

LEVEL 2 EV CHARGER TESTER

no need for an electric vehicle to be present ↴

A tool which can be used to verify the correct operation and setting of an EV charger after installation, without an electric vehicle present.



- Displays charge rate
- Verify the EV charger responds to a charge request & that the EV charger properly responds to a ground fault condition
- Confirmation of the following:
 - The communication signal, proximity signal & output voltage with a digital voltage meter
 - Line 1, Line 2 & neutral EV charger outputs
 - Pilot communication signal with an oscilloscope
 - The CCID safety circuit is functioning properly

PART #	UPC	DESCRIPTION
EVC-L2-ACC-TESTER-J1772	844006087449	LEVEL 2 EV CHARGER TESTER

INSTRUCTIONS: VEHICLE CHARGE REQUEST

STEP 1: POWER ON LEVEL 2 CHARGER

STEP 2: TURN ON TESTER

- Confirm "Request Charge" button is NOT depressed (see image 2)

STEP 3: PLUG IN CHARGER CABLE INTO THE TESTER

- Charger should go into "Ready" status, charge not activated
- Tester display L1 = OFF

STEP 4: PRESS "REQUEST CHARGE" BUTTON

- Charger should initiate AC charging
- Request Charge" button will glow red
- Tester display L1 = ON



IMAGE 2



Charge Not Requested Charge Requested

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INSTRUCTIONS: PROXIMITY SIGNAL TEST

STEP 1: POWER ON LEVEL 2 CHARGER

STEP 2: TURN ON TESTER

- Confirm "Request Charge" button is NOT depressed (see image 2)

STEP 3: SET DVM TO MEASURE OHMS AND CONNECT TO THE DVM TO PROXIMITY AND GROUND TEST POINTS ON THE TESTER

- The resistance should measure between 127 and 156 ohms

STEP 4: PRESS AND HOLD THE SAE J1772 CONNECTOR BUTTON DOWN TO DISENGAGE THE PROXIMITY CIRCUIT, LEAVING THE CHARGER PLUGGED INTO THE TESTER

- The resistance should now measure between 366 and 448 ohms

INSTRUCTIONS: LINE 1, LINE 2/N CHARGER OUTPUT

WARNING: RISK OF ELECTRIC SHOCK! Service line voltage is present at these testpoints. It is suggested that the following steps be performed in the order shown below

STEP 1: TURN ON TESTER

- Confirm "Request Charge" button is NOT depressed (see image 2)

STEP 2: PLUG THE SAE J1772 CONNECTOR INTO THE TESTER

STEP 3: CONNECT A DVM TO THE DVM LINE 1 AND DVM LINE 2 / NEUTRAL TEST POINTS ON THE TESTER

STEP 4: PRESS THE "REQUEST CHARGE" BUTTON TO TOGGLE TO "CHARGE REQUESTED"

- The "Request Charge" button will glow red to indicate that AC power is applied to the tester
- The DVM should read line voltage (the same voltage as the service power to the charger)

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INSTRUCTIONS: PILOT COMMUNICATION SIGNAL TEST

STEP 1: POWER ON LEVEL 2 CHARGER

STEP 2: TURN ON TESTER

- Confirm "Request Charge" button is NOT depressed (see image 2)

STEP 3: SAE J1772 PILOT STATE B WILL BE VISIBLE ON THE TESTER SCREEN

- The CP positive voltage should be approximately +9 VDC, indicating a charge has not been requested

STEP 4: PRESS THE "REQUEST CHARGE" BUTTON TO TOGGLE TO "CHARGE REQUESTED"

- The "Request Charge" button will glow red to indicate that AC power is applied to the tester
- The charger will also display "Charging in Progress"
- The CP positive voltage should be approximately +6 VDC, indicating a charge has been requested

STEP 5: FOR ADVANCED DIAGNOSTICS TESTER WILL ALSO DISPLAY:

- CP Negative Voltage
- CP Frequency and Duty Cycle



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INSTRUCTIONS: CCID TRIP POINT

STEP 1: TURN ON TESTER

- Confirm “Request Charge” button is NOT depressed (see image 2)

STEP 2: PRESS THE “REQUEST CHARGE” BUTTON TO TOGGLE TO “CHARGE REQUESTED”

- The “Request Charge” button will glow red to indicate that AC power is applied to the tester
- The charger will also display “Charging in Progress”

STEP 3: SIMULATE A GROUND FAULT BY PRESSING THE “CCID TRIP” BUTTON

- The red “request charge” button indicator light on the Tester will turn off when the fault is found
- The Fault or Protection light on a charger will illuminate to indicate a fault

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