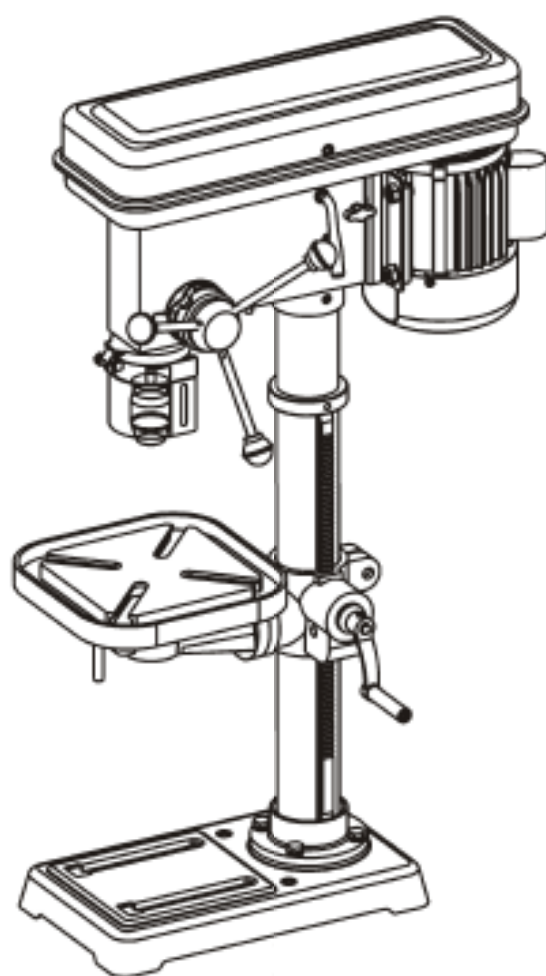


TITAN®

700W DRILL PRESS



TTB541DBT

Barcode : 5052931253692



WARNING! Read the instructions before using the product!



TITAN®

Congratulations on your purchase of a TITAN power tool from TITAN Power Tools (UK) Ltd. We want you to continue getting the best performance from it so this handbook includes information on safety, handling and care. Please retain this handbook in case you need to refer to any of the information in the future.

Your TITAN power tool comes with a 2 year guarantee, so should it develop a fault within this period contact your retailer.

GUARANTEE



This TITAN product carries a 2 year guarantee. If your product develops a fault within this period, you should, in the first instance contact the retailer where the item was purchased.

This guarantee specifically excludes losses caused due to:

- Fair wear and tear
- Misuse or abuse
- Lack of routine maintenance
- Failure of consumable items (such as batteries)
- Accidental damage
- Cosmetic damage
- Failure to follow manufacturer's guidelines
- Loss of use of the goods

This guarantee does not affect your statutory rights. This guarantee is only valid in the UK.

700W DRILL PRESS TTB514DBT



Let's get started...

These instructions are for your safety. Please read through them thoroughly before use and retain them for future reference.



Getting **started...**

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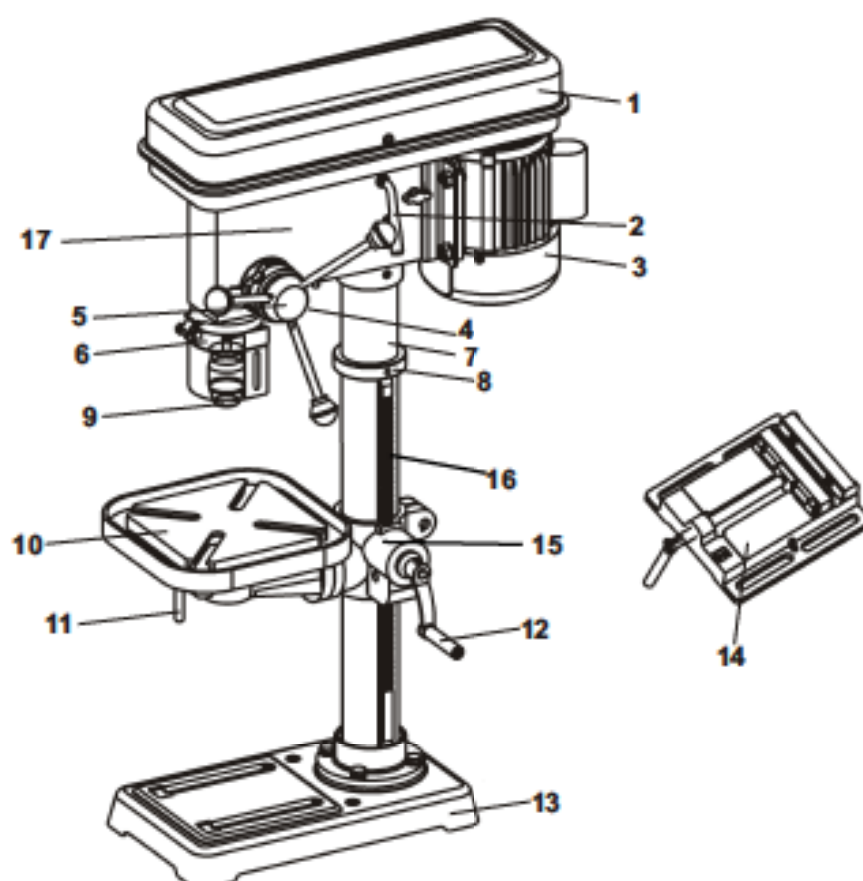
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Your Product



Getting started...

1、	Pulley Cover
2、	Cam Shaft
3、	Motor
4、	Laser
5、	Handle Seat
6、	Chuck Guard
7、	Column
8、	Collar
9、	Chuck
10、	Work Table
11、	Clamp handle
12、	Crank
13、	Base
14、	Vice
15、	Table Support
16、	Rack
17、	Headstock

Technical specifications

TECHNICAL DATA

Voltage:	230-240V/50Hz
Spindle speeds	210,300,370,430,525,570,780,1000,1150,1250, 1330,1540,1710,2010,2300,3040/min
Power	700W S2:10min
Degree of protection	IP20
Insulation class	Class I
Weight	44kg
Drill capacity	ø16mm
Max. drill depth	80mm

INFORMATION ON THE NOISE

Sound pressure level (According EN 61029)	74dB(A)/Kpa:3dB
Sound power level (According EN 61029)	87dB(A)/Kpa:3dB
Wear the ear protection when the sound pressure exceeds	75dB

VIBRATION

Total vibration values(vector sum of tri-axial) and after EN 61029	
Drilling	Vibrations for drilling in metal $a_h < 2.5 \text{ m/s}^2$
	Uncertainty $K=1.5 \text{ m/s}^2$

OPERATION INSTRUCTIONS

⚠ Warning: Before using your drill press, read the instruction manual carefully.

Safety warnings



WARNING! Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

SAVE THESE INSTRUCTIONS

1. Keep the work area clean.

Cluttered areas and benches invite injuries.

2. Consider work area environment.

Do not expose power tools to rain. Do not use power tools in damp or wet location. Keep the work area well lit. Do not use tools in the presence of flammable liquids or gases.

3. Guard against electric shock.

Avoid users body contact with earthed or grounded surfaces (e.g. pipes, radiators, ranges, refrigerators).

4. Keep persons away.

Do not let persons, especially children, not involved in the work touch the tool or the extension cord and keep them away from the work area.

5. Store idle tools.

When not in use, tools should be stored in a dry, locked up place, out of reach of children.

6. Do not force the tool.

It will do the job better and safer at the rate for which it was intended.

7. Use the right tool.

Do not force small tools to do the job of a heavy-duty tool. Do not use tools for purposes not intended, for example, do not use circular saws to cut tree limbs or logs.

8. Dress properly.

Do not wear loose clothing or jewellery, they can be caught in moving parts. Non-skid footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.

9. Use protective equipment.

Use safety glasses. Use face or dust mask if working operations create dust.

10. Connect dust extraction equipment.

If the tool is provided for the connection of dust extraction and collecting equipment, ensure these are connected and properly used.

11. Do not abuse the cord.

Never yank the tool to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.

12. Secure work.

Where possible use clamps or a vice to hold the work. It is safer than using your hand.

13. Do not overreach.

Keep proper footing and balance at all times.

14. Maintain tool with care.

Keep cutting tools sharp and clean for better and safer performance. Follow Instructions for lubrication and changing accessories. Inspect tool cord periodically and if damaged have them replaced by an authorised service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean and free of oil or grease.

15. Disconnect tools.

When not in use, before servicing and when changing accessories such as blades, bits and cutters, disconnect tools from the power supply.

16. Remove adjusting keys and wrenches.

From the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

17. Avoid unintentional starting.

Ensure switch is in the "off" position when plugging in.

18. Use outdoor extension leads.

When tool is used outdoors, use only extension cords intended for outdoor use and so marked.

19. Stay alert.

Watch what you are doing. Use common sense. And do not operate tool when you are tired.

20. Check for damaged parts.

Before further use of the tool, it should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorised service centre unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorised service centre. Do not use the tool if the switch does not turn it on and off.

21. Warning.

The use of any accessory or attachment other than those recommended in this instruction manual may present a risk of personal injury.

22. Have your tools repaired by qualified person.

This electrical tool complies with the relevant safety rules. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

HEALTH ADVICE

⚠ WARNING! When drilling, sanding, sawing or grinding, dust particles will be produced. In some instances, depending on the materials you are working with, this dust can be particularly harmful to you (e.g. lead from old gloss paint). You are advised to consider the risks associated with the materials you are working with and to reduce the risk of exposure. You should:

- Work in a well-ventilated area.
- Work with approved safety equipment, such as those dust masks that are specially designed to filter microscopic particles.

ADDITIONAL SAFETY INSTRUCTIONS FOR YOUR BENCH DRILL PRESS

1. Only use lubricating oil on drill bits and not near to motor or electrical components. Never spray as a cooling agent. A fatal electric shock could occur.
2. Always use sharp drill bits.
3. Never use sub-standard or blunt drill bits.
4. Never use excessive force on drill handle.
5. Always secure the workpiece to be drilled.
6. Always ensure the machine is securely mounted to a solid workbench.
7. Never remove the guard.
8. Always wear suitable gloves when handling swarf.
9. Wear suitable clothing. Adjust all loose clothing and remove ties, neck chains rings and watches.
10. Tie long hair back or preferably wear a hair net.
11. Use correct speed for size of drill (see speed chart).

12. Care should be taken when drilling brass and copper as drill may jam and break if too much pressure is applied.

Laser safety

Do not stare directly at the laser beam. Eye damage may occur if you deliberately stare into the beam. Thank you to strictly follow all safety points below:

1. The laser light beam used in this system is Class II with maximum 1 mW and 650 nm Wavelengths.

AVOID DIRECT EYE EXPOSURE.

2. The laser must be used and maintained in accordance with the manufacturer's instructions:

3. Never aim the beam at any person or an object other than the workpiece.

4. Do not project the laser beam into the eyes of others. And never directly towards the eyes of a person for more than 0.25 seconds.

5. Always ensure the laser beam is aimed at a workpiece without reflective surfaces as the laser beam could be projected into your eyes or the eyes of others.

6. Never replace the laser device by another. The repairs must be performed only by the manufacturer or dealer.

WARNING! Remove the laser light batteries when the tool is to be stored without use for a few days or more. If left in position, the batteries might leak and damage the laser light assembly. Damage due to leaking batteries is not covered under the warranty.

SYMBOLS

The labels stick on the product has a significant warning to using the product safely.



Read the instruction manual.



Always wear ear protection



Always wear eye protection



Always wear an anti-dust mask



Conforms to relevant safety standards

yyWxx Manufacturing date code; year of manufacturing (20yy)
and week of manufacturing (Wxx);

Unpack

1. Unpack all parts and lay them on a flat, stable surface.
2. Remove all packing materials and shipping devices if applicable.
3. Make sure the delivery contents are complete and free of any damage. If you find that parts are missing or show damage do not use the product but contact your dealer. Using an incomplete or damaged product represents a hazard to people and property.
4. Ensure that you have all the accessories and tools needed for assembly and operation. This also includes suitable personal protective equipment.

You will need

(items not supplied)

Suitable personal protective equipment

Philips head screwdriver

(items supplied)

Chuck & chuck key

4mm Hex key

Assembling the machine

The bench drill comes partially assembled for packaging purposes. Lay the parts on the bench and check against the parts list. **(Fig 1)**

Once it has been established that all parts are correct proceed as follows:

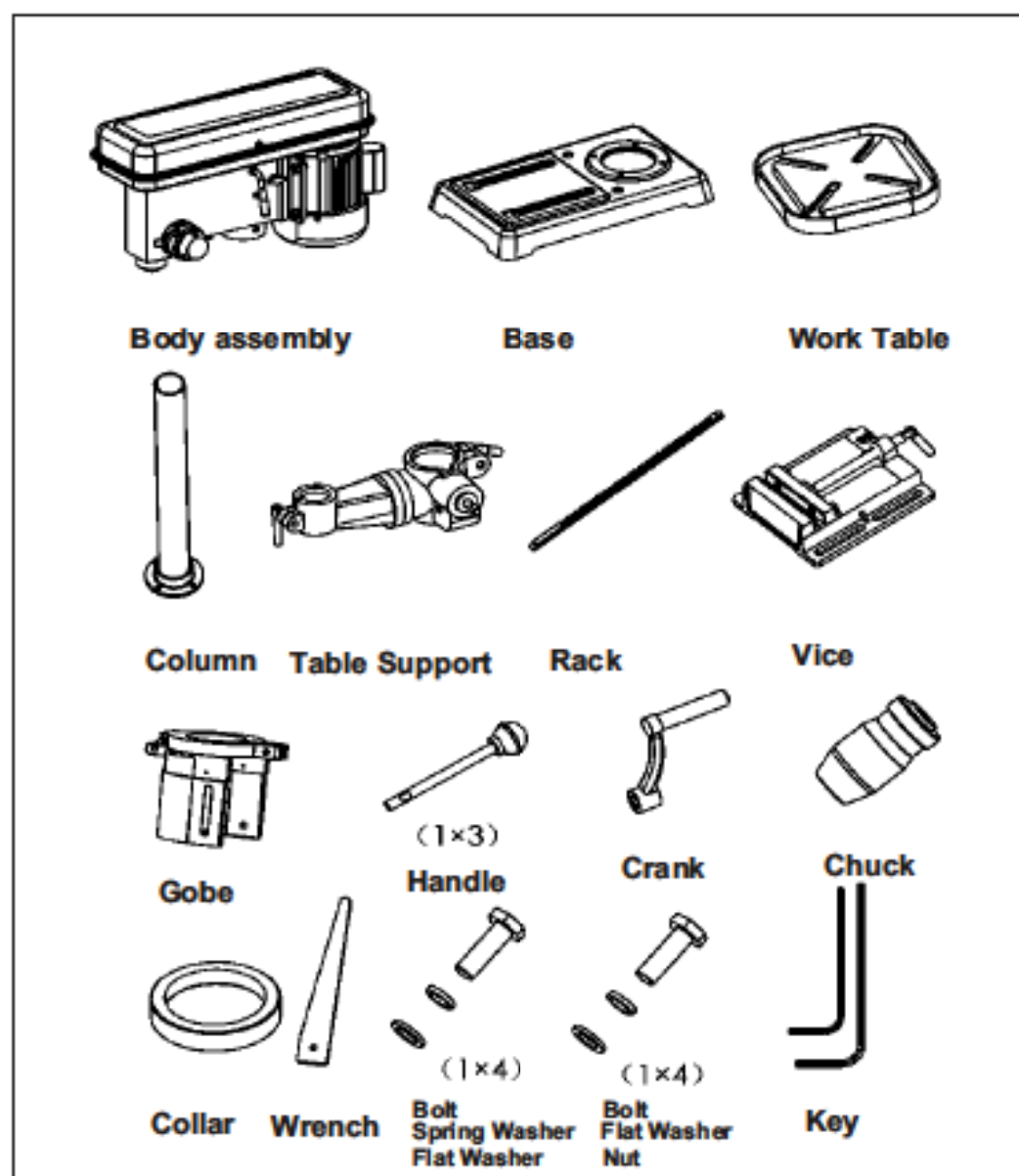


Fig 1

Assembly

Before the drill is started for the first time, it must be solidly and fully mounted on the work area of a stable workbench.

Use four mounting holes in the base plate to do this. Ensure that the machine is freely accessible for operation, adjustment and maintenance.

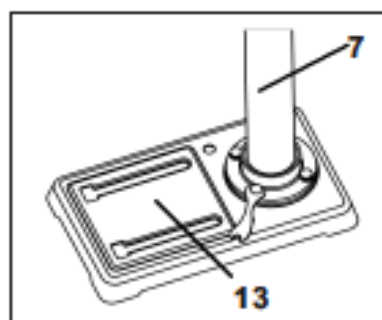


Fig 2

Column to Base

1. Place Column (7) on the Base (13) and align holes in the Column with holes in the Base.
2. Attach using Bolt Washer and Spring Washer hole through the Column and into the Base. (Fig 2)

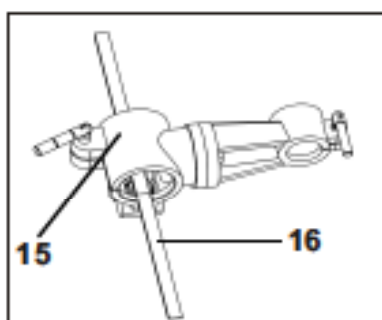


Fig 3a

Table to Column

1. Place the Table Support (15) over the Rack (16). (Fig 3a)

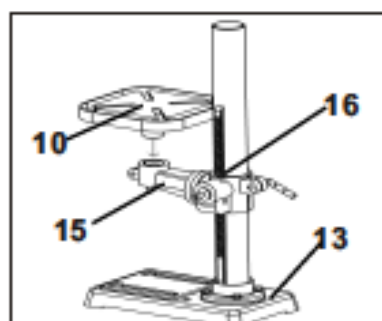


Fig 3b

2. Slide the Table Support(15) over the Column(7). It will slide easily into position so do not use force.
3. Install the Work Table(10) onto the Table Support(15). Make sure the Work Table(10) will rotate 360°. (Fig 3b)

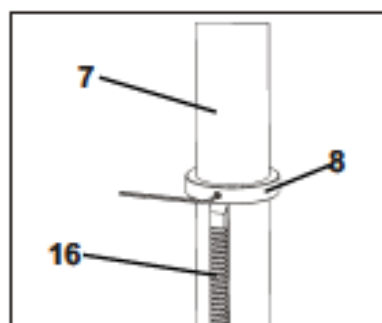


Fig 4

4. Slide the Collar(8) over the Column(7) with the beveled edge facing down until it presses against the top of the Rack(16). Tighten the Set Screw, but do not overtighten it. (Fig 4)

Assembly

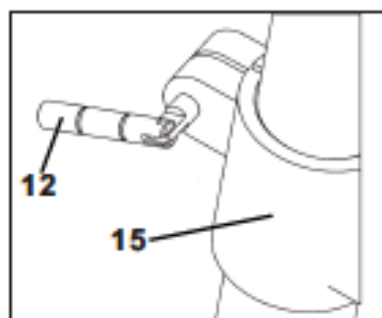


Fig 5a

- Slide the Height Crank(12) over the shaft on the side of the Table Support(15). **(Fig 5a)**

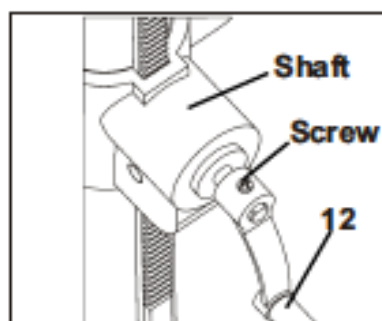


Fig 5b

- Secure the Crank(12) to the Shaft using the Screw against the flat part of the Shaft. **(Fig 5b)**

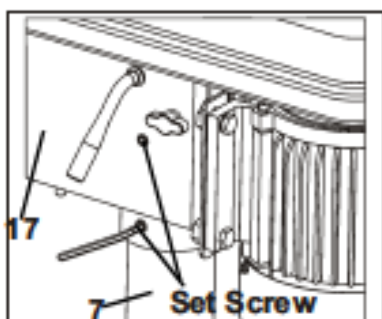


Fig 6

Headstock to Column

- Loosen the two Set Screws on the left side of the Headstock(17) so they will stay clear while installing it.
- With the help of an assistant, lift the Headstock above the Column(7), and gently slide it down the Column as far as it will go.
- Tighten the two Set Screw to secure the Headstock in place. **(Fig 6)**

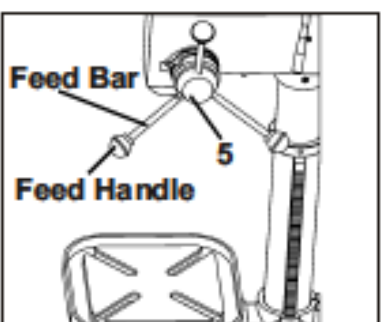


Fig 7

Feed Handles/Bars

- Thread the Feed Bars in to the Handle Seat(5) and tighten them.
- Install three Feed Handles in to the Feed Bars and tighten them. **(Fig 7)**

Assembly

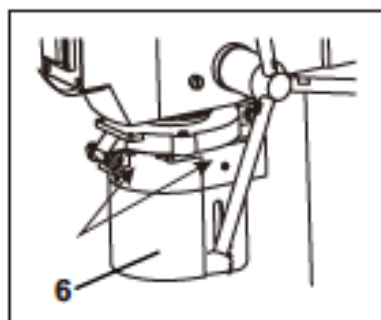


Fig 8a

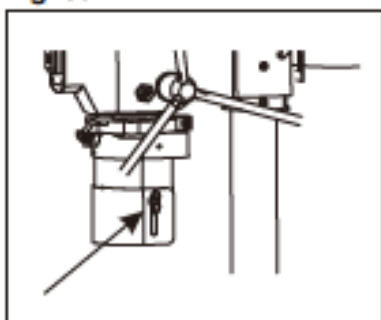


Fig 8b

Fitting the Chuck Guard

Warning: never attempt to use the machine without the Chuck Guard(6) fitted.

The telescopic Chuck Guard(6) is partially assembled onto the machine.

Remove three cross head screws just below the hinge on the collar.

Position the transparent plastic shield into the collar and secure in place with the small screw. The Chuck Guard is spring loaded and on a hinge which allows the guard to be moved upwards to expose the Chuck(9) for drill installation and removal. Always return the guard to cover rotating parts. Simply unscrew the wing nuts and the two piece guard will extend vertically up or down. Chuck Guard is adjustable to varying depths to give more protection. (Fig 8a–8b)

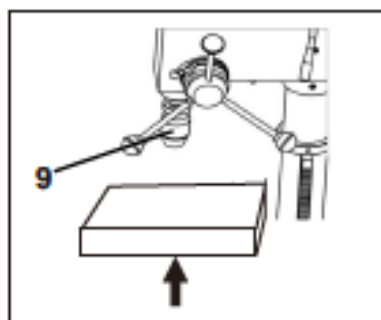


Fig 9

Fitting the Chuck

This machine is supplied with a Morse taper stub shaft fitted into the spindle.

To fit the Chuck(9), clean the protective film from the it and the stub shaft external taper with white spirit.

Place a piece of wood onto the drill table. Using the Feed Handles lower the Chuck onto the wood. Gently apply pressure to engage the taper and then let the spindle raise to its upper position. (Fig 9)

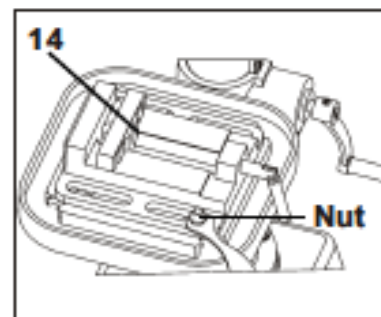


Fig 10

Mounting the Vice to the Work Table

You could use the Vice(14) when you drilling the small parts. Fitting the Vice(14) upon the Work table(10), using the Bolts through the work table's U-holes under the table. Then secure them on the upper side of the Vice(14) with the Flat Washer and Nuts. (Fig 10)

The drill is now fully assembled and secured in position. The following adjustments and setting up instruction must be carried out before connecting the machine to the mains supply.

General operating Instructions

You can use the laser just press the laser switch. The Laser is powered by 2 AAA batteries (not included). Change the batteries, open the small cover and insert the batteries with the correct polarity.

The batteries must be disposed of safely. Place in collection bins to protect the environment.

Connection to the power supply

- > Make sure the on/off switch is in its off position.
- > Connect the plug with a suitable socket.



WARNING! Check the voltage! The voltage must comply with the information on the rating label!

- > Your product is now ready to be used.

Check that you have noted all the following instructions:



- ☒ Before starting you must have fully read and understood the entire instruction manual.
- ☒ Working with this product is demanding; therefore ensure you are physically and mentally fit to complete the job safely.
- ☒ Ensure that you have all the accessories and tools needed for assembly and operation.
- ☒ Make sure that you wear suitable personal protective equipment.
- ☒ Ensure that no unauthorised people, especially children, and pets are nearby or could enter the working area.
- ☒ Ensure that the product is free from damage and that it is not worn.
- ☒ Make sure that safety devices and accessories are correctly fixed.
- ☒ Double check that all assembly tools have been removed from the product before use.
- ☒ Undertake periodic structural checks of this product; do not use it if you have any doubts about its suitability for its intended purpose.

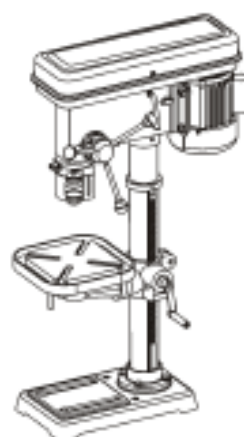


WARNING! For your own and the safety of other people you must read and follow the safety instructions in section "In more detail - Technical and legal information - Safety warnings".



In more detail

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Intended use

This drill press TTB541DBT is designated with a rated output of 700 Watts. This product is used to drill holes in metal and wood.

The product should not be used on masonry and materials that are harmful to health.

This product is intended for private domestic use only, not for any commercial trade use. It must not be used for any purposes other than those described.

Adjusting the table height

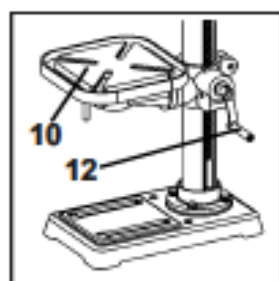


Fig 11

To adjust the Work Table(10) height, slacken the Crank(12) at the rear of the table support assembly. Raise table(10) up or down to desired height. When the desired height has been achieved, do not forget to re-secure the support lock. (Fig 11)

Work table swing 360°

The table(10) may also be swung through 180° either way to allow larger workpiece to be accommodated on the base plate. Simply unclamp the table and manoeuvre either clockwise or anti-clockwise to the rear of the machine.

Tilting the table $\pm 45^\circ$

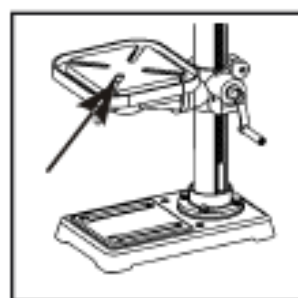


Fig 12

Locate the securing bolt underneath the table(10). With a suitable socket loosen the bolt. On the table support assembly casting there is a graduated 0 - 45° scale. Set the table(10) to the required angle and retighten the bolt. Note: The graduated scale is for guidance only we recommend the use of an engineers protractor when setting any angles. (Fig 12)

Using a machine vice

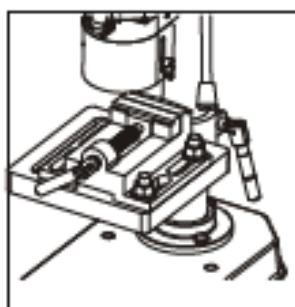


Fig 13

WARNING: The drill should never be used without the work piece being securely held in a machine vice or clamped directly to the drill table(10). The drill table(10) is designed to accept a variety of machine vice which can be fastened directly to the drill table(10). Always secure the vice to the table(10) with bolts, washers and nuts. If the drill jams into the work piece an unsecured machine vice will spin out of control causing the drill to snap and possibly injure the operator **(Fig 13)**



WARNING! Always use drill bits according to the intended use! For example, never use a drill bit intended for working on wood for working on stone or vice versa!



Observe the technical requirements of this product (see section "Technical specifications") when purchasing and using drill bits! Some drill bits are very sharp and become hot during use! Handle them carefully! Wear safety gloves when handling drill bits in order to avoid injuries like burns and cuts!

Switch ON and OFF

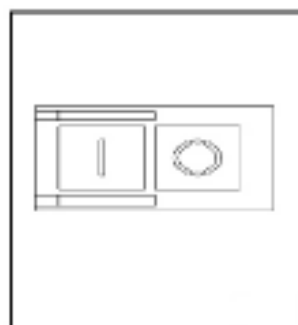


Fig 14

This machine is fitted with a "No Volts Switch". In the event of a mains power failure or if the mains plug is removed from the mains supply socket before the machine is switched off, the machine will not restart without warning when the mains supply is restored or the mains plug is re-connected to the mains supply, until the machine is switched ON at the ON/OFF switch fitted to the machine. To start the machine press the green ON button. To stop the machine, press the red OFF button (Fig 14).

Feed depth adjustment

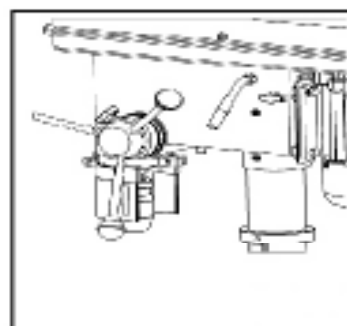


Fig 15

This facility is useful if a number of uniform depth holes are required in a work piece. Set the work piece to be drilled in your machine vice. Insert the drill required into the chuck(9). Bring the drill bit into contact with the work surface. Using the depth stop nuts and the depth scale, set the depth of hole required, secure the depth stop nuts. The drill will stop at the required depth every time (Fig 15).
NOTE: Always stop feeding while the depth stop nuts stops, otherwise the red plastic collar might be damaged.

Changing the spindle speed

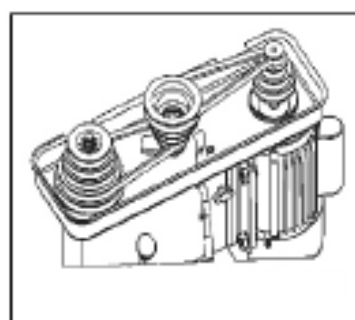


Fig 16

WARNING: Always ensure that the tool is switched off and unplugged from the power supply before making any adjustments or changing a drill bit. Unscrew the cross head screw securing the pulley guard (1) and lift open the pulley guard (1) to expose the pulley system. Determine the spindle speed required. Identify the pulley arrangement that gives the nearest spindle speed to that required by referring to the drill speed chart (Fig 16).

Drill speed chart

Drill Bits	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
1.6mm-4.8mm	3040RPM	2300RPM	2300RPM	2300RPM	3040RPM	2300RPM
5.2mm-9.5mm	2010RPM	1540RPM	2010RPM	1250RPM	2300RPM	1250RPM
9.9mm-15.9mm	1540RPM	780RPM	1540RPM	780RPM	1540RPM	570RPM
17.5mm-25.4mm	780RPM	525RPM	1000RPM	430RPM	1000RPM	370RPM

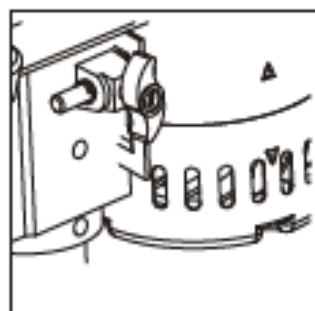


Fig 17

Slacken the belt tension locking knob. This will allow the tension on the drive belt to be released. The motor assembly is hinged to allow tensioning of the drive belt. To move the drive belt to the desired pulley arrangement push the belt on the largest drive spindle pulley towards the next smallest pulley and at the same time rotate the drive spindle, by hand until the drive belt locates onto the next smallest pulley. Repeat this procedure on the motor pulley until the desired pulley arrangement has been achieved (Fig 17).

NOTE: Do not cross the belt to give intermediate speeds this will cause damage to the machine.

Belt tension

When the desired pulley arrangement has been achieved tension the drive belt. To check that the correct tension has been achieved, press your finger onto the centre of the drive belt. The drive belt should move approximately 13mm.

Re-tighten the belt tension locking knob (Fig 18).

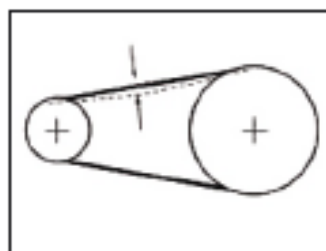


Fig 18

General guidelines for drilling

Always centre punch the position for drilling. A centre punch is a pointed tool that marks the material to be drilled with a small indent. It stops the drill bit moving from the desired position.

Always start by drilling a small pilot hole and gradually progress in drill diameter. When drilling metal, lubricate the drill tip with oil.

Maintenance

If the power cable is damaged, it must be replaced by the manufacture, service agent or similarly qualified persons in order to avoid a hazard.

Always lubricate drill bits with suitable oil when drilling. This will prolong the life of drill bits.

Caution: Do not use water-based coolant or any kind of continuous coolant pump. Remove all swarf and dust after each operation.

Spread oil onto unplated surfaces especially if the machine is not used for long periods.

Lubricate the Spindle drive with oil every six months. Spindle guide screw should be checked periodically to inger tightness.

Power cord

- > If the power cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a safety hazard.

Plug replacement

If you need to replace the fitted plug then follow the instructions below.

Important

The wires in the mains lead are coloured in accordance with the following code:

Green & yellow - Earth

Blue - Neutral

Brown - Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows. The wire which is coloured **green & yellow** must be connected to the terminal which is marked with **E** or \perp .

The wire which is coloured **blue** must be connected to the terminal which is marked with **N**. The wire, which is coloured brown, must be connected to the terminal, which is marked with the letter **L**.

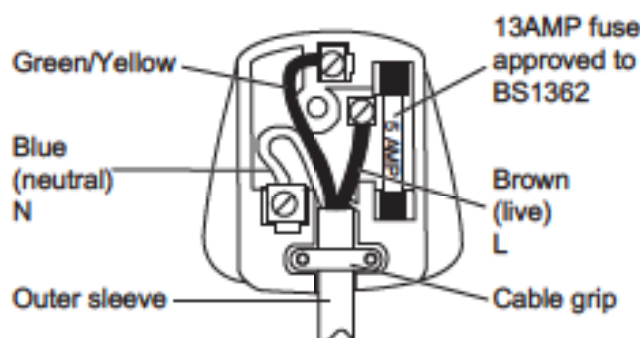


Fig. 19



Warning: Never connect live or neutral wires to the earth terminal of the plug. Only fit an approved 13 Amp BS1363/A plug and the correct rated fuse.



NOTE: If a moulded plug is fitted and has to be removed take great care in disposing of the plug and severed cable, it must be destroyed to prevent engaging into a socket. If the supply cord is damaged it must be replaced by a service agent or a similarly qualified person in order to avoid hazard.

Repair

- > This product does not contain any parts that can be repaired by the consumer. Contact a qualified specialist to have it checked and repaired.

TROUBLE SHOOTING GUIDE

TROUBLE	PROBABLE CAUSE	REMEDY
Noisy operation	A) Incorrect belt tension B) Dry spindle C) Loose pulley D) Loose belt E) Bad bearing	A) Adjust tension B) Remove spindle/quill assembly and lubricate C) Tighten pulley D) Adjust belt tension E) Replace bearing
Excessive drill wobble	A) Loose chuck B) Worn spindle shaft or bearing C) Bad chuck	A) Tighten by pressing chuck down against table B) Replace spindle shaft or bearing C) Replace chuck
Motor won't start	A) Power supply B) Motor connection C) Switch connections D) Motor windings burned E) Bad switch	A) Check power cord B) Check motor connection C) Check switch connections D) Replace motor E) Replace speed
Drill binds in workpiece	A) Excessive pressure on feed handle B) Loose belt C) Loose drill D) Speed too fast	A) Apply less pressure B) Check belt tension C) Tighten drill with key D) Change speed
Drill burns or smokes	A) Incorrect speed slow down RPM B) Chips are not discharging C) Dull drill or not cut properly for material D) Needs lubrication E) Feed pressure wrong	A) Refer to speed chart B) Clean drill C) Clean sharpness and taper D) Use lubrication while drilling E) Apply less pressure
Table difficult to raise	A) Needs lubrication B) Bent rack C) Table lock tightened	A) Lubricate with light oil B) Straighten rack C) Loosen clamp

In more detail...

Recycling and disposal



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice. In accordance with the European Directive 2002/96/EC. It will then be recycled and dismantled to reduce the danger on the environment, electrical products and electronic has potentially dangerous for the environment and human health due to the presence of hazardous substances.

For more information, please contact your local or regional store.

In more detail...



Declaration of Conformity

We, Importer
Titan Power Tools (UK) Ltd
Trade House, Mead Avenue, BA22 8RT

Declare that the product:
Designation: 700W drill press
Model: TTB541DBT

Complies with the following Directives:
2014/30/EC Electromagnetic Compatibility Directive
2006/42/EC Machinery Directive
2014/35/EC Low Voltage Directive
2011/65/EU Restrictions of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment

2012/19/EU Waste Electrical and Electronic Equipment (WEEE)

Standards and technical specifications referred to

EN 55014-1:2006+A1:2009+A2:2011
EN 55014-2:1997+A1:2001+A2:2008
EN 61000-3-2:2006+A1:2009+A2:2009
EN 61000-3-3:2013
EN 61029-1:2009+A11:2010
EN ISO 12100:2010

Authorised Signatory and technical file holder
Date : 02/09/2015

Signature: P. C. Harries

Name / title: Peter Harries / Quality Manager
Titan Power Tools (UK) Ltd. Trade House, Mead Avenue, BA22 8RT



700W DRILL PRESS TTB541DBT



Titan Power Tools (UK) Ltd
Trade House, Mead Avenue,
BA22 8RT
