

# Quick Service

## HEADSAIL HANDLING

## Jib Reefing & Furling Systems

### SERVICE AT REGULAR INTERVALS

Flush unit with soap and fresh water. Occasionally lower sail and flush halyard swivel with soap and fresh water. At least twice a year unit should be cleaned more thoroughly by removing line (first note direction of spool) and flushing bearings with soap and fresh water. See manuals online for detailed troubleshooting tips and procedures at [www.harken.com/manuals](http://www.harken.com/manuals).

#### Inspect carefully for:



**Halyard wrapping:** Correct the halyard angle with a wire pendant or halyard restrainer so halyard is at an 8- to 10-degree angle from foil.

**Line jumps above guard on MKIII or MKIV and jams system:** Make sure line is led through one of two enclosed windows in guard.



#### Hard to furl or unfurl:

- **Too little headstay tension.** Increase headstay tension by accessing and adjusting the turnbuckle.
- **Too much halyard tension.** Try easing halyard. Remember, tensioning backstay tightens halyard. Set backstay, then tension halyard.
- **Line scrapes on line guard:** There may be too much line on the spool, or an incorrect lead block angle is spooling line onto the bottom of the spool. Make sure the lead angle is 90 degrees perpendicular to headstay, then if necessary untie and adjust the sheets to reduce the amount of line.
- **Line is wound on spool too loosely or has overrides:** Be sure the last block in lead system is a ratchet block to spool tightly.
- **Leads for furling line creating too much friction:** Use ball bearing blocks.
- **Furling line runs backwards through ratchet block:** Re-rig block in correct direction.
- **Stopper knot is catching:** MKI: Dead-end with an overhand knot outside the drum. MKII, MKIII, MKIV: check that it runs through the correct hole, or reduce knot size.
- **Foils are scraping at top or bottom:** Foil may be too high or too low. Make sure foil hasn't dropped into torque tube and started riding on turnbuckle.
- **Tensioning halyard makes it hard to furl:** Missing top bushing, or swivel may be installed upside down.



#### Sail won't furl/unfurl completely:

- **Too much/too little line on the drum:** Untie sheets, turn furled unit to reduce/add line to drum, retie.
- **Line spools on bottom of drum and won't unfurl completely:** Adjust forward lead block so line exits drum at 90 degrees to headstay from middle of spool.

Find specific information including parts list at [www.harken.com/manuals](http://www.harken.com/manuals).

## ACCESSORIES AND REPLACEMENT PARTS

See manual for replacement component part numbers.

Note for ordering parts: Pre-1987 MKI units have different locking collars for swage, Norseman/STA-LOK®, and rod.

| Furling unit | Halyard restrainer | Snap shackle |
|--------------|--------------------|--------------|
| 00AL/0/1     | 944                | 884          |
| 2            | 945                | 885          |
| 3/3.25       | 945                | —            |



## FURLING LEAD BLOCK KITS

Harken recommends equipping every system with Carbo lead blocks for safe furling from the cockpit. The 7404 lead block kit provides a complete system for most boats. Fits 1" (25 mm) stanchions.

7402 Ratchet: Maintains tension when spooling for smooth furling.

7403 Outboard assembly: Keeps furling line outboard of stanchion.

7401 40 mm block: Inboard lead on the bow pulpit.

| Part No. | Description                             | Sheave Ø                                    |    | Max line Ø                  |    | Maximum working load |     |
|----------|---|---|----|-----------------------------|----|----------------------|-----|
|          |   | in  | mm | in                          | mm | lb                   | kg  |
| 7401     | 40 mm Carbo lead block assembly         | 1 <sup>9</sup> / <sub>16</sub>              | 40 | <sup>3</sup> / <sub>8</sub> | 10 | 485                  | 220 |
| 7402     | 57 mm Carbo ratchet lead block assembly | 2 <sup>1</sup> / <sub>4</sub>               | 57 | <sup>3</sup> / <sub>8</sub> | 10 | 500                  | 227 |
| 7403     | 29 mm Outboard lead block assembly      | 1 <sup>1</sup> / <sub>8</sub>               | 29 | <sup>3</sup> / <sub>8</sub> | 10 | —                    | —   |
| 7404     | Lead block kit*                         | Includes 3 x 7403/1 x 7401/1 x 7402/1 cleat |    |                             |    |                      |     |

\*Max line Ø: 3/8" (10 mm)

**HARKEN**<sup>®</sup>  
INNOVATIVE SAILING SOLUTIONS










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### FAMILY IDENTIFICATION

Use to help order replacement parts. Note: Some parts on older furlers may not be available.  
Find specific information including parts list at [www.harken.com/manuals](http://www.harken.com/manuals).

| Family    | Line guard  | Spool material & color | Torque tube   | Screws near torque tube base   | Unit Number/Date of manufacture  |
|-----------|---|------------------------|---|--|--|
| MKI       | Stainless cup, one opening   | Gray-anodized aluminum | Straight cylinder    | Yes   | Size and date stamped on top of spool  |
| MKII      | Stainless curved plate secured to gray aluminum single line opening  | Gray plastic           | Tapered              | Yes   | No unit size marked. See chart below. Date on hub of halyard swivel and lower unit (must remove split drum)          |
| MKIII     | Black aluminum line guard with 4 openings, 2 for line.               | Black plastic          | Tapered              | Yes   | No unit size marked. See chart below. Date on hub of halyard swivel and lower unit (must remove split drum)          |
| 00AL      | Black aluminum line guard with 4 openings, 2 for line.               | Black plastic          | Tapered top          | No    | No unit size marked. See chart below. Date on halyard swivel and lower unit (must remove drum)                       |
| MKIV      | Black aluminum line guard with 4 openings, 2 for line.              | Black plastic          | Tapered top         | No   | Size on label. No date marked.  |
| Cruising* | Black aluminum line guard with 4 openings, 2 for line.             | Black plastic          | Straight cylinder  | No  | Size on label. No date marked.  |

\*Cruising furler foils have a single sail groove. All other families have two.

### SIZE IDENTIFICATION (MKI, MKII, MKIII)

MKIV and Cruising furlers have unit size printed on label. For older models use drum diameter (measure across top of drum), clevis pin diameter, and torque tube length.



| Unit size | Drum Ø  |     | Clevis pin Ø         |                 | Torque tube length |     |
|-----------|---------|-----|----------------------|-----------------|--------------------|-----|
|           | in      | mm  | in                   | mm              | in                 | mm  |
| 00AL      | 5 3/4   | 146 | 1/4, 5/16, 3/8, 7/16 | 6, 8, 9.5, 11.1 | 9 1/2              | 241 |
| 0         | 5 13/16 | 147 | 5/16, 3/8, 7/16      | 8, 9.5, 11.1    | 5 7/8              | 150 |
| 1         | 7 7/16  | 188 | 1/2                  | 12.7            | 7 7/16             | 189 |
| 1.5       | 7 7/16  | 188 | 5/8                  | 15.9            | 13                 | 330 |
| 2         | 9 1/2   | 241 | 5/8                  | 15.9            | 10 5/16            | 262 |
| 2.5       | 9 1/2   | 241 | 3/4                  | 19.1            | 17 1/4             | 438 |
| 3         | 12      | 305 | 3/4, 7/8             | 19.1, 22.2      | 13                 | 330 |
| 3.25      | 12      | 305 | 7/8, 1               | 22.2, 25.4      | 15                 | 381 |