

# PARTS & SERVICE NEWS

REF NO.	AA02262A
DATE	June 1, 2003

Page 1 of 56

*This Parts & Service News supersedes AA02262, dated December 12, 2002 which should be discarded.*

**SUBJECT:** EXTERIOR CRACKS

**PURPOSE:** To reinforce the external parts.

**APPLICATION:** WA600-3 Wheel Loader Serial Number 50001 to 50360  
WA600-3L Wheel Loader Serial Number A52001 to A52224  
WA600-3LK Wheel Loader Serial Number A53002 to A53051\*

**FAILURE CODE:** 5400HA

**DESCRIPTION:** This News introduces a two part procedure to reinforce the external parts between the bulkhead and the radiator guard.

PART 1 This portion introduces new parts, replaced parts and the parts that are to be reworked or retained and reinstalled.

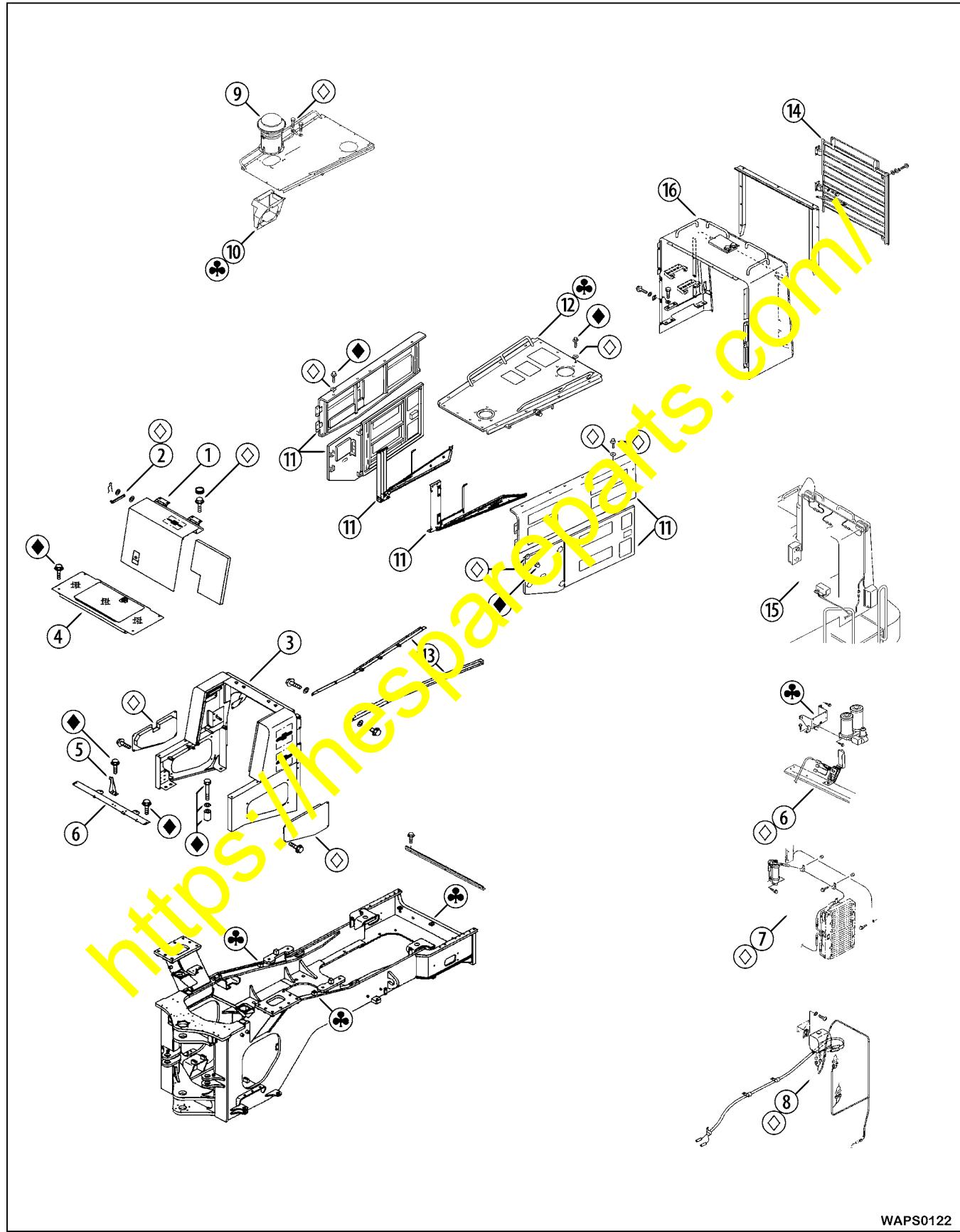
PART 2 This portion introduces modification procedures for the current parts, parts that have to be replaced and the parts that are to be reworked or retained and reinstalled.

\* Machines with serial number **A53009 to A53051** only require rework to the top side panels found on Page 44.

## PART 1

Item	New Part	Description	Qty	Ref	Old Part
①	426-54-31191	FRONT COVER .....	1		426-54-31190
②		COVER STAY ROD .....	1	◊	
③	426-54-21517	BULKHEAD - WA600-3 AND 3L .....	1		426-54-21515
④	426-54-31113	BULKHEAD - WA600-3LK .....	1		426-54-31111
⑤	426-54-24184	UPPER COVER .....	1		426-54-24183
⑥	426-54-21762	BRACKET .....	1		426-54-21761
⑦	426-54-21542	CROSS BEAM .....	1		426-54-21541
⑧		AIR CONDITIONER AND LINES .....	1	◊	
⑨		WASHER TANK AND LINES .....	1	◊	
⑩		PRECLEANER .....	1	◊	
⑪		AIR EXTENSION BOX .....	1	♣	
⑫	426-54-21243	LEFT TOP SIDE PANEL .....	1		426-54-21242
⑬	426-54-21253	RIGHT TOP SIDE PANEL .....	1		426-54-21252
⑭		LOWER BRACKETS .....	2	♣	
⑮		GRILLE .....	1	♣	
⑯		REAR LIGHTING .....	1	◊	
⑰		RADIATOR GUARD .....	1	♣	

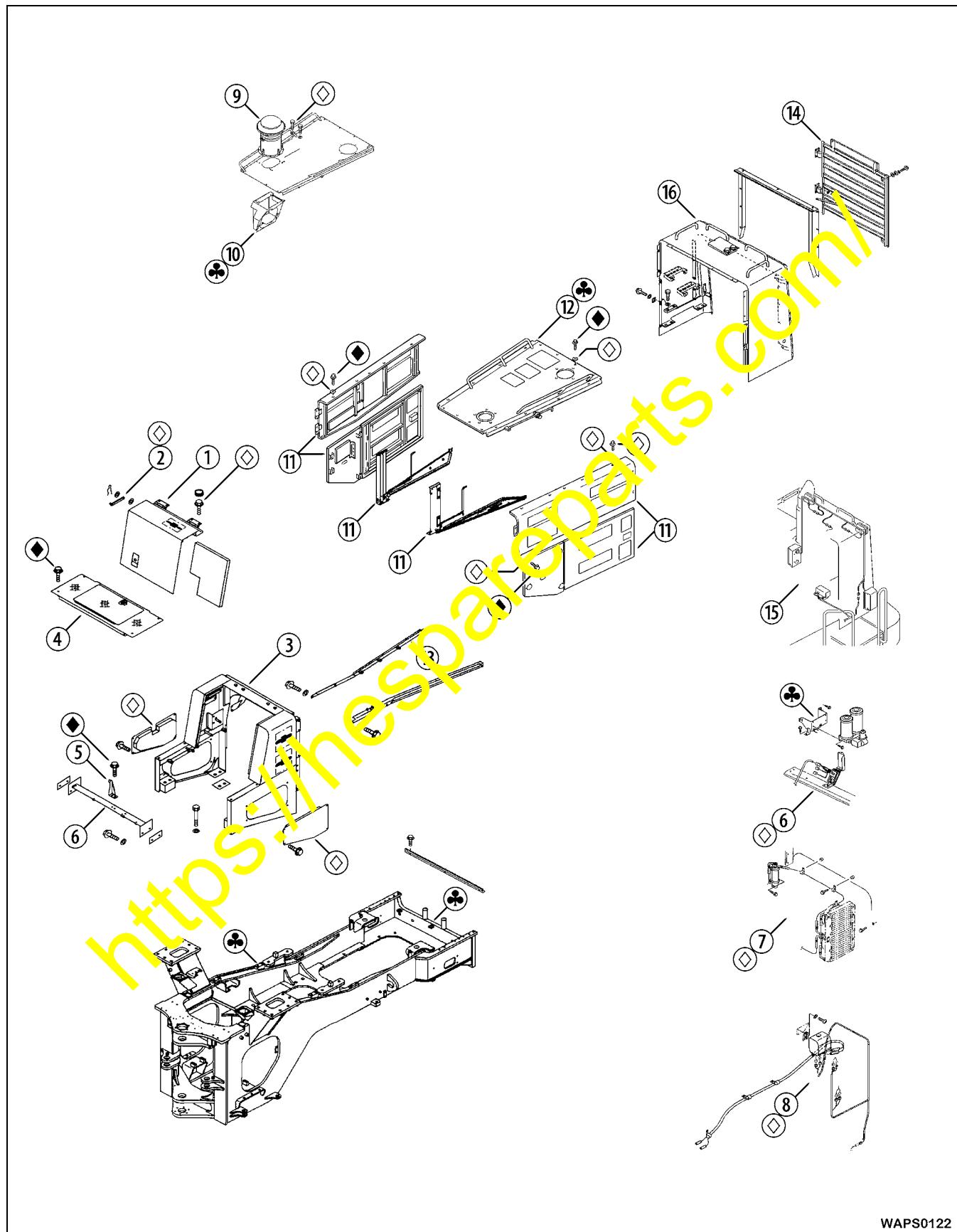
PRIOR DESIGN



◊	Retain these parts for future use.
♣	Remove the part and rework per the appropriate page.
♦	Discard these parts and replace with new ones.

1. Open the front cover ① and support. Unhook the stay rod ② from the bulkhead ③. Close the cover and remove the hardware and store for reuse. Remove the cover.  
★ Machines with serial number **50327 or A52209 and Up**, have the improved front cover ① for the bulkhead ③. To determine if the cover needs rework, see Page 24.
2. Remove the upper cover ④ from the bulkhead.  
★ Machines with serial number **50327 or A52209 and Up**, have the improved upper cover ④ for the bulkhead ③. To determine if the cover needs rework, see Page 27.
3. If equipped with an automatic grease system, remove the pump and bracket and the controller unit from the crossbeam ⑥. Disconnect the pump from the bracket ♦ and see Page 25 for bracket rework.
4. Remove the bracket ⑤. Remove the cross beam ⑥ and hardware.
5. Remove the condenser, receiver and piping of the air conditioner ⑦ installed to the inside surface of the bulkhead.  
★ Do not disconnect the air conditioner hoses. It is not necessary to separate the condenser and the bracket.
6. Remove the window washer tank and the harness ⑧.
7. Machines with serial number **50001 to 50360**, remove the precleaner hood and extension ⑨. Remove the air extension box ⑩, ♣ and see Page 42 for box rework.
8. Remove the left and right top and bottom side panels ⑪ and brackets and see Page 44 for side panel rework.
9. Remove the hood ⑫, ♣ and see Page 40 for rework.
10. Remove the support bracket ⑬ and see Page 25 for rework.
11. Remove the hardware and bulkhead ③ from the machine.
12. Remove the grill ⑭ and associated parts and see Page 35 for rework.
13. Remove the rear lighting and backup alarm ⑮.
14. Remove the radiator guard ⑯ and see Page 32 for rework.
15. Rework the rear main frame ♣ and see Page 23 or 36 for rework.

CURRENT DESIGN



WAPS0122

1. Reverse the removal steps.

 N·m	M6 bolts.....	8.8 to 14.7 N·m
	M8 bolts.....	14.7 to 34 N·m
	M10 bolts.....	34 to 74 N·m
	M12 bolts.....	54 to 123 N·m
	M20 bolts.....	319 to 608 N·m

https://hespareparts.com/

## PART 2

- ★ There may be cases of occurrence of cracks on various external parts of the standard specification wheel loaders when these machines are used under severe operating conditions. When cracks occur, make the modification following the procedures being outlined in this **PARTS & SERVICE NEWS** to repair and to make reinforcement.

### CONTENTS

#### Contents of the Improvement

- ★ Machines with the serial numbers of **50327** or **A52209 and Up**, the improved front cover ① for the bulkhead ② and the improved upper cover ③ for the transmission have been already used.

#### Reinforcement Procedure

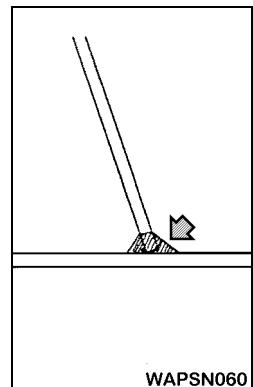
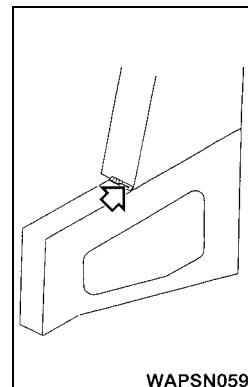
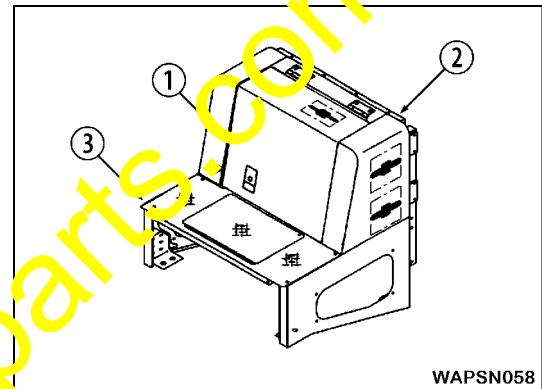
Since reinforcement is to be made to different sections one by one, refer to the followings.

- ★ If cracked sections exist, make the repair procedure before executing this reinforcement work. Examples of repair procedures for cracks are being shown and refer to this example when making the rework.

Examples of repair procedures for cracks

Pattern 1: The crack is a small one in the welded end section.

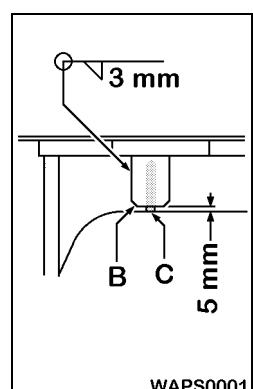
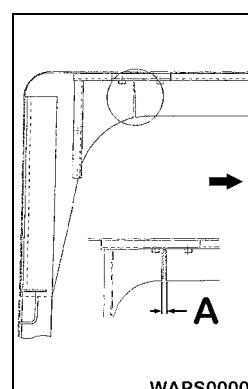
1. Remove the section where the crack exists by gouging or by use of a grinder.
2. Make a build up weld. Be sure to make the build up weld on both sides when it is possible.



Pattern 2: The crack is a large one in the base metal.

1. Remove the section where the crack exists by gouging or by use of a grinder, 5 to 7 mm **A**.
2. Add a reinforcement plate **B**, make the build up weld **C**.

- ★ Use a reinforcement plate with a thickness similar to that of the base plate. Prepare a reinforcement plate which will not cause interference when it is added to the cracked section.

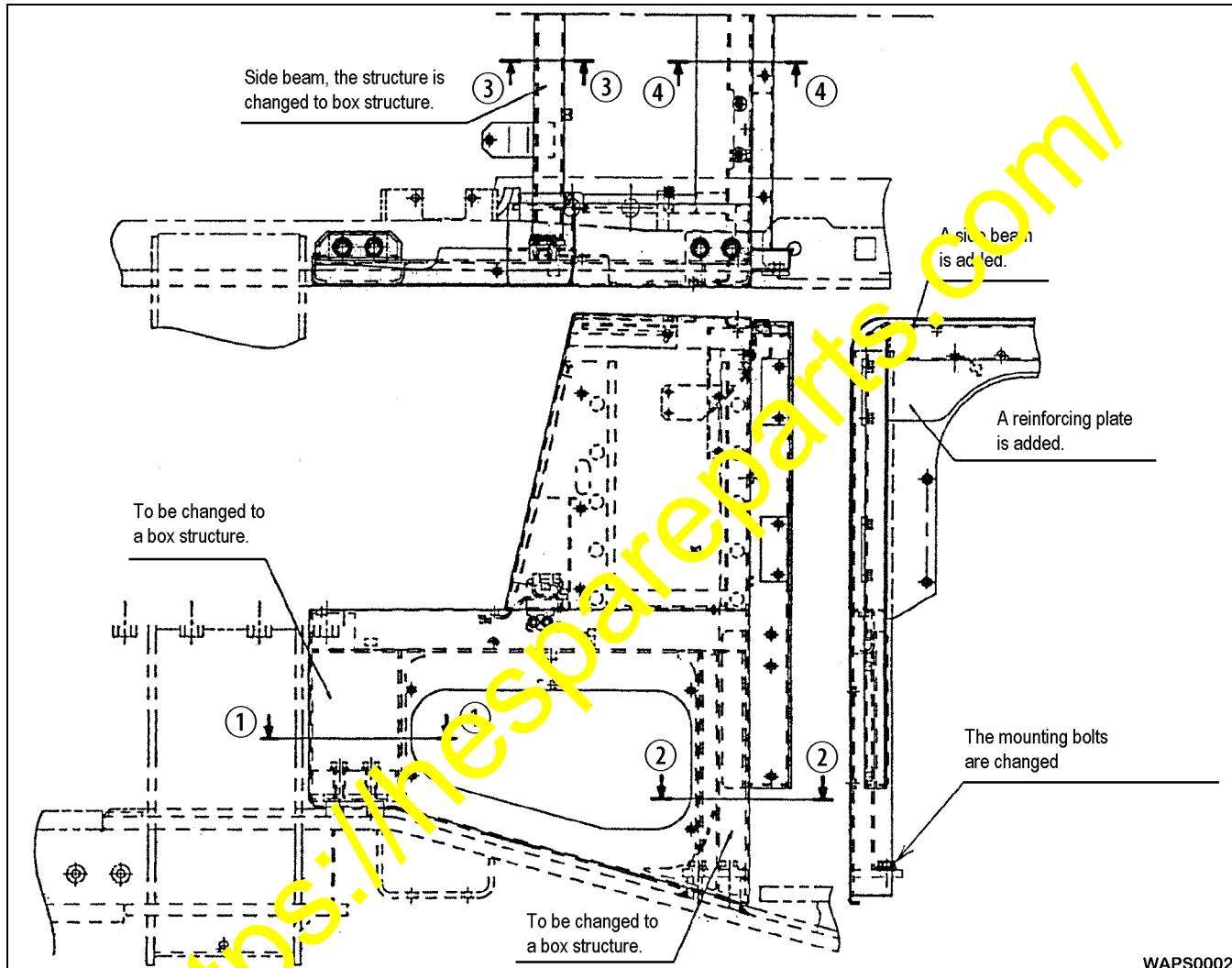


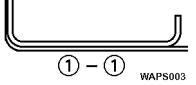
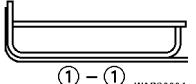
No.	Item	Contents	Page
1	<b>Reinforcement of the Bulkhead</b> Related parts to which additional work is to be made: <ul style="list-style-type: none"><li>• Rear frame</li><li>• Angle</li><li>• Front cover of the bulkhead</li><li>• Optional auto greasing pump bracket</li><li>• Upper cover of the transmission, replace with the reinforced parts. Machines with the serial numbers <b>50327 or A52209 and Up</b>, the improved front cover for the bulkhead and the improved upper cover for the transmission have been already used and it is not necessary to prepare these parts.</li></ul>	1. Lists of parts..... 2. Removing the parts for this modification..... 3. Reinforcement procedures ..... <ul style="list-style-type: none"><li>1. Bulkhead.....</li><li>2. Rear frame.....</li><li>3. Front cover of the bulkhead .....</li><li>4. Angle, between the bulkhead and the radiator guard.....</li><li>5. Optional auto greasing pump bracket.....</li></ul> 4. Reinstalling the removed parts .....	10 11 15 15 23 24 25 25 26
2	<b>Reinforcement of the radiator guard</b> Modifying parts relevant to the above reinforcement <ul style="list-style-type: none"><li>• Grille</li><li>• Rear frame</li></ul>	1. Lists of parts..... 2. Removing the parts for this modification..... 3. Reinforcement procedures ..... <ul style="list-style-type: none"><li>1. Radiator guard.....</li><li>2. Grill .....</li><li>3. Rear frame.....</li></ul> 4. Reinstalling the removed parts .....	29 30 32 32 35 36 37 37 38 39
3	<b>Reinforcement of the top hood</b> Modifying parts relevant to the above reinforcement <ul style="list-style-type: none"><li>• Optional air intake extension box</li></ul>	1. Lists of parts .....	40
		2. Removing the parts for this modification.....	40
		3. Reinforcement procedures .....	41
		1. Top hood .....	41
		2. Optional air intake extension box.....	42
		4. Reinstalling the removed parts .....	43
4	<b>Reinforcement of the side panels</b> Modifying parts relevant to the above reinforcement	1. Lists of parts..... 2. Removing the parts for this modification..... 3. Reinforcement procedures .....	44 45 46
5	<b>New or locally made parts</b>	1. New or locally made parts.....	49

## CONTENTS OF THE MODIFICATION

### Bulkhead Reinforcement

- ★ A reinforcing plate is added to the column of the bulkhead to change the structure into a box structure and side beams are to be added in the rear section of the bulkhead, thus the overall rigidity has been increased.



Current Structure	The current configuration is of an open structure.  ① - ① WAPS003	The current configuration is of an open structure.  ② - ② WAPS0005	Side beam  ③ - ③ WAPS0007	Top hood mounting section  ④ - ④ WAPS0009
Reinforced Structure	Change to a box structure by adding a plate.  ① - ① WAPS0004	Change to a box structure by adding plates.  ② - ② WAPS0006	Change to a box structure, shape changed  ③ - ③ WAPS0008	A side beam is added. Top hood mounting section  ④ - ④ WAPS0010

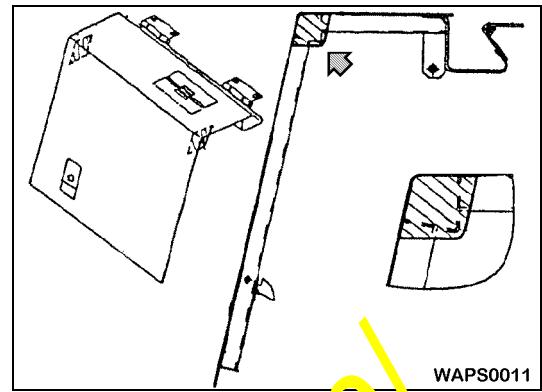
## Front Cover Reinforcement

- ★ Machines with the serial numbers of **50327 or A52209 and Up**, the improved front cover for the bulkhead has been already used and it is not necessary to make this reinforcement.

## Transmission Upper Cover Reinforcement

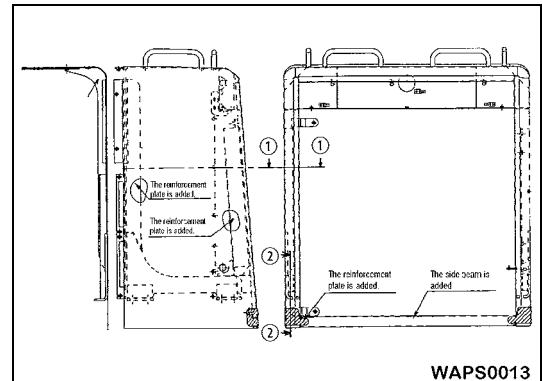
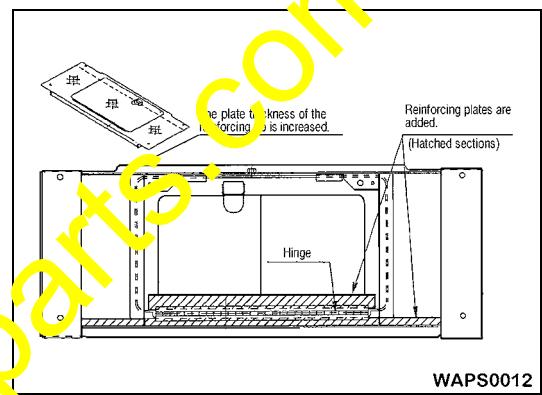
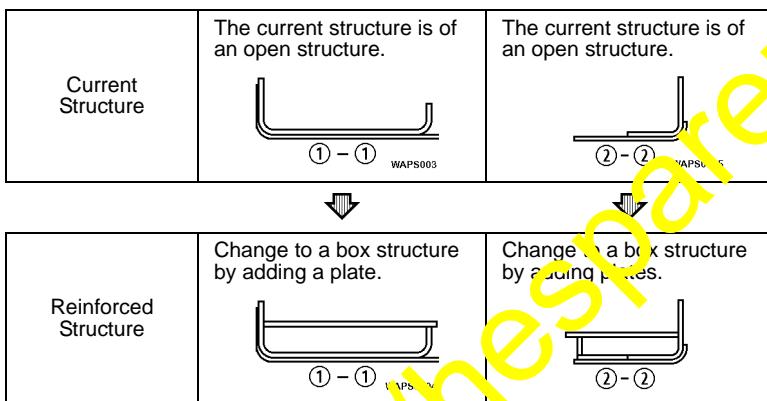
To be replaced with the reinforced parts. Reinforcing plates are added to the hinge and the plate thickness of the reinforcing rib is increased to improve the rigidity.

- ★ Machines with the serial numbers of **50327 or A52209 and Up**, the improved upper cover for the transmission has been already used and it is not necessary to make this reinforcement work.



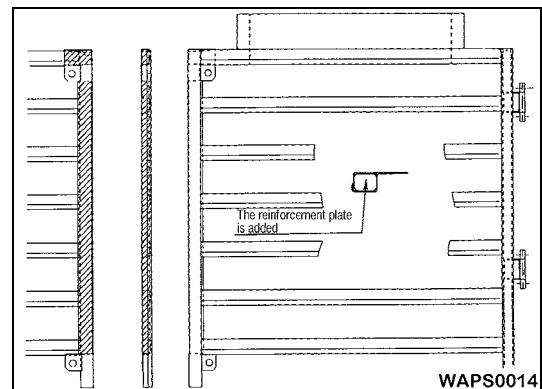
## Radiator Guard Reinforcement

The reinforcement plates and the side beam are added in order to increase the total rigidity.



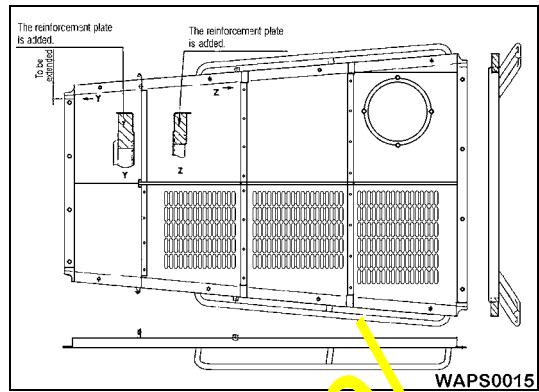
## Grill Reinforcement

The reinforcement plates are added to the vertical rib of the grill in order to increase the rigidity.



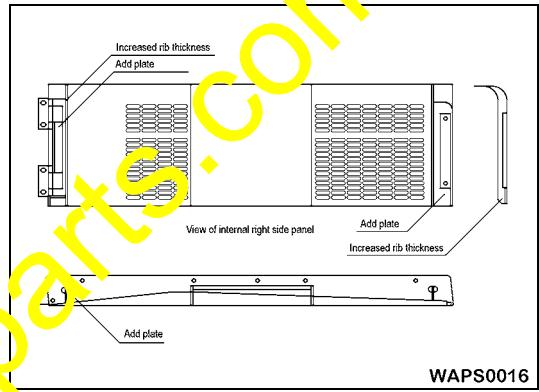
## Top Hood Reinforcement

The rib of the top hood is extended to the end section of the hood in order to increase the total rigidity, all the sections.



## Side Hood Reinforcement

The reinforcement plates are added in order to increase the rigidity of the mounting sections.



## BULKHEAD REINFORCEMENT

### List of Parts

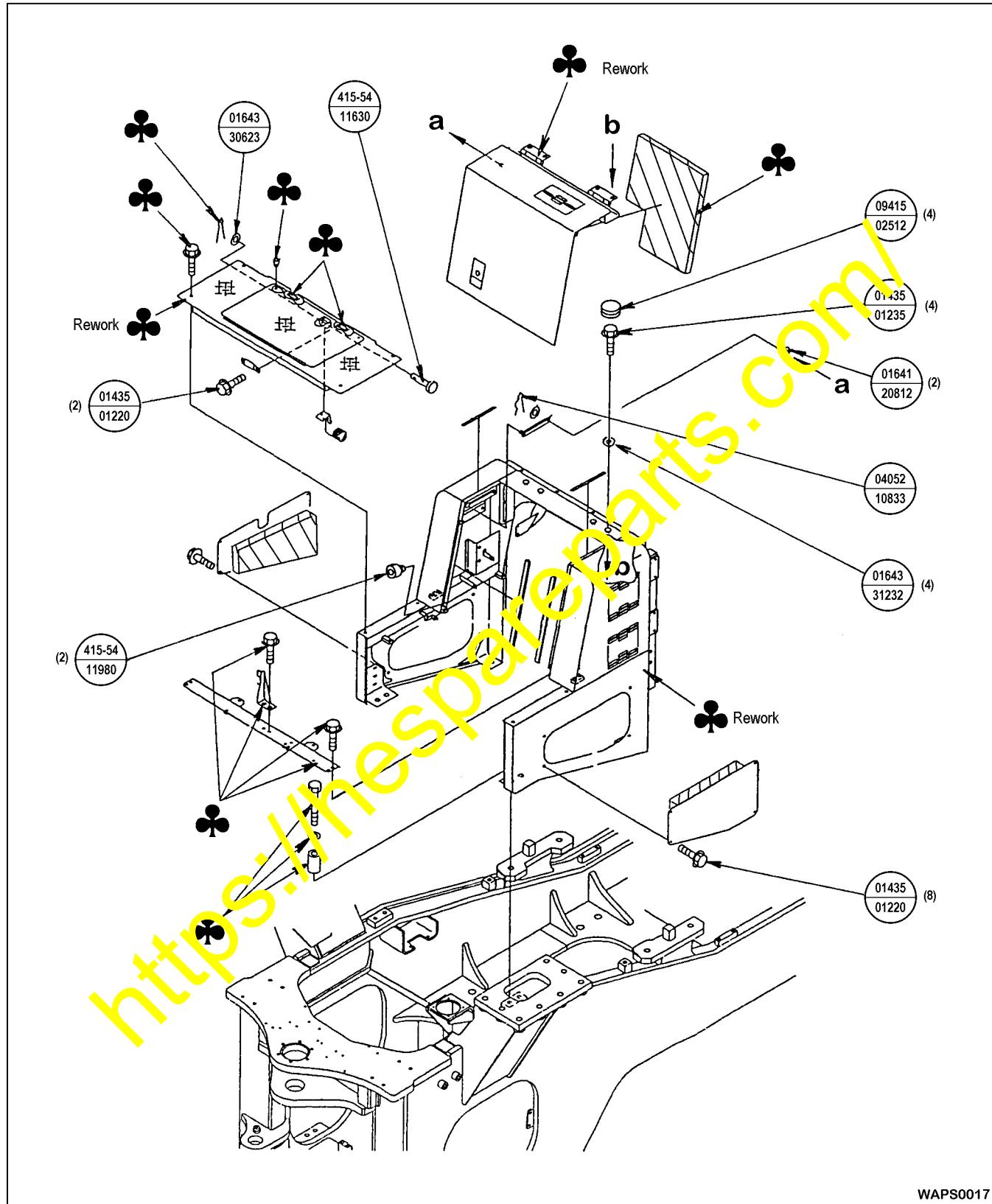
New Service Part	Description	Qty	Ref	Old Service Part
426-54-21517	BULKHEAD - W400-3AND 3L .....	1		426-54-21515
426-54-31113	BULKHEAD - W4600-3LK.....	1		426-54-31111
426-54-21754	COVER .....	1		426-54-21753
426-54-23710	ANGLE .....	4		---
426-54-23720	ANGLE .....	2		---
426-54-23730	SEAL .....	2		---
426-54-23740	PLATE .....	2		---
426-54-23750	LEFT BLOCK .....	1		---
426-54-23760	RIGHT BLOCK .....	1		---
426-54-23770	PLATE .....	2		---
426-54-23780	PLATE .....	2		---
426-54-23790	PLATE .....	2		---
426-54-23810	PLATE .....	2		---
426-54-23820	PLATE .....	2		---
426-54-23830	PLATE .....	2		---
426-54-23840	RIGHT PLATE .....	1		---
426-54-23850	LEFT PLATE.....	1		---
426-54-23860	PLATE .....	2		---
426-54-23870	RIGHT PLATE .....	1		---
426-54-23880	LEFT PLATE.....	1		---

New Service Part	Description	Qty	Ref	Old Service Part
426-54-23890	RIGHT ANGLE .....	1		---
426-54-23910	LEFT ANGLE .....	1		---
426-54-23920	BRACKET .....	1		---
426-54-23930	PLATE .....	1		---
08036-C2845	CLIP .....	3		---
08053-00910	CLIP .....	1		---
01573-10205	SEAT .....	3		---
01573-10206	SEAT .....	2		---
426-54-31870	PLATE .....	1		---
01010-82050	BOLT .....	4		01010-82095
01643-32060	WASHER..	8		---
426-54-27150	SHIM .....	6		---
426-54-27180	SHIM .....	6		---
426-54-21542	BRACKET .....	1		426-54-21541
426-54-27140	SHIM .....	3		---
01010-81230	BOLT .....	4		01435-01220
01643-31232	WASHER..	20		---
426-54-21762	BRACKET .....	1		426-54-21761
01010-81230	BOLT .....	2		01435-01225
01010-81225	BOLT .....	6		01435-01220
426-46-22190	BLOCK .....	2		426-46-22J11
426-45-27160	PLATE .....	2		---
01010-81235	BOLT .....	2		01435-01225
01010-81225	BOLT .....	2		01435-01225
426-S95-2240	PLATE .....	1		---
426-54-24184	PLATE .....	1		426-54-24183
421-09-21420	SHEET .....	2		---
415-54-11980	CUSHION..	2		---
04050-12015	PIN .....	1		---
426-54-2151	SHEET .....	1		---
426-54-23590	PLATE .....	1	@	---

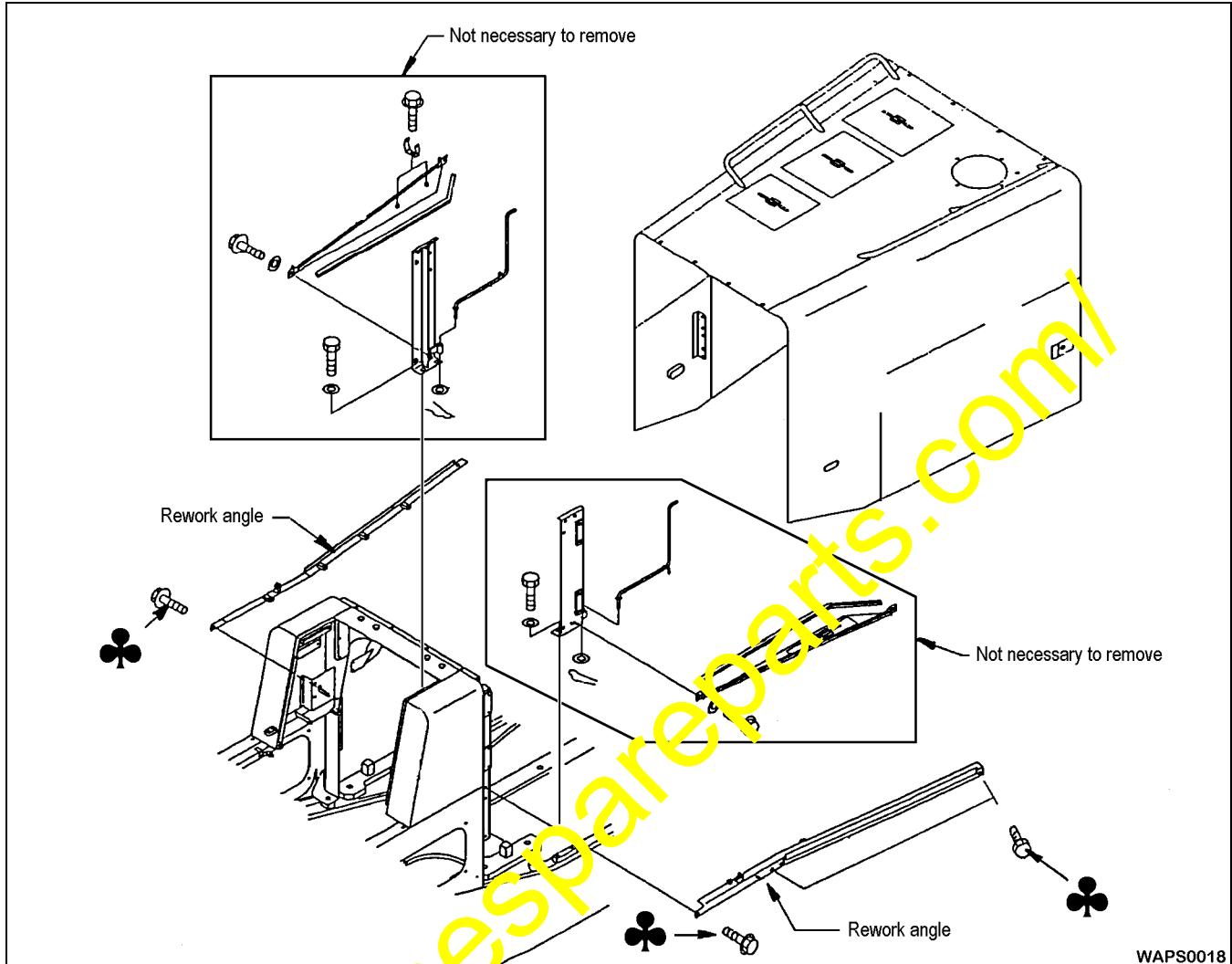
- @ It is not necessary to prepare this plate for machines with which the modification as per the **Parts & Service News AA99166** has already been made.

### Removal Of The Parts

1. Remove the parts indicated below. Remove the bulkhead from the machine body. Store removed parts.
- ★ Parts marked ♣ will be changed to the prepared parts when making the installation work.

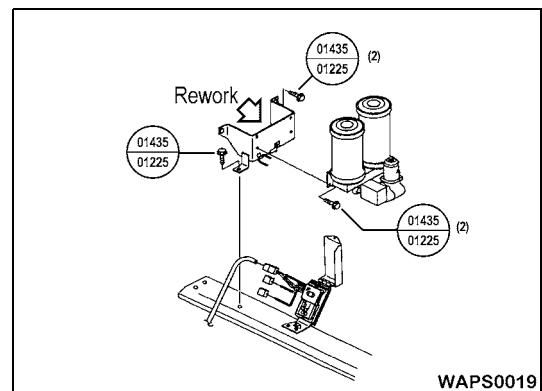


WAPS0017

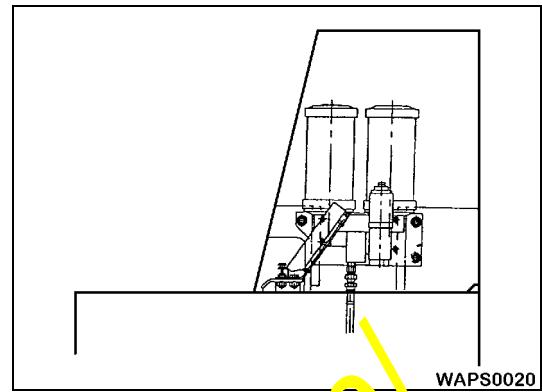


WAPS0018

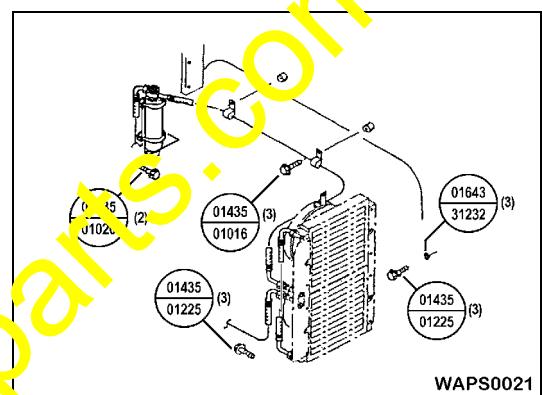
1. When the machine is equipped with the auto grease pump, remove the pump mounting bracket.



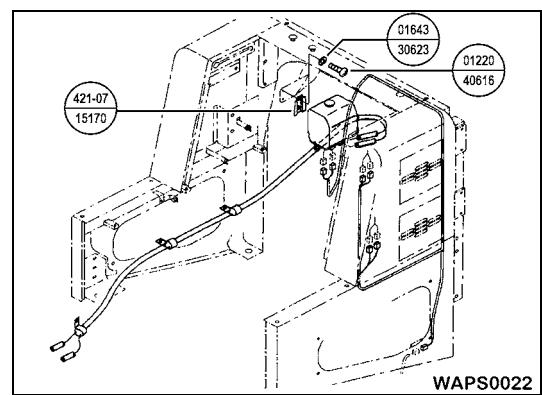
WAPS0019



2. Remove the condenser, receiver and piping of the air conditioner installed to the inside surface of the bulkhead.
  - ★ Do not disconnect the air conditioner hose. It is not necessary to separate the condenser and the bracket.

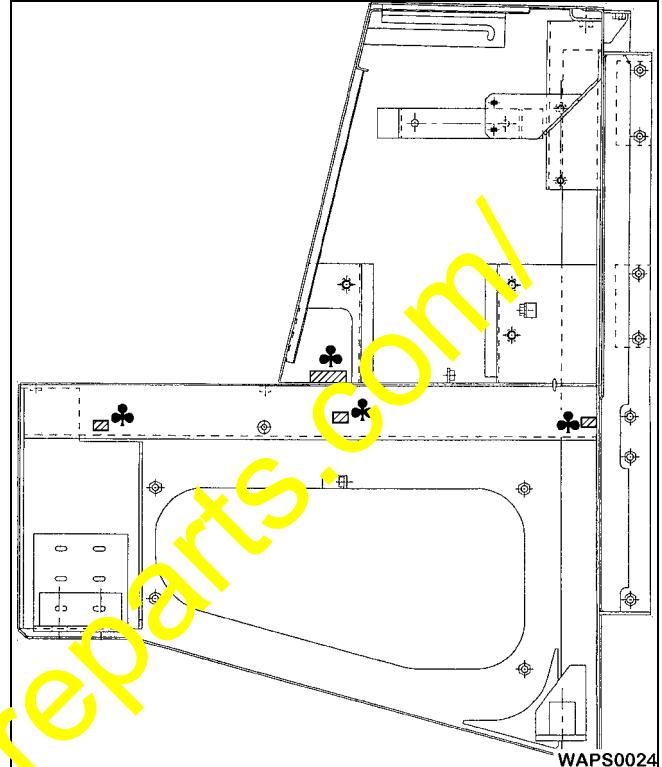
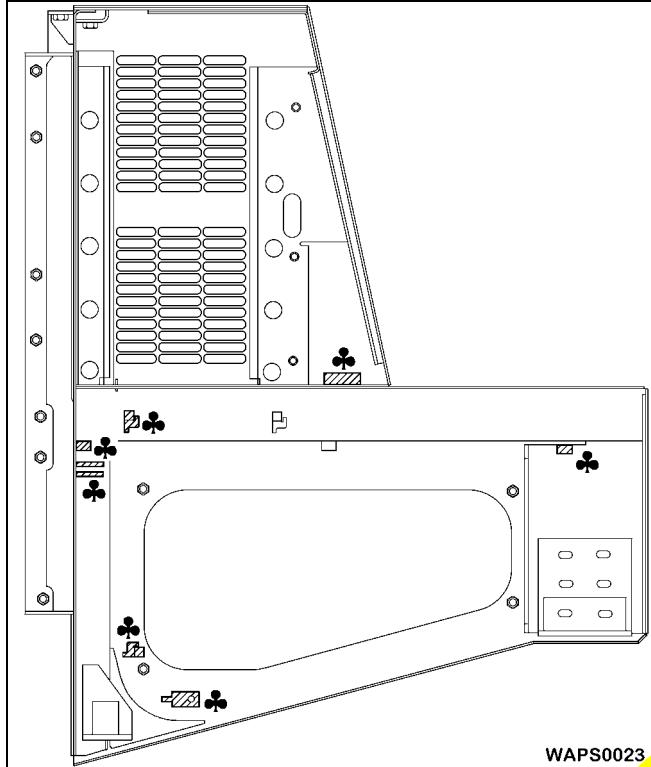


3. Remove the window washer tank and the harness

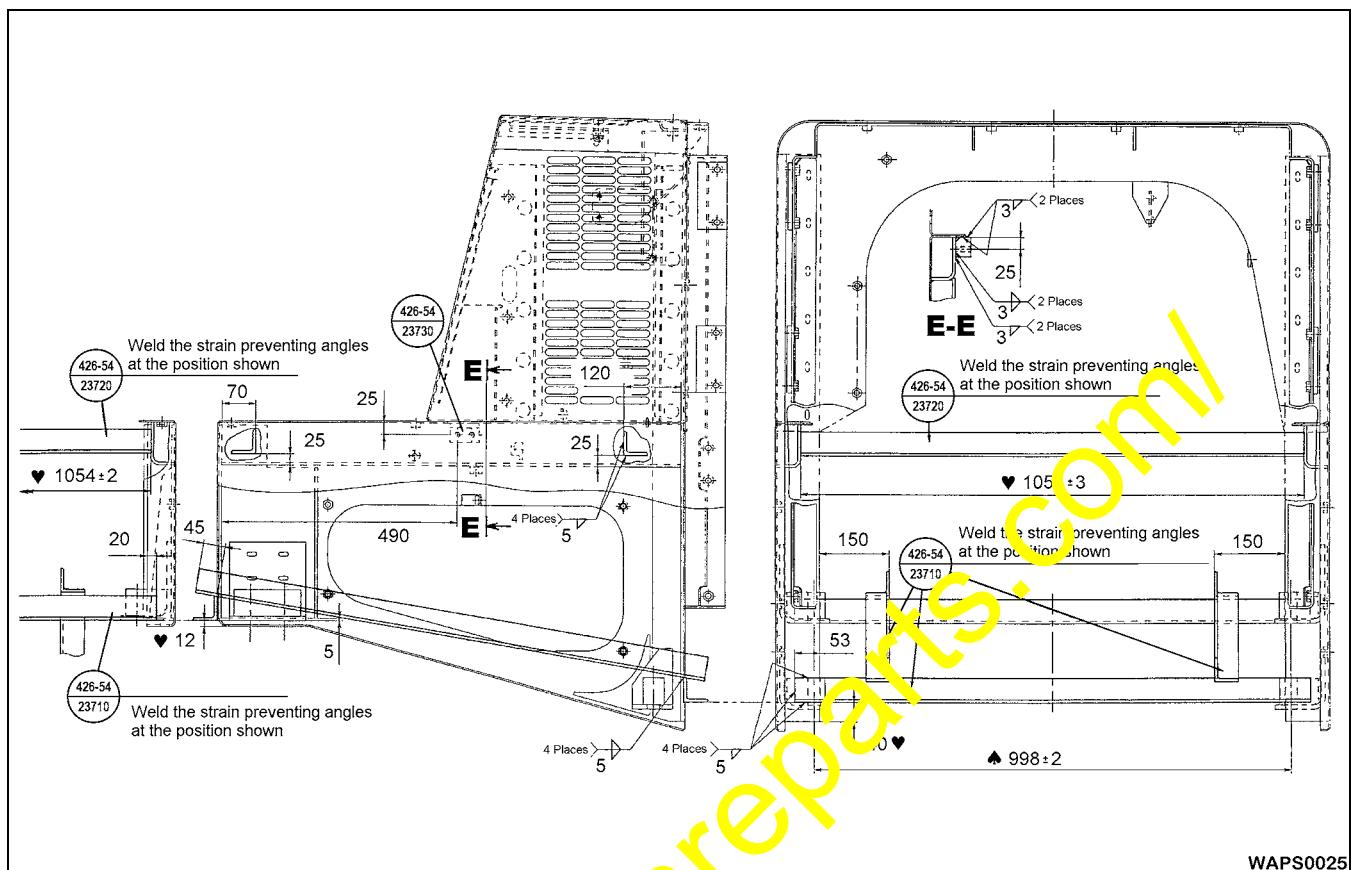


## Reinforcement Procedures

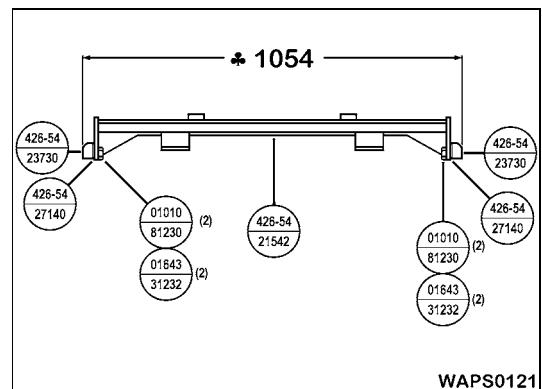
### BULKHEAD REWORK



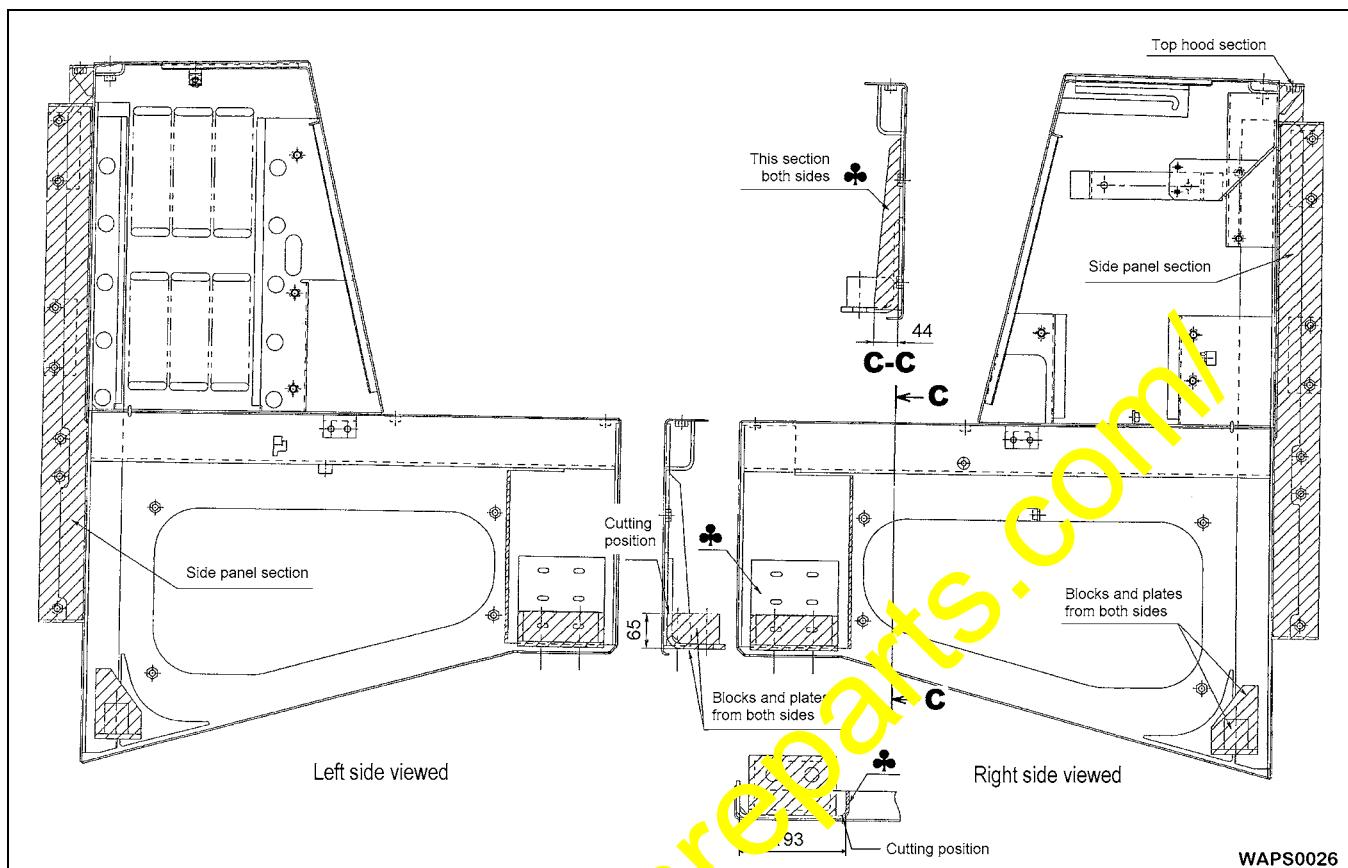
1. Remove the hatched parts shown (seats and clips) at the eleven places marked ♣. After removing these parts, grind the surfaces smooth.



2. To prevent bulkhead strain or warpage when welding, add the stiffener angles  $\ominus$  and side beam and seat.
  - A. Measure the dimension marked  $\heartsuit$  to check if it is within the tolerance and weld the bottom angles.
  - B. If the dimension is not within of the tolerance, correct it by use of a hydraulic jack, etc. and weld the angles.
  - C. Measure the dimension marked  $\clubsuit$  and install the beam to the seats with shims before welding the seats to the bulkhead.
  - D. After finishing the above, weld the top angles. Be sure to keep the dimensions  $\heartsuit$  when welding all of the angles.

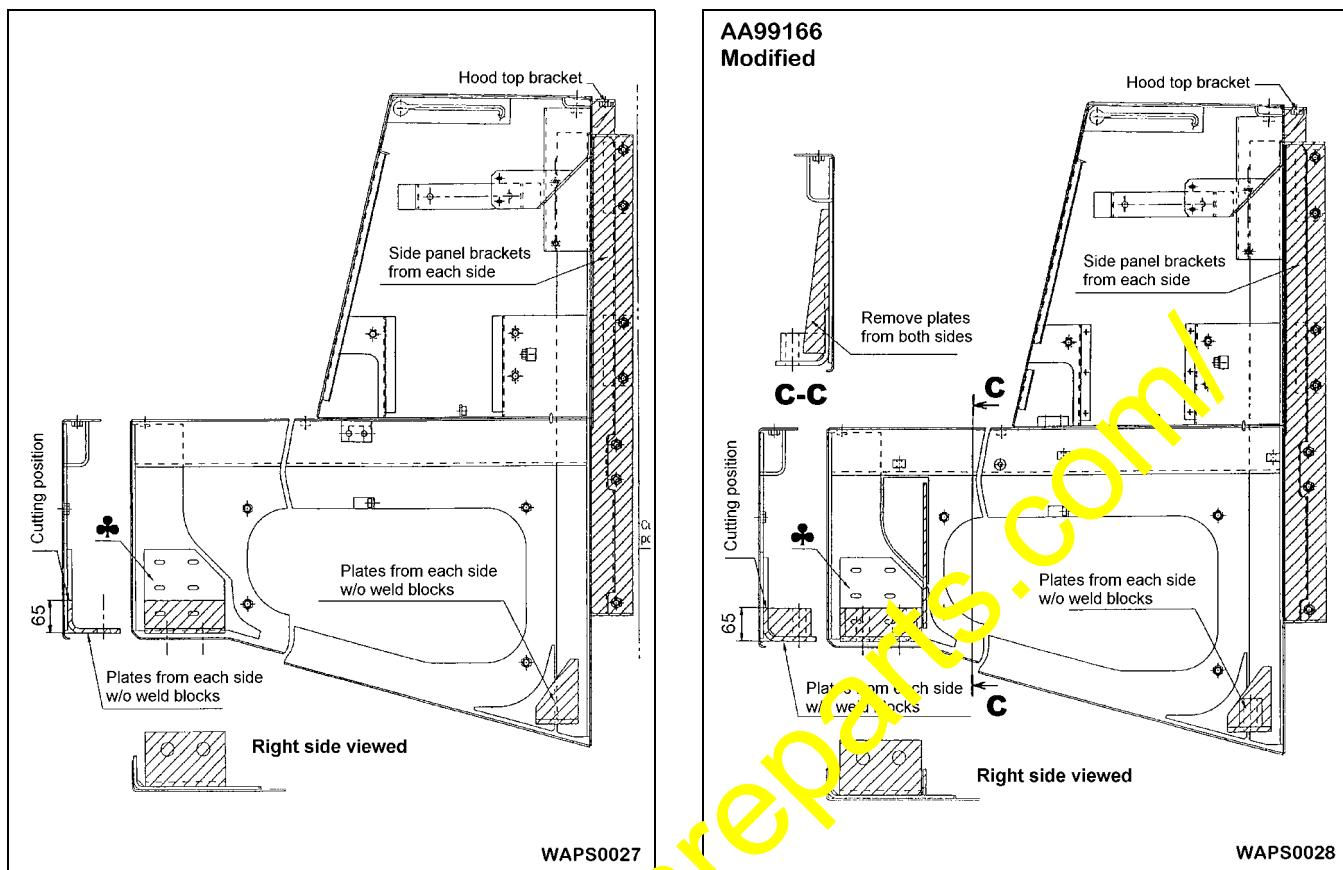


Unit : mm



3. Remove the hatched parts marked.
  - A. Removing the side hood mounting sections from both sides.
  - B. Removing the top hood mounting section.
  - C. As for the parts marked cut them at the position indicated.
  - D. After removing these parts, grind the surfaces smooth.
  - E. Since the bulkhead mounting section may differ depending on if the modification as per the **Parts & Service News AA-2916** has been made or not, refer to Page 18.

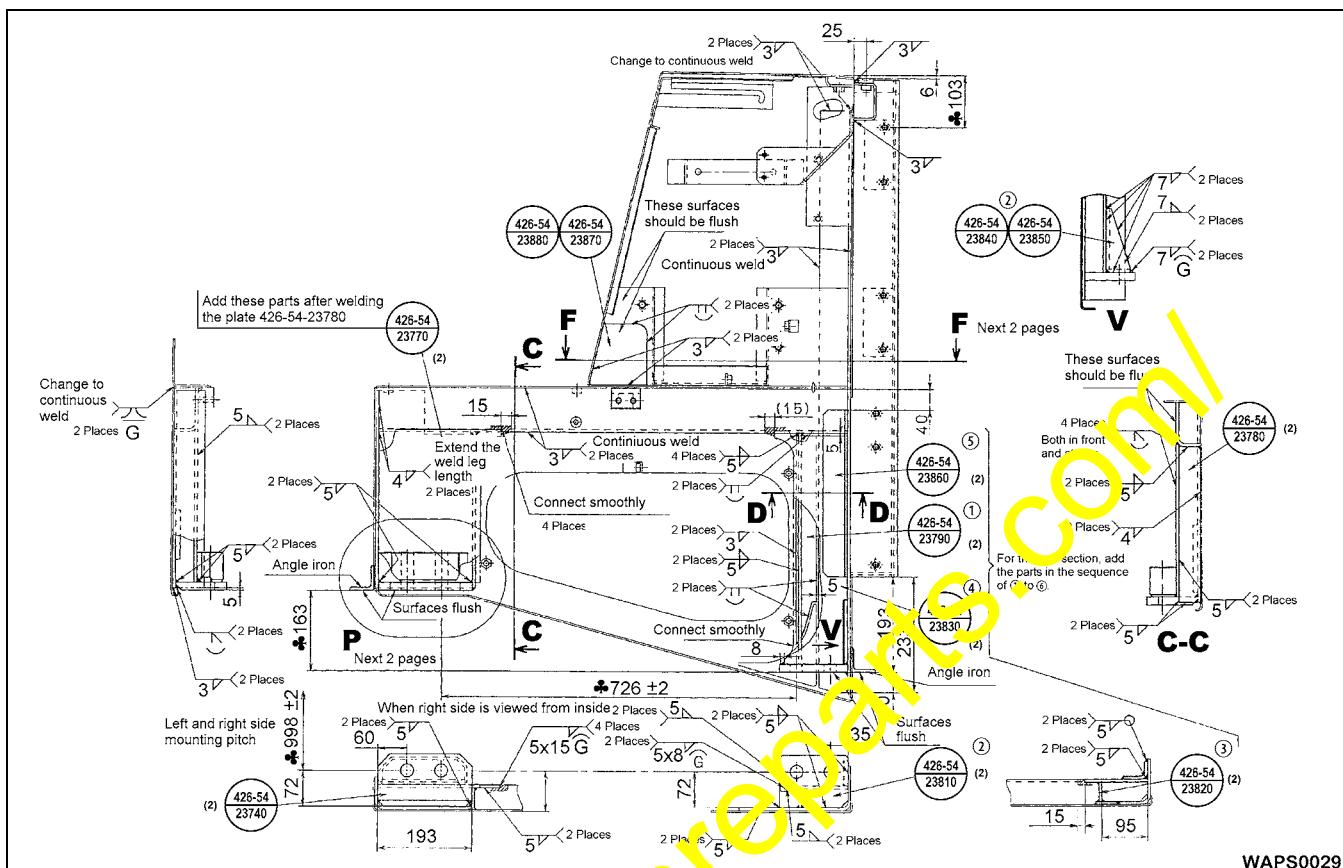
Unit : mm



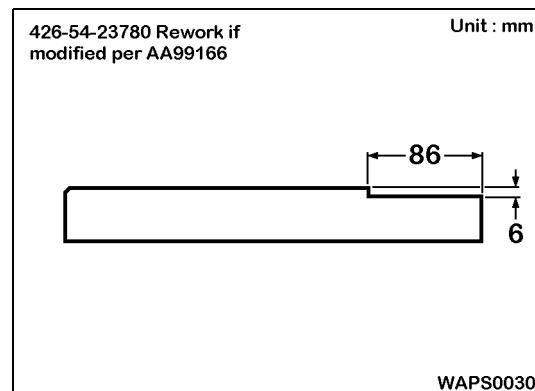
#### Machines Modified per PARTS & SERVICE NEWS AA99166.

4. If the shape of the bulkhead mounting section is as shown, remove the hatched sections.
- ★ Also, when the machine has already been modified per AA99166, make the additional work on the right side. As for the serial numbers of the applicable machines, refer to the above Service News.
- A. Remove the hatched parts. As for the parts marked ♣, cut the part at the position shown.
  - B. After removing the parts, finish the cut surfaces smoothly using a grinder.
  - C. Remove the top hood mounting section and the side mounting section.

Unit : mm

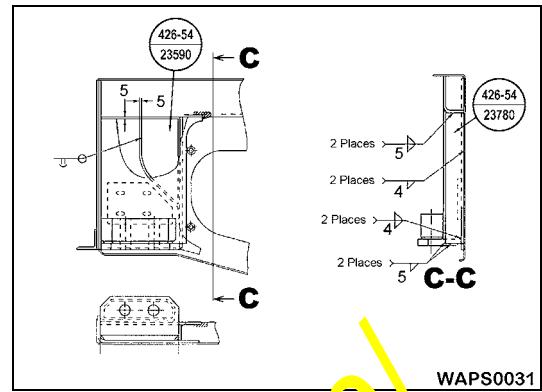


5. Weld the prepared parts  $\ominus$ .
  - A. When welding, the strain preventing angles may be used as the positional standard.
  - B. After finishing this work, check the dimensions  $\clubsuit$  marked and execute corrections as necessary.
  - C. Since the shape of the cross section C-C of the front mounting section of the bulkhead differs depending on if the modification is made **Parts & Service News AA99166** has been made or not, pay attention to the point.
  - D. Since it becomes necessary to make added work of the prepared part, cut it at the dimensions being instructed.
6. Since the shape of the front mounting section of the bulkhead differs depending on the serial number of the machine, check and confirm if the shape is as shown before starting the repair procedure.
  - ★ When the machine has been modified as per **Parts & Service News AA99166**, make the additional work to the right side. Before welding the new part, cut the hatched section being shown.



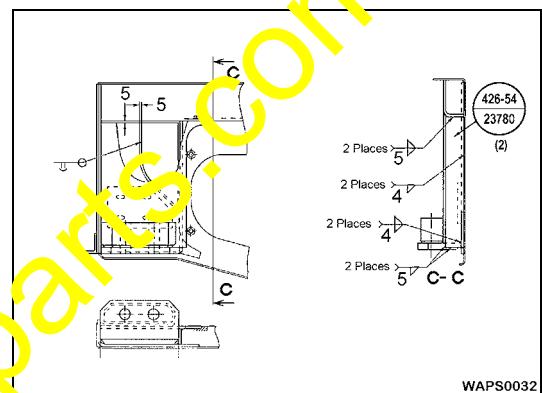
**A. NOT Reworked per Parts & Service News AA99166.**

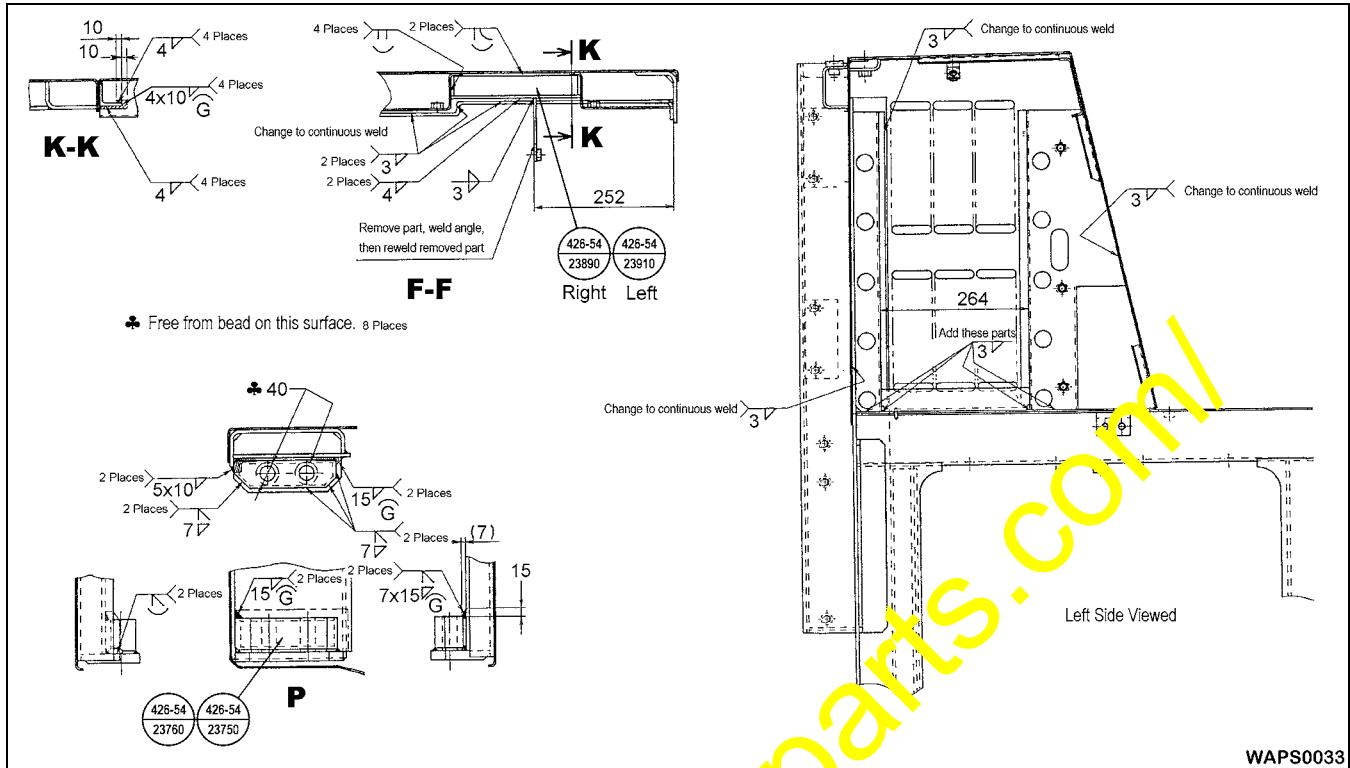
Make modifications.



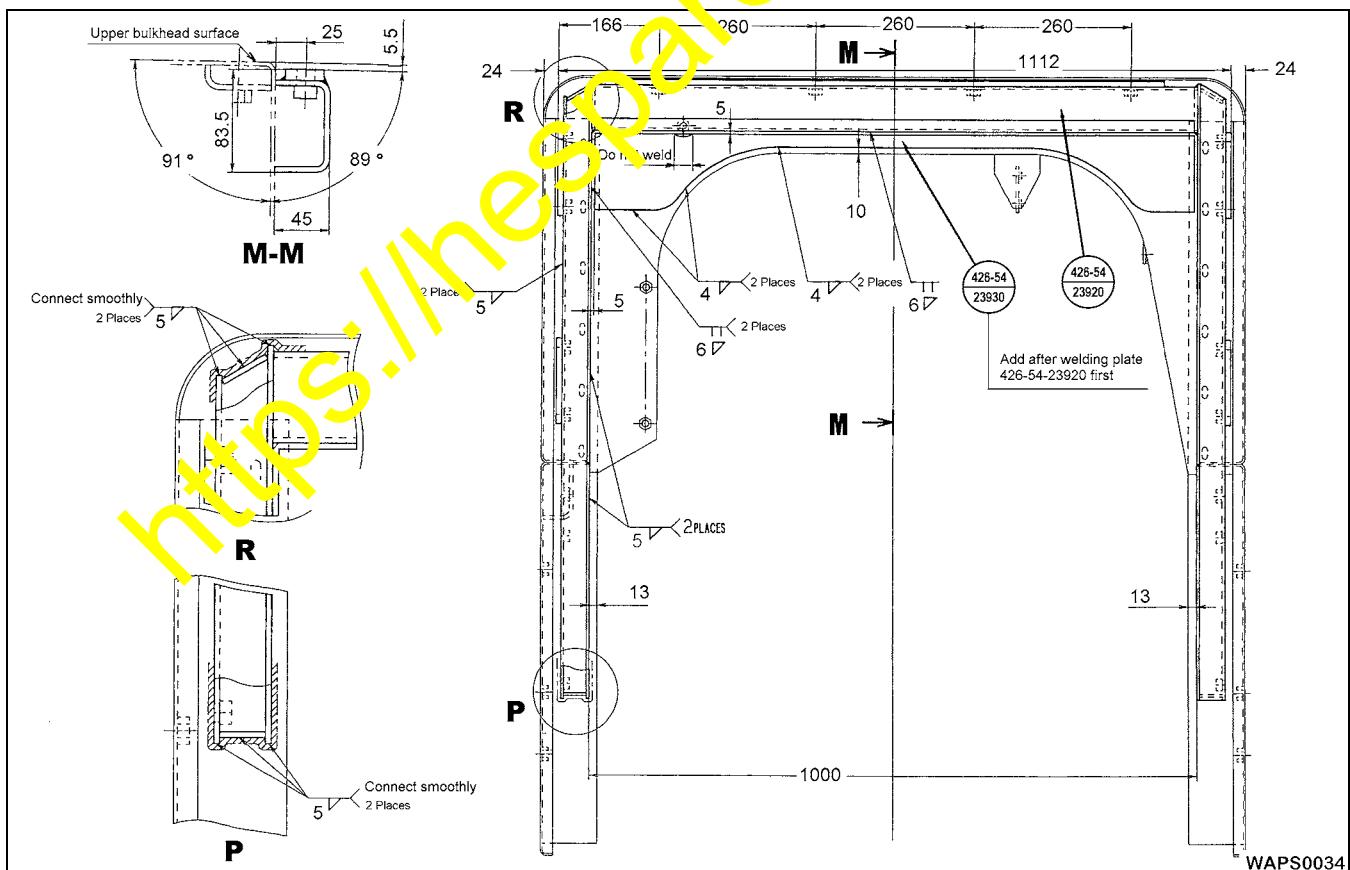
**B. Reworked per Parts & Service News AA99166.**

Make modifications.

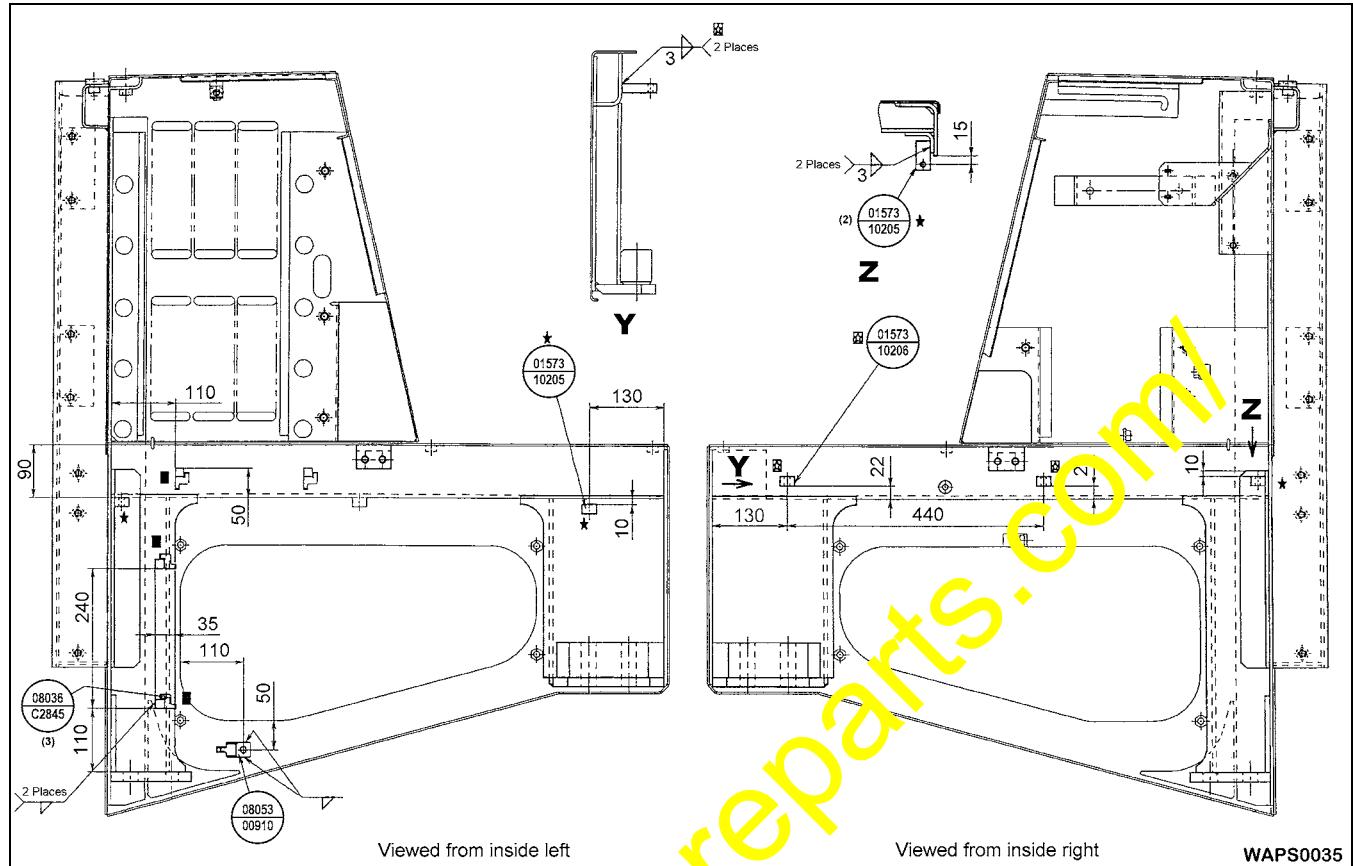




7. Weld the prepared parts

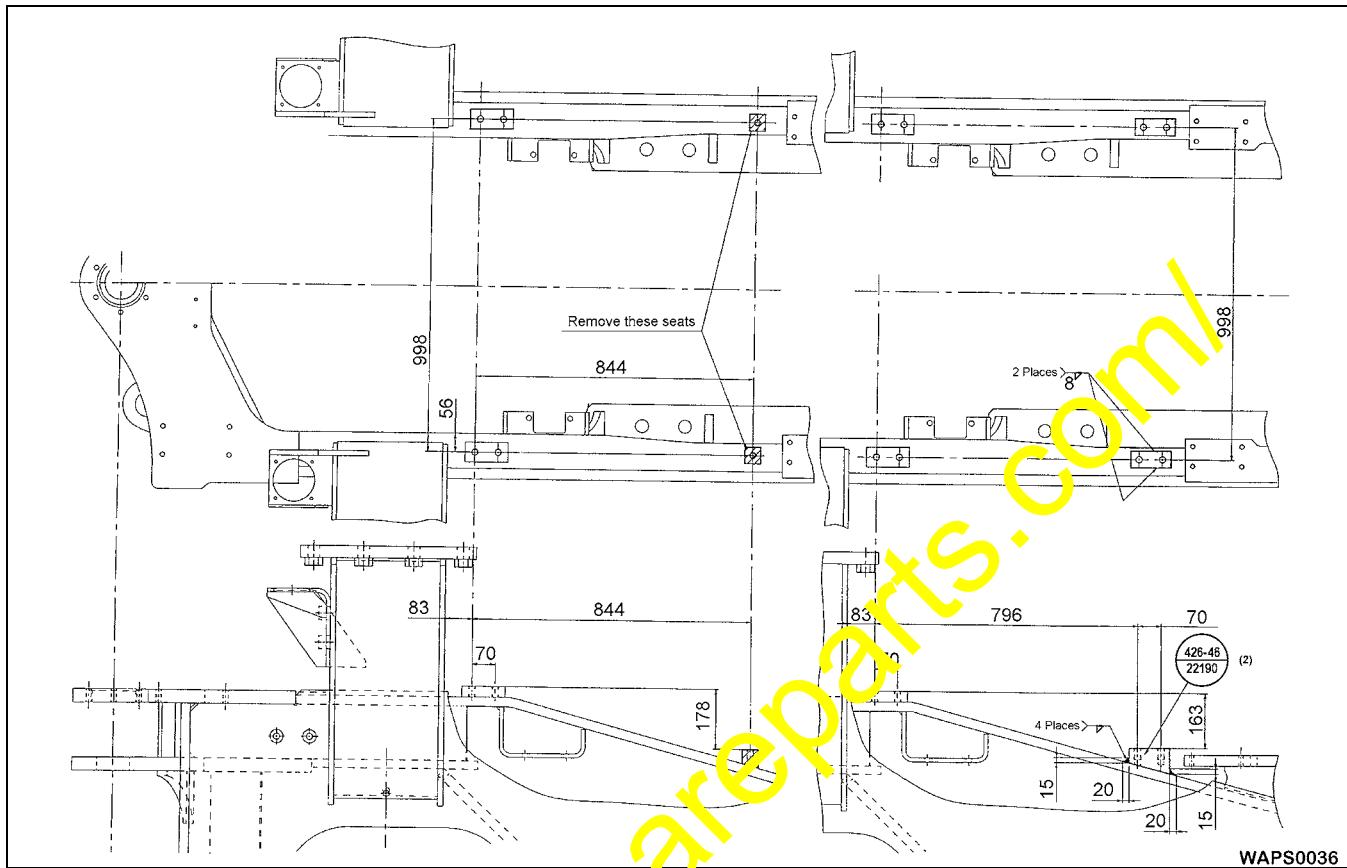


8. Weld the prepared parts



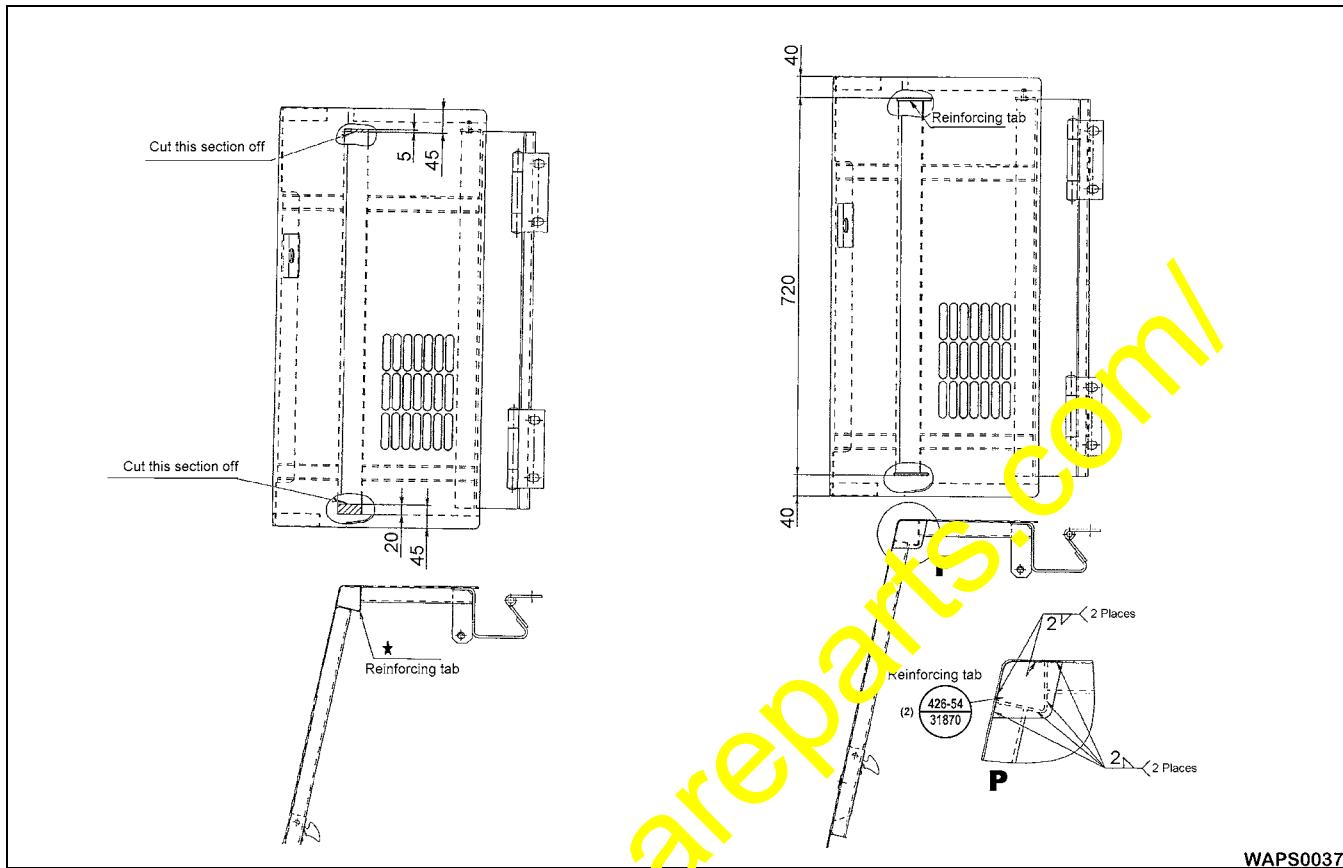
9. Weld the prepared parts  $\ominus$ .
10. After finishing the repair procedure, remove the welding strain preventing angles and the side beams.
11. After finishing the rework, paint the areas  
Paint color..... Natural Yellow

## REAR FRAME REWORK



1. Remove the hatched parts indicated.  
★ Since gas cutting and welding are being carried out, thoroughly protect the surfaces.
2. After removing these parts, finish the sections of the surface from which these parts have been removed smoothly with a grinder.
3. Weld the prepared parts  $\ominus$ .  
★ When welding the prepared parts  $\ominus$ , the reworked bulkhead may be used as the positional jig.
4. After finishing the rework, paint the areas.  
Paint color..... Natural Yellow

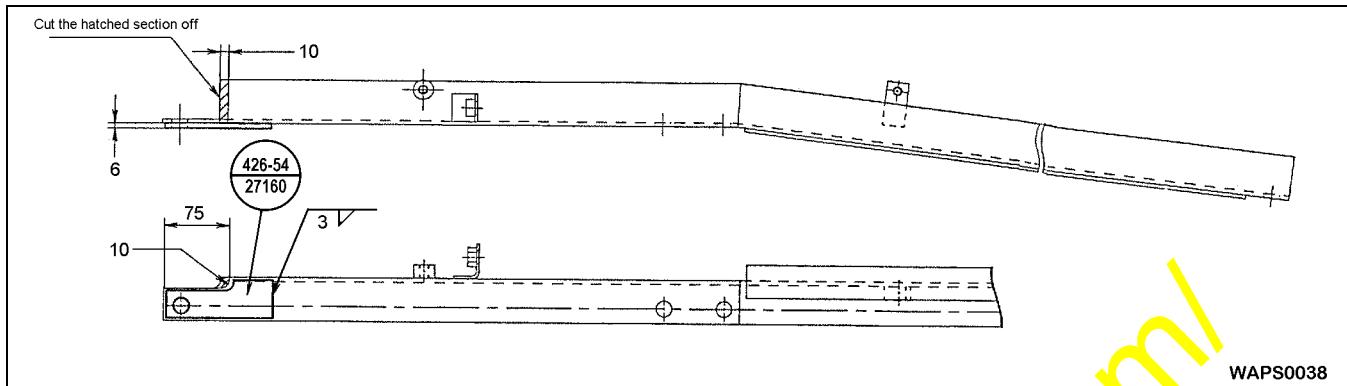
## FRONT COVER REWORK



WAPS0037

- ★ Machines with the serial numbers of **50327** or **A52209** and **Up**, the improved front cover for the bulkhead has already been used and it is not necessary to make this change.

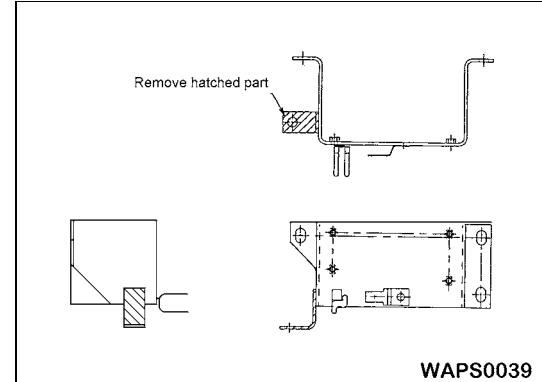
1. Add the prepared parts  $\ominus$  (reinforcing tabs) according to the instructions given.
2. Cut off the ends of the reinforcing tabs at the positions indicated, hatched sections.
3. Add the prepared parts  $\ominus$  (reinforcing tabs) by welding according to the instructions given. Add the reinforcing tab at both ends.
4. After finishing the rework, paint the areas.  
Paint color ..... Natural Yellow

**HOOD ANGLE REWORK**

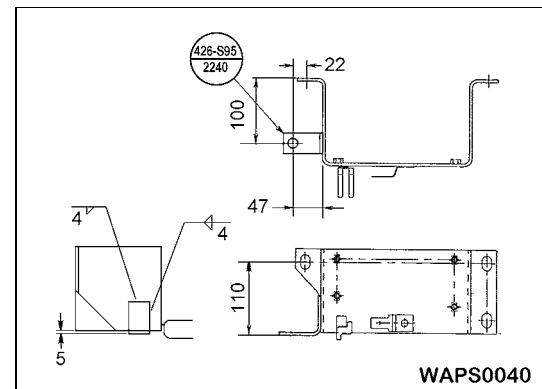
1. Rework on the angles on both sides.
2. Cut off the hatched section shown.
3. Weld the prepared parts  $\ominus$ .
4. After finishing the rework, paint the areas.  
Paint color ..... Natural Yellow

**GREASE BRACKET REWORK**

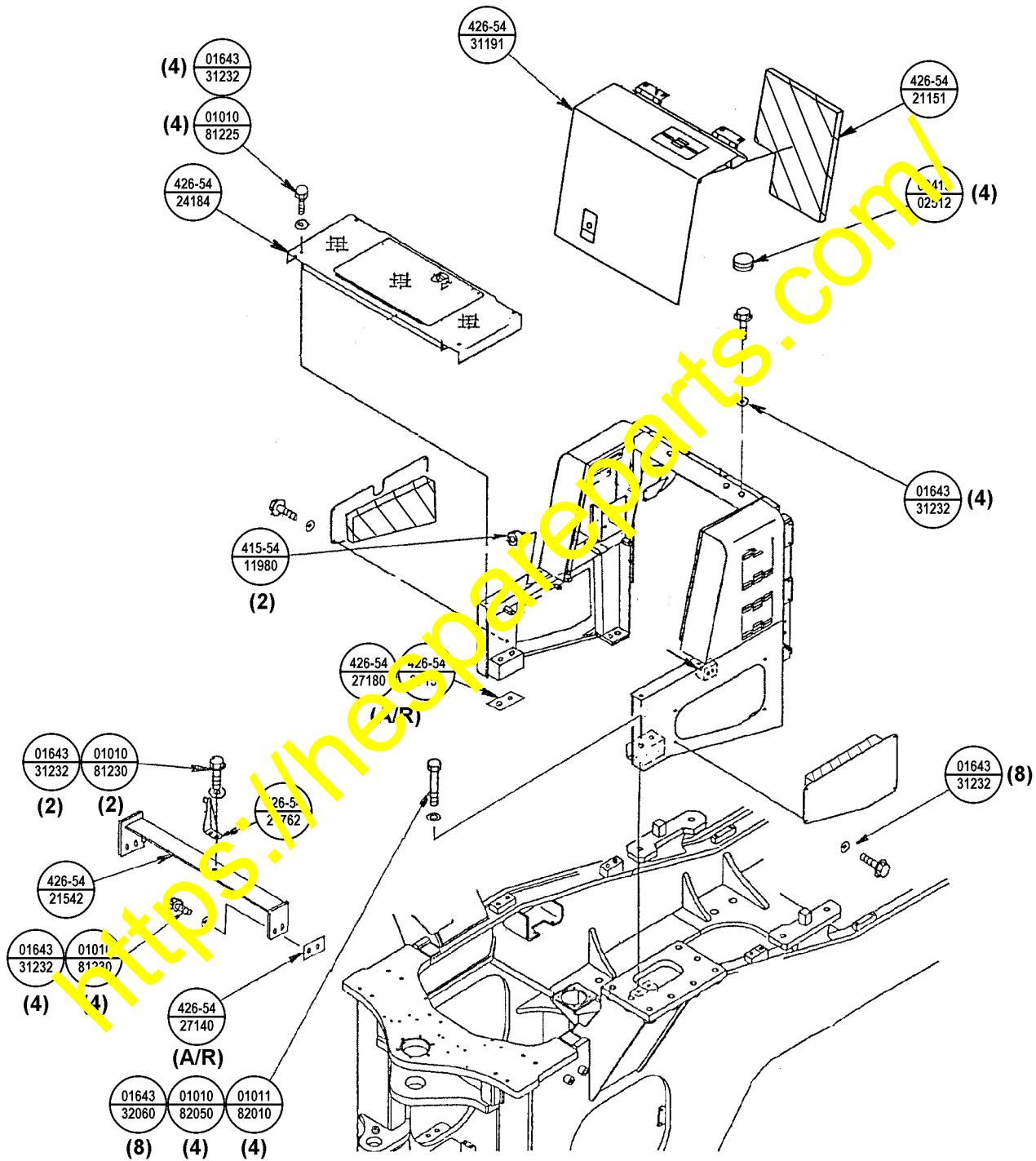
1. Remove the auto greasing pump bracket installed inside the bulkhead.
2. Remove the hatched parts indicated from the bracket.



3. Weld the prepared part  $\ominus$ .
4. After finishing the rework, paint the areas.  
Paint color ..... Natural Yellow



## Reinstalling The Removed Parts



WAPS0041

1. Install the parts which have been removed back to their original positions. Meanwhile, replace the parts marked  shown with the newly prepared parts.

 M10 bolts..... 34 to 74 N·m  
M12 bolts..... 54 to 123 N·m

★ Machines with the serial numbers of **50327** or **A52209** and **Up**, since the improved upper cover for the transmission has already been used, reuse the cover.

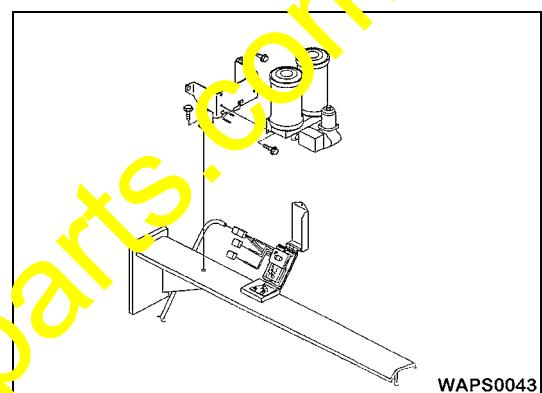
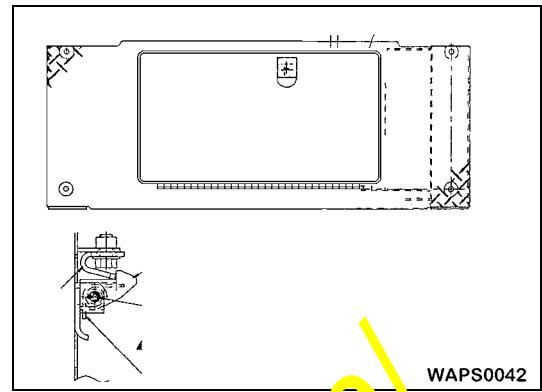
#### UPPER TRANSMISSION COVER

1. Assemble the parts to the upper cover of the transmission and install them to the machine body.

#### AUTO GREASING PUMP

1. Install the pump.

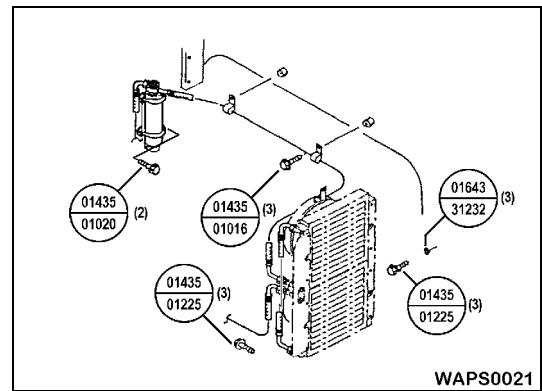
 M12 bolts..... 54 to 123 N·m



#### AIR CONDITIONER PARTS

1. Install the condenser, receiver and piping of the air conditioner to the inside surface of the bulkhead.

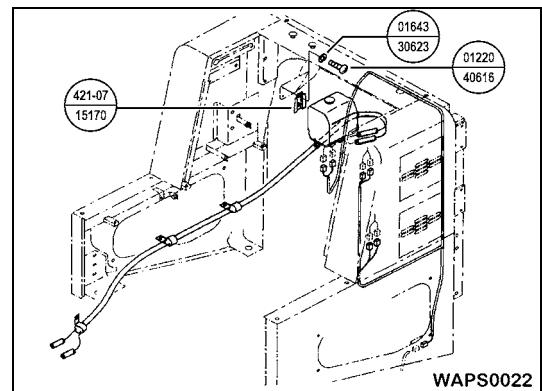
 M10 bolts..... 34 to 74 N·m  
M12 bolts..... 54 to 123 N·m



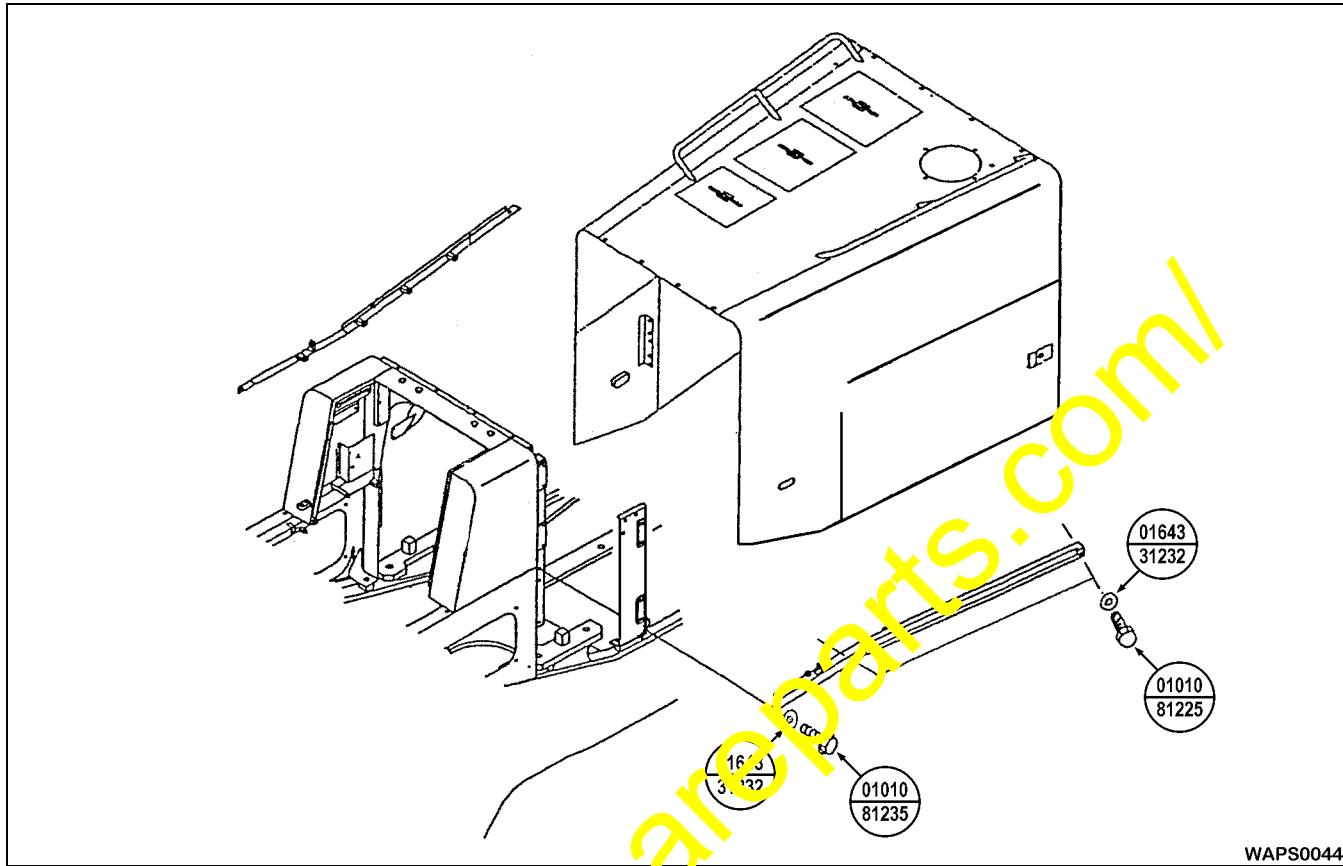
#### WASHER TANK

1. Install the window washer tank to its original position and reconnect the harness.

 M12 bolts..... 54 to 123 N·m



**BOTTOM HOOD ANGLES**



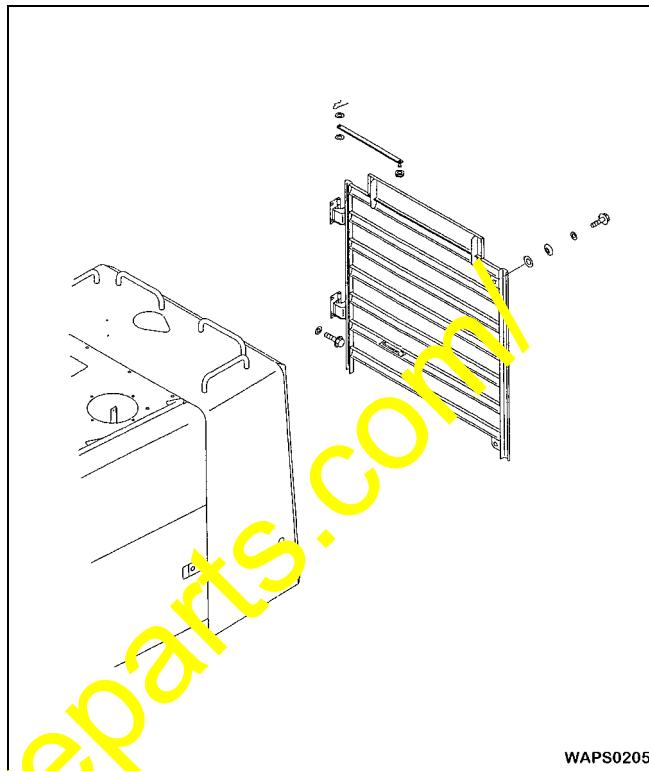
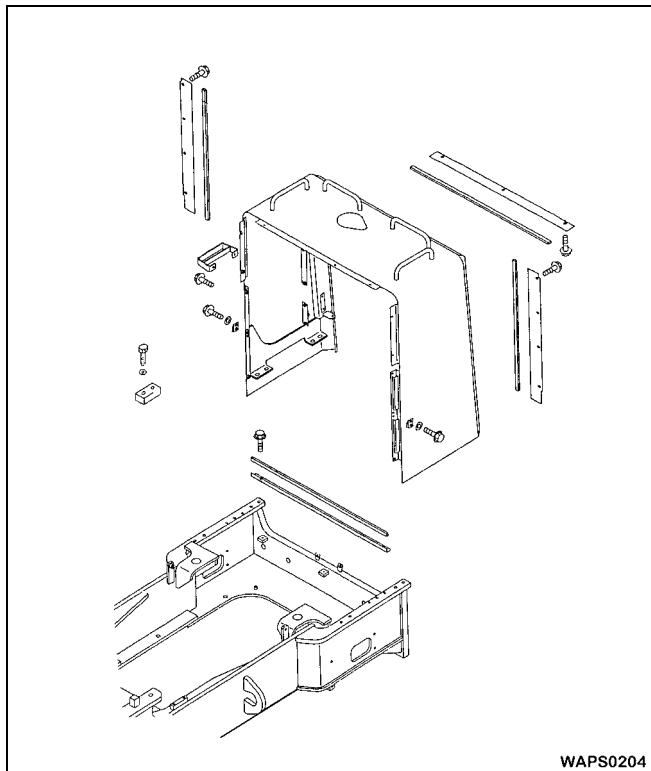
1. Install the hood bottom angles.

M12 bolts ..... 54 to 123 N·m

## RADIATOR GUARD REINFORCEMENT

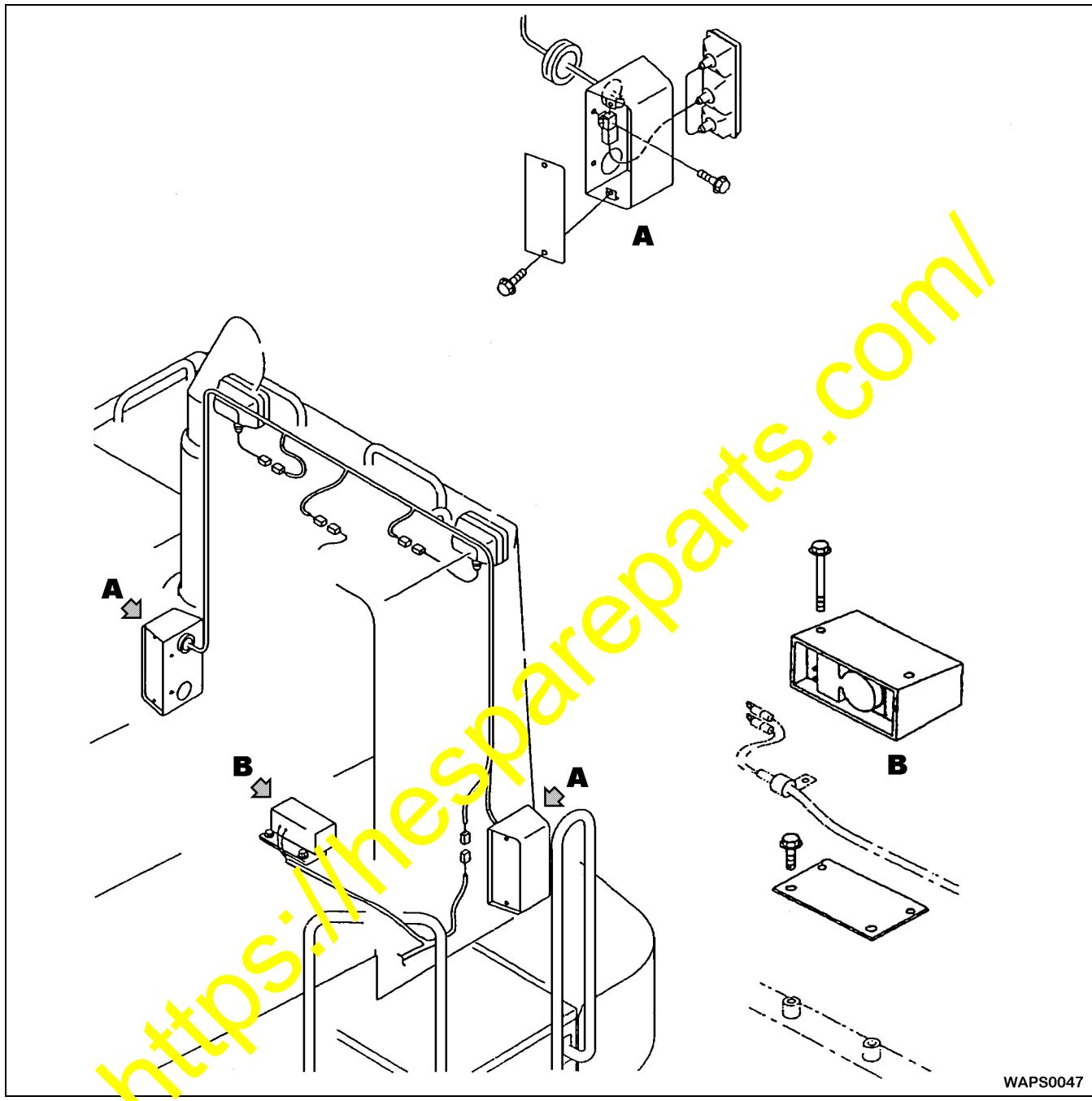
New Service Part	Description	Qty	Ref	Old Service Part
426-54-21214	RADIATOR GUARD ..... WA600-3	1		426-54-21213
426-54-21612	RADIATOR GUARD ..... WA600-3L	1		426-54-21611
426-54-31172	RADIATOR GUARD ..... WA600-3LK	1		426-54-31171
426-54-21224	GRILLE ..... WA600-3 OR 3L	1		426-54-21224
426-54-31181	GRILLE ..... WA600-3LK			426-54-31180
426-54-24910	ANGLE .....	4		---
426-54-24920	ANGLE .....	2		---
426-54-24930	PLATE .....	2		---
426-54-24940	PLATE .....	2		---
426-54-24950	LEFT PLATE.....	1		---
426-54-24960	PLATE .....			---
426-54-24970	RIGHT PLATE .....			---
426-54-24980	PLATE .....	1		---
426-54-24810	PLATE .....	2		---
426-54-24820	PLATE .....	2		---
426-54-24830	RIGHT PLATE .....	1		---
426-54-24840	LEFT PLATE.....	1		---
426-54-24850	PLATE .....	2		---
426-54-24860	PLATE .....	2		---
08036-C2845	CLIP .....	6		---
08053-00910	CLIP .....	2		---
426-54-23610	PLATE .....	1		---
426-54-23620	PLATE .....	1		---
426-54-23630	PLATE .....	1		---
562-03-15810	SEAT .....	2		---
01010-20750	BOLT .....	8		01010-82070
01010-3-32060	WASHER.....	8		---
426-93-11370	<b>WA600</b> DECAL .....	2		---
426-93-21330	GRAY STRIPE.....	2		---
418-93-A2340	 DECAL.....	2		---
418-93-A2320	<b>avance</b> DECAL .....	2		---
09806-C1680	SAFETY DECAL .....	2		---
09667-A0880	SAFETY DECAL .....	2		---
09690-C0560	<b>KOMATSU</b> DECAL .....	1		---

## Parts Removal



1. Remove the parts shown.
  2. Remove the radiator guard from the machine body.
- ★ Since the removed parts are to be reused, store them carefully.

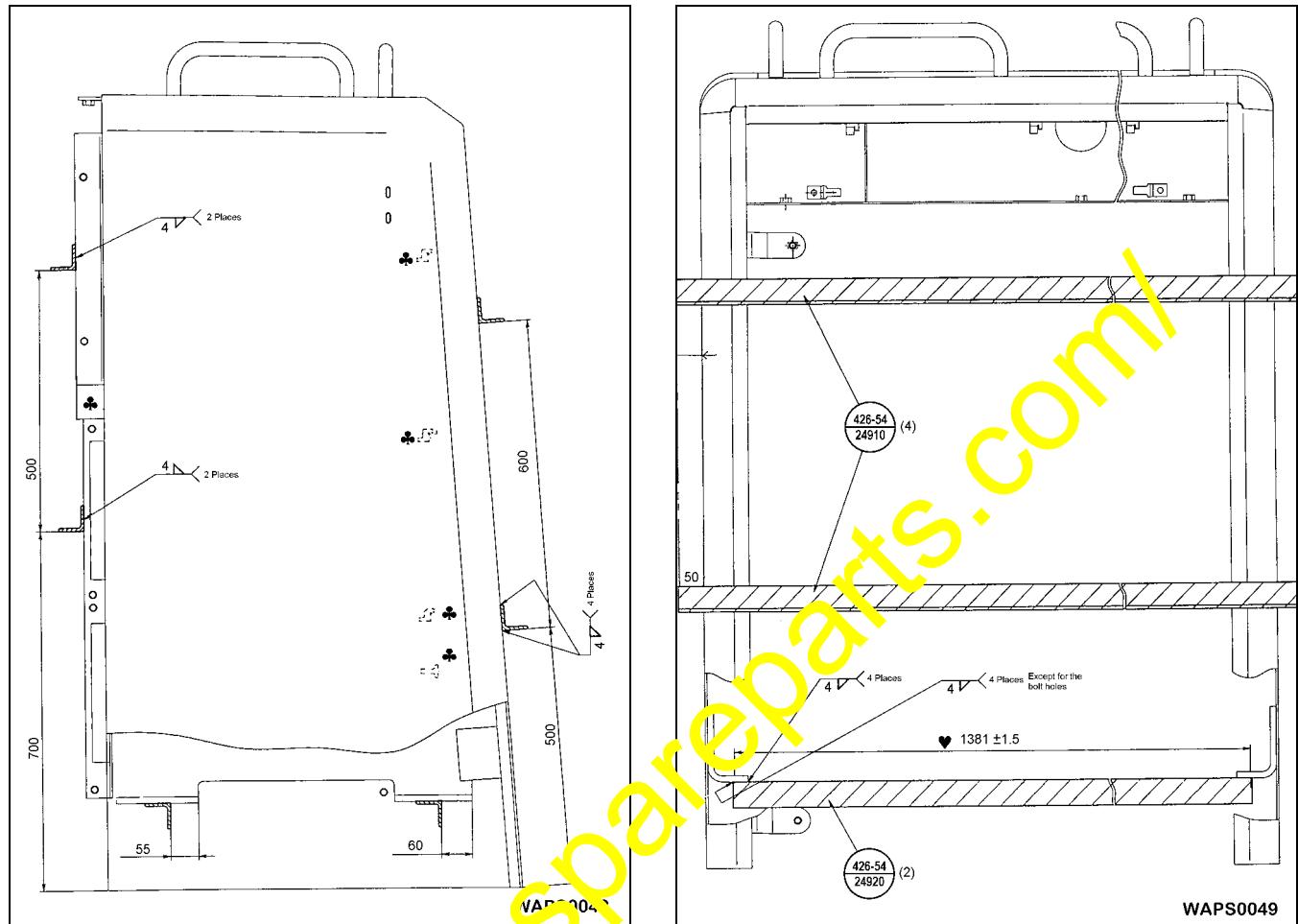
## Rear Lamp and Harness



1. Remove the parts indicated.
- ★ Since the removed parts are to be reused, store them carefully.

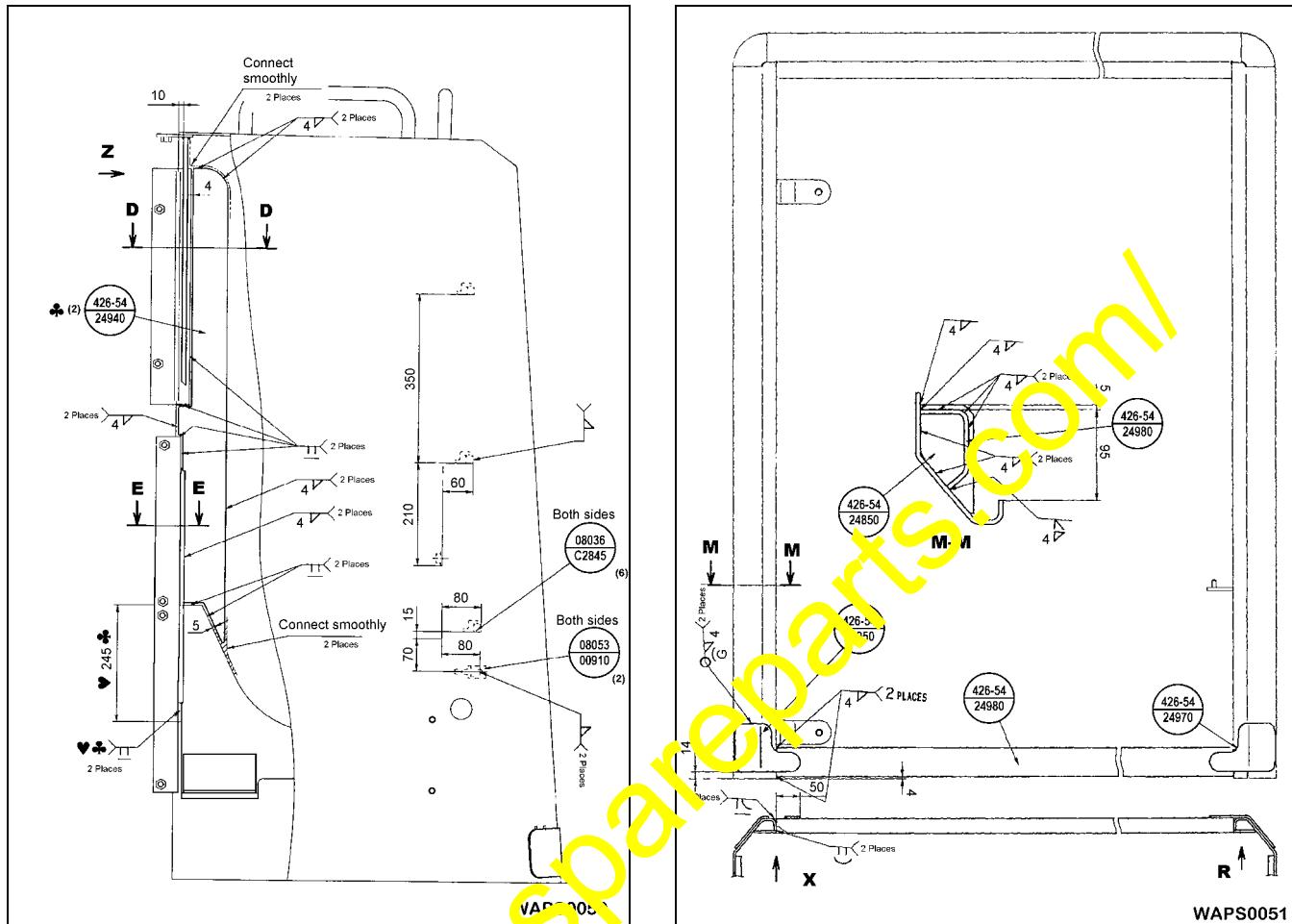
WAPS0047

## Radiator Guard Rework

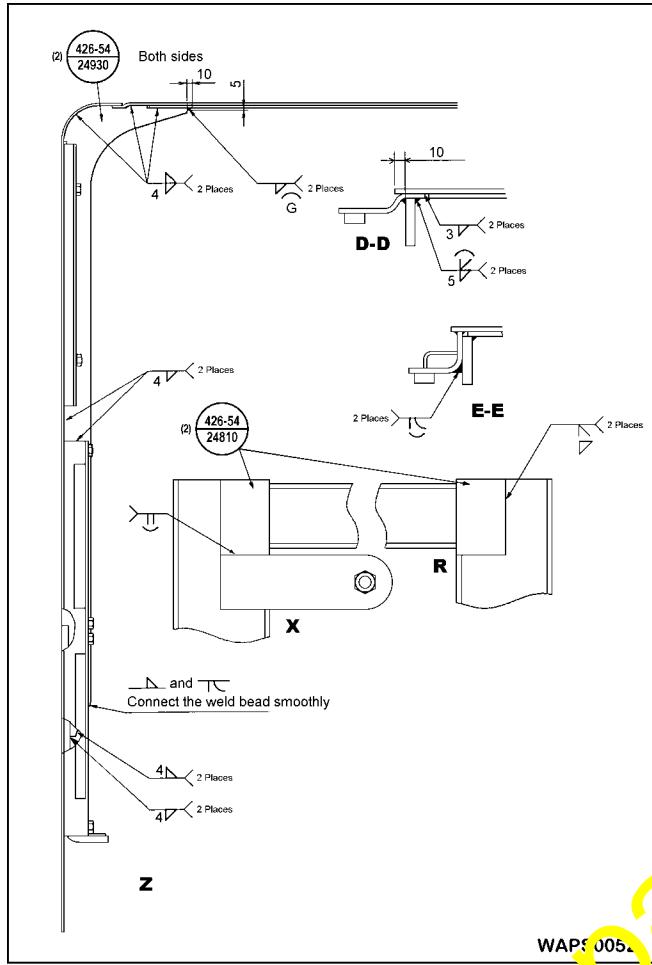


1. For strain preventing purposes add the angle  $\ominus$  and the side beam.
  - A. Measure the dimension marked  $\heartsuit$  to confirm that it is within the tolerance and, after that, weld the angles.
    1. If the dimension is not within the tolerance, correct the dimension by a hydraulic jack, etc. and, after that, weld the angles.
2. Remove the parts marked  $\clubsuit$ .

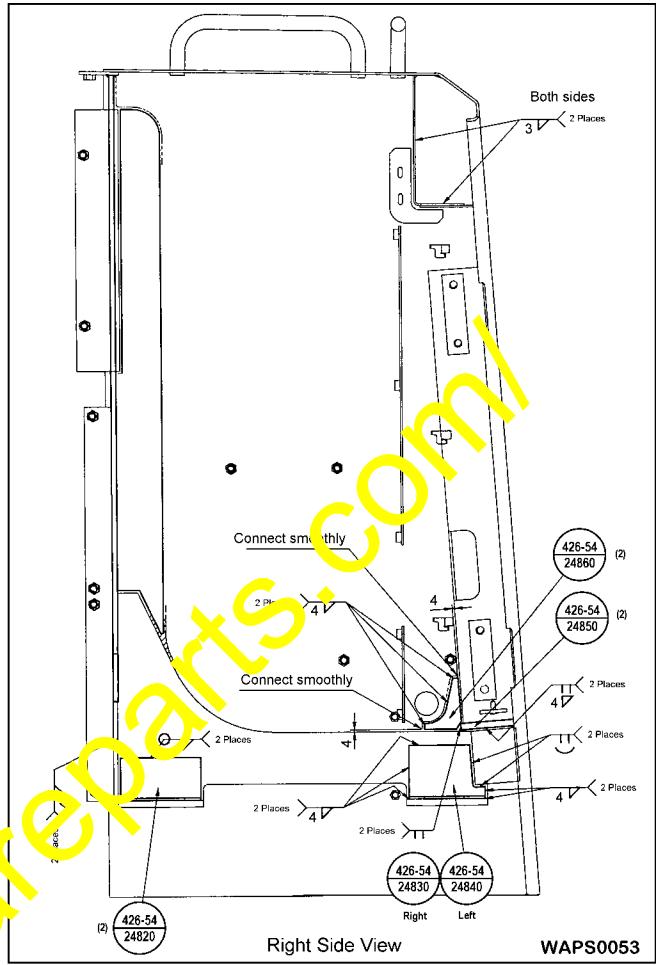
## REINFORCEMENT PROCEDURE



1. Weld the prepared parts  $\ominus$ . See the following for additional welding.
  - ♣ Weld this part before welding 426-54-24930.
  - ♥ Fill the range marked with weld.
2. After finishing the repair procedure, remove the strain preventing angle and the side beam.
3. After finishing the rework, paint the areas.  
Paint color ..... Natural Yellow



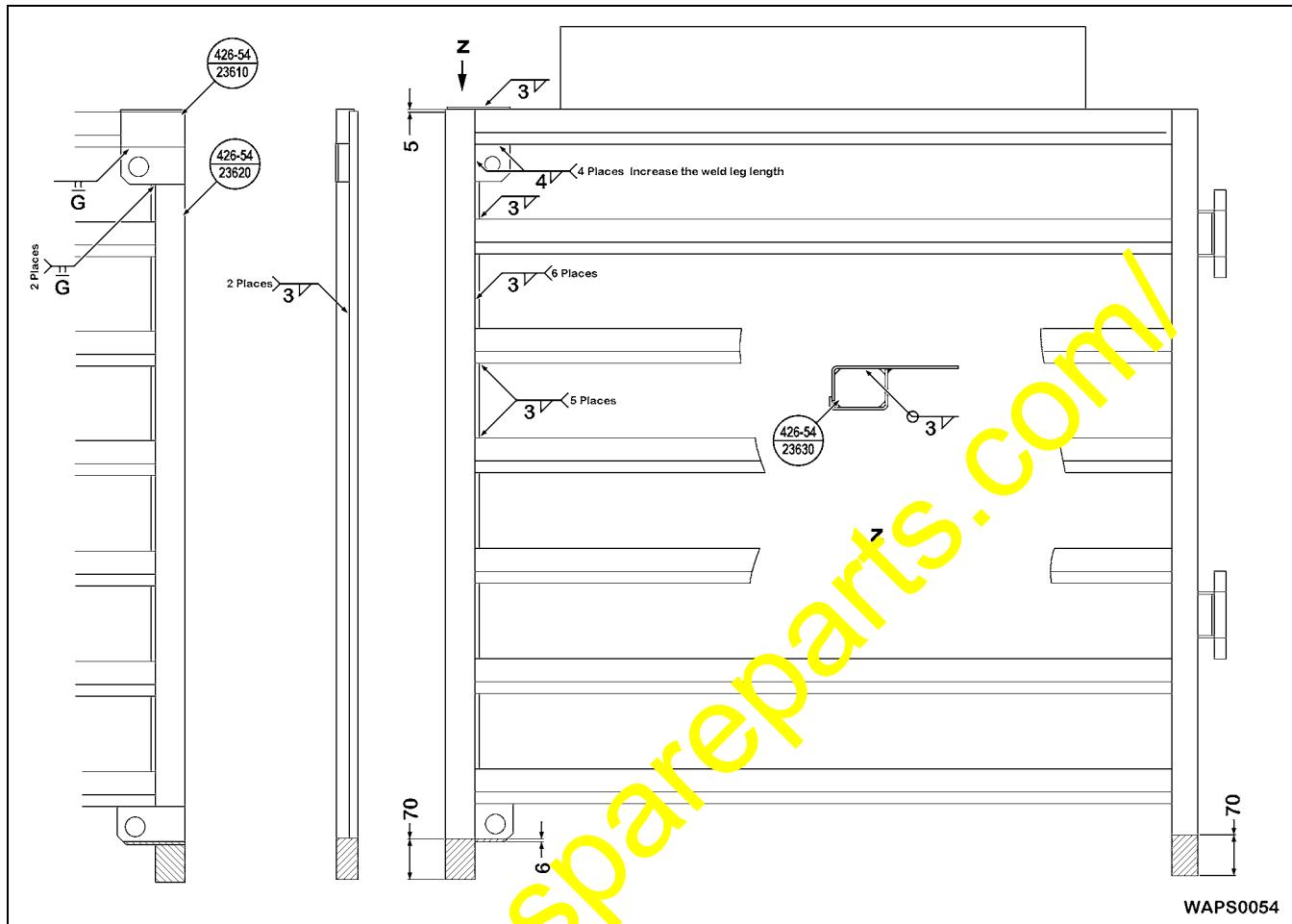
WAPS0052



Right Side View

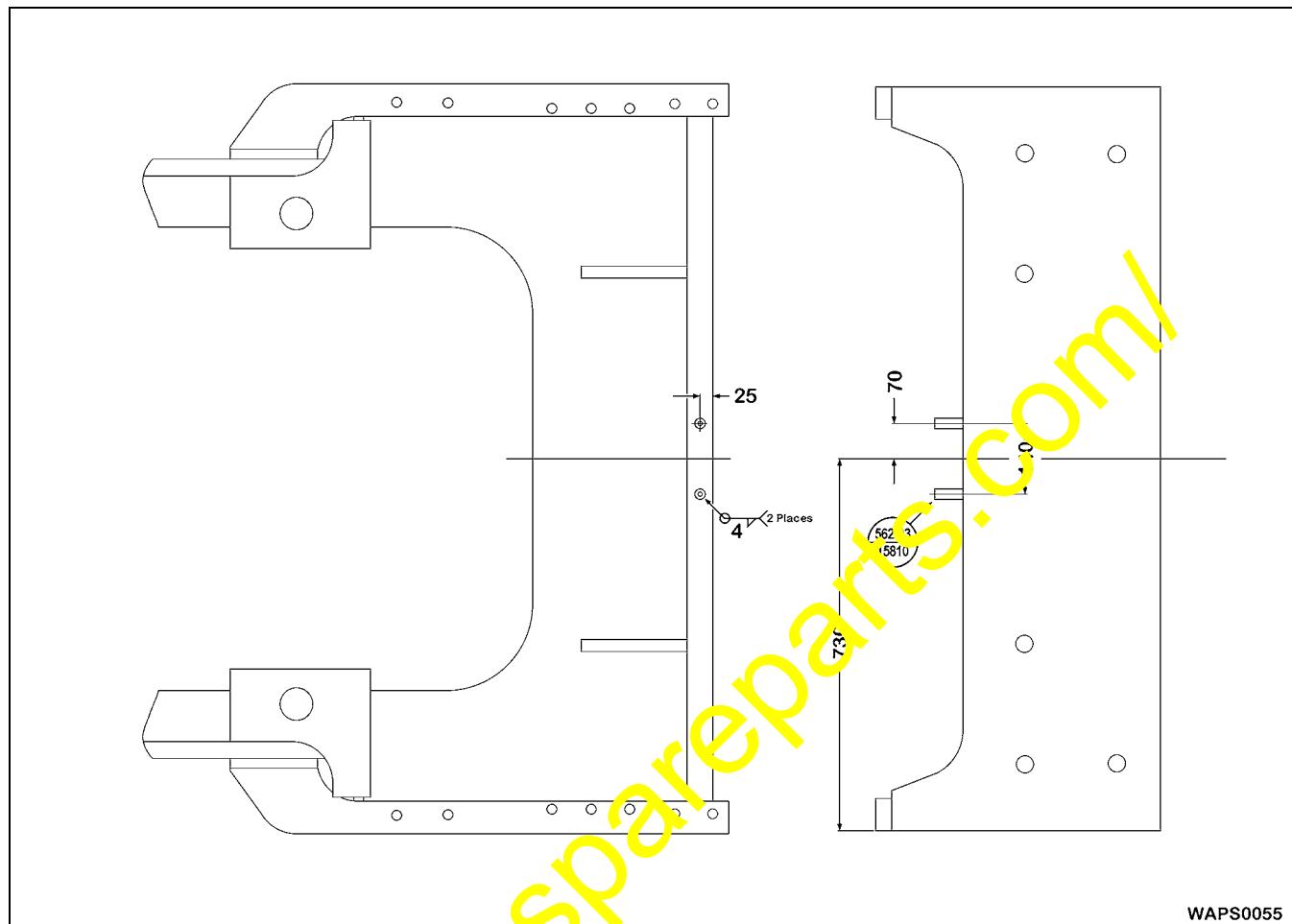
WAPS0053

## Grill Rework



1. Cut the hatched section shown.
2. Weld the prepared marked parts .
3. After finishing the rework, paint the areas.  
Paint color..... Natural Yellow

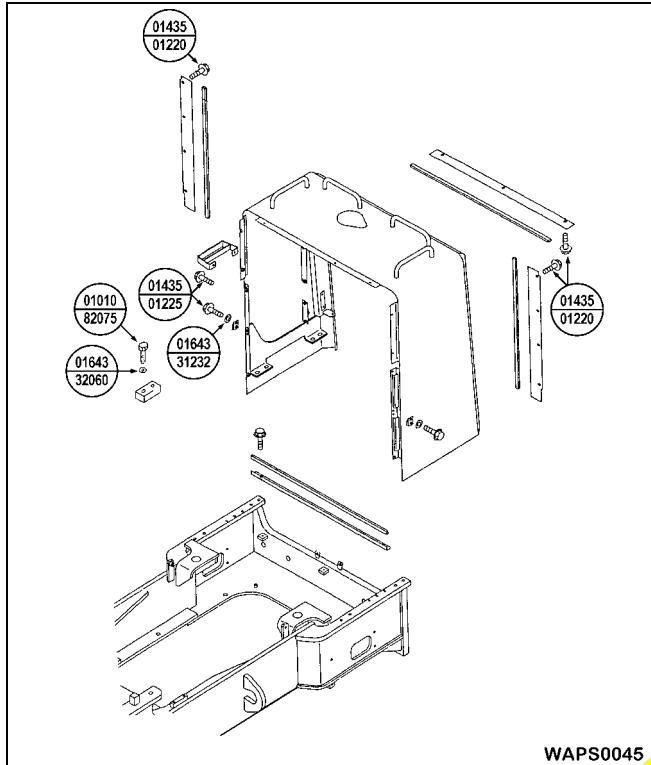
## Additional Rear Frame Rework



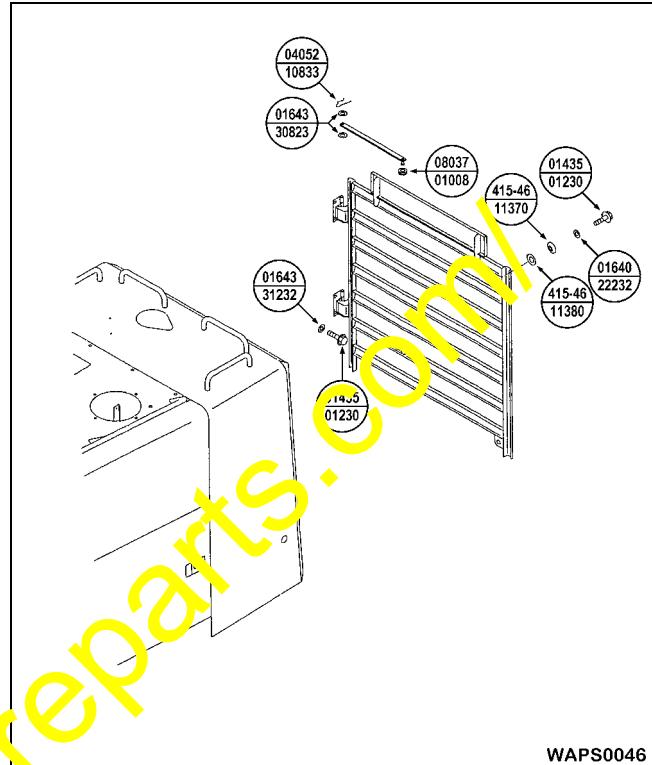
1. Replace the back up alarm buzzer mounting seats, at two places.
2. Change the seats to the prepared marked parts  $\ominus$ .
3. Weld the seats as the positions shown (same as old positions).
4. After finishing the rework, paint the areas.  
Paint color ..... Natural Yellow

## Reinstalling the Removed Parts

### RADIATOR GUARD PARTS



WAPS0045

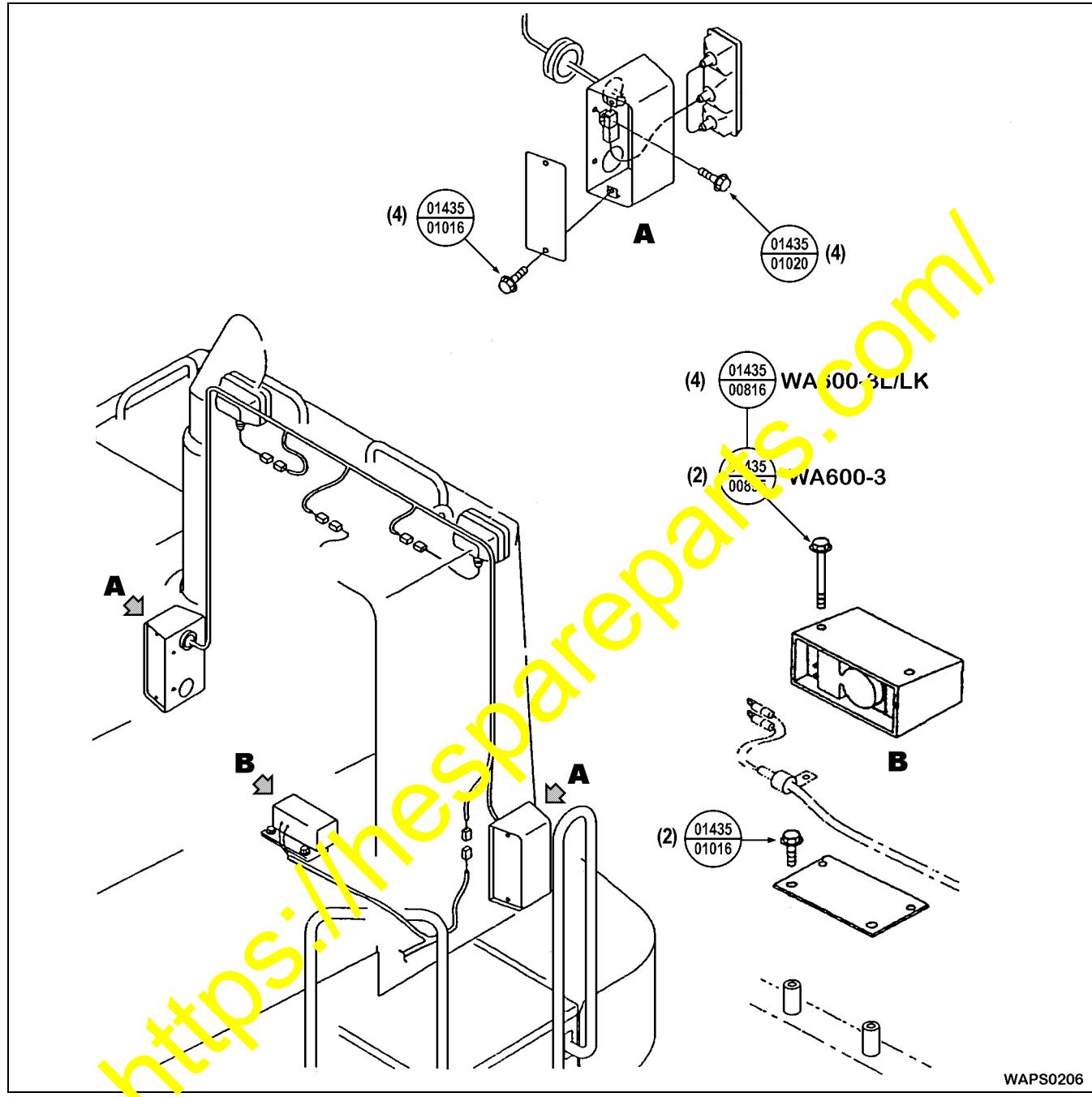


WAPS0046

Make the installation work.

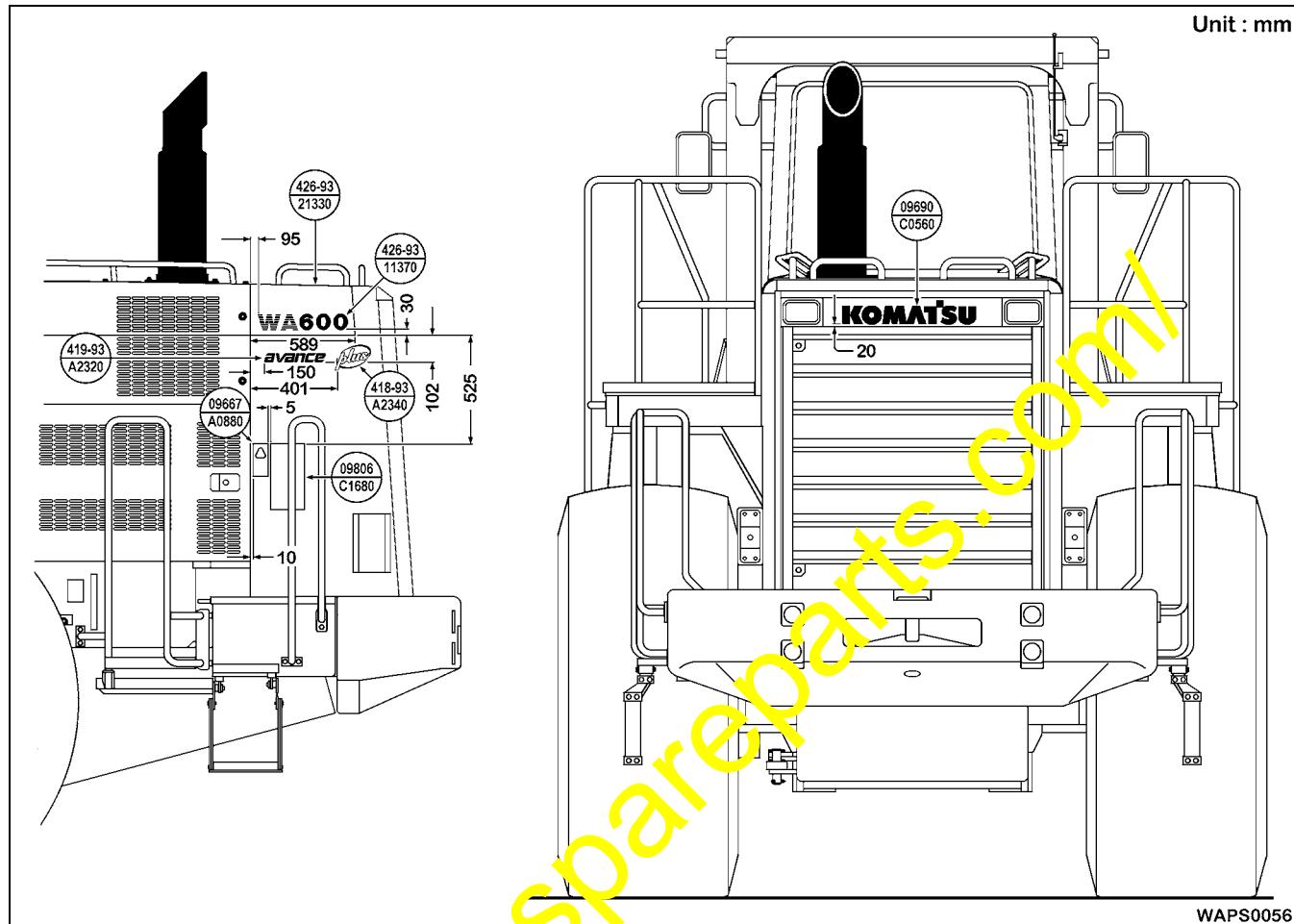
	M12 Bolts .....	54 to 123 N·m
	M20 Bolts .....	319 to 608 N·m

REAR LAMP AND HARNESS



Make the installation work.

	M8 Bolts .....	14.7 to 34 N·m
	M10 Bolts .....	34 to 74 N·m

**DECAL REPLACEMENT**

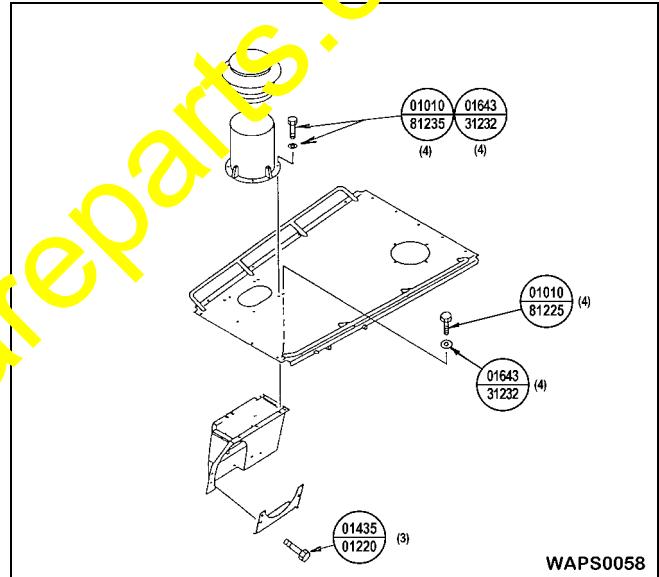
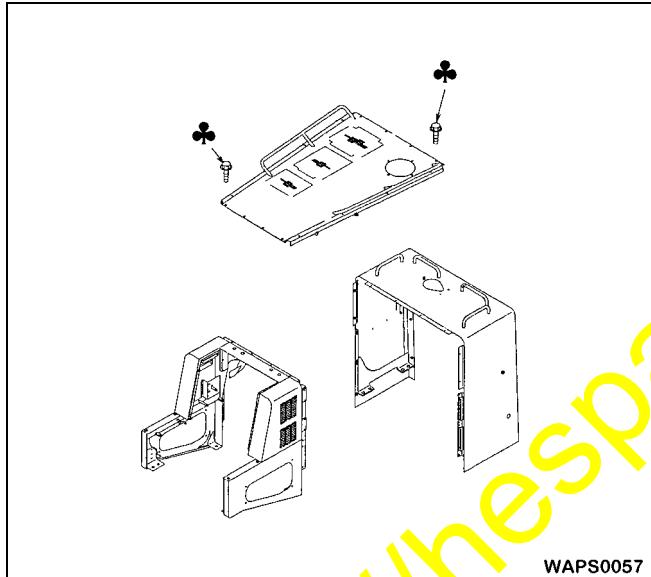
1. Apply the marked decals at the positions indicated. Weld spatter, etc. may adhere to them while installing the external parts.

## TOP HOOD REINFORCEMENT

### List of Parts

New Service Part	Description	Qty	Ref	Old Service Part
426-54-21235	TOP HOOD .....	1		426-54-21234
426-54-23640	PLATE .....	4		---
426-54-23650	PLATE .....	7		---
426-54-23660	PLATE .....	1		---
01010-81235	BOLT .....	8		01435-01230
01643-31232	WASHER.....	8		---

### Removal of Parts

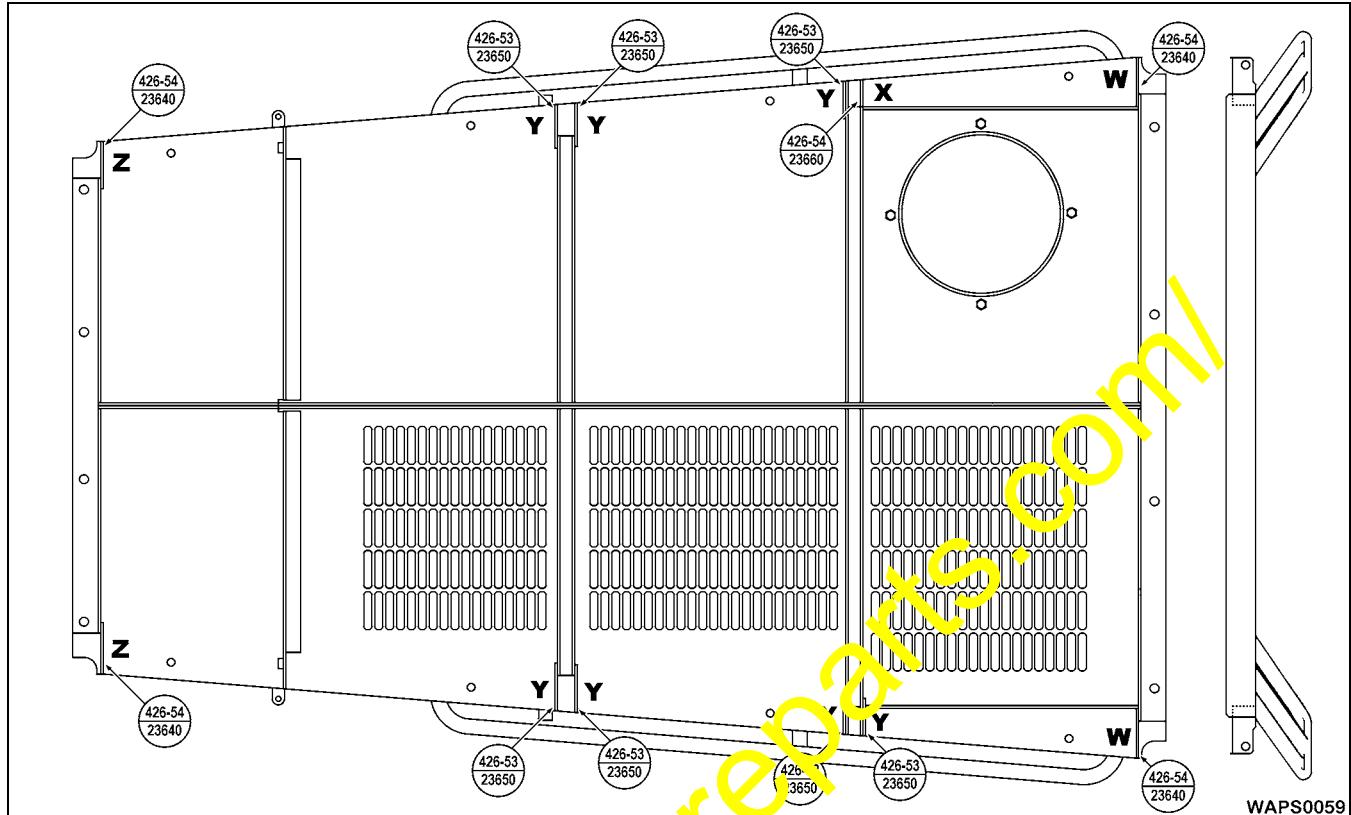


1. Remove the parts indicated. Remove the top hood from the machine body and rework.
- ★ Parts marked ♣ will be changed to the new parts when reinstalling the top hood.

### Serial Number 50001 to 59360

2. Remove the air intake extension box. Rework the air intake extension box.
- ★ The parts marked ⊖ are indicated here for reference, so that the parts can be ordered if they are lost while being removed.

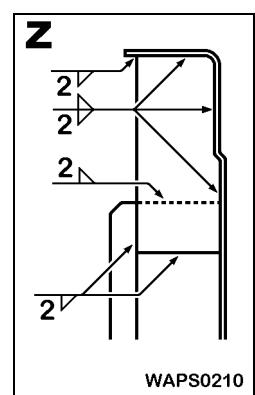
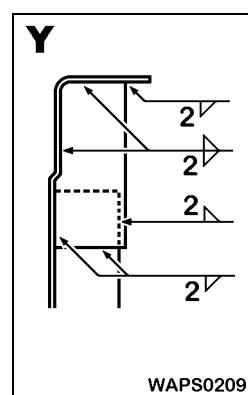
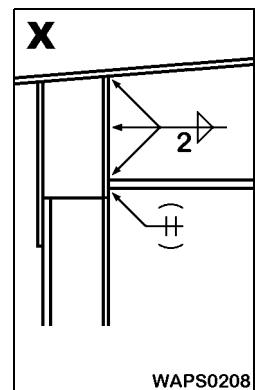
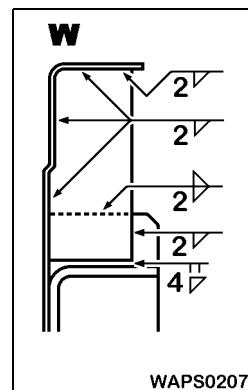
## Reinforcement Procedure



### TOP HOOD REWORK

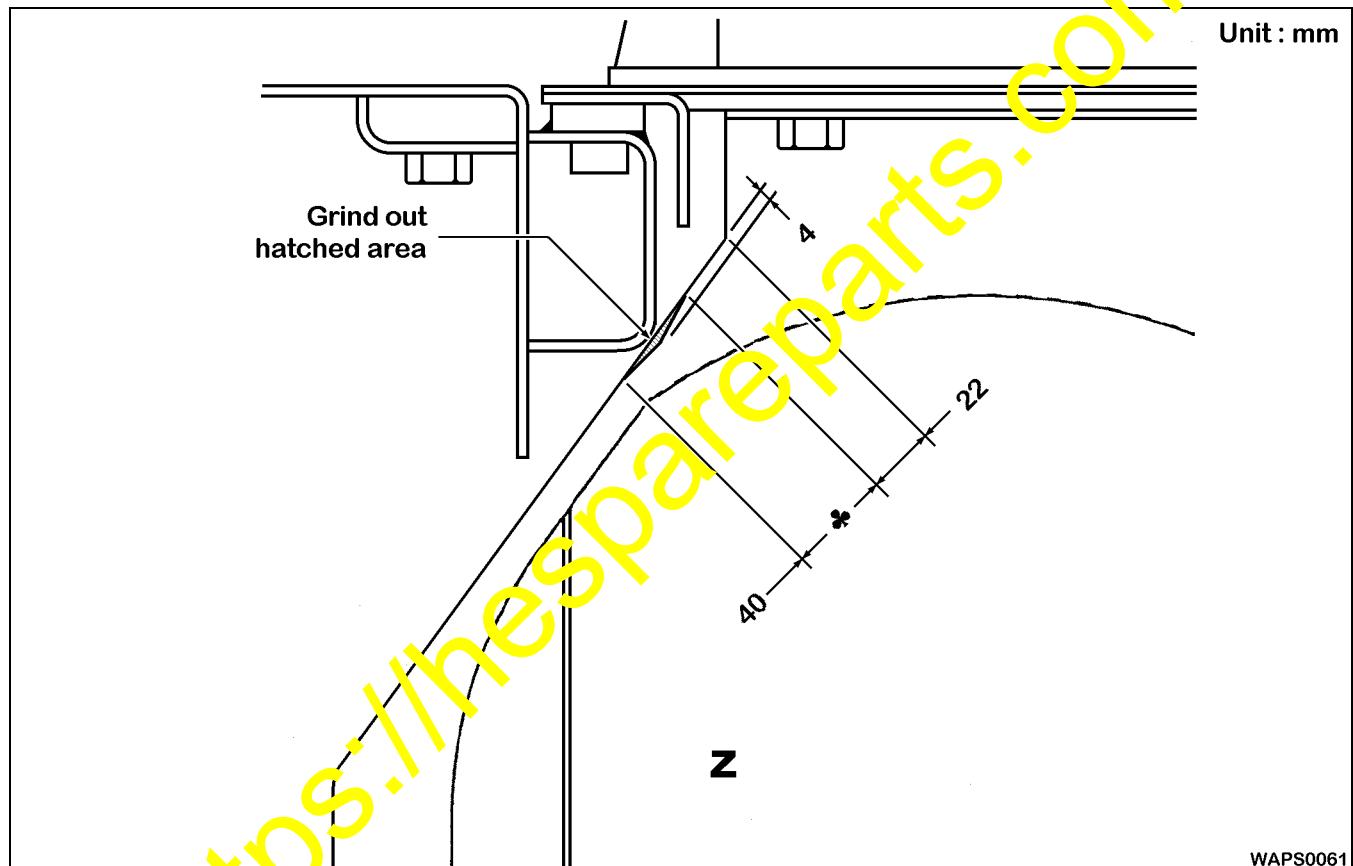
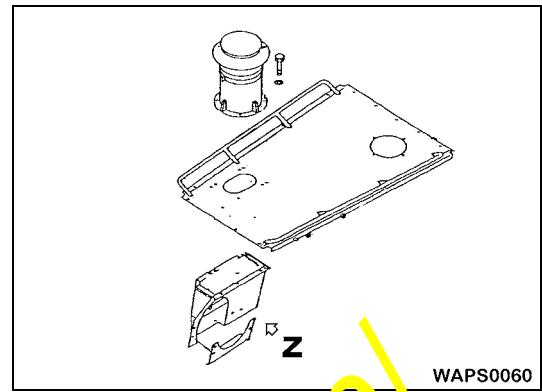
1. Weld the prepared parts, marked with at the positions shown, W, X, Y and Z.
2. After finishing the rework of the top hood, paint the areas.  
Paint color..... Natural Yellow

Unit : mm

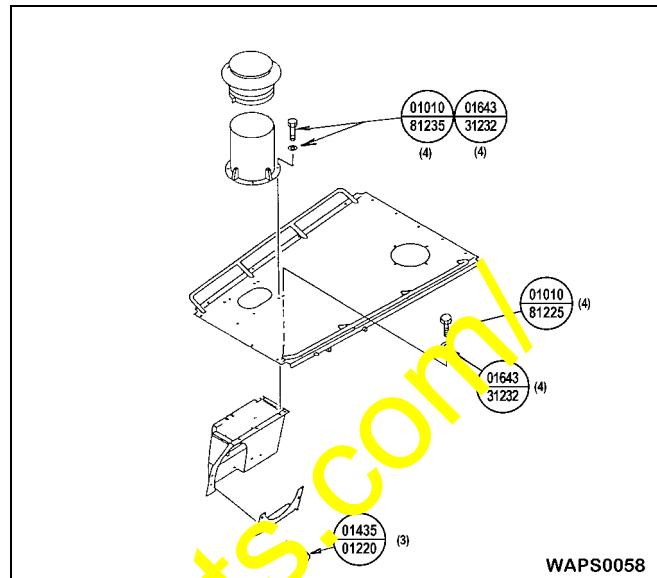
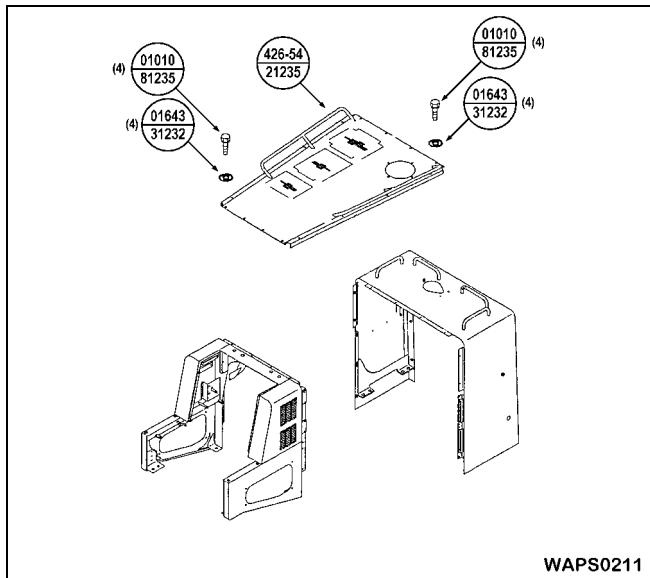


**SERIAL NUMBER 50001 TO 50360, AIR INTAKE EXTENSION BOX REWORK**

1. Rework the air intake extension box. Remove the hatched section off with a grinder.
2. Continuous weld the range marked ♦.
3. After finishing the rework, paint the areas.  
Paint color..... Natural Yellow



## Installing the Removed Parts



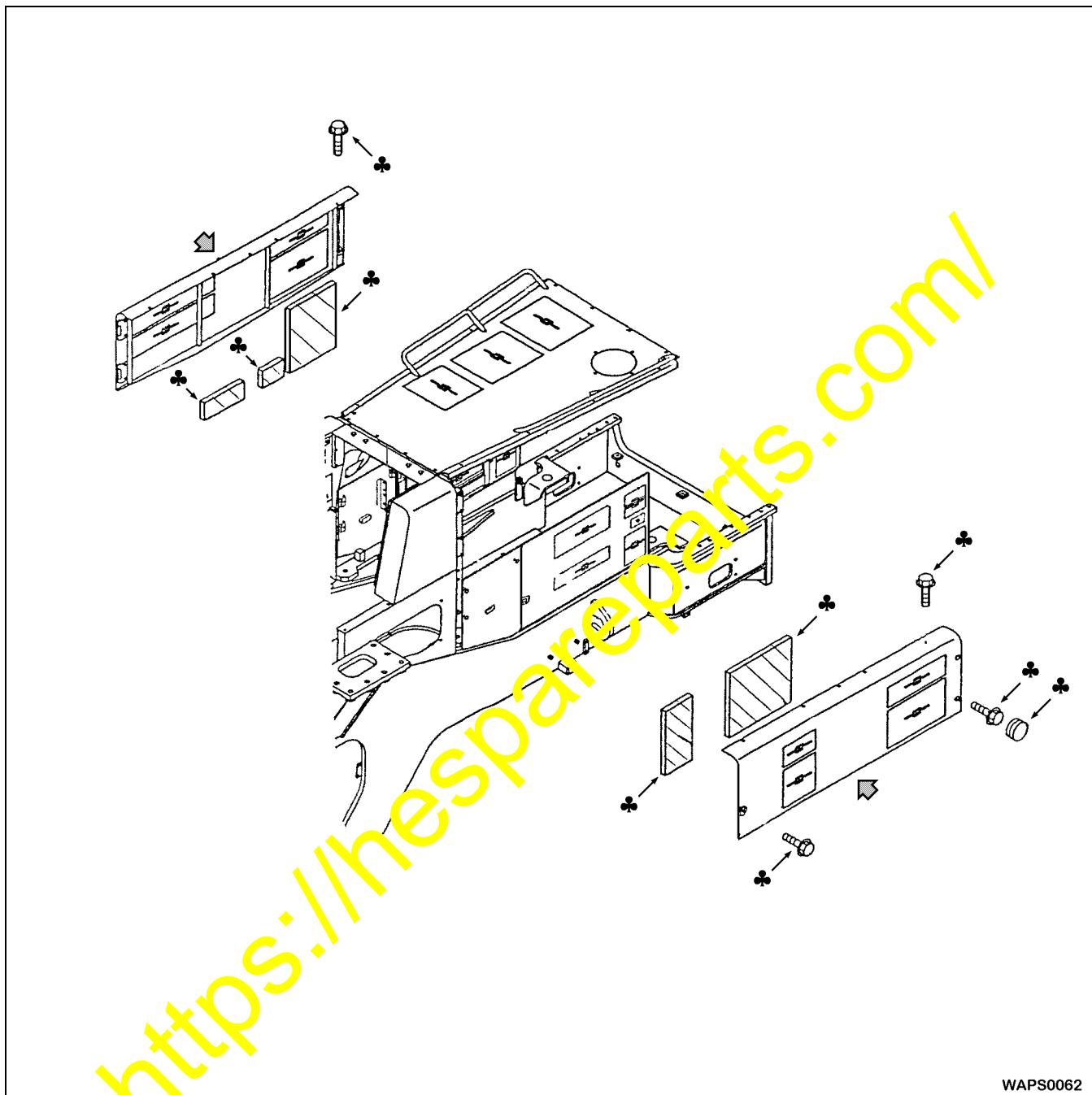
1. Reinstall the removed parts and replace with the new parts.
2. Reinstall the air intake extension box.

M12 Bolts ..... 54 to 123 Nm

**ENGINE SIDE PANELS REINFORCEMENT****List of Parts**

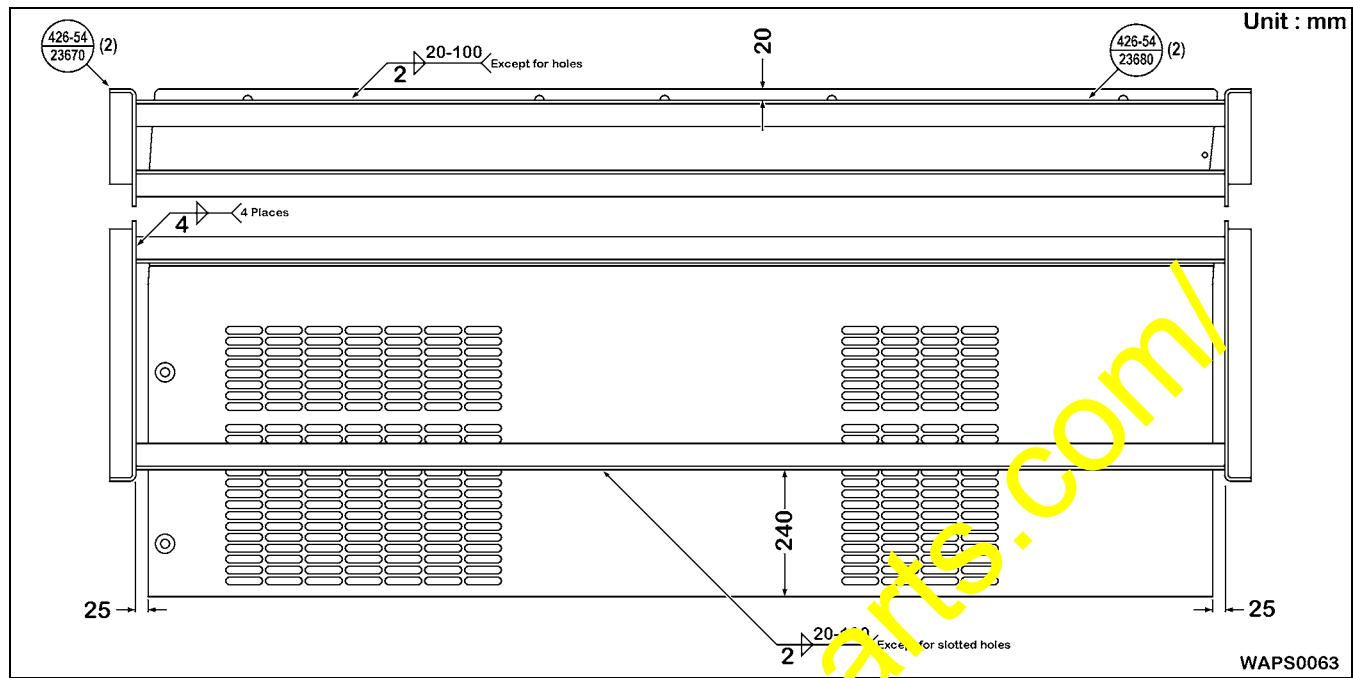
New Service Part	Description	Qty	Ref	Old Service Part
426-54-21243	LEFT SIDE PANEL.....	1		426-54-21242
426-54-21253	RIGHT SIDE PANEL .....	1		426-54-21252
426-54-23670	ANGLE .....	2		---
426-54-23680	ANGLE .....	2		---
426-54-23940	PLATE .....	2		
426-54-23950	PLATE .....	2		---
426-54-23960	PLATE .....	8		---
426-54-23970	PLATE .....	2		---
426-54-23980	PLATE .....	2		---
426-54-23990	PLATE .....	4		---
09415-02520	CAP .....	4		---
01010-81235	BOLT .....	12		01435-01235
01010-81230	BOLT .....	8		01435-01230
01643-31232	WASHER.....	20		---
426-54-21930	SHEET .....	1		---
426-54-21940	SHEET .....	1		---
426-54-21880	SHEET .....	1		---
426-54-21980	SHEET .....	1		---
426-54-21990	SHEET .....	1		---

## Parts Removal

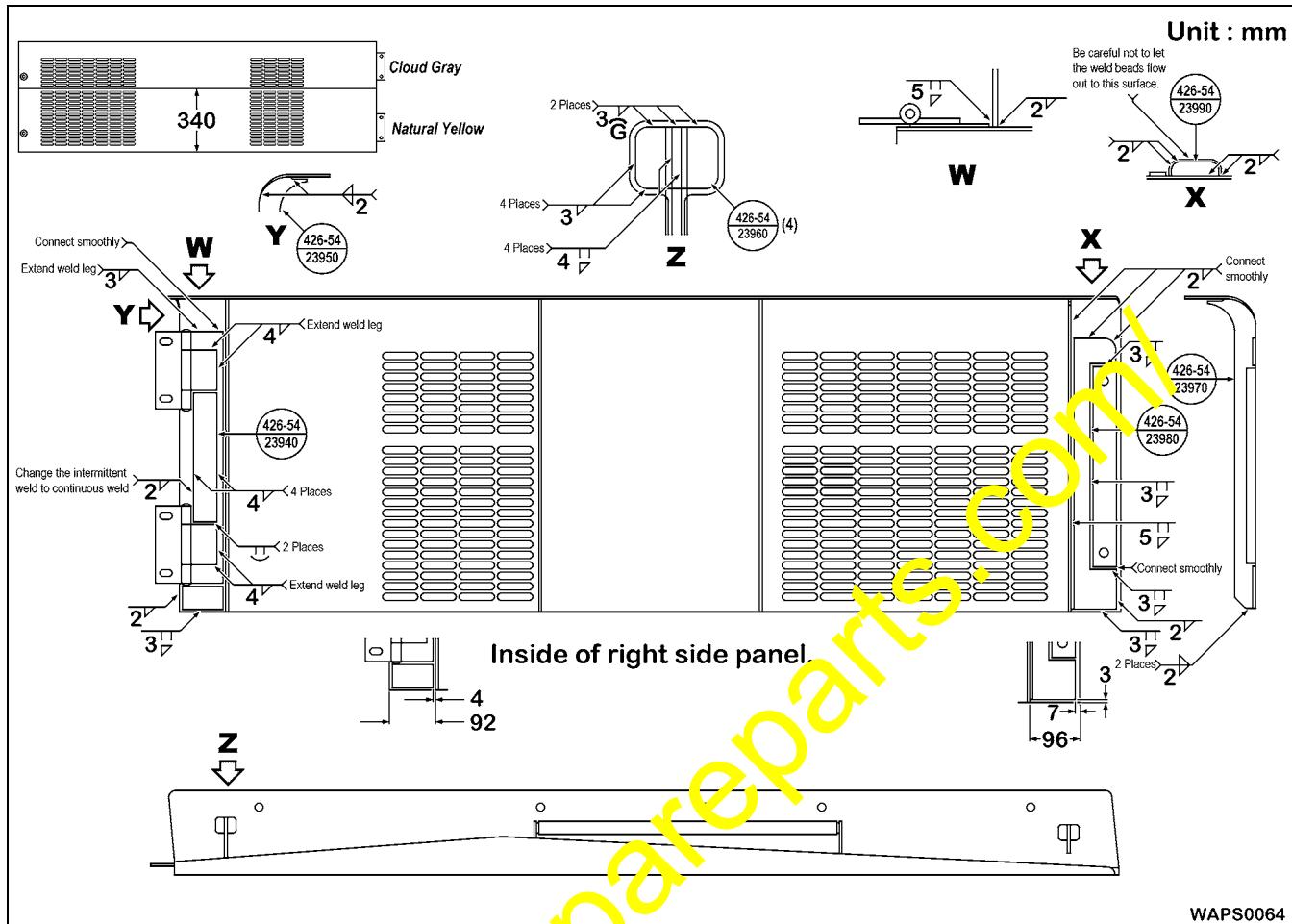


1. Remove the parts indicated, the side panels from the machine. Remove the sound sheets from each side panel.
- ★ Parts marked with a ♣ are to be replaced with the new parts at installation.

## Side Panel Rework

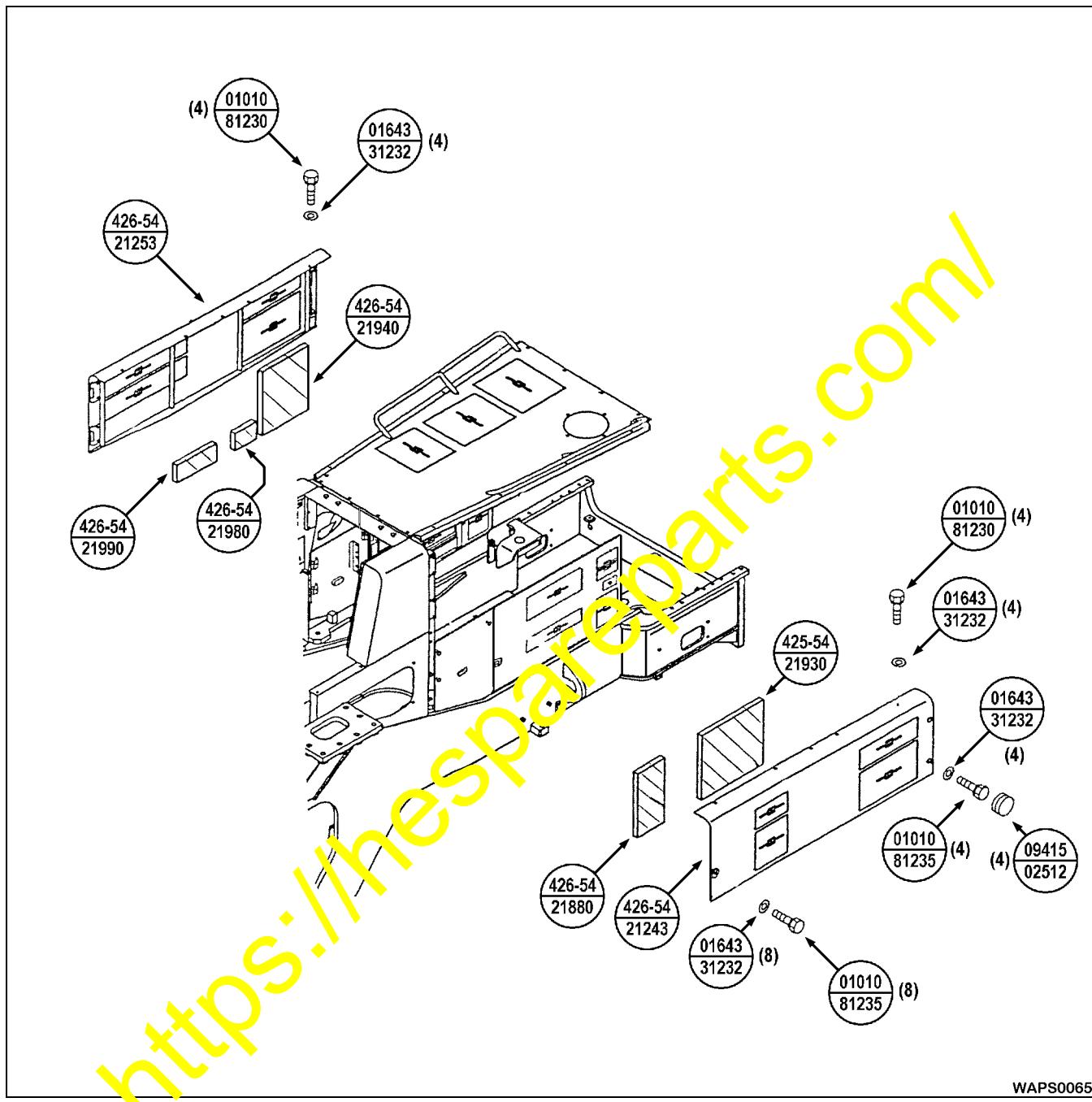


1. For strain preventing purposes, add the angles  $\ominus$  at the dimensions shown. At this time, if it is judged that more adjustability is required, prepare and add the additional angle locally.



2. Remove the vertical ribs marked.  
The plate thickness is increased ..... from 3.2 to 4.5 mm
3. Weld the prepared parts  $\ominus$  at the dimensions shown.
4. After finishing the rework, remove the welded strain preventing angles.
5. After finishing the rework, paint the side panels.  
Bottom paint color..... Natural Yellow  
Top paint color..... Cloud gray

## Installation the Parts

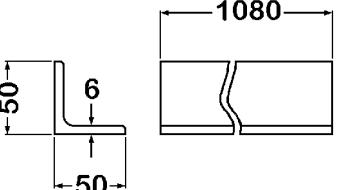
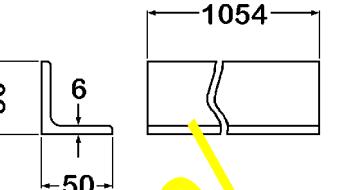
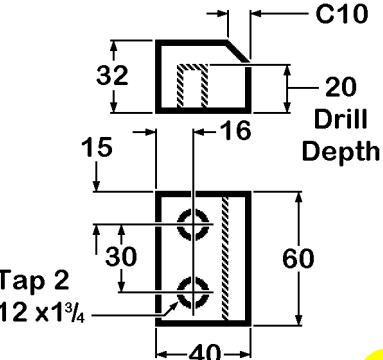
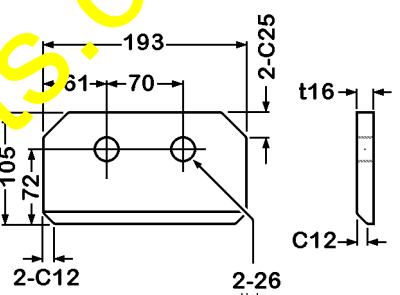
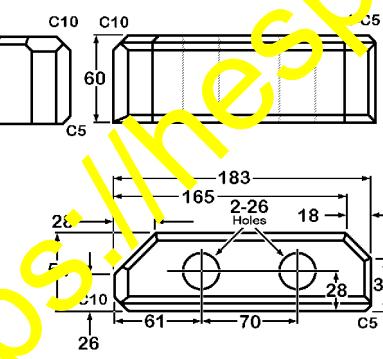
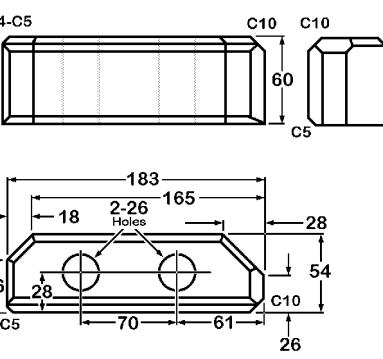
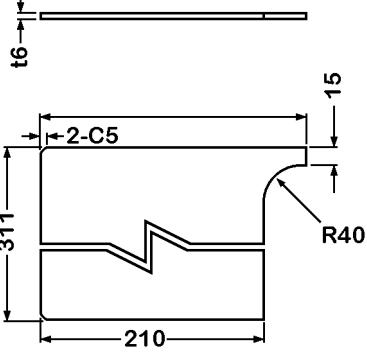
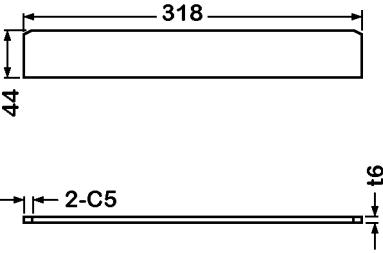


1. Perform the installation work.
  - ★ Change the sound sheets, since welding spatter, etc. may adhere to these materials while welding.
2. Tighten the bolts.

M12 Bolts ..... 54 to 123 N·m

## NEW OR LOCALLY MADE PARTS

Unit : mm

Number..... 426-54-23710 Name ..... ANGLE Material..... SS400A Quantity ..... 4 Position..... Bulkhead		Number ..... 426-54-23720 Name ..... ANGLE Material..... SS400A Quantity ..... 2 Position..... Bulkhead	
Number..... 426-54-23730 Name ..... SEAT Material..... SS400P Quantity ..... 2 Position..... Bulkhead		Number ..... 426-54-23740 Name ..... PLATE Material..... SS400P Quantity ..... 2 Position..... Bulkhead	
Number..... 426-54-23750 Name ..... RIGHT BLOCK Material..... SS400P Quantity ..... 1 Position..... Bulkhead		Number ..... 426-54-23760 Name ..... LEFT BLOCK Material..... SS400P Quantity ..... 1 Position..... Bulkhead	
Number..... 426-54-23770 Name ..... PLATE Material..... SS400P Quantity ..... 2 Position..... Bulkhead		Number ..... 426-54-23780 Name ..... PLATE Material..... SS400F Quantity ..... 2 Position..... Bulkhead	

Unit : mm

<p>Number ..... 426-54-23790 Name ..... PLATE Material ..... SS400F Quantity ..... 2 Position ..... Bulkhead</p> <p><b>426-54</b> <b>23790</b></p>	<p>Number ..... 426-54-23810 Name ..... PLATE Material ..... SS400P Quantity ..... 2 Position ..... Bulkhead</p> <p><b>426-54</b> <b>23810</b></p>
<p>Number ..... 426-54-23820 Name ..... PLATE Material ..... SS400F Quantity ..... 2 Position ..... Bulkhead</p> <p><b>426-54</b> <b>23820</b></p>	<p>Number ..... 426-54-23830 Name ..... PLATE Material ..... SS400P Quantity ..... 2 Position ..... Bulkhead</p> <p><b>426-54</b> <b>23830</b></p>
<p>Number ..... 426-54-23840 Name ..... RIGHT PLATE Material ..... SS400P Quantity ..... 1 Position ..... Bulkhead</p> <p><b>426-54</b> <b>23840</b></p>	<p>Number ..... 426-54-23850 Name ..... LEFT BLOCK Material ..... SS400P Quantity ..... 1 Position ..... Bulkhead</p> <p><b>426-54</b> <b>23850</b></p>
<p>Number ..... 426-54-23860 Name ..... PLATE Material ..... SS400P Quantity ..... 2 Position ..... Bulkhead</p> <p><b>426-54</b> <b>23860</b></p>	<p>Number ..... 426-54-23870 Name ..... PLATE Material ..... SS400P Quantity ..... 2 Position ..... Bulkhead</p> <p><b>426-54</b> <b>23870</b></p>

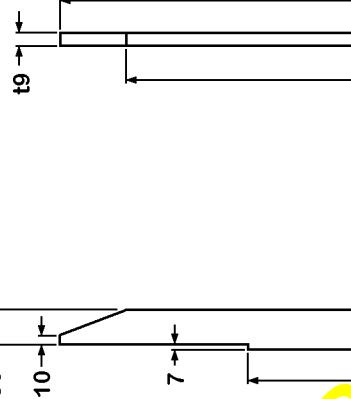
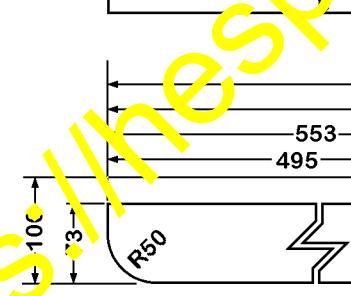
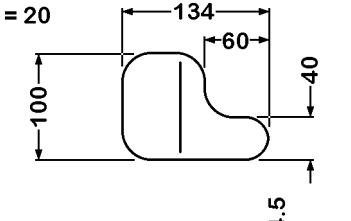
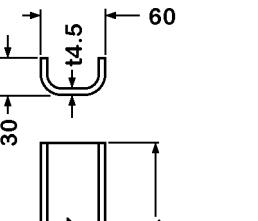
Unit : mm

<p>Number ..... 426-54-23880 Name ..... LEFT PLATE Material ..... SS400P Quantity ..... 1 Position ..... Bulkhead</p> <p><b>426-54 23880</b></p>	<p>WAPS0082</p>	<p>Number ..... 426-54-23890 Name ..... RIGHT ANGLE Material ..... SS400A Quantity ..... 1 Position ..... Bulkhead</p> <p><b>426-54 23890</b></p>	<p>WAPS0083</p>
<p>Number ..... 426-54-23910 Name ..... RIGHT ANGLE Material ..... SS400A Quantity ..... 1 Position ..... Bulkhead</p> <p><b>426-54 23910</b></p>	<p>WAPS0084</p>	<p>Number ..... 426-54-23640 Name ..... PLATE Material ..... SS400P Quantity ..... 4 Position ..... Hood</p> <p><b>426-54 23640</b></p>	<p>WAPS0085</p>
<p>Number ..... 426-54-23930 Name ..... PLATE Material ..... SS400P Quantity ..... 1 Position ..... Bulkhead</p> <p><b>426-54 23930</b></p>	<p>WAPS0086</p>		
<p>Number ..... 426-54-23650 Name ..... PLATE Material ..... SS400P Quantity ..... 7 Position ..... Hood</p> <p><b>426-54 23650</b></p>	<p>WAPS0087</p>	<p>Number ..... 426-54-23660 Name ..... PLATE Material ..... SS400F Quantity ..... 1 Position ..... Hood</p> <p><b>426-54 23660</b></p>	<p>WAPS0088</p>

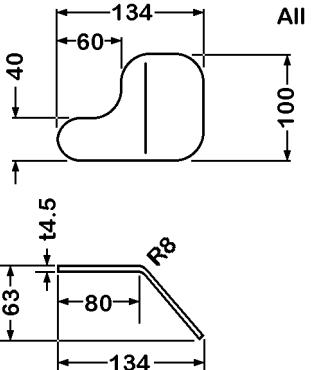
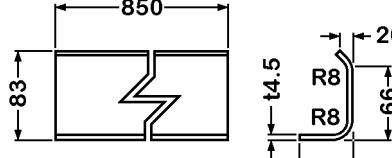
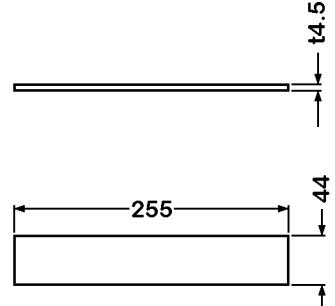
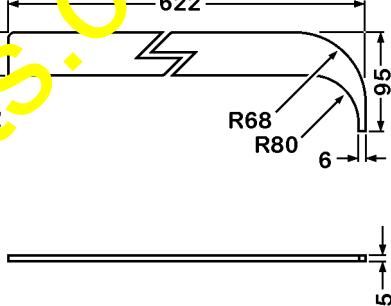
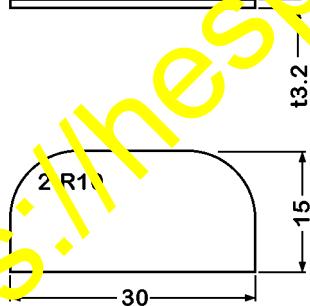
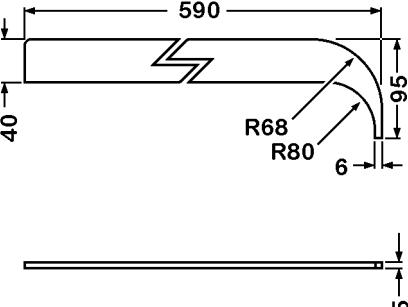
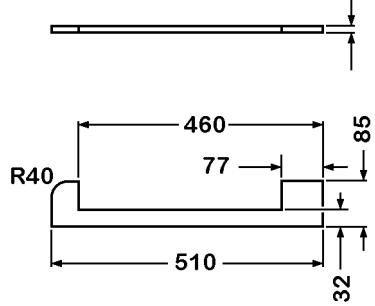
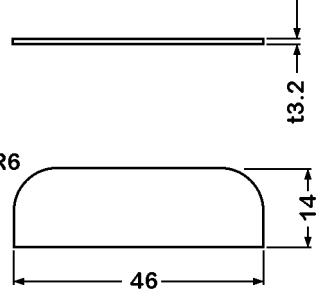
Unit : mm

<p>Number ..... 426-54-23670 Name ..... ANGLE Material ..... SS400A Quantity ..... 2 Position ..... Side Panel</p> <p><b>426-54 23670</b></p>	<p>WAPS0089</p>	<p>Number ..... 426-54-23680 Name ..... ANGLE Material ..... SS400A Quantity ..... 2 Position ..... Side Panel</p> <p><b>426-54 23680</b></p>	<p>WAPS0090</p>
<p>Number ..... 426-54-24810 Name ..... PLATE Material ..... SS400P Quantity ..... 2 Position ..... Rad Guard</p> <p><b>426-54 24810</b></p>	<p>WAPS0091</p>	<p>Number ..... 426-54-24820 Name ..... PLATE Material ..... SS400P Quantity ..... 2 Position ..... Rad Guard</p> <p><b>426-54 24820</b></p>	<p>WAPS0094</p>
<p>Number ..... 426-54-24830 Name ..... RIGHT PLATE Material ..... SS400A Quantity ..... 1 Position ..... Rad Guard</p> <p><b>426-54 24830</b></p>	<p>WAPS0095</p>	<p>Number ..... 426-54-24840 Name ..... LEFT PLATE Material ..... SS400P Quantity ..... 1 Position ..... Rad Guard</p> <p><b>426-54 24840</b></p>	<p>WAPS0096</p>
<p>Number ..... 426-54-24850 Name ..... PLATE Material ..... SS400P Quantity ..... 2 Position ..... Rad Guard</p> <p><b>426-54 24850</b></p>	<p>WAPS0097</p>	<p>Number ..... 426-54-24860 Name ..... PLATE Material ..... SS400P Quantity ..... 2 Position ..... Rad Guard</p> <p><b>426-54 24860</b></p>	<p>WAPS0098</p>

Unit : mm

Number ..... 426-54-24910 Name ..... ANGLE Material ..... SS400A Quantity ..... 2 Position ..... Rad Guard	 <p>1600</p> <p>50 t6 50</p> <p>WAPS0091</p>	Number ..... 426-54-24920 Name ..... ANGLE Material ..... SS400A Quantity ..... 2 Position ..... Rad Guard	 <p>1390</p> <p>50 t6 50</p> <p>WAPS0092</p>
Number ..... 426-54-24930 Name ..... SEAT Material ..... SS400P Quantity ..... 2 Position ..... Rad Guard	 <p>1180</p> <p>1104</p> <p>1104</p> <p>10</p> <p>7</p> <p>t9</p> <p>WAPS0099</p>		
Number ..... 426-54-24940 Name ..... PLATE Material ..... SS400P Quantity ..... 2 Position ..... Rad Guard	 <p>982</p> <p>900</p> <p>553</p> <p>495</p> <p>100</p> <p>3</p> <p>R50</p> <p>90</p> <p>44</p> <p>5</p> <p>t4.5</p> <p>WAPS0100</p>		
Number ..... 426-54-24950 Name ..... END PLATE Material ..... SS400P Quantity ..... 1 Position ..... Rad Guard	 <p>All R = 20</p> <p>134</p> <p>60</p> <p>40</p> <p>100</p> <p>80</p> <p>14.5</p> <p>63</p> <p>134</p> <p>R8</p> <p>WAPS0101</p>	Number ..... 426-54-24960 Name ..... PLATE Material ..... SS400P Quantity ..... 1 Position ..... Rad Guard	 <p>60</p> <p>30</p> <p>t4.5</p> <p>1314</p> <p>WAPS0102</p>

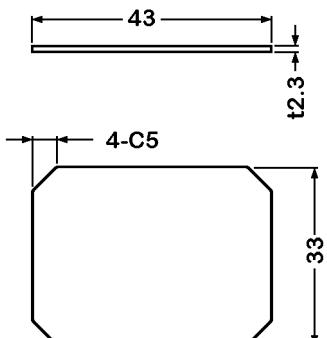
Unit : mm

<p>Number ..... 426-54-24970  Name ..... RIGHT PLATE  Material..... SS400P  Quantity ..... 1  Position ..... Rad Guard</p> <p><b>426-54 24970</b></p>	 <p>All R = 20</p> <p>WAPS0103</p>	<p>Number ..... 426-54-24980  Name ..... PLATE  Material..... SS400P  Quantity ..... 1  Position ..... Rad Guard</p> <p><b>426-54 24980</b></p>	 <p>WAPS0104</p>
<p>Number ..... 426-54-23940  Name ..... PLATE  Material..... SS400P  Quantity ..... 2  Position ..... Side Panel</p> <p><b>426-54 23940</b></p>	 <p>t4.5</p> <p>255</p> <p>44</p> <p>WAPS0105</p>	<p>Number ..... 426-54-23950  Name ..... PLATE  Material..... SS400P  Quantity ..... 2  Position ..... Side Panel</p> <p><b>426-54 23950</b></p>	 <p>622</p> <p>R68</p> <p>R80</p> <p>6</p> <p>t4.5</p> <p>WAPS0106</p>
<p>Number ..... 426-54-23960  Name ..... PLATE  Material..... SS400P  Quantity ..... 8  Position ..... Side Panel</p> <p><b>426-54 23960</b></p>	 <p>t3.2</p> <p>2 R10</p> <p>30</p> <p>15</p> <p>WAPS0108</p>	<p>Number ..... 426-54-23970  Name ..... PLATE  Material..... SS400P  Quantity ..... 2  Position ..... Side Panel</p> <p><b>426-54 23970</b></p>	 <p>590</p> <p>R68</p> <p>R80</p> <p>6</p> <p>40</p> <p>95</p> <p>t4.5</p> <p>WAPS0107</p>
<p>Number ..... 426-54-23980  Name ..... PLATE  Material..... SS400P  Quantity ..... 2  Position ..... Side Panel</p> <p><b>426-54 23980</b></p>	 <p>t4.5</p> <p>R40</p> <p>460</p> <p>77</p> <p>85</p> <p>510</p> <p>32</p> <p>WAPS0109</p>	<p>Number ..... 426-54-23990  Name ..... PLATE  Material..... SS400P  Quantity ..... 4  Position ..... Side Panel</p> <p><b>426-54 23990</b></p>	 <p>2-R6</p> <p>46</p> <p>14</p> <p>t3.2</p> <p>WAPS0110</p>

Unit : mm

<p>Number ..... 426-54-27160 Name ..... PLATE Material ..... SS400P Quantity ..... 1 Position ..... Hood Angle</p> <p><b>426-54 27160</b></p>	<p>WAPS0111</p>	<p>Number ..... 426-S95-2240 Name ..... PLATE Material ..... SS400P Quantity ..... 1 Position ..... Auto Grease</p> <p><b>426-S95 2240</b></p>	<p>WAPS0112</p>
<p>Number ..... 426-54-31870 Name ..... PLATE Material ..... SS400P Quantity ..... 2 Position ..... Front Cover</p> <p><b>426-54 31870</b></p>	<p>WAPS0113</p>	<p>Number ..... 426-46-22190 Name ..... SEAT Material ..... SS400P Quantity ..... 2 Position ..... Rear Frame</p> <p><b>426-46 22190</b></p>	<p>WAPS0114</p>
<p>Number ..... 562-03-15810 Name ..... PLATE Material ..... SS400P Quantity ..... 8 Position ..... Rear Frame</p> <p><b>562-03 15810</b></p>	<p>WAPS0115</p>	<p>Number ..... 426-54-23590 Name ..... PLATE Material ..... SS400P Quantity ..... 2 Position ..... Grille</p> <p><b>426-54 23590</b></p>	<p>WAPS0116</p>
<p>Number ..... 426-54-23610 Name ..... PLATE Material ..... SPHC Quantity ..... 1 Position ..... Grille</p> <p><b>426-54 23610</b></p>	<p>WAPS0117</p>	<p>Number ..... 426-54-23620 Name ..... PLATE Material ..... SPHC Quantity ..... 1 Position ..... Grille</p> <p><b>426-54 23620</b></p>	<p>WAPS0118</p>

Unit : mm

<p>Number..... 426-54-23630 Name ..... PLATE Material.....SPHC Quantity .....1 Position..... Grille</p> <p><b>426-54 23630</b></p>			
<p>Number..... 426-54-23920 Name ..... BRACKET Material..... SS400P Quantity .....1 Position..... Bulkhead Purchase</p> <p><b>426-54 23920</b></p>	