These 23 Student Training Modules on parts counter comprise one of nine sets of self-paced learning modules developed for Pre-Apprenticeship Phase 2 Training. (A companion instructor's guide is available separately as CE 031 571.) The modules are designed to impart trade knowledge and skills to the student. Each module contains some or all of the following: cover sheet listing module title, goals, and performance indicators; study guide/checklist with directions for module completion; introduction; vocabulary listing and defining new trade or technical terms; supplementary references; information sheet(s) providing information and graphics covering the module topic (a) self-assessment; self-assessment answers; assignment sheet(s); job sheet(s) listing materials and tools necessary to complete tasks designed to develop manipulative skill; post assessment; and post assessment answers. Topics covered in the module include catalog arrangement and indexing, keeping catalogs current, interpreting customer needs, handling money, selling, salesmanship; picking merchandise (major suppliers, warehouse, small stores, special order parts, hard-to-get parts), shipping, pricing items for sale, operating a microfiche reader, inventory control, receiving merchandise, stock investment and turnover, stocking, returned merchandise, machine shop and customer service, identification of sheet metal body parts, and promotions, advertising, and merchandising. (YLB)
PRE-APPRENTICESHIP
PHASE 2 TRAINING
Student Training Modules

Parts Counter
Parts Counter Module Writer:
James A. Snyder

Technical Assistance:
John Holcomb

Graphics: Ralph Bentley

Editorial, Proofreading and Pasteup:
Ron Hamblen, Dick Ingram, Debi Carroll

Typing:
Stranalien Typing Service

This project was developed under a subcontract for the Oregon Department of Education by Lane Community College, Community Education Division, Eugene, Oregon. Funds were provided by the Governor of Oregon from the Educational Linkages Component of the CETA Governor's Grant.

STATEMENT OF ASSURANCE
It is the policy of the Oregon Department of Education that no person be subjected to discrimination on the basis of race, national origin, religion, sex, age, handicap or marital status in any program, service or activity for which the Oregon Department of Education is responsible. The Department will comply with the requirements of state and federal law concerning non-discrimination and will strive by its actions to enhance the dignity and worth of all persons.
On behalf of Lane Community College, I wish to express our pride and gratitude for the opportunity to participate in the development of the Pre-Apprenticeship training materials. We also wish to commend the Oregon Department of Education for its original concept and continued support; and, the Educational Linkages Component of the CETA Governor's Grant for funding.

The goals of this project are many, but none are more important than that of producing valid, understandable vocational curriculum material. We congratulate the tradespeople and production staff for their accomplishments.

Finally, I recommend this material to anyone exploring Pre-Apprenticeship as an entry into the vocational work world, with the hope and belief that it will go a long way toward producing skilled craftspeople who are dedicated to their work.

Sincerely,

Eldon G. Schafer
CATALOG ARRANGEMENT AND INDEXING

Goal:
The student will be able to recognize methods of arranging and indexing catalogues.

Performance Indicators:
The student will demonstrate knowledge of the subject by successfully completing a Self Assessment, an Assignment page and a Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. ___ Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. ___ Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. ___ Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. ___ Study the Information section. This section will give you the information you need to understand the subject.

5. ___ Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. ___ Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. ___ Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Parts catalogs are the "tools" of a parts department. The information they contain makes it possible for a parts person to identify, locate and price the merchandise he or she handles. A very good working knowledge of parts catalogs and related manuals is needed for the parts employee to do a good job.

The auto parts industry is continuing to grow and become more complex. This means that the parts worker must spend more and more time in the study and use of the parts catalogs.

The catalogs are always being improved and changed to make them more uniform and up-to-date. Since 1965 there has been a 46% increase in car sales in the U.S.A. It can be a hard job to keep up with the increasing number of different models made within just the past 10 years. Ford cars give a good example of this trend toward model changes or diversification. In 1958 Ford offered 4 models and 3 engines. In 1975 Ford offered 10 models and 8 different engines! This has made it hard to keep catalogs uniform and organized. The value of an organized method of catalog arrangement, regardless of the system used, is that it makes it easier to locate and sell the correct part.
Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

INDEX--An alphabetical list of names, subjects, etc., together with the page number or section where they may be found.

CATALOG--A book or pamphlet printed by a manufacturer containing a complete listing of its items for sale. A catalog will normally also contain photographs and illustrations of many of the items for sale.

ORGANIZE--To arrange in an orderly way so that things may be found quickly.

MERCHANDISE--Things bought and sold; goods; wares.

DIVERSIFICATION--The increase in business as a result of increasing the variety of things produced.

JOBBER--One who buys goods in quantity from manufacturers or importers, and sells them to dealers. A "middleman."

AERONAUTICAL--Concerning making or flying airplanes.

SUPPLEMENT--A section added to a book or catalog to give additional information.

PROFIT--Money made from sales of merchandise after deducting the costs of the merchandise.
MARINE--Concerning boats or ships.

FASTENERS--Nuts and bolts, etc.

DIFFERENTIAL--Gear mechanism.

RE-MANUFACTURER--A person who replaces worn out components in used parts and re-sells them.
Supplementary References

1. The Inside Salesman. NAPA.


There are several methods used to index and arrange parts catalogs. The three most widely used in the industry will be covered here. To become skilled in one or even two methods will enable you to go from one place of employment to another and the arrangement of the catalogs would be the same or very similar.

The three most common methods used to organize parts catalogs are:

1. The Weatherly System.
2. Factory Group Number Systems.
3. Manufacturers Name.

No single method is better or worse than another. For example, to use the Weatherly system and the numerical, you must first look up the part category in an alphabetical index in front of the catalogs to find which section will contain the catalog for that part category. The "manufacturers name" system has no index, but you will have to know who manufactures the part in order to find the right catalog.

The Weatherly System

The Weatherly system is the most widely used by jobbers— independent parts stores that sell parts made by many different manufacturers. The Weatherly index system was first used in 1932. It provides a complete alphabetical and numerical index designed to be used in automotive, aeronautical, and marine supply catalogs.

Very simply, here is how the Weatherly system index works. It is an index ranging numerically from 002 to 998 using only the even numbers. All items are grouped either by location on the automobile or truck or by the relationship to a system of the automobile or truck. The 10 major categories are:

1. 000 group contains those parts with a fixed location in the central or drive section of the vehicle. It ranges from engine
to differential.

2. 100 group contains those parts with a fixed location on the frame and axle.

3. 200 group contains those parts on and around the body.

4. 300 group contains gaskets, grease seals and bearings.

5. 400 group contains all parts in the cooling system.

6. 500 group contains parts in ignition, electrical and lighting systems.

7. 600 group contains fuel and lubrication parts.

8. 700 group contains items used in and around service and repair shops, also chemicals and fasteners.

9. 800 group contains hand tools.

10. 900 group contains power tools and heavy tools and equipment.

Most of the auto parts manufacturers now use the Weatherly system to key their catalogs to an index. In fact, the Weatherly index number is printed in the upper-right hand corner of the cover or first page of most manufacturer's catalogs.

The use of the Weatherly index is the reverse of the ordinary method. Catalogs are usually made up first and then provided with an index of their contents. In the Weatherly system, the index is provided first and catalogs and information sheets are fitted into the indexing system by placing them between the cardboard dividers which show the appropriate group number.

Not all manufacturers print their catalogs with the Weatherly index number. If you are working in a parts store which uses the Weatherly system and you receive a catalog or information sheet that has no Weatherly index number in the top right-hand corner, you would:

1. Look at the alphabetical listing of the Weatherly index to find the correct group.

2. Stamp or print the group number in the upper right-hand corner of each un-numbered sheet or catalog.

3. After the material has been given a proper group number, it can then be placed in the section that contains that group number in the counter catalog.
A lot of times, manufacturer's catalogs will contain several groups of items and may have several Weatherly index numbers. For example, one catalog may list parts or items in group 136, a principle number, but the catalog may also contain items listed in groups 126, 130, and 134. In some cases the catalog may be taken apart or pages removed so that they may be placed in the correct order.

The West Coast uses a Weatherly index containing 34 major divisions or groups, while the Mid-west and Southwest use 58 divisions or groups.

Factory Group Numbering Systems
Under these systems, catalogs are organized using the group numbers that are assigned by the major automobile manufacturers to their parts.

A study of the major auto manufacturers' catalogs shows that they all have the same basic structure. All contain an alphabetical and a numerical index. All show pictures of the part, usually before each group division. Each manufacturer uses a group number, or part number prefix, to identify the major assemblies and subassemblies of the vehicle. Manufacturers also use part numbers to identify each individual part. In addition, manufacturers' catalogs present a lot of related information to help the parts worker in:

1. Model identification.
2. Interior trim classification.
3. Engine and option specifications.
4. Ordering procedures.
5. Other information pertinent to ordering and stocking parts.

Each new part produced by an auto manufacturer must be assigned its own part number in order to be able to identify it. The methods of assigning parts numbers are slightly different among different manufacturers.

General Motors parts manufacturer's numbers are usually 6 or 7 digits long and are used only to describe an individual part. The same number is used by all divisions to describe the same part. If a certain part were used by Pontiac and Chevrolet, both divisions would use the same part number to identify that part.

General Motors has certain blocks of numbers assigned to parts that are produced by different manufacturing divisions. As new parts are developed, numbers
from these blocks are assigned in a rotating manner. This means that no digit in a manufacturer's number would identify parts in a certain category.

An example would be a number 7450745. The number alone doesn't show that it is a side carrier bearing for a differential that is found in Group 5.536. The group numbers before the decimal point identify the major assemblies or auto systems. Numbers after the decimal point relate to subassemblies or individual parts. For example, "5" refers to the group of parts pertaining to brake, propeller shaft and rear axle. Further breakdown of 5.000 separates the parts into specific use and vehicle application. There are about 25 group numbers used by G.M.

Ford Motor company part numbers are formed by "expanding" the basic group numbers that further divide the catalog into smaller groups or sections. Unlike, General Motors parts numbers, Ford parts numbers are "significant" because they identify what the part goes and where the part goes. For example, for part number C3AZ-6303, A tells the experienced Ford parts counter worker that the part is a crankshaft, since all crankshafts have a 6303 basic number, and that it fits a 1963 series A vehicle (C3 means 1963 and the A identifies the model). By using various combinations of letters and numbers added to the beginning or end of a basic part number, new parts can be added to the existing system, while the basic part number will remain the same. The Ford parts catalog is divided into sections which are further divided into basic groups. These basic group numbers are divided into sub-groups and these are the base on which each part number is made. The assignment of part numbers in the Ford system then is based on individual sub-group divisions that have already been established.

Group numbers in manufacturers' systems are important because some numbers are nonsignificant, they tell nothing. For example, G.M.'s part number 7450745 tells nothing about the application of that particular part. You would have to turn to the group numbers for information on where and how the particular part would be applied or used.

Some method of dividing parts into major groups and sub-groups is followed in all catalogs. Each group division represents a major section or area of the vehicle. Each group is further divided into sub-groups within which the various manufacturers may give different numbers to groups and sub-groups, but the basic system is similar. Since most catalogs contain 25 or less groups and
sub-groups, the new parts counter worker should memorize what each group or sub-group contains as soon as possible. You shouldn't try to memorize large blocks of parts numbers, since these change a lot, but the group numbers seldom, if ever, change. Once group numbers are memorized, looking up the part will become much easier and faster.

Three general methods are used to locate parts in manufacturers' catalogs. The most common method is by looking up the part in the alphabetical index. Look for the part by its main name. The alphabetical index is keyed to the group in which the part can be found.

The second common method of locating parts is by referring to illustrations that are in front of each major group division in most manufacturers' catalogs.

The third method is used only when the part number is known. By referring to the numerical index or price index, the group number can be found. This method simply places the catalogs in the alphabetical order of the company name, with "A" on the left end of the catalog file or holder. For example, the left-most catalog in the catalog file holder would be "A-1," then ANCO, and the "ATP" and so on down through the alphabet. Zollner's catalog would be filed on the right-most end of the catalog file holder. Using this method requires the new parts counter worker or trainee to find out which firm or supplier furnishes the part required by the customer. For example, the parts worker will have to learn that "A-1" is a re-manufacturer that supplies windshield wiper motors and "Blackhawk" supplies lifting equipment, floor jacks, etc., as well as tools for body and frame repair. Then, if a customer asks for a windshield wiper motor the parts person will look in A-1's catalog. Since not all suppliers are nation-wide and some only supply a local area or only a few states, parts jobbers will not all have the same supplies.

The new parts counter worker should memorize as quickly as possible those manufacturers that supply parts for his or her particular store to sell.

All systems, regardless of the type, try to organize the filing of catalog information in such a way that the parts counter worker can find part numbers quickly and easily.
The first step toward becoming good at finding information is to become very familiar with whatever index system is being used. It is very important to keep counter catalogs current with new supplements and new suggested price sheets. Most suppliers publish a complete up-to-date catalog every other year, with a supplement in between. Suggested price schedules may occur more often. It takes effort to insert new catalog material, but failure to do so will cause missed sales. Using out-of-date price sheets cuts the store's profit.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. How many popular systems of indexing catalogs are in use today?

2. When was the Weatherly index system first used?

3. How many numbers are basic to the Ford Motor Company system of assigning part numbers?

4. What is the G.M. parts numbering system based on?

5. What is the first and most important thing a new parts counter worker should memorize when he or she goes to work for a G.M. parts dealer?
Assignment

DO FIVE OR MORE OF THE FOLLOWING.

1. Obtain a G.M. parts catalog and look up 5 items and list their part numbers.

2. Obtain a Ford Motor Company parts catalog and look up 5 items and list their part numbers.

3. Visit a local parts jobber and examine the parts catalog system. Tell how the system is indexed and how the system is used.

4. Visit a local parts store or jobber that uses the Weatherly index system. List the number of manufacturers in the 400 section.

5. Find out how many crankshafts are listed in that section of the Ford Motor Company catalog.

6. Obtain 25 parts and look their numbers up in a catalog system that uses an alphabetical index. List the manufacturer's name and part numbers.
LISTED BELOW ARE SEVERAL STATEMENTS. IF THE STATEMENT IS TRUE, PLACE A "T" IN THE BLANK PROVIDED. IF THE STATEMENT IS FALSE, PLACE AN "F" IN THE BLANK.

1. ____ Major groups of parts are given the same numbers by all auto manufacturers.

2. ____ The Ford parts number system is being expanded throughout from 5 to 6 numbers.

3. ____ Helpful supplementary tables, data, and information are found in most parts catalogs.

4. ____ Hand tools are not indexed in the Weatherly index system.

5. ____ A G.M. parts dealer would probably use the Weatherly index system.

5. ____ Weatherly index numbers are really random groupings.

7. ____ All parts numbering systems are the same.

8. ____ The new or beginning parts counter worker should memorize as many part numbers as possible.

9. ____ In the G.M. system "blocks" of numbers are assigned to different manufacturing divisions.

10. ____ The assignment of Ford part numbers depends on individual sub-group divisions already assigned.
1. F
2. F
3. T
4. F
5. F A G.M. parts dealer would use the G.M. catalogs. Independent jobbers who sell parts made by many different manufacturers would use the Weatherly index system.
6. F
7. F
8. F
9. T
10. T
Goal:
The student will understand the importance of keeping catalogs current and will be able to identify procedures for keeping catalogs current.

Performance Indicators:
Given a set of old and current catalogs, the student will update a catalog set, and will complete a Self and Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. **Read the Goal and Performance Indicators on the cover of the module.** This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. **Read the Introduction.** The Introduction will tell you why the module is an important part of the parts counter trade.

3. **Study the Vocabulary section.** Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. **Study the Information section.** This section will give you the information you need to understand the subject.

5. **Take the Self Assessment exam.** This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. **Do the Assignment page.** Follow the instructions at the top of the Assignment page.

7. **Do the Job Sheet.** Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. **Take the Post Assessment exam.** Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Introduction

Keeping catalogs up-to-date is an important part of the job of an auto parts counter worker. Without current catalogs, sales will be lost and locating parts can be more difficult and time consuming. Incorrect prices may be charged, lowering profits or making overcharged customers unhappy.

The parts counter worker must have the most current listings of new products or parts on the market if they are to be located and sold. If catalogs are not kept up-to-date the store will lose money and customers will go elsewhere for their parts.
Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

PERFORMANCE--Best effort and output of work.

COMPILE--Put together in an orderly manner; such as a long list of numbers or letters in sequence or order.

EFFECTIVE DATE--The time at which the use of a part number, part price or catalog should be started.

SUPPLEMENT--Sheets or lists that are printed later and added to or replace parts of a catalog.

REVISED--Changed.

SUPPLANTED--Replaced by something new.
Supplementary References

1. Auto Parts Counter Worker. University of Texas.

2. The Inside Salesman. NAPA.

Keeping catalogs up-to-date is a job shared by both the manufacturer or supplier and the parts store worker. Keeping "up-to-date" means something different to each of them. From the manufacturer's or supplier's point of view, it means keeping listings of vehicles, applications of parts, prices and other supplemental information.

From the wholesaler or parts jobber's point of view it means having all the latest catalogs, price sheets and other information properly filed.

The suppliers or manufacturers can help the jobber by doing these four things:

1. Compile and publish new listings, applications, and prices as soon as they become available.

2. New price catalogs should be produced and distributed by the manufacturers well before new prices go into effect. The warehouses, the parts stores suppliers and the parts stores themselves need price change information in advance. They can use this information to help them decide when to order and how much stock to keep on hand to maximize profits. Some prices change more quickly than others do.

3. Print enough new catalogs and price lists to meet the demand of all the levels of the industry that the information will effect.

4. Catalogs should be planned so that supplements can be kept to a minimum. It is best to avoid issuing supplements whenever possible. They are difficult to insert into the catalogs and are frequently lost, or not available for use by the parts counter worker when they are needed.

The duties of the jobber in keeping catalogs and price lists current are outlined in the four steps listed below.
1. Schedule a regular time for up-dating.
2. Set up a procedure for changing, adding, discarding or correcting sheets.
3. Individual parts counter workers should be assigned up-dating jobs to do and a check sheet posted to insure that he or she has done it.
4. One person should be made responsible for overseeing the revisions of the catalogs and price lists.

Successful jobbers mail new or revised catalogs and price sheets once a week. They are usually mailed so that they are received by Saturday. Price lists and changes on fast selling items are distributed as soon as they are available.

Instructions for the use of new pages or sheets are prepared by the manufacturers. These instructions include information on what to add and what to take out of the catalogs. The parts store involved can make its own rules and instructions for its employees.

By making several copies of the instructions for distribution within a store, all the parts counter workers can be informed on what to do with catalog and price list changes when they receive them.

Some parts stores have the parts counter worker who makes catalog changes initial and date the catalog sheet he or she has changed to help keep track of the process. (See picture 1 on the following page.)

Some jobbers keep a master file of all the latest catalogs of each type. The other catalogs can be checked against the master to see if it is up-to-date. Some parts stores make this check every three months, some do it only once a year.

When you receive pages from the supplier or warehouse, watch for words such as "superseded," "to replace," "corrections," "revised" or "add to." These words help the parts counter worker identify the kind of change being made in the catalog. Other key words such as, "revised price list" or "prices effective" (on such a date) also help to identify the type of change. All such sheets received should be filed immediately.
SUGGESTED TRADE AND WHOLESALE

OIL SEALS

NET PRICE LIST
FOR
THE UNITED STATES

PRICES

Prices are subject to change without notice and include Federal Excise Tax where applicable. No local taxes are included.

For your convenience, this price list has been arranged in alpha-numeric sequence. All non-prefixed numbers will appear first, then “EP”, “SS”, and “TK” prefixed numbers.

See separate list prices covering Gaskets, Assortments, and Gasket Materials.

INDEX

NON-PREFIXED NUMBERS

13,000 - 72.5  2-7

PREFIXED NUMBERS

EP  7-8
SS   8
TK   8

* REORDER is used on part numbers that will be superseded in the future. THESE PART NUMBERS SHOULD NOT BE RETURNED. Reorder parts are currently cataloged, classified and priced. Therefore, they should continue to be sold until inventories at all levels are depleted. The following year, these same part numbers will be published in the Classification Listing as “O Superseded by”.

* New Item In Stock
* New Item Not In Stock (Order When Announced)

DANA CORPORATION
TOLEDO, OHIO 43692

Litho in U.S.A.
Another method of keeping catalogs up-to-date is to keep a file by date of changes made. If your store uses this type of calendar system, you should check every day for changes. You should then make the changes to keep your catalogs and price lists up-to-date. Some warehouses or wholesalers make use of an inventory clerk. One of the inventory clerk's jobs is changing and recording superseded parts numbers. If you find that you don't have a part that a customer wants, check for a superseded number. If the store you work in has an inventory clerk also check with that person to see if the part required has been given a new number.

Up-to-date catalogs and price lists are a must. They affect profit, sales, the store's investment and help control inventory.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. Why must catalogs be kept up-to-date?

2. What does the word "superseded" mean when referring to part numbers?

3. What is an "effective date" on a price list?

4. How does the manufacturer help the parts store to keep catalogs up-to-date?

5. How is a master set of catalogs used to keep catalogs up-to-date?
**Self Assessment Answers**

1. Keeping the catalog up-to-date helps the parts counter worker locate parts quickly and charge the customer the correct price for the parts.

2. It means that the part has been replaced by another part with a new number.

3. The date that the new price goes into effect.

4. By publishing new and up-to-date catalogs and price lists and distributing them to jobbers.

5. By keeping the master set up-to-date and comparing the other catalogs to it, they also can be kept up-to-date.
COMPLETE THE FOLLOWING ASSIGNMENT.

Visit an auto parts store and ask to speak to the worker who keeps the catalogs up-to-date. Ask them the following questions and take notes on their answers.

1. When were the last price changes made?

2. When are catalog changes usually made in the store?

3. How often are changes from the manufacturer received?
COMPLETE THE FOLLOWING TASKS.

1. Obtain some out-of-date catalogs from a parts store. Compare them with catalogs in use at present. Make a list of the changes that you find.

2. Visit a parts store and ask to see a current price list. Check the effective date of the list. How many days, weeks or months old was the list. Take notes on your findings.

3. Visit a parts store and observe a parts counter worker. Does he or she appear to be careful when looking up the parts and prices. How long is spent, on the average, with a customer. Does he or she take the time to be sure numbers and prices are accurate? Write a brief report on your observations.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. List three ways manufacturers can help with indexing and filing problems of jobbers.

2. Why do warehouse distributors and jobbers want advance notice of price changes?

3. Name three ways a jobber can be more successful in keeping catalogs up-to-date.

4. What is a calendar method of up-dating catalogs?

5. How often are catalogs checked when a master set is kept?

6. What are the duties of the inventory clerk in regard to catalog up-dating?
7. Explain how using old or out-of-date catalogs affect stores' profits?
1. Compiles and publishes new parts listings and price sheets as soon as the information is available. Also distributes new lists to jobbers and stores concerned in advance of the effective date. And print sufficient quantities of the change sheets to give to everyone who needs them.

2. So they can charge the correct prices and place orders for needed inventory in advance of price increases.

3. a. Maintain a regular schedule for doing catalog up-dating.
   b. Set up a procedure that insures that up-dates are inserted.
   c. Assign an individual worker to do specific up-dating jobs.

4. The date is recorded when charges are made and catalogs can be checked by date to see if needed changes have been made or should be made.

5. Every three months if possible. Most do it once a year. The average is every 6 months.

6. Receiving the catalog up-dates and placing them into the catalog. Also removing any out-of-date material from the catalog.

7. A store could be buying parts at new up-dated higher prices and then selling them at old lower prices. No store will stay in business long if they do this.
INTERPRETING CUSTOMER NEEDS

Goal:
The student will learn techniques that parts counter workers use to find the correct part for the customer.

Performance Indicators:
The student will successfully complete the Self Assessment, the Assignments, the Job Sheet and a Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. ___ Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. ___ Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. ___ Study the vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. ___ Study the Information section. This section will give you the information you need to understand the subject.

5. ___ Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. ___ Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. ___ Do the Job sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. ___ Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
It is the parts counter worker's job to make sure the customer buys the correct part. This is not as easy as it sounds. In the automotive industry, because of the many different types of engines made for the same model car, there could be as many as 10 different choices for the same part. It is up to you to make sure the customer gets the one that will fit his or her particular vehicle. The parts counter worker must ask the customer the right questions and gather information to find the right section in the parts catalogs. More questions are usually needed to find the right part of the many listed in each section.

Techniques for locating the appropriate catalog will be covered in another module.
Vocabulary

Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

DISPLACEMENT--Refers to the size of an engine and is listed in cubic inches, (C.I.) For example, a 327 cubic inch engine is called a "327."

YEAR--Date vehicle was manufactured.

VEHICLE-- Anything used for moving or carrying people (e.g. car, truck, tractor, motorcycle).

MAKE--Name of the vehicle (e.g. Ford, Chevrolet, etc.).

MODEL--Refers to body style such as 2-door, 4-door, station wagon, etc.
Supplementary References


2. The Inside Salesman. NAPA.
It is important that the parts counter worker give each customer the best possible service. This includes making sure that the correct parts are supplied and sold. The only way to be sure you are selling the correct part is to ask the customer the right questions. The customer must supply the answers. The following list of questions might be asked:

1. What year is the vehicle?
2. What make is the vehicle?
3. What model is the vehicle?
4. What part do you need?

With the above questions answered, the parts counter worker has an idea of where to begin looking for the part in the catalogs.

Because of limited space some common words are abbreviated, or shortened in the parts catalogs. If you do not understand an abbreviation always ask your supervisor or another parts worker. You cannot be expected to know them all and you may guess incorrectly. You will be surprised how quickly you will learn them.

Some common abbreviations used in Figure A are listed below, together with what they mean.

- AC = Air Conditioner
- Alt. = Alternator
- Comp = Compressor
- Exc. = Except
- W/ = With
- W/O = Without
- W/W/O = With or without

Once you have found the correct section in the catalog, more information will be needed. Suppose the customer needs a fan belt for a 1979 Chrysler LeBaron.
### Chrysler—Lebaron

#### Belt Specifications

<table>
<thead>
<tr>
<th>Year</th>
<th>Model</th>
<th>Belt No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>&quot;6&quot; 225 Eng., Fan &amp; Alt. (Exc. 100 Amp. Alt.)</td>
<td>ALL 15575</td>
<td>Power Steering</td>
</tr>
<tr>
<td></td>
<td>Power Steering</td>
<td>w/o AC 15450</td>
<td>Fan &amp; Power Steering</td>
</tr>
<tr>
<td></td>
<td>Fan &amp; Air Pump</td>
<td>w/o AC 15450</td>
<td>Fan &amp; Air Pump</td>
</tr>
<tr>
<td>1979</td>
<td>&quot;6&quot; 225 Eng., Fan &amp; Alt. (Exc. 100 Amp. Alt.)</td>
<td>ALL 15675</td>
<td>Power Steering</td>
</tr>
<tr>
<td></td>
<td>Power Steering</td>
<td>w/o AC 15395</td>
<td>Power Steering</td>
</tr>
<tr>
<td></td>
<td>Air Pump</td>
<td>w/o AC 15485</td>
<td>Power Pump</td>
</tr>
<tr>
<td></td>
<td>Fan &amp; Air Pump</td>
<td>w/o AC 15485</td>
<td>Fan &amp; Air Pump</td>
</tr>
<tr>
<td>1978</td>
<td>&quot;6&quot; 225 Eng., Fan &amp; Alt. (Exc. 100 Amp. Alt.)</td>
<td>ALL 15675</td>
<td>Power Steering</td>
</tr>
<tr>
<td></td>
<td>Power Steering</td>
<td>w/o AC 15395</td>
<td>Power Steering</td>
</tr>
<tr>
<td></td>
<td>Air Pump</td>
<td>w/o AC 15485</td>
<td>Air Pump</td>
</tr>
<tr>
<td></td>
<td>Fan &amp; Air Pump</td>
<td>w/o AC 15485</td>
<td>Fan &amp; Air Pump</td>
</tr>
<tr>
<td>1977</td>
<td>&quot;6&quot; 225 Eng., Fan &amp; Alt. (Exc. 100 Amp. Alt.)</td>
<td>ALL 15675</td>
<td>Power Steering</td>
</tr>
<tr>
<td></td>
<td>Power Steering</td>
<td>w/o AC 15395</td>
<td>Power Steering</td>
</tr>
<tr>
<td></td>
<td>Air Pump</td>
<td>w/o AC 15485</td>
<td>Air Pump</td>
</tr>
<tr>
<td></td>
<td>Fan &amp; Air Pump</td>
<td>w/o AC 15485</td>
<td>Fan &amp; Air Pump</td>
</tr>
</tbody>
</table>

### Chrysler—Continued

#### Radiator Hose Specifications

<table>
<thead>
<tr>
<th>Year</th>
<th>Model</th>
<th>Upper Hose</th>
<th>Lower Hose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>V-8 318 Eng. w/o AC</td>
<td>CH463</td>
<td>M90</td>
</tr>
<tr>
<td></td>
<td>w/o AC</td>
<td>CH975</td>
<td>M92 Ch780</td>
</tr>
<tr>
<td></td>
<td>w/o AC</td>
<td>CH637 By-Pass</td>
<td>CH780</td>
</tr>
<tr>
<td>79-78</td>
<td>V-8 440, 440 Eng. w/o AC</td>
<td>CH639</td>
<td>M37 CH780</td>
</tr>
<tr>
<td>78-75</td>
<td>V-8 318 Eng. w/o AC</td>
<td>CH463</td>
<td>M37 Ch780</td>
</tr>
<tr>
<td></td>
<td>w/o AC</td>
<td>CH975</td>
<td>M91 Ch780</td>
</tr>
<tr>
<td></td>
<td>w/o AC</td>
<td>CH637 By-Pass</td>
<td>CH780</td>
</tr>
<tr>
<td>1978</td>
<td>V-8 360 Eng. w/o AC</td>
<td>CH463</td>
<td>M37 Ch780</td>
</tr>
<tr>
<td></td>
<td>w/o AC</td>
<td>CH975</td>
<td>M91 Ch780</td>
</tr>
<tr>
<td></td>
<td>w/o AC</td>
<td>CH637 By-Pass</td>
<td>CH780</td>
</tr>
</tbody>
</table>

### Citroen

#### Belt Specifications

<table>
<thead>
<tr>
<th>Year</th>
<th>Model</th>
<th>Belt No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1968</td>
<td>GS 16, GS19, DS21 Pallas, M10, ID190</td>
<td>ALL 15375</td>
<td>Power Steering, Pump</td>
</tr>
<tr>
<td></td>
<td>After 7-67 (28%4%) F8 or F &amp; Alt.</td>
<td>ALL 15395</td>
<td>Power Steering, Pump</td>
</tr>
<tr>
<td></td>
<td>Power Steering, Pump</td>
<td>ALL 15310</td>
<td>Power Steering, Pump</td>
</tr>
<tr>
<td>1978</td>
<td>10-64</td>
<td>ALL 15300</td>
<td>Hyd. Pump</td>
</tr>
<tr>
<td></td>
<td>10-65-66</td>
<td>ALL 15300</td>
<td>Hyd. Pump</td>
</tr>
<tr>
<td></td>
<td>10-66-67</td>
<td>ALL 15300</td>
<td>Hyd. Pump</td>
</tr>
<tr>
<td>1977</td>
<td>10-68</td>
<td>ALL 15300</td>
<td>Hyd. Pump</td>
</tr>
<tr>
<td></td>
<td>10-69</td>
<td>ALL 15300</td>
<td>Hyd. Pump</td>
</tr>
<tr>
<td></td>
<td>10-70</td>
<td>ALL 15300</td>
<td>Hyd. Pump</td>
</tr>
<tr>
<td></td>
<td>10-71</td>
<td>ALL 15300</td>
<td>Hyd. Pump</td>
</tr>
<tr>
<td></td>
<td>10-72</td>
<td>ALL 15300</td>
<td>Hyd. Pump</td>
</tr>
<tr>
<td></td>
<td>10-73</td>
<td>ALL 15300</td>
<td>Hyd. Pump</td>
</tr>
</tbody>
</table>

### Classic (See American Motors Standard)

### Colt (See Dodge Colt)

### Comet (See Mercury Comet)

### Concord (See American Motors Concord)

### Continental (See Lincoln Standard)

### Cordoba (See Chrysler Cordoba)
(See Fig. A) To be sure you are giving the customer the correct fan belt, you will have to ask the following questions:

1. What size is the engine?
2. What equipment is on the engine? (Such as air conditioning, or power steering)
3. Does the engine have any heavy duty equipment, such as a larger fan or radiator?
4. Is the car equipped with a standard or an automatic transmission.

If the customer replies that he or she has a 6-cylinder 225 engine with power steering, but without an air conditioning, you would look along the line that said "Power Steering . . . . . W/O Ac" (under the 1979 "6" 225 Eng. section) and see that the correct part number would be 15390. (Refer back to Figure A.)

If there is a symbol (such as *) next to a part number in a catalog, this means there is a note (called a foot-note) about that part at the bottom of the page. Always read the notes when they concern a part you are about to sell, because they will give you more important information. For an example look at Figure A again. In the Chrysler-LeBaron section there is an asterisk (*) next to part number 15570. Looking at the foot of the page for the same symbol (the *), you will read next to it that the customer will need two belts. Certainly important news for you and your customer.

Look at the second example of a parts catalog page in Figure B. (See Figure B on the next page.) Notice how many different sizes of engines are made in the same year. Look at the different valve seal sets that are used and the different engines the seals fit.

Look at the headings at the top of Figure B. These tell you what information is contained in each column. It gives YEAR, NO. of CYL. (number of cylinders), ENGINE, the VALVE SEAL SET and the VALVE SEAL TOOL.

The tool is necessary to install the valve seals. If a customer needs valve seals for a 1964 Chevrolet Truck you will need to ask him or her how many cylinders the engine has and what size the engine is. Without this information you will not be able to identify the correct part. If the customer replies that he or she has a "4 cylinder, 153" you will look at the first line under the sub-heading
<table>
<thead>
<tr>
<th>YEAR</th>
<th>NO OF CYL</th>
<th>ENGINE</th>
<th>VALVE SEAL SET</th>
<th>VALVE SEAL TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962-69</td>
<td>8</td>
<td>327 (Replaceable Valve Guide)</td>
<td>VS-28</td>
<td>VST-1611</td>
</tr>
<tr>
<td>1958-61</td>
<td>8</td>
<td>348</td>
<td>VS-4</td>
<td>VST-2012</td>
</tr>
<tr>
<td>1967-73</td>
<td>8</td>
<td>350 (Single Valve Spring)</td>
<td>VS-2</td>
<td>VST-1811</td>
</tr>
<tr>
<td>1967-73</td>
<td>8</td>
<td>350 (Double Valve Spring)</td>
<td>VS-24</td>
<td>VST-1711</td>
</tr>
<tr>
<td>1967-73</td>
<td>8</td>
<td>350 (Replaceable Valve Guide)</td>
<td>VS-28</td>
<td>VST-1611</td>
</tr>
<tr>
<td>1965-70</td>
<td>8</td>
<td>396 (Single Valve Spring)</td>
<td>VS-4</td>
<td>VST-2012</td>
</tr>
<tr>
<td>1965-70</td>
<td>8</td>
<td>316 (Double Valve Spring)</td>
<td>VS-21</td>
<td>VST-1712</td>
</tr>
<tr>
<td>1970-73</td>
<td>8</td>
<td>400 (2 bbl carb) (Single Valve Spring)</td>
<td>VS-2</td>
<td>VST-1811</td>
</tr>
<tr>
<td>1970-73</td>
<td>8</td>
<td>400 (2 bbl carb) (Double Valve Spring)</td>
<td>VS-24</td>
<td>VST-1711</td>
</tr>
<tr>
<td>1970-73</td>
<td>8</td>
<td>402 (Turbo-Jet 400/4 bbl carb) (Single Valve Spring)</td>
<td>VS-4</td>
<td>VST-2012</td>
</tr>
<tr>
<td>1970-73</td>
<td>8</td>
<td>402 (Turbo-Jet 400/4 bbl carb) (Double Valve Spring)</td>
<td>VS-21</td>
<td>VST-1712</td>
</tr>
<tr>
<td>1961-65</td>
<td>8</td>
<td>409 (Single Valve Spring)</td>
<td>VS-2</td>
<td>VST-2012</td>
</tr>
<tr>
<td>1961-65</td>
<td>8</td>
<td>409 (Double Valve Spring)</td>
<td>VS-21</td>
<td>VST-1712</td>
</tr>
<tr>
<td>1966-69</td>
<td>8</td>
<td>427 (Single Valve Spring)</td>
<td>VS-2</td>
<td>VST-2012</td>
</tr>
<tr>
<td>1966-69</td>
<td>8</td>
<td>427 (Double Valve Spring)</td>
<td>VS-21</td>
<td>VST-1712</td>
</tr>
<tr>
<td>1970-73</td>
<td>8</td>
<td>454 (Single Valve Spring)</td>
<td>VS-4</td>
<td>VST-2012</td>
</tr>
<tr>
<td>1970-73</td>
<td>8</td>
<td>454 (Double Valve Spring)</td>
<td>VS-21</td>
<td>VST-1712</td>
</tr>
</tbody>
</table>

**CHEVROLET MARINE ENGINES**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NO OF CYL</th>
<th>ENGINE</th>
<th>VALVE SEAL SET</th>
<th>VALVE SEAL TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963-65</td>
<td>4</td>
<td>153</td>
<td>VS-2</td>
<td>VST-1811</td>
</tr>
<tr>
<td>1960-63</td>
<td>6</td>
<td>145</td>
<td>VS-26</td>
<td>Not Required</td>
</tr>
<tr>
<td>1964-65</td>
<td>6</td>
<td>164</td>
<td>VS-26</td>
<td>Not Required</td>
</tr>
<tr>
<td>1963-65</td>
<td>6</td>
<td>194</td>
<td>VS-1</td>
<td>VST-1811</td>
</tr>
<tr>
<td>1967-53</td>
<td>6</td>
<td>216</td>
<td>VS-1</td>
<td>Not Required</td>
</tr>
<tr>
<td>1963-69</td>
<td>6</td>
<td>230</td>
<td>VS-1</td>
<td>VST-1811</td>
</tr>
<tr>
<td>1941-62</td>
<td>6</td>
<td>245</td>
<td>VS-1</td>
<td>Not Required</td>
</tr>
<tr>
<td>1966-73</td>
<td>6</td>
<td>260</td>
<td>VS-1</td>
<td>VST-1811</td>
</tr>
<tr>
<td>1953-62</td>
<td>6</td>
<td>264</td>
<td>VS-1</td>
<td>Not Required</td>
</tr>
<tr>
<td>1966-73</td>
<td>6</td>
<td>292</td>
<td>VS-15</td>
<td>VST-2012, VST-20A14</td>
</tr>
<tr>
<td>1965-73</td>
<td>6</td>
<td>478, 478M</td>
<td>VS-15</td>
<td>VST-2012, VST-20A14</td>
</tr>
<tr>
<td>1965-67</td>
<td>8</td>
<td>265 (Single Valve Spring)</td>
<td>VS-2</td>
<td>VST-1811</td>
</tr>
<tr>
<td>1950-57</td>
<td>8</td>
<td>265 (Replaceable Valve Guide)</td>
<td>VS-28</td>
<td>VST-1611</td>
</tr>
<tr>
<td>1951-61</td>
<td>8</td>
<td>283 (Single Valve Spring)</td>
<td>VS-2</td>
<td>VST-1811</td>
</tr>
<tr>
<td>1952-67</td>
<td>8</td>
<td>283 (Replaceable Valve Guide)</td>
<td>VS-28</td>
<td>VST-1611</td>
</tr>
<tr>
<td>1958-73</td>
<td>8</td>
<td>307 (Single Valve Spring)</td>
<td>VS-2</td>
<td>VST-1811</td>
</tr>
<tr>
<td>1958-73</td>
<td>8</td>
<td>307 (Replaceable Valve Guide)</td>
<td>VS-28</td>
<td>VST-1611</td>
</tr>
<tr>
<td>1962-68</td>
<td>8</td>
<td>327 (Single Valve Spring)</td>
<td>VS-2</td>
<td>VST-1811</td>
</tr>
<tr>
<td>1962-68</td>
<td>8</td>
<td>327 (Replaceable Valve Guide)</td>
<td>VS-28</td>
<td>VST-1611</td>
</tr>
<tr>
<td>1958-65</td>
<td>8</td>
<td>348</td>
<td>VS-2</td>
<td>VST-1811</td>
</tr>
<tr>
<td>1958-65</td>
<td>8</td>
<td>348</td>
<td>VS-28</td>
<td>VST-1611</td>
</tr>
<tr>
<td>1969-73</td>
<td>8</td>
<td>350 (Single Valve Spring)</td>
<td>VS-2</td>
<td>VST-1811</td>
</tr>
<tr>
<td>1969-73</td>
<td>8</td>
<td>350 (Replaceable Valve Guide)</td>
<td>VS-28</td>
<td>VST-1611</td>
</tr>
<tr>
<td>1966-70</td>
<td>8</td>
<td>396</td>
<td>VS-4</td>
<td>Not Required</td>
</tr>
<tr>
<td>1970-73</td>
<td>8</td>
<td>400 (2 bbl carb)</td>
<td>VS-2</td>
<td>VST-1811</td>
</tr>
<tr>
<td>1970-73</td>
<td>8</td>
<td>402 (Turbo-Jet 400/4 bbl carb)</td>
<td>VS-4</td>
<td>VST-12</td>
</tr>
</tbody>
</table>
QUESTIONS NUMBER 1 AND 2 ARE FOLLOWED BY A NUMBER OF POSSIBLE ANSWERS. SELECT THE ANSWER WHICH ANSWERS THE QUESTION CORRECTLY AND PLACE THE LETTER IN THE BLANK PROVIDED.

1. ____ How do you find out what the customer needs?
   a. by guessing
   b. by asking the customer questions
   c. by asking another parts counter worker questions

2. ____ If you sell a customer the wrong part, what is likely to happen?
   a. your boss will be pleased with your work
   b. the customer will probably always shop at your store
   c. the customer will be irritated, will blame you, and will probably not shop at your store next time

WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

3. What are the following abbreviations short for?
   a. Alt.
   b. W/0
   c. AC
   d. W-W/0
   e. Exc.

4. When should you ask for the vehicle engine size?
5. When should you ask the customer if the engine has special equipment?
Self Assessment

Answers

1. b

2. c

3. a. alternator
   b. without
   c. air conditioning
   d. with or without
   e. except

4. Whenever the part you are looking for has many different variations,
   depending on the size of the engine.

5. When the catalog shows that parts are different for those engines that
   have special equipment.
COMPLETE THE FOLLOWING ASSIGNMENTS.

1. **Role Playing.**
   Pretend that you are a parts counter worker and have another student play the role of a customer. (Both look at Figure A.) Have the "customer" pretend he or she needs a fan belt for a Chrysler LeBaron. Let the "customer" choose which year, model, and optional equipment they have. (The student playing the customer should jot this down, together with the part number of the fan belt that they think would fit. They should not tell you which car they have chosen.) You should then ask the "customer" questions to find the right fan belt for the car. Did you both come up with the same part number?

   Now reverse roles with you now playing the customer, and pretend you need a fan belt for a different year and model of Chrysler LeBaron.

2. **Obtain a parts catalog** (auto parts stores often have out-of-date ones) and look at parts for various engines or transmissions. How many different transmissions and models of engines does Chevrolet sell?

3. **Find two footnotes in your catalog.** Write down what the footnotes say and why you think they were necessary.
STUDY FIGURE B CAREFULLY AND ANSWER THE FOLLOWING QUESTIONS.

1. How many different seal sets are shown on the page?

2. What seal set is required for a 1972 Chevrolet 402 passenger car with a single-valve spring?

3. If the engine in question has a double-valve spring, would it use the same seal set? How do you know?
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. Look at Figure A. What is the part number of the belt required to drive a 1978, 360 C.I., with power steering and a 100-Amp Alternator, but without an air pump or air conditioning (AC)?

2. Where would you find belt information about a Colt? (Figure A)

3. What does the symbol ● mean next to the Radiator Hose part #CH463?

4. How many belts are required for a Chrysler LeBaron 1979 V/8, 318, alt. and comp. W/ 100-amp alt.? What is the number of the belts required? (Figure A)

5. What seal set is required for a 1964-292-Chevrolet engine? (Figure B)

6. What seal set is required for a 1964, 327, W/ single valve spacing? (Figure B)
1. 15450
2. Under Dodge Colt
3. Three belts required (install in matched sets)
4. 2, 15585
5. VS-1
6. VS-2
Goal:
The student will be able to identify the principles of handling money correctly and will practice those principles.

Performance Indicators:
The student will complete a Self Assessment, an Assignment, a Job Sheet, and a Post Assessment, and will practice counting out change. The student will also become proficient in the use of a cash register and an adding machine or calculator.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. Study the Information section. This section will give you the information you need to understand the subject.

5. Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Money collected in your store for a sale of merchandise should be rung up on a cash register immediately. The invoice should be dated, the sale amount written in, and the invoice should be signed. This assures that the sale is completed and the money received. The cash register receipt is made out and marked. Sometimes a "Paid" stamp is used on the customer's copy of the invoice and no cash register receipt is given.

Money that is collected for a sale of merchandise belongs to the employer. Honesty is very important. Improper handling of money, especially cash, could cause you to lose your job.
Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

CASH DROP--Money taken out of the cash drawer that is more than you need to make change. Money taken by manager to put in safe.

SURPLUS CASH--Money that is more than you started with; money taken in by sales; more money than necessary to run your cash register.

CASH DRAWER--The drawer that can be lifted easily from a cash register; it has divisions for bills and change.
Supplementary References

2. The Inside Salesman. NAPA.
3. Auto Parts Counter Worker. University of Texas.
If you handle money collected for the sale of merchandise in the parts store, you need to know a few things in addition to the duties of supplying parts to customers:

* How to operate a cash register and adding machine or calculator
* The method of giving a receipt to the customer for money received
* The policy of your store on receiving checks
* How to "close out" the cash register and balance the money
* The method of discounts used and how to figure them for your store
* If you must collect a sales tax, how the tax is figured and how it is recorded on a sales receipt

If the sale is large or involves several different items and prices, use a calculator or adding machine to be sure you are accurate. Do this before using the cash register tape.

If your firm has rules on check receiving (accepting checks from customers), follow them. Sometimes only the manager or a senior employee will be able to receive checks. Whatever the policy is, follow it.

The cash register drawer you use will probably start with $25, which is used to make change: one $10 bill, two $5 bills, five dollars in quarters, dimes, nickels, and pennies. (Fifty-cent pieces are seldom used. If you receive some, be sure to place them where they will not be mixed with other coins.)

Coins come in paper rolls: pennies--50 to a roll; nickels--2 to a roll; dimes--5 to a roll, and quarters in $20 rolls.

Large bills (twenties, fifties, etc.) and checks should be placed in the
compartment beneath the cash drawer. If you take in a large amount of money
(above the cash you started the day with), ask the manager or person in charge
to remove some. He or she will record the amount and give you a receipt for
it. FCR SECURITY REASONS (DANGER OF THEFT) LARGE AMOUNTS OF CASH SHOULD
NOT BE KEPT IN THE CASH REGISTER. Never turn away from, or leave, the cash
register with the drawer open. It is a temptation for someone to steal.

To be accurate in handling money, you should always count back change from
a cash sale. For example, if a sale totals $12.99 and the customer gives you
a $20 bill, you should:

1. Lay the $20 bill on the shelf above the cash drawer. This prevents
   confusion about the size of the bill the customer gave you.
2. Remove money from the drawer to make change: one penny, two $1 bills,
one $5 bill.
3. As you hand back the change, count it out aloud as you place it in
   the customer's hand. ("Thirteen," give the customer the penny;
   "fourteen, fifteen," give the customer the two $1 bills, one at a
time; then give the customer the $5 bill and say, "and twenty.
   Thank you.")
4. Be sure to give the customer a receipt or stamp the invoice "PAID,"
   whichever is your store's policy.
5. Place the $20 bill in the register.

To prevent mistakes, employees will arrange bills in the cash drawer so they
all face the same way. Be sure bills and coins are in the correct spaces for
their denominations. This prevents mistakes and gives the worker a good
idea of the amount of money taken in.

At the end of the day, the total of the cash register tape should be equal to
the amount of cash and checks you took it, plus any receipts for cash drops,
minus the money you started the day with (to make change).

Always keep in mind that the money in the cash register belongs to the
employer; honesty is of great importance. If you are dismissed for stealing
dishonesty, your chances of getting a job anywhere will be very slim.
Stealing from an employer is almost certain cause for immediate dismissal.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What does the counter worker do so the customer can prove he or she paid the bill?

2. How much money is in the cash register at the beginning of each day?

3. What should be done with checks?

4. Where are checks and large bills placed?

5. Why does the counter worker count out change to customers?
1. Gives the customer the cash register receipt and/or stamps the invoice "PAID."

2. Usually $25 in small bills and change.

3. Follow store policy on check cashing.

4. In the compartment beneath cash drawer.

5. For accuracy and to avoid mistakes.
COMPLETE THE FOLLOWING ASSIGNMENT.

Practice counting out change by simulating sales of different amounts. Use money or play money to develop skill.
COMPLETE TWO OF THE FOLLOWING THREE TASKS.

1. Learn to operate a cash register.

2. Learn to operate an adding machine.
   or

3. Learn to operate a calculator.

It is important that a counter worker be able to use these machines quickly and accurately. Practice until you can!
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. Why is a cash drop necessary during the working day?

2. Why are large bills and checks put in the compartment under the cash drawer?

3. How can you help prevent theft from your cash drawer?

4. Why is honesty important?

5. How much money is in a roll of quarters? Dimes?
1. To remove large amount of cash from the cash drawer, for security reasons.

2. For security reasons.

3. Place large bills **below** drawer, never leave cash register drawer open or unattended.

4. Money belongs to firm or business; you are subject to immediate dismissal for dishonesty or theft.

5. Quarters $20 to a roll.
   Dimes $5 to a roll.
"SELLING: GETTING THE JOB DONE"

**Goal:**

Student will be able to identify good sales attitudes.

**Performance Indicators:**

The student will complete a Self Assessment, an Assignment, a Job Sheet and a Post Assessment, and will observe and practice sales techniques.
Study Guide

In order to finish this module, do the following tasks. Check each item off as you complete it.

1. Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. Study the Information section. This section will give you the information you need to understand the subject.

5. Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
One of the most challenging jobs of a parts counter worker is selling. Good skills can lead to a better job in the parts sales field.

Selling ability is important to your store's success and your ability to serve your customers. The knowledge of products, store policies, people and procedures is very important. Selling goes beyond just supplying the parts your customer wants. Selling customers the related items, as well as equipment and supplies necessary to do the job, is another important part of your job as parts counter worker.

Having the ability to persuade people to buy is known as selling. A salesperson knows how to use attention, interest and principles of salesmanship to lead customers to buy.
Vocabulary

Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

RELATED ITEMS—arts, supplies, products or equipment and special tools which a customer can (or would) use to do the job easier, better, or faster and cheaper.

INFLUENCE—The ability to produce effects without use of force or authority.

SALESMA NSHIP—The ability or skill of selling.

ATTITUDE—A manner that shows how people accept or look at something, how they may feel about a job.

ATTRIBUTES—A characteristic or quality that someone has, kindness, friendliness. The ability to sell is an attribute. An attribute can be developed.
Supplementary References


Every person who walks to the counter or comes in the store is a possible sale. How do you turn it into a real sale?

1. You should try to create a favorable impression with every customer you meet. Starting off with a friendly greeting is a good start. Remember, the first impression you give to a customer can be a lasting one, and it should be a GOOD one.

2. Follow the opening greeting with a question like "How can I help you?" or something that shows you are willing and ready to help.

3. A little social talk about the weather is fine, but don't over-do it. Too much chit chat wastes the customer's time, and there may be other customers waiting.

4. Greet customers at the counter IMMEDIATELY, even if you aren't able to wait on them right away. To be recognized is important to the customers. They know you have seen them and will get to their needs as soon as you can.

5. Good sales people are good LISTENERS. Good listening is one part of good selling. A good salesperson can use things the customer says as a way to know what the customer needs. It also alerts you to things the customer may need to complete the job.

6. Give the customer you are serving your IMMEDIATE, UNDIVIDED attention. It's a good way to train yourself to become a good listener. Try some of these when you listen to a customer:
   a. Do you detect any helplessness, hesitance, impatience on the part of the customer?
   b. Wait until the customer finishes talking; don't interrupt with questions of your own.
   c. If the customer doesn't give you enough information, ask questions when he or she is finished. Ask in a friendly manner. Don't talk "down" to a customer or be impatient.
d. Write notes as you listen; you can refer to them later and you won't need to ask unnecessary questions.
e. Don't silently judge a person. You shouldn't judge whether a customer is "dirty," "sloppy," or "cheap." Judging someone blocks your ability to listen.
f. Avoid any reference to race, religion, nationality or color; this could damage relations, lose a sale and lose customers. Also, you might hear from your boss and lose your job!

An aid to listening is learning when and what questions to ask.
1. Ask for complete information. You need make, model, year, component part number, etc.
2. What kind of problem does the customer have?
3. What does the customer want?
4. What other items (related parts) does the customer need?

You should understand the customer and be aware of the job he or she is doing. What other parts or products might be required? Think of his or her job in terms of your knowledge. If the customer is grinding valves on an engine, you should be thinking of what related parts might be needed, and suggest them. Carburetor timing chain, new valves, and many other items might be needed for the job. Write some of these on your notes. If a customer's needs aren't clear to you, ask other parts counter workers for help.

Suggest and sell related items that will benefit the customer. Things that save time and money may be important to the customer. If it means he or she can do a better job and make more profit, say so. If it makes a better job for your customer's customer, it is sure to make a customer for you.

Don't "oversell" customers. Don't persuade them to buy items or products they don't need or can't afford. This is "overselling" and can cause hard feelings on the part of the customer. If customers leave the store and say to themselves, "I didn't need all this stuff; that salesperson really got to me! I've been had!", you probably won't see them again.

It is important that you have a good attitude toward your job. You should be loyal to your store; don't talk badly about the place, not to anyone.
you don't have respect and loyalty for your job, quit it and find another. Be pleasant and work with fellow workers. Cooperation with them will make your work more pleasant and your job easier.

Develop the following attitudes:
1. Be interested in the job of selling.
2. Learn as much as possible about the wholesaling business.
3. Keep up-to-date with catalogs, parts, equipment, products, supplies and manufacturer's lines.
4. Increase your knowledge of vehicles, equipment and related automotive supplies and products.
5. Learn from every selling experience.

Try to apply the following principles of selling to your job. Selling sounds like a difficult thing to do, but it really isn't.

* Get the attention of the customer. Your questions, your merchandising displays and product pamphlets are all means of getting the prospective buyer's attention.

* Find out what the customer needs and create some interest in a particular product or part. Stop "selling" and let the customer ask questions.

* Believe in the product. It's a good way to convince the customer if you are already convinced that a product will do what it says it will.

* Appeal to the customer's sense of pride in work and need for profits.

* Make it easy for the customer to buy. Once the customer is convinced he or she needs the part, mention the store's policy on discounts, charging, credit, etc. This may make it easier for the customer to buy.

* For any sales order in a positive way. Ask, "Can we send this along with your order?" or "May we put this on your account?"

* Your sense of timing about when to close the sale is important. If there is a pause or hesitation, say, "Shall I write this up now or were there some other things you needed to Jay?" Taking action completes the sale.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What are the steps of a sales process?

2. What would be related items for a valve grind; list 3 items.

3. What attributes should you develop to become a better sales person?

4. What are some things to remember about becoming a better listener?
Self Assessment Answers

1. Getting attention, promoting interest in product or parts, benefits of sales to customer, creating a desire to buy, taking final step (action) to selling.

2. Valves, timing chain, gaskets.

3. Interest in your job, loyalty, knowledge of products and customers, keep up-to-date, learn from experience.

4. Listen, don't interrupt, ask questions or make statements that lead the customer to ask questions, make statements after the customer finishes talking.
Assignment

COMPLETE THE FOLLOWING ASSIGNMENT.

Visit a parts store and observe a "sales" parts counter worker in action. Listen and learn.

1. Write a brief report on your visit. Write about things such as sales techniques used. Were hints on selling you've learned about used in situations you observed? List the hints. Give the report to your instructor.
COMPLETE THE FOLLOWING TASKS.

1. Team up with a classmate. One of you will be the prospective customer, the other will be the sales counter worker.
   a. Use steps and hints on selling.
   b. Be a good listener.
   c. Ask questions.

2. Reverse roles and simulate "sales resistance" or reluctance to buy.

3. List statements and questions you use to make selling easier for you to do.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What are related items?

2. What is a greeting to use when a customer walks into your store?

3. What do you do if you find the customer wants something you never heard of before?

4. What attitude should you have toward your store?

5. How can you make the selling job easier?
Instructor Post Assessment Answers

1. Items a customer may need to speed up the job, do it better or make more profit.

2. "Hello _____, how can I help you?"

3. Ask for a co-worker's help or ask sales manager for assistance.

4. Loyalty, pride in product, pride in merchandise you sell.

5. Develop sales attributes, be knowledgeable about parts and products, keep up-to-date on catalogs and prices.
SALESMA SHIP

Goal:
The student will identify the steps in handling the customer orders in a satisfactory manner.

Performance Indicators:
The student will understand the fine principles necessary for developing a good sales attitude by completing a Self Assessment, an Assignment, a Job Sheet and a Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. **Read the Goal and Performance Indicators on the cover of the module.** This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. **Read the Introduction.** The Introduction will tell you why the module is an important part of the parts counter trade.

3. **Study the Information section.** This section will give you the information you need to understand the subject.

4. **Take the Self Assessment exam.** This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

5. **Do the Assignment page.** Follow the instructions at the top of the Assignment page.

6. **Do the Job Sheet.** Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

7. **Take the Post Assessment exam.** Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
The main duty of the parts counter worker is to sell the merchandise and services that the store has for sale. It is a difficult job.

There are more than 130 million cars and trucks on the nation's highways. These vehicles each contain more than 15,000 parts. Besides all the cars and trucks, there are millions of stationary pieces of equipment like small engines, lawnmowers, outboard motors and the tools and equipment needed to repair them.

In addition to knowing the technical and mechanical end of the auto parts business, the parts counter worker must be able to handle customers in a prompt and cheerful manner.

The ability to develop an understanding of human relations will help a parts counter worker be a success.
Supplementary References


2. Auto Parts Counter Worker. University of Texas.

Making a profit and balancing the stock is part of the work that goes on between the store and the parts counter worker. Much time and effort may be spent in getting the customer into the store to buy parts. The sale might not be made if the customer is not properly served by the parts counter worker.

Think of yourself as a customer. You would not want to be served by someone in dirty or messy clothes. Remember, you are behind the counter and you represent the store. Your speech, your attitude and your knowledge tell the customer the good and bad points of you and your store.

Believe in your job and your product. As a parts counter worker you are a salesperson, and if you don't believe, you are merely behind the counter, not selling. You might as well be one of the fixtures.

The first step to becoming a good salesperson is to develop a good, wholesome, proper attitude. You must have the proper attitude about yourself, your job, your business organization, your product and your customer. A proper selling attitude is based on several principles.

* Do not just take customer orders. "Waiting on customers" is a bad phrase and you should forget it. Your real job is to serve and assist the customer in every way. Some parts counter workers just wait for the customer to tell them what they need. Customers should go out of the store knowing they bought the right product and the right services, accessories and all that is needed to do the job properly.

* Discover the personal satisfaction of selling. A person feels good when
he or she has helped another person. Selling is the challenge of helping people.

* It helps to have a genuine interest in a customer's needs and problems. A person needs assistance when his or her car won't run as it should. Part of your job is to advise and assist in helping the customer solve the problem. Try not to say, "Sorry, we don't have the part," or "Sorry, I can't help you." If you are interested enough to help solve the problem, you will probably make a friend, and win a customer for your business.

* Another important point is to sell quality to the customer. The owner of a vehicle wants what is best for that vehicle. A large investment is made for a car or truck and the owner expects quality performance from it. When you sell a product or provide a service, be sure to tell the customer it is a quality product which can be relied on.

* Customers judge a business by the appearance. You wouldn't want to go into a store that is messy, or has junk on the floor and counters in a sloppy arrangement. Messy clothes, grease-smeared invoices and dirty parts add up to a sloppy attitude by the store. Personal cleanliness and an orderly, clean, well-run store helps build the customer's confidence.

* Greeting the customer is the first step in the sale of any part. Calling the customer by name shows a good interest and a desire to serve. A friendly smile shows your greeting is sincere.

* Determine the customer's wants and needs. Ask questions to get all the facts. Your knowledge of the vehicle and your catalog helps the customer. If parts needed are not in stock, they may have been replaced by another part. A new part might be unfamiliar to the customer. Explain how the part works or how to install it. Give advice if special tools or other equipment is needed to install it. Get clues about problems by asking the customer questions.

* You may have to demonstrate how a product performs. Show the customer so he or she can judge the quality and performance. You may have to learn how to perform such a demonstration beforehand in order to do it correctly.
Show any advertising brochures and literature you may have and any facts in charts or tables. Let the customers see, so they can judge. Remove the part from the box to be sure that no mistake has been made in packaging. If the customer objects to size, price, terms, delivery, credit, trade-in allowances, or any other reason for buying, you have a real test of sales ability.

* Do not talk the customer into buying something that is not needed. You should never "high pressure" your customer into buying something. Sales resistance means that there is some question in the customer's mind. Listen to him or her, they may be telling you their wants and needs, but you aren't listening.

* Objections to price may be overcome by pointing out quality, reliability and long-life of the product. Explain credit terms and store policies on credit and discounts.

* If the customer objects to brand names, show guarantees of quality and performance. Take time to explain anything they do not understand.

* Fill the order quickly and accurately. When the order is ready, assure the customers of their correct choice and thank them for the business. If properly treated, the customer will be back for repeat business.

A lot of the parts counter sales are handled over the telephone. Courtesy and friendliness are the main parts of good telephone manners. Sometimes the counter worker is interrupted at the sales counter by the telephone. Use good judgment in determining who must wait.

Rules or good telephone use can be an asset to your sales ability if followed properly:

1.) Voice is the only clue to your personality. Prompt, friendly, courteous service is a must.

2.) Answer promptly in a business-like manner. Identify the place of business and give your name. You then may offer service by asking, "May I help you?"

3.) Use the same techniques and attitudes you would use if you were selling the customer in person.
4.) Write down requests, repeat the information aloud so you are sure it is correct.

5.) Check catalog and parts inventory if time permits. If it doesn't, look up the necessary parts and prices and call the customer back.

6.) Close the phone conversation courteously and hang up gently.

If you promise a phone customer you will call back, do so. If another customer is at the counter, call first, then serve the counter customer. Remember, first come, first served. Explain to the counter customer that you'll be right with him or her, make sure you call quickly and be as brief as possible.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. Describe how you should handle customers.

2. What attitude should the customer have when leaving the store?

3. What is meant by "knowing your products and services?"

4. What things cause the customer to resist buying?

5. How can you increase customers' desire for the product?

2. The correct product or part was purchased, the price was correct, the customer was treated in a friendly courteous manner, and not sold something he or she didn't need.

3. You should know your product lines, their advantages in price, quality and warranty. Services your store can provide and how they can help the customer.

4. Price, discount, allowance for old part, lack of knowledge of product or brand.

5. Show off brand or product. Compare with like brands or product. Advantage of price or discount. Ease of installation or use.
COMPLETE THE FOLLOWING ASSIGNMENTS.

1. List five principles necessary for an aggressive sales attitude.

2. Name six things you can do to develop pleasant relations with your customers.

3. List services that may be offered by an auto parts store.
Job Sheet

COMPLETE THE FOLLOWING TASKS.

1. Set up "role playing" with other students. One student takes the role of the parts counter worker, the other student takes the role of a prospective customer. Reverse roles and simulate problems and sales resistance. How do you overcome the problems?

2. "Role play" by acting out a telephone order between customer and parts store worker. Take orders and "sell" over the telephone. Don't forget the telephone rules.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What are the five principles for developing an aggressive sales attitude?

2. Who is responsible for changing your attitudes?

3. Name 6 things you can do to develop pleasant relations with your customers.
Instructor Post Assessment Answers

1. A. Sell, don't be an order-taker.
   B. Discover the personal satisfaction of selling.
   C. Develop a genuine interest in customer needs and problems.
   D. Sell quality to the customer.
   E. Develop a good appearance.

2. You are: Develop a proper attitude toward yourself, your job, your business organization, your product and your customer.

3. Handle customers promptly, efficiently. Be clean and neatly dressed. Greet customers with a friendly smile, by name, if possible. Believe in the product you sell and be able to demonstrate its use. Know products and services your store can offer. Be helpful, sell don't just take orders. Make suggestions and assist customer in every way. Be sure customer leaves the store pleased with the purchase, the price, product and service was what was needed.
Goal:
The student will be able to identify the differences between a major supplier and lesser-known suppliers, and will identify advantages and disadvantages of each.

Performance Indicators:
The student will demonstrate an understanding of the subject by completing a Self Assessment, an Assignment, a Job Sheet and Post Assessment.
Study Guide

In order to finish this module, do the following tasks. Check each item off as you complete it.

1. Read the Goal and Performance indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. Read the Introduction. The Introduction will tell you why the module is an important part of the parts, counter trade.

3. Study the Information section. This section will give you the information you need to understand the subject.

4. Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

5. Do the Assignment page. Follow the instructions at the top of the Assignment page.

6. Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

7. Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Picking parts that are supplied by major supply companies has both advantages and disadvantages. The well-trained parts counter worker will recognize the name of major suppliers and also what goods, materials and parts they supply.

The beginning parts counter worker should learn the names of major suppliers for the store or parts department in which he or she works. Some major suppliers are well known: Delco-Reny, Motorcraft. But there are many others. The major suppliers are often nation-wide, but may only supply a certain area.

The counter worker should be aware of major suppliers and the products they supply in order to give the customer the best service possible.
Supplementary References

1. Parts Catalogs. (All manufacturers and years.)

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>A1</td>
<td>12345</td>
</tr>
<tr>
<td>B2</td>
<td>B2</td>
<td>67890</td>
</tr>
</tbody>
</table>

**EUGENE**
105 BERTILSON ROAD  -  EUGENE, OR 97402
ORDER DESK 485-2733
WATS 1-800-452-8805

**PORTLAND**
17972 MEWAN ROAD  -  PORTLAND, OR 97223
ORDER DESK 620-8750
OREGON WATS 1-800-452-0910
WASH. WATS 1-800-547-0652

---

**Contact Information**
- **EUGENE**
  - Order Desk: 485-2733
  - WATS: 1-800-452-8805

- **PORTLAND**
  - Order Desk: 620-8750
  - OREGON WATS: 1-800-452-0910
  - WASH. WATS: 1-800-547-0652

---

**Product Specifications**
- **Model A1**
- **Model B2**

---

**Additional Information**
- **Contact Details**
- **Product Lineup**
- **Dryer Parts**
- **Motor Parts**
- **Engine Parts**
- **Transmission Parts**
- **Brake Parts**
- **Electrical Parts**
- **Miscellaneous Parts**

---

**Notices**
- **Warranty Information**
- **Return Policy**
- **Privacy Policy**

---

**Technical Support**
- **Technical Assistance**
- **FAQs**
- **Contact Support**
Picking parts for the auto parts store customer is one of the counter worker's biggest and most important jobs. The choice of the supplier can sometimes make sure the customer is satisfied and completely happy. The wrong choice can mean a very unhappy customer, one which you probably won't see again.

There are several suppliers available for each different part, product, all supplies and materials. Some suppliers are what are known as "major" suppliers, others, less known, are not.

Following are some of the reasons that major suppliers are chosen over lesser-known suppliers:

1. **Availability.** The major companies keep large inventories in local warehouses--within a few hours of even the most remote parts store. Sometimes only a phone call is needed to have the necessary parts on their way.

2. **Price.** Many of the major suppliers give a discount above the normal discount if you buy in quantity (or even buy items that are not usually carried in your inventory).

3. **Merchandising.** Major suppliers will furnish--at no charge--displays of their products. Also, salespeople for the supplier may call on the store, showing new stock, possibly even taking orders and handling all the paperwork. Sometimes, they even go so far as to put the stock on your shelves, label and price it for your store!

4. **Guarantees and Warranties.** If a part fails, the major supplier will take the part back and replace it with a new one (if it is within warranty time). Sometimes, the major supplier will have a policy that will pay the customer for his or her labor if the part fails.

All of these things should be taken into consideration when picking parts.
for your customer.

The smaller parts supplier may also have the advantages that have been listed. The service might be just as good; it might even be on a personal basis. Customers that come into your store may have already used parts and supplies from the lesser-known company. If they have been satisfied, they might want to get parts and supplies from a company they know they can trust.

If it comes to a choice between a major supplier and a lesser-known company, all other things being equal, ask the customer if he or she has a preference. Some customers will want and use only one brand or "make" of parts. If you substitute a part, it might be questioned. Be prepared to tell why you chose one brand over another. If there is any question then, always point out some advantages (and disadvantages) for the choice. Maybe the customer doesn't know the price advantage or the quality or guarantees. Let the customer decide. The customer, after all, will use the part or product.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS IN THE SPACE PROVIDED.

1. What are the advantages of using a major supplier?

2. List any advantages of a lesser-known company over a major supplier.

3. List 3 major suppliers.
Self Assessment Answers

1. Price, availability, warranties, guarantees, merchandising.

2. Service might be better, more personalized, if it's a local company. Customer might prefer it over a major supplier.

3. A-C, Delco-Reny, Motorcraft.
Assignment

COMPLETE THE FOLLOWING ASSIGNMENT.

1. Study the daily order sheet. List the names of companies you know.

2. Are the companies you listed major suppliers?

3. List names you are not familiar with. Find out if they are major suppliers.

4. How would you learn what companies supply what parts and products?

Give the Assignment page to your teacher when you're finished.
COMPLETE THE FOLLOWING TASKS:

Visit a local parts store and ask to see the daily parts order sheet. Does it look like the one in this module?

1. List the major suppliers.

2. Do the major suppliers listed by the parts store person match up with the list you made on the assignment sheet?

3. Ask the names of some of the smaller companies the part store deals with. Why does the store use them?
1. What are the advantages of buying parts from a major supplier?

2. How can a major supplier help sales in your store?
1. Prices may be lower because of large volume buying.

2. Sales people call on your store. Major company helps merchandising by providing displays and promotions.
PICING MERCHANDISE
"WAREHOUSE"

Goal:
Student will become familiar with parts picking in a regional warehouse.

Performance Indicators:
The student will demonstrate knowledge of the subject by successfully completing a Self Assessment, an Assignment, and a Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. Study the Information section. This section will give you the information you need to understand the subject.

5. Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
The operation of the regional warehouse is an important part of the auto parts industry. Its purpose is to supply the jobbers (the parts retailers) with supplies and parts. The warehouse can keep enough parts on hand to make almost any parts available to the jobber's customers without a long delay. Parts are available on a will call basis and can be obtained in just a few hours after ordering. This is a valuable service to the small jobber. It means that the small jobber doesn't have to have large inventory, yet can still provide customers with the parts they want.
Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

CORE--A part that is returned by the customer when a replacement part is purchased. Cores are rebuilt or remanufactured by the factory. Cores are such items as brake shoes, fuel pumps, water pumps, generators, starters, alternators and many others.

WILL CALL--Means person ordering part will come to the warehouse to pick up the parts.

DEFECTIVE PART--Part that was found to be broken after it was bought.
Supplementary References

Auto Parts Counter Worker. University of Texas.
The supplier to the auto parts jobber in most cases is the regional warehouse. The warehouse buys large amounts of parts, supplies, equipment and merchandise directly from the manufacturer. These are stored in the warehouse and sold in smaller amounts to the local parts jobbers. The parts jobbers then sell the parts to their customers.

This is a valuable service for the parts store. It makes it possible for the parts store to have available a lot of parts that would be economically impossible for a small store to keep in stock and carry in their inventory for a long time. When a parts store doesn't have an item in stock, or has sold out of the part, it's possible to get it from the warehouse in only a few hours.

The average warehouse is very large, varying in size from 45,000 square feet to over 100,000 square feet of floor space. Some are two and three stories high.

Another valuable service that the warehouse performs is to buy cores, old parts that are re-buildable, and also parts that are obsolete or returned by a customer because they were defective (broken or assembled wrong). Regional or area warehouses also stock a huge supply of exhaust system parts. This requires a large area for storage and the small parts jobber could not carry even a small selection of the many thousands of exhaust system parts that are available.

The parts picker's only job in the warehouse is to pick parts. Order takers take down the orders over the phone. The part numbers and the quantity
ordered are typed into a computer and the computer subtracts the part from the
inventory and types out the invoice, plus other copies of the order. The
parts-order forms are distributed to various places in the warehouse. Parts pickers receive the orders and begin to gather the parts listed on the orders.

The warehouse is laid out in rows and aisles. The parts are all numbered--from the front of the warehouse toward the rear. The smallest numbers are located at the front. Parts pickers begin with the largest numbers (in the rear of the warehouse) and work their way toward the front. Pickers may use hand baskets, push carts, dollies or electric vehicles to carry the parts in. (The type of parts carrier used depends on the size of the order.)

Parts pickers in the warehouses work various shifts. One crew comes early, usually 8:30 a.m. to 5:30 p.m. The night crew, which works until around midnight, has one job, mainly: to re-stock the shelves with new parts. Unlike parts pickers in retail stores, pickers in the warehouse do not need to work with catalogs or spend time looking up numbers. They pick parts according to the numbers on their parts orders.

The warehouse parts picker must learn the warehouse layout in order to be accurate and fast in picking parts.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. Who buys the parts held in the regional warehouse?

2. What advantage is a warehouse to a small parts store?

3. What are the duties of warehouse parts pickers?

4. Where does a parts picker get the part numbers?

5. Do warehouse parts pickers use catalogs?
1. Local jobbers (independent parts stores).

2. The warehouse has a larger inventory of parts available to the parts jobber on short term notice. The warehouse will buy back cores.

3. Find the correct parts for the customer as quickly as possible.

4. From the parts order invoice.

5. No.
Assignment

COMPLETE THE ASSIGNMENT BELOW.

1. Visit a local parts warehouse and write a brief report about how it operates. What are the differences between it and the example given in the module?
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. Why do parts pickers work various hours?

2. Why would a parts jobber use the warehouse?
1. So that there will always be someone at the warehouse whenever any stores are open. So that customer orders can be filled as quickly as possible.

2. When they do not have a part one of their customers wants to buy. Buying from the warehouse means their customer will not wait the long periods of time it would take to obtain parts from the factory or the manufacturer.
Goal:
The student will be able to identify the steps involved in "picking merchandise."

Performance Indicators:
The student will demonstrate knowledge of the subject by successfully completing the Self Assessment, the Assignment and the Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. **Read the Goal and Performance Indicators on the cover of the module.**
   This will tell you what you will learn by studying the module, and how you will show you’ve learned it.

2. **Read the Introduction.** The Introduction will tell you why the module is an important part of the parts counter trade.

3. **Study the Vocabulary section.** Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. **Study the Information section.** This section will give you the information you need to understand the subject.

5. **Take the Self Assessment exam.** This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. **Do the Assignment page.** Follow the instructions at the top of the Assignment page.

7. **Take the Post Assessment exam.** Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Introduction

Picking merchandise means to remove the articles from stock and sell or otherwise ship to customers who are buying the items. Items must be located in the store, selected and written up on an invoice before they are sold to the customer who orders them.

Items that are heavy or bulky may require special handling, such as using a hand cart, forklift truck, dolly cart or other moving equipment. Some articles that are numerous but small might require boxing or placing in cartons. All articles and supplies should be checked and double checked against the customer's order to insure that they are exactly what the customer ordered.
Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

INVENTORY--A record of the amount of each part or item in stock in the store.
Supplementary References


3. *Auto Parts Counter Worker*. University of Texas.
Picking merchandise is an important part of the auto parts counter worker's job. To do the picking correctly, a few important steps should be followed:

1. Be sure you understand what the customer wants.
2. Write down on a piece of paper what item or items are requested.
3. If you're on the telephone, repeat back to the customer what you have written down as his or her order.
4. Before you start looking for a part, be sure you have all information required for the vehicle: model, year, make, engine size, etc.--everything that would make locating the correct part easier.
5. Don't hold the customer on the phone too long. If necessary, call back after you've looked up the part. If the customer is in the store, you can ask him or her for information as you look up the part in the catalog.
6. Once you have the part number and location in your store, the sale or delivery may take place. This is the actual "picking" of parts.
7. Transfer part numbers from your scratch paper to the invoice. Look up the price on the correct price sheet and complete the invoice as required by your store.
8. If several items are being picked at one time for a customer, put them in a box or bag. If the parts are large or bulky, a cart, such as those found in supermarkets, might make picking parts easier and faster.

If any parts or items requested by the customer are not in stock on your shelves at that time, inform the customer as soon as possible. Make some plan that the customer can agree to to get and/or deliver the parts that are not in stock.

(Refer to Picking Merchandise: "Special Order Parts.")
After the parts are delivered to the customer or otherwise "sold," give a copy of the invoice to the inventory clerk so that the items can be removed from the inventory list. If that is also part of your job, be sure to check on how many items are left in stock to see if re-ordering is necessary.

SUMMARY
Always double-check with the customer that you have understood what he or she wants. BE ACCURATE.

Find out all the necessary details—all their needs, what type of vehicle, etc.

Look up the part number in the correct catalog. Write it down on a piece of paper.

Find the part in the store and remove it from the shelf ("picking the part").

Take it to the counter, look up the price and write up an invoice. Fill out the invoice as required by your particular store.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. Why write part names and numbers on scratch paper rather than using an invoice?

2. When do you get information about the vehicle?

3. If a particular brand name is not available, what can you do?

4. What important step should be done after the part is delivered or "sold" to a customer?

5. If your customer is on the telephone and it seems that it might take you a long time to find out if you have the part they need in stock, what should you do?
1. It is important to do this so you don't waste an invoice. If you write on scratch paper you don't have to remember the part name or number and if changes or corrections need to be made you can do it easily and the invoice will be neat and accurate. If the part isn't in stock you can refer to the scratch paper note when ordering the part for the customer.

2. As soon as the customer tells you what part is required, find out all the information necessary to pick the correct part.

3. Ask the customer if another brand is satisfactory. Sometimes some price differences make other brand names more economical and therefore more attractive for the customer to purchase.

4. Item should be removed from inventory.

5. Suggest to the customer that you call him or her back when you have located the part. (Make sure you have the telephone number.)
Assignment

COMPLETE THE FOLLOWING ASSIGNMENT.

Visit a small parts store and talk with parts counter workers. How do they do picking of parts?
WRITE THE ANSWERS IN THE SPACE PROVIDED.

Write down the steps for "picking merchandise."
1. Be sure you understand what it is the customer wants.

2. Repeat back what the customer has requested.

3. Write part name and number on scratch paper. (To be transferred to invoice later.)

4. Be sure you have information about vehicle, model, year, make, engine size, etc.

5. Don't delay customer unnecessarily.

6. Pick parts from shelf.

7. Transfer information, part name, number to invoice and price out item from price lists.

8. If parts aren't in stock, make some plan to obtain them for customer.
PICKING MERCHANDISE
"SPECIAL ORDER PARTS"

Goal:
The student will understand what it means to "special order" parts.

Performance Indicators:
The student will demonstrate knowledge of the subject by successfully completing a Self Assessment, an Assignment and a Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. Study the Information section. This section will give you the information you need to understand the subject.

5. Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Introduction

It often happens that parts which the customer wants to buy are not readily available. It might also be true that the part required by the customer is not usually stocked by the parts jobber and therefore not in the store's inventory for picking.

It is then necessary to order the part just for that customer.
Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

BUY OUT--A term which means going to a competitor to obtain parts required by your customer. This can be done on a short profit margin or could be done on an exchange basis. For example, you need a part at short notice and it is either not available at the warehouse or the warehouse is closed. You could then get the part from a competitor with the agreement that it would be replaced in 24 hours.
In the course of operating a parts store, customers will often come into the store and ask for parts that you cannot pick from the inventory in stock. It then becomes necessary to try to find the parts for the customer.

There are several ways to do this. You should try to find out if the part needed is on your inventory cards or has been put in the "obsolete" file. If the part is no longer stocked or is out of stock, you can do several things to get it:

1. Call other parts jobbers who you think might have the part and "buy out."
2. Make a special order and obtain the part from your supplying warehouse.
3. Make up a special order and order the part directly from the factory or manufacturer.
4. If you get 2 or 3 requests for the same item, it might be to your advantage to stock the part in your inventory. This provides service to the customer, and you can then pick the parts much easier and faster.

Most parts stores keep a daily sheet of "want" parts and may also include a space for special order parts. (See next page.)

It is usually necessary, whenever parts are special ordered, that the customer pay for the part or parts in advance. Some stores require the total price of the items, plus any postage or shipping charges. You should at least get a large percentage of the price of the item (a deposit) before special ordering. Getting paid in advance for special ordering is good business because:
1. If the customer has had to pay for the part, he or she is more likely to pick it up and you won't be left with a special part that you probably won't be able to sell to anyone else.

2. If you have to return the part the customer doesn't pick up or decides isn't needed, you will have to pay shipping charges both ways, and also may have to pay a penalty for returning or non-acceptance.

When special ordering parts, you should always find out how long you will have to wait to receive it for your customer. Be sure to inform the customer of the time it will take. It may make it necessary for him or her to go elsewhere to find it.

You should try to pick parts for customers in the quickest time for them. It helps their businesses and will mean increased business for you because of the good service you can deliver.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What does it mean to pick parts by "special order?"

2. What should you do if you get repeated requests for parts you have been special ordering?

3. What is a daily want list?

4. Why should you advise the customer of the approximate delay in receiving a special order part?
1. Parts aren't available to pick from stock. It's necessary to order parts from somewhere else.

2. Consider whether it would be profitable to stock the part.

3. List of parts asked for by customers or needed by you for your inventory.

4. Your customer might not want to wait that long and maybe would like to try elsewhere to get the part. It is a nice courtesy to the customer and saves future misunderstanding and frustration.
COMPLETE THE FOLLOWING ASSIGNMENT.

1. Visit a parts store and find out what items they have "special ordered" in the past few days. List them and how long it will be before they receive the part.

2. Ask if a deposit is required for special order parts.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. Why is it not profitable to "buy out?"

2. Why is a deposit necessary for special order parts?

3. List places you can "special order" parts from.
1. Profit margin is small or profit is lost.

2. To pay for possible shipping charges and perhaps loss of sale. If customer has money tied up in the part he or she is more likely to pick it up and you won't be left with a part you can't sell.

3. warehouse, factory, manufacturer.
Goal:
The student will be able to identify hard-to-get parts and will determine how they may be obtained.

Performance Indicators:
The student will complete a Self Assessment, an Assignment and a Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. ___ Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. ___ Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. ___ Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. ___ Study the Information section. This section will give you the information you need to understand the subject.

5. ___ Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. ___ Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. ___ Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Introduction

Every parts jobber and wholesaler, and especially the parts counter worker, who faces the customers everyday, will often be asked to locate "hard-to-get" parts. Parts that are for older cars and trucks or import cars usually fall into this type of picking parts.

The parts counter worker, in an effort to give good customer service, will make every attempt to get the parts.
Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

HARD-TO-GET--Parts that are not listed in regular parts catalogs and are not usually found in stock.

MANUFACTURER--The "big four" are Ford Motor Company, General Motors, Chrysler Corporation, American Motors Company; others are imports such as Datsun, Volkswagen, Toyota, etc.

DEALER--Manufacturer's outlet; the dealers sell new vehicles and have a service and parts department.
INDIVIDUALIZED LEARNING SYSTEMS

Supplementary References

1. Hollander Interchange Book. Hollander Co. (any year)

2. Manufacturer's Parts Manuals. (any year)
Often the customer who comes into the parts store is looking for a part that falls into the area of "hard to get." The parts counter worker will quickly learn what the real definition of hard-to-get-parts is when it is discovered that:

1. Parts catalogs don't list the part.
2. Parts catalogs do not go back to that year.
3. No parts catalog even lists the make and model of vehicle.
4. The parts jobber's warehouse or supplier also has no listing for the part.

What the parts counter worker does next defines the difference between a parts counter worker and a parts "clerk." There are several different things to do that might help locate the part:

1. Some car manufacturers maintain an inventory of what are known as "obsolete" or "out-of-stock" parts. These parts are usually for older models of cars and trucks that may date back as far as the first years that they were built.

The first step is to call the manufacturer's dealer in your area. Ask the dealer's parts counter worker if the part is listed in the dealer's parts books. Usually, these parts must be ordered; you should tell your customer of the delay. (The parts counter worker and the dealer parts department will usually require payment-in-full, plus the postage or freight charges, before the parts are ordered.)

2. Find out if your rebuilders could rebuild or re-manufacture your customer's parts on a special order. Again, you should find out the amount of time and charges involved and collect the money in advance.
3. Call local automotive salvage companies to try to locate a part that can be used. The salvage dealers have books which list parts that interchange. (Interchangeable parts are parts from one type or make of vehicle which can be used on another type or make of vehicle. The parts might not be identical in shape or size, but can still be used.)

4. Call other major suppliers—suppliers that you do not buy from regularly. It might be necessary to call other parts jobbers in your area. They possibly may either have the part or know where one is available.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. Define "hard-to-get" parts.

2. Why try to get the parts that are "hard to get" for the customer?

3. Define "obsolete" parts.
1. Parts not carried in inventory; not listed in current parts catalogs; not readily available in warehouse or jobber's supplier's inventory.

2. It is a service for the customer and builds goodwill and repeat customer business.

3. Parts that are for older cars, very seldom asked for, or parts that very seldom fail, so don't need to be replaced.
COMPLETE THE FOLLOWING ASSIGNMENTS.

1. Call a dealer and ask if obsolete or out-of-date vehicles parts are available through their parts department.

2. Contact a local parts jobber and find out what out-of-date or hard-to-get parts he or she has located or attempted to locate. List these parts and the sources used in attempting to get the parts.

Give the list to your instructor.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What are 4 steps you would take to locate "hard-to-get" parts?

2. Why try to locate "hard-to-get parts?"

3. What could an automotive salvage company do that might help you get the part?
1. a. Call dealer or manufacturer's parts department.
   b. Have a rebuilder rebuild or remanufacture the part on a special order.
   c. Try to obtain a used part.
   d. Locate part through another jobber or jobber's supplier.

2. You can build customer goodwill and repeat business.

3. They might have an interchangeable part, from another make or model, that would work. They might have a part in better condition (not broken, etc.) that could be rebuilt.
Goal:
The student will learn the procedures for shipping merchandise.

Performance Indicators:
The student will demonstrate knowledge of the subject by successfully completing the Self Assessment, the Assignment, the Job Sheet and the Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. _____ Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you’ve learned it.

2. _____ Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. _____ Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. _____ Study the Information section. This section will give you the information you need to understand the subject.

5. _____ Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. _____ Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. _____ Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. _____ Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Many times parts and merchandise sold by the jobber has to go to distant places. This makes it necessary for the material to be packed, labeled and shipped.

If the merchandise is not properly handled, the parts, materials and items may be damaged or lost in shipping. Much time is lost. Customers far away cannot complain directly to you, but they lose time and money and are very often "lost" to you as customers.

Proper packing and labeling is very important. The choice of the carrier used to deliver the part will depend upon the customer's preference, or your store's policy.
Vocabulary

Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

LABEL--A piece of paper on which you write the name and address of person the shipment is being sent to.

PACKING SLIP--A list of items in a shipment of merchandise. If there is more than one package to an order it is usually placed on or in one package that is designated "contains packing slip."

ROUTING--Method of sending material, type of motor carrier or method of shipment (e.g. UPS, U.S. Mail).

C.O.D.--Collect on delivery. Means price of item and all shipping charges will be collected from person who receives the merchandise.

CONSIGNEE--Person the merchandise is shipped to.

CONSIGNOR--Person who sends merchandise.

SHIPPER--Person or store who is sending merchandise to another.

DESTINATION--The place where a part is being sent to. The address the package will arrive at.

SHIPLMENT--One or more packages shipped by one shipper at one time to one consignee at one address with one receipt.
Supplementary References


2. Auto Parts Counter Worker. University of Texas.
There are several steps in the shipping of merchandise.

The goods must be packed, the package or packages must be labeled, a packing slip must be enclosed, the invoice and a "notice of arrival" must be sent, and the shipment must be routed using the most appropriate carrier.

When packing merchandise for shipment, select a container strong enough to protect whatever type of materials are being sent. Before you start packing things in the boxes or cartons that you have selected, you should have a checklist and description of each part to be packed. Get each part on the list from the stockroom and place all parts to be packed close to where you will actually do the packing. This saves time and a lot of unnecessary steps.

As soon as you put a part in the container, check it off on the list once again to be sure that all parts are packed.

After everything on the list is in the container, put packing material in and around the parts. This material may be shredded paper, styrofoam pellets or something else. Pack the contents as firmly and compactly as possible. If the articles to be shipped completely fill the container, packing material or filler may not be needed.

When the packing is complete, put the packing slip in the box or glue or tape it to the outside of the package. Address the box or carton before you close it, so you don't send it to the wrong person. If you are shipping more than one box or container to the same customer, send only one packing slip. Be sure to mark which carton contains the packing slip. You should write or stamp clearly on the outside "PACKING SLIP ENCLOSED." It is helpful to the customer to label cartons "1 of 3," "2 of 3," etc., if you are sending several
to the same customer. This way, the customer will know when he or she has received all of the packages.

The invoice should be written before the packages are shipped. You can put the invoice in a separate envelope and fasten it to the carton. It's better to send the invoice with the shipment.

The packages are now ready to be taken to the transportation company. The customer usually tells the counter worker which routing should be used when the order is placed. If the customer doesn't tell you how to send it, it's up to you to choose. You should choose the fastest, yet least expensive way. Your organization will probably have a policy on shipping.

Shipping by motor bus is the fastest and most convenient way. Don't guess about the routing; call the bus line's office for information about delivery, packaging regulations and requirements. (See following page.) Here are some general regulations to follow when shipping by motor bus:

1. A shipment is one or more packages shipped at one time to one customer.
2. A consignee is the person you send the merchandise to.
3. Shipments can be sent pre-paid or C.O.D.
4. Shipments can be made to any station on the company's schedule.
5. Packages should be able to stand up to normal handling (stacking, strapping or rubbing against other baggage, being dropped).
6. Fragile items should be marked "Fragile--Handle with Care," or words to that effect.
7. The name and address of the consignee should be plainly written or printed on all packages.
8. Some items cannot be shipped by bus because they are dangerous or hazardous. Some of these are: acid, wet batteries, gases in cylinders, paint thinner and some paints.

A "notice of arrival" is sent by mail unless some other arrangements have been made. Notice can also be given by phone. Any charges for making this notice should be included in shipping costs.

A shipment that is unclaimed or refused must stay with the bus company until the sender tells them what should be done. Usually, the bus company sends a notice to the sender, followed by another notice if nothing is done within
from Eugene to the points shown

**GREYHOUND SERVES ALL AMERICA!**

---

<table>
<thead>
<tr>
<th>Route</th>
<th>Points</th>
<th>Schedule</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland</td>
<td>Oregon</td>
<td>18</td>
<td>Roseburg 14</td>
</tr>
</tbody>
</table>
2 weeks. The merchandise will not be returned to the sender unless the sender gives instructions to do so. If the shipment is returned to the sender, all shipping charges will be charged to the sender.

C.O.D. means this: the price of the merchandise and the shipping charges are collected by the bus company when the merchandise is delivered to the firm that is supposed to receive it. Usually, when the shipment is C.O.D. it cannot be opened or inspected until it is paid for. If the sender wants to allow inspection by the person receiving it, a notice must be given by marking on the outside of the package "INSPECTION ALLOWED." Inspection must be done while an agent of the bus company is present.

Sometimes it may be easy to send parts by U.S. Mail. Check on the rates, fees, and package restrictions as to size and weight with your local U.S. Post Office.

There are 4 classes of mail in the U.S.: first, second, third and fourth. Each class may have some special handling. Most auto parts are shipped by third or fourth class mail.

Third class mail consists of mailable merchandise weighing up to 15 ounces. Speedometer parts and other small items are examples of parts you would mail by third class.

Fourth class mail or parcel post mail would be used for packages that weigh more than 15 ounces. This mail must not exceed certain weight and size limits.

Fourth class or parcel post packages that are mailed at a first class post office for delivery to another first class post office in the continental United States are subject to the following restrictions:

1. Weight limit: 40 lbs.
2. Size limit: 84 inches in length and girth combined.

Fourth class packages mailed at a second class post office for delivery to another second class post office in the continental United States are subject to the following restrictions:
1. Weight limit: 70 lbs.
2. Size limit: 100 inches length and girth combined.

(In measuring a parcel, the length is the greatest distance in a straight line between the ends; the girth is the distance around the parcel (package) at its thickest part).

Packages should never be deposited in a mailbox. They should be taken to the Post Office for mailing.

The C.O.D. service is an ideal way to ship when the shipper does not want to extend credit, or when the customer does not want to pay in advance. The sender must pay the postage and C.O.D. fee. The sender may then include the postage and C.O.D. fee in the price of the article. C.O.D. forms are available at the post office.
Shipping by motor freight plays an important role in the automotive parts business. Motor freight carries parts to several locations before the parts are delivered to the jobbers' warehouse. Parts are usually first sent to a regional warehouse; from there to a central warehouse. The central warehouse distributor then ships to service distributors. From the service distributors, parts are shipped to the jobber. Each of these ship in large enough quantities to send by motor freight.

(The jobber is the local wholesaler; jobbers sell parts to garages, mechanics, service departments and fleet accounts. When these sales are not made across the counter or are not picked up, the jobber uses their [garage, mechanics', etc.] local delivery facilities to deliver the parts.)

Motor freight service is used by retail stores to send parts to their customers. It is also used to send cores back to the wholesaler, and to return damaged items, incorrect items, and items that are over-supplied.

UPS (United Parcel Service) is one of the biggest shippers of merchandise. UPS ships by truck, plane, ship or boat, and train. UPS provides pick-up and delivery service by motor truck in almost all cities and towns in the United States. When UPS picks up a shipment, a receipt is filled out in triplicate (3 copies); the original is left with the shipper. The consignee signs the second copy when the shipment arrives. A third copy remains with the consignee and the second copy is kept by UPS. (See following page for UPS form.)
<table>
<thead>
<tr>
<th>PACKAGE</th>
<th>SEND TO ADDRESS</th>
<th>C.O.D. AMOUNT</th>
<th>DECLARED VALUE</th>
<th>UPS ZONE</th>
<th>CUSTOMER COUNTER</th>
<th>DATE</th>
<th>TRANS</th>
<th>CHARGES</th>
<th>AMOUNT</th>
<th>TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NAME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>COD</td>
</tr>
<tr>
<td></td>
<td>STREET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EX.</td>
</tr>
<tr>
<td></td>
<td>CITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>VAL.</td>
</tr>
<tr>
<td>2</td>
<td>NAME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>COD</td>
</tr>
<tr>
<td></td>
<td>STREET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EX.</td>
</tr>
<tr>
<td></td>
<td>CITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>VAL.</td>
</tr>
<tr>
<td>3</td>
<td>NAME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>COD</td>
</tr>
<tr>
<td></td>
<td>STREET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EX.</td>
</tr>
<tr>
<td></td>
<td>CITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>VAL.</td>
</tr>
<tr>
<td>4</td>
<td>NAME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>COD</td>
</tr>
<tr>
<td></td>
<td>STREET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EX.</td>
</tr>
<tr>
<td></td>
<td>CITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>VAL.</td>
</tr>
<tr>
<td>5</td>
<td>NAME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>COD</td>
</tr>
<tr>
<td></td>
<td>STREET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EX.</td>
</tr>
<tr>
<td></td>
<td>CITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>VAL.</td>
</tr>
</tbody>
</table>

**Shipper Complete All Information Shown Above**

A duplicate address label must be enclosed in each package listed above.

*Unless a greater value is declared in writing on this receipt, the shipper hereby agrees that the released value of each package, or article not enclosed in a package, covered by this receipt to be $100. The entry of a C.O.D. amount is not a declaration of value. In addition, the maximum declared value for air service shipments is $1,000 and the maximum carrier liability is $1,000. Claims not made to carrier within 6 months of shipment date are waived. Customer's check accepted at shipper's risk unless otherwise noted on C.O.D. tag.*

_Thank you for using United Parcel Service_
UPS allows shipments by C.O.D. The money for express service and merchandise (invoice amount) is collected by the UPS carrier and sent to the shipper.

Air express is available in some cities; pick-up and delivery, as well as C.O.D. is also possible. All packages are insured by the shipper.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. If the customer doesn't tell you how to ship the merchandise, how should you do it?

2. What is the fastest and most convenient way to ship auto parts?

3. Which classes of the U.S. Mail are used most frequently to ship auto parts?

4. Why should zip codes be used?

5. Where are motor freight shipping services most often used in auto parts?
Self Assessment Answers

1. Fastest and most economical way.

2. By motor bus (e.g. Greyhound)

3. 3rd or 4th class

4. Speeds up the delivery of mail.

5. Getting parts from the distributor to the warehouses and from there to the jobbers.
Assignment

COMPLETE THE FOLLOWING ASSIGNMENTS.

1. Visit a parts store and ask what motor freight services they use.

2. Visit a bus line and obtain their freight rates.

3. How would you route a large carton to a remote town that is not served by bus lines?
COMPLETE THE FOLLOWING TASKS.

1. Obtain some blank UPS forms and practice filling them out.

2. Explain the routing of the invoice.

3. How do you get your money from a UPS C.O.D. carton?

4. How are refused or unclaimed shipments handled by UPS?
WRITE AN ANSWER FOR THE FOLLOWING QUESTIONS.

1. What qualifications must a package container meet?

2. What must you have ready before you start packing?

3. What method is used to get the packing slip to the customer?

4. How are packages numbered so the customer will know if they have received all the shipment? Assume there are 3 packages in the shipment.

5. Define a shipment.
1. Strength, large enough to hold all of shipment. Meet U.S. postal regulations as to size and weight if the U.S. mail is to be used.

2. Checklist of merchandise, items to be shipped from stock, filler if needed, labels, packing slip, invoice.

3. It can be placed in one of the containers and label the container "packing slip enclosed," or it may be glued to the outside of the carton and labeled.

4. 1 of 3, 2 of 3, 3 of 3.

5. A shipment consists of one or more packages shipped by one shipper at one time to one consignee at one address with one receipt.
PRICING ITEMS FOR SALE

Goal:
The student will learn and practice the technique for pricing sale parts and will understand price lists.

Performance Indicators:
The student will demonstrate knowledge of the subject by successfully completing the Self Assessment, Assignment, Job Sheet, and Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. Read the Introduction. The introduction will tell you why the module is an important part of the parts counter trade.

3. Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. Study the Information section. This section will give you the information you need to understand the subject.

5. Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
The proper and correct use of price lists is an important part of the parts counter worker's job. The price lists are to be used whenever you make a sale or accept an item for return.

Don't depend on your memo. There are too many different prices and the prices change frequently. Look up the price each time a sale is made.
Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

JOBBER--Parts store that sells parts made by many different parts manufacturers.

WHOLESALE--Buying at a low price to sell at retail.

RETAIL--Price paid by customer who uses part.

NET--Term used to indicate below retail.
Supplementary References

1. Parts Price Lists from various manufacturers.


3. Auto Parts Counterworker. University of Texas.
The new parts counter worker will find there are many suggested prices listed for each part. The price schedule you use will depend on which kind of customer is buying the part. In some businesses the manufacturer furnishes only a suggested list price to the wholesaler or retailer. Discounts for different types of customers are then figured from these price lists. In the parts business it is a common practice for the manufacturer to provide the added service of computing and then printing some discounts on the price lists they provide.
There are six suggested prices used by parts stores. The price charged for a part will depend on who you are selling to or buying from. Figure 1 shows a price sheet with the three most common prices listed in columns to the right of the part number.

Below are the six prices with an explanation of each.

1. Suggested List Price--This is what a service station or garage would charge its customers.

2. Suggested Trade Net--This is used when pricing parts to customers who are not connected with the trade. In other words, a customer who is buying parts for his or her own use, or installation on his own vehicle.

3. Suggested Dealer Net--This is what customers who are working in the trade pay for their parts. Customers such as workers in garages, body repair shops, service stations and others who buy parts for resale to their customers.

The suggested dealer net price is also used in another way. Suppose another parts store or jobber has a customer request for a part it doesn't have. The parts person can ask another store to sell him or her the part. In this instance the price charged is usually 10% or 15% below the suggested Dealer Net (depending on each store's policy).

Parts are also "borrowed," especially on Saturdays when parts manufacturer outlets and warehouses are closed. In such a borrowing arrangement, parts "borrowed" on Saturday are replaced on Monday when the warehouses are open again. This is another way of providing your customer with service.

4. Stocking Jobber Net--What the parts store pays for the parts from its representative outlet, supplier, or warehouse.

5. Regular Jobber Net--What any parts store pays a warehouse or distributor. It is a further reduction in price below the stocking jobber net.

6. Fleet Dealer Net--This price is usually 10 to 15% above regular jobber net. This price is used for customers that have large operations with many vehicles, but are not in the repair business. Fleet dealers use the parts they buy for repairs and maintenance to their own fleet of vehicles. An example might be a freight hauling company or a delivery company.
In order to know what price to charge a customer, you will have to find out whether the customer is another jobber, a fleet dealer, a garage worker, or someone who wants a part for their own car. Make sure you are using the proper price sheet for the customer's classification and that the price list is up-to-date.

Price lists are confidential; they should not be readily available for parts customers to look at. You can see from the illustration in Figure 1 that some price lists are not shown. The reason is to keep the jobber's cost of stocking the item confidential. The parts counter worker should not tell parts customers these confidential prices.

Be careful when quoting prices to customers. Be sure to use the correct list for the customer you are dealing with. Be very careful when quoting prices over the telephone.

Manufacturers' catalogs and price sheets come in many forms. It is important for the parts counterworker to become familiar with the information they contain. Fast, efficient and accurate service depends on how well you use the catalogs and price lists. However, you must take enough time to read the catalogs and price lists correctly. It helps to use a straightedge to read across columns, especially when the numbers are close together. Follow vertical-rulled lines when they are available.

Price lists are confidential information. Many errors can result when price sheets are improperly used. A price list must be kept up-to-date by replacing the old one with the latest version. Failure to do so penalizes your customers and your firm. If incorrect prices are charged, the customer becomes unhappy. Your firm may lose the profits due from the sale if you use a price that is too low, and you may lose customers if you use a price that is too high.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. List 2 errors made when using price sheets.

2. What precautions should be used when quoting prices?

3. Why should price lists be confidential?

4. What is the difference between stocking jobber net and regular jobber net?

5. Explain how suggested dealer net is used between jobbers.
1. Using out-of-date price lists and using wrong column for customer.

2. Know the customer and which price he or she should pay. Read price list accurately. Be sure price list is the current one.

3. So other customers won't know what others pay and what the store's profit is.

4. Regular jobber net is a lower price.

5. To sell between jobbers or "borrow" parts.
COMPLETE THE FOLLOWING ASSIGNMENTS.

1. Refer to Figure 1. Explain the difference between suggested list net and suggested dealer net. What does this amount represent?

2. Refer to Figure 1, under the heading "screws." What does (order in multiples of 10 pcs. only) mean?

3. Visit a parts jobber worker and ask him or her how often catalogs and price lists must be changed to keep them up-to-date. Write a brief paragraph about your interview.
COMPLETE THE FOLLOWING TASKS.

1. Refer to Figure 1. What is the price of part #5R-126 to a walk-in customer?

2. Refer to Figure 1. What is the price of part #3R499A to a local garage?

3. What price will a service station charge the customer for a 1R885A air hose?

4. How much profit will the service station owner make from the sale of a 4R967 to a customer? (Hint: The service station owner will pay the suggested Dealer Net price for the part. He or she will sell it for the suggested List Net price.)

5. Refer to Figure 1. How much do you charge another jobber for an air horn assembly #1R961A.
Figure 2

MISCELLANEOUS PARTS

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Class</th>
<th>Code</th>
<th>Lot</th>
<th>Pkg.</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>128-1120</td>
<td>A</td>
<td>108</td>
<td>33</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 3

MISCELLANEOUS PARTS

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Class</th>
<th>Code</th>
<th>Lot</th>
<th>Pkg.</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>128-1120</td>
<td>A</td>
<td>108</td>
<td>33</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 2

MISCELLANEOUS PARTS

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Class</th>
<th>Code</th>
<th>Lot</th>
<th>Pkg.</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>128-1120</td>
<td>A</td>
<td>108</td>
<td>33</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 3

MISCELLANEOUS PARTS

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Class</th>
<th>Code</th>
<th>Lot</th>
<th>Pkg.</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>128-1120</td>
<td>A</td>
<td>108</td>
<td>33</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 2

MISCELLANEOUS PARTS

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Class</th>
<th>Code</th>
<th>Lot</th>
<th>Pkg.</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>128-1120</td>
<td>A</td>
<td>108</td>
<td>33</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 3

MISCELLANEOUS PARTS

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Class</th>
<th>Code</th>
<th>Lot</th>
<th>Pkg.</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>128-1120</td>
<td>A</td>
<td>108</td>
<td>33</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. How much does a 13R37 cost a garage's customer? (Fig. 2)

2. How much does a 17R31 cost Smith's garage? (Fig. 2)

3. What is the suggested trade net for a 25R-72-65A? (Fig. 3)

4. What is suggested dealer net for a 25R-475-16AS? (Fig. 3)

5. What precautions can you use when reading across columns?
1. $17.40
2. $4.80
3. $1.74
4. $10.47
5. Use a straightedge.
<table>
<thead>
<tr>
<th><strong>Goal:</strong></th>
<th><strong>Performance Indicators:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Student will be able to demonstrate how microfiche systems work and explain why they are useful in the auto parts industry.</td>
<td>The student will successfully complete the Self Assessment, the Assignments, the Job Sheet and the Post Assessment.</td>
</tr>
</tbody>
</table>
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. Study the Information section. This section will give you the information you need to understand the subject.

5. Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Figure 1 shows you a photograph of a microfiche reader. It looks a lot like a television set, but it is a much simpler machine. It is used to read microfiches. What is a microfiche? "Micro" means small, and "fiche" (said feesh) means readable card. These postcard-size plastic cards (see Figure 2 for an example) contain photographs of catalog pages. The photographs are reduced to such a small size that each microfiche can contain photographs of 2,000 pages of information. This means that the information contained in shelves and shelves of catalogs or books can be stored in an 8 1/2" X 11" file folder -- if it is placed on microfiches. The microfiche reader machine is needed because the writing on each microfiche is too small to read, except for the heading. When a microfiche is placed in the microfiche reader, it appears on the screen enlarged to a size that is readable.

The system was originally made for the Department of Defense so they could store all their 10-digit part numbers in a small space. It is now being used by more and more businesses--from libraries to auto part stores. Anywhere, in fact, where people want to search through a lot of information quickly. The information on fiches can be numbers or illustrations or anything else that could be normally printed or typed.
Supplementary References

National Cash Register Operating Guide for Microfiche
Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

OPERATOR'S MANUAL--A book that tells you how to work a machine or piece of equipment.

TROUBLE SHOOTING--Ways to find out what has caused something to break down.

DIGIT--Any number from 0 to 9.

GRID--Rows of straight lines, half going across the page, the other half up and down the page. When the lines cross each other, they form equal squares, or spaces, like the lines on graph paper.

FOCUS--To adjust the distance between an object and a lens until a clear image of the object is produced on the screen.
Next time you are in an auto parts store that does not use a microfiche system, look at the amount of counter space used for catalog storage. Often the set of catalogs a parts worker will have to refer to are 4 feet wide! And larger stores will have a set of catalogs for each parts worker. When parts and information is recorded on microfiches instead, it takes less time to look up the right part number and much less space is required. The machines are usually mounted in a convenient place where all the store employees can use them.

The microfiches, or just fiches, are kept near the microfiche readers. There is a title across the top of each fiche to tell you what information the card contains. Each parts store will arrange the fiches in the order it finds the most convenient.

Once you have located the fiche you think contains information on the part you want to find, the next step is to place the fiche in the microfiche reader so that you can read it. You will see from the illustration in Figure 1 that there are only a few controls on the microfiche reader: The viewing screen, ON-OFF switch, and the focus knob are the most important.

Here's how you would operate the microfiche reader: (Refer back to Figure 1 as you read each step)
1. Pull the microfiche carrier carriage toward you until upper glass plate (called microfiche carrier) opens automatically.

2. Slide the microfiche (right side up and title strip toward you) between the glass plates and position against the back edge.

3. Set ON-OFF switch to ON. This switch will automatically turn on a cooling fan to keep the machine cool.

4. Push carrier back into the reader until a picture appears centered on the viewing screen.

5. Turn focus control knob, clockwise or counterclockwise until the picture is sharp.

6. Move carrier back and forth or side to side until the page you want is displayed on the screen.

The microfiche reader is a delicate machine and should always be handled carefully. Microfiches are expensive and should always be returned to their paper holders when you have finished using them to keep them clean and prevent them from being scratched.

Anything you need to know about the microfiche reader can be found in the manufacturer's operator's manual. Follow the manufacturer's methods for correct cleaning of carrier glass, mirrors, lens and screen to avoid damaging these parts. The operator's manuals will also contain detailed instructions for replacing broken parts. Always follow the instructions carefully. Most manuals also contain a troubleshooting section to help you fix any problems that you might have with the machine.
LISTED BELOW ARE QUESTIONS OR STATEMENTS FOLLOWED BY A NUMBER OF POSSIBLE ANSWERS OR COMPLETIONS. SELECT THE ANSWER OR COMPLETION WHICH ANSWERS THE QUESTION OR COMPLETES THE STATEMENT CORRECTLY AND PLACE THE LETTER IN THE BLANK VIDE D.

1. ___ Microfiche readers are used:
   a. to watch some cartoons
   b. to read a microfiche
   c. to take a photograph

2. ___ Microfiche:
   a. don't have to be looked after because they are free
   b. make good postcards
   c. should be handled carefully because the business has to pay for them

3. ___ What information would be on the fiches in an auto parts store?
   a. pictures of other parts stores
   b. information normally found in auto parts catalogs
   c. names of all the books in the local library

4. ___ Why would a parts store want to use a microfiche system, rather than catalogs?
   a. because microfiche systems are free
   b. because microfiche systems take up less space than catalogs and are quicker to use
   c. because they want to watch T.V. while they work
Self Assessment Answers

1. b
2. c
3. b
4. b
Assignment

COMPLETE THE ASSIGNMENTS BELOW.

1. Obtain a microfiche machine and practice using it.

2. Visit a shop or store that uses a microfiche, observe its use and write a small paragraph on how it is used in the place you visit.

3. Compare a catalog with a microfiche. Write a brief paragraph on how much is on the microfiche compared with 1 catalog and then compared with 2 catalogs.
Complete the following tasks.

1. Visit a parts store and see how the microfiche is used. Write a report on the number of fiches used and how they compare to the number of catalogs used.

2. Obtain a microfiche machine and use it to look up 25 parts. Look at 10 illustrations or pictures and use them to locate parts.

3. Use the grid to locate 10 specific areas on the fiche, list them as you find them.
4. What businesses in your area are not now using a microfiche but could benefit from using one?
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. Why was the microfiche viewer developed?

2. How is a part number located on the fiche?

3. Describe the care needed for the microfiche machine.

4. Explain how the fiche is placed into the machine for viewing.
1. To reduce the amount of space required to store all the Department of Defense's 10-digit part numbers.

2. Use grid and pointer to locate area and then scan for particular part number or object.

3. Wash exterior with mild soap and water, dry with lint free cloth. Surface dust and dirt can be removed with vacuum or dust brush.

4. a. Pull out carrier until upper glass raises.
   b. Insert fiche right side up and label out.
   c. Push carrier back into viewer.
   d. Turn ON-OFF switch to ON.
   e. Adjust focus and scan.
Goal:
The student will be able to explain why physical inventory is important.

Performance Indicators:
The student will demonstrate knowledge of the subject by successfully completing the Self Assessment, an Assignment, a Job Sheet and the Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. ___ Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned.

2. ___ Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. ___ Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. ___ Study the Information section. This section will give you the information you need to understand the subject.

5. ___ Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. ___ Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. ___ Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. ___ Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Because of the increasing volume of parts and the growth of the parts service industry, inventory control becomes more and more important. Ten years ago the average parts jobber was using about 50,000 part numbers. Today the number is more than twice that amount and continues to grow every year. Inventory demands attention of the parts store owner and a system for controlling the parts inventory. The parts store owner has to make sure that parts sales grow and that parts turnover is enough to make a fair profit in return for the investment.
Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

PHYSICAL INVENTORY--Parts are counted one by one and physically handled during the counting; gives an accurate count of parts on hand. Done to find out the dollar value for tax purposes.

UNIT PACKAGES--Several items of one particular part in one package. (Such as 10 bolts, or 10 screws, in one package.)

TURNOVER--Amount of parts sold and replaced with same part to sell again.

PERPETUAL INVENTORY--Control kept from records of sales and receipts.

COMPUTER-TERMINAL--A machine with a T.V. screen and a typewriter keyboard which lets a person communicate with a computer.
Supplementary References


2. Auto Parts Counter Worker. University of Texas.

There are two general methods of inventory control.

1. Physical inventory for controlling stock.
2. A perpetual inventory, or continual inventory.

Physical Inventory Control

Every business takes a physical inventory at least once a year. Some businesses take one every 6 months or every month. A physical inventory takes an accurate count of all stock on hand. The real purpose is to determine the correct amount of stock on hand so that its value can be figured to see if a profit has been made. A physical inventory is also necessary if taxes must be paid on the stock on hand. In some areas, a tax is paid yearly based on the dollar value of the stock in the store.

A definite system should be used in the inventory process to prevent mistakes and give an accurate count of parts actually on hand. Before an inventory is taken all parts should be in their proper place. Everything should be binned.

Parts counter workers count the parts in each bin, put them into a container and count them back into the bin again. This gives a double check to insure an accurate count. Parts should be counted from one bin into another as parts might be mixed or a duplicate count made.

Some parts are packed in unit packages. Each package contains a certain number of a particular part. Counter workers should count the number of items, not the number of packages. If a bin has two full packages of 10 bolts each and 25 bolts loose, then each bolt is counted individually: (45 bolts) not 4 1/2 packages. Each package should also be checked to see if it is full. If the package seal is broken and shows evidence of having been opened, it should be reopened and each piece counted.
Physical inventory is also used to do the following:

1. To check the condition of the parts in stock. This information is valuable and helps determine the dollar value of the stock.
2. It is a method of determining turnover—the percentage of parts sold and then replaced in a given time period.
3. It is a way to tell which parts sell faster than others and uncovers the amount of obsolete parts in stock.
4. It reveals parts that have been replaced (superseded).
5. It shows whether or not all merchandise is accounted for.

Perpetual Inventory Control
The perpetual inventory control system is a continual inventory system that uses sales and buying records. Information on inventory cards or stock cards is gathered from records of sales. These records may be in the form of invoices or credit memos of returns by customers. If it is kept up to date, this system tells exactly the amount of parts on hand at all times. From these records, you can tell what parts to order and how many of each item is needed for stock. It shows when a part should be added or when the number of items on hand increased. It also shows parts that have not sold well or have become obsolete and should no longer be kept in stock. The stock card shows the location of the part.

When a perpetual inventory system is being started, a physical inventory must be made so that an accurate count of parts on hand can be made. This information is recorded on the cards and other physical inventories are taken occasionally to see if the cards are accurate. Errors made on the cards can show the number of parts on hand incorrectly. Physical inventories are taken at the end of the year for accounting and tax purposes.

If a part is ordered it should be written on the stock card. List the date, order number and quantity ordered. This prevents duplication of orders.

Incoming shipments, or parts returned by customers should be listed on the stock card. The date, invoice number and quantity should be entered and the balance of the order (if any) should be shown. Be sure to add to the balance on order any shortages of shipments and the number on back order. As items are received, the total back order should be reduced. The stock control person can then see how many units of an item are on order, in transit, or back ordered. The total number received should be added to balance on hand.
<table>
<thead>
<tr>
<th>PART NO</th>
<th>374177</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Class Per Car Std. Pkg</th>
<th>Wt.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>DATE IN</th>
<th>OUT</th>
<th>BAL</th>
<th>DATE IN</th>
<th>OUT</th>
<th>BAL</th>
<th>DATE IN</th>
<th>OUT</th>
<th>BAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ORDERED</th>
<th>RECEIVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE QUAN</td>
<td>B O DATE QUAN</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL</th>
<th>YR 1</th>
<th>YR 2</th>
<th>YR 3</th>
<th>YR 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

215
The figure in the balance column shows how many are in stock. This information is used to determine how many to order and when to order parts.

Each day a record is made from sales slips of the total number of each item sold. The date, quantity sold and balance on hand should be recorded.

Maximum and minimum numbers to be kept on hand should be established for each item.

By ordering when the minimum number is reached, a shortage of an item may be prevented. The amount ordered should not exceed the difference between the balance on hand and the maximum kept in stock. The maximum and minimum figures should never be considered permanent. They should be checked occasionally against the stock turnover. The turnover rate may tell that quantities kept on hand should be increased or decreased.

One way to decide on how many of each part to keep in stock is to refer to the National Automotive Parts Association (NAPA) classification system.

NAPA founded their parts classification system many years ago. They also pioneered the first obsolescence program in the aftermarket. A common mistake often made today is thinking that classification and obsolescence are the same thing and that is not true. The NAPA systems use over 90,000 parts numbers. Each number is received every year by a central classification staff. They work with manufacturers to determine a classification rating of each part number. Sales figures are gathered from all over the United States. Sales figures from manufacturers and sales trends are analyzed by computers. The application of each number is studied and compared with the number of vehicles running from figures obtained from Detroit. The nature of the part itself is taken into consideration—how often it is replaced and the average age of the item when it is replaced. After all these factors are considered on each part number, the final determination as to its classification is then the human judgment of NAPA Classification Director. The classification ratings which are assigned each number are as follows:

"D" classification: Designed as a minimum stock item for trading areas with car and truck registration of up to 6,000 (in other words, any place with 6,000 cars and trucks on the road).
"C" classification: A combination of "D" and "C" numbers, constitutes the minimum stock for trading areas with cars and trucks over 6,000 and less than 13,000.

"B" classification: Combining "D" and "C" as well as "B" numbers, relates to car and truck markets of over 13,000 up to 31,000.

"A" classification: Naturally includes "D", "C" and "B" as well as "A"; is put together for car and truck registrations of over 31,000.

It might be noted here that these jobber classifications are conservative base stocks. This affords the jobber a system for controlling his inventory. Without a systematic approach to inventory a jobber would be guessing constantly and this usually results in an inadequate inventory turnover. The NAPA jobber can be reasonably certain that every number in his or her basic classification "A", "B", "C" or "D" should be stocked for his or her trading area. From this base they can build their inventory to meet the demands of their own trading area.

The NAPA system is one method of knowing what to order, and what basic level of stock to keep on hand. There are other systems available to jobbers who are not NAPA jobbers.

When information is received that a number has been superseded by another number, the new number should be placed on the card above the old one. Leave the old card in the file. Make a new card with a new number. The recent number should be filed in numerical order.

Some inventory cards provide a space for giving the location of the stock item. They show the aisle, section, and bin numbers where each type of article is located. For new parts counter workers this information saves time in locating merchandise. Saving time speeds up service to customers and helps fellow employees.

One of the most recent methods of stock inventory control involves the use of computers. Basic stock inventory figures are stored in the computer. To find out if a part is in stock the parts counter worker types in the part number on a computer terminal and asks the computer if the part is in stock. The computer
can be programmed to give inventory on hand, location, when to reorder and other data that might be helpful for stock inventory control.

Other computerized systems use computers tied to printing machines (printers) that do the invoice or billing work and remove the item from stock by computer. In this case, the use of hand sorting and marking inventory cards is eliminated.

More systems and better, faster methods are being developed. The beginning parts counter worker should become aware of these systems and how they work. Knowledge of all phases of the parts sales industry makes you a better parts counter worker and a more valuable employee.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What is the purpose of taking a physical inventory?

2. What job should you complete before taking a physical inventory?

3. How are items in unit packages counted?

4. What causes an inventory control card to show an incorrect number of items on hand?

5. What sales information should be recorded at the end of each day?
1. a. To get an accurate count of all parts and merchandise on hand.
b. When the value is computed, a store can determine if a profit is being made.
c. For tax purposes.

2. Make sure all parts are in proper location.

3. Each unit is counted. Packages that have been opened should be reopened and their contents counted.

4. Errors in posting, sales not removed from card, new stock received but not added to inventory card, returned items not added to stock, quantity received not correctly entered on cards.

5. Record from sales slips the total number of items sold, date, quantity sold and balance on hand.
Assignment

COMPLETE THE FOLLOWING ASSIGNMENT.

Find examples of inventory control cards. Study and compare them. Write down which cards you find more useful than others and why.
COMPLETE THE FOLLOWING TASK.

Visit 2 or more parts stores:

1. What type of inventory control is used?

2. Who does the actual posting on inventory cards?

3. How many different items are in stock (how many cards are there)?

4. How recently has a physical inventory been taken?

5. Does any store in your area use a computerized parts inventory control system? Write a paragraph about the system. What is it called, advantages and disadvantages over the inventory card system, etc.?
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What is the purpose of knowing exactly how much stock is on hand?

2. Name 6 things a physical inventory shows.

3. Where does information on the inventory control system cards come from?

4. Why should a physical inventory be taken when a perpetual inventory system is being used?

5. When should the first entry be made on an inventory control card?

6. Give 5 things an up-to-date perpetual inventory card shows.
7. How do the inventory control cards help new employees locate items?

8. Suppose a stock number is replaced (superseded) by a new number. How is this handled on the inventory control cards?
1. Turnover rate is known and profit can be figured.

2. a. accurate count of all parts in stock.
   b. condition of stock is known.
   c. amount of turnover is known.
   d. which items move faster than others.
   e. uncovers obsolete stock items.
   f. reveals parts that have been replaced or superseded.

3. Receiving parts (bills of lading), sales slips, invoices, items returned to store by customers, physical inventory.

4. To start off with an accurate count and see if the cards are correct.

5. When parts are received.

6. a. amount of stock on hand at all times.
   b. amount of each item to order.
   c. location of each item.
   d. when to add or when to stop carrying item in stock.
   e. number of items in stock or on back order.

7. Location of items is usually recorded on inventory control cards.

8. A new card with the new number is made out and the new card filed in numerical order. The card with the old number is left in the system but across the top of the card you should write "superseded by part #____" and give the number of the new part. This way someone else using the system will know exactly what happened.
RECEIVING MERCHANDISE

Goal:
The student will be able to explain how to check merchandise when it is received and how to handle shortages and damaged items.

Performance Indicators:
The student will demonstrate knowledge of the subject by successfully completing a Self Assessment, an Assignment, a Job Sheet and a Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. ___ Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you’ve learned it.

2. ___ Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. ___ Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. ___ Study the Information section. This section will give you the information you need to understand the subject.

5. ___ Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. ___ Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. ___ Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. ___ Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Accepting a shipment of merchandise from a transporting company is one of the duties of parts counter workers. Merchandise is usually shipped to the parts store by motor freight, railway express, bus or U.S. Mail. The way it is shipped, packaged and handled depends largely on the urgency or need for a quick delivery, the size and bulk of the order, and the distance from the point of delivery to the dealer.
Vocabulary

Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

MERCHANDISE--Goods, parts, products.

BIN--General term, refers to several kinds of containers for providing storage for merchandise. Can be made of wood, steel, metal, etc. Some have adjustable spaces and shelves.

SHIPPING RECEIPT--A piece of paper listing quantity, description weight, and cost of shipping items delivered by a transportation company. Name of company, shipper, person to whom merchandise is shipped is also listed on this receipt.

PACKING SLIP--A piece of paper listing articles included in a package or in a number of packages. Also gives number and description of each type of article included. Found inside package or packages.

INVOICE--Similar to packing slip; in addition to parts numbers and descriptions, it shows the price of each item and cost of shipment. Invoices are sent with goods when they are delivered or they are sent in the mail.

ORDER--Written request to ship merchandise.

BACK ORDER--Part of order not made at present time, will be delivered later.

PREPAID SHIPMENT--Shipping charges are paid by the shipper before goods are sent.
C.O.D. CASH ON DELIVERY--Shipping charges are paid at time goods are delivered paid by person receiving them.

BILL OF LADING--Piece of paper that accompanies merchandise when it is transferred from shipper to transportation company. Contains complete number and description of packages shipped and shipping instructions.
Supplementary References


2. Auto Parts Counter Worker. University of Texas.
The first important step to be taken by the person receiving and checking a shipment is to check the type of cartons and how many cartons there are. This should be checked with the number and types of packages listed on the bills of lading or the shipping receipt.

When checking, be sure to look at the addresses on all the cartons or packages. This is to make sure that they are all addressed to your company. (Sometimes packages that belong to another company will be left at your place of business by mistake.) Other times packages that are supposed to be left for may be sent to another company. Such mistakes cause delay and confusion and can be avoided if the people responsible for checking and receiving merchandise do their jobs correctly.

Handle incoming merchandise efficiently. The shipping receipt or bill of lading should not be signed until packages have been checked and accounted for. Details of broken cartons or damaged items and any shortages should be written on the shipping receipt or bill of lading.

After the shipping receipt or bill of lading has been signed, the transportation company has proof that the merchandise has been received in full and in good order, unless damages and shortages have been noted on the shipping receipt.

If a shipping receipt shows the company should receive 10 packages and only 8 are delivered, a note stating "only 8 received" should be made on all copies of the shipping receipt. If some packages have been damaged or broken open so things might fall out, this should also be written on the shipping receipt when the papers are signed. If there are any damages or shortages, have the driver or representative of the shipping company sign the papers after you have written your notes on them. This confirms the shortages and damages as they were noted.
If loss or damage is seen when the packages are opened, the local representative of the transportation company should be informed and the items set aside so inspection can be made. Also, the shipper should be notified so they can file a claim against the transportation company.

If the shipping charges were paid by your company, the person receiving the merchandise should notify the person in the company responsible for filing and settling claims.

After packages and cartons are received and checked, the individual items should be checked. A "packing slip" is usually enclosed in one of the packages in the shipment, and it will be marked on the outside "packing slip enclosed." Some companies put a separate packing slip in each package. The package containing the packing slip should be opened first and other packages should be arranged and opened in numerical order so listed by number on the packing slip.

Open each box and check each item on the packing slip for quantity and type of merchandise. Check all contents of all packages until the entire shipment is checked against the packing slip. Any shortages or incorrect items found should be noted on the packing slip. The person in charge of claims should be notified so the company the goods were bought from can be told.

When unpacking items, each item should be tagged with the correct number. If it is not tagged correctly or tagged with a number different from the numbering system used by your company, the numbers should be changed at this time.

Sometimes items received have been changed in construction or design. This means the part you ordered has been superseded (or replaced) by a new part. It will have a new number and it should be binned separately. Notations are then made beside the old part numbers and on the bins that the part has been superseded by a new item.

Save all cartons and packing until the incoming items have all been checked. This prevents losing or accidentally throwing away small parts with the packing materials.

Any error found between the quantity of items in packages and the quantity listed on the packing slip should be listed. Write down the part name and number and
how many were ordered and how many were actually received. This information should be sent to the company who sold the merchandise, so adjustments can be made.

Some common tools are necessary for opening packages and crates. Some of the most common tools are crate openers, claw hammers, nail pullers, wire cutters and carton knives. A chisel, screwdriver and pliers are also handy to have.

Nailed wooden crates or cases should be opened with a claw hammer and crate opener. A nail puller can be helpful after a hammer has been used to loosen the nails.

Some companies use metal bands or wire to tie and bind shipping cartons. Some of these bindings are under pressure; a pair of wire cutters should be used to cut the band or wire. Stand to one side when cutting wires or bands; they may fly out when cut and can cause injuries.

When cartons are taped shut, they may be opened with a carton knife or other sharp instrument cut along 3 sides of the carton. Be sure not to cut too deep, so that you don’t damage the contents.

Cartons and packages that are glued together may be cut along three edges. Again, be careful not to cut too deeply so that items in the package won’t be damaged.

**Summary**

Here are nine steps to take, after you have signed the shipping receipt or bill of lading.

1. Open packages carefully. Get help with larger bulky packages. Use the proper tools.
2. Put flammable packing material in safe place, guard against fire.
3. Group same type of items together.
4. Count items, check against packing slip and purchase order.
5. Make a note of any overages, shortages, or damaged items.
6. Make a note of any back-ordered items.
7. Note any differences in items on purchase order and items in packages. Record and report changes.
8. Note any "special order" items.
9. After complete checking, sign and date the necessary forms.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS IN THE SPACE PROVIDED.

1. List at least 3 things you should check when receiving merchandise.

2. How should glued cartons be opened?

3. How should crates with metal bands or wires be opened?

4. What is a "bill of lading"?

5. What is a bin?

6. What is a packing slip?
1. Damages, shortages, overages.

2. Cut on three sides with carton knife (don't cut too deeply).

3. Cut with wire cutters, stand to one side.

4. List of items given to transportation company by the shipper.

5. Spaces provided for storing merchandise. Can be made of wood, steel, adjustable spaces or shelves.

6. Lists items contained in packages or cartons.
Assignment

COMPLETE THE FOLLOWING ASSIGNMENT.

1. Visit a parts store; go into the receiving area and ask to see various forms -- labels, tags, bills of lading, shipping invoices, price labels.

2. With a copy of the "checking merchandise list of 9 items," check off the items as the store follows its regular procedure. How closely does the store follow the list of 9 points?
DO ONE OR MORE OF THE FOLLOWING TASKS.

1. Visit a parts store or jobber, assist in opening various packages and crates. Describe how this was done and what tools were used.

2. Compare a packing slip with the contents of a carton or package. Note overages or shortages. Any damaged items?

3. Visit a transportation company, talk with the representative; ask him or her to describe the job and show you what a "bill of lading" looks like. Write a brief report of your visit.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS IN THE SPACES PROVIDED.

1. Describe the proper method of opening a wooden crate.

2. What should be done with merchandise after the cartons have been opened?

3. What is an invoice?

4. What is a "back order"?

5. How can merchandise be sent from manufacturer to seller?

6. Where is the packing slip located on incoming orders?
7. What is a superseded item?

8. How should superseded items be binned?

9. Name 3 factors to consider in determining the way an order is shipped.

10. What are bins?
1. Use a claw hammer or nail puller. Use wedging or prying motion. Pull nails. Store flammable packing carefully, guard against fire.

2. Checked and counted carefully. Check for breakage or damage. Note any on packing slip. Moved to area for stocking.

3. Lists all parts by number, description, and price.

4. Part of order that wasn't filled, to be filled at later time.

5. Motor freight, motor bus, railway, parcel post.

6. In one of the packages usually marked "packing slip enclosed."

7. Item that has been changed in design or construction, and has been replaced by a new item. Usually has a new part number.

8. Separate from old items. Old items sold first. Notation made that it is a superseded item.

9. Size, bulk, weight, number of cartons or crates.

10. Storage spaces for parts. Made of wood or steel and usually adjustable.
STOCKING--STOCK TURNOVER

Goal:

- Student will understand stock investment and turnover.

Performance Indicators:

The student will demonstrate an understanding of problem solving in stock control and sales by successfully completing a Self Assessment, an Assignment, a Job Sheet and a Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. ___ Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. ___ Read the Introduction: The Introduction will tell you why the module is an important part of the parts counter trade.

3. ___ Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. ___ Study the Information section. This section will give you the information you need to understand the subject.

5. ___ Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. ___ Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. ___ Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. ___ Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Introduction

The main function of the parts store is to supply parts, services and equipment to the customers. A balanced and adequate supply of stock must be kept on hand to sell. Money must be spent for stock that will return enough money for the store to make a profit after paying overhead and any other expenses.
Vocabulary

Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

BALANCED STOCK--Parts in enough variety and enough quantity that they sell quickly, with no parts remaining on the shelves for many months.

INVENTORY--Parts, supplies, materials kept on hand.

OBSELETE ITEMS--Parts no longer in demand by customers.

OVERSTOCKING--Too many of some items so that it takes too long to sell them. Ties up money that could be used for more variety.

SEASONAL INFLUENCE--Parts bought and sold during certain times of the year. For example, antifreeze and tire chains are popular items in the winter only.

TURNOVER--The number of times stock is sold and replaced.
Supplementary References


2. Inside Salesman. NAPA.

3. Auto Parts Counterworker. University of Texas.
Some control of inventory must be made. Increased turnover may lower the cost of stocking; however, the more frequently small amounts are ordered and picked up the higher the store's cost is. It may be that doing business in that manner may be worse than having a slower turnover.

To make the best profit for the store the rate of turnover and the cost to stock the parts must be compared. Having a fast turnover must be balanced against the cost. Buying small amounts will mean a faster turnover. But small amounts often cost more than larger amounts. The goal is to buy at a price as low as possible and to turnover as fast as possible.

Figure 1 is a bar graph that shows how much it costs to buy and stock parts and the profit at various rates of turnover. (See illustration on next page.)

Column A shows that by buying a large amount of stock, the cost to buy the parts is very low. But costs to keep such a large amount of parts in the store until they all sell becomes very high and profit is therefore less. This column represents 1 year's turnover. This means it takes a year to sell all the stock bought.

Column C shows that turnover of stock 4 times a year is the most profitable. As the rate of turnover increases there is a steady reduction in the cost of stocking. But once we start to buy stock in really small quantities the costs to buy start to go up. If we look at bar "D" note then that because the cost to buy parts is high profits again go down. Profits will always go down as the cost to stock goes up or as the cost to buy goes up.

Notice that the profit in both of the extremes (A and F) is about the same. Examine bar "A" and bar "F" closely. Which is the most profitable? With only a single turnover each year there is always stock to sell. With 15 turnovers every
year the stock might be short and not enough of some items so that generally all sales might be reduced.

If a part cost $100 and did not sell, it did not return any profit. Also it might have cost the store money because in some states there is an inventory tax. As much as $10 may be charged the store for the inventory tax on that item. If the $100 cost of the part would have been in the bank, interest would have been paid and some profit earned.

Finally if the part that cost $100 was finally sold for $120 a year later, the profit is not really $20. The reason is that it costs money to keep the part long. Don't forget, too, that other expenses have to come out of the sale of that part. Salaries, overhead, rent, etc. As much as 25% of the gross sales might have to be deducted. Profit from the sale keeps getting less and less, the longer the item is in stock.

If all the sales of parts went that slowly, one time a year, the store would not be able to give good service and might even go out of business.

The end results of all this is simply stated: A slow turnover (once a year) means loss of money and poor service. On the other hand, a faster turnover (4 times a year) means more money and much better service to the customer.

Supplying the customers' needs, within your store's ability to buy stock in enough variety and amounts, has to be balanced with your sales abilities and efforts to keep an adequate, balanced and salable stock.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What is turnover?

2. What makes frequent restocking of items expensive?

3. What is rate of turnover?

4. What is profit?

5. What is an obsolete item?
Self Assessment Answers

1. Number of times items are sold and replaced with more.

2. Cost to pick up parts, (may have to buy from another competitor). Prices go up when buying in smaller quantities.

3. Number of times per year an item is sold and replaced.

4. Money left over from the sale of an item after the cost of the item overhead, and other expenses, have been deducted.

5. Part no longer in demand by customers.
COMPLETE THE FOLLOWING ASSIGNMENTS.

1. Visit a parts store, find out what makes up overhead. Write a list of these things and note the amount.

2. Observe items on display--are these seasonal items? Make a list of as many seasonal items as you can. Are any out of season. What are they?

3. Visit several different parts stores, estimate in dollars what the inventory amount might be. What, if any, is the rate of inventory tax in your area? How much tax is due? (Estimate)
Job Sheet

COMPLETE THE FOLLOWING TASKS.

Based on Figure 1--

1. What is the most profitable column? Why?

2. What is the least profitable column? Why?

3. If store X's stock is represented by column C, and store Y's stock is represented by column E, which store is making more profit? (Assume overhead is the same for both stores.)
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What is stock turnover?

2. What is the best rate of turnover?

3. What is an obsolete item?

4. List items that are seasonal.

5. What makes up a store's investment?

6. Study Figure 1. What is the most profitable column for stock buying and turnover? Why? Does this necessarily mean you make the most money?
1. Stock sold and replaced.

2. Lowest cost to buy parts and keep on hand.

3. Parts no longer in demand by customers.

4. Anti-freeze, tire chains, air conditioning parts, cooling fans, snow tires, gasoline additives.

5. The cost to stock shelves with parts and keep them includes taxes, overhead, etc.

6. "C" cost to stock is low. Profit is high. Not necessarily. You may be out-of-stock on items and not be able to provide customers with parts needed. It might be necessary to pick up parts from competitors at increased costs.
Goal:
The student will be able to properly receive and store parts stock.

Performance Indicators:
The student will complete a Self Assessment, an Assignment, a Job Sheet and a Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. Study the Information section. This section will give you the information you need to understand the subject.

5. Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
The auto parts counter worker needs to be fully aware of the method used to accept and store parts and other merchandise. Most stores use very similar methods to do this.

Larger stores may have a "receiving clerk" or "inventory clerk", but in smaller stores a counter worker will do both jobs and serve customers at the sales counter, too. The size of the store and the volume of its sales will determine how much time and how many people will have to do the receiving of the goods to be sold.
Vocabulary

Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

BINS--A group of metal or wooden boxes or open shelves, usually adjustable in height and width, for storage of parts, and other goods.

BINNING--To put the parts and other merchandise away in the right place. Those that belong in bins are put into those bins, those that are hung on hooks are hung on the right hooks and so on.
Supplementary References


2. Auto Parts Counter Worker. University of Texas.
After merchandise has been received and accepted from the delivery person, the following things must be done:

1. It must be unpacked to give you individual items for sale.
2. The items must be marked with the price and a part number.
3. Each item must be put into storage in the right bin or on the right shelf.

Each store is a little different so you must learn the layout of the shelves and bins by experience. You will become faster at "binning" once you have learned the location of the more popular merchandise.

A simple method often used is a group system. In using the group system, you place related parts in bins grouped in one place in the store.

Most stock rooms use metal bins with adjustable shelves. Bins and shelves can also be made of wood.

Some stock, such as exhaust pipes and fan belts, are stored on racks that are made especially for their storage.

The space and shape of the stockroom determine the layout of the bin arrangement. Bin sections are usually arranged in double rows, back to back. The rows are lined up so they end at the front sales counter. A three foot aisle is usually provided between the bins. This arrangement gives plenty of working space without wasting too much floor space.

Most shelving sections of bins contain bins of various shapes and sizes. The shelving sections are usually 7 feet high, 3 feet wide, and 1 foot deep. This design makes the stock easy to reach and leaves space above for lighting fixtures.
The bins are labeled with numbers or letters to help the parts counter workers find the parts they are looking for. Labeling systems usually show the general category or type of part, the manufacturer, the price and have a specific code for each part similar to that of the catalog number. As you learn the labeling system you will be able to find the part you want more quickly. As you become familiar with the store you will learn its inventory and where frequently purchased items are located.

Bins and shelves should be kept as clean as possible. Dust, old empty boxes, papers and trash create fire and safety hazards. It also slows down workers as they stumble over the garbage in the aisles while getting parts. For the same reasons, merchandise should not be allowed to stack up on counters and in the aisles. Also, some parts can be damaged by exposure to dust and dirt and then cannot be sold.

When binning parts and supplies, place them at the rear of the bins and move the older stock up to the front to be sold first. This is called rotating the stock and should always be practiced. Think of the stock as fruit in a grocery store. No one wants to buy old fruit and no one wants parts that have worn out lying on the shelf.

Handle heavy items carefully and get help to lift very heavy items. A hand truck can be handy for moving stock. Always put the larger and heavier objects on the truck first, and then the lighter and fragile ones on top. All the parts in a parts store represent a cash investment for the store owner. Any parts that are lost or damaged by careless handling result in money lost by your employer.

Care should always be taken when handling parts not to damage them in any way. Even parts made of durable materials can be scratched or marred and made unsalable.

Careful handling of parts is as important as making sure the parts are correctly stored. Both will enable you as a parts counter worker to provide your customers with damage-free parts and fast service.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What 2 things do you need to know to be able to efficiently put stock in bins.

2. How are bins usually arranged?

3. Why are aisles usually 3 ft. wide?

4. What advantages does a 7 foot tall bin give?

5. Why is it important to handle parts and merchandise carefully?
1. Knowledge of the bin arrangement and knowledge of the numbering and lettering system.

2. Back to back with 3 foot aisles between them and the ends of the aisles toward the front sales counter.

3. To provide good working space for moving even bulky items.

4. The top shelves can be reached and it leaves room for good lighting.

5. To avoid waste and loss of money due to damage and breakage of goods.
COMPLETE THE ASSIGNMENTS BELOW.

1. Visit a parts store and note the bin arrangement.

2. Visit a parts store and note the bin numbering and lettering systems. Write a report about your visit.
Job Sheet

COMPLETE THE TASKS BELOW.

1. Visit a parts store. Draw a floor plan of the parts bin arrangement.

2. On your drawing, label bins with numbering and lettering system used.

3. Make a list of the equipment you find that is used for moving heavy parts and materials.

4. Find out who does the following jobs.
   a. receives merchandise
   b. moves heavy parts
   c. bins stock
   d. cleans aisles, bins, shelves
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What factors determine bin arrangement?

2. How are some bins arranged in order to simplify binning?

3. Why should dust, trash and other debris be disposed of and kept out of the aisles?

4. Why should new stock be placed at the rear of the shelf?

5. When using hand trucks to transport items, which parts should be placed on the bottom?

6. List two advantages of putting parts in the proper bins.
1. Size and shape of the building and the parts storage system used.

2. In groups, according to the type of stock.

3. To prevent fires, accidents and damage to parts.

4. So that older parts are sold first before they get shelf worn.

5. Heavy or bulky parts.

6. a. It takes less time to find when a customer needs it.
   b. It takes less time to put the parts in storage when they are received at the store.
Goal:
The student will be able to explain the importance of good stocking and customer service.

Performance Indicators:
The student will complete a Self Assessment, an Assignment, a Job Sheet and a Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. ___ Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module.

2. ___ Read the Introduction. The introduction will tell you why the module is an important part of the parts counter trade.

3. ___ Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. ___ Study the Information section. This section will give you the information you need to understand the subject.

5. ___ Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. ___ Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. ___ Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. ___ Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Customers appreciate coming into a parts store where they can find and purchase the parts or supplies and equipment that they need. They want to be able to do this every time and, because of that attitude on the part of the customers, it's important for the parts store to keep the materials that are needed on the shelves. This requires planning and careful control of inventory and buying stock.
Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

OVERSTOCKED--Too much or too many of an item of merchandise.

COMPETITOR--A store that is also in the business of selling the same parts, materials and equipment as your store.

WHOLESALE-JOBBER--Person or business that sells parts to other businesses, or person in resale (retail) sales business.
Supplementary References

1. The Inside Salesman. NAPA

2. Auto Parts Counter Worker. University of Texas.

Customers want a "one stop" source where they can buy any automotive part, supplies or equipment they need. They want to find an adequate stock, a large enough quantity to fill their needs, and parts and supplies that are up to date. No one wants to go to 3, 4 or maybe more stores in order to find the parts and supplies needed. The latest part or model should be available.

Selling parts or supplies that are out-of-date, obsolete or no longer usable would send the customer to a competitor. If not right away, the next time they need parts, they will go somewhere else if they were not satisfied completely with the selling job you did for them. If your customer is a dealer, then your customer also wants to give his or her customer the best possible service that he or she can. They will want the parts to fit correctly and effectively so that they, in turn, have a satisfied customer. They do not want to have a job held up in their shop or place of business because the parts are not available. That means that their shop has vehicles taking up space, not making them any money.

During the time your customer is waiting on parts, his or her customer's vehicle is sitting, taking up space in his shop. If it is a commercial vehicle, such as a delivery truck or salesman's car, then the problem increases. Your customer's job is delayed further, compounding the lack of productive work. His or her shop and his or her customer are both now idle, waiting on parts that you can't supply. People get irritated when they are not working because this means they are losing money.

The demands of customers are all different, but your main purpose is to supply parts and materials to as many customers as you can. It might not be possible to satisfy every customer who walks in your door. It might not be possible to satisfy every customer, everytime, because of several reasons.
1. Finances tell you how much stock you can shelve.
2. Space may dictate that you have room for only so much stock or so many items.
3. No store can carry enough of every item to have it on the shelf ready for sale every time.
4. In remote areas or stores that are in places where warehouse stocks are not available for backup, items that are not frequently asked for can't be obtained on short notice (such as in 3 or 4 hours).

Wholesaler's or part store owner's finances may be limited, and stock has to be bought wisely. A rule of balanced stock needs to be followed. Store owners and or the store manager has to keep close account of items in stock. Close accurate counts of items must be kept so that parts won't be overstocked. By keeping close, accurate records, overstocking and stocking of items that don't sell, called slow moving items, can be avoided.

A record should also be kept of parts that are asked for and can't be found in the store's shelves. Items that aren't available for sale result in no sale. A list of these items should be kept. This is called a "Report of Lost Sales" and the list should be brought to the attention of the store manager or person in charge of ordering parts. This list can be used by them as a guide when buying items for stock. A "good" stock buying practice makes for a good inventory, good sales and improved customer service.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What is the hardest part of stocking?

2. What happens when customers can't find what they want in your store?

3. What problems come up that prevent your store from satisfying every customer?

4. How do you help prevent lost sales?

5. How do you prevent stock from becoming obsolete?
1. Keeping inventory of what customers need and trying to anticipate those needs and quantities to match them.

2. They go somewhere else—to your competitors.

3. Can't financially stock everything. Lack of space. Remote location or long distance from warehouse.

4. Write down numbers and items asked for but not stocked. Turn over list to person in charge of ordering or inventory clerk.

5. Sell old stock first, update numbers and information about parts that can be supplemented or used in place of another part.
COMPLETE THE FOLLOWING ASSIGNMENTS.

1. List as many things as you can that would help customers to always be satisfied.

2. Make a list of things that would assure you of an adequate stock.

3. Write a paragraph on how you would handle a customer who has asked for a part, and you don't have it on the shelf. List steps you would take to get the customer the parts he or she needs in the quickest way.
COMPLETE THE FOLLOWING TASKS.

1. Visit a parts store, ask how they report "lost sales."

2. Find out who is in charge of ordering parts.

3. Ask a local parts store where they buy stock. How far away is it? How much time passes before they can get a part in an emergency?

4. Ask how they avoid "overstocking."

5. Do they have any way to return overstocked or obsolete items to their supplier? Write a paragraph on how this is done.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What is the purpose of a "lost sale" report?

2. Besides finances, what else prevents a store from carrying a large inventory?

3. How could out-of-date or obsolete items be disposed of?

4. What is meant by a "one stop" source?

5. Why do your customers demand prompt, efficient service from you?
1. Give it to person in charge of inventory or buying stock. Item might be ordered and kept in stock if there is a demand for it.

2. Size of store and shelves, bins and storage areas. Tax laws in some states on inventory. Need to keep low at times to avoid large tax bill. Location, distance to supplier or manufacturer.

3. Sold at discount prices; find other firms or businesses that might have demand for them.

4. Customers can find everything they need in one store, thus only stopping once.

5. So they can deliver prompt, efficient service to their customers. They don't want their shop or place of business tied up for lack of parts. They lose money when they can't complete a job because of lack of parts.
Goal:
The student will be able to identify the steps involved in accepting and handling returned merchandise.

Performance Indicators:
The student will demonstrate knowledge of the subject and practice the skills by completing a Self Assessment, an Assignment, a Job Sheet and a Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. ___ Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. ___ Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. ___ Study the Information section. This section will give you the information you need to understand the subject.

4. ___ Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

5. ___ Do the Assignment page. Follow the instructions at the top of the Assignment page.

6. ___ Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

7. ___ Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Introduction

Parts or materials are sometimes returned to the parts store. The parts counter worker should be familiar with the category of the item and know what should be done with it.

Every parts store has its own procedures to handle merchandise that is returned. The counter worker should be familiar with different procedures, but especially with how it is done in his or her store. Completing and routing the paperwork correctly is very important. If it is not done properly, sales and money might be lost.
Supplementary References


3. Auto Parts Counter Worker. University of Texas.
There are three major categories into which "returned merchandise" can be grouped. Each group requires the parts counter worker to handle the parts differently.

1. **Exchange items**

Automotive parts jobbers sell rebuilt or re-manufactured units. These parts are usually less expensive than new parts. The old parts, however, must be turned in to the rebuilder so they can be rebuilt or re-manufactured, too. If the rebuilder is to stay in business, it's up to the parts jobber and the parts counter workers to see that the old parts (called "cores") are turned in by the customer. A trade-in allowance is usually subtracted from the cost of the rebuilt parts when they are bought. This encourages the customer to turn in the old part.

If the cores are not turned in, or if they are not handled, labeled and inspected properly, the parts jobber will lose money and the rebuilder won't have a stock of cores to rebuild.

The parts counter worker should inspect the core to find out:

* is it complete, are there missing parts?
* is it the correct core, can it be identified as the exchange part?
* is it in acceptable condition?

Price lists often give the allowance for the core. If the core doesn't meet the rebuilder's standards, less money may be allowed on the trade-in value.

The amount of allowance should be entered on the invoice or sales slip and itemized so the customer knows he or she has received the core allowance.
The invoice number should be written on the box in which the core is stored. Often it is the same box the rebuilt item came in—the rebuilt item is taken out, the core is put in. A core tag is attached to the item, if the rebuilder requires it. (Some rebuilders have very strict policies they set for core exchanges. Be sure you are aware of them and follow them. If you don't, you lose money for your company and the rebuilder loses the core!)

If your parts store has a special rack or bin for cores, place all cores in it when the transaction (exchange) is completed.

If the exchange item is not acceptable to the rebuilder and you know it, be sure to explain carefully to the customer why.

2 and 3. Defective items
These items are broken down into two groups:
   A. Parts or products that failed within the warranty or guarantee period.
   B. Parts or products that were defective before they were used, or put into service or operation.

(A) Most manufacturers, rebuilders or mechanics guarantee or warranty their parts, usually for 90 days. That means if the part or product fails to perform (work as it should), the manufacturer will replace it. However, if the part was installed incorrectly, or damaged due to carelessness, then the guarantee is probably not good.

The specific manufacturer's warranty policies should be fully understood before adjustments (trade-in allowance changes) are made with the customer. (An example: Batteries are pro-rated; that means the customer pays only for the used warranty time. Other electrical items, such as voltage regulators, switches, gauges, etc., are not ever guaranteed. The reason is because the customer may burn out the electrical unit by incorrect use or improper diagnosis of a problem.)

Labor claims are not awarded by manufacturers very often; the company involved should have a well-understood and clearly-defined procedure.

(B) Sometimes a part or product fails to work or is found to be defective as
soon as it is taken from the box or package. (The rebuilder or manufacturer makes mistakes, too.) If the item is found to be defective in any way before it was put into service or use, it should be replaced. The defect should be noted and the part returned to the supplier. In these cases, full warranty is made and, if necessary, you should go out of your way to see that your customer is satisfied.

The following steps should be taken when returning a part for warranty:

1. Find out as much as you can about the part, what failed and why.
2. Find the original sales slip or invoice. You will need dates, prices, and other information.
3. Find out the supplier's policies and follow them to receive warranty.
4. Label the returned part and place it where it can be returned to the supplier. "Old" cores can become obsolete and out-of-date if allowed to collect dust in some forgotten place in the store.
5. Follow through with the necessary paperwork; a "no charge" or "adjusted charge" (when appropriate) should appear on the invoice. Attach any shipping labels to the part and tag or label parts for easy identification. List the reasons for return, why part failed or what was wrong.
6. Package and label returned parts for the correct supplier.

Some parts found to be defective or which failed during the warranty period have to be returned to the manufacturer for repair. If this is the case, be sure to tell the customer how much time it will take, what charges there will be, if any, etc.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. Name three categories of returned merchandise.

2. What is the usual warranty period for parts?

3. What are the warranty policies?

4. Where should cores be placed after they are received and labeled.

5. What should your attitude be toward a customer who brings in a part that failed?
1. a. Failed during warranty period.
   b. Defective when new or before put into service.
   c. Exchange item, "core."

2. 90 days

3. Each manufacturer has its own.

4. Wherever you store has designated. Be sure rebuilder will pick them up.

5. Do whatever you can within the policy to satisfy the customer. Keep him or her happy.
Assignment

COMPLETE THE FOLLOWING ASSIGNMENT.

Visit a parts store.

1. See how "cores" are handled.

2. See what paperwork is involved with a returned part that failed while still under warranty.

Write your findings down and hand in to instructor.
COMPLETE THE FOLLOWING TASKS.

Obtain blank invoices and practice making them out for:
1. warranty
2. cores
3. refunds
4. credit.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. What errors can be made when returning parts for warranty?

2. What procedures are to be followed when a part must be returned to the manufacturer for warranty repairs?

3. What is the major difference between a warranty part that failed and a defective part?

4. If cores are not acceptable by your store (according to the rebuilder's standards) what should you do?
Instructor
Post Assessment Answers

1. a. manufacturer's policies which aren't followed can result in no credit being given for warranty items.
   b. wrong company is sent part.
   c. parts labeled wrong.
   d. defects not clear.
   e. reason for failure not clear.

2. Customer should be told time involved and any charges that will be made to customer.

3. Warranty part was installed or placed in use and it failed. Defective part was broken or inoperative before it was installed or placed in use.

4. Carefully explain to customer what specific standards are required for core returned for credit and why. Explain how to handle cores in the future so that core is acceptable and full refund or allowance can be made.
Goal:
The student will be able to identify functions and processes of the auto parts store’s machine shop operation.

Performance Indicators:
The student will demonstrate knowledge of the subject by successfully completing a Self Assessment, an Assignment, a Job Sheet and a Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module and how you will show you have learned it.

2. Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. Study the Information section. This section will give you the information you need to understand the subject.

5. Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. Take the Post-Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Introduction

A machine shop is a necessary service for the auto repair industry. It also helps to increase the auto parts store's sales.

To promote the parts store machine shop business, the auto parts counter worker can encourage customers to visit the shop to see first-hand what services it can provide. The well-trained auto parts counter person is aware of the machine shop and of the various machines and tools that provide services he or she can sell.
Vocabulary

Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

MACHINE--A mechanical device for doing some kind of work.

BORING--To put a hole through or in a material with a drill, or to enlarge an existing hole such as a cylinder in an engine block to make it perfectly round again.

GRIND--Sharpen, shape or smooth with an abrasive wheel or stone.

CRIMP--Press into shape with folds.

TOOL--An implement or instrument held in the hand and used to do a job. Also a similar part of a power driven machine.
Supplementary References

1. The Inside Salesman. NAPA.
3. Auto Parts Counterman. University of Texas.
The 4 major functions of the automotive machine shop are:

1. To accept orders and write up orders for repair.
2. Make estimates and bids for repair work.
3. Repair and recondition automotive parts.
4. Pick up and deliver.

To learn the different services a machine shop offers, the parts counterworker should visit the machine shop of the store he or she works in. Learn as much as you can about the services they provide and the capabilities of the machines they use. Learn what hand tools and hand work is done. This information will also aid you in providing services your customers may need.

The following is a list of tools and equipment usually found in a complete machine shop. The right side of the list is a list of parts related to the machine shop tool or operation. Following each list is a brief description of how each tool is used.

**Piston Rings and Pin Service**

<table>
<thead>
<tr>
<th>Tool</th>
<th>Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pin fitting machine</td>
<td>Pistons</td>
</tr>
<tr>
<td>Connecting rod alignment</td>
<td>Piston rings</td>
</tr>
<tr>
<td>machine</td>
<td>Piston pins</td>
</tr>
<tr>
<td>Ring groove cleaner</td>
<td>Piston pin bushings</td>
</tr>
<tr>
<td>Top ring groove machine</td>
<td>Connecting rods</td>
</tr>
<tr>
<td>Bench arbor press</td>
<td>Rod bearings</td>
</tr>
<tr>
<td>Knurlizer</td>
<td>Ring groove spacers</td>
</tr>
<tr>
<td>Piston grinder</td>
<td>Gaskets and seals</td>
</tr>
<tr>
<td>Piston pin press</td>
<td></td>
</tr>
<tr>
<td>Rod cap grinder</td>
<td></td>
</tr>
</tbody>
</table>
Piston and pin service involves the following operations. Pin fitting, requires the use of one or more machines. Some pistons require a press fit. The connecting rod must also be aligned. In other words, it has to be straight with the center-line of the piston. Connecting rods that use bushings must have the bushings replaced and then honed or machined so the pin fits precisely. Sometimes when pistons are re-used, oversize pins can be installed after the piston is honed for them.

A ring groove cleaner is a tool used to clean carbon out of the piston ring grooves. This must be done before new piston rings are fitted and installed on the pistons.

A top ring groove machine removes part of the piston ring groove material, making it wider, and then the installation of a steel spacer ring brings the width back to the correct size again. Badly worn piston ring grooves can be rebuilt in this manner and the piston can be reused.

A Bench Arbor Press is used to install rod bushings before they are honed.

A Knurlizer is a machine used to expand the skirt of the piston to eliminate piston slap. The machine also leaves marks in the piston that help improve piston lubrication.

A Piston Grinder is used to resize semi-finished pistons (a semi-finished piston has not had the final size ground on, nor is the finish smooth enough for installation in the engine).

The piston grinder also grinds the piston in an elliptical shape, also known as "cam ground" pistons. Refinishing a piston in this manner makes it as good as the one the manufacturer put in the original engine. Oversize pistons are now available in a finished condition so this operation of the machine shop is not done as much as it used to be.

Grinding rod caps is necessary in cases where the connecting rod has to be resized.
Valve and Valve Seat Equipment

Valve refacing machine
Bench arbor press
Valve seat installation machine
Valve seat grinder
Valve guide knurlizer machine
Valve spring tester
Heli-coil installation machine
Magnaflux (Crack Detector) machine
Valve guide installing equipment

Valves:
Valve springs and locks
Valve seats
Valve guides
Valve shims
Valve lifter
Valve seals
Push rods
Rocker arms
Gaskets and seals
Heli-coil
Facing machines are used to grind a new smooth face on the valve head and of the valve stem is also smoothed off by this machine. Rocker arms are reground with some of these machines when they have special attachments.

Seat grinders are used to grind the valve seat and correct the seat angle both if required. This machine can do the valve seats on cylinder heads or valve seats that are in the cylinder block on some engines.

Seat installation machines cut or machine out the old seat surface so seat can be pressed in place. Some valve seats are not part of the head or block, but a special ring, and these may be removed in one and a new seat pressed into place.

A guide reseater enlarges the bore of a valve quick hole so a new guide can be pressed into it. This makes a head or block that doesn't normally have replaceable guides reusable.

A guide knurlizer reduces the inside diameter of the valve guide. A coil is then used to ream the guide back to its normal size. This is done on cylinder heads and blocks when the guides are badly worn and not replaceable. It also serves to provide a better lubrication surface for the valve stem.

A spring tester tests the spring pressure at the given height. If the spring is weak or bent it will show up on this tester and the spring should be replaced.

A coil is a steel coil put into a prepared hole. This restores the size normal size. It is used often on aluminum cylinder heads and cylinders when threads become damaged or pulled out.

Fluxing is a process of locating cracks in metal. A metallic powder is used to cover the area to be tested. The metal is then exposed to a magnetic field. The powder collects in any cracks and makes them easy to see.

Flux process is used on iron or steel, while Zyglo is used for aluminum. Magnafluxing and zygloing are patented processes and require special equipment.
Cylinder Boring Equipment

- Sleeves
- Sleeve assemblies
- Pistons
- Piston rings
- Expansion plugs
- Gaskets and seals

Equipment is used to rebore and increase the size of the cylinder. It is used to put the final finish required on the cylinder walls prior to glaze breaking. Glaze breakers do not remove any material from the walls; they just remove the polished surface of the cylinder so that new piston rings will seal properly.

A tool used to remove the ridge worn in the top of the cylinder is a result of piston ring wear. The ridge is a result of piston ring wear. The ridge and piston rings will not strike against the ridge and piston rings. In some instances, it is sometimes necessary to remove the ridge and piston rings. In some instances, it is sometimes necessary to remove the ridge and piston rings. It is then possible to install main bearings with the size that will match the cylinder size.

Some of this equipment is portable. They are able to fit into a vehicle and are used to refinish the cylinder walls prior to glaze breakers. They are able to fit into a vehicle and are used to refinish the cylinder walls prior to glaze breakers.

Crankshaft Repair Equipment

- Main rod bearings
- Gaskets and seals
- Main bearing sets
- Crankshaft straightener
- Crankshaft sizer
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft grinders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Crankshaft griders
- Cranksha
caws, when the crankshaft is still in the cylinders, even with the engine left in the car. A crankshaft

vory belt and is used to polish the bearing surfaces.

size is used to bore over-sized or unfinished bearings.

ence precision fit bearings are generally available as.

y more.

Block Equipment

Camshaft
Cam and main bearings
Gaskets
Expansion plugs

machine is used to machine interior surfaces of cam and
they are installed.

Head and Block Resurfacing

Milling machine
Milling machine
Milling machine
Gaskets

block milling machines are used to machine the
heads and cylinder blocks. A milling machine of this

series of cutting tools on a cutter head. Other
generally are grinders that use a large grinding stone. The
generally use a coolant to reduce the dust and keep parts

ions produces a very smooth finish.
Brake Equipment

<table>
<thead>
<tr>
<th>Brake relining machine</th>
<th>Brake shoe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riveter</td>
<td>Disc brake pads</td>
</tr>
<tr>
<td>Shoe arc grinder</td>
<td>Wheel grease seals</td>
</tr>
<tr>
<td>Brake drum lathe</td>
<td>Wheel bearings</td>
</tr>
<tr>
<td>Brake rotor lathe</td>
<td>Brake parts</td>
</tr>
<tr>
<td>Brake drum and rotor grinder</td>
<td>Brake hardware</td>
</tr>
</tbody>
</table>

Brake relining equipment is used to remove and re-rivet the brake linings on brake shoes. A brake shoe grinder is also used to true up the brake linings and prepare it for installation on the car.

A brake drum lathe is used to refinish the inside of the brake drums and drum shoes touch the drum surface. A brake rotor lathe is used to refinish the surfaces of the brake rotor where the brake disc pads meet the rotor surface. Some brake lathes have attachments so that one machine can do both types of operations. In some cases the brake drum or rotor is reground, and attachments are available with the brake drum lathe for such operations.
Dynamometer

Engine run-in equipment

A dynamometer is used to test-run engines and is found only in the very large machine shops. They are very expensive and require people to operate them who are very highly trained.

Cleaning and Crack Detecting Equipment

- Magnaflux
- Crack detector
- Hot cleaning
- Steam cleaner
- Cold chemical cleaning tank
- Hot or cold pressure washer
- Glass bead (cleaning) machine
Cleaning of engine parts is an important part of the machine shop job. Engine parts must be cleaned so they may be inspected for wear or damage that might otherwise be overlooked.

Tank cleaning machines use a mixture of chemicals and water, that is heat circulated. Tanks are large enough to hold entire cylinder blocks. A cold chemical tank is not heated but uses special chemicals and is used to clean alloys such as pistons, carburetors and aluminum blocks and heads.

A steam cleaner uses a mixture of hot water and special soap compounds. The mixture is forced through a nozzle under high pressure.

A glass bead machine forces tiny glass beads under high pressure through a nozzle against the piece to be cleaned. Glass beading is fast and easy to use. It does not damage the metal surfaces and leaves a nice finish.

**Hydraulic Hose Make-up**

- Equipment for installing reusable ends
- Crimping machine
- Hose cutter
- Hoses
- Hose fittings
- Hydraulic fluid

Some machine shop operations have equipment to make up hydraulic hoses, such as those found on tractors, fork lifts and other equipment. The hoses are often of a specialized nature and difficult to find replacements for. This is a valuable service that the machine shop can provide. This is because making up the hoses (often using the same metal fittings) reduces the cost and puts the equipment back in operation in a shorter time. It is usually the hoses that fail and not the metal fittings on the ends. Equipment of this type is usually capable of crimping the reusable ends. Some metal ends are not reusable and these can be readily purchased and permanently crimped on the new hose.
Hydraulic Press

Axle shafts
Axle bearings
Axle seals

The hydraulic press is used for many machine shop jobs. It is used most often for rear axles, to remove and replace axle bearings and to use in the removing and replacing of universal joints in drive lines. The press may also be used to straighten bent parts that must be bent cold. Most hydraulic presses can exert several ton of pressure and this makes them valuable tools where high pressure is needed.

Drive Line Service

Lathe
Power hacksaw
Arc welder
Balancer

Universal joints
Universal joint parts
Suspension parts
Motor and Transmission Mounts

A large floor model type of lathe is necessary for drive line work. It has to be large enough to hold drive shafts for proper alignment so that the drive shaft ends, yokes and stubs may be correctly installed.
General Machine Shop Tools

- Lathe
- Drill press
- Bench grinder
- Bench vise
- Air compressor
- Overhead chain hoist
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS IN THE SPACE PROVIDED.

1. Why do automotive parts stores have a machine shop as part of their business?

2. What are some major functions of the machine shop operations?

3. Why are machine shop services advertised and displayed in the parts counter area?

4. Why should the parts counterworker be familiar with the machine shop and its operation?

5. Refer to the Piston Rings and Pin Service section. List parts you might sell if a customer has his or her piston pins fitted.

6. Refer to the Crankshaft Repair Equipment section. List parts you might sell if a customer has his or her crankshaft polished.
Self Assessment Answers

1. To provide an additional service to their customers. Customers usually go where they can get complete service.

2. a. Accept orders and write up orders for repair.
   b. Make estimates and bids for repair work.
   c. Repair and recondition automotive parts.
   d. Pickup and delivery

3. To make customers aware of services available when they are in the store for parts.

4. Promotes more selling. Machining and machine services often require related parts, thus increasing sales and services that make more money for the store.

5. Piston rings, pins, bushings, connecting rods, rod bearings, gaskets and seals.

6. Main and rod bearings, gaskets, and seals.
Assignment

DO ONE OF THE FOLLOWING ASSIGNMENTS.

1. Visit a parts store and ask to see the machine shop. List as many of the services as you can.

2. Visit a parts store that does not have a machine shop. Ask them if they provide any machine shop service and how they are able to do it.
COMPLETE THE FOLLOWING TASKS.

1. Visit a machine shop, list as many pieces of equipment as you can recognize and the operations they perform.

2. List as many of the related parts of the brake system as you can that could be sold by the machine shop.

3. Write a brief observation of the various types of equipment the operator used while you were there.

4. After you have completed the tasks above, cut out the pictures of machine shop equipment and tools on the next three pages and glue them in their proper locations in the Information section. Spaces have been left for this purpose. Show your work to your instructor.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS IN THE SPACES PROVIDED.

1. What advantage is it for a parts store to have a machine shop?

2. How is the parts counter worker's job related to the machine shop?

3. How would a parts store that doesn't have a machine shop provide that service to their customers?

4. How can you become familiar with the machine shop operation?

5. What types of machine shop services are gradually not being used very much?
Instructor Post Assessment Answers

1. They provide a complete service for their customers and can sell related parts and service to the customer.

2. Make customers aware of services provided and sell related parts.

3. Send it out to another machine shop, risk losing the customer completely.

4. Visit it, ask questions, take customers through and show them operations.

5. Bearing sizing, bearing boring, crankshaft grinding.
IDENTIFICATION OF SHEET METAL BODY PARTS

**Goal:**
The student will be able to identify basic auto body sheet metal parts in a catalog and locate their part numbers.

**Performance Indicators:**
The student will demonstrate knowledge of the subject by successfully completing the Self Assessment, the Assignment, the Job Sheet, and the Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. ___ Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. ___ Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. ___ Study the Vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. ___ Study the Information section. This section will give you the information you need to understand the subject.

5. ___ Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. ___ Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. ___ Do the Job Sheet. Follow the instructions at the top of the Job Sheet. The tasks listed on the Job Sheet will help you develop skills which will be helpful to you.

8. ___ Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Because some areas of the auto parts industry involve the repair and replacement of the sheet metal body parts, workers trained in that field are required. In addition, some shops do only body and fender repair and replacement. For these shops a specialized parts counter worker is required: One who can identify and supply the sheet metal parts needed.

Auto dealerships, such as General Motors and others, usually have a body and fender repair shop as part of their service operation. Parts counter workers trained in body sheet metal are sometimes part of the complete parts sales department. In stores, the body and fender repair shop has a separate and complete parts department with parts counter workers.
Vocabulary

Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

MLDG--Moulding.
RVL--Reveal.
W/S--Windshield.
UPR--Upper.
LWR--Lower.
QTR--Quarter.
WDO--Window.
BELT--Middle of side of car, also called belt line--for example "belt line" moulding or "belt" moulding.
T/GATE--Tail gate. Used in trucks and station wagons.
REQD--Required, such as "2 REQD" would mean 2 items would be needed for that particular area or job.
CTR--Center.
DRIP MOULDING OR DRIP.RAIL--The small gutter that keeps moisture or rain from running into the car when the door is opened.

R.F.--Right front.

L.F.--Left front.

PNL--Panel.

FIN--Finish.

ASS'Y--Assembly.

R or Rr--Right or right rear.

B/W--Back window (not RW as that would mean right window not rear window).

BTM--Bottom.

L or Lr--Left or left rear.
Supplementary References

1. Parts Catalogs. Various Manufacturers: General Motors, Ford, Chrysler, etc.


(Illustrations taken from existing Auto Parts Manuals for instructional uses.)
The outside of the automobile is called the car body. This includes the sheet metal that covers the doors as well as the hood and the trunk lid. Auto body repair sometimes calls for straightening the sheet metal back to its original shape. Other times, if the damage is too much to make it practical to repair, replacement of the parts is then required. That is when the special parts counter worker who works with sheet metal body parts is needed.

(See Figure 1 on the following page.)

Study Figure 1. Figure one is a typical page from a Ford Motor Company parts catalog. Notice that every part, no matter how small or how large has a number.

Some auto body parts are distinctive. That means some parts are only for the left side of the vehicle, others only for the right side and the parts cannot be interchanged. In other words, a left fender would not be suitable for the right side. Of course there are some parts that may be suitable or can be used on either side.

The left and right side of the vehicle is always determined as if you were seated in the driver’s seat facing forward. The right side of the car is then the side the passenger is seated on.

(See Figure 2 on the page following Figure 1.)

Look at Figure 2. Is the front fender 16006 for the left or right side of the car? Careful study would show it to be for the right side of this car.
# NOT INCLUDED IN SKELTON BODY

* REFER TO CHASSIS GROUP NUMBER

REFER TO (CHA-AS) ILLUSTRATION SECTION 160
*REFER TO GROUP IN CHASSIS SECTION

REFER TO ILLUSTRATION SECTION 160 FOR DETAILS
Auto parts counter workers also have to be familiar with the mouldings and shiny metal parts on the outside of the car. These parts are called trim parts and are accents that make the outside appearance more pleasing to the eyes and give the car a "dressed up" look. In some cases they also protect the body from surface scratches.

Study Figures 3 and 4. (Figure 3 below, Figure 4 on the following page.) These illustrations show various moulding or trim strips, their locations, names and part numbers. Notice the abbreviations in the part names. It would require much more space to write out the entire name. Most manufacturers use the same abbreviations. Study the abbreviations. If you can't make out what an abbreviation stands for, look it up in the vocabulary section of this module.

1975 MONTE CARLO FRONT END MOLDLINGS

1. 8.055 MOULDING, Hood Pnl. Rr. Edge 362398
2. 8.132 MOULDING UNIT, Frt. Fdr. Fdr. Sl. Upr 6258054
3. 8.147 PLATE UNIT, Frt. Fdr. Sl. Name 6258310
4. 8.132 MOULDING ASSY., Frt. Fdr. Sl. Rr. 360951-52
5. 8.132 MOULDING, Frt. Fdr. W/H Cpg. 6258033-34
6. 8.132 MOULDING UNIT, Frt. Fdr. Sl. Frt. 360949-50
Some body and fender repair shops also have to work with the interior of the car. Study the illustrations, Figures 5, 6, 7 and 8, and become familiar with the interior parts, as they are also part of the body sheet metal parts counter worker's job.

(See Figures 5, 6, 7 and 8 on the following pages.)

Notice how Figure 5 illustrates the difference between bucket seats (A), split back seats (B) and bench type seats (C).

The parts counter worker that is a beginning or apprentice worker should study the parts catalogs that the firm uses and become familiar with sheet metal body parts, interior parts and mouldings and trim. The complete parts counter worker should be familiar with all areas of the auto parts industry.

Very few parts jobbers provide sheet metal body parts, only the manufacturer's dealerships will carry these replacement parts. For this reason these parts
1973 CHEVELLE INTERIOR TRIM (1AD29-35-37-80)

GM PARTS DIVISION, GENERAL MOTORS CORPORATION—CHEVROLET—11-14

14,000-GROUP

14-177

325 335
| 1. | 10.203 | SUN SHADE—Trimmed | 36. | 11.419 | SPRING & FRAME ASSY—F/St Btm |
| 2. | 10.219 | SUPPORT—Sunshade | 36. | 14.880 | PAD ASSY—R/Seat Btm Wife & |
| 3. | 11.381 | BUMPER—Frt St Bk Fmm | 37. | 11.810 | SPRING & FRAME ASSY—R/Seat Btm |
| 4. | 14.830 | PANEL—Shroud Side Fin | 37. | 15.081 | PAD ASSY—R/Seat Cush |
| 5. | 14.840 | HEADLINING | 38. | 11.428 | FRAME ASSY—Fldg 2nd Seat Back |
| 6. | 11.120 | MOLDING—Garn B/W Upr | 38. | 15.022 | PAD ASSY—Fldg 2nd Seat Back |
| 7. | 10.053 | MOLDING—Garn W/S Upr | 39. | 11.610 | FRAME ASSY—Fldg 2nd Seat Cush |
| 8. | 14.861 | MOLDING—Roof Inr Sd Rr | 39. | 15.038 | PAD ASSY—Fldg 2nd Seat Cushy |
| 9. | 11.119 | MOLDING—Garn Qtr Wdo Rr | 40. | 15.090 | COVER—3rd Seat Back |
| 10. | 15.388 | HOOK—Cost | 40. | 11.373 | FOUNDATION—3rd Seat Back Frmd |
| 11. | 14.731 | COVER ASSEMBLY—Body Lk Fm Abv Btt | 40. | 15.002 | PAD ASSY—Fldg 3rd Seat Back |
| 12. | 14.951 | MOLDING—Roof Inr St Frr | 41. | 15.070 | COVER—3rd Seat Back |
| 13. | 14.730 | COVER ASSEMBLY—C/Ptr Upr | 42. | 11.810 | FRAME ASSY—Fldg 3rd Seat Btm |
| 14. | 15.000 | COVER—Rr St Bk | 43. | 15.038 | PAD ASSY—Fldg 3rd Seat Cush |
| 15. | 14.880 | COVER—Frt St Cush | 43. | 12.195 | PANEL—T/Gat Inr Cvr |
| 16. | 14.300 | COVER—St St Bk | 44. | 14.924 | COVER ASSY—P & D H/Rst Seat Back |
| 17. | 15.000 | COVER—Second St Back | 45. | 14.885 | TRIM—F/D Upr |
| 18. | 15.035 | COVER—Rr St Cush | 46. | 14.760 | TRIM—R/D Upr |
| 19. | 15.035 | COVER—2nd St Cush | 47. | 11.373 | FRAME—P & D Seat Back |
| 21. | 15.108 | PANEL—Qtr A/Rst Trim Fin | 48. | 12.180 | MOLDING—Garn T/Gate Wdo |
| 22. | 12.944 | PANEL—W/H Car | 49. | 11.238 | PANEL—Fin P & D Seat Back |
| 23. | 15.308 | MAT—R/Ftr Rub | 50. | 14.880 | PAD—P & D Seat Btm Wires |
| 24. | 15.285 | MAT—F/Ftr Rub | 51. | 12.180 | MOLDING—Fin Back Btm Ptr Lwr |
| 25. | 12.579 | PANEL—Spa Tire Cvr | 52. | 14.800 | COVER ASSY—P & D Seat Complete |
| 26. | 11.378 | COVER—P & D St Bk Qtr Hge | 53. | 14.304 | BUTTON ASSY—Seat Back Trim |
| 27. | 12.180 | MOLDING—Fin Bk Body Ptr Upr | 54. | 11.373 | PANEL ASSY—F/St Back |
| 28. | 15.024 | TRIM, Pn. R/Seat To B/W | 54. | 14.802 | PAD ASSY—F/St Seat Back |
| 31. | 14.885 | PANEL—Trim Fin Frt Or Lwr | 57. | 11.828 | FRAME ASSY—R/Seat Back |
| 32. | 14.760 | PANEL—Tr Fin RR Or Lwr | 57. | 15.002 | PAD—R/Seat Back |
| 33. | 14.762 | PAD ASSY—R/D Lwr Tr Fin Pnt A/Rst | 58. | 10.051 | ESCUTCHEON—W/S Upr Corn Mldg (57 Style only) |
| 34. | 14.762 | PAD ASSY—R/D Lwr Tr Fin Pnt A/Rst | 59. | 15.100 | EXTENSION—Spare Tire Cvr Pnt |
| 35. | 10.051 | MOLDING—Garn W/S Side | 60. | 12.180 | MOLDING—Fin Bk Bdy Opng Upr |
1975 MONTE CARLO SHEET METAL.
1975 MONTE CARLO SHEET METAL

1. 8.130 FENDER ASSY., Frt.
2. 8.977 SCREW, Machine-
   (5/16" — 18 x 1")
3. 8.977 SCREW (5/16" — 18)
4. U-NUT
5. DUCT ASSY., Carb.
   Air Intake
6. 8.518 HINGE ASSY., Hood
7. 8.013 SPRING, Hood Hinge
   (3/8" — 16 x 1-3/8")
9. N.S. SHIM
10. 8.000 HOOD ASSY., Panel
11. 1.272 BAFFLE, Radiator-
12. 8.154 SHIELD, Frt. Fdr.
    St. Dust
13. 8.977 SCREW
15. 8.921 U-NUT
16. 8.083 SPRING, Hood Pop-up
17. 8.080 CATCH ASSY., Hood Lock
18. 1.276 SCREW (5/16" — 16 x 1-3/4")
19. 8.080 STRIKER, Hood Latch
20. 8.977 SCREW
21. 8.977 SCREW
22. 1.277 SHROUD, Rad., Lwr., Upr.
23. 1.277 EXTENSION, Rad. Shroud,
    Upr. & Lwr.
24. 3.130 CANISTER, Fuel Vapor
25. 3.310 SUPPORT ASSY., Fuel
    Vapor Canister
26. 1.270 SUPPORT ASSY., Rad. Core
27. 1.218 RADIATOR
28. 1.203 CAP ASSY., Radiator
29. 1.270 PAD, Rad. Retainer
30. 8.083 LATCH ASSY., Hood
31. 8.083 PLATE ASSY., Hood
    Latch Mtg.
32. 8.016 SCREW (3/8" — 16 x 1")
33. 1.276 SCREW (5/16" — 18 x 3/4")
34. 1.267 BRACKET, Rad. Grl.
35. 1.276 SCREW (5/16" — 18 x 3/4")
36. 8.977 SCREW
37. 8.977 SCREW
38. 2.585 LAMP ASSY., Frt.
    & Side Mark.
40. 2.737 SPRING, Hdlmp. Adj.
41. 2.737 SCREW ASSY.
42. 2.726 HEADLAMP CAPSULE
43. 2.728 BIZEL-Headlamp
44. 8.977 SCREW (4-8-19 x 3/4")
45. 8.921 U-NUT
46. 1.286 GRILLE, Rad. Lwr.
47. 8.977 SCREW
48. 1.286 U-NUT
49. 1.283 PANEL, Rad. Grl. to
    Frt. Bpr. Fill.
50. 1.286 GRILLE ASSY., Rad. Upr.
51. 8.900 SCREW, Hx. Hd.
    (1/4" — 14 x 3/4")
52. 1.286 PANEL ASSY., Ft. Header
53. 8.977 SCREW
54. 8.977 SCREW
55. 8.083 U-NUT
56. 8.900 SCREW, Hx. Hd.
    (1/4" — 14 x 3/4")
57. 1.287 RETAINER, Ft. Fdr. to
    Bpr. Fill.
58. 8.900 SCREW, Hx. Hd.
    (1/4" — 14 x 3/4")
59. 1.287 RETAINER, Ft. Fdr. Fill.
60. 1.283 FILLER, Ft. Fdr. to Bpr.
61. 8.977 SCREW (5/16" — 18)
62. 8.141 BRACE, Ft. Fdr.
63. 8.929 WASHER-(11/32")
64. 8.900 NU., (5/16" — 18)
65. 2.333 TRAY ASSY., Battery
66. 2.336 CLAMP, Battery

---

GM PARTS DIVISION, GENERAL MOTORS CORPORATION—CHEVROLET—11A

8.000-GROUP

8-221
are called original equipment or dealer items. If an individual needs a sheet metal part for a vehicle, it must be obtained from a manufacturer's dealership.

Recently some foreign manufacturers have licensed private companies to produce fenders for some popular imports and these are available in a few jobbers' inventories.

Most jobbers don't carry sheet metal body parts because a large amount of space is required for stocking parts for the large number of different models and styles.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. Why should auto parts counter workers be familiar with sheet metal body parts?

2. What is the sheet metal outside of the vehicle called?

3. What is another name for mouldings?

4. What is the purpose of a drip rail?

5. Why does a manufacturer's dealership have a body-fender shop as part of its business?
1. The complete parts counter worker should understand all areas of the parts industry and some body and fender repair shops and dealerships require a specialized parts counter worker who can work with body parts.

2. The body.

3. Trim.

4. Keep water out of the car when the door is opened.

5. To make their service to customers complete.
MECHANICS

BODY PANEL SECTIONS AND ACCESSORIES

1. Grille Guard
2. Headlight
3. Radiator Grille
4. Hood Ornament
5. Hood
6. Front Fender
7. Cowl Ventilator
8. Upper Cowl Panel
9. Roof Panel
10. Drip Molding
11. Rear Window
12. Deck Lid
13. Taillight
14. Gravel Shield
15. Hub Cap
16. Wheel
17. Tire
18. Front Door Hinge Pillar
19. Rocker Panel Molding
20. Door Window Ventilator
21. Belt Molding
22. Center Pillar
23. Door Lock
24. Door Handle
25. Door
26. Rear Door Hinge Pillar
27. Rear Fender
(also known as quarter panel when all one piece.)
28. Rear Quarter Panel
(also known as quarter panel when all one piece.)
29. Bumper
1. Study Figure 9.

2. Identify on Figure 10 as many parts as you can remember. (Figure 10 is on the following page.)

3. What do the following abbreviations stand for?
   - QTR
   - FIN
   - LWR
   - W/S
   - MLDG
   - T/GATE
   - CIR
   - PLR
   - REQD
   - R or Rr
BODY PANEL SECTIONS AND ACCESSORIES

1. __________
2. __________
3. __________
4. __________
5. __________
6. __________
7. __________
8. __________
9. __________
10. __________
11. __________
12. __________
13. __________
14. __________
15. __________
16. __________
17. __________
18. __________
19. __________
20. __________
21. __________
22. __________
23. __________
24. __________
25. __________
26. __________
27. __________
28. __________
29. __________
COMPLETE THE FOLLOWING TASKS.

Parts catalogs and sheet metal body catalog illustrations have several ways of showing the parts. Many pictures are external or outside views. Figure 3 is an example of an outside or external view. It is a 3/4 view; that is, you can see more than just the side of the vehicle. You can see all of the left front fender, grille and the top and front of the right front fender.

Figure 4 is an external or outside view, but is a side view as it shows only one side of the vehicle.

Figure 7 is a combination of 2 types of illustrations – an exploded view and a phantom view. An exploded view shows all the parts separated, but in the approximate position. The dotted lines connecting various parts show how the parts would be assembled. Some parts are drawn as if they were transparent. You can see through them and see their approximate relationship to other parts in the illustrations. Study all the Figures 1 through 7 carefully. Imagine the vehicle as it would appear if it were real.

A. Study Figures 7 and 8. Look up the following parts. Write down their part numbers. Write down the location numbers in the illustration.

1. Radiator lower shroud
2. Hood hinge assembly
3. Hood latch assembly
4. Radiator grille bracket
5. Battery clamp
6. Front fender, retainer
7. Headlamp adj. spring
8. Radiator shroud extension
9. Fuel vapor cannister support
10. Headlamp capsule
11. Radiator grille bracket
12. Front fender to bumper filler
13. Battery tray assembly
14. Hood panel assembly
15. Hood latch striker
16. Front fender shield
17. Lower radiator grille
18. Hood pop-up spring
19. Park and side marker lamp assembly
20. Front fender assembly
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. Where are auto parts counter workers who know sheet metal body parts most likely to find work?

2. What special skills should the auto body sheet metal parts counter worker have?

3. What type of illustration is Figure 1?

4. Look at Figure 7. What is the part number for the radiator grille?

5. Look at Figure 4. What do the following abbreviations stand for?
   a. MLDG
   b. QTR
   c. W/S
   d. ASS'Y
   e. W/S PLR
   f. PNL
   g. FIN
   h. BK

   337
1. In an auto manufacturer's dealership or independent body and fender repair shops.

2. A knowledge of the car body parts names and their location.

3. Exploded view of the upper body of a 1965-66 Thunderbird.

4. 1.266

5. a. moulding  
b. quarter  
c. windshield  
d. assembly  
e. windshield pillar  
f. panel  
g. finish  
h. back
Goal:
The student will learn and be able to identify advertising and merchandising methods.

Performance Indicators:
The student will demonstrate an understanding of display methods by completing a Self Assessment, an Assignment and a Post Assessment.
In order to finish this module, do the following tasks. Check each item off as you complete it.

1. ___ Read the Goal and Performance Indicators on the cover of the module. This will tell you what you will learn by studying the module, and how you will show you've learned it.

2. ___ Read the Introduction. The Introduction will tell you why the module is an important part of the parts counter trade.

3. ___ Study the vocabulary section. Vocabulary words are important for a good understanding of the trade. After you have studied the vocabulary, ask your teacher to quiz you on the words and their meanings.

4. ___ Study the Information section. This section will give you the information you need to understand the subject.

5. ___ Take the Self Assessment exam. This is a test for you to prove to yourself that you have learned the material you have studied. Compare your answers with the answers on the Self Assessment Answer Sheet, which is on the page following the Self Assessment. If you scored poorly, re-study the Information section or ask your teacher for help.

6. ___ Do the Assignment page. Follow the instructions at the top of the Assignment page.

7. ___ Take the Post Assessment exam. Give the exam to your teacher after you have completed it. Your teacher will grade it for you.
Merchandising is a means of drawing in customers and making them want to buy. The appearance of the store you work in (outside and inside) is a method of attracting customers and influencing them to buy.

Your attitude and the way you treat the customer who has come inside is an important part of selling and merchandising. Quick, courteous service, friendly greetings and clean, attractive displays of merchandise persuade the customers to buy in your store.

The appearance of the inside of your store should tell them you want to serve them. Displays should draw attention to parts and merchandise you sell. That will increase sales:
Trade terms are very important for a good understanding of the trade. Study these words and meanings. When you have learned them, ask your teacher to quiz you on the words and their meanings.

MERCHANDISING--The act of selling, buying or trading wares, goods or commodities. In this case, parts for cars, trucks, related items and products for serving, repairing or maintaining vehicles.

ADVERTISING--Inform or give notices of prices and availability of products. Tell advantages of one product over another, special prices and sales.

PROMOTIONS--Promoting. For example, a product may be put on display in the front of the store: Seasonal items such as tire chains in the winter time, or tires and tune-up parts in the spring. This encourages and gives ideas to the customer to buy items. Putting items up front or pointing out items are forms of promotion.
Supplementary References


2. Auto Parts Counter Worker. University of Texas:

3. The Inside Salesman. NAPA.
Some of your customers may never (or seldom) see the inside of your store. All of their buying is done by telephone. The appearance of your delivery truck and the courtesy of your delivery driver are important selling and advertising points for your store. The way you talk over the telephone and the condition of the merchandise when it reaches the customer are selling points for your store.

Your store should, of course, be clean, orderly and attractive to customers. Products and displays should draw attention to the products for sale and help to sell them.

Keeping the store attractive takes the cooperation of everyone. You should pay attention to:

1. Keeping the store neat.
2. Displaying merchandise properly.
3. Making repairs and re-painting when necessary.
4. Stocking supplies orderly and neatly on shelves.

Factories and suppliers of parts can provide brochures, pamphlets and displays for their products. If they are available, use them as an aid to selling the merchandise.

Displays, advertising and literature used properly can do several things:

1. Remind customers of what they need now.
2. Show advantages of a product or part.
3. Create ideas for customers to buy at a later time.
4. Bring up questions in the customer's mind about the product.
5. Make sales immediately.
"Point of sale" aids are signs or displays that tell customers you have certain items in stock. Usually they describe the product's features or values.

Some customers buy on impulse. They see something on display and it encourages them to buy "on the spot." This is called impulse buying. Something about the display or a low price may encourage them to buy.

Displays of items which are frequently used, low-priced, new or profitable, or very useful, help to promote impulse buying. Products shown in an attractive display that encourage "look! pick me up! buy me!" help set the buying impulse in motion. To make displays do a better selling job, they should be located at busy customer locations. Use the windows, walls, floor and counters for displays, but don’t clutter and be sure to keep counter tops open.

Items which trigger impulse buying should be located where they can be easily seen and reached.

1. Place large items of parts or equipment on the floor or in the window.
2. Items like air compressors, battery chargers, floor jacks, etc. are better in the windows or on the floor.
3. Smaller items related to them should be placed near them.
4. Be sure displays are kept clean and orderly.
5. Replace items that are handled a lot if they begin to look stained or "shop worn."
6. Some displays should reflect seasonal items—items that relate to the time of year or the weather.
7. Change displays often. Don’t display Christmas time items on the Fourth of July. Keep them up-to-date.
8. Use lots of color, lights and motion to draw attention to displays.
9. Displays located on the floor should not block aisles or be so tall that the counter worker is hidden from view. Tall displays are better if placed against the wall or in an out-of-the-way area.
10. Displays should be kept full.
11. Displays of a definite theme are effective, if they are directed to a particular type of customer. Attractive displays of high-performance parts, farm and home equipment or small engine parts are effective in reaching special customers.
12. Hand tools and chemicals must be displayed to be sold. Most parts stores place hand tools on open racks behind the counter so they can't be stolen.

13. Watch for new products that have eye-catching appeal. Some parts stores have a special area marked off for "new items."

14. Dust on displays is proof to the customer that the item is not in demand.

15. Be sure displays are well lighted. Use spot lights to make them stand out.

16. To prevent theft, keep pocket-sized items away from the door. Be sure there is a clear view of the storefront from behind the counter. If necessary, tie or wire small items to a peg board.

17. Windows should be kept clean and free from decals.

18. The top of the parts sales counter should be clean. The only things on the counter should be parts catalogs and a pad to write on. (The telephone can even be placed on a shelf, handy, but out of sight, below the counter.)

When the store's business increases, you need to use displays and promotions to continue to increase the business. Merchandising, promotions and displays are the most interesting and challenging parts of a business you can face.
WRITE AN ANSWER TO THE FOLLOWING QUESTIONS.

1. How does a telephone customer form an image of your store?

2. What should the condition of the store tell your customers?

3. Who supplies nearly all of the display material for the parts store?

4. Where should impulse items be displayed?

5. What are rules to follow when using window displays?
1. The way you sound and talk to the customer over the telephone; the appearance of your driver and delivery truck, and the condition the merchandise is in when it reaches the buyer.

2. Clean, neat, orderly, up-to-date and attractive displays; clean windows, courteous, friendly, efficient parts counter workers all tell customers you want their business and are there to serve them.

3. Manufacturer's, wholesalers and suppliers.

4. Near the sales counter, within sight and touch!

5. Display large items and related small items close together. Don't clutter windows with posters or decals. Use seasonal items appropriate to the time of year or climate.
Assignment

COMPLETE THE FOLLOWING ASSIGNMENTS.

1. Visit several parts stores and make a list of impulse displays you see and the items offered for sale.

2. List seasonal items on display.

3. Visit local parts stores. Observe window displays. Grade them according to standards you have learned. Share this information with the instructor.

4. List manufacturers who have merchandise on display. List items that are seasonal, impulse items, spot-buying items.
ANSWER THE FOLLOWING QUESTIONS IN THE SPACES PROVIDED.

1. How does an out-of-town customer form an image of your parts store?

2. Who in the store is responsible for making it a show spot?

3. Name 4 ways the store can be made attractive to customers.

4. List the uses of displays, advertising and product literature.
1. Courtesy of sales staff, condition of merchandise, cleanliness of store, displays, counter-tops.

2. Everyone's cooperation and help is needed.

3. Well lighted, clean, attractive displays, windows not cluttered with decals or posters, able to walk through aisle without stumbling over or bumping into something.

4. Impulse buying, spot buying, reminder to buy in the future, sell related items. Show features of product, inquiries about products.