



Cordless Tube Cutter

Model TC-01

USERS MANUAL



SAVE THIS MANUAL FOR FUTURE REFERENCE

CONTENTS

General safety instructions	1
Tool use and care	2
Service	2
Safety rules for the Cordless Tube Cutter	2
Safety rules for the batteries and charger	3
Battery charging	3
To obtain the best life for the battery	4
Fitting and removing the battery pack	4
Battery indicator	4
LED work light	4
Know your tool	5
Basic operation	6
Adjustment of cutting force	7
Accessory operations	7
Replacing the cutting blade	7
Maintenance	8
Troubleshooting	9
Replacement parts – accessories	9
Customer service, contact and repair information	10
Limited one year warranty	11

Specifications

Charger	input:	110-120VAC, 60Hz
	output:	18VDC, 2.2A
Charging time:		1 hour approx.
Battery capacity:		2.0 Ah
Nominal Battery voltage:		18V
No load speed (cutter):		0 - 120 RPM
Tube size (standard):		3/8" ID to 1-1/8" OD
Tube size (optional):		1/8" ID to 7/8" OD
Tube wall thickness:		up to 0.100"
Tube material:		metals and plastics
Weight (w/o battery):		6 lbs.

GENERAL SAFETY INSTRUCTIONS

WARNING! Read and understand all instructions. Failure to follow all instructions listed below may result in electrical shock, fire and/or serious personal injury.

WORK AREA

- **Keep your work area clean and well lit.**
Cluttered work environments and poor lighting invite accidents.
- **Do not operate power tools around explosive materials.**
Be aware of flammable liquids, gases or dust.
Power tools can create sparks which may ignite the dust or fumes.
- **Keep bystanders, children and visitors out of the work area.**
To avoid distractions that could cause injury to you or others all visitors should be kept away from the work area.

ELECTRICAL SAFETY

- **Never use the power cord to carry the charger. Keep the cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.**
Damaged cords can cause injury or fires.
- **Batteries must be charged with the specified charger for the battery.**
Charging the batteries with the incorrect charger may damage the battery and create the risk of injury or fire.
- **Use only approved batteries.**
Use of unapproved batteries may damage the tool and create the risk of injury or fire.

PERSONAL SAFETY

- **Do not operate power tools while tired or under the influence of drugs, alcohol or medication.**
A moment of inattention while operating the tube cutter may result in serious personal injury.
- **Dress attire.**
Loose clothing, jewelry or long hair can be caught in moving parts.
- **Do not overreach.**
Proper footing and balance enables better control of the tool.
- **Use safety equipment. Always wear eye protection.**
Dust mask, non-skid safety shoes, hard hat or hearing protection should be worn for appropriate conditions.
- **Store idle tools out of reach of children or other untrained persons.**
Tools are dangerous in the hands of untrained users.

TOOL USE AND CARE

- **Disconnect the battery from the unit before making any adjustment, changing cutting blade, accessories or storing the tool.**
Such preventive measures reduce the risk of injury and damage to the tool.
- **Maintain tools with care. Keep cutting tools sharp and clean.**
Properly maintained tools, with sharp cutting edges, are less likely to bind and are easier to control.
- **Check for misalignment or binding of moving parts, breakage of parts and other conditions that may affect the tool's operations. If damaged, have the tool serviced before using.**
Many accidents are caused by poorly maintained tools.

SERVICE

- **Tool service must be performed by authorized personnel.**
Service or repair performed by any unauthorized personnel will result in a void of warranty and could result in a risk of injury.

SAFETY RULES FOR THE CORDLESS TUBE CUTTER

- Hold tool by insulated gripping surfaces when performing any operation where the cutting tool may contact hidden wiring. Contact with a "live" wire will make the exposed metal parts of the tool "live" and could shock the user.
- Always wear safety goggles or eye protection when using this tool.
- Do not remove safety cover from tool. Cover must be installed on the tool all the time to prevent accidental injury from rotating parts.
- Position yourself to avoid being caught between the tool or handle and other stationary objects. Should the cutting blade jam or bind on the work piece, the reaction could spin the handle of the tool causing the risk of injury.
- Do not grasp the tool or place hands too close to the cutting head.
The cutting head contains sharp and spinning parts that could cause injury.
- Do not use dull or damaged blades or accessories.
Dull or damaged blades or accessories increase the risk of injury.
- Use caution when changing the blade or accessories.
The blade or accessories may become hot after prolonged use.
- Remove the Adjustment wrench before use.
The wrench can fly away at high velocities, striking you or a bystander.

SAFETY RULES FOR THE BATTERIES AND CHARGER

- Only use the charger and batteries supplied in this pack, or use batteries purchased for this unit.
- Protect the charger and battery packs against moisture including rain and high humidity.
- Always check that the power cord is in good condition before using the charger.
- When not using the charger, remove the plug from the power supply. Do not pull the plug out by the cord.
- Do not operate the charger to charge batteries if the ambient temperature is less than 32°F (0°C) or greater than 104°F (40°C).
- Do not short circuit the battery pack. Short circuits can cause the risk of damage to the battery pack and the possibility of fire or explosion.
- Do not connect a cable to the terminals of the battery pack.
- Make sure that no metal objects fall onto the charging socket.
- Damaged battery packs or battery packs that no longer hold a charge should be properly disposed of in approved disposal locations. Battery packs should not be disposed of with household trash.
- Never throw battery packs into a fire or into water.

UNPACKING

It is unlikely that your Tesla Power Tool is faulty or that a part is missing, but if you find anything wrong, do not operate the tool until the parts have been replaced or the fault has been rectified. Failure to do so could result in serious personal injury.

BATTERY CHARGING

Important! The battery will be fully charged **first time after 1-3 hours**, remove it from the charger after this time. Do not leave a battery charging for longer than 24 hours.

1. Plug in the charger. The green LED indicator will show power to the unit.
2. Align and slide the battery onto the charger until the battery pack latches or “clicks” into position. The red LED indicator will show that charging is taking place.
3. The battery charging time is approximately **one hour**. The red LED goes out when the charging cycle is complete.
4. To remove the battery pack from the charger firmly press the battery release tabs at either side of the battery pack, and slide the battery forward out of the charger.

TO OBTAIN THE BEST LIFE FOR THE BATTERY

Never allow the tube cutter to come to a complete stand still before recharging. The battery should be charged whenever the battery is noticeably running low or the tube cutter no longer performs a task it previously performed.

Avoid conducting short charges. Make sure that the battery is fully charged every time by allowing the charger to complete its full charging cycle.

Avoid allowing loose items like screws or nails etc to be stored with battery packs as these or similar items can short circuit the battery packs and cause a fire or explosion. Always unplug the charger when not in use and store in a dry secure place. Avoid charging or storing your battery in temperatures below 32°F and above 104°F.

FITTING AND REMOVING THE BATTERY PACK

To remove the battery pack from the tube cutter, firmly press the battery release tabs at either side of the battery pack, and slide the battery backward out of the tool. To install the battery pack, align rails on the tool with the tabs on the battery pack and slide the battery pack on to the tool. Ensure the battery pack is sitting straight on the foot and correctly entering the runners. The battery should slide fully on to the tool foot until the battery pack “clicks” into position.

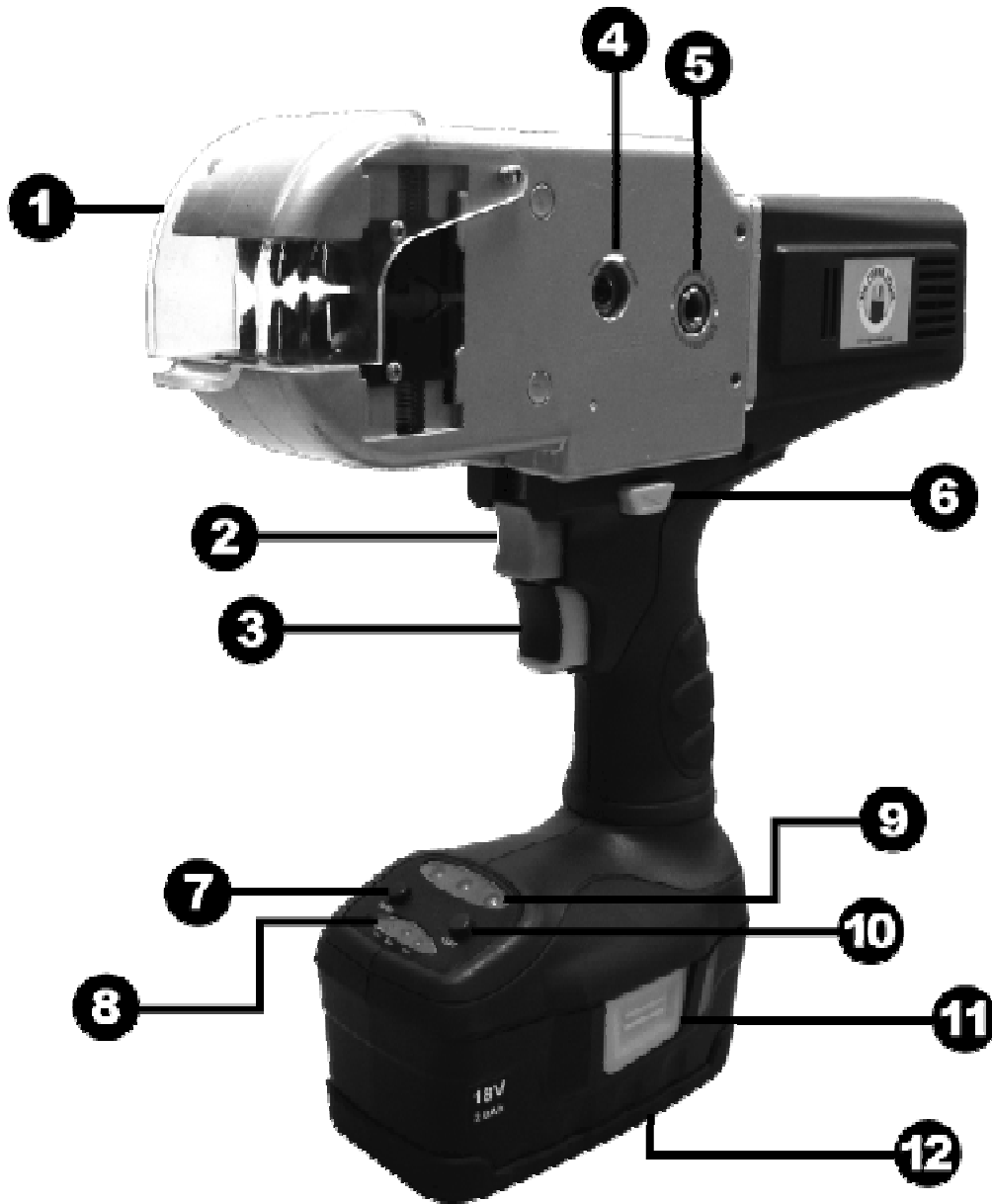
BATTERY INDICATOR (8)

To activate the battery indicator feature, first pull the power switch then press the battery indicator button (7), this will display the level of charge remaining in the battery. There are 3 levels of charge: low, medium and high. When the battery indicator (8) is showing only 1 LED (low) the battery should be removed and put on the charger.

LED WORK LIGHT (9)

The drill has 3 external LED lights to illuminate the work area and improve vision when working in areas with insufficient light. To turn the LED lights on and off, depress the LED light button (10). There is also an LED light inside the cutting head that is activated by the same switch; helping to align tube cutting mark with cutting blade.

KNOW YOUR TOOL



1. Cutting Head / Safety Cover	7. Battery Test Button
2. Cutting Switch	8. Battery Level Indicator
3. Power Switch (Variable Speed)	9. LED Work Light
4. Tension Adjustment Screw	10. LED Work Light Button
5. Accessory Receiving Shaft	11. Battery Release Tab
6. Forward / Reverse Switch	12. Rechargeable Battery

BASIC OPERATION

- 1. Make sure cutting head (1) is aligned and ready for cutting use.**
Running the tube cutter in reverse opens and aligns the cutting head.
- 2. Place the tube cutter in the forward operation direction.**
Push “forward-reverse” shuttle switch (6) in forward direction
- 3. Place tube cutter over the tube to be cut.**
The spring loaded tube guides will center the cutting head on the tube. Align cutting blade with tube cutting mark by using clear window sight, illuminate inside LED light if needed. Be sure that cutting head cover is back in place and covers rotating parts
- 4. Hold tube firmly to prevent its rotation (if it isn't already fixed in place).**
Rotation of the tube during cutting operation will cause excessive pressure in one cutting point creating dent and can damage cutting blade.
- 5. Activate tool rotation power switch (3) with middle finger to size cutting mechanism.**
Depressing power switch lightly will cause cutting head to size its mechanism for size of the tube placed into tool. Do not push or pull tool on the tube. Hold tool lightly in place; the cutting mechanism will grab tube itself. The cutting head will rotate around tube without cutting it with speed proportional to amount of switch pressure.
- 6. Activate cutting switch (2) with index finger to cut tube.**
Once the cutting head sizes on the tube and starts rotation around tube, depress cutting switch to engage cutting mechanism. The tube cutter will start feeding the cutting blade into tube. After a couple rotations, depending on the material and adjustment, tube will be cut.

WARNING:

Running the tube cutter in the forward direction with cutting switch engaged but w/o tube in the tool to be cut could cause damage to the tube cutter.

- 7. Release power switch and cut switch, prepare tool for the next cut.**
After the tube has been cut, release power and cut switches simultaneously, the cutting head will stop rotation. Push “forward-reverse” switch (6) into reverse position, activate power switch (3) to rotate cutting head in reverse until it stops in aligned position and the tube can then be removed from the tube cutter.

WARNING:

Running the tube cutter in the reverse direction for a prolonged period of time could cause damage to the tube cutter.

ADJUSTMENT OF CUTTING FORCE

1. **Insert supplied allen wrench into the tension adjustment screw (4).**
Be sure the “forward-reverse” switch (6) is in center lock position to prevent accidental powering of the tool.
2. **Turn tension adjustment screw to adjust cutting force.**
 - **Clockwise for harder materials (back off ¼ turn from screw bottoming)**
 - **Counter Clockwise for softer materials**Be sure to do test cut before attempting to adjust cutting force. The right amount of tension adjustment depends on materials to be cut, shape of the cutting blade, and prior experience of the operator.
3. **Remove adjusting wrench, unlock power switch.**

ACCESSORY OPERATION

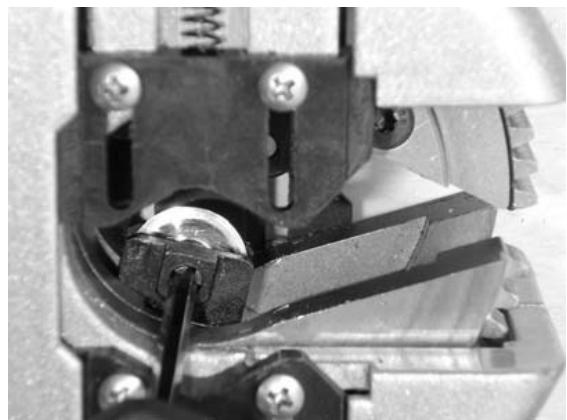
There are several accessories included with the tube cutter. These are provided to clean, de-burr and ream the tubes after cutting. Once an accessory is screwed in the power output shaft, rotation of the cutting head will be stopped. Forward-reverse switch must be in reverse position to prevent unscrewing of the accessories and to have proper rotation. The proper rotation of the accessories is counter clockwise when looked from accessories side.

1. **Place forward-reverse switch (6) in reverse position.**
2. **Screw in desired accessory to the accessory receiving shaft (5).**
3. **Place tube cutter with the battery bottom on flat surface.**
4. **Hold tube with left hand while activating power switch with right hand to rotate desired accessory. Rotational speed of the accessory is proportional to the amount of pressure applied to the power switch.**
5. **After finishing accessory operation (cleaning, de-burring or reaming) unscrew accessory, clean and store it. If de-burring or reaming tool do not unscrew easy, unscrew them by inserting screwdriver in the appropriate side hole to provide more leverage.**

REPLACING THE CUTTING BLADE

WARNING: Keep fingers clear of moving parts when changing the cutting blade.

1. **Slowly activate power switch (3) in the forward direction until you can see the cutting blade and screw that holds the blade in place.**
2. **Remove the battery.**



3. Place the tube cutter on its battery connection surface.
4. Slide open the tube guides and secure in place by tightening the guide screws on the tube cutter.
5. Unscrew cutting blade pin.
6. Remove old blade and insert new blade. Use only approved blade to assure proper tool function.
7. Replace and lightly tighten the cutting blade pin. Manually rotate the side gears up down to verify that the cutting blade holder retracts freely.
CAUTION: Over tightening the cutting blade pin screw can cause damage.
8. Release tube guides by loosening the guide screws.
9. Replace the battery.
10. Slowly activate power switch (3) with the tube cutter in the forward direction. Be sure that blade mechanism is moving freely.



MAINTENANCE

- Store the tools, instruction manual and accessories in the original packaging. This way you will always have all the information and parts ready at hand.
- Clean and lubricate the tool after every battery charge.
 1. Remove the battery.
 2. Lift the safety cover
 3. Remove any metal shavings and dirt out of the cutter head. This can be done with compressed air or a small brush. Do not blow shavings into tool gear case. Always wear safety glasses when performing this task.
 4. Lubricate cutter head with couple drops of light oil or spray lubricant.
 5. Replace the battery.
 6. Spin tool for couple rotations to spread lubricant onto other gears.
 7. Wipe off any residual lubricant left on the housing.

TROUBLESHOOTING

PROBLEM	SOLUTION
Tool does not cut when power switch is depressed	Make sure the battery is installed properly and the forward-reverse switch is in forward position.
The LED light does not come on when turning on light switch	Make sure the battery is installed properly or battery may need charging
Cutting head does not retract to aligned position when reversed	Make sure no small pieces of tubing are stuck in the cutting head. First, try first to move tool forward and reverse. If this does not unlock head, remove battery before dislodging tube. Releasing material cutting force adjustment screw will help cutting head to retract.
Adjusting screw for different cutting force adjustment can not be released back, cutting head does not stay in place	This could happen if the cutting force is too tight, or when cutting hard materials. Place a piece of metal tubing in the tool and start cutting. Stop cutting in middle of cycle (tube are gripped by cutting head), release adjustment screw now.
Accessories, when attached to the tool, do not stop rotation of the cutting head when power switch is depressed	Check if accessory connecting thread is not screwed in completely or is worn out. Replace with new screw if needed. If problem persists call authorized service for help. Accessories <u>must rotate counter clockwise</u> when looked from accessories side.

REPLACEMENT PARTS – ACCESSORIES

Part #	Description
PT10000000	Complete TC-1 Package
PT10880100	Charger
PT10880200	Battery
PT10050102	Replacement Blade
PT10990100	Brush – 1/2"
PT10990200	Brush – 3/4"
PT10990300	Brush – 1"
PT10990400	De-burring Tool
PT10990500	Reaming Tool

CUSTOMER SERVICE, CONTACT AND REPAIR INFORMATION

To assure product safety and reliability, service and repairs must be performed by Tesla Power Tools Company or its authorized services only. If you are having trouble with this tool please call us at: (630)-274-2069 or email to: service@teslatools.com

We will put all efforts to discuss and solve any problems you may have with this tool. If we can not solve your problem over the phone, you can return tool, prepaid and in its complete packaging, to Tesla Power Tools for service or repair.

LIMITED ONE YEAR WARRANTY

Every Tesla Power Tools Company tube cutter is thoroughly inspected and tested before shipment. It is warranted to be free of defects from workmanship and materials for the period of one year from the date of original purchase. Should any problems develop using this tool during this one year period, return the complete tool in original packaging, freight prepaid to Tesla Tools LLC., 125 8th Ct., Racine, WI 53403. If inspection shows that the problem is caused by defective workmanship or material, Tesla Power Tools LLC., will repair (or replace at our discretion) tool without charge.

This warranty does not apply where:

- Unauthorized personnel have made or attempted to make repairs
- Repair is required because of normal wear and tear
- The tool has been abused, misused or improperly maintained
- Alterations have been made to the tool

IN NO EVENT SHALL TESLA POWER TOOLS BE LIABLE FOR ANY DIRECT, INDIRECT OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THIS PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

TESLA POWER TOOLS DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE YEAR TERM OF THIS WARRANTY.

Tesla Power Tools LLC
125 8th Ct., Racine, WI 53403

1-630-561-4008 or service@teslatools.com