

Instructions: how to attach the Mistral 5 paramotor risers

In this guide we describe how to set up your Mistral 5 with paramotor risers.

Please take extreme care when you are doing this and double-check everything one final time when you have finished.

Caution: After you have finished attaching the paramotor risers, it is essential that you inflate your glider before you next fly it and check that everything is in order

1. Preliminary

You will need the following items to set up your Mistral 5 with paramotor risers (Fig. 1):

1. Paramotor risers for Mistral 5. We have developed paramotor risers specifically for the Mistral 5. These are very different from paramotor risers for other models of paraglider. A quick-link with an O-ring is attached to the right-hand B-riser. This should make it easier for you to change the risers and will be left over once you have finished.
2. Your Mistral 5
3. A small spanner (7mm wide) to open the quick links
4. A place to hang up the risers
5. These instructions



Fig. 1: Items required

2. How to change over the risers

We recommend that you hang up the risers in pairs beside one another when you change them over i.e. the two right-hand risers together and then the two left-hand risers together (see Fig. 2).



Fig. 2: risers hanging up

Check that you have the correct pairs of riser hanging up together before you start to change them over. You have done this correctly if the brake pulleys are facing in the same direction (Fig. 3).

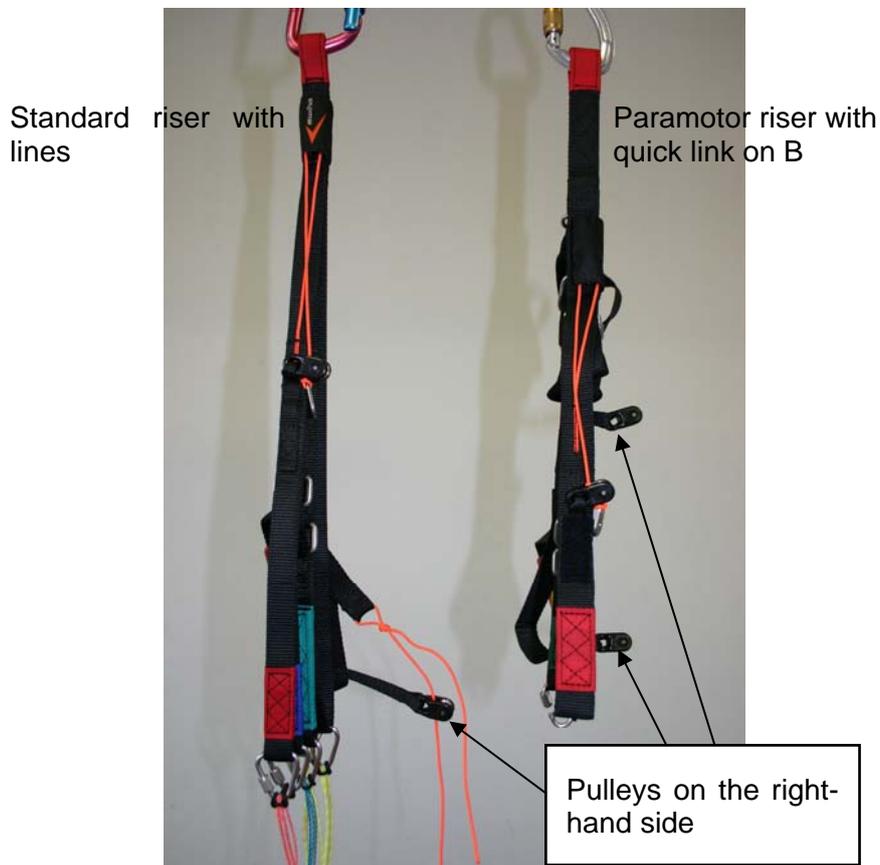


Fig. 3: The two right-hand risers

Begin with the right-hand risers. First, you need to attach all of the lines from the right-hand standard riser to the right-hand paramotor riser. You then need to attach all of the lines from the left-hand standard riser to the left-hand paramotor riser. It is important to follow a specific sequence as described below to do this, so that the lines are not mixed up or twisted.

2.1. Transferring the A quick links

Start with the lines on the A1 riser. Open the quick link (Fig. 4), remove it from the riser (Fig. 5) and hang it on the A1 riser of the paramotor riser, facing in the same direction (Fig. 6).



Fig. 4: Open the quick link



Fig. 5: Remove the quick link



Fig. 6: Paramotor riser with A1 quick link

Now close the quick link again and use the spanner to tighten it (Fig. 7). It has been tightened up enough when you can no longer open it up with your fingers.



Fig. 7: Closing and tightening the quick link

Repeat the process with the lines on the A2 riser.

2.2. Transferring the stabiliser lines and the B- and C1 lines

You must transfer the stabiliser lines from the B-level to the C-level for use with the paramotor riser. This means that you cannot simply transfer the B and C1 quick links from one riser to the other.

Open the quick link for the B-lines and undo the O-ring (Fig. 8).

Take the inside three B-lines (blue) and hang them in the quick link on the paramotor riser (Fig. 9 and Fig. 10).



Fig. 8: B-quick link open and showing O-ring undone



Fig. 9: Paramotor riser with B-quick link (to the right-hand side)

Now take the shackle with the stabiliser lines and connect it to the C1 strap on the paramotor riser (Fig. 11).



Fig. 10: Paramotor riser with B-lines



Fig. 11: Paramotor riser with stabiliser lines on C1

Next, open the C1 quick link and undo that O-ring too (Fig. 12). Now take the lines out of the quick link and hang them with the stabiliser lines on the paramotor riser. Fasten the O-ring and close the C1 quick link on the paramotor riser (Fig. 13).



Fig. 12: C1 quick link on the standard riser



Fig. 13: Paramotor riser with C1 quick link and both stabiliser and C1-lines

Take the empty quick link off the standard riser and put it in a safe place. You will need it later on to change over the second riser.

2.3. Transferring the C2 quick link

The C2 quick link is transferred in the same way to the A quick link. When you have swapped over the C2 quick link, all of the rigging lines will be on the paramotor riser. Only the brake line will still be on the standard riser (Fig. 14).



Fig. 14: Paramotor riser with all lines, except the brake line

2.4. Transferring the brake line

You must first undo the knot on the brake handle before you are able to transfer the brake line (Fig. 15).



Fig. 15: Brake line with the knot undone

Now remove the brake handle from the brake line and pull the brake line through the pulley. Feed the brake line from the quick link through the upper pulley on the paramotor riser (Fig. 16).

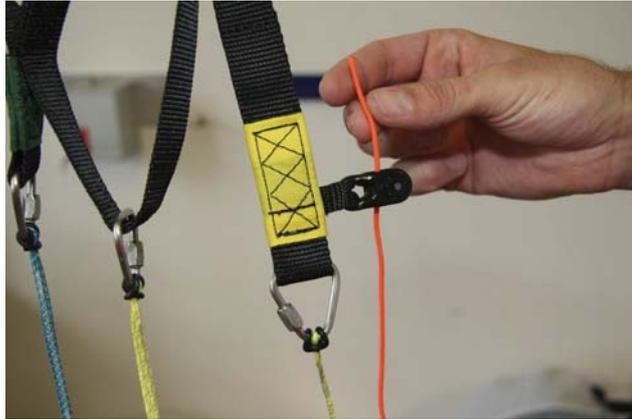


Fig. 16: Brake line in upper pulley

Then make a loose knot in the brake line at the mark (behind the pulley, see Fig. 17).

Now attach the brake handle to the brake line again. To do this, feed the brake line through the loop on the brake handle until just before the knot (Fig. 18). Take the free end of the brake line, loop it back and make it into a knot with the brake line.

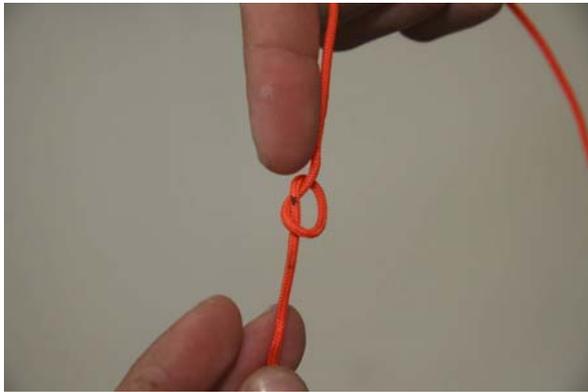


Fig. 17: Brake line with knot at the mark

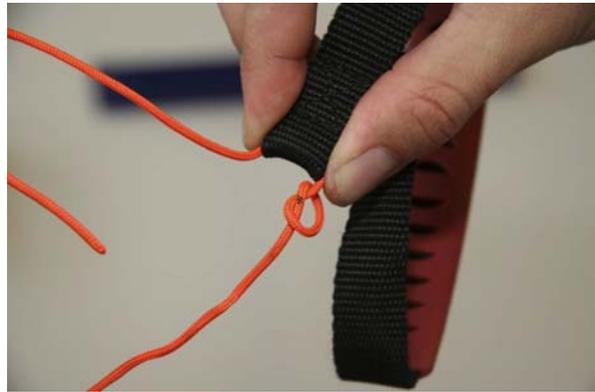


Fig. 18: Brake handle with brake line

To make the knot, feed the end of the brake line into the knot in the brake line following the way the line is running (Fig. 19 to Fig. 21). By doing this, you will turn the single knot in the line into a double knot which holds the brake handle firmly



Fig. 19: Make a knot



Fig. 20: Make a knot



Fig. 21: Make a knot

When making the knot, take care that the brake line is the same length as it was before. The brake line must not be shortened.

You have now changed over the first riser. All of the lines should now be on the paramotor riser, none of them twisted and all of the quick link openings should be facing inwards (away from the brake pulley). Check once again that you have also correctly attached the stabiliser lines to C1. Your paramotor riser should now look like the picture in Fig. 22.



Fig. 22: Paramotor riser with all main lines and brake lines (the right-hand riser is shown here)

If the brake handles are extremely high up and difficult to reach when used with a motor, it is also possible to feed the brake lines through the lower pulley in motorised use.

To do this, it is essential that you **lengthen** the **brake lines** by the distance between the pulleys (18.5cm). This requires a longer main brake line, which you are able to obtain from us for your paramotor riser. The longer brake line generally already has a second mark for the lower pulley. If this is not the case, make a second mark on the brake line, 20cm below the original mark (towards the end of the line).

We would like to point out to you once again that the **brake lines must not be shortened**, as this can cause dangerous changes in flight behaviour and extreme flight behaviour.

2.5. Preparation of the second side

After you have finished changing over the first riser correctly, hang up the two risers for the other side next to one another. Hang the quick link which you previously put to one side onto the B-riser with the open side facing inwards (the side away from the pulley).

You are now ready to change over the second riser in the same way as the first riser.

3. Check

When you have finished changing over the riser, there should be two standard risers and one quick link with O-ring left over.

It is essential that you check the following after the risers have been changed over:

3.1. Lines correct

The lines must not be twisted. The quick links must be attached to the correct riser and the stabiliser lines must now be attached to the C1 quick link. The brake pulleys must be facing outwards. The brake line must be running through the upper pulley.

3.2. Quick links closed

When this has all been done correctly, make sure that all of the quick links have been tightened firmly so they do not open accidentally. The best way to do this is to check them again lightly with the spanner.

3.3. Inflate the glider

After you have changed over the risers, it is imperative that you inflate the glider on a flat area before you next fly it and check once again that all of the lines are clear. You should also check at the same time that the brakes are symmetrical and adjusted to the right length.

4. Final words

We hope that you have many memorable flights with your Mistral 5, whether you are flying in the mountains, on winch or with a motor.

Always remember to put the risers back to the DHV configuration when you are not flying with a motor, as this is how it was tested for certification and certification will otherwise be void.

If you have any other questions or are having difficulty changing over the risers, please telephone us on (+49) 81413277888 or write to us at info@swing.de.

The *SWING* Team