

FEATURES

1. Easy to Install or Upgrade

C-shaped connectors slip over the headstay without feeding wire through the connector. The lower unit fits over the existing turnbuckle for easy length adjustment.



Convert from manual to electric power using a Harken Upgrade Kit.

Tough triple-interlock foil joints withstand years of torque loading.



2. 12- or 24-Volt Systems

Available in 12 or 24 volts; switches, control box, and circuit breaker included.

3. Emergency Manual Operation

Use a cordless drill adapter, a supplied manual crank handle, or winch handle.



4. Scratch-Resistant Link Plates

Stainless steel link plates fit over standard turnbuckle, resist scratches, and can be easily repolished.



ELECTRIC FURLING

Details Make the Difference



High-Strength Materials, Sculpted Design

The torque tube, motor, and gear housing are Hardkote-anodized, UV-stabilized aluminum. The sculpted gear box and motor housing is sealed with double lip seals. The motor mounts vertically in the pulpit for low windage.

High-Torque, Low-Power Motor

The motor is a permanent magnet design with high torque and low power consumption. The reversible drive uses a high-reduction worm gear set to prevent reefed sails from unfurling under load.

Improved Sail Shape

Independent tack swivels shape partially furled sail to improve upwind pointing. Unit 3 has an additional independent swivel at the head for further shaping.

ELECTRIC FURLING

Push-Button Sail Control



Easy Reefing and Furling

Cruise in luxury and reef, furl, or set sail safely from the cockpit with the push of a button.



HARKEN®

1251 E. Wisconsin Ave., Pewaukee, WI 53202
Tel: 262-691-3320 • Email: harken@harken.com • Web: www.harken.com

HARKEN®

INNOVATIVE SAILING SOLUTIONS

ELECTRIC FURLING

Q&A

JIB REEFING & FURLING SYSTEMS

ABOUT THE ELECTRIC FURLER

Is it easy to add electric furling to my boat?

Yes. These systems easily connect to your boat's existing electrical system. For example, in many cases the wiring to the bow is already in place for a windlass, allowing you to splice into that system. Units are available in both 12 or 24 volts.

What type of electric motor is used with electric furling?

Electric furlers feature a permanent magnet motor that gives off very little heat. It is small and efficient for its size with high torque and low power consumption.

Why is motor heat an issue?

When marine equipment heats up and cools down condensation occurs. So even if your motor is sealed, the resulting moisture might short out your electrical equipment. The solution is to have a motor like Harken's that gives off very little heat.

Why is the motor installed vertically rather than horizontally like I've seen on other systems?

Installing the motor housing vertically streamlines the unit so it can fit into narrow pulpits, clear anchor tackle, and reduce windage.

What materials are used in Harken electric furlers?

The torque tube, motor, and gear housing are deep-saturation Hardkote-anodized, UV-stabilized aluminum. The motor and gear housing are further protected against corrosion with a high-performance paint finish. Inside the motor, hardened steel gears are permanently lubricated. Toggle and link plates are scratch-resistant stainless steel.

Can I adjust the length of my headstay with an electric furler?

Yes. The electric furler rides over a standard turnbuckle allowing easy length adjustment.



How do I adjust the turnbuckle?

Using a halyard to lift the unit, remove the stainless plates attached to the toggle. You then have full access to the turnbuckle and can adjust as normal. The Installation Manual on the Harken website has a complete step-by-step guide.

What happens if the electric furling system loses power?

Harken electric furlers can be operated manually if power is lost. Simply remove the cover on the manual drive socket on the motor housing and insert a cordless drill to manually operate the system. A cordless drill adapter is included with each furler.



Safety Tip: Make sure the power line in the boat is switched off so there is no chance the electric furling motor will start and cause the drill to spin.

What type of cordless drill should I use?

Many models are available. It is important to have a drill that charges quickly and holds the charge for a long time. A good model is the Milwaukee 28-volt, right-angle drill.

Can I rely on a cordless drill as my emergency drive?

No. Harken supplies a crank handle with each unit for quick manual cranking. A standard winch handle works too, but the grinding radius will be much bigger and you'll have to work a lot harder to furl.



INSTALLATION AND MAINTENANCE

When I purchase an electric furling system what is included?

The lower furling unit foils and halyard swivel are included, as well as a 12- or 24-volt control box, switches, and circuit breaker.

Toggle and link plates sold separately.

Note: When ordering, match pin size.



I have a Harken manual furling system on my boat. Is it easy to convert to electric power?

Yes. Upgrades from a Unit 2 Cruising Furler or MKIV Unit 3 manual furler are simple using the Harken Upgrade Kit.

In some cases, the stay and foil lengths are the same and do not need to be cut.

How much work is involved in maintaining my electric furler?

The halyard and tack swivels require minimal maintenance and can be cleaned by flushing with detergent and fresh water. The motor and gear system is sealed using double-lip, spring-energized Nitrile seals and gaskets and requires no maintenance.

GENERAL FURLING INFORMATION

What size luff tape should be used with Harken electric furlers?

Electric Furlers use #6 luff tape (6/32 in, 5 mm).

Why do I need more than one jib if I can just reef?

Experienced seamen rarely sail without a heavy-air jib because even the best all-around reefing sails can fail. In a blow, you should change to a reefable heavy-air sail before leaving the harbor. A storm jib is vital for offshore passages because of the possibility of hurricane weather. In light air, having a large, lightweight genoa can make sailing a lot more fun.

How can I reduce heel and get better control with a reefed sail?

Electric Furling Units 2 & 3 feature an independent tack swivel that helps furl the center of the sail before the tack for improved sail shape and upwind pointing. Unit 3 has an additional independent swivel at the head for further shaping.

For best results, use a sail designed specifically for reefing with your furler.

Additional sail shape adjustments can be made by increasing or decreasing halyard tension and by changing genoa lead car positions. After reefing, simply move the car forward so the sheet between the car and the clew points to the middle of the luff.

