

## Ten Ways to Succeed at Cannibalizing:

### **Cannibalizing a machine for parts can bring many benefits to maintainers... but it must be done right.**

By Ron Giuntini

All maintainers of equipment must face the inevitable. Their stuff will eventually become permanently impaired. This is driven by three facts of life:

- Equipment will some day be too worn out to be fixed.
- Fixing will eventually become too expensive.
- Regulators will say equipment must go due to safety/environmental factors.

When an asset is classified as permanently impaired, an organization will physically remove the asset. This can be done in several ways:

- Sell it to another user.
- Dispose of it through the waste stream.

The focus of this article is on the disassembly process, also known as "cannibalization."

Cannibalization provides many benefits to an organization:

- It can reduce future parts costs.
- It can provide immediate availability of "hard to find" parts when unplanned failures occur (accidents are the most common driver...they may even reduce business interruption insurance rates).
- It can provide a pool of inexpensive parts to "trade" with other converters.
- It can extend the economic life of the remaining equipment units because of lower parts costs.
- It can provide bartering capabilities with the OEM who may want to buy-back the "canned" parts to fulfill the needs of other converters.

Below are 10 tips for maintainers to ensure a successful cannibalization program.

#### **1. Always know balance sheet values.**

Contact the financial department to know exactly the net asset value of the equipment. If the value is zero, life is easy for accounting purposes; the reclaimed parts simply go into stock as zero value.

If there is a value to the equipment, the finance department, can bring the value down to zero and charge the difference to the maintenance department as a period expense, and then the maintenance department can receive the material at zero value.

The most challenging scenario is to take the remaining value of the equipment and spread its costs over the reclaimed parts and then reflect its value on the balance sheet. This gets a bit more complex especially if the organization differentiates between repairable (fixed assets) and non-repairable (current asset) parts.

2. Assess a need storage system

## **2. Arrange a good storage system.**

Because most parts canned are slow moving, a large footprint may be required to store them. For all the “insurance” items, those parts that have no predictable demand but may be needed in the future, find a third party logistics (3PL) organization that will dense-store the parts for a very low rate. The storage location may not be very close, but usually when these parts are required, waiting an extra hour is no big deal.

These stored parts should be periodically reviewed and certain parts should be disposed of if it is believed that there will be no future demand. Why pay for the storage of parts that will be never employed?

## **3. Think packaging.**

Regardless of where the parts are stored, a long-term packaging strategy should be mapped out to avoid the deterioration of the condition of the part. For example, if there are seals embedded in a part, the worst situation is to pull the part for an “emergency” use and the unit fails because the seal has dried out. This happens more often than it should. Also keep parts storage away from high vibration areas. Many times parts hardware can be loosened, causing immediate parts failure upon installation.

## **4. Keep good records.**

As parts are removed from a piece of equipment, their part number, quantity and location must be recorded in a perpetual asset records file. It would be great to have the parts information “in the head” of an experienced maintainer, and not have to “put the information into the computer” — if the equipment were only running during that maintainer’s shift and the maintainer was never absent. But in the “real world” most organizations work most of their equipment more than 8 a.m. to 5 p.m. Keeping accurate records, for all to access, at any time, is a prudent policy.

## **5. Make records available.**

If the maintenance organization has sister operations at other locations that could also use the canned parts, it is imperative to create a parts availability IT-based portal for all to see. In the “real world” this is more often a “cheat sheet” that is found in the desk of an individual. Many larger organizations have established informal bartering systems to trade parts that have been canned if they are on the balance sheet at zero value, because there is no inter-organizational financial costs.

Though the maintenance organization that canned the equipment is “giving” these canned parts to other entities, in reality there is often an informal bartering system between individuals who have established a high level of trust over many years.

## **6. Know the condition**

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When reviewing canned parts availability, consider their condition: used-never-repaired, used-repaired, and used-remanufactured. Identifying these conditions is important because it helps maintainers understand what parts they have in-house that could be employed in remanufacturing/rebuilding currently installed equipment.

For example a maintainer could install a canned part that was remanufactured only 12 months before the equipment was cannibalized and use the part as-is for the remanufacturing of a piece of equipment.

## **7. Know their interchangeability.**

Recording the configuration of canned parts and their interchangeability with the remaining installed equipment can be helpful. Imagine believing that a hydraulically actuated valve, derived from the cannibalization process, is employed for an emergency requirement, and it is found not to be the "right" configuration for the installed equipment.

Many times an organization may have several units derived from an OEM's common product line, but each product-unit is not "exactly" configured the same. Some parts may have different revision levels (form, fit and function remain the same, but certain revision levels may not be interchangeable) and other parts may have different configurations (form, fit and function may be different and parts are not interchangeable).

When using part numbers to store items, changes in form, fit and function are typically related through the use of a different part number, while revisions get a bit trickier to monitor. Having current maintenance manuals from the OEM reduces errors in this area.

## **8. Establish a selling price.**

Use the OEM's current price catalog and provide a discount from that price. For used parts a good place to start is 25 percent of the OEM's new condition price of non-repairables and for repairables, a "core" can be worth up to 50 percent of new condition prices.

## **9. Consign canned parts to reman/rebuild suppliers.**

OEMs are not often willing to stock customer owned parts. If the canned part is used during a work order, the maintenance organization doesn't pay for the part. Remember that 35 percent to 50 percent of the cost of work orders is for parts.

Also, the supplier, if they need a part for another customer, can purchase the consigned part. It is strongly recommended that no cash transaction be processed. The supplier should provide a credit to the maintenance organization. This is important because if a supplier provides a check, the funds are usually received by the maintainer's treasury function, where the maintenance organization will "never see the money again."

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#### **10. Note details for OEMs.**

When maintainers cannibalize equipment, they can observe many technical issues about components that may be of value to an OEM product development team. Examples could be:

- Corrosion
- High wear and tear
- Housing/structural cracks
- Low wear and tear
- Substitutes that may have been more effective/efficient than that of the OEM’s original configuration.

If treated properly, the OEM may provide assistance during the cannibalization process, which may reduce the maintenance organization’s cost of disassembly. The OEM even be willing to pay for some of the parts for testing

All the above can provide a maintenance organization with ways to maximize the product lifecycle productivity of a piece of equipment. Think of it as making turkey soup from the scraps left over from the Thanksgiving dinner.

Can also be found at:

<http://www.packaging-online.com/paperboardpackaging/article/articleDetail.jsp?id=324487>