



GLIDING NEW ZEALAND INCORPORATED

ADVISORY CIRCULAR
AC 3-04

**WINCH & AUTO LAUNCH
CABLE CONFIGURATION**

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1 Introduction

Each winch or auto launch cable must incorporate a weak link, which should not exceed the weak link strength recommended in the glider's Flight Manual. Where no specific strength is given, the maximum strength of the weak link should be approximately one and one-third times the gross weight of the glider being launched.

2 Cable set-up

The drawing appended after page 3 depicts the recommended cable set-up for TOST fittings. The weak link must be incorporated at the glider end of the cable between the glider and the parachute.

3 BGA approved winch launch weak link strengths

The British Gliding Association (BGA) maintains a list of TOST weak links to be used in winch launching various gliders. For convenience, extracts from this table are reproduced in the table on page 3 for glider types on the NZ register, and may be relied upon to ensure compliance with the GNZ MOAP (Section 2-9, paragraph 2.6). This list was last updated by BGA on 14 July 2010.

4 Maximum winch launching speeds

The table on page 3 also includes maximum winch launching speeds for each glider type, taken from the Skylaunch chart, last updated by the BGA on 22 December 2010. The speeds given are for guidance only – for authoritative speeds, consult the relevant glider placards or Flight Manual.

Note: The TOST colour coding assumed in the table is as follows:

White = 500 kg

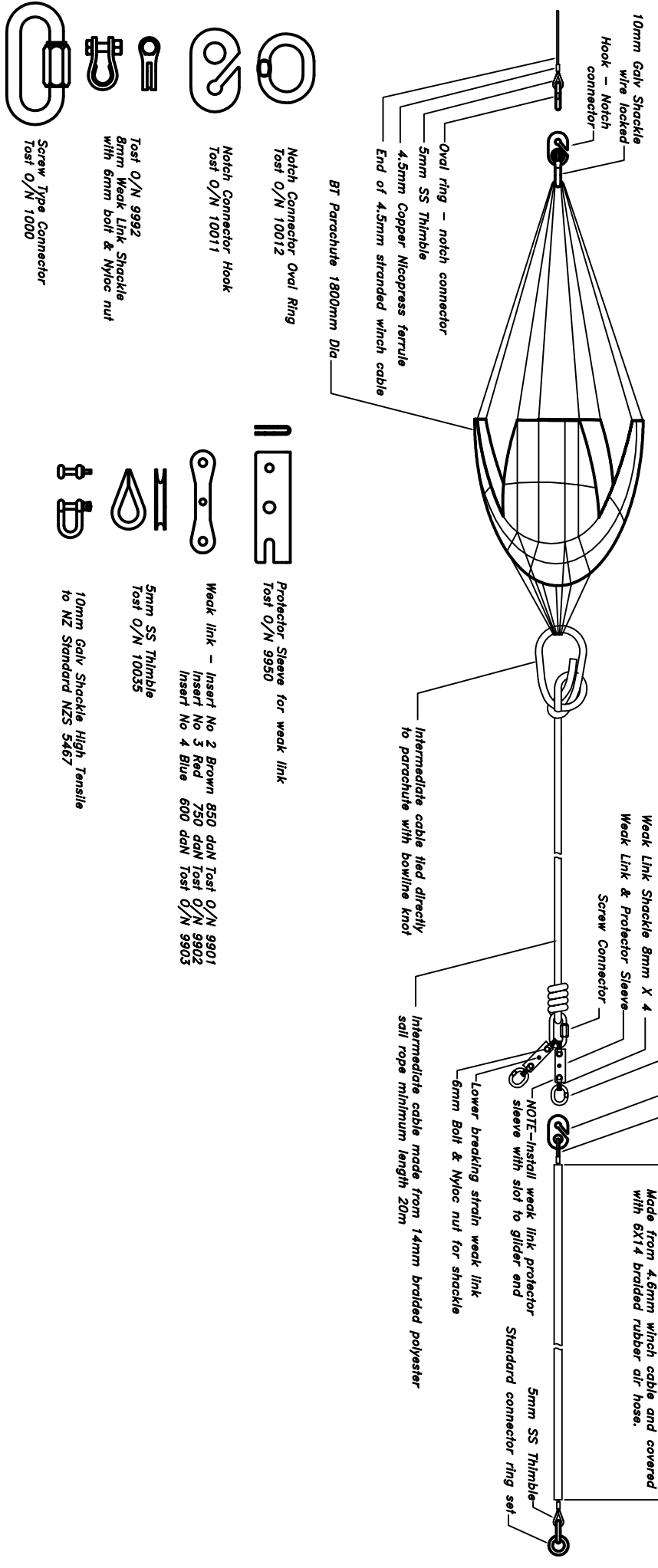
Blue = 600 kg

Red = 750 kg

Brown = 850 kg

Black = 1000 kg

Glider Type	Tost Weak Link	Max Speed Kt		Glider Type	Tost Weak Link	Max Speed Kt
ASH 25	Brown	70		Ka 6E	Blue	56
ASH 26	Red	70		Ka 7	Brown	66
ASK 21	Black	81		Ka 8	Blue	60
Astir/Grob single	Blue	65		Ka 13	Brown	65
Astir/Grob twin	Brown	65		Kestrel 17/19	Blue	70
ASW 15	Blue	59		LAK 12	Blue	75
ASW 17	Red	65		Libelle 201/301	Blue	65
ASW 19B	Blue	67		LS 1f	Blue	65
ASW 20	Blue	65		LS 3 & 4	Blue	70
ASW 27	Blue	70		LS 6 & 8	Red	75
Bocian	Black	54		Mini Nimbus	Blue	81
Cirrus (Open)	Brown	59		Mosquito	Blue	81
Cirrus (Standard)	Blue	65		Nimbus 2	Red	65
Club Libelle	Blue	65		Olympia 463	White	66
Cobra	Red	59		Phoebus C	Red	65
Dart 15 & 17	Blue	71		PIK 20	Blue	67
DG 100/200/300	Blue	70		Puchacz	Red	59
DG 400/600/800	Blue	81		PW 5	Blue	65
DG 500/505	Black	75		Rhonlerche (Ka 4)	Brown	49
Discus & Discus 2	Blue	81		Sagitta	Blue	66
Duo Discus	Brown	81		SHK	Blue	56
Eagle	Blue	70		Skylark 2B	Blue	61
Foka 4	Blue	65		Skylark 3F	Blue	71
Hornet	Blue	75		Skylark 4	Blue	76
Jantar Standard 2	Red	67		T 31	White	48
Janus a & b	Brown	65		T 53	Red	70
Janus c	Brown	81		Vega	Blue	70
Ka 6BR & CR	Blue	60		Ventus & Ventus 2	Blue	81



- 10mm Galv Shackle wire hooked Hook - Notch connector
- Oval ring - notch connector
- 5mm SS Thimble
- 4.5mm Copper Niocress ferrule
- End of 4.5mm stranded winch cable
- BT Parachute 1800mm Dia

- Notch Connector Oval Ring Test O/N 10012
- Notch Connector Hook Test O/N 10011
- Protector Sleeve for weak link Test O/N 9950
- Weak link - Insert No 2 Brown 850 dan Test O/N 9901
Insert No 3 Red 750 dan Test O/N 9902
Insert No 4 Blue 600 dan Test O/N 9903
- 5mm SS Thimble Test O/N 10035
- 10mm Galv Shackle High Tensile to NZ Standard NZS 5467

- Intermediate cable tied directly to parachute with bowline knot
- 5mm SS Thimble
- Notch connector hook
- Oval Ring for notch connector
- Weak Link Shackle 8mm X 4
- Weak Link & Protector Sleeve
- Screw Connector
- Lower breaking strain weak link 6mm Bolt & Nyloc nut for shackle
- NOTE - Install weak link protector sleeve with slot to glider end
- Standard connector ring set
- 5mm SS Thimble
- Intermediate cable made from 14mm braided polyester sail rope minimum length 20m

- Safety Cable Length 3.0m
- Made from 4.5mm winch cable and covered with 6X14 braided rubber air hose.

GLIDING NEW ZEALAND	TOST WINCH CABLE SET-UP	
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