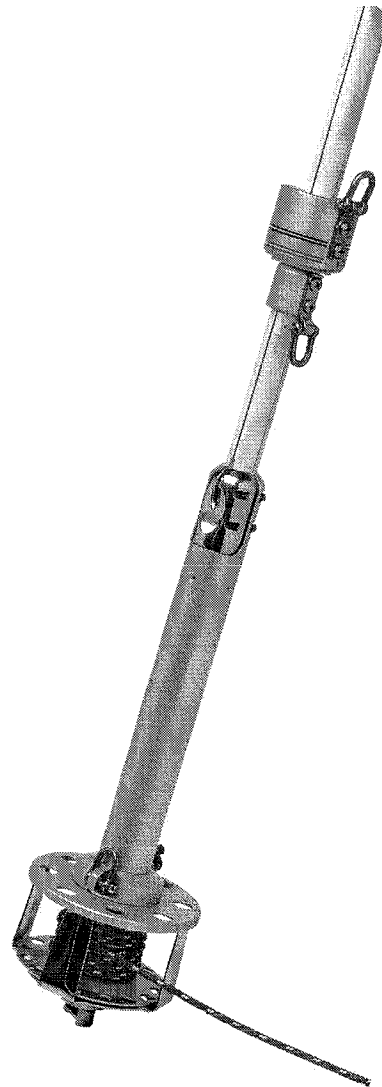


**SCHAEFER**  
LEGENDARY STRENGTH

***OWNERS  
MANUAL***

***Snapfurl CF-700***



DO NOT INSTALL  
IN COLD WEATHER

## SYSTEM REQUIREMENTS

1. The maximum headstay wire diameter size is 7/32" [6mm] wire.
2. The maximum headstay length is 38 Feet [11.6m].
3. A toggle is required at the lower end of the turnbuckle for attaching the drum unit to the stem head. Most often the headstay turnbuckle toggle is suitable.
4. A toggle is recommended at the upper end of the headstay to allow proper articulation of the headstay.
5. Normal installation does not require modifying the headstay.
6. See page 10-11 for trouble shooting guide.

## SAILMAKERS INSTRUCTIONS

1. The required luff tape size is #6 standard.
2. Webbing, instead of a grommet, is recommended at the tack and head to avoid bulky furling.
3. A foam luff pad can be installed for reefing deep draft sails.
4. A sunshade is recommended on the leech and foot, if the sail will be exposed to the sun for an extended period of time.
5. See page 9 for measurement details.

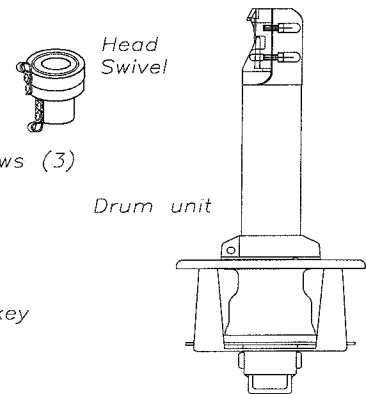
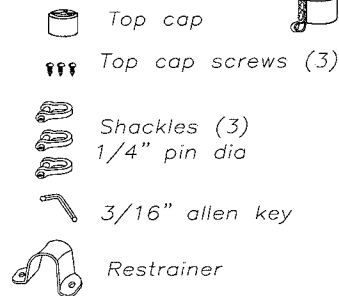
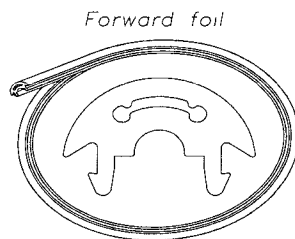
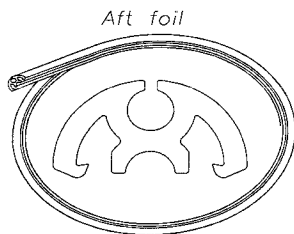
## TOOLS REQUIRED

1. Wire Snips
2. Phillips head screwdriver
3. Crescent wrench
4. 50 ft. tape measure
5. Hacksaw

## PRE-INSTALLATION NOTES:

This system can be assembled with the headstay on the boat or on the dock. Installation with headstay on the boat will require removing the lower end headstay briefly to install the swivel and drum unit. Insure the mast is properly supported during this installation. DO NOT INSTALL IN TEMPERATURES 60°F (15°C). Supplied halyard restrainer must be installed.

### STANDARD COMPONENTS (in box)





- \* The installation of the furler may require going aloft in a bosun's chair to remove the headstay prior to assembly and to reattach the headstay after assembly. If you are uneasy about going aloft in a bosun's chair or with any aspect of the furler assembly procedure, please seek the assistance of a professional yacht rigger.
- \* Do not treat going aloft lightly. Always use a safety line or second halyard to back up the halyard being used.
- \* Use a heavy duty bosun's chair in good condition which provides good support and security. Large deep tool pockets are helpful.
- \* Never attach a snap shackle directly to the bosun's chair. Bypass the snap shackle and use a "D" shackle or tie the halyard to the chair.
- \* Never allow anyone to stand under the person working aloft. Any tools or fittings dropped from above could cause severe personal injury.
- \* If removing headstay from boat, first make sure the mast is properly supported. Do not use a snap shackle on the halyard to support the mast. Tie the halyard to a substantial deck fitting. Secure a line to the top of the headstay in order to prevent it from dropping to the deck when the masthead pin is released.

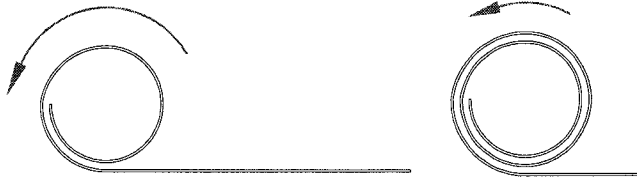


- \* Do not allow mast or rigging to contact electrical cables or high tension lines. The parts are conductive. Injury or death could result from shocks induced by contact with power lines.

# UNCOIL FOIL



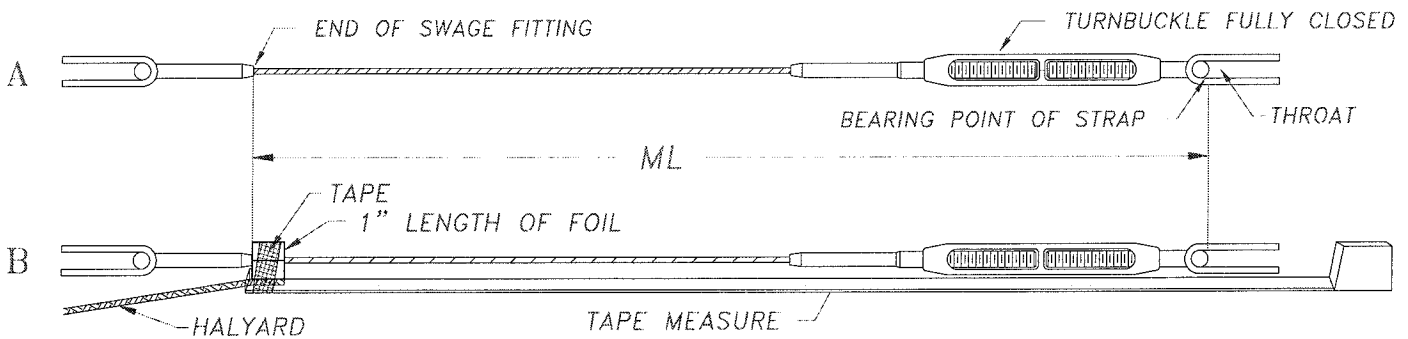
A. The foils are coiled and caution must be used when uncoiling to prevent a whiplash effect. Lay end of coil with the straight of the outer most coil on the floor or dock. Unwind or roll out coils. Hold coil tightly to prevent it from springing out. The foils may be twisted or curved from being coiled. Straighten foils by gently bending in opposite direction. Severe bending may result in foil damage. Allow foils to lay out for several hours to straighten out. Do not install system in temperatures below 60°F [15°C].



## FURLER ASSEMBLY:

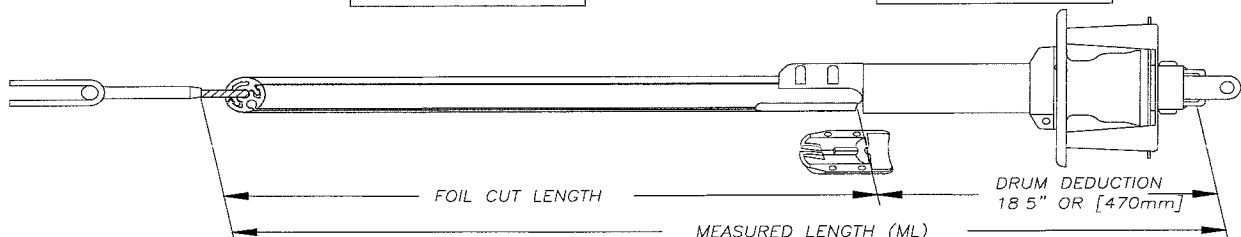
### 1. MEASURE HEADSTAY LENGTH

- A. **On the dock**-Measure headstay length from the end of the swage fitting to the throat of the toggle on turnbuckle as shown below. Be sure turnbuckle is closed, otherwise the upper end of foil could interfere with upper swage fitting if turnbuckle is used in closed position.
- B. **On the boat**-cut a 1" piece of each foil half and snap them over headstay. Hook and tape the end of tape measure and halyard to top of this piece. Hoist tape with halyard until foil hits the swage fitting. With turnbuckle closed, take measurement as shown



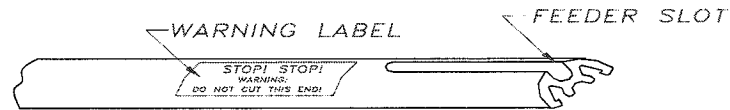
### 2. CALCULATE FOIL LENGTH

A. Foil cut length:  $ML - 18.5" =$   OR  $ML - 470mm =$



### **3. CUT FOILS TO LENGTH**

- A. Lay foils flat, mark, cut to 'Foil Cut Length' in step 2. The **aft foil has the feeder slot** in the lower end and a warning sticker. **Do not cut this end off!**

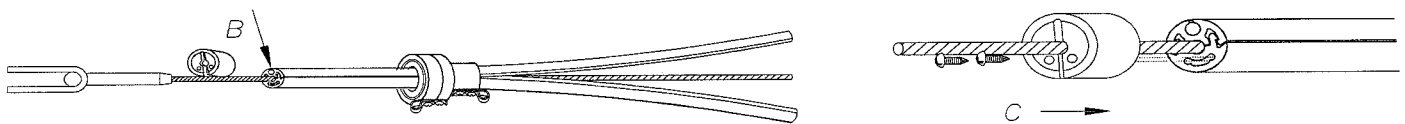


### **4. SNAP FOILS ONTO HEADSTAY**

- A. Slide swivel over turnbuckle and up onto headstay. Be sure larger part is up. Larger turnbuckles may need to be removed to attach upper swivel.
- B. Bring upper end of aft foil (end without feeder slot) and forward foil to headstay wire. Align ends of each half and snap together by hand for 36". Make sure foils are securely snapped together.



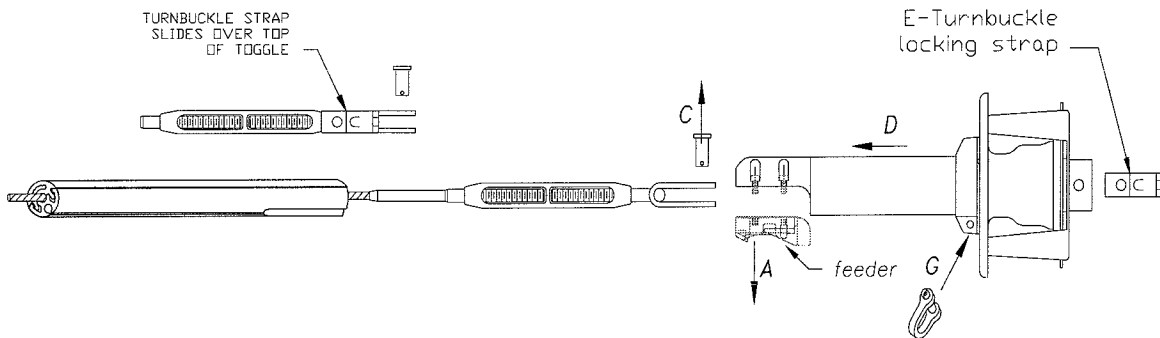
- C. Slide upper swivel onto foils and install top cap by sliding slot over headstay wire and onto assembled foils.
- D. Align the two screw holes in the cap with the two holes in the forward foil. Install the two self tapping screws.



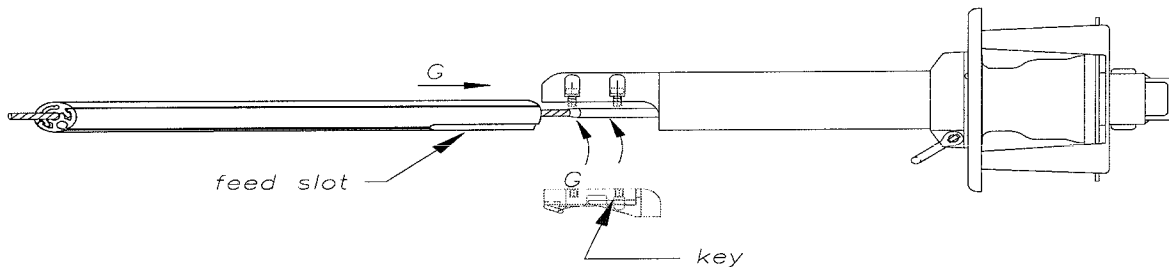
- E. Finish snapping foils together by sliding upper swivel over them. The ends of the foils should be within 1/4" of each other. If assembly is on the boat, slide foils up as they are snapped together.
- F. Install shackles onto eyes on upper swivel.

## **5. INSTALL DRUM UNIT**

- A. Loosen four screws in feeder and remove feeder from drum (an allen wrench is provided for this purpose). Note: screws are captive in drum unit
- B. Remove two screws at base of the furler attaching the turnbuckle locking strap to the inner drum and remove the turnbuckle locking strap.
- C. Remove clevis pin from turnbuckle.
- D. Slide drum unit up over turnbuckle and onto foil.
- E. Install turnbuckle locking strap, slide into bottom of drum and install screws.
- F. Reinstall clevis pin. (for installation with headstay on boat reattach turnbuckle to stem)



- G. Install tack shackle.
- H. Reinstall feeder onto drum unit. Note rectangular key inside feeder. This must fit into feed slot in bottom of aft foil. Slide foil down into feeder and top of drum. Line up feed slot with key in feeder. Be sure foil slides completely down into feeder (2 1/4"). Tighten four allen head screws that attach feeder to top of drum unit. Over-tightening can result in screw breakage.



## **SYSTEM ADJUSTMENT**

- A. Check system for free rotation on the headstay.
- B. Clean foil with a mild cleaner such as Windex and a light abrasive pad such as Scotch-Brite before installing the headstay on the boat.
- C. Slide swivel up and down entire length of foil. It should slide freely up and down. If the swivel does not slide freely, check snap fit along length of foils for a section that may not be completely snapped together.

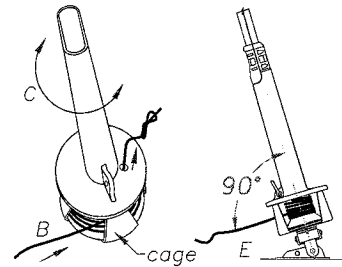
**NOTE:** All feeder screws must be tightened equally and a small gap (up to 1/8") between the feeder and torque tube is normal.

## **TURNBUCKLE ADJUSTMENT**

- A. Loosen the four screws in the feeder and remove the feeder.
- B. Remove the two screws in the turnbuckle locking strap.
- C. Slide the drum unit up to expose the turnbuckle.
- D. Adjust the turnbuckle as required. Be sure to reinstall the cotter pins in the turnbuckle and tape them completely.
- E. Slide the drum unit back down, install the locking strap with thread locker. Then install the feeder.

## INSTALLING THE FURLING LINE

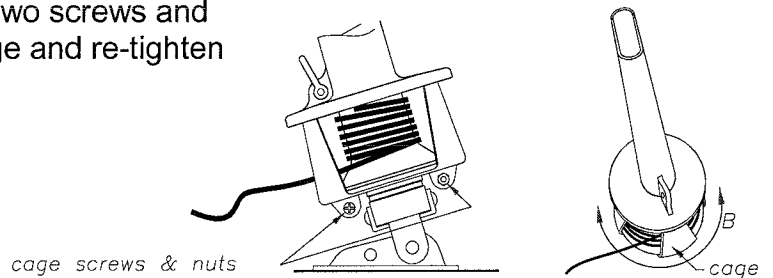
- A. The recommended furling line size is 1/4" or 7mm braid.
- B. Feed the end of the line into the cage, up through the hole in the upper drum plate and tie a figure eight knot.
- C. If the sail has a sunshade, check the rotation of the rope on the drum to allow the sunshade to face out when the sail is furled.
- D. Spin the furler to wrap about 12 ft. of line on the drum.
- E. Adjust the location of the pulpit block to lead the furling line 90° to the headstay when the line is in the middle of the drum.



## ADJUSTING THE CAGE

- A. The furling line should not rub on the cage. Rotate the cage to adjust location as required.
- B. To adjust, loosen (do not remove) the two screws and nuts on the bottom of the cage, rotate cage and re-tighten screws and nuts.

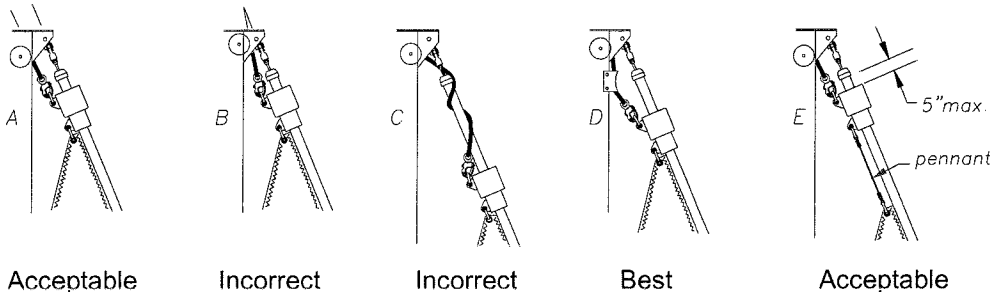
**Note:** Optional fairlead arm part number CF-700-22 is available to mount on drum for leading furling aft.



## INSTALLING THE SAIL

Attach the tack of the sail to the shackle on the drum.  
 Feed the head of the sail through the feeder and attach to the lower shackle on the swivel.  
 Attach the halyard to the upper shackle on the swivel and hoist sail.

- A. Check the halyard lead at the masthead. It should be parallel to the headstay or angled away 10°.
- B. An improper halyard lead angled toward the headstay will result in a halyard wrap.
- C. Halyard wraps, due to improper lead to the masthead, can lock a furling system or damage the headstay.
- D. The halyard lead can be corrected by **using the halyard restrainer provided**.
- E. If the sail is not full hoist, a pennant will be required to keep the swivel within 5" of the top cap.



# **OPERATING INSTRUCTIONS**

## **1. FURLING THE SAIL**

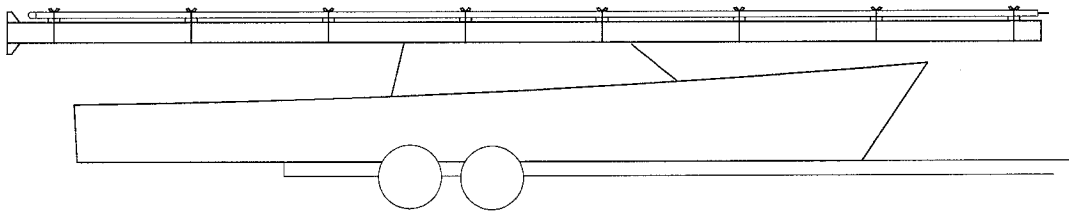
- A. Release the jib sheet and pull on the furling line. Keep slight tension on the sheet for a neat and tight furl.
- B. It is recommended to ease the jib halyard before furling to relieve the sail of undue loads while furled.
- C. If the sail does not furl, do not force anything. Investigate the cause of the problem by checking for halyard wrap or entangled line in the drum.

## **2. UNFURLING THE SAIL**

- A. Release the furling line and pull the jib sheet. Keep slight tension on the furling line while deploying the jib.

## **TRAILERING**

Remove the swivel and drum unit and store below in a secure place. Tie the foil to the mast at regular intervals to avoid drooping the foil. Check the connection at the masthead for binding and remove headstay if any binding exists.



## **MAINTENANCE**

### **1. FOIL**

Clean the foil with soap and water or use a fine Scotch-Brite pad M# 7445. Avoid using chemicals such as acetone and thinner. Do not expose or store the foil in temperatures above 130° F.

### **2. DRUM AND SWIVEL**

Flush the bearing races with soap and water periodically. Avoid using grease and oily lubricants as they attract dirt and other foreign matter that can damage the bearings. Dry lubricants are acceptable, but should not be necessary. Remove the drum and swivel during storage to avoid unnecessary exposure to the elements.

## **WARRANTY**

Schaefer Marine Inc. warrants its standard catalog products to be free from factory defects in material and workmanship for a period of five (5) years from the date of purchase, unless otherwise stated in this catalog or any other Schaefer Marine catalog.

At any time within five years of the demonstrated date of purchase, Schaefer Marine, Inc. will remedy any factory defect in material or workmanship (at no charge to the original purchaser) if the product is returned to Schaefer Marine, Inc. The buyer shall be responsible for shipping and insurance charges, if any, on the products returned for repair under the terms of this warranty. Schaefer Marine, Inc. will pay shipping for products returned to the buyer. Return of defective products must be accompanied by a letter giving name, address, proof of purchase, type of boat, and description of malfunction of the gear.

This warranty extends only to defects in material or workmanship of products in normal use. It does not extend to damage caused by accident or abuse, or to any consequential or incidental losses or damages arising from the products or their use. There are no other warranties, including that of merchantability, expressed or implied, other than those set forth herein which extend beyond the period of this warranty.

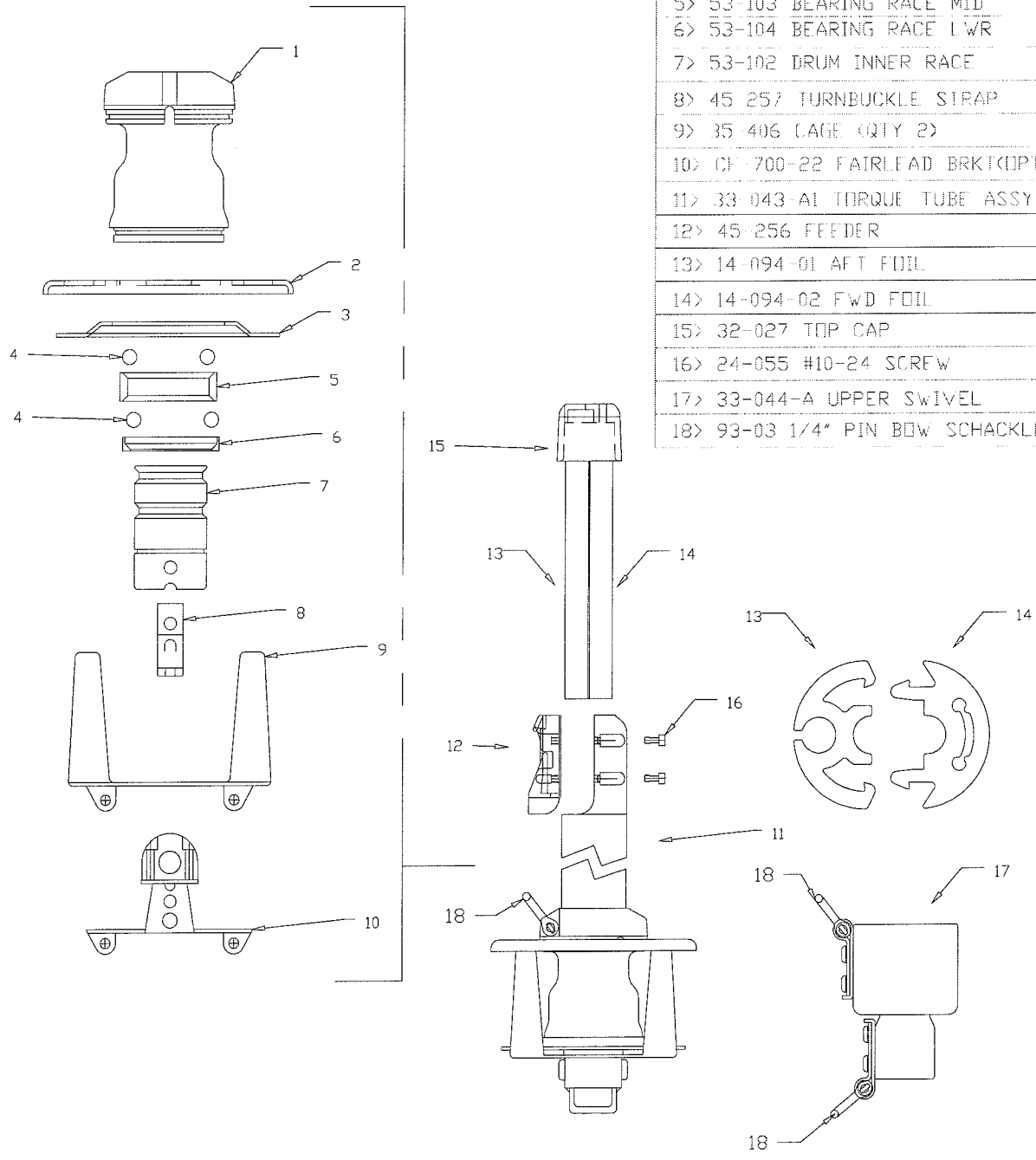
This warranty is in lieu of all other implied, express and statutory guarantees, and in no event shall Schaefer Marine, Inc. be liable for special, incidental or consequential damages.

Some states do not allow limitations on how long an implied warranty lasts, nor the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



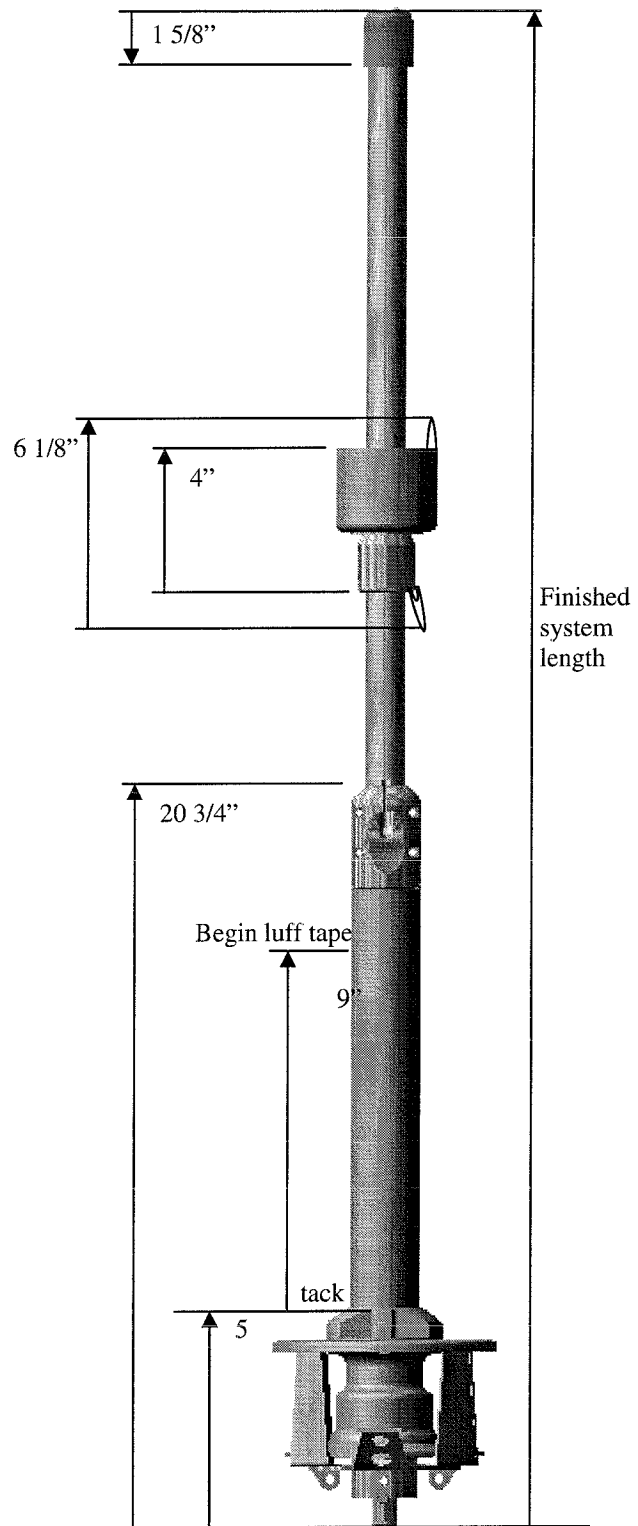
# SYSTEM PARTS LIST

| SNAPPURL CF-700 |                              |
|-----------------|------------------------------|
| 1>              | 33-042 DRUM HOUSING          |
| 2>              | 35-407 DRUM PLT UPR          |
| 3>              | 35-408 DRUM PLT LWR          |
| 4>              | 25-253 3/8 BALLS(32)         |
| 5>              | 53-103 BEARING RACE MID      |
| 6>              | 53-104 BEARING RACE LWR      |
| 7>              | 53-102 DRUM INNER RACE       |
| 8>              | 45-257 TURNBUCKLE STRAP      |
| 9>              | 35-406 CAGE (QTY 2)          |
| 10>             | CF-700-22 FAIRLEAD BRKT(OPT) |
| 11>             | 33-043 AL TORQUE TUBE ASSY   |
| 12>             | 45-256 FEEDER                |
| 13>             | 14-094-01 AFT FOIL           |
| 14>             | 14-094-02 FWD FOIL           |
| 15>             | 32-027 TOP CAP               |
| 16>             | 24-055 #10-24 SCREW          |
| 17>             | 33-044-A UPPER SWIVEL        |
| 18>             | 93-03 1/4" PIN BOW SCKL      |



SYSTEM  
DIMENSIONS

For sailmaker



## Troubleshooting the Snapfurl CF-700 System

**Problem:**

The sail does not feed into the foil

**Solution:**

A #6 luff tape needs to be installed on the front of the jib or genoa. It is best to specify to the sailmaker "best quality," "Standard #6" (not heavy #6 luff tape). There are different levels of quality luff tape, so please be specific.

**Problem:**

There is no room to install Schaefer supplied halyard restrainer.

**Solution:**

The halyard restrainer must be installed per the instructions and our warranty. Please check the luff length of the sail, as it is mandatory that the restrainer is installed properly.

**Problem:**

The upper swivel does not turn.

**Solution:**

The sail luff length may be too long. Check that the halyard restrainer is installed properly per our instructions. The boat's mast needs to be tuned. The headstay must be tight.

**Problem:**

Swivel slow to turn.

**Solution:**

Excessive halyard tension. Headstay must be tightened to insure proper mast tuning. Jib halyard should not be tighter than headstay.

**Problem:**

Line bunches up on the drum.

**Solution:**

Review installation instructions, furling line should lead into the drum at 90 degrees. A lead arm bracket (CF700-22) is available from your nearest dealer or Schaefer. Check line size, type. A softer line type lays on the drum better than a hard laid line.

continued next page

**Problem:**

Sail is messy to furl.

**Solution:**

It is always best to dip down (fall off the wind) to reef or furl. Basically, you are unloading the sail. Please drag the furling line (friction) as you pull the sail out.

**Problem:**

Too much line on the drum – snags.

**Solution:**

When the sail is furled, there should be only 3 – 4 wraps on the drum. Check line size or type.

**Problem:**

Foil will not fit on headstay.

**Solution:**

Measure headstay diameter of wire, see manual. Headstay may be metric or oversized.

**Problem:**

Top cap of furler extrusion came off the extrusions.

**Solution:**

- Insure you have not cut the extrusion “too long”
- Some headstay wire should be showing aloft
- Check mast tuning. Is mast too loose? Check shrouds and headstay tension. Tune mast.
- Is the luff length of the sail too long?

**Problem:**

Upper swivel slow to turn.

**Solution:**

- Check the installation of the halyard restrainer
- Upper swivel upside down
- Sail has too many laminates of sailcloth at the head of the sail and adding friction to the furling/reefing process. Top of sail too stiff.
- Check mast tuning
- The head of the sail has too large a grommet. A webbing is best for tack and head of sail.