

PARTS & SERVICE NEWS

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SUBJECT: STRENGTHENED PARTS OF TRANSMISSION R-CLUTCH

PURPOSE: To introduce strengthened R-clutch discs for the transmission ass'y on motor graders

APPLICATION: GD825A-2 Motor Graders S/N 12099 thru 12116

FAILURE CODE: 15G0CA

DESCRIPTION:

1. Introduction

This Service News will introduce the improved R-clutch discs for the transmission ass'y with increased durability.

2. List of parts

No.	Part No.	Part Name	Q'ty	Remarks
1	235-15-21221 [23901-15-500] (235-15-21220)	Cage (Cage)	1 (1)	The part number in [] is the part number for the prototype.
2	235-15-22631 [23901-15-501] (235-15-22630)	Ring gear (Ring gear)	1 (1)	
3	235-15-22732 [23901-15-502] (235-15-22731)	Piston (Piston)	1 (1)	
4	235-15-21212 [23901-15-503] (235-15-21211)	Housing (Housing)	1 (1)	
5	235-15-11232 [23901-15-504] (235-15-11231)	Cage (Cage)	1 (1)	
6	235-15-11112 (235-15-11111)	Case (Case)	1 (1)	The current case can also be used with the rework. (at 4 places).
7	01010-81230 (01010-81235)	Bolt (Bolt)	6 (6)	L = 30
8	14X-15-12910 (235-15-22910)	Spring (Spring)	10 (10)	Free length: 69.5
9	232-15-19230 (568-15-12850)	Seal ring (Seal ring)	1 (1)	φ345

No.	Part No.	Part Name	Q'ty	Remarks
10	424-15-12711 (235-15-22710)	Disc (Disc)	5 (5)	Paper discs → Metallic discs
11	175-15-42880	Spring	5	} Additional parts
12	125-15-11230	Plug	1	
13	235-15-22720	Plate	4	
14	232-15-19220	Seal ring	1	} Consumable parts
15	175-15-11230	Plug	1	
16	07043-70108	Plug	1	
17	07018-12005	Seal ring	1	
18	07018-00954	Seal ring	1	
19	06000-06922	Bearing	1	
20	06044-00214	Bearing	1	
21	(562-15-22880)	(Plate)	(1)	Canceled parts
22	235-15-21014 (235-15-21013)	Transmission ass'y (Transmission ass'y)	1 (1)	GD825A-2
23	235-15-21021 (235-15-21020)	Transmission ass'y (Transmission ass'y)	1 (1)	GD825A-2 (-50 °C)

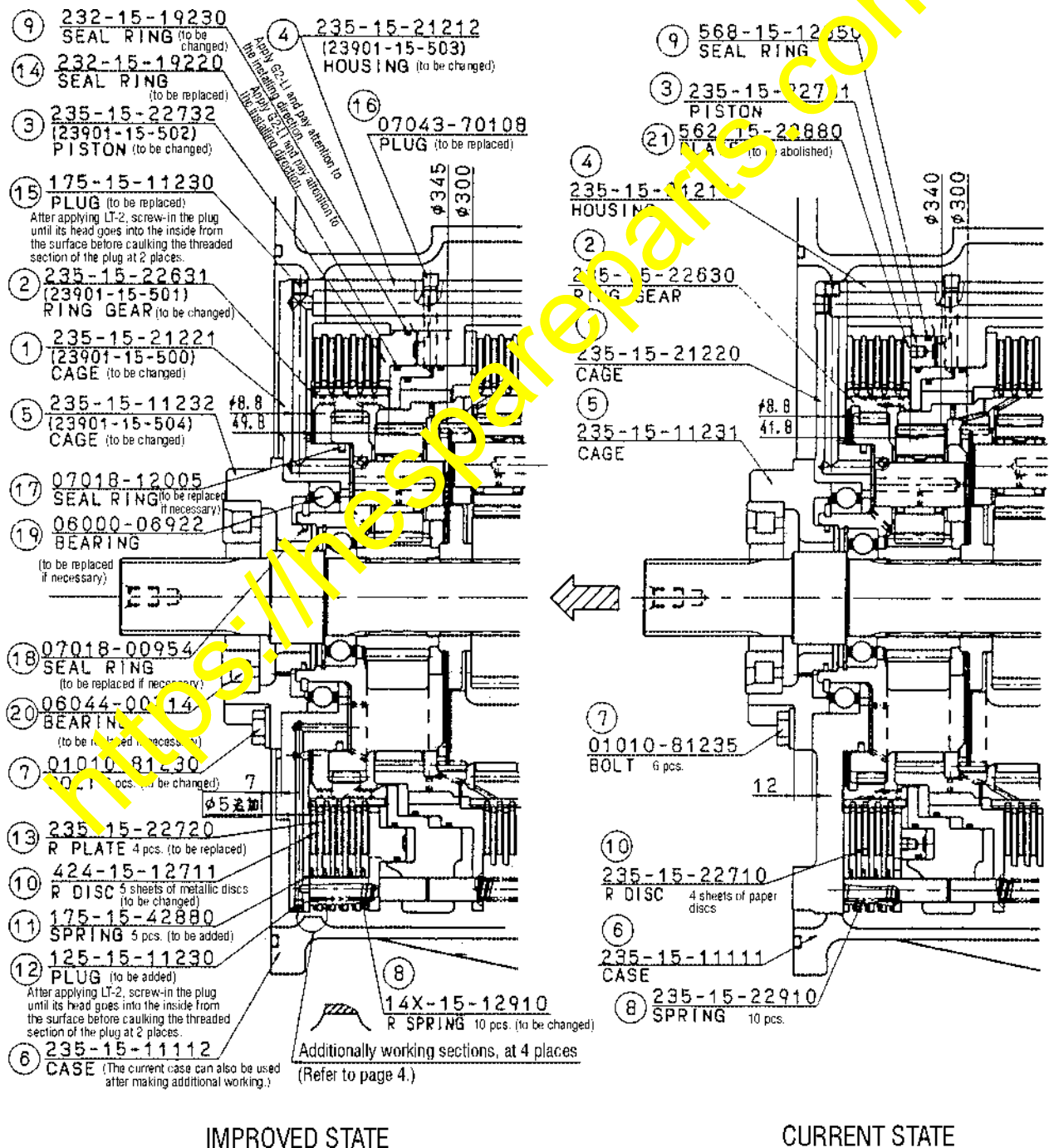
3. Details of the modification

(1) R-clutch section

By implementation of the following modifications to the R-clutch section, the lubrication of the section and the durability of the section for the inching can be improved.

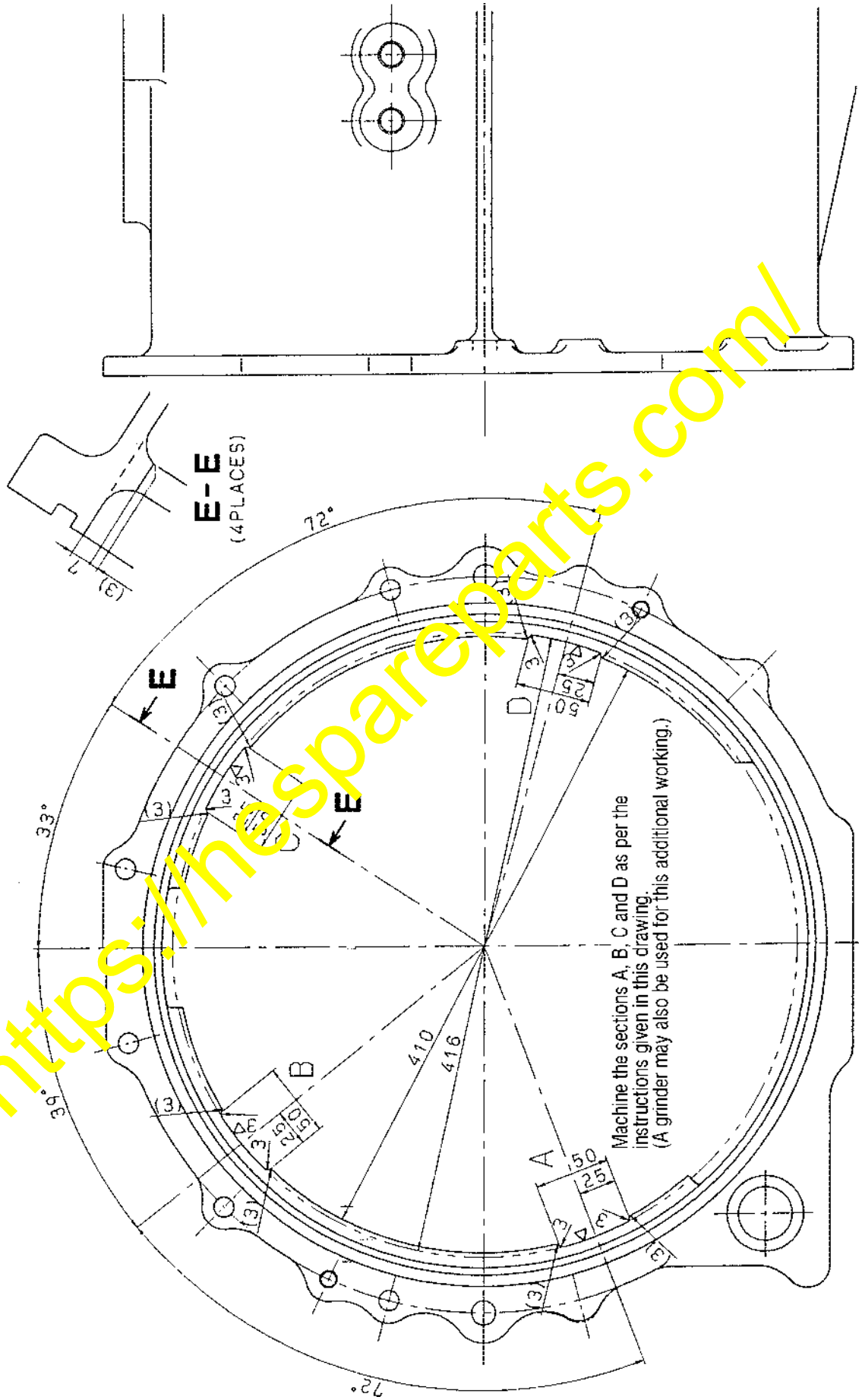
- 1) To change the R-clutch discs from the (current) 4 sheets of paper clutch discs to the (improved) 5 sheets of metallic clutch discs.
- 2) To add a drilled hole ($\phi 5$) in the R-clutch section to increase the lubricating oil flow.

(Caution) Install the plugs ⑫, ⑮ and ⑯ to the cage or to the housing securely.



(2) Transmission case

When reusing the current transmission case (235-15-11111) to make this modification of the R. clutch, it becomes necessary to make the additional working (at the 4 places of sections A, B, C and D) to the CASE ⑥. Make the additional working as per the instructions given in the drawing below.



4. Modification procedure

- (1) Refer to the Chapter "Disassembly of Transmission Assembly" in the Shop Manual for the Motor Grader GD825A-2.
- (2) Although the part numbers do not change for the PLATE [⑬ 235-15-22720], SEAL RING [⑭ 232-15-19220], PLUG [⑮ 175-15-11230 and ⑯ 07043-70108], replace them with new parts.
- (3) Although the part numbers do not change for the BEARINGS [⑰ 06000-06922 and ⑱ 06044-00214], prepare new parts when performing this modification since there is a possibility of damaging them when removing them.
- (4) Although the SEAL RINGS [⑲ 07018-12005 and ⑳ 07018-00954] can be reused, replace them to new parts if uneven wear is occurring.
- (5) When installing the PLUGS [㉑ 125-15-11230 and ㉒ 175-15-11230], after applying LT-2, screw-in the plugs until their heads go into the inside from the surface before caulking the threaded sections of the plugs at 2 places.
- (6) After finishing this modification work, stamp "T" after the part number of the assembly on the name plate.

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