Approved
Y4R 2026-6 BE-LU

BULLETIN

921-0000010B OM
Operation Manual

Q-ty of sheets 9
Sheet 1

GROUND: customer requirement

BULLETIN Y4R 2026-6	TRACTOR MODEL	921/921.2/921.3/921.3 with modernized transmission/921.4

Abstract

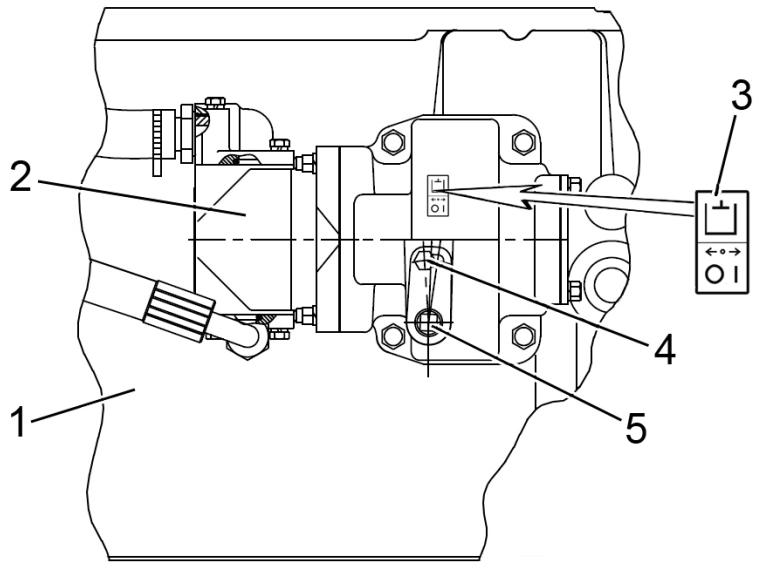
This operation bulletin provides the following information:

- new control rules for the sections of the HLL and FLL distributor are presented;
- information on design changes of the HLL is provided;
- the procedure for maintenance operations of the hydraulic lift linkage has been refined.

Content of changes

Section 2 “Controls and instruments”
Subsection 2.20 “HLL pump control” – replace Figure 2.20.1 “HLL pump control”.

The figure available



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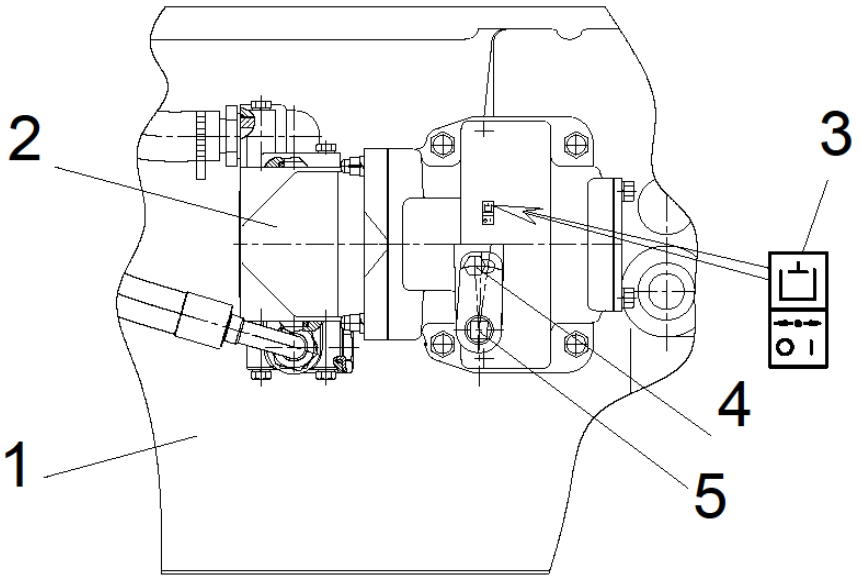
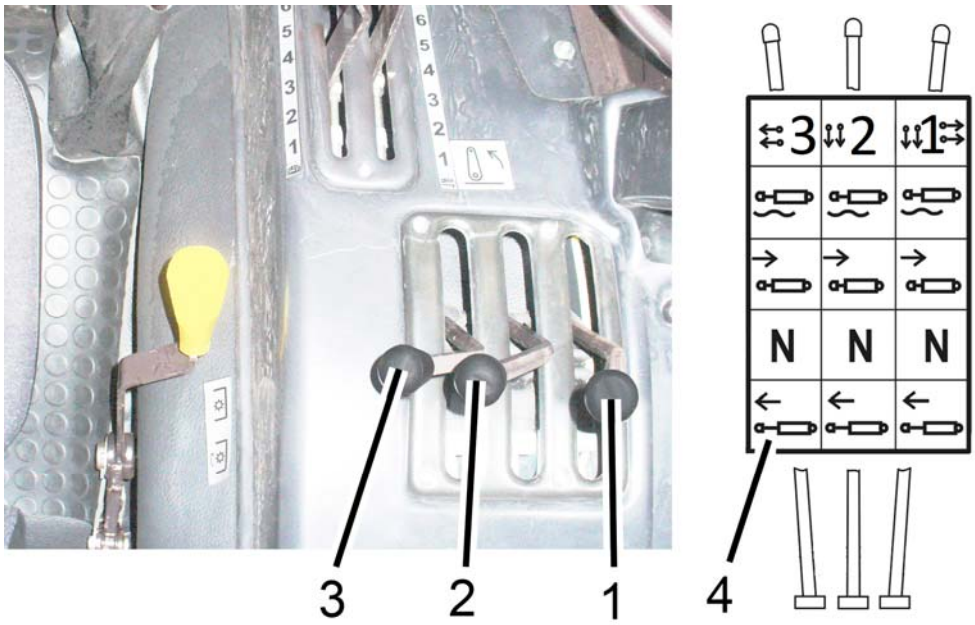


Rewrite subsection 2.21 "Control of HLL distributor sections (remote cylinders)" as follows:

2.21 Control of HLL distributor sections (remote cylinders)

The controls for remote hydraulic cylinders with the RP70-921 distributor installed are shown in Figure 2.21.1.



1, 2, 3 – handles to control HLL distributor outlets (remote cylinders); 4 – instruction plate with a distributor control diagram

Figure 2.21.1 – Control of remote hydraulic cylinders

Handle 1 (Figure 2.21.1) controls the right side and right rear outlets of the HLL distributor. Handle 2 controls the rear outlets of the HLL distributor. Handle 3 controls the left side outlets of the HLL distributor.
Note – The rear outlets are located on the HLL distributor body.
Each of the three handles 1, 2, 3 of the distributor has four positions:
- "Floating" – extreme forward fixed position;
- "Forced lowering" – middle forward non-fixed position between the "Floating" and "Neutral" positions. In the "Forced lowering" position with the engine running, hold the handle by hand, because when released the handle automatically returns to the "Neutral" position;
- "Neutral" – middle rear fixed position;
- "Lifting" – extreme rear position. Non-fixed position for handles 1 and 3, fixed position for handle 2. Handle 2 has a detent without auto-return to the "Neutral" position. Therefore, when operating with handle 2 that controls the spool of the left rear outlets in the "Lifting" position, to avoid overheating of the hydraulic system and premature failure of the pump and other HLL components, after completing the operation do not forget to set the control lever of this spool to the "Neutral" position. In the "Lifting" position, handles 1 and 3 should be held by hand, because when released the handle automatically returns to the "Neutral" position.

The layout and connection diagram of the distributor outlets to external consumers on BELARUS-921/921.2/921.3/921.4 tractors is shown in Figure 2.21.2.

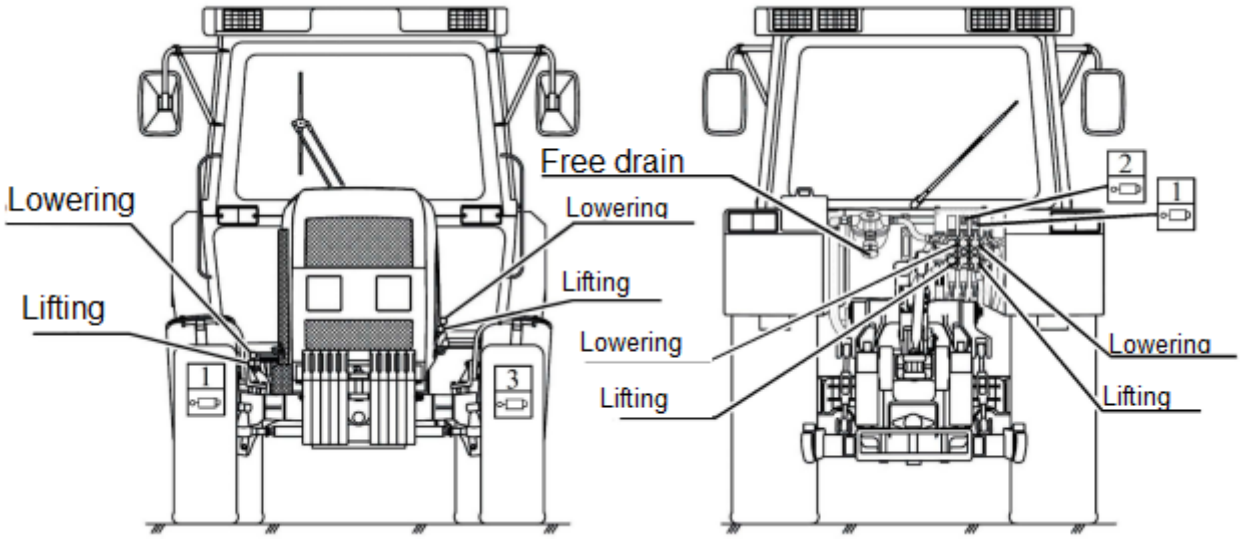


Figure 2.21.2 – Layout and connection diagram of distributor outlets

Rewrite subsection 2.22 "Front lift linkage control" as follows:

2.22 Front lift linkage control

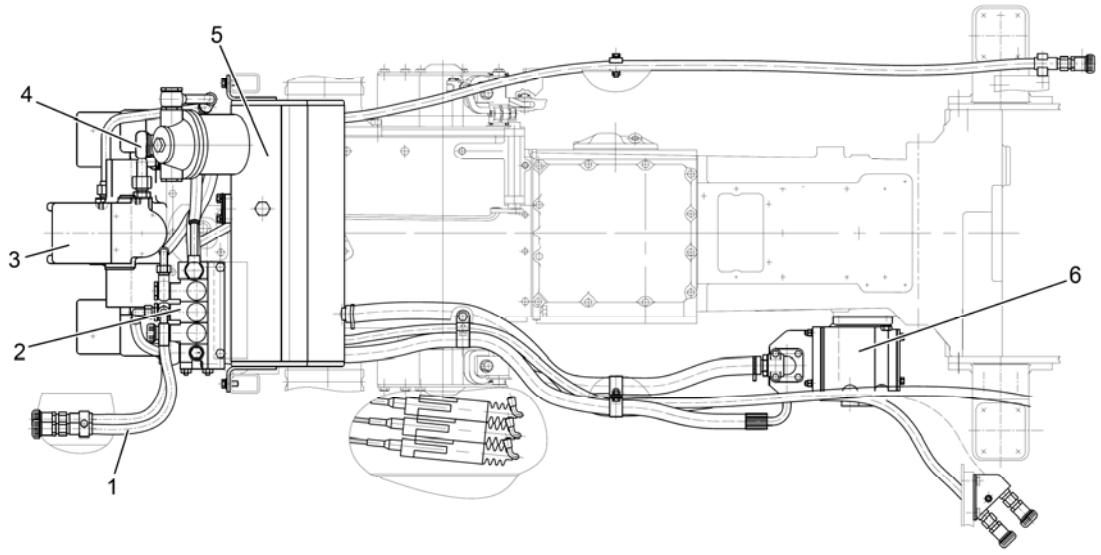
On BELARUS-921/921.2/921.3/921.3 with modernized transmission/921.4 tractors, a front lift linkage can be installed upon order. The front lift linkage is installed only when the tractor is fitted with front tires 12.4L-16 and rear tires 14.9R30.

The front lift linkage is controlled by handle 3 (Figure 2.21.1). The rules for controlling the distributor outlets are given in subsection 2.21 "Control of HLL distributor sections (remote cylinders)".

Note – The hoses for controlling the front lift linkage (FLL) are connected to the left side outlets of the HLL distributor."

Subsection 3.11 "Hydraulic lift linkage" – replace Figure 3.11.1 "Hydraulic lift linkage".

The figure available



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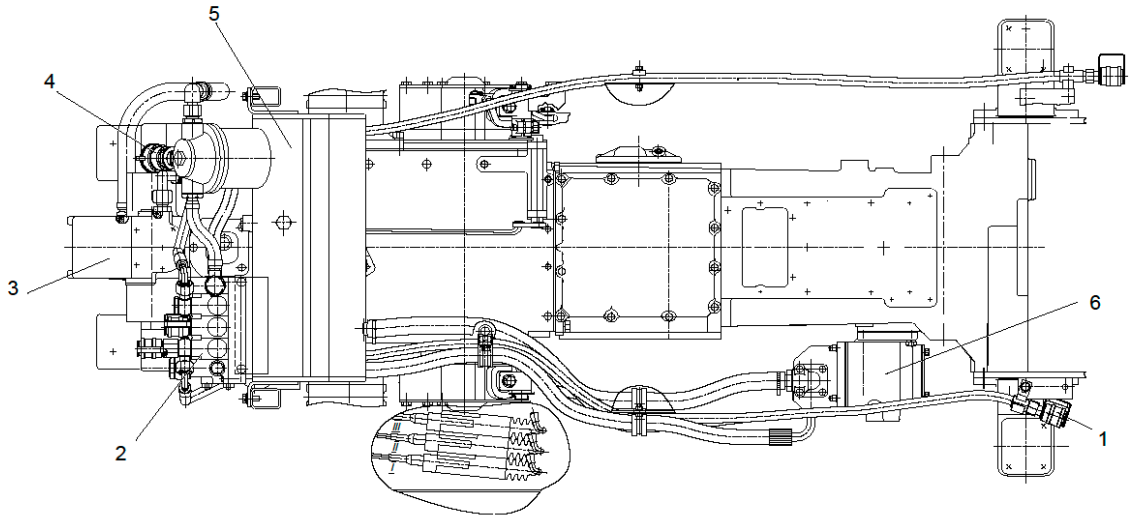
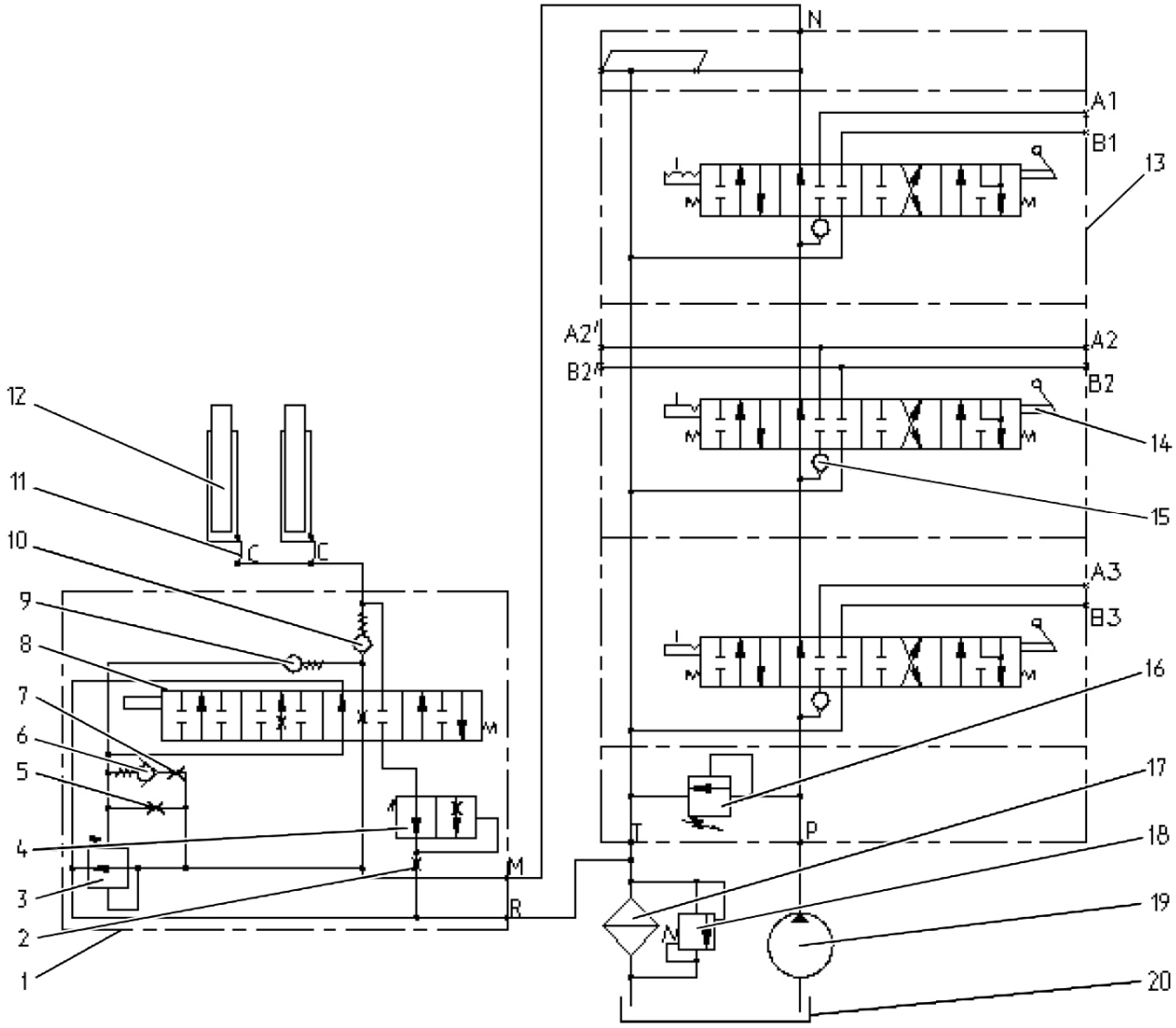


Subsection 3.11 "Hydraulic lift linkage" – replace Figure 3.11.2 "Schematic hydraulic diagram of HLL with RP70-921 distributor installed".

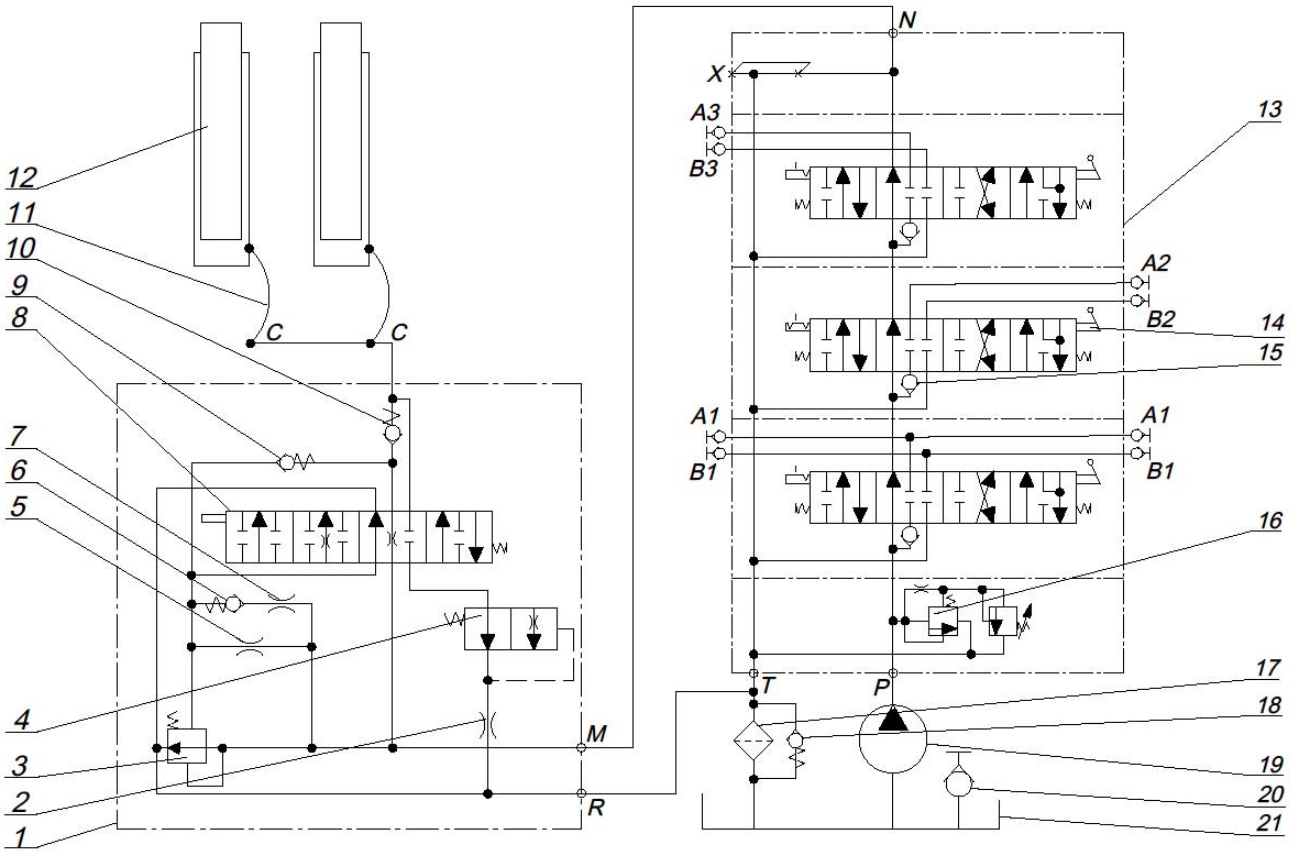
The information available



1 – hydraulic lift distributor; 2 – slowdown valve orifice; 3 – unloading valve; 4 – slowdown valve; 5 – bypass valve orifice; 6 – shut-off valve;7 – shut-off valve orifice; 8 – spool; 9 – equalizing valve;10 – check valve;11 – hose; 12 – cylinder; 13 – RP70-921 distributor; 14 – spool; 15 – check valve;16 – relief valve; 17 – hydraulic system filter; 18 – filter valve; 19 – pump;20 – tank

Figure 3.11.2 – Schematic hydraulic diagram of HLL with RP70-921 distributor installed

To be replaced with



1– hydraulic lift distributor; 2 – slowdown valve orifice; 3 – unloading valve; 4 – slowdown valve; 5 – bypass valve orifice; 6 – shut-off valve; 7 – shut-off valve orifice; 8 – spool; 9 – equalizing valve; 10 – check valve; 11 – hose; 12 – cylinder; 13 – RP70-921 distributor; 14 – spool; 15 – check valve; 16 – relief valve; 17 – hydraulic system filter; 18 – filter valve; 19 – pump; 20 – free drain; 21 – tank

Figure 3.11.2 – Schematic hydraulic diagram of HLL with RP70-921 distributor installed

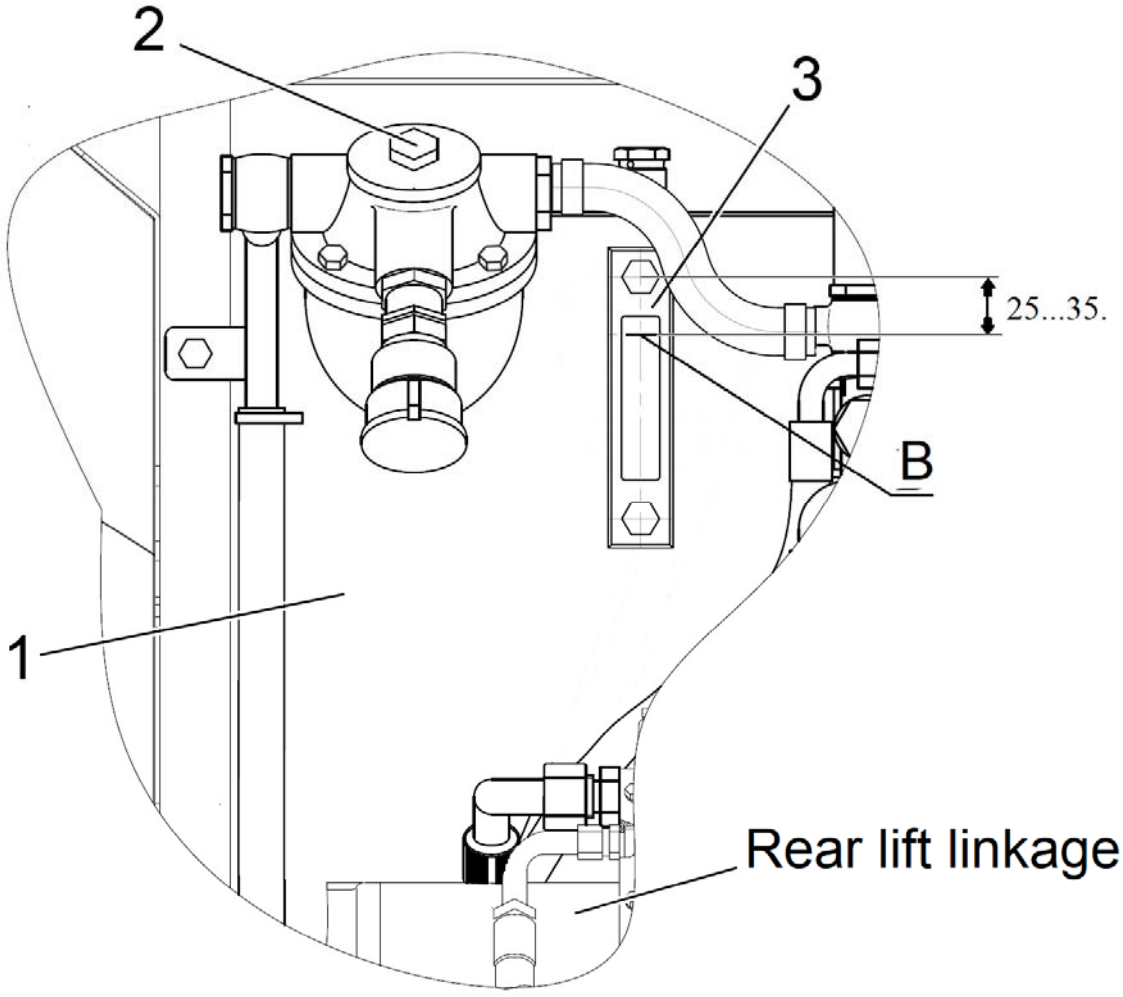
Section 6 "Maintenance" – rewrite subsection 6.4.1.5 "Operation 4. Check of oil level in HLL tank" as follows:

6.4.1.5 Operation 4. Check of oil level in HLL tank

Before checking the oil level, place the tractor on a level horizontal surface. Lower the RLL links to the lowest position, stop the engine and secure the tractor with the parking brake.

Visually check the oil level using the oil level indicator 3 (Figure 6.4.4) on tank 1 at the rear of the tractor. The level should be at distance A. If necessary, top up oil to the specified level B through the oil filler opening after removing threaded plug 2.

When operating the tractor with machines that require increased oil extraction, top up an additional 2.5 to 3 liters of oil with the hydraulic cylinder rods of the attached machine retracted.



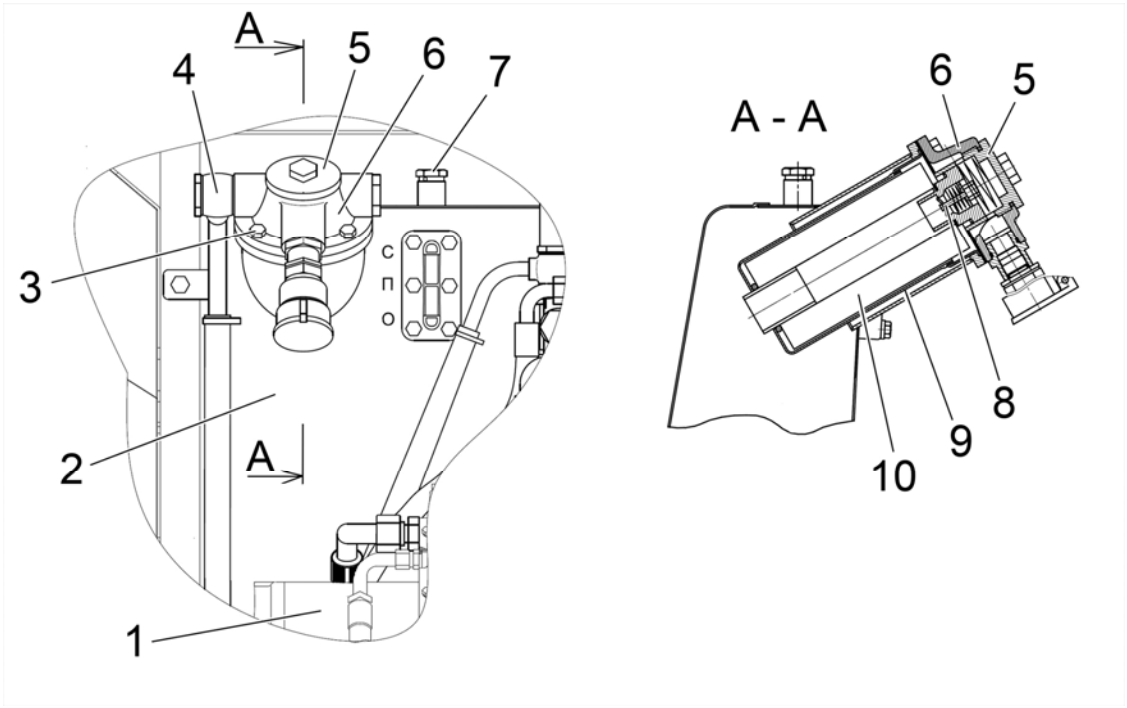
1 – HLL tank; 2 – oil filler opening plug; 3 – oil level indicator

Figure 6.4.4 – Check of oil level in HLL tank

CAUTION: THE OPERATION OF CHECKING THE OIL LEVEL IN THE HLL TANK SHALL BE PERFORMED ONLY WITH RETRACTED RODS OF THE HYDRAULIC CYLINDERS OF THE RLL AND OF MACHINES ATTACHED TO THE TRACTOR!

Subsection 6.4.4.13 "Operation 51. Replacement of filter cartridge and washing of breather in HLL tank" – replace Figure 6.4.38 "Replacement of filter cartridge in HLL tank"

The figure available



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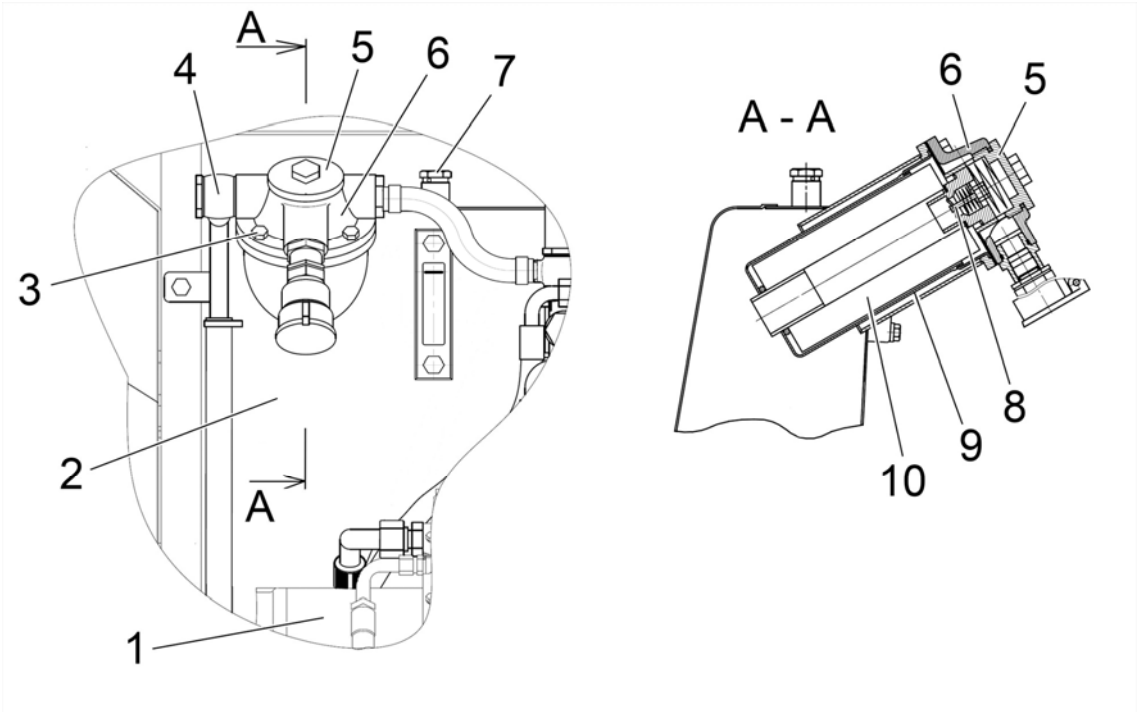


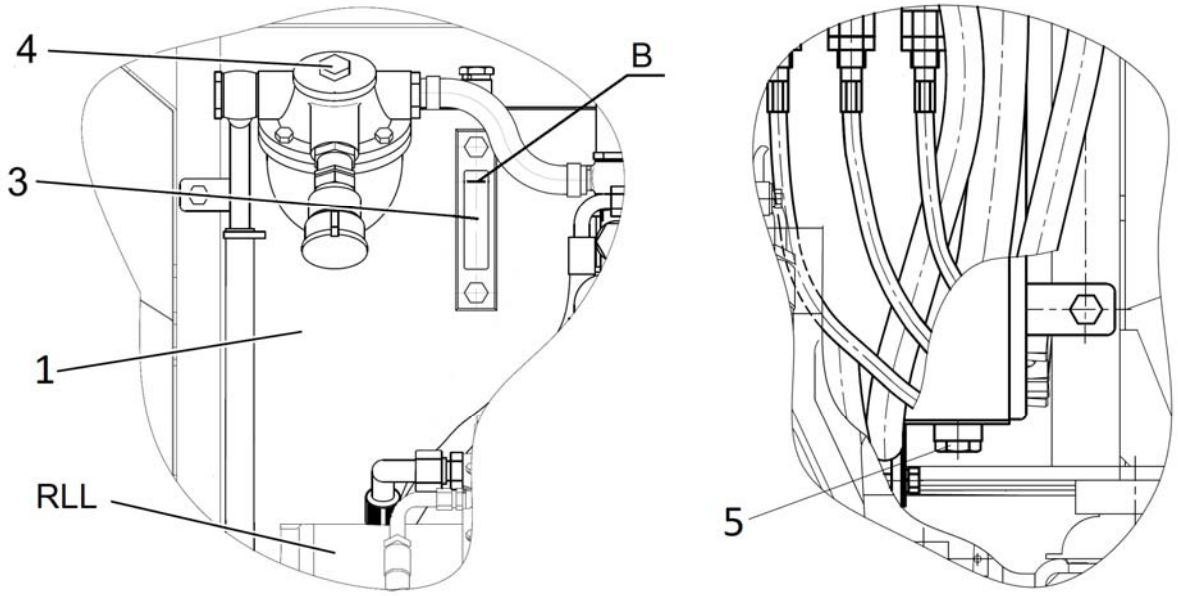
Rewrite subsection 6.4.5.2 "Operation 53. Oil change in HLL tank" as follows:

6.4.5.2 Operation 53. Oil change in HLL tank

Before changing the oil, warm up the oil in HLL tank 1 (Figure 6.4.40) to normal operating temperature. For accelerated oil heating, start the engine and set any of the hydraulic outlet control levers to the "Lifting" position and hold the lever in this position until the hydraulic system heats up.

To change the oil in the HLL tank, perform the following:

- place the tractor on a level surface, lower the RLL links to the lowest position, secure the tractor with the parking brake. The engine must be stopped;
- unscrew the oil filler opening plug 4 (Figure 6.4.40) and drain plug 5, drain the oil from the oil tank into a special container for used oil;
- reinstall drain plug 5 and fill the system with fresh oil to level B (25 to 35 mm from the upper bolt of the indicator mounting) on oil level indicator 3. When using machines that require increased oil extraction, top up an additional 2.5 to 3 liters of oil.
- reinstall oil filler opening plug 4.



1 – HLL tank; 3 – oil level indicator; 4 – oil filler opening plug; 5 – drain plug
Figure 6.4.40 – Oil change in HLL

CAUTION: THE OPERATION OF OIL CHANGE IN THE HLL SHALL BE PERFORMED ONLY WITH RETRACTED RODS OF THE HYDRAULIC CYLINDERS OF THE RLL AND OF MACHINES ATTACHED TO THE TRACTOR!

WARNING: WHEN CARRYING OUT MAINTENANCE OF THE HYDRAULIC LIFT LINKAGE, BE CAREFUL TO AVOID CONTACT WITH HOT OIL AND THE HOT SURFACE OF THE HYDRAULIC LIFT LINKAGE TANK!