SERVICE MANUAL

RG140.B VHP
RG170.B VHP
RG200.B VHP

Motor Graders

Part Number
48050423D
4th Edition
English 10/2017

NEW HOLLAND CONSTRUCTION

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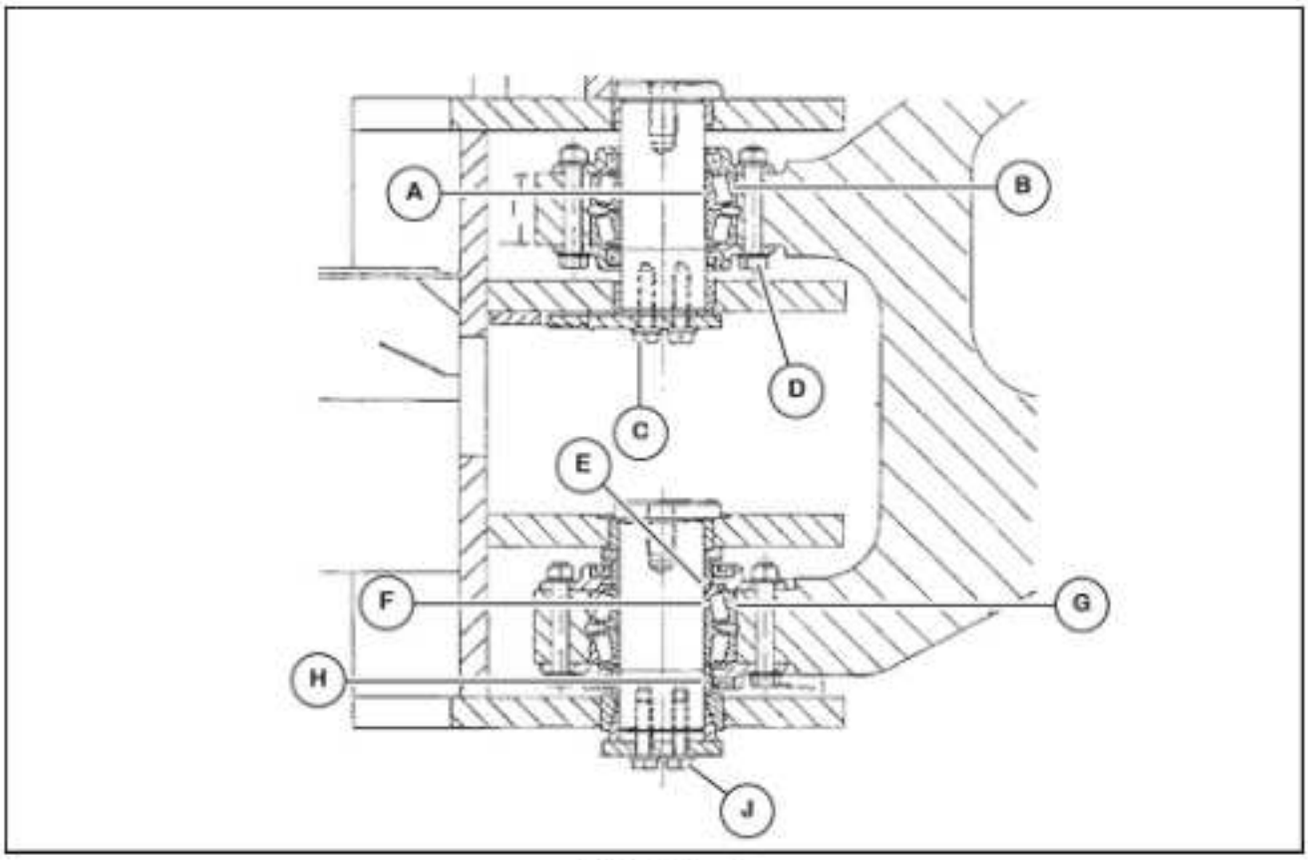
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Articulation frame pivot - Sectional view

RG140.B	LA
RG170.B	LA
RG200.B	LA



A.	E.D. of pin	**66.7133 – 66.725 mm (2.627 – 2.627 in)**
	I.D. of the bearing cone	**66.675 – 66.888 mm (2.625 – 2.633 in)**
B.	I.D. of the articulation support	**66.7133 – 66.725 mm (2.627 – 2.627 in)**
	E.D. of the bearing cap	**66.675 – 66.888 mm (2.625 – 2.633 in)**
C.	Screw torque	13.5 – 15.7 Nm (100 – 116 ft.lbs)
D.	Screw torque	12.3 – 13.5 Nm (90 – 100 ft.lbs)
E.	E.D. of the pin	**66.7133 – 66.725 mm (2.627 – 2.627 in)**
	I.D. of the bush	**66.890 – 67.160 mm (2.633 – 2.644 in)**
F.	E.D. of the pin	**66.713 – 66.725 mm (2.626 – 2.627 in)**
	I.D. of the bearing cone	**66.67533 – 66.725 mm (2.625 – 2.627 in)**
G.	E.D. of the pin	**66.7133 – 66.725 mm (2.627 – 2.627 in)**
	I.D. of the bearing cone	**66.7133 – 66.725 mm (2.627 – 2.627 in)**
H.	E.D. of the pin	**66.7133 – 66.725 mm (2.627 – 2.627 in)**
	I.D. of the bush	**66.8909 – 67.160 mm (2.633 – 2.644 in)**
I.	Screw torque	**66.7133 – 66.725 mm (2.627 – 2.627 in)**
J.	Screw torque	**66.7133 – 66.725 mm (2.627 – 2.627 in)**
K.	E.D. of the pin	**66.7133 – 66.725 mm (2.627 – 2.627 in)**

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3309 (DTC 1865) - Fuel rail pressure has exceeded maximum limit

RG140.B Torque converter transmission, Tier 3, made in Brazil [NAAF08001 -]	
RG170.B Direct drive transmission, Tier 3, made in Brazil [HBZN0170HBAF00360 -]	
RG170.B Torque converter transmission, Tier 3, made in Brazil [NAAF09000 -]	
RG200.B Direct drive transmission, Tier 3, made in Brazil [NAAF11000 -]	
RG200.B Torque converter transmission, Tier 3, made in Brazil [HBZN0200TBAF00511 -]	

Control Module: ECU

NOTE: *If the Pressure Relief Valve (PRV) is replaced, it is necessary to perform the Replacement of the Rail Pressure Relief Valve (PRV) - Reset ECU Data with the Electronic Service Tool (EST) before you return the machine to service. See* ***Common rail - Configure - Reset ECU data (10.218)****, if necessary.*

NOTE: *If the rail pressure sensor B-015 is replaced, it is necessary to perform the Replacement of the Rail Pressure sensor - Reset ECU Data with the Electronic Service Tool (EST) before you return the machine to service. See* ***Common rail pressure sensor - Configure - Reset ECU data (Rail pressure sensor) (55.010)****, if necessary.*

Context:
The Engine Control Unit (ECU) A-057 monitors fuel rail pressure using the rail pressure sensor B-015. If the ECU A-057 determines that the measured rail pressure is greater than desired by more than a dependent engine speed value, this fault will occur. For more information regarding fuel system troubleshooting, see **Fuel injection system - Troubleshooting (10.218)**.

Cause:
The ECU A-057 has determined that the measured rail pressure is greater than desired by more than a dependent engine speed value.

Possible failure modes:

1. Faulty fuel metering unit Y-011 wiring.
2. Faulty fuel metering unit Y-011, stuck open or internal failure.
3. Faulty fuel back-flow lines, blocked or damaged.
4. Faulty Pressure Relief Valve (PRV), stuck closed or mechanically unable to open.
5. Faulty high pressure pump, zero delivery throttle valve clogged.
6. Faulty rail pressure sensor B-015, drifted signal.
7. Faulty ECU A-057, software.

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5408 - Open circuit at ground connection PIN 3 on right front wheel speed sensor

RG170.B Direct drive transmission, Tier 3, made in Brazil [HBZN0170HBAF00360 -]	
RG200.B Direct drive transmission, Tier 3, made in Brazil [NAAF11000 -]	

Context:
An open circuit at ground connection of front right wheel speed sensor was detected while engine is running.

Solution:

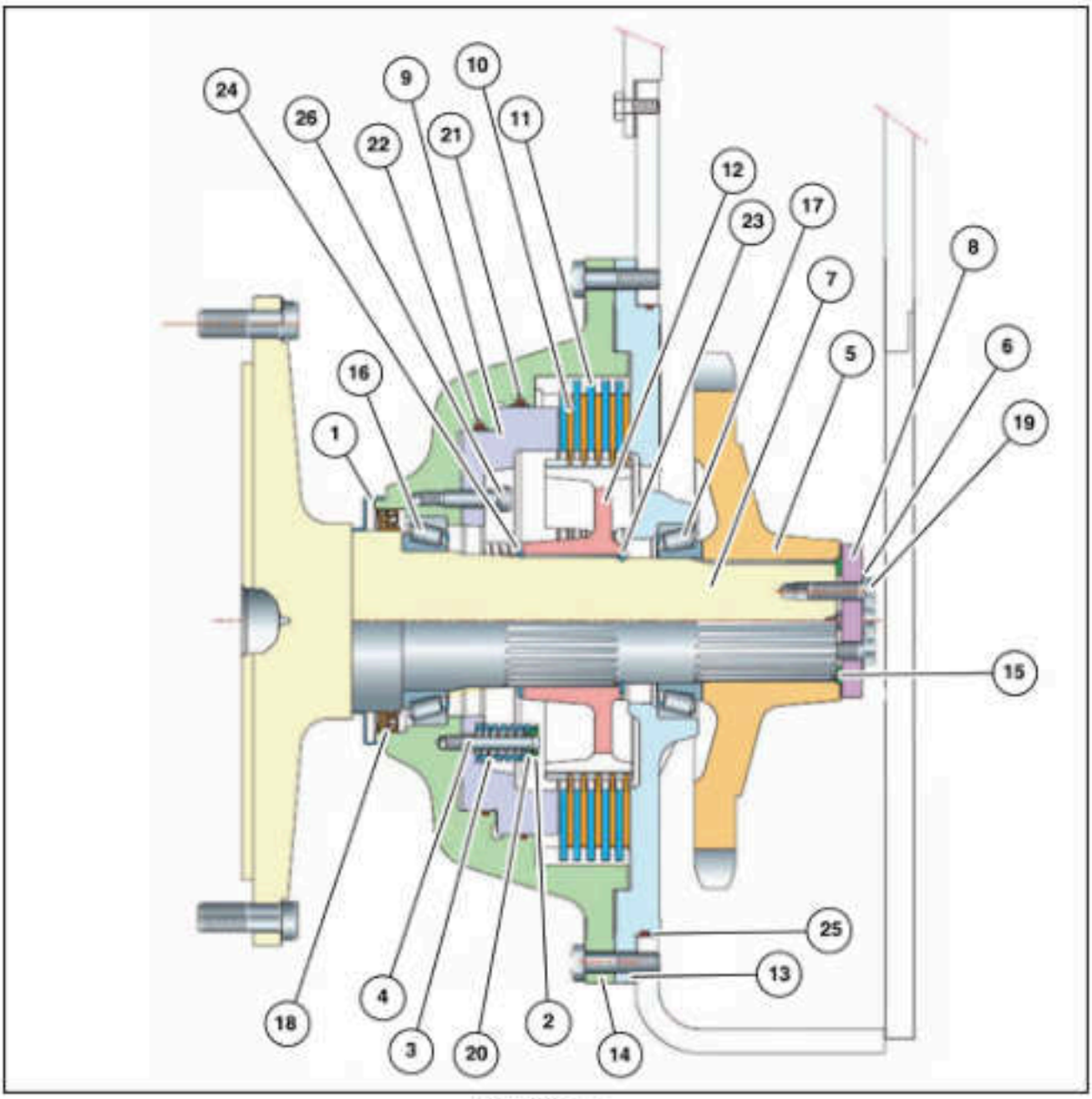
1. Check connector of right front wheel speed sensor.
2. Check harness from EHC pin 32 to connector of right front wheel speed sensor pin 3.
3. Check harness from right front wheel speed sensor pin 3 to EHC pin 1 for having resistance of 40±2Ω.

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Wheel hub - Component identification

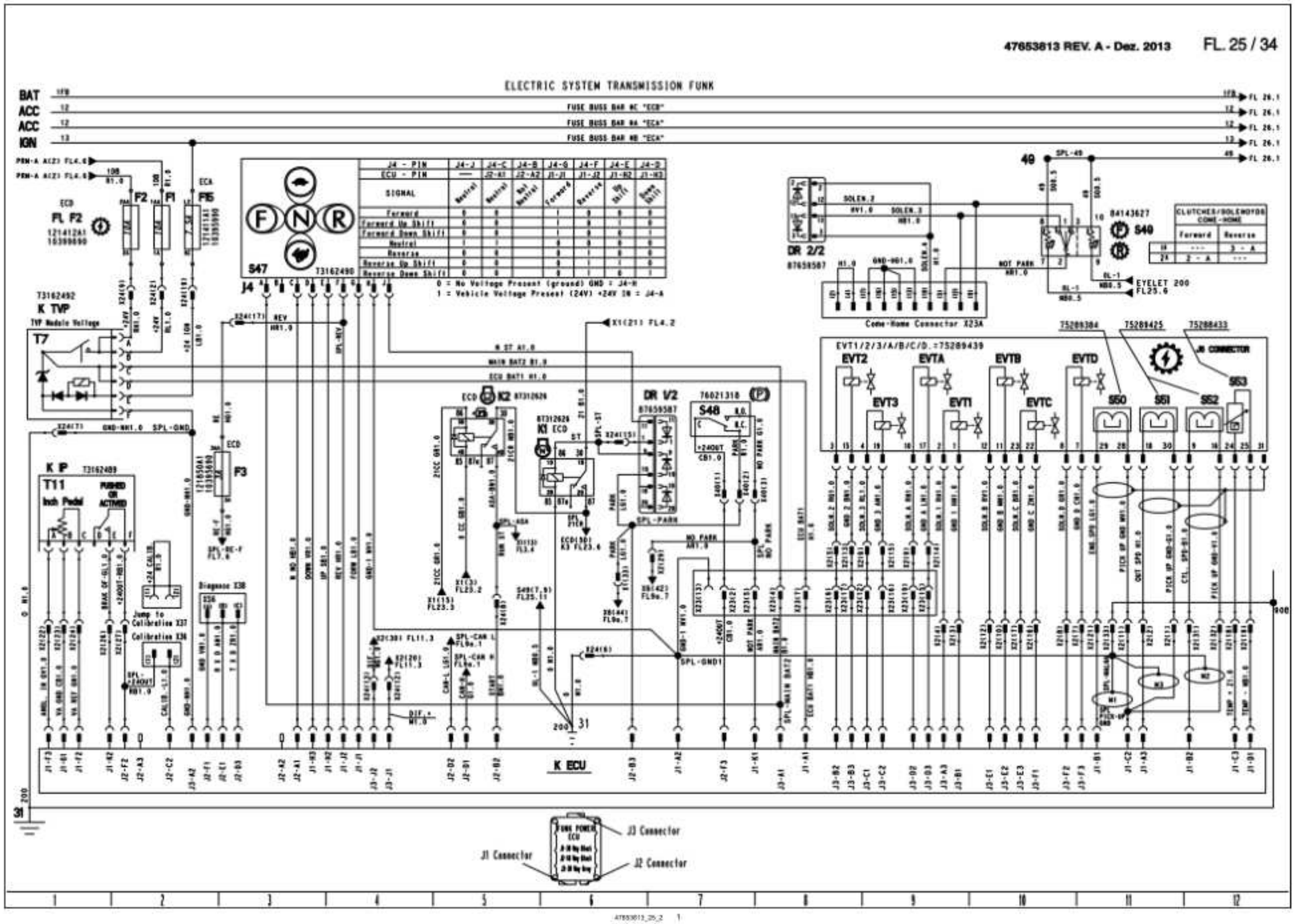
RG140.B	LA (8 x 8 direct drive) OR (6 x 3 torque converter) OR (Tier 1) OR (Tier 3-VHP)
RG170.B	LA (8 x 8 direct drive) OR (6 x 3 torque converter) OR (Tier 2) OR (Tier 3-VHP) OR (Tier 0) OR (AWD)
RG200.B	LA (8 x 8 direct drive) OR (6 x 3 torque converter) OR (Tier 2) OR (Tier 3-VHP) OR (Tier 0) OR (AWD)

Wheel Hub Assembly and Brake Section



1. Shield
2. Spring cover
3. Spring
4. Threaded pin
5. Sprocket wheel
6. Lock plate
7. Output shaft - Assembly
10. Brake disc - Assembly
11. Steel plate
12. Brake disc drum
13. Brake support
14. Brake body
15. Adjustment shim
16. Roller bearing
19. Screw
20. Circlip
21. Retainer
22. Retainer
23. Circlip
24. Circlip
25. O-Ring

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