Fast Charge Option (IEC 335)

MegaPulse Surge Testers

Instruction Manual

COMPLIANCE WEST *USA*

Dear Customer:

Congratulations! Compliance West USA thanks you for purchasing the Fast Charge option for our MegaPulse family of surge testers. Connection of this option will allow the MegaPulse to charge within the minimum time constraints as dictated by relevant Standards pertaining to the MegaPulse you have purchased.

In order to use this option safely, we urge you to carefully review this manual before connection to your MegaPulse tester. Both line voltage and high voltage secondary circuits could be contacted if this option is improperly connected, and contact with either of these circuits pose the risk of serious injury or death.

Compliance West USA stands by your instrument with a full one-year warranty and free lifetime technical support. If the need arises, please don't hesitate to call on us.

Thank you for your trust and confidence.

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Section 1

MegaPulse Fast Charge Option (IEC 335)

General Information

The MegaPulse Fast Charge Option allows the host MegaPulse tester to charge quickly enough to satisfy minimum repetition times for tests within particular Standards. In this case, IEC 335 requires multiple surges to be applied to the EUT with a minimum pause time of 3 seconds between pulses, and the Fast Charge Option designed to allow recharging to the full capabilities of the tester within that time.

There are no adjustments or controls on the Fast Charge Option (IEC 335). If the option is connected to the MegaPulse tester, the Fast Charge Option is operational.

Operation of the MegaPulse is the same whether the Fast Charge Option (IEC 335) is connected or disconnected. Set the voltage knob for the voltage desired, press Charge, then press Trigger. See the MegaPulse Tester manual for more information on its operation.

Connection of the Fast Charge Option (IEC 335) is simple and straightforward, but for operator safety during installation, the Installation Instructions in Section 3 must be followed. It is imperative that ALL connections between the Fast Charge Option (IEC 335) and the MegaPulse tester be made, and the Connection Cover secured, before the MegaPulse is connected to line voltage. If the Fast Charge Option (IEC 335) is disconnected, please disconnect the MegaPulse from line voltage first.

Once connected, the Fast Charge Option does not pose the risk of shock. However, both line voltage and high voltage secondary circuits exist in the connections between the two enclosures. Exercise care with these wires and inspect them for damage periodically.

This manual contains a general description of the option (above), installation and removal instructions, and support information. For further information regarding operation of the MegaPulse Tester, please see the MegaPulse Tester Manual.

Section 2

Description

The Fast Charge Option (IEC 335) contains an auxiliary AC power supply which allows the MegaPulse it is connected to to charge within 3 seconds as required for the minimum rest time between repetitive cycles.

MegaPulse operation is identical whether the Fast Charge Option (IEC 335) is connected or not. Charge times to 12kV are approximately 12 seconds without the Option, and approximately 2-1/2 seconds with the Option installed.

Connection points on the Fast Charge Option (IEC 335) front panel are noted in Figure 1 and Table 1. All cables are supplied with the Option, and cable use is also documented in Table 1.

MegaPulse testers are supplied with a covered connection terminal enclosure on its rear panel. A photo of this enclosure and connection points on the MegaPulse rear panel are noted in Figure 2 and Table 2.

After connection or disconnection of the Fast Charge Option (IEC 335), the Connector Cover on the rear panel of the MegaPulse must be replaced using the four provided screws before the MegaPulse is energized. Fig. 3 shows the cover correctly installed.

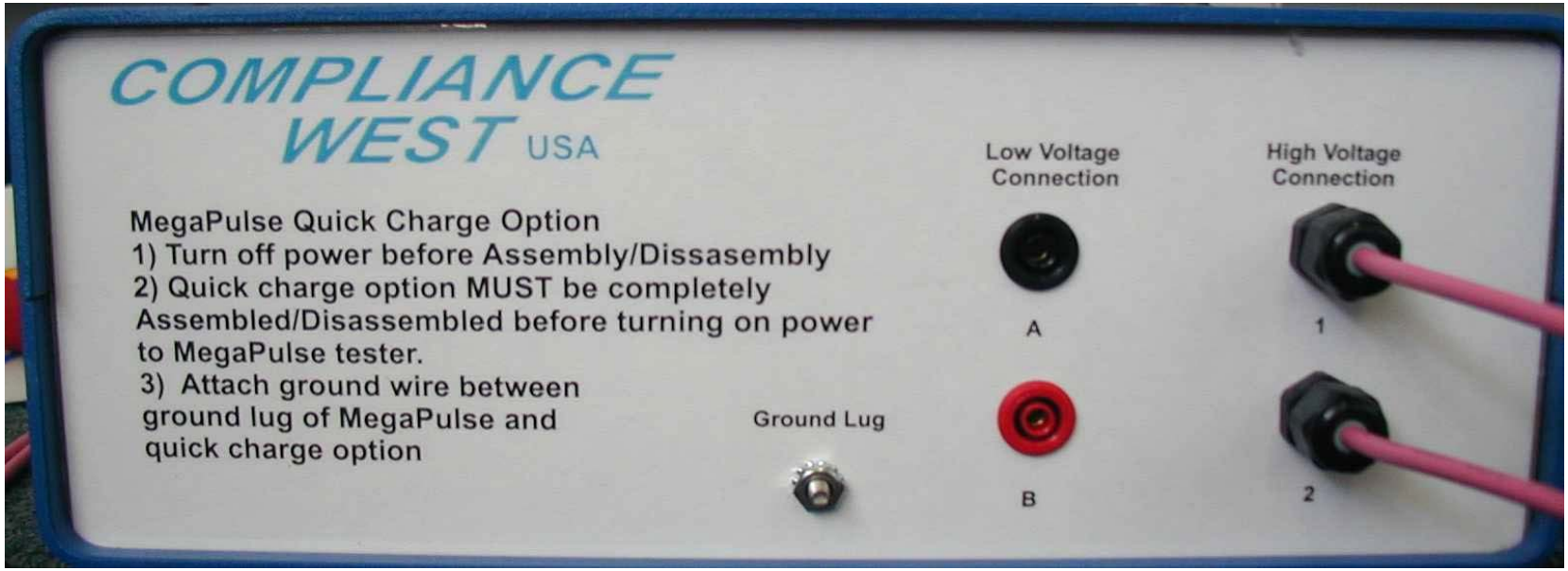

Figure 1 Fast Charge Option (IEC 335) Front Panel

ITEM	NAME	FUNCTION AND CONNECTION MEANS
1	Low Voltage Connection A	Line Voltage A connection from MegaPulse: Separate BLACK lead
2	Low Voltage Connection B	Line Voltage B connection from MegaPulse: Separate RED lead
3	Ground Lug	Ground Connection point (from MegaPulse ground): Green wire terminated in closed loop connectors
4	High Voltage Connection 1	High Voltage connection 1 to MegaPulse: Pigtail from Fast Charge Option (IEC 335)
5	High Voltage Connection 2	High Voltage connection 2 to MegaPulse: Pigtail from Fast Charge Option (IEC 335)

Table 1 Fast Charge Option (IEC 335) Front Panel

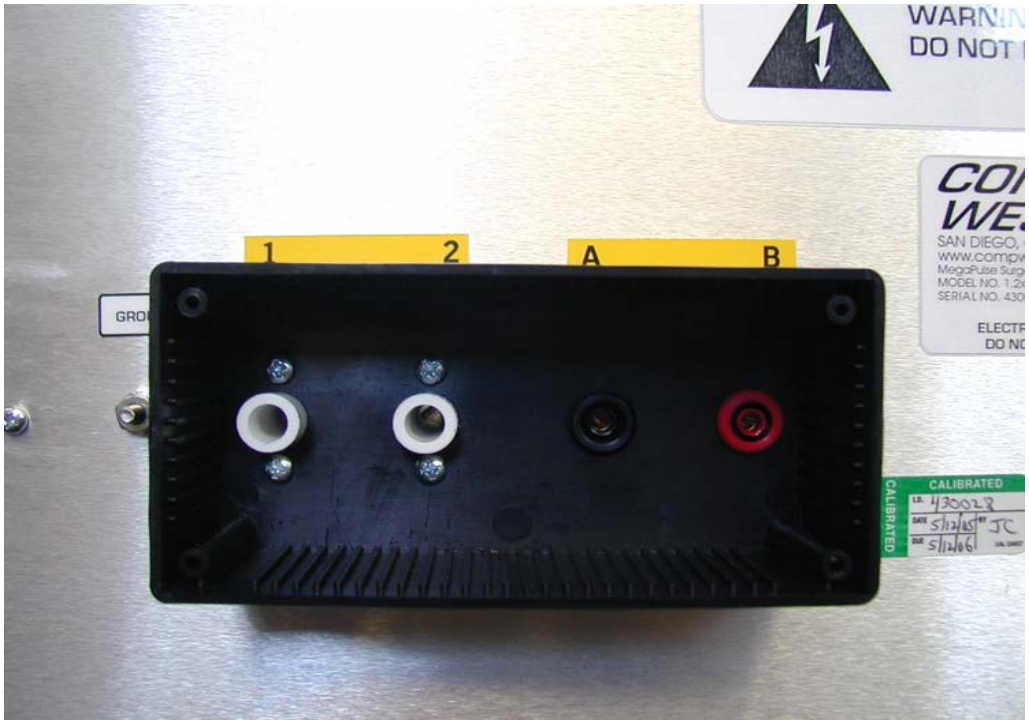

Figure 2 MegaPulse Fast Charge Option Connector

ITEM	NAME	FUNCTION AND CONNECTION MEANS
1	High Voltage Connection 1	High Voltage 1 connection from Option: Pigtail 1 from Option
2	High Voltage Connection 2	High Voltage 2 connection from Option: Pigtail 2 from Option
3	GROUND	Grounding connection point: Connect green wire from Option ground here
4	Low Voltage Connection A	Line Voltage A connection: Use separate BLACK lead
5	Low Voltage Connection B	Line Voltage B connection: Use separate RED lead

Table 2 MegaPulse Fast Charge Option Connector

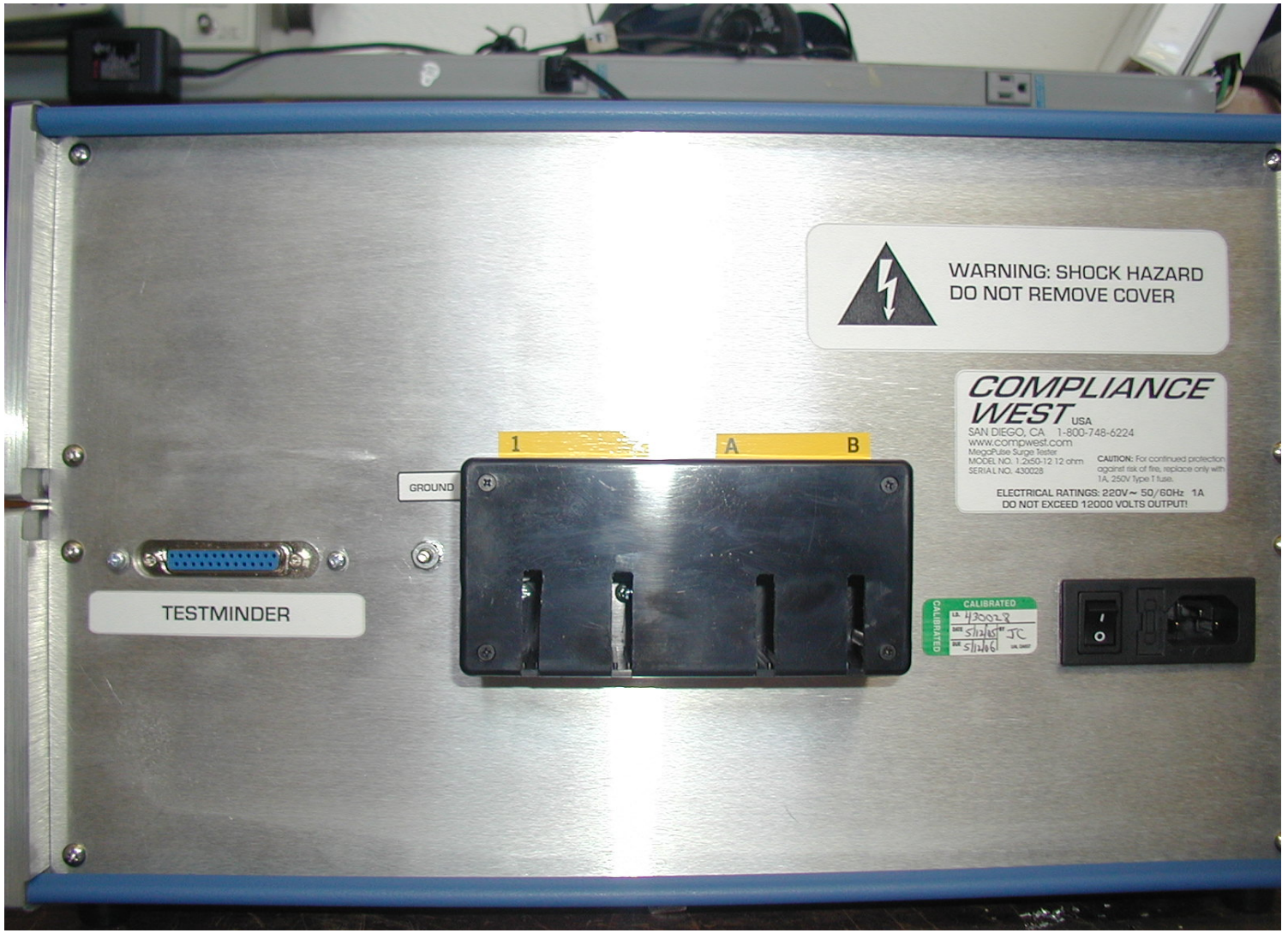

Figure 3 MegaPulse Option Connector Cover

Section 3

Installation

This section describes how to install and remove the Fast Charge Option (IEC 335) from the MegaPulse surge tester. We recommend that you read the entire section carefully before beginning, as the potential for serious injury or death exists. Please be careful, we want you to be our customer far into the future.

1. Remove line voltage from the MegaPulse by unplugging the power cord from the AC power inlet on the rear panel. If this step is completed correctly, the rear panel of the MegaPulse will not have any cords connected to it.
2. Using an appropriate screwdriver, remove the cover of the Fast Charge Connector on the rear panel of the MegaPulse Surge tester. See Fig. 3 above for details.
3. Find the green with yellow stripe bonding jumper that was supplied with the Fast Charge Option. Connect it between the ground lugs on the MegaPulse and the Fast Charge option using a suitable wrench. Tighten the connections until they are snug.
4. Find the loose BLACK and RED jumper wires that were supplied with the Fast Charge Option. They are color keyed to the Low Voltage Connections on the Fast Charge Option and the rear panel of the MegaPulse. Connect them, being aware to match colors throughout the connection process.
5. Connect the High Voltage jumper wires connected to the Fast Charge Option to the appropriate terminals on the rear panel of the MegaPulse. It is imperative that polarity be observed when connecting. Connect 1 to 1 and 2 to 2.
6. Recheck all connections for polarity and make sure they are firmly connected.
7. Replace the cover of the Fast Charge Connector on the rear panel of the MegaPulse surge tester using the supplied screws.
8. Connect the power cord to the MegaPulse.

Testing for Proper Operation

If the Fast Charge Option is correctly connected, the full voltage on the MegaPulse front panel meter should be achieved in approximately three seconds. Please refer to the MegaPulse manual for Operation Procedures.

Removal of the Fast Charge Option

Should you wish to remove the Fast Charge Option from the MegaPulse tester, please follow these steps noted below.

1. Remove line voltage from the MegaPulse by unplugging the power cord from the AC power inlet on the rear panel. If this step is completed correctly, the rear panel of the MegaPulse will not have any cords connected to it.
2. Using an appropriate screwdriver, remove the cover of the Fast Charge Connector on the rear panel of the MegaPulse Surge tester. See Fig. 3 above for details.
3. Remove all connections from the rear panel of the MegaPulse Surge Tester.
4. Remove the bonding conductor and the Low Voltage cables from the Fast Charge Option (IEC 335) .
5. Store these three cables in a safe place, for use when the Fast Charge Option (IEC 335)

is reconnected to the MegaPulse Surge Tester.

6. Replace the cover of the Fast Charge Connector on the rear panel of the MegaPulse surge tester using the supplied screws.
7. Connect the Power Cord to the MegaPulse.

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Section 4

Technical Assistance

For Technical Assistance
Phone: (800) 748-6224

Technical Assistance is available from Compliance West USA between the hours of 8:30 AM and 5:00 PM Pacific Time.

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