

Table 2 - Galvanic Series

More Active (Anodic)	
Group I	magnesium
Group II	zinc aluminum aluminum alloy 7072 aluminum alloy 7079-T6 cadmium aluminum alloy 6061-T6 aluminum alloy 2024-T4
Group III	tin stainless steel 430 (active) lead steel 1010 cast iron
Group IV	nickel chromium stainless steel 430 (passive) brass
Group V	Copper Monel 400 Titanium silver gold graphite
Less Active (Cathodic)	

- Metals toward the top of the series are more active and will corrode when placed in contact with a metal lower in the series in a seawater electrolyte environment. *(Rain + road contaminants are conductive and corrode like seawater, esp. near a coast - jv)*
- Generally, metals in the same group may be placed in contact with each other.
- Metals from separate groups must be protected from corrosion by coating *(They mean conversion coatings like chromic acid (Alodine) which is expensive and corrosive, or intermediate metals (see last point below). If don't/can't use these, use corrosion protectant like CRC2:26 – jv)* and by sealing the edges to preclude moisture *(e.g. CRC CPC400 - jv)*
- Avoid leaving a small unprotected anodic area compared to the cathodic area in contact with the electrolyte. The smaller the area the greater the current density and the greater the corrosion. *(Massive aluminum frame is large unprotected anodic area so is ok - jv)*
- An intermediate metal should be placed between two metals that are far apart in the series to reduce the tendency to corrode. The intermediate metal can be a plating. *(That's why you don't rub plating off when cleaning the joints/lugs- jv)*

Data taken from MIL-STD-8898 Dissimilar Metals and AFSC DH 1-4.

Table 2 from NASA/CR-1998-207400 Electrical Bonding: A Survey of Requirements, Methods, and Specification.

Courtesy gabby_duck BadWeB.

- jv 02Sep18