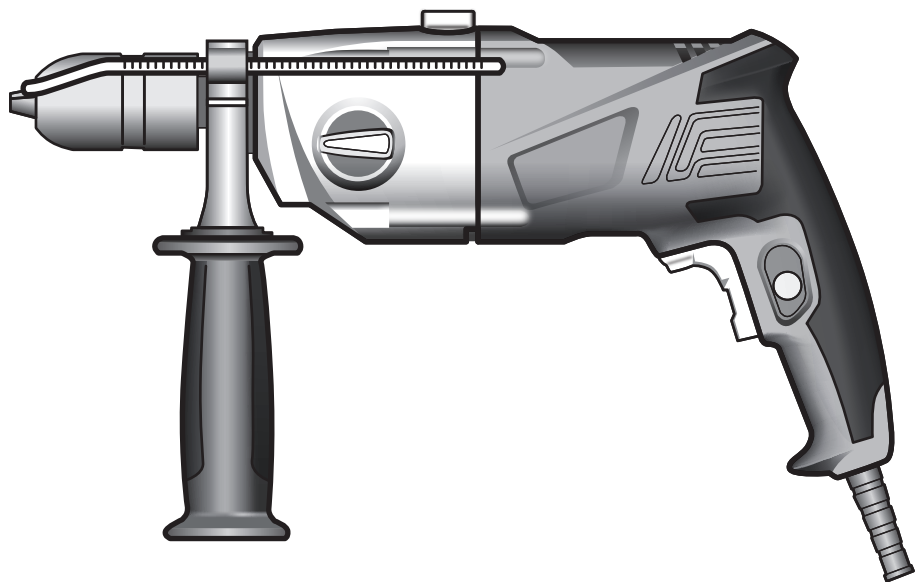


TITAN®



24 month
Manufacturer's
Warranty

SAFETY AND OPERATING MANUAL

Original instructions

IMPACT DRILL 850W

TTB276DRL

TITAN®

Congratulations on your purchase of a TITAN power tool from Titan Power Tools (UK) Ltd. We want you to continue getting the best performance from it so this handbook includes information on safety, handling and care. Please retain this handbook in case you need to refer to any of the information in the future.

Your TITAN power tool comes with a 24-month guarantee, so should it develop a fault within this period contact your retailer.

GUARANTEE

This **TITAN** product carries a guarantee of 24 months. If your product develops a fault within this period, you should, in the first instance contact the retailer where the item was purchased.

This guarantee specifically excludes losses caused due to:

- Fair wear and tear
- Misuse or abuse
- Lack of routine maintenance
- Failure of consumable items (such as batteries)
- Accidental damage
- Cosmetic damage
- Failure to follow manufacturer's guidelines
- Loss of use of the goods

This guarantee does not affect your statutory rights. This guarantee is only valid in the UK.

For any enquiries relating to the guarantee please refer to your retailer.

GENERAL SAFETY INSTRUCTIONS



WARNING! Read all safety warnings designated by the symbol  and all instructions.



WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. **Save all warnings and instructions for future reference.**

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1. Work area safety

a. Keep work area clean and well lit. Cluttered or dark areas invite accidents.

b. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.

c. Keep children and bystanders away while operating a power tool.

Distractions can cause you to lose control.

2. Electrical safety

a. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.

Unmodified plugs and matching outlets will reduce risk of electric shock.

b. Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.

c. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

d. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

e. When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

f. If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

3. Personal safety

a. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

b. Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

c. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.

d. Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

e. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

f. Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

g. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

4. Power tool use and care

a. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.

b. Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

c. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

d. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

e. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

f. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g. Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

5. Service

a. Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

ADDITIONAL SAFETY INSTRUCTIONS FOR YOUR IMPACT DRILL

1. Wear ear protectors when impact drilling. Exposure to noise can cause hearing loss.

2. Use auxiliary handle(s), if supplied with the tool. Loss of control can cause personal injury.

3. Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.



WARNING! Some dust particles created by power sanding, sawing, grinding, drilling and other construction jobs contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks and cement and other masonry products.
- Arsenic and chromium from chemically treated timber.

Your risk from these exposures varies, depending upon how often you do this type of work. To reduce your exposure to these chemicals:

- Work in a well ventilated area.
- Work with approved safety equipment, such as those dust masks that specially designed to filter out microscopic particles and use dust extraction facility at all times.

VIBRATION

The European Physical Agents (Vibration) Directive has been brought in to help reduce hand arm vibration syndrome injuries to power tool users. The directive requires power tool manufacturers and suppliers to provide indicative vibration test results to enable users to make informed decisions as to the period of time a power tool can be used safely on a daily basis and the choice of tool.

Further Advice can be found at www.hse.gov.uk

Work mode description	Vibration total values (triax vector sum) determined according to EN60745:
Impact drilling into concrete $a_{h,D} =$	13.079m/s ² K=1.5m/s ²
Drilling into metal $a_{h,D} =$	5.425m/s ² K=1.5m/s ²

The declared vibration emission value should be used as a minimum level and should be used with the current guidance on vibration.

Calculating the actual period of the actual period off use can be difficult and the HSE website has further information.

The declared vibration emission has been measured in accordance with a standardized test stated above and may be used to compare one tool with another.

The declared vibration emission value may also be used in a preliminary assessment of exposure.

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Warning: The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used dependant on the following examples and other variations on how the tool is used:

How the tool is used and the materials being drilled.

The tool being in good condition and well maintained

The use the correct accessory for the tool and ensuring it is sharp and in good condition.

The tightness of the grip on the handles.

And the tool is being used as intended by its design and these instructions.

This tool may cause hand-arm vibration syndrome if its use is not adequately managed



Warning: identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time). Note The use of other tools will reduce the users' total working period on this tool.

Helping to minimise your vibration exposure risk.

ALWAYS use sharp drill bits.

Maintain this tool in accordance with these instructions and keep well lubricated (where appropriate)

Avoid using tools in temperatures of 10°C or less

Plan your work schedule to spread any high vibration tool use across a number of days.

Health Surveillance

All employees should be part of an employer's health surveillance scheme to help identify any vibration related diseases at an early stage, prevent disease progression and help employees stay in work.

Double insulation: 

The tool is double insulated. This means that all the external metal parts are electrically insulated from the mains power supply. This is done by placing insulation barriers between the electrical and mechanical components making it unnecessary for the tool to be earthed.

Important note:

Be sure the supply is the same as the voltage given on the rating plate. The tool is fitted with a two-core cable and plug.

Remove the mains plug from socket before carrying out any adjustment or servicing.

SYMBOLS



To reduce the risk of injury, user must read instruction manual



Warning



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.



Wear ear protection



Wear eye protection



Wear dust mask



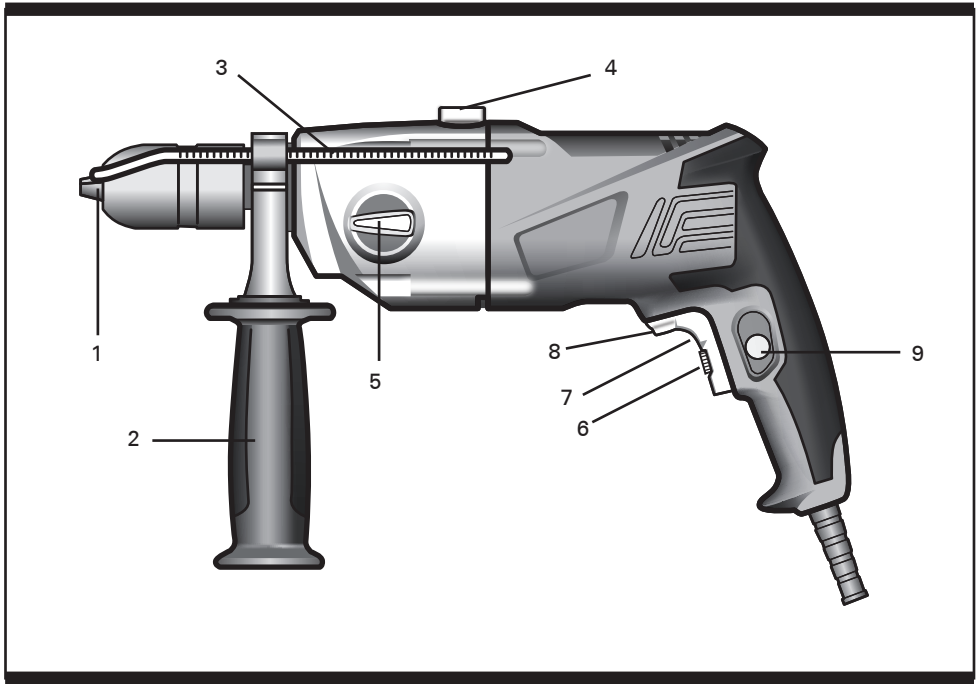
Double insulation



Conformity to CE directive

IMPACT DRILL 850W

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1 Keyless chuck 13mm

2 Auxiliary handle

3 Depth gauge

4 Drill/Impact Drill selector

5 Two speed selector

6 Variable speed control

7 Trigger

8 Forward/Reverse selector

9 Lock-on button

TECHNICAL DATA

Voltage:	230-240V~ 50Hz
Input power:	850W
No load speed:	
Speed 1:	0-1100/min
Speed 2:	0-3000/min
Impact rate:	
Speed 1:	0-16500BPM
Speed 2:	0-45000BPM
Maximum capacity of the chuck:	∅ 13mm
Drilling Capacity:	
Wood:	∅ 30mm
Steel:	∅ 13mm
Masonry:	∅ 16mm
Protection class:	II
Machine weight:	3.3kg

NOISE DATA

A weighted sound pressure	93.3dB(A) / KpA: 3dB(A)
A weighted sound power	104.3dB(A) / KwA: 3dB(A)
Wear ear protection when sound pressure is over	80dB

ACCESSORIES

Auxiliary handle	1pc
Depth gauge	1pc

IMPACT DRILL 850W

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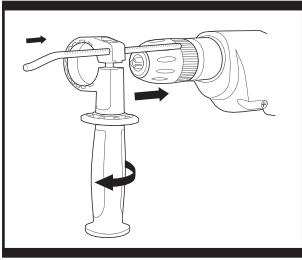


Fig. 1

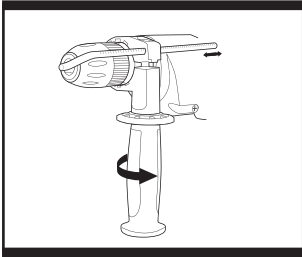


Fig. 2

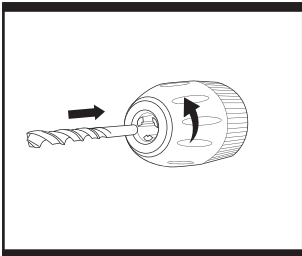


Fig. 3

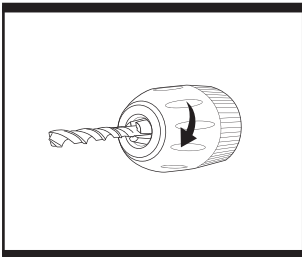


Fig. 4

OPERATIONS INSTRUCTIONS



Note: Before using the tool, read the instruction book carefully.

INTENDED USE

This impact drill shall be used for drilling metal or wood or similar materials and for impact drilling of concrete or similar materials.

Other uses for the tool will lead to the damage of the tool and a series of dangers to the operator. This tool is intended for DIY home use, or occasional professional use.

1. INSTALLING THE AUXILIARY HANDLE & DEPTH GAUGE

Loosen the handgrip anti-clockwise then insert the depth gauge through hole in handle to required depth. Slide the handle on the head of the drill (Fig. 1).

Rotate the handgrip clockwise to clamp the handle and tighten fully (Fig. 2). The depth gauge can be used to set a constant depth to drill.

Note: Use the auxiliary handle where possible to gain extra control and to prevent fatigue. Hold the tool firmly to control the twisting of the tool.

2. INSERT DRILL BITS

Turn by hand the chuck of the drill in a counter clockwise direction to open it (Fig. 3). Then insert the drill bit inside and turn the chuck in a clockwise direction and grip the rear chuck sleeve at the same time. The chuck is also integrated with a locking device to prevent bit loosening in use (Fig. 4).

3. SPEED ADJUSTMENT

Two speed selector (Fig. 5)

Choose position 1 for high torque/low speed range for large diameter drill bits.

Choose position 2 for low torque/ high speed range for small diameter drill bits.

Note: Never change the gears when the tool is rotating, wait until it has stopped.

Variable speed switch (Fig. 6)

This tool has a variable speed switch (a) that delivers higher speed and torque with increased trigger pressure. Speed is controlled by the amount of switch trigger depression.

The variable speed feature is particularly useful when starting drilling. It also enables you to select the best speed for a particular application.

To limit the maximum speed of the tool, rotate the dial (b) on the front of the trigger until the desired setting is achieved.

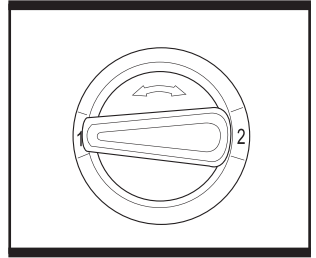


Fig. 5

4. SWITCHING ON AND OFF (Fig. 6)

Start the tool by squeezing the variable speed trigger switch (a). Release the trigger to stop the tool. If you press the lock on button (d) while the trigger switch is depressed, the switch is kept in the operating position. This is convenient when continuous operating for extended periods of time is required.

To release the lock on button (d), press and release the trigger switch (a).

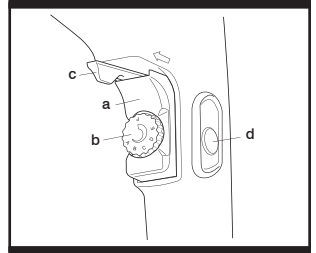


Fig. 6

5. FORWARD AND REVERSE ROTATION CONTROL (Fig. 7)

The forward/reverse control (c) determines the direction of rotation of the tool.

To select forward rotation for normal drilling operation, push the forward/reverse control (c) as indicated (Fig. 7). Use reverse rotation to release a jammed drill bit only.

Note: When changing the position of forward/reverse control (c) be sure the trigger is released and the motor is stationary.

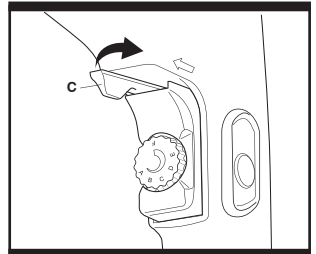


Fig. 7

6. DRILLING & IMPACT DRILLING

If you want to activate the drill function (For drilling metal, wood or plastic), put the switch on the drill position (Fig. 8).

If you want to activate the impact function (For masonry or concrete), put the switch on the hammer position.

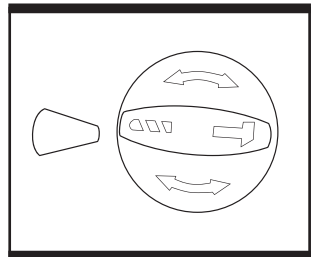


Fig. 8

WORKING HINTS FOR YOUR DRILL

1. Drilling masonry and concrete

Select the drill/impact action selector switch to the “hammer symbol” position. Tungsten carbide drill bits should always be used for drilling masonry, concrete etc with a high speed.

2. Drilling steel

Select the drill/impact action selector switch to the “drill symbol” position. HSS drill bits should always be used for drilling steel with a lower speed.

3. Pilot holes

When drilling a large hole in tough material (i.e. steel), we recommend drilling a small pilot hole first before using a large drill bit.

4. Drilling tiles

Select the drill/impact action selector switch to the “drill symbol” position to drill the tile. When tile has been penetrated, switch over to “hammer symbol” position.

5. Cool the motor

If your power tool becomes too hot, set the speed to maximum and run no load for 2-3 minutes to cool the motor.

MAINTENANCE

Remove the plug from the socket before carrying out any adjustment, servicing or maintenance.

Your power tool requires no additional lubrication or maintenance. There are no user serviceable parts in your power tool. Never use water or chemical cleaners to clean your power tool. Wipe clean with a dry cloth. Always store your power tool in a dry place. Keep the motor ventilation slots clean. Keep all working controls free of dust. Occasionally you may see sparks through the ventilation slots. This is normal.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

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. For further information visit www.recyclemore.co.uk

UK PLUG REPLACEMENT

The fuse in the main plug of your power tool should always be replaced with one of identical rating.

Check the voltage given on your power tool matches the supply voltage.

The power tool is supplied with a fitted plug, however if you should need to fit a new plug follows the instruction below.

IMPORTANT

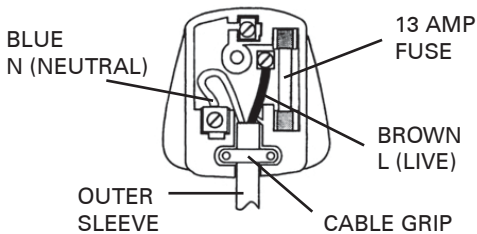
The wire in the mains lead are coloured in accordance with the following code:

Blue ---Neutral

Brown ---Live

The wire that is coloured **blue** must be connected to the terminal that is marked with the letter **N**. The wire that is coloured **brown** must be connected to the terminal that is marked with the letter **L**.

A 13AMP (BS1363 or BS1363/A) plug must be used and a 13 AMP fuse must be fitted.



TITAN®

Declaration of Conformity

We, Importer
Titan Power Tools (UK) Ltd
Trade house, Mead Avenue, BA22 8RT

Declare that the product:

Designation: IMPACT DRILL 850W
Model: TTB276DRL

Complies with the following Directives:

2004/108/EC Electromagnetic Compatibility Directive,
2006/42/EC Machinery Directive
2006/95/EC Low Voltage Directive,

2002/95/EC Restrictions of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment
2002/96/EC and **2003/108/EC** Waste Electrical and Electronic Equipment (WEEE),

Standards and technical specifications referred to:

EN 60745-1: 2009
EN 60745-2-1: 2003+A11: 2007+A12: 2009+A1: 2009
EN 55014-1: 2006+A1: 2009
EN 55014-2:1997+A1: 2001+A2: 2008
EN 61000-3-2: 2006
EN 61000-3-3: 2008

Authorised Signatory and technical file holder

Date: 07/07/2010

Signature: _____

Name / title: Peter Harries / Quality Manager

Titan Power Tools (UK)Ltd. Trade House , Mead Avenue ,BA22 8RT

