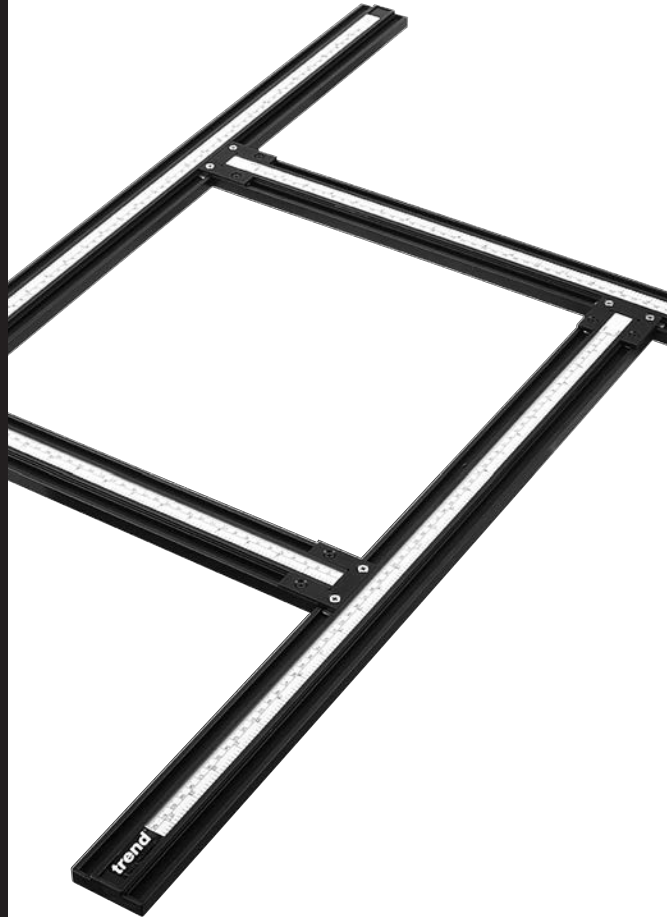




VARIJIG



trend[®]
routing technology



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

Extrusion thickness	15.8mm (5/8")
Extrusion width	54.0mm (2 1/8")
Working area size (max.)	600mm x 600mm (23 5/8" x 23 5/8")

Guide bush spigot length (min.)	8mm (5/16")
Weight	2.1kg (4.6lbs)

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.



Denotes risk of electric shock.

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

The jig allows a variety of squares and rectangles to be routed with a portable plunge router with guide bush and suitable router cutter fitted.



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

1. 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.
2. 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.
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 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.
7. Keep work area clean. Cluttered workshops and benches can cause injuries. Ensure there is sufficient room to work safely.
8. 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.
11. 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.
13. 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.
15. Do not use tool if switch does not turn it on or off. Have defective switches replaced by an Authorised Service Agent
16. 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.
18. 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.
20. 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.
24. 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

1. Read and understand instructions supplied with power tool, attachment and cutter.
2. Keep hands, hair and clothing clear of the cutter.
3. 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.
4. 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.
5. Eye protection. Always wear eye protection in the form of safety goggles, spectacles or visors to protect the eyes.

6. Respiratory protection. Wear a face or dust mask, or powered respirator. Dust masks/filters should be changed regularly.
7. Do not switch router on with the 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
8. The direction of routing must always be opposite to the cutter's direction of rotation. Do not back-cut or climb-cut.
9. Check before cutting that there 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.
3. The maximum speed (n.max) marked 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.
4. 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 cutting application for which they are designed. Do not use on metal or masonry.
5. Never use cutters with a diameter 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.
8. When using stacked tooling (multi-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 $\frac{3}{4}$ 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.
15. In case of excessive vibrations whilst 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.
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

1. Attention should be made to the 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 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.
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.
7. 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.
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.
9. Never thickness timber between the back of the cutter and the backfence.

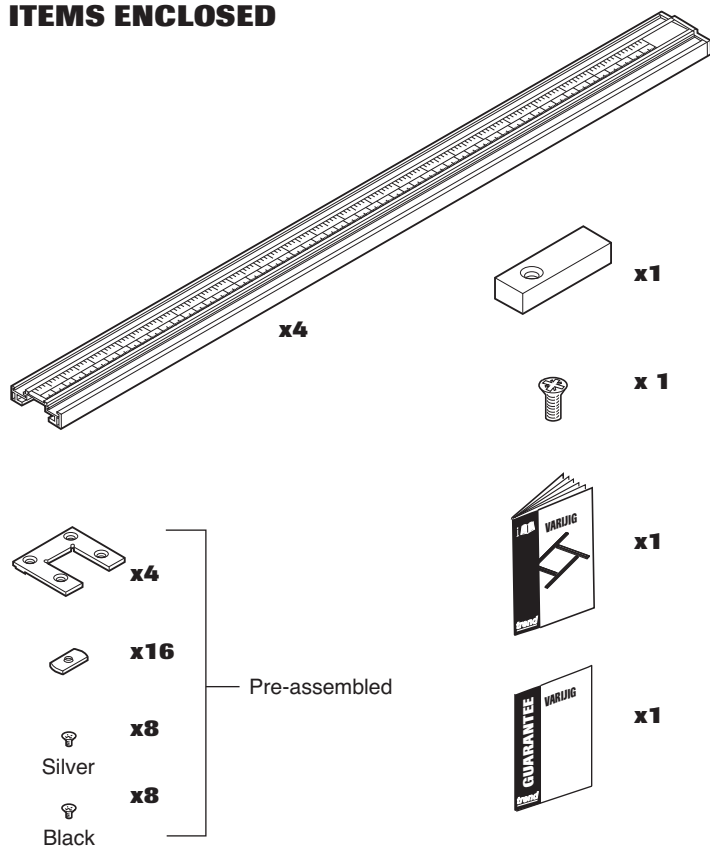
Useful Advice When Routing

1. 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.
2. 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.
4. 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 Repair/Maintenance

1. Repair of tools is only allowed in accordance with the manufacturers instructions.
3. 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.
4. Repair shall therefore include, e.g. the use of spare parts which are in accordance with the specification of the original parts provided by the manufacturer.
5. Tolerances which ensure correct clamping shall be maintained.
6. Care shall be taken that regrinding of the cutting edge will not cause weakening of the body and the connection of the cutting edge to the body.

ITEMS ENCLOSED

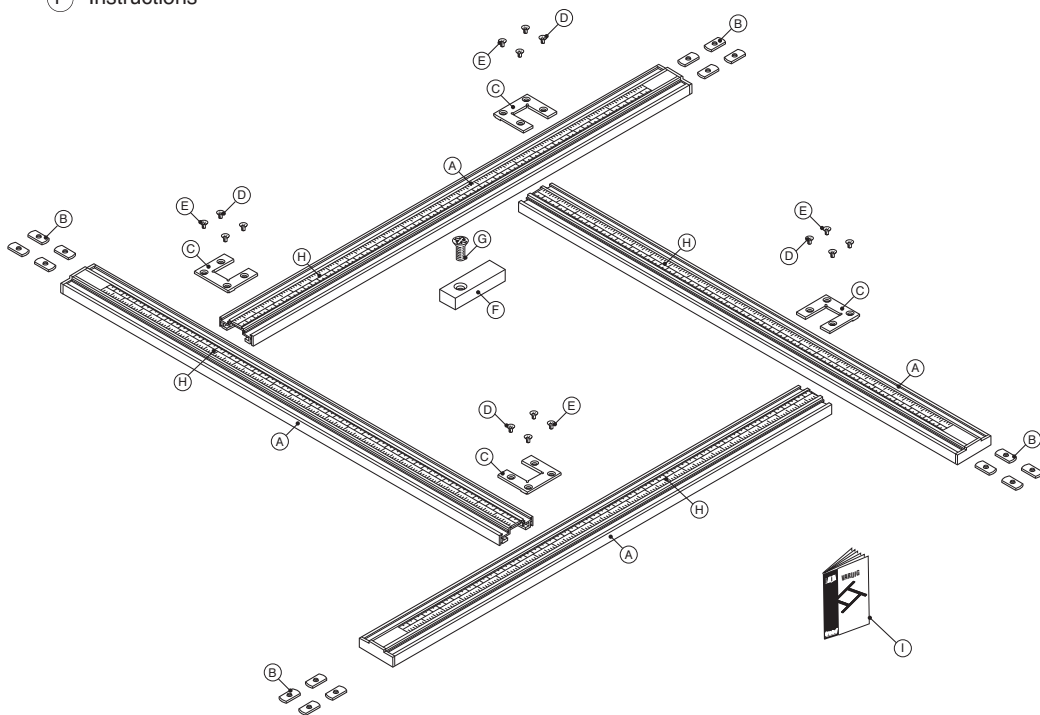


ITEMS REQUIRED

- Plunge router with suitable guide bush fitted (minimum spigot projection 8mm, e.g. Ref. GB30/A).
- Suitable router cutter.
- No. 2 Phillips[®] screwdriver.
- Square or long rule/tape measure.
- Hand tools.
- Clamps x 2 (or Varijig accessory clamps).

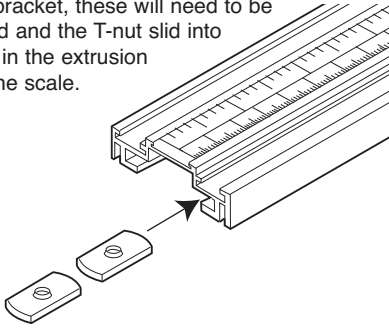
DESCRIPTION OF PARTS

- (A) Alloy extrusion
- (B) T-nut
- (C) Corner bracket
- (D) Machine screw M5 (black-fixed)
- (E) Machine screw M5 (silver-adjustable)
- (F) Anti-tilt shoe
- (G) Anti-tilt shoe fixing screw
- (H) Scale
- (I) Instructions



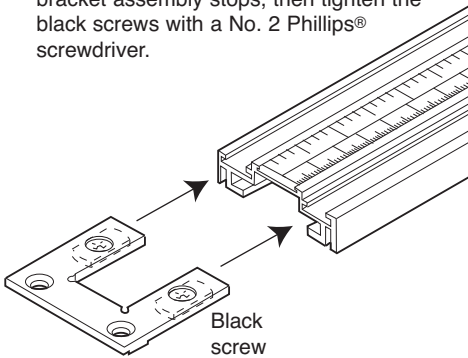
ASSEMBLY & ADJUSTMENT

The T-nuts are held by the silver screws onto the corner bracket, these will need to be removed and the T-nut slid into the slot in the extrusion below the scale.



Do not remove the T-nuts held by the black screws onto the corner bracket.

- Slide the corner bracket assembly into the open end of each extrusion, ensuring the T-nuts align with the slots in the extrusion.
- Slide T-nut down extrusion until corner bracket assembly stops, then tighten the black screws with a No. 2 Phillips® screwdriver.

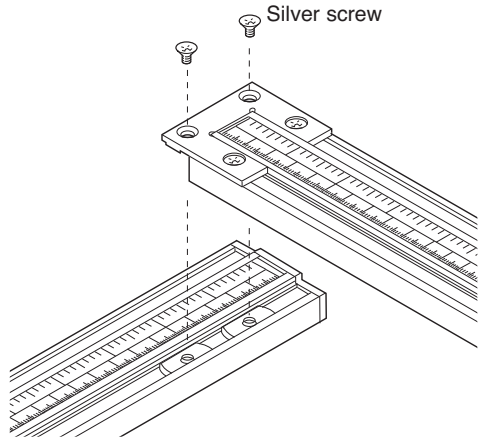


- Lay all parts onto a workbench in a square with the metric scale side of the extrusions towards the centre.



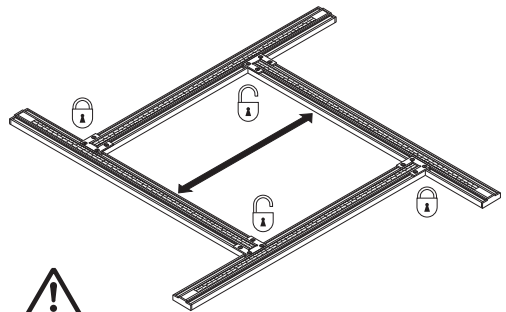
Certain extrusions are fitted with end caps for protection. These can be temporarily removed to allow accessories to be slid onto the extrusion but should always be refitted.

- Place the ends of each extrusion with the corner bracket fitted onto the bottom slot of each extrusion, line up the T-nut and using the silver screws join the corner bracket to the T-slots in the extrusion.



Adjustment

The black screws are used to lock the corner bracket plates into the end of the extrusions. Once they are fitted correctly they should not need to be adjusted. The silver screws are the screws that allow for adjustment of the frame. By loosening the silver screws the extrusion can be moved.



The scale is self adhesive backed. Only remove a 20mm section of the self adhesive backing to ease positioning of the scale.

OPERATION



Fitting Anti-Tilt Shoe

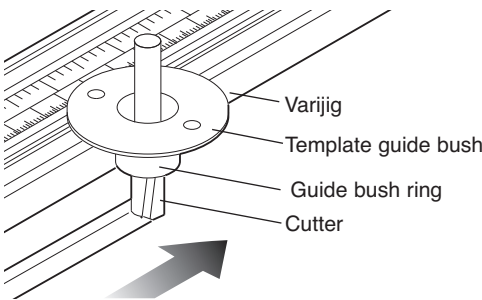
Fit the anti-tilt shoe to the base of the router. For TBC routers the fixing screw will locate into the one of the TBC holes. If non-TBC, the anti-tilt device can be re-drilled and a suitable size screw used, or it can be secured with double sided sticky tape to the router base.

Guiding The Router

The router can be guided around the frame using a guide bush, a circular sub-base or shank mounted bearing guided router cutter. The best method is to use a guide bush fitted to the bottom of the router. The guide bush should have a spigot projection of minimum 8mm.

When using the guide bush the router sits on top of the Varijig frame. Choose a cutter with a diameter which will pass through the centre of the guide bush leaving enough clearance. The cutter can be straight or shaped. The guide bush follows the inside edge of the frame and this guides the router around the Varijig frame so that the shape can be replicated.

As the guide bush is bigger than the cutter there will be an offset. This offset will need to be calculated when setting frame size.

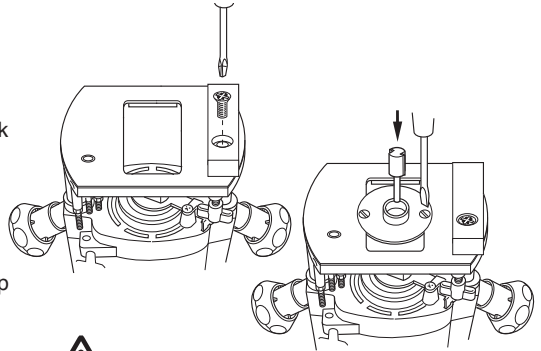


Shank mounted bearing guided cutters can also be used, please note however that extra care must be taken as the cutting edge may scratch the frame edge. The router sits on top of the frame. If the router has a base smaller than 170mm diameter, the Unibase circular sub-base can be fitted to the router, and this can follow the inside edge of the router.

Ensure the cutter diameter will pass through the guide bush leaving at least a 3mm clearance.



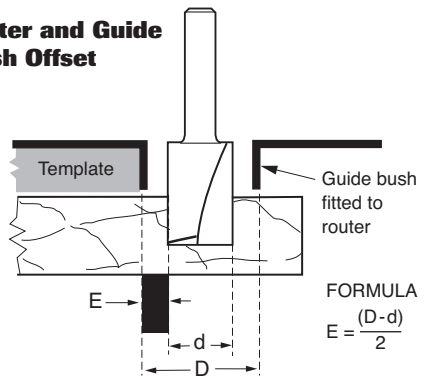
Ensure all fixing screws are tight.



The guide bush should have a projection of minimum 8mm. Suggested guide bushes are:

- 30mmØ Ref. GB30/A**
- 40mmØ Ref. GB40/B**

Cutter and Guide Bush Offset



Ensure working position is comfortable when routing. Keep proper footing and balance at all times.

Adjusting Frame for Size

- Loosen the silver screws.
- Set required size of square or rectangle and use a square to set corner squareness.
- Check each corner.

Another method to check squareness is to measure across diagonals. If the measurement is equal the frame is square, if the measurement is out adjust as necessary.

The scales are for repetitive work and have some lengthways adjustment to allow zero setting.



Ensure the jig is sitting correctly and clamped securely to the component. Ensure component is clamped properly.



Only loosen silver screws to adjust frame.



After every adjustment, the frame will need to be checked for squareness.

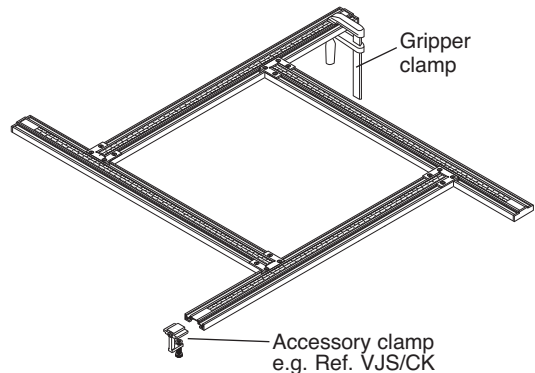
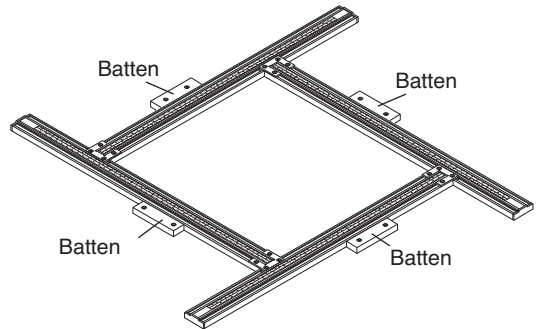
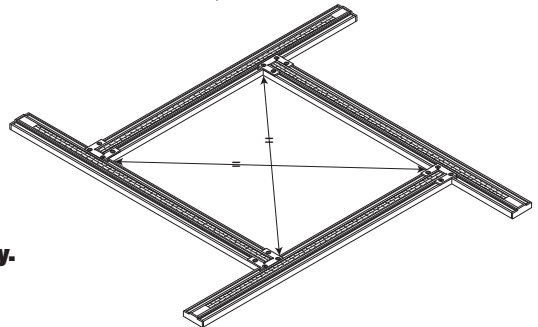
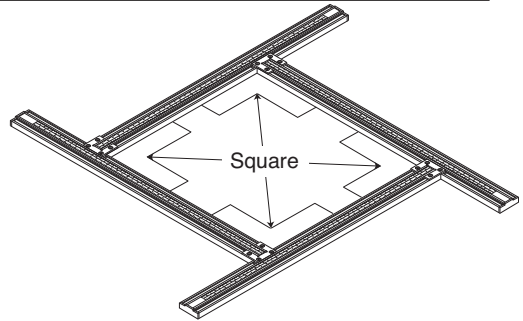
Clamping Varijig Frame

- Clamp frame to component using shallow battens with pins or gripper clamps if they do not foul router, or use the optional accessory clamps.

When using battens ensure the pins do not foul the path of router. The battens should have a thickness of maximum 12mm. Four battens will be needed.

Gripper clamps can be used if the frame is set to a smaller size and the overhanging parts of the extrusion can be held. The clamps must not foul the router path. At least two clamps should be used to hold the frame securely.

The accessory clamps are sold as a pair and they slide into the underside of the extrusion and do not foul the router path.



Routing Squares and Rectangles



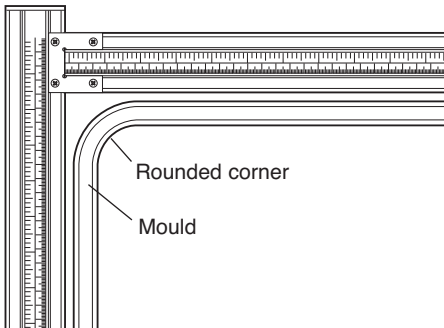
- Ensure the anti-tilt shoe is fitted and secure.
- Ensure guide bush and cutter is fitted to the router.
- Set the cutter depth.
- Place router onto Varijig with the anti-tilt shoe sitting on the component.
- Place router so that guide bush is touching the inside edge of the frame and switch on router. Plunge down and rout in a clockwise direction keeping the guide bush against the frame edge.
- At the corners carefully rotate the router so the anti-tilt shoe does not touch the frame, complete routing until rounded square or rectangle is complete.
- After on one circuit, release plunge and switch off router.

Repeat operation until final depth of cut is achieved.

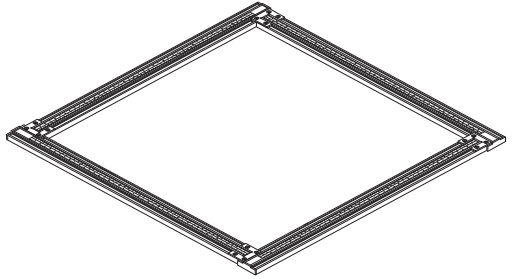
After use of the jig it is advisable to keep jig assembled and store safely.



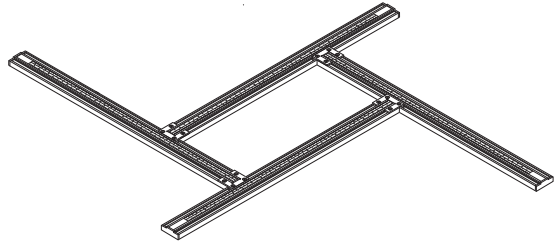
Please note corners will be rounded and not square due to rotary cutting action of the cutter.



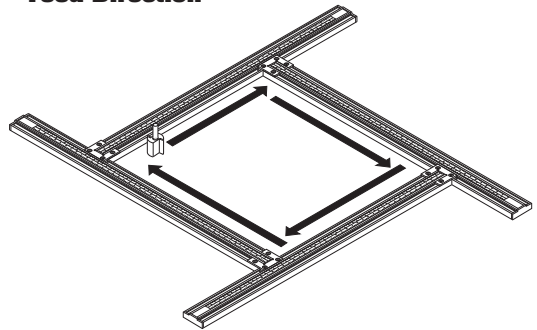
Square for Panels



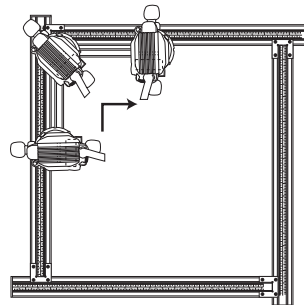
Rectangle for Housing and Trenching



Feed Direction



Turning Corners with Anti-tilt Shoe Fitted



Infill Corner Pieces



MDF corner pieces can be user made and hot melt glued into the corner of the frame to allow decorative panel effects to be created. The corner pieces must be of a suitable thickness.

ACCESSORIES

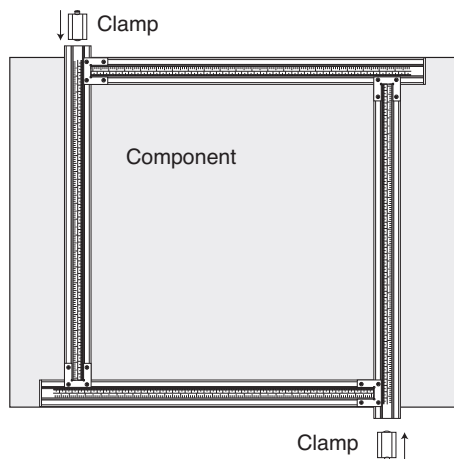
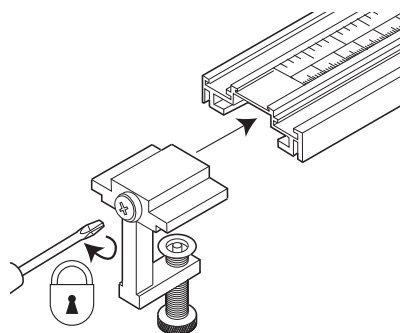
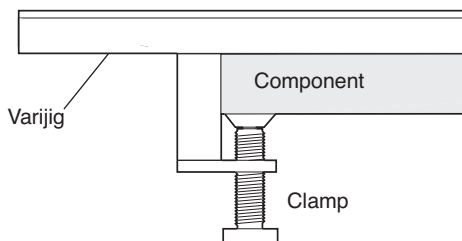
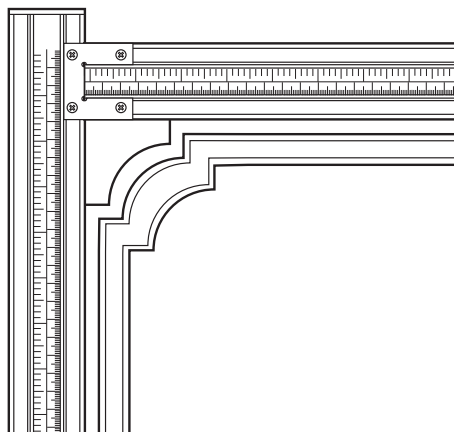
Please use only Trend original accessories.

Friction clamps are available. One clamp is fitted at either end of the extrusion. Tighten friction screw with No.2 Phillips[®] screwdriver.

Ref. VJS/CK Sliding friction clamp (pair). Clamping thickness 32mm (1-1/4").

Ref. VJS/CK/L Sliding friction clamp (pair). Clamping thickness 51mm (2").

Ref. VJS/PCK/L Pivot head sliding friction clamp (pair). Clamping thickness 51mm (2").



MAINTENANCE

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

Cleaning

- Keep the grooves on the extrusion and knob threads clear of sawdust.
- Regularly clean with a soft cloth.

Lubrication

- Your accessory requires no additional lubrication.

Storage

- This jig should be stored safely on wall hooks after use.

ENVIRONMENTAL PROTECTION

Recycle raw materials instead of disposing as waste.

Packaging should be sorted for environmentally friendly recycling. This product and its accessories at the end of its life should be sorted for environmental-friendly recycling

GUARANTEE

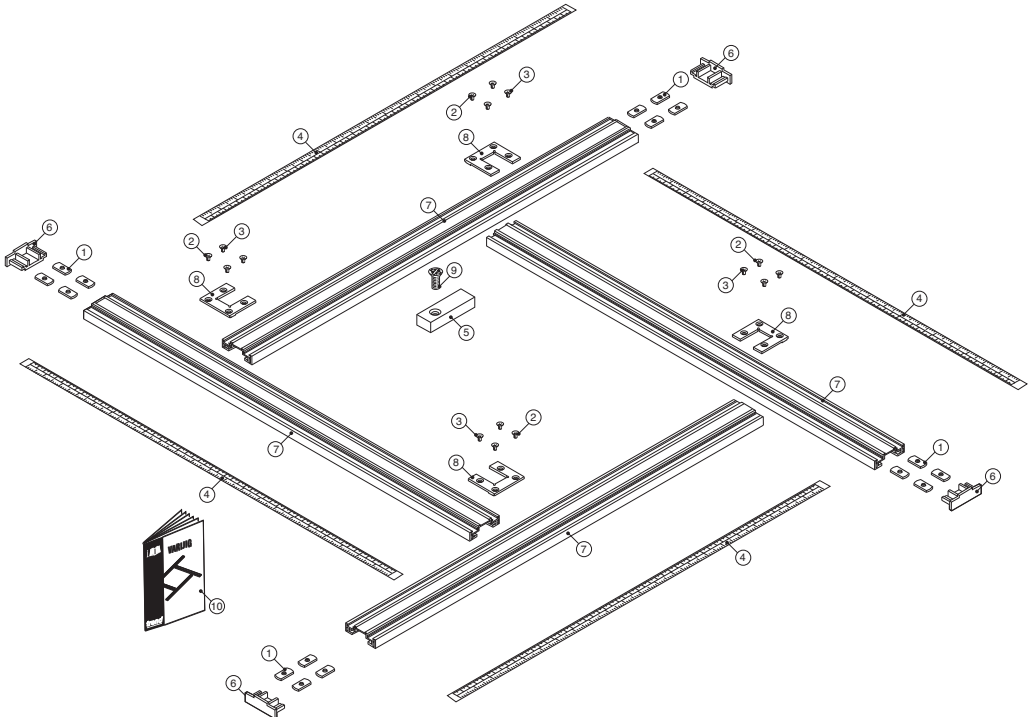
The jig carries a manufacturers guarantee in accordance with the conditions on the enclosed guarantee card.

Please use only Trend original spare parts.

VARIJIG - SPARE PARTS LIST			v1.0 03/2005
No.	Qty.	Desc.	Ref.
1	16	T-Nut M4	WP-VJS/01
2	8	Machine Screw Csk M4 x 6mm Pozi Silver	WP-VJS/02
3	8	Machine Screw Csk M4 x 6mm Pozi Black	WP-VJS/03
4	4	Scale Metric/Imperial 640mm	WP-VJS/04
5	1	Anti-Tilt Device	WP-VJS/05
6	4	End Cap for Extrusion	WP-VJS/06
7	4	Extrusion 700mm Black	WP-VJS/07
8	4	Corner Frame Joint	WP-VJS/08
9	1	Machine Screw Csk M6 x 25mm Pozi	WP-SCW/31
10	1	Manual	MANU/VJS

VARIJIG - SPARE PARTS DIAGRAM

v1.0 03/2005



MANU/VJS v3.0



RECYCLABLE

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