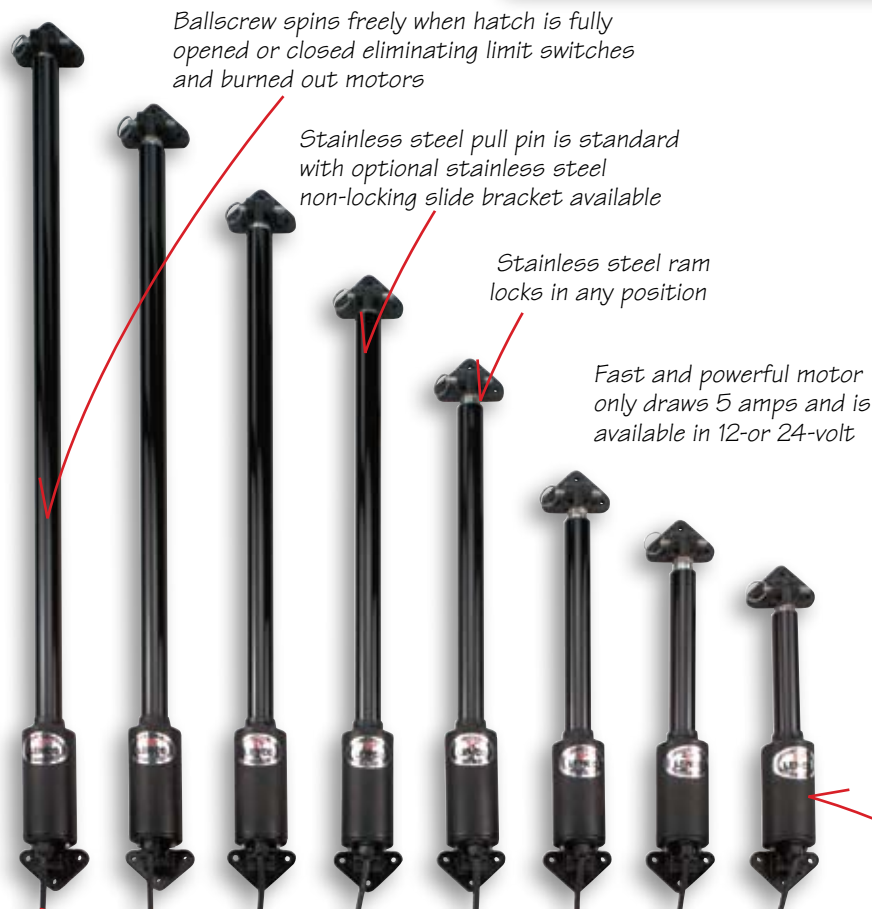


Hatch Lifts



We make the best boats better!™

Lenco hatch lifts are designed to meet the specific needs of the marine industry. They are made entirely of non-corrosive materials and are completely submersible, ensuring that they will look and perform like new for many years of trouble free boating. Our inline motor design makes mounting easier and delivers over 500 lbs. (226.70 kg) of force. Lenco's clutchless ballscrew design always runs in sync on dual lift applications and never binds. Hatch lifts are operated by our optional single rocker switch 125.



Ballscrew spins freely when hatch is fully opened or closed eliminating limit switches and burned out motors

Stainless steel pull pin is standard with optional stainless steel non-locking slide bracket available

Stainless steel ram locks in any position

Fast and powerful motor only draws 5 amps and is available in 12-or 24-volt

High-impact, ultraviolet resistant nylon 66, 50% glass fiber reinforced thermoplastic housing

Lenco hatch lifts install with a single power cable saving hours on installation compared to hydraulics

**Waterproof
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Hatch lifts are operated by our single rocker switch # 10225-101 (125) **sold separately**

S = Short, all part #'s ending in S have the same stroke but in a 4" shorter length. Actuator extension harnesses sold separately in lengths of 7', 14', 20', 26' and 32'.



2007-2008 Electric Hatch Lifts (With 2' Leads And Deutsch Plug)

12-volt Part #	24-volt Part #	L.O.A. Retracted Inches (cm)	Approx. Stroke Inches (cm)	L.O.A. Extended Inches (cm)
HL-400	HL-400/24V	15" (38.10)	4" (10.16)	19" (48.26)
HL-600	HL-600/24V	20" (50.8)	6" (15.24)	26" (66.04)
HL-800S	HL-800S/24V	20" (50.8)	8" (20.32)	28" (71.12)
HL-800	HL-800/24V	24" (60.96)	8" (20.32)	32" (81.28)
HL-1200S	HL-1200S/24V	24" (60.96)	12" (30.48)	36" (91.44)
HL-1200	HL-1200/24V	29" (73.66)	12" (30.48)	41" (104.30)
HL-1400	HL-1400/24V	31" (78.74)	14" (35.56)	45" (114.30)
HL-1600S	HL-1600S/24V	29" (73.66)	16" (40.64)	45" (114.30)
HL-1600	HL-1600/24V	33" (83.82)	16" (40.64)	49" (124.46)
HL-2000S	HL-2000S/24V	33" (83.82)	20" (50.80)	53" (134.62)
HL-2000	HL-2000/24V	37" (93.98)	20" (50.80)	57" (144.78)
HL-2400S	HL-2400S/24V	37" (93.98)	24" (60.96)	61" (154.10)
HL-2400	HL-2400/24V	41" (104.14)	24" (60.96)	65" (165.10)
HL-2600	HL-2600/24V	47" (119.38)	26" (66.04)	65" (165.10)
HL-3000	HL-3000/24V	47" (119.38)	30" (76.20)	77" (195.58)

Hatch Lift Accessories and parts

Part #	Superseded Part #	Description
70381-001	HL-SB	Stainless Steel Slide Bracket
60101-001	121 SS	SS Mounting Pin For Htlifts (1)
10225-101	125	Single Rocker Switch - Deutsched
50014-001	119	Mounting Bracket
50015-001	118	Mounting Bracket
60101-001	121SS	Mounting Bracket



ELECTRIC

Hatch Lift Installation



Due to the many different variables involved with the numerous applications for Lenco hatch lifts, installation is never the same. Here are some general guidelines that can be of assistance:

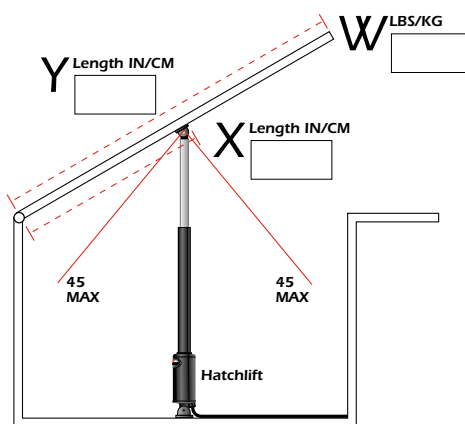
- The actuator is most powerful when it is installed vertically at 90 degrees.
- Lifting capabilities decrease the closer the upper or lower mount is located to the hinge.
- The further from a vertical position the less lifting capability. When retracted, Do Not position hatch lift at an angle less than 45 degrees.
- Dual actuator systems are recommended for hatches over 500 pounds (226.79 kg) of force.
- Lenco hatch lifts are designed around a ball screw that spins freely when hatch is fully open or closed.
- For installation, it is important that the hatch lift is able to disengage itself at the fully retracted position.
- The ram must be allowed to free spin at both ends of its stroke or it will continue to push or pull against any resistance potentially damaging the hatch lift or the hatch itself.
- Failure to make accurate measure could cause damage to hatch lift or the hatch itself.
- Lenco hatch lifts are fully submersible and will not drift.
- Lenco hatch lifts are offered in both 12- and 24-volts.

OPERATION

The function of the Lenco Hatch Lift system is simple. Since the hatch lift is based around a ball screw it is able to push a heavy load and remain at a constant position. To raise a load, extend the hatch lift by pressing on the upper part of the switch. To lower a load, retract the hatch lift by pressing the lower part of the switch.

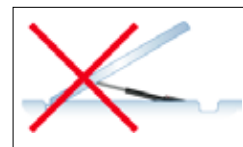
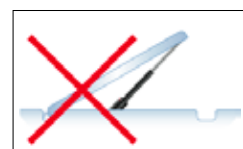
In case of power failure, Lenco hatch lifts are supplied with two clevis pins at the mounting brackets. To pull this pin out while the hatch is closed, you must rig it to a point outside of the hatch.

Lenco Hatch Lift Mounting



$$Y \times W \div X = \text{Force}$$

Following the chart above to figure out load on the hatch lift, maximum load is 500 lbs. (226.79 kg.)



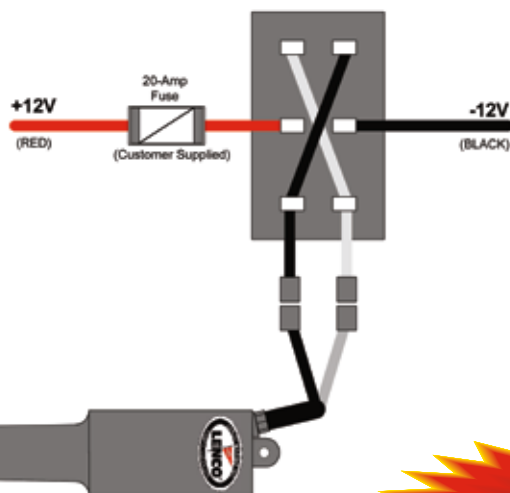
1. Follow the chart above to figure out load on the hatch lift. Maximum load is 500 lbs. (226.79 kg)

Y = Total length of hatch

X = Length from the hinge to the hatch lift mounting point

W = Weight of the hatch to be lifted

2. Determine the angle of the hatch lift mount. Do not exceed 45 degrees from center.
3. Mount the hatch lift on the desired location as per the above instructions. **Important:** It may be necessary to shim the upper or lower mounting bracket up or down so the hatch does not bind when fully closed. The hatch lift does not stop pulling until it has reached its fully closed position. If the hatch fully closes before the hatch lift is fully retracted, it will cause damage to the lift or the mounting hardware. Shim the hatch lift with stainless washers for small amounts of length. Use Lenco part #50015-001 (118S) for lengths greater than 1/8" (3 mm).
4. Wire to switch according to the hatch lift wiring diagram in the owners manual supplied with the hatch lift.



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