

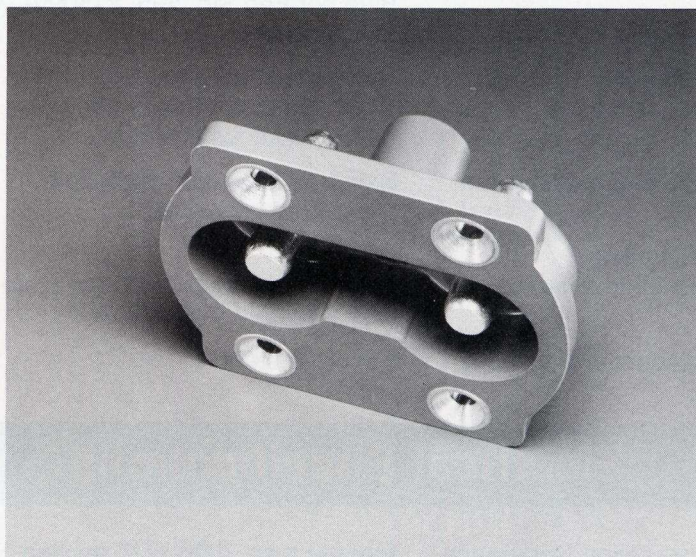
The Rebling 7002 Style 2 Aero Battery Receptacles are two-pin receptacles conforming to MS3509 Style 2. They are designed to mate with Rebling's Series 7000 Quick Disconnects and all other quick disconnect plugs conforming to MS25182-2 and MS3349-2. Attached directly to the battery housing, the 7002 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 consistency. 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 ex-



### **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

pander 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.

## 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).
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## Mechanical Specifications

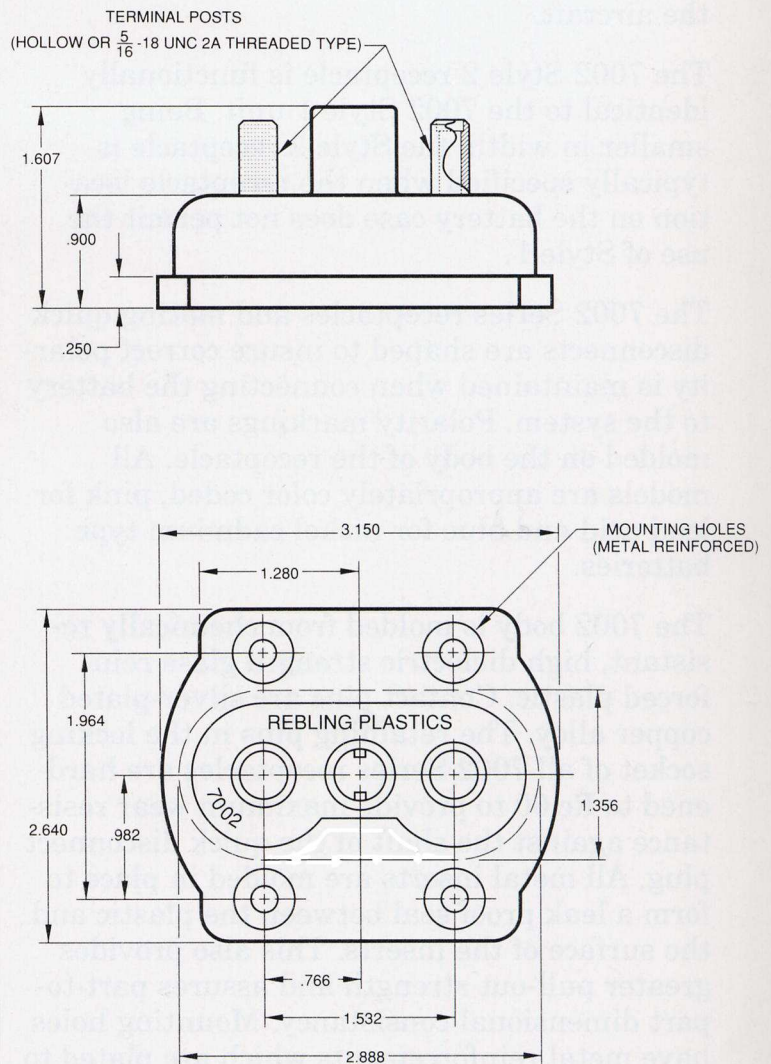
Strength .....	Locking socket withstands 500 lb. pullout force and 10 foot-pounds of torque (-65°F to +140°F).
Sealing Capability .....	Maintains 2 psi (minimum) pressure differential in mounted configuration (-65°F to +140°F).
Life .....	Greater than 5000 engagements with MS25182-2 type quick disconnect (-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: <ul style="list-style-type: none"> <li>• 1.1 Sp.Gr. Sulfuric acid - 4 hours</li> <li>• 1.1 Sp.Gr. Potassium Hydroxide - 4 hours</li> <li>• Aircraft hydraulic fluid per MIL-H-5606 - 20 hours</li> <li>• Lubrication oil per MIL-L-23699 - 20 hours</li> </ul>

## Ordering Information

Rebling Part Number	Color	Electrical Connection
7002-2	Pink	Hollow posts
7002-4	Blue	Hollow posts
7002-6	Pink	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**



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