

SENDER FLY RAMP - 16 PLUS RAMPS IN ONE



PLEASE TAKE EXTREME CARE OPENING YOUR FLY RAMP – DO NOT USE A KNIFE! TAKE THE OPPORTUNITY TO OBSERVE HOW THE FLY COMPONENTS FOLD AND STORE!

Thank you for buying our FLY RAMP. It is the most adjustable ramp ever designed and manufactured. It has been a long term project that has stretched our experience and knowledge of geometry and woodworking. Each part has been carefully considered for weight and strength. Our solution provides you with EVERY RAMP you would ever need to progress and LEARN to FLY. Welcome onboard SENDER AIRWAYS;)

Build confidence with ease – Gain height in small increments and become familiar with straight and curved take offs!

MODULAR:

In addition, our ramp integrates with the rest of the SENDER BOLT ON Range at 350 Height! This is the perfect coaching height where our Pump Roller, Compression Roller, Tabletop and Seesaw Booster Kit all work perfectly.

The FLY can be used as a take-off ramp which is Straight or Curved but only as a landing ramp in STRAIGHT MODE and <u>NEVER</u> with the extension attached! The extension <u>is not</u> designed to take impact loads.

The ramp has **TERRAIN ADJUSTMENT**. Once set at a specific height you can micro adjust legs to stabilise. The ramp is best used on grass but can be used on tar or concrete. However, the severity of landing and risk factor will greatly increase.

RAMP RANGE / ADJUSTMENT:

- STRAIGHT 350 400 450 500 550 600
- CURVED 400 450 500 550 600 650 **690 725 **760 800 extension component must be fitted / used

SAFE OPERATION!

Once you are familiar with all the parts you can set up, fold and pack THE FLY in 5-10 minutes or less. You can easily adjust the ramp to the next height in a matter of minutes. However, YOU MUST ALWAYS check the components are bolted tightly together to prevent the ramp from failing / folding or collapsing. Some parts have SKULLs to indicate the importance of tightening bolts.

^{**} These heights have marker holes but to avoid clutter on the legs (clear markings) we have left it for you to go freeride and set the legs between the next and previous marker numbers to create your own take off!

Lift your ramp into place with two people. Dragging will damage the feet!

The Ramp comes in a strong Vinyl bag which has webbing strap points on the front you can use for attaching clothing (you will need to add elastic or similar). The Ramp is 20 Kgs so lift the bag using the central lifting loop or both handles to place on your back. The load on one strap may rip the stitching. We do not recommend children under 16 carry the bag on the back OR set the ramp up.

DANGER

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 heavy manual lifting injuries.

DESIGNED FOR:

Suitable for riders, clubs and coaches on all types of bikes - Heavy use including E 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. THE FLY can be landed to FLAT or better use a grass downslope as the height increases. Ensure adequate fall space all around with no surrounding impact surfaces like fences, trees or vehicles. Keep spectators clear. Locate THE FLY on flat even ground. Take your time and follow all the user instructions carefully for max strength. Built confidence before trying higher jumps. Build up slowly and 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 FLY and it will last a life time. We recommend storing the trainer inside after use and carefully drying the trainer 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:

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. <u>Under no circumstances use Varnish!!</u> Check for damage before and after each use and retire the FLY if you find any until you seek further advice from support@sender-ramps.com

INSTALLATION EQUIPMENT REQUIRED:

 1 x 6 mm HEX KEY (Found ON Your Bike Maintenance TOOL!) – SUPER Fast with and Impact Gun with 6 mm Attachment.

Your FLY comes assembled ready to unfold and start jumping. WE RECOMMEND YOU OBSERVE AND UNFOLD / UNPACK CAREFULLY THE FIRST TIME PAYING ATTENTION TO THE STORAGE SEQUENCE. IT IS EASY WHEN YOU KNOW HOW!

Components – Loose and Fixed:

- 1 x Transport Bag
- 1 x Transport Strap
- 1 x FLY RAMP
- 1 x Back Plate
- 2 x Cross Batons
- 2 x Curved Ramp Stabilisers





RAMP SURFACES AND SIDES - BACK PLATE



CURVED RAMP SETTING STABILISERS – CROSS BATONS

1: Remove the packing carefully <u>without using a knife</u> in case you cut the bag. You will find additional packaging not shown in the images. Pull the Back Plate from the bag first. Lie the bag on one side or hold the Blue Strap and pull the ramp from its bag vertically. Beware as there are additional loose parts inside the folded ramp.



2: The FLY EXTENSION is bolted to the inside when the ramp is folded. Undo these bolts with a 6 mm Hex Key (On your bike tool).



3: Unfold the ramp until the Ramp Surface is exposed. Please take care when turning the ramp over not scratch or mark the take off! The Ramp is now lying face down so you can see the sides. It is always best to set the ramp up for use in the EASIEST 350 Straight MODE FIRST! At least until you are familiar with the set up process. First we will join the two lower SIDE PANELS using the BIG LOCK BLOCK with the SKULL.



The BIG LOCK BLOCK is in Storage Mode. You need to loosen the transit bolt and turn it to match the bottom edge of the ramp. Remove the opposing fixing bolt and replace it through the block. These BLOCKS have a LOCKED and ACTIVE MODE. Push the Block so it locks onto the Bolt and tighten the bolts at both ends.



IMAGE BELOW shows LOCKED and ACTIVE MODE. The washer has been removed for purposes of ILLUSTRATION but should be in place to spread the load of the bolt head.



4: Next go to the SMALL LOCK BLOCK and repeat this process. Remove the block from Storage mode by loosening the bolt and turning the block to match the edge of the ramp. Remove the opposing bolt and replace through the slot and tighten in LOCK MODE.



You may need to hold the sides together FLUSH and LEVEL to get a good connection between the BOLT and T NUT and avoid cross threading!





5: The NEXT PART IS VERY IMPORTANT FOR SET UP AND STORAGE! The LONG BACK LEG needs to be turned around on the TRANSIT BOLT. On the smooth backface there is a REMINDER – <u>STORE</u> plus <u>DIRECTIONAL</u> arrows. Loosen the bolt enough to enable the leg to clear the Extension bolts and turn almost 180 degrees. At this point the LEG will fit in the slot and slide so the angled top edge butts against the underside of the ramp surface. Tighten the Bolt.



You will see 4 Bolts and Washers at the end of the ramp on the Largest Side Panel. The bottom two nearest the join are for the CURVED Stabilisers. The Top two are for the CURVED Extension.

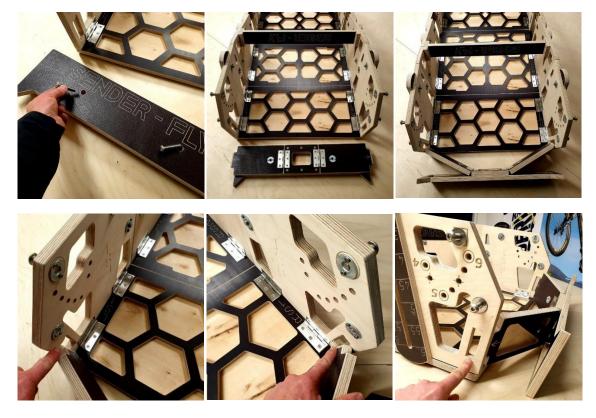


6: Now repeat the process and join the OPPOSITE SIDES together with the LOCK BLOCKS. Once Complete pull the sides up so they sit vertically. Take one of the Cross Batons and place this through the hole in the smallest side. Push the baton through the

opposite hole and pull the tooth into the slot / block. This FIT MAY VARY depending on temperature and humidity. IF the ramp has been outside in the wet the baton will SWELL. You may need a RUBBER MALLET to carefully knock the baton at both ends until it can be removed. You must DRY all components inside and store dry! The SENDER TEXT must face the BACK / HIGHEST point of the ramp. IF you remove at an angle you could snap the TOOTH!



7: Take the Back Plate and remove the bolts. Place this face down as shown with the TEETH Towards you. Unfold / Open the Wings and locate the BLOCK ENDS into the SLOTS on the sides. Press / Push the middle of the back plate so the Ends go into and through the slot in the sides. It is important not to over force these or you could damage the ramp. If the ramp is wet the fit will be tight! Take Care.



Check the sides are flush with the Back Plate. Your FLY was PRE ASSEMBLED and CHECK for full function in the Factory! Everything fits and works perfectly BEFORE Packing.



Replace the two bolts (NO WASHERS) in the back plate and tighten with the 6 mm HEX Key.



Turn your Ramp over and Check ALL BOLTS. ALL LEGS should be located / pushed up against the ramp surface at the end of the slot for the 350 Setting. IF you look at the markers you will see them ALL AT 350 STRAIGHT MODE. YOU ARE READY TO START JUMPING ©

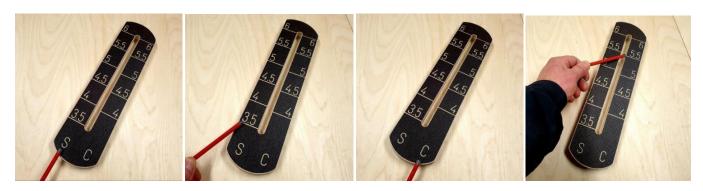
IMPORTANT NOTE! – 350 STRAIGHT MODE CONNECTS WITH OTHER SENDER FEATURES. YOU WILL HAVE TO USE 60mm BOLTS TO MOUNT FEATURES TO THE BACK OF THE FLY. THESE MUST BE REQUESTED IF YOU BUY MORE PRODUCTS. PLEASE CALL OR EMAIL FOR HELP.

ADJUSTING YOUR FLY RAMP

UNDERSTANDING THE MARKINGS

Once you adjust the ramp a few times it will become a lot easier and faster! The most important point is to CHECK and TIGHTEN all bolts BEFORE TAKE OFF or LANDING. Each LEG has an S for STRAIGHT and a C for CURVED. Each FIXED position has a marker line and height. In the images below you will see as an illustration with a STRAIGHT 350 OR a CURVED 550. The number relates to the Approximate Height of the LIP of the Ramp from the ground in millimetres.

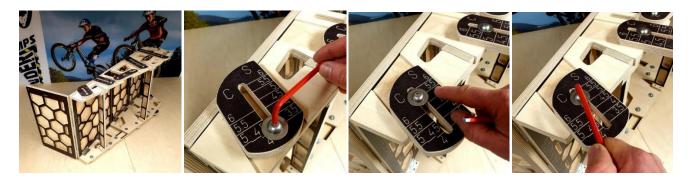
It is possible to alter the legs to suit your OWN take off (FREERIDE MODE). The Curved settings can be made Steeper or Sweeter.



CREATING A 550 STRAIGHT and then SWITCHING TO A 550 CURVED

1: Creating a 550 Straight Ramp is EASY. Turn the ramp on its side so the legs on one side are free to move. You can use the end ramp surface and turn it to 90 degrees to create a stabiliser. Loosen the Bolt on the (FIRST) SMALLEST Leg so it can be / pushed /

pulled in the slot. Please note that it may be tighter IF the wood is damp and has swollen. Pull the bolt in line with the 5.5 (S) Marker. Tighten the Bolt.



Loosen the Bolt on the SECOND Leg so it can be / pushed / pulled in the slot. Please note that it may be tighter IF the wood is damp and has swollen. Pull the bolt in line with the 5.5 (S) Marker. Tighten the Bolt.



Loosen the Bolt on the THIRD Leg so it can be / pushed / pulled in the slot. Please note that it may be tighter IF the wood is damp and has swollen. Pull the bolt in line with the 5.5 (S) Marker. Tighten the Bolt.



Loosen the Bolt on the FOURTH Leg so it can be / pushed / pulled in the slot. Please note that it may be tighter IF the wood is damp and has swollen. Pull the bolt in line with the 5.5 (S) Marker. Tighten the Bolt.



CHECK that BOTH small and large LOCK BLOCKS are tight and in the LOCK Position! Turn the ramp over so the legs on the other side are free to move. Use the Surface as a stabiliser and be very careful when rotating not to damage the surfaces. It is better to LIFT the ramp and sit it on a protective surface. REPEAT ALL the processes above until all Legs are set to 550 STRAIGHT. LIFT / TURN the Ramp over and CHECK ALL BOLTS are TIGHT. You are ready to JUMP at 550 STRAIGHT!

STRAIGHT SETTINGS ARE EASY – SET THE BOLT ON EACH LEG TO THE NUMBERS ON THE STRAIGHT SIDE OF THE LEG!

350 - 400 - 450 - 500 - 550 - 600 Always make sure the Lock Block are engaged



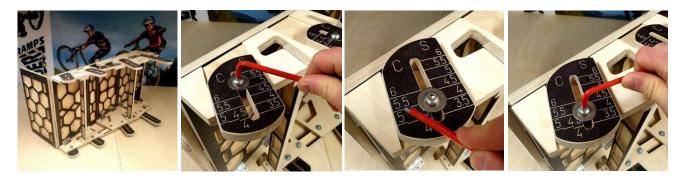
TERRAIN ADJUSTMENT

In the images below fake rocks have been used to ILLUSTRATE Terrain adjustment. In reality the adjustments will be small. You should NOT place the ramp on rocky ground. It is better to find a flat even surface to locate the ramp using the PROPER settings. If you need to adjust the ramp to be MORE stable you can make Terrain Adjustments easily by extending or retracting the legs INDIVIDUALLY! If the ground is uneven it may take several adjustments to get the ramp stable and SAFE to use. NEVER USE THE RAMP IF IT IS ROCKING! Standing on the ramp surface is a good way to test stability.

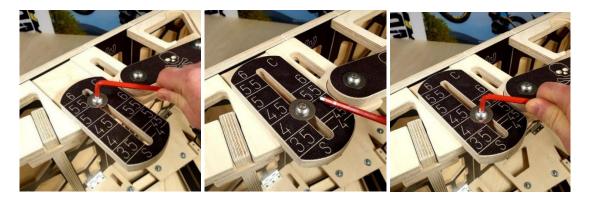


CREATING A 550 CURVED RAMP

2: Creating a 550 CURVED Ramp is EASY. Turn the ramp on its side so the legs on one side are free to move. You can use the end ramp surface and turn it to 90 degrees to create a stabiliser. Loosen the Bolt on the (FIRST) SMALLEST Leg so it can be / pushed / pulled in the slot. Please note that it may be tighter IF the wood is damp and has swollen. Pull the bolt in line with the 5.5 (C) Marker. Tighten the Bolt.



Loosen the Bolt on the SECOND Leg so it can be / pushed / pulled in the slot. Please note that it may be tighter IF the wood is damp and has swollen. Pull the bolt in line with the 5.5 (C) Marker. Tighten the Bolt.



VERY IMPORTANT!
Loosen both the bolts on the BIG LOCK BLOCK and pull the block OUT OF LOCK MODE. Leave this Block Loose just now!



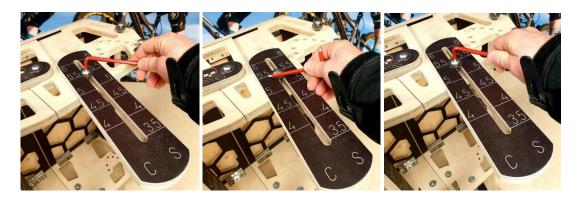
Loosen the Bolt on the THIRD Leg so it can be / pushed / pulled in the slot. Please note that it may be tighter IF the wood is damp and has swollen. Pull the bolt in line with the 5.5 (C) Marker. Tighten the Bolt.



VERY IMPORTANT!
Loosen both the bolts on the BIG LOCK BLOCK and pull the block OUT OF LOCK MODE. Leave this Block Loose for just now!



Loosen the Bolt on the FOURTH Leg so it can be / pushed / pulled in the slot. Please note that it may be tighter IF the wood is damp and has swollen. Pull the bolt in line with the 5.5 (C) Marker. Tighten the Bolt.



CHECK that BOTH small and large LOCK BLOCKS are LOOSE! Turn the ramp over so the legs on the other side are free to move. Use the Ramp Surface as a stabiliser and be very careful when rotating not to damage the surfaces. It is better to LIFT the ramp and sit it on a protective surface. REPEAT ALL the processes above until all Legs are set to 550 CURVED.



LIFT / TURN the Ramp over onto its feet. The LOCK BLOCKS should be loose. **MANIPULATE** the ramp surface so ALL the adjusted legs are touching the ground. Make sure that the Bolts in the Lock Blocks are in the slot or this will not be possible! DO NOT TERRAIN ADJUST AT THIS STAGE. Once you are happy all legs are touching down tighten all 8 Bolts on the Lock Blocks to **FIX THE CURVED POSITION**. Go around and CHECK ALL BOLTS are TIGHT.





FITTING THE CURVED STABILISER LEGS – NO STABILISERS NO JUMP!

The FLY is NOT SAFE TO USE IN CURVED MODE WITHOUT THE STABILISERS FITTED. IT WILL TIP. Fitting is EASY once you are familiar with the system. Take the two CURVED STABILISER LEGS. At the top of the leg is a fixed bolt protruding through the T NUT. This end of this Bolt goes into the hole that matches the height setting you have already set the legs. 5.5 = 5.5 (Cross) Hole

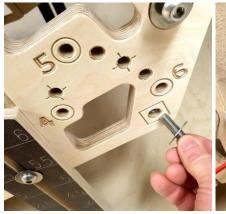


In the image below you will see the Stabiliser Leg Settings. ALL of these markings relate ONLY to the CURVED SETTINGS.

- The Numbers 4 / 5 / 6 are beside holes with a circle around them and relate to the 4 / 5 / 6 (C) markings on the legs.
- The Holes with the Cross Hair over them relate to the Half Sizes 4.5 and 5.5
- The Holes with no marking <u>DO NOT have leg markings</u>. These are settings 5.25 and 5.75. These are used with the Extension to give you additional settings at the HIGHER END Approx 690 and 760 High. Please refer to the table below for the FULL Range of Height Settings available.

The HOLE with the **SQUARE** is **HOME** – THE SECOND SECURITY BOLT ALWAYS GOES INTO THE SQUARE.

In this ILLUSTRATION we are still creating a 550 High Curved Ramp so the end of the bolt in the Stabiliser goes into the Cross Hole between Number 5 and 6. Essentially 5.5 (representing 550 mm high). Place the security bolt through the Stabiliser SLOT and into the hole with the SQUARE as shown below. Tighten the Bolt to secure the leg! Repeat the same for the other Stabiliser on the otherside.









NUANCES OF THE FLY

You may notice that the Stabiliser leg settings have a number 4 BEFORE the 5. This may not seem logical at first sight or a mistake. The geometry is such that the curve created by the movement puts the 4 before the 5! You will see how this works if you try and use this position.



TERRAIN ADJUSTMENT

The stabilisers are now fixed to the ramp at 550 Curved Height and all the legs are set at 550! If the ground is uneven you may need to micro adjust some of the legs.



Getting to this stage will only take a few minutes you are familiar with the system and settings.

CURVED SETTINGS ARE EASY – SET THE BOLT ON EACH LEG TO THE NUMBERS ON THE CURVED "C" SIDE OF THE LEG AND SECURE THE STABILISERS. NO EXTENSION IS NEED FOR THE FOLLOWING RAMP HEIGHTS

400 - 450 - 500 - 550 - 600

FITTING THE RAMP EXTENSION

The Extension is ONLY needed to achieve the height settings of 650 - 725 and 800. We have added a couple of intermediate settings at 690 and 760 (The UNMARKED holes on the Stabiliser Legs). These last two settings (690 / 760) do not have corresponding leg markings to avoid clutter on the legs. You can adjust the Ramp Freestyle for these settings.

The ramp is already set in the EXAMPLE ABOVE as a 550 CURVED RAMP. IF we mount the Extension with the MAIN RAMP at 550 Height we will achieve the 725 Setting. Here is a guide to Extension Use!

- 500 Main Ramp Setting = 650 with EXTENSION
- 550 Main Ramp Setting = 725 with EXTENSION
- 600 Main Ramp Setting = 800 with EXTENSION

Unwind the Bolt on the SKULL Plate (on the Extension) until the bolt end is flush with the back of the T NUT as shown.



Unwind the Extension Bolt on the Main Ramp Side Panels to accommodate the Extension to a gap of 20 / 25 mm. Slot the Extension over the bolt. Push the extension forward until it is flush with the back of the ramp and tighten the bolt. The Washer is on the OUTSIDE face.



IMPORTANT: THE EXTENSION WILL FAIL WITHOUT THE NEXT STEP.

Wind the Upper Bolt until the head is flush with the side of the Extension. Look underneath / behind the ramp to ensure the bolt thread is trapped behind the side panel of the ramp. This stops the EXTENSION TIPPING forward. The lower bolt only = DEATH.



Your Ramp has now been transformed into a 725 High Ramp. BEFORE JUMPING check ALL BOLTS are tight!



The table below shows the Markings and Settings for all the CURVED height Settings with or without the Extension Ramp. You will notice that there is some overlap. For example; you can Attach the Extension with the MAIN RAMP set at the 450 Curved Setting and this will BOOST the height to 600. This will give you a LONGER TRANSITION that just using the Main Ramp to get to 600. A Sweeter Take OFF!

STABILISER MARKINGS LOCATIONS ON THE SIDE PANELS	LEG MARKING HEIGHT CURVED (C) ONLY – WITH NO EXTENSION ON	HEIGHT OF RAMP WITH EXTENSION BOLTED ON
4 - CIRCLE O	400	550
CROSS +	450	600
5 - CIRCLE O	500	650
NO MARK – BLANK HOLE	FREERIDE ½ WAY – 500 – 550 on Legs	690
CROSS +	<u>550</u>	725
NO MARK – BLANK HOLE	FREERIDE ½ WAY – 550 – 600 on Legs	760
6 - CIRCLE O	600	800

Please get in touch with us if you need help or an explanation;)

In the images below we have created an example! We have lowered the MAIN RAMP to 400 S Leg Setting. We have attached the EXTENSION. The result is a 550 HIGH RAMP with a LONG Transition.



STORING YOUR RAMP - KEY POINTS TO REMEMBER

- **1:** All the bolts that are placed into the ramp sides and not holding a component at the point of storage should be wound in until flush with the T nut screws on the inside face as shown.
- 2: Make sure the Lock Blocks are turned and fixed in the Storage Position



- **3:** Turn / rotate and secure the FOURTH and Biggest Leg into the storage position. This position is DIAGONAL pointing towards the top corner of the ramp side.
- 4: Push the Cross Batons out equally or knock out / tap with a rubber mallet if they are stuck due to wood swelling in the wet.



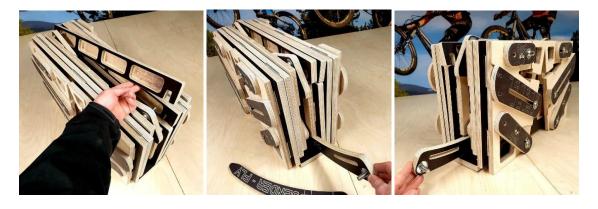
5: Remove the bolts and pull the Back Plate out with equal force. You may need to hold the sides. Do not force.

6: Fold the sides matching the biggest ones. Turn the Ramp over onto the Take OFF Surface. Fold the components taking care not to trap or pinch fingers. Mount and fix the Extension onto the bolts as shown below before folding the last section.



7: Once the ramp is folded with the extension inside both the batons are stored along the top. One of the batons will fit over the bolt threads if it is turned located to cover them.

8: The Curved Stabiliser legs fit in the opposite ends of the folded ramp. They each have a specific end. Swap them around if you cannot locate them first time. You do not need to loosen or remove the bolts.



9: Use the strap to hold the folded ramp together – Slide the ramp into the bag. Easiest placed inside with the bag and ramp lying on the side if you are alone. From the top is better with a partner holding the strap. Parts can fall out!



SENDER TRANSPORT BAG

Our Bag is Manufactured in the UK. It is strong but not indestructible. The Webbing straps are strong and double welded to the bag but avoid picking the ramp up with one strap! You will be able to buy a replacement bag from us when it wears out. We have used super strong cord rather than elastic because it is easier to insert the ramp.







USE A WATER BASED (LOW VOC) DECKING PROTECTOR NATURAL COLOUR OR CLEAR – WIPE EXCESS OFF BROWN MESH WITH A DAMP CLOTH. DOUBLE COAT and REPEAT ANNUALLY.

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