DUDEK paragliders

Service documents

FreeWay XX

09-2015

SERVICE MANUAL

The latest version of service manual is available at:
www.dudek.eu/en/service-and-inspections/

TECHNICAL INSPECTIONS

Full inspection is recommended every 24 months, if not advised otherwise by the inspecting person due to current paraglider condition.

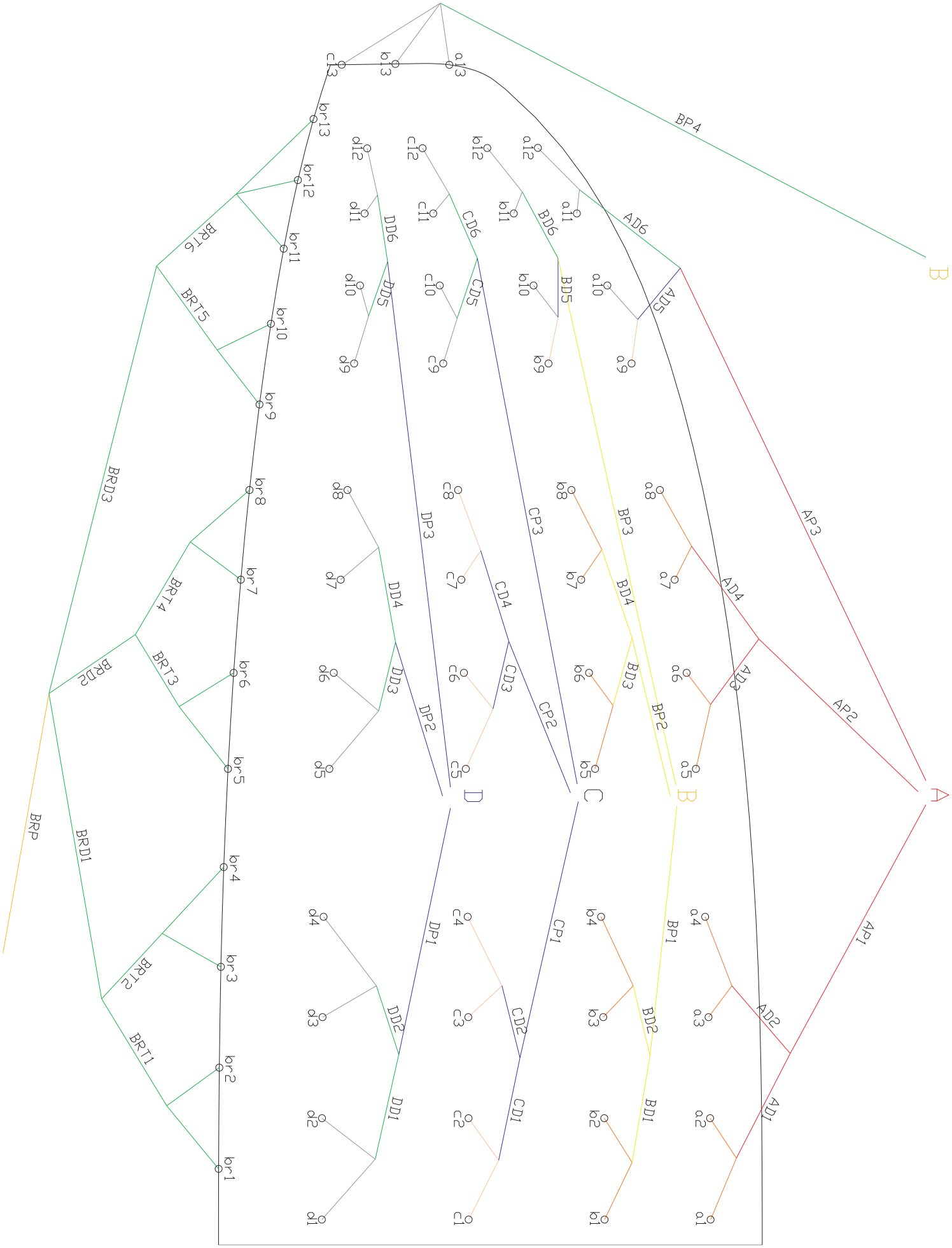
Paragliders in commercial use (training and tandem flights) should be undergoing Full Inspection every 12 months (excluding first 24-month period after purchase).

Technical inspection is carried out by the manufacturer or authorised person.

TECHNICAL DATA

FreeWay XX	19,5	22
Certification	-	-
Number of cells	55	55
Surface area (flat) [m^2]	19,50	22,00
Surface area (projected) [m^2]	17,16	19,36
Span (flat) [m]	10,07	10,69
Span (projected) [m]	8,44	8,96
Aspect Ratio (flat)	5,20	5,2
Aspect Ratio (projected)	4,15	4,15
Max. cord [cm]	231,70	246,20
Min. cord [cm]	60,30	64,00
Distance pilot to wing [m]	7,40	7,86
Total line lenght [m]	327,95	349,34
Weight range [kg]	50-80	55-100
Weight [kg]	5,4	5,9
Lines	Technora: 1,2 & 1,3 & 1,5 & 1,8 & 2,3	
Fabric	Porcher 38 g/m^2	
	Dominico tex 41 g/m^2	
	Porcher Hard 40 g/m^2	
	SR Scrim, SR Laminate 180 g/m^2	
Risers	PASAMON - Bydgoszcz, Polska	

Lining scheme



Length of the lines

FreeWay XX - 19,5

The tables / Tables / Tabele:

The individual lenghts and type of line
La longueur et le type de chaque ligne
Długości i rodzaj poszczególnych linek

	a	b	c	d	br
1	1127	1121	1083	1011	1358
2	1034	1029	980	905	1153
3	1084	1077	1034	961	1144
4	1102	1096	1063	988	1122
5	1067	1057	1022	955	1172
6	1000	995	952	881	1103
7	979	962	920	861	1103
8	985	973	942	876	1109
9	893	860	787	770	1132
10	803	776	696	668	1072
11	836	763	662	639	1093
12	809	736	632	601	1031
13	879	854	893		1036

	AD	BD	CD	DD	BRT
1	1147	1140	945	1040	1252
2	1067	1063	860	954	1106
3	1138	1118	919	1019	1143
4	1126	1124	926	1006	1076
5	940	867	716	655	1092
6	834	814	680	603	1031

	AP	BP	CP	DP	BRD
1	4522	4451	4711	4789	2304
2	4434	4391	4653	4723	2164
3	4599	4645	4897	5047	2066
4		5150			

BRP	2470

The total lenghts
Longueur des suspentes
Sumaryczna długość linek

	a	b	c	d	br
1	6756	6672	6706	6815	7352
2	6663	6581	6603	6710	7148
3	6634	6552	6572	6679	6991
4	6652	6571	6601	6707	6970
5	6598	6526	6561	6673	6911
6	6532	6464	6491	6598	6844
7	6500	6436	6466	6566	6776
8	6505	6447	6488	6581	6783
9	6402	6343	6370	6447	6725
10	6311	6259	6279	6345	6666
11	6240	6193	6209	6265	6631
12	6212	6166	6179	6226	6566
13	6009	5984	6024		6574

Technora A 8000U-070:

Technora A 8000U-090:

Technora A 8000U-120:

Technora TSL 90:

Technora 7343-140-006:

Technora TSL 140:

Technora TSL 190:

Technora TSL 280:

Technora TSL 380:

Total suspension lines length, measured from the lower surface of the canopy to the inside edge of the maillon (tolerancy +/- 10 mm)

Length of the lines

FreeWay XX - 22

The tables / Tables / Tabele:

The individual lenghts and type of line
La longueur et le type de chaque ligne
Długości i rodzaj poszczególnych linek

	a	b	c	d	br
1	1197	1191	1151	1074	1490
2	1100	1094	1042	963	1222
3	1151	1144	1097	1020	1208
4	1171	1165	1129	1050	1188
5	1133	1122	1086	1015	1252
6	1063	1057	1012	936	1187
7	1040	1021	977	914	1166
8	1046	1033	1000	931	1173
9	949	914	836	818	1202
10	853	825	739	709	1137
11	888	811	703	679	1158
12	859	782	672	638	1093
13	934	907	949		1149

	AD	BD	CD	DD	BRT
1	1216	1209	1002	1103	1344
2	1135	1131	915	1015	1170
3	1208	1187	976	1082	1224
4	1197	1195	985	1070	1139
5	998	921	761	696	1158
6	886	865	723	641	1096

	AP	BP	CP	DP	BRD
1	4839	4764	5038	5128	2473
2	4752	4703	4981	5062	2307
3	4928	4975	5241	5408	2197
4		5511			

BRP	2630

The total lenghts
Longueur des suspentes
Sumaryczna długość linek

	a	b	c	d	br
1	7217	7125	7160	7276	7907
2	7121	7030	7050	7167	7636
3	7091	7003	7020	7135	7447
4	7112	7022	7050	7164	7426
5	7055	6971	7009	7134	7378
6	6985	6908	6936	7055	7316
7	6952	6872	6906	7017	7205
8	6958	6888	6927	7035	7216
9	6844	6772	6809	6892	7149
10	6753	6690	6713	6780	7084
11	6681	6619	6635	6701	7046
12	6650	6589	6607	6658	6978
13	6434	6404	6447		7037

Technora A 8000U-070:

Technora A 8000U-090:

Technora A 8000U-120:

Technora TSL 90:

Technora 7343-140-006:

Technora TSL 140:

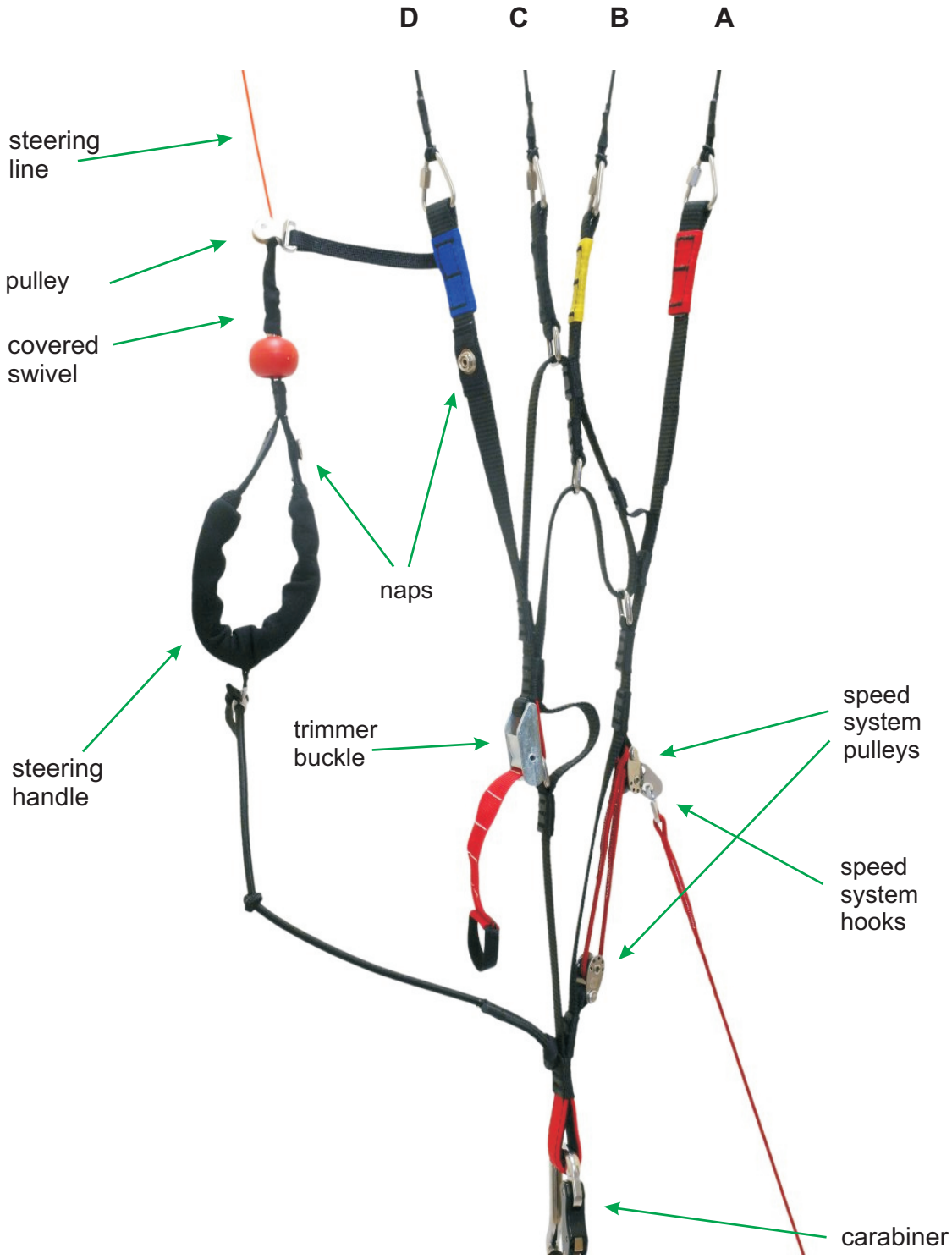
Technora TSL 190:

Technora TSL 280:

Technora TSL 380:

Total suspension lines length, measured from the lower surface of the canopy to the inside edge of the maillon (tolerancy +/- 10 mm)

FreewayXX Risers



Other informations:

- number of risers: 4 (with A riser split into A and A')

- trimmers: yes

FreewayXX Risers

Risers neutral (without speed)

Slowest speed,
minimum sink,
Take off position

length of the risers (with maillons)

All risers neutral at: 585 mm

Full speed

Increased speed,
increased sink

length of the risers (with maillons)

speed system:
A - 465
B - 485
C - 535
D - 585

FreewayXX Risers

Trimmer off

Icreased trim speed,
Sink increased a little

length of the risers (with maillons)

speed system:
A - 585
B - 600
C - 617
D - 635

Trimmer off and full speed

maximum speed,
maximum sink

length of the risers (with maillons)

speed system:
A - 465
B - 485
C - 560
D - 635

Components

List of components and materials for Freeway XX

Name of product	Dimension	Supplier	Location of use								
CANOPY			Others	Top surface front	Top surface	Bottom surface front	Bottom surface	Ribs suspended	Ribs unsuspended	Diagonals	Vector – stripes
Porcher 09017 1580 E25	38gr	NCV industries		X	X						
Dominico DOKDO-30DMF(WR)	40gr	Domico Textile				X	X				
Porcher 09017 1580 E29	40gr	NCV industries						X	X	X	X
Porcher 09092 1520 001 80g	80gr	NCV industries	Reinforcements								
Porcher 02420 1450 X15A	180gr	NCV industries	Reinforcements								
Nylon Fibre 2,0mm	fi 2,0mm	Zarys	Reinforcements on ribs								
Nylon Fibre 2,4mm	fi 2,4mm	Zarys	Reinforcements on ribs								
Nylon Fibre 3,0mm	fi 3,0mm	Zarys	Reinforcements on ribs								
Webbing 57 501/12,5	12,5mm	GUTH & WOLF	Suspension points			&	Edging on intake				
Machine thread Durafix size 60	60	Durak	Canopy sewing								

LINES			Others	Main	Brake
Technora A-7343-140	1,3mm/140 daN	Edelrid			X
Technora A-8000/U-70	0,7mm/70 daN	Edelrid	X		
Technora A-8000/U-090	0,8mm/90 daN	Edelrid	X		
Technora TSL00-0090	1,2mm/90 daN	Liros	X		X
Technora TSL00-0140	1,3mm/140 daN	Liros	X	X	
Technora TSL00-0190	1,55mm/190 daN	Liros	X	X	
Technora TSL00-0280	1,8mm/280 daN	Liros		X	
Technora TSL00-0380	2,2mm/380 daN	Liros	X		X
Machine thread Durafix size 60	60	Durak	Lines sewing		

RISERS & METAL PARTS						
Webbing TE216/20D	20mm	Pasamon	Riser main			
Webbing TS548/20	20mm	Pasamon	Trimer tape			
Webbing TS548/25	25mm	Pasamon	Trimer tape			
Webbing TE324/10 czarna	10mm	Pasamon	Suspension for accelerator pulley		Suspension for brake pulley	
Webbing TS555/20	20mm	Pasamon	Suspension for accelerator pulley		Suspension for brake pulley	
Webbing TS555/25	25mm	Pasamon	Suspension for accelerator pulley			
Rubber O-rings 14x2mm	14x2mm	ABS Serwis	For lines protection			
Neodymium magnet 16x16x4[N38]	16x16x4mm	Biegun	Riser magnet			
DUDEK Smart Pulley	16mm	Fixi / Dudek	Accelerator pulley	&	Brake pulley	
Rolls - AustriAlpin	15mm	AustriAlpin	Brake pulley			
Delta Inox MRDI03.5	fi 3,5mm	Pequet	Maillon			
Brummel Hook Be 180	25mm	Finsterwalder	Accelerator line			
Rectangle inox - welded	20/4mm	Sow-Yacht	Riser constraction			
Buckle regulator 25mm	25mm	NINGBO	Buckle trimer			
Machine thread Gral size 20	20	COATS	Riser sewing			