



## TECHNICAL SERVICE BULLETIN

### **PARTS & SERVICE DEPARTMENT**

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**TO:** Manufacturers' Representatives, District Sales Managers, Regional Managers, Technical & Customer Service Personnel, Service Agents and Sales & Marketing Personnel, UK Personnel

**SUBJECT:** Corrosion of Dissimilar Metals

Field evaluations of installed Double Duty water heaters and other tank type models using this indirect internal coil have shown that there can be problems with electrolysis at the connection points. The electrolysis driven corrosion is due to the connection of the dissimilar metals (i.e., copper or steel) directly to the inlet and outlet connections. The resulting corrosion damage can eventually cause premature failure or leaks at the couplings, internal coil tube or nipples. This can be prevented by installing an insulating coupling or a dielectric union at all water connections to break the electrical flow due to the dissimilar metals.

When installing the insulating couplings or dielectric unions care should be taken to always use a back-up wrench or ford wrench to prevent turning or twisting of the tank fittings. Failure to use a back-up wrench may cause loosening of the tank connections or damage to the seal of the internal tank coil resulting in leakage.

The diagram below shows an example of the separation provided by proper installation of an insulating coupling or a dielectric union to help prevent dissimilar metal problems.

