

# Maintenance & Repair

Maintenance = Predictive Repair

# Compare Repair and Maintenance

How much of “repair” is really maintenance?

Dust-choked laptops

Dried-up print-heads

Worn-out drive belts

... predictable & preventable faults.

Repair is half the answer: often it fixes a problem that should never have occurred.

Maintenance is the other half.

# Wherefore Art Thou Maintenance?

We see maintenance everywhere but we don't notice it

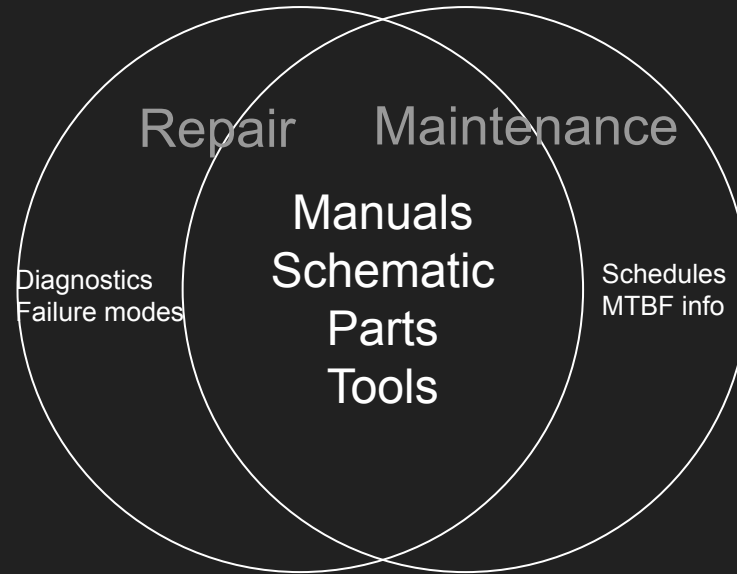
- Buildings
- motor vehicles
- medical devices
- PAT testers!

Why doesn't your laptop/phone/hairedryer have a maintenance schedule?

The truth: it's just not as glamorous as repair & it's easier to react than to predict

Compare heart surgery with nutritional & exercise advice

# Repair & Maintenance



Repair: What's failed?

Maintenance: What's going to fail & when?

MTBF = mean time between failures

# Right to Maintain

Right to Maintain is as important as Right to Repair

Small problems can cause bigger problems that can cause product failure  
Maintenance can avoid this and increase product lifetimes

Manufacturers will fight it even harder

It exposes the limited lifetimes of products & the shoddy components they use  
Obvious example: electrolytic capacitors

# What to Do?

Get things started ...

The repair movement already has lots of (hidden) maintenance data

Failed component ID + age of device = MTBF

Suggestion

Augment repair data with more precise info on failed components

Component nomenclature & taxonomy would be very useful