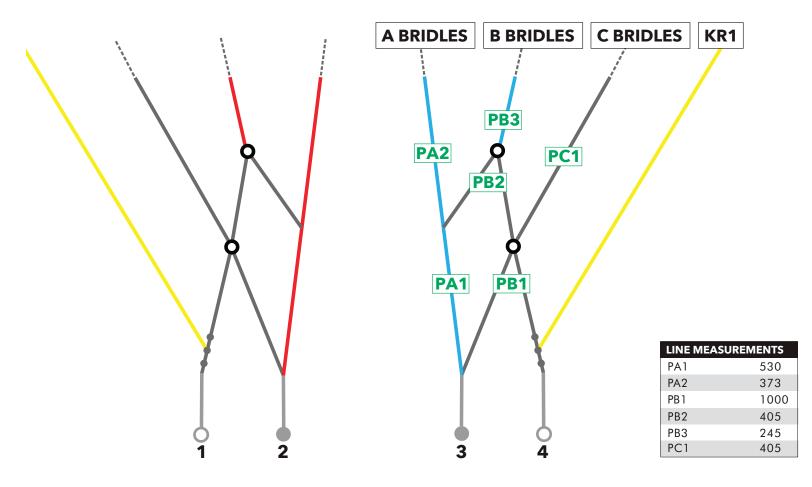




Speed System and Bridle lines should be regularly checked and maintained in the correct trim or the kite will not perform as designed.

### MACH1 SPEED SYSTEM



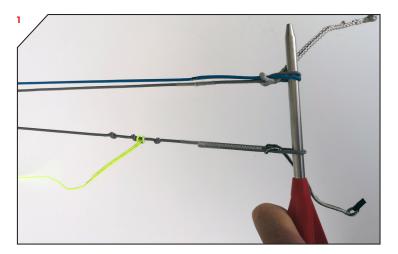


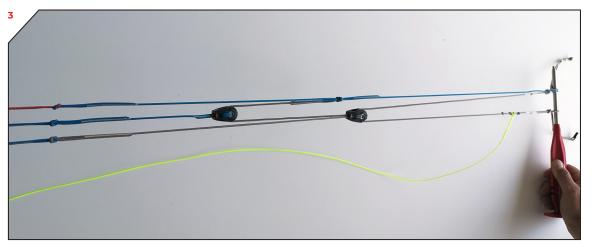
#### SPEED SYSTEM 'ZERO' CHECK

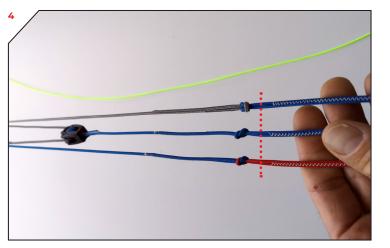
Speed Systems that are worn or not to factory specification (+ or - 15mm) from the 'zero' position must be partially or completely replaced. Replacements can be ordered from your shop/dealer.

## STEP-BY-STEP INSTRUCTIONS. REFER TO THE MACHI SPEED SYSTEM DIAGRAM AND PHOTOS.

- Align the lower ends of the Speed System. These are lines PAI (connected to pigtails #2 or #3), PBI (running through the lower pulley connecting to pigtails #1 and #2 or #3 and #4) and KRI (connecting to pigtails #1 or #4).
- Ask a friend to hold the pigtails keeping the Speed System lower ends even, or use a Ground Stake (or a screw driver) through the lower ends.
- 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.
- **4.** The upper ends of PA2, PB3 and PC1 should each be at the same level + or 15mm.
- 5. If the difference between the upper ends is more than 15mm, most likely the lines PB1 and PB2 running through the pulleys have shrunk/stretched and need replacing, or any other line is out of trim and/or damaged and needs replacing.







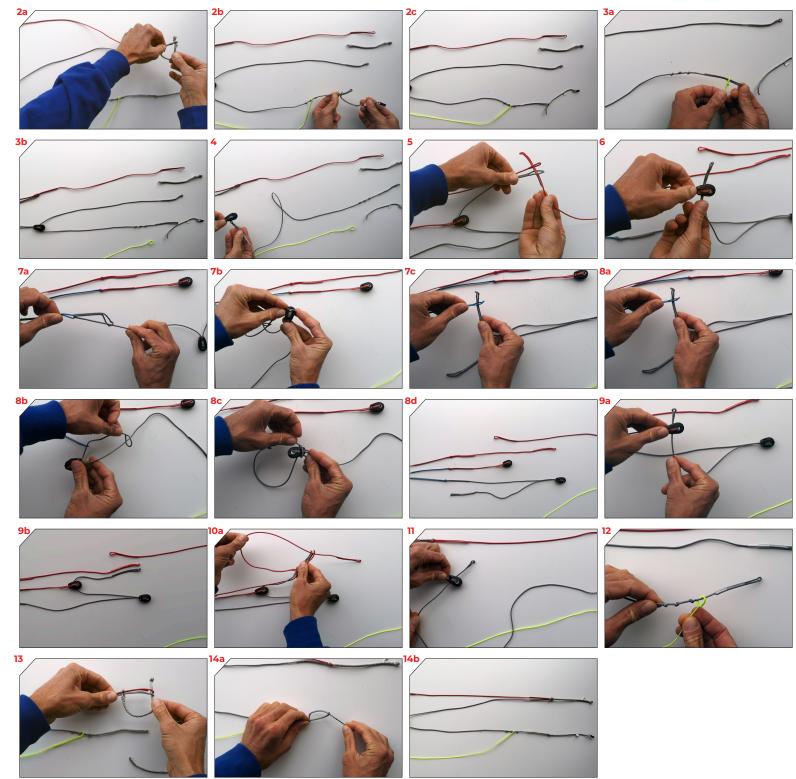


# SPEED SYSTEM PULLEY LINE REPLACEMENT

The sheathed pulley lines (PB1 & PB2/PC1) will wear over time and will need to be replaced. Make sure you check them before every session. If the Speed System lines have shrunk or stretched drastically they might be damaged. Make sure you check every single Speed System line to their specs and if necessary replace them. Replacements can be ordered from your shop/dealer.

### STEP-BY-STEP INSTRUCTIONS. REFER TO THE MACHI SPEED SYSTEM DIAGRAM AND PHOTOS.

- 1. Disconnect the flying lines and lay the Speed System out in an open area.
- 2. Disconnect the front (#2 or #3) and back (#1 or #4) pigtails.
- 3. Remove KR1 from PB1 knot.
- 4. Remove PB1 from the lower pulley and discard.
- 5. Disconnect PAI from PA2 and PB2.
- 6. Remove PB2 from the upper pulley.
- Disconnect PB2/PC1/pulley from the C bridle loosen the loop-toloop connection and feed the pulley through the end loop of PC1. Discard PB2/PC1/pulley.
- 8. Take the replacement PB2/PC1/pulley and re-connect with the C bridle. The pulley goes through the end loop of PC1 i.e. reverse the previous steps.
- 9. Feed the replacement PB2 line through the upper pulley.
- 10. Connect replacement PB2 and PA2 with PA1.
- 11. Take the PB1 replacement line and feed it through the lower pulley.
- 12. Connect KR1 to PB1 knot.
- 13. Connect PB1 and PA1 to the front line pigtail (#2 or #3).
- 14. Connect the other end of PBI to the back pigtail (#1 or #4).
- 15. Repeat the same process for the other speed system side. Always check your speed system and replace lines when excessive wear shows.





### BRIDLE LINES

Bridle Lines that are worn or not to factory specification (+ or - 15mm) must be replaced. Replacements can be ordered individually or as a full set from your shop/dealer.

- 1. Open the kite out in a large space.
- **2.** Inspect all bridle lines for wear/damage. Take note or label lines to be replaced.
- 3. Use a tape measure to measure the remaining bridles. Ask a friend to hold the end of the tape measure and bridle line in position to get an accurate measurement.
- **4.** Pull on the line to add some tension and note each measurement.
- Refer to the bridle line measurements sheet and rigging diagrams. Take note or label lines to be replaced.
- 6. Replace all bridle lines as necessary.

### BRIDLE LINE LENGTHS ALL MEASUREMENTS IN MM

LINE NO.	7m	9m	11M	13M	15M	18M	LINE NO.	7m	0	11M	13M	15M	18M
	993	1115	1720		1333	1462		7m 392	<b>9m</b> 452	756	830	763	868
A1 A2	823	926	1513	1868 1645	1092	1202	C7 C8	313	364	537	590	634	727
					1092		C9						
A3	817	922	1397	1522		1208		-	-	1866	2022	298	353
A4	689	780	1673	1822	961	1068	C10	-	-	-	-	241	291
A5	670	761	1418	1547	1030	1151	CM1	1080	1220	1500	1630	1600	1750
A6	477	545	1244	1362	762	861	CM2	930	1050	-	-	1400	1530
A7	363	418	720	813	736	837	CM3	620	700	-	-	1300	1420
A8	294	341	506	587	622	713	CM4	620	700	-	-	1100	1200
A9	-	-	1839	2049	289	343	CR1	1910	2140	3800	4099	3360	3676
A10	-	-	-	-	241	290	CR2	1990	2230	3300	3553	3074	3367
AM1	1080	1220	1500	1630	1600	1750	CR3	2753	3066	2000	2141	4140	4529
AM2	930	1050	-	-	1400	1530	K1	752	853	983	1068	1206	1320
AM3	620	700	-	-	1300	1420	K2	543	617	735	795	914	1000
AM4	620	700	-	-	1100	1200	K3	595	679	565	612	709	779
AR1	1930	2180	3800	4130	3400	3720	K4	430	494	660	726	637	712
AR2	2010	2270	3300	3590	3120	3410	K5	546	614	487	545	429	488
AR3	2700	3040	2000	2170	4200	4600	K6	382	432	695	771	720	813
B1	958	1075	1679	1824	1284	1408	K7	378	434	546	612	521	599
B2	790	888	1473	1601	1045	1150	K8	313	363	545	612	534	610
В3	787	887	1360	1482	1048	1159	K9	346	401	632	702	644	718
B4	663	751	1639	1784	922	1024	K10	284	332	497	558	519	583
B5	648	736	1388	1515	993	1110	K11	559	644	482	541	530	593
B6	462	528	1221	1337	733	829	K12	-	-	420	474	447	503
B7	352	406	711	793	712	811	K13	-	-	-	-	826	922
B8	286	332	519	585	608	699	KM1	-	-	-	-	1950	2140
BM1	1080	1220	-	-	1600	1750	KM2	-	-	-	-	1800	1970
BM2	930	1050	-	_	1400	1530	KM3	-	-	-	-	1400	1530
BM3	620	700	-	-	1300	1420	KM4	-	-	-	-	1300	1420
BM4	620	700	-	_	1100	1200	KM5	-	-	-	-	800	880
BR1	1920	2160	3800	4130	3400	3720	KML1	1010	1140	1300	1410	1300	1530
BR2	2000	2250	3300	3590	3120	3410	KML2	850	960	800	870	1000	1100
BR3	2739	3055	3500	3800	-	-	KML3	770	870	-	-	-	-
C1	1023	1150	1747	1898	1361	1493	KMU1	810	910	1600	1740	400	440
C2	854	961	1541	1676	1121	1234	KMU2	590	660	1300	1410	-	-
C3	849	958	1424	1552	1122	1240	KMU3	500	570	1000	1090	_	-
C4	720	815	1700	1852	990	1099	KMU4	390	440	1100	1190	-	-
C5	701	797	1446	1579	1060	1184	KMU5	310	350	1000	1090	_	-
C6	508	581	1271	1391	791	894	KR1	2445	2630	2820	2950	3045	3270

