

5.4: Accounting for Product Warranties

Learning Objectives

At the end of this section, students should be able to meet the following objectives:

1. Explain the difference between a warranty that is a revenue performance obligation (purchased separately or extended) and a contingent guarantee.
2. Account for the liability and expense incurred by a company that provides its customers with an contingent guarantee on a purchased product.
3. Account for the amount received on the sale of an extended warranty and any subsequent cost incurred as a result of this warranty.

Question: A company sells merchandise such as a car or a microwave and agrees to fix certain problems if they arise within a specified period of time. If the car's transmission breaks, for example, the seller promises to replace it. Making the sale with a warranty attached is the past event that creates this contingency. However, the item acquired by the customer must break before the company has an actual loss. That outcome is uncertain.

In accounting for contingencies, several estimates are required:

- The approximate number of claims
- The likelihood that claims will result from the warranty
- The eventual cost

As an example, Stanley Black and Decker reported on its December 31, 2022, balance sheet a liability for product warranties totaling over \$99 million. That is certainly not a minor obligation. In the notes to the financial statements, the company explains, "We provide for estimated product warranty expenses when we sell the related products. Because warranty estimates are forecasts that are based on the best available information—mostly historical claims experience—claims costs may differ from amounts provided." How does a company record and report contingencies such as product warranties?

Answer: In accounting for warranties, cash rebates, the collectability of receivables and other similar contingencies, the likelihood of loss is not an issue. These losses are almost always probable. For the accountant, the challenge is in arriving at a reasonable estimate of that loss. How many microwaves will break and have to be repaired? What percentage of cash rebate coupons will be presented by customers in the allotted time? How often will a transmission need to be replaced?

Many companies utilize such programs on an ongoing basis so that data from previous offers will be available to help determine the amount of the expected loss. However, historical trends cannot be followed blindly. Officials still have to be alert for any changes that could impact previous patterns. For example, in bad economic periods, customers are more likely to take the time to complete the paperwork required to receive a cash rebate. Or the terms may vary from one warranty program to the next. Even small changes in the wording of an offer can alter the expected number of claims.

To illustrate, assume that a retail store sells ten thousand refrigerators during Year One for \$400 cash each. The product is covered by a warranty that extends until the end of Year Three. No claims are made in Year One but similar programs in the past have resulted in repairs being made to 3 percent of the refrigerator at an average cost of \$90. Thus, this warranty is expected to cost a total of \$27,000 (ten thousand units \times 3 percent or three hundred claims \times \$90 each). Immediate recognition is appropriate because the loss is both probable and subject to reasonable estimation.

Although no repairs are made in Year One, the \$27,000 is recognized in that period. All requirements for a liability have been met. In addition, the matching principle states that expenses should be recorded in the same period as the revenues they help generate. The revenue from the sale of the refrigerators is recognized in Year One so the warranty expense resulting from those sales of refrigerators should also be included at that time.

Figure 5.7 Year One—Sale of Ten Thousand Refrigerators for \$400 Each – note that we omitted cost of goods sold for simplicity

Cash	4,000,000	
Sales of Inventory		4,000,000

Figure 5.7 Year One—Recognize Expected Cost of Warranty Claims

Warranty Expense	27,000	
Warranty Payable		27,000

This warranty is in effect until the end of Year Three. Assume in the year following the sale (Year Two) that repairs costing \$13,000 are made for these customers at no charge. Refrigerators break and are fixed as promised. The expense has already been recognized in the year of sale so the payments made by the company serve to reduce the recorded liability. **They have no additional impact on net income.**

Figure 5.8 Year Two—Payment for Repairs Covered by Warranty

Warranty Payable	13,000	
Cash		13,000

At the end of Year Two, the warranty payable T-account in the general ledger holds a balance of \$14,000 (\$27,000 original estimation less \$13,000 payout for repairs to date). Because the warranty has not expired, company officials need to evaluate whether this \$14,000 liability is still a reasonable estimation of the remaining costs to be incurred. If so, no further adjustment is made.

However, the original \$27,000 was an estimate. More information is now available, some of which might suggest that \$14,000 is no longer the best number to be utilized for the final period of the warranty. As an illustration, assume that a design flaw has been found in the refrigerators and that \$20,000 (rather than \$14,000) is now the estimate of the costs to be incurred in the final year of the warranty. The \$14,000 is no longer appropriate. The reported figure must be updated to provide a fair presentation of the information that is now available. Estimations should be changed at the point that new data provide a clearer vision of future events.

Figure 5.9 December 31, Year Two—Adjust Warranty Liability from \$14,000 to Expected \$20,000

Warranty Expense	6,000	
Warranty Payable		6,000

In this adjusting entry, the change in the expense is not recorded in the period of the sale. As discussed earlier, no retroactive changes are made in previously reported figures unless fraud occurred or an estimate was held to be so unreasonable that it was not made in good faith. While it is shown a situation where the liability is higher it could also be adjusted lower but that would be more unusual and would need more evidence to support the change.

*Question: Not all warranties are built into a sales transaction. Many retailers also provide **extended product warranties** but for an additional fee. Other warranties can be purchased separately from the item even if they are not actually extended warranties. For example, assume a business sells a high-definition television with an automatic one-year warranty. The buyer receives this warranty as part of the purchase price and is not available for purchase separately. The accounting for that first year is the same as just demonstrated; an estimated expense and liability are recognized at the time of sale.*

However, an additional warranty for three more years is also offered at a price of \$50. If on January 1, Year One, a customer chooses to acquire this three-year coverage, what recording is made by the seller? Is an extended warranty purchased by a

customer reported in the same manner as an automatic warranty embedded within a sales contract?

Answer: Extended warranties, or those which can be purchased separately are separate performance obligations as discussed in our revenue recognition section of Principles of Financial Accounting 1. If the customer buys the coverage, the product is insured against breakage or other harm for the specified period of time. In most cases, the company is making the offer in an attempt to earn extra profit. The seller hopes that the amount received for the extended warranty will outweigh the eventual repair costs. Therefore, the accounting differs here from that demonstrated for an contingent guarantee that was provided to encourage the sale of the product. Because of the matching principle, the anticipated expense was recognized in the same period as the revenue generated by the sale of the product.

By accepting money for an extended or separate, the seller agrees to provide services in the future. The amount may have to be separated from the amount of the actual item purchased. This revenue is not earned until the earning process is substantially complete in the future. Thus, the \$50 received for the extended or separate warranty is initially recorded as “unearned revenue.” This balance is a liability because the company owes a specified service to the customer. As indicated previously, liabilities do not always represent future cash payments. The amount must be separated out from the amount paid for the item even if the company only receives one cash payment.

Figure 5.10 January 1, Year One—Sale of Extended/Separate Warranty Covering Years 2–4

Cash	50	
Unearned Revenue		50

Note that no expense was estimated and recorded in connection with this warranty. As explained by the matching principle, no expense is recognized until the revenue begins to be reported.

Because of the terms specified, this extended/separate warranty does not become active until January 1, Year Two. The television is then covered for a three-year period. The revenue is recognized, most likely on a straight-line basis, over that time. The \$50 will be recognized at the rate of 1/3 per year or \$16.66.

Figure 5.11 December 31, Year Two (Three and Four)—Recognition of Revenue from Extended/Separate Warranty

Unearned Revenue	16.66	
Revenue from Extended Warranty		16.66

In any period in which a repair must be made, the expense is recognized as incurred because revenue from this warranty contract is also being reported. To illustrate, assume that on August 8, Year Two, a slight adjustment must be made to the television at a cost of \$9. The product is under warranty so there is no charge to the customer for this service. The expense recognized below is matched with the Year Two revenue recognized above.

Figure 5.12 August 8, Year Two—Repair Television under Contract

Warranty Expense	9	
Cash		9

Check Yourself

Harvey sells large complicated sound systems with a warranty for 2 years and each system costs \$75,000. Because Harvey offers these warranties to customers separately for \$4,000, they determine that the warranty should be accounted for as a separate performance obligation in terms of revenue recognition. When the customer pays \$75,000 for the sound system, \$4,000 is allocated to the warranty and \$71,000 is allocated to the sound system. If Harvey sells a sound system on January 1, 2023 to a

customer and only makes adjusting entries at the end of the year, what adjustment would be needed at the end of 2023 with regard to this sound system warranty?

- A. Debit Cash \$4,000 and Credit Revenue \$4,000
- B. Debit Cash \$2,000 and Credit Revenue \$2,000
- C. Debit Unearned Revenue \$2,000 and Credit Revenue \$2,000
- D. Debit Revenue \$4,000 and Credit Cash \$4,000

The correct answer is C. When the sale is made the debit is to cash for 75,000 with a credit to unearned revenue (from warranty) for \$4,000 and credit to sales or revenue for \$71,000. After one year, half of the \$4,000 or \$2,000 of the unearned revenue from the warranty has been earned (one year of the two years has been completed). Notice that this is independent of whether any repairs were made in 2023. The obligation is to be willing and available to make repairs for 2 years and one year is over and thus half of the obligation is fulfilled.

Key Takeaway

Many companies incur contingent liabilities as a result of product warranties. If the warranty is given to a customer along with a purchased item, an anticipated expense should be recognized at that time as well as the related liability. If the cost of this type of embedded warranty eventually proves to be incorrect, the correction is made when discovered. Companies also sell extended or separate warranties, primarily as a means of increasing profits. These warranties are recorded initially as liabilities and are reclassified to revenue over the time of the obligation. Subsequent costs are expensed as incurred to align with the matching principle. Expenses are not estimated and recorded in advance.

Talking with a Real Investing Pro (Continued)

Following is a continuation of our interview with Kevin G. Burns.

Question: Analysts often look closely at current liabilities when evaluating the future prospects of a company. Is there anything in particular that you look for when examining a company and its current liabilities?

Kevin Burns: For almost any company, there are a number of things that I look at in connection with current liabilities. I always have several questions where possible answers can concern me. I am interested in the terms of the current liabilities as well as the age of those liabilities. In other words, is the company current with its payments to vendors? Does the company have a significant amount of current liabilities but only a small amount of current assets? Or, stated more directly, can these liabilities be paid on time? Have current liabilities been growing while business has remained flat or grown much more slowly? Are any of the current liabilities to organizations controlled by corporate insiders? That always makes me suspicious so that, at the very least, I want more information. In sum, I like balance sheets where there are no potential conflicts of interest and the company is a reasonably fast payer of its debts.

5.4: Accounting for Product Warranties is shared under a [not declared](#) license and was authored, remixed, and/or curated by LibreTexts.