

**Installation Instructions for
24 Volt 1/2 in. Drive Cordless Impact Wrench
555-81747**



SPECIFICATIONS

Model	81747
No load speed	2000/min. ¹
Impact	2600/min. ¹
Max.tightewing torque	550N.m(410ft lbs)
Overall length	300mm
Net weight	3kg

Voltage	Input	Output	Charging time
120 V	A.C.only 60Hz	D. C. 24V	1H

- Manufacturer reserves the right to change specifications without notice.
- Specifications may differ from country to country.

GENERAL SAFETY RULES

(FOR ALL BATTERY OPERATED TOOLS)

⚠ WARNING:

Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, serious personal injury.

SAVE THESE INSTRUCTIONS

Work Area

1. Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.
2. 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.
3. Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

Electrical Safety

4. A battery operated tool with integral batteries or a separate battery pack must be recharged only with the specified charger for the battery. A charger that may be suit able for one type of battery may create a risk of fire when used with another battery.
5. Use battery operated tools only with specifically designated battery pack. Use of any other batteries may create a risk of fire.

Personal Safety

6. Stay alert, watch what you are doing, and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
7. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
8. Avoid accidental starting. Be sure switch is in the locked or off position before inserting battery pack. Carrying tools with your finger on the switch or inserting the battery pack into a tool with the switch on invites accidents.
9. Remove adjusting keys or wrenches before turning the tool on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
10. Do not over reach. Keep proper footing and balance at all times. Proper footing and balance enable better control of the tool in unexpected situations.
11. Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

Tool Use and Care

12. Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
13. Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
14. Do not use tool if switch does not turn it on or off. A tool that cannot be controlled with the switch is dangerous and must be repaired.
15. Disconnect battery pack from tool or place the switch in the locked or off position before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
16. Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
17. When battery pack is not in use, keep it away from other metal objects like: paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause sparks, burns, or a fire.
18. Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools with sharp cutting edge are less likely to bind and are easier to control.

19. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
20. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool *may* create a risk of injury when used on another tool.

SERVICE

21. Tool service must be performed only by qualified **repair** personnel. Service or maintenance performed by unqualified personnel may result in a risk of injury.
22. When servicing a tool, use only identical replacement parts. Follow Instructions In the maintenance section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of shock or injury.

SPECIFIC SAFETY RULES

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to cordless impact wrench safety rules. If you use this tool unsafely or incorrectly you can suffer serious personal injury.

1. Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring. Contact with a "live" wire will also make exposed metal parts of the tool "live" and shock the operator.
2. Be aware that this tool is always in an operating condition, because it does not have to be plugged into an electrical outlet.
3. Wear ear protectors.
4. Check the socket carefully for wear, cracks or damage before Installation.
5. Hold the tool firmly.
6. Always be sure you have a firm footing.
7. Be sure no one is below when using the tool in high locations.
8. The proper fastening torque may differ depending upon the kind or size of the bolt. Check the torque with a torque wrench.

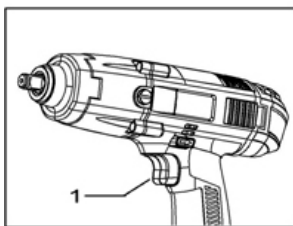
IMPORTANT SAFETY INSTRUCTIONS FOR CHARGER & BATTERY CARTRIDGE

1. **SAVE THESE INSTRUCTIONS** - This manual contains important safety and operating Instructions for battery charger.
2. Before using battery charger, read all instructions and cautionary markings on
(1) Battery charger, (2) Battery, and (3) Product using battery
3. **CAUTION** - To reduce risk of injury, charge rechargeable batteries marked on the charger label. Other types of batteries may burst causing personal injury and damage.
4. Do not expose charger to rain or snow.
5. Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.
6. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
7. Make sure cord is located so that it will not be stepped on, tripped over or otherwise subjected to damage or stress.
8. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure:
 - a. That pins on plug of extension cord are the same number, size, and shape as those of plug on charger;
 - b. That extension cord is properly wired and in good electrical condition;

- c. That wire size is at least as large as the one specified in the table below.
- 9. Do not operate charger with damaged cord or plug - replace them immediately.
- 10. Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified serviceman.
- 11. Do not disassemble charger or battery cartridge; take it to a qualified serviceman when service or repair is required, incorrect reassembly may result in a risk of electric shock or fire.
- 12. To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.
- 13. The battery charger is not intended for use by young children or infirm persons without supervision.
- 14. Young children should be supervised to ensure that they do not play with the battery charger.
- 15. If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.
- 16. If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight.

ADDITIONAL SAFETY RULES FOR CHARGER & BATTERY CARTRIDGE

- 1. Do not charge Battery Cartridge when temperature is BELOW 10°C {50 °F} or ABOVE 40°C {104°F}.
- 2. Do not attempt to use a step-up transformer, an engine generator or DC power receptacle.
- 3. Do not allow anything to cover or clog the charger vents.
- 4. Always cover the battery terminals with the battery cover when the battery cartridge is not used.
- 5. Do not short the battery cartridge:
- 6. Do not incinerate the Battery Cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
- 7. Do not touch the terminals with any conductive material.
- 8. Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
- 9. Do not expose battery cartridge to water or rain.
- 10. A battery short can cause a large current flow, overheating, possible burns and even a breakdown.
- 11. Do not store the tool and Battery Cartridge in locations where the temperature may reach or exceed 50 degree C {122°F}.
- 12. Be careful not to drop, shake or strike battery.
- 13. Do not charge inside a box or container of any kind. The battery must be placed in a well ventilated area during charging.



Switch action

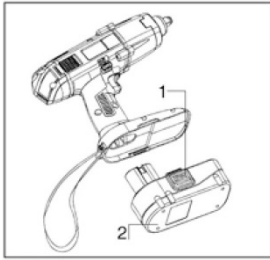
- 1. Switch Trigger

CAUTION:

Before inserting the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

To start the tool, simply pull the switch trigger. Tool speed is increased by increasing pressure on the switch trigger. Release the switch trigger to stop.

FUNCTIONAL DESCRIPTION



1. Button 2. Battery cartridge

CAUTION:

Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

Installing or removing battery cartridge

1. Always switch off the tool before insertion or removal of the battery cartridge.
2. To remove the battery cartridge, withdraw it from the tool while pressing the buttons on both sides of the cartridge.
3. To insert the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Always insert it all the way until it locks in place with a little click. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.
4. Do not use force when inserting the battery cartridge. If the cartridge does not slide in easily, it is not being inserted correctly.

Charging

INDICATIONS



Green Power On

Green
Red Charging

Green Fully
Red Charged

1. Remove the battery pack from the wrench, by depressing the two side release clips. **WARNING! DO NOT** touch metal terminals.
2. Place wrench in carry case and remove the battery charger.
3. Connect the charger to the mains electricity supply. The green LED will light.
4. The battery pack and charger have the positive (+) and negative (-) terminals marked. Align the correct terminals and insert the battery into slot.
5. **NOTE:** The battery pack is designed so that it will only enter the charger unit the correct way. When placed in the charger, a very slight downward pressure will seat the pack firmly into the power terminals.
6. When inserted correctly, the red charge light will flash whilst the battery is charging.

7. When the charge is complete the red LED will show a steady aspect along with the green LED. The battery pack is now ready for use.
8. NOTE: When new, the battery pack will have been shipped in a low charge state. It will take longer to charge initially, and several subsequent charges may also take a little longer than when the battery pack reaches its optimum performance. Afterwards, normal charging time is approximately 80 minutes.
9. After removing the battery, disconnect the charger from the mains supply and store in the carry case.

NOTE:

1. The battery charger is for charging battery cartridge. Never use it for other purposes or for other manufacturer's batteries.
2. When you charge a new battery cartridge or a battery cartridge which has not been used for a long period of time, it may not accept a full charge. This is a normal condition and does not indicate a problem. You can recharge the battery cartridge fully after discharging it completely and recharging a couple of times.
3. If you charge a battery cartridge from a just operated tool or a battery cartridge which has been left in a location exposed to direct sunlight or heat for a long time, the charging light may flash in red color. If this occurs, wait for a while. Charging will begin after the battery cartridge cools. The battery cartridge will cool faster if you remove the battery cartridge from the battery charger.
4. If the charging light flashes alternately in green and red color, charging is not possible. The terminals on the charger or battery cartridge are clogged with dust or the battery cartridge is worn out or damaged.
5. Trickle charge (Maintenance charge)
6. If you leave the battery cartridge in the charger to prevent spontaneous discharging after full charge, the charger will switch into its "trickle charge (maintenance charge)" mode and keep the battery cartridge fresh and fully charged.
7. Tips for maintaining maximum battery life
8. Charge the battery cartridge before completely dis- charged.
9. Always stop tool operation and charge the battery cartridge when you notice less tool power.
10. Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.
11. Charge the battery cartridge with room temperature at 10°C - 40°C (50°F - 104°F).
12. Let a hot battery cartridge cool down before charging it.
13. Charge the Nickel Metal Hydride battery cartridge when you do not use it for more than six months.

CAUTION:

Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

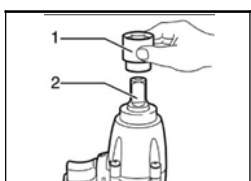
Selecting correct socket

Always use the correct size socket for bolts and nuts. An incorrect size socket will result in inaccurate and inconsistent fastening torque and/or damage to the bolt or nut.

Installing or removing socket

Align the hole in the side of the socket with the detent pin on the anvil and push it onto the anvil of the tool until it locks into place. Tap it lightly if required.

To remove the socket, simply pull it off.



1. Socket
2. Anvil