



# MK2 BRIDLE LINE MAINTENANCE



## BRIDLE LINE LENGTHS ALL MEASUREMENTS IN MM

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.

### CHECKING INDIVIDUAL BRIDLE LINES

Bridle Lines that are worn or not to factory specification (+ or - 15mm) must be replaced. Replacement lines can be ordered individually or as a full set from your shop/dealer. The kite repair pack includes spare bridle line lengths that can be used to make a short-term replacement bridle line.

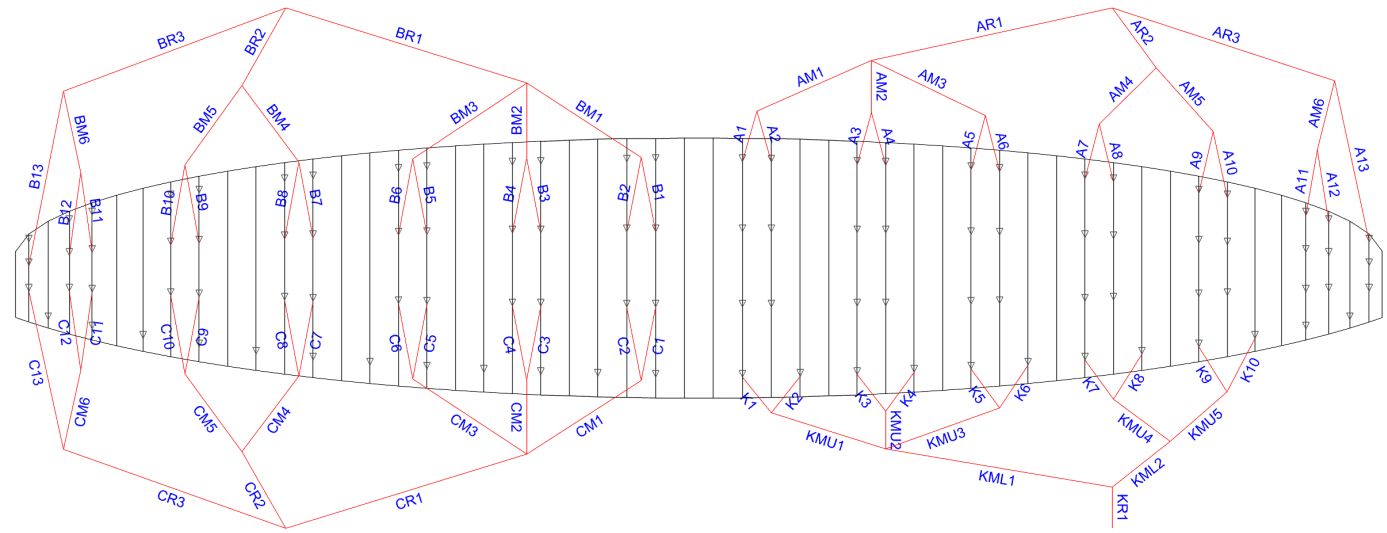
1. Open the kite out in a large space.
2. Inspect all bridle lines for wear/damage. Take note or label lines to be replaced.
3. Use a tape measure to measure the remaining bridles. Ask an assistant to hold the end of the tape measure and bridle line in position to get an accurate measurement.
4. Pull on the line with 5kg of load and note each measurement.
5. 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.

NAME	LINE MATERIAL CODE	8M	9M	LINE MATERIAL CODE	10M	11M	14M	15M	LINE MATERIAL CODE	19M	21M
A1	8001-050	302	322	8001-050	1039	1089	1352	1388	8001-050	1640	1724
A2	8001-050	243	260	8001-050	910	955	1204	1242	8001-050	1419	1494
A3	8001-050	280	299	8001-050	991	1037	1277	1311	8001-050	1520	1604
A4	8001-050	235	252	8001-050	912	956	1187	1212	8001-050	1389	1468
A5	8001-050	222	244	8001-050	859	903	1161	1232	8001-050	1906	2016
A6	8001-050	196	217	8001-050	675	712	947	1016	8001-050	1667	1768
A7	8001-025	265	295	8001-050	602	638	899	958	8001-050	1525	1620
A8	8001-025	190	216	8001-050	499	532	774	818	8001-050	1645	1747
A9	8001-025	195	222	8001-050	847	902	1169	1113	8001-050	465	509
A10	8001-025	158	182	8001-050	720	770	1019	960	8001-050	427	469
A11	8001-025	296	328								
A12	8001-025	236	265								
A13	8001-050	840	905								
AM1	8001-090	1900	2010	8001-090	1625	1700	1900	2200	8001-090	2300	2420
AM2	8001-090	1700	1800	8001-090	1430	1500	1700	2000	8001-090	2000	2105
AM3	8001-090	1600	1690	8001-050	1240	1300	1450	1700	8001-050	1000	1050
AM4	8001-050	1100	1160	8001-050	1145	1200	1300	1550			
AM5	8001-050	900	950								
AM6	8001-070	700	740								
AR1	8001-190	2600	2750	8001-190	3865	4000	4500	4500	8001-190	4236	4455
AR2	8001-130	2800	2960	8001-090	3865	4000	4500	4500	8001-090	5300	5575
AR3	8001-070	2600	2750	8001-070	4345	4500	5050	5400	8001-070	4900	5155
B1	8001-025	267	284	8001-025	1050	1100	1358	1393	8001-025	1617	1700
B2	8001-025	208	223	8001-025	921	967	1214	1252	8001-025	1387	1461
B3	8001-025	246	263	8001-025	1002	1048	1287	1323	8001-025	1490	1572
B4	8001-025	202	217	8001-025	924	968	1198	1226	8001-025	1389	1468
B5	8001-025	192	213	8001-025	870	915	1171	1244	8001-025	1953	2066
B6	8001-025	167	186	8001-025	687	725	961	1029	8001-025	1715	1817
B7	8001-025	240	269	8001-025	614	650	917	976	8001-025	1567	1664
B8	8001-025	166	190	8001-025	509	542	788	834	8001-025	1687	1791
B9	8001-025	178	203	8001-025	858	914	1182	1127	8001-025	499	544
B10	8001-025	139	163	8001-025	724	775	1025	965	8001-025	454	497
B11	8001-025	288	320								
B12	8001-025	228	257								
B13	8001-050	833	898								
BM1	8001-050	1900	2010	8001-050	1625	1700	1900	2200	8001-050	2300	2420
BM2	8001-050	1700	1800	8001-050	1430	1500	1700	2000	8001-050	2000	2105
BM3	8001-050	1600	1690	8001-050	1240	1300	1450	1700	8001-050	1000	1050
BM4	8001-050	1100	1160	8001-050	1145	1200	1300	1550			
BM5	8001-050	900	950								
BM6	8001-050	700	740								
BR1	8001-070	2600	2750	8001-070	3865	4000	4500	4500	8001-070	4250	4470
BR2	8001-070	2800	2960	8001-070	3865	4000	4500	4500	8001-070	5300	5575
BR3	8001-070	2600	2750	8001-050	4345	4500	5050	5400	8001-050	4890	5145

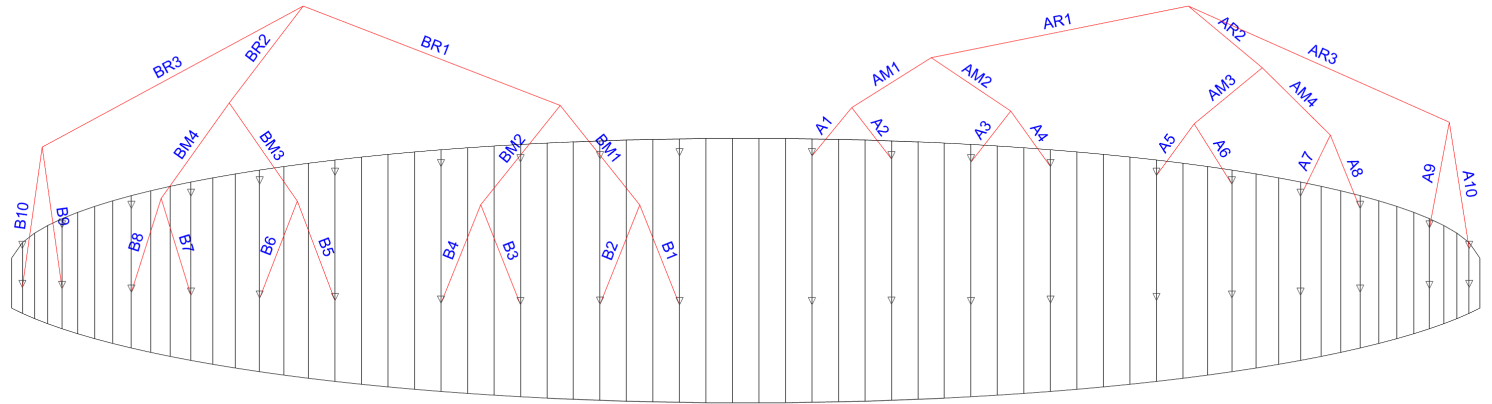
NAME	LINE MATERIAL CODE	8M	9M
C1	8001-025	325	346
C2	8001-025	266	284
C3	8001-025	304	324
C4	8001-025	259	277
C5	8001-025	245	269
C6	8001-025	218	241
C7	8001-025	289	321
C8	8001-025	213	241
C9	8001-025	218	247
C10	8001-025	176	203
C11	8001-025	316	350
C12	8001-025	253	283
C13	8001-050	847	913
CM1	8001-050	1900	2010
CM2	8001-050	1700	1800
CM3	8001-050	1600	1690
CM4	8001-050	1100	1160
CM5	8001-050	900	950
CM6	8001-050	700	740
CR1	8001-050	2610	2750
CR2	8001-050	2810	2960
CR3	8001-050	2610	2750
K1	8001-025	626	636
K2	8001-025	461	455
K3	8001-025	574	557
K4	8001-025	437	409
K5	8001-025	535	503
K6	8001-025	452	422
K7	8001-025	555	517
K8	8001-025	416	375
K9	8001-025	462	423
K10	8001-025	381	356
KML1	8001-050	1480	1480
KML2	8001-050	1160	1160
KMU1	8001-050	1550	1550
KMU2	8001-050	1280	1300
KMU3	8001-050	1080	1100
KMU4	8001-050	1150	1160
KMU5	8001-050	1000	1000
KR1	8001-090	2280	2580



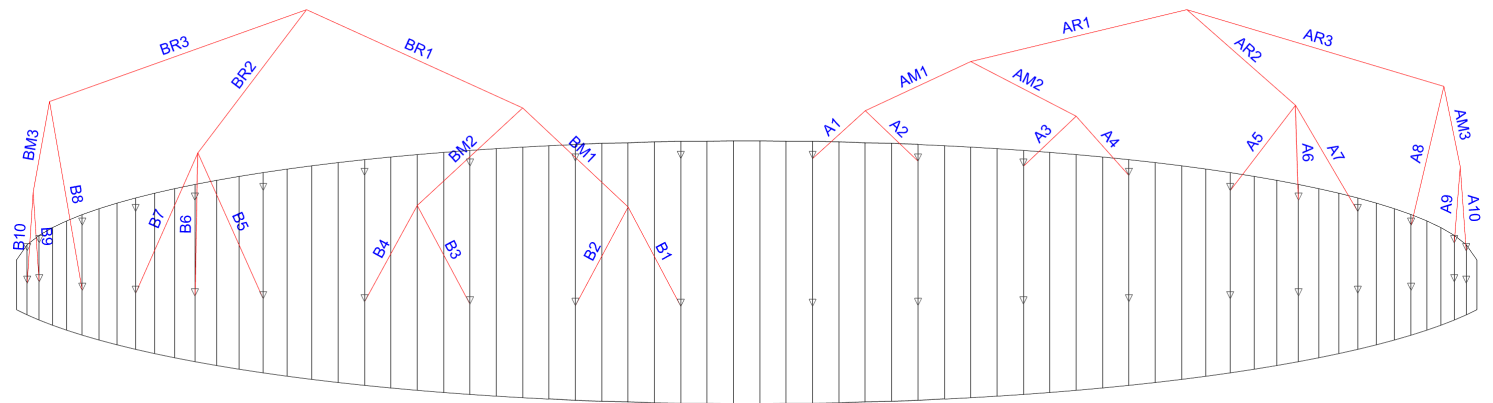
**8M/9M**  
RIGGING DIAGRAM



**10M/11M /14M/15M**  
RIGGING DIAGRAM



**19M/21M**  
RIGGING DIAGRAM

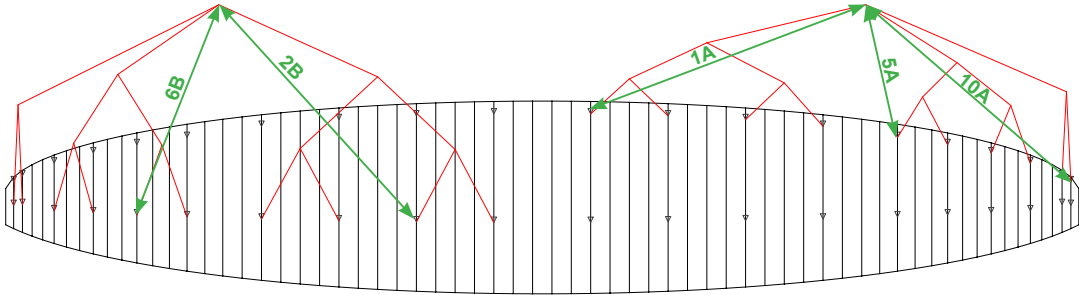




### CHECKING OVERALL BRIDLE LENGTHS

Checking the overall length of bridle lines is another step to ensure the kite is trimmed correctly. Overall bridle lengths should not exceed + or - 20mm.

1. Open the kite out in a large space.
2. Use a measuring device to measure from the top of the Speed System to the bridle line attachment tab on the kite.
3. Ask an assistant to hold the measuring device and Speed System (or attachment tab) to get an accurate measurement.
4. Pull on the bridle with 5kg of load and note each measurement.
5. Refer to the overall bridle line measurements and diagram. Take note or label lines to be replaced.
6. Replace all bridle lines as necessary.
7. It is also possible to shorten a riser bridle line. Refer to the next section.



8m	A	B	C	K	9m	A	B	C	K
1	4802	4767	4836	5933	1	5082	5044	5122	6243
2	4743	4708	4777	5768	2	5020	4983	5060	6062
3	4580	4546	4615	5609	3	4849	4813	4890	5892
4	4535	4502	4570	5472	4	4802	4767	4843	5744
5	4422	4392	4456	5370	5	4684	4653	4725	5638
6	4396	4367	4429	5287	6	4657	4626	4697	5557
7	4165	4141	4200	5140	7	4415	4390	4457	5402
8	4090	4067	4124	5001	8	4336	4311	4377	5260
9	3895	3879	3929	4897	9	4132	4114	4173	5158
10	3858	3840	3887	4816	10	4092	4074	4129	5091
11	3596	3589	3627		11	3818	3811	3856	
12	3536	3529	3564		12	3755	3748	3789	
13	3435	3429	3453		13	3650	3644	3674	

10m	A	B	11m	A	B	14m	A	B
1	6527	6530	1	6787	6790	1	7730	7708
2	6398	6401	2	6653	6657	2	7592	7574
3	6289	6297	3	6540	6548	3	7480	7477
4	6210	6219	4	6459	6468	4	7390	7388
5	5967	5989	5	6206	6230	5	7114	7131
6	5783	5806	6	6015	6040	6	6900	6921
7	5615	5638	7	5841	5865	7	6692	6727
8	5512	5533	8	5735	5757	8	6567	6598
9	5197	5227	9	5407	5414	9	6224	6222
10	5065	5093	10	5270	5275	10	6069	6065

15m	A	B	19m	A	B	21m	A	B
1	8056	8039	1	8174	8167	1	8597	8590
2	7910	7897	2	7953	7937	2	8367	8351
3	7799	7799	3	7759	7740	3	8167	8147
4	7705	7716	4	7628	7639	4	8031	8043
5	7435	7464	5	7211	7253	5	7596	7641
6	7218	7249	6	6972	7015	6	7348	7392
7	7001	7041	7	6830	6867	7	7200	7239
8	6861	6900	8	6550	6587	8	6907	6936
9	6518	6517	9	6370	6399	9	6719	6739
10	6359	6355	10	6327	6354	10	6674	6692



## SHORTENING A RISER BRIDLE LINE USING THE ADDITIONAL LOOP TECHNIQUE

If a riser bridle line (AR1/2/3, BR1/2/3, CR1/2/3) has stretched it is possible to shorten by making one or two additional loops in the connection to the Speed System upper lines (4-line system: PA2/PB3/PC1, 2-line system: PA1/PA2).

If the riser bridle line is stretched more than it is possible to compensate with one or two additional loops, we recommend to replace or re-splice to the spec length.

1. Lay out the Speed System and bridles as you would for set up.
2. Disassemble the Speed System to separately access the bridle line groups - refer to the Speed System Pulley Line Replacement sections for how to take the Speed System apart.
3. Open the loop to loop connection between Speed System upper line and riser bridle lines.
4. Put the riser bridle lines that are not affected in length back onto the Speed System upper line.
5. Put the affected riser bridle line onto the Speed System upper line using a double loop as shown. This will shorten the line length by around 1cm to 1.5cm depending on the line thickness. If the affected line needs shortening even more, add a second loop.
6. Tighten onto the Speed System upper line and re-measure to check if the modification has brought it back within tolerance.
7. Close the loop to loop connection by feeding the Speed System line's lower end through its upper loop (i.e. reverse way from opening).
8. Reassemble the Speed System.
9. Repeat for the other side and/or other affected riser bridle lines.

