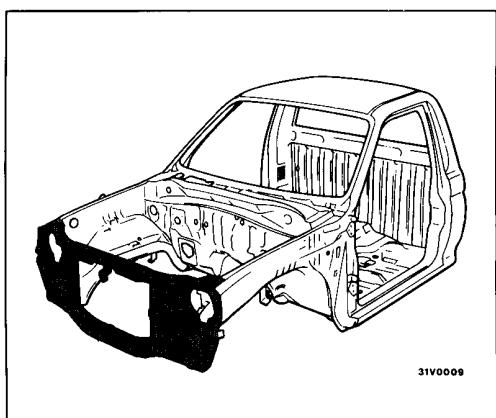


# 3 WELDED PANEL REPLACEMENT

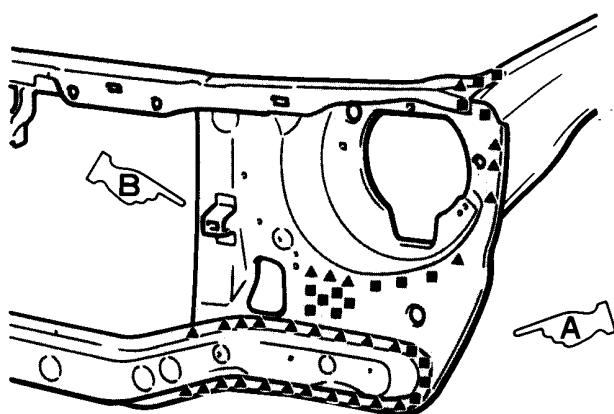
HEADLAMP SUPPORT .....	3-2
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## HEADLAMP SUPPORT

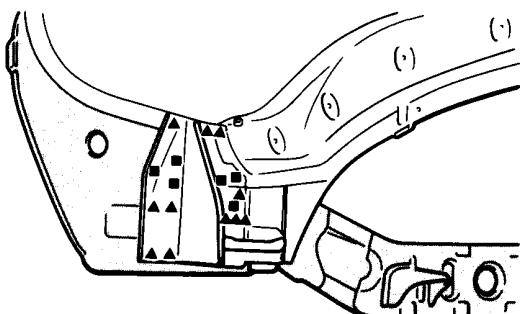


Symbol	Operation description
• • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++	MIG spot welding
=====	MIG arc welding (continuous)
=====	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

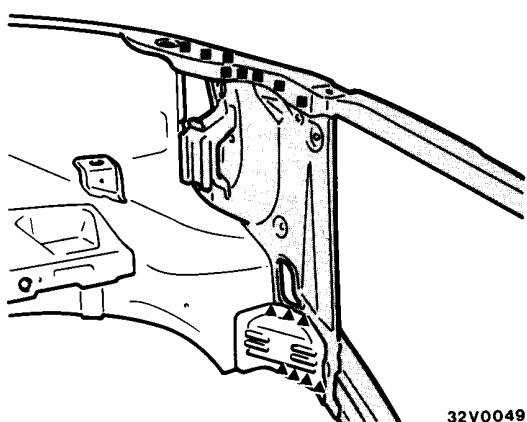
## REPAIR WELDS



32V0047



A

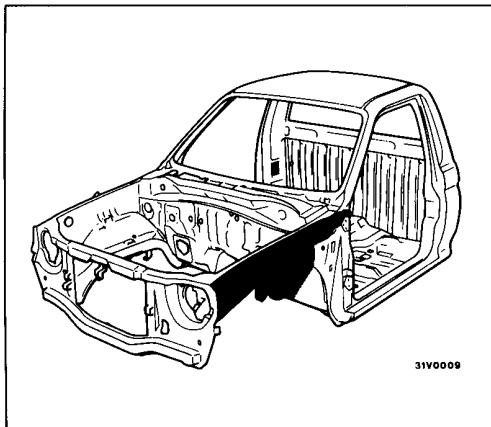


B

32V0048

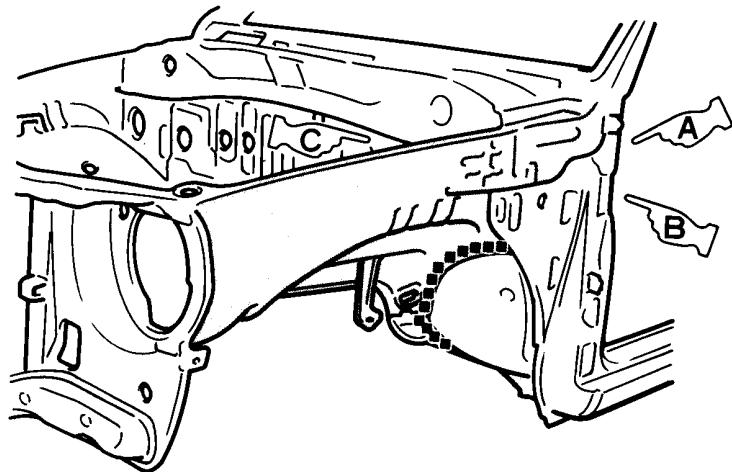
32V0049

## FENDER SHIELD

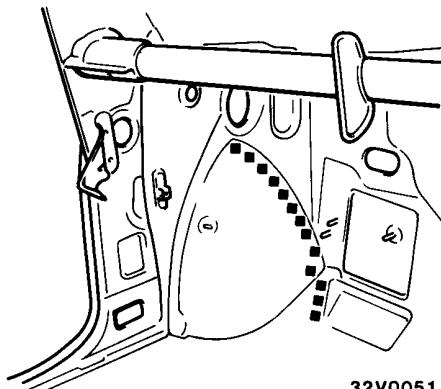


Symbol	Operation description
• • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++	MIG spot welding
====	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

### REPAIR WELDS

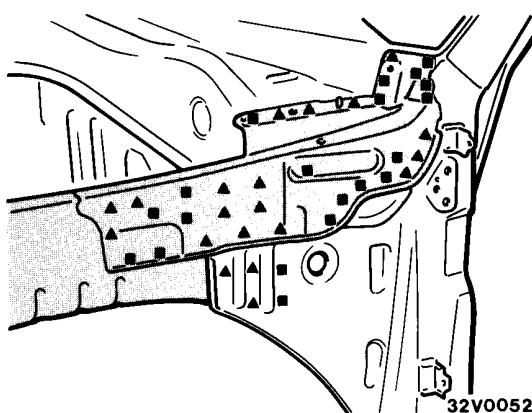


32V0050

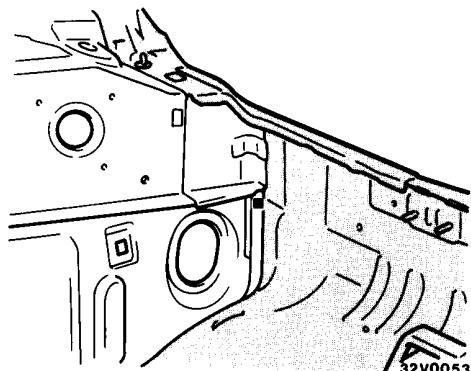


32V0051

A



B

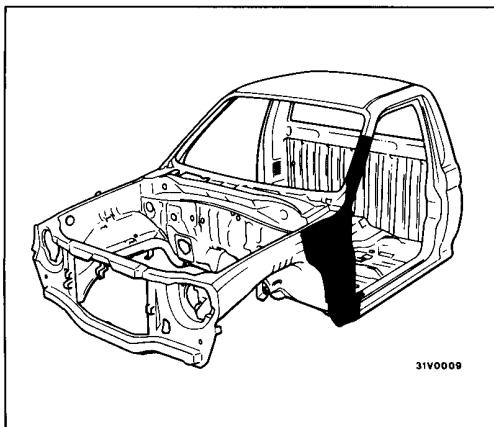


C

#### NOTE

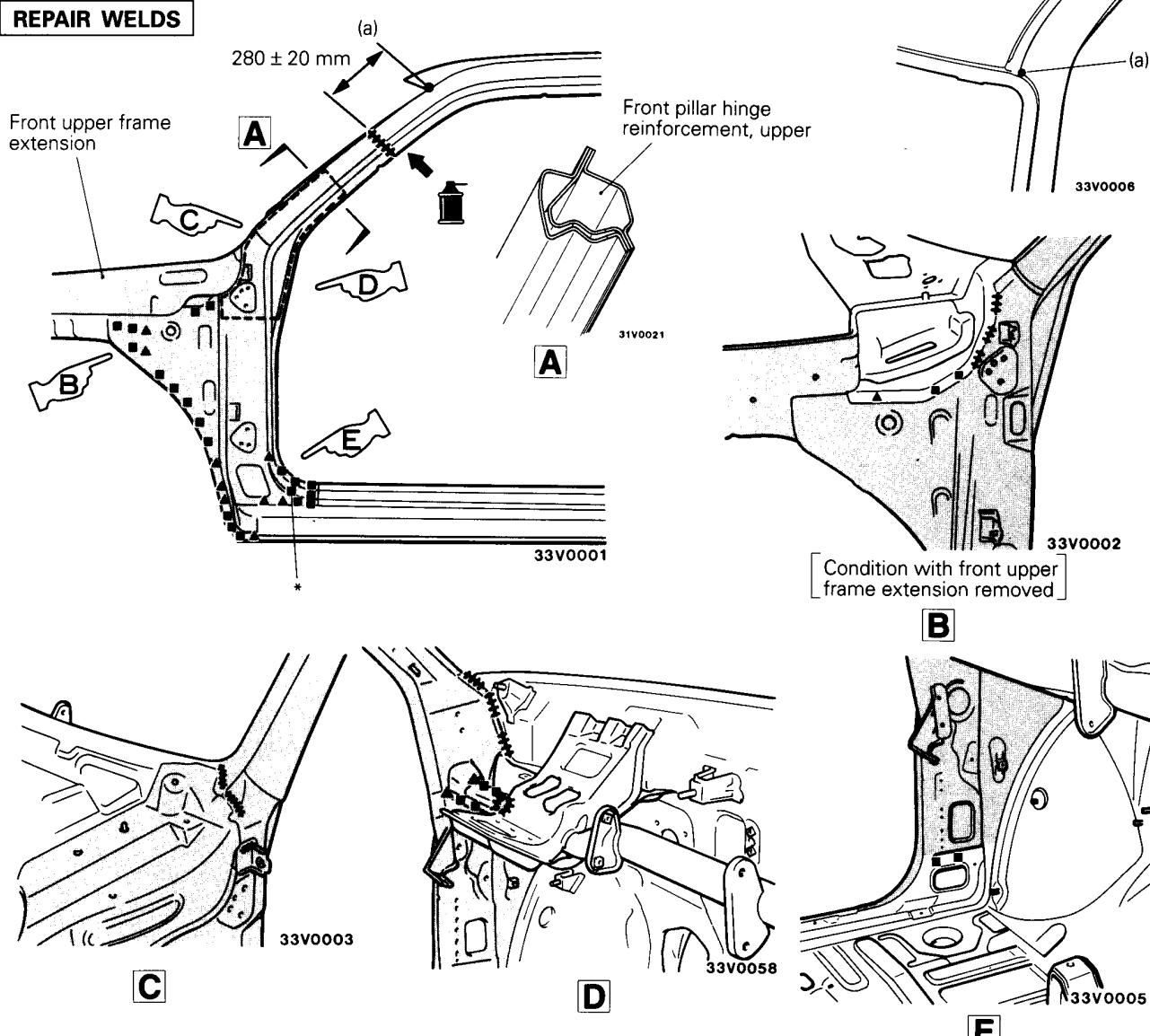
Refer to P. 3 - 2 for the headlamp support weld points.

## FRONT PILLAR



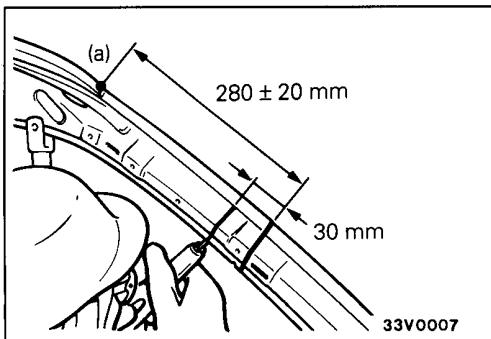
Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++	MIG spot welding
=====	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS



## NOTE

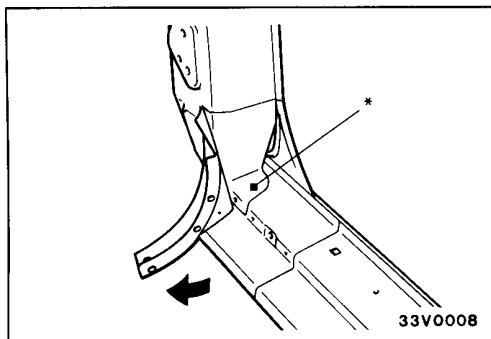
Refer to P.3 - 3 for the welds points for the front upper frame extension.



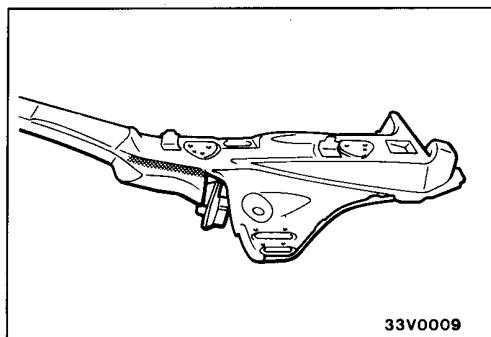
## NOTES WITH REGARD TO REPAIR WORK

### REMOVAL

- (1) Cut the front pillar  $280 \pm 20$  mm below reference point (A).
- (2) Cut only the front pillar inner panel 30 mm above the cut section of the front pillar.

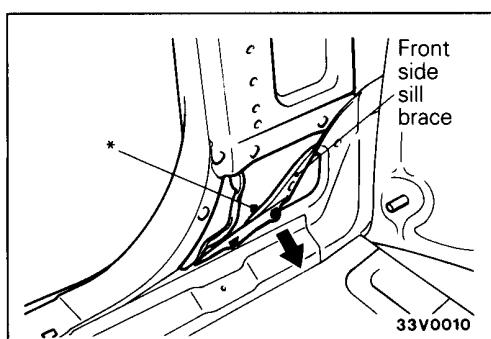


- (3) Cut the front pillar outer panel in the place indicated illustration. After this, bend the outside of the panel and then cut the weld point (marked with \*) between the front pillar hinge reinforcement lower and the front floor side sill outer panel.

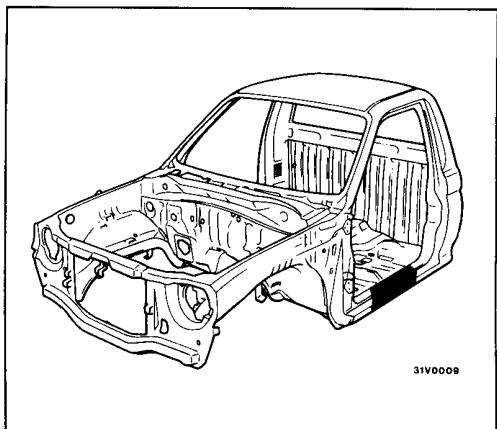


### INSTALLATION

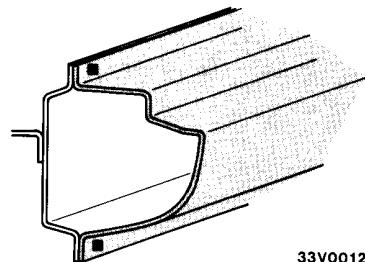
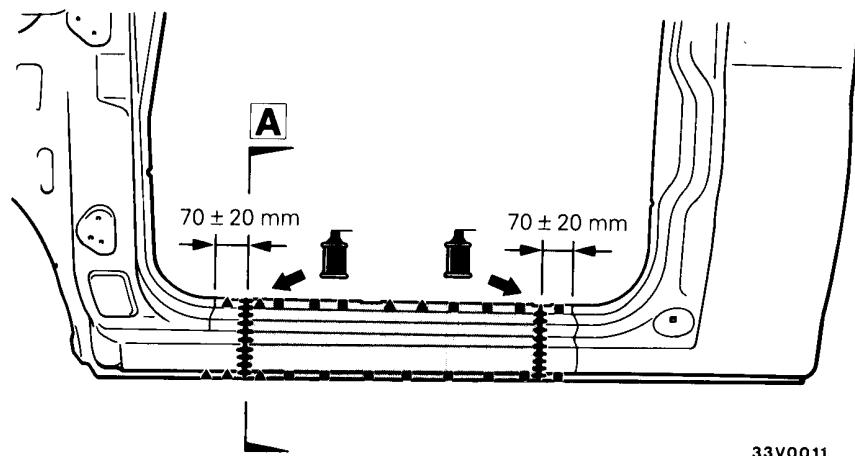
- (1) Apply body sealant to the new front pillar assembly in the section shown in the illustration.



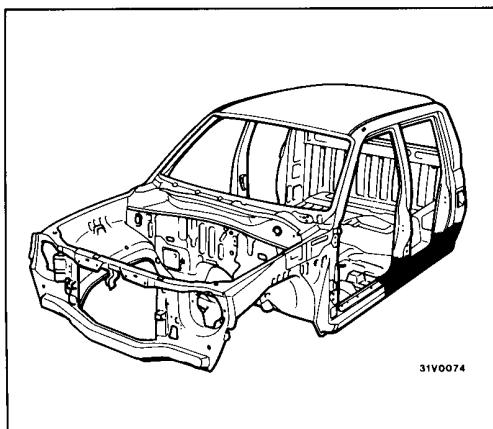
- (2) When welding the weld point marked with \*, bend the front side sill brace into the passenger compartment.

**SIDE SILL**

Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++	MIG spot welding
=====	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

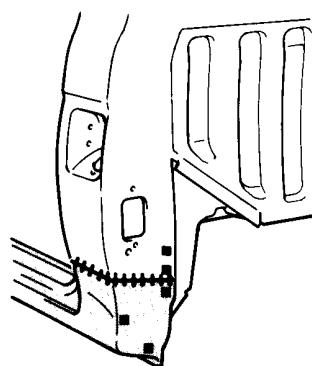
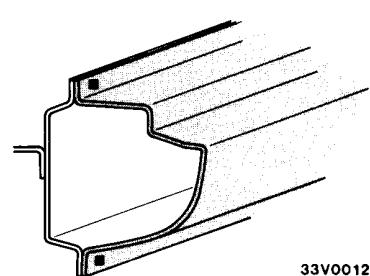
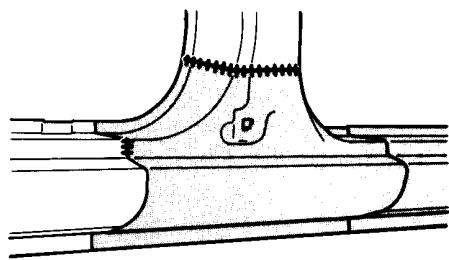
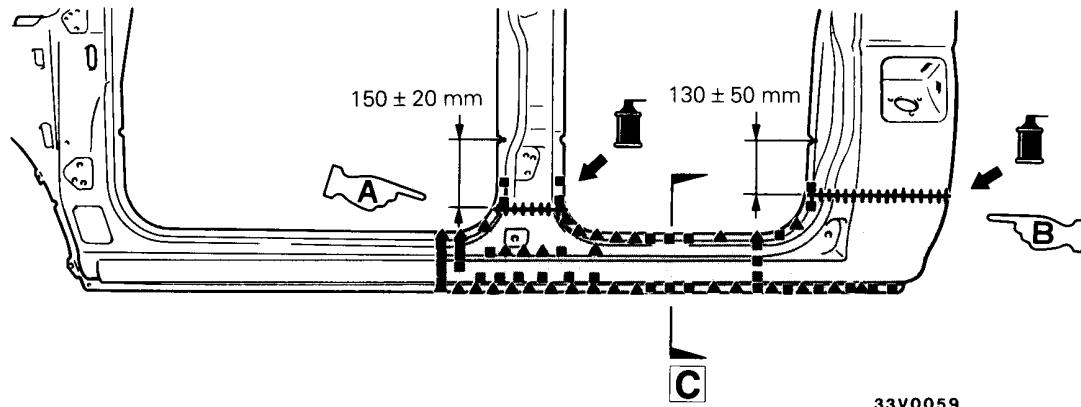
**REPAIR WELDS****A**

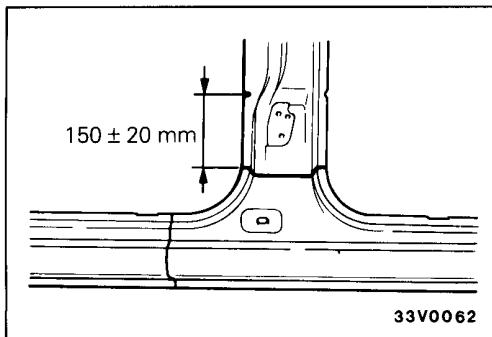
## SIDE SILL REAR &lt;Double cab&gt;



Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++ +	MIG spot welding
	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS





## NOTES WITH REGARD TO REPAIR WORK

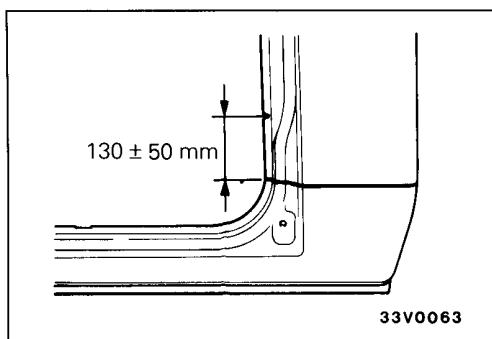
### REMOVAL

- (1) Allowing for an overlap, cut the side panel, outer, rear  $150 \pm 20$  mm below the notch which is located below the center pillar.

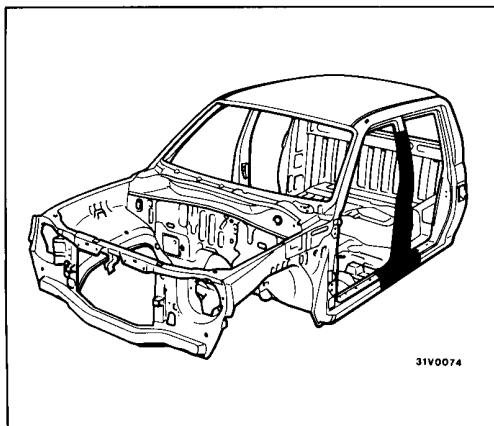
#### Caution

**Take care not to damage the center pillar hinge reinforcement, lower when cutting the side panel, outer, rear. If it is damaged, make repair welding.**

- (2) Allowing for an overlap, cut the side panel, outer, rear  $130 \pm 50$  mm below the notch which is located below the rear pillar.

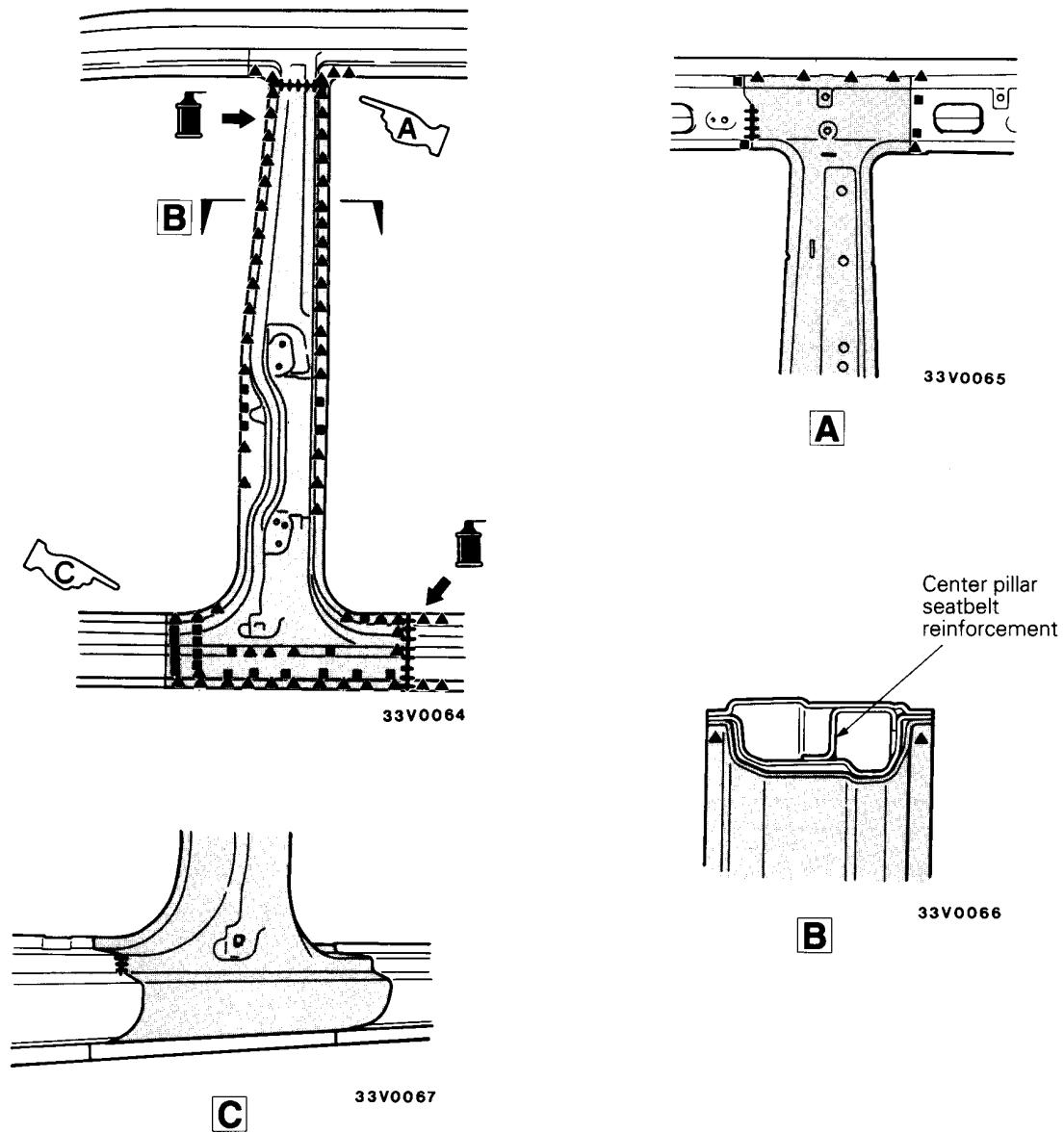


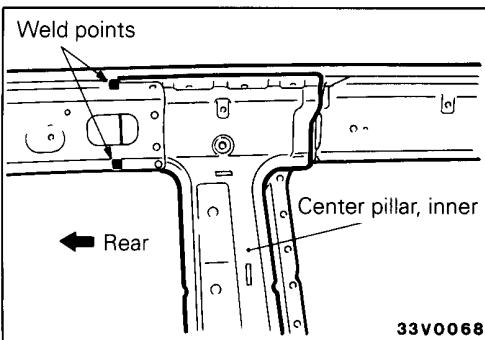
## CENTER PILLAR &lt;Double cab&gt;



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++ +	MIG spot welding
	MIG arc welding (continuous)
○○○○○○○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

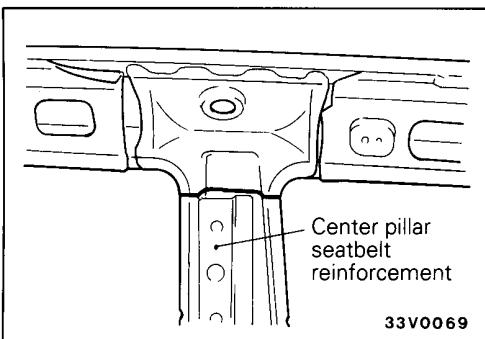
## REPAIR WELDS



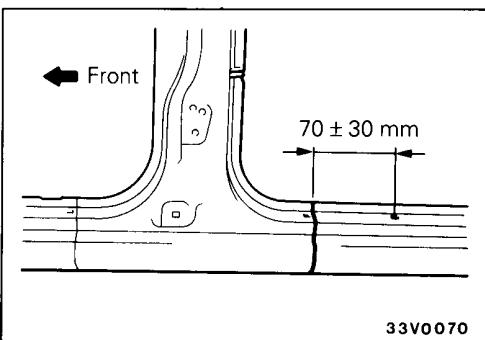


### NOTES WITH REGARD TO REPAIR WORK REMOVAL

(1) Remove the weld points shown in the illustration and take out the center pillar, inner moving it backward.



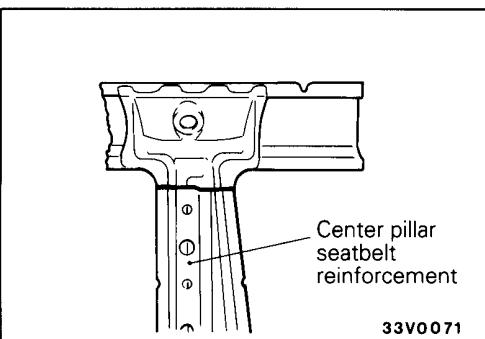
(2) Cut the side panel, outer, rear and the center pillar outer reinforcement together, aligning them with the upper end of the center pillar seatbelt reinforcement.



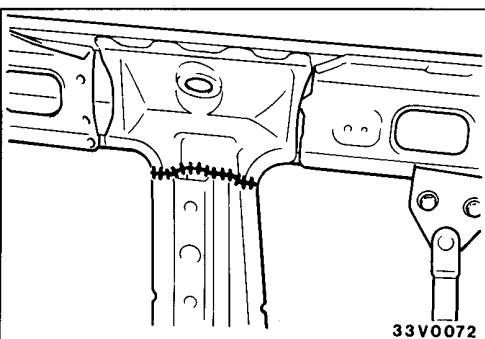
(3) Cut the side sill  $70 \pm 30$  mm front from the scuff plate installation hole.

### INSTALLATION

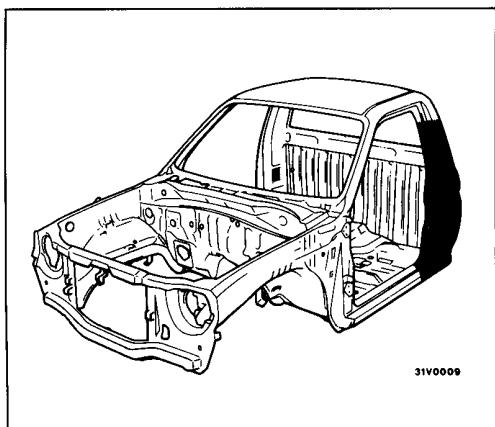
(1) Aligning the new center pillar with the upper end of the center pillar seatbelt reinforcement, cut the side panel, outer, rear and the center pillar outer reinforcement together.



(2) Weld the center pillar outer reinforcement surely from the passenger compartment side, then weld the side panel, outer, rear.

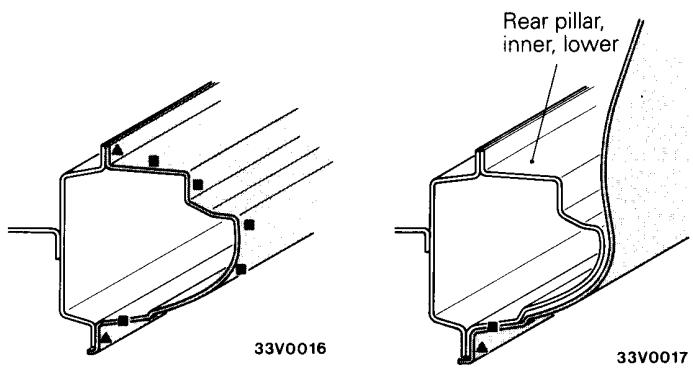
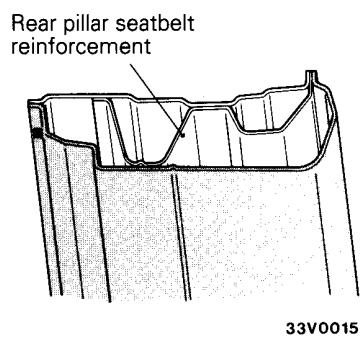
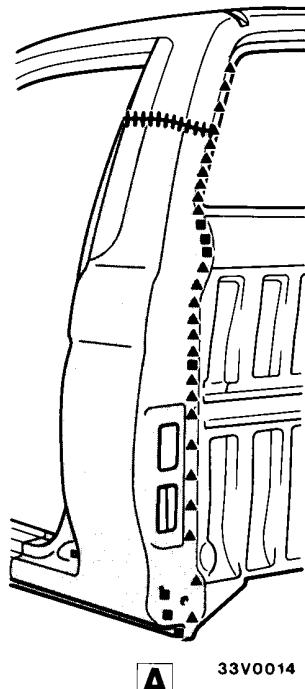
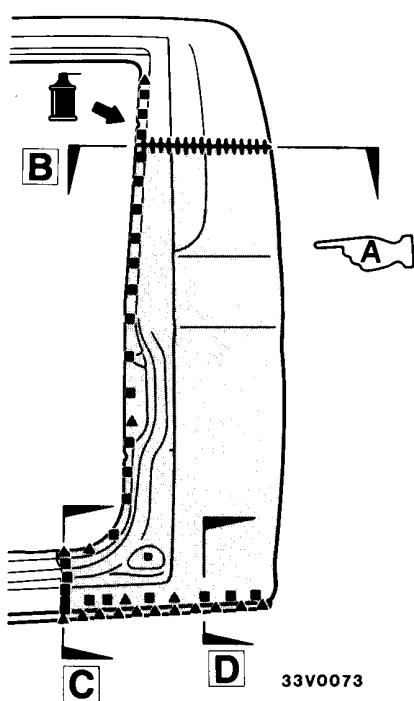


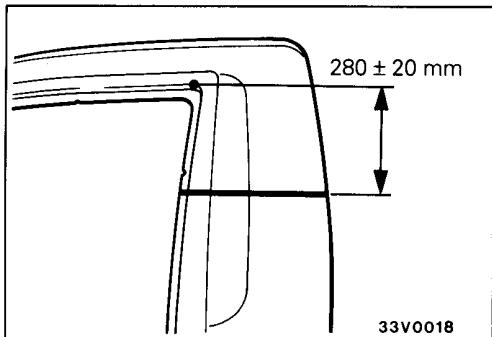
## REAR PILLAR &lt;Single cab&gt;



Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++	MIG spot welding
=====	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS





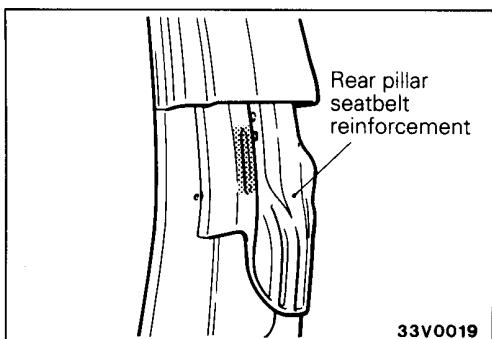
## NOTES WITH REGARD TO REPAIR WORK

### REMOVAL

Allowing for an overlap, cut the rear pillar, outer,  $280 \pm 20$  mm below the rear pillar outer corner.

### Caution

**Take care not to damage the rear pillar seatbelt reinforcement when cutting the rear pillar, outer. If it is damaged, make repair welding.**

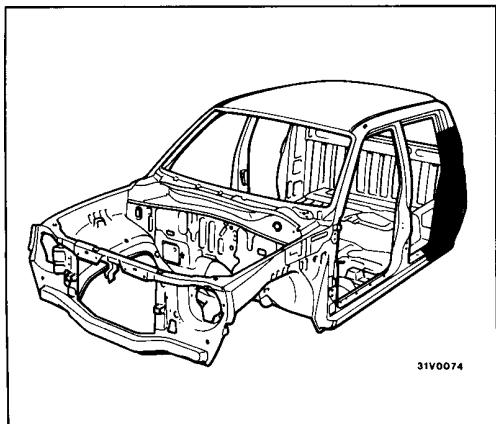


### INSTALLATION

Apply adhesive to the places shown in the illustration.

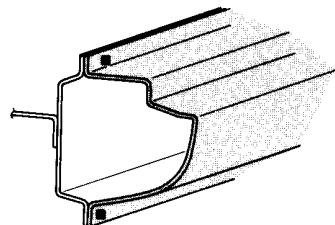
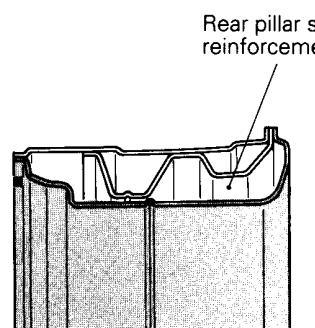
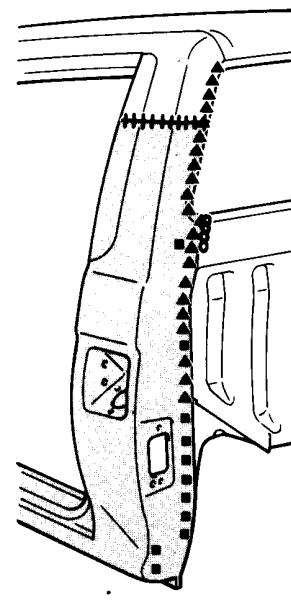
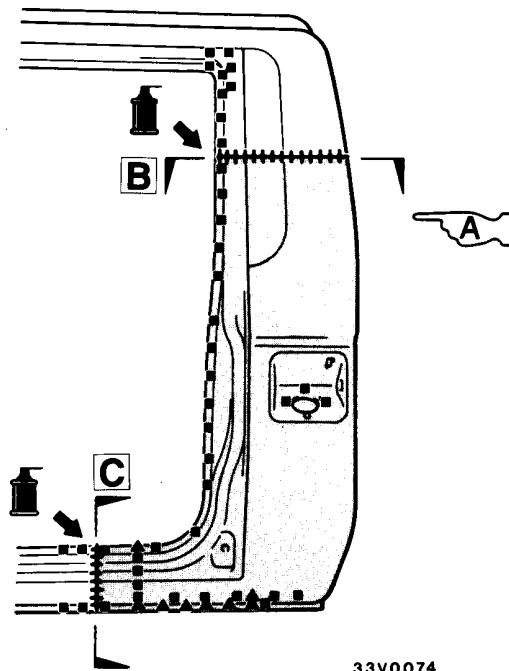
Adhesive	Type
	Chloroprene-base drying sealant

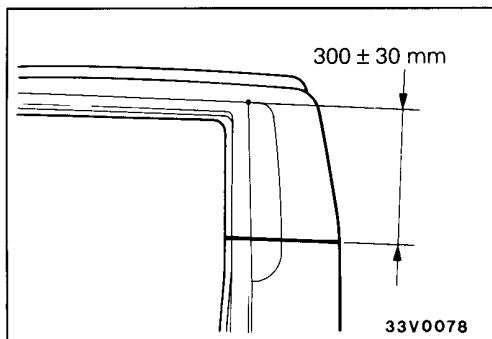
## REAR PILLAR &lt;Double cab&gt;



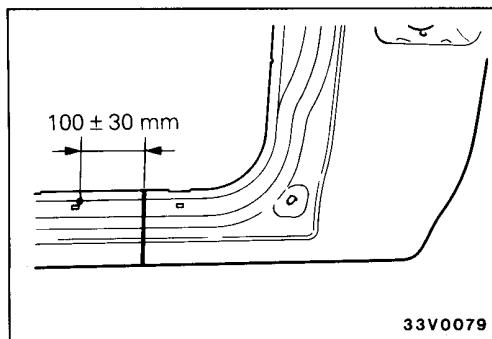
Symbol	Operation description
● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++	MIG spot welding
	MIG arc welding (continuous)
ooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS

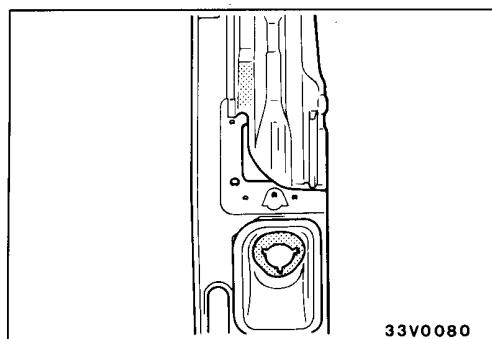


**NOTES WITH REGARD TO REPAIR WORK****REMOVAL**

(1) Allowing for an overlap, cut the side panel, outer, rear  $300 \pm 30$  mm below the rear pillar corner.



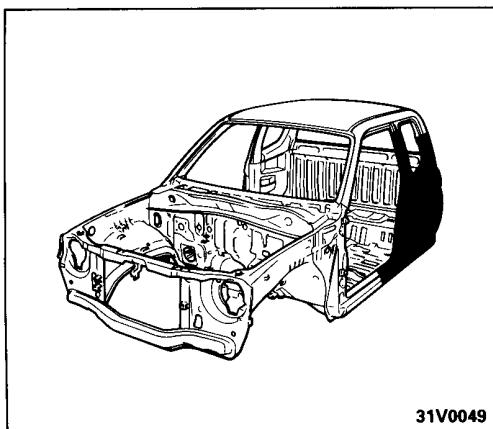
(2) Allowing for an overlap, cut the side panel, outer, rear  $100 \pm 30$  mm below the scuff plate installation hole.

**INSTALLATION**

Apply adhesive to the places shown in the illustration.

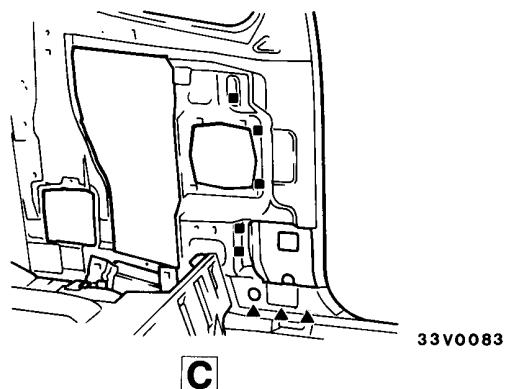
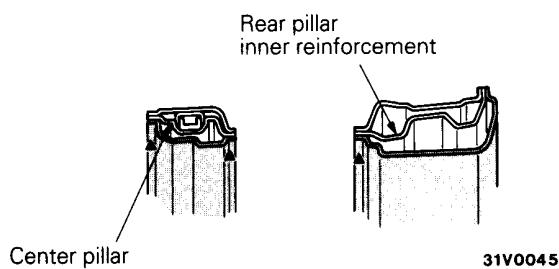
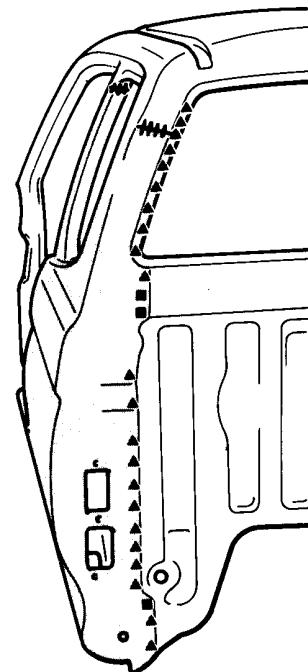
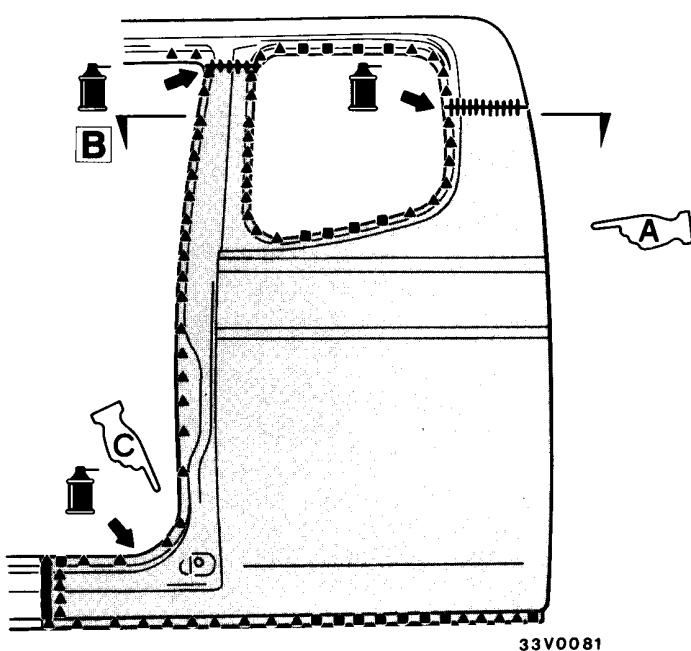
Adhesive	Type
	Chloroprene-base drying sealant

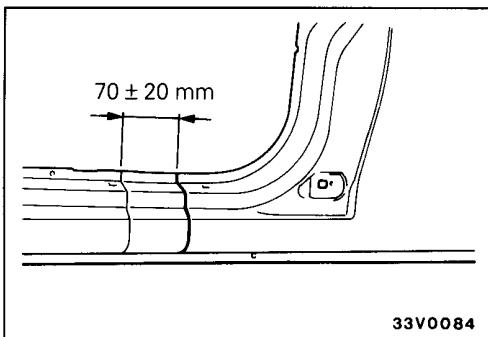
## QUARTER PANEL, OUTER &lt;Club cab&gt;



Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++ +	MIG spot welding
	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

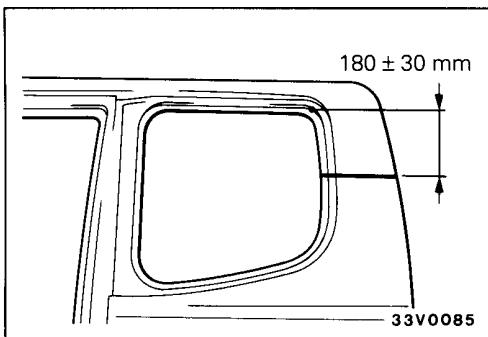
## REPAIR WELDS



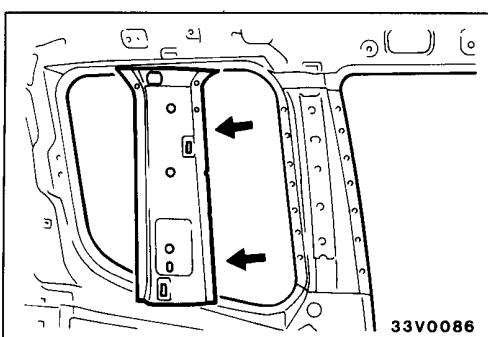


## NOTES WITH REGARD TO REPAIR WORK REMOVAL

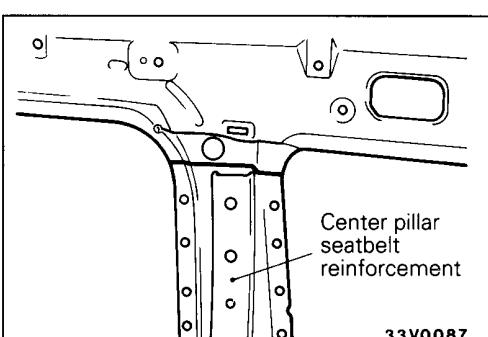
(1) Cut the quarter panel, outer and the side sill extension, outer together  $70 \pm 20$  mm back from the place where the quarter panel, outer and the front floor side sill, outer are connected.



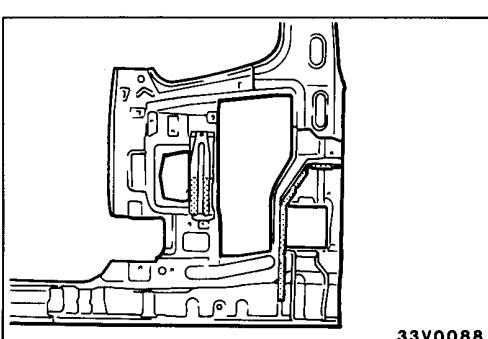
(2) Allowing for an overlap, cut the quarter panel, outer  $180 \pm 30$  mm below the rear pillar corner.



(3) Cut and take out the center pillar of the quarter panel, inner, upper at the section shown in the illustration.



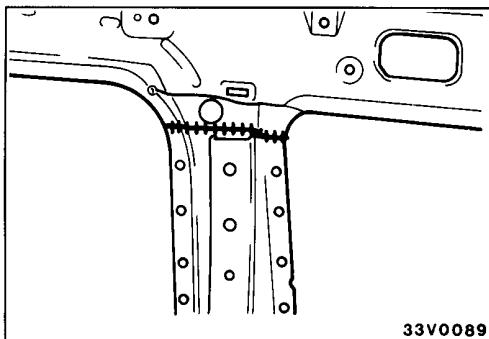
(4) Cut the quarter panel, outer and the center pillar outer reinforcement together, aligning them with the upper end of the center pillar seatbelt reinforcement.



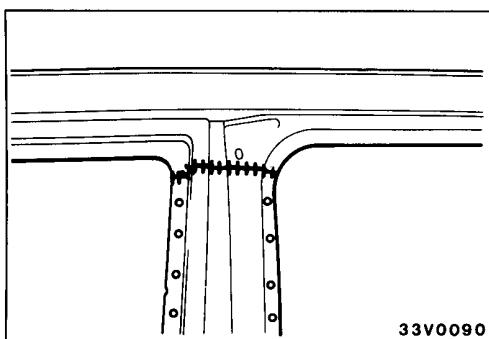
## INSTALLATION

(1) Apply adhesive to the places shown in the illustration.

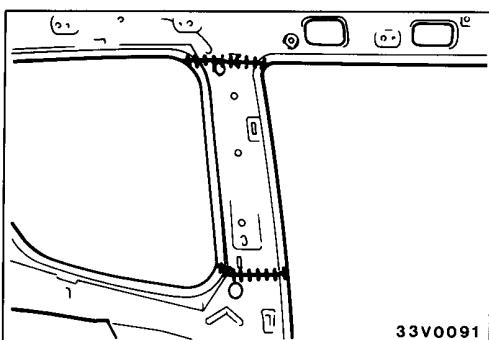
Adhesive	Type
	Chloroprene-base drying sealant



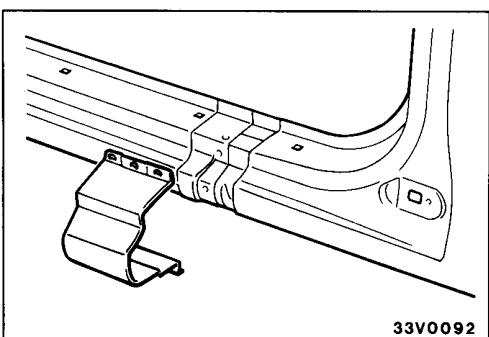
(2) Weld the center pillar outer reinforcement surely from the passenger's compartment.



(3) Weld the quarter panel, outer surely.

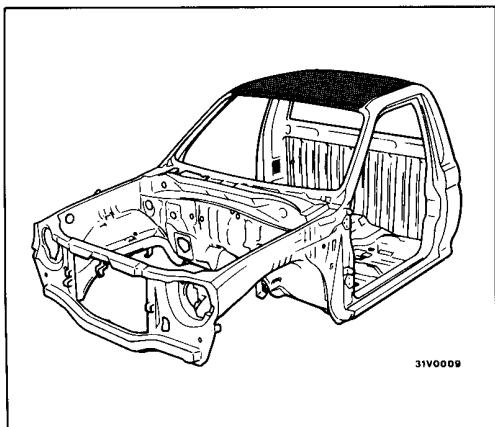


(4) Install the removed quarter panel, inner, upper.



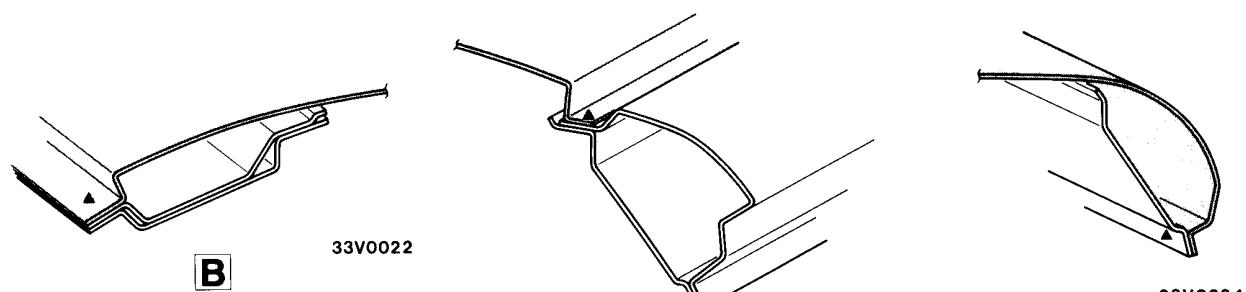
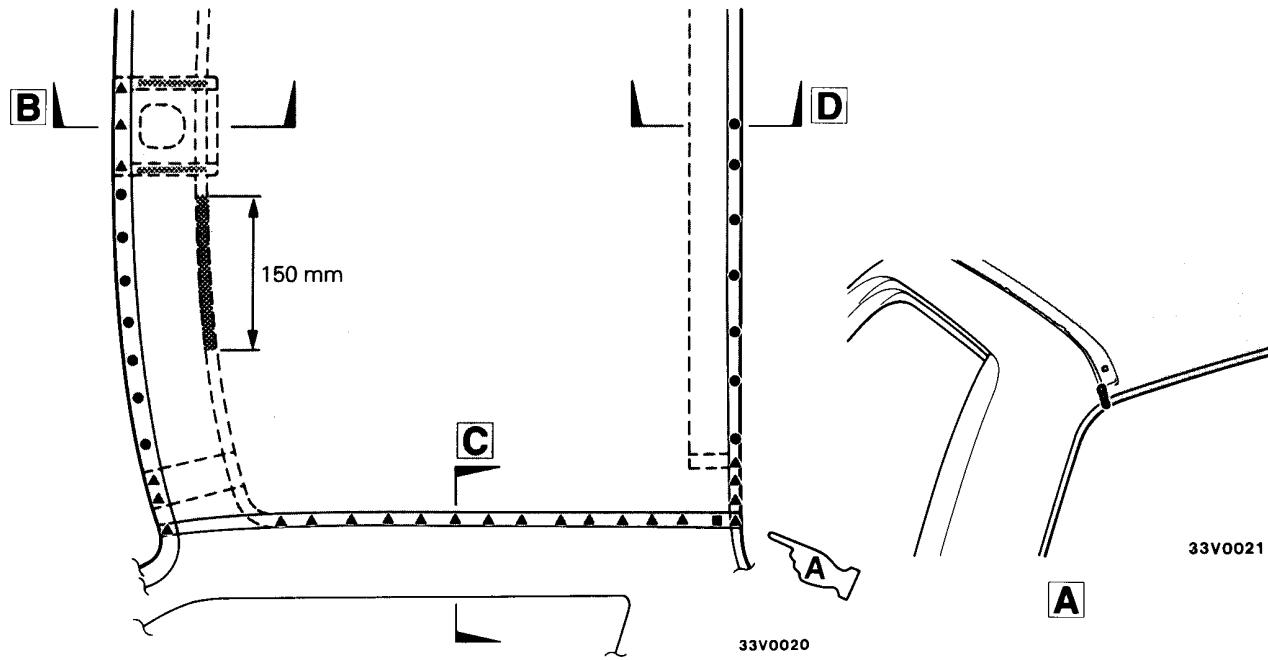
(5) Remove the part shown in the illustration of the new quarter panel, outer. Weld the front floor side sill, outer and the side sill extension, outer, then install the removed quarter panel.

## ROOF &lt;Single cab&gt;



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++ +	MIG spot welding
	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

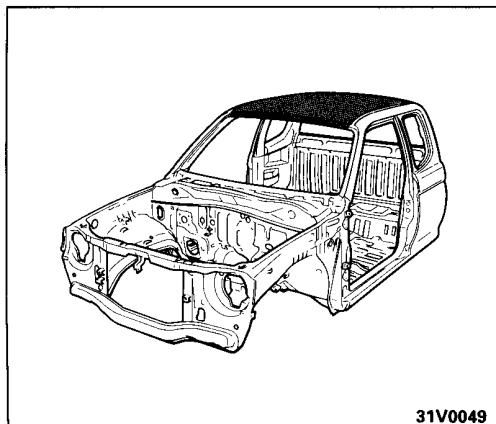
## REPAIR WELDS



: Adhesive

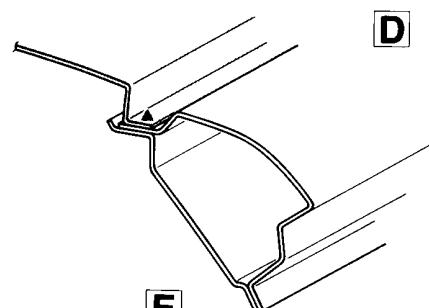
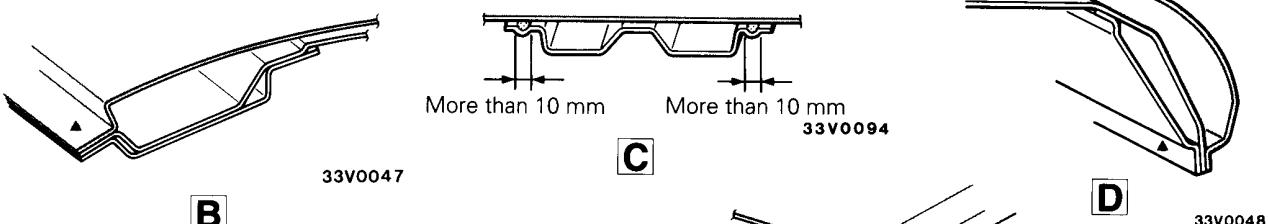
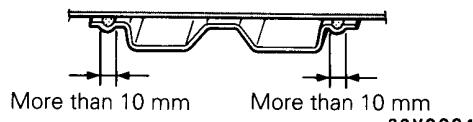
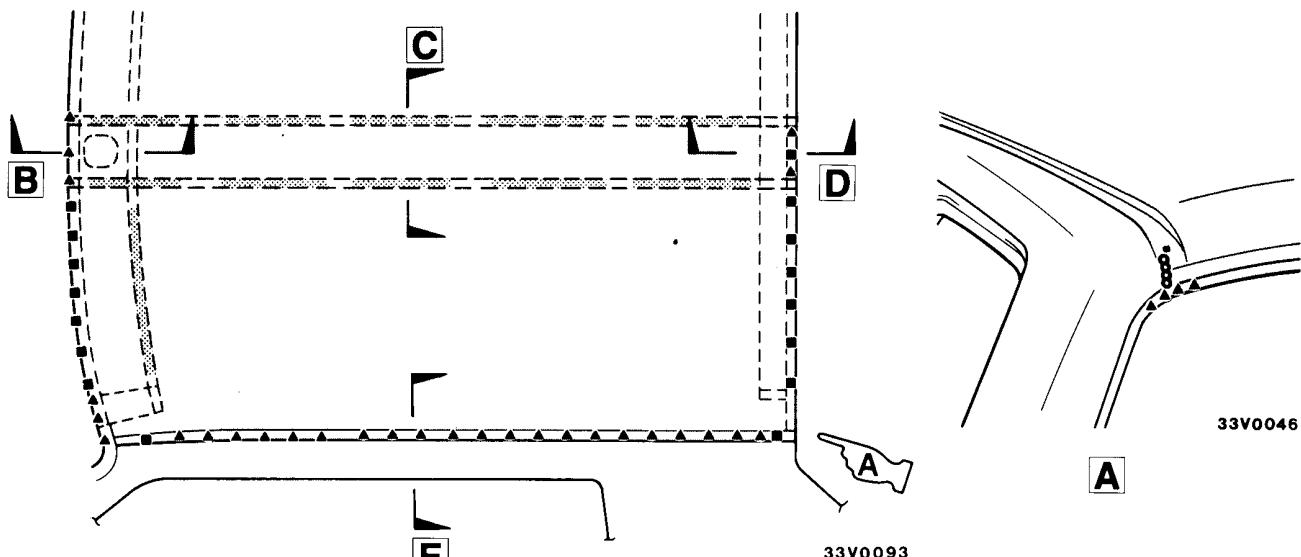
Adhesive	Type
	Chloroprene-base drying sealant

## ROOF &lt;Club cab&gt;



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++ +	MIG spot welding
====	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

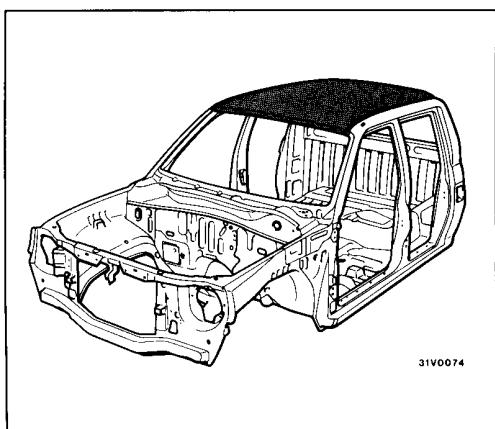
## REPAIR WELDS



: Adhesive

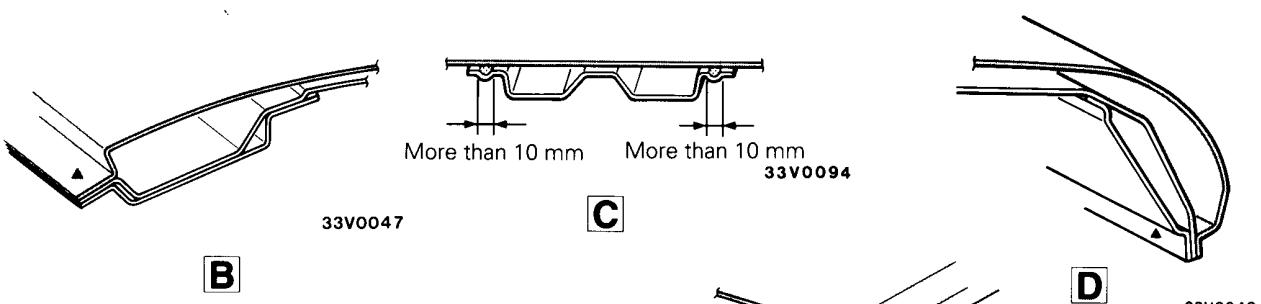
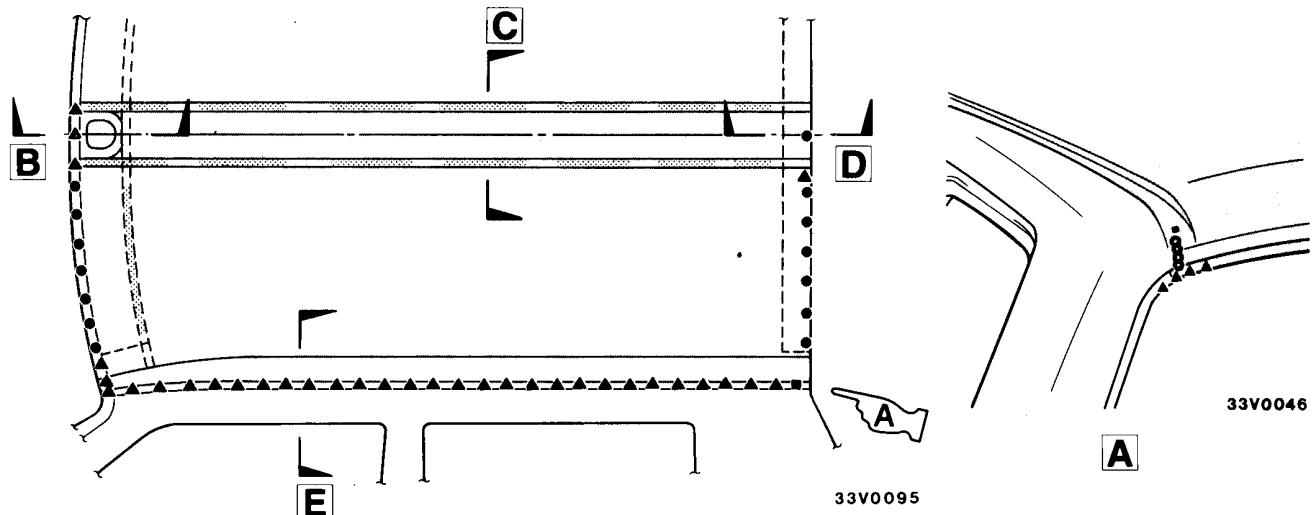
Adhesive	Type
	Chloroprene-base drying sealant

## ROOF &lt;Double cab&gt;



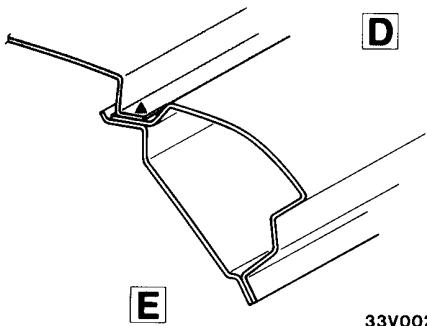
Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++ +	MIG spot welding
	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS

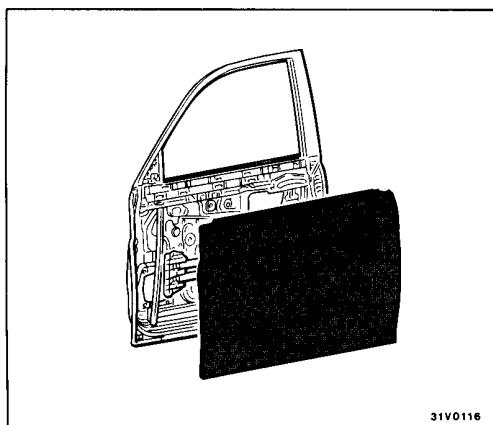


: Adhesive

Adhesive	Type
	Chloroprene-base drying sealant

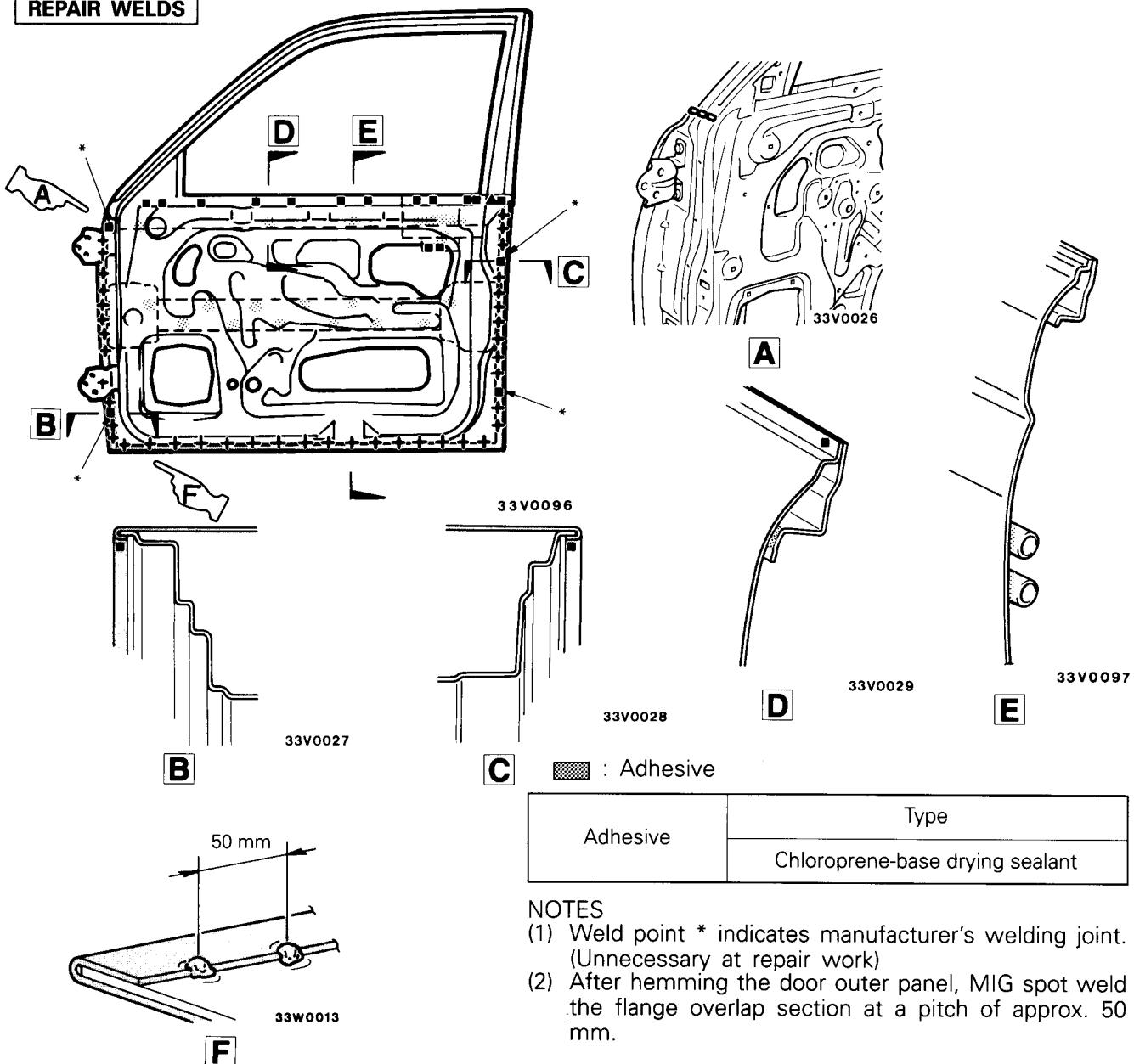


## FRONT DOOR OUTER PANEL



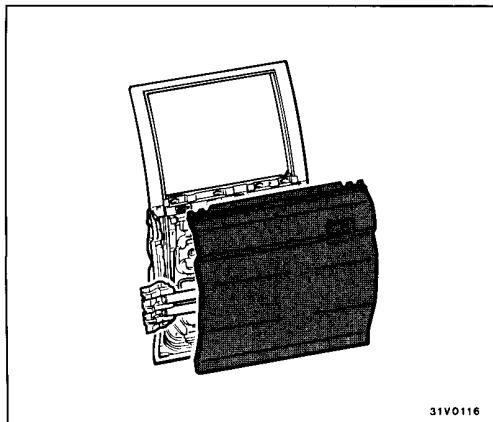
Symbol	Operation description
● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++	MIG spot welding
	MIG arc welding (continuous)
oooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS



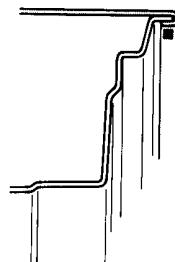
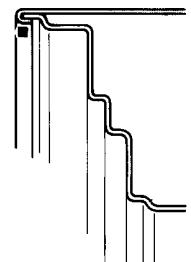
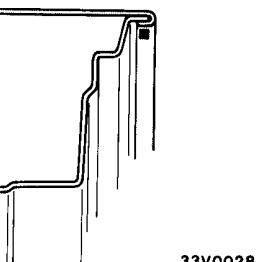
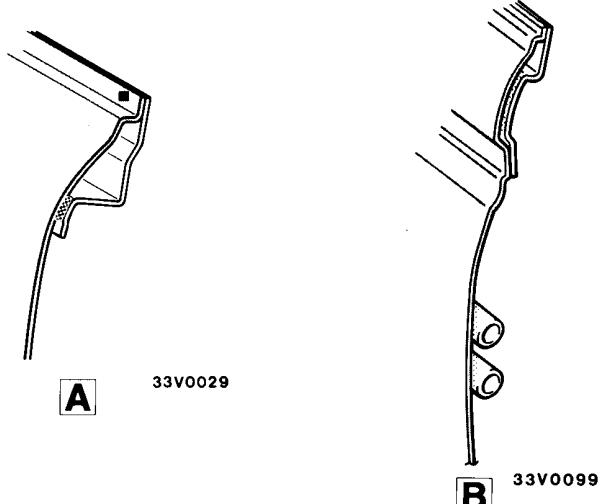
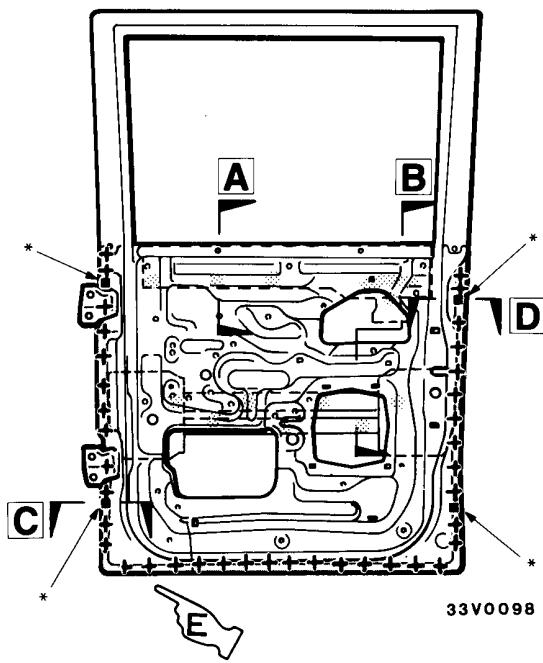
## 3-22 WELDED PANEL REPLACEMENT – Rear Door Outer Panel <Double cab>

### REAR DOOR OUTER PANEL <Double cab>



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++ +	MIG spot welding
	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

#### REPAIR WELDS

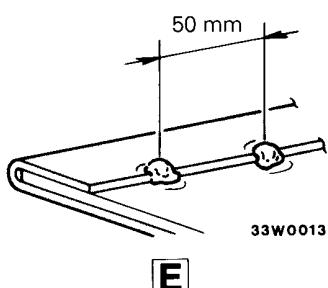


: Adhesive

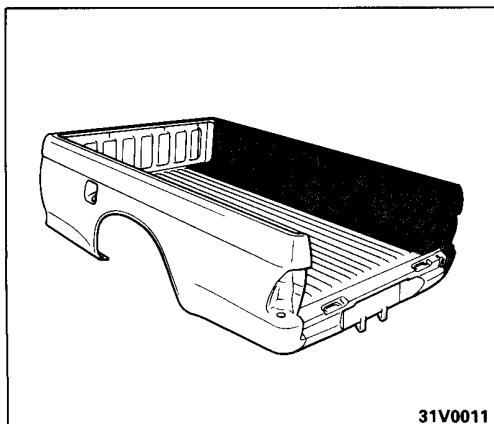
Adhesive	Type
	Chloroprene-base drying sealant

#### NOTES

- (1) Weld point \* indicates manufacturer's welding joint.  
(Unnecessary at repair work)
- (2) After hemming the door outer panel, MIG spot weld the flange overlap section at a pitch of approx. 50 mm.

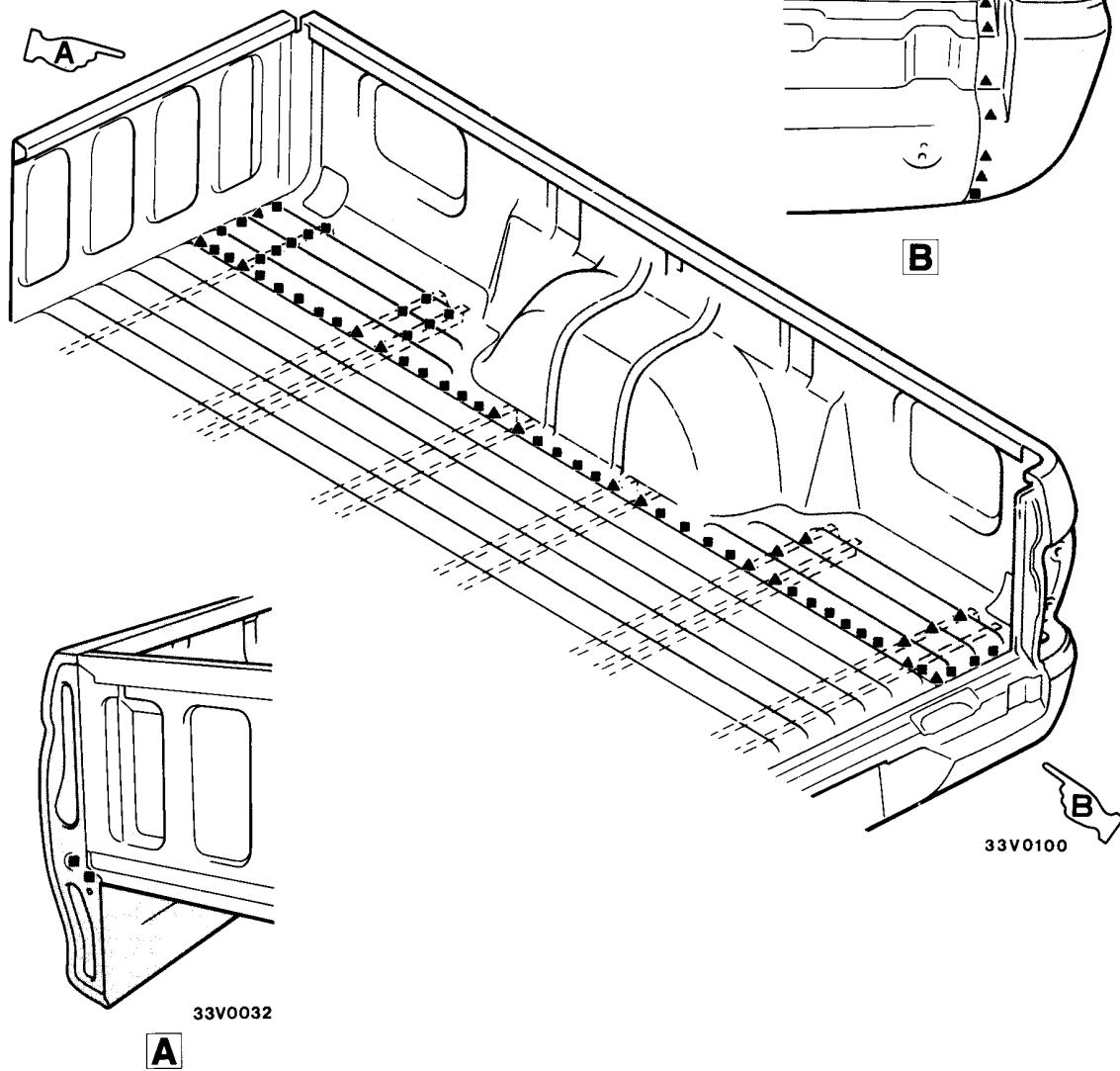


## SIDE PANEL &lt;Single cab&gt;

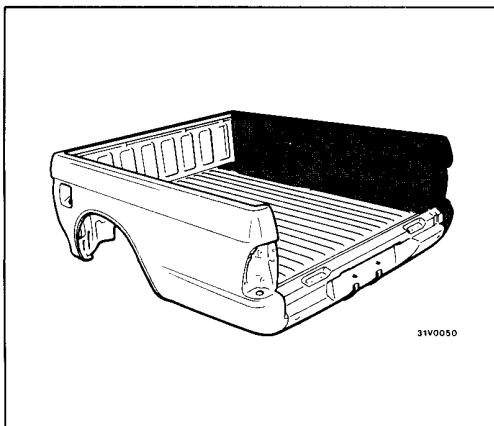


Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++ +	MIG spot welding
====	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS

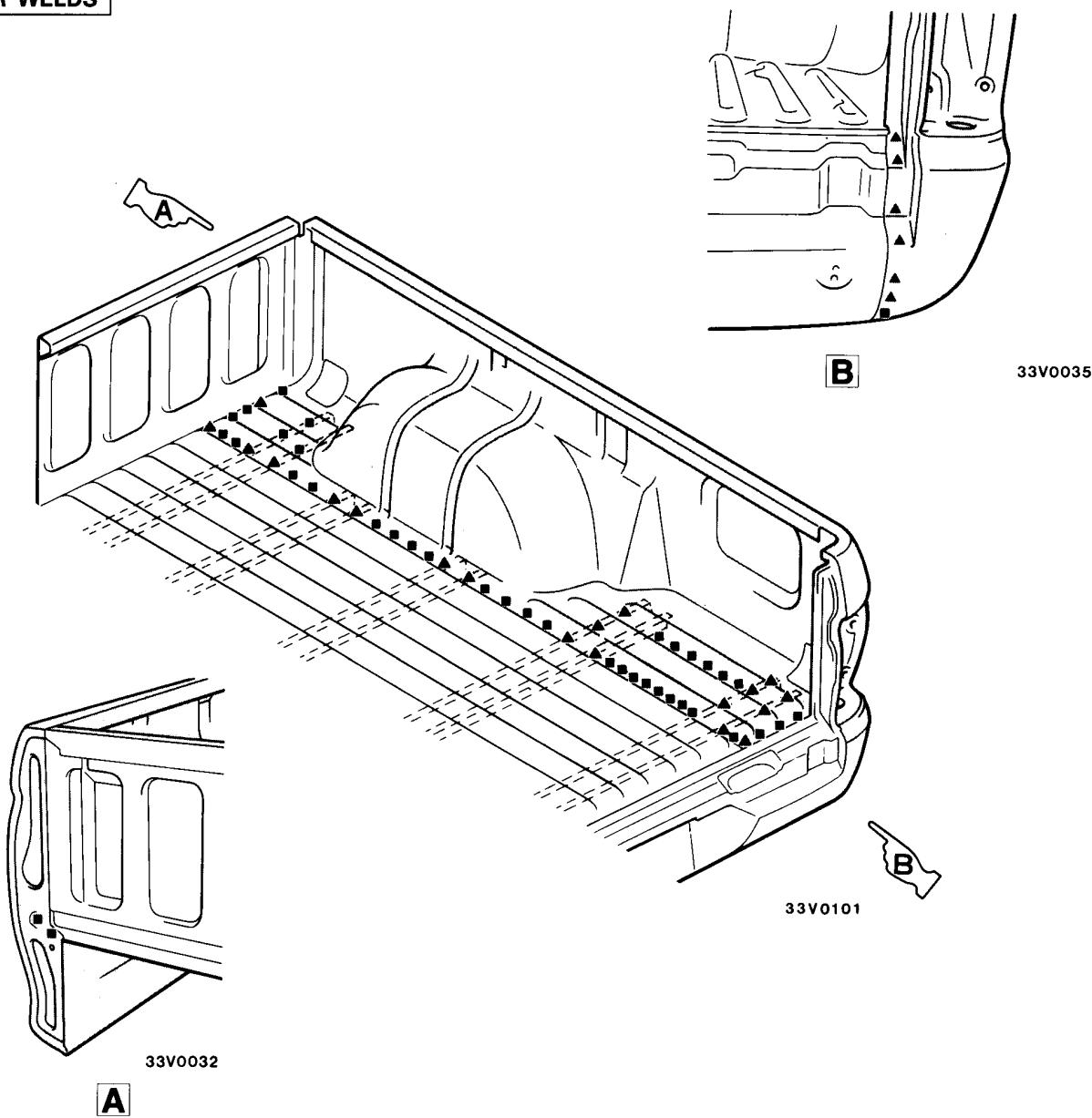


## SIDE PANEL &lt;Club cab&gt;

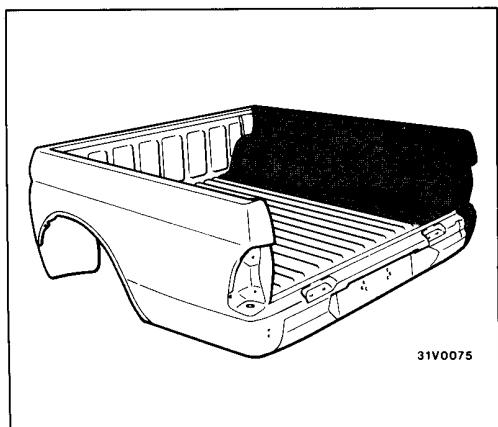


Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++ +	MIG spot welding
	MIG arc welding (continuous)
oooooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS

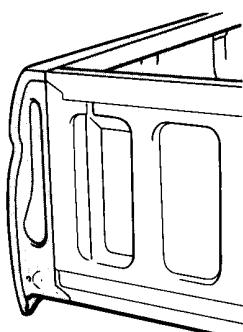


## SIDE PANEL &lt;Double cab&gt;



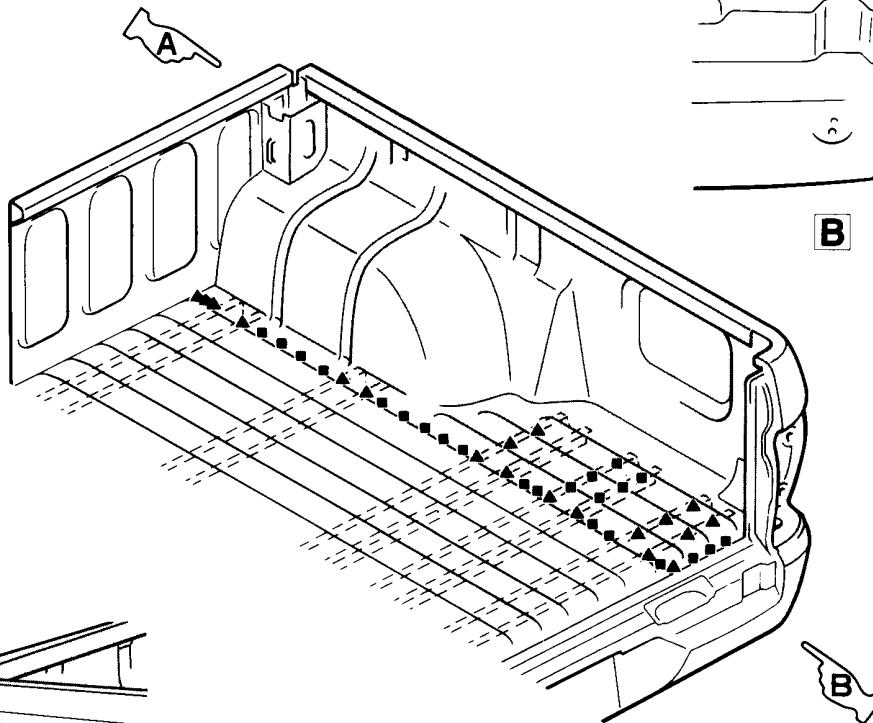
Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++	MIG spot welding
=====	MIG arc welding (continuous)
oooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS



33V0103

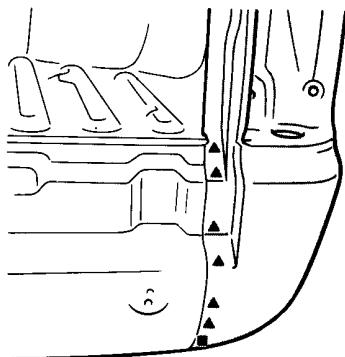
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33V0102

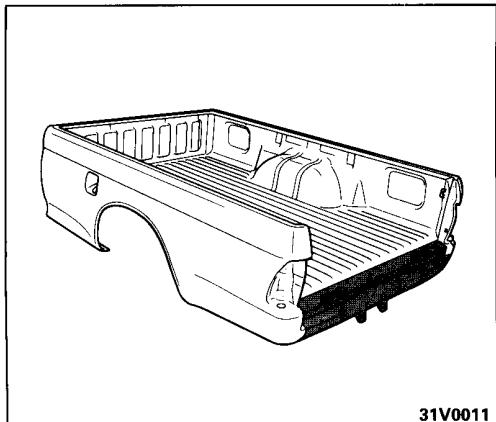
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33V0035



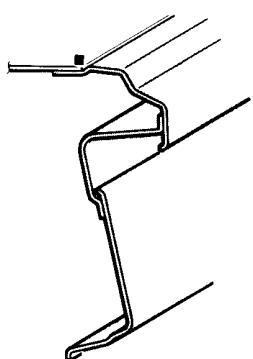
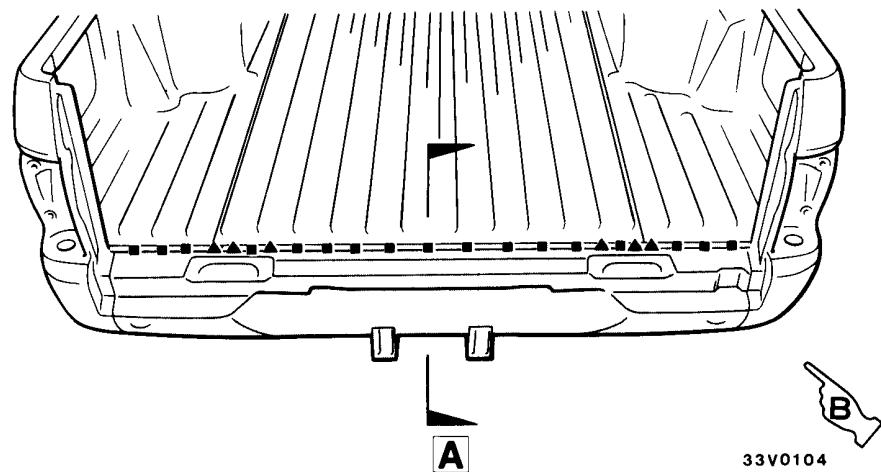
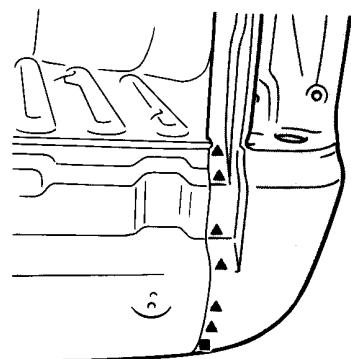
B

## REAR END SILL

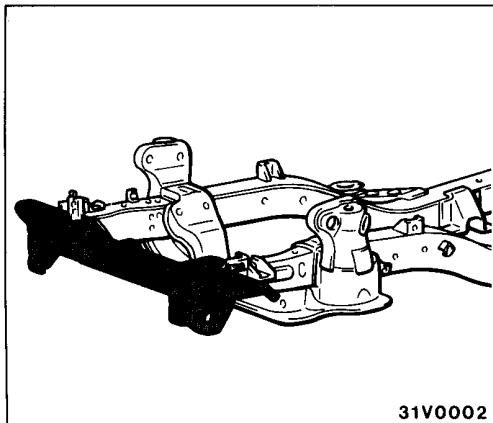


Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++	MIG spot welding
	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS

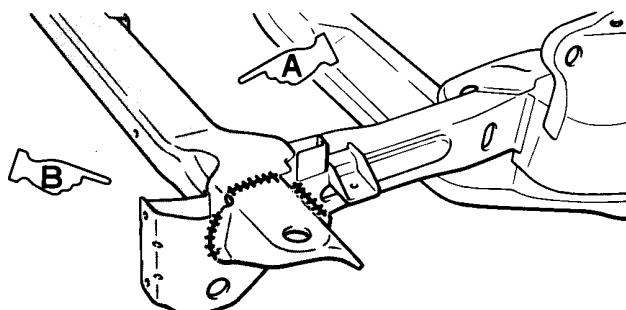
**A****B**

## No. 1 CROSMEMBER &lt;2WD&gt;

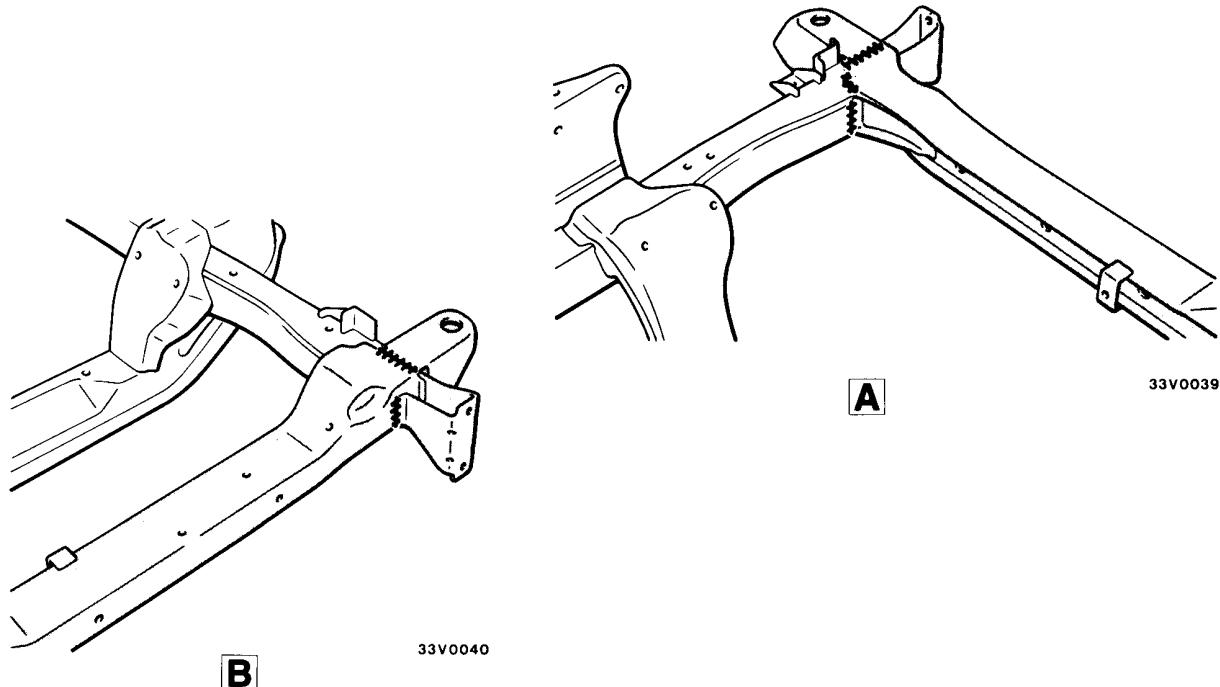


Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++ +	MIG spot welding
=====	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS



33V0038

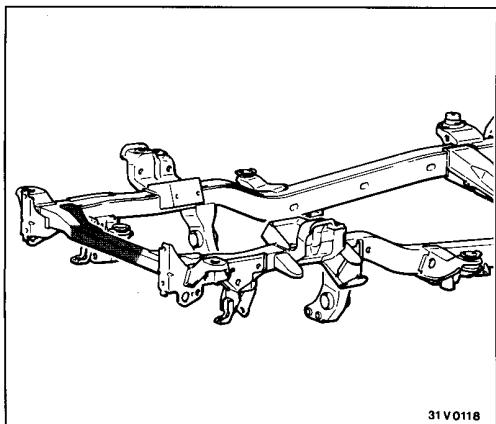


33V0039

33V0040

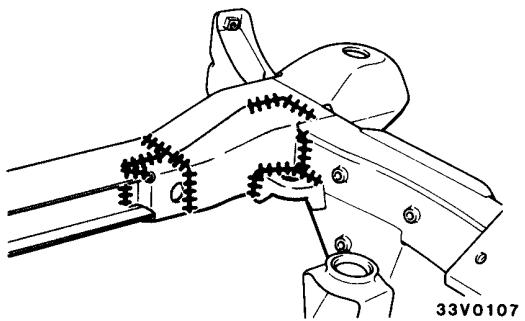
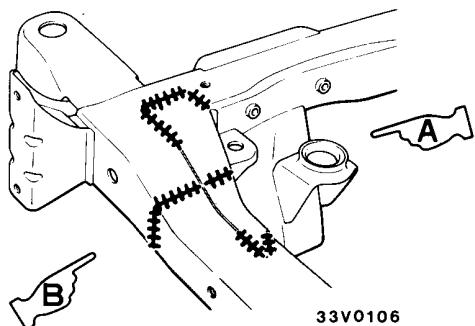
B

## No. 1 CROSMEMBER &lt;4WD&gt;

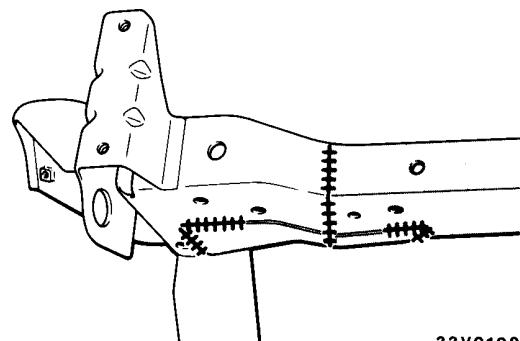


Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++	MIG spot welding
	MIG arc welding (continuous)
oooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS

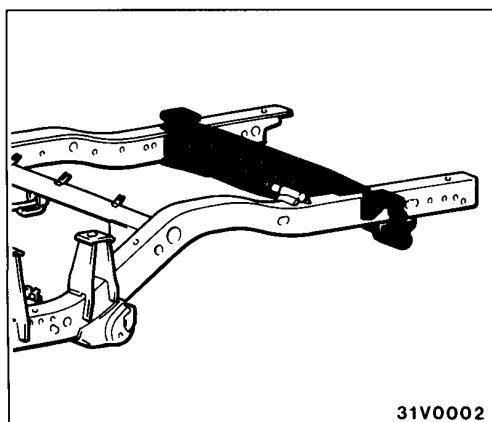


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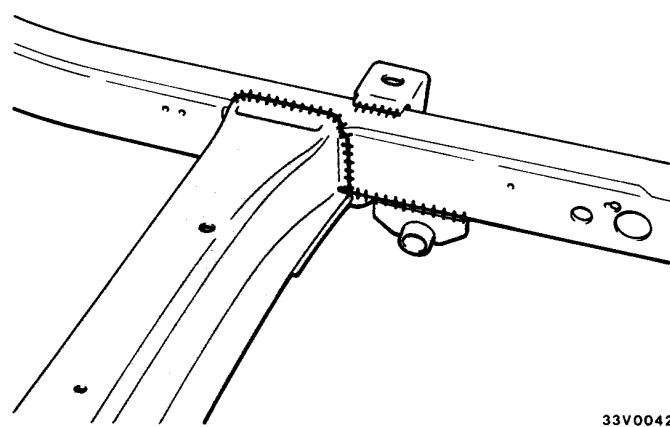
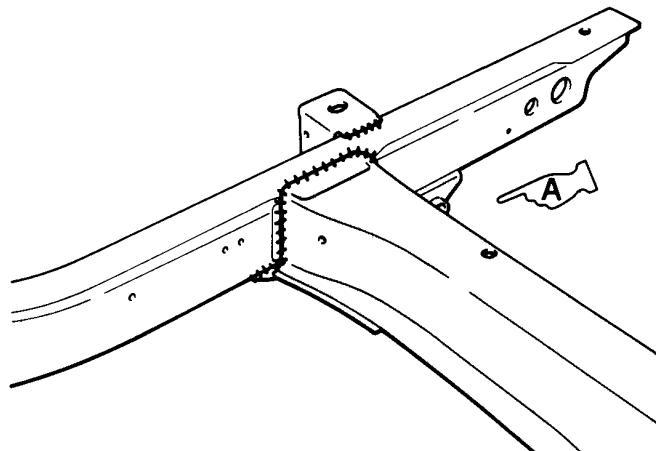
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## No. 5 CROSMEMBER &lt;2WD&gt;

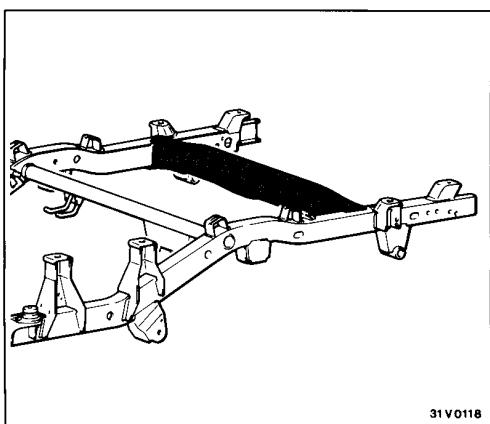


Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++	MIG spot welding
	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS



## No. 5 CROSMEMBER &lt;4WD&gt;



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+++ +	MIG spot welding
====	MIG arc welding (continuous)
~~~~~	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

## REPAIR WELDS

