



OPERATING INSTRUCTIONS – CATALOG NO. 2200 - Field Test Interface Kit

Description

Field Test Interface Kit (Catalog No. 2200) is designed to allow meter testing at any location, field (at service drop), truck (via inverter power) or shop/desk with integral line cord connection. The Field Test Interface includes a zero insertion force (ZIF) meter socket, voltage and form selection, and connection points to link it with a TESCO Field Test Kit. The 2200 can power the meter under test from an internal source or the customer service. With the 2200 all necessary connections can be made to a load box and a watt-hour standard for full meter testing. Three sets of high current jacks allow meter under test to be connected to a load box.

Functions and Features

Power Source:

The power source selector switch enables the user to perform meter testing in the field at the customers service drop or at a location where access to 120VAC power source is available.

LINE Mode: This selects the internal power circuits. The selected voltage is applied to the meter under test and to the “Test Box Potential” jacks to power test box.

TEST KIT Mode: This applies the customer service potentials to the meter under test. Connect the customer potential connections to the 2200 at “Test Box Potential” jacks. This voltage will be applied to the meter in the 2200 ZIF socket.

DISCONNECT Mode: Use this mode for testing the operation of the meter disconnect switch.

NOTE: Disconnect testing can ONLY be performed in with 2200 powered by 120VAC line voltage. All external load and potential connections must be removed.

Form Selector

The form selector configures the meter potential connections to the ZIF socket.

Voltage Selection

When in LINE mode (only) this selects the potential to be applied to the meter and at the “TEST BOX POTENTIAL” jacks.



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Link Switch:

The link switch allows open link testing when single source load boxes are used, such as the Catalog No. 621 Test Kit and GA-50 Series Load Box. When used with the Catalog No. 630 Field Test Kit set switch to closed link.

INTERNAL POWER:

The internal power pushbutton powers on the 2200 when run in LINE or DISCONNECT mode and when a meter is in the socket.

INTERLOCK SWITCH:

The meter socket has a safety interlock switch to detect the presence of a meter. The interlock switch is located in the upper portion of the socket, at 12:00 o'clock. The sockets must have a meter to be enabled. Assure meter is sitting flush with socket to engage interlock switch.

Operation

Verify meter form and operating voltage. Connect the 2200 and load box per diagrams and table setting. See diagram below.

Set meter form switch and voltage selection switch.

Rotate ZIF (Zero Insertion Force) release knob counter clockwise to open the socket. Insert meter. Rotate knob clockwise to lock meter in socket.

When POWER SOURCE selector is set to LINE position press the INTERNAL POWER pushbutton to apply potential to meter. The pushbutton will light indicating power is applied to the meter and load box. Press INTERNAL POWER pushbutton to remove power prior to removing meter from socket

When POWER SOURCE selector is set to TEST KIT power to the 2200 is from customer source paralleled to the 2200. This connection is made at the "TEST KIT POTENTIAL" jacks. Potential is applied to the meter as long as the meter interlock switch is made (meter seated in socket). See diagram below.



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Disconnect Testing

Verify 2200 is powered from 120VAC line source. Remove all cables and connections to the 2200 load and potential jacks. Set POWER SOURCE selector to DISCONNECT. Install meter and press the INTERNAL POWER pushbutton. Disconnect light will illuminate if disconnect switch is closed. Perform test per utility procedures.

Catalog No. 630 Field Test Kit Setup Table

FORM	Cat. 630 Current Output Switches			METER	STANDARD
	LOAD A	LOAD B	LOAD C	ELEMENTS	ELEMENTS
1S	ON	OFF	OFF	1	1
2S	ON	OFF	ON/REV*	1	2
3S	ON	OFF	OFF	1	1
4S	ON	OFF	ON/REV*	1	2
5/45S	ON	OFF	ON	2	2
6/36S	ON	ON/REV*	ON	2.5	3
8S	ON	ON/REV*	ON	2	3
9S	ON	ON	ON	3	3
12S	ON	OFF	ON	2	3
14S	ON	ON/REV*	ON	2.5	3
16S	ON	ON	ON	3	3
15S	ON	ON/REV*	ON	2	3

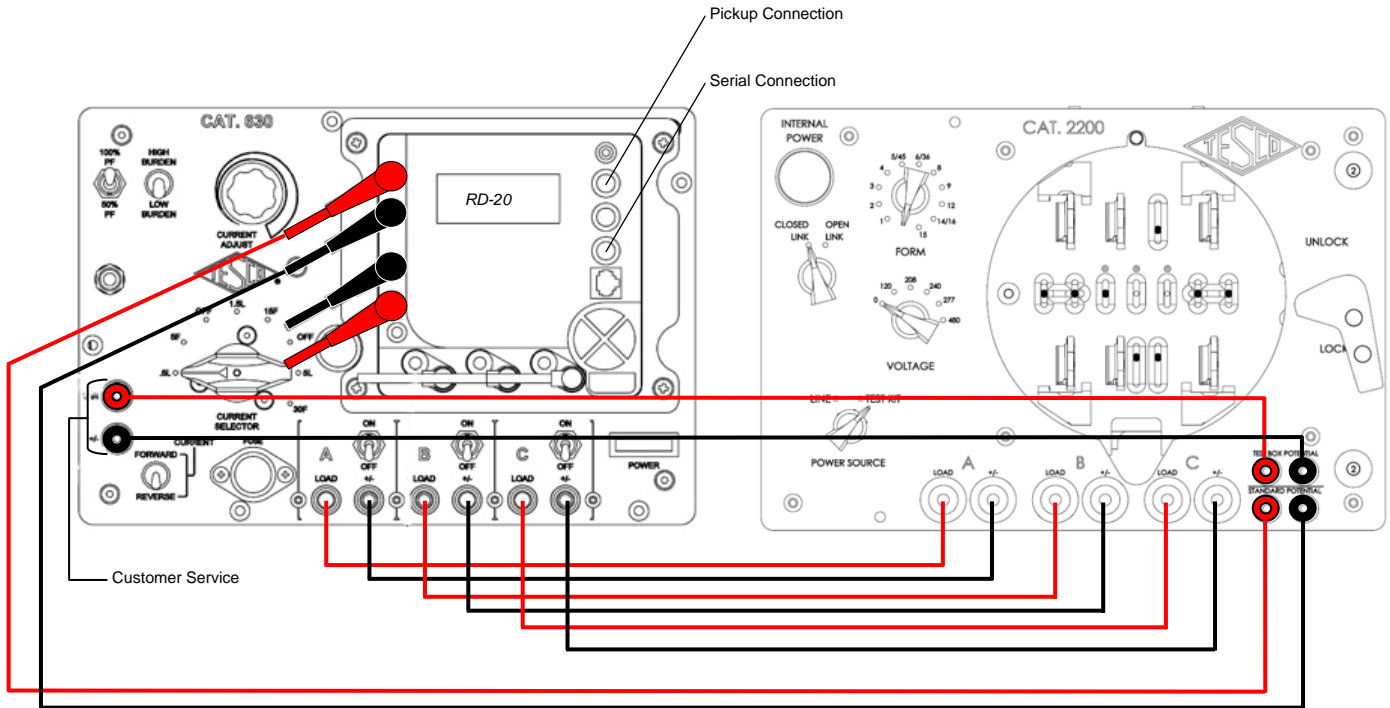
* Reverse polarity of input cables at the 2200 load input jacks.



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Catalog No. 630 Field Test Kit Connections.

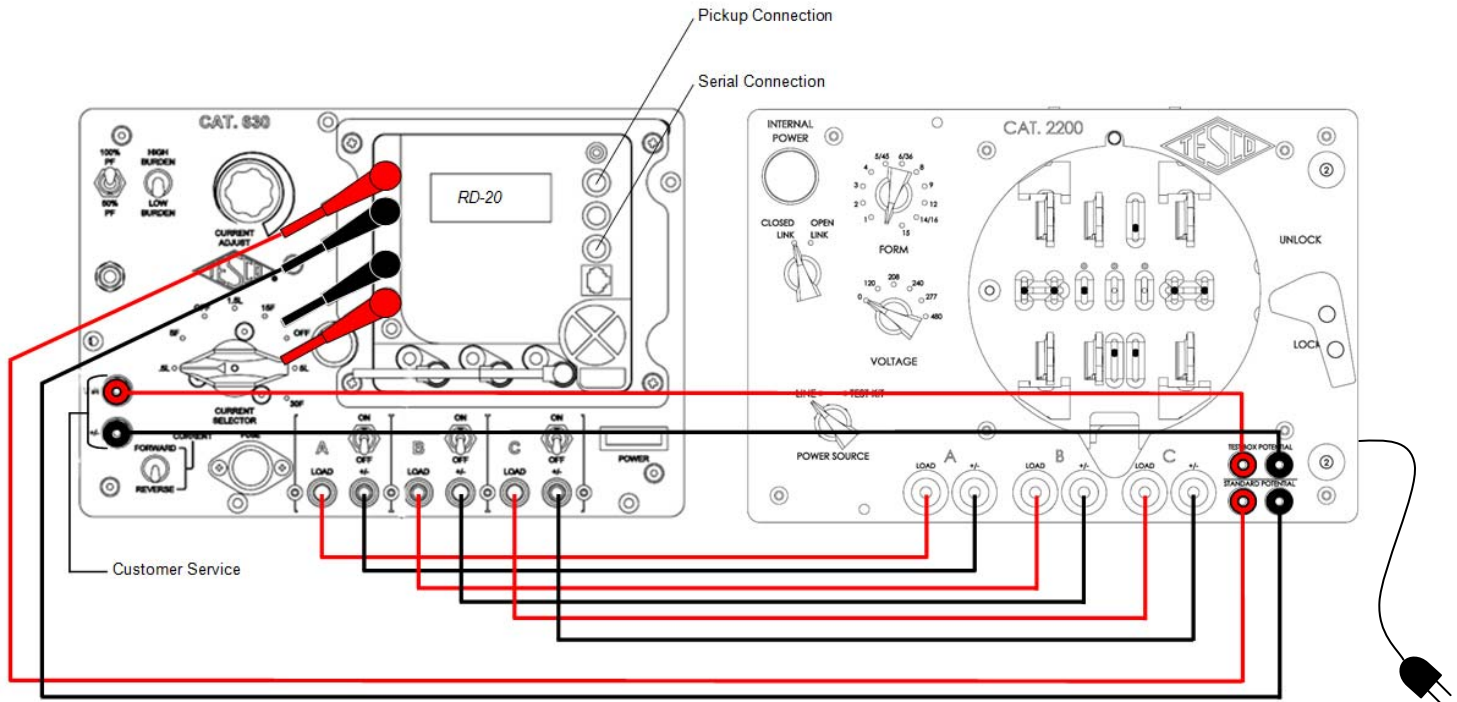
Catalog No. 2200 Powered From a TESCO Field Test Kit (Customer Service)





OPERATING INSTRUCTIONS – CATALOG NO. 2200 - Field Test Interface Kit

Catalog No. 2200 Powered From 120 VAC Power Source





OPERATING INSTRUCTIONS – CATALOG NO. 2200 - Field Test Interface Kit

Catalog No. 621 Field Test Kit Connections.

Cat. 621 to Cat. 2200 Connection Chart

METER FORM	Cat. 2200 Current Connections						METER ELEMENTS	STANDARD ELEMENTS
	A (Load)	A (+/-)	B (Load)	B (+/-)	C (Load)	C (+/-)		
1S	621-(LOAD)	621- (+/-)	n/c	n/c	n/c	n/c	1	1
2S	621-(LOAD)	C (+/-)	n/c	n/c	621- (+/-)	A (+/-)	1	1
3S	621-(LOAD)	621- (+/-)	n/c	n/c	n/c	n/c	1	1
4S	621-(LOAD)	C (+/-)	n/c	n/c	621- (+/-)	A (+/-)	1	1
5/45S	621-(LOAD)	C (Load)	n/c	n/c	A (+/-)	621- (+/-)	2	1
6/36S	621-(LOAD)	B (+/-)	C (Load)	A (+/-)	B (Load)	621- (+/-)	2.5	1
8S	621-(LOAD)	B (+/-)	C (Load)	A (+/-)	B (Load)	621- (+/-)	2	1
9S	621-(LOAD)	B (Load)	A (+/-)	C (Load)	B (+/-)	621- (+/-)	3	1
12S	621-(LOAD)	C (Load)	n/c	n/c	A (+/-)	621- (+/-)	2	1
14S	621-(LOAD)	B (+/-)	C (Load)	A (+/-)	B (Load)	621- (+/-)	2.5	1
16S	621-(LOAD)	B (Load)	A (+/-)	C (Load)	B (+/-)	621- (+/-)	3	1
15S	621-(LOAD)	B (+/-)	C (Load)	A (+/-)	B (Load)	621- (+/-)	2	1