

# Pillar Drills



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**[axminster.co.uk](http://axminster.co.uk)**

# Index of Contents

Index of Contents	02
Declaration of Conformity	02
What's Included	03-04-05-06
General Safety Instructions	06
General Safety Instructions for Drilling Machines	06-07
Specification	07
Assembly	08-09-10-11-12-13
Illustration and Parts Description	14-15-16-17-18-19
Changing the Speed	20-21
Speed Select Table	22
Removing the Chuck Assembly	23
Maintenance	24
Parts Breakdown/List	25-26-27-28-29-30
Notes	31

## Declaration of Conformity

The undersigned, *Just* authorised by Laizhou Light Industry Machinery Plant No. 989 Laizhou North Road, Laizhou, Shandong 261400, China declares that this product:

**ZQJ4119-3**  
**Drill Press**

manufactured by Laizhou Light Industry Machinery Plant is in compliance with the following standards or standardisation documents in accordance with Council Directives

**DIN EN 60204-1:1998-11**  
**Machinery Directive 98/37/EEC, Annex 1**  
**Amended 93/68/EEC**

The undersigned, *Ke* authorised by Laizhou Plant Machinery Co., Ltd 989 North Lasi Zhou Road Laizhou, Shandong declares that this product:

**ZQJ4113, ZQJ4119K**  
**Drill Press**

manufactured by Laizhou Plant Machinery Co. is in compliance with the following standards or standardisation documents in accordance with Council Directives

The undersigned, *V. Plot* authorised by Shandong Laizhou Light Industry Machinery Plant No. 989, North Lai Zhou Road Laizhou, Shandong 261400 P.R. China declares that this product

**ZQJ4116Q**  
**Drill Press**

manufactured by Shandong Laizhou Light Industry Machinery Plant is in compliance with the following standards or standardisation documents in accordance with Council Directives

**EN 55014-1: 1993+A1**  
**EN 61000-3-2: 1995+A13**  
**EN 61000-3-3: 1995**  
**EN 55014-2: 1997**

**Declaration of Conformity**  
**Copied from CE Cer**



# Warning

The symbols below advise that you follow the correct safety procedures when using this machine.



**Fully read manual and safety instructions before use**



**Ear protection should be worn**



**Eye protection should be worn**



**Two man assembly**



**HAZARD**  
**Motor gets hot**

## What's Included

Quantity	Item	Part	Model Number
1 No	ED16F2 Pillar Drill	<b>A</b>	Code:505024
	ED16B2 Pillar Drill	<b>B</b>	Code:700100
	ED16SB Pillar Drill	<b>C</b>	Code:700101
	WD13L Pillar Drill	<b>D</b>	Code:700099

### Box Containing:

1 No	Pillar drill head	<b>1</b>	
1 No	Base	<b>2</b>	
1 No	Drill pillar complete with mounting flange, rise and fall rack and retaining ring	<b>3</b>	
1 No	Drill table mounting bracket arm	<b>4</b>	
1 No	Drill table	<b>5</b>	
1 No	Lever feed handle assembly	<b>6</b>	
1 No	Drill guard with Phillips screws	<b>7</b>	
1 No	Crank handle for table rise and fall mechanism	<b>8</b>	

### Bag Containing:

2 No	Motor yoke butterfly knobs	<b>9</b>	(700101 ONLY)
2 No	M8 x 20mm Hex bolt and washers		(700101 ONLY)
3 No	M8 x 20mm Hex bolt and washers		(700099 ONLY)
4 No	M10 x 25mm Hex bolts spring and plain washers		(505024 and 700100 ONLY)
1 No	3-5-6mm Hex keys	<b>10</b>	
1 No	3mm Hex key	<b>10</b>	(700099 Only)
1 No	Morse taper arbor for the chuck	<b>11</b>	
1 No	Morse taper drift	<b>12</b>	

Box containing 3-16mm B16 keyless chuck	<b>13</b>
Box containing 13mm B16 keyless chuck	
<b>(NOTE CHUCKS CAN VARY DEPENDING ON MODEL)</b>	

3 No	Lever feed handles	<b>14</b>	(700099 Only)
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# What's Included



Guard shield and screws inside the pulley drive belt cover

## WD13L Pillar Drill



Having unpacked your machine and its accessories, please check the contents against the equipment list "What's Included"; if there are any discrepancies, please contact Axminster Tool Centre using the procedures laid down in the catalogue.



**PLEASE DISPOSE OF THE PACKAGING RESPONSIBLY; MUCH OF THE MATERIAL IS RECYCLABLE**

The machine and its accessories will arrive coated with heavy corrosion preventative grease and greased wax paper or plastic wrapping. These will need to be cleaned from the machine, its components and accessories prior to it being set up and commissioned. Use water soluble de greaser to remove the barrier grease. Be warned, it will stain if you splash it on clothing etc.



**WARNING! WEAR OVERALLS, RUBBER GLOVES AND EYE PROTECTION!**

After cleaning, lightly coat the exposed metal surfaces of the machine with a thin layer of light machine oil. N.B If you used water soluble de greaser make sure you apply this thin film sooner rather than later.

**Please read the Instruction Manual prior to using your new machine; as well as the installation procedure, there are daily and periodic maintenance recommendations to help you keep your machine on top line and prolong its life. Keep this Instruction Manual readily accessible for any others who may also be required to use the machine.**

## General Safety Instructions

### Work Place/Environment/Installation

#### Mains Powered Machines/ Primary Precautions

These machines are supplied with a moulded 13 Amp. Plug and 3 core power cable. Before using the machine inspect the cable and the plug to make sure that neither are damaged. If any damage is visible have the machine inspected/repared by a suitably qualified person. If it is necessary to replace the plug, it is preferable to use an 'unbreakable' type that will resist damage. Only use a 13 Amp plug, make sure the cable clamp is tightened securely. Fuse at 13 Amp. If extension leads are to be used, carry out the same safety checks on them, and ensure that they are correctly rated to safely supply the current that is required for your machine. It is also recommended that the power supply outlet is the switched type, and that the supply is switched off whilst plugging in, or unplugging the machine.

### General Instructions for 230V Tools

#### Good Working Practices/Safety

The following suggestions will enable you to observe good working practices, keep yourself and fellow workers safe and maintain your tools and equipment in good working order.



**WARNING! KEEP TOOLS AND EQUIPMENT OUT OF THE REACH OF YOUNG CHILDREN!**

# What's Included

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## Work Place/Environment

Do not use when or where it is liable to get wet. If the machine is to be used outside and it starts to rain stop work and move it inside. If machine has got wet; dry it off as soon as possible, with a cloth or paper towel.

Do not use 230Va.c. powered machines anywhere within a site area that is flooded or puddled, and do not trail extension cables across wet areas.

Keep the machine clean; it will enable you to more easily see any damage that may have occurred.

Clean the machine with a damp soapy cloth if needs be, do not use any solvents or cleaners, as these may cause damage to any plastic parts or to the electrical components.

Keep the work area as uncluttered as is practical, this includes personnel as well as material.



**WARNING! UNDER NO CIRCUMSTANCES SHOULD CHILDREN BE ALLOWED IN WORK AREAS!**

## General Safety Instructions

---

It is good practice to leave the machine unplugged until work is about to commence, also make sure to unplug the machine when it is not in use, or unattended. Always disconnect by pulling on the plug body and not the cable.

Once you are ready to commence work, remove any tools used in the setting operations (if any) and place safely out of the way. Re-connect the machine. Carry out a final check e.g. check the drill bit is securely tightened in the machine, check you have the correct speed and function set, check that the power cable will not 'snag' etc.

Make sure you are comfortable before you start work, balanced, not reaching etc. If the work you are carrying out is liable to generate flying grit, dust or chips, wear the appropriate safety clothing, goggles, gloves, masks etc., If the work operation appears to be excessively noisy, wear ear-defenders. If you wear your hair in a long style, wearing a cap, safety helmet, hairnet, even a sweatband, will minimise the possibility of your hair being caught up in the

rotating parts of the machine, likewise, consideration should be given to the removal of rings and wristwatches, if these are liable to be a 'snag' hazard. Consideration should also be given to non-slip footwear, etc.

DO NOT work with cutting or boring tools of any description if you are tired, your attention is Wandering or you are being subjected to distraction. A deep cut, a lost fingertip or worse; is not worth it!

DO NOT use this machine within the designated safety areas of flammable liquid stores or in areas where there may be volatile gases. There are very expensive, very specialised machines for working in these areas, THIS IS NOT ONE OF THEM.

CHECK that drills are the correct type and size, are undamaged and are kept clean and sharp, this will maintain their operating performance and lessen the loading on the machine. Above all, OBSERVE.... make sure you know what is happening around you, and USE YOUR COMMON SENSE.

## General Safety Instructions for Drilling Machines

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1. Do not operate the machine without carrying out a preliminary inspection.

2. Check that the speed is correct for the planned operation, and the upper drive belt cover is closed and fastened secure.

3. Check the drill bit is the correct size and type, is correctly fitted and tightened in the chuck.

4. Make sure that the drillhead, the table bracket arm, the table tilt and the table swivel clamps are all locked before any drilling is attempted.

5. Do not attempt to carry out any drilling operation on material that has not been secured to the drill table, either by vise or clamp.

6. Remove any tools (chuck key, spanners etc), that

# General Safety Instructions for Drilling Machines

may have been used in setting up operations and put them away in their correct stowage positions.

7. Try to arrange the drilling operation so that the drill tip does not come in contact with the table.

8. Always allow the drill to stop before removing drillings or swarf from around the job or the table.

9. NEVER remove 'flying' swarf strands from the drill whilst it is turning.

10. It is a good precaution to wear eye protection when drilling, especially using small drills, or very hard material that produces small chips.

11. It is not a good idea to wear gloves when operating a drill press.

12. After the job is completed, remove all tools and accessories from the machine, check that drill bits are still sharp and re-use able.

13. Clean the machine down thoroughly, including removing coolant or cutting compounds from the drill table.

14. Lightly coat all metal surfaces with a light oil coating.

15. Disconnect the machine from the supply. Secure the cable/plug clear of the floor.

## Specification

Model	<b>ED16F2</b>
Code	<b>505024</b>
Rating	<b>Trade</b>
Power	<b>650W 230V</b>
Speed Range	<b>120-2580 rpm</b>
Throat	<b>178mm</b>
Chuck Cap/Type	<b>3-16mm keyless</b>
Chuck Travel	<b>80mm</b>
Max Chuck to Table	<b>680mm</b>
Max Chuck to Base	<b>1,170mm</b>
Diameter of Column	<b>80mm</b>
Table Size	<b>290 x 290mm</b>
Table Tilt	<b>45° - 0 - 45°</b>
Base Size	<b>450 x 270mm</b>
Overall L x W x H	<b>710 x 350 x 1,645mm</b>
Weight	<b>88kg</b>

Model	<b>ED16B2</b>
Code	<b>700100</b>
Rating	<b>Trade</b>
Power	<b>650W</b>
Speed Range	<b>120-2580 rpm</b>
Throat	<b>178mm</b>
Chuck Cap/Type	<b>3-16mm keyless</b>
Chuck Travel	<b>80mm</b>
Max Chuck to Table	<b>310mm</b>
Max Chuck to Base	<b>510mm</b>
Diameter of Column	<b>80mm</b>
Table Size	<b>290 x 290mm</b>
Table Tilt	<b>45° - 0 - 45°</b>
Base Size	<b>450 x 270mm</b>
Overall L x W x H	<b>710 x 350 x 1,015mm</b>
Weight	<b>82kg</b>

Model	<b>ED16SB</b>
Code	<b>700101</b>
Rating	<b>Hobby</b>
Power	<b>370W</b>
Speed Range	<b>(5) 460-2890rpm</b>
Throat	<b>127mm</b>
Chuck Cap/Type	<b>16mm keyless</b>
Chuck Travel	<b>60mm</b>
Max Chuck to Table	<b>315mm</b>
Max Chuck to Base	<b>430mm</b>
Table Size	<b>200 x 200mm</b>
Table Tilt	<b>45° - 0 - 45°</b>
Base Size	<b>340 x 210mm</b>
Overall L x W x H	<b>310 x 520 x 840mm</b>
Weight	<b>37kg</b>

Model	<b>WD13L</b>
Code	<b>700099</b>
Rating	<b>Hobby</b>
Power	<b>250W</b>
Speed Range	<b>(5) 600 - 2,500rpm</b>
Throat	<b>105mm</b>
Chuck Cap/Type	<b>13mm keyless</b>
Chuck Travel	<b>50mm</b>
Max Chuck to Table	<b>215mm</b>
Max Chuck to Base	<b>370mm</b>
Table Size	<b>160 x 160mm</b>
Table Tilt	<b>45°-0-45°</b>
Base Size	<b>290 x 180mm</b>
Overall L x W x H	<b>240 x 470 x 735mm</b>
Weight	<b>20kg</b>

# Assembly

## Assembly for ED16F2-ED16B2-ED16SB Pillar Drills

Please read through the section entitled illustration and parts description, to identify the parts quickly and easily.



**WARNING! THE DRILLHEAD IS A HEAVY AND SUBSTANTIAL PIECE OF MACHINERY, YOU ARE ADVISED TO HAVE HELP TO LIFT IT CLEAR OF THE BOX AND FIT IT TO THE COLUMN.**

### For ED16SB ONLY (Motor Yoke Butterfly Clamps)

Place the drill head on upside down on the work bench and remove the two Hex bolts (A) from the drill head with a spanner, (see fig 1) place the Hex bolts safely aside in readiness for mounting the column to the base. Locate the two motor yoke butterfly knobs (9) and screw them into the threaded holes, (see fig 1)

Place the base (2) on the bench or (floor) and place the mounting flange of the column (3) onto the seating flange of the base, align the holes. Use the four Hex bolts and plain washers secure the column to the base (see fig 2). Loosen the socket grubs crew holding the cup chamfered retaining collar to the column (with the supplied Hex key), remove it and the rise and fall rack, put aside (see fig 3).

Take the drill table mounting bracket arm (4) and twist the worm drive shaft with your fingers such that the whole shaft protrudes from the casting and the worm gear itself is clear of the square recess in the main body of the casting (see fig 4).

Locate and fit the crank handle (8) to the shaft, ensuring that you tighten the grub screw onto the machined flat on the shaft. This will keep the worm gear in position (see figs 4-5). Pick up the rise and fall gear rack, identify the top and the bottom, (the rack gearing is cut asymmetrically, with the gear cut extending closer to the bottom), make sure you have the rack the right way up, as it will allow you to drive the drill table up and down over its full range (see fig 6).

Fit the rise and fall rack into the square recess in the mounting body casting, ensure that it is engaged with the pinion, (see figs 7-8) and lower the combined mechanism over the column (3). Allow

it to slide down the column until the rise and fall rack is located in the cup chamfer in the top of the mounting flange (see figs 9-10). Replace the cup chamfered retaining collar over the column and slide it down onto the top of the rack. Lock it in place with the grub screw, ensuring that it has captured the upper end of the rack securely, but not too tight that the rack can not be swivelled around the pillar (see fig 3).

Check that the bracket can be driven up and down the column and can swivel around the pillar. Locate the Bristol clamping handle at the rear of the bracket and tighten, (see fig 11) check it has 'pinched' up on the column and the bracket is immobile; both in it's up and down travel and swivel movement.

Fit the drill table (5), identify the Bristol clamping handle at the front of the bracket and tighten, (see fig 12) check it has 'pinched' up on the drill table spigot and the drill table is immobile.

**CHECK** the drill head, ensure that the two hex socket grub screws that lock the head in place on the column are withdrawn and will not foul on the column (3) when the head is fitted (see fig 13). Put the lower assembly you have just been working on in the designated position, make sure it is stable and lift the drillhead (1) over the column (3) and let it drop into place (see fig 14). Set the drill head approximately fore and aft and lock in position using the two caphead grub screws mentioned earlier. Check that the drillhead is immobile. Everything on the drilling machine is now secured.

Once the drilling machine is correctly positioned and, if necessary, fastened down; you can proceed with the final assembly.

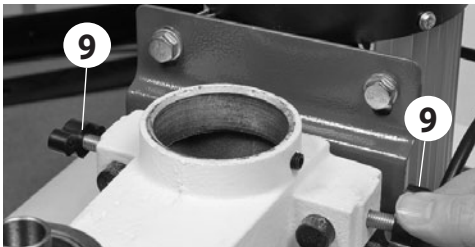
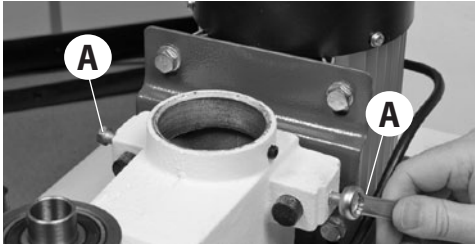
Locate the lever feed handle (6) and it's securing screw, **note the raised boss of the feed mechanism and the spigot next to it** (see fig 15). Mount the handle over the boss and ensure the spigot hole in the handle engages the spigot on the mechanism. Secure with the supplied caphead bolt and washer through the hole in the centre of the handle through to the tapped hole in the mounting boss (see fig 16).

Locate the guard moulding, shield and Phillips screws (7). Insert the shield into the guard moulding's recess and line up the three pre-drilled holes and secure with the Phillips screws (see fig 17-18).

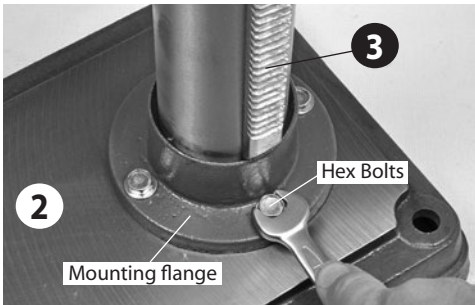


Take the chuck guard and fit to the lower bearing flange of the quill mounting. Tighten the screw and nut fastening so that the drill guard is securely held in place (see fig 19).

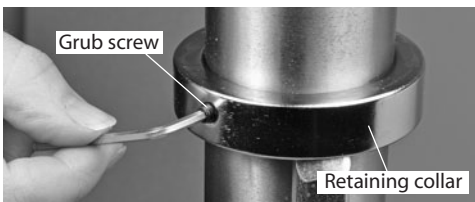
**Fig 01**



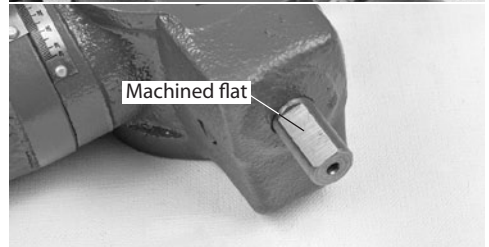
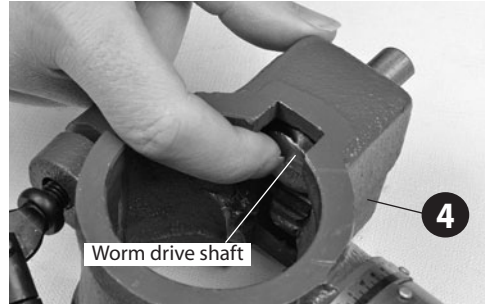
**Fig 02**



**Fig 03**



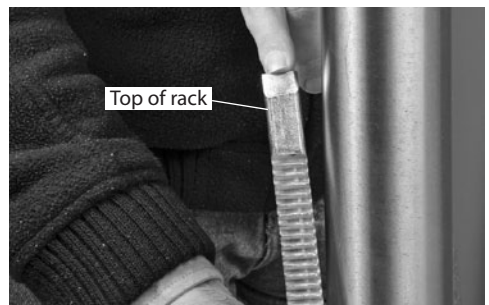
**Fig 04**



**Fig 05**



**Fig 06-07-08**



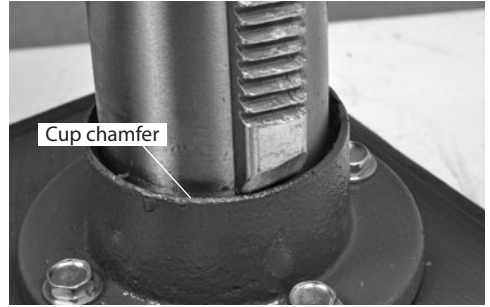
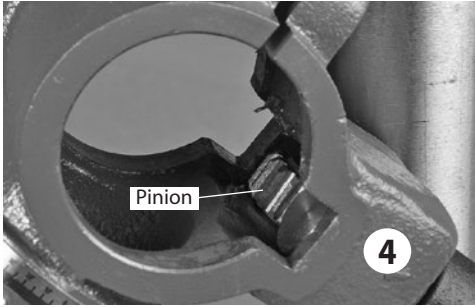


Fig 11

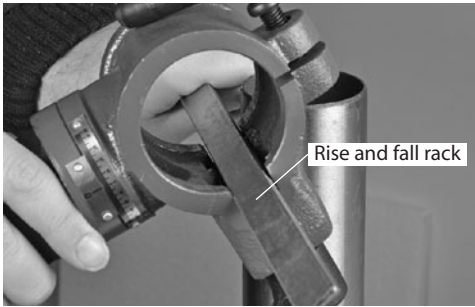


Fig 09-10

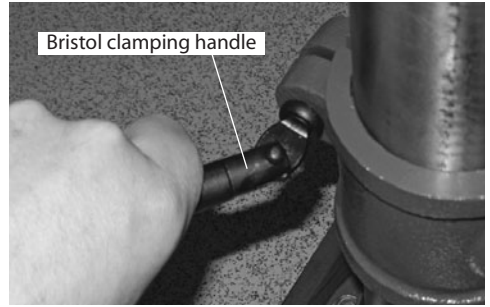


Fig 12

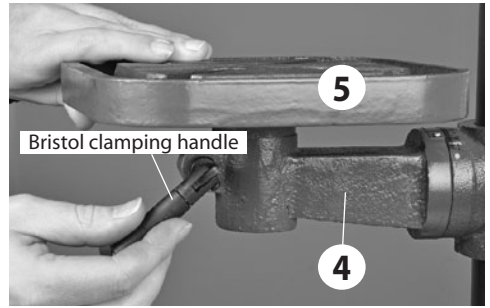
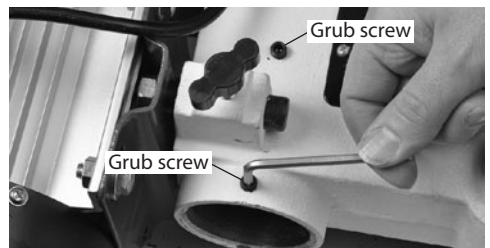
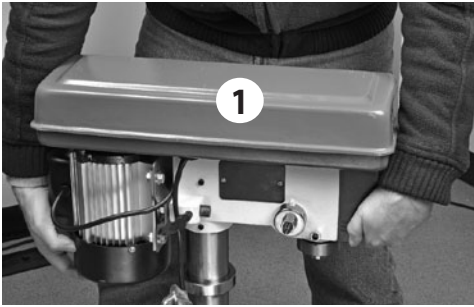



Fig 13



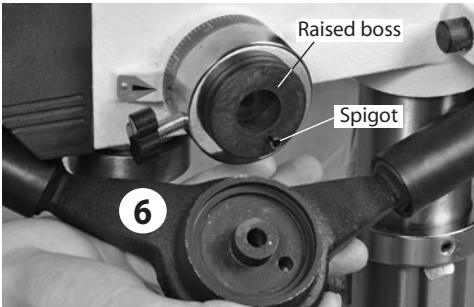
**Fig 14**





**WARNING! THE DRILLHEAD IS A HEAVY AND SUBSTANTIAL PIECE OF MACHINERY, YOU ARE ADVISED TO HAVE HELP TO LIFT IT CLEAR OF THE BOX AND FIT IT TO THE COLUMN.**

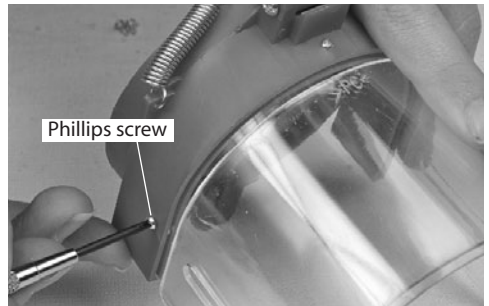
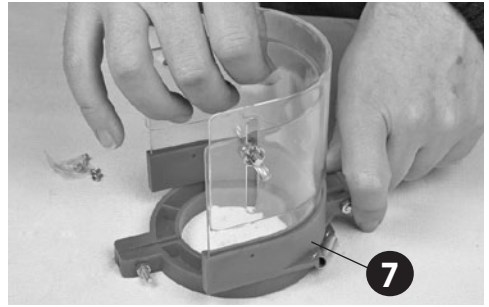
**Fig 15**



**Fig 16**



**Fig 17-18**



**Fig 19**



Fit the guard assembly to the lower bearing flange of the quill mounting, tighten the screw and nut so that the drill guard is securely held in place.

**Morse taper arbor and chuck**

Locate the morse taper arbor (11) and the B16 keyless chuck (13). Insert the arbor into the keyless chuck as shown in (fig 20). Insert the other end of the arbor (11) up into the lower bearing flange in the quill until the assembly locks in place, (see fig 21)

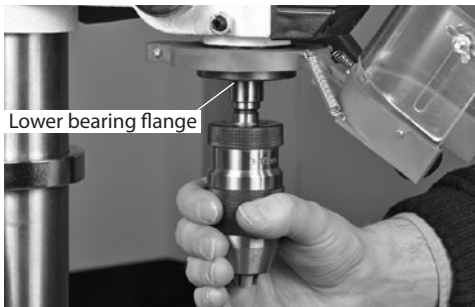
# Assembly

**Fig 20**



Insert the arbor into the keyless chuck as shown

**Fig 21**



Insert the other end of the arbor up into the quill until the assembly locks in place

## Assembly for WD13L Pillar Drill

### Mounting the column

Place the mounting flange of the column (3) onto the seating flange of the base. Align the holes. Locate the two M8 Hex bolts you removed earlier from the drill head and the extra hex bolts and 8mm plain washers and secure the column to the base with a 13mm spanner, (see fig 22).

**Fig 22**



### Table

Locate the table/support assembly and slide it down the column until it rests on the base plate. Insert the bristol clamping handle into the threaded hole to the side of the table casting, slide the table up the column to working height and clamp the table in position, (see figs 23-24).

**Fig 23**



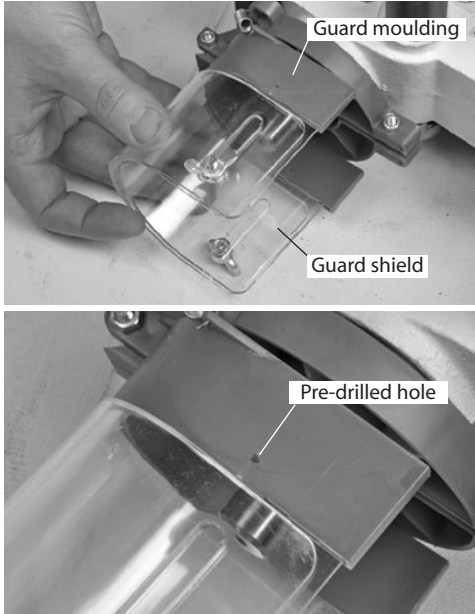
**Fig 24**



### Guard shield

Locate the guard shield and Phillips screws (7). Insert the shield into the guard moulding's recess and line up the three pre-drilled holes and secure with the Phillips screws, (See figs 25-26)

**Fig 25-26**

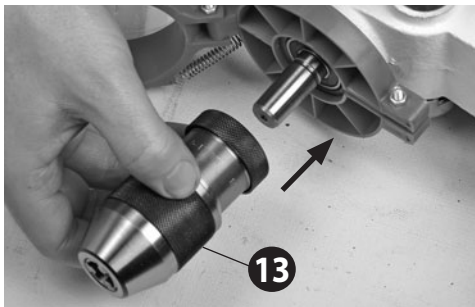


Line up the three pre-drilled holes and secure with the Phillips screws

**Keyless chuck**

Insert the keyless chuck (13) over the morse taper arbor as shown in (fig 27) and press home.

**Fig 27**




**Lever feed handles**

Locate the three lever handles (14) and screw them into the threaded holes on the feed shaft, (See fig 28)

**Fig 28**



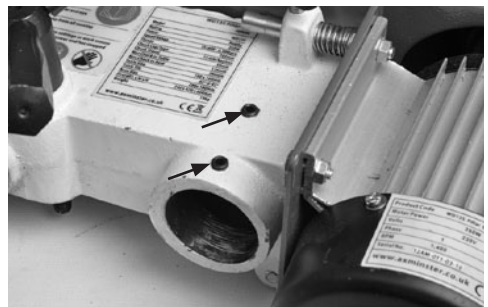
**Pillar drill head**



**WARNING! THE DRILLHEAD IS A HEAVY AND SUBSTANTIAL PIECE OF MACHINERY, YOU ARE ADVISED TO HAVE HELP!**

Using the 3mm Hex key loosen the two grub screws to the right side of the head, (see fig 29) lift the drill head above the column and let it drop into place.

**Fig 29**

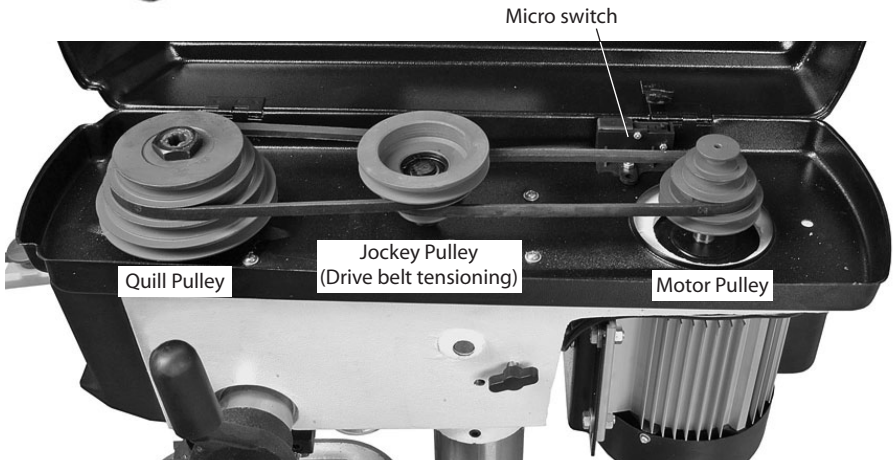
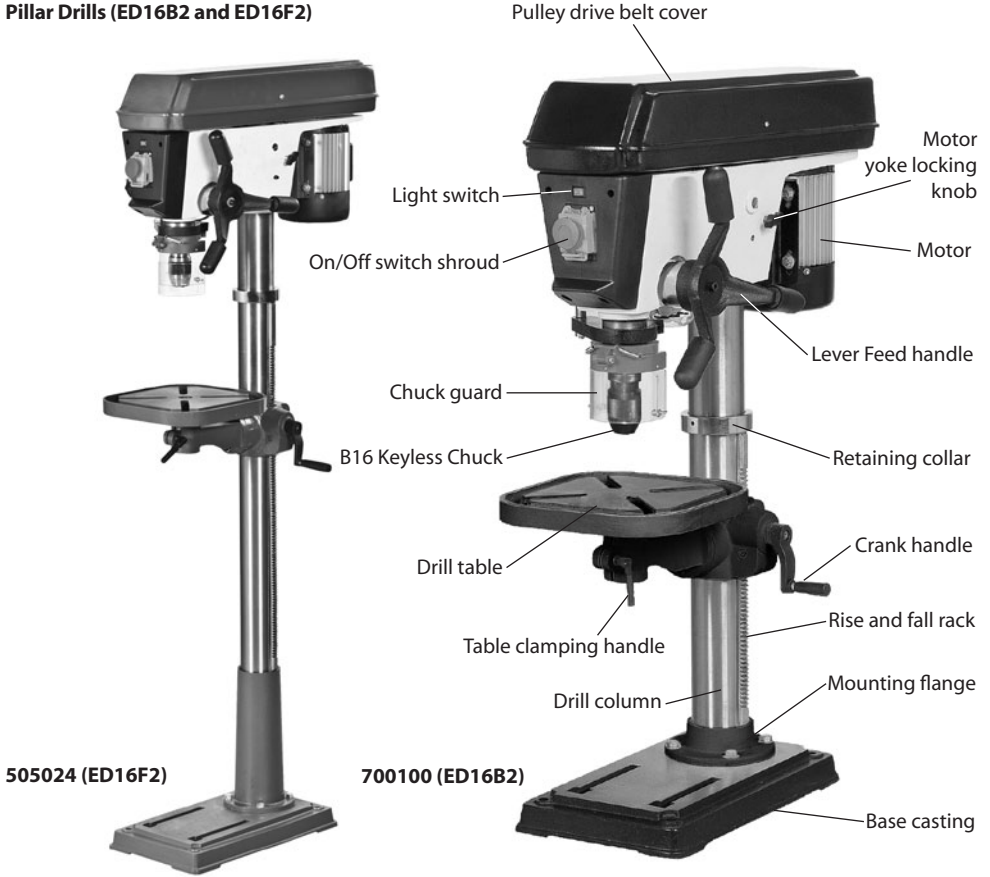


Set the drillhead approximately fore and aft and lock in position using the two caphead grub screws mentioned earlier.

Check that the drillhead is immobile. Everything on the drilling machine is now secured, and if you now wish to move it to its preferred workplace, nothing should slew during the lift and move. Once the drilling machine is correctly positioned and fastened down, it is ready for use.

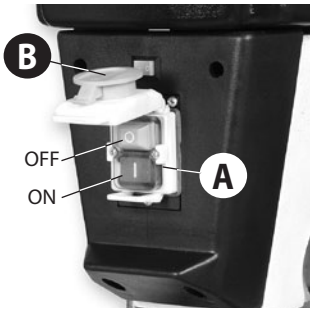
# Illustration and Parts Description

## Pillar Drills (ED16B2 and ED16F2)

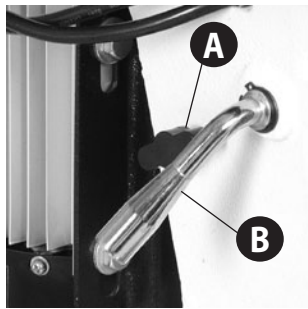


# Illustration and Parts Description

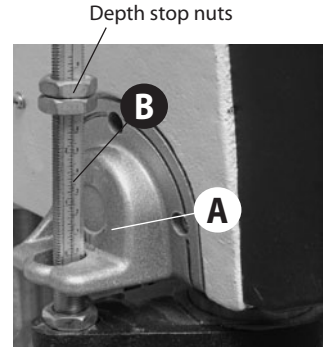
## Pillar Drills (ED16B2 and ED16F2)



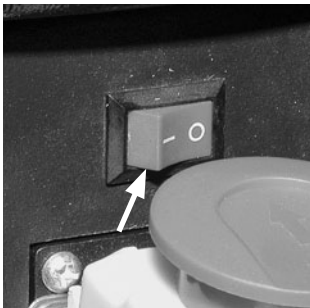
On/Off switch (A)  
Emergency stop button (B)



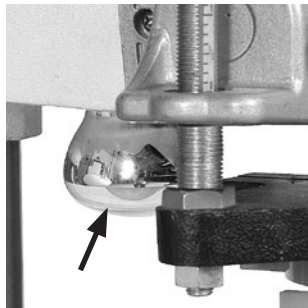
Motor yoke butterfly knob (A)  
Drive belt tensioning lever lock (B)



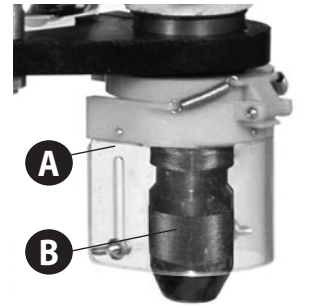
Depth stop assembly (A)  
Depth stop scale (B)



Pillar drill light switch



Pillar drill light



Chuck guard (A)  
Keyless chuck (B)



Quill lower bearing flange

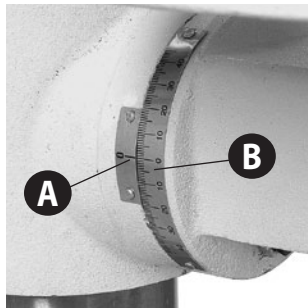


Table tilt pointer (A)  
Table tilt scale (B)

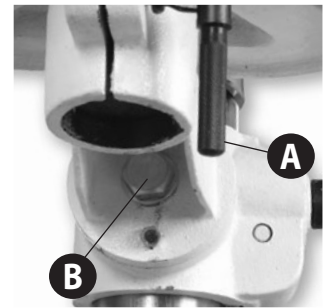
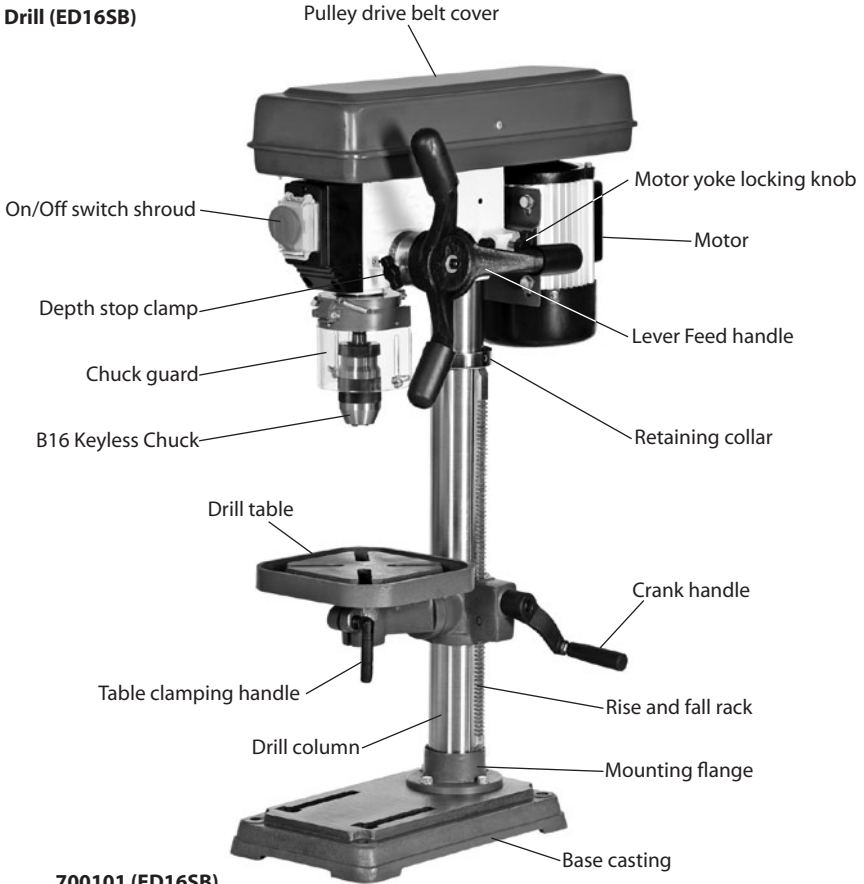


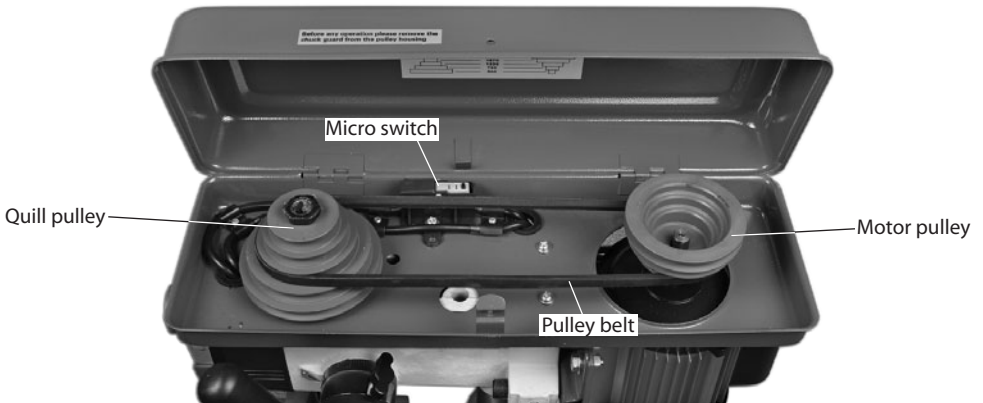
Table clamping handle (A)  
Table tilt clamping bolt (B)

# Illustration and Parts Description

## Pillar Drill (ED16SB)



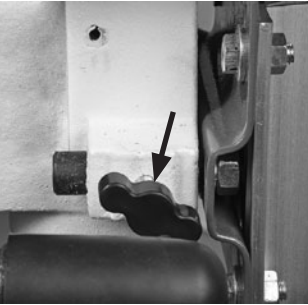
## 700101 (ED16SB)



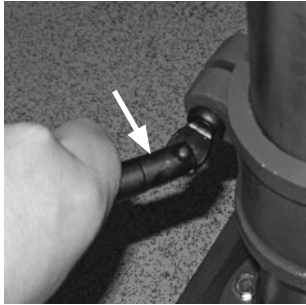


# Illustration and Parts Description

## Pillar Drill (ED16SB)



Motor yoke butterfly locking knob



Drill table mounting  
bracket clamping handle



Table clamping handle

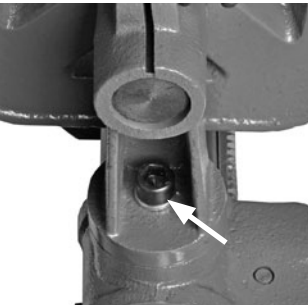
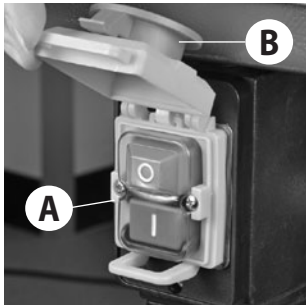


Table tilt clamping bolt



On/Off switch (A)  
Emergency stop button (B)

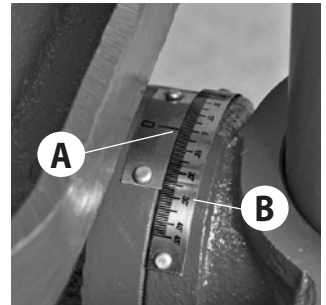
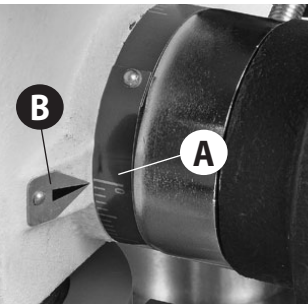


Table tilt pointer (A)  
Table tilt scale (B)



Depth scale (A)  
Depth scale pointer (B)



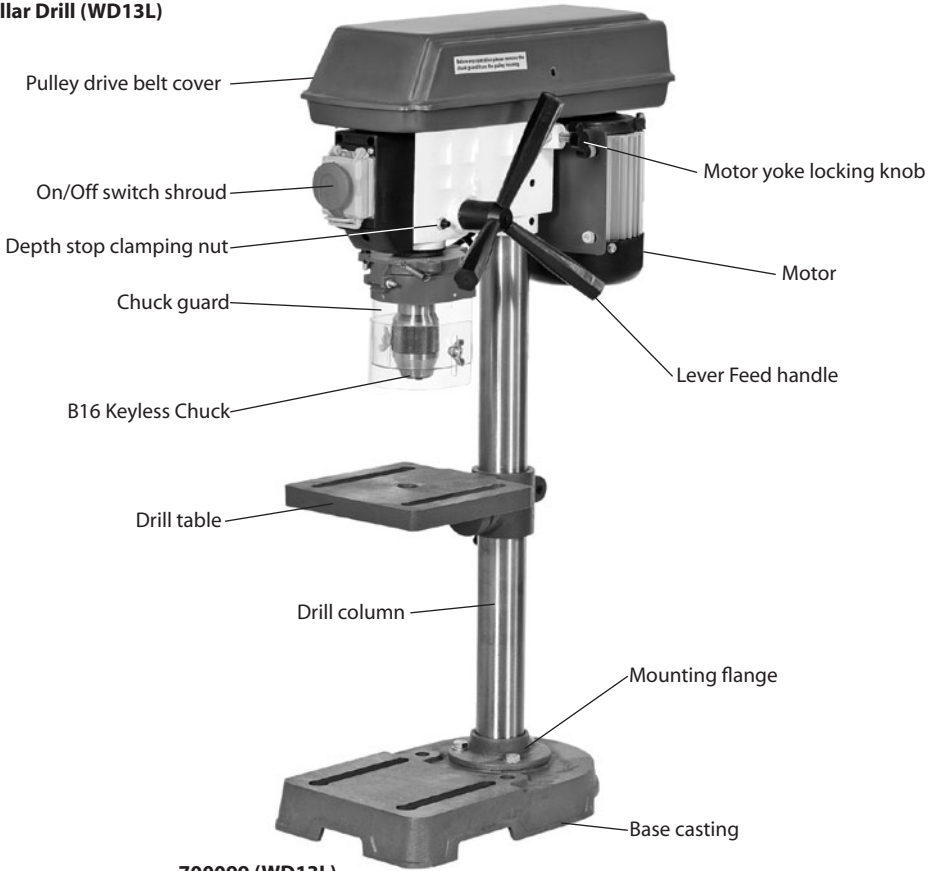
Depth stop butterfly clamp



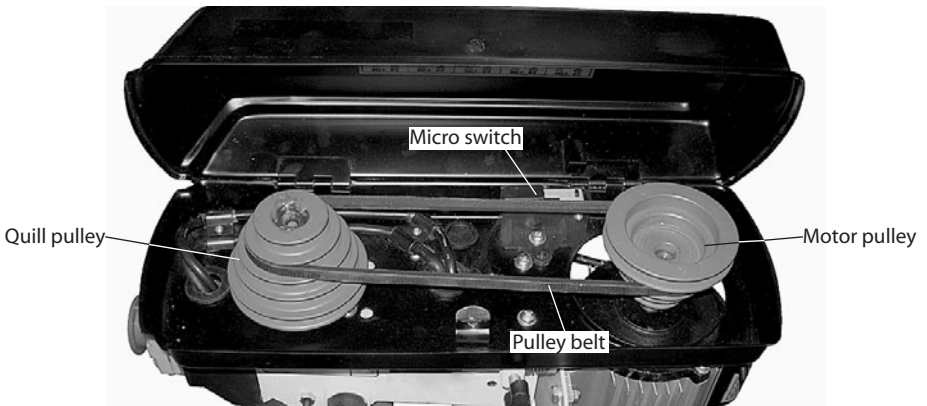
Chuck guard

# Illustration and Parts Description

## Pillar Drill (WD13L)



700099 (WD13L)

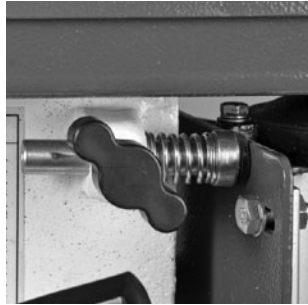


# Illustration and Parts Description

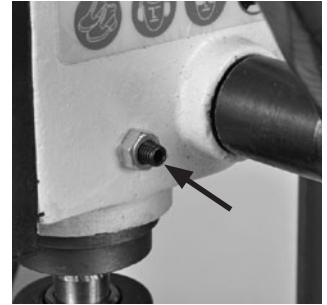
## Pillar Drill (WD13L)



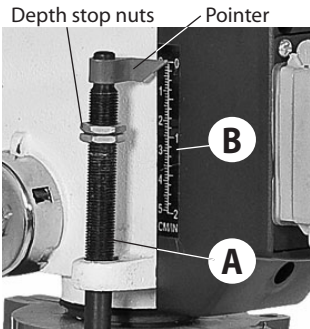
Drill table mounting  
bracket clamping handle



Motor yoke butterfly locking knob



Depth stop clamping screw/nut



Depth stop assembly (A)  
Depth stop scale (B)



Chuck guard assembly

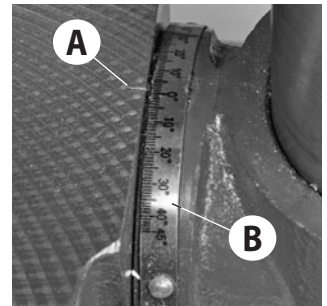


Table tilt pointer (A)  
Table tilt scale (B)

# Changing the Speed



**WARNING! DISCONNECT THE PILLAR DRILL FROM THE MAINS SUPPLY BEFORE CONTINUING!**

Remove the securing screw from the side of the pulley and drive belt cover, put carefully aside and raise the cover (See fig 30).

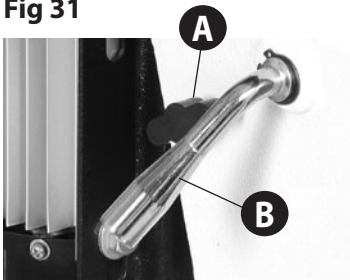
**Fig 30**



## Pillar Drills (ED16B2 and ED16F2) Only

Locate and loosen the motor yoke butterfly locks (A). Locate the drive belt tensioning lever (B), (see fig 31) and turn it un-clockwise, to move the motor assembly "in". This will release the tension from the drive belts (See figs 32-33-34-35).

**Fig 31**



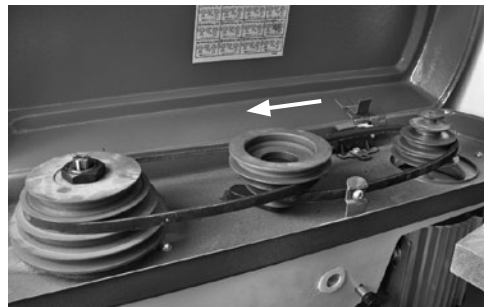
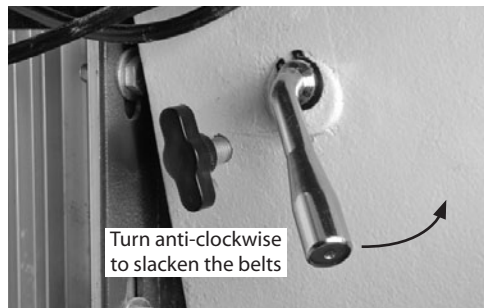
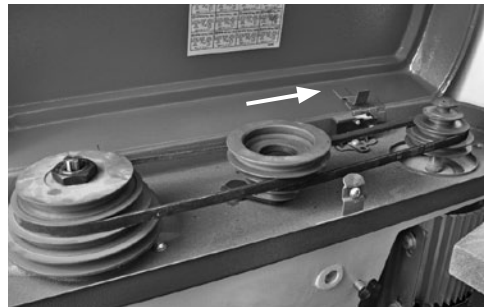
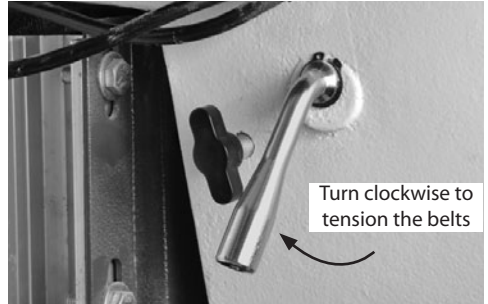
Refer to the (speed select table) and ascertain the belt positions for the speed you require. Move the belts to these positions.



**WARNING! TAKE CARE NOT TO TRAP YOUR FINGERS WHEN REPOSITIONING THE BELT ON THE PULLEYS!**

Turn the pulley train to check the belts move freely. Tension the whole belt train by turning the drive belt

**Fig 32-33-34-35**

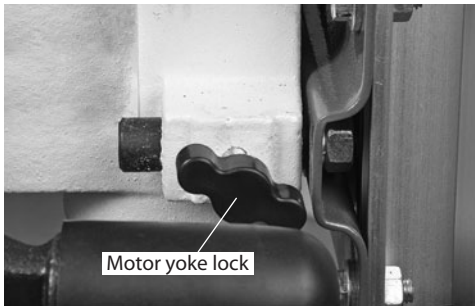


tensioning lever (B) clockwise, to move the motor assembly "out". Tighten the motor yoke butterfly knobs (A) to lock the motor assembly in position.

### Pillar Drill (ED16SB) Only

To release the tension on (ED16SB) loosen the two motor yoke locks on either side of drillhead, push the motor assembly up against the drillhead casting, thus releasing the tension on the pulleys, (See figs 36-37). Refer to the (speed select table) and ascertain the belt positions for the speed you require.

**Fig 36-37**



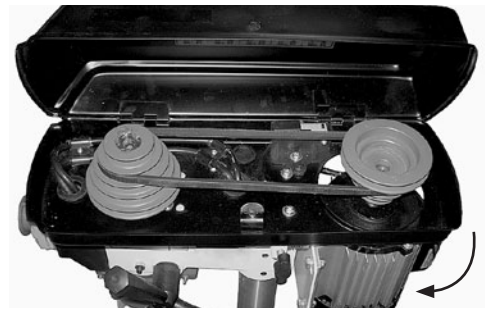
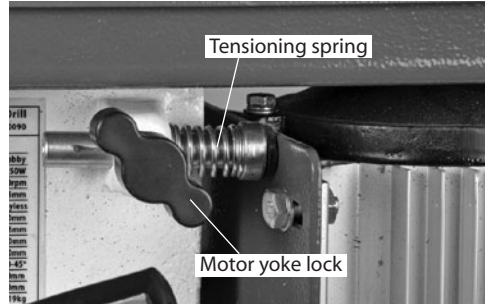
**WARNING! TAKE CARE NOT TO TRAP YOUR FINGERS WHEN REPOSITIONING THE BELT ON THE PULLEYS!**

Turn the pulleys to check the belts move freely. Tension the pulleys by pushing the motor assembly out and securing the motor yoke butterfly knobs to lock the motor assembly in position.

### Pillar Drill (WD13L) Only

To release the tension loosen the motor yoke tensioning lock which loosens the tension on the spring, push the motor up against the drillhead casting, thus releasing the tension on the pulleys, (See fig 38).

**Fig 38**



**WARNING! TAKE CARE NOT TO TRAP YOUR FINGERS WHEN REPOSITIONING THE BELT ON THE PULLEYS!**

Turn the pulleys to check the belts move freely. Tension the pulleys by pushing the motor assembly out and securing the motor yoke butterfly knob to lock the motor assembly in position. Lower the belt and pulley cover carefully, (remember the micro switch) refit the securing screw and tighten.



**RE-CONNECT THE SUPPLY AND SWITCH ON. Check the drill runs smoothly, no hard vibration etc.**

If all seems satisfactory, recommence drilling operations.

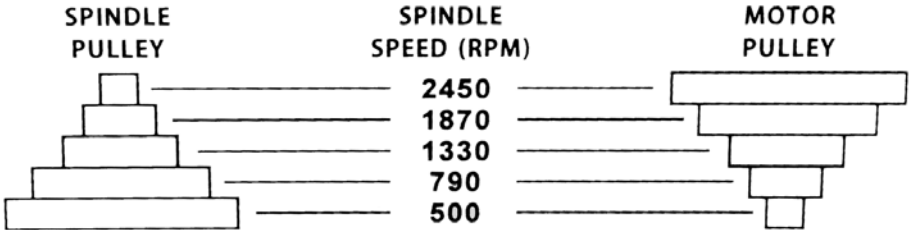
# Speed Select Table

700100 (ED16B2)- 505024 (ED16F2) Pillar Drills

<p>① RPM 50 ~ 120</p> <p>BELT: A - 1, 4 - 4</p>	<p>② RPM 50 ~ 220</p> <p>BELT: B - 2, 4 - 4</p>	<p>③ RPM 50 ~ 270</p> <p>BELT: A - 1, 3 - 3</p>	<p>④ RPM 50 ~ 320</p> <p>BELT: C - 3, 4 - 4</p>
<p>⑤ RPM 50 ~ 400</p> <p>BELT: B - 2, 3 - 3</p>	<p>⑥ RPM 50 ~ 450</p> <p>BELT: A - 1, 2 - 2</p>	<p>⑦ RPM 50 ~ 820</p> <p>BELT: D - 4, 3 - 3</p>	<p>⑧ RPM 50 ~ 970</p> <p>BELT: C - 3, 2 - 2</p>
<p>⑨ RPM 50 ~ 1260</p> <p>BELT: B - 2, 1 - 1</p>	<p>⑩ RPM 50 ~ 1380</p> <p>BELT: D - 4, 2 - 2</p>	<p>⑪ RPM 50 ~ 1820</p> <p>BELT: C - 3, 1 - 1</p>	<p>⑫ RPM 50 ~ 2580</p> <p>BELT: D - 4, 1 - 1</p>

7000101 (ED16SB) Pillar Drill

## SPINDLE SPEEDS



700099 (WD13L) Pillar Drill

PROCEDURE FOR ADJUSTING SPINDLE SPEED				
1	2	3	4	5
<p>RPM: 2500</p> <p>BELT: E-5</p>	<p>RPM: 1750</p> <p>BELT: D-4</p>	<p>RPM: 1250</p> <p>BELT: C-3</p>	<p>RPM: 900</p> <p>BELT: B-2</p>	<p>RPM: 600</p> <p>BELT: A-1</p>

## Removing the Chuck Assembly

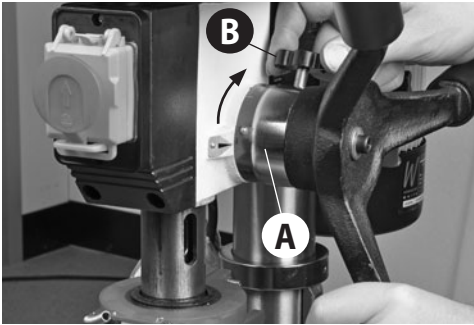
### Preparation

You will require the morse taper drift (12)

### Pillar Drill (ED16SB) Only

Lower the quill to it's maximum depth by turning the feed lever handle. while holding the handle turn the depth scale ring (A) fully round and then tighten the butterfly depth stop knob (B) to lock the quill in position, (See fig 39)

Fig 39



### Pillar Drill (ED16B2-ED16F2)

Place a piece of timber on the drill table to prevent the chuck from being damaged and lower the quill to it's maximum depth by turning the feed lever handle.

### Removing the chuck

While holding the handle in place turn the chuck to line up the morse taper arbor (11) in the quills machined slot, (See fig 40). Insert the morse taper drift (12) in the quills slot, thus pushing the morse taper down and releasing the chuck, (See fig 41).

Fig 40

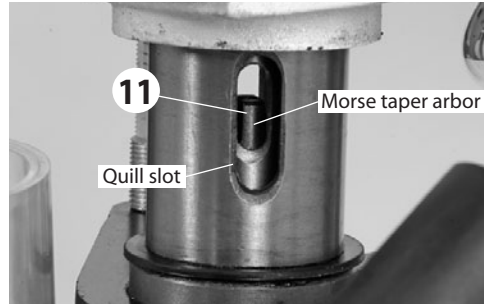
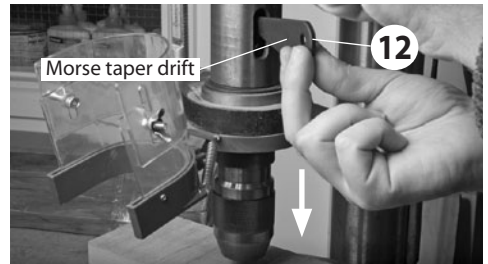


Fig 41



# Maintenance



**WARNING! DISCONNECT THE MACHINE FROM THE MAINS SUPPLY BEFORE CONTINUING!**

## Cleaning

Excessive dust in the motor can cause excessive heat to develop. Every effort should be made to prevent foreign material from entering the motor.

When operated under conditions likely to permit accumulations of dust, dirt or waste, a visual inspection should be made at frequent intervals. Accumulations of dry dust can usually be blown out successfully.

**Caution: To avoid eye injury or adverse reaction to dust, high pressure hoses should not be used especially in poorly ventilated areas. The operator performing this cleaning function should wear safety goggles and dust filter mask.**

After cleaning all dust and debris a light coating of machine oil on the quill then to spread the oil.

If the machine is going to stand idle for any length of time, a light coat of spray or machine oil over the column and table will prevent rusting.

## Electrics



**WARNING! DO NOT USE THE MACHINE IF THE POWER CABLE HAS BECOME DAMAGED**

If any servicing (other than the above cleaning) becomes necessary the unit should be returned to Axminster tool centre to be repaired by one of our qualified electrician. Contact our technical sales department for further assistance.

**Call** 03332 406406

**Email** [technical@axminster.co.uk](mailto:technical@axminster.co.uk)

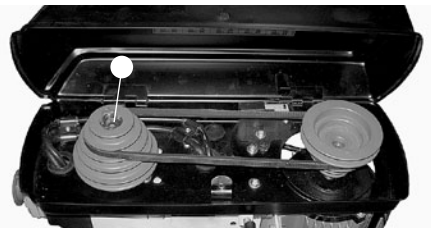
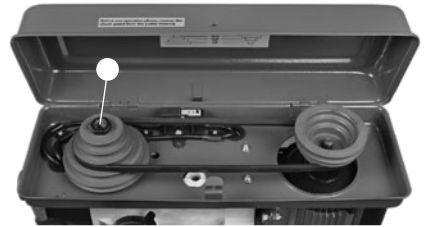
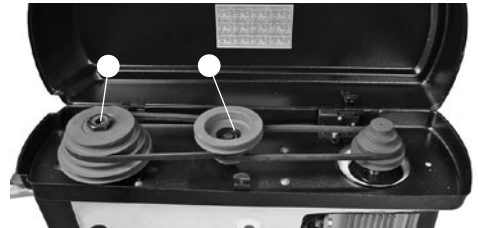


**WARNING! DO NOT ATTEMPTED TO REPAIR IT YOUR SELF CONTACT OUR TECHNICAL SALES TEAM FOR ASSISTANCE!**

## Motor speed

The speed of the motor cannot be regulated or changed - no adjustment is necessary.

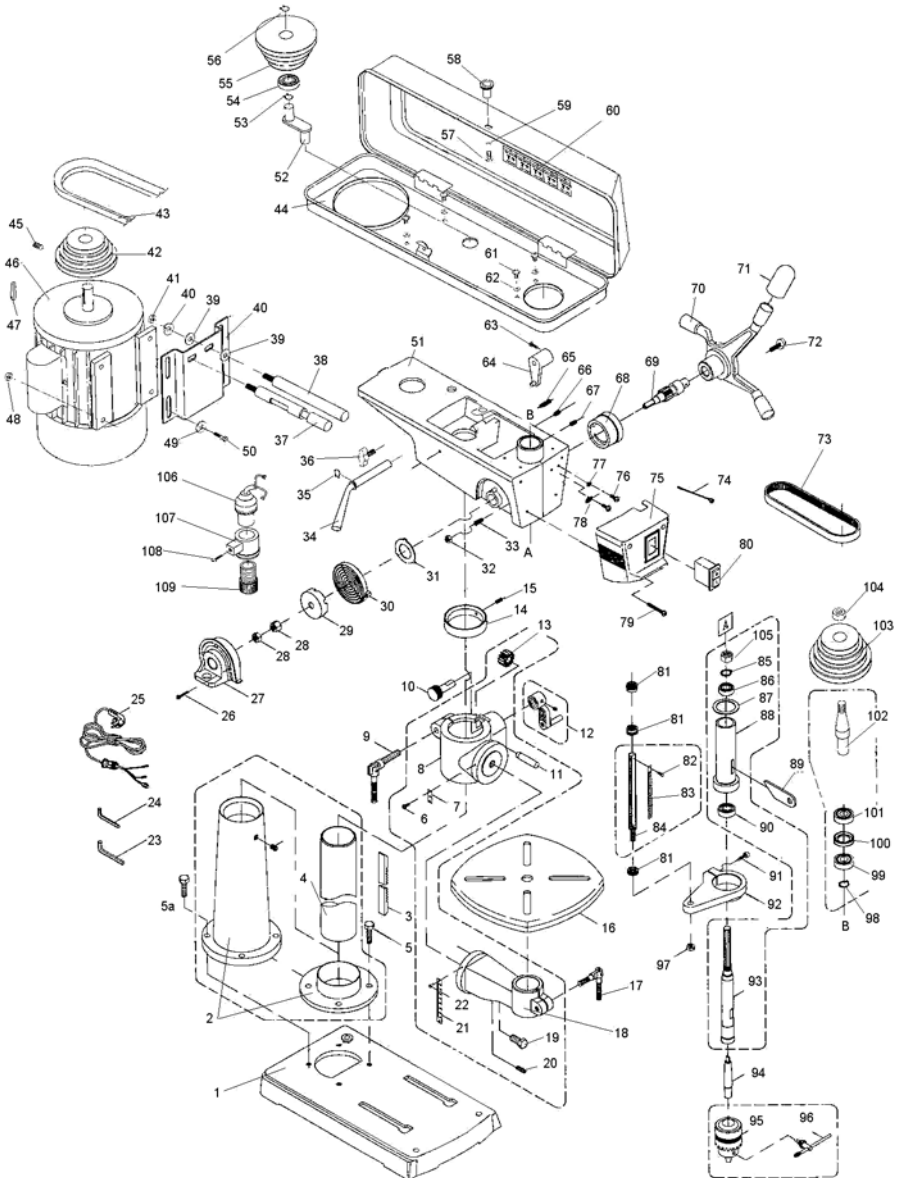
## Oiling points





# Parts Breakdown/List

## Pillar Drills 505024 (ED16F) 700100 (ED16B2)



# Parts Breakdown/List

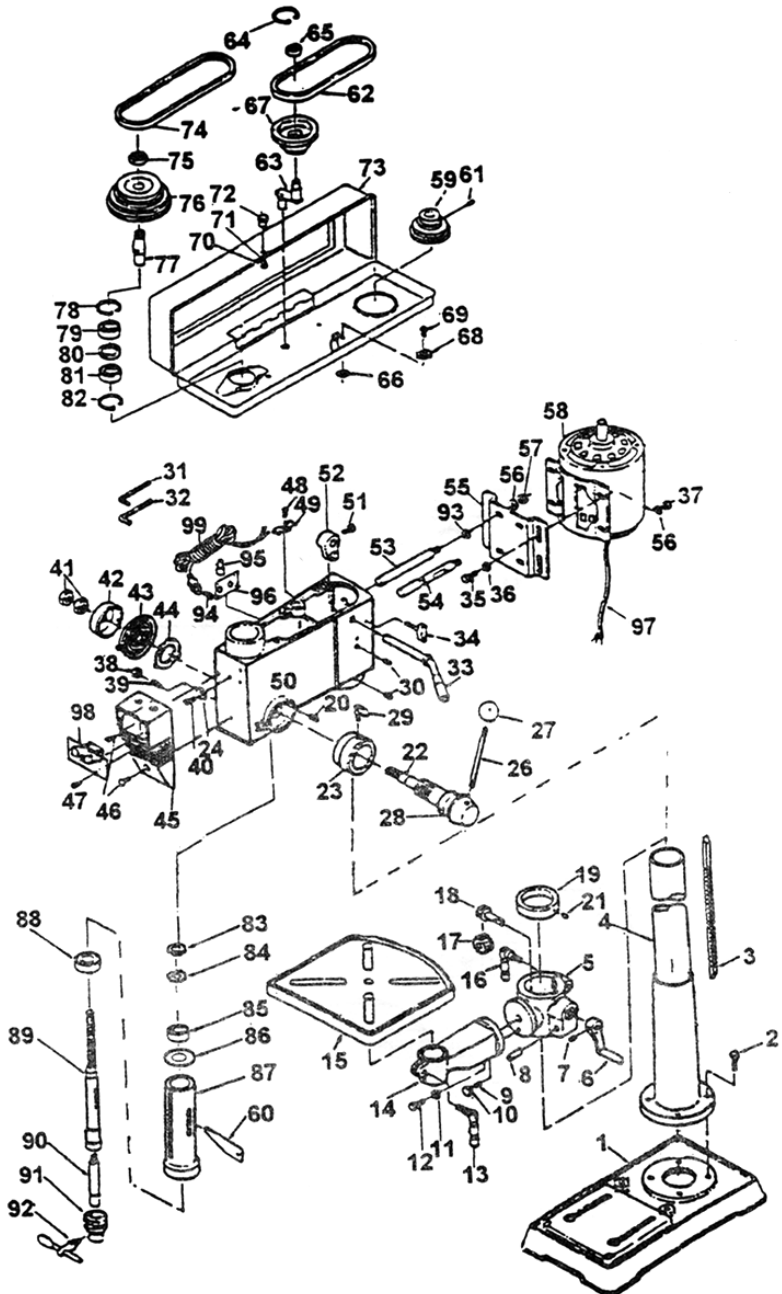
## Pillar Drills 505024 (ED16F) 700100 (ED16B2)

1	BASE	1
2	COLUMN SHOULDER	1
3	RACK	1
4	COLUMN	1
5	HEX BOLT	4
6	SCREW	2
7	MARK	1
8	TABLE BRACKET	1
9	CLAMP BOLT	1
10	WORM GEAR	1
11	SHAFT	1
12	HANDLE	1
13	GEAR	1
14	RACK RING	4
15	SET SCREW	1
16	TABLE	1
17	TABLE BOLT	1
18	TABLE ARM BRACKET	1
19	HEX BOLT	2
20	PIN	1
21	MARK	1
22	SCREW	2
23	WRENCH 5mm	1
24	WRENCH 3mm	1
25	POWER CORD	1
26	SCREW	3
27	COVER	1
28	NUT	2
29	SPRING CAP	1
30	TORSION SPRING	1
31	SPRING COVER	1
32	NUT	1
33	SCREW SPECIAL SET	1
34	SHIFTER BAR	1
35	C-CLIP	1
36	SLIDE BAR BOLT	2
37	SLIDE BAR	1
38	SLIDE BAR	1
39	WASHER	2
40	MOTOR BASE	2
41	NUT	2
42	MOTOR PULLEY	1
43	V-BELT	1
44	PULLEY COVER	1
45	SET SCREW	1
46	MOTOR	1
47	KEY	1
48	NUT	4
49	WASHER	4
50	HEX BOLT	4
51	BODY	1
52	CENTER SHAFT	1
53	C-CLIP	1
54	BALL BEARING	1

55	CENTER PULLEY	1
56	C-CLIP	1
57	SCREW	1
58	KNOB	1
59	WASHER	1
60	SPEED CHART LABEL	1
61	SCREW	4
62	WASHER	4
63	HEX BOLT	1
64	SHIFTER	1
65	SET SCREW	1
66	SET SCREW	1
67	SET SCREW	2
68	DEPTH RING	1
69	FEED SHAFT	1
70	HANDLE	1
71	HANDLE COVER	1
72	CAP BOLT	1
73	V-BELT	1
74	SCREW	2
75	SWITCH BOX	1
76	SCREW	2
77	WASHER	2
78	WASHER	1
79	SCREW	2
80	SWITCH	1
81	NUT	3
82	SCREW	2
83	SCALE	1
84	SCALE BASE	1
85	C-CLIP	1
86	BALL BEARING	1
87	RUBBER WASHER	1
88	SPINDLE SLEEVE	1
89	WEDGE	1
90	BALL BEARING	1
91	CAP BOLT	1
92	PLATE	1
93	SPINDLE	1
94	ARBOR	1
95	CHUCK	1
96	CHUCK KEY	1
97	NUT	1
98	C-CLIP	1
99	BALL BEARING	1
100	SPACER	1
101	BALL BEARING	1
102	INSERT PULLEY	1
103	SPINDLE PULLEY	1
104	PULLEY NUT	1
105	NUT	1
106	LIGHT BODY	1
107	LIGHT BASE	1
108	SCREW	1
109	LIGHT SCREW	1

# Parts Breakdown/List

Pillar Drill 700101 (ED16SB)

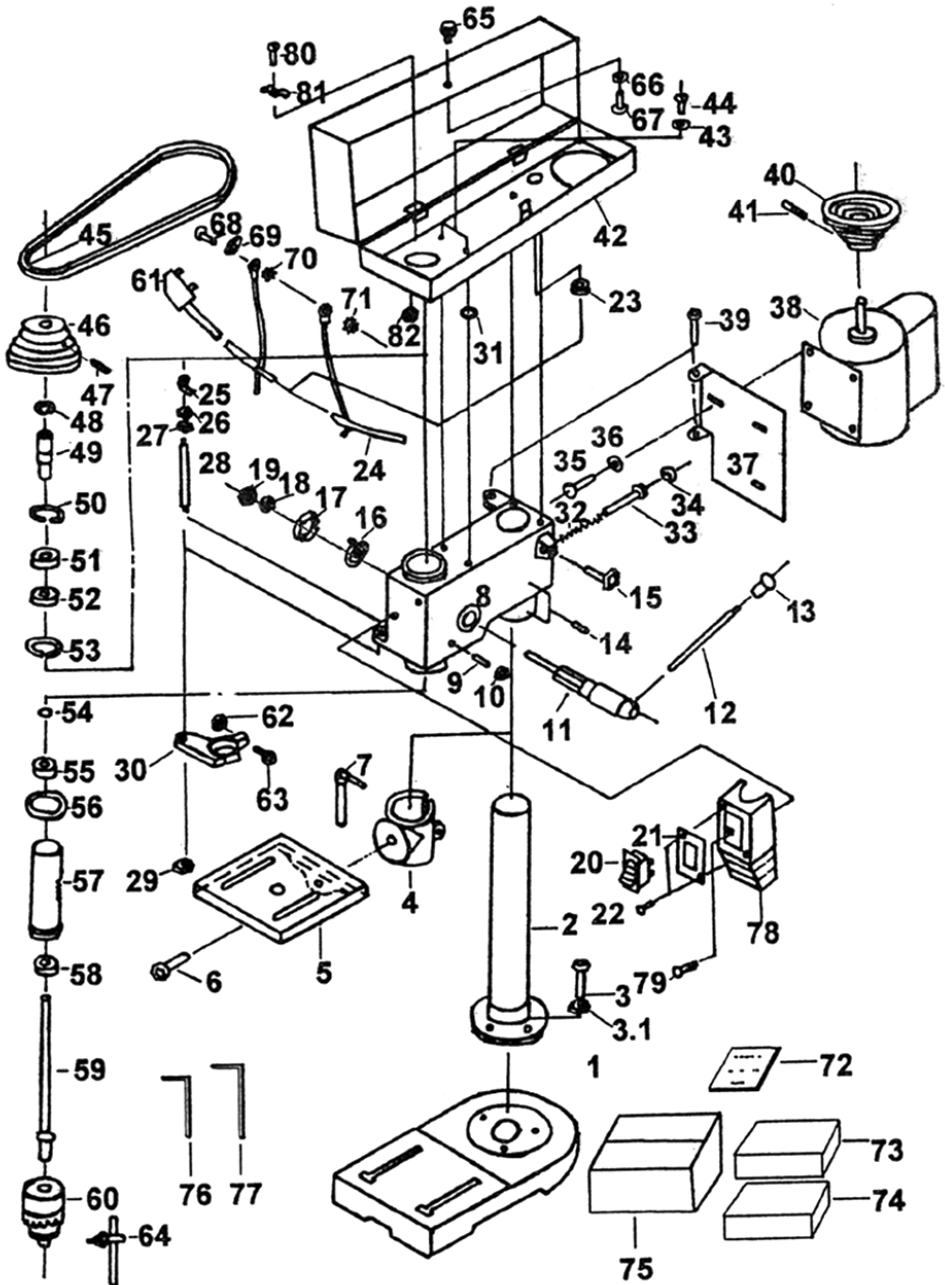


## Parts Breakdown/List

Pillar Drill 700101 (ED16SB)

PART NO	DESCRIPTION	Q'TY	PART NO	DESCRIPTION	Q'TY	PART NO	DESCRIPTION	Q'TY
1	Base	1	46	Bolt	4	91	Chuck	1
2	Bolt	4	47	Bolt	2	92	Key Chuck	1
3	Rack	1	48	Bolt	1	93	Washer	2
4	Column	1	49	Clamp Cord	1	94	Screw	2
5	Table Bracket	1	50	Body	1	95	Connector wire	2
6	Handle	1	51	Bolt	1	96	Cover	1
7	Headless Set Screw	1	52	Shifter	1	97	Wire	1
8	Shaft	1	53	Slide Bar	1	98	Witch	1
9	Pin	1	54	Slide Bar	1	99	Plug	1
10	Nut	1	55	Motor Base	1			
11	Washer	1	56	Washer	2			
12	Bolt	1	57	Nut	2			
13	Table Bolt	1	58	Motor	1			
14	Table Arm Bracket	1	59	Motor Pulley	1			
15	Table	1	60	Wedge	1			
16	Clamp Bolt	1	61	Headless Screw	1			
17	Gear	1	62	V-Belt	1			
18	Warm Gear	1	63	Center Shaft	1			
19	Rack Ring	1	64	Circles For Hole	1			
20	Pin Stop	1	65	Ball Bearing	2			
21	Headless Set Screw	1	66	rubber Washer	4			
22	Feed Shaft	1	67	Center Pulley	1			
23	Scale Ring	1	68	Washer	4			
24	Washer	1	69	Screw	4			
25	Handle Body	1	70	Screw	1			
26	Handle	3	71	Washer	1			
27	Knob	3	72	Knob	1			
28	Staff Gauge	1	73	Pulley Cover	1			
29	Slide Bar Bolt	1	74	V - Belt	1			
30	Headless Set Screw	1	75	Pulley Nut	1			
31	Key Hexagon Screw	1	76	Spindle Pulley	1			
32	Key Hexagon Screw	1	77	Insert Pulley	1			
33	Shifter Bar	1	78	Circles For Hole	1			
34	Slide Bar Bolt	2	79	Ball Bearing	1			
35	Bolt	4	80	Spacer	1			
36	Washer	4	81	Ball Bearing	1			
37	Nut	4	82	Circles For Hole	1			
38	Nut	1	83	Round Nut	1			
39	Screw Special Set	1	84	Thrust Bearing	1			
40	Bolt	1	85	Ball Bearing	1			
41	Nut	2	86	Rubber Washer	1			
42	Spring Cap	1	87	Spindle Sleeve	1			
43	Spring Torsion	1	88	Ball Bearing	1			
44	Spring Cover	1	89	Spindle	1			
45	Switch box	1	90	Arbor	1			

Pillar Drill 700099 (WD13L)



## Parts Breakdown/List

Pillar Drill 700099 (WD13L)

PART NO.	DESCRIPTION	Q'TY	PART NO.	DESCRIPTION	Q'TY
1	Base	1	42	Pulley Cover	1
2	Column	1	43	Washer	4
3	Bolt	3	44	Screw	4
3-1	Washer	3	45	V-Belt	1
4	Clamping Sleeve	1	46	Spindle Pulley	1
5	Table	1	47	Headless Set Screw	1
6	Bolt	1	48	Retain Ring	1
7	Clamping Lever	1	49	Internal Spline Sleeve	1
8	Body	1	50	Retaining Ring	1
9	Headless Set Screw	1	51	Ball Bearing	1
10	Nut	1	52	Ball Bearing	1
11	Feed Shaft	1	53	Retaining Ring	1
12	Handle Bar	3	54	Retaining Ring	1
13	Knob	3	55	Ball Bearing	1
14	Headless Set Screw	2	56	Collar	1
15	Shifter Bar	1	57	Spindle Sleeve	1
16	Spring Seat	1	58	Ball Bearing	1
17	Spring Cap	1	59	Spindle	1
18	Nut	1	60	Drill Chuck	1
19	Nut	1	61	Plug	1
20	Switch	1	62	Nut	1
21	Clamping Sheet	1	63	Bolt	1
22	Screw	2	64	Chuck Key	1
23	Bush	2	65	Handle	1
24	Wire	1	66	Washer	1
25	Pointer	1	67	Screw	1
26	Nut	1	68	Screw	1
27	Nut	1	69	Grounding Symbol	1
28	Limit Bolt	1	70	Washer	1
29	Nut	1	71	Washer	1
30	Heel Block	1	72	Manual	1
31	Rubber Washer	1	73	Upper-Inner Carton	1
32	Spring	1	74	Lower-Inner Carton	1
33	Slide Bar	1	75	External Carton	1
34	Rubber Pad	1	76	Hex Key 3mm	1
35	Bolt	3	77	Hex Key 4mm	1
36	Washer	3	78	Switch Box	1
37	Motor Base	1	79	Screw	2
38	Motor	1	80	Screw	2
39	Bolt	2	81	Wire Clamps	2
40	Motor Pulley	1	82	Nut	2
41	Headless Set Screw	1			





Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local recycling centre and place into the appropriate recycling bin.

**Only for EU countries**



Do not dispose of electric tools together with household waste material. In observance of European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.