Operating manual

Push Cut TPLO Saw



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<u>Notice</u>

Please read the entire manual prior to using the Whittemore battery operated push cut TPLO saw.

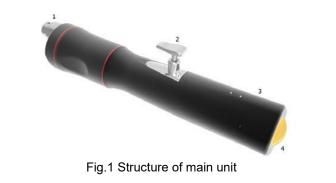
For service or repair, contact Whittemore Enterprises at 909-980-2452 or 800-999-2452.

INTRODUCTION:

- Always inspect the components before and after use for identifying any damage. Do not use the damaged part until it is repaired or replaced if damage is observed.
- Verify sterility prior to use. Do not use if not sterilized.
- The hub and blade should be securely fixed to the main unit.
- Test and check the saw movement and sharpness of the blade prior to use.
- The battery should not be sterilized at high temperature and/or high pressure. Do not leave the battery in the saw for an extended period of time. Remove the battery immediately if there is something wrong with the power during surgery.
- Explosion hazard if batteries are exposed to flames. Properly dispose of used batteries.
- Stop using this device immediately if the main unit gets hot or makes an abnormal sound. Contact your distributor and return the saw for repair.
- Optimum speed is 16000r/min. Damage to the bone can occur if the speed is too high, and cutting time will increase if speed is too low.

PRODUCT CONFIGURATION:

This device is composed of the main unit, battery, and battery charger.



1. Rotating head 2. Power switch 3. End cover 4. Knob switch

OPERATION AND USE:

Installing and disassembling the hub and blade

Lock the hub and blade assembly firmly into place with the hex screw. Ensure the blade being used is sharp. Remove the hub and blade prior to sterilization.

Installing and removing the battery

Installation:

Step 1: After sterilization and prior to use, turn the knob switch counter-clockwise to take off the end cover.

Step 2: Put the battery into the main unit.



Fig.2 Insert the battery

Step 3: Align the two points between the main unit and the end cover, then turn the lock knob clockwise.



Fig.3 Install the end cover



Fig.4 Lock the end cover

Disassembly: Step 1: Rotate the knob counter-clockwise to unlock and remove the end cover.



Fig.5 Take off the end cover

Step 2: Remove the battery.



Fig.6 Remove the battery

Step 3: Align the two points between the main unit and the end cover, then turn the knob clockwise to lock.



Fig.7 Lock the end cover

CHARGING THE BATTERY:

- The 'power' and 'charging' LED lights will both be illuminated if the charger is connected to the power supply.
- The 'charging' LED will change from green to red if a battery is inserted into the charger. This means that the battery is charging.
- The LED will change from red to green after 3 hours, indicating that the charging process is completed.
- The battery should not be used immediately after charging. It should be allowed to cool down first. The charged battery can be used at full load for no less than 8 minutes.
- The battery should be charged approximately every 15 days if the saw is not going to be used on a regular basis.

Normally the battery can be charged and discharged approximately 150 times. After the charger is connected to the power supply, the LED turns green. It means that the capacity is full. Otherwise the capacity is not full. These batteries should be charged again or replaced.

Note: Explosion hazard if batteries are exposed to flames. Properly dispose of used batteries.

SAFE AND WORKING MODE:

The switch has a self-locking function. It has two modes: working mode and safe mode.

Safe mode (Locked):

To put the saw in safe mode, turn the switch clockwise 90 $^{\circ}$. The saw is now locked. The switch cannot be pressed and the saw will not operate.

Working mode :

Turn the switch 90 degrees counter-clockwise (as in Figure 8 below). The saw will now run when the switch is pressed. The actual speed is controlled by how far the switch is depressed. Gentle pressure means low speed, and firmer pressure will result in higher speed.



Fig.8 Mark on the switch

CLEANING AND STERILIZATION:

Cleaning :

Wipe all surfaces of the saw with a cloth dampened with a neutral enzymatic cleaner (pH 6.0 - 8.0). Dry thoroughly.

Sterilization :

These sterilization guidelines are only recommended guidelines and may vary among hospitals depending upon the type of sterilization equipment and possible pathogens. These guidelines represent exposure time and not total cycle time. The recommended sterilization parameters may be modified based on standard hospital sterilization protocol.

Method	Temperature	Time	Dry time
Quick, wrapped	129°C~134°C	10min	8min
Vacuum, wrapped	129°C~134°C	4min	8min
100% ethylene oxide, wrapped	49°C~57°C	150min	Venting 8 hours
270F steam, wrapped	129°C~134°C	35min	8min
270Fsteam, double wrapped	121℃~123℃	50 min	8 min

Table.3 Sterilization

TECHNICAL SPECIFICATIONS:

Total length (mm)	290		
Diameter (mm)	55		
Weight (kg)	0.9		
Working voltage	9.6		
Output power (W)	90		
Oscillation rate (r/m)	16000 +/- 10%		
Classification	Class II, Type B		
Charger:			
Input voltage	AC 220V, 50Hz		
Output voltage	9.6V		
Charging time	About 3 hours		
Battery voltage	9.6V		
Operating environmental requirements:			
Operating environmental requirements:			
Temperature	+10 deg C to +40 deg C		
Humidity	30% to 75% RH		

TROUBLESHOOTING:

Problem	Possible cause	Solution
The saw does not work.	No charge in the battery.	Check the battery prior to use. Replace with a fully charged battery if needed.
The saw works only for a short time or lacks power.	Check the battery.	Check the battery prior to use. Replace with a fully charged battery if needed.
The blade does not cut well.	Blunt blade.	Check the blade prior to use. Replace with a new blade if needed.

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