FLAME ENTERPRISES
INCORPORATED
The Electromechanical Marketplace

21500 Gledhill Street
Chatsworth, CA 91311
flamecorp.com

TOLL FREE: 800-854-2255
PHONE: 818-700-2905
FAX: 818-700-9168

Product Notice

Date: 11/1/2021
Manufacturer: Rebling

AVIONICS/ MIL SPEC BATTERY RECEPTACLE - STYLE 2

Rebling has discontinued manufacturing all Style 2 Battery Receptacles. Flame Enterprises will be stocking the remaining product available and will be able to potentially supply product going forward in limited colors [Green]. On Hollow Post + Drive Pin products Flame will supply parts in a kit format and the customer will need to assemble. For Hollow Post + Drive Pin products which come with an adapter the same kit format will be used where the customer will be required to manage the assembly. Two adapters supplied for those units which require adapters.

See the chart below for information that may be helpful. Please reach out to Dave Boush in Product Management at Flame Enterprises for details on what your options may be.

dave@flamecorp.com

P/N	Description	Can Supply the following		Note
7002-4	Receptacle, Style 2 with rear Hollow Posts + Drive pins, Blue	7002-2G	Receptacle, Style 2 with rear Hollow Posts + Drive pins, Green	1
7002-4-101	Receptacle, Style 2 with rear right angle -101 Adapters, Blue	7002-2G-101	Receptacle, Style 2 with rear right angle -101 Adapters, Green	1
7002-4-103	Receptacle, Style 2 with rear right angle -103 Adapters, Blue	7002-2G-103	Receptacle, Style 2 with rear right angle -103 Adapters, Green	1
7002-4-105	Receptacle, Style 2 with rear right angle -105 Adapters, Blue	7002-2G-105	Receptacle, Style 2 with rear right angle -105 Adapters, Green	1
7002-2	Receptacle, Style 2 with rear Hollow Posts + Drive pins, Pink	7002-2G	Receptacle, Style 2 with rear Hollow Posts + Drive pins, Green	1
7002-2G	Receptacle, Style 2 with rear Hollow Posts + Drive pins, Green	7002-2G	Receptacle, Style 2 with rear Hollow Posts + Drive pins, Green	1
7002-8	Receptacle, Style 2, Rear Threaded Posts, Blue	7002-6G	Receptacle, Style 2 Rear Threaded Posts, Green	
7002-10	Receptacle, Style 2, Rear Threaded Posts, Black	7002-6G	Receptacle, Style 2 Rear Threaded Posts, Green	
7002-6	Receptacle, Style 2, Rear Threaded Posts, Pink	7002-6G	Receptacle, Style 2 Rear Threaded Posts, Green	
7002-6G	Receptacle, Style 2 Rear Threaded Posts, Green	7002-6G	Receptacle, Style 2 Rear Threaded Posts, Green	

Accessory	
023A1169	Gasket for Style 2 Receptacle, Elastomer
100A1165	Adapter, -101 Style (2 required per receptacle)
100A1045-03-2	Adapter, -103 Style (2 required per receptacle)

Notes	
Note 1	Flame will supply the 7002-2G Style 2 Receptacle and the associated adapters [were requried] and drive pins as a kit. It is up to the customer to assemble them.

REBLING PLASTICS 7002 Style 2 BATTERY RECEPTACLE

The Rebling 7002 Style 2 Aero Battery Receptacles are two-pin receptacles conforming to MS3509 Style 2. They are designed to mate with Rebling's Series 7000 Quick Disconnects and all other quick disconnect plugs conforming to MS25182-2 and MS3349-2. Attached directly to the battery housing, the 7002 receptacle provides a reliable, high-current connection of the battery output to the electrical load and permits rapid removal of the battery from the aircraft.

The 7002 Style 2 receptacle is functionally identical to the 7002 Style 1 unit. Being smaller in width, the Style 2 receptacle is typically specified when the receptacle location on the battery case does not permit the use of Style 1.

The 7002 Series receptacles and mating quick disconnects are shaped to insure correct polarity is maintained when connecting the battery to the system. Polarity markings are also molded on the body of the receptacle. All models are appropriately color coded, pink for lead acid and blue for nickel cadmium type batteries.

The 7002 body is molded from chemically resistant, high dielectric strength glass reinforced plastic. Contact pins are silver-plated copper alloy. The retaining pins in the locking socket of all 7002 Series receptacles are hardened to Rc 60 to provide maximum wear resistance against the shaft of the quick disconnect plug. All metal inserts are molded in place to form a leak proof seal between the plastic and the surface of the inserts. This also provides greater pull-out strength and assures part-to-part dimensional consistancy. Mounting holes have metal reinforcements which are plated to prevent corrosion.

The Rebling Series 7002 receptacles are available with hollow or threaded post electrical connections. Hollow-post models may be ordered with Terminal Adapters which are available in a variety of configurations to meet specific customer requirements. Two steel expander pins are supplied with all hollow-post configurations. The hollow posts are annealed to prevent cracking when the expander pin is inserted.

The Rebling Series 7002 receptacles conform to MS3509 and are on the Qualified Products List (QPL) per MIL-E-81099.

Rebling 7002, Style 2 Battery Receptacle

- Conforms to MS3509, Style 2
- On Qualified Products List (QPL) per MIL-E-81099
- Color-coded for lead-acid or nickel-cadmium batteries
- Mates with MS25182-2 and MS3349-2
- Hollow or threaded posts
- Variety of Terminal Adapter configurations

Material Specifications

Body Material	Chemical resistant, high-dielectric strength glass reinforced plastic.
Color	~~Pink per Fed.Std. 595, #21158 Blue per Fed.Std. 595, #15090-15193 range~~
Contacts	Annealed copper per QQ-C-502, silver plated per QQ-S-365, .0005 thickness minimum.
Locking Socket	Stainless steel with hardened (Rc60) retaining pins.
Mounting Reinforcements	Steel, nickel plated with cad plate and chromate per AMS 2416.
Expander Pins	Stainless steel.

Electrical Specifications

Insulation Resistance	Greater than 2500 VDC applied for one minute between contacts (-65°F to +140°F).

Mechanical Specifications

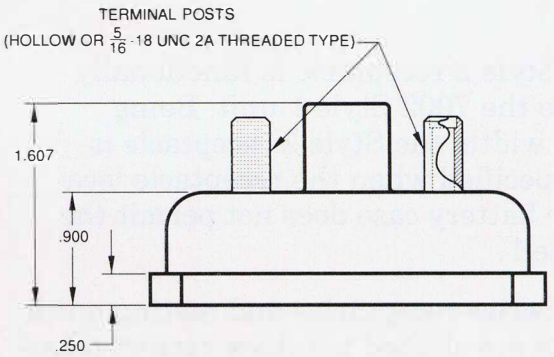
Strength	Locking socket withstands 500 lb. pullout force and 10 foot-pounds of torque (-65°F to +140°F).
Sealing Capability	Maintains 2 psi (minimum) pressure differential in mounted configuration (-65°F to +140°F).
Life	Greater than 5000 engagements with MS25182-2 type quick disconnect (-65°F to +140°F).
Temperature Shock	-65°F to +140°F.
Humidity	95% RH @120°F for 15 days.
Fungus	Will not support fungus growth.
Salt Spray	Withstands 50 hour exposure of 5% salt spray @ 90°F.
Weight	0.28 lbs.
Chemical Resistance	Withstands immersion in following: • 1.1 Sp.Gr. Sulfuric acid - 4 hours • 1.1 Sp.Gr. Potassium Hydroxide - 4 hours • Aircraft hydraulic fluid per MIL-H-5606 - 20 hours • Lubrication oil per MIL-L-23699 - 20 hours

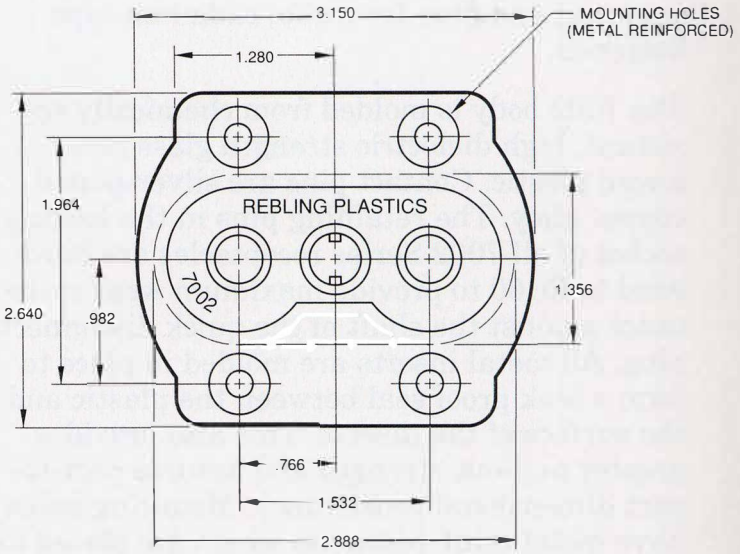
Ordering Information

Rebling Part Number	Color	Electrical Connection
7002-2G	Green	Hollow posts
~~7002-4~~	~~Blue~~	~~Hollow posts~~
7002-6G	Green	Threaded posts
~~7002-8~~	~~Blue~~	~~Threaded posts~~

To order receptacle with Terminal Adapters installed, refer to Terminal Adapter data sheet.

7002 - Style 2 Battery Receptacle





Rebling Plastics

150 Franklin Drive • Warrington Industrial Park
Warrington, PA 18976
215-343-2400 • Fax: 215-343-1780

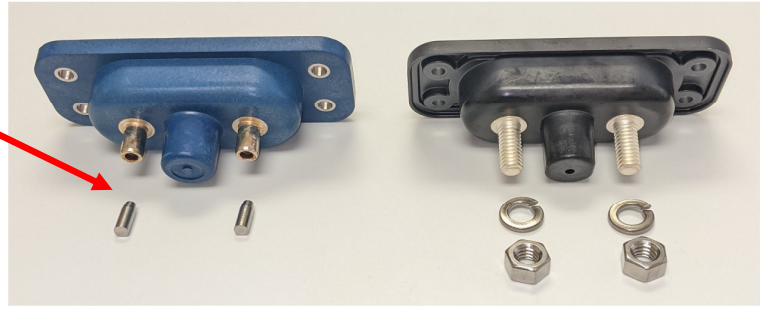
Comparison of Rebling's Hollow Post vs Threaded Post vs Adapter Receptacles

Rebling's bulkhead-mounted receptacle connectors (pictured below) are designed to be attached to the metal cases of avionics batteries.
All Rebling receptacles can be interchangeably mated to all of Rebling's cable-mounted plug connectors (P/Ns 7013, 7016, 7017, 7007, 7020-T)

Rebling makes 30 styles of bulkhead-mounted receptacles which vary in color (blue, pink, green, black)
and method of rear termination (threaded post, hollow post, right angle adapters) (P/Ns 7002-3, 7002-7, 7002-5-30, 7010-3, etc.)

Electrical connections are made to the rear of the 7002-3 using the included steel drive pins which, when hammered into the center of the connector's silver plated hollow copper posts, expand the hollow posts causing a force fit between the expanded copper post and the metal bus bar or metal adapter the Customer wishes to attach to the rear of the receptacle.

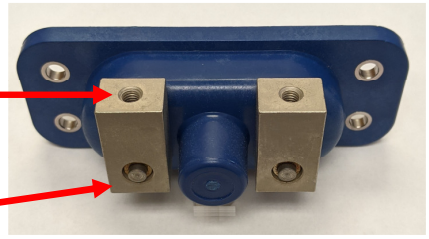
Front of 7002-3 or 7002-3-101 **Front of 7010-3**



Rear of 7002-3 **Rear of 7010-3**

Electrical connections are made to the rear of the 7010-3 (or other P/Ns) using the 5/16-18 silver plated copper threaded posts and included stainless steel nuts and split washers

Electrical connections are made to the rear of the 7010-3-101 using the 10-32 internal threads of the right angle adapter which has been attached to the hollow copper posts of a 7002-3 using the steel drive pins



Rear of 7002-3-101

REBLING PLASTICS

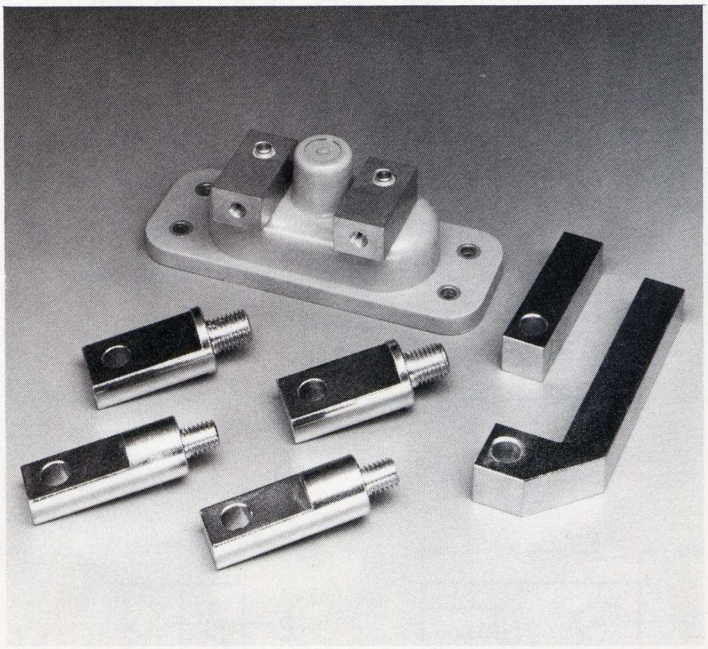
7002 TERMINAL ADAPTERS

Rebling Series 7000 Aero Battery Receptacles can be supplied assembled with various styles of terminal adapters. These adapters conform to the original equipment specifications and are fully interchageable with those supplied by the battery manufacturers.

The terminal adapters provide a convenient interface for attaching the electrical output of the battery to the receptacle. All adapters are made from nickel-plated steel and have threads of Class 2 quality.

Standard terminal adapters can be modified, or, if required, configurations not listed can be supplied on a custom basis. Consult the factory for availability of non-standard units.

Note: Terminal adapters can only be assembled on receptacles with hollow posts configurations. See Rebling data sheets 7002 Style 1 and Style 2 for details on receptacles.



Ordering Information

To order a Rebling Series 7002 Receptacle with Terminal Adapters installed, specify the following:

7002 - X - YYY

Receptacle dash number - Specifies Style 1 or 2, color & post* configuration (see 7002 Series data sheet)

Terminal Adapter No.

Example:

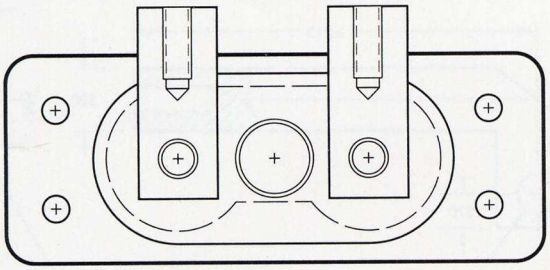
7002 - 3 - 105

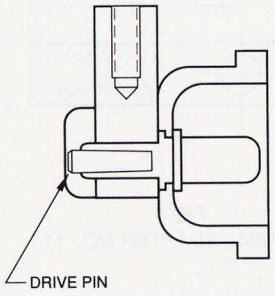
Specifies a Style 1, color blue, hollow post receptacle

Specifies Terminal Adapter No. 105

*Note: Terminal Adapters can only be assembled on receptacles with hollow post configurations.

7002 Receptacle Terminal Adapter Assembly





Terminal Adapters

Model No.	Figure No.	Dimension 'A'	'B'	'C'	'D' Thread
101	1	.866	.625	.500	10-32 UNF
~~102~~	~~1~~	~~1.218~~	~~.625~~	~~.500~~	~~10-32 UNF~~
103	1	.866	.625	.625	1/4-28 UNF
~~104~~	~~1~~	~~.687~~	~~.625~~	~~.500~~	~~10-32 UNF~~
105	3	See Figure 3			
~~106~~	~~2~~	~~1.205~~			~~M10X 1.25 MM~~
107	2	.831			M10X 1.25 MM
~~108~~	~~2~~	~~1.047~~			~~M10X 1.25 MM~~
109	1	1.000	.625	.500	10-32 UNF
~~110~~	~~4~~	~~See Figure 4~~			
~~111~~	~~5~~	~~See Figure 5~~			

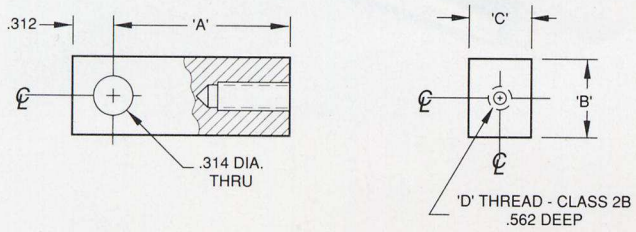


FIG 1
TERMINAL ADAPTER NO. 101, ~~102~~, 103, ~~104~~, & 109

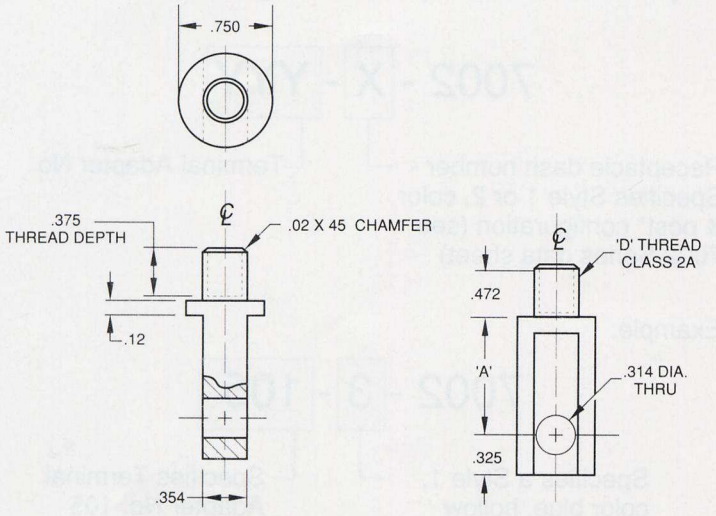


FIG 2
TERMINAL ADAPTER NO. ~~106~~, 107, & ~~108~~

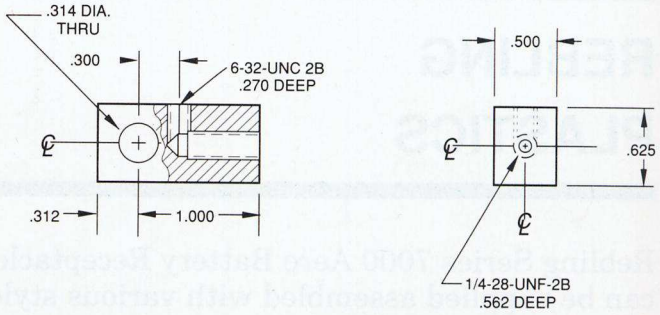


FIG 3
TERMINAL ADAPTER NO. 105

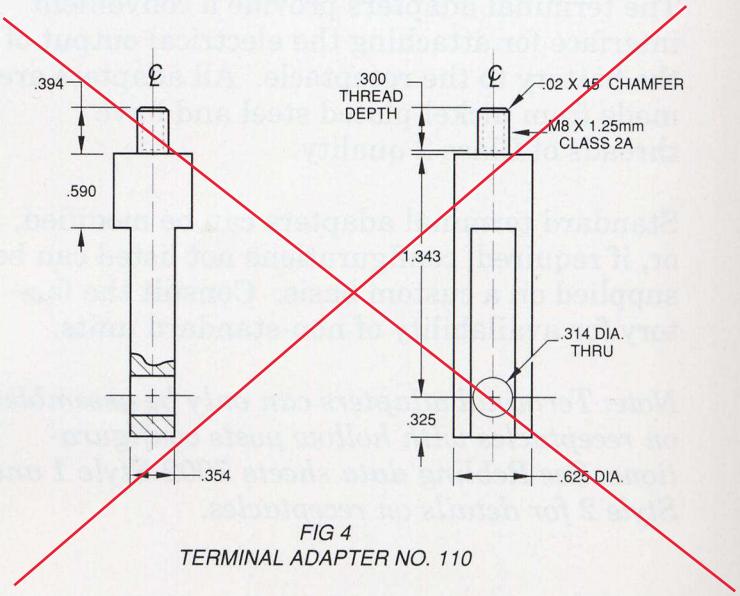


FIG 4
TERMINAL ADAPTER NO. 110

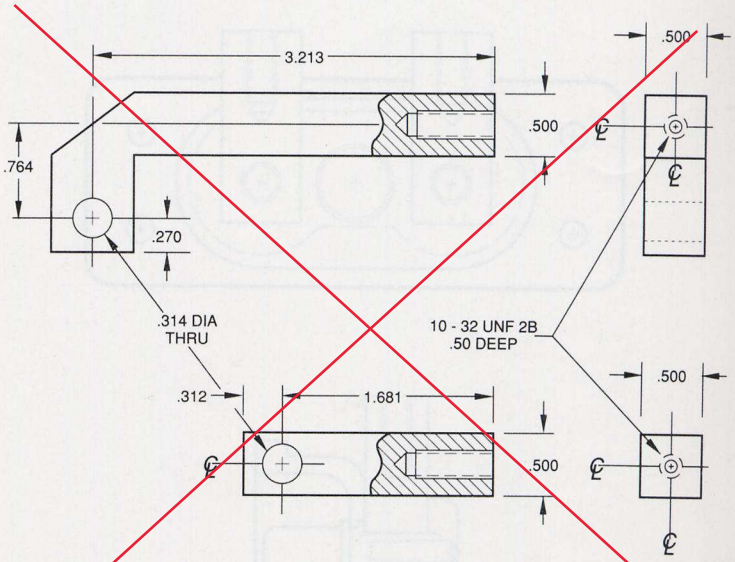


FIG 5
TERMINAL ADAPTER NO. 111

Rebling Plastics

150 Franklin Drive • Warrington Industrial Park
Warrington, PA 18976
215-343-2400 • Fax: 215-343-1780

Rev. 3/91