



Tesla™ Cobra™ Connectors

Product Catalog



Built Smart...Proven Tough



www.teslaind.com ♦ www.tesla1.com



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For the quickest response to your inquiry, please call us at our Headquarters between 8:30 am and 5 pm EST.

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- DUNS #: 791792583
- CAGE CODE: OVWE2

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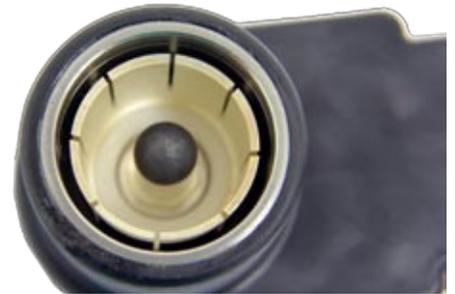
Cobra™ Connectors

Tesla™ Cobra™ Connectors are constructed from rugged combinations of advanced composite materials and corrosion resistant alloys. The result is weatherproof connectors that will withstand battlefield conditions and extreme environments. Along with highly conductive contact materials, Cobra™ Connectors feature virtually indestructible designs and fast “in-the-field” component replacement to make them the last connectors you will ever need.

Tesla™ Connectors are warranted for 2 years. Our Customer Service Team is always available to assist you in answering any questions or getting necessary replacement parts and tools for your connectors.

Additional Features!

- Our **NATO plugs** positive post has a tip on the end to prevent arcing. An O-ring and hex allows for easy removal and installation of the post with a 3/4” deep well socket.
- The **Aviation plugs** has a replaceable nose. Customers can now easily replace the nose with a standard hex key.



The Origin of Tesla’s™ Connectors

Tesla™ Industries was started in 1992 to provide high-quality power conversion equipment to the United States’ military, law enforcement, and aviation communities. Early on, it was determined that the power coming from Tesla™ units encountered restrictive impedance when it reached other name brand connectors. All of the standard “off the shelf” connectors, like the standard NATO slave plug, were outdated designs. Since no other connectors were available that matched the quality of the Turbo Start™ power systems, Tesla™ developed a new line of high-power Tesla™ connectors.

Cobra™ Connector Features

Good News for OEMs

As Original Equipment Manufacturers, we understand the need for superior components to build rugged, reliable equipment that must perform under the harshest conditions. For this reason, each of our connectors are manufactured to the strictest safety, quality and performance standards – creating the most reliable connector on the market.

With a two-year warranty, all our Connectors are reliable, durable, and will easily integrate into your current product configuration. Best of all, they are in stock for immediate delivery. Call Tesla™ Customer Service at (302) 324-8910 for more details on volume pricing.

Cobra™ Connector Features:

- Rated up to 3000 peak amps
- Clamped cable connections
- UV, fuel, fungus, water, & oil resistant
- Easy component replacement
- Manufactured by Tesla™
- Exceeds MIL-STD-810
- Tested to withstand 50 G of force

Weatherproof Construction

Through a series of strategically placed seals and bushings, our connectors are hermetically sealed to lock out rain, snow, sand and other harmful debris. For NATO receptacles, we include a protective cap to provide protection from outside elements and damaging debris.

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.

Rugged, Durable, Reliable

Made from virtually indestructible composite materials, the plug housing won't crack, melt, blister, dry-rot or disintegrate. In conjunction with corrosion resistant conductors, this ensures that the Tesla™ Plugs will still be in the field long after other plugs have failed.

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.

Insertion/Extraction Tools

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.

Field Tested

To prove its toughness and dependability, the Cobra™ NATO Plug was subjected to the harshest abuse. A 70 ton M1 Abrams tank has driven over the Cobra™ NATO Plug. The plug was then used, successfully, to start up the tank.



NATO CONNECTORS 4-12



DC AVIATION CONNECTORS 13-23



DC BATTERY CONNECTORS 24-29



MISCELLANEOUS CONNECTORS 30-32



**All Sizes in catalog are listed as Width x Height x Depth and Weight.
For detailed technical info go online at www.teslaind.com*

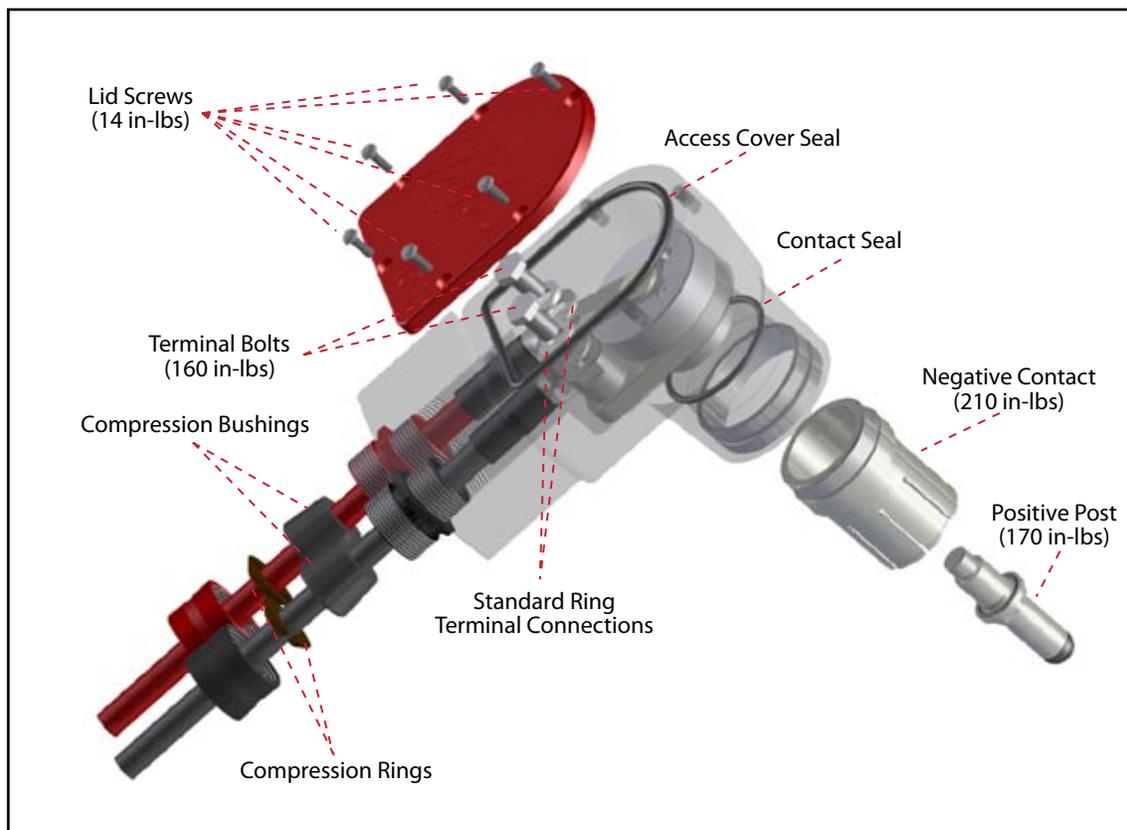
TI2005-078 Cobra™ NATO Connector

NSN: 6130-01-523-1270 (CL IX)



*2.94" (74.63mm) x 8.09"
(205.5mm) x 4.56" (115.8mm)
4.13 lbs. (1.87 kg)

This Cobra™ NATO Connector is our best seller, providing up to 3000 peak amps to the vehicle's DC receptacle. Attaching to a DC Plug is quick and easy. 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.



***All Sizes in catalog are listed as Width x Height x Depth and Weight.**

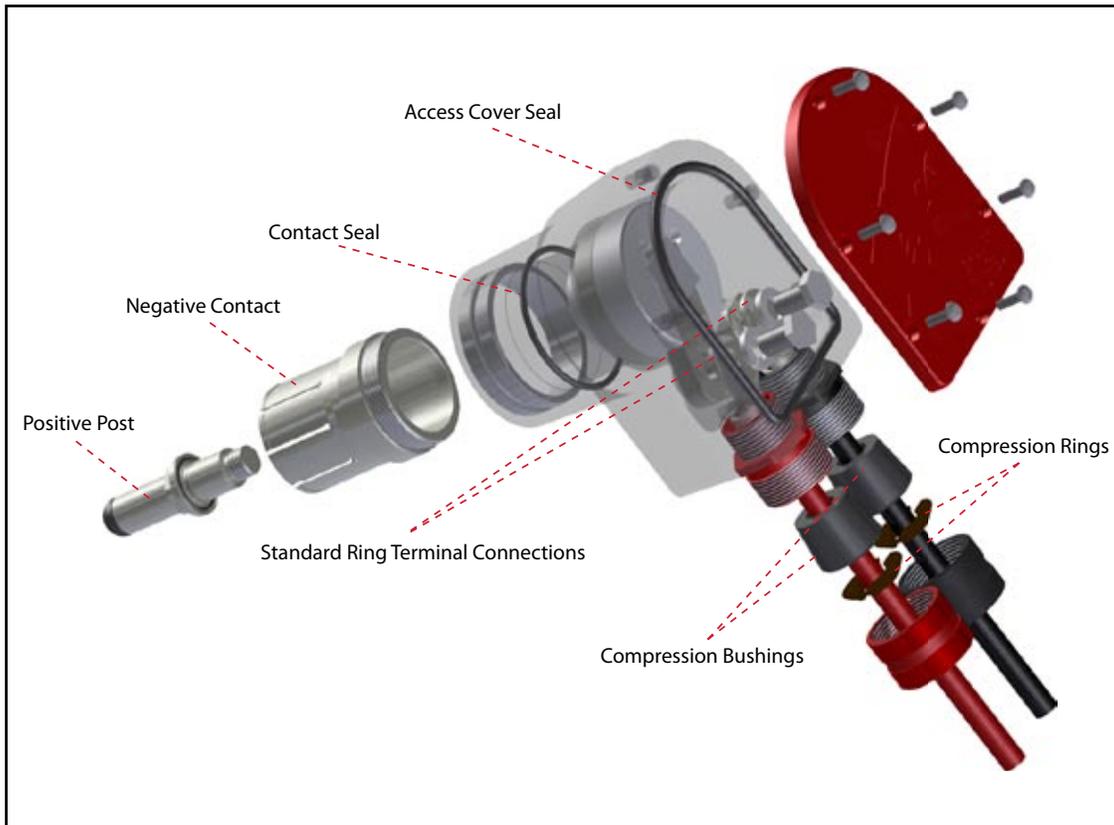
TI2005-129 Cobra™ Compact NATO Connector

NSN: 5935-01-523-8368 (CL IX)



3.68" (93.47mm) x 5.9"
(149.86mm) x 4.56" (115.8mm)
3.6 lbs. (1.64 kg)

This Cobra™ Compact NATO Connector is as reliable and powerful as the full-sized NATO Connector, but is compact to fit in places requiring a tighter space.



TI2000-087 Cobra™ NATO DC Receptacle



2.26" (57.48mm) x 3.87"
(98.35mm) x 2.26" (57.48mm)
1.43 lbs. (.65 kg)

The Tesla™ NATO DC Receptacle is a perfect fit for the Tesla™ TI2005-078 Cobra™ NATO Plug, allowing the safe and efficient transfer of power up to 1500 amps.

TI2000-227 Cobra™ NATO DC Receptacle with 3.25" Flange

3.25" (82.55mm) x 3.87"
(98.35mm) x 2.26" (57.48mm)
1.60 lbs. (.73 kg)



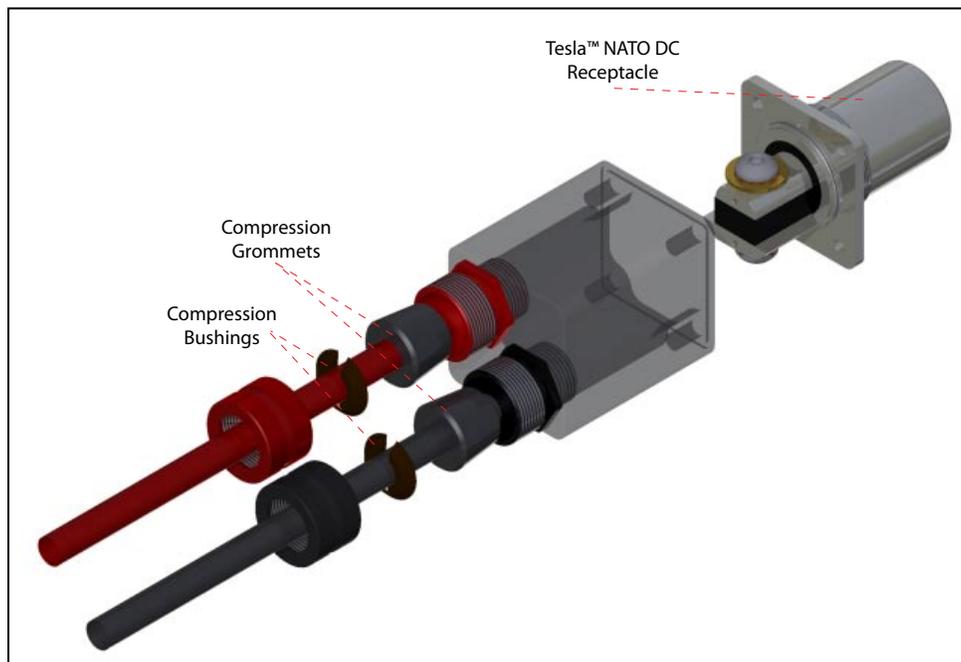
Identical to TI2000-087, but has a 3.25" flange

TI2000-376 Cobra™ Inline NATO DC Receptacle



2.50" (63.5mm) x 7.32"
(185.9mm) x 2.50" (63.5mm)
1.43 lbs. (.65 kg)

The Tesla™ Inline NATO DC Receptacle provides capable power transfer up to 1500 amps. The receptacle provides a perfect fit that molds to its connector for a reliable connection every time.

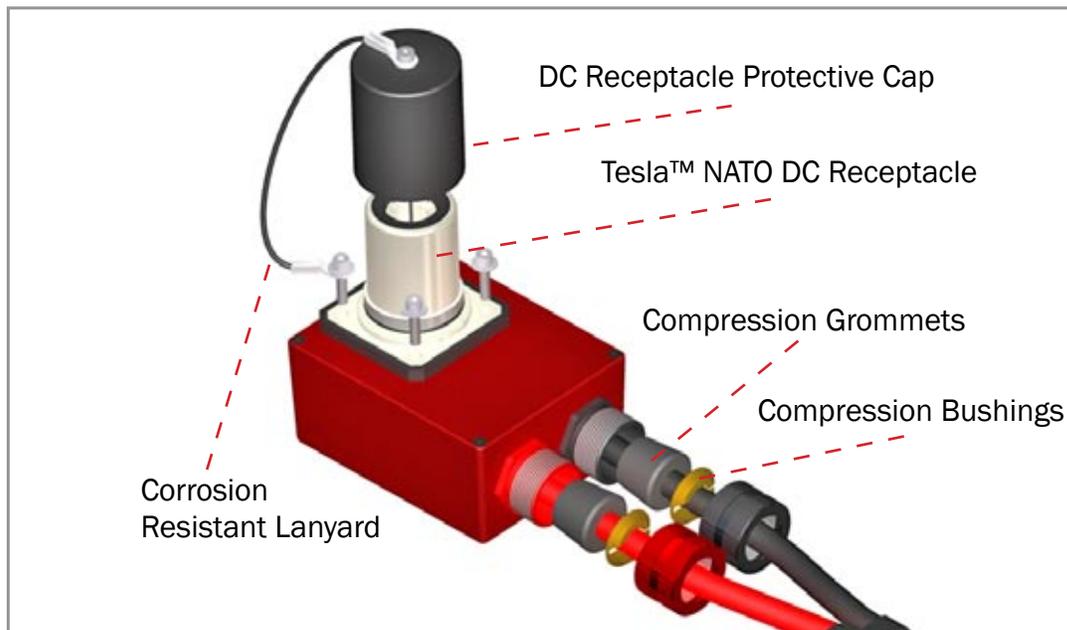


TI2007-828 Cobra™ NATO DC Receptacle Box



3.69" (93.7mm) x 5.16"
(131.1mm) x 5.99" (152.2mm)
1.43 lbs. (.65 kg)

The Tesla™ NATO DC Receptacle Box provides our high quality NATO receptacle in a highly durable and secure box.

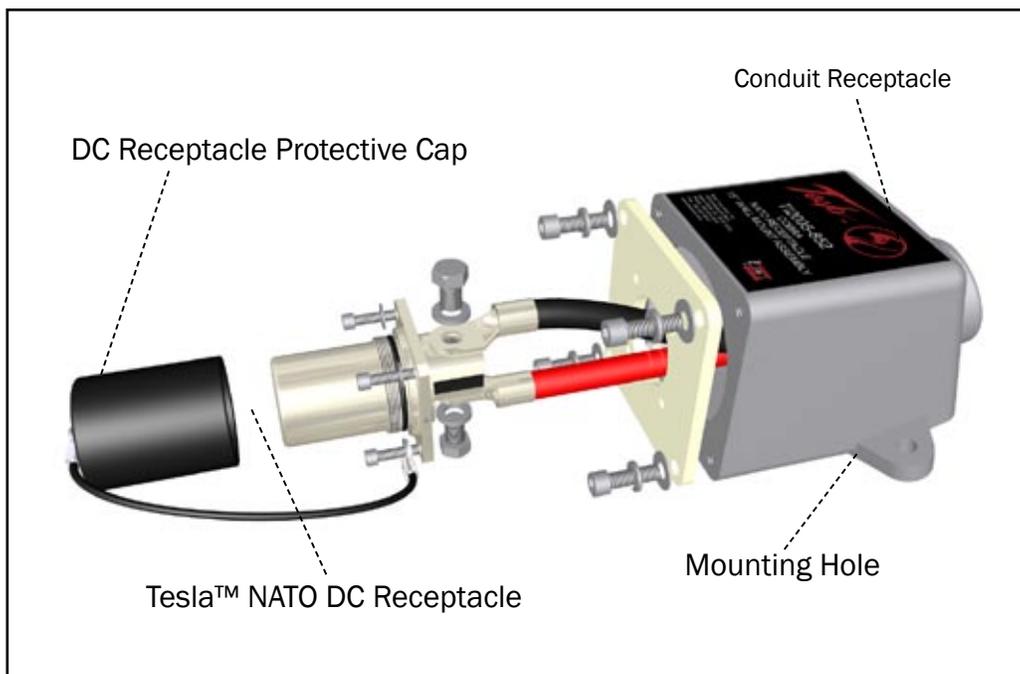


TI2005-852 Cobra™ NATO Receptacle 15° Wall Mount Assembly



6.26" (159.1mm) x 8.92"
(226.6mm) x 4.95" (125.8mm)
4.57 lbs. (2.07 kg)

The Cobra™ NATO Receptacle 15° Wall Mount Assembly is designed to fit a 1½" conduit, and mount easily to a wall. A custom adapter is available to fit any conduit up to an 1½". The NATO receptacle has 15° incline to easily plug into the DC receptacle and safely transfer up to 3000 Amps.



Cobra™ NATO Connectors

TI2005-147 Cobra™ NATO 2-Pin Adapter

NSN: 5935-01-525-5316 (CL IX)



1.84" (46.74mm) x 3.53"
(89.66mm) x 1.84" (46.74mm)
1.15 lbs. (.52 kg)

The Tesla™ Cobra™ NATO Plug's modular design allows a simple transformation from a standard NATO plug to the older style 2-pin plug in seconds.

TI2000-295 Cobra™ Male NATO to 2-Pin Female Adapter



2.18" (55.4mm) x 4.56"
(115.8mm) x 2.18" (55.4mm)
2.15 lbs. (.97 kg)

The Tesla™ Cobra™ NATO Plug's modular design allows a simple transformation from a standard NATO plug to the older style 2-pin plug in seconds.

NATO Connector Parts and Tools



TI2004-444

Cobra™ NATO Replacement Post

For NATO plugs with new style post, indicated by the black tip at the end of the post. The Tip prevents arcing. Replacement plug uses standard 3/4" deep well socket for installation.



TI2005-121

Cobra™ NATO Negative Contact

NSN: 5999-01-525-0582 (CL IX)



TI2005-126

Cobra™ NATO Negative Contact Insertion/Extraction Tool

NSN: 5120-01-523-8761 (CL II)



TI2005-117

Cobra™ NATO Positive Post

NSN: 5935-01-523-8914 (CL IX)



TI27000-082

Cobra™ NATO Positive Contact Insertion/Extraction Tool

NSN: 5120-01-527-7729 (CL II)



TI2005-072

Negative Cord Grip



TI2005-073

Positive Cord Grip
5340-01-524-4530



TI2005-074

Negative Cap
5999-01-523-8390



TI2005-075

Positive Cap
5999-01-524-5077

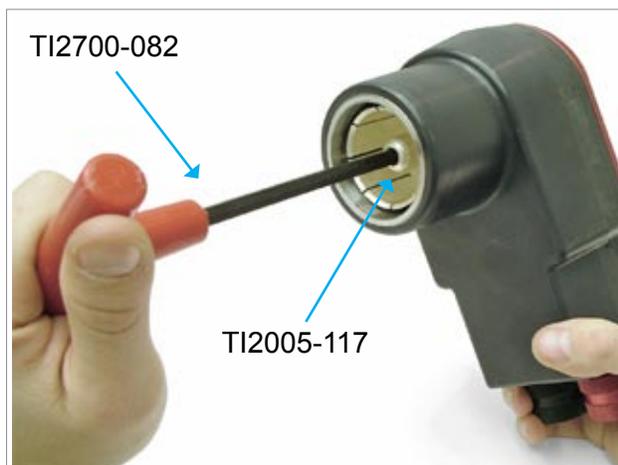
NATO Contact Replacement Instructions



REPLACING NEW STYLE POSITIVE POST:

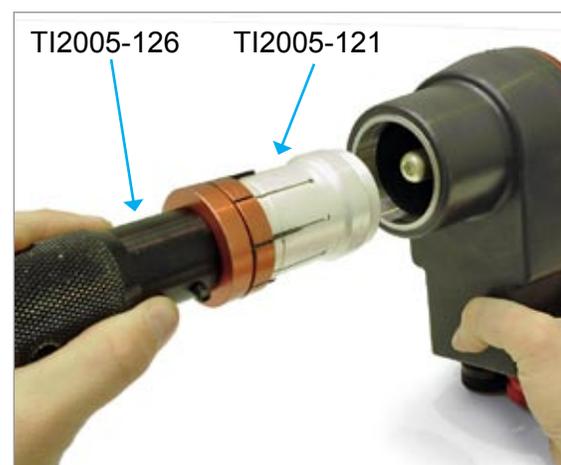
1. Use a 3/4" Deep Well Socket to remove the positive post by inserting and turning counterclockwise.
2. Install new positive post (TI2004-444) using same tool and screw in the contact clockwise.

NOTE: TI2004-444 post can only be installed in new style NATO Plugs. This is indicated with a post that has a black tip on the end.



REPLACING POSITIVE POST:

1. Use Positive Contact Tool (TI2700-082) to remove the positive post by inserting and turning counterclockwise.
2. Install new positive post (TI2005-117) using same tool and screw in the contact clockwise.



REPLACING NEGATIVE CONTACT:

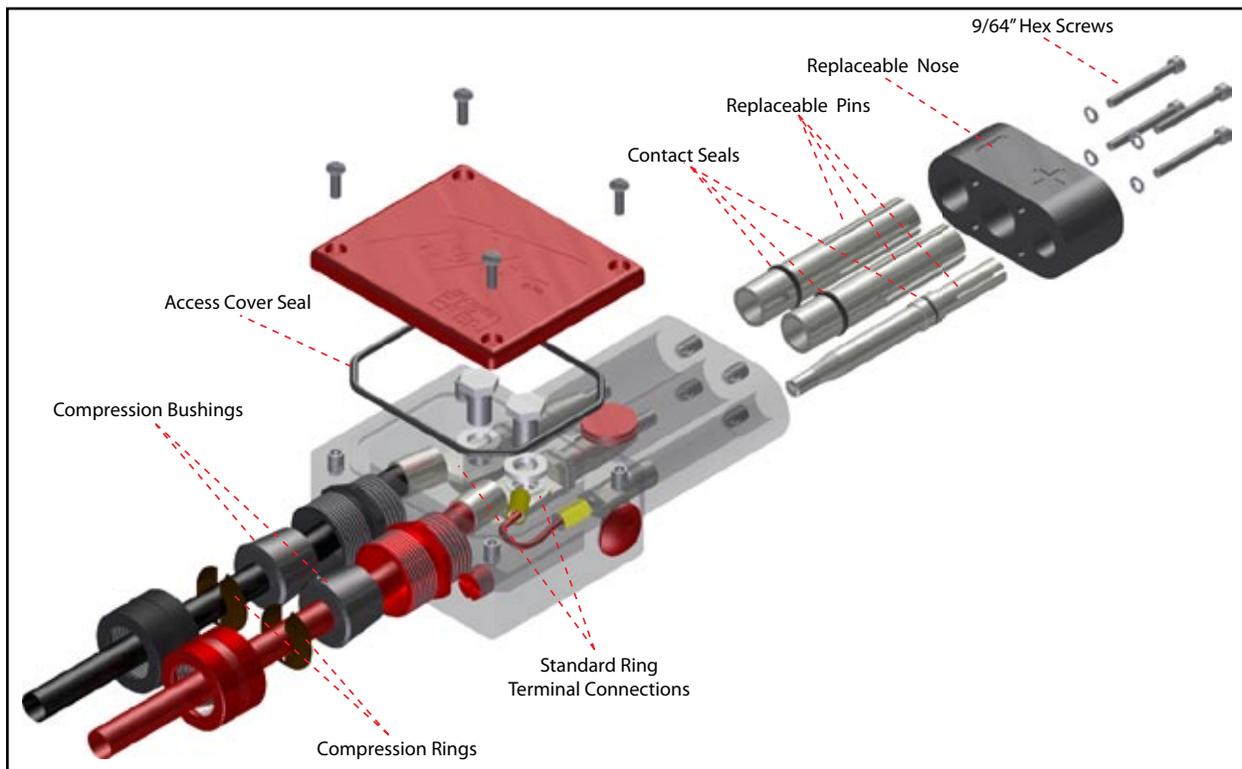
1. Use the Negative Contact Tool (TI2005-126) to remove old negative contact by inserting and turning counter-clockwise.
2. Install new negative contact (TI2005-121) and screw in the contact clockwise.

TI2005-238 Cobra™ DC Aviation Plug



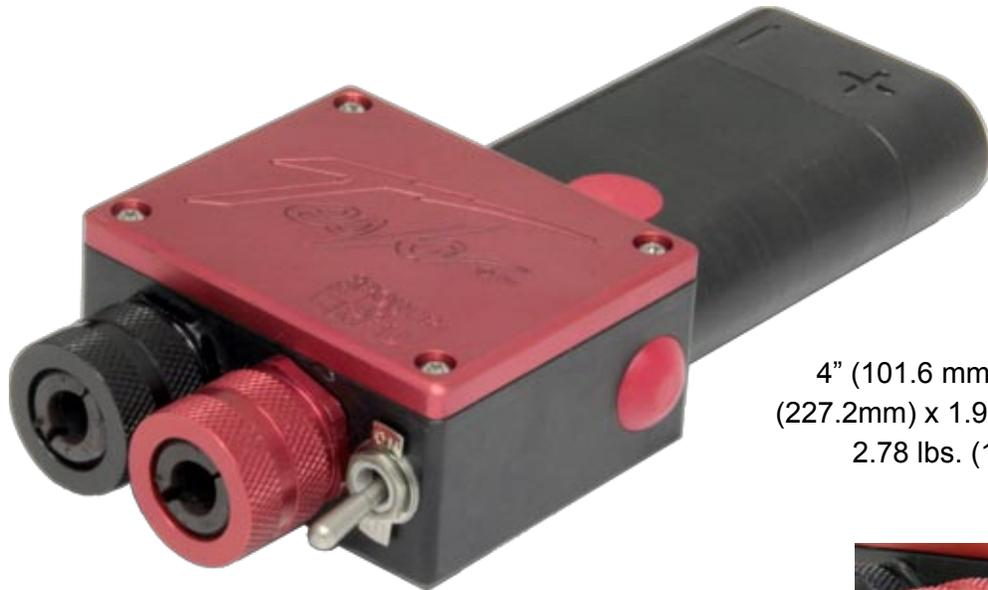
4" (101.6 mm) x 8.945"
(227.2mm) x 1.925" (48.9mm)
2.72 lbs. (1.24 kg)

This 3-Pole 28V DC Female Aircraft Connector Plug is specially designed and weatherproofed to withstand extreme operational environmental conditions. These connectors provide fast and reliable connections from GPU to aircraft.



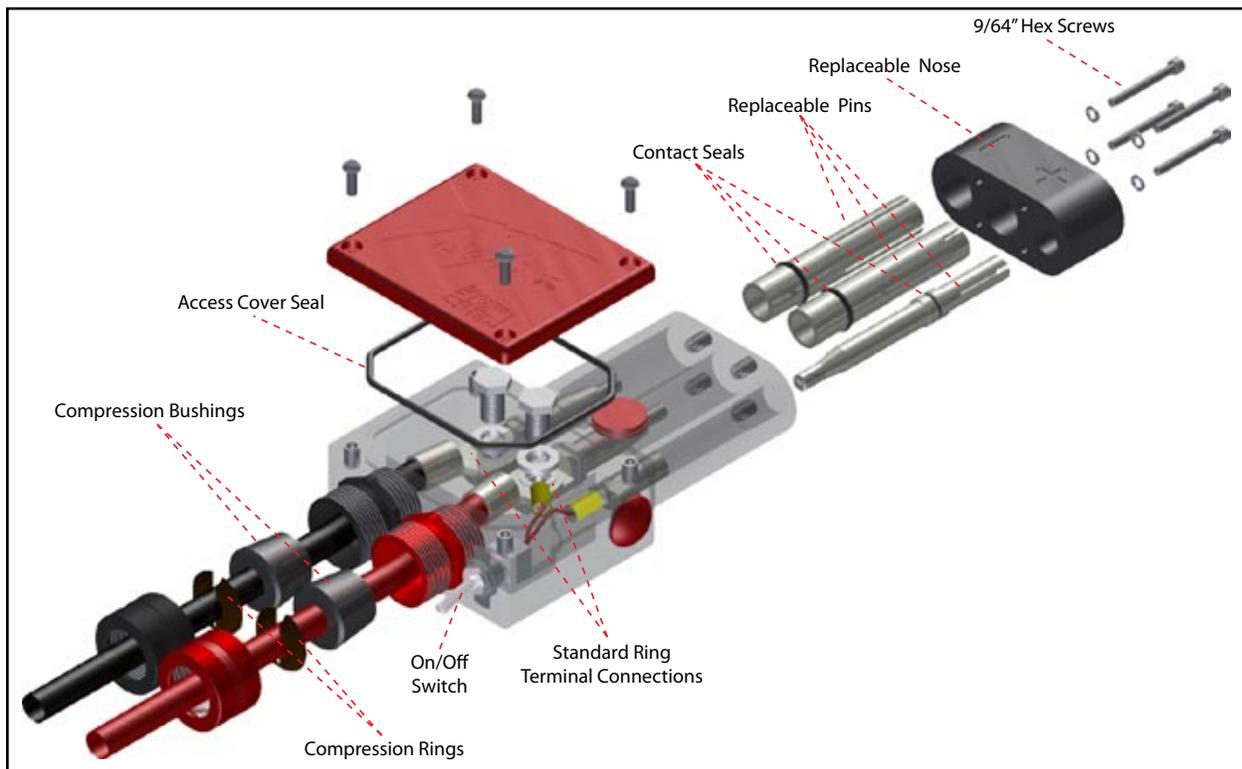
Cobra™ DC Aviation Connectors

TI2005-241 Cobra™ DC Aviation Plug with On/Off Switch

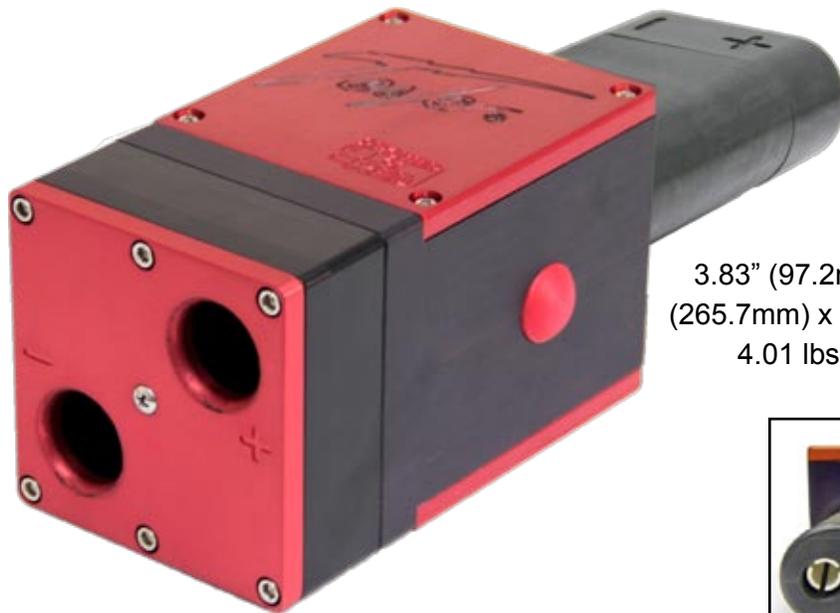


4" (101.6 mm) x 8.945"
(227.2mm) x 1.925" (48.9mm)
2.78 lbs. (1.26 kg)

This Cobra™ DC Aviation Plug is identical to the TI2005-238, but has an On/Off switch added for easy access to turn on and off power. This gives you extra control when directing power to the connected aircraft.



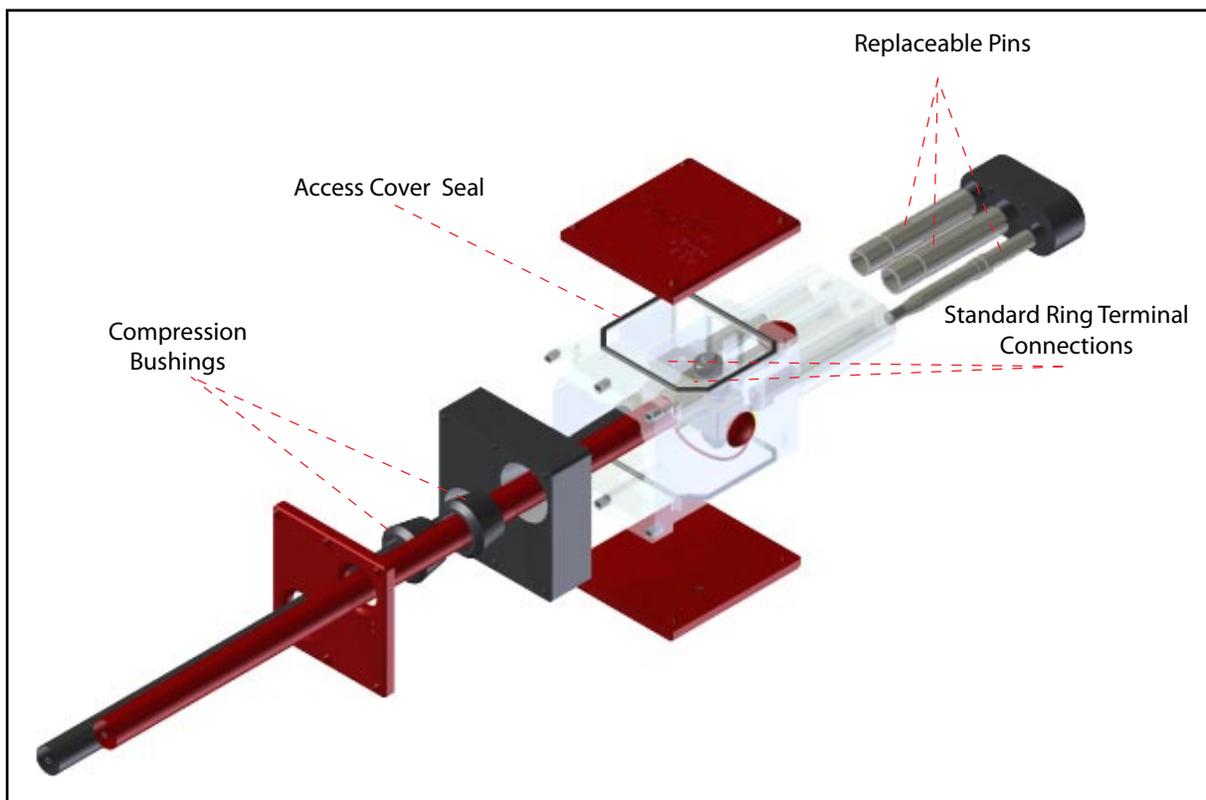
TI2000-331 Cobra™ DC Aviation Plug with Two Conductors



3.83" (97.2mm) x 10.46"
(265.7mm) x 3.60" (91.4mm)
4.01 lbs. (1.82 kg)



This Aviation Plug is a 3-Pole 28V DC Female Aircraft Connector Plug with Two Conductors for aircraft ground power units.



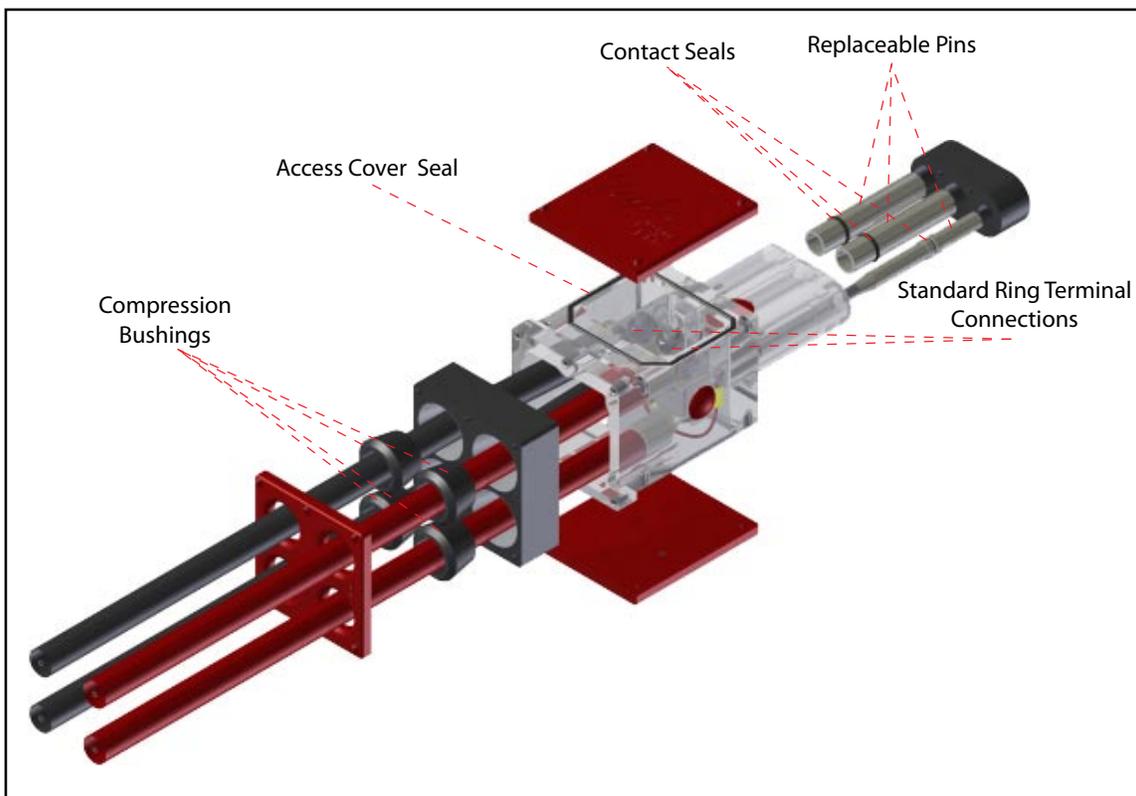
TI2000-332 Cobra™ DC Aviation Plug with Four Conductors



3.83" (97.2mm) x 10.46"
(265.7mm) x 3.60" (91.4mm)
4.24 lbs. (1.92 kg)



This Aviation Plug is a 3-Pole 28V DC Female Aircraft Connector Plug with Four Conductors for aircraft ground power units.

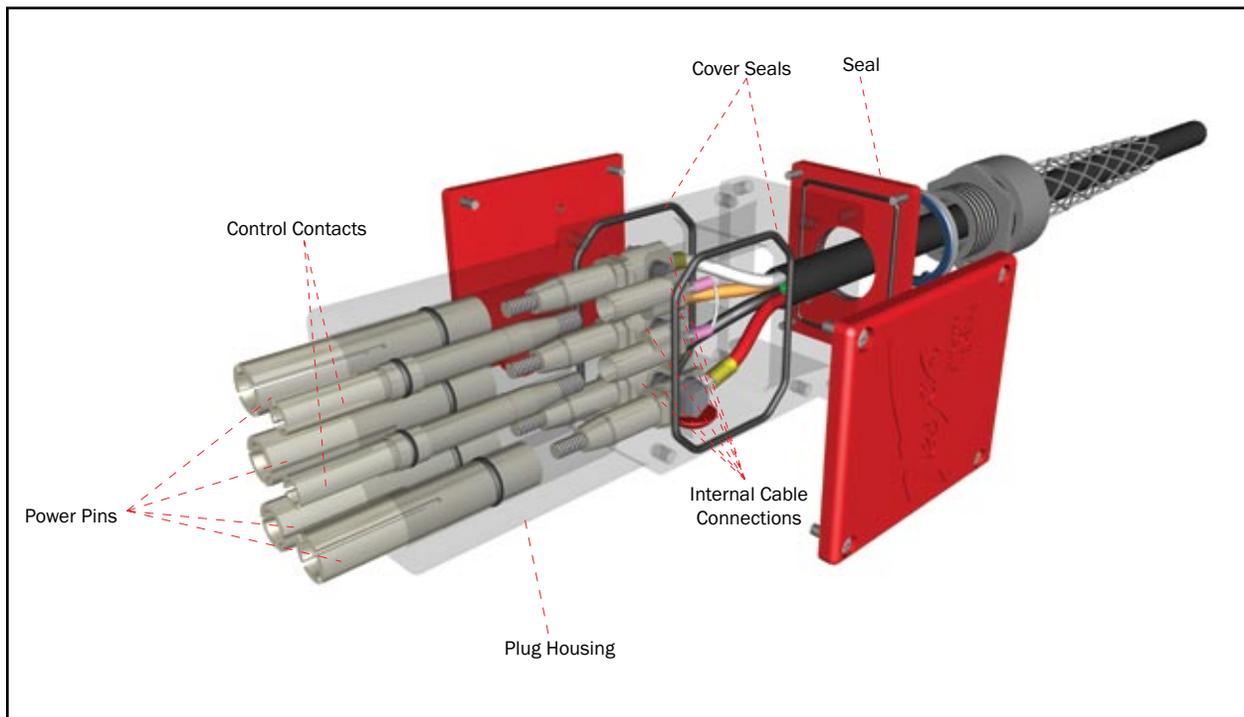


TI2005-400 Cobra™ 400 Hz Aviation Plug



3.6" (91.44mm) x 9.209"
(233.9mm) x 2.895" (73.53mm)
4.5 lbs. (2.04 kg)

This Aviation Plug is intended for 400 Hz aircraft applications, these connectors provide fast and reliable connections from GPU to Aircraft.



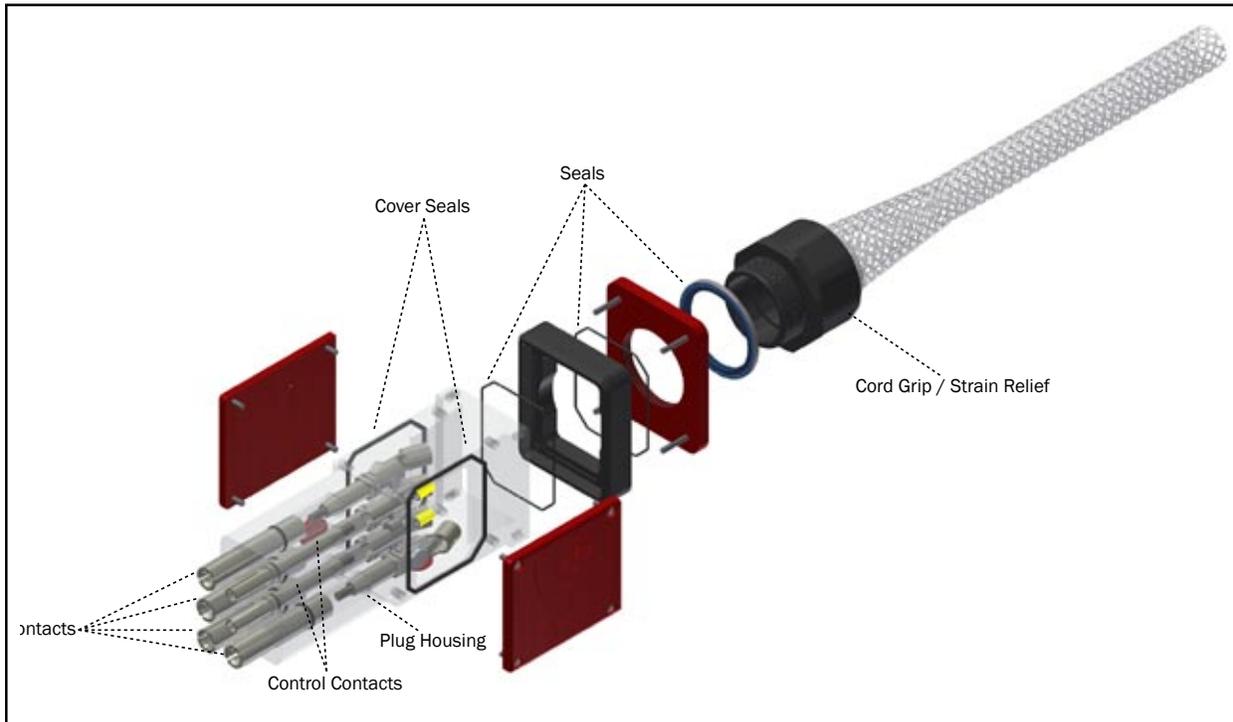
TI2000-346 Cobra™ 400 Hz Aviation Plug



4.1" (104.1mm) x 26.15"
(664.2mm) x 3.43" (87mm)
6.46 lbs. (2.93 kg)



This 6-Pole Female Aviation Plug is intended for 400 Hz aircraft applications, these connectors provide fast and reliable connections from GPU to Aircraft. The Strain Relief Cord Grip prevent cable pullout at the point of termination due to tension, vibration, flexure or motion.

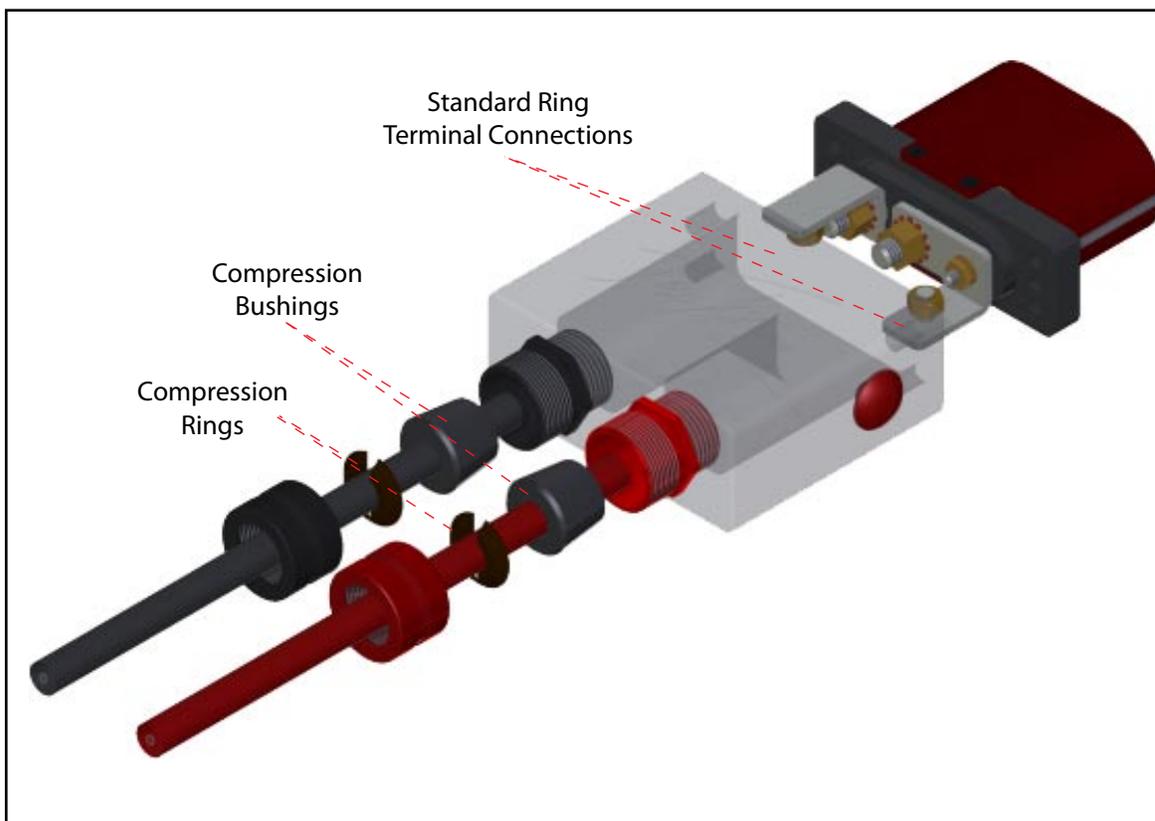


TI2000-375 Cobra™ Aviation Inline Receptacle

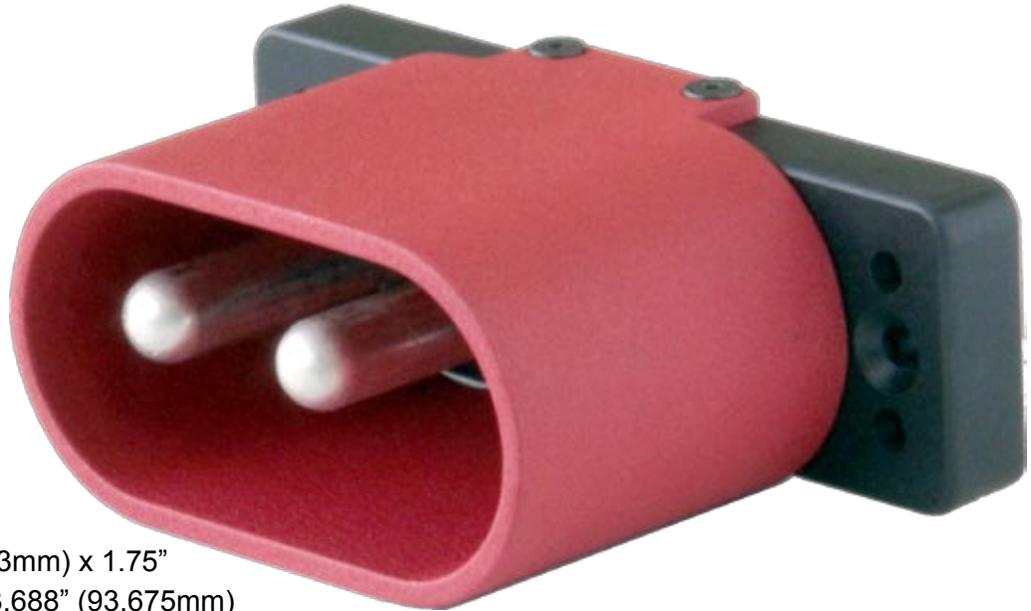


4.85" (123.2mm) x 7.85"
(199.4mm) x 1.75" (44.5mm)
2.72 lbs. (1.24 kg)

This Aviation Inline Receptacle is a 3-Pole 28V DC Male Aircraft Connector Receptacle for aircraft ground power units.



TI2000-336 Cobra™ Aviation Receptacle



4.5" (114.3mm) x 1.75"
(44.45mm) x 3.688" (93.675mm)
1.00 lbs. (0.45 kg)

This Aviation Receptacle is a 3-Pole 28V DC Male Aircraft Connector Receptacle for aircraft ground power units.



TI2005-831 Cobra™ Aviation 400Hz Receptacle



This Aviation Receptacle is intended for 400 Hz aircraft applications, providing fast and reliable connections from GPU to Aircraft.



REPLACING PINS:

1. Unscrew and set aside the eight Flat Head Socket Cap Screws ([TI2100-383](#)) using a hex key turning counterclockwise.
2. Separate the top by sliding it off and away from the pins..
3. Remove the pins that you will be replacing.
4. Put the replacements, nut side, into the base of the receptacle.
5. Making sure the holes match up with the pin size, slide the top piece over the pins. The fit is snug
6. Screw the Flat Head Socket Cap Screws back into the top. Both pieces together should be flush on the bottom.



Parts for TI2005-831



TI2005-834

400Hz Aviation Receptacle Power Pin



TI2005-835

400Hz Aviation Receptacle Control Pin

Aviation Connector Parts and Tools



TI2005-250
3-Slotted Connector



TI2005-239
Aviation Insertion/Extraction Tool



TI2005-251
DC Aviation Plug
Positive/Negative Contact



TI2005-654
400Hz Aviation Plug
Positive/Negative Contact



TI2004-341
Replacement Nose for Aviation Plug
(Requires 9/64" Hex Key)



TI2004-340
Replacement Nose for 400Hz Aviation
Plug (Requires 5/32" Hex Key)



TI2005-072
Negative Cord
Grip



TI2005-073
Positive Cord Grip
5340-01-524-4530



TI2005-074
Negative Cap
5999-01-523-8390



TI2000-075
Positive Cap
5999-01-524-5077

Aviation Contact Replacement Instructions



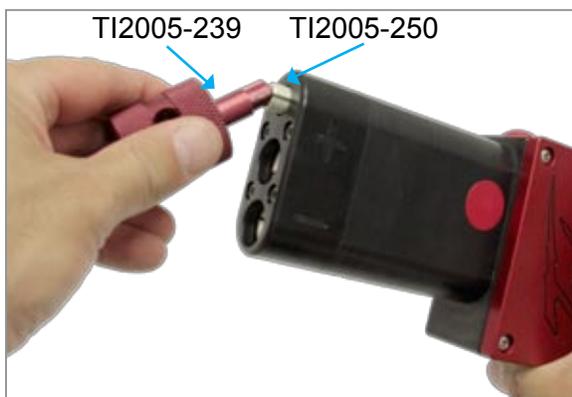
REPLACING NOSE:

1. Remove screws using 9/64" hex key turning counterclockwise.
2. Put aside the screws and lock washers.
3. Line up and insert new Replaceable Nose (TI2004-341). Make sure the flat side is against the plug, curved side facing out.
4. Screw in the four screws clockwise.



REPLACING NOSE on 400Hz:

1. Remove screws using 5/32" hex key turning counterclockwise.
2. Put aside the screws and lock washers.
3. Line up and insert new Replaceable Nose (TI2004-340). Make sure the flat side is against the plug. (Printed letters facing out)
4. Screw in the two screws clockwise.



REPLACING CONTROL PIN:

1. Use Insertion/Extraction Tool (TI2005-239) using the smaller end to remove the pin by inserting and turning counterclockwise.
2. Install new pin (TI2005-250) using same tool and screw in clockwise.



REPLACING POWER PIN:

1. Use Insertion/Extraction Tool (TI2005-239) using the larger end to remove the pin by inserting and turning counterclockwise.
2. Install new pin (TI2005-251) (TI2005-654 for 400Hz plug) using same tool and screw in clockwise.

Cobra™ DC Battery Connectors

Cobra™ DC Battery Connector

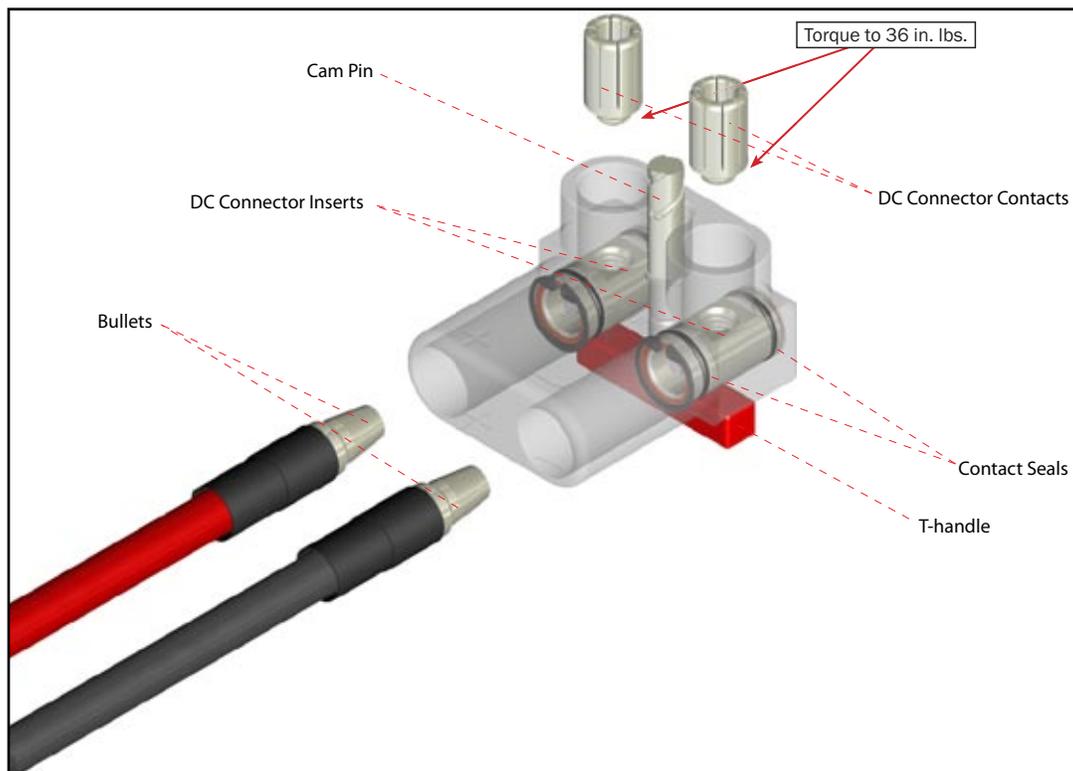
Model Numbers and Ordering Instructions on page 26



2.65" (67.31mm) x 32.25"
(819.2mm) x 2.984" (75.79mm)
0.8 lbs. (0.36 kg)

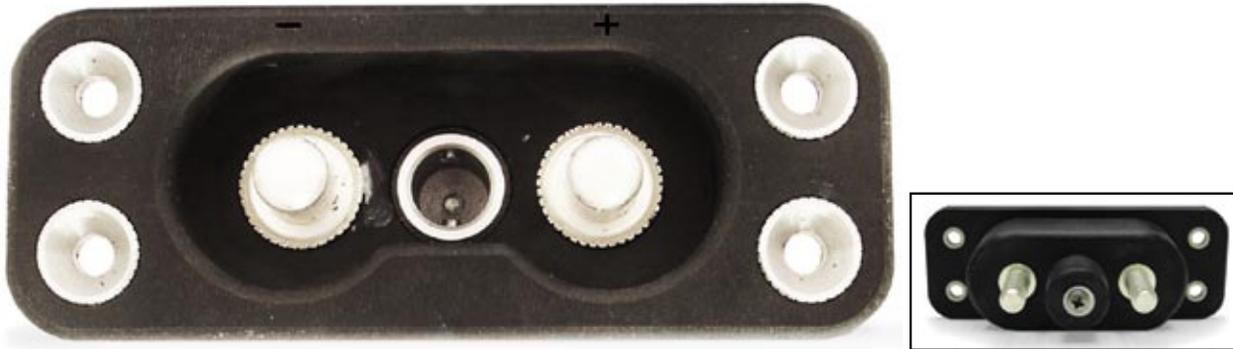
The Tesla™ DC Battery Connector's internal cables are connected by crimpable bullets allowing for direct termination inside of the connector. The connector contacts are easily replaceable "in the field".

The T-Handle makes for easy and quick connections to the receptacle.



Cobra™ DC Battery Receptacle

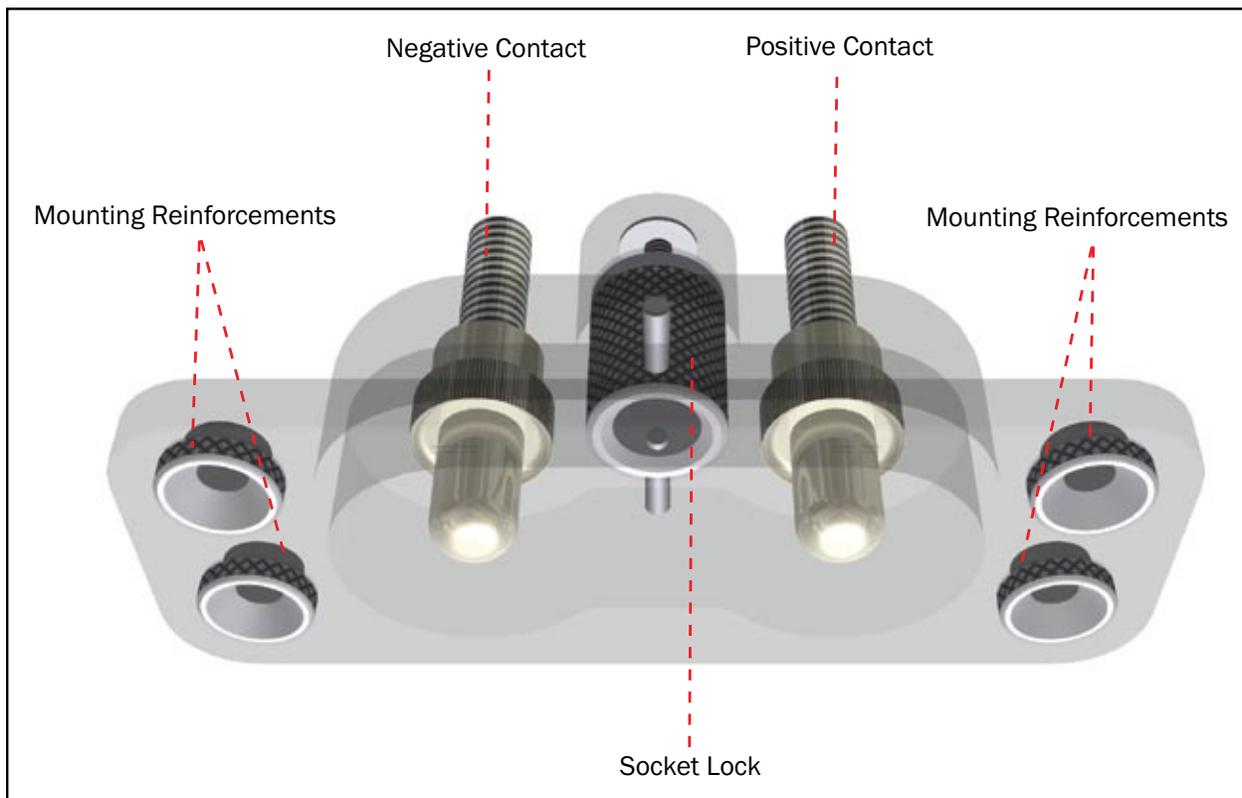
Model Numbers and Ordering Instructions on page 26



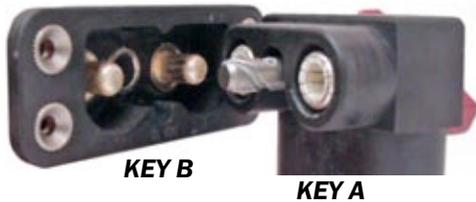
* T12005-379 Pictured / Back view on right

4.28" (108.7mm) x 1.625"
(41.28mm) x 1.95" (49.53mm)
0.36 lbs. (0.16 kg)

All Tesla™ MPU's and GPU's are fitted with Tesla™ DC Battery Receptacles.

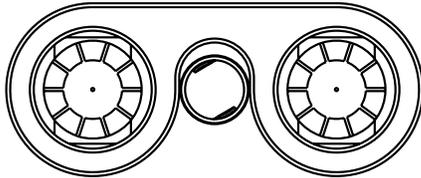


Connector & Receptacle Ordering Options

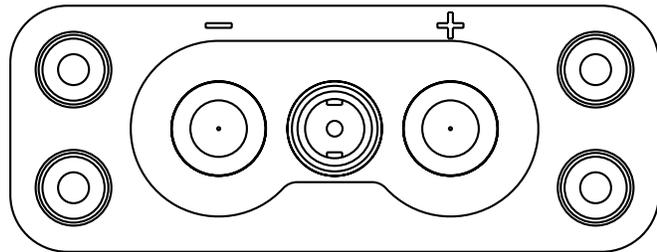


Each keyed DC Receptacle is only compatible with the matching keyed DC Battery Connector. As an example the Key A **TI2005-410** DC Battery Connector **WILL NOT** mate with the Key B **TI2004-020** DC Battery Receptacle. They must be the same Key to fit properly; This is a safety measure. Picture shows a sample of what NOT to do.

KEY A



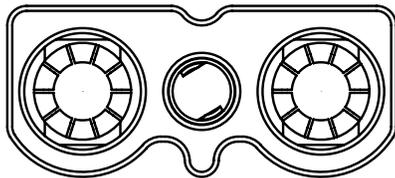
Key A **TI2005-410**



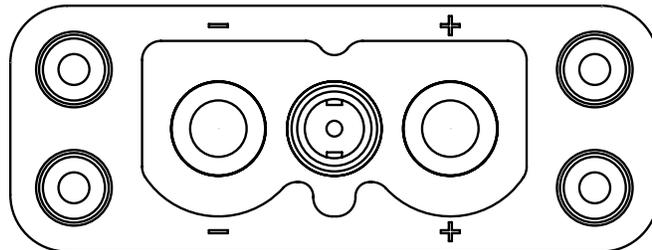
Key A **TI2005-379** / NSN: 5935-01-594-9348

Key A uses the Military standard MS3509 and comes standard with all Tesla™ 28 Vdc Ground Power Units and (MPU) Aircraft Battery Systems.

KEY B



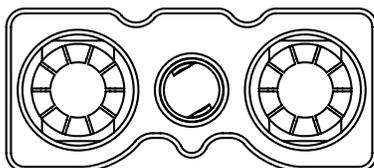
Key B **TI2004-021**



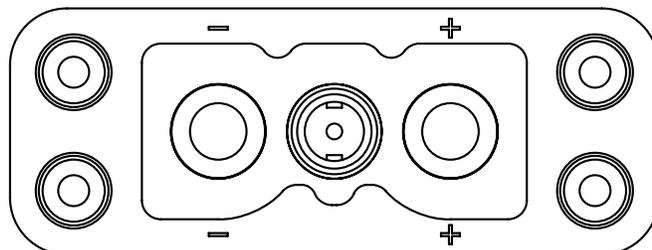
Key B **TI2004-020**

Key B is the standard for all Tesla™ 12 Vdc on Ground Power Units

KEY C

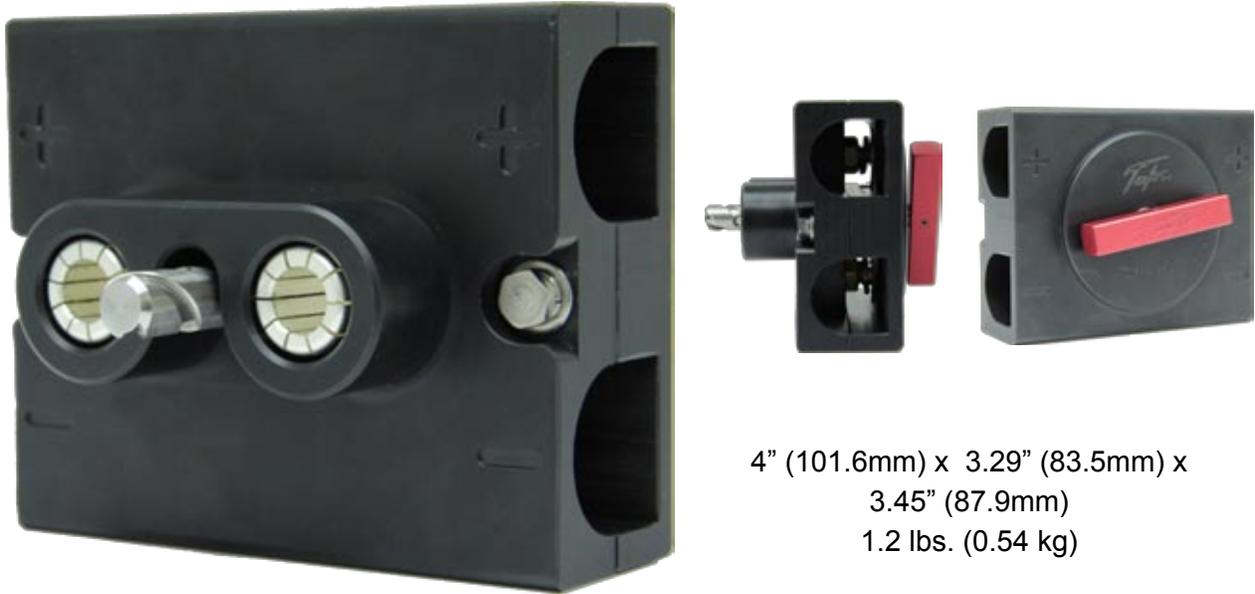


Key C **TI2004-108**

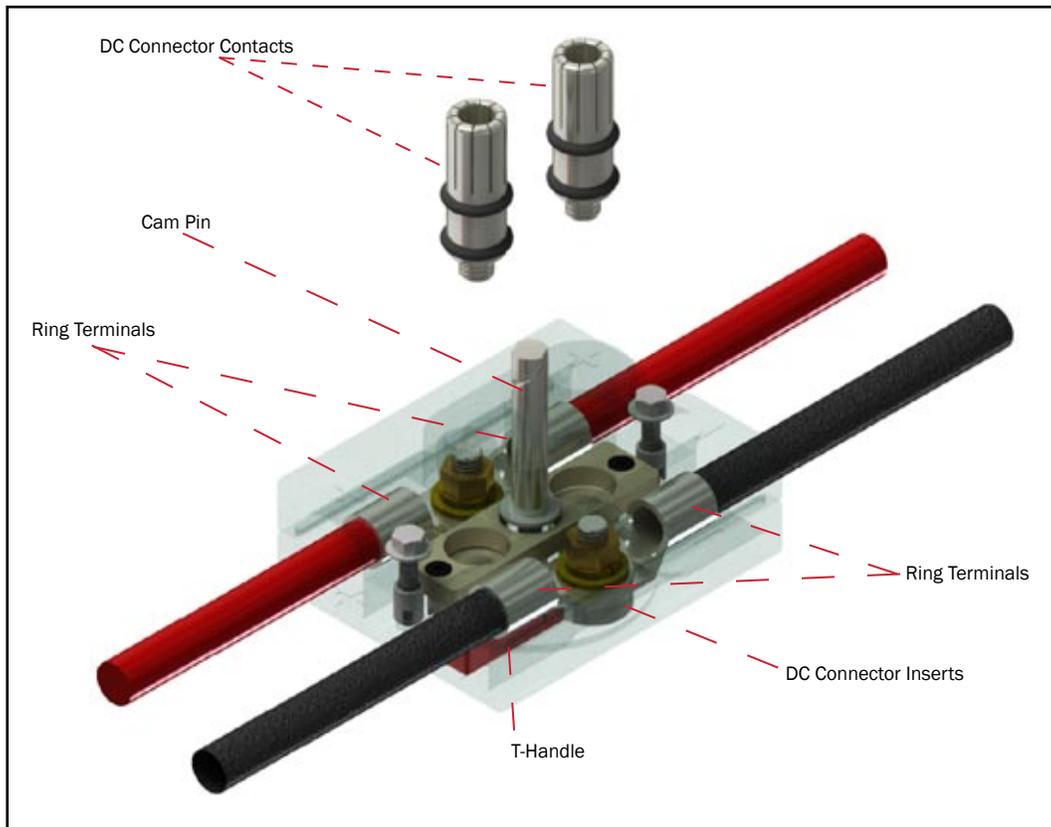


Key C **TI2004-109**

TI2000-384 Cobra™ DC Battery Connector



The TI2000-384 is able to attach to a receptacle with two separate cords so you can connect two separate units in parallel. The cords are secured inside with Ring Terminals, eliminating the need for cumbersome splices.



Battery Connector Replacement Parts & Tools



TI2005-488

DC Battery Connector
Insertion/Extraction Tool



TI2005-925

DC Battery Receptacle
Dust Cover



- For DC Connectors -



TI2005-490

DC Battery Connector
Replacement Contacts



- for TI2000-384 -



TI2004-336

DC Battery Connector
Replacement Contacts



*cable sold
separately

Cable Crimp Bullets

TI2005-199 1Ø-2Ø Cable
More sizes available.
Call for assistance.



*cable sold separately

Ring Terminals

Standard Stud Size is 3/8"
More sizes available.
Call for assistance.

Battery Contact Replacement Instructions

Step 1



Step 1: To remove either contact, insert the hex end of the DC Contact Insertion/Extraction Tool into a 1/2 inch socket wrench. Do not use a torque wrench.

Step 2



Step 2: Next, insert the tool into the contact and turn counterclockwise using the wrench.

Step 3



Step 3 & 4: To install a new contact, use the same tool and screw the contact in clockwise using a 3/8" torque wrench. Be sure to fully insert the tool or the fins may break.

NOTE: T12000-384 Uses replacement contact T12004-338 (Pictured bottom right)

Step 4



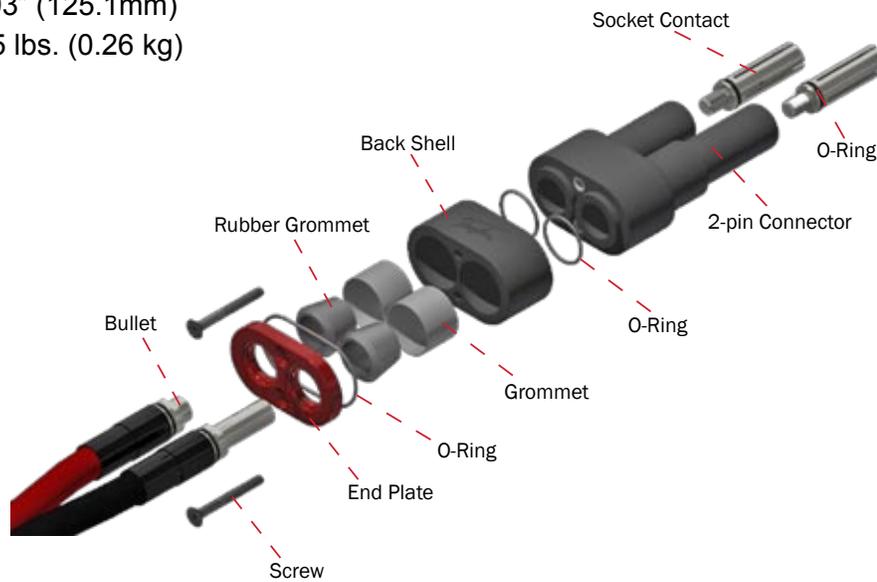
Miscellaneous Connectors

TI2000-294 2-Pin Cat® Jump Start Connector

The 2-Pin Cat® Jump Start Connectors are engineered to be compatible with Caterpillar® equipment.



2.30" (58.4mm) x 1.32" (33.4mm)
x 4.93" (125.1mm)
0.575 lbs. (0.26 kg)



Parts for TI2000-294



TI2004-105
Contact Replacement Tool



TI2000-368
Positive/Negative Slotted Contact w/O-Ring



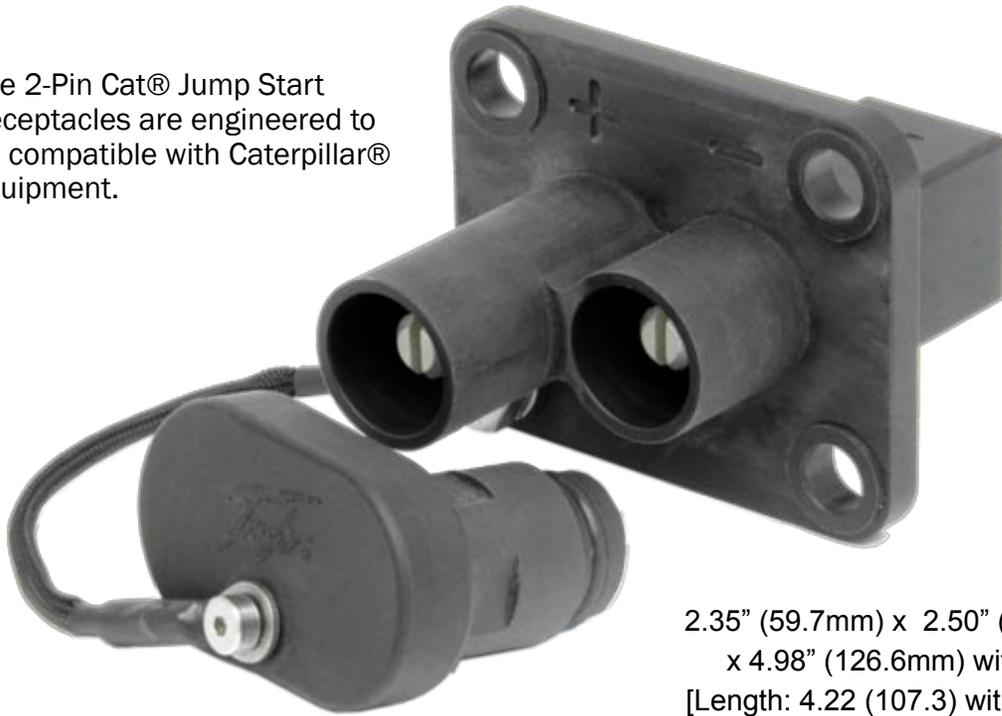
TI2004-092
Negative Bullet



TI2004-093
Positive Bullet

TI2000-421 2-Pin Cat® Jump Start Receptacle

The 2-Pin Cat® Jump Start Receptacles are engineered to be compatible with Caterpillar® equipment.



2.35" (59.7mm) x 2.50" (63.5mm)
x 4.98" (126.6mm) with cap
[Length: 4.22 (107.3) without cap]
0.6 lbs. (0.25 kg)



Part for TI2000-421



TI2000-433
Replacement Dust Cover

Miscellaneous Connectors

TI28000-623 / TI28000-624 Black and Red Alligator Clamps

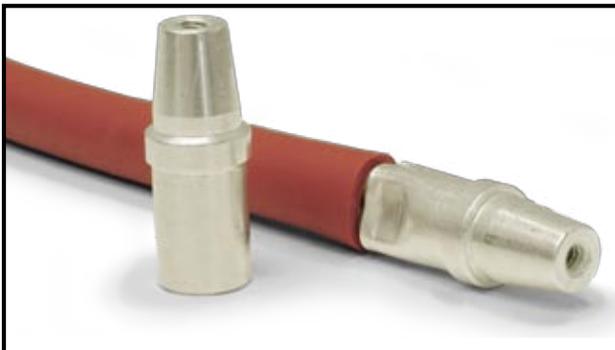


Rugged heavy duty clamps engineered for quick connection to battery posts.

Cables sold separately.

Rated to 3000 peak amps.

Cable Crimp Bullets

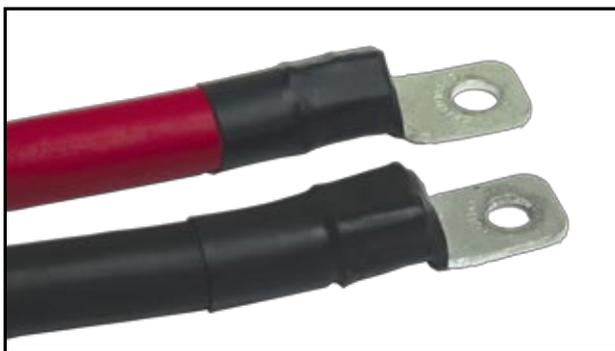


Pictured with cable to show crimped bullet. Cable sold separately.

These easily crimpable bullets allow for direct termination inside of the connector.

Many sizes available. Please call for assistance.

Ring Terminals



Various combinations for studs and wire sizes available. Please call for assistance.

Cable sold separately.



National Stock Numbers

Military Products Cage Code OVWE2

NSN #	Model #	Description	Page #
Connectors			
NSN: 6130-01-523-1270	TI2005-078	Cobra NATO Connector	4
NSN: 5935-01-523-8368	TI2005-129	Cobra NATO Compact Connector	5
NSN: 5935-01-525-5316	TI2005-147	Cobra NATO 2-Pin Adapter	10
NSN: 5935-01-523-8914	TI2005-117	NATO Positive Post	11
NSN: 5999-01-525-0582	TI2005-121	NATO Negative Contact	11
NSN: 5120-01-523-8761	TI2005-126	NATO Negative Contact Insertion/Extraction Tool	11
NSN: 5120-01-527-7729	TI27000-082	NATO Positive Contact Insertion/Extraction Tool	11
NSN: 5340-01-524-4530	TI2005-073	Positive Cord Grip	11,22
NSN: 5999-01-523-8390	TI2005-074	Negative Cord Grip	11,22
NSN: 5999-01-524-5077	TI2005-075	Positive Cap	11,22
NSN: 5935-01-594-9348	TI2005-379	DC Battery Receptacle	25-26

For a complete list of NSN Numbers go to
<http://www.teslainsd.com/national-stock-numbers.php>

PRODUCT NOTE: We have many standard DC cables available with our Cobra™ connectors including Aviation Plug, NATO Plug, Ring Terminals, Bullet End and Alligator Clips.

Go online to <http://www.teslainsd.com/accessories-dc-cables.php> for a list.

From there you can also discover our endless Cable assemblies using our Cobra™ connectors or call Tesla™ Customer Service for a custom cable... *cut to fit any size!*

Power Anytime, Anywhere



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POWER
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