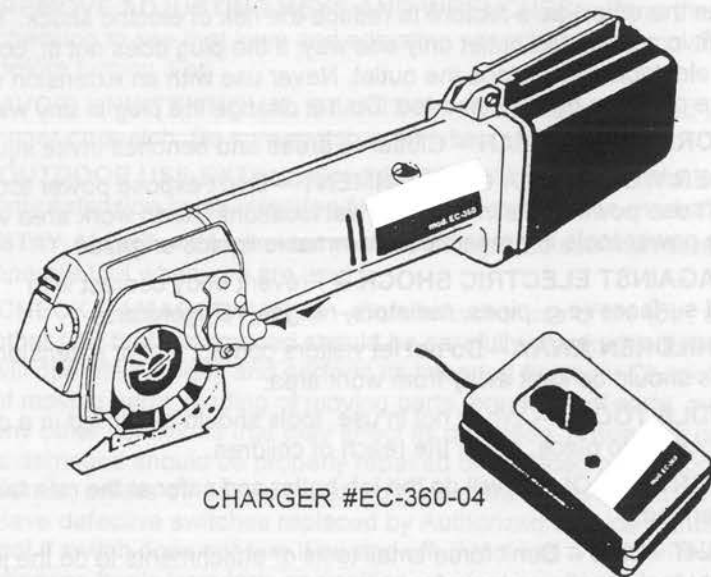


**Round Knife Cutter (60mm)
Cordless Electric Shear**

OPERATING INSTRUCTIONS

mod. EC-360



CHARGER #EC-360-04

Important: Save This Instruction Manual
Charger Operating Instructions Included

Before use
Read this instruction manual

SAFETY INSTRUCTIONS

WARNING! When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the following:

READ ALL THESE INSTRUCTIONS before attempting to operate this product and **SAVE THESE INSTRUCTIONS**. Keep these operating instructions with this product.

DOUBLE INSULATED

The Double Insulation System replaces the three-wire system, eliminates uncertainty, and allows operation with grounded or ungrounded power supplies while providing maximum electrical safety. **IMPORTANT! WHEN SERVICING, USE ONLY IDENTICAL REPLACEMENT PARTS!**

- 1. POLARIZED PLUGS** -- This power tool has a polarized plug (one blade is wider than the other) as a feature to reduce the risk of electric shock. This plug will fit in a polarized outlet only one way. If the plug does not fit, contact a qualified electrician to replace the outlet. Never use with an extension cord unless the plug can be fully inserted. Do not change the plug in any way.
- 2. KEEP WORK AREA CLEAN** -- Cluttered areas and benches invite injuries.
- 3. CONSIDER WORK AREA ENVIRONMENT** -- Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit. Don't use power tools in presence of flammable liquids or gases.
- 4. GUARD AGAINST ELECTRIC SHOCK** -- Prevent body contact with grounded surfaces (e.g. pipes, radiators, ranges, refrigerators).
- 5. KEEP CHILDREN AWAY** -- Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
- 6. STORE IDLE TOOLS** -- When not in use, tools should be stored in a dry, high, or locked-up place, out of the reach of children.
- 7. DON'T FORCE TOOL** -- It will do the job better and safer at the rate for which it was intended.
- 8. USE RIGHT TOOL** -- Don't force small tools or attachments to do the job of a heavy duty tool. Don't use tools for purposes not intended; for example, don't use circular saw for cutting tree limbs or logs.
- 9. DRESS PROPERLY** -- Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
- 10. USE SAFETY GLASSES** -- Also use face or dust mask if cutting is dusty. Always wear safety goggles or safety glasses with side shields, complying with current national standards and a full face shield, when needed.

- 11. DON'T ABUSE CORD** -- Never carry tool by cord or yank it to disconnect it from receptacle. Keep cord away from heat, oil and sharp edges.
- 12. SECURE WORK** -- Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
- 13. DON'T OVERREACH** -- Keep proper footing and balance at all times.
- 14. 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 repaired by Authorized Service Center. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean and free from oil and grease.
- 15. DISCONNECT TOOLS** -- When not in use, before servicing, and when changing accessories such as blades, bits and cutters.
- 16. REMOVE ADJUSTING KEYS AND WRENCHES** -- Form the habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- 17. AVOID UNINTENTIONAL STARTING** -- Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
- 18. OUTDOOR USE EXTENSION CORDS** -- When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
- 19. STAY ALERT** -- Watch what you are doing. Use common sense. Do not operate tool when you are tired.
- 20. CHECK DAMAGED PARTS** -- Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by Authorized Service Center, unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by Authorized Service Center. Do not use tool if switch does not turn it on and off. If tool has a lock-on switch be sure it releases freely from lock-on position.

IMPORTANT SAFETY INSTRUCTIONS FOR BATTERY CHARGER SAVE THESE INSTRUCTIONS

21. This manual contains important operating instructions for battery charger **MODEL EC-360-04**.
22. Before using battery charger, read all instructions and cautionary markings on (1) battery charger, (2) battery and (3) product using battery.

23. **CAUTION** - To reduce risk of injury, charge only [] rechargeable batteries. Other types of batteries may burst, causing personal injury and damage.
24. Do not expose charger to rain or snow.
25. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
26. Make sure charger cord is located so that it will not be stepped on, tripped over or otherwise subjected to damage or stress.
27. An extension cord should not be used on the battery charger 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:

RECOMMENDED MINIMUM AWG SIZE FOR EXTENSION CORDS FOR BATTERY CHARGERS

Length of cord in meter (feet)			
7.6m(25')	15m(50')	30m(100')	45m(150')
18 ga.	18 ga.	18 ga.	16 ga.

28. Do not operate charger with damaged cord or plug; have them replaced immediately.
29. Do not operate charger if it has received a sharp blow, been dropped or otherwise damaged in any way; take it to an EMERY Authorized Service Center.
30. Do not disassemble charger; take it to an [] Authorized Service Center when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
31. To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or clearing. Turning off controls will not reduce this risk.

SAVE THESE INSTRUCTIONS

SPECIAL SAFETY INSTRUCTIONS FOR THE ROTARY SHEAR

1. Keep guards in place and in working order -
Never wedge or tie finger guard open. Check operation of finger guard before each use. Do not use if finger guard does not close over rotary shear sew blade.

CAUTION: If the rotary shear is dropped, finger guard may be bent, restricting full return.

2. Keep blades clean and sharp -
• Sharp blades minimize stalling.
3. **DANGER:** keep hands away from cutting area-
• Keep hands away from blades. Do not reach beneath work while blade is rotating. Do not attempt to remove cut material when blade is moving.

CAUTION: Blade coasts after turn off.

4. Don't force tool.
• Stay alert; exercise control.
• During a cut, don't remove shear from work while the blade is moving.
5. Finger Guard -
• To avoid accidents never expose excessive blade. Lower the finger guard so that the material being cut just clears guard.
6. Adjustments -
• Before cutting, be sure the finger guard lock nut is tight.
7. Use only the correct blades in mounting -
• Do not use blades with incorrect size holes. Never use defective or incorrect blade washers or bolts.

SAVE THESE INSTRUCTIONS

CAUTION: The battery pack is not to be used or recharged while it is hot. The battery pack will be hot after use. It can be recharged more than once. Do not use the battery pack if it is damaged or if it is not working properly. CHARGE BATTERY PACK IF IT IS HOT. The battery pack should be maintained like any electronic device. 1. The charger and battery have been designed to work together. 2. Do not use a power source other than the charger for any repair. CAUTION: The battery pack is not to be used or recharged while it is hot. It can be recharged more than once. Do not use the battery pack if it is damaged or if it is not working properly. The battery pack should be maintained like any electronic device. 1. The charger and battery have been designed to work together. 2. Do not use a power source other than the charger for any repair. CAUTION: The battery pack is not to be used or recharged while it is hot. It can be recharged more than once. Do not use the battery pack if it is damaged or if it is not working properly. The battery pack should be maintained like any electronic device. 1. The charger and battery have been designed to work together. 2. Do not use a power source other than the charger for any repair.

Figure 1-3

- | | |
|-------------------------------|-----------------------------|
| 1. Oil hole (not illustrated) | 11. Drive flange |
| 2. Finger guard lock nut | 12. Blade |
| 3. Finger guard | 13. Pin hole |
| 4. Guide runner | 14. Screw flange |
| 5. Stationary blade | 15. Upper guard bushing |
| 6. Holding spring clip | 16. Upper guard |
| 7. Battery pack | 17. Screw |
| 8. On / Off switch | 18. Sharpening stone |
| 9. Spring | 19. Sharpening stone holder |
| 10. Blade lubricating felt | 20. Bracket |

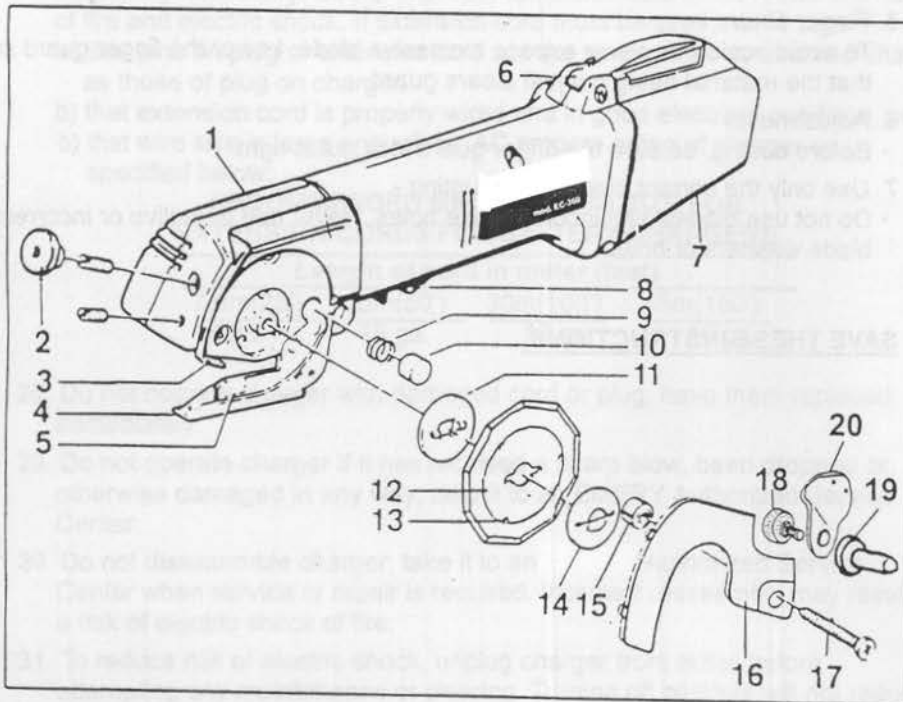


Figure 1

SWITCHES

Pull back on the switch (8) to start tool. Switch trigger will slip into a recess in motor housing. This helps hold it on against spring tension. Normal holding of the tool with fingers around switch trigger will keep the switch on. To turn tool off, release switch. There is no provision to lock the tool on for continuous running.

ACCESSORIES AND ATTACHMENTS

To avoid accidents, remove battery from the tool while installing blade or other accessories.

WARNING - The use of any accessory or attachment other than recommended in this operating instruction catalog may present a risk of personal injury.

CLEANING AND CARE

To avoid accidents, remove battery before cleaning or performing any maintenance. Always see that the ventilation openings are kept clean. The tool may be cleaned most effectively with compressed dry air. Do not attempt to clean by inserting pointed objects through openings

Recharge battery periodically to keep ready for operation. When not in use, store tool and battery in a dry and frost-free place. Never store in temperatures above 44°C or 110°F or below 0°C or 32°F.

BATTERY PACK - EC-360-03 (Figure 1, position 7)

The battery pack is housed in the handle of the motor housing. To remove the battery pack, release the holding spring clip (Figure 1 -position 6) and pull the battery pack out. Do not force the battery pack out. If the battery pack is hot, let it cool before removing from the housing.

No special maintenance is required for the battery pack. Store it in a dry and frost-free place. Never store in temperatures above 44°C or 110°F or below 0°C or 32°F. If the battery pack has a warped or swollen plastic housing, it must be replaced.

The battery pack will charge in about 1 hour. It can be recharged more than 30 times; however, misuse or abuse can shorten its life expectancy.

IMPORTANT: DO NOT TRY TO CHARGE BATTERY PACK IF IT IS HOT FROM DISCHARGE.

CHARGER - EC-360-04

The battery charger must be maintained like any electronic device.

1. The charger and battery have been designed to work together.
2. Always check the power source before returning charger for any repair.

CAUTION: The transformerless battery chargers EC-360-04 are designed to operate on 115 Volts AC, 60Hz, or 230V, 50Hz, commonly available from all public utilities. They will not operate on some inverters found in remote areas out of reach of public utilities, which change low-voltage DC to 115V or 230V modified sine-wave AC. For those who must use "inverted power", contact your representative to obtain a transformer type charger.

3. Power source must conform to the voltage rating on the name plate.
4. Have any damaged plug and cord replaced immediately by a service center.
5. Make sure that the contact plate connection between the charger and the battery pack is not obstructed by any debris.

CAUTION: To reduce the risk of electrical shock, always disconnect the charger from the power source before removing any debris that obstructs the charger contact plate.

6. Rapid charging begins as soon as the battery pack is inserted. The light indicates charging is in process. When light goes out, the rapid charging process is completed, and trickle charge will begin.
7. A battery pack can remain indefinitely in the battery charger and the full charge will be maintained automatically by the trickle charging circuit built into the charger.
8. It is normal for the charger and battery to become warm during the charging process.
9. No special maintenance is required for the charger. It may be cleaned most effectively with compressed dry air. Do not attempt to clean by inserting pointed objects through openings. We recommend that all service be performed by an Authorized Service Center.

IMPORTANT

- DO NOT CHARGE A BATTERY PACK IF THE ROOM TEMPERATURE IS BELOW 0°C OR 32°F OR ABOVE 44°C OR 110°F.
- DO NOT FORCE BATTERY PACK INTO CHARGER.
- IN ORDER TO ENSURE A LONG LIFE SPAN FOR THE BATTERY PACK IT HAS AN ELECTRONIC TEMPERATURE SENSOR, WHICH PREVENTS RAPID CHARGING IF THE BATTERY PACK TEMPERATURE IS ABOVE 44°C OR 110°F.
- IF A BATTERY PACK IS NOT WITHIN THE TEMPERATURE RANGES INDICATED AND FALLS OUTSIDE THE BOUNDARY CONDITIONS, THE BATTERY PACK WILL NOT CHARGE. ALSO, IF THE BATTERY PACK REACHES THE 44°C OR 110°F TEMPERATURE DURING THE CHARGING PROCESS, THE CHARGER WILL DISCONTINUE CHARGING EVEN THOUGH THE CHARGING PROCESS IS NOT FINISHED. IN ORDER TO RESTART THE CHARGING PROCESS, ALLOW THE BATTERY PACK TO COOL.
- THE BATTERY CHARGER AND BATTERY PACK HAVE NO USER SERVICEABLE PARTS INSIDE.

Cutting capacity.

Carpeting:	max. 13mm (1/2")
PVC, linoleum	max. 4.8mm (3/16")
Foam fabrics	max. 14.5mm (9/16")
Rubber	max. 4.8mm (3/16")
Leather	max. 4.8mm (3/16")
Cardboard	max. 4.8mm (3/16")
Cork	max. 4mm (5/32")
Textile fabrics	max. 10 layers

Sharpening of blades (Figure 1)

To avoid accidents always remove battery pack (7) and secure blade (12) by

means of pin hole (13). Loosen screw flange (14), then remove blade. Sharpen blade (12) from direction oil bevel with a fine oilstone, at an angle of 19° -21°. Never grind or sharpen blade on the side facing the stationary blade (5). If a slight burr shows up on this side, remove it with a fine oilstone. The carbide tipped stationary blade can not be sharpened. It must always be replaced when it becomes dull.

When replacing blades handle with care as blades are extremely sharp.

OPERATING THE TOOL (Figure 1)

Following a few simple tips will reduce wear on the tool and it will reduce the chance of injury to the operator. However, these instructions are not intended to teach a novice how to operate this tool. If you are not familiar with the operation of this tool, it is best to obtain instruction from a skilled user, or a class at a local junior or community college.

WARNING: THE ROTARY SHEAR MUST NEVER BE OPERATED WITHOUT FINGER GUARD IN PLACE AND PROPERLY ADJUSTED.

1. Make sure guard is adjusted properly (see above).
2. Test shear on scrap material before cutting, to get the feel for the operation.
3. Turn on shear and let blade come up to speed before beginning to cut material.
4. For accurate joining of any material, place materials one above the other and cut with assistance of a locating strip.

WARNING: At end of cutting, set finger guard (3) back to single pile height.

Material cutting hints

When cutting carpeting, cut in such a manner that the guide runner 4 is resting parallel to the floor.

PVC, linoleum, rubber: cut similar to carpeting.

Fabrics: First, check whether blade is sharp. Depending on type of fabric, up to 10 layers can be cut simultaneously. Tack or stitch the cutting pattern in place against shifting.

Felt: Cut similar to fabric, but in most cases only 3 layers are possible, max. thickness 3/16 inch (4.8mm).

Leather: Max. cutting thickness depends quality of the leather.

Cork, corrugated board, cardboard, wallpaper (dry), foam fabrics and sheeting. These materials may also be cut with this tool, although a test cut is recommended for each one.

SERVICE

We recommend that all tool service be performed by an Authorized Service Center. Work performed by unauthorized persons may create a hazard. Contact your dealer or the local Yellow Pages for the nearest Authorized Service Center.

WARRANTY

Applicable to all countries. Supersedes any other warranty. _____ warrants new power tools sold by it to be free from defects in material and workmanship subject to the following:

For six months in all countries, after delivery to the first using purchaser, _____ will refund the purchase price of, repair, or replace, at its option, any tool which under normal conditions of use and service proves to be defective in material or workmanship at no charge to the purchaser. No charge will be made for labor with respect to defects covered by this warranty, provided that the work is done by _____ or any of its authorized service facilities. However, this warranty does not cover expenses incurred in the removal and reinstallation of any product, whether or not proven defective.

To obtain performance of this warranty, return the tool intact, freight prepaid, to the nearest _____ Authorized Service Center along with the purchase receipt or other positive proof that the tool is within the warranty period.

This warranty is limited to the first using purchaser and is not transferable. Specifically excluded from this warranty are failures caused by misuse, neglect, abuse, improper operation, or unauthorized service or parts. This warranty sets out the purchaser's exclusive remedies with respect to products covered by it, whether for negligence or otherwise. Neither _____ nor any of its affiliates will be liable for consequential or incidental damages or other losses or expenses incurred by reason of the use of sale of such products.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, WHETHER FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. No attempt to alter, amend or extend this warranty shall be effective unless authorized in writing by an Officer of _____ company.

SPECIFICATIONS

Model No.	Description	Rating in	No Load RPM	Weight
EC-360	Cordless rotary shear	9.6 V DC Nickel-Cadmium Battery	1,200*	1.15kgs** (2.5lbs)

*No load RPM with a fully charged battery

**Weight with battery

WARNING -- The use of any accessory or attachment other than recommended in this operating instruction or catalog may present a risk of personal injury.

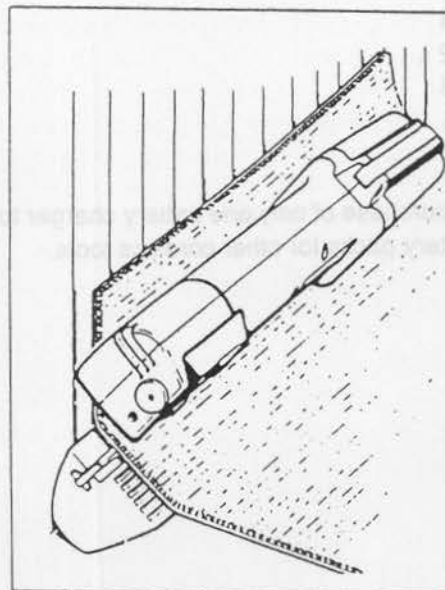


Figure 2
Edge Cutter
EC-360-ECG

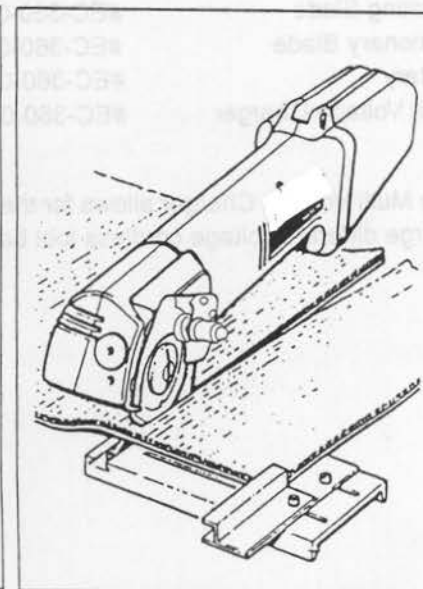


Figure 3
Strip Cutter
EC-360-ASC

Standard Equipment - part numbers

9.6 V Battery	EC-360-03
Multi-Volt Charger	EC-360-04
Rotating Blade	EC-360-01
Stationary Blade	EC-360-02

Optional Equipment

Edge Cutter	mod EC-360-ECG
Adjustable strip cutter	mod EC-360-ASC
Metal Case	mod EC-360-MC

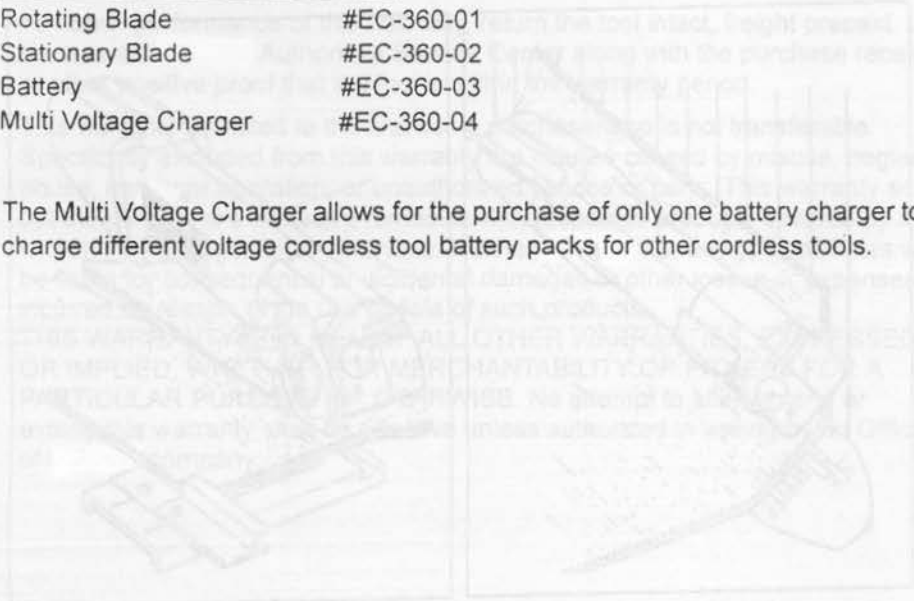
CHARGER SPECIFICATIONS – for battery tools only

Part No.	Input	Charging Voltage	Weight
EC-360-04-1	115VAC/60Hz.1.2A	7.2-14.4VDC	340grams
EC-360-04-2	230VAC/50Hz.0.6A	7.2-14.4VDC	

REPLACEMENT COMPONENTS:

Rotating Blade	#EC-360-01
Stationary Blade	#EC-360-02
Battery	#EC-360-03
Multi Voltage Charger	#EC-360-04

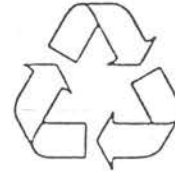
The Multi Voltage Charger allows for the purchase of only one battery charger to charge different voltage cordless tool battery packs for other cordless tools.



Standard Equipment - part numbers

8.8 V Battery	EC-360-03
Multi-Volt Charger	EC-360-04
Rotating Blade	EC-360-01
Stationary Blade	EC-360-02

Nickel Cadmium Battery Care & Disposal



Ni-Cd

This nickel cadmium battery must be collected, recycled, or disposed of in an environmentally sound manner.

Do not place used batteries in your regular trash. The incineration, landfilling, or mixing of nickel cadmium batteries with municipal solid waste streams is prohibited by law in most areas.

Return depleted batteries to an authorized power tool service center or other State Municipal approved battery collection center. Contact your local waste management

Item No. EC-360-03 (9.6VDC)

authority for specific locations and additional information regarding the environmentally sound collection, recycling, and disposal of nickel cadmium batteries.



Do not expose the tool or battery to fire or high heat as batteries may explode. Care must be taken not to short terminals together with metal objects; jewelry, keys, nails, screws, etc. Do not attempt to disassemble battery. Fire or injury may result. Prior to disposal protect terminals with heavy insulating tape to prevent shorting.