



installation and calibration manual

I.View Manual for Wheel Loader



3B6[®]

2	PREPARING THE INSTALLATION	24	WEIGHING CALIBRATION PRESSURE CALIBRATION
3	NAME PARTS and COMPONENT POSITIONING	25	WEIGHING CALIBRATION PRESSURE CALIBRATION – EMPTY BUCKET
4	CONTROL BOX	26	WEIGHING CALIBRATION PRESSURE CALIBRATION – PRESSURE TABLE
5	JUNCTION BOX	27	WEIGHING CALIBRATION PRESSURE CALIBRATION – LOADED BUCKET
6	WHEEL LOADER - VIEW-MASTER.05 POSITIONING ASA63 SENSOR ON THE CHASSIS	28	WEIGHING CALIBRATION KNOWN LOAD
7	WHEEL LOADER - VIEW-MASTER.05 POSITIONING ASA67 SENSOR ON THE MAIN BOOM	29	WEIGHING CALIBRATION ACCURACY VALIDATION
8	WHEEL LOADER - VIEW-MASTER.04 POSITIONING PROXIMITY SENSORS ON THE MAIN BOOM	30	PARAMETERS
9	WHEEL LOADER - VIEW-MASTER.04 POSITIONING PROXIMITY SENSORS ON THE MAIN BOOM	31	PARAMETERS WEIGHING
10	WHEEL LOADER - VIEW-MASTER.04 POSITIONING PROXIMITY SENSORS ON THE MAIN BOOM	32	CONFIGURATION SYSTEM SELECTION
11	WHEEL LOADER - VIEW-MASTER.04 POSITIONING PROXIMITY SENSORS ON THE MAIN BOOM	33	CONFIGURATION LOCALIZATION
12	FORK LIFT - VIEW-MASTER.06 POSITIONING PROXIMITY SENSORS ON THE MAIN BOOM	34	CONFIGURATION CHANGE ASA CAN-BUS IDENTIFIER
13	PRESSURE TRANSDUCERS	35	CONFIGURATION SYSTEM SELECTION
14	PRESSURE TRANSDUCERS	36	MENU
15	PRESSURE TRANSDUCERS Making a hole for the valve and threading	37	80.UV.MA0040 (VIEW-MASTER04) SYSTEM LAYOUT
16	FIX CABLES ON MACHINES	38	80.UV.MA0040 (VIEW-MASTER04) SYSTEM LAYOUT
17	KEY IDENTIFICATION	39	80.UV.MA0050 (VIEW-MASTER05) SYSTEM LAYOUT
18	SYSTEM DIAGNOSTIC PAGES	40	80.UV.MA0050 (VIEW-MASTER05) SYSTEM LAYOUT
19	ACCESS TO CALIBRATION PAGES	41	80.UV.MA0060 (VIEW-MASTER06) SYSTEM LAYOUT
20	WEIGHING CALIBRATION	42	80.UV.MA0060 (VIEW-MASTER06) SYSTEM LAYOUT
21	WEIGHING CALIBRATION AREA RATIO		
22	WEIGHING CALIBRATION ANGLE CALIBRATION - VIEW-MASTER.05		
23	WEIGHING CALIBRATION ANGLE CALIBRATION - VIEW-MASTER.05		

The following equipment is needed for easy installation of the system.

- Electric or explosive welder
- Normal mechanical and electrical tools
- Set of adjustable spanners
- Set of screwdrivers
- Lapping machine
- Tester

Take the system out of its packaging and make sure that the individual parts have not been damaged during transport.

Using the system composition (end of this manual) and the transport document make sure that all the parts needed to install the system on your machine are available.

IMPORTANT INFORMATION ON SAFETY FOR WORKING WITH MOBILE MACHINES

Protective equipment

Always wear protective goggles as required by the working conditions when welding or using the lapping machine.

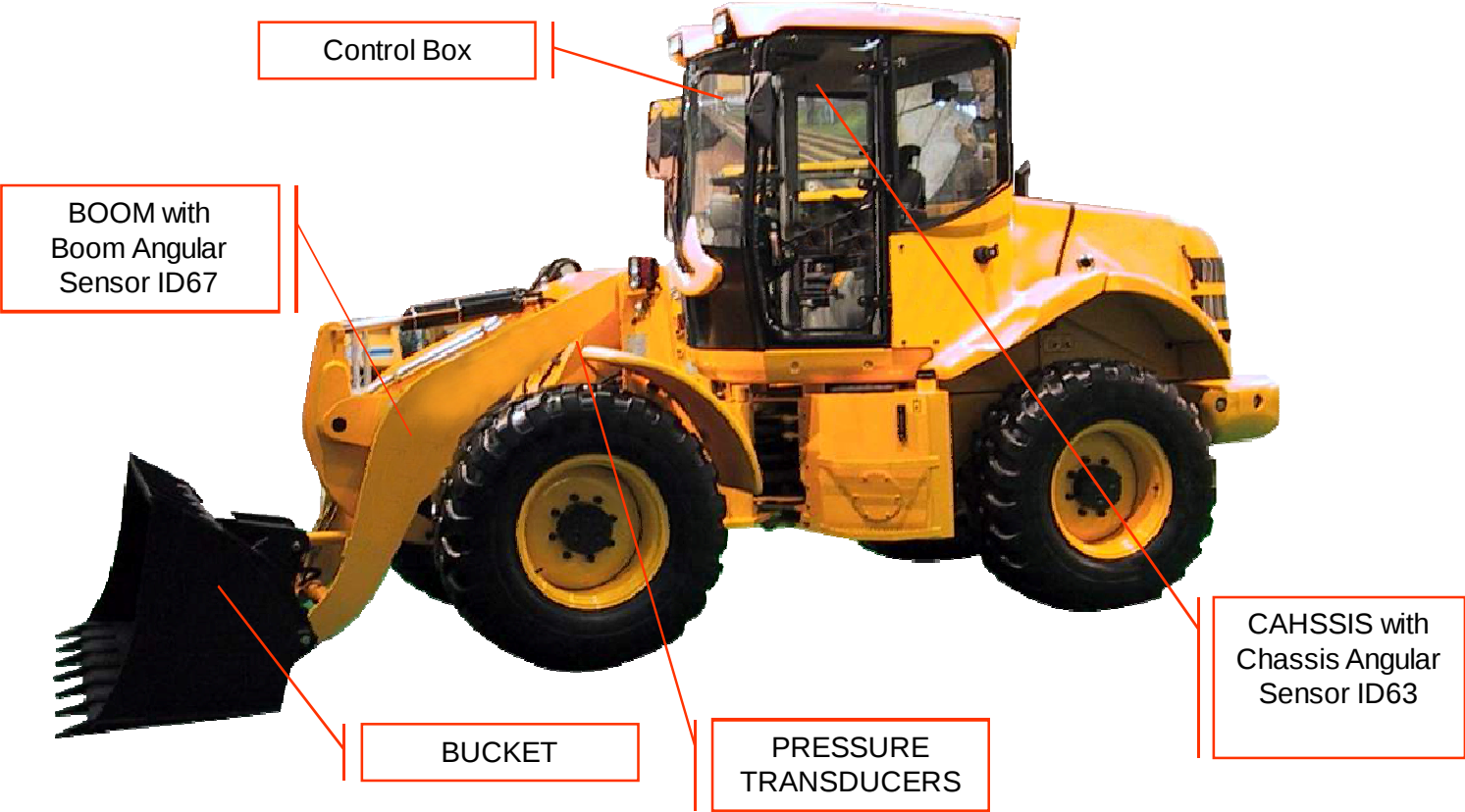
Do not wear baggy clothes and jewellery which could be caught in the machine.

Repairs

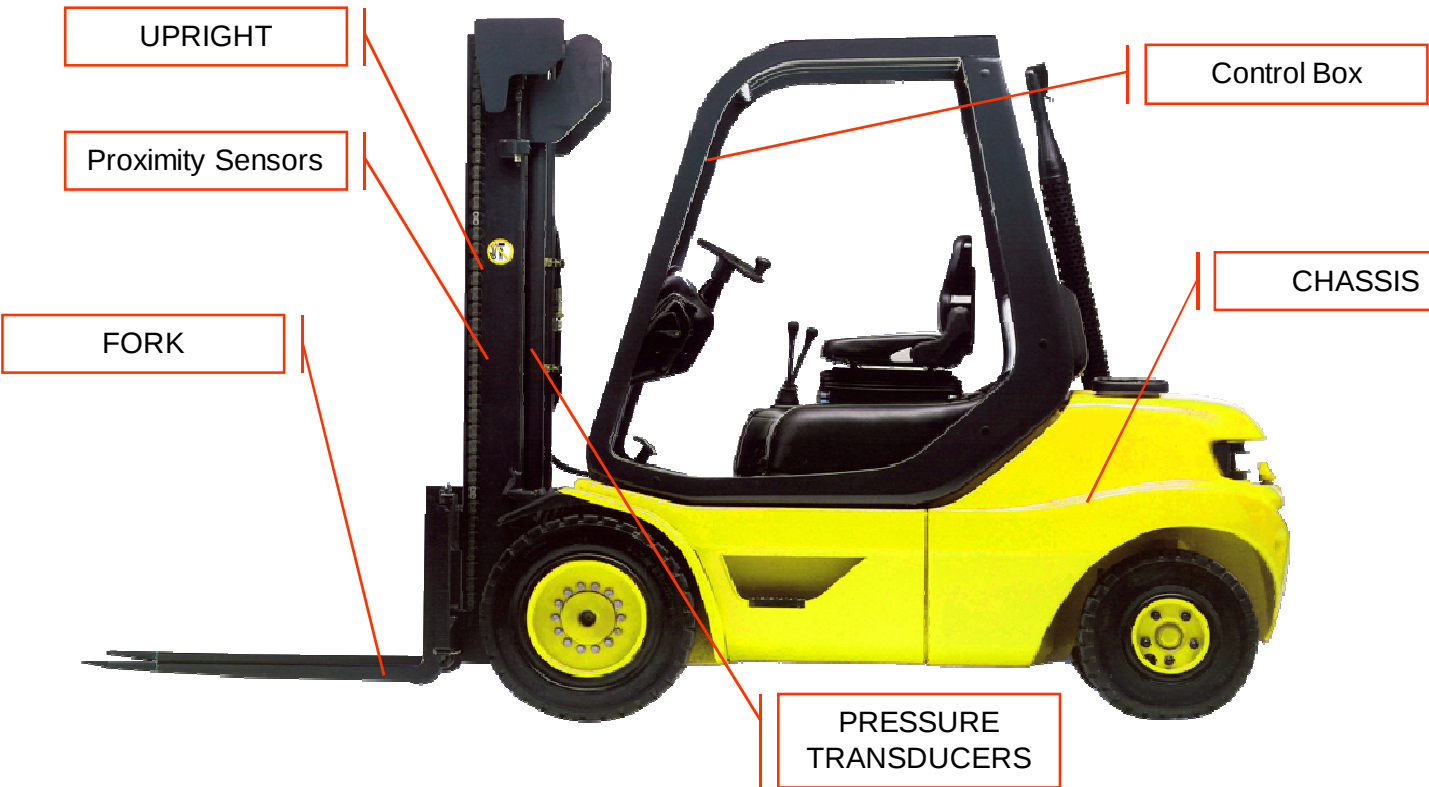
Disconnect the battery and discharge any electric charges before beginning work on the machine.

If possible move the machine inside a shed or to a surface with hard and clean ground.

Wheel Loader



Fork Lift

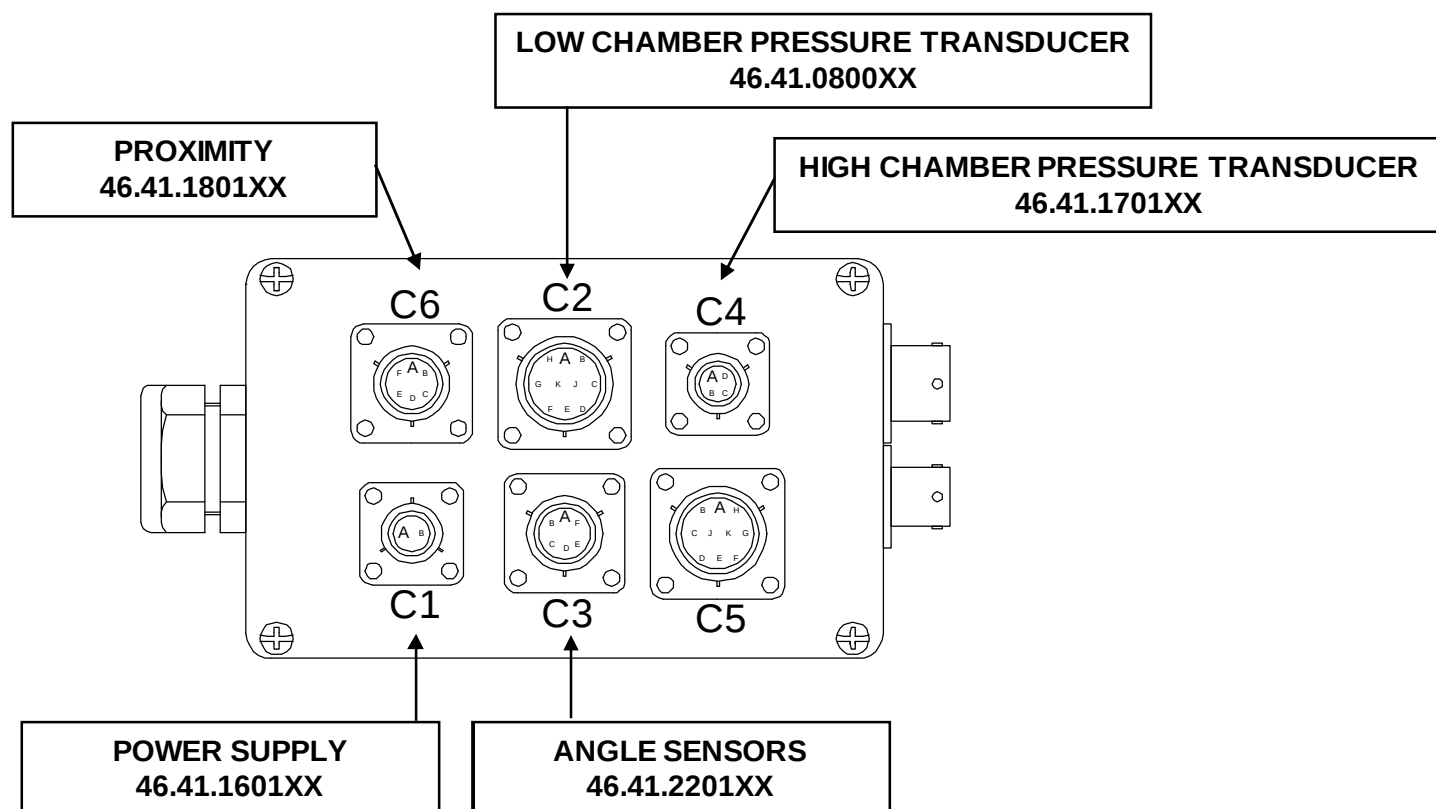


The central unit must be positioned on the right side of the cabin.

Before fastening make sure that:

- The unit does not block the opening of the front window or the movements of the lifting lever
- The unit is clearly visible to the operator and easy to use





The junction box is a wiring hub that groups all the machine cables, from battery and sensors. The junction box can be positioned in the battery compartment, back to the seat or below the cabin.

Keep it away from water or dirty (protect unused connectors).



Example: Positioning under the cabin



WHEEL LOADER - VIEW-MASTER.05 POSITIONING ASA63 SENSOR ON THE CHASSIS

I.View

- Position and weld the plate to support the sensor as in figure1 ASA.



Support Plate
cod.: Y5 ASAM37

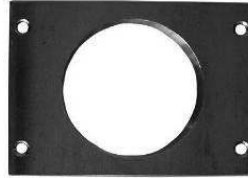


Figure 1

Install the ASA sensor in a safe area of the chassis, vertical and parallel to the longitudinal axle of the machine.

- Fix the sensor on the plate as in the left picture.
- Tighten the screws using a 4 set screw wrench



Screw M5X20 UNI5931
Grower washer M5 UNI1751
Flat washer M5 UNI6592

WHEEL LOADER - VIEW-MASTER.05 POSITIONING ASA67 SENSOR ON THE MAIN BOOM

I.View



- Position and weld the plate to support the sensor as in figure1 ASA.



Support Plate
cod.: Y5 ASAM37



Figure 1

Install the ASA sensor taking care that the cable is faced parallel to the boom and eventually other cables that are already installed in the machine.

- Fix the sensor on the plate as in the left picture.
- Tighten the screws using a 4 set screw wrench



Screw M5X20 UNI5931
Grower washer M5 UNI1751
Flat washer M5 UNI6592

Positioning the proximity sensors is extremely important for the weighing accuracy during the lifting stage. Proximity have to be installed taking care that the lifting reference notch activates the first proximity switch, and that it remains active even when the second has been activated. If the weighing system is running properly, the acoustic indicator will go off after the second proximity has been reached. This means a measurement has been made. Vice-versa, when the vehicle arm is coming down, it must first activate the second proximity, and then the first. In this way weighing takes place only during lifting and not lowering.



In order to have the system properly operate, it is recommended to enable the weighing phase when the points **A** and **B** are aligned as in the picture here below.









The box is IP65 waterproof, and has been designed to protect the electrical connection between proximity sensors and the cable connected to the junction box.

We would advise you to position the box as near as possible to the proximity brackets, so that connections can be more easily made.



In a fork lift the proximity distance has to be about 20 cm due the high speed of the fork rising.

From ground, the start weigh point should be at least 40 cm.

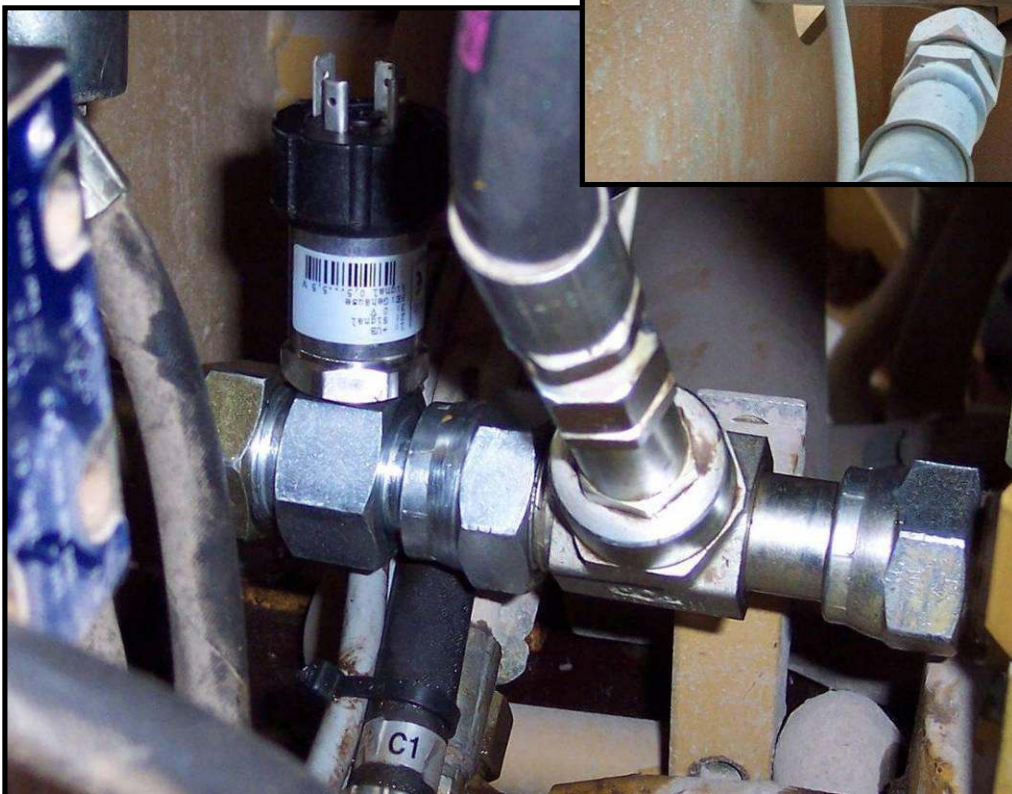
From the proximity “head” and the moving part installed on the machine, the max distance is 5 mm, so try to keep 2-3 mm of air between the proximity and the metal when is activated.



For the unit to work properly, the transducer must be only mounted in such a way that it can measure the pressure inside the bucket raising cylinder in the lower chamber. Therefore work out where the possible connection point ought to be as follows:

- **Installing a tee**
- **Welding a pawl to the rigid pipe**
- **Drilling a hole and threading the connector**
- **Using pressure outlets already present on the vehicle**
(these are generally present where pressure is measured with a manometer gauge)

Note: if you mount the unit in another place, it may not work so well.



Place the hydraulic connector holder.

Inject the vehicle's own hydraulic oil through the nipple of the same holder to avoid forming air locks.

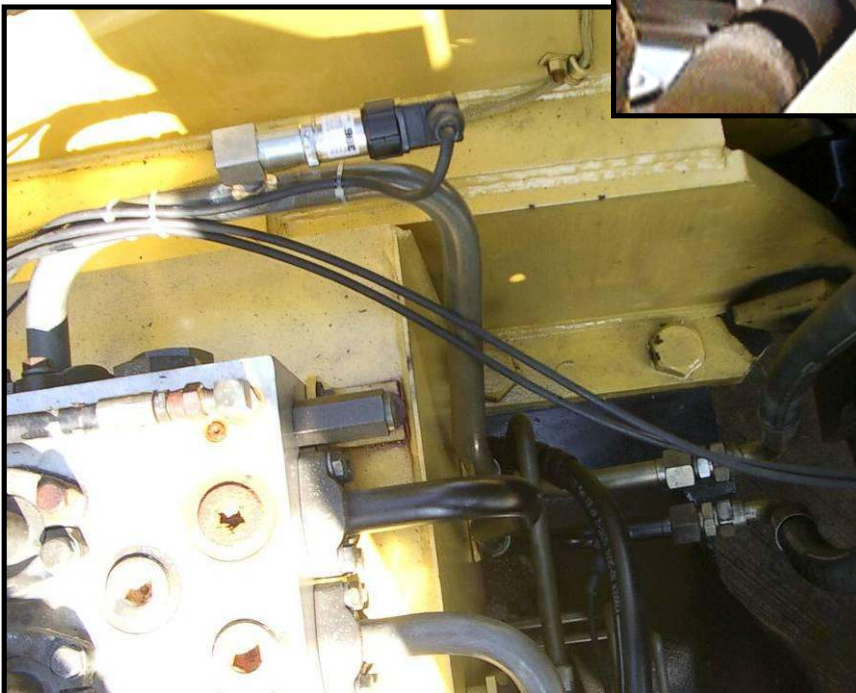
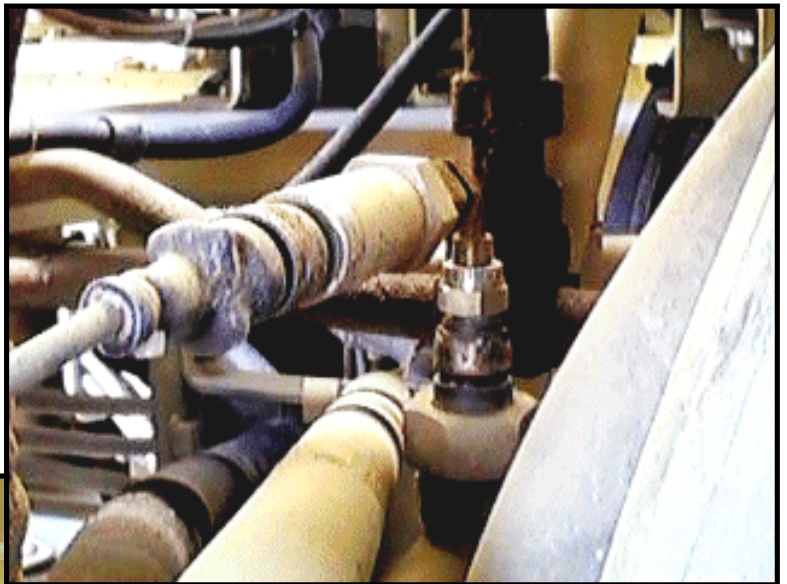
Partially tighten the transducer and pressurise the cylinder until an air-oil emulsion starts coming out.

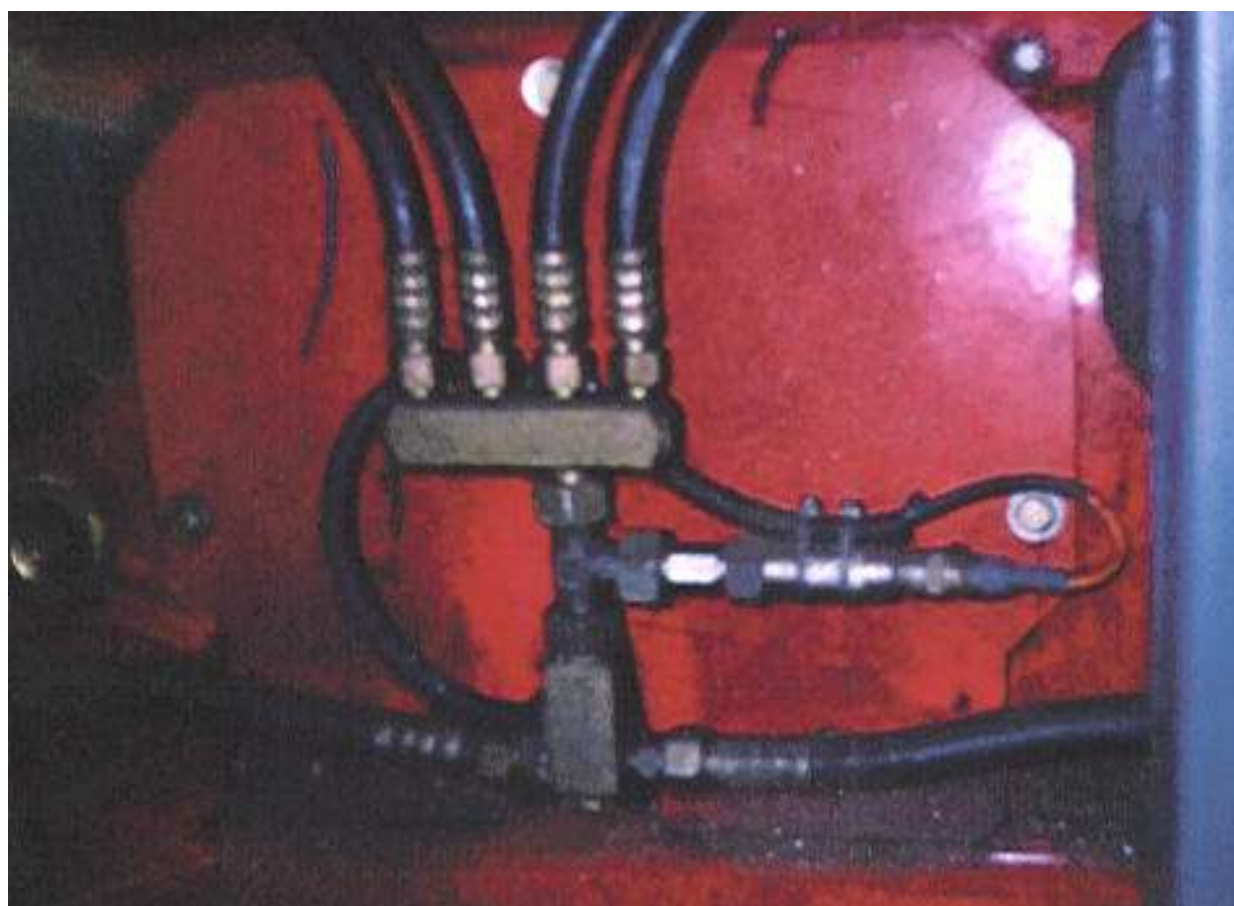
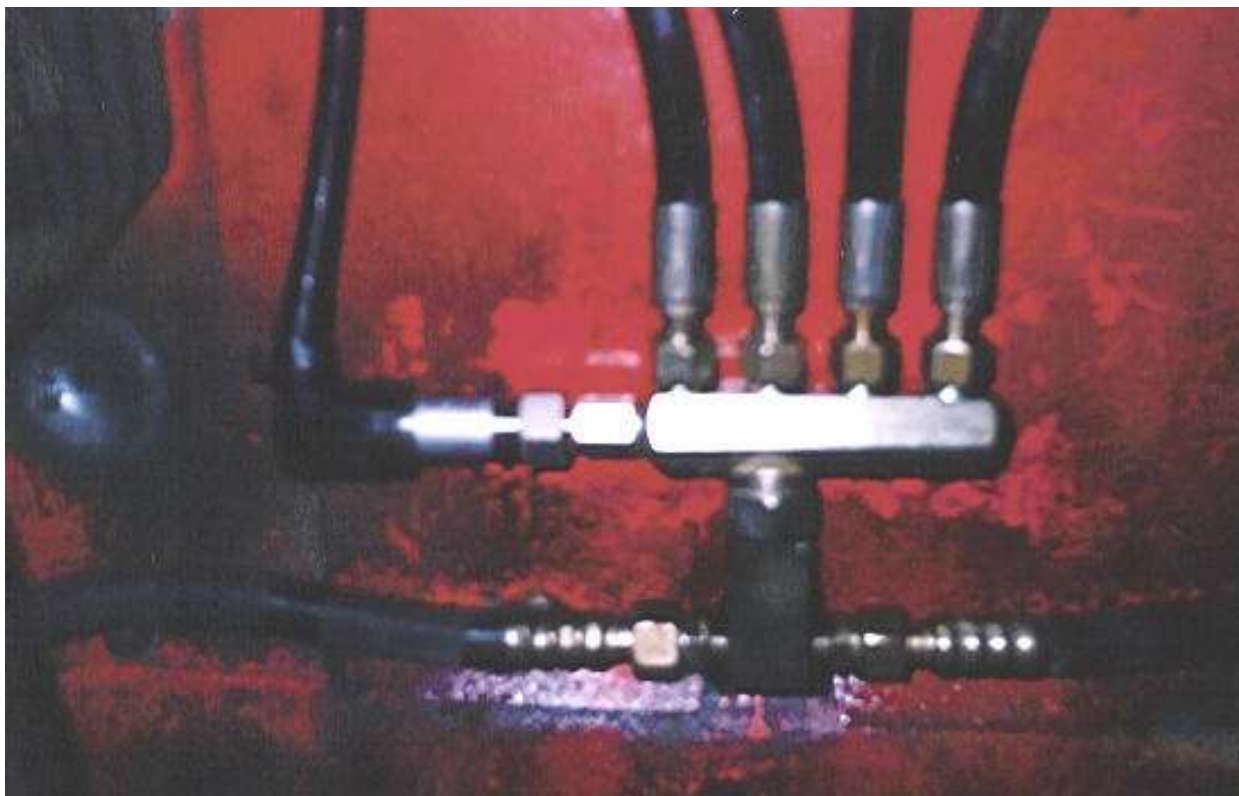
When only oil starts coming out, completely tighten the transducer.

Make sure you do not place the transducer in such a way that it will receive knocks while the machine is running. If necessary, use elbow joints to keep the transducer out of the way.

The installation of the transducer is a very important stage, and you should take all possible care while doing it, as the readings may not be accurate if you do not.

Once you have made your installation, make sure there are no oil leaks from the circuit.





“T” Connection

POWER SUPPLY CABLE

The power supply cable is taken to the battery and connected directly to it or after the battery main switch if present, as the unit has an ON/OFF switch. The feed can however be taken into the cabin.

Be careful to use as minus (0V) the real minus of the battery that usually compared to the chassis has to have the same potential (no different voltage). On some machine with 2 or more batteries it's very important to **don't** take as minus the negative pole of the second or third battery that it's different from the chassis voltage.

ANGLE SENSORS CABLE

These cables should pass through using as far as possible the paths used by the hydraulic system. The cables should be protected with rubber sheathes when they pass behind the hoses.

CABLES IN THE CABIN

In its passages these cables must not obstruct the operator or the movements of the machine lever.

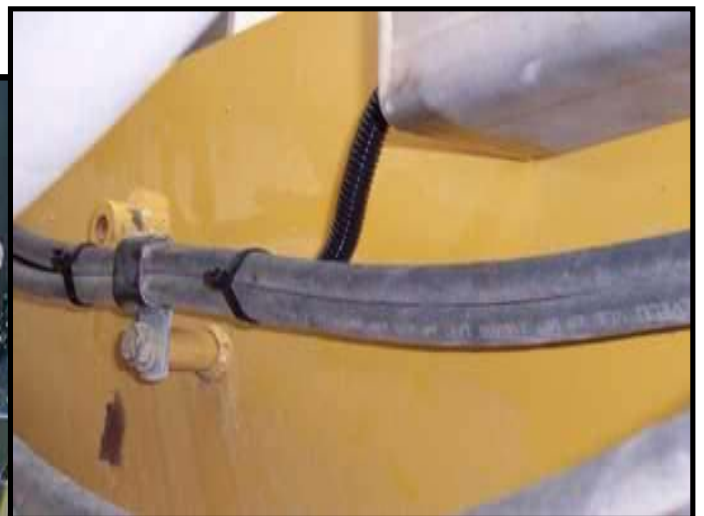
CABLE SLACK

All the cables are of standard length; the excess of each cable should be collected in the excavator "chassis" or well fixed on booms. fastening them in place after the slack has been taken up.

IMPORTANT NOTES

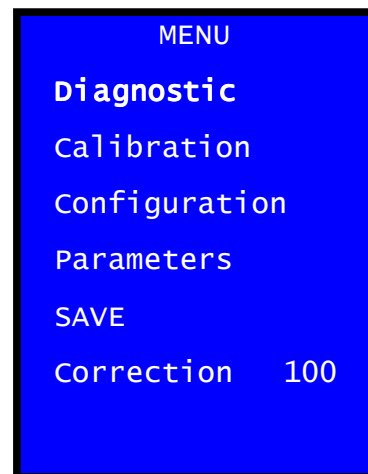
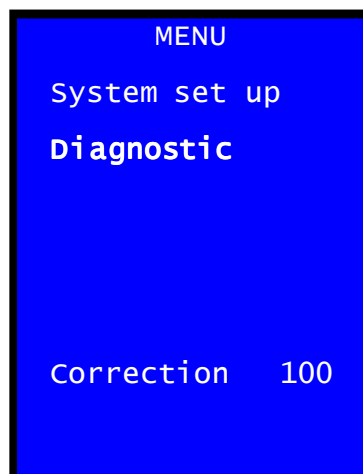
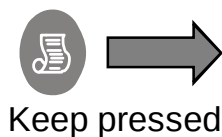
After the cables have been passed on the boom perform several tests along the entire arm stroke to check the cable functionality.

Often a badly pulled clamp or an incorrectly fastened cable affects system operation.



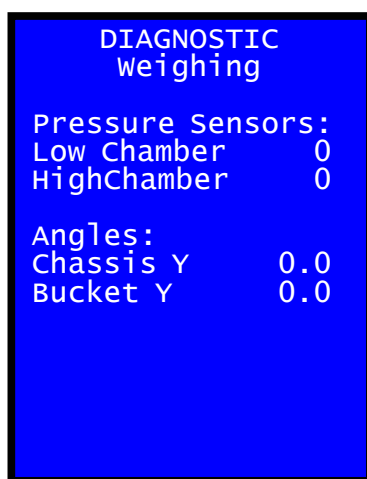


	Short press: option menu Long press: diagnostic and calibration
	Cursor up/down in the text menu
	Value decrease/increase in text menu
	Confirm the selected function / enter in the selected menu
	Exit (back to previous menu page).

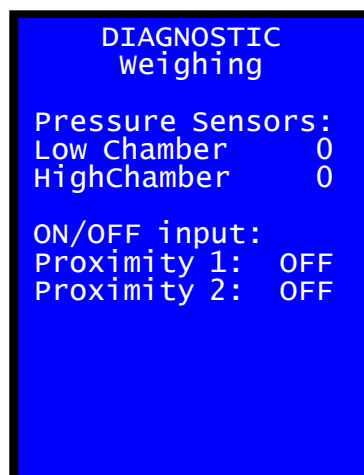


The right page is shown only if the password has been set,

- In both cases it's possible to enter in the diagnostic page.
- It's useful to enter in this page after the installation of the system to see that all the sensors are properly received.



VIEW-MASTER.05

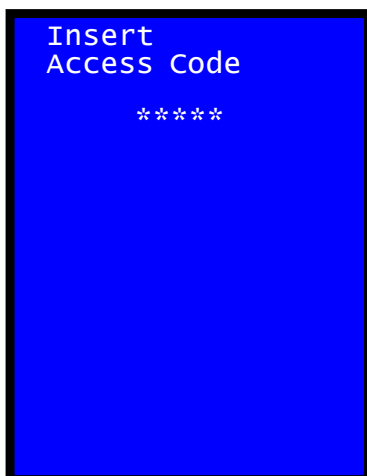
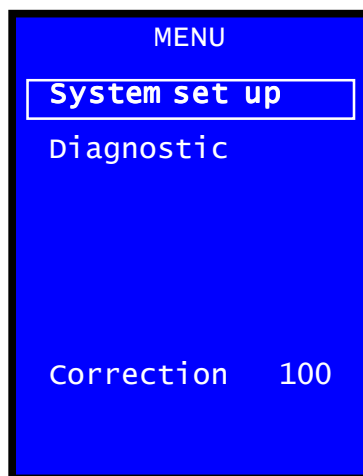


VIEW-MASTER.04

Pressure Sensors: pressure reading expressed in BAR (analogue signal 0-5,5 V)

Angles: angles received from the angular sensor (CAN-BUS digital line).

ON/OFF input: (digital input 0-12V)



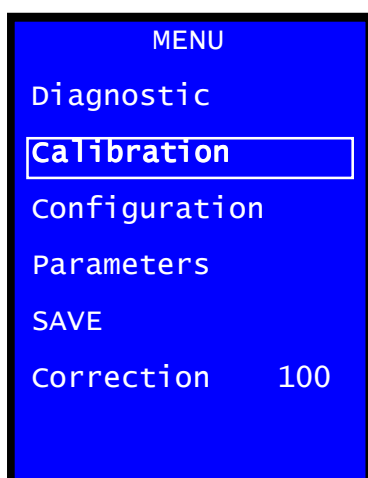
The code has 5 digits shown as asterisks until changed.

To set the pin use  or  to select the digit and  or  to edit it.

When the 5 digits are set, press  to continue

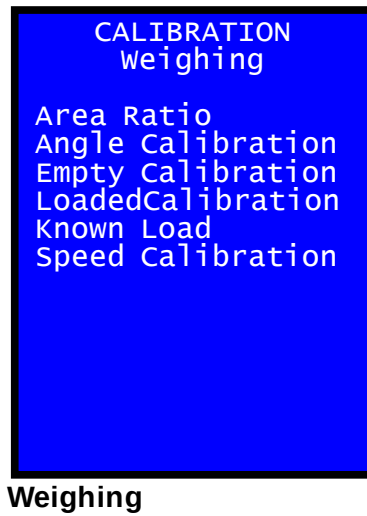
Wrong PIN: "WRONG PIN" message.

Correct PIN: Installer reserved page 



proceed to calibration pages.

WARNING: the control box handles two different machines calibrations. The machine under calibration is the machine selected in the OPTIONS MENU.

**Area Ratio**

Ratio between the cylinder's chambers (where the pressure transducer are installed).

Angle Cal. (only if the angular sensors are in use)

Calibration of the weighing angle range.

Empty Cal.

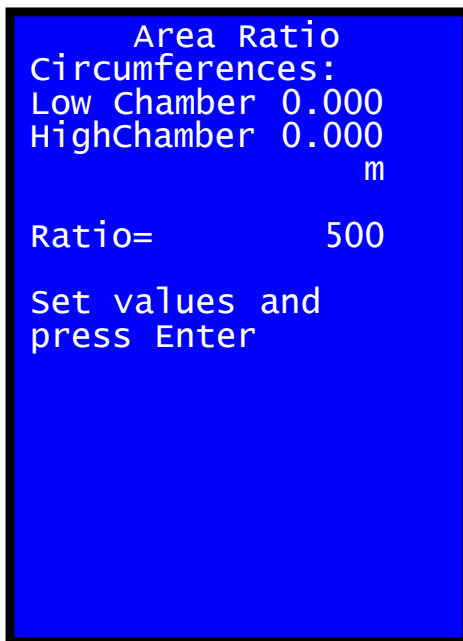
Pressure table with no load in the bucket.

Loaded Cal.

Pressure table with a known load in the bucket.

Known Load:

Value of the Load (in metric tons) in the bucket during the loaded calibration.



To be done only if 2 pressure transducers are installed.

Ratio between the cylinder's chambers (where the pressure transducer are installed).

This value hasn't a particular unit of measure. Must be between 0 and 1000.

Insert the circumferences value of the cylinder (low chamber, rising chamber) and the piston (rod, high chamber) expressed in meters (m) or feet (f) then press  to calculate the Area Ratio value.

CALIBRATION
Angles

Chassis	
Side	L
Actual:	0.0
Boom	
Side	L
Actual:	0.0
Ang.Ground:	0.0
Ang.Reset:	0.0
Ang.Start:	0.0
Ang.Stop:	0.0

Angle range used for the weighing procedure.

The setting of this angle is important: starting to weight too low can affect the system accuracy.

Side:

Side where the sensor is mounted (**L**eft or **R**ight).

Actual:

Actual sensor value.



Ang.Ground

Minimum reachable angle by the boom. It's used just to zero the sensor angle.

Ang.Reset:

Reset Angle: it's necessary to move the boom below this angle before to perform a new weighing. The installer is free to choose this angle. Moving the boom down make higher the possibility to reach the start weighing point at constant speed.



Ang.Start:

Start weigh angle.

The two boom pivots should be at the same height.



Ang.Stop:

End weigh angle.

Move the boom at least 6-10 degrees above the start weigh point to have a weighing phase that last a couple of seconds at maximum speed.



(EMPTY and LOADED BUCKET CALIBRATION)

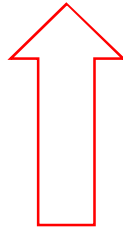
Before starting the pressure calibration (with empty and loaded bucket) we suggest to perform some booms movements to bring the machine hydraulics to the working (constant) temperature.

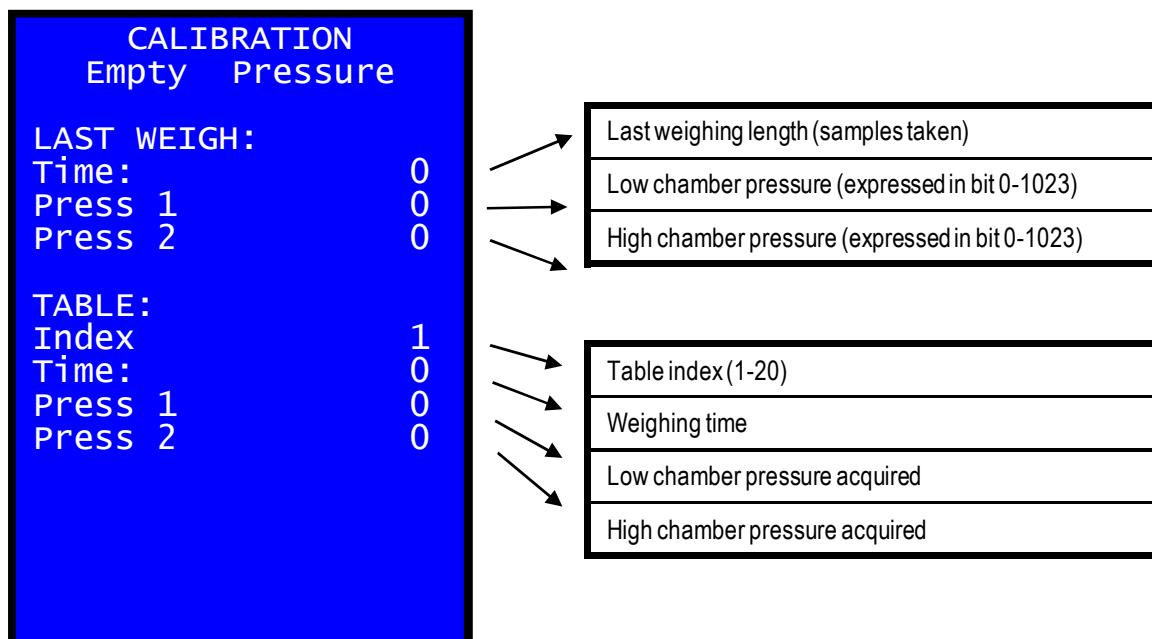
On the major part of machines is also better to disable all power saving functions (usually marked by hare/turtle or auto rpm lower) and to keep the engine rpm at constant value (usually at the maximum).

Machine must be also levelled and stable.

NOTE: all the calibration operations are performed starting the boom rising with the bucket completely closed.

If the machine is equipped with fork, they have to be always in the same position (usually horizontal).





Before starting a new calibration check that the table index is “1” and Press 1 / Press 2 values are empty (otherwise has to be zeroed in the configuration menu).

Close the bucket and place it on the ground.

Make a lifting (weighing) with empty bucket and engine rpm at maximum.

The system will acquire the pressure during the rising and the values will be shown in the TABLE section under the proper index.

Decrease the number of rpm of the engine and repeat the rising, starting with closed bucket on land.

The index table for each weight increase (step of calibration) performed.

Continue lowering the rpm of the engine and repeat the weighing.

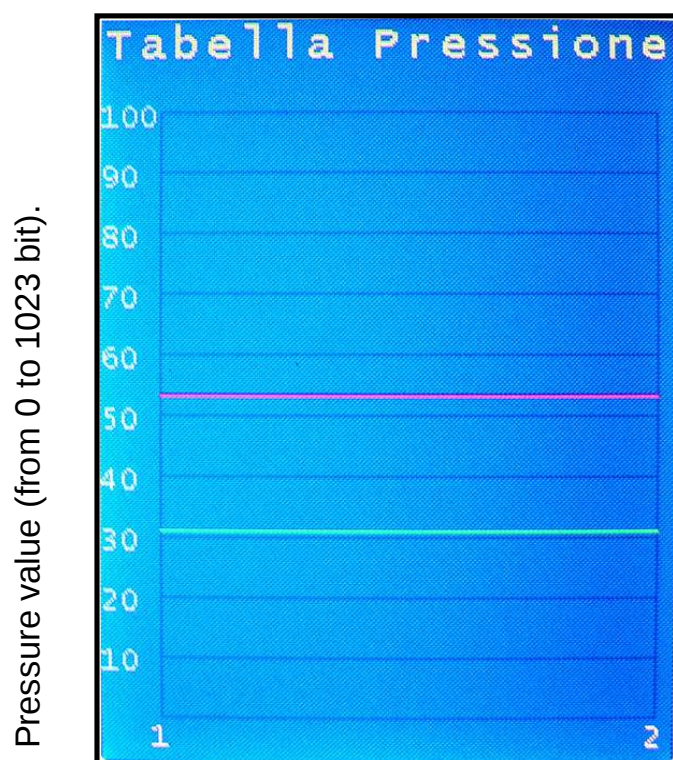
Continue until the engine rpm are so low that make lifting the bucket difficult.

IMPORTANT: Do not move other parts of the machine during the calibration.

If the weighing is not performed check:

- The calibration of the angles is correct or proximity are properly activated.
- Weighing system is enabled ( in operator page).

Pressing the key switch  it is possible to check the pressure table.



Pressure index table.

The number of points corresponds to the calibration rises.

One of the two tables can have multiple points of a second made of rose

LIGHT GREEN: low chamber empty table

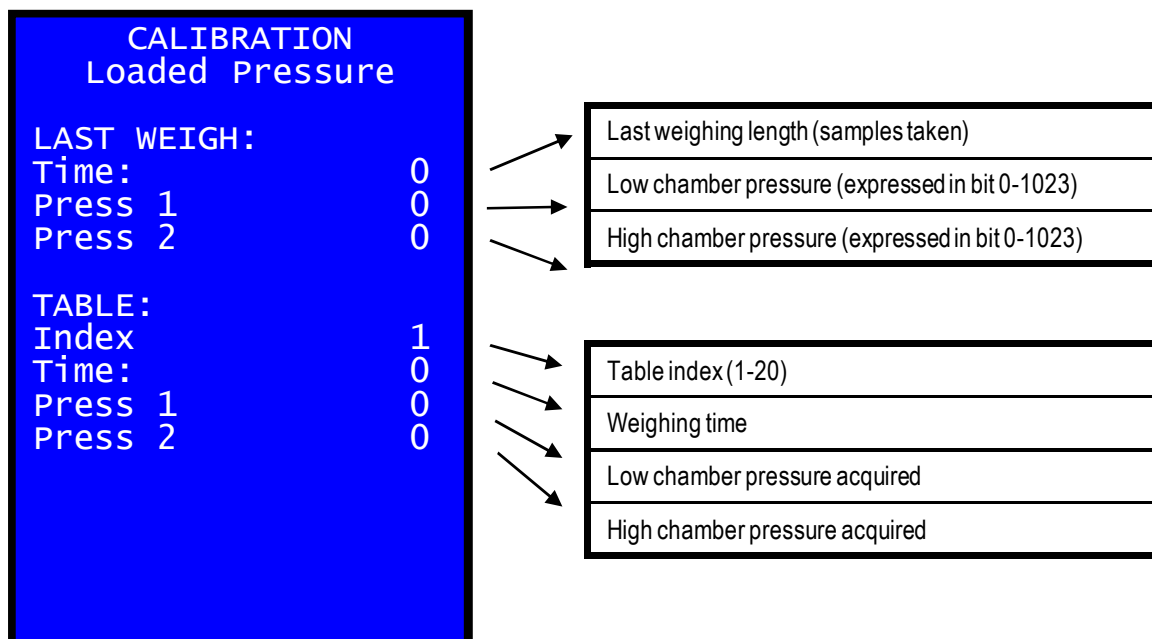
DARK GREEN: high chamber empty table

RED: low chamber loaded table

ORANGE: high chamber loaded table

When all the points are taken save the data permanently by means of the command Save on Calibration menu.

If you switch off the power without save, you'll loose all calibration data.

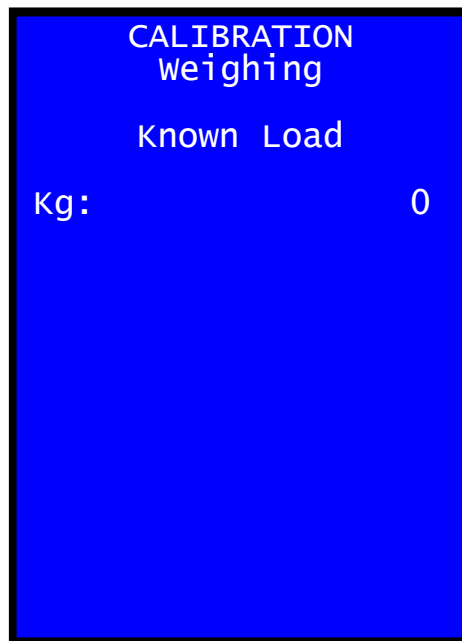


The loaded calibration has to be performed with the bucket full of material in order to obtain good results (at least $\frac{3}{4}$ it's recommended; we also recommend to use a material like gravel or sand that easily fill the bucket instead of a big concrete block.)

Be careful to don't exceed the bucket maximum capacity (you don't have to loose important quantity of material during the calibration!!).

Proceed in the same way of empty bucket calibration, performing all the steps.

At the end of the calibration it's possible to check again the pressure table filled with loaded calibration too.



The “Known Load” value is the real weight of the material present in the bucket during the “Loaded Bucket” calibration.

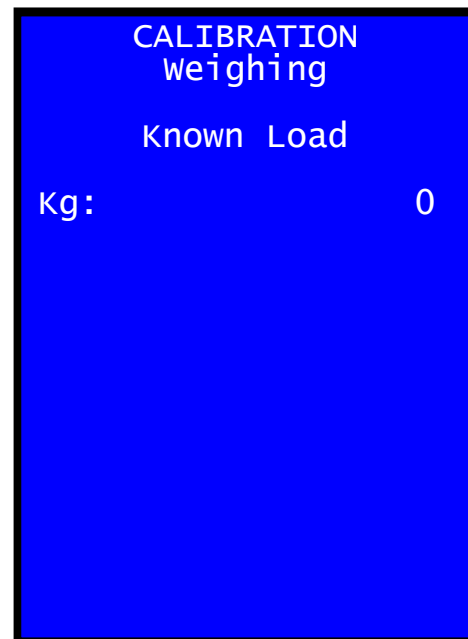
The ideal situation is to weigh the machine (or a truck) on a certified “weighing bridge” with and without the material to know the real net weight and enter this value in the control box.

At this point the system is able to weigh. Save your work and make some lifting (weighing) from the main work screen to see that the system works.

The weight on the screen should be similar to the entered Known Load if that material is still in the bucket.

As system tests continue to weigh the same load, taking care to always use the same speed and position of the machine.

We expect that the on-screen value is always the same with little variation, if not (eg 500 kg of difference between a bucket and the other) it is good to check the calibration, as well continuing the optimization of the system is assumed there is a fundamental error in the calibration of the system or application.



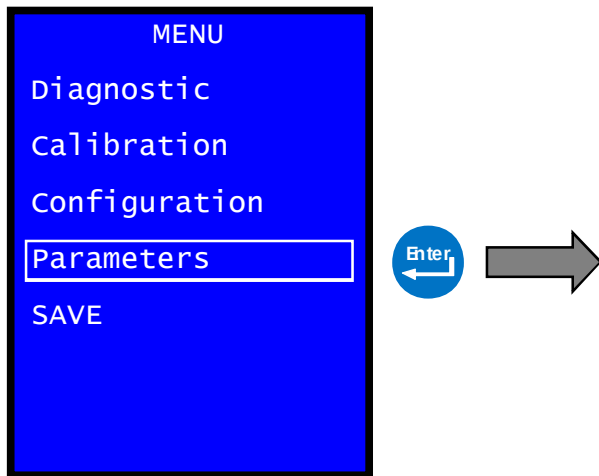
System is designed to take count of the material loaded on a truck, so system accuracy is referred to the truck load calculated by the control box compared with the real net weight of the truck.

Installation/Calibration check and accuracy validation:

Try to load several trucks and compare the material net weight value calculated by the control box with the value measured by another certified system (example weighing bridge).

System accuracy must be with an error $\leq \pm 1\%$ from the real net weight.

If the error is higher but constant (many trucks compared are always weighing heavier for example) it's possible to simply adjust the Known Load to match the required system accuracy: the "Known Load" must be increased / decreased taking into account the number of buckets made for each truck (remove or add to the "Known Load" the weight error divided by the number of buckets).



Parameters are values that can be modified only by the system installer.

Usually are a fine tuning of the system, but too much dangerous/complicated to be available to the end user.

PARAMETERS Weighing	
Rounding	0
Printer	STP6
ShowNames	1
SerialProt.	0
Press.Tra.	300

Rounding

Mathematical rounding of the load shown on the screen.

1.00 -> 1.00

1.01 -> 1.00

1.03 -> 1.05

1.06 -> 1.05

Printer

System printer: STP6 or STM295

ShowNames

Show the names of the items in use in the main display page.

SerialProt.: Enables the send of the message trough the serial line to communicate with an auxiliary device.

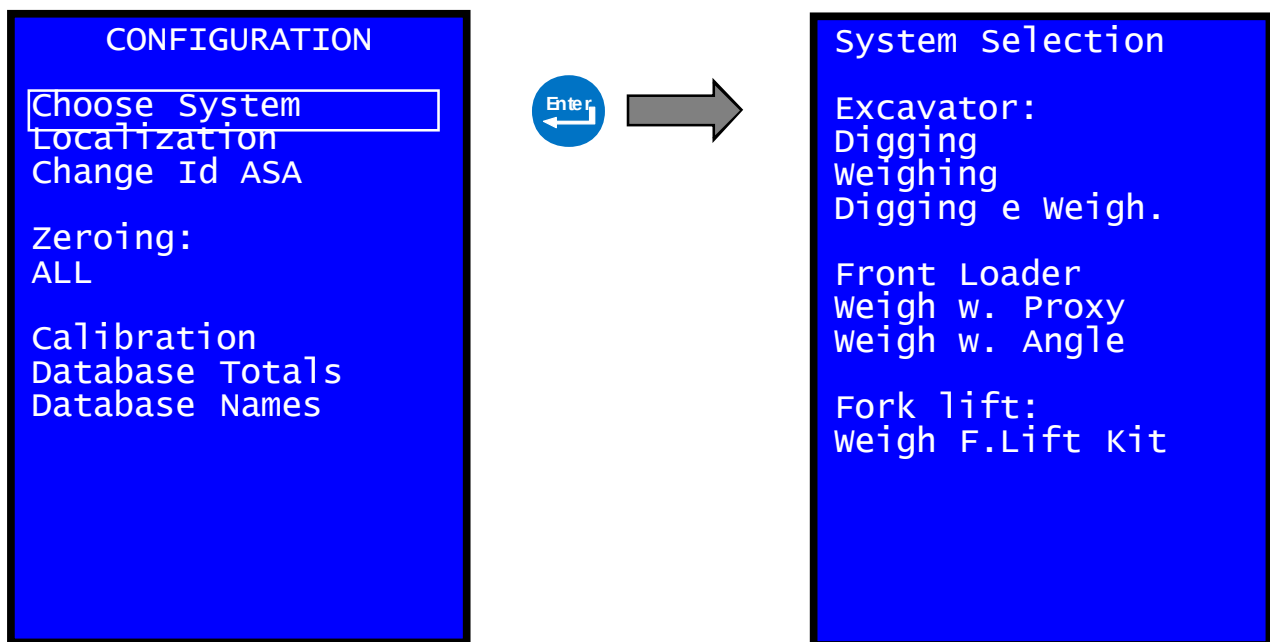
0: disabled

1 or greater: enabled (frequency of the message is 50 ms multiplied the set number).

Details in the dedicated manual.

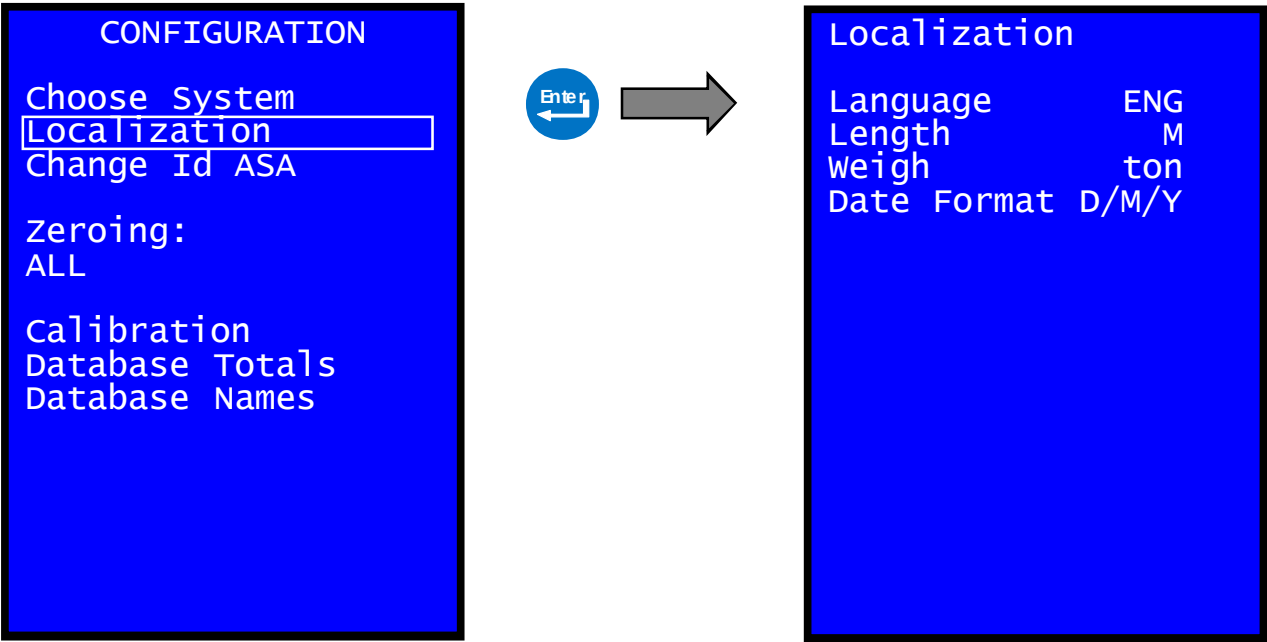
Press Tra.

It's possible to set the correct value of the pressure transducer used. It's used only to have a proper visualization in the diagnostic page.



System Selection

Select on with machine and mode the control will work.

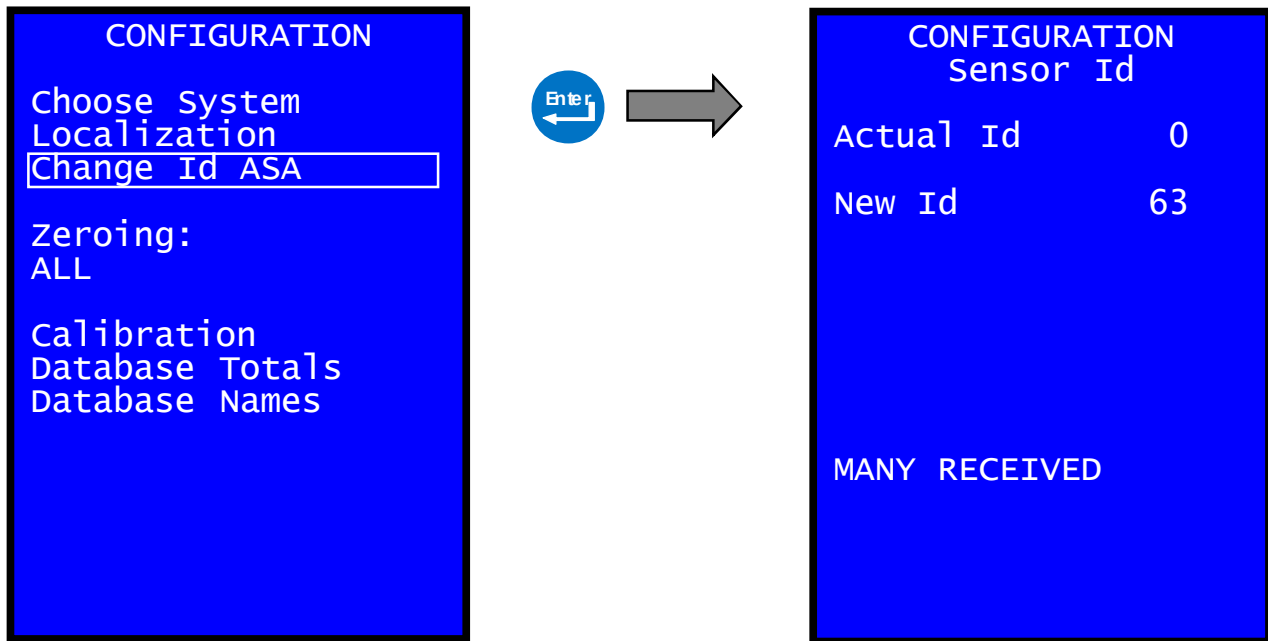


Language
System language

Length
Unit of measure used for lengths

Weigh
Unit of measure used for mass (weigh)

Date Format
How the date is shown



This procedure can be used to program the angular sensor “Id” (the identifier that distinguishes one angular sensor to another over the CAN-BUS digital line).

This means that you can transform a CAN-BUS angular sensor to another.

This could be useful to replace a bad sensor having a sensor with different Id as spare part.

Chassis = ID63

Boom1 = ID64

Boom2 = ID65

Boom3 = ID66

Bucket = ID67

To perform the sensor programming only 1 sensor must be connected to the CAN-BUS line.

Actual ID

Actual sensor Id connected to the line. Zero if no or more then one sensor connected.

New Id

Select the new Id that must be programmed. Press  to program.

Status Line

Nothing Connected – No Sensor Connected.

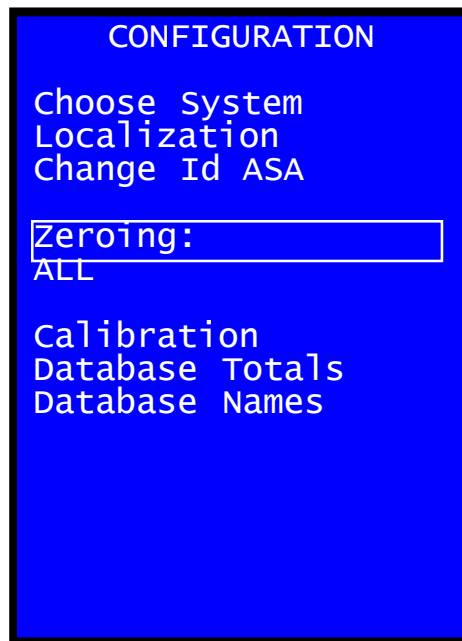
MANY RECEIVED – More then 1 sensor is actually connected.

Ready to program – Sensor Ready for programming.

Programming... - Waiting sensor answer.

Programmed / Power Off System – Id programmed (changes after a sensor power off / power on cycle).

Failed – No response from sensor (not programmed)



ALL

Restore the system to the original setting, calibration, parameters, names and totals are zeroed.

Calibration

Delete the system calibration (both machines) and restore the system original parameters.

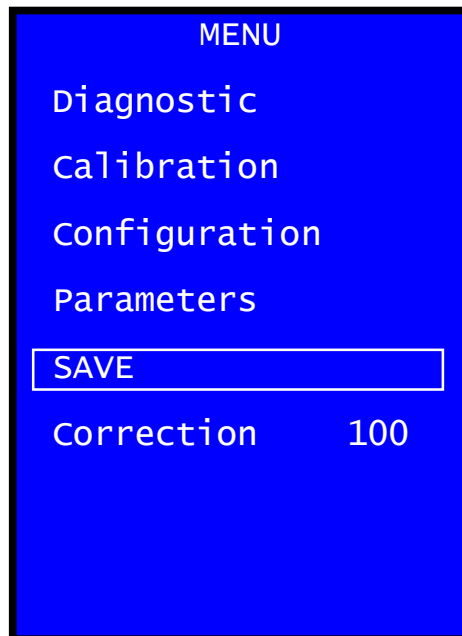
Database Totals

Zeroing of all the loads summary.

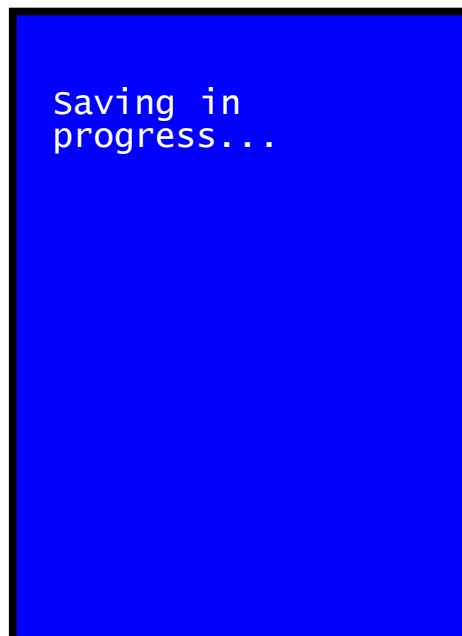
Database Names

Zeroing of all the names set.

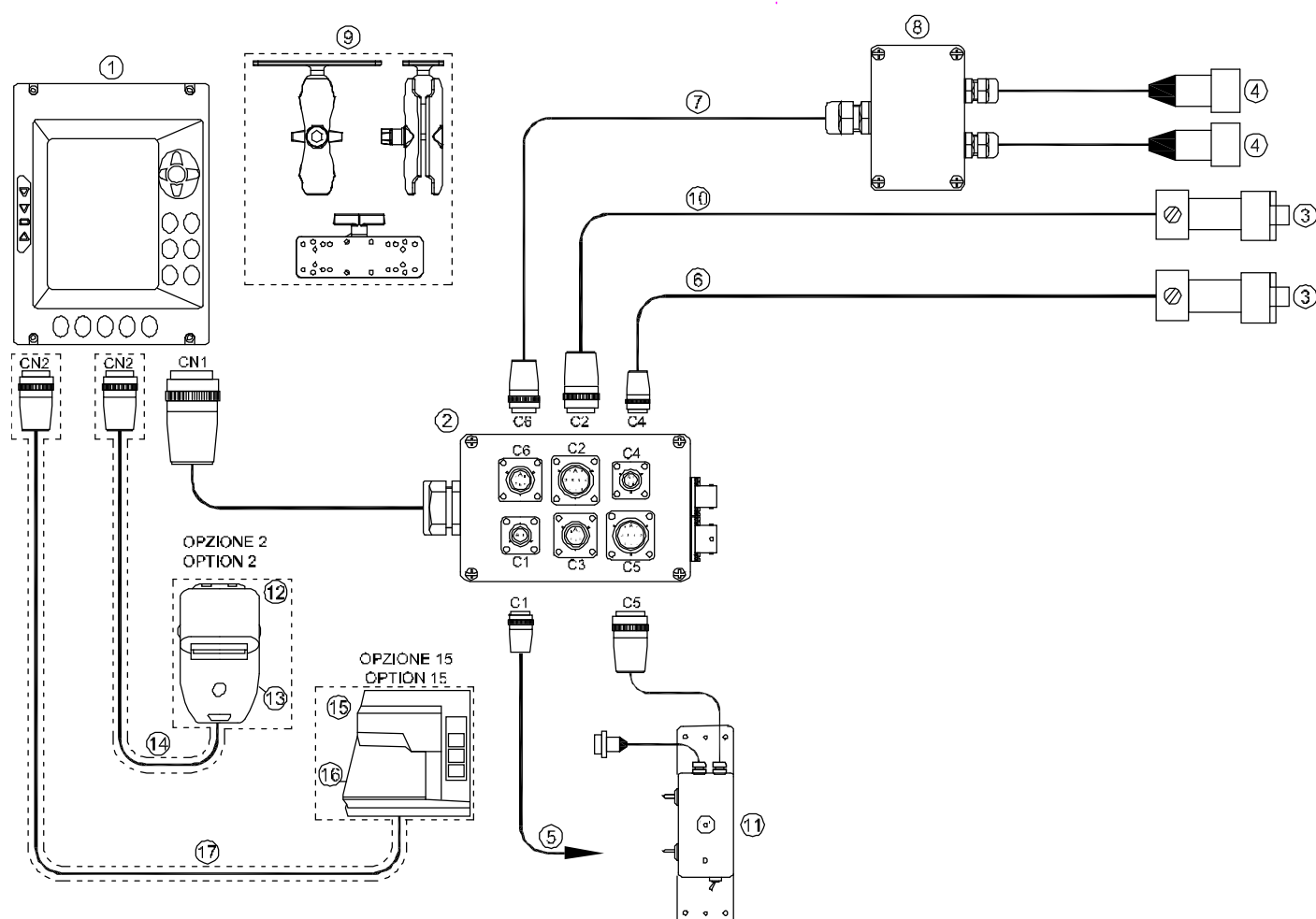
IMPORTANT: no parameters are automatically saved in calibration. You have to launch the SAVE command before a system power off to store permanently in the system memory any changes made in calibration.



Press  on SAVE



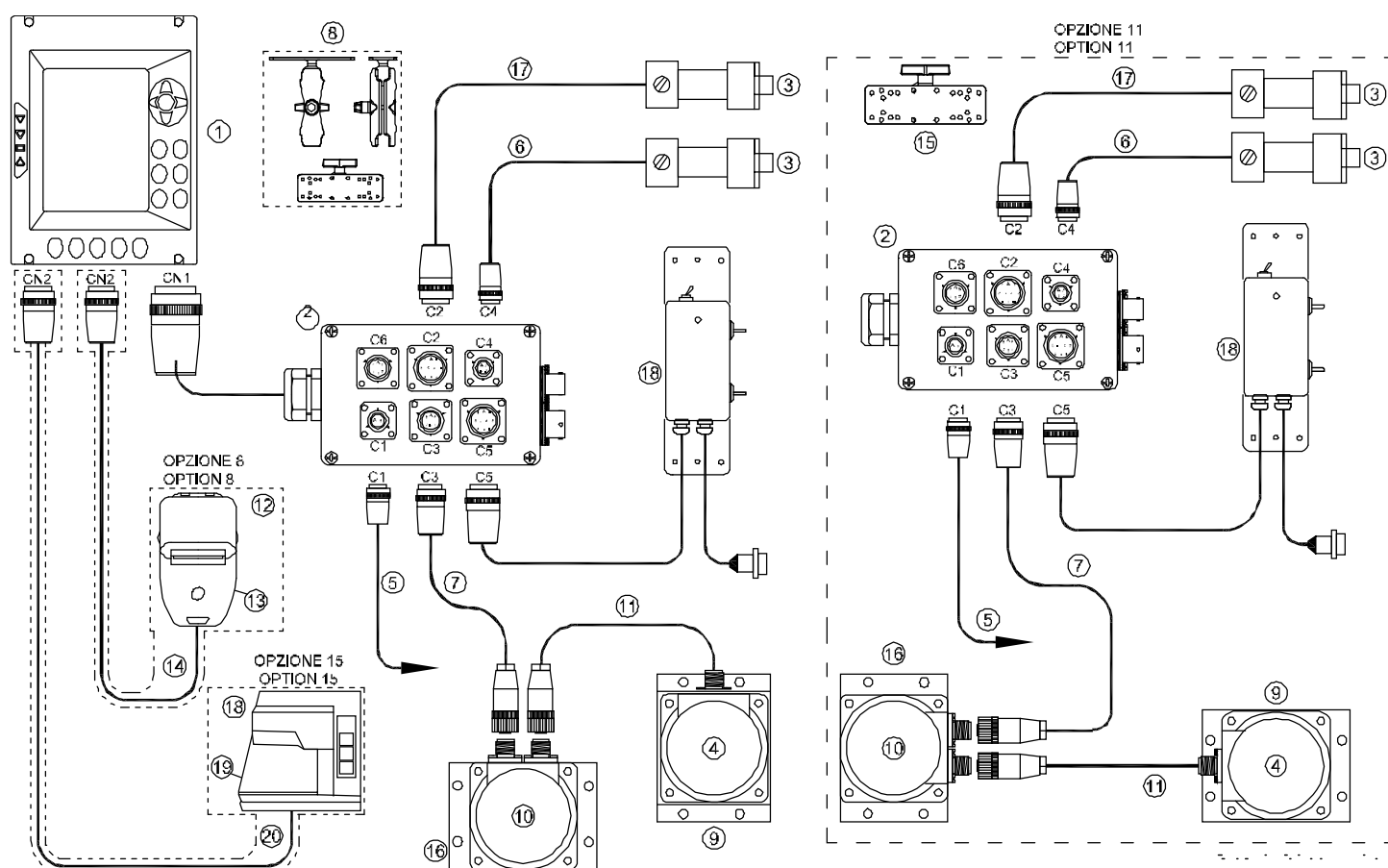
When done the previous page will appear again.



IMPIANTO BASE / STANDARD SYSTEM: 80.UV.MA0040.01			
Rif.	Qty	Titolo/Nome.	Codice:
1	1	UNITÀ CENTRALE / MAIN UNIT - VIEW GREY	43.31.1101A1.01
2	1	SCATOLA DI DERIVAZIONE / JUNCTION BOX - SD12	46.61.0304A0.01
3	2	TRASDUTTORE DI PRESSIONE / PRESSURE TRANSDUCER	AV45.60.0117.01
4	2	SENSORE DI PROSSIMITÀ / PROXIMITY SENSOR	45.50.0101XX.01
5	1	CAVO ALIMENTAZIONE / POWER SUPPLY CABLE	46.41.1801XX.01
6	1	CAVO TRASD. DI PRESSIONE CAMERA BASSA/PRESSURE TRANSD.CABLE LOW CHAMBER	46.41.1701XX.01
7	1	CAVO SENSORE DI PROSSIMITÀ / PROXIMITY SENSOR CABLE	46.41.1801XX.01
8	1	KIT INSTALLAZIONE SENSORI DI PROSSIMITÀ / INSTALLATION KIT FOR PROXIMITY	46.11.0025XX.01
9	1	KIT PER IL FISSAGGIO DEL DISPLAY (STAFFA RAM) / INSTALLATION KIT FOR DISPLAY	46.12.0201XX.01
10	1	CAVO TRASD. DI PRESSIONE CAMERA ALTA/ CABLE PRESSURE TRANSD. HIGH CHAMBER	46.41.0600XX.01
11	1	UNIT COM REM FOR VIEW WEIGHING	46.50.0909XX.01

OPZIONE 2: STAMPANTE TERMICA : 80.UT.KT0500.01 OPTION 2: THERMAL PRINTER : 80.UT.KT0500.01			
Rif.	Qty	Titolo/Nome.	Codice:
12	1	STAMPANTE TERMICA / THERMAL PRINTER	46.50.1501XX.01
13	1	KIT DI INSTALLAZIONE STAMPANTE / INSTALLATION KIT FOR PRINTER	46.12.0501XX.01
14	1	CAVO STAMPANTE / PRINTER CABLE	46.46.0003XX.01

OPTION 15: KIT STAMPANTE CARTELLINO: 80.UT.KT0600.01 OPZIONE 15: KIT TICKET PRINTER: 80.UT.KT0600.01			
Rif.	Qty	Titolo/Nome.	Codice:
15	1	STAMPANTE ETICHETTE / TICKET PRINTER - STM295	46.50.3700A0.01
16	1	SUPPORTO STAMPANTE STM295 / MOUNTING KIT PRINTER STM295	Y5 BIGSHPM7
17	1	CAVO PER STAMPANTE STM295 / STM295 CABLE LINK	46.40.F500XX.01

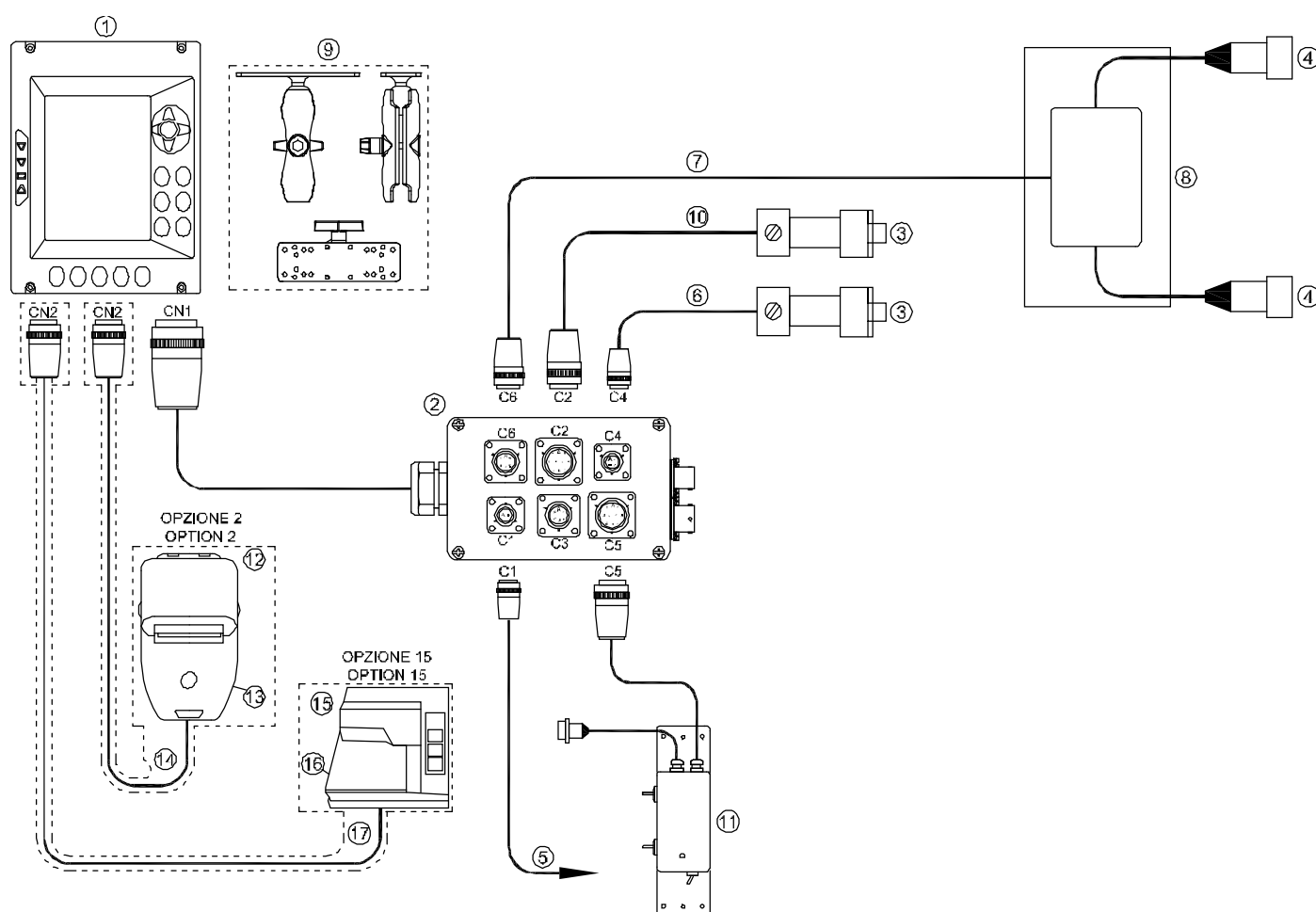


IMPIANTO BASE: 80.UV.MA0050.01			
Ref.	Quantity	Name	Codice
1	1	UNITÀ CENTRALE / MAIN UNIT - VIEW GREY	43.31.110'A'.01
2	1	SCATOLA DI DERIVAZIONE / JUNCTION BOX - SD12	46.81.0304A0.01
3	2	TRASDUTTORE DI PRESSIONE / PRESSURE TRANSDUCER	AV45.80.0117.01
4	1	SENSORE ANGOLARE CAN-BUS / ANGULAR SENSOR CAN-BUS - ASA BLACK	45.10.0203A1.01
5	1	CAVO ALIMENTAZIONE / POWER SUPPLY CABLE	46.41.1701XX.01
6	1	CAVO TRASD. DI PRESSIONE CAMERA BASSA/PRESSURE TRANSD.CABLE LOW CHAMBER	46.41.1701XX.01
7	1	CAVO SENSORE ANGOLARE / ANGULAR SENSOR CABLE	46.41.2201XX.01
8	1	KIT PER IL FISSAGGIO DEL DISPLAY (STAFFA RAM) / INSTALLATION KIT FOR DISPLAY	46.12.0201XX.01
9	1	KIT PER IL FISSAGGIO DEL SENSORE BENNA / INSTALLATION KIT FOR SENSOR BRACKET	46.11.0012XX.01
10	1	ASA PASSANTE CAN BUS / PASS. ANGULAR SENSOR CAN-BUS	45.10.0502A1.01
11	1	CAVO COLL.ASA PASS.CAN SPL=6m / CABLE FOR ASA PASS. CAN SPL=6m	46.11.2301XX.01
12	1	KIT FISSAGGIO ASA PASSANTE / SENSOR SP MOUNTING KIT	46.11.0008XX.01
13	1	CAVO TRASD. DI PRESSIONE CAMERA ALTA/ CABLE PRESSURE TRANSD. HIGH CHAMBER	46.41.3800XX.01
14	1	UNIT COM REM FOR VIEW WEIGHING	46.50.3909XX.01

OPTION 15:KIT STAMPANTE CARTELLINO: 80.UV.KT0600.01 OPZIONE 15: KIT TICKET PRINTER: 80.UV.KT0600.01			
Rif.	Qty	Titolo/Name	Codice
15	1	STAMPANTE ETICHETTE / TICKET PRINTER - STM295	46.50.5700A0.01
16	1	SUPPORTO STAMPANTE STM295 / MOUNTING KIT PRINTER STM295	Y5 RAM-1"1B
17	1	CAVO PER STAMPANTE STM295 / STM295 CABLE LINK	46.40.F500XX.01

OPZIONE 8: STAMPANTE TERMICA : 80.UV.KT0500.01 OPTION 8: THERMAL PRINTER : 80.UV.KT0500.01			
Ref.	Quantity	Name	Codice
12	1	STAMPANTE TERMICA / THERMAL PRINTER	46.50.1601XX.01
13	1	KIT DI INSTALLAZIONE STAMPANTE / INSTALLATION KIT FOR PRINTER	46.12.0501XX.01
14	1	CAVO STAMPANTE / PRINTER CABLE	46.40.0003XX.01

OPTION 11 KIT STANDARD SYSTEM 2nd MACHINE : 80.UV.KM0200.01 OPZIONE 11: KIT IMPIANTO BASE 2° MACCHINA: 80.UV.KM0200.01			
Ref.	Quantity	Name	Codice
2	1	SCATOLA DI DERIVAZIONE / JUNCTION BOX - SD12	46.81.0304A0.01
3	2	TRASDUTTORE DI PRESSIONE / PRESSURE TRANSDUCER	AV45.80.0117.01
4	1	SENSORE ANGOLARE CAN-BUS / ANGULAR SENSOR CAN-BUS - ASA GREY	45.10.0203A0.01
5	1	CAVO ALIMENTAZIONE / POWER SUPPLY CABLE	46.41.1601XX.01
6	1	CAVO TRASD. DI PRESSIONE CAMERA BASSA/PRESSURE TRANSD.CABLE LOW CHAMBER	46.41.1701XX.01
7	1	CAVO SENSORE ANGOLARE / ANGULAR SENSOR CABLE	46.41.2201XX.01
15	1	POLOLO A BASE RETTANGOLARE / RECTANGULAR KNOB	Y5 RAM-1"1B
9	1	KIT PER IL FISSAGGIO DEL SENSORE BENNA / FIXING KIT FOR BRACKET SENSOR	46.11.0012XX.01
10	1	ASA PASSANTE CAN BUS / PASS. ANGULAR SENSOR CAN-BUS	45.10.0502A0.01
11	1	CAVO TRASD. DI PRESSIONE CAMERA ALTA/ CABLE PRESSURE TRANSD. HIGH CHAMBER	46.41.3800XX.01
12	1	CAVO COLL.ASA PASS.CAN SPL=6m / CABLE FOR ASA PASS. CAN SPL=6m	46.11.2301XX.01
13	1	KIT FISSAGGIO ASA PASSANTE / SENSOR SP MOUNTING KIT	46.11.0008XX.01
14	1	UNIT COM REM FOR VIEW WEIGHING	46.50.3909XX.01



IMPIANTO BASE / STANDARD SYSTEM: 80.UV.MA0060.01			
Ref.	Q.ty	Name	Code
1	1	UNITÀ CENTRALE / MAIN UNIT - VIEW GREY	43.31.1101A1.01
2	1	SCATOLA DI DERIVAZIONE / JUNCTION BOX - SD12	46.61.0304A0.01
3	2	TRASDUTTORE DI PRESSIONE / PRESSURE TRANSDUCER	AV45.60.0117.01
4	2	SENSORE DI PROSSIMITÀ / PROXIMITY SENSOR	45.50.0101XX.0*
5	1	CAVO ALIMENTAZIONE / POWER SUPPLY CABLE	46.41.1601XX.0*
6	1	CAVO TRASD. DI PRESSIONE CAMERA BASSA/PRESSURE TRANSD.CABLE LOW CHAMBER	46.41.1701XX.01
7	1	CAVO SENSORE DI PROSSIMITÀ / PROXIMITY SENSOR CABLE	46.41.1801XX.01
8	1	KIT INSTALLAZIONE SENSORI DI PROSSIMITÀ / INSTALLATION KIT FOR PROXIMITY	46.11.0026XX.01
9	1	KIT PER IL FISSAGGIO DEL DISPLAY (STAFFA RAM) / INSTALLATION KIT FOR DISPLAY	46.12.0201XX.01
10	1	CAVO TRASD. DI PRESSIONE CAMERA ALTA/CABLE PRESSURE TRANSD. HIGH CHAMBER	46.4*.0800XX.01
11	1	UNIT COM REM FOR VIEW WEIGHING	46.50.0909XX.01

OPZIONE 2: STAMPANTE TERMICA : 80.UT.KT0500.01 OPTION 2: THERMAL PRINTER : 80.UT.KT0500.01			
Ref.	Quantity	Name.	Code:
12	1	STAMPANTE TERMICA / THERMAL PRINTER	46.50.1501XX.01
13	1	KIT DI INSTALLAZIONE STAMPANTE / INSTALLATION KIT FOR PRINTER	46.12.0501XX.0*
14	1	CAVO STAMPANTE / PRINTER CABLE	46.46.0003XX.0*

OPTION 15: KIT STAMPANTE CARTELLINO: 80.UT.KT0600.01 OPZIONE 15: KIT TICKET PRINTER: 80.UT.KT0600.01			
Rif.	Q.ty	Titolo/Nome.	Codice:
15	1	STAMPANTE ETICHETTE / TICKET PRINTER - STM295	46.50.3700A0.01
16	1	SUPPORTO STAMPANTE STM295 / MOUNTING KIT PRINTER STM295	Y5 BIGSHPM7
17	1	CAVO PER STAMPANTE STM295 / STM295 CABLE LINK	46.40.F500XX.01

Informations in this document are provided for only informative purpose. They can be changed without warning and don't have to be understood as some C.O.B.O. S.p.A. - Divisione 3B6 commitment.

All rights reserved. Reproduction, adaptation or translation of this material are forbidden without previous written C.O.B.O. S.p.A. - Divisione 3B6 authorization, safe for how much allowed by the laws on the rights of author.

The only guarantees of C.O.B.O. S.p.A. - Divisione 3B6 products and services are those established in the explicit declarations of guarantee that accompany such products and services. Nothing contained in the present document has value of additional guarantee.

C.O.B.O. S.p.A. - Divisione 3B6 is not responsible of technical or publishing errors or omissions contained in the present document.

C.O.B.O. S.p.A. - Divisione 3B6 is a trademark and it's deposited in Italy. Any possible society reference or marks quoted in the present publishing product is purely casual: it has only illustrative purpose and it excludes any by-end. Names and terms used in the present document are C.O.B.O. S.p.A. - Divisione 3B6 creative ownership.



C.O.B.O. S.p.A. - Divisione 3B6
Via Sivo, 74
28053 Castelletto Sopra Ticino (Novara)
ITALY
Tel. +39 0331 9286.1
Fax +39 0331 972160
3b6@3b6.it
www.3b6.it



Headquarters:
C.O.B.O. S.p.A.
Via Tito Speri, 10
25024 Leno (Brescia)
ITALY
Tel. +39 030 90451
Fax +39 030 9045330
info@cobospa.it
www.cobospa.it