BASE EXTRUSION MODIFICATION AND LEAF SPRING INSTALLATION FOR REPLACEMENT FLEX FEEDERS

The flex feeder assembly is a highly stressed part of your luff system. Stresses can exceed design parameters when sail handling is done improperly. Forespar® has identified two reoccurring operator errors which result in flex feeders cracking at the transition point where the flex feeder extends below the support of the aluminum base extrusion. The following information will prevent breaking of flex feeders and instruction details for installing a replacement assembly. If you have any questions, please contact your Leisure Furl™ dealer or Forespar® at (949)858-8820.

The first issue arises when a reefed main is set with a batten on the flex feeder. A reefed Leisure Furl™ main should always have a batten on the mandrel and never on the flex feeder. The batten at the mandrel provides outhaul tension to the foot of the reefed sail. If the batten is on the flex feeder cyclical batten thrust forces resulting from the sail loading and unloading causes the flex feeder to fracture.

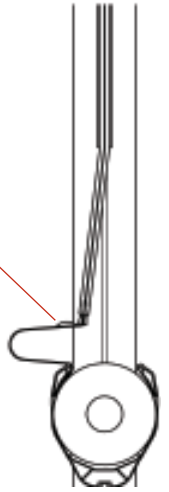
ALWAYS REEF WITH A BATTEN HERE AND NEVER ON THE FLEX FEEDER

The restrictor line and termination blocks have been omitted from these drawings for clarity

The other common error results from insufficient tailing tension on the furling line during hoisting. If the sail is allowed to billow out of the top of the boom, it has to make a hard turn as it enters the stainless steel prefeeder at the bottom of the flex feeder. The vertical compression forces are greatly magnified when a batten gets to the prefeeder and can't enter until it makes virtually a right angle turn. Tailing tension on the furling line keeps the sail as flat and vertical as possible as it enters the prefeeder. If the sail does billow out, it is critical to secure the halyard and furl the billowed sail back into the boom. Never continue to hoist a sail which is not coming straight out of the boom.

BATTEN

NEVER CONTINUE TO HOIST A SAIL WHICH HAS BILLOWED OUT OF THE BOOM. SECURE THE HALYARD AND FURL THE BILLOWED SAIL BACK INTO THE BOOM.



The following page is the instructions for installing a replacement flex feeder. The process includes a simple modification to the aluminum base extrusion which can be accomplished with basic hand tools in less than one hour. This new flex feeder assembly is stronger, more flexible and more forgiving than the original but the cautions described above are still required.

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To remove the original flex feeder, first loosen the screws holding the stainless steel prefeeder and slide it out of the flex feeder. Next, slide the aluminum liner out of the flex feeder. Remove and retain the two screws which secure the flex feeder to the aluminum base extrusion. After removing the original flex feeder the following modification must be made to the aluminum base extrusion. The tools required include a ruler or tape measure, hacksaw, file, drill motor, #25 (.150) drill bit and a 10-24 tap.

1) Measure up from the bottom of the aluminum base extrusion 4” and mark the top of the T portion of the aluminum base extrusion.
2) Using the hacksaw cut through the T portion (aft to forward). (Diagram #1)
3) Cut from the lower end of the aluminum base extrusion to remove the bottom 4” of the T shape. (Diagram #1)
4) Dress and fair the cut area of the Aluminum base extrusion using the file.
5) Place the leaf spring onto the aluminum base extrusion. Ensure it is straight and centered and mark the two fastener holes.
6) Drill the two holes and tap to 10-24. Now the lower end of your aluminum base extrusion should look like diagram #1.
7) Attach the leaf spring to the aluminum base extrusion as shown using the supplied (2) 10-24 FHMS. (Diagram #2)
8) Slide the new flex feeder onto the leaf spring and aluminum base extrusion and replace the two screws to secure it.
9) Reattach the stainless steel prefeeder
10) Ensure that the prefeeder restrictor line allows port and starboard movement of the flex feeder but no aft movement.

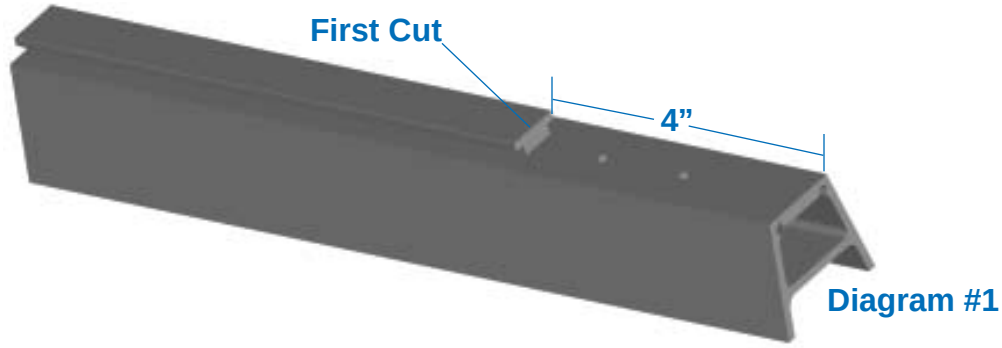

Diagram #1

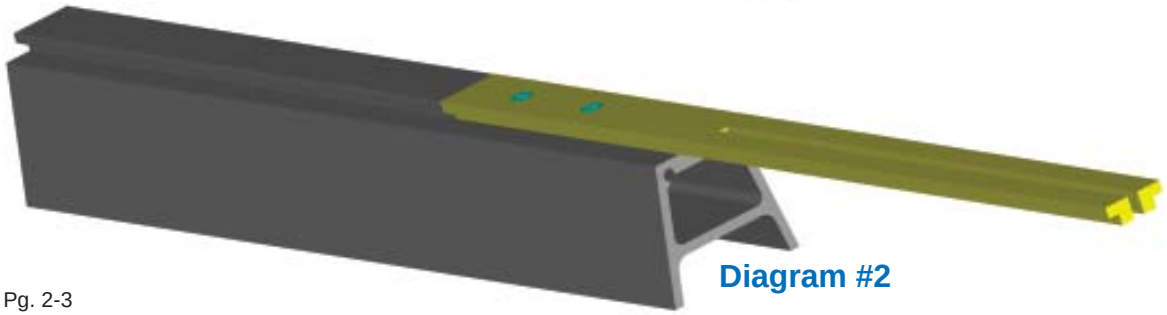

Diagram #2

Leaf Spring

Leisure Furl Flex Feeder Installation