Setup guide

Model S14

Greenhouse only

V4 / From January 2023

If you have a Smart Sprout please also use the smart setup guide whilst assembling your S14

Thank you for buying a Harvst Sprout mini greenhouse.

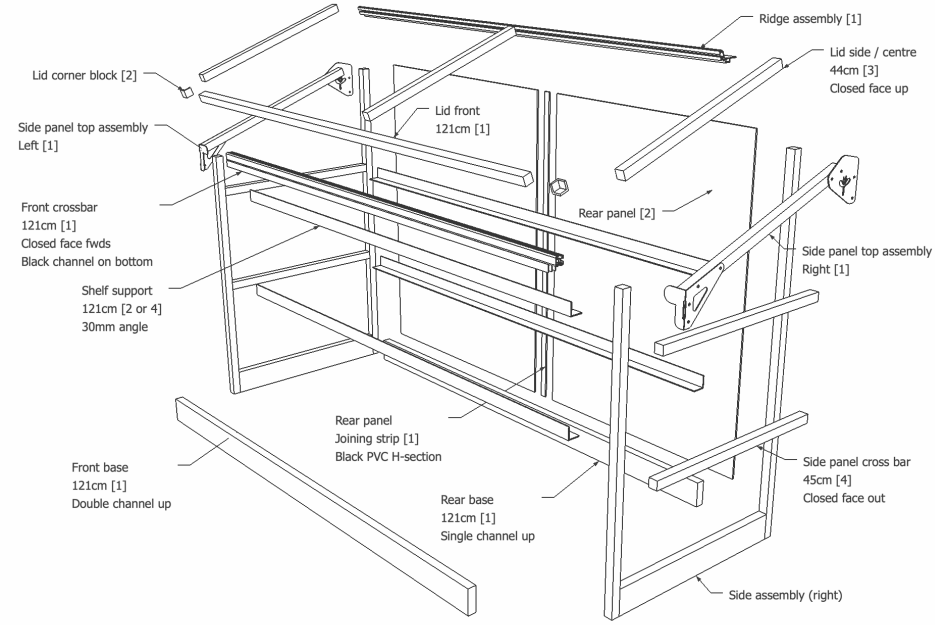
If you have any questions while setting up, send us an email (help@harvst.co.uk) or check out our forums:

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.

Parts / assembly diagram

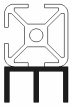


Tools provided	Tools required (not supplied)
3mm allen key, 4mm allen key 8mm spanner Pozidrive screwdriver	Tape measure to identify parts Secateurs for cutting pipe

Parts list (aluminium pieces)

We've fitted the front and rear uprights to the side base parts for you, to save time and help you get started. We've also pre-fitted screws into bars, where required.

450mm **x3**
2 lid sides, **with corner cubes**
1 lid centre

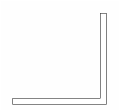


1210mm **x1**
Front crossbar
Double channel trim attached

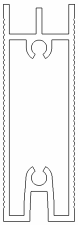
450mm **x4**
Side panel crossbar
2 pre installed screws per piece

1210mm **x1**
Lid front bar
1 - hole through open faces

Side assemblies **x2**
Front uprights - 728mm
Rear uprights - 910mm
Base extrusion - 450mm

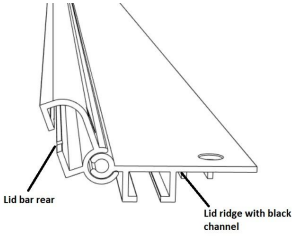


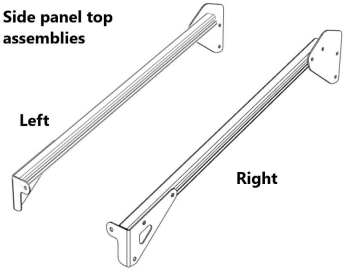
Shelf supports **x2**
1 pair drilled - 1210mm



1210mm **x2**
Front and rear base parts
With pre installed screws
Front with double channel up
Rear with single channel up

1250mm two part lid hinge **x1**

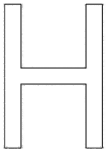




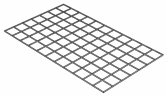
Side panel top assembly **x2**
One left and one right

Lid prop **x2**

Door handles **x 2**



H trim
830mm **x1**



14” x 22” mesh panels **x2**

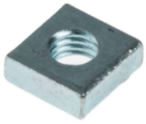
Fixings and small parts

Button head
M5 x 8mm **x14**

Button head
M5 x 10mm **x12**

Cap head
M5 x 8mm **x8**

M5 x 30mm **x2**



M5 square nut **x24**

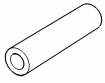
M5 Nyloc **x10**

Shelf bracket **x4**

Fixing bracket **x2**

4.5 x 30 countersunk head screws **x2**

4.5 x 30 dome head screw **x2**

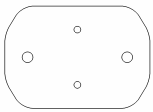


4mm tube for fixing shelves
160mm **x 2**

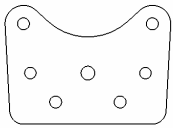
M5 washer **x2**

10cm cable tie **x12**
20cm cable tie **x10**

Blanking plug **x11**



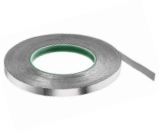
Lifter arm plate **x1**



Mounting plate **x1**

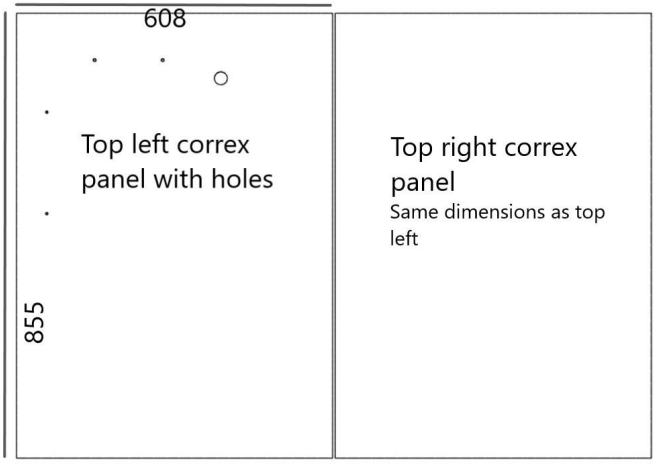
Hole punch

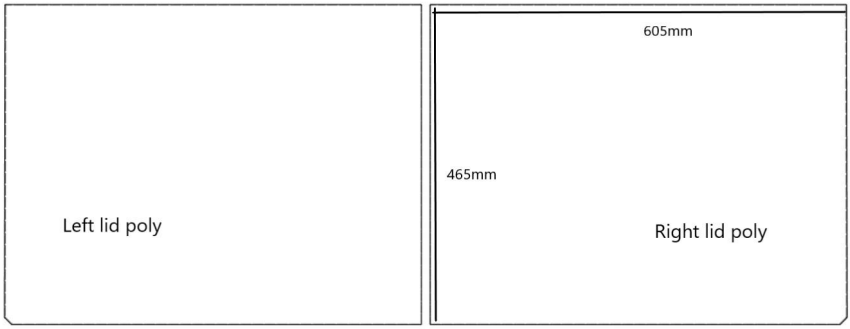
O-ring **x2**



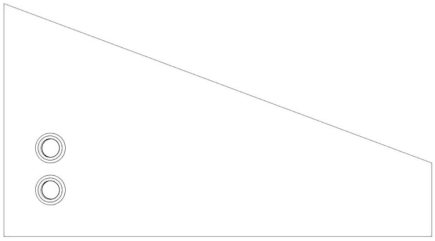
Roll of foil tape

Panels

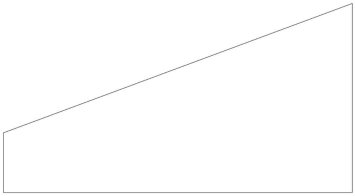




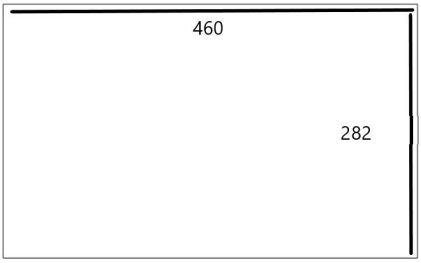
Above - note the orientation of the lid panels relative to the notches in the bottom left/right respectively.



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



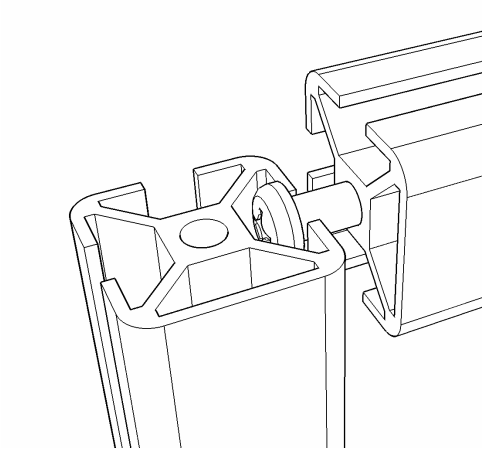
Clear side top panel - right **x1**



Clear side panels **x4**

Slotting parts together

The greenhouse is based on parts that slot together using 30mm 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.

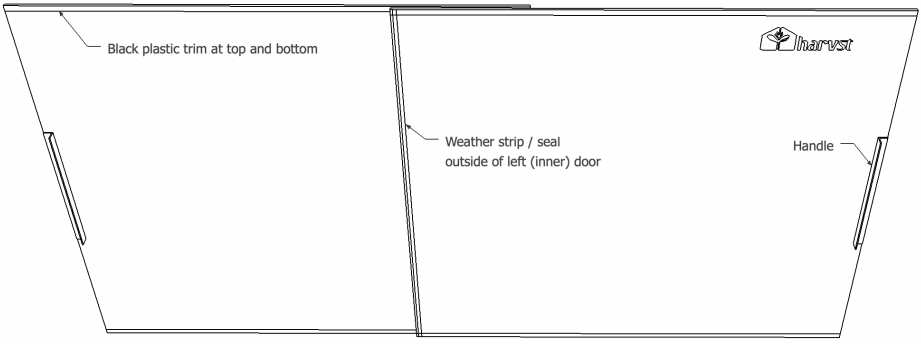
Twin wall polycarbonate panels act like double glazing for your mini greenhouse. To improve the insulation characteristics, it's good to seal the ends of the channels using the foil tape provided. It also helps prevent bugs from crawling into the plastic.

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
2 x door handle
2 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 right door.
The left, inner door has a weather strip fitted to the front to reduce draughts in the greenhouse.

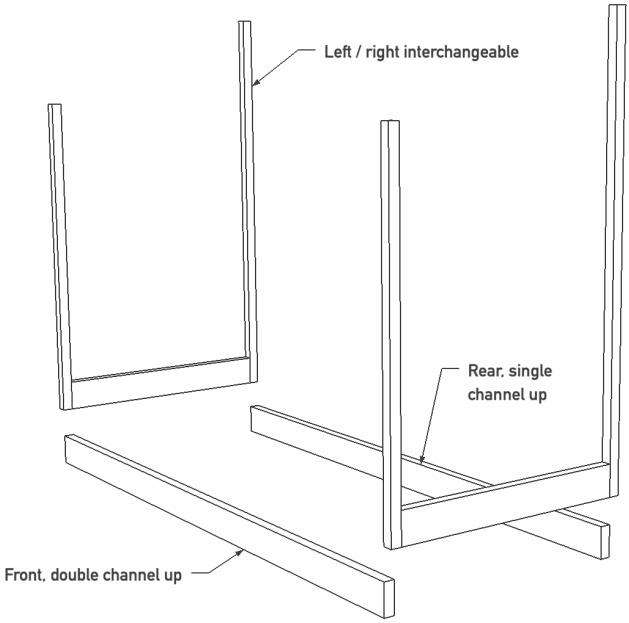
Step 3 - Assemble the base

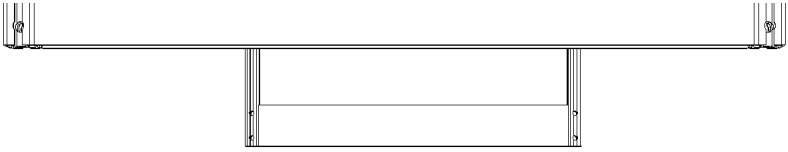
Parts:
2 x side assemblies
1 x front base 121cm
1 x rear base 121cm

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.

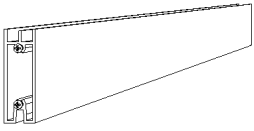
The left and right assemblies are interchangeable.

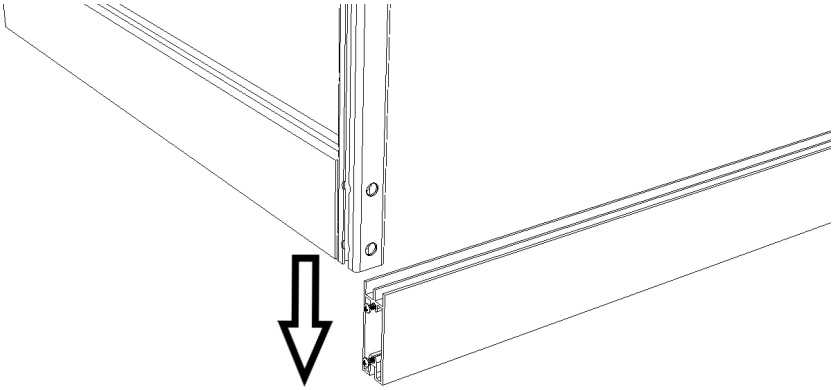
NOTE:
The rear base part has the single channel facing up, and the front has the double channel facing up.





Sprout front

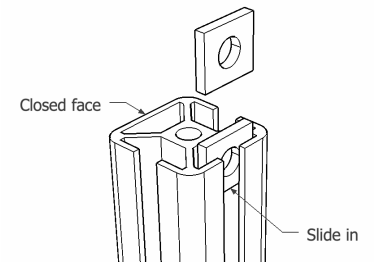




Slot the left and right assemblies over the screws on the front and rear base parts and tighten the screws using the screwdriver provided.

Step 4 - Insert square nuts to side cross bars

Parts
4 x side panel cross bar 45cm
6 x square nut



See the drawing in step 6 and insert square nuts into the cross bars.

Two will be for the shelves, and the third will be for supporting the irrigation pipe (it's worth fitting the nuts now even if you don't have the irrigation kit yet).

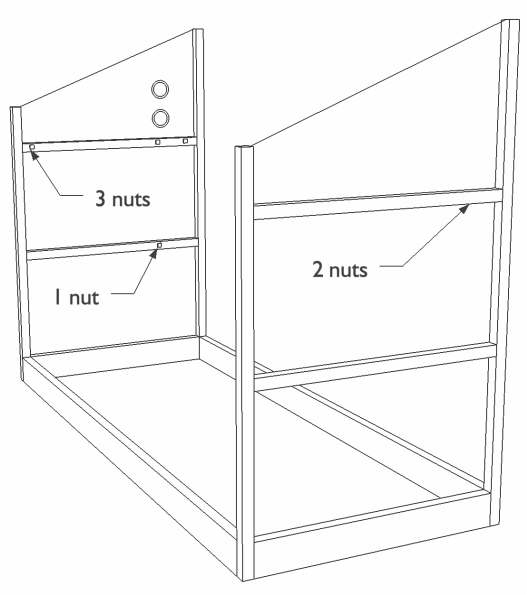
The inside channel is the one opposite the closed face.

Insert square nuts into the **inside** channel of each cross bar according to the following quantities per cross bar:

- 1 lengths with 1 square nut
- 1 length with 3 square nuts
- 1 length with 2 square nuts

You can refer to the diagram in step 5 for reference.

Step 5 - Insert the side panels and side cross bars



Parts:
4 x clear side panel
4 x side cross bar 45cm
2 x clear side top panel
Note the sequence of cross bars, with the number of nuts in the diagram to the left
Peel the protective plastic off *both sides* of two side panels, remembering which side had the white film.

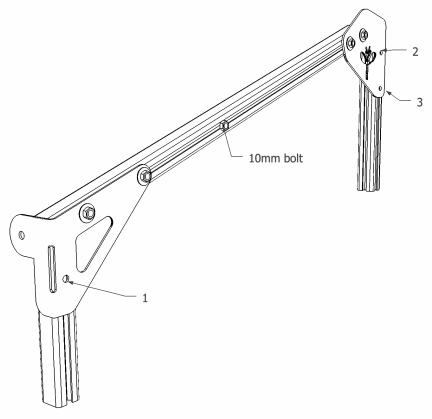
> The side with the white film should face outside; it is the UV treated side.

Slot the panels into the frame, then slide the bars, **closed face outwards**, down over the clear side panels.

Tighten the screws.

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

Step 6 - Fit **right** side top assembly



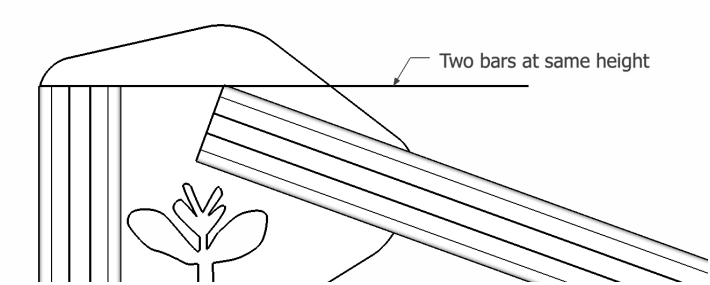
Parts:
1 x Right side top assembly
*3 x M5 * 8mm button head bolt*
3 x M5 square nut
*1 x M5 * 10mm button head bolt*

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 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)
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 below).

Tighten the bolts.



Step 7 - Fit left side top assembly

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

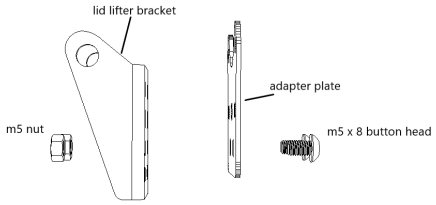
Repeat step 6 for the left hand side.

Step 8 - 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.

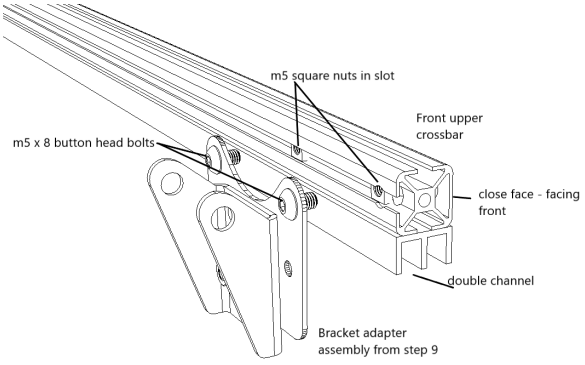
Parts:
1 x lid lifter bracket
1 x adapter plate
2 x M5 x 8mm button head
2 x M5 nyloc nut



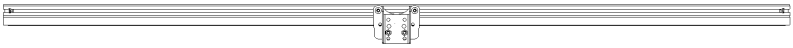
Bolt the lifter bracket to the adapter plate as shown in the diagram to the right, with the nyloc nuts on the inside of the bracket.

Step 9 - Fix bracket to front crossbar

Parts:
1 x front upper bar 121cm
1 x bracket assembly from above
2 x M5 x 8mm button head
2 x M5 square nut



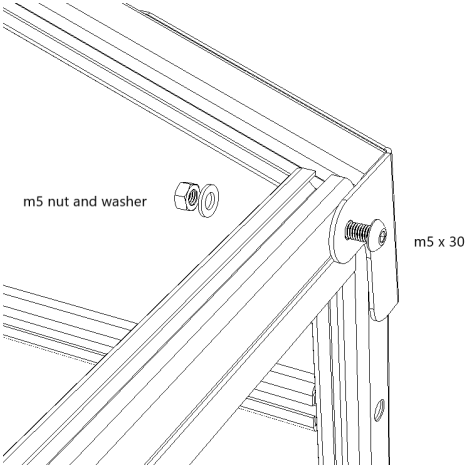
Slide two square nuts into the **rear** channel (the side opposite the closed face). Bolt the bracket assembly in the exact centre of the bar.



Step 10 - Insert the front crossbar

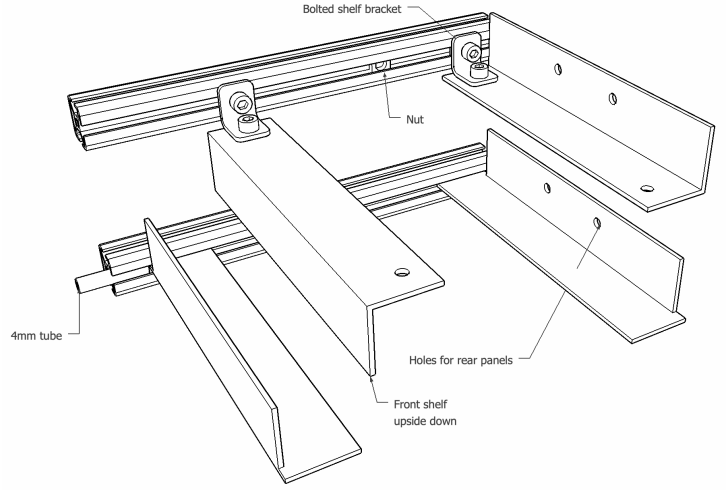
Parts
2 x M5 x 30mm bolt
2 x M5 nyloc nut
2 x M5 washer

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.



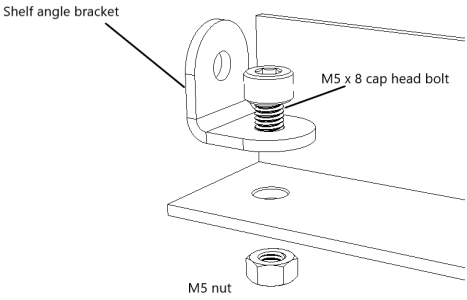
Step 11 - Understanding shelf fitting

Study the drawing below to see how the shelves fit. The top shelves are bolted, and if you additional shelves for a smart sprout the bottom shelf is slotted in



Step 12 - Assemble shelf supports

The shelf **with** the double holes half way along is fitted to the **rear** of the greenhouse.
The shelf **without** the holes is fitted to the **front**. This step can be easier with an additional pair of hands to support the bars whilst positioning.

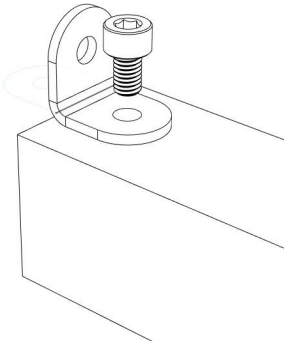


Parts
4 x M5 x 8mm cap head bolt
4 x M5 nyloc nut
1 x pair drilled shelf supports 121cm
4 x shelf angle bracket

Tools
4mm allen key
8mm spanner

The rear shelf support has the shelf angle bracket fitted to the inside of the angle as pictured above. Fix the shelf angle brackets to your drilled shelves using the m5 x 8 cap head bolts and m5 nyloc nuts. Tighten up just enough so that there is some movement to make the next step easier.

The front shelf support has the shelf angle bracket fixed to the underside of the angle

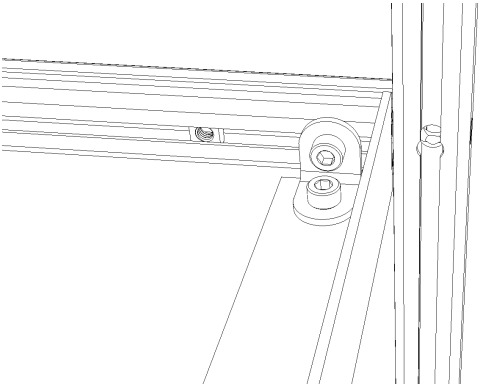


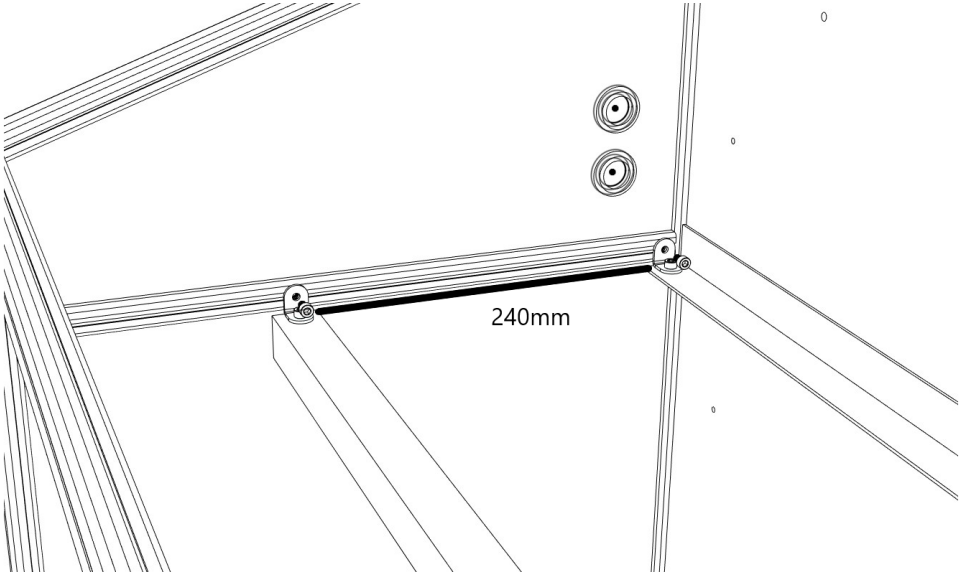
Step 13 - Fit assemblies from step 12 to your frame

Parts
4 x M5 x 8mm cap head bolt

NOTE: Where the end panel has three nuts, leave the middle one unused.
Locate the square nuts in the 45cm sidebar channel and secure the shelf supports from step 13 using the m5 x 8 cap head bolts.

With the rear shelf support fixed in place, use a tape measure to set the distance between the shelves as 240mm before securing the front shelf support in place.





Step 14 - Slot in the lower shelves (4-season only)

Refer to the S14 smart setup guide for guidance on fitting the additional shelf if required.

Step 15 - Install mesh panels

Parts:
2 x mesh panels
20cm (longer) zip ties

Position the mesh panels on the top shelf leaving a 5 cm gap in the centre to allow space for the lid lifter to operate. See the diagram in step 16 for reference. Use the 20cm long zip ties to secure these panels in place.

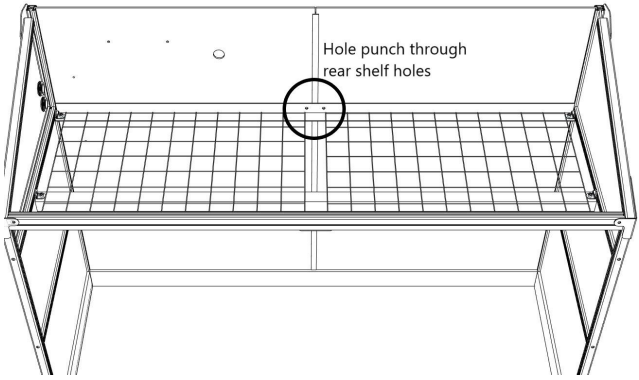
Step 16 - Install rear panels

Note: 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.

Parts
2 x rear panel
1 x PVC H-trim 84cm
2 x 20cm cable tie

Insert the two rear panels with the drilled panel on the left. See your control system setup guide for panel orientation.

a. Drop the rear panels into the inner slots of the rear uprights. Ensure they go fully into the lower base part - it's a tight fit.
b. Slide the H-trim between the panels.
c. Using the holes in the rear shelf as a guide, punch holes through the rear panels with the supplied hole punch and secure the panels to the shelf support with the longer cable ties supplied



Step 17 - Install irrigation, heating and lighting

If you have a **smart sprout**, refer to the smart sprout S14 setup guide.

Step 18 - Fit the doors

Parts
2 x polycarbonate door
With handles fitted

Flex the doors slightly and pop them into the channels on the front base.

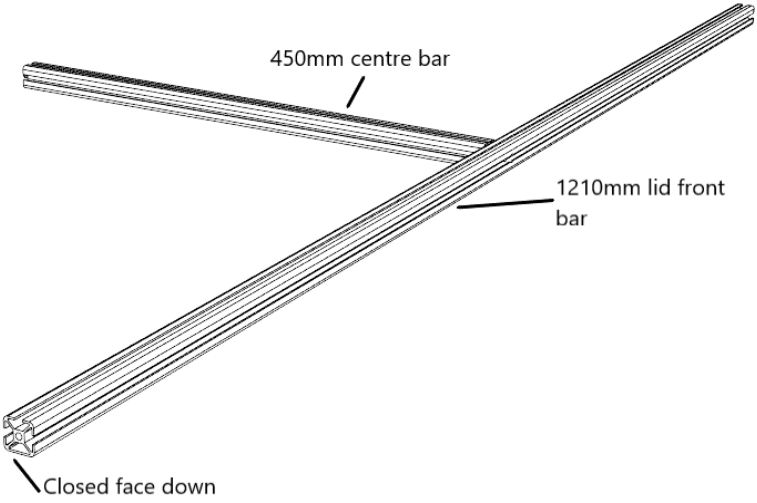
The left hand door goes in the rear (inside) channel and the right hand door goes in the front (outside) channel.

The friction of the sliding doors can be adjusted by revisiting step 11 and adjusting the two outer securing bolts to raise or lower the crossbar.

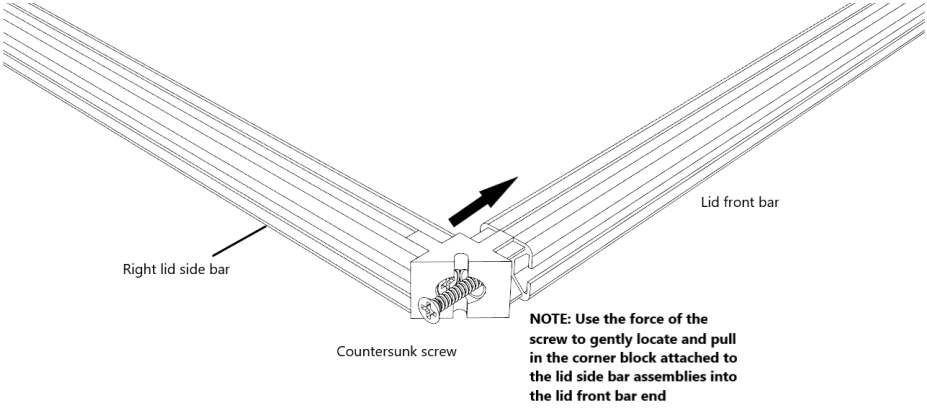
Step 19 - Assemble the lid

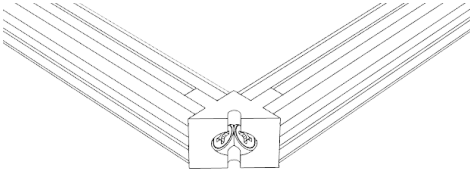
Parts
1 x lid ridge
1 x lid bar rear
2 x lid side bars with corner caps
8 x M5 square nuts
2 x 30mm countersunk head screws
1 x 45cm lid centre bar
1 x 121cm lid front bar
1 x lid poly set

a) Lay out the lid front bar onto a flat surface with the closed face facing downwards. Slide the lid centre bar into the slot with the closed face in the same orientation. Use the screwdriver to firmly secure the centre bar in place through the hole in the centre of the lid front bar.



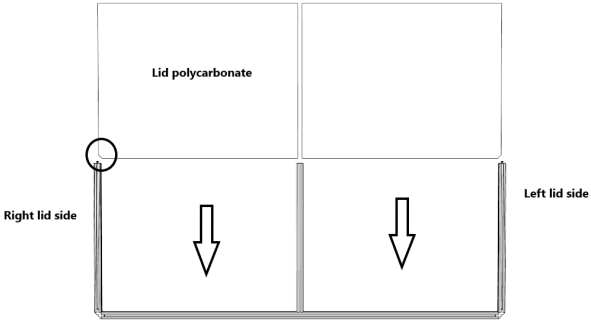
b) Attach the lid side bars with the corner piece to the lid front. The left and right lid side bars are identified by L and R on their protective packaging.
Line up the corner piece with the open end of the lid front bar and use the countersunk 30mm screw to gently pull the corner piece into the end of the 1210 bar



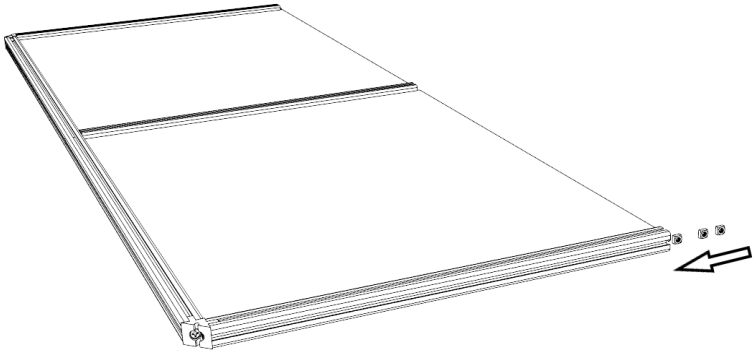


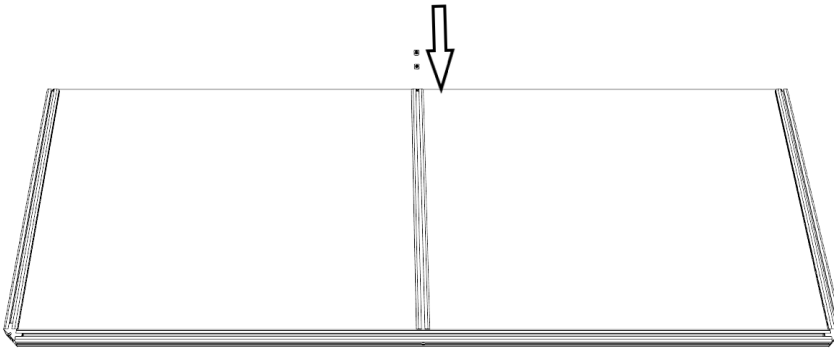
Repeat step b for the left lid side- bar

c) Peel back the film from the polycarb faces. The white side is outside facing. Slot the polycarb panels into the two internal areas in the lid paying attention to the notch in the polycarb corner.

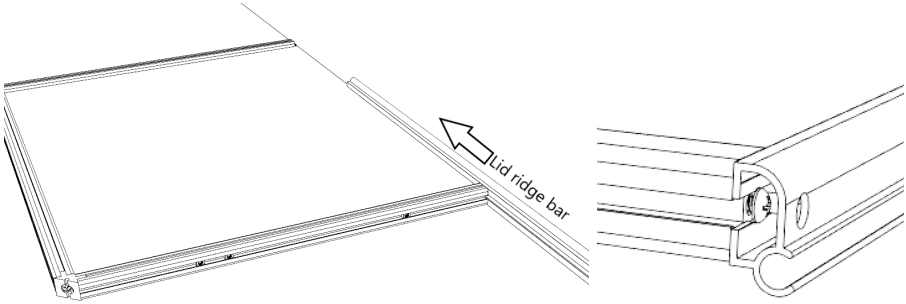


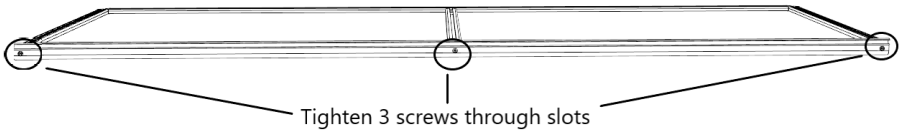
d) Insert 3 square nuts into the outside slot of the left/ right side bars. Insert 2 square nuts into the slot of the centre bar.





e) Slide the ridge bar slotted face over the screws in the centre bar/ side bar. Once positioned, tighten the 3 screws in the centre/ side bars.





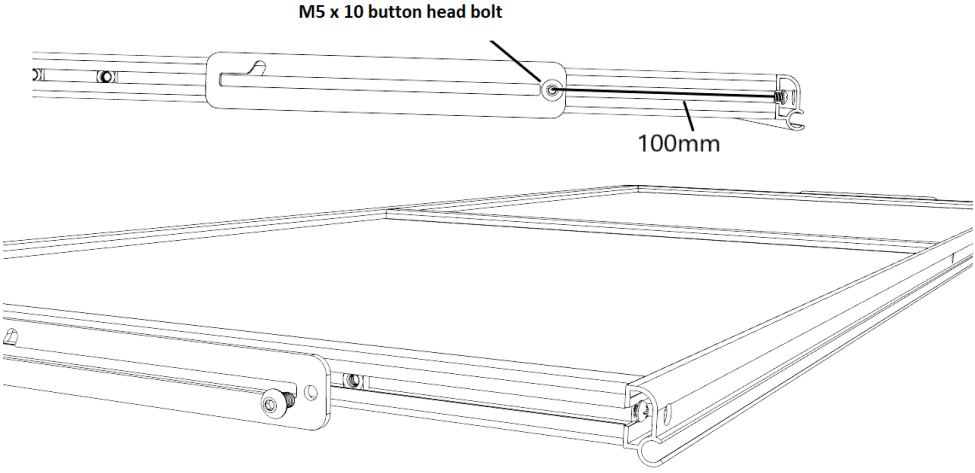
Step 20 - Add lid props to lid

This is easiest done on a flat table or worktop.

Parts

2 x lid props

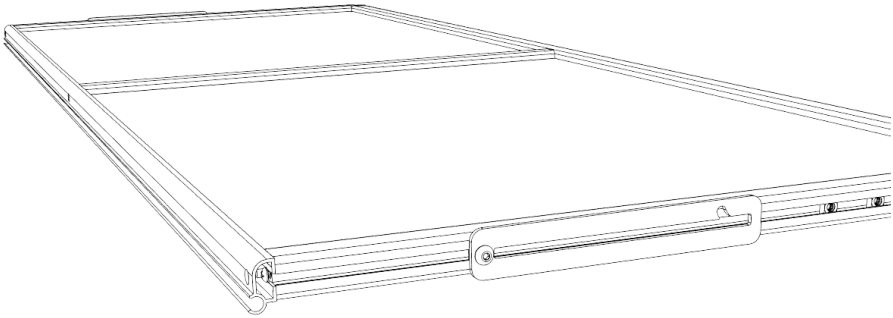
2 x m5 x 10 button head bolts



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 21 - 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 22 - Fit the lifter arm plate to the lid lifter

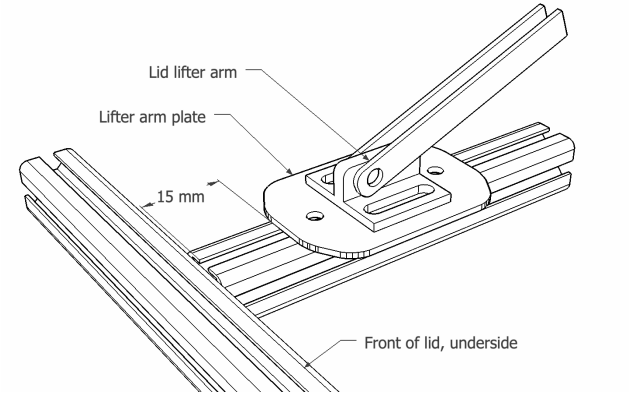
Parts:
2 x M5 x 10mm bolt
2 x M5 nyloc nut
1 x lifter arm plate
1 x lid lifter

Fit the lid lifter to the lifter arm plate.
See image below for reference.

Step 23 - Fit the lid lifter to the lid

Parts:
2 x M5 x 8mm bolt
1 x lid lifter

Turn the lid upside down.
The two square nuts in the centre channel will now be visible.



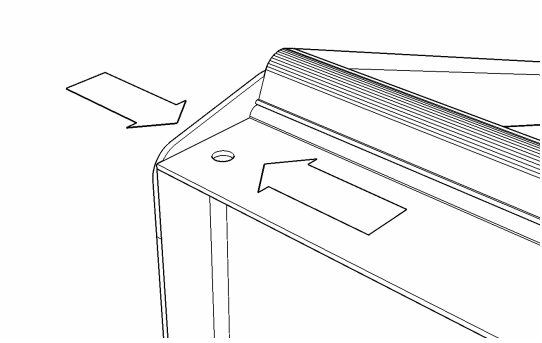
Refer to the drawing above and fix the lifter arm plate to the square nuts using the bolts, with a 15mm gap to the front bar.

Step 24 - Fit the lid to the greenhouse

Parts
2 x 30mm domed 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 30mm screws into the rear uprights.



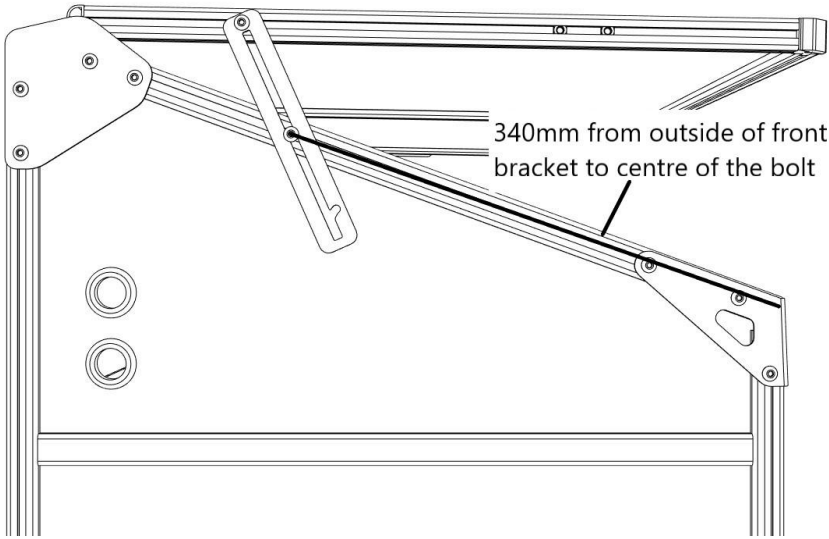
Before you tighten the screws, ensure the sides of the greenhouse are firmly pushed together to secure the rear panels in place.

Tighten the screws well.

Step 25 - 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 26 - Fit lid corner and hole caps

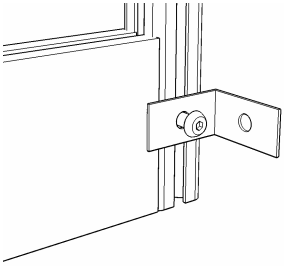
The lid front corners caps are pushed fit into place to conceal the screws.
We've supplied some small black plastic caps to cover the screw holes in the front of the greenhouse and the holes in the lid ridge to make it look smarter. Now's the time to fit the caps, sit back and have a cup of tea.

Step 27 - Secure the greenhouse down

If you are in an exposed location, we recommend that you secure the greenhouse to the ground, a wall or a fence.

Parts
2 x fixing bracket
2 x Square nut
2 x M5 x 8mm bolt

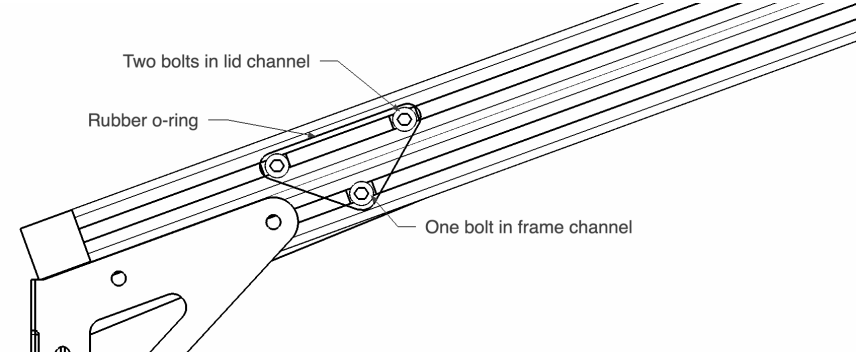
Use two square nuts in the rear upright side slots (one each side), with an M5 x 8mm bolt and the stainless steel angle bracket (or a bracket of your choice to suit what you're mounting to)



Storm lock

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. Position the top two bolts 60mm apart.

Parts:
4 x M5 x 10 button head



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 community at

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

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