



14.4 CORDLESS DRILL

Model 4285

ASSEMBLY AND OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our Web site at <http://www.harborfreight.com>

Copyright © 2002 by Harbor Freight Tools®. All rights reserved. No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools.

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

Specifications

Drill	0 ~ 550 RPM 3/8 inch keyed chuck Variable speed Switch Forward / Reverse Switch 6 torque settings
Batteries	One 14.4 VDC battery provided, 1.3 amp-hour
Charger	120 VAC (input) charger, 3~5 hours, UL approved

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.

Safety Warnings and Precautions

WARNING: When using tools, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using any of these tools!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Do not force tool.** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool capacity.
6. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
7. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.

8. **Use eye and ear protection.** Always wear ANSI approved impact safety goggles and ear protection. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.
9. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
10. **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician. The handles must be kept clean, dry, and free from oil and grease at all times.
11. **Disconnect power.** Unplug charger when not in use.
12. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or work surface before turning on.
13. **Avoid unintentional starting.** Be sure the switch is in the Off position when not in use. Do not carry any tool with your finger on the trigger.
14. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
15. **Take caution as some woods contain preservatives such as copper chromium arsenate (CCA) which can be toxic.** When working with these materials extra care should be taken to avoid inhalation and minimize skin contact.
16. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.
17. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
18. **Do not operate tool 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 operate the tool.
19. **Maintenance.** For your safety, service and maintenance should be performed regularly by a qualified technician.

Note: Performance of these tools (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

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

Unpacking

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

Battery Precautions

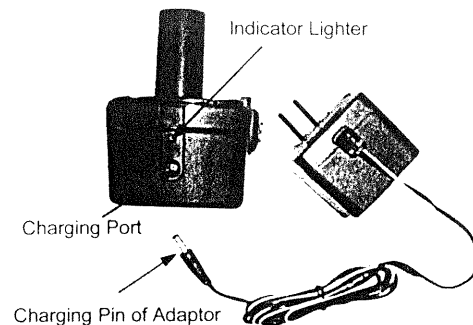
1. Read all instructions and warnings on the battery before charging the battery.
2. To avoid accidents, charge the supplied battery only. Do not use a different charger with this battery.
3. Do not expose the battery to rain or wet conditions.
4. To avoid damage of cable and plug, never pull the cable to disconnect the charger.
5. Do not use the charger if the cable or plug are damaged.
6. Repairs should be carried out by a qualified technician only.
7. Do not touch the battery poles with any conductive source.
8. Do not store the battery in a box with other metal objects.
9. Do not throw the battery in a fire. Dispose of battery in accordance with all laws.

Charging Battery

The battery does not come charged from the factory. Charge before using.

1. Plug the Adaptor (#21) into a wall outlet.
2. Plug the Charging Pin of the Adaptor (#21) into the charging port receptacle located at the back of the Battery (#20).
3. Verify the red charging indicator light comes on. If it does not come on, check the power connection or try a different wall outlet.
4. The Battery (#20) will charge in approximately 3 to 5 hours. **Do not charge the Battery for longer than 7 hours.**
5. Unplug the Adaptor (#21) from the wall outlet.
6. Insert the battery into the tool by pressing on the two side tabs while inserting.

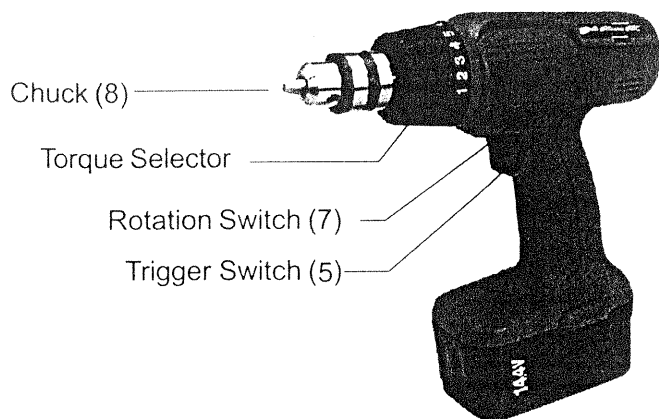
Note: The operation time of a new battery will ramp up as it is properly used and recharged.



Drill Operation

1. Insert a drill or screw bit into the Chuck (8). Securely tighten. Insert the chuck key (22) into the side of the chuck so that the "teeth" of the chuck key line up with those on the chuck itself. Rotate the chuck key (22) counterclockwise to open the chuck. Insert the bit and make sure it reaches the bottom of chuck shaft. Rotate the chuck key (22) clockwise to tighten the chuck and prevent the bit from slipping. Use 3/8 inch bits or smaller to avoid damage to gears and motor.

2. Set the desired drill torque by turning the Torque Selector to setting 1 to 6. The higher the number, the more the torque. Use # 6 for drilling, and the others for driving. Do this when the drill is off.
3. Set the desired drill rotation by pressing the Rotation Switch (7) for drilling or driving; Press Reverse for removing screws. Press Forward for drilling. Do this when the drill is off.
4. Press the Trigger Switch (5) in to turn the drill on. The harder you press, the faster the rotation.



The item numbers (in brackets) can be found on the Drill Assembly and Drill Parts List.

Maintenance

1. Use only sharp bits.
2. Keep motor air vents clean of dust and debris. Vacuum periodically.
3. Clean tool with a damp cloth and light detergent. Do not use solvents.
4. Regularly charge batteries, whether used or not.
5. Store Drill in a clean and dry area. Avoid storing in high temperature areas.

WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. some examples of these chemicals are:

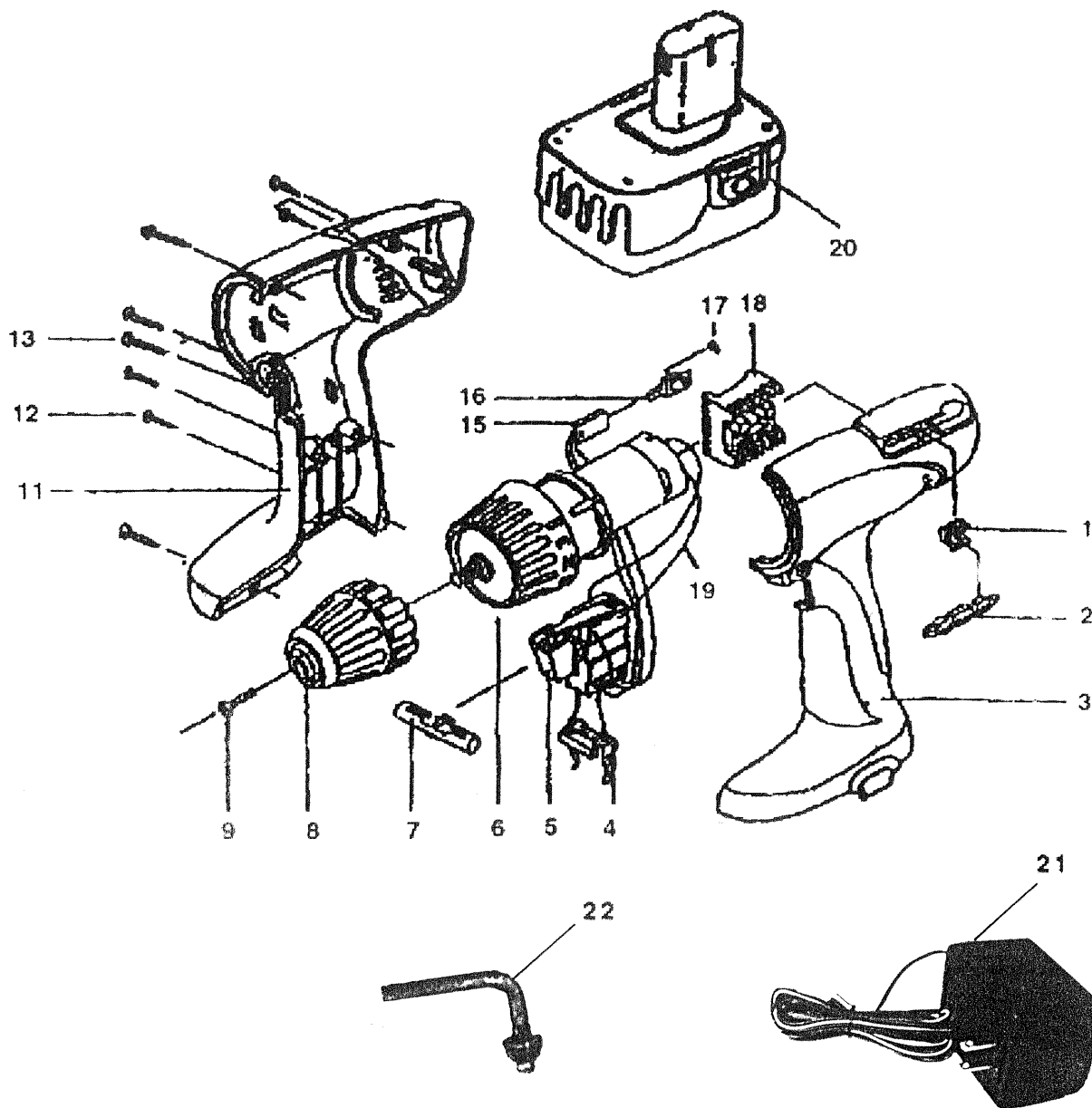
- Lead from lead-based paints
- Crystalline silica from bricks and cement or other masonry products
- Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code 25249.5, et seq.)

Drill Parts List

ITEM	DESCRIPTION
1	Screw driver Bit Clamp
2	Screw driver Bit, double-head
3	Left Case
4	Battery Clamp
5	Trigger Switch
6	Gear Box
7	Rotation Switch
8	Chuck
9	Screw, M 5x25
11	Right Case
12	Screw, ST 2.9x15
13	Screw, ST 2.9X18
15	Connector
16	Vmos Bulb
17	Screw, M 3X8
18	Radiator
19	Wire
20	Battery
21	Adaptor 120 VAC
22	Chuck Key

Drill Assembly Drawing



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

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.