

CHICAGO

Electric® Power Tools

CORDLESS DRILL KIT-18V

Model 44849

ASSEMBLY INFORMATION



Diagrams within this manual may not be drawn proportionally.

Due to continuing improvements, actual product may differ slightly from the product described herein.

Distributed exclusively by Harbor Freight Tools®.

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**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

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For technical questions or replacement parts, please call 1-800-444-3353.

Revised 03a, 07i

SPECIFICATIONS

Battery	18V, Ni-Cd Rechargeable
Speed	0-900 RPM, Reversible
Torque Settings	6
Chuck	3/8" Keyless
Drill Weight	4.3 lb.
Length	9"
Included Bits	6 Pc. Screw. Set; 6 Pc. Drill Set; Magnetic Extension Bit

SAVE THIS MANUAL

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

GENERAL SAFETY WARNINGS AND PRECAUTIONS

1. **KEEP WORK AREA CLEAN AND DRY.** Cluttered, damp or wet work areas invite injuries.
2. **KEEP CHILDREN AWAY FROM WORK AREA.** Do not allow children to handle this product.
3. **STORE IDLE EQUIPMENT.** When not in use, tools and equipment should be stored in a dry location to inhibit rust. Always lock up tools and equipment and keep out of reach of children.
4. **DO NOT USE THIS PRODUCT IF UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to use this tool.
5. **USE EYE, HEARING, AND BREATHING PROTECTION.** Wear ANSI-approved safety impact eye glasses, hearing protection, and dust mask/respirator when working with this product.
6. **DRESS SAFELY.** Nonskid footwear or safety shoes should be used when working with this product. Do not wear loose clothing or jewelry as they can become caught in moving parts. Wear a protective hair covering to prevent long hair from becoming caught in moving parts. If wearing a long-sleeve shirt, roll sleeves up above elbows.
7. **INDUSTRIAL APPLICATIONS MUST FOLLOW OSHA REQUIREMENTS.**
8. **DO NOT OVERREACH.** Keep proper footing and balance at all times to prevent tripping, falling, back injury, etcetera.
9. **STAY ALERT.** Watch what you are doing at all times. Use common sense. Do not use this tool when you are tired or distracted from the job at hand.

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10. **CHECK FOR DAMAGED PARTS.** Before using this product, carefully check that this tool will operate properly and perform its intended function. Check for damaged parts and any other conditions that may affect the operation of this tool. Replace or repair damaged or worn parts immediately.
11. **REPLACEMENT PARTS AND ACCESSORIES.** When servicing, use only identical replacement parts. Only use accessories intended for use with this product. Approved accessories are available from Harbor Freight Tools.
12. **MAINTAIN THIS PRODUCT WITH CARE.** Keep this tool clean and dry, and keep drill bits clean and sharp for better and safer performance.
13. **USE THE RIGHT PRODUCT FOR THE RIGHT JOB.** Do not use a small tool or attachment to do the work of a larger industrial tool. Do not use this product for a purpose for which it was not intended.
14. **PEOPLE WITH PACEMAKERS SHOULD CONSULT THEIR PHYSICIAN(S) BEFORE USE.** Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
15. **WARNING:** This product contains or, when used, produces a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (California Health & Safety Code § 25249.5, *et seq.*)

SPECIFIC PRODUCT WARNINGS AND PRECAUTIONS

1. **TO REDUCE THE RISK OF PERSONAL INJURY WHERE THE DRILL BIT MAY CONTACT HIDDEN WIRING,** hold tool by its plastic insulated gripping surfaces located on the Left Case (15) and the Right Case (3). Contact with a “live” wire will make exposed metal parts of the Drill “live” and will shock the operator.
2. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make sure all adjusting keys and wrenches are removed from this product before turning it on.
3. **MAINTAIN A SAFE WORK ENVIRONMENT.** Do not expose the Drill, Battery, or Transformer to rain or wet conditions. Keep work area well lit. Make sure there is adequate surrounding work space. Do not operate this product in the presence of flammable liquids, gases, or dust.
4. **DO NOT FORCE THE TOOL.** This product will do the work better and safer at the speed and capacity for which it was designed.
5. **SECURE THE MATERIAL.** Whenever possible, use clamps or a vise to hold the material when drilling.
6. **NEVER USE YOUR BODY TO BRACE THE DRILL.** Never put your hands, or other body parts, between the part of the Drill being braced and the object it is being braced against.
7. **ALWAYS DISCONNECT TOOL FROM ITS ELECTRICAL SUPPLY SOURCE BEFORE PERFORMING ANY SERVICES OR MAINTENANCE** such as changing drill bits, leaving

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the work area, moving the tool from one location to another, handing the tool to another person, etcetera.

8. **READ ALL INSTRUCTIONS AND WARNINGS ON THE BATTERY BEFORE CHARGING THE BATTERY.**
9. **TO AVOID ACCIDENTS, CHARGE THE BATTERY THAT IS SUPPLIED WITH THIS PRODUCT ONLY.** Do not use a different charger with this battery.
10. **TO AVOID DAMAGE TO CABLE AND PLUG, NEVER PULL THE CABLE TO DISCONNECT THE CHARGER.** Do not use the Charger if the Cable or Plug are damaged.
11. **DO NOT TOUCH THE BATTERY POLES WITH ANY CONDUCTIVE SOURCE.**
12. **DO NOT STORE THE BATTERY IN A BOX WITH OTHER METAL OBJECTS.**
13. **WARNING: DO NOT EXPOSE THE BATTERY TO EXTREME HEAT OR THROW THE BATTERY IN A FIRE.** This could result in an explosion.
14. **TO DISPOSE OF OLD BATTERY:** After the Battery for this Drill has expired and can not be recharged, it should be recycled. Some states require this recycling. Contact your local solid waste authority for recycling information. Before disposing of Battery cover exposed terminals with heavy duty electrical tape to prevent shorting.
15. **KEEP THE CORDLESS DRILL IN ITS CASE WHEN NOT IN USE.** This will prolong the life of the tool.

UNPACKING

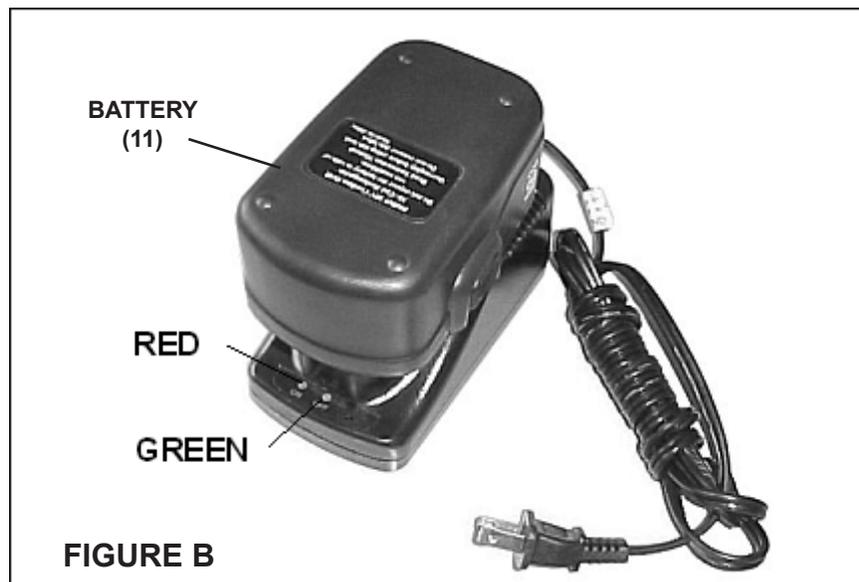
When unpacking, check to make sure all parts shown on the Parts List (page 10) are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

To Charge The Battery:

1. The Battery (11) does not come charged from the manufacturer. Before use, you must charge the Battery.



2. Plug the Battery Charger into the electrical outlet.



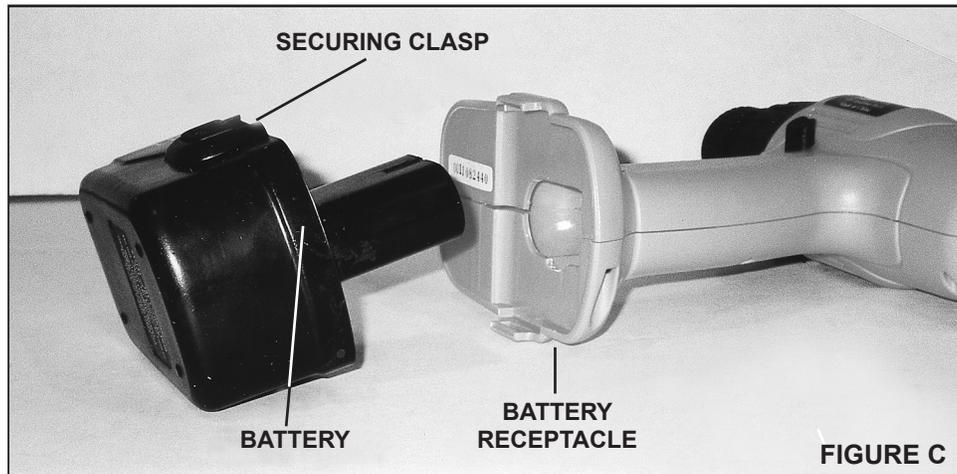
3. Insert the Battery (11) into the Battery Charger. (See Figure B.)

CAUTION! Make certain to insert the battery in the correct orientation, as noted in Figure B. Inserting the battery improperly will damage the charger and will prevent the battery from charging properly.

4. **The red light on the Charger turns on when you insert the Battery into the Battery Charger**, indicating that the electric current is charging the Battery. If the red light does not come on, recheck the Transformer cord connection or try a different electrical outlet. **The red light will shut off when the Battery is fully charged, and then the green light will turn back on automatically.**
5. **The Battery (11) will charge in approximately 1 to 1-1/2 hours.** Do not charge the Battery for longer than 2 hours. **Subsequent charges will also take between 1 and 1-1/2 hours.** Allow charger to cool down before charging another battery.

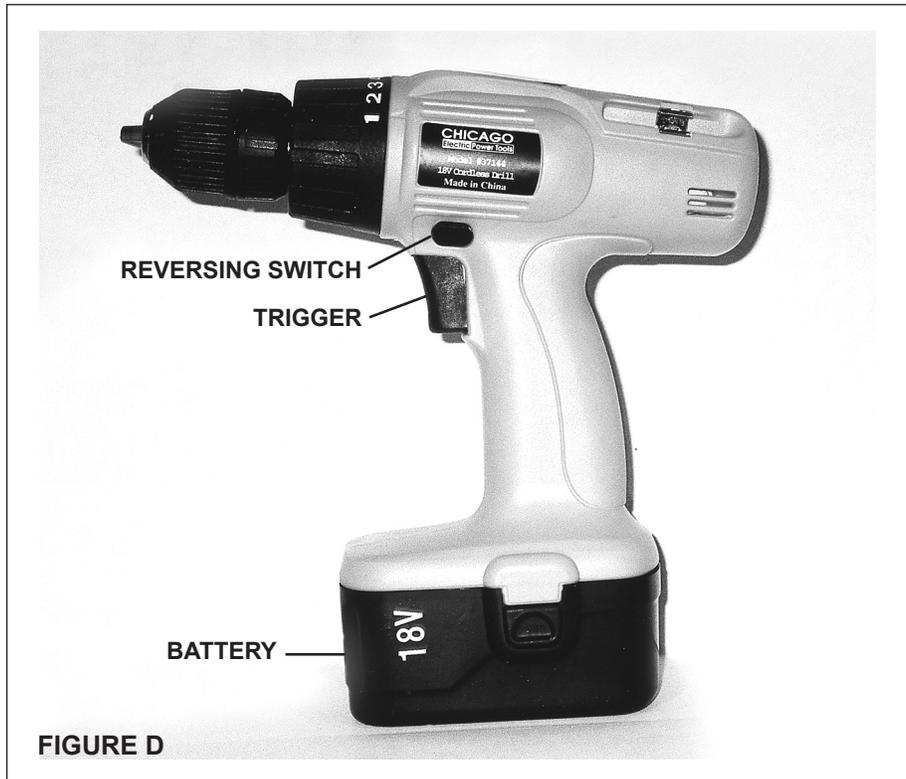
To Attach The Charged Battery To The Drill:

1. When the Battery (11) is fully charged, remove the Battery from the Battery Charger.



2. Insert the Battery into the Battery Receptacle located at the bottom of the Drill. Make sure the *two* Securing Clasps (one on each side of the Battery) engage the Drill. **(See Figure C.)**

To Insert And Remove Drill Bits And Drivers:



1. Set the Reversing Switch (16) to the “LOCKED” (Center) position. **(See Figure D.)**
2. Hold the Chuck firmly while turning the forward section of the Chuck *counterclockwise*. This opens the Chuck to accept the drill bit. Insert the drill bit into the chuck fully.
3. Turn the forward section of the Chuck *clockwise* while holding the Chuck firmly in place to tighten the Chuck around the drill bit shaft. Make sure the drill bit is seated securely before operation.
4. To remove the drill bit, repeat Steps 1 and 2.

Note: A Magnetic Driver Bit Adapter is provided for use with the supplied driver bits. First, insert the driver bit into the end of the Driver Bit Adapter. Then, insert the Hex end of the Driver Bit Adapter in the Chuck as you would do with a drill bit.

5. *The Cordless Drill is ready for use.*

OPERATING INSTRUCTIONS

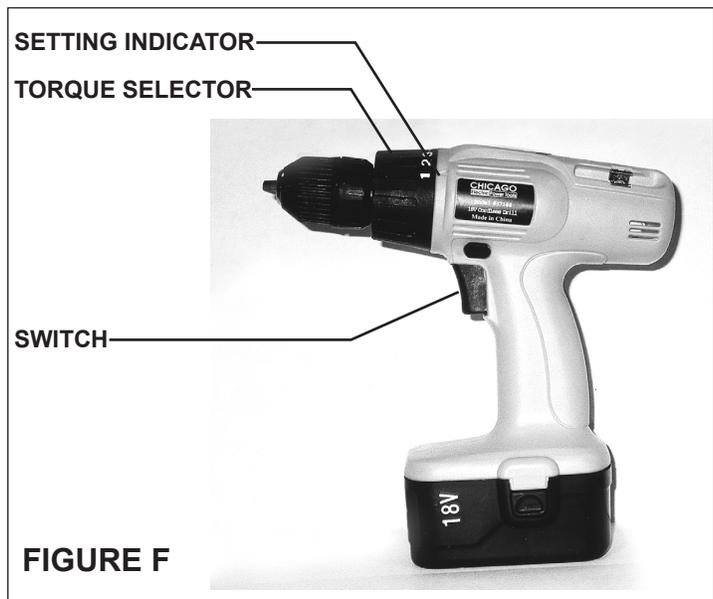
Note: All parts below refer to the parts listed on pages 11 and 12 of this manual.

To Operate The Reversing Switch:

1. The three-position Reversing Switch is located on top of the Trigger. **(See Figure D.)**
2. When the Reversing Switch is in the *center*, the Drill is in a “locked” position.
3. When the Reversing Switch is pressed to the *right*, the rotation of the Drill will be *counter-clockwise* (typically for removing fasteners or freeing drill bits).
4. When the Reversing Switch is pressed to the *left*, the rotation of the Drill will be *clockwise* (typically for driving fasteners or drilling holes).

To Operate The Torque Selector:

1. The Torque Selector is a six-position dial located behind the Chuck. **(See Figure F.)**
2. A higher setting equals more torque; therefore, position #1 (low torque) is appropriate for driving screws into wood without stripping the screw, but would not provide enough torque for drilling or driving into harder materials.
3. Position #6 is indicated by a drill bit icon and produces about 100 in-lb of torque, and should be used for drilling only.



Drill Bit Selection:

1. Always use sharp drill bits. Sharp bits are less likely to bind when drilling.
2. Use the proper bit for the job. There are many types of bits designed for specific purposes. Check the information on the bit's packaging for proper usage.
3. Do not use bits larger than the rated capacity of the drill; gear damage or motor overload may result.

Drilling An Object:

CAUTION: Do not operate the Drill before placing the Drill Bit on the material.

1. Avoid overloading the Drill. Do not apply excessive pressure to the Drill while drilling. If the speed drops abnormally, decrease the pressure immediately. If the drill bit stops abruptly or the drill bit becomes blocked, release the Trigger at once.
2. Ensure the safety of the work space. Clear the work area of all parts and debris that may cause injury by flying objects.
3. Before drilling, clamp the object down securely. A poorly secured piece of material may result in personal injury and/or inaccurate drilling.
4. When drilling in a light gauge metal or wood, use wooden block to back up the material to prevent damage to the workpiece.
5. Mark the center of the hole to be drilled with a center punch to give the drill bit a start and to prevent the bit from "walking."
6. Lubricate the drill bit with cutting oil when drilling iron or steel. Use a coolant when drilling nonferrous metals such as copper, brass or aluminum.
7. Grip the Drill firmly. Place the drill bit on the spot that is to be drilled.
8. To begin drilling, press the Trigger.
9. The Drill has a variable speed for drilling. To vary the speed of the drilling action, vary the pressure on the Trigger.
10. Do not drill deeper than necessary into walls or other areas where you cannot identify any possible hazards behind the drilling surface.
11. To reduce jamming as the bit breaks through the workpiece, decrease the drilling pressure when the point of the drill bit breaks through the surface of the workpiece.
12. When you have drilled the hole, remove the drill bit from the hole while the Drill is still spinning. This prevents the drill bit from getting caught in the hole and causing damage.
13. Release the Switch to stop the Drill.

CLEANING AND MAINTENANCE

Caution: Always disconnect this tool from its electrical power supply before performing any cleaning, servicing, or maintenance.

1. Keep the Drill exterior free of oil or grease. Use only a mild soap and damp cloth when cleaning. Do not use a flammable or combustible solvent. Do not immerse this product in a liquid or allow a liquid to flow inside the tool.
2. Before each use, examine the general condition of the Drill. Check for loose screws, misalignment, binding of moving parts, improper mounting, broken parts and any other condition that may affect its safe operation. Run the Drill for about ten seconds to ensure all moving parts are running smoothly and there are no loose parts, rattles, or sparking that would indicate defects. If an abnormality occurs, turn off the Drill immediately and have the problem corrected before further use. Do not use a damaged tool.
3. The Drill is equipped with an 18V Nickel-Cadmium Battery. With proper care, the Battery can be recharged many times. Follow the steps below to ensure correct Battery care:
 - a. **Note: Always switch to a fresh battery when tool performance begins to diminish.** Severe heat is most destructive to a battery; the more heat generated, the faster the battery loses power. A battery that gets too hot can be permanently damaged. Never over-discharge a battery by using the tool even after tool performance is decreasing. Never attempt to discharge a tool's battery by continuing to pull the tool trigger. **When tool performance begins to diminish, stop the tool, recharge the battery and use the fresh battery for optimal performance.**
 - b. Place the Battery into the Battery Charger as described in the section, ***"To Charge The Battery."*** Charging room temperature: 50° F - 104° F.
4. If the Battery has charged for 2 hours but will not power the Drill, the Battery may need replacement. Purchase only replacement batteries from Harbor Freight Tools. Do not attempt to repair the Ni-Cd Battery.

Disposal of Ni-Cd Battery

5. Contact local hazardous waste disposal authorities for proper battery disposal or recycling guidelines. **NEVER** set fire to a used battery.

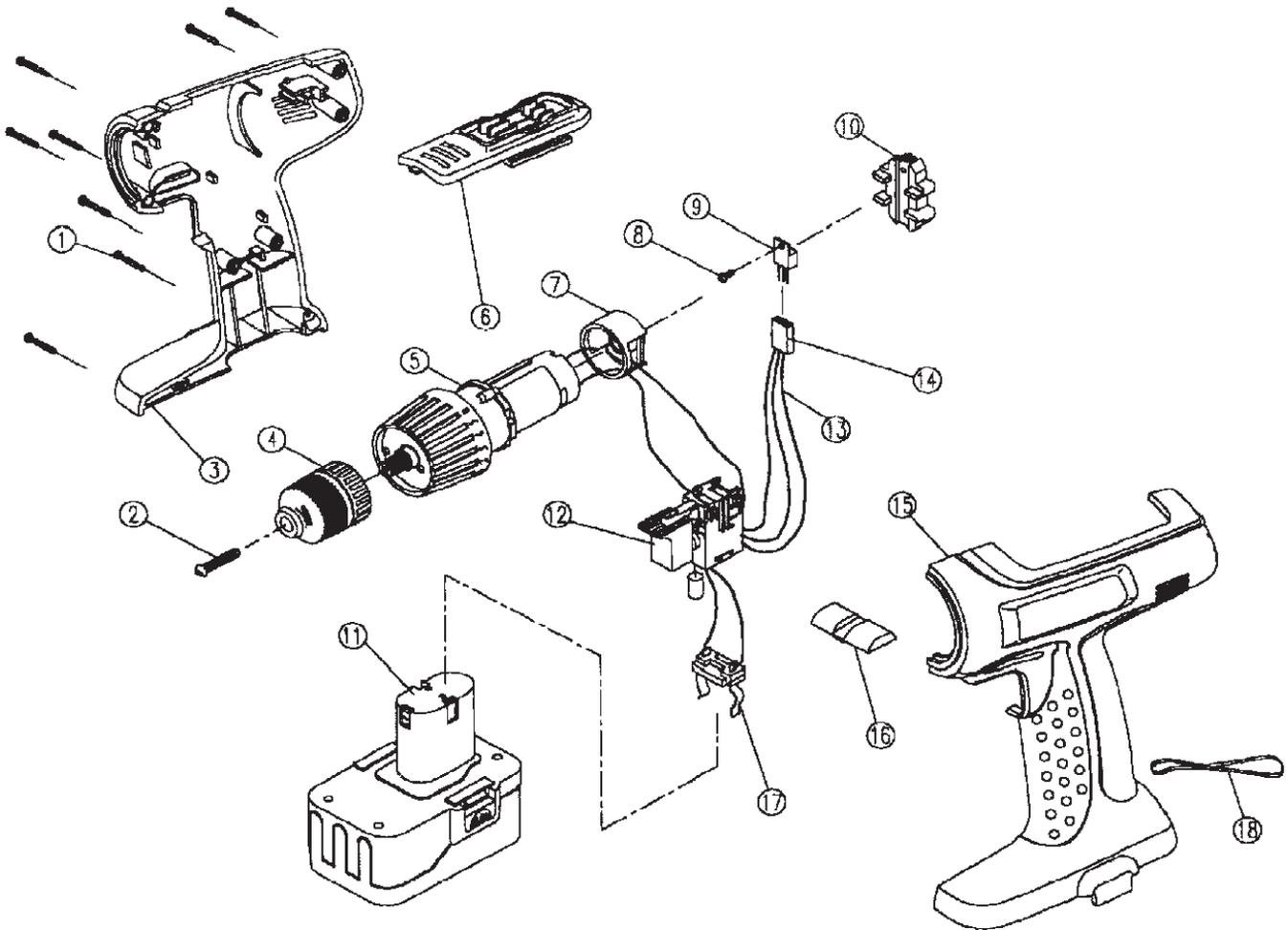
PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

PARTS LIST

Part	Description
1	Screw
2	Screw M5 x 25
3	Right Case
4	Chuck
5	Gear Box w/Motor and Torque Selector
6	Top Place
7	Motor Shaft
8	Screw
9	Vmos Transistor
10	Radiator
11	Battery Pack
12	Trigger/Switch Mechanism
13	Wire
14	Connector
15	Left Case
16	Reversing Switch
17	Battery Clamp
18	Belt
19	Battery Charger

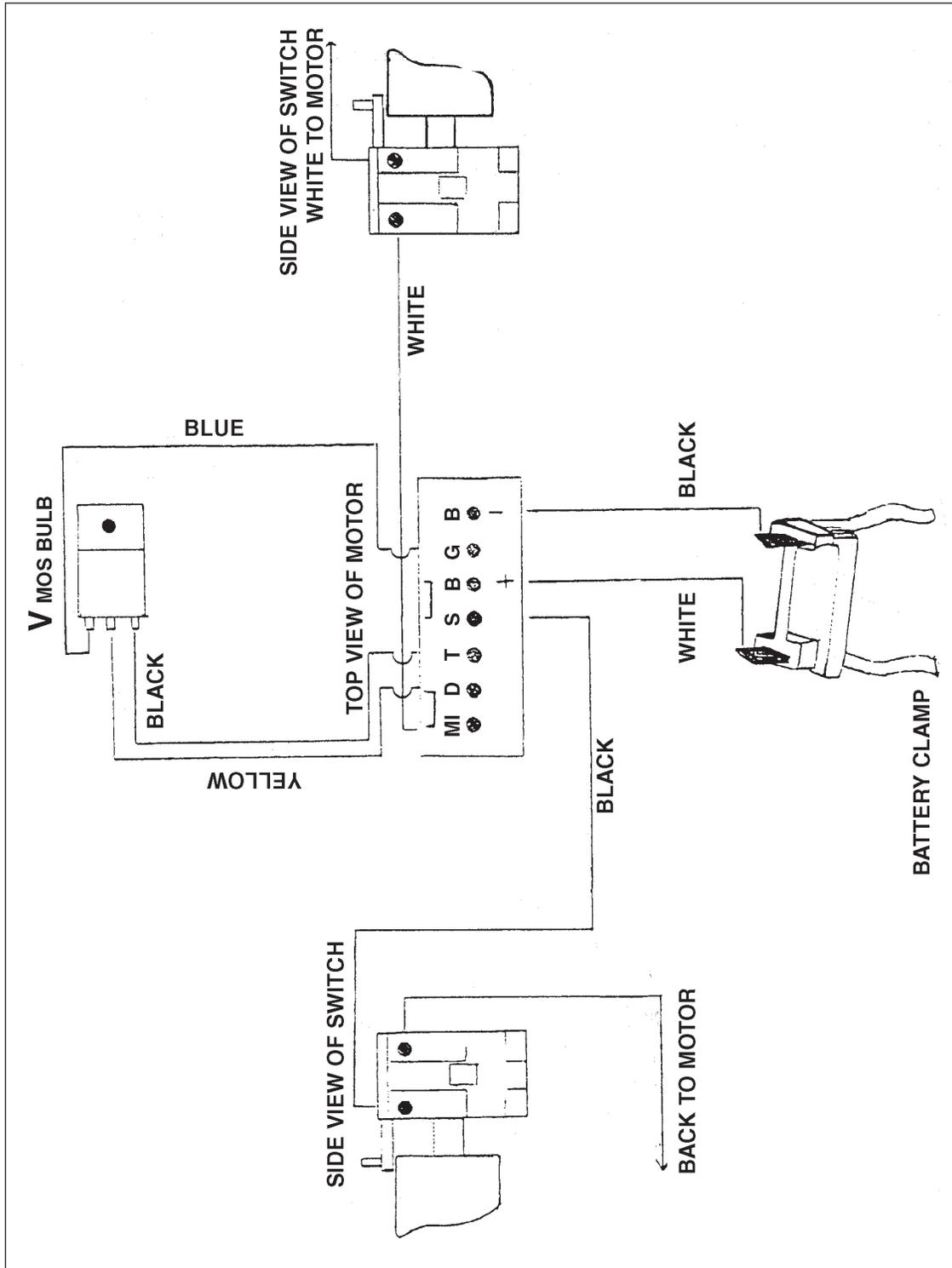
PARTS ASSEMBLY



#19 Battery Charger (not shown)

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

ELECTRICAL SCHEMATIC



LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

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

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