

CYCLOPS

IC3D Tower-Free
Alignment Machine



QUICK START GUIDE

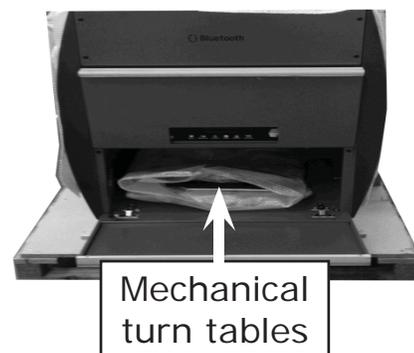
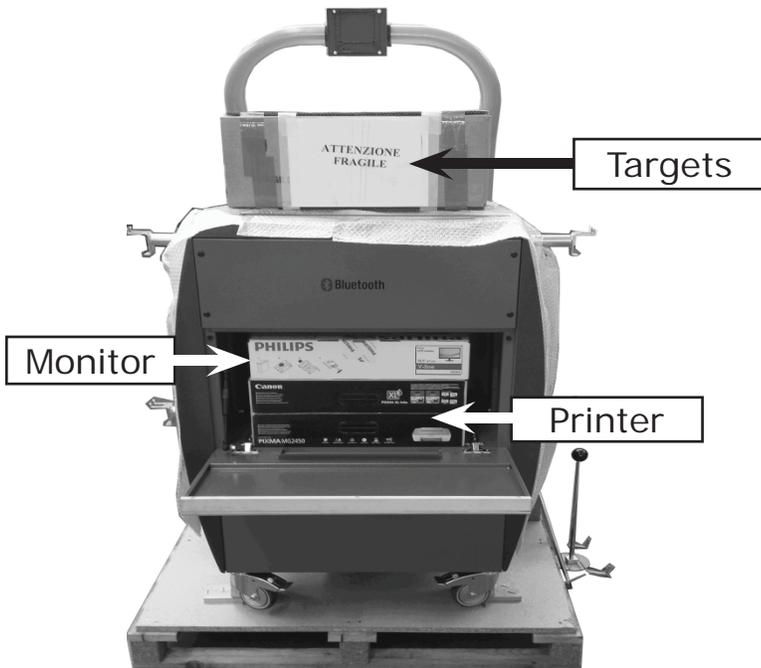
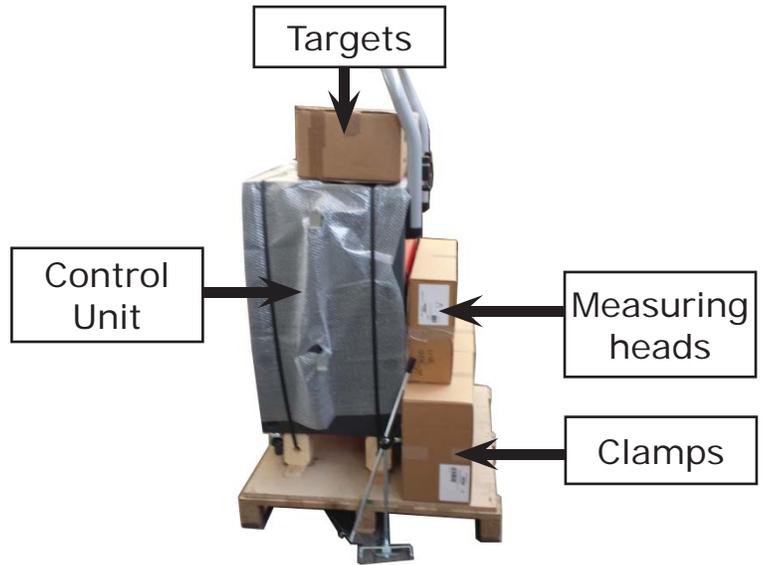
Check List

OPERATING INSTRUCTIONS:	
Preparation For Installation, Product Identification	Check
Charging The Batteries	Check
Checking And Adjusting The Lift	Check
Mounting Head's Brackets	Check
Mounting Clamps And Quick-Locking Arms	Check
Installation Of Accessories On The Control Unit And First Start	Check
Registration Of Heads On The Lift	
Adjusting The Angle Of The Measurement Heads	Check
Adjusting The Vertical CCD On Lift	Check
Targets Assembly And Targets Setting	Check
What Remains To Be Done? – Last Operations	Check

All items listed in this table are discussed extensively in the following pages

Quick Start Steps

Unpack The Wheel Aligner Box



Charge The Batteries

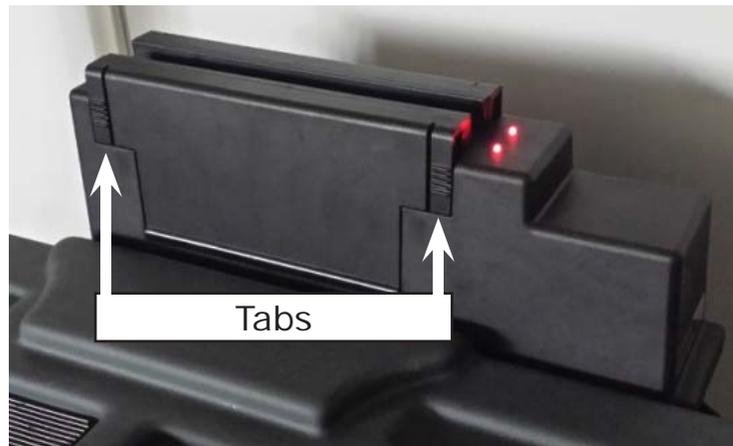
Remove the Control Unit from the platform, remove the power cord normally placed in the printer compartment, connect the cable to the Control Unit and to a suitable power outlet.

Leave the power switch of the Control Unit in OFF position. Only the charger is energized at this time.

Identify the box containing the measuring heads and open it.



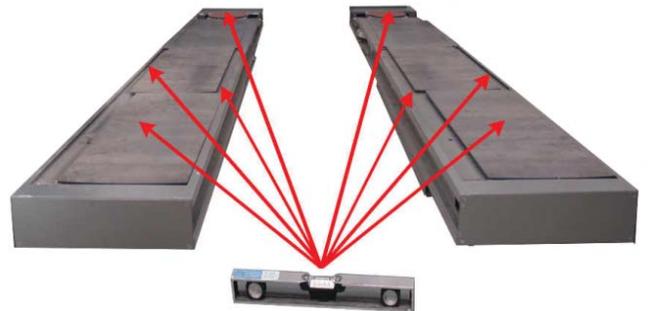
Remove the batteries inserted in the heads (push the 2 tabs on each side) and put them in charge - The 2 red LEDs on the charger will light up.



Checking And Adjusting The Lift

With the lift all the way down, hanged on the supports, check and adjust the ramps.

Any registration made on a vehicle is done properly if the vehicle is on level then the lift should be "leveled". The 3D wheel aligner compensates the lift variation between no load condition and to different loads as per lift variation between the ground position and the different heights to working position (ramps at different heights) but to do this, it has to start from a known condition: **LIFT LEVELED AT THE GROUND POSITION !!**



Mounting Head's Brackets

Remove from the boxes containing the measuring heads the 2 supports to be screwed in the lift.



Figure 1 - Support heads used up to 31/12/2014

Using the support of figure 1:

Place the Turn Table properly as per the position shown in the manual (in the backward Turn Table place).

Take the measures to fix the measuring heads supports as indicated in the service manual.

Distance between the center of the Turn Table and the first hole of the heads support: 1135 mm for the left side and 1140 mm for the right side with respect to the drive-in direction of the vehicle.

Using the heads support as a template, mark the spot where drilling, drill with a drill bit for steel diameter of 6.7 mm and thread M8.

The support of figure 2 must be fixed using the measurements shown below

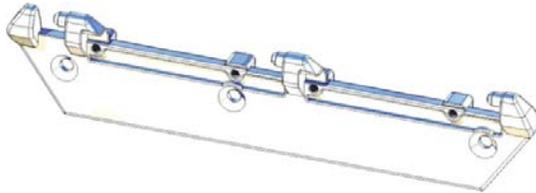
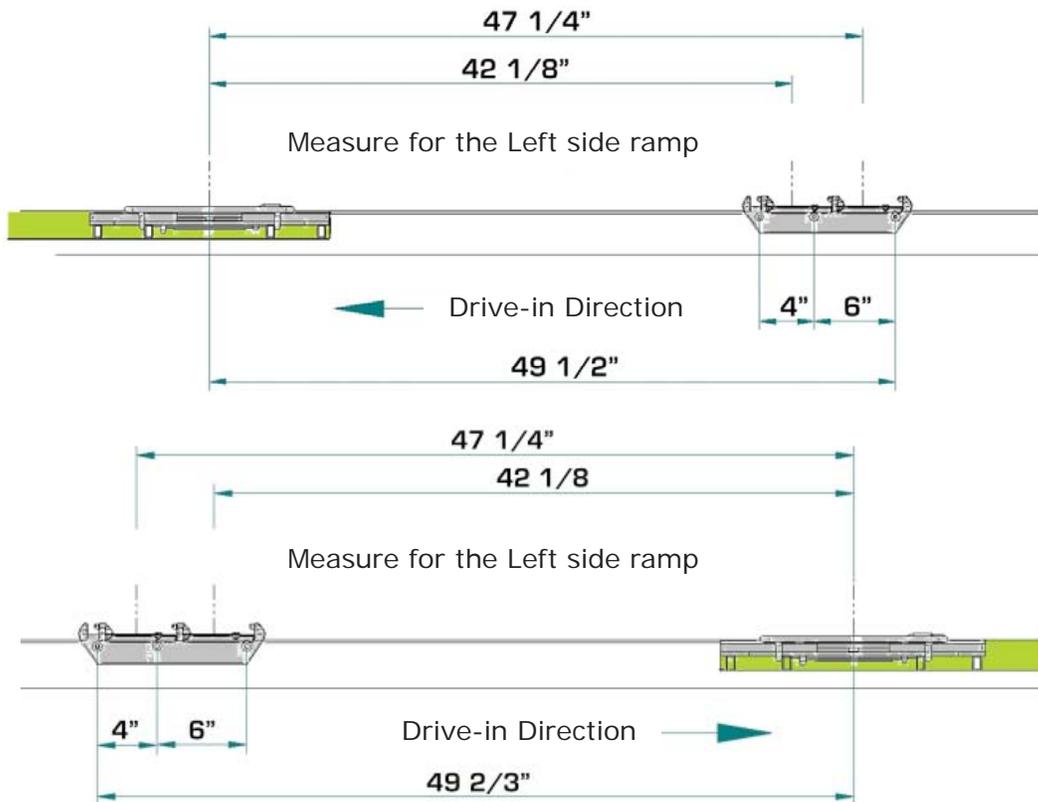


Figure 2 – New measuring heads support



Using the heads support as a template, mark the spot where drilling, drill with a drill bit for steel diameter of 6.7 mm and thread M8.

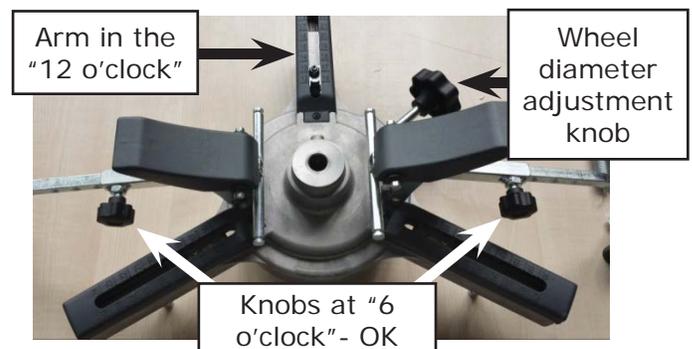
Mount Clamps And Quick-Locking Arms

Identify the package containing the clamps and open it.

Remove the clamps and assemble them. The knobs used to stop the arms should be pointing towards the ground in order to facilitate the adjustment of the arm and be sure that the knob turns easily into the groove on the arm to ensure a good seal.

Please note the mounting position of the Quick Locking arms and relative adjustment knobs. The system is designed to have a left and right arm with both knobs mounted as shown, respect this position to have an easy adjustment, see the following figure.

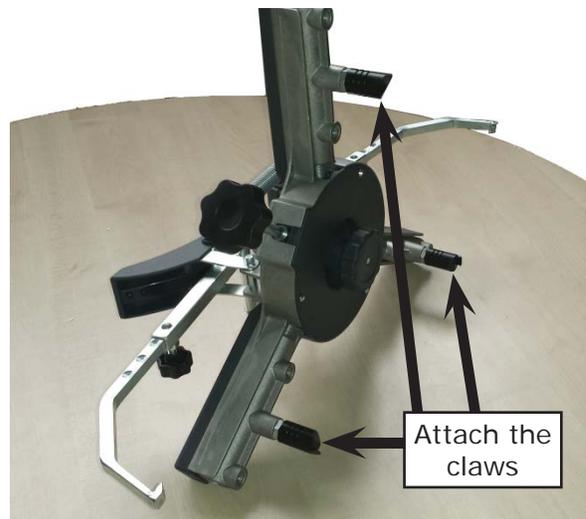
Clamp positioned with one arm in the "12 o'clock" Wheel diameter adjustment knob to the right, Quick Locking arms properly mounted with knobs at "6 o'clock"



Connect the quick locking device on the clamp



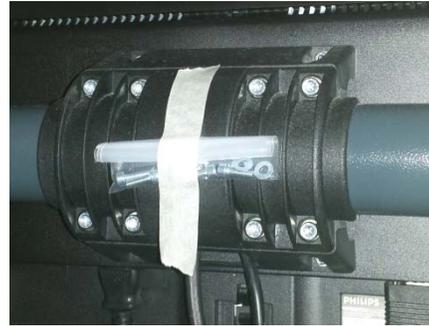
Insert the clips to lock the pin.
Assemble the springs.
Attach the claws.



Installation Of Accessories On The Control Unit And First Start

Open the rear panel of the console. Open the Computer door on the front of the console. **Make sure your computer is free from items used for packaging and is well ventilated.**

Remove the packaging of the monitor from the compartment of the printer. Take the monitor and tighten the brackets to the support on the console



Connect the signal cable and the power cable to the monitor



Make sure they are connected to the computer and to the power outlet



Remove the printer from the box and connect it to the power outlet and the USB cable from the computer.



Remove the SMART CARD from the plastic bag and place it correctly in the reader



You can now switch to the ON position the power switch on the back of the console. The computer will automatically turn on, check that the monitor turns on otherwise turn it on. Also turn on the printer and Insert the Ink cartridges.



Take the two batteries placed previously under charge, insert them into the measuring heads and press the central gray button for more than a second in order to Turn on both heads.



If all goes well you got to this point the computer has finished starting. In the monitor appears the logo page of Wheel Aligner program. In the lower right side of the monitor, spent about one minute, you have to see the two Bluetooth icons in Blue color which tells us that the heads are connected with the Computer.



Now mount the heads of their respective supports. Make sure that the arrow stuck on the cover is facing **the driving direction** of the vehicle.



Registration Of Heads On The Lift

ADJUSTING THE ANGLE OF THE MEASUREMENT HEADS

Go in front of the monitor and from the logo page displayed on the right, proceed as follows:



Press the F2 function key, you see the following page; Press F3 to select the "Additional Features"; confirm by pressing F4 to access the next page.



The cursor is now positioned on the "Test Application", if it does not, press the F2 or F3 key to move the cursor to this selection. Confirm by pressing F4 to access the next page.

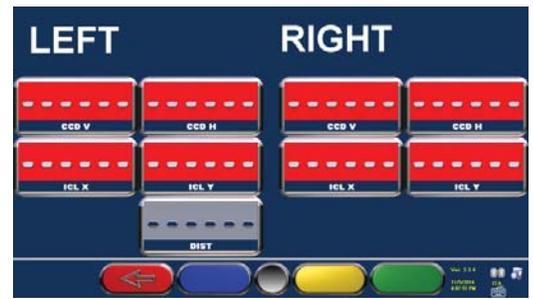


By pressing the F2 or F3 move the cursor to select "Measure Head: onboard sensors". Confirm by pressing F4 to access the next page. **The measuring heads must be switched on.**



If you do not read any values as in this screen, it can be caused by:

- 1) The heads are off - turn them on.
- 2) The heads are on but there is no Bluetooth connection, Bluetooth icons appear on the screen are gray - perform the procedure "Searching for Bluetooth"
- 3) The heads are on, the Bluetooth icons are blue colored (connection established), check that there are no obstructions between the CCD

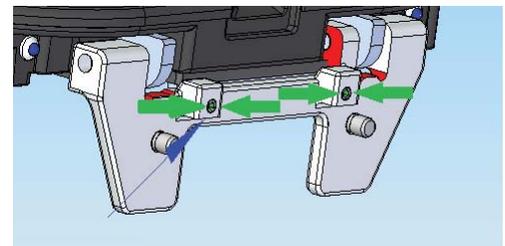


Under normal conditions, this page displays the values. Read the values "ICL X" and " ICL Y " of the 2 heads; **these are the values of the inclinometers**. ICL Y depends on the accuracy with which you have been carried out the fixing holes of the heads support to the lift, the optimal value is 0:00 degrees but a tolerance of +/- 1 degree is acceptable



The "ICL X" is adjustable, see picture below.

Acting on the Allen screws (size 3) shown in the figure, bring the values ICL X to 0.00 degrees. **THESE ADJUSTMENTS SHOULD BE MADE WITH LIFT COMPLETELY DOWN.**



After the adjustment of the ICL X values close to zero (tolerance +/- 0,05 degrees) it is suggested to lock the adjustment screws by using a special glue (thread braker).



ADJUSTING THE VERTICAL CCD ON LIFT

This adjustment is used to compensate different heights between the left and right ramps of the lift. Installations on the floor (in the pit) and lifts who have ramps at the same height do NOT require this adjustment.

To perform this procedure: Read the service manual.

Targets Assembly And Targets Setting

Place one car on the lift stopped with the front wheels on the turn table.

Fix the clamps on the wheels.

Take care of the vertical arm of the clamp to be placed to "12 o'clock" as shown in the figure.



In the rear part of the Target, there is a label which identifies the working position.

There must be at Target FL; FR; RL and RR to be fixed on their respective wheels (Front Left, Front Right, Rear Left and Rear Right).



Mount the targets on their clamps.

The filter of the target should be facing the camera mounted in the measuring head.

For now, do not stop the Target because they have to be adjusted in accordance to a correct angle Clamp / Target / Camera.

The settings are made as follows:



Turn on the measuring heads.

Go in front of the monitor and from the logo page displayed on the right, proceed as follows:
Press the "F2" key (blue)

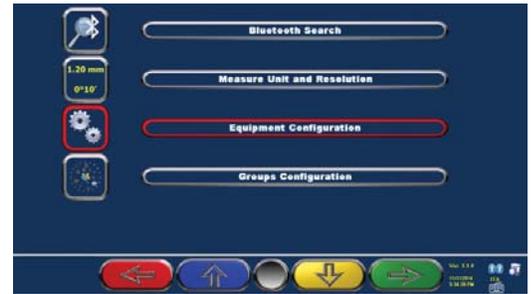


Press "F2" or "F3" key (blue or yellow) to move the cursor to "System Configuration".

Press "F4" to continue.



Press "F2" or "F3" key (blue or yellow) to move the cursor to "Equipment Configuration".
Press "F4" to continue.

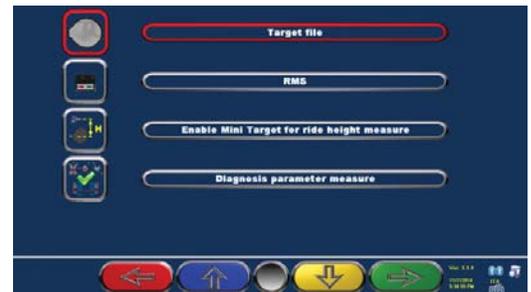


Press "F2" or "F3" key (blue or yellow) to move the cursor to "Equipment Configuration".
Press "F4" to continue.

WE CHECK THAT THE TARGET CODE (ON BAR CODE STACKED ON THE REAR OF THE EACH TARGET) MATCHES WITH THE FILES ENTERED IN THE WHEEL ALIGNMENT PROGRAM CONFIGURATION.



Press "F2" or "F3" key (blue or yellow) to move the cursor to the "Target File" Press "F4" to continue.



Check that the names of the Target written on this page match with the code on the label stacked on each target, see photo below. The name written here should match with the file characterization/calibration of the target and this file is used to correctly read the angles of the wheels. If the file name is wrong also file stored on your computer is not correct. **Enter correct code** and the right file normally stored on the USB memory key will be automatically copied on the wheel aligner program.



The Target files are located in the memory stick that came with the PC. Check on the memory key, in the "TARGET" folder, the files stored have the same name of the target mounted on Clamps. Connect the USB to the PC.

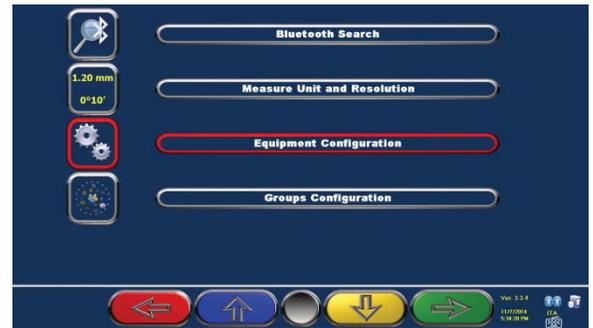
Referring to the previous image, write the correct code in each box of the Target if wrong or not present. When you press the "F1" key to exit this page, the program will automatically copy the files from USB to PC, if not already done.



This is an example of a “Recovery” key that came with the wheel alignment containing the TARGET folder with files.



After pressing “F1” from the target code page, the program goes back to show the page here displayed; move the cursor to “Equipment Configuration” and press “F4”.



Press “F2” or “F3” (blue or yellow) to move the cursor to “Target Mounting”. Press “F4” to continue.



We are ready to record and lock the targets in the clamps in their normal operating position. **Make sure that measuring heads are turned on.** **Check the Targets are fully inserted in clamps.**



With the pin slightly braked, turn the target until you find the correct position.



THE TARGET WHEN REACHED THE RIGHT POSITION MUST BE LOCKED

What Remains To Be Done? – Last Operations

At this point the wheel aligner is ready for operation.

It remains to choose:

- The measure unit by which you want to display the measurements (mm, degrees minutes or degrees decimal),
- The resolution of the measured values,
- How you want to display the vehicles database
- You have to write the heading of the client, the address, the phone, to be saved and printed in the report.

Please consult your service manual and user manual for this information.