

Hardware (Green)

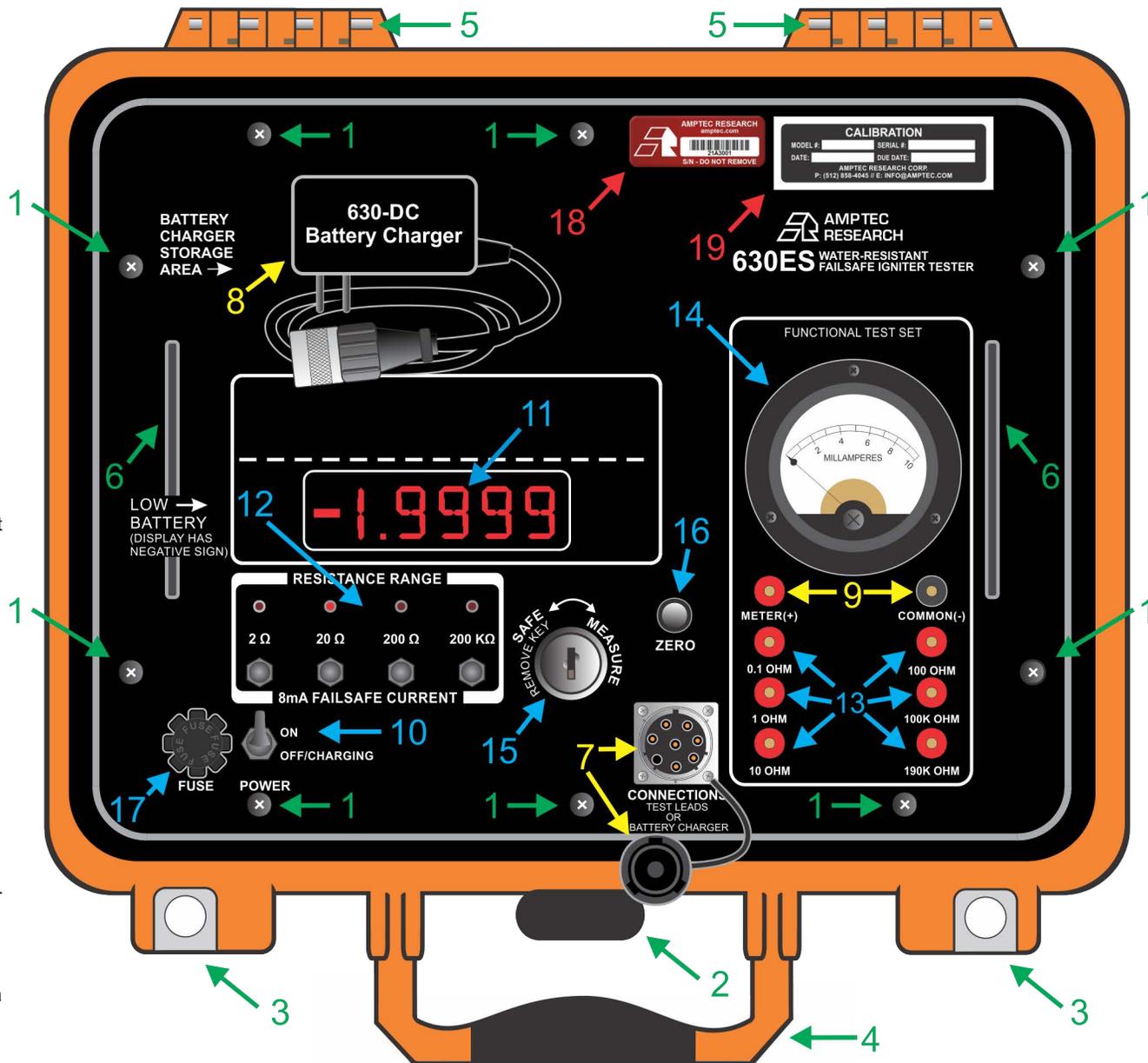
- 1. Calibration Access Screws:** These ten phillips head screws must be removed in order to lift the top plate and calibrate the unit. One screw is located underneath the calibration plate. Note that removing these screws voids the unit's warranty.
- 2. Purge Valve:** This valve is for air pressure equilization.
- 3. Padlock Holes:** When the unit is closed, a padlock can be placed through either hole to provide added security.
- 4. Handle:** Provides unit portability and easy lifting.
- 5. Hinge Pins:** By pulling out these two pins, the unit's lid may be removed.
- 6. Top Plate Handles:** These two handles are for lifting up the unit's top plate once the calibration screws have been removed, revealing the unit's inner circuitry.

Connections (Yellow)

- 7. Trident Connector & Dust Cap:** Used for both test lead/probe connections and the 630-DC battery charger. The dust cap can be affixed by screwing it clockwise over the connector to provide protection from the elements.
- 8. Battery Charger:** The unit's 630-DC battery charger is stored here. Please note the unit's power toggle switch must be in the "OFF/CHARGING" position in order to charge the batteries.
- 9. METER/Common Jacks:** These input jacks are used as a part of the test resistor function. They are also used as part of the test current function along with the milliammeter.

General Operation (Blue)

- 10. Power Switch:** The unit's power switch. Place into the "OFF/CHARGING" position when charging the unit's batteries.
- 11. Display:** The 630ES has a 4 1/2 digit LED display that is on a beveled hood for added visibility. A negative sign will be visible on the left side of the display when the unit's battery level is low.
- 12. Resistance Ranges:** The 630ES can measure 2 ohms, 20 ohms, 200 ohms, 200 Kohms. The desired range can be selected by using the pushbutton switches. These switches are covered by silicone rubber boots to provide protection from the elements. The red LED above each switch indicates which range is selected. Only one range may be selected at a time.
- 13. Test Resistors:** These jacks can be used to test the functionality of the varying ranges on the 630ES. A trident to banana jack lead set (such as the 630-305) is required. Connect your leads to the unit's trident connector, then insert the black lead into the COMMON(-) jack. Select the range you'd like to test, then insert the red lead into a correlating red jack. Ensure the keylock switch is inserted and set to MEASURE. The unit's display should now produce a reading.
- 14. Milliammeter/Test Current Function:** This analog milliammeter measures the test current coming from the 630ES. A trident to banana jack lead set (such as the 630-305) is required. Connect your leads to the unit's trident connector, then insert the black lead into the COMMON(-) jack and the red lead into the METER(+) jack. Now select the range you'd like to test. Ensure the keylock switch is inserted and set to MEASURE. The milliammeter should produce a reading. The unit will never produce a test current above 8 mA.
- 15. Keylock Switch:** The unit comes with a key that activates two distinct modes on the 630ES. When turned to the left, or SAFE mode, the unit will short the inputs together, disconnecting and isolating user inputs from the 630ES's internal measurement electronics. When turned to the right, or MEASURE mode, the unit will allow user inputs to access the 630ES's internal measurement electronics.



16. Zero Pot: Adjusts shorted resistance offset, such as with test leads. Should be used if user encounters unusual resistance.

17. Fuse Holder: This houses the unit's 2A fuse required for general operation.

Identification (Red)

18. Serial Number Sticker: This sticker identifies the unit's serial number and should not be removed under any circumstance. The serial number is located below the barcode.

19. Calibration Plate: This sticker shows the date the unit was last calibrated at Amptec's facility. All units carry a 1-year calibration interval. One of the calibration access screws is beneath this plate. Removing this sticker voids your unit's