

MODEL I / MODEL III

**MANUFACTURING
INVENTORY
CONTROL**

**CAT. NO.
26-1559**

Radio Shack

TRS-80

SOFTWARE

TM

CUSTOM MANUFACTURED IN USA BY RADIO SHACK, A DIVISION OF TANDY CORP.

IMPORTANT NOTE TO MODEL III OWNERS

The program and initialization disks contain a MODIFIED version of MODEL III TRSDOS version 1.3. This modified version is required for proper use of the program(s).

DO NOT transfer this software to a different TRSDOS disk.

DO NOT use this modified version of TRSDOS 1.3 with other software.

ALWAYS RESET your system AFTER inserting the program disk for this package.

ALWAYS RESET your system AFTER changing to any program disk not included with this package.

If you need to create TRSDOS disks to use with this package, be sure to create them using the MODIFIED TRSDOS disk which is enclosed.

875-9179

Manufacturing Inventory Control

Radio Shack

A DIVISION OF TANDY CORPORATION
FORT WORTH, TEXAS 76102

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Manufacturing Inventory Control Program :
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Introduction

The Radio Shack Manufacturing Inventory Control System is designed to help reduce the time and expense of inventory control. This system will help control Raw Materials, Finished Goods, and assist in planning material requirements. This program is designed for the TRS-80 32K Business System:

Required Equipment

Model I:

- TRS-80 16K Level II Computer with Video Display
- TRS-80 16K Expansion Interface
- 2 Disk Drives (3 or 4 for greater capacity)
- TRS-80 Line Printer (80 Column Capacity) and Printer Cable

Model III:

- TRS-80 32K Model III with 2 Disk Drives
- TRS-80 Line Printer (80 Column Capacity) and Printer Cable
- Optional External Drives (for greater capacity)

Program and Initialization diskettes have been included for both the Model I and Model III.

Capacity

There are three different capacity options available:

1. 1700 Raw Materials requires 2 Disk Drives and 32K RAM
2. 3700 Raw Materials requires 3 Disk Drives and 32K RAM
3. 5700 Raw Materials requires 4 Disk Drives and 48K RAM

This manual will take you through the creation of a Raw Materials and Finished Goods file, step by step. Once you learn the program, using this manual as your guide, you will have a solid background in using the TRS-80 and the Manufacturing Inventory program.

Features

- Raw Materials Inventory Report
- Bill Of Materials
- Pull Sheets
- Finished Goods List
- Out-of-Stock Reports
- Inventory Worksheets
- Raw Materials Use Reports
- “Where Used” Reports

Before You Start

Diskettes can be damaged through exposure to magnetic fields, mishandling etc. To insure against loss of the Program, make Backup copies of your diskettes. Keep the original Program and Initialization diskettes in a safe place. Never use the originals, except to make “working copies”, for actual operation of the program. (See Backing Up Your Diskettes in Appendix 1.)

After you have made Backups of the Program and Initialization diskettes, you must also Format blank Data diskettes. These disks will be used to store the Raw Materials information. Approximately 20000 Raw Materials can be stored on a single Data diskette. If you require more than one Data diskette, you must clearly mark each diskette to indicate in which Drive it will be used. You must always have the same Data disk in the same Drive every time you run the program. (See How To Format Your Data Diskettes in Appendix 2.) An unformatted Data diskette has been included in this package to be used with your Model I or Model III computer.

Set Up

Before using the Manufacturing Inventory Control System, you will have to transfer your inventory from your present system into the computer. You must also supply the computer with some information about your company. The entire Set Up procedure is called Initialization. Since you must transfer **all** of your Raw Materials and Finished Goods information into the computer, find a comfortable chair, and let's begin.

Follow these steps in **EXACT** order:

1. Turn on the system.
2. Insert the disk labeled Initialization in Drive 0 and close the door.
3. Put a formatted Data diskette in Drive 1 (if you are using more than two Drives, put the additional formatted Data disks in 2 and 3.)
4. Press the Reset button on your computer.

The screen will show:

DOS READY (Model I) or
TRSDOS Ready (Model III)
HOW MANY FILES? _
MEMORY SIZE? _
READY > _

You type:

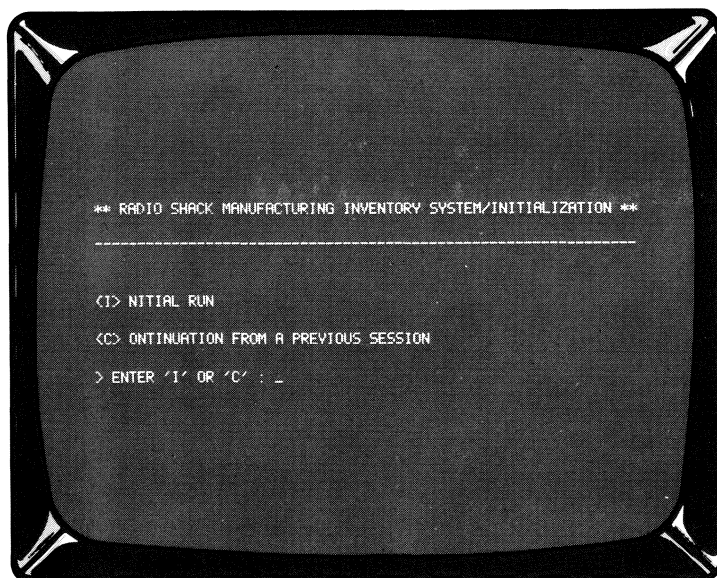
BASIC and press **ENTER**

4 and press **ENTER**

Press **ENTER**

RUN "MFGINIT" and press **ENTER**

The screen will show:

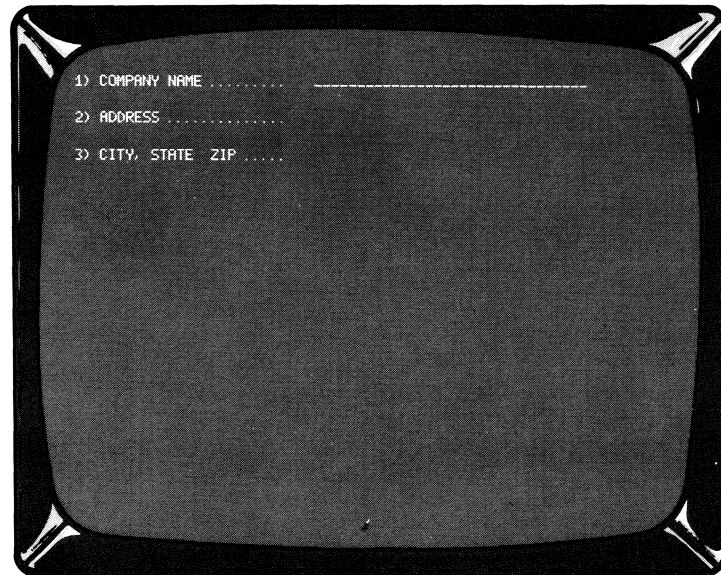


Set Up (continued)

Press **[1]**, since this is the Initial Run. You will be asked how many Disk Drives you will be using to run this program. Press **[2]**, **[3]**, or **[4]**.

Once you choose the number of drives, you cannot decrease the number: You can increase the number of drives later.

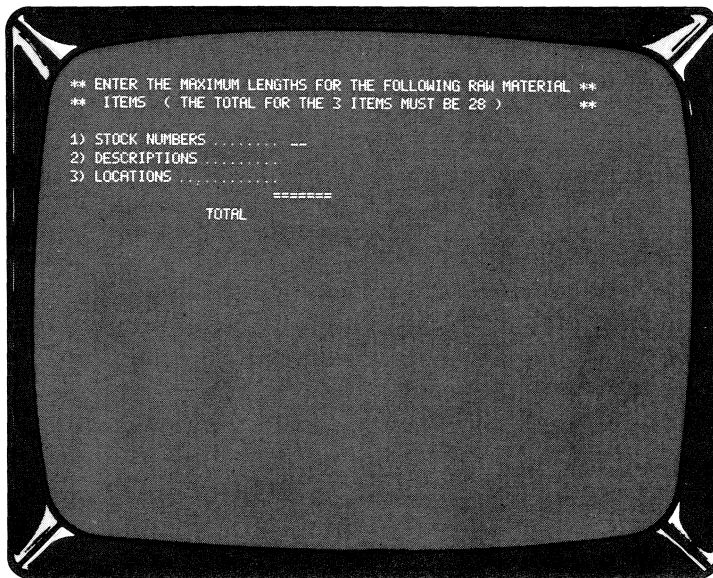
The screen will show:

A screenshot of a computer screen displaying a form for entering company information. The form is titled '1) COMPANY NAME' and has three lines of input fields. The first line is for the company name, the second for the address, and the third for the city, state, and zip code. The screen is dark with light-colored text and input fields.

Company Information

1. Type your company name (up to 32 spaces) and press **[ENTER]**.
2. Type the company's Address and press **[ENTER]**.
3. Type the company's City, State, and Zip Code and press **[ENTER]**.
4. You will be asked "ARE ALL ENTRIES CORRECT (Y/N)". If the entries are not correct, press **[N]**. Enter the number of the line that needs correcting. Retype the line and press **[ENTER]**.
5. When all entries are correct, press **[Y]**.

The screen will show:



Stock Numbers, Descriptions, And Locations

When you make the actual entries for your inventory you will be limited to a certain number of characters. You can choose the line lengths of the stock numbers, descriptions, and locations of your Raw Materials. However, the lengths for all three items must exactly total 28 characters. For example: 10 characters for the Stock Number, 16 characters for the Description, and 2 characters for the Location. Blank spaces count as characters. Reports have the best appearance when Stock Numbers are at least 6 characters long, and the Descriptions are at least 12 characters long.

Note: After Initialization has been completed, these lengths cannot be changed.

Type your desired lengths for Stock Number, Description, and Location. (Press the **ENTER** key after each line.) The program will ask you "ARE ALL ENTRIES CORRECT (Y/N)". Press **N** if you wish to change an entry, then type the desired change. If the lines are correct, press **Y**.

The screen will show:

```

**VERIFYING DATA DISKETTES**
DRIVE:_____ GRANULE:_____

```

This indicates the computer is checking the data diskette to make sure it is ready to accept data.

Raw Material Initialization

Here, you actually create a Raw Material File. In some cases, this process can take several days to complete. For example, if you have 5700 Raw Materials, it will take quite a while to enter them into the computer. Fortunately, this is done only once.

You do not have to enter your Raw Materials Stock Numbers in order. When Initialization is completed, all stock numbers will be sorted by the computer.

Stock numbers are sorted in "alphanumeric" order. This is just like "alphabetic" order except numbers and punctuation are also included. In alphanumeric order, the sequence begins with punctuation, followed by the numbers 0-9 then the letters A-Z. The characters are evaluated from left to right. For example, the stock numbers: 101, A-101, AA-101, 1001, A-1001, AA-1001 would be sorted in the following order:

1001	A-101
101	AA-1001
A-1001	AA-101

The stock number 1001 is before 101 because the third character is a zero in 1001 and a one in 101. If you want the numbers to be in numeric order, use leading zeroes. For example, entering 101 as 0101 will place it before 1001 in the order. Here is the list again, adjusted for numeric order:

0101	A-1001
1001	AA-0101
A-0101	AA-1001

The screen will show:

```

** RAW MATERIAL INITIALIZATION **
-----
1) STOCK NUMBER .....
2) DESCRIPTION .....
3) LOCATION .....
4) UNIT MEASURE .....
5) QTY ON HAND .....
6) UNIT COST .....

** ENTER '0' FOR STOCK NUMBER TO END **

LAST ITEM ENTERED -          NO. ON FILE - 0

```

1. Type the first stock number and press **ENTER** .
2. Type the description and location of the Raw Material, pressing **ENTER** after each.
3. Type the unit measure. Unit measure can be: EA = Each, BX = Box, CS = Case, LB = Pound, FT = Feet, etc.
4. Enter the quantity on hand. The computer will **not** accept decimal fractions for this entry. If some of your Raw Materials are measured in decimal fractions, you must use the next lowest unit of measure. For example, if the measurement is 1.5 feet, change it to 18 inches. Press **ENTER** afterwards.
5. Type the Unit Cost, per box, per case, etc., then press **ENTER** .
6. You will see the message: ANY CORRECTIONS (Y/N/D)? You can now make any corrections or you can Delete. Pressing **D** erases all entries for that item. If there are just one or two incorrect lines, press **N** . Indicate the line number with the mistake and retype it.
7. Press **Y** when all entries are correct. The entry format will reappear.
8. Repeat the process outlined above for the next item.

Note: At the bottom of the screen, you will see the last Stock Number entered, and the number of Raw Materials on file.

Take A Break

If you have a large quantity of Raw Materials, it is unlikely you can enter them in one session. The following function will allow you to enter Raw Materials in several sessions.

Press **@** for the Stock Number.

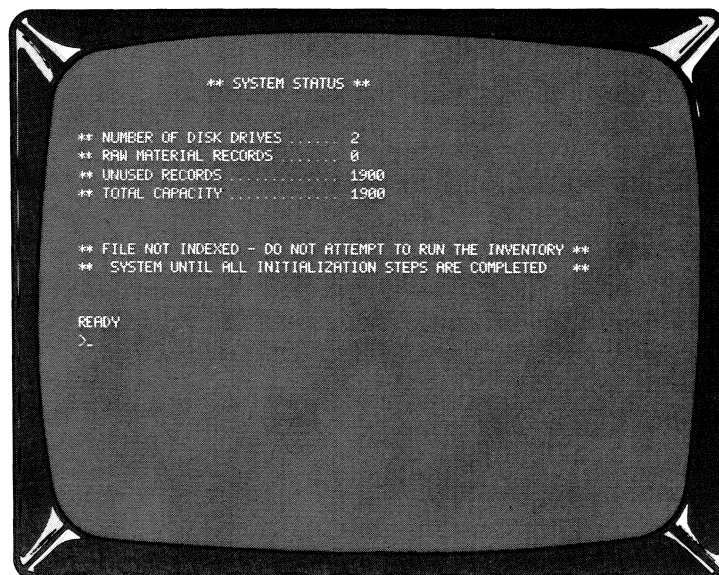
You will then be asked, (CONT)INUE OR (END) SESSION. Type **END** and press **ENTER** .

The screen will show:

DO YOU WISH TO CONTINUE IN ANOTHER SESSION (Y/N)?

Press **Y** .

The screen will show:



This is the System Status. It will let you know where you stand as you run the program. We will discuss this in more detail on page 10.

****IMPORTANT****

Remember to make a Backup of the diskettes you have used today. (For instructions on making a Backup, refer to Appendix 1.)

After you have backed up the diskettes, label the copies with the appropriate Drive number.

How To Continue Initialization

1. Put the Disks in the proper Drive(s) and follow the procedure outlined in "Set Up" on page 3.
2. Instead of pressing an "I" as you did the first time, press a **C** for Continuation From A Previous Session.
3. The program will go straight to entering Raw Materials.
4. Now you can continue entering Raw Materials.

When You Finish Initialization

When you finish entering all Raw Materials, follow these instructions:

1. Press **@** for the Stock Number.
2. Type **END** to end the session and press **ENTER** .
3. Press **N** when asked if you want to continue in another session.

Indexing And Sorting

The screen will show:

```
**INDEXING AND SORTING**  
RECORD =
```

The computer is sorting the Raw Materials on file in ascending order and creating an index. This program could run 12 hours or more (depending on the number of Raw Materials entered). Once sorted, the file stays in order.

Note: If you entered any duplicate Stock Numbers, a list of duplicate Stock Numbers will be printed out after the operation of indexing and sorting. Press **ENTER** for the list.

When Indexing And Sorting Is Completed

When this function has been completed, the screen will show:

```
**OPERATION COMPLETE**  
PRESS <ENTER> TO CONTINUE
```

Press **ENTER** . System Status will appear on the screen. Under the Status report, you will see:

```
**INITIALIZATION COMPLETE**  
**INSERT INVENTORY SYSTEM DISKETTE IN DRIVE 0 AND RUN "MFGINV"  
READY >_
```

****IMPORTANT****

Before you run the Manufacturing Inventory program, or quit for the day, make Backup copies of the Data Disks. You should make Backups at the end of every session, if you have made changes, or added information to the system.

Initialization is now completed. If you are ready to run Manufacturing Inventory, follow these instructions:

1. Remove the Initialization diskette from Drive 0.
2. Put the Program diskette in Drive 0 and close the door.
3. Type `RUN"MFGINV"` and press `ENTER`.

If you are through for the day, remove the disks (after making Backups) and store them in a safe place (before you turn off the computer). When you are ready to run Inventory, follow these instructions:

1. Turn on the system.
2. Put the Program diskette in Drive 0 and the Data diskettes in the appropriate Drives.
3. Press the Reset button.

Note: Make sure you have a Backup copy of the Inventory program before going any further.

The screen will show:

```
DOS READY (Model I) or
TRSDOS Ready (Model III)
HOW MANY FILES? _
MEMORY SIZE? _
READY> _
```

You type:

```
BASIC and press ENTER
4 and press ENTER
Press ENTER
RUN"MFGINV" and press ENTER
```

System Status

This is your status up to this point. Check the number of Raw Materials to see if it corresponds to the number you entered.

Available Records is the number of Raw Materials you can still enter in the system.

Finished Goods Capacities

Finished Goods are stored on the Inventory Program diskette (Drive 0). You can store up to 20 Finished Goods per diskette. If your company manufactures more than 20 types of Finished Goods, simply make Backup copies of the Inventory Program diskette, storing the additional Finished Goods on the Backup diskettes.

Finished Goods (On Line) should be 0 at this point.

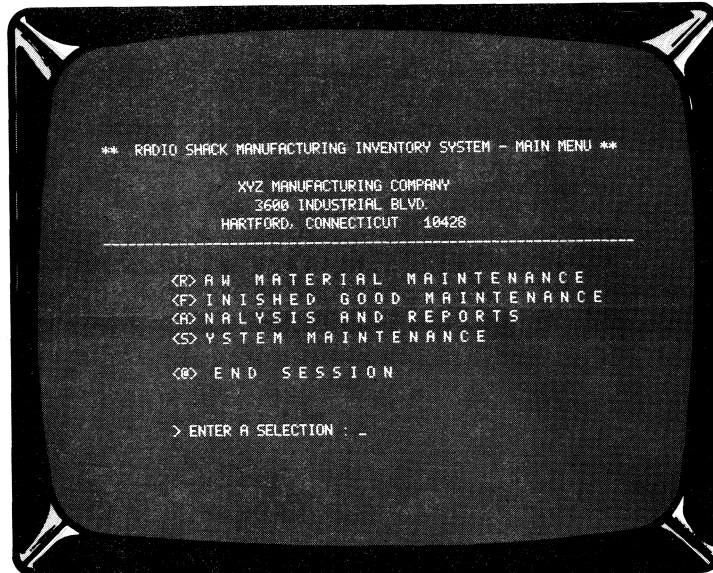
Unused Finished Goods Files should be 20.

Disk Drives should be 2, 3, or 4, whichever you entered during Initialization.

Press `ENTER` to proceed to the Main Menu.

Main Menu

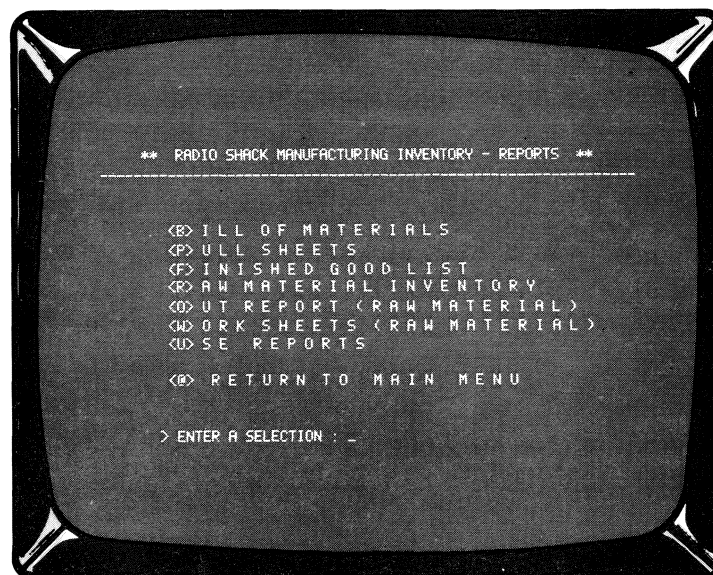
The screen will show:



This is the Main Menu. It is like a table of contents for the program. The first thing you need to do is run a Raw Material Inventory List. This would be considered a report, so press A for Analysis And Reports.

Raw Material Inventory

The screen will show:



This is the Reports Menu. Press **R** for Raw Material Inventory. Turn on the line printer and type the report date. Example: May 5, 1979, or 05/05/79. Either one is acceptable. Press **ENTER** .

If the date is correct, press **Y** . If it is not, **N** will delete the date and you can retype it.

The Raw Material Inventory List gives you complete information on all Raw Materials and a Summary Report. The Summary Report will include:

- Total Extended Value

- Total Number of Items

- Total Active Items — Raw Materials used in a Finished Good. For the first report, the total will be 0.

- Total Inactive Items — Raw Materials not currently being used in a Finished Good. For this first report, the total will be the number of Raw Materials you entered.

After the report is printed, you will return to the Reports Menu. Press **@** to return to the Main Menu.

Note: You will first return to System Status. You can press **ENTER** from there to return to the Main Menu. This occurs throughout the program.

Checking The Report

Use this report as a reference to check the Raw Materials File for mistakes. Go over the report carefully. If you entered a large number of Raw Materials, there are probably a few mistakes. To correct any mistakes, go to Raw Materials Maintenance.

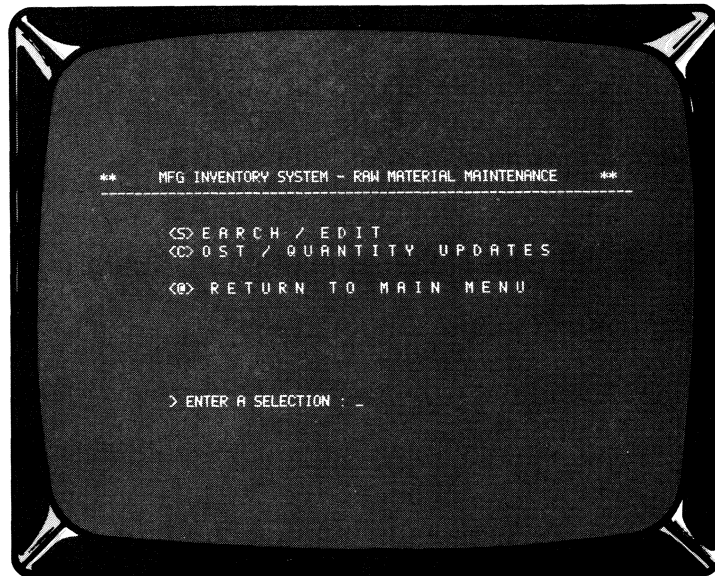
Note: Even if you have no mistakes you need to read the Raw Materials Maintenance Section. It tells you how to delete, update, and change information about the Raw Materials.

Raw Materials Maintenance

If you need to make any corrections, add or delete a Raw Material, follow these instructions:

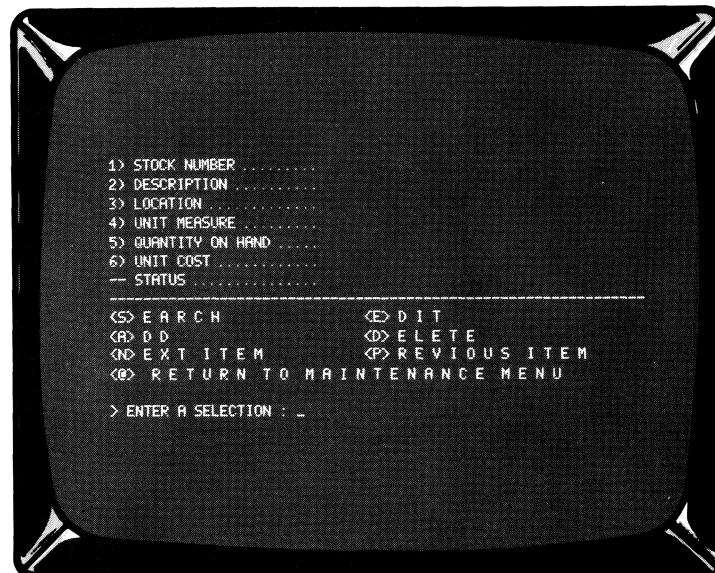
Press **R** at the Main Menu.

The screen will show:



This is the Raw Materials Maintenance Menu. Press **S** for Search/Edit.

The screen will show:



This is the command list from which you'll make your changes.

There are two ways to display the Raw Materials File you need:

1. Press **[S]** for Search from the command list. Now, type in the desired Stock Number and press **[ENTER]**. The computer will search for that Stock Number. When the Stock Number is found, all relative information will be displayed on the screen.
— or —
2. From the command list, press **[N]** for Next Item. The first Stock Number on file will appear. Continue to press **[N]** and the next Stock Number will appear. Do this until you reach the desired Raw Material.

Editing Raw Materials

To alter the Raw Material on the screen:

1. Press **[E]** for Edit.
2. Enter the stock number and press **[ENTER]**.
3. When asked if all entries are correct, press **[N]**.
4. Enter the number of the incorrect line (2-6).
5. Type the correction and press **[ENTER]**.
6. Once again you'll be asked if everything is correct. If not, press **[N]** and make the other corrections.
7. Press **[Y]** to return to the list of commands.

You'll notice the word STATUS under line 6. Beside this is the word INACTIVE. An Active Status refers to a Raw Material being used in a Finished Good. Since you haven't entered Finished Goods yet, all of the Raw Materials will be inactive.

Deleting Raw Materials

To delete a Raw Material:

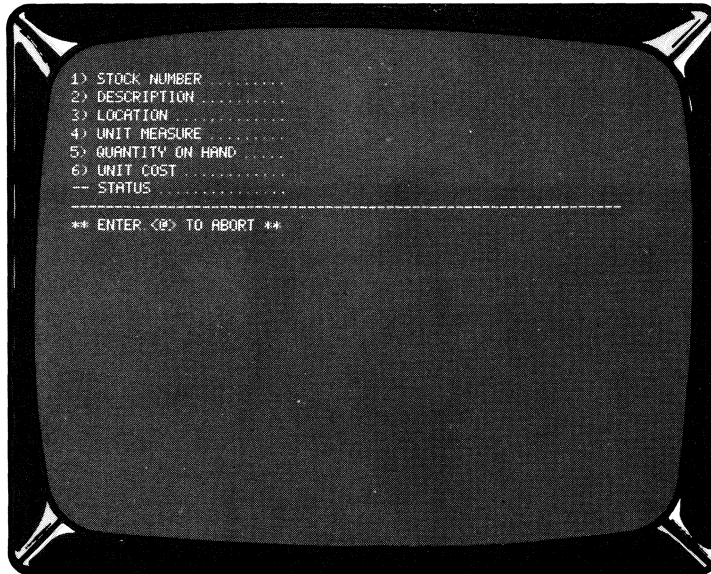
1. With the (S)earch, (P)revious, or (N)ext Item option, get the Raw Material on the screen.
2. Press **[D]**.
3. The screen will show: OK TO DELETE (YES OR NO): Type **[YES]** and press **[ENTER]**.
4. The word DELETED will appear in the upper corner of the screen. The item deleted will no longer be in the Raw Materials File.

Note: You may not delete active items. To change item status for items no longer used, you must run an Inactive Raw Materials list.

Adding Raw Materials

1. Press **A** for **A**dd from the command list.

The screen will show:



2. Type the information just as you did during Initialization.
3. You will be asked if all of the entries are correct; press **Y** or **N**. A “Y” answer will bring the list of commands back to the screen.
4. The new item(s) are now recorded on the file.

Cost/Quantity Updates

It may be necessary to change the cost and quantity of the Raw Materials from time to time.

From the Raw Material Maintenance Menu, press **C**. You have a choice of:

(C)OST UPDATES
(Q)UANTITY UPDATES
(B)OTH

Cost Updates

If only the cost needs changing, this method of updating will save you time.
Press **C**.

1. Type the stock number of the Raw Material that needs updating. Press **ENTER**.
2. The computer will display the old price under the Previous column.
3. Type in the Current Cost and press **ENTER**.
4. You'll be asked: OK (Y/N). If No, press **N** to reenter Stock Number and cost. Pressing **Y** will store new cost and allow you to go to another Stock Number.
5. If you are going in stock number order, type **N** for Next and press **ENTER** to get to the next item on file or type a stock number and press **ENTER**.

When you have finished updating costs, press **@** for Stock Number. This will return you to the Raw Material Maintenance Menu.

Quantity Updates

Here's how to change the quantity on hand:

1. Press **Q** at the Cost/Quantity Update Menu.
2. The screen will show: **> DO YOU WANT TO (A)DJUST OR (R)EPLACE CURRENT QUANTITIES:** If you type **R** for Replace, the quantities you enter will replace the current quantity. If you type **A** for Aadjust, the quantities you enter will be added to (or subtracted from, by entering a negative figure) the current quantities. The Replace option might be used for correcting your inventory after a physical count. The Adjust option could be used when receiving orders.

Press **R**.

3. The format will be the same as the Cost Updates. Type the Stock Number and press **ENTER**.
4. When the Old Quantity is displayed, type the New Quantity and press **ENTER**.
5. Type the next stock number or press **N** for the Next item on file and press **ENTER**.
6. When finished, press **@** for the Stock Number.

Both Cost And Quantity Updates

If both the cost and the quantity of some Raw Materials need updating, this will be the quickest way to do it:

1. Press **B** at the Cost/Quantity Update Menu.
2. The screen will show: DO YOU WANT TO (A)DJUST OR (R)EPLACE CURRENT QUANTITIES:

Press **R**.
3. Type the desired Stock Number and press **ENTER**.
4. The Previous Quantity and Cost will appear.
5. Enter the new figures. Press **ENTER** after both Quantity and Cost figures.
6. If the information is correct, press **Y**, if it is not, press **N**.
7. Type the next Stock Number or press **N** for the next item on file and press **ENTER**.
8. When finished, press **@** for the Stock Number. This will return you to the Raw Material Maintenance Menu.

At the Raw Material Maintenance Menu, press **@**. This will return you to System Status. Verify the status is correct and press **ENTER** to return to the Main Menu.

Finished Goods

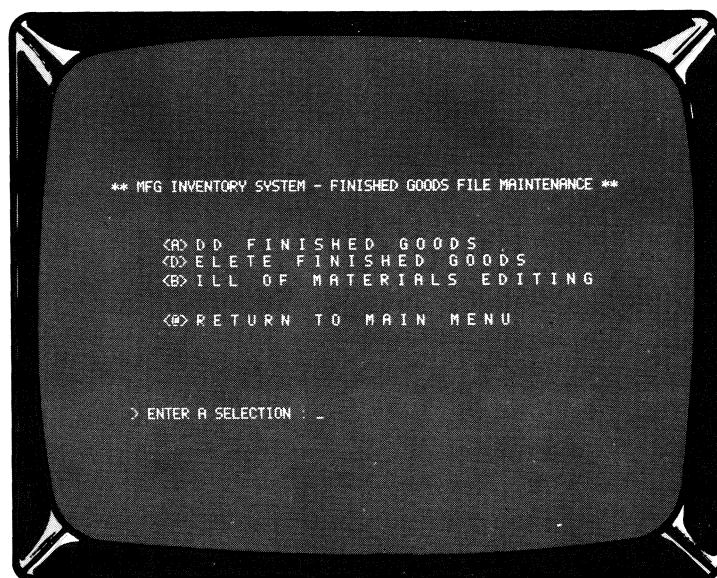
The next step is to add your Finished Goods to the File.

Although there is a maximum of 20 Finished Goods per diskette, in some cases the number may be less. Each Finished Good will hold up to 600 Raw Materials. But for every Finished Good with 320 or more Raw Materials, the capacity on the diskettes is reduced by one. For instance, if one of your Finished Goods has 320 Raw Materials, then you can hold 19 Finished Goods on that diskette. If two of your Finished Goods have more than 320 Raw Materials, then you could only have 18 Finished Goods on that diskette.

Starting The Finished Goods File

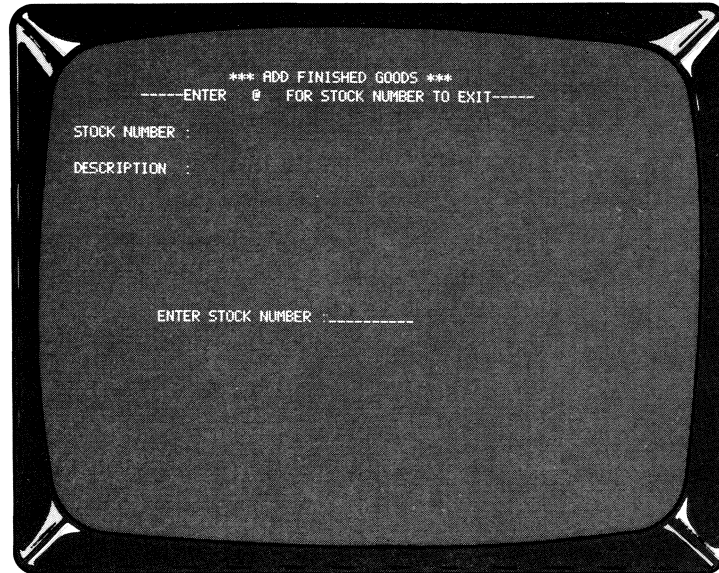
Press **F** at the Main Menu.

The screen will show:



This is the Finished Goods File Menu. To Add Finished Goods, press **A**.

The screen will show:



1. Type the Stock Number of the first Finished Good and press **ENTER** .
2. Type the Description and press **ENTER** .
3. **The screen will show:** INFORMATION CORRECT? (Y/N)
4. If it is correct, press **Y**; if not, press **N** to re-enter the item.
5. Continue this process until you have all of your Finished Goods entered, or you reach 20 Finished Goods. To go beyond 20, see Continuing On Another Diskette. (See the section on Finished Good Maintenance in Appendix 3.)
6. When you are through, press **@** to return to the Finished Goods File Menu.

Deleting Finished Goods

To delete a Finished Good:

1. Press **D** at the Finished Goods File Menu.
2. Type the Stock Number of the Finished Good to be deleted and press **ENTER**.

3. The description of that Finished Good will appear on the screen with these words:

IS THE ITEM TO BE DELETED (YES/NO)

This gives you a second chance in case you made a mistake or the wrong Finished Good is on the screen.

4. Type **Y E S** and press **ENTER** .
5. The Finished Good is now deleted. You can delete more than one if necessary.
6. When through, press **@**. You will now be back at the Finished Goods File Menu.

Bill Of Materials Editing

Bill of Material Editing is used to create and edit a Bill of Materials for a Finished Good.

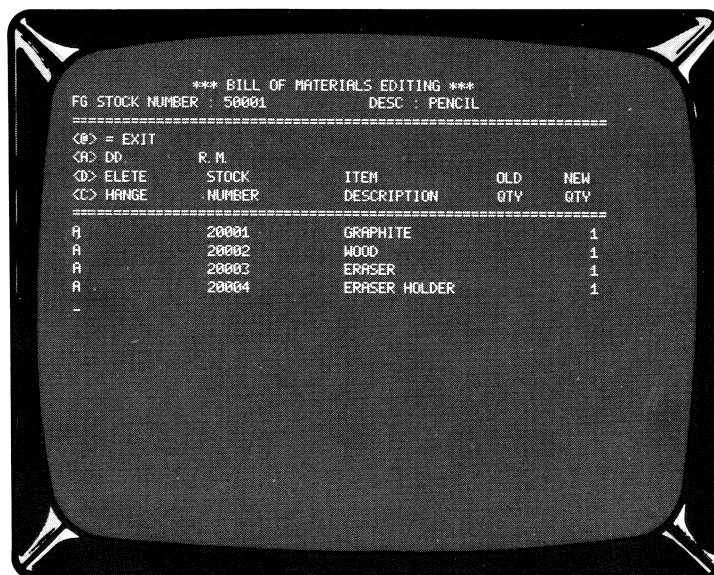
Note: the maximum number of Raw Materials per Finished Good is 600.

1. Press **B** at the Finished Goods Maintenance Menu.
2. Type the Stock Number of the Finished Good you wish to create and press **ENTER** .
3. The screen shows a command list. Since this is a new Bill of Materials, press **A** for Add.
4. Type a Raw Material Stock Number needed to make this Finished Good and press **ENTER** .
5. The description of the Raw Materials will now be displayed. Since this is your first time through, there will be nothing under the heading Old Quantity.
6. Type the New Quantity, (that is, how many units of this Raw Material are required to make the Finished Good). The Quantity must be a whole number. The computer will ignore fractional quantities in Finished Goods.

Note: After seven Raw Materials have been typed in for one Finished Good the screen will start to scroll. The top item will disappear from the screen to make room for the Raw Material number eight. This feature will allow you to see the last set of Materials entered.

Sample Bill Of Materials

Here's a sample Bill of Material using a pencil as the Finished Good. The Raw Materials in this sample are graphite, wood, eraser, and eraser holder. The Bill of Materials for one pencil would look like this:



```
*** BILL OF MATERIALS EDITING ***
FG STOCK NUMBER : 50001          DESC : PENCIL
=====
<B> = EXIT
<A> DD
<D> ELETE
<C> HANGE
=====
R.M.      STOCK      ITEM      OLD      NEW
NUMBER    NUMBER    DESCRIPTION  QTY    QTY
=====
A         20001      GRAPHITE           1
A         20002      WOOD              1
A         20003      ERASER            1
A         20004      ERASER HOLDER     1
-         -         -                 -
```

Changing The Bill Of Materials

From time to time, it may become necessary to change the amount of a particular Raw Material used in a Finished Good. Here is the procedure:

1. Display the Finished Good on the screen by pressing **[B]** at the Menu for Bill of Materials Editing. Then, enter the Finished Good Stock Number you need and press **[ENTER]**.
2. Press **[C]** for Change.
3. Now type the Raw Material Stock Number and press **[ENTER]**.
4. The Description of that Raw Material will appear along with Old Quantity.
5. Type in the New Quantity and press **[ENTER]**.

Deleting A Raw Material From The Bill Of Materials

1. From the Menu, press **[B]**. Then, enter the Finished Good Stock Number.
2. Press **[D]**.
3. Type the Stock Number (of the Raw Material you wish to Delete) and press **[ENTER]**.
4. The word Deleted will appear under New Quantity.
5. Press **[@]** to exit.

Once you've entered all of the Finished Goods, and their Raw Materials, the only time you'll use this function is for editing.

Analysis And Reports

Press **A** at the Main Menu.

These reports have a number of uses and can be run any time.

Because many of these reports are time-consuming, when possible they should be run overnight. To help you become acquainted with them, we have included a brief explanation of each report. We have included some sample reports in Appendix 4.

Bill of Materials

This report will give you the total cost and material requirements for Finished Goods. The report may have several Bill of Materials printed separately, one for each Finished Good. (This is the printed version of the Bill of Materials you made earlier in the program.) The report is preceded by an index referring you to the page each Bill of Materials appears. (See Appendix 4 for a sample of the Bill of Materials.)

Printing The Bill Of Materials

1. Press **B** at the Reports Menu.
2. Type the Finished Good Stock Number you wish to start with, and press **ENTER**. (You can enter as many Finished Goods Stock Numbers as you wish, just press **ENTER** after every Stock Number.)
3. When finished entering the last stock number, press **@** for the next Stock Number.
4. Type the date (to appear on the Bill of Materials) and press **ENTER**.
5. Answer **Y** or **N** when asked if the date is correct.
6. Pressing **Y** will start the Bill of Materials report.
7. When the reports are completed, you will return to the Reports Menu.

Pull Sheets

Pull Sheets are used to find the total cost of an order or production run. For example, if an order is for 100 pencils, you can find out exactly how much the order will cost, and how many of which Raw Materials it will take to fill the order. If you have an order that includes more than one Finished Good, the Pull Sheet report will combine all of the Finished Goods and Raw Materials involved. For example, if you have an order for 100 pencils, 50 pens, and 25 colored pencils, the Pull Sheet will give you the total number of each Raw Material required and the total cost of all the Finished Goods. Some Raw Materials may be common to several Finished Goods.

The Pull Sheet will also let you know when the Quantity on Hand is less than the Quantity Required by placing two asterisks (**) beside the column.

There is also a space provided for the person that pulls the order to mark down the quantity pulled, the date, and the puller's name. (A sample Pull Sheet can be found in Appendix 4.)

Printing A Pull Sheet

1. Press **[P]** at the Reports Menu.
2. Type the Stock Number of the first Finished Good required for the order and press **[ENTER]**.
3. Type the quantity for the Finished Good and press **[ENTER]**.
4. When you've typed in all Finished Goods Stock Numbers included in the order, type **@** and press **[ENTER]**.
5. You will be asked if all entries are correct. If no, you can start over by pressing **[N]**.
6. If entries are correct, you type the date (to appear on the report) and press **[ENTER]**.
7. Answer **[Y]** or **[N]** when asked if the date is correct. A "Y" answer will start the report.
8. The pull sheet will be printed. If there were deficient quantities indicated on the report, the screen will show:

```
  **XX RAW MATERIALS HAVE DEFICIENT QUANTITIES**  
  **CANNOT UPDATE RAW MATERIAL FILE**
```

If this occurs, you should either adjust the finished good quantities on the pull sheet or make any necessary corrections to the raw material quantities in the Raw Material Maintenance function and run the pull sheet again.

If there were no deficient quantities, the screen will show:

```
DO YOU WANT AN AUTOMATIC RAW MATERIAL UPDATE USING THE  
PULL SHEET QUANTITIES (YES OR NO):
```

This will allow you to automatically update the raw material quantities. The quantities will be adjusted by the amount indicated on the pull sheet.

You will probably want to run the pull sheet once to be used in the warehouse or stockroom and answer the update question with **[NO]**. After the stock has been "pulled," the pull sheet can be run again to update the raw material file - after the quantities have been verified.

After verifying the “pulled” quantities, type **YES** and press **ENTER** to update the Raw Material quantities.

Finished Goods List

This report will give you a complete list of all Finished Goods, descriptions, and the total number of Raw Materials in each.

You have the option of having it printed or just displayed on the screen.

(A sample of a Finished Goods list can be found in Appendix 4.)

Printing Or Displaying The Finished Goods List

1. Press **F** at the Reports Menu.
2. Press **S** for Screen for **P** for Printer. If you press **S**, the display will begin immediately, on the screen.
3. If you press **P**, then enter the date (to appear on the report) and press **ENTER**.
4. At the end of the report, you will return to the Reports Menu.

Raw Materials Inventory

The Raw Materials Inventory List gives you complete information on all Raw Materials and a Summary Report.

Printing A Raw Materials Inventory List

1. Press **R** at the Reports Menu.
2. Type the date (to appear on the report) and press **ENTER**.
3. Answer **Y** or **N** when asked if the date is correct.
4. A **Y** answer will start the report.

(A sample of the Raw Materials Inventory can be found in Appendix 4.)

Outage Report

You can get a complete listing of every Raw Material you are out of. This will be helpful in determining the quantity and frequency of your reorders.

(A sample of an Outage Report can be found in Appendix 4.)

Printing An Outage Report

1. Press at the Reports Menu.
2. Type the date (to appear on the report) and press .
3. Answer or when asked if the date is correct.
4. A answer will start the report.

Note: If nothing is printed on this report, then you are not out of any Raw Materials.

Work Sheet (Raw Materials)

A Work Sheet is provided for physical inventory. The Work Sheet is a list of all Raw Materials, but with a blank space for Quantity on Hand. There is also space for Comments.

Printing A Work Sheet

1. Press at Reports Menu.
2. Type the date to appear on the Work Sheet.
3. Answer or when asked if the date is correct, then press .
4. Answering will start the printout.

Use Reports

There are two Use Reports: Inactive Raw Materials List and Raw Materials Use Report.

Inactive Raw Materials List

This report gives you a complete listing of all Raw Materials not currently being used in any Finished Goods.

Note: This report must be run to change an item's status from active to inactive, if it is no longer used.

First, you will get a list of all Finished Goods, then the list of Inactive Raw Materials.

You will also get the Total Extended Value of the Inactive Raw Materials. This will aid you in determining the amount of capital tied up in obsolete parts.

(A sample Inactive Raw Materials List can be found in Appendix 4.)

Printing An Inactive Raw Materials List

1. Press **U** at the Reports Menu.
2. At the Use Reports Menu, press **I**.
3. Type the date and press **ENTER**.
4. Answer **Y** or **N** when asked if the date is correct.
5. A **Y** answer will start the report.
6. The computer will scan every Raw Material on file. EVALUATING RECORDS will appear.
7. The screen will show:

ANY MORE FINISHED GOODS DISKETTES (Y/N)?

If you have more diskettes, type **Y**. Put the next diskette in Drive 0. Press **ENTER** when ready. After the computer reads the diskette, you can insert the next diskette.

8. When you answer **N** for No More Diskettes, the list of Inactive Raw Materials will begin.

Note: During the reading of each diskette, there will be a long period of processing. This is because every Raw Material must be compared with every Finished Good item..

Raw Material Use Report

The Use Report prints out every Raw Material on file and beside each item, lists every Finished Good that uses the item.

(A sample Raw Material Use Report can be found in Appendix 4.)

Printing A Raw Material Use Report

1. Press **U** at the Reports Menu.
2. Press **R** at the Use Reports Menu.
3. Type the date and press **ENTER** .
4. Press **Y** to start the report.

Note: If you remove a Raw Material from a Finished Good, you must also run an Inactive Raw Material List, that will zero the status of the Raw Material which was removed. You cannot delete an active Raw Material — you must make an Inactive Raw Material List, that will zero the status of the Raw Material which Raw Materials from the Finished Good, then run an Inactive Raw Materials Use Report.

System Maintenance

This function will allow you to make corrections or changes regarding the number of Disk Drives and Company Information.

Press **[S]** at the Main Menu.

The screen will show:

(A)DD DISK DRIVES
(C)HANGE COMPANY INFORMATION
(@) TO EXIT

If you press **[A]**, type in the total number of Disk Drives to be used and then press **[ENTER]**.

Note: You can't decrease the number of the Drives.

The screen will show:

PLACE BLANK FORMATTED DISKETTES IN THE NEW DRIVE(S)
>PRESS <ENTER> WHEN READY!

If you press **[C]**, you'll be able to change Company Name and Address. Press **[ENTER]** after every entry.

After making any corrections, press **[@]** to return to the Main Menu.

How To Backup Your Diskettes

Use this procedure **exactly**:

1. Turn on your computer. If this is the first time you've ever used the Radio Shack Disk System, refer to the Disk Operating System Manual for detailed instructions.
2. Insert a new, blank diskette in Drive # 1 and close the door.
3. Insert the Initialization diskette in Drive # 0, and close the door.
4. Press the Reset button.

Model I:

The screen will show:

DOS READY
SOURCE DRIVE NUMBER?
DESTINATION DRIVE NUMBER?
BACKUP DATE (MM/DD/YY)?

HIT 'ENTER' TO CONTINUE

You type:

B**A****C****K****U****P** and press **ENTER**
0 and press **ENTER**
1 and press **ENTER**
0**1****2****0****1****2****8****2** and press **ENTER**
(Example for January 1, 1982)
Press **ENTER** and you will be
returned to DOS READY.

To make Backup copies of additional diskettes, follow the above directions through typing **B****A****C****K****U****P** and pressing **ENTER**. Remove the Initialization diskette from Drive 0 and insert the diskette you wish to Backup and continue, starting with SOURCE DRIVE NUMBER.

Model III:

The screen will show:

Enter Date (MM/DD/YY)?

Enter Time (HH:MM:SS)?
TRSDOS Ready
SOURCE Disk Master
Password?

You type:

0**1****2****0****1****2****8****2** and press **ENTER**
(Example for January 1, 1982)
Press **ENTER**
B**A****C****K****U****P** **0****1****2****0****1****2****8****2** and press **ENTER**
P**A****S****S****W****O****R****D** and press **ENTER**

Note: If you are using a new disk, the system will format the disk for you. If you are re-using an old disk, one or two additional questions may appear, depending on the previous contents on the disk. You may see:

Diskette contains DATA. Use Disk or not?

or:

Do you wish to RE-FORMAT the diskette?

If the questions appear, type ☒ and press **ENTER** for each question.

When the process is done, the screen will show:

****Backup Complete****

Model I and Model III

Now we can check to see if the “BACKUP” procedure was successful:

1. Remove the original diskette from Drive # 0.
2. Take the Backup Diskette out of Drive # 1. Place the Backup copy in Drive # 0 and close the door.
3. Press the Reset Button. If the screen shows: DOS READY (Model I) or TRSDOS Ready (Model III), your Backup was successful.

Formatting Data Diskettes

This process prepares blank diskettes for use on the disk system. All data diskettes must be formatted before being used. Here's how you do it:

1. Turn on your system. If you are not familiar with the equipment, please refer to your Disk Owner's Manual for System Start Up (Power Up Sequence).
2. Insert a diskette containing TRSDOS in Drive 0 and close the door. (The Initialization diskette in this package contains TRSDOS.)
3. Insert a blank diskette in Drive 1 and close the door.
4. Press the Reset button.

Model I:

The screen will show:

DOS READY
WHICH DRIVE IS TO BE USED?
DISKETTE NAME?
CREATION DATE (MM/DD/YY)?
MASTER PASSWORD?
DO YOU WANT TO
LOCK OUT ANY TRACKS?
HIT "ENTER" TO CONTINUE

You type:

FORMAT press **ENTER**
1 press **ENTER**
DATA82 press **ENTER**
01/01/82 press **ENTER**
PASSWORD press **ENTER**
NO press **ENTER**
Press **ENTER**

Model III:

The screen will show:

TRSDOS Ready
Format Which Drive?
Diskette Name?
Master Password?

You type:

FORMAT press **ENTER**
1 press **ENTER**
DATA82 press **ENTER**
PASSWORD press **ENTER**

If you are re-using an old disk, the computer may show: DISKETTE contains DATA. Use Disk or not? If this question appears, type **Y** and press **ENTER**. The computer will start formatting the disk in Drive 1.

After the disk is formatted, you will return to TRSDOS Ready. Remove the formatted disk from Drive 1, and mark the disk with the name you've chosen. Always use a felt-tip marking pen. Pencils and ball point pens can damage the disk surface.

While running Manufacturing Inventory, you might see some error messages. Many times, they are caused by typing the wrong information. Here are samples of the error messages you might see, what caused them, and how they resolve the problem.

Initialization:

NO PREVIOUS SESSION OR WRONG DATA DISKETTE IN DRIVE 1 —
Caused by typing a **C** option when asked INT OR CONT at the beginning of Initialization. Or, it could be that Drive 1 does not contain the correct diskette. Check Drive 1, then reanswer the question.

SYSTEM CONTAINS DATA — CANNOT INITIALIZE — Attempted to initialize after Initialization is complete. Press **ENTER** to exit. Type **RUN** and press **ENTER**, then go back and answer with a **C** .

**YOU DON'T HAVE XX DISK DRIVES — Answering HOW MANY DISK DRIVES question with more Drives than you have. Reanswer the question.

*SYSTEM NOT INITIALIZED OR WRONG DATA DISKETTE IN DRIVE 1 —
*RUN INITIALIZATION OR CHECK DRIVE 1 DATA DISKETTE AND RERUN
If system has been initialized, check Drive 1 Diskette and start over.

System Maintenance:

YOU CANNOT DECREASE # OF DRIVES — The number of Drives you just specified is less than current number. Reenter the number of Drives.

YOU DON'T HAVE XX DRIVES — The number of Drives you just specified exceeds number of available Drives, or there's no disk in the Drive. Reenter the number of Drives or put a blank formatted Disk in the Drive.

4 DRIVES ALREADY ON LINE — Attempted to add another Drive when you're already using 4. Reenter the number of Drives.

Raw Material Maintenance:

ACTIVE ITEM — CANNOT DELETE — Attempted to delete a Raw Material which is currently used in a Finished Good. To change the status of an item, an Inactive Raw Materials List must be run, or you can decide not to delete.

FILE FULL — CANNOT ADD — Attempted to Add a record when the maximum number of Raw Materials are on file. Delete an inactive item or add another drive.

STOCK # ALREADY EXISTS — Attempted to add a new Raw Material using a stock number already on file. Change the stock number or delete the item on file.

STOCK # NOT FOUND — Attempted to Search for or Delete a Raw Material which does not exist.

During Finished Good Maintenance:

ALREADY IN FILE — Attempted to add a Finished Good which already exists. Delete or use different stock number.

THERE ARE NOW 20 FINISHED GOODS ON DISK. CONTINUE ON ANOTHER DRIVE 0 DISK — Attempted to add another Finished Good when all available Finished Goods space is used. Exit to Main Menu, then use a Backup copy of the original to continue.

NOT IN BILL OF MATERIALS — Attempted to delete or change a Raw Material (from/to the Bill of Materials) that doesn't exist.

NOT FOUND — Attempted to Add a Raw Material (to Bill of Materials) that doesn't exist.

During Reports:

TURN ON PRINTER — Printer off when trying to print a report.

NOT FOUND — Finished Good number entered (for Bill of Materials or Pull Sheet) doesn't exist.

“***” — Next to quantity on Bill of Materials or Pull Sheet, indicates insufficient quantity.

Appendix 4 — Sample Report A-Raw Material Inventory

PAGE — 1

XYZ MANUFACTURING COMPANY
3600 INDUSTRIAL BLVD.
HARTFORD, CONNECTICUT 10428

*** RAW MATERIAL INVENTORY REPORT ***
JULY 19, 1979

```
*****
STOCK      UNIT      QTY      UNIT
NUMBER     DESCRIPTION  LOC  MEAS  OH      COST      EXTENSION  STATUS
-----
088724 NPC  RED PEN COVER   WHS  EA      0      0.02000      0.00      A
088775 NPC  BLACK PEN COVER WHS  EA      0      0.02000      0.00      A
122550 AEC  ERASER HOLDER   DRW  EA  14699      0.00095      13.96      A
122840 NPC  CLEAR PEN COVER WHS  EA   7500      0.02000     150.00      A
124445 GC   #2.5 GRAPHITE   DRW  IN  32000      0.00100      32.00      A
144587 NPC  BLUE PEN CAP    DRW  EA   4500      0.01000      45.00      A
144588 NPC  BLACK PEN CAP   DRW  EA   2000      0.01000      20.00      A
144589 NPC  RED PEN CAP     DRW  EA    900      0.01000      9.00      A
188947 IC   GREEN INK       WHS  ML   4000      0.00800      32.00      I
200153 AEC  PENCIL ERASER   WHS  EA  11699      0.01500     175.49      A
211126 APC  YELLOW PAINT     WHS  ML 249097      0.00150     373.65      A
211989 NPC  PLASTIC TUBING  WHS  IN   7000      0.01000      70.00      A
221437 ATX  FELT STEM       DRW  IN   3300      0.01000      33.00      A
223443 IC   BLUE INK        WHS  ML  19000      0.00800     152.00      A
233422 GC   #4 GRAPHITE     DRW  IN  50000      0.00100      50.00      A
236955 GC   #1 GRAPHITE     DRW  IN  82291      0.00100      82.29      A
265877 NPC  BLACK CAP       DRW  EA    200      0.01000      2.00      A
325668 GC   #2 GRAPHITE     DRW  IN  50000      0.00100      50.00      A
334544 AWC  BALL POINT TIP   DRW  EA  30000      0.01500     450.00      A
355482 AWC  BLK FLT-TP INK  WHS  ML   2750      0.00500      13.75      A
355485 AWC  RED FLT-TP INK  WHS  ML   2000      0.00500      10.00      A
355489 AWC  BLUE FLT-TP INK WHS  ML    500      0.00500      2.50      A
396409 IC   RED INK         WHS  ML      0      0.00800      0.00      A
441236 WWW  9" WOOD CASING  WHS  EA   8699      0.01050      91.34      A
455387 WWW  10" WOOD CASING WHS  EA   1000      0.01050      10.50      I
458997 NPC  PLASTIC PLUG    DRW  EA   3000      0.00500      15.00      A
645541 AWC  METAL WASHER    DRW  EA   7500      0.00500      37.50      A
655776 AWC  1" POCKET CLIP  DRW  EA  10000      0.01000     100.00      A
677546 AWC  SPRING .15" DIA DRW  CM   9800      0.00300      29.40      A
765244 NPC  BLUE CAP        DRW  EA   2300      0.01000      23.00      A
765924 NPC  RED CAP         DRW  EA   3000      0.01000      30.00      A
778344 IC   BLACK INK       WHS  ML   8000      0.00800      64.00      A
887034 NPC  BLUE PEN COVER  WHS  EA  13000      0.02000     260.00      A
997455 AWC  METAL PEN COVER WHS  EA   4300      0.03000     129.00      A
*****
```

***** SUMMARY REPORT *****

```
TOTAL EXTENDED VALUE ..... $2556.38
TOTAL NUMBER OF ITEMS ..... 34
TOTAL ACTIVE ITEMS ..... 32      % 94.12
TOTAL INACTIVE ITEMS ..... 2      % 5.88
```

Appendix 4 — Sample Report B-Finished Goods List

PAGE - 1

XYZ MANUFACTURING COMPANY
3600 INDUSTRIAL BLVD.
HARTFORD, CONNECTICUT 10428

**** FINISHED GOOD LIST ****
JULY 19, 1979

```
*****
STOCK NUMBER      DESCRIPTION                      NO. OF RAW MAT.
-----
FG 1001           #1 PENCIL                      5
FG 1002           #2 PENCIL                      5
FG 1003           #2.5 PENCIL                   5
FG 1004           #4 PENCIL                     5
FG 1005           RED RETRACTABLE PEN           7
FG 1006           BLUE RETRACTABLE PEN          7
FG 1007           BLK RETRACTABLE PEN           7
FG 1008           BLUE BALL POINT PEN           6
FG 1009           BLACK BALL POINT PEN           6
FG 1011           BLUE FELT TIP PEN              4
FG 1012           BLACK FELT TIP PEN             4
FG 1013           RED FELT TIP PEN               4
FG 1010           RED BALL POINT PEN             6
*****
```

Appendix 4 — Sample Report C-Bill Of Materials

PAGE - 1

XYZ MANUFACTURING COMPANY
3600 INDUSTRIAL BLVD.
HARTFORD, CONNECTICUT 10428

**** BILL OF MATERIALS ****
JULY 19, 1979

```
*****
FINISHED GOOD                                     PAGE
-----
FG 1001      #1 PENCIL                             2
FG 1005      RED RETRACTABLE PEN                     3
FG 1011      BLUE FELT TIP PEN                       4
*****
```

PAGE - 2

**** BILL OF MATERIALS **** JULY 19, 1979
FG 1001 #1 PENCIL

```
*****
STOCK      UNIT      QTY      QTY      UNIT
NUMBER     DESCRIPTION  LOC  MEAS   OH    REQ    COST    EXTENSION
=====
122550 AEC  ERASER HOLDER  DRW  EA    14699      1    0.00095    0.00
200153 AEC  PENCIL ERASER  WHS  EA    11699      1    0.01500    0.01
211126 APC  YELLOW PAINT    WHS  ML   249097      3    0.00150    0.00
236955 GC   #1 GRAPHITE    DRW  IN    82291      9    0.00100    0.01
441236 WWW  9" WOOD CASING  WHS  EA     8699      1    0.01050    0.01

***** TOTAL = 0.04
```


Appendix 4 – Sample C-Bill of Materials (continued)

PAGE - 3

**** BILL OF MATERIALS **** JULY 19, 1979
FG 1005 RED RETRACTABLE PEN

STOCK NUMBER	DESCRIPTION	LOC	UNIT MEAS	QTY OH	QTY REQ	UNIT COST	EXTENSION
088724 NPC	RED PEN COVER	WHS	EA	0	1**	0.02000	0.02
211989 NPC	PLASTIC TUBING	WHS	IN	7000	6	0.01000	0.06
334544 AWC	BALL POINT TIP	DRW	EA	30000	1	0.01500	0.01
396409 IC	RED INK	WHS	ML	0	3**	0.00800	0.02
645541 AWC	METAL WASHER	DRW	EA	7500	1	0.00500	0.00
655776 AWC	1" POCKET CLIP	DRW	EA	10000	1	0.01000	0.01
677546 AWC	SPRING .15" DIA	DRW	CM	9800	2	0.00300	0.01
***** TOTAL =							0.14

PAGE - 4

**** BILL OF MATERIALS **** JULY 19, 1979
FG 1011 BLUE FELT TIP PEN

STOCK NUMBER	DESCRIPTION	LOC	UNIT MEAS	QTY OH	QTY REQ	UNIT COST	EXTENSION
221437 ATX	FELT STEM	DRW	IN	3300	6	0.01000	0.06
355489 AWC	BLUE FLT-TP INK	WHS	ML	500	20	0.00500	0.10
765244 NPC	BLUE CAP	DRW	EA	2300	1	0.01000	0.01
997455 AWC	METAL PEN COVER	WHS	EA	4300	1	0.03000	0.03
***** TOTAL =							0.20

Appendix 4 – Sample Report D-Pull Sheets

PAGE - 1

XYZ MANUFACTURING COMPANY
3600 INDUSTRIAL BLVD.
HARTFORD, CONNECTICUT 10428

**** PRODUCTION PULL SHEETS ****
JULY 19, 1979

```
*****
QUANTITY      STOCK NUMBER      DESCRIPTION
-----
150           FG 1001           #1 PENCIL
200           FG 1005           RED RETRACTABLE PEN
100           FG 1011           BLUE FELT TIP PEN
*****
```

PAGE - 2

**** PRODUCTION PULL SHEETS **** JULY 19, 1979

```
=====
PULLER :                               DATE :
=====
STOCK  UNIT  QTY  QTY  QTY  UNIT  ESTIMATED
NUMBER / DESCRIPTION / LOC MEAS OH REQ PULLED COST EXTENSION
-----
088724 NPC RED PEN COVER  WHS  EA    0  200**.....  0.02000  4.00
122550 AEC ERASER HOLDER  DRW  EA 14699  150 .....  0.00095  0.14
200153 AEC PENCIL ERASER  WHS  EA 11699  150 .....  0.01500  2.25
211126 APC YELLOW PAINT   WHS  ML 249097  450 .....  0.00150  0.68
211989 NPC PLASTIC TUBING WHS  IN  7000  1200 .....  0.01000  12.00
221437 ATX FELT STEM      DRW  IN  3300  600 .....  0.01000  6.00
236955 GC #1 GRAPHITE     DRW  IN 82291  1350 .....  0.00100  1.35
334544 AWC BALL POINT TIP DRW  EA 30000  200 .....  0.01500  3.00
355489 AWC BLUE FLT-TP INK WH  ML   500  2000**.....  0.00500  10.00
396409 IC RED INK         WHS  ML    0  600**.....  0.00800  4.80
441236 WWW 9" WOOD CASING WHS  EA  8699  150 .....  0.01050  1.57
645541 AWC METAL WASHER   DRW  EA  7500  200 .....  0.00500  1.00
655776 AWC 1" POCKET CLIP DRW  EA 10000  200 .....  0.01000  2.00
677546 AWC SPRING .15" DIA DRW  CM  9800  400 .....  0.00300  1.20
765244 NPC BLUE CAP       DRW  EA  2300  100 .....  0.01000  1.00
997455 AWC METAL PEN COVER WHS  EA  4300  100 .....  0.03000  3.00
=====
```

**** TOTAL EXTENDED COST 53.99

Appendix 4 – Sample Report E-Outage Report

PAGE - 1

XYZ MANUFACTURING COMPANY
3600 INDUSTRIAL BLVD.
HARTFORD, CONNECTICUT 10428

**** RAW MATERIAL OUTAGE REPORT ****
JULY 19, 1979

```
*****
STOCK      UNIT      UNIT
NUMBER     DESCRIPTION  LOC  MEAS   COST      STATUS
-----
088724 NPC  RED PEN COVER   WHS   EA    0.02000    A
088775 NPC  BLACK PEN COVER WHS   EA    0.02000    A
396409 IC   RED INK         WHS   ML    0.00800    A
*****
```

Appendix 4 – Sample Report F-Worksheet

PAGE - 1

XYZ MANUFACTURING COMPANY
3600 INDUSTRIAL BLVD.
HARTFORD, CONNECTICUT 10428

**** RAW MATERIAL INVENTORY WORK SHEET ****
JULY 19, 1979

```
*****
STOCK      UNIT  QUANTITY
NUMBER     DESCRIPTION  LOC  MEAS  ON HAND  COMMENTS :
-----
088724 NPC  RED PEN COVER    WHS  EA  .....
088775 NPC  BLACK PEN COVER  WHS  EA  .....
122550 AEC  ERASER HOLDER    DRW  EA  .....
122840 NPC  CLEAR PEN COVER  WHS  EA  .....
124445 GC   #2.5 GRAPHITE    DRW  IN  .....
144587 NPC  BLUE PEN CAP     DRW  EA  .....
144588 NPC  BLACK PEN CAP    DRW  EA  .....
144589 NPC  RED PEN CAP      DRW  EA  .....
188947 IC   GREEN INK        WHS  ML  .....
200153 AEC  PENCIL ERASER    WHS  EA  .....
211126 APC  YELLOW PAINT     WHS  ML  .....
211989 NPC  PLASTIC TUBING   WHS  IN  .....
221437 ATX  FELT STEM        DRW  IN  .....
223443 IC   BLUE INK         WHS  ML  .....
233422 GC   #4 GRAPHITE      DRW  IN  .....
236955 GC   #1 GRAPHITE      DRW  IN  .....
265877 NPC  BLACK CAP        DRW  EA  .....
325668 GC   #2 GRAPHITE      DRW  IN  .....
334544 AWC  BALL POINT TIP   DRW  EA  .....
355482 AWC  BLK FLT-TP INK   WHS  ML  .....
```

Appendix 4 — Sample Report F-Worksheet (continued)

PAGE - 2

**** RAW MATERIAL INVENTORY WORK SHEET ****

JULY 19, 1979

STOCK NUMBER	DESCRIPTION	LOC	UNIT MEAS	QUANTITY ON HAND	COMMENTS :
355485 AWC	RED FLT-TP INK	WHS	ML	.....	.....
355489 AWC	BLUE FLT-TP INK	WH	ML	.....	.....
396409 IC	RED INK	WHS	ML	.....	.....
441236 WWW	9" WOOD CASING	WHS	EA	.....	.....
455387 WWW	10" WOOD CASING	WHS	EA	.....	.....
458997 NPC	PLASTIC PLUG	DRW	EA	.....	.....
645541 AWC	METAL WASHER	DRW	EA	.....	.....
655776 AWC	1" POCKET CLIP	DRW	EA	.....	.....
677546 AWC	SPRING .15" DIA	DRW	CM	.....	.....
765244 NPC	BLUE CAP	DRW	EA	.....	.....
765924 NPC	RED CAP	DRW	EA	.....	.....
778344 IC	BLACK INK	WHS	ML	.....	.....
887034 NPC	BLUE PEN COVER	WHS	EA	.....	.....
997455 AWC	METAL PEN COVER	WHS	EA	.....	.....

Appendix 4 – Sample Report G-Inactive Raw Materials List

PAGE - 1

XYZ MANUFACTURING COMPANY
3600 INDUSTRIAL BLVD.
HARTFORD, CONNECTICUT 10428

**** INACTIVE RAW MATERIAL LIST ****

JULY 19, 1979

-- FINISHED GOODS INCLUDED --

STOCK NUMBER	DESCRIPTION
FG 1001	#1 PENCIL
FG 1002	#2 PENCIL
FG 1003	#2.5 PENCIL
FG 1004	#4 PENCIL
FG 1005	RED RETRACTABLE PEN
FG 1006	BLUE RETRACTABLE PEN
FG 1007	BLK RETRACTABLE PEN
FG 1008	BLUE BALL POINT PEN
FG 1009	BLACK BALL POINT PEN
FG 1011	BLUE FELT TIP PEN
FG 1012	BLACK FELT TIP PEN
FG 1013	RED FELT TIP PEN
FG 1010	RED BALL POINT PEN

PAGE - 2

**** INACTIVE RAW MATERIAL LIST **** JULY 19, 1979

STOCK NUMBER	DESCRIPTION	LOC	UNIT MEAS	QTY OH	UNIT COST	EXTENSION
188947 IC	GREEN INK	WHS	ML	4000	0.00800	32.00
455387 WWW	10" WOOD CASING	WHS	EA	1000	0.01050	10.50
**** TOTAL EXTENDED VALUE						42.50

Appendix 4 – Sample Report H-Raw Material Use Report

PAGE - 1

XYZ MANUFACTURING COMPANY
3600 INDUSTRIAL BLVD.
HARTFORD, CONNECTICUT 10428

**** RAW MATERIALS USE REPORT ****

JULY 19, 1979

-- FINISHED GOODS INCLUDED --	
FG 1001	#1 PENCIL
FG 1002	#2 PENCIL
FG 1003	#2.5 PENCIL
FG 1004	#4 PENCIL
FG 1005	RED RETRACTABLE PEN
FG 1006	BLUE RETRACTABLE PEN
FG 1007	BLK RETRACTABLE PEN
FG 1008	BLUE BALL POINT PEN
FG 1009	BLACK BALL POINT PEN
FG 1011	BLUE FELT TIP PEN
FG 1012	BLACK FELT TIP PEN
FG 1013	RED FELT TIP PEN
FG 1010	RED BALL POINT PEN

Appendix 4 – Sample Report H-Raw Material Use Report (continued)

PAGE - 2

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***** RAW MATERIALS USE REPORT ***** JULY 19, 1979
I----- RAW MATERIAL -----I I----- FINISHED GOODS -----I
STOCK NUMBER / DESCRIPTION      STOCK NUMBER / DESCRIPTION
-----
=====
088724 NPC    RED PEN COVER              FG 1005    RED RETRACTABLE PEN
=====
088775 NPC    BLACK PEN COVER            FG 1007    BLK RETRACTABLE PEN
=====
122550 AEC    ERASER HOLDER              FG 1001    #1 PENCIL
                                         FG 1002    #2 PENCIL
                                         FG 1003    #2.5 PENCIL
                                         FG 1004    #4 PENCIL
=====
122840 NPC    CLEAR PEN COVER            FG 1008    BLUE BALL POINT PEN
                                         FG 1009    BLACK BALL POINT PEN
                                         FG 1010    RED BALL POINT PEN
=====
124445 GC     #2.5 GRAPHITE                FG 1003    #2.5 PENCIL
=====
144587 NPC    BLUE PEN CAP                FG 1008    BLUE BALL POINT PEN
=====
144588 NPC    BLACK PEN CAP              FG 1009    BLACK BALL POINT PEN
=====
144589 NPC    RED PEN CAP                FG 1010    RED BALL POINT PEN
=====
188947 IC     GREEN INK                      ***** NOT USED *****
=====
200153 AEC    PENCIL ERASER              FG 1001    #1 PENCIL
                                         FG 1002    #2 PENCIL
                                         FG 1003    #2.5 PENCIL
                                         FG 1004    #4 PENCIL
=====
211126 APC    YELLOW PAINT                      FG 1001    #1 PENCIL
                                         FG 1002    #2 PENCIL
                                         FG 1003    #2.5 PENCIL
                                         FG 1004    #4 PENCIL
=====
211989 NPC    PLASTIC TUBING                  FG 1005    RED RETRACTABLE PEN
                                         FG 1006    BLUE RETRACTABLE PEN
=====

```


Appendix 4 – Sample Report H-Raw Material Use Report (continued)

PAGE - 3

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          **** RAW MATERIALS USE REPORT ****      JULY 19, 1979
I----- RAW MATERIAL -----I      I----- FINISHED GOODS -----I
  STOCK NUMBER / DESCRIPTION          STOCK NUMBER / DESCRIPTION
=====
                                         FG 1007  BLK RETRACTABLE PEN
                                         FG 1008  BLUE BALL POINT PEN
                                         FG 1009  BLACK BALL POINT PEN
                                         FG 1010  RED BALL POINT PEN

=====
221437 ATX  FELT STEM                  FG 1011  BLUE FELT TIP PEN
                                         FG 1012  BLACK FELT TIP PEN
                                         FG 1013  RED FELT TIP PEN

=====
223443 IC   BLUE INK                  FG 1006  BLUE RETRACTABLE PEN
                                         FG 1008  BLUE BALL POINT PEN

=====
233422 GC   #4 GRAPHITE                FG 1004  #4 PENCIL

=====
236955 GC   #1 GRAPHITE                FG 1001  #1 PENCIL

=====
265877 NPC  BLACK CAP                  FG 1012  BLACK FELT TIP PEN

=====
325668 GC   #2 GRAPHITE                FG 1002  #2 PENCIL

=====
334544 AWC  BALL POINT TIP             FG 1005  RED RETRACTABLE PEN
                                         FG 1006  BLUE RETRACTABLE PEN
                                         FG 1007  BLK RETRACTABLE PEN
                                         FG 1008  BLUE BALL POINT PEN
                                         FG 1009  BLACK BALL POINT PEN
                                         FG 1010  RED BALL POINT PEN

=====
355482 AWC  BLK FLT-TP INK             FG 1012  BLACK FELT TIP PEN

=====
355485 AWC  RED FLT-TP INK             FG 1013  RED FELT TIP PEN

=====
355489 AWC  BLUE FLT-TP INK           FG 1011  BLUE FELT TIP PEN

=====
396409 IC   RED INK                   FG 1005  RED RETRACTABLE PEN
                                         FG 1010  RED BALL POINT PEN

=====
441236 WWW  9" WOOD CASING             FG 1001  #1 PENCIL

```

Appendix 4 – Sample Report H-Raw Material Use Report (continued)

PAGE - 4

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***** RAW MATERIALS USE REPORT ***** JULY 19, 1979
I----- RAW MATERIAL -----I      I----- FINISHED GOODS -----I
STOCK NUMBER / DESCRIPTION          STOCK NUMBER / DESCRIPTION
-----
                                         FG 1002  #2 PENCIL
                                         FG 1003  #2.5 PENCIL
                                         FG 1004  #4 PENCIL

=====
455387 WWW    10" WOOD CASING                      **** NOT USED ****

=====
458997 NPC    PLASTIC PLUG                      FG 1008  BLUE BALL POINT PEN
                                         FG 1009  BLACK BALL POINT PEN
                                         FG 1010  RED BALL POINT PEN

=====
645541 AWC    METAL WASHER                      FG 1005  RED RETRACTABLE PEN
                                         FG 1006  BLUE RETRACTABLE PEN
                                         FG 1007  BLK RETRACTABLE PEN

=====
655776 AWC    1" POCKET CLIP                    FG 1005  RED RETRACTABLE PEN
                                         FG 1006  BLUE RETRACTABLE PEN
                                         FG 1007  BLK RETRACTABLE PEN

=====
677546 AWC    SPRING .15" DIA                   FG 1005  RED RETRACTABLE PEN
                                         FG 1006  BLUE RETRACTABLE PEN
                                         FG 1007  BLK RETRACTABLE PEN

=====
765244 NPC    BLUE CAP                          FG 1011  BLUE FELT TIP PEN

=====
765924 NPC    RED CAP                          FG 1013  RED FELT TIP PEN

=====
778344 IC     BLACK INK                        FG 1007  BLK RETRACTABLE PEN
                                         FG 1009  BLACK BALL POINT PEN

=====
887034 NPC    BLUE PEN COVER                   FG 1006  BLUE RETRACTABLE PEN

=====
997455 AWC    METAL PEN COVER                  FG 1011  BLUE FELT TIP PEN
                                         FG 1012  BLACK FELT TIP PEN
                                         FG 1013  RED FELT TIP PEN

***** END OF REPORT *****
```


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