



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 amenity tip and place into the appropriate recycling bin.



Never dispose of electrical equipment or batteries in with your domestic waste. If your supplier offers a disposal facility please use it or alternatively use a recognised re-cycling agent. This will allow the recycling of raw materials and help protect the environment.

FOR HELP OR ADVICE ON THIS PRODUCT PLEASE CONTACT YOUR DISTRIBUTOR, OR SIP DIRECTLY ON: TEL: 01509500400

EMAIL: sales@sip-group.com or technical@sip-group.com www.sip-group.com

## Ref: 050716





01700 - 01708

Please read and fully understand the instructions in this manual before operation. Keep this manual safe for future reference.

## **DECLARATION OF CONFORMITY**

Declaration of Conformity
We
SIP (Industrial Products) Ltd
Gelders Hall Road
Shepshed
Loughborough
Leicestershire
LE12 9NH
England

As the manufacturer's authorised representative within the EC declare that the

F32-20 Floor Pillar Drill 400v - SIP Part No. 01708

Conforms to the requirements of the following directive(s), as indicated.

2006/42/ECMachinery Directive2014/30/EUEMC Directive2011/65/EURoHS Directive

And the following harmonised standard(s), including:

EN 60204-1:2006+A1:2009 EN 12717:2001+A1:2009 EN 55014-1:2006+A2:2011 EN 55014-1:1997+A2:2008 EN 61000-3-2:2014 EN 61000-3-3:2013

Signed:

Mr P. Ippaso - Managing Director - SIP (Industrial Products) Ltd

Date: 16/05/2016.

Œ

## **DECLARATION OF CONFORMITY**

Declaration of Conformity
We
SIP (Industrial Products) Ltd
Gelders Hall Road
Shepshed
Loughborough
Leicestershire
LE12 9NH
England

As the manufacturer's authorised representative within the EC declare that the

B13-13 Bench Pillar Drill - SIP Part. No. 01700 B16-12 Bench Pillar Drill - SIP Part. No. 01701 B16-16 Bench Pillar Drill - SIP Part No. 01702 B20-16 Bench Pillar Drill - SIP Part No. 01703 F16-16 Floor Pillar Drill - SIP Part No. 01704 F20-16 Floor Pillar Drill - SIP Part No. 01705 F28-20 Floor Pillar Drill - SIP Part No. 01706 F32-20 Floor Pillar Drill 230v - SIP Part No. 01707 F32-20 Floor Pillar Drill 400v - SIP Part No. 01708

#### Conforms to the requirements of the following directive(s), as indicated.

| 2006/95/EC  | Low Voltage Directive |
|-------------|-----------------------|
| 2006/42/EC  | Machinery Directive   |
| 2004/108/EC | EMC Directive         |
| 2011/65/EU  | RoHS Directive        |

#### And the following harmonised standard(s), including:

EN 61029-1:+A11:2010 EN ISO 12100:2010 EN 60204-1+A1:2009 EN 12717+A1:2009 EN 55014-1+A2:2011 EN 55014-2+A2:2008 EN 61000-3-2+A2:2009 EN 61000-3-11:2000

Signed:

Mr P. Ippaso - Managing Director - SIP (Industrial Products) Ltd

Date: 16/05/2016.



### **CONTENTS**

| Page No. | Description                                |  |  |  |  |
|----------|--|--|--|--|--|
| 4.       | Safety Symbols Used Throughout This Manual |  |  |  |  |
| 4.       | Safety Instructions                        |  |  |  |  |
| 8.       | Technical Specifications                   |  |  |  |  |
| 11.      | Electrical Connection                      |  |  |  |  |
| 13.      | Guarantee                                  |  |  |  |  |
| 14.      | Getting To Know Your Drill                 |  |  |  |  |
| 16.      | Assembly Instructions                      |  |  |  |  |
| 21.      | Operating Instructions                     |  |  |  |  |
| 27.      | Maintenance                                |  |  |  |  |
| 28.      | Troubleshooting                            |  |  |  |  |
| 29.      | Exploded Drawing - 01700                   |  |  |  |  |
| 30.      | Parts List - 01700                         |  |  |  |  |
| 32.      | Exploded Drawing - 01701                   |  |  |  |  |
| 33.      | Parts List - 01701                         |  |  |  |  |
| 35.      | Exploded Drawing - 01702                   |  |  |  |  |
| 36.      | Parts List - 01702                         |  |  |  |  |
| 38.      | Exploded Drawing - 01703                   |  |  |  |  |
| 39.      | Parts List - 01703                         |  |  |  |  |
| 41.      | Exploded Drawing - 01704                   |  |  |  |  |
| 42.      | Parts List - 01704                         |  |  |  |  |
| 44.      | Exploded Drawing - 01705                   |  |  |  |  |
| 45.      | Parts List - 01705                         |  |  |  |  |
| 47.      | Exploded Drawing - 01706                   |  |  |  |  |
| 48.      | Parts List - 01706                         |  |  |  |  |
| 50.      | Exploded Drawing - 01707                   |  |  |  |  |
| 51.      | Parts List - 01707                         |  |  |  |  |
| 53.      | Exploded Drawing - 01708                   |  |  |  |  |
| 54.      | Parts List - 01708                         |  |  |  |  |
| 58.      | Declaration of Conformity                  |  |  |  |  |

### SAFETY SYMBOLS USED THROUGHOUT THIS MANUAL



**Danger / Caution:** Indicates risk of personal injury and/or the possibility of damage.



Warning: Risk of electrical injury or damage!



Note: Supplementary information.

### SAFETY INSTRUCTIONS



IMPORTANT: Please read the following instructions carefully, failure to do so could lead to serious personal injury and / or damage to the drill.

When using the pillar drill, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury.

Read all these instructions before operating the drill and save this user manual for future reference.

The pillar drill should **not** be modified or used for any application other than that for which it was designed.

It was designed to be fitted with a cutting tool attachment or driving tool attachment, usually a drill bit or driver bit, to be used for drilling holes in various materials.

If you are unsure of its relative applications do not hesitate to contact us and we will be more than happy to advise you.

**KNOW YOUR PILLAR DRILL:** Read and understand the owner's manual and labels affixed to the drill. Learn its applications and limitations, as well as the potential hazards specific to it.

**KEEP WORK AREA CLEAN AND WELL LIT:** Cluttered work benches and dark areas invite accidents. Floors must not be slippery due to oil, water or sawdust etc.

**DO NOT USE THE DRILL IN DANGEROUS ENVIRONMENTS:** Do not use the pillar drill in damp or wet locations, or expose it to rain. Provide adequate space surrounding the work area. Do not use in environments with a potentially explosive atmosphere.

KEEP CHILDREN AND UNTRAINED PERSONNEL AWAY FROM THE WORK AREA: All visitors should be kept at a safe distance from the work area.

### **NOTES**

### SAFETY INSTRUCTIONS....cont

**STORE THE PILLAR DRILL SAFELY WHEN NOT IN USE:** The pillar drill should be stored in a dry, locked cupboard wherever possible and out of the reach of children.

**WEAR THE CORRECT CLOTHING:** Do not wear loose clothing, neckties, rings, bracelets, or other jewellery, which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves up above the elbow.

**USE SAFETY CLOTHING / EQUIPMENT:** Wear CE approved safety goggles at all times, normal spectacles only have impact resistant lenses, they are **NOT** safety glasses. A face or dust mask should be worn if the operation is dusty and ear protectors (plugs or muffs) should be worn, particularly during extended periods of operation.

**PROTECT YOURSELF FROM ELECTRIC SHOCK:** When working with the pillar drill, avoid contact with any earthed items (e.g. pipes, radiators, hobs and refrigerators, etc.). It is advisable wherever possible to use an RCD (residual current device) at the mains socket.

**STAY ALERT:** Always watch what you are doing and use common sense. Do not operate the pillar drill when you are tired or under the influence of alcohol or drugs.

**DISCONNECT THE PILLAR DRILL FROM THE MAINS SUPPLY:** When not in use, before servicing and when changing accessories such as drill bits etc.

**AVOID UNINTENTIONAL STARTING:** Make sure the switch is in the **OFF** position before connecting the drill to the mains supply.

**NEVER LEAVE THE DRILL RUNNING / CONNECTED WHILST UNATTENDED:** Turn the drill off and disconnect it from the mains supply between jobs. Do not leave the drill until it comes to a complete stop.

DO NOT ABUSE THE MAINS LEAD: Never attempt to move the drill by the mains lead or pull it to remove the plug from the mains socket. Keep the mains lead away from heat, oil and sharp edges. If the mains lead is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid unwanted hazards.

CHECK FOR DAMAGED PARTS: Before every use of the drill, a guard or other part that is damaged should be carefully checked to determine that it will operate correctly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, and any other conditions that may affect its operation. A guard or other part that is damaged should be correctly repaired or replaced by an authorised service centre unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorised service agent. Do not use the drill if the switch does not turn it on and off.

KEEP ALL GUARDS IN PLACE: And in full working order.

MAINTAIN THE PILLAR DRILL WITH CARE: Keep bits sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories. All extension cables must be checked at regular intervals and replaced if damaged. Always keep the hand grip/s on the drill clean, dry and free of oil and grease.

**USE ONLY RECOMMENDED ACCESSORIES:** Consult this user manual, your distributor or SIP directly for recommended accessories. Follow the instructions that accompany the

### SAFETY INSTRUCTIONS....cont

accessories. The use of improper accessories may cause hazards and will invalidate any warranty you may have.

**REMOVE ADJUSTING KEYS AND WRENCHES:** Form a habit of checking to see that keys and adjusting wrenches are removed from the drill before every use.

**SECURE THE WORKPIECE:** Use clamps or a vice to hold the workpiece. This frees up both hands to operate the pillar drill.

DO NOT OVERREACH: Keep proper footing and balance at all times.

**USE THE RIGHT TOOL:** Do not use the drill or attachment to do a job for which it was not designed.

**DO NOT FORCE THE PILLAR DRILL:** It will do the job better and more safely at the rate which it was designed.

**DO NOT OPERATE THE PILLAR DRILL IN EXPLOSIVE ATMOSPHERES:** Do not use the drill in the presence of flammable liquids, gases, dust or other combustible sources. Drilling operations may create sparks which can ignite the dust or fumes.

DO NOT EXPOSE THE PILLAR DRILL TO RAIN OR USE IT IN WET CONDITIONS: Water entering pillar drill will greatly increase the risk of electric shock.

HAVE YOUR PILLAR DRILL REPAIRED BY A QUALIFIED PERSON: The tool is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

**DO NOT** dismantle, tamper with or use the drill without all guards fitted as this may be dangerous and will invalidate the warranty.

- Keep hands away from the path of the drill bit, never reach around the drill bit.
- Make sure the drill bit is clear of the workpiece before the switch is turned on.
- Allow the drill bit to run up to full speed before drilling.
- Stop operation immediately if you notice anything abnormal.
- Wait for the drill bit to stop completely and remove the plug from mains supply before servicing or adjusting the drill or changing bits.
- Be alert at all times, especially during repetitive, monotonous operations. Don't be lulled into a false sense of security. Drill bits can be extremely unforgiving.
- Use of improper accessories may cause damage to the drill and surrounding area as well as increasing the risk of injury.
- Turn off the drill and wait for it to completely stop before moving workpiece or changing settings or bits etc.
- Do not modify the pillar drill to do tasks other than those intended.
- When drilling, particularly hard items such as metal, use clamps to hold the workpiece; To avoid injury, the work should never be held with the bare hands.
- Secure the base of the drill to a work bench or the floor before using the pillar drill. If
  the work is heavy or large and likely to cause the drill to tip over, use additional supports as appropriate under and around the workpiece.

6

### PARTS LIST - 01708....cont

| Ref. No. | Description          | SIP Part No. | Ref. No. | Description        | SIP Part No. |
|----------|----------------------|--------------|----------|--------------------|--------------|
| 67.      | Nut M5               | WD01-00697   | 92.      | Nut                | WD02-00380   |
| 68.      | Microswitch holder   | WD01-00709   | 93.      | Washer M6          | WD01-00702   |
| 69.      | Washer M6            | WD01-00702   | 94.      | Screw (M6 x 12)    | WD02-00381   |
| 70.      | Spring washer M6     | WD01-00707   | 95.      | Screw (10 x25)     | WD02-00382   |
| 71.      | Nut M6               | WD01-00710   | 96.      | Casting            | WD02-00383   |
| 72.      | Cam assembly         | WD02-00368   | 97.      | Spindle pulley     | WD02-00384   |
| 73.      | Screw (M5 x 16)      | WD01-00838   | 98.      | Кеу                | WD02-00385   |
| 74.      | Washer               | WD01-00881   | 99.      | Spindle shaft      | WD02-00386   |
| 75.      | Protecting ring      | WD01-00839   | 100.     | Bearing 6007       | WD02-00387   |
| 76.      | Pulley cover         | WD02-00369   | 101.     | Ring               | WD02-00388   |
| 77.      | Washer M8            | WD01-00672   | 102.     | Circlip            | WD02-00389   |
| 78.      | Bolt (M8 x 10)       | WD02-00370   | 103.     | Screw (M4 x 60)    | WD02-00434   |
| 79.      | Clamp                | WD02-00371   | 104.     | Spring washer (M4) | WD02-00435   |
| 80.      | Overload 5A          | WD02-00432   | 105.     | Washer (M4)        | WD02-00436   |
| 81.      | Lock washer          | WD02-00433   | 106.     | Washer             | WD02-00437   |
| 82.      | Eccentric shaft      | WD02-00374   | 107.     | Quill              | WD02-00393   |
| 83.      | Centre pulley        | WD02-00375   | 108.     | Bearing 51107      | WD02-00394   |
| 84.      | Bearing 6202         | WD01-00771   | 109.     | Spindle            | WD02-00395   |
| 85.      | Circlip              | WD01-00831   | 110.     | Arbor MT4          | 17823        |
| 86.      | Belt A686            | WD02-00376   | 111.     | Chuck              | WD02-00396   |
| 87.      | Protecting ring      | WD01-00770   | 112.     | Chuck guard 75mm   | 68328        |
| 88.      | Clamp                | WD02-00377   | 113.     | Drift key          | WD01-00862   |
| 89.      | Mains lead           | WD01-00720   | 114.     | Switch             | WD02-00430   |
| 90.      | Tension spring       | WD02-00378   | 115.     | Label              | WD02-00438   |
| 91.      | Tension spring cover | WD02-00379   | 116.     | Switch box         | WD02-00439   |

| Ref. No. | Description       | SIP Part No. | Ref. No. | Description          | SIP Part No. |
|----------|-------------------|--------------|----------|----------------------|--------------|
| 1.       | Base              | WD02-00329   | 34.      | Lock handle          | WD02-00352   |
| 2.       | Column flange     | WD02-00330   | 35.      | Label                | WD02-00353   |
| 3.       | Spring washer M10 | WD01-00795   | 36.      | Connection           | WD02-00354   |
| 4.       | Bolt (M10 x 35)   | WD02-00331   | 37.      | Pinion shaft         | WD02-00355   |
| 5.       | Crank handle      | WD02-00332   | 38.      | Indicator            | WD01-00897   |
| 6.       | Bolt (M6 x 12)    | WD01-00905   | 39.      | Screw                | WD02-00356   |
| 7.       | Circlip           | WD01-00742   | 40.      | Roll pin (5 x 25)    | WD01-00869   |
| 8.       | Worm shaft        | WD02-00333   | 41.      | Screw (M10 x 10)     | WD02-00345   |
| 9.       | Table support     | WD02-00334   | 42.      | Bearing 6005         | WD01-00889   |
| 10.      | Worm pin          | WD02-00335   | 43.      | Warning label        | WD01-00685   |
| 11.      | Table             | WD02-00431   | 44.      | Roll pin (6 x 18)    | WD01-00760   |
| 12.      | Spring washer M20 | WD02-00337   | 45.      | Belt tension handle  | WD02-00358   |
| 13.      | Bolt (M20 x 55)   | WD02-00338   | 46.      | Lock handle          | WD02-00359   |
| 14.      | Indicator         | WD01-00897   | 47.      | Circlip              | WD01-00816   |
| 15.      | Lock handle       | WD02-00339   | 48.      | Circlip              | WD01-00871   |
| 16.      | Angle label       | WD02-00340   | 49.      | Adjusting shaft      | WD01-00872   |
| 17.      | Worm gear         | WD02-00341   | 50.      | Shaft                | WD02-00360   |
| 18.      | Column            | WD02-00342   | 51.      | Washer M12           | WD01-00819   |
| 19.      | Rack              | WD02-00343   | 52.      | Washer M10           | WD02-00361   |
| 20.      | Hex. wrench 3mm   | WD01-00790   | 53.      | Nut M8               | WD01-00687   |
| 21.      | Hex. wrench 4mm   | WD01-00737   | 54.      | Motor plate          | WD02-00362   |
| 22.      | Screw (M10 x 10)  | WD02-00345   | 55.      | Bolt (M8 x 30)       | WD02-00363   |
| 23.      | Hex. wrench M5    | WD02-00397   | 56.      | Spring washer M12    | WD01-00676   |
| 24.      | Hex. wrench M6    | WD01-00861   | 57.      | Nut M12              | WD01-00821   |
| 25.      | Rack collar       | WD02-00346   | 58.      | Motor                | WD02-00428   |
| 26.      | Screw (M6 x 12)   | WD01-00740   | 59.      | Grub screw (M8 x 10) | WD01-00689   |
| 27.      | Handle knob       | WD02-00347   | 60.      | Motor pulley         | WD02-00365   |
| 28.      | Screw (M6 x 12)   | WD01-00740   | 61.      | Motor pulley key     | WD02-00366   |
| 29.      | Handle cap        | WD02-00349   | 62.      | Nut M10              | WD01-00717   |
| 30.      | Screw (M8 x 20)   | WD01-00801   | 63.      | Belt A787            | WD02-00367   |
| 31.      | Spring washer M8  | WD01-00673   | 64.      | Microswitch          | WD01-00706   |
| 32.      | Handle            | WD02-00350   | 65.      | Washer M5            | WD01-00881   |
| 33.      | Scale             | WD02-00351   | 66.      | Spring washer M5     | WD01-00882   |

### SAFETY INSTRUCTIONS....cont

- Remove the key from the chuck after adjustment.
- Use only the chuck key provided by the manufacturer or a duplicate of it.
- Appropriate personal protective equipment MUST be worn and MUST be designed
  to protect against all hazards created. Severe permanent injury can result from
  using inappropriate or insufficient protective equipment Eyes in particular are at
  risk.
- Do not overload the tool. Allow the tool to operate at its optimum speed for maximum efficiency.
- Always ensure that the accessories such as drill bits, as well as the drill are rated / designed for use with required application, and are the bits are correctly and securely fastened before connecting the tool to the mains supply.
- The work must be clamped firmly while drilling. Any tilting, twisting or shifting results not only in a rough hole but also increases the hazard, which could result in injury or drill breakage. For flat work lay the piece on a wooden base and clamp it firmly down against the table to prevent it from turning If the piece is of irregular shape and cannot be laid flat on the table, it should be securely blocked and clamped.
- Understand the operating environment; Before each use the operator should assess, understand and where possible reduce the specific risks and dangers associated with the operating environment. Bystanders should also be made aware of any risks associated with the operating environment.



When using the pillar drill for certain operations, particularly during extended periods; ensure the operator as well as those in the area wear ear protection.



When using the pillar drill always ensure the operator as well as those in the area wear eye protection.



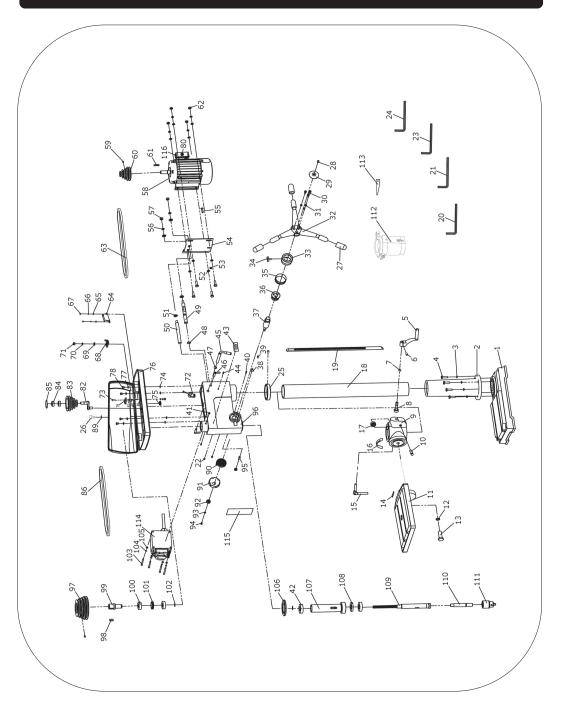
Some materials have the potential to be highly toxic; always wear a face mask when operating the pillar drill.



**CAUTION:** The warnings and cautions mentioned in this user manual can not cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be applied.

| Part number                         | 01700        | 01701        | 01702        |
|-------------------------------------|--------------|--------------|--------------|
| Model                               | B13-13       | B16-12       | B16-16       |
| Input Voltage                       | 230v ~ 50hz  | 230v ~ 50hz  | 230v ~ 50hz  |
| Power                               | 350 w        | 375 w        | 375 w        |
| Speed Range                         | 620-2620 rpm | 300-2550 rpm | 180-2770 rpm |
| Number of Speeds                    | 5            | 12           | 16           |
| Drill Bit Size                      | 1.5-13 mm    | 3-16 mm      | 3-16 mm      |
| Max. Drilling Capacity (mild Steel) | 13 mm        | 16 mm        | 16 mm        |
| Spindle Taper                       | B16          | B16          | MT2          |
| Table Size                          | 160 x 160 mm | 202 x 195 mm | Ø 290 mm     |
| Base Size                           | 290 x 190 mm | 340 x 210 mm | 415 x 245 mm |
| Column Ø                            | 46 mm        | 58 mm        | 72 mm        |
| Swing                               | 210 mm       | 260 mm       | 325 mm       |
| Height                              | 580 mm       | 840 mm       | 980 mm       |
| Spindle Travel                      | 50 mm        | 60 mm        | 80 mm        |
| Collar Ø                            | 40 mm        | 40 mm        | 55 mm        |
| Max. Distance Chuck to Table        | 220 mm       | 405 mm       | 450 mm       |
| Max. Distance Chuck to Base         | 300 mm       | 515 mm       | 630 mm       |
| Net Weight                          | 14.7 Kg      | 27 Kg        | 38 Kg        |
| Gross Weight                        | 16.7 Kg      | 29 Kg        | 40 Kg        |

8



# PARTS LIST - 01707....cont

| Ref. No. | Description          | SIP Part No. | Ref. No. | Description        | SIP Part No. |
|----------|----------------------|--------------|----------|--------------------|--------------|
| 69.      | Washer M6            | WD01-00702   | 94.      | Screw (M6 x 12)    | WD02-00381   |
| 70.      | Spring washer M6     | WD01-00707   | 95.      | Screw (10 x25)     | WD02-00382   |
| 71.      | Nut M6               | WD01-00710   | 96.      | Casting            | WD02-00383   |
| 72.      | Cam assembly         | WD02-00368   | 97.      | Spindle pulley     | WD02-00384   |
| 73.      | Screw (M5 x 16)      | WD01-00838   | 98.      | Кеу                | WD02-00385   |
| 74.      | Washer               | WD01-00881   | 99.      | Spindle shaft      | WD02-00386   |
| 75.      | Protecting ring      | WD01-00839   | 100.     | Bearing 6007       | WD02-00387   |
| 76.      | Pulley cover         | WD02-00369   | 101.     | Ring               | WD02-00388   |
| 77.      | Washer M8            | WD01-00672   | 102.     | Circlip            | WD02-00389   |
| 78.      | Bolt (M8 x 10)       | WD02-00370   | 103.     | Switch box         | WD02-00390   |
| 79.      | Clamp                | WD02-00371   | 104.     | Switch             | WD01-00895   |
| 80.      | Circlip              | WD02-00372   | 105.     | Screw (ST3.2 x 12) | WD02-00391   |
| 81.      | Knurled screw        | WD02-00373   | 106.     | Washer             | WD02-00392   |
| 82.      | Eccentric shaft      | WD02-00374   | 107.     | Quill              | WD02-00393   |
| 83.      | Centre pulley        | WD02-00375   | 108.     | Bearing 51107      | WD02-00394   |
| 84.      | Bearing 6202         | WD01-00771   | 109.     | Spindle            | WD02-00395   |
| 85.      | Circlip              | WD01-00831   | 110.     | Arbor MT4          | 17823        |
| 86.      | Belt A686            | WD02-00376   | 111.     | Chuck              | WD02-00396   |
| 87.      | Protecting ring      | WD01-00770   | 112.     | Chuck guard 75mm   | 68328        |
| 88.      | Clamp                | WD02-00377   | 113.     | Drift key          | WD01-00862   |
| 89.      | Mains lead           | WD01-00720   | 114.     | Hex. wrench 3mm    | WD01-00790   |
| 90.      | Tension spring       | WD02-00378   | 115.     | Hex. wrench 4mm    | WD01-00737   |
| 91.      | Tension spring cover | WD02-00379   | 116.     | Hex. wrench 5mm    | WD02-00397   |
| 92.      | Nut                  | WD02-00380   | 117.     | Hex. wrench 6mm    | WD01-00861   |
| 93.      | Washer M6            | WD01-00702   |          |                    |              |

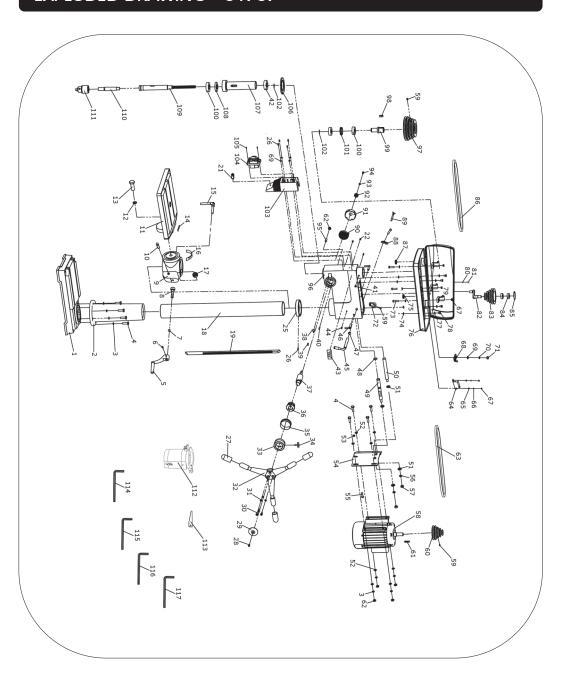
# TECHNICAL SPECIFICATIONS....cont

| Part number                         | 01703        | 01704        | 01705        |
|-------------------------------------|--------------|--------------|--------------|
| Model                               | B20-16       | F16-16       | F20-16       |
| Input Voltage                       | 230v ~ 50hz  | 230v ~ 50hz  | 230v ~ 50hz  |
| Power                               | 550 w        | 375 w        | 550 w        |
| Speed Range                         | 180-2770 rpm | 180-2770 rpm | 180-2770 rpm |
| Number of Speeds                    | 16           | 16           | 16           |
| Drill Bit Size                      | 3-16 mm      | 3-16 mm      | 3-16 mm      |
| Max. Drilling Capacity (mild Steel) | 16 mm        | 16 mm        | 16 mm        |
| Spindle Taper                       | MT2          | MT2          | MT2          |
| Table Size                          | 290 x 290 mm | 250 x 250 mm | 290 x 290 mm |
| Base Size                           | 462 x 274 mm | 450 x 265 mm | 450 x 265 mm |
| Column Ø                            | 72 mm        | 72 mm        | 72 mm        |
| Swing                               | 360 mm       | 325 mm       | 360 mm       |
| Height                              | 990 mm       | 1550 mm      | 1565 mm      |
| Spindle Travel                      | 83 mm        | 80 mm        | 83 mm        |
| Collar Ø                            | 55 mm        | 55 mm        | 55 mm        |
| Max. Distance Chuck to Table        | 405 mm       | 725 mm       | 682 mm       |
| Max. Distance Chuck to Base         | 600 mm       | 1205 mm      | 1174 mm      |
| Net Weight                          | 50 Kg        | 47 Kg        | 53 Kg        |
| Gross Weight                        | 52 Kg        | 50 Kg        | 57 Kg        |

| Part number                         | 01706        | 01707        | 01708        |
|-------------------------------------|--------------|--------------|--------------|
| Model                               | F28-20       | F32-20       | F32-20       |
| Input Voltage                       | 230v ~ 50hz  | 230v ~ 50hz  | 400v ~ 50hz  |
| Power                               | 750 w        | 1100 w       | 1100 w       |
| Speed Range                         | 280-2380 rpm | 150-2450 rpm | 180-2500 rpm |
| Number of Speeds                    | 12           | 12           | 12           |
| Drill Bit Size                      | 5-20 mm      | 5-20 mm      | 5-20 mm      |
| Max. Drilling Capacity (mild Steel) | 25 mm        | 32 mm        | 32 mm        |
| Spindle Taper                       | MT3          | MT4          | MT4          |
| Table Size                          | 290 x 290 mm | 420 x 470 mm | 415 x 470 mm |
| Base Size                           | 460 x 272 mm | 573 x 427 mm | 565 x 425 mm |
| Column Ø                            | 80 mm        | 92 mm        | 92 mm        |
| Swing                               | 360 mm       | 510 mm       | 510 mm       |
| Height                              | 1600 mm      | 1722 mm      | 1730 mm      |
| Spindle Travel                      | 82.5 mm      | 120 mm       | 120 mm       |
| Collar Ø                            | 65 mm        | 75 mm        | 75 mm        |
| Max. Distance Chuck to Table        | 687 mm       | 726 mm       | 735 mm       |
| Max. Distance Chuck to Base         | 1177 mm      | 1204 mm      | 1205 mm      |
| Net Weight                          | 60 Kg        | 117 kg       | 115 kg       |
| Gross Weight                        | 64 Kg        | 122 kg       | 122 kg       |

| Ref. No. | Description       | SIP Part No. | Ref. No. | Description          | SIP Part No. |
|----------|-------------------|--------------|----------|----------------------|--------------|
| 1.       | Base              | WD02-00329   | 36.      | Connection           | WD02-00354   |
| 2.       | Column flange     | WD02-00330   | 37.      | Pinion shaft         | WD02-00355   |
| 3.       | Spring washer M10 | WD01-00795   | 38.      | Indicator            | WD01-00897   |
| 4.       | Bolt (M10 x 35)   | WD02-00331   | 39.      | Screw                | WD02-00356   |
| 5.       | Crank handle      | WD02-00332   | 40.      | Roll pin (5 x 25)    | WD01-00869   |
| 6.       | Bolt (M6 x 12)    | WD01-00905   | 41.      | Screw                | WD02-00357   |
| 7.       | Circlip           | WD01-00742   | 42.      | Bearing 6005         | WD01-00889   |
| 8.       | Worm shaft        | WD02-00333   | 43.      | Warning label        | WD01-00685   |
| 9.       | Table support     | WD02-00334   | 44.      | Roll pin (6 x 18)    | WD01-00760   |
| 10.      | Worm pin          | WD02-00335   | 45.      | Belt tension handle  | WD02-00358   |
| 11.      | Table             | WD02-00336   | 46.      | Lock handle          | WD02-00359   |
| 12.      | Spring washer M20 | WD02-00337   | 47.      | Circlip              | WD01-00816   |
| 13.      | Bolt (M20 x 55)   | WD02-00338   | 48.      | Circlip              | WD01-00871   |
| 14.      | Indicator         | WD01-00897   | 49.      | Adjusting shaft      | WD01-00872   |
| 15.      | Lock handle       | WD02-00339   | 50.      | Shaft                | WD02-00360   |
| 16.      | Angle label       | WD02-00340   | 51.      | Washer M12           | WD01-00819   |
| 17.      | Worm gear         | WD02-00341   | 52.      | Washer M10           | WD02-00361   |
| 18.      | Column            | WD02-00342   | 53.      | Nut M8               | WD01-00687   |
| 19.      | Rack              | WD02-00343   | 54.      | Motor plate          | WD02-00362   |
| 20.      | Screw (M4 x 10)   | WD01-00783   | 55.      | Bolt (M8 x 30)       | WD02-00363   |
| 21.      | Overload          | WD02-00344   | 56.      | Spring washer M12    | WD01-00676   |
| 22.      | Screw (M10 x 10)  | WD02-00345   | 57.      | Nut M12              | WD01-00821   |
| 25.      | Rack collar       | WD02-00346   | 58.      | Motor                | WD02-00364   |
| 26.      | Screw (M6 x 12)   | WD01-00740   | 59.      | Grub screw (M8 x 10) | WD01-00689   |
| 27.      | Handle knob       | WD02-00347   | 60.      | Motor pulley         | WD02-00365   |
| 28.      | Screw (M6 x 12)   | WD02-00348   | 61.      | Motor pulley key     | WD02-00366   |
| 29.      | Handle cap        | WD02-00349   | 62.      | Nut M10              | WD01-00717   |
| 30.      | Screw (M8 x 20)   | WD01-00801   | 63.      | Belt A787            | WD02-00367   |
| 31.      | Spring washer M8  | WD01-00673   | 64.      | Microswitch          | WD01-00706   |
| 32.      | Handle            | WD02-00350   | 65.      | Washer M5            | WD01-00881   |
| 33.      | Scale             | WD02-00351   | 66.      | Spring washer M5     | WD01-00882   |
| 34.      | Lock handle       | WD02-00352   | 67.      | Nut M5               | WD01-00697   |
| 35.      | Label             | WD02-00353   | 68.      | Microswitch holder   | WD01-00709   |

### **EXPLODED DRAWING - 01707**



## **ELECTRICAL CONNECTION**

**WARNING!** It is the responsibility of the owner and the operator to read, understand and comply with the following:

You must check all electrical products, before use, to ensure that they are safe.

You must inspect power cables, plugs, sockets and any other connectors for wear or damage.

You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices; A residual current circuit Breaker (RCCB) should be incorporated in the main distribution board. We also recommend that a residual current device (RCD) is used. It is particularly important to use an RCD with portable products that are plugged into a supply which is not protected by an RCCB. If in any doubt consult a qualified electrician.

#### Connecting to the power supply:

These SIP drills (01700-01707) are fitted with a standard  $230v \sim 13$  amp type plug. Before using the drill, inspect the mains lead and plug to ensure that neither are damaged. If any damage is visible have the drill inspected / repaired by a suitably qualified person. If it is necessary to replace the plug a heavy duty impact resistant plug would be preferable.

The wires for the plug are coloured in the following way:

Yellow / green Earth
Blue Neutral
Brown Live

As the colours of the wires may not correspond with the markings in your plug, proceed as follows: The wire which is coloured blue, must be connected to the terminal marked with N or coloured black. The wire which is coloured brown, must be connected to the terminal, which is marked L or coloured red. The wire which is coloured yellow / green should be connected to the terminal which is coloured the same or marked \_\_\_\_

Always secure the wires in the plug terminal carefully and tightly. Secure the cable in the cord grip carefully.



### ELECTRICAL CONNECTION....cont

3PH Wiring: 01708 only.

**WARNING!** It is the responsibility of the owner and the operator to read, understand and comply with the following:

You must check all electrical products, before use, to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage.

You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices; A residual current circuit Breaker (RCCB) should be incorporated in the main distribution board. We also recommend that a residual current device (RCD) is used. It is particularly important to use an RCD with portable products that are plugged into a supply which is not protected by an RCCB. If in any doubt consult a qualified electrician.

#### Connecting to the power supply:

The SIP 01708 F32-20 pillar drill requires 400v 50hz supply. Before each use, inspect the mains lead and plug (where applicable) to ensure that neither are damaged. If any damage is visible have the pillar drill inspected / repaired by a suitably qualified person. If it is necessary to replace the plug a heavy duty impact resistant plug would be preferable.

#### The wires for the plug are coloured in the following way:

Yellow / green Earth
Blue/Grey Phase
Brown Phase
Black Phase

Always secure the wires in the plug terminal carefully and tightly. Secure the cable in the cord grip carefully.



*Warning:* Never connect live, neutral or any phase wires to the earth terminal of the plug. Only fit an approved plug with the correct rated fuse. If in doubt consult a qualified electrician.



*Warning:* Always use a qualified electrician to wire in the 3ph pillar drill, never wire the pillar drill without any knowledge of electrics, this is extremely dangerous and will cause personal injury or even death.

## PARTS LIST - 01706....cont

| Ref. No. | Description          | SIP Part No. | Ref. No. | Description       | SIP Part No. |
|----------|----------------------|--------------|----------|-------------------|--------------|
| 68.      | Circlip              | WD01-00713   | 98.      | Spring washer M16 | WD01-00853   |
| 69.      | Spindle shaft        | WD02-00309   | 99.      | Lock handle       | WD02-00322   |
| 70.      | Bearing 6005         | WD01-00889   | 100.     | Worm pin          | WD02-00323   |
| 71.      | Bearing ring         | WD02-00191   | 101.     | Table support     | WD02-00324   |
| 72.      | Screw (M8 x 25)      | WD01-00891   | 102.     | Bolt (M6 x 12)    | WD01-00905   |
| 73.      | Casting              | WD02-00311   | 103.     | Crank handle      | WD02-00325   |
| 74.      | Label                | WD02-00312   | 104.     | Circlip           | WD01-00742   |
| 75.      | Lock washer          | WD01-00725   | 105.     | Worm shaft        | WD02-00207   |
| 76.      | Clip                 | WD01-00724   | 106.     | Worm gear         | WD02-00208   |
| 77.      | Screw (M5 x 6)       | WD01-00894   | 107.     | Locking handle    | WD01-00852   |
| 78.      | Tension spring       | WD02-00313   | 108.     | Angle label       | WD02-00328   |
| 79.      | Tension spring cover | WD02-00314   | 109.     | Lamp socket       | WD01-00837   |
| 80.      | Nut M12              | WD01-00821   | 110.     | Chuck guard 65mm  | 07664        |
| 81.      | Switch box           | WD02-00315   | 111.     | Drift key         | WD01-00862   |
| 82.      | Switch               | WD01-00895   | 112.     | Hex. wrench 4mm   | WD01-00737   |
| 83.      | Screw (M3 x 10)      | WD01-00896   | 113.     | Hex. wrench 6mm   | WD01-00861   |
| 84.      | Mains lead clamp     | WD01-00700   | 100.     | Worm pin          | WD02-00323   |
| 85.      | Mains lead           | WD01-00720   | 101.     | Table support     | WD02-00324   |
| 86.      | Indicator            | WD01-00897   | 102.     | Bolt (M6 x 12)    | WD01-00905   |
| 87.      | Circlip              | WD01-00787   | 103.     | Crank handle      | WD02-00325   |
| 88.      | Bearing 6203         | WD01-00714   | 104.     | Circlip           | WD01-00742   |
| 89.      | Quill                | WD02-00316   | 105.     | Worm shaft        | WD02-00207   |
| 90.      | Spinale              | WD02-00317   | 106.     | Worm gear         | WD02-00208   |
| 91.      | Bearing 6006         | WD01-00900   | 107.     | Locking handle    | WD01-00852   |
| 92.      | Washer               | WD01-00901   | 108.     | Angle label       | WD02-00328   |
| 93.      | Arbor                | WD02-00318   | 110.     | Chuck guard 65mm  | 07664        |
| 94.      | Chuck                | WD02-00319   | 111.     | Drift key         | WD01-00862   |
| 95.      | Table                | WD02-00320   | 112.     | Hex. wrench 4mm   | WD01-00737   |
| 96.      | Table arm            | WD02-00321   | 113.     | Hex. wrench 6mm   | WD01-00861   |
| 97.      | Bolt (M16 x 30)      | WD01-00854   |          |                   |              |

| Ref. No. | Description                    | SIP Part No. | Ref. No. | Description         | SIP Part No. |
|----------|--------------------------------|--------------|----------|---------------------|--------------|
| 1.       | Base                           | WD02-00284   | 34.      | Washer M8           | WD01-00672   |
| 2.       | Column flange                  | WD02-00285   | 35.      | Motor plate         | WD02-00296   |
| 3.       | Spring washer M10              | WD01-00795   | 36.      | Spring washer M12   | WD01-00676   |
| 4.       | Bolt (M10 x 25)                | WD01-00796   | 37.      | Nut M12             | WD01-00821   |
| 5.       | Rack                           | WD02-00286   | 38.      | Grub screw (M8 x10) | WD01-00689   |
| 6.       | Column                         | WD02-00287   | 39.      | Motor pulley        | WD02-00297   |
| 7.       | Grub screw (M6 x 12)           | WD01-00740   | 40.      | Motor               | WD02-00298   |
| 8.       | Rack collar                    | WD02-00288   | 41.      | Nut M8              | WD01-00687   |
| 9.       | Screw (M6 x 16)                | WD01-00708   | 42.      | Cam assembly        | WD02-00299   |
| 10.      | Handle cap                     | WD02-00289   | 43.      | Washer              | WD02-00300   |
| 11.      | Screw (M8 x 20)                | WD01-00801   | 44.      | Protecting ring     | WD01-00839   |
| 12.      | Spring washer M8               | WD01-00673   | 45.      | Speed label         | WD02-00301   |
| 13.      | Handle knob                    | WD02-00290   | 46.      | Pulley cover        | WD02-00302   |
| 14.      | Handle                         | WD02-00291   | 47.      | Microswitch         | WD01-00706   |
| 15.      | Label                          | WD02-00292   | 48.      | Washer M5           | WD01-00881   |
| 16.      | Knob                           | WD01-00867   | 49.      | Spring washer M5    | WD01-00882   |
| 17.      | Scale                          | WD02-00293   | 50.      | Nut M5              | WD01-00697   |
| 18.      | Connection                     | WD02-00294   | 51.      | Nut M6              | WD01-00710   |
| 19.      | Pinion shaft                   | WD02-00295   | 52.      | Spring washer M6    | WD01-00707   |
| 20.      | Roll pin (5 x 16)              | WD01-00868   | 53.      | Washer M6           | WD01-00702   |
| 21.      | Warning label                  | WD01-00685   | 54.      | Microswitch holder  | WD01-00709   |
| 22.      | Screw (M5 x 10)                | WD01-00726   | 55.      | Eccentric shaft     | WD02-00303   |
| 23.      | Spindle pulley nut (M24 x 1.5) | WD01-00907   | 56.      | Centre pulley       | WD02-00304   |
| 24.      | Roll pin (5 x 25)              | WD01-00869   | 57.      | Bearing 6202        | WD01-00771   |
| 25.      | Roll pin (6 x 18)              | WD01-00760   | 58.      | Circlip             | WD01-00831   |
| 26.      | Locking handle                 | WD01-00870   | 59.      | Belt A550           | WD02-00305   |
| 27.      | Belt tension handle            | WD01-00812   | 60.      | Knurled screw       | WD02-00306   |
| 28.      | Circlip                        | WD01-00813   | 61.      | Circlip             | WD01-00704   |
| 29.      | Circlip                        | WD01-00871   | 63.      | Screw (M5 x 16)     | WD01-00838   |
| 30.      | Shaft                          | WD01-00872   | 64.      | Mains lead clamp    | WD01-00700   |
| 31.      | Adjusting shaft                | WD01-00873   | 65.      | Protecting ring     | WD01-00770   |
| 32.      | Washer M12                     | WD01-00819   | 66.      | Belt A620           | WD02-00307   |
| 33.      | Bolt (M8 x 25)                 | WD01-00695   | 67.      | Spindle pulley      | WD02-00308   |

## **ELECTRICAL CONNECTION....cont**



**Note:** Always make sure the mains supply is of the correct voltage and the correct fuse protection is used. In the event of replacing the fuse always replace the fuse with the same value as the original.



**Note:** If an extension lead is required in order to reach the mains supply; ensure that this too is rated for the correct voltage and fuse rating.



**Note:** The cross section of the extension lead should be checked so that it is of sufficient size so as to reduce the chances of voltage drops.

### **GUARANTEE**

#### Guarantee:

These SIP pillar drills are covered by a 12 month parts and labour warranty covering failure due to manufacturers defects. This does not cover failure due to misuse or operating the pillar drill outside the scope of this manual - any claims deemed to be outside the scope of the warranty may be subject to charges Including, but not limited to parts, labour and carriage costs.

This guarantee does not cover consumables such as the chuck, belts etc.

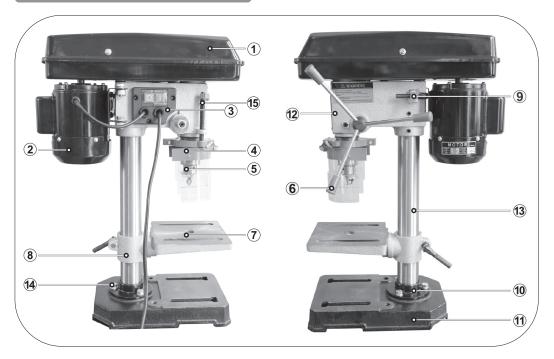
In the unlikely event of warranty claims, contact your distributor as soon as possible.



**Note:** Proof of purchase will be required before any warranty can be honoured.

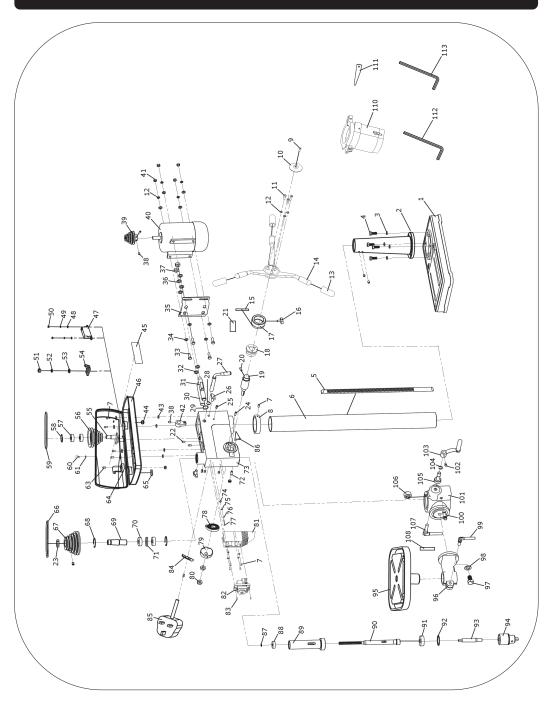
# GETTING TO KNOW YOUR DRILL

## 01700



| Ref. No. | Description          | Ref. No. | Description          |
|----------|----------------------|----------|----------------------|
| 1.       | Pulley Cover         | 9.       | Belt Tension Lock    |
| 2.       | Motor                | 10.      | Column Support       |
| 3.       | NVR On/Off Switch    | 11.      | Base                 |
| 4.       | Chuck Guard          | 12.      | Main Drill Head      |
| 5.       | Chuck                | 13.      | Column               |
| 6.       | Feed Handle          | 14.      | Column Support Bolts |
| 7.       | Table                | 15.      | Depth Stop           |
| 8.       | Table Support Collar |          |                      |

# **EXPLODED DRAWING - 01706**



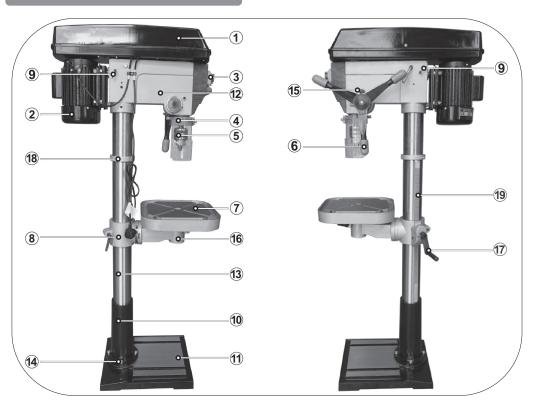
# PARTS LIST - 01705....cont

| Ref. No. | Description          | SIP Part No. | Ref. No. | Description       | SIP Part No. |
|----------|----------------------|--------------|----------|-------------------|--------------|
| 68.      | Circlip              | WD01-00713   | 91.      | Bearing 6006      | WD01-00900   |
| 69.      | Spindle shaft        | WD01-00888   | 92.      | Washer            | WD01-00901   |
| 70.      | Bearing 6005         | WD01-00889   | 93.      | Arbor MT2         | 66633        |
| 71.      | Bearing ring         | WD01-00890   | 94.      | Chuck             | WD01-00789   |
| 72.      | Screw (M8 x 25)      | WD01-00891   | 95.      | Table             | WD01-00902   |
| 73.      | Casting              | WD01-00892   | 96.      | Table arm         | WD01-00903   |
| 74.      | Label                | WD01-00893   | 97.      | Bolt (M16 x 30)   | WD01-00854   |
| 75.      | Lock washer          | WD01-00725   | 98.      | Spring washer M16 | WD01-00853   |
| 76.      | Clip                 | WD01-00724   | 99.      | Lock handle       | WD01-00904   |
| 77.      | Screw (M5 x 6)       | WD01-00894   | 100.     | Worm pin          | WD01-00850   |
| 78.      | Tension spring       | WD01-00842   | 101.     | Table support     | WD01-00849   |
| 79.      | Tension spring cover | WD01-00841   | 102.     | Bolt (M6 x 12)    | WD01-00905   |
| 80.      | Nut M12              | WD01-00821   | 103.     | Crank handle      | WD01-00906   |
| 81.      | Switch box           | WD01-00910   | 104.     | Circlip           | WD01-00742   |
| 82.      | Switch               | WD01-00895   | 105.     | Worm shaft        | WD01-00911   |
| 83.      | Screw (M3 x 10)      | WD01-00896   | 106.     | Worm gear         | WD01-00848   |
| 84.      | Mains lead clamp     | WD01-00700   | 107.     | Locking handle    | WD01-00852   |
| 85.      | Mains lead           | WD01-00720   | 108.     | Angle label       | WD01-00851   |
| 86.      | Indicator            | WD01-00897   | 110.     | Chuck guard 55mm  | 07662        |
| 87.      | Circlip              | WD01-00787   | 111.     | Drift key         | WD01-00862   |
| 88.      | Bearing 6203         | WD01-00714   | 112.     | Hex. wrench 4mm   | WD01-00737   |
| 89.      | Quill                | WD01-00898   | 113.     | Hex. wrench 6mm   | WD01-00861   |
| 90.      | Spindle              | WD01-00899   |          |                   |              |

46

## GETTING TO KNOW YOUR DRILL....cont

## 01701 - 01708



| Ref. No. | Description          | Ref. No. | Description          |
|----------|----------------------|----------|----------------------|
| 1.       | Pulley Cover         | 11.      | Base                 |
| 2.       | Motor                | 12.      | Main Drill Head      |
| 3.       | NVR On/Off Switch    | 13.      | Column               |
| 4.       | Chuck Guard          | 14.      | Column Support Bolts |
| 5.       | Chuck                | 15.      | Depth Stop           |
| 6.       | Feed Handle          | 16.      | Table Lock           |
| 7.       | Table                | 17.      | Table Height Adjust  |
| 8.       | Table Support Collar | 18.      | Rack Collar          |
| 9.       | Belt Tension Lock    | 19.      | Rack                 |
| 10.      | Column Support       |          |                      |

## **ASSEMBLY INSTRUCTIONS**

### FIT THE COLUMN TO THE BASE - BENCH DRILL



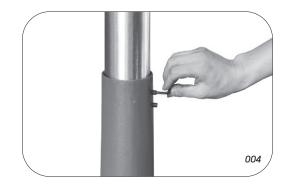
- Line up the 4 holes on the bottom of the column with those on the base.
- Screw the 4 bolts supplied through the column and into the base.
- Fully tighten to secure (001).

### FIT THE COLUMN TO THE BASE - FLOOR DRILL



- Line up the 4 holes on the bottom of the column support with those on the base (002).
- Screw the 4 x bolts supplied through the column support and into the base.
- Fully tighten to secure.
- Slide the column into the column support (003).
- Secure in place by tightening the 2 grub screws (004).

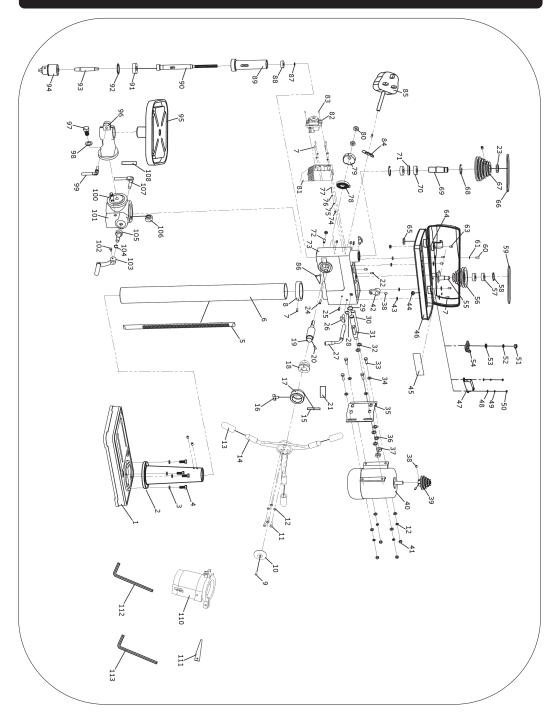




## **PARTS LIST - 01705**

| Ref. No. | Description                    | SIP Part No. | Ref. No. | Description         | SIP Part No. |
|----------|--------------------------------|--------------|----------|---------------------|--------------|
| 1.       | Base                           | WD01-00863   | 34.      | Washer M8           | WD01-00672   |
| 2.       | Column flange                  | WD01-00864   | 35.      | Motor plate         | WD01-00874   |
| 3.       | Spring washer M10              | WD01-00795   | 36.      | Spring washer M12   | WD01-00676   |
| 4.       | Bolt (M10 x 25)                | WD01-00796   | 37.      | Nut M12             | WD01-00821   |
| 5.       | Rack                           | WD02-00282   | 38.      | Grub screw (M8 x10) | WD01-00689   |
| 6.       | Column                         | WD02-00283   | 39.      | Motor pulley        | WD01-00876   |
| 7.       | Grub screw (M6 x 12)           | WD01-00740   | 40.      | Motor               | WD01-00877   |
| 8.       | Rack collar                    | WD01-00799   | 41.      | Nut M8              | WD01-00687   |
| 9.       | Screw (M6 x 16)                | WD01-00708   | 42.      | Cam assembly        | WD01-00909   |
| 10.      | Handle cap                     | WD01-00800   | 43.      | Washer              | WD01-00878   |
| 11.      | Screw (M8 x 20)                | WD01-00801   | 44.      | Protecting ring     | WD01-00839   |
| 12.      | Spring washer M8               | WD01-00673   | 45.      | Speed label         | WD01-00879   |
| 13.      | Handle knob                    | WD01-00802   | 46.      | Pulley cover        | WD01-00880   |
| 14.      | Handle                         | WD01-00803   | 47.      | Microswitch         | WD01-00706   |
| 15.      | Label                          | WD01-00866   | 48.      | Washer M5           | WD01-00881   |
| 16.      | Knob                           | WD01-00867   | 49.      | Spring washer M5    | WD01-00882   |
| 17.      | Scale                          | WD01-00805   | 50.      | Nut M5              | WD01-00697   |
| 18.      | Connection                     | WD01-00806   | 51.      | Nut M6              | WD01-00710   |
| 19.      | Pinion shaft                   | WD01-00809   | 52.      | Spring washer M6    | WD01-00707   |
| 20.      | Roll pin (5 x 16)              | WD01-00868   | 53.      | Washer M6           | WD01-00702   |
| 21.      | Warning label                  | WD01-00685   | 54.      | Microswitch holder  | WD01-00709   |
| 22.      | Screw (M5 x 10)                | WD01-00726   | 55.      | Eccentric shaft     | WD01-00883   |
| 23.      | Spindle pulley nut (M24 x 1.5) | WD01-00907   | 56.      | Centre pulley       | WD01-00884   |
| 24.      | Roll pin (5 x 25)              | WD01-00869   | 57.      | Bearing 6202        | WD01-00771   |
| 25.      | Roll pin (6 x 18)              | WD01-00760   | 58.      | Circlip             | WD01-00831   |
| 26.      | Locking handle                 | WD01-00870   | 59.      | Belt O-565          | WD01-00833   |
| 27.      | Belt tension handle            | WD01-00812   | 60.      | Knurled screw       | WD01-00885   |
| 28.      | Circlip                        | WD01-00813   | 61.      | Circlip             | WD01-00704   |
| 29.      | Circlip                        | WD01-00871   | 63.      | Screw (M5 x 16)     | WD01-00838   |
| 30.      | Shaft                          | WD01-00872   | 64.      | Mains lead clamp    | WD01-00700   |
| 31.      | Adjusting shaft                | WD01-00873   | 65.      | Protecting ring     | WD01-00770   |
| 32.      | Washer M12                     | WD01-00819   | 66.      | Belt O-678          | WD01-00886   |
| 33.      | Bolt (M8 x 25)                 | WD01-00695   | 67.      | Spindle pulley      | WD01-00887   |

## **EXPLODED DRAWING - 01705**

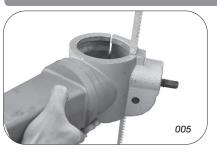


## ASSEMBLY INSTRUCTIONS....cont

### FIT THE TABLE - 01700

- Ensure that the table support lock is loose.
- Slide the table support over the column until it is in position.
- Secure in place by tightening the table lock towards the rear of the table support.

### FIT THE RACK & TABLE - ALL OTHER MODELS

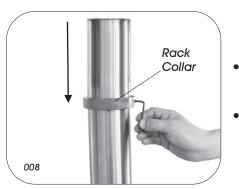


• Fit the rack inside the table support as shown (005).



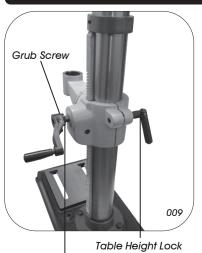
• Fit the table support / rack assembly over the column (006) and slide down until the rack fits inside the column support (007).





- Slide the rack collar, tapered side facing down, over the column until it locates over the rack.
- Tighten the grub screw to hold in position (008).

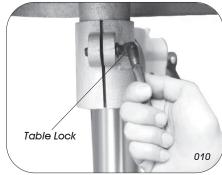
## ASSEMBLY INSTRUCTIONS....cont



- Secure the table support arm in place by fitting the table height lock.
- Also fit the table height adjust lever as shown left.
- Secure in place by tightening the grub screw.

Table Height Adjust

- Screw the table lock loosely into the table support.
- Fit the table into the table support.
- Tighten the table lock to secure in position (010).



### FIT THE HEAD ONTO THE COLUMN



**Danger / Caution:** Due to the weight of the head; at least 2 persons are required to safely fit it to the column.



**Note:** Ensure that any dust or debris left over from the manufacturing process is removed from inside the head and from around the column prior to fitting them together.

# PARTS LIST - 01704....cont

| Ref. No. | Description          | SIP Part No. | Ref. No. | Description       | SIP Part No. |
|----------|----------------------|--------------|----------|-------------------|--------------|
| 69.      | Screw (M5 x 16)      | WD01-00838   | 92.      | Worm gear         | WD01-00848   |
| 70.      | Mains lead clamp     | WD01-00700   | 93.      | Table support     | WD01-00849   |
| 71.      | Protecting ring      | WD01-00839   | 94.      | Worm pin          | WD01-00850   |
| 72.      | Protecting ring      | WD01-00770   | 95.      | Angle label       | WD01-00851   |
| 73.      | Mains lead           | WD01-00720   | 96.      | Locking handle    | WD01-00852   |
| 74.      | Mains lead clamp     | WD01-00700   | 97.      | Locking handle    | WD01-00814   |
| 75.      | Nut M12 x 1.75       | WD01-00840   | 98.      | Spring washer M16 | WD01-00853   |
| 76.      | Tension spring cover | WD01-00841   | 99.      | Bolt (M16 x 30)   | WD01-00854   |
| 77.      | Tension spring       | WD01-00842   | 100.     | Table arm         | WD01-00855   |
| 78.      | Screw                | WD01-00843   | 101.     | Table             | WD01-00856   |
| 79.      | Casting              | WD01-00844   | 102.     | Circlip           | WD01-00787   |
| 80.      | Label                | WD01-00807   | 103.     | Bearing 6204      | WD01-00857   |
| 81.      | Lock washer          | WD01-00725   | 104.     | Quill             | WD01-00858   |
| 82.      | Clip                 | WD01-00724   | 105.     | Spindle           | WD01-00859   |
| 83.      | Screw (M4 x 6)       | WD01-00723   | 106.     | Bearing 6201      | WD01-00732   |
| 84.      | Switch box           | WD01-00784   | 107.     | Washer            | WD01-00860   |
| 85.      | Screw (M5 x 12)      | WD01-00701   | 108.     | Arbor MT2         | 66633        |
| 86.      | Switch               | WD01-00782   | 109.     | Chuck             | WD01-00789   |
| 87.      | Screw (ST3 x 10)     | WD01-00845   | 110.     | Chuck guard 55mm  | 07662        |
| 88.      | Crank                | WD01-00846   | 111.     | Hex. Wrench 4mm   | WD01-00737   |
| 89.      | Bolt (M6 x 10)       | WD01-00847   | 112.     | Hex. Wrench 6mm   | WD01-00861   |
| 90.      | Circlip              | WD01-00742   | 113.     | Drift key         | WD01-00862   |
| 91.      | Worm shaft           | WD01-00810   |          |                   |              |

| Ref. No. | Description         | SIP Part No. | Ref. No. | Description          | SIP Part No. |
|----------|---------------------|--------------|----------|----------------------|--------------|
| 1.       | Base                | WD01-00793   | 35.      | Washer M8            | WD01-00672   |
| 2.       | Column flange       | WD01-00794   | 36.      | Motor plate          | WD01-00820   |
| 3.       | Spring washer M10   | WD01-00795   | 37.      | Nut M12              | WD01-00821   |
| 4.       | Bolt (M10 x 25)     | WD01-00796   | 38.      | Grub screw (M8 x 10) | WD01-00689   |
| 5.       | Rack                | WD02-00280   | 39.      | Motor pulley         | WD01-00822   |
| 6.       | Column              | WD02-00281   | 40.      | Motor                | WD01-00823   |
| 7.       | Screw (M6 x 12)     | WD01-00740   | 41.      | Spring washer M12    | WD01-00676   |
| 8.       | Rack collar         | WD01-00799   | 42.      | Nut M8               | WD01-00687   |
| 9.       | Screw (M6 x 16)     | WD01-00708   | 43.      | Cam pin              | WD01-00824   |
| 10.      | Handle cap          | WD01-00800   | 44.      | Cam                  | WD01-00825   |
| 11.      | Screw (M8 x 20)     | WD01-00801   | 45.      | Washer               | WD01-00826   |
| 12.      | Spring washer M8    | WD01-00673   | 46.      | Speed label          | WD01-00827   |
| 13.      | Handle knob         | WD01-00802   | 47.      | Nut M5               | WD01-00697   |
| 14.      | Handle              | WD01-00803   | 48.      | Pulley cover         | WD01-00828   |
| 15.      | Knob                | WD01-00804   | 49.      | Washer M6            | WD01-00702   |
| 16.      | Scale               | WD01-00805   | 50.      | Microswitch          | WD01-00706   |
| 17.      | Connection          | WD01-00806   | 51.      | Washer M6            | WD01-00702   |
| 18.      | Label               | WD01-00807   | 52.      | Spring washer M6     | WD01-00707   |
| 19.      | Roll pin (5 x 18)   | WD01-00808   | 53.      | Screw (M6 x 16)      | WD01-00708   |
| 20.      | Pinion shaft        | WD01-00809   | 54.      | Microswitch holder   | WD01-00709   |
| 21.      | Warning label       | WD01-00685   | 55.      | Nut M6               | WD01-00710   |
| 22.      | Roll pin (6 x 18)   | WD01-00760   | 56.      | Eccentric shaft      | WD01-00829   |
| 23.      | Indicator           | WD01-00811   | 57.      | Centre pulley        | WD01-00830   |
| 24.      | Belt tension handle | WD01-00812   | 58.      | Bearing 6202         | WD01-00771   |
| 25.      | Circlip             | WD01-00813   | 59.      | Circlip              | WD01-00831   |
| 26.      | Locking handle      | WD01-00814   | 60.      | Belt O-500           | WD01-00832   |
| 27.      | Roll pin (6 x 18)   | WD01-00760   | 61.      | Belt O-565           | WD01-00833   |
| 29.      | Screw (M5 x 10)     | WD01-00726   | 62.      | Spindle pulley       | WD01-00834   |
| 30.      | Circlip             | WD01-00816   | 63.      | Circlip              | WD01-00713   |
| 31.      | Shaft               | WD01-00817   | 64.      | Spindle shaft        | WD01-00835   |
| 32.      | Adjusting shaft     | WD01-00818   | 65.      | Bearing 6203         | WD01-00714   |
| 33.      | Washer M12          | WD01-00819   | 66.      | Knurled screw        | WD01-00836   |
| 34.      | Bolt (M8 x 25)      | WD01-00695   | 67.      | Circlip              | WD01-00704   |

## ASSEMBLY INSTRUCTIONS....cont





- Carefully raise the head above the column.
- Ensure that the hole in the bottom of the drill head lines up with the column.
- Lower the drill head down the column taking care that the head and the column stay square with each other.
- Line up the spindle with the table and base (011).
- Secure in place by tightening the 2 x grub screws on each side (012).

FIT THE FEED HANDLE - 01700 & 01701

• To fit the feed handles; simply screw them into the hub, as shown (013).



### FIT THE FEED HANDLE - 01702 - 01708



- Fit the cast feed handle over the hub.
- Secure in place by tightening the 3 x screws, as shown (014).

## ASSEMBLY INSTRUCTIONS....cont

• Fit the cover and secure with the screw (015).

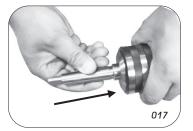


#### FIT THE ARBOR & CHUCK



Prior to fitting the chuck / arbor; Fit the chuck guard:

- Slide the chuck guard over the spindle collar ensuring that the 'open' part of the guard faces towards the back.
- Tighten the screw to secure in place.
- Ensure that the outside of the arbor and the inside of the chuck are clean and free of dust/debris.
- Slide the arbor into the chuck with reasonable force, as shown (017).



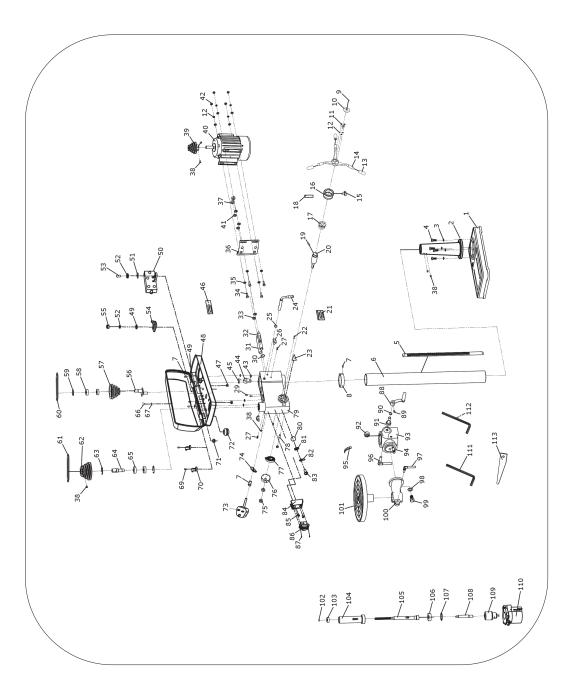


• Ensure that the chuck jaws are wound all the way in (inside the chuck) to prevent them from getting damaged (018).

- Slide the arbor and chuck into the spindle.
- Rotate the arbor with small upward pressure until it 'seats' correctly.
- Tap the arbor with a piece of scrap wood or a mallet to ensure it stays in place (019).



## **EXPLODED DRAWING - 01704**



## PARTS LIST - 01703....cont

| Ref. No. | Description          | SIP Part No. | Ref. No. | Description                    | SIP Part No. |
|----------|----------------------|--------------|----------|--------------------------------|--------------|
| 69.      | Spindle shaft        | WD01-00888   | 92.      | Washer                         | WD01-00901   |
| 70.      | Bearing 6005         | WD01-00889   | 93.      | Arbor MT2                      | 66633        |
| 71.      | Bearing ring         | WD01-00890   | 94.      | Chuck                          | WD01-00789   |
| 72.      | Screw (M8 x 25)      | WD01-00891   | 95.      | Table                          | WD01-00902   |
| 73.      | Casting              | WD01-00892   | 96.      | Table arm                      | WD01-00903   |
| 74.      | Label                | WD01-00893   | 97.      | Bolt (M16 x 30)                | WD01-00854   |
| 75.      | Lock washer          | WD01-00725   | 98.      | Spring washer M16              | WD01-00853   |
| 76.      | Clip                 | WD01-00724   | 99.      | Lock handle                    | WD01-00904   |
| 77.      | Screw (M5 x 6)       | WD01-00894   | 100.     | Worm pin                       | WD01-00850   |
| 78.      | Tension spring       | WD01-00842   | 101.     | Table support                  | WD01-00849   |
| 79.      | Tension spring cover | WD01-00841   | 102.     | Bolt (M6 x 12)                 | WD01-00905   |
| 80.      | Nut M12              | WD01-00821   | 103.     | Crank handle                   | WD01-00906   |
| 81.      | Switch box           | WD01-00910   | 104.     | Circlip                        | WD01-00742   |
| 82.      | Switch               | WD01-00895   | 105.     | Worm shaft                     | WD01-00911   |
| 83.      | Screw (M3 x 10)      | WD01-00896   | 106.     | Worm gear                      | WD01-00848   |
| 84.      | Mains lead clamp     | WD01-00700   | 107.     | Locking handle                 | WD01-00852   |
| 85.      | Mains lead           | WD01-00720   | 108.     | Angle label                    | WD01-00851   |
| 86.      | Indicator            | WD01-00897   | 109.     | Chuck guard 55mm               | 07662        |
| 87.      | Circlip              | WD01-00787   | 110.     | Drift key                      | WD01-00862   |
| 88.      | Bearing 6203         | WD01-00714   | 111.     | Hex. Wrench 4mm                | WD01-00737   |
| 89.      | Quill                | WD01-00898   | 112.     | Hex. Wrench 6mm                | WD01-00861   |
| 90.      | Spindle              | WD01-00899   | 113.     | Spindle pulley nut (M24 x 1.5) | WD01-00907   |
| 91.      | Bearing 6006         | WD01-00900   |          |                                |              |

## **OPERATING INSTRUCTIONS**



**Danger:** Before making any changes or adjustments, ensure that the drill is turned off, and the mains lead is removed from the supply socket.

### **SETTINGS & ADJUSTMENTS**

#### Setting The Table Height:

- Loosen the table height lock (020).
- For the 01700, simply slide the table up/down to the desired height and re-tighten the table height lock.





- For all other models; Rotate the table height adjustment handle until the table is at the required height (021).
- Re-tighten the table height lock.

Setting The Table Angle:

• The table angle can be adjusted by loosening the table angle lock located underneath the table (022).





- Rotate the table to the desired angle (023).
- Re-tighten the angle lock.

### **OPERATING INSTRUCTIONS....cont**

#### ON / OFF (NVR) SWITCH

Once fully assembled and adjusted, and all safety precautions have been followed; the pillar drill is ready to be run.

Your SIP pillar drill is fitted with a safety NVR (No Volt Release) switch. This means that if the power is cut to the drill (such as in a power failure); the motor will not start to run once the power is returned without the operator following the instructions below to restart the drill.

To start the drill - press the green (I) button.

To stop the drill - press the red (0) button or press down on the emergency stop cover.

#### ADJUSTING THE SPEED - 01700 & 01701

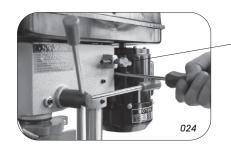


**Danger:** Before making any changes or adjustments, ensure that the drill is turned off, and the mains lead is removed from the supply socket.



**Note:** The speed of the pillar drill can be changed by adjusting the position of the belt on the pulley system. See the chart inside the pulley cover for speed configurations.

- Open the pulley cover.
- Slacken off the belt tension lock.
- Consult the chart inside the pulley cover, and position the belt on the pulley's according to the spindle speed required.
- When the belt has been correctly positioned, re-tension by levering the motor away from the head (024); Lever the motor with its bracket, away from the head, so that tension is applied to the belt.
- Tension is correct when the belt deflects by approx. ½" at its centre, when using reasonable thumb pressure.
- Lock the motor in this position using the belt tension lock.



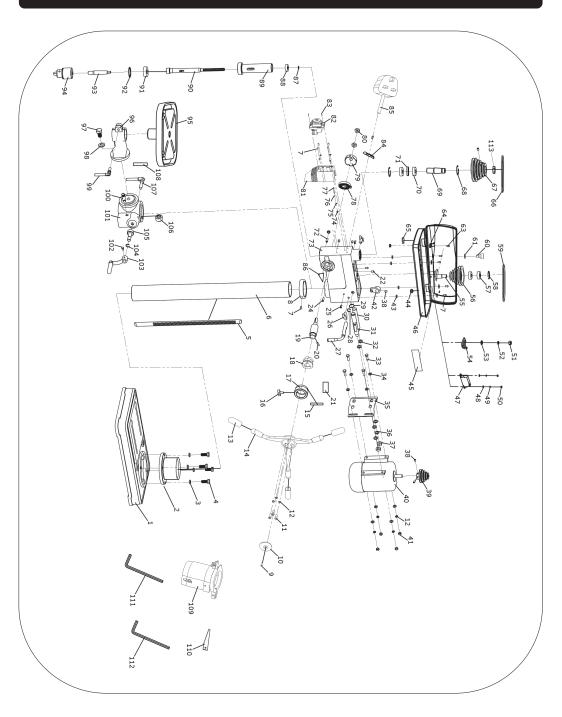
22

Belt Tension Lock

### **PARTS LIST - 01703**

| Ref. No. | Description          | SIP Part No. | Ref. No. | Description         | SIP Part No. |
|----------|----------------------|--------------|----------|---------------------|--------------|
| 1.       | Base                 | WD01-00863   | 35.      | Motor plate         | WD01-00874   |
| 2.       | Column flange        | WD01-00864   | 36.      | Spring washer M12   | WD01-00676   |
| 3.       | Spring washer M10    | WD01-00795   | 37.      | Nut M12             | WD01-00821   |
| 4.       | Bolt (M10 x 25)      | WD01-00796   | 38.      | Grub screw (M8 x10) | WD01-00689   |
| 5.       | Rack                 | WD01-00908   | 39.      | Motor pulley        | WD01-00876   |
| 6.       | Column               | WD01-00865   | 40.      | Motor               | WD01-00877   |
| 7.       | Grub screw (M6 x 12) | WD01-00740   | 41.      | Nut M8              | WD01-00687   |
| 8.       | Rack collar          | WD01-00799   | 42.      | Cam assembly        | WD01-00909   |
| 9.       | Screw (M6 x 16)      | WD01-00708   | 43.      | Washer              | WD01-00878   |
| 10.      | Handle cap           | WD01-00800   | 44.      | Protecting ring     | WD01-00839   |
| 11.      | Screw (M8 x 20)      | WD01-00801   | 45.      | Speed label         | WD01-00879   |
| 12.      | Spring washer M8     | WD01-00673   | 46.      | Pulley cover        | WD01-00880   |
| 13.      | Handle knob          | WD01-00802   | 47.      | Microswitch         | WD01-00706   |
| 14.      | Handle               | WD01-00803   | 48.      | Washer M5           | WD01-00881   |
| 15.      | Label                | WD01-00893   | 49.      | Spring washer M5    | WD01-00882   |
| 16.      | Knob                 | WD01-00867   | 50.      | Nut M5              | WD01-00697   |
| 17.      | Scale                | WD01-00805   | 51.      | Nut M6              | WD01-00710   |
| 18.      | Connection           | WD01-00806   | 52.      | Spring washer M6    | WD01-00707   |
| 19.      | Pinion shaft         | WD01-00809   | 53.      | Washer M6           | WD01-00702   |
| 20.      | Roll pin (5 x 16)    | WD01-00868   | 54.      | Microswitch holder  | WD01-00709   |
| 21.      | Warning label        | WD01-00685   | 55.      | Eccentric shaft     | WD01-00883   |
| 22.      | Screw (M5 x 10)      | WD01-00726   | 56.      | Centre pulley       | WD01-00884   |
| 24.      | Roll pin (5 x 25)    | WD01-00869   | 57.      | Bearing 6202        | WD01-00771   |
| 25.      | Roll pin (6 x 18)    | WD01-00760   | 58.      | Circlip             | WD01-00831   |
| 26.      | Locking handle       | WD01-00870   | 59.      | Belt O-565          | WD01-00833   |
| 27.      | Belt tension handle  | WD01-00812   | 60.      | Knurled screw       | WD01-00885   |
| 28.      | Circlip              | WD01-00813   | 61.      | Circlip             | WD01-00704   |
| 29.      | Circlip              | WD01-00871   | 63.      | Screw (M5 x 16)     | WD01-00838   |
| 30.      | Shaft                | WD01-00872   | 64.      | Mains lead clamp    | WD01-00700   |
| 31.      | Adjusting shaft      | WD01-00873   | 65.      | Protecting ring     | WD01-00770   |
| 32.      | Washer M12           | WD01-00819   | 66.      | Belt O-678          | WD01-00886   |
| 33.      | Bolt (M8 x 25)       | WD01-00695   | 67.      | Spindle pulley      | WD01-00887   |
| 34.      | Washer M8            | WD01-00672   | 68.      | Circlip             | WD01-00713   |

## **EXPLODED DRAWING - 01703**



## **OPERATING INSTRUCTIONS....cont**

### ADJUSTING THE SPEED - ALL OTHER MODELS

- Release the belt tension locks located on either side of the main housing (025).
- Once the tension is released, the belt tension handle can be used to move the motor pulley closer to the idler pulley (026).
- The belt is removed by lifting it over the lip of the pulley while rotating the pulley simultaneously (027).
- After re-adjusting the belts, use the belt tension handle to move the motor pulley further away from the idler pulley. When the desired position is achieved use the belt tension locks to secure the pulleys in place (028).
- Proper belt tension is achieved when the measured deflection (by pushing in the centre of the belt) is approx.  $\frac{1}{2}$ " (029).











## **OPERATING INSTRUCTIONS....cont**

### FITTING A DRILL BIT

### To fit a straight shank bit:

- Open the jaws of the drill chuck (fit the chuck key into the chuck and turn it anticlockwise) enough to fit the required bit (030).
- Push the bit into the chuck (031).
- Secure the bit in place by tightening the jaws with the chuck key (032).







#### To fit a morse taper bit:

- Lower the chuck to its lowest position; Turn the chuck by hand until both slots align (033).
- Insert the drift key into the slot (034) and tap firmly with a metal hammer until it releases (Ensure the chuck jaws are wound all the way up to prevent damage).
- Place the taper bit into the spindle hole (035), twisting and pushing upward until the bit is correctly seated.







# PARTS LIST - 01702....cont

| Ref. No. | Description          | SIP Part No. | Ref. No. | Description       | SIP Part No. |
|----------|----------------------|--------------|----------|-------------------|--------------|
| 69.      | Screw (M5 x 16)      | WD01-00838   | 92.      | Worm gear         | WD01-00848   |
| 70.      | Mains lead clamp     | WD01-00700   | 93.      | Table support     | WD01-00849   |
| 71.      | Protecting ring      | WD01-00839   | 94.      | Worm pin          | WD01-00850   |
| 72.      | Protecting ring      | WD01-00770   | 95.      | Angle label       | WD01-00851   |
| 73.      | Mains lead           | WD01-00720   | 96.      | Locking handle    | WD01-00852   |
| 74.      | Mains lead clamp     | WD01-00700   | 97.      | Locking handle    | WD01-00814   |
| 75.      | Nut M12 x 1.75       | WD01-00840   | 98.      | Spring washer M16 | WD01-00853   |
| 76.      | Tension spring cover | WD01-00841   | 99.      | Bolt (M16 x 30)   | WD01-00854   |
| 77.      | Tension spring       | WD01-00842   | 100.     | Table arm         | WD01-00855   |
| 78.      | Screw (              | WD01-00843   | 101.     | Table             | WD01-00856   |
| 79.      | Casting              | WD01-00844   | 102.     | Circlip           | WD01-00787   |
| 80.      | Label                |              | 103.     | Bearing 6204      | WD01-00857   |
| 81.      | Lock washer          | WD01-00725   | 104.     | Quill             | WD01-00858   |
| 82.      | Clip                 | WD01-00724   | 105.     | Spindle           | WD01-00859   |
| 83.      | Screw (M4 x 6)       | WD01-00723   | 106.     | Bearing 6201      | WD01-00732   |
| 84.      | Switch box           | WD01-00784   | 107.     | Washer            | WD01-00860   |
| 85.      | Screw (M5 x 12)      | WD01-00701   | 108.     | Arbor MT2         | 66633        |
| 86.      | Switch               | WD01-00782   | 109.     | Chuck             | WD01-00789   |
| 87.      | Screw (ST3 x 10)     | WD01-00845   | 110.     | Chuck guard 55mm  | 07662        |
| 88.      | Crank                | WD01-00846   | 111.     | Hex. Wrench 4mm   | WD01-00737   |
| 89.      | Bolt (M6 x 10)       | WD01-00847   | 112.     | Hex. Wrench 6mm   | WD01-00861   |
| 90.      | Circlip              | WD01-00742   | 113.     | Drift key         | WD01-00862   |
| 91.      | Worm shaft           | WD01-00810   |          |                   |              |

| Ref. No. | Description         | SIP Part No. | Ref. No. | Description          | SIP Part No. |
|----------|---------------------|--------------|----------|----------------------|--------------|
| 1.       | Base                | WD01-00793   | 35.      | Washer M8            | WD01-00672   |
| 2.       | Column flange       | WD01-00794   | 36.      | Motor plate          | WD01-00820   |
| 3.       | Spring washer M10   | WD01-00795   | 37.      | Nut M12              | WD01-00821   |
| 4.       | Bolt (M10 x 25)     | WD01-00796   | 38.      | Grub screw (M8 x 10) | WD01-00689   |
| 5.       | Rack                | WD01-00797   | 39.      | Motor pulley         | WD01-00822   |
| 6.       | Column              | WD01-00798   | 40.      | Motor                | WD01-00823   |
| 7.       | Screw (M6 x 12)     | WD01-00740   | 41.      | Spring washer M12    | WD01-00676   |
| 8.       | Rack collar         | WD01-00799   | 42.      | Nut M8               | WD01-00687   |
| 9.       | Screw (M6 x 16)     | WD01-00708   | 43.      | Cam pin              | WD01-00824   |
| 10.      | Handle cap          | WD01-00800   | 44.      | Cam                  | WD01-00825   |
| 11.      | Screw (M8 x 20)     | WD01-00801   | 45.      | Washer               | WD01-00826   |
| 12.      | Spring washer M8    | WD01-00673   | 46.      | Speed label          | WD01-00827   |
| 13.      | Handle knob         | WD01-00802   | 47.      | Nut M5               | WD01-00697   |
| 14.      | Handle              | WD01-00803   | 48.      | Pulley cover         | WD01-00828   |
| 15.      | Knob                | WD01-00804   | 49.      | Washer M6            | WD01-00702   |
| 16.      | Scale               | WD01-00805   | 50.      | Microswitch          | WD01-00706   |
| 17.      | Connection          | WD01-00806   | 51.      | Washer M6            | WD01-00702   |
| 18.      | Label               | WD01-00807   | 52.      | Spring washer M6     | WD01-00707   |
| 19.      | Roll pin (5 x 18)   | WD01-00808   | 53.      | Screw (M6 x 16)      | WD01-00708   |
| 20.      | Pinion shaft        | WD01-00809   | 54.      | Microswitch holder   | WD01-00709   |
| 21.      | Warning label       | WD01-00685   | 55.      | Nut M6               | WD01-00710   |
| 22.      | Roll pin (6 x 18)   | WD01-00760   | 56.      | Eccentric shaft      | WD01-00829   |
| 23.      | Indicator           | WD01-00811   | 57.      | Centre pulley        | WD01-00830   |
| 24.      | Belt tension handle | WD01-00812   | 58.      | Bearing 6202         | WD01-00771   |
| 25.      | Circlip             | WD01-00813   | 59.      | Circlip              | WD01-00831   |
| 26.      | Locking handle      | WD01-00814   | 60.      | Belt O-500           | WD01-00832   |
| 27.      | Roll pin (6 x 18)   | WD01-00760   | 61.      | Belt O-565           | WD01-00833   |
| 29.      | Screw (M5 x 10)     | WD01-00726   | 62.      | Spindle pulley       | WD01-00834   |
| 30.      | Circlip             | WD01-00816   | 63.      | Circlip              | WD01-00713   |
| 31.      | Shaft               | WD01-00817   | 64.      | Spindle shaft        | WD01-00835   |
| 32.      | Adjusting shaft     | WD01-00818   | 65.      | Bearing 6203         | WD01-00714   |
| 33.      | Washer M12          | WD01-00819   | 66.      | Knurled screw        | WD01-00836   |
| 34.      | Bolt (M8 x 25)      | WD01-00695   | 67.      | Circlip              | WD01-00704   |

## **OPERATING INSTRUCTIONS....cont**

#### OPERATING THE DEPTH STOP - 01700

To set the depth of the hole, adjust the depth stop as follows:

- Lower the chuck with the power *OFF*, until the drill bit touches the surface of the workpiece, and hold in that position.
- Spin down the adjuster nut so that the gap between its underside and top of bracket is the depth of the hole required.
- Screw down the lock nut and lock it against the adjuster nut.

The drill is now set to drill holes to your pre-determined depth from that particular start point. i.e. Providing the surface of your workpiece is flat and level, you may drill a series of holes, each to the same depth.



#### OPERATING THE DEPTH STOP - ALL OTHER MODELS

To set the depth of the hole, adjust the depth stop as follows:

- Loosen depth stop lock knob by turning in an anti-clockwise direction (Fig. 37).
- Rotate depth scale to the desired depth, then tighten half wing bolt (Fig. 38).



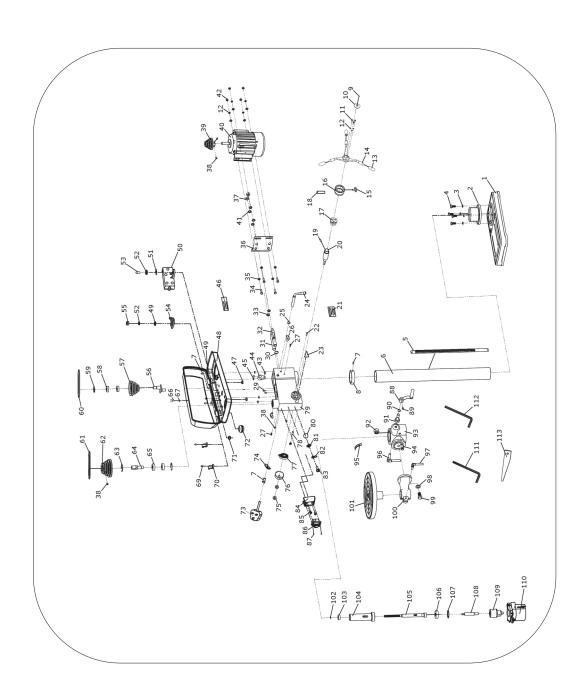


## **OPERATING INSTRUCTIONS....cont**

### DRILLING OPERATIONS

- Set the table to the required height; the drill bit should be set just above the workpiece, but not touching it.
- Clamp the workpiece to the table.
- Set the required speed.
- Turn the drill on.
- Allow the drill to reach that speed.
- Turn the feed handle anti clockwise to lower the spindle towards the workpiece.
- Once the operation is complete; guide the feed handle clockwise to raise the spindle.

## **EXPLODED DRAWING - 01702**



## PARTS LIST - 01701....cont

| Ref. No. | Description    | SIP Part No. | Ref. No. | Description      | SIP Part No. |
|----------|----------------|--------------|----------|------------------|--------------|
| 67.      | Switch box     | WD01-00784   | 77.      | Chuck guard 40mm | 66609        |
| 68.      | Screw (M4 x 6) | WD01-00723   | 78.      | Hex. wrench      | WD01-00790   |
| 69.      | Clip           | WD01-00724   | 79.      | Hex. wrench      | WD01-00737   |
| 70.      | Lock washer    | WD01-00725   | 80.      | Belt O-490       | WD01-00791   |
| 71.      | Bearing 6201   | WD01-00732   | 81.      | Centre pulley    | WD01-00792   |
| 72.      | Quill          | WD01-00785   | 82.      | Eccentric shaft  | WD01-00778   |
| 73.      | Washer         | WD01-00786   | 83.      | Nut M5           | WD01-00697   |
| 74.      | Circlip        | WD01-00787   | 84.      | Screw (M6 x 16)  | WD01-00708   |
| 75.      | Spindle        | WD01-00788   | 85.      | Circlip          | WD01-00787   |
| 76.      | Chuck          | WD01-00789   |          |                  |              |

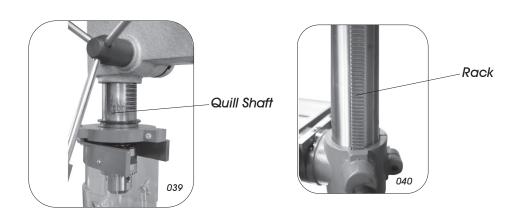
## **MAINTENANCE**

Cleaning and maintenance of this drill is mainly common sense some points for guidance are as follows:

- Regularly check that all the fixing screws are tight.
- The mains lead of the drill and any extension cord used should be checked frequently for damage. If damaged, have the mains lead replaced by an authorised service facility. Replace the extension cord as necessary.
- Regularly check and clean out any dust etc. that may have gathered in the fan housing of the motor.
- After each use brush off any chippings etc. with a soft brush.
- Regularly check the drive belt for wear; Replace if frayed or worn.

#### Lubrication:

- All bearings are packed with grease at the factory and require no further lubrication.
- Periodically grease or oil all moving parts.
- Periodically apply a thin coat of wax paste or light oil on the column, table and base for lubrication and to help prevent corrosion.
- Occasionally, lubricate the quill shaft assembly and rack with light oil if required (039 & 040).

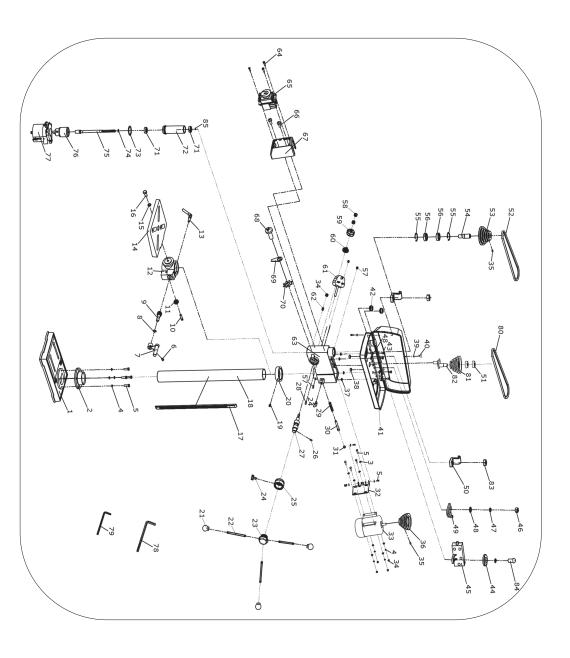


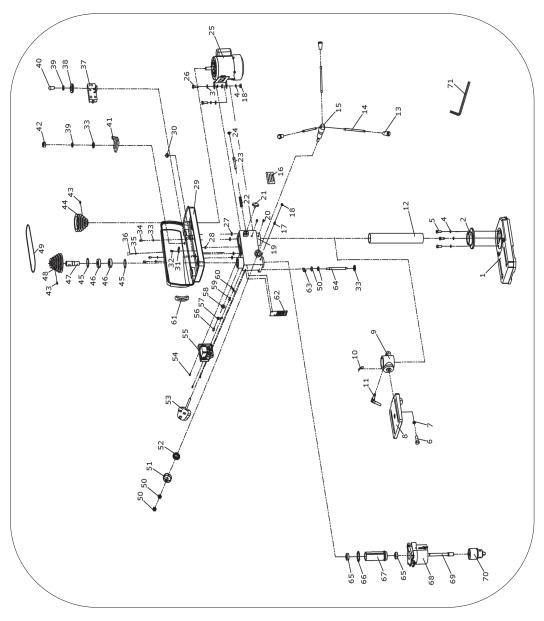
# TROUBLESHOOTING

| Problem                          | Probable Cause  | Possible Solution  |
|----------------------------------|---|--|
| Noisy operation<br>(under load). | <ul> <li>Incorrect belt tension.</li> <li>Dry spindle.</li> <li>Loose pulley.</li> <li>Loose belt.</li> <li>Worn bearing.</li> </ul>  | <ul> <li>Adjust tension.</li> <li>Remove spindle and quill assembly and lubricate.</li> <li>Tighten pulley.</li> <li>Adjust belt tension.</li> <li>Replace bearing.</li> </ul>   |
| Excessive drill wobble.          | <ul><li>Loose chuck.</li><li>Worn spindle or bearing.</li><li>Worn chuck.</li><li>Bent drill bit.</li></ul>   | <ul> <li>Tighten by pressing chuck down on to a block of wood against the table.</li> <li>Replace the spindle shaft or bearing.</li> <li>Replace chuck.</li> <li>Renew drill bit.</li> </ul>   |
| Motor won't start.               | <ul> <li>Power supply.</li> <li>Motor connection.</li> <li>Switch connection faulty.</li> <li>Faulty switch.</li> <li>Motor windings burned.</li> <li>Pulley cover not closed.</li> <li>Microswitch on cover faulty.</li> </ul> | <ul> <li>Check mains lead/fuse.</li> <li>Check motor connections.</li> <li>Check switch connections.</li> <li>Replace switch.</li> <li>Replace motor.</li> <li>Close pulley cover.</li> <li>Check operation of microswitch and renew/adjust as necessary.</li> </ul>   |
| Drill binds in workpiece.        | <ul> <li>Excessive feed pressure.</li> <li>Loose belt.</li> <li>Loose drill.</li> <li>Incorrect bit speed.</li> <li>Drill angles incorrect for type of material.</li> </ul>   | <ul> <li>Apply less pressure.</li> <li>Check belt tension.</li> <li>Tighten drill with key.</li> <li>Adjust the drill speed reasonably.</li> <li>Consult a technical manual dealing with materials drills and cutting angles and sharpen drill accordingly.</li> </ul> |
| Drill bit burns or smokes.       | <ul> <li>Incorrect speed.</li> <li>Swarf is not discharging.</li> <li>Dull drill or not proper clearance for material.</li> <li>Needs coolant.</li> <li>Excessive feed pressure.</li> </ul>                                     | <ul> <li>Adjust drill speed accordingly.</li> <li>Clean drill.</li> <li>Check sharpness &amp; taper.</li> <li>Use coolant whilst drilling.</li> <li>Apply less pressure.</li> </ul>  |
| Table difficult to raise.        | <ul><li>Needs lubrication.</li><li>Table lock tightened.</li></ul>  | Lubricate with light oil.     Loosen clamp.  |

# PARTS LIST - 01701

| Ref. No. | Description          | SIP Part No. | Ref. No. | Description          | SIP Part No. |
|----------|----------------------|--------------|----------|----------------------|--------------|
| 1.       | Base                 | WD01-00738   | 34.      | Nut M8               | WD01-00687   |
| 2.       | Column flange        | WD01-00739   | 35.      | Grub screw (M6 x 10) | WD01-00711   |
| 3.       | Washer M8            | WD01-00672   | 36.      | Motor pulley         | WD01-00766   |
| 4.       | Spring washer M8     | WD01-00673   | 37.      | Washer               | WD01-00767   |
| 5.       | Bolt (M8 x 25)       | WD01-00695   | 38.      | Nut M5               | WD01-00697   |
| 6.       | Grub screw (M6 x 12) | WD01-00740   | 39.      | Circlip              | WD01-00704   |
| 7.       | Crank handle         | WD01-00741   | 40.      | Knurled screw        | WD01-00768   |
| 8.       | Circlip              | WD01-00742   | 41.      | Pulley cover         | WD01-00769   |
| 9,       | Worm shaft           | WD01-00743   | 42.      | Protecting ring      | WD01-00770   |
| 10.      | Worm pin             | WD01-00744   | 43.      | Screw (M6 x 10)      | WD01-00703   |
| 11.      | Worm gear            | WD01-00745   | 44.      | Washer M6            | WD01-00702   |
| 12.      | Table support        | WD01-00746   | 45.      | Microswitch          | WD01-00706   |
| 13.      | Locking handle       | WD01-00747   | 46.      | Nut M6               | WD01-00710   |
| 14.      | Table                | WD01-00748   | 47.      | Spring washer M6     | WD01-00707   |
| 15.      | Spring washer M12    | WD01-00676   | 48.      | Washer M6            | WD01-00702   |
| 16.      | Bolt (M12 x 25)      | WD01-00749   | 49.      | Microswitch holder   | WD01-00709   |
| 17.      | Rack                 | WD01-00750   | 50.      | Mains lead clamp     | WD01-00700   |
| 18.      | Column               | WD01-00751   | 51.      | Bearing 6202         | WD01-00771   |
| 19.      | Grub screw (M6 x 12) | WD01-00740   | 52.      | Belt O-450           | WD01-00772   |
| 20.      | Rack collar          | WD01-00752   | 53.      | Spindle pulley       | WD01-00773   |
| 21.      | Handle knob          | WD01-00753   | 54.      | Spindle shaft        | WD01-00774   |
| 22.      | Handle               | WD01-00754   | 55.      | Circlip              | WD01-00713   |
| 23.      | Handle base          | WD01-00755   | 56.      | Bearing 6203         | WD01-00714   |
| 24.      | Locking handle       | WD01-00756   | 57.      | Screw (M8 x 8)       | WD01-00775   |
| 25.      | Scale                | WD01-00757   | 58.      | Nut M10              | WD01-00717   |
| 26.      | Roll pin (6 x 12)    | WD01-00758   | 59.      | Spring cover         | WD01-00776   |
| 27.      | Pinion shaft         | WD01-00759   | 60.      | Tension spring       | WD01-00777   |
| 28.      | Roll pin (6 x 18)    | WD01-00760   | 61.      | Mains lead           | WD01-00720   |
| 29.      | Motor spring         | WD01-00761   | 62.      | Screw (M8 x 15)      | WD01-00779   |
| 30.      | Motor push rod       | WD01-00762   | 63.      | Casting              | WD01-00780   |
| 31.      | Washer               | WD01-00763   | 64.      | Screw (ST2.9 x 12)   | WD01-00781   |
| 32.      | Motor plate          | WD01-00764   | 65.      | Switch               | WD01-00782   |
| 33.      | Motor                | WD01-00765   | 66.      | Screw (M4 x 10)      | WD01-00783   |





| Ref. No. | Description          | SIP Part No. | Ref. No. | Description          | SIP Part No. |
|----------|----------------------|--------------|----------|----------------------|--------------|
| 1.       | Base                 | WD01-00670   | 34.      | Screw (M6 x 10)      | WD01-00703   |
| 2.       | Column flange        | WD01-00671   | 35.      | Circlip              | WD01-00704   |
| 3.       | Washer 8mm           | WD01-00672   | 36.      | Knurled screw        | WD01-00705   |
| 4.       | Spring washer 8mm    | WD01-00673   | 37.      | Microswitch          | WD01-00706   |
| 5.       | Bolt (M8 x 20)       | WD01-00674   | 38.      | Washer 6mm           | WD01-00702   |
| 6.       | Bolt (M12 x 30)      | WD01-00675   | 39.      | Spring washer 6mm    | WD01-00707   |
| 7.       | Spring washer 12mm   | WD01-00676   | 40.      | Screw (M6 x 16)      | WD01-00708   |
| 8.       | Table                | WD01-00677   | 41.      | Microswitch holder   | WD01-00709   |
| 9,       | Table support        | WD01-00678   | 42.      | Nut M6               | WD01-00710   |
| 10.      | Angle label          | WD01-00679   | 43.      | Grub screw (M6 x 10) | WD01-00711   |
| 11.      | Locking handle       | WD01-00680   | 44.      | Motor pulley         | WD01-00712   |
| 12.      | Column               | WD01-00681   | 45.      | Circlip              | WD01-00713   |
| 13.      | Handle knob          | WD01-00682   | 46.      | Bearing              | WD01-00714   |
| 14.      | Handle               | WD01-00683   | 47.      | Spindle shaft        | WD01-00715   |
| 15.      | Handle shaft         | WD01-00684   | 48.      | Spindle pulley       | WD01-00716   |
| 16.      | Warning label        | WD01-00685   | 49.      | Belt K630            | 18090        |
| 17.      | Screw (M8 x 16)      | WD01-00686   | 50.      | Nut M10              | WD01-00717   |
| 18.      | Nut M8               | WD01-00687   | 51.      | Spring cover         | WD01-00718   |
| 19.      | Casting              | WD01-00688   | 52.      | Spring               | WD01-00719   |
| 20.      | Grub screw (M8 x 20) | WD01-00689   | 53.      | Mains lead           | WD01-00720   |
| 21.      | Knob                 | WD01-00690   | 54.      | Screw (M4 x 12)      | WD01-00721   |
| 22.      | Motor spring         | WD01-00691   | 55.      | Switch               | WD01-00722   |
| 23.      | Motor push rod       | WD01-00692   | 56.      | Screw (M4 x 6)       | WD01-00723   |
| 24.      | Washer               | WD01-00693   | 57.      | Clip                 | WD01-00724   |
| 25.      | Motor                | WD01-00694   | 58.      | Lock washer          | WD01-00725   |
| 26.      | Bolt (M8 x 25)       | WD01-00695   | 59.      | Screw (M5 x 10)      | WD01-00726   |
| 27.      | Washer               | WD01-00696   | 60.      | Mains lead clamp     | WD01-00700   |
| 28.      | Nut M5               | WD01-00697   | 61.      | Label                | WD01-00728   |
| 29.      | Pulley cover         | WD01-00698   | 62.      | Label                | WD01-00729   |
| 30.      | Protecting ring      | WD01-00699   | 63.      | Indicator            | WD01-00730   |
| 31.      | Mains lead clamp     | WD01-00700   | 64.      | Limit bolt           | WD01-00731   |
| 32.      | Screw (M5 x 12)      | WD01-00701   | 65.      | Bearing 6201         | WD01-00732   |
| 33.      | Washer 6mm           | WD01-00702   | 66.      | Washer               | WD01-00733   |

# PARTS LIST - 01700....cont

| Ref. No. | Description      | SIP Part No. | Ref. No. | Description     | SIP Part No. |
|----------|------------------|--------------|----------|-----------------|--------------|
| 67.      | Quill            | WD01-00734   | 70.      | Chuck           | WD01-00736   |
| 68.      | Chuck guard 40mm | 66609        | 71.      | Hex. Wrench 4mm | WD01-00737   |
| 69.      | Spindle          | WD01-00735   |          |                 |              |