

The Speed System and Bridle lines will require maintenance just like any high performance equipment in racing sports - they must be checked after every 60 hours flying time and maintained in the correct trim or the kite will not perform as designed.

Bridle Lines that are worn or not to factory specification (+ or - 15mm) must be replaced.

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.

CHECKING BRIDLE LINES

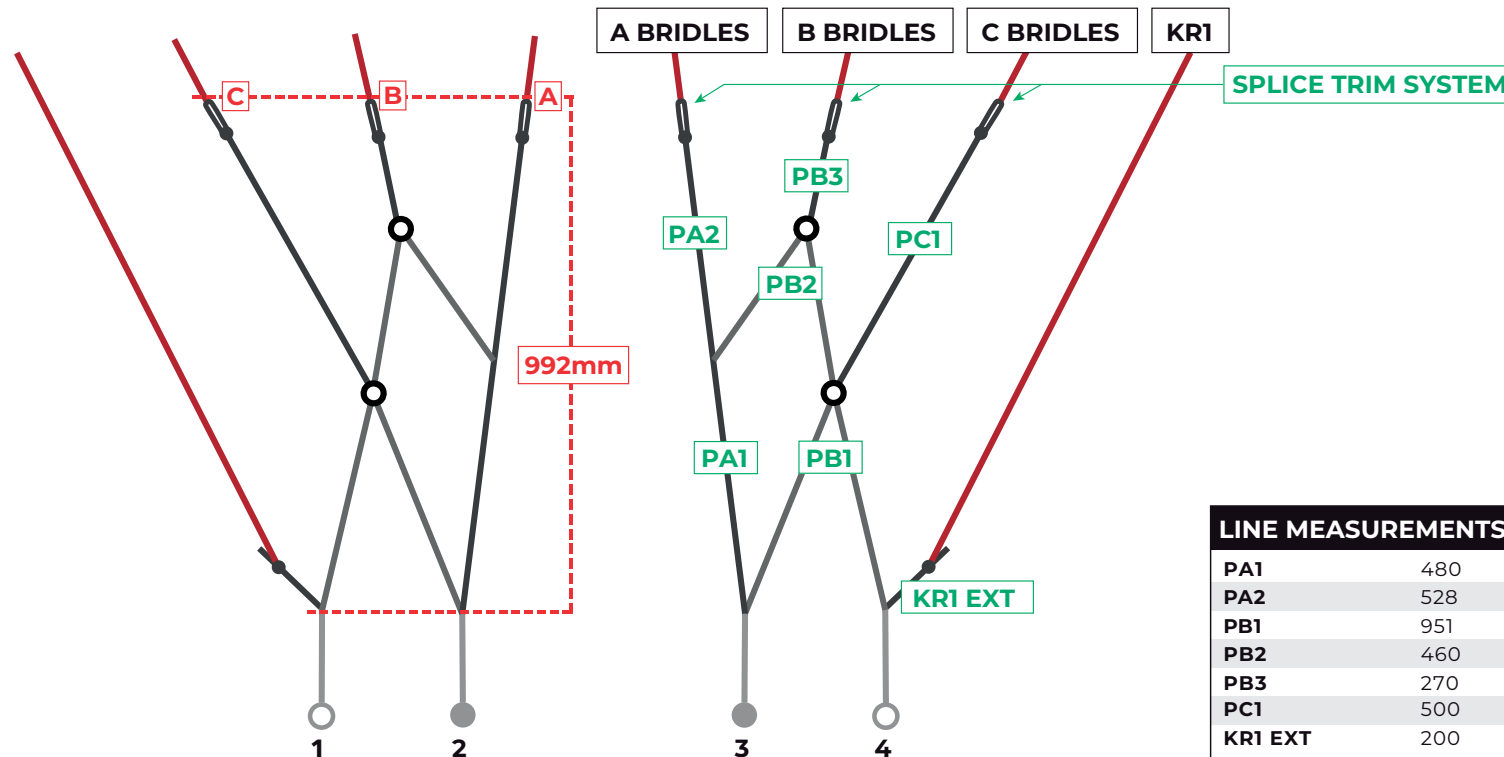
Bridle Lines that are worn or not to factory specification (+ or - 15mm) must be replaced.

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.

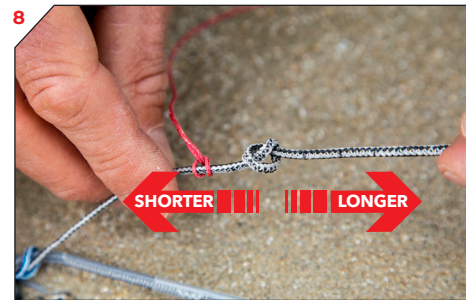
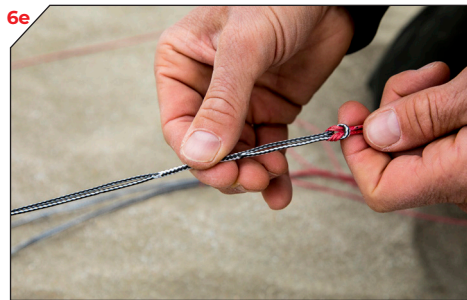
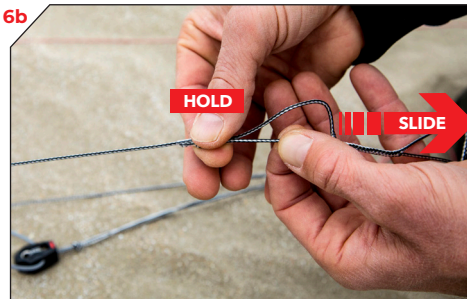
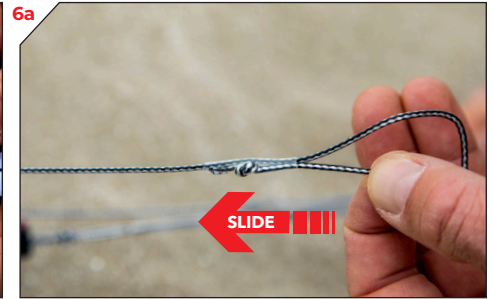
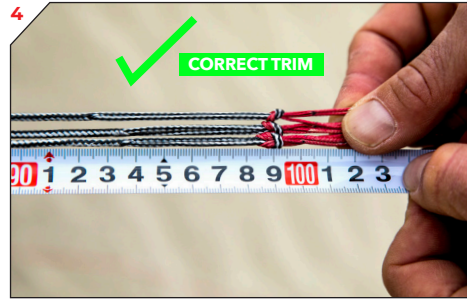
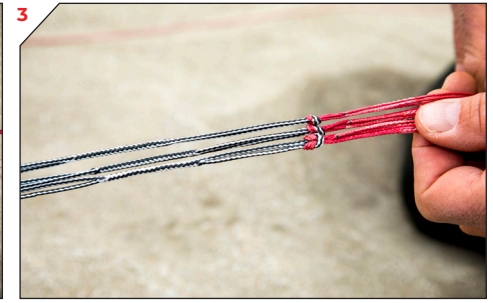
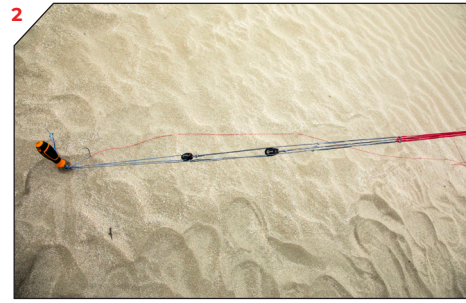
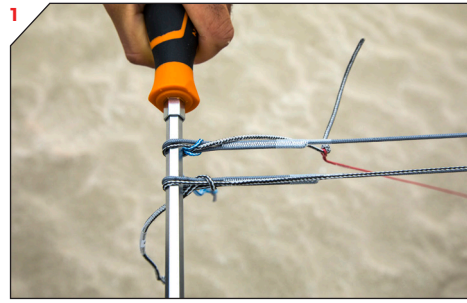
1. Open the kite out in a large space.
2. Inspect all bridle lines for wear/damage. Take note or label lines to be replaced.
3. Use a tape measure to measure the remaining bridles. Ask a friend to hold the end of the tape measure and bridle line in position to get an accurate measurement.
4. Pull on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

R1 V4 PRO-TUNE SPEED SYSTEM



R1_{v4}

R1 V4 PRO-TUNE SPEED SYSTEM TRIMMING



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.

R1_{v4}

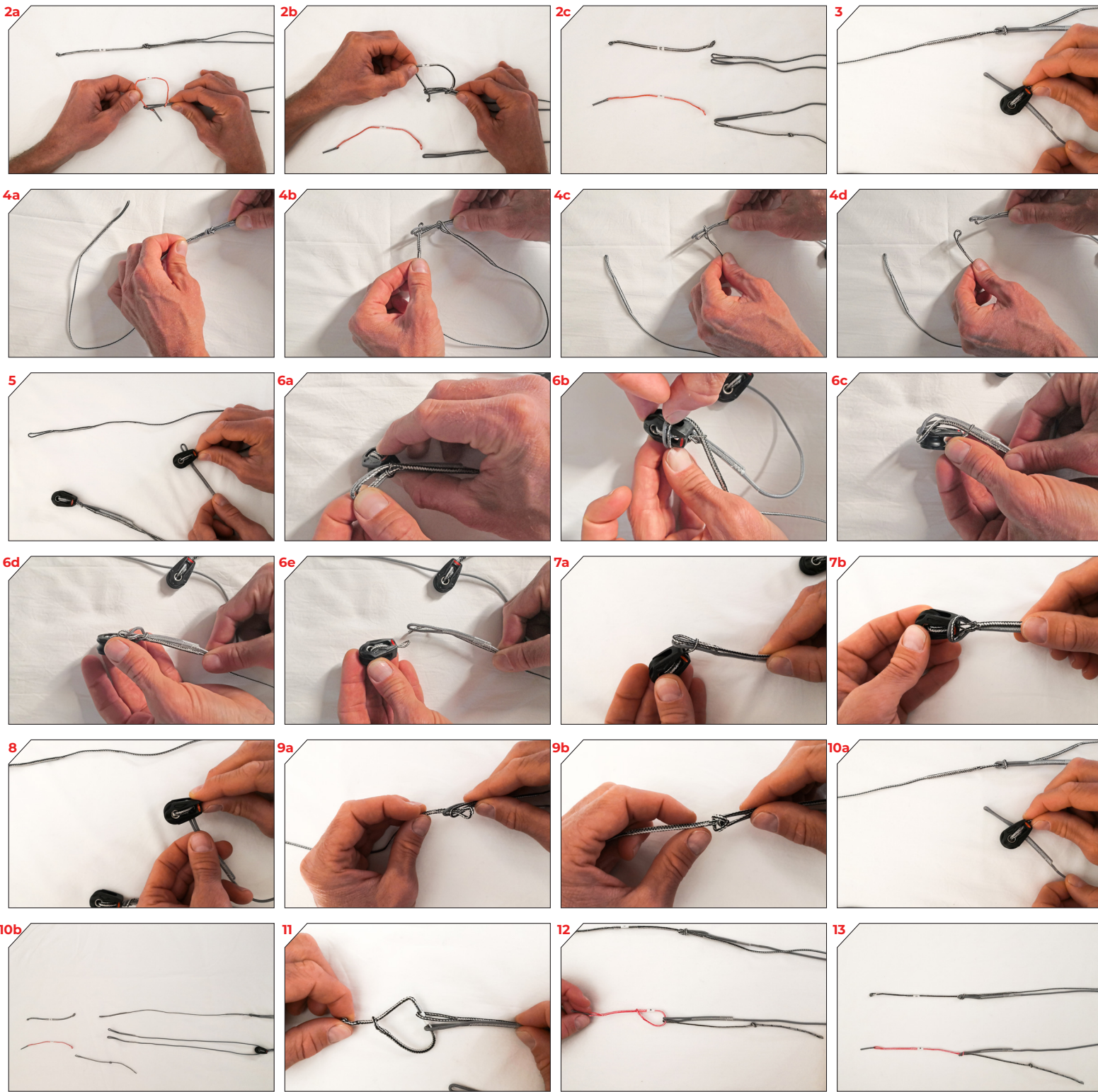
PRO-TUNE SPEED SYSTEM PULLEY LINE REPLACEMENT

The sheathed pulley lines (PB1 & PB2) will wear over time and will need to be replaced. Make sure you check them before every session. You'll find spare pulley lines in the supplied repair kit. 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.

[WATCH THE VIDEO AT WWW.OZONEKITES.COM](http://WWW.OZONEKITES.COM)

STEP-BY-STEP INSTRUCTIONS. REFER TO THE R1 V4 PRO-TUNE 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 PB1 from the lower pulley.
4. Disconnect PA1 from PA2 and PB2.
5. Remove PB2 from the upper pulley.
6. 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.
7. Take the replacement PB2 and PC1 and re-connect with the pulley. The pulley goes through the end loops of PB2 and PC1 i.e. reverse the previous steps.
8. Feed the replacement PB2 line through the upper pulley.
9. Connect replacement PB2 and PA1.
10. Take the PB1 replacement line and feed it through the lower pulley.
11. Connect PB1 and PA1 to the front line pigtail (#2 or #3).
12. Connect the other end of PB1 and KR1 EXT to the back pigtail (#1 or #4).
13. Repeat the same process for the other speed system side. Always check your speed system and replace lines when excessive wear shows.





BRIDLE LINE LENGTHS

ALL MEASUREMENTS IN MM

NAME	LINE MATERIAL CODE	7M	9M	LINE MATERIAL CODE	10M	11M	13M	LINE MATERIAL CODE	15M	17M	18M	19M	21M
A1	8000-025	294	271	8000-050	1028	1078	1175	8000-050	1181	1249	1293	1329	1395
A2	8000-025	231	204	8000-050	840	882	965	8000-050	963	1020	1058	1090	1146
A3	8000-025	241	247	8000-050	900	946	1038	8000-050	1071	1136	1179	1216	1283
A4	8000-025	216	198	8000-050	805	849	935	8000-050	985	1049	1090	1125	1190
A5	8000-025	281	239	8000-050	889	938	1033	8000-050	964	1032	1069	1106	1164
A6	8000-025	208	211	8000-050	680	721	799	8000-050	748	805	836	868	916
A7	8000-025	217	279	8000-050	667	711	792	8000-050	546	593	618	646	685
A8	8000-025	189	203	8000-050	580	620	694	8000-050	500	544	567	593	631
A9	8000-050	195	221	8000-025	222	241	285	8000-050	129	162	172	187	214
A10	8000-050	140	187	8000-025	190	207	248	8000-050	110	138	148	161	185
A11	8000-050	155	238	-	-	-	-	-	-	-	-	-	-
A12	8000-025	150	178	-	-	-	-	-	-	-	-	-	-
A13	8000-025	-	212	-	-	-	-	-	-	-	-	-	-
A14	8000-025	-	191	-	-	-	-	-	-	-	-	-	-
AM1	8000-090	1250	1900	8000-090	1355	1420	1540	8000-090	1690	1790	1850	1895	1990
AM2	8000-090	1100	1680	8000-090	1145	1200	1300	8000-090	1350	1430	1480	1515	1590
AM3	8000-090	1100	1520	8000-070	1070	1120	1215	8000-090	1000	1065	1100	1125	1185
AM4	8000-090	920	1050	8000-070	910	950	1030	8000-090	1000	1065	1100	1125	1185
AM5	8000-090	850	850	-	-	-	-	-	-	-	-	-	-
AM6	8000-070	700	1300	-	-	-	-	-	-	-	-	-	-
AM7	8000-070	-	1100	-	-	-	-	-	-	-	-	-	-
AR1	8000-190	2800	2800	8000-190	2820	2950	3200	8000-190	3380	3600	3700	3790	3980
AR2	8000-130	2550	3000	8000-130	2580	2700	2930	8000-130	3380	3590	3700	3790	3985
AR3	8000-090	2400	2270	8000-090	3580	3750	4070	8000-070	4440	4710	4860	4980	5230
B1	8000-025	260	234	8000-050	988	1036	1129	8000-050	1133	1198	1241	1275	1339
B2	8000-025	198	168	8000-050	801	841	920	8000-050	917	970	1007	1037	1091
B3	8000-025	210	212	8000-050	862	907	996	8000-050	1028	1091	1132	1168	1232
B4	8000-025	185	163	8000-050	772	814	897	8000-050	946	1007	1047	1081	1144
B5	8000-025	254	206	8000-050	858	906	998	8000-050	933	998	1034	1070	1127
B6	8000-025	182	179	8000-050	655	695	771	8000-050	722	778	808	839	885
B7	8000-025	196	251	8000-050	648	690	769	8000-050	528	573	598	625	663
B8	8000-025	168	176	8000-050	566	606	679	8000-050	484	527	551	576	613
B9	8000-025	182	199	8000-025	217	236	280	8000-025	127	159	170	184	211
B10	8000-025	127	166	8000-025	181	199	239	8000-025	96	125	134	148	173
B11	8000-025	149	224	-	-	-	-	-	-	-	-	-	-
B12	8000-025	137	165	-	-	-	-	-	-	-	-	-	-
B13	8000-025	-	206	-	-	-	-	-	-	-	-	-	-
B14	8000-025	-	179	-	-	-	-	-	-	-	-	-	-
BM1	8000-050	1250	1900	8000-070	1355	1420	1540	8000-090	1690	1790	1850	1895	1990
BM2	8000-050	1100	1680	8000-070	1145	1200	1300	8000-090	1350	1430	1480	1515	1590
BM3	8000-050	1100	1520	8000-050	1070	1120	1215	8000-070	1000	1065	1100	1125	1185
BM4	8000-050	920	1050	8000-050	910	950	1030	8000-070	1000	1065	1100	1125	1185
BM5	8000-050	850	850	-	-	-	-	-	-	-	-	-	-
BM6	8000-050	700	1300	-	-	-	-	-	-	-	-	-	-
BM7	8000-050	-	1100	-	-	-	-	-	-	-	-	-	-
BR1	8000-130	2800	2800	8000-130	2820	2950	3200	8000-130	3380	3600	3700	3790	3980
BR2	8000-090	2550	3000	8000-090	2580	2700	2930	8000-130	3380	3590	3700	3790	3985
BR3	8000-070	2400	2270	8000-090	3580	3750	4070	8000-070	4440	4710	4860	4980	5230



BRIDLE LINE LENGTHS

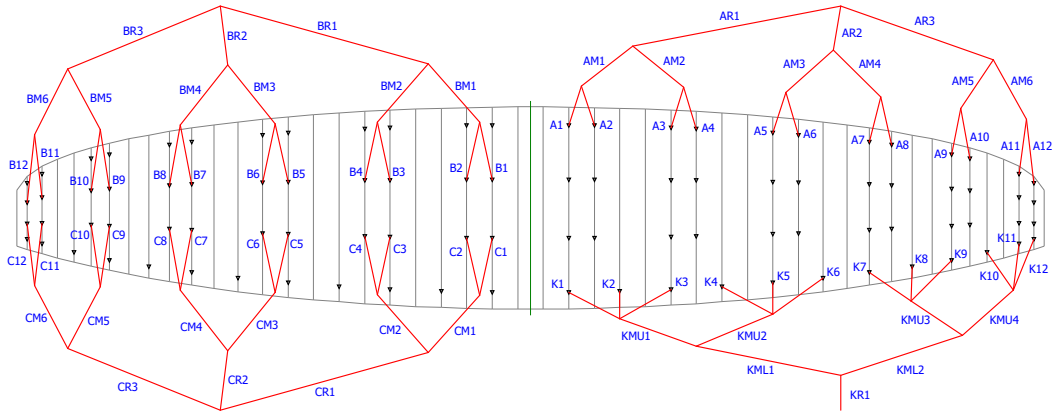
ALL MEASUREMENTS IN MM

NAME	LINE MATERIAL CODE	7M	9M	LINE MATERIAL CODE	10M	11M	13M	LINE MATERIAL CODE	15M	17M	18M	19M	21M
C1	8000-025	316	294	8000-025	1051	1102	1201	8000-025	1211	1281	1326	1363	1432
C2	8000-025	253	227	8000-025	864	907	992	8000-025	994	1052	1092	1124	1183
C3	8000-025	263	271	8000-025	924	971	1066	8000-025	1102	1170	1214	1252	1321
C4	8000-025	237	221	8000-025	828	873	962	8000-025	1014	1080	1122	1158	1225
C5	8000-025	303	262	8000-025	912	962	1059	8000-025	995	1065	1103	1141	1201
C6	8000-025	230	234	8000-025	704	746	827	8000-025	779	838	870	903	953
C7	8000-025	239	303	8000-025	690	735	819	8000-025	573	621	648	676	717
C8	8000-025	208	227	8000-025	596	637	714	8000-025	513	558	583	610	648
C9	8000-025	215	244	8000-025	239	259	305	8000-025	148	182	193	209	237
C10	8000-025	157	209	8000-025	196	215	257	8000-025	110	141	151	165	191
C11	8000-025	167	261	-	-	-	-	-	-	-	-	-	-
C12	8000-025	148	200	-	-	-	-	-	-	-	-	-	-
C13	8000-025	-	226	-	-	-	-	-	-	-	-	-	-
C14	8000-025	-	191	-	-	-	-	-	-	-	-	-	-
CM1	8000-050	1250	1900	8000-050	1355	1420	1540	8000-050	1690	1790	1850	1895	1990
CM2	8000-050	1100	1680	8000-050	1145	1200	1300	8000-050	1350	1430	1480	1515	1590
CM3	8000-050	1100	1520	8000-050	1070	1120	1215	8000-050	1000	1065	1100	1125	1185
CM4	8000-050	920	1050	8000-050	910	950	1030	8000-050	1000	1065	1100	1125	1185
CM5	8000-050	850	850	-	-	-	-	-	-	-	-	-	-
CM6	8000-050	700	1300	-	-	-	-	-	-	-	-	-	-
CM7	8000-050	-	1100	-	-	-	-	-	-	-	-	-	-
CR1	8000-070	2800	2800	8000-070	2820	2950	3200	8000-070	3380	3600	3700	3790	3980
CR2	8000-070	2550	3000	8000-070	2580	2700	2930	8000-070	3380	3590	3700	3790	3985
CR3	8000-070	2400	2270	8000-070	3580	3750	4070	8000-070	4440	4710	4860	4980	5230
K1	8000-025	1024	992	8000-025	1321	1239	1438	8000-025	1440	1655	1505	1573	1565
K2	8000-025	813	792	8000-025	1118	1020	1204	8000-025	1189	1400	1229	1296	1267
K3	8000-025	664	651	8000-025	962	860	1028	8000-025	1004	1206	1031	1098	1059
K4	8000-025	733	718	8000-025	1104	920	1192	8000-025	1251	1246	1154	1220	1175
K5	8000-025	590	569	8000-025	961	758	1031	8000-025	1081	1059	959	1021	961
K6	8000-025	571	531	8000-025	895	710	965	8000-025	1011	989	904	960	910
K7	8000-025	592	708	8000-025	981	963	1140	8000-025	1062	1074	1115	1175	1110
K8	8000-025	443	533	8000-025	823	793	961	8000-025	876	875	912	967	887
K9	8000-025	404	465	8000-025	740	709	866	8000-025	796	798	831	881	813
K10	8000-025	325	471	8000-025	726	720	825	8000-025	713	834	929	881	900
K11	8000-025	275	373	8000-025	651	643	748	8000-025	637	755	853	799	814
K12	8000-025	295	411	8000-025	649	648	753	8000-025	648	756	853	802	822
K13	8000-025	-	146	8000-025	248	219	280	8000-025	503	447	503	432	460
K14	8000-025	-	163	8000-025	256	232	295	8000-025	437	373	433	351	384
K15	-	-	-	-	-	-	-	8000-025	402	333	341	308	240
K16	-	-	-	-	-	-	-	8000-025	403	337	341	312	242
KML1	8000-050	1200	1300	8000-050	1200	1300	1400	8000-050	1500	1500	1700	1700	1800
KML2	8000-050	900	920	8000-050	900	1000	1100	8000-050	1200	1250	1300	1400	1400
KML3	-	-	-	-	-	-	-	8000-050	1645	1900	1800	2100	2000
KMU1	8000-050	900	1110	8000-050	1050	1200	1195	8000-050	1330	1410	1500	1600	1700
KMU2	8000-050	700	920	8000-050	765	1000	870	8000-050	910	1200	1200	1300	1400
KMU3	8000-050	800	1000	8000-050	850	900	850	8000-050	1000	1200	1200	1200	1400
KMU4	8000-050	800	900	8000-050	780	800	800	8000-050	1000	1065	1000	1100	1200
KMU5	8000-050	-	1110	8000-050	1150	1200	1250	8000-050	550	580	700	615	800
KMU6	-	-	-	-	-	-	-	8000-050	550	580	750	615	900
KR1	8000-090	2470	2790	8000-090	2850	2970	3150	8000-090	3370	3455	3570	3550	3770

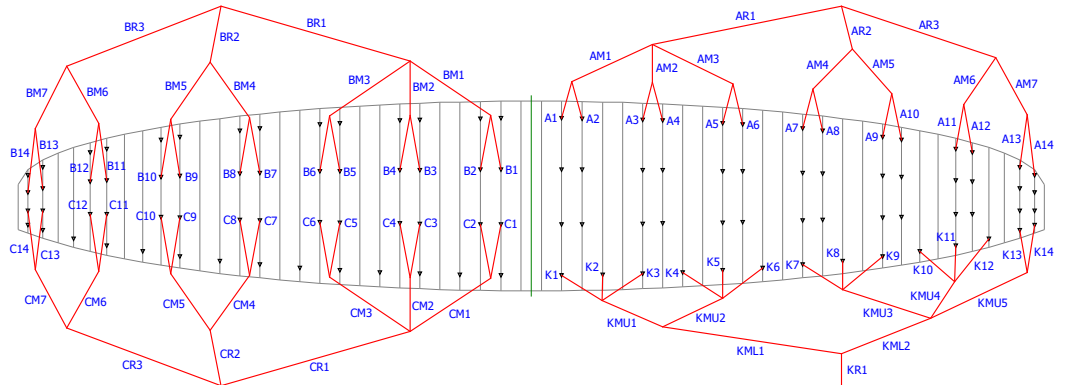
R1_{v4}

RIGGING DIAGRAMS

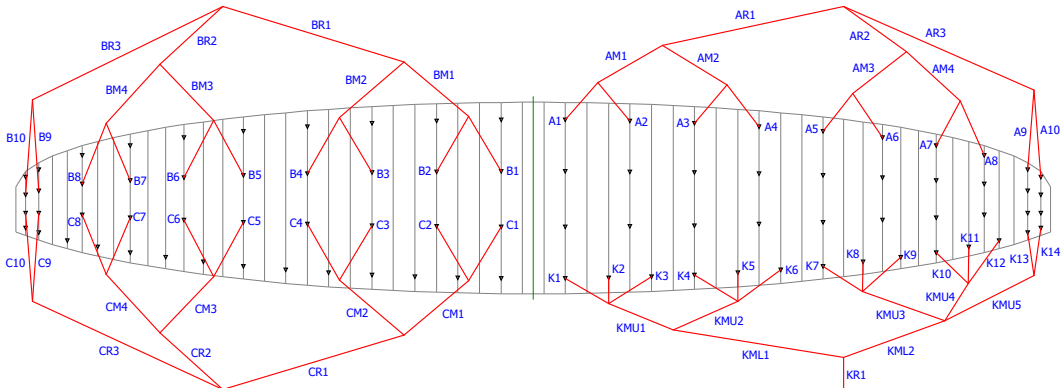
R1 V4 - 7M RIGGING DIAGRAM



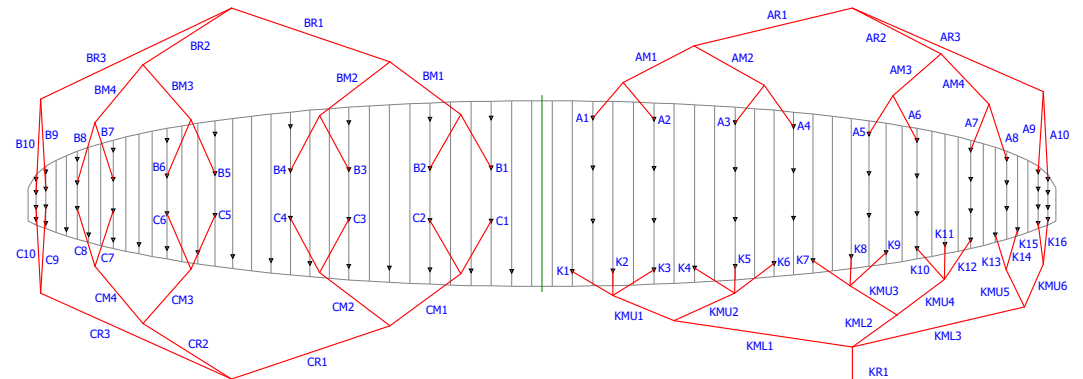
R1 V4 - 9M RIGGING DIAGRAM



R1 V4 - 10M/11M/13M RIGGING DIAGRAM



R1 V4 - 15M/17M/18M/19M/21M RIGGING DIAGRAM



R1_{v4}

HOW TO TO SHORTEN A BRIDLE LINE USING THE DOUBLE LOOP TECHNIQUE

1. Lay out the speedsystem as you would for set up
2. Disconnect the front (#2 or #3) pigtail
3. Remove PA1 from PA2 and PB2
4. Remove PA2 from bridle lines AR1, AR2, AR3
5. Put the bridle lines that are not effected back onto PA2 (AR2, AR3 in sample)
6. Put effected bridle line onto PA2 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 effected line needs shortening even more add another loop. If the line is off spec more than you can compensate with the double loop we recommend to replace or re-splice to the spec length
7. Tighten the double loop onto PA2 and measure length of effected line to check if modification brought it back to spec length
8. Close the loop to loop connection on upper end of PA2 by looping lower end of PA2 through its upper loop (reverse way from opening)
9. Connect PA2 and PB2 with PA1
10. Connect PA1 with PB2 with front pigtail
11. Repeat for other side or any other effected line.

