

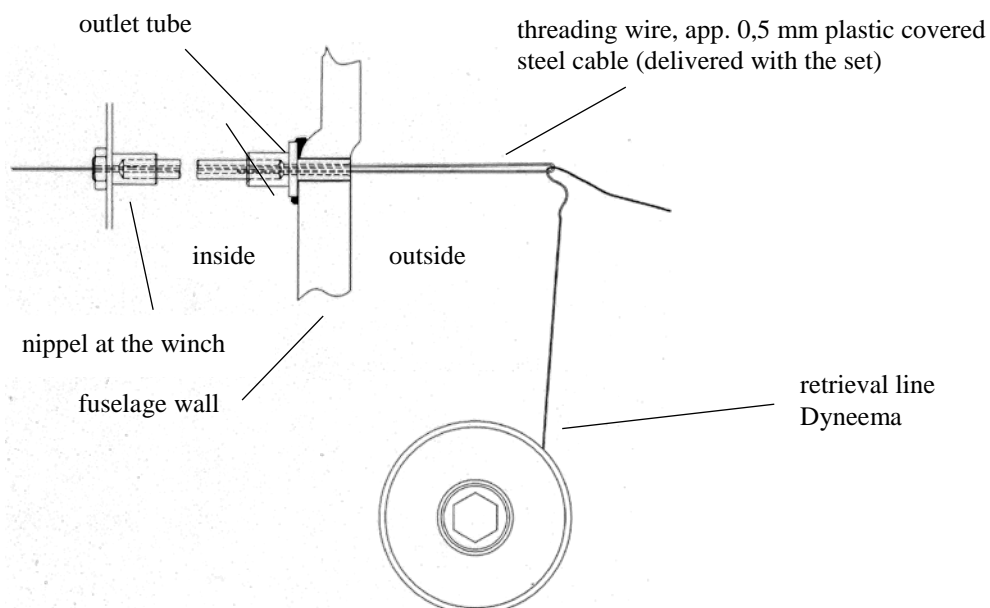
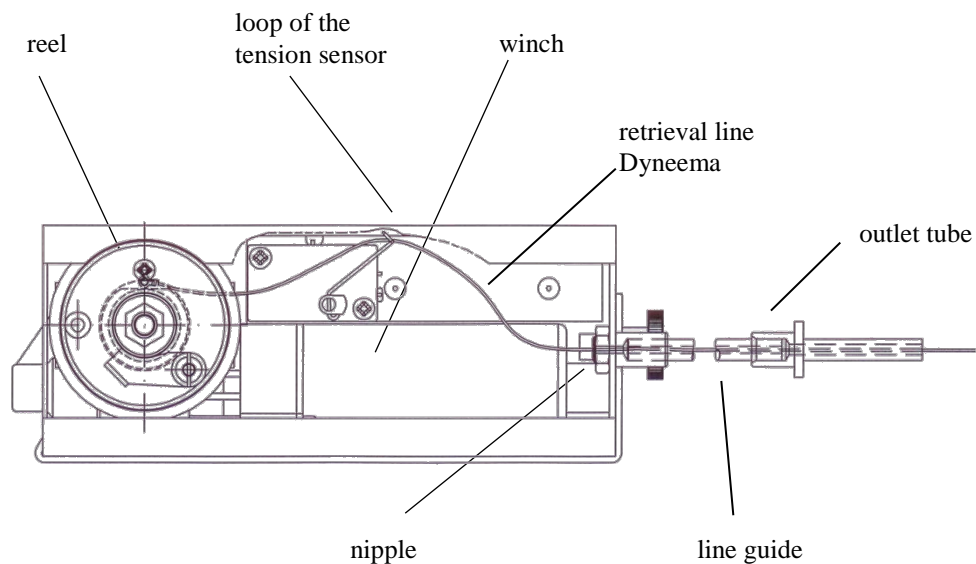


Replacement of the retrieval line made of Dyneema

Threading the retrieval line

Threading of the retrieval line with the aid of a stiff wire by the following steps:

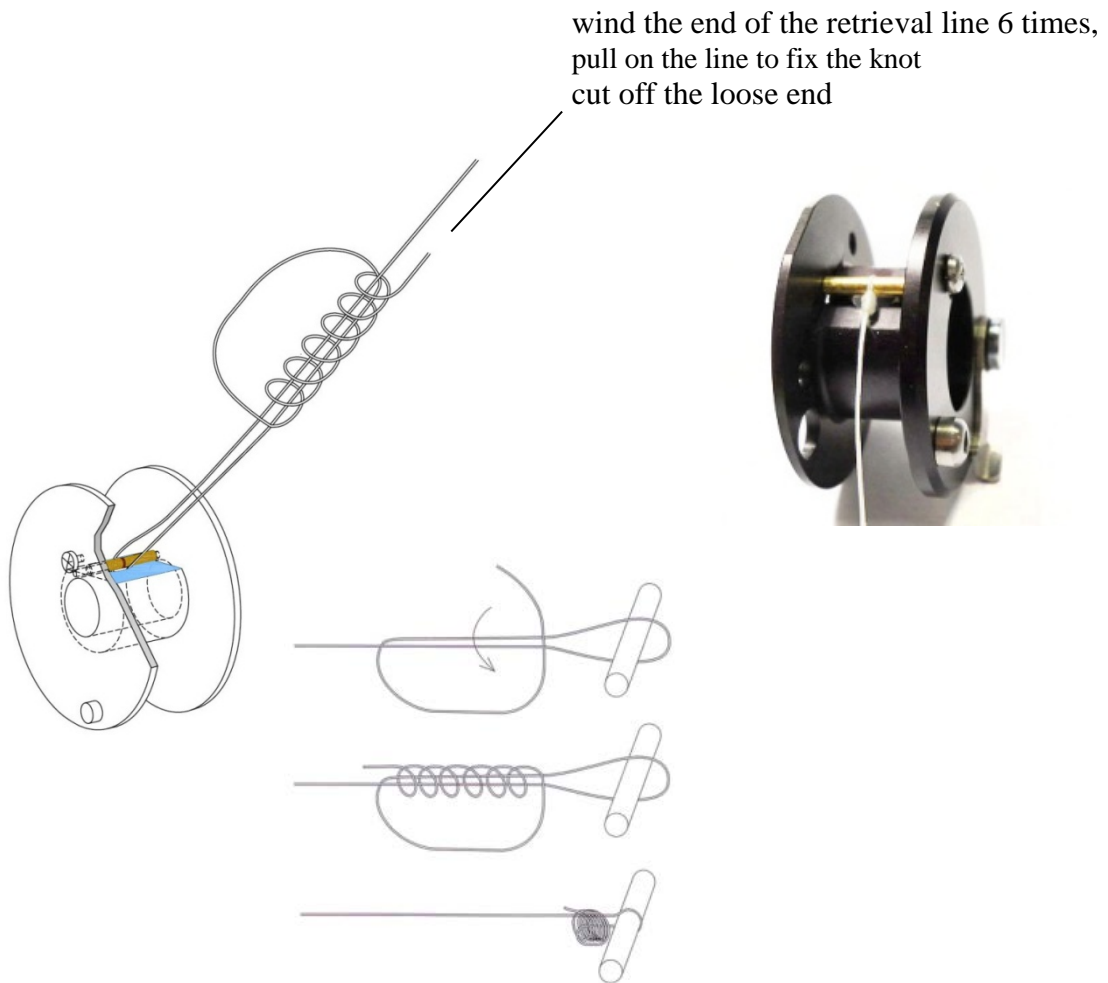
- push threading wire from outside through the plastic tube (line guide)
- hook retrieval line to the threading wire and pull it towards the winches
- thread the retrieval line through the loop of the tension sensor (micro switch)
fix retrieval line to the reel



Knotting the retrieval line to the reel

Dyneema lines need special knots which are well known in fishing sports and which we recommend (see following figures).

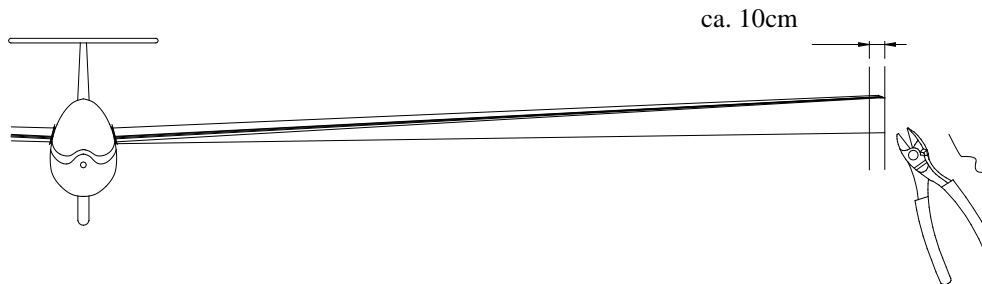
- remove the removable reel
- remove the old retrieval line
- fix the retrieval line as shown in the sketch
- putting the reel on the winch again



**Attention! A knot weakens the line by about 50% !
Therefore, use only recommended knot which weakens the line only by about 30%.**

Cutting the retrieval line to length

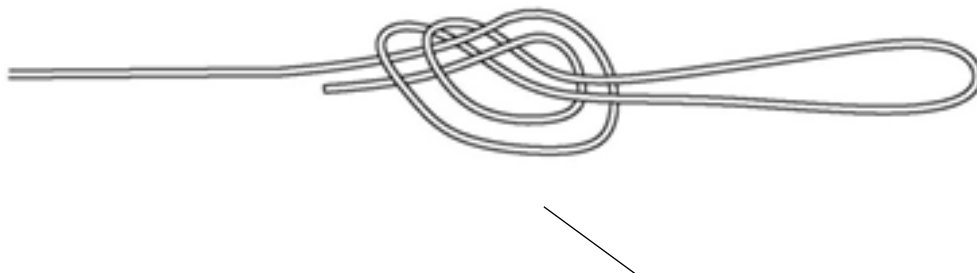
After having attached the retrieval line to the reel and threaded it through the guide line, pull it to the wing tips. Tension and cut it in such a manner that it ends at the wing tips.



Attention! For completely unwound retrieval line the bug wiper shall not come closer to the wing tips than 20 cm !

Making a loop at the end of the retrieval line

To be able to secure the retrieval line to the bug wiper a loop has to be made at the end of the line. Form the loop and fix it by the recommended knot.



Retrieval line, Dyneema tensile strength ca. 47 kp

Renew the retrieval line at the beginning of each new flying season.

Hooking retrieval line to BWS Flexi-wiper for example: with retrieval line on the underside of the wing

Make a loop at the end of the retrieval line as shown below on next page and then thread line through 1 in the small bow, through the corresponding hole 2 in the large bow, through the adjacent hole 3 and then hook loop to the pin at 4 and tense the line.

Cleaning filament: Fasten filament with 4 knots at the hole (1), thread it through the holes (2), (3),(4),(5) and (6) and back again through the holes (5),(4),(3),(2) up to (1). After adjusting bug wiper to maximum profile at the fuselage tense filament and fasten it with 4 knots to hole (1).

Important: for free moving joint in front of the bug wiper (to enable automatic adaption to the wing profile during cleaning) make sure that the cleaning filaments are short enough to prevent opening to a thicker profile than at the fuselage.

Also check, especially at the wing tip, that the bug wiper always slides on the filaments and NOT on the frame.

