TEREX®

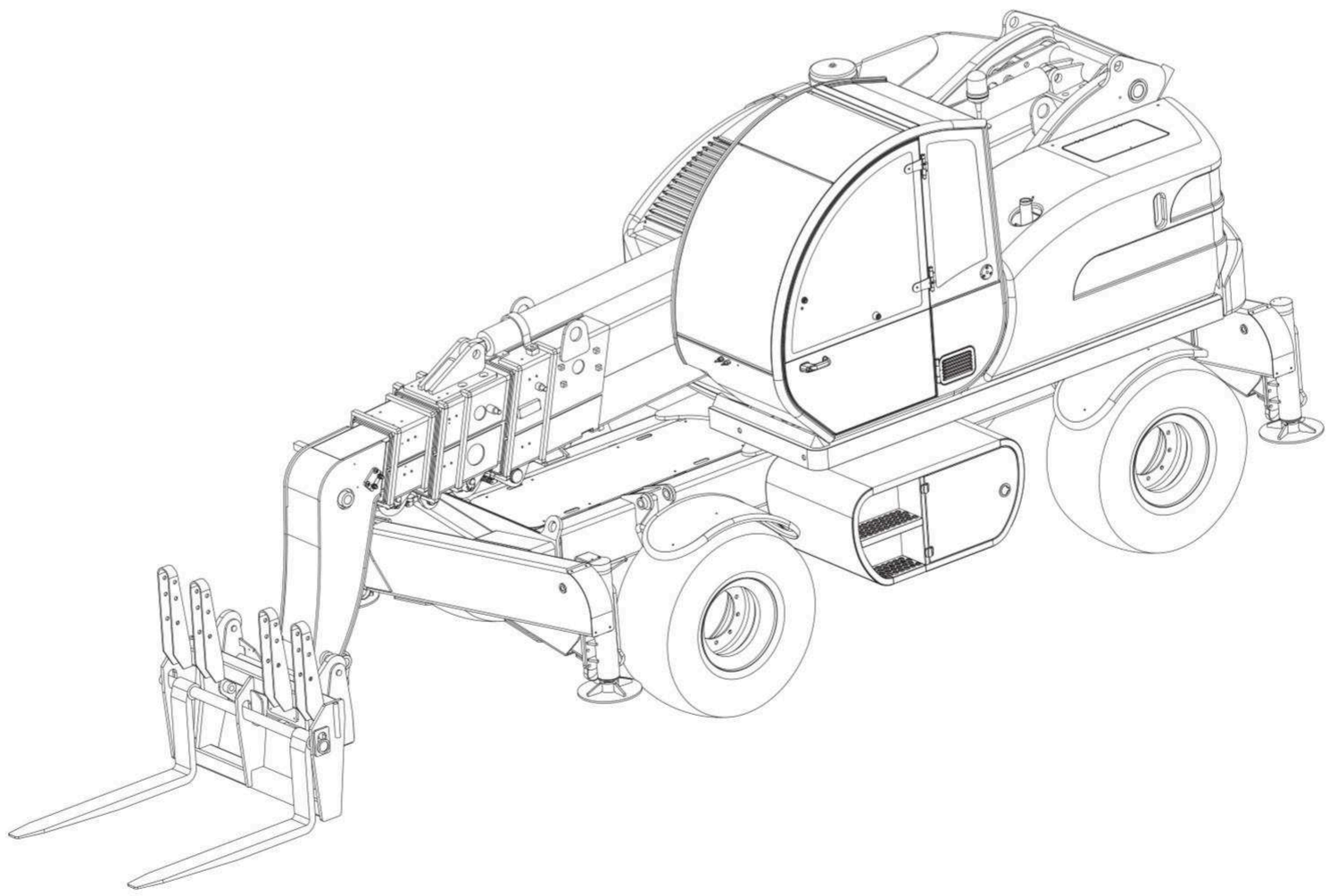
SERVICE MANUAL

Code 57.4402.8200 - 1st Edition 03/2007

Handler with telescopic boom

Gyro 4020 *(From serial n. 12888)*

Gyro 4518 *(From serial n. 12508)*



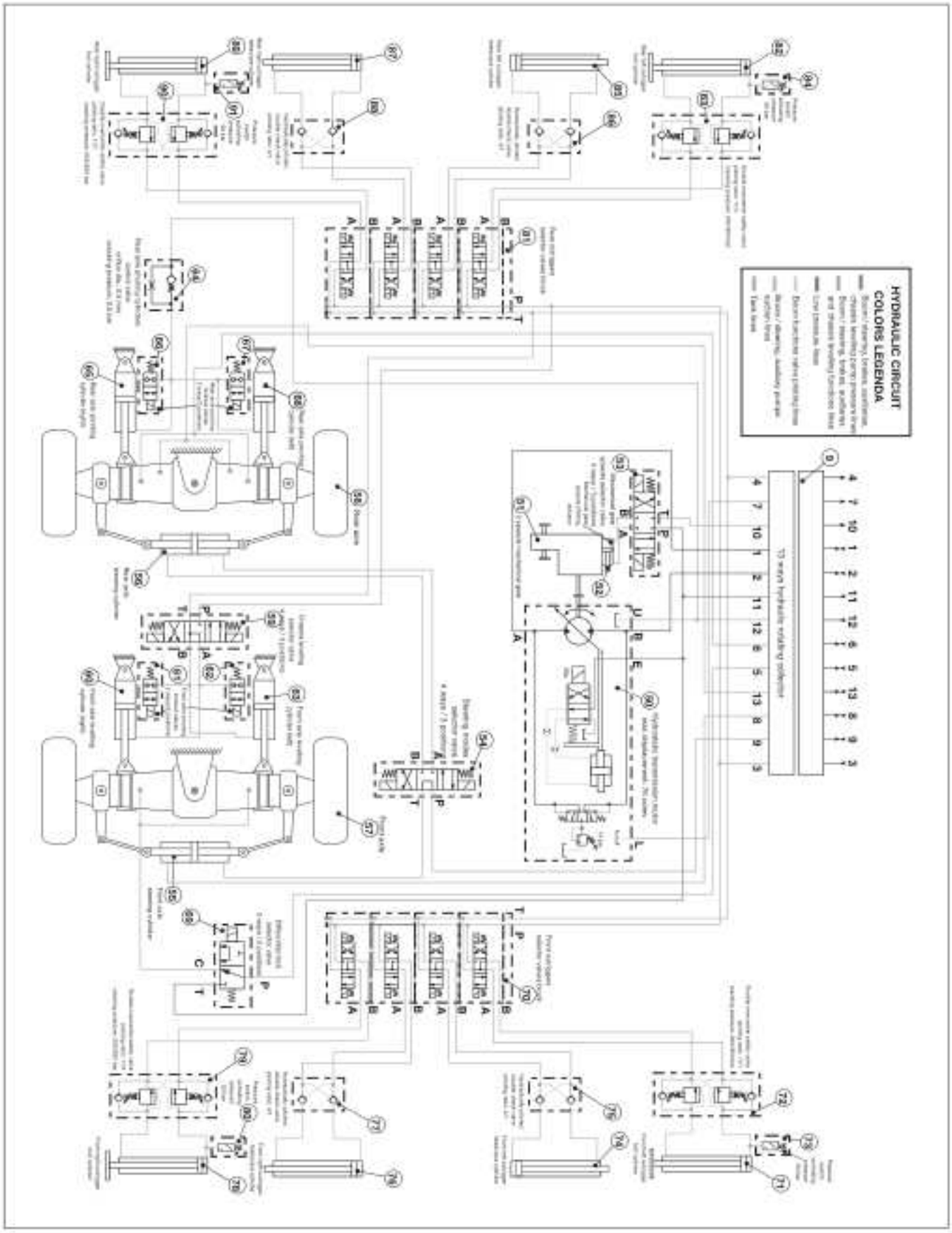
English

Edition

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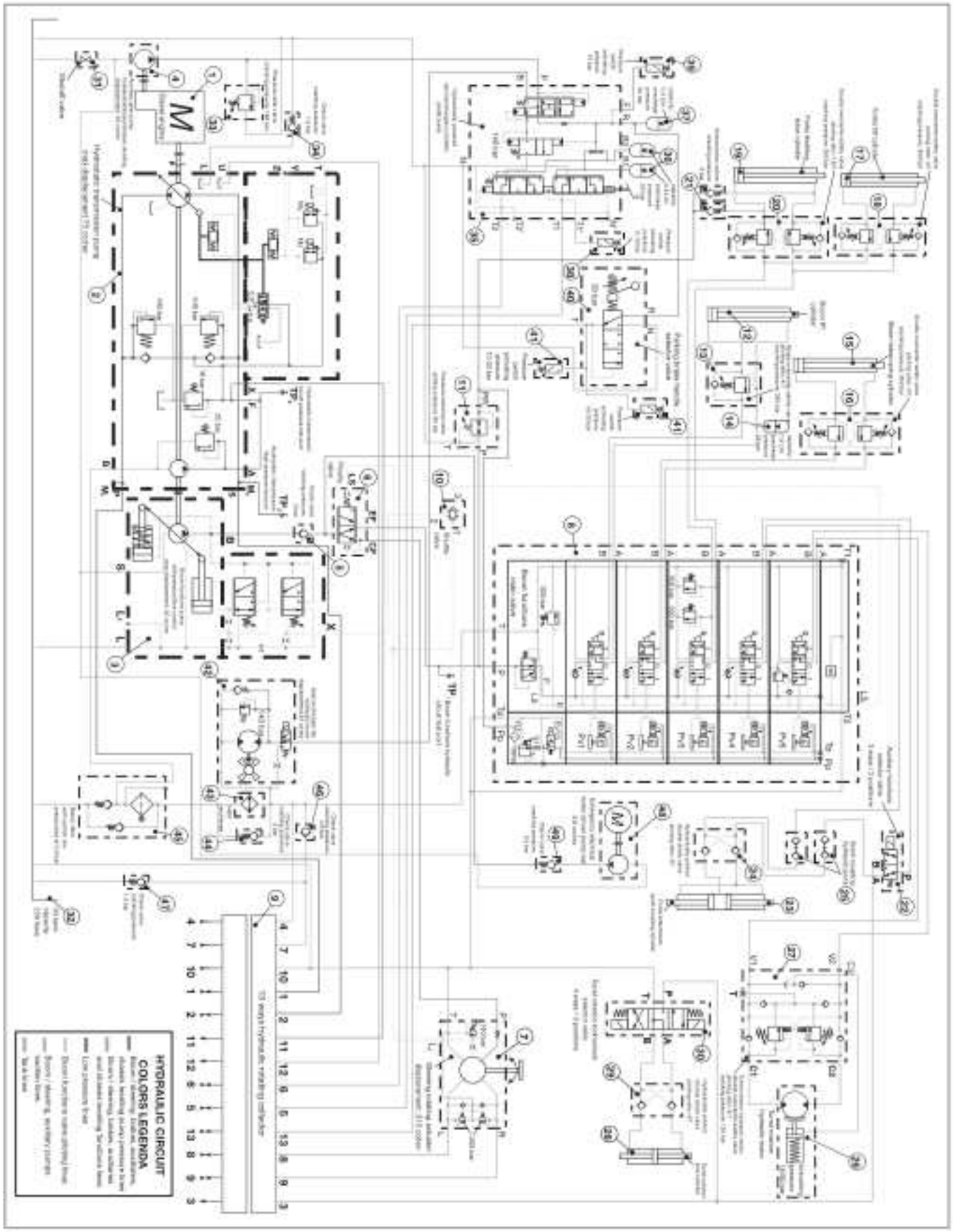
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Gyro 4020 - 4518 carrier hydraulic scheme



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Gyro 4020 - 4518 turntable hydraulic scheme



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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. 30** on the **Tecnord** 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.
- Calibrate the max pressure valve ref. **C** (encl. **1**) to 330 bar.

CAUTION

If it is not possible to reach 330 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 315 bar.
- Recalibrate the max pressure valve ref. **C** (encl. **1**) to 300 bar.
- During calibration, check that the two safety valves **W** of the main valve (encl. **1**) discharge the pressure exceeding 330 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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5.1 INTRODUCTION

- *Maintenance inspections shall be completed by a person trained and qualified on the maintenance of this machine.*
- *Immediately tag and remove from service a damaged or malfunctioning machine.*
- *Repair any damage or malfunction before operating machine.*
- *Unless otherwise specified, perform each procedure with the machine in the following configuration:*
  - *machine parked on a flat level surface;*
  - *boom in the stowed position;*
  - *key switch in the OFF position with the key removed.*

Before troubleshooting:

- *Read, understand and obey the safety rules and operating instructions printed in the Operator Manual of the machine.*
- *Be sure that all necessary tools are available and ready for use.*
- *Read each appropriate flow chart thoroughly.*
- *Pay special attention to the following warnings:*

⚠DANGER

Crushing hazard. When testing or replacing any hydraulic component, always support the structure and secure it from movement.

⚠WARNING

Electrocution hazard. Contact with electrically charged circuits may result in death or serious injry. Remove all rings, watches and other jewerly.

⚠WARNING

Spraying hydraulic oil can penetrate and burn skin; loosen hydraulic connections very slowly to allow the oil pressure to dissipate gradually. Do not allow oil to squirt or spray.

CAUTION

Perform all troubleshooting on a firm level surface.

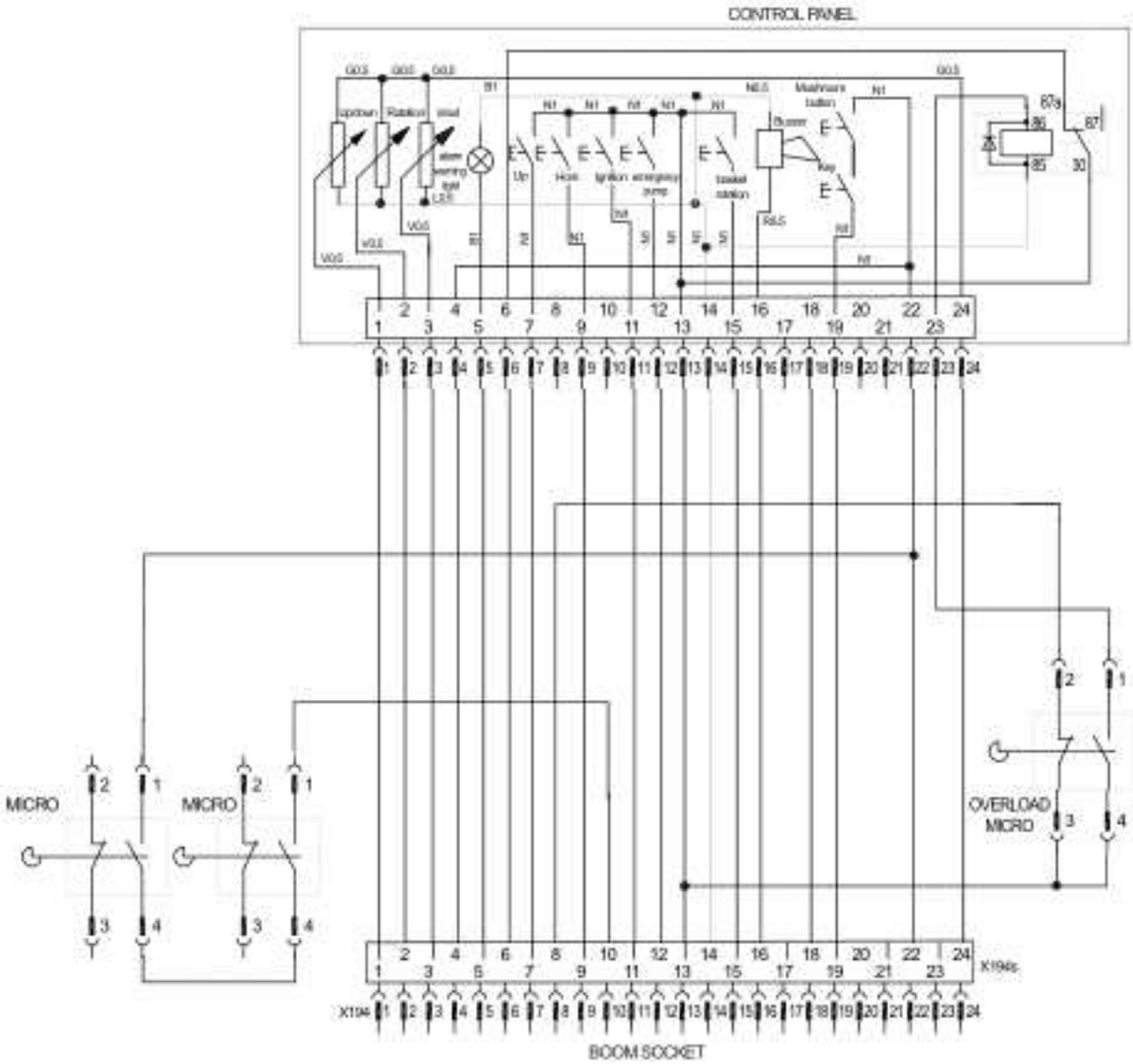
CAUTION

Two person will be required to safely perform some troubleshooting procedures.

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6.4.19 Wiring diagrams - man-platforms

Model 2P300F



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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.

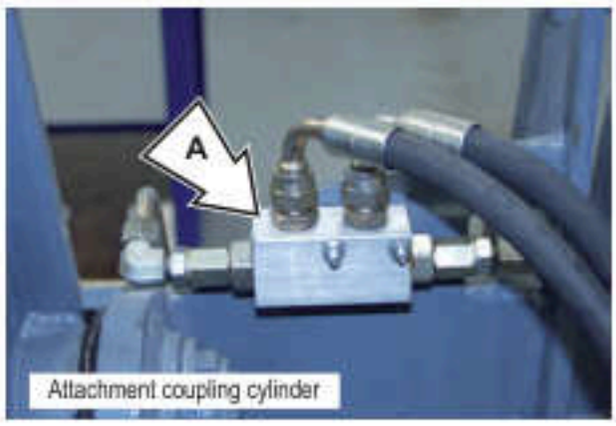
To check the efficiency of a valve, proceed as follows:

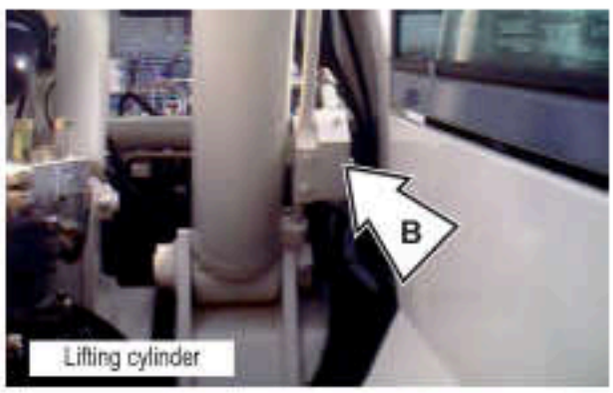
- Load a weight near the maximum payload onto the boom.
- Raise the load some centimetres above the ground (max 10 cm). To check the valve on the telescope extension cylinder move the boom to maximum height and extend it some centimetres.
- Loosen the oil hoses to the cylinder of which you are checking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

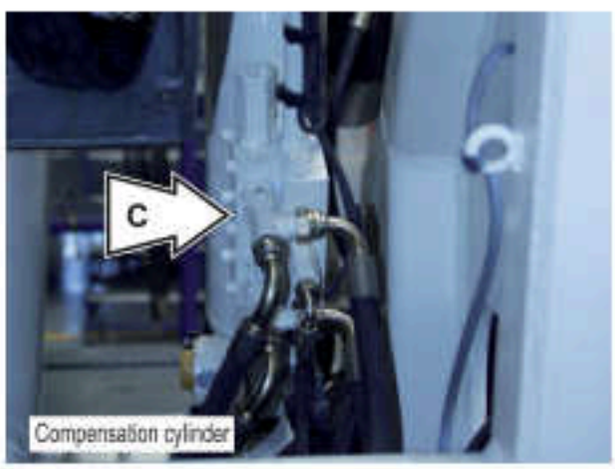
During the check, the oil will flow out of the hoses and the load shall remain blocked in position.
Should that not be the case, the valve must be replaced. Contact TEREXLIFT Technical Service.

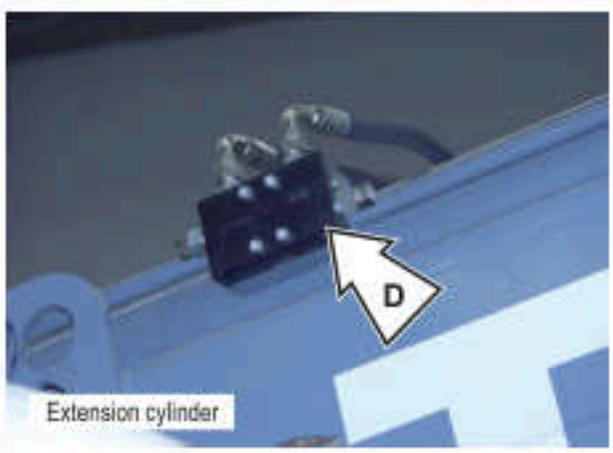
NOTICE

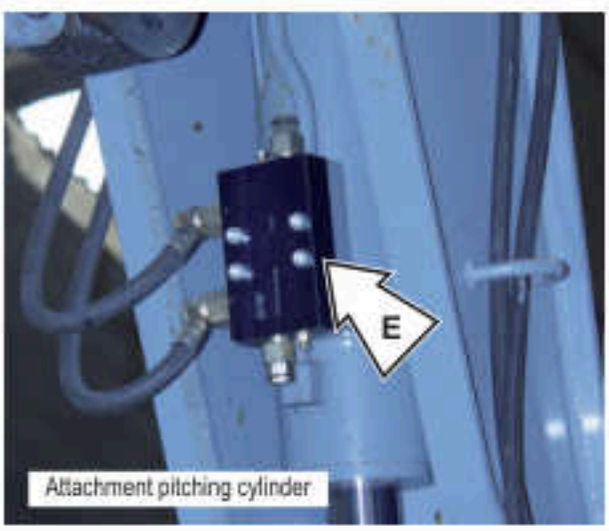
Place a container of suitable size under the hoses.











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2.26 CONTROLLING AND SETTING THE MACHINE WITH WINSCOPE

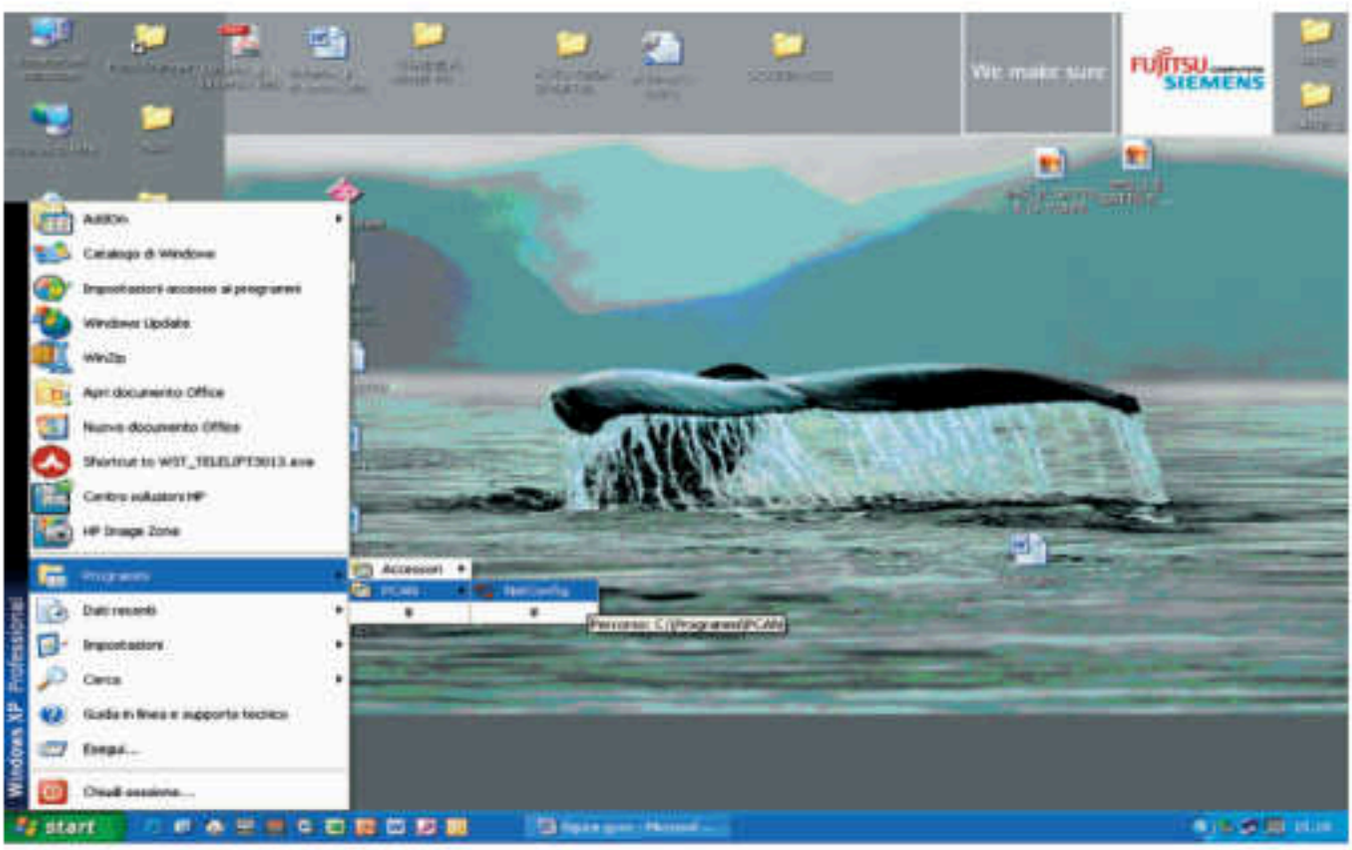
In order to control the system, you shall install 2 programmes:

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

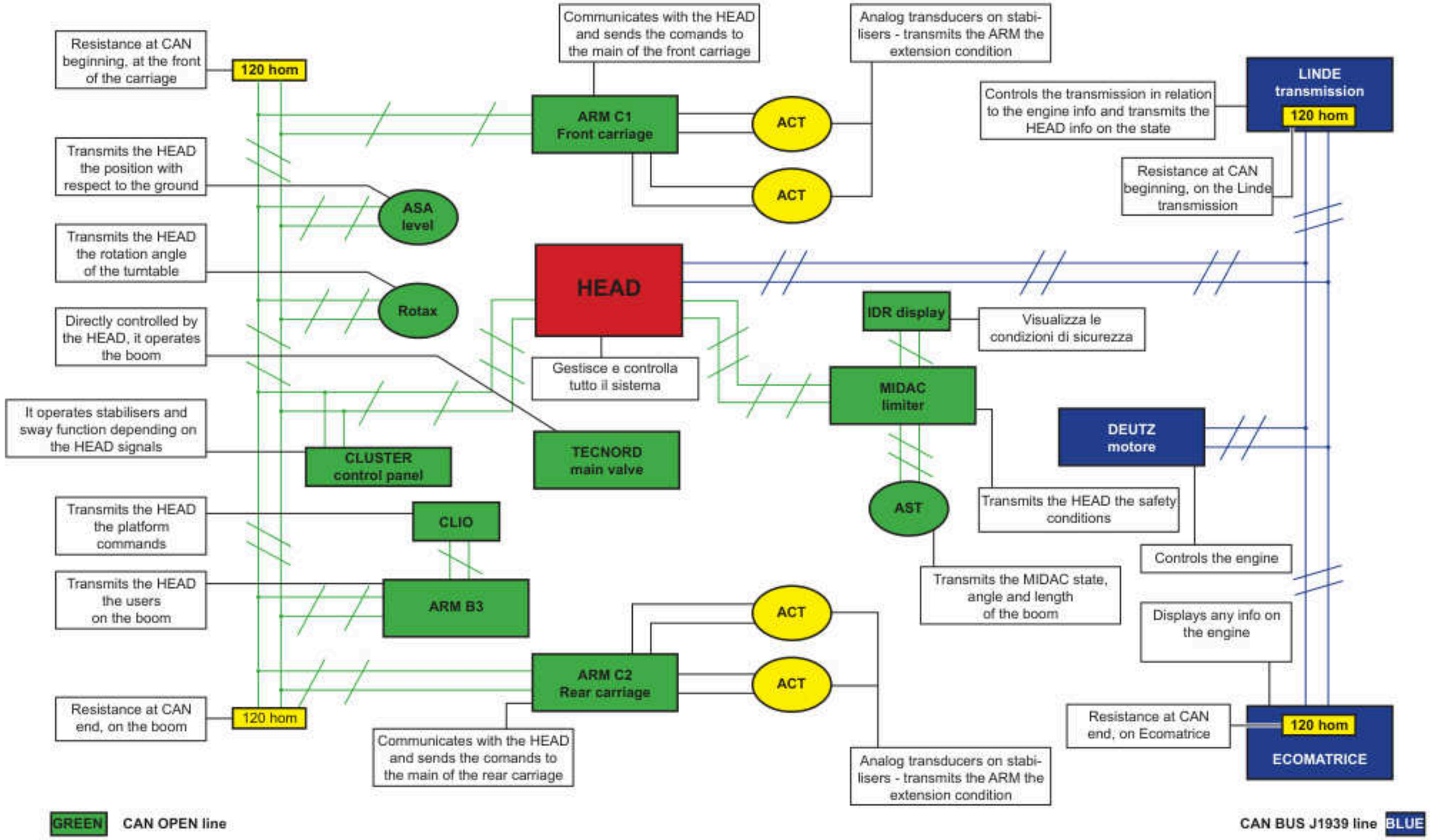
CAN VIEW is a tool which lets you display the messages relevant to the CAN network and to interact with the relevant units connected.
WINSCOPE is a programme which lets you display the state of the machine and modify some parameters relevant to the speed of some movements of the machine boom.

- **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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