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Service Department

Operations

Reducing Service Department Parts Costs to

KPI of 13% of Service Sales or Less

Reducing Service Department Parts

Costs to 13% of Sales or Less

This article is part of a series on improving Service Department performance.

It supplements another article on this website entitled “Step by Step to Building a Service Department Growth Plan. That article focuses on creating a plan to improve overall performance of service and maintenance. The article included a detailed needs analysis questionnaire that asked how a company’s service department compared to industry benchmarks. One of the questions in the needs analysis for Demand Service & Maintenance Financial Performance asks “Is the residential service department part/material cost 13% or less of sales?”

This article specifically addresses that question. The 13% is a Key Performance Indicator for residential demand service. The best service companies in this industry are able to keep costs less than this 13% benchmark. What is your company’s residential service cost of sales for parts/materials? If it is more than 13%, you will want to read on about the issues pertaining to these benchmarks and the action steps you can take to achieve this objective.

Before getting to that, there’s a term called inventory shrinkage that appears several times in this article. Inventory shrinkage refers to a situation that occurs after a physical inventory count when the count comes up short of what’s expected. The monetary value of the missing inventory is deducted from the inventory account on the balance sheet and is expensed to the various departments as a cost of sale. In the case of the service department, this will be ‘parts cost of sales’. Inventory shrinkage reflects poor inventory management practices and can be caused by:

* Poor inventory replenishment processes.
* Poor Purchase Order processes.
* Poor warranty return processes.
* Sloppy paperwork practices by both technicians and warehouse personnel.
* Technicians not being accountable for truck inventory.
* Wrong part costs in companies on a flat rate pricing system.
* Failure of technicians to charge customers for all parts used in a repairs.
* Actual theft.

The following questionnaire identifies those issues that can cause the parts/material costs to be greater than 13%. The first column identifies the issues. Some of the issues may apply to your company others may not. This chart serves another function as well. It can be used as a planning tool. The action item columns let you note if this is an issue your company needs to address. If it is an issue that needs to be addressed, the last column lets you set priorities. If the issue is a high priority that needs to be addressed immediately, put an ‘A’ in the box. ‘B’ is for issues that are not as urgent, but need to be addressed. “C’ is for issues that you would like to address sometime in the future. If the issue doesn’t pertain to your company, put ‘NA’ in the box for not applicable.

This article goes on to explore each of the issues identified in the chart. Notice that each issue is numbered in the chart. This number is cross-referenced in the write up for each issue. The write-ups should help you assemble action steps to improve your residential service cost of sales. These action steps should be included in your Service Department Growth Plan.

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| --- | --- | --- | --- |
| **Are parts/materials cost of Residential Service sales 13% or less?** | | | |
| Issues | **Action Item** | | **Priority**  **(A,B,C**  **or NA)** |
| **Yes** | **No** |
| 1. When technicians are not held accountable for truck inventory and shrinkage. |  |  |  |
| 1. When company lacks standardized service vehicle stock. |  |  |  |
| 1. When company lacks service vehicle restocking processes and controls. |  |  |  |
| 1. When company does not correctly use a PO system to purchase parts. |  |  |  |
| 1. When company has not negotiated a primary parts supplier. |  |  |  |
| 1. When service parts inventory is not secured. |  |  |  |
| 1. When company is on flat rate service and parts costs have not been updated in over a year. |  |  |  |
| 1. When company is on time and material and technicians do not bill out enough on parts. |  |  |  |
| 1. When technicians do not charge for all work performed in a flat rate pricing system |  |  |  |
| 1. When service department lacks processes to recover expense of parts used on equipment covered by manufacturer’s warranty. |  |  |  |
| 1. When company participates in third party extended warranty programs for Residential Replacement sales and lacks processes to submit warranty claims. |  |  |  |
| 1. When parts/material are expensed to the wrong department. |  |  |  |
| 1. When company does not separate key duties. |  |  |  |
| 1. \* When company lacks controls over setting up vendor accounts in the accounting system. |  |  |  |
| 1. \* When parts multipliers are not set up correctly. |  |  |  |
| 1. When technicians perform major repairs on existing equipment rather than presenting replacement options to customer. |  |  |  |

\*Note – The size of your company may limit possible solutions to these issues. However, recognize the potential problems and develop safeguards to prevent them from happening in your company.

Technician Accountability – Issue 1

Your service trucks represent a substantial investment in parts inventory. Depending on your company’s part supply availability and replenishment capability, you may have $3,000 to $5,000 or even more in inventory per service vehicle. You want to manage this inventory to generate a maximum return on your investment.

As a General Manager or owner, you want to build an effective team that has a common purpose and goals. You also want to instill individual accountability and responsibility among your employees. Some of the best General Managers in this industry make their employees feel as if they own their individual functions within the company. For service technicians, this means caring for customers and being able to provide solutions for their comfort problems. It also means treating the truck and the contents of the truck as if it were their own. Most importantly, it technicians are accountable for their own actions, their individual performance and meeting or exceeding expectations.

Most technicians want to do a good job. They want to be able to take care of the customer. In their minds, this means carrying every conceivable part that they may need on a service call. If your company uses a task based pay system to compensate technicians, this can encourage this attitude. After all, their livelihood now depends on having the part on the truck when they need it.

Consequently many technicians start cramming as much stuff as they can into a disorganized mess in back of the truck. Parts get damaged or become obsolete. Physical inventory counts become a nightmare. The disorganization creates a poor image with the customer. And most importantly, this lack of organization makes it virtually impossible to hold technicians accountable for the inventory that’s supposed to be on their trucks. Granted some perpetual inventory systems can tell you every part and piece that should be on the truck. But in the real world a perpetual inventory system usually requires a lot of administration and discipline to maintain. Most perpetual inventory systems ultimately breakdown and you can easily lose control of what’s on and not on each service vehicle.

Another approach is to determine upfront what’s going to be on each service vehicle. This is called standardized truck stock. You also need a good truck replenishment system to support standardized truck stock approach. With both of these in place, each service vehicle should have the same contents each and every day. The technician can then be held accountable for the contents of his/her truck.

As a manager, you must measure employee performance over time. In the case of maintaining standardized truck stock this means conducting regular physical inventory counts. This practice reinforces the belief that truck inventory is important to the company and that technicians are responsible for their own parts. You need to do physical inventory counts a minimum of once a year. A lot of companies will do a physical truck count a minimum of four times a year. If you are just implementing standardized truck stock or you are experiencing inventory shrinkage, you will need to do the counts more frequently. You can ease up on the number of counts when you feel comfortable with the results. As a word of advice, standardizing the vehicle layout among all the service trucks, simplifies the physical count.

Another important aspect to gaining technician accountability is that there must be consequences for not doing it. If there’s inventory shrinkage on a service vehicle, someone needs to meet with the technician and find out why. Usually it’s because of a behavior problem, they didn’t fill out the paperwork correctly (service ticket or service truck replenishment form) and the truck did not get replenished. If the technician has a legitimate issue, work through the issue to prevent it from happening again. If it’s a behavior problem, there should be a penalty. Some companies require the technician pay for missing inventory. Whatever the penalty, be sure it’s written clearly in company policy. Remember that theft should never be tolerated and is grounds for termination.

The preceding couple of paragraphs addressed accountability and consequences. You can’t do this just by creating a new rule, then act as the policeman, prosecutor and judge. You must lead your team through change. Otherwise ‘today’s’ technicians may leave because they do not believe the company cares or because they fear the changes could affect their ability to do the work and make a living.

To be an effective leader, you must create a foundation of trust. Here are some insights into creating trust in regards to implementing standard truck stock and technician accountability for that truck stock:

* Anticipate what concerns your technicians may have. Having the right part on the truck when they need it will be their primary concern.
* Anticipate the need for a good truck replenishment process. Read the articles on this website concerning both warehouse and truck replenishment.
* Involve your best technicians very early on. Help these technicians visualize what you want to accomplish. Explain the basic concepts and the reasons for the changes. Explain how this can be a win/win/win for the customer, technicians and the company. Explain why it’s impossible to stock everything a technician may need and introduce the 80/20 concept. Ask for feedback, listen to what they say and recognize their concerns. Establish a common purpose and create buy-in.
* These technicians will feed information to their peers, so you start creating buy-in before the program is even introduced.
* Meet with all the technicians and warehouse personnel to introduce the new standardized truck stock and parts replenishment initiatives. Use the same format used when introducing it to the best technicians. Involve these technicians as needed. Recognize that this will not be perfect from the get-go, but as a team we will make it work. Assign a team to put together the standardized truck stock. Assign another team to work out the details for truck replenishment. Be personally involved with both teams. Set short time lines and help the teams make quick decisions.
* Finalize the team recommendations into an action plan to standardize all service trucks and to begin the new truck replenishment program.
* Execute the plan.
* Meet with the technicians regularly to get their feedback. Adapt the standardized truck list as needed.
* Do spot inventory counts frequently the first few months to identify any issues.
* Refine policies & procedures and update the employee handbook.

As a General Manager or Owner, you need to set an expectation that technicians must be accountable for the company’s investment in truck inventory.

Standardized Truck Stock – Issue 2

Inventory control and truck replenishment are problems for many companies. However, parts management is essential to controlling the cost of service parts. Otherwise parts will accumulate on service vehicles. This not only affects the company’s working capital and cash flow, there’s a chance truck stock that parts may get damaged or become obsolete on an over stocked vehicle and this increases parts cost of sales when the parts are scrapped.

A standardized truck stock helps prevent this from occurring. A standard truck stock system is based on having predetermined inventory items for each type of service vehicle. For example, a maintenance truck will probably carry different parts than residential service or commercial service trucks.

Consequently, technicians can be held accountable for parts that are missing from their truck as well as extra parts that may have accumulated. Getting standardized truck stock is a first step in gaining technician accountability for truck inventory.

When matched with a standardized truck layout and a good replenishment system, there are other advantages as well:

* Technicians find parts easier on service calls.
* Physical inventory counts are much quicker and are much easier to perform.
* Eliminating excessive parts off the truck improves cash flow and reduces wear and tear on the vehicle.

For more information on standardized truck stocking including sample truck inventory lists, refer to the Truck Inventory and Replenishment article on this website.

Warehouse & Truck Replenishment – Issue 3

The preceding section on Technician Accountability touched upon the importance of having a good truck replenishment system. Without one it’s impossible to maintain standardized truck stock and technician accountability for truck inventory will erode. Every day will bring on new emergencies as technicians run out of parts. The same thing holds true for warehouse replenishment.

The chaos of running out of parts or having too many parts will increase costs including the parts cost of sales for the service department.

There are some excellent articles on this website that address specifics of inventory control. Please refer to:

* Inventory Replenishment – Using a Simple Kanban System
* Truck Inventory and Replenishment
* Step by Step Guide to Understanding Inventory Management
* Parts Inventory – Carry Generic Parts

Here are some highlights from these articles pertaining to service:

* Establish a philosophy within the company that excessive parts inventory equates to waste. It’s bad for the company and it ultimately hurts employees as well as customers. Likewise establish the philosophy that the company will replenish parts just in time for customer needs.
* Establish standardized truck stock for service vehicles. Stock with enough parts to take care of 75% to 80% of all service calls. Stock items should move a minimum of 4 to 6 turns per year.
* Keep enough of each item to last the truck replenishment cycle (generally one day).
* Use the service ticket or a truck replenishment form as a signal to pull specific parts for replenishment. Note that some companies partner with suppliers to do individual truck replenishment.
* Use universal parts whenever possible.
* Carry additional parts in the warehouse that are not stocked on the truck.
* Have established procedures to secure part(s) from inventory or from a supplier when part is not stocked on the truck.
* Establish minimum and maximum stocking levels for all active items stocked in the warehouse. Establish the minimum stocking level based on the warehouse replenishment cycle with the supplier. Use a simple warehouse replenishment system like Kanban.

Purchasing – Issue 4

With good inventory management and truck replenishment systems there should be little need for technicians to go to supply houses. But there will always be exceptions to any rule and inevitably this need will arise. Recognize that you must control the purchasing aspects of this circumstance or your parts purchases will go up and your parts cost of sales will rise as well.

If a technician has complete freedom to purchase a part he/she needs, they probably will purchase two just in case they ever need another one in the future. If you allow this freedom among all technicians, inventory management is quickly compromised. Even worse, a dishonest technician may order extra parts for his/her personal needs (moonlighting).

This situation can be controlled with a few precautions. Consider:

* Inform suppliers that your company will not pay an invoice unless there is a company purchase order number.
* Keep purchasing authorization down to a minimum number of people. Make suppliers aware of who’s authorized to place part orders.
* Require technicians to call the dispatcher or warehouse when they need a part not stocked on the truck. The dispatcher will make the decision to send out a parts runner, to order the part or to send the technician to a supply house to pick up the part. If at all possible, the order should always be placed from the office/warehouse to the supplier.

Suggested Service Technician Guidelines for Picking up Part(s) at Supply Houses

* Call dispatcher for instructions. Give service number and customer name. The dispatcher instructs you to pick up the part, note the Purchase Order number.
* Refer to the Purchase Order number when picking up the part(s) from the supply house. Receive the part(s) from the packing slip and sign for the merchandise.
* Attach the supply house packing slip to the service ticket once the repair is completed. Turn in the paperwork.

Suppliers – Issue 5

Some people think the primary duty of the person who orders parts is to negotiate the ‘best price’ for every order that’s placed. After all if you pay too much for parts, this causes parts prices to be higher. This can affect the parts cost of sales unless the company is able to mark up the retail price accordingly.

It may be hard for some to believe, but negotiating prices on every order is not a good use of a company’s resources. It usually sets up an adversarial role with suppliers that rarely get the best price anyway. It’s a very inefficient means of procuring parts & materials that take time and can also affect productivity. Relying on a single person to negotiate prices on every order also contributes to the following problems:

* The time it takes to call suppliers and finally place the order equates to increased overhead costs.
* In order to get the best price, some parts managers place larger stocking orders. This adversely affects working capital and cash flow.
* Local supplier sales people can influence Parts Managers. They may decide to place an order with a supplier because they like doing business with them regardless of where the price is.
* Too much critical knowledge is held in the hands of the Parts Manager. There’s not a system in place for orders. It becomes very easy for a company to be held hostage by the Parts Manager for fear he/she may leave.

A better approach is to partner with a primary supplier upfront each year. By committing most of your purchases to a primary supplier you’re in a better position to negotiate the best overall deal for your company. By identifying what parts you’ll need through the year, the quantity of those parts and a rough idea of when you’ll need those parts, your will be in a position to:

* Get quantity discounts.
* Know what your parts/material costs are going to be for the entire year.
* Negotiate on the supplier’s commitment to increased inventory turns as well as on price. There’s ‘value’ to the company in the supplier’s ability to increase turns while having the parts/materials delivered when they’re need.
* Provide the supplier with the information so they can guarantee parts/materials availability.
* Work with the supplier to standardize parts/material replenishment processes.

Secure Inventory – Issue 6

It is impossible to maintain inventory control if inventory is not stored in a secure area. This is particularly true of service parts. Otherwise, anyone can pull parts out of inventory without anyone knowing what they were used for. This is a cause of shrinkage and will cause cost of sales parts to rise. The first rule of inventory control is to secure parts and material.

Only allow access to the person or people who are responsible for maintaining inventory. Small companies often use a locked storage closet or a wire-screen cage. Larger companies often have an area that includes a parts manager’s office. Remember that good warehouse and truck replenishment systems will minimize the amount of inventory that needs to be stored.

Also be sure to control the replenishment of parts to service vehicles. Most companies use the service tickets or a truck replenishment form to identify what parts need to be stocked on individual service vehicles. Many companies include a parts window in the secured area. Technicians and/or part runners work with the parts manager through this window opening. This allows open communication while restricting general access to the parts inventory. The obvious problem with this arrangement is the morning rush when technicians have to wait to restock their trucks. The larger the company is, the longer the waiting period. This affects productivity and labor costs.

Other companies have bins or cubicles that are open to the warehouse, but are locked to an open area accessible to technicians. Each technician has a key to his or her cubicle. Each morning they drop off the paperwork from the previous day and pickup parts to restock their trucks. During the day, warehouse personnel replenish the parts used from the previous day and place them in the appropriate cubicle. It’s also a good idea to put a copy of the service ticket or truck replenishment form back in the cubicle. It serves as a receiving slip for the technician that they can confirm they received the parts. They should sign the form indicating they received all the parts and leave behind in the cubicle for the warehouse personnel to file.

Other companies minimize the need to store parts all together by having their suppliers restock parts each day. Individual orders are placed for each technician each day based on usage. The supplier puts the replacement parts in individual bins that are delivered during the day. Each morning the technicians drop off their paperwork and pick-up the replenished bin. In case the technician does not get back to the shop each day, a parts runner can deliver the replenishment bin.

Arrange for access to parts inventory for after-hour and on-call workers. These employees should have the phone number of the person(s) responsible for the parts room to gain entrance in emergencies.

Part Costing Problems – Issues 7 & 8

Flat Rate Pricing

The pricing output in a flat rate pricing system is determined by many factors including the cost of the part used on the repair. If the actual cost of the part is more than what is in the flat rate system, this can create a couple of problems for a company:

* The revenue is less than what it should be. As a percentage of sales, this will increase all the cost of sales line items including parts.
* The same thing happens when technicians use outdated flat rate books. This is why all old pricing should be pitched when price books are updated.
* If the company uses a hybrid inventory system, an inventory base line value is set on the Balance Sheet. If the company expenses at the time of usage and the costs are based on what’s in the flat rate pricing system, inventory will be overstated. When a physical inventory is taken, the shrinkage will become apparent and the cost of sales will be hit for the difference. This is not a problem if costs are regularly updated in the flat rate pricing system or the company expenses at the time of purchase instead of at the time of usage.

If you use a flat rate pricing system and your cost of parts is too high, check the last time the book was updated. It’s a good idea to update the flat rate book costs a minimum of once a year. Usually it’s a good idea to update the books before the primary season for the local market (cooling or heating). Flat Rate books may have to be updated more frequently during inflationary periods with rising parts costs.

If the flat rate pricing system has been updated recently and the cost of parts to sales is still high, it’s a good idea to spot check the cost of parts in the flat rate system.

Time & Material Pricing

If technicians use a parts cost sheet where the costs are not correct, this will also affect revenue and will cause parts cost of sales to be high on the department Income Statement. The same thing happens if the technician makes errors in the pricing calculations.

If parts costs are high, check to see when the parts cost sheet was last updated. Also make sure that technicians are using the correct parts cost sheet.

Not Billing Out All Repairs – Issue 9

This is a common problem among many companies utilizing flat rate pricing systems and it’s sometimes tough to detect. When it occurs, it affects revenue, labor costs, possibly part costs and productivity.

Sometimes it’s possible to catch obvious omissions by reviewing service tickets to see what work was performed. However, this is no guarantee you’ll uncover this abuse. You’ll want to monitor the average ticket revenue per technician. If a technician does not charge for all work performed with customers, his/her average ticket revenue will be less than expected. Meet in private with those technicians whose average ticket is low and address your concerns.

The average ticket revenue varies across the country depending on the technician pay scale and travel time, but generally should be greater than **$150 per ticket.** To determine the average ticket revenue for a period of time, take the service department revenue and divide it by the number of service tickets. Be sure to include all tickets including callbacks and warranty.

Another give away is diagnostic only service tickets. All non-revenue service ticket should be routed to management for review.

If the company has a standardized truck stock and a good truck replenishment program, the problem will also appear when a physical inventory is taken. Any parts used on repairs not charged out on the service ticket will show up as truck inventory shrinkage.

Most technicians want to do a good job and want to do the right thing. Understanding the technician’s motives for not charging for all repairs goes a long ways towards correcting the problem. Here are common issues that arise among many service organizations:

* The technician does not know what’s covered and what’s not covered for all repairs in the flat rate system. This often occurs when a flat rate system is introduced or a new technician is hired. Determine if this is an issue with the technician. Provide the necessary training and coaching to correct the problem.
* Reinforce the principles of flat rate pricing system at department meetings.
* Sometimes technicians omit repairs because they want to avoid a conflict with a customer. They do not have the necessary communication skills to deal with an irate or grouchy customer. Many progressive companies hold weekly meetings with all their technicians to address customer communication issues. Role-playing is part of the training. Practice makes perfect over time. These communication meetings generally last about an hour.
* More often than not, technicians do not charge for all repairs because they do not believe in the price. They think the repair cost is too much for the value the customer is getting. This situation tests your role as a leader. The technician may be confusing gross margin and net profit. He/she knows what they are getting paid and has some idea of the cost of the part. But they may have no idea of the costs associated with overhead support. Being open and sharing information about the department’s financial costs will help employees understand about business. Some companies open their employee’s eyes with a training session based on 100 pennies. Based on the company’s Income Statement, pennies are pulled out to reflect costs as a percentage of sales. The remaining pennies at the end of the exercise represent the net profit. They then explain the need for profit to fund working capital for growth and the opportunities that represents. The pennies chart is on the web site if you want to download it.

It takes training, coaching and continual reinforcement to get technicians to appreciate the value they bring to their customers. Technicians are very astute to what other companies charge for repairs in your market place. If you are taking a premium pricing strategy in regards to service work, be sure your technicians understand the added value your company brings to the customer.

Manufacturer Warranties – Issue 10

If a technician replaces a part that is covered under a manufacturer’s warranty and the warranty claim is not handled correctly, the part cost hits the cost of sales. This causes the parts cost of sales to rise and will decrease gross margin as well as net profit. Likewise, if a technician thinks a part is covered under warranty and it’s not, this also increases the cost of sales. Many companies experience these types of problems in their operations.

Let’s begin by reviewing manufacturer warranties. Most manufacturers offer a one-year warranty on all parts included in a piece of equipment. This warranty usually begins on the installation date. Some manufacturers offer this same parts warranty for 5 years on their better models. The warranties for more expensive components in the machine, like heat exchangers and compressors, will be for longer periods of time. Most manufacturer heat exchangers carry a ‘lifetime warranty’ for their 90% AFUE models. However, there’s often a clause in the warranty that says it’s lifetime as long as the original purchaser owns the home, otherwise it reverts back to a 20-year warranty.

The warranty offered by the manufacturer is one thing; your ability to get reimbursed for a part covered by warranty is quite another thing. Generally the manufacturer requires special paperwork be filled out before they will honor the warranty. Some manufacturers allow their dealers to file warranty claims on the Internet.

In some cases the part may need to be returned to the distributor/manufacturer as well. In other cases, they will accept the claim without the part but retain the right to ask for the part for a period of time. This means storing the old part for a period of time. Consequently it’s important to know the warranty policies for the various manufacturers you encounter in your service area.

Generally you have three choices for warranty reimbursement. One method is to use a part out of the truck or warehouse inventory and get a replacement part in exchange from the distributor/manufacturer.

The other option is to order the part from the distributor/manufacturer and take a ‘credit’ on your account to offset the cost of the part. Sometimes the manufacturer requires an invoice number on the warranty claim form to show that you purchased the part. The manufacturer does this for a couple of reasons. First it assures the part was actually purchased from them. Second it assures the part they specify was used on the repair. If you use this option, it’s important to identify the correct invoice number when the claim is written and to make sure the proper ‘credit’ hits your statement when it’s processed.

Manufacturer Warranty Guidelines

1. Technicians should always confirm that the part is covered under warranty. This may require proof of purchase and the installation date if your company did not install the equipment. If this is for a customer where your company installed the equipment, your customer records should show if the equipment is covered under warranty or not. Many companies identify if the equipment is covered under warranty when the call is dispatched to the technician. It makes the technician’s life much easier.

Your customer records should have the model number, serial number and should also identify the warranty period. If your customer records do not, work on getting that information into your database.

1. Warranties can be confusing to technicians, particularly if they are new to the business. It’s a good idea to assemble the warranty information for the various manufacturers you encounter in your service area and to include this information in your technician training. A simple spreadsheet can go along ways to helping a new technician get knowledgeable on warranties as quickly as possible. The technician should also be able to call a lead technician, Service Manager or someone designated in the office to help clarify warranty questions. It’s also a good idea to detail your company’s warranty procedures in the technician’s procedures and policies handbook
2. Have technicians carry warranty claim forms for the various manufacturers encountered in the service area. Require that technicians fill out the warranty claim forms correctly. This always means including the complete model and serial number of the equipment. This is much easier to control if technicians are held accountable for all vehicle inventories.
3. Require that technicians bring back warranty parts with a completed warranty claim form and the service ticket. Make sure your warehouse staff does not replenish a part used on a warranty call unless the part is returned with the correct paperwork.
4. Hold someone accountable for handling and processing warranty claims. All claims should be processed in a timely manner (2 days or less). Documentation of processing should be maintained.
5. Set aside a dedicated space in the warehouse to retain the old warranty part if this is required of the manufacturer. Always attach a copy of the warranty claim form to the part in case the manufacturer asks that it be returned to them. Arrange the warranty parts by dates if at all possible. Discard the warranty parts after the warranty period.
6. If the technician does not have the correct replacement part on the truck, he/she should call the warehouse to see if it is in stock. The technician should tell the warehouse that this is a warranty call. If it’s not an item stocked in the warehouse, it will need to be ordered. The warehouse can pass on the Purchase Order number to the technician so he/she can note it on the warranty claim form.

Most Purchase Order systems have a place to identify payment terms. The word ‘warranty’ should be written or keyed into this field. This will help administration in processing accounts payable.

When the warehouse calls the distributor/manufacturer to actually order the part, they should note the invoice number. Some companies use a warranty log that identifies the warranty claim form number, the Purchase Order number, the distributor/manufacturer invoice number, date and any other pertinent information they want to retain on the transaction. For those manufacturers that do require an invoice number before a credit will be paid, the invoice number must be completed on the warranty claim form before it is processed.

In cases where, the technician or a parts runner must go to the supply house to get the part covered under warranty, the technician should record the invoice number on the warranty claim form if required.

1. If you intend to replace the part, you need to make sure the part actually comes in. Some companies do this with a warranty log or keep a file of the warranty claim forms. Other companies do this through the Purchase Order system. When the payment terms are identified as ‘warranty’ they match up with the shipping documents when the part is received to confirm that the transaction is complete.
2. If you intend to take a ‘credit’ for the part, administration needs to confirm that the proper credit has been applied in accounts payable.

Extended Warranty & Insurance Programs – Issue 11

Warranty programs are available that go beyond the manufacturer’s warranty. Here are just a few examples:

* Some companies include a full 5-year parts and labor warranty and even a full 10-year parts and labor warranty for some of their new equipment packages. The cost of these extended warranty programs are priced into the cookbook pricing.
* Other companies have the extended warranties available, but the consumer is charged extra for them.
* Companies can either use third party providers such as the manufacturer or firms such as Equiguard. Some companies’ even self-fund extended warranties. If a company self-funds, money should be reserved on the balance sheet as a liability for future repair work that may be needed under the terms of the warranty. Also note that some states have strict laws restricting the ability of companies to offer self-funded extended warranties.
* Some companies will even offer extended warranties to preexisting equipment. When the third party provider costs are marked up, this increases revenue and gross margin. It also builds customer loyalty and guarantees that any work performed under the terms of the extended warranty will be paid at preset rates.
* Some companies partner with insurance companies such as American Home Shield. The insurance company sells policies to homeowners to protect them from repair costs to major home appliances including the heating and cooling system. These companies agree to do any repair work for the insurance company at a set labor rate and under defined conditions.

One thing that all the above have in common, except for companies that self-fund extended warranties, is that paper work is required to submit a claim. If the paper work is not done correctly, the claim will not get processed and the company ends up eating the cost of all parts that were used on the repair. This increases the parts cost of sales, reduces gross margin and reduces net profit.

As discussed in the previous warranty section, a company must have procedures and processes in place to submit claims when work is performed under the terms of the warranty or insurance program. If breakdowns occur, the company may end up eating the cost of the repairs. Here are some additional considerations:

1. Considering that extended warranties can be purchased for various lengths of time and for various accessories, it’s mandatory that the warranty details be included in the customer records. Otherwise the technician may have to ask the customer for proof that the equipment repair is covered under the terms of the extended warranty. This practice is not customer friendly and should be avoided if at all possible.
2. Communication is imperative. Not only between the dispatcher and technician, but also with administration. Technicians must fill out the service ticket correctly so the office knows to file a claim. In some cases, technicians may need to fill out additional paperwork. If this is the case, instructions on filling out the necessary paperwork should be documented in the technician’s procedures and policies handbook.
3. Administration must determine how to process the extended warranty when the service ticket is closed for accounting purposes.

* If the company self-funds the extended warranty, funds should be taken from the ‘warranty reserve’ account that is set up on the balance sheet to pay for the service call. If the company has not reserved for these repair costs, refer to the additional comments below.
* If the extended warranty was purchased from a third party, a claim must be filed. The call should be billed out under the terms of the extended warranty. This way the claim can be monitored under accounts receivable to make sure it is paid.

Comments concerning self-funded extended warranties for companies that do not reserve for future repairs.

Recognize that when the company does not reserve for future liabilities under the terms of the extended warranty, it is overstating residential replacement gross profit when the job was sold. When repair work is performed, the cost of the part hits the parts cost of sales for the service department. In other words, the service department ends up subsidizing the residential replacement department.

If this happens, be careful not to condemn the service department for low margins when it was a business decision to do so. Another thing to consider is that this practice covers up margin problems in the residential replacement department that could be caused by pricing or by poor workmanship in the installation department.

A warranty cost line item in the Service Department Income Statements helps identify those part costs that were caused by extended warranties.

It’s always best to recognize the liability upfront in a reserve account on the balance sheet or to go with a third party provider and not self-fund at all.

1. Insurance programs operate a little differently. The customer generally calls the insurance company directly and the insurance company contacts the HVAC/Plumbing Company to see if they can go out to diagnose and fix the problem. If the estimated repair cost exceeds a preset level, the technician must call the insurance company to get authorization to proceed with the repairs. There may be an authorization number assigned, which the technician needs to record on the service ticket. The insurance company may decide not to make a major repair and to replace the equipment instead.

Administration must process the actual insurance claim and create a bill in the accounting system when the service ticket is closed. The claim can be monitored under accounts receivable to make sure it is paid.

Allocation of Expenses – Issue 12

As a company grows, it’s advisable to departmentalize the Income Statement to reflect the main revenue generation segments of the business. In looking at the residential side of the business, these departments include:

* Residential Replacement
* Residential New Construction
* Residential Service
* Residential Maintenance
* Indoor Air Quality

Technician Truck Stock Considerations

Most companies have their technicians perform work in different departments. For example, a company may switch from service to maintenance during the slower time of year, or may do start-ups for residential replacement and residential new construction.

If the materials or parts used for work in the various departments are not allocated correctly, the parts cost of sales could appear to be more than what it actually is.

To avoid this problem, technicians need to fill out their service tickets correctly. They need to clearly identify the particular department for what work was performed. Administration must also make sure the correct department is expensed when the service ticket is closed.

If the company uses truck replenishment forms and uses technicians to help in installations, the technicians should identify the department and the particular job when they submit the replenishment form.

Warehouse Replenishment Considerations

For companies that expense at the time of usage, an item purchased for inventory does not get expensed until it is relieved from inventory and is consumed. This is the conventional way of expensing items in a perpetual inventory system.

But it is not the only method. If the company uses a hybrid inventory system and expenses at the time of purchase, the item is expensed upfront when it is purchased. This type of inventory system is popular among companies that focus on residential service and replacement. There’s little administration needed under this type of inventory system. If the company expenses at the time of purchase, there can be a problem when it comes to purchasing common materials such as refrigerant. How much of the order needs to go to residential service versus residential maintenance or residential replacement?

There’s no simple answer to this question. It all depends on the company’s mix of business. In the end it’s a judgment call based on experience. The important thing is that administration not allocated the entire cost to one department. This could make the parts costs of sales appear to be higher than it actually is.

As an additional note, it’s a good idea to make seasonal adjustments to your inventory base line when expensing at the time of usage. This practice allows you to stock up for an upcoming season without having the stocking order hit your Income Statement at one time. Expense at the time of purchase works well for parts and supplies. Equipment should always be expensed at the time of usage.

For more information on this subject, refer to the ‘Step by Step Guide to Understanding Inventory Management’ on this website.

Theft – Issues 13 & 14

Theft can occur in a variety of ways within a company. It occurs with technicians who use parts for moonlighting, it occurs with warehouse personnel who steal parts to sell on the side, and it occurs from administrative staff that embezzles funds.

Theft is one of the causes of inventory shrinkage. After a physical count when the amount of inventory shrinkage is determined, the inventory account is adjusted on the Balance Sheet and the cost of sales is hit on the Income Statement for the various departments within the company. This causes the cost of sales parts to rise, gross margin to fall and net profits to fall as well.

Embezzlement can cause parts cost of sales to rise as well when someone writes purchase orders for vendors that do not exist.

This is a disturbing subject, but something that affects many companies. If we knew our people were going to be dishonest, we would never have hired them in the first place. Most General Managers and Owners trust their people or they would not be in business. It comes as a complete surprise when they find out their people are stealing from them.

Most theft can be prevented with a few precautions. A good inventory management and replenishment system helps a lot. Here are some additional thoughts.

Technician Theft

Here are some guidelines to minimize technician theft:

* Instill a company culture that values honesty and will not tolerate theft.
* Do background checks on all perspective technicians.
* Implement standardized truck stock.
* Implement a good truck replenishment program.
* Hold technicians accountable for truck inventory and shrinkage.
* Restrict technicians from purchasing parts and always require a Purchase Order with your part vendors.

Warehouse Theft

* Instill a company culture that values honesty and will not tolerate theft.
* Do background checks on all perspective warehouse personnel.
* Implement a good warehouse inventory management system.
* Implement a good parts replenishment program with suppliers.
* Separate Purchase Order and receiving functions.
* If it is impossible to separate ordering and receiving, do spot checks of purchase orders.

Ideally you want to separate the Purchase Order and receiving functions within a company. When the responsibilities are combined, it is possible for someone to steal from the company. Yet it may be impossible to separate these functions in all but the larger companies. As a General Manager or Owner, you want to spot check Purchase Orders so you can be confident no theft is occurring in that part of your business.

Embezzlement

As a General Manager or Owner always personally approve the addition of a vendor on your accounting system. It’s also a good idea to be the only person with the capability of adding a vendor to the accounting system. You want to avoid any possibility of administrative staff setting up a false vendor account and then generating purchase orders to that account. Some Owner’s and General Managers sign all accounts payable checks so they are continually aware of the cash outflow from the business.

You also want to avoid the possibility of administration setting up any accounts that can suck up ‘credits’ from parts returned to vendors.

Repair Versus Replacement – Issue 16

If parts are not priced correctly, this affects company revenue and can cause parts cost of sales to be high. Most contractors use multiplier factors they apply to the cost of the part.

Some companies confuse mark-up and margin. For example, if they want to achieve a 65% in gross margin, they will multiply the 65% times the cost of the part.

In this case let’s say the part costs $100.

**Part Cost $100**

**Markup x .65**

**Markup Profit $ 65**

**Plus Cost + $100**

**Selling Price $165**

The gross margin percentage is actually much less than the desired 65%. Using the above example:

**Selling Price $165**

**Minus Cost - $100**

**Gross Margin $ $ 65**

**Gross Margin % $65**

**$165 or 39%**

The selling price actually needed to be $286 to achieve the desired 65% gross margin.

**Refer to other articles on this web site for more information on multipliers, gross margin and mark-up.**

Most companies use multipliers similar to the following. Notice the multipliers are higher on the lower cost items and less on higher cost parts. This structure reflects a company’s need to recover inventory and handling costs.

**Cost of Part Multiplier Factor Gross Margin %**

**$.01 to $9.99 4 75%**

**$10 to $49.99 3 66.6%**

**$50 to $99.99 2.5 60%**

**$100 to $199.99 1.75 42.8%**

**Over $200 1.67 40%**

Repair Versus Replacement – Issue 16

Some technicians would rather fix old equipment rather than provide replacement options. This represents lost residential replacement sales opportunities for the company. It also affects the parts cost of sales for service.

The preceding section showed that the multipliers for more expensive parts have lower gross margin percentages. For example, a part with a 1.67 multiplier will generate only a 40% gross margin. If technicians do not promote replacement of old equipment and continue to make major repairs, a higher mix of the service repairs will shift to this lower margin work compared to companies that promote replacement. The shift to lower margin work will cause the parts cost to be higher than companies that promote replacement