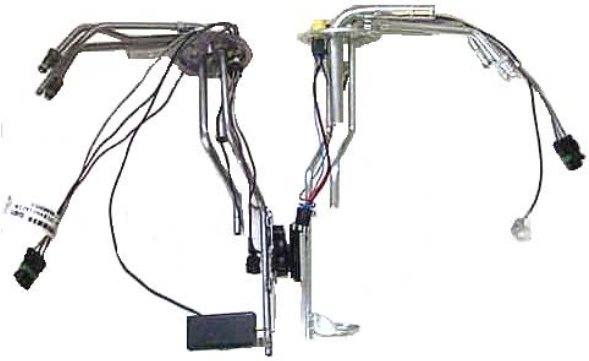
FineLine vs. Competitor (Ni-Terne vs. Dipped Chromate Finish)

What is Ni-Terne Steel?

Ni-terne steel is a lead-tin alloy of approximately 92% lead and 8% tin, which has a dull grey finish, is very ductile and has a lubricating characteristic that enhances formability in drawing operations. Terne sheet continues to be used today because of its excellent corrosion performance when in contact with petroleum fuels. The lead provides long-term barrier-type corrosion resistance. Barrier corrosion means simply that the liquid medium is physically kept from contacting the steel to prevent corrosion of the steel.

FineLine Unit Ni-Terne

FineLine units are made of ni-terne steel (flat darker finish)

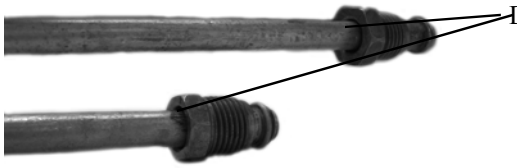


Competitor Unit Dipped Chromate

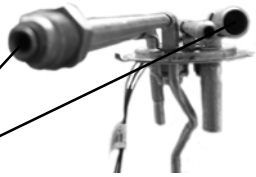
Competitor units are made from a zinc chromate (silver) or a zinc dichromate (gold) finish.

Dipped Chromate and Di-Chromate Finishes

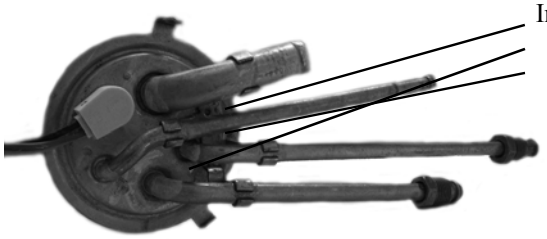
Most sending units rust out on the lines. In the dipping process, the di-chromate dip cannot get underneath the pressure fittings on the lines, as the pressure fittings have to be put on before the sending unit is dipped. As well, the dip is not inside the lines. As gas touches or flows through these areas, it corrodes the metal, rusts, and the lines leak so the sending unit has to be replaced. Not only is di-chromate a less quality finish, there are areas on the sending unit where it is just plain steel, as they cannot get the di-chromate on them.



Dipped finishes cannot get under the pressure fittings, so they rust much quicker than ni-tern units



Dipped Finishes cannot get inside the lines, therefore as gas flows through, it will corrode the metal quicker than ni-tern units



In the hard to reach areas in between the lines, it is difficult for the dip to get to, therefore the lines corrode quicker than ni-tern units