

This is an electronic version of the printed Imperial Concise Pocket Guide to Locks.

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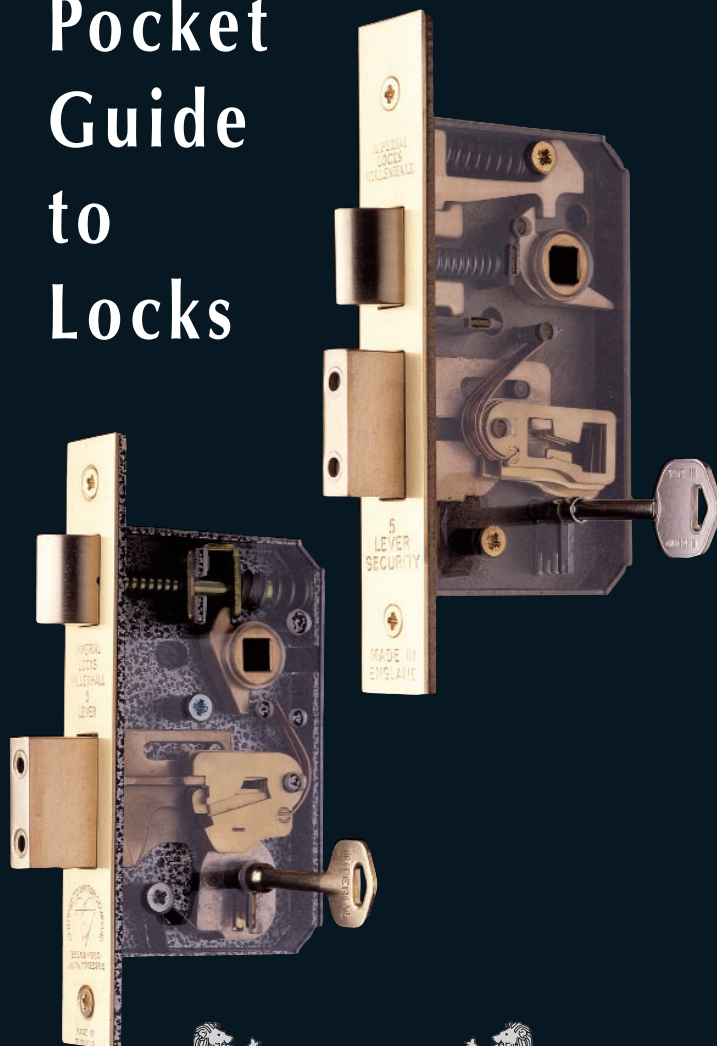
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GLOSSARY OF TERMINOLOGY

BACKSET	KEYWAY
BIT	LATCH
BLADE	LATCHBOLT
BOLT STUMP	LEVER
BOW	LEVER CUTS
BROACHING	LIP
BURR	MASTER KEY
CAM	MORTICE
CENTRES	OVAL PROFILE
COLLAR	PIN TUMBLER
CUTS OR BITINGS	PLUG
CYLINDER	REBATED
DEADBOLT	ROLLERS
DEADLOCK	SASHLOCK
DRIVER	SHANK
EURO PROFILE	SHOULDER
FLUTINGS	SPRINGBOLT
FOLLOWER	SPRINGING
FOREND	STRIKING PLATE
GATING	THROWER
HANDING	WARDING



A Concise Pocket Guide to Locks

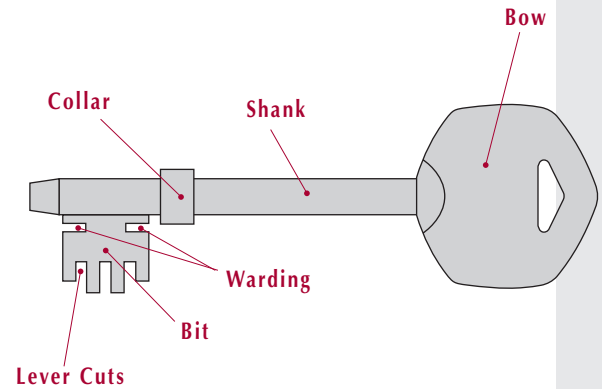


For full range please refer to catalogue

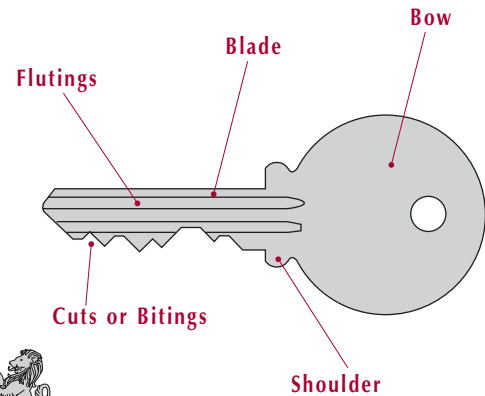
A CONCISE POCKET GUIDE TO LOCKS

Imperial is the trade name of Guardian Lock & Engineering Co. Ltd. of Willenhall, West Midlands, England. The company manufacture a wide range of locks and latches and is a firm of assessed capability to BS EN ISO 9001:2000 recognised internationally as ensuring quality of product, manufacture and service. This pocket guide provides a brief outline of the types and operations of the most common lock types available. A comprehensive catalogue providing full specification details is available on request.

TERMINOLOGY → LEVER TYPE KEY



TERMINOLOGY → CYLINDER TYPE KEY



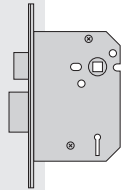
TERMINOLOGY

MORTICE LOCKS

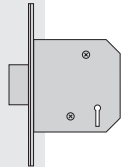
are made for fixing in a hole or mortice cut in a door from the edge

BASIC LOCK TYPES

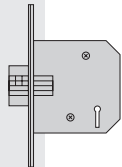
Lever Locks



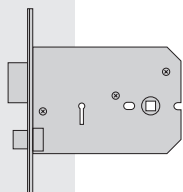
Mortice Sashlock



Mortice Deadlock

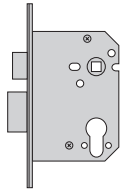


Mortice Sliding Door Lock

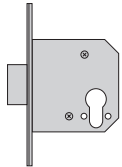


Horizontal Mortice Lock

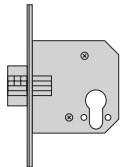
Euro Profile Cylinder Lockcases



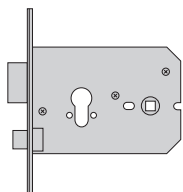
Mortice Sashlock



Mortice Deadlock

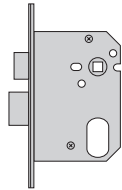


Mortice Sliding Door Lock

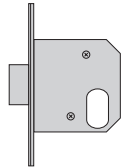


Horizontal Mortice Lock

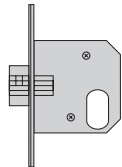
Oval Profile Cylinder Lockcases



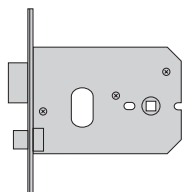
Mortice Sashlock



Mortice Deadlock



Mortice Sliding Door Lock

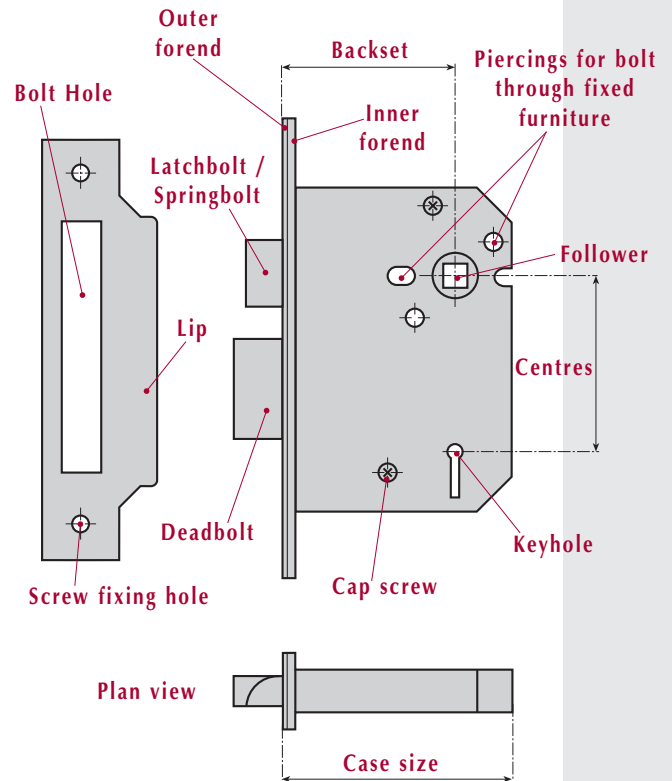


Horizontal Mortice Lock

TERMINOLOGY

TYPICAL UPRIGHT

MORTICE SASHLOCK, two bolts with lever mechanism



TERMINOLOGY

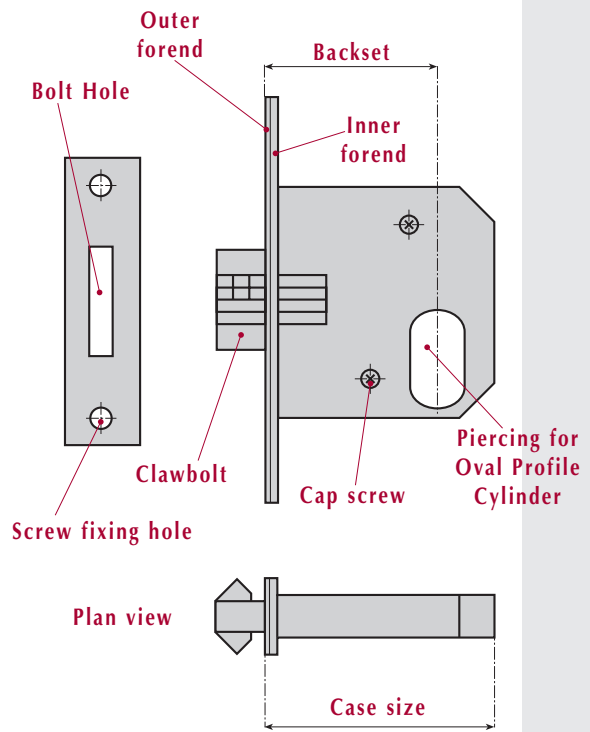
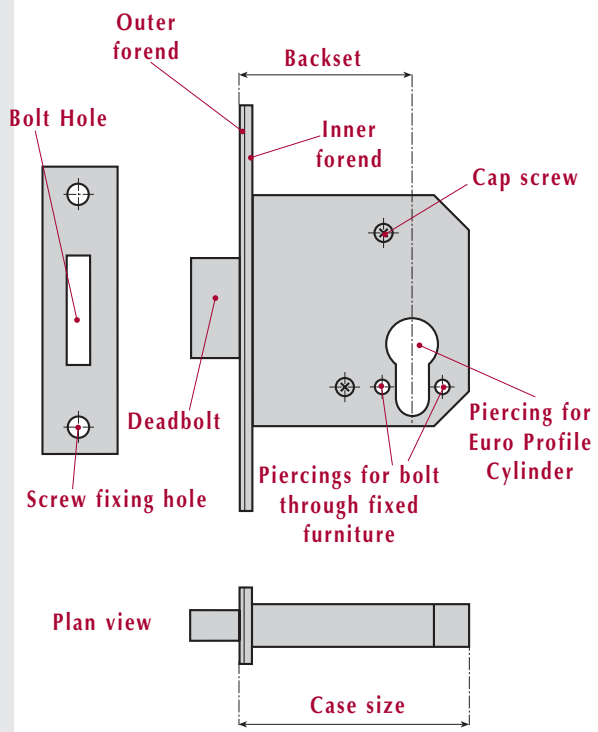
TYPICAL MORTICE

DEADLOCK to suit Euro Profile Pin Tumbler Cylinder

TERMINOLOGY

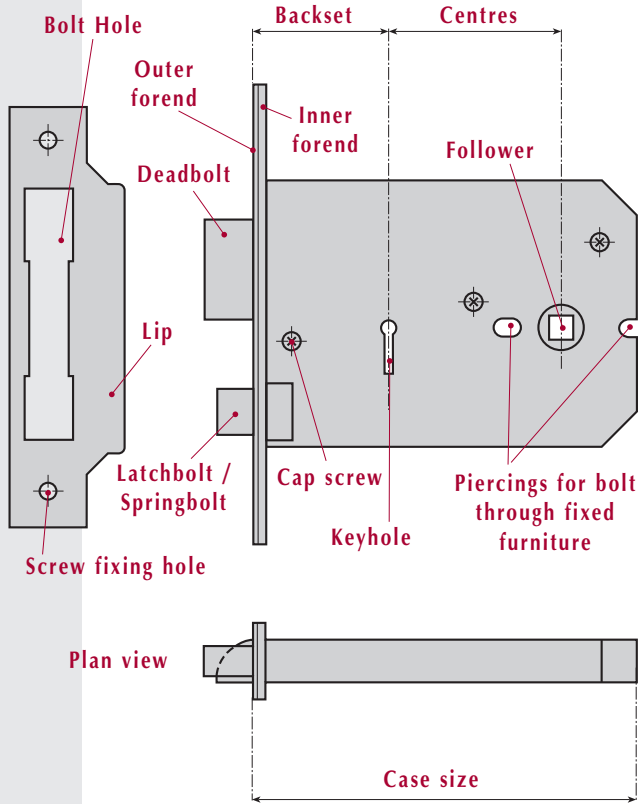
TYPICAL MORTICE SLIDING

DOOR LOCK to suit Oval Profile Pin Tumbler Cylinder



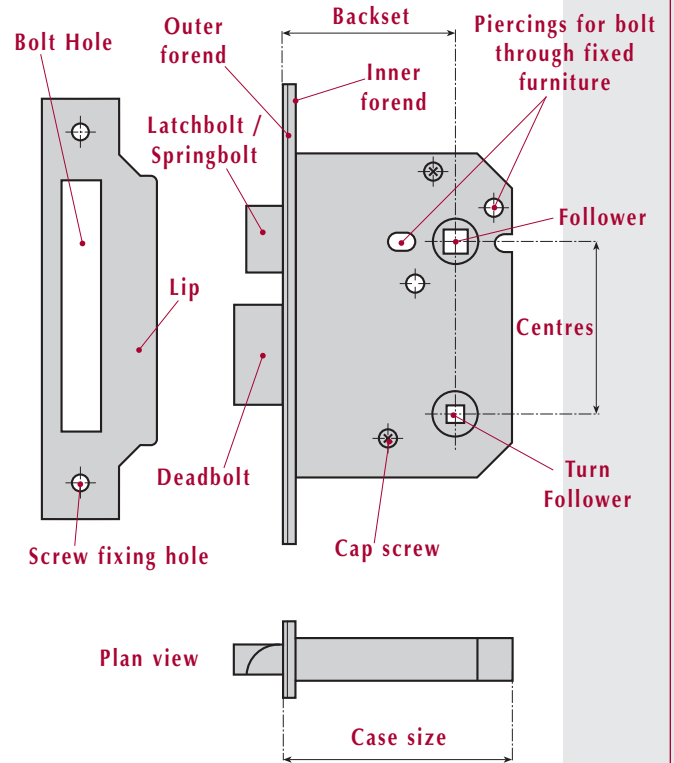
TERMINOLOGY → TYPICAL HORIZONTAL

MORTICE LOCK, two bolts with lever mechanism



TERMINOLOGY → TYPICAL UPRIGHT

BATHROOM MORTICE LOCK. From the inside the deadbolt is operated by a turn or small knob instead of a key

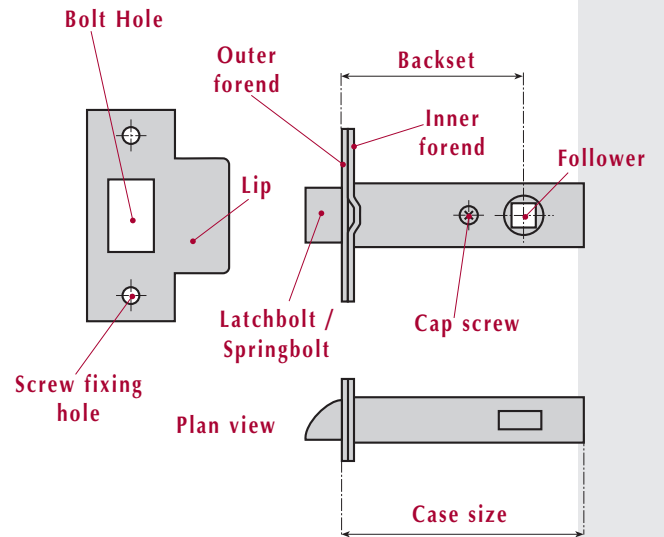
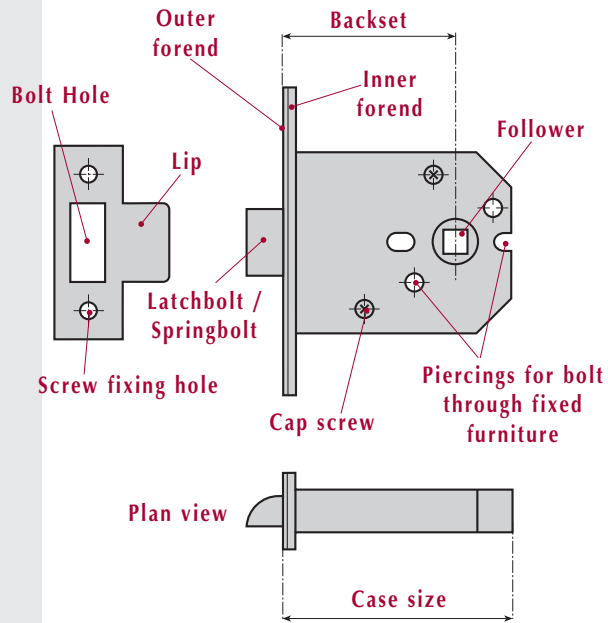


TERMINOLOGY

TYPICAL MORTICE LATCH

TERMINOLOGY

TYPICAL TUBULAR MORTICE LATCH



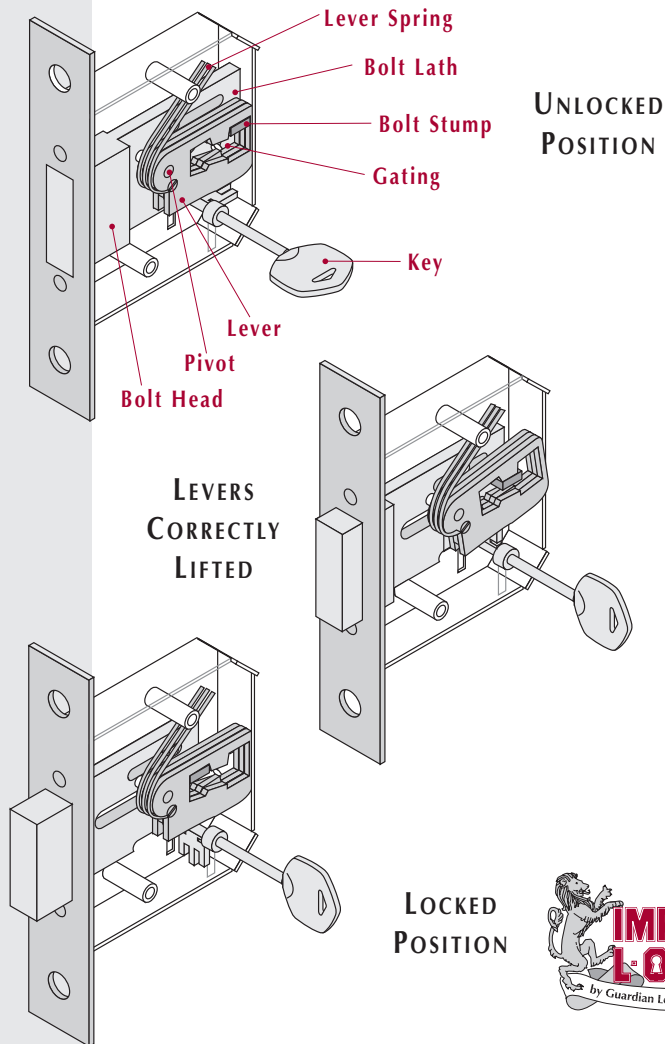
TERMINOLOGY

LEVER LOCKS

Most commonly such locks are fitted with three or five levers. By varying the gatings in the levers and with keys cut correspondingly, locks are made to differ.

When operated by the correct key, the levers are lifted together so that the gating is aligned with the bolt stump allowing the bolt to be thrown or withdrawn.

Use of an incorrect key either overlifts or underlifts the levers so that the bolt stump is obstructed.

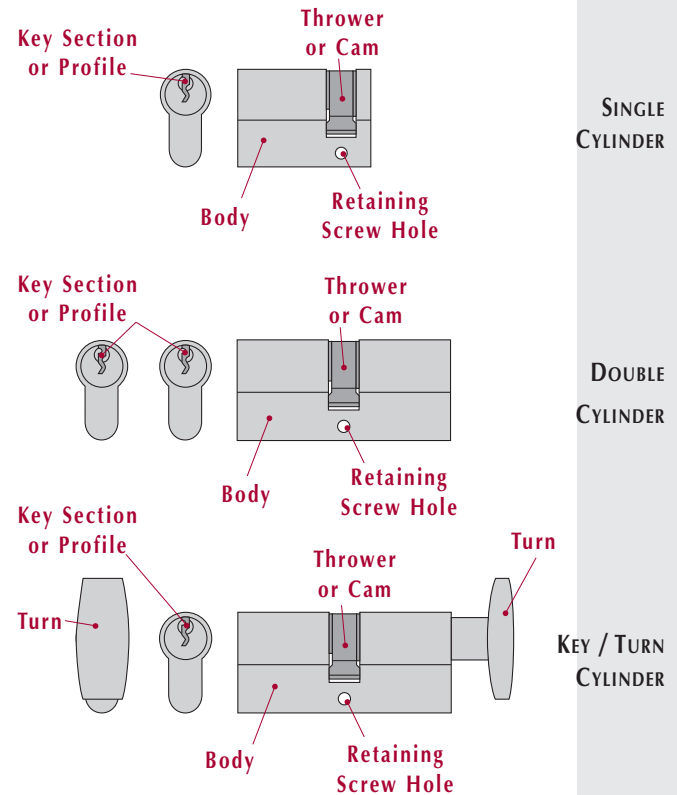


TERMINOLOGY

PIN TUMBLER CYLINDERS

— EURO PROFILE

BASIC TYPES

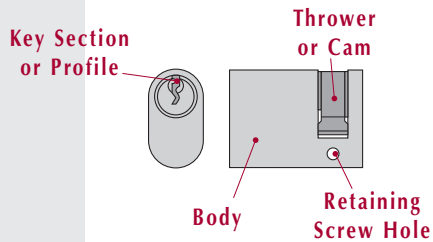


TERMINOLOGY

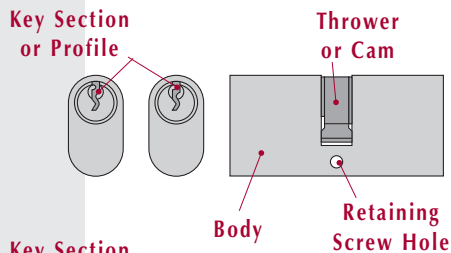
PIN TUMBLER CYLINDERS

— OVAL PROFILE

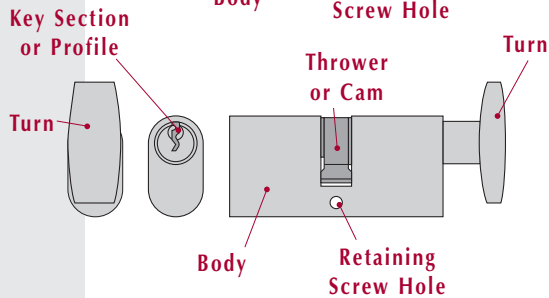
BASIC TYPES



SINGLE CYLINDER



DOUBLE CYLINDER



KEY / TURN CYLINDER



TERMINOLOGY

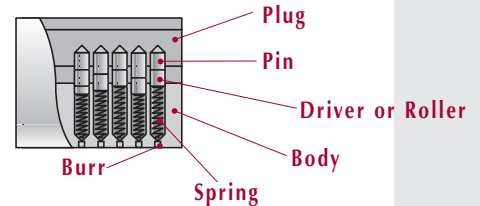
PIN TUMBLER CYLINDERS.

Euro and oval profile cylinder bodies have through their length a rotatable plug broached with a keyway. A thrower or cam is attached to the end of the plug so that when a correct key is used to turn the plug, the thrower or cam activates the mechanism of the lockcase to which it is fitted.

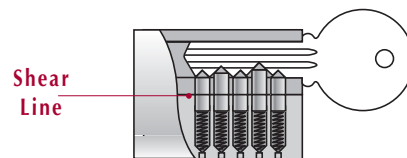
The security of a cylinder is provided by means of spring loaded pin tumblers, commonly five or six, which in simple form are in two parts known as pins and rollers or drivers. In a locked condition the rollers or drivers are partly in the plug and partly in the body thus preventing the plug from being rotated.

By use of a correctly cut key the pins and rollers are lifted so that a shear line is achieved between the plug and the body allowing the plug to be turned by its key.

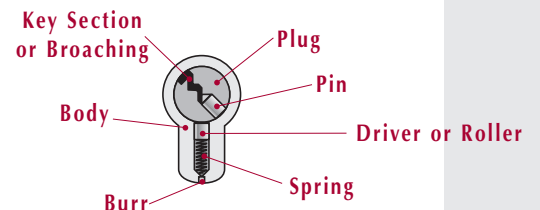
LOCKED POSITION



CORRECT KEY LIFTING PINS TO UNLOCKED POSITION



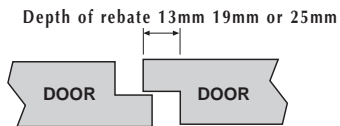
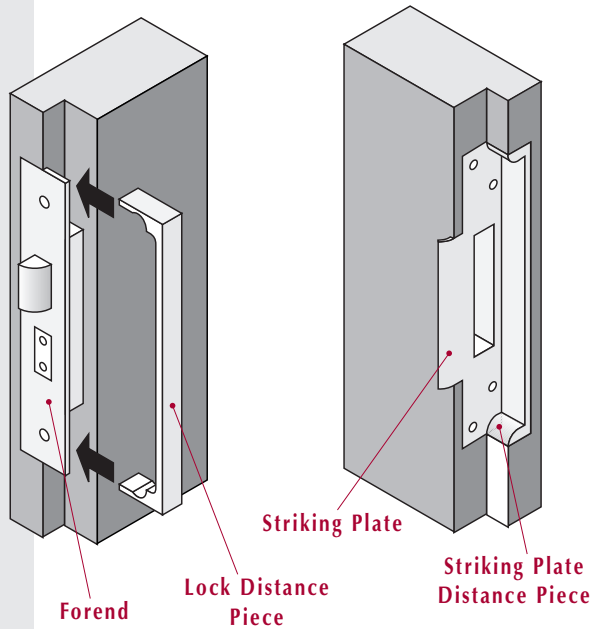
UNLOCKED PLUG ROTATING



TERMINOLOGY

REBATED COMPONENTS

For use mainly on double doors where one leaf overlaps the other



PAIR OF DOUBLE REBATED DOORS

TERMINOLOGY

HANDING

Many locks and latches are easily reversible to suit the most common ways of opening and closing hinged doors. However, some have to be made to suit the hand required. It should be noted that different handing rules apply in some trades and countries.

FLAT OR PLAIN FOREND LOCKS AND LATCHES



Left Hand



Right Hand



Left Hand Open Out



Right Hand Open Out

REBATED FOREND LOCKS AND LATCHES



Left Hand



Right Hand



Left Hand Open Out



Right Hand Open Out



TERMINOLOGY → SPRINGING

Traditionally upright mortice sashlocks and latches manufactured in England have been made with the springing of the latchbolt or springbolt sufficient to allow easy and positive closing. Such locks are designed and intended for use with lever handle furniture incorporating it's own springing, to return the handle to the horizontal at rest position.

Where upright mortice sashlocks and latches are to be used with unsprung lever handle furniture, compatibility should be ascertained and where appropriate locks and latches specified with heavy springing to suit such applications.

Horizontal mortice locks and latches are primarily intended for use with knob furniture. Such furniture being self centring negates the need for heavy springing. Such locks and latches are most usually fitted with two way action followers thus allowing the knobs to be turned in either direction to withdraw the latchbolt or springbolt.

TERMINOLOGY → ROUND ENDED OR RADIUS

FORENDS. Locks and latches having forends and / or striking plates rounded at the top and bottom may be found convenient, particularly where factory morticed doors are used.

TERMINOLOGY → THIEF RESISTANT LOCKS

By implication all Locks are to some degree resistant to unauthorised operation. BS3621:1998 is a standard prepared under the direction of the Building Hardware Standards Committee for Locks providing an enhanced degree of security against attack. They may most frequently be required to be fitted to final exit doors of domestic and some commercial buildings.

Locks independently tested and assessed to the stringent requirements of this British Standard carry the Kitemark, the number of the Standard ie: BS3621 and the name, trade mark or other means of identification of the manufacturer.



TERMINOLOGY → TO PASS

A set of two locks or more keyed alike so that all are operated by the same key.

TERMINOLOGY → MASTER KEYING

As a matter of convenience it is sometimes a requirement that a number of locks to differ in addition to being operated by their own individual keys, known as servant keys, are also operated by an overriding key known as a master key. Such a set of locks constitute a master keyed suite.

More complex arrangements may be required whereby sub master keys are introduced to operate groups of different locks the whole to be operated by a master key or grand master key as such keys are sometimes known.

Master keyed suites have to be especially made and depending on the complexity of the proposed keying arrangement consultation with Imperial is recommended before ordering.

CHOOSING OF LOCKS →

A lock or latch correctly fitted, maintained and considerably used will provide many years of satisfactory service.

As a general guide, three possible categories of use may be considered.

Light duty — for use typically in housing and other buildings where there is a low frequency of use primarily by those with a high incentive to exercise care.

Medium duty — for use typically in office and other buildings where there is a medium frequency of use primarily by those with some incentive to exercise care.

Heavy duty — for use typically in public and other buildings where there is a high frequency of use primarily by those with little incentive to exercise care.

It should be remembered that a lock is only as strong as the door and frame to which it is fitted.

South African Distributor:

Products shown in the catalogue are available to order from Mercury Fittings cc
in South Africa and surrounding African countries.



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