SERVICE MANUAL

TD65F / TD75F / TD85F

Tractor

Part number 48064954

English

September 2016

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Differential - General specification

TD65F	ANZ — APAC — LA — MEA
TD75F	ANZ — APAC — LA — MEA
TD85F	ANZ — APAC — LA — MEA

Main specifications for the differential (Pinion/Crown)

	All models
Pinion/crown pair ratio	10/44 = 1:4.4 (**40 km**
Gap between the pinion/crown teeth	**0.18 – 0.23 mm**
Type of differential	with 2 planetary gears
Differential lock activation	controlled by switch on control panel
Unhitching the differential lock	hydraulic, activated by the brake pedals
Diameter of inner satellite seat **(5)**, **Mechanical transmission - Sectional view (21.114) Mechanical transmission - Sectional view (21.114)**	**25.040 – 25.061 mm**
Diameter of satellite pins **(13)**, **Mechanical transmission - Sectional view (21.114)** and **(20) Mechanical transmission - Sectional view (21.114)**	**24.939 – 24.960 mm**
Gap between satellites and their pins	**0.080 – 0.122 mm**
Diameter of planetary seats in the differential casing **(3)**, **Mechanical transmission - Sectional view (21.114)** and **Mechanical transmission - Sectional view (21.114)**	**51.100 – 51.146 mm**
Diameter of planetary hub **(17)** and **(18)**, **Mechanical transmission - Sectional view (21.114) Mechanical transmission - Sectional view (21.114)**	**50.954 – 51.000 mm**
Gap between the planetary hubs and the differential casing	**0.100 – 0.192 mm**
Adjusting the pinion position Pinion position adjustment shims **(8)**,	**1.85 mm - 1.90 mm - 1.95 mm - 2.00 mm - 2.05 mm - 2.10 mm - 2.15 mm - 2.20 mm - - 2.40 mm - 2.45 mm - 2.50 mm - 2.55 mm - 2.60 mm - 2.65 mm - 2.70 mm**
Pinion bearing adjustment	
Adjusting the bearing pre-load of the differential gap between the teeth	see **Differential - Adjust (27.106)**

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Power steering pump - Assemble

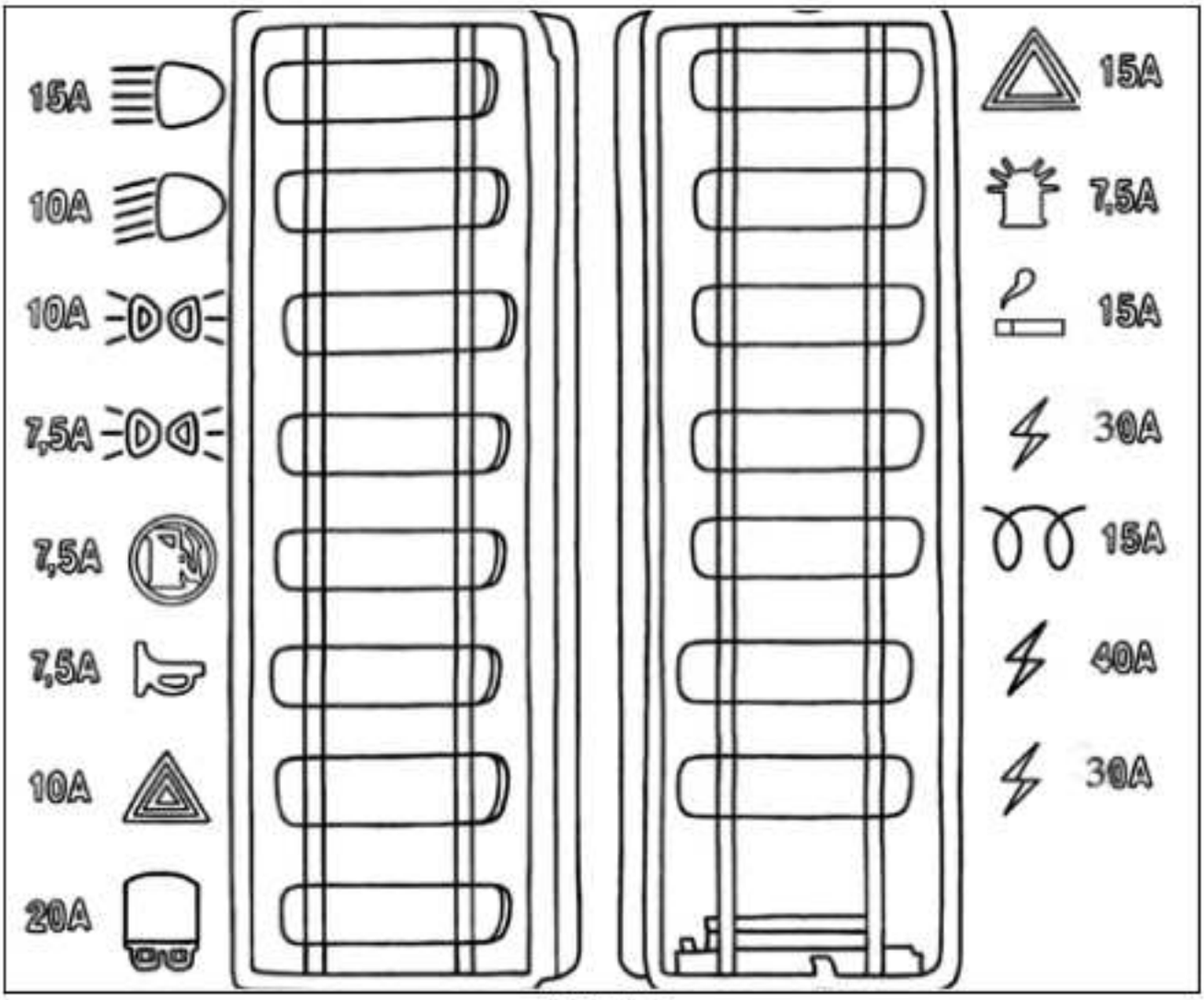
Assembly

1. Carry out the assembly as follows:
   A. Install the pump, carrying out the disassembly procedures in reverse order.
   B. Keep working areas and parts thoroughly clean. Any foreign body inside the pump could cause serious damage.
   C. Fit parts **(3)**, **(5)**, and **(6)**, aligning the positioning marks made before disassembly **Power steering pump - Disassemble (41.206)** (see step 4).
   D. Assemble the gear bushings **(6)** on the pump body so that the cover **(8)** on the outer bushing perimeter is aligned with the distribution line **(M)** and the lubrication fitting faces are in contact with the gears.
   E. Fit the plastic support ring **(2)** in the centre of the O–ring sealant **(2)**.
   F. Install the sealants **(9)**and **(11)** on the front cover **(1)**, together with the spacers and fill the cavity between the sealing points with industrial petroleum jelly grease.
2. Install the pump on the tractor. Fill the suction tube and pump with **NEW HOLLAND AMBRA GR-9 MULTIPURPOSE GREASE** oil to help compression and avoid the risk of breakage during initial operation.

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Fuse and relay box - Component identification

Fuses on models



Fuses	Protected circuits	Amp
1	Main beam head	15 A
2	Dipped beam headlights	10 A
3	Front right and rear left side lights	10 A
4	Front left and rear right side lights	7.5 A
5	Sedimentation filter circuit	7.5 A
6	Horn	7.5 A
7	Hazard warming lights	10 A
8	Engine shut down solenoid	20 A
9	Hazard lights	15 A
10	Beacon	7.5 A
11	Cigar lighter	15 A
12	Free	30 A
13	Thermostat	15 A
14	Free	40 A
15	Free	30 A
16	Free	

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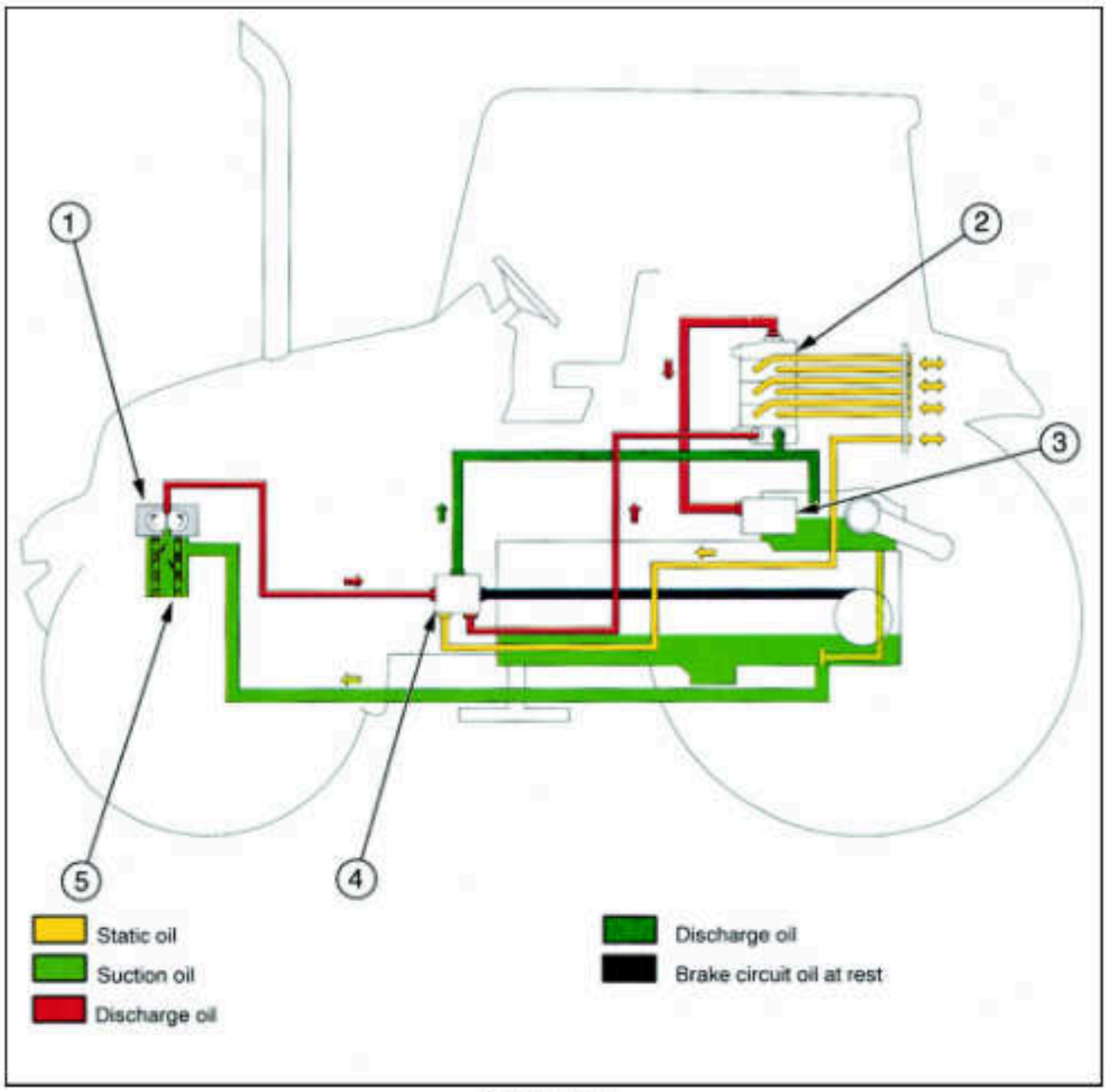
Rear three-point hitch - Dynamic description

The mechanical lift can operate with controlled position or draft control and with a combination of the two.

The lift is controlled by two levers located on the operator's right. It also features the Lift–O–Matic device which raises and lowers the implement without the need to use the position and draft control levers.

Draft control is actuated by the flex bar positioned in the special box mounted under the rear transmission.

The lower lift arms and corresponding control rods are connected to the flex bar.



Hydraulic lift circuit

1. Hydraulic pump
2. Auxiliary control valves
3. Hydraulic lift control valve
4. Trailer brake valve
5. Filter.

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Operating steps of the auxiliary control valve for the dual-acting cylinder (Fig. 3 and Fig. 4) and single-acting cylinder (Fig. 5 and Fig. 6)

Lifting: When the lever is pulled back, the valve spool **(2)** moves to connect: the pressure line **(P)** to the lower chamber of the cylinder by the line **(A)**, and the exhaust line **(T)** by the line **(B)**, intercepting the supply of oil to the lift control valve. Keep the lever back to extend the full cylinder stroke. When the lever is released, it will automatically return to the neutral position, under the action of the return spring, and the full pump flow will be sent to the lift control valve by the line **(P)**.

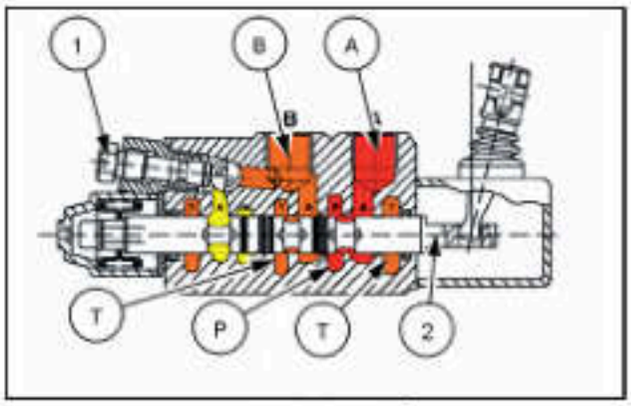
Lowering: To lower the implement, move the lever forward. The spool **(2)** will move to the position indicated in Fig. **4**, which allows oil in the lower chamber to flow to the exhaust **(T)** through the line **(A)**. The upper chamber is connected to the pressure line **(P)** by the **(B)**.

Lifting: When the lever is pulled back, the valve spool **(2)** fig. **5**, moves to connect the cylinder with the pressure line **(P)** from the line **(A)**. The line **(C)**, for control of single-acting cylinders, is used in this step since it is permanently connected to the exhaust **(T)** from the open position of the shift valve **(1)**.

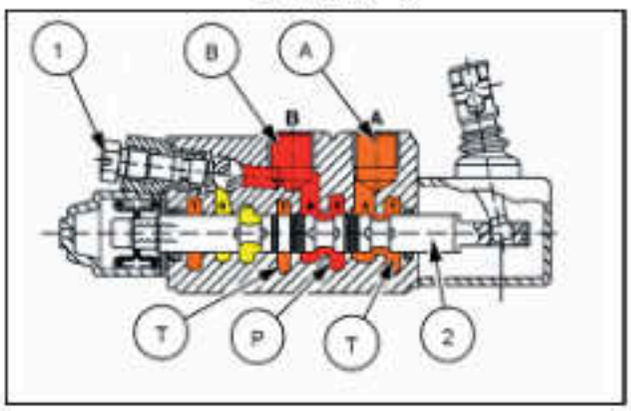
Lowering: When the lever is moved forward, the spool **(2)** will move as indicated by fig. **6**. The oil contained in the cylinder, pressurized by the weight of the implement lifted, will flow to the exhaust **(T)** through the line **(A)**. The full flow of the pump is transported to the exhaust **(T)** by the line **(B)**.

- Pressure Oil
- Suction, discharge, or return oil
- Static oil

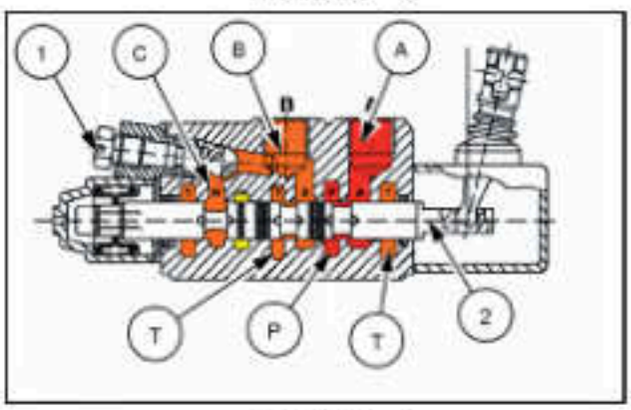
NOTE: *To operate a dual-action cylinder, tighten the bolt **(1)** completely. To operate a single-action cylinder, unscrew the bolt completely **(1)**.*



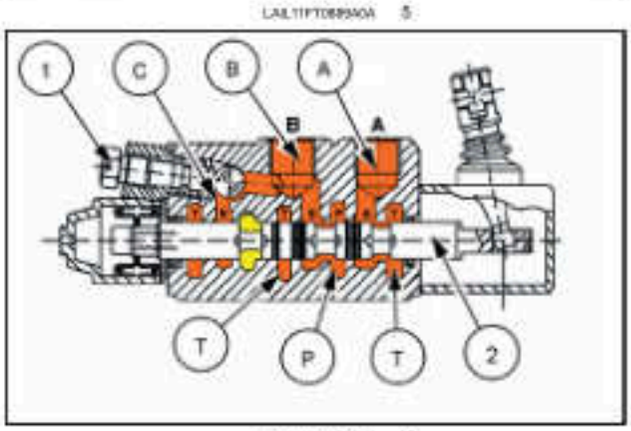
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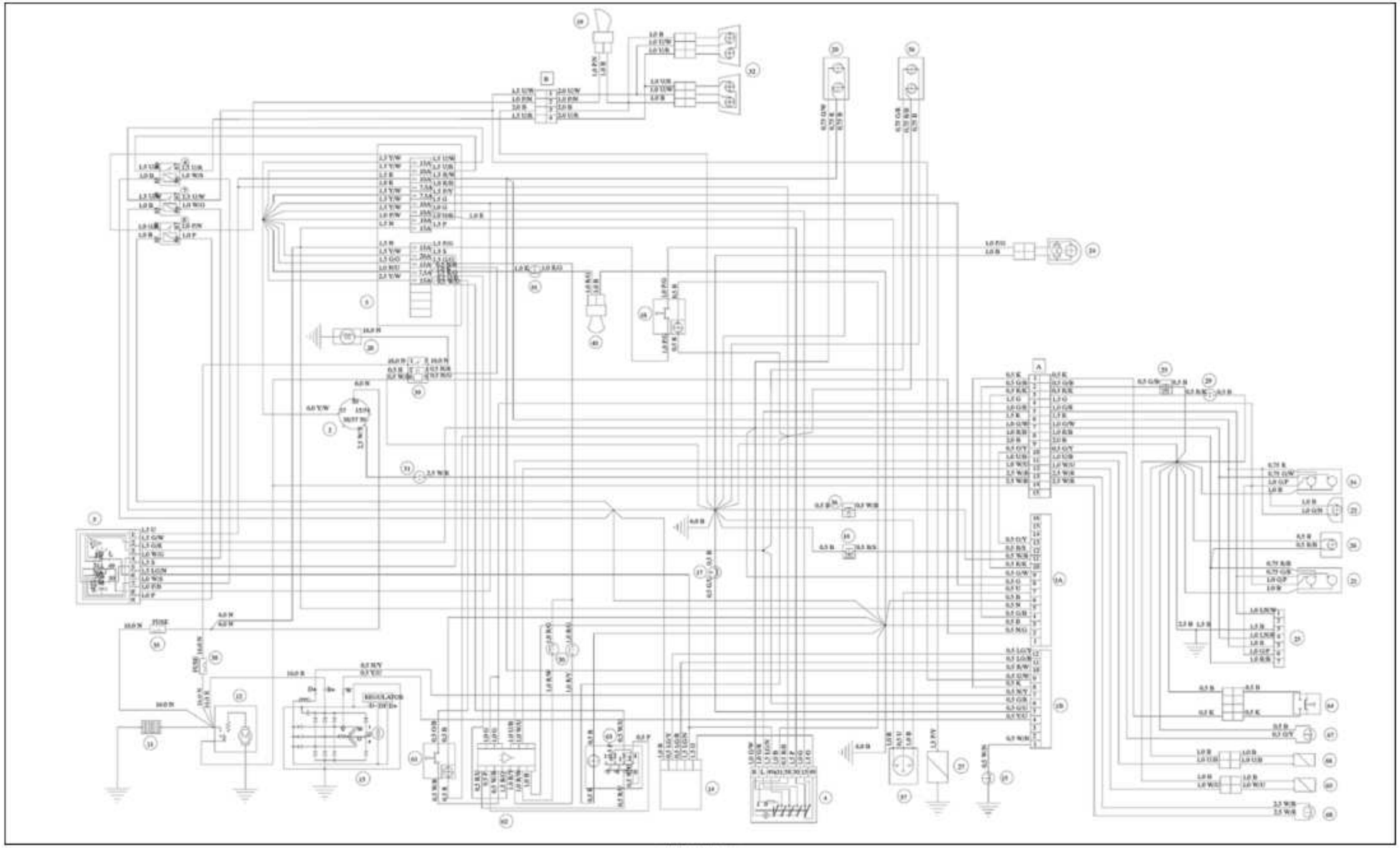


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