



Eletttronica Progetti

SHOOTING RANGE SOLUTIONS

USER INSTALLATION MANUAL

EP098TBH 7-6-28, 36, 54



Multi - Pull

S Y S T E M

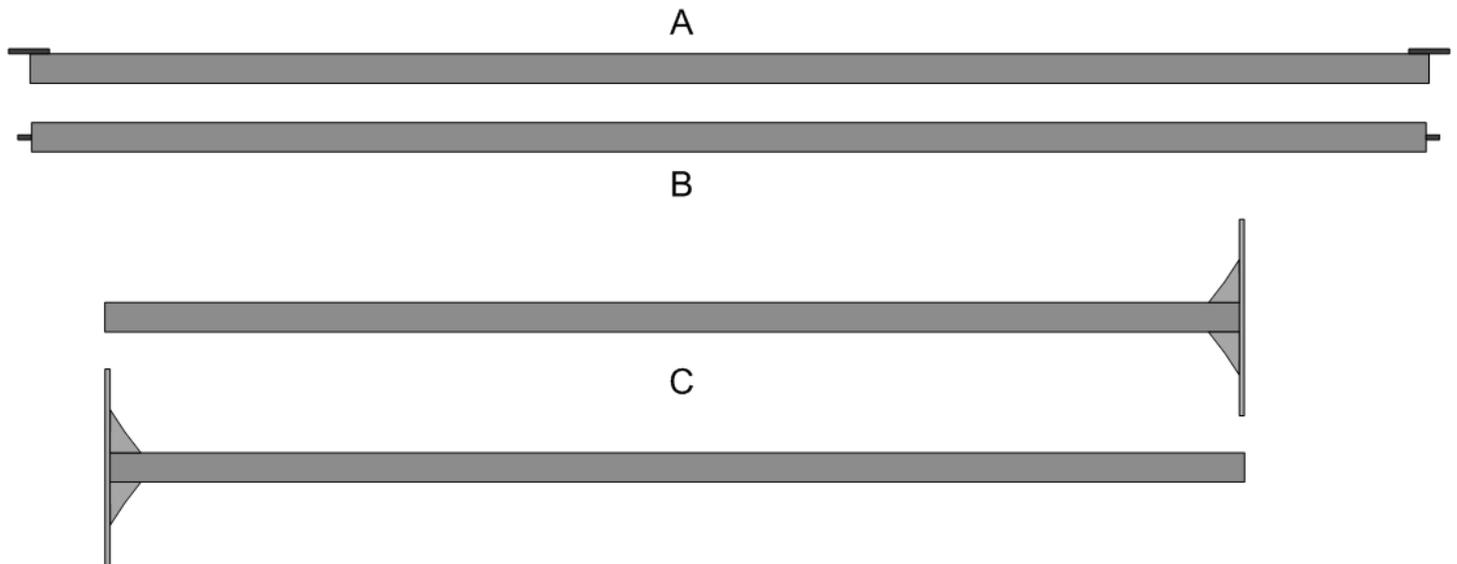
Table of contents	Page
Structure assembly	2
Assembly procedure	3
Fixing on ground	4
Scoreboard installation	5
Roof assembly	6-8
External connections	9
How to operate and mantainance	10



Structure assembling

Starting with the structure, it consists in two types, fixed or wheeled version.

Fixed version has 4 main pieces:

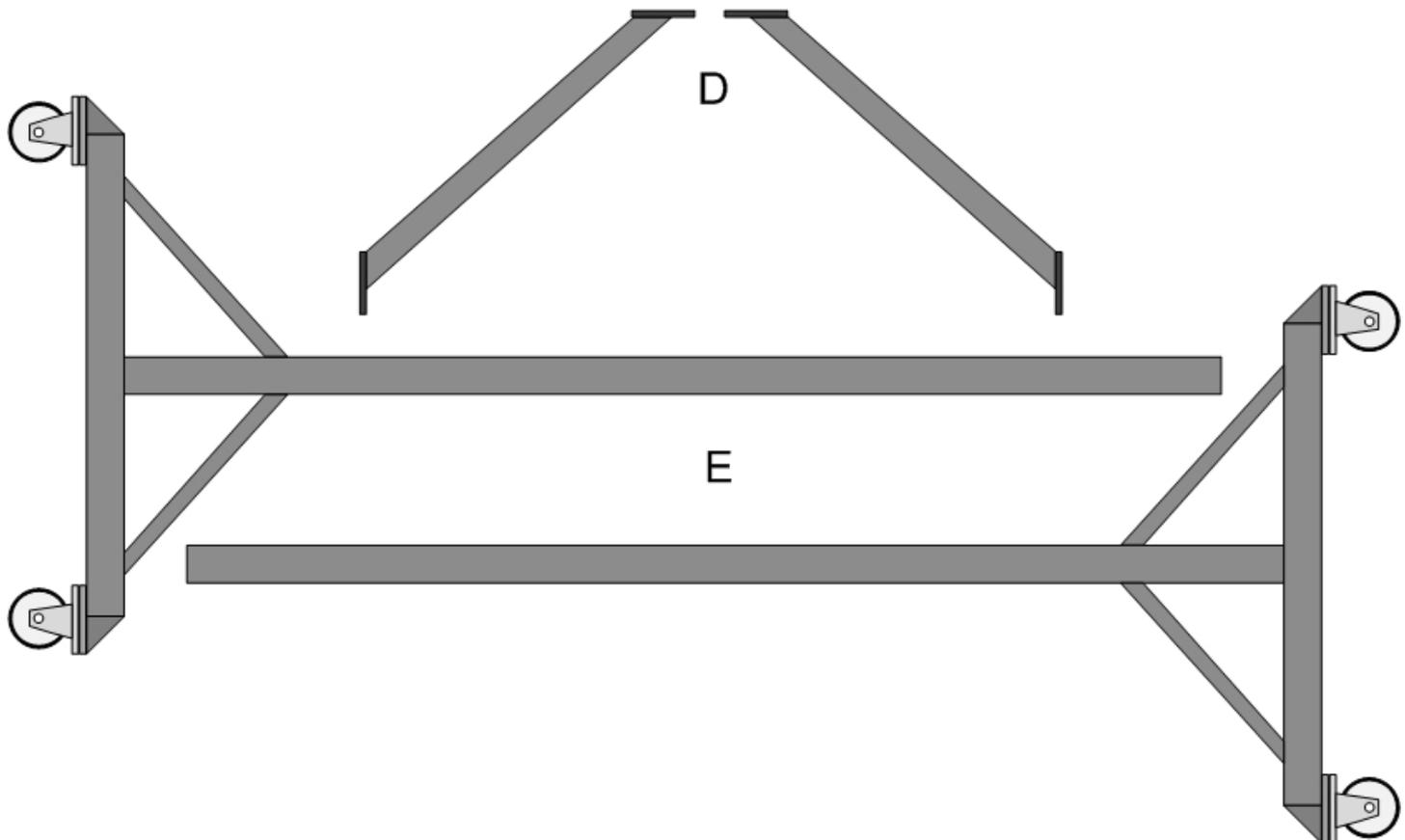


A: Upper bar (for roof mounting)

B: Middle bar

C: Legs x2 (Left and Right)

Wheeled version has an additional set of component and different legs:



D: Angular supports

E: Wheeled legs x2 (Left and Right)

Assembly procedure

NOTE: It is always suggested, when installing metal/mechanical structures, to NOT tight bolt by bolt, but roughly put everything together, then tight them all in the same pass.

NOTE2: you can choose to install the **roof** on the upper bar (A) then lift everything **or** install it after the metal frame is fixed.

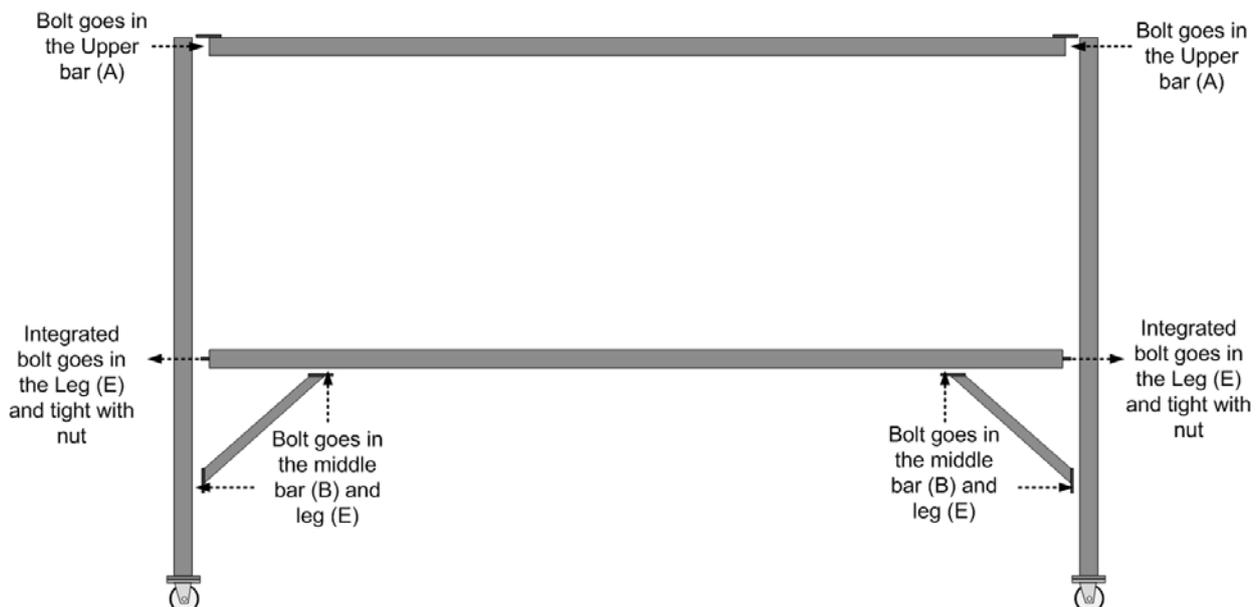
Fixed version:

- Starting with the middle bar, it has two welded bolts per side, insert those into one leg and hold it in place with one nut each.
- The upper bar has two plates, that help to install it, it has two M12 inner nuts welded per side, use the provided bolts to fix this.



Wheeled version:

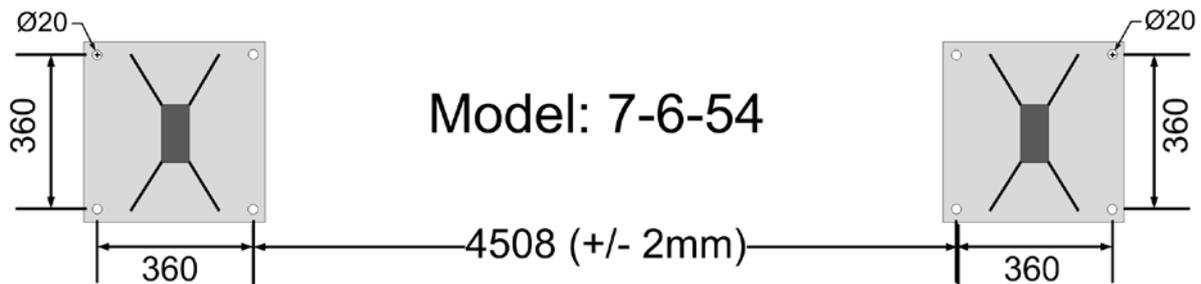
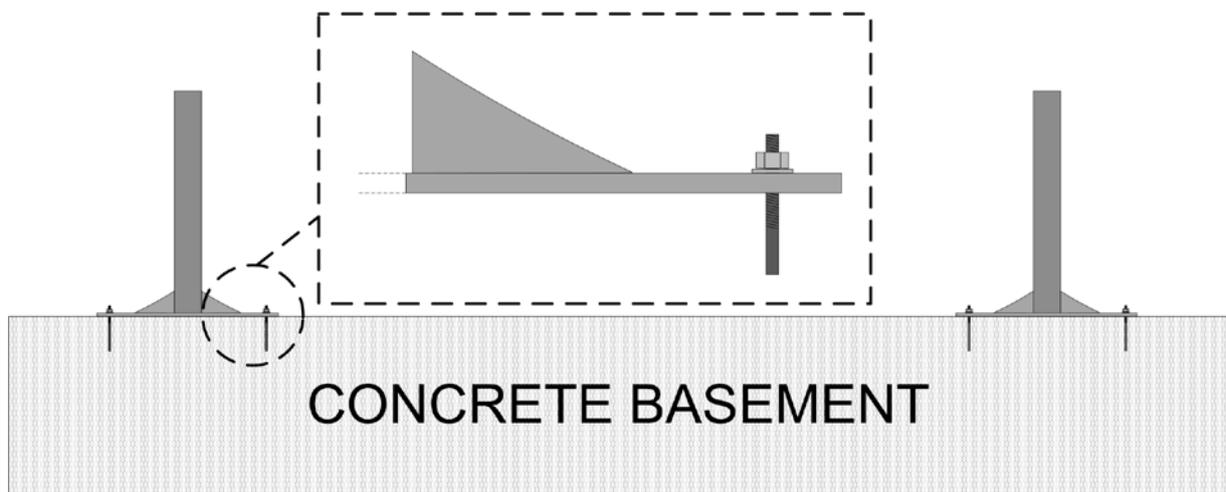
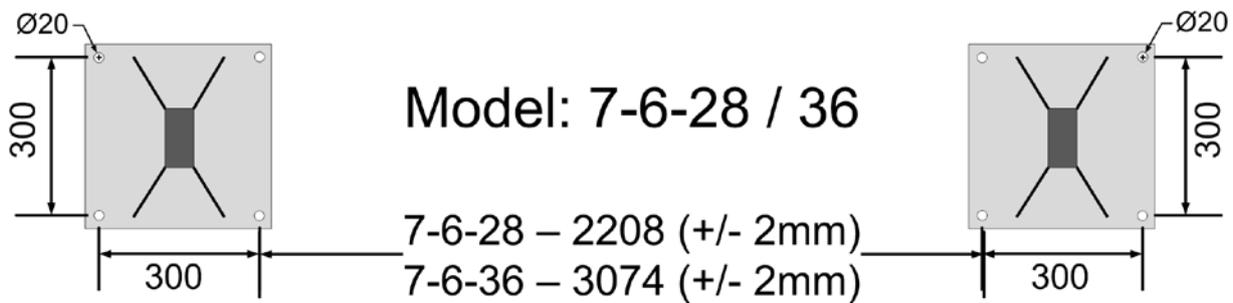
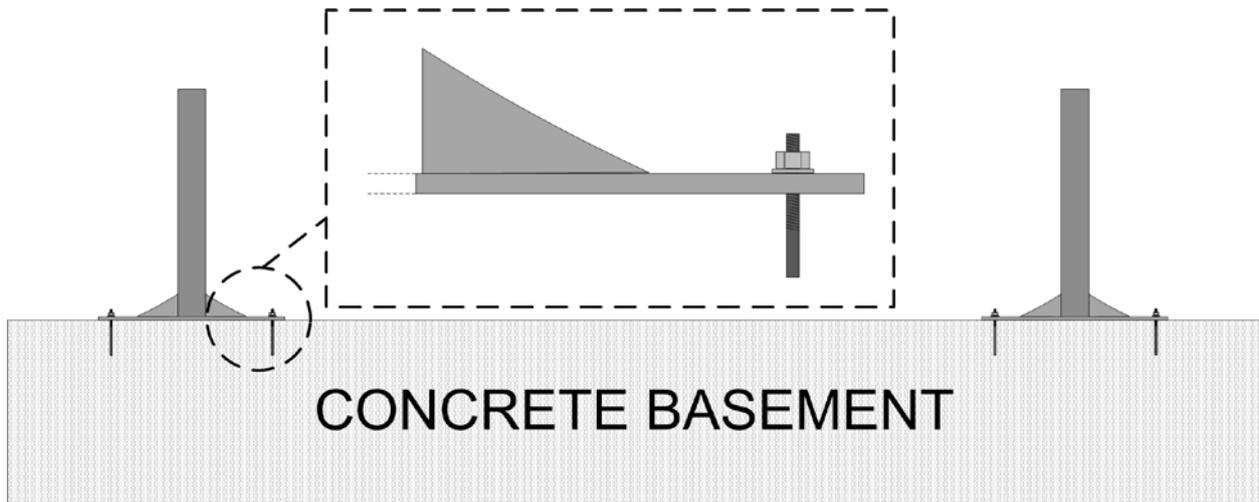
- Starting with the middle bar, it has two welded bolts per side, insert those into one leg and hold it in place with one nut each.
- Fix the angular bars, fix those on both sides.
- The upper bar has two plates, that help to install it, it has two M12 inner nuts welded per side, use the provided bolts to fix this.



Fixing on ground

Note: We are not responsible for concrete works. Consult your civil works engineer about the whole procedure.

Be aware that the distance of the holes between legs may have changed for product necessary modifications, suggested to put the metal frame together and measure again for an exact placement of the concrete anchors

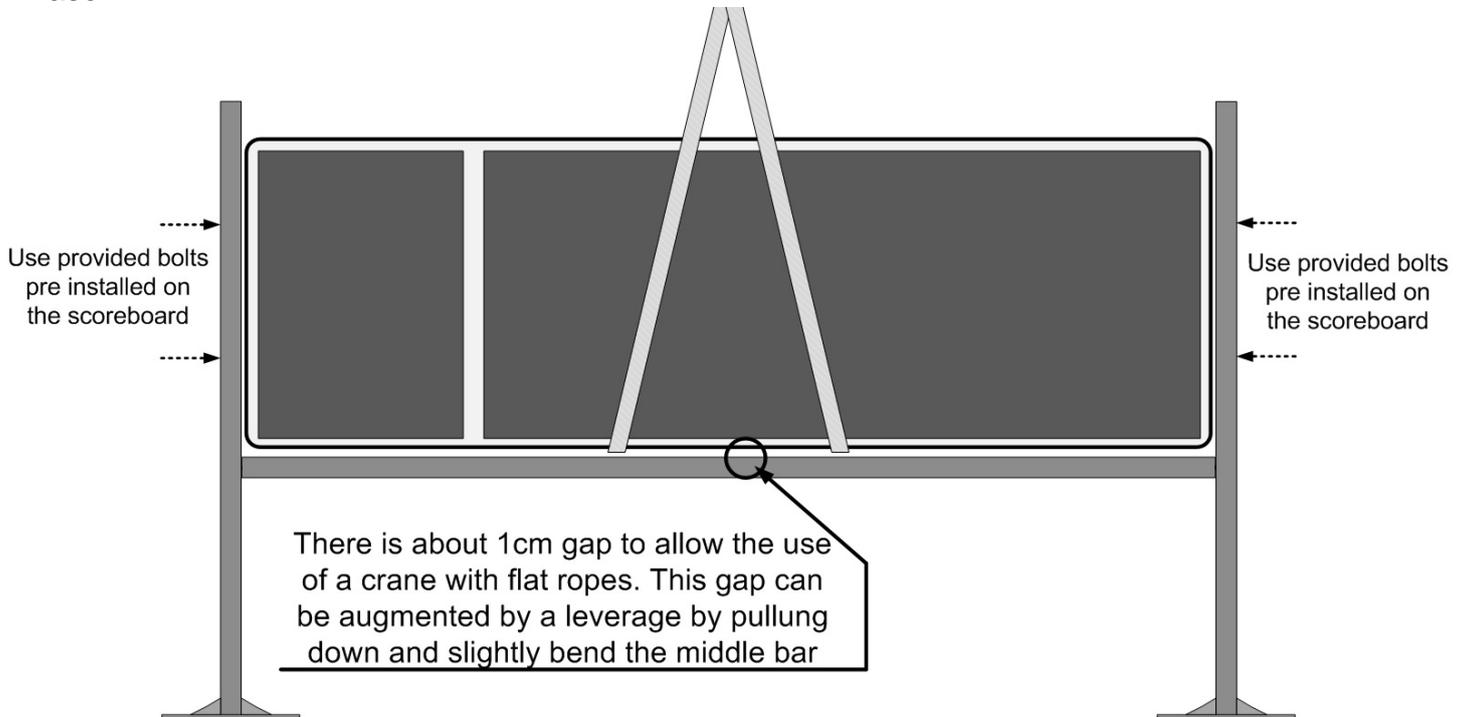


Scoreboard installation

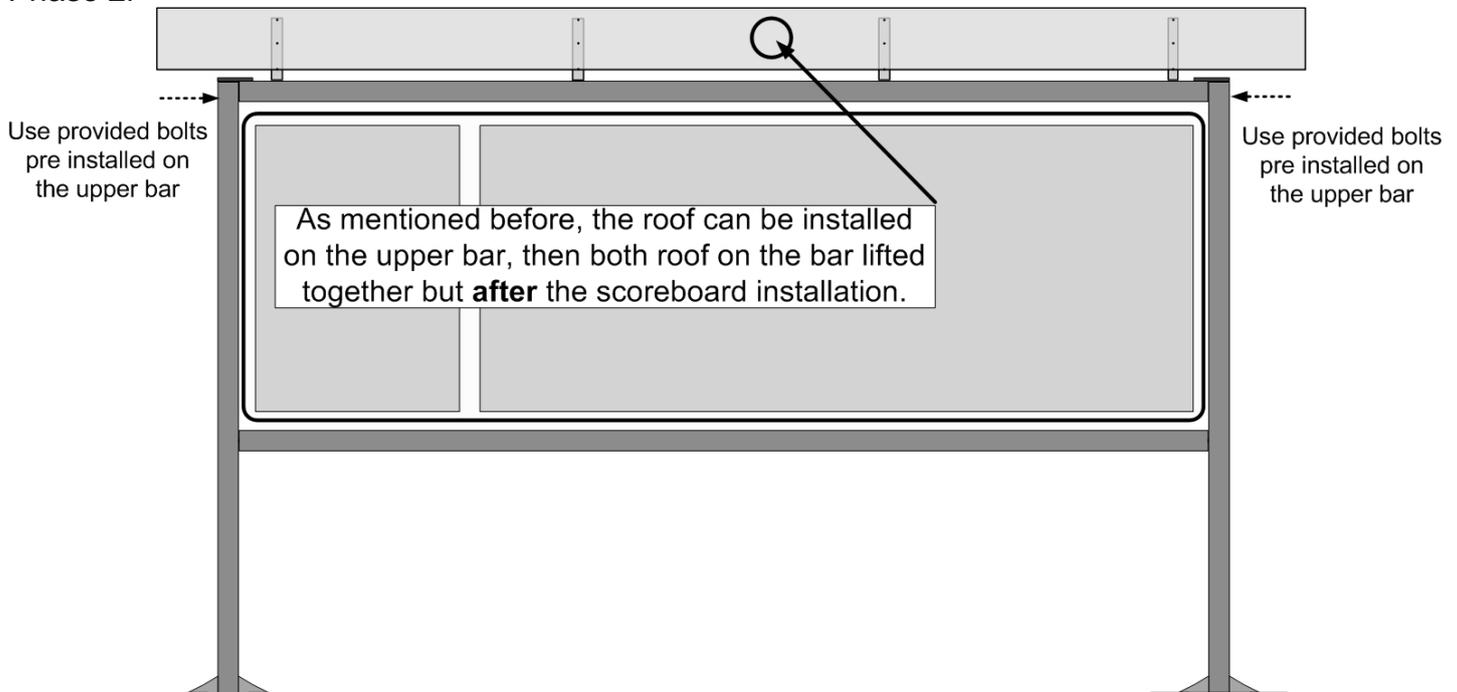
After the metal structure is in place, (with or without the upper bar), it is possible to install the scoreboard.

We suggest the use of a crane or an equivalent lifting system, using flat ropes. When not possible, an “by hand” installation is still possible but it requires a lot of people.

Phase 1:



Phase 2:



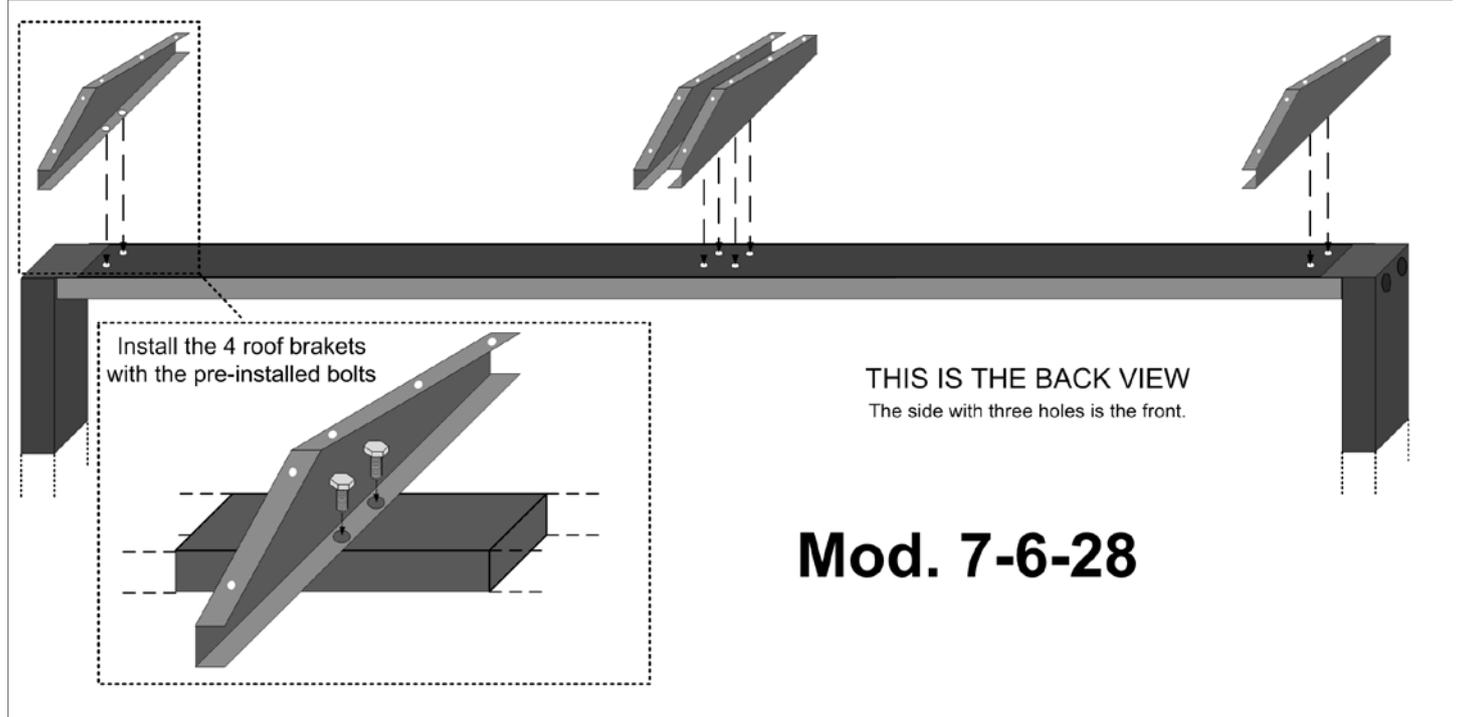
Roof assembly

The roof assembly will be divided per model, since **central part** of the metal plates that composes the roof, differs from model to model.

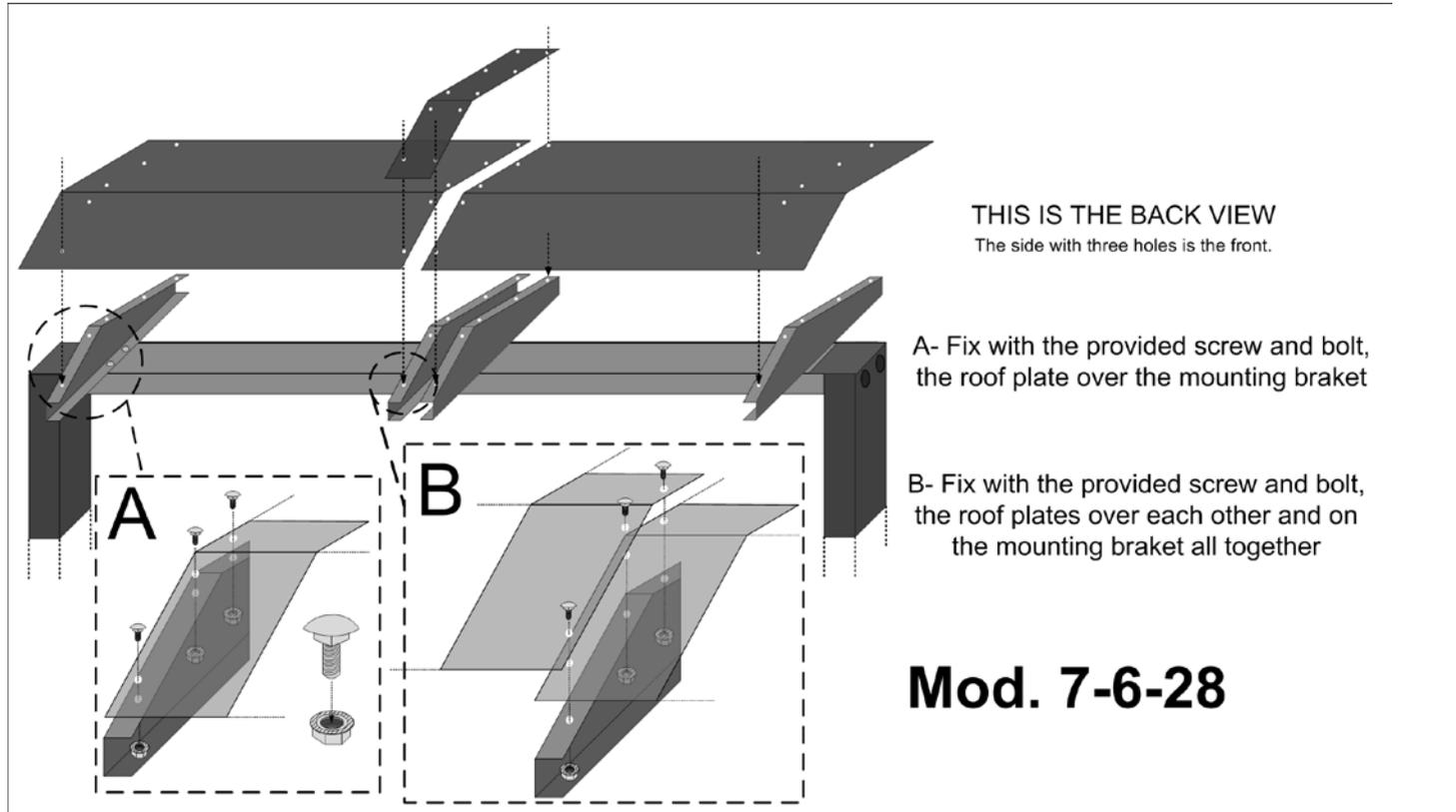
NOTE: As mentioned before, do not tight all the screws, only when all pieces are in place, start to tight the bolts and nuts.

Model 7-6-28:

Phase 1:

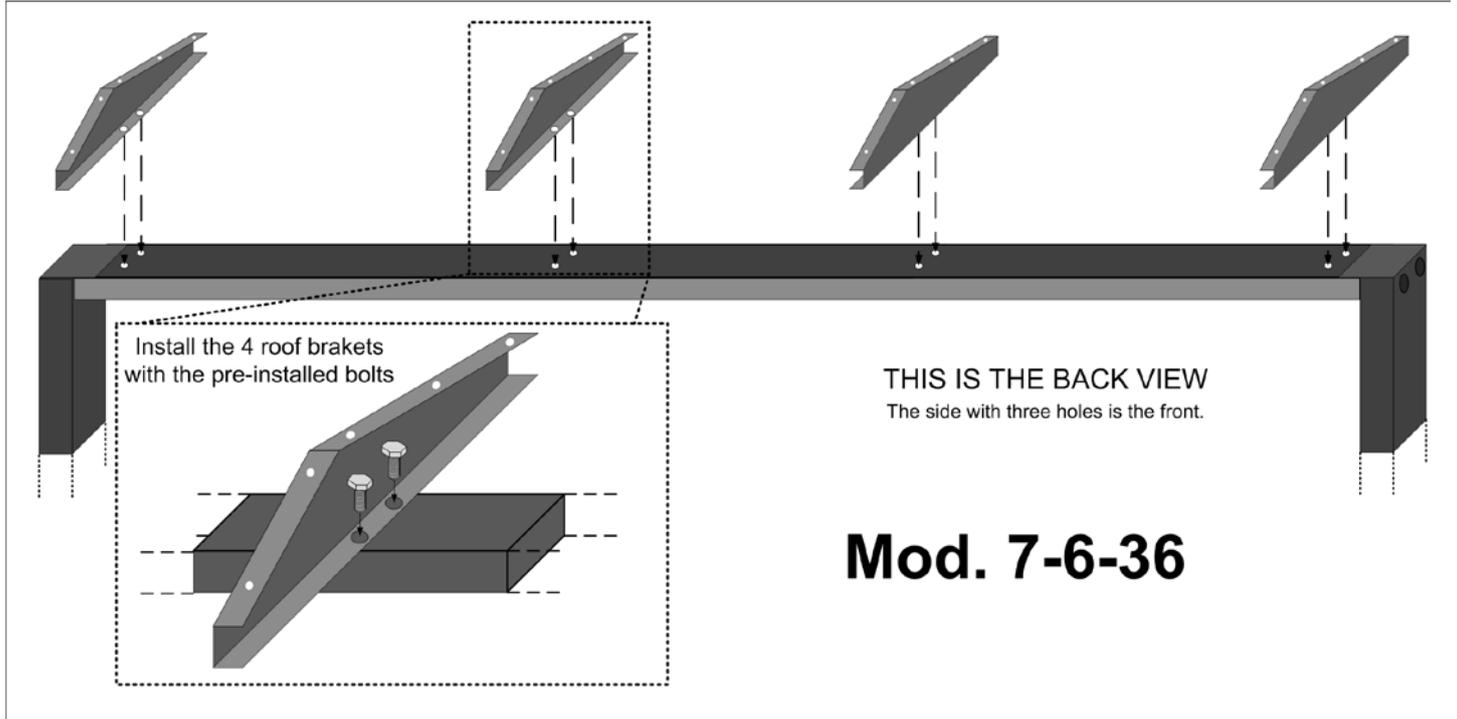


Phase 2:

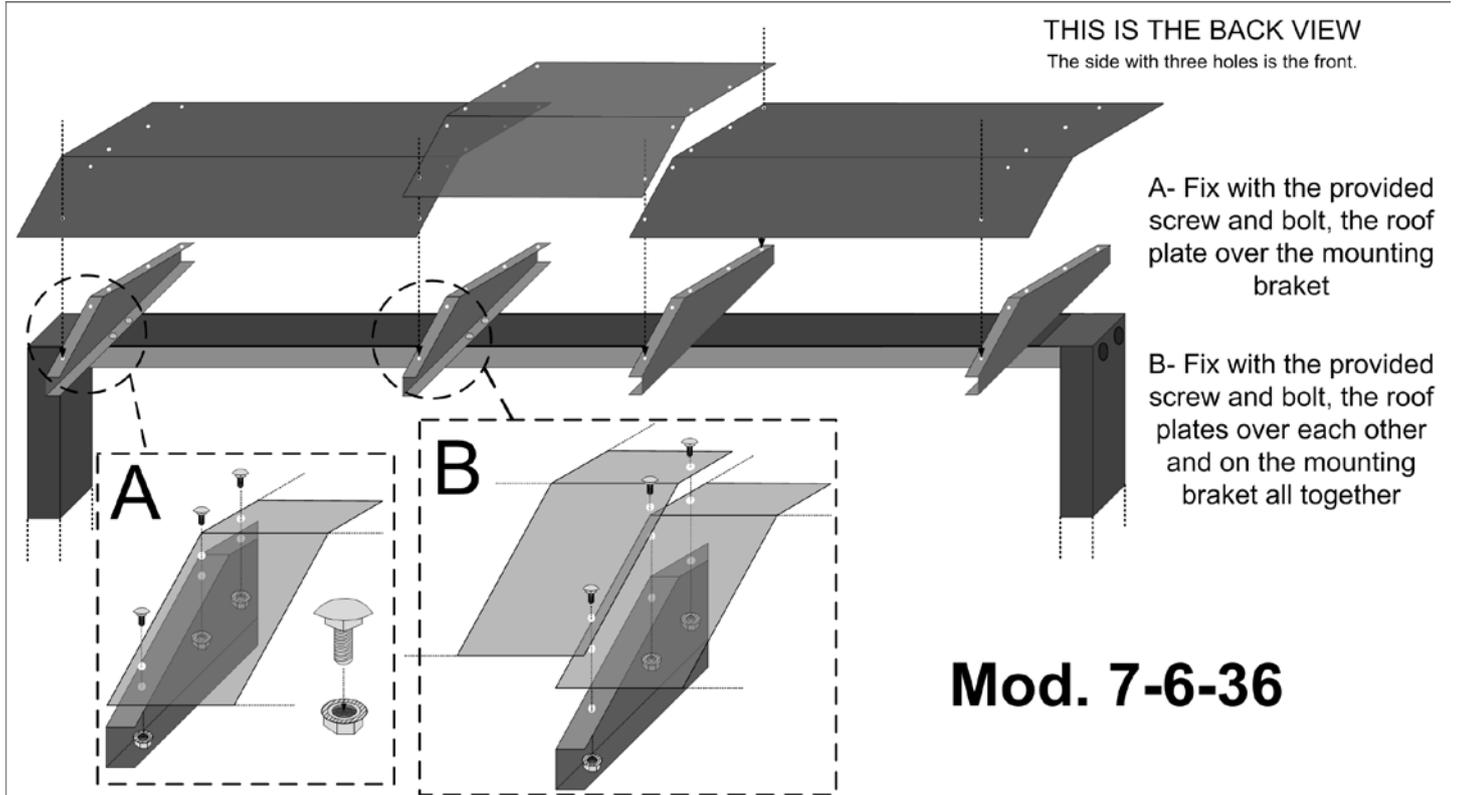


Model 7-6-36:

Phase 1:

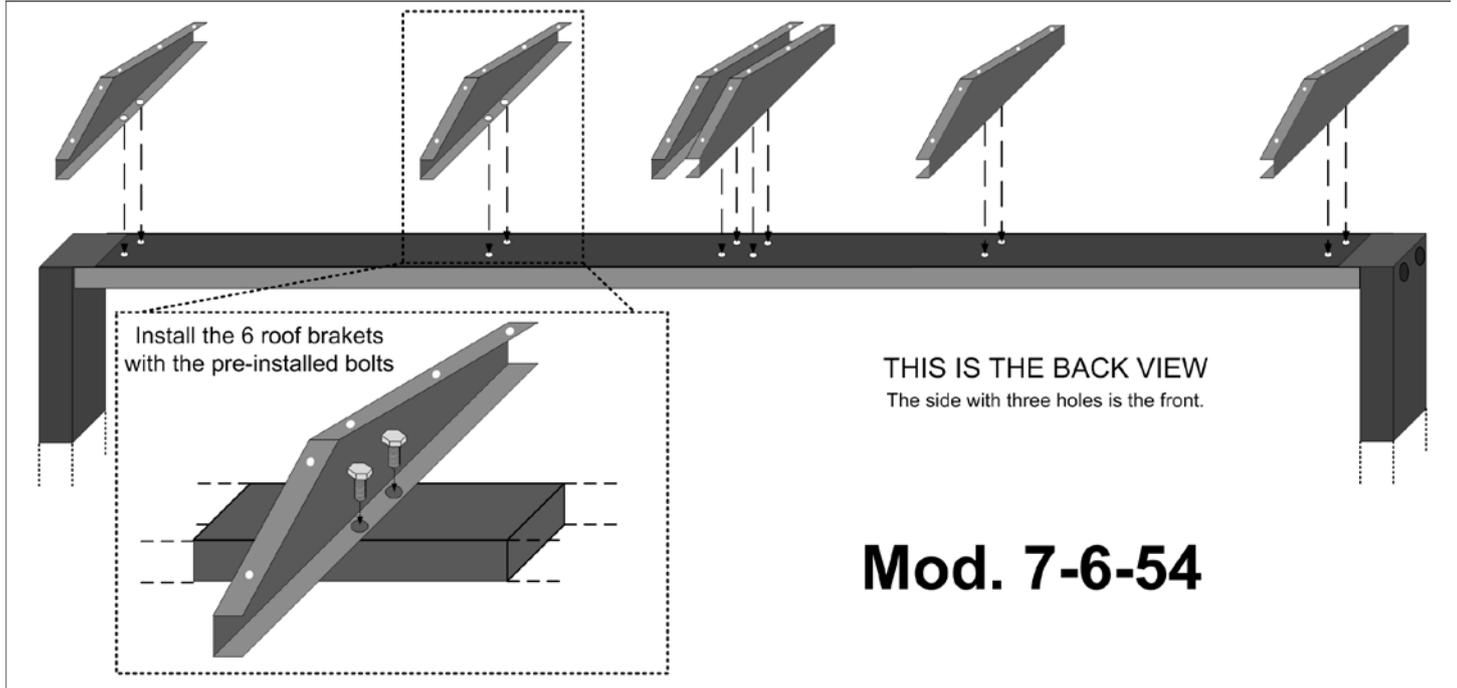


Phase 2:

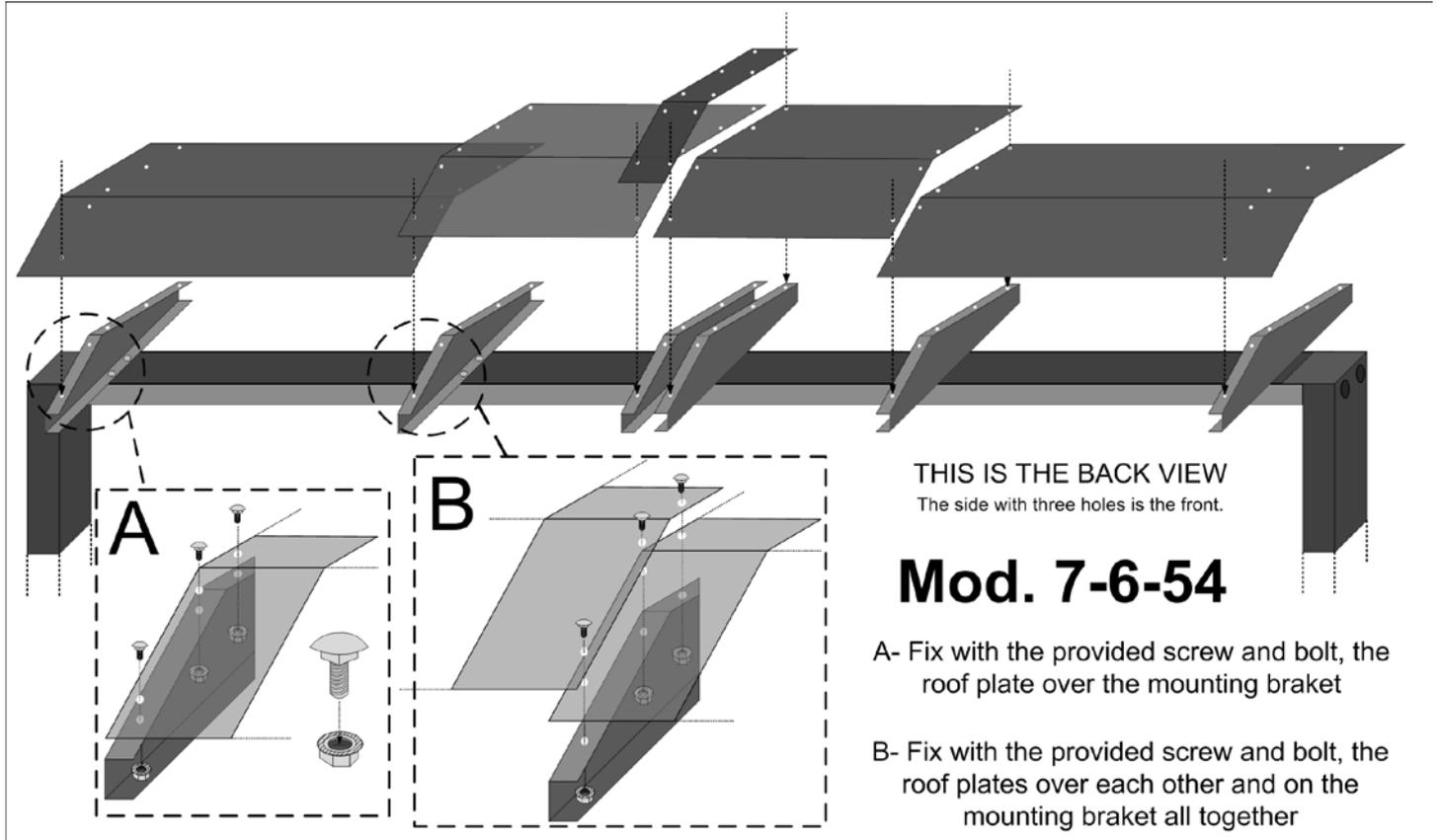


Model 7-6-54:

Phase 1:



Phase 2:

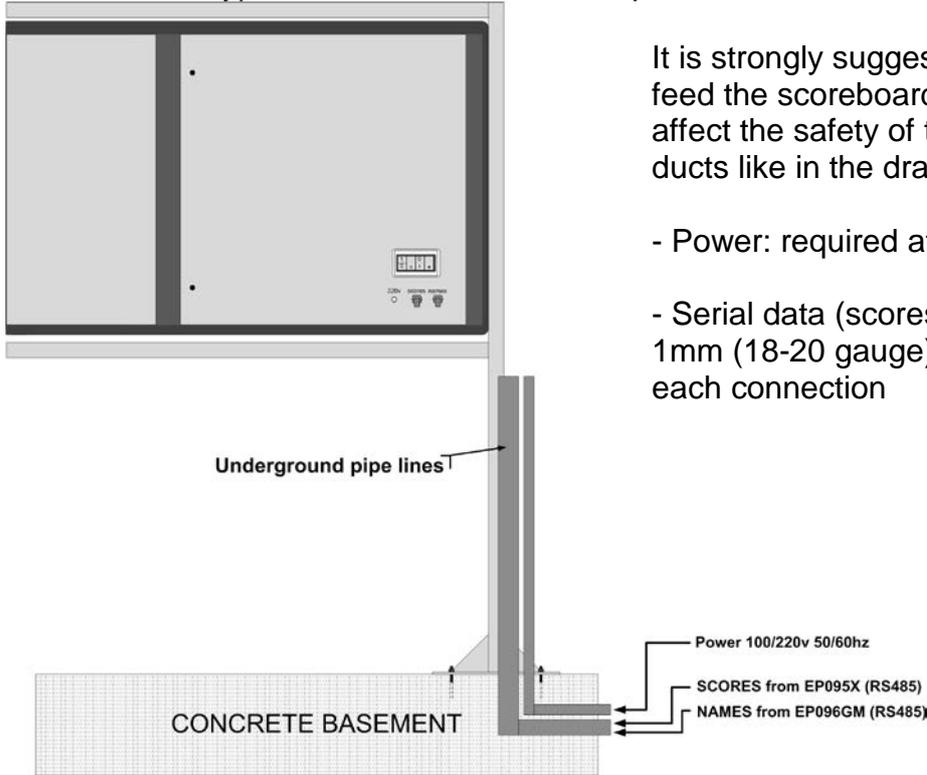


ADDITIONAL INFORMATIONS: There are 4 or 6 roof brackets to install, these holds the roof that is made out of 5 bended metal plates. They have 5 holes each, **three** facing on the front side, and two on the back side.

With the brackets in place, lay upon the outer parts (left and right), fix the most external line of bolts, then place the center-left and center-right piece and fix these, then place the middle part that completes the roof. Now tight everything

EXTERNAL CONNECTIONS

There are two type of connections to make, power and two serial data:

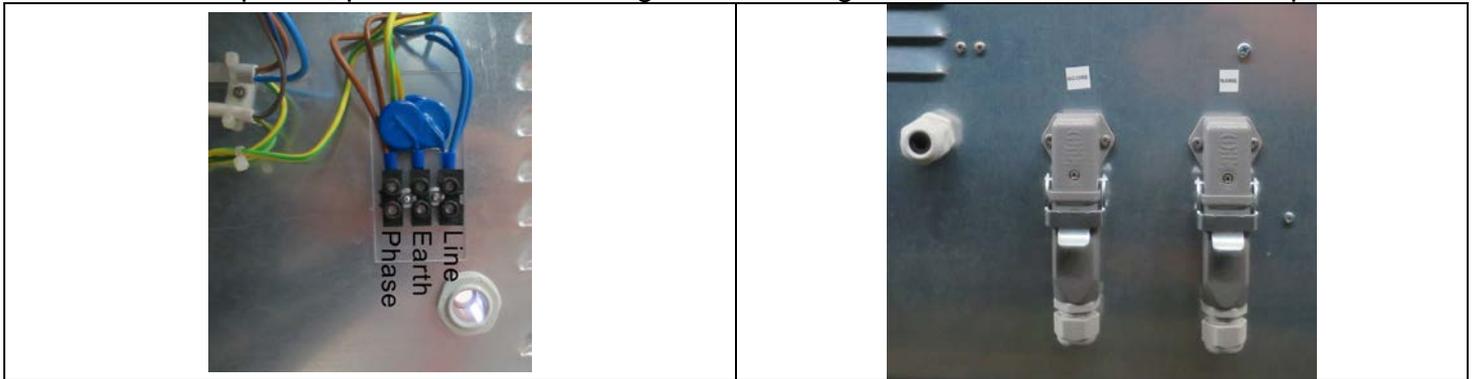


It is strongly suggested to avoid using only one pipe to feed the scoreboard, alternate current (100/220v) can affect the safety of the incoming data. Use separate ducts like in the drawing.

- Power: required at least a 3x2.5mm (10 gauge) cable

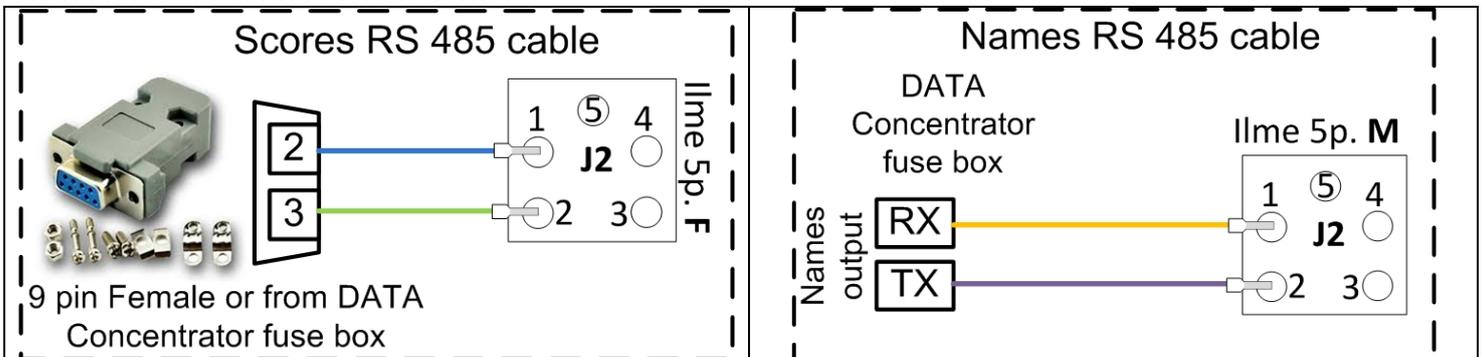
- Serial data (scores / names): required a 2x0,75 or 1mm (18-20 gauge) shielded and twisted cable, for each connection

To connect the power, pass the cable through the cable tightened and connect like in the photo



Scores and Names connector pin-out:

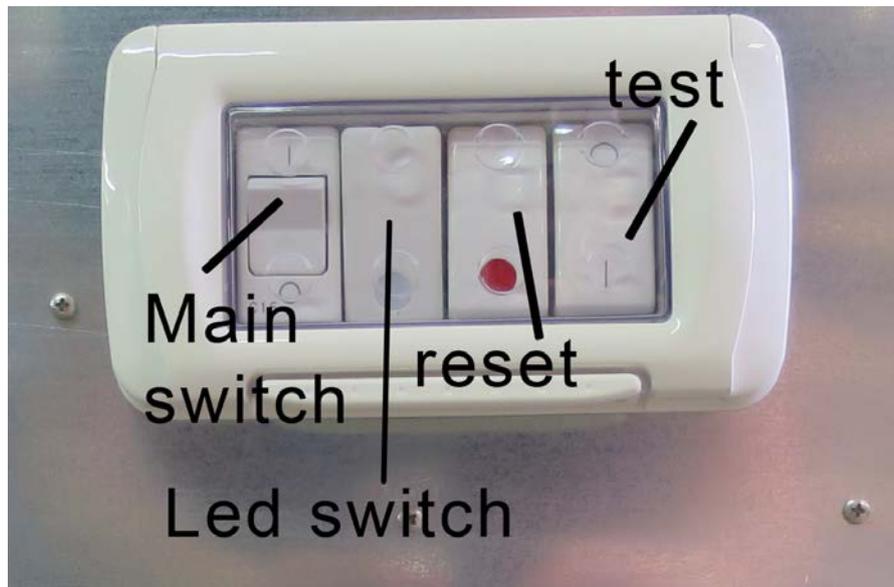
The two connector share the same pin-out, it differs from one each other by the male/female plug to use. Here is a connection scheme:



NOTE: Only the 7-6-28 series has only the scores connector, '36, and '54 models have both

How to operate

The 7-6-XX scoreboard series are dependent on the system and are self operating. There is a back panel (see photo) with a minimal operation capability.



Main Switch:

- Description: This is a thermal breaker, it has the function to switch the main power on and off.
- Function: When turned on, the ventilators will start, no power will be sent to the l.e.d. system

Led Switch:

- Description: This is a normal on/off switch with a signal light
- Function: When turned on, it will transfer the power from the main, and feed the whole system, the l.e.d. will start to lighten up and the scoreboard will be ready to receive data from external feeds.

Reset:

- Description: This is a pushbutton, normal state is off
- Function: When pressed, it will send a signal and erase all the data stored in the main board and clear the board from any scores/names

Test:

- Description: This is a on/off button
- Function: When set to ON, it will start a visual test procedure, with a repetitive scheme, make so that it is possible to look after any malfunctions with the l.e.d. or the electronic boards hosting the l.e.d.

Maintenance:

Make sure to disconnect the connections if not used for a long period of time.

To prevent malfunctions in the connections, it is a good thing to turn it on in the morning, do a 15/20 min test round, then it is possible to switch off. This will keep the small inner contacts clean by making electricity running through them.