

# PARTS & SERVICE NEWS

REF NO. AT97067A

DATE April 19, 2004

(C)

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This **Parts & Service News** supercedes AT97067 dated May 1, 1997 and should be discarded

**SUBJECT:** CRACK PLATFORM

**PURPOSE:** To introduce repair procedures for cracks occurring in the joints between the platform and the ladder rail

**APPLICATION:** WA500-3 Wheel Loaders, S/N 50001 thru 50091  
WA500-3A Wheel Loaders, S/N 50001 thru 50091  
WA500-3L Wheel Loaders, S/N A70001 thru A70017

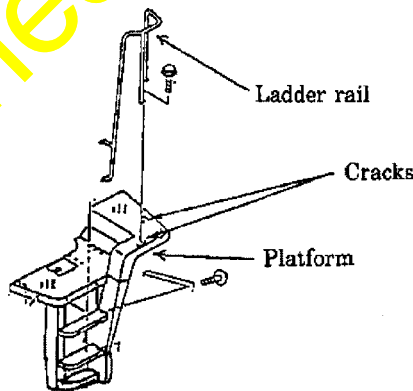
**FAILURE CODE:** 5450HA

**DESCRIPTION:**

1. Introduction:

Cracks may occur in the joints between the platform and the ladder rail while the vehicle is in use causing excessive vibration such as lapping out operations and bucket shaking operations.

When cracks are found in these sections, repair the cracks and reinforced the structure following the procedures introduced in this Parts & Service News.



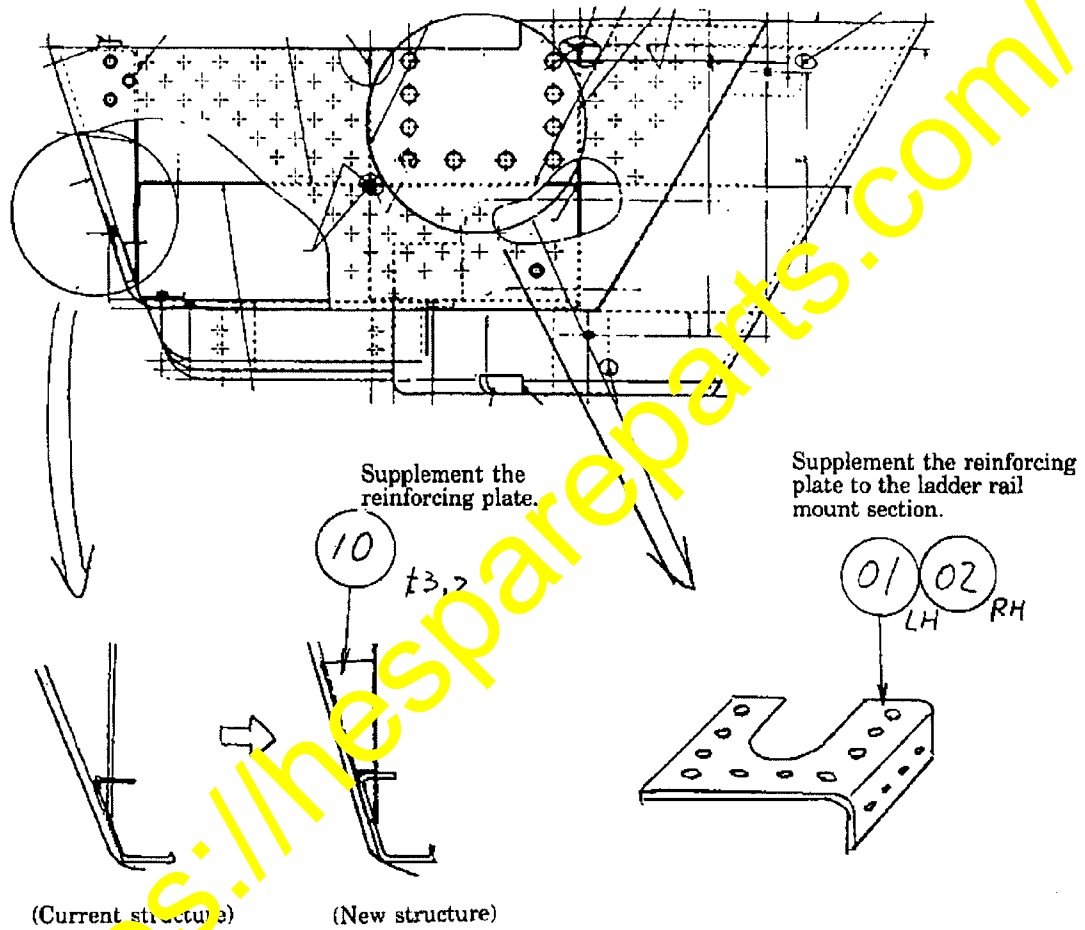
## 2. List of parts

Part No.	Part Name	Purpose of part	Q'ty	Remarks		
425-54-24114	Floor (L.H)		1	It is necessary to modify both LH and RH floor panels. (When the vehicle is equipped with the ROPS system.)		
(425-54-24113)	(Floor (L.H))		(1)			
(425-54-24112)	(Floor (L.H))		(1)			
425-54-24124	Floor (R.H)		1			
(425-54-24123)	(Floor (R.H))		(1)			
(425-54-24122)	(Floor (R.H))		(1)			
425-54-25112	Handrail F (L.H)	Reworks	1			
(425-54-25111)	(Handrail F (L.H))		(1)			
425-54-25122	Handrail R (L.H)		1			
(425-54-25121)	(Handrail R (L.H))		(1)			
425-54-25132	Handrail F (R.H)		1			
(425-54-25131)	(Handrail F (R.H))		(1)			
425-54-25142	Handrail R (R.H)		1			
(425-54-25141)	(Handrail R (R.H))		(1)			
—	Plate - (01)		Additional		1	Reinforcing parts (For the floor)
—	Plate - (02)				1	
—	Plate - (03)				14	Reinforcing parts (For the ladder rail)
—	Plate - (04)				1	Reinforcing parts (For the floor)
—	Plate - (05)	1				
—	Plate - (06)	1				
—	Plate - (07)	1				
—	Plate - (08)	1				
—	Plate - (09)	1				
—	Plate - (10)	2				

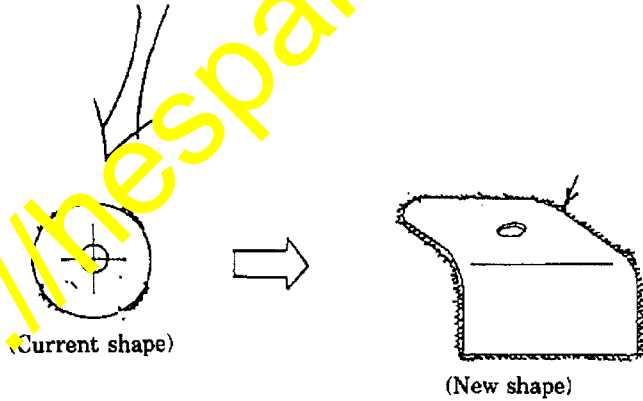
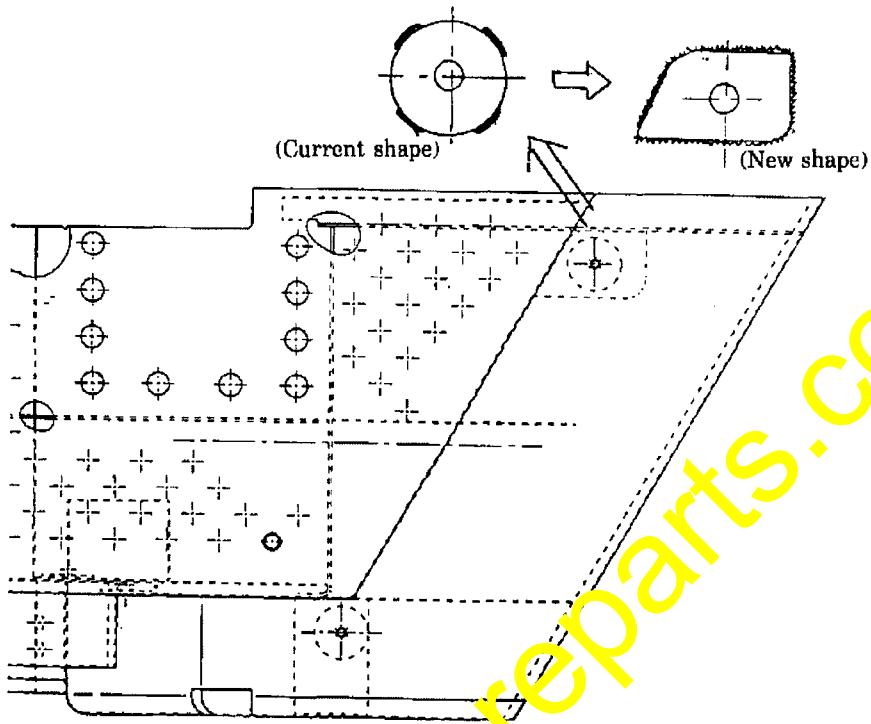
[Note] For the floor panels 425-54-24113/24123, necessary parts for the modification are (01), (02), (08), (09) and (10) only. Other parts are already installed.

3. Contents of the modification

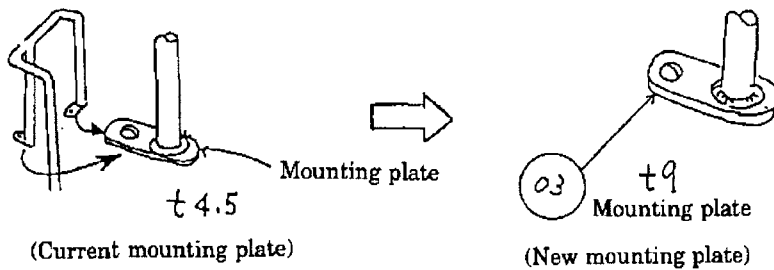
- 1 Supplement reinforcing plates at the front section and center support section of the platform to strengthen its structure.



- 2 As shown below, supplement the reinforcing plate to the ladder rail mounting section of the platform and replace the ladder rail mounting plates to strengthen the relevant structures.  
<1> Platform side

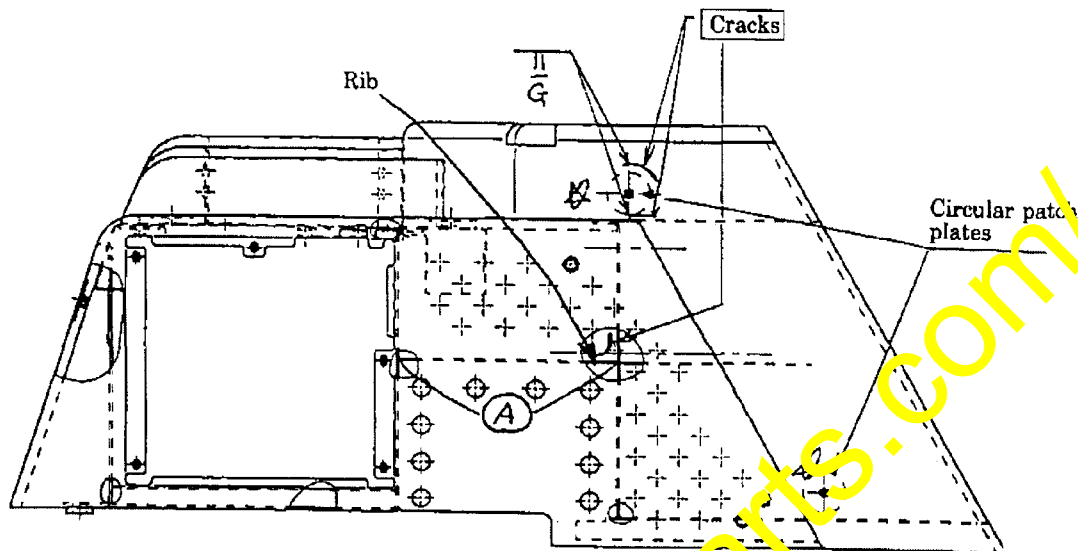


<2> Ladder rail side



## 4. Modification procedures

- 1 Repairing the cracked sections of the floor panels (common for the floor panel, L.H and floor panel, R.H)



- ① Separate the ladder rails from the floor panel.
- ② Remove the circular patch plates (at 2 places marked ☆) welded to the rear face of the floor panel.
- ③ Repair the cracked sections by welding and finish the weld surfaces using a grinder.  
Note) Pay extra attention to finish the mating surfaces with the bottom planes of the ladder rails to flat planes.
- ④ Remove the rib from the area (A).

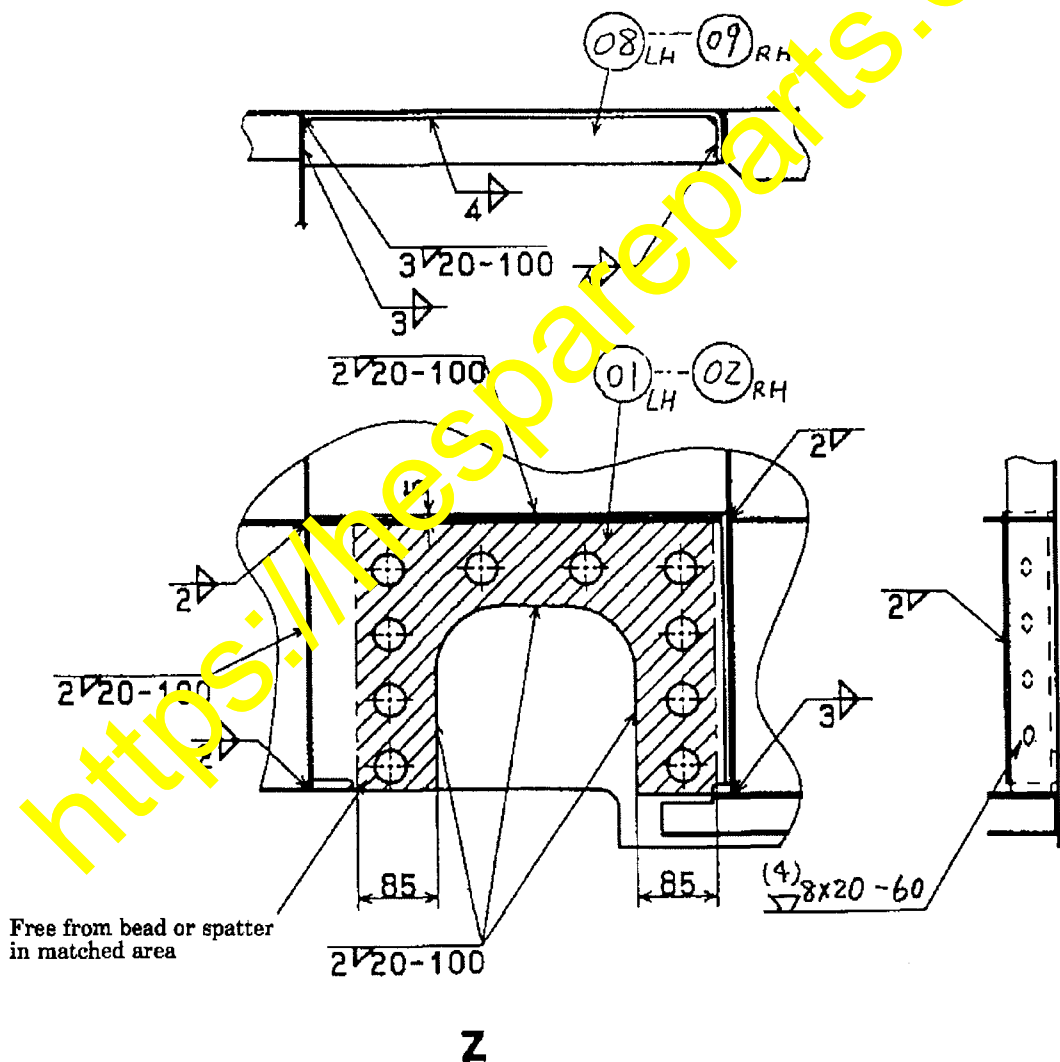
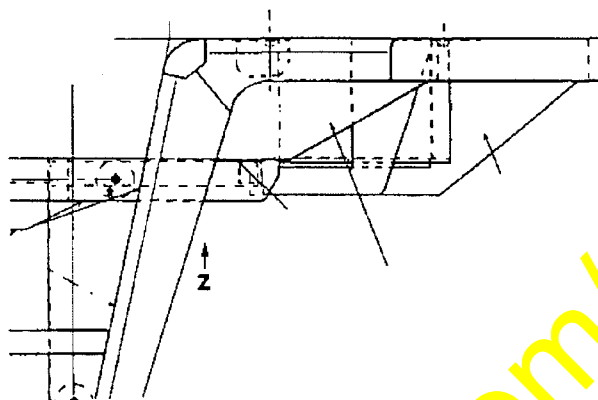
[ After completing repair of the floor panel (platform) and handrails, apply touch-up painting to the welded surface. Paint should be "Cloud Gray". ]

(1) Reinforcing the ladder rail mount section of the platform  
 (These drawings are for the platform, L.H.)

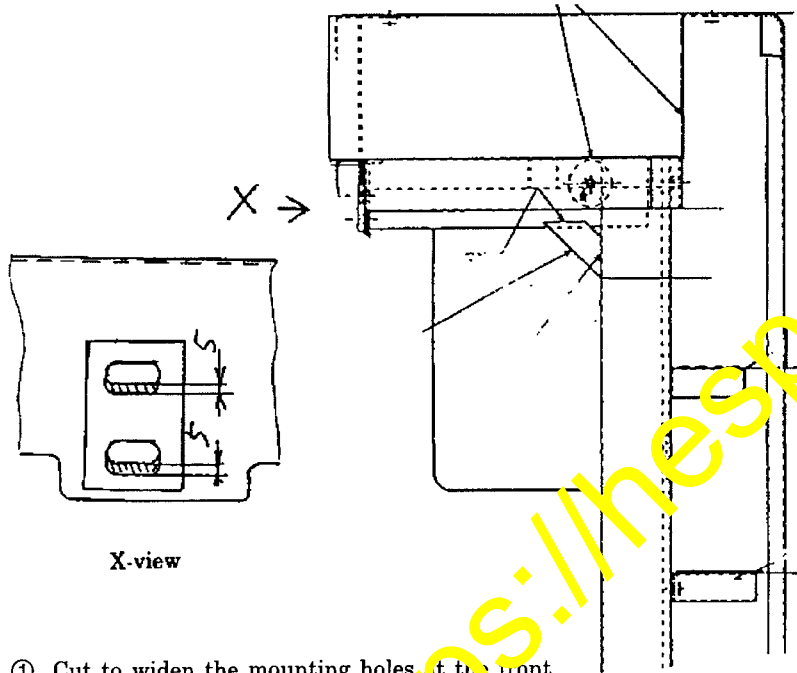
① Weld the plate (01) according to the designations given in the drawings below.

② Weld the rib (08) on the plate (01) according to the designations given in the drawings below.

Weld the plate and rib similarly to the platform, RH also.



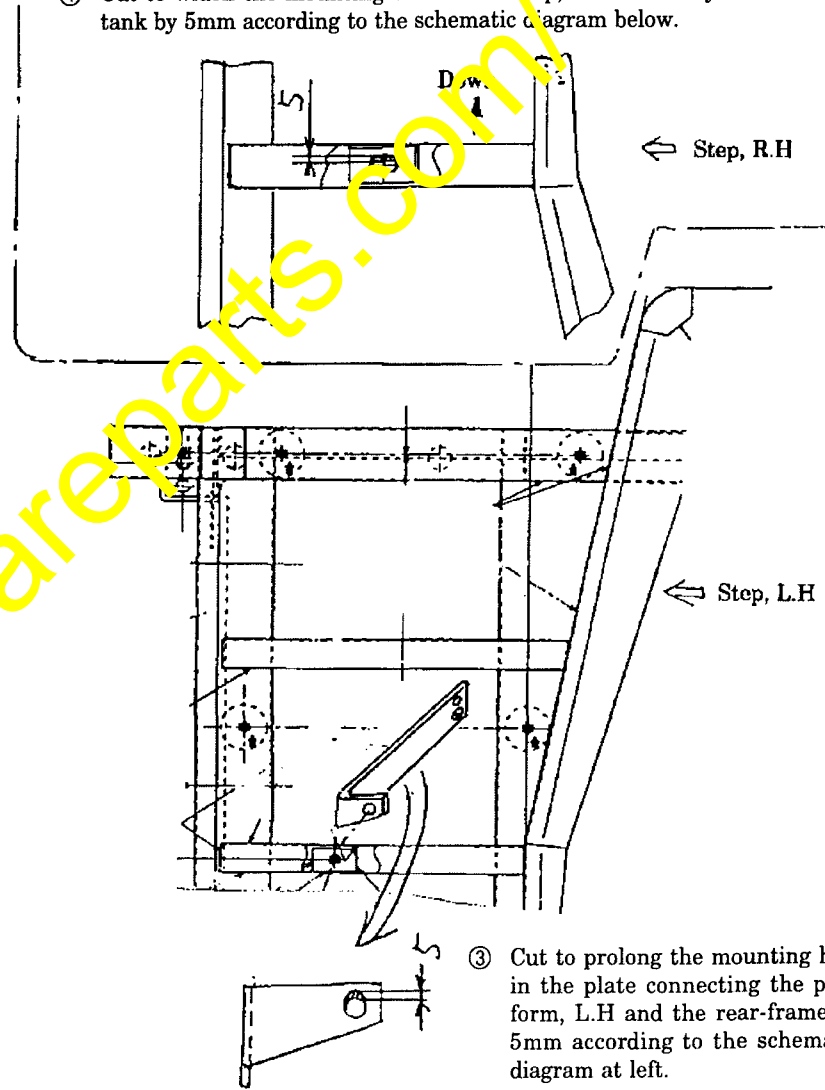
Since the installing elevation of the platforms, L.H and R.H rises by the plate thickness by supplementation of the plate ① or ②, rework with the mounting holes to compensate for the increased elevation according to the schematic diagrams below.



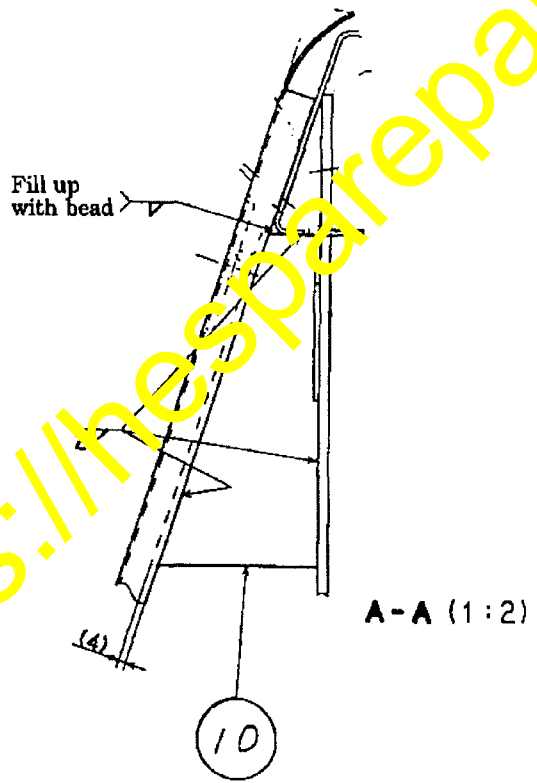
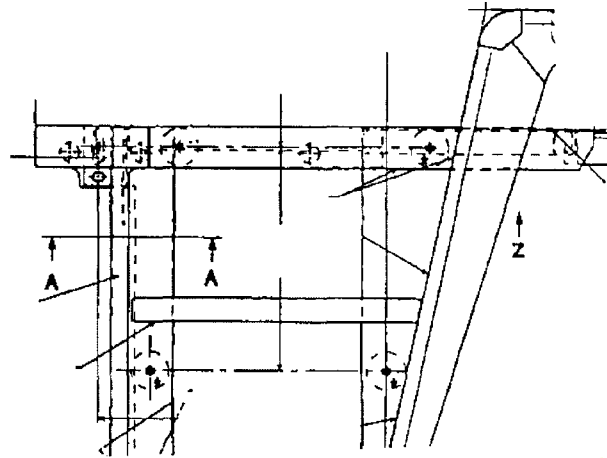
X-view

- ① Cut to widen the mounting holes at the front section of the platform by 5mm according to the above schematic diagram.
- ② Execute this reworking with both platforms, L.H and R.H.

- ④ Cut to widen the mounting hole in the step, R.H to the hydraulic oil tank by 5mm according to the schematic diagram below.



- ③ Cut to prolong the mounting hole in the plate connecting the platform, L.H and the rear-frame by 5mm according to the schematic diagram at left.



The above drawings are for the platform, L.H.

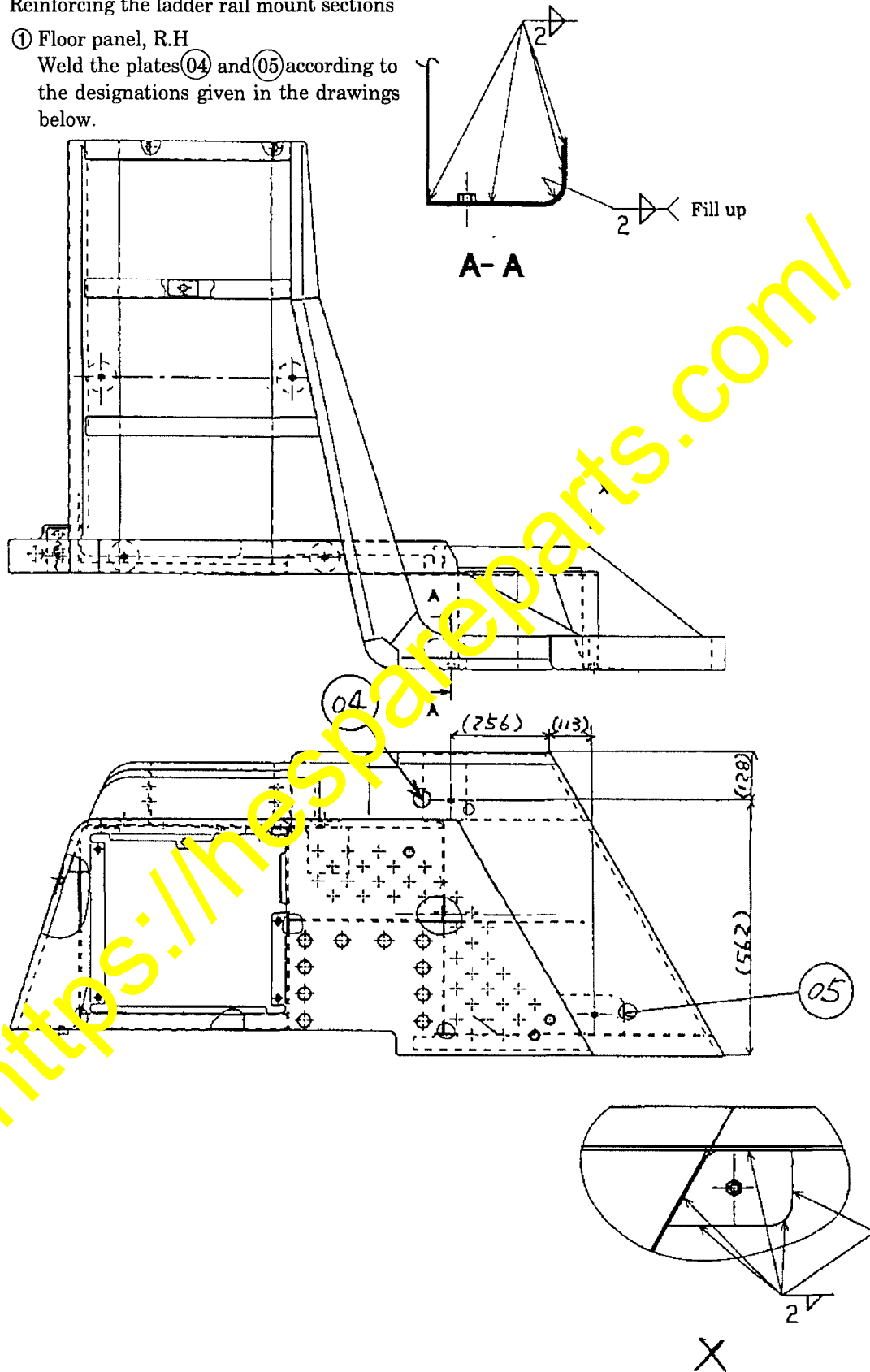
- ① Weld the plate ⑩ according to the designations given in the above drawings.
- Weld the reinforcing plate similarly to the platform, R.H.



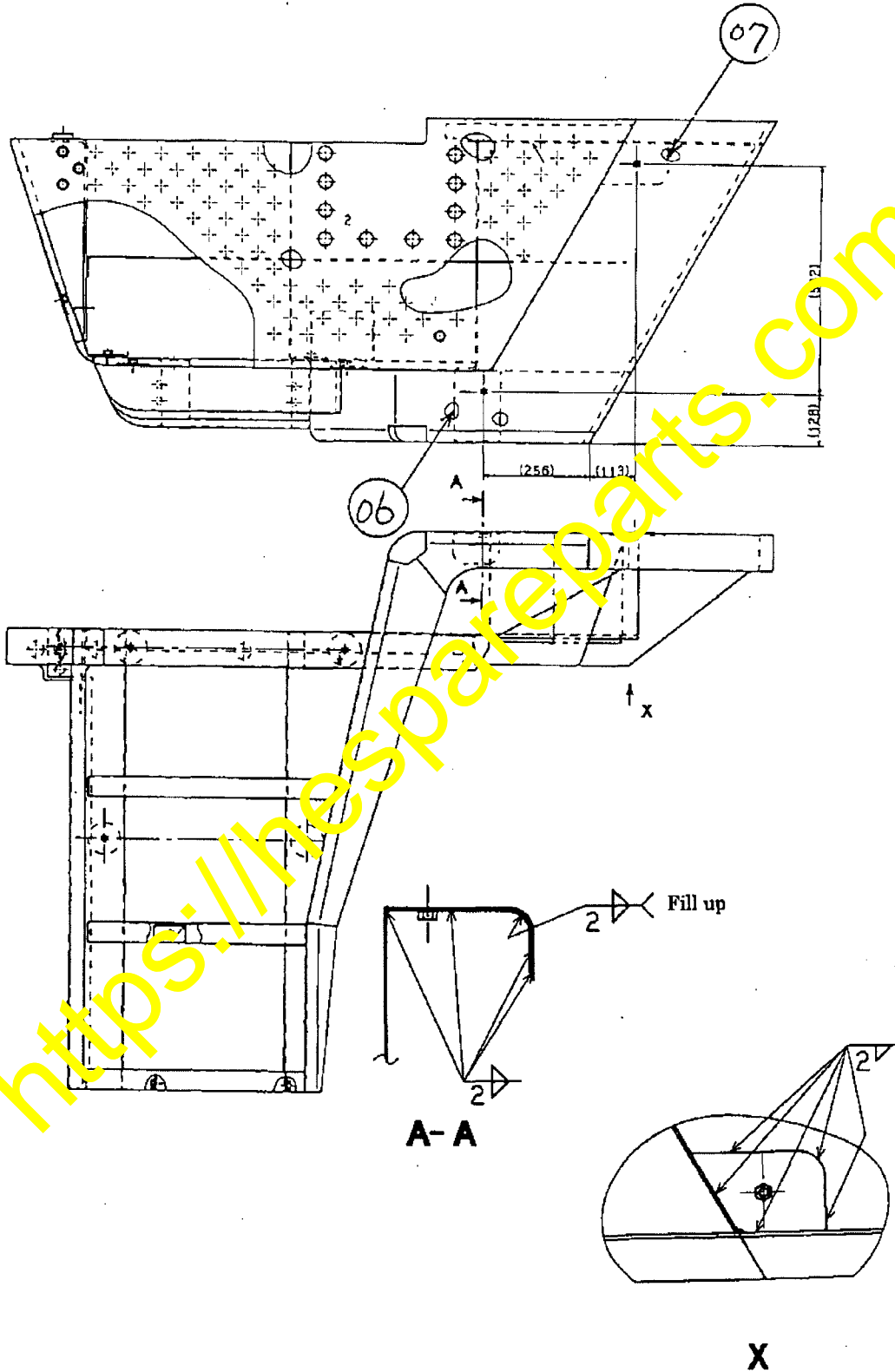
(2) Reinforcing the ladder rail mount sections

① Floor panel, R.H

Weld the plates ④ and ⑤ according to the designations given in the drawings below.



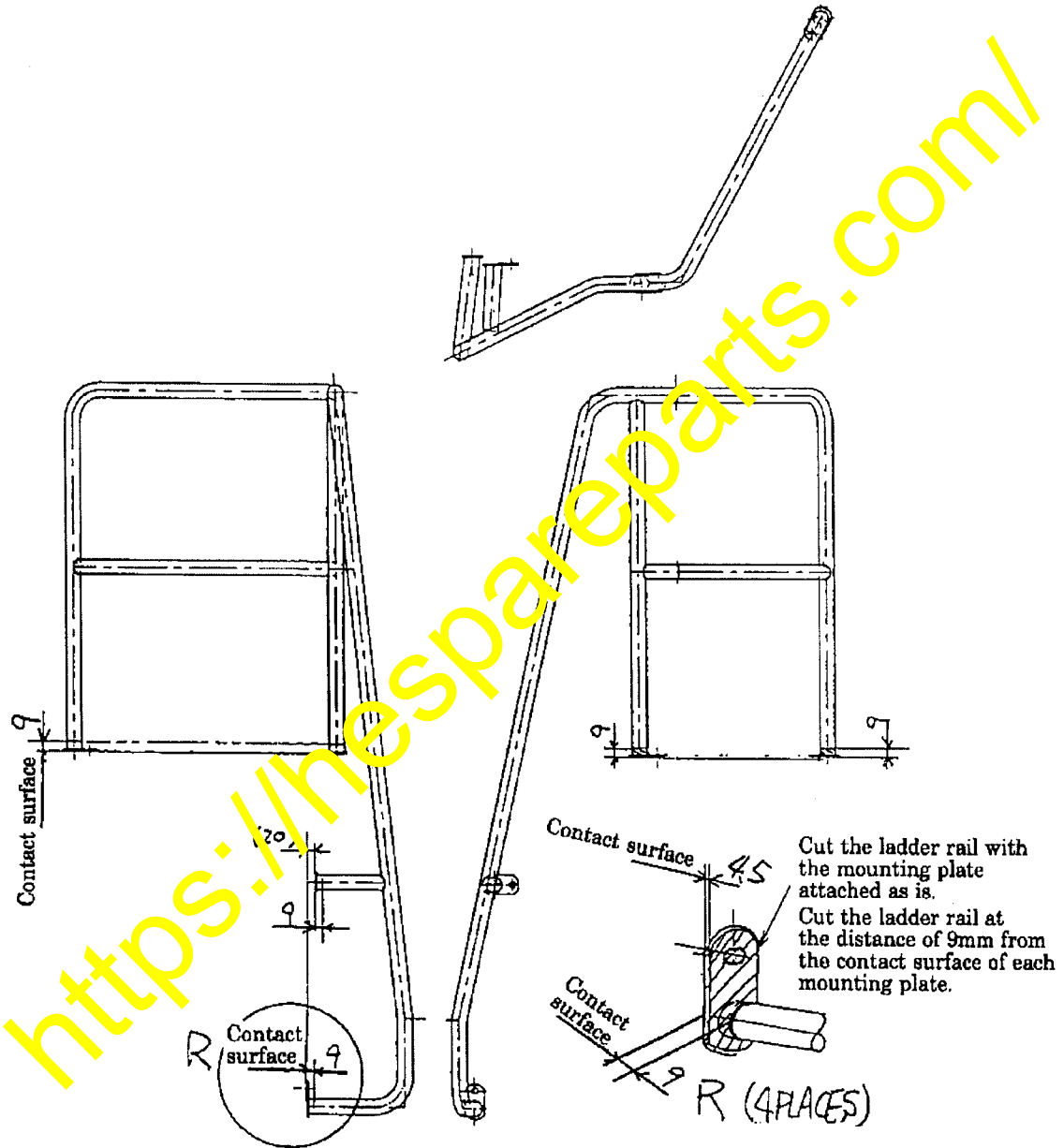
- ② Floor panel, L.H  
Weld the plates ⑥ and ⑦ according to the designations given in the drawings below.



**2 Reworking with the handrails**

**(1) Replacing the rear ladder rail mounting plates**

- ① As shown in the schematic diagrams below, cut the ladder rail at the distance of 9mm from the contact surface of each mounting plate.



The above schematic diagrams are for the rear-ladder-rail, L.H.

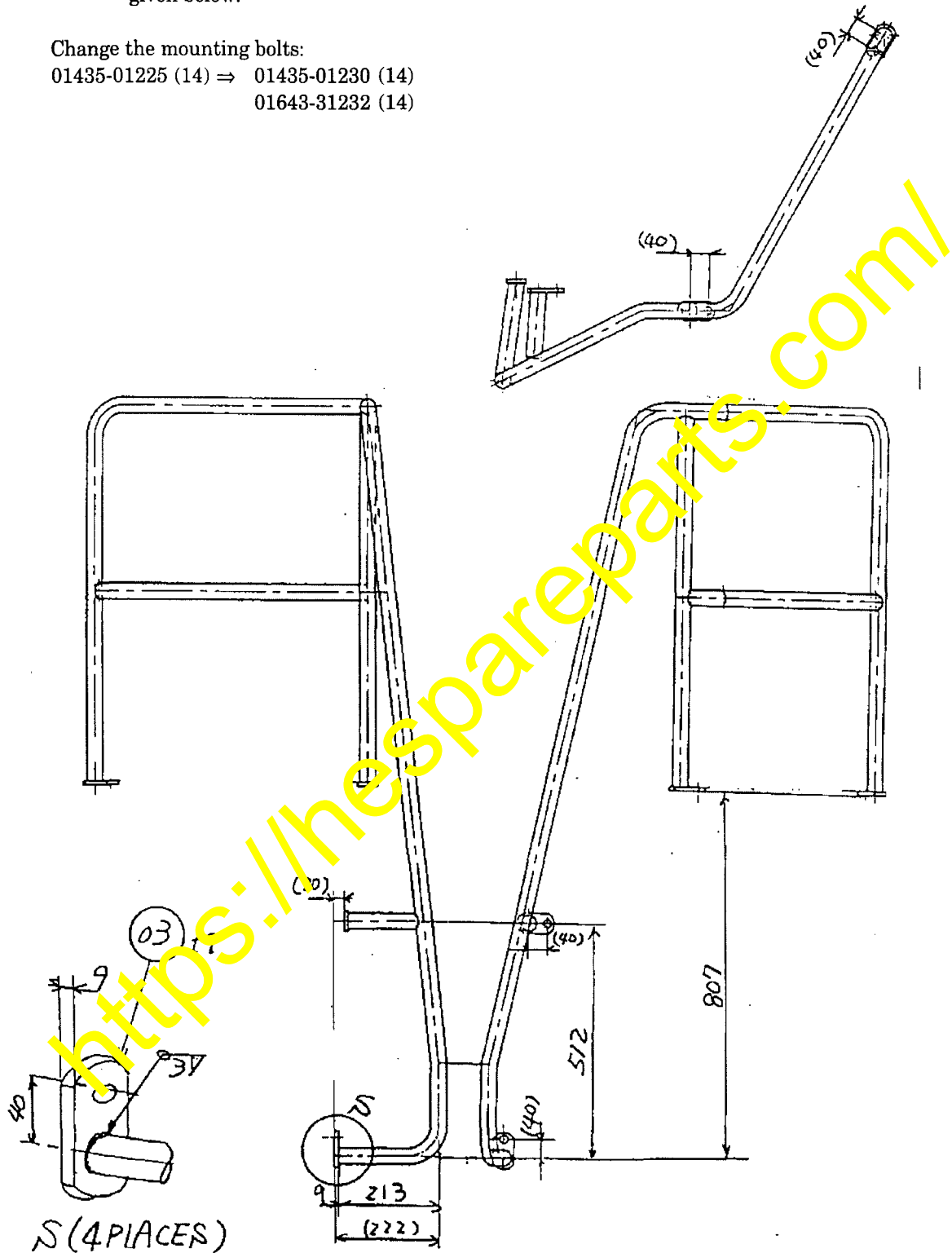
Similarly cut the rear-ladder-rail, R.H also at the distance of 9mm from the contact surface of each mounting plate.

- ② Weld the mounting plates ③ at the positions designated in the schematic diagrams given below.

Change the mounting bolts:

01435-01225 (14) ⇒ 01435-01230 (14)

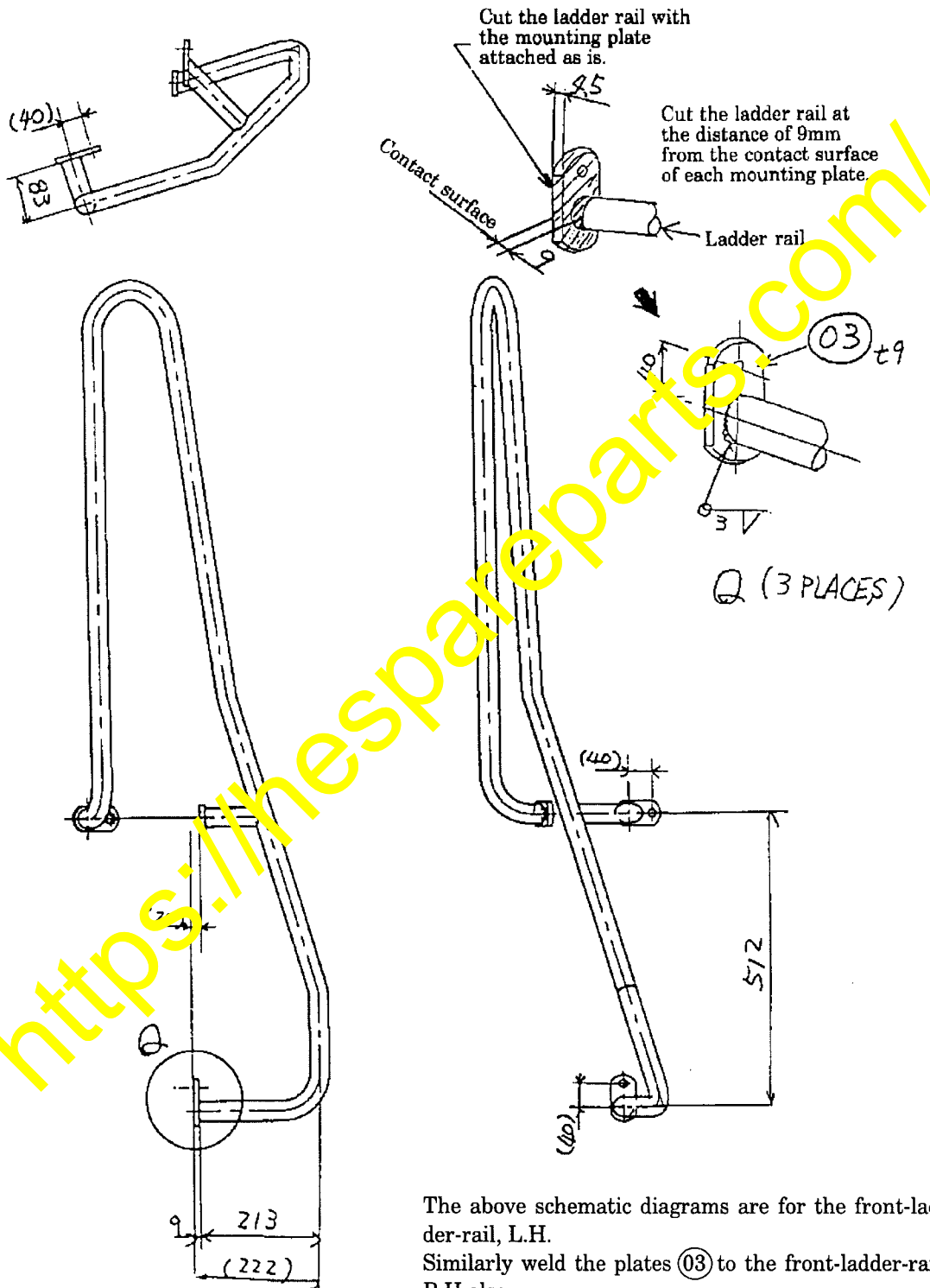
01643-31232 (14)



The above schematic diagrams are for the rear-ladder-rail, L.H.  
Similarly weld the plates ③ to the rear-ladder-rail, R.H also.

(2) Replacing the front ladder rail mounting plates

Similarly to the case of the rear ladder rails, cut the current mounting plates and weld the new mounting plates (03) for replacement.

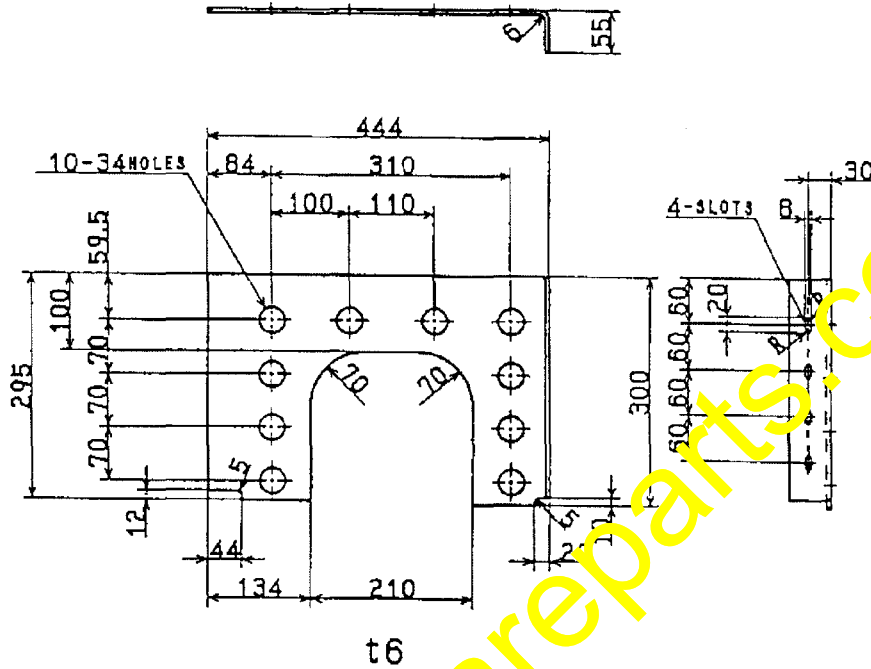


The above schematic diagrams are for the front-ladder-rail, L.H.  
Similarly weld the plates (03) to the front-ladder-rail, R.H also.

5. Shapes and dimensions of the reinforcing parts

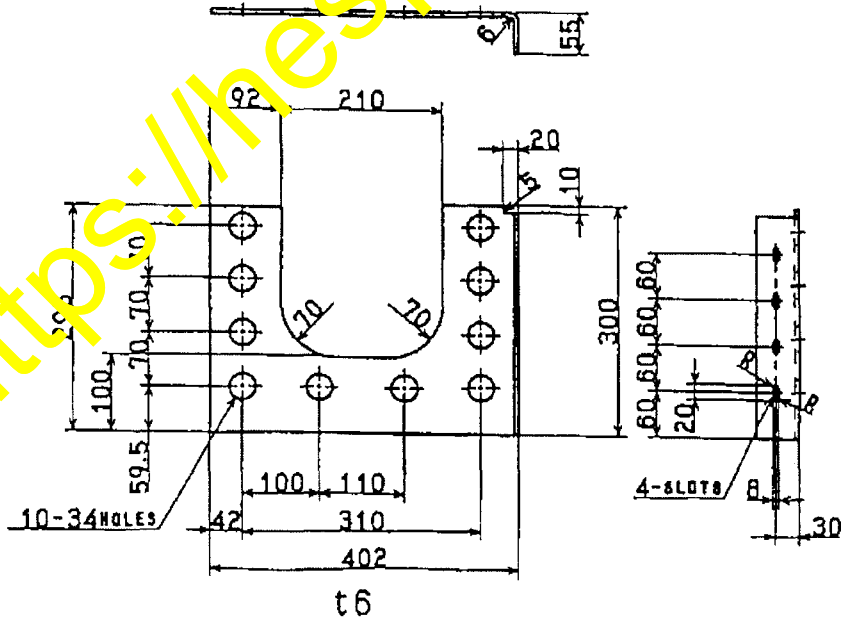
01

Material: SS400P  
Quantity: 1 unit/vehicle



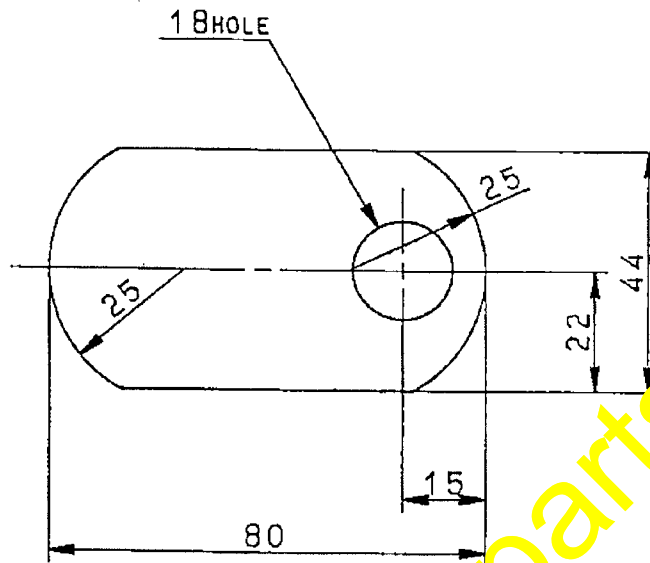
02

Material: SS400P  
Quantity: 1 unit/vehicle



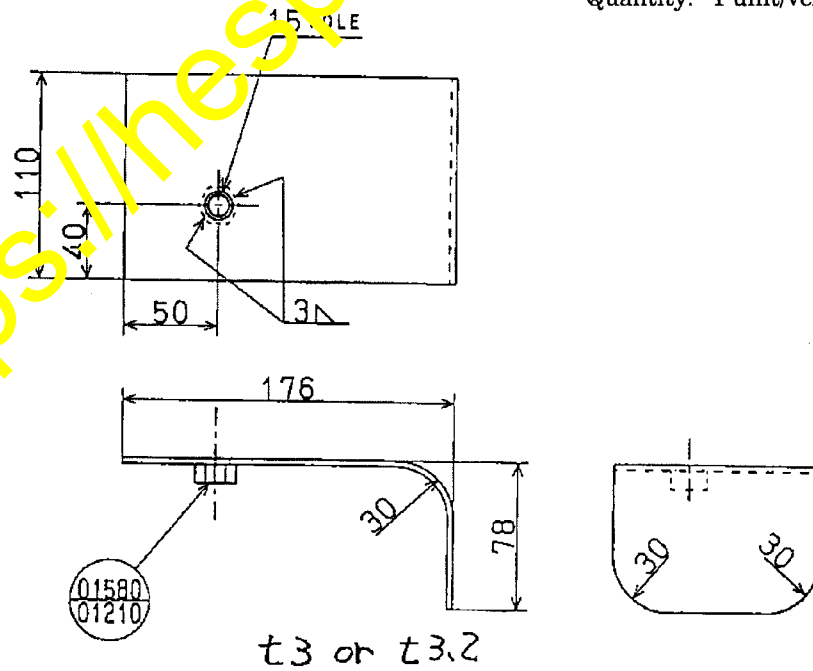
03 Plate

Material: SS400F  
Quantity: 14 units/vehicle



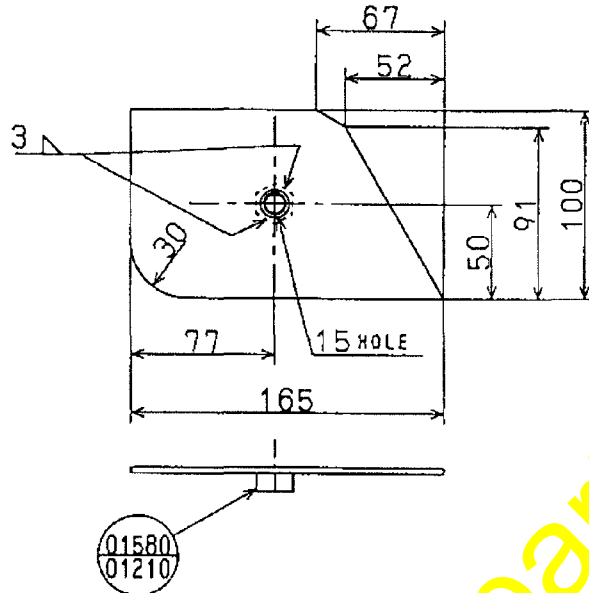
04 Plate

Material: SS400P  
Quantity: 1 unit/vehicle



05 Plate

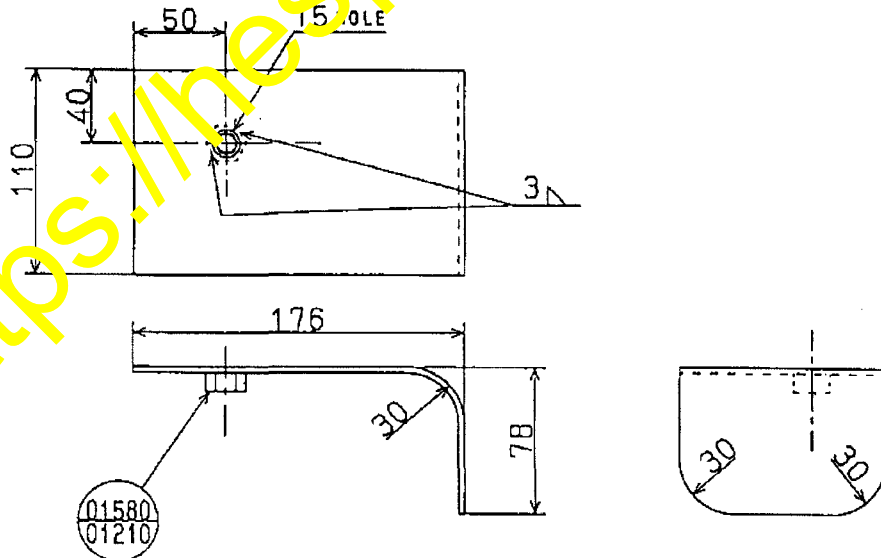
Material: SS400P  
Quantity: 1 unit/vehicle



t3 or t3.2

06 Plate

Material: SS400P  
Quantity: 1 unit/vehicle

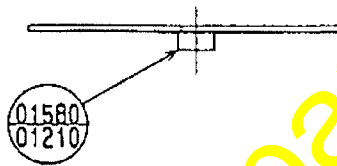
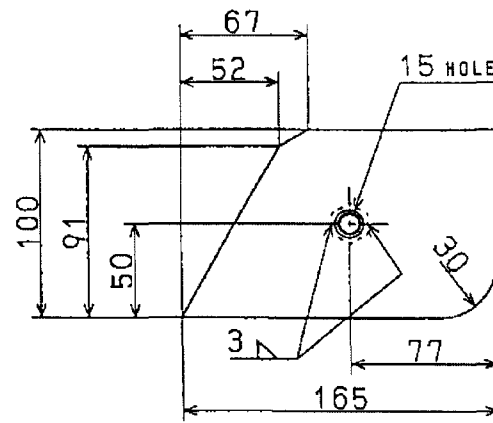


t3 or t3.2



07 Plate

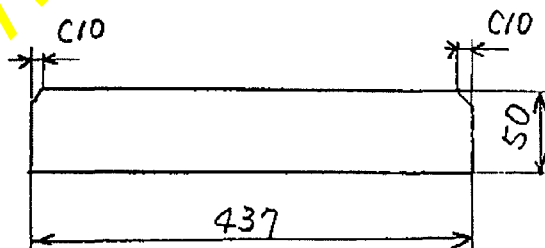
Material: SS400P  
Quantity: 1 unit/vehicle



t3 or t3.2

08

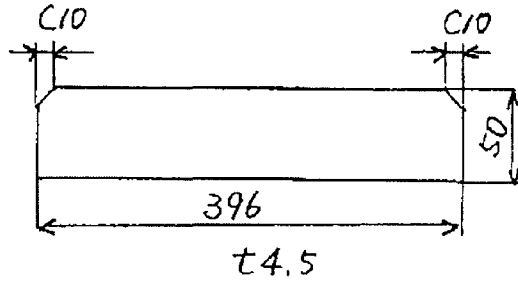
Material: SS400F  
Quantity: 1 unit/vehicle



t4.5

09

Material: SS400F  
Quantity: 1 unit/vehicle



10

Material: SS400P  
Quantity: 2 units/vehicle

