

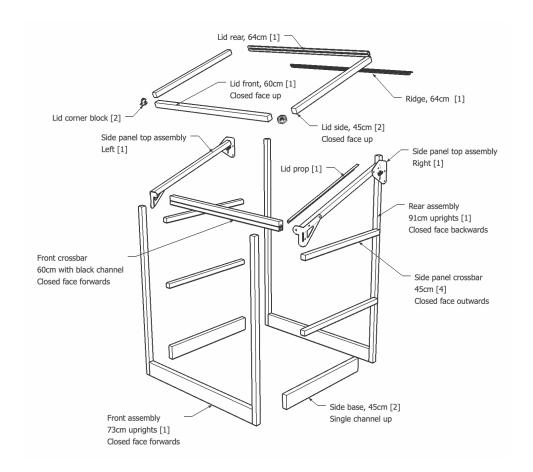
# Setup guide Model S6

V2 from Jan 2022



Greenhouse-only model comes with one shelf

### Exploded diagram





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

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

	450mm <b>x2</b> Lid sides, with corner cubes		600mm <b>x1</b> Front upper crossbar (box profile as alternative)
	450mm <b>x4</b> Side panel crossbar		728mm <b>x2</b> Front upright
	910mm <b>x2</b> Rear upright		600mm <b>x1</b> Lid front
	420mm <b>x1</b> Lid prop		610mm Shelf support * x2 GH / 3S / Solar only
	450mm <b>x2</b> Side base parts		600mm <b>x2</b> Front and rear base parts
	640mm <b>x1</b> Lid rear		640mm <b>x1</b> Ridge With black PVC channel
1.0		Side panel top assembly x2 One left and one right	

<sup>\* 4-</sup>season models are supplied with an integrated grow light / shelf support

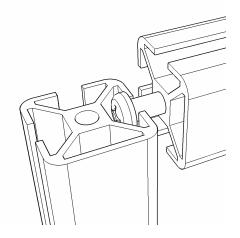
## Fixings and small parts



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.



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.

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

**WARNING** <u>DO NOT USE POWER TOOLS</u> 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.

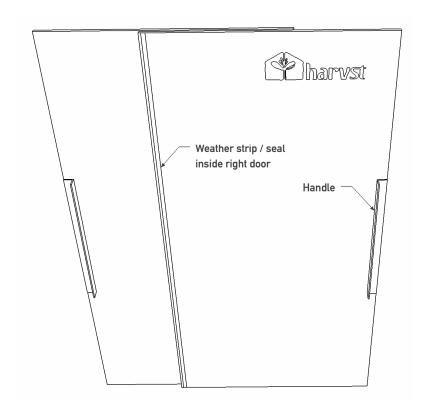
This step is optional - it can take some time but is recommended.

- 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 - Fit the door handles

Do this step first to allow the adhesive tape to cure before fitting 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, that the surfaces are clean, dry and free from grease, and that the UV treated side of the door panels (white film) faces out.

### Step 3 - Assemble the base

#### Parts:

1 x front assembly

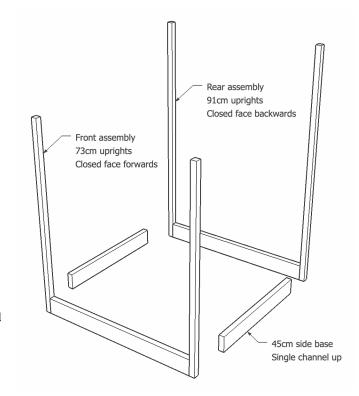
1 x rear assembly

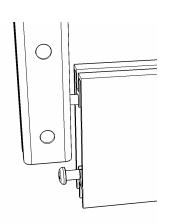
2 x side base 45cm

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.

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**.



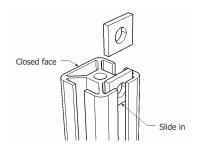


Slot the front assembly over the screws on the side base parts and tighten the screws.

Do the same for the rear assembly.

### Step 4 - Insert square nuts into cross bars

Parts 2 x side cross bar 45cm 2 x square nut



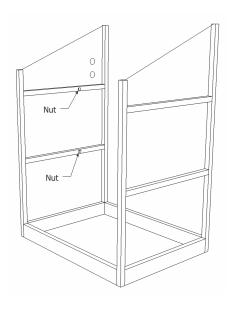
Insert a square nut into the inside channel of each cross bar that will go on the **left** side of the greenhouse.

The inside channel is the one opposite the closed face.

These nuts are for irrigation parts which you may or may not add in the future.

### Step 5 - Insert the side panels and side cross bars

The **upper left side panel** has a hole with grommets in it for an external hose or tank connection, if you have a solar, 3-season or 4-season model.



#### Parts:

4 x clear side panel

4 x side cross bar 45cm, two with nuts

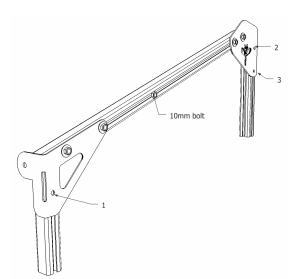
Peel the protective plastic off *both sides* of two side panels, remembering which side had the white film.

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

Insert the bottom two clear side panels.
Slide a bar with nut over the left panel.
Slide a bar without nut over the right panel.
Tighten the screws.

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

### Step 6 - Fit the right side panel top assembly



#### Parts:

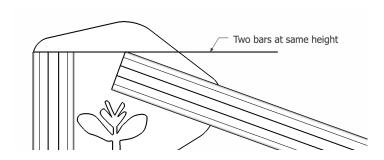
1 x Right side panel top assembly 3 x M5 \* 8mm button head bolt 3 x M5 square nut 1 x M5 \* 10mm button head bolt

Insert the <u>8mm bolts</u> into the assembly in positions marked 1,2,3, and add the <u>square nuts</u> 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 <u>10mm bolt</u> 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 the **left** side panel top assembly

#### Parts:

1 x Right side panel top assembly 3 x M5 \*8mm button head bolt

3 x M5 square nut

Repeat for the left hand side

(apart from the storm lock bolt which is only on the right 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)

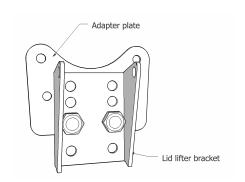
#### Parts:

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:

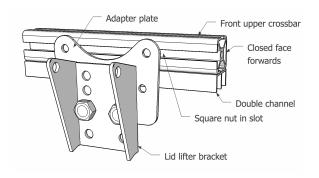
1 x front upper bar 60cm

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 place.

#### Parts:

1 x front upper bar 60cm

1 x bracket assembly from step 9

2 x M5 x 30mm bolt

2 x M5 nut

Bolt the bracket to the front bar, through the two holes.

### Step 10 - Insert the front crossbar

Parts

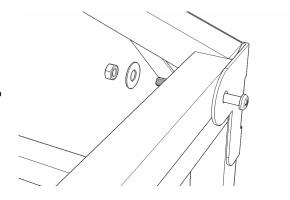
2 x M5 x 30mm bolt

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.

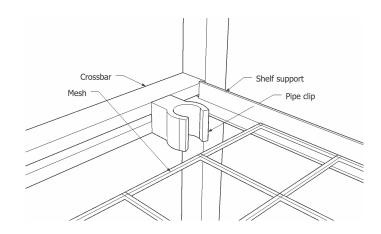
Tighten securely.



### Optional step - fit pipe clips

If you have a greenhouse with self watering, it will be easiest to fit the pipe clips before adding the mesh shelves.

Parts (from control system kit): 4 x pipe clip 4 x M5 x 16mm bolt

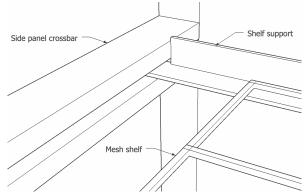


Fit the pipe clips to the crossbars as shown in the drawing above. The irrigation down-pipe will clip into these.

### Step 11a - Fit the shelves (greenhouse, solar and 3-season)

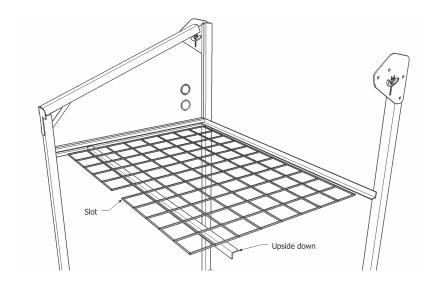
One mesh shelf is supplied as standard for the greenhouse-only and solar models. Two mesh shelves are supplied with the 4-season model, since the additional lighting allows plants to be grown closer together.

Parts, per shelf 2 x shelf support 1 x mesh shelf 4 x cable tie Slot the shelf supports into the slots on the inside of the side panel cross bars.

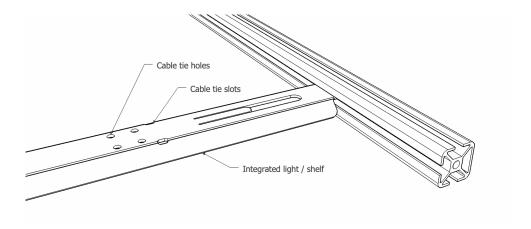


Place the mesh shelves onto the shelf supports and secure with cable ties.

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



### Step 11b (4-season model with LED lights)



- 1. Slot the combination shelf support / LED lights into the side cross bars in the same way as in step 10a above, with the wires coming out of the **left** hand side.
- 2. Secure the mesh shelves to the lights using the cable tie holes.

If you have heater cables, leave the attachment of the mesh shelves until after you have added the heating cable.

If you don't have heater cables, place the mesh shelves onto the shelf supports and secure them with cable ties.

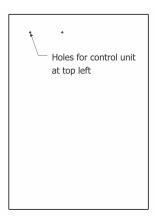
### Step 12 - Install rear panel

**Parts** 

1 x rear panel

Drop the rear panel into the inner slots of the rear uprights.

Ensure it goes fully into the lower base part - it's a tight fit.



### Step 13 - Add the lid prop support bolts

**Parts** 

2 x M5 x 16mm button head bolt 2 x M5 nut

The nyloc nut has a little plastic ring inside to prevent it loosening over time.

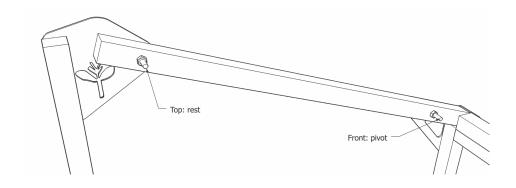
Screw the two nuts onto the bolts until they are 2mm away from being fully tightened.

Slide the heads of the bolts down the inner slot on the top right of the greenhouse, as shown in the drawing below.

Slide one all the way to 40mm off the bottom and leave the other one near the top.

Holding the bolt thread, tighten the nut to create a stud. The lower / front stud goes through the lid prop with a nyloc nut on it.

The top / rear stud is used to rest the lid prop when not in use.



### Step 14 - Fit the lid prop

**Parts** 

1 x lid prop, 40cm

1 x M5 nyloc nut

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

Put the hole in the lid prop over the lower stud that you inserted above.

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

### Step 15 - Lid side bars

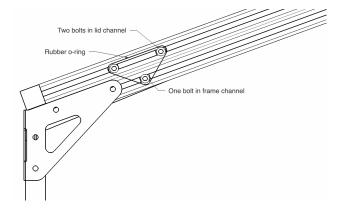
This is easiest done on a flat table or worktop.

Parts
1 x lid rear
2 x square nut
2 x M5 x 10mm
2 x lid sidebar 45cm with corner cubes
1 x o-ring



Left and Right lid sides will be marked with the corner cubes facing towards you, as per the drawing above.

- 1. Slide two <u>square nuts</u> into the outside channel of the right <u>lid sidebar</u>. These will form the top bolts for the storm lock as per drawing below.
- 2. Screw the 10mm bolts into the nuts and tighten them by hand to lock them in place.
- 3. Fit the o-ring over the two bolts on the side 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 16 - Insert the lid polycarbonate

Parts
1 x clear lid panel

Slot in the lid polycarbonate sheet, with the holes at the front.

 $\label{eq:make-sure-the-white-UV-protected} \ \text{Make sure the white-UV-protected-side-is-upwards.}$ 

You'll need to flex the lid side bars apart slightly.

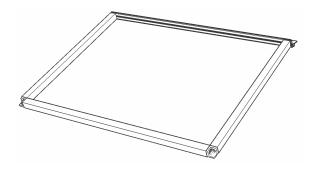
### Step 17 - Complete the lid

Parts

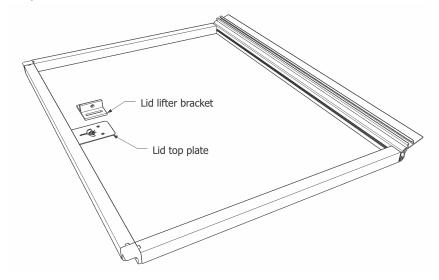
1 x lid front bar

2 x 30mm screw

Screw the front of the lid onto the rest of the lid assembly, with the closed face up.



Step 18 - Fit the lid lifter to the lid



Place the lid upside down on a table (with the black channel facing up), with the holes over the edge.

Parts:

2 x M4 x 16mm bolt

2 x M4 nut

1 x lid top plate

1 x lid lifter

Place the lid lifter so that the bracket with slots in is above the two holes in the front of the lid.

The slotted bracket is shown in the diagram above without the lid lifter, for clarity.

Bolt the lid lifter to the bottom of the lid, using the top plate on the other side (underneath the upturned lid).

### Step 19 - Fit lifter piston

WARNING - the lid lifter has powerful springs and should be treated with care.

Parts

Insert the black piston into the lid lifter, using the instructions as

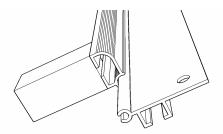
1 x lid lifter piston supplied with the lid lifter.

Taking care not to trap your fingers, squeeze the sides of the lid lifter together and insert the studs into the bracket on the inside of the front upper bar. Watch a video at www.harvst.co.uk/setup for more tips.

### Step 20 - Fit the ridge to the lid

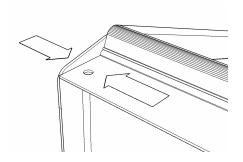
Parts 1 x assembled lid 1 x ridge 2 x plugs

Fit the blanking plugs when the screws are fully tightened.



### Step 21 - Fit the lid

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.



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 22 - Fit the doors

Parts 2 x polycarbonate door With handles fitted 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. Refer to the door drawing at the beginning of the guide.

**Tip:** If the doors are too tight, you can loosen the crossbar mounting bolts to let the bar come up a little. Tighten them in a suitable position so that the doors slide well.

### Step 23 - Fit the hole caps

We've supplied some small black plastic caps to cover the screw holes in the front of the greenhouse to make it look smarter.

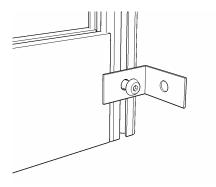
Now's the time to fit the caps, sit back and have a cup of tea.

### Step 24 - 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.

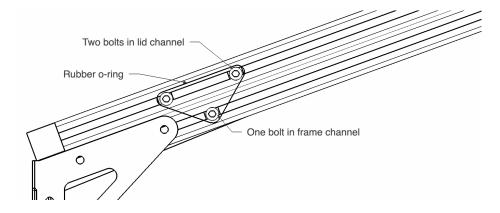
Parts
2 x Angle bracket
2 x Square nut
2 x M5 x 8mm bolt

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 right side 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 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