



## User Instruction & Installation Manual

### M9 & M10 Searchlight 45w LED



#### Product Reference Number:

- A6261 – M9 Deck Silver Finish**
- A6262 – M9 Deck White Finish**
- A6263 – M10 Cabin Silver Finish**
- A6264 – M10 Cabin White Finish**

#### Manufacturer's details:

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#### Distributor details:

Manual Part Number: C30613

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# 1 - Introduction

**It is imperative that this manual is read carefully and understood before installing your equipment. For your future reference please keep this manual in a safe place.**

Thank you for specifying a product from the Francis Searchlights range. All Francis products are designed to give complete customer satisfaction and are manufactured to the highest engineering standards to ensure optimum performance and service life.

The Francis LED range combines features proven over many years service in the most hazardous conditions in both marine and land installations.

To prolong the life and performance of your product, we recommend that you only specify Francis Searchlights spare parts. This will also ensure that any warranties on your equipment will not be invalidated. Information on spares ordering and parts is provided in this manual.

Should you ever need to contact Francis Searchlights Ltd. regarding your equipment, please always quote the Product Serial Number.

## 2 - Safety Precautions

The following instructions must be adhered to, to ensure a safe working environment and the safety of the user.

- Only suitably qualified personnel may install the products.
- Never look directly into an illuminated searchlight as this may cause severe damage to eyesight. If it is necessary to inspect a lamp whilst in operation, always wear suitable protective goggles.
- Searchlights get hot. Never touch the unit when lit and always allow at least ten minutes for cooling down after turning off.
- Never place anything on or cover the searchlight when in use.

### 3 – Technical Information

This product has been designed to operate in accordance with the product specification. The M9 & M10 searchlights have the following features:

- Constructed from marine grade aluminium.
- High quality 5° Ledil Lenses.
- Cree LED Chip
- Powder coated & stove enamel painted.
- Vertical movement +35° to -35°.
- Fixed focus.
- Toughened super clear Optiwhite front glass.
- Sealing to IP65.
- Weight                      M9 – 2.1Kg      M10 – 2.6 Kg.

The searchlight also performs to the following optical data:

Volts	Watts	Range @ 1 Lux	Luminous Flux	Div.	LED Life
12/24v	45	723M	3,126	5°	50,000

In order that the searchlight operates correctly it is imperative that competent personnel are responsible for the installation, operation, and servicing of this equipment. Failure to adhere to this advice may cause premature failure or incorrect operation of the searchlight, which may damage the equipment or cause personal injury.

## 4 - Unpacking and Installation Instructions

The following instructions should be read and fully understood prior to installing the equipment to ensure that the correct procedures are followed, and all safety precautions are observed.

If the equipment has been in storage for a considerable time, it is advisable to conduct a routine maintenance check on all parts before installation.

Care should be taken when unpacking the searchlight, so as not to cause damage to the equipment or cause personal injury. A visual inspection of the equipment should be conducted to check for damage during transit or damaged lamps.

Enclosed in the packing is the flange sealing gasket. This should be retained for installation purposes.

### **Preparing the Mounting Position**

Mark out and drill 3 off holes  $\varnothing 6.4$  on a 108.0 P.C.D.

On underdeck models a central hole  $\varnothing 45.0$  will be required to accept the movement of the control handle. Make sure to fit the Base-sealing gasket, when in the desired position bolt the searchlight firmly down. On an UN-even surface, a suitable sealant maybe required to provide a weatherproof seal.

## 5 - Electrical Installation

For safety purposes, only competent personnel should perform the electrical installation. All equipment should be installed to current Electrical Regulations and Standards.

To obtain the maximum light output from the searchlight, it is essential that the full operating voltage of the lamp fitted be applied to the lampholder contacts.

### Method of Electrical Connection

- 1) Disconnect the supply before working on the electrical system.
- 2) The searchlight must be connected to a fused electrical supply, using suitably sized cable.
- 3) If the searchlight is located a considerable distance from the supply, provision must be made in the cable size to overcome the voltage drop.

The following table should be used for indication purposes only:

Searchlight	12v	24v
Cable Size (mm <sup>2</sup> )	Distance Max	Distance Max
2 core 1mm	22 MTRS	45 MTR

- 4) Whenever possible cable terminations should be made below deck and with approved terminal devices.
- 5) If a spare auxiliary fuse or circuit breaker is not available, one of the correct type/ratings should be fitted and connected to a positive supply. It is advisable to locate a bus bar or main connection and avoid any direct connection to the supply.
- 6) When wiring the negative supply, the direct connection to a battery or supply, or metal hull/object, should be avoided. It is advisable to use a suitable terminal block or connection.
- 7) For ease of use a single pole switch, of the appropriate rating, should be fitted in a convenient location. All cable lengths should be kept to a minimum.



## 6 - Operating Instructions

This equipment is designed for use out of doors, in free air. Never place anything on, or cover, the searchlight when in use as this may present a hazard.

### M9 Searchlight

The searchlight can be tilted  $\pm 35^\circ$  by using the rear handle mounted on the rear of the searchlight.

### M10 searchlight

The searchlight can be tilted  $\pm 35^\circ$  by pushing or pulling the underdeck handle.

**This product should not be used for any purpose other than for which it was designed. Any modifications to the product should not be undertaken without consulting the manufacturer.**

## 7- Fault Finding

If a fault occurs the following procedures should be adopted. Any work to be carried out should be conducted by a competent person. A multimeter should be used for fault finding purposes.

### **Fault**

Lamp fails to light.

### **Causes**

- 1) Power not supplied.
- 2) Fuse blown.
- 3) Failed LED

### **Remedy**

- 1) Check voltage at supply / battery. If necessary, recharge battery. If supply is not present fault is at customer's supply. If power is present, see remedy 2.
- 2) Check fuse for visual failure. If non noticeable check fuse for continuity. If fuse found to be faulty, replace with new part. If found to be working correctly see remedy 3.
- 3) Replace LED Panel Assembly.

## 8 - Maintenance and Servicing

To prolong the service life and performance of your searchlight, the following maintenance guidelines are recommended:

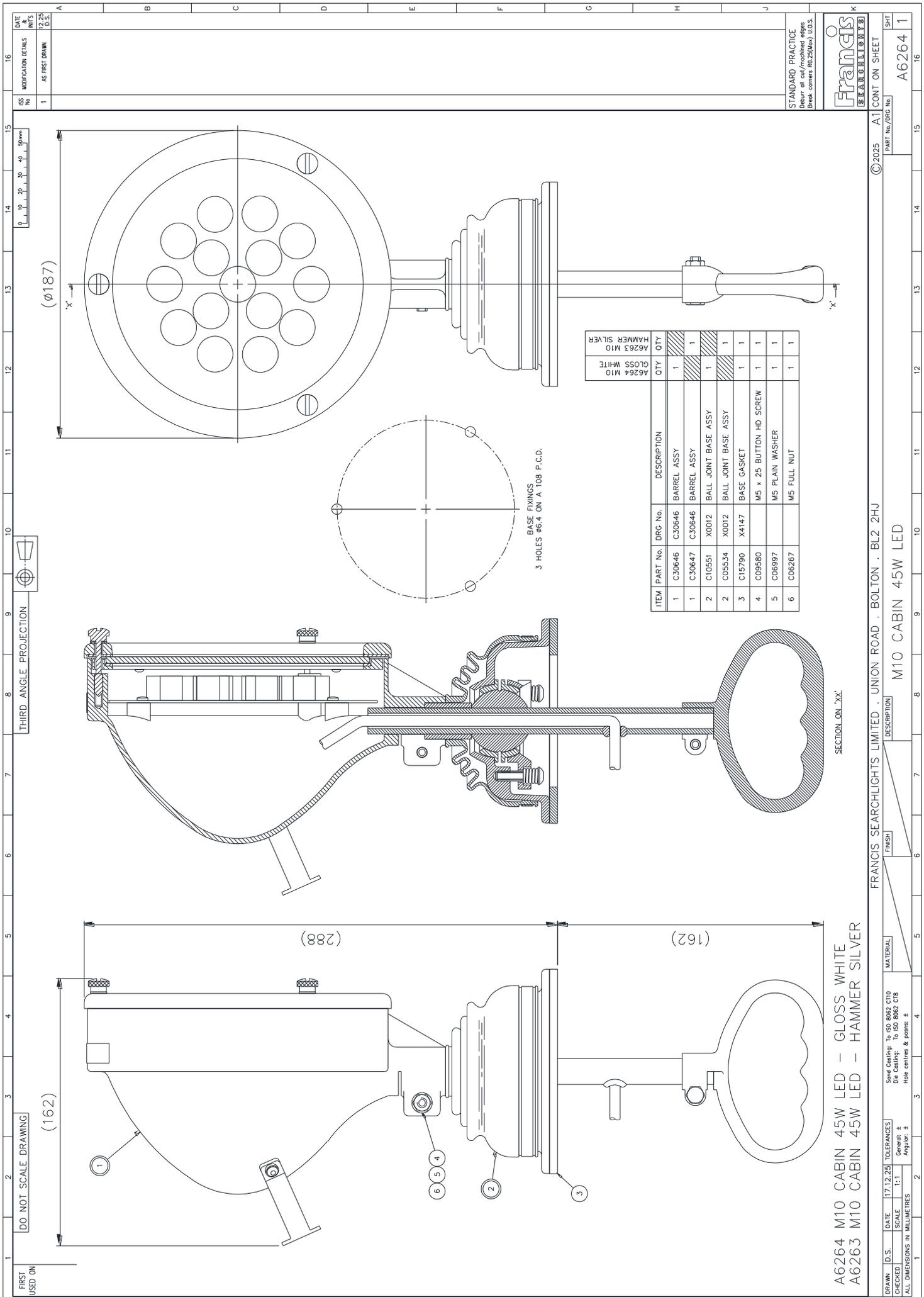
- Maintenance checks should be conducted before every voyage or at least every three months.
- Before checking, disconnect the equipment from the supply.
- Visually inspect the condition of the equipment.
- Any major or minor structural damage should be rectified immediately.
- After inspection it may be necessary to clean the inside of the searchlight. The following procedure should be adhered to:
  - Remove the front bezel.
  - Clean the front glass inside and out using a proprietary glass cleaner.
- It is advisable to check all seals and gaskets for signs of degradation. Renew if necessary.
- Upon completing all maintenance requirements, the searchlight should be tested for full working order (approximately 20 minutes).

**If in any doubt as to the correct servicing procedures to adopt, please contact your distributor/agent or the manufacturer who will be able to advise the best course of action for your product.**

## 9 - General Assembly Drawing

<b>Drawing Number</b>	<b>Description</b>
A6262	M9 General Assembly
A6264	M10 General Assembly





ITEM No	MODIFICATION DETAILS	DATE	BY	CHKD
1	AS FIRST DRAWN			

STANDARD PRACTICE  
 Debur all cut/fabricated edges  
 Break corners R0.25(Max) U.S.S.

© 2025 A1 CONT ON SHEET  
 PART No./DRG No. A6264 1

FRANCIS SEARCHLIGHTS LIMITED · UNION ROAD · BOLTON · BL2 2HU  
 M10 CABIN 45W LED

FINISH: M10 CABIN 45W LED - GLOSS WHITE  
 M10 CABIN 45W LED - HAMMER SILVER

Send Coatings: To ISO 8062 C10  
 Die Coatings: To ISO 8062 C18  
 Hole centres & posns: 2

17.12.25 TOLERANCES  
 SCALE 1:1 General: ±  
 Angular: ±

DO NOT SCALE DRAWING  
 FIRST USED ON

ALL DIMENSIONS IN MILLIMETRES

THIRD ANGLE PROJECTION

SECTION ON 'X-X'

BASE FIXINGS  
 3 HOLES Ø6.4 ON A 108 P.C.D.

ITEM PART No. DRG No. DESCRIPTION QTY QTY

1	C30646	C30646	BARREL ASSY	1	1
1	C30647	C30646	BARREL ASSY	1	1
2	C10551	X0012	BALL JOINT BASE ASSY	1	1
2	C05534	X0012	BALL JOINT BASE ASSY	1	1
3	C15790	X4147	BASE GASKET	1	1
4	C09580		M5 x 25 BUTTON HD SCREW	1	1
5	C06997		M5 PLAIN WASHER	1	1
6	C06287		M5 FULL NUT	1	1

A6263 M10  
 HAMMER SILVER

A6264 M10  
 GLOSS WHITE

FRANCIS SEARCHLIGHTS LIMITED · UNION ROAD · BOLTON · BL2 2HU

CONT ON SHEET  
 PART No./DRG No. A6264 1

## 10 – Spare Parts List

The following spare parts can be ordered directly from the manufacturer:

<b>Part Number</b>	<b>Description</b>
C15790-00	Base Gasket
C26255-00	Front Glass
C15557-00	Rubber Bellows
C15920-00	Bellows Bottom Locking Band
C28385-00	Bellows Top Locking Band
C02193-00	Base Spring
C17104-01	Gasket Seal Kit
C30491-01	LED Panel Assembly
C30474-00	LED Lens

To prolong the life and performance of your product, we recommend that you only specify Francis Searchlights spare parts. This will ensure that any warranties on your equipment will not be invalidated.

When ordering spare parts please contact the Sales Department at Francis Searchlights Limited. Please always quote searchlight model and serial number. This will enable a fast response to your spares' requirements.