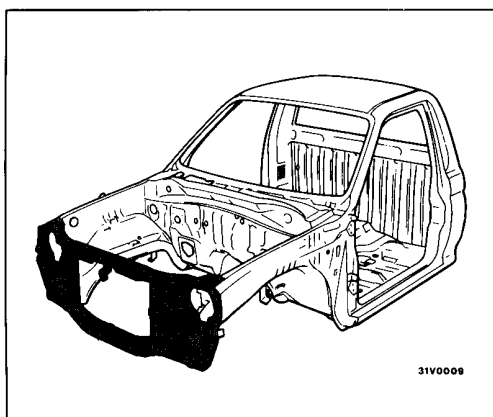



# 3 WELDED PANEL REPLACEMENT

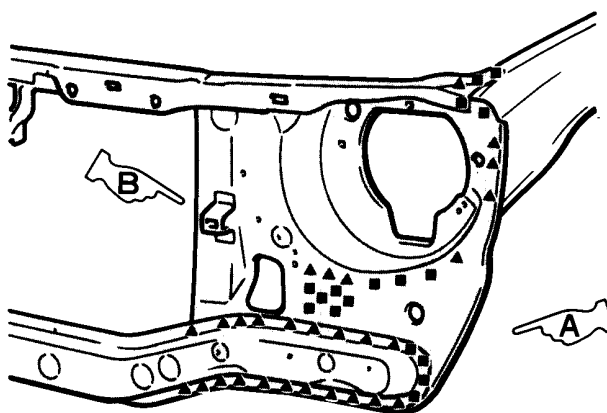
HEADLAMP SUPPORT .....	3-2
FENDER SHIELD .....	3-3
FRONT PILLAR .....	3-4
SIDE SILL .....	3-6
SIDE SILL REAR <Double cab> .....	3-7
CENTER PILLAR <Double cab> .....	3-9
REAR PILLAR <Single cab> .....	3-11
REAR PILLAR <Double cab> .....	3-13
QUARTER PANEL, OUTER <Club cab> .....	3-15
ROOF <Single cab> .....	3-18
ROOF <Club cab> .....	3-19
ROOF <Double cab> .....	3-20
FRONT DOOR OUTER PANEL .....	3-21
REAR DOOR OUTER PANEL <Double cab> .....	3-22
SIDE PANEL <Single cab> .....	3-23
SIDE PANEL <Club cab> .....	3-24
SIDE PANEL <Double cab> .....	3-25
REAR END SILL .....	3-26
No.1 CROSSMEMBER <2WD> .....	3-27
No.1 CROSSMEMBER <4WD> .....	3-28
No.5 CROSSMEMBER <2WD> .....	3-29
No.5 CROSSMEMBER <4WD> .....	3-30

## HEADLAMP SUPPORT

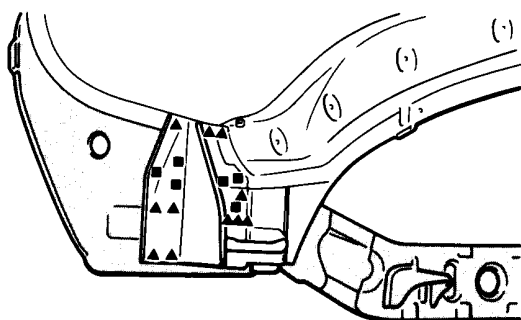


Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+ + + +	MIG spot welding
	MIG arc welding (continuous)
○○○○○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally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

## REPAIR WELDS

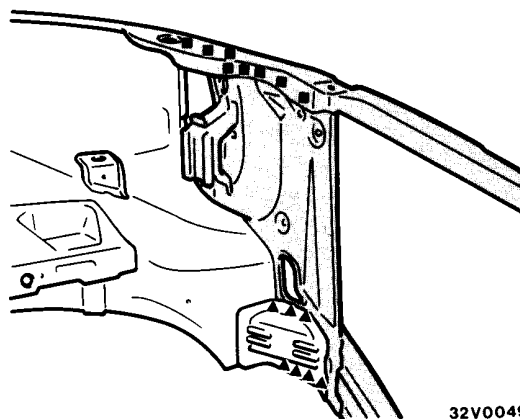


32V0047



32V0048

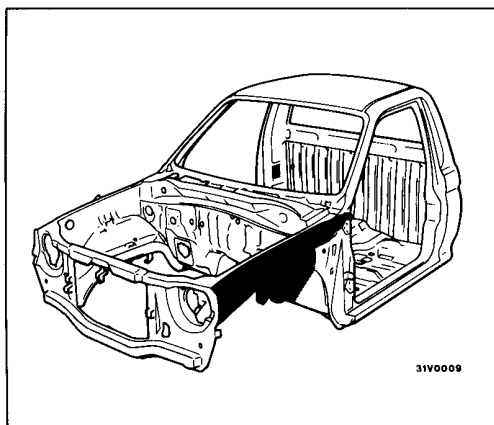
A




32V0049

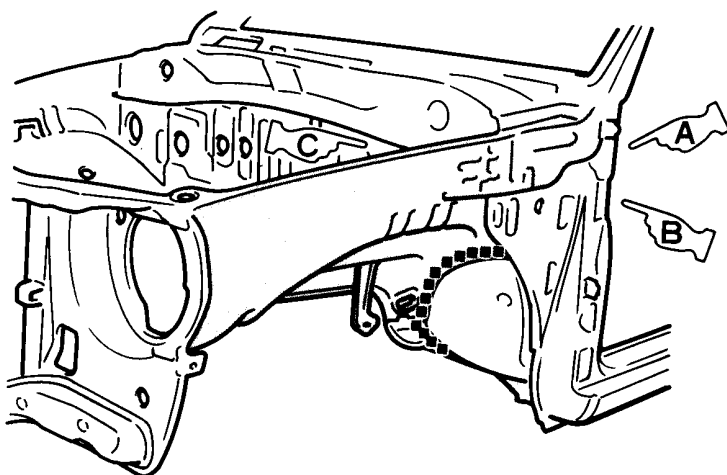
B

# FENDER SHIELD

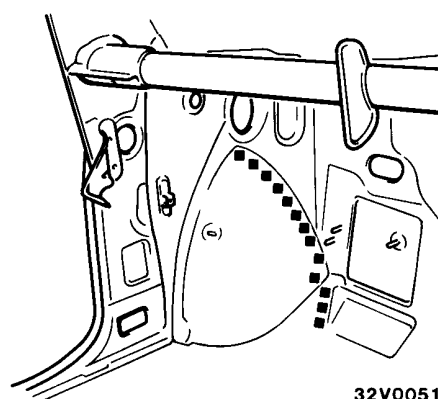


Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+ + + +	MIG spot welding
	MIG arc welding (continuous)
ooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally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

## REPAIR WELDS

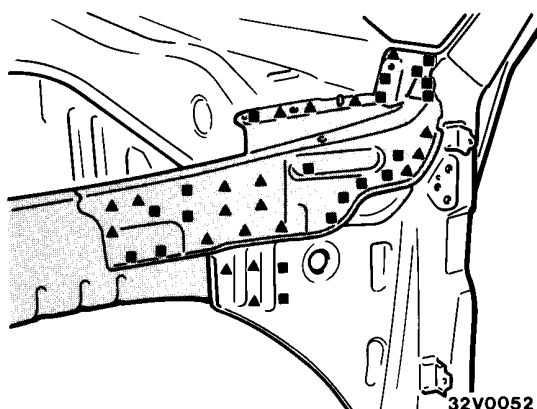


32V0050



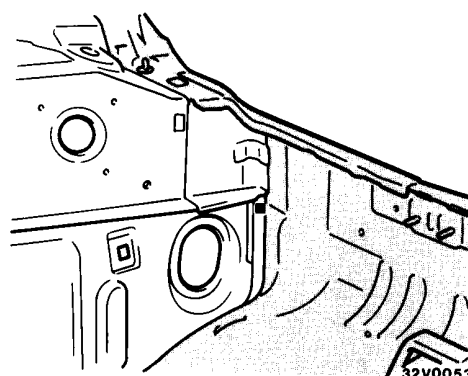
32V0051

A



32V0052

B



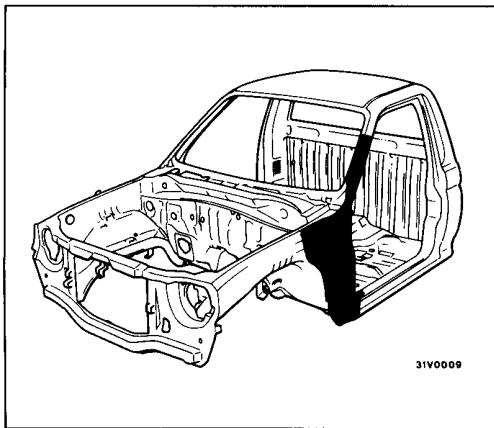
32V0053

C

### NOTE

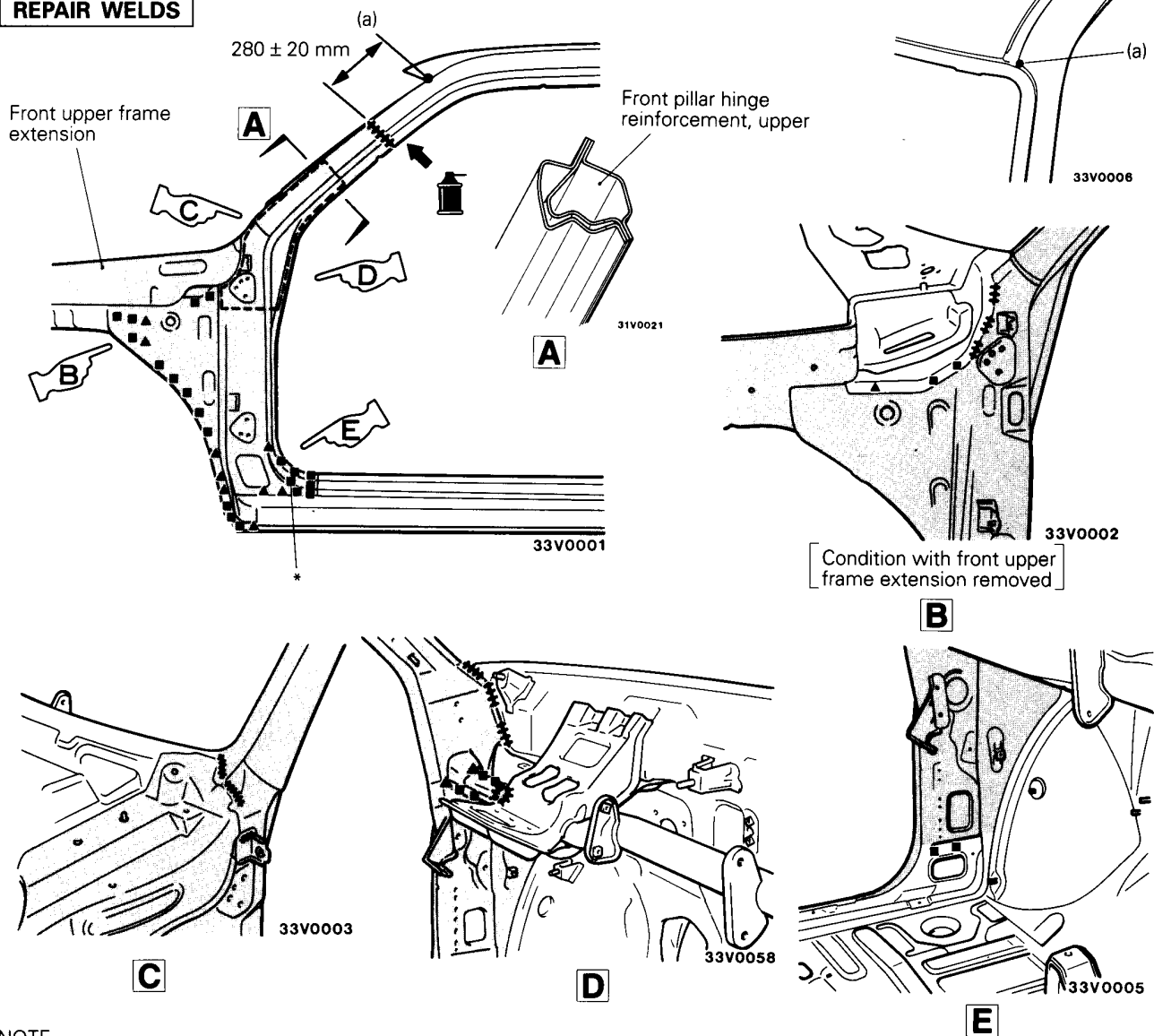
Refer to P. 3 - 2 for the headlamp support weld points.

## FRONT PILLAR



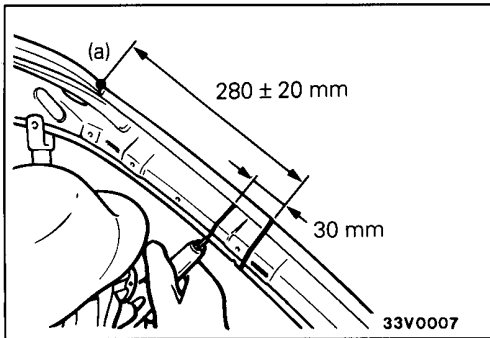
Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+ + + +	MIG spot welding
	MIG arc welding (continuous)
○ ○ ○ ○ ○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally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

## REPAIR WELDS



## NOTE

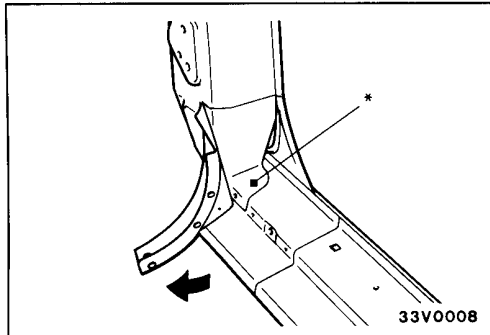
Refer to P.3 - 3 for the welds points for the front upper frame extension.



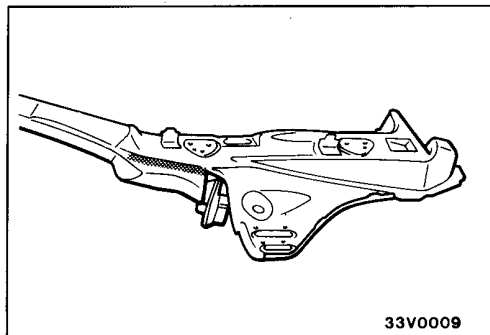
## NOTES WITH REGARD TO REPAIR WORK

### REMOVAL

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

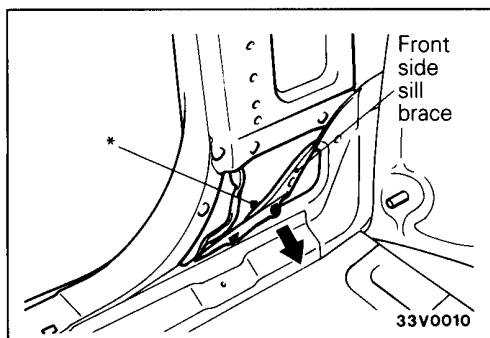


- (3) Cut the front pillar outer panel in the place indicated illustration. After this, bend the outside of the panel and then cut the weld point (marked with \*) between the front pillar hinge reinforcement lower and the front floor side sill outer panel.



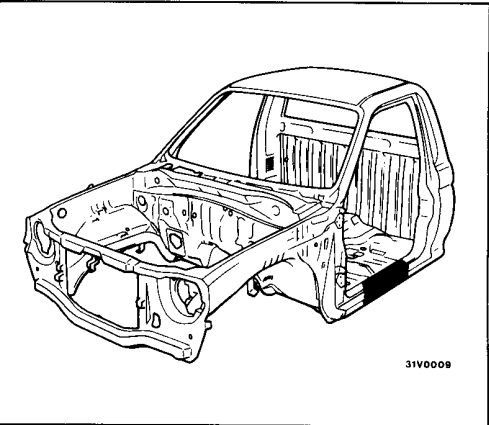
### INSTALLATION


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



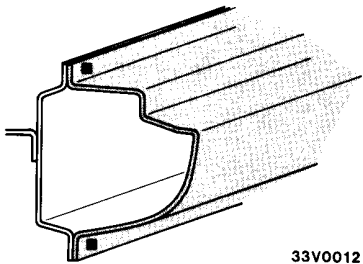
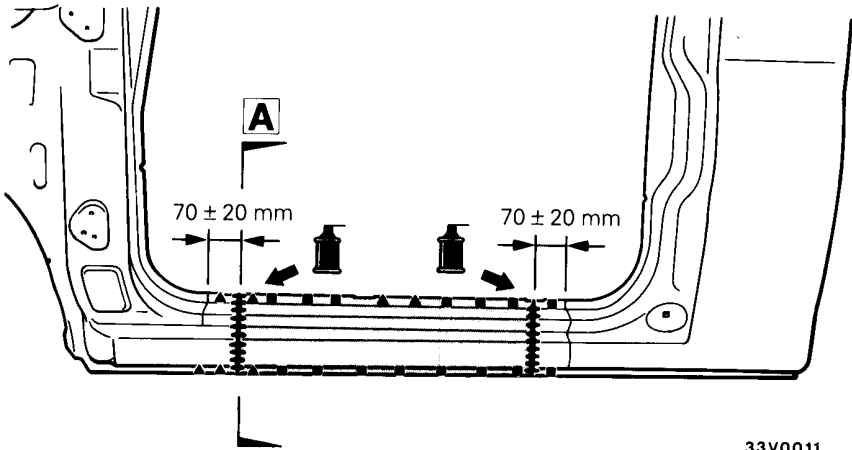
- (2) When welding the weld point marked with \*, bend the front side sill brace into the passenger compartment.

SIDE SILL



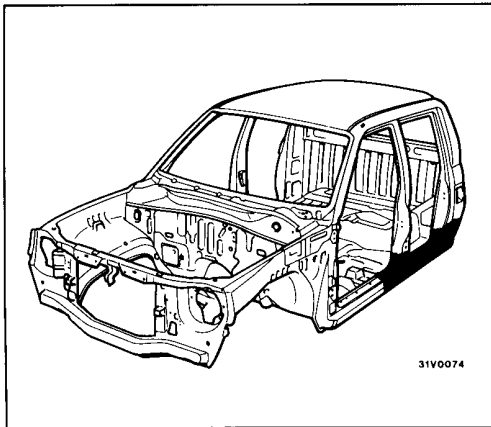
Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+ + + +	MIG spot welding
	MIG arc welding (continuous)
○ ○ ○ ○ ○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally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

REPAIR WELDS



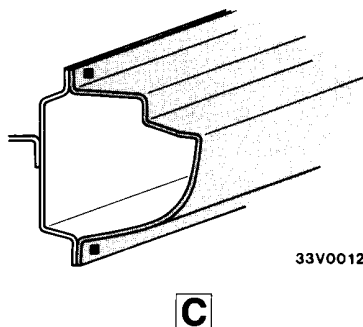
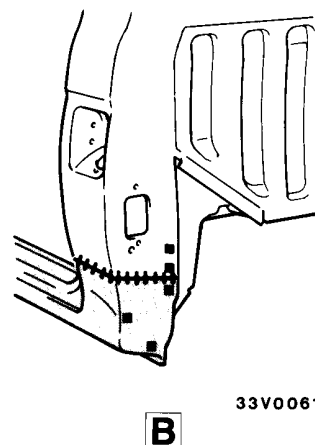
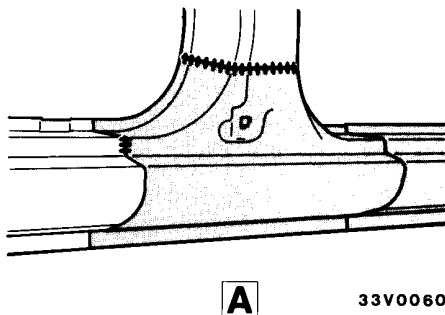
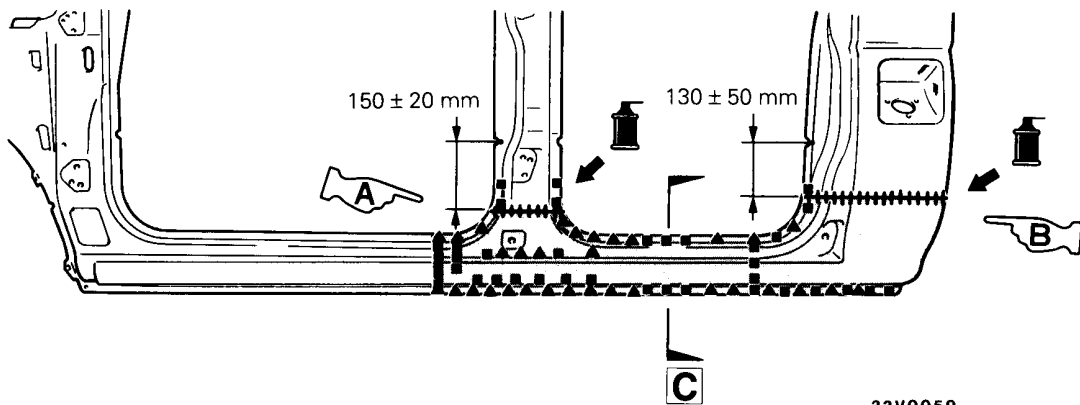
A

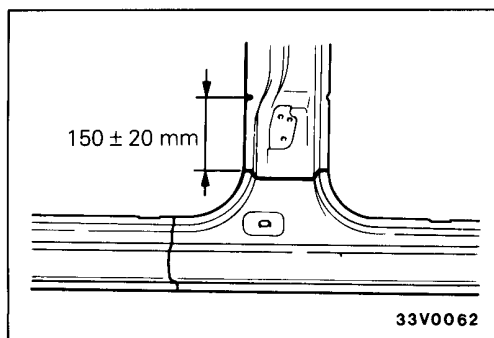
# SIDE SILL REAR <Double cab>



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

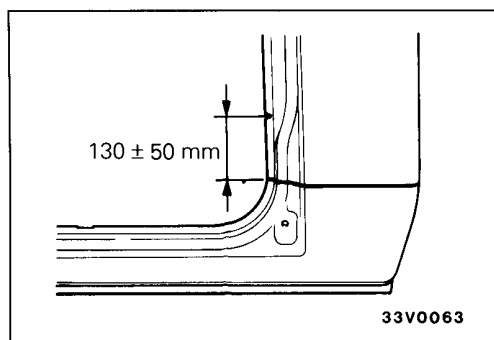


**NOTES WITH REGARD TO REPAIR WORK****REMOVAL**

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

**Caution**

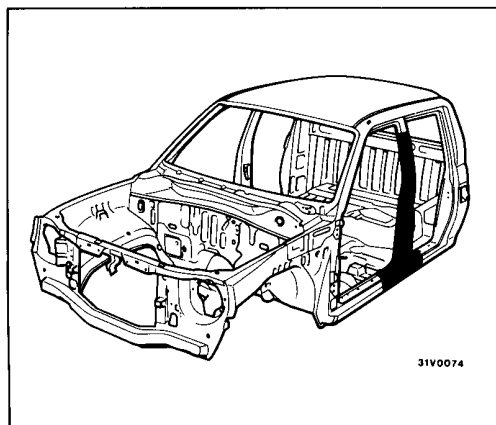
**Take care not to damage the center pillar hinge reinforcement, lower when cutting the side panel, outer, rear. If it is damaged, make repair welding.**



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

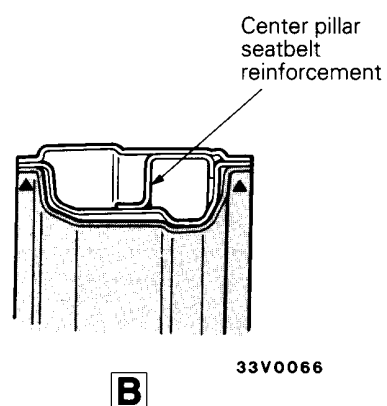
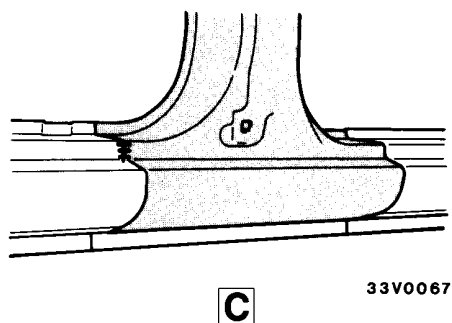
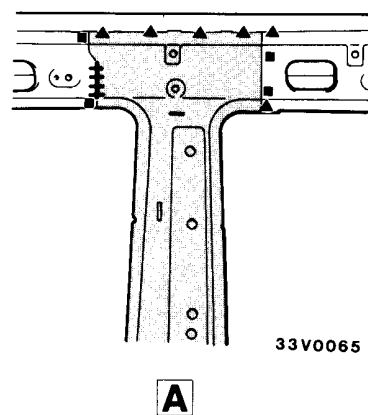
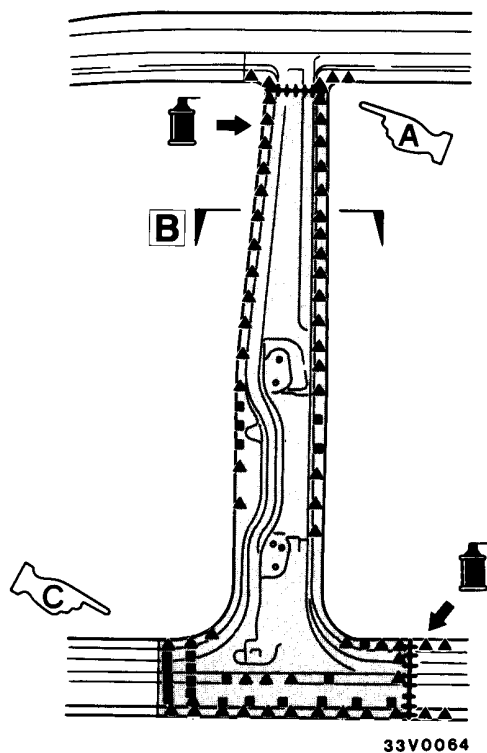


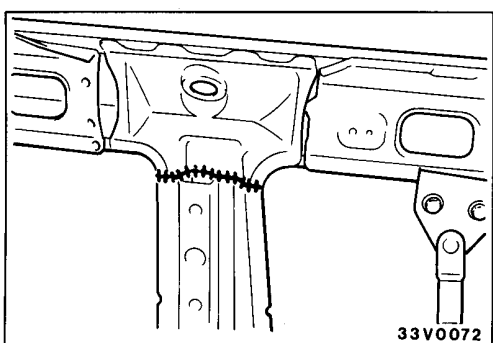
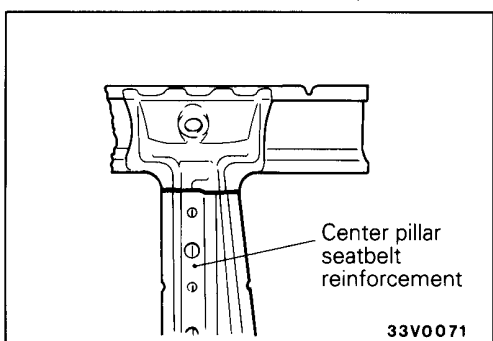
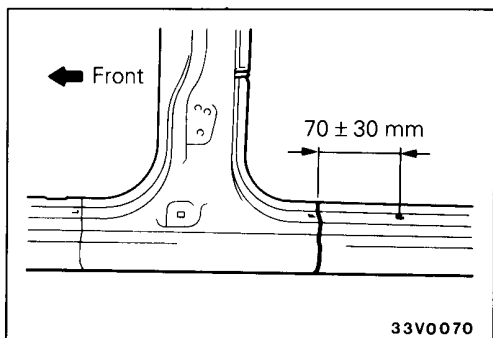
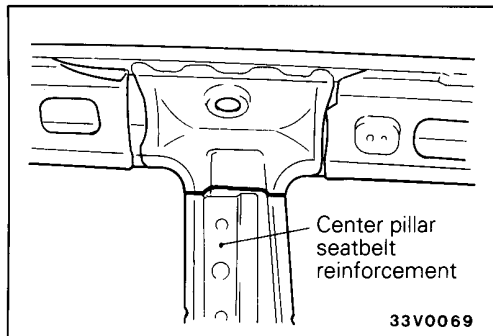
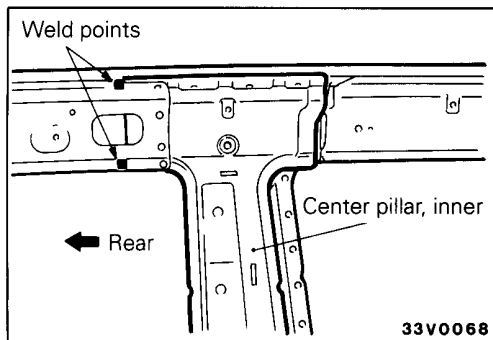
## CENTER PILLAR &lt;Double cab&gt;



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)
ooooo	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

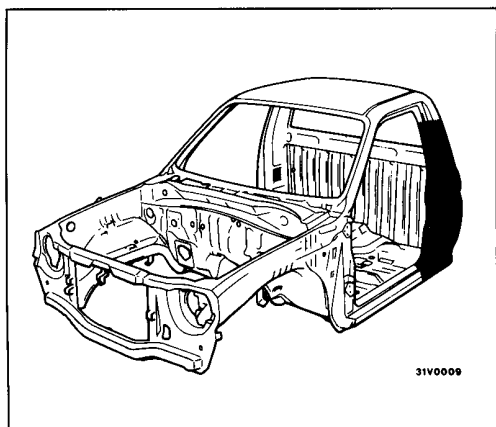
### REMOVAL

- (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

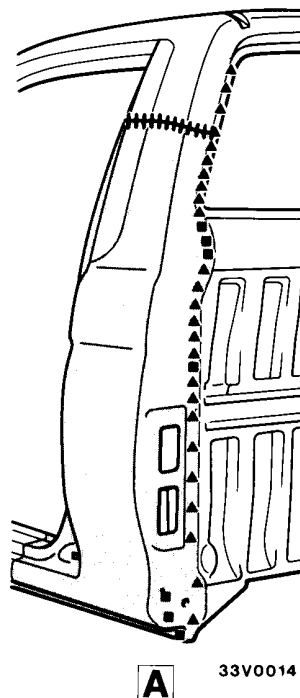
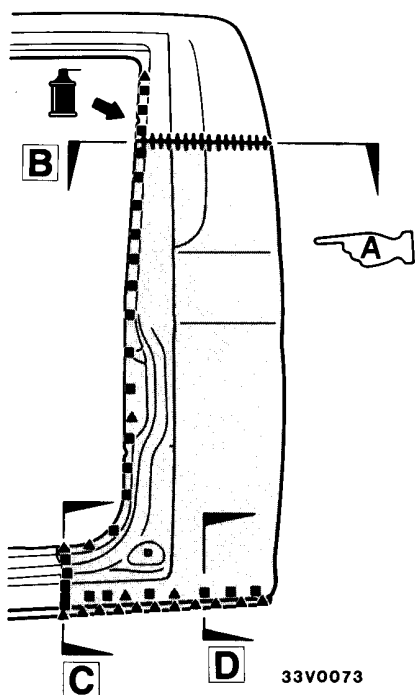
- (1) Aligning the new center pillar with the upper end of the center pillar seatbelt reinforcement, cut the side panel, outer, rear and the center pillar outer reinforcement together.
- (2) Weld the center pillar outer reinforcement surely from the passenger compartment side, then weld the side panel, outer, rear.

# REAR PILLAR <Single cab>

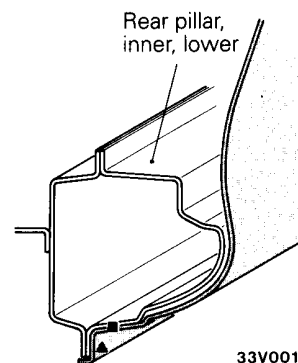
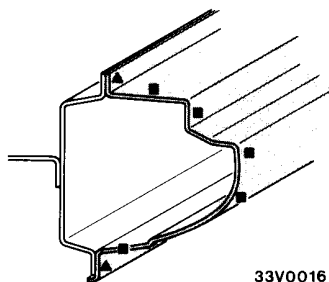
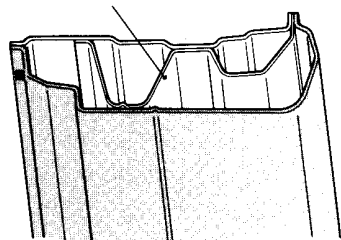


Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
++++	MIG spot welding
	MIG arc welding (continuous)
oooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally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

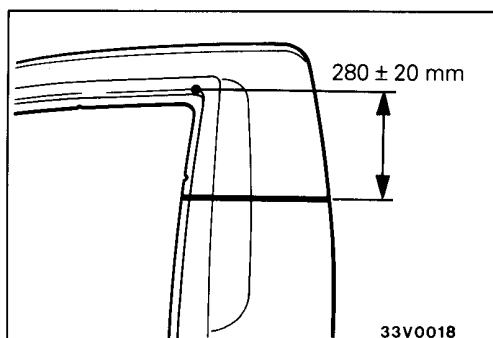
## REPAIR WELDS



Rear pillar seatbelt reinforcement



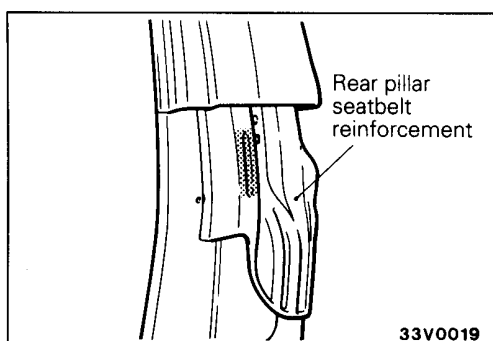
Rear pillar, inner, lower

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

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

**Caution**

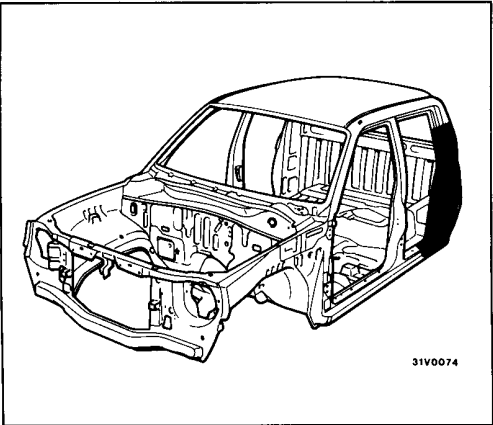
**Take care not to damage the rear pillar seatbelt reinforcement when cutting the rear pillar, outer. If it is damaged, make repair welding.**


**INSTALLATION**

Apply adhesive to the places shown in the illustration.

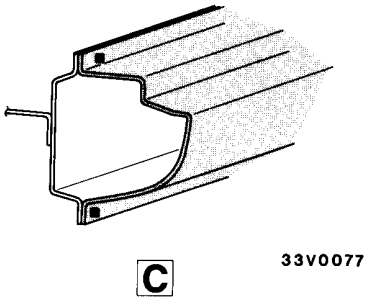
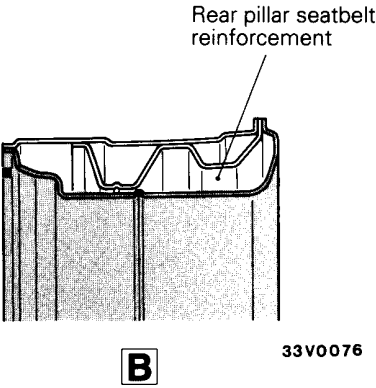
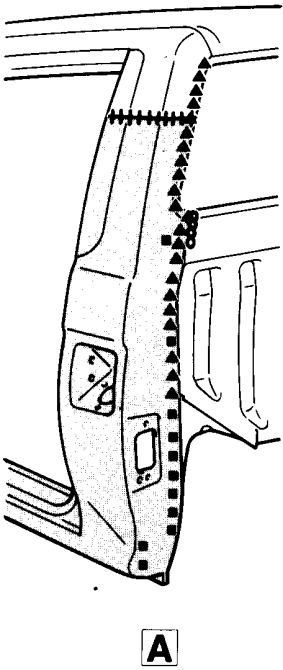
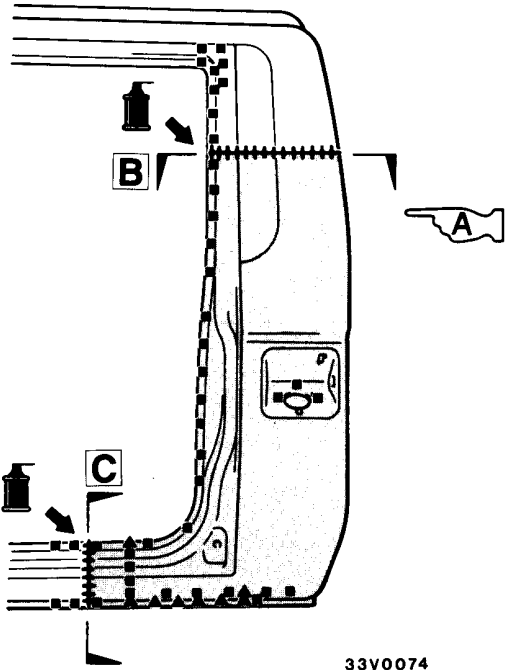
Adhesive	Type
	Chloroprene-base drying sealant

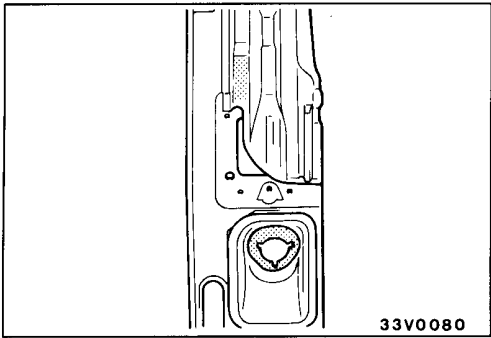
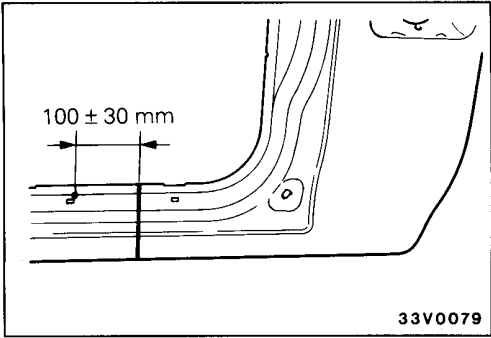
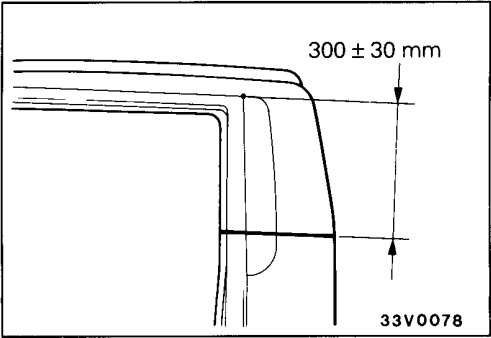
REAR PILLAR <Double cab>



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)
o o o o o o	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**

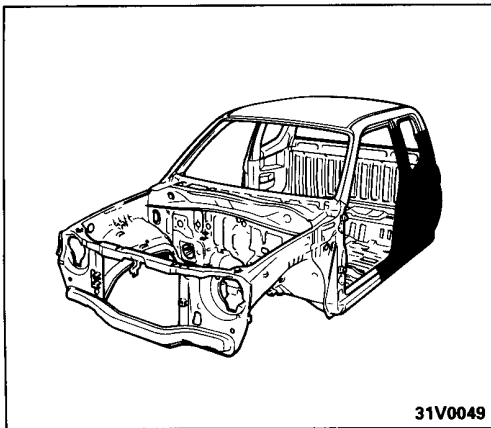
- (1) Allowing for an overlap, cut the side panel, outer, rear 300 ± 30 mm below the rear pillar corner.
- (2) Allowing for an overlap, cut the side panel, outer, rear 100 ± 30 mm below the scuff plate installation hole.


**INSTALLATION**

Apply adhesive to the places shown in the illustration.

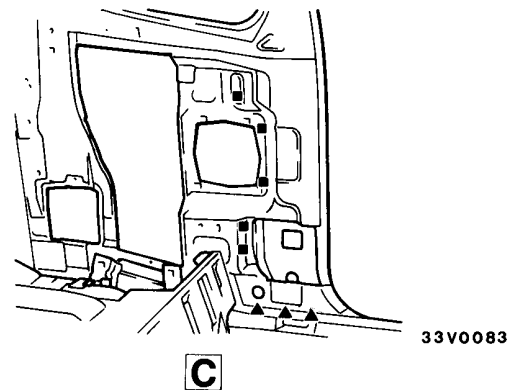
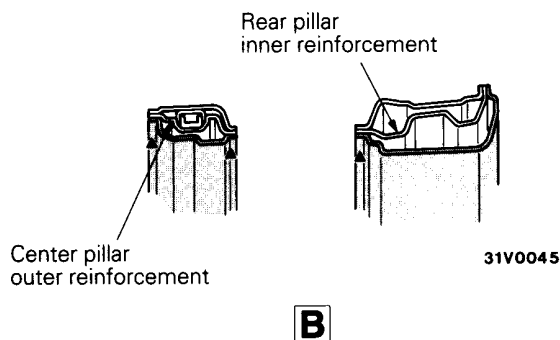
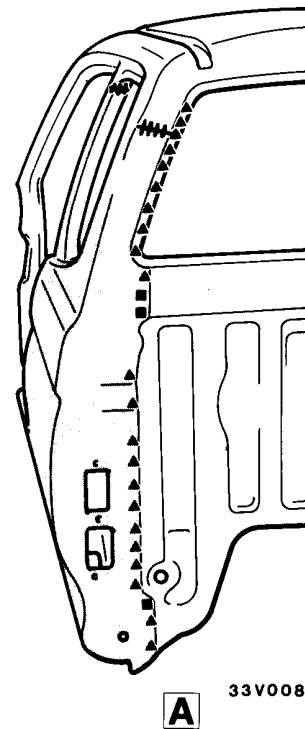
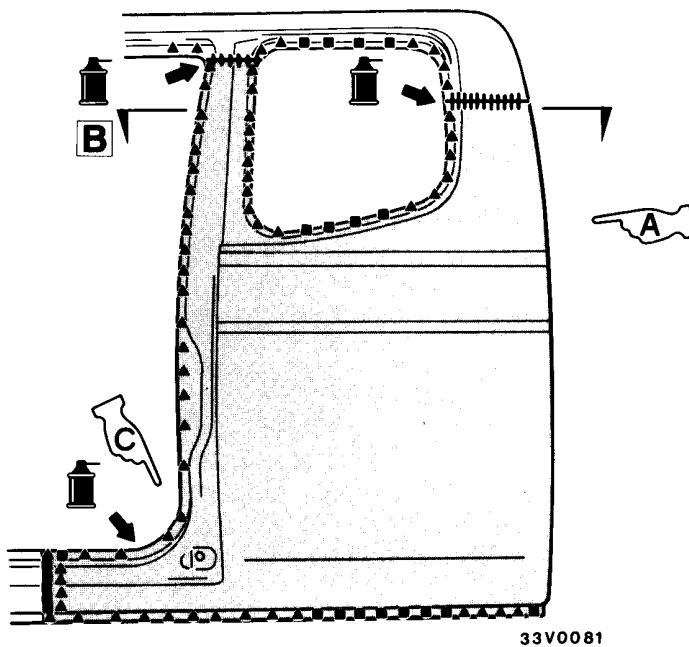
Adhesive	Type
	Chloroprene-base drying sealant

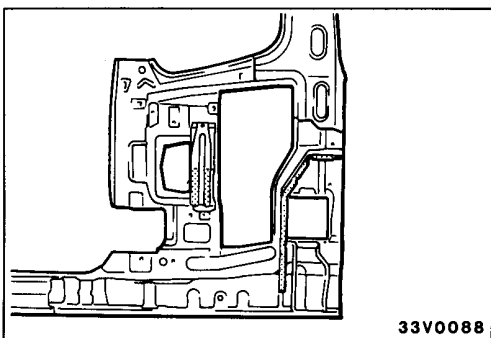
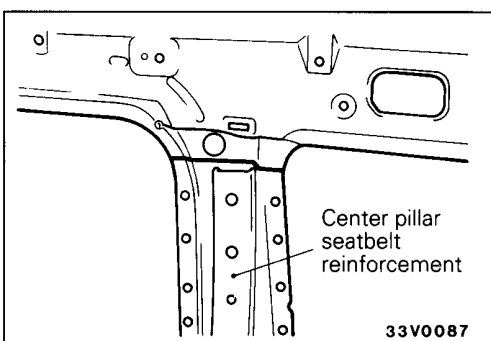
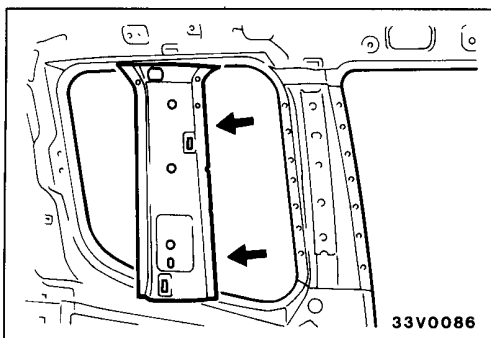
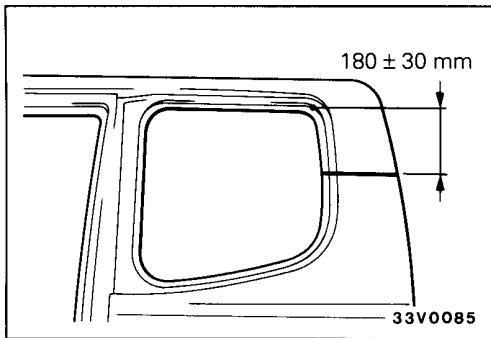
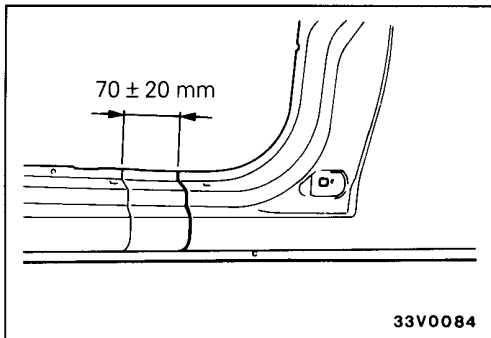
# QUARTER PANEL, OUTER <Club cab>



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)
o o o o o o	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

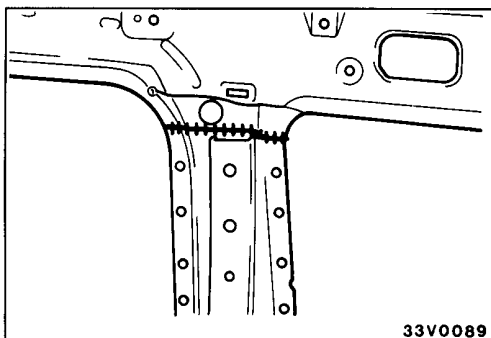
- (1) Cut the quarter panel, outer and the side sill extension, outer together 70 ± 20 mm back from the place where the quarter panel, outer and the front floor side sill, outer are connected.
- (2) Allowing for an overlap, cut the quarter panel, outer 180 ± 30 mm below the rear pillar corner.
- (3) 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

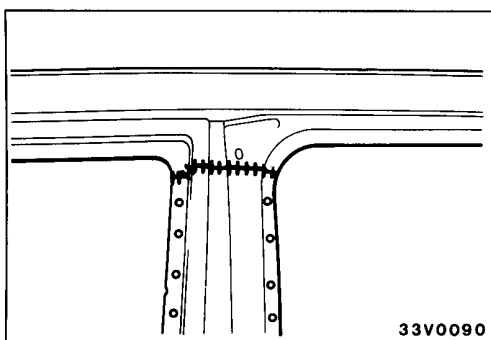
- (1) Apply adhesive to the places shown in the illustration.

Adhesive	Type
	Chloroprene-base drying sealant

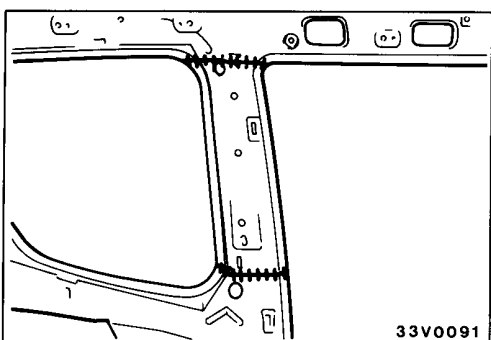




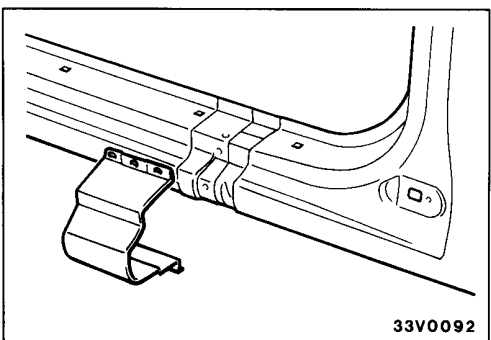
- (2) Weld the center pillar outer reinforcement surely from the passenger's compartment.



- (3) Weld the quarter panel, outer surely.

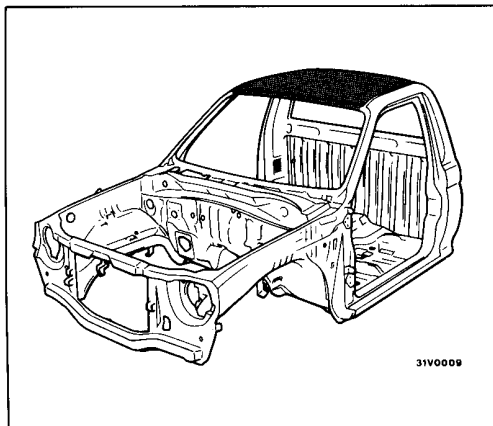



- (4) Install the removed quarter panel, inner, upper.



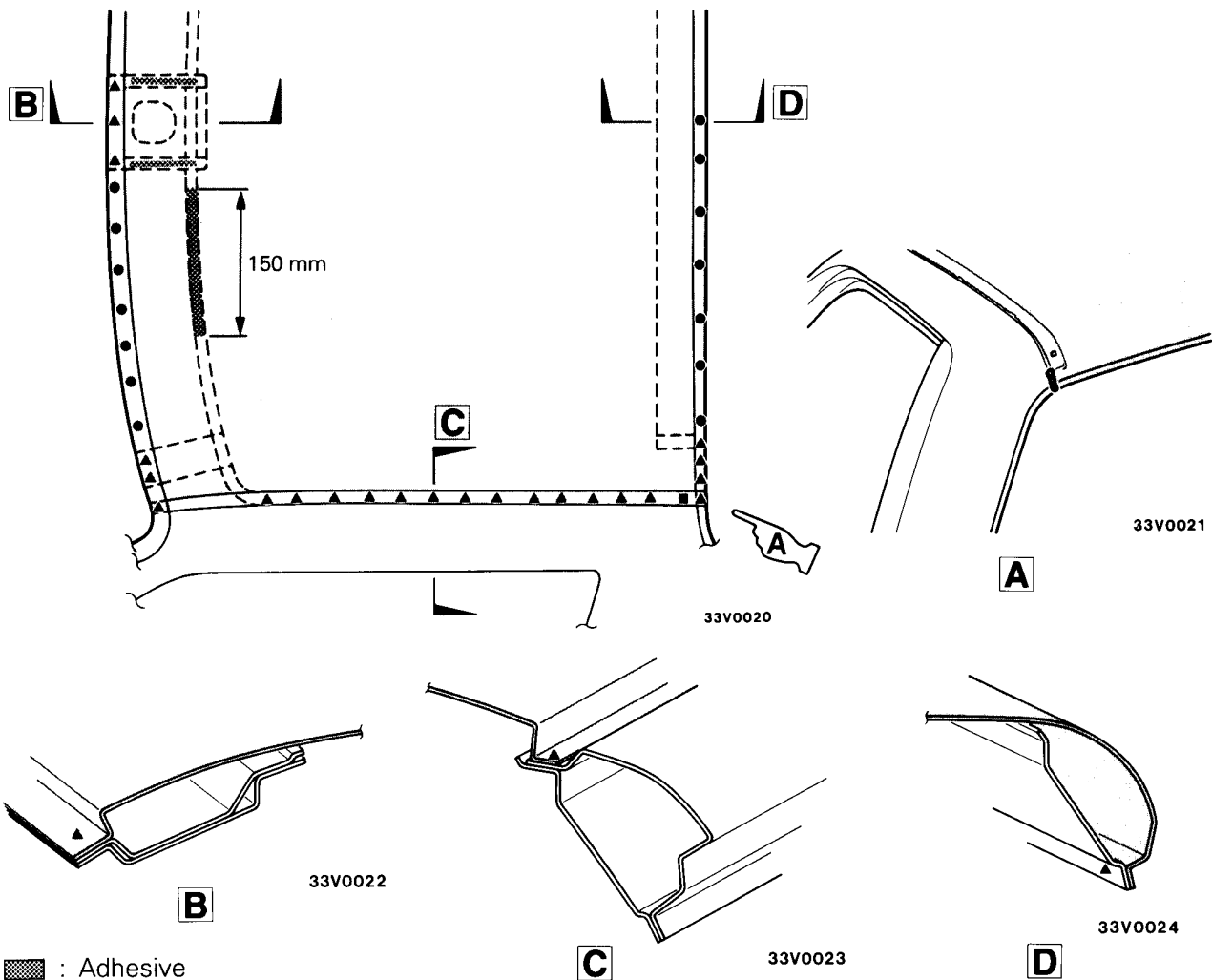
- (5) Remove the part shown in the illustration of the new quarter panel, outer. Weld the front floor side sill, outer and the side sill extension, outer, then install the removed quarter panel.

## ROOF &lt;Single cab&gt;



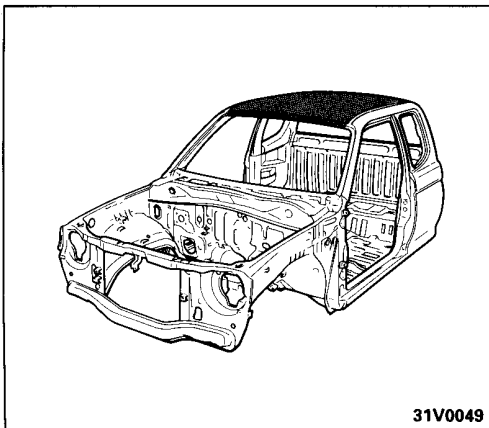
Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+ + + +	MIG spot welding
	MIG arc welding (continuous)
○ ○ ○ ○ ○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally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

## REPAIR WELDS



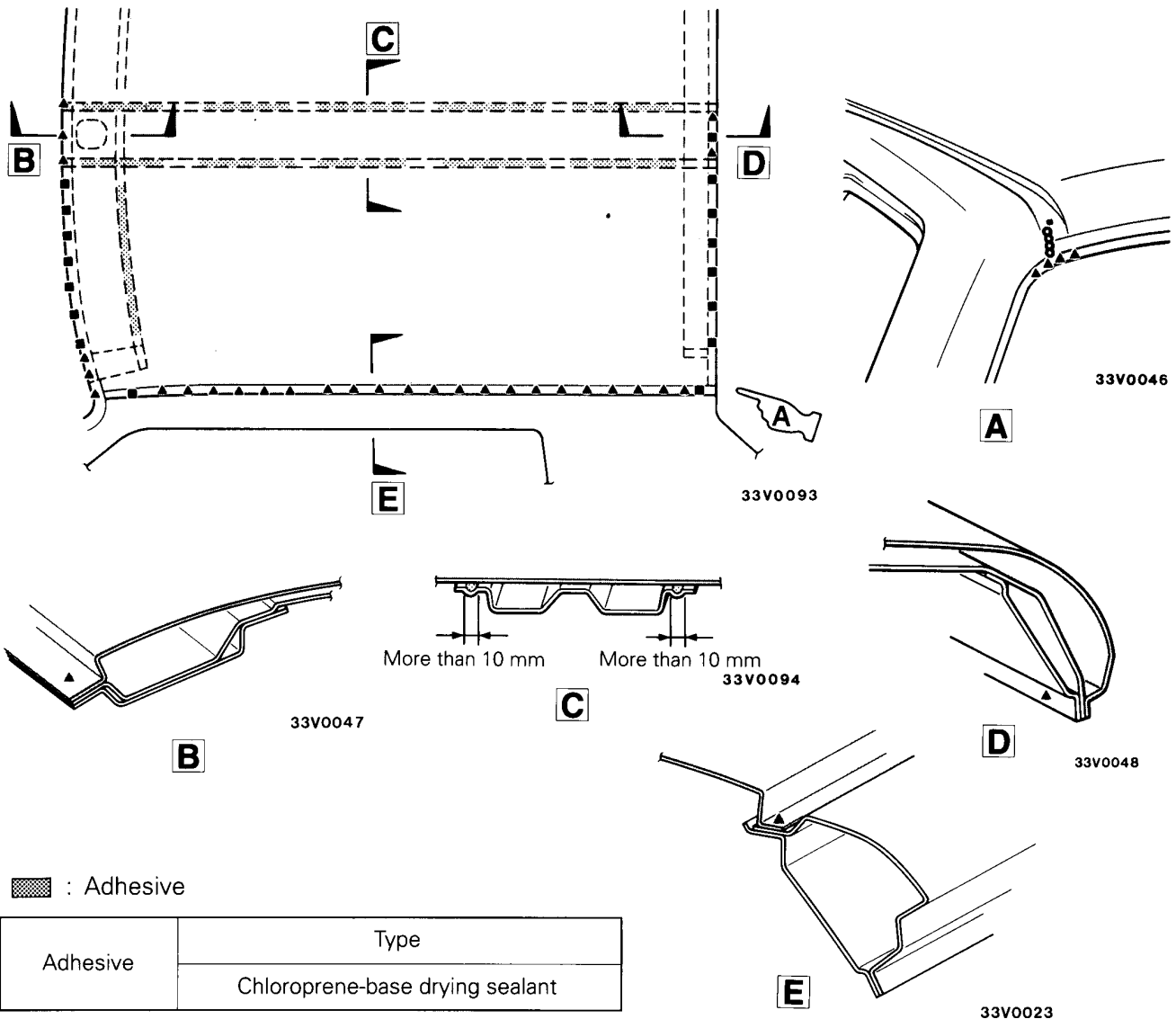
Adhesive	Type
	Chloroprene-base drying sealant

# ROOF <Club cab>

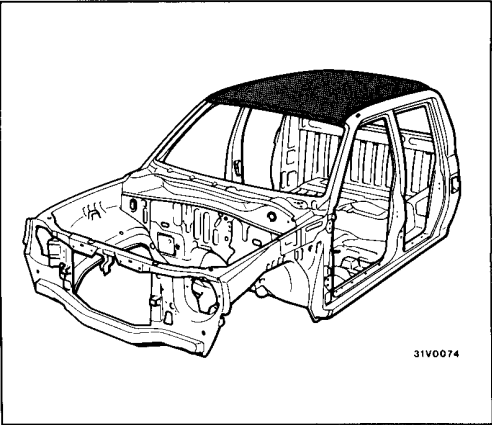



Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
++++	MIG spot welding
	MIG arc welding (continuous)
○○○○○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally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

## REPAIR WELDS

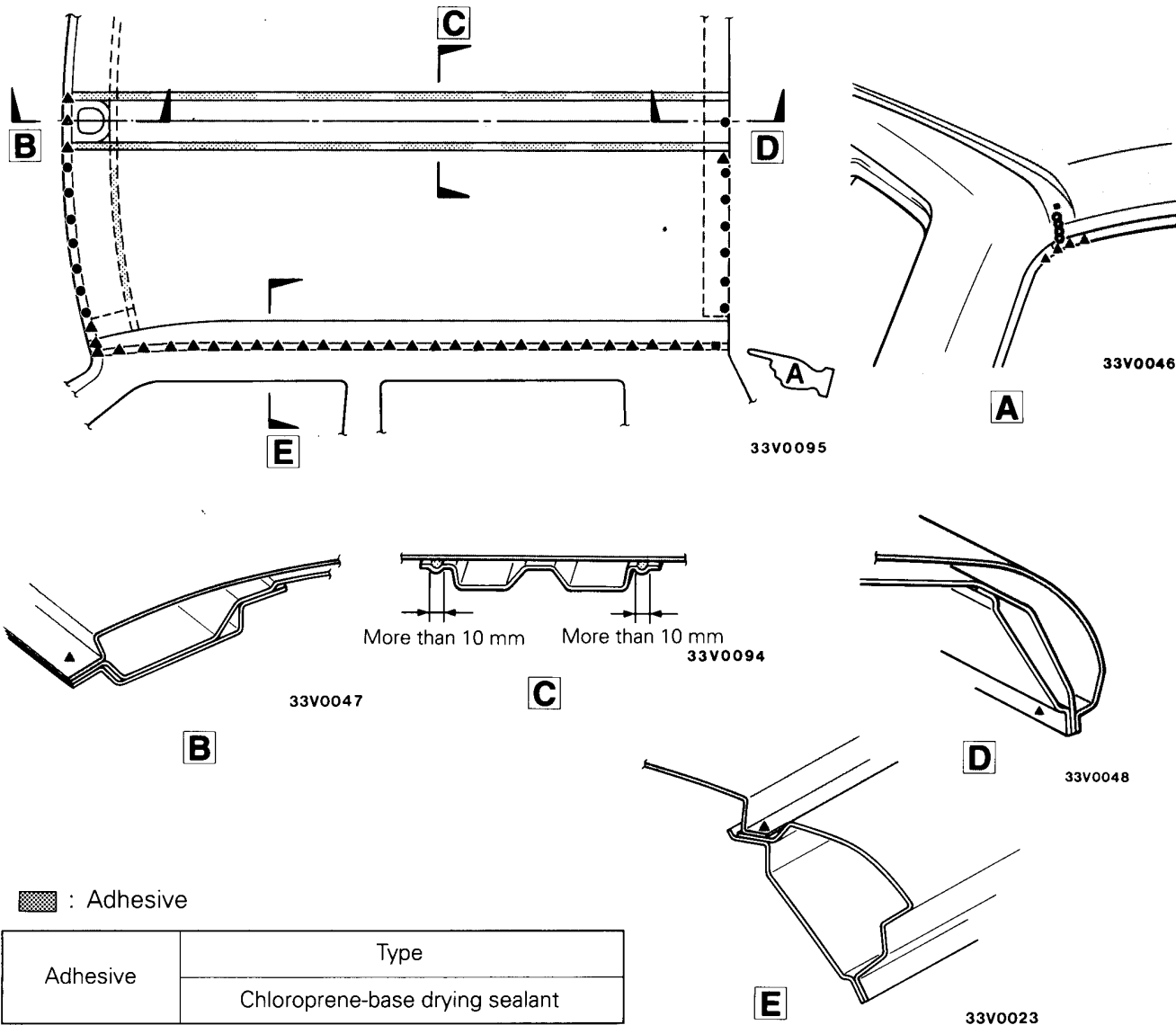


ROOF <Double cab>

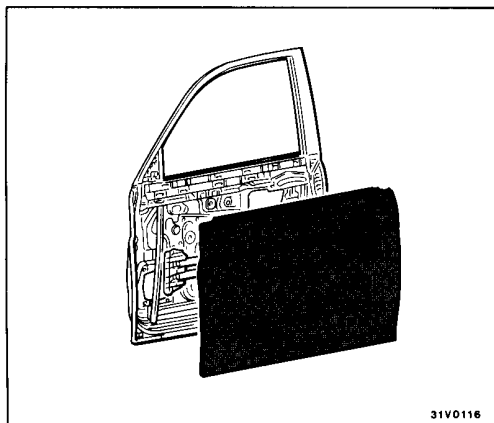


Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+ + + +	MIG spot welding
	MIG arc welding (continuous)
○ ○ ○ ○ ○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally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

REPAIR WELDS

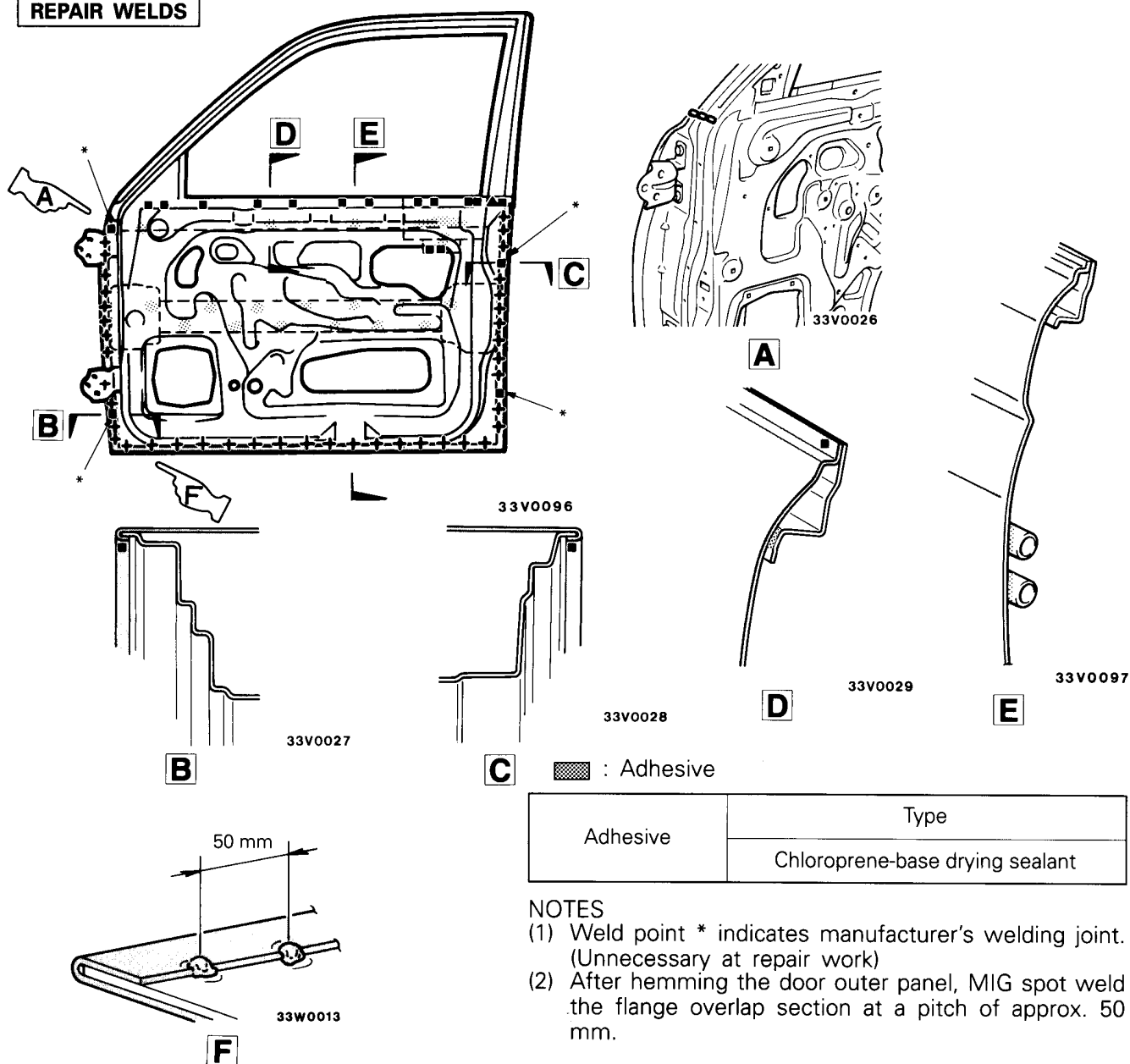


## FRONT DOOR OUTER PANEL



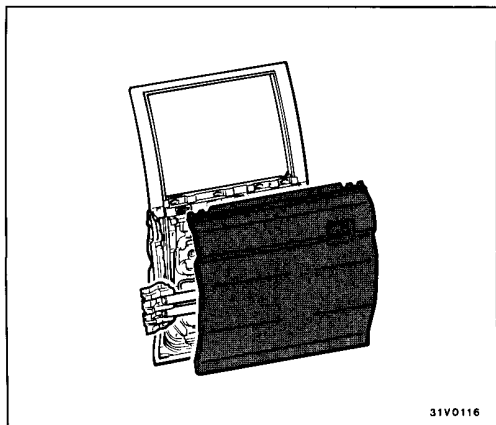
Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+ + + +	MIG spot welding
	MIG arc welding (continuous)
○○○○○○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally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

## REPAIR WELDS



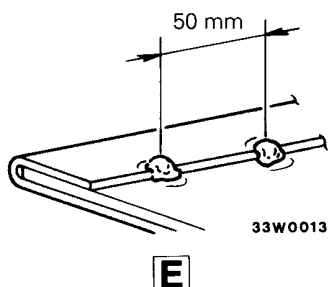
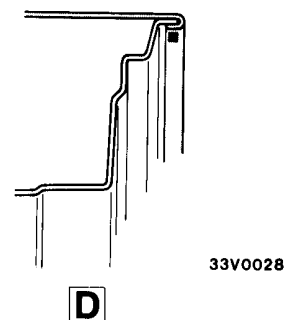
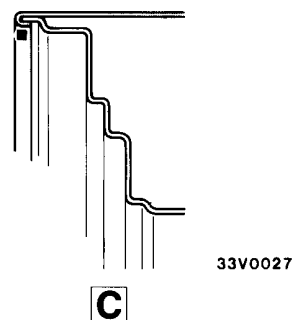
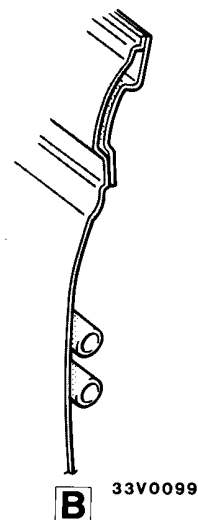
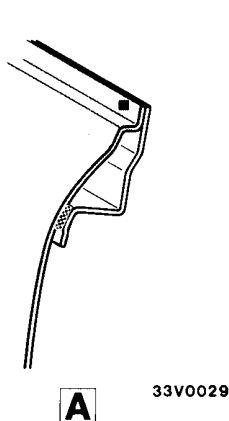
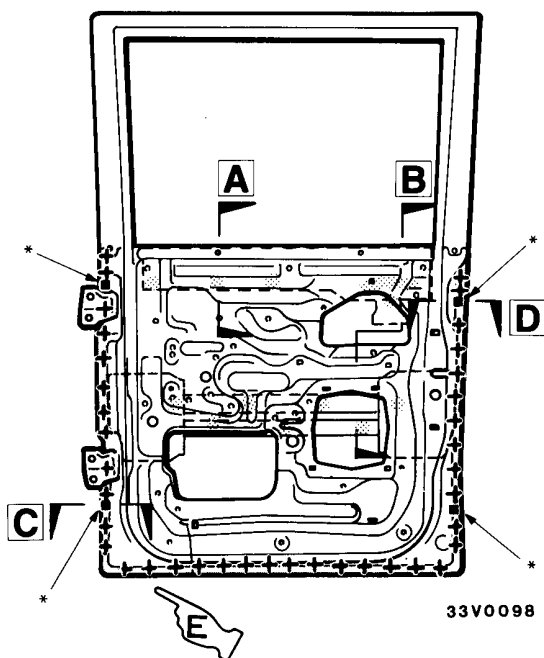
## 3-22 WELDED PANEL REPLACEMENT – Rear Door Outer Panel <Double cab>

### 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



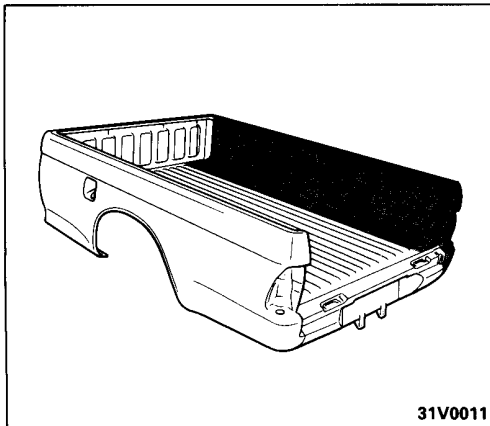
: Adhesive


Adhesive	Type
	Chloroprene-base drying sealant

#### NOTES

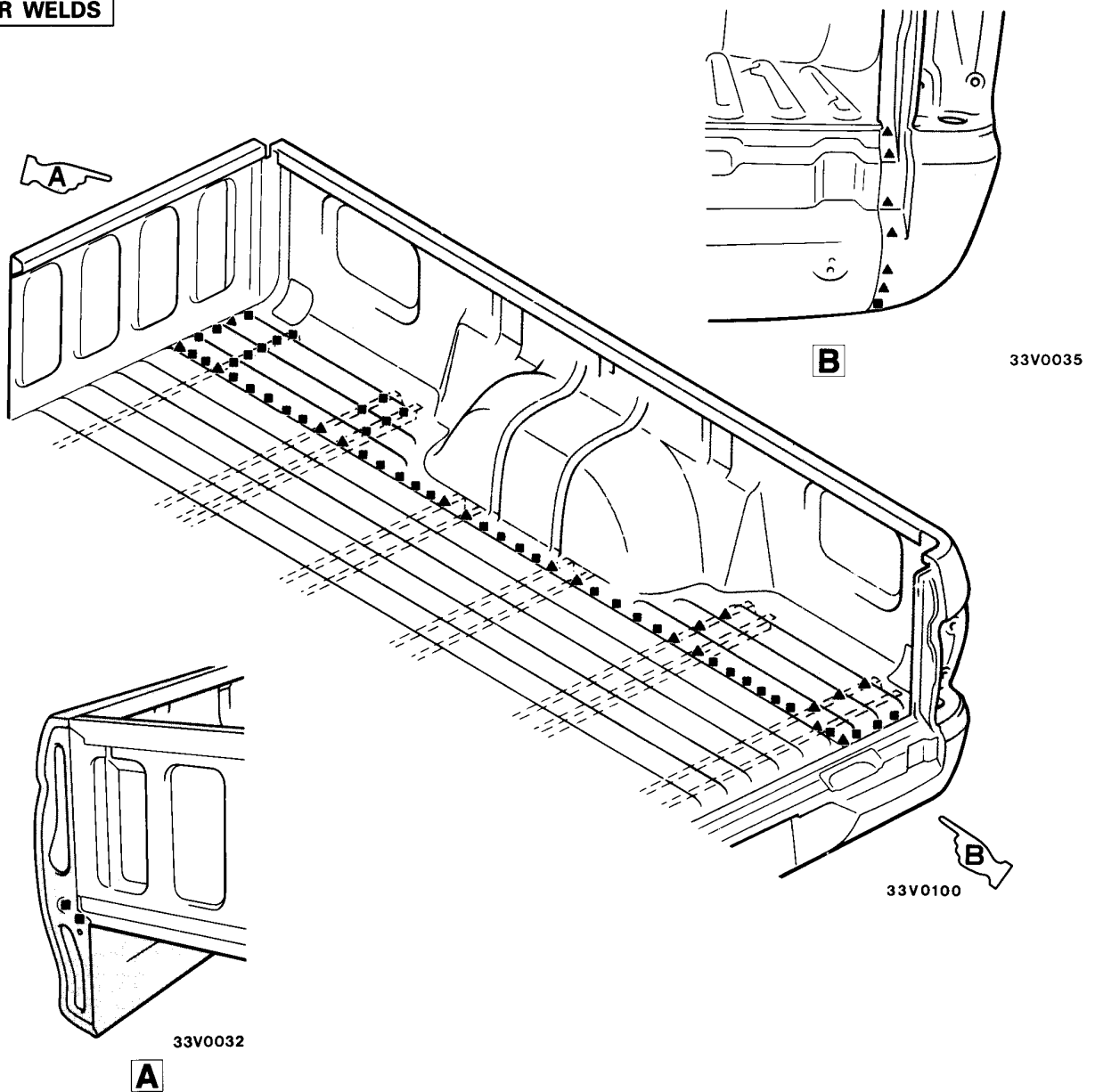
- (1) Weld point \* indicates manufacturer's welding joint. (Unnecessary at repair work)
- (2) After hemming the door outer panel, MIG spot weld the flange overlap section at a pitch of approx. 50 mm.

# SIDE PANEL <Single cab>

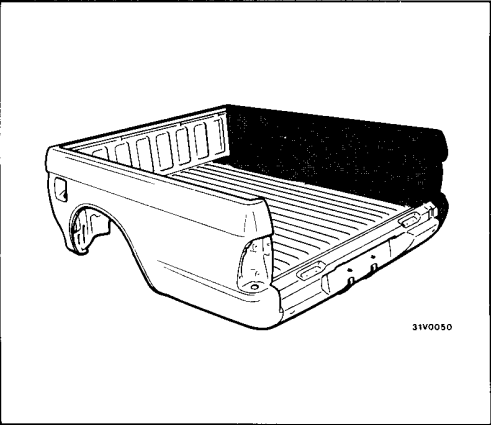



Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+ + + +	MIG spot welding
	MIG arc welding (continuous)
ooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally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

## REPAIR WELDS

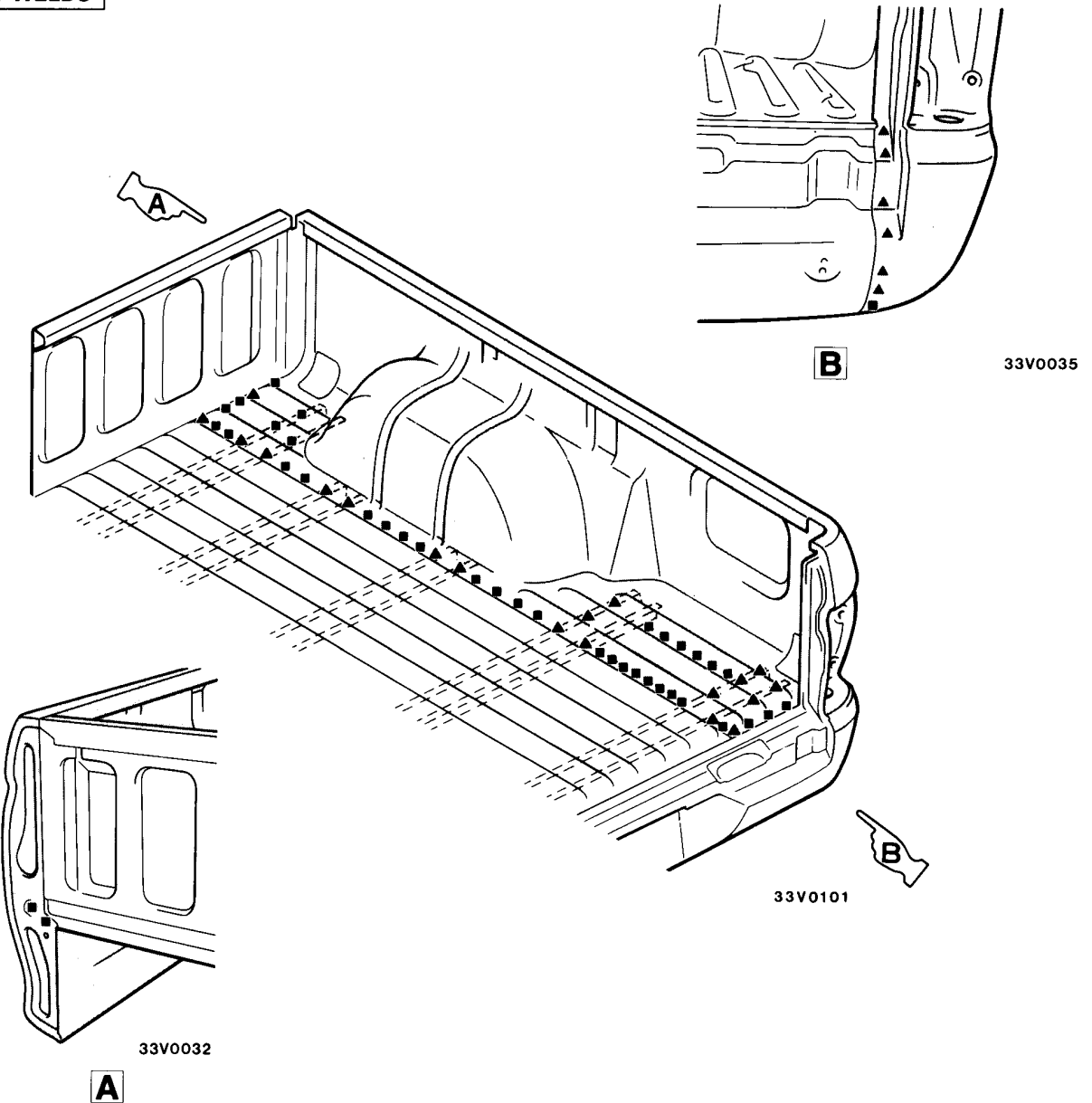


SIDE PANEL <Club cab>



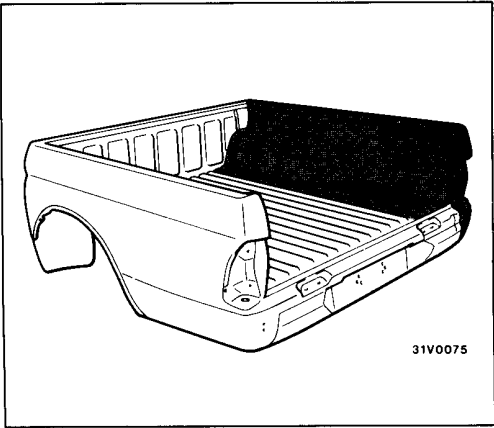
Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+ + + +	MIG spot welding
	MIG arc welding (continuous)
○ ○ ○ ○ ○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally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

REPAIR WELDS



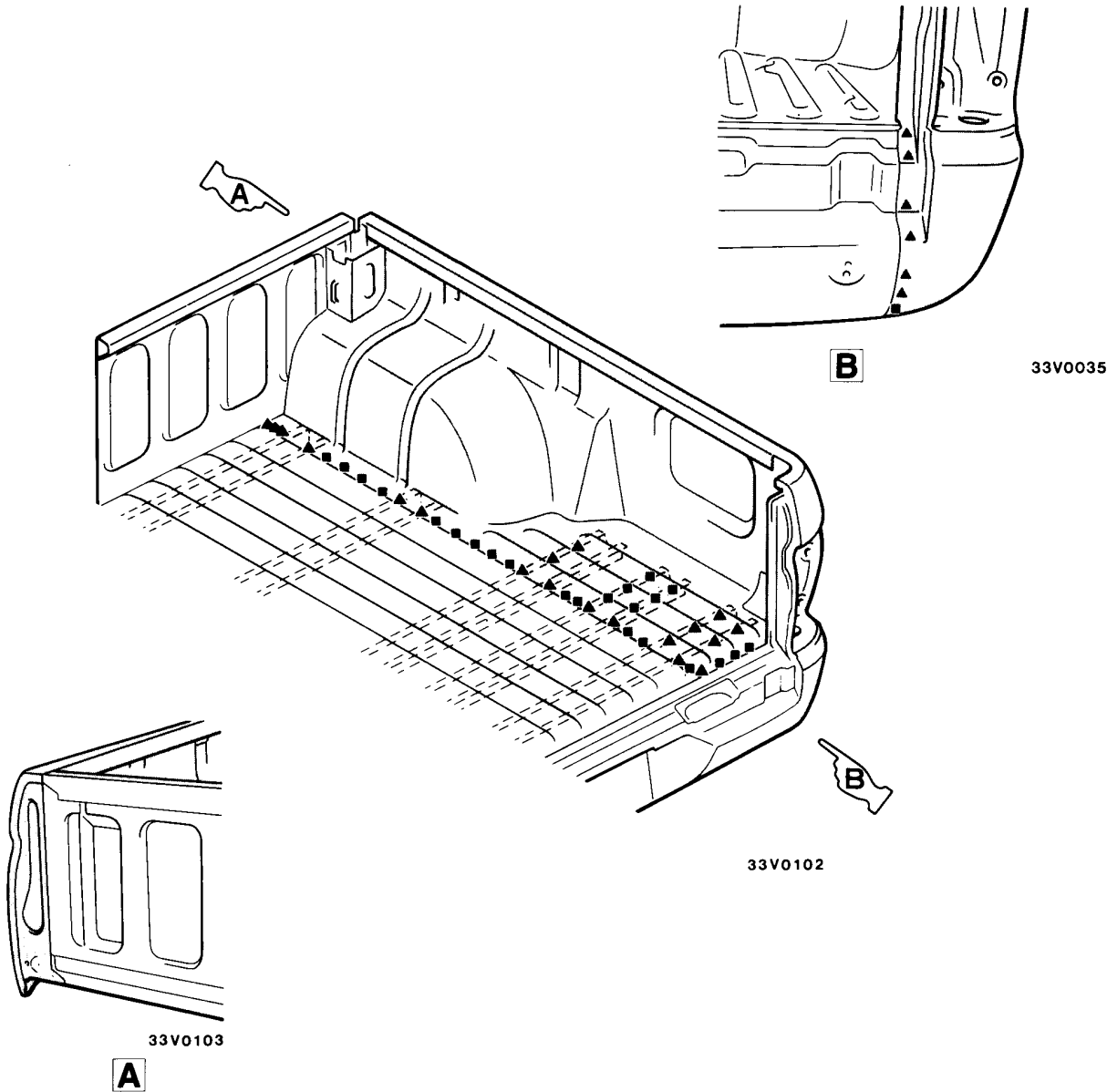


SIDE PANEL <Double cab>

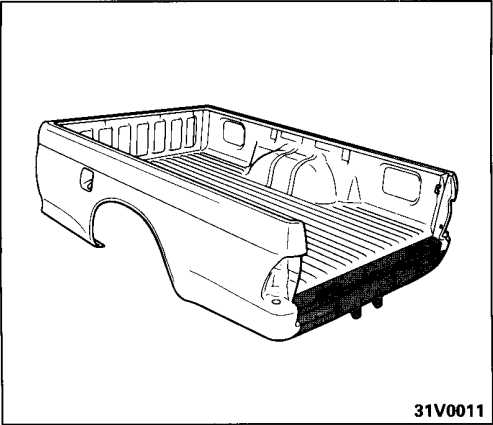



Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+ + + +	MIG spot welding
	MIG arc welding (continuous)
ooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally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

REPAIR WELDS

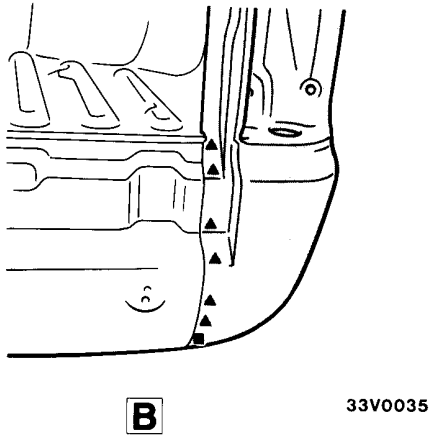
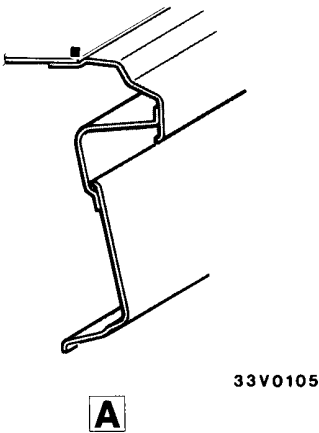
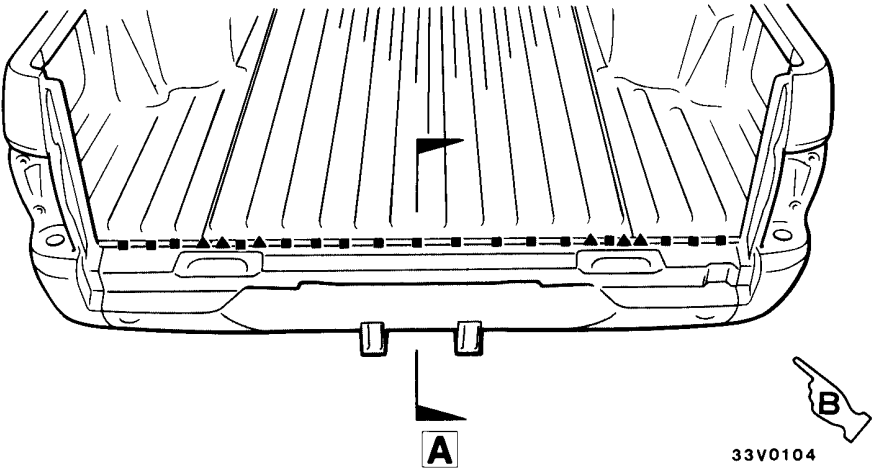


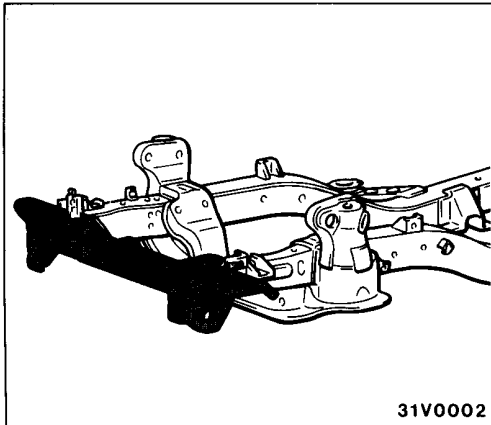
REAR END SILL




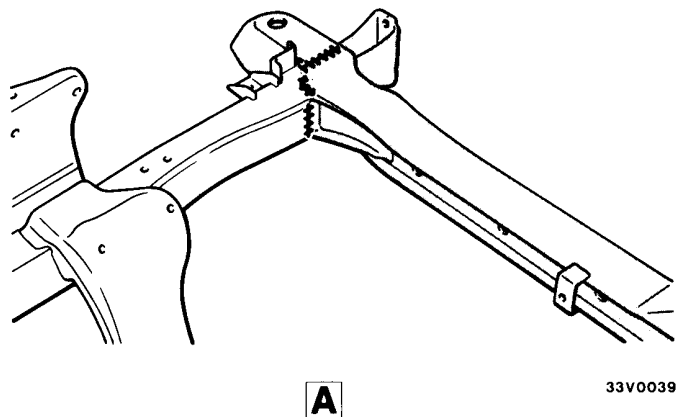
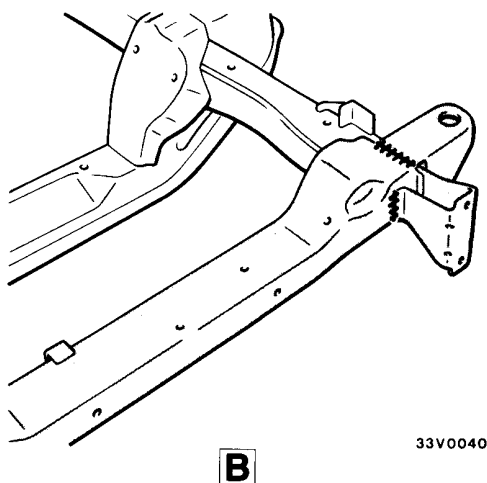
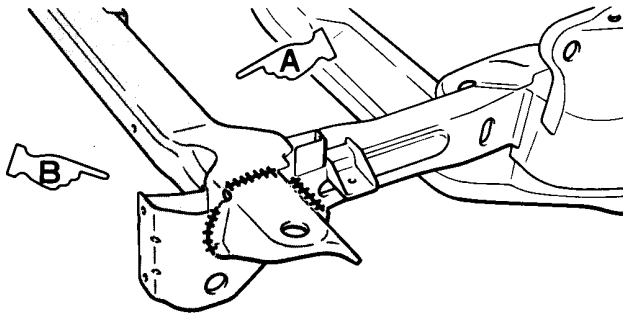
Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+ + + +	MIG spot welding
	MIG arc welding (continuous)
ooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally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

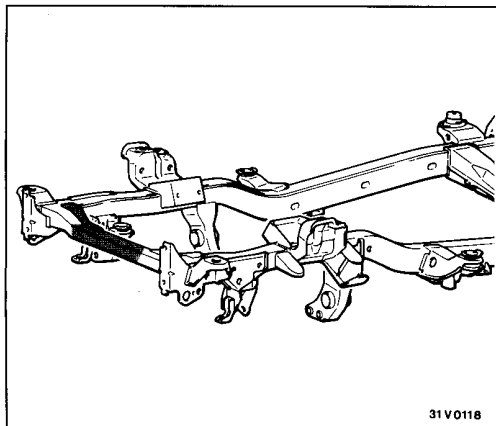
REPAIR WELDS




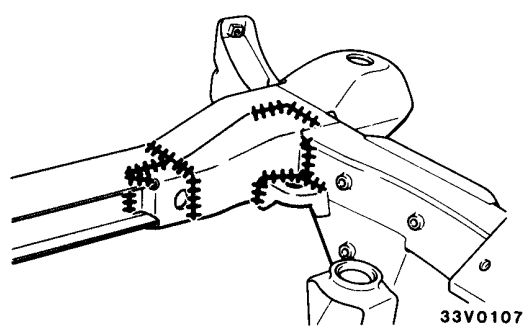
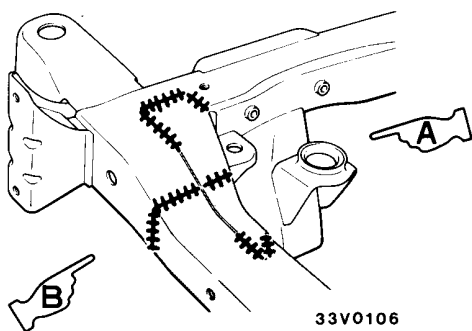
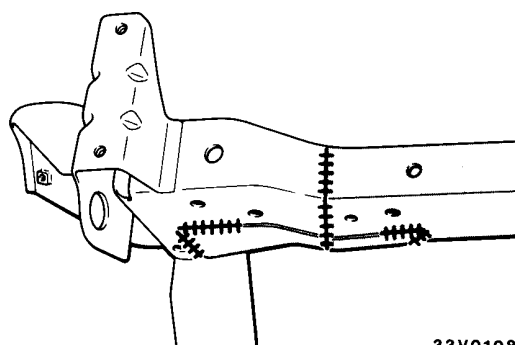
**No. 1 CROSSMEMBER <2WD>**

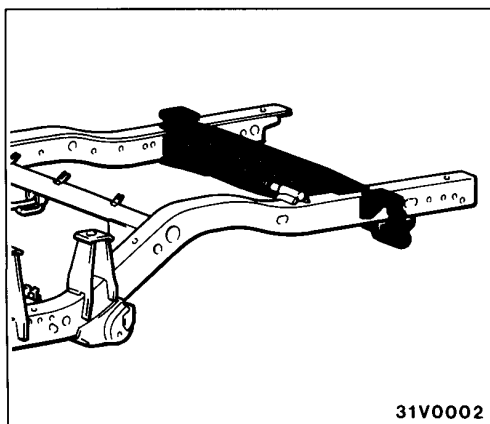
Symbol	Operation description
• • • •	Spot welding
■ ■ ▲ ▲	MIG plug welding ■ indicates two panels to be welded ▲ indicates three panels to be welded
+ + + +	MIG spot welding
	MIG arc welding (continuous)
○ ○ ○ ○ ○ ○ ○ ○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply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


**REPAIR WELDS**

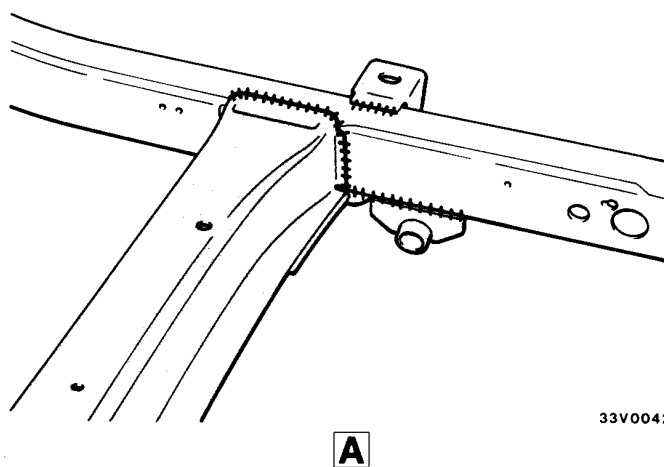
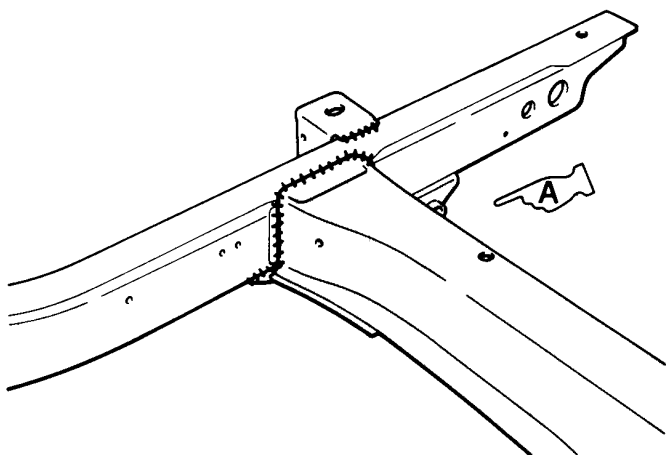
**No. 1 CROSSMEMBER <4WD>**

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.)

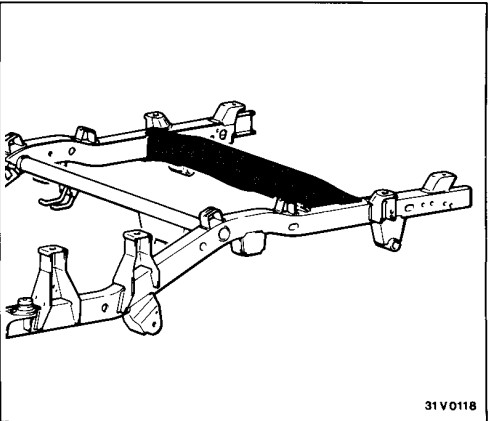
**REPAIR WELDS****A****B**


**No. 5 CROSSMEMBER <2WD>**

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)
o o o o o o	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

**REPAIR WELDS**

No. 5 CROSSMEMBER <4WD>



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

