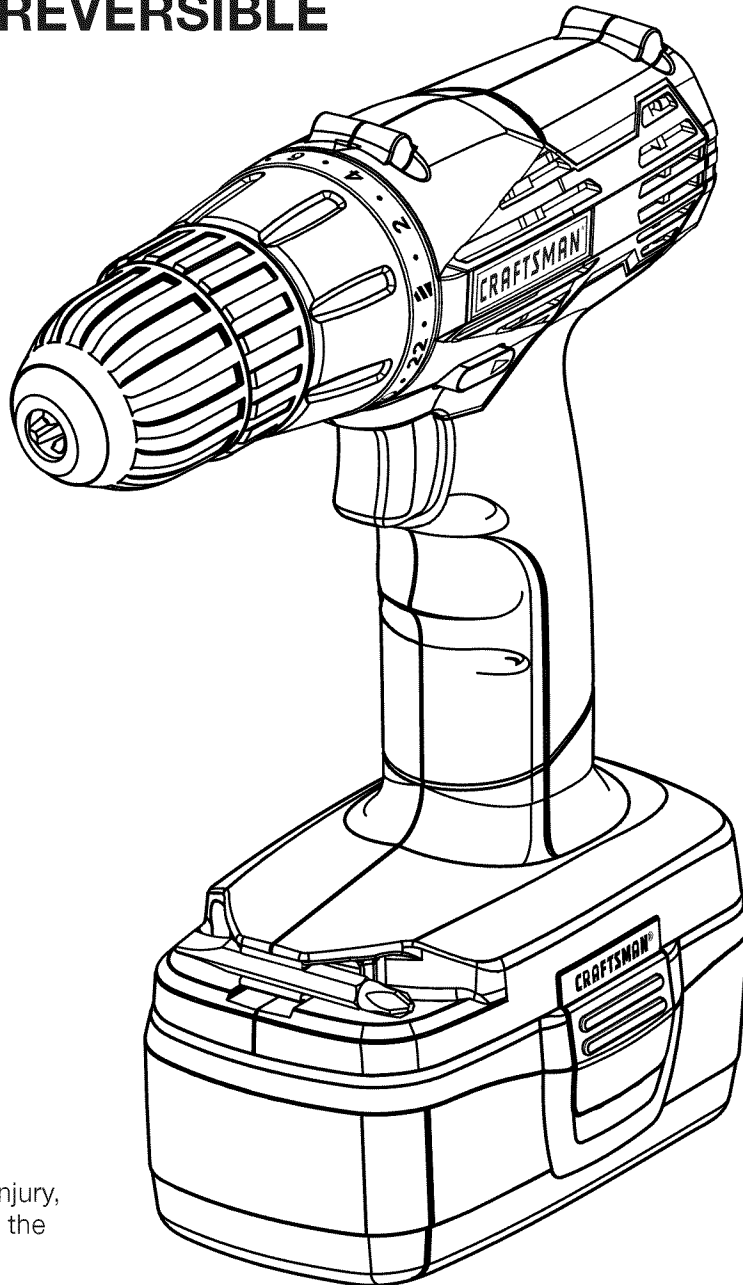


# OPERATOR'S MANUAL

# CRAFTSMAN<sup>®</sup>

## 3/8 in., 19.2 VOLT CORDLESS DRILL-DRIVER VARIABLE SPEED/REVERSIBLE

Model No.  
315.116890



**⚠ WARNING:** To reduce the risk of injury, the user must read and understand the operator's manual before using this product.

Customer Help Line: 1-800-932-3188

Sears, Roebuck and Co., 3333 Beverly Rd., Hoffman Estates, IL 60179 USA  
Visit the Craftsman web page: [www.sears.com/craftsman](http://www.sears.com/craftsman)

987000-433  
8-15-08 (REV:01)

**Save this manual for future reference**



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## WARRANTY

### ONE-YEAR FULL WARRANTY ON CRAFTSMAN TOOL

If this Craftsman tool fails to give complete satisfaction within one year from date of purchase, **RETURN IT TO ANY SEARS STORE OR PARTS AND REPAIR CENTER OR OTHER CRAFTSMAN OUTLET IN THE UNITED STATES FOR FREE REPAIR (or replacement if repair proves impossible).**

If this Craftsman tool is used for commercial or rental purposes, this warranty applies for only 90 days from the date of purchase.


This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**Sears, Roebuck and Co., Hoffman Estates, IL 60179**

## INTRODUCTION

This product has many features for making its use more pleasant and enjoyable. Safety, performance, and dependability have been given top priority in the design of this product making it easy to maintain and operate.

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 **WARNING:** Some dust created by power sanding, sawing, grinding, drilling, 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 and cement and other masonry products, and
- 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 work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

# GENERAL SAFETY RULES

**⚠ WARNING - Read all instructions.** Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term “power tool” in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

## SAVE THESE INSTRUCTIONS

### WORK AREA SAFETY

- **Keep 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 which may ignite the dust or fumes.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

### ELECTRICAL SAFETY

- **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.
- **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.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **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.
- **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.
- **Use battery only with charger listed.**

MODEL	BATTERY PACK (Li-ion)	CHARGER
315.116890	315.113740 (130285003, 130285006) 315.113710 (130156001)	(Multi-Chemistry) 315.259260 (140351001)
	<b>BATTERY PACK (Ni-Cd)</b>	315.259260 (140351001) 1425301 (≠11041)
	130279003, 130279005 (Item No. ≠11375)	315.115730 (140301003) 315.115720 (140301001) 140107001

### PERSONAL SAFETY

- **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.
- **Use safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **Avoid accidental starting. Ensure the switch is in the off-position before plugging in.** Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
- **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.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust-related hazards.
- **Do not wear loose clothing or jewelry. Contain long hair.** Loose clothes, jewelry, or long hair can be drawn into air vents.
- **Do not use on a ladder or unstable support.** Stable footing on a solid surface enables better control of the power tool in unexpected situations.

### POWER TOOL USE AND CARE

- **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.
- **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.
- **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.
- **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.
- **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.
- **Keep cutting tools sharp and clean.** Properly main-

# GENERAL SAFETY RULES

tained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

- **Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, 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.

## BATTERY TOOL USE AND CARE


- **Ensure the switch is in the off position before inserting battery pack.** Inserting the battery pack into power tools that have the switch on invites accidents.
- **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.
- **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- **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.

- **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

- **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.

 **WARNING!** To reduce the risk of injury, user must read instruction manual.

- **When servicing a power 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

- **Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a “live” wire will also make exposed metal parts of the tool “live” and shock the operator.
- **Know your power tool. Read operator’s manual carefully. Learn its applications and limitations, as well as the specific potential hazards related to this power tool.** Following this rule will reduce the risk of electric shock, fire, or serious injury.
- **Always wear safety glasses with side shields.** Everyday glasses have only impact resistant lenses. They are NOT safety glasses. Following this rule will reduce the risk of eye injury.
- **Protect your lungs. Wear a face or dust mask if the operation is dusty.** Following this rule will reduce the risk of serious personal injury.
- **Protect your hearing. Wear hearing protection during extended periods of operation.** Following this rule will reduce the risk of serious personal injury.
- **Battery tools do not have to be plugged into an electrical outlet; therefore, they are always in operating condition. Be aware of possible hazards when not using your battery tool or when changing accessories.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not place battery tools or their batteries near fire or heat.** This will reduce the risk of explosion and possibly injury.
- **Do not crush, drop or damage battery pack. Do not use a battery pack or charger that has been dropped or received a sharp blow.** A damaged

battery is subject to explosion. Properly dispose of a dropped or damaged battery immediately.

- **Batteries can explode in the presence of a source of ignition, such as a pilot light.** To reduce the risk of serious personal injury, never use any cordless product in the presence of open flame. An exploded battery can propel debris and chemicals. If exposed, flush with water immediately.
- **Do not charge battery tool in a damp or wet location.** Following this rule will reduce the risk of electric shock.
- **For best results, your battery tool should be charged in a location where the temperature is more than 50°F but less than 100°F.** To reduce the risk of serious personal injury, do not store outside or in vehicles.
- **Under extreme usage or temperature conditions, battery leakage may occur. If liquid comes in contact with your skin, wash immediately with soap and water, then neutralize with lemon juice or vinegar. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention.** Following this rule will reduce the risk of serious personal injury.
- **Save these instructions.** Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also to prevent misuse of the product and possible injury.

# SAFETY RULES FOR CHARGER

**⚠ WARNING! READ AND UNDERSTAND ALL INSTRUCTIONS.** Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

- **Before using battery charger,** read all instructions and cautionary markings in this manual, on battery charger, battery, and product using battery to prevent misuse of the products and possible injury or damage.

**⚠ CAUTION:** To reduce the risk of electric shock or damage to the charger and battery, charge only nickel-cadmium rechargeable batteries as specifically designated on your charger. Other types of batteries may burst, causing personal injury or damage.

- **Do not use charger outdoors or expose to wet or damp conditions.** Water entering charger will increase the risk of electric shock.
- **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.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not abuse cord or charger.** Never use the cord to carry the charger. Do not pull the charger cord rather than the plug when disconnecting from receptacle. Damage to the cord or charger could occur and create an electric shock hazard. Replace damaged cords immediately.
- **Make sure cord is located so that it will not be stepped on, tripped over, come in contact with sharp edges or moving parts or otherwise subjected to damage or stress.** This will reduce the risk of accidental falls, which could cause injury, and damage to the cord, which could result in electric shock.
- **Keep cord and charger from heat to prevent damage to housing or internal parts.**
- **Do not let gasoline, oils, petroleum-based products, etc. come in contact with plastic parts.** They contain chemicals that can damage, weaken, or destroy plastic.

- **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; and
- c. That wire size is large enough for AC ampere rating of charger as specified below:

Cord Length (Feet)	25'	50'	100'
Cord Size (AWG)	16	16	16

**NOTE:** AWG = American Wire Gauge

- **Do not operate charger with a damaged cord or plug,** which could cause shorting and electric shock. If damaged, have the charger replaced by an authorized serviceman.
- **Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way.** Take it to an authorized serviceman for electrical check to determine if the charger is in good working order.
- **Do not disassemble charger.** Take it to an authorized serviceman when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
- **Unplug charger from outlet before attempting any maintenance or cleaning to reduce the risk of electric shock.**
- **Disconnect charger from the power supply when not in use.** This will reduce the risk of electric shock or damage to the charger if metal items should fall into the opening. It also will help prevent damage to the charger during a power surge.
- **Risk of electric shock.** Do not touch uninsulated portion of output connector or uninsulated battery terminal.
- **Save these instructions.** Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also to prevent misuse of the product and possible injury.

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## IMPORTANT SAFETY INSTRUCTIONS






### 1. SAVE THESE INSTRUCTIONS

This manual contains important safety and operating instructions for battery charger 140107001.




2. **Before using battery charger,** read all instructions and cautionary markings on battery charger, battery, and product using battery.
3. **CAUTION:** To reduce the risk of injury, charge only nickel-cadmium rechargeable batteries. Other types of batteries may burst, causing personal injury or damage.

# SYMBOLS

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the product better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
min	Minutes	Time
~	Alternating Current	Type of current
≡	Direct Current	Type or a characteristic of current
$n_0$	No Load Speed	Rotational speed, at no load
	Class II Tool	Double-insulated construction
.../min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
	Read The Operator's Manual	To reduce the risk of injury, user must read and understand operator's manual before using this product.
	Eye Protection	Always wear safety goggles or safety glasses with side shields and, as necessary, a full face shield when operating this product.
	Safety Alert	Precautions that involve your safety.

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOL	SIGNAL	MEANING
	<b>DANGER:</b>	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	<b>WARNING:</b>	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	<b>CAUTION:</b>	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	<b>CAUTION:</b>	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

# SYMBOLS

## SERVICE

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the product to your nearest **SEARS PARTS AND REPAIR SERVICE CENTER** for repair. When servicing, use only identical replacement parts.



**WARNING:** To avoid serious personal injury, do not attempt to use this product until you read thoroughly and understand completely the operator's manual. If you do not understand the warnings and instructions in the operator's manual, do not use this product. Call the Craftsman Consumer Helpline at 1-800-932-3188 for assistance.

## WARNING:



The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and, when needed, a full face shield. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.

## SAVE THESE INSTRUCTIONS

## FEATURES

### PRODUCT SPECIFICATIONS

Chuck .....3/8 in. Keyless  
Motor ..... 19.2 Volt DC  
Switch..... VSR (Variable Speed Reversible)  
No Load Speed .....0 - 650 r/min. (RPM)

Clutch ..... 24 Positions  
Torque..... 125 in.lb.  
Battery Pack Voltage ..... 19.2 Volt DC  
Charger Input..... 120 V, 60 Hz, AC only  
Charge Rate .....10-12 hours

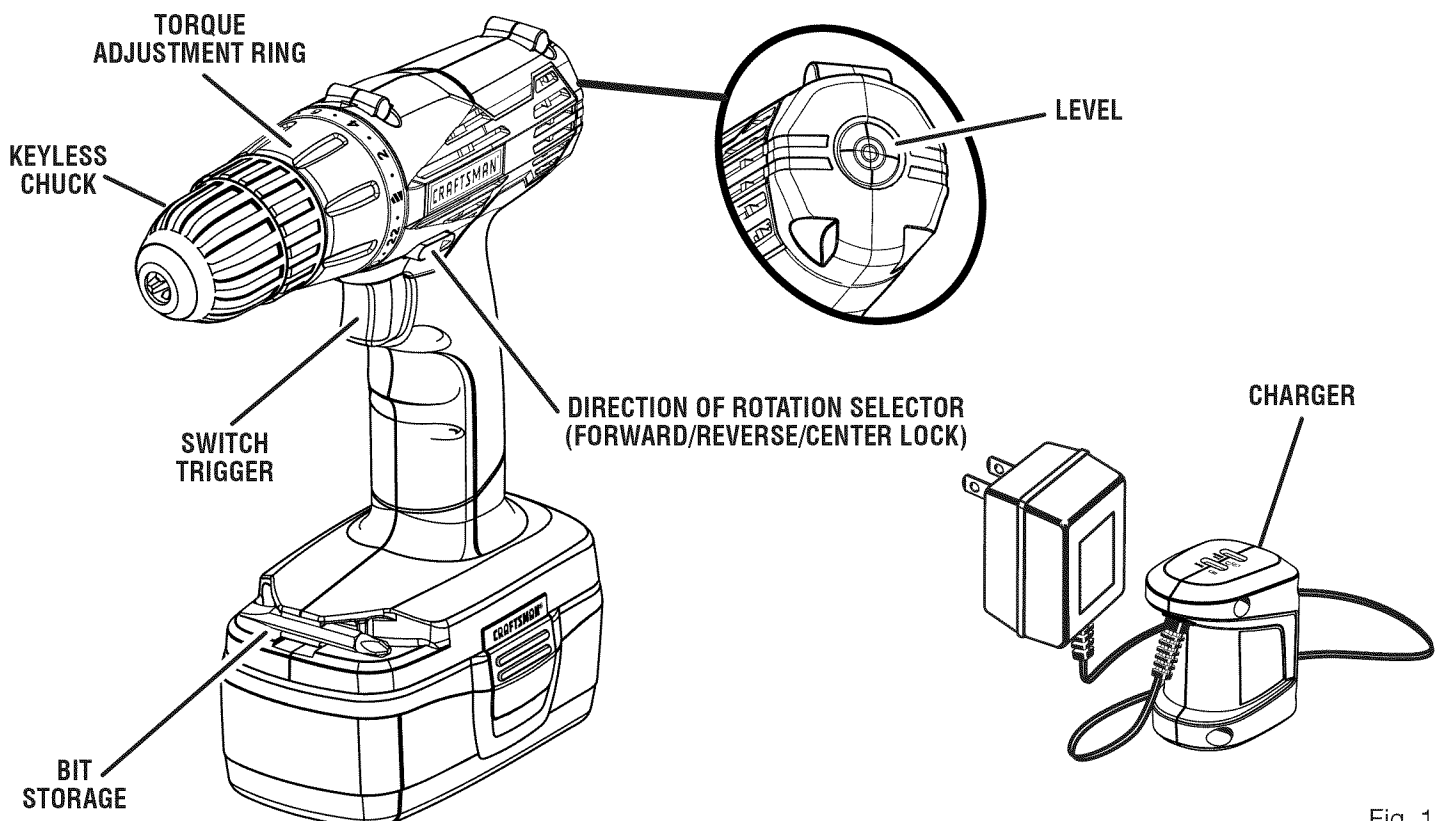


Fig. 1

# FEATURES

## KNOW YOUR DRILL-DRIVER

See Figure 1.

The safe use of this product requires an understanding of the information on the tool and in this operator's manual as well as a knowledge of the project you are attempting. Before use of this product, familiarize yourself with all operating features and safety rules.

## BIT STORAGE

Bit provided with the drill-driver can be placed in the storage area, located on the base of the tool.

## 10-12 HOUR CHARGER

Your drill comes with a 10-12 hour charger for overnight charging of your 19.2 Volt battery (included).

## DIRECTION OF ROTATION SELECTOR (FORWARD/REVERSE/CENTER LOCK)

Your drill-driver has a direction of rotation (forward/reverse/center lock) selector located above the switch trigger for changing the direction of bit rotation. Setting the direction of rotation selector in the **OFF** (center lock) position will lock the switch trigger to help reduce the possibility of accidental starting when not in use.

## KEYLESS CHUCK

The keyless chuck allows you to hand-tighten or release the drill bit in the chuck jaws.

## LEVEL

A level is located on the rear of the motor housing to help keep the drill bit level during use.

## TORQUE ADJUSTMENT RING

Your drill has a 24-position clutch. The torque adjustment ring can be turned to select the right amount of torque for your application.

## VARIABLE SPEED

The variable speed switch trigger delivers higher speed with increased trigger pressure and lower speed with decreased trigger pressure.

# ASSEMBLY


## UNPACKING


This product has been shipped completely assembled.


- Carefully remove the tool and any accessories from the box. Make sure that all items listed in the packing list are included.
- Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.
- If any parts are damaged or missing, please call 1-800-932-3188 for assistance.

## PACKING LIST

Drill-Driver  
Double-ended Bit  
Battery  
Charger  
Operator's Manual

 **WARNING:** If any parts are damaged or missing do not operate this tool until the parts are replaced. Failure to heed this warning could result in serious personal injury.

 **WARNING:** Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

 **WARNING:** To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the tool when assembling parts.



# OPERATION

**⚠ WARNING:** Do not allow familiarity with tools to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.

**⚠ WARNING:** Always wear safety goggles or safety glasses with side shields when operating tools. Failure to do so could result in objects being thrown into your eyes, resulting in possible serious injury.

**⚠ WARNING:** Do not use any attachments or accessories not recommended by the manufacturer of this tool. The use of attachments or accessories not recommended can result in serious personal injury.

## APPLICATIONS

You may use this product for the purposes listed below:

- Drilling in all types of wood products (lumber, plywood, paneling, composition board, and hard board)
- Drilling in ceramics, plastics, fiberglass, and laminates
- Drilling in metals

This product will accept DieHard® 19.2 V lithium-ion battery packs and Craftsman 19.2 V nickel-cadmium battery packs.

For complete charging instructions, refer to the Operator's Manual for the battery packs and chargers listed in the General Safety Rules.

## LED FUNCTIONS OF CHARGER

### LED WILL BE ON TO INDICATE STATUS OF CHARGER AND BATTERY PACK:

- Red LED on = Battery pack is charging
- Orange LED = Charger is evaluating battery pack

## CHARGING THE BATTERY PACK

See Figure 2.

**Use only these Craftsman 19.2 V battery packs with this charger: 140107001 (130279003 and 130279005)**

The battery pack for this tool has been shipped in a low charge condition to prevent possible problems. Therefore, you should charge them before use.

**NOTE:** Batteries will not reach full charge the first time they are charged. Allow several cycles (operation followed by recharging) for them to become fully charged.

If the charger does not charge the battery pack under normal circumstances, return both the battery pack and charger to your nearest Sears or other qualified service center for electrical check.

## CHARGING A COOL BATTERY PACK

- Connect the charger to the power supply. Make sure the power supply is normal household voltage, **120 volts, 60 Hz, AC only.**

- Place the battery pack on a stable surface. Place the charger over the battery stem.
- Press down on the charger to be sure contacts on the battery pack engage properly with contacts in the charger.
- The charge indicator light (LED) will light up red and glow when the charger is properly connected to power supply. This light indicates the charger is operating properly. It will remain on until battery pack is removed from charger or charger is disconnected from power supply.
- If both red and orange LED indicators glow, the battery pack is deeply or completely discharged, and 10-12 hours or longer of charging time is required to fully recharge battery pack.

**NOTE:** The orange LED will go out as the battery pack recovers from the deep discharge. If after 30 minutes the orange LED is still glowing then the pack may be defective and should be replaced.

- The battery pack will become slightly warm to the touch while charging. This is normal and does not indicate a problem.
- Do not place the charger and battery pack in an area of extreme heat or cold. They will work best at normal room temperature.

**NOTE:** The charger and battery pack should be placed in a location where the temperature is more than 50°F but less than 100°F.

- When batteries become fully charged, unplug the charger from the power supply and remove the battery pack.

## CHARGING A HOT BATTERY PACK

When using a tool continuously, the batteries in the battery pack will become hot. You should let a hot battery pack cool down for approximately 30 minutes before attempting to recharge.

**NOTE:** This situation only occurs when continuous use of a tool causes the batteries to become hot. It does not occur under normal circumstances. Refer to "**CHARGING A COOL BATTERY PACK**" for normal recharging of batteries.

## TO INSTALL BATTERY PACK

See Figure 3.

- Lock the switch trigger by placing the direction of rotation selector in the center position.
- Place battery pack in the tool. Align raised rib on battery pack with groove inside tool.
- Make sure the latches on each side of the battery pack snap into place and battery pack is secured in tool before beginning operation.

**CAUTION:** When placing battery pack in the tool, be sure raised rib on battery pack aligns with groove inside tool and latches snap into place properly. Improper assembly of battery pack can cause damage to internal components.

# OPERATION

**⚠ WARNING:** Always remove battery pack from your tool when you are assembling parts, making adjustments, cleaning, or when not in use. Removing battery pack will prevent accidental starting that could cause serious personal injury.

## TO REMOVE BATTERY PACK

See Figure 3.

- Lock the switch trigger by placing the direction of rotation selector in the center position.
- Locate latches on end of battery pack and depress to release battery pack from the tool.
- Remove battery pack.

**⚠ WARNING:** Battery products are always in operating condition. Therefore, the switch should always be locked when not in use or carrying at your side.

## SWITCH TRIGGER

See Figure 4.

To turn the drill **ON**, depress the switch trigger. To turn it **OFF**, release the switch trigger.

## VARIABLE SPEED

The variable speed switch trigger delivers higher speed with increased trigger pressure and lower speed with decreased trigger pressure.

**NOTE:** You might hear a whistling or ringing noise from the switch during use. Do not be concerned; this is a normal part of the switch function.

## DIRECTION OF ROTATION SELECTOR (FORWARD/REVERSE/CENTER LOCK)

See Figure 4.

The direction of bit rotation is reversible and is controlled by a selector located above the switch trigger. With the drill held in normal operating position, the direction of rotation selector should be positioned to the left of the switch trigger for forward drilling. The drilling direction is reversed when the selector is to the right of the switch trigger.

Setting the switch trigger in the **OFF** (center lock) position helps reduce the possibility of accidental starting when not in use.

**CAUTION:** To prevent gear damage, always allow the chuck to come to a complete stop before changing the direction of rotation.

To stop the drill, release the switch trigger and allow the chuck to come to a complete stop.

**NOTE:** The drill will not run unless the direction of rotation selector is pushed fully to the left or right.

Avoid running the drill at low speeds for extended periods of time. Running at low speeds under constant usage may cause the drill to become overheated. If this occurs, cool the drill by running it without a load and at full speed.

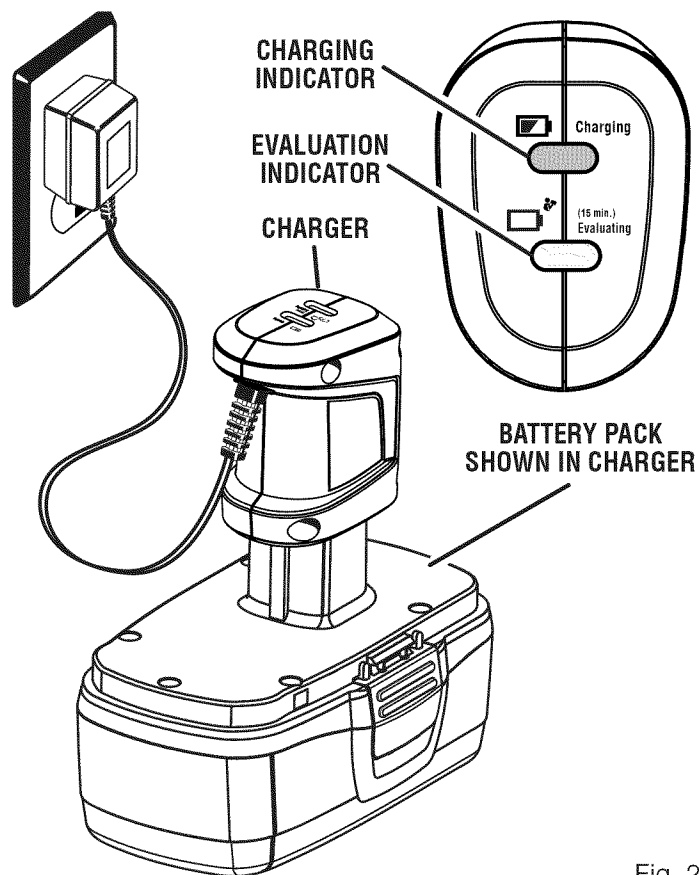


Fig. 2

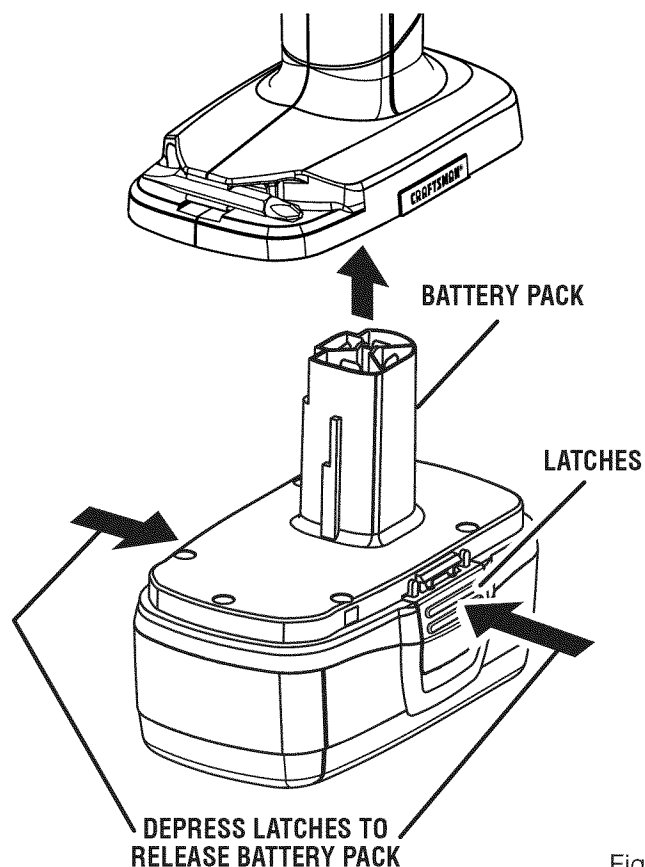


Fig. 3

# OPERATION

## KEYLESS CHUCK

See Figure 5.

The drill has a keyless chuck to tighten or release bits in the chuck jaws. The arrows on the chuck indicate which direction to rotate the chuck body in order to **LOCK** (tighten) or **UNLOCK** (release) the bit.

**⚠ WARNING:** Do not hold the chuck with one hand and use the power of the drill to tighten the chuck jaws on the bit. The chuck body could slip in your hand, or your hand could slip and come in contact with the rotating bit. This could cause an accident resulting in serious personal injury.

## ADJUSTABLE TORQUE CLUTCH

This product is equipped with an adjustable torque clutch for driving different types of screws into different materials. The proper setting depends on the type of material and the size of screw you are using.

## ADJUSTING TORQUE

See Figure 6.

There are twenty-four torque indicator settings located on the front of the drill.

- Rotate the adjusting ring to the desired setting.
  - 1 - 4 For driving small screws
  - 5 - 8 For driving screws into soft material
  - 9 - 12 For driving screws into soft and hard materials
  - 13 - 16 For driving screws into hard wood
  - 17 - 20 For driving large screws
  - 21- ∞ For heavy drilling

## INSTALLING BITS

See Figures 7 - 8.

- Lock the switch trigger by placing the direction of rotation selector in the center position.
- Open or close the chuck jaws to a point where the opening is slightly larger than the bit size you intend to use. Also, raise the front of the drill slightly to keep the bit from falling out of the chuck jaws.
- Insert the bit.

**⚠ WARNING:** Make sure to insert the bit straight into the chuck jaws. Do not insert the bit into the chuck jaws at an angle then tighten, as shown in figure 9. This could cause the bit to be thrown from the drill, resulting in possible serious personal injury or damage to the chuck.

- Tighten the chuck jaws securely on the bit.

**NOTE:** Rotate the chuck body in the direction of the arrow marked **LOCK** to close the chuck jaws. Do not use a wrench to tighten or loosen the chuck jaws.

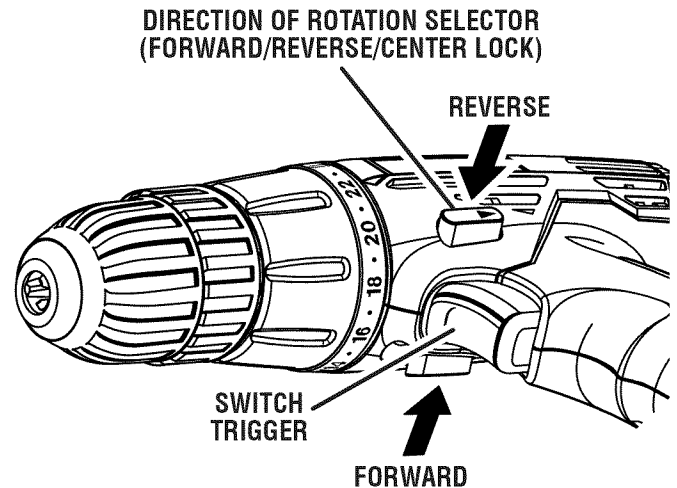


Fig. 4

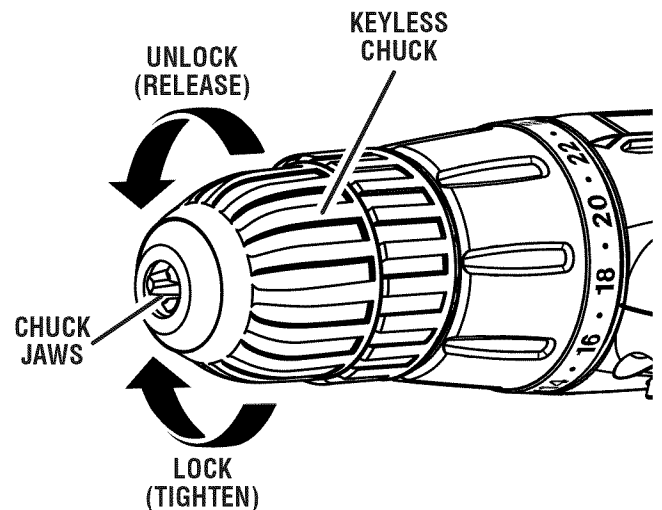


Fig. 5

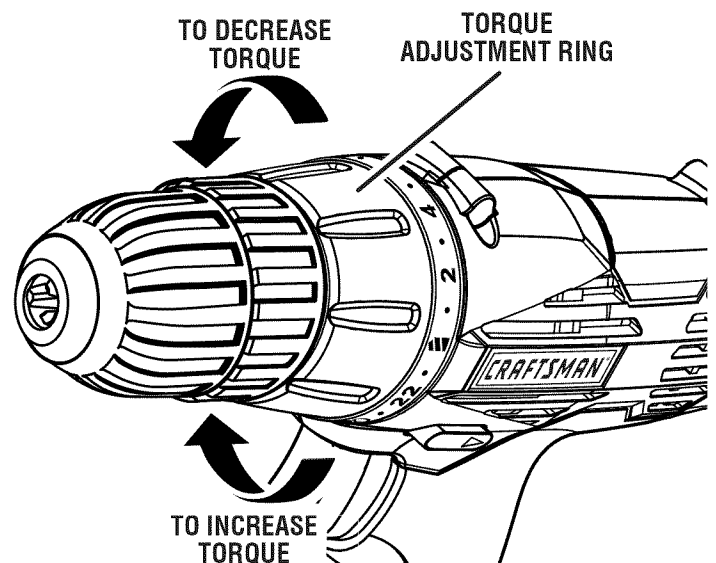


Fig. 6

# OPERATION

## REMOVING BITS

See Figure 8.

- Lock the switch trigger by placing the direction of rotation selector in the center position.
- Open the chuck jaws.  
**NOTE:** Rotate the chuck body in the direction of the arrow marked **UNLOCK** to open the chuck jaws. Do not use a wrench to tighten or loosen the chuck jaws.
- Remove the bit.

## DRILLING

See Figure 9.

A level is located on the top of the motor housing to help keep the drill bit level during use.

- Check the direction of rotation selector for the correct setting (forward or reverse).
- Secure the material to be drilled in a vise or with clamps to keep it from turning as the drill bit rotates.
- Hold the drill firmly and place the bit at the point to be drilled.
- Depress the switch trigger to start the drill.
- Move the drill bit into the workpiece, applying only enough pressure to keep the bit cutting. Do not force the drill or apply side pressure to elongate a hole. Let the tool do the work.

**⚠ WARNING:** Be prepared for binding at bit break-through. When these situations occur, drill has a tendency to grab and kick opposite to the direction of rotation and could cause loss of control when breaking through material. If not prepared, this loss of control can result in possible serious injury.

- When drilling hard, smooth surfaces, use a center punch to mark the desired hole location. This will prevent the drill bit from slipping off-center as the hole is started.
- When drilling metals, use a light oil on the drill bit to keep it from overheating. The oil will prolong the life of the bit and increase the drilling action.
- If the bit jams in the workpiece or if the drill stalls, stop the tool immediately. Remove the bit from the workpiece and determine the reason for jamming.

**NOTE:** This drill has an electric brake. When the switch trigger is released, the chuck stops turning. When the brake is functioning properly, sparks will be visible through the vent slots on the housing. This is normal and is the action of the brake.

## WOOD DRILLING

For maximum performance, use high speed steel bits for wood drilling.

- Begin drilling at a very low speed to prevent the bit from slipping off the starting point. Increase the speed as the drill bit bites into the material.

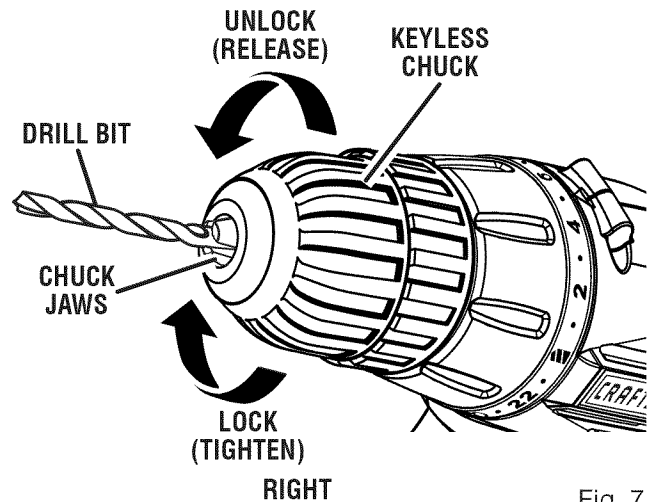


Fig. 7

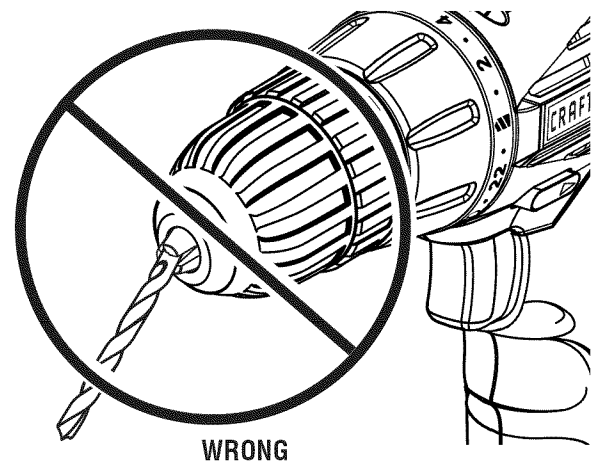


Fig. 8

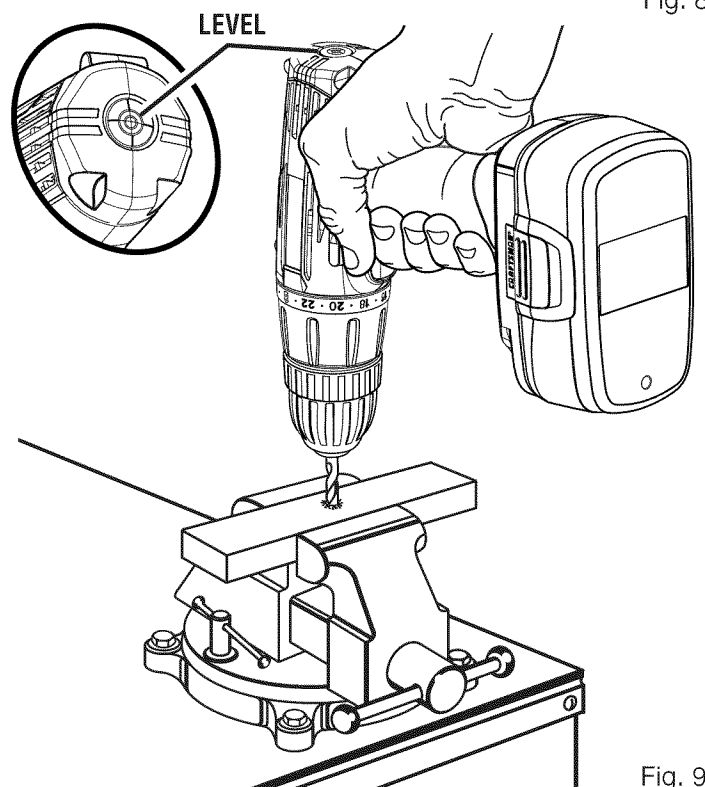


Fig. 9

# OPERATION

- When drilling through holes, place a block of wood behind the workpiece to prevent ragged or splintered edges on the back side of the hole.

## METAL DRILLING

For maximum performance, use high speed steel bits for metal or steel drilling.

- Begin drilling at a very low speed to prevent the bit from slipping off the starting point.
- Maintain a speed and pressure which allows cutting

without overheating the bit. Applying too much pressure will:

- Overheat the drill;
  - Wear the bearings;
  - Bend or burn bits; and
  - Produce off-center or irregular-shaped holes.
- When drilling large holes in metal, start with a small bit, then finish with a larger bit. Also, lubricate the bit with oil to improve drilling action and increase bit life.

# MAINTENANCE

## CHUCK REMOVAL

See Figures 10 - 12.

The chuck may be removed and replaced by a new one.

- Lock the switch trigger by placing the direction of rotation selector in center position.
- Insert a 5/16 in. or larger hex key into the chuck of the drill and tighten the chuck jaws securely.
- Tap the hex key sharply with a mallet in a clockwise direction. This will loosen the screw in the chuck for easy removal.
- Open the chuck jaws and remove the hex key.
- Using a screwdriver, remove the chuck screw by turning it in a clockwise direction.

**NOTE:** The chuck screw has left hand threads.

- Insert the hex key into the chuck and tighten the chuck jaws securely. Tap sharply with a mallet in a counter-clockwise direction. This will loosen the chuck on the spindle. It can now be unscrewed by hand.

## TO RETIGHTEN A LOOSE CHUCK

The chuck may become loose on the spindle and develop a wobble. Also, the chuck screw may become loose, causing the chuck jaws to bind and prevent them from closing.

**To tighten:**

- Lock the switch trigger by placing the direction of rotation selector in the center position.
- Open the chuck jaws.
- Insert the hex key into the chuck and tighten the chuck jaws securely. Tap the hex key sharply with a mallet in a clockwise direction. This will tighten the chuck on the spindle.
- Open the chuck jaws and remove the hex key.
- Using a screwdriver, tighten the chuck screw by turning in a counterclockwise direction.

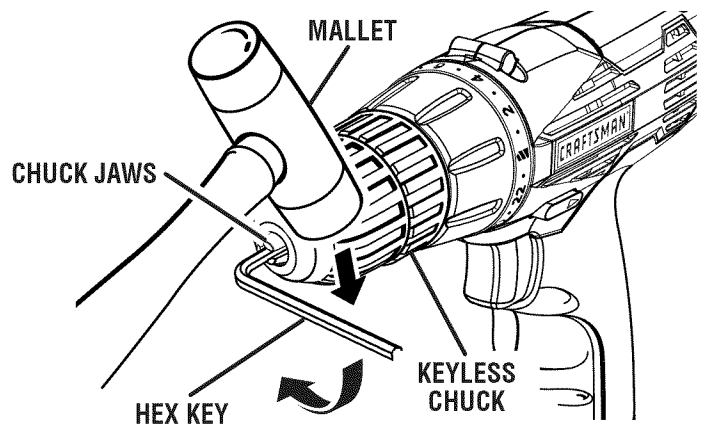


Fig. 10

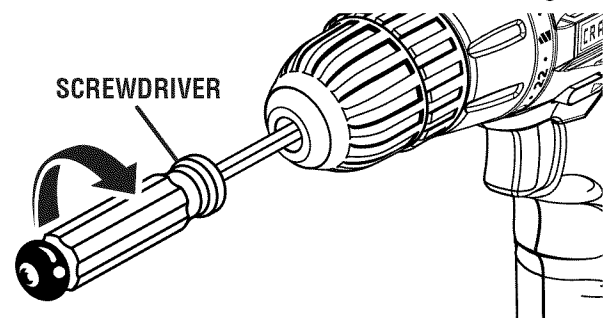


Fig. 11

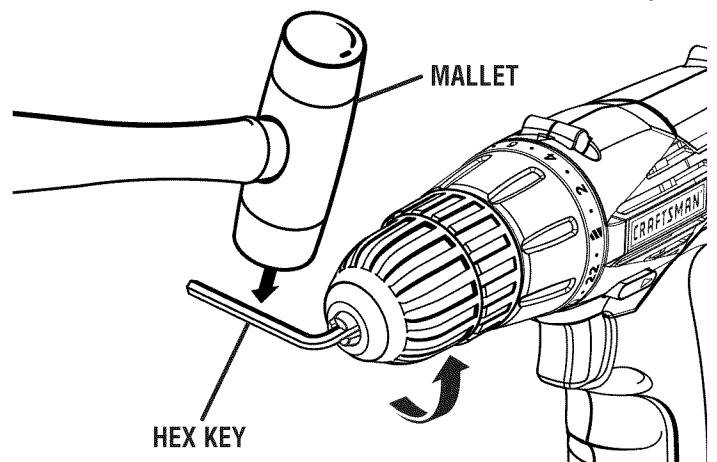


Fig. 12

# MAINTENANCE

**⚠ WARNING:** When servicing, use only identical Craftsman replacement parts. Use of any other part may create a hazard or cause product damage.

**⚠ WARNING:** Always wear safety goggles or safety glasses with side shields when using compressed air to clean tools. If the operation is dusty, also wear a dust mask.

**⚠ WARNING:** To avoid serious personal injury, always remove the battery pack from the tool when cleaning, performing any maintenance, or when storing the tool.

## GENERAL MAINTENANCE

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, grease, etc.

**⚠ WARNING:** Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic which may result in serious personal injury.

Only the parts shown on the parts list are intended to be repaired or replaced by the customer. All other parts should be replaced at a Sears Service Center.

## BATTERIES

This product will accept DieHard® 19.2 V lithium-ion battery packs and Craftsman 19.2 V nickel-cadmium battery packs.

The batteries for this product have been designed to provide maximum trouble-free life. However, like all batteries, they will eventually wear out. Do not disassemble battery pack and attempt to replace the batteries. Handling of these batteries, especially when wearing rings and jewelry, could result in a serious burn.

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

### For nickel-cadmium batteries:

- Remove the battery pack from the charger once it is fully charged and ready for use.

For battery pack storage longer than 30 days:

- Store the battery pack where the temperature is below 80°F.
- Store battery packs in a “discharged” condition.

## BATTERY PACK REMOVAL AND PREPARATION FOR RECYCLING



To preserve natural resources, please recycle or dispose of batteries properly.

This product uses nickel-cadmium batteries. Local, state or federal laws may prohibit disposal of batteries in ordinary trash.

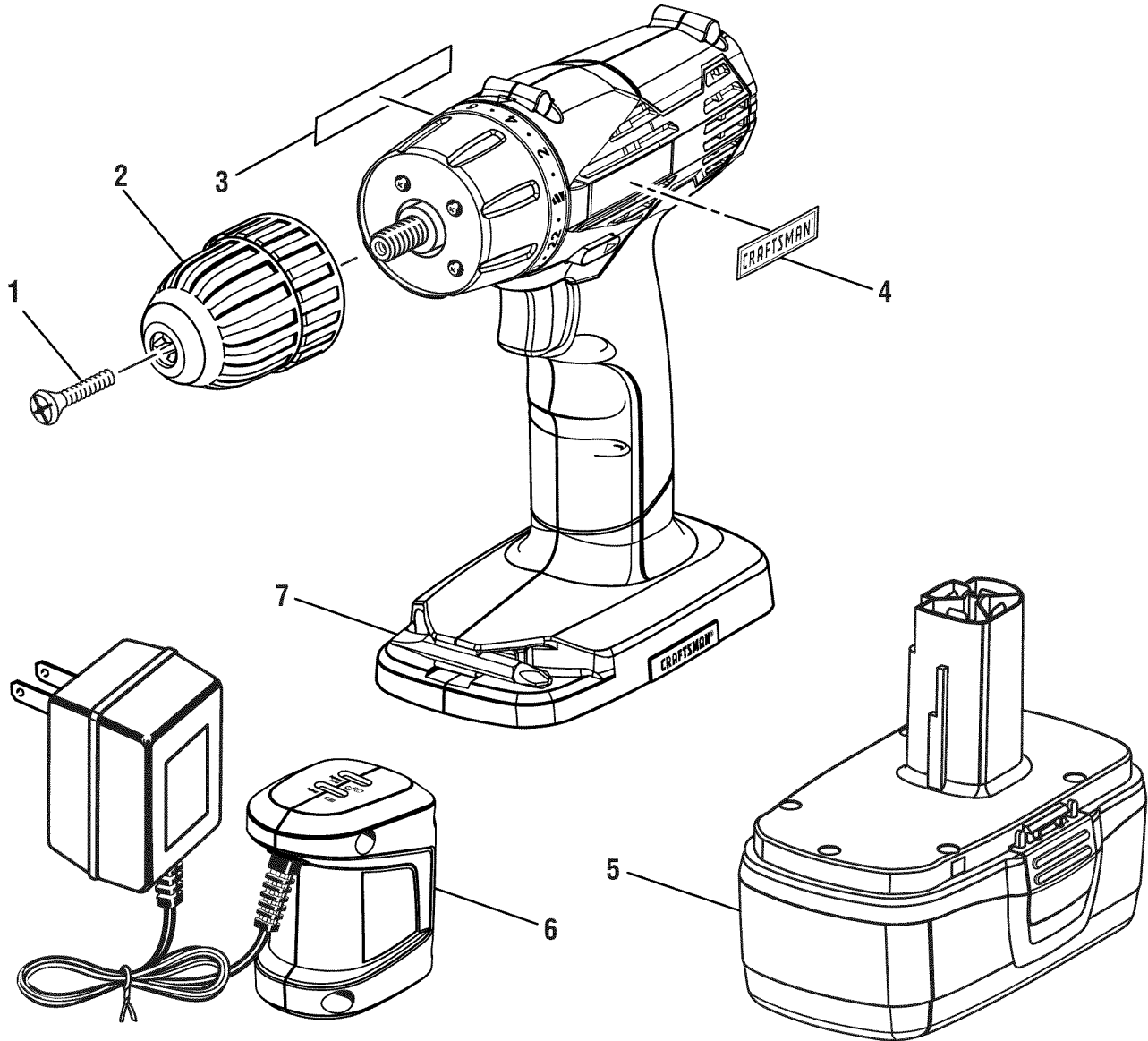
Consult your local waste authority for information regarding available recycling and/or disposal options.

**⚠ WARNING:** Upon removal, cover the battery pack's terminals with heavy-duty adhesive tape. Do not attempt to destroy or disassemble battery pack or remove any of its components. Lithium-ion and nickel-cadmium batteries must be recycled or disposed of properly. Also, never touch both terminals with metal objects and/or body parts as short circuit may result. Keep away from children. Failure to comply with these warnings could result in fire and/or serious injury.

**CRAFTSMAN 19.2 VOLT DRILL-DRIVER – MODEL NUMBER 315.116890**

The model number will be found on a plate attached to the motor housing. Always mention the model number in all correspondence regarding your **DRILL-DRIVER** or when ordering repair parts.

**SEE BACK PAGE FOR PARTS ORDERING INSTRUCTIONS**



Key No.	Part Number	DESCRIPTION	Qty.
1	660120002	Screw (Special).....	1
2	690037075	Chuck .....	1
3	940045280	Data Label .....	1
4	940114217	Logo Label .....	1
5	130279005	Battery Pack (Item No. 9113750) .....	1
6	140107001	Charger .....	1
7	670821006	Double-ended Bit .....	1
	987000433	Operator's Manual	

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