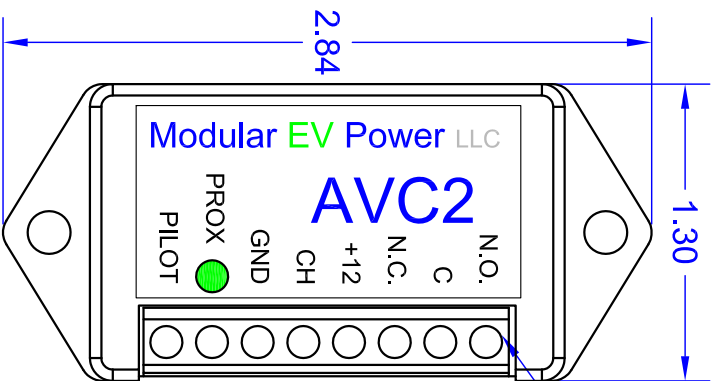


J1772 AVC2 Board



Screw Terminals

Normally Open Relay

Relay Common

Normally Closed Relay

Battery Positive

Vehicle Chassis & Battery negative

J1772 Green Ground & Chassis

J1772 Proximity pin

J1772 Pilot Pin

The AVC1 and AVC2 are functionally identical. The AVC1 is a bare board and the AVC2 is in a plastic box.

Relay in AVC2 board
0.3 Amp @125VA
1.0 Amp @30VDC

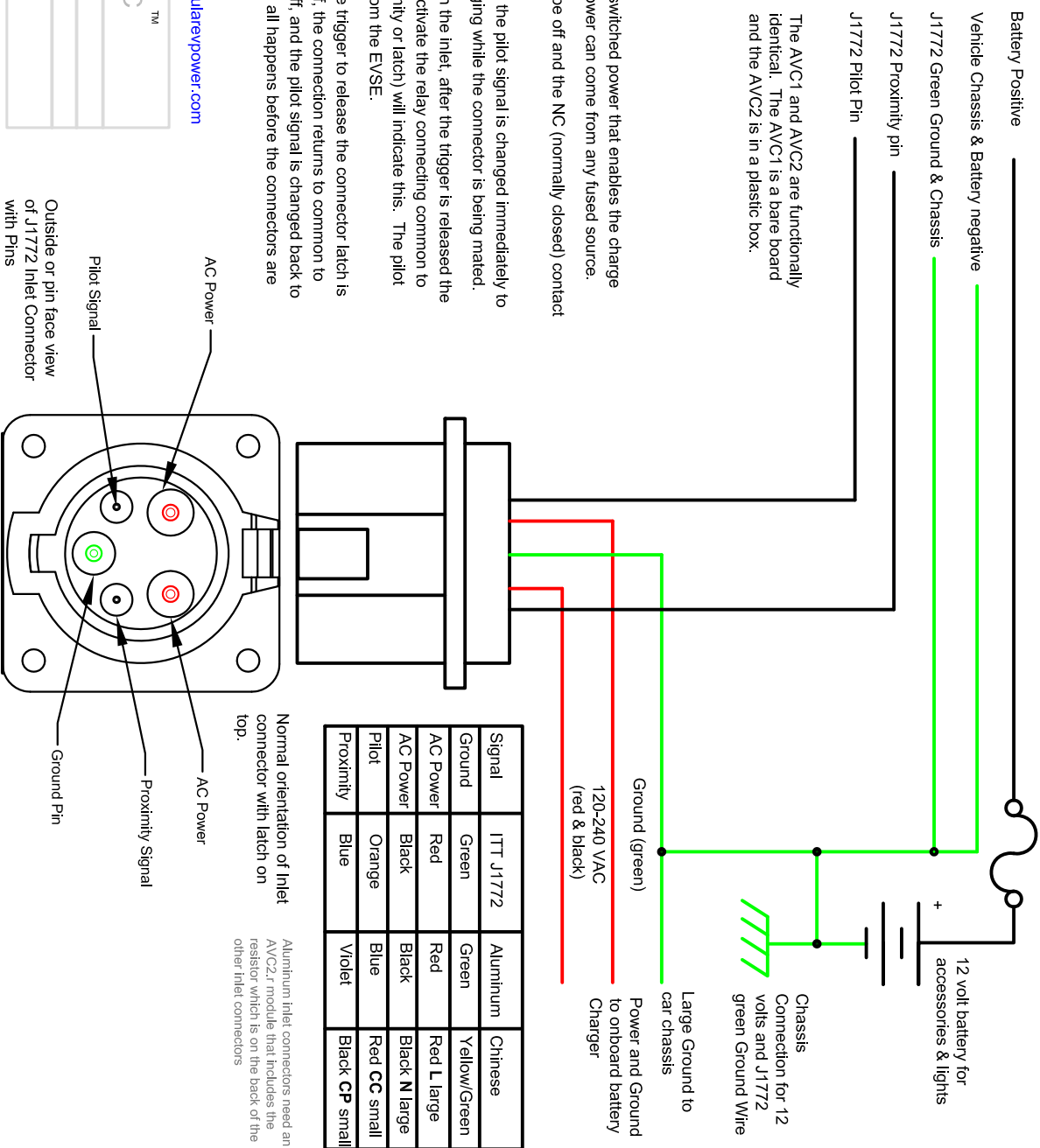
+12 must be fused
This load is <0.5ma when not latched
This load is <25ma when latched

Operation:

Apply +12 volt DC power. The unit may have switched power that enables the charge process or it may be left on continually. The power can come from any fused source. Initially with the J1772 not mated the relay will be off and the NC (normally closed) contact will be connected to the relay common.

When the J1772 Cable is plugged into the inlet the pilot signal is changed immediately to connected. Still no power is available for charging while the connector is being mated. Then the latch on the J1772 connector locks on the inlet, after the trigger is released the AVC2 board will use the proximity signal and activate the relay connecting common to Normally Open. The green PROX LED (proximity or latch) will indicate this. The pilot signal will also be changed to request power from the EVSE.

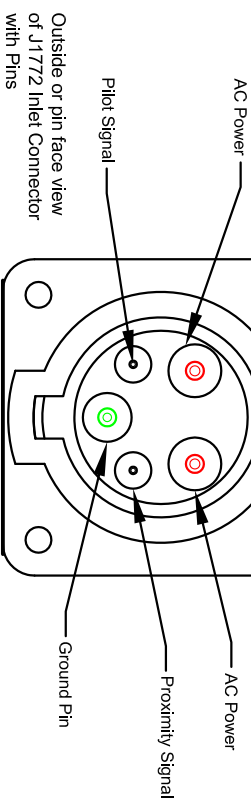
Later when it is time to disconnect, pressing the trigger to release the connector latch is sensed by the AVC2 board. The relay turns off, the connection returns to common to Normally closed, the green PROX LED goes off, and the pilot signal is changed back to CONNECTED and stops charging power. This all happens before the connectors are separated.



Signal	ITT J1772	Aluminum	Chinese
Ground	Green	Green	Yellow/Green
AC Power	Red	Red	Red L large
AC Power	Black	Black	Black N large
Pilot	Orange	Blue	Red CC small
Proximity	Blue	Violet	Black CP small

Normal orientation of Inlet connector with latch on top.

Aluminum inlet connectors need an AVC2r module that includes the resistor which is on the back of the other Inlet connectors



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Wiring - J1772 AVC2 Board

Rev 1.4- 5/22/2016

Drawing: J1772_AVC2_Wiring

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