

Routerack[®]

Universal Router Stand Set

Instruction Manual

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Dear Customer

Thank you for purchasing the Trend Routerack. We hope you enjoy many years of creative and productive use of this universal stand.

Trend welcomes comments on this and all our products in our aim to develop and improve what we do to meet the needs of you, the customer.

Please contact our Technical Department in the first instance if you have any comments or queries.

Trend is the UK's leading supplier of router cutters, equipment and accessories. Our Craft range of cutters is designed specifically to meet the needs of amateur Craftsmen and woodworking enthusiasts in quality and value.

For the professional woodworker, the Trend Professional Range of Routing Products has become the industry's standard guide to the most comprehensive range of router cutters and related products available in the UK.

Please contact your nearest Trend Stockist to obtain any of our products and for a copy of the latest Trend Routing Catalogue.

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INTRODUCTION

The Trend Routerack is of a modular design, enabling the Elu range and other makes of router to be mounted in numerous ways.

The assembly instructions shown in this manual include many accessories that can be purchased separately to extend the applications of the Routerack. Alternatively, they can be home-made to suit the user's particular requirements.

The Routerack enables the portable router to be fixed in four different modes to take full advantage of the versatility of the router. These are as follows:

- Table routing mode
- Single pillar overhead routing mode
- Twin pillar overhead routing mode
- Lateral routing mode

The assembly instructions for each of these positions is included in this manual.

Mounting the router in a fixed position provides many advantages:

- More accuracy especially important for joinery
- More control to improve safety
- Enables larger cutters to be used
- Enables narrow workpieces to be machined
- Facilitates copy routing operations

USING THE ROUTERACK

When your router is being used inverted as a table router, periodically turn router over to remove any wood chips or dust. This will prevent clogging and over heating causing eventual damage to your router. Dust extraction equipment should remove all the fine dust particles.

Check all nuts, bolts and screws periodically as continuous vibrations may cause them to work loose.

Use good woodworking practice and common sense with any portable router, fixed or otherwise.

SAFETY PRECAUTIONS

1. Always switch off power and unplug router when changing cutters, or making adjustments
2. Use ear defenders
3. Wear sound protective ear muffs.
4. Do not start-up with cutter in the work.

CUTTER CARE

1. Do not drop cutters or knock against hard objects.
2. Keep cutters sharp to reduce motor overload or burning and produce a better finish.
3. Cutters should be kept clean. Resin build-up should be removed at regular intervals with a solvent. If the cutter has a bearing fitted, this should be removed first. The use of a dry lubricant will act as a preventative e.g. Trendicote spray.
4. Cutter shanks should be inserted at least 3/4 of shank length to prevent distortion. A distorted collet should be discarded, as it can cause vibration and damage the shank.
5. Do not overtighten collet as this will score the shank and create a weakness there.
6. It is also advisable to check collet nut.

TOOLS REQUIRED FOR ASSEMBLY

Spanners -

10mm -when using backfence and pressure guards
13mm and 17mm (double end spanner 13mm and 17mm is supplied with basic Routerack Kit)

Screwdriver - flat 8 - 12mm.

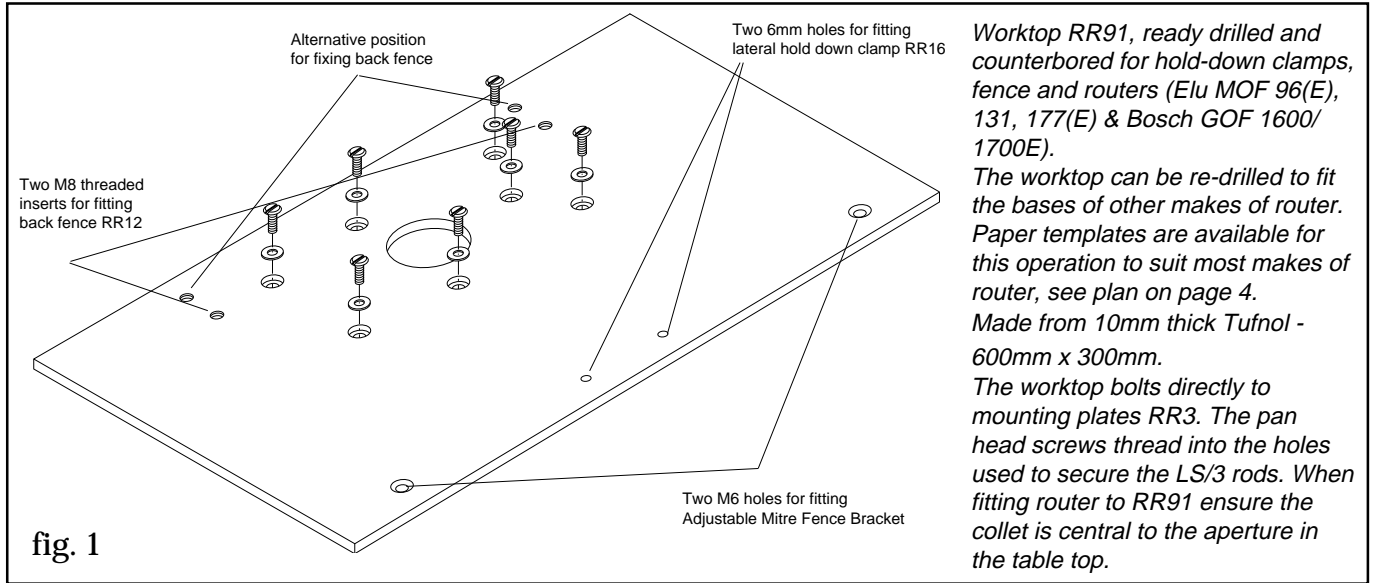
Box Spanner - 13mm - when using workboard.

BASIC ROUTERACK SET - RR/SET (Parts available separately)

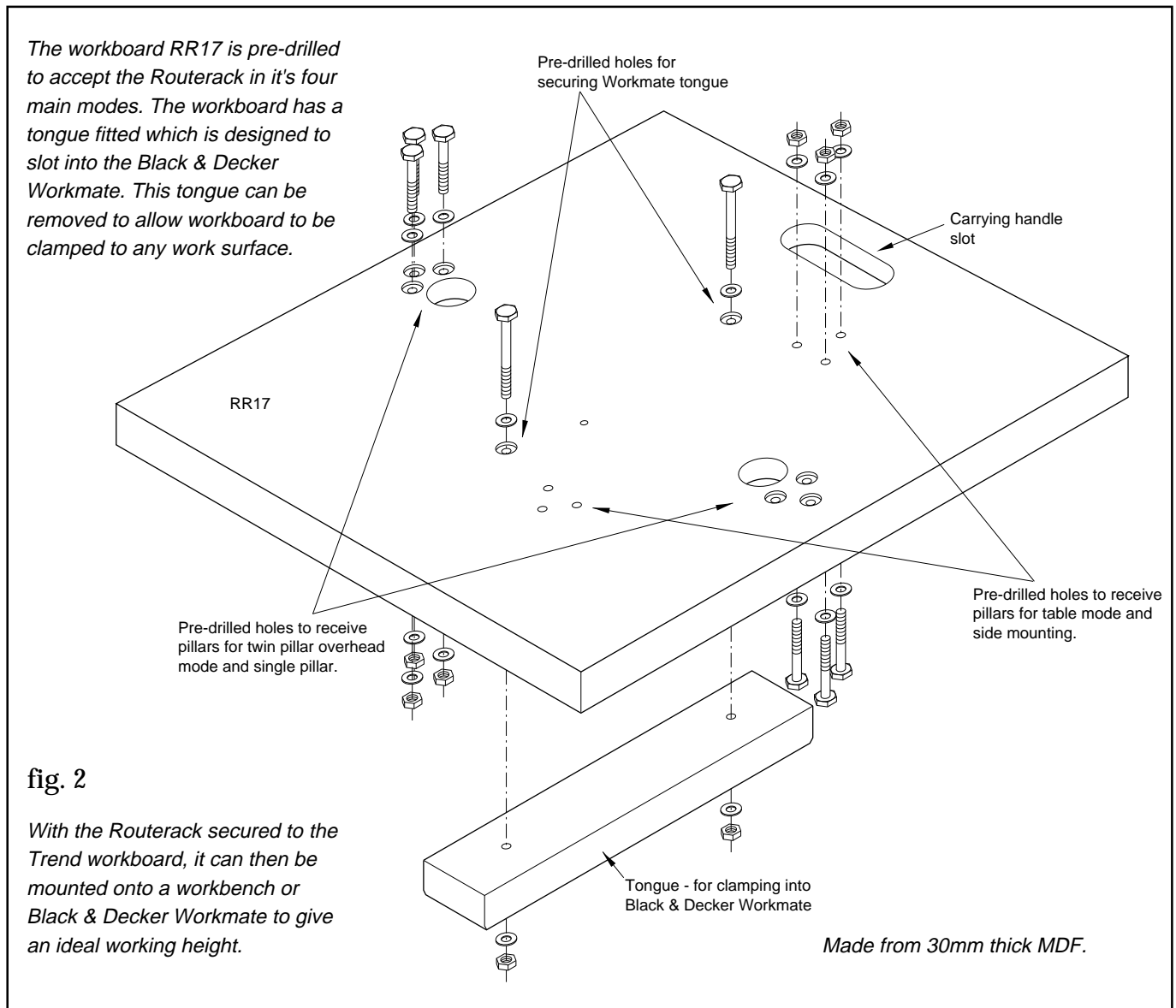
<p style="text-align: right;">RR2</p>	<p>2 x Pillar Bases For fixing pillars to the workboard, complete with bolt (M10), nut and washer for clamping.</p>
<p style="text-align: right;">RR3</p>	<p>2 x Mounting Plates For securing pillars to worktop or for supporting connecting rods. Location holes are designed to fit connecting rods LS/2 or LS/3. Fixing points for adaptor plates RR9 and RR90 allowing other makes of routers to be used.</p>
<p style="text-align: right;">RR4</p>	<p>4 x Lobe Knobs (M6) For securing support rods LS/2 and LS/3 to mounting plates.</p>
<p style="text-align: right;">RR7 RR6 RR5</p>	<p>4 x Bolts, Spacers and Handles (M8) For securing clamping bracket sets (RR0) and mounting plates (RR3) to the support pillars. Spacers RR6 are removed when using Routerack in single pillar mode.</p>
<p style="text-align: right;">RR0</p>	<p>2 x Clamping Brackets sets For securing RR3 to pillar. One half of each set is pinned for exact mating to RR3.</p>
<p style="text-align: right;">RR8</p>	<p>1 x Spanner 17/13mm AF</p>
<p style="text-align: right;">2 x Support Pillars For supporting router in all modes</p> <p style="text-align: right;">RR1</p>	

ACCESSORIES for Table Mode

Worktop - RR91



Workboard - RR17



Assembly of Table Mode - see fig. 3

- a. Bolt pillar bases (RR2) to workboard (RR17), only lightly tighten the nuts. M8 x 75mm bolts, washers and nuts are supplied with the workboard for this purpose.
- b. Insert pillars (RR1) fully into each pillar base. Lightly secure pillars into each base by tightening bolt with 17mm spanner provided.
- c. Repeat for each clamping assembly :
 1. Holding the mounting plate (RR3) insert bolts (RR5) ensuring bolt heads sit into square housings.
 2. Lay mounting plate flat leaving bolt studs protruding.
 3. Slide one half of clamping bracket (RR0 - with two locating lugs) over studs ensuring lugs locate in mounting plate.
 4. Slide the other half of clamping bracket over studs so as to form a 35mm hole to slide down pillar.
 5. Take spacers (RR6) and slide one over each stud.
 6. Finally screw on both M8 handles (RR7), and lightly tighten.
- d. Slide one clamping assembly over each pillar. Swivel both assemblies to face inwards and align assemblies so that the mounting plates are flush with tops of pillars. Lightly clamp to pillars.
- e. Fitting the Worktop
 1. Lay the worktop onto the routerack assembly ensuring the counterbored holes are facing up.
 2. Align the four outside holes with the two mounting plates (RR3) and secure using M6 x 16mm pan head bolts supplied with the worktop. Only lightly tighten the bolts.
- f. The three counterbored holes which surround the cutter aperture are used to secure your router. The Worktop has been pre-drilled to receive the Elu MOF 96(E), 131, 177(E), OF97(E) and the Bosch 1600/1700E. Before mounting your router to the worktop, first fit a vertical fine adjuster which is recommended for table routing. Secure router under table using three M6 x 16mm bolts supplied.

Tighten all bolts and handles securely and check periodically when in use.

When fitting other makes of router, the worktop will need to be re-drilled to fit the securing points on the base of the router. An appropriate template plan is available to aid in the marking out of these points. See chart below for correct selection of template plan.

General Information

1. A larger self-made false table and fence can be fabricated when working with large cutters or awkward sized material.
2. When machining all sides of natural timber or grained man-made board, machine across the grain first. Any break-out incurred will be removed when machining along the grain.
3. Always keep a push stick in easy reach.
4. When machining curved work with a bearing guided cutter remove side fence and hold down clamps, and fit lead-on piece and a guard.

PAPER TEMPLATE PLAN - for fixing points for routers listed below

ELU MOF 96/96E Mk2	PLAN/01	DEWALT 613	PLAN/01	METABO OF528, OF1028, OFE1229	PLAN/15
ELU MOF 131/177/177E Mk2	PLAN/02	FESTO OF900E	PLAN/06	METABO OF1612, OFE1812	PLAN/24
ELU MOF 69	PLAN/21	FESTO OF2000E	PLAN/25	PEUGEOT DEF570E, DF55E	PLAN/16
ELU OF97/97E	PLAN/34	FREUD FT 2000E	PLAN/07	PORTERCABLE 100, 690, 693	PLAN/31
AEG OFS50/OFSE850/OF5720/OF450S	PLAN/03	HITACHI FM8, ZK2008	PLAN/08	PORTERCABLE 7519, 7539	PLAN/32
AEG OFSE2000	PLAN/07	HITACHI TR12	PLAN/09	RYOBI R150, R151	PLAN/17
BLACK & DECKER SR100	PLAN/03	HITACHI M12V/M12SA	PLAN/10	RYOBI R500	PLAN/18
BLACK & DECKER BD66	PLAN/04	HITACHI M8/M8V	PLAN/11	RYOBI R502	PLAN/33
BLACK & DECKER BD780/780E, KW780/780E ..	PLAN/30	KANGO R855OS	PLAN/03	RYOBI R600N/RE600N	PLAN/19
BOSCH POF 400	PLAN/05	MAKITA 3620	PLAN/12	RYOBI RE120	PLAN/29
BOSCH POF 52/500/600ACE	PLAN/22	MAKITA 3612BR	PLAN/13	SKIL 1835U	PLAN/20
BOSCH GOF 1600A/1700ACE	PLAN/23	MAKITA 3600B	PLAN/14	SKIL 1875U1	PLAN/20
BOSCH GOF 900A/900ACE	PLAN/26	MAKITA 3612C, 3612	PLAN/28	STAYER PR50	PLAN/03
BOSCH GOF 1300ACE	PLAN/27	METABO OF508	T.B.A		

Assembly of Table Mode

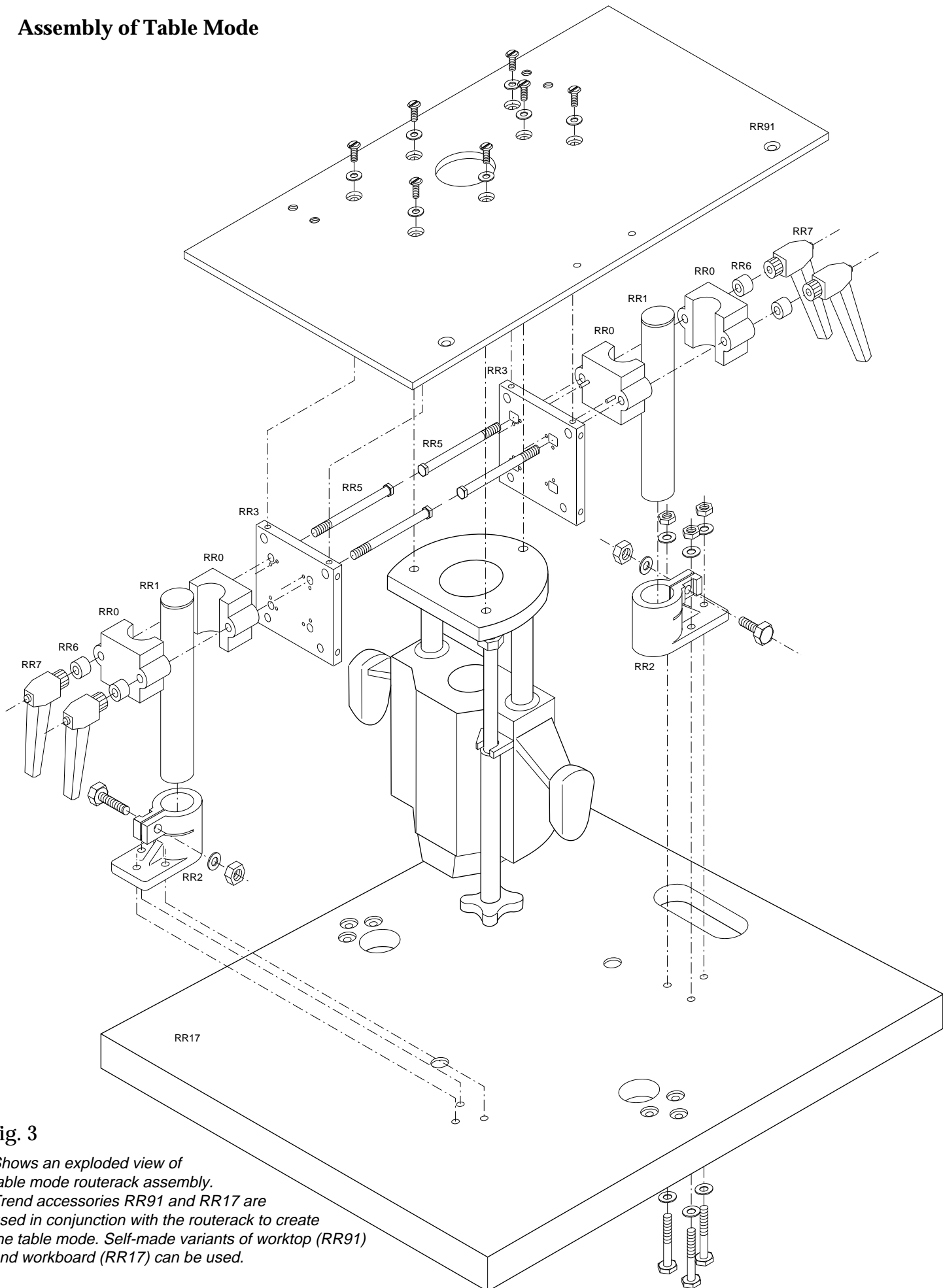
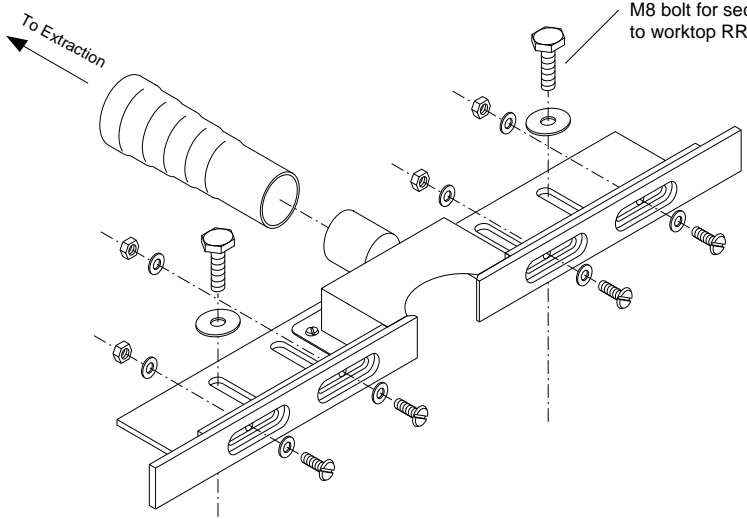


fig. 3

Shows an exploded view of table mode routerack assembly. Trend accessories RR91 and RR17 are used in conjunction with the routerack to create the table mode. Self-made variants of worktop (RR91) and workboard (RR17) can be used.

OPTIONAL ACCESSORIES for Table Mode

Vertical Adjustable Back Fence - RR12



M8 bolt for securing to worktop RR91.

Tufnol cheeks should be adjusted to suit cutter diameter. Allow a 2mm gap each side of cutter for clearance.

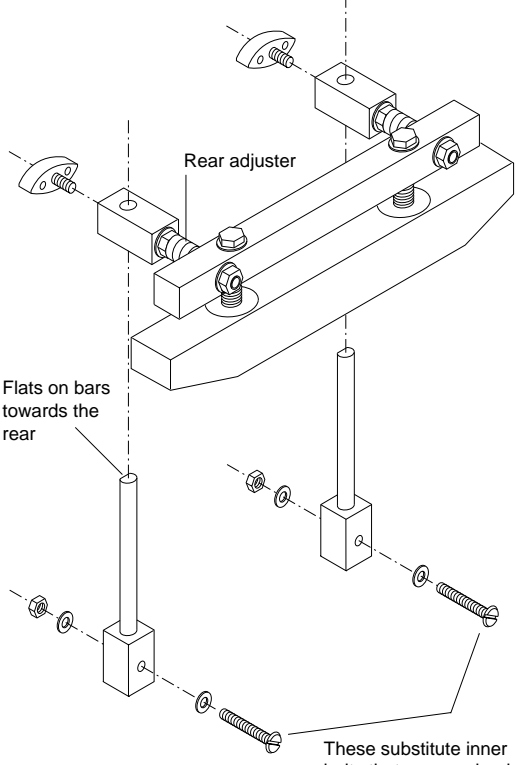
The cheeks can be substituted for larger ones made from MDF or plywood by the end user.

The stepped bayonet will allow hoses from various extractors to be fitted.
Minimum diameter - 33mm
Maximum diameter - 48mm

Also see adjustable levers, fig.7 below.

fig. 4

Vertical Hold-down Clamp - RR15



Rear adjuster

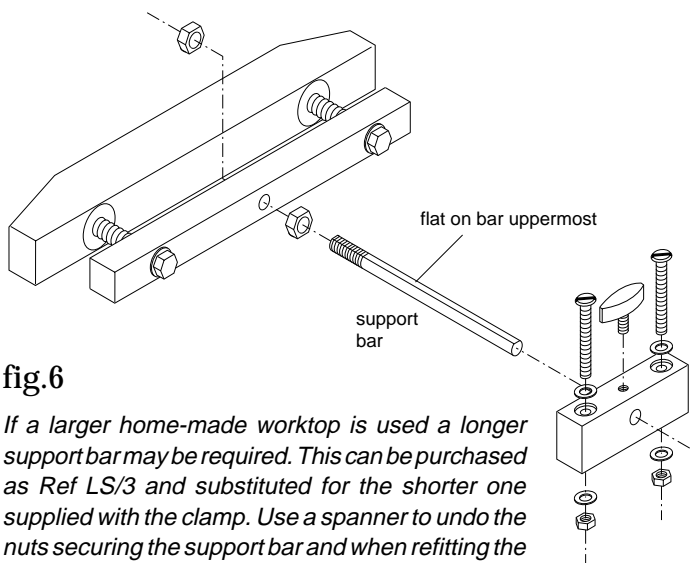
Flats on bars towards the rear

These substitute inner bolts that secure cheeks on back fence RR12.

fig.5

When using RR15 Vertical Hold Down Clamp remove spacers when using smaller cutters so that pressure is provided onto the workpiece as close as possible to the back fence. Removing one extra spacer from the rear adjuster will ensure the material is kept in constant contact with the back fence. This is especially important when no lateral hold-down clamp is fitted.

Lateral Hold-down Clamp - RR16



flat on bar uppermost

support bar

fig.6

If a larger home-made worktop is used a longer support bar may be required. This can be purchased as Ref LS/3 and substituted for the shorter one supplied with the clamp. Use a spanner to undo the nuts securing the support bar and when refitting the nut ensure that the support bar flat is uppermost. Also see locking keys, fig.8 below.

Adjustable Lever - KB12/M/8

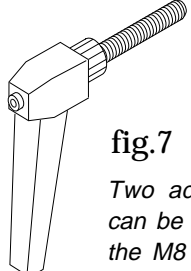


fig.7

*Two adjustable levers can be used instead of the M8 bolts to secure the back fence (RR12) to the worktop (RR91).
2 x KB12/M/8 required*

Locking Keys - KB3/F/6

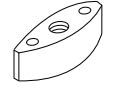


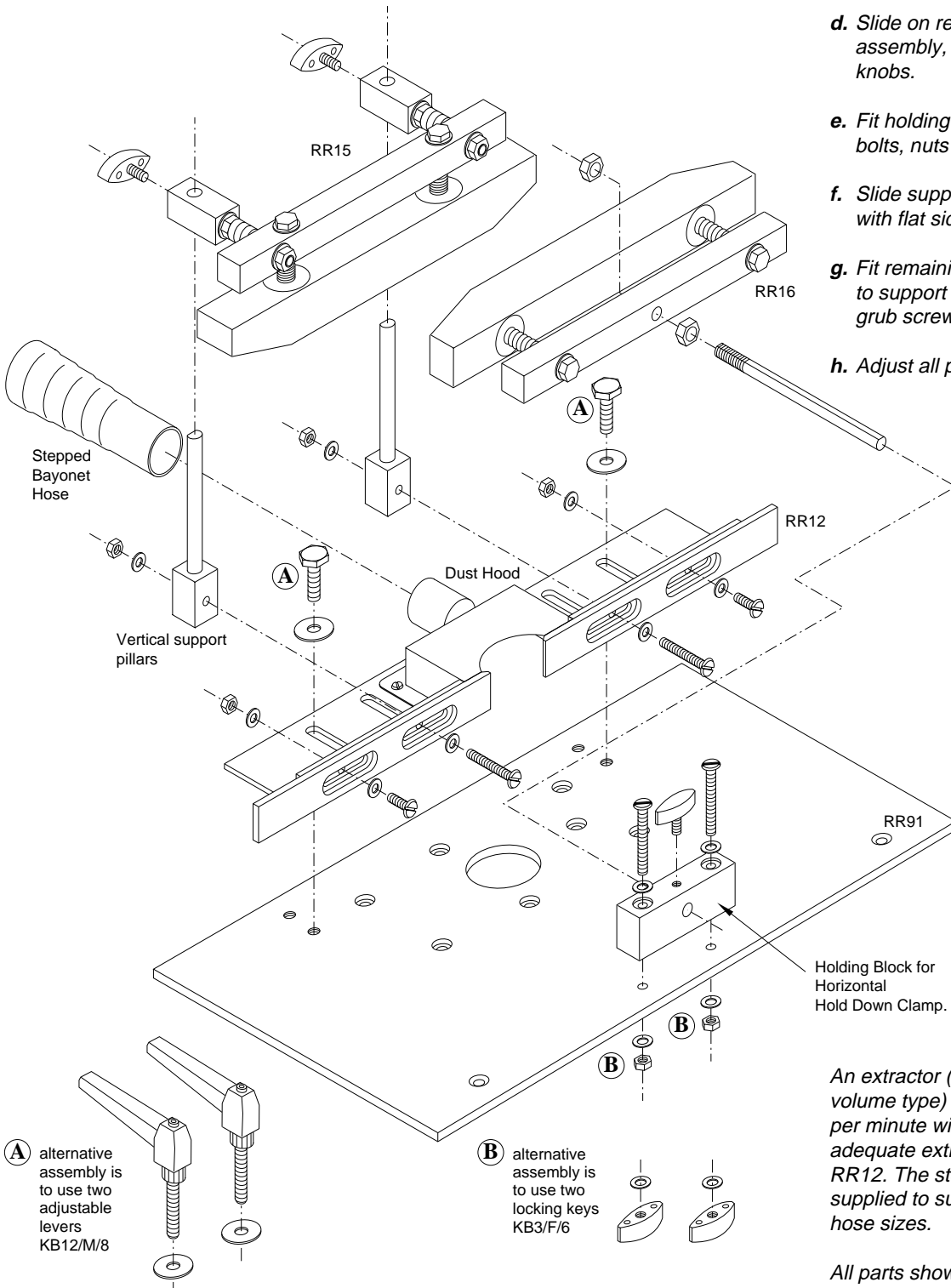
fig.8

*Two locking keys can be used instead of the M6 nuts to secure the lateral hold-down clamp (RR16) to the worktop (RR91).
1 x (pack of 4) KB3/F/6 required*

OPTIONAL ACCESSORIES FOR TABLE MODE

- Vertical hold-down clamp - RR15**
- Lateral hold-down clamp - RR16**
- Adjustable back fence - RR12**
- Adjustable levers - KB12/M/8**
- Locking keys - KB3/F/6**

- a.** Bolt back fence RR12 to worktop using the two M8 bolts and washers supplied.
- b.** Remove inner bolts which secure cheeks to back fence.
- c.** Fit vertical support pillars for RR15 and secure with bolts supplied with RR15. Ensure flat side of pillars face outwards.
- d.** Slide on remaining RR15 assembly, fit and tighten lobe knobs.
- e.** Fit holding block of RR16 with bolts, nuts and washers supplied.
- f.** Slide support bar through hole with flat side facing upwards.
- g.** Fit remaining assembly of RR16 to support bar and secure with grub screw and allen key.
- h.** Adjust all parts to suit application.



An extractor (high velocity low volume type) of at least 3000 litres per minute will be required for adequate extraction when fitted to RR12. The stepped bayonet is supplied to suit a wide range of hose sizes.

All parts shown above are supplied as standard with the individual accessories when purchased.

fig. 9

Adjustable Mitre Fence - RR18

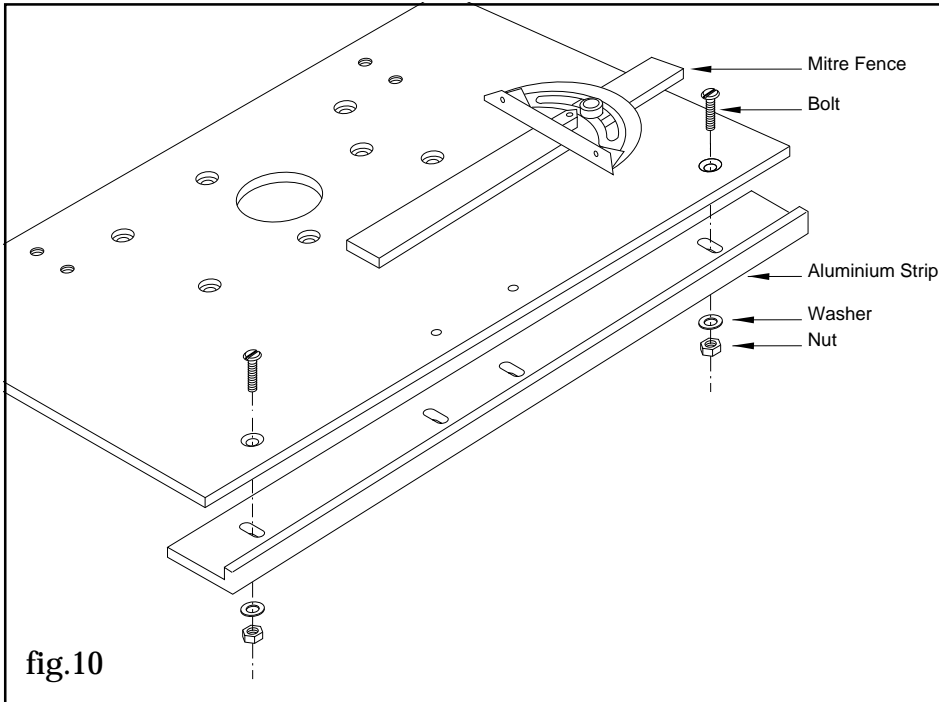


fig.10

Assembly Instructions

Bolt the aluminium guide to the base edge of the table surface with the two bolts, washers and nuts provided. If holes are not pre-drilled they can be drilled with a 6mm diameter bit and countersink. Before tightening the nut, adjust the strip to allow the mitre fence to slide freely. Holes in the aluminium guide are slotted so any side play can be taken up. Centre pair of holes are drilled to accept holding block for lateral hold-down clamp (RR16) - see p.7.

Adjustable Mitre Fence - RR18

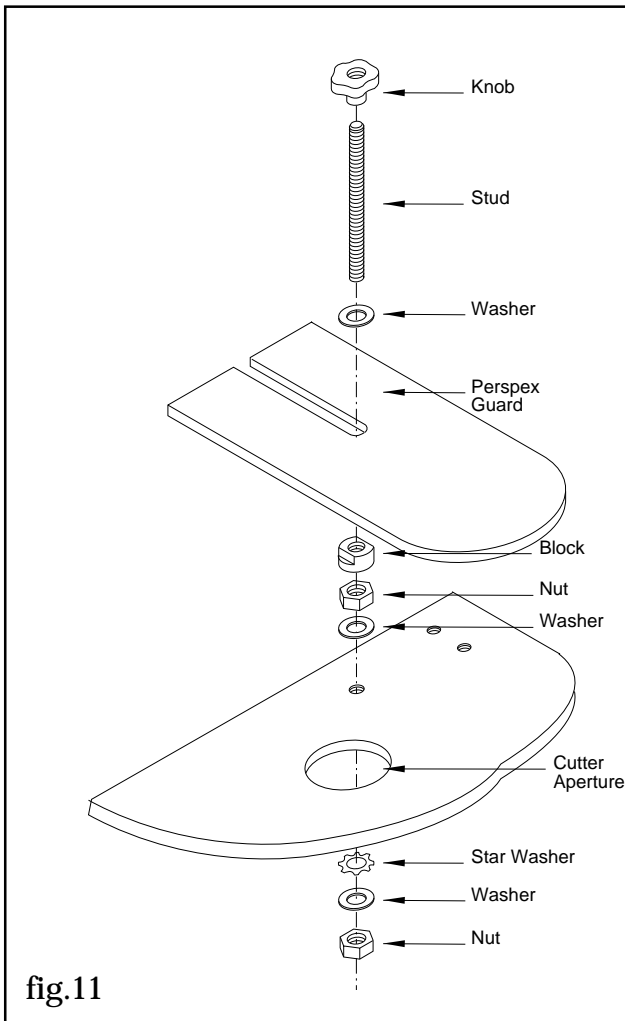


fig.11

Assembly Instructions

Assemble the profiling top guard (RR20) as illustrated. An 8mm diameter hole will be required in the table surface. This should be drilled 60-80mm from the centre of the cutter aperture. Please note that the two flats on the threaded block should be recessed within the slot of the plastic guard. Adjust the height of the block to suit the thickness of the material being cut.

Safety Aspect

A 6-12mm gap should be allowed between material and underside of the guard to prevent fingers contacting the cutter.

Assembly of Side Mounting Mode

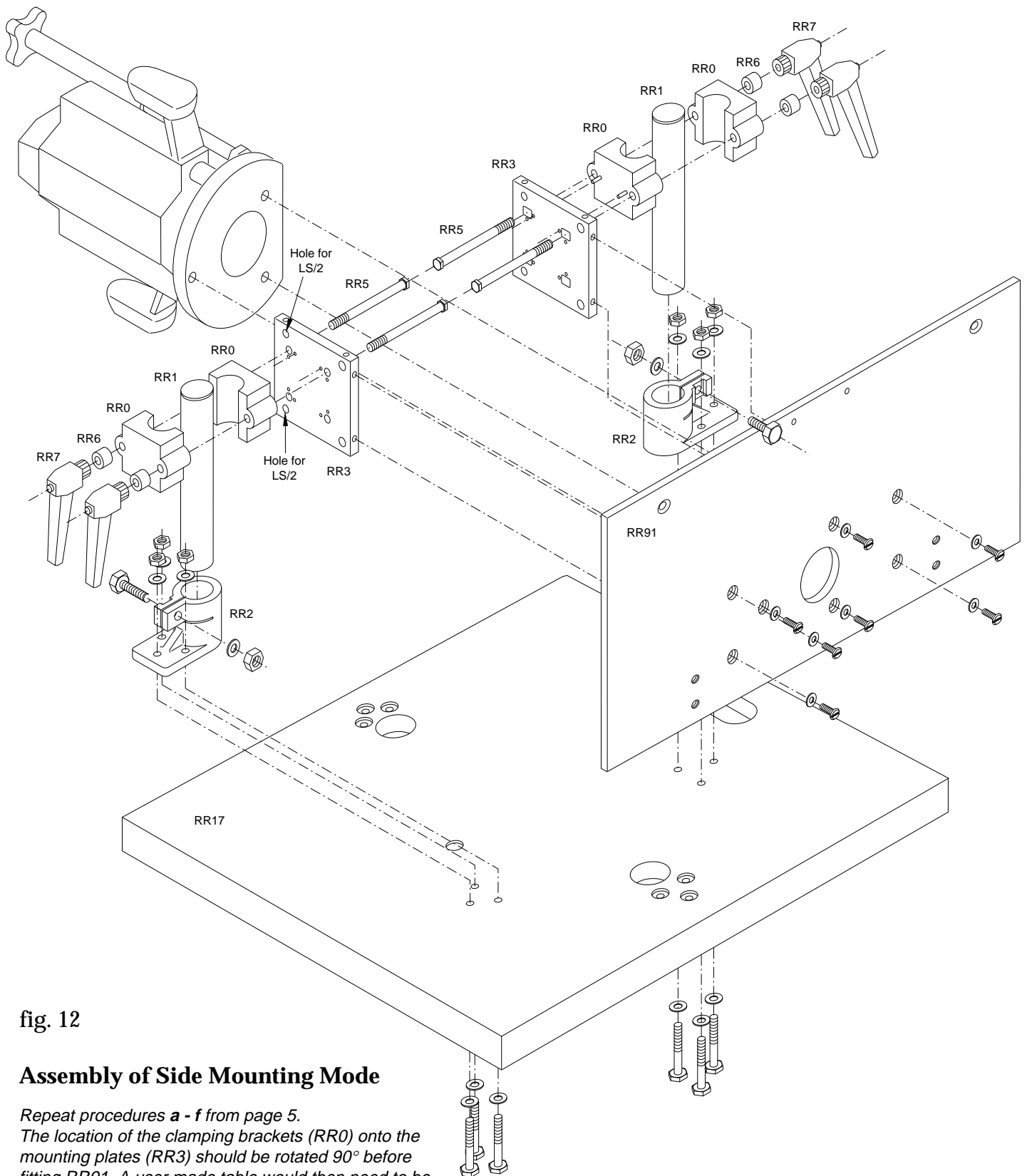


fig. 12

Assembly of Side Mounting Mode

Repeat procedures a - f from page 5.
 The location of the clamping brackets (RR0) onto the mounting plates (RR3) should be rotated 90° before fitting RR91. A user made table would then need to be made. This table could be fitted to the workboard (RR17), an aperture would need to be cut in the worktop to allow the cutter to protrude through.

**Assembly of Twin Pillars Mode
(overhead) for Elu routers**

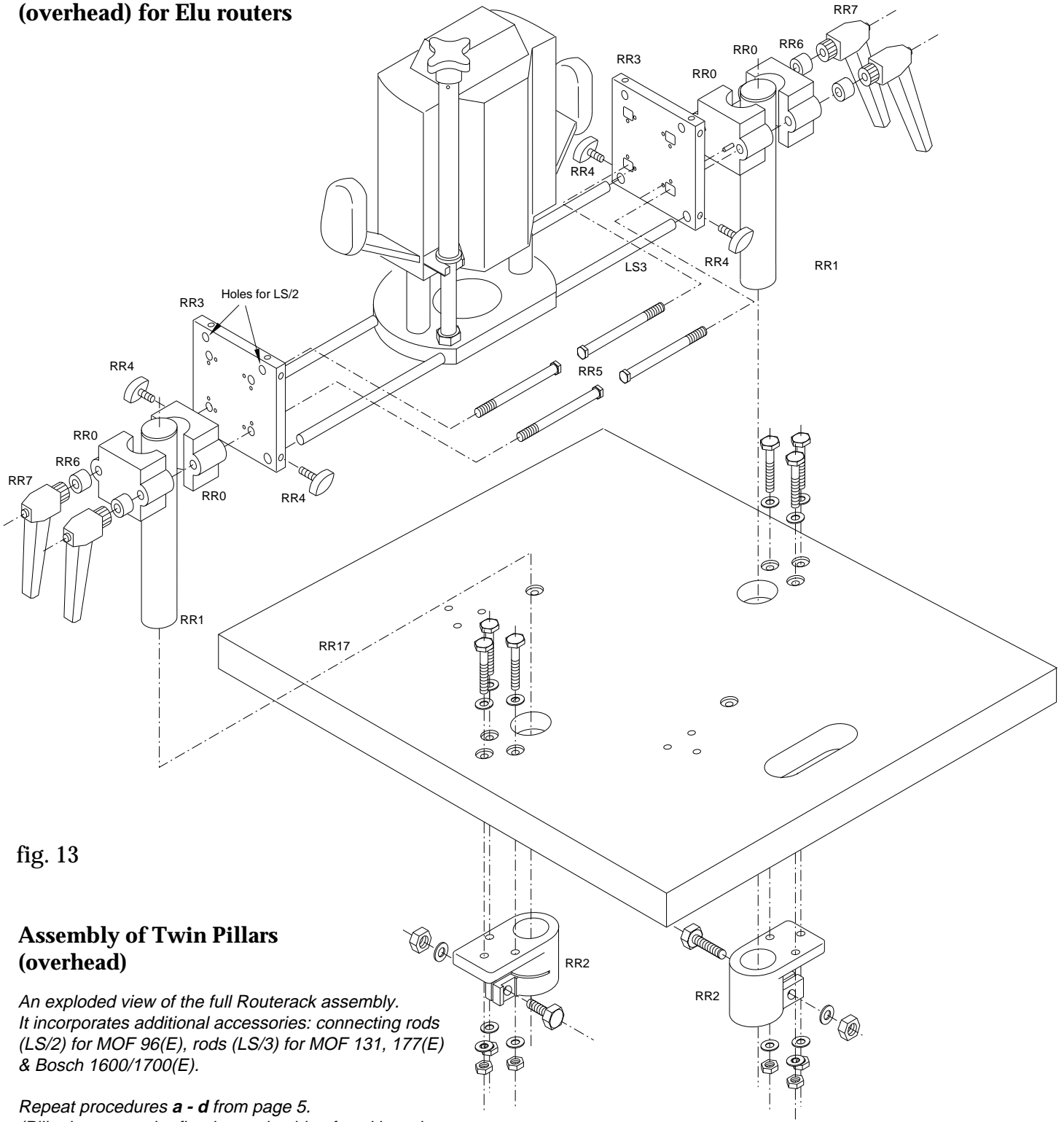


fig. 13

**Assembly of Twin Pillars
(overhead)**

An exploded view of the full Routerack assembly. It incorporates additional accessories: connecting rods (LS/2) for MOF 96(E), rods (LS/3) for MOF 131, 177(E) & Bosch 1600/1700(E).

Repeat procedures **a - d** from page 5. (Pillar bases can be fitted to underside of workboard as shown to reduce any obstruction).

- e. 1. Slide LS/2 or LS/3 through location holes on one assembly.
2. Slide bars through router.
3. Slide bars through second plate.
4. Secure with lobe knobs.
5. Adjust height of assembly to suit the application.

Tips

1. This is the ideal machining operation for forming rebates, grooves and decorative moulds on long lengths of timber. Joinery items may include door stiles, rails, transoms, mullions and jambs.
2. There is a width restriction of 480mm & height of 250mm.

**Assembly of Single Pillar Mode
for Elu routers**

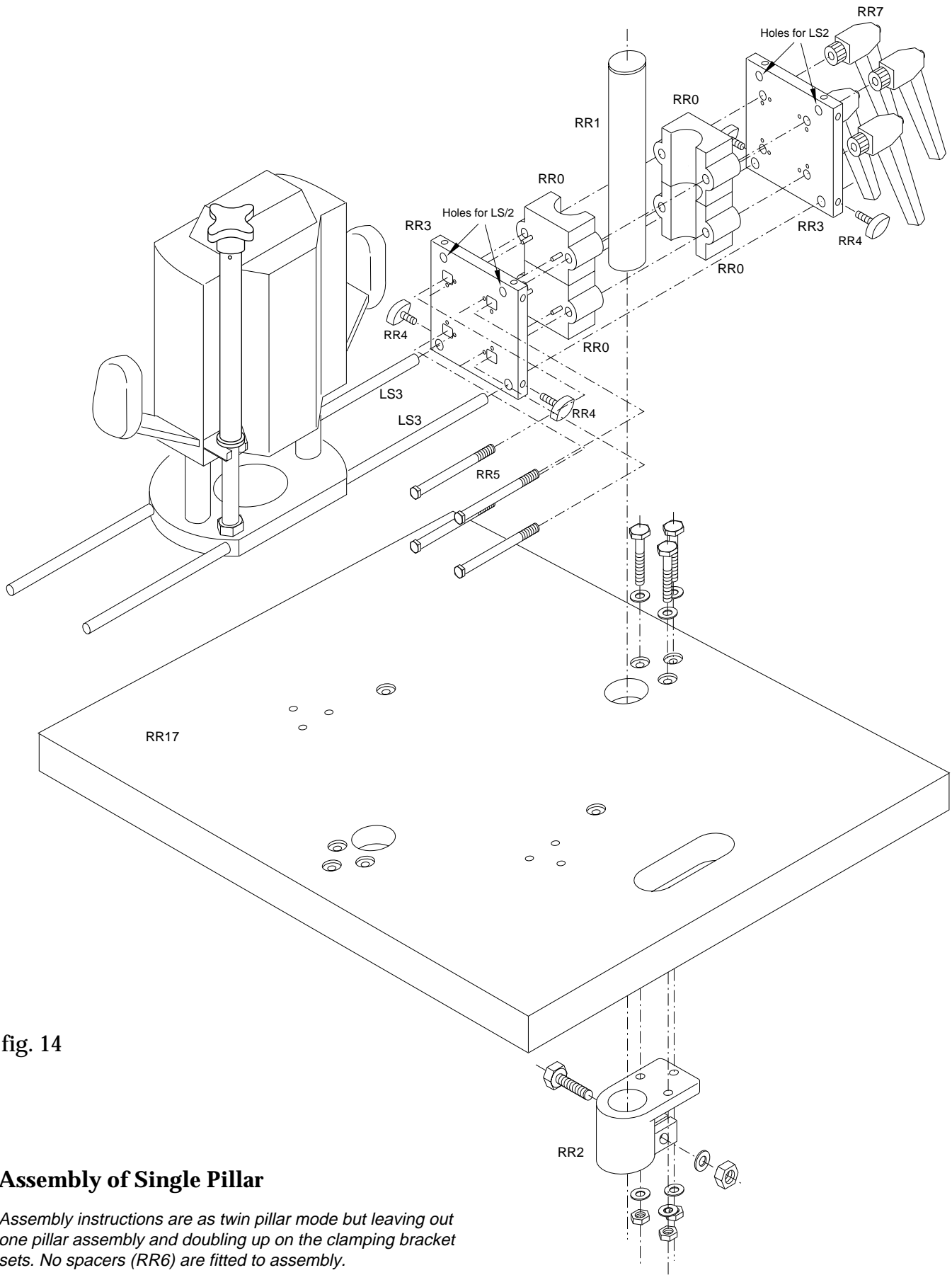


fig. 14

Assembly of Single Pillar

Assembly instructions are as twin pillar mode but leaving out one pillar assembly and doubling up on the clamping bracket sets. No spacers (RR6) are fitted to assembly.

**Assembly of Twin Pillars Mode
(overhead) for non-Elu routers
using RR9 adaptor plate**

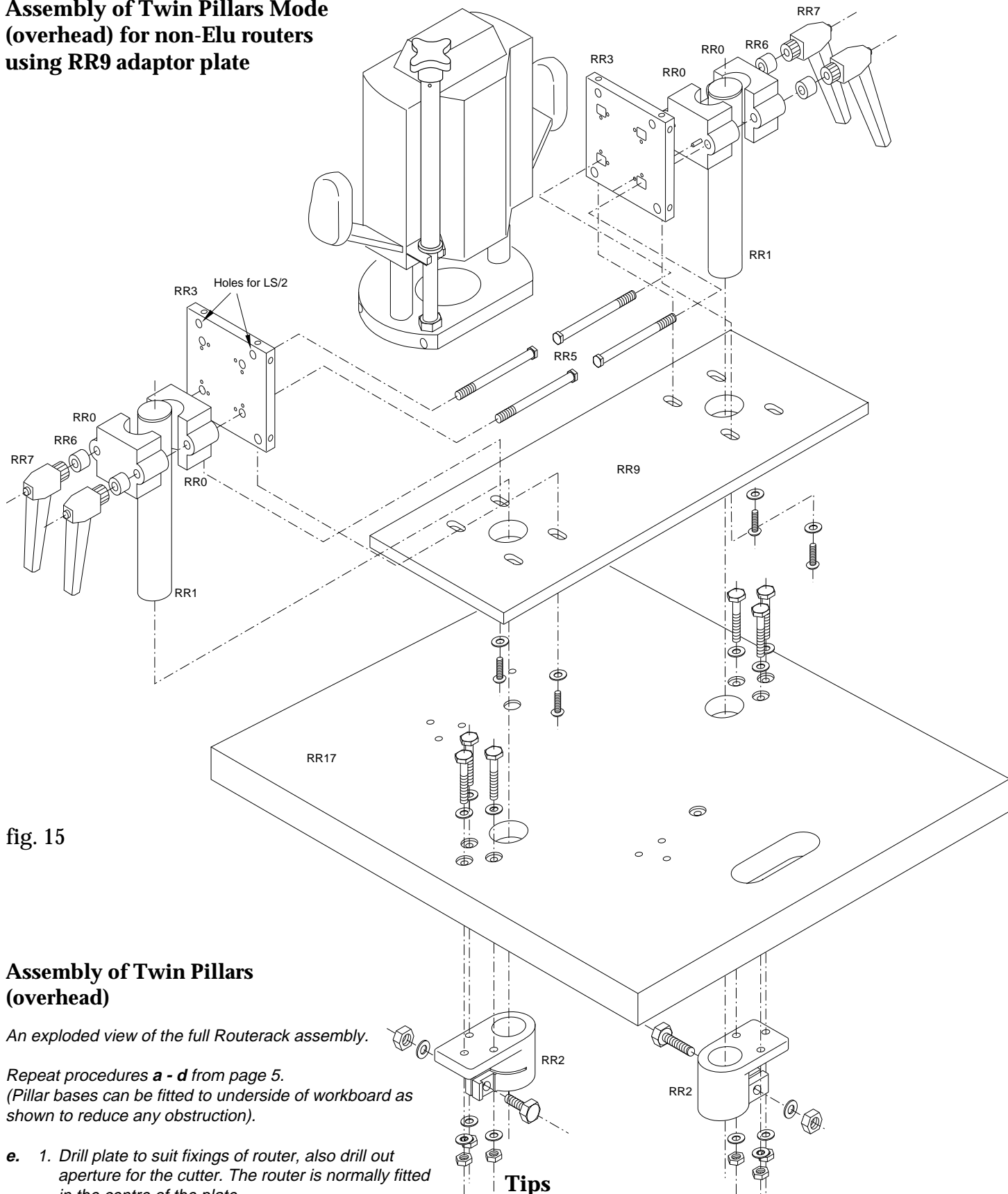


fig. 15

**Assembly of Twin Pillars
(overhead)**

An exploded view of the full Routerack assembly.

Repeat procedures **a - d** from page 5.
(Pillar bases can be fitted to underside of workboard as shown to reduce any obstruction).

- e. 1. Drill plate to suit fixings of router, also drill out aperture for the cutter. The router is normally fitted in the centre of the plate
- 2. Secure adaptor plate (RR9) to mounting plates (RR3) using M6 screws supplied, loosely tighten.
- 3. When brackets are in position tighten up screws.
- 4. Fit router to plate.

Tips

- 1. This is the ideal machining operation for forming rebates, grooves and decorative moulds on long lengths of timber. Joinery items may include door stiles, rails, transoms, mullions and jambs.
- 2. There is a width restriction of 480mm & height of 250mm.

**Assembly of Single Pillar Mode
for non-Elu routers using RR90
short adaptor plate**

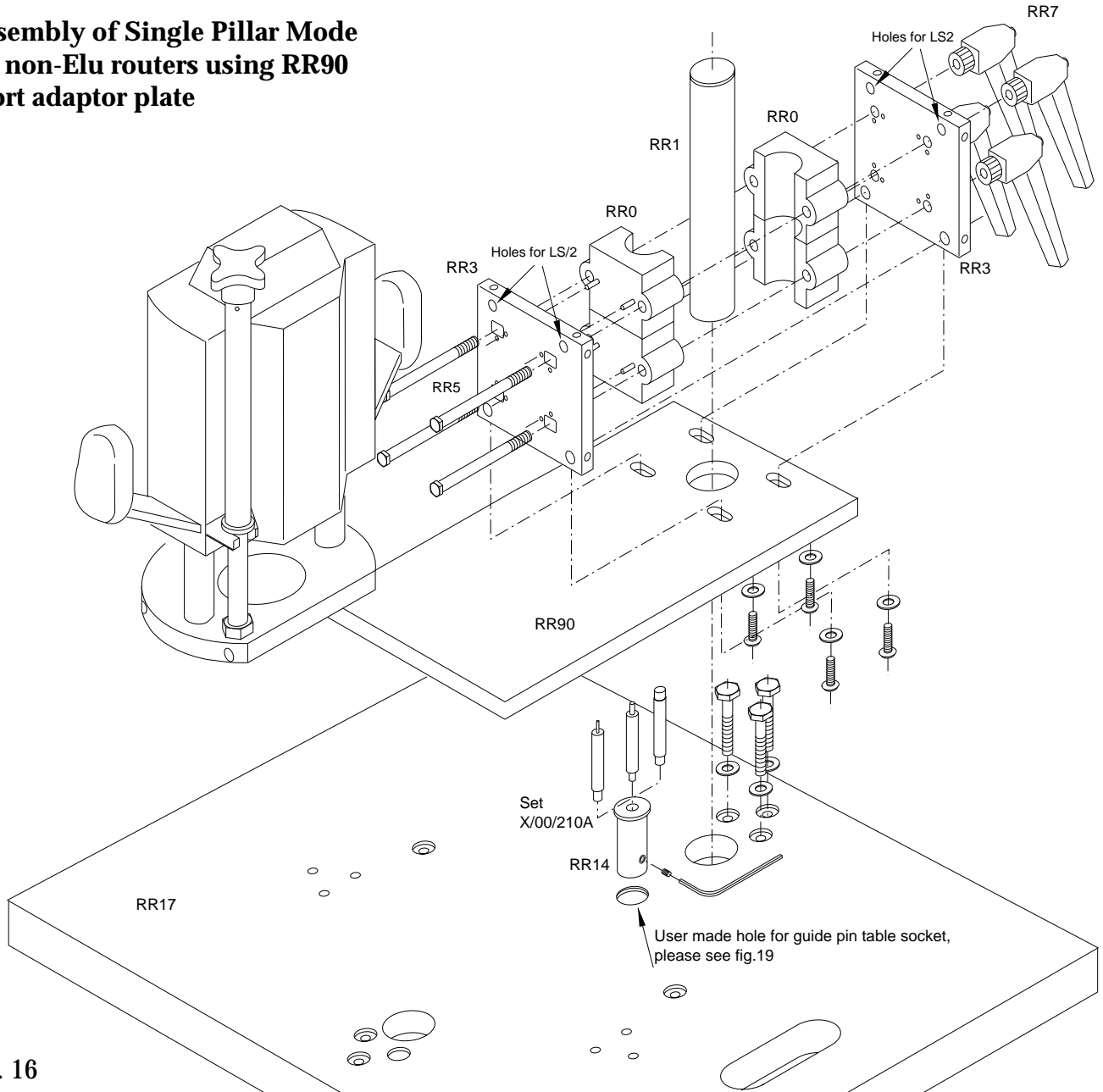
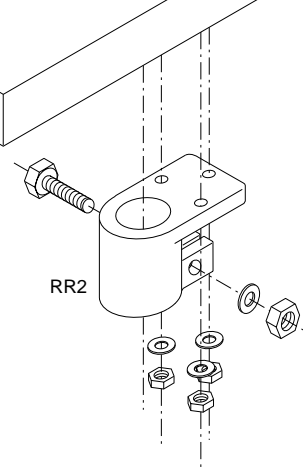


fig. 16

Assembly of Single Pillar

Assembly instructions are as twin pillar mode but leaving out one pillar assembly and doubling up on the clamping bracket sets. No spacers (RR6) are fitted to assembly.

1. Drill adaptor plate to suit fixings of router
2. Drill aperture for cutter
3. Secure plate to RR3 plates
4. Loosely tighten screws
5. Fit bracket to pillar to aid lining up of parts
6. Tighten screws of adaptor plate
7. Fit router to adaptor plate



OPTIONAL ACCESSORIES

No Volt-Release Switch - E35146 & E35147

RR17 - Workboard

E35146 = 240v
E35147 = 115v

The No Volt-Release switch provides an easy access to on/off buttons when the router is mounted in any position.

If the power should be turned off at the main source, the machine will not re-start until the start button (green) is pressed.

The 240 volt version is supplied with a socket only.
The 115 volt version is not supplied with a plug or socket.

The No-volt release switch can be secured to underside of workboard. Two self tapping pan head screws No. 10 will be required.

Socket for plug of router

Requires fitting with appropriate plug & fuse for connecting to mains supply.

fig. 17

Long Pillar Bars - RR13 & RR130, 90° Cast Bracket - RR11 & Swivel Ring Kit RR19

RR130 - 1000mm

RR13 - 500mm

RR19

RR11

The 500mm pillar bar (RR13) and 90° cast bracket (RR11), can be added to the Routerack to support your router when a long reach is required.

The RR11 permits routers to be mounted at various angles. It also provides the means of mounting a bridging bar across two vertical pillars, thus creating unlimited throat for tools when mounted centrally.

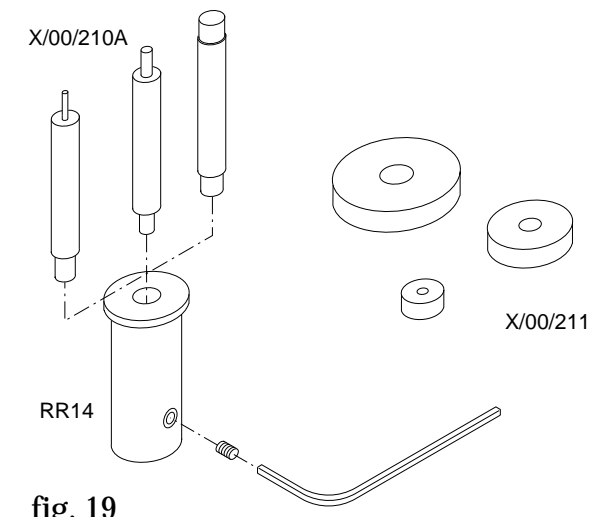
The extra long pillar bar (RR130) is used with the sliding runner set.

The swivel ring kit (RR19) slides onto pillar bars and is used to support RR11 when swivelling the beam trammel.

fig. 18

OPTIONAL ACCESSORIES - cont.

Guide Pin and Bush Sets



The diagram shows the assembly of a guide pin table socket (RR14) with a copy pin (X/00/210A) and a guide bush (X/00/211). The socket is shown being inserted into a hole in a workboard. The copy pin is inserted into the socket and secured with a set screw. The guide bush is shown being inserted into the socket. The diagram is labeled 'fig. 19'.

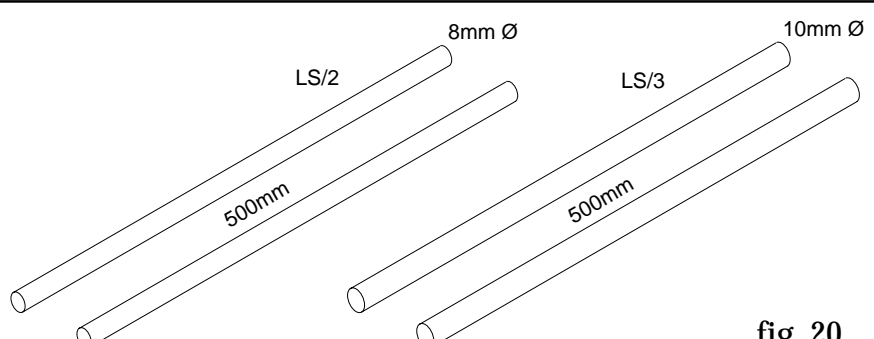
Assembly Instructions

The guide pin table socket (RR14) includes a standard pin 2mm/6mm. The socket is fitted into the workboard beneath the collet of the router. The workboard must be drilled with a 25mm diameter hole. The hole must be rebated to accept the flange of the socket. Please ensure that access to the set screw is maintained when fitting. The copy pin is fitted into the socket and secured at the suitable height by tightening the set screw with the allen key supplied.

The guide pin set (X/00/210A) allows a greater variety of copy pin sizes. The pins are fitted into the socket as previously described.

The guide bush set (X/00/211) have varying diameters and allow larger diameter cutters to be used for copy pin work. The cutter diameter should equal the bush diameter. The bushes fit onto the 6mm copy pin supplied with the RR14 socket.

Fence Rods - LS/2 and LS/3

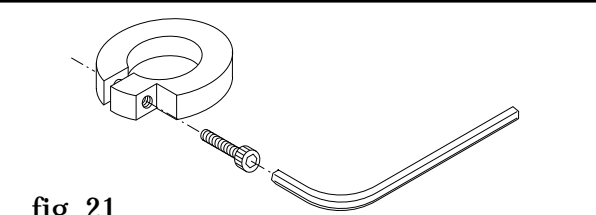


The diagram shows two sets of fence rods. The first set, labeled LS/2, consists of two rods with a diameter of 8mm and a length of 500mm. The second set, labeled LS/3, consists of two rods with a diameter of 10mm and a length of 500mm. The diagram is labeled 'fig. 20'.

Assembly Instructions

The LS/2 rods are for use with the Elu MOF 96(E) router and LS/3 are for use with the Elu MOF 131, 177(E) routers. The rods go through the router base and into the RR3 plates. The rods are secured by RR4 knobs.

Swivel Ring Kit - RR19

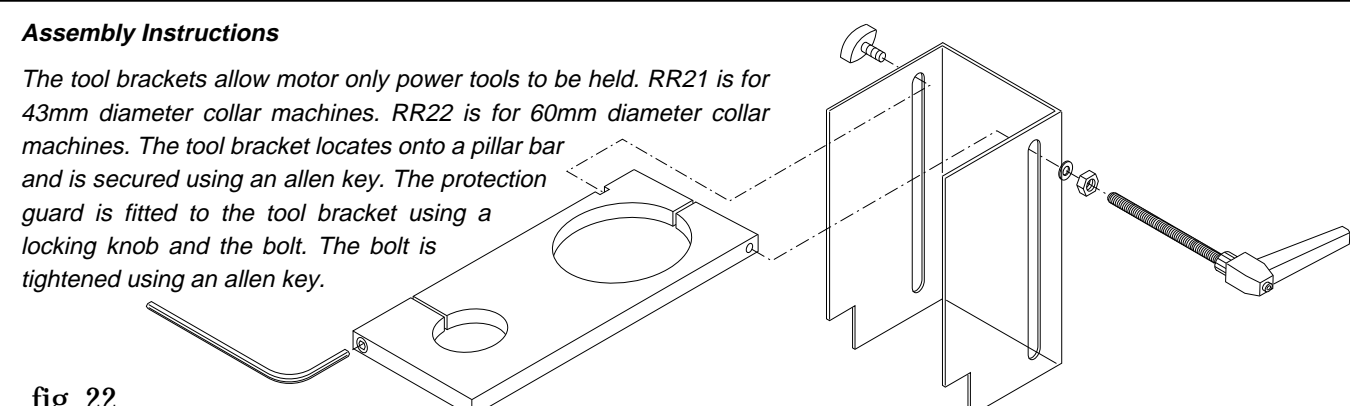


The diagram shows a swivel ring kit (RR19) being assembled onto a routerack pillar bar. The ring is shown sliding onto the bar and being secured with an allen key. The diagram is labeled 'fig. 21'.

Assembly Instructions

Ring slides onto routerack pillar bars. The ring is secured into position by tightening the allen key supplied. Please do not overtighten. The swivel ring kit is used in conjunction with the RR11 90° cast bracket.

Tool Brackets - RR21 & RR22, Protection Guard - RR23

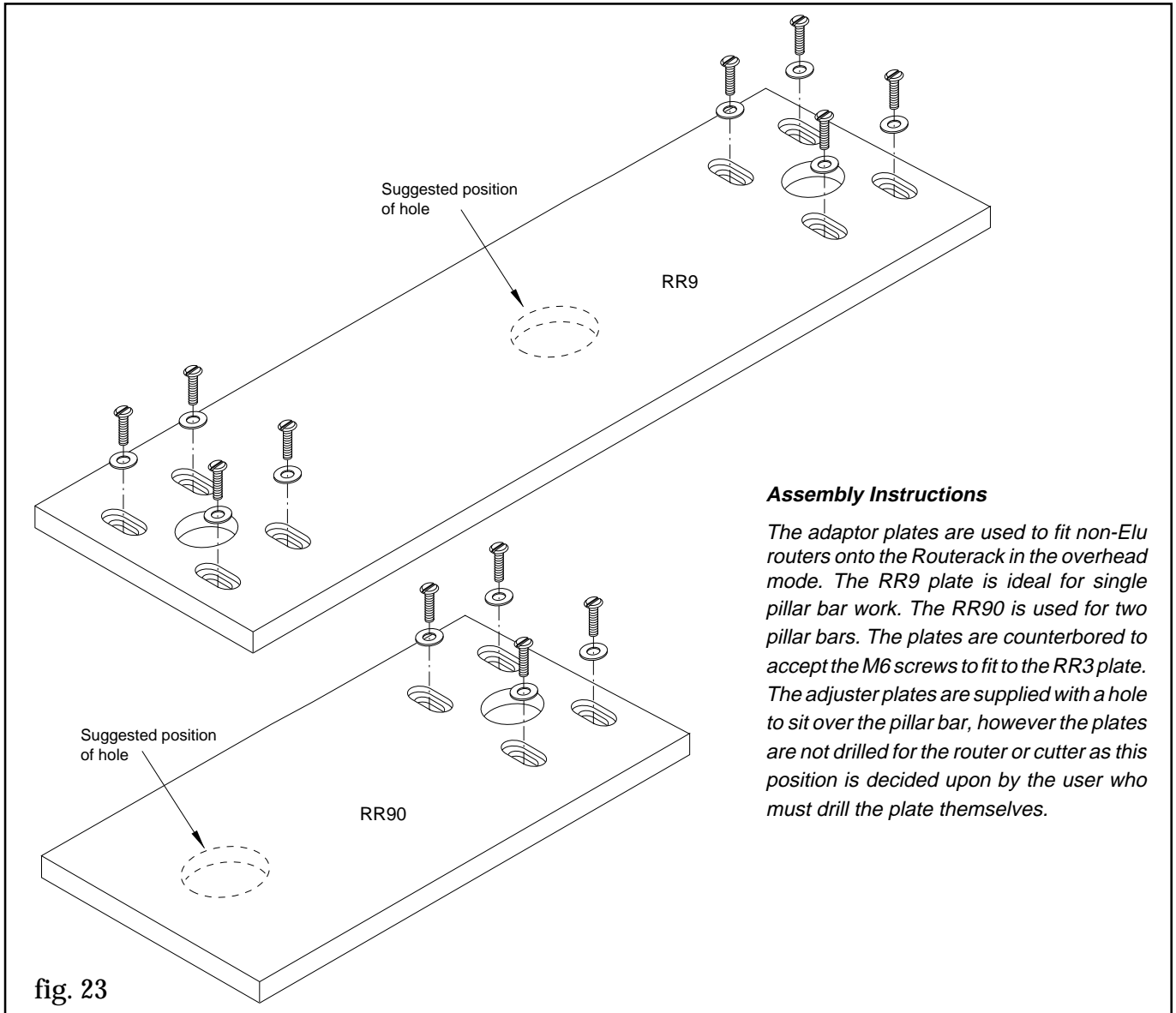


The diagram shows the assembly of a tool bracket (RR21 or RR22) and a protection guard (RR23). The tool bracket is shown being inserted into a pillar bar and secured with an allen key. The protection guard is shown being fitted to the tool bracket using a locking knob and a bolt. The bolt is tightened using an allen key. The diagram is labeled 'fig. 22'.

Assembly Instructions

The tool brackets allow motor only power tools to be held. RR21 is for 43mm diameter collar machines. RR22 is for 60mm diameter collar machines. The tool bracket locates onto a pillar bar and is secured using an allen key. The protection guard is fitted to the tool bracket using a locking knob and the bolt. The bolt is tightened using an allen key.

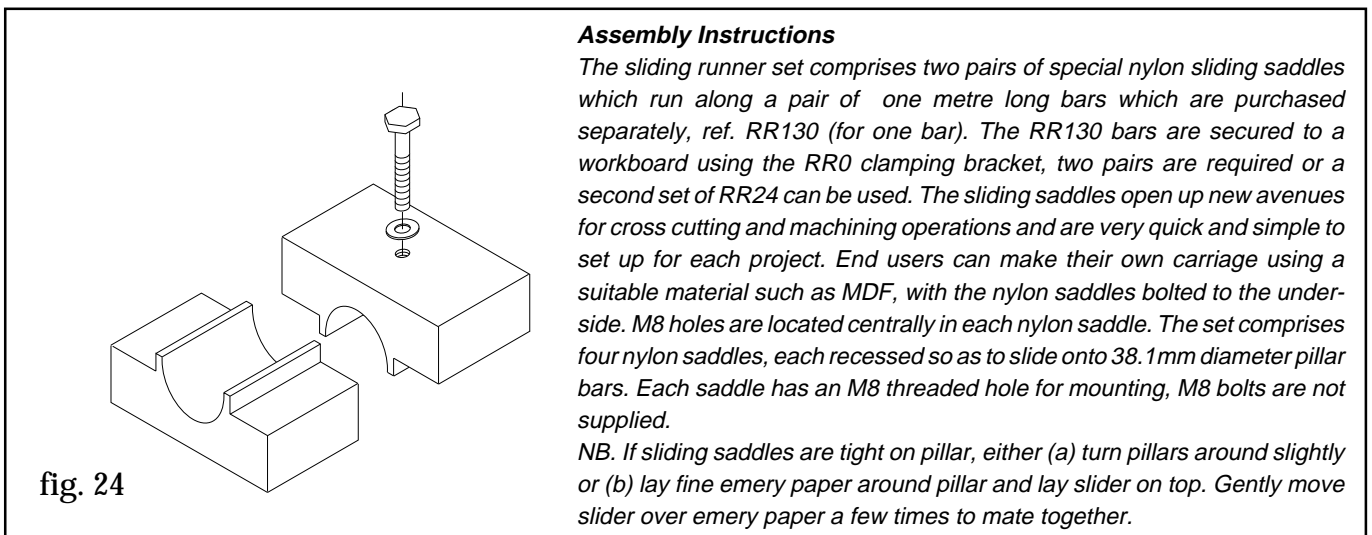
Adaptor Plates - RR9 and RR90



Assembly Instructions

The adaptor plates are used to fit non-Elu routers onto the Routerack in the overhead mode. The RR9 plate is ideal for single pillar bar work. The RR90 is used for two pillar bars. The plates are counterbored to accept the M6 screws to fit to the RR3 plate. The adjuster plates are supplied with a hole to sit over the pillar bar, however the plates are not drilled for the router or cutter as this position is decided upon by the user who must drill the plate themselves.

Sliding Runner Set - RR24



Assembly Instructions

The sliding runner set comprises two pairs of special nylon sliding saddles which run along a pair of one metre long bars which are purchased separately, ref. RR130 (for one bar). The RR130 bars are secured to a workboard using the RR0 clamping bracket, two pairs are required or a second set of RR24 can be used. The sliding saddles open up new avenues for cross cutting and machining operations and are very quick and simple to set up for each project. End users can make their own carriage using a suitable material such as MDF, with the nylon saddles bolted to the underside. M8 holes are located centrally in each nylon saddle. The set comprises four nylon saddles, each recessed so as to slide onto 38.1mm diameter pillar bars. Each saddle has an M8 threaded hole for mounting, M8 bolts are not supplied.

NB. If sliding saddles are tight on pillar, either (a) turn pillars around slightly or (b) lay fine emery paper around pillar and lay slider on top. Gently move slider over emery paper a few times to mate together.

**Alternative Modes using:
Long Pillar Bar
90° Cast Brackets**

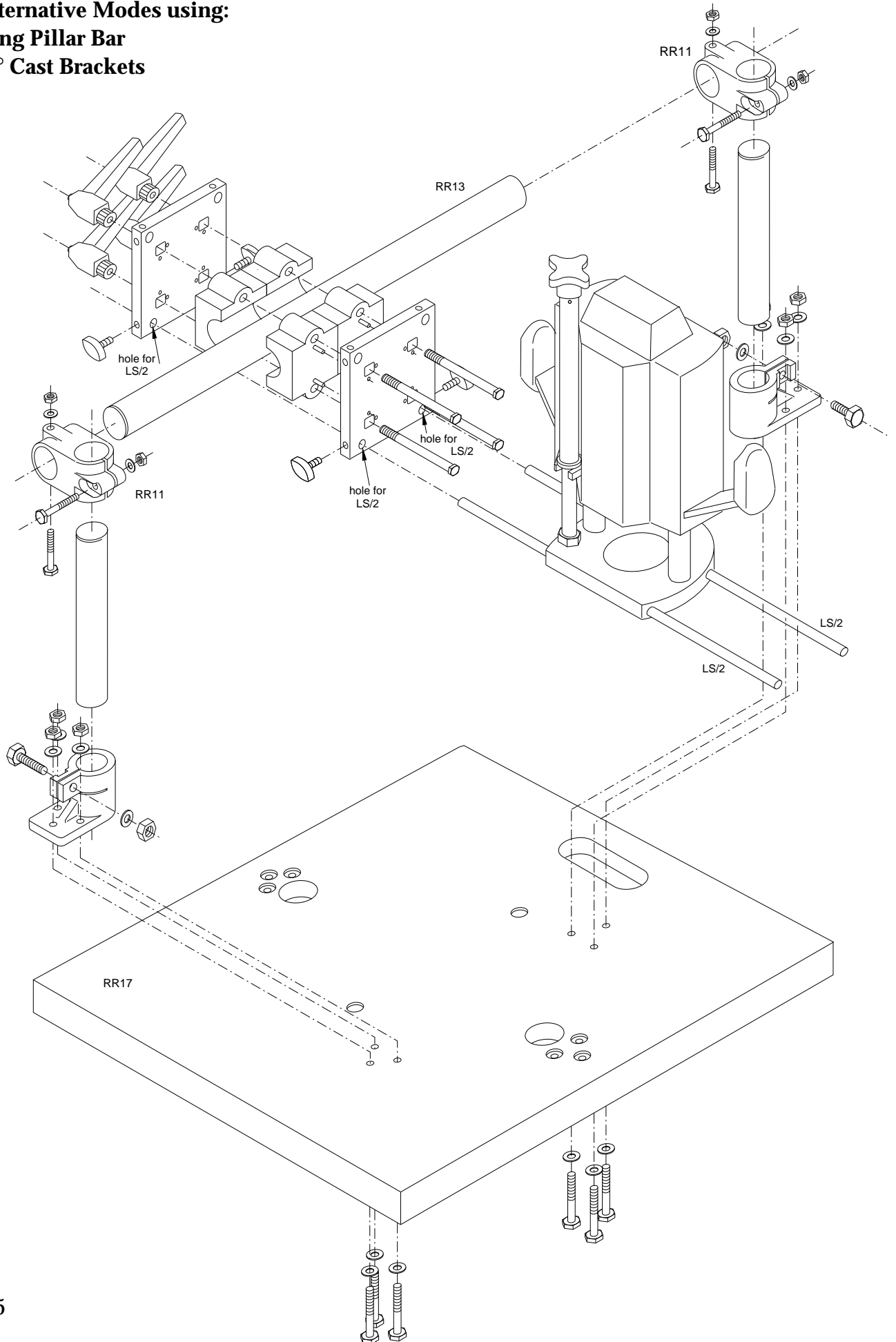


fig. 25

**Alternative Modes using:
Long Pillar Bar
90° Cast Brackets
Swivel Ring Kit**

The Swivel Ring Kit enables the router to be pivoted around 360° for radial cutting, drilling etc. The swivel ring is locked below the 90° bracket (RR11) which is only lightly tightened so that the trammel work can be undertaken.

Please note:

The nuts and washers of RR11 have been exchanged with knobs (RR7) to allow quick adjustment of height and length of trammel.

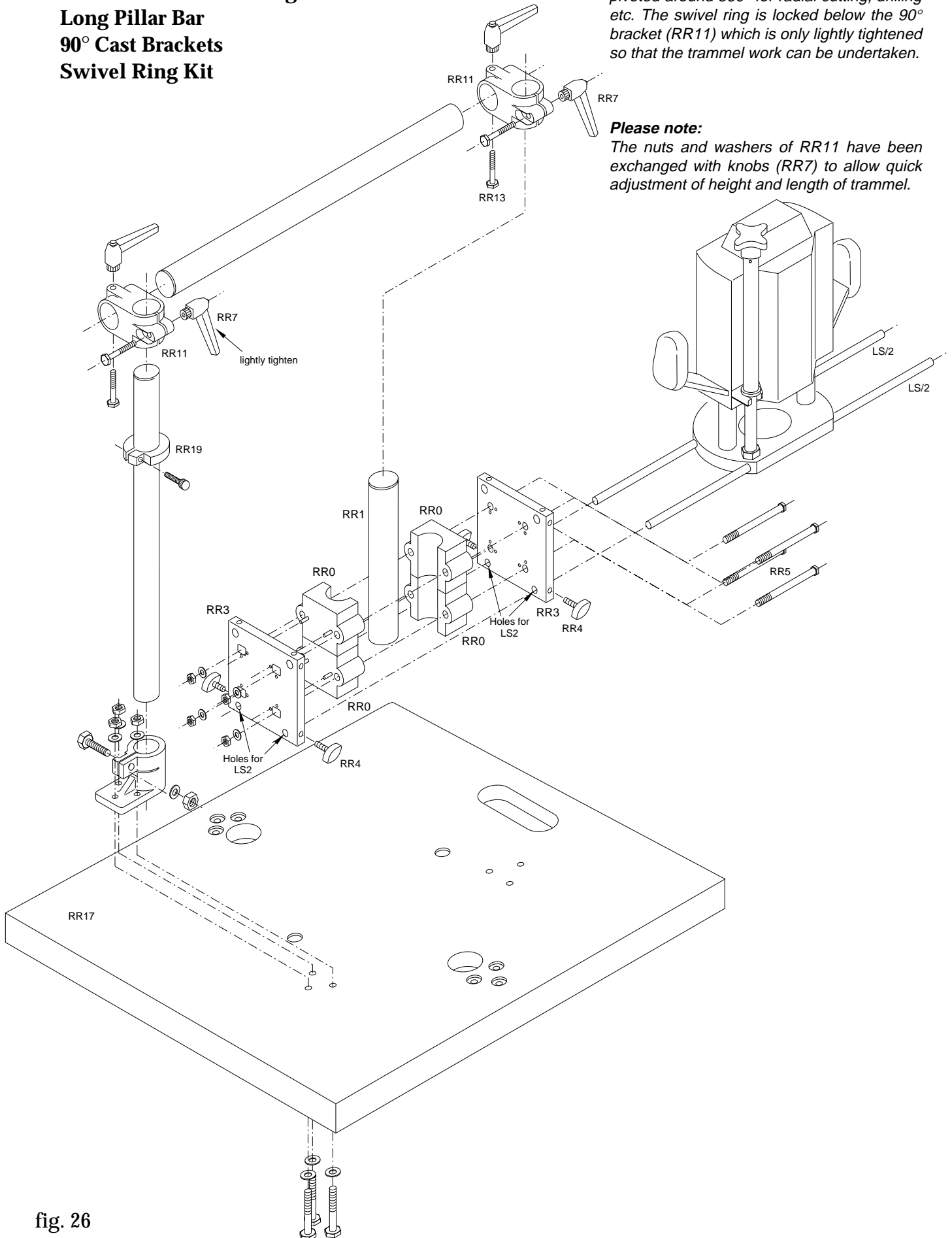


fig. 26

**Alternative Modes using:
Long Pillar Bar
90° Cast Brackets
Swivel Ring Kit
Tool Bracket**

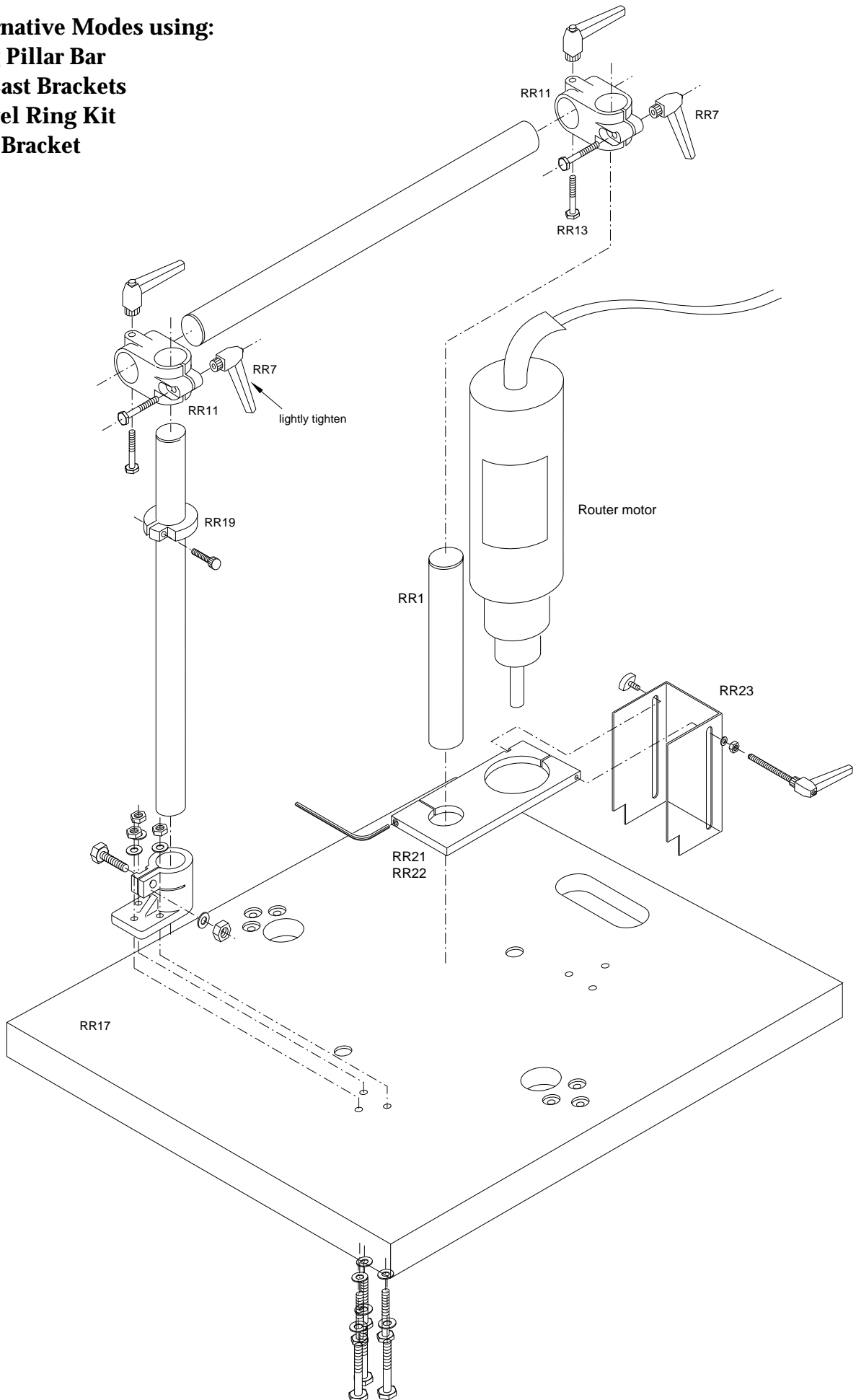


fig. 27

**Alternative Modes using:
Extra Long Pillar Bar
90° Cast Brackets
Swivel Ring Kit
Sliding Runner Set**

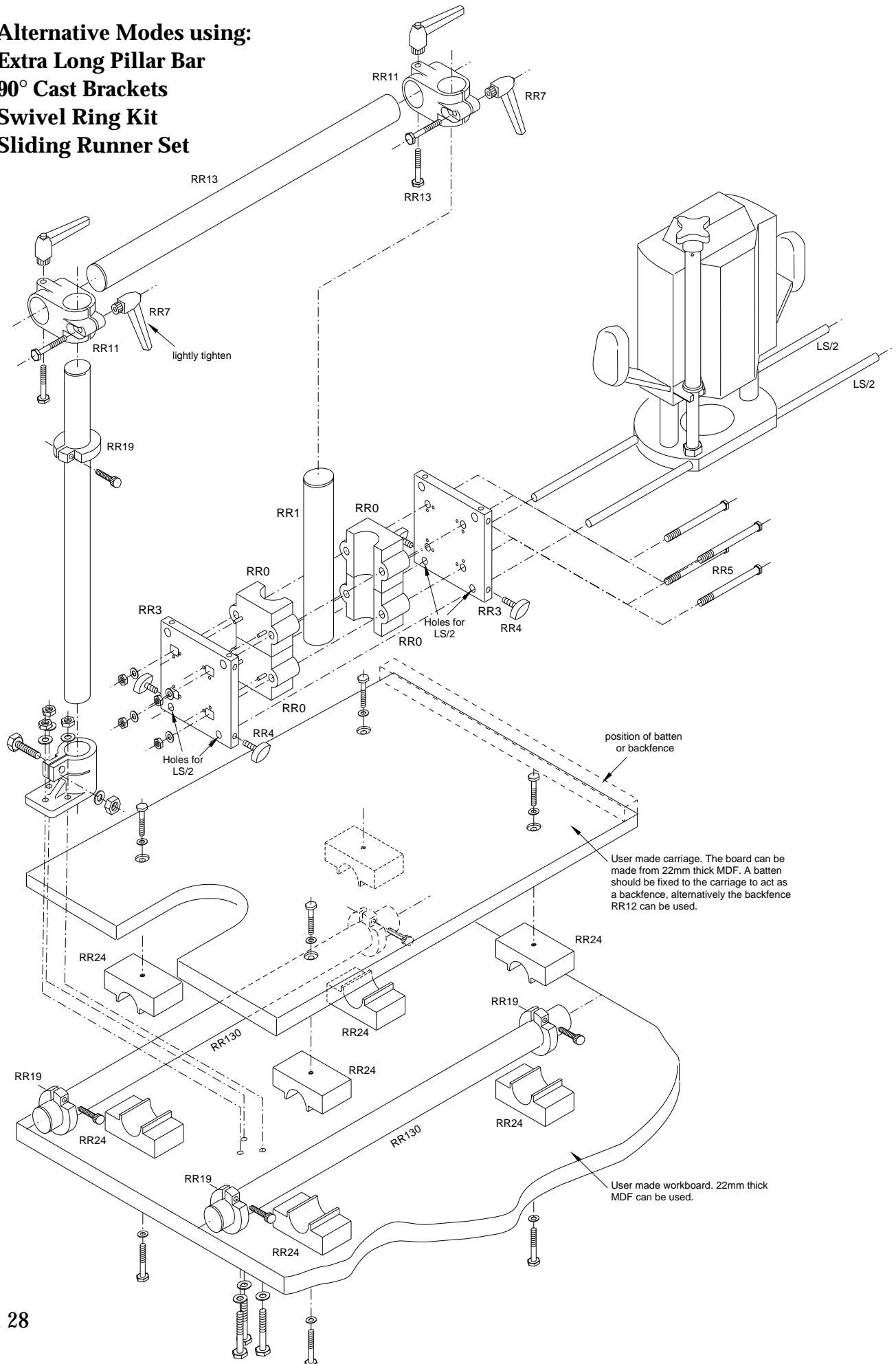


fig. 28