Setup guide

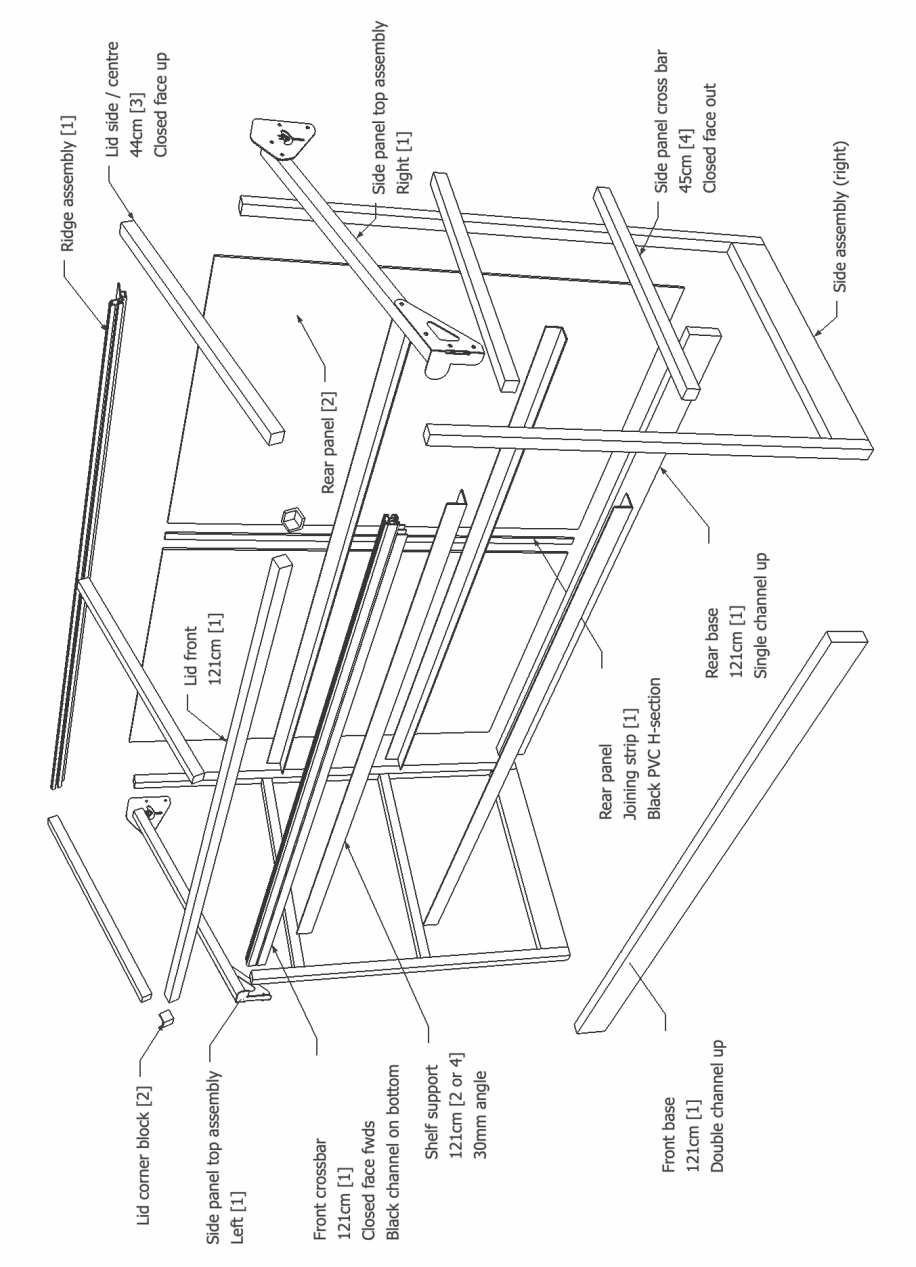
Model S14

Greenhouse only, Solar, 3-season and 4-season versions

SCAN ME

Visit **www.harvst.co.uk/setup** for more information, videos and photos

Parts / assembly diagram



Thank you for buying a Harvst greenhouse.

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

https://grow.harvst.co.uk

There are also videos at

https://www.harvst.co.uk/setup

Parts list (aluminium pieces)

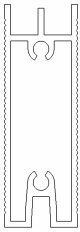
We've fitted the front and rear uprights to the side base parts for you, to save time and help you get started. We've also pre-fitted screws into bars, where required.

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

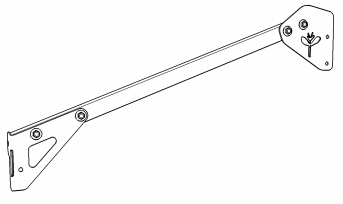
450mm **x4**
Side panel crossbar

910mm **x2**
Rear upright
(fitted to assembly)

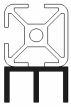
535mm **x1**
Lid prop



450mm **x2**
Side base parts
(fitted to assembly)



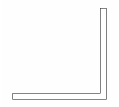
Side panel top assembly **x2**
One left and one right



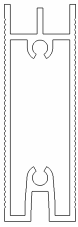
1210mm **x1**
Front upper crossbar
(box profile as alternative)

728mm **x2**
Front upright
(fitted to assembly)

1210mm **x1**
Lid front

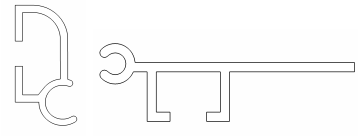


1210mm Shelf support
x2 GH / Solar / 3S models
+2 1222mm - 4S



1210mm **x2**
Front and rear base parts

Front with double channel up
Rear with single channel up



Two-part ridge **x1**

Fixings and small parts

Button head
M5 x 8mm **x16**

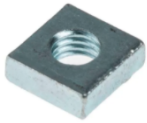
Button head
M5 x 10mm **x6**

Button head
M5 x 16mm **x1**

Cap head
M5 x 8mm **x8**

M5 x 30mm **x3**

M5 x 40mm **x2**



M5 square nut **x22**

M5 nut **x11**

M5 Nyloc **x1**

Shelf bracket **x4**

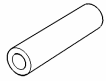
Fixing bracket **x2**

4.5 x 30 screw **x4**

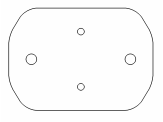
Cable tie **x12**

Blanking plug **x11**

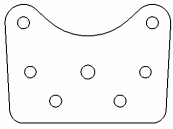
M5 washer **x2**



4mm x 80mm tube
for fixing shelves **x2**



Lifter arm plate **x1**



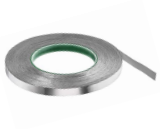
Mounting plate **x1**

M4 nut **x2**

May be slot head
M4 x 12mm **x2**

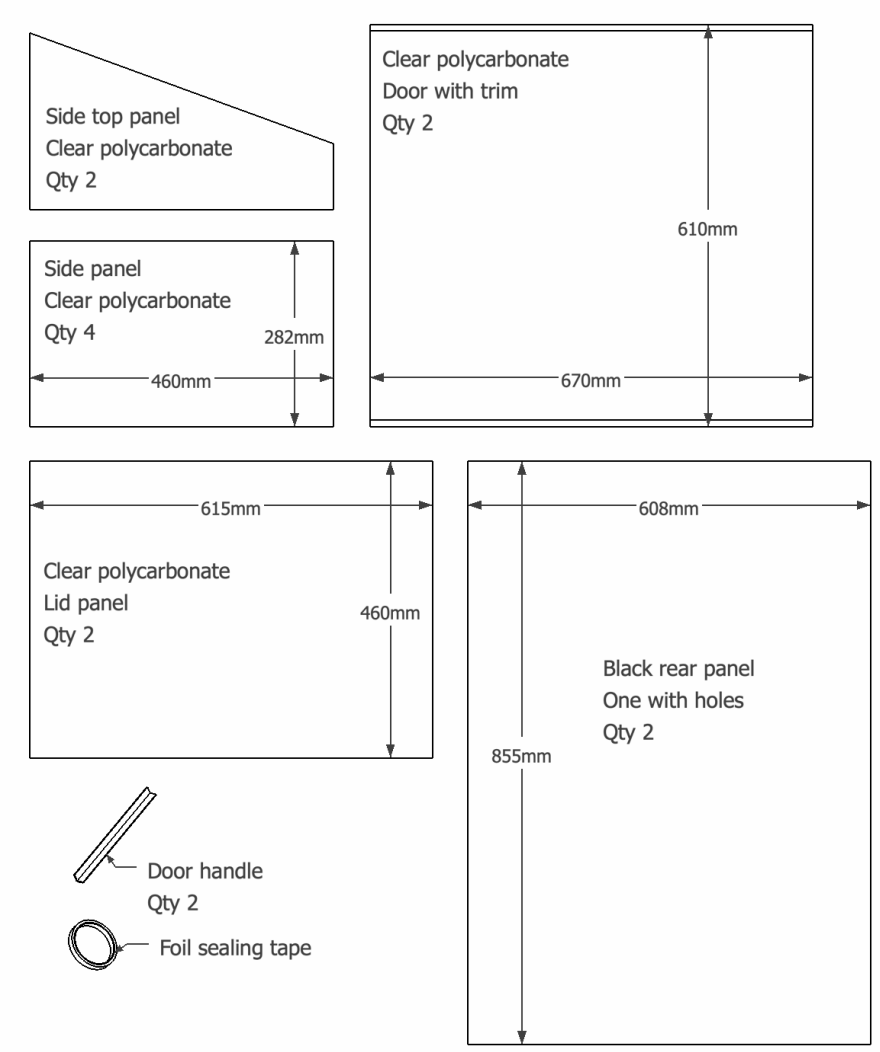
Hole punch

O-ring **x2**



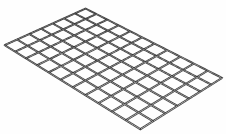
Roll of foil tape

Panels



Tools provided
3mm allen key, 4mm allen key
8mm spanner
Pozidrive screwdriver

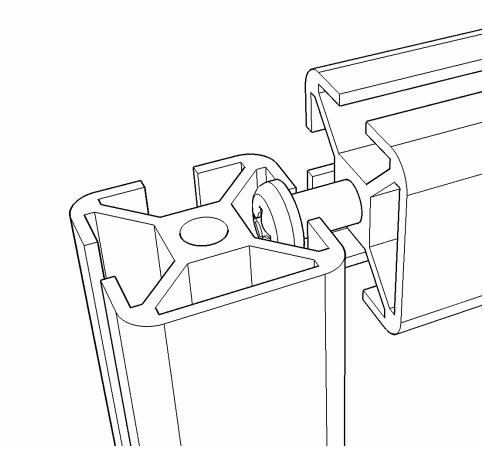
Tools required
Tape measure to check parts
Secateurs for cutting pipe



You will also have mesh shelves, the quantity depending on which model you have bought.

Slotting parts together

The greenhouse is based on parts that slot together using 30mm stainless steel screws, as shown in the diagram below.



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)

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

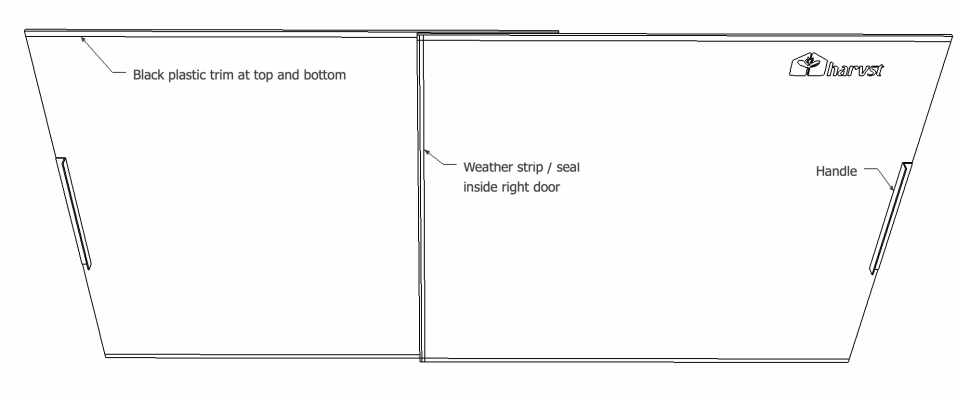
This step is optional - it can take some time but is recommended.

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.
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.

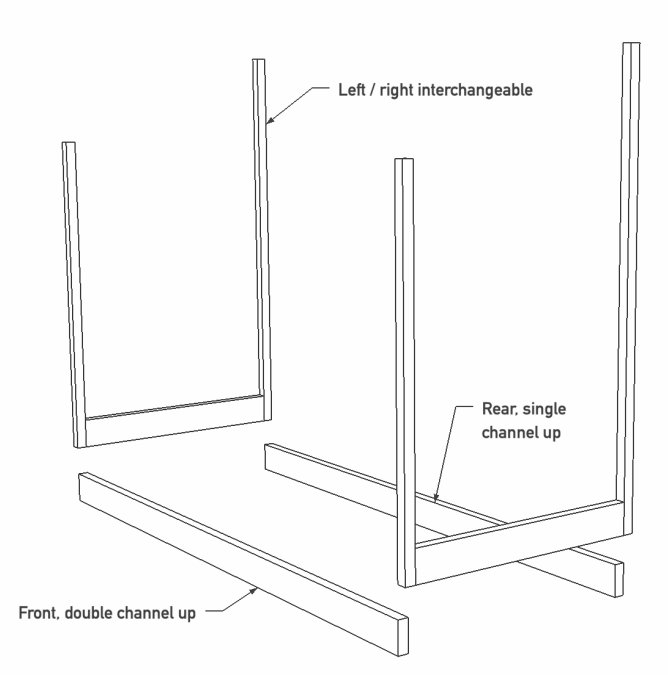
Step 3 - Assemble the base

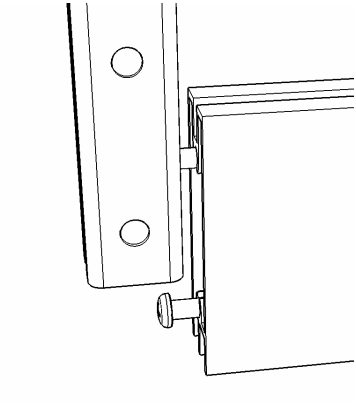
Parts:
1 x left assembly
1 x right assembly
1 x front base 121cm
1 x rear base 121cm

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.

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

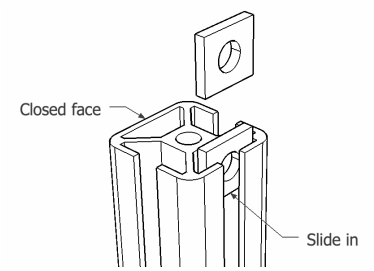




Slot the left and right assemblies over the screws on the front and rear base parts and tighten the screws.

Step 4 - Insert square nuts to side cross bars

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

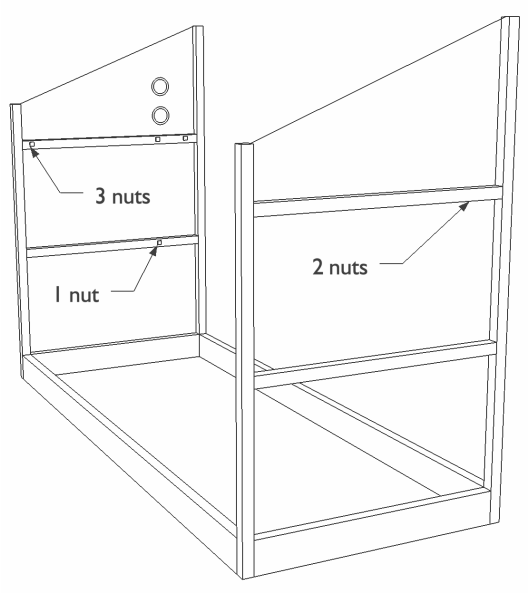


See the drawing in step 6 and insert square nuts into the cross bars.

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.

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

Peel the protective plastic off *both sides* of two side panels, remembering which side had the white film.

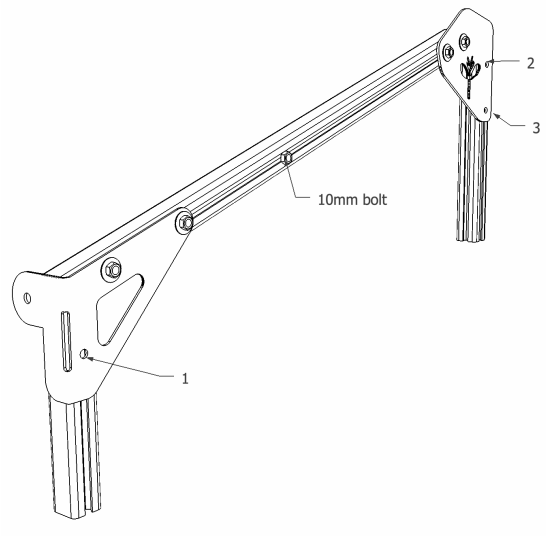
> The side with the white film should face outside; it is the UV treated side.

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 panel top assemblies



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

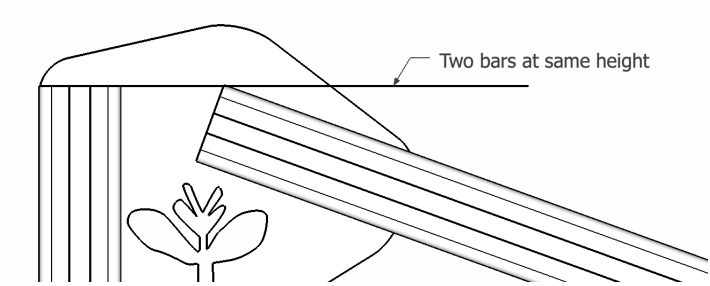
Insert the 8mm bolts into the assembly in positions marked 1,2,3, and add the square nuts on the inside, loosely.

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)

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 panel top assembly

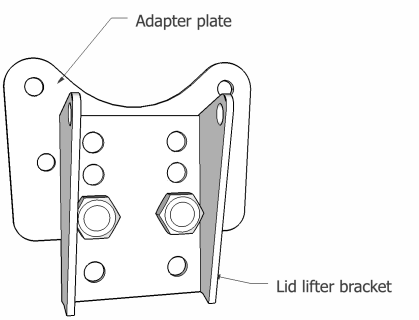
Repeat for the left hand side.

Step 8 - Fix lid lifter bracket to adapter plate

OPTIONAL - if you have an automatic lid opener
The *lid lifter bracket* is in the lid opener box. (see drawing below for named parts)

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

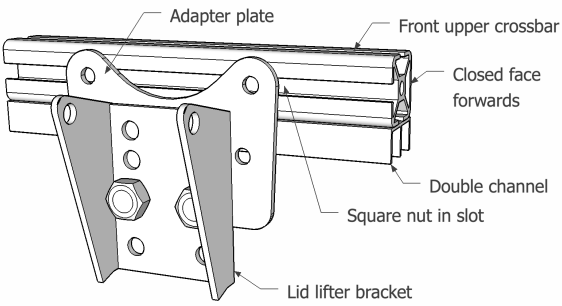
Bolt the lifter bracket to the adapter plate as shown, with the nuts on the inside of the bracket.



Step 9a - Fix bracket to front bar : slot method

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 of the bar (the side opposite the closed face). Bolt the bracket assembly to the front bar, in the exact centre of the bar.



Step 9b - Through-hole method

If your greenhouse has a front crossbar with no slot, it will have holes drilled in the relevant places.

Parts:
1 x front upper bar 121cm
1 x bracket assembly from step 9
2 x M5 x 30mm button head
2 x M5 nut
2 x M5 washer

Bolt the bracket to the front bar, through the two holes using the 30mm bolts, washers and nuts.

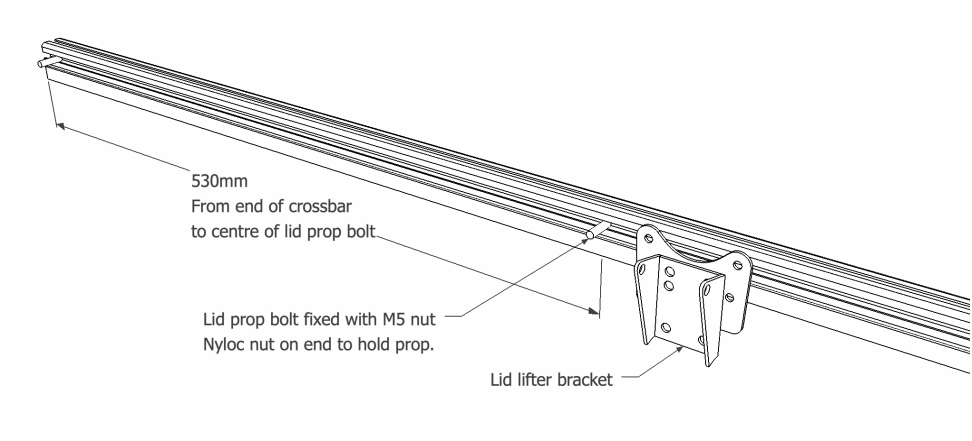
Step 10 - Add the lid prop bolt

This is the pivot bolt for the lid prop.

Note: If your crossbar does not have a slot, you will be provided with longer bolts (M5x40mm) which go all the way through the bar from the front.

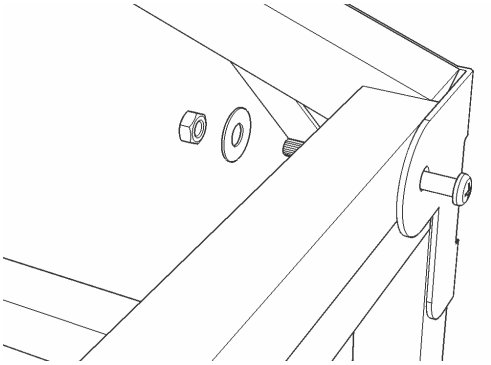
Parts:
1 x M5 x 16mm bolt
1 x M5 nut

1. Put the M5 nut loosely onto the 16mm bolt.
2. Slide the bolt *head* into the rear channel (same channel as the lid lifter bracket) on the right hand side (with the lid lifter bracket facing away from you)
3. Slide the bolt to 530mm from the right hand side.
4. Holding the thread of the bolt, tighten the nut to lock the bolt in place.



Step 11 - Insert the front crossbar

Parts
1 x M5 x 30mm bolt
1 x M5 x 40mm bolt
2 x M5 nut
2 x M5 washer



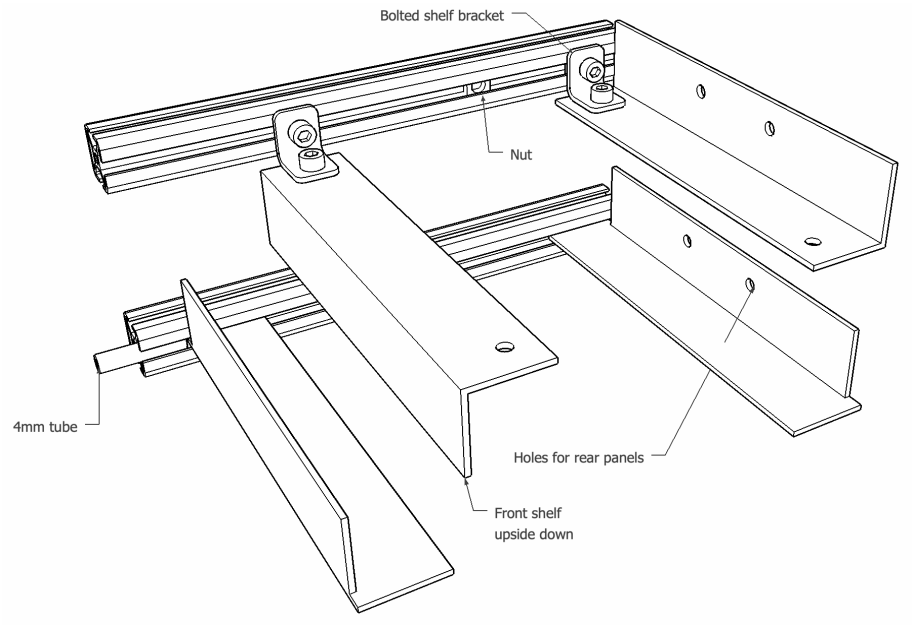
Bolt the front upper bar to the rear of the brackets on the front of the greenhouse, using the 30mm bolt on the left and 40mm bolt on the right.

The longer bolt on the right hand side acts as a support for the lid prop which you will add later.

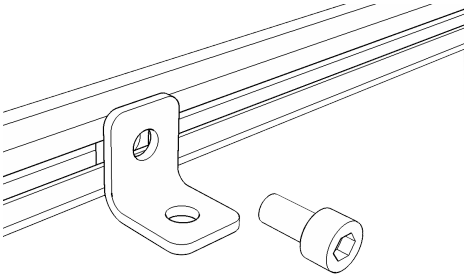
Tighten securely.

Step 12 - Understanding shelf fitting

Study the drawing below to see how the shelves fit. The top shelves are bolted, and the lower shelves are slotted in. A short section of 4mm tube pressed into the channel prevents the bottom front shelf from sliding forwards.



Step 13 - Fit the shelf brackets to the frame

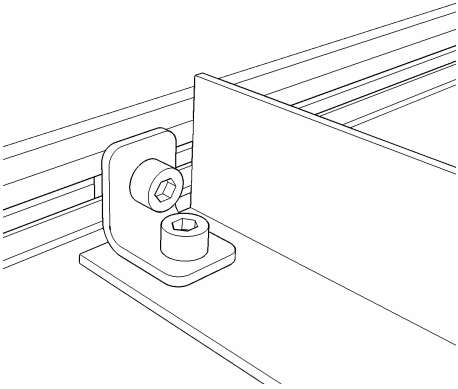


Parts
4 x M5 x 8mm cap head bolt
4 x shelf angle bracket

Screw the brackets loosely onto the cross-bars of the end panels, using the M5x8mm bolts and the nuts in the channels of the cross bars.

In the top left crossbar ensure there is one square nut in between the two shelf angle brackets.

Step 14 - Fit the upper shelf support bars



Parts
4 x M5 x 8mm cap head bolt
4 x M5 nut
2 x angle aluminium, 121cm

Fix the shelf loosely to the bottom of the bracket, using another M5x8mm bolt and a nut underneath.

Push the shelf as far back as it will go, without obstructing the channel on the inside of the rear upright; this slot is where the rear panels will fit.

Tighten all the bolts with the 4mm allen key.

Fit the front upper shelf to the bottom of the angle bracket as shown in step 12, upside down.

Secure two mesh shelves to the supports using cable ties in each corner.

Note: Ensure there is a gap between the two mesh panels to allow the lid lifter piston to swing when the lid opens.

Step 15 - Slot in the lower shelves (4-season only)

Parts
2 x notched shelf support
2 x 4mm plastic tube
2 x mesh shelf

Refer to the drawing in step 12 to see how the lower shelves slot in.

Push the 4mm tube into the slot on the inside of the crossbar, to prevent the front shelf support from sliding forwards.

Place the mesh shelves on the shelf supports.

Step 16 - Install rear panels

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

Tip: The edges of the rear panels can be squished slightly to make it easier for them to slot into rear uprights.

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

- 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.
- Slide the H-trim between the panels.
- 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 cable ties.

Step 17 - 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 18 - Fit the lid prop

Parts
1 x lid prop, 535mm
1 x M5 nyloc nut

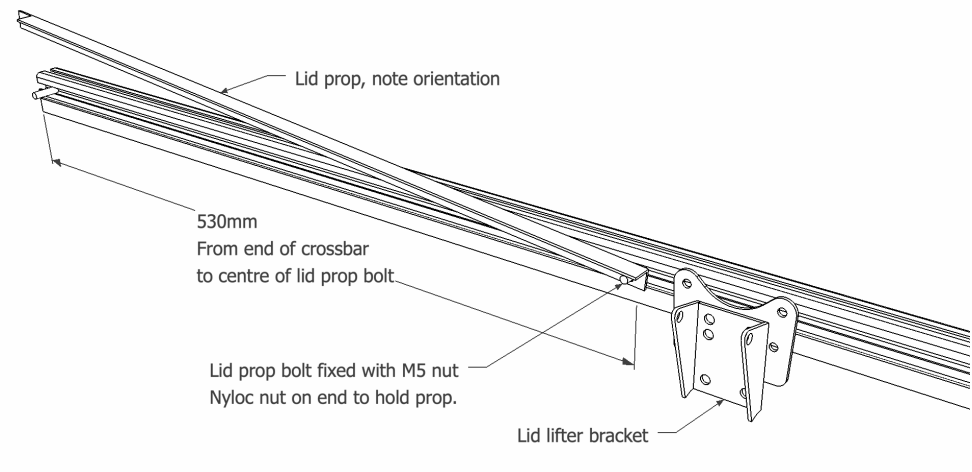
Note: The nyloc nut has a little plastic ring inside to prevent it loosening.

Put the hole in the lid prop over the stud formed by the bolt on the front crossbar.

Put on the nyloc nut, tightening it just so that the plastic “bites” the thread. The prop should be loose enough to move around.

The right hand end of the lid prop rests on the bolt which secures the front bar.

The drawing below shows the view from the inside of the greenhouse.



Step 19 - Lid centre bar

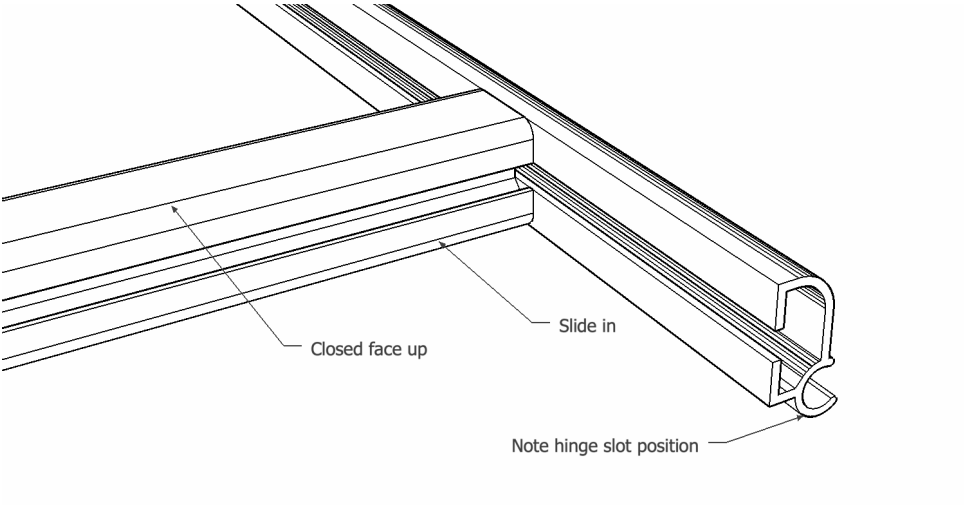
This is easiest done on a flat table or worktop.

Parts
1 x lid rear bar 125cm
1 x lid centre bar 45cm
2 x square nut

Slide the lid centre bar into the lid rear bar, with the closed side upwards.

Slide the square nuts into the centre bar, in the channel opposite the closed face. These will hold the automatic lid opener arm.

When the centre bar is in the middle, tighten the screw at the back.

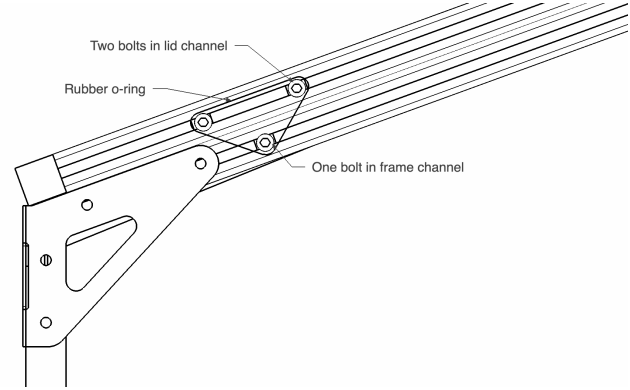


Step 20 - Lid side bars

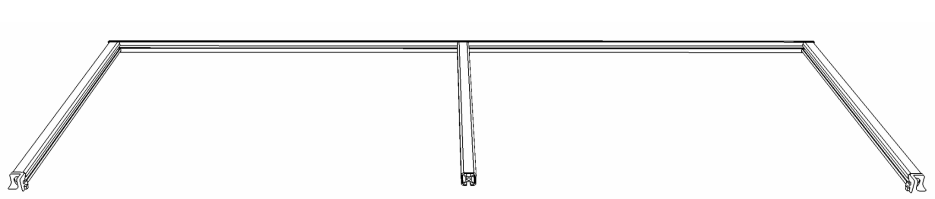
Parts
1 x lid assembly from step 20
4 x square nut
*4 x M5 * 10mm*
2 x lid sidebar 45cm with corner cubes

Left and Right lid sides will be marked with the corner cubes facing towards you, as per the drawing at the bottom of this page.

1. Slide two square nuts into the outside channels of the lid sides. These will form the top bolts for the storm lock as per drawing below.
2. Screw the bolts into the nuts and tighten them by hand to lock them in place.
3. Fit the o-rings over the two bolts on both sides of the lid. This is what the lock will look like when in operation, holding the lid down:



1. Slide the lid sides into the ends of the lid rear, with the closed side upwards.
2. Tighten the screws.



Step 21 - Insert the lid polycarbonate

Parts
2 x clear lid panel

Slot in the lid polycarbonate sheets.
You'll need to flex the lid side bars apart slightly.

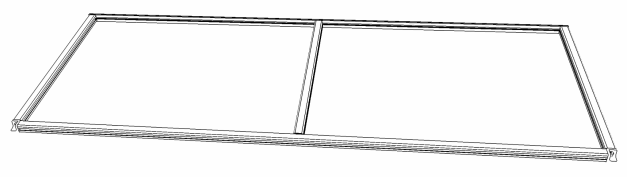
Make sure the white UV protected side is upwards. There is a corner taken off the polycarbonate to fit the corner cubes - ensure that is in the right position before moving to the next step.

Step 22 - Fit the lid front bar

Parts
1 x lid front bar 121cm
2 x 30mm screw

With the closed face up, slide the lid front bar over the protruding screw on the centre bar.

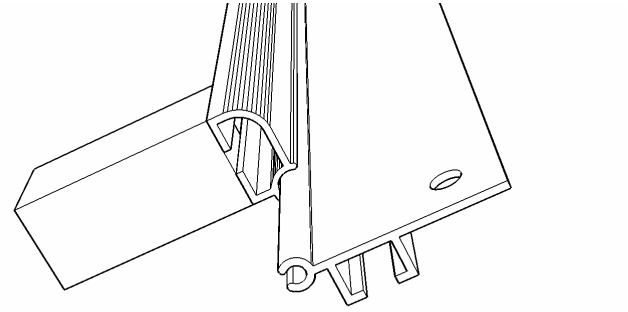
Screw the sides of the lid to the front bar using the 30mm screws.



Tighten the lid screws **firmly**.

Step 23 - Fit the ridge to the lid

Parts
1 x assembled lid
1 x ridge



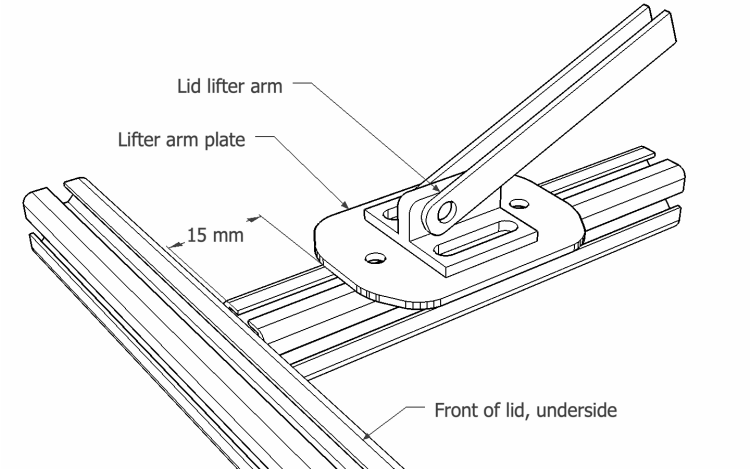
Slide the ridge into the assembled lid as in the drawing above.

Step 24 - Fit the lifter arm plate to the lid lifter

Parts:
2 x M4 x 12mm bolt
2 x M4 nut
1 x lifter arm plate
1 x lid lifter

Open the lid lifter box and remove the small parts from the bag.

Fit the lid lifter bracket (at the end of the sprung arm) to the lifter arm plate.



Step 25 - 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 26 - Fit lifter piston

Parts
1 x lid lifter piston

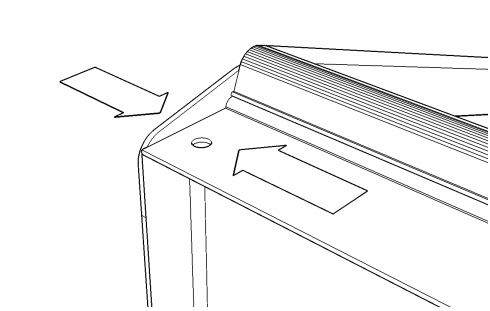
Prop the greenhouse lid open using the lid prop. Insert the black lid lifter piston into the lid lifter, using the instructions as supplied with the lid lifter.

Tip: There's a video on our website which shows how we recommend you fit the piston to the automatic lid opener www.harvst.co.uk/setup

Step 27 - Fit the lid to the greenhouse

Parts
2 x 30mm 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.



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 28 - Fit the hole caps

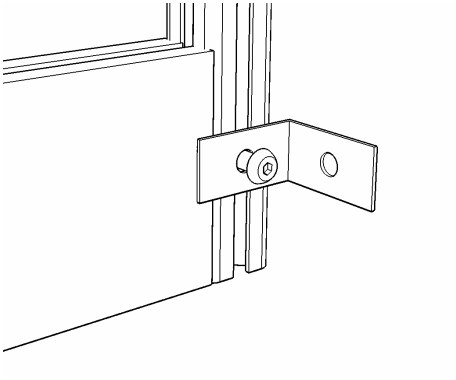
We've supplied some small black plastic caps to cover the screw holes in the front of the greenhouse and the holes in the lid ridge to make it look smarter. Now's the time to fit the caps, sit back and have a cup of tea.

Step 29 - 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.

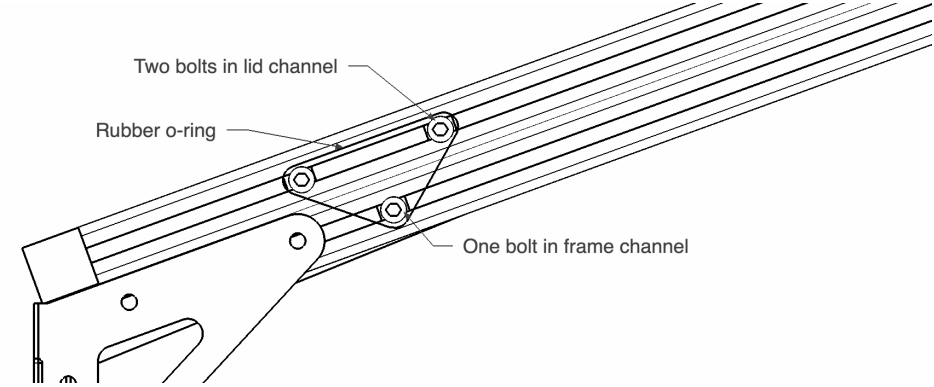
Parts
2 x fixing bracket
2 x Square nut
2 x M5 x 8mm bolt

Use the spare square nuts in the rear upright side slots, 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.



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 too frequently. 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