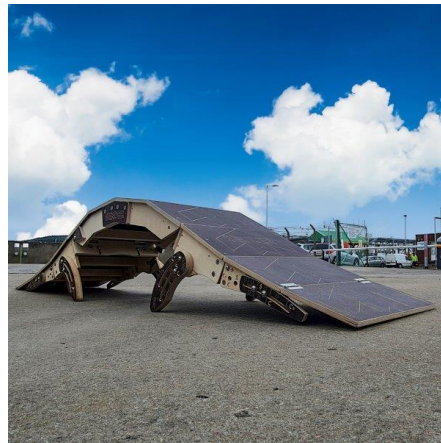




SENDER PROGRESSION RANGE

PUMP ROLLER / COMPRESSION / CASEPAD



PLEASE TAKE CARE OPENING YOUR PROGRESSION ROLLER OF YOU USE WITH A KNIFE

Thank you for buying a SENDER PROGRESSION RANGE PUMP ROLLER. This Roller is part of our extensive, modular, compact and transportable system. Each part has been carefully considered for weight and strength. Rollers are durable and built to last. Our NEW design allows you to use the Roller on our FIXED HEIGHT CLASSIC, CORE RANGE or our ADJUSTABLE HEIGHT PROGRESSION RANGE RAMPS.

MODULAR:

Our ramps integrate with other SENDER BOLT ON features. For advice on compatibility please contact us. You can hook the Roller to the end of a 500 Tabletop using a Pair of Tabletop / Pump Roller Joining Blocks. You can Hook the Pump Roller to Ramps at 350 to 500 mm in Height to create a Casepad or Compression Roller. You can even sit the Roller on its own to create a Trail Feature.

COMPATABILITY:

PUMP ROLLER MODE:

- You simply hook the Roller onto the Bolts in the back of TWO Classic / Core or Progression Ramps at any height. Make some adjustments so that the surfaces are level and tighten the bolts.

WITH SINGLE OR DOUBLE TABLETOP:

- You can connect the Pump Roller to the end of a Tabletop ONLY at 500 mm in height with a pair of Joining Blocks and Bolts

COMPRESSION / CASE PAD MODE:

- You simply hook the Roller onto the Bolts in the back of a 350 to 500 mm high ramp and adjust the feet.

TERRAIN ADJUSTMENT:

Sender features are best used on grass but can be used on tar or concrete. However, the severity of landing and risk factor will greatly increase on hard surfaces. There is no adjustment in the feet if you connect the Roller to a Tabletop or use in Casepad / Compression Mode so you will need to find a flat even surface. When using the Roller between two ramps you have Terrain Adjustment capability in the legs of the ramps.

SAFETY FEATURE:

The front edge of our ramps has 2 x PEG POINTS so you secure the ramp on grass or gravel. Normal Tent pegs will considerably increase stability and removed movement. These may help when using a Pump Roller attached to the ramps in all modes.



SUITABLE FOR SKATEBOARDS and SCOOTERS

Progression ramps and Pump Rollers can be used with Skateboards and Scooters with the OPTIONAL Skate Plate installed. This Galvanised plate can be retro fitted. Once installed it can be adjusted and placed in transport / storage mode



TABLETOP MODEL WEIGHT:

- APPROX PUMP ROLLER WEIGHT – 19 kgs

SAFE OPERATION!

Once you are familiar with all the parts you can set up, fold and pack PROGRESSION ROLLER in 5 minutes. YOU MUST ALWAYS check the components are bolted tightly together to prevent the Tabletop from failing / folding or collapsing. Please lift your Roller into place with two people. Dragging the Ramp and Roller will damage components. Be very careful not to create situations where LEVERAGE between the Roller and Ramp (s) could damage the joining plates and surface.

The Roller has an OPTIONAL and strong Vinyl Carry Bag which has webbing strap points on the front you can use for attaching clothing (you will need to add elastic or similar). Lift the bag using the central lifting loop or both handles to mount on your back. The load / weight on one strap alone may rip the stitching. We do not recommend children under 16 carry the bag on the back OR set up the Roller.

WARNING – These ramps have moving components that can cause a finger entrapment. Under 16's should be supervised when assembling, erecting or changing the mode of the ramp.

The Ramp has many MOVING PARTS which means finger entrapment is a significant risk. Always unfold / adjust / store with care. Once again under 16's should not set the ramp up. We advise packing, unpacking and transporting the ramp with two people to avoid manual handling injuries.

DESIGNED FOR:

- Riders, clubs and coaches on all types of bikes - Heavy use including E Bikes.
- Safe Working Load is 150 Kgs – Dynamically Tested to over 350 Kgs
- Bolt Torque setting is 12 Nm

SAFE USE AND PPE:

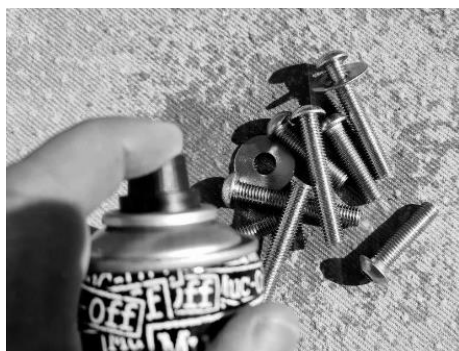
Always wear a full face helmet, gloves and knee pads when jumping. We also recommend back protection and a neck brace. Ensure adequate fall space all around with no surrounding impact surfaces like fences, trees, vehicles or roads. Keep spectators clear. Locate your ramp / features on flat even ground. Take your time and follow all the user instructions carefully for max strength. Built confidence before trying higher jumps or obstacles. 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 Sender Product 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 the ramp around. It should be LIFTED into place to prevent premature deterioration.

MAINTENANCE:

When you assemble your ramp please use silicone spray to protect and lubricate the bolts. Follow the safety 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 Tabletop if you find any damage until you seek further advice from support@sender-ramps.com. Additional notes at the end of this guidebook.

INSTALLATION EQUIPMENT REQUIRED:

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

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

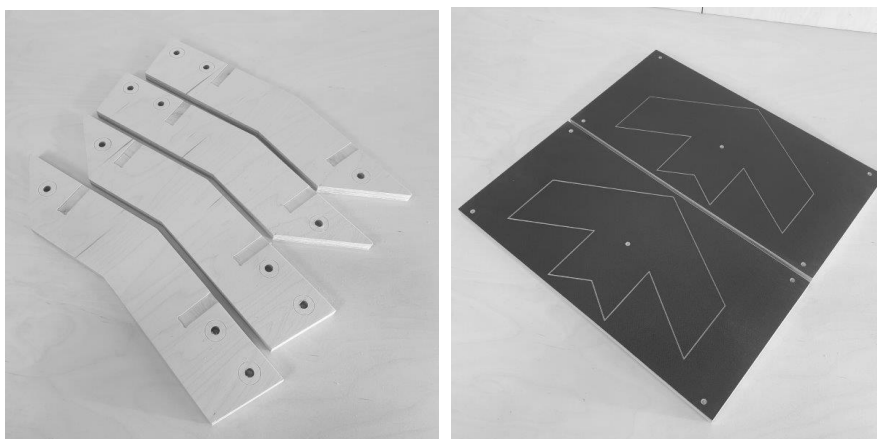
SENDER PROGRESSION PUMP ROLLER ASSEMBLY

REFRESH KIT: A Refresh KIT will be available in our shop for components in contact with the ground subject to the most wear and tear.

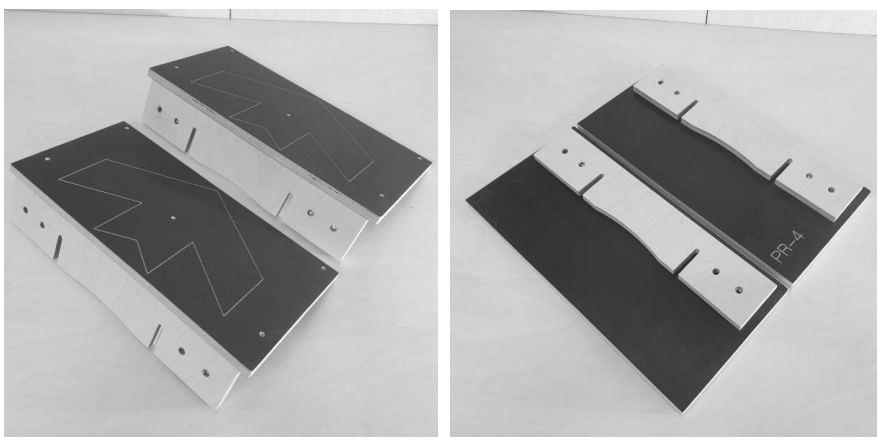
ROLLER COMPONENTS:



2 x JOINING BLOCKS – 4 x ROLLER FEET – 4 x CROSS BATONS / SUPPORTS



4 x SIDE PANELS – 2 x ROLLER SURFACES WITHOUT HINGED PLATES



2 x SURFACES WITH HINGED AND PRE FITTED PLATES

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 Drill Driver
- 1 x Impact Drill Driver
- 1 x Pozi 2 Hand Screw Driver
- 1 x 4 mm Drill Bit
- 1 x TX25 Driver Bit
- 2 x 600 mm Long Quick Wood Clamps
- 1 x 6 mm Hex Key

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

PUMP ROLLER FIXINGS:

- 28 x TX25 Screws
- 16 x T Nuts
- 32 x T Nut Screws
- 4 x Hinges (Installed)
- 24 x Hinge Screws (Installed)
- 8 x M10 x 35 mm Countersink Bolts (Joining Blocks)
- 8 x M10 x 40 mm Button Head Bolts (Feet and Mounting Bolts)
- 8 x Washers

ASSEMBLING YOUR PUMP ROLLER

STAGE 1: Time to assemble approximately 1 – 2 Hrs

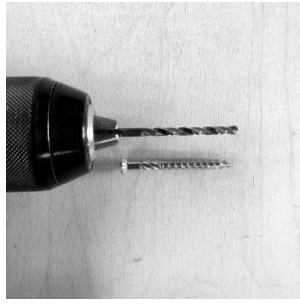
Select all the components with 13 mm holes through the plywood. Lie them on a flat surface so you can see ALL of the CIRCLE / ROUND Markers around the holes. Place the T nuts into **ALL CIRCLED** Holes ONLY!

Place the Small Screws into the holes in the T Nuts and fix them to the Plywood. The Screws MUST be placed VERTICALLY!

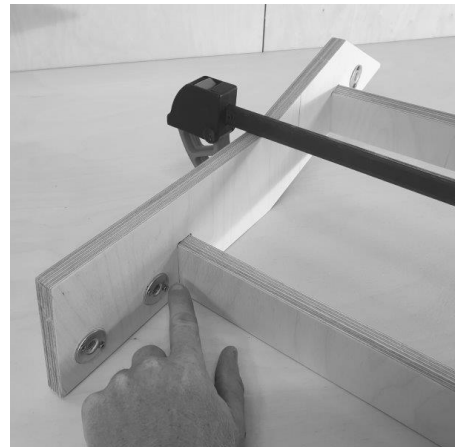


STAGE 2:

In this stage we will create the Substructure for your Pump Roller. Take the 2 x Side Panels and 2 x Cross Batons. Place the Cross Batons in the Pockets inside the side Panels. Use a Quick Clamp to hold the structure together. It is important that you follow the sequence described. Place the 4 mm Drill Bit beside a TX25 Screw and ensure that the drill bit will make a hole the same length as the TX25 x 50 mm screw.



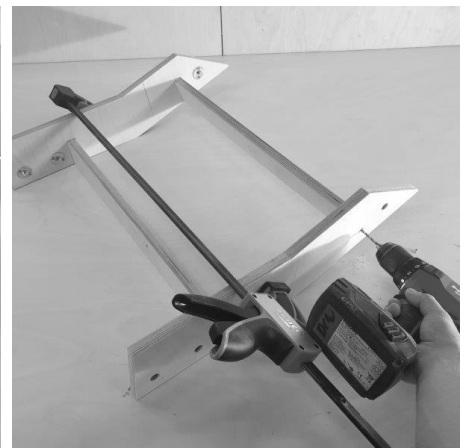
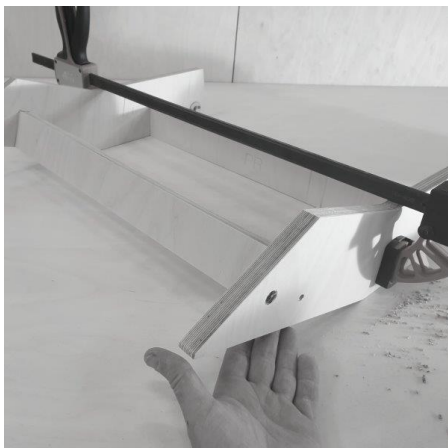
WARNING! YOU MUST DRILL EACH HOLE BEFORE FIXING COMPONENTS WITH A SCREW. FAILING TO DO THIS WILL SPLIT THE PLYWOOD. WE BUILD HUNDREDS OF RAMPS AND NEVER HAVE SPLIT COMPONENTS! DO NOT SKIP THIS PROCESS.



SIDE PANELS AND CROSS BATONS – CLAMPED STRUCTURE – CROSS BATONS IN POCKETS



You can clamp the structure together as shown or flip the parts over (Curve Down) and clamp from the other side. Start at the vertical end of the side panels. Check that the cross baton is flush with the edge of the side panel. Drill through the marker point in the side panel. Secure this baton with a 5 x 50 TX25 Screw. Turn the structure around and repeat on the other side of the baton.

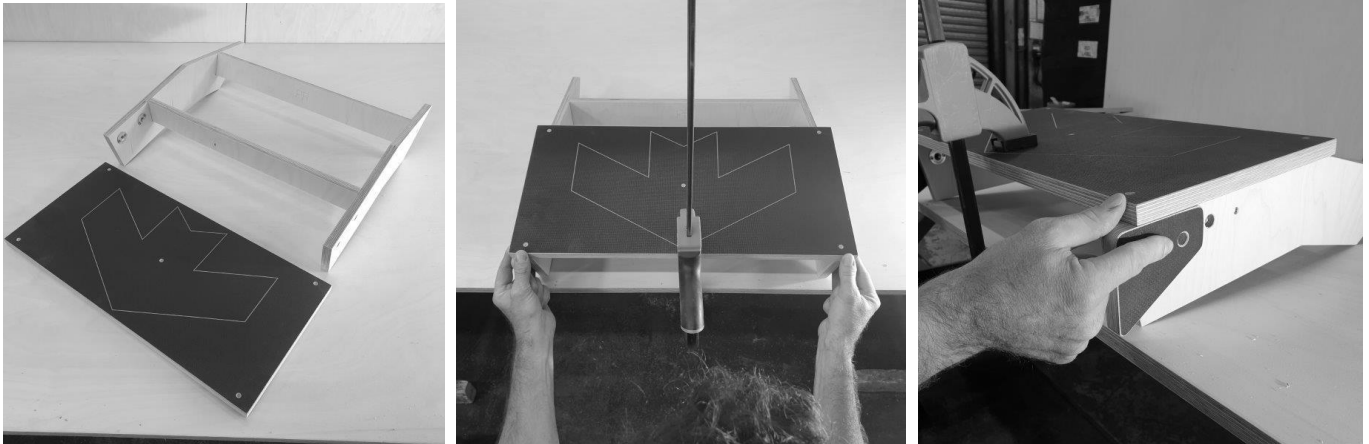


At the angled end of the Side Panel, check that the cross baton is flush with the edge of the side panel and drill through the marker point in the side panel. Secure this baton with a 5 x 50 TX25 Screw. Turn the structure around and repeat on the other side of the baton.

Repeat this process to complete the SECOND Substructure.

STAGE 3:

Turn one of the substructures over so you can see the top edge of the batons and side panels. Take surface (PR2). This is one of the Pump Roller Surfaces WITHOUT the hinged end plate CODE PR2 – PR3. Lie PR2 on top of the substructure. Make sure the arrow on the surface points to the SQUARE END of the substructure as shown below.

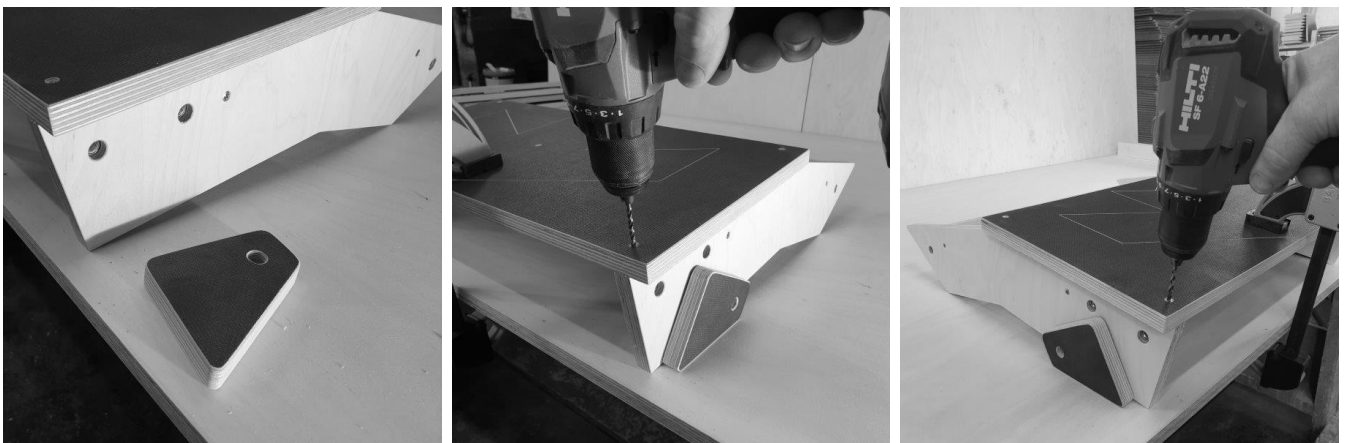


USE THE PUMP ROLLER FEET AS SPACER BLOCKS TO HELP ALIGN THE SIDES AND SURFACES. FAILURE TO COMPLETE THIS PROCESS ACCURATELY MAY PREVENT THE TABLETOP FROM FUNCTIONING PROPERLY AND MISSALIGN THE SURFACES IF BOLTED TOGETHER! THE BOLT PLATE MIGHT NOT WORK!

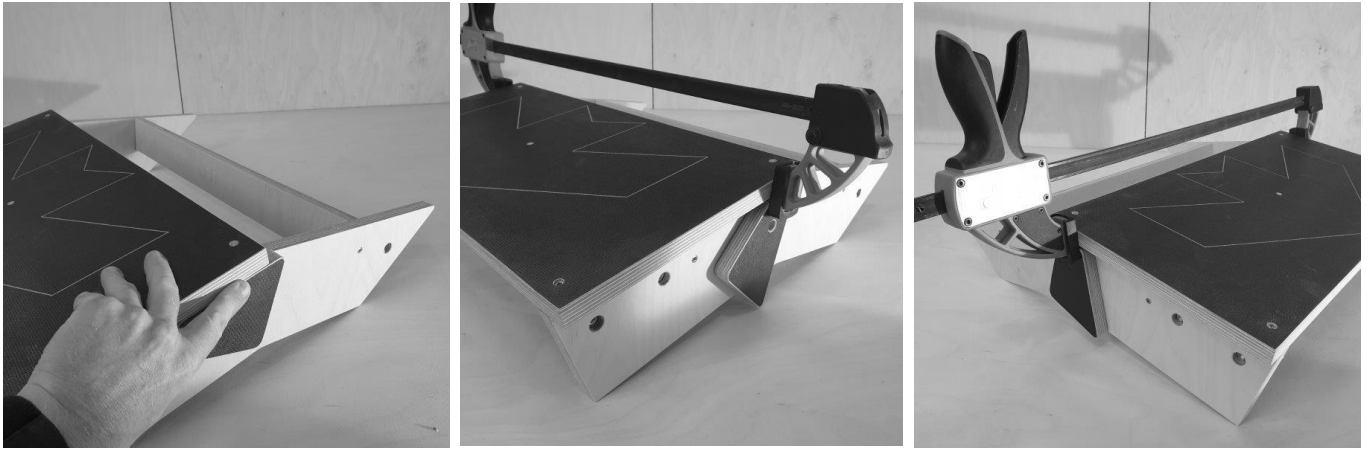
Pull the structure to the edge of the work table so you can lightly clamp the parts together. You must be able to manipulate the parts. **Use the Feet as spacers to align the surface and substructure!** Place the foot blocks underneath the surface and flush against the side of the substructure.

IT IS VERY IMPORTANT THAT YOU TAKE YOUR TIME AND BE PATIENT WHILE YOU ALIGN THE SURFACE AND SUBSTRUCTURE

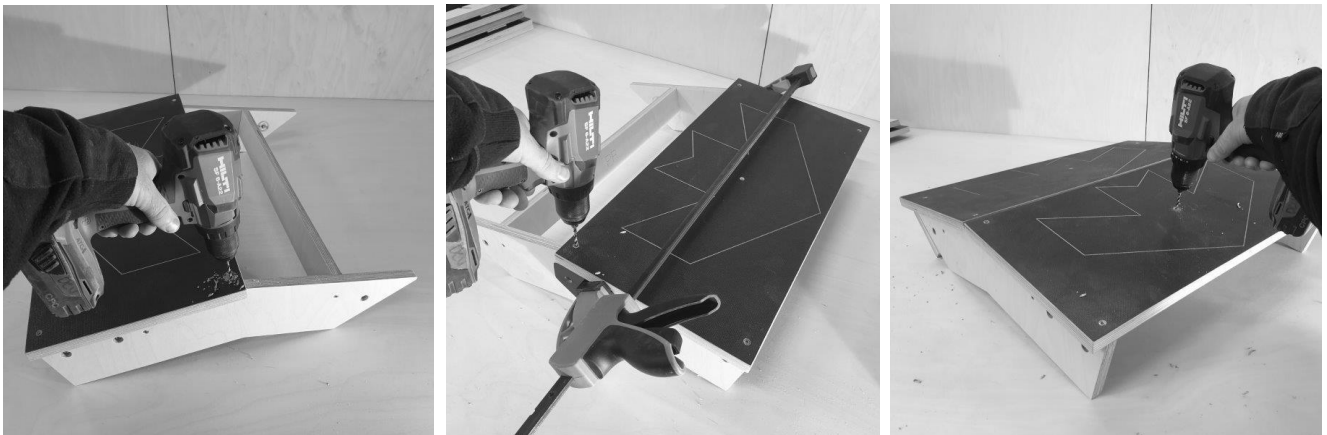
BALANCE and EQUALISE the components by feel and sight so that the surface is sitting EQUALLY above the Substructure. It is normal that the substructure might be 0.5 to 1 mm inset from the Surface when using the blocks as a guide. You will need to MAKE MICRO ADJUSTMENTS by continually checking both sides. You may find it easier to secure the surface to the substructure using 2 x Clamps located closer to the edges rather than one in the middle. When you are ready tighten the clamp to hold the position. Drill through the marker points on the ramp surface above the SQUARE ends of the side panel. Secure with TX25 Screws.



Turn the structure so you can easily access and secure the opposite LONG edge of the surface. Use the foot blocks to balance and equalise the surface on the substructure. A clamp can be extremely useful and hold the surface and blocks in place.



Drill through the marker points and secure with TX25 Screws. You may need to move / rotate the clamp to allow access to these fixing points.



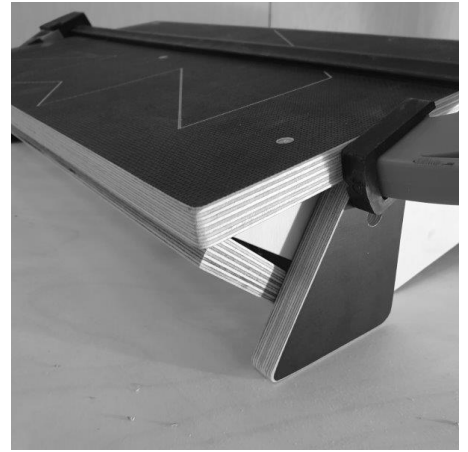
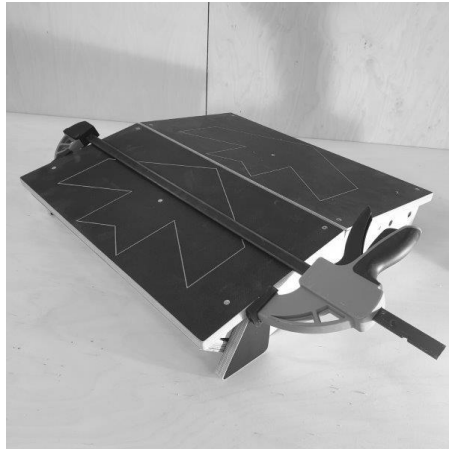
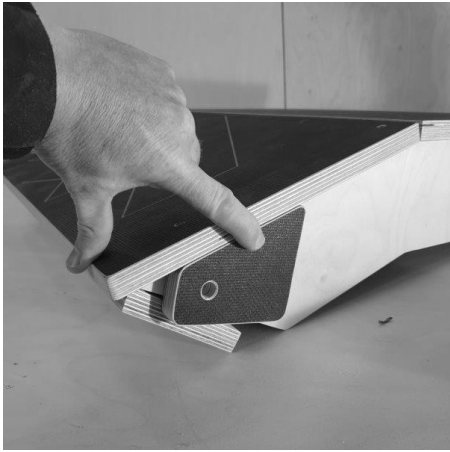
There is an additional screw marker point in the centre of the surface. Drill perpendicular to the surface and secure with a TX25 Screw. If you drill at an angle the drill bit may come out the side of the baton!

STAGE 4:

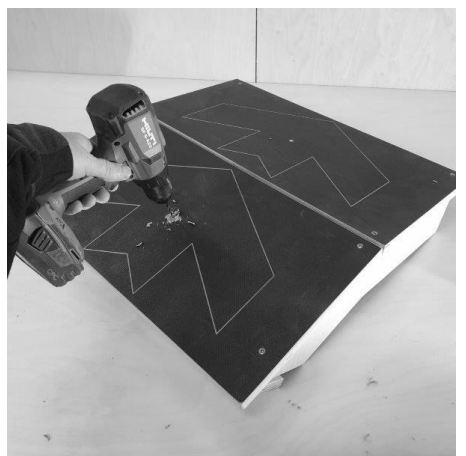
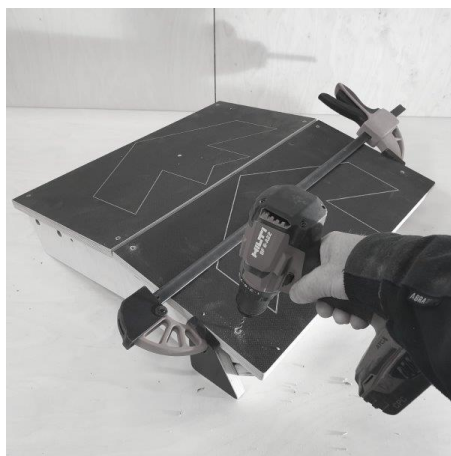
Take PR1. This is one of the surfaces which has the end plate attached with hinges. Butt the non-hinged end of the surface against the surface already installed on the substructure. The ARROWS should point the same direction! Towards the middle of the Roller. Use a clamp to hold PR1 to PR2 at the join. Drill through the marker points and secure with screws.



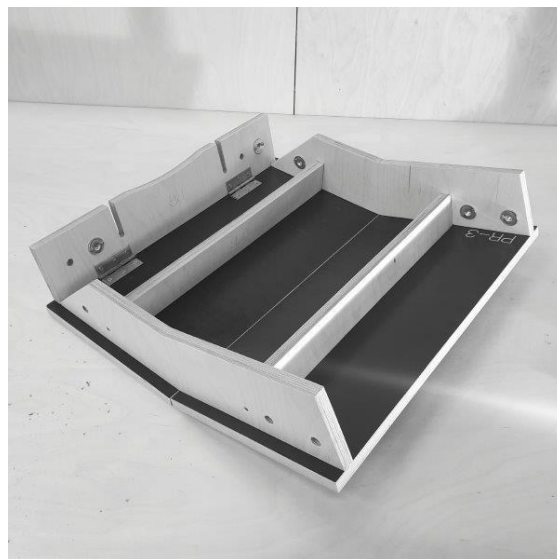
Turn the structure so you can easily access and secure the opposite LONG edge of the surface. This is the end with the hinge plate and ANGLED side panels. Use the foot blocks to balance and equalise the surface on the substructure. A clamp can be extremely useful and hold the surface and blocks in place.



Drill through the marker points perpendicular to the surface and secure with TX25 Screws. You may need to move / rotate the clamp to allow access to these fixing points.



There is an additional screw marker point in the centre of the surface. Drill perpendicular to the surface and secure with a TX25 Screw. If you drill at an angle the drill bit may come out the side of the baton! You have now complete the assembly of HALF a Pump Roller! Repeat this process to complete the other end / side. This will require Surfaces PR3 and PR4

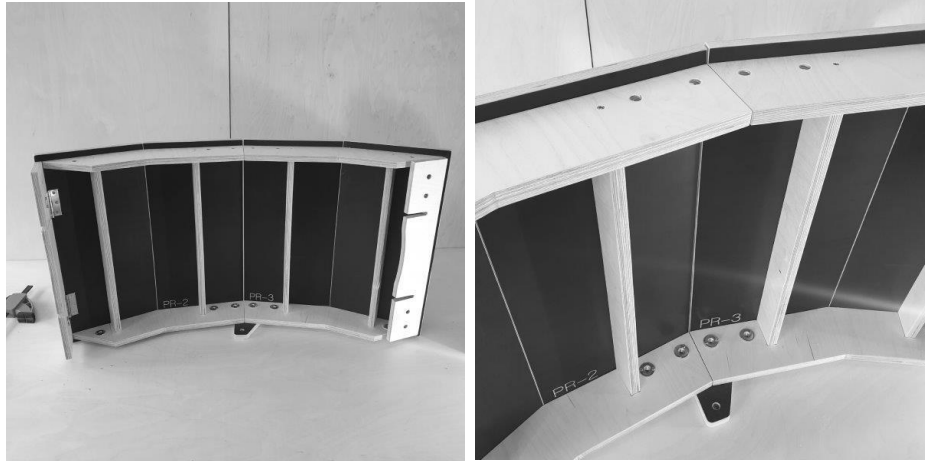


RE-JOINING YOUR ASSEMBLED PUMP ROLLER

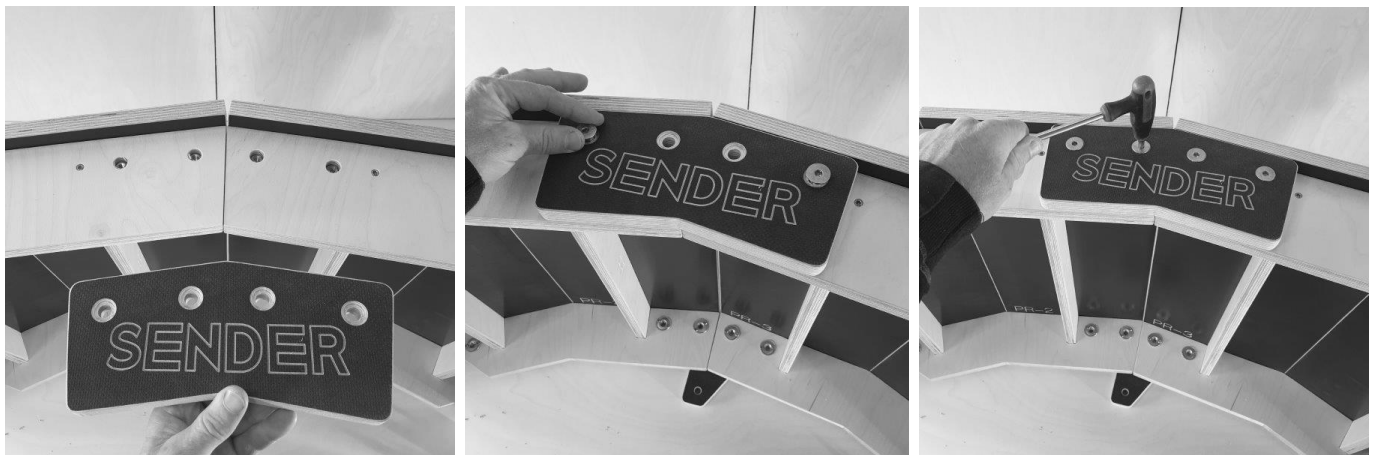
You may have purchased your Pump Roller Assembled and it has arrived in what we call COMPACT shipping / transport and storage mode OR have just finished the stages above. You must follow these steps to join the two parts together. Place the two parts together on a flat surface. Stand the two parts on one edge / side as shown below.

The two parts may not sit evenly. You can use one of the joining block OR one or two of the foot blocks as shown to help align the parts. They sit under the side panels. Take one of the curved joining plates with 4 holes and align this over the holes in the side panels. Place 4 x M10 x 35 Countersink bolts into the holes by finger and then tighten the bolts to 12 Nm.

NOTE: You should place ALL of the 4 x Bolts BEFORE tightening. You may find it difficult to align the bolts / catch the thread if you tighten them one at a time! This could lead to cross threading.



Carefully turn the PUMP ROLLER over and repeat on the other side tightening the fixing bolts to 12 Nm. Before proceeding check that all screws and bolts are secure. Your PUMP ROLLER is now ready to place between two ramps of the same height.



INSTALLING FEET ON YOUR PUMP ROLLER

Each Pump Roller has 4 x feet. Use the Bolt hole located nearest the angled end of the Pump Roller (at each end) and on both sides. Secure the feet with an M10 x 40 mm Button Head bolt with a large washer.



Once Installed, the Feet can PIVOT out of the way and be placed in storage mode. Please note that if you attach your Roller to the end of a Tabletop you MUST remove one pair of feet.

These feet can rotate and sit flush with the ground. The final position of the feet depends on the mode and height of ramp. The ground / terrain may also dictate the position of the feet. Once the Roller feels secure and solid tighten the feet to 12 Nm before use.



CREATING A TRAIL OBSTACLE

This is the easiest feature to create and why we supply 4 x feet. Simply loosen all 4 feet. Turn the Roller over and place on the ground. Swing the feet out of storage mode so they are flush with the ground. Tighten them all to 12 Nm before use. You can buy additional feet if they wear out.



JOINING YOUR PUMP ROLLER TO A RAMP TO CREATE A PUMP ROLLER

Your Pump Roller will work on CLASSIC – CORE and PROGRESSION RAMPS. Using our Progression Range Ramp's you can create a Roller at any height! You can also use the Roller with ANY of the transitions Modes (Curved / Curved Plus OR Straight). However, the best position for the smoothest curve is **ALWAYS CURVED PLUS SETTING!**

The example below uses 2 x ROOKIE PROGRESSION RAMPS at 200 mm High in CURVED PLUS MODE.

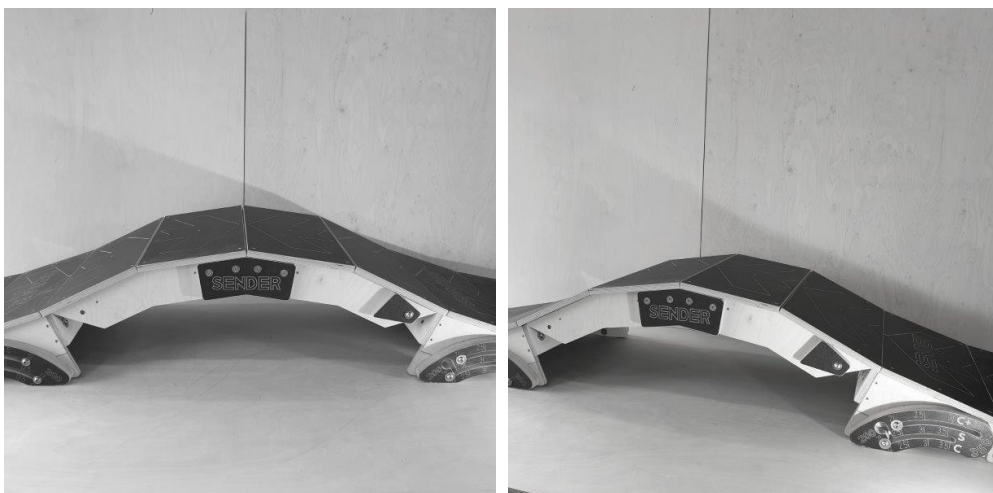
Place 2 x M10 x 40 mm Button head bolts into the back of your ramp. These should have 2 x Washers. Leave these protruding so it is easy to hook the Roller onto the Bolts. Allow the V Slots on the Hinged Back plate to sit on the bolts. Leave the bolts loose. This will create a STEP in the surface at this stage between the roller and ramp (shown below). This will be fixed at the next stage.



Hook the Roller onto ANOTHER / A SECOND Ramp of the same height and transition (at the other end) and allow the Roller to rest on the loose bolts. LIFT the ROLLER surface at the FIRST join (2 x people make this easy). This will create a gap between the bolt and the V of the hinged back plate but allow the surfaces to become level (the same height). THIS IS NORMAL! Tighten the bolts to hold the position where the surface of the Roller and Ramp at the JOIN are equal. It is important to use the Washer on the bolt as this spreads the force of the bolt and will prevent damage to the V slot! Tighten to 12 Nm.



Repeat the process of equalising the surfaces at the other end / join (Between the Roller and Second Ramp). Tighten the Bolts. Then check all the bolts on your ramps and roller! Your Roller is ready to use!



INCREASING THE HEIGHT OF YOUR ROLLER

The example below uses 2 x ROOKIE PROGRESSION RAMPS at 350 mm High in CURVED PLUS MODE.

Loosen the bolts and remove your PUMP ROLLER. Use a bigger CLASSIC OR CORE Ramp OR adjust the legs on your PROGRESSION ramp to the new height. Repeat the process above to fit the Roller. You will need to level / equalise the surface of the ramp with the surface of the PUMP ROLLER. Once level you should check and tighten all bolts before use.



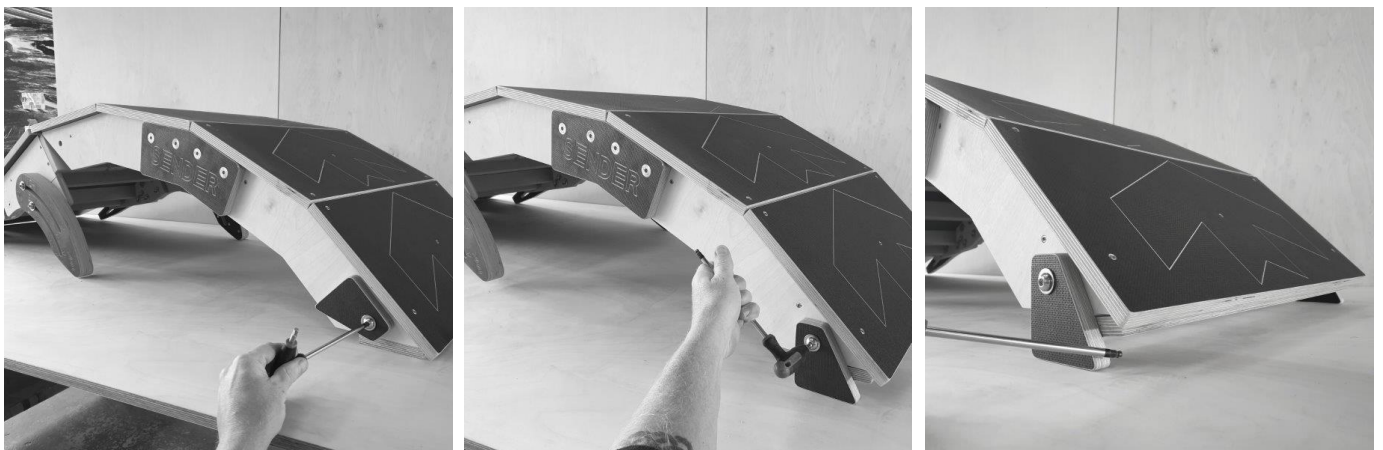
JOINING YOUR PUMP ROLLER TO A RAMP - CREATE A COMPRESSION ROLLER / CASEPAD

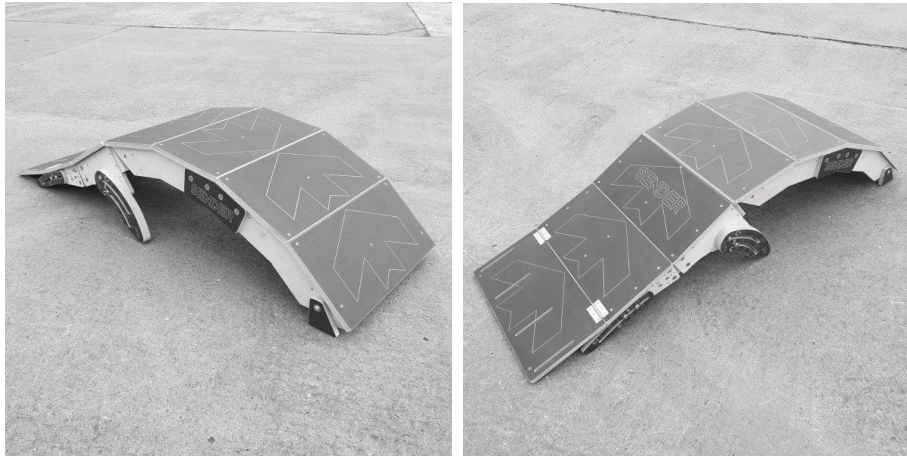
In this MODE your Ramps must be set at / or between 350 and 500 mm HIGH. You can use a Classic / Core OR Progression Ramp. Wind 2 x M10 x 40 mm Bolts into the back plate of your ramp. Hook the Pump Roller onto the Bolts. Lift the Pump Roller until the surface of the ramp and roller are level / equal. Tighten the bolts underneath to 12 Nm. It is important to use the Washers because they spread the load of the bolt head. You may find there is a gap between the end of the V and the bolt.



Loosen the two feet either side of the Pump Roller. Twist them until the foot is level with the ground. This should lift the edge of the ramp off the ground and prevent damage to hinged plate. You should never have the hinged plate taking the load or impact from a rider. Tighten the bolts to 12 Nm. Your Pump Roller is now a Compression Roller OR Case Pad!

If you choose to use the Roller as a Case Pad we recommend hooking the roller onto a ramp in straight mode. This will give you a longer rolling surface to land on!





ATTACHING YOUR PUMP ROLLER TO A TABLETOP – ONLY SUITABLE AT 500 mm!

You will need 1 x Pair of Tabletop / Pump Roller Joining Blocks to create this feature.

Fix your 500 Tabletop to your 500 Ramp as normal. YOU MUST set both the Tabletop and Ramp at 500 mm high! Make sure the Legs on the Tabletop are secure. With the help of a second person hold the back Plate of the Tabletop and Back Plate of the Pump Roller together so you can align the T Nuts and Bolt Holes.

Use 2 or 4! M10 x 40 mm Button Head Bolts to secure the plates together at the locations shown. IT is always a good idea to make sure bolts are lubricated with SILICONE SPRAY or similar. Tighten the bolts to 12 Nm.



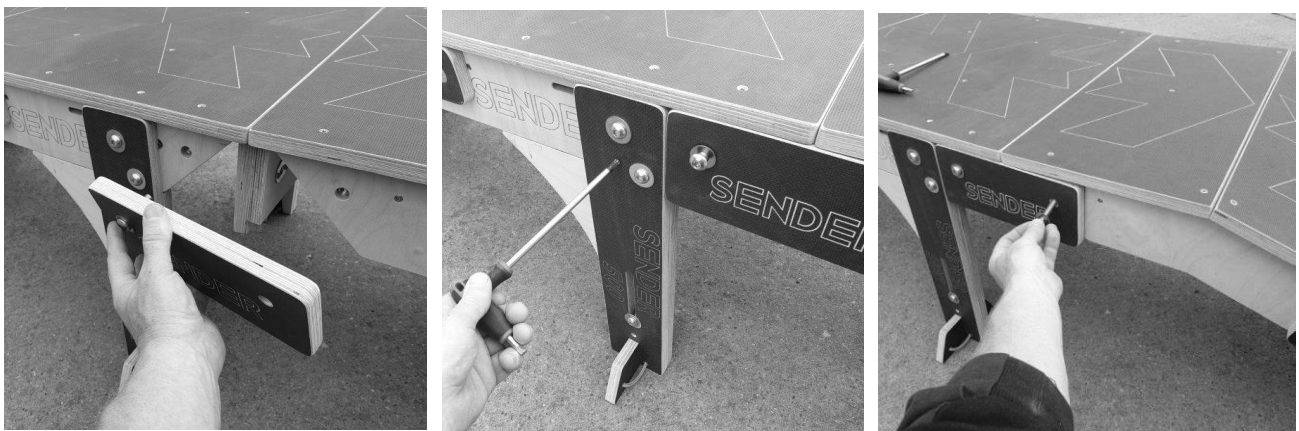
IMAGES SHOW THE 4 POSSIBLE BOLT / PLATE OPTIONS



Loosen the two feet either side of the Pump Roller. Twist them until the foot is level with the ground. This should lift the edge of the ramp off the ground and prevent damage to hinged plate. You should never have the hinged plate taking the load or impact from a rider. Tighten the bolts to 12 Nm.



Loosen the bolts on the Legs of the Tabletop. This will create some additional space for the Tabletop / Pump Roller joining blocks. Use an M10 x 40 mm Bolt to fix the Joining Block to the Tabletop first. Take another bolt and fix the otherside of the Block to the Pump Roller. There is slots in the block which should give you some adjustment. Check the join between Tabletop and Roller is level. Repeat to attach the block on the otherside of the table. Tighten the bolts to 12 Nm



Check all bolts on all Components before use. Your Ramp – Tabletop to Roller is now ready to use



STORING YOUR ROLLER – KEY POINTS TO REMEMBER

Your Roller 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

COMPACT MODE:

You can easily unbolt your Roller into two sections for storage and transportation. See Image Below

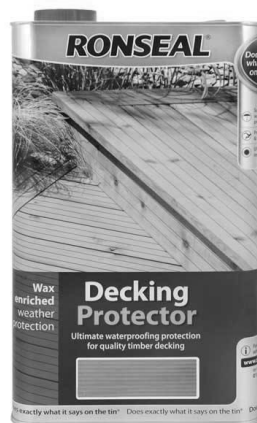


SENDER TRANSPORT BAG

Our Transport bags are manufactured in the UK. They are strong but not indestructible. The webbing straps are double welded but you must avoid picking the ramp up with one strap! Use the Lifting Loop and a strap at the same time to mount the ramp on your bag with increase the life span of the bag.

TREATING YOUR RAMP WITH A PRESERVATIVE

It is not essential to use a preservative but it will greatly increase the longevity of your ramp 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.



RONSEAL WATER BASED – NATURAL COLOUR OR CLEAR

DISPOSING OF YOUR RAMP

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 keep 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