

Thank you for purchasing a Sealey product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.



IMPORTANT

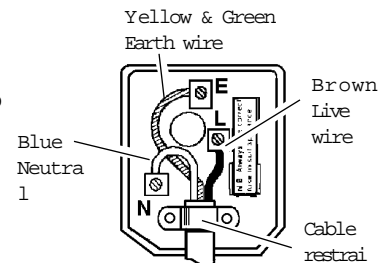
PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS AND CAUTIONS. USE THIS PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY, AND WILL INVALIDATE THE WARRANTY. RETAIN THESE INSTRUCTIONS FOR FUTURE USE.

1. SAFETY INSTRUCTIONS

1.1 ELECTRICAL SAFETY. **WARNING! It is the user's responsibility to check the following:**

You must check all electrical equipment and appliances to ensure they are safe before using. **You must** inspect power supply leads, plugs and all electrical connections for wear and damage. **You must** ensure the risk of electric shock is minimised by the installation of appropriate safety devices. An RCCB (Residual Current Circuit Breaker) should be incorporated in the main distribution board. We recommend that an RCD (Residual Current Device) is used with all electrical products. It is particularly important to use an RCD together with portable products that are plugged into an electrical supply not protected by an RCCB. If in doubt consult a qualified electrician. You may obtain a Residual Current Device by contacting your Sealey dealer. **You must** also read and understand the following instructions concerning electrical safety.

- 1.1.1. The **Electricity At Work Act 1989** requires all portable electrical appliances, if used on business premises, to be tested by a qualified person, using a Portable Appliance Tester (PAT), at least once a year.
- 1.1.2. The **Health & Safety at Work Act 1974** makes owners of electrical appliances responsible for the safe condition of the appliance, and the safety of the appliance operator. **If in any doubt about electrical safety, contact a qualified electrician.**
- 1.1.3. **DO** ensure that the insulation on all cables and the product itself is safe before connecting to the mains power supply. See 1.1.2. above and use a Portable Appliance Tester (PAT).
- 1.1.4. **DO** ensure that cables are always protected against short circuit and overload.
- 1.1.5. **DO** regularly inspect power supply, leads, plugs for wear and damage, and power connections to ensure that none is loose.
- 1.1.6. **DO** check that the voltage marked on the product is the same as the electrical power supply to be used, and check that all fused plugs are fitted with the correct capacity fuse.
- 1.1.7. **DO NOT** pull or carry the powered appliance by its power supply lead.
- 1.1.8. **DO NOT** pull power plugs from sockets by the power cable.
- 1.1.9. **DO NOT** use worn or damage leads, plugs or connections. Immediately replace or repair by qualified person. A U.K. 3 pin plug with ASTA/BS approval is fitted. In case of damage, cut off and fit a new plug according to the following instructions (UK only - see diagram at right).



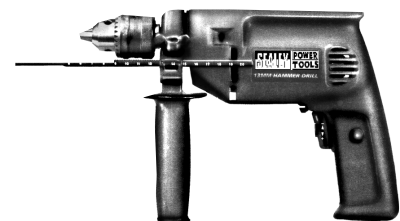
- a) Ensure the unit is correctly earthed via a three-pin plug.
- b) Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.
- c) Connect the BROWN live wire to live terminal 'L'.
- d) Connect the BLUE neutral wire to the neutral terminal 'N'.

After wiring, check there are no bare wires, that all wires have been correctly connected, that the cable outer insulation extends past the cable restraint and that the restraint is tight.

- 1.1.10. **Cable extension reels.** When a cable extension reel is used it should be fully unwound before connection. A cable reel with an RCD fitted is recommended since any product which is plugged into the cable reel will be protected. The section of the cores in the cable is important and should be at least 1.5mm², but to be absolutely sure that the capacity of the cable reel is suitable for this product and for others that may be used in the other output sockets, the use of 2.5mm² section is recommended.

1.2 GENERAL SAFETY

- 3 Disconnect the drill from the mains power before changing accessories, servicing or performing any maintenance.
- 3 Maintain drill in good condition. Check moving parts and alignment, and keep drill bits sharp. If necessary use an authorised service agent.
- 3 Replace or repair damaged parts. *Use recommended parts only. Unauthorised parts may be dangerous and will invalidate the warranty.*
- 3 Wear approved safety eye protection with side shields, and a dust mask if drilling generates dust. Rubber gloves are recommended when using out doors, and safety gloves when drilling items such as steel, brick work etc,
- 3 Remove ill fitting clothing. Remove ties, watches, rings, and other loose jewellery, and contain long hair.
- 3 Use the drill in a suitable working area, keep area clean and tidy and free from unrelated materials. Ensure there is adequate lighting.
- 3 Prevent body contact with grounded surfaces, pipes, radiators, ranges, refrigerators etc., to avoid electric shock.
- 3 Evaluate your working area before using the drill. Ceilings, floors and enclosures may contain hidden electrical wires or water piping.
- 3 Maintain correct balance and footing. **DO NOT** over-reach and ensure the floor is not slippery, wear non-slip shoes.
- 3 The supplementary handle grip should always be attached for use.
- 3 Remove chuck key before starting the drill.
- 3 Keep children and unauthorised persons away from the working area.
- 3 Secure non-stable workpiece with a clamp, vice or other adequate holding device.
- 3 Avoid unintentional starting, and ensure the lock-on button is disengaged before use.
- 3 Keep the drill clean for best and safest performance.
- 7 **DO NOT** use the drill for a task it is not designed to perform.
- 7 **DO NOT** operate drill where there are flammable liquids or gasses.
- 7 **DO NOT** get the drill wet or use in damp or wet locations.
- 7 **DO NOT** hold unsecured work in your hand.
- 7 **DO NOT** leave the drill running unattended.
- 7 **DO NOT** carry the drill with your finger on the power switch.
- 7 **DO NOT** operate the drill if any parts are missing, or the drill is damaged, as this may cause failure and/or personal injury.
- 7 **DO NOT** operate the drill when you are tired, under the influence of alcohol, drugs or intoxicating medication.
- 3 When not in use switch off drill, remove plug from power supply and store in a safe, dry, childproof area.

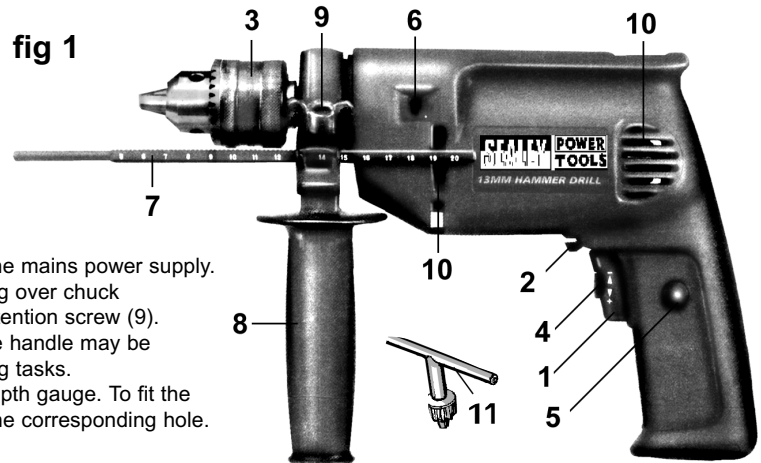


FUSE RATING
 THE PLUG FITTED TO PRODUCT
 MUST BE EQUIPPED WITH A
5 AMP FUSE

2. TECHNICAL SPECIFICATIONS

Input power 230V - 650W
Speed at no load 0-2700rpm
Spindle thread 1/2" x 20UNF
Chuck capacity 13mm
Maximum capacity for steel 13mm
Maximum capacity for wood 25mm
Maximum capacity for concrete 16mm
Blows per minute 0 - 29700bpm
Approx weight (with drill-holder) 1.95kg

- | | | | |
|----|----------------------------------|-----|----------------------------|
| 1. | Variable control On/Off trigger. | 7. | Depth stop gauge |
| 2. | Forward/reverse switch | 8. | Removable handle grip |
| 3. | Chuck | 9. | Grip & stop gauge lock nut |
| 4. | Variable speed control | 10. | Ventilation slots |
| 5. | Motor lock-on button | 11. | Chuck key. |
| 6. | Hammer switch | | |



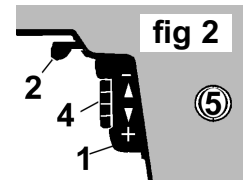
3. OPERATING INSTRUCTIONS

3.1. PREPARING DRILL FOR USE.

- 3.1.1. Ensure the drill is switched off and unplugged from the mains power supply.
- 3.1.2. Fit supplementary handle grip (fig 1 item 8) by placing over chuck head and onto the drill grip collar. Secure with the retention screw (9). This grip is used to improve control over the drill. The handle may be angled, affording a more stable grip for various drilling tasks. The handle grip further allows the attachment of a depth gauge. To fit the gauge loosen screw 9 and slide the gauge through the corresponding hole. Re-tighten screw 9.

3.2. DRILL SPEED.

- The required speed (or rpm). will depend on the material and task, and can be determined by testing. The following may be used as a guide.
- 3.2.1. Low speeds are recommended for hard materials such as stone, ceramic, glass, concrete and high tensile steel and tasks such as starting holes without centre punch, driving screws, mixing paint etc.
 - 3.2.2. Medium speeds are suitable for plastics and laminates.
 - 3.2.3. High speeds recommended for soft materials such as wood, aluminium, copper, bronze and brass.
 - 3.2.4. Your drill has a variable speed control on/off trigger (fig 2 item 1) which increases the speed the more the trigger is depressed.
 - 3.2.5. The trigger has a speed control selector Incorporated (fig 2 item 4) designed to allow control and adjustment of speed and torque limits. The speed and torque of your drill can be increased or decreased by rotating the variable speed control selector in the direction of the arrows on the switch, (-) decreases speed and torque and (+) will increase speed and torque.
 - 3.2.6. To pre-set and lock the trigger at a given speed, set the selector (4) to the required speed, depress the trigger (1) fully and press the trigger lock-on button (5), also see 3.5. Release the trigger and the speed will drop to that pre-set. Note: if the variable speed control selector is fully turned in the low speed (-) direction your drill may not operate on some tasks as the torque will be very low. To achieve such a low speed performance you may have to use the variable trigger (1) only. Familiarise yourself by practicing variable speed adjustments. If you do not wish to use variable speed control selector (4) turn the selector to full (+) speed, and control drill speeds by the trigger only.

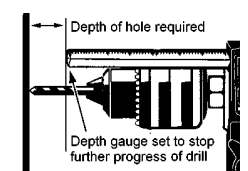


⚠ CAUTION: DO NOT run your drill at low to medium speeds for extended periods of time as this may cause drill to overheat. If this occurs, cool your drill by running it without a load at full speed for approximately 3 minutes.

3.3. DEPTH STOP GAUGE.

If you require to drill a precise depth you can set the depth gauge (fig 1 item 7). Ensure the workpiece has a flat surface and is wide enough for the gauge to butt up against once the required depth has been reached. Measure back from the tip of the drill bit to the point at which the drill must stop. Slacken the retaining screw (fig 1 item 9) and extend the depth gauge to the point at which you wish to stop the drill penetrating further (fig 3) and tighten (9). Once drill has reach correct depth the gauge will butt up against the workpiece and stop further inward progress.

fig 3

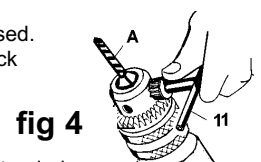


3.4. DRILL OR TOOL BIT FITTING.

⚠ **WARNING! Unplug from the mains power supply before placing bit into chuck.**

Open or close the chuck jaws to a point where the opening is slightly larger than the drill or tool bit (fig 4 A) to be used. Also raise the front of the drill slightly to prevent bit from falling out of the chuck jaws. Insert the drill bit into the chuck as far as it will go. Place the chuck key in one of the chuck holes and tighten the chuck securely.

⚠ **WARNING! Ensure you remove the chuck key before starting the drill.**



3.5. TRIGGER LOCK.

- 3.5.1. Your drill is equipped with a lock-on button (fig 1 item 5) which is convenient when continuous drilling for extended periods is required. To lock-on, depress the trigger, push in and hold the lock-on button then release trigger. Release the lock-on button and the drill will continue running accordingly.
- 3.5.2. To release the lock depress the trigger and release it.
- 3.5.3. Power failure. If you have the lock-on feature engaged during use and your drill becomes disconnected from the power supply, disengage the lock-on feature immediately.

⚠ **WARNING! Before connecting your drill to power supply, ensure it is not in the lock-on position as this may result in damage and/or personal injury. Depress the trigger to ensure release.**

DO NOT use the lock-on facility for jobs where your drill may need to be stopped suddenly.

3.6. FORWARD & REVERSE SWITCHING.

The chuck rotation direction is controlled by the direction lever (fig 2 item 2). With drill held in normal operation position, the direction lever must be positioned to the right of the on/off trigger (see symbol on drill body at side of lever marked FWD (forward) this is the correct direction for normal drilling tasks. To reverse chuck rotation direction turn the lever to the left REV (reverse) position. The reverse direction is used for unscrewing, for insertion of left hand threaded screws, and in some cases for the release of jammed drills.

⚠ **WARNING! Do not change direction whilst the drill is running. Release trigger and allow drill to stop before changing direction.**

3.7. STANDARD DRILLING INSTRUCTIONS.

Ensure hammer button (fig1 item 6) is disengaged by pushing fully in from side marked with a drill symbol.

WARNING! Ensure you wear approved safety goggles and any other safety item required for the job. Remove the chuck key before using the drill, and ensure the trigger button lock is not engaged which would result in accidental starting of the drill. Also ensure that all other safety requirements are followed.

Ensure drill is unplugged from the mains power supply.

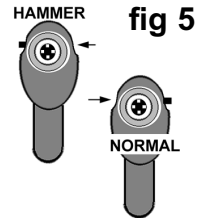
- 3.7.1. If the material to be drilled is free standing it should be secured in a vice or with clamps to keep it from turning as the drill bit rotates.
 - 3.7.2. When drilling metals, use a light oil on the drill bit to keep it from overheating. Oil will prolong life of bit and improve the drilling action.
 - 3.7.3. For hard smooth surfaces use a centre punch to mark desired hole location. This will prevent bit from slipping as your start to drill.
 - 3.7.4. A pilot hole may be necessary to assist the final drill size through the work piece.
Lock a pilot drill (smaller size drill than the finished hole size) into the chuck. Follow steps 3.7.5 to 3.7.7. below and drill a pilot hole in the middle of the centre punch mark where final hole is to be drilled. Insert the final sized bit in chuck. Hold drill firmly and place the bit at the entrance of the pilot hole and depress the trigger.
 - 3.7.5. Plug drill into mains power supply.
 - 3.7.6. Hold tool firmly and place the bit tip to the point to be drilled.
 - 3.7.7. Depress the trigger to start drill. Move the drill bit into the work piece applying only enough pressure to keep the bit cutting.
DO NOT force or apply side pressure to elongate the hole.
- WARNING!** Be prepared for drill binding or break through. When these situations occur the drill has a tendency to grab and kick in the opposite direction which could cause loss of control. If you are not prepared, this loss of control can result in damage and/or personal injury.
- 3.7.8. If the bit jams in the work piece or if the drill stalls, release the trigger switch immediately. Remove the bit from the work piece and determine the reason for jamming.
 - 3.7.9. For continuous operation, engage the lock-on button, see 3.5.
 - 3.7.10. To change the direction of the drill change the forward/reverse switch, see 3.6. **DO NOT** change whilst the drill is running.
 - 3.7.11. The depth gauge may be used to pre-determine the depth of hole, see 3.3.
 - 3.7.12. After working for a lengthy period of time at low speed run drill for approximately 3 minutes with no load at the highest speed.
 - 3.7.13. When job is complete unplug drill from the mains, remove the drill bit, sharpen if necessary and store.

3.8. HAMMER DRILLING.

The hammer action accompanied with a masonry drill bit is used to assist penetration into concrete, stone and masonry. To use the hammer function press the hammer button (fig 4 viewing drill from the front, chuck end) in from the side marked with a hammer symbol (right to left). To disengage the hammer function press the hammer button in from the side marked with a drill bit symbol (left to right).

Note: You may shift the hammer button when the drill is running without damaging the machine.

WARNING! DO NOT use the hammer action with non-masonry bits as bit failure and consequent damage and/or injury may result.



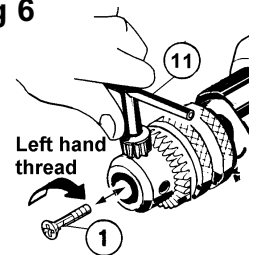
3.9. TO USE AS A SCREW DRIVER.

- 3.9.1. To drive in a screw.
 - a) Lock appropriate tool bit in the chuck and set a slow speed. Check that the drill direction, speed and torque are correct.
 - b) Hold the drill carefully and proceed to screw in as necessary.
 - c) Be careful to ensure the drill bit does not slip off of the screw, especially if the screw is long.
 - e) Secure non-stable work pieces with a clamp, vice or other adequate holding device. **DO NOT** hold loose work pieces in your hand.
- 3.9.2. To remove screws.
Place chuck in reverse, see 3.6.
- 3.10. **Work complete.** **WARNING!** Drill bits become very hot during use. Allow to cool or hold with a cloth for removal.
When you have finished working, unplug from the mains power supply, remove the bit from the chuck, clean drill, clean and if necessary sharpen the tool bit and store in a safe, dry, childproof area.

4. MAINTENANCE.

- 4.1. **Changing the drill chuck.**
To remove the drill chuck open the chuck fully. Locate the internal screw head and undo turning the screw **CLOCKWISE** (left handed thread, fig 6 item 1). Stop the chuck from moving by holding it with the chuck key (11). To replace the chuck reverse the above process.
- 4.2. **Cleaning.**
Keep the drill ventilation slots (fig 1 item 10) clean and free from obstructions. If available blow compressed air into the vents to clear any internal dust (safety goggles must be worn when undertaking this process). Keep the outer case of the drill clean and free from grease.
DO NOT wash with water or use solvents or abrasives.
- 4.3. **Other.**
To change internal brushes and service the drill contact your local Sealey service agent.

fig 6



Declaration of Conformity

We, the sole importer into the UK, declare that the product listed here is in conformity with the following standards and directives

**Variable Speed Hammer Drill Model
SDE650**
73.23/EEC Low Voltage Directive
89/336/EEC EMC Directive



The construction file for this product is held by the Manufacturer and may be inspected, by a national authority, upon request to Jack Sealey Ltd.

Signed by Mark Sweetman

Date 28th June 2000

For Jack Sealey Ltd.
Sole importer into the UK
of Sealey Power Products.

NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

IMPORTANT: No liability is accepted for incorrect use of product. **WARRANTY:** Guarantee is 12 months from purchase date, proof of which will be required for any claim. **INFORMATION:** For a copy of our latest catalogue and promotions, call us on 01284 757525 and leave your full name and address, including postcode.



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