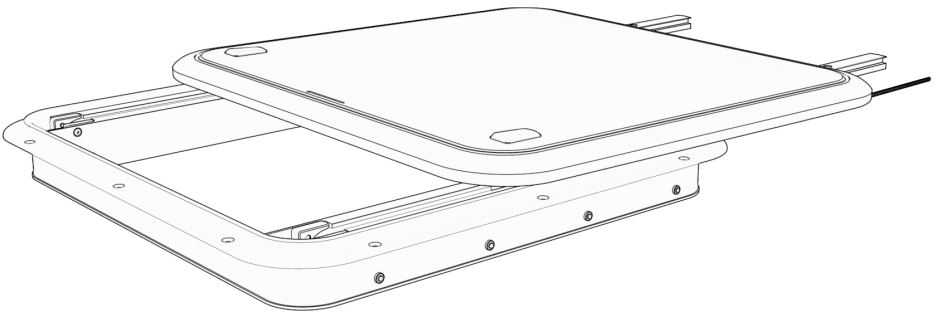


Powered Pilot Hatch

Product manual- 35004252 Iss 2



1- Introduction

Dear Customer,

Thank you for choosing Lewmar. Lewmar products are world renowned for their quality, technical innovation and proven performance. With a Lewmar product you will be provided with many years of outstanding service.

Product support

Lewmar products are supported by a worldwide network of distributors and Authorised Service Representatives. If you encounter any difficulties with this product, please contact your national distributor, or your local Lewmar dealer. Details are available at: www.lewmar.com

CE Approvals

For CE approval certificates contact Lewmar.

Important information about this manual

Throughout this manual, you will see safety and product damage warnings. You must follow these warnings carefully to avoid possible injury or damage.

2 - Safety Notice

 WARNING!

IMPORTANT: Read these notes before continuing.

2.1 Fitting

- ▶ This equipment must be installed and operated in accordance with the instructions contained in this manual. Failure to do so could result in poor product performance, personal injury and/or damage to your boat.
- ▶ Consult the boat manufacturer if you have any doubt about the strength or suitability of the mounting location.

2.2 Electrical

- ▶ Make sure you have switched off the power before you start installing this product.
- ▶ This product requires installation by a suitably qualified electrical engineer.

3 - Installation

To separate the upper frame assembly from the lower frame. Slide the hatch to a half open position, lift then rotate the upper assembly by approximately 20 degrees, this will disengage the internal sliding dowels (on the end of the handle) from the internal guide track in the lower frame.

Pilot Hatches should be fitted to a flat surface with a maximum tolerance of +/- 1mm and a deck /hull thickness minimum of 15mm (5/8"). Check that all fastenings will be clear of deck moulding radii etc.

- ▶ Allow clearance for track and lid opening.
- ▶ Do not open and close the hatch more than necessary until the lower frame is securely mounted.
- ▶ Mark the deck with a pencil around the outside edge of the lower frame flange.
- ▶ It is essential that the lower frame is placed squarely on the deck opening. When fitting a number of hatches it is advisable to prepare a template.
- ▶ Cut out deck along the pencil line using a suitable saw.

Where the deck is of composite construction, it is recommended that the exposed laminate be sealed with the appropriate material prior to fitting the hatch. Openings cut in metal decks should have all burrs and sharp edges removed. (It is recommended that the lower frame of the hatch is suitably insulated from the deck if there is a possibility of electrolytic corrosion with the aluminium frame of the hatch).

Hatches should not be considered as stiffening members and it is recommended that the deck be adequately stiffened to prevent distortion during heavy weather.

Re-check the frame on the aperture and then apply bedding compound to the channel in the lower frame. Bedding compound must have good adhesive qualities (eg. Silicon sealant), be of a suitable for marine sealing applications, of 3mm thickness and compressible to allow the lower frame to be pulled down in contact with the deck by tightening screws.

Position lower frame over hole and drill two fixing screw holes in opposite corners. Insert appropriate stainless steel fasteners, M5 in all positions, of the type listed below.

Deck type

Wood M5 through bolts or marine grade wood screws.
(Torque to 2.25 - 3.0 Nm)
Standard ply / Marine ply - 3Nm
Hardwood - 2.75Nm
Softwood - 2.25Nm

GRP/Steel/Al Alloy M5 through bolts or machine screws into suitable tapped plates. (Torque to 3.0 Nm)

Fixing Sizes M5, 10UNC, 2BA, 3/16", Wood screws
(min. length 40mm).

Hinge Fixings M6 or ¼" through bolts only.

Drill remainder of holes and fasten down from the centre working out to the corners. Clean off surplus sealant. Fit the upper frame assembly to the lower frame. To do this reverse the procedure to separate the two items. Place upper assembly over lower frame, rotating 20 degrees so the handle passes into the lower frame. Align internal slide dowel with internal guide track in lower frame. Rotate upper frame back to zero degrees. Slide to closed position, ensuring external slide dowels (rear of upper frame assembly) engage with the track cam block (rear of lower frame). Locate external runner track to the track cam block, and push together, ensuring runner track is fully engaged, and perpendicular to the lower frame. Slide hatch open carefully to ensure correct position of runner tracks. Carefully close hatch, checking the closing action and clearances.

Drill fixing holes through track holes. Insert M5 fasteners, of the type listed below.

Deck type

Wood Through bolts or marine grade wood screws.

GRP/Steel/Al Alloy Through bolts or machine screws into suitable tapped plates.

4 - Wiring

Installation of this product should meet the regulations and standards or codes of practice relevant to the craft to which it is being fitted. As a minimum the installer should conform to ISO 10133. Lewmar recommends the installer use cable with insulation rated at 90°C or higher.

Length= Length of cable from battery '+' terminal and back to battery '-' terminal including any circuit breaker and switch gear fitted. Cable size guide given is for guidance only.

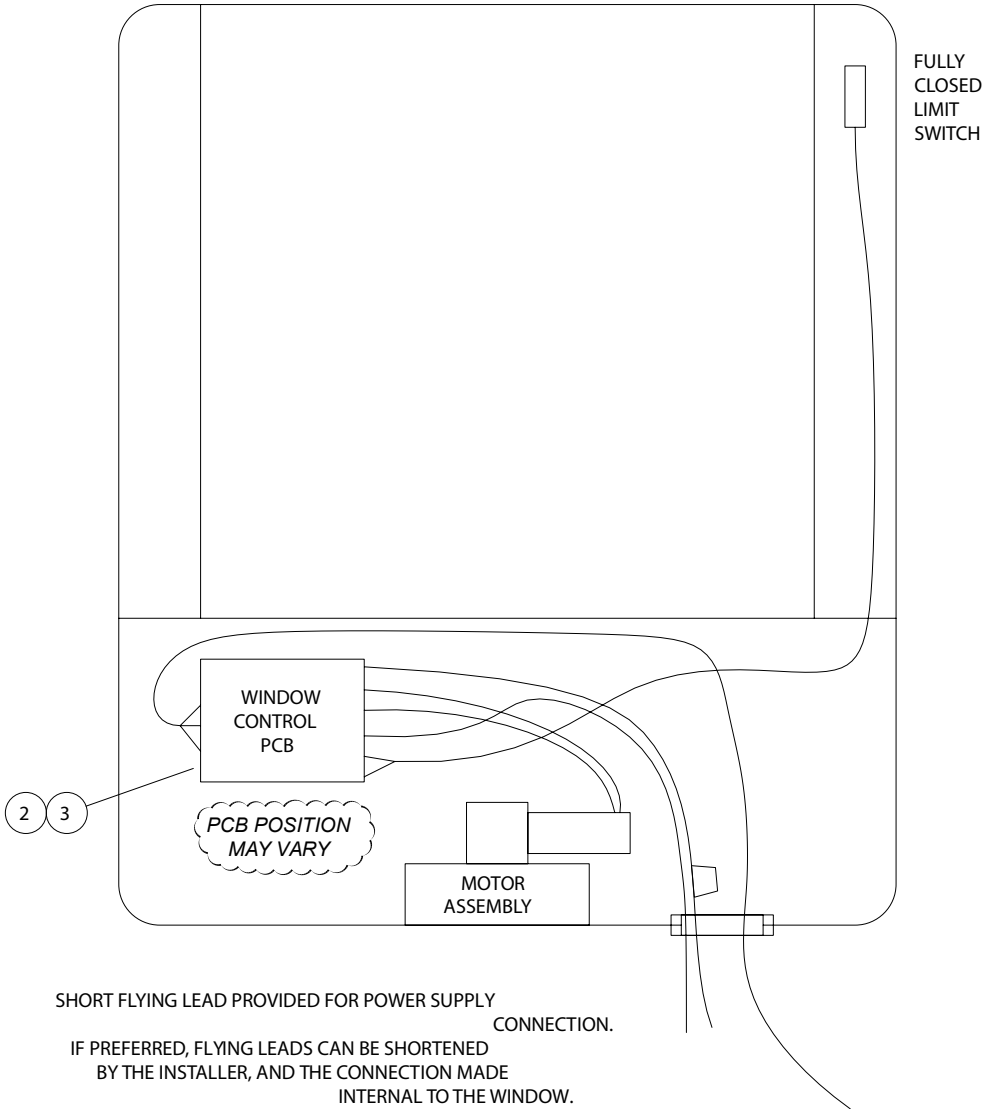
It is the responsibility of the installer to confirm the capacity and voltage drop for the installation. If in any doubt, contact a qualified marine electrician.

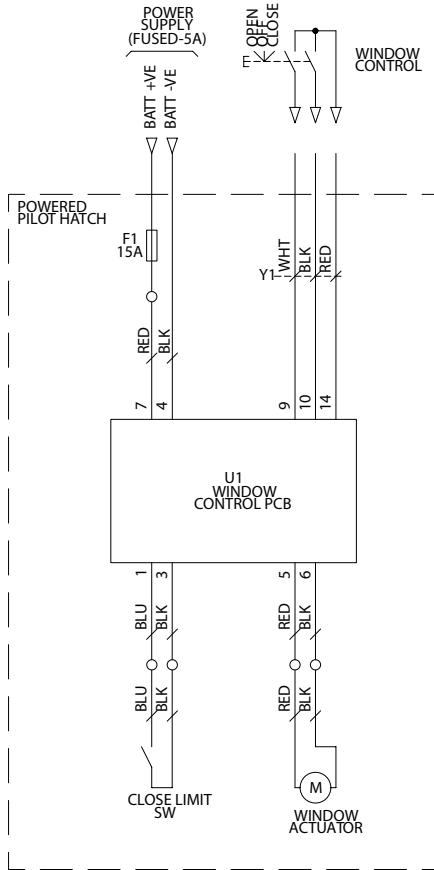
VOLTS	REQUIRED CABLE THICKNESS BASED ON CABLE DISTANCE FROM MOTOR TO BATTERY				
	Under 6m	7-9m	7-12m	10-14m	13-19m
12v	2.5mm	4mm	-	6mm	-
24v	1.5mm	-	2.5mm	-	4mm

The wiring system should be of the fully insulated type, which avoids possible electrolytic corrosion problems. We recommend the use of type III stranded, tinned copper wire with copper crimp terminals. Most modern installations are negative return (negative ground) but polarity should be checked.

This product is supplied with a 15A fuse, a battery isolator is also to be fitted by the installer.

5 - Wiring Diagram





6 - Operating

Normal operation

Press button once to open/close, press either button to cancel command.

Safety features

Trapped object – if the door collides with a trapped object it will stop moving and run backwards a short distance

7 - Fault finding

FAULT	SOLUTION
Hatch doesn't run	Check fuse. Check wiring on switch is correct. Check battery is charged and battery wires are connected properly.
Runs slowly, makes noise but doesn't move, closes but struggles or can't open	Under voltage, check battery, check power supply cables are of appropriate thickness (refer to installation section)
Only runs in one direction or runs in incorrect direction	Check if switch is wired correctly
Fuse keeps blowing	Check fuse rating, rating must not exceed 15A. If rating is correct check for damaged wires causing a possible short-circuit

8 - User Notes

Always wash the hatch with soap, water and a soft cloth.

Never use abrasive or solvent cleaners, as this may at a later date damage the acrylic or frames.

To avoid risk of injury care should be taken to keep hands and limbs clear of lever and lid pinch zones while operating and adjusting the hatch.

9 - Warranty

Limited Warranty and Key Terms of Supply by Lewmar

Lewmar warrants that in normal private pleasure boat usage and with proper maintenance its products will conform with their specification for a period of three years from the date of purchase by the end user, subject to the conditions, limitations and exceptions listed below. Any product, which proves to be defective in normal usage during that three-year period, will be repaired or, at Lewmar's option, replaced by Lewmar.

A CONDITIONS AND LIMITATIONS

- i Lewmar's liability shall be limited to the repair or replacement of any parts of the product which are defective in materials or workmanship.
- ii Responsibility for the selection of products appropriate for the use intended by the Buyer shall rest solely with the Buyer and Lewmar accepts no responsibility for any such selection.
- iii Lewmar shall not be liable in any way for Product failure, or any resulting loss or damage that arises from:
 - a. use of a product in an application for which it was not designed or intended;
 - b. corrosion, ultra violet degradation or wear and tear;
 - c. a failure to service or maintain the product in accordance with Lewmar's recommendations;
 - d. faulty or deficient installation of the product (unless conducted by Lewmar);
 - e. any modification or alteration of the product;
 - f. conditions that exceed the product's performance specifications or safe working loads.
- g. Abuse
- iv Product subject to a warranty claim must be returned to the Lewmar outlet that supplied the product for examination unless otherwise approved by Lewmar in writing.
- v This warranty does not cover any incidental costs incurred for the investigation, removal, carriage, transport or installation of product.
- vi Service by anyone other than authorized Lewmar representatives shall void this warranty unless it accords with Lewmar guidelines and standards of workmanship.
- vii Lewmar's products are intended for use only in the marine environment. Buyers intending to use them for any other purpose should seek independent professional advice as to their suitability. Lewmar accepts no liability arising from such other use.

B EXCEPTIONS

Cover under this Warranty is limited to a period of one year from the date of purchase by the end user in the case of any of the following products or parts of products:

- Electric motors and associated electrical equipment
- Electronic controls
- Hydraulic pumps, valves and actuators
- Hatch & Portlight weather seals
- Products used in "Grand Prix" racing applications
- Products used in commercial or charter applications
- Anchor rodes

C LIABILITY

- i Lewmar's liability under this warranty shall be to the exclusion of all other warranties or liabilities (to the extent permitted by law). In particular (but without limitation):
 - a. Lewmar shall not be liable for:
 - Any loss of anticipated turnover or profit or indirect, consequential or economic loss;
 - Damages, costs or expenses payable to any third party;
 - Any damage to yachts or equipment;
 - Death or personal injury (unless caused by Lewmar's negligence).
- Some states and countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you
- b. Lewmar grants no other warranties regarding the fitness for purpose, use, nature or satisfactory quality of the products.
 - ii Where applicable law does not permit a statutory or implied warranty to be excluded, then such warranty, if permitted by that state or country's law, shall be limited to a period of one year from the date of purchase by the end user. Some states and countries do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you.

D PROCEDURE

Notice of a claim for service under this warranty shall be made promptly and in writing by the end user to the Lewmar outlet that supplied the product or to Lewmar Limited at Southmoor Lane, Havant, Hampshire PO9 1JJ, England.

E SEVERANCE CLAUSE

If any clause of this warranty is held by any court or other competent authority to be invalid or unenforceable in whole or in part, the validity of the remaining clauses of this warranty and the remainder of the clause in question shall not be affected.

F OTHER RIGHTS

This warranty gives you specific legal rights, and you may also have other legal rights, which vary from state to state and country to country.

In the case of European States a Consumer customer (as defined nationally) has legal rights under the applicable national law governing the sale of Consumer Goods; this Warranty does not affect those rights.

G LAW

This warranty shall be governed by and read in accordance with the laws of England or the state or country in which the first end user is domiciled at the time of purchase of the product.

H DISPUTES

Any dispute arising under this warranty may, at the option of the end-user, be referred to alternative dispute resolution under the rules of the British Marine Federation or to the Courts of the State whose law shall govern the warranty or to the Courts of England and Wales. The British Marine Federation may be contacted at Marine House, Thorpe Lea Road, Egham, England, TW20 8BF

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