

SAFETY GUIDELINES FOR USING IMPACT WRENCH

SAFETY GUIDELINES FOR USING IMPACT WRENCH

WARNING

1. Before using your impact wrench, make sure you go through the accompanying instruction manual from start to finish.
2. Please go thoroughly understand all the specified warnings and requirements placed there in. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.
3. Please save all warnings and instructions for future reference.
4. The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool

OPERATING WITHIN THE GUIDELINES

Do not use the impact wrench for tasks it is not designed for. Your hands should be able to form a strong grip on the tool and maintain control irrespective of the amount of torque applied. This is why you need to check against your instruction manual for the recommended torque and appropriate sockets.

BATTERY TOOL AND USE

1. Charge the battery pack with the charger specified by the manufacturer. A charger that is not suitable for battery pack may create a risk of fire when used.
2. Use power tools only with specifically designated battery packs. Use any other battery packs may create a risk of injury and fire.
3. 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 burns or a fire.
4. Do not use a battery pack or tool that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
5. Do not expose a battery pack or tool to fire or excessive temperature. Exposure to fire or temperature above 265 F (130°C) may cause explosion.
6. Follow all charging instructions and do not charge the battery pack outside the temperature range specified in the instructions. Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.
7. To reduce the risk of personal injury and damage, never immerse your tool, battery pack or charger in liquid or allow a liquid to flow inside them.
8. Under abusive conditions, liquid may be ejected from the battery, avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

BATTERY CAUTIONS

1. Do not impact or damage a battery (e.g., do not use it as a hammer), use it solely for the defined purpose as specified by the manufacturer. Inspect your battery regularly for signs of damage, such as crushing, cuts, or punctures. Do not use a battery that has received a sharp blow, been dropped or is damaged
2. Never modify, disassemble, or tamper with the battery. The performance of damaged or modified batteries can be unpredictable and dangerous. Do not short circuit the battery terminals. Battery pack will short circuit if a metal object makes a connection between the positive and negative contacts on the battery pack. Do not store or transport the battery in a container with loose metal objects, such as coins, keys, or nails, which may contact the terminals.
3. Be mindful of abnormal battery behavior - failure to fully charge or hold a charge, longer than-usual charging times, noticeable drop in performance, unusual LED activity when placed on a charger (with batteries so equipped), liquid leakage from the battery, or melted plastic anywhere on the pack. These are indications of an internal problem.
4. Use and store your battery within the temperature limits stated by the instructions. Do not store in a closed location where sunlight may cause

SAFETY GUIDELINES FOR USING IMPACT WRENCH

- elevated temperatures, such as near a window inside a vehicle.
5. As a general practice, it is best to unplug battery chargers and remove battery packs when not in use. Do not store batteries on their chargers.
 6. Never burn / incinerate a battery or expose to a heat source - it may explode.
 7. Do not immerse the battery or allow any fluids to flow inside. Conductive liquid ingress, such as water, can cause damage resulting in fire or explosion. Store your battery in a cool, dry place, away from combustible and flammable items. Corrosive gas atmospheres must be avoided.
 8. If you suspect your battery may have a problem, do not use, ship, or discard as normal trash. Always dispose of your battery pack according to federal, state, and local regulations. Contact a recycling agency in your area for recycling locations. Even discharged battery packs contain some energy. Before disposing, use electrical tape to cover the terminals to prevent the battery pack from short circuit.
- or jewelry. Keep your hair and clothing away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
6. Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

PERSONAL SAFETY

1. 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.
2. Wear personal protective equipment. Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
3. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to battery pack or picking up or carrying the tool. Remove the battery pack at any time when not use the impact wrench
4. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
5. Dress properly. Do not wear loose clothing

FUNCTIONAL DESCRIPTION



SPECIFICATIONS

Model	DW-C401
Voltage	21V (MAX) ===
Drive Size	12,7 mm (1/2")
Break Away Torque	1350 N.m / 990 Ft-Lb
Fastening Max Torque	760 N.m / 560 Ft-Lb
Speed	2500rpm
Battery Capacity	4.0Ah
Number of batteries included	2 Packs
Net Weight	1.7kg (Tool Only)

INSTALLING OR REMOVING BATTERY PACK

INSERTING THE BATTERY

To insert the battery, slide the battery into the body of the tool, making sure that it clicks securely into place.



REMOVING THE BATTERY

To remove the battery, press the release button and pull the battery pack away from the tool.



INSTALLING OR REMOVING BATTERY PACK

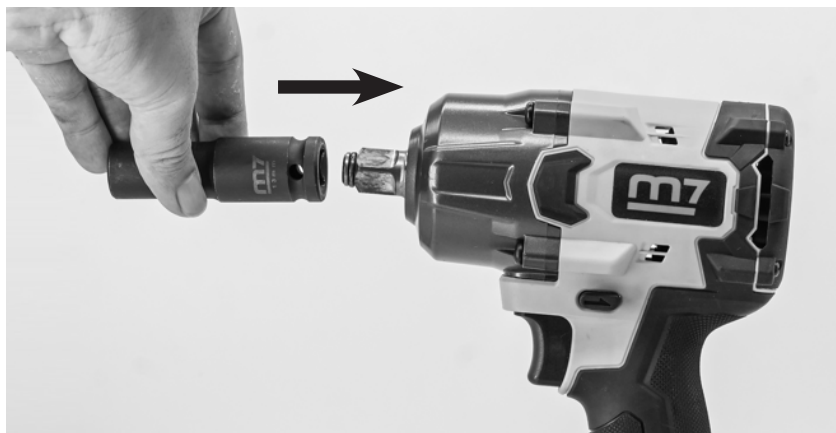
WARNING

1. Recharge only with the charger specified for the battery. For specific charging instructions, read the operator's manual supplied with your charger and battery.
2. Before installing the battery cartridge into the tool, please check that the ma-

chine's 'Forward-Stop-Reverse' button is in the centre position, it indicates that the machine is locked.

3. Hold the tool and the battery pack firmly when installing or removing battery pack. Failure to hold the tool and the battery pack firmly may cause them to slip off your hands and result in damage to the tool and battery pack and a personal injury.

ATTACHING AND REMOVING SOCKET

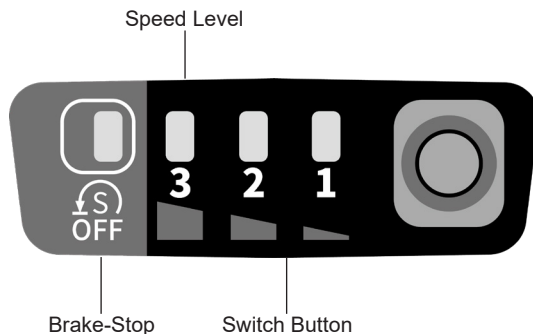


Align the 1/2" square of the impact socket with the square drive and push the impact socket onto the square drive until it locks into place. Tap it lightly if required. To remove the impact socket, simply pull it off

FUNCTIONAL DESCRIPTION AND SPECIFICATIONS

CAUTION

Disconnect battery pack from tool before making any assembly, adjustments or changing accessories. Such preventive safety measures reduce the risk of starting the tool accidentally.



USING THE SWITCH CONTROL

The control switch may be set to three positions: forward, reverse and lock.

- 1. For forwarding (clockwise) rotation, push the control switch in the direction shown. Check the direction of rotation before use.



• High, medium, and low speeds can be set in clockwise mode

No-Load Speed (RPM)	Level 1	0-1200/min
	Level 2	0-1800/min
	Level 3	0-2500/min
Impacts per Minute (IPM)	Level 1	0-1700/min
	Level 2	0-2200/min
	Level 3	0-3000/min

USING THE SWITCH CONTROL

2. For reverse (counterclockwise) rotation, push the control switch in the direction shown. Check the direction of rotation before use.



- Reverse(counterclockwise) rotation mode applied to remove screws!
- Auto Stop Mode and Continuous Mode can be set under counterclockwise mode by pressing the switch to change!
- Auto-stop indicator lights up automatically in counterclockwise mode.

For reverse (counterclockwise) rotation	Indicator	Screw stops or falls off (Application)
Auto Stop Mode		
Continuous Mode		

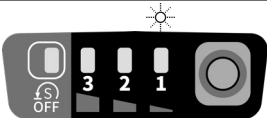
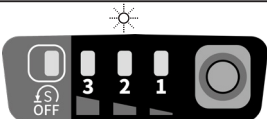
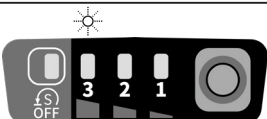
CHANGING THE APPLICATION MODE

You can change the impact force in three steps: Low, Medium or High

This allows a tightening suitable to the work.

The level of the impact force changes every time you press the button.

You can change the impact force within approximately one second after releasing the switch trigger.

Application mode (Impact force grade displayed on panel)		Maximum blows
Low		1200 RPM
Medium		1800 RPM
High		2500 RPM

NOTE: When none of the light on the panel is lit, pull the switch the trigger once before pressing the button.

NOTE: All lights on the switch panel go out when the tool is turned off to save the battery power. The impact force grade can be checked by pulling the switch trigger to the extent that the tool does not operate.

USING THE SWITCH CONTROL

3. To lock the trigger, push the control switch to the center position. The trigger will not work when the control switch is in the locked position.



STARTING, STOPPING AND CONTROLLING SPEED

WARNING

The vibration speed during actual use of the power tool can differ from the declared speed value depending on the ways in which the tool is used.



1. To start the tool, grasp the handle(s) firmly and pull the trigger.
NOTE: An LED is turned on when the trigger is pulled and will go off shortly after the trigger is released.
2. To vary the speed, increase or decrease the pressure on the trigger. The further the trigger is pulled, the greater the speed.
3. To stop the tool, release the trigger. Ensure the tool has come to a complete stop before laying the tool down.

BATTERIES AND CHARGERS

READ ALL INSTRUCTIONS

1. Important Safety Instructions for All Battery Packs

WARNING

Read all safety warnings, instructions, and cautionary markings for the battery pack, charger and product. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

- Do not charge or use the battery pack in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Inserting or removing the battery pack from the charger may ignite the dust or fumes.
- NEVER force the battery pack into the charger. DO NOT modify the battery pack in any way to fit into a non-compatible charger as battery pack may rupture causing serious personal injury. Consult the chart at the end of this manual for compatibility of batteries and chargers.
- Charge the battery packs only in Uaoaii chargers.
- DO NOT splash or immerse in water or other liquids.
- DO NOT allow water or any liquid to enter battery pack.
- Do not store or use the tool and battery pack in locations where the temperature may reach or exceed 104 °F (40 °C) (such as outside sheds or metal buildings in summer). For best life store battery packs in "a cool, dry location."

NOTE: Do not store the battery packs in a tool with the trigger switch locked on. Never tape the trigger switch in the ON position.

- Do not incinerate the battery pack even if it is severely damaged or is completely worn out. The battery pack can explode in a fire. Toxic fumes and materials are created when lithium-ion battery packs are bummed.
- Do not expose a battery pack or appliance to fire or excessive temperature. Exposure to fire or temperature above 265 °F (130 °C) may cause explosion.
- Follow all charging instructions and do not charge the battery pack or appliance outside the temperature range specified in the instructions. Charging improperly or

at temperatures outside of the specified range may damage the battery and increase the risk of fire.

- If battery contents come into contact with the skin, immediately wash area with mild soap and water. If battery liquid gets into the eye, rinse water over the open eye for 15 minutes or until irritation ceases. If medical attention is needed, the battery electrolyte is composed of a mixture of liquid organic carbonates and lithium salts.
- Contents of opened battery cells may cause respiratory irritation. Provide fresh air. If symptoms persist, seek medical attention.
- Battery liquid may be flammable if exposed to spark or flame.
- Never attempt to open the battery pack for any reason. If the battery pack case is cracked or damaged, do not insert into the charger. Do not crush, drop or damage the battery pack. Do not use a battery pack or charger that has received a sharp blow, been dropped, run over or damaged in any way (e.g., pierced with a nail, hit with a hammer, stepped on). Damaged battery packs should be returned to the service center for recycling.

Storage Recommendations

The best storage place is one that is cool and dry, away from direct sunlight and excess heat or cold. Store the fully charged battery pack out of the charger.

Battery Pack Cleaning Instructions

Dirt and grease may be removed from the exterior of the battery pack using a cloth or soft non-metallic brush. Do not use water or any cleaning solutions.

Fuel Gauge Battery Packs

Some battery packs include a fuel gauge. When the fuel gauge button is pressed and held, the LED lights will indicate the approximate level of charge remaining. This does not indicate tool functionality and is subject to variation based on product components, temperature, and end-user application.

BATTERIES AND CHARGERS

2. Important Safety Instructions For All Battery Chargers

WARNING

Read all safety warnings, instructions, and cautionary markings for the battery pack, charger and product. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

- **SAVE THESE INSTRUCTIONS** - The manual contains important safety and operating instructions.
- **DO NOT** attempt to charge the battery pack with any chargers other than a M7 charger. M7 chargers and battery packs are specifically designed to work together.
- These chargers are not intended for any uses other than charging M7 rechargeable batteries. Any other uses may result in risk of fire, electric shock or electrocution.
- Do not expose the charger to rain or snow.
- Pull by the plug rather than the cord when disconnecting the charger. This will reduce the risk of damage to the electric plug and cord.
- Make sure that the cord is located so that it will not be stepped on, tripped over or otherwise subjected to damage or stress.
- Do not use an extension cord unless it is absolutely necessary. Use of improper extension cord could result in risk of fire, electric shock or electrocution.
- When operating a charger outdoors, always provide a dry location and use an extension cord suitable

3. Important Charging Notes

1. Longest life and best performance can be obtained if the battery pack is charged when the air temperature is between 65 °F - 75 °F (18 °C-24 °C). **DO NOT** charge when the battery pack is below +40 °F (+4.5 °C), or above +104 °F (+40 °C). This is important and will prevent serious damage to the battery pack.
2. The charger and battery pack may become warm to the touch while charging. This is a normal condition, and does not indicate a problem. To facilitate the cooling of the battery pack after use, avoid placing the charger or battery pack in a warm environment such as in a metal shed or an uninsulated trailer.

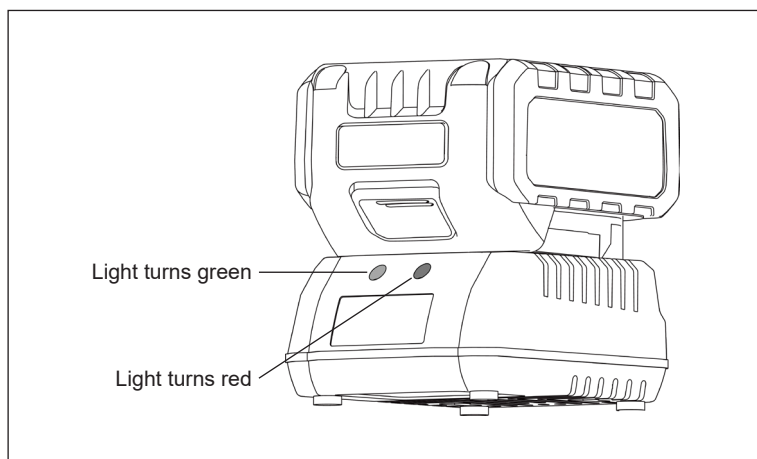
3. If the battery pack does not charge properly:

- a. Check operation of receptacle by plugging in a lamp or other appliance;
 - b. Check to see if receptacle is connected to a light switch which turns power off when you turn out the lights;
 - c. Move the charger and battery pack to a location where the surrounding air temperature is approximately 65 °F -75 °F (18 °C-24 °C);
 - d. If charging problems persist, take the tool, battery pack and charger to your local service center.
4. The battery pack should be recharged when it fails to produce sufficient power on jobs which were easily done previously. **DO NOT CONTINUE** to use under these conditions. Follow the charging procedure. You may also charge a partially used pack whenever you desire with no adverse effect on the battery pack.
 5. Foreign materials of a conductive nature such as, but not limited to, grinding dust, metal chips, steel wool, aluminum foil, or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug the charger before attempting to clean.
 6. Do not freeze or immerse the charger in water or any other liquid.

CHARGING THE BATTERY WITH CHARGER

Do not expose the battery to extreme conditions such as high temperature or hock. Otherwise, it will cause personal injury due to the leakage of the electrolytic solution. Before charging, check that the surface of the battery is clean and dry. Before using it for the first time, the battery needs to be fully charged.

Indicator Light	Status
Red	Charging
Green	Charging completed



After the battery is fully charged remove the charger plug from the outlet and remove the battery from the charger.

When the machine is not being condition. The battery is used to ensure that it is recharged at least once every 3 months.

ASSEMBLY

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 the Correct Impact Socket

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

Installing or Removing Impact Socket

Optional accessory

CAUTION

Make sure that the impact socket and the mounting portion are not damaged before installing the impact socket.

CAUTION

After inserting the impact socket, make sure that it is firmly secured. If it comes out, do not use it.

NOTE: The way of impact socket installation varies depending on the type of the square drive on the tool.

Installing or Removing Impact Socket

DW-C401:

Note:

1. There are no holes in the square drive of the DW-C401.
2. Friction Ring has been installed on the square drive.
Fit the impact socket onto the square drive to complete the installation.
(To remove the impact socket, simply pull it off)

MAINTENANCE

CAUTION

Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.

NOTICE: Never use gasoline, benzene, thinner, alcohol or the like.
Discoloration, deformation or cracks may result.

To maintain product safety and reliability, repairs, and any other maintenance or adjustment should be performed by M7 Authorized or Factory Service centers, always using M7 replacement parts.

Be sure to pull off the plug before repairing or replacing the machine:
The electric tool does not require additional lubrication or other maintenance.

Do not wash the electric tool with the water or chemical cleaner.
Wipe it off with a dry cloth. Tool shall be stored under the dry conditions and kept clean at the vent of motor. Try not to use it in a dusty environment.

To prolong the service life of battery pack:

1. Store the battery pack below 26 °C after charging it to 30%-50%
2. Charge the battery pack fully once in less than 6 months.

If the replacement of the supply cord is necessary, this has to be done by the manufacturer or his agent in order to avoid a safety hazard;

TROUBLESHOOTING

1. Why does the machine not operate after the switch is pressed?
The reversing yoke on the upper part of switch is locked. Turn it to the position where the rotation is in need, and then press the button to rotate the machine.
2. Why does the machine stop when it is not tightened? The machine has low-voltage protection. When the level of battery pack is too low, the machine will not work. Please confirm the level of battery pack. The machine has temperature protection. When the battery is working at full load for a long time, the battery pack will overheat and the temperature protection system will start to stop the machine. Cool the machine to normal temperature before resumption.
3. Why is the service life of same kind of battery pack is different? If a battery pack is left unused for a long time, its service may be shortened. This is the matter of charging frequency. Repeated charging and application may improve the situation. In case of heavy work the battery pack will run out soon. Do not charge in a temperature below °C or above 35 °C. Otherwise, the performance of battery pack will be affected.

IMPACTING TECHNIQUES

1. The longer a bolt, screw, or nut is impacted, the tighter it will become. To help prevent damaging the fasteners or work pieces, avoid excessive impact. Be particularly careful when impacting smaller fasteners because they require less impact to reach optimum torque.
2. Practice with various fasteners, noting the length of time required to reach the desired torque. Check the tightness with a hand-torque wrench. If the fasteners are too tight, reduce the impacting time. If they are not tight enough, increase the impacting time.
3. Oil, dirt, rust, or other matter on the threads or under the head of the fastener affects the degree of tightness.
4. The torque required to loosen a fastener average 75% to 80% of the tightening torque, depending on the condition of the contacting surfaces.
5. On light gasket jobs, run each fastener down to a relatively light torque and use a hand torque wrench for final tightening.

MAINTAIN POWER TOOLS AND ACCESSORIES

To prevent walking in on an accident, you should ideally examine the impact wrench and its accessories. Look for symptoms of breakage, cracking and damage. If you find signs of damage, make sure a trained professional repairs them, or replace the tool entirely. Working with damaged tools can expose you to dangers and cause a serious accident that a little foresight could have prevented.



To prevent walking in on an accident, you should ideally examine the impact wrench and its accessories. Look for symptoms of breakage, cracking and damage. If you find signs of damage, make sure a trained professional repairs them, or replace the tool entirely. Working with damaged tools can expose you to dangers and cause a serious accident that a little foresight could have prevented.

CLEANING

1. Clean dust and debris from charger and tool vents.-Keep tool handles clean, dry and free of oil or grease.
2. Use only mild soap and a damp cloth to clean the tool, battery pack and charger since certain cleaning agents and solvents are harmful to plastics and other insulated parts. Some of these include gasoline, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia and household detergents containing ammonia.
3. Never use flammable or combustible solvents around tools.

WORK AREA SAFETY

1. Keep the work area clean and well-lit. Cluttered or dark areas invite accidents.
 - Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks that may ignite dust or fumes.
2. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

STORAGE THE POWER TOOL IN SAFETY PLACE

Store 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.

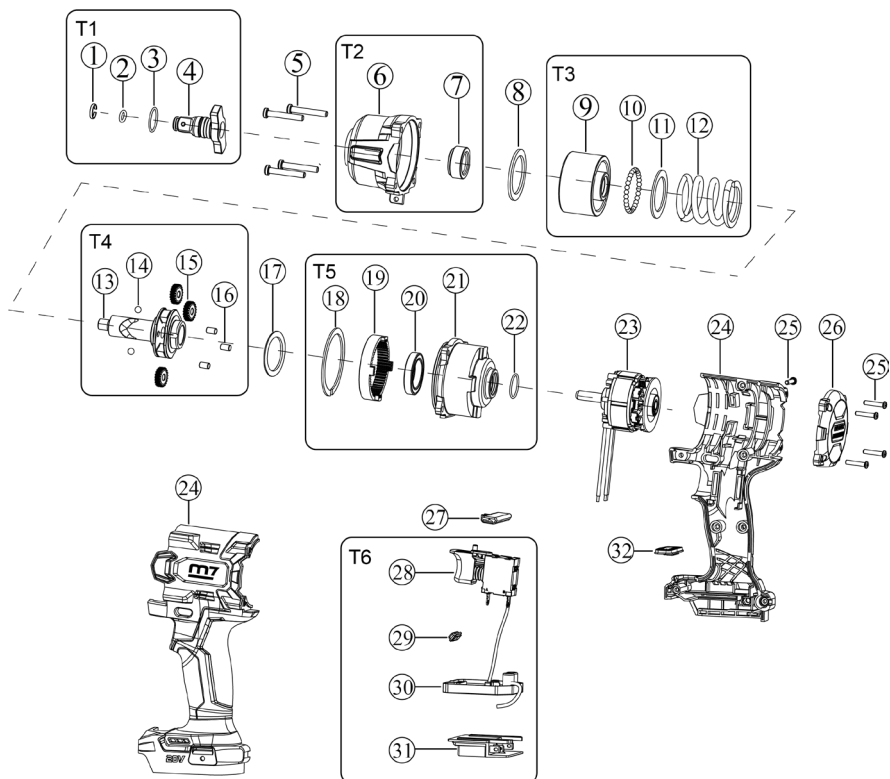
SUPPLIER

Mighty Seven International Co., Ltd.
No. 70-25, Qingguang RD., Wujih Dist., Taichung City, 41466 Taiwan.
<http://www.mighty-seven.com>



Cordless Impact Wrench

Item No : DW - C401



Part List **DW - C401**

NO.	INDEX NO.	DESCRIPTION	Q'TY
T1	DW-C401T1	1/2" Output shaft Ass'y (1,2,3,4)	1 SET
T2	DW-C401T2	Gear box Ass'y (6,7)	1 SET
T3	DW-C401T3	Impact block Ass'y (9,10,11,12)	1 SET
T4	DW-C401T4	Center shaft Ass'y (13,14,15,16)	1 SET
T5	DW-C401T5	Rear gear box Ass'y (18,19,20,21,22)	1 SET
T6	DW-C401T6	Brushless controller Ass'y (28,29,30,31)	1 SET
5	DW-C401T05	ST5.0 x 33 stscrew (4 pcs)	1 SET
8	DW-C401P08	Washer\Ø45 x Ø34.2x2	1
17	DW-C401P17	Washer\Ø33 x Ø25.2x0.5	1
23	DW-C401P23	Brushless MOTOR	1
24	DW-C401T24	DW-C401 housing (Left & Right)	1 SET
25	DW-C401T25	ST3.5 x 18 ST SCREW (9 pcs)	1 SET
26	DW-C401P26	Rear cover	1
27	DW-C401P27	The reversing push twist	1
32	DW-C401P32	Shifting gear button	1



