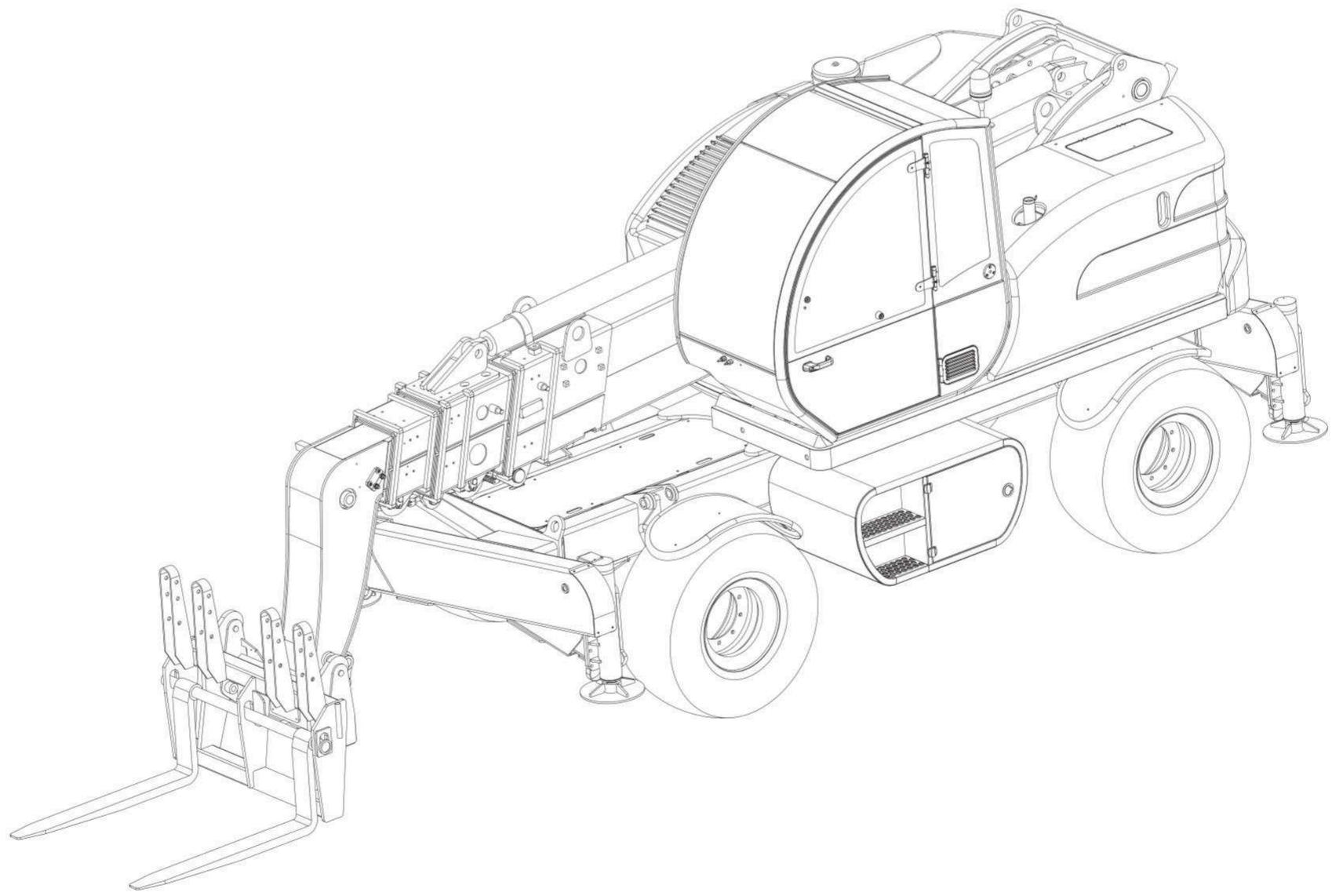
A TEREX COMPANY

SERVICE MANUAL

Code 57.4403.2200 - 1st Edition 02/2008

Handler with telescopic boom

GTH-6025 R *(da matr. 16760)*



English
Edition

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Section 1
SAFETY INFORMATION

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2.22 HYDRAULIC CALIBRATIONS

1. PRELIMINARY OPERATIONS

Warm up the hydraulic oil to 60°C by keeping one of the elements of the boom distributor to full stroke under pressure.
To reach this temperature in a faster way, cover the oil core of the radiator with a carton in the case of a water-oil combined cooler, or the oil radiator if the machine is equipped with a separate oil radiator.

2. SETTING THE BOOM DISTRIBUTOR

Find the manometer mini-socket **ref. A** on the distributor (encl. **1**).

2.1 SETTING THE STAND-BY

Connect a **0-60bar manometer to the mini-socket ref. A**.
Calibrate valve **B** (encl. **4**) **on the pump to 40 bar.**

CAUTION

The operation shall be carried out with the engine running at idle and without moving any lever of the main valve.

2.2 SETTING THE DISTRIBUTOR PRESSURE CONTROL VALVE

- Remove the 0-60bar pressure gauge from the mini-socket **ref. A** and fit a 0-400bar pressure gauge before lifting the boom to end-of-stroke (this operation shall be done at max speed).
- Calibrate the max pressure valve ref. **C** (encl. **1**) **to** 300 bar.

CAUTION

If it is not possible to reach 300 bar when setting the main valve, tighten the valve ref. D (see encl. 4) of the Hydromatik pump with variable displacement.

- Once the main valve has been calibrated, proceed with the calibration of valve ref. **D** (encl. **4**) of the variable displacement boom pump to a value of 295 bar.
- Recalibrate the max pressure valve ref. **C** (encl. **1**) to 270 bar.
- During calibration, check that the two safety valves **W** of the main valve (encl. **1**) discharge the pressure exceeding 295 bar.
- Remove the pressure gauge from the mini-socket and re-tighten the protective cap.

3. SETTING THE PRESSURE RELIEF VALVE

- Connect a 0-60bar manometer to the mini-socket **ref. E** (encl. **2**) located on valve **ref. F**. With the engine running at idle, move any of the element of the main valve to end of stroke and then set the valve ref. **F** to 30 bar.
- Remove the pressure gauge from the mini-socket and re-tighten the protective cap.

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5.6 REXROTH PUMP ERROR CODES LIST

Error ID	Error message	Possible cause	Effect	Remedy
301	Bit 0: Error: Startup_V_High	- At the start-up of the controller a voltage at the output side > 4V was detected.	- Driving not possible.	- Check wiring.
302	Bit 1: Error: Start Condition	- Drive direction lever not in neutral. - Acceleration pedal not <10%. - Power supply < 7V. - Non-plausible parameterization of at least one of the curves. - Wrong parameter for the permanent speed limitation. - "Basket Mode" is active. - The 1st gear of the gearbox is not engaged.	- Driving not possible.	- Set direction lever to neutral and acceleration pedal to zero. - Check wiring. - Check power supply. - Check curve parameters. - Check speed limitation parameter.
303	Bit 2: Error: Direction Switch	- Logical error: Forward and backward inputs are true. - Defective direction lever.	- Driving not possible. - If vehicle in motion, it will be decelerated to zero via a ramp.	- Check wiring. - Check lever. - Fulfill start condition.
304	Bit 3: Error: Accel Pedal	Only if acceleration signal comes via analogue input, regardless of which type (0, 1 or 2) the pedal is. - Short circuit or broken wire. - Wrong calibration.	- Driving not possible. - If vehicle in motion, it will be decelerated to zero via a ramp.	- Check wiring. - Check lever/potentiometer. - Calibrate potentiometer. - Fulfill start condition.
305	Bit 4: Error: Inch Pedal	- Short circuit or broken wire. - Wrong calibration.	- If vehicle in motion, it will be decelerated to zero via a ramp. - As soon as the start condition is fulfilled the inch signal is set to 60% and limited driving without inch pedal is possible.	- Check wiring. - Check lever/potentiometer. - Calibrate potentiometer. - Fulfill start condition.
306	Bit 5: Error: Handgas	Error of the hand gas potentiometer – short circuit, broken wire or wrong calibration.	- If vehicle in motion, it will be decelerated to zero via a ramp.	- Check wiring. - Check lever/potentiometer. - Calibrate potentiometer. - Fulfill start condition.
307	Bit 6: Error: Hydmot Sensor			
308	Bit 7: Error: DRE-Output	Short circuit or broken wire.	- DRE-output will be switched off.	- Check wiring. - Check DRE-valve. - Fulfill start condition.

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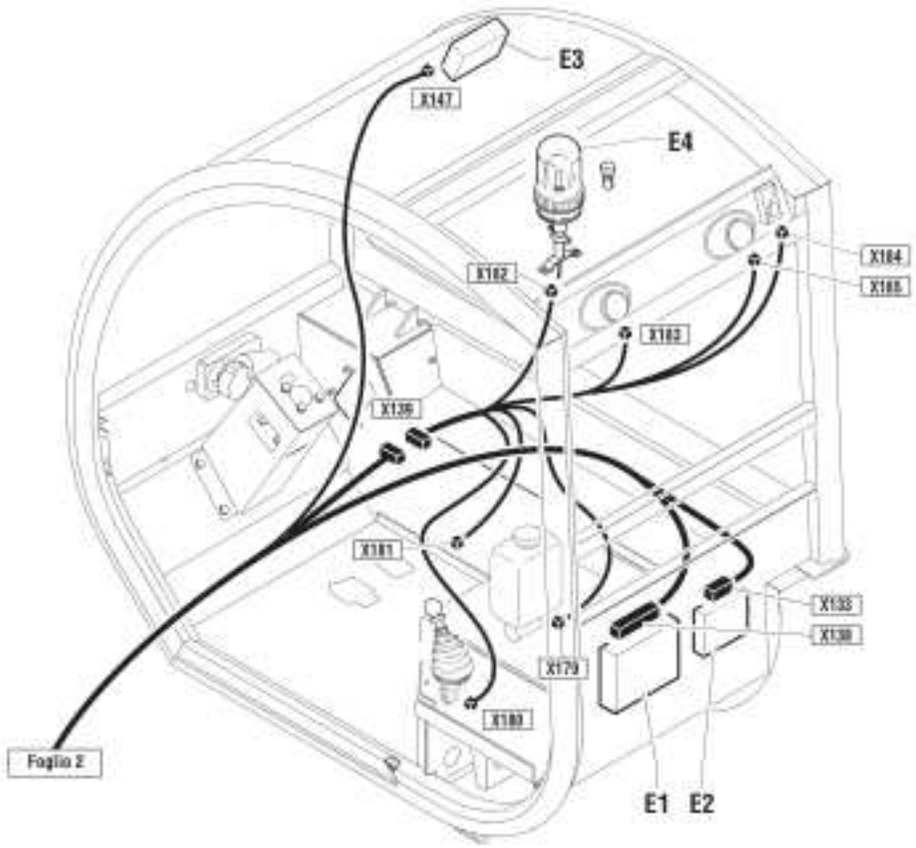
6.5 POSITION OF THE ELECTRIC AND HYDRAULICAL COMPONENTS ON THE MACHINE

CAUTION

All references with a digit are referred to hydraulic components; the remaining references are initials which can be found on the wiring diagram of the machine.

6.5.1 Electric components

Sheet 1 of 9



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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.

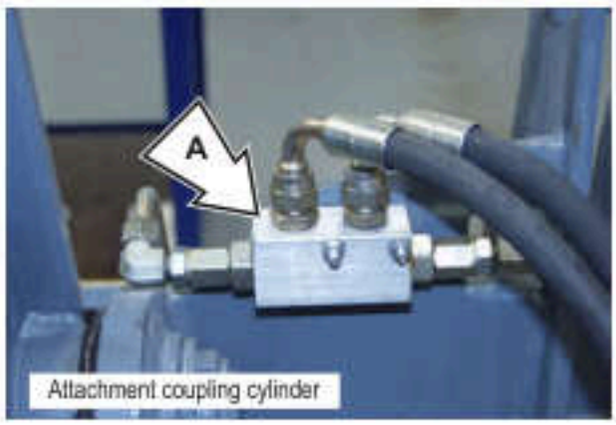
To check the efficiency of a valve, proceed as follows:

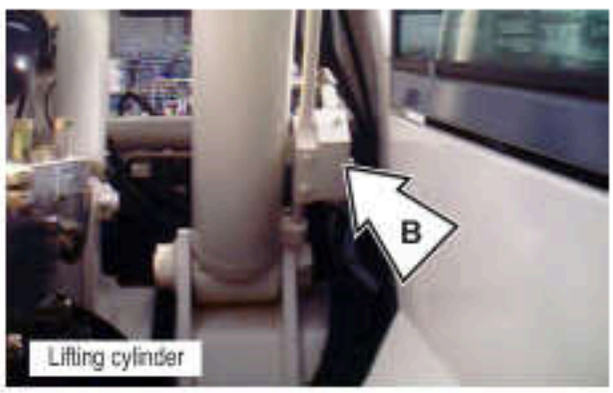
- Load a weight near the maximum payload onto the boom.
- Raise the load some centimetres above the ground (max 10 cm). To check the valve on the telescope extension cylinder move the boom to maximum height and extend it some centimetres.
- Loosen the oil hoses to the cylinder of which you are checking 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.

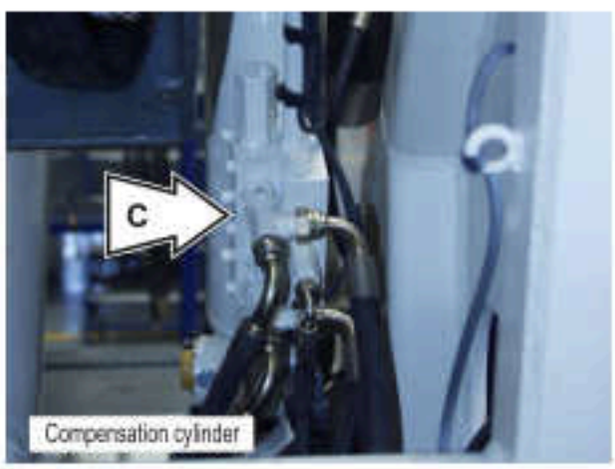
During the check, the oil will flow out of the hoses and the load shall remain blocked in position.
Should that not be the case, the valve must be replaced. Contact GENIE Technical Service.

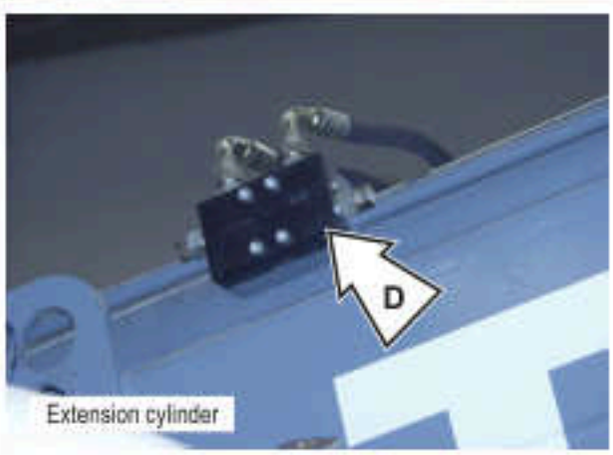
NOTICE

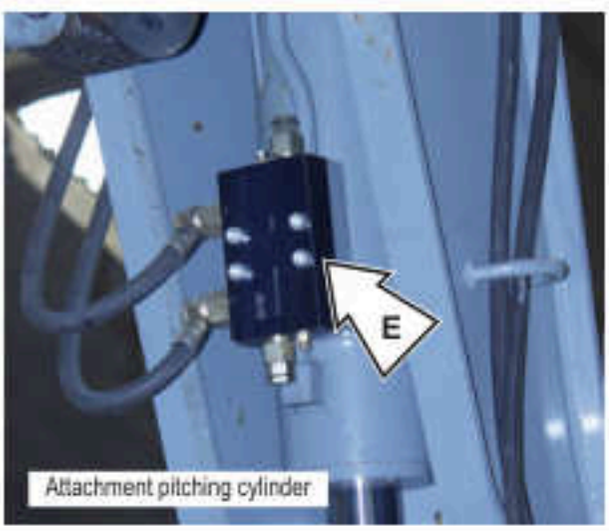
Place a container of suitable size under the hoses.











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2.26 CONTROLLING AND SETTING THE MACHINE WITH WINSCOPE

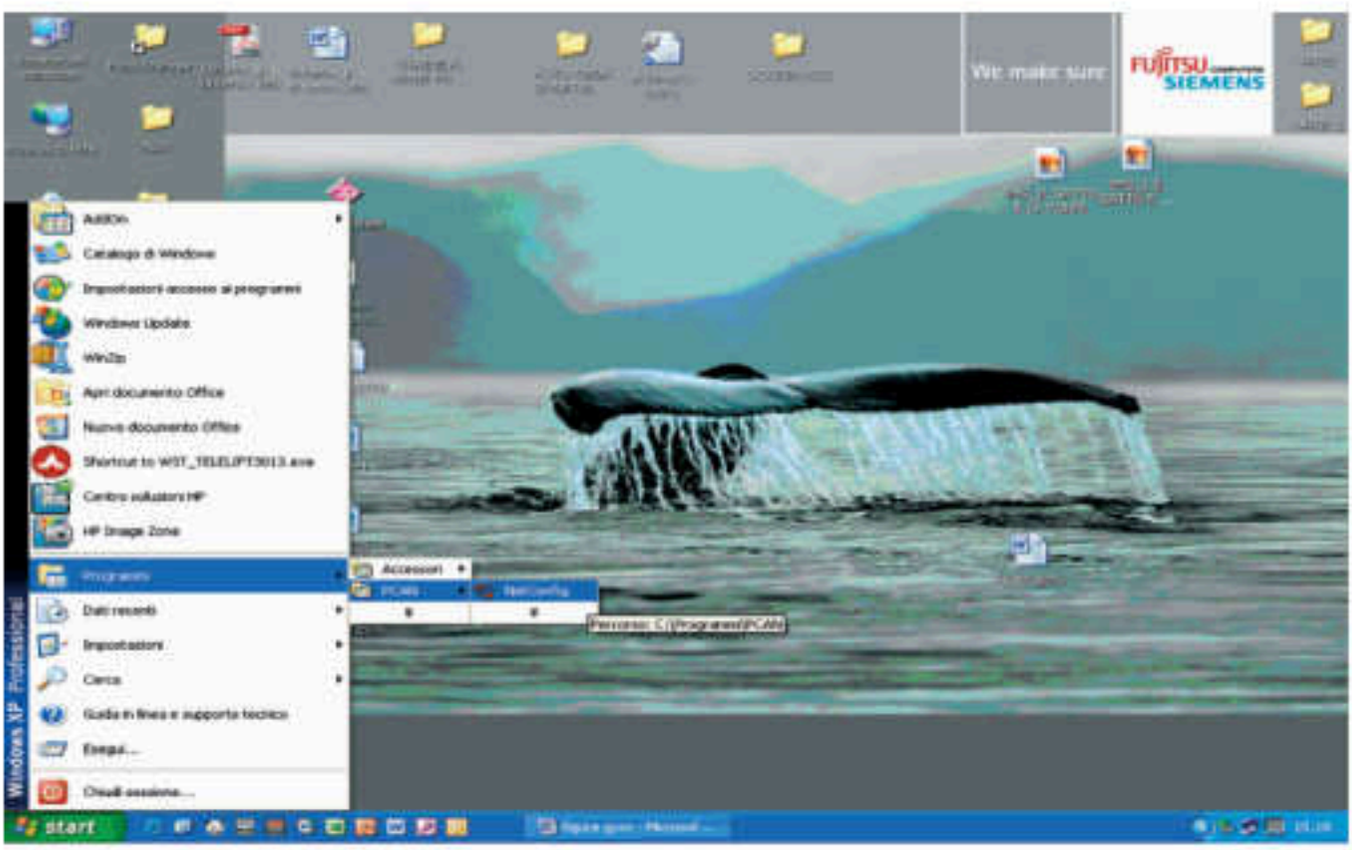
In order to control the system, you shall install 2 programmes:

- **CAN VIEW**
- **WINSCOPE**

CAN VIEW is a tool which lets you display the messages relevant to the CAN network and to interact with the relevant units connected.
WINSCOPE is a programme which lets you display the state of the machine and modify some parameters relevant to the speed of some movements of the machine boom.

- **Configuring the machine: installing and configuring the software**

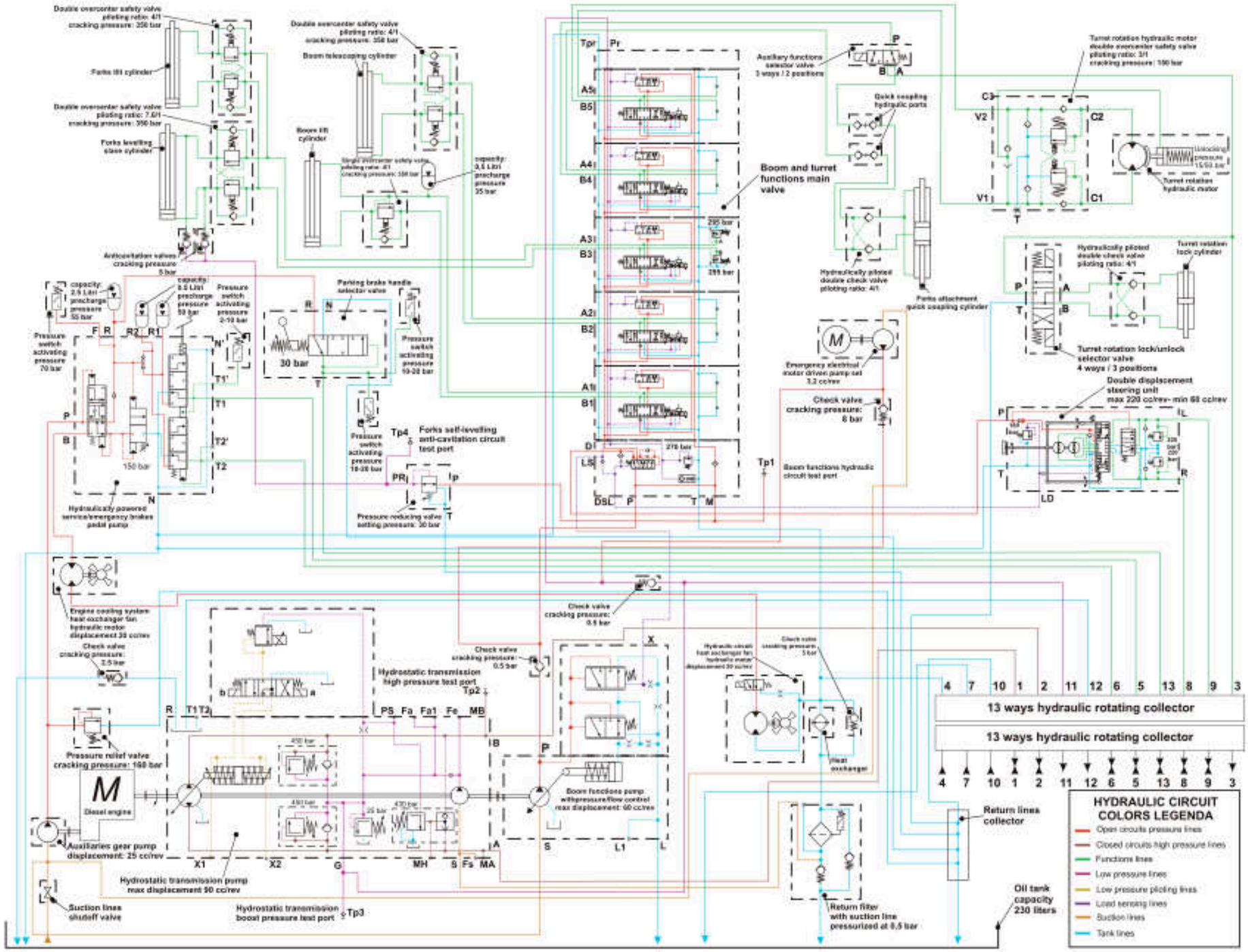
Once the **CAN VIEW** programme has been installed on the PC, you shall configure the same so it can "see" the CAN network.
This operation shall be performed on each single PC unless, for some reasons, the set parameters are changed.
To set the network, launch the programme from the **START => Programmes => PCAN => NetConfig.** menu.



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6.2 HYDRAULIC SCHEMES

6.2.1 Turntable hydraulic scheme (code 57.2201.3200 - rev. A)



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