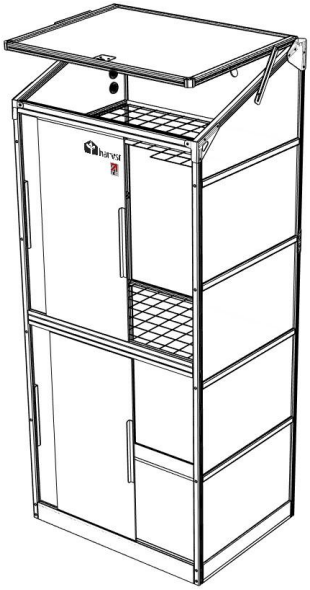
Setup guide

Model S10

Greenhouse only

V4 / From January 2023

If you have a Smart Sprout please also use the smart setup guide whilst assembling your S10



Thank you for buying a Harvst Sprout mini greenhouse.

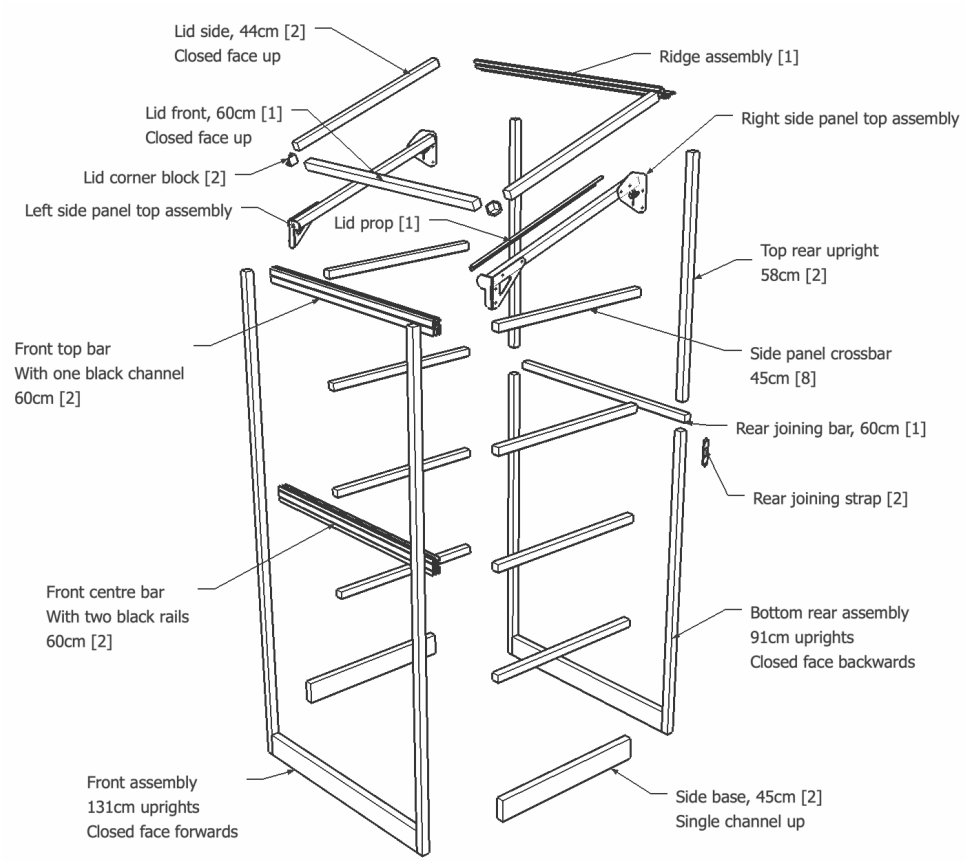
If you have any questions while setting up, send us an email (help@harvst.co.uk) or check out our forums:

https://grow.harvst.co.uk

Important information

Sprout Mini Greenhouses are intended for outdoor use and should be secured to a fence or wall with the provided fixings. Harvst accept no liability for incorrectly used products.

Exploded diagram

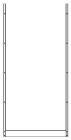


Tools provided	**Tools required (not supplied)**
3mm allen key 8mm spanner Pozidrive screwdriver	Tape measure to identify parts Secateurs for cutting pipe

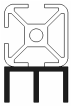
Parts list (aluminium pieces)

450mm **x2**
Lid sides **with corner cubes**

450mm **x8**
Side panel crossbar
2 pre installed screws per piece



Front assembly **x1**
1308mm uprights
600mm bases



600mm **x1**
Front crossbar
Double channel trim attached

600mm **x1**
Front centre crossbar
Double channel trim top and bottom

450mm **x2**
Side base extrusions

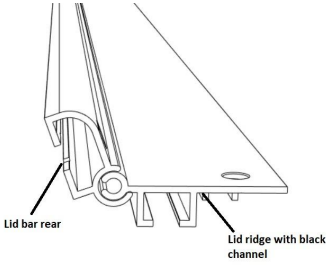
580mm **x2**
Rear top upright

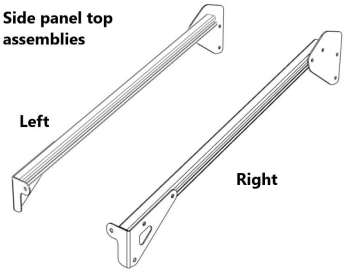
Rear assembly **x1**
910mm uprights
600mm base

600mm **x2**
Lid front (no screws)
Rear brace (screws in both ends)

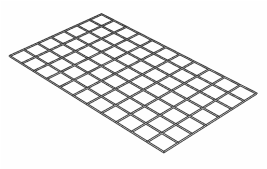
610mm
Shelf supports **x4**
4 season kits will have a LED shelf support bars

640mm two part lid hinge **x1**

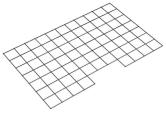




14” x 22” mesh panel **x1**



Side panel top assembly **x2**

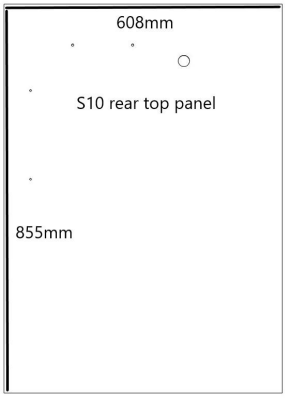


14”x 22” top mesh panel with notch in front

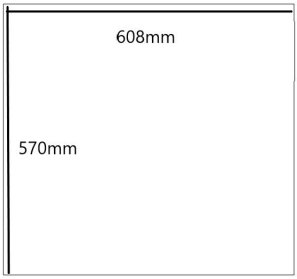
Door handles **x4**

Lid prop **x2**

Panels



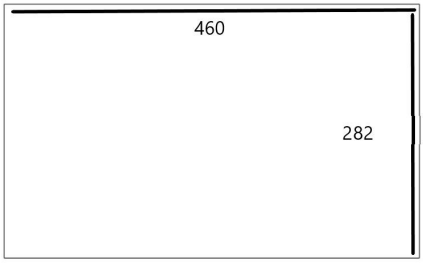
Black rear top panel **x1**



Black rear lower panel **x1**

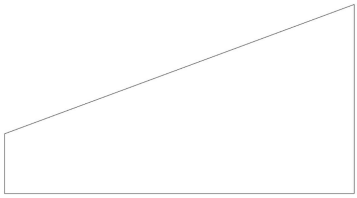
Clear lid panel **x1**

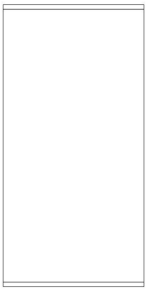
Clear side panels **x 8**



Clear side top panel - left **x1**
Note: Holes for piping

Clear side top panel - right **x1**





S10 door panels

Top door pair - with stickers shorter **x2**

Lower door pair Longer **x2**

Fixings and small parts

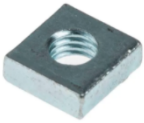
M5 x 8mm **x18**

M5 x 10mm **x12**

M5 x 16mm **x2**

M5 x 30mm **x2**

M5 Nyloc **x6**



M5 square nut **x23**

4.5 x 30 dome head screw **x2**

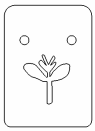
4.5 x 30 countersunk head screws **x2**

10cm cable ties **x20**

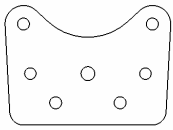
M5 washer **x2**

Blanking plug **x14**

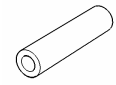
Joining strap **x2**



Lid top plate **x1**



Mounting plate **x1**



4mm tubes for shelves 90mm **x6**
190mm **x2**

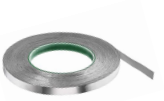
Fixing bracket **x2**

3mm allen key

Screwdriver

8mm spanner

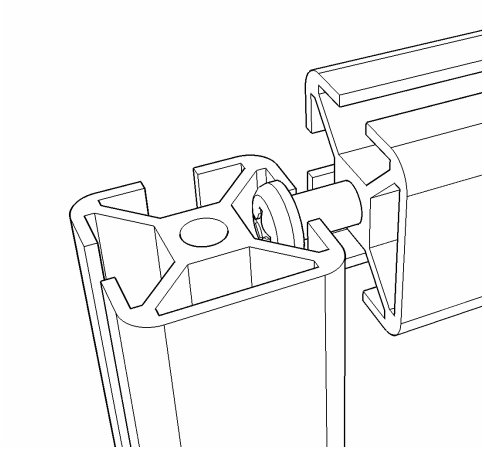
O-ring **x2**



Roll of foil tape

Introduction - Slotting parts together

The greenhouse is based on parts that slot together using stainless steel screws, as shown in the diagram below. These are self tapping screws which require a little bit of force to get them fully seated.



Ensure that your screwdriver is fully engaged with the screw head when you tighten, so that you don't round off the head of the screw.

Note the orientation of each piece in the description; specifically the closed face.

WARNING Every care has been taken during manufacture to avoid sharp edges or burrs, however you should still take care when handling metal parts.

WARNING DO NOT USE POWER TOOLS TO SCREW IN THE SCREWS. YOU MIGHT SNAP OFF THE HEAD, WHICH IS NOT COVERED BY WARRANTY.

Step 1 - Seal the polycarbonate panels (optional)

This step is optional, but is recommended.

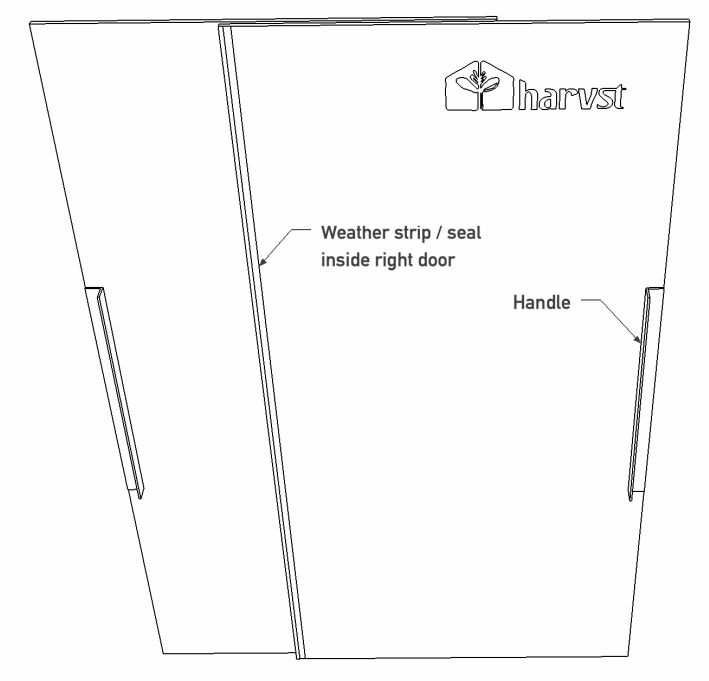
Twin wall polycarbonate panels act like double glazing for your mini greenhouse. To improve the insulation characteristics, it's good to seal the ends of the channels using the foil tape provided. It also helps prevent bugs from crawling into the plastic.

1. Peel back a couple of inches of the protective foil which covers both sides of the panels, but don't take it all the way off yet.
2. Apply the tape to the end of the panel, covering the flutes / open ends.
3. Fold down the sides to seal the tape to the panels.

The white film is on the UV protected side which should face out when you place the panels into the greenhouse.

Step 2 - Attach the door handles

Do this step first to allow the adhesive tape to cure while you assemble the rest of the greenhouse. You'll fit the doors at the end.



Parts
4 x door handle
4 x polycarbonate door

Fix the door handles to the doors as shown in the drawing above, using the tape fixed to the handles.

Make sure you have peeled the protective film off the doors first, the surfaces are clean, dry and free from grease, and that the UV treated side of the door panels (white film) faces out.

There is a sticker on the **upper** pair of doors.

NOTE: The longer (taller) doors are the lower pair

Step 3 - Assemble the base

Parts:
1 x front assembly. 1308mm uprights
1 x rear assembly. 910mm uprights
2 x side base extrusion 45cm

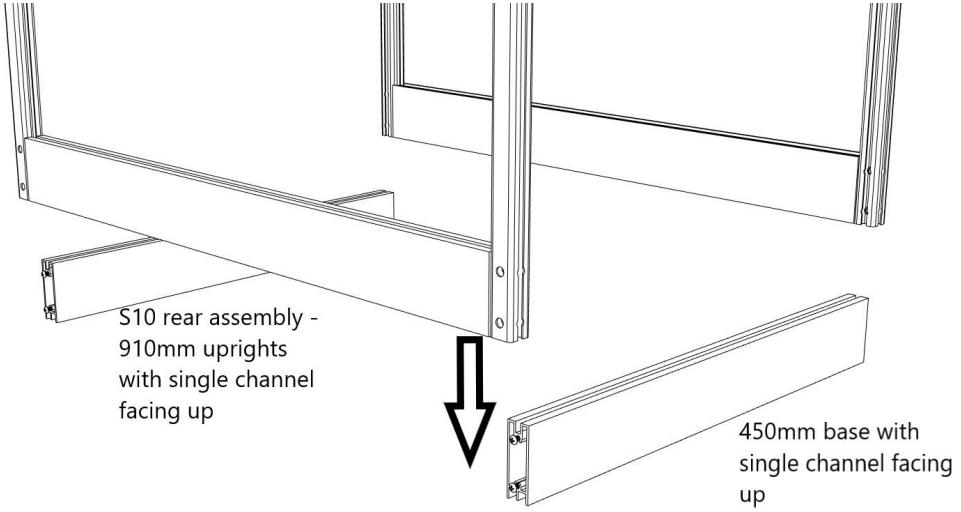
This step is best done on a flat surface where you can easily access the screws at the bottom, such as a table or workbench.

Slot the front and rear assemblies over the base extrusions

The closed faces on the assembly uprights face **outside** the greenhouse.

The side base parts have the single channel facing **up**, and the double channel facing **down**.

Slot the assemblies over the screws on the side base parts and tighten.



Step 3 - Fit the rear upright joining straps

Move the frame down onto the floor.

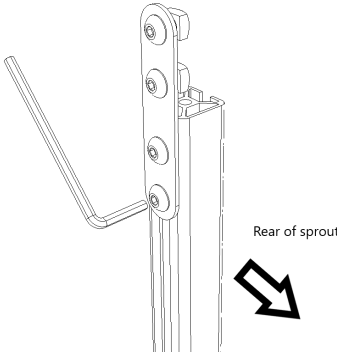
Parts
2 x joining strap
8 x M5 x 8 button head
8 x M5 square nut

Insert the 8mm bolts into the joining straps, and put a square nut on the back of each, loosely.

Slide the square nuts into the outside channel of the rear uprights.

The outside channel is the far left or far right channel; the joining straps will be on the outside of the greenhouse.

Tighten the lower pair of bolts.



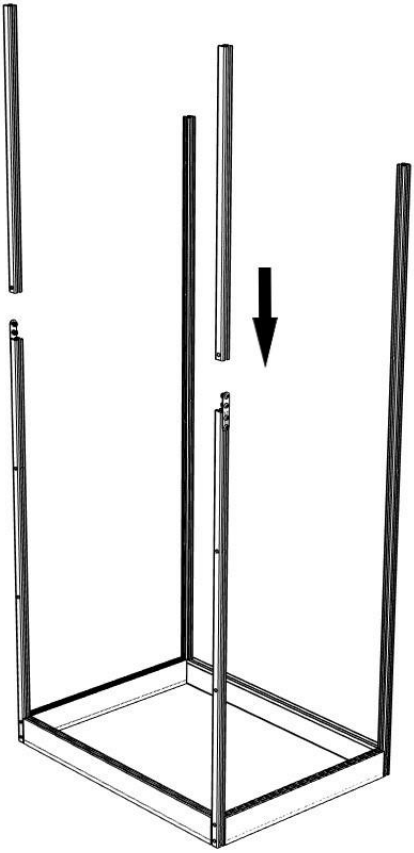
Step 4 - Fit the top rear uprights

Parts
2 x top rear upright 558mm

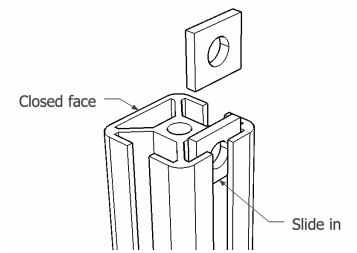
With the holes as shown in the drawing below, slide the top rear uprights down over the joining straps.

The closed face should be to the rear of the greenhouse.

Tighten the upper pair of bolts.



Step 5 - Insert square nuts into cross bars



Parts
4 x side cross bar 45cm
4 x M5 square nut

Insert a square nut into the inside channel of each crossbar that will go on the **left** side of the greenhouse. The inside channel is the one opposite the closed face.

Step 6 - Side panels and side crossbars

Parts:
8 x clear side panel
2 x clear top side panel
4 x side cross bar 45cm
4 x side cross bar with nuts 45cm

Peel the protective plastic off the side panels. Slot the panels into the frame, one on each side.

> The side with the white film should face outside; it is the UV treated side.

Slide the crossbars, **closed face outwards**, down over the clear side panels.

The bars with the nuts go on the **left** side.

Tighten the screws.

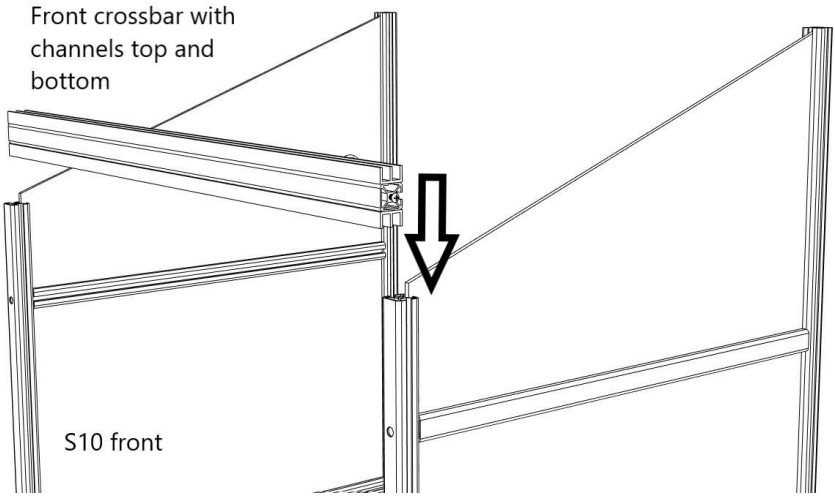
Finish inserting all the side panels and cross bars in the same way.

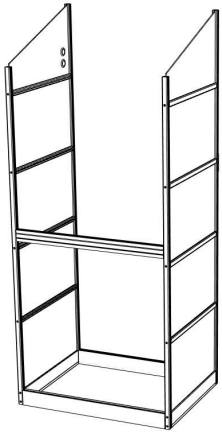
Step 7 - Front centre crossbar

Parts:

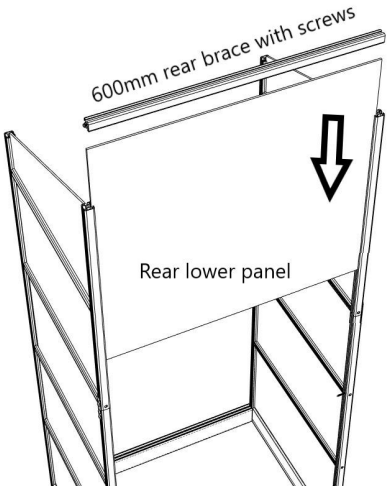
1 x Front centre cross bar
(600mm with double channel top and bottom)

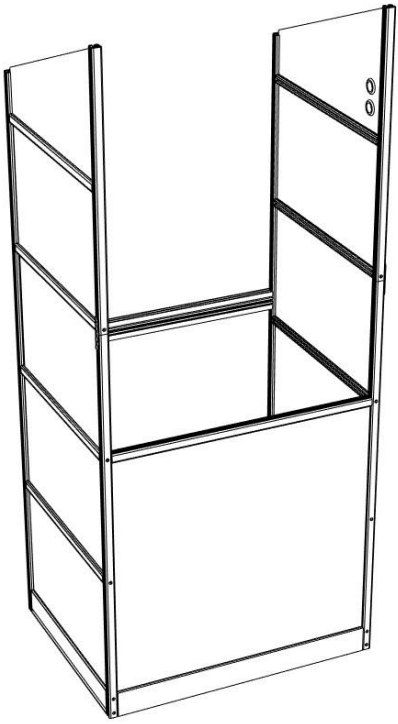
With the closed face outwards, slide the crossbar into the front of the greenhouse from the top down and tighten when the screws line up with the holes in the uprights.


Front crossbar with channels top and bottom
S10 front



Step 8 - Lower rear panel and rear brace





Parts:
1 x Lower rear panel (shorter panel)
1 x Rear brace (600mm with screws in)
This step can be made easier by squeezing the edges of the panels that will be in the slots of the frame so that they are slightly deformed.

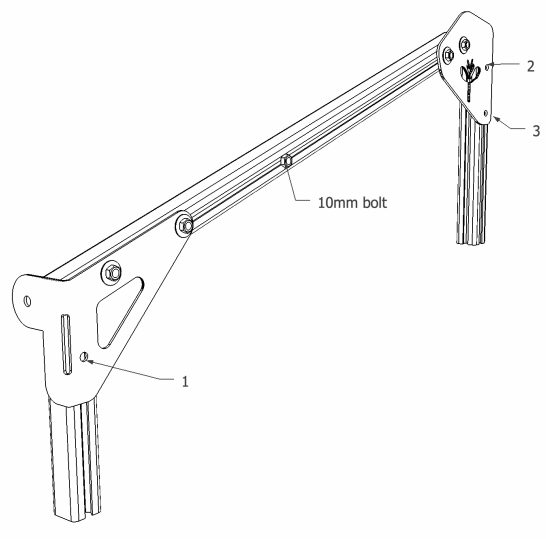
Slide the panel into the slots on the rear of the greenhouse. Make sure it's fully seated in the base.

It’s a snug fit into the base (anti-slug!)

Slide the bar into the rear of the greenhouse. Closed face outwards.

Tighten the screws from the sides.

Step 9 - Fit the right side top assembly



Parts:
1 x Right side top assembly
*3 x M5 * 8mm button head bolt*
3 x M5 square nut
*1 x M5 * 10mm button head bolt*

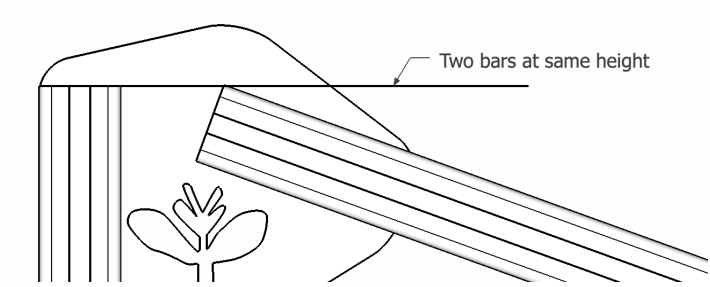
Insert the 8mm bolts into the assembly in positions marked 1,2,3, and add the square nuts on the inside, loosely.

Slide the assembly down over the side panel, inserting the square nuts into the outer channels on the uprights.

Screw the 10mm bolt into the lower square nut which is already in the outside channel of the assembly and tighten by hand. This will form part of the storm lock (see end of guide for more info.) **Ensure the second square nut in the channel is further up towards the rear of the extrusion.**

The front end goes down as far as it will go, and the rear end is flush with the top of the rear upright (see drawing).

Tighten the bolts.



Step 10 - Fit the **left** side top assembly

Parts:
1 x Left side top assembly
*3 x M5 * 8mm button head bolt*
3 x M5 square nut

Repeat step 9 for the left hand side top assembly

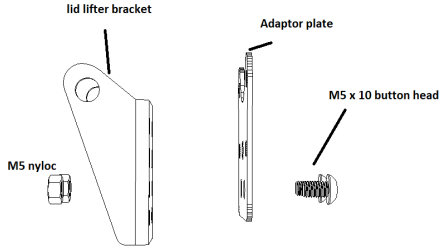
Step 11 - Fix lid lifter bracket to adapter plate

This step is only relevant if you have purchased an automatic lid opener.

Parts in Lifter Box :
1 x Piston Clip (end of box)
1 x Piston
1 x Arm
1 x Lifter Bracket
The *lid lifter bracket* is in the lid opener box.

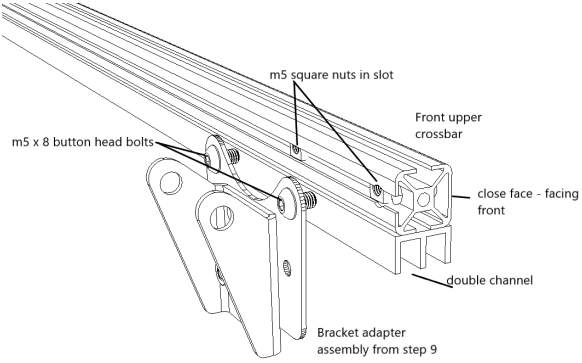
Parts:
1 x lid lifter bracket
1 x adapter plate
2 x M5 x 10mm button head
2 x M5 nyloc nut

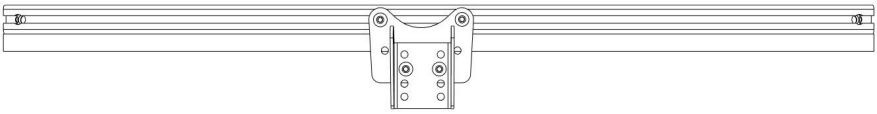
Bolt the lifter bracket to the adapter plate as shown in the diagram to the right, with the nyloc nuts on the inside of the bracket.



Step 12 - Fix bracket to front crossbar

Parts:
1 x front crossbar 600mm
1 x bracket assembly from step 11
2 x M5 x 8mm button head
2 x M5 square nuts
Slide two square nuts into the **rear** channel (the side opposite the closed face). Bolt the bracket assembly in the exact centre of the bar.

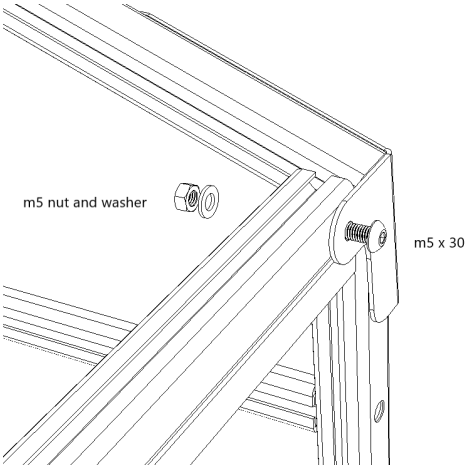




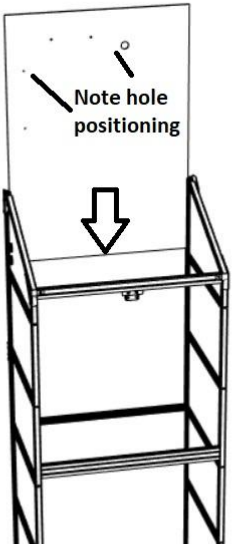
Step 13 - Insert the front crossbar

Parts
2 x M5 x 30mm bolt
2 x M5 nyloc nut
2 x M5 washer

Use the M5 x 30 bolts to secure the front crossbar to the rear of the side assembly corner brackets.
Fix them in place with a washer and nyloc nut on the rear.
Tighten so that the top door bar is secure.



Step 14 - Insert the rear upper panel



Parts:
1 x rear upper panel

Insert the rear upper panel in the orientation shown in the left diagram.

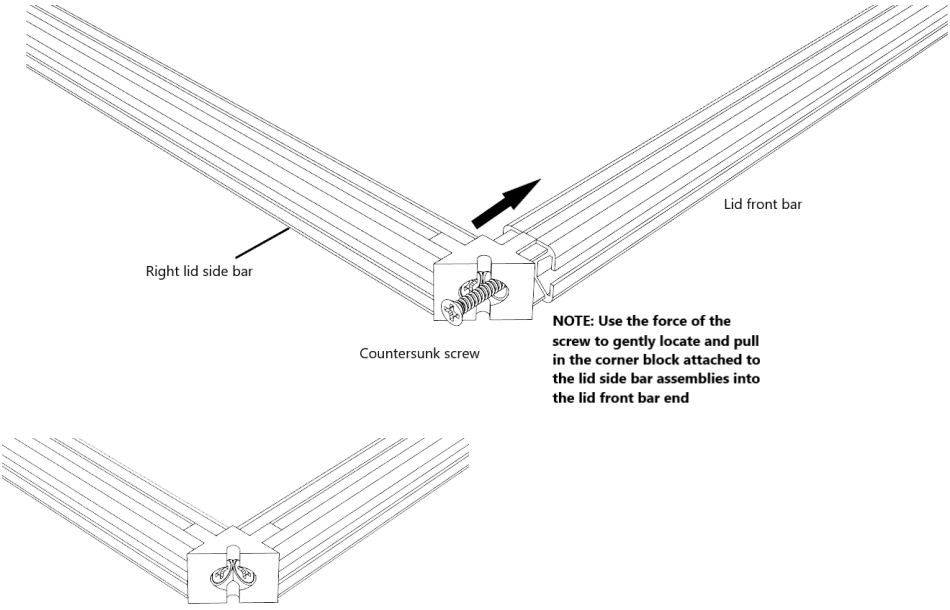
Note: Ensure the panel holes are in the top left orientation when installing the panel

This step can be made easier by squeezing the edges of the panels that will be in the slots of the frame so that they are slightly deformed.

Step 15 - Assemble the lid

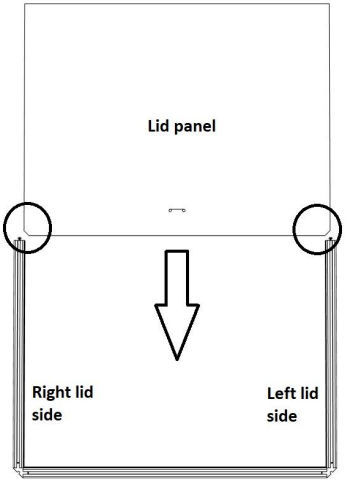
Parts
1 x lid ridge
1 x lid rear bar
2 x lid side bars with corner caps
6 x M5 square nuts
2 x 30mm countersunk head screws
1 x 60cm lid front bar
1 x lid panel

a) Lay out the lid front bar onto a flat surface with the closed face facing downwards. Attach the lid side bars with the corner piece to the lid front. The left and right lid side bars are identified by L and R on their protective packaging. Line up the corner piece with the open end of the lid front bar and use the countersunk 30mm screw to gently pull the corner piece into the end of the front bar

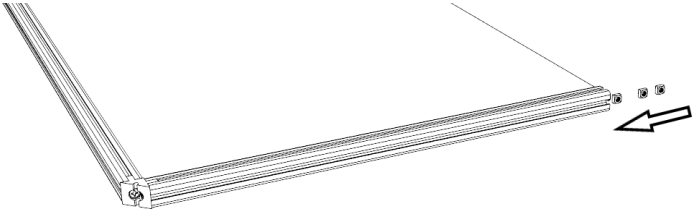


Repeat above steps for the left lid side

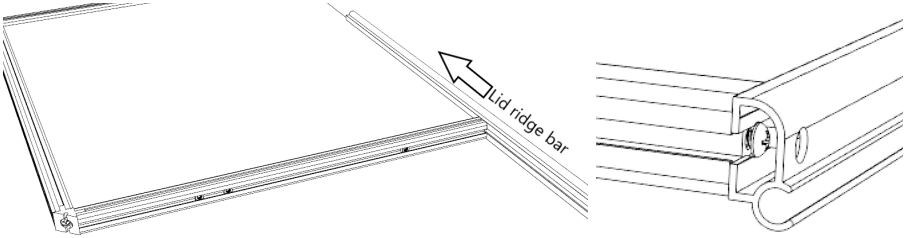
b) Peel back the film from the lid panel faces. The white side is outside facing. Slot the clear lid panel into the internal area in the lid paying attention to the notches in the panel corner as circled in the diagram below.

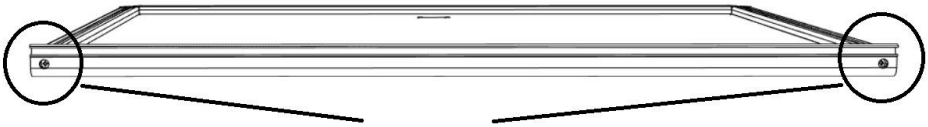


Insert 3 square nuts into the outside slot of the left and right side bars.



c) Slide the ridge bar slotted face over the screws of the sidebar. Once positioned, tighten the 2 screws in the side bars to fix the lid ridge in place.





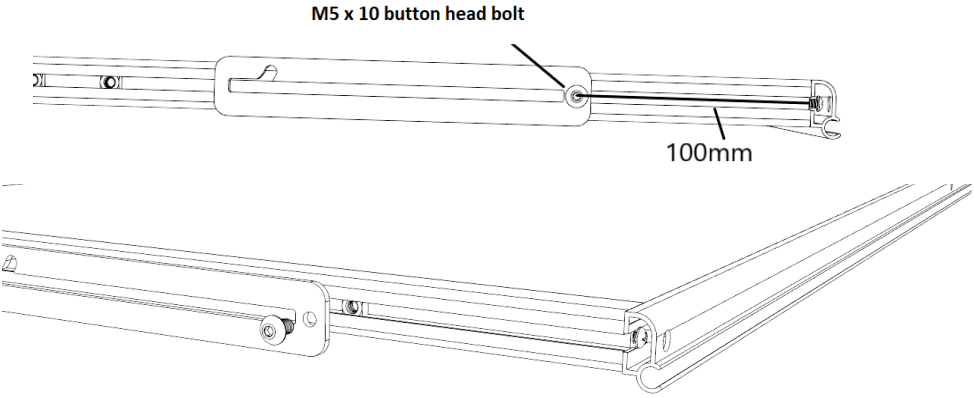
Step 16 - Add lid props to lid

This is easiest done on a flat table or worktop.

Parts

2 x lid props

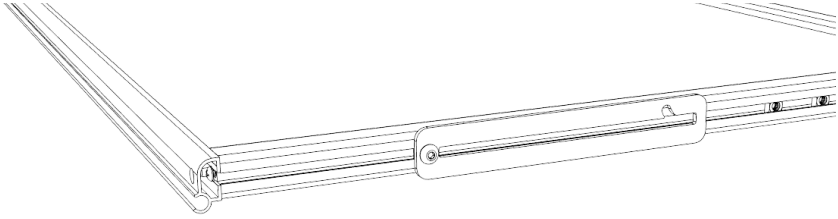
2 x m5 x 10 button head bolts



Note orientation of the lid prop

Secure the lid prop bracket. Measure 100mm from the rear of the lid sidebar to the centre of the bolt and secure the bolt through the lid prop hole and into the square nut in the slot. Tighten well.

Repeat for the other side, see diagram below.



Step 17 - Assemble lid lifter

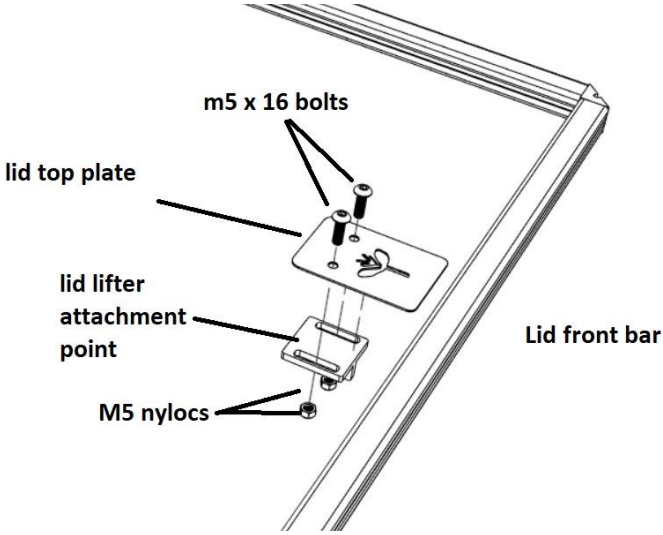
Parts
1 x lid lifter piston

Insert the black lid lifter piston into the lid lifter, using the instructions as supplied in the lifter box.

Step 18 - Fit the lifter to the lid

Parts:
2 x M5 x 16mm bolt
2 x M5 nyloc nut
1 x lid top plate
1 x lid lifter assembly from step 19

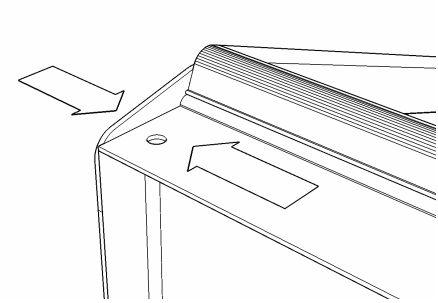
Locate the lid top plate in the orientation of the diagram below on the outside/ top of the lid. The bottom lip of the plate below the harvst logo slots into the gap between lid panel and the front lid bar. The two holes on the lid top plate align with the holes on the lid panel.



Step 19 - Fit the lid to the greenhouse

Parts
2 x 30mm pan head screw
1 x Lid

Place the lid on top of the greenhouse, making sure that the rear panel slots into the black channel on the underside of the lid.



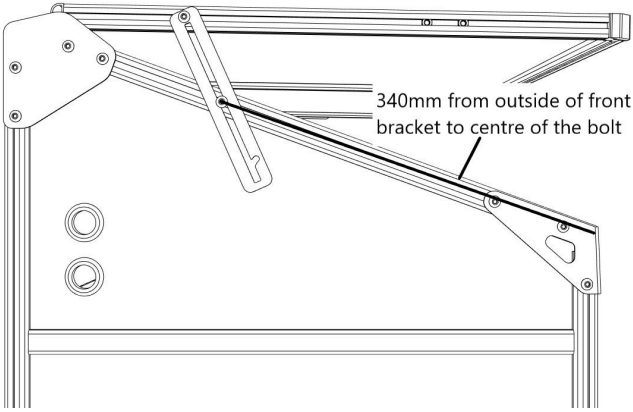
Secure it with two pan head 30mm screws into the rear uprights.

Before you tighten the screws, ensure the sides of the greenhouse are firmly pushed together to secure the rear panels in place.

Tighten the screws well.

Step 20 - Fix the lid props to the top side bars

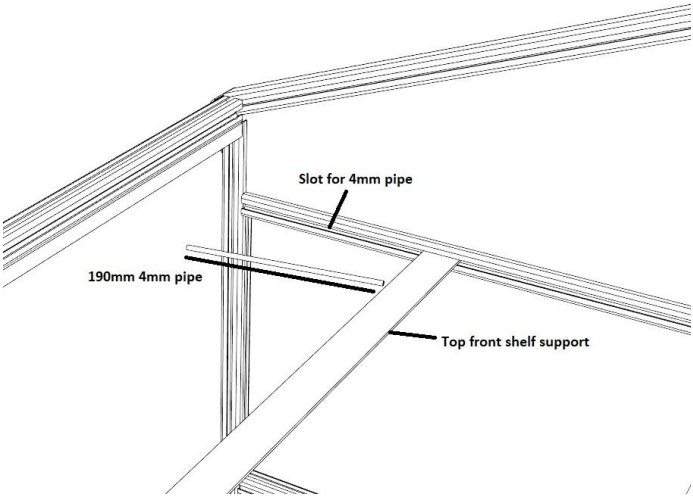
Parts
2 x M5 x 10 bolts
Measure 34 cm from the front of the greenhouse to the centre of the M5 x 10 bolt.



Step 21 - Understand how the shelves fit

Refer to the drawing below to see the recommended position of the shelves.
Note: If you have a smart sprout please refer to your smart control guide for layout of additional shelves
Parts:
6 x 90mm length 4mm pipe
2 x 190mm length 4mm pipe

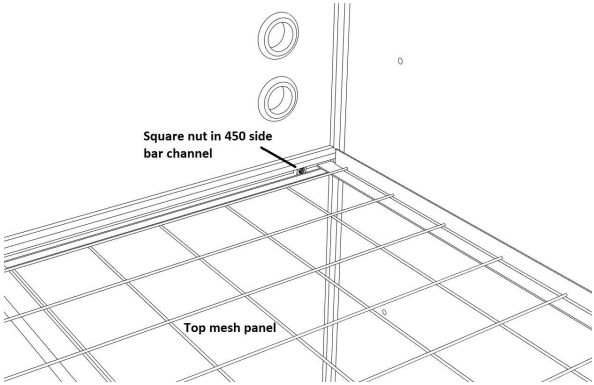
A short section of 4mm tube pressed into the channel prevents the front shelf from sliding forwards.
Use 190mm in front of the top shelf and 90mm in the rest.



Step 22 - Fit the shelves

Parts:
Mesh shelves
2 x shelf support per shelf
4 x 10cm cable tie per shelf

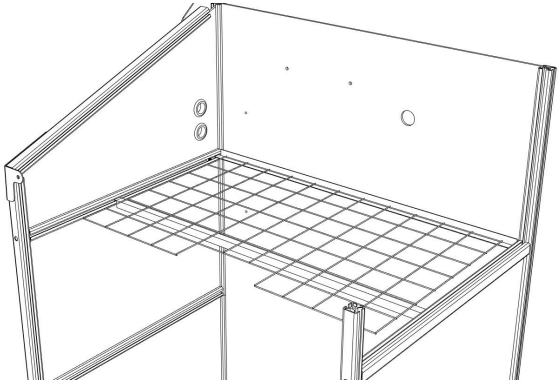
Slide the square nuts for the 13mm water pipe to the middle of the crossbars on the left hand side of the frame, before you insert the shelf supports.



Slot the shelf supports into the slots on the inside of the side panel cross bars, inserting them at a diagonal and then straightening up.

Place the mesh shelves onto the shelf supports and secure with cable ties, one in each corner.

NOTE: The mesh shelf with a slot cut out goes in the top level to allow the lid lifter piston to operate. The front shelf support goes in upside down.



Step 23 - Install irrigation, heating and lighting

If you have a **smart sprout**, refer to the smart sprout S10 setup guide for adding additional parts

Step 24 - Fit the top doors

Parts
2 x clear doors
With handles fitted
Shorter pair
With stickers

Pop the doors into the sliding channels by flexing them slightly. The left hand door goes in the rear (inside) channel and the right hand door goes in the front (outside) channel.

Step 25 - Fit the bottom doors

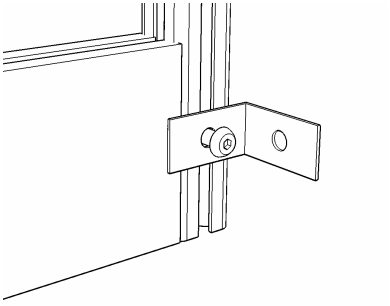
Parts
2 x clear doors
With handles fitted
Longer pair

Pop the doors into the sliding channels by flexing them slightly. The left hand door goes in the rear (inside) channel and the right hand door goes in the front (outside) channel.

Step 26 - Fit lid corner and hole caps

The lid front corners caps are pushed fit into place to conceal the screws.
We've supplied some small black plastic caps to cover the screw holes in the front of the greenhouse and the holes in the lid ridge to make it look smarter. Now's the time to fit the caps, sit back and have a cup of tea.

Secure the greenhouse down



We recommend that you secure the greenhouse to the ground, a wall or a fence.

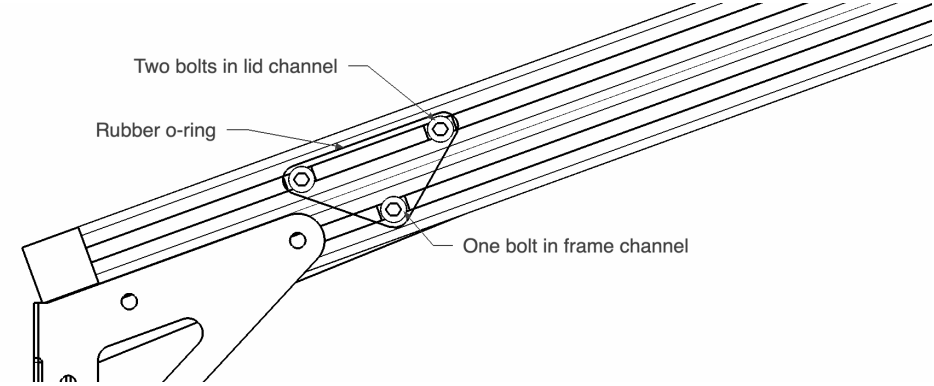
Parts
2 x square nut
2 x M5 x 8mm bolt
2 x securing bracket

Use square nuts in the rear upright side slots, with an M5 bolt and a bracket of your choice to suit what you're mounting to.

Storm lock

Parts:
4 x M5 x 10mm bolt

In very strong winds, you may want to lock the lid so that it doesn't blow open. The o-ring fitted to the sides of the lid should be stretched over the frame bolt as shown below:



Note: When the storm lock is fitted, you must disengage the automatic lid lifter from the pegs on the lower mounting bracket.

Regular maintenance

The materials and design of your greenhouse means that it does not need much maintenance.

- The automatic lid lifter will need oiling from time to time to prevent corrosion.
- Clean the inside of the panels from time to time, especially if you have hard water.

To extend the life of your automatic lid lifter, avoid opening the lid against the pressure of the piston. Open the front doors, unclip the lifter mechanism, and then open the lid. The lid opener piston is not covered under our manufacturer's guarantee.

Help and support

For tips, advice and questions, visit our Forums at:

https://grow.harvst.co.uk/forums

For setup assistance or other queries contact help@harvst.co.uk