**Operator's Manual** 

# CRAFTSMAN° NEXTEC

## 12.0-VOLT LITHIUM-ION CORDLESS RIGHT-ANGLE IMPACT DRIVER

Model No. 320.17562







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

• Warranty

- Safety
- Assembly
- Operation
- Maintenance
- Español

Charge battery before first use

Sears Brands Management Corporation, Hoffman Estates, IL 60179 U.S.A.

www.craftsman.com

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## **CRAFTSMAN ONE YEAR LIMITED WARRANTY**

FOR ONE YEAR from the date of purchase, this power tool, battery pack and charger are warranted against any defects in material or workmanship. With proof of purchase, defective product will be replaced free of charge.

For warranty coverage details to obtain free replacement, visit the web site: www.craftsman.com

This warranty does not cover nut driver bits and screw driver bit which are expendable parts that can wear out from normal use within the warranty period.

This warranty is void if this product is ever used while providing commercial services or if rented to another person.

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

Sears Brands Management Corporation, Hoffman Estates, IL 60179

## SAVE THESE INSTRUCTIONS!

## **READ ALL INSTRUCTIONS**

This cordless 12V Right-Angle Impact Driver 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.

**A** WARNING: Some dust created by using power tools contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

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## SAFETY SYMBOLS

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols and the explanations with them deserve your careful attention and understanding. The symbol warnings do not, by themselves, eliminate any danger. The instructions and warnings they give are no substitutes for proper accident prevention measures.

**WARNING:** Be sure to read and understand all safety instructions in this manual, including all safety alert symbols such as **"DANGER," "WARNING,"** and **"CAUTION"** before using this Right-Angle Impact Driver. Failure to following all instructions listed in this manual may result in electric shock, fire, and/or serious personal injury.

## SAFETY SYMBOL MEANING

A SAFETY ALERT SYMBOL: Indicates DANGER, WARNING, OR CAUTION. May be used in conjunction with other symbols or pictographs.

**A** DANGER: Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.

**A** WARNING: Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

**A** CAUTION: Indicates an imminently hazardous situation, which, if not avoided, may result in death or serious injury.

NOTE: These inform the user of import information and/or instructions that could lead to equipment or other property damage if they are not followed. Each message is preceded by the word "NOTE," as in the example below:

NOTE: Equipment and/or property damage may result if these instructions are not followed.

**WARNING:** To ensure safety and reliability, all repairs should be performed by a qualified service technician at a Sears parts & Repair Service Center.



A 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 a full-face shield when needed. We recommend a 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

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

SYMBOL	NAME	DESIGNATION/EXPLANATION		
V	Volts	Voltage		
А	Amperes	Current		
Hz	Hertz	Frequency (cycles per second)		
W	Watt	Power		
min	Minutes	Time		
$\sim$	Alternating Current	Type of current		
	Direct Current	Type or a characteristic of current		
n <sub>o</sub>	No Load Speed	Rotational speed, at no load		
	Class II Construction	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.		
$\bigcirc$	Read The Operator's Manual	To reduce the risk of injury, user must read and understand operator's manual before using this product.		
$\bigcirc$	Eye Protection	Always wear safety goggles or safety glasses with side shields and a full face shield when operating this product.		
A	Safety Alert	Precautions that involve your safety.		
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.		
	No Hands Symbol	bol Failure to keep your hands away from the blade will result in serious personal injury		
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.		
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.		
$\bigotimes$	Hot Surface	To reduce the risk of injury or damage, avoid contact with any hot surface.		

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## SAFETY INSTRUCTIONS

## **GENERAL POWER TOOL SAFETY WARNINGS**

**WARNING: Read all safety warnings and instructions.** Failure to follow the warnings and instructions may result in electric shock, fire and/or serious personal injury.

#### Save all warnings and instructions for future reference.

The term "power tool" in all warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

#### WORK AREA SAFETY

- Keep your work area clean and well lit. Cluttered or dark areas invite accidents
- Do not operate power tools in explosive environments, 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 may 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 the risk of electric shock.
- 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.
- 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 the 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.
- If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.
- NOTE: The term "residual current device (RCD)" may be replaced by the term "ground fault circuit interrupter (GFCI)" or "earth leakage circuit breaker (ELCB)".

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• Use the battery only with the charger listed:

BATTERY PACK	CHARGER
320.11221	320.10006

#### PERSONAL SAFETY

- Stay alert, watch what you are doing, and use common sense when operating a power the tool. Do not use a power 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.
- Use personal protective equipment. Always wear eye protection. Protective equipment, such as dust mask, non-skid safety shoes, hard hat, or hearing protection, used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure that the switch is in the OFF
  position before connecting to power source and/or battery pack,
  picking up, or carrying the tool. Carrying power tools with your finger
  on the switch or energizing 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 that these are connected and properly used. Use of these devices can reduce dust-related hazards.

#### 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 more safely at the rate for which it was designated.
- 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.

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- 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 maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- Use the power tool, accessories, blades, 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**

- 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 the battery pack is not in use, keep it away from other metal objects, such as 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.
- 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.

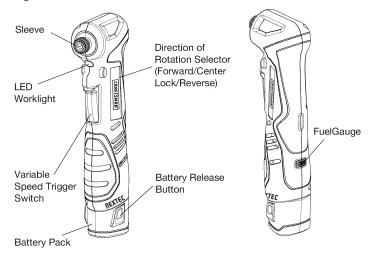
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## SPECIFIC SAFETY RULES FOR CORDLESS RIGHT ANGLE IMPACT DRIVER

- Hold power tools by insulated gripping surfaces when performing an operation where the 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.
- Secure the workpiece. Clamping devices or a vise will hold the workpiece in place better than the hand
- Always wait until the machine has come to a complete stop before placing it down. The tool can jam and lead to loss of control over the power tool.
- Before performing any kind of work on the machine (e. g., maintenance, tool change, etc) as well as when transporting and storing it, always set the rotational direction switch to the center position. Unintentional activation of the On/Off switch may result in personal injury.
- Do not open the battery. There is risk of a short circuit.
- Protect the battery from heat and fire. There is risk of explosion.
- Wear ear protectors with impact drills. Exposure to noise can cause hearing loss
- Use protective gloves when removing the bit from the tool, or first allow the clamp to cool down. The bit may be hot after prolonged use.
- Use protective gloves when operating the tool. Protective gloves can help to keep you from being burnt and hurt.
- Keep your hands away from the motor-housing vents. Hot gas comes from the vents during operation.
- **Do not** operate the tool at full-load for more than 30 seconds, as this can cause the motor to become too hot, which may damage the motor.
- Release the trigger immediately when the fasteners are sufficiently tightened to avoid breaking the fasteners.
- For best results, your battery tool should be charged in a location where the temperature is more than 32°F (0°C) but less that 104°F (40°C). Do not store outside or in vehicles.

## DESCRIPTION

## KNOW YOUR RIGHT-ANGLE IMPACT DRIVER (Fig.1) Fig. 1



PRODUCT SPECIFICATION			
Motor	12 Volt DC		
Collar	1/4"		
Switch	VSR (Variable Speed Reversible)		
No Load Speed	0-2100 RPM		
Impacts per minute	0-3400 BPM		
Torque	700 in.lbs		
Driver Weight (without battery)	1.83 lbs (without battery)		
Battery Type	Lithium-Ion		
Battery Voltage	12 Volt DC		
Charger Input	120-Volts, 60 Hz AC only		
Optimum Charging Temperature	32°F (0°C) -104°F (40°C)		

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

### VARIABLE SPEED

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

## FORWARD/CENTER LOCK/REVERSE

The direction-of-rotation selector located above the trigger switch changes the direction of bit rotation. Setting the trigger switch in the OFF (center lock) position helps to reduce the possibility of accidental starting.

## LED WORK LIGHT

Pressing the trigger switch illuminates the LED worklight. This feature provides extra light for increased visibility.

### FuelGauge

Indicates the battery-pack charge level.

## ASSEMBLY

A WARNING: If any part is broken or missing, do not attempt to plug in the power cord, attach the battery pack or operate the 12V Right-Angle Impact Driver until the broken or missing part is replaced. Failure to do so could result in possibly serious injury.

**A** WARNING: Do not attempt to modify this 12V Right-Angle Impact Driver 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 injury.

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

## 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 that no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.

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 If any parts are damaged or missing, please refer to the numbers listed on the back page of operator's manual.

## PACKING LIST

Right-Angle Impact Driver, soft case, 1-3/8" Phillips screwdriver bit, ¼" nut driver bit, 3/8" nut driver bit, 5/16" nut driver bit, operator's manual.

### OPERATION

#### LOW-BATTERY CAPACITY INDICATOR

NOTE: The new battery pack is not fully charged!

First, read the safety rules, and then follow the instructions in the sections entitled "Important charging notes" and "Charging the battery".

## Important charging notes

- 1. Longest life and best performance can be obtained if batteries are charged at normal room temperature.
- 2. While charging a battery, the charger will normally become warm.
- 3. If the batteries do not charge properly:
  - A. Verify the current at the outlet by plugging in a lamp or other appliance and turning it on.
  - B. Determine whether the outlet is connected to a light switch that turns the power off when you turn out the lights; if so, make sure that the power is turned on.
- 4. The battery pack should be recharged when it fails to produce sufficient power on jobs that were previously done easily or when the FuelGauge shines red to indicate that the charge is depleted. Do not continue to use the tool under these conditions. Repeat the charging procedure.
- 5. Unplug the charger from the power supply before disconnecting it from the tool. Unplug the charger before attempting to clean.
- 6. Battery life depends on usage, storage temperature and time.
- 7. The charger is intended to be used in a vertical or floor-mounted position.

Unlike other battery types, Lithium-Ion battery delivers fade-free power for their entire run time. The tool will not experience a slow, gradual loss of power as you work. To signal that the battery is at the end of its run time and needs to be charged, the power to the tool will drop quickly.

**NOTE:** The LED worklight may flash slowly and the FuelGauge may not illuminate in the case of an overload or high temperature (see BATTERY PROTECTION, Page 12).

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## **BATTERY PROTECTION**

The battery circuitry protects the battery pack from extreme temperature, over-discharge, and over-charge. To protect the battery from damage and prolong its life, the battery pack circuitry will turn off the battery pack if it becomes overloaded or if the temperature becomes too high during use. This may happen in extremely high torque, binding, and stalling situations. This intelligent system will shut down your battery pack if its operating temperature exceeds 176°F (80°C) and will begin normal operation when it returns to 32°F (0°C) - 104°F (40°C).

The LED worklight will begin to flash slowly if the battery circuitry detects a momentary overload.

**NOTE:** A significantly reduced run time after fully charging the battery pack indicates that the battery is near the end of its usable life and must be replaced.

## COLD WEATHER OPERATION

This Lithium-Ion battery pack will provide optimal performance in temperatures between  $32^{\circ}F$  (0°C) and  $104^{\circ}F$  (40°C). When the battery pack is very cold, it may "pulse" for the first minute of use to warm itself. Install the battery pack in the tool and use the tool in a light application; after about a minute, the battery pack will have warmed itself and will operate normally.

#### WHEN TO CHARGE THE BATTERY PACK

It is not necessary to run down the battery pack charge before recharging. The Lithium-Ion battery can be charged at any time and will not develop a "memory" when charged after only a partial discharge.

Remove the battery pack from the tool when it is convenient for you and your job. "Top off" the battery pack charge by charging it for a time before starting a big job or long period of use.

Due to Lithium-Ion fade-free properties, the only time it is necessary to charge the Lithium-Ion battery pack is when the pack has reached the end of its charge.

The orange LED on the FuelGauge indicates that the battery has used approximately one half of its charge.

The red LED on the FuelGauge indicates the battery pack is depleted and needs to be charged.

Charge the battery pack as needed.

## HOW TO CHARGE THE BATTERY PACK (Fig. 2)

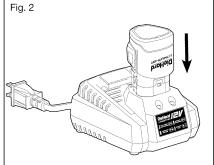
**NOTE:** This Lithium-Ion battery pack is shipped partially charged. Before using it the first time, fully charge the battery pack.

A fully discharged battery pack will charge in about 30 minutes in a surrounding temperature between  $32^{\circ}F(0^{\circ}C)$  and  $104^{\circ}F(40^{\circ}C)$ .

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- 1. Charge the Lithium-Ion battery pack with the correct charger.
- 2. Connect the charger to a power supply.
- 3. Align the raised ribs of the battery pack with the slot in the charger.
- 4. Insert the battery pack into the charger (Fig. 2).
- 5. The charger will communicate with the battery pack to evaluate the condition of the battery pack.



- 6. The green lights will flash while the battery pack is charging. After charging is complete, the green LED on the charger will be on. The flickering red light indicates a defective battery or a bad connection between the battery and the charger.
- 7. The battery pack will fully charge if left on the charger, but it will not overcharge.

**NOTE:** For your convenience, the charger can operate with most generators and inverters rated at 300 watts or higher.

## LED FUNCTIONS OF CHARGER (Fig. 3)

LED INDICATOR	BATTERY PACK	RED LED	GREEN LED	ACTION
HI/LO TEMP.	Hot/Cold battery	On	Off	Charging will begin when battery returns to 32°F (0°C)-104°F (40°C)
	Defective	Flashing	Off	Battery pack or Charger/Adapter is defective
	Charging	Off	Flashing	Charging
	Fully charged	Off	On	Charging is complete

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#### **CHARGING A HOT BATTERY PACK**

If the battery pack is above normal temperature range, the red LED will illuminate and the green LED will be off. When the battery pack cools down to approximately  $104^{\circ}F$  ( $40^{\circ}C$ ), the charger will automatically begin charging.

## CHARGING A COLD BATTERY PACK

If the battery pack is below the normal temperature range, the red LED will illuminate and the green LED will be off. When the battery warms to a temperature of more than 32°F (0°C), the charger will automatically begin charging.

## **DEFECTIVE BATTERY**

If the charger detects a problem with the battery, the battery may be defective: the red LED will begin flashing and the green LED will be off.

- If registering as defective, remove and reinsert the battery pack in the charger. If the LED status reads "defective" a second time, try charging a different battery pack.
- 2. If a different battery pack charges normally, dispose of the defective battery pack (see Maintenance section).
- 3. If a different battery pack also indicates "defective," the charger may be defective.

## **BATTERY CHARGING**

If the battery pack is being charged within a normal surrounding temperature range ( $32^{\circ}F$  to  $104^{\circ}F$ ), the green LED will begin flashing and the red LED will be off. The battery pack will reach a full charge in 30 minutes.

#### **BATTERY FULL**

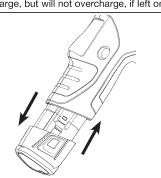
If the battery pack is within normal temperature range, the green LED will illuminate and the red LED will be off. The battery pack is fully charged and ready to use. The battery pack will fully charge, but will not overcharge, if left on the charger.

**NOTE:** The charger may become warm with several continuous charge cycles. This is part of the normal operation of the charge. Charge in a well ventilated area.

#### TO ATTACH BATTERY PACK (Fig. 4)

 Lock the trigger switch on the Right-Angle Impact Driver by placing the

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direction of rotation (forward/ center lock/ reverse) selector in the center position.

2. Align the raised rib on the battery pack with the grooves in the Right-Angle Impact Driver, and then insert the battery pack into the tool.

**NOTE**: Make sure that the latch on the battery pack snaps into place and that the battery pack is secured to the tool before beginning operation.

**A** CAUTION: When placing the battery pack in the tool, be sure that the raised rib on battery pack aligns with the groove inside the Right-Angle Impact Driver and that the latches snap into place properly. Improper attachment of the battery pack can cause damage to internal components.

## TO DETACH BATTERY PACK (Fig. 4)

- Lock the trigger switch on the Right-Angle Impact Driver by placing the direction of rotation (forward / center lock /reverse) selector in the Center Lock position.
- 2. Depress the battery release buttons located on the both sides of the battery pack to release the battery pack.
- 3. Pull the battery pack out and remove it from the tool.

**WARNING:** Battery tools are always in operating condition. Therefore, the direction-of-rotation selector should always be locked when the tool is not in use or when carrying it your side.

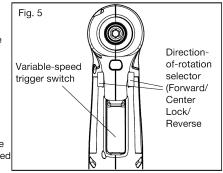
## TRIGGER SWITCH (Fig. 5)

To turn the 12V Right-Angle Impact Driver ON, depress the trigger switch.

To turn it OFF, release the trigger switch.

## VARIABLE SPEED (Fig.5)

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



## DIRECTION-OF-ROTATION SELECTOR (FORWARD/CENTER LOCK/ REVERSE) (Fig. 5)

The direction of bit rotation is reversible and is controlled by a selector located above the trigger switch. With the Right-Angle Impact Driver held in normal operating position:

- 1. Position the direction-of-rotation selector to the left of the tool for forward rotation.
- Position the direction-of-rotation selector to the right of the tool for reverse rotation.
- 3. Setting the switch in the OFF (center lock) position helps reduce the possibility of accidental starting when not in use.

**A** CAUTION: To prevent gear damage, always allow the 12V Right-Angle Impact Driver to come to a complete stop before changing the direction of rotation.

**NOTE:** The 12V Right-Angle Impact Driver will not run unless the direction of rotation selector is engaged fully to the left or right.

## ELECTRIC BRAKE

To stop the 12V Right-Angle Impact Driver, release the trigger switch and allow the tool to come to a complete stop. The electric brake quickly stops the rotation. This feature engages automatically when you release the trigger switch.

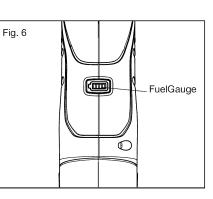
## FuelGauge (Fig. 6)

This tool is equipped with a FuelGauge that indicates the battery pack charge level.

The green LED on the FuelGauge indicates that the battery is fully charged.

The orange LED on the FuelGauge indicates that the battery has used approximately one half of its charge

The red LED on the FuelGauge indicates the battery pack is depleted and needs to be charged.



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## LED WORKLIGHT (Fig. 7)

The LED worklight, located on the front of the 12V Right-Angle Impact Driver, will illuminate when the trigger switch is depressed.

This provides additional light on the surface of the workpiece for operation in lower-light areas.

The LED worklight will turn off when the trigger switch is released.

#### INSTALLING BITS (Fig. 8)

- Lock the trigger switch by placing the direction-ofrotation selector in the OFF (center) position.
- With one hand, pull the sleeve toward the front of the tool, and hold it in place.
- With the other hand, insert a 1/4-in. shank bit into the hexagonal hole in the bit retainer.
- 4. Release the sleeve and check that it returns to its original position.

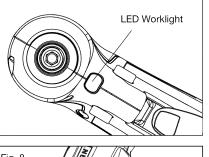
**A** WARNING: If the sleeve does not return to its original position, the bit is not correctly installed. Retry until the bit is properly installed.

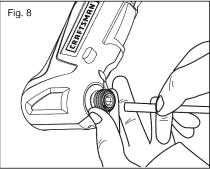
**A** WARNING: Use protective gloves when removing the bit from the tool, or first allow the bit to cool down. The bit may be hot after prolonged use.

Fig. 7

#### **REMOVING BITS (Fig. 8)**

- 1. Lock the trigger switch by placing the direction-of rotation selector in the OFF (center) position.
- 2. Pull the sleeve towards the front of the tool, and hold it in place.
- 3. Remove the bit from the hexagonal hole in the bit retainer.
- 4. Release the sleeve.





## TIGHTENING SCREWS AND NUTS (Fig. 9)

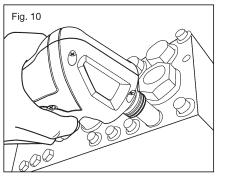
- 1. Install the correct bit.
- 2. Apply just enough pressure to keep the bit engaged on the screw or nut.
- Position the direction-ofrotation selector to the left of the tool for forward rotation.
- Apply minimal pressure to the trigger switch initially. Increase the speed only when full control can be maintained.

**WARNING:** Do not over-tighten, as the force of the 12V Right-Angle Impact Driver can break the fastener. Keep the 12V Right-Angle Impact Driver at a right angle to the fastener to avoid damaging the fastener head.

Fig. 9

## LOOSENING SCREWS AND NUTS (Fig. 10)

- 1. Install the correct bit.
- Apply just enough pressure to keep the bit engaged on the screw or nut.
- Position the direction-ofrotation selector to the right of the tool for forward rotation.
- Apply minimal pressure to the trigger switch initially. Increase the speed only when full control can be maintained.



CRA



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

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

A WARNING: It is not recommended to use compressed dry air as a cleaning method for the Right-Angle Impact Driver. If cleaning with compressed air is the only method available, always wear safety goggles or safety glasses with side shields when using compressed air to clean the tool. If the operation is dusty, also wear a dust mask.

## **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.

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

**WARNING:** When servicing, use only identical Craftsman replacement parts. Use of any other parts may create a hazard or cause product damage. To ensure safety and reliability, all repairs should be performed by a qualified service technician at a Sears Service Center.

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#### BATTERIES:

The battery pack is equipped with Lithium-Ion rechargeable batteries. The duration of use from each charge will depend on the type of work performed.

The batteries in this tool have been designed to provide maximum troublefree life. Like all batteries, they will eventually wear out. Do not disassemble the battery pack or attempt to replace the batteries. Handling of the batteries, especially when wearing rings and jewelry, could result in a serious burn.

To obtain the longest possible battery life, read, understand and follow this operator's manual.

 It is good practice to unplug the Charger/Adapter and remove the Lithiumlon battery pack when not in use.

For Lithium-Ion battery pack storage longer than 30 days:

- Store the Lithium-Ion battery pack where the temperature is below 80°F (26°C) and free of moisture.
- Store Lithium-Ion battery packs in a 30%-50% charged condition.
- After every six months of storage, fully charge the Lithium-Ion battery pack.
- Exterior may be cleaned with a cloth or soft non-metallic brush.

## BATTERY PACK REMOVAL AND PREPARATION FOR RECYCLING

To preserve natural resources, please recycle or dispose of batteries properly. This product contains lithium-ion batteries. Local, state, or federal laws may prohibit disposal of lithium-ion batteries in ordinary trash. Consult your local waste authority for information regarding available recycling and/or disposal options.

A WARNING: Upon removal of the battery pack for disposal or recycling, cover the battery pack's terminals with heavy-duty adhesive tape. Do not attempt to destroy or disassemble the battery pack or remove any of its components. Lithium-Ion 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.



## TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
The tool does not work	Battery is depleted	Charge the battery
Dit a suprat has in stallard	Sleeve is not released	Release the sleeve
Bit cannot be installed	Bit does not fit the sleeve	Use a 1/4" shank bit
Motor overheating	Make sure that the cooling Clean clear vents are free from dust and obstacles during operations of the cooling operation	

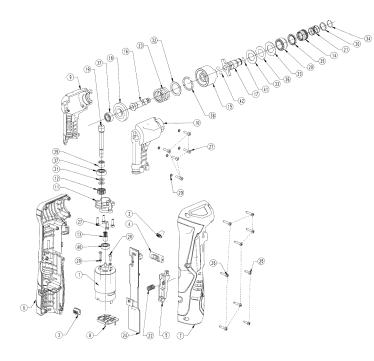
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## PARTS LIST

## 12.0-VOLT LITHIUM-ION CORDLESS RIGHT-ANGLE IMPACT DRIVER MODEL NO. 320. 17562

The Model Number will be found on the Nameplate attached to the handle of the Right-Angle Impact Driver. Always mention the Model Number when ordering parts for this tool.

## Exloded View



1	2730137000	DC Motor	1
2	3123113000	LED Cover	1
3	3123120000	Light Guide Pole	1
4	3125334000	F/R Button	1
5	3125534000	Switch Trigger	1
6	3321025000	Left Housing Assy	1
7	3321026000	Right Housing Assy	1
8	3402298000	Contact Receptacle ASSY	1
9	3421092000	Left Gear Case	1
10	3421093000	Right Gear Case	1
11	3421145000	Bottom Support	1
12	3520410000	Gear	1
13	3520555000	Pinion	1
14	3550606000	Bush	1
15	3551501000	Impact Block	1
16	3551502000	Spindle	1
17	3551503000	Spindle	1
18	3551511000	Bevel Gear	1
19	3551528000	Bevel Gear	1
20	3551582000	Bush	1
21	3660177000	Spring	1
22	3660403000	Spring	1
23	3660437000	Spring	1
24	4890699000	PCB Assembly	1
25	5610012000	Tapping Screw	2
26	5610013000	Tapping Screw	7
27	5620006000	Hexagon Socket Screw	9
28	5620033000	Screw	2
29	5650003000	Spring Washer	7

PARTS LIST

Part Name

QTY

Part No

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No	Part No	Part Name	QTY
30	5650192000	Washer	1
31	5650254000	Washer	2
32	5650349000	Washer	1
33	5650366000	Washer	2
34	5660035000	Circlips For Shaft	1
35	5690207000	Washer	1
36	5690222000	Washer	1
37	5700003000	Ball Bearing	2
38	5700044000	Steel Ball	23
39	5700053000	Needle Bearing	1
40	5700176000	Ball Bearing	1
41	5700178000	Steel Ball	2
42	5700226000	Steel Ball	2

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