



19.2V CORDLESS 2-IN-1 COMBO KIT

OWNER'S MANUAL



WARNING:

Read carefully and understand all INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item # 331804

For technical questions and replacement parts, please call 1-800-222-5381.

Thank you very much for choosing a NORTHERN TOOL + EQUIPMENT CO., INC. Product! For future reference, please complete the owner's record below:

Model: _____ Purchase Date: _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This machine is designed for certain applications only. Northern Tool + Equipment strongly recommends this machine is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted Northern Tool + Equipment to determine if it can or should be performed on the product.

TECHNICAL SPECIFICATIONS

Impact Driver

Description	Specifications
Battery power:	19.2V
Battery:	1.5Ah
Charger time:	1 hour
No load speed:	0 - 2000 RPM
Impacts:	0 - 2900 BPM
Max. torque:	210 ft/lbs
Chuck size:	3/8"

Cordless Drill

Description	Specifications
Battery power:	19.2V
Charger time:	1 hour
No load speed:	0 - 400 / 0 - 1150 RPM
Chuck size:	3/8"
Gearbox:	2 Speed
Torque rating:	8.8 ft/lbs
Hammer function:	Yes

ACCESSORIES

- 1 x Impact Driver
- 1 x Cordless Drill
- 2 x 1.5Ah Ni-Cd Batteries
- 1 x Fast Charger

SAFETY INSTRUCTIONS

⚠ WARNING! A battery operated tool with integral batteries or pack must be recharged only with the specific charger for the that may be suitable for one type of battery may create a risk with another battery.

- Avoid accidental starting. Make sure the switch is in position before inserting the battery pack. Carrying a on the switch or inserting the battery pack into a tool invites accidents.
- Disconnect the battery pack from the tool or place the locked OFF position before making any adjustments, accessories, or storing the tool. Such preventative safety the risk of starting the tool accidentally.
- When the battery pack is not in use, keep it away from

Read the whole manual carefully and make sure you know tool OFF, in an emergency, before operating the tool.

GENERAL SAFETY RULES

⚠ WARNING! The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SAVE THESE INSTRUCTIONS

WORK AREA

- **Keep work area clean and well lit.** Cluttered and dark work areas can cause accidents.
- **Do not use your tool where there is a risk of causing a fire or an explosion; e.g., in the presence of flammable liquids, gasses, or dust.** Power tools create sparks, which may ignite the dust or fumes.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control, so visitors should remain at a safe distance from the work area.

ELECTRICAL SAFETY & PERSONAL SAFETY

- **Dress appropriately.** Do not wear loose clothing or jewelry, as these can be caught in moving parts. Preferably wear non-slip footwear when working outdoors. Wear protective hair covering to keep long hair out of the way.
- **Head protection.** Always use safety glasses. Use a face or dust mask whenever the operations may produce dust or flying particles. Wear ear protection whenever the sound level seems uncomfortable.
- **Guard against electric shock.** Prevent body contact with earthed or grounded surfaces (e.g. pipes, radiators, cookers and refrigerators).
- **Do not overreach.** Keep proper footing and balance at all times.
- **Stay alert.** Watch what you are doing. Use common sense. Do not operate the tool when you are tired.
- **Secure work piece.** Use clamps or a vice to hold the work piece; it is safer as it frees both hands to operate the tool.

- **Remove adjusting keys and wrenches.** Always check that adjusting keys and wrenches are removed from the tool before operating the tool.
- **Extension cords.** Before use inspect the extension cords and replace if damaged. When using the tool outdoors, only use extension cords intended for outdoor use and marked accordingly.
- **Use appropriate tool.** The intended use is described in this instruction manual. Do not force small tools or attachments to do the job of a heavy duty tool. The tool will do the job better and safer at the rate for which it was intended. Do not force the tool.

⚠ WARNING! The use of any accessory or attachment, or performance of any operation with this tool other than those recommended in this instruction manual may present a risk of personal injury.

- **Check for damaged parts.** Before use carefully check the tool and power cord for damage. Check for misalignment and seizure of moving parts, breakage of parts, damage to guards and switches and any other conditions that may affect its operation. Ensure that the tool will operate properly and perform its intended function. Do not use the tool if any parts are damaged or defective. Do not use the tool if the switch does not turn it on and off.
- **Unplug the tool.** Shut off the power and wait for the tool to come to a complete standstill before leaving it unattended. Unplug the tool when it is not in use, before changing any parts of the tool, accessories or attachments and before servicing.
- **Avoid unintentional starting.** Do not carry the tool with a finger on the on/off switch. Make sure the tool is switched off when plugging in.
- **Do not abuse the cord.** Never carry the tool by its cord or pull it to disconnect from the socket. Keep the cord away from heat, oil and sharp edges.
- **Connect dust extraction equipment.** If devices are provided for the connection of dust extraction and collection facilities, ensure that these are connected and properly used.
- **Store idle tools.** When not in use, tools should be stored in a dry, locked up or high place, out of reach of children.
- **Maintain tools with care.** Keep tools clean and in good condition for better and safer performance. Follow the instructions for maintenance and changing accessories. Keep handles and switches dry, clean and free from oil and grease.

SAFETY INSTRUCTIONS FOR BATTERY PACK & CHARGER

THIS MANUAL CONTAINS IMPORTANT SAFETY AND OPERATING INSTRUCTIONS FOR YOUR BATTERY CHARGER.

- Before using the charger, read all instructions and cautionary markings on charger, battery pack and product using the battery pack.

⚠ Danger! If the battery packs casing is cracked or damaged, do not insert into charger. There is a danger of electric shock or electrocution.

⚠ WARNING! Don't allow any liquid to get inside charger. Electric shock may result. To facilitate 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.

- This charger is not intended for any uses other than charging rechargeable batteries. Any other use may result in risk of fire, electric shock or electrocution.
- Do not place any object on top of the charger or place the charger on a soft surface that may result in excessive internal heat. Place the charger in a position away from any heat source.
- To reduce the potential risk of damage to the electric plug and cord, pull by the plug rather than the cord when disconnecting the charger from the power supply.
- Make sure the cord is located so it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in the risk of fire, electric shock or electrocution.
- Do not operate the charger if it has received a sharp blow, been dropped or otherwise damaged in any way.
- Do not disassemble charger. Incorrect reassembling may result in a risk of electric shock, electrocution or fire.
- To prevent the risk of electric shock, unplug the charger from the outlet before attempting any cleaning. Only removing the battery pack from the charger will not reduce this risk.
- Never attempt to connect two chargers together.
- 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).
- The charger is designed to operate on standard household electrical power (110 to 120 volts). Do not attempt to use it on any other voltage!

ADDITIONAL SAFETY RULES FOR CHARGERS & BATTERY

The battery pack is not fully charged out of the carton. First read the safety instructions and then follow the charging notes and procedures.

- The longest life and best performance can be obtained if the battery pack is charged when the air temperature is between 64°–75°F (18°–24°C). Do not charge the battery pack in an air temperature below 50°F (10°C) or above 104°F (40°C). This is important and will prevent damage to the battery pack.
- Do not incinerate the battery pack even if it is seriously damaged or is completely worn out. The battery can explode in a fire.
- Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, immediately discontinue use and do not recharge.

The length of service from your battery will depend on the type of work you are doing. The battery has been designed to provide maximum trouble free life. However, like all batteries, it will eventually wear out.

To obtain the longest possible battery life, we suggest the following:

- Store and charge your battery in a cool area. Temperatures above or below normal room temperature will shorten battery life.
- Never store the battery in a discharged condition. Recharge them immediately after they are discharged.
- All batteries gradually lose their charge. The higher the temperature the quicker they lose their charge. If you store your tool for long periods of time without use, recharge the battery every month or two. This practice will prolong battery life.

BATTERY PACK AND CHARGING

To install the battery pack to the driver

- Ensure the switch is turned off (trigger released).
- Align the notches in the base of the driver with those of the battery and slide battery and driver together until the battery locks into place.
- Do not force when inserting the battery. If the battery pack does not slide in it is not being inserted correctly.

To remove the battery pack from the driver

- Ensure the switch has turned off (trigger released).
- Depress the battery pack release buttons (on the left and right hand sides of the battery) and simultaneously pull the battery forward away from the driver.

Charging your battery pack

The battery has been shipped in a low charge condition to prevent potential problems; therefore, you will need to charge them prior to use.

- Plug the charger into an appropriate AC power outlet and switch on main power, if necessary. The green light will illuminate.
- Align the notches of the charger with those of the battery, squeeze the battery pack release buttons and slide the battery and charger together until the battery locks into place.

The red light will illuminate when the charger commences charging.

- The battery will take 1 hour to charge. Once charged the red light will fade and the green light will once again illuminate.
- Once the battery has charged the charger will cease charging but as a safety precaution, removing the battery from the charger and switching off at the mains is recommended.

Removing the battery from the charger

Depress the battery pack release buttons on both sides of the battery and simultaneously slide the battery backwards away from the charger.

Note: If LED on the charger fails to illuminate

- Check the charger is securely plugged into the wall outlet and is switched on.
- Check the battery is firmly seated into the charger.

Important charging notes

- The charger and battery may become warm to touch while charging. This is a normal condition, and does not indicate a problem.
- Use the charger at normal room temperatures whenever possible. To prevent overheating, do not cover the charger and do not charge the battery pack in direct sunlight or near heat sources.

OPERATION FOR IMPACT DRIVER

On/off switch

To turn the impact driver on, depress the trigger switch, to turn off, release the trigger switch.

Speed control

The speed can be varied from 0 to maximum, depending on the pressure applied to the trigger. This way you can select the best possible speed for the job being done.

Changing direction of rotation

With the incorporated reversing switch installed in your tool the direction of rotation can be changed with the forward / reverse lever. To engage the tool into the forward setting, depress the right side of the lever into the tool. To engage the tool into the reverse setting, depress the left side of the lever into the tool.

The switch can be locked off by pushing the forward / reverse lever into the middle of both forward and reverse positions.

Do not change the direction of rotation while the sleeve is still in motion.

Installing power bits

Ensure the tool has been switched off and the battery removed prior to installing bits.

Pull the sleeve forward and then insert the power bit into the sleeve as far as possible. Once the bit has been inserted, release the sleeve. The sleeve will spring back to its original position locking the power bit in place. Pull the power bit to ensure it is locked in the sleeve prior to operation.

Removing power bits

Ensure the tool has been switched off and the battery removed prior to removing power bits. Pull the sleeve forward and then pull the power bit out of the sleeve.

Driving / removing screws

- Install the required power bit into the sleeve of the tool.
- Select the direction of rotation.
- Place the head of the power bit into the head of the screw. Ensure the power bits head matches the head of the screw.
- Apply a forward pressure on the impact driver so the head of the power bit sits firmly in the screw head. Ensure the impact driver is kept pointing straight to the screw.
- Squeeze the trigger to begin operation.

OPERATION FOR CORDLESS DRILL

Keyless Chuck

A keyless chuck has been provided with your drill to allow for easy installation and removal of bits. The chuck is divided into two parts, the rear is called the collar and the front is the body. To open and close the chuck; grasp and hold the collar of the chuck with one hand and rotate the chuck body with your other hand. The arrows on the chuck indicate which direction to rotate the chuck body in order to GRIP (tighten) or RELEASE (unlock) the drill bit.

⚠ WARNING! Do not hold the chuck body with one hand and use power of the drill to tighten or loosen the chuck jaws. The chuck body could slip and your hand could come in contact with a rotating accessory. This could cause an accident resulting in personal injury.

Installing Drill/Driver Bits

- Remove battery from the drill.
- Open or close the chuck to a point where the opening is slightly larger than drill bit you intend to use.
- Insert the drill bit into the chuck ensuring the end of the drill bit does not touch the screw inside the chuck.
- Tighten the chuck onto the drill bit as described above (Keyless Chuck).

Removing Drill/Driver Bits

- Remove the battery from the drill.
- Loosen the chuck as described above (Keyless Chuck).
- Remove the drill bit from the chuck.

Note: Do not handle drill bits without gloves as drill bits and other accessories are sharp and can cause a personal injury.

General Hints for Drilling in all Materials

- Always use sharp drill bits.
- Mark the place where you would like the hole to be drilled.
- Commence with a slow rotation speed to start the hole.
- Reduce your pressure on the tool when the drill bit is about to break through the material.

Metal Drilling

- Support thin material with a wooden plate.
- Use a punch to mark the position of the hole.
- If drilling a large hole use a small drill at first to establish a pilot hole then use the required large size drill bit.
- Use only HSS (high speed steel) drill bits or those recommended for metal use.
- When drilling into iron or steel, use a cooling lubricant such as thin oil. With aluminium, use turpentine or paraffin. With brass, copper and cast iron, use no lubricant but withdraw the drill regularly to assist cooling.

Wood Drilling

- Mark the place where you want to drill with a punch or nail.
- To avoid splintering on breakthrough either clamp a piece of scrap wood to the back of the wood or continue the hole from the back of the wood when the drill bit first breaks through.

Masonry Drilling

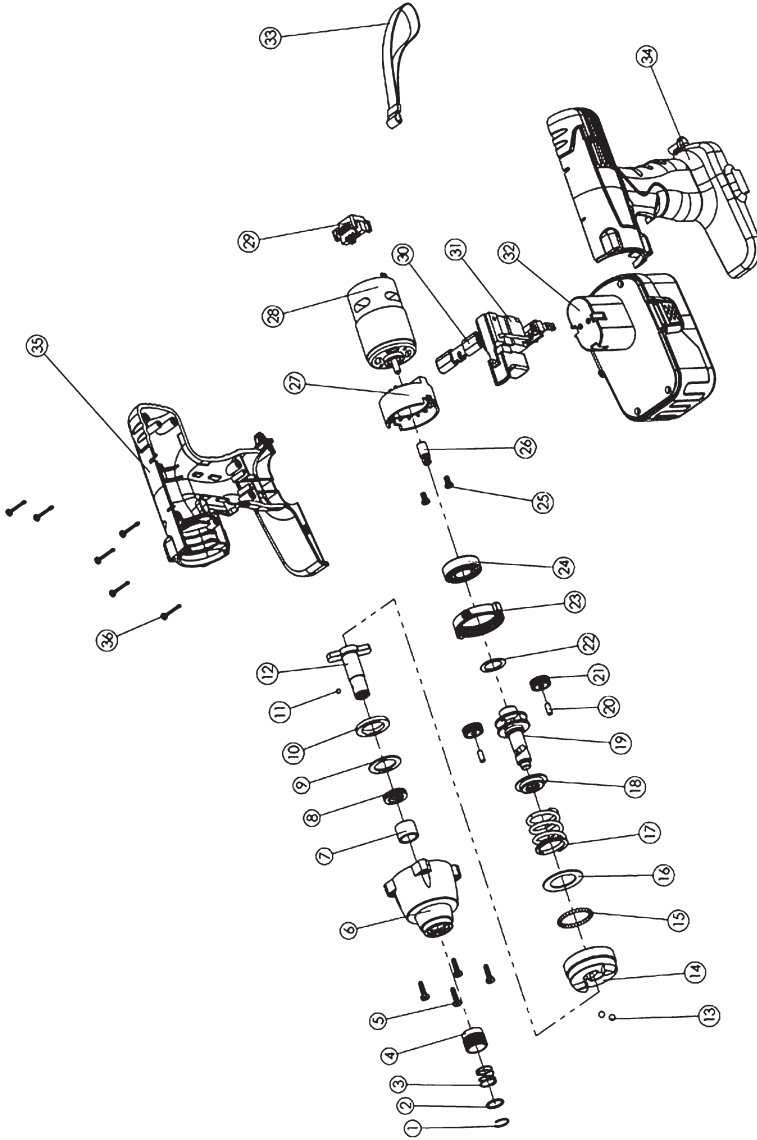
- Mark the place where you want to drill.
- Only use carbide tipped drill bits.
- Use the drill only in the forward position.
- Hold the drill firmly and place the bit at the point to be drilled.
- Do not force the drill. Allow the drill and the bit to do the work.
- If the bit jams in the work piece or stalls, stop the tool immediately. Remove the bit from the work piece and determine the reason for jamming.

MAINTENANCE

⚠ CAUTION: Always make sure that the tool is switched off and the battery pack has been removed prior to attempting to perform any inspections or maintenance.

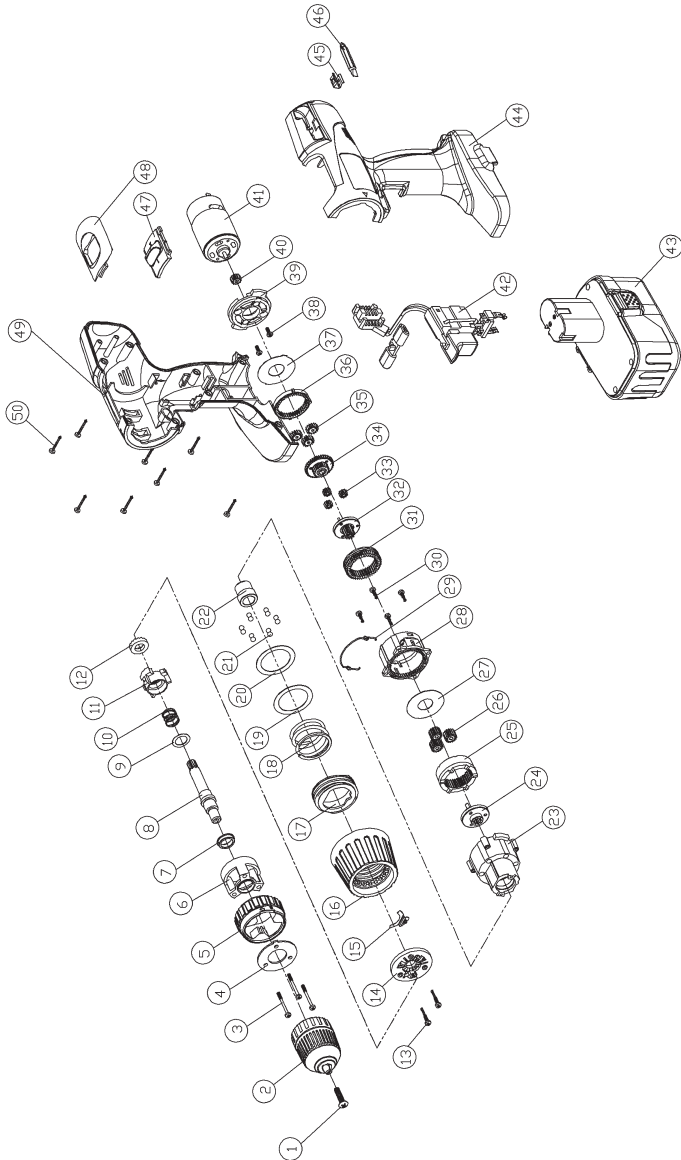
- If the enclosure of the impact driver requires cleaning do not use solvents but a moist soft cloth only. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.
- Store the impact driver in a dry place.
- When not in use, the drill should be stored in a dry, frost free location not within the reach of children.
- Keep ventilation slots of the drill clean at all times and prevent any foreign matter from entering.
- If the housing of the drill requires cleaning, do not use solvents but a moist soft cloth only.
- Blow out the ventilation slots with compressed air periodically .

DIAGRAM & PARTS LIST (IMPACT DRIVER)



Part	Description	Part	Description
1	Circlip	19	Gear Shaft
2	Washer	20	Roller Pin
3	Spring	21	Gear
4	Locking Ring	22	Washer
5	Screw	23	Internal Gear Ring
6	Gear Case	24	Bearing
7	Front Bearing	25	Screw
8	Felt	26	Motor Gear
9	Rubber Gasket	27	Gearbox
10	Washer	28	Motor
11	Steel Ball	29	Radiator
12	Spindle	30	Lever
13	Steel Ball	31	Switch Assy.
14	Impact Block	32	Battery Pack
15	Steel Ball	33	Tie
16	Washer	34	Left Housing
17	Spring	35	Right Housing
18	Gasket	36	Screw

DIAGRAM & PARTS LIST (CORDLESS DRILL)



Part	Description	Part	Description
1	Screw	27	Washer
2	Chuck Keyless	28	Gearbox
3	Screw	29	Clip
4	Pressure Plate	30	Screw
5	Sleeve	31	Steering Gear
6	Bracket	32	Gear Support
7	Bush	33	Planetary Gear Set
8	Spindle	34	Gear support
9	Washer	35	Planetary Gear Set
10	Spring	36	Internal Gear Ring
11	Limited Block	37	Shim
12	Impact Gear	38	Screw
13	Screw	39	Flange
14	Fixed Tray	40	Motor Gear
15	Pressure Spring	41	Motor
16	Torque Ring	42	Switch Assy
17	Adjusting Ring	43	Battery Pack
18	Spring	44	Left Housing
19	Washer	45	Bits Holder
20	Washer	46	Bits
21	Steel Ball	47	Adjusting Block
22	Bush	48	Decorated
23	Gear Case	49	Right Housing
24	Gear Support	50	Screw
25	Internal Gear Ring	51	Lever

 **WARNING!**

Some dust created by power sanding, sawing, grinding, and other construction activities contains 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, cement, and other masonry products
- Arsenic and chromium, from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well-ventilated area, and use approved personal protective equipment, such as dust masks that are specially designed to filter out microscopic particles.



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