

# 137-JIG2

## Manual - EN





137-JIG2 IGM Mortising Jig Manual EN v1.01.01 A4ob MAN - VZOR NÁSTROJ EN v1.02.01

# **IGM Mortising Jig for Classical Rebated Doors**

Dear customer,

thank you for the confidence you have placed in us with the purchase of your new IGM jig.

This manual was prepared for the owner and operator of **IGM Mortising Jig for Classical Rebated Doors** to promote safety during setup, operation and maintenance. Please read carefully and understand the information contained in this manual and accompanying documents. To obtain maximum service life and performance, use the machine according to these instructions and safety guidelines. Observe work safety.

We wish you a lot of work satisfaction and joy when working with the IGM Mortising Jig for Classical Rebated Doors.

#### 1. Intended Use

This higly precise mortising jig is designed to quickly and accurately produce holes (mortises) for door locks on classic wooden or aluminum doors using a drill.

#### 1.1 Warranty

IGM always strives to deliver a high-quality and efficient product. The warranty is governed by the valid terms and conditions of IGM.

#### 2. Product Specifications

Speed: 2000 - 3000 rpm

Maximum depth of the lock hole: 100 mm

Cutter diameter: 16 mm / 20 mm / 22 mm

## 3. Safety

**Warning!** Read all instructions and safety guidelines. Failure to follow safety instructions may result in damage to the jig and serious injury to the operator. Keep the manual for future reference.

- Check the technical condition of the jig and cutting tool before work. The cutting tool must be sharp and free from damage. Do not use the jig or cutting tool when damaged.
- The working area must be clean and well-lit. There must be sufficient space around the work area.
- Take care of your safety when working. Long hair, loose clothing and jewellery may cause injury. Wear suitable work clothing, footwear and eye, ear and respiratory protection.
- Watch your hands and fingers. Always use both hands when working with the jig.
- Ensure that the jig is held securely in place. If necessary, use a clamp. Never hold the jig with your hand while working!
- Keep the jig out of reach of children and unqualified persons.
- Do not leave the jig in a damp environment and do not expose it to rain.

### 3.1 Symbols

	Read the manual and all instructions carefully before use.
	Wear head, ear, eye and respiratory protection.
	Use gloves.
<u>.</u>	Warning of general danger.





Scan the QR code and find the manual in your language.



Recycle package materials.

# 4. Package Contents

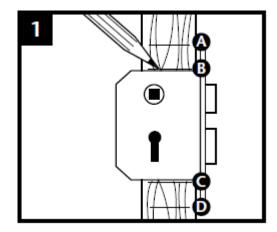
- Mortising Jig
- Boring Shaft
- Flat wrench
- Allen key

- Cutter HW for Wooden Doors D16 mm
- Cutter HW for Wooden Doors D20 mm
- Cutter HW for Wooden Doors D22 mm

## 5. Operation

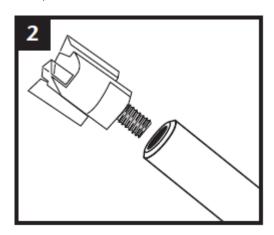
The morticer is positioned on the door edge to suit normal lock height and is secured to the door by clamps. The lower clamp is fixed to the vertical bars, while the upper clamp can slide up and down to suit the required length of mortice. Between the clamps a cutter shaft in an aluminium housing assembly travels manually, the distance governed by the spacing of the clamps. An electric hand-drill powers the cutter.

## **MORTICING WOODEN DOORS**

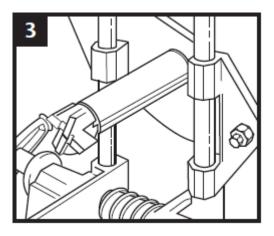


# Recommended procedure

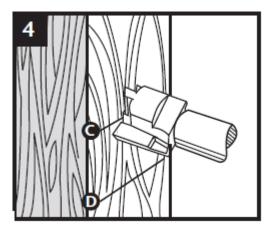
Use the lock as a template and mark off the top and bottom edges of the lock body and the front plate - (4 marks).



Choose cutter to suit correct size of lock body, then screw the cutter onto shaft until tight.

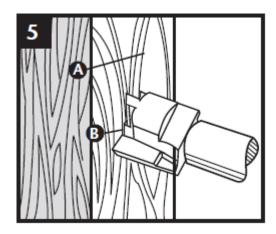


Shaft is inserted into aluminium housing assembly.

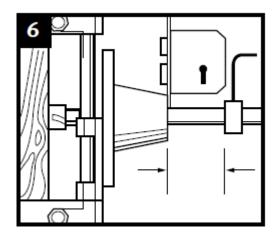


Present the Morticer to the door edge, positioning the cutter to lowest lock body mark but overlapping by 5 mm (position C). The housing assembly should be resting on the bottom pair of clamps. Tighten bottom clamp.

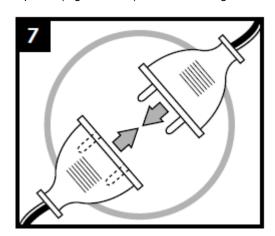




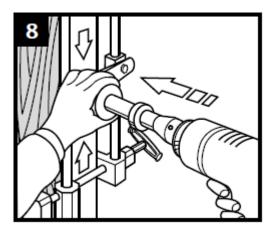
Slide housing assembly upwards to upper lock body mark (position B). The cutter should now overlap this mark by about 5 mm. Bring upper pair of clamps to rest on housing and tighten clamps. Check overal movement.



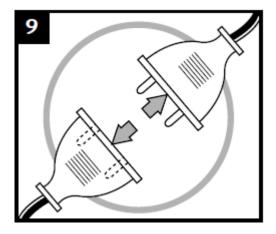
Set depth stop on cutter shaft to depth of mortice required. (1 grub screw). Do NOT overtighten.



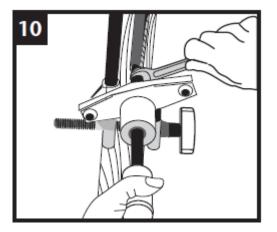
Connect power.



Connect electric drill to cutter shaft. Select fastest available speed, switch on. Traverse housing assembly with one hand and feed cutter into door. Clear woodchips as work proceeds.

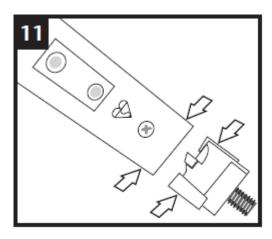


Disconnect power.

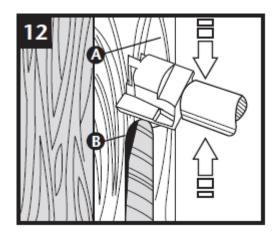


Unscrew cutter by holding drill chuck and releasing cutter with the spanner supplied.

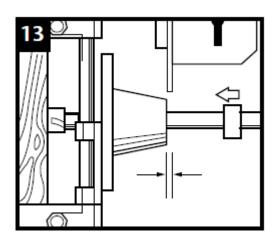




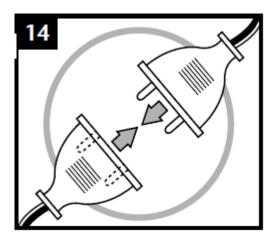
Select cutter for forend and place in front of housing aperture. Push shaft through housing and then screw cutter into shaft until tight.



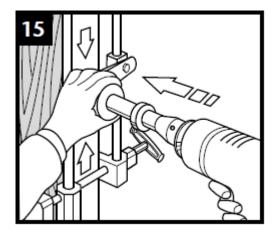
Move top clamp to a position which allows cutter to move within 5mm of top mark (position A). Tighten top clamp. Move bottom clamp to a position which allows cutter to move within 5mm of bottom mark (position B). Tighten bottom clamp.



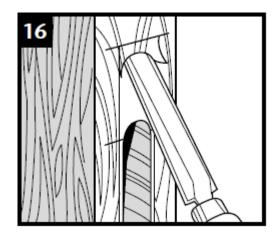
Push shaft so that cutter strikes door edge. Now adjust depth collar on shaft to allow cutter to make recess for lock forend. Tighten grub screw on depth stop.



Connect power.



Slowly cut recess for lock forend.

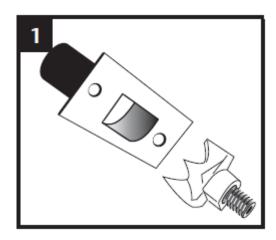


Neatly finish off the recess with a chisel.

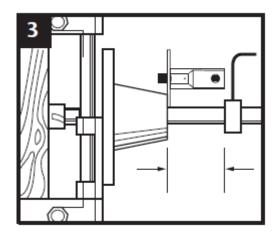


#### SINGLE HOLES USING PLUNGING WOOD CUTTERS

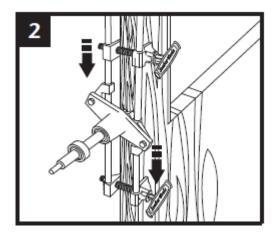
For tubular latches, tubular deadbolts, concealed door closers etc.



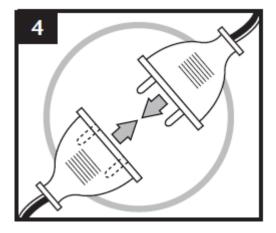
Select a cutter appropriate to the size of the product being fitted. Only choose a 'PD' range cutter shown in the spares section at the back of this manual. Secure it onto shaft by screwing it until tight.



Set depth stop on cutter shaft to depth of mortice required. (1 grub screw). Do NOT overtighten.

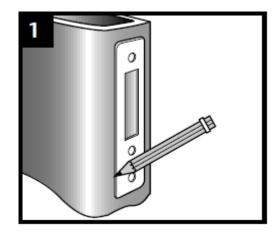


Insert the shaft through the housing and attach jig to door in chosen position. Ensure that the top and bottom clamps are touching the housing sliders so that housing cannot move up or down.

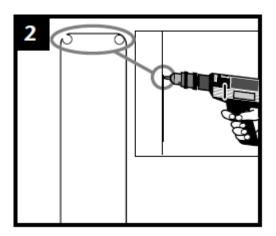


Connect power. Attach the electric drill (not cordless) to the shaft and select the fastest speed available. Switch on, clear the wood chippings regularly to prevent jamming.

# **MORTICING ALUMINIUM DOORS**

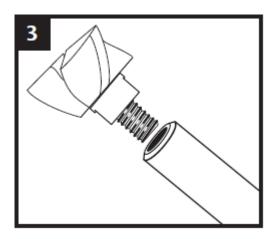


Remove faceplate from lock. Place on door and draw or scribe around faceplate.

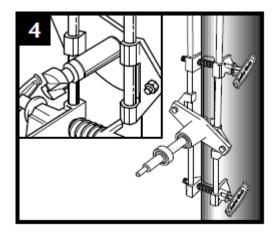


Use drills to correctly identify the radius of the faceplate corners. Then mark and drill a hole in each corner of the scribed outline.

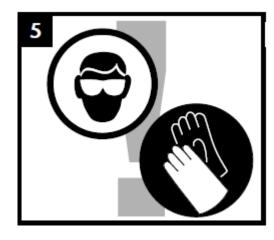




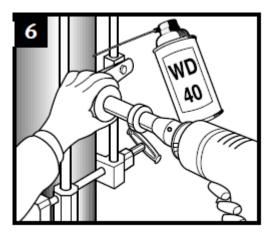
Choose an aluminium cutter to suit the lock being fitted. Secure this to the shaft by screwing it until it is tight.



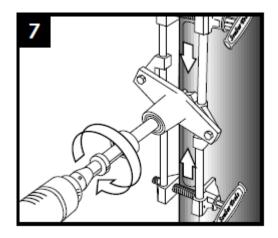
Put shaft into morticer housing and place on door. Position top and bottom clamps to allow cutter to travel between the top and bottom scribe marks. Tighten both clamps securely.



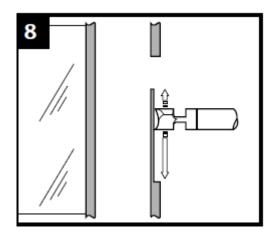
Put on safety goggles and gloves!



Attach pistol drill to cutter shaft and tighten drill chuck securely. Spray door and cutter with WD40, paraffin or similar cutting lubricant.

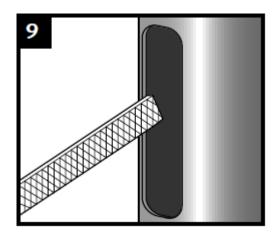


Start drill and lock trigger at 2000-3000 rpm. Move shaft housing up and down whilst cutting door surface. Do not try to dril at one position. Move the cutter up and down at a rate of 20 times per minute.

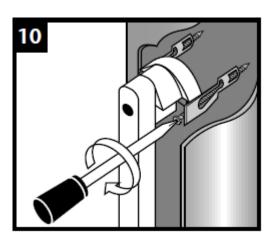


Eventually, the cutter will break through the aluminium. Continue to move the cutter up and down until the remaining section is 0.5 mm (0.020") or less. Only at that point should the cutter be allowed to travel inside the pierced door section.



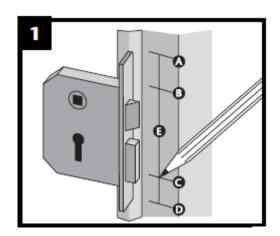


Finally, use a powerfile or handfile to finishoff the hole.

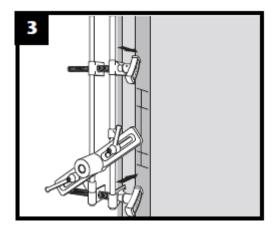


Fit lock using "Adams Rite style" bridges as illustration above.

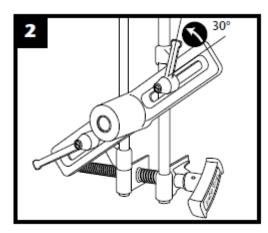
# **OFFSET MORTICING**



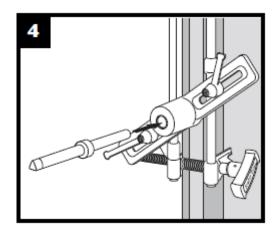
Mark-up door, including centre of faceplate.



Clamp morticer on the door.

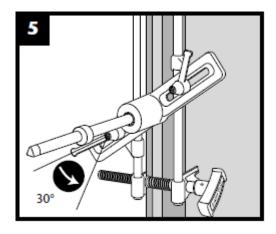


Loosen top quick release lever by 30°.

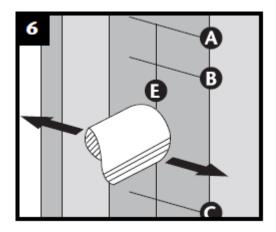


Insert shaft into housing.

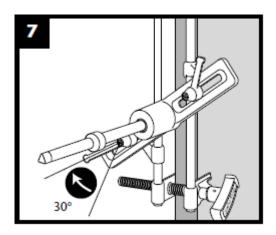




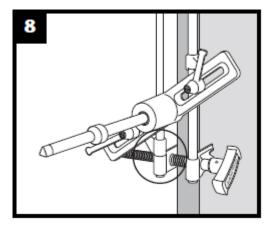
Loosen bottom quick release lever by 30°.



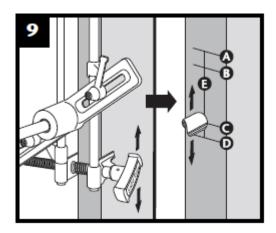
Align the housing and shaft left or right to the required position E.



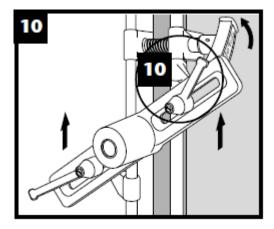
Lock the bottom quick release lever.



Rest the lower housing slider against the bottom clamp.

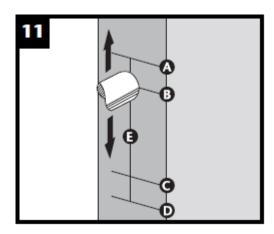


Release the bottom clamp screw and move it so that part of the shaft crosses C. Now lock the lower clamp.

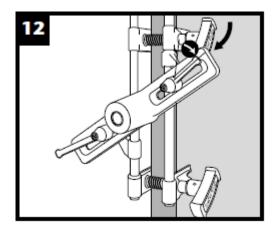


Move the housing up to the top clamp. Now loosen the top clamp.



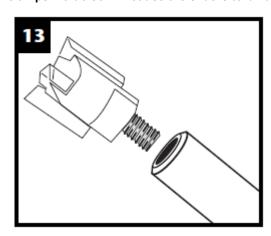


Move the housing and top clamps together to position B.

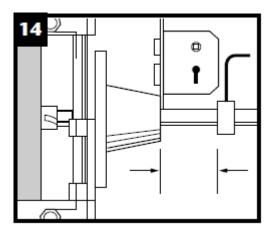


Lock both the top clamp and quick release lever.

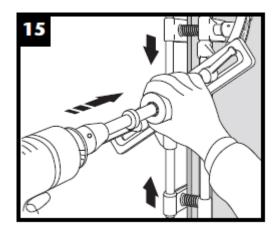
WARNING: Do not overtighten the top or bottom clamps. To do so will cause the sliders to bind.



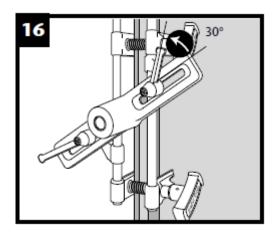
Choose cutter to suit correct size of lock body, then screw the cutter onto shaft until tight.



Set depth stop. Connect up power and drill.



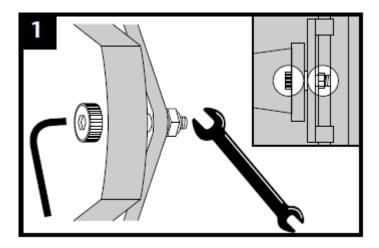
Cut mortice in usual up and down motion.



- 1. Remove cutter with spanner provided.
- 2. To cut forend/faceplate release the top quick release lever by 30° and follow steps 9–16.

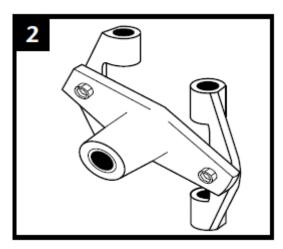


### MAINTENANCE, PROBLEM SOLVING, ETC.



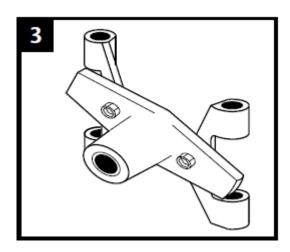
PROBLEM: Morticer housing is loose OR Cut made in door is not straight.

SOLUTION: Try tightening the the nuts fixing the sliders to the housing. Do not overtighten and make sure the housing does not bind when the clamps are being adjusted.



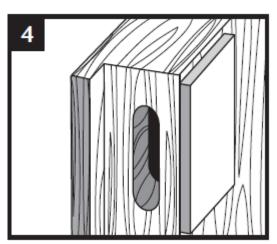
PROBLEM: Shaft is sloppy or loose in the housing bushes.

SOLUTION: Order and fit a new housing kit.



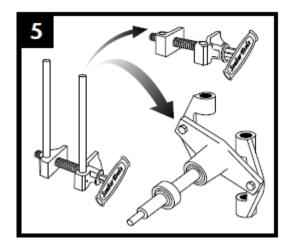
PROBLEM: Door is over 55 mm thick and the morticer won't open any more.

SOLUTION: Change standard housing kit for the special version.



PROBLEM: The lock has to be fitted off-centre to door.

SOLUTION: Fit a packing strip to one side of the door to off-set the morticer or, replace housing with Offset Housing Kit,



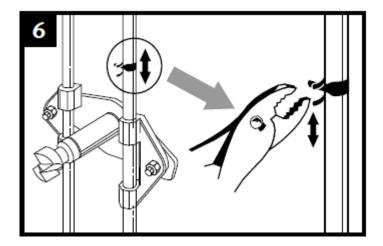
PROBLEM: The sliders are now binding on the upright shafts, making up and down movement difficult.

SOLUTION: This is probably caused by wood dust trapped in the sliders. Remove the top clamps, pull off



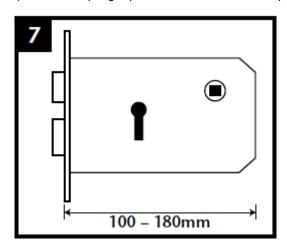
the sliders, clean the upright bars and remove any particles in the slider holes. Replace all components and check for operation.

Lubricate with WD40 or similar.



PROBLEM: There are many doors to do and we need to save time on set-ups.

SOLUTION: Cut all lock bodies first (cut the the forend/faceplate later). Adjust the spring clip at the top and use as a 'stop'. Keep the clip in position for the remaining locks, until all lock bodies are cut. After cutting the final lock body reposition the spring clip to suit the forend and faceplate.

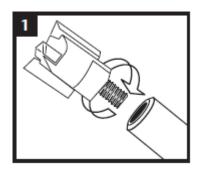


PROBLEM: The lock is over 100mm deep and the shaft is not long enough.

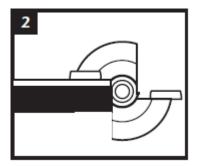
SOLUTION: Order a long shaft to suit locks up to 180 mm deep.



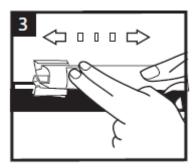
#### SHARPENING CARBIDE CUTTERS



Screw cutter onto shaft. Carbide tipped cutters can be sharpened using a diamond wetstone.

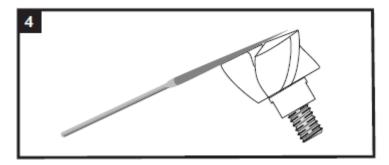


Always sharpen the flat side, never the profile. Use water only. Never oil.



Glide the bit with light pressure along the stone. To maintain balance repeat the same number of strokes on other edge. Usually only 5-30 strokes.

## SHARPENING HIGH SPEED STEEL CUTTERS



High Speed Steel Cutters can be sharpened using a very fine diamond file A triangular file or a small flat file would be ideal for most applications.

# 6. Accessories

Recommended accessories are listed on the IGM website.

**Caution!** Installing unapproved accessories may cause damage to the jig and serious injury. Use only accessories recommended for this jig by IGM.

