INSTRUCTIONS FOR:
VARIABLE SPEED HAMMER DRILL
Models: **SDE850.V4 & SDE1050.V2**

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 & CAUTIONS. USE THE 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. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.**

1. SAFETY INSTRUCTIONS

1.1. ELECTRICAL SAFETY

❒ **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. 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 electrician, 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 those appliances and the safety of the appliance operators. **If in any doubt about electrical safety, contact a qualified electrician.**

1.1.3. Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply. See 1.1.1. and 1.1.2. and use a Portable Appliance Tester.

1.1.4. Ensure that cables are always protected against short circuit and overload.

1.1.5. Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that none is loose.

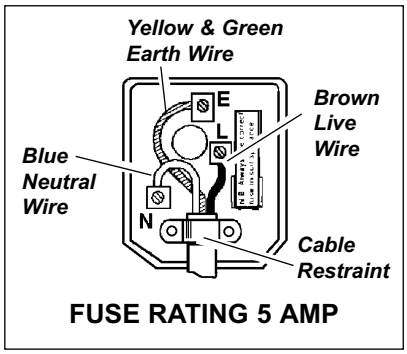
1.1.6. **Important:** Ensure that the voltage marked on the appliance matches the power supply to be used and that the plug is fitted with the correct fuse - see fuse rating at right.

1.1.7. **DO NOT** pull or carry the appliance by the power cable.

1.1.8. **DO NOT** pull the plug from the socket by the cable.

1.1.9. **DO NOT** use worn or damaged cables, plugs or connectors. Immediately have any faulty item repaired or replaced by a qualified electrician. When an ASTA/BS approved UK 3 pin plug is damaged, cut the cable just above the plug and **dispose of the plug safely.** Fit a new plug according to the following instructions (UK only).

a) Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.
b) Connect the BROWN live wire to the live terminal 'L'.
c) Connect the BLUE neutral wire to the neutral terminal 'N'.
d) After wiring, check that there are no bare wires, that all wires have been correctly connected, that the cable outer insulation extends beyond the cable restraint and that the restraint is tight.



Double insulated products, which are always marked with this symbol ⧈ , are fitted with live (brown) and neutral (blue) wires only. To rewire, connect the wires as indicated above - **DO NOT** connect either wire to the earth terminal.

1.1.10. Products which require more than 13 amps are supplied without a plug. In this case you must contact a qualified electrician to ensure that a suitably rated supply is available. We recommend that you discuss the installation of an industrial round pin plug and socket with your electrician.

1.1.11. If an extension reel is used it should be fully unwound before connection. A reel with an RCD fitted is preferred since any appliance plugged into it will be protected. The cable core section is important and should be at least 1.5mm^2, but to be absolutely sure that the capacity of the reel is suitable for this product and for others which may be used in the other output sockets, we recommend the use of 2.5mm^2 section cable. If extension reel is to be used outdoors, ensure it is marked for outdoor use.

1.2 GENERAL SAFETY

✓ Disconnect the drill from the mains power before changing accessories, servicing or performing any maintenance.
✓ Maintain drill in good condition. Check moving parts and alignment, and keep drill bits sharp. If necessary use an authorised service agent.
✓ Replace or repair damaged parts. *Use recommended parts only. Unauthorised parts may be dangerous and will invalidate the warranty.*
✓ 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,
✓ Remove ill fitting clothing. Remove ties, watches, rings, and other loose jewellery, and contain long hair.
✓ Use drill in an adequate working area for its function, keep area clean, tidy and free from unrelated materials, and ensure adequate lighting.
✓ Prevent body contact with grounded surfaces to avoid electric shock i.e. pipes, radiators, ranges refrigerators etc.
✓ Evaluate your working area before using the drill i.e. ceiling, floors and enclosures may contain hidden electrical wires or water piping.
✓ Maintain correct balance and footing. DO Not over-reach and ensure the floor is not slippery and wear non skid shoes.
✓ The supplementary handle grip should always be attached for use.
✓ Keep children and unauthorised persons away from the working area.
✓ Secure non stable work piece with a clamp, vice or other adequate holding device. DO NOT hold unsecured work in your hand.
✓ Avoid unintentional starting, and ensure the lock on button is disengaged before use.
✗ DO NOT force the drill to achieve a task it was not designed to perform.
✗ DO NOT operate drill where there are flammable liquids or gasses.
✗ DO NOT get the drill wet or use in damp or wet locations.
✗ DO NOT operate the drill if any parts are missing or the drill is damaged as this may cause failure or possible personal injury.
✗ DO NOT operate the drill when you are tired, under the influence of alcohol, drugs or intoxicating medication.
✗ DO NOT carry the drill with your finger on the power switch, or carry by the power cord, or leave the drill running whilst unattended.
✓ When not in use switch drill off, remove plug from power supply, clean the drill and store in safe, dry, child proof area.

2. TECHNICAL SPECIFICATIONS

MODEL	SDE850		SDE1050	
Input power	230 V - 3.7 A, 850	W	230 V - 4.7 A, 1050	W
Speed at no load	0 - 1300 / 0 - 3100	rpm	200 - 1300 / 500 - 3100	rpm
Spindle thread	1/2" x 20	UNF	1/2" x 20	UNF
Hammer acton	0-7800/0-19000	bpm	2800 - 7800 / 6800 - 19000	bpm
Drilling capacity for steel	13	mm	15	mm
Maximum capacity for wood	30	mm	32	mm
Maximum capacity for Masonry	20	mm	22	mm
Weight	2.6	kg	2.7	kg

1. Keyless chuck
2. Depth stop gauge
3. Chuck shaft nut
4. Depth gauge lock
5. Handle lock
6. Removable handle grip
7. 2 Speed gearbox control switch.
8. Hammer switch
9. Reverse lever
10. Variable ON/OFF trigger
11. Trigger lock
12. Speed selector (*model SDE850 only*)

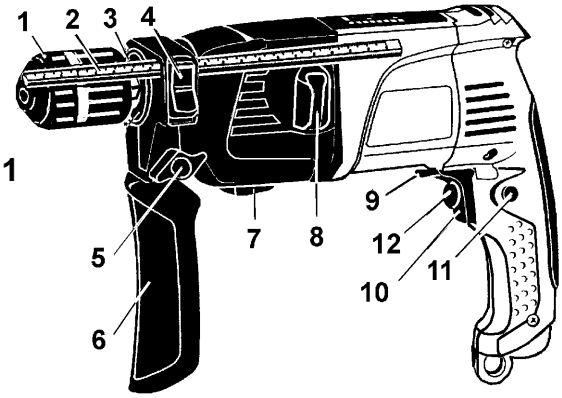


fig 1

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 6) by placing over chuck head and onto the machine neck. Secure with the handle lock (5). The handle may be placed at angles affording a more stable grip for various drilling tasks. The handle grip further allows the attachment of a depth gauge. To fit the gauge release lock (4) and slide the gauge (2) through the corresponding hole and re-lock (4).

3.2. DRILL SPEED

The required speed (Revolutions per minute or RPM). will depend on the material and task, and can be determined by testing. Following may be used as a guide.

3.2.1. Your drill has a variable speed control on/off trigger (fig 1 item 10) which increases the speed the more the trigger is depressed (SDE 850 only). The drill also incorporates a 2 speed mechanical gearbox (7) which adds versatility to the high and low speed settings.

a) Low speeds are recommended for hard materials i.e. stone, ceramic, glass, concrete, high tensile steel, and tasks such as starting holes without centre punch, driving screws, mixing paint etc. Note: the lower the speed the higher the torque.

b) Medium speeds are suitable for plastics and laminates.

c) High speeds recommended for soft materials such as wood, aluminium, copper, bronze and brass.

3.2.2. Lower speeds may be controlled by turning the 2 speed gear shift switch (7) to setting "2", and setting "1" for higher speeds.

▲ **CAUTION:** ***DO NOT run your drill at low to medium speeds for extended periods of time as this may cause drill to overheat. To cool drill run it without a load for approximately 3 minutes at full speed.***

3.3. TRIGGER LOCK.

3.3.1. Your drill has a button lock (fig 1. 11) which is convenient for continuous drilling. To lock on, depress the trigger (10) push in and hold the lock on button then release trigger. Release the lock on button and your drill will continue running accordingly.

3.3.2. To release the lock depress the trigger and release it.

3.3.3. 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 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.***

3.4. DEPTH STOP GAUGE.

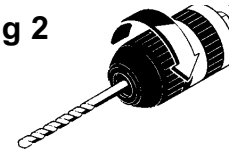
Ensure the work piece has a flat surface and is wide enough for the gauge to butt up against when the required depth has been reached. Measure back from tip of the drill bit to the point at which the drill must stop. Release lock (fig 1.4) and extend the depth gauge to the point at which you wish to stop drill penetrating further and lock (4). Once drill has reach correct depth the gauge will butt up against work piece and stop further inward progress.

3.5. 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 to be used. Also raise the front of the drill slightly to stop the bit from falling out of the chuck jaws. Insert the drill bit into the chuck as far as it will go and tighten the chuck securely by hand (fig 2).

fig 2



3.6. HAMMER DRILLING.

The hammer action accompanied with a masonry drill bit is used to assist penetration into concrete, stone and masonry. To use the drill's hammer function turn the hammer switch (fig 1.8) up toward the hammer symbol. To disengage the hammer function turn the hammer switch back to the drill bit symbol. ***Note:*** *You may shift the hammer button when the drill in running without damaging the machine.*

3.7. VARIABLE SPEED & TORQUE CONTROL SELECTOR.

3.7.1. MODEL SDE850 ONLY.

a. The speed and torque of your drill may be increased or decreased by rotating the variable control selector incorporated in the trigger (fig 1.12 & fig 3. A). Turn selector to the (-) symbol to decrease speed and torque and turn toward the (+) symbol to increase speed and torque.

b. You may pre-set the selector and lock the trigger to a given speed, to do so depress the trigger (fig 3. B) fully and lock trigger with locking button (fig 3. C). Release trigger and the speed will drop to the pre-set selection.

c. **Note:** If you place selector (fig 3. A) on the lowest (-) speed the drill may not operate on some tasks as the torque may be too low. In such a case, low speed performance may be achieved by use of the variable trigger (fig 3. B) only.

fig 3

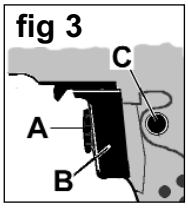
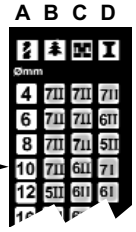


fig 4



d. To de-activate the variable control selector (fig 3. A) turn it fully to (+). The speed will now be control by the trigger (B) in conjunction with the gearbox (fig 1. 7).

e. The table on top of the drill will assist you to set correct gear and speed. Item: Fig 4. A = drill, B = wood ,C = brick, E = metal. Table reading: i.e. say you are going to use drill no 10 for wood = selector control set at 7 (*which is off*) and gear switch set on II. Now say you are using a drill 10 for drilling brick = selector control set on 6 and gear switch to II, and for metal set control to 7 and gear switch to I.

3.7.2. MODEL SDE1050 ONLY.

a. The SDE1050 has a torque adjustment (screw driver function) located on the top of the drill (fig 5). The switch has a minimum torque adjustment (fig 5. B) of a constant speed of 200rpm and is used to tighten or loosen screws. The large screw setting (C) has a maximum torque at a constant speed of 600rpm and is used to tighten or loosen screws requiring maximum torque. To switch from the B to C setting (or any other torque setting) ensure you stop the drill first .

fig 5

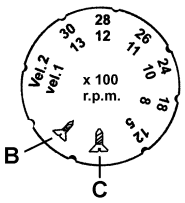
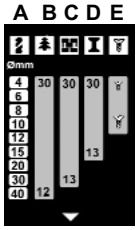


fig 6



b. You may pre-set selector and lock trigger to a given speed. To do so set variable control switch (fig 5) and depress trigger (fig 1.10) fully and lock the trigger with locking button (fig 1.11). Release trigger and the speed will drop to the pre-set selection.

c. De-activate the variable control selector to allow the speed to be control by the trigger (fig 1.10) in conjunction with gearbox (fig 1. 7).

d. The table on top of the drill (fig 6) will assist you to set correct gear and speed. Item A = drill, B = wood, C = brick, D = metal, E = screws.

3.8. STANDARD DRILLING INSTRUCTIONS.

❒ **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 locked in position which would result in accidental starting of the drill. Also ensure that all other safety requirements of chapter 1 are followed.**

Ensure drill is unplugged from the mains power supply.

3.8.1. 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.
3.8.2. 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.
3.8.3. For hard smooth surfaces use a centre punch to mark desired hole location. This will prevent bit from slipping as your start to drill.
3.8.4. 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 3.8.5 to 3.8.7. 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. Hold drill firmly and place the bit at the entrance of the pilot hole and depress the trigger.
3.8.5. Plug drill into mains power supply.
3.8.6. Hold tool firmly and place the bit tip to the point to be drilled.
3.8.7. 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 which will elongate the hole.

❒ ***WARNING! be prepared for drill binding or break through. When these situation occur the drill has a tendency to grab and kick in the opposite direction and could cause loss of control. If you are not prepared, this loss of control can result in possible damage and personal injury***

3.8.8. 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.
3.8.9. For continuous operation, depress the the trigger lock (see 3.3).
3.8.10. The depth gauge may be used to pre-determine the depth of hole (see 3.4).
3.8.11. After working for lengthy period of time at low speed setting run drill for approximately 3 minutes with no load at highest speed.
3.8.12. When job is complete unplug drill from the mains, remove the drill bit, sharpen if necessary and store accordingly.

3.9. 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, clan 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. Stop the chuck from moving by securing the the nut at the base of the chuck (fig1. 3) with a spanner.To replace the chuck reverse the above process.

4.2. Cleaning

Keep the drill ventilation slots clean and free from obstructions. If available blow compressed air into the vents to clear any internal dust (safety goggles must be warn 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. Brushes Brush must be changed by an authorised Sealey service agent.

Declaration of Conformity We, the sole importer into the UK, declare that the products listed here are in conformity with the following EEC standards and directives

Variable Speed Hammer Drill
Models SDE850.V4 & SDE1050.V2
73/23/EEC Low Voltage Directive (S.I. 1994/3260)
89/336/EEC EMC Directive (S.I. 1992/2372 & Amendments)

CE

The construction files for these products are held by the Manufacturer and may be inspected on request by contacting Jack Sealey Ltd

Signed by Mark Sweetman  21st March 2000

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

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 for and leave your full name and address including postcode.

SEALEY POWER TOOLS
Sole UK Distributor
Sealey Group,
Bury St. Edmunds, Suffolk.

☎ 01284 757500 | 01284 703534 | email sales@sealey.co.uk | Web www.sealey.co.uk