

PARTS & SERVICE NEWS

REF NO.	AT04275
DATE	November 27, 2004

SUBJECT: PROCEDURE TO ACCOMMODATE THE PARTS THAT ENHANCE THE RELIABILITY OF 2ND CLUTCHES

PURPOSE: To inform field personnel.

APPLICATION: GD555-3A: 10001-11057
 GD555-3C: 50001-51044
 GD655-3: 1001-1002
 GD655-3A: 10001-11027
 GD655-3C: 50001-51091
 GD655-3Y: 4001-4104
 GD655-3Y: 4106-4106
 GD675-3A: 10001-11017
 GD675-3C: 50001-51011

FAILURE CODE: 15L0FA

DESCRIPTION:

Introduction

In the GD675, GD655, and GD555 transmissions, clutch disc/plate burning may occur due to insufficient drainage of the 2nd clutch oil. The parts that enhance the reliability of the clutch have been available. Follow this Service News to replace a clutch disc/plate each time the failure is experienced.

List of Parts

Part No.	Part Name	Purpose of Part	Qty	Remarks
714-23-10021 (714-23-10020)	Transmission Ass'y (Transmission Ass'y)	Adjustment	1 (1)	GD655-3/3A/3C/3Y, GD555-3A/3C, GD675-3A/3C
714-23-10001 (714-23-10000)	Transmission Ass'y (Transmission Ass'y)	Adjustment	1 (1)	Former GD655-3C, GD655-3C, and GD675-3C
714-23-12033 (714-23-12032)	Clutch Ass'y 2nd & 3rd (Clutch Ass'y 2nd & 3rd)	Adjustment	1 (1)	
714-23-12133 (714-23-12132)	Shaft & Cylinder Ass'y 2nd & 3rd (Shaft & Cylinder Ass'y 2nd & 3rd)	Adjustment	1 (1)	
714-12-19711	Clutch Disc		21	Worn parts to be repaired
714-16-19730	Plate		23	Worn parts to be repaired

Part No.	Part Name	Purpose of Part	Qty	Remarks
714-16-19220	Seal Ring		2	Worn parts to be repaired
714-07-19320	Seal Ring		2	Worn parts to be repaired
06040-06313	Bearing		1	Worn parts to be repaired
714-12-19340	Bearing		1	Worn parts to be repaired
714-12-19170	Seal Dust		1	Worn parts to be repaired
714-12-19121	Seal Oil		1	Worn parts to be repaired
07000-72120	O-Ring		1	Worn parts to be repaired
02896-11018	O-Ring		2	Worn parts to be repaired, 714-23-10020 only required
02896-11015	O-Ring		2	Worn parts to be repaired, 714-23-10020 only required
07005-02416	Gasket		1	Worn parts to be repaired, 714-23-10020 only required
07005-01612	Gasket		4	Worn parts to be repaired, 714-23-10020 only required
07005-02012	Gasket		4	Worn parts to be repaired, 714-23-10000 only required
07005-01612	Gasket		2	Worn parts to be repaired, 714-23-10000 only required
09608-05080	Plate		1	Replaced part, 714-21-10020 only required
04418-13060	Screw		4	Replaced part 714-23-10020 only required

1. Description of modification

The oil drainage speed of the second clutch has been increased by enlarging the bleed off diameter (see Fig.1) from $\Phi 1.0$ to $\Phi 1.2$.

[Sectional view of transmission]

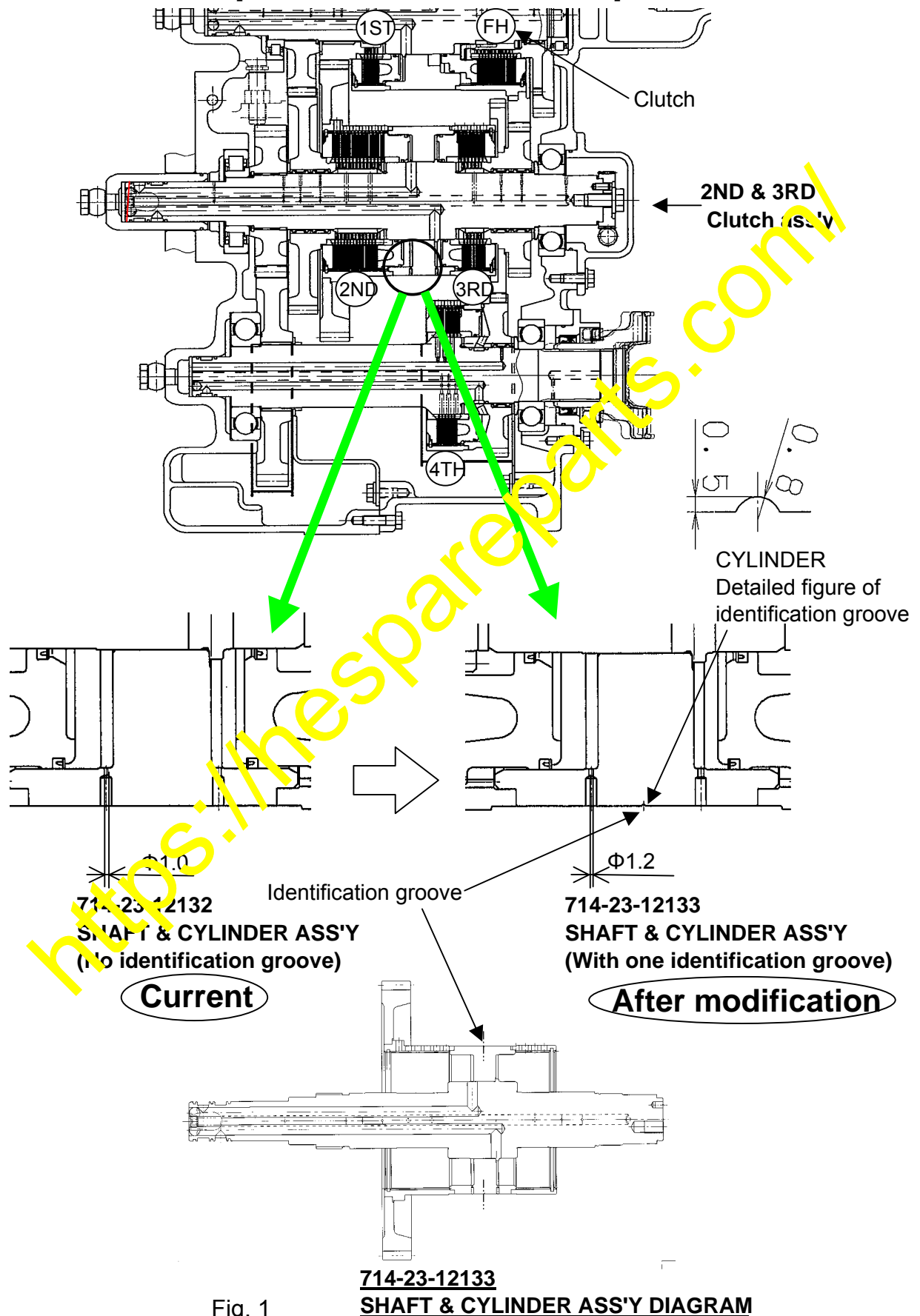


Fig. 1

**714-23-12133
SHAFT & CYLINDER ASS'Y DIAGRAM**

2. Modification procedure

- 1) Repair the clutch with the improved parts according to "Assembly and Disassembly" in the shop manual.

Note: Remove the hoses and tubes below for respective transmission ass'y.

- (1) Transmission ass'y: 714-23-10020

Remove only the four parts: hoses (02762-20607 and 02762-20507) and tubes (714-23-18181 and 714-23-18192). Do not remove other tube/valve ass'y.

- (2) Transmission ass'y: 714-23-10000

Remove only the four parts: hoses (07621-20607 and 07621-20507) and tubes (714-23-18180 and 714-23-18191). Do not remove other tube/valve ass'y.

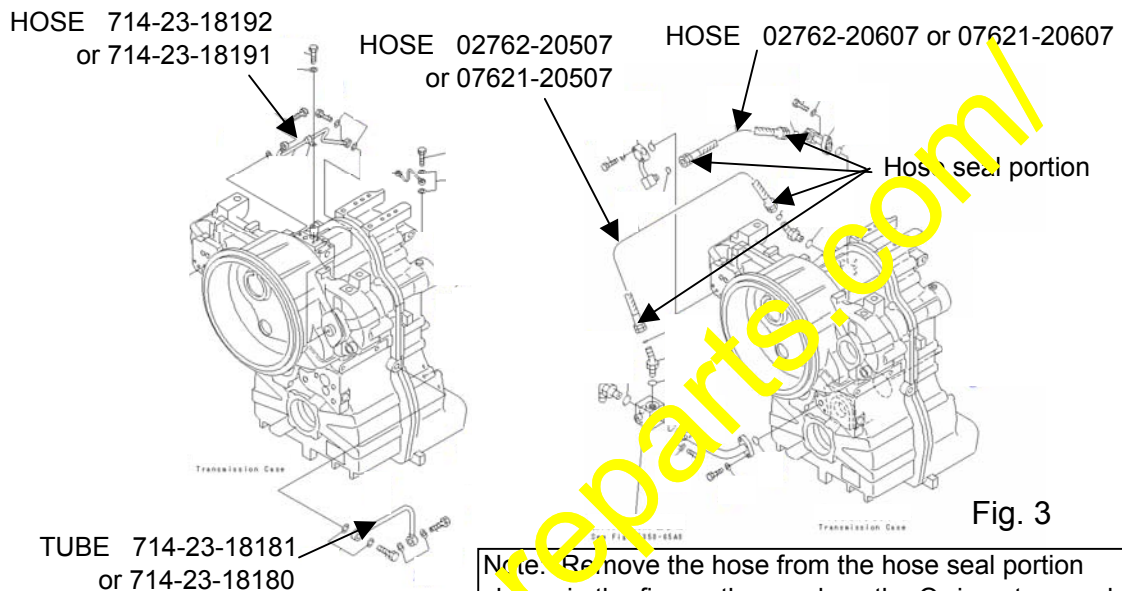


Fig. 2

Fig. 3

Transmission piping diagram

(Transmission ass'y: 714-23-10020 or 714-23-10000)

- 2) Remove and disassemble the second and third clutch assemblies, then modify the shaft & cylinder ass'y shown on page 1.

- 3) Other parts to be replaced

Replace the parts below. Other peripherals cannot be reused.

For the portions to be modified on the parts book, see pages 3 thru 7.

GD675-3A, GD655-3A/3C and GD555-3A

(Transmission ass'y: 714-23-10020)

GD675-3C, GD655-3C and GD555-3C

(Transmission ass'y: 714-23-10000)

Part No.	Part name	Q'ty
714-12-19711	CLUTCH DISC	21
714-16-19730	PLATE	23
714-16-19220	SEAL RING	2
714-07-19320	SEAL RING	2
06040-06313	BEARING	1
714-12-19340	BEARING	1
714-12-19170	DUST SEAL	1
714-12-19121	OIL SEAL	1
07000-72120	O-RING	1
02896-11018	O-RING	2
02896-11015	O-RING	2
07005-02416	GASKET	4
07005-01612	GASKET	4
09608-05080	PLATE	1
04418-13060	SCREW	4

Part No.	Part name	Q'ty
714-12-19711	CLUTCH DISC	21
714-16-19730	PLATE	23
714-16-19220	SEAL RING	2
714-07-19320	SEAL RING	2
06040-06313	BEARING	1
714-12-19340	BEARING	1
714-12-19170	DUST SEAL	1
714-12-19121	OIL SEAL	1
07000-72120	O-RING	1
07005-02012	GASKET	4
07005-01612	GASKET	2

3. Nameplate (Nameplate, Part No. 09608-05080)

After reassembling the transmission, follow the procedure below to check that the transmission has been modified.

- 1) When the model No. on the nameplate before modification is "714-23-10020", replace it with a new one stamped as "714-23-10021."
- 2) When the model No. on the nameplate before modification is "714-23-10000", stamp "T" following the model No. without replacing the nameplate.

GD655-3 S/N 1001-UP
Transmission (2nd speed and 3rd speed clutches)

IDX	Part No.	Part name	Q'ty	Unit price	Application serial No.
	(714-23-10020)	Transmission assembly This assembly consists of components ranging from Fig. F5350-51A0 to Fig. F5350-70A0.	1	6350000	SN:1001--
	714-23-12032	· Clutch assembly, 2nd and 3rd	1	0	SN:1001--
	714-23-12132	· Shaft & cylinder assembly, 2nd and 3rd	1	0	SN:1001--
1	☆	· · · Shaft, lower	1	127000	SN:1001--
2	714-11-19390	· · · Ball	2	50	SN:1001--
3	714-08-12950	· · · Orifice	1	0	SN:1001--
4	☆	· · · Housing, 2nd	1	179000	SN:1001--
5	714-23-12690	· · Piston, range	1	0	SN:1001--
6	714-23-12660	· · Piston	1	0	SN:1001--
7	419-15-12140	· · Ring, snap	2	2600	SN:1001--
8	714-12-19711	· · Disc	21	1490	SN:1001--
9	714-16-19730	· · Plate, separate	23	690	SN:1001--
10	419-15-12133	· · Spring, wave	21	1090	SN:1001--
11	714-12-12610	· · Plate, end	2	4010	SN:1001--
12	714-16-19220	· · Ring	2	1910	SN:1001--
13	714-07-19320	· · Ring, seal (K1)	2	1260	SN:1001--
14	714-08-19570	· · Washer, thrust	4	2450	SN:1001--
15	714-23-19430	· · Bearing, needle	4	4690	SN:1001--
16	714-23-12710	· · Spacer, 4th	1	0	SN:1001--
17	06040-06313	· · Bearing	1	9010	SN:1001--
18	714-12-19340	· · Bearing, roller	1	3800	SN:1001--
19	714-23-12451	· · Gear, 2nd	1	0	SN:1001--
20	714-23-12540	· · Gear, lower, output	1	0	SN:1001--
21	714-12-19520	· · Ring, snap	1	0	SN:1001--
22	714-23-12460	· · Gear, 3rd, house 55, and house 41	1	0	SN:1001--
23	419-15-12122	· Ring	3	390	SN:1001--

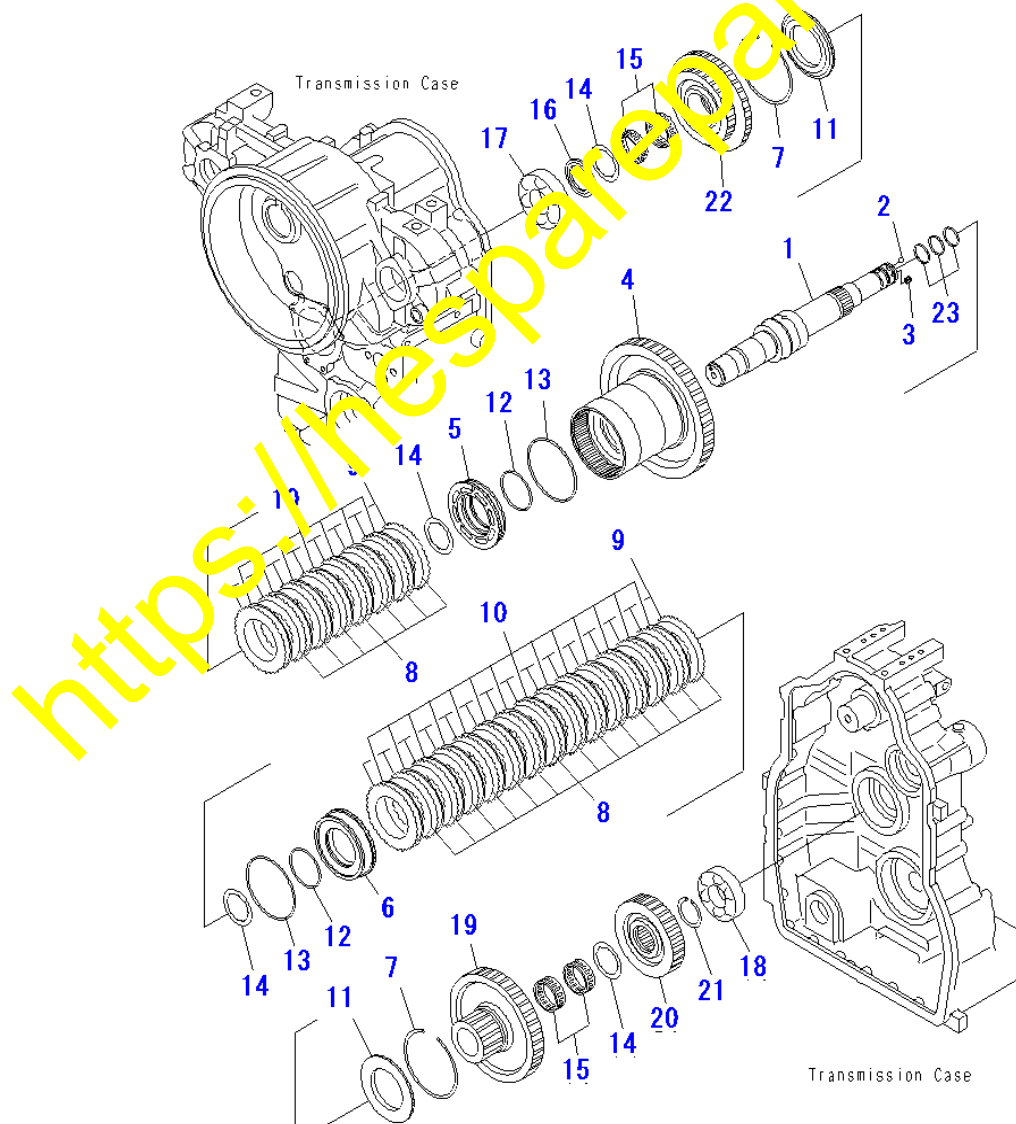


Fig. 4

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**GD655-3 S/N 1001-UP
Transmission (Output)**

IDX	Part No.	Part name	Q'ty	Unit price	Application serial No.
	(714-23-10020)	Transmission assembly	1	6350000	SN:1001--
		This assembly consists of components ranging from Fig. F5350-51A0 to Fig. F5350-70A0.		0	0 SN:1001--
	714-23-14110	· Coupling assembly	1	36100	SN:1001--
1	☆	· Coupling, output	1	780	SN:1001--
2	714-11-14320	· Deflector	1	0	SN:1001--
3	714-23-14810	· Retainer, output	1	0	SN:1001--
4	714-12-19170	· Seal, dust (K1)	1	1320	SN:1001--
5	714-12-19121	· Seal, oil (K1)	1	3300	SN:1001--
6	07000-72120	· O-ring (K1)	1	1510	SN:1001--
7	01010-81230	· Bolt	4	140	SN:1001--
8	01643-31232	· Washer	4	30	SN:1001--
9	714-23-14910	· Shroud	1	0	SN:1001--
10	714-23-14920	· Shroud, 4th	1	0	SN:1001--
11	01010-81225	· Bolt	4	130	SN:1001--
12	01643-31232	· Washer	4	30	SN:1001--

(Replaced with a new one)
(Replaced with a new one)
(Replaced with a new one)

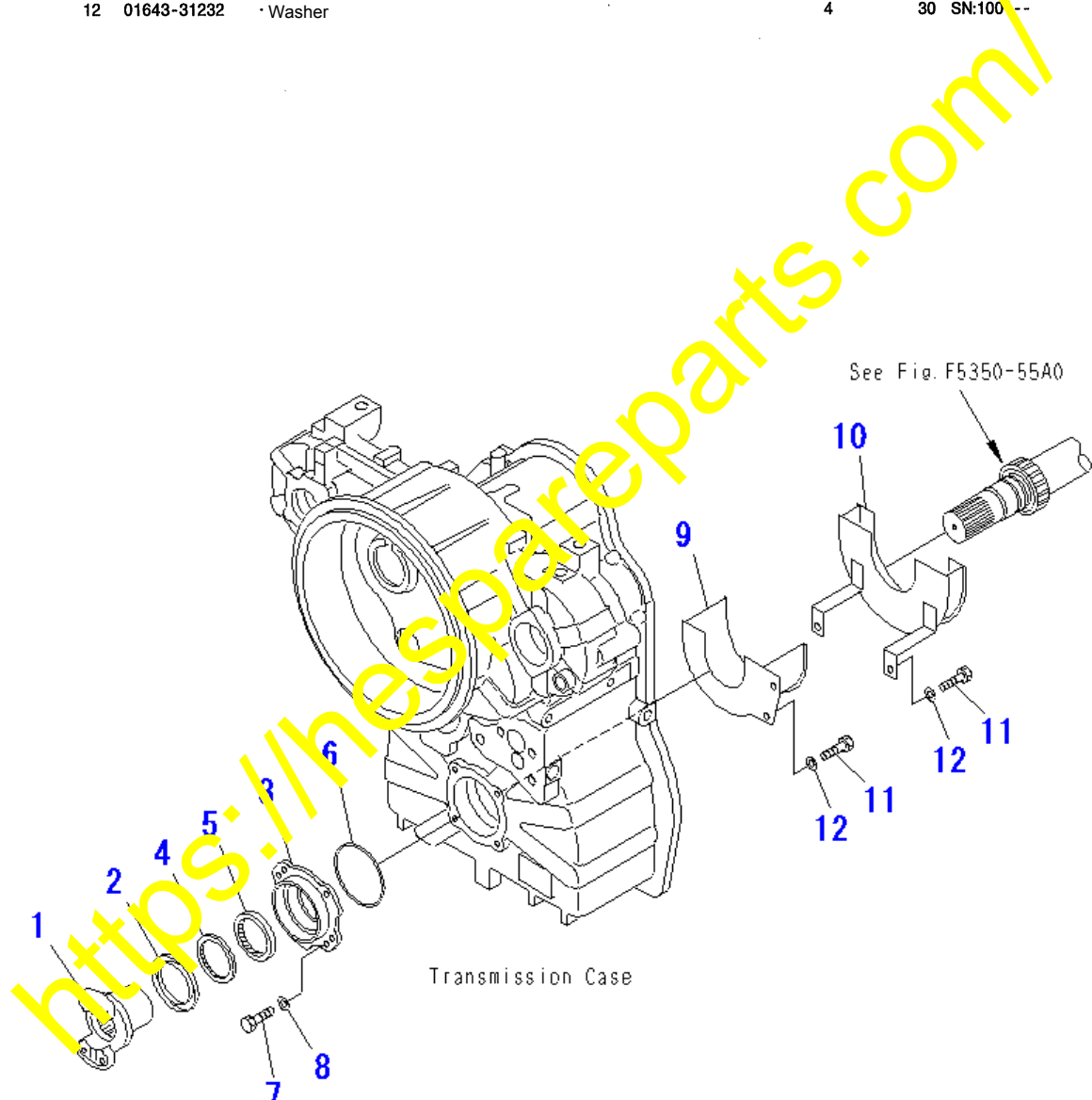
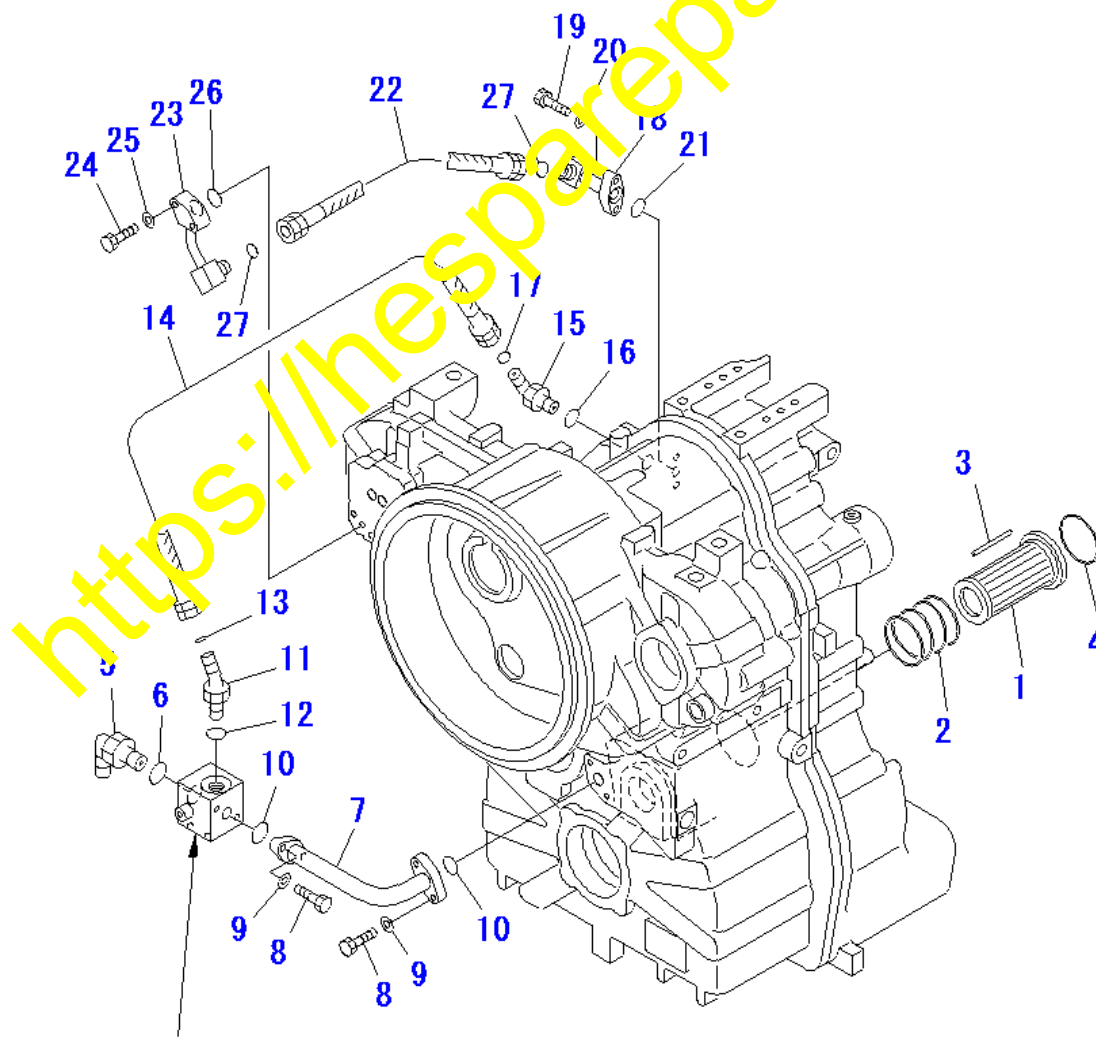


Fig. 5

**GD655-3 S/N 1001-UP
Transmission (Piping 1/3)**

Idx	Part No.	Part name	Q'ty	Unit price	Application serial No.
	(714-23-10020)	Transmission assembly	1	6350000	SN:1001--
		This assembly consists of components ranging from Fig. F5350-51A0 to Fig. F5350-70A0.		0	
	714-07-14521	Strainer assembly	1	14900	SN:1001--
1	714-07-14641	Strainer	1	11000	SN:1001--
2	714-07-14652	Spring	1	780	SN:1001--
3	417-15-14660	Magnet	5	1660	SN:1001--
4	07000-15085	O-ring (K3)	1	200	SN:1001--
5	21W-62-42640	Elbow	1	4370	SN:1001--
6	07002-13334	O-ring (K3)	1	390	SN:1001--
7	714-23-18232	Tube	1	11000	SN:1001--
8	01010-81040	Bolt	4	120	SN:1001--
9	01643-31032	Washer	4	15	SN:1001--
10	07000-13028	O-ring (K3)	2	45	SN:1001--
11	02783-10628	Elbow	1	7860	SN:1001--
12	07002-12434	O-ring (K3)	1	330	SN:1001--
13	02896-11018	O-ring (K3)	1	45	SN:1001--
		(Replaced with a new one)			
14	02762-20607	Hose	1	16000	SN:1001--
15	02782-10628	Elbow	1	4480	SN:1001--
16	07002-12434	O-ring (K3)	1	330	SN:1001--
17	02896-11018	O-ring (K3)	1	45	SN:1001--
		(Replaced with a new one)			
18	714-23-18211	Tube	1	851	SN:1001--
19	01010-81040	Bolt	2	12	SN:1001--
20	01643-31032	Washer	2	15	SN:1001--
21	07000-13025	O-ring (K3)	1	5	SN:1001--
22	02762-20507	Hose	1	1340	SN:1001--
23	714-23-18222	Tube	1	83	SN:1001--
24	01010-81075	Bolt	1	185	SN:1001--
25	01643-31032	Washer	1	15	SN:1001--
26	07000-13022	O-ring (K3)	1	40	SN:1001--
27	02896-11015	O-ring (K3)	2	40	SN:1001--
		(Replaced with a new one)			

For transmission assembly (Part No. 714-23-10000), no O-ring is required because a taper seal is used for a hose.



See Fig.F5350-65A0

Transmission Case

Fig. 6

GD655-3 S/N 1001-UP
Transmission (Piping 2/3)

IDX	Part No.	Part name	Qty	Unit price	Application serial No.
	(714-23-10020)	Transmission assembly	1	6356000	SN:1001--
		This assembly consists of components ranging from Fig. F5350-51A0 to FIG. F5350-70A0.	0		
1	207-62-7141B	* Elbow	1		SN:1001--
2	07042-80108	* Plug	1	1120	SN:1001--
3	07002-63334	* O-ring (K3)	1	550	SN:1001--
4	714-23-18110	* Tube	1	0	SN:1001--
5	07206-30710	* Bolt	3	580	SN:1001--
6	07005-01012	* Gasket (K3)	6	240	SN:1001--
7	714-23-18121	* Tube, PTO	1	0	SN:1001--
8	07206-30710	* Bolt	3	580	SN:1001--
9	07005-01012	* Gasket (K3)	6	240	SN:1001--
10	714-23-18131	* Tube	1	7280	SN:1001--
11	07206-31520	* Bolt	2	1150	SN:1001--
12	07005-02012	* Gasket (K3)	4	320	SN:1001--
13	714-23-18140	* Tube	1	7280	SN:1001--
14	07206-31520	* Bolt	2	1150	SN:1001--
15	07005-02012	* Gasket (K3)	4	320	SN:1001--
16	714-23-18151	* Tube	1	7800	SN:1001--
17	07206-31520	* Bolt	2	1150	SN:1001--
18	07005-02012	* Gasket (K3)	4	320	SN:1001--
19	714-23-18160	* Tube	1	7280	SN:1001--
20	07206-31520	* Bolt	2	1150	SN:1001--
21	07005-02012	* Gasket (K3)	4	320	SN:1001--
22	714-23-18180	* Tube	1	6760	SN:1001--
23	07206-31520	* Bolt	2	1150	SN:1001--
24	07005-02012	* Gasket (K3) → (Replaced with a new one)	4	320	SN:1001--

Gasket: Part No. 07005-02416 for transmission ass'y: Part No. 714-23-10020
 Gasket: Part No. 07005-02012 for transmission ass'y: Part No. 714-23-10000

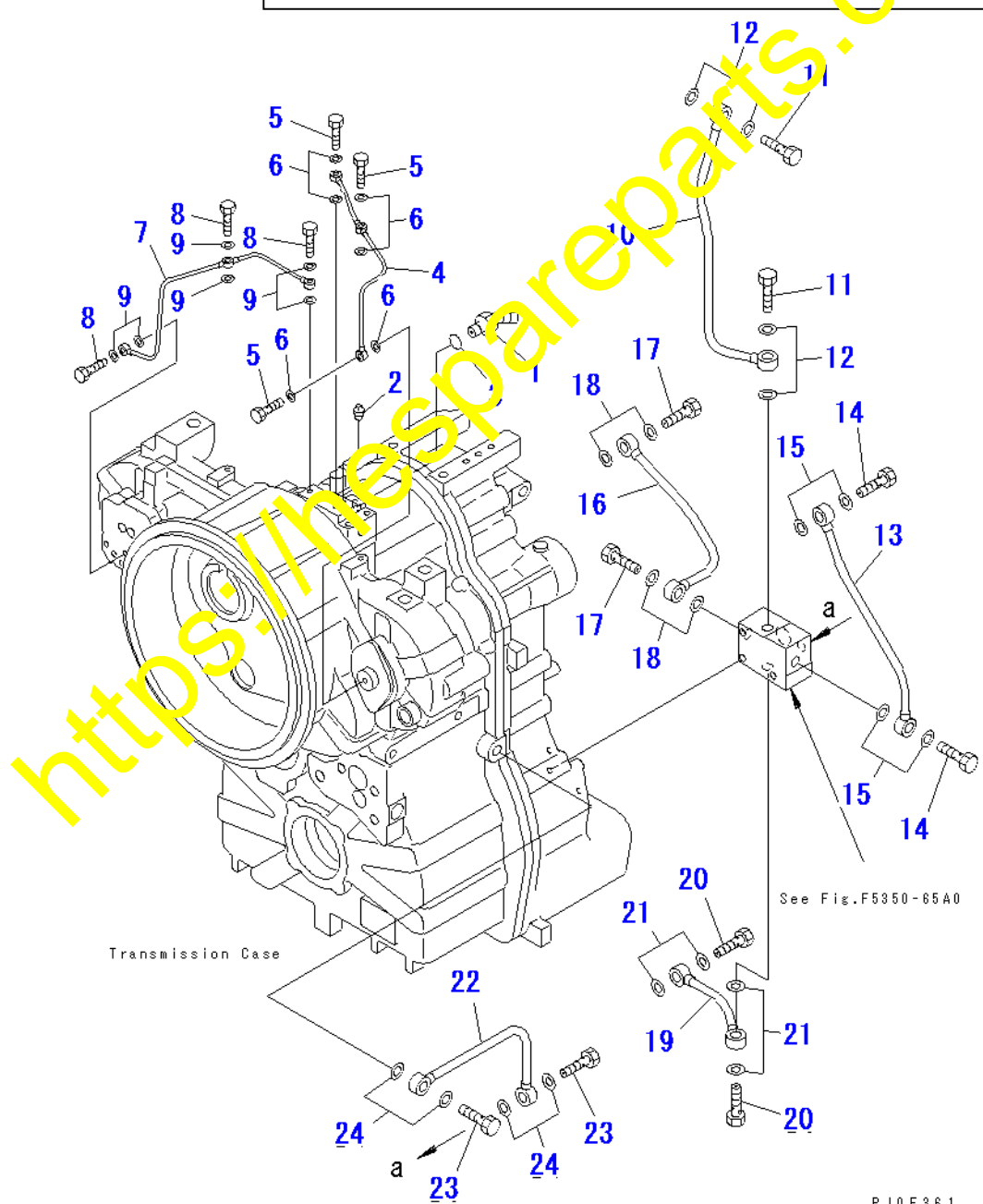


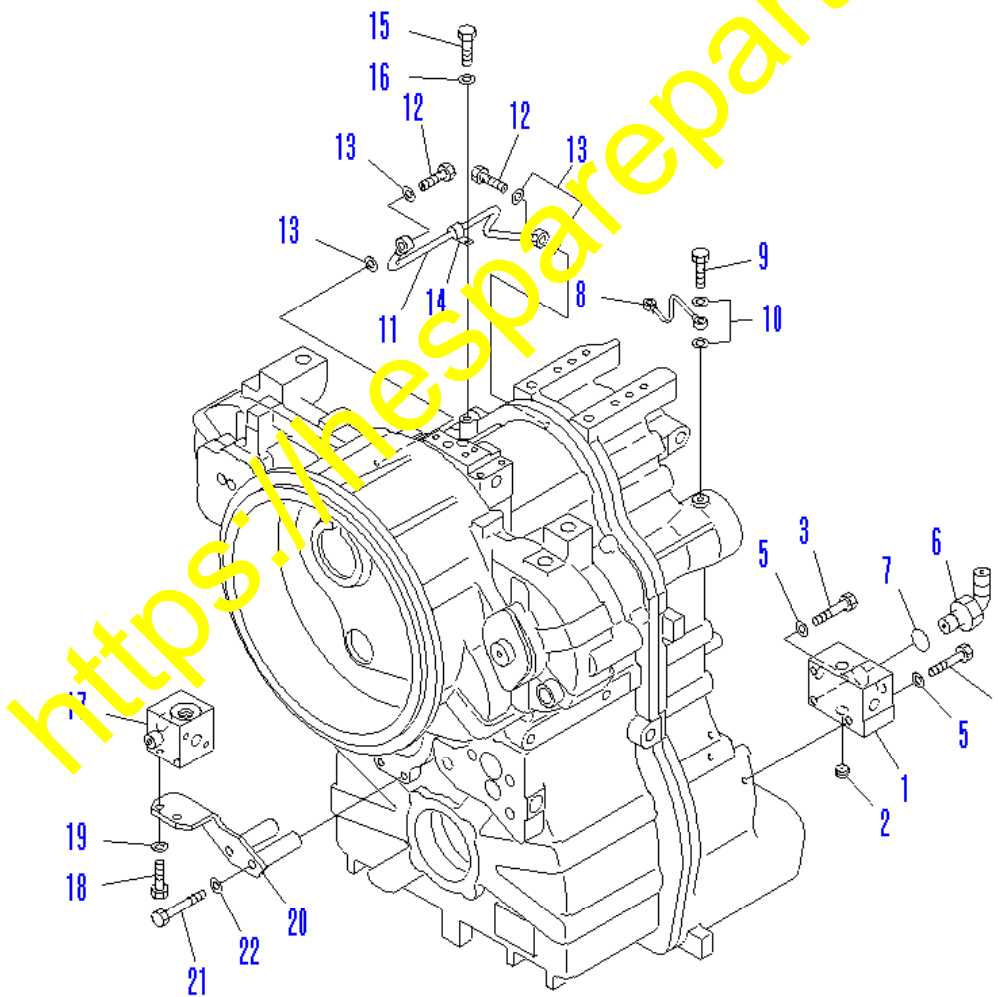
Fig. 7

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**GD655-3 S/N 1001-UP
Transmission (Piping 3/3)**

IDX	Part No.	Part name	Q'ty	Unit price	Application serial No.
	(714-23-10020)	Transmission assembly	1	6350000	SN:1001--
		This assembly consists of components ranging from Fig. F5350-51A0 to Fig. F5350-70A0.		0	0
1	714-23-18311	- Block	1	0	SN:1001--
2	714-23-17330	- Plug	1	0	SN:1001--
3	01010-81085	- Bolt	1	200	SN:1001--
4	01010-81075	- Bolt	2	185	SN:1001--
5	01643-31032	- Washer	3	15	SN:1001--
6	21W-62-42640	- Elbow	1	4370	SN:1001--
7	07002-13334	- O-ring (K3)	1	390	SN:1001--
8	714-23-18170	- Tube	1	0	SN:1001--
9	07206-30710	- Bolt	2	580	SN:1001--
10	07005-01012	- Gasket (K3)	4	240	SN:1001--
11	714-23-18192	- Tube	1	7870	SN:1001--
12	07206-31014	- Bolt	2	630	SN:1001--
13	07005-01412	- Gasket (K3) → (Replaced with a new one)	4	250	SN:1001--
14	04434-51010	- Clip	1	390	SN:1001--
15	01010-81020	- Bolt	1	80	SN:1001--
16	01643-31032	- Washer	1	15	SN:1001--
17	714-23-15160	- Block	1	0	SN:1001--
18	01010-81040	- Bolt	2	120	SN:1001--
19	01643-31032	- Washer	2	15	SN:1001--
20	714-23-18750	- Bracket	1	0	SN:1001--
21	01011-81225	- Bolt	2	390	SN:1001--
22	01643-31232	- Washer	2	30	SN:1001--

Gasket: Part No. 07005-01612 for transmission ass'y: Part No. 714-23-10020 Q'ty 4
 Gasket: Part No. 07005-01612 for transmission ass'y: Part No. 714-23-10000 Q'ty 2



Transmission Case

Fig. 8