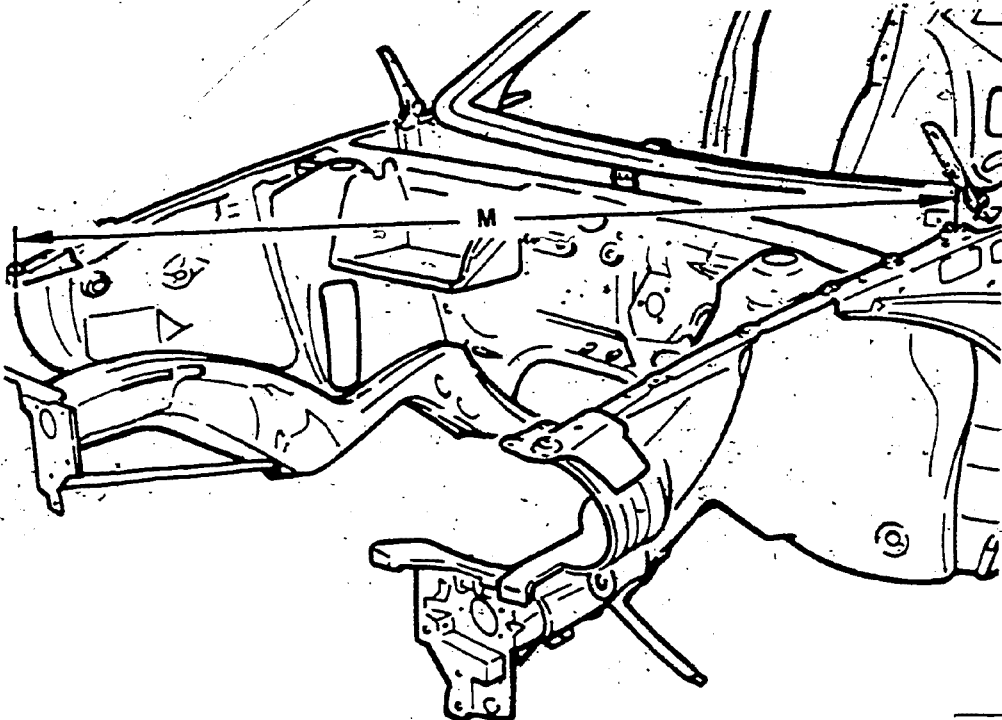
00-1007

O = 927 ± 1.0mm (36 15/32 ± 3/64 in.)

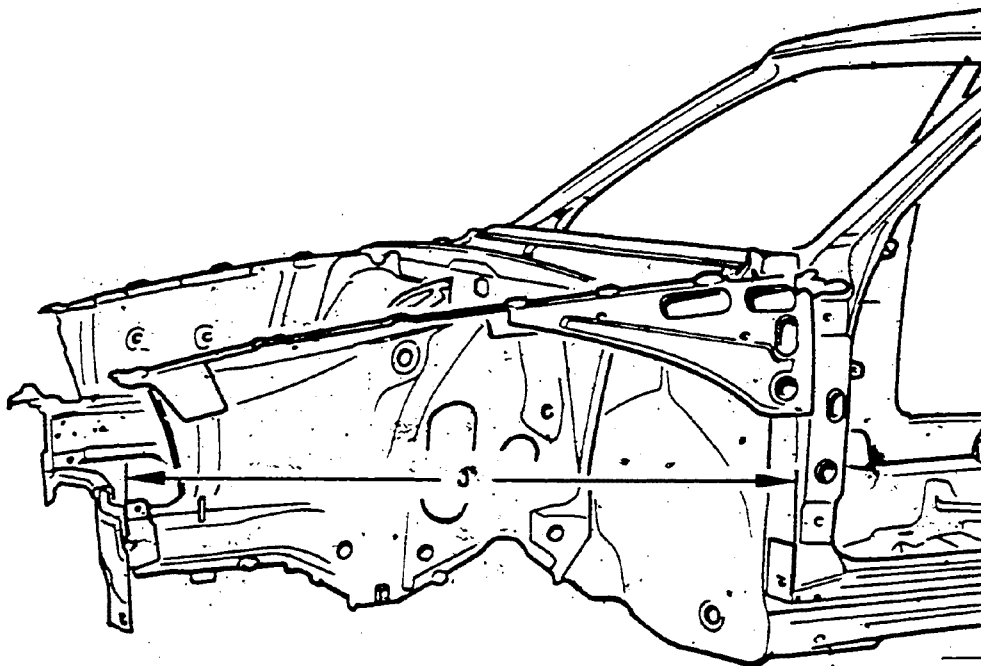
P = 686 ± 3.0mm (27 21/32 ± 1/8 in.)



$L = 1050 = 1.0\text{mm} (40.58 = 3.64 \text{ in.})$

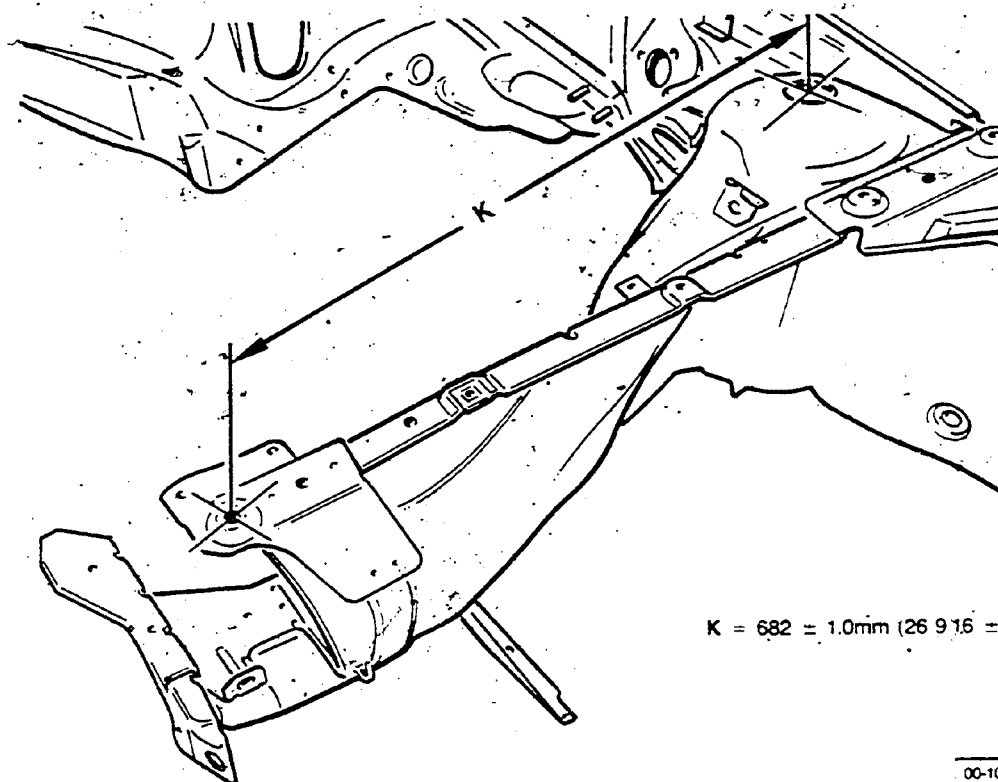


$M = 1626 = 2.0\text{mm} (63.516 = 5.64 \text{ in.})$



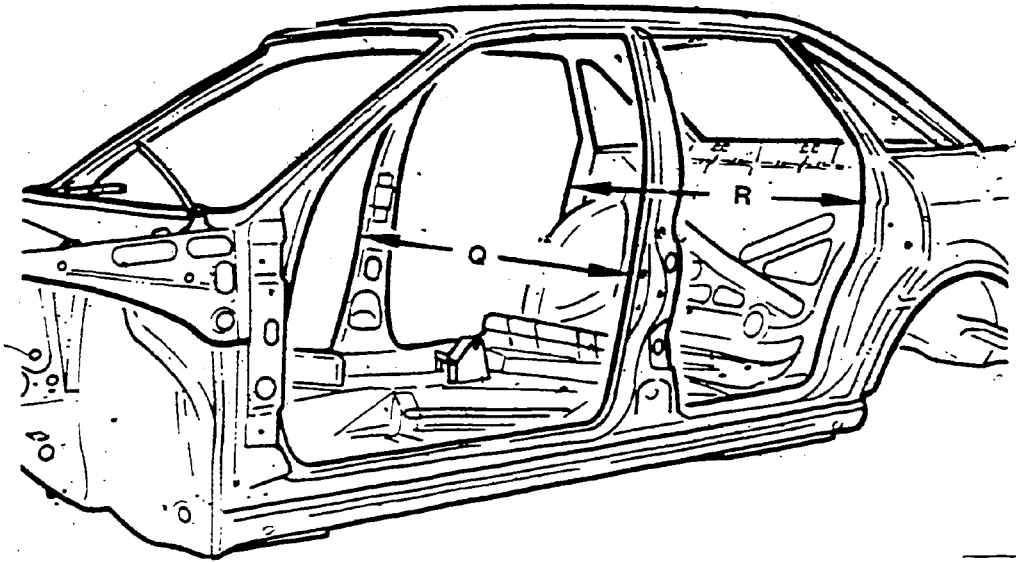
00-1002

= 1090 ± 2.0mm (42 17/32 ± 5/64 in.)



K = 682 ± 1.0mm (26 9/16 ± 3/64 in.)

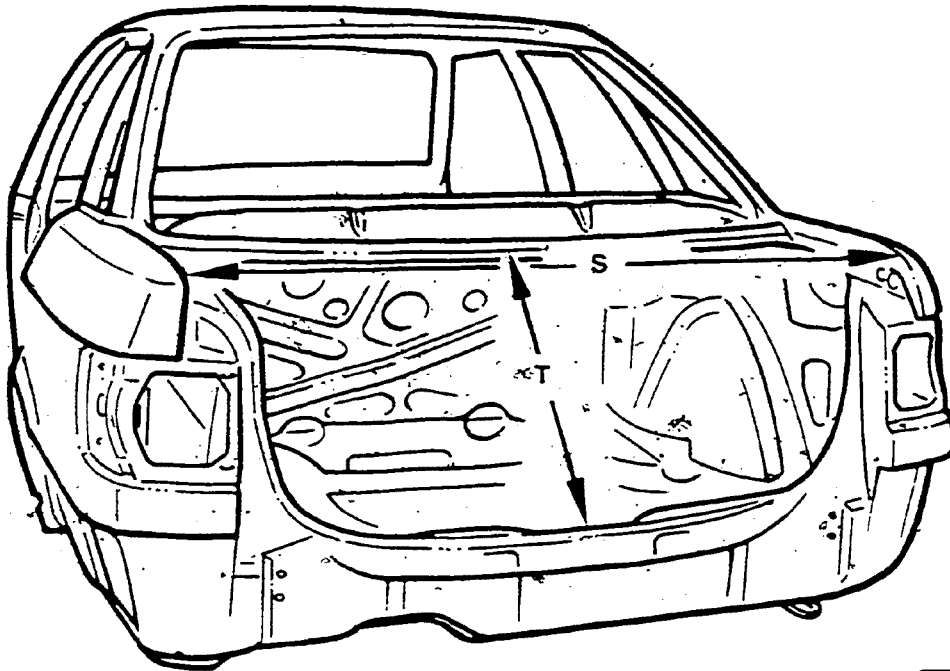
00-1003



00-1009

Q = 1380 ± 1.0mm (53 43/16 ± 3/64 in.)

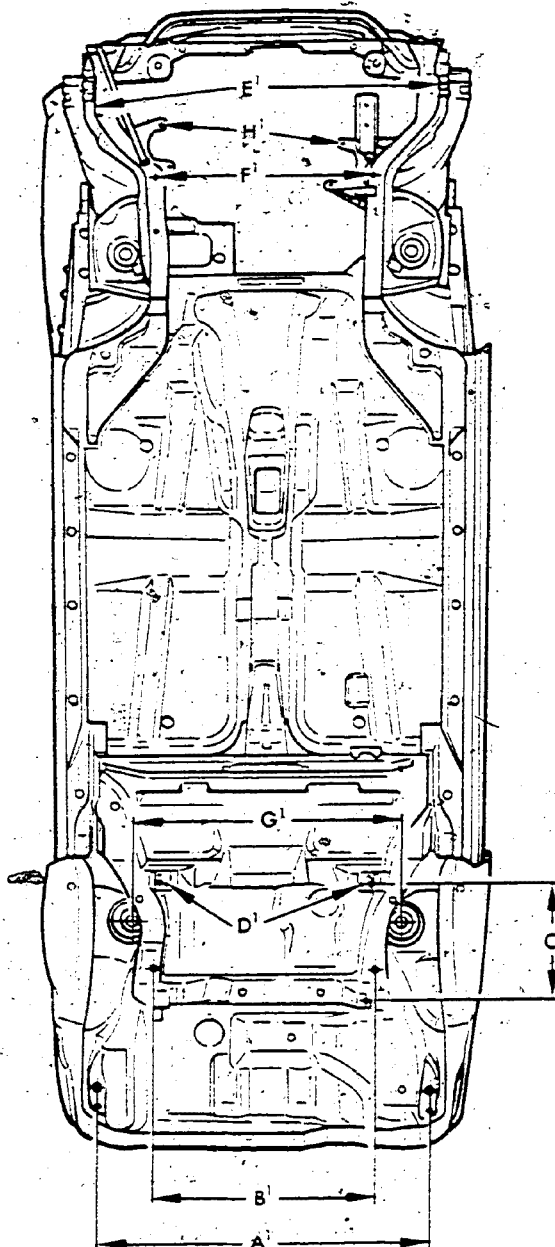
R = 1360 ± 2.0mm (53 1/32 ± 5/64 in.)



00-1008

S = 1226 ± 1.0mm (47 13/16 ± 3/64 in.)

T = 470 ± 1.0mm (18 5/8 ± 3/64 in.)



A' = 1200mm (46 13/16 in.)

B' = 732mm (28 13/16 in.)

C' = 450mm (17 11/16 in.)

D' = 722mm (28 7/16 in.)

E' = 1143mm (45 in.)

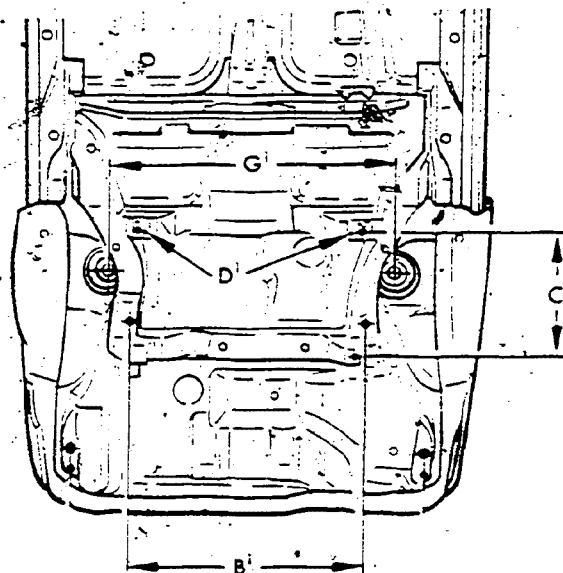
F' = 734mm (28 7/8 in.)

G' = 1031mm (40 9/16 in.)

H' = 616mm (24 in.)

All dimensions are $\pm 2.0\text{mm}$ (5/64 in.)

00-1010



B¹ = 732 mm (28-13/16 in.)

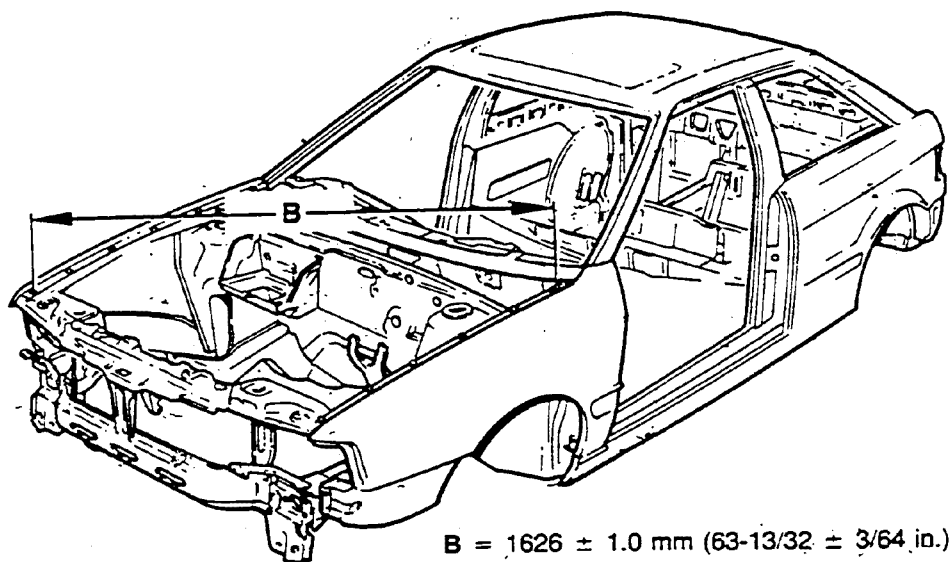
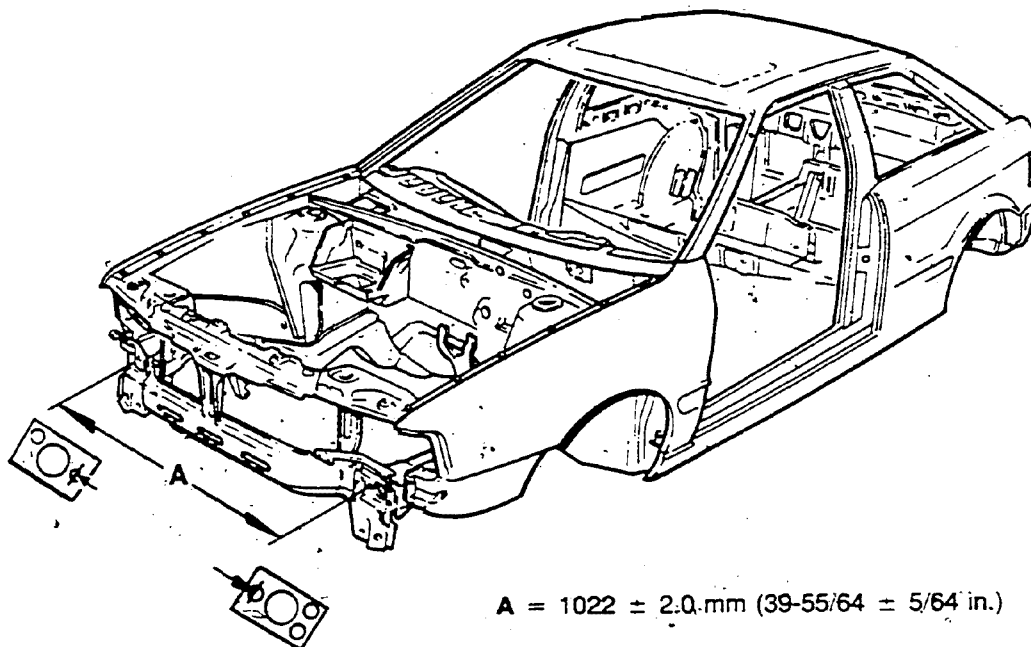
C¹ = 450 mm (17-11/16 in.)

D¹ = 722 mm (28-7/16 in.)

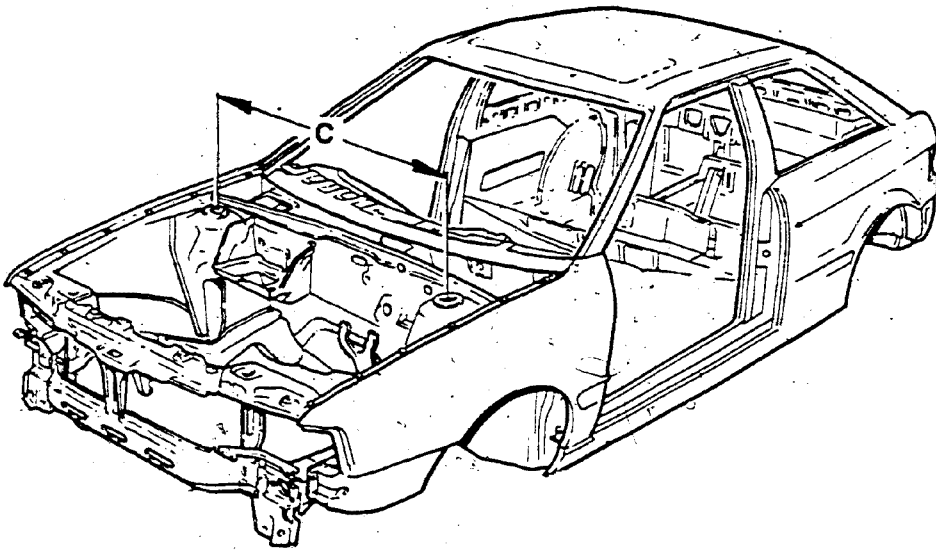
G¹ = 1031 mm (40-9/16 in.)

All dimensions are ± 2.0 mm (5/64 in.)

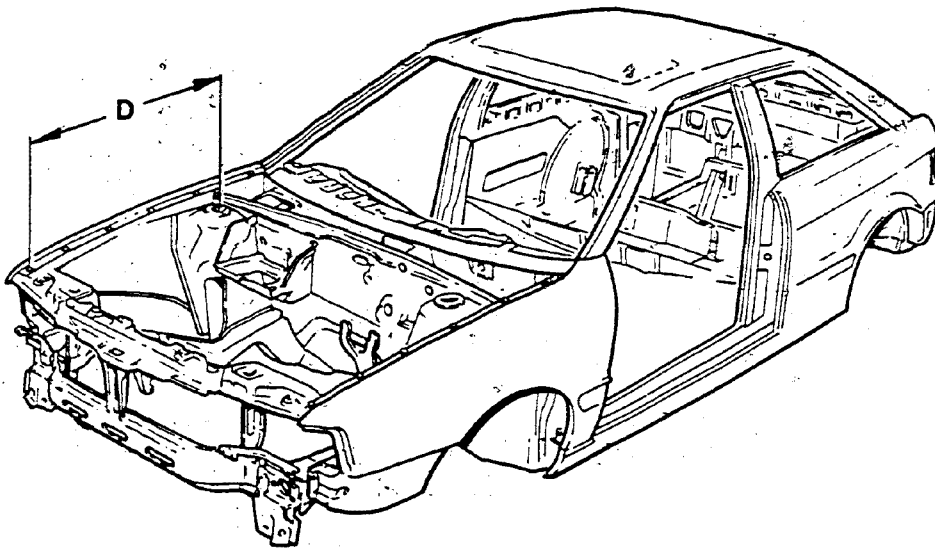
00-1010



00-1176a

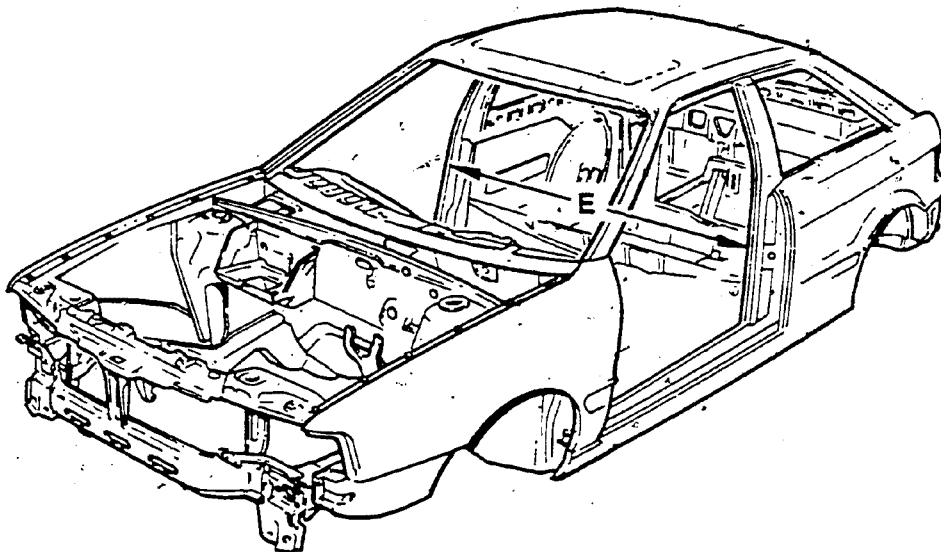


$C = 1050 \pm 2.0 \text{ mm (40-61/64} \pm 5/64 \text{ in.)}$

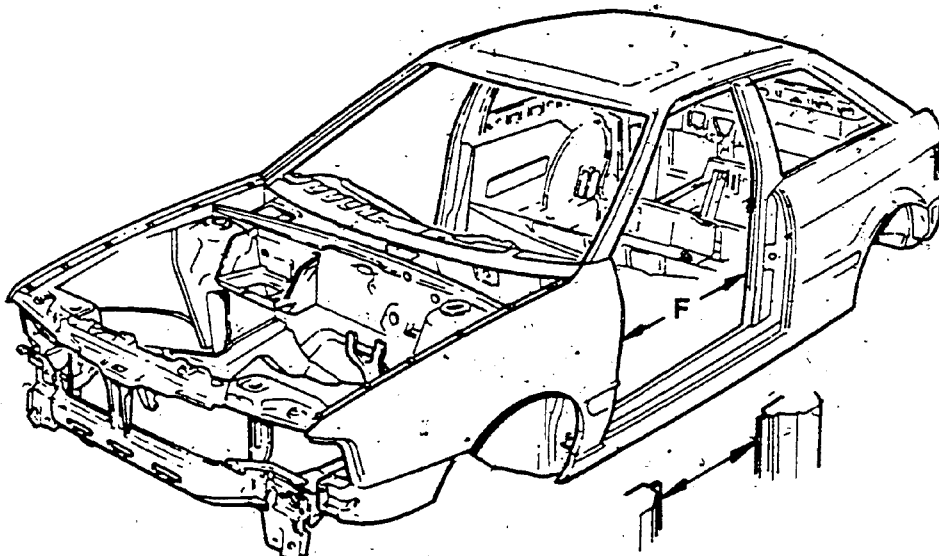


$D = 682 \pm 1.0 \text{ mm (26-19/32} \pm 3/64 \text{ in.)}$

00-1178a

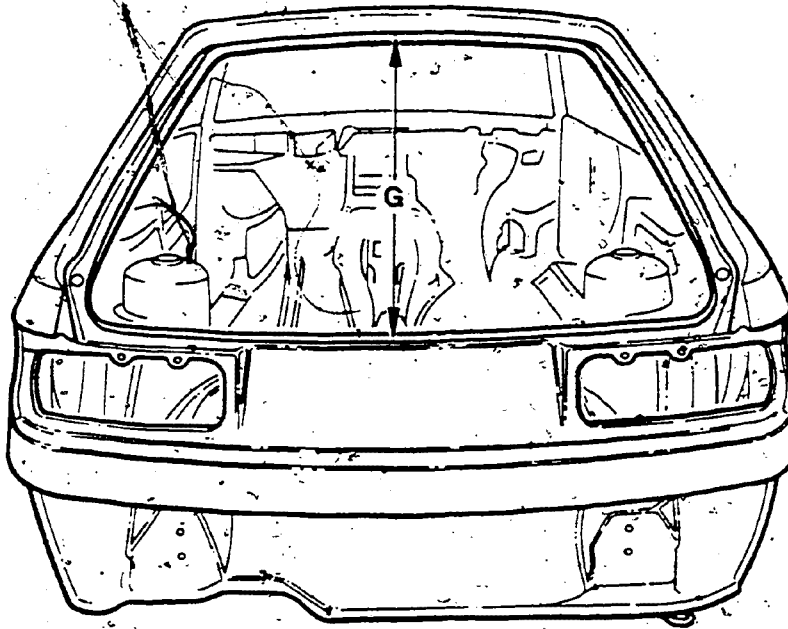


$E = 1385 \pm 1.0 \text{ mm} (54\text{-}1/64 \pm 3/64 \text{ in.})$

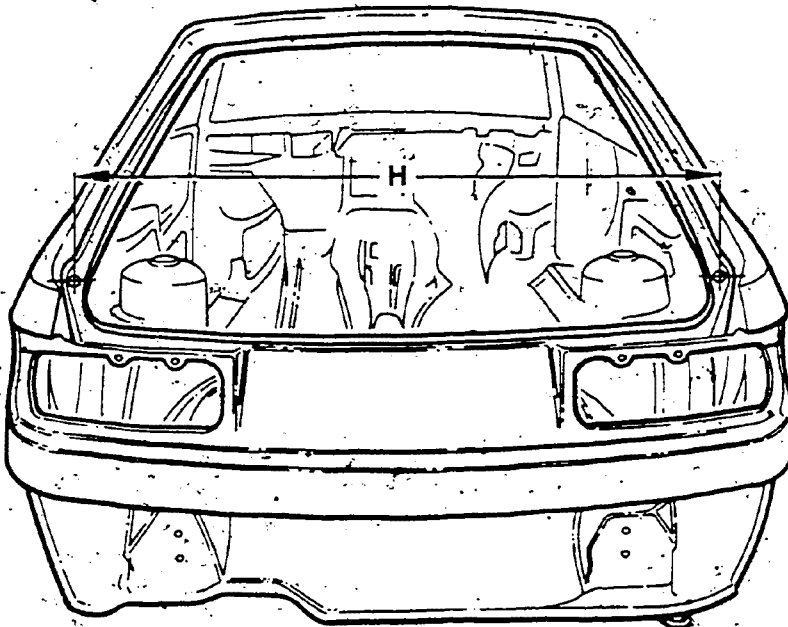


$F = 1110 \pm 1.0 \text{ mm} (43\text{-}19/64 \pm 3/64 \text{ in.})$

00-1180a

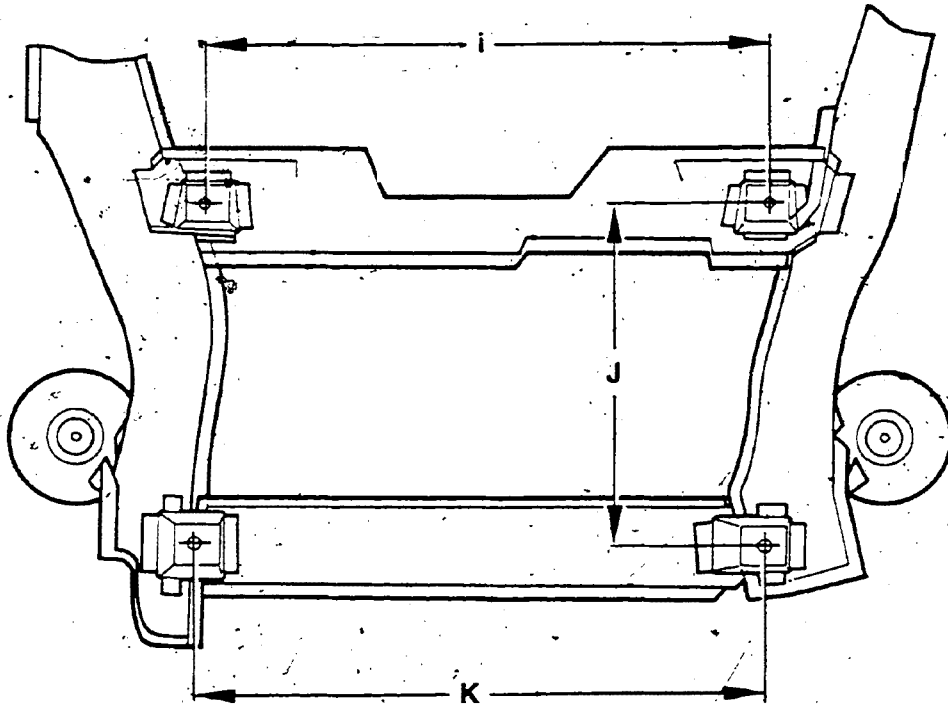


$G = 1066 \pm 1.0 \text{ mm } (41\text{-}37/64 \pm 3/64 \text{ in.})$



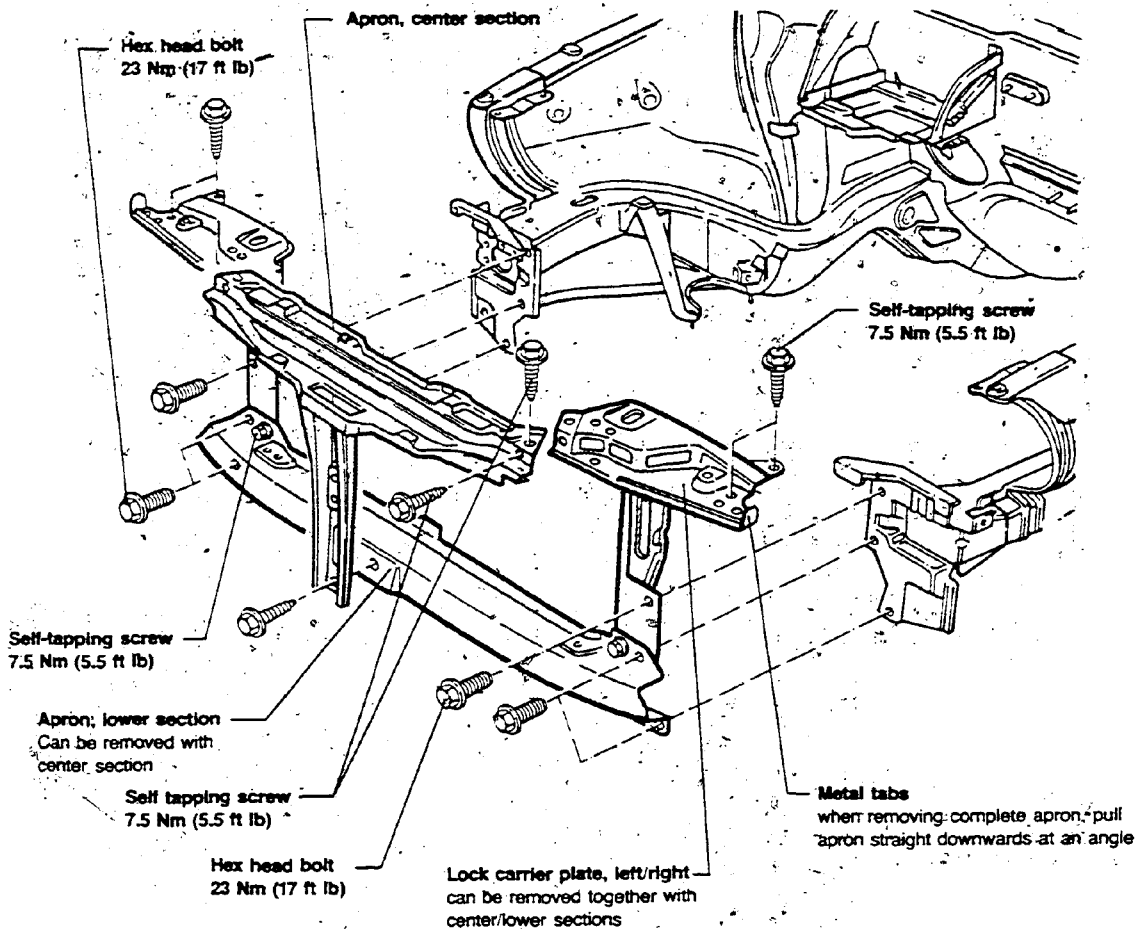
$H = 1255 \pm 2.0 \text{ mm } (48\text{-}15/16 \pm 5/64 \text{ in.})$

00-1182a

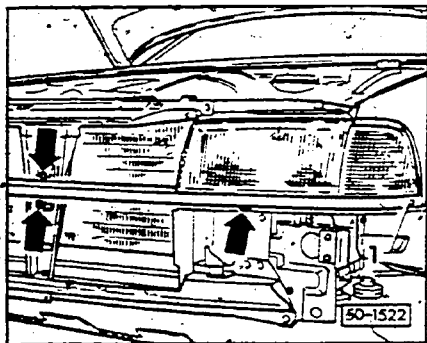


$i = 722 \pm 2.0 \text{ mm} (28\text{-}5/32 \pm 5/64 \text{ in.})$
 $J = 450 \pm 1.0 \text{ mm} (17\text{-}9/16 \pm 3/64 \text{ in.})$
 $K = 732 \pm 2.0 \text{ mm} (28\text{-}35/64 \pm 5/64 \text{ in.})$

00-1184a



50-1521



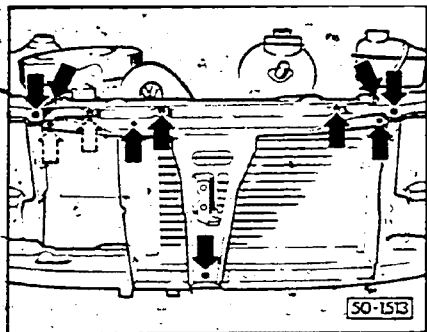
Apron center section, removing/ installing

Removing

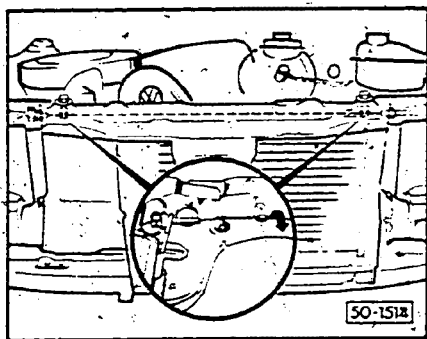
- remove bumper (see Repair Group 63)
- remove radiator grill (see Repair Group 66)
- remove trim plate (**arrows**)
- pull apron out from grommets

Installing

Install in reverse order of removal.

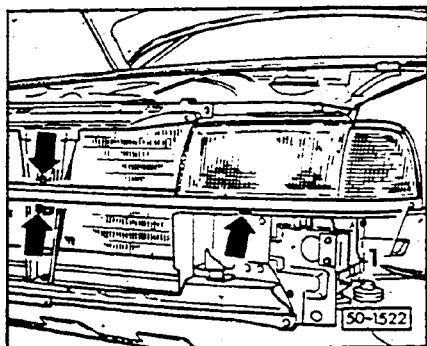


- unscrew cooling air duct and mounting from radiator at top
- remove center section of apron



Hood cable, detaching

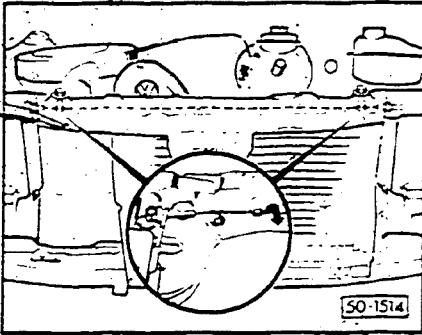
- remove cable holder through access hole
- lift out hood cable (inset)



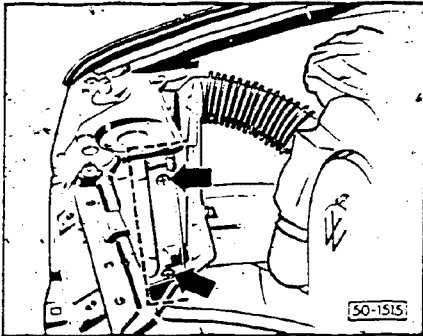
Front apron, removing

Removing

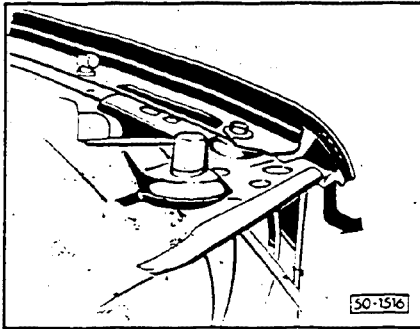
- remove bumper (see Repair Group 63)
- remove radiator grill (see Repair Group 66)
- unscrew trim plate (**arrows**)
- pull out apron to left or right from grommet



- remove cable holder through access hole and detach cable



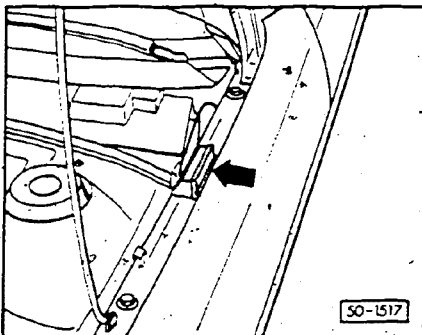
- unscrew intake air housing (arrows)



- pull apron out downwards under fender (arrow)

Front apron, installing

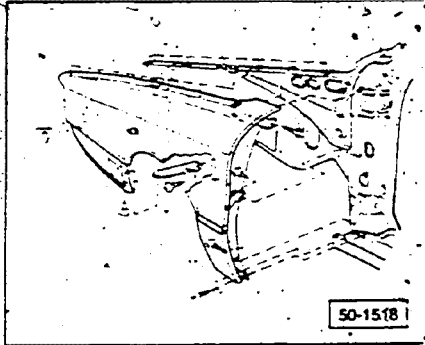
Install in reverse order of removal.



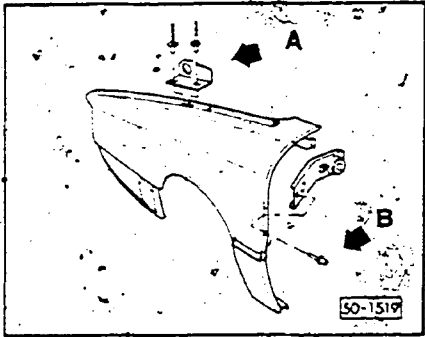
Front fender, removing

Removing

- remove front bumper (see Repair Group 63)
- remove wheel house liner (see Repair Group 66)
- remove seal (arrow)



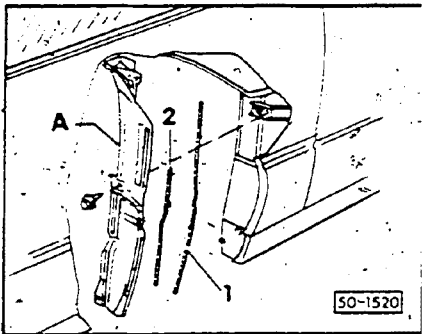
- remove mounting bolts, self tapping screws



Front fender, installing

Install in reverse order. Note the following

- install rivets for hood support bracket (arrow A)
- install rivet for door retainer (arrow B)



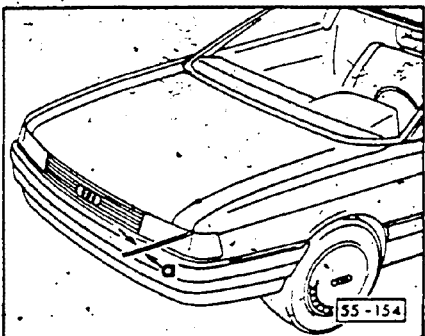
- install strips of sealing cord, 1, 2 and bolt filler plate A to retainer

1 = 480mm (approximately 19 in.) long,
7.0mm (9/32 in.) diameter

2 = 250mm (approximately 10 in.) long,
7.0mm (9/32 in.) diameter

Note

Sealing cord will have to be molded to 7.0mm (9/32 in.) diameter.



Adjusting front fender, hood gap

- loosen all fender bolts
 - with the fender bolts loosened, adjust gap by moving fender
- a = $4.5 \pm 1.0\text{mm}$ ($11/64 \pm 3/64$ in.)

Identifying/painting and repairing plastic parts

Refer to the Volkswagen of America
Refinishing Guide, Lit N. **W42-701-008-1**.

Pearl effect paint, painting

The Audi 80/90 will be available with special pearl white metallic paint as an option. Transparent white lamellar particles are used instead of the aluminum particles generally used in metallic finishes. This provides the iridescent effect peculiar to the pearl paint finish.

The major difference between the present two-stage metallic paint procedure and the new pearl effect procedure is the addition of a metallic base coat step. In addition, the wet-on-wet method is employed so the base coat shines through as a reflective color.

Materials required

Description	Part No.
2K Acrylic High Solid/Filler	ALN 786 001 13
Thinner	ALV 002 000 06
Special Metallic Base Coat	ALN 769 90E
White Pearl Effect Paint	ALD 649 0A0
2K Acrylic Clear Coat	ALN 769 001 10
2K Acrylic Hardener	ALZ 009 001 06
	(Slow)
	ALZ 009 002 06
	(Fast)

CAUTION

Part numbers are listed for reference only. Always consult with the Parts Department for latest information.

Paint procedure

Step 1:

- apply 2K acrylic high solid primer/filler as label directions recommend
- sand with ultra fine sandpaper
- clean with silicone remover

Step 2:

- spray special white metallic base coat
 - mixing ratio 2:1 with hardener
 - spray two covering coats
 - spray viscosity: 17 seconds, adjusted with thinner **ALV 002 000 06**
 - flash-off time: 10-15 minutes

Step 3:

- spray white pearl-effect paint plus 80% synthetic thinner
 - spray three coats
 - spray viscosity: 17 seconds
 - flash-off time: 15 minutes

Step 4:

- spray 2K acrylic clear coat with 2K acrylic hardener
 - spray two coats
 - mixing ratio: 2:1
 - spraying viscosity: 16-17 seconds, adjusted with thinner **ALV 002 000 06**
 - flash-off time: 5-10 minutes
 - drying time: 60 minutes at 60°C (140°F)

Brilliant black ALD 626 Y9B, painting

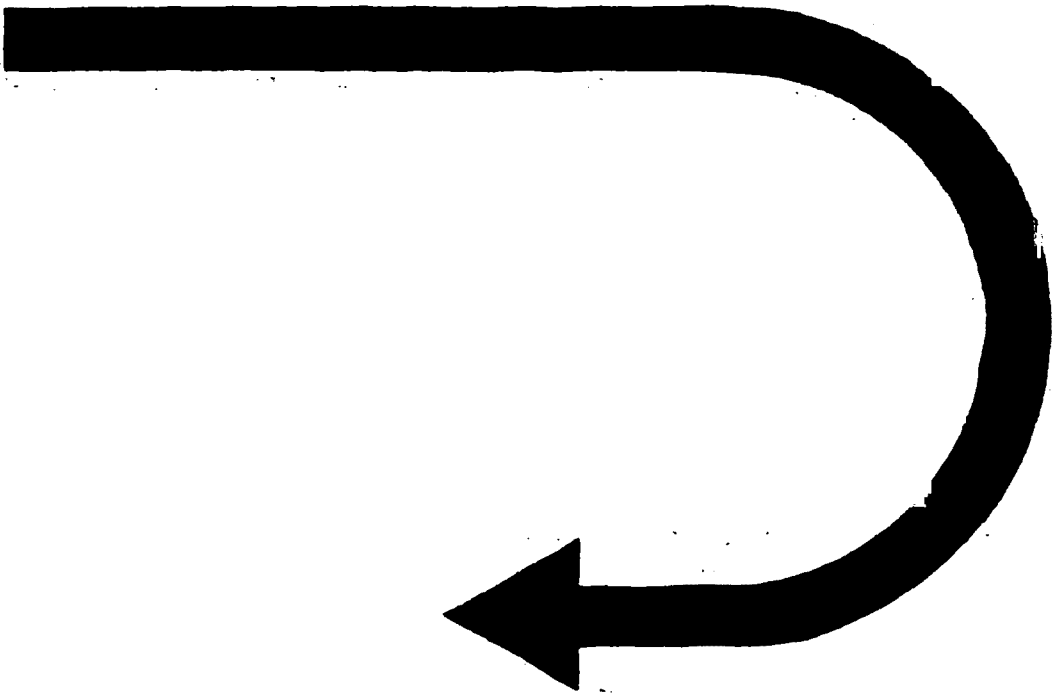
Standard two-step painting and refinishing procedures apply. Note the following:

- do not mix or touchup with **L 041**
- do not mix or touchup with **ALN 769** finishing paint

CAUTION

Part numbers are listed for reference only. Always consult with the Parts Department for latest information.

CONTINUED IN THE
BEGINNING OF NEXT ROW



Acid rain spots on paint, repairing

Acid rain spots are most visible under fluorescent light and look like water spots.

In most cases, you can remove these spots by the following procedures and thus avoid re-painting.

Do **NOT** confuse the effects of acid rain damage with industrial fallout. Industrial fallout consists of small airborne metallic particles that settle onto the paint and eventually eat their way into the finish. Rubbing your hand across the clean surface will reveal a gritty texture.

Inspect each new vehicle for acid rain spots as soon as it arrives at the dealership. Document your findings at that time in accordance with dealer instructions for Transportation Damage Claims. If you see acid rain spots, get prior approval from your DSM to do the reconditioning outlined.

If acid rain spot removal is new to you, we recommend that you contact a good body shop or reconditioning center.

WARNING

Before using any chemicals or cleaning compounds, carefully read all of the cautions and medical information on the container. Always follow all of the manufacturer's recommendations.

Most makers of professional automotive reconditioning products recommend the following six steps **IN SEQUENCE** to repair acid rain paint spots:

STEP 1: Inspection

- wash vehicle with mild soap and water, then dry completely

CAUTION

Do **NOT** wash or dry vehicle in direct sunlight. Ordinary water spots could form and confuse the inspection.

- inspect the following surfaces under a fluorescent light
 - hood, roof, rear deck, tops of fenders, painted surfaces of bumpers and doors from the belt line up

STEP 2: Neutralization

The continuing effect of the acid must be stopped by neutralizing.

- mix a solution of baking soda and water (4 tablespoons per gallon) and stir until completely dissolved
- apply solution to all affected areas and let stand for a few minutes before rinsing off with clear water

Commercial neutralizing products such as "Blue Max" by Car Brite[®] or equivalent work well.

STEP 3: Buffing

You can buff by hand or with a low speed orbital buffer or with a high speed buffer.

CAUTION

It is extremely important that power buffing be done by an experienced person. If done incorrectly, power buffing can quickly and easily damage the paint finish.

Use clean buffing pads at ALL times.

- mask off any trim or glass close to affected areas
- buff small areas at a time, no larger than two feet by two feet
- buff using a light polishing compound such as "Finesse-It" by 3M®, "Acid Rain Creme" by Car Brite®, or equivalent. Follow the manufacturers instructions to achieve the best possible results.

CAUTION

Do **NOT** use general purpose rubbing or buffing compounds. They are too coarse for this application and could damage the finish.

- buff surface until acid spots are removed

Note

Inspect the work surface frequently during buffing to ensure that only a minimum of original finish is removed. If the color of the vehicle shows up on the buffing pad, you have cut through the clearcoat and you have to repaint the affected area.

STEP 4: Cleaning

- wash vehicle thoroughly with a solution of mild soap and water
- rinse vehicle with clear water then dry completely
- inspect vehicle to see if another application is necessary.

STEP 5: Polishing

Polish the finish to restore the original luster either by hand or with a power buffer. Always follow polishing with an application of wax.

CAUTION

It is extremely important that power buffing be performed by an experienced person. If done incorrectly, power buffing can quickly and easily damage the paint finish.

Use clean buffing pads at ALL times.

- buff with polishes such as "Liquid Polish" by 3M®, "Crystal Shine" by Car Brite®, or equivalent. Follow the manufacturers instructions to get the best possible results.

STEP 6: Waxing

Waxing (unlike polishing) will seal the finish and prevent acid rain from leaving spots.

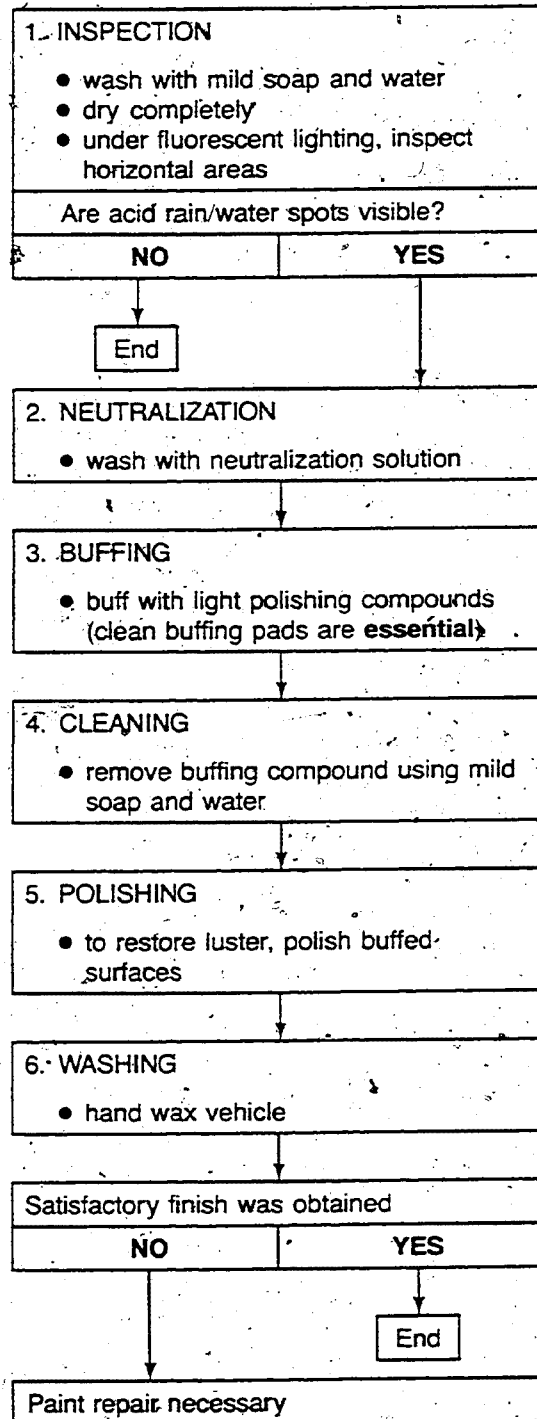
- **HAND WAX** using clean cheesecloth and a good quality non-abrasive wax.

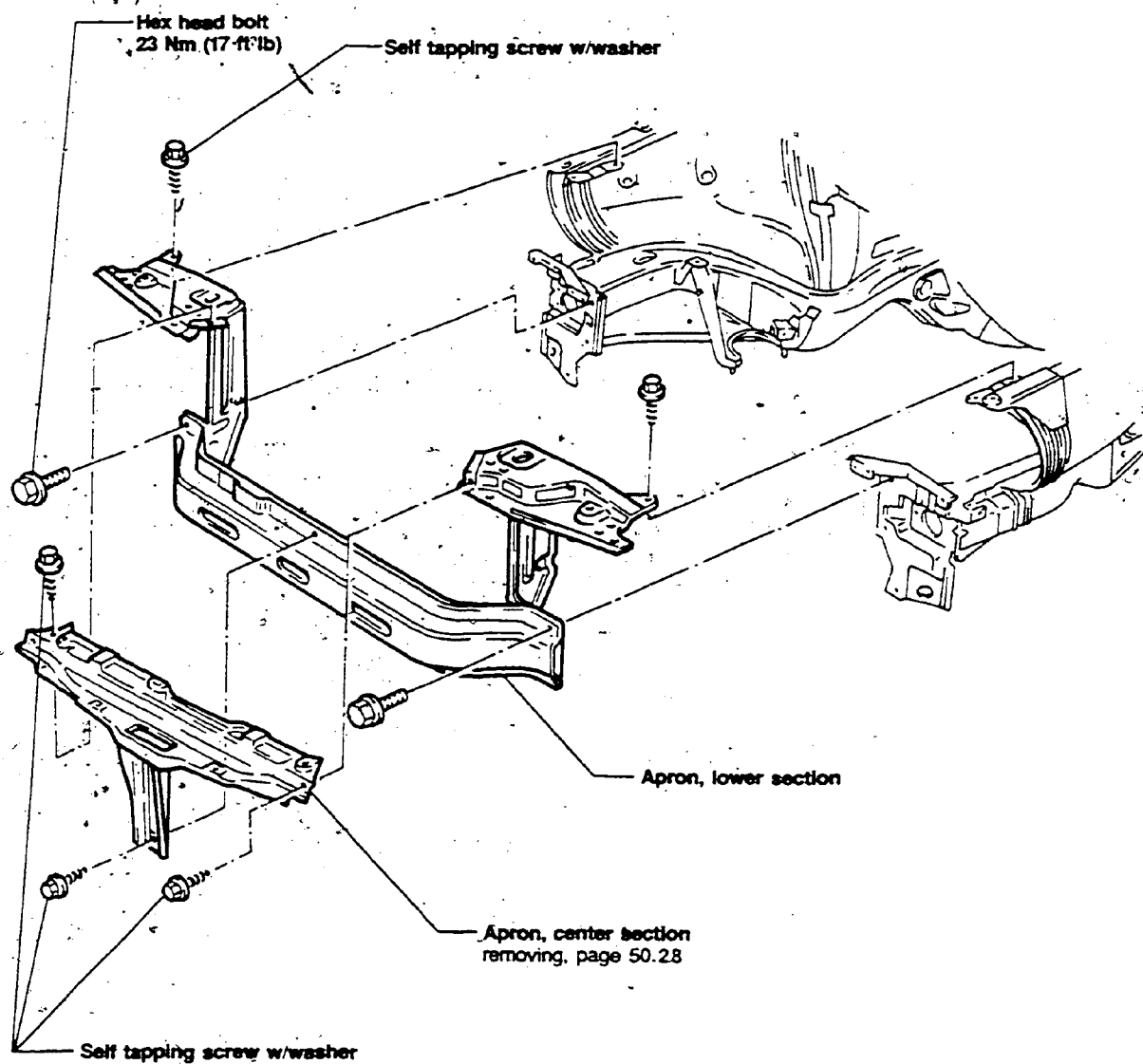
If, in extreme cases, you can still see acid rain spots after the previous six steps, or if the clearcoat has been rubbed through, it will be necessary to re-paint the affected areas.

Get prior DSM authorization for ALL acid rain related reconditioning, as well as repainting.

Acid Rain Spot Removal Flowchart

(See detailed instructions on previous pages)

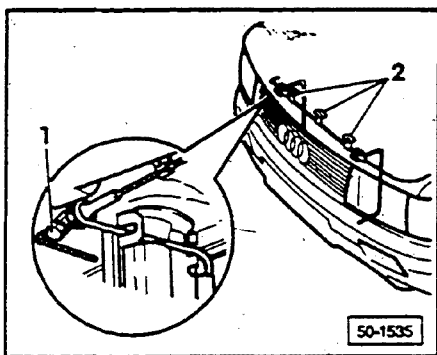




Note

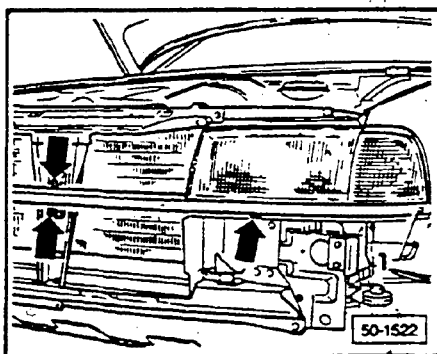
Center and lower apron panels may be replaced individually.

50-1534



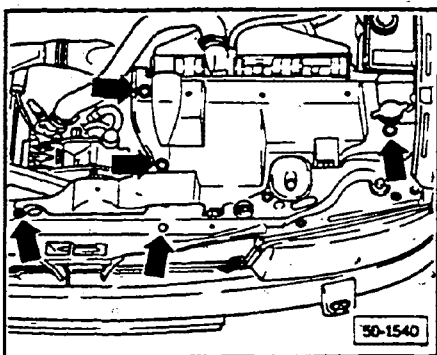
▶ Hood cable, detaching

- loosen cable holder 1 through access hole
- unclip cable from bracket 2
- turn bracket 2 approximately 90°, and unhook from apron

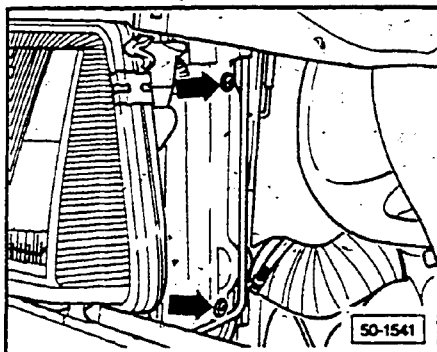


▶ Front apron, removing

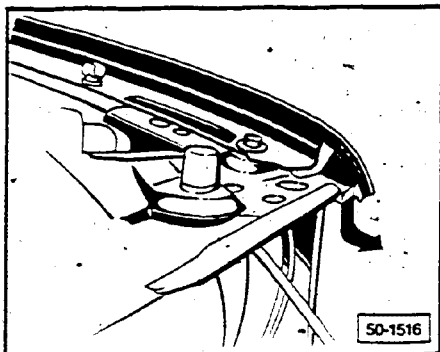
- remove bumper (see Repair Group 63)
- remove radiator grille (see Repair Group 66)
- unhook hood cable
- unscrew trim (**arrows**) and pull out from grommets



- unscrew cooling air duct, radiator bracket (**arrows**)
- unscrew oil cooler bracket
- disconnect switch for engine compartment light
- open tie-wrap on apron panel 



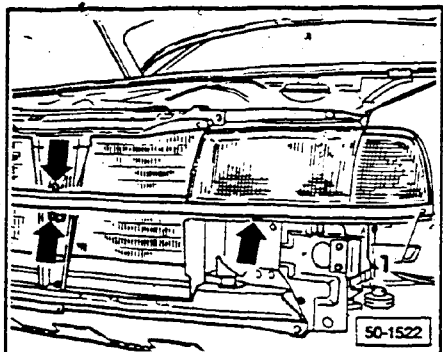
- unscrew air guide for intake air (**arrows**)



- pull apron out and downwards **under** fender (arrow)

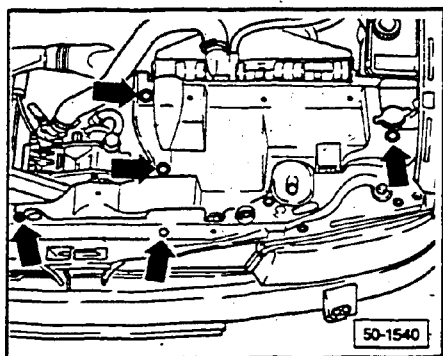
Front apron, installing

Reinstall all components in reverse order of removal.



Apron center section, removing

- remove bumper (see Repair Group 63)
- remove radiator grille (see Repair Group 66)
- unhook hood cable
- unscrew trim (arrows) and pull out from grommets



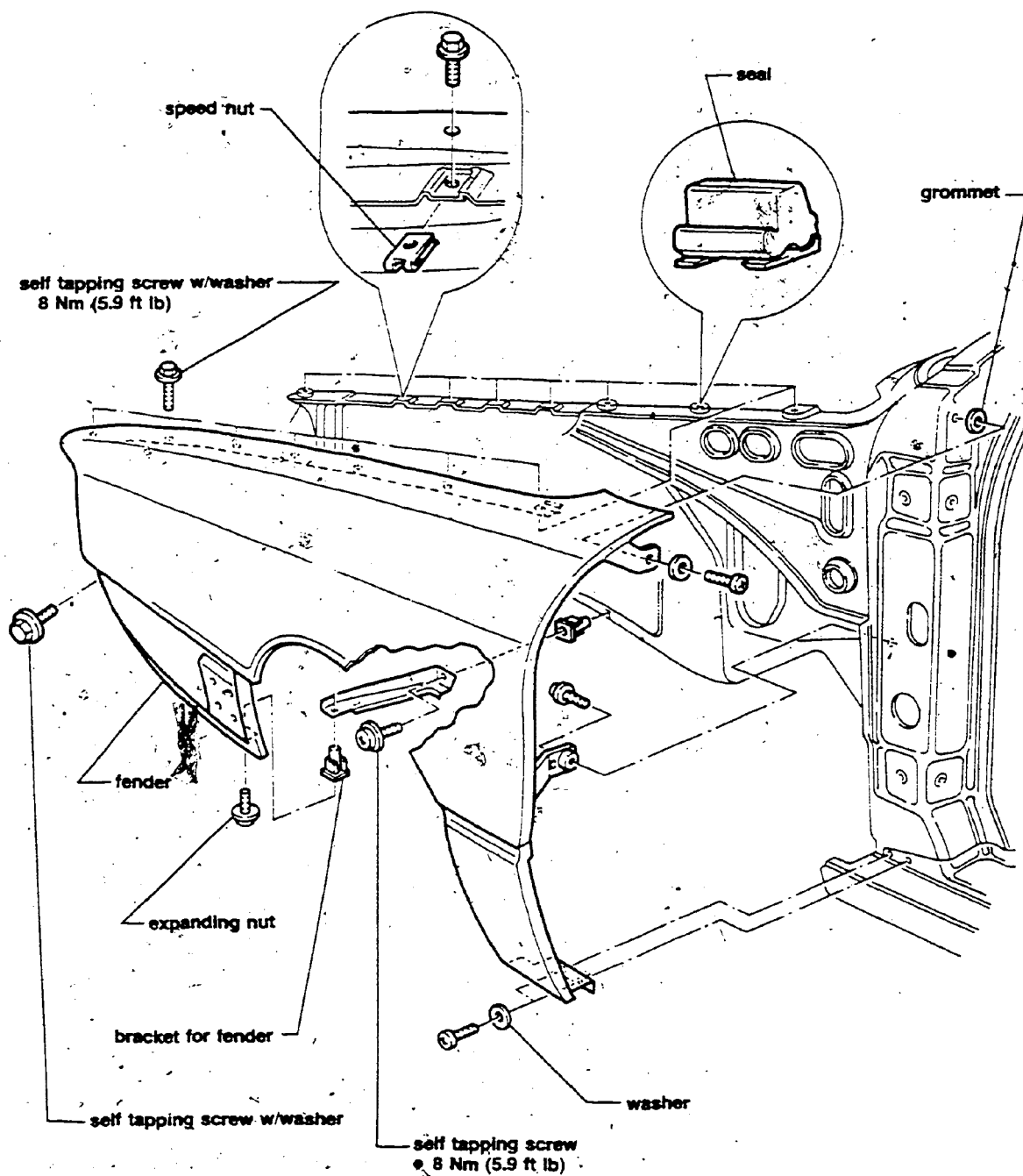
- unscrew cooling air duct, radiator bracket (arrows)
- unscrew and remove apron center section

Apron center section, installing

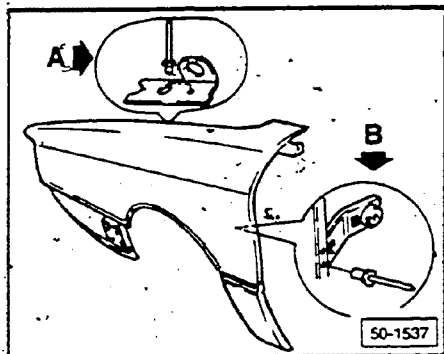
Reinstall all components in reverse order of removal.

THIS FRAME INTENTIONALLY LEFT

BLANK



50-1536



Front fender, removing

- remove front bumper (see Repair Group 63)
- remove wheel house liner (see Repair Group 66)

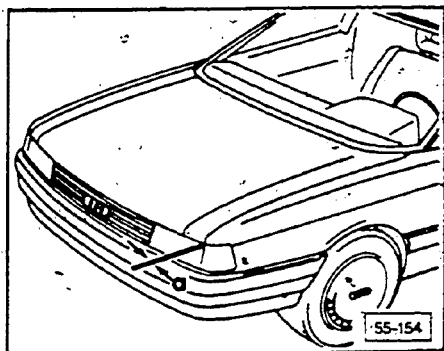
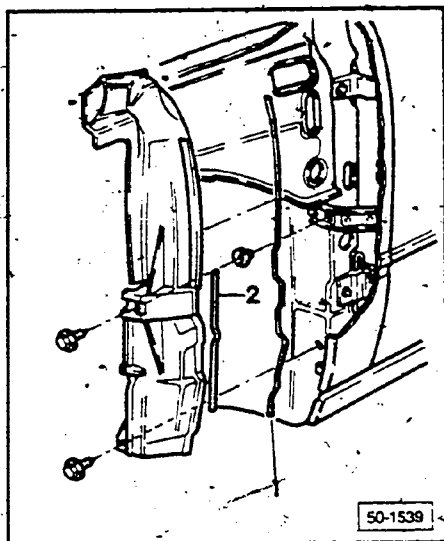
Front fender, installing

Reinstall all components in reverse order of removal, noting the following:

- install rivet for hood support bracket (arrow A)
- install rivet for door retainer (arrow B)
- install strips of sealing cord, 1, 2 and bolt filler plate A to retainer
 - 1 = 480mm (approximately 19 in.) long, 7.0mm (9/32 in.) diameter
 - 2 = 250mm (approximately 10 in.) long, 7.0mm (9/32 in.) diameter

Note

Use sealing cord Part No AKD 497 010 04 or equivalent and mold to 7.0mm (9/32 in) diameter.



Adjusting front fender, hood gap

- loosen all fender bolts
- with the fender bolts loosened, adjust gap by moving fender
 - a = 4.5 + 1.0mm (11/64 = 3/64 in.)

CAUTION

Part numbers are for reference only. Always check with your Parts Department for latest information.