





Patent No.: GB2285410



#### Dear Customer

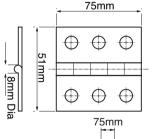
Thank you for purchasing this Trend product, we hope you enjoy many years of creative and productive use.

Please remember to return your guarantee card within 28 days of purchase.

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The hinge jig will cut apertures to suit the hinge shown.



### **TECHNICAL DATA**

Guide bush diameter 16mm Hinge length 75mm 21 5mm Hinge width Door height 1956mm (6'5") min max 2100mm (6'10") Door thickness min. 25mm 44mm max. 3.2ka Weight

The following symbols are used throughout this manual:



Denotes risk of personal injury, loss of life or damage to the tool in case of non-observance of the instructions in this manual.

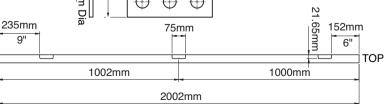


Refer to the instruction manual of your power tool.

This unit must not be put into service until it has been established that the power tool to be connected to this unit is in compliance with 98/37/EC (identified by the CE marking on the power tool).

## **INTENDED USE**

This jig allows 75mm hinge recesses to be routed in a door or frame with separate stops and no architraves fitted. It is to be used with a portable plunge router with suitable guide bush and router cutter fitted.





If you require further technical information or spare parts, please call our technical support department on 01923 224681.



The jig will only work on door linings with separate stops.



# SAFETY WARNING:



Observe the safety regulations in the instruction manual of the power tool to be used. Please read the following instructions carefully. Failure to do so could lead to serious injury. When using electric tools, basic safety precautions, including the following should always be followed to reduce the risk of fire, electric shock and personal injury. Also observe any applicable additional safety rules. Read the following safety instructions before attempting to operate this product.

#### PLEASE KEEP THESE INSTRUCTIONS IN A SAFE PLACE.

The attention of UK users is drawn to The Provision and Use of Work Equipment Regulations 1998, and any subsequent amendments.

Users should also read the HSE/HSC Safe Use of Woodworking Machinery Approved Code of Practice and Guidance Document and any amendments.

Users must be competent before using our products.

#### IMPORTANT NOTE:

Residual Risk. Although the safety instructions and operating manuals for our tools contain extensive instructions on safe working with power tools, every power tool involves a certain residual risk which cannot be completely excluded by safety mechanisms. Power tools must therefore always be operated with caution!

#### General

- 1. Disconnect power tool when making any adjustments. When not in use, before servicing and when changing accessories such as cutters. disconnect power tool and attachment from power supply. Ensure the machine is switched off before plugging tool in or connecting to a power supply.
- 2. Always mount the power tool, accessory or attachment in conformity with the present instructions. The tool should not be modified or used for any application other than that for which it was designed.
- 3. Keep children and visitors away. Do not let children or visitors touch the tool, accessory or attachment. Keep children and visitors away from work area. Make the workshop child proof with padlock and master switch.
- 4. Dress properly. Do not wear loose clothing or jewellry, they can be caught in moving parts. Rubber gloves and non-skid footwear is recommended when working outdoors. Wear protective hair

- covering to contain long hair.
- 5. Consider working environment. Do not use the product in the rain or in a damp environment. Keep work area well lit. Do not use power tools near gasoline or flammable liquids. Keep workshop at a comfortable temperature so your hands are not cold. Connect machines that are used 18. Don't abuse the cable. Never carry in the open via a residual current device (RCD) with an actuation current of 30 mA maximum. Use only extension cables that are approved for outdoor use.
- The accessory or attachment must be kept level and stable at all times.
- 7. Keep work area clean. Cluttered workshops and benches can cause injuries. Ensure there is sufficient room to work safely.
- 8. Use the attachment with the power tools and accessories specified in this manual only. Do not force the tool or attachment to do a job for which it is not designed.
- 9. Secure idle tools. When not in use. tools should be stored in a dry and high or locked up place, out of reach of children.
- 10. For best control and safety use both hands on the power tool and attachment. Keep both hands away from cutting area. Always wait for the spindle and cutter to stop rotating before making any adjustments.
- 11. Always keep guards in place and in good working order.
- 12. Remove any nails, staples and other metal parts from the workpiece.
- 13. Maintain tools and cutters with care. Keep cutters sharp and clean for better and safer performance. Do not use damaged cutters. Follow instructions for lubricating and changing accessories. Keep handles dry, clean and free from oil and grease.
- Maintain accessories. Do not use damaged accessories. Only use accessories recommended by the manufacturer.
- 15. Check damaged parts. Before operation inspect the attachment, the power tool, the cable, extension cable and the plug carefully for signs of damage. Check for alignment of moving parts, binding, breakage, mounting and any other conditions that may effect its operation. Have any damage repaired by an Authorised Service Agent before using the tool or accessory. Protect tools from impact and shock.
- 16. Do not use tool if switch does not turn

- it on or off. Have defective switches replaced by an Authorised Service Agent.
- 17. Don't over reach. Keep proper footing and balance at all times. Do not use awkward or uncomfortable hand positions.
- power tool or accessory by cord or pull it to disconnect from the socket. Keep cord from heat, oil and sharp edges. Always trail the power cord away from the work area.
- 19. Connect dust extraction equipment. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.
- 20. Check all fixing and fastening nuts, bolts and screws on power tool, attachment and cutting tools before use to ensure they are tight and secure. Periodically check when machining over long periods.
- 21. Stay alert. Watch what you are doing. Use common sense. Do not operate tools when you are tired, under the influence of drugs or alcohol.
- 22. Personal Protective Equipment (PPE). All PPE must meet current UK and EU legislation.
- 23. Do not leave tools running unattended. Do not leave tool until it comes to a complete stop.
- 24. Always clamp workpiece being machined securely.
- 25. Only use cutting tools for woodworking that meet EN847-1/2 safety standards, and any subsequent amendments.
- 26. Vibration levels. Hand held power tools produce different vibration levels. You should always refer to the specifications and relevant Health & Safety Guide.

#### **Routing Safety**

- 1. Disconnect router power tool. When not in use, before servicing and when changing accessories such as cutters, disconnect router and attachment from power supply.
- 2. Ensure router cutter has stopped rotating before changing it. Never use the spindle lock as a brake.
- 3. Remove adjusting keys and spanners. Form the habit of checking to see that keys and adjusting spanners are removed from the router tool, cutter and attachment before turning router on. Make sure cutter can rotate freely.
- Noise. Take appropriate measures for the protection of hearing if the sound pressure of 85dB(A) is



- exceeded. Routing sound pressure may exceed 85dB(A), so ear protection must be worn.
- Eye protection. Wear safety goggles, spectacles or visors to protect the eyes from ejected waster particles.
- Respiratory protection. Wear a face or dust mask, or powered respirator. Dust masks/filters should be changed regularly.
- Do not switch router on with the cutter touching the workpiece.
   Observe the correct assembly instructions in the router instructions.
- The direction of routing must always be opposite to the cutter's direction of rotation. Do not back-cut or climb-cut.
- At the end of the cut, release the router plunge and allow spindle to stop rotating before putting machine down.
- 10. Check before cutting that there are no obstructions in the path of the router. When cutting through the full thickness of the workpiece, ensure there are no obstacles beneath workpiece, and that a sacrificial work surface is used.

#### **Router Cutter Safety**

- 1. Cutting tools are sharp. Care should be taken when handling them.
- Always use cutters with a shank diameter corresponding to the size of the collet installed in your tool.
- 3. Always run router cutters at the spindle speed recommended and marked accordingly. Ensure cutter has reached correct speed before entering workpiece. Recommended speeds can be found on the packaging, in cutter instructions, in the Trend Routing Catalogue or on our website.
- 4. Always use router cutters in a router. Router cutters must not be used in a drill. Drill and boring bits must not be used in a router. Router cutters must only be used for the material cutting application for which they are designed. Do not use on metal or masonry.
- Never use cutters with a diameter exceeding the maximum diameter indicated in the technical data of the powertool or attachment used.
- Do not drop cutters or knock them against hard objects. Do not use cutters that are damaged.
- Cutters should be kept clean. Resin build up should be removed at regular intervals with Resin Cleaner®. The use of a dry lubricant (Trendicote® PTFE) will act as a preventative. Do not use PTFE spray on plastic parts.

- blade, block and groover etc.) on a spindle arbor, ensure that the cutting edges are staggered to each other to reduce the cutting impact.
- 9. Cutter shanks should be inserted into the collet to the line indicated on the shank. This ensures that at least ¾ of the shank length is held in the collet. Do not over-tighten the collet nut as this will score the shank and create a weakness and fracture point.
- 10. Observe the correct assembly instructions in the router instruction manual for fitting the collet and nut. Observe the router power tool manual instructions on fitting cutters correctly.
- 11. It is advisable to periodically check the collet and collet nut. A worn, distorted or damaged collet can cause vibration and damage the shank, and should be replaced. Worn collet nuts should be replaced.
- 12. Do not take deep cuts in one pass; take several shallow or light passes to reduce the side load applied to the cutter. Too deep a cut in one pass can stall the router.
- Very small diameter cutters must be handled and used with care.
- Always return cutter to its packaging after use.
- 15. Should you experience excessive vibration during use stop immediately. Have the eccentricity of the router, router cutter and clamping system checked by a qualified repair agent.
- 16. All fastening screws and nuts should be tightened using the appropriate spanner or key in accordance with the manufacturers instructions.

#### **Using Routers In A Fixed Position**

- Attention should be made to the HSE's Safe Use of Vertical Spindle Moulding Machines Information Sheet No.18 and any revisions.
- After work, release the router plunge to protect the cutter.
- Always use a push-stick or push-block when making any cut less than 300mm in length or when feeding the last 300mm of the cut.
- 4. The opening around the cutter should be reduced to a minimum using suitably sized insert rings in the table and closing the back fence cheeks or fitting a false fence on the back fence.
- Whenever possible use a work holding device or jig to secure component being machined.
- **6.** Ensure attachment is securely fitted to the workbench, with table surface at

- approximately hip height.
- Ensure a No-Volt Release Switch is fixed to or adjacent to the attachment, is easily accessible and that it is used correctly.
- 8. In router table (inverted) mode, stand to the front right of the table. The cutter will rotate anti-clockwise when viewed from top so the feed direction is from the right (against the rotation of the cutter).
- In overhead mode, stand to the front left of the machine table and the feed direction is from the left.
- 10. Do not reach underneath table or put your hands or fingers at any time in the cutting path while tool is connected to a power supply.
- Never thickness timber between the back of the cutter and the backfence.

#### **Useful Advice When Routing**

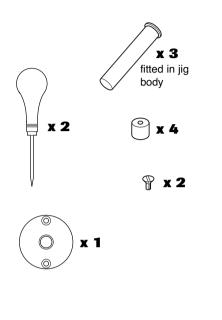
- Judge your feed rate by the sound of the motor. Feed the router at a constant feed rate. Too slow a feed rate will result in burning.
- Take many light passes rather than one deep cut to reduce the side load applied to both router and router cutter.
- Trial cuts should be made on waste material before starting any project.
- When using some attachments including a router table or dovetail jig, the use of a fine height adjuster is highly recommended.
- 5. When using a template guide bush, ensure there is sufficient clearance between cutter tip and inside edge of bush and that it cannot come into contact with collet and nut. Ensure cutter and guide bush are concentric.

#### **Router Cutter Maintenance**

- Composite cutting tools (brazed tip) must be maintained by a competent person i.e. a person of training and experience, who has knowledge of the design requirements and understands the levels of safety to be achieved.
- The design of composite tools must not be changed in the process of maintenance. When re-grinding the tool, care must be taken not to cause weakening of the body or the connection between the cutting edge and the body.
- Replacement parts must meet Trend specification.
- Tolerances which ensure correct clamping by the collet shall be maintained.

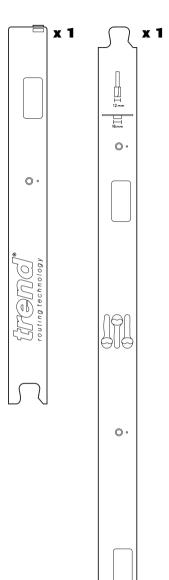


## **ITEMS ENCLOSED**









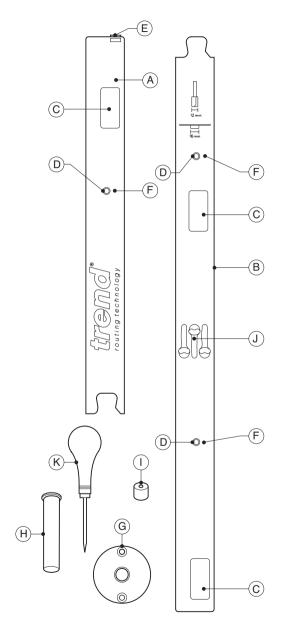
# **ASSEMBLY TOOLS REQUIRED**

- No. 2 Pozi® screwdriver
- Flat head screwdriver
- Hammer / mallet



# **DESCRIPTION OF PARTS**

- (A) Jig body short (top)
- B Jig body long (bottom)
- (C) Aperture
- (D) Pin location hole
- (E) Swivel end plate
- F Bradawl hole
- (G) Template guide bush 16mm with extra long spigot
- (H) Pin
- (I) Nylon spacer
- (J) Pin park
- (K) Bradawl
- (L) Guide bush screws





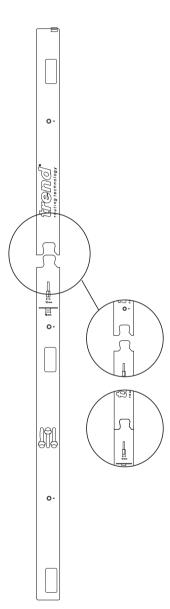
## **ASSEMBLY**

The H/JIG/75 is in two separate pieces. It is assembled by the use of a one way dovetail joint.

- Assemble the jig on a hard flat surface and press firmly to join. Do not dis-assemble by twisting or bending the jig.
- Place the larger piece onto a flat surface eg. table, and overhang the smaller part.
- Gently hand tap the smaller part near the dovetail joint - try to keep both parts straight so they do not bend at the join.



■ Put two nylon spacers onto each bradawl blade.

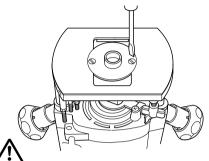




# Setting up the Router $\angle$



■ Fit the guide bush to the base of the router using the screws supplied with the router.



If there is any doubt about the concentricity of cutters relative to the guide bush, then a false sub-base as described below should be used in order to ensure an accurate fit of hinges. For all other makes of router, the sub-base to suit your router will need to be purchased.

- The UNIBASE Universal Sub-base has a central recess to allow fitting of the special guide bush Ref. GB160. The sub-base is supplied drilled to fit the most popular makes of routers. See the chart for the correct selection of sub-base.
- UNIBASE set contains a circular sub-base, mounting screws, a line up guide bush Ref. UNI/GB16 and centring pins.
- The 1/4" centring pin and the UNI/GB16 are used to align the sub-base with the router spindle, to ensure concentricity with the guide bush.

The special guide bush will fit directly onto the base of routers below. No sub-base is required:

Trend
AEG
Atlas Copco
Axminster
Black & Decker

T3, T5, T5MK2 OF450S, 500S, OFE710 OFS50, 720, OFSE850, 1000 AW635R

SR100, BD780(E), KW779, 780(E), 800(E), 850ET

Britech BT850EF-E Casals FT1000

Challenge 1020W, Extreme MR5757

Champion CPR850 Charnwood P200 Clark CR1

**Dewalt** DW613, 614, 615

 Draper
 R850V

 Einhell
 EOF850SP

 Elu
 MOF96(E), 69

 Ferm
 FBF-6E, 8E

 Holzher
 2335, 2336, 2356

JCB PR1217 Kango R8550S Kress FM6955

 Nutool
 NPT850, 102, HP6, MNPC900

 Perles
 OF808(E), OF2-808E, OF9(E)

 Power Base
 1020W

 Power Devil
 PDW5026, 5027, 5037PRA

 Silverline
 762170

 Stayer
 PR50

 Virutex
 FR77C, 78C

 Wickes
 900W

The UNIBASE is required for the following light duty routers.

**Bosch** POF400A, 52, 500A, 600ACE

1100AE, 1300ACE GOF900A, 900ACE,

Casals FT750, 1000(E)

DeWalt DW620, 621

Elu OF97(E)

**Festo** OF900(E), 1000(E), 1010EB

 Freud
 FT1000(E)

 Hitachi
 FM8, ZK2008, M8(V)

Hitachi FM8, ZK2008, M8(V)
Mafell L050E

Makita 3620, RP0910, 1110C Metabo OF528, 1025, OFE1229 Milwaukee OFS800, OFSE1000

 Milwaukee
 OFS800, OFSE1000

 Peugeot
 DEF570E, DF55E

 Ryobi
 R150, 151, RE155K, 120

Skil 1835U Sparky X52E

The GB/5/S\* sub-base is required for the following routers.

 Black & Decker
 BD60, DN67

 Kinzo
 25C44

 Lynx
 RT-800-A

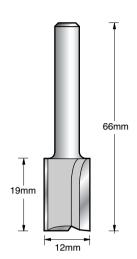
\* Please state make and model of router when ordering.



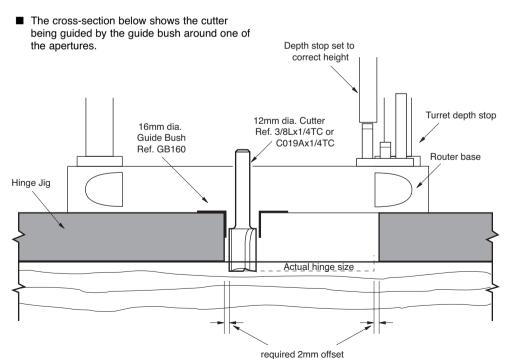
# Fitting the Router Cutter



- The recommended router cutters for use with the jig are Refs. 3/8LX1/4TC or C019AX1/4TC.
- The cutters must have a 12.0mm diameter and a minimum overall length of 70mm.
- Unplug router from mains, insert 25mm of shank of cutter into collet and gently tighten collet nut.



## **Template Guide Bush Principle**





# **OPERATION**





## **Setting the Depth of the Recess**

The depth of the recess must be the same thickness as the hinge or slightly deeper. Most routers are fitted with a depth stop to limit the depth of plunge of the router. Refer to your router's instruction manual for particular details on using the depth stop. The depth of the recess for the hinge is set as follows:

- Release depth stop on the router.
- Place jig onto the edge of the door.
- Place router onto jig and locate guide bush into one of the apertures of the jig.
- Plunge cutter through aperture until it touches the edge of the door.
- Lock the router's carriage in this position.
- Move depth gauge up by the thickness of the hinge by:
  - Either using the depth gauge measurement/dial
    or
  - 2. Placing a leaf of the hinge between the depth gauge and the stop.
- Lock off depth stop and remove hinge.
- Check the depth of the cutter is correct by first fully plunging the router and locking the plunge mechanism. Invert the router and place the jig over the guide bush, now check that the cutter protrudes past the template the same distance as the thickness of the hinge.

Double check all settings, ensure all screws are tight. Setting up is complete.





# Routing Hinge Recesses in the Door



- The door should be laid on its edge with the hanging edge of the door facing upwards. Use the conventional block and wedge to keep the door securely in this position.

  Alternatively clamp the bottom of the door into the jaws of a Black & Decker®

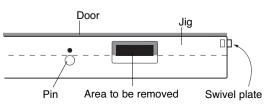
  Workmate®
- Insert the three location pins into the holes. Ensure the heads of the pins are sub-flush.
- Place the jig onto the edge of the door. Ensure that the jig is placed the correct way round so that the pins are on the knuckle edge of the door. The swivel end plate should be at the top of the door.
- Rotate the swivel end plate through 90° and slide the jig down the door until the swivel end plate touches the top of the door.
- Push the jig up to the door so that the pins touch the opening face of the door.
- Without letting the jig move, locate the bradawls with two nylon bushes fitted into the bradawl holes.
- Hammer the bradawls carefully into the edge of the door until the nylon spacers fitted to the bradawls touch the face of the jig.







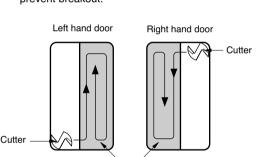
# The swivel end plate fixing screw may need to be loosened slightly.







- Now plug in the router and place the router with cutter and guide bush fitted into the first aperture of the jig.
- Switch router on and wait for the motor to reach full running speed. Electronic speed controlled routers should be set to the maximum speed.
- Position the guide bush in the corner of the aperture and plunge cutter until correct depth is reached. Lock the carriage of the router in this position. Rout around the aperture in a clockwise direction, then remove the waste from the centre of the aperture. See drawings opposite for direction of cut to prevent breakout.



Door



- Release the carriage of the router and repeat the procedure for the remaining apertures.
- Switch off router and remove jig from door by pulling out bradawls with a twisting action.
- Square off rounded corners of hinge recess with a corner chisel Ref. C/CHISEL and hammer





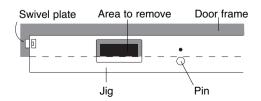
# Routing Hinge Recesses in the Frame



- No adjustments are necessary to the router.
- Swivel the end plate through 90° so that it is aligned with the jig. The end plate now acts as a shim.
- Remove the pins from the locating holes and insert them back in from the other side of the jig so the opposite face of the jig is used as the frame. Ensure pin heads are sub-flush.
- Using the opposite side of the jig, butt the top of the jig into the head of the frame and up against the hanging jamb until the pins touch the opening edge of the frame.
- Without letting the jig move, locate the bradawls into the bradawl holes.
- Hammer the bradawls carefully into the door frame until the nylon spacer fitted to the bradawl touches the face of the jig.
- Now plug in the router and place the router with cutter and guide bush fitted, into the first aperture of the jig.
- Switch router on and wait for the motor to reach full running speed. Electronic speed controlled routers should be set to the maximum speed.

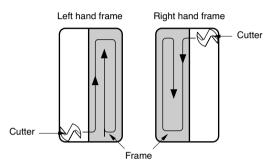








■ Position the guide bush in any corner of aperture and plunge cutter into frame until depth, set by depth stop, is reached. Lock the carriage of the router in this position. Immediately start routing around the aperture in a clockwise direction. Then remove the waste from the centre of the aperture.





- Release the carriage of the router and repeat the procedure for the remaining apertures.
- Switch off router and remove jig from frame by pulling out bradawls with a twisting action.
- Square off rounded corners of hinge recess with a corner chisel Ref. C/CHISEL and hammer.





# **Fitting the Door**



- Fit hinges to door and raise upright.
- Use a jack to raise door until hinges align with recess.
- Screw leafs to frame.

Providing procedure is carried out correctly and that the frame/lining is plumb and parallel, then no adjustment should be necessary due to the identical mirror image positioning of the recesses in both the door and the frame.

#### Other Points

If a larger gap is required to accommodate a draft excluder, a packing piece can be temporarily glued or stuck to the swivel end plate in order to utilise the jig in the same technique and achieve accurate results.

## **Finishing the Frames**

The holes left by the bradawls are on both closing edges of the door and frame and are very unobtrusive. These can be easily filled with a matching coloured filler.

Release the plunge action on the router after each hinge, to prevent cutting into the edge of the iig and causing damage. If you damage the jig, an epoxy resin (e.g. Araldite® **Epoxide Resin) can be used to fill the** gap and if rubbed smooth will provide a continuous edge on which the guide bush can follow.



### MAINTENANCE

The jig has been designed to operate over a long period of time with a minimum of maintenance. Continual satisfactory operation depends upon proper tool care and regular cleaning.

#### Cleaning

Regularly clean the jig with a soft cloth.

#### Lubrication

Your iig requires no additional lubrication.

## **ENVIRONMENTAL PROTECTION** Recycle raw materials instead of disposing as



waste. Packaging should be sorted for environmental-

friendly recycling. The product and its accessories at the end of their

life should be sorted for environmental friendly recycling.

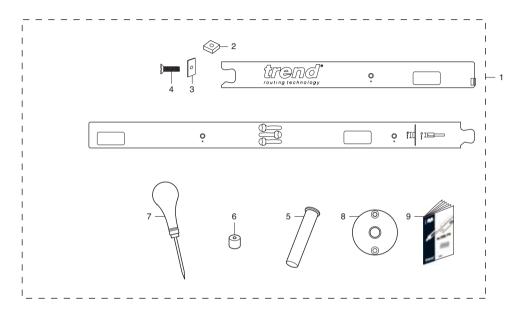
#### **GUARANTEE**

The iid carries a manufacturers quarantee in accordance with the conditions on the enclosed quarantee card.



# H/JIG/75 - SPARE PARTS DIAGRAM

V2.0 09/2005



H/JIG/7	H/JIG/75 - SPARE PARTS LIST V2.0 09/200		
No.	Qty.	Desc.	Ref.
1	1	Hinge Jig Plastic 75mm Two Part	H/JIG/75
2	1	Nut Square M5	WP-NUT/07
3	1	Swivel Plate	WP-HJ/75/03
4	1	Machine Screw Csk M5 x 16mm Pozi®	WP-SCW/11
5	4	Pin 10mm Plastic (pack of 4)	KWJ/PIN/4
6	4	Nylon Spacer	WP-HJ/08
7	2	Bradawl	WP-HJ/09
8	1	Guide Bush 16mm Dia x 10mm Spigot	GB160
9	2	Machine Screw Csk M5 x 10mm Slot	WP-SCW/13
10	1	Manual	MANU/HJ/75

## H/JIG/75



# **QUICK START INSTRUCTIONS**

These instructions are provided for those who are confident with the router and are already familiar with the H/JIG/75

## **Setting Up**

- 1. Fit router cutter & guide bush to router.
- 2. Position door with hanging edge uppermost.
- 3. Fit pins.
- 4. Place hinge jig on hanging edge of door.
- 5. Rotate the end plate at 90° to jig.
- **6.** Ensure end plate touches end of door.
- 7. Ensure pins touch opening face of door.
- Secure jig to door using the two bradawls. Ensure two nylon spacers are fitted onto each bradawl.
- **9.** Switch router on & locate guide bush into aperture.
- 10. Plunge down router and rout clockwise.
- **11.** Repeat routing operation for each hinge recess.
- **12.** Chisel corners square by hand to receive hinges.

### **Routing the Frame**

- 1. Rotate the end plate until flush with jig.
- 2. Remove pins and fit onto other side.
- **3.** Butt the end plate into the head of frame.
- 4. Ensure pins touch edge of frame.
- **5.** Secure jig to door frame using the two bradawls.
- **6.** Locate guide bush into aperture and switch router on.
- 7. Plunge down router and rout clockwise.
- **8.** Repeat routing operation for each hinge recess.
- **9.** Chisel corners square by hand to receive hinges.

5 027654 537718



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