

PARTS & SERVICE NEWS

REF NO.	AT00015
DATE	Mar. 10, 2000
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SUBJECT: INTRODUCTION OF TOOL TO REMOVE TIRE FROM DUMP TRUCK

PURPOSE: To introduce new tire-removing tool for dump trucks

APPLICATION: HD325-6 Dump Trucks, Serial Nos. 5001 and up
 HD405-6 Dump Trucks, Serial Nos. 1001 and up
 HD465-5 Dump Trucks, Serial Nos. 4001 and up
 HD605-5 Dump Trucks, Serial Nos. 1001 and up
 HD785-3 Dump Trucks, Serial Nos. 2001 and up
 HD785-5 Dump Trucks, Serial Nos. 4001 and up
 HD985-5 Dump Trucks, Serial Nos. 1021 and up

FAILURE CODE: 3A1045

DESCRIPTION:

1. Introduction

This Service News will introduce reinforced tire removing tool for dump trucks which has been newly registered as available.

This tool is meant to be used when it becomes difficult to remove tires because of seizure of the wedge ring and, in comparison with the existing tool introduced in the Service Mate (SMP-475), the new tool works to improve the working ease by increasing the pushing force of the hydraulic cylinder.

2. List of parts

No.	Part No.	Part Name	Q'ty	Remarks
	790-105-2600 (790-105-2400)	Hydraulic system (Hydraulic system)	1 (1)	Part number of a set
1	790-105-2410	Pump	1	} Component parts of the 790-105-2600
2	790-105-2420	Nipple	1	
3	790-105-2430	Gauge	1	
4	790-105-2440	Nipple	1	
5	790-105-2450	Joint	1	
6	790-105-2460	Coupling	6	
7	790-105-2470	Nipple	6	
8	790-105-2480	Hose	3	
9	790-105-2490	Elbow	2	
10	790-105-2300	Cylinder	3	
11	790-105-2710	Bracket	3	} Local fabrication drawing is attached to this Serves News.
12	790-105-2720	Spacer	3	
13	790-105-2730	Spacer	3	
14	790-105-2740	Band	2	

Note 1: 790-105-2600 includes the Item No. 1 part thru Item No. 10 part in the above listing.

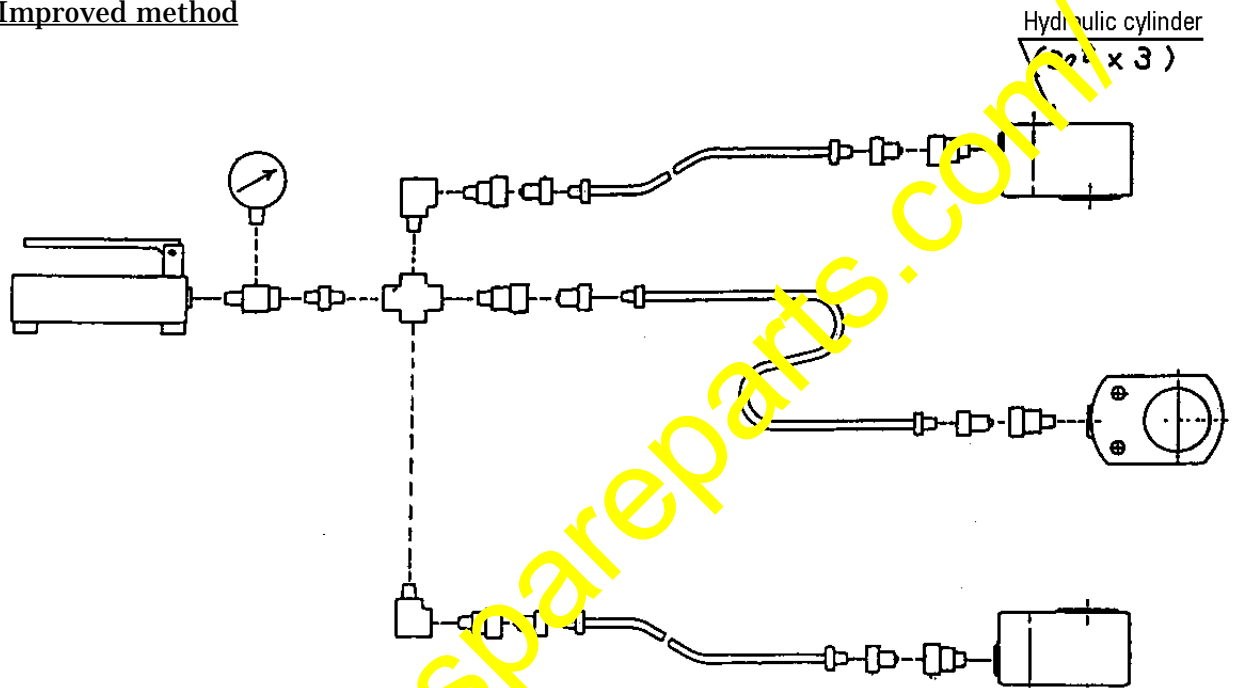
Note 2: The Item No. 11 part thru Item No. 14 part in the above listing can be locally fabricated and they are not included in the above "set part No." of 790-105-2600. (However, they are individually available and can be ordered.)

3. Contents of the modification

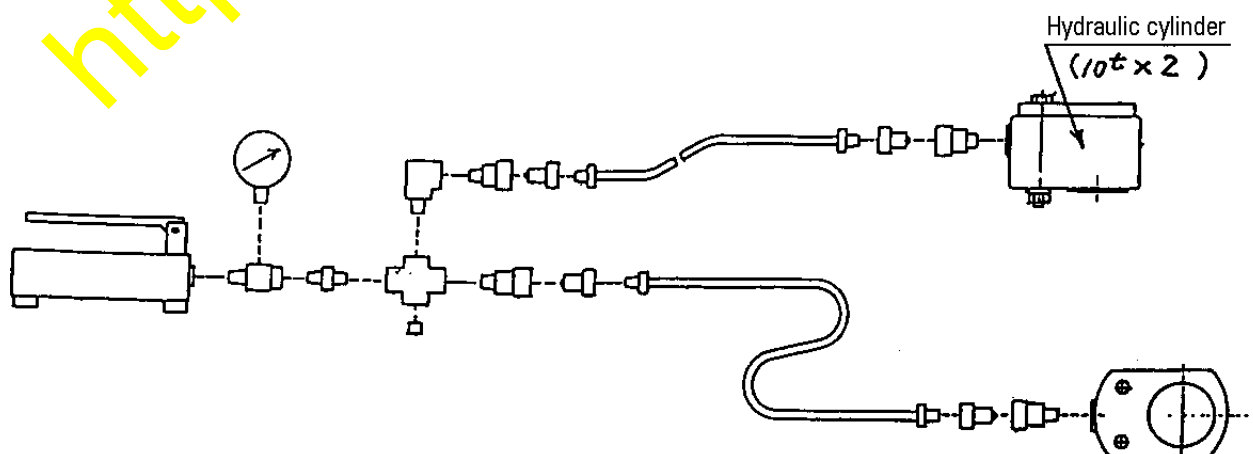
From the previous method of using two units of hydraulic cylinders with the pushing force of 10 tons, the new method uses three units of hydraulic cylinders with increased pushing force of 20 tons each and, also, we improved the procedures so that the pushing force may be applied evenly.

Furthermore, we have supplemented brackets which work to fasten the hydraulic cylinders enabling a single person to make the work.

Improved method



Current method



4. Component parts

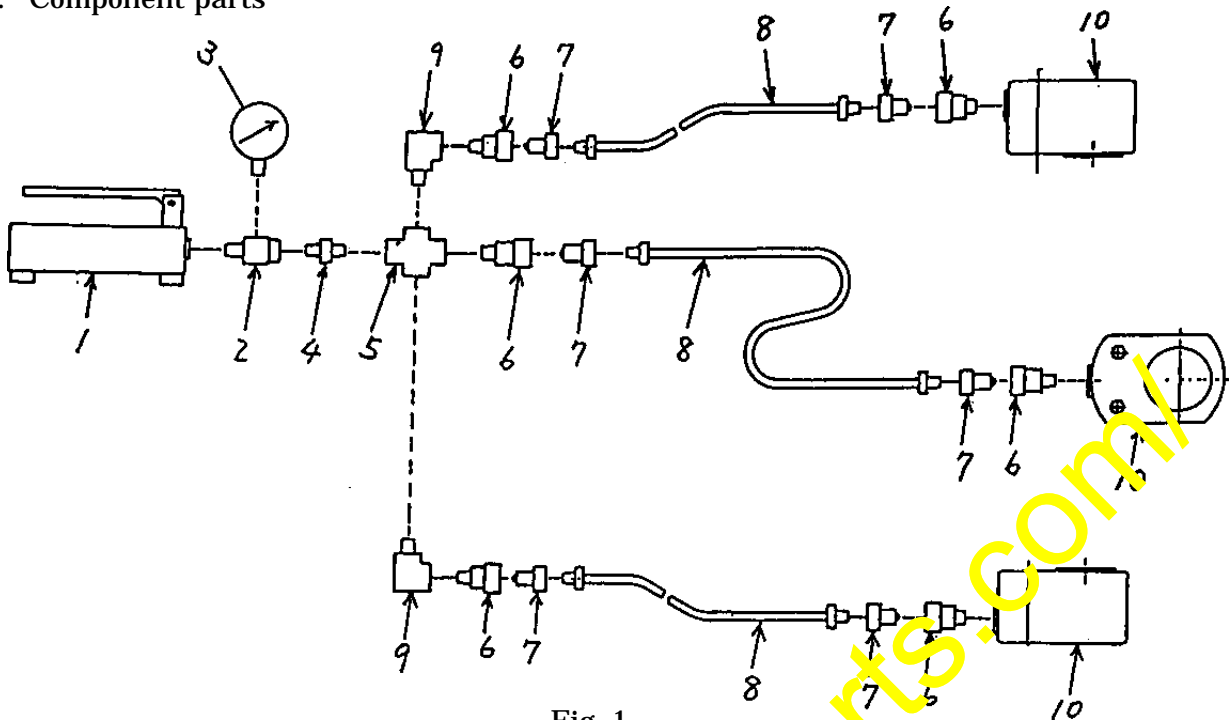


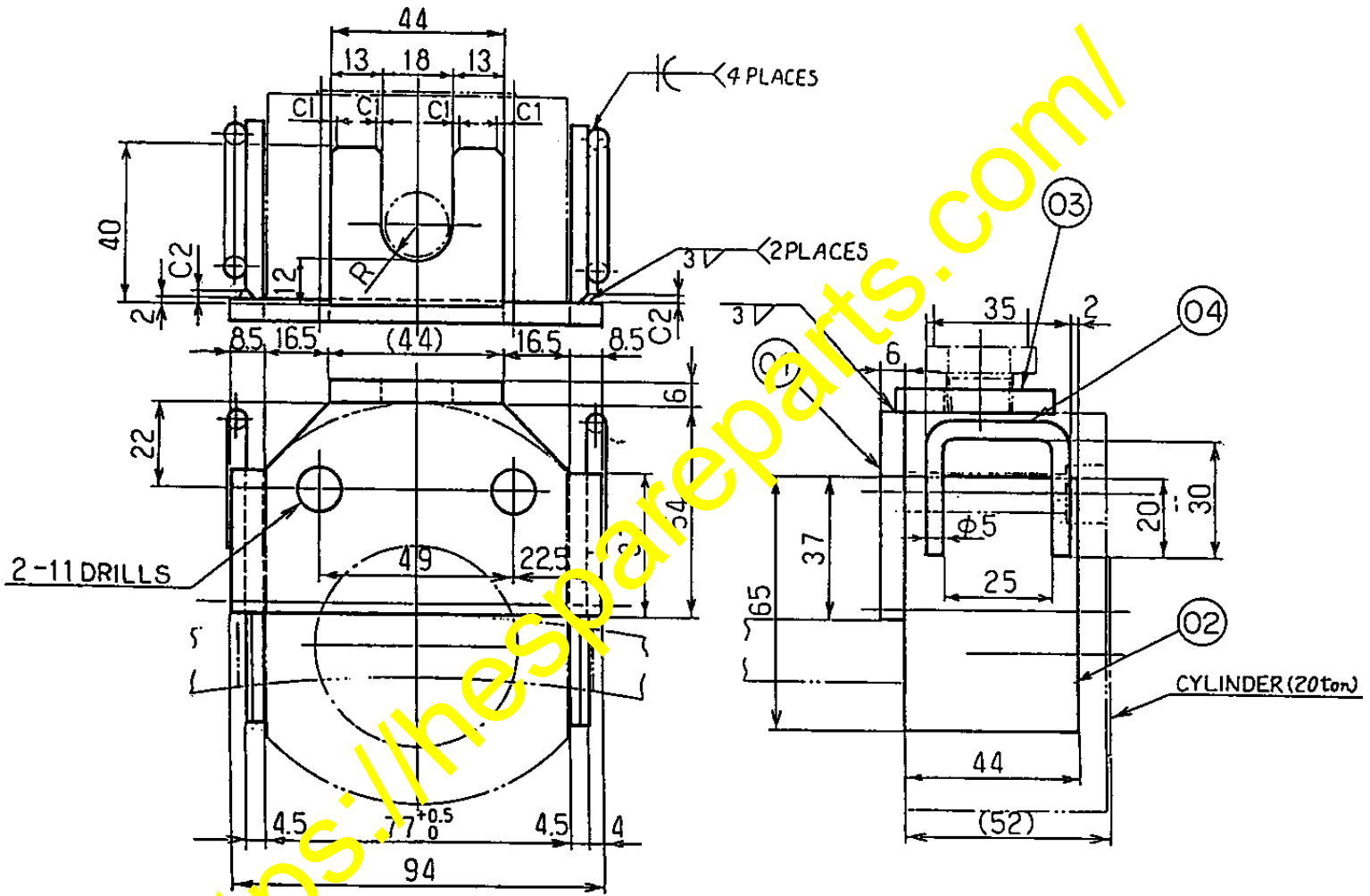
Fig. 1

No.	Part No.	Part Name	Q'ty	Manufacturer's part numbers	Remarks
	790-105-2600	Hydraulic system	1		
1	790-105-2410	Pump	1	P-392	
2	790-105-2420	Nipple	1	GA-1	
3	790-105-2430	Gauge	1	GP-1000-100	
4	790-105-2440	Nipple	1	FZ-1617	
5	790-105-2450	Joint	1	FZ-1613	
6	790-105-2460	Coupling	6	CR-400	
7	790-105-2470	Nipple	6	CH-604	
8	790-105-2480	Hose	3	H-926	
9	790-105-2490	Elbow	2	FZ-1616	
10	790-105-2300	Cylinder	3	RSM200	20 ton spec.
11	790-105-2710	Bracket	3		To fasten the cylinder
12	790-105-2720	Spacer	3		To increase the pushing distance
13	790-105-2730	Spacer	3		To increase the pushing distance
14	790-105-2740	Band	2		To fasten the cylinder

The Item No. 11 part thru Item No. 14 part can also be fabricated locally.
(Refer to respective drawings.)

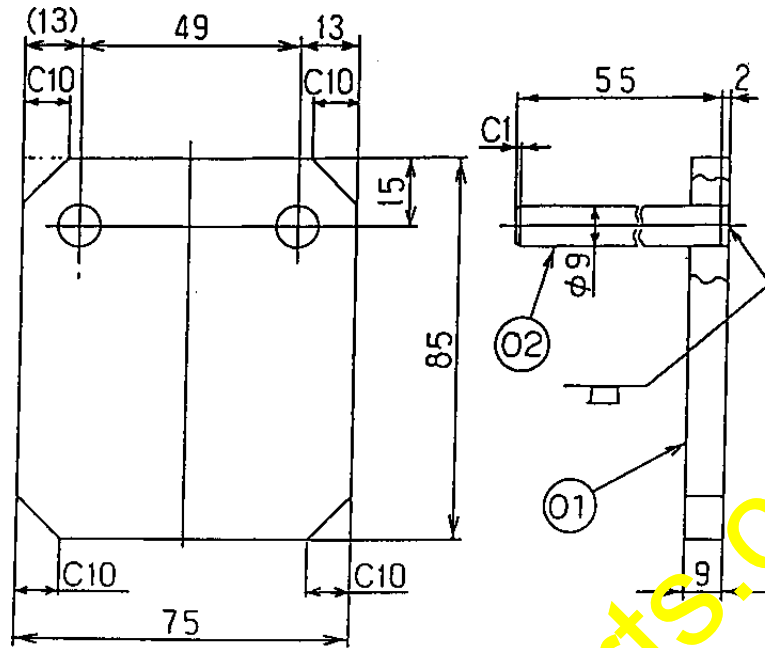
5. Local fabrication drawing

790-105-2710



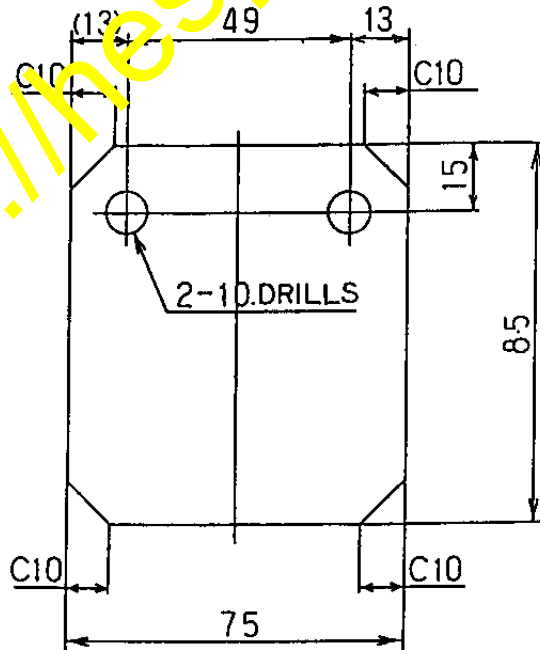
SYM.	Part name	Material	Q'ty/Set	Mass (kg)	Remarks
04	Bolt	SS400B	2	0.015	φ15
03	Plate	SS400F	1	0.06	44 × t6FB
02	Plate	SS400F	2	0.10	44 × t4.5FB
01	Plate	SS400P	1	0.16	t6

790-105-2720

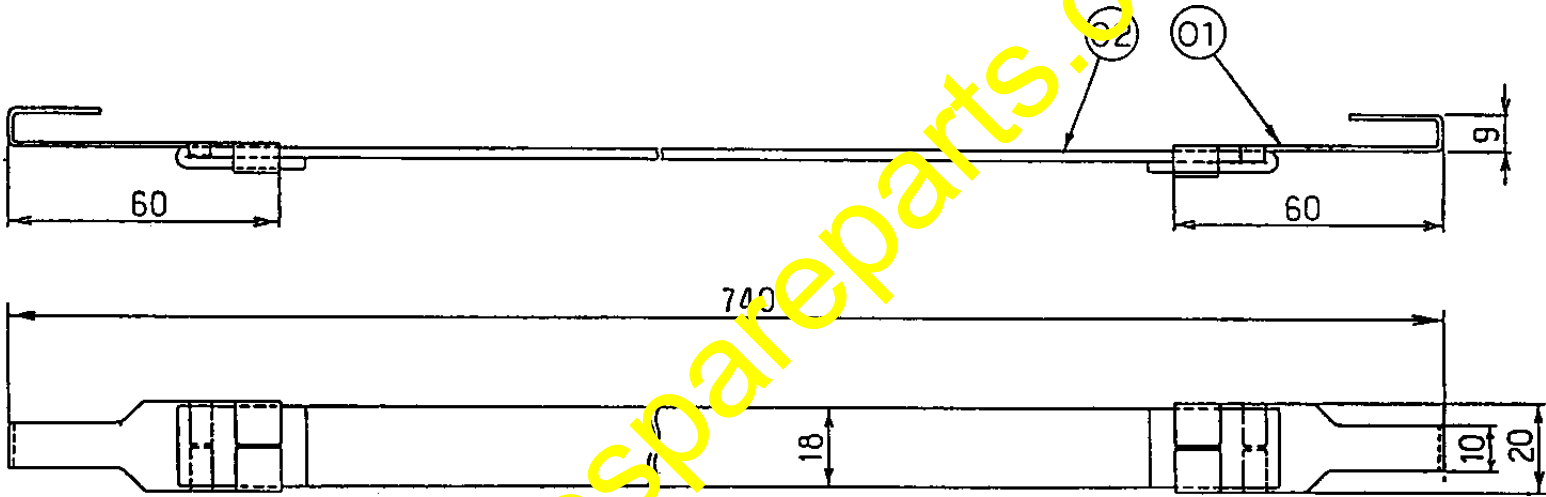


02	Bar	SS400B	2	0.03	φ9
01	Plate	SS400P	1	0.43	t9
SYM.	Part name	Material	Q'ty/Set	Mass (kg)	Remarks

790-105-2730

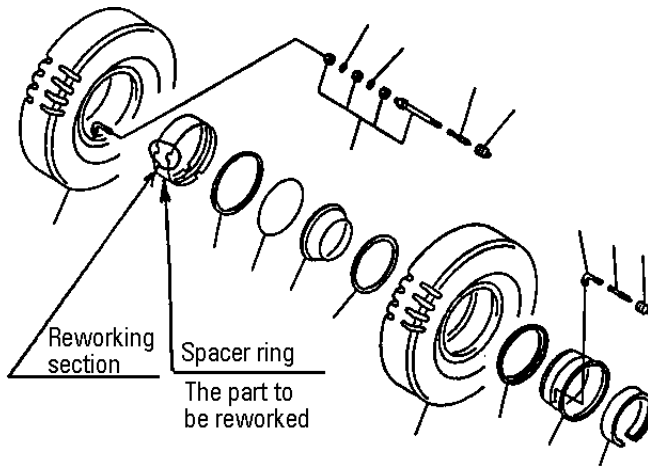


t9 SS400P

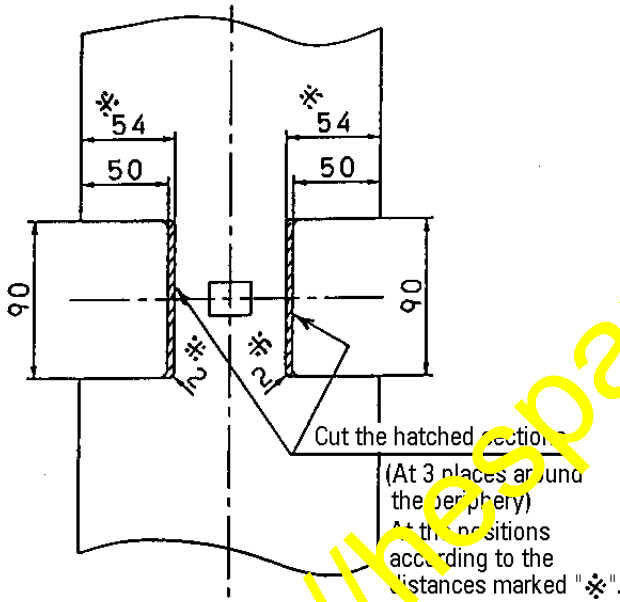


02	Band	NBR	1		
01	Hook	SUS	2		
SYM.	Part name	Material	Q'ty/Set	Mass (kg)	Remarks

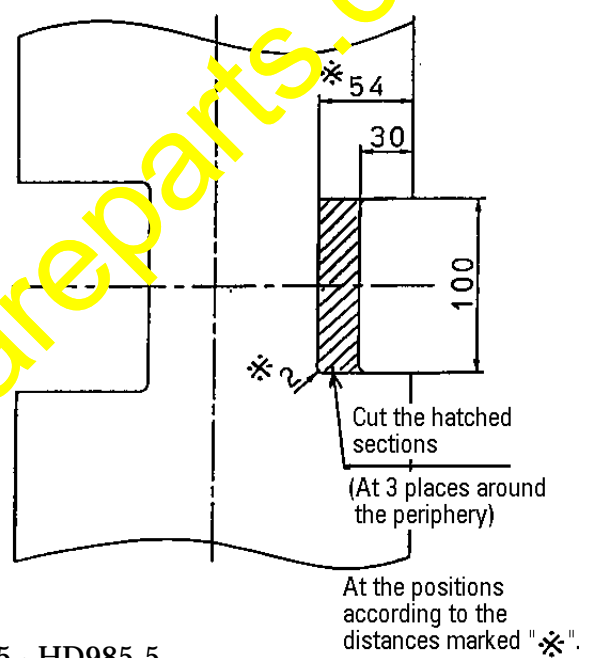
6. Reworking procedures for the spacer ring



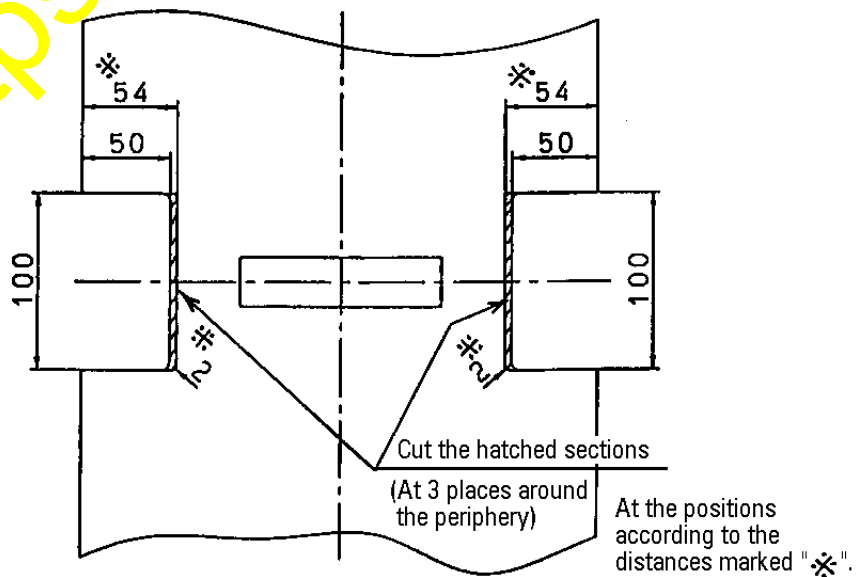
HD325-6 · HD405-6



HD465-5 · HD605-5



HD785-3 · HD785-5 · HD985-5



7. Work procedures
7-1. Exemplary use

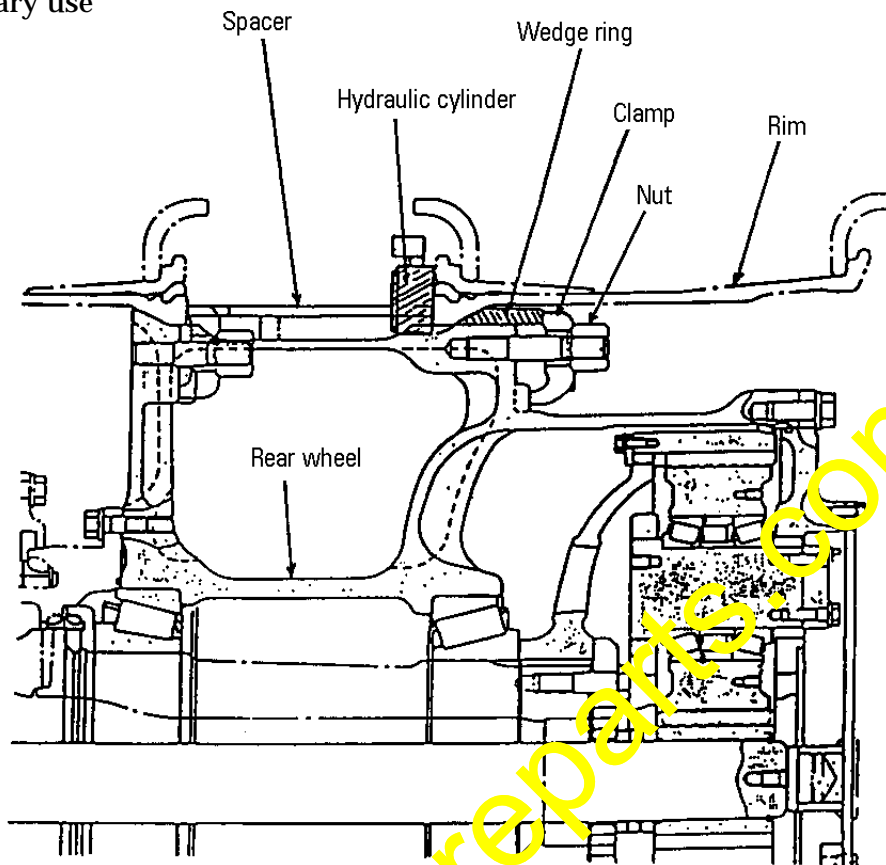


Fig. 2

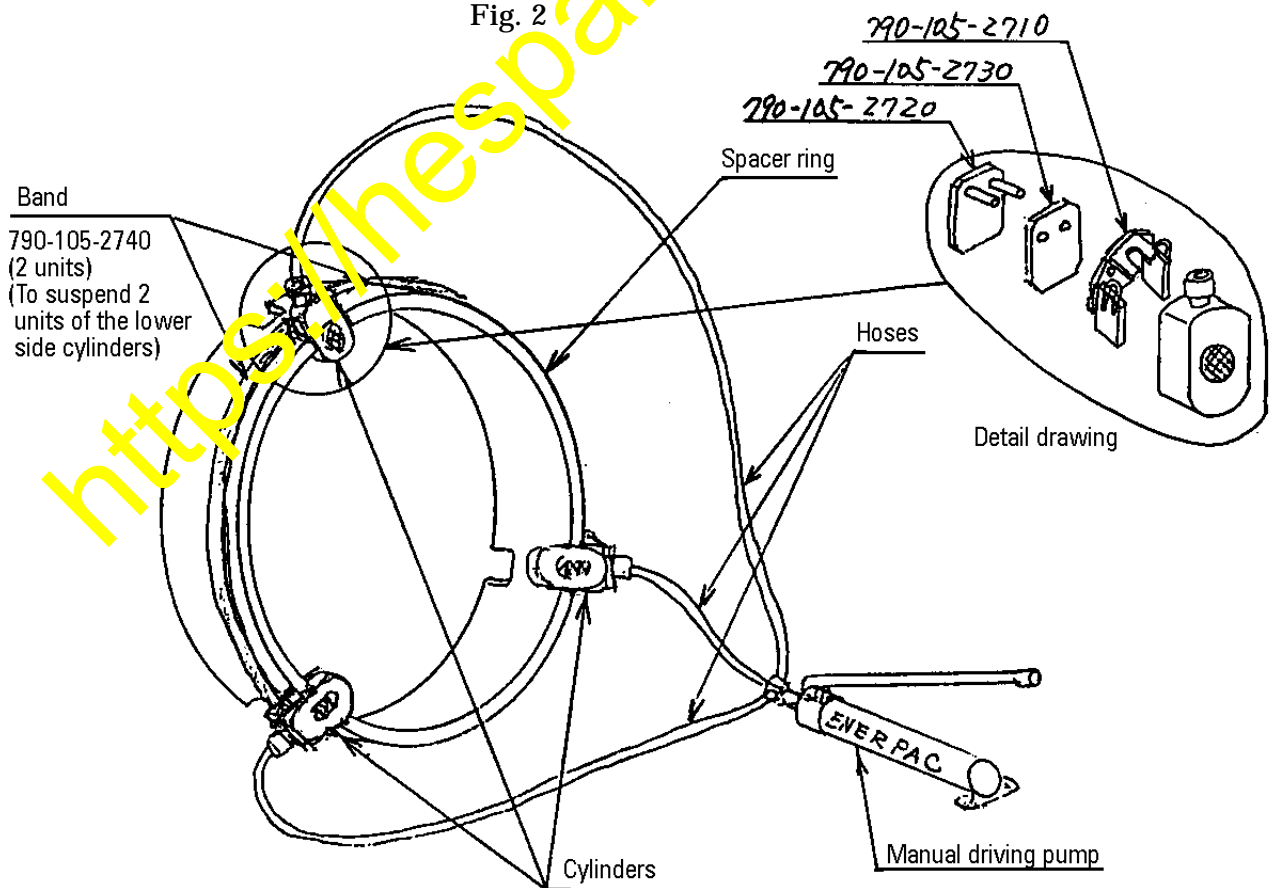


Fig. 3

7-2. Work procedures

- 1) Park the vehicle on a level surface and jack up the rear axle.
- 2) Loosen the rear wheel clamp nuts and remove the clamps leaving 3 clamps around the periphery in the clamping state as they are.
- 3) Prepare the set of hydraulic pump and cylinders introduced in Fig. 1.
- 4) Hydraulic cylinder setting procedures are indicated in Fig. 2 and Fig. 3.
- 5) Engaging the hydraulic cylinders and brackets (790-105-2710), fasten the two lower side cylinders using the bands (790-105-2740) in order not to let these cylinders run out of the spacer groove.
- 6) Start the hydraulic pumps and push the rim out to the maximum stroke (11 mm) of the cylinder. Watching the pushing state, remove the remaining clamps.

Note: After removing all the clamps, do not stay beside the tire under any circumstances.

If the tire collapses, you may suffer a physical injury.

- 7) After finishing the work according to the above Paragraph 6, separate the cylinder and retract the piston to set the spacer (790-105-2720) to the cylinder to push out the rim following the same procedures according to the above Paragraph 6).
- 8) If the wedge ring still does not come out after the procedure according to the above Paragraph 7), supplement the spacer (790-105-7230) to repeat the same procedures. (Hitting around the inner surfaces of the rim may facilitate separation.)
- 9) After all the above procedures the wedge ring will become easily removable.