
Subject: Re: Cleaning Connections on Equipment
Posted by [Wayne Parham](#) on Tue, 17 Jan 2023 20:18:38 GMT
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One of the more interesting developments I have witnessed in connector technology has been the progression of crimp connections. Not so long ago, I always preferred soldered connections to those that were crimped. As an example, crimped connectors were popularly used in cars, but they really sucked. They were only marginally better than twisting wires together and covering them with tape. So I tended to always solder wire splices and protect with heat-shrink tubing. I still do.

What made matters even worse were the early digital controls in cars, which were even more sensitive to poor connections than analog stuff. Not only did cars serviced at repair shops and modified by "weekend warriors" suffer from poor connections - those added during repairs or aftermarket add-ons - but even the factory stuff failed as it oxidized. Many of the production approaches used in 1980s cars weren't suitable and were unreliable.

Not related, but I saw EPROM chips in early computers sent from the factory, which surprised me because American car manufacturers produced enough to make a regular ROM chip feasible. EPROM chips are erased with ultraviolet light, so a cover is placed over their erasure window. But even if covered, an EPROM doesn't last forever, and will eventually become deprogrammed. ROMs last much longer. So that was another reason that electronics in early 1980s cars really sucked.

But auto manufacturers learned from those problems, and by the year 2000, the digital electronics they put in cars were very reliable. A lot of this was due to advancements in connector technology. Removable connectors used sealed gaskets and crimps were gas-tight. Their gas-tight crimps are better than soldering, offer lower resistance and no chance of failing from heat-cycling that can cause a solder connection to fail just like a cold solder joint.