Right to Repair Submission

22-Dec-2020

Dear Hon Josh Frydenberg MP,

I regularly repair worn out items at work, as well things picked up off nature strips.

The main barrier to repair of items that have non-trivial electronic circuitry is the lack of a schematic diagram.

Where the diagram can be obtained, usually from the internet, the copyright status is usually questionable.

All product user and repair manuals should be freely available for copying for repair purposes, especially useful where manufacturers have long gone.

This would help greatly in reducing e-waste and national import deficits.

In making repair more cost effective, the repair industry is more viable.

Items should not have a locked repair software menu accessible only by authorized agents.
The items become unrepairable if the manufacturer disappears or discontinues support for the product.

Any technically competent person should be allowed to fix mains power equipment. Various states have differing laws in this area, such as requiring an electricians licence.

Electricians are usually unskilled and unqualified for repairing mains voltage intricate circuitry in things like variable-frequency motor drives that are essential for industrial machines. Instead, the machine is left dead for 4-8 weeks until a new unit arrives from China or Europe. A sufficiently skilled person can replace some $4 IGBT transistor devices and have the machine running in a day or two, and add extra mains voltage spike devices to prevent the fault happening again.

One law says a repair can only be done using an identical replacement component.
Many industrial machines use old contactors that wear out and are unavailable. A technically competent person can use a new contactor of different brand with sufficient ratings.

Technical competency is gained only by a small degree from things like university engineering courses. Most TAFE repair courses were discontinued many years ago when television became more flat-panels and less CRTs.

A large amount of repair competency comes only from practice and personal satisfaction, having gained the fundamentals in a TAFE or university electronics course or self study.

The cohort of people I know that are good and competent at fixing a variety of things, or not the type that pursue a licenced industry such as Electrician, so requiring any kind of hard to obtain licence is a large barrier.

Reading various state laws, the scope of Electricians licence for “electrical work” is vague.

Requiring an Electricians licence should only be required for fixed building structures such as houses, and not beyond the power plug outlets into appliances where repair is usually needed.

Repair of electrical work (including modification to avoid faults) in building structures should be allowed by anyone, as long as the work is inspected by a competent electrical inspector.

Some items I have fixed:

lawn mowers, whipper snippers, chain saws, radio receivers and transmitters, farm machinery, car and tractor mechanical and electrical faults, battery chargers, televisions, monitors, computers, hifi amplifiers, house kitchen appliances, microwaves, fridges, welders, milling machines, lathes, electro-hydraulic guillotines and metal-folders, generators, hydraulic jacks and presses, air-compressors, air-conditioners, winches, variable-frequency motor drives, oscilloscopes, spectrum analysers, signal generators, RF power meters, inkjet and laser printers.