



175 WATT ELECTRIC SOLDERING GUN KIT

INSTRUCTION MANUAL AND SAFETY GUIDE

Stock Code: S1738



D.K. TOOLS LTD

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Important: please read the instructions and safety guides carefully before using this tool. Failure to do so could lead to serious personal injury. When using power tools basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury. Keep and store this manual in a safe place for further reference. Always wear the correct safety wear when using power tools. Always keep away from children and store the tool in a safe, secure place.

Am-Tech 175W ELECTRIC SOLDERING GUN KIT

TECHNICAL INFORMATION:

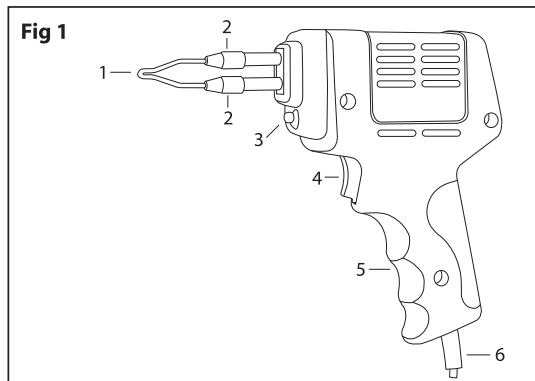
Power:	175 Watt	Intermittent service:	12s/48s
Voltage/frequency:	220-240V/50Hz	Insulation:	Class II

APPLICATION:

Soldering gun is suitable for soldering on printed circuit boards, cutting/sealing of plastic and for burning work on wood and leather. All other applications are specifically excluded. It is not designed for commercial use.

DESCRIPTION (Fig 1):

1. Tip
2. Fixing nut
3. LED work light
4. Switch
5. Handle
6. Power supply lead



CONTENTS:

1pc 175W electric soldering gun, 1pc flux, 2pc soldering tips, 1pc solder tube.

PACKAGE:

Remove all packing materials. Remove remaining packaging and transit supports (if existing). Check the completeness of the packing content. Check the appliance, the power cord, the power plug and all the accessories for transportation damages. Keep the packaging materials as far as possible until the end of the warranty period. Dispose it into your local authority waste disposal centre afterwards.

WARNING:

Packing materials are not toys! Children must not play with plastic bags! Danger of suffocation.

SPECIFIC SAFETY WARNINGS:

Safe handling of the machine is only possible when you read the safety and operating instructions thoroughly and rigorously follow the instructions which are included.

- For all work on the soldering gun, pull the plug out of the socket.
- The power supply lead and the plug must be in perfect condition. Always keep the power supply lead away from the area of work.
- Do not drill into housing of the machine, as otherwise the double insulation will be broken (use adhesive shields).
- The voltage of the electric power source must tally with the instructions on the rating plate of the soldering gun.
- Always fasten the fixing nut tightly when attaching the tip. This ensures a good electric connection.
- Ventilate the place of work sufficiently in order to take unwanted vapors quickly away from soldering fumes and melted material.

- The mains power supply lead for the soldering gun may only be replaced by a specialist electrician.
- Use only original accessories which are supplied or recommended by the manufacturer.
- This appliance
- Children must not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.

OPERATION:

Connection:

This soldering gun may only be connected to single phase alternating current. The voltage of the electric power supply on the network must correspond with the instructions on the rating plate of the machine. Connection to a socket without an earthed contact is also possible since the double insulation complies with the standard requirements according to EN60335-1:2010.

Switching on:

Caution: Use this appliance only for work which is included in the established operative range.

- Switch on: press switch 4 and keep depressed for maximum of 12 seconds. Status indicator 3 lights up when the appliance is switched on.
- Switch off: release switch 4.
- The duration of the current supply determines the heat of the solder (longer current supply = higher solder temperature). While soldering, do not keep the switch pressed for too long. Determine the necessary duration from current supply in practice through control of the temperature of the solder. In order to achieve a constant temperature, avoid constant current for more than 12 seconds and cut off current of over 48 seconds. As soon as you release the switch, the temperature of the solder is automatically reduced. A subsequent depressing of the switch ensures a fast increase in temperature. Constant solder temperature guarantees optimum solder quality. Avoid running the soldering tip at temperatures which are too high and extends the service life of the appliance.

Below, we give you some examples of poorly soldered joints:

- If the soldered joint is tear-shaped, the soldering coagulate was too cold.
- If the solder joint is dull and slightly porous or crystalline, the parts were probably moved during the cooling process.
- If too little solder has been left in the joint, the soldering was too warm or the soldering tin was not melted sufficiently.
- If the soldered joint is Yellow or Black, this means that too much soldering paste has been used or that the inner core of the tin solder wire has become overheated during soldering.
- You must avoid this above all in electronic circuits since most acid pastes are corrosive and reduce the service life of electronic wiring.

Replacement of the soldering tip

Pull out the mains plug!

- The tip and housing of the soldering gun are connected by means of knurled fixing nuts so that the soldering tips can be easily repaired and changed. Wear and tear of the tip after long periods will occur if used for regular work.

To replace the soldering tip:

- Unscrew the two fixing nuts, which hold the tip and the housing together and remove the old tips.
- Put in the new tip and tighten up the two knurled nuts again. The appliance is now ready for work again.

Working indications:

For good soldering

- The soldering joint must be homogeneous and smooth. Remove oxidation, grease and so forth by means of mechanical (abrasive paper, brushed, and file) or chemical cleaners (alcohol, fluxing agent).
- Cleanliness is essential - solder will not adhere to oil, grease or oxidised surfaces. Clean with wire wool, wire brush, emery cloth or suitable solvent contact cleaner.

- The soldering irons tips must be tinned with solder to give a good plating of soldering tin.
- Remove corrosion and flux scaling with a wet sponge.
- Never clean the soldering tips up with a file.
- Pre-tinning of the parts which are to be soldered makes the soldering easier and ensures a perfect electrical contact
- Ensure that the wires are mechanically connected before soldering (twist together, hook into place, attach round eyelets).
- First heat up the soldering joint and then melt the solder over the soldering joint and allow it to flow in.
- Melt as little solder as possible.
- Keep the heat load (soldering time) as short as possible.
- A perfect soldering joint is shiny and smooth. The edge shows a clean, bonding joint to the metal.

Soldering using tin-lead solder:

Soldering tin is essentially an alloy of tin and lead. The designation of 60/40 means a combination of 60% tin with 40% lead. For electrically soldered joints, use only non-acid solder and fluxing agent. For more information on special solder for specific work consult the manufacturer.

Flux:

The melting of the solder is improved with the use of flux while, at the same time, impurities such as grease or metal oxide are removed and evaporate during soldering.

- Organic fluxing agents like colophon and resins for acid free soldering.
- Inorganic fluxing agents, which are highly effective these are effective but corrosive. Use only for larger joints and clean the soldering joint thoroughly afterwards.

Printed circuits:

The strip conductors and the miniature component parts are very temperature sensitive and can therefore be easily damaged. Pay attention to the following:

- Prepare the solder work well.
- Pre-assemble the component parts.
- Secure the printed circuit board or soldering joint against movement.
- Use only first class solder with anticorrosive flux.
- Do not apply any surplus solder.
- Keep the soldering time (heat load) as short as possible.

Handling of plastic:

As it is used for many household items, flooring materials and toys, plastic can be worked on with the soldering gun. The shape of the cutting point is specially designed for this.

- Warm up the cutting point carefully and check until the material becomes pasty.
- Temperatures which are too high will harden or burn the material. Plastic may therefore separate or a point of rupture joining together again.

Burning work on wood or leather:

If you enjoy burning work then the cutting point offers you a special accessory specially prepared for engraving. The rapid adaptation of the working temperature to the material allows for work without interruptions.

CARE AND MAINTENANCE:

- Always keep the ventilation ducts and the housing of the appliance clean.
- Clean the appliance housing only with a damp cloth. Do not use any solvents. Afterwards dry properly.
- Use only original accessories and replacement parts (if available).
- When not in use store the appliance and accessories in the storage case.

GENERAL SAFETY RULES:

Soldering can be dangerous if safe and proper operating procedures are not followed. As with all tools, there are certain hazards involved with the operation of this product. Using the tool with respect and caution will considerably reduce the possibility of personal injury. Please note that if normal safety

precautions are overlooked or ignored personal injury to the operator may result. Safety equipment may reduce your potential for injury, but even this will not make up for poor judgement, carelessness or inattention. Always exercise caution in the workshop. Remember: your personal safety is your responsibility.

- Keep work area clean. Cluttered areas and benches invite injuries.
- Guard against electric shock.
- Keep children away from the work area.
- Use the right tool for the job.
- Don't abuse the power cord. Never carry the tool by the power cord.
- Dress properly and wear the correct safety wear. Safety gloves and safety glasses are essential.
- Stay alert and use common sense. Pay attention to your work.
- Do not leave the work area unattended.
- Always unplug the soldering gun after use.
- Before each use, check for damaged parts.
- If unsure of operation seek advice from an expert.
- Never operate the tool when tired or under the influence of alcohol.

This tool was designed for soldering applications only. We strongly recommend that it is neither modified nor used for any applications other than those for which it was designed.


Warning: failure to follow these rules may result in serious personal injury.

WARNING/CAUTION:

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

DISPOSAL:

As with power and air tools, electric powered tools should not be disposed of with household waste and so must be recycled accordingly. Contact your local waste disposal authority for information on the correct way to dispose of electric powered tools.

	<p>ENVIRONMENTAL PROTECTION Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.</p>
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<p>IMPORTANT: No liability is accepted for the incorrect use of the product. Whilst every effort has been made to ensure accuracy of information contained in this manual the DK Tools Ltd policy of continuous improvement determines the right to make modifications without prior warning.</p>
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