

# trend T12 Heavy Duty Variable Speed Site Plunge Router Instructions

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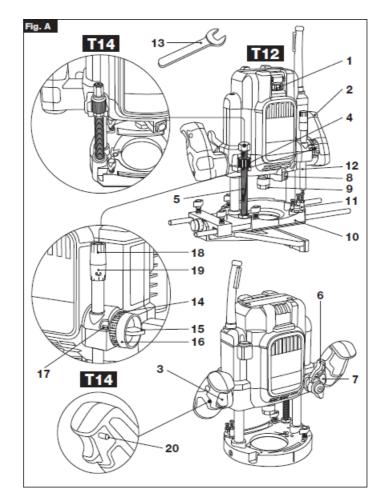


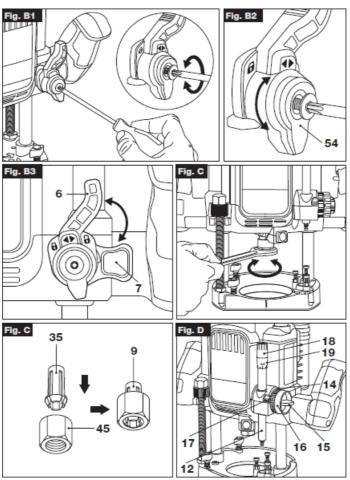
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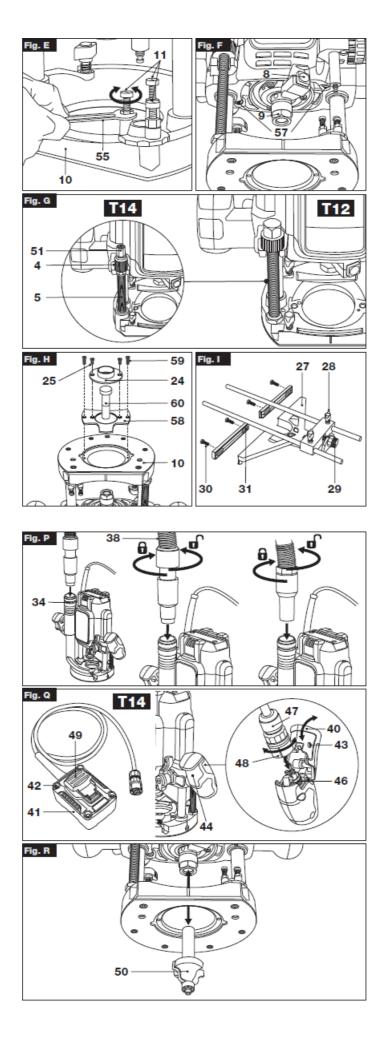
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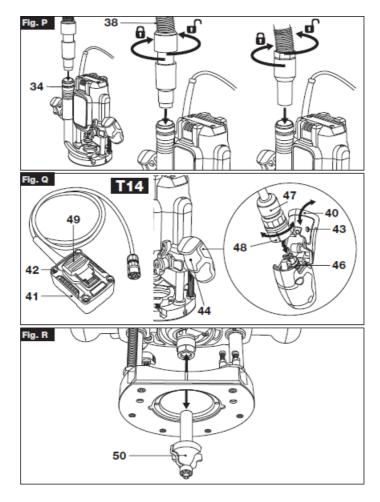
T12 Heavy Duty Variable Speed Site Plunge Router

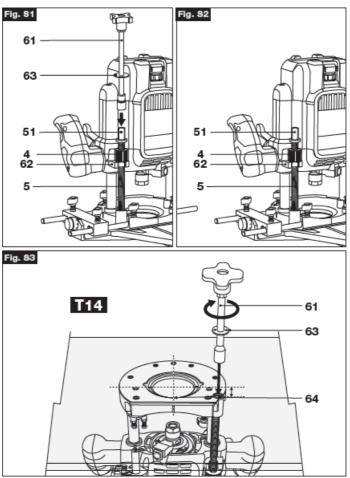












Thank you for purchasing this Trend product, we hope you enjoy many years of creative and productive use. Please remember to return your guarantee card within 28

# **TECHNICAL DATA**

	1		1	
		T12EL	T12E	T14E
Voltage	V AC	115	230	230
Туре		1	1	1
Power input	W	2100	2300	2300
No load speed	min 1	9000	9000	9000
Router carriage	mm	2 column	2 column	2 column
Max cutter diameter (Portable Router)	mm	50	50	50
Max cutter diameter in table	mm	50	50	86
Collet size for Europe	mm	_	12	12
Collet size for UK and ROI	inch	1/2	1/2	1/2
Weight	kg	6.4	6.4	6.5
Noise values and vibration values (triax vector sum) according to EN62841 2 17:				
LPA (emission sound pressure level)	dB(A)	94.2	95.1	95.1
LWA (sound power level)	dB(A)	105.2	106.1	106.1

K (uncertainty for the given sound level)	dB(A)	2.5	2.5	2.5
Vibration emission value ah,hv =	m/s2	4.1	3.1	3.1
Uncertainty K =	m/s2	0.31	0.31	0.31

The vibration and/or noise emission level given in this information sheet has been measured in accordance with a standardised test given in EN62841 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.

**WARNING:** The declared vibration and/or noise emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration and/or noise emission may differ. This may significantly increase the exposure level over the total working period.

An estimation of the level of exposure to vibration and/or noise should also take into account the times when the

tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Identify additional safety measures to protect the operator from the effects of vibration and/or noise such as: maintain the tool and the accessories, keep the hands warm (relevant for vibration), organisation of work patterns.

# EC DECLARATION OF CONFORMITY MACHINERY DIRECTIVE

#### T12E & T14E

Plunge Router

Trend Tool Technology Ltd declares that these products described under Technical Data are in compliance with: 2006/42/EC, EN 62841-1:2015 + AC:2015; EN 62841-2-17:2017.

These products also comply with Directive 2014/30/EU and 2011/65/EU. For more information, please contact Trend Tool Technology Ltd at the following address or refer to the back of the manual.

The undersigned is responsible for compilation of the technical file and makes this declaration on behalf of Trend Tool Technology Ltd

Trend Tool Technology Ltd Unit 6 Odhams Trading Estate St Albans Road, Watford Herts, WD24 7TR United Kingdom 01/11/21

Neil McMillan Technical Director

# **Technical File Contact**

Trend Tool Technology Ltd 3rd Floor, Kilmore House, Park Lane, Spencer Dock, Dublin 1, Ireland

01/11/21

UK DECLARATION OF CONFORMITY THE SUPPLY OF MACHINERY (SAFETY) REGULATIONS 2008

# T12E & T14E Plunge Router

Trend Tool Technology Ltd declares that these products described under "technical data" are in compliance with: The Supply of Machinery (Safety) Regulations, 2008, S.I. 2008/1597 (as amended), BS EN 62841-1:2015 + AC:2015; BS EN 62841- 2-17:2017.

These products conform to the following UK Regulations Electromagnetic Compatibility Regulations, 2016, S.I.2016/1091 (as amended).

The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012, S.I. 2012/3032 (as amended). For more information, please contact Trend Tool Technology Ltd at the following address or refer to the back of the manual.

The undersigned is responsible for compilation of the technical file and makes this declaration on behalf of Trend Tool Technology Ltd.

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01/11/21

WARNING: To reduce the risk of injury, read

the instruction manual.

Definitions: Safety Guidelines

The definitions below describe the level of severity for each signal word. Please read the manual and pay

attention to these symbols.

DANGER: Indicates an imminently hazardous

situation which, if not avoided, will result in death or serious injury.

WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE: Indicates a practice not related to personal injury which, if not avoided, may result in

property damage.

Denotes risk of electric shock.

Denotes risk of fire.











## **GENERAL POWER TOOL SAFETY** WARNINGS

WARNING: Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

# SAVE ALL WARNINGS AND **INSTRUCTIONS FOR FUTURE REFERENCE**

The term "power tool" in the warnings refers to your mains- operated (corded) power tool or battery-operated (cordless) power tool.

- 1) Work Area Safety
- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.
- 2) Electrical Safety
- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord for

carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.
- 3) Personal Safety
- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.
- h) Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.
- 4) Power Tool Use and Care
- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

 c) Disconnect the plug from the powersource and/ or the battery pack, if detachable, from the power tool before making any adjustments, changing

accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits, etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- h) Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.
- 5) Service
- a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Safety Instructions for Routers

- a) Hold the power tool by insulated gripping surfaces only, because the cutter may contact its own cord. Cutting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electrical shock.
- b) Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by your hand or against the body leaves it unstable and may lead to loss of control.
- c) Keep handles dry, clean and free from oil and grease. This will enable better control of the tool.
- d) Maintain a firm grip with both hands on the tool to resist starting torque. Maintain a firm grip on the tool at all times while operating.
- e) Keep hands away from cutting area above and below the base. Never reach under the workpiece for any reason. Keep the router base firmly in contact with the workpiece when cutting.

may be extremely hot.

g) Be sure that the motor has stopped completely before you lay the router down. If the bit is still spinning when the tool is laid down, it could cause injury or damage.

- h) Be sure that the router bit is clear of the workpiece before starting the motor. If the bit is in contact with the workpiece when the motor starts, it could make the router jump, causing damage or injury.
- i) The permitted speed of the cutting bit must be at least equal to the maximum speed marked on the power tool. If cutting bits run faster than their rated speed, they may break and fly off.
- j) Always follow the bit manufacturer's speed recommendations as some bit designs require specific speeds for safety or performance. If you are unsure of the proper speed or are experiencing any type of problem, contact the bit manufacturer.
- k) Do not use cutters larger than 50 mm (2") unless the router is fitted in a router table.

Do not use cutters larger than 86 mm (3 3/8") in this tool.

**RESIDUAL RISKS** 

WARNING: We recommend the

use of a residual current device with

a residual current rating of 30mA or

less.

In spite of the application of the relevant safety

regulations and the implementation of safety devices,

certain residual risks cannot be avoided. These are:

- · Impairment of hearing.
- Risk of personal injury due to flying particles.
- Risk of burns due to accessories becoming hot during operation.
- Risk of personal injury due to prolonged use.

#### SAVE THESE INSTRUCTIONS

**Electrical Safety** 

The electric motor has been designed for one voltage

only. Always check that the power supply corresponds to

the voltage on the rating plate.

Your tool is double insulated in accordance with

EN62841; therefore no earth wire is required.

115V machines are intended to be used with a safety

transformer manufactured to BS EN 61558 and

BS 4343. Never work without this transformer in place.

If the supply cord is damaged, it must be replaced only by Trend Tool Technology Ltd or an authorised service organisation.

Mains Plug Replacement (U.K. & Ireland Only)

If a new mains plug needs to be fitted:

- · Safely dispose of the old plug.
- Connect the brown lead to the live terminal in the plug.
- Connect the blue lead to the neutral terminal.

WARNING: No connection is to be made to

the earth terminal. Follow the fitting instructions supplied with good quality plugs. Recommended fuse for 230V

U.K. plug: 13 A.

Fitting a Mains Plug to 115 V Units

(U.K. and Ireland Only)

• The plug fitted should comply with BS EN 60309

(BS4343), 32 Amps.

WARNING: Always ensure that the cable

clamp is correctly and securely fitted to the sheath of the cable.

Using an Extension Cable

An extension cord should not be used unless absolutely if an extension cable is required, use an approved 3–core extension cable suitable for the power input of this tool (see Technical Data). The minimum conductor size is 1.5 mm2; the maximum length is 30m.

When using a cable reel, always unwind the cable completely.

#### PACKAGE CONTENT

- 1 x Router
- 1 x Collet 1/2" UK & ROI (12mm EU)
- 1 x Parallel fence
- 2 x Guide rods
- 1 x Guide bush (30mm)
- 1 x 22 mm wrench
- 1 x SA Dust extraction tube
- 1 x Remote Switch Box (T14 only)
- 1 x Instruction manual
- 1 x Fine height adjuster (T14 only)
- Check for damage to the tool, parts or accessories which may have occurred during transport.
- Take the time to thoroughly read and understand this manual prior to operation.

MARKINGS ON TOOL

The following pictograms are shown on the tool:

Read instruction manual before use.

Wear ear protection.

Wear eye protection.

Visible radiation. Do not stare into light.

Date Code Position – (Fig. A)

The date code (56), which also includes the year of manufacture, is printed into the housing.

Example:

2021 XX XX

Year and Week of Manufacture

Description – (Fig. A)

WARNING: Never modify the power tool or

any part of it. Damage or personal injury could result.

- 1. Speed control wheel
- 2. Main handles
- 3. On/off trigger switch
- 4. Thumb wheel
- 5. Height stop rod
- 6. Plunge lock lever
- 7. Quick release button
- 8. Spindle lock button
- 9. Collet assembly

- 10. Base plate
- 11. Multiple position turret stop
- 12. Depth stop bar
- 13. 22 mm wrench
- 14. Quick zero reset ring
- 15. Quick height adjuster lock
- 16. Quick height adjuster
- 17. Pointer
- 18. Fine adjuster
- 19. Fine zero reset ring
- 20. Lock on button switch

Intended Use

The T12 and T14 routers have been designed for professional heavy duty routing of wood, wood based materials and plastics.

These routers are intended for routing grooves, edges, profiles and slots as well as copy routing.

DO NOT use under wet conditions or in the presence of flammable liquids or gases.

The T12 and T14 are professional power tools.

The T14 is designed so that it can be installed into a router table. The router may only be installed in tables that meet the legal safety requirements for router tables. DO NOT let children come into contact with the tool. Supervision is required when inexperienced operators use this tool.

- Young children and the infirm. This appliance is not intended for use by young children or infirm persons without supervision.
- This product is not intended for use by persons (including children) suffering from diminished physical, sensory or mental abilities; lack of experience, knowledge or skills unless they are supervised by a person responsible for their safety. Children should never be left alone with this product.

CAUTION: Before operating any of the controls, read the following sections.

Plunge Lock Lever – (Fig. B)

The plunge lock lever (6) allows you to stop the working bit at a specified height.

- 1. Press down the plunge lock lever (6) until you hear an audible "Click" when you want to lower the router bit into the workpiece.
- 2. You can lower the unit until it reaches your preset stop.
- 3. To lock the tool in place along its vertical travel, press quick release button (7).

Collets - (Fig. C)

WARNING: Projectile hazard. Only use bits with shanks that match the installed collet. Smaller shank bits will not be secure and could become loose during operation.

CAUTION: Never tighten the collet without first installing a router bit in it. Tightening an empty collet, even by hand, can damage the collet.

A collet is included with this router.

12 mm: Europe1/2": UK & Eire

- 1. To change collets (35), unscrew the collet assembly (9)
- 2. Sharply pull the old collet out of the collet nut (45) and insert the new collet (35).
- 3. Push firmly so that the new collet snaps past the retainer spring in the collet nut.

Multiple Position Turret Stop – (Fig. E)

WARNING: Do not change the turret stop

while the router is running. This will place your hands too near the cutter head.

The turret stop (11) limits the downward distance that the tool can be plunged. It consists of three screws of

different lengths that serve to define the depth of cut by limiting the travel of the depth stop bar (12).

- 1. Routing depth can be set by selecting the screw of the appropriate length on the turret.
- 2. The turret is rotatable with detent stops to properly align the screws.
- 3. It is the interaction of the depth stop bar and the turret stop that determine the routing depth.
- 4. If none of the provided screws seems close to the desired height each can be adjusted by loosening the hex nut at the bottom and then turning the screw either in or out to make it the proper length. After adjusting this screw be sure to tighten the hex nut at the bottom with the an 8 mm wrench (55).
- 5. Refer to section Setting the Routing Depth for instructions on how to use the turret stop in an actual operation.

Height Stop Rod and Height Stop

Thumb Wheel – (Fig. G & Ga)

T12 Height Stop Rod and Height Stop Thumb Wheel (Fig. G)

The height stop rod (5) and thumb wheel (4) limit how high the unit can travel up the rails. The system is adjustable to limit the rise of the plunge regardless of the position of the plunge release lever to full up where the bottom of the collet is 80 mm (3 5/32") above the workpiece.

NOTE: It is easier to move the height stop thumb wheel UP if the plunge release lever is locked and easier to move the thumb wheel down if the unit is first moved down by releasing the plunge release lever and then tightening it.

ASSEMBLY AND ADJUSTMENTS

WARNING: To reduce the risk of serious personal injury, turn tool off and disconnect tool from power source before making any adjustments or removing/ installing attachments or accessories. An accidental start-up can cause injury.

Installing and Removing a Cutter

- (Fig. C, F)

WARNING: Do not tighten the collet without a cutter fitted.

WARNING: Always use cutters with shanks which match the diameter of the collet.

WARNING: Do not use cutters larger than 50

mm (2") unless the router is fitted in a router table.

CAUTION: Care should be taken when

removing cutter to avoid cuts to fingers.

Installing a Cutter

- 1. Insert at least three fourths of the shank length of the cutter into the collet assembly (9).
- 2. Press the spindle lock (8) forward until the router spindle is locked.

NOTE: You may need to turn the spindle slightly to engage it.

3. Turn the collet nut (45) counter clockwise with the supplied 22 mm wrench (13) to tighten it.

Removing a Cutter

- 1. Press the spindle lock button (8) forward until the router spindle is lock.
- 2. Turn the collet nut (9) clockwise with the supplied 22 mm wrench (13) to loosen.
- 3. Keep turning the wrench until the collet nut tightens and then loosens again. This is the fail safe mechanism releasing the collet.
- 4. The cutter should now slide out.

NOTE: Each time you finish using a cutter, remove it and store it in a safe place.

Fine Height Adjuster – (Fig. A, D, E)

CAUTION: Ensure that the plunge locking

lever is unlocked. Never use unnecessary force to rotate the fine height adjuster mechanism.

CAUTION: DO NOT remove the screw on

hex nuts.

The fine height adjuster can be used in portable mode or when the router is held inside a table.

Adjusting the Depth of Cut

- (Fig. A, D, E)

Your router is equipped with a high precision depth adjustment system including a zero reset ring for both the quick height adjuster and the fine height adjuster.

Quick adjustment Using the graduation with Zero Reset Ring

- 1. Loosen the depth stop quick height adjuster lock (15).
- 2. Unlock the plunge limiter by pushing the release lever (6) down.
- 3. Lower the router carriage until the cutter is in contact with the workpiece.
- 4. Press the quick locking button (7).
- 5. Set the quick height adjuster (16) to zero and reset the fine adjust reset ring (19) to zero. The depth stop bar (12) must be in contact with the turret stop (11).
- 6. Adjust the depth of cut using the quick height adjuster (16) and the corresponding graduation. The adjusted depth of cut is indicated by the pointer (17).
- 7. Tighten the quick height adjuster lock (15).

Fine Adjustment

When not using a depth template, or if the depth of cut needs readjustment, it is recommended to use the fine height adjuster (18).

- 1. Adjust the depth of cut as described in Adjusting the Depth of Cut.
- 2. Set the fine height adjuster to zero using the fine zero reset ring (19).
- 3. Rotate the fine height adjuster (18) to the required

position: one turn corresponds to approximately 1 mm and 1 mark to 0.1 mm.

Fitting Template Guide Bush and

Inner Plate – (Fig. H)

The routers have a unique built-in line up system for the template guide bush. This system ensures that the guide bush is exactly concentric to the router cutter to ensure accurate work.

- 1. Turn the router upside down.
- 2. Fit inner plate (58) into the recess in the router base plate (10). For T12 the bushes on the inner plate must be towards the router motor. For T14 the raised side of the inner plate must be away from router base. Loosely fit the two pan head machine screws (59) through the inner plate and into the tapped holes. DO NOT TIGHTEN SCREWS.
- 3. Fit the 30mm template guide bush (24) to the inner plate (58). Fit guide bush with the two M5 countersink machine screws (25). Tighten these screws.
- 4. The line-up pin (60) is stepped for 12mm and 1/2" collet (9) sizes. (For the 1/2" collet simply push the lineup pin further down into the 1/2" collet).
- 5. Fit line up pin (60) into the 1/2" collet (9) (or 12mm depending on the size fitted) in the router, lightly tighten collet nut to hold the line up pin (60).
- 6. Release plunge lever and gently depress base until line up pin (60) projects through the 30mm guide bush

(24).

7. Once in line, tighten the pan head machine screws (59) with a flat screwdriver.

Fitting the Parallel Fence – (Fig. I, J)

- 1. Fit the guide rod (26) to the router base (10).
- 2. Slide the parallel fence (27) over the rods.
- 3. Tighten the wing bolts (28) temporarily.

Adjusting the Parallel Fence -

- (Fig. A, I, J)
- 1. Draw a cutting line on the material.
- 2. Lower the router carriage until the cutter is in contact with the workpiece.
- 3. Push quick release button (7) and limit the carriage return using the thumb wheel (4).
- 4. Position the router on the cutting line.
- 5. Slide the parallel fence (27) against the workpiece and tighten the wing bolts (28).
- 6. Adjust the parallel fence using the fine adjustment knob (29). The outer cutting edge of the cutter must coincide with the cutting line.
- 7. If required, loosen the screws (30) and adjust the strips (31) to obtain the desired guiding length.

Dust Extraction – (Fig. A, K, P)

Dust from materials such as lead containing coatings and some wood types, can be harmful to one's health. Breathing in the dust can cause allergic reactions and/or lead to respiratory infections of the user or bystanders. Certain dust, such as oak or beech dust, is considered carcinogenic, especially in connection with wood treatment additives.

Observe the relevant regulations in your country for the

materials to be worked.

The vacuum cleaner must be suitable for the material being worked.

When vacuuming dry dust that is especially detrimental to health or carcinogenic, use dust class M vacuum cleaner.

Connecting Dust Extraction Adaptor

- (Fig. K)

The dust extraction adaptor consists of a main section (32), a cover (33), an extraction tube adaptor (34), one extraction tube screw (37), two base screws (52) and two nuts (36).

- 1. Slide the cover (33) onto the main section (32) until it clicks into place.
- 2. Place the main section (32) on the base and secure with two screws (52) and nuts (36).
- 3. Remove screw (37) from the top of the router and use this screw to assemble the extraction tube adaptor (34) to the router.

Connecting Dust Extractor Hose

- (Fig. P)

WARNING: Risk of dust inhalation. To reduce

the risk of personal injury, ALWAYS wear an approved

dust mask.

WARNING: ALWAYS use a vacuum extractor

designed in compliance with the applicable directives regarding dust emission when sawing wood. Vacuum hoses of most common vacuum cleaners will fit directly into the dust extraction outlet.

Connect a dust extractor hose (38) to the extraction tube adaptor (34).

A dust extraction tube adaptor (34) is supplied with your tool. Vacuum hoses on most vacuum extractors will fit directly into the dust extraction spout.

NOTE: When using dust extraction, be sure that the dust extractor is out of the way and secure so that it will not tip over or interfere with the router or workpiece.

The dust extractor hose and power cord must also be positioned so that they do not interfere with the router or workpiece. If the dust extractor or dust extractor hose cannot be positioned properly, it should be removed.

OPERATION

Instructions for Use

WARNING: Always observe the safety instructions and applicable regulations. WARNING: To reduce the risk of serious personal injury, turn tool off and disconnect tool from power source before making any adjustments or removing/ installing attachments or accessories. An accidental start-up can cause injury.

Proper Hand Position – (Fig. O)

WARNING: To reduce the risk of serious

personal injury,

ALWAYS use proper hand position as shown WARNING: To reduce the risk of serious

personal injury,

ALWAYS hold securely in anticipation of a sudden reaction.

Proper hand position requires both hands on the main handles (2).

Using the Router – (Fig. A, L)

CAUTION: Turn the router on before plunging

the cutter head into the workpiece.

**CAUTION:** 

- Excessive cutting may cause overload of the motor or difficulty in controlling the tool, the depth of cut should not be more than 15 mm (19/32") at a pass when cutting grooves with a 8 mm (5/16") diameter bit.
- When cutting grooves with a 20 mm (25/32") diamter bit, the depth of cut should not be more than 5 mm (3/16") at a pass.
- For extra deep grooving, make two or three passes with progressively deeper bit settings.

CAUTION: After long periods of working at low speeds, allow the machine to cool down by running it for three minutes at maximum speed, with no load. All common routing tasks can be performed with the plunge cut router on all types of wood and plastic:

- Grooving
- Rebating
- Recessing
- Veining
- Profiling

To prevent overload of the tool by using the wrong speed

selection, follow the recommended settings below:

To prevent overload of the tool by using the wrong speed selection, follow the recommended settings below:

	CUTTER DIAMETER			
MATERIAL	10 – 30 mm	30 – 50 mm	50 – 86* mm	
SPEED SELECTION				
Hardwood	7 – 5	6 – 2	5 – 2	
Softwood	7 – 6	7 – 5	5 – 2	
Chipboard Faced	7 – 6	7 – 4	n/a	
Plastic	7 – 5	7 – 4	n/a	

<sup>\*</sup> Do not use cutters larger than 50 mm (2") unless the router is fitted in a router table.

NOTE: Only carbide tipped cutters should be used on panels faced with plastic laminates. The hard laminates will quickly dull steel cutters.

#### EN - T12/T14

NOTE: For better plunge sliding movement, frequently clean the columns of dust or debris. If the plunging movement is not moving as smooth as desired, lubricate the columns with a dry Teflon lubricant.

- 1. After setting the cutting depth as described, locate the router such that the bit is directly over the place you will be cutting.
- 2. With the router running, lower the unit smoothly down into the workpiece. DO NOT JAM THE ROUTER DOWN.
- 3. When the tool reaches the pre set depth, push the quick release button (7) to lock.
- 4. When you have finished routing, push the plunge lock lever (6) to unlock and let the spring lift the router directly out of the workpiece.
- 5. Always feed the router opposite to the direction in which the cutter is rotating. Refer to Fig. L.

On/Off Trigger Switch – (Fig. A)

WARNING: To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/ installing attachments or accessories. An accidental start-up can cause injury.

- 1. To turn the unit on, squeeze the on/off trigger switch (3). Continue to squeeze the trigger switch or press the lock on button switch (20) for continuous running.
- 2. To turn the unit off:
- a. If lock on trigger is engage, release the lock on button by squeezing and releasing trigger.
- b. If the lock on switch is not engaged, fully release the trigger.

Variable Speed Dial – (Fig. A)

WARNING: If the speed control ceases to operate, or is intermittent, stop using the tool immediately. Please contact Trend Tool Technology Ltd or authorized service facility for repair.

NOTICE: The router is equipped with electronics to monitor and maintain the speed of the tool while cutting. In low and medium speed operation, the speed control prevents the motor speed from decreasing. If you expect to hear a speed change and continue to load the motor, you could damage the motor by overheating. Reduce the depth of cut and/or slow the feed rate to prevent tool damage.

Refer to the Speed Selection Chart to choose a router speed. Turn the speed dial (1) to control router speed. The speed is variable from 9000 to 22000 rpm using the speed dial (1).

- 1. Turn the speed dial to the required position. The dial is numbered from 1 –7 and corresponds to router speeds of 9000 rpm to 22000 rpm.
- 2. Use the slower settings for large diameter cutters and the faster settings for small diameter cutters.
- 3. The correct setting will also depend on the density of the material, depth of cut and feed speed of the router.

NOTE: A noticeable loss of motor rpm means motor overload

SPEED SELECTION CHART		
DIAL SETTING	APPROXIMATE RPM	
1	9000	
2	11000	
3	13000	
4	15000	
5	18000	
6	20000	
7	22000	

The speeds in this chart are approximate and are for reference only. Your router may not produce the exact speed listed for the dial setting.

WARNING: Always follow the bit

manufacturer's speed recommendations as some bit designs require specific speeds for safety or performance.

If you are unsure of the proper speed or are experiencing any type of problem, contact the bit manufacturer.

LED Worklight – (Fig. F)

CAUTION: Do not stare into worklight. Serious eye injury could result.

Two LED worklights (57) are located next to the collet assembly (9).

- 1. The worklights (57) will constantly illuminate when the router is connected to the mains power supply.
- 2. To switch off the worklights the router must be disconnected from mains power supply.

NOTE: The worklight is for lighting the immediate work surface and is not intended to be used as a flashlight.

Setting Plunge Lock System – (Fig. B)

The plunge is fully automatically locking for all cuts. For heavy cut operations, ensure to push the lever towards the tool body. The plunge lock lever (6) position is set at

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the factory so the lever does not touch the motor body, if the plunge lock lever begins to hit the body when the

quick release lever is pushed, readjust the locking lever position as follows:

- 1. Push in quick release button (7). The plunge lever lock will unlock automatically.
- 2. Using a Torx 20 star bit (39), loosen the shoulder screw (54) on the plunge lock lever (6) with six counterclockwise turns. Do not fully remove.
- 3. Lift the plunge lock lever, rotate and reposition the plunge lock lever at position 2 (at eleven o'clock).
- 4. Tighten the shoulder screw.
- 5. If after setting to position 2 sliding is not correct, repeat steps 1 to 3 and reposition the lock lever at position 1. Tighten the shoulder screw.

Moulding Natural Timbers

WARNING: When routing always lock the plunge locking lever.

When edge moulding natural timbers, always mould the end grain first, followed by the long grain. This ensures that if there is breakout, it will be removed when the long grain is routed.

Setting the Routing Depth – (Fig. D, E) 1. Place the router with cutter fitted on to the workpiece. 2. Set the multiple position turret stop (11) as required.

- 3. Loosen the knob quick adjustment (15) securing the depth stop (12).
- 4. Push down the plunging lock lever (6) to start plunging.
- 5. Lower the router slowly until the cutter touches the workpiece and secure it in place by pushing quick release button (7).
- 6. Rotate the quick height adjuster (16) until the depth stop bar (12) touches multiple turret stop (13). Secure in position by tightening the quick height adjuster lock (15).
- 7. If the depth of cut needs re adjustment, it is recommended to use quick depth adjuster (16) for gross settings, or the fine height adjuster for accurate settings.
- 8. Adjust the depth of cut using the fine height adjuster (18)

NOTE: : One turn of the fine height adjuster (18) corresponds to 1 mm (3/64"), one turn of the quick height adjuster (15) corresponds to 40 mm (1 1/2")

- 9. Read the depth of cut using the quick zero reset ring (14) and fine zero reset ring (19).
- 10. The distance between the top of the revolving depth stop and the bottom of the depth stop is the required depth of cut.
- 11. The rotating turret stop screws (11) can be used for setting up to three depths of cut. The height can be adjusted using a flat screwdriver and a 8mm (5/16") wrench.

NOTE: By rotating the turret stop, three depth settings can be quickly made.

Fine Height Adjuster – (Fig. D)

This router has a built in fine height adjuster. This should be used when fine height adjustment of the cutter is required. This is especially recommended when using dovetail jigs or router tables.

Direction Of Feed – (Fig. L)

WARNING: Avoid climb-cutting (cutting in direction opposite than shown in Fig. L). Climb-cutting increases the chance for loss of control resulting in possible injury. When climb-cutting is required (backing around a corner), exercise extreme caution to maintain control of router. Make smaller cuts and remove minimal material with each pass.

The direction of feed is very important when routing and can make the difference between a successful job and

a ruined project. Fig. L show proper direction of feed for most cuts.

1. When routing along an edge, the direction of the router travel should be against that of the rotation of the cutter. This will create the correct cutting action and prevent the cutter from snatching. It will also pull the router towards the workpiece and the side fence or guide bearing will be less likely to wander from the edge of the workpiece.

# Feed Speed

The speed at which the cutter is fed into the wood must not be too fast that the motor slows down, or too slow that the cutter leaves burn marks on the face of the wood.

NOTE: Practice judging the speed by listening to the sound of the motor when routing.

Sequence of Plunging

WARNING: When routing always lock the plunge locking lever.

- 1. Plunge down and lock the motor carriage, by pushing quick release button (7).
- 2. Perform the desired routing operation.
- 3. Push down the plunge lock lever (6) and the motor carriage returns to the normal position.

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Using a Side Fence – (Fig. M)

CAUTION: Ensure working position is comfortable and at a suitable working height.

- 1. Ensure the wing bolts (28) are fully released. Slide the guide rods (26) into the routing base (10) and tighten the wing bolts.
- 2. Adjust the fence fine adjustment knob (29) to the required distance and clamp in place with the wing bolts (28).
- 3. Then lower the cutter height until the cutter is just above the workpiece.
- 4. Fine adjustments are possible by loosening the wing bolt (28) and adjusting the side fence fine adjustment knob (29).
- 5. Tighten the wing bolt (28) to secure the position.

NOTE: One revolution of the side fence fine adjustment knob (29) equals 3/64" (1.0 mm) of side feed.

- 6. Lower the cutter onto the workpiece and set the cutter height by to the required distance. Refer to Setting the Router Depth.
- 7. Switch the router on and after the cutter reaches full speed, gently lower the cutter into the workpiece and lock the plunge.
- 8. Feed along the workpiece, keeping sideways pressure to ensure the side fence does not wander away from the workpiece edge and downward pressure on the inside hand to prevent the router from tipping.
- 9. When finished, raise the router, secure with the plunge locking lever (6) and switch the router off.

NOTE: When starting the cut, keep the pressure on the front cheek until the back cheek contacts the workpiece edge.

NOTE: At the end of the cut, keep pressure on the back cheek until the cut is finished. This will prevent the router cutter swinging in at the end of the workpiece and nipping the corner.

Side Fence Routing – (Fig. I, J)

The side fence is used to guide the router when moulding, edge profiling or rebating the edge of a workpiece or when routing grooves and slots in the center of the workpiece, parallel to the edge.

The edge of the workpiece must be straight and true.

The strips (31) are adjustable and should be set ideally with a 1/8" (3 mm) gap each side of the cutter.

Guiding Off a Batten

Where an edge guide cannot be used, it is also possible to guide the router along a batten clamped across the workpiece (with an overhang at both ends).

Freehand Routing

WARNING: Make shallow cuts only! Use cutters with a max. diameter of 12mm.

Your router can also be used without any sort of guide, e.g. for signwriting or creative work.

Table Mode – (Fig. Q)

(T14 ONLY)

WARNING: Before T14 is installed into the router table, check that the router table meets all of the legal safety requirements for router tables. Read all safety warnings, instructions, and specifications provided with the router table. Failure to follow all instructions and safety rules may result in electric shock, fire and/or serious injury.

WARNING: To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/ installing attachments or accessories. An accidental start-up can cause injury.

WARNING: Do not use the T14EK as a handheld router if the power switch box is connected.

CAUTION: If there is dust inside the power switch socket, clean it out before using the power switch box.

- 1. To connect the power switch box (41) to the router, disconnect the tool from its power source.
- 2. Attach the power switch box (41) to the workbench in a position easily accessible by hand and where unintentional switching on is prevented.

NOTE: The external switch can be secured to the router table with the four mounting holes (42).

- 3. The cable must be installed and fastened in such a way that it cannot be squeezed or touch sharp edges.
- 4. Push in on the lock button (43) located on the left side handle (44) with a pen or a small screwdriver to unlock the handle cap (40).

NOTE: If there is dust inside the power switch socket, clean it out before using the power switch box.

- 5. Keep pushing the lock button (43) in and rotate the handle cap (40) to access the power switch socket (46).
- 6. Ensure the paddle switch of the power switch box is in the off position before connecting to the power switch socket.

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- 7. Connect power switch box plug (47) to the power switch socket (46).
- 8. Thread the ring nut (48) of power switch box plug (47) to the power switch socket (46) to lock it securely in place.
- 9. Attach the plunge router under the workbench, as required per your application or the instruction for the router table switch box (41).

- 10. Plug the tool back into its power source. The router can now switched on and off by acting on paddle (49) on the power
- 11. Pull out the paddle (49) to start the tool and push in the paddle to switch it off.

Fitting the T14 Fine Height Adjuster – (Fig. S1)

The fine height adjuster (Quick Raiser) (61) for the T14 can be used portably or when the router is held inverted in a table. If a suitable size access hole is drilled into the router table top, the height adjustment can also be adjusted from above the table top.

To set up for fine height adjustment:

- 1. Plunge router and lock lever down.
- 2. Rotate the knurled nut (4) down the stud until it is close to the router casting forks (62).
- 3. Align the base of the knurled nut (4) so that it will locate in the forks (62).
- 4. Release plunge locking lever.

CAUTION: DO NOT use a powered drill to drive the T14 Quick Raiser assembly. Only use the supplied handle. Ensure that the plunge locking lever is unlocked. Never use unnecessary force to rotate the Quick Raiser mechanism. Do not undo Torx® screw on hex nuts.

Using the T14 Without Fine Height Adjuster – (Fig. S2)

In portable use the knurled nut (4) should be wound to the top of the stud and hand tightened against the hex cap. The base of the knurled nut (4) should be aligned with the forks (62) in the router casing.

CAUTION: In normal plunge mode, ensure the base of the knurled nut is aligned correctly with the forks of the lower motor housing. This will enable the cutter to retract into the base safely.

For Portable Use:

- 1. Place the fine height adjuster handle (61) onto the top threaded spindle hex nut (51).
- 2. Rotate handle clockwise to raise motor body and reduce cutter depth.
- 3. Rotate handle anti-clockwise to lower motor body and increase cutter depth.

For Router Table Use – (Fig. S3)

- 1. Ensure router is fitted into the router table, see opposite page.
- 2. Place fine height adjuster handle (61) through router table cutter hole onto bottom threaded spindle hex nut (64).
- 3. Rotate handle clockwise to raise motor body and raise cutter height.
- 4. Rotate handle anti-clockwise to lower motor body and lower cutter height.

One revolution corresponds to 1.5mm. The height adjuster handle dial (63) can be reset to zero.

Prior to Operation

- 1. Check that the cutter is correctly installed in the collet. 2. Set the cutting depth.
- 3. Connect a dust extractor.
- 4. Make sure the plunge limiter is always locked before switching on.

Routing with Pilot Cutters – (Fig. R)

Where a parallel guide or guide bush are inappropriate, it is possible to use pilot cutters (50) for cutting shaped

edges.

These include collets (6 - 12.7 mm), a height adjusting tool and router table for use in inverted position, finger jointing tools for dovetail and finger jointing jigs, dovetail jointing templates, adjustable guide bush holder and guide bushes and guide rails in various lengths.

Base Mounting Points for Accessories – (Fig. N)

This router has three threaded holes (53) built into the base that allows it to attach to other accessories.

#### **MAINTENANCE**

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

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WARNING: To reduce the risk of serious personal injury, turn tool off and disconnect tool from power source before making any adjustments or removing/ installing attachments or accessories. An accidental start-up can cause injury.

### Repairs

WARNING: To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including power cord repairs, and brush inspection and replacement, when applicable) should be performed by a Trend service center or a Trend authorized service center.

Always use identical replacement parts.

Lubrication

Your power tool requires no additional lubrication. Cleaning

WARNING: Blow dirt and dust out of

the main housing with dry air as often as dirt is seen collecting in and around the air vents. Wear approved eye protection and approved dust mask when performing this procedure.

WARNING: Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. These chemicals may weaken the materials used in these parts. Use a cloth dampened only with water and mild soap. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

#### **Optional Accessories**

WARNING: Since accessories, other than those offered by Trend Tool Technology Ltd, have not been tested with this product, use of such accessories with this tool could be hazardous. To reduce the risk of injury, only Trend Tool Technology Ltd recommended accessories should be used with this product.

Consult your dealer for further information on the appropriate accessories.

Storage

• After use return the tool to its storage box.

### **ENVIRONMENTAL PROTECTION**

Recycle raw materials instead of disposing as waste.

Accessories and packaging should be sorted for environmental-friendly recycling.

Separate collection. This product must not be disposed of with normal household waste.

Household User

Local regulations may provide for separate collection of electrical products from the household, at municipal waste sites or by retailer when you purchase a new product. Please call Trend Customer Services for advice as to how to dispose of unwanted Trend electrical products in an environmentally safe way or visit www.trend-uk.com

#### **Business Users**

Please call Trend Customer Services for disposal of unwanted Trend electrical products.

#### **GUARANTEE**

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

For the location of your nearest Trend Service Agent, please call Trend Customer Services or see our stockist locator at www.trend-uk.com

#### **Documents / Resources**



trend T12 Heavy Duty Variable Speed Site Plunge Router [pdf] Instructions T12, T14, Heavy Duty Variable Speed Site Plunge Router, Heavy Duty Plunge Router, Variable Speed Site Plunge Router, Plunge Router, T12, Router

## References

• Trend Tool Technology

Manuals+,