

Maintenance Advice Manual

Introduction

Having selected Ironmongery products from Acorn Architectural Ironmongery Ltd, it is important for them to function correctly throughout the length of their working life and a number of areas should therefore be considered:

- ▶ **Storage of products on site**
- ▶ **Fixings and fixing instructions**
- ▶ **Installation**
- ▶ **Maintenance**
- ▶ **Care of Finishes**

Acorn Architectural Ironmongery Ltd has taken every care to deliver the best quality products. However, as these fittings will be functioning every single working day of a buildings life span, many ironmongery items are subject to wear and tear. As such, they need to be properly maintained.

On the following pages, guidelines are offered on the most significant items, which will require attention.

- ▶ **Hinges**
- ▶ **Overhead door controls**
- ▶ **Floor springs**
- ▶ **Electro magnetic devices**
- ▶ **Locks and latches**
- ▶ **Cylinders**
- ▶ **Lever handles**
- ▶ **Pull handles**
- ▶ **Emergency and panic exit hardware**
- ▶ **Ancillary products**

At some stage in the future it may be decided to alter the functional use of a building. In the eventuality Acorn Architectural Ironmongery Ltd can offer assistance in specific areas, fire safety, security, product innovation. Please contact Acorn Architectural Ironmongery Ltd **01223 414121** for assistance.

STORAGE

Hardware is carefully packed before delivery to avoid damage. It is important that all ironmongery received on site is stored in secure, clean and dry conditions prior to fixing. Abrasives, acids and other corrosive materials should be stored well away from hardware.

FIXINGS

When products are supplied with appropriate fixings and fixing instructions these should be used. Fixings should not be substituted without reference to Acorn Architectural Ironmongery Ltd as this may affect product performance and guarantee. Fixing instructions should be retained and handed over to Building Maintenance for future reference.

INSTALLATION

In order to operate, products should be installed in accordance with manufacturers fixing instructions, current Doc M Regulations and BS8300.

We recommend that ironmongery is protected during the construction programme.

MAINTENANCE

Detailed advice is offered on page 3.

Whilst every effort has been made to cover the common concerns, you may well require further information on some of our products or on the general areas of preventative maintenance. In this instance please contact Acorn Architectural Ironmongery Ltd who will be pleased to assist you.

CARE OF FINISHES

More door furniture is damaged by incorrect cleaning than by any other means. It is vitally important to ensure proper care in keeping the finish clean. Dust, which is chemically active and moisture, which is frequently acid, are the main natural hazards affecting door furniture. Simple but regular cleaning is therefore more successful than more severe sporadic treatment.

Irreparable damage can be caused to the surface by using proprietary metal polishes, harsh abrasive cleaners or emery cloths on an electrolytically deposited finish. On page 4, is a list of the correct procedures for cleaning the most common finishes.

Maintenance Advice

Hinges

Hinges must be fitted accurately to ensure efficient operation and all hinge pins should be in vertical alignment.

Hinges should be inspected periodically for wear that may inhibit the free movement of the door and also that may cause the door to drop. All screws should be checked for tightness.

Loosening of hinges is usually caused by poor alignment or by incorrect choice of screws. Loose screws should be tightened and if possible the problem should be eliminated by realigning the hinges or by replacing the screws with a more suitable type.

Hinges should be lubricated periodically with a light machine oil. Whilst squeaking of hinges is a sign of lack of lubrication, if it occurs frequently then pin misalignment should be investigated.

In all instances hinges should be fire rated and conform to BS EN1935.

Acorn cannot be held responsible for the failure of any hinges that may be supplied by others, ie door set manufacturers.

Overhead Door Closers & Floor Springs

Since all internal parts are completely immersed in oil there is little routine maintenance to be carried out. However, each closer should be inspected for oil leakage, tightness of fixings and correct operation. Light oil lubrication should be applied to exposed pivot points.

Ensure the door closes smoothly and firmly into the frame overcoming the latch and/or seals if fitted. If it does not, make sure the lock and hinges are correctly fitted and operating correctly before adjusting the closer.

To avoid slamming, the latch action should be adjusted. Where backcheck or delayed action functions are incorporated, these should also be checked and adjusted. Similarly with adjustable power units the valve should be adjusted to take account of the size of door, variable air pressures and the ability of the user to operate the door. It is recommended that door stops are fitted to all non backcheck applications to prevent the door opening beyond the limit of the closer.

Door closers conforming to BS8300 and Doc M are tested without intumescent fire and smoke seals. Opening forces may vary depending on air pressure conditions, type of hinge fitted and positioning of smoke seals.

Electro Magnetic Devices

Any electrical hold open devices and its associated sensor or alarm should be checked once a week in accordance with the current fire regulations.

Locks and Latches

The correct operation of a lock or latch, assuming correct fitting, is often affected by movement of the door or frame caused by climatic conditions or wear on hinges. The usual result is the inability of the latch and deadbolts to easily engage the striking plate or keep, requiring an adjustment to their position on the frame. The mortice should also be checked to ensure that no debris has entered the lockcase.

It is also important that the holes in the frame behind striking plates are deep enough & free from foreign matter, to ensure unrestricted movement of the latch and deadbolts.

Lubricant should be occasionally applied to the side and striking face of latch bolts. Grease should not be applied to the internal lock mechanism, as this will attract dust.

Cylinders

Cylinders should not be lubricated with oil as this will attract dust, which can affect their smooth operation. They should be maintained with a periodic application of powdered graphite into the keyway.

Unauthorised key cutting or incorrect key blanks may affect the long term performance of the cylinders and keys.

Cylinders must be fitted centrally within the lock and door to guarantee the correct operation.

Keys should not be used as a means of pulling the door open.

Lever Handles

Backplate and rose fixings should be periodically checked for tightness and adjustment if found loose. Badly fitted and maintained furniture can prevent the lock from operating correctly. Spindle grub screw fixings should also be checked and tightened and bolt through fixing must be used.

Under BS8300 and Doc M guidelines all lever handles should be fitted using bolt through fixings.

Pull Handles

Pull handles should be inspected to ensure that bolt through fixings and/or screw fixings are tight. Loose pull handles can damage the door face and become unstable.

Under BS8300 and Doc M guidelines all pull handles should be fitted using bolt through fixings.

Emergency and Panic Exit Hardware

Regular inspection and maintenance is essential in the interest of safety.

Attention must be given to ease of opening and closing with adjustments as necessary to compensate for any door or frame movement. Floor sockets should be cleaned out to prevent foreign matter impeding bolt movement.

Lubrication will be limited to the application of a little light machine oil to the pivots of the top tripper mechanism of panic bolts, to the saddles of panic bolts and the bolt head of panic latches.

All panic hardware must conform to EN1125 or EN179.

Ancillary Products

These items should be checked to ensure that they have been correctly fitted and they do not interfere with the correct operation of other ironmongery or the function of the door leaf.

Care of Finishes

Surface deposits such as dirt and dust are the main cause of corrosion in metal door furniture particularly when combined with moisture in a damp atmosphere. In hard wearing environmental conditions near the coast or industrial areas acidic or alkaline deposits may build up and attack the surface finish. It is very important that care is taken to maintain door furniture finishes since many finishes especially anodised, electro-plated, polished and lacquered surfaces are damaged by incorrect cleaning.

Frequent dusting using a soft dry cloth and occasional washing with warm soapy water, followed by a light application of good quality wax polish will provide a good foundation for preserving the appearance of most finishes. Chemical sprays, cellulose based thinners and silicone based polishes should be avoided. Ironmongery fitted externally will require greater attention due to increased exposure to atmospheric conditions.

It is strongly advised that solvents, metal polishes or cleaners containing abrasive powders or abrasive cloths and pads should not be used for cleaning lacquered or electro-plated finishes.

Electro Plated Finishes

Electrophoretic and plated finishes should be wiped clean with soapy water and a soft cloth and wiped dry.

Powder Coated

Epoxy, polyester or polyurethane powder coated finishes should be cleaned with a soft cloth and household furniture polish. Under no circumstances must industrial solvents be used.

Nickel and Chrome

Door furniture with nickel and chrome finishes should be dusted regularly. They should be washed periodically with weak detergent solutions and rubbed occasionally with a cloth dampened in paraffin or light oil.

Anodised and Aluminium

Satin and polished finishes should be dusted regularly. They should be washed periodically with weak detergent solutions occasionally wiped with wax polish.

Stainless Steel

Whether supplied in satin or polished finish, stainless steel should be dusted regularly, occasionally washed with warm soapy water and dried with a soft clean cloth. Avoid acid or chloride based cleaning products and abrasive materials.

Nylon

Nylon is a non-porous material and the smooth surfaces of nylon products do not attract dust. Appearance can be maintained by wiping with a damp cloth, which will restore the product to a pristine condition.

Un-lacquered Brass

Lacquered finishes should be cleaned by the occasional application of a light coating of wax polish. Eventually it is likely that the lacquer will become damaged and break down. When this occurs, all traces of the lacquer should be removed using acetate lacquer remover. This product may then be re-lacquered or cleaned as un-lacquered brass on a regular basis.

Bronze

Bronze finishes should be dusted regularly and periodically washed in warm soapy water. They should also be treated occasionally with a sparing rub of wax or furniture polish.

Stove Enamelled

These finishes should be wiped with a non-abrasive, soft cloth and a gentle cleaner.

Manufacturer's Guarantee

Please note Acorn will only support the Manufacturers guarantee if all products have been strictly fitted and specified in accordance with the manufacturers fixing instructions and the following European standards EN1154, EN12209, EN179 and EN1125, Doc M and BS8300.

For further information on maintenance or a request to visit site, please contact us at the address below or visit our website:

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