



G CloneTM
Series

Instruction Manual 98020 15 Minute Charger

Getting the most out of your tool.

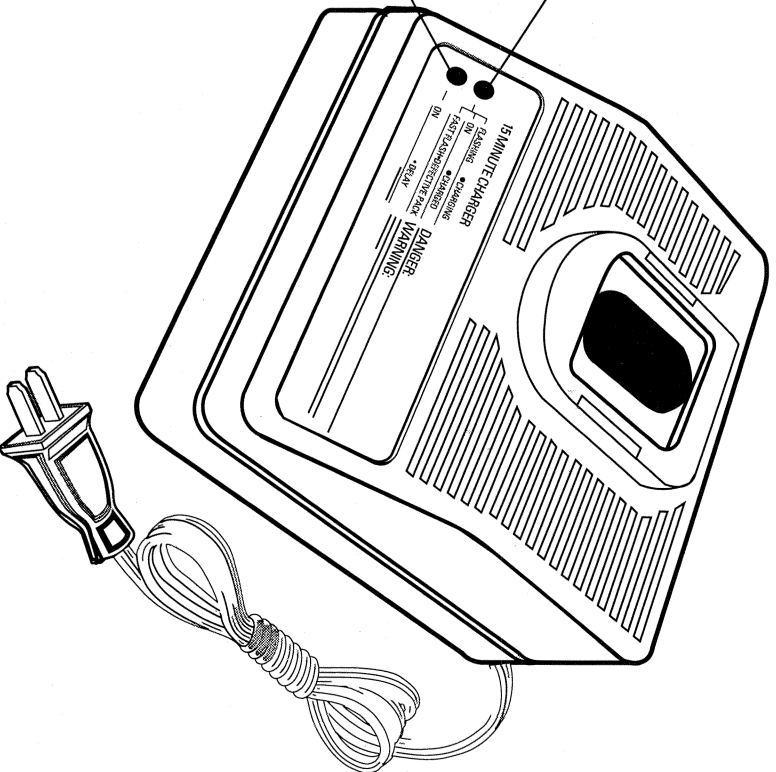
Please take time to read this manual and pay particular attention to the safety rules we've provided for your protection. Don't forget to send in your owner's registration card. If you have any questions about your tool please call:

1-800-9-BD TOOL
(1-800-923-8665)

98020
15 MINUTE CHARGER

RED LIGHT
Indicates charging status. (see page 2)

YELLOW LIGHT
Indicates need for charger to cool down. (see page 3)



SAFETY RULES FOR CHARGERS

This manual contains important safety and operating instructions.

1. Before using charger, read all instructions and cautionary markings on (1) charger, (2) battery pack, and (3) product using battery pack.
2. **DANGER:** 120 volts present at charging terminals. Do not probe with conductive objects. Danger of electric shock or electrocution.
3. **DANGER:** If battery pack case is cracked or damaged, do not insert into charger. Danger of electric shock or electrocution.
4. The charger and battery pack are specifically designed to work together.
5. Do not expose charger to rain or snow.
6. This charger is not intended for any uses other than charging Univolt™ and Cyclone Series™ rechargeable batteries. Any other uses may result in risk of fire, electric shock or electrocution.
7. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
8. Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
9. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in risk of fire, electric shock, or electrocution.
10. Two-wire cords can be used with 2-wire or 3-wire extension cords. Only round jacketed extension cords should be used, and we recommend that they be listed by Underwriters Laboratories (U.L.). If the extension will be used outside, the cord must be suitable for outdoor use. The letters "WA" on the cord jacket indicate that the cord is suitable for outdoor use.
11. An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety. The smaller the gauge number of the wire, the greater the

capacity of the cable, that is 16 gauge has more capacity than 18 gauge. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size.

CHART FOR MINIMUM WIRE SIZE (AWG) OF EXTENSION CORDS
NAMEPLATE RATING AMPS - 0 - 10.0

Total Extension Cord Length (feet)	25	50	75	100	125	150	175
Wire Gauge	18	18	16	16	14	14	12

12. The charger is ventilated through slots in the top and the bottom of the housing. Do not place any object on top of charger or place the charger on a soft surface that might block the ventilation slots and result in excessive internal heat. Place the charger in a position away from any heat source.
13. Do not operate charger with damaged cord or plug — have them replaced immediately.
14. Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to an authorized B&D service center.
15. Do not disassemble charger; take it to an authorized B&D service center when service or repair is required. Incorrect reassembly may result in a risk of electric shock, electrocution or fire.
16. Unplug charger from outlet before attempting any cleaning, to reduce risk of electric shock. Removing the battery pack will not reduce this risk.
17. NEVER attempt to connect 2 chargers together.
18. DO NOT store or use the tool and battery pack in locations where the temperature may reach or exceed 105°F (such as outside sheds or metal buildings in summer).
19. The charger is designed to operate on standard household electrical power (120 volts). Do not attempt to use it on any other voltage!

SAVE THESE INSTRUCTIONS FOR FUTURE USE.

Introduction

The 98020 charger is designed to charge Univolt™ and Cyclone Series™ battery packs in about 15 minutes. This charger requires no adjustment and is designed to be as easy as possible to operate. Simply place your battery pack into the receptacle of a plugged in charger, as shown in Figure 1, and it will automatically charge the pack.

Charging Procedure

1. Plug the charger into an appropriate 120 Volt AC power outlet. The charger will beep twice and the red light will blink and then go off.
2. Insert the battery pack into the charger, as shown in Figure 1, making sure the pack is fully seated in the charger. The red light will blink and the charger will beep once indicating the charging process has started.
3. The battery pack will be fully charged in less than 15 minutes under most conditions. This will be indicated by the red light remaining ON and 3 audible beeps. The pack is fully charged and may be used at this time or left in the charger.

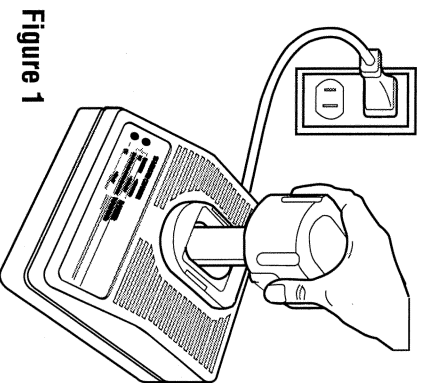
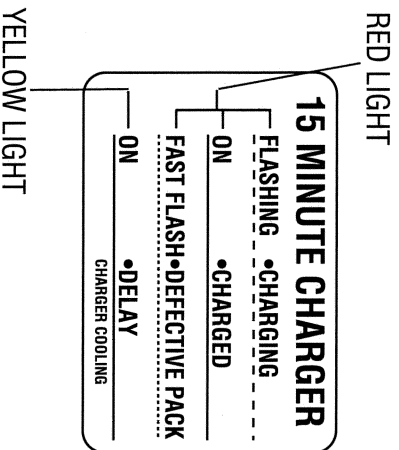


Figure 1



Leaving the Battery Pack in the Charger

When the red light remains ON, the charger has switched to its "equalize charge" mode which lasts approximately 4 hours, after which the charger will switch to "maintenance charge" mode. The battery pack can be removed at any time during these charge cycles, but will only be fully charged if the red light is solid ON. The charger and battery pack can be left connected with the red light glowing indefinitely. The charger will keep the battery pack fresh and fully charged.

NOTE: A battery pack will slowly lose its charge when kept out of the charger. If the battery pack has not been kept on maintenance charge, it may need to be recharged before use. A battery pack may also slowly lose its charge if left in a charger that is not plugged into an appropriate AC source.

Trouble Indicators

Your charger is designed to detect certain problems that can arise with battery packs which would be indicated by the red light flashing at a fast rate and continuous beeping. If this occurs, re-insert battery pack. If problem persists, try a different battery pack to determine if the charger is OK. If the second pack charges correctly, then the original pack is defective and should be returned to an authorized B&D service center for recycling. If the second battery pack elicits the same trouble indication as the original pack, have the charger tested at an authorized B&D service center.

Weak Battery Packs

The charger can also detect a weak battery. Such batteries are still usable but should not be expected to perform as much work. In such cases, about 10 seconds after battery insertion, the charger will beep rapidly 8 times to indicate a weak battery condition. The charger will then go on to charge the battery to the highest capacity possible.

IMPORTANT CHARGING NOTES

1. Longest life and best performance can be obtained if the battery pack is charged when the air temperature is between 65°F and 75°F (18°- 24°C). DO NOT charge the battery pack in an air temperature below +40°F (+4.5°C), or above +105°F (+40.5°C). This is important and will prevent serious damage to the battery pack.
2. The charger and battery pack may become warm to touch while charging. This is a normal condition, and does not indicate a problem.
3. This charger has an **internal temperature limit** that, when exceeded, will temporarily stop the full charge current. This is indicated by the yellow light being ON. The normal charge cycle will resume when the temperature falls below the preset limit and will be indicated by the yellow light turning OFF. The charge time may be extended beyond the normal 15 minutes due to the delay. Use the charger in normal room temperatures whenever possible. To prevent overheating, do not cover the charger and do not charge battery packs in direct sunlight or near heat sources.
4. If the battery pack does not charge properly — (1) Check current at receptacle by plugging in a lamp or other appliance, (2) Check to see if receptacle is connected to a light switch which turns power off when you turn out the lights. (3) Move charger and battery pack to a location where the surrounding air temperature is approximately 65°F - 75°F (18°- 24°C). (4) If charging problems persist, take or send the tool, battery pack and charger to your local service center.
5. The battery pack should be recharged when it fails to produce sufficient power on jobs which were easily done previously. DO NOT CONTINUE to use under these conditions. Follow the charging procedure. You may also charge a partially used pack whenever you desire with no adverse effect on the battery pack.

6. Under certain conditions, with the charger plugged in to the power supply, the exposed charging contacts inside the charger can be shorted by foreign material. Foreign materials of a conductive nature such as, but not limited to, steel wool, aluminum foil, or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug charger before attempting to clean.

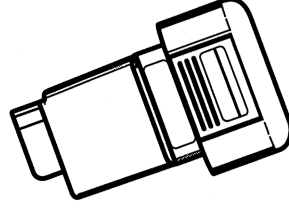
7. Do not freeze or immerse charger in water or any other liquid.

8. **WARNING:** Don't allow any liquid to get inside charger. Electric shock may result.

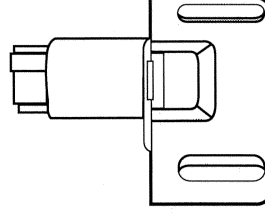
9. To facilitate the cooling of the battery pack after use, avoid placing the charger or battery pack in a warm environment such as in a metal shed, or an uninsulated trailer.

10. **CAUTION:** Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, return to a Service Center for recycling.

The 98020 charger will charge both Univolt™ and Cyclone Series™ battery packs (see below).



Univolt™ battery pack.



Cyclone Series™ battery pack.
Will also charge XR Pack™
(Extended Run-Time) Battery Packs.

Cleaning Instructions

Warning: Disconnect the charger from the power supply before cleaning. Dirt and grease may be removed from the exterior of the charger using a cloth or soft, non-metallic brush. Do not use water or any cleaning solutions.

Charger Specifications

Input	120 Volts, 60Hz, 200VA
Output	6.0 - 14.4 Volts DC
Charge Current	Normal 7.5A Equalize 120mA
Weight	Maintenance 40mA 2 pounds (.9kg)
Dimensions	6.7 in (171mm) wide 7.2 in (187mm) long 3.4 in. (87mm) high
Nominal Charge Time	15 minutes or less

Battery Packs

The charger is designed to charge Univolt™ and Cyclone Series™ battery packs. When ordering replacement battery packs, be sure to include catalog number and voltage.

IMPORTANT!

To assure product safety and reliability, particularly for Double Insulated tools, repairs, maintenance and adjustment (excluding maintenance described in this manual) should be performed by B&D service centers or authorized service centers, using identical B&D replacement parts.

Every B&D tool is of the highest quality.
If you wish to contact us regarding this product, please call toll free between 8:00am and 8:00pm ET, seven days a week:

1-800-9-BD TOOL
(1-800-923-8665)

One Year Service/Safety Check

All B&D tools for Industry and Construction are covered under a service/safety check program where B&D will inspect your tool for safety and provide necessary maintenance or repairs, including normal wear and tear parts, for one year, FREE OF CHARGE.

Full Warranty

All B&D tools for Industry and Construction are warranted to be free of any defects in materials or workmanship. Upon thorough examination of tool, B&D will repair or replace, at our option, any product that is determined to be defective.

Conditions

The service/safety check and the warranty do not apply to: repairs made or attempted by anyone other than an authorized B&D service location; misuse, abuse, neglect, improper application of the tool; missing parts; or normal wear and tear (after first year of ownership). Please return the complete unit, transportation prepaid, to any B&D factory owned or B&D authorized service center location (list provided with tool or see Yellow Pages under "Tools Electric").

These symbols on the nameplate mean the product is listed by Underwriter's Laboratories, Inc. and certified by the Canadian Standards Association.





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