



THERMAL CAUTERY UNIT
MODEL 150 OPERATION MANUAL

I. INTRODUCTION

If you need assistance related to this product, please call Delasco at 800.831.6273 (712.323.3269).

It is important that the instructions supplied with this equipment be read, understood, and followed in order to enhance safety and effectiveness.

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III. PRECAUTIONS

CAUTION: Federal (U.S.A.) law requires the sale of this device to or on the order of a physician or health care professional.

CAUTION: This device is supplied non-sterile.

WARNING: The risk of igniting flammable gases or other materials is inherent in the practice of thermal cautery and cannot be eliminated by device design. Precautions must be taken to avoid contact of flammable materials and substances with thermal cautery electrodes, whether they are in the form of an anesthetic or skin preparation agent, are produced by natural processes within body cavities, or originate in surgical drapes, tracheal tubes or other materials.

CAUTION: Studies have shown that smoke generated during thermal cautery procedures may be harmful to surgical personnel. These studies recommend using a surgical mask and adequate ventilation of the smoke using a smoke evacuator or other means.

CAUTION: The TCU handpiece is designed for intermittent use only. Continuous activation is not recommended and will cause permanent damage to the handpiece.

CAUTION: The cautery electrode shafts, insulation material and the handpiece metal nosecone may become hot with use. Do not allow these areas, during or immediately after use, to make human contact or contact with materials that may be adversely affected by heat.

IV. INDICATIONS FOR USE

The TCU is a non-sterile, reusable, AC-powered thermal cautery device. The TCU is intended to be used for destroying small lesions and to coagulate small bleeders by applying high levels of heat via a cautery electrode.

V. INSPECTION

The TCU Model 150-ST & 150A-ST includes:

- (1) Thermal Cautery Unit - Part No.: 150
- (1) Cautery Handpiece - Part No.: 250
- (6) General Purpose Cautery Electrodes
Part No.: 2 ea of: 210T, 212, 214
- (1) TCU Case - Part No.: 150-C
- (1) Operation Manual - Part No.: 81-0018

Upon receipt of your TCU, carefully unpack the contents and verify that all items ordered are present and undamaged. If damage has occurred during shipment, or an item is missing, contact Delasco directly within ten days of purchase.

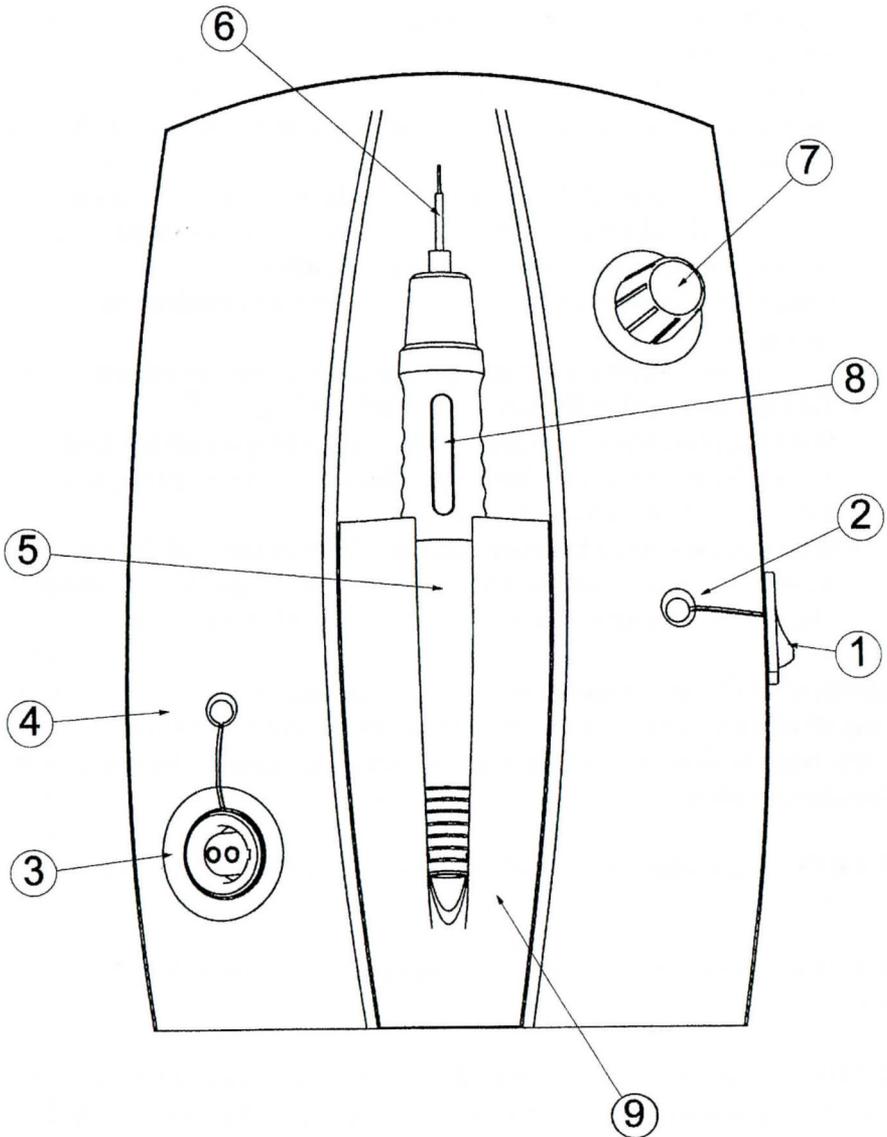
To purchase additional TCU supplies, contact your Delasco Distributor, or Delasco at 800.831.6273 (712.323.3269).

VI. DEVICE DESCRIPTION

Please refer to Figure 1 for the following device descriptions:

1. On/Off Switch - Turns TCU power "On" and "Off".
2. Power On Light - Illuminates when the unit is turned "On".
3. Handpiece Receptacle - The Cautery Handpiece is connected to this receptacle.
4. Activation Light - Illuminates when the Handpiece Activation Button is pressed.
5. Cautery Handpiece - Used to deliver current to the Cautery Electrode.
6. Cautery Electrode - The tip of the Electrode heats and is used to deliver heat to the patient.

- 7. Dial Setting Knob - Allows for the adjustment of the unit output. Settings are from 1-10 and are for reference only.
- 8. Handpiece Activation Button - Activation occurs when the blue Handpiece Activation Button on the Handpiece is pressed.
- 9. Handpiece Holder - During non-use periods, the Handpiece may be stored in this holder.



VII. OPERATING INSTRUCTIONS

CAUTION: If you are unfamiliar with the practice of thermal cautery, it would be wise to practice at the various settings on a piece of raw meat.

CAUTION: If using the TCU in a horizontal position, leave the handpiece connector in place during non-use periods to prevent fluids from accidentally entering the unit through the connector receptacle.

1. Place the unit in a safe convenient location near a power receptacle. The unit may either be used in a vertical or horizontal position.
2. Align the red dot on the Handpiece Connector with the red dot on the handpiece Receptacle. Insert the Connector until a secure fit is obtained.
3. Align the two pins of the desired Electrode with the two holes at the end of the Handpiece and insert the Electrode. The Electrode must be fully and securely inserted for proper function.
4. Connect the Cautery unit power cord to a properly grounded power receptacle.
5. Turn the Dial Setting Knob counterclockwise to the lowest setting.
6. Turn the unit On/Off Switch to the "On" position.
7. Press the Handpiece Activation Button and slowly rotate the Dial Setting Knob clockwise. When the electrode exhibits a red glow, the Cautery Unit is ready for use.
8. When the procedure has been completed, return the Dial Setting Knob to the lowest setting and switch the unit to the "Off" position. The unit should remain in the "Off" position when not in use.

If the output of the unit is intermittent, make sure that the cautery electrode is making satisfactory contact with the walls of the handpiece receptacle holes. You may want to slightly bend the electrode shafts to increase the contact area if the electrode is loose.

CAUTION: The TCU is intended for use only with Delasco Cautery Electrodes.

CAUTION: Over-heating the Cautery Electrode will shorten the life span of the Electrode.

CAUTION: When unsure of the output level to use during a procedure, begin at a low setting and increase the output gradually to prevent unnecessary damage to the patient.

VIII. UNIT CLEANING

CAUTION: To reduce the risk of an electric shock, do not remove the rear cover of the device. Refer all servicing to qualified personnel.

CAUTION: Disconnect the unit power cord from the power receptacle prior to performing cleaning operations.

Periodic external cleaning of the TCU is required. Clean all external surfaces with a mild soap and water solution using a moist, soft, lint-free cloth. Dry all surfaces with a clean, lint-free cloth.

CAUTION:

Care must be exercised to ensure that the electrical connections and control knob do not come in contact with water.

IX. STORAGE

Store the TCU in a cool, dry place.

X. STERILIZATION OF ACCESSORIES

The Cautery Handpiece and Reusable Cautery Electrodes may be autoclaved according to the instructions below.

Separate the electrode from the Handpiece prior to autoclaving and use aseptic procedures when handling and sterilizing both items.

1. Wipe and remove all debris present on the Handpiece/Electrode.
2. Place the Handpiece/Electrode in an autoclavable pouch or wrapped cloth.
3. Steam sterilize for a period of 20 minutes at 250°F (121°C) or consult an appropriate nationally recognized standard for sterilizing medical instrumentation. Do not flash autoclave or exceed 250°F.
4. Allow the Handpiece/Electrode to cool for 30 minutes prior to use.
5. Inspect the Handpiece/Electrode after sterilization for damage. If the Handpiece/Electrode has deteriorated or cracked, or severe discoloration or damage has occurred, discard and replace.

CAUTION: Do not use liquid sterilizing solutions with TCU or accessories, as the potential for material damage exists.

XI. WARRANTY AND REPAIR

The warranty period for the TCU unit and handpiece is one year from the date of purchase and covers parts and labor. Electrodes carry a 90-day warranty.

Items for return require a Return Authorization (RA) and should be sent with all original packaging and instructions included. Please use proper packaging to prevent damage during shipment. We recommend that you insure the return with your chosen carrier for loss or damage. Include a copy of the original invoice with the return and state the reason for the return. Freight charges to return merchandise to Delasco are non-refundable except in the case of shipping error on the part of Delasco

Please contact Delasco at 800.831.6273 (712.323.3269) to obtain a Return Authorization Number.

XII. SPECIFICATIONS

Line Voltage	Model 150 - 90-130 volts 50/60Hz Model 150A - 210-240 volts 50/60Hz
Line Current	1.0 Amps
Line Frequency	50/60Hz
Output Wave Shape	Clipped Sinusoidal
Output Power	0-30 Watts+/-6 Watts (0.2 Ohm Load)
Fundamental Output Frequency	50/60Hz
Maximum Output Power	36 Watts (0.2 Ohm Load)
Output Regulation	+/-20% at 30 Watts (0.2 Ohm Load) for a +/- 10% Line Voltage
Duty Cycle	100% (See Handpiece Restrictions)
Display Reading	1-10 (Reference Points Only)
Over Current Protection	Protection Device (Set at 14 Amps)
Fuse	1.0 Amps, 250V
Dimensions	5.0" (12.7 cm)D x 5.0" (12.7 cm)W x 8.0" (20.3 cm)H
Weight	4 lbs. (1.8 kg)

XIII. SYMBOL EXPLANATION

The symbols that appear on the TCU, along with their explanations, appear in Figure 2.

Definition of symbols appearing on unit:



Caution: Read Operation Manual and directions for use prior to using equipment.



On (power: connection to the mains)



Off (power: disconnection from the mains)



Cautery Handpiece Connection Receptacle

Figure 2

XIV. VOLTAGE/CURRENT VS. DIAL SETTING

Figure 3 contains the voltage and current output of the TCU over the range of dial settings available.

TRC[®] Voltages/Current vs Dial Setting
 (Load: 0.167 ohm)

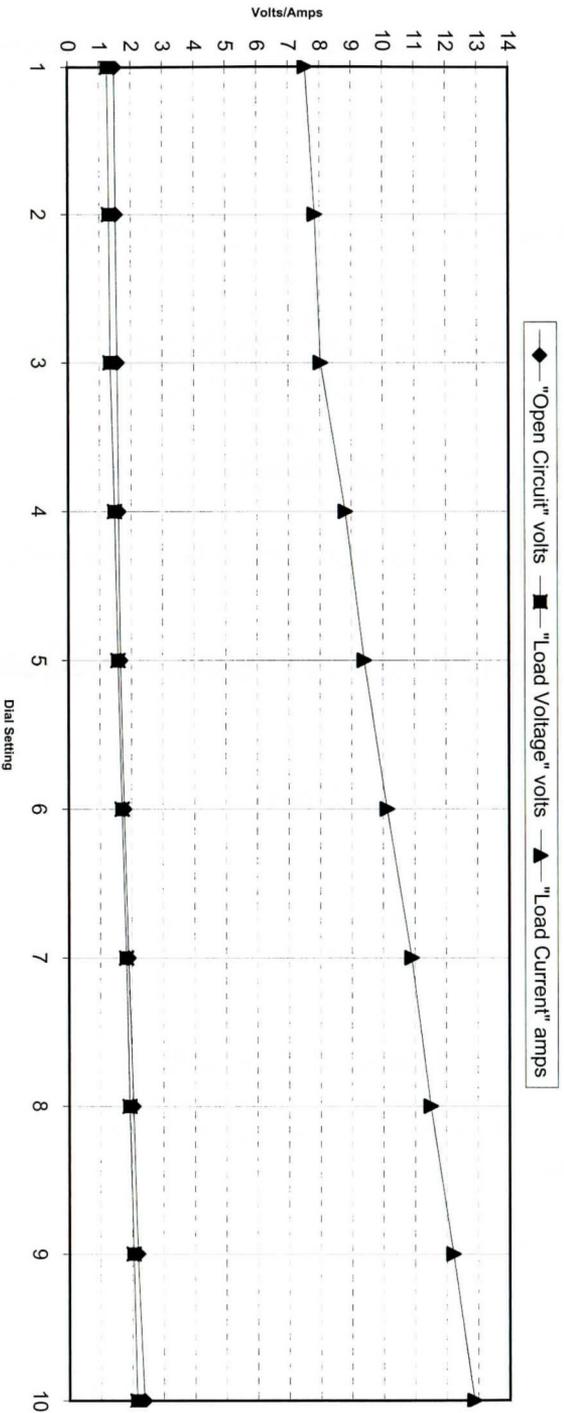


Figure 3

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