

# LITTLE BEAVER

**20V BRUSHLESS CORDLESS DRILL**

**MODEL: DUECD336**



**SAVE THIS MANUAL**


You will need this manual for safety instructions, operating procedures and warranty.  
Put it and the original sales receipt in a safe dry place for future reference.

# IMPORTANT SAFETY 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. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

## ELECTRICAL SAFETY

4. **Double Insulated tools are equipped with a polarized plug (one blade is wider than the other.) This power plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double Insulation  eliminates the need for the three wire grounded power cord and grounded power supply system.
5. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.
6. **Don't expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
7. **Handle the cord carefully. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.

## PERSONAL SAFETY

8. **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.
9. **Dress properly. Do not wear loose clothing or jewelry. Tie up long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught by moving parts.
10. **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools with the switch on invites accidents.
11. **Remove adjusting keys 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.
12. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enable better control of the tool in unexpected situations.
13. **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used in appropriate conditions.

## POWER TOOL USE AND CARE

14. **Use clamps or other practical ways to secure and support the work piece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
15. **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.
16. **Do not use tool if switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
17. **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
18. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.

# IMPORTANT SAFETY INSTRUCTIONS

19. **Maintain tools with care. Keep accessories sharp and clean.** Properly maintained tools with sharp cutting edges are less likely to bind and easier to be controlled. Do not use a damaged tool. Tag damaged tools “Do not use” until repaired.
20. **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.
21. **Only use accessories recommended by the manufacturer for your model.** Accessories suitable for one tool may become hazardous when used on another tool.

## BATTERY TOOL USE AND CARE

22. **Ensure the switch is in the off position before inserting the battery pack.** Inserting the battery pack into power tools that have the switch on may cause an accident.
23. **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
24. **Use power tools only with specifically designed battery packs.** Use of any other battery packs may create a risk of injury or fire.
25. **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 terminals together may cause burns or a fire.
  - a. Do not use the tool in wet or damp conditions.
  - b. Always keep the work area free of tripping hazards.
  - c. When using the tool, always ensure you are wearing protective safety equipment including safety glasses/goggles, ear muffs, dust masks and other protective clothing including gloves and aprons.
26. **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.

## SERVICE

27. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
28. **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 electric shock or injury.

# SAFETY INSTRUCTIONS FOR CORDLESS DRILL

- **Always wear safety goggles or eye protection when using this tool. Use a dust mask or respirator for applications which generate dust.**
- **Do not grasp the tool or place your hands too close to the spinning chuck or drill bit.** Your hand may be lacerated or may cause injury.
- **Securing the material being worked on. Never hold it in your hand or across your legs.** Unstable support can cause loss of control and injury.
- **Position yourself to avoid being caught between the tool or side handle and the walls or posts.** Should the socket or bit become bound in the work, the reaction torque of the tool could crush your hand or leg.
- **Check to see that keys and adjusting wrenches are removed from the Cordless Drill before switching the tool "ON".** Keys or wrenches can fly away at high velocity striking you or a bystander.
- **When using the Cordless Drill, always maintain a firm grip on the tool with both hands.**
- **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.
- **Keep the handle of the Cordless Drill dry, clean, and free from oil and grease.**
- **Do not run the Cordless Drill while carrying it at your side.** A spinning socket or bit could become entangled with clothing and injury may occur.
- **Disconnect the plug or remove the battery pack from tool and place the switch in the locked or "OFF" position before making any assembly adjustments, changing accessories, performing any inspection, maintenance or cleaning procedures.** Such preventive safety measures reduce the risk of starting the tool accidentally.
- **Do not use the Cordless Drill if it has been damaged, left outdoors in the rain, snow, wet or damp environments, or immersed in liquid.**

# SAFETY INSTRUCTIONS FOR BATTERIES AND CHARGER

## BATTERY

1. Never attempt to open or modify battery for any reason. Released electrolyte is corrosive and may cause damage to eyes and skin. It may be toxic if swallowed.
2. Under extreme conditions, battery leakage may occur. When you notice liquid on the battery, proceed as follows:
  - Carefully wipe the liquid off using a cloth. Avoid skin contact.
  - In case of skin or eye contact, follow the instructions below.
  - The battery fluid, a 25-30% solution of potassium hydroxide, can be harmful. In case of skin contact, immediately rinse with water. Neutralize with a mild acid such as lemon juice or vinegar. In case of eye contact, rinse abundantly with clean water for at least 10 minutes.
3. Do not expose to water.
4. Do not store in locations where the temperature may exceed 40°C (104°F).
5. Charge at room temperature: 0°C - 45°C (0°F-140.6°F). It is normal for the battery charger to hum and be warm but not hot during operation.
6. Charge only using the charger provided with the tool.
7. Before charging, make sure that the battery is dry and clean.
8. Use only the battery supplied with your tool.
9. Exercise care in handling and storing batteries in order not to short them with conductive materials such as rings, keys, coins. There is a real risk of the battery or the conductor overheating, causing fire or burns.
10. Keep the battery pack away from fire. It may explode. Follow instructions and regulations given by local authorities concerning environmental protection. Dispose of old batteries at an appropriate waste disposal facility.

## CHARGER

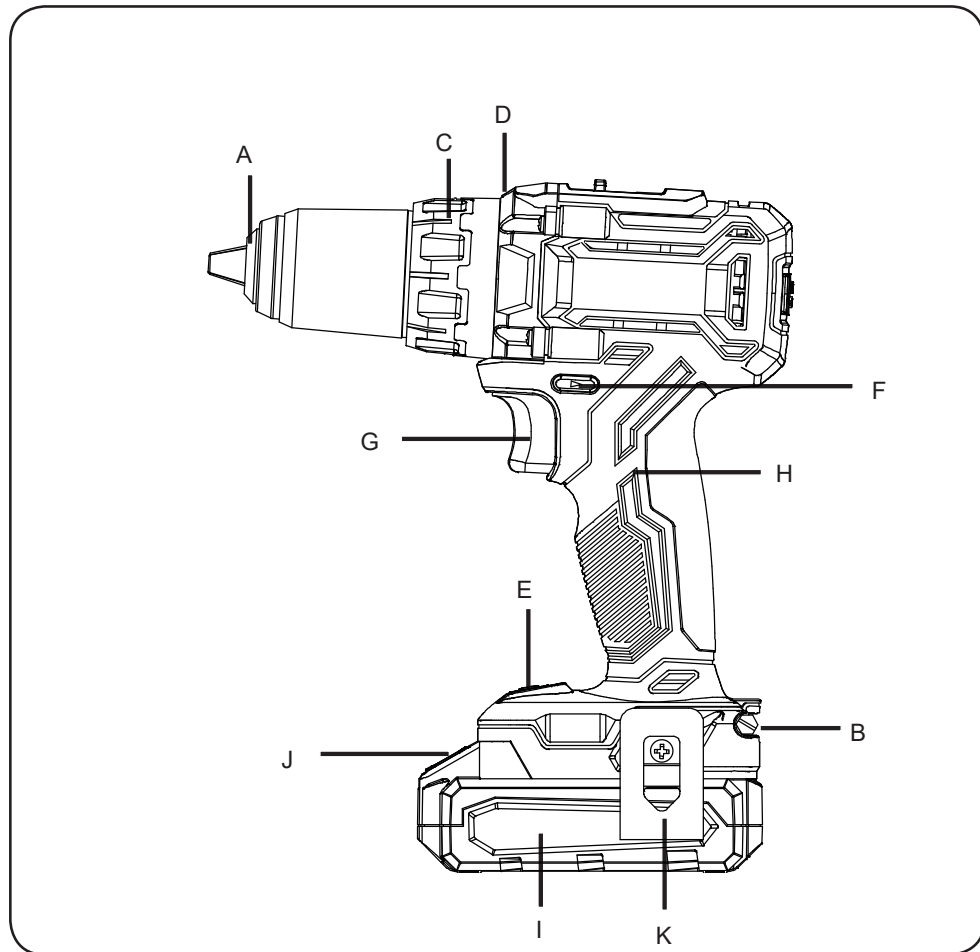
1. Use your charger only to charge batteries supplied with your tool. Other batteries could burst, causing personal injury and damage.
2. Never attempt to charge a non-rechargeable battery.
3. Have damaged cords replaced immediately.
4. Do not expose to water.
5. Do not open the charger.
6. Indoor use only. Do not recharge the battery in the rain or in wet conditions.

# SPECIFICATIONS

- Voltage: 20V Max
- No Load Speed: 0-480/0-1800 RPM
- Chuck Size: 1/2" (13mm)
- Chuck Type: Single Sleeve
- Max Torque: 50Nm (440 in-lbs)
- Torque Setting: 23+1
- Automatic Spindle Lock
- Built-in LED Work Light

# FUNCTIONAL DESCRIPTION

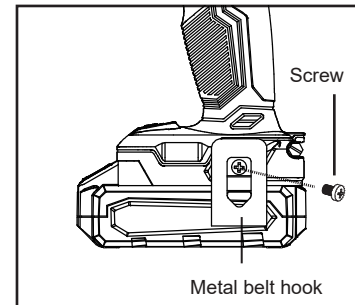
- A 1/2" (13 mm) chuck
- B Double-end driver bit storage
- C Torque regulation ring
- D Torque indicator scale
- E LED work light
- F Forward / reverse switch
- G Variable speed trigger with electric brake
- H Rubber-covered handle
- I Battery pack
- J Battery lock button
- K Metal belt hook



# ASSEMBLY

## TO INSTALL/REMOVE METAL BELT HOOK

Attach metal belt hook to Handle using supplied Screw:  
Clockwise is to tighten.  
Counterclockwise is to loosen.  
Metal belt hook may be attached to either side.



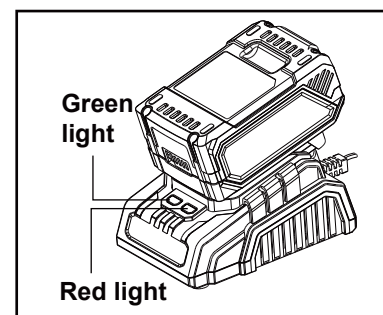
# OPERATION

## How to charge the battery pack ?

1. Connect the power supply, green light is ON.
  2. Plug in the battery, charging is beginning, green light is OFF and red light is ON.
  3. Fully charge finished, red light is OFF, green light is ON and keep lighting.
- NOTICE: Please push the battery pack forward until you hear a click sound.

The click sound means the battery is properly inserted into the charger.

- After the charging is completed, remove the battery pack from the charging stand immediately. When charging more than one battery pack, allow 15 minutes between charges.
- After many charge/discharge cycles, your battery may lose its ability to hold a charge. If so, please replace it. Dispose of batteries at an appropriate waste disposal facility. Do not throw batteries away in common trash cans.



# OPERATION

## Caution

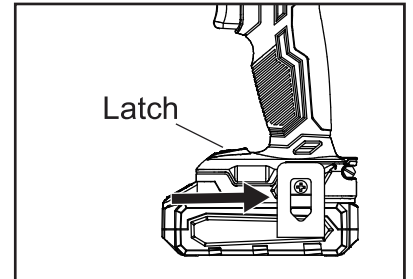
- Fully charge battery before first use.
- Avoid short periods of charging. Only charge battery pack when it completely runs out.
- In order to extend the battery life, fully charge it after each use and ensure that it is charged every three months; avoid storing batteries in cold places as low temperatures may cause them to fail.

## Install or remove battery pack

**To install :** slide battery pack into the bottom of the tool until you hear a click.

Make sure the latch is in place and the battery is secured before operation.

**To remove:** Press the battery release latch and pull the battery pack out at the same time.



**WARNING:** When the machine is obstructed, please turn off the switch right away and check if the work piece is right. An obstruction may cause the machine motor to be burned.



**REMEMBER:** This tool is cordless and does not need to be connected to a power supply.


**CAUTION:** Do not expose either the tool or charger to the rain or water.

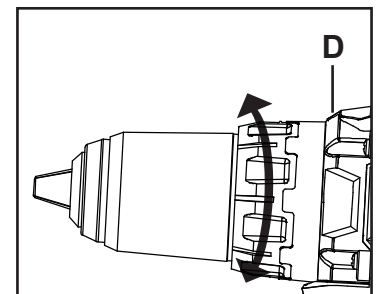
It is best not to overcharge the battery as this may damage the battery.

If the battery power is low, stop working and recharge the battery pack.

To prolong the using life of the tool, do not work continually for more than 20 minutes at a time.

## TORQUE REGULATOR

1. When arrow on the top of the housing points to 1 on the Torque indicator scale (D in the functional description), torque is at minimum before the clutch disengages the chuck from the drive.
2. When indicator is just past 23, output is at maximum before it is disengaged. This is useful in driving screws into different types of material.
3. More torque will set a screw deeper into material, less torque will prevent it stripping. Larger screws require more torque to drive than small ones. A little trial and error will show you which is the optimum setting for the situation.
4. Release the trigger when the clicking sound indicates the chuck will not turn further.
5. For drilling, always use the drill  setting, indicated by the pictogram of a drill bit. At this setting, the drive does not disengage from the chuck.





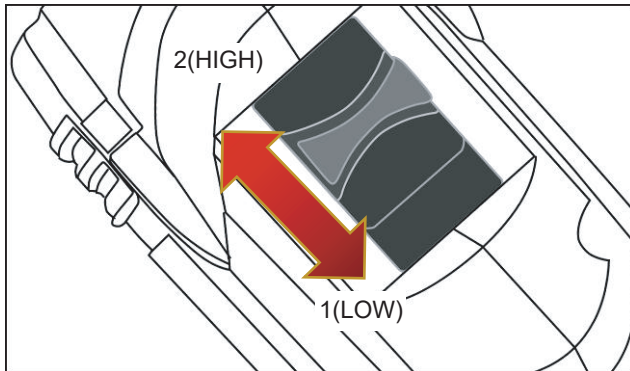
# OPERATION

## GEAR SHIFTING

The tool is equipped with two separate gear ranges, low gear, and high gear. 1(LOW) gear provides high-torque and slower drilling speeds for heavy-duty work or for driving screws. 2(HIGH) gear provides faster speeds for lighter drilling work.

A) Select 1(LOW) speed for applications requiring higher power and torque.

B) Select 2(HIGH) speed for fast drilling or driving applications.

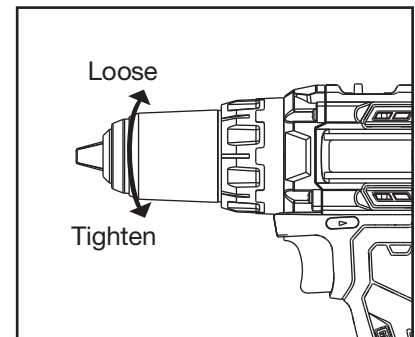


**NOTE:** Never change speeds while the tool is running. Failure to obey this caution could result in serious damage to the drill.

**NOTE:** If you have difficulty changing from one gear range to the other, turn the chuck by hand until the gears engage.

## KEYLESS CHUCK

1. Center the rotation direction knob to prevent the motor from accidentally starting.
2. Turning the chuck by one hand while with the other hand holding the drill.
3. Turning the chuck counter-clockwise to open the jaws.
4. Insert a bit and then turning the chuck clockwise to close the jaws so they clamp the bit tightly.



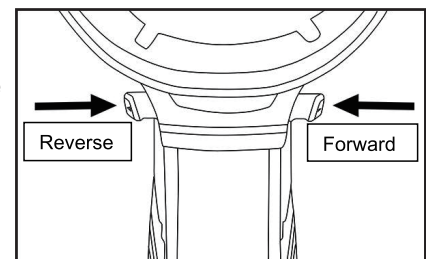
## FORWARD/REVERSING LEVER & TRIGGER LOCK

After tool use, lock trigger in "OFF" position to help prevent accidental starts and accidental discharge.



For forward rotation, (with chuck pointed away from you) move the lever to the far left.

For reverse rotation move the lever to the far right. To activate trigger lock move lever to the center off position.



**Do not change direction of rotation until the tool comes to a complete stop.** Shifting during rotation of the chuck can cause damage to the tool.



# MAINTENANCE

1. Keep the tool clean using a soft damp (not wet) cloth. Do not use solvents on the plastic parts.
2. Lubrication is necessary. After long use, have an authorized service centre maintain and lubricate the tool.
3. Should the chuck require replacement,
  - Remove the battery pack
  - Open the chuck jaws as widely as possible so you can get at the chuck retaining screw.
  - Unscrew the chuck retaining screw with a Philips screwdriver. Note that this is a left hand threaded screw and you remove it by turning it clockwise.
  - Clamp the shorter arm of a large Allen wrench in the chuck, aligning it with the jaws so they grip three of its six flat sides.
  - Place the drill on a flat surface, and support the chuck with a piece of wood about 1/2" (13 mm) above that surface. Or press the drill body on the working table and place the chuck over the edge of the table. (Be careful with your hand!)
  - Strike the long arm of the wrench with a hammer so that the chuck turns counter-clockwise and unscrews from the spindle. This may require a fairly sharp blow.
  - Repeat the process in reverse to install a new chuck.
4. To maintain the best performance of your rechargeable battery, protect it from overheating, both from overcharging and during storage. Occasionally charge the battery for 7 hours.

# PARTS LIST

No.	Description	Qty.	No.	Description	Qty.
11	Screw	1	25	2 Class planet support	1
2	Chuck	1	26	2 Class gear ring	1
3	Elastic ring	1	27	Steel wire	1
4	Souder	1	28	2 Class planet gear	5
5	Shaft	1	29	1 Class gear ring	1
6	Bearing 6800Z	2	30	1 Class planet support	1
7	Torque setting ring	1	31	1 Class planet gear	3
8	Thread ring	1	32	Washer03	1
9	Torque spring	1	33	Motor connecting piece	1
10	Torque washer	1	34	Motor gear	1
11	Screw ST3*14	17	35	Motor	1
12	Front gear box	1	36	Label	1
13	Washer01	1	37	LED transparent cover	1
14	Elastic ring	1	38	Switch	1
15	Pin	6	39	Forward / Reverse switch	1
16	Locking ring	1	40	Steel wire	1
17	Pin	2	41	Variable speed button	1
18	Powder metallurgy plate	1	42	Left housing	1
19	3 Class planet support	1	43	Metal belt hook	1
20	3 Class gear ring	1	44	Screw M4X8	2
21	3 Class planet gear	5	45	Driver bit support	1
22	Washer02	1	46	Double-Ended bit	1
23	Compensating gear	1	47	Right housing	1
24	Rear gear box	1	48	Battery clip assembly	1

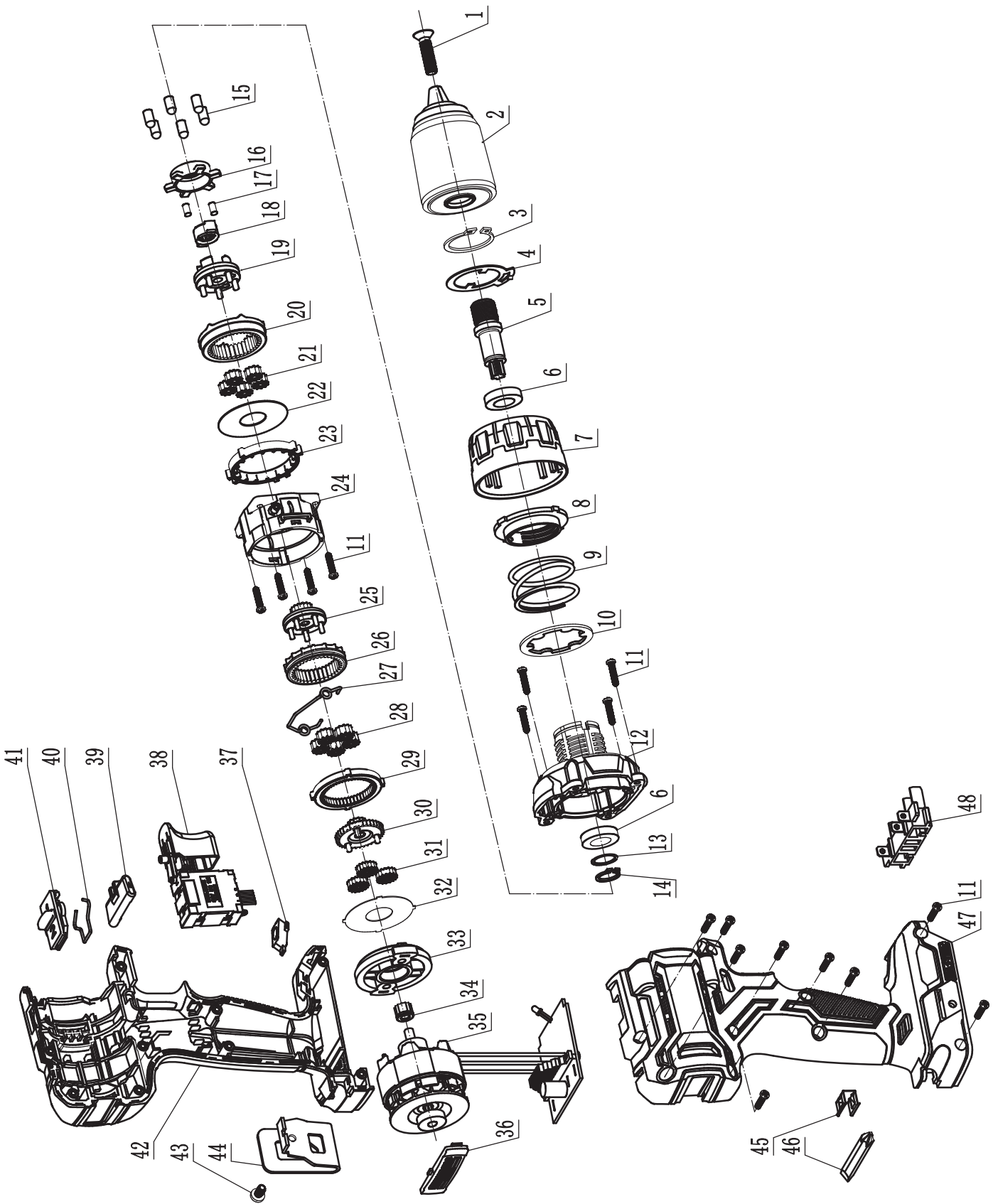
**WARNING:** Repairs should be made by an authorized repair centre. Opening this tool could invalidate your warranty.



**NOTE:** Due to continuous product improvement, we reserve the right to change the product specification without prior notice.



# SCHEMATIC DRAWING



**LITTLE BEAVER**