TEREX®

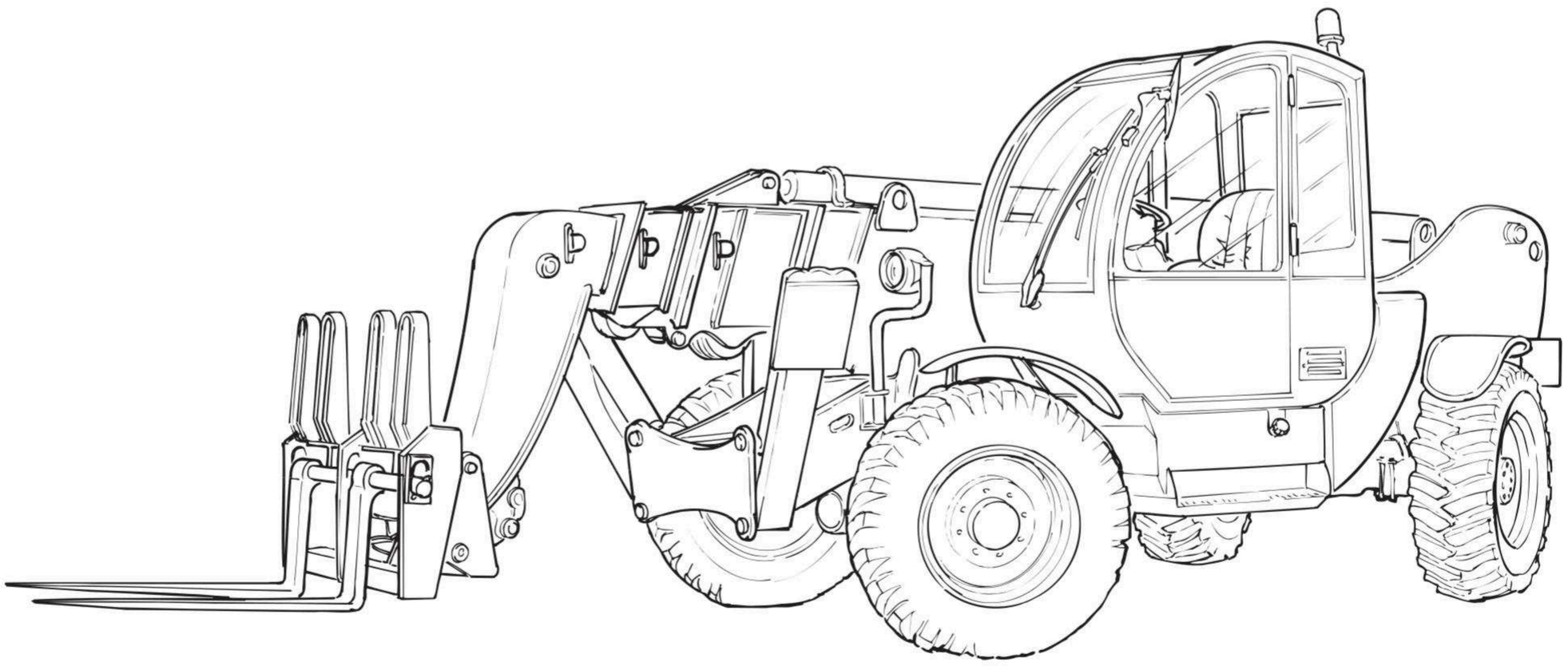
SERVICE MANUAL

Code 57.4403.1200 - 1st Edition 01/2007

Handler with telescopic boom

Telelift 4017 *(From serial n. 14867)*

Telelift 4514 *(From serial n. 15125)*

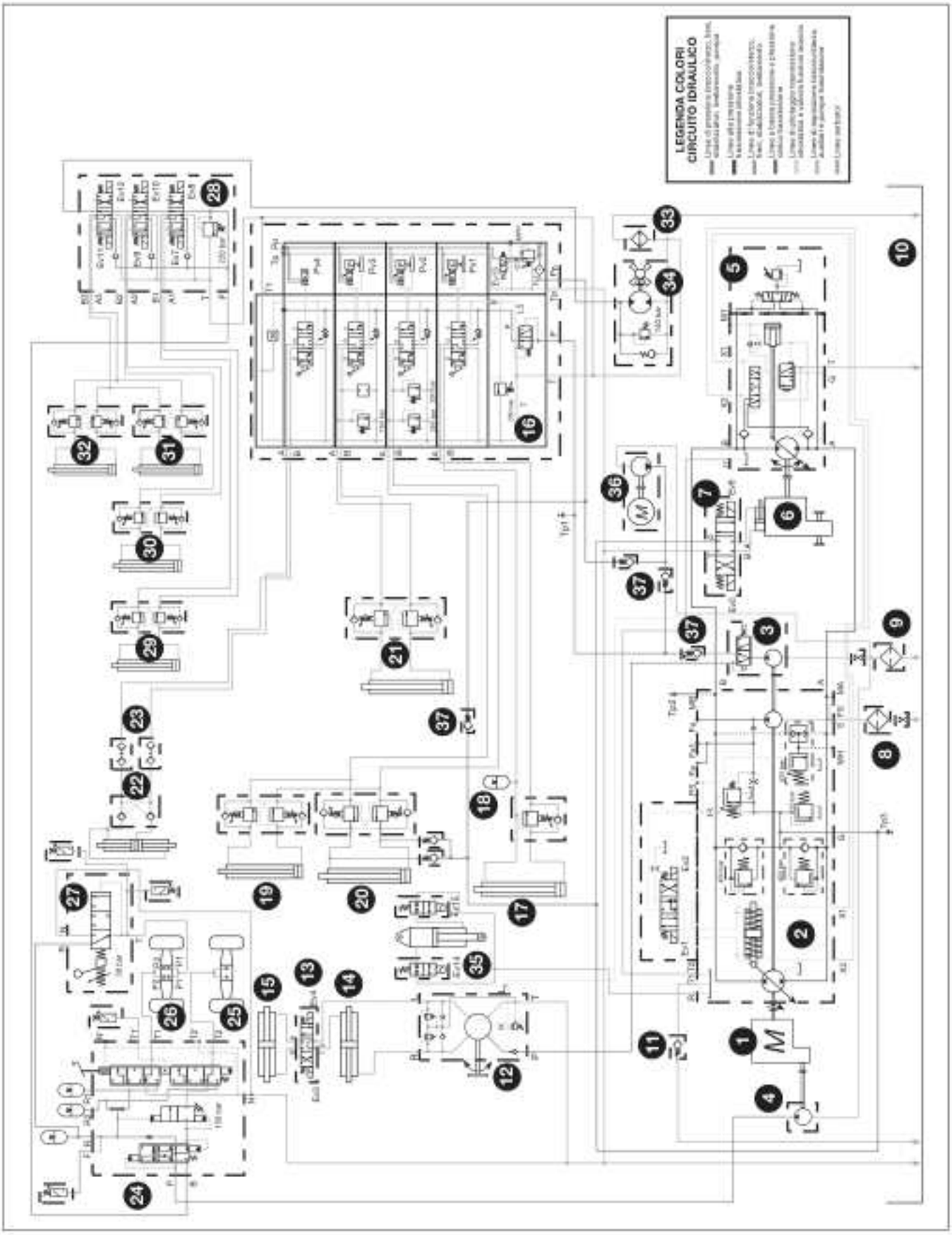


English
Edition

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Telelift 4017 - 4514 hydraulic schematic



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Section 1
SAFETY INFORMATION

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The brake pedal located in the driving cab, which is an integral part of the braking system S6, is connected to two proportional sliders which control the two separated lines of the service brake, one for each axle. In relation to the stroke of these sliders, a gradual communication between the feeding line, connected to two accumulators which, at their turn, are connected to ports R1 and R2 (the accumulators have 0.5-lt. capacity and 50 bar fill pressure), and the service brake lines is established so the flow is distributed to such lines and the discharge line increasing, in this way, the pressure (and as a result the braking force) on the lines of the service brakes. When the sliders are in the rest position, the lines of the service brakes are connected to the discharge.
The pressure switch set at 2-10 bar, paralleled to on of the two lines of the service brake, sends an electrical signal when this brake is engaged.
The pressure switch set at 70 bar and connected to port F, sends an electrical warning signal when the pressure inside the feeding circuit of the brake lines is too low to guarantee the minimum braking efficiency.
The accumulator with 1.5-lt. capacity and 35 bar fill pressure is connected to port R of system S6 and is used to unlock the parking brake of the front axle **(pos. 26)**.
The command of the parking brake is controlled by a special valve with lever control **(pos. 27)** located in the driving cab. In relation to the position of the lever, the release line of the parking brake is connected to the pressure line (parking brake unlocked) or the discharge line (parking brake locked).
The two pressure switches set at 10-20 bar send an electrical warning signal when the parking brake is activated (brake locked).
The Bucher electro-hydraulic modular distributor of the ON/OFF type for open loops **(pos. 28)** drives the movements of the outriggers and the sway function of the machine. It receives oil from port B of the braking system **(pos. 24)** and uses this to operate the cylinder of the left outrigger **(pos. 29)**, the cylinder of the right outrigger **(pos. 30)** and the right and left sway cylinders **(pos. 31)** and **(pos. 32)**. These two cylinders **(pos. 31)** and **(pos. 32)** are cross-connected, say the annular chamber of one cylinder is connected to the annular chamber of the other and vice versa. This connection is consistent with the operation of the cylinder which move out and in an opposite way one respect to the other. All of these cylinders are equipped with double-acting compensation valves with safety function.
On the inlet head of this control block there is a pressure relief valve set at 220 bar. The oil flow which is not used by the control block to operate the outriggers and the machine sway function, is sent to the Casappa 20 cm^3 hydraulic gear motor **(pos. 34)** for the operation of the cooling fan of the heat exchanger **(pos. 33)**. Inside the motor housing, there are an anti-cavitation valve and a pressure relief valve with by-pass function set at 140 bar.

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C-15 CHECK THE EFFICIENCY OF THE BLOCK VALVES

The piloted blocking valves allow to held the load in position in case of burst of a flexible hose.

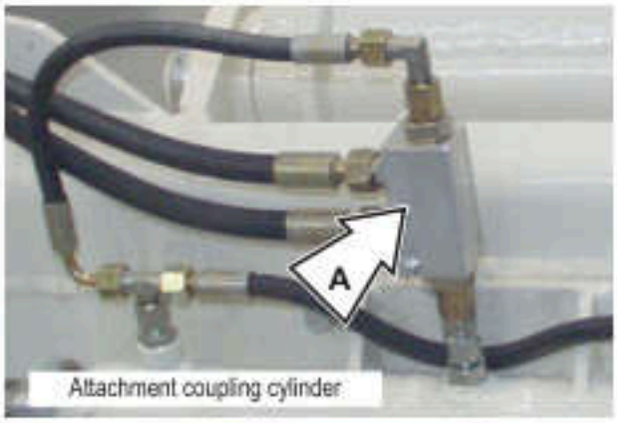
To check the efficiency of a valve, proceed as follows:

- Load a weight near the maximum payload onto the boom.
- Raise the load some centimetres above the ground (max 10 cm). To check the valve on the telescope extension cylinder move the boom to maximum height and extend it some centimetres.
- Loosen the oil hoses to the cylinder of which you are checking the valve with caution.
- To check the efficiency of the block valves of the outriggers, lower them to the ground and unload the weight of the tyres without raising them. Loosen the cylinder hoses to check the efficiency of the valve.

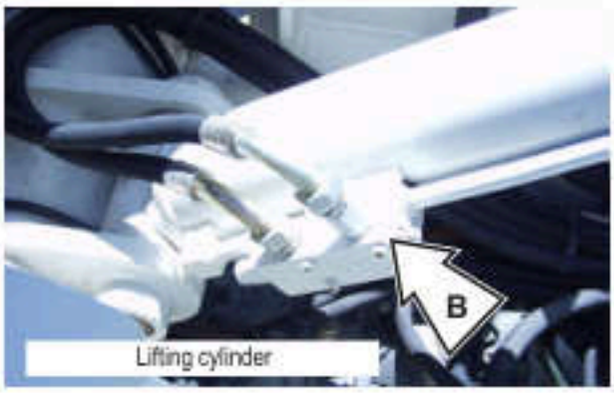
During the check, the oil will flow out of the hoses and the load shall remain blocked in position.
Should that not be the case, the valve must be replaced.
Contact TEREXLIFT Technical Service.

NOTICE

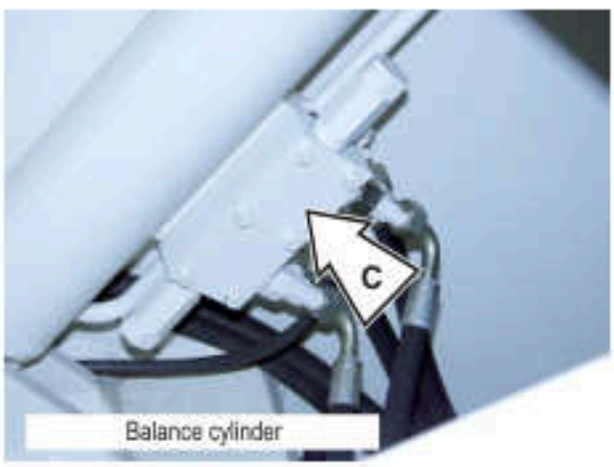
Place a container of suitable size under the hoses.



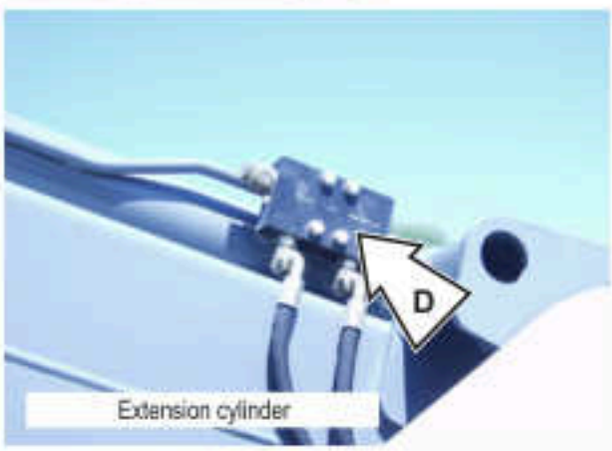
Attachment coupling cylinder



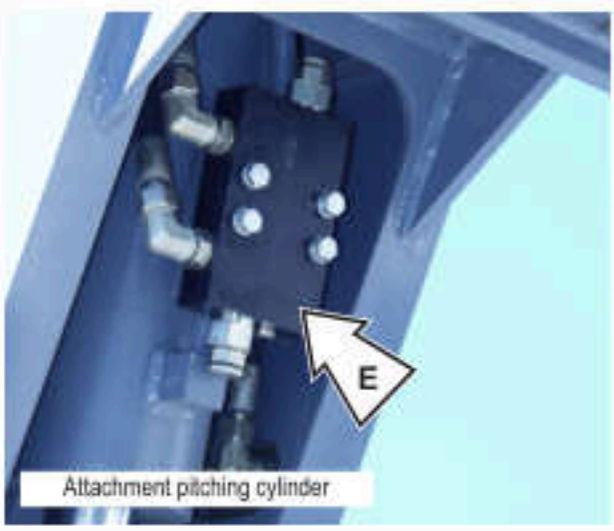
Lifting cylinder



Balance cylinder



Extension cylinder



Attachment pitching cylinder

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D-11 CLEAN THE CAB AIR FILTER

Every six months clean the air filter in the cab. Replace the cartridge if the filtering cloth is damged.

Cleaning and changing the cartridge:

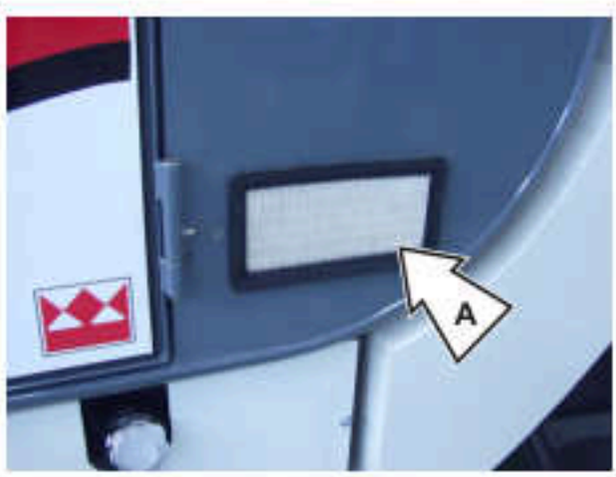
- Shut the engine down and engage the parking brake.
- Pull filter **A** out of the housing accessible from the outside of the cab.
- Clean the filter bowl.
- Clean the filter cartridge by beating it against a piece of wood. Replace the cartridge if damaged.

CAUTION

Paper filters must never be cleaned using compressed air or washed with water and/or solvents.



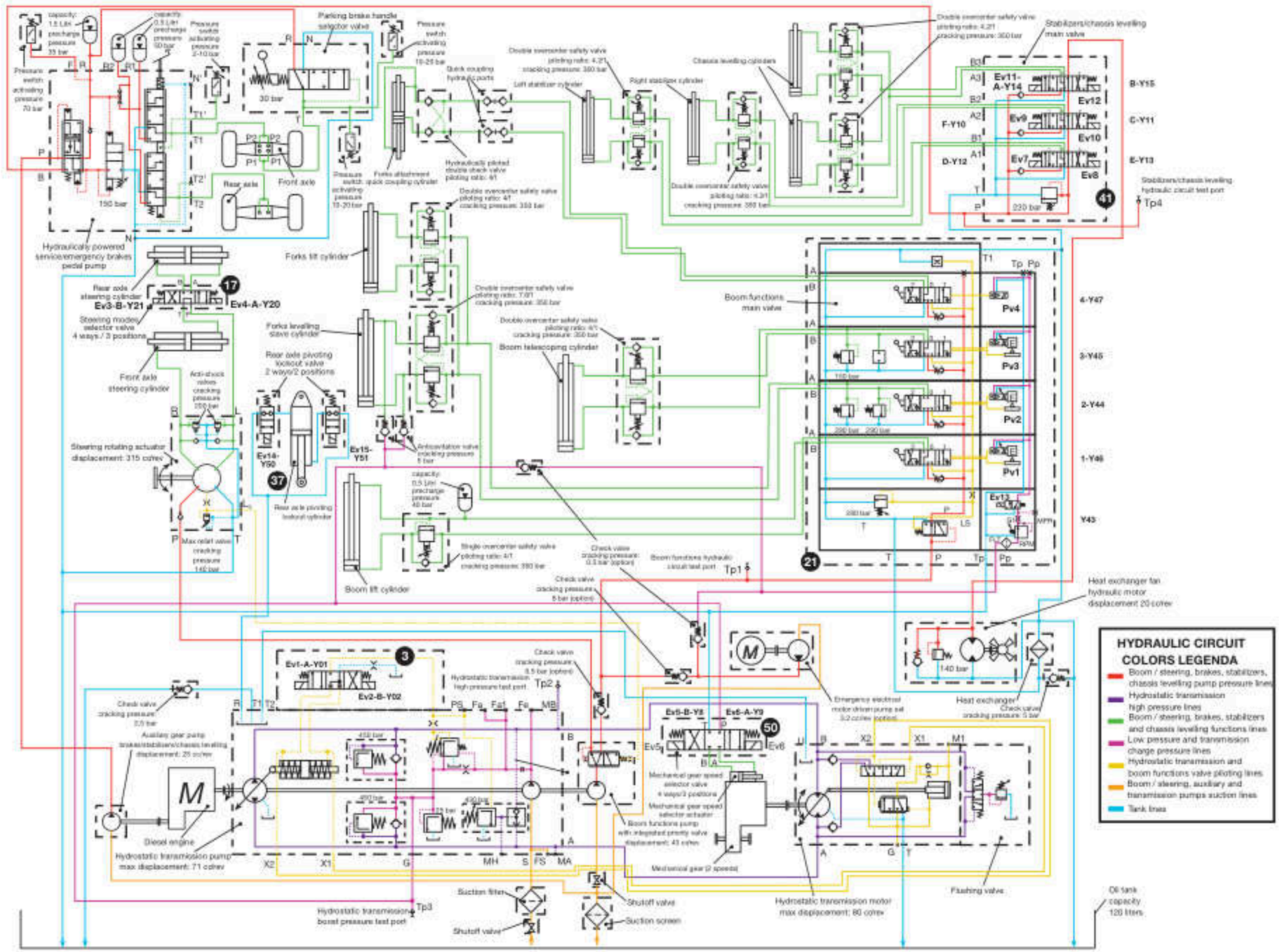




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6.2 HYDRAULIC SCHEMES

6.2.1 Telelift 4017-4514



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