

PARTS & SERVICE NEWS

REF NO. AA02078

DATE March 14, 2002

(C)

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SUBJECT: CHANGING HYDRAULIC TANK POSITION TO ALLOW MESHED CHAINS TO BE FASTENED OVER LARGE DIAMETER TIRE

PURPOSE: To introduce modification procedures to change the position of the hydraulic tank to install large diameter tires (41.25/70-39) and tire chains

APPLICATION: WA700-3 Wheel Loaders, S/N 50001 and up
WA700-3L Wheel Loaders, S/N A50001 and up

FAILURE CODE: 600068

DESCRIPTION:

When large diameter tires (41.25/70-39) are installed and meshed tire chains are fastened over them, clearance toward the hydraulic tank becomes too narrow causing possible interference. In such a case, make the modifications to move the hydraulic tank forward following the procedures outlined in this **PARTS & SERVICE NEWS**.

<https://hespareparts.com/>

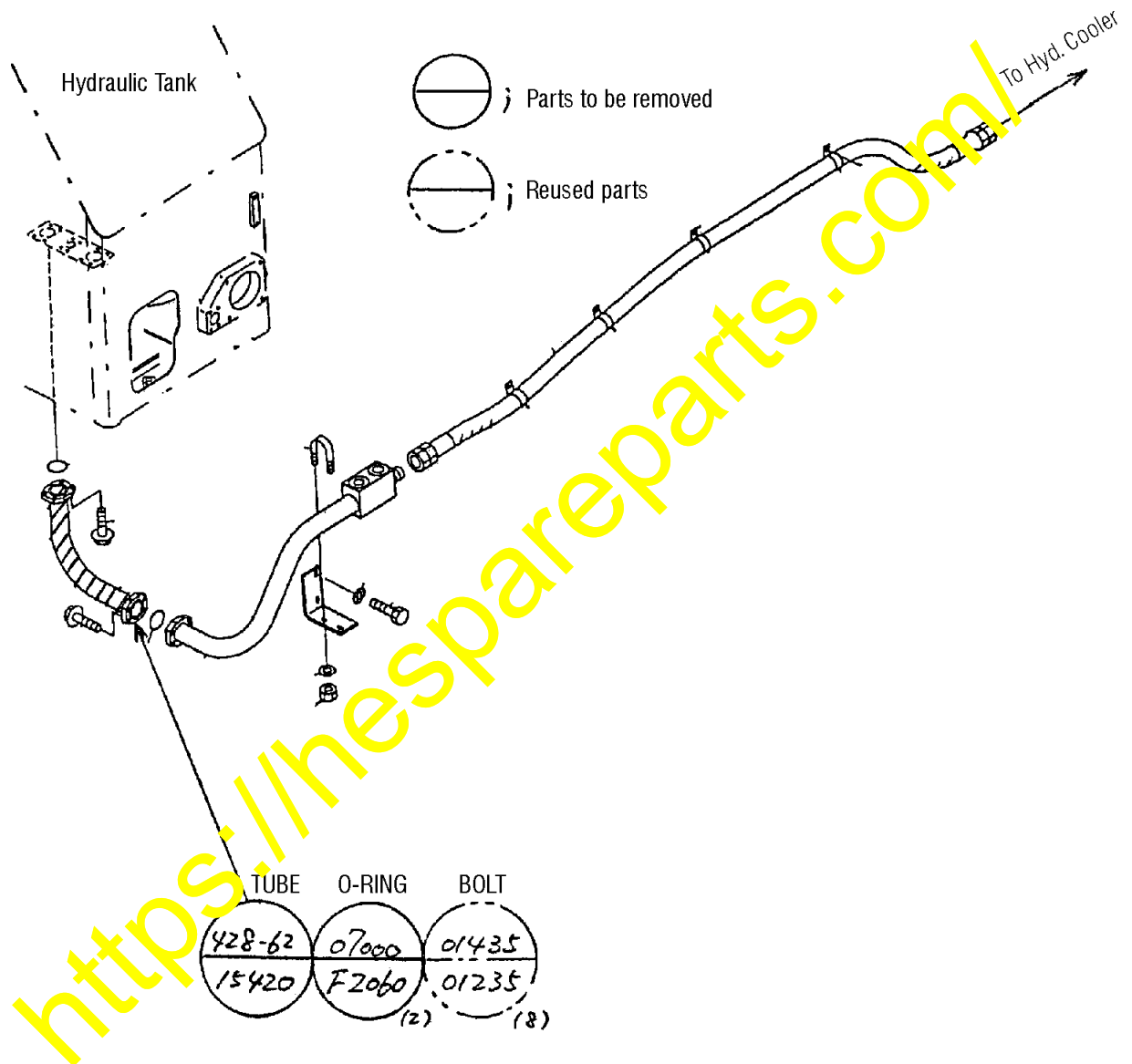
2. List of parts

Part No.	Part Name	Q'ty	Remarks
428-62-23210 (428-62-13791)	Tube (Tube)	1 (1)	
428-62-24110 (428-62-14122)	Tube (Tube)	1 (1)	
428-62-25110 (428-62-15420)	Tube (Tube)	1 (1)	
428-62-26120 (428-62-16120)	Tube (Tube)	1 (1)	
428-62-26130 (428-62-16321)	Tube (Tube)	1 (1)	
428-62-26140 (428-62-16170)	Plate (Plate)	1 (1)	
428-54-24310 (428-54-24171)	Plate (Plate)	1 (1)	
428-60-25120 (428-60-15251)	Plate (Plate)	1 (1)	
428-46-22F90	Bracket	1	} Part necessary for reworking
428-46-21790	Plate	1	
428-54-24560	Plate	1	
07000-02140	O-ring	1	} Part to be replaced
07000-F2060	O-ring	3	
07000-12060	O-ring	1	
07000-13042	O-ring	1	

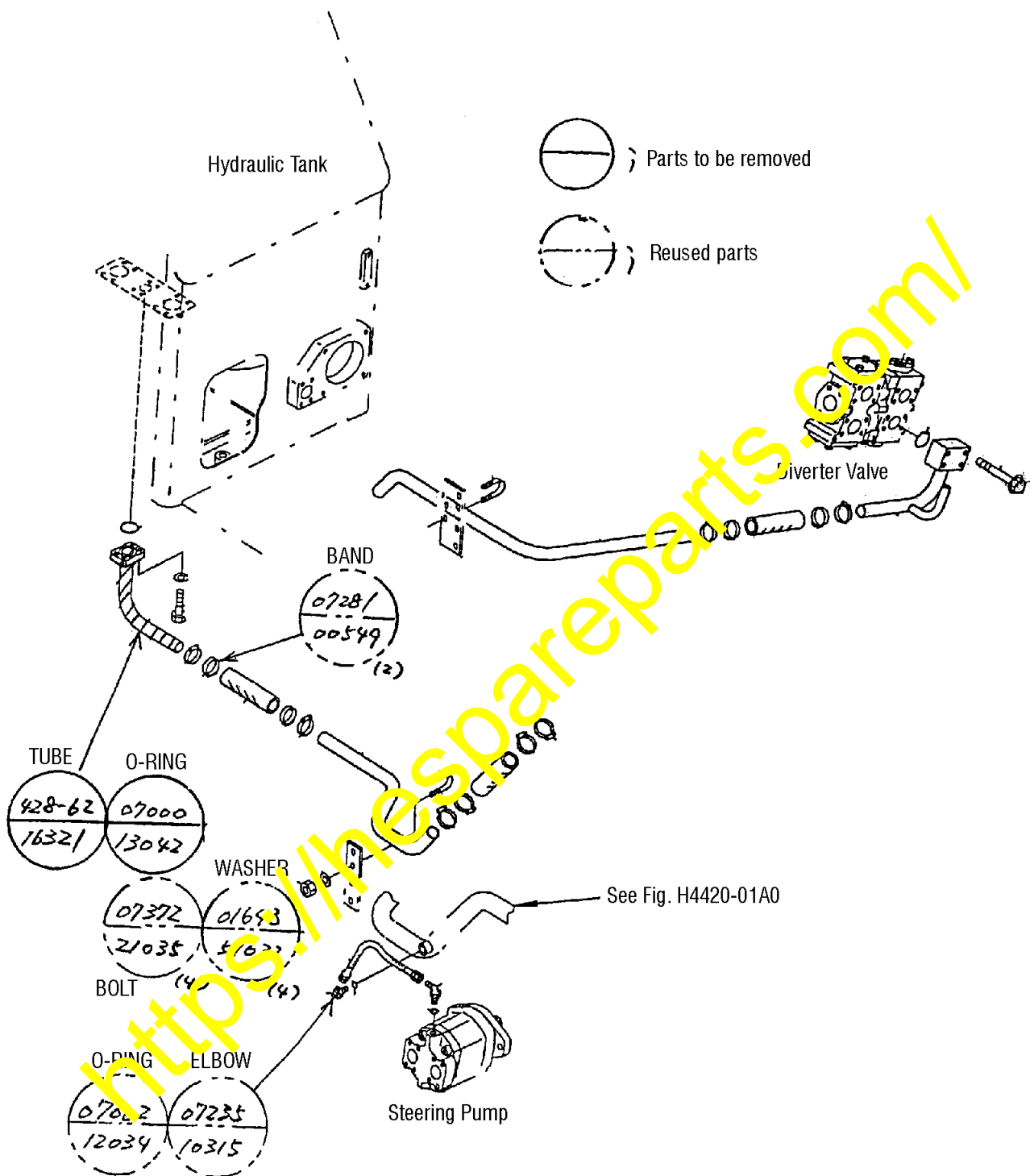
1. Parts which need to be removed for this modification
 - ① Remove the pipings connecting to the hydraulic tank.
 - ② Remove the hydraulic tank.
 - ③ Remove the L. H. floor.

1-1 Removing the hydraulic cooler piping

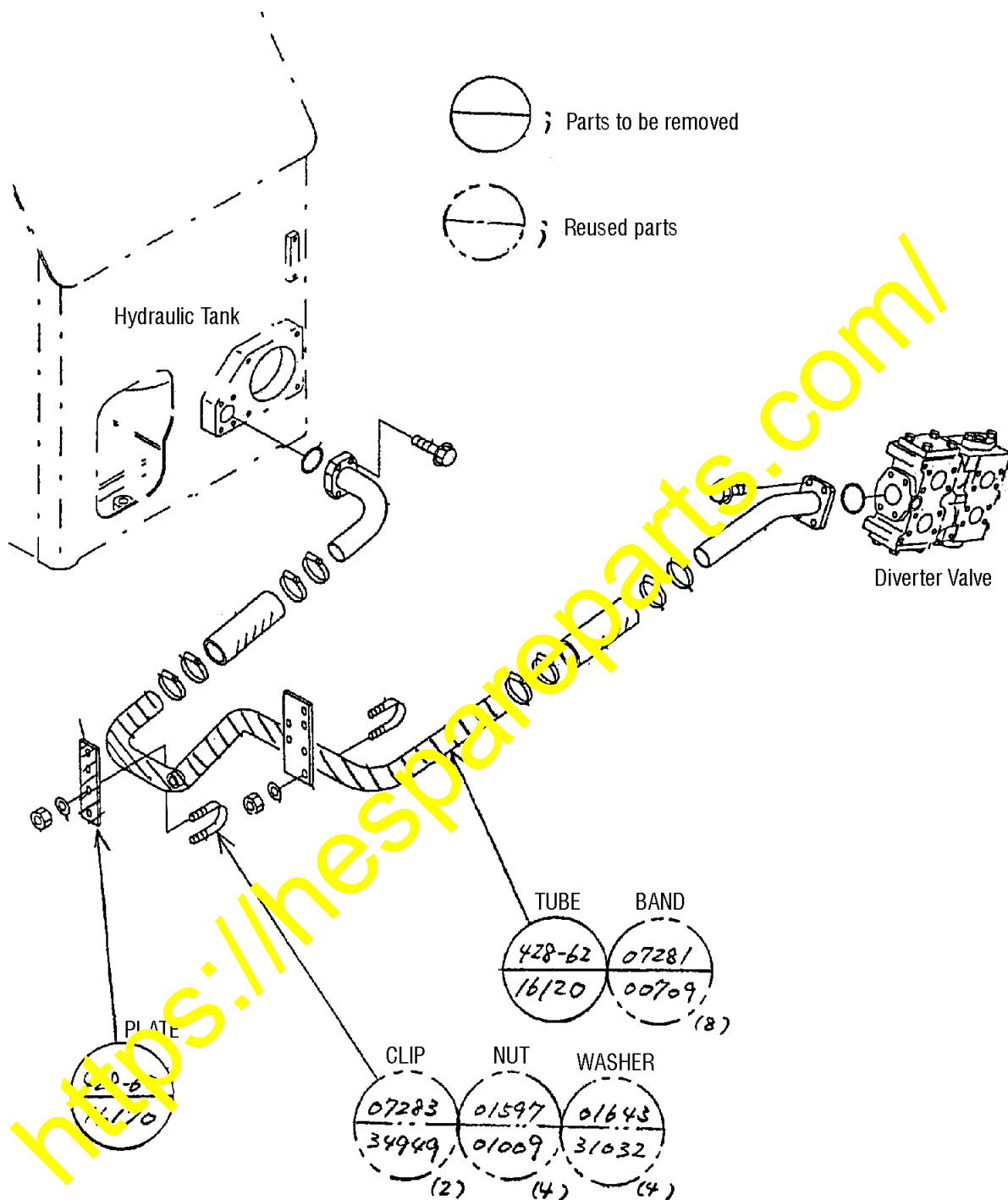
Remove the parts so indicated in the figure below.



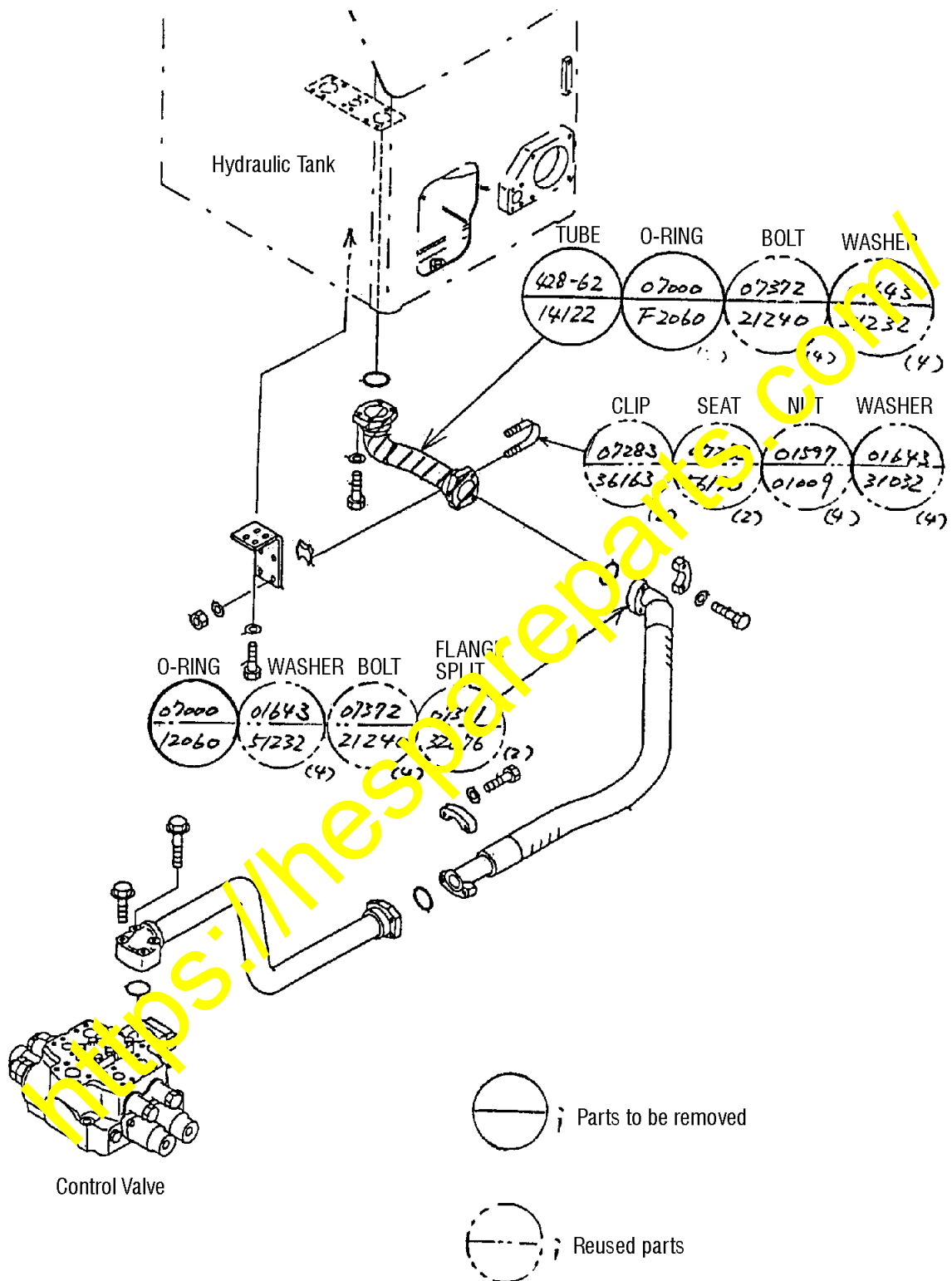
1-2 Removing the emergency S/T line return tube
Remove the parts so indicated in the figure below.



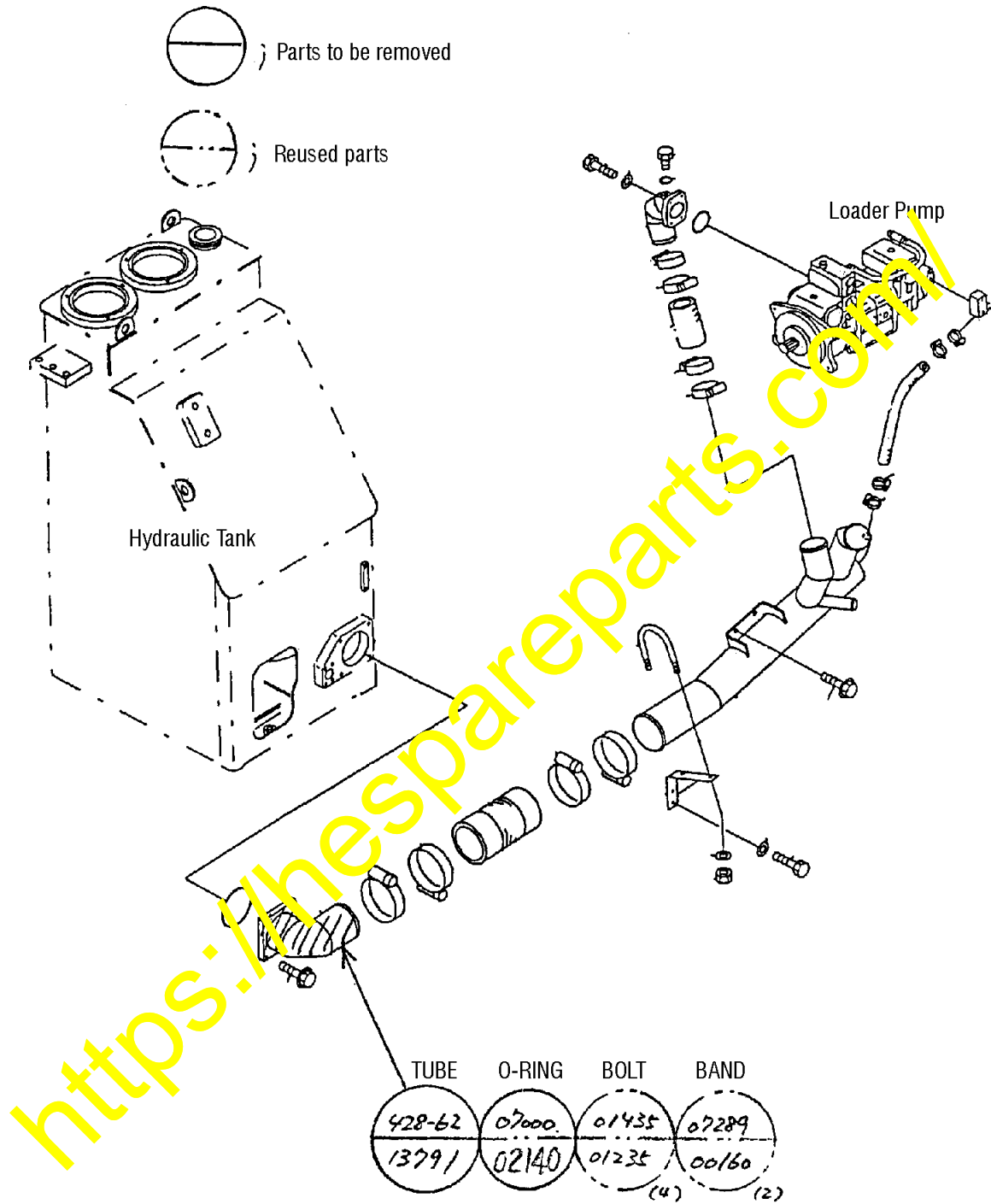
1-3 Removing the emergency S/T suction line
 Remove the parts so indicated in the figure below.



1-4 Removing the main hydraulic return tube
 Remove the parts so indicated in the figure below.

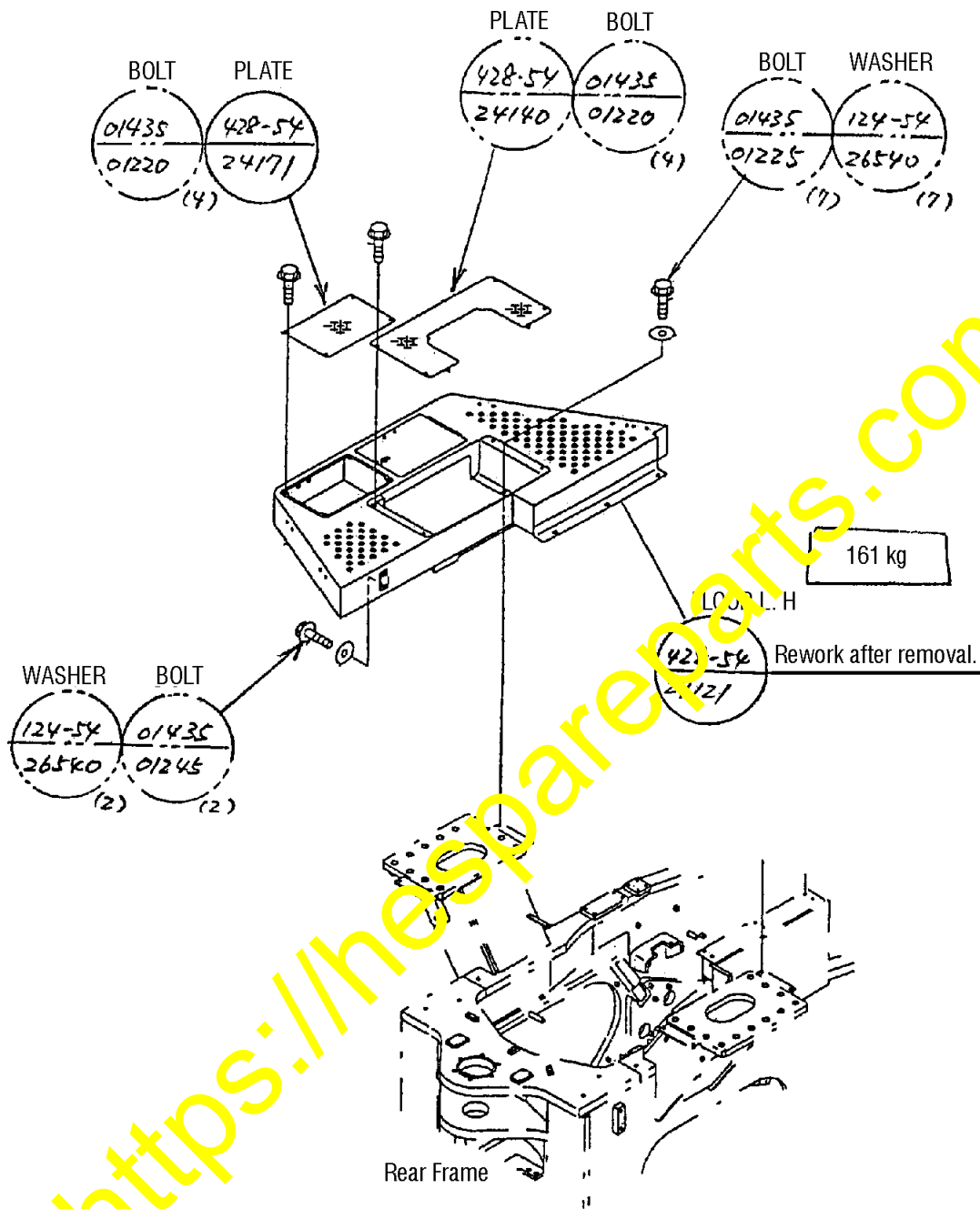


1-5 Removing the main suction tube of the hydraulic line
 Remove the parts so indicated in the figure below.



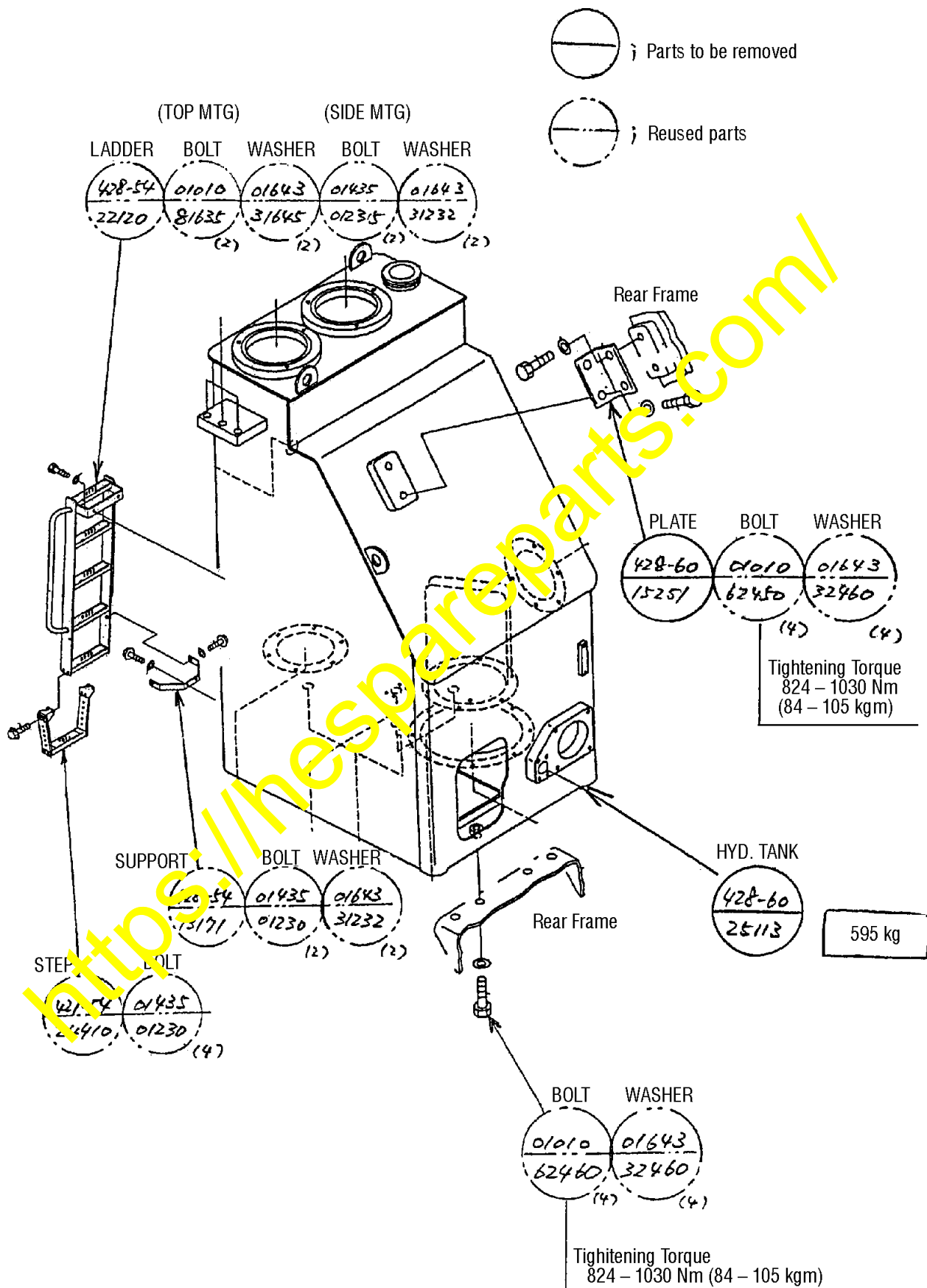
1-6 Removing the floor L. H.

Remove the parts so indicated in the figure below.



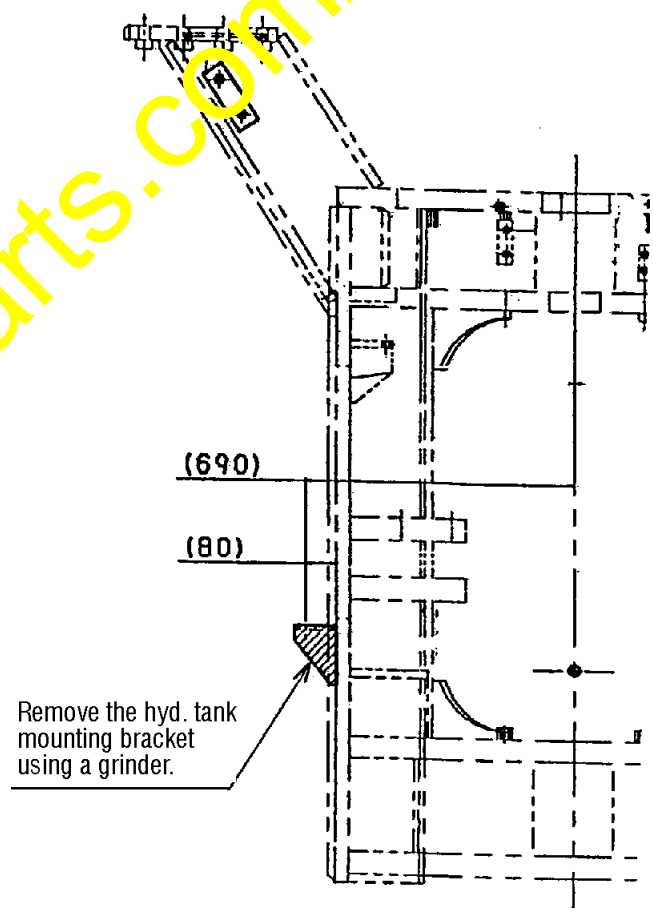
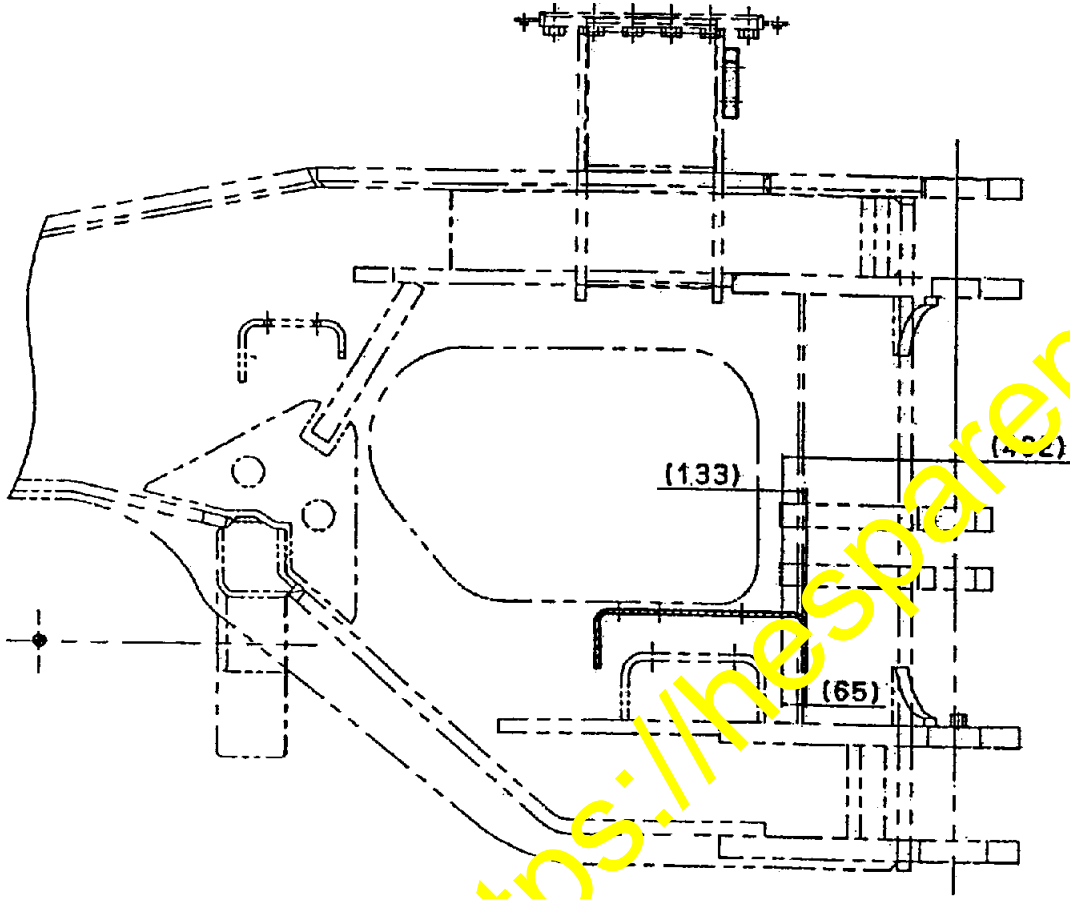
1-7 Removing the hydraulic tank

Remove the parts so indicated in the figure below.



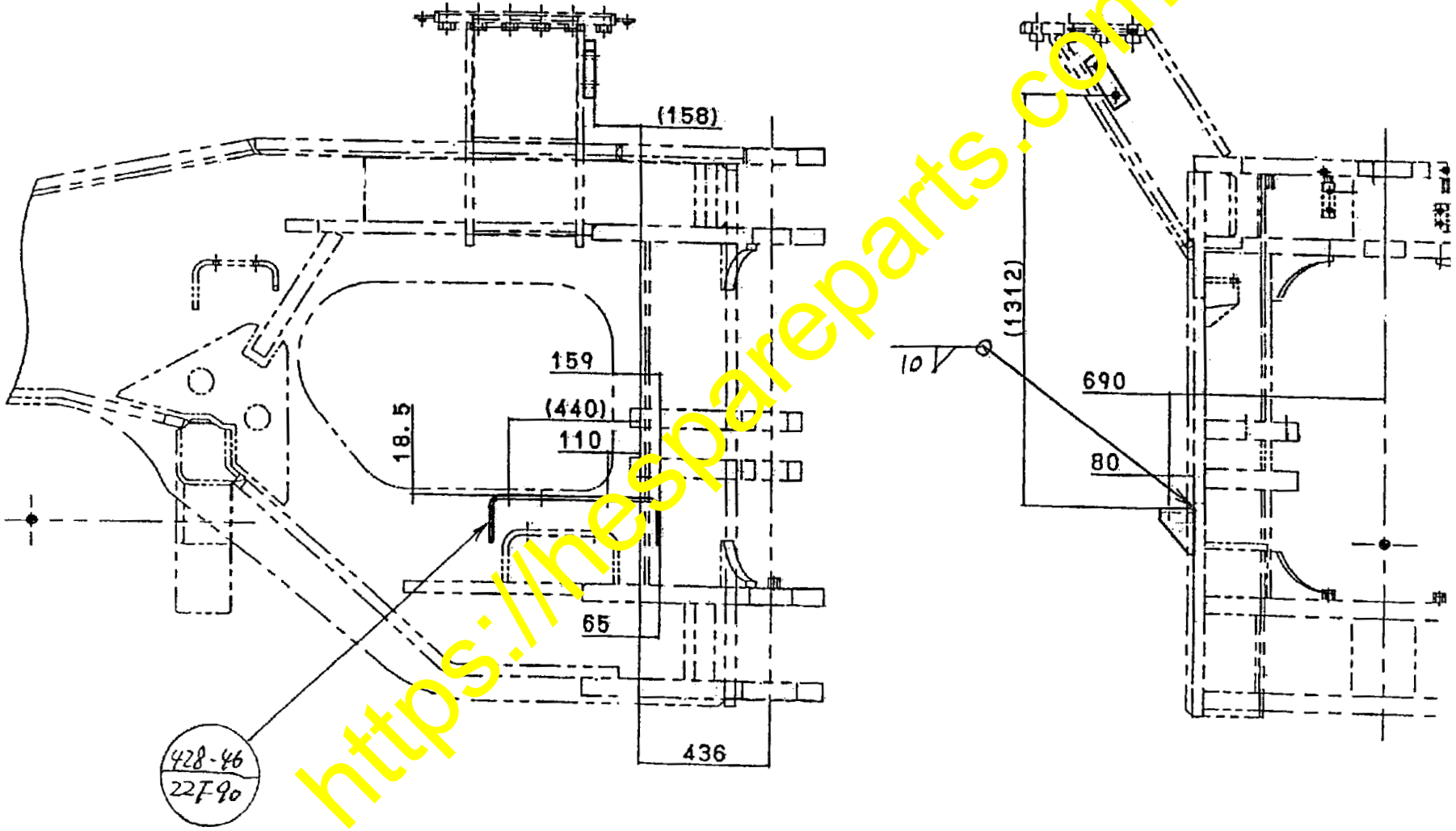
2. Rework


2-1 Reworking with the rear frame

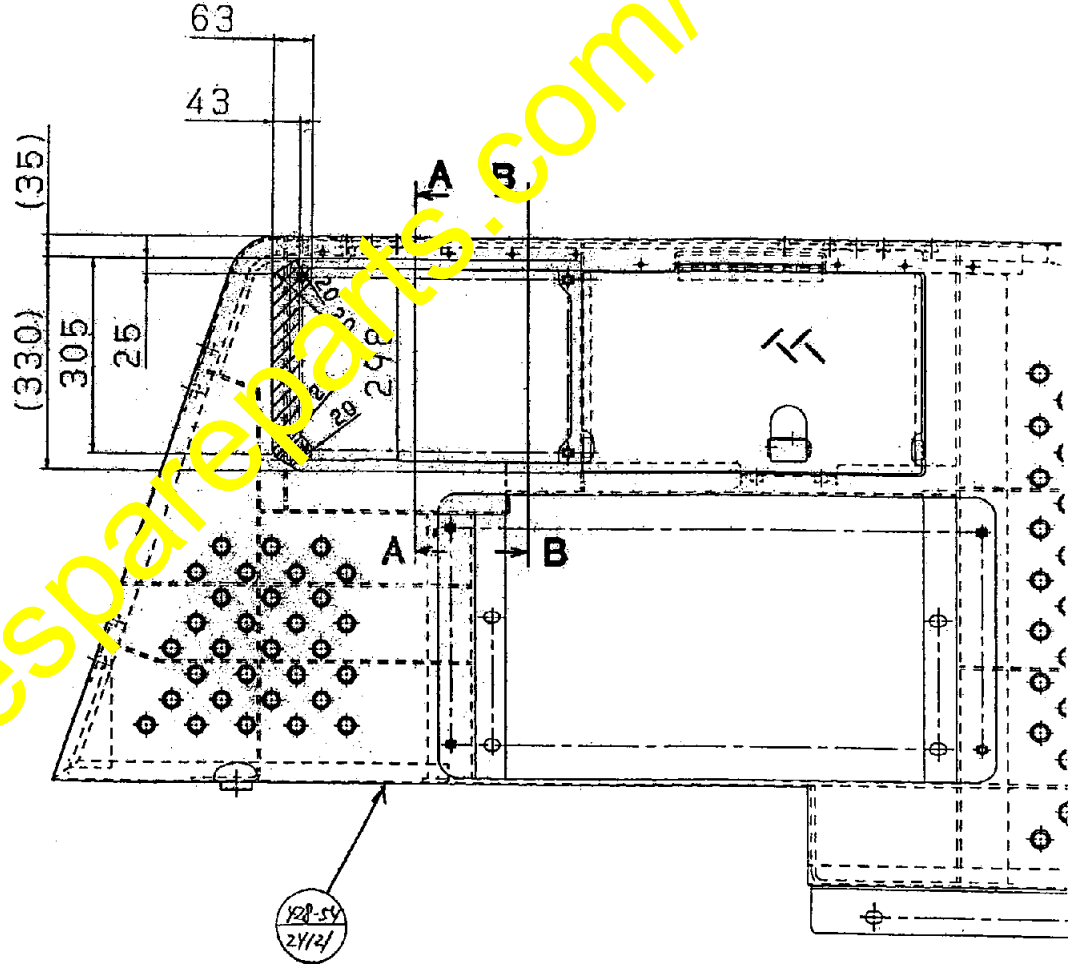
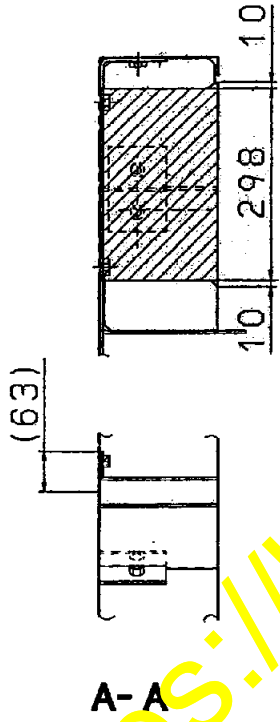
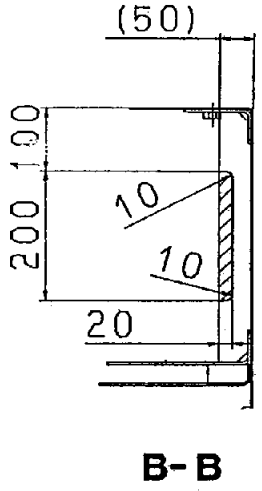


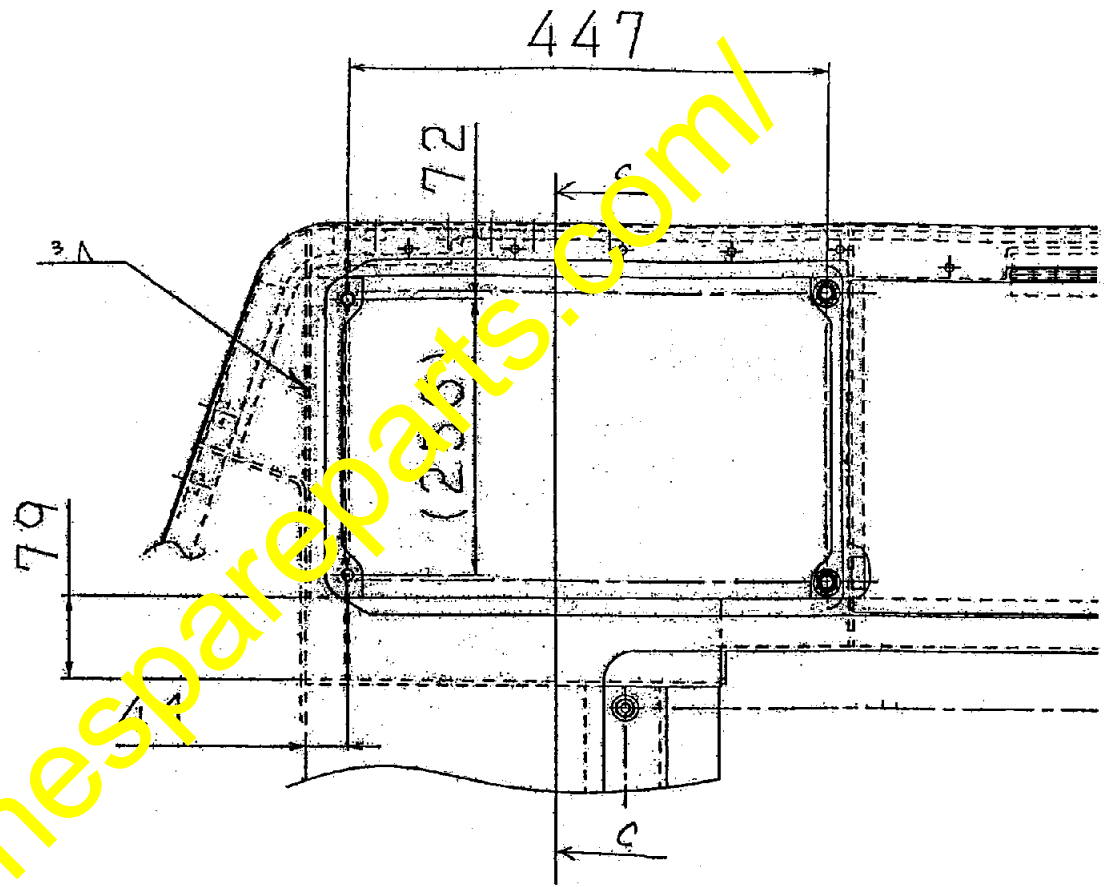
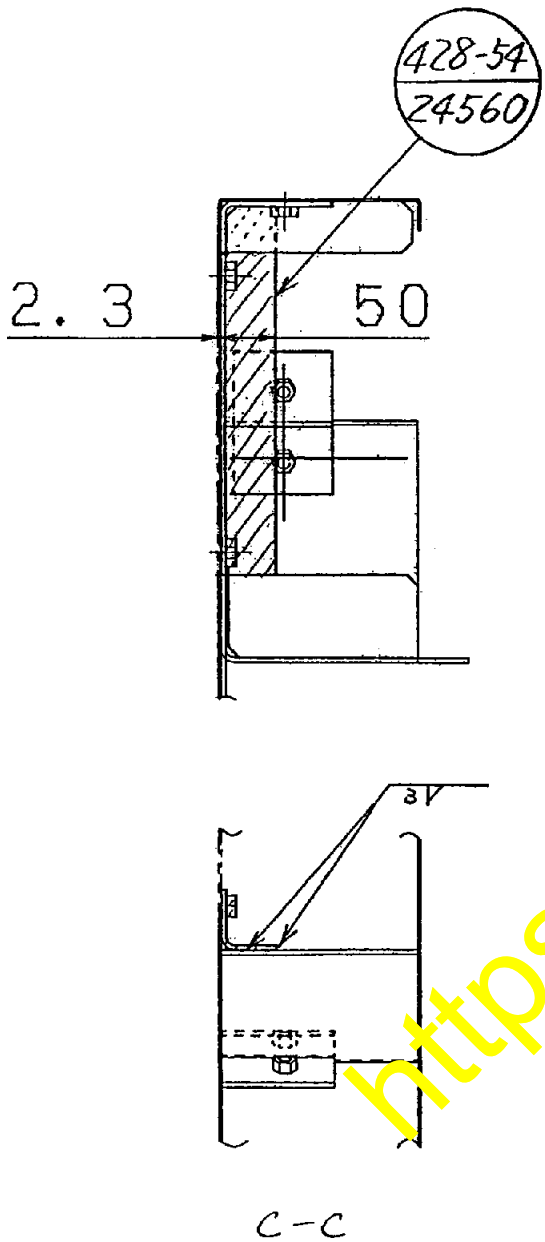
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※ After welding paint the reworked section.



2-2 Reworking with the L. H. floor
Cut off the  marked area.

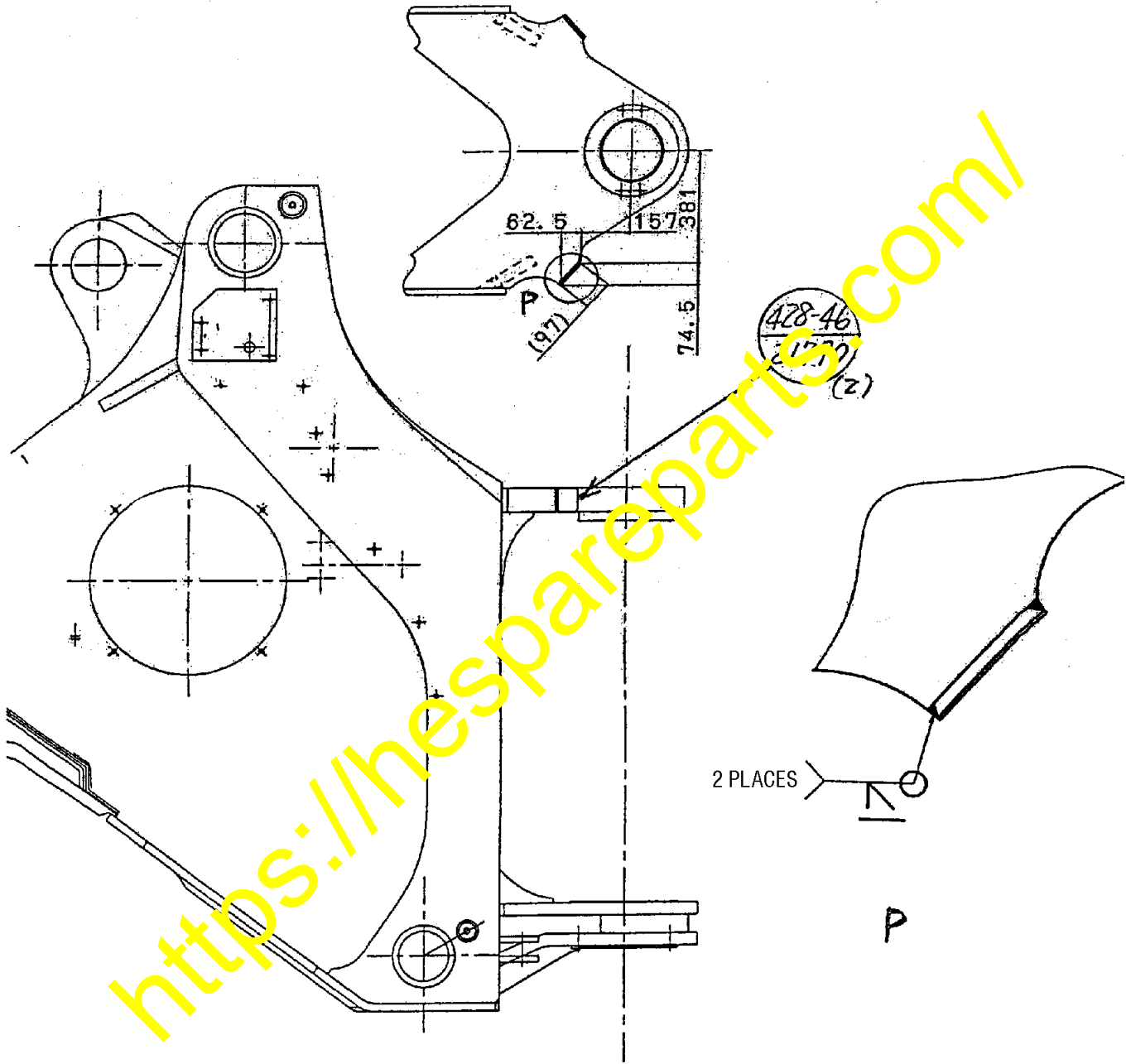




Weld to install the prepared parts to L. H. floor.
※ After finishing welding, apply corrective painting over the welded surface.

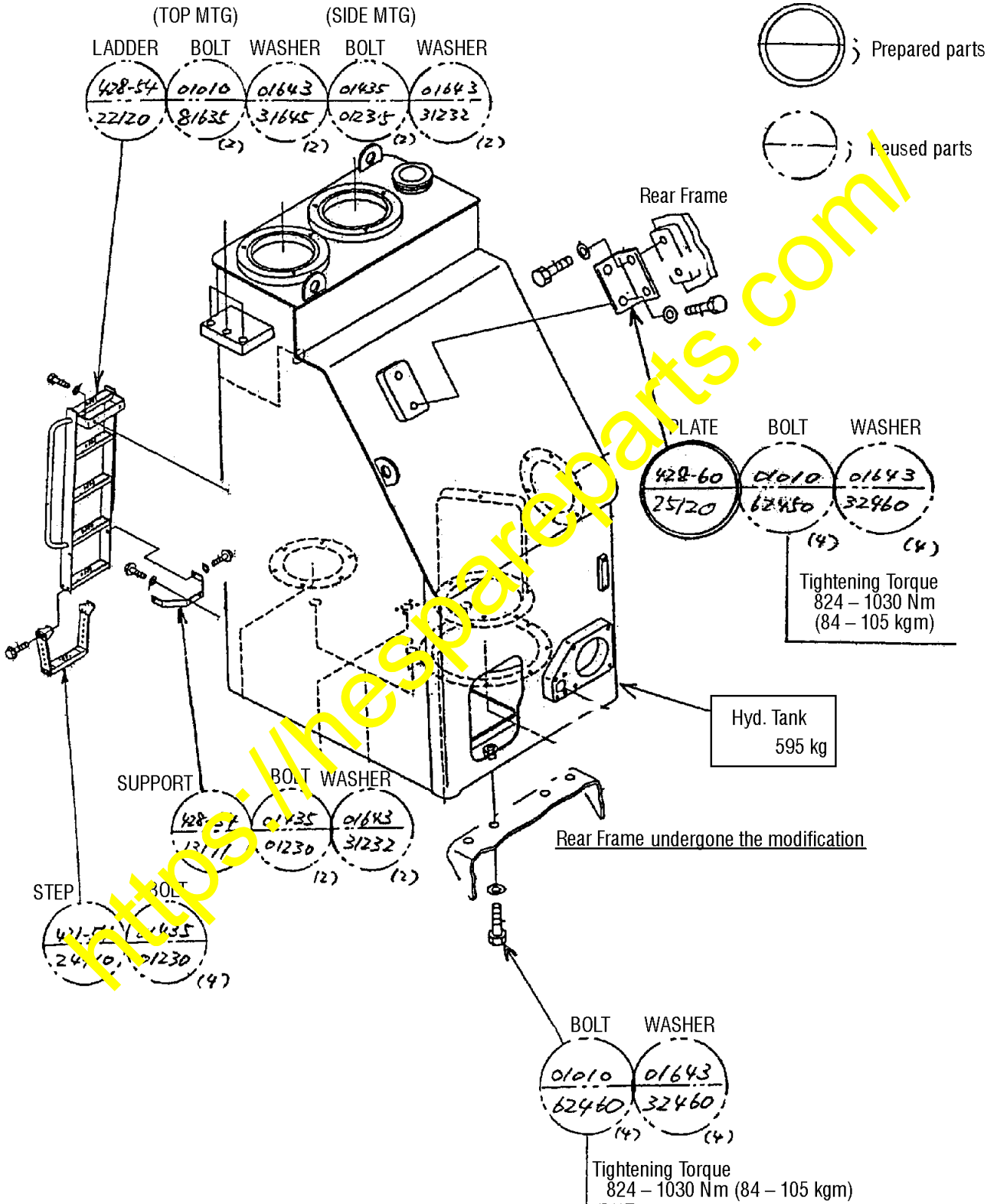
F/FRAME REWORK

※ After welding, paint the reworked section.

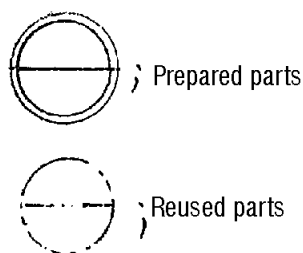
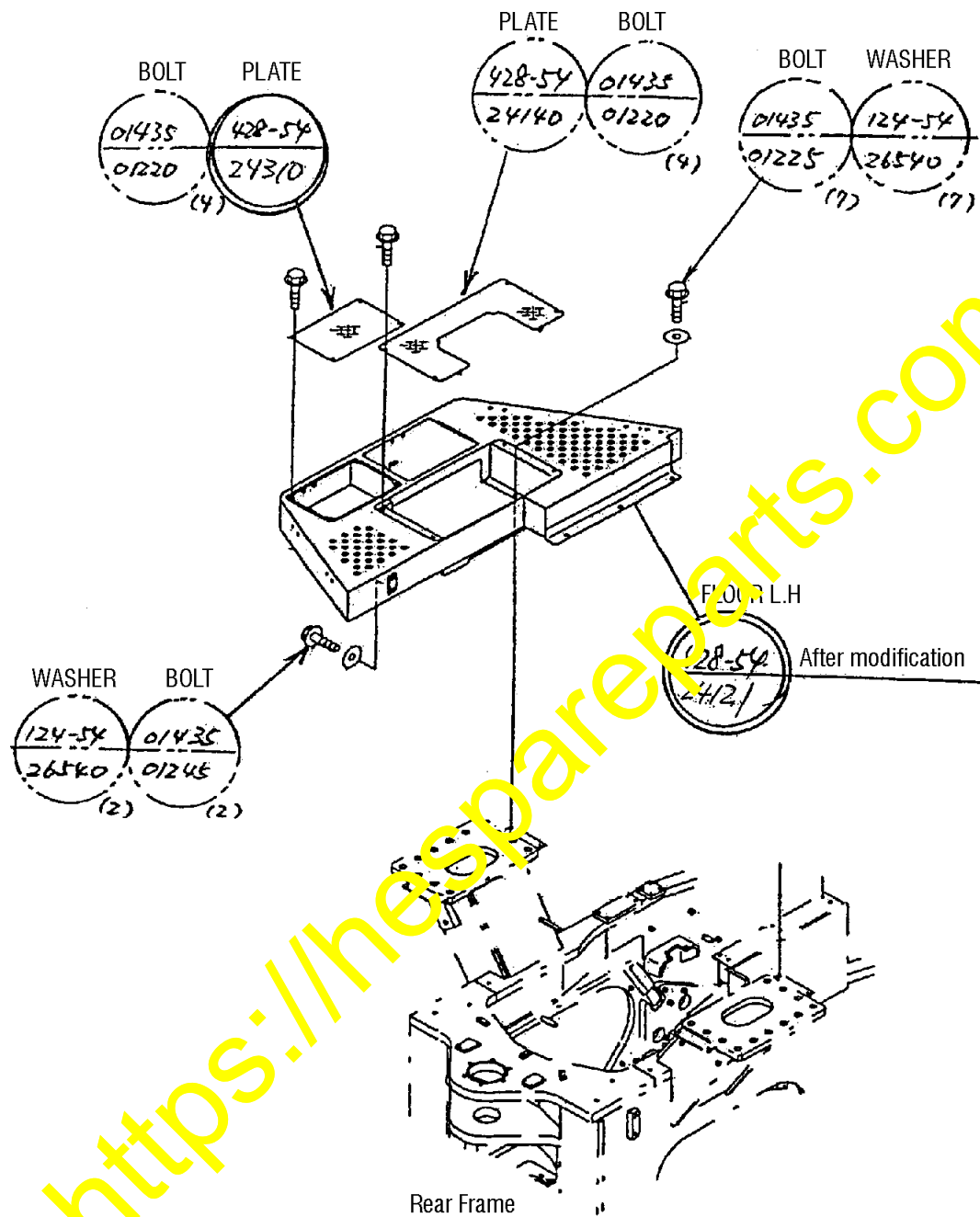


3. Restoration

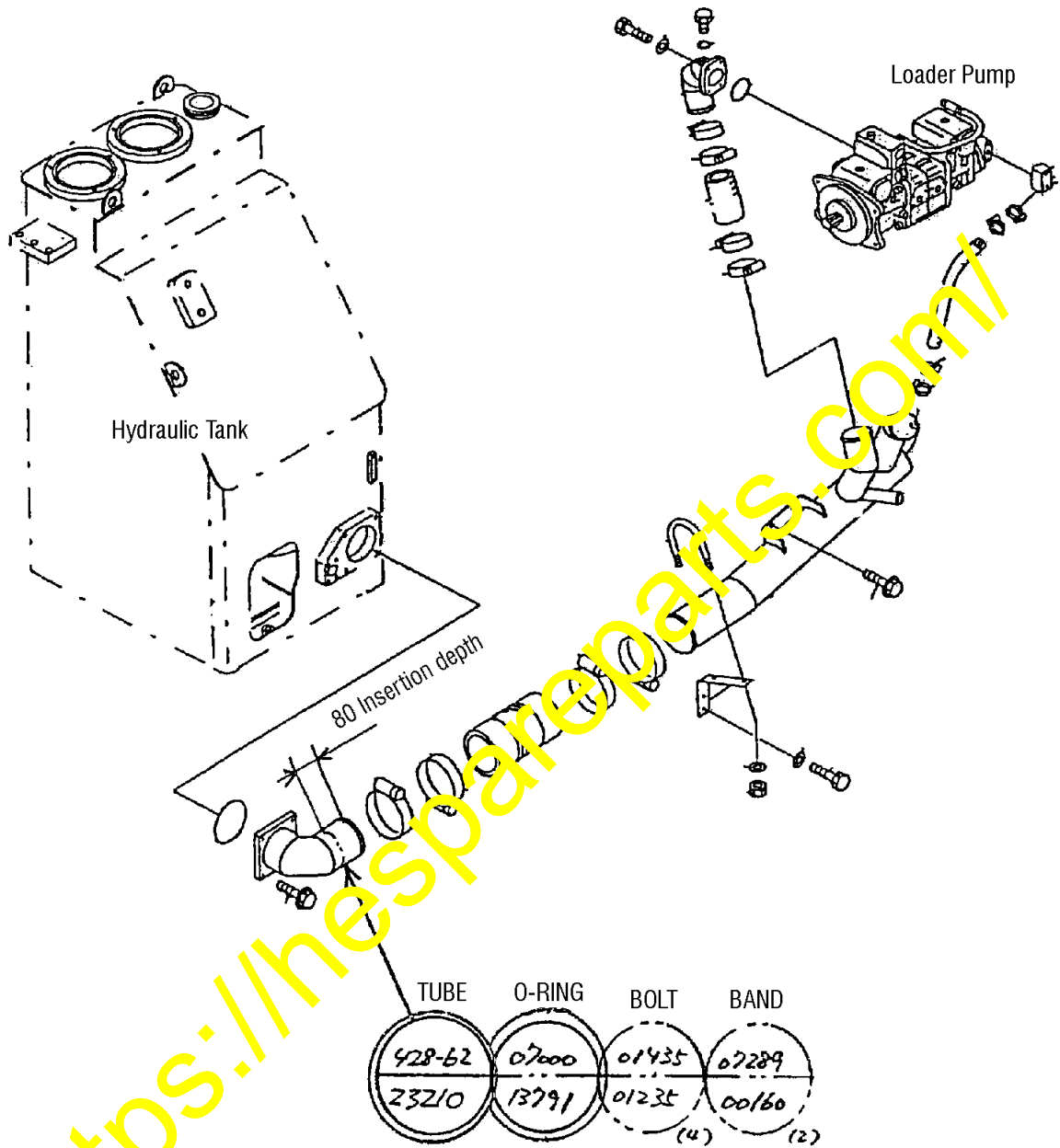
3-1 Assembling the hydraulic tank



3-2 Assembling the L. H. floor

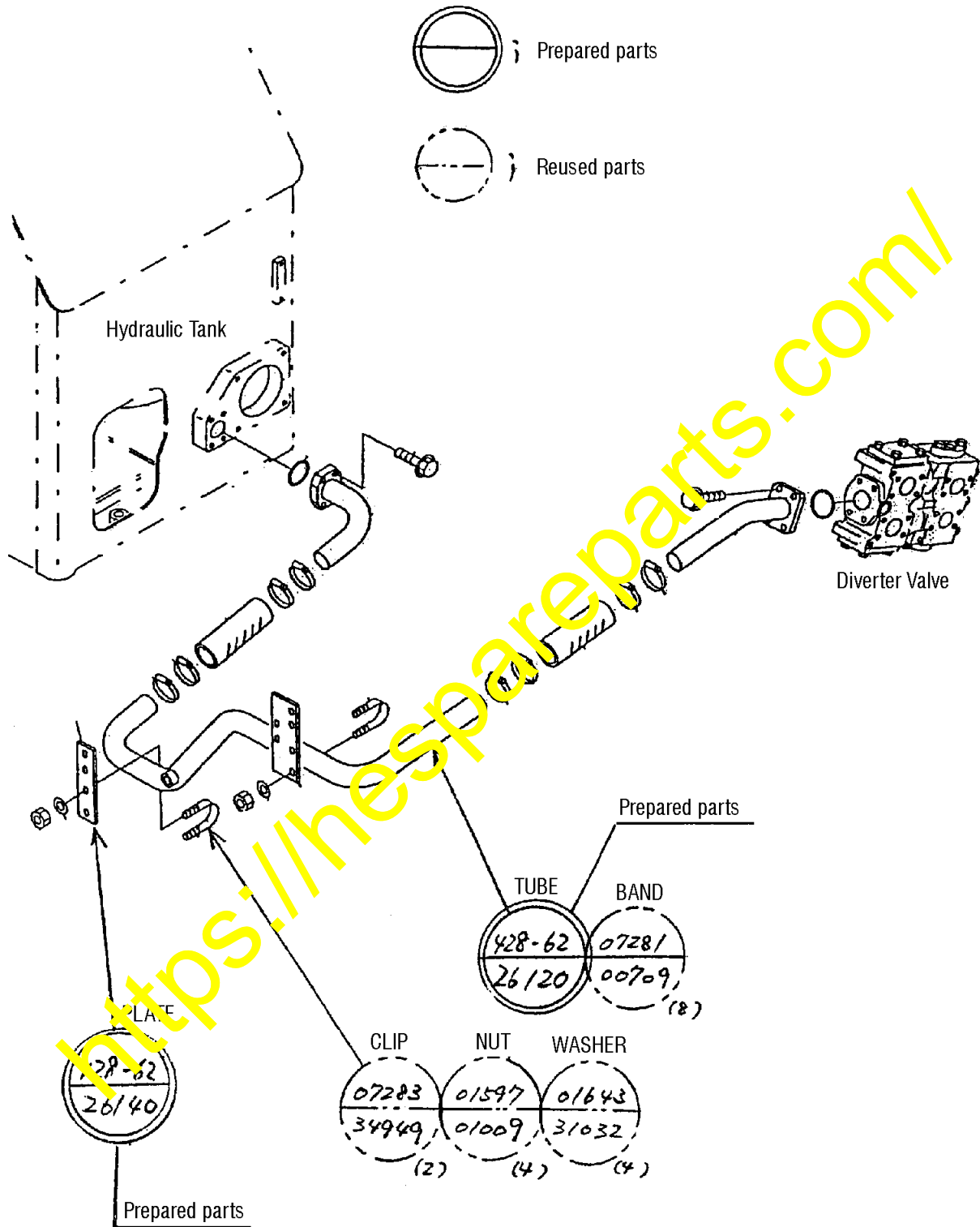


3-3 Assembling the main suction tube

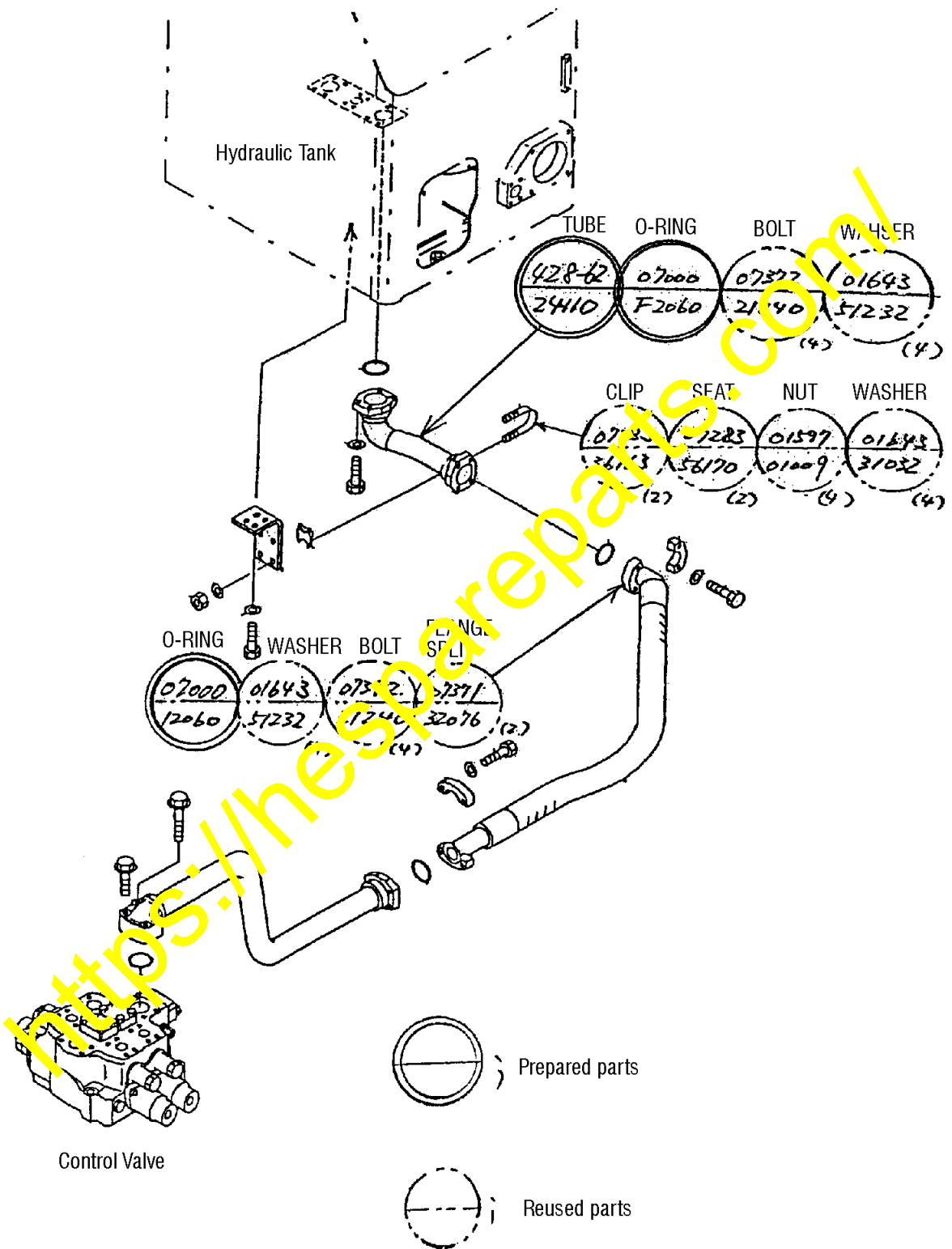


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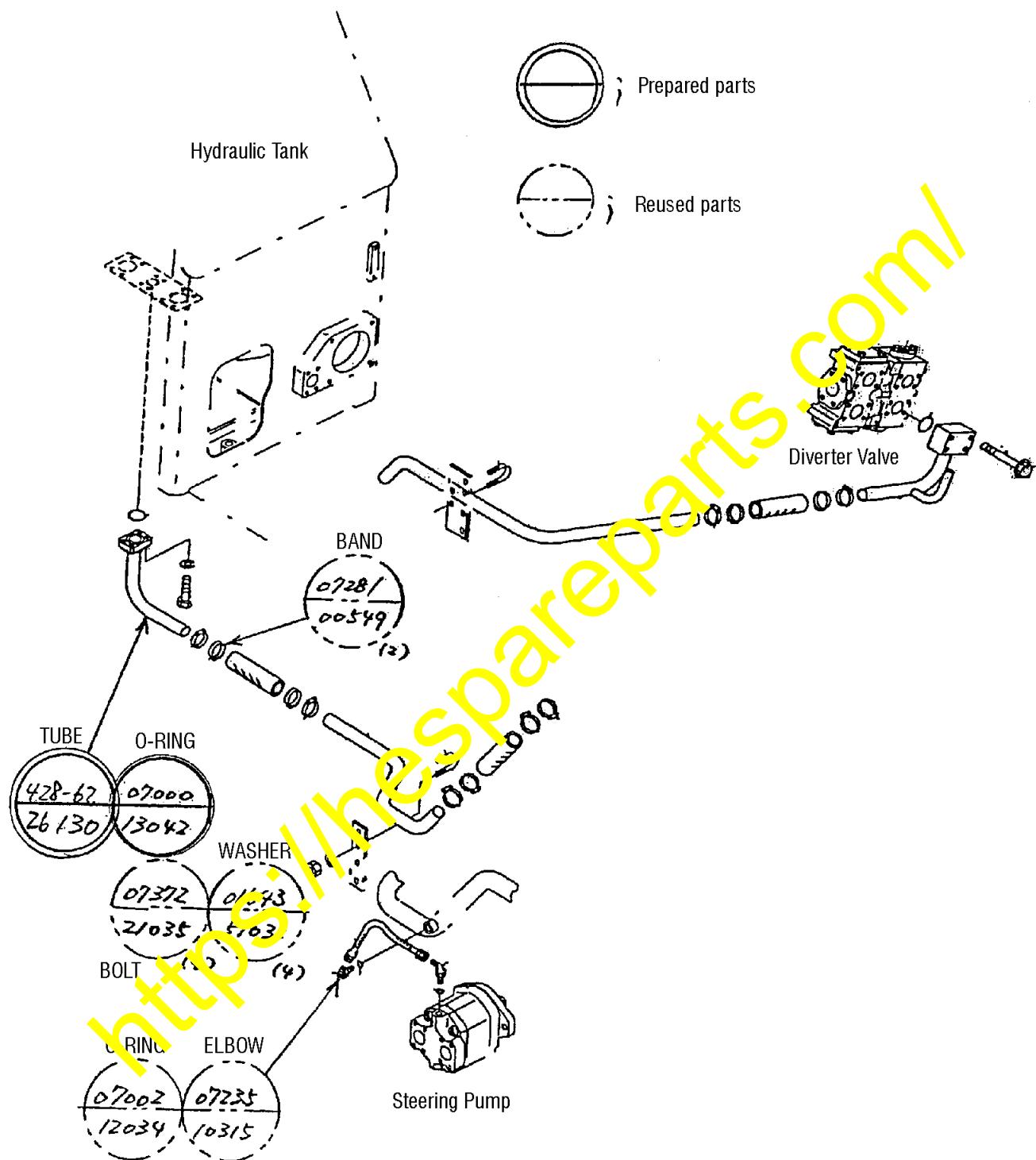
3-4 Installing the emergency S/T suction line tube



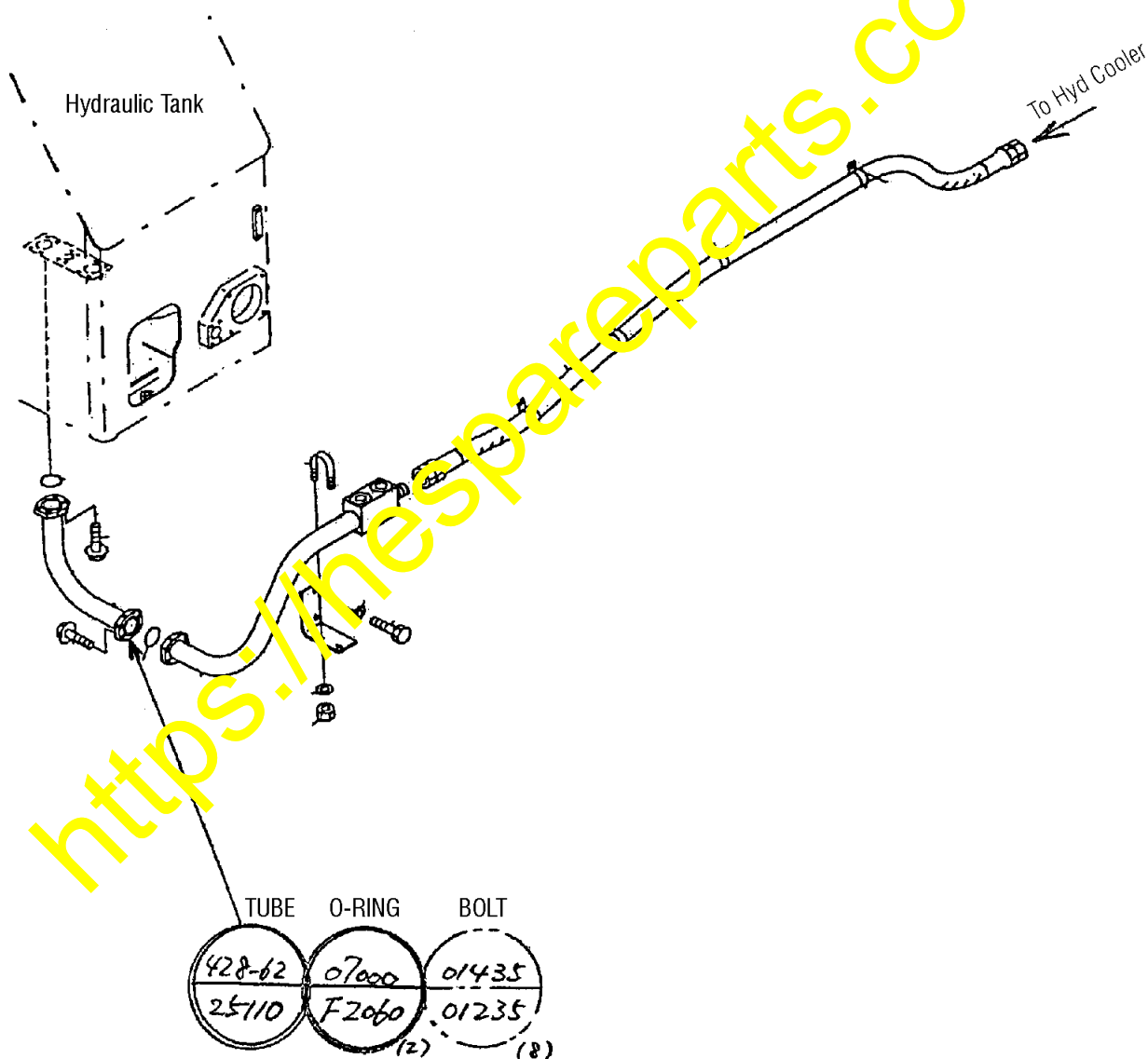
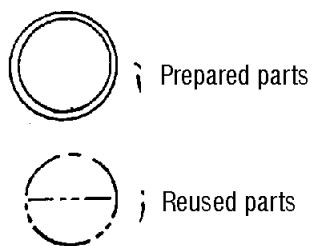
3-5 Assembling the hydraulic return tube

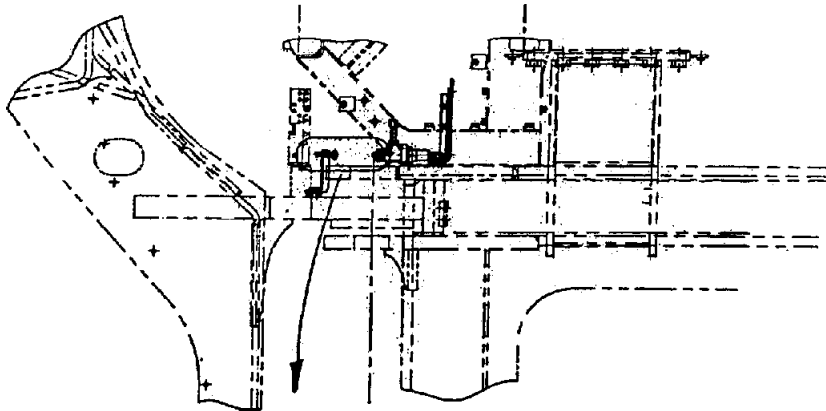


3-6 Assembling the emergency S/T return line tube



3-7 Assembling the hydraulic cooler piping.





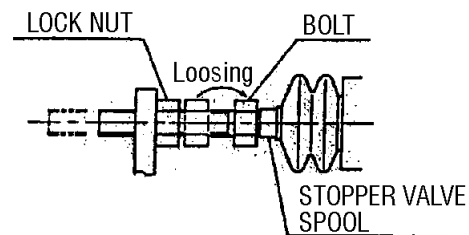
ADJUSTMENT PROCEDURE FOR STOPPER VALVE STOPPER BOLT

1. MINIMIZE THE STOPPER BOLT LENGTH AS SHOWN.



2. RUN THE ENGINE AT THE LOW IDLING SPEED AND SLOWLY STEER TO LOCK TO THE FRAME END.

3. UNDER THIS CONDITION, LOOSEN THE BOLT UNTIL ITS HEAD TOUCHES THE STOPPER VALVE SPOOL END.



NOTE
(DON'T PUSH THE SPOOL BY LOOSING THE BOLT TOO MUCH.)

4. STEER IN THE OPPOSITE DIRECTION UNTIL THE WHEELS ARE STRAIGHTENED, THEN STOP THE ENGINE.
5. LOOSEN THE BOLT BY 8.5 - 9 TURNS (14.9 - 15.8 MM) THEN SECURE IT WITH THE LOCK NUT.
6. PERFORM ABOVE STEPS 1 THRU 5 FOR BOTH SIDES.

GENERAL TOLERANCE FOR MACHINING	RANGE	OVER 0.5 TO 3	OVER 3 TO 8	OVER 8 TO 30	OVER 30 TO 120	OVER 120 TO 315	OVER 315 TO 1000	OVER 1000 TO 2000	OVER 2000 TO 4000	OVER 4000 TO 8000	1 428-46-21790 △
	TOLERANCE	±0.15	±0.2	±0.5	±0.8	±1.2	±2	±3	±4	±5	
GENERAL TOLERANCE SHALL CONFORM TO KES 04.052.0.											
REVISION	'00. 7.21	THIS DRAWING IS PREPARED FOR WA700-3									△
△x.	
△x.	

CODE NO.	E110	REVISE ONLY ON CAD
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SYM.	PART NAME	MATERIAL	QTY/SET	MASS (kg)	REMARKS	WA700(3)-46	2
NUMERICAL VALUES AND UNITS WITHIN CURLY BRACKETS ARE FOR REFERENCE						APPLICATION	Q'TY
3RD ANGLE P.	MASS (kg)	HEAT TREATMENT		CASE DEPTH		MATERIAL	
	0.50	---		---		SS400P	
PROJECT MANAGER	CHIEF DESIGNER	DESIGNER	CHECKED BY	DRAWN BY	COPIED BY	DATE	PART NAME
		佐藤				'00. 7.20	PLATE
PAINT OR SURFACE TREAT. CODE	---						
DUPLICATE	SIMILAR PARTS	APPROVAL	SCALE	SIZE	1/1	PART NO. 428-46-21790 △	

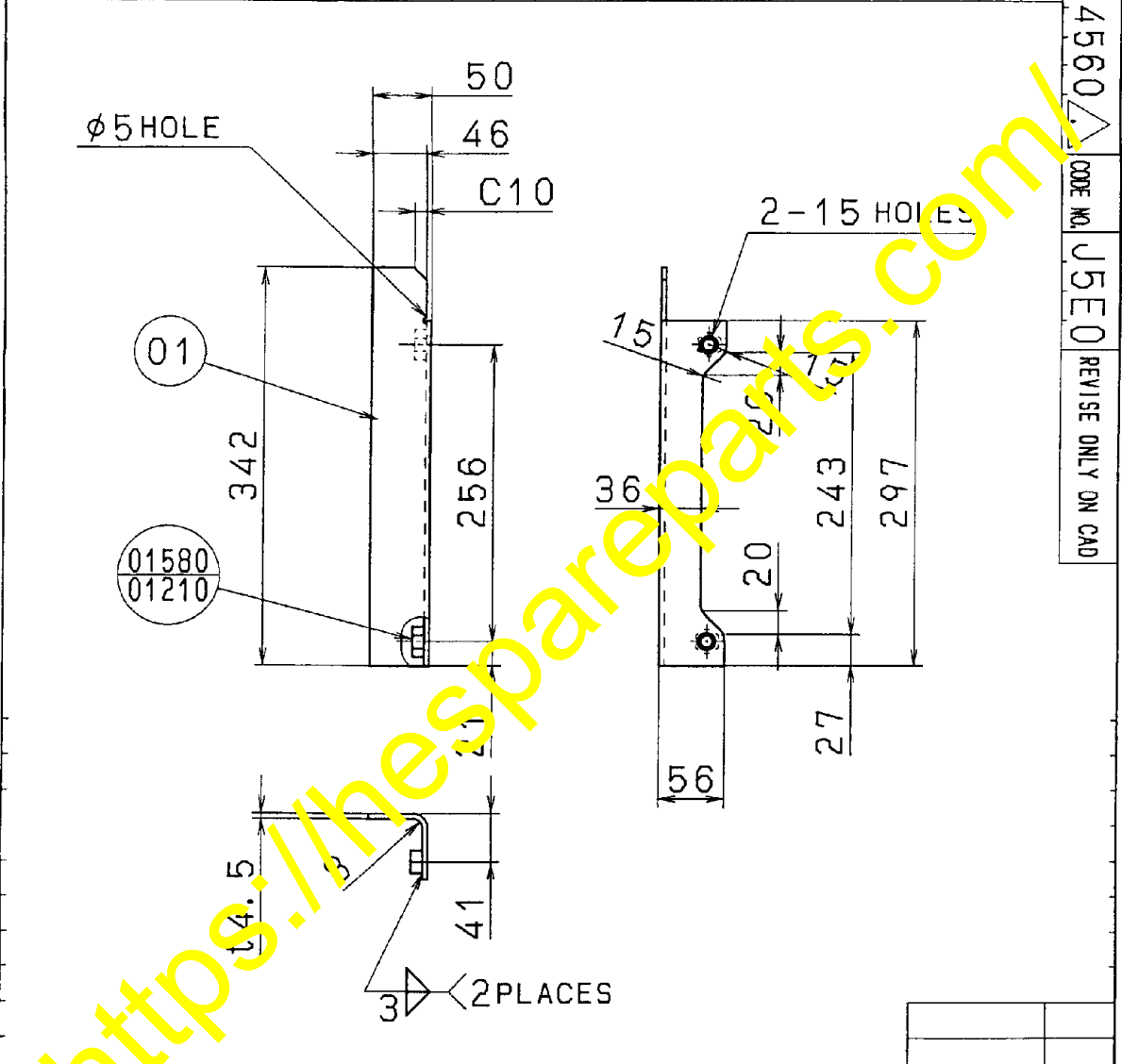
KOMATSU

KES A4-3

GENERAL TOLERANCE FOR MACHINING	RANGE		OVER 0.5 TO 3	OVER 3 TO 6	OVER 6 TO 30	OVER 30 TO 120	OVER 120 TO 315	OVER 315 TO 1000	OVER 1000 TO 2000	OVER 2000 TO 4000	OVER 4000 TO 8000
	TOLERANCE		±0.15	±0.2	±0.5	±0.8	±1.2	±2	±3	±4	±5

GENERAL TOLERANCE SHALL CONFORM TO KES 04.052.0.

REVISION	00. 7.21	THIS DRAWING IS PREPARED FOR WA700-3									
△1×											
△3×											



1428-54-24560
 CODE NO. J5E0
 REVISE ONLY ON CAD

01580-01210	NUT	STD	O2	0.01	
01	PLATE	SS400P	O1	1.02	t4.5
SYM.	PART NAME	MATERIAL	QTY/SET	MASS (kg)	REMARKS
NUMERICAL VALUES AND UNITS WITHIN CURLY BRACKETS ARE FOR REFERENCE					WA700 (3) -54 1
MASS (kg)		HEAT TREATMENT		CASE DEPTH	
1.03		---		---	
3RD ANGLE P.		PART NAME		MATERIAL	
PROJECT MANAGER		DATE		WELD	
DESIGNER		PART NAME		PAINT OR SURFACE TREAT. CODE	
佐藤		PLATE		---	
APPROVAL		SCALE		PART NO.	
		1:5		1/1 428-54-24560	

KOMATSU

KES A4-3