SERVICE MANUAL

TD95D HC

Tractor

Part number 48013264

English

August 2016

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Brakes and controls generic sub-group - Troubleshooting

Problem	Possible Cause	Correction
Braking ineffectual	Friction material on brake discs worn	Replace the brake discs
Unbalanced braking	Incorrect tyre pressure	Inflate the tyres to the correct pressure
	Friction material on one of the brake discs worn	Replace the discs
Braking noisy	Friction material on brake discs worn	Replace the discs
Parking brake does not lock	Brake discs worn	Replace the brake discs
Brakes locked on when the parking brake is disengaged	Brake discs seized on brake discs	Release and replace damaged parts

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Main specification of implement hitching device

Type	Three-point linkage
Category: All models Draft control	 2 By means of lower arms with flex bar
Maximum liftable load with centre of gravity **610 mm** (**24.0157 in**) from the lower arm link ends: with arms horizontal (with top link connected to hole on upper support): TD95 HC model	 **2700 kg (5952.48 lb)**
Maximum liftable load: with arms horizontal (with top link connected to upper support pin): TD95 HC model	 **3565 kg (7859.48 lb)**
Flex bar diameter: TD95 HC model Axial clearance of flex bar	 **24.867 - 24.900 mm (0.9790 - 0.9803 in)** **1.2 - 4.1 mm (0.0472 - 0.1614 in)**

Main specification of hydraulic pump (all models)

Filter Type Location	 Paper cartridge Fixed to the pump housing on suction side
Pump Type Location Construction Model Operation Direction of rotation (as seen from drive side) Engine speed to pump speed ratio Maximum speed of pump rotation (with engine at maximum power equivalent to **2500 RPM**) Bench output at **1450 RPM** and pressure of **172 bar** (**2494 psi**): For new or reconditioned pump For worn pump Test oil temperature Test oil viscosity	 Gear type with oil suction from transmission casing Flanged on the rear left-hand side of the engine BOSCH A31 By means of the engine gears Left (counter clockwise) 1 : 0.931 **2328 RPM** (**19000 cm³ (1159.5 in³)**)/min. (**13299 cm³ (811.6 in³)**)/min. **55 - 65 °C (131 - 149 °F)** **SAE 20**
Driven and driving gear shaft diameter Internal diameter of seats in supports Clearance between gear shafts and their seats Maximum clearance due to wear	**17.400 - 17.418 mm (0.6850 - 0.6857 in)** **17.450 - 17.470 mm (0.687 - 0.6878 in)** **0.032 - 0.070 mm (0.0013 - 0.0028 in)** **0.1 mm (0.0039 in)**
Radial clearance of gears in pump body Maximum wear on pump body, suction side, at position of gears	**0.020 - 0.064 mm (0.0008 - 0.0025 in)** **0.1 mm (0.0039 in)**
Width of gears **(5)** (Fig. 104) Width of supports **(4)** and **(6)** Width of pump body **(3)** for gear seats and supports Axial clearance of gears complete with supports in pump body (recondition if necessary)	**24.000 - 24.015 mm (0.9449 - 0.9455 in)** **24.490 - 24.510 mm (0.9642 - 0.965 in)** **73.135 - 73.160 mm (2.8793 - 2.8803 in)** **0.100 - 0.180 mm (0.0039 - 0.0071 in)**

Lift hydraulic pump (optional) data

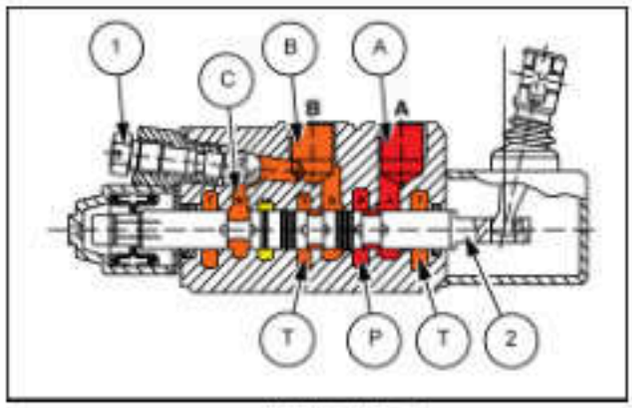
Filter Type Location	 Paper cartridge Fixed to the pump housing on suction side

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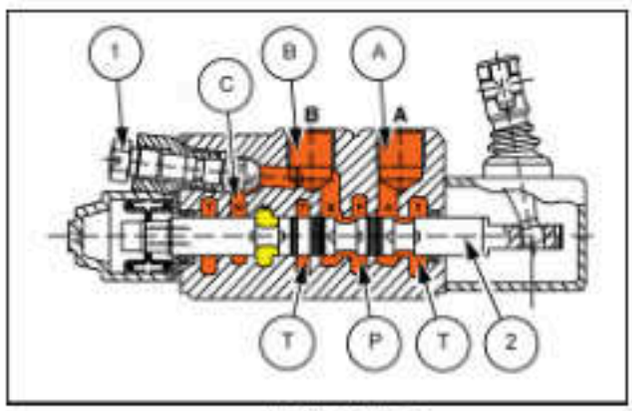
2	Starter switch	41	Rear working lamps
5	Fuse box	42	Front working lamps
11	Battery	56	Main harness — Switch harness connection connectors, 15 ways black
12	Starter	57	Main harness — Switch harness connection connectors, 8 ways
35	Main fuse	58	Main harness — Switch harness connection connectors, 4 ways
37	Relay box	64	Switch harness — Driver cab harness connection connectors, 4 ways
38	Fuse box	65	Switch harness — Driver cab harness connection connectors, 2 ways
40	Switches		

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4. LOWERING - On pushing the control lever forward, the spool **(2)** will move to the position indicated in Fig. 7. The oil contained in the cylinder, pressurised by the weight of the lifted implement, will flow to the exhaust **(T)** by way of line **(A)**, while the entire flow from the pump is also conveyed to the exhaust **(T)** through the line **(B)**.



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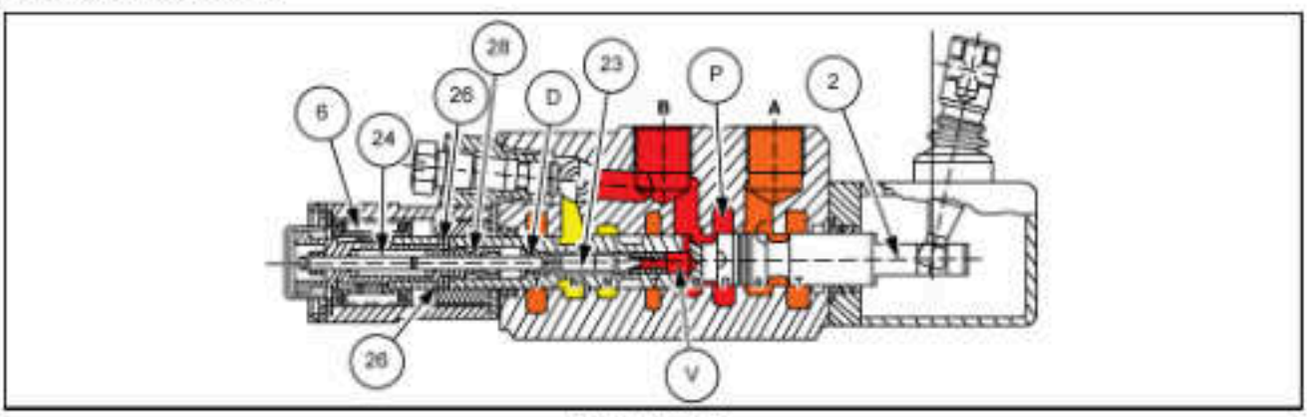
Pressurised oil

Suction, delivery or exhaust oil

Static oil

NOTE: *To operate a double-acting cylinder, tighten screw **(1)** fully home. To operate a single-acting cylinder, fully undo screw **(1)**.*

Operating stages of auxiliary control valve operating a double-acting cylinder with automatic detent release



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Pressurised oil

Suction, delivery or exhaust oil

Static oil

Lifting

On pulling back the control lever, the spool **(2)** moves and the detent balls **(26)** engage the groove, where they are held in place by the support **(28)** and spring **(24)**. The movement of the spool **(2)** connects: The pressure line **(P)** with the line **(B)**, and also the upper cylinder chamber with the exhaust line **(T)** by way of line **(A)**, intercepting the supply of oil to the hydraulic lift control valve.

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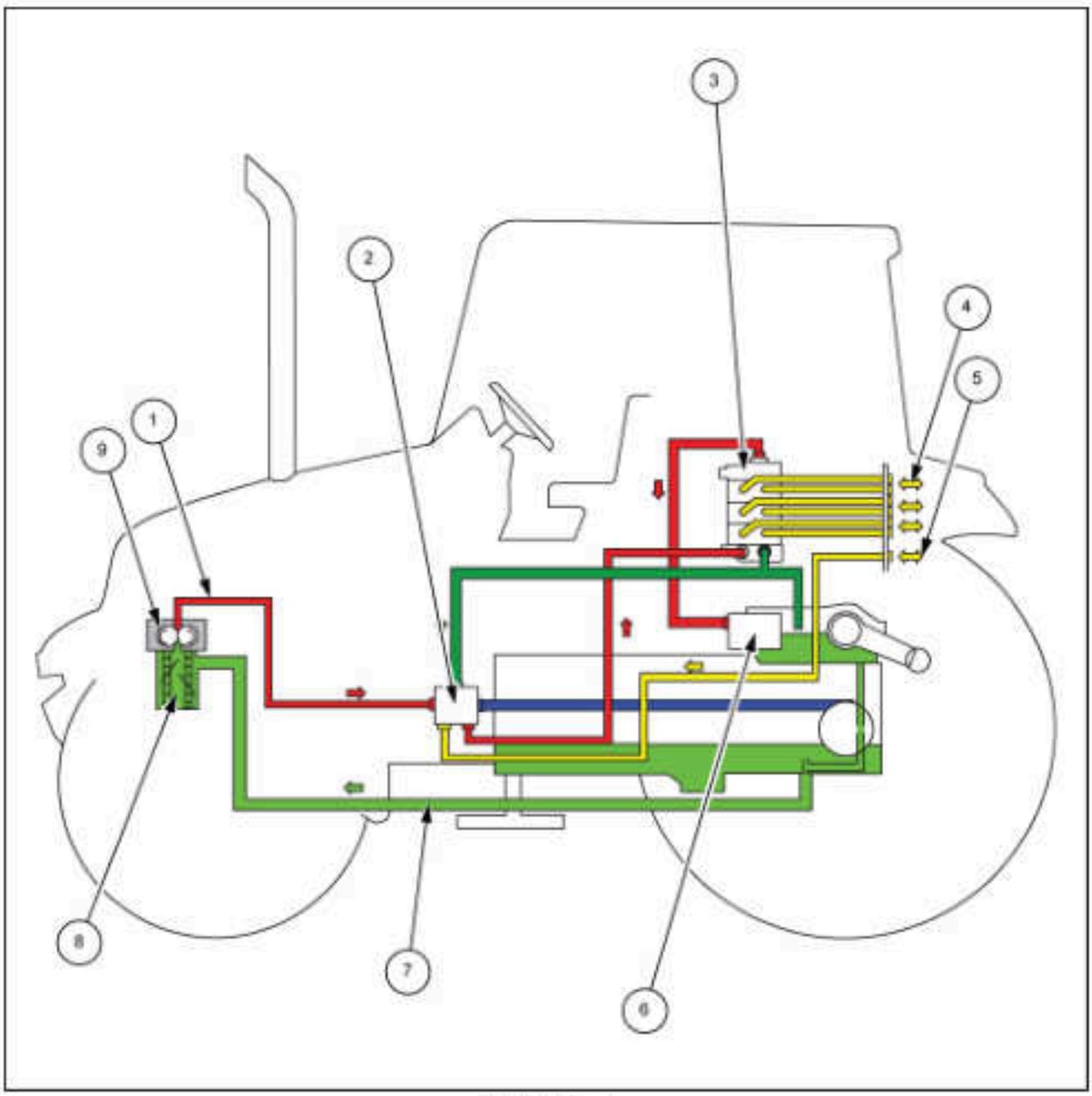
Hydraulic systems - Dynamic description

Hydraulic lift circuit

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.

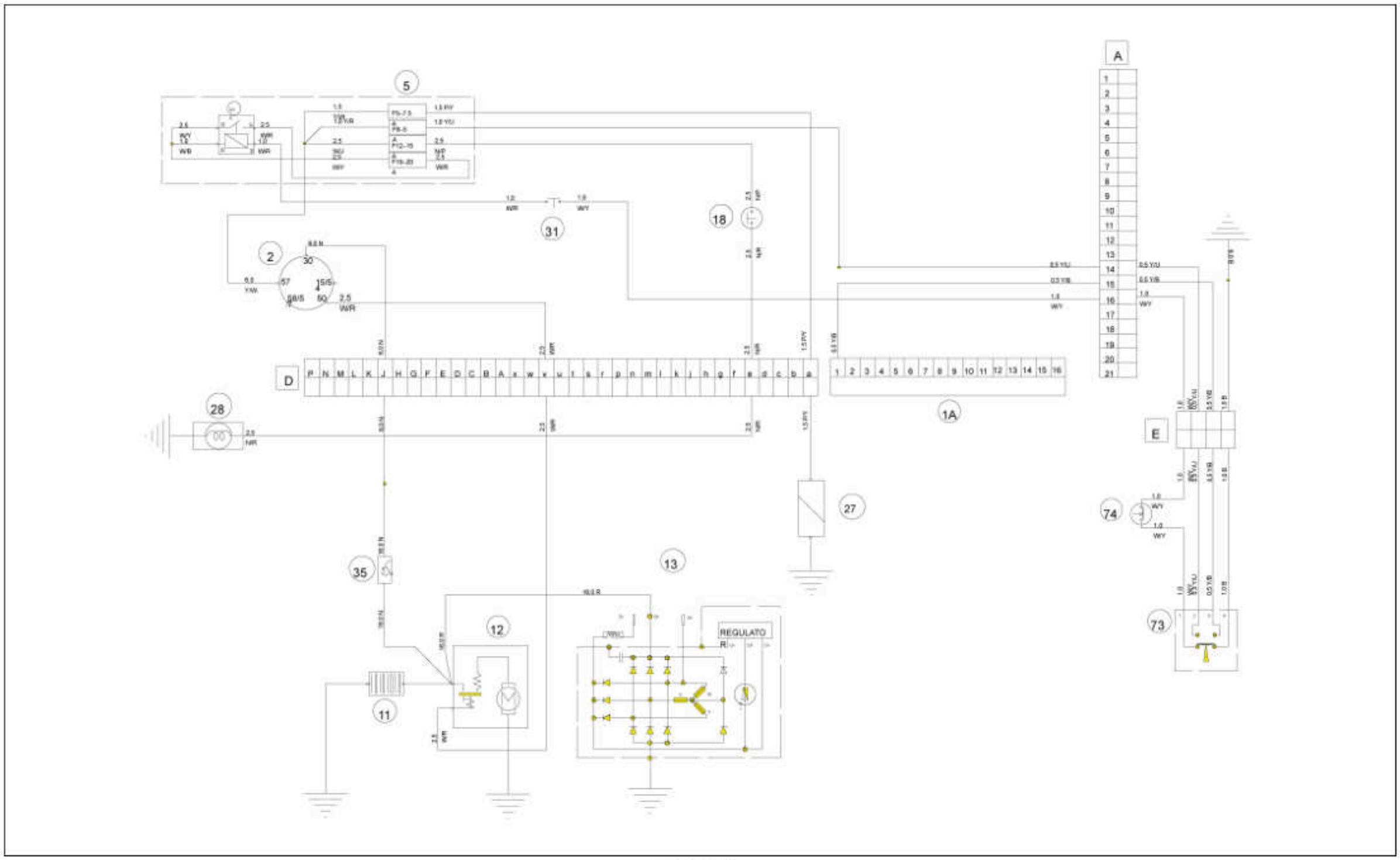
Draft control is actuated by the flex bar positioned in the special box mounted under the rear transmission.

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



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