



Controlling the Cost of ATM Ownership: The Value of Refurbished Parts

By Dan Swain

When it comes to supporting an ATM in the field, there are a number of factors that come into play. In terms of keeping your ATMs operational at all times, perhaps the most important factor is the availability of replacement parts. Looking at an ATM as a tool that needs to deliver currency during a life-span that may be as long as 10 years, it is critically important to have a reliable source of support. Over time, any ATM will inevitably be subjected to a number of issues including operating environment (power, communications, temperature, humidity and dust), customer use, customer abuse (in some instances), cash replenishment and settlement cycles, non-technical support (first line) and field service (second line). An ATM that averages 300 transactions per month over a span of 10 years will deliver out over \$2M in currency. Factoring in the varying quality of the currency, an ATM can truly be considered a high-performance device!

At the rate of 1.5 service calls per year, an ATM will require 15 service calls in a 10-year period. Factor in replenishment and first line service calls on top of that, and you can see there is a substantial effort involved in supporting an ATM in the field. Owners of multiple ATM's can quickly see that the on-going costs of supporting these machines can be a costly proposition.

In order to understand parts availability as one of the key factors in supporting a product in the field better, the major hardware components that make up an ATM are:

- Electronics (circuit boards)
- Cash Dispenser (with currency holder - tray or cassette)
- Consumer Display
- Keypad
- Receipt Printer
- Power Supply
- Cabinetry
- Security

Other items include cabling, brackets, and miscellaneous hardware like screws, bolts, washers, fasteners, etc. A typical entry-level ATM is comprised of over 1000 parts.

How does one go about obtaining a part for an ATM when needed?

Considerations include:

- What tools and training are required to properly diagnose any service issues that may occur during the life of an ATM?
- How does the manufacturer support their units in the field?
- Once it is understood how to diagnose a problem, what can be done to obtain a part or parts, if needed?
- How easy is it to identify a part and then locate the item I need?
- What options do I have for purchasing a part?

It is this last question that provides the largest opportunity for cost savings.

Other considerations include:

- Warranty
- Original Equipment Manufacturer (OEM) vs. Other (OEM part or generic/gray market)
- Compatibility (Fit/Function, Software, Firmware)
- Source for obtaining part (Purchase from manufacturer, reseller, other)
- Legal (Is there a certain standard required? VISA/MasterCard, ADA, etc.)
- Types of parts available (New, Refurbished, Harvested)

The Refurbished Part Option

What is a refurbished part?

A refurbished part has been thoroughly tested, repaired and updated to meet current requirements for an ATM. Typically a refurbished part is obtained either by a warranty claim (where a new part has been returned), or has been reclaimed from the field out of a used machine.

Warranty Claim: In this scenario, a NEW part has been returned as defective. It is evaluated on the bench to determine what can be done.

Is there a defect?

Yes = can it be repaired? (See "What is required for repair?")

No = it is tested, certified and returned to the shelf for resale.

What is required for repair?

- Mechanical?
- Electrical?
- Cosmetic?
- Firmware update required?
- Testing and Burn-in?

Reclaimed from a machine in the field: With this option, a part is typically obtained through a process whereby the used component is harvested out of a unit. It then can go through an evaluation to determine if it is already functioning properly and should be sold as is (“closeout” part) or sent to the bench for complete refurbishment.

How is a part refurbished?

When a part is evaluated for refurbishment, it goes through a multi-step process to determine one of four categories that it may be assigned. This assignment comes from a visual inspection, followed up by a complete analysis on the bench utilizing a testing process that evaluates performance in a simulated environment. This can be as simple as installing the component in question into a test ATM and performing a series of transactions, or can take on a more complex evaluation through the use of proprietary testing equipment. Once that is complete, the component in question will be assigned one of the following designations:

- No Defect Found - Component is tested and repackaged for resale as a refurbished part.
- Complete Refurbishment Required - Component goes to the bench for a complete tear down, cleaning, replacement and update of necessary components and burn-in process. It is then given a refurbished part number assignment and is repackaged and put on the shelf for resale.
- Harvest Part sent to Closeout Category - If a part is deemed to be functional, yet does not meet the criteria for being classified as a refurbished part, it is tested and cleaned and then assigned a closeout part number. It is repackaged and put on the shelf for resale.
- Part is Scrapped - The component in question does not meet the criteria for being refurbished. It is disposed of, taking into consideration any environmental safety requirements.

How cost-effective are refurbished parts?

The real value proposition of refurbished parts is simple. Economics. Refurbished parts provide significant value, and can be purchased anywhere from 50% to 75% less than the cost of a new equivalent. Therefore, when looking to support a unit in the field upwards of ten years or more, the refurbished part option is something to seriously consider. However, all

refurbished parts are not created equal! When looking at a refurbished or harvest/closeout part, there are a number of things to consider ensuring your discounted cost on the front-end does not jeopardize the performance and lifespan of your ATM in the future. Here are some fundamental questions you should ask.

- How do I know my part has been thoroughly refurbished and tested?
- What kind of warranty is provided?
- Did I compare with new to guarantee the cost difference was indeed enough?
- Is the company providing the used part option to me certified by the manufacturer?
- Are the components used in my refurbished part up to the standards mandated by the OEM?
- Are the latest updates to firmware and software (if applicable) included with my refurbished part?
- Will my refurbished parts void any warranties, regulations or certifications?

Once you are satisfied you are receiving an adequately refurbished part, you may want to talk with other distributors in the industry to make sure the company you are doing business with is reputable with a proven track record.

What are the risks of using a refurbished part?

If you can answer the above questions and feel the company is proven, refurbished parts provide an enticing alternative that can provide an overall lower cost of ownership over the life span of your ATM. As always, you want to be comfortable with the company you are trusting with your equipment. Many in the industry usually know those that provide sub-standard work. Stick with the organizations that have a proven track record and a willingness to work with you at resolving any issues that may arise.

What about availability?

This is one of the most difficult issues faced by parts suppliers. Refurbished parts, by nature, are typically offered as a result of a NEW part being returned due to warranty, failure, upgrade or routine maintenance. Therefore, your refurbished part may not always be readily available when you need it. Having a relationship with your parts supplier to be put on a waiting list, if needed, is one of many ways to ensure your flow of refurbished parts remains constant.

Why would I ever want to use a NEW part?

There may be instances when you will want to use NEW parts. If there has been a recent update to a component, if there has been a change in the manufacturing process, or perhaps you feel more comfortable knowing your part is new. Sometimes a change mandated by a legal outcome (PCI keypads for instance) may dictate that a new part is required.

In conclusion, refurbished parts provide a cost-conscious solution to supporting ATM's in the field, thereby lowering your overall cost of ownership. Make sure that you know who you are dealing with, and make sure they provide a warranty/guarantee on the components that are offered. Ask for a detailed listing of how their refurbishment program works. Make sure you are getting the latest updates and that there will be no compatibility issues. Finally, put together a "wish list" of the components you are in need of so that once they become available you will have first chance at purchase. Using refurbished ATM parts is just one way to lower your overall cost of operation. In today's business world, is there anyone that shouldn't be thinking along those lines?