OPERATIONAL GUIDE FOR SADDLE BLOCK TESTER
MMSBT-170

THIS TESTER CAN ONLY BE USED WITH THE MCGAN HIGH VOLTAGE INSULATION DEFECT TESTERS USED TO TEST THE JACKET INTEGRITY OF ELECTROSURGICAL INSTRUMENTS
NOTE: Please read the full MM PD-8K or MM513 operation manual in detail before operating the unit. Review all warnings noted in the manuals. Always use gloves when using these kits.

USE: The MMSBT-170 is used in conjunction with the MMPD-8K KIT or the MM513 KIT. This is a non-destructive, non-patient contact, high voltage insulation tester designed to test the insulation integrity of electrosurgical instruments.

1. Secure the Saddle block to a flat, preferably metal surface, by pushing the top of the unit until the suction feet stick to the surface.
2. There are a number of ways to set the Saddle Block up depending upon the electrosurgical instrument (ESI) to be tested and/or the McGan kit used.

a. For Round ESI such as laparoscopic
   i. Insert the chosen electrode into the proper slot in the top of the Saddle Block. Make sure the pin is securely placed in the hole.
   ii. If using the MMPD-8K Kit attach the HV Red wire to the pin located on the side of the Saddle Block
   iii. If using the MM513 Kit attach the HV Red wire to the pin on the side of the Saddle Block OR connect red port on the top of the unit directly to the side pin. Make sure controls face up.
iv. Take the clamp on the Green ground wire and attach it to the conductive core of the instrument under test.

v. Turn the base unit on and set the voltage to 2.8kV +/- 0.3kV

vi. Push the ESI under test through the LSE ring slowly (approximately 3 feet every 4 seconds)

vii. The Alarm will sound when the ESI is first inserted into the electrode as that is the bare tip of the instrument.

viii. Alarm will sound and LED will Flash if a fault is found in the coating which will indicate a fault with the instrument.

**Using the Tri-Hole Electrode:**

1. The Set-up is the same as the steps in #2 except set the voltage to 4.2kV +/- 0.3kV
   i. Insert the round electrosurgical instrument into hole size closest to the diameter of the ESI under test. NOTE: Hole sizes are slightly larger than 3mm, 5mm and 10mm from the bottom (pin side) up,
For Bi-Polar Instruments: (wear gloves)

i. The Set-up is the same as the steps in #2  

ii. Place the Brush Electrode into the Saddle Block in the slot on the right side away from the pin.

![Image of Bi-Polar Instruments](image1.png)

iii. Attach the Green ground wire to the back end of the bi-Polar forceps. Make sure the clamp is connected to both pins.

iv. Insert the end of one tine of the Bi-Polar forceps into the middle of the brush.

![Image of Bi-Polar Instruments](image2.png)

v. Turn the base unit on and set the voltage to 2.8kV +/- 0.3kV

vi. Slowly push the Bi-Polar forceps away from you. Go from the tip of the forceps to the base.

vii. Repeat using the second tine.

viii. Alarm will sound and LED will Flash if a fault is found in the coating which will indicate a fault with the instrument
NOTES:
A. The unit should always be switched off prior to removing or repositioning of the ground lead, the HV red wire or the Saddle Block.
B. If the unit is on and you touch the ground lead (clamp end) and the probe end of the base unit at the same time you will receive a very mild “tingle”. To remove the possibility of receiving the “tingle” always use surgical gloves when handling the leads.
C. You can hold the Saddle Block from the top or the sides as long as you do not touch the connection points.

D. Read the Full Operator’s Handbook in detail and always use caution when operating the MM PD-8K.