SERVICE MANUAL

RG140.B / RG170.B / RG200.B

Motor Grader

Part number 48050423
English
January 2017

NEW HOLLAND CONSTRUCTION

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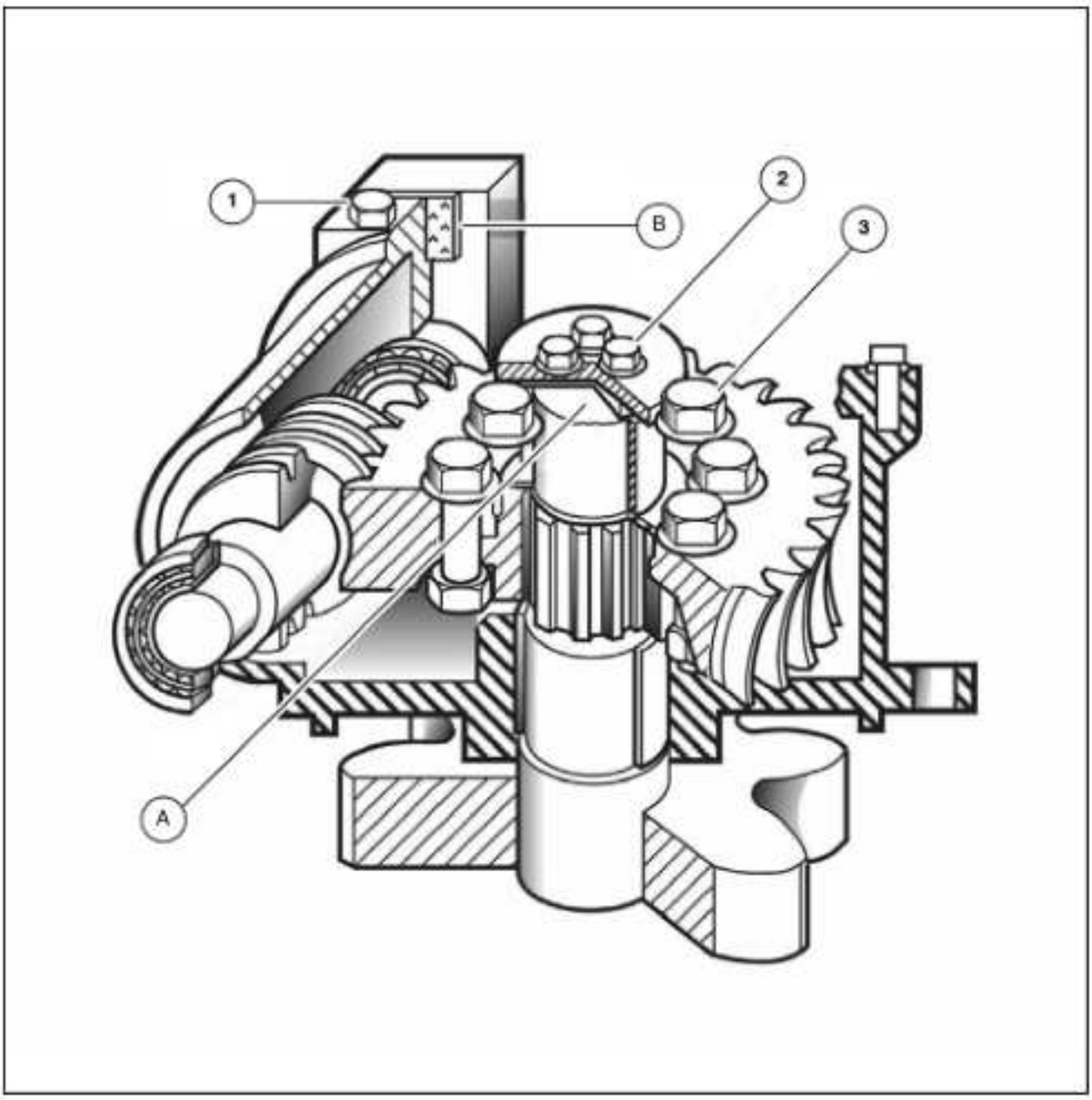
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Frame - Service instruction

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

Turning Circle Assembly



LA3L11MG3511G0A 1

A. Install the shims as required to obtain a clearance at the end of **0.0 – 3.3 mm** (**0.00 – 0.13 in**). Do not apply a pre-load.
B. With the worm gear removed, install shims to obtain a rotation torque of **9.4 – 0.9 N·m** (**6.9 – 0.7 lb ft**) on the bearings.

Torques

1. One position – **12.20 – 13.65 daN** (**90 – 100 lb ft**)
   Five positions – **15.60 – 17.60 daN** (**115 – 130 lb ft**)
2. **4.70 – 5.40 daN** (**35 – 40 lb ft**)
3. **47.40 – 50.80 daN** (**350 – 375 lb ft**)

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Air conditioning - Troubleshooting

RG140.B ZF transmission, Tier 1 [NAAF08000 -]
RG140.B Torque converter transmission, TIER 3 [NAAF08001 -]
RG170.B Torque converter transmission, TIER 3 [NAAF09000 -]
RG200.B Direct drive transmission, TIER 3 [NAAF11000 -]
RG200.B Torque converter transmission, TIER 3 [HBZN0200TBAF00511 -]

NOTICE: *All repairs that involve the coolant load being collected/applied must be carried out by technical assistance.*

Problem	Possible Cause	Correction
Low suction pressure Pressure reading with: Low suction and Discharge normal	Suction hose obstructed or blocked	Check and replace hose
High suction pressure Pressure reading with: High suction and Discharge normal	Low compressor performance	Check and replace the compressor
High suction pressure Pressure reading with: High suction and Discharge high	Insufficient air flow through the condenser	Clean and straighten the vanes
Low discharge pressure Pressure reading at: Normal suction and Low discharge	Low air flow in the evaporator	Clean and straighten the vanes
	Low refrigerant charge	Charge following good practices (until the bubbles in the liquid reservoir disappear)
High discharge pressure Pressure reading with: Normal to high suction and Discharge high	Air in the system	Load new coolant gas
	Excess coolant gas	Load new coolant gas
Insufficient cooling Pressure reading at: Suction normal to high and Discharge normal	Humidity in the system	Replace the liquid reservoir and add new coolant charge
	Excess oil	Remove the charge, clean the system, and recharge. Add **150 ml** of oil
Insufficient cooling Pressure reading with: Suction normal to high and Discharge normal	Humidity in the system	Replace the liquid reservoir and add new coolant charge
	Excess oil	Remove the charge, clean the system, and recharge. Add **150 ml** of oil
Insufficient cooling Pressure reading with: Low suction and Low discharge	Insufficient refrigerant charge	Check and eliminate any leaks. Install a new refrigerant charge
Insufficient cooling Pressure reading with: Low vacuum suction and Low discharge	Obstruction of the liquid reservoir	Replace the liquid reservoir and add new coolant charge
Insufficient cooling Pressure reading with: Zero vacuum suction and Low discharge	Obstructed expansion valve	Replace the expansion valve

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Electrical system - Electrical schematic sheet 18

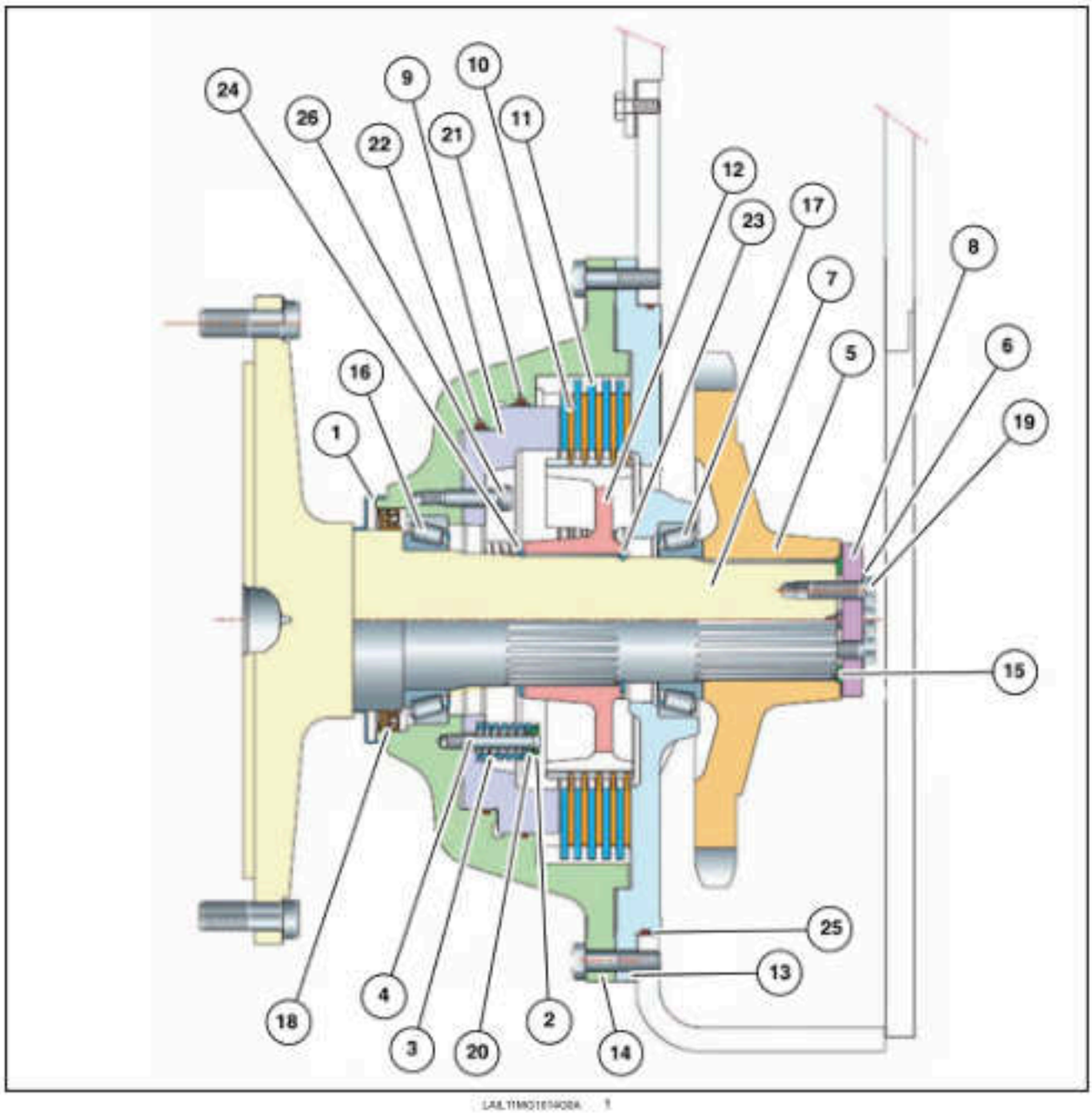
RG140.B	LA 6 x 3 torque converter — LA 8 x 8 direct drive — LA Tier 3-VHP — LA Tier 1
RG170.B	LA 6 x 3 torque converter — LA 8 x 8 direct drive — LA Tier 0 — LA Tier 2 — LA Tier 3-VHP
RG200.B	LA 6 x 3 torque converter — LA 8 x 8 direct drive — LA Tier 0 — LA Tier 2 — LA Tier 3-VHP

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Wheel hub - Component identification

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

Wheel Hub Assembly and Brake Section

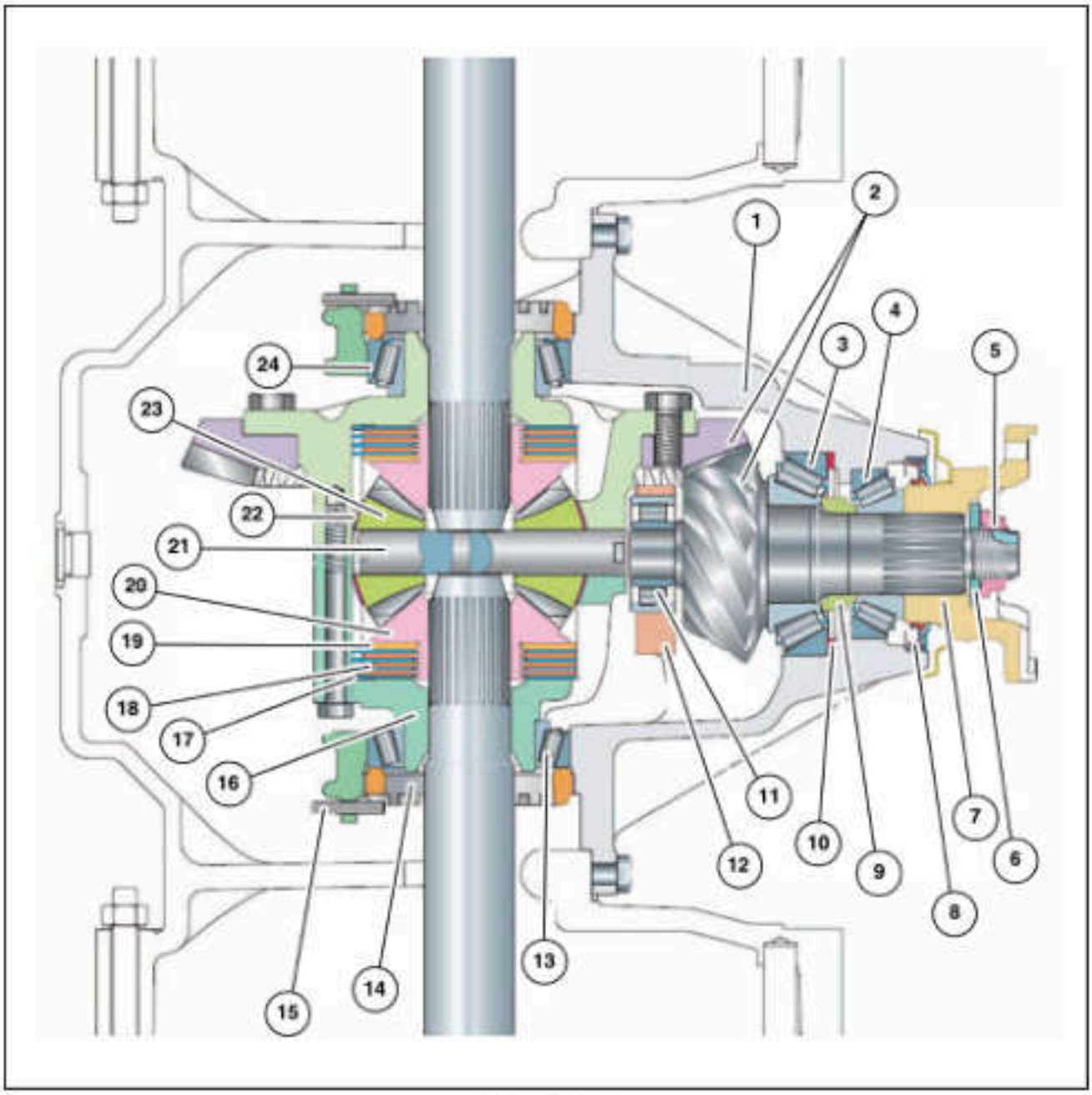


1. Shield
2. Spring cover
3. Spring
4. Threaded pin
5. Sprocket wheel
6. Lock plate
7. Output shaft - Assembly
10. Brake disc - Assembly
11. Steel plate
12. Brake disc drum
13. Brake support
14. Brake body
15. Adjustment shim
16. Roller bearing
19. Screw
20. Circlip
21. Retainer
22. Retainer
23. Circlip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

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Differential - Component identification

RG140.B	LA 6 x 3 torque converter — LA 8 x 8 direct drive — LA Tier 3-VHP — LA Tier 1

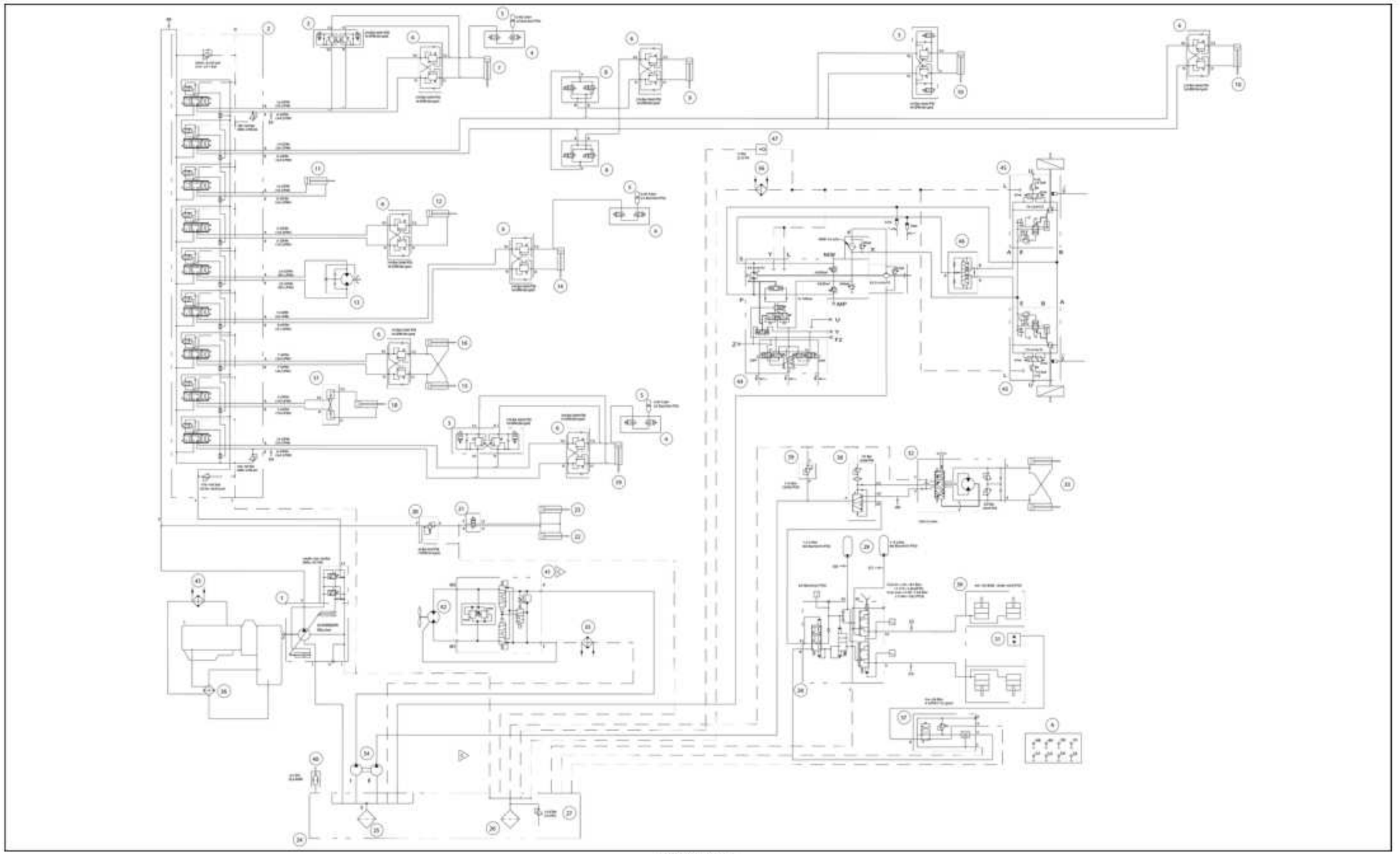


LAS.11MG19/903A 1

Differential Shaft Section

1. Differential support
2. Ring gear and pinion kit
3. Roller bearing (Tapered)
4. Roller bearing (Tapered)
5. Nut
6. Washer
7. Drive flange
8. Retainer (with lip)
9. Adjusting spacer
10. Pinion Adjusting Spacer
11. Ball bearing
13. Roller bearing (Tapered)
14. Ring nut
15. Pin
16. Differential casing
17. Steel discs
18. Clutch discs (Intermediate)
19. Clutch discs
20. Planetary gear
21. Crosshead shaft
22. Bevel Thrust Washer of Side Gear
23. Gear (Side)

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