

# **INSTRUCTIONS FOR:**

# VARIABLE SPEED HAMMER DRILL

Model Nos: SDE600 & SDE700

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 OR PERSONAL INJURY, AND WILL INVALIDATE THE WARRANTY. RETAIN THESE INSTRUCTIONS FOR FUTURE USE.

# 1. SAFETY INSTRUCTIONS

# 1.1. ELECTRICAL SAFETY. p WARNING! It is the user's responsibility to read, understand and comply with 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 also 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 professional 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 a business premises, to be tested by a qualified Electrician at least once a year by using a Portable Appliance Tester (PAT).
- 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 doubt about electrical safety, contact a qualified electrician.*
- 1.1.3. Ensure the insulation on all cables and the product itself is safe before connecting to the mains power supply. See 1.1.1. & 1.1.2. above and use a Portable Appliance Tester (PAT).
- 1.1.4. Ensure that cables are always protected against short circuit and overload.
- 1.1.5. Regularly inspect power supply, leads, plugs and all electrical connections for wear and damage, especially power connections, to ensure that none are loose.
- 1.1.6. Important: Ensure the voltage marked on the product is the same as the electrical power supply to be used, and check that plugs are fitted with the correct capacity fuse. A 13Amp plug may require a fuse smaller than 13Amps for certain products (subject to 1.1.10. below) see fuse rating at right.
- 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 have repaired by a qualified Electrician. 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 (discard old plug safely).

(UK only - see diagram at right). Ensure the unit is correctly earthed via a three-pin plug.

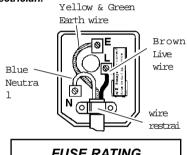
- a) Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.
- b) Connect the BROWN live wire to live terminal 'L'.
- c) Connect the BLUE neutral wire to the neutral terminal 'N'.

After wiring, check there are no bare wires, that all wires have been correctly connected and that the wire restraint is tight. Double insulated products are often fitted with live (BROWN) and neutral (BLUE) wires only. Double insulated products are always marked with this symbol . To re-wire, connect the brown & blue wires as indicated above. DO NOT connect the brown or blue to the earth terminal.

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 cable on the cable reel is important. We recommend that at least 1.5mm² section cable 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, we recommend the use of 2.5mm² section cable.

# 1.2 GENERAL SAFETY

- 3 Disconnect the drill from the mains power before changing accessories, servicing or performing any maintenance.
- 3 Maintain the drill in good condition. Check moving parts alignment, and keep drill bits sharp. If necessary use an authorised service agent.
- 3 Replace or repair damaged parts. Use recommended parts only. Non authorised parts may be dangerous and will invalidate the warranty.
- Keep the drill clean for best and safest performance.
- 3 Wear approved safety eye protection (standard spectacles are not adequate) 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 an adequate working area for its function, keep area clean and tidy and free from unrelated materials, and ensure there is adequate lighting.
- 3 Prevent body contact with grounded surfaces to avoid electric shock i.e. pipes, radiators, range, refrigerators etc.
- 3 Evaluate your working area before using the drill i.e. ceiling, floors and enclosures may contain hidden electrical items or water piping.
- 3 Maintain correct balance and footing. Ensure the floor is not slippery and wear non skid shoes.
- 3 The supplementary handle grip should always be attached for use, and the chuck key must be removed before starting the drill.
- 3 Keep children and unauthorised persons away from the working area.
- 3 Secure non stable work piece with a clamp, vice or other adequate holding device.
- 3 Avoid unintentional starting, and ensure the lock on button is disengaged before use.
- 7 DO NOT force the drill to achieve a task it was not designed to perform.
- 7 DO NOT operate drill where there are flammable liquids or gases.
- 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 whilst unattended.
- 7 DO NOT carry the drill with your finger on the power switch.
- 7 DO NOT operate the drill when you are tired, under the influence of alcohol, drugs or intoxicating medication.
- 7 DO NOT operate the drill if any parts are missing or the drill is damaged as this may cause failure or possible personal injury.
- When not in use switch drill off, remove plug from power supply and store in safe, dry, child proof area.



FUSE RATING
THIS PRODUCT MUST BE FITTED
WITH A:

**5 Amp FUSE** 

# 2. TECHNICAL SPECIFICATIONS

# fiq 1

### COMMON TO MODELS SDE600

Power supply Maximum capacity for steel . . . . . 13mm Maximum capacity for concrete .13mm Maximum capacity for wood ....30mm

Drill chuck capacity ......13mm Speed at no load ......0-2600rpm Maximum capacity for steel . . . . 13mm Maximum capacity for concrete .18mm Maximum capacity for wood . . . 30mm Ø head attachment socket .43 x 25mm Approx weight (with drill-holder) .2.05kg

**COMMON TO MODELS SDE700** 

**COMPONENT LIST** 

6.

8.

Chuck lock screw 2. Crown wheel drill chuck

Approx weight (with drill-holder) . .1.8kg

Ø head attachment socket . . . . . . 43 x 25mm

10. Trigger switch 11. 12. Two speed switch Model SDE600 only 3. Drill chuck spindle

Chuck key

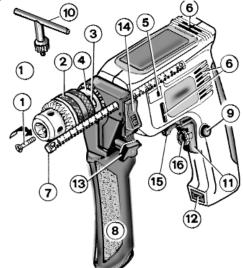
13. Grip locking screw 4. Handle grip sleeve 5.

Depth stop gauge release button 14. Hammer button

Cooling vents Model SDE700 only:

Depth stop gauge Forward/Reverse switch 15. Supplementary handle grip 16 Variable speed control

9 Lock on button



# **SDE600 & SDE700 COMMON INSTRUCTIONS**

#### PREPARING DRILL FOR USE. (identification numbers refer to fig 1). 3 1

- 3.1.1. Ensure the drill is switched off and unplugged from the mains power supply.
- Fit supplementary handle grip (8) by placing over chuck head and onto the drill grip sleeve (4). Secure with the retention screw (13). The grip is used to gain greater control over the drill when handling. The handle may be place at various angles to the back handle affording a more stable grip for various drilling tasks. The handle grip further allows the attachment of a depth gauge (7). To fit the gauge press the side release (14) and slide the gauge through the hole.

#### **DRILL SPEED General information.** 3.2.

The required speed (or rpm), will depend on the material and task, and can be determined by carrying out tests. The following may be used as a guide. Low speeds are recommended for hard materials such as stone, ceramic, glass, concrete and high tensile steel, High speeds recommended for soft materials such as wood, aluminium, copper, bronze, and brass.

#### Model SDE600 Speed setting. 3.2.1.

Identify the two speed switch at the base of the handle (12). Switch indicator number 1 is for low speed setting at 2250rpm and no 2 high speed at 2500rpm. Select the speed you will require.

Model SDE700 Speed setting see chapter 5.

### 3.3. **DEPTH STOP GAUGE**

Ensure the work piece 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 to the point where the drill must stop (fig 2). Press the depth gauge release button (fig 1 item 14) and push the gauge to this point and release the lock button. Once drilling has reached correct depth the gauge will butt up against the work piece thus stopping further inward progress.

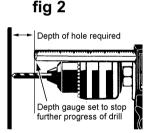


fig 3

#### 3.4. DRILL OR TOOL BIT FITTING.

# p 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 3 A) 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. Place the chuck key (10) in one of the chuck holes and tighten the chuck securely.

p WARNING! ensure you remove the chuck key before starting the drill.

### 3.5 TRIGGER LOCK.

- Your drill is equipped with a lock on button (fig 1 item 9) which is convenient when continuous drilling for an extended periods is 3.5.1. required. To lock on, depress the trigger, push in and hold the lock on button then release trigger. Release the lock on button and trigger and your drill will continue running accordingly.
- 3.5.2. To disengage the lock on button, depress the trigger and release it.
- IMPORTANT! If you should experience power failure, disengage the lock on feature immediately.

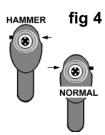
p WARNING! before connecting your drill to power supply, ensure it is not in the lock on position as this may result in damage and personal injury. Depress the trigger to ensure release.

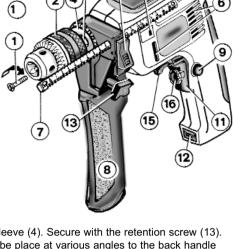
DO NOT use the lock on facility for jobs where your drill may need to be stopped suddenly.

#### 3.6. 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 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 in running without damaging the machine.





# 4. SDE600 & SDE700 COMMON DRILLING INSTRUCTIONS

### STANDARD DRILLING INSTRUCTIONS.

- p 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 lock on and hammer functions are disengaged. Also ensure that all other safety requirements are followed.
- 4.1. Ensure drill is unplugged from the mains power supply.
- 4.2. 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.
- 4.3. 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.
- 4.4. For hard smooth surfaces use a centre punch to mark desired hole location. This will prevent bit from slipping as your start to drill.
- 4.5. Plug drill into mains power supply.
- 4.6. Hold tool firmly and place the bit tip to the point to be drilled.
- 4.7. 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.
- p 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 and could cause loss of control. If you are not prepared this can result in possible damage and personal injury.
- 4.8. 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, and drill a pilot hole. Insert the final sized bit.

  Hold drill firmly and place the bit at the entrance of the pilot hole and depress the trigger.
- 4.9. 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.
- 4.10. For continuous operation, press the switch lock on button in see 3.5.
- 4.11. The depth gauge may be used to pre-determine the depth of hole see 3.3.
- 4.12. After working for lengthy period of time at low speed, run drill for approximately 3 minutes with no load at the highest speed.
- 4.13. When job is complete see 3.10.
- 4.8. HAMMER DRILLING see 3.6.
- 4.9. WORK COMPLETE
  - p 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.

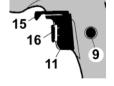
# 5. SDE700 ONLY ADDITIONAL OPERATING INSTRUCTIONS

# SEE CHAPTER 3 & 4 FOR GENERAL INSTRUCTIONS. THE FOLLOWING BEING ADDITIONS FOR MODEL SDE700 ONLY.

- 5.1. DRILL SPEED additional information. See part 3.2. for general speed information.
- 5.1.1. For the SDE700 Low speeds are also used for driving screws, starting holes without a centre punch, mixing paint etc.

fiq 5

- 5.1.2. Medium speeds are suitable for plastics and laminates.
- 5.1.3. Your drill has a variable speed control on/off trigger (fig 5 item 11) which increases the speed the more the trigger is depressed.
- 5.1.4. In addition the trigger has a variable speed control selector Incorporated (fig 5 item 16) 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.



- 5.1.5. If you wish to pre-set and lock the trigger at a given speed, set selector (16) to the required speed, depress the trigger (11) fully and press the trigger locking button (9). Release trigger and speed will drop to that pre-set. Note: if 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 set very low. To achieve such a low speed performance you may have to use the variable trigger (11) only. Practicing variable speed adjustments. If you do not wish to use variable speed control selector (16) turn the selector to full (+) speed, and control drill speeds by the trigger (11) only.
  - s 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.

# 5.2. FORWARD & REVERSE SWITCHING.

The chuck rotation direction is controlled by the direction lever (fig 5 item 15). With drill held in normal operating 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 turn the lever to the left REV (reverse) position. The reverse direction is used for unscrewing, for insertion of left hand threaded screws.

p WARNING! do not change direction whilst the drill is running. Release trigger and allow drill to stop before changing direction.

# 5.3. AS A SCREW DRIVER.

- 5.3.1. To drive in a screw.
  - a) Lock appropriate tool bit in the chuck and set a slow speed. Check that the drill direction is 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.
  - d) Secure non stable work pieces with a clamp, vice or other adequate holding device. DO NOT hold loose work pieces in your hand.
- 5.3.2. To remove screws place the chuck in reverse (see 5.2).

# 6. MAINTENANCE

# 6.1. Changing the drill chuck.

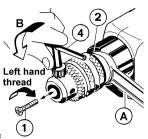
To remove the drill chuck open the chuck fully. Grip spindle (fig 6 item 2) with a fixed spanner (A). Locate the screw inside the chuck head. Keep the chuck from turning by holding the spanner and undo the screw in a CLOCKWISE direction (the screw has a left handed thread fig 6 item 1), remove the screw and keep in a safe place. Continue to grip spindle with spanner and place the chuck key (4) in the chuck. Hold the chuck key and turn the chuck in the direction of arrow (B) whilst gripping the spanner. To replace the chuck reverse the above process.

# 6.2. Cleaning

Keep drill ventilation slots clean and free from obstructions (fig1 item 6). If available blow compressed air into the vents to clear any internal dust (safety goggles must be warn when undertaking this process). Keep outer case of the drill clean and free from grease. DO NOT wash with water, solvents or use abrasive

6.3. 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 products listed below are in conformity with the following EEC standards and directives.

# Variable Speed Hammer Drills Models SDE600 & SDE700

73/23/EECLow Voltage Directive (S.I. 1994/3260) 89/336/EEC EMC Directive (S.I. 1992/2372 & Amendments)



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



1st 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 this product. **WARRANTY:** Guarantee is 12 months from purchase date, proof of which will be required for any claim. **INFORMATION:** Call 01284 757525 for our catalogue & promotions. Leave your full name, address & postcode.

POWER TOOLS

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