

# **HR/JIG**



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Please read these instructions before use.



### 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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# **TECHNICAL DATA**

Jig thickness	12mm
Cutter size	R6.35mm or R6mm cove (radius)
Guide bush size	30mm
Slot lengths	100mm, 200mm, 300mm, 400mm
Slot pitch	50mm
Weight	3.5kg

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 2006/42/EC (identified by the CE marking on the power tool).

# **INTENDED USE**

This jig is intended to be used with a plunge router fitted with suitable cutter and guide bush to rout grooves in solid timber or solid surface worktops for stainless steel hot rods.



If you require further safety advice, technical information or spare parts, please call Trend Technical Support or visit www.trend-uk.com



### 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 with woodworking equipment 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

- Disconnect power tool and attachment from power supply when not in use, before servicing, when making adjustments and when changing accessories such as cutters. Ensure switch is in "off" position. Always ensure cutter has stopped rotating.
- Always mount the power tool, accessory or attachment in conformity with the instructions. Only use attachment and accessories specified in the power tool manual. The tool or attachment should not be modified or used for any application other than that for which it was designed. Do not force tool.
- 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.
- Dress properly. Do not wear loose clothing or jewellery, 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 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.
- 6. The accessory or attachment must be kept level and stable at all times.
- Keep work area clean. Cluttered workshops and benches can cause injuries. Ensure there is sufficient room to work safely.
- 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.
- 9. 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.
- **10.** Always keep guards in place and in good working order.
- Remove any nails, staples and other metal parts from the workpiece.
- 12. 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.
- 14. 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.
- Do not use tool if switch does not turn it on or off. Have defective switches replaced by an Authorised Service Agent
- Don't over reach. Keep proper footing and balance at all times. Do not use awkward or uncomfortable hand positions.
- 17. Don't abuse the cable. Never carry

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.

- Connect dust extraction equipment. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.
- 19. 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.
- 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.
- 21. Personal Protective Equipment (PPE) for eye, ear and respiratory protection must be worn. All PPE must meet current UK and EU legislation.
- **22.** Do not leave tools running unattended. Do not leave tool until it comes to a complete stop.
- 23. Always clamp workpiece being machined securely.
- Only use cutting tools for woodworking that meet EN847-1/2 safety standards, and any subsequent amendments.
- 25. Vibration levels. Hand held power tools produce different vibration levels. You should always refer to the specifications and relevant Health & Safety Guide.

#### **Routing Safety**

- Read and understand instructions supplied with power tool, attachment and cutter.
- 2. Keep hands, hair and clothing clear of the cutter.
- Remove adjusting keys and spanners. Check 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. Always wear eye protection in the form of safety goggles, spectacles or visors to protect the eyes.
- 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 7. cutter touching the workpiece. At the end of the cut, release the router plunge and allow spindle to stop rotating. Never use the spindle lock as a brake
- The direction of routing must always 8 be opposite to the cutter's direction of rotation. Do not back-cut or climbcut
- Check before cutting that there a are no obstructions in the path of the router. Ensure there are no obstacles beneath workpiece when cutting full thickness, and that a sacrificial work surface is used.

### **Router Cutter Safety**

- 1 Cutting tools are sharp. Care should be taken when handling them. Do not drop cutters or knock them against hard objects. Handle very small diameter cutters with extra care. Always return cutter to its packaging after use.
- 2 Always use cutters with a shank diameter corresponding to the size of the collet installed in your tool.
- The maximum speed (n.max) marked 3 on the tool, or in instructions or on packaging shall not be exceeded. Where stated the speed range shall be adhered to. Recommended speeds are shown in the Trend Routing Catalogue and/or website.
- Always use router cutters in a router. Drill and boring bits must not be used in a router. Router cutters must only be used for the material designed. Do not use on metal or masonry.
- Never use cutters with a diameter 5 exceeding the maximum diameter indicated in the technical data of the powertool or attachment used.
- 6. Before each use check that the cutting tool is sharp and free from damage. Do not use the cutting tool if it is dull, broken or cracked or if in any other damage is noticeable or suspected.
- 7. Cutters should be kept clean. Resin build up should be removed at regular intervals with Resin Cleaner. The use of a PTFE dry lubricant will reduce resin build up. Do not use PTFE spray on plastic parts.
- When using stacked tooling (multi-8 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 all the way to the line indicated on the shank. This ensures that at least 3/4 of the shank length is held in the collet. Ensure clamping

surfaces are cleaned to remove dirt. grease, oil and water.

- 10. Observe the correct assembly and fitting instructions in the router instruction manual for fitting the collet. nut and cutter.
- 11 Tool and tool bodies shall be clamped in such a way that they will not become loose during operation. Care shall be taken when mounting cutting tools to ensure that the clamping is by the shank of the cutting tool and that the cutting edges are not in contact with each other or with the clamping elements.
- 12. It is advisable to periodically check the collet and collet nut. A damaged, worn or distorted collet and nut can cause vibration and shank damage. Do not over-tighten the collet nut
- 13. Do not take deep cuts in one pass; take several shallow or light passes to reduce the side load applied to the cutter and router. Too deep a cut in one pass can stall the router.
- In case of excessive vibrations whilst 2. 14. using the router stop immediately and have the eccentricity of the router, router cutter and clamping system checked by competent personnel
- 15. All fastening screws and nuts should be tightened using the appropriate spanner or key and to the torque value provided by the manufacturer.
- 16. Extension of the spanner or tightening using hammer blows shall not be permitted.
- cutting application for which they are 17. Clamping screws shall be tightened according to instructions provided by the manufacture. Where instructions are not provided, clamping screws shall be tightened in sequence from the centre outwards.

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

- Attention should be made to the 1. HSE's Safe Use of Vertical Spindle Moulding Machines Information Sheet No.18 and any revisions.
- 2. After work, release the router plunge to protect the cutter.
- 3. Always use a push-stick or pushblock when making any cut less than 300mm in length or when feeding the 4. last 300mm of the cut.
- The opening around the cutter 4. 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.
- 5. Whenever possible use a work holding device or jig to secure component being machined. Ensure any attachment is securely fitted to the workbench, with table surface at

approximately hip height.

- 6. Use a No-Volt Release Switch. Ensure it is fixed securely, easily accessible and used correctly.
- In router table (inverted) mode, stand 7. 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.
- 8. 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 9. back of the cutter and the backfence.

### **Useful Advice When Routing**

- Judge your feed rate by the sound 1 of the motor. Feed the router at a constant feed rate. Too slow a feed rate will result in burning.
- Trial cuts should be made on waste material before starting any project.
- 3. When using some attachments e.g. a router table or dovetail jig, a fine height adjuster is recommended.
- When using a template guide bush, 4. 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.

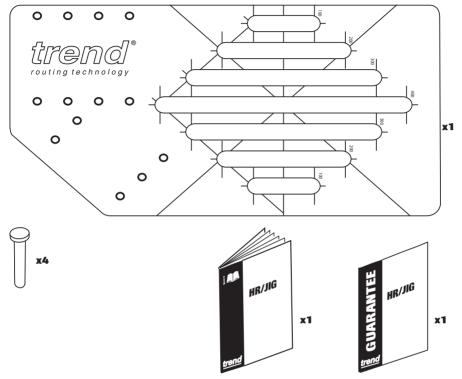
#### **Router Cutter Repair/Maintenance**

- Repair of tools is only allowed in 1. accordance with the manufacturers instructions
- 2. The design of composite (tipped) tools shall not be changed in process of repair. Composite tools shall be repaired 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.
- Repair shall therefore include, e.g. 3. the use of spare parts which are in accordance with the specification of the original parts provided by the manufacturer.
  - Tolerances which ensure correct clamping shall be maintained.
- Care shall be taken that regrinding 5. of the cutting edge will not cause weakening of the body and the connection of the cutting edge to the body

Version 7.2 06/2013



# **ITEMS ENCLOSED**



## **ITEMS REQUIRED**

- 1/2" plunge router with suitable size collet fitted.
- R6.35mm (12.7mmØ) or R6mm (12mmØ) cove (radius) cutter depending on hot rod diameter\*.
- 30mm guide bush.
- Trestles x 2.
- Clamps x 3.

\*Other hot rod diameters are available on the market, please choose a suitable cove cutter to suit.

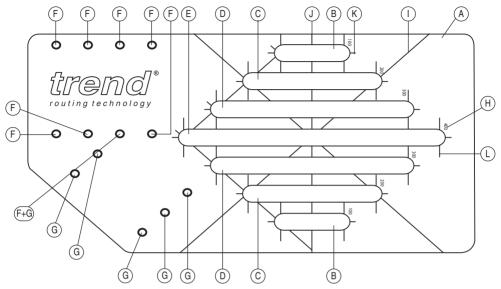
### Ref. UNIBASE

For certain makes of router a sub-base will be required to allow the guide bush to be fitted.



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## **DESCRIPTION OF PARTS**



- (A) Jig body
- (B) 100mm hot rod slot
- C 200mm hot rod slot
- (D) 300mm hot rod slot
- (E) 400mm hot rod slot
- (F) Pin holes for 90° to worktop edge
- $\bigcirc$  Pin holes for 45° to worktop edge
- (H) Slot size engravings
- (I) Engraved lines at 45°
- (J) Engraved lines for middle of slot
- (K) Engraved lines for centre of slot
- (L) Engraved lines for actual hot rod length
- (M) Pin



### ACCESSORIES

Please use only Trend original accessories.

### **Recommended Cove Cutter R6.35mm**

for 12.7mmØ Rods Ref. C054AX1/2TC

# Recommended Cove Cutter R6mm for 12mmØ Rods

Ref. C053CX1/2TC

Please see Trend catalogue for other sizes of cove cutter to suit other rod diameters on the market.



### C053CX1/2TC



### Sub-base Set

Ref. UNIBASE

To obtain a perfect accurate close fitting joint, a 30mm guide bush must be used. The guide bush must always be fitted concentric with the cutter. This can be achieved using a Universal Sub-base and 30mm outside diameter guide bush ref. GB30.

The Universal Sub-base has a central recess to allow fitting of the guide bush to most makes of routers and is available ready to fit the most popular makes.

The Sub-base contains screws, a line up bush and two line up pins. The line up pins and bush ensure exact alignment of Sub-base with router spindle, when fitted with the relevant collet.

### General Instructions for Fitting Sub-bases to Router

- 1. Fit line up guide bush onto sub-base, with screws supplied.
- Fit 12.7mm (<sup>1</sup>/<sub>2</sub>") shank line up pin into collet of router. Plunge router until pin projects through base and lock plunge.
- 3. Locate guide bush and sub-base assembly over protruding pin.
- 4. Line up fixing holes and fit screws. Now tighten up screws.
- 5. Remove line up bush and line up pin. Alignment should now be correct. Fit 30mm guide bush and cutter.
- 6. Periodically check the sub-base is concentric to the spindle of the router.



### Fits following router models

Atlas Copco OFSE2000 Bosch GOF 1300ACE, 1600A, 1700ACE Casals FT2000VCE DeWalt DW625EK, 629 Draper R1900V Elu MOF 31, 77, 98, 131, 177(E) Felisatti TP246(E), R346EC Festo OF2000E Freud FT2000E Hitachi MI12V, M12SA, TR12 Makita 3612BR, 3612(C) Metabo OF1612, OFE1812 Performance Pro CLM1250R >11/2003, CLM2050R Ryobi RE600N, R600N, RE601, R500, R502 Skil 1875U1 T-TECH TT/R127 Wadkin WW



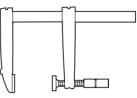
### **30mm Guide Bush**

Ref. GB30/A



### Clamps

Ref. FC/200 Three heavy duty quick action or gripper clamps are required to secure the jig to the worktop.



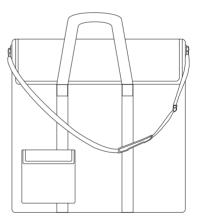
# $\triangle$

Whenever fast action clamps are used, ensure they do not foul the router path and that they are securely tightened.

### **Carry Case**

Ref. CASE/DG Large carry case to hold and transport the Hot Rod Jig.

Case has hard carry strap, removable shoulder strap and accessory pouch.



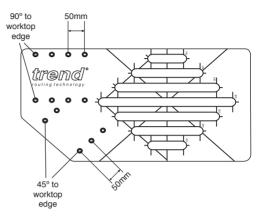


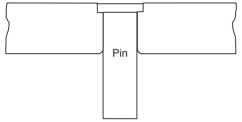
# **ASSEMBLY**

### **Fitting Location Pins**

The jig has sets of pin holes to allow the jig to be accurately positioned at 90° or 45° to the worktop edge. The pin holes are at 50mm centres.

Location pins are tapered to ensure a good tight fit in hole. Insert the smallest end of the pin into the hole by lightly pushing. Ensure pins are fully home before use and head is below surface. When using jig ensure location pins do not foul workbench





### **Marking Out for Hot Rods**

The jig has a series of engraved lines on one side that allow the jig to sighted to lines drawn on the worktop.

The jig slots allow for certain hot rod lengths to be routed

For complicated hot rod slots the jig will need to be repositioned and the routed slot length limited by using a user made stop or to a pencil line. Careful marking out will be required.



Ensure jig is lined up at an equal distance from worktop edge.



### At 45° to Worktop Edge







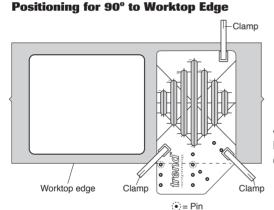
### **Positioning Jig on Worktop**

- After choosing which design is required, locate the pins in the necessary holes.
- Using two of the pins provided in the relevant pin holes locate the jig against the front of the worktop.
- For repeat slot designs, or custom designs use the engraved sight lines on the jig to set the jig to the marked lines drawn on the worktop. Ensure spacing between each slot is equal.
- Secure the jig with clamps, ensure clamps do not foul router path.

# vant if the comfortable. Keep proper footing at all times. is

Ensure working position is

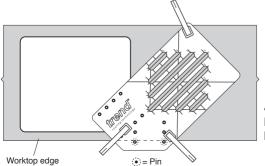
Ensure worktop is held securely to trestles. Ensure jig is clamped securely to worktop and placed at a suitable and comfortable work height.



**A** 

Ensure jig is lined up at an equal distance from worktop edge.

### Positioning for 45° to Worktop Edge



Make trial cuts on waste material before using jig on actual worktop.



# Setting the Depth of Cut

- The preferred method of recessing slots for hot rods is to cut one third to half the diameter in depth of the hot rods. For example for 12mm diameter rods the cut depth is 4-6mm deep.
- Ensure router has correct size of guide bush and cutter fitted.
- Plunge router down until the cutter is just touching the worktop.
- Now set the depth of cut required depending on the diameter of the hot rod.
- Release router plunge.
- Make a trial cut on waste material first to check recess depth and length of slots suits the hot rods.



### Check slot depth and length in a waste piece of material before starting main cut.

# Routing the Grooves



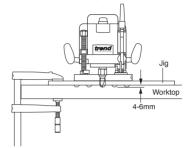
- Position the router in left hand side of first slot.
- Switch on router and plunge down to depth setting. Rout groove using a steady and even feed speed. Ensure guide bush follows the left side of the slot, do not rout back down the slot.
- At the end of the cut release the plunge and switch off the router. Reposition the router at the beginning of the next slot.
- Repeat this operation for each slot in the jig as required.
- When routing is complete remove any rough edges with a fine grade adhesive paper.



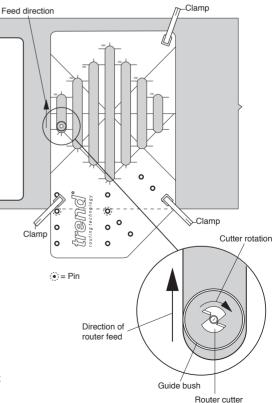
# Rout only in one direction, do not rout back in the opposite direction.



Before cutting an actual worktop, make trial cuts on a waste piece of worktop to check groove depth and spacing is correct and to allow familiarisation of jig.



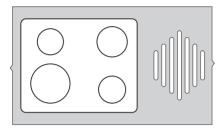
### **Feed Direction**





### **Fitting Hot Rods**

- Place the hot rods into the recesses. Check with hot rod manufacturers instructions for fitting guidance, and suitable adhesive.
- Finish and seal worktop with an appropriate sealer. Always follow the manufacturers instructions



After use, store jig carefully.

# MAINTENANCE

Please use only Trend original spare parts and accessories.

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

### Cleaning

Regularly clean the jig with a soft cloth.

### Lubrication

■ Your jig requires no additional lubrication.

### Storage

- After use store jig in its packaging or it can be hung on a wall hook.
- An accessory case is also available Ref. CASE/DG.

# ENVIRONMENTAL PROTECTION

# Recycle raw materials instead of disposing as waste.

Packaging should be sorted for environmentalfriendly recycling.

The product and its accessories at the end of their life should be sorted for environmental friendly recycling.

# **GUARANTEE**

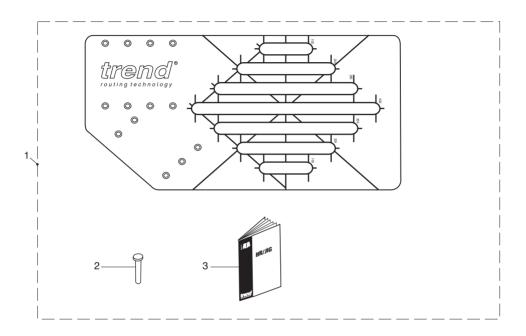
The jig carries a manufacturers guarantee in accordance with the conditions on the enclosed guarantee card.



### HR/JIG - SPARE PARTS DIAGRAM

v1.0 03/2014

Please use only Trend original spare parts.



HR/JIG - SPARE PARTS LIST		v1.0 03/2014	
No.	Qty.	Desc.	Ref.
1	1	Hot Rod Jig	HR/JIG
2	1	Pins 10mmØ (Pack of 4)	KWJ/PIN/4
3	1	Manual	MANU/HR



# **TROUBLE SHOOTING**

Fault	Cause	Remedy
Groove is too wide or too narrow for the rods.	Cutter or guide bush is the incorrect diameter or cutter is not running true.	Check concentricity of cutter and guide bush. Cutter should be a radius cove cutter of suitable diameter to suit hot rods. A 30mm guide bush is required.
Groove depth varies between slots.	Jig has lifted when routing.	Reposition clamps so jig does not lift when routing. Ensure router does not foul clamps.
	Cutter has slipped in the collet when routing.	Check cutter is being held in the collet, replace collet if necessary.
<ul> <li>Grooves are too shallow for rods.</li> </ul>	Cut depth not deep enough.	Reset cut depth depending on diameter of rods. For example for 12mm rods, between 4-6mm depth.
<ul> <li>Grooves are too deep for rods.</li> </ul>	Cut depth too deep.	Replace worktop and reset cut depth depending on diameter of rods. For example for 12mm rods, between 4-6mm depth.
Groove in worktop is burnt.	Cutter is blunt.	Always use sharp cutters.
<ul> <li>Jig is slipping on material.</li> </ul>	Clamps are not secure.	Check clamps for wear. Clamp securely.



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