Manual Supplement

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This supplement contains information necessary to ensure the accuracy of the above manual. This manual is distributed as an electronic manual on the following CD-ROM:

CD Title:	ESA612
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CD PN:	3334509

FLUKE. Biomedical

Change #1

At the beginning of the Manual under ***Notices***, Technical Support replace the phone number:

From: 1-800-648-7952
To: 1-800-850-4608

On page 14, at the end of ***Setting Up the Analyzer*** add:

Setting the GFCI Limit

The GFCI (Ground Fault Current Interrupter) protects the DUT from short circuits whenever it is connected to the test receptacle of the Analyzer except during Insulation testing, Protective Earth Resistance testing, and Voltage testing, during which the test receptacle is not connected to mains power. When the GFCI trips, it removes power from the test receptacle, and thereby the DUT, by opening the relays. The Analyzer continues to operate and displays “Fault Detected” with an explanation.

The Analyzer uses the GFCI setting based upon the standard selected by the user for testing. For best results, verify the GFCI setting in the Setup menu. AAMI standard specifies 5 mA. All of the other standards (for example IEC 60601-1 and IEC 62353) specify 10 mA. 25 mA is a special case that is not defined in any standard.

To set the GFCI current limit:

1. From the Setup menu, press the softkey labeled **Instrument** to reveal the instrument setup selections.
2. Press the softkey labeled **More** to reveal additional menu selections.
3. Press the softkey labeled **GFCI Limit** to open a scroll box above the softkey label.

4. Press the Up or Down navigation arrow buttons to adjust the current limit to the desired value.
5. Press the softkey labeled GFCI Limit to exit the GFCI Limit setup function.

Change #2, 620

On page 17, under ***Performing a Ground-Wire (Protective-Earth) Resistance Test***, add the following for Products shipped with a US outlet:

As a temporary deviation, this unit includes a 15 A to 20 A adapter. Use the adapter to accommodate devices with 20 A power plugs. When this adapter is installed, use the included ground lug and zero out the resistance for Ground Wire (Protective Earth) Resistance measurements. If you do not zero the resistance, you must add an additional factor of 5 mΩ to the readings obtained Ground Wire Resistance mode.

To zero the resistance for units with the adapter, connect the adapter to the test receptacle. Follow the procedure on page 18, under ***Performing a Ground-Wire (Protective-Earth) Resistance Test***, and replace step 4 with:

4. If using an accessories probe, connect it to the other end of the test lead and place the probe tip into the ground jack on the 15 A to 20 A adapter. If using an alligator clip accessory, connect it to the other end of the test lead, place the null post adapter in the ground jack of the 15 A to 20 A adapter, and clamp the alligator clip to the null post adapter.

Change #3, 625

On page 68, under **Table 6. Replacement Parts**, change the Power Cord for USA to:

USA	2238644

Change #4, 663

On page 14, replace ***Setting Polarity Switching Delay*** section, with:

Setting Polarity Switching Delay

When switching the polarity of the Analyzer's test receptacle, a delay can be set to control the actual switch time. Use the Polarity Switching Delay to protect the internal components of the Analyzer from transient effects. Transient effects can occur when the DUT has a highly capacitive or inductive power supply. These types of power supplies are in larger DUTs, for example, ultrasound, dialysis, and portable X-ray machines. If you think the DUT has a highly capacitive or inductive power supply, increase the Polarity Switching Delay from 1 second (default) to at least 5 seconds. This increase allows the DUT to self-discharge safely.
To set the polarity delay:

1. From the Setup menu, push ⏶ or ⏷ until the **Polarity Delay** variable is highlighted.
2. Push ENTER.
3. Push ⏶ or ⏷ to highlight one of the preset delay values.
4. Push ENTER .

Change #5, 687

On page 42, replace Figure 24 with:

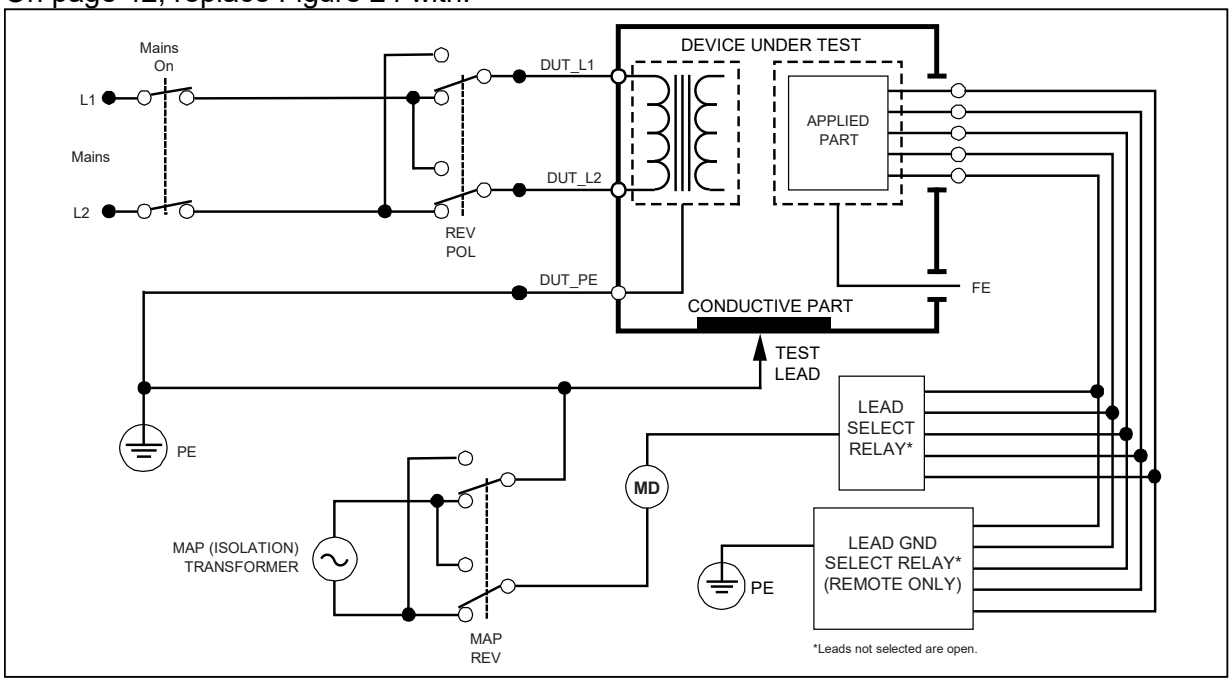

Figure 24. Lead Isolation (Mains On Applied Parts) Leakage Test Schematic

Change #6, 762

On page 23, under, ***Performing an Insulation Resistance Test*** add:

Note

*A reading of **OR** is used to indicate "Over Range", a resistance reading which exceeds the maximum resistance value measurable on the Analyzer.*