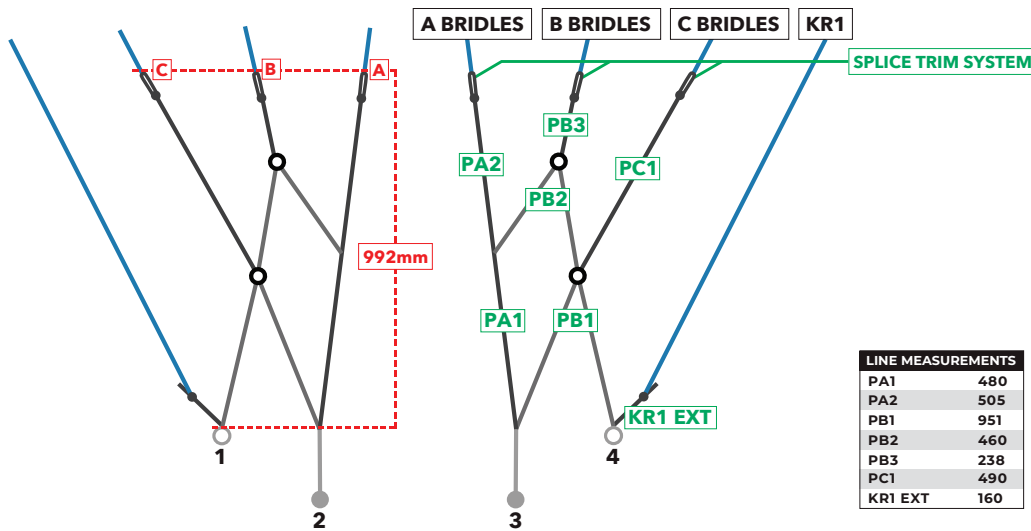


Exposure to heavy loads, regular wear and tear, as well as harsh marine environments such as water, salt, sand, and sun, can lead to stretching, shrinking, or damage in both Bridle lines and Speed System lines.

Bridle lines and Speed Systems require maintenance just like any high performance equipment in racing sports - they must be checked regularly and maintained in the correct trim or the kite will not perform as designed. Check all lines to their specs and replace if necessary.

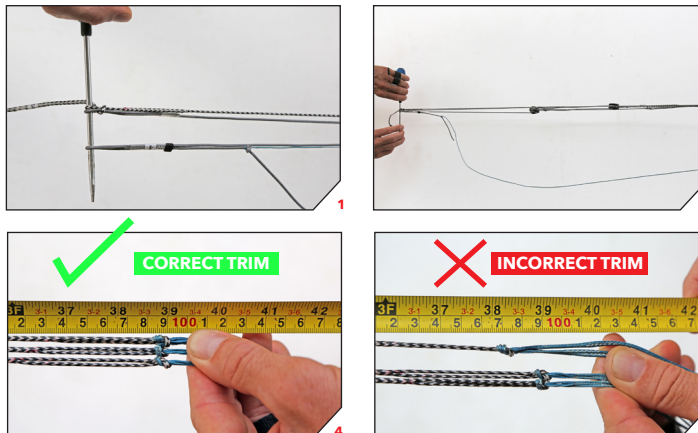
R1 V5 4-LINE SPEED SYSTEM MAINTENANCE

R1 V5 4-Line Speed System lines that are worn must be replaced. If the Speed System lines are not worn but are not to factory specifications you must adjust back to factory spec using the Splice Trim System.



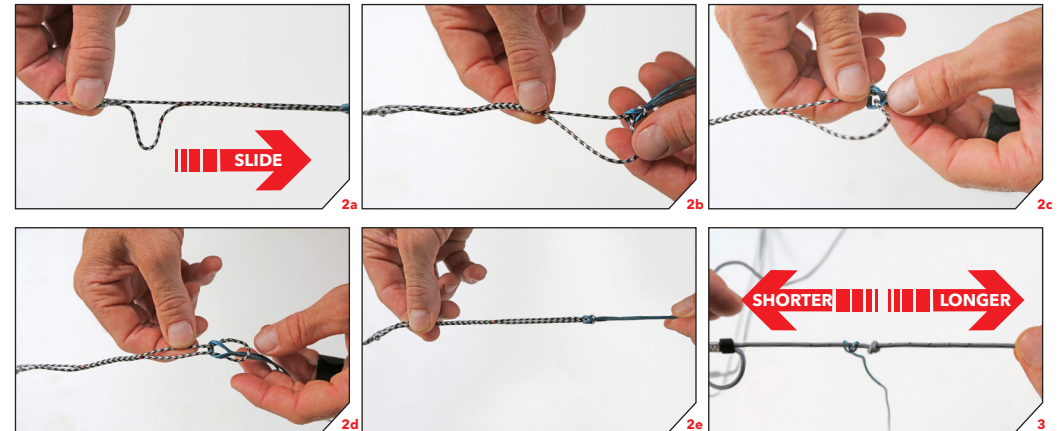
MEASUREMENT

- Align the lower ends of PA1 and PB1.
- Ask an assistant to hold lower ends even, or use a ground stake (or a screw driver) through the lower end loops.
- Apply even tension through the Speed System by pulling on the A, B and C bridle line groups attached to the upper ends of PA2, PB3 and PC1 respectively.
- The overall length of the Speed System should measure 992mm from the lower ends to the upper ends.
- If measurement points A, B and/or C are not positioned at 992mm they can be individually adjusted using the Splice Trim System located on lines PA2, PB3 and PC1.
- Check all Speed System lines to their specs and replace as necessary.



ADJUSTMENT

- To shorten: pull the knot under the heat shrink down twice the distance required to adjust. While holding it in position, loosen the splice so the loop can adjust to its new length. Loosen the bridle lines connection at the upper end of PA2/PB3/PC1 and move them to position at the top of the loop. Pull the lines tight and ensure the splice is locking.
- To lengthen: push the knot under the heat shrink up twice the distance required to adjust. The upper end of the knot is spliced into itself. Loosen the splice and pull out line as required from the top end of the splice. Loosen the bridle lines connection at the upper end of PA2/PB3/PC1 and move them to position at the top of the loop. Pull the lines tight and ensure the splice is locking.
- If adjusting the position of measurement C by changing the length of PC1, the position of the knot in KR1 EXT must also be adjusted by the same amount and in the same direction.
- If A, B and/or C can not be adjusted to a length of 992mm the Speed System lines have likely shrunk or stretched and/or might be damaged.
- Check all Speed System lines to their specs and replace as necessary.



EXAMPLE 1: If measurement point A is 20mm longer than the factory standard spec of 992mm, move the knot under the heat shrink down 40mm and adjust the A bridles connection to the loop of PA2.

EXAMPLE 2: If measurement point B is 10mm shorter than the factory standard spec of 992mm, move the knot under the heat shrink up 20mm and adjust the B bridles connection to the loop of PB3.

EXAMPLE 3: If measurement point C is 10mm shorter than the factory standard spec of 992mm, move the knot under the heat shrink up 20mm and adjust the C bridles connection to the loop of PC1. Then move the knot in KR1 EXT up by 10mm.

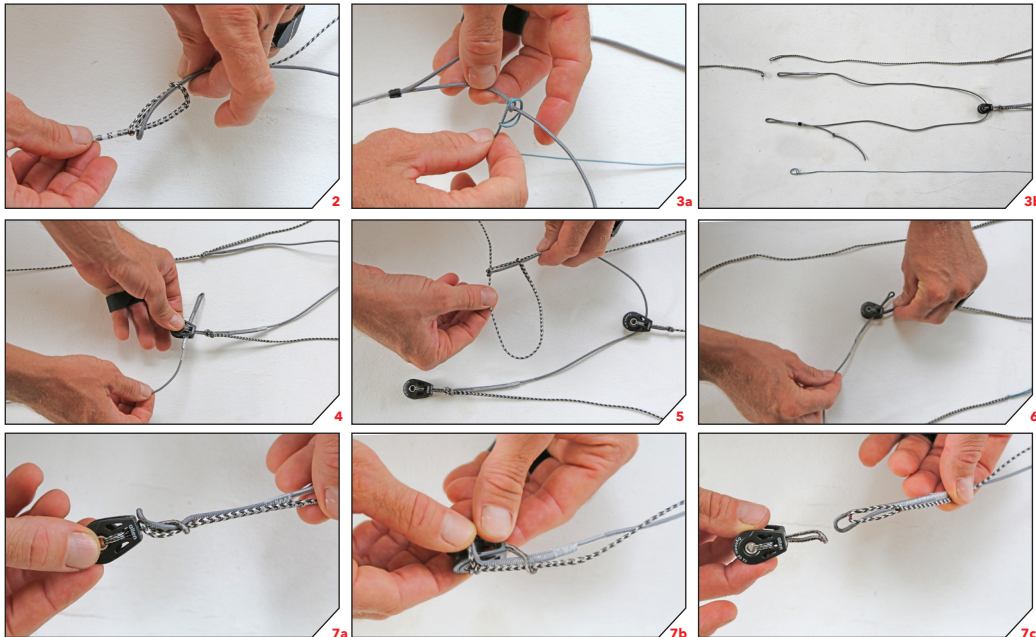
EXAMPLE 4: If measurement point C is 20mm longer than the factory standard spec of 992mm, move the knot under the heat shrink down 40mm and adjust the C bridles connection to the loop of PC1. Then move the knot in KR1 EXT down by 20mm.



PULLEY LINE REPLACEMENT

The sheathed pulley lines (PB1 & PB2) will likely wear the fastest. Check them before every session. Spare pulley lines are supplied in the kites repair kit.

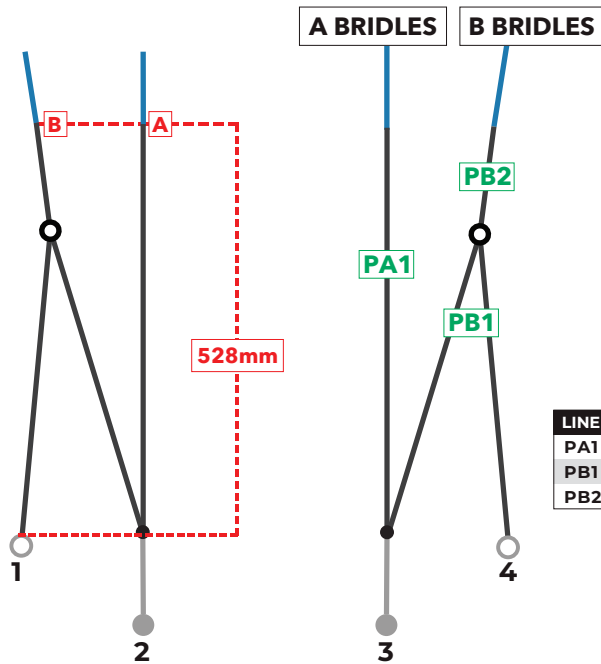
1. Disconnect the flying lines and lay the Speed System out in an open area.
2. Disconnect the front pigtail (#2 or #3).
3. Disconnect KR1 from KR1 EXT.
4. Remove PB1 from the lower pulley.
5. Disconnect PA1 from PA2 and PB2.
6. Remove PB2 from the upper pulley.
7. Disconnect PB2 and PC1 from the pulley - loosen the loop-to-loop connection and feed the pulley through the end loops of PB2 and PC1.
8. Take the replacement PB2 and reverse the previous steps to re-assemble the Speed System.
9. Connect replacement PB2 and PC1 to the pulley with a loop-to-loop connection.
10. Feed the replacement PB2 through the upper pulley.
11. Connect replacement PB2 and PA2 with PA1.
12. Take replacement PB1 and feed it through the lower pulley.
13. Connect PB1 and PA1 to the front line pigtail (#2 or #3).
14. Connect KR1 to KR1 EXT.
15. Repeat the same process for the other speed system side. Always check your speed system and replace lines when excessive wear shows.





R1 V5 2-LINE SPEED SYSTEM MAINTENANCE

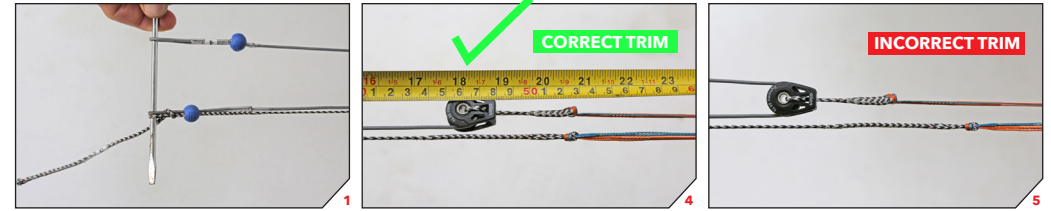
R1 V5 2-Line Speed System lines that are worn or are not to factory specifications must be replaced. There is no adjustment on the 2-Line Speed System.



LINE MEASUREMENTS	
PA1	528
PB1	950
PB2	50

MEASUREMENT

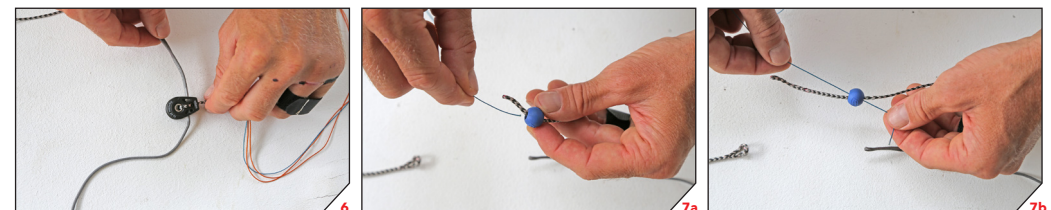
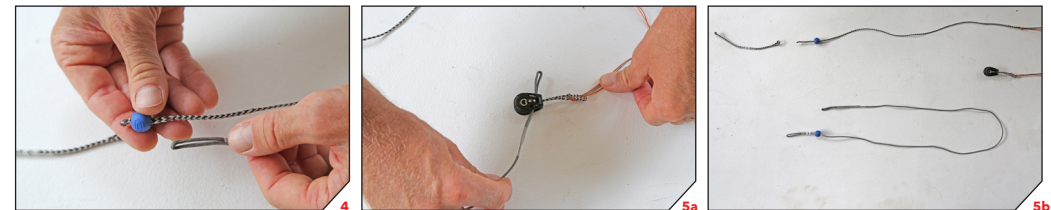
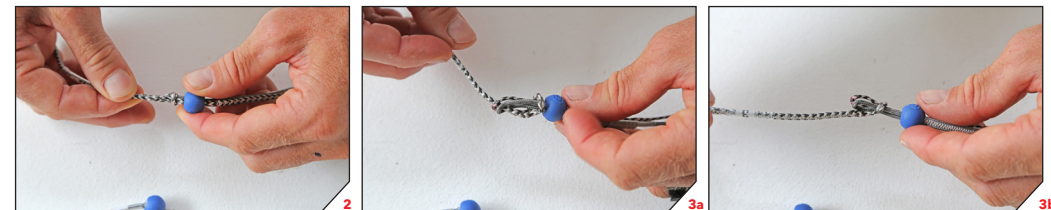
1. Align the lower ends of PA1 and PB1.
2. Ask an assistant to hold lower ends even, or use a ground stake (or a screw driver) through the lower end loops.
3. Apply even tension through the Speed System by pulling on the A and B bridle line groups attached to the upper ends of PA1 and PB2 respectively.
4. The overall length of the Speed System should measure 528mm from the lower ends to the upper ends.
5. If measurement points A and/or B are not positioned evenly or at 528mm the Speed System lines have likely shrunk or stretched and/or might be damaged.
6. Check all Speed System lines to their specs and replace as necessary.



PULLEY LINE REPLACEMENT

The sheathed pulley lines (PB1 & PB2) will likely wear the fastest. Check them before every session. Spare pulley lines are supplied in the kites repair kit.

1. Disconnect the flying lines and lay the Speed System out in an open area.
2. Slide the stopper off the PB1 and PA1 connection.
3. Disconnect the front pigtail (#2 or #3).
4. Remove PB1 from the stopper ball. Keep PA1 running through the stopper ball.
5. Remove PB1 from the pulley.
6. Take the PB1 replacement line and feed it through the pulley.
7. Feed a thin mouse line through the stopper ball (use the spare bridle line from the kites repair pack)
8. Feed the mouse line through the end loop of PB1.
9. Feed the mouse line back through the stopper ball.
10. Pull PB1 through the stopper ball.
11. Remove the mouse line.
12. Connect PB1 and PA1 to the front line pigtail (#2 or #3).
13. Slide the stopper ball over the PB1 and PA1 connection.
14. Repeat the same process for the other speed system side. Always check your speed system and replace lines when excessive wear shows.



PULLEY LINE REPLACEMENT (CONTINUED)

