



VJS/TG/JIG



trend[®]
routing technology

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
Extrusion width	54.0mm
Working groove length	400mm
Maximum width adjustment	70mm
Weight	1.9kg

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 instructions manual or 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 accessory is designed to be used with a router with a suitable cutter and guide bush fitted to groove and trench natural timber and boards. The accessory can also be used with a jigsaw or circular saw to crosscut boards.



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

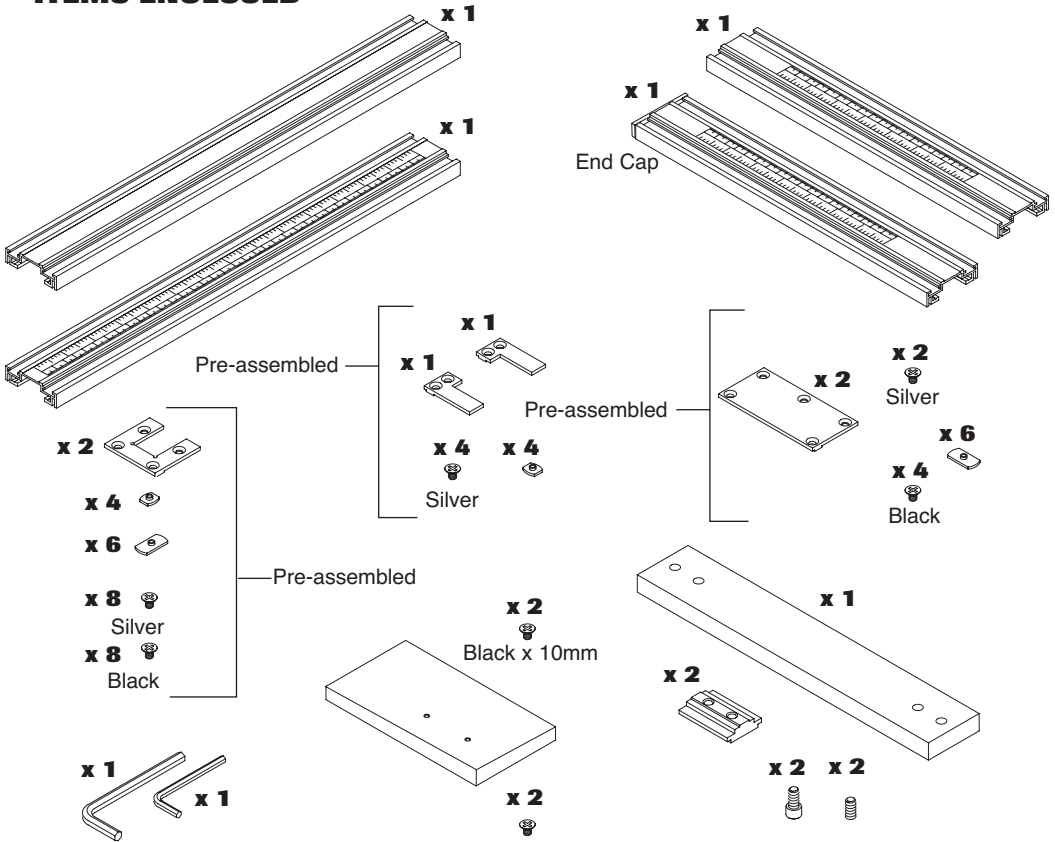
1. Judge your feed rate by the sound of the motor. Feed the router at a constant feed rate. Too slow a feed rate will result in burning.
2. Trial cuts should be made on waste material before starting any project.
3. When using some attachments e.g. a router table or dovetail jig, a fine height adjuster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

Version 7.1 06/2006

ITEMS ENCLOSED

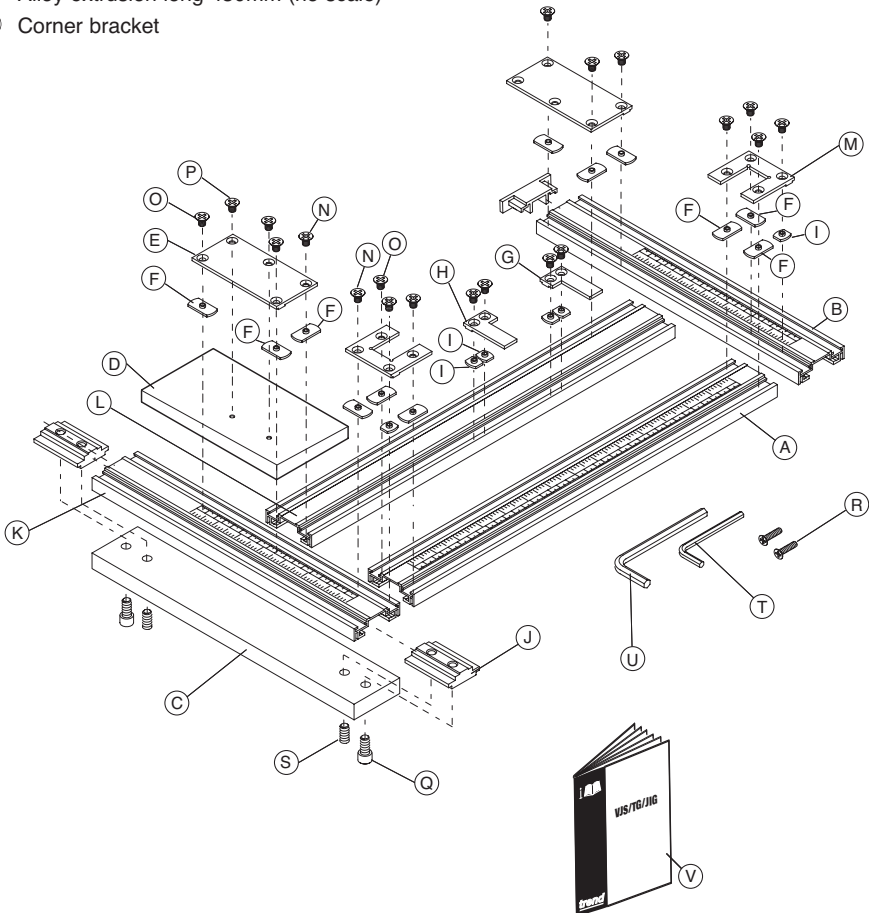


ITEMS REQUIRED

- Plunge router (or jigsaw/circular saw)
- 30mm guide bush with minimum 8mm projection.
- T-Square
- Board with flat edge
- Suitable router cutter
- No. 2 Phillips screwdriver
- Square and long rule/tape measure
- Clamp x 2
- Hand tools
- User made MDF splch block

DESCRIPTION OF PARTS

- (A) Alloy extrusion long 430mm with scale
- (B) Alloy extrusion short 310mm with end cap
- (C) Bottom squaring butt
- (D) Clamping plate
- (E) Squaring plate
- (F) T-nut
- (G) Right-hand sliding stop
- (H) Left-hand sliding stop
- (I) Short T-nut
- (J) Connector block
- (K) Alloy extrusion short (no end cap)
- (L) Alloy extrusion long 430mm (no scale)
- (M) Corner bracket
- (N) Machine screw M4 x 6mm (black-fixed)
- (O) Machine screw M4 x 6mm (silver-adjustable)
- (P) Machine screw M4 x 10mm (black-fixed for clamping plate)
- (Q) Machine screw UNC 5/16" x 5/8" for squaring butt to connector plate
- (R) Machine screw M5 x 20mm for splch block fixing
- (S) Set screw for connecting block to extrusion
- (T) Hex key 4mm A/F
- (U) Hex key 6mm A/F
- (V) Manual



ASSEMBLY & ADJUSTMENT

Using the drawing on page 5 as a guide.

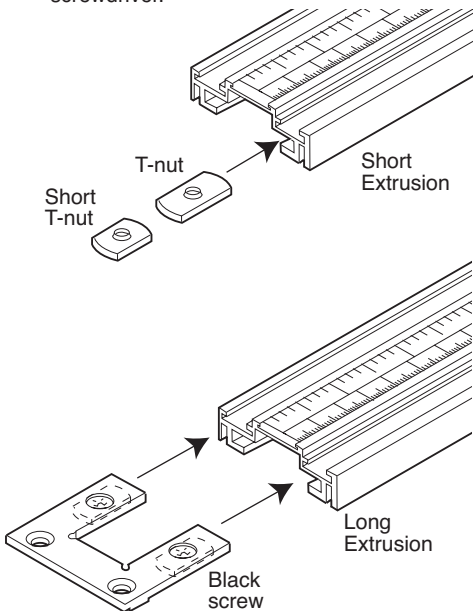
Corner Brackets

The T-nuts on the corner brackets are held by silver screws, these will need to be removed and the T-nut slid into the slot in the short extrusion to assemble. The short T-nut must be positioned nearest the end of extrusion.



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

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



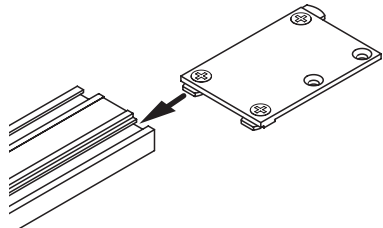
- Lay all parts onto a workbench with the scale of the extrusions towards the centre.

Sliding Stops

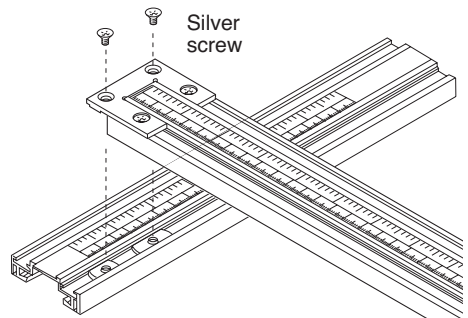
- Slide the right hand and left hand sliding stop assembly into the bottom slot of the long extrusion that does not have a scale.
- Slide sliding stop assemblies along the extrusion by about 100mm and then lock into position by tightening screws with a No. 2 Phillips screwdriver.

Squaring Plate

- Slide the squaring plate assembly into the bottom slot of the short extrusion. Repeat for other short extrusion. The end cap will need to be removed.

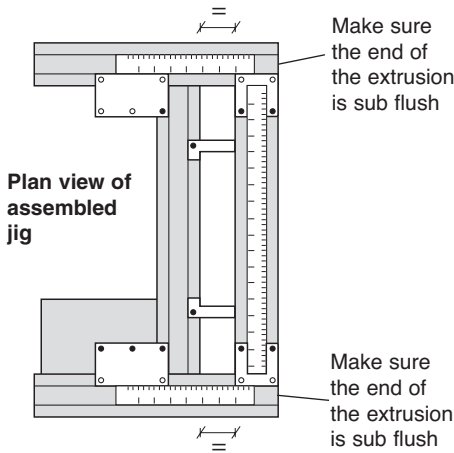


- Place the ends of the long extrusion with the corner bracket fitted onto the bottom slot (slot towards centre of jig) of each short extrusion, line up the T-nut and using the silver screw join the corner bracket to the T-slot in the extrusion.



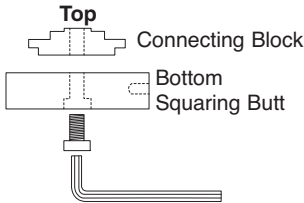
Clamping Plate

The clamping plate is secured to the squaring plate by two screws. Ensure the ends of the small extrusions are sub-flush with the right hand long extrusion.

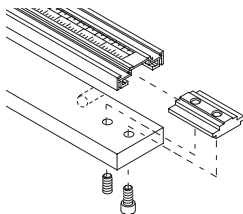


Bottom Squaring Butt

- Screw the set screw into the connecting block using a 4mm A/F hex key. Repeat for the other connecting block.
- Screw the connecting block onto the bottom squaring butt using the socket head screw and 6mm A/F hex key. Repeat for the other connecting block.



- With the M5 tapped holes of the bottom squaring butt facing away from you, slide the connecting block and butt assembly into the end of the short extrusion without end caps.



- Ensure the connecting block is flush with the end of the extrusion and then tighten the set screws with a 4mm A/F hex key.

Adjustment

The black screws are used to lock the brackets into the extrusions. Once they are correctly fitted they should not need to be adjusted. The silver screws are the screws that allow for adjustment of the jig.

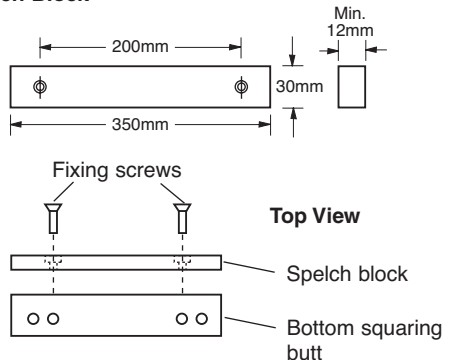
Setting Jig Squareness

- Place a T-Square onto a flat board with a flat edge. Place butt of T-Square against flat edge and mark a pencil line along T-Square blade edge .
- Lay assembled jig onto the board and butt the bottom square butt against the flat edge and check the inner edge of each long extrusion against pencil line. Loosen screws and move long extrusion so that they are parallel to the pencil line and tighten screws. Check squareness again.

User Made Spelch Block 

To use the jig properly a user made sacrificial spelch block should be made and fitted, this prevents breakout on the back edge of the component when cross cutting, as well as allowing grooves to be cut to the end of the board without damaging the jig. The spelch block should be made from minimum 12mm thick MDF (suggested 18mm thick), the length should be about 350mm and 30mm high. Drill and countersink two holes at 200mm centres to accept M5 screws. The holes should be 7mm down from one edge so that it will fit under the extrusion. The countersink diameter should be 12.7mm. Screw spelch block to bottom squaring butt using screws supplied and Phillips No.2 screwdriver.

Spelch Block



OPERATION



Adjusting Frame for Size

- Loosen the silver screws.
- Set required size.
- Check jig for squareness with a T-Square and flat board and adjust if necessary.

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.



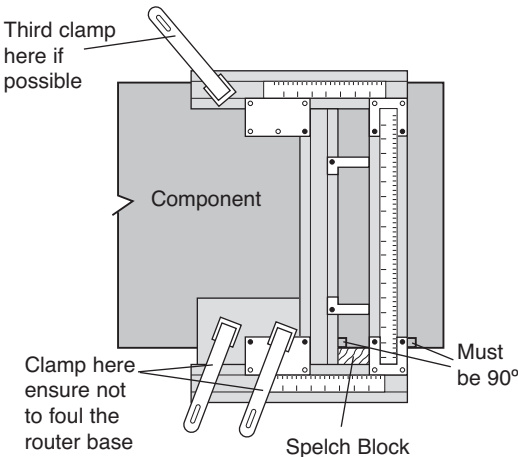
Only loosen silver screws to adjust frame.



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

Clamping

Always use a minimum of two clamps to hold the jig to the component. Ensure the clamps will not foul the saw or router. The jig has a clamping plate to allow for the clamps to hold the jig. A third clamp can also be used at the back of the jig in some instances if component size allows.



Guiding the Router/Saw



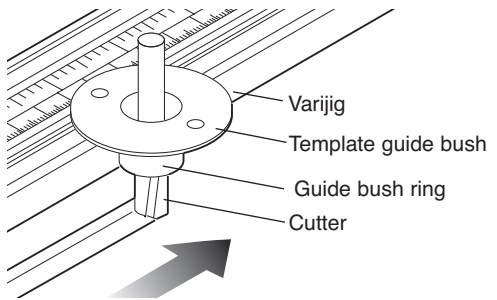
The jig can be used either with a router, or for sawing using a jigsaw or circular saw.

- **Router** - to groove boards with a router fitted with a guide bush with a minimum 8mm projection. The guide bush follows the inside of the extrusion. Adjustable stops can be set to limit the length of the groove. The flat side of the router base can also be used against the edge of the right hand extrusion for grooving, or trimming.
- **Sawing** - A jigsaw or circular saw can be used against the edge of the right hand extrusion to trim a board.

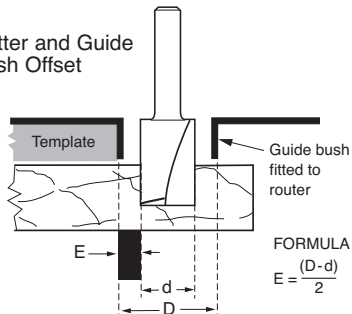
Grooving/Trenching/Tenon Cutting with a Router



When grooving/trenching the router requires a guide bush to be fitted which follows the inside edge of the extrusion and guides the router. The guide bush should have a spigot projection of a minimum 8mm and suitable diameter to suit the cutter. A recommended guide bush diameter is 30mm. The difference between the cutter and the guide bush is the offset. This offset will need to be marked on the component to give the true cut-line.



Cutter and Guide Bush Offset





A recommended 30mm guide bush should be used with a minimum 8mm spigot projection e.g. Ref. GB30/A.

To rout grooves, trenches and tenon's the router base will sit on top of the extrusions, therefore the maximum distance between the extrusion should be 70mm so that both sides of the router base are supported.

For grooves/trenches ensure that the straight cutter has a smaller diameter that will pass through the centre of the guide bush leaving enough clearance.



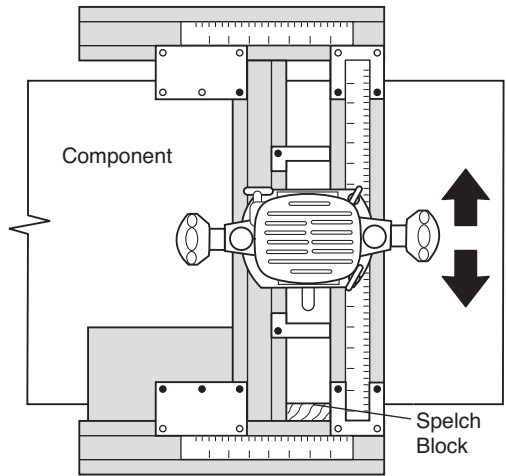
If using a router and guide bush with router base sitting on top of the extrusion, the maximum distance between the extrusions is 70mm so that both sides of the router base are supported.

The trench/groove length can be limited by using the sliding stops. To set the length stops

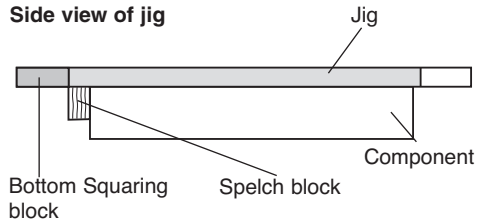
- Loosen both silver screws with a No.2 Phillips screwdriver and slide the stops along the extrusion to the required length. The offset between the guide bush and cutter will need to be catered for in the calculations.
- Once the sliding stops are in the correct position tighten both screws on each stop to lock in position.

The jig can also be used to cut tenons on timber. This will require careful clamping to the component. The component itself will require to be clamped securely to the workbench. The other end of the jig will need to be supported by a waste piece of the same material of the same thickness as the component.

Grooving with the router



Side view of jig



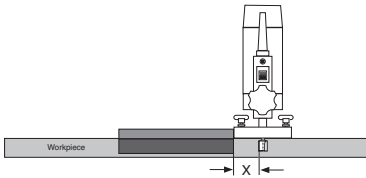
Check squareness of jig before use.

Cross-cutting with a Router



The flat side of the router base can be used against the edge of the right hand extrusion for grooving or trimming. Ensure that the end of the front and back short extrusions are not proud, so they do not foul the base of the tool. The base plate offset will need to be allowed for to give the true cut line.

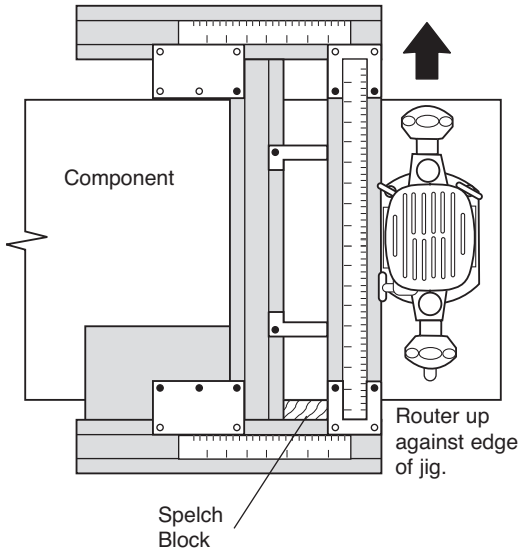
- Measure edge of left-hand router base plate to right side of cutting edge, this will give the offset.



X= Offset distance required from edge of jig to edge of cutter.

- Mark cutline on the board and measure offset to left of pencil line, at each end of line.
- Set right hand extrusion to offset line.
- Clamp jig using two or three clamps
- Set cutter depth.
- Plug in router, plunge down and rout across board in a series of passes, until final depth of cut is reached.
- Release plunge.
- Switch off router and remove.
- Remove clamps and jig from workpiece.

Crosscutting with the router



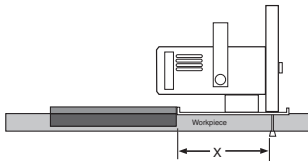
Check squareness of jig before use.

Cross-cutting with a Circular Saw or Jigsaw



The edge of the jig is used to guide the base plate of the saw. The base plate offset will need to be allowed for to give the true cut line. Ensure that the end of the front and the back of the short extrusion are not proud, so they do not foul the base of the tool.

- Measure from the edge of left-hand side of the saw base plate to right side of cutting edge, this will give the offset.



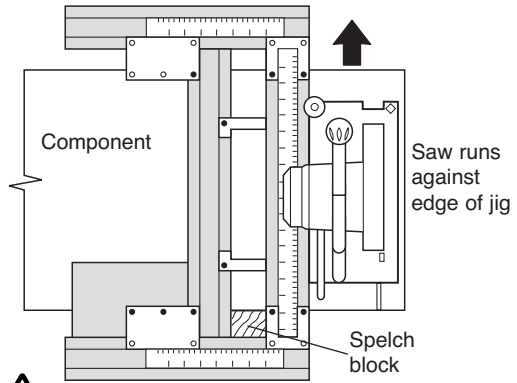
X= Offset distance required from edge of jig to blade.

- Mark cut line on the board and measure offset to left of pencil line, at each end of line.
- Set right hand extrusion to offset line.
- Clamp jig using two or three clamps
- Set blade depth of cut.
- Plug in saw and cut across the board.
- Release plunge.
- Switch off saw and remove.
- Remove clamps and jig from workpiece.



Check squareness of jig before use.

Crosscutting with the saw



Ensure the jig is not clamped onto the waste piece.

MAINTENANCE

This jig 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

- Regularly clean the jig with a soft cloth.

Lubrication

- Your jig requires no additional lubrication.

Storage

- Store jig safely on wall hooks.

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 its life should be sorted for environmental-friendly recycling.

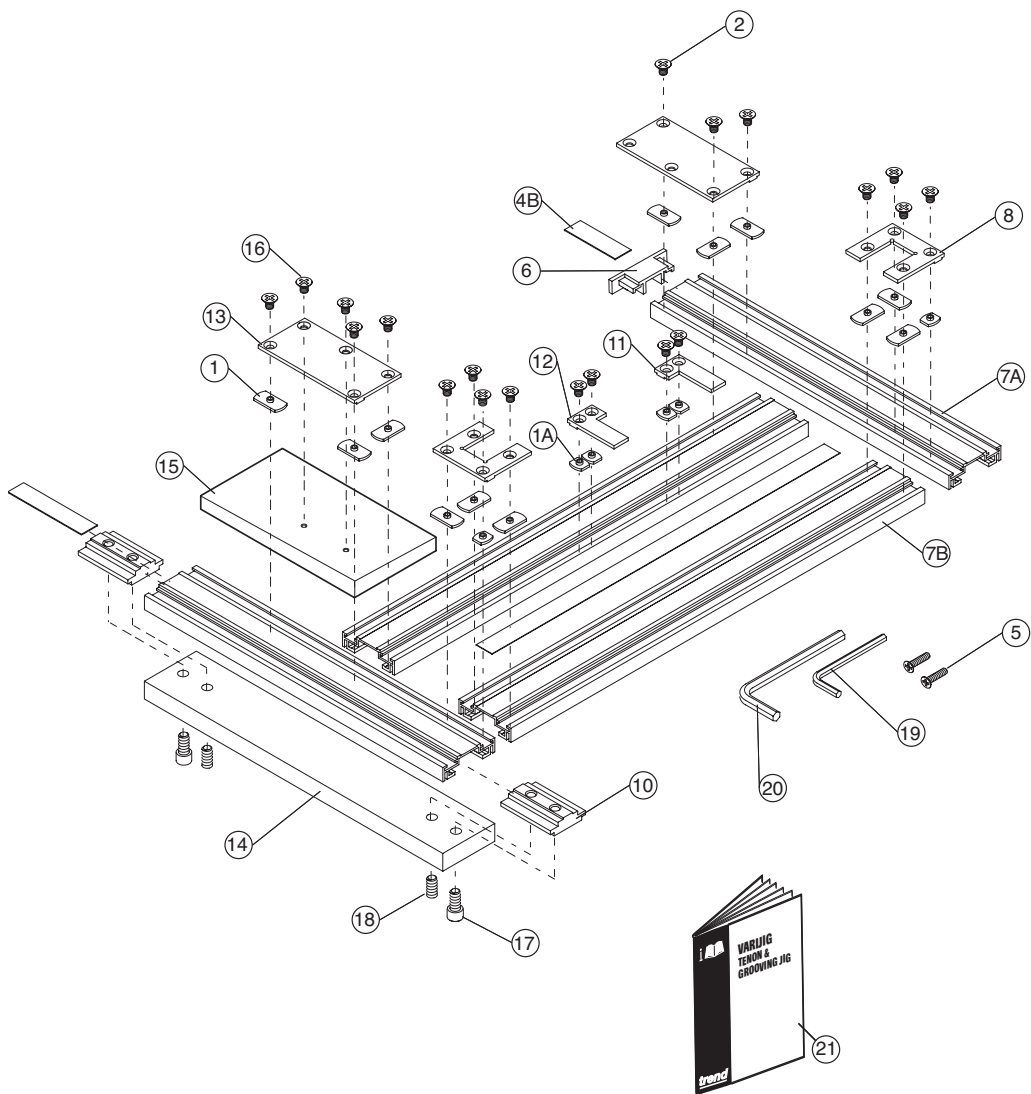
GUARANTEE

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

VJS/TG/JIG - SPARE PARTS LIST			v1.0 08/2007
No.	Qty.	Desc.	Ref.
1	12	Varijig T-Nut M4	WP-VJS/01
1A	6	Varijig Short T-Nut M4	WP-VJS/01A
2	12	Varijig Machine Screw M4 x 6mm Csk Zinc	WP-VJS/02
3	6	Varijig Machine Screw M4 x 6mm Csk Black	WP-VJS/03
4A	1	Varijig Scale 400mm Metric/Imperial	WP-VJS/04A
4B	2	Varijig Scale 150mm Metric/Imperial	WP-VJS/04B
5	2	Machine Screw Csk M5 x 20mm Phillips	WP-SCW/86
6	1	Varijig End Cap for Extrusion	WP-VJS/06
7A	2	Varijig Alloy Extrusion 310mm	WP-VJS/07A
7B	2	Varijig Alloy Extrusion 430mm	WP-VJS/07B
8	2	Varijig Corner Frame	WP-VJS/08
9	-	-	-
10	2	Varijig Connector Block	WP-VJS/10
11	1	Varijig Right Hand Stop	WP-VJS/11
12	1	Varijig Left Hand Stop	WP-VJS/12
13	2	Varijig Squaring Plate	WP-VJS/13
14	1	Varijig Bottom Squaring Butt	WP-VJS/14
15	1	Varijig Clamping Plate	WP-VJS/15
16	2	Varijig Machine Screw M4 x 10mm Csk Black	WP-VJS/16
17	4	Varijig Machine Screw Skt UNC 5/16" x 5/8"	WP-VJS/17
18	2	Varijig Set Screw Skt UNC 5/16" x 5/8"	WP-VJS/18
19	1	Hex Key 4mm A/F	WP-AP/04
20	1	Hex Key 6mm A/F	WP-AP/06
21	1	Manual	MANU/VJS/TG

VJS/TG/JIG - SPARE PARTS DIAGRAM

v1.0 08/2007



MANUVJS/TG v1.1



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