

TI2007-013

Mini NATO Quick Disconnect Cable Assembly



Power Anytime, Anywhere

The Tesla™ TI2007-013 Mini NATO Quick Disconnect Cable Assembly connects to the TI150 IEC (International Electrotechnical Commission) cord 12/24V Battery Charger/Conditioner. Constructed from a rugged combination of advanced composite materials and corrosion-resistant alloys, the NATO plug will withstand the harshest battlefield conditions and other extreme environments. Along with highly conductive contact materials, the virtually indestructible design and fast “in-the-field” component replacement make it the last NATO plug you will ever need.

Features:

- Rated to 25 Amps max.
- DC Output Cable Quick Disconnect cable ends
- UV, fuel, fungus, water, and oil resistant
- Easy component replacement
- Manufactured Tesla™
- Exceeds MIL-STD-810F
- Tested to withstand 50 G of force



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The **POWER**
Of
RED™



Features and Benefits

Rugged, Durable, Reliable

Made from virtually indestructible composite materials, the plug housing won't crack, melt, blister, dry-rot or disintegrate. Through a series of strategically placed seals and bushings, the Cobra™ Compact NATO Plug is hermetically sealed to lock out rain, snow, sand and other harmful debris. This, in conjunction with corrosion resistant conductors, insures that the Tesla™ Compact NATO Plug will still be in the field long after other plugs have failed.

Internal Cable Connections

Unlike plugs with cables that are molded directly to the housing, easily accessible lugs allow for direct termination inside of the plug. Additionally, compression grommets and bushings provide strain relief. This unique combination of protection eliminates dangerous shocks from exposed wiring due to cable stretching and splicing.

Replaceable Contacts

Manufactured from highly conductive alloys, the negative contact is specially tapered and has memory to maximize contact surface area and to minimize deformity over time. Once installed, contacts are hermetically sealed within the plug. Additionally contacts can be easily replaced "in-the-field" without discarding the entire plug using the Insertion/Extraction Tools. The tools and contact replacements can be ordered through Tesla™ Customer Service at (302) 324-8910.

Quick Disconnect Connector

The TI2007-013 Mini NATO Quick Disconnect Cable Assembly is equipped with a male Quick Disconnect connector. This will connect with the female end of the connector which is attached to the TI150 IEC cord 12/24V Battery Charger/Conditioner.



Hermetically sealed & easily replaceable contacts



- A. Positive Insertion/Extraction Tool: TI27000-082
NSN: 5120-01-527-7729
- B. Negative Insertion/Extraction Tool: TI2005-126
NSN: 5120-01-523-8761
- C. Cobra NATO Plug Negative Contact: TI2005-121
NSN: 5999-01-525-0582
- D. Cobra NATO Plug Positive Post: TI2005-117
NSN: 5935-01-523-8914

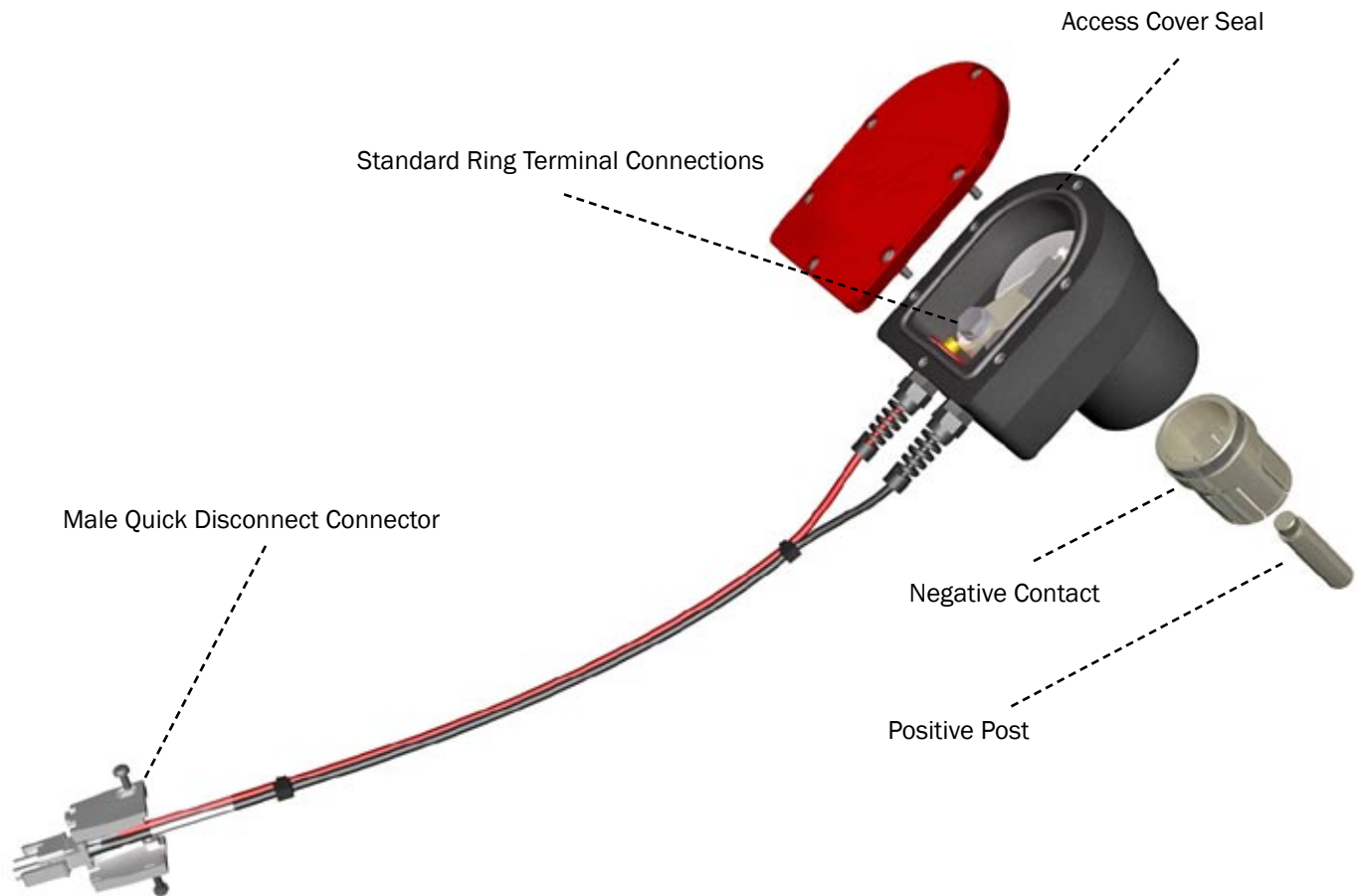


TI150 Battery Charger/Conditioner



Male Quick Disconnect Connector

Components - Exploded View



Contact Replacement

Step 1: To remove the positive post, simply insert the Positive Contact Tool and turn counterclockwise.

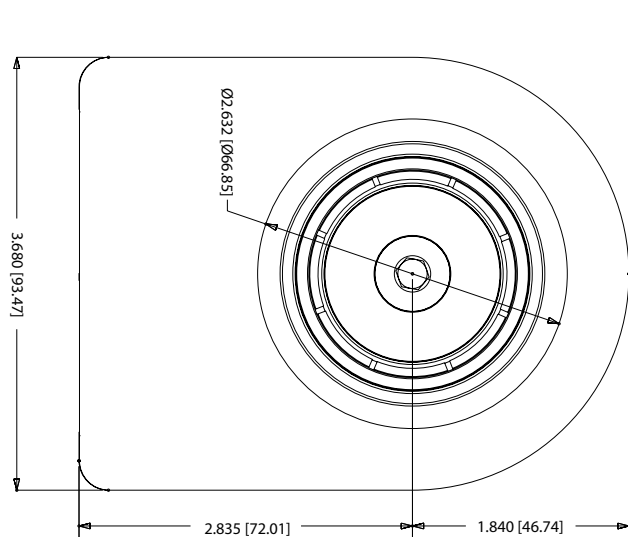
Step 2: To install a new positive post, use the same tool and screw the contact in clockwise.

Step 3: To remove the negative contact, simply insert the Negative Contact Tool and turn counterclockwise.

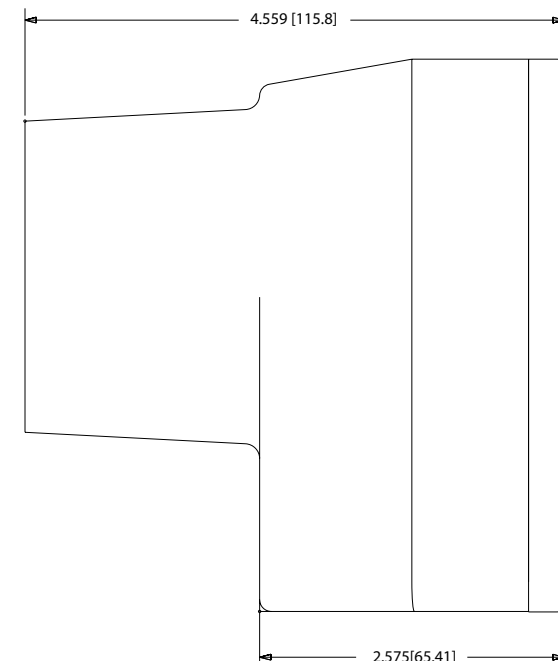
Step 4: To install a new negative contact, use the same tool and screw the contact in clockwise.



Dimensions and Technical Specifications

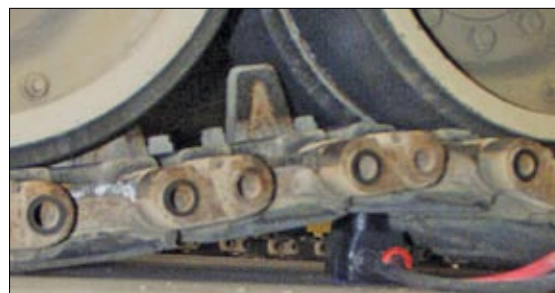


* All dimensions are in inches [millimeters]



Technical Specifications:

Number of Contacts	2
Gauges Accepted	4, 2, 1/0
Terminal Lugs	3/8-24
Peak Current	25 A
Storage Temperature	-65 °C - 125 °C (-85 °F - 257 °F)
Operating Temperature	-40 °C - 110 °C (-40 °F - 230 °F)
Air Gap-leakage Path	0.355" (9 mm)
Protection Class	IP28C (tested to 20 m)
Rated Current	12.5 A
Rated Voltage	12 - 28 Vdc
Inrush Current (@ 28 Vdc)	25 A max.
Dielectric Strength	> 6000 Vdc for 1 min. across contacts
Insulation Resistance	4 GΩ w/1 kV across contacts
Contact Resistance	< 50 μΩ @ 25 °C
Shock	50 G
Vibration	MIL-STD-810F
Engagement Torque	45 lbs (20.5 kg)
Weight	4.05 lbs (1.83 kg) with 6' cable
Warranty	2 years (3 years optional)



Field Tested

To prove its toughness and dependability, the Cobra NATO Plug was subjected to the harshest abuse. The photo above shows the NATO plug can withstand the weight of a 70 ton M1 Abrams tank. Even after this severe punishment, the plug was still fully functional.