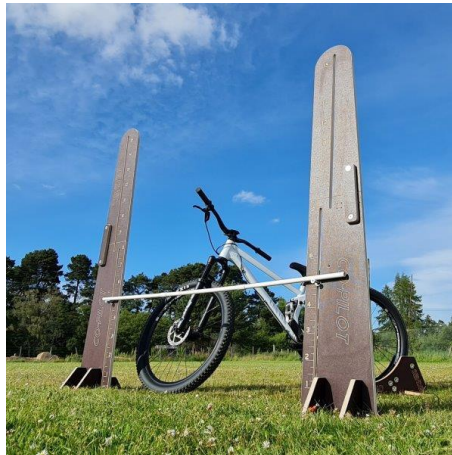




# SENDER PROGRESSION RANGE

## BUNNY HOPPER / COPILOT / SENDER CONES



**RIDE CONCEPTS** BIKE: **CANYON** STITCHED 720

**PLEASE TAKE CARE OPENING YOUR PROGRESSION RAMPS WITH A KNIFE  
THE OPTIONAL CARRY BAG MAY BE INSIDE ALONG WITH ASSEMBLY COMPONENTS.**

Thank you for buying SENDER COMPONENTS. Our range is the most comprehensive adjustable and modular range ever designed and manufactured. Each part has been carefully considered for weight and strength. Progression products allow you to build confidence and skill at your speed. Our equipment is fantastic for helping coaches improve students core bike handling skills.

### **MODULAR:**

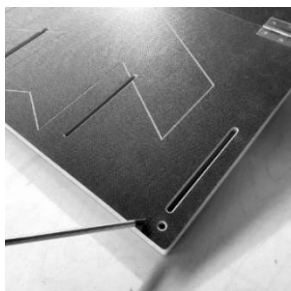
Combine the BUNNY HOPPER or COPILOT with a pair of SENDER CONES to create a Height and Distance Challenge. You can also use this equipment with our ramps and tabletops to create challenging and engaging jump sessions.

### **SAFETY ADVICE:**

Jumping can go wrong very quickly at ANY height. However, the severity of injuries could increase as you make scenarios more challenging / harder! Always make small increases in difficulty and consolidate at a certain height or distance before progressing. In all cases a grass landing / landing slope will be much better and safer. Always wear full PPE – Helmet Gloves and Pads as a minimum.

### **SAFETY FEATURE:**

The front edge of our ramps have 2 x PEG POINTS so you can add extra security when using the ramp on grass or gravel. We strongly recommend using these at ALL Times. **You must use these anchor points if you plan to attempt or execute any back or front flips.**



## SAFE OPERATION:

Familiarise yourself with all components before you use them and check for damage before and after use. The COPILOT must be pegged to the ground or fixed / held using the guy ropes. This is especially important on a windy day when they will be prone to blowing over. In rare occasions the pipe MAY pull the posts over if they have not been properly secured to the ground. This could hurt the rider or damage equipment / the riders bike.

It is important to check the pipe used on the COPILOT and BUNNY HOPPER regularly for damage. It must be replaced if cracked / split or broken. Replacement Pipe is inexpensive can be purchased at most hardware stores. Expect breakages.

## DESIGNED FOR:

- Riders, clubs and coaches on all types of bikes

## SAFE USE AND PPE:

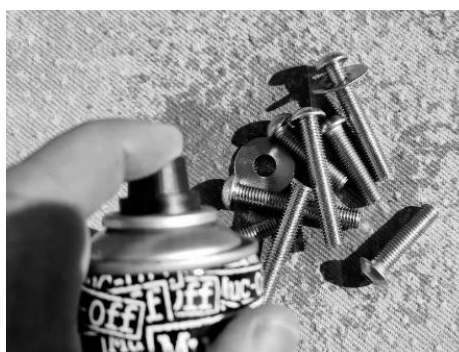
Always wear a full face helmet, gloves and knee pads when jumping. We also recommend back protection and a neck brace. You should not jump ramp to ramp with a gap between components. Progression Ramps can be landed to FLAT. However, it is better to use a grass downslope as the height increases or a landing ramp. Ensure adequate fall space all around with no surrounding impact surfaces like fences, trees, vehicles or roads. Keep spectators clear. Locate your ramp on flat even ground. Take your time and follow all the user instructions carefully for max strength. Built confidence before trying higher jumps. We recommend hiring / consulting a coach to improve skills. When jumping goes wrong it can lead to life changing injuries and destroy expensive bikes.

## SENDER BUILT TO LAST:

Designed and Manufactured in the Highlands of Scotland from 18 mm (13 layer) Birch Plywood and 18 mm (13 layer) Phenolic Grip (mesh) coated Plywood secured with Stainless Steel Components. Look after your ramp and it will last a life time. We recommend storing the ramp inside after use and carefully drying the ramp if it is used outside in the damp or rain. **Spare parts are available for purchase on request.** The Plywood has been Independently Impact tested and Insert Pull Tested. Do not drag or pull equipment across the ground. It should be LIFTED into place to prevent premature deterioration.

## MAINTENANCE:

When you assemble your Copilot and Bunny Hopper please use silicone spray to protect and lubricate the bolts. Follow instructions on the bottle / can for safe use.



**Torque Wrench (recommended) – Spray your bolts during assembly process and as often as possible for better function**

Moving parts such as Nuts and Bolts should be silicone sprayed frequently. All cut edges and natural plywood faces should be treated with LOW VOC (Water Based) Decking protector Natural Colour. Repeat annually. Under no circumstances use Varnish!! Check for damage before and after each use and retire the Ramp if you find any until you seek further advice from [support@sender-ramps.com](mailto:support@sender-ramps.com). Additional notes at the end of this guidebook.

### INSTALLATION EQUIPMENT REQUIRED (Varies depending on product purchased):

- 1 x 6 mm HEX KEY (Found ON Your Bike Maintenance TOOL!) – SUPER Fast with an Impact Gun with 6 mm Attachment.
- A “T” HANDLE 6 mm HEX / ALLEN KEY is useful piece of equipment for tightening bolts
- A Torque Wrench will ensure that ALL bolts are set at the max tension of 12 Nm

Your product may come unassembled or assembled. Please reads the section appropriate to your purchase.

## SENDER CONES ASSEMBLY

### COMPONENTS:



PLYWOOD COMPONENTS

### ASSEMBLY TOOLS:

1 x HAMMER

Wear appropriate PPE when assembling your product – Eyewear / Gloves / Footwear. Protect your work space to avoid damaging your property.

FIXINGS: NONE

### ASSEMBLING YOUR SENDER CONES

**STAGE 1:** Time to assemble approximately 5 Minutes

Take one of the small feet with 2 large holes and place this slot into slot. Push them firmly together. If the feet are too tight to place by hand, then use a hammer to tap them together. Make sure the base is flush. Repeat for all CONES purchased.





**ADDITIONAL INFORMATION:**



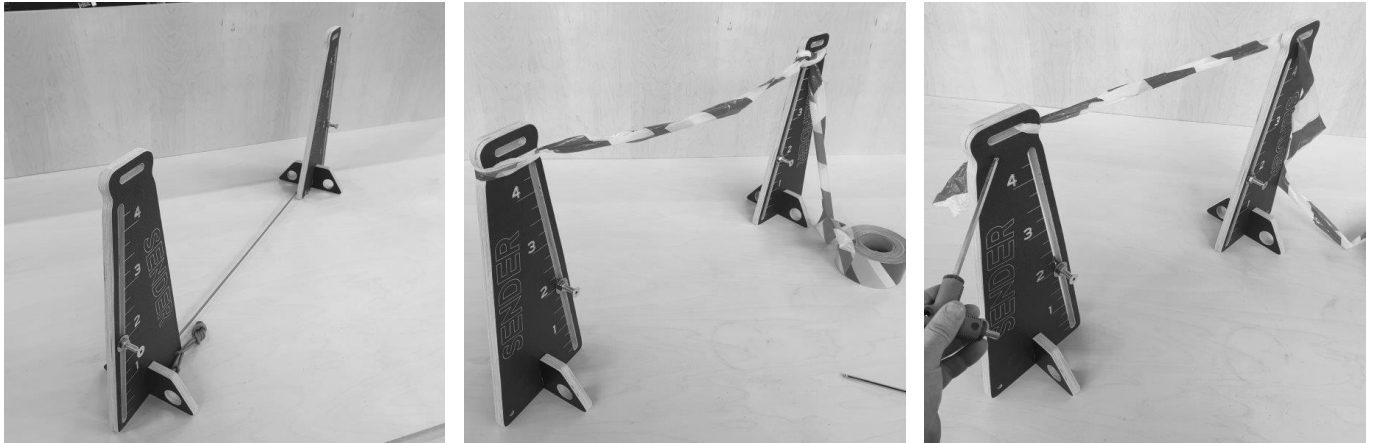
**LEFT IMAGE = PEG HOLES TO SECURE CONE TO GROUND - RIGHT IMAGE = CORD HOLE WHEN USED AS DISTANCE MARKER**

**USING THE CONE PEG HOLES**

Wind, unstable / uneven ground or the pipe / elastic cord could cause the CONES to fall over into the path of the rider.  
We recommend using the Peg Holes for stability. Place one or more Pegs at an angle through the holes. Pegs Not Included.



**LEFT IMAGE = SLOT FOR ROPE OR DANGER TAPE - RIGHT IMAGE = BOTTLE NECK FOR WRAPPING ROPE OR DANGER TAPE**



**DISTANCE JUMP LINE BETWEEN CONES – DANGER TAPE AROUND BOTTLE NECK – DANGER TAP THROUGH SLOT**

## **SENDER BUNNY HOPPER ASSEMBLY**

### **COMPONENTS:**



**PLYWOOD COMPONENTS**

### **ASSEMBLY TOOLS:**

1 x HAMMER

Wear appropriate PPE when assembling your product – Eyewear / Gloves / Footwear. Protect your work space to avoid damaging your property.

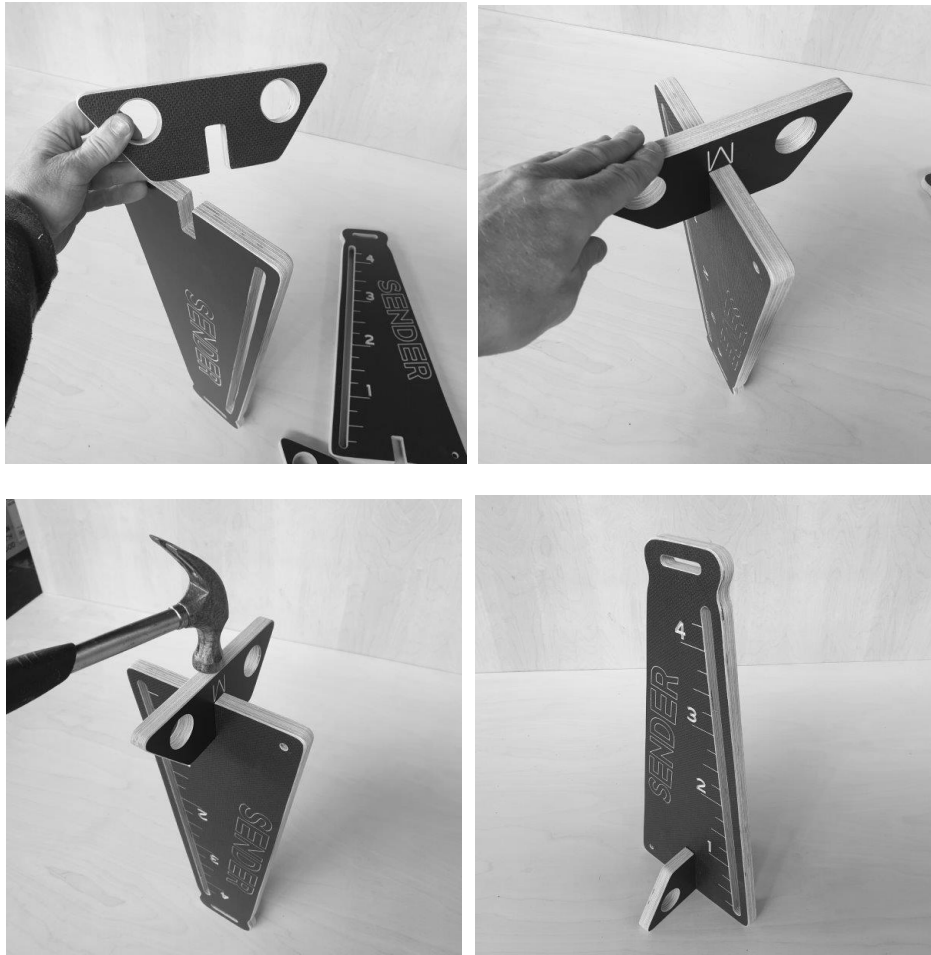
### **FIXINGS:**

- 2 x M10 x 50 Countersink Bolts
- 2 x T Nuts
- 2 x M10 Nuts
- 2 x Washers
- 2 x Pipe Connectors
- 3 x 500 mm Sections Pipe

## **ASSEMBLING YOUR BUNNY HOPPER**

**STAGE 1:** Time to assemble approximately 20 Minutes

Take the small foot with 2 large holes and place this slot into slot. Push them firmly together. If they are too tight to place by hand, then use a hammer to tap them together. Repeat this process to create a PAIR of Stands.

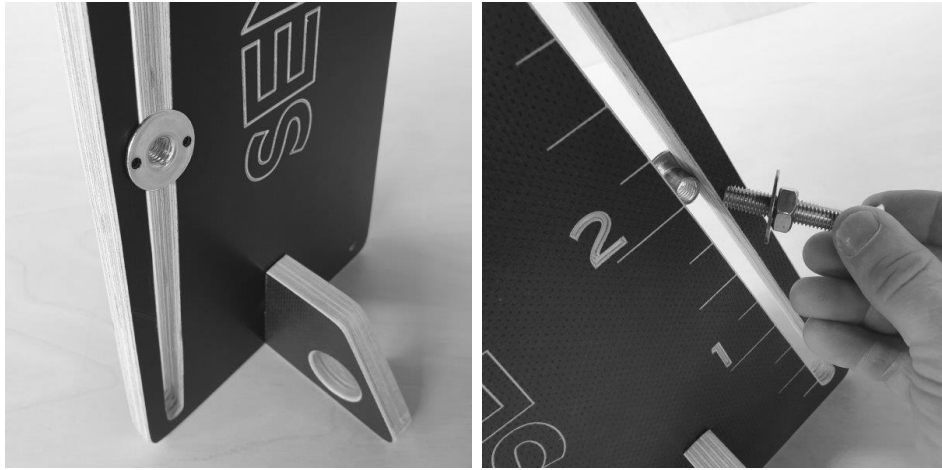


## STAGE 2:

Take a 50 mm Countersink Bolt PLUS 1 x Nut and 1 x Washer and create the BOLT assembly shown below. There should be approx. 15 mm between the end of the bolt and the washer. Take one of the BUNNY HOPPER Plywood Stands and place a T Nut into the slot on the Shiny / Smooth face.



Hold the T Nut in the slot and place the Bolt with Nut and Washer into the T Nut through the slot on the rough / mesh side with Numbers!



Wind the Bolt into the T nut with your fingers until the Washer touches the Plywood face. Tighten the nut using your fingers. You can easily adjust the tension / friction and height at which you would like to hold the plastic pipe. REPEAT ON THE OTHER STAND



The height markings go up to 450 mm in 25 mm stages from the ground. Each number is 100 mm. The large holes in the feet will allow you to use pegs (NOT SUPPLIED) to hold the BUNNY HOPPER to the ground. One or more Pegs should be placed at an angle. Securing the Bunny Hopper to the ground helps when it is windy or the ground is uneven. If you are using an elastic bungee or danger tape the pegs will also help stabilise the stands



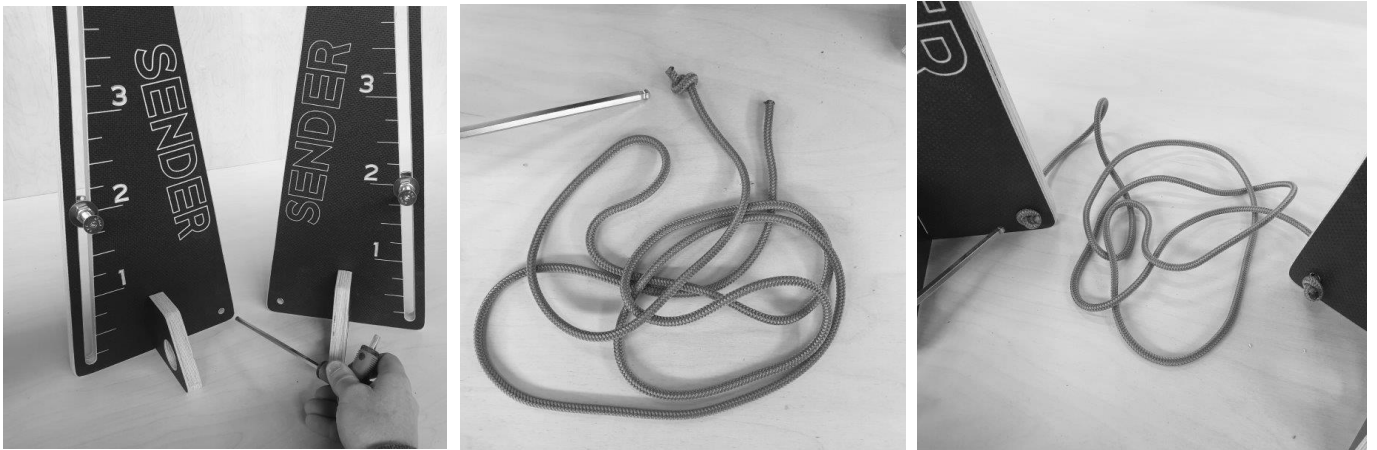
**LEFT IMAGE = HOLE IN THE FEET FOR PEGS – MIDDLE AND RIGHT IMAGE = SLOT FOR ROPE OR DANGER TAPE**



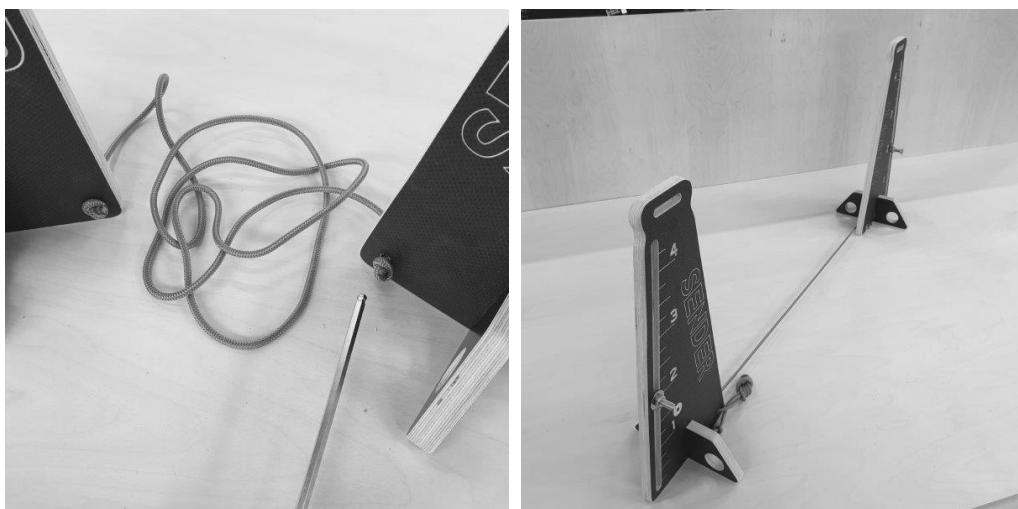
IMAGES = BOTTLE NECK FOR WRAPPING ROPE OR DANGER TAPE

## USING YOUR BUNNY HOPPER AS A DISTANCE MARKER

6 mm Cord does not come as part of the Bunny Hopper Pack. This can easily be purchased at a Camping or Hardware Store.



Tie a knot in one end of the cord. Thread this through the hole in the bottom corner of the BUNNY HOPPER. Thread the other end of the cord through the bottom corner of the other stand. Pull the Stands apart until the cord is tight and then place these on the landing side of a ramp. You can then use the cord as a target to jump past. Move according to the longest jump.



## USING YOUR BUNNY HOPPER AS A HEIGHT MARKER WITH PLASTIC PIPE

The Bunny Hopper has 1500 mm of pipe in 3 sections. You have 2 Pipe Connectors. Simply use the Pipe Connectors to hold the sections together as shown below. Push them firmly together.





This Pipe sits onto the top of the Countersink Bolts. The ground might not be level so you may wish to offset and adjust the height of the bolts on the Stands so that the Pipe is level. These pipes and connectors may break over time especially in a heavy impact when used on gravel or tarmac. It is possible to use bungee cord / bungee strap which hooks over the bolts but you will need to peg the BUNNY HOPPER to the ground to prevent the elastic pulling the stands over.



## SENDER COPILOT ASSEMBLY

### COMPONENTS:



PLYWOOD COMPONENTS

## VERY IMPORTANT:

STAINLESS STEEL IS SOFT. It is VERY easy to round the heads of screws. Apply CONSTANT PRESSURE when fixing components. Take your time to complete the ASSEMBLY process. Poor Assembly WILL lead to a weak and poorly functioning product!

## ASSEMBLY TOOLS:

- 1 x HAMMER
- 1 x BATTERY DRILL DRIVER
- 1 x POZI 2 DRIVER BIT
- 1 x 3 mm DRILL BIT

Wear appropriate PPE when assembling your product – Eyewear / Gloves / Footwear. Protect your work space to avoid damaging your property.

## FIXINGS:

- 4 x Hinges
- 24 x Hinge Screws
- 7 x T Nuts
- 10 x Pan Head T Nut Screws
- 4 x 4 x 30 Screws
- 2 x 50 mm Countersink Bolts
- 2 x M10 Nuts
- 2 x Washers
- 6 x Guy Lines
- 6 x Guy Line adjusters
- 6 x Ground Pegs
- 2 x Pipe Connectors
- 3 x 666 mm Sections Plastic Pipe

## ASSEMBLING YOUR SENDER COPILOT

**STAGE 1:** Time to assemble approximately 30 Minutes

Take both Stands and unfold them. Place 5 x T nuts into the smooth face of the Stands. These holes have circles around them. There is ONLY 5! Use 2 x Pan Head Screws for each T Nuts. Place these vertically until the T nut is pulled tight to the face.



The NEXT STAGE IS IMPORTANT – If you mount the feet with the HIGHER side on the WRONG side then the COPILOT will not fold flush face to face! in storage mode. The end of the stand will rest on the feet at an angle! Please follow the instructions below.

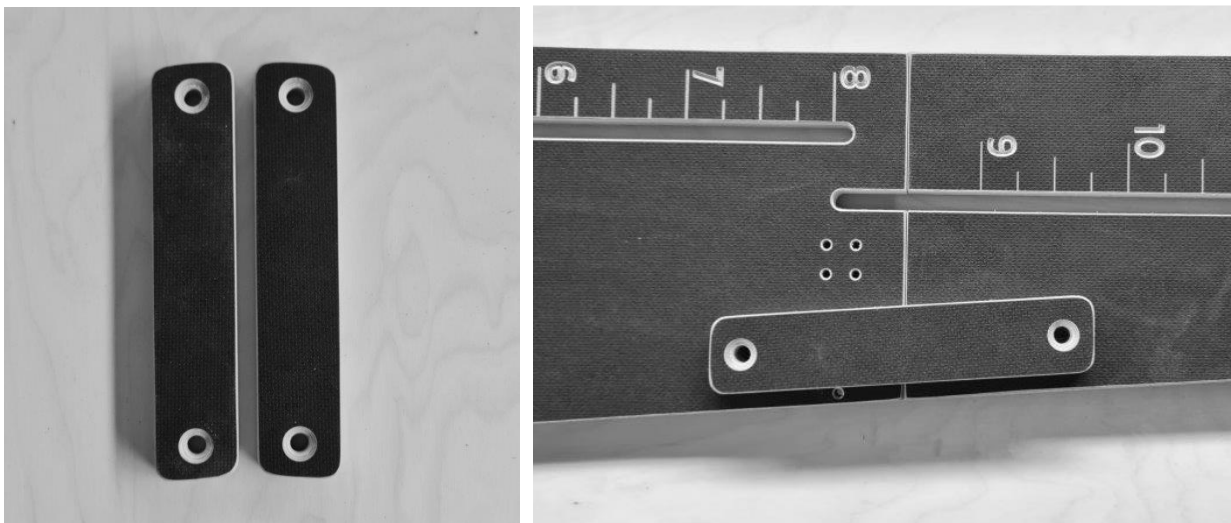
Place one of the stands to the side. Take two Feet and place them into the slots on the STANDS. The feet have a HIGH Side and LOW Side. It is important that you orientate these feet so that you can see the TWO SCREW MARKER points when the feet have been located in the slots on the stand. COSMETICALLY you may also want to coordinate the feet so that the Mesh / Rough face is on the outside of the stand. You may need to (carefully) use a Hammer if the parts are too tight to push together by hand! Make sure that the bottom of the feet and stand are flush.



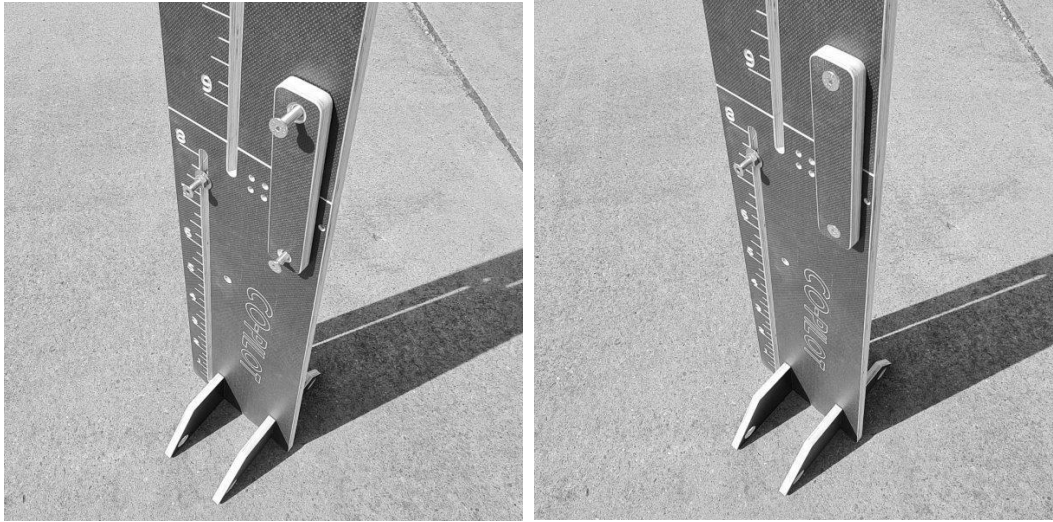
Drill 40 mm deep holes with a 3 mm DRILL BIT through the marker points on the face of the stand into the foot behind. IF you do not drill the foot you WILL split the plywood. Fix the feet to the stand with 2 x 4 x 30 Stainless steel screws. Stainless Steel is SOFT. Be careful not to round the head of the screws! Repeat on the other stand



Take the two joining blocks. Each block has two holes and an angle cut into each end. Choose the correct block and orientate it with the stand as shown below. The block is located on the number side / rough mesh face and crosses the join when the stand is unfolded. Please be careful not to trap your fingers in the join.



The LEFT Stand uses 2 x M10 x 35 mm Countersink Bolts to hold the blocks in place. This is the stand with 2 T Nuts! The other RIGHT HAND stand has 3 T Nuts – On this stand use 2 x M10 x 60 mm Countersink Bolts. You should wind these bolts until they are flush and tight and there is no movement at the join. The 60 mm Bolts will protrude out the back face.

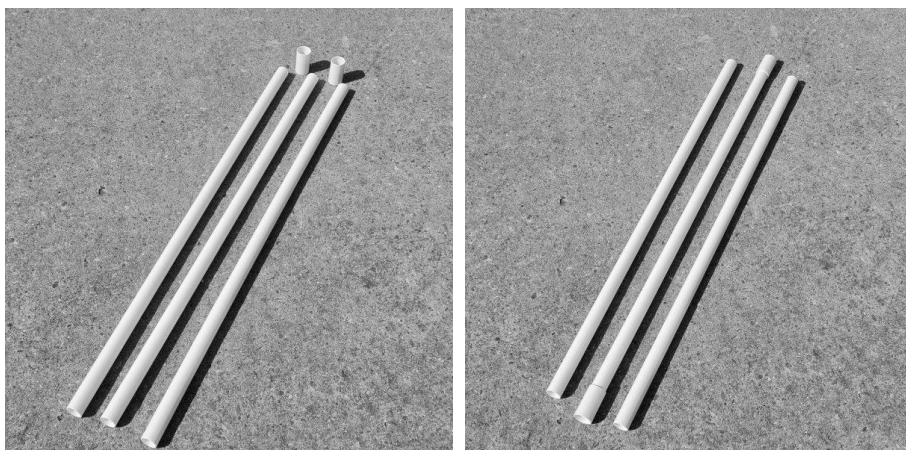


The Image above shows 60 mm Bolts On the RIGHT HAND STAND

The Image below shows the joining block swing across the face of the stand when it is folded to meet the extra T Nut Position. This position allows you to store the plastic pipe on the front face during transportation. Simply catch the thread of the bolts and T nuts by finger. Then place the pipes between the bolts and under the block. Tighten the bolts until the pipes cannot move.



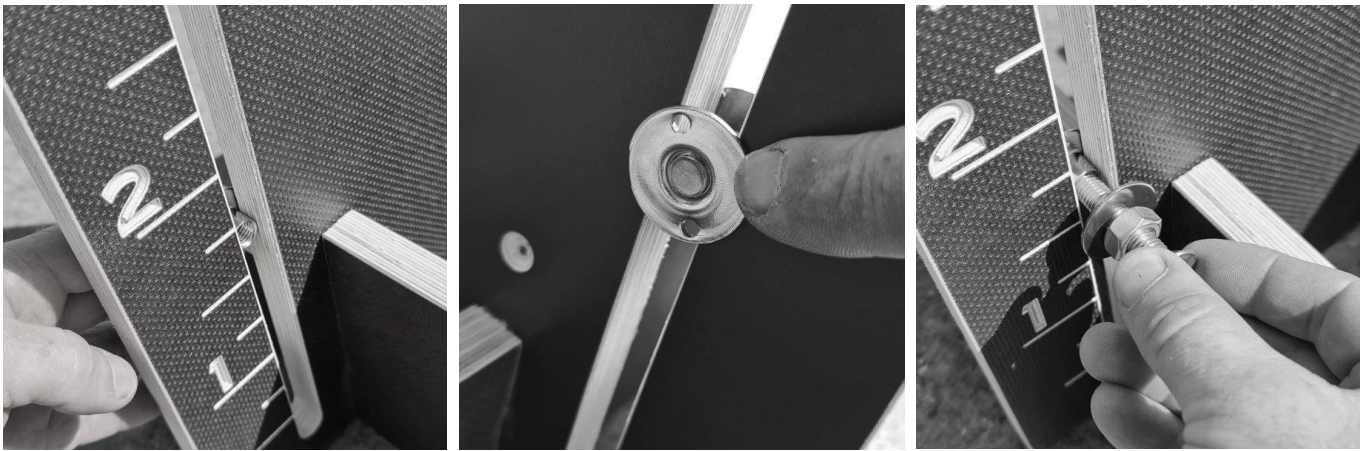
Your COPILOT may arrive with the Pipe Sections already stored on the front face of one of the stands! **TOP RIGHT IMAGE**



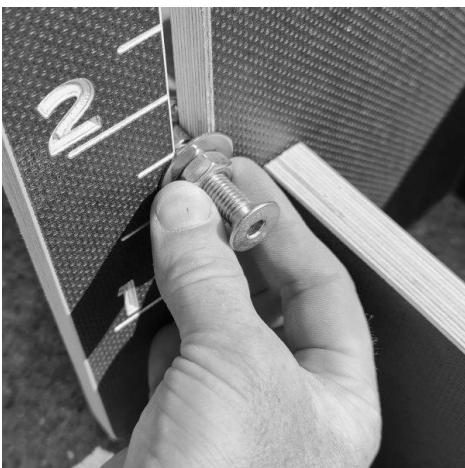
Your 2000 mm Pipe comes in 3 Sections with 2 x Joining Connectors. Simply use the Pipe Connectors to hold the sections together by pushing them firmly together.



Take a 50 mm Countersink Bolt PLUS 1 x Nut and 1 x Washer and create the Nut / Bolt assembly shown above. There should be approx. 15 mm between the end of the bolt and the washer. Take one of the COPILOT Plywood Stands and place a T Nut into the slot on the Shiny / smooth face.



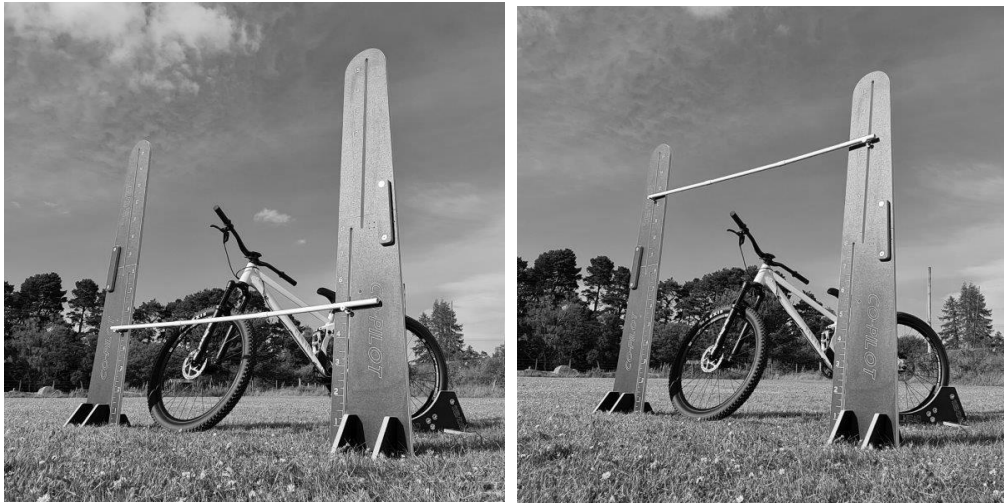
Hold the T Nut in the slot and place the Bolt with Nut and Washer into the T Nut through the slot on the rough / mesh side with Numbers! Wind the Bolt into the T nut with your fingers until the Washer touches the Plywood face. Tighten the nut using your fingers. You can easily adjust the tension / friction and height at which you would like to hold the plastic pipe. REPEAT ON THE OTHER STAND.



The height markings go up to 1550 mm in 25 mm stages from the ground. Each full number is 100 mm. You will notice that the slot is staggered. This allows you to have continuous height adjustment! You may need to allow for this extra width if you peg or guy rope the COPILOT to the ground!

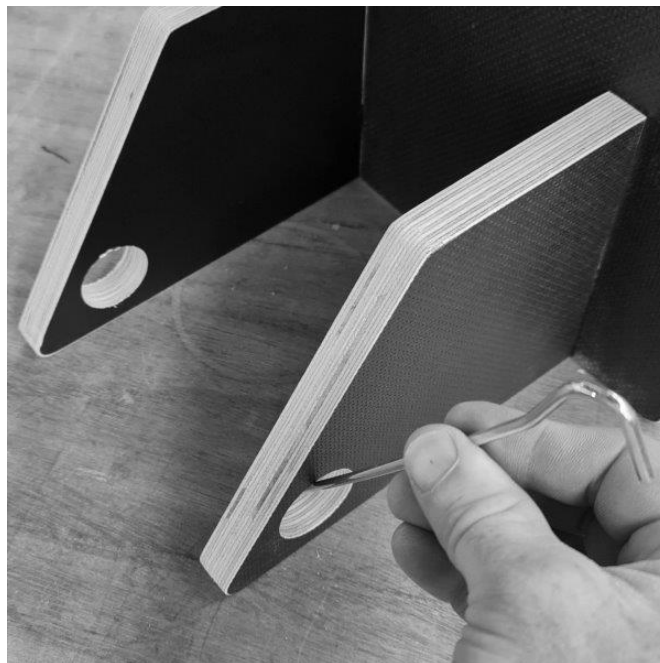
This Pipe sits onto the top of the Countersink Bolts. The ground might not be level so you may wish to offset and adjust the height of the bolts on the Stands so that the Pipe is level. These pipes and connectors may break over time especially in a heavy impact when used on gravel or tarmac. It is possible to use bungee cord / bungee strap which hooks over the bolts but you will need to Peg or Guy Rope the COPILOT to the ground to prevent the stands being pulled over.

SEE PEG AND GUY ROPE INSTRUCTIONS BELOW!



### USING THE COPILOT PEG HOLES

Wind, unstable / uneven ground or the pipe / elastic cord could cause the COPILOT to fall over onto the rider. We recommend using the Peg Holes to stabilise the COPILOT when it is being used for Bunny Hops or Limbo. You may need to purchase or use more pegs if you are using the guy lines at the same time. Place one or more Pegs at an angle through the holes.



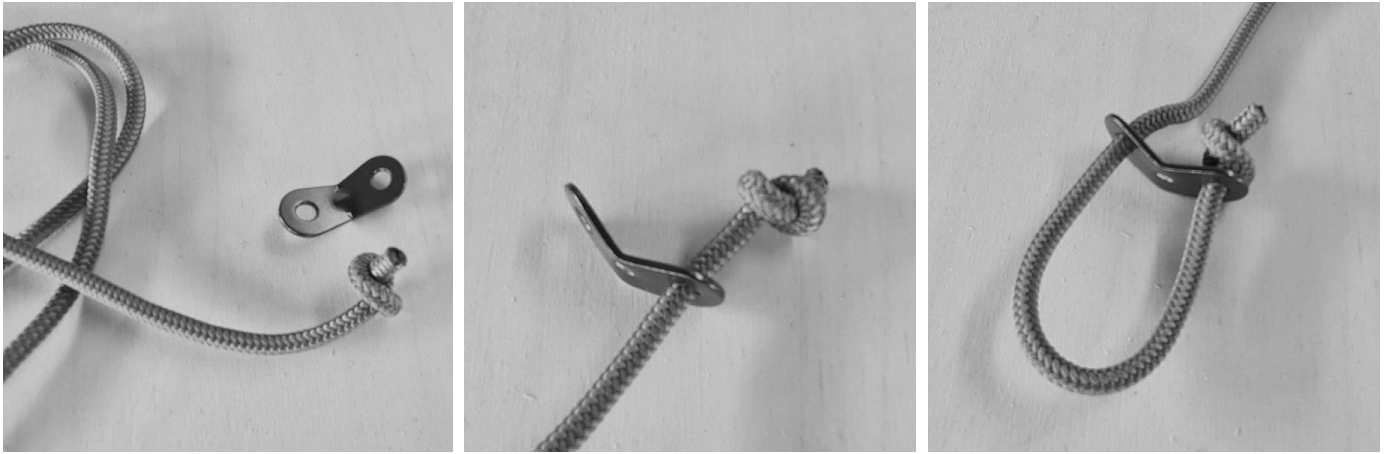
**THESE ARE PEG HOLES TO HELP YOU SECURE THE COPILOT TO GROUND – PEGS SUPPLIED FOR GUY ROPES OR PEG HOLES**

### USING THE COPILOT GUY LINES

We recommend using the Guy Lines to stabilise the COPILOT when the Pipe or an Elastic Bungee are being used for Bunny Hop or Limbo. You may need to purchase or use more pegs if you are using them through the peg holes in the feet.

Assembling the Guy Lines: You have been supplied with 6 x lengths of 5 or 6 mm cord. Make a knot and pass this through one of the holes in the adjuster as shown. Pass the end through the other hole in the adjuster to create a loop. The bottom of the V on the adjuster should face the inside of the loop.

This loop is where you will place the peg and tension the COPILOT in its chosen location. There are 6 Guy Lines and 6 Pegs.



Each Stand has 3 Guy Line attachment points. Simply pass the other (long) end of the guy line through the holes in one face of the stand and tie a knot on the other side. Repeat with a guy line going the opposite way. There is another hole on the edge of the stand. This allows you to create a strong and stable triangular shape with the guy lines.

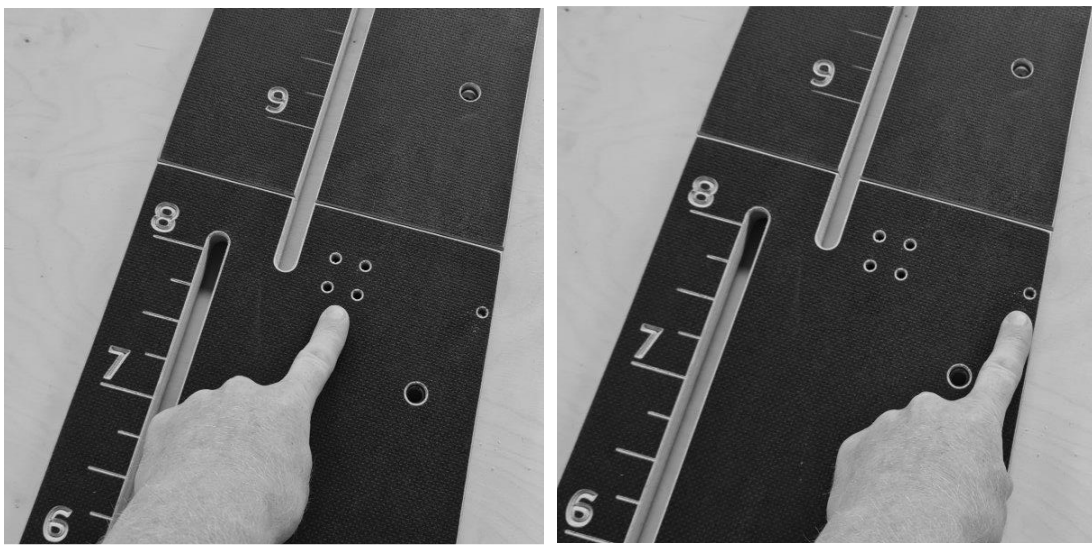


Image below shows the guy line passed through the face of the stand. And on the right through the edge of the stand.



The image below shows one of the stands fully secured to the ground with 3 points creating a triangle. The other Image shows a fully installed COPILOT Station in Limbo Mode with the Stands at the correct width to accommodate the pipe in the outer slot!



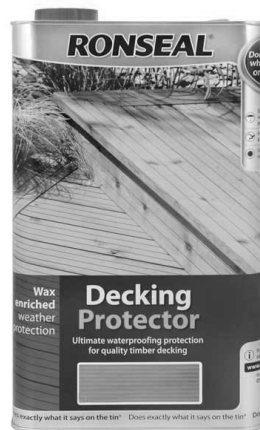
## STORING YOUR PRODUCTS – KEY POINTS TO REMEMBER

Your products should be stored in a dry location. Shipping Containers are terrible for humid, warm and cold conditions that are perfect for growing mould and mildew. Birch Plywood (and other sheet materials) are prone to these growths if it is not treated. Your ramp CAN BE used outside in the rain and in wet grass but if you would like your ramp to last a lifetime bring it inside after use. We strongly recommend treating your ramp with a preservative. Please see below.

Never leave your ramp in the transport bag if it has been used in wet grass or in the rain.

## TREATING YOUR RAMP WITH A PRESERVATIVE

It is not essential to use a preservative but it will greatly increase the longevity of your product and prevent unsightly marks. NEVER use a varnish. Use a water based protector. These are very easy to apply as long as you use a wet, then dry cloth to remove the excess from all BROWN Surfaces. It leaves a waxy film that peels in the rain! You should coat / treat all cut edges, all birch faces and any holes / routed text. Preferably twice! And again annually or biannually. A Clear or Natural Colour should not YELLOW the wood. Ronseal LOW VOC Decking Protector easily and quickly soaks in and dries leaving an effective barrier.



## DISPOSING OF YOUR PRODUCT

You should remove all screws / nuts and bolts and place these in metal recycling. You must put the plywood in the wood recycling. BETTER! Get in touch for new parts or one of our refresh kits! This will allow you to keep using the ramp or even sell the ramp to another user. This is by far the MOST ENVIRONMENTALLY FRIENDLY SOLUTION.

Thanks again – We hope you enjoy the process of building your ramp and then making fast progress to new skill levels and greater confidence on the trail!

Scott and Team

You can get expert advice at Sender. Do not hesitate to contact us. You can also order replacement parts. This keeps your purchase environmentally friendly and keeps you rolling.

Please subscribe to our YouTube Channel **Sender Ramps** for notifications when we upload new films. If you need advice or help please contact us direct [support@sender-ramps.com](mailto:support@sender-ramps.com)