



Consumer Electronics Service In The 21st Century

"Let's Get Really Small!"

(--- Part 2 ---)

by C.J. Huss

In this issue, directly following up from the previous one, (KEY-NOTES #242, December 2020) I want to get into exactly, and truthfully, what electronic service (and sales) personnel have to deal with in the here and now.

Modern mass production techniques, for all their advanced technology, can build a product, but they can't repair one. You can't yet get a robot to fix your robot-- or your stereo or TV.

Following through on the logic from the last paragraph, realize that a factory may be able to physically build, say, a home theater receiver in a matter of 20 or 30 minutes, but a human technician likely can't even disassemble it in that time, let alone diagnose the problem and repair it.

Next, part of the drive by engineers to make products available at lower retail prices involves finding ways for the factory to cut production costs. One way to do so is to reduce the assembly time required, such as by using snap fittings instead of screws, or fitting all circuitry and mechanisms on a single PC board.

Manufacturers also work to lower their overhead by reducing secondary expenses. To achieve this, a company may decide to farm out all of its warranty service to third parties, or do the same with replacement parts.

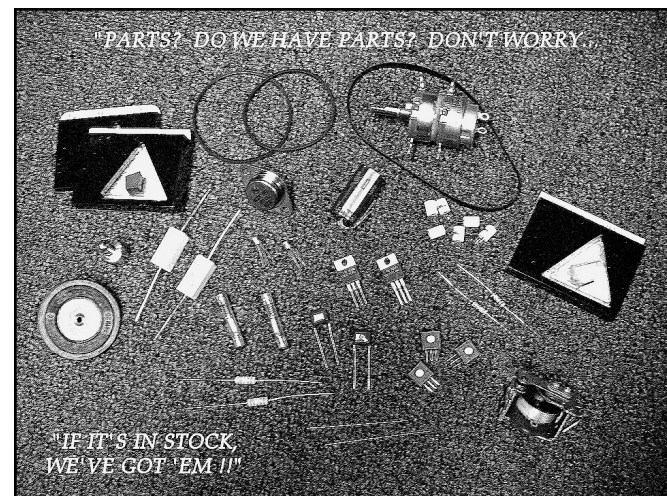
You might think that a company that persists in doing things "the old way" would gain a competitive advantage in the marketplace, but sadly the opposite is usually true. The cost differential between making serviceable products and non-serviceable ones has gotten so high that people nearly always vote with their dollars and buy the less expensive offering.

Short detour:

Despite all this, there are some companies that put reliability and serviceability ahead of other things. If you can afford these products, please buy them. It does send a clear and welcome message that you appreciate the extra effort.

Main road once again:

Getting back to the difficulties servicers have to face, the single largest one is that electronics repair is nothing like appliance or automotive repair, products which are largely mechanical in nature.



For example, if your washer starts leaking oil, the only place that oil can come from is the transmission. If your air conditioner loses its cool, there are only so many parts that can cause the problem.

Largely, this is because unlike most mechanical products-- as with the washer leaking oil-- there is rarely an external sign that the part has failed. Locating the fault must be determined experimentally, using test equipment and deductive logic.



This is the real killer for the service tech. There is extremely little longer-term standardization in the world of solid-state parts, and no service department could possibly stock all those tens of thousands of them-- they'd be broke before they even started.

Or, the faulty item could turn out to be very cheap, like a bad capacitor or resistor, but tracking it down can take literally hours. How does one provide an estimate on the repair until for all practical purposes the product is actually fixed?

Part... just one rack of four. Ummm, wait a minute... five? Six? I forget now... 000! More parts!

Thus, contrary to popular belief, many electronic service businesses seldom make very much money, at least not if they're honest shops. The shop can only charge what the local traffic will bear, and that amount is typically much less than many other professions.

There are yet more service-y calamities we could discuss, but things will get like all whiny after a bit, so I'll stop right here before that happens.

Epilogue: So why do some stores still operate a service department?

Most do it for the same reason they've always done it -- to make life a little simpler for their customers, and give customers a reason to buy equipment from them instead of the place down the street or over the 'net.

This is not going to change anytime soon, because the marketplace will not change anytime soon, perhaps never. Technology moves on, society changes. Que sera.

So if you find a place that still fixes things, and you like their work--be of good cheer, and remunerate them accordingly. It's always good to know that somebody still cares.

"Experience is a wonderful thing, because it allows you to recognize a mistake when you make it again."

---- wisdom gleaned from the back of a packet of sugar in a coffee shop, c. 1978



BIG NEWS!

Our website has been updated and improved. There you will find tons of information about our show, extensive history of our club and other music resource material. Please visit: www.recordcollectors.org and have a look around!