MANUALE MD JARVIS

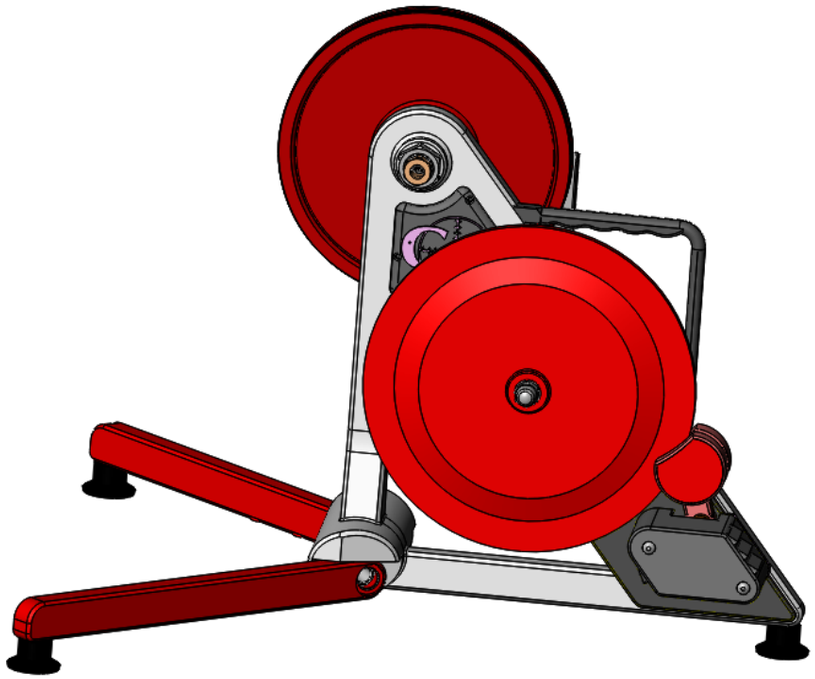
ASSEMBLY AND CONNECTION INSTRUCTIONS MD JARVIS

1. INTRODUCTION:

2. ASSEMBLY:

3. PERIPHERALS CONNECTIONS:

4. TECHNICAL SECTION:



1. INTRODUCTION

1.1. TECHNICAL DATA

- Weight: 9 Kg;
- Battery (2800 mA, approx. 4 h use);
- Connectivity: Bluetooth 4.0, USB, ANT+, Wifi.

1.2. PACKAGE CONTENTS:

- MD JARVIS spinner;

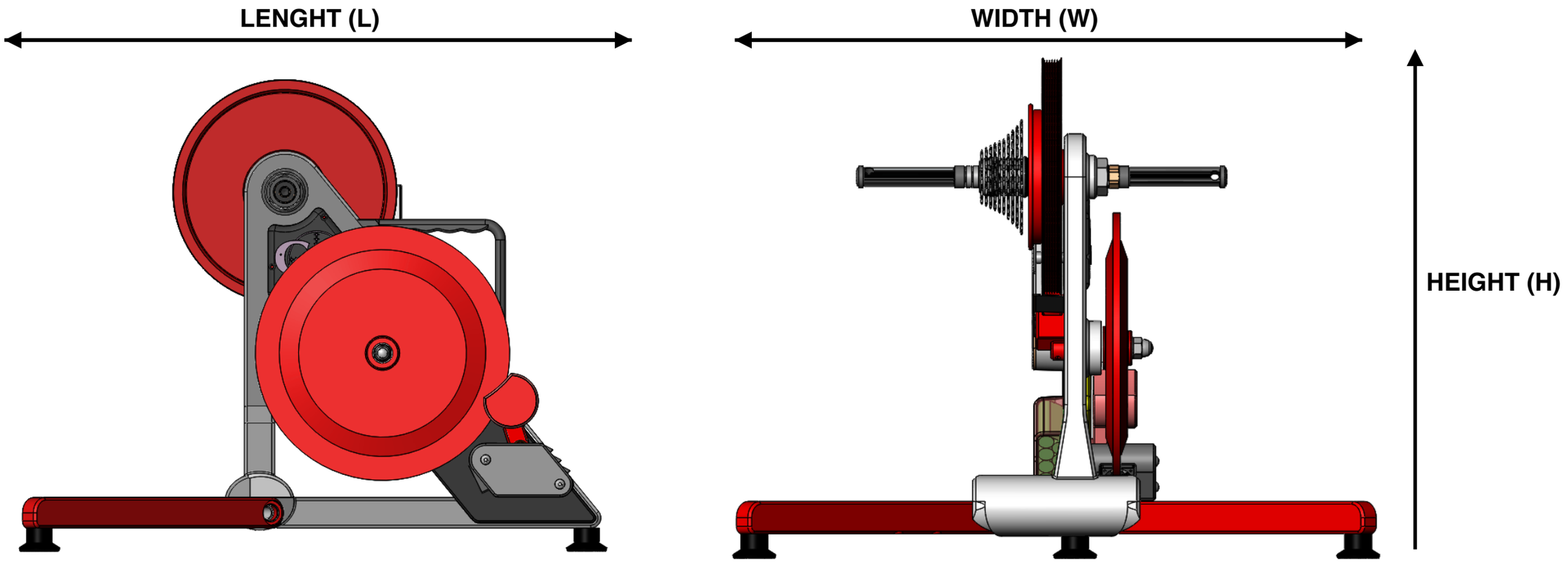
- Calibration certificate

- Accessory pack:
  - Power cable;
  - PC connector cable (USB/A male – USB male) length 4.5 m;
  - RPM Sensor Ant+ Garmin (or Sigma);
  - Heartbeat monitor Ant+;
  - Remote control optical keys;
  - Mechanical accessories (for assembly): right crank, left crank (with a longer threaded shaft), n° 4 shims to adapt the chassis, crank locking key (seated inside the right crank and is easily extracted with the ring on the end.

Optional:
- Lowered bushing for Fixed bikes (rear carriage 125 mm).

1. INTRODUCTION

1.3. DIMENSIONS



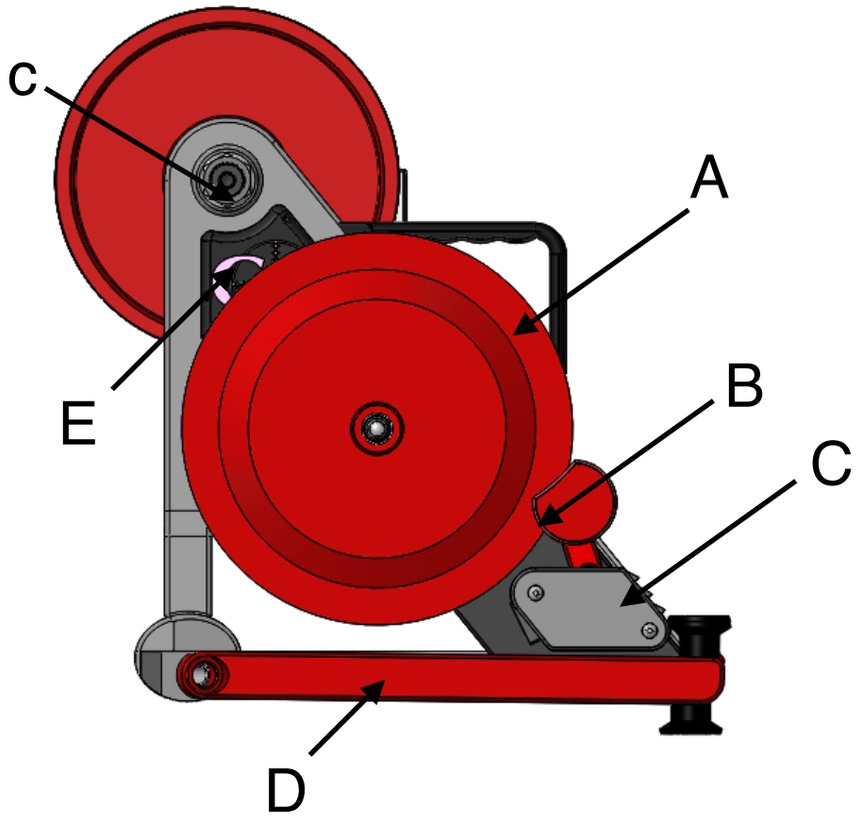
CLOSED:
L = 432 mm;
W = 173mm;
H = 464mm.

OPEN:
L = 576 mm;
W = 595mm;
H = 464mm.

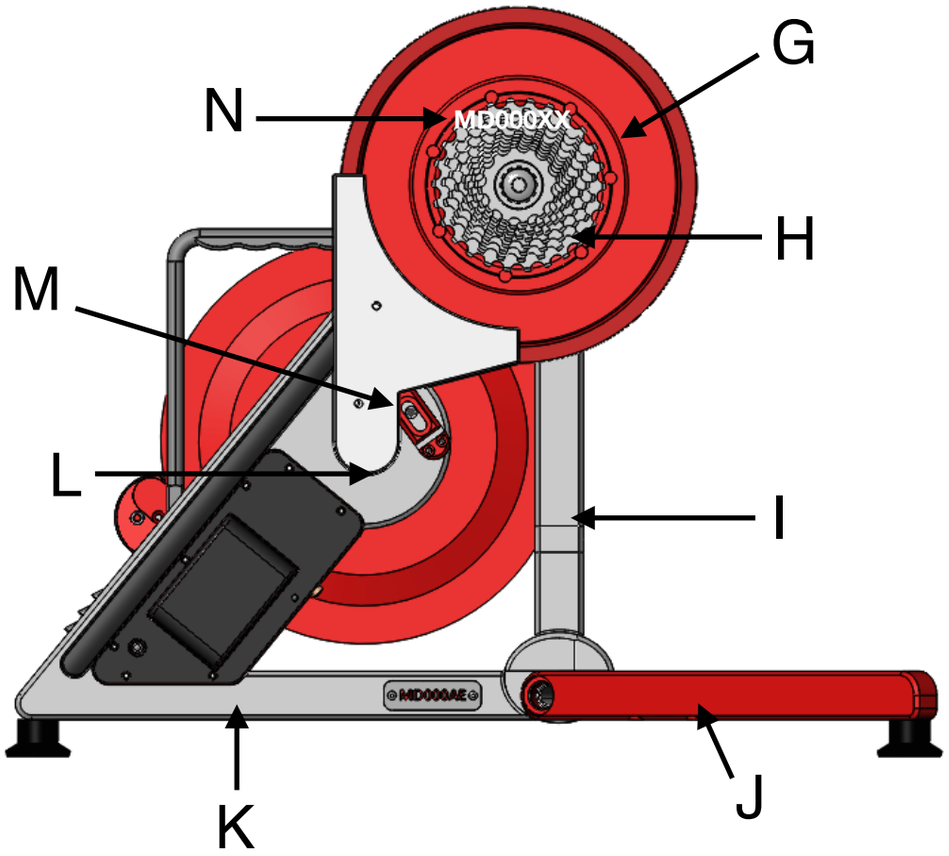
1. INTRODUCTION

1.4. PARTS DESCRIPTION

LEFT SIDE



RIGHT SIDE



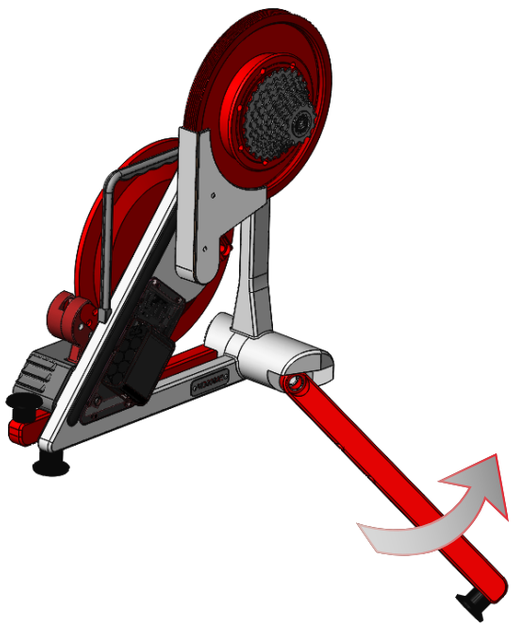
A: Fly wheel
B: Brake
C: Brake motor with cooling fan
D: Left stand
E: Mother board cover
F: Bike carriage width adjustment bush
G: Large pulley
H: Pinion rack
I: Right stand
J: Serial number
K: Battery
L: Power connector
M: Brake motor electronic board
N: Belt cover

2. PACKAGE CONTENTS

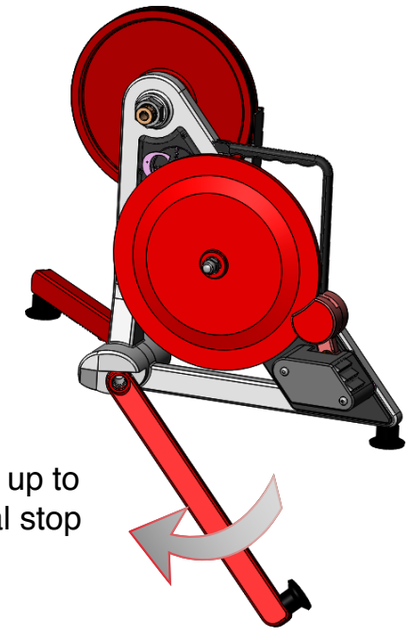
2.1. SYSTEM OPENING

Swing the two stands (D and J) forward up to the mechanical stop. So the system then rests on three points guaranteeing perfect adherence even on unlevel surfaces, thanks to the adjustable supports.

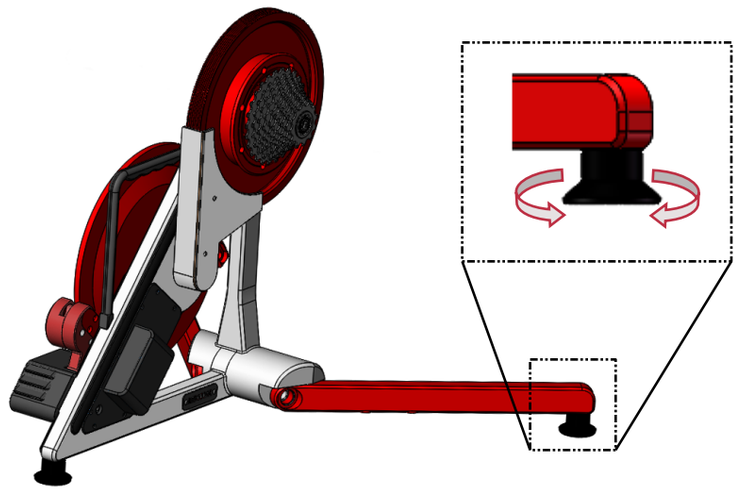
RIGHT SIDE



LEFT SIDE



Swing forward up to
the mechanical stop

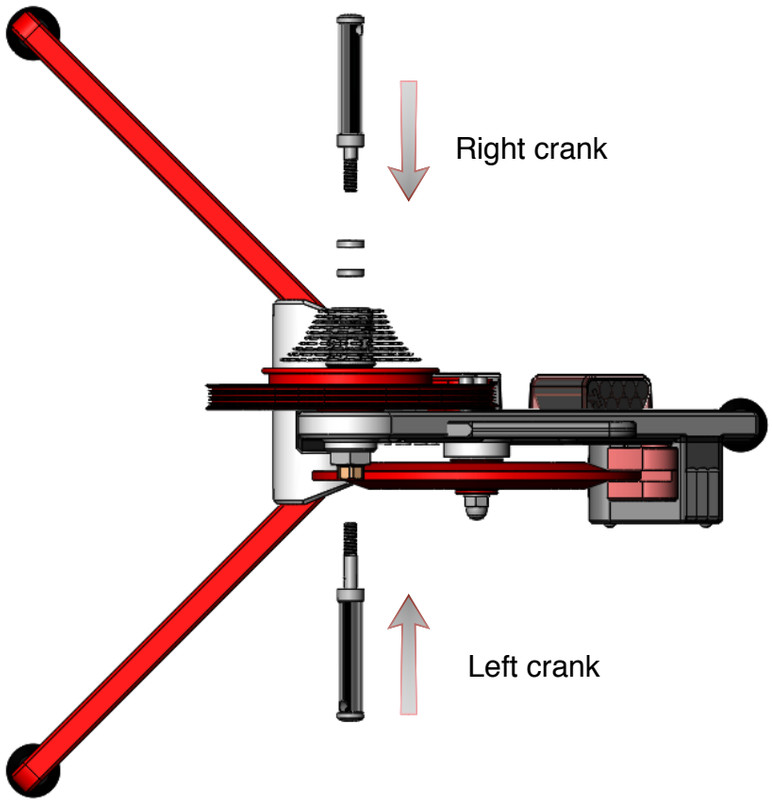


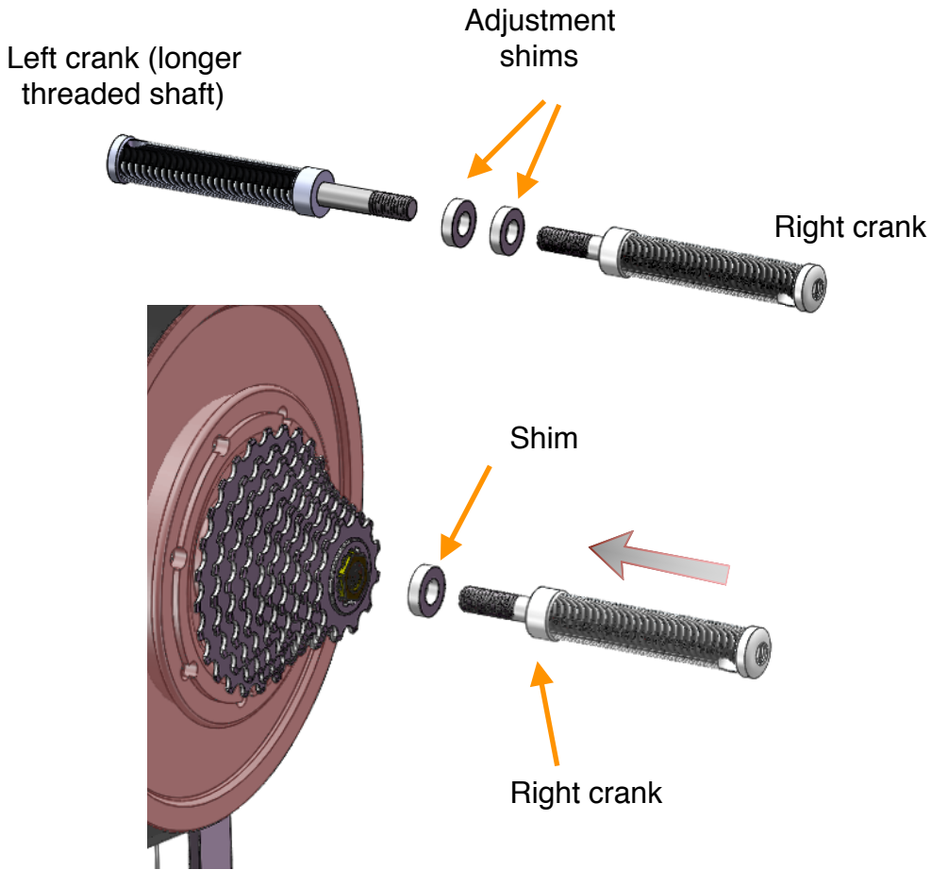
2. PACKAGE CONTENTS

2.2. MOUNTING THE BIKE

The Jarvis fits on the bike like a rear wheel using the provided mechanical accessories.

- Insert the cranks into their housings on the Jarvis, lightly screwing them in.



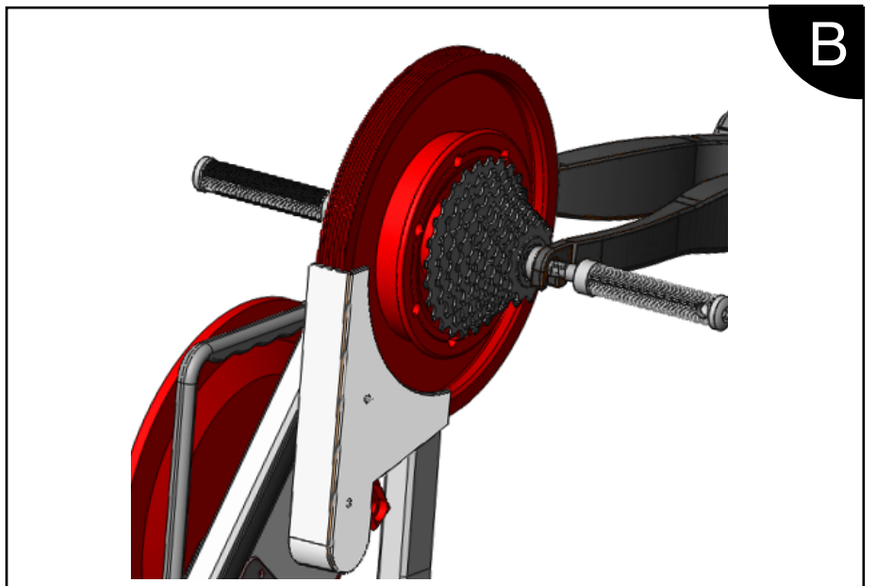


- If the rear carriage of the bike is 125 mm (Fixed Bike) the Standard bushing can be replaced (F) with a lowered bushing (optional);
- Leaving the Standard bushing (F) in place, the width of the MD fits bikes with a rear carriage of 130 mm (Road Bikes);
- Settings for wider carriages (MTB) are carried out using the shims provided.

For narrower settings the shims may be used externally like washers.

2. PACKAGE CONTENTS

2.2. MOUNTING THE BIKE



B)) Insert the rear carriage fork;

C) Fit the chain onto the pinion rack aligning it correctly;

D) Verify that the fork is correctly fitted on both crank pins, tighten them by hand to grip the chassis.

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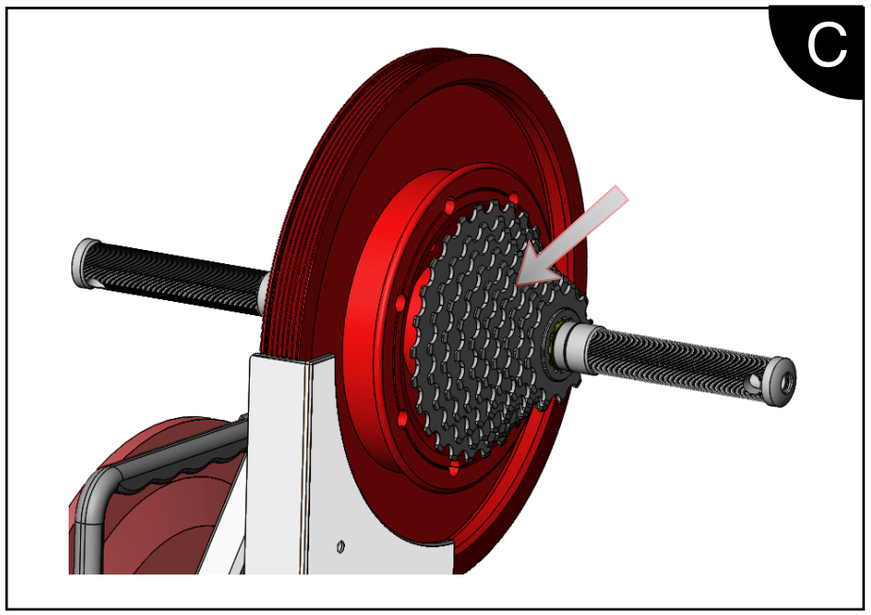
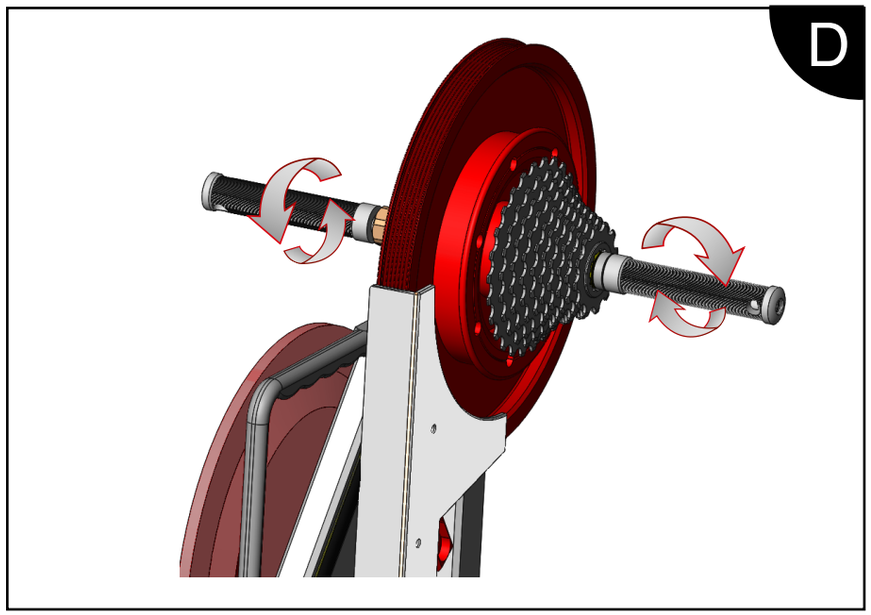
Once finished, lock both cranks using the key provided inserted into the external holes.

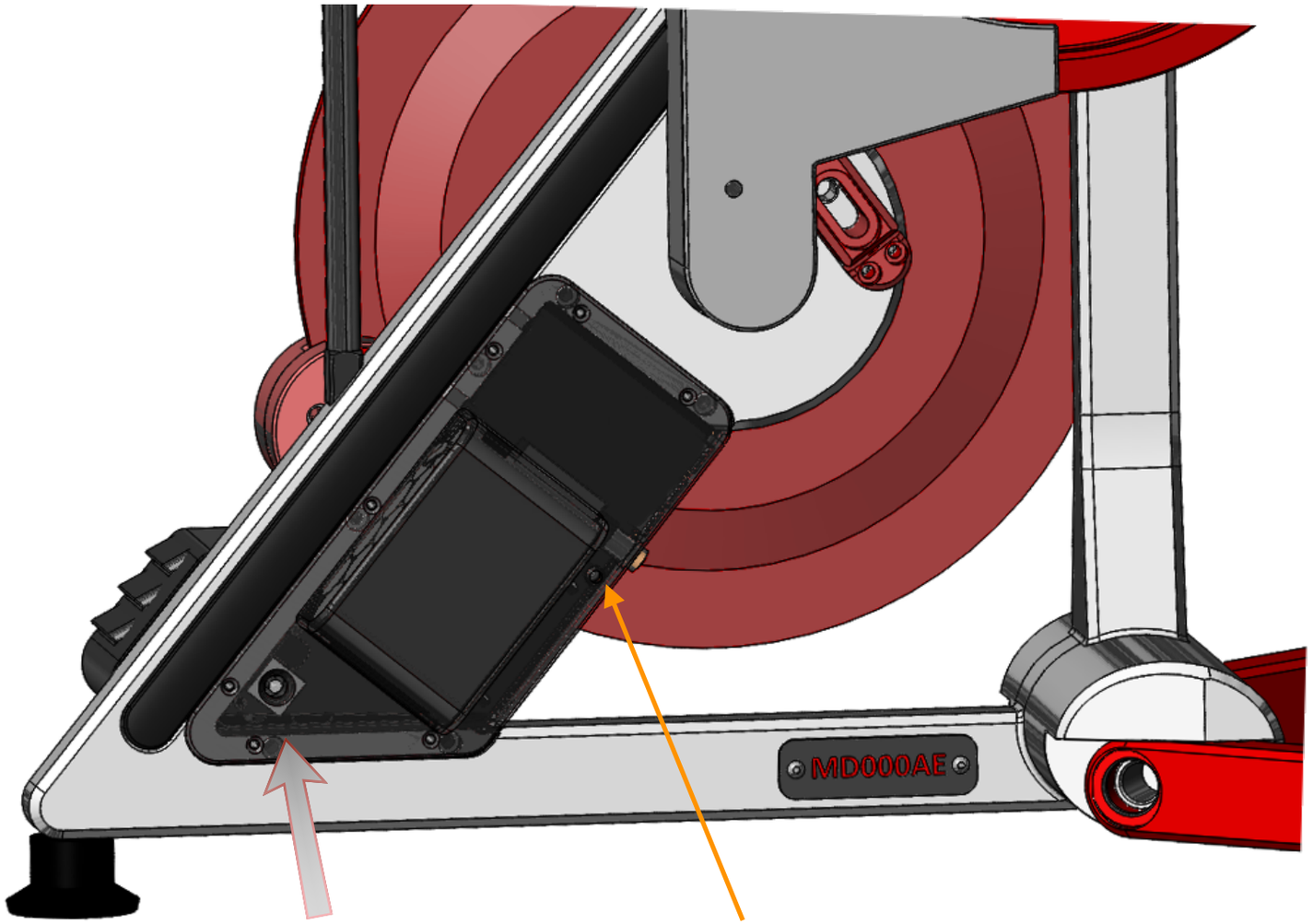
The key is housed inside the right crank and is easily removed thanks to the ring on the end. Once both cranks are tightened replace the key in it’s housing.





3. PERIPHERALS CONNECTIONS

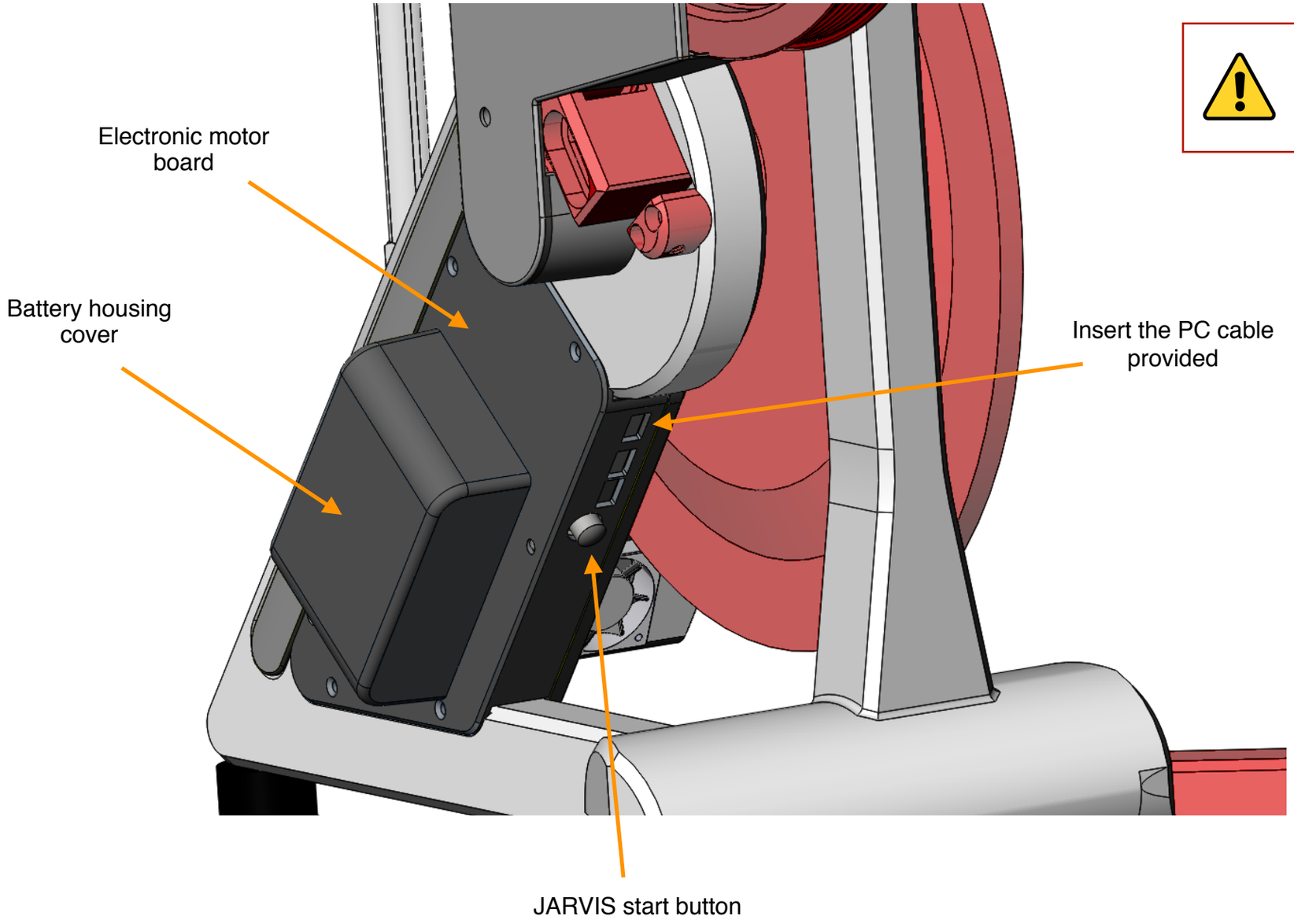
3.1. POWER SUPPLY CONNECTION



- During the battery charge the Jarvis must be switched on (start button in postion ON).
- The first charging must last 6 hours.
- When the battery is on, the RED LED will be lit.
- When the battery is on and there is an electrical supply connected both LEDS RED and GREEN will be lit.

3. PERIPHERALS CONNECTIONS

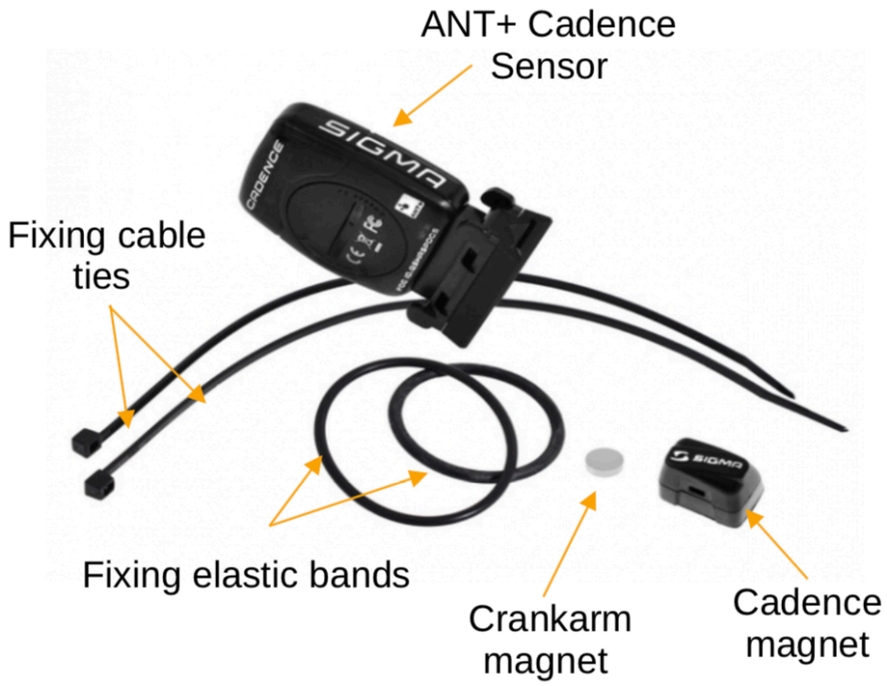
3.2. PC CONNECTION



Do not insert the PC cable into the other two USB sockets.

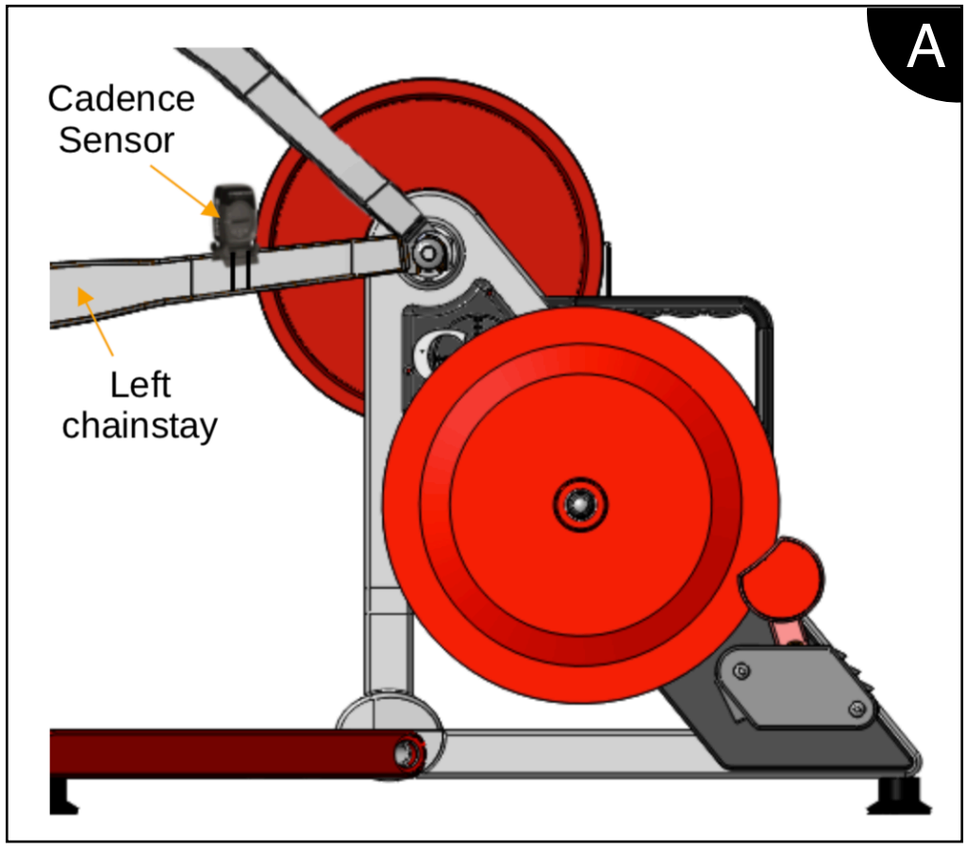
3. PERIPHERALS CONNECTIONS

3.3. WIRELESS RPM SENSOR CONNECTION



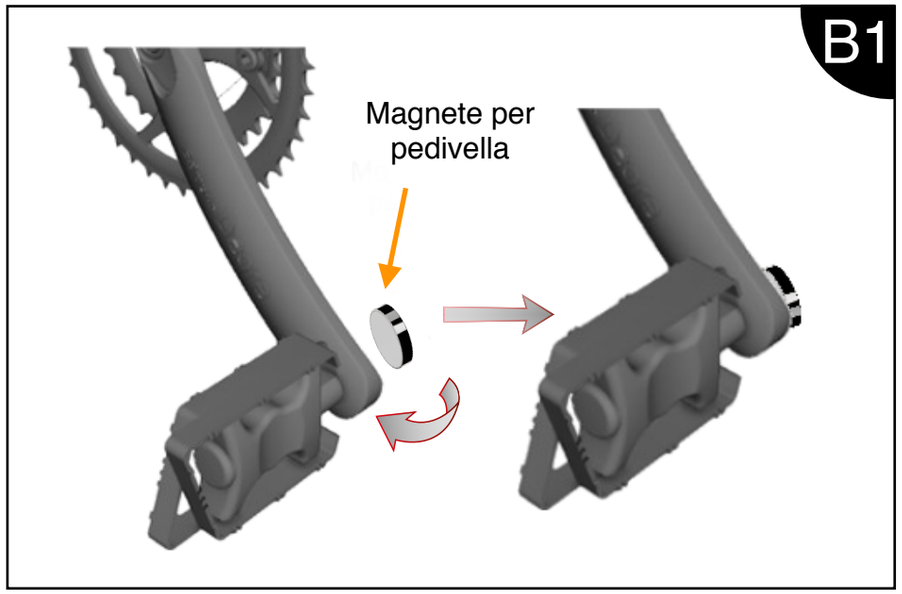
Press this button to check if the cadence sensor battery is charged: if yes a green led will light on.

A) Mount the Cadence Sensor on one of the chainstay of the bike (i.e. the left one) using the fixing cable ties.



3. PERIPHERALS CONNECTIONS

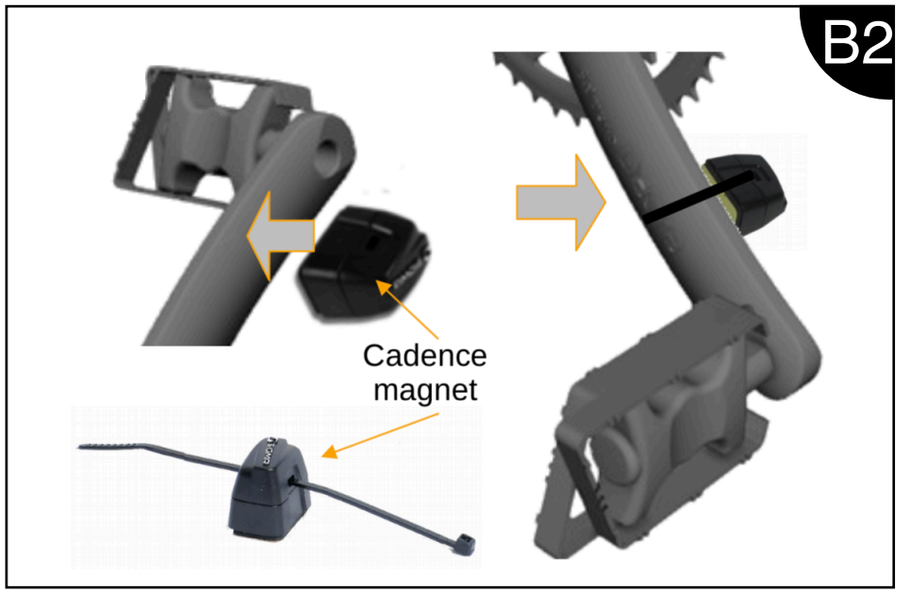
3.3. WIRELESS RPM SENSOR CONNECTION

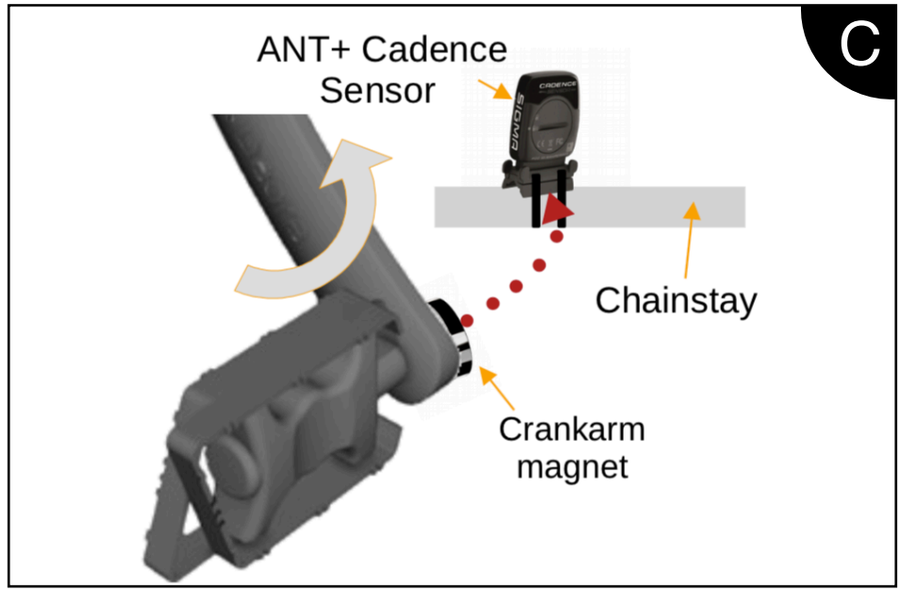


B1) Fix the crankarm magnet on on of the bike crankarm. The magnet has to face directly to the chainstay where the ANT+ Cadence sensor is mounted.

B2) Is also possible to fix the cadence magnet to one of the bike crankarm using the fixing cable ties. The magnet has to face directly to the chainstay where the ANT+ Cadence sensor is mounted.

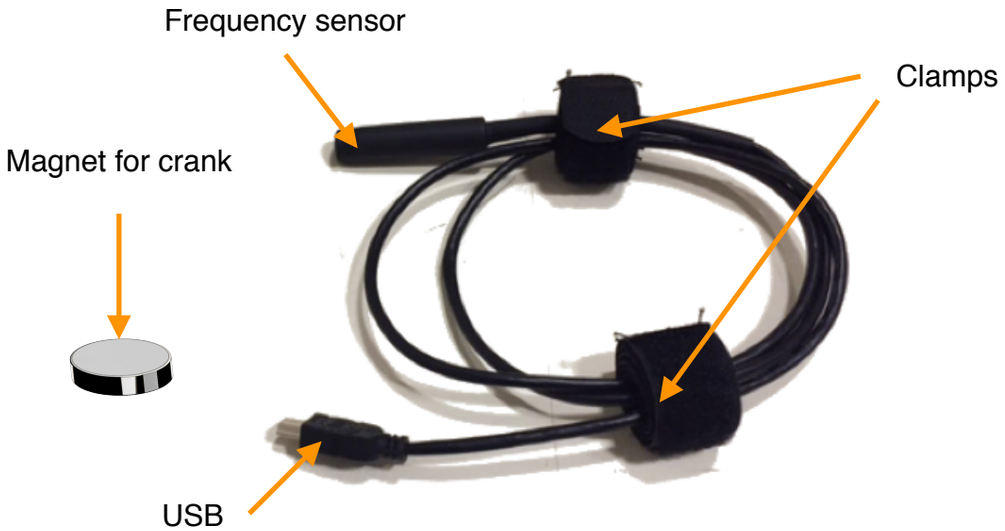
C) Be sure that the ANT+ Cadence Sensor and the magnet (either the crankarm or the cadence magnet) are correctly aligned. The magnet has to pass in front of the sensor at a distance less than 1 cm, as shown in the picture.



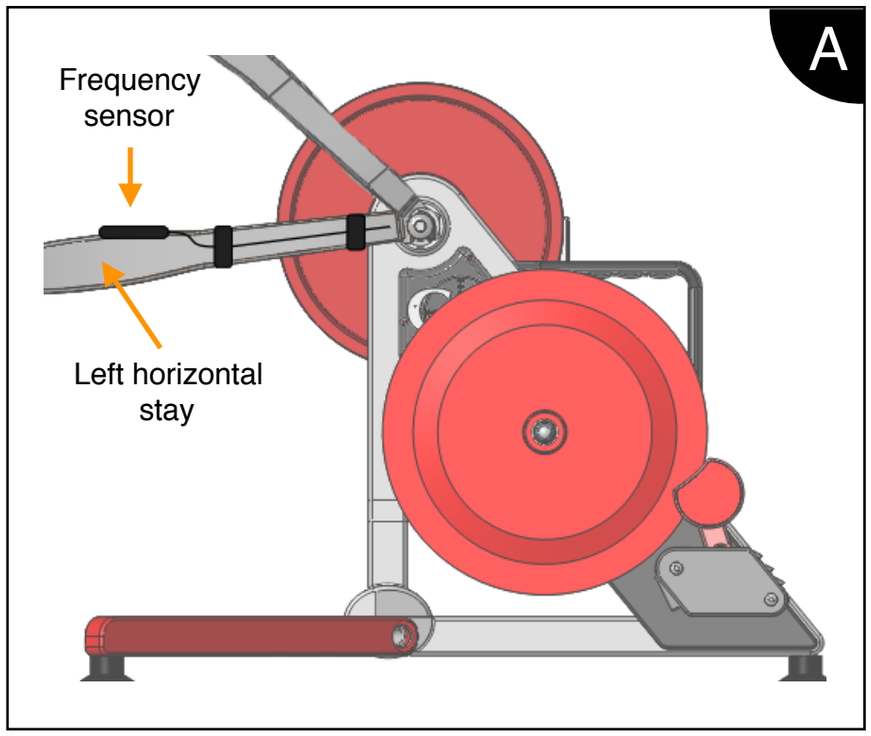


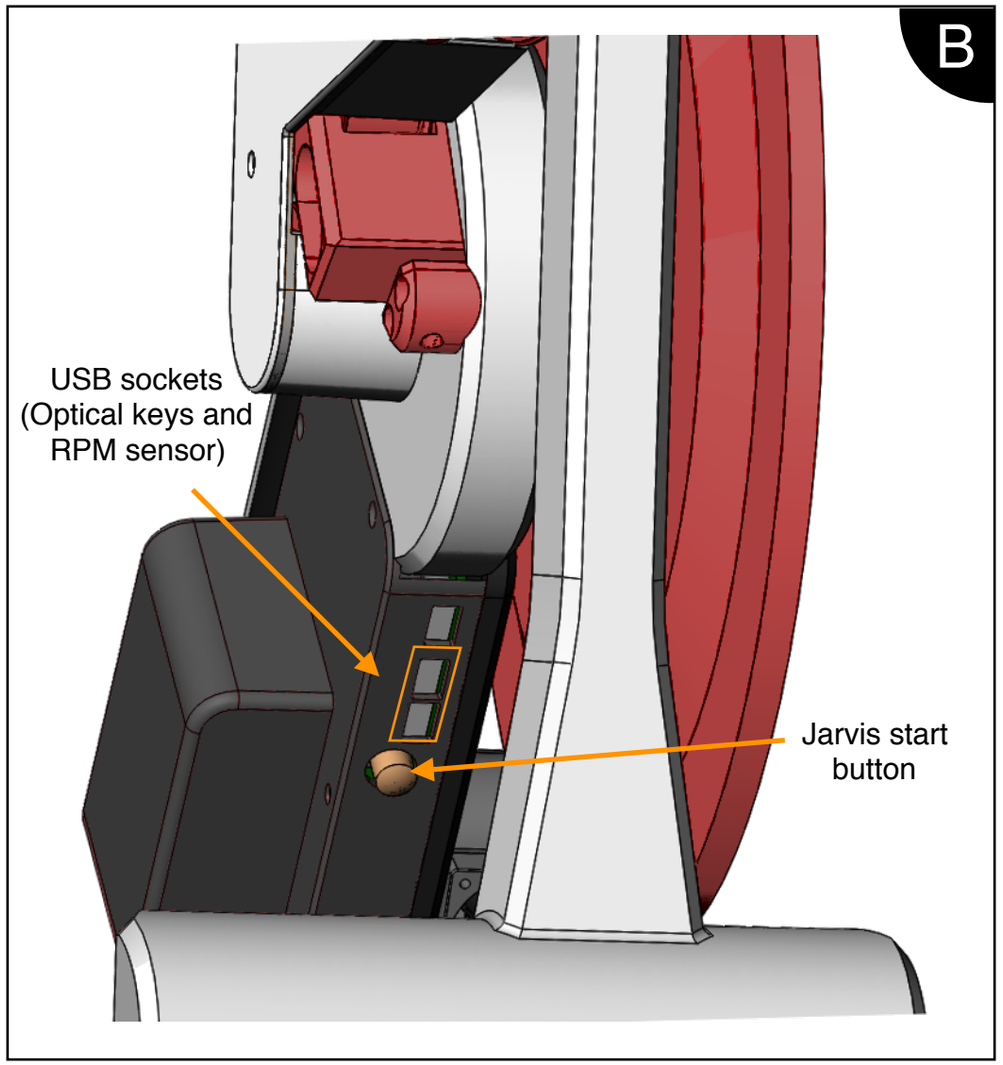
3. PERIPHERALS CONNECTIONS

3.4. RPM SENSOR CONNECTION (VIA CABLE)



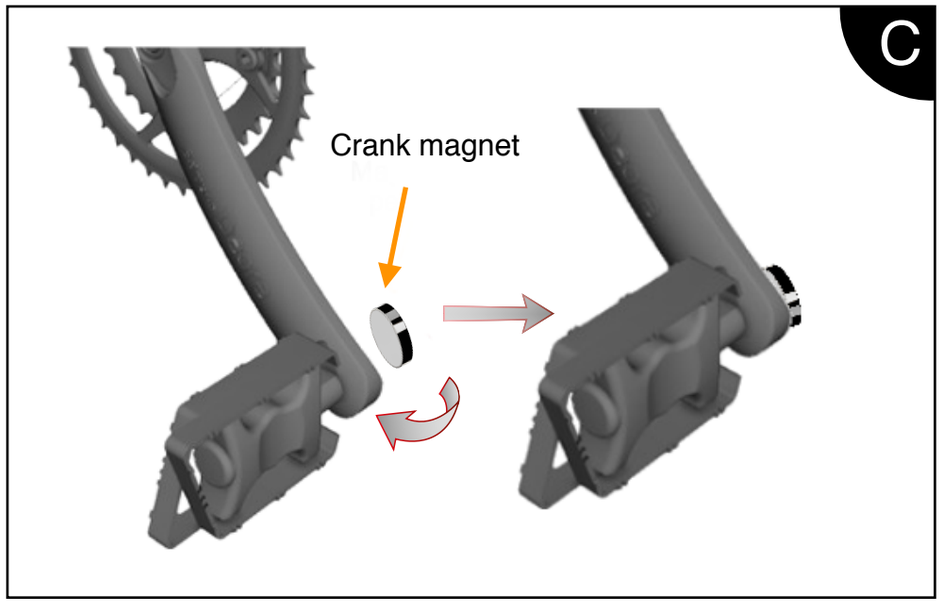
A) Fix the frequency sensor to one of the horizontal stays of the bike (eg left) using the clamps;
B) Insert the RPM sensor lead into one of the two USB sockets as shown.





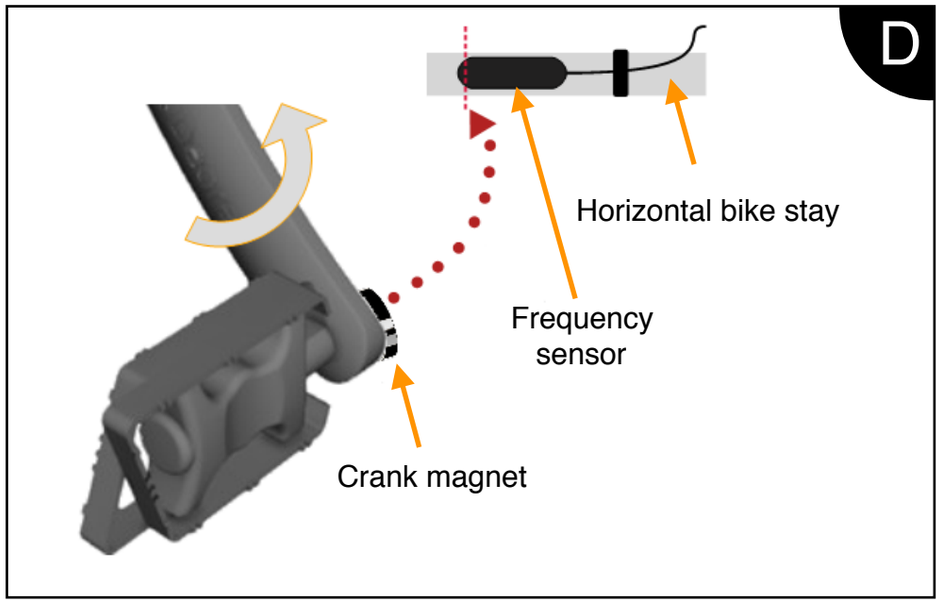
3. PERIPHERALS CONNECTIONS

3.4. RPM SENSOR CONNECTION (VIA CABLE)



C) Fix the crank magnet to one of the bike cranks. It must face the horizontal stay where the frequency sensor is fixed.

D) Make sure that the frequency sensor and the crank magnet are correctly aligned. The magnet must pass in front of the end of the sensor as shown in the illustration.



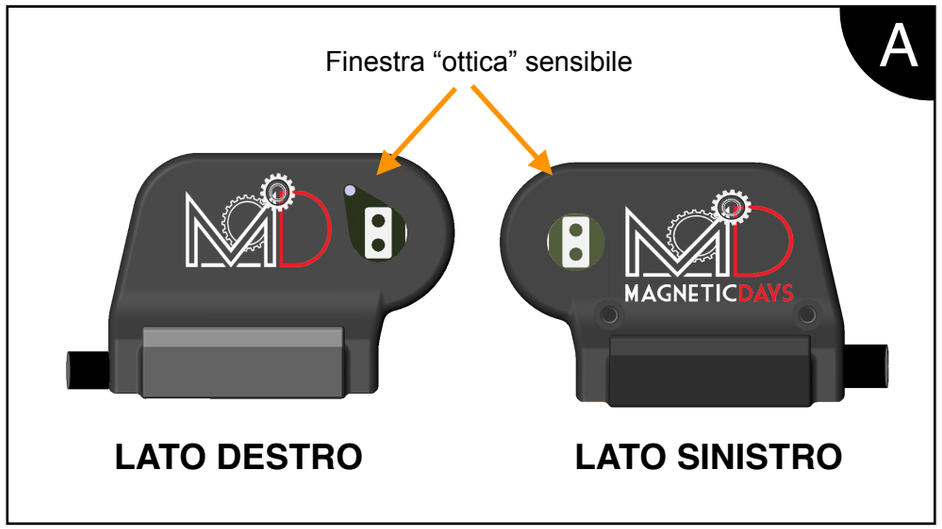
3. PERIPHERALS CONNECTIONS

3.5. CONNECTING THE OPTICAL KEYS FOR REMOTE CONTROL

A) Fix the sensor to the handlebar in a functional position;

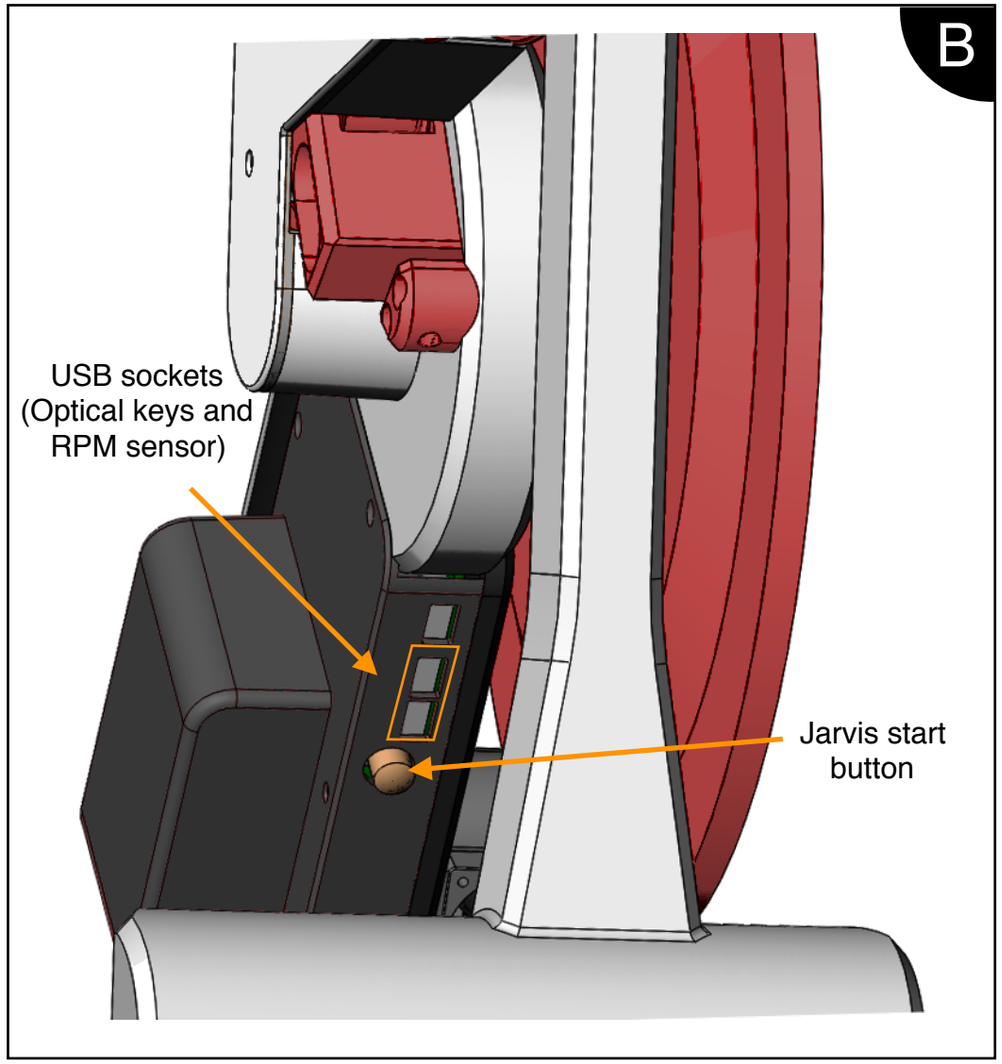
B) Insert the optical keys lead for remote control into one of the USB sockets shown in the illustration;

You can use either of the sockets for both the optical keys and the RPM sensor.



Obstructing one sensor at a time will vary (+/-) the workloads: positive, obstructing the left sensor, negative obstructing the right sensor

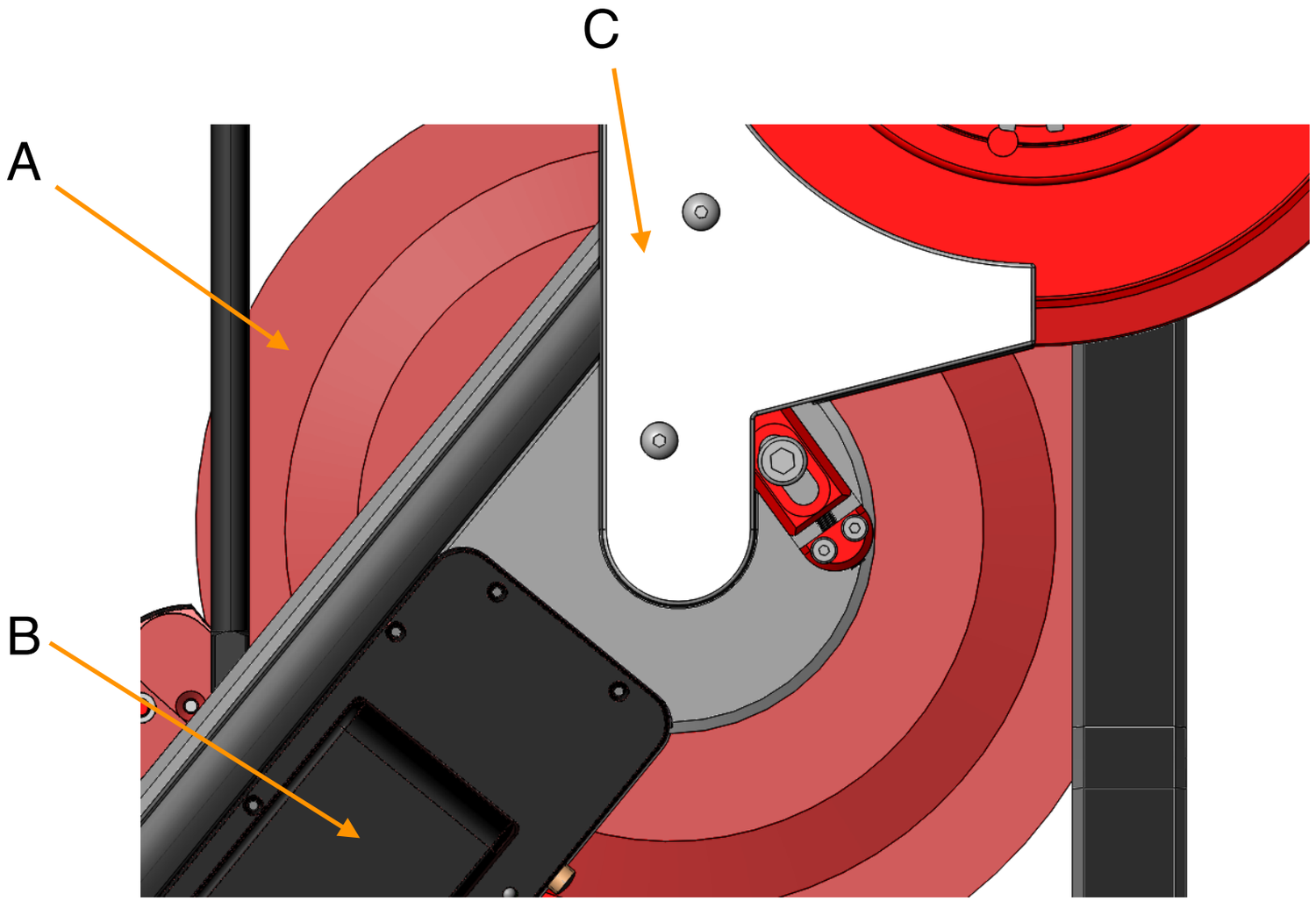
N.B. Do not cover the sensore completely



In case of RPM cabled sensor, insert the cable into the remaining USB socket.

4. TECHNICAL SECTION

4.1. BELT STRETCHER ADJUSTMENT

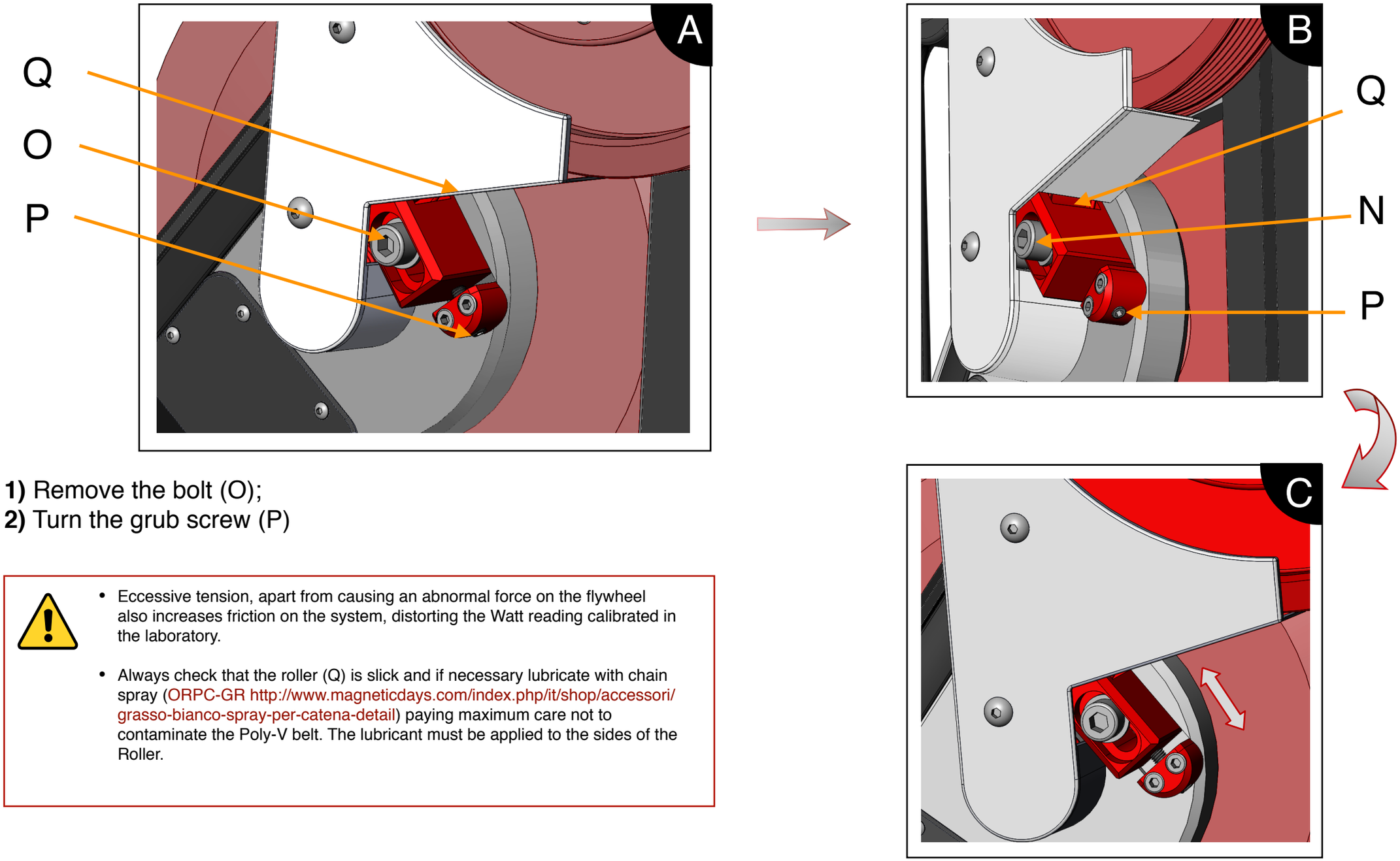


A: Fly wheel
B: Battery housing cover
C: Belt cover

If the adjustment is necessary a warning will be received via the App.

4. TECHNICAL SECTION

4.1. BELT STRETCHER ADJUSTMENT



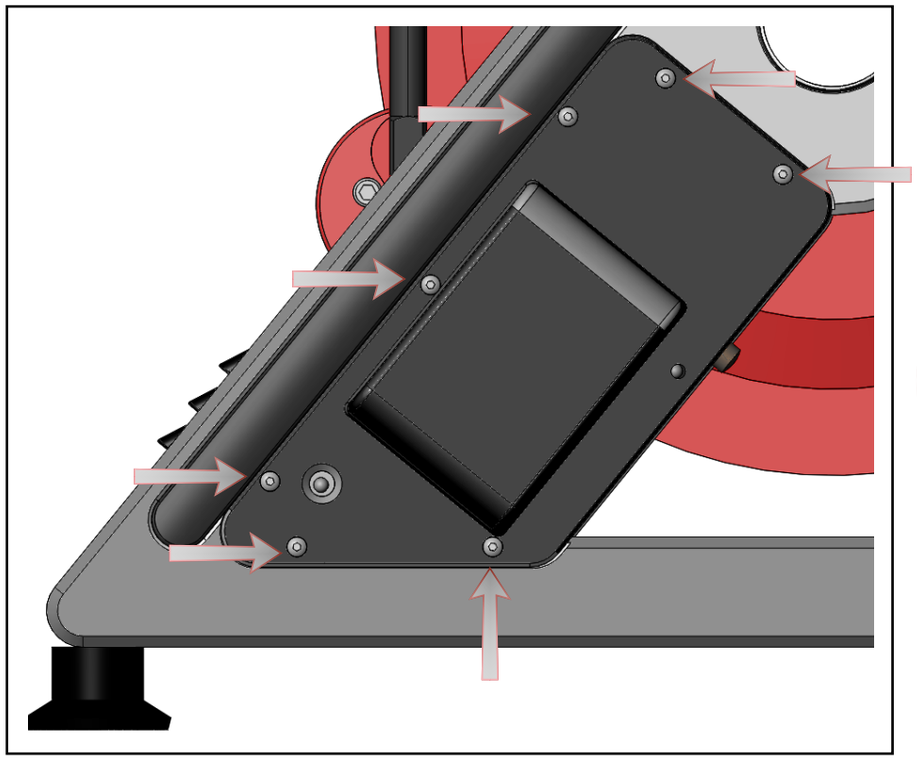
1) Remove the bolt (O);
2) Turn the grub screw (P)

- Eccessive tension, apart from causing an abnormal force on the flywheel also increases friction on the system, distorting the Watt reading calibrated in the laboratory.
- Always check that the roller (Q) is slick and if necessary lubricate with chain spray (ORPC-GR http://www.magneticdays.com/index.php/it/shop/accessori/grasso-bianco-spray-per-catena-detail) paying maximum care not to contaminate the Poly-V belt. The lubricant must be applied to the sides of the Roller.

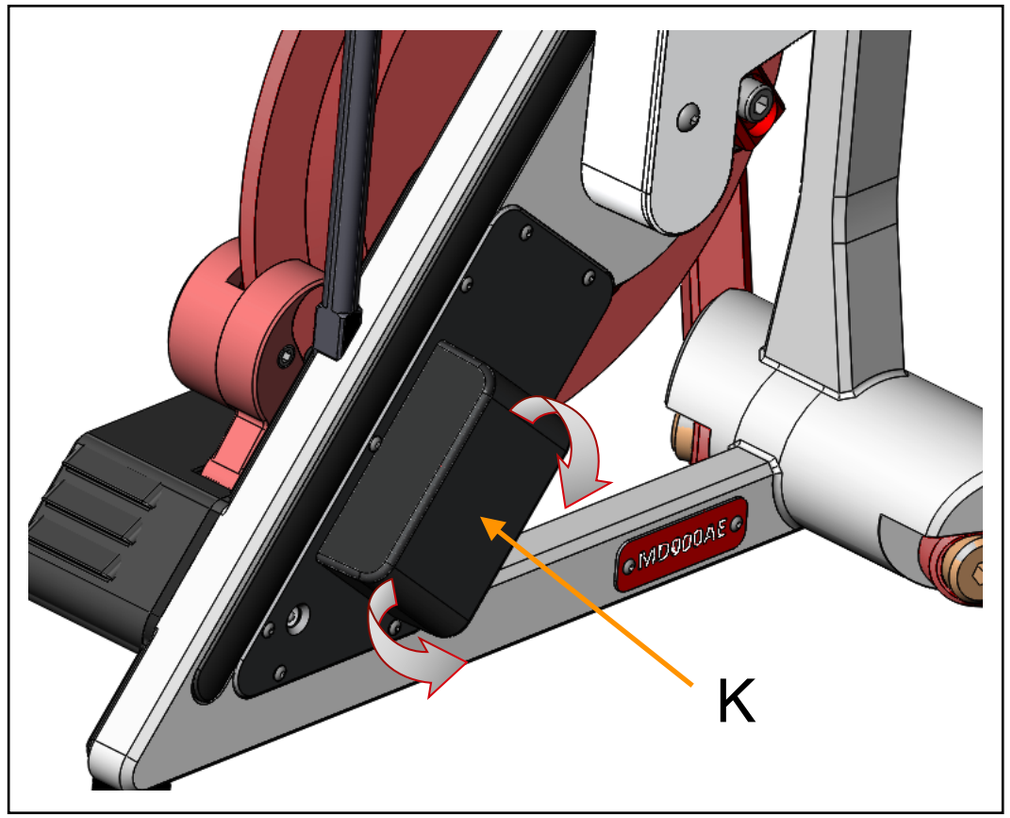
4. TECHNICAL SECTION

4.2. REPLACING THE ELECTRONIC MOTOR BOARD

Necessary tools:
- 2 mm Allen wrench;
- 3 mm Allen wrench.



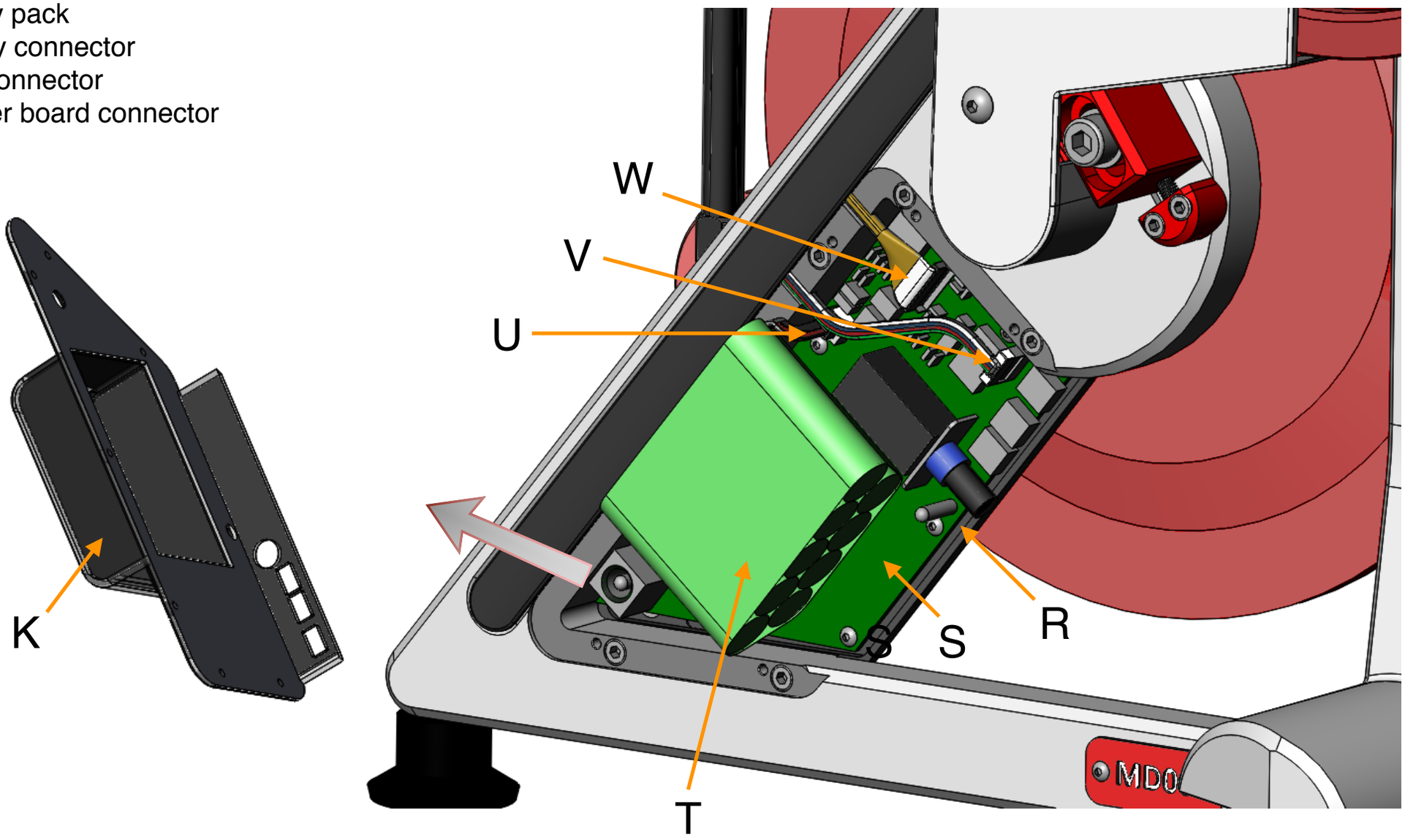
A) Use the 2 mm Allen wrench to remove the screws as shown in the illustration;
B) Lift the Battery housing cover (K).



4. TECHNICAL SECTION

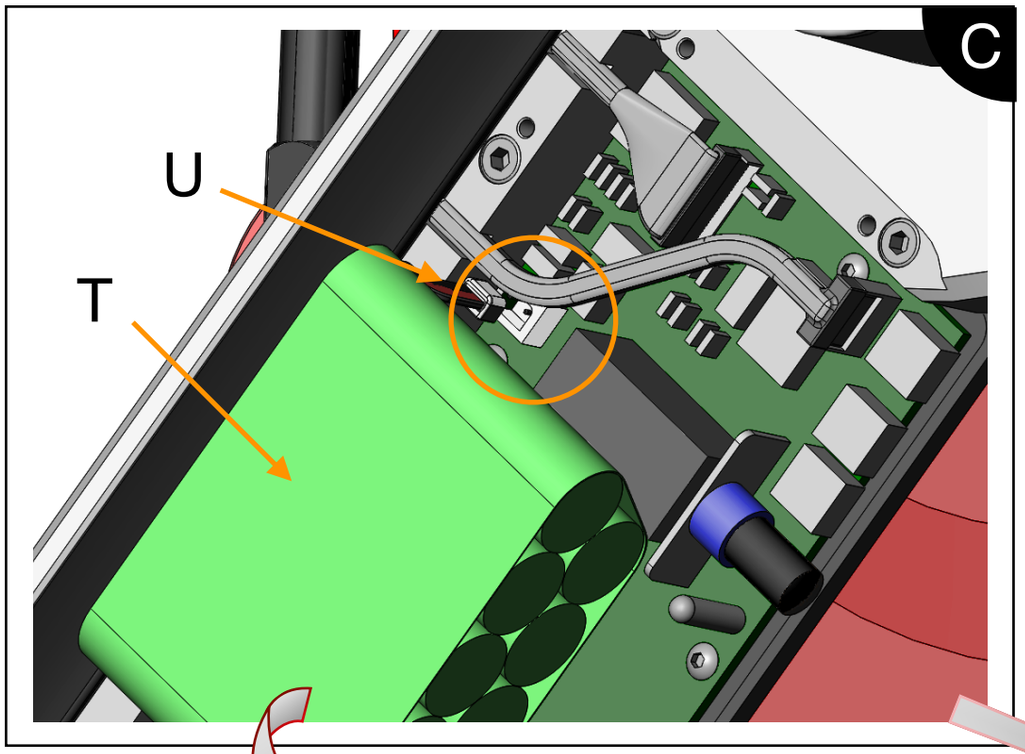
4.2. REPLACING THE ELECTRONIC MOTOR BOARD

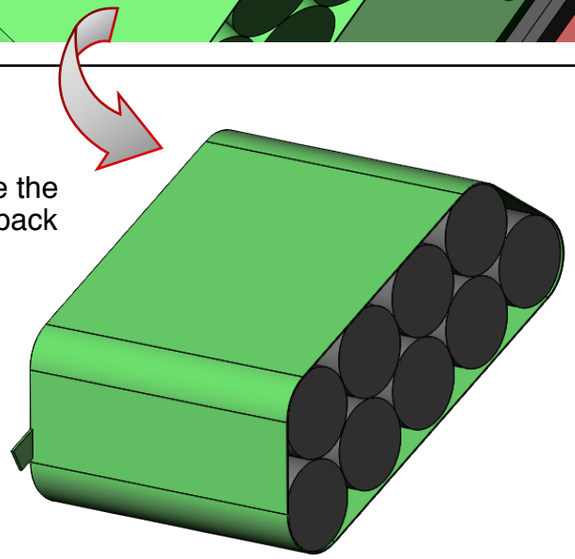
K: Battery housing cover
R: Electronic motor board plate
S: Electronic motor board
T: Battery pack
U: Battery connector
V: USB connector
W: Mother board connector



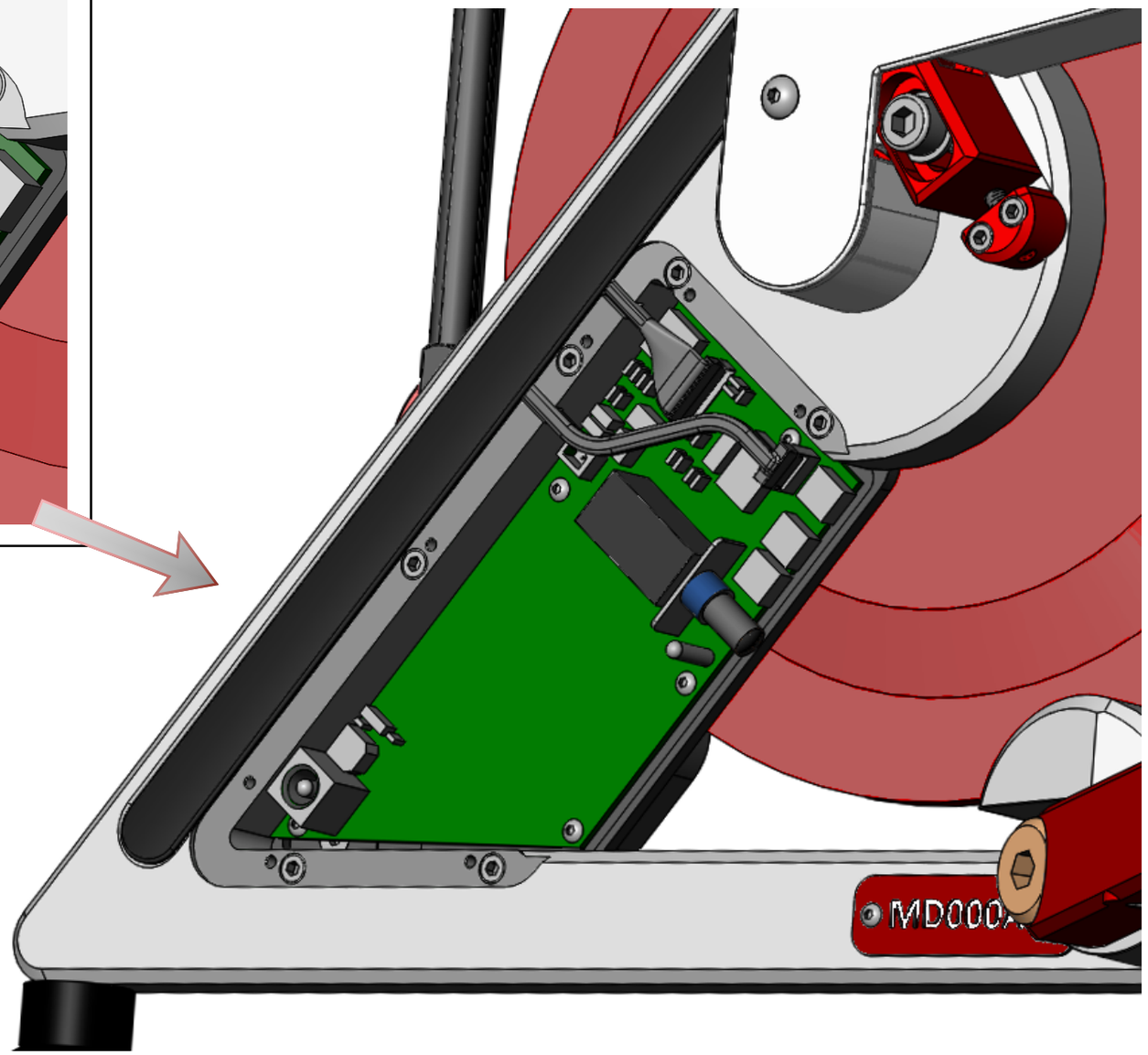
4. TECHNICAL SECTION

4.2. REPLACING THE ELECTRONIC MOTOR BOARD



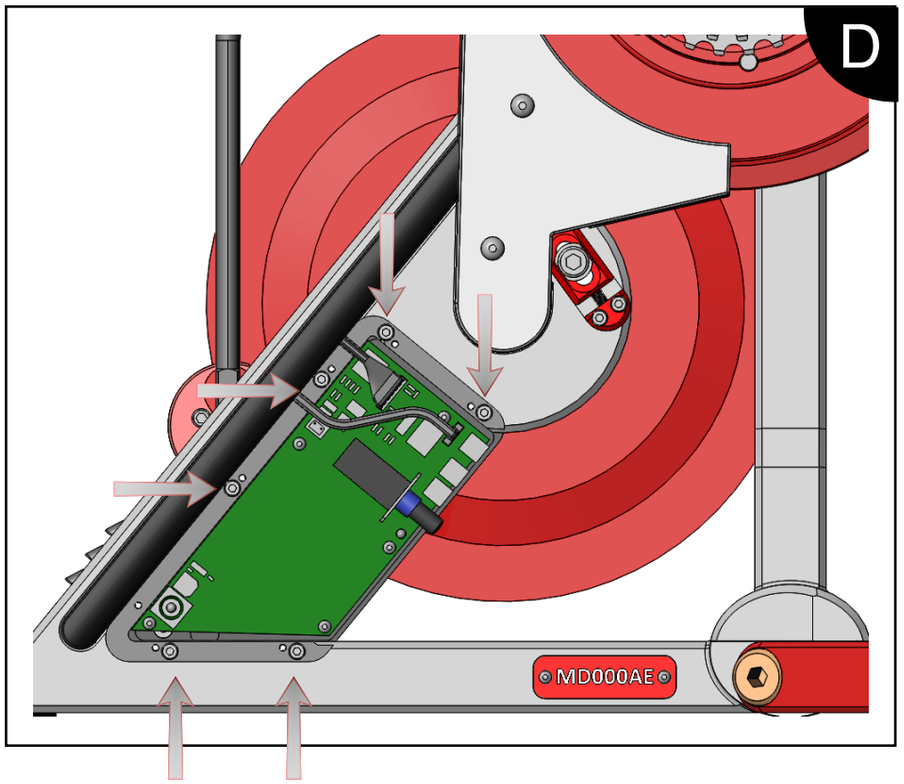


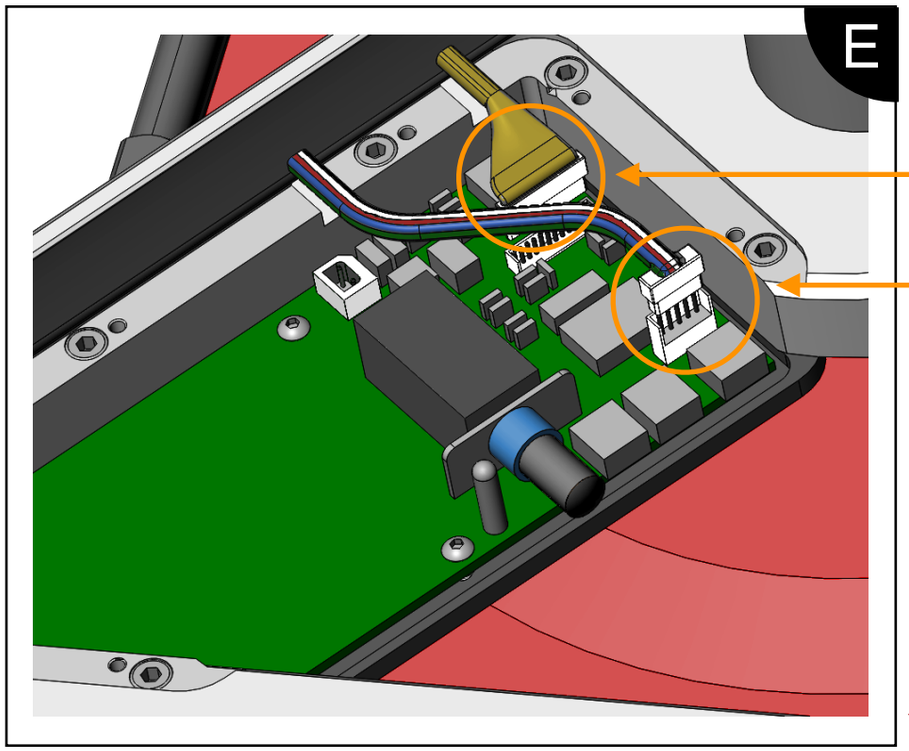
C) Delicately remove the battery connector (U) and remove the battery pack (T);

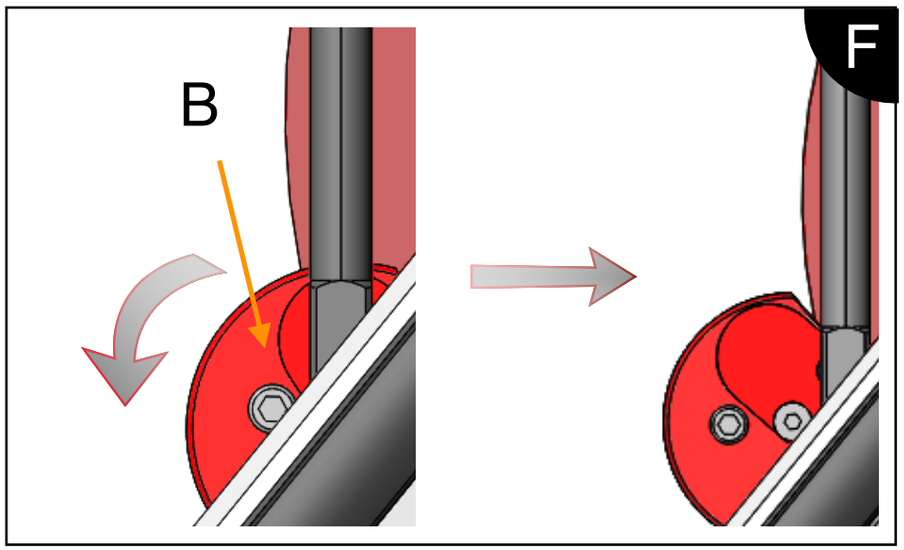


4. TECHNICAL SECTION

4.2. REPLACING THE ELECTRONIC MOTOR BOARD







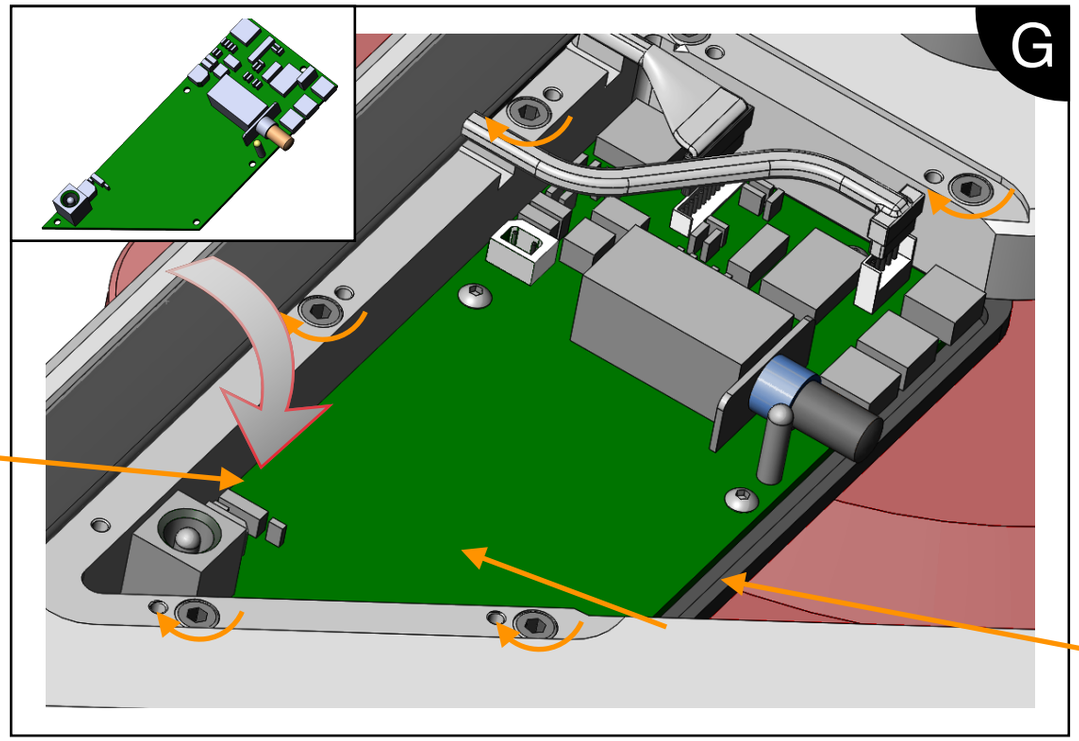
D) Use the 3 mm Allen wrench to loosen the 6 screws indicated in the illustration, but do not remove them;

E) Disconnect the two connectors (V and W) indicated in the illustration without forcing them, to free the brake clip (B);

F) Move the brake (B) to a completely open position;

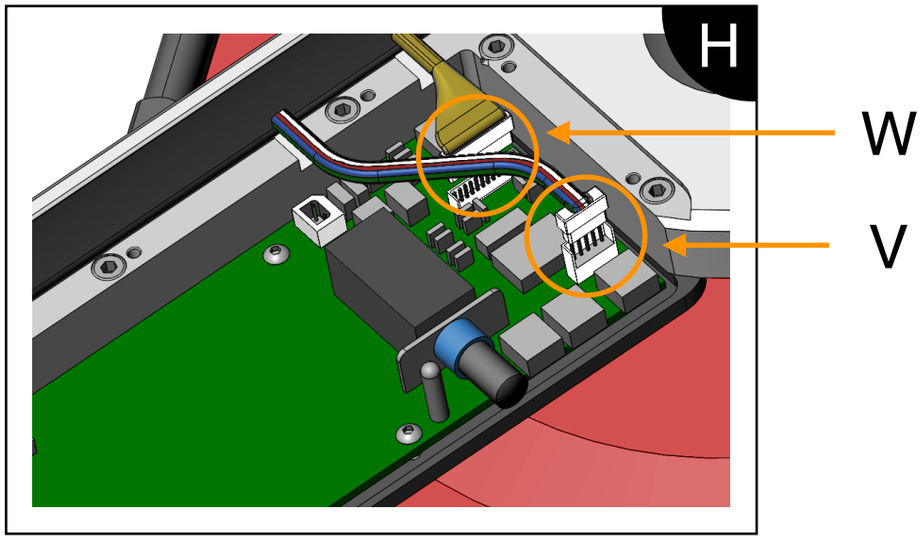
4. TECHNICAL SECTION

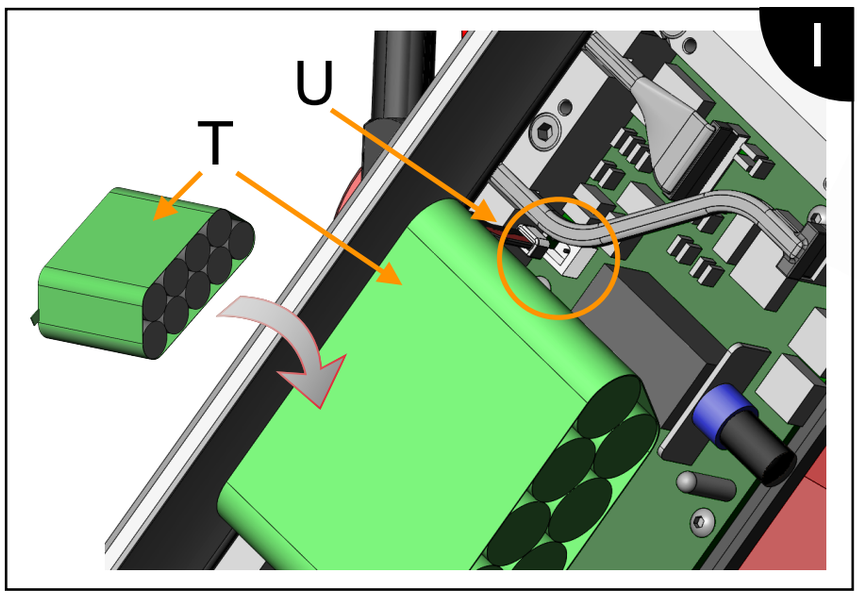
4.2. REPLACING THE ELECTRONIC MOTOR BOARD

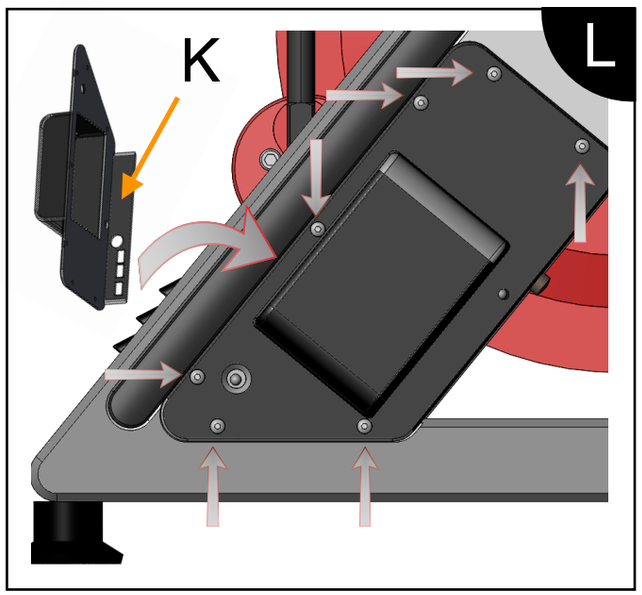


G) Position the board of the new brake block (S) on the plate (R) and tighten the screws with the 3 mm Allen wrench;

H) Reattach the connectors (V and W);







I) Reconnect the battery (T) and fit it into the housing;

L) Replace the battery housing cover screws (K) with the 2 mm Allen wrench

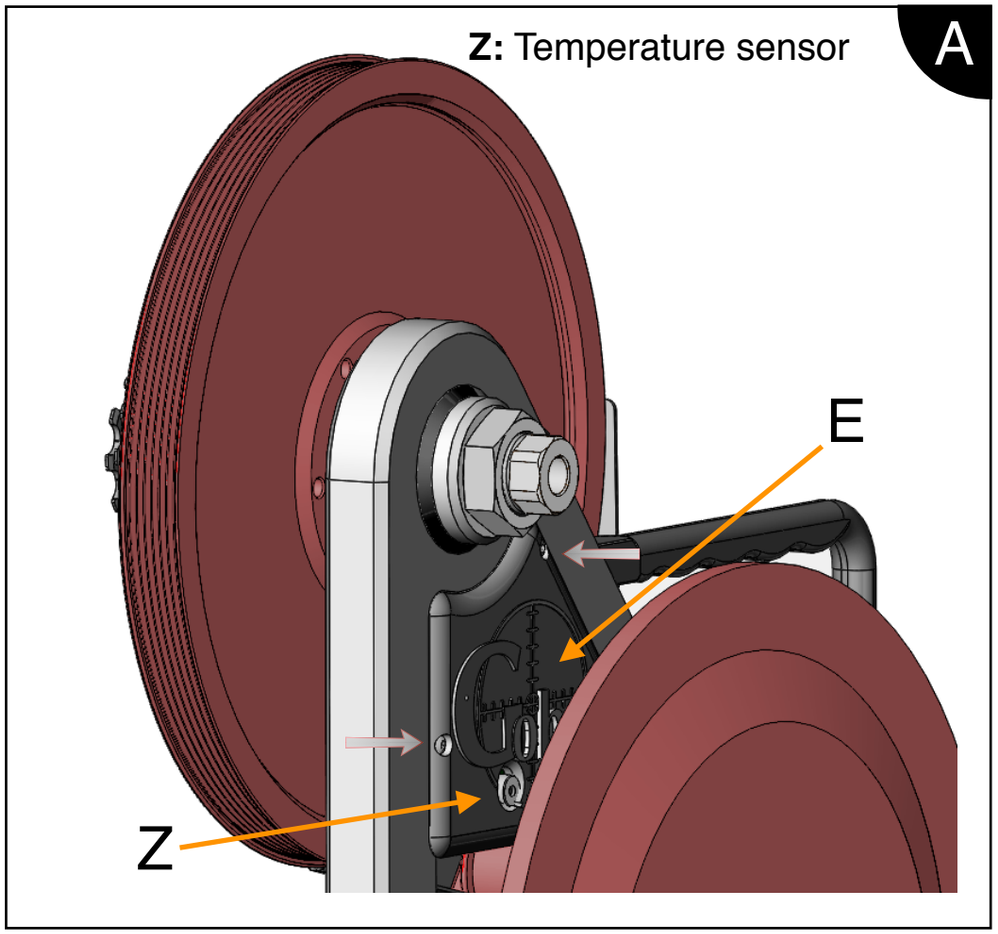
Before normal use of the system it is necessary to contact the service department to reprogramme the electonic board with the calibration file for the new brake.

4. TECHNICAL SECTION

4.2. REPLACING THE MOTHER BOARD

Necessary tools:

- 2 mm Allen wrench



If the cabling is damaged (points C and E) send the Jarvis to the manufacturer to substitute the components.

1) Use the 2 mm to remove the screws indicated in the illustration;

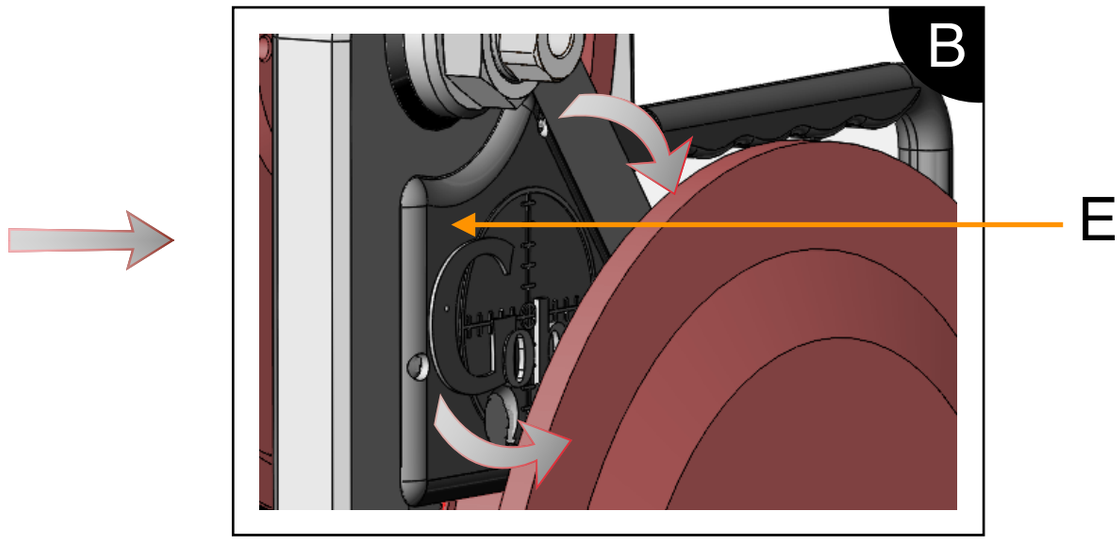
2) Once they have been removed, carefully pull away the cover (E) to remove it from it's seating;

3) CAREFULLY disconnect the multiple cabling connector (yellow). To facilitate the operation use a small flat headed screwdriver to disconnect the the connector from the female socket of the board;

4) Remove the cover/board couple (E) and insert the new one;

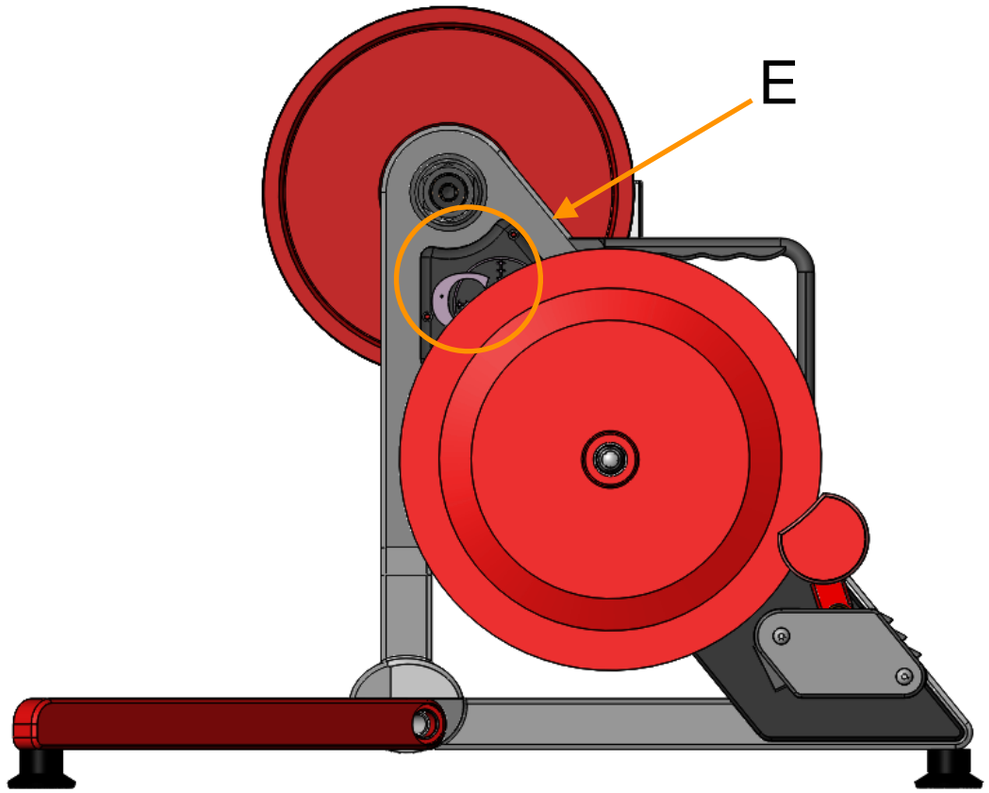
5) Repeat the step at point C to reconnect the connector;

6) Replace the cover (E) and fix it to the structure with the two screws that were removed.

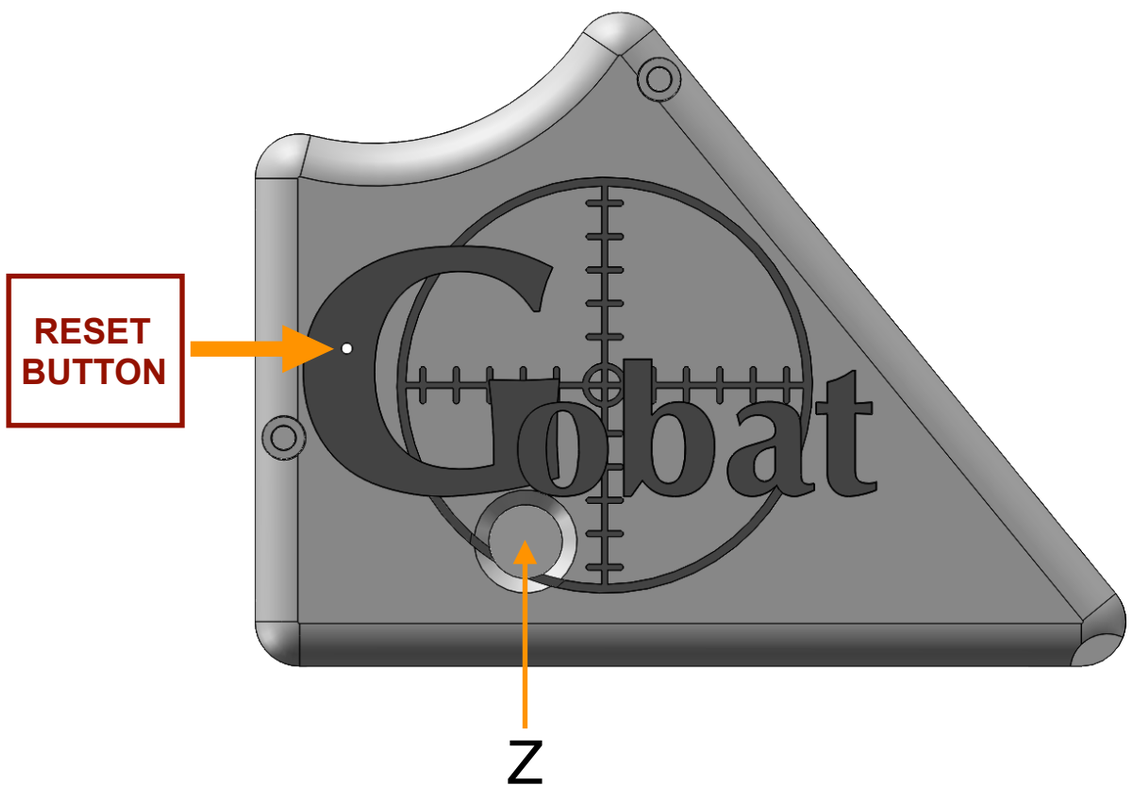


4. TECHNICAL SECTION

4.4. MOTHER BOARD RESET



To solve any connectivity problems, ONLY if indicated by the service centre and with the Jarvis switched on, insert a pin key (or a paper clip) into the hole indicated and keep pressed for at least 20 seconds.



Z: Temperature sensor aperture

CONTACT

MAGNETICDAYS

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