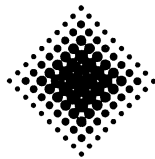


APPLICATIONS PACKAGE

WHOLESALE/RETAIL AUTOMATED ACCOUNTING PACKAGE



SYSTEM TEN BY SINGER

PRELIMINARY

SINGER
FRIDEN DIVISION

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INTRODUCTION

The Singer System Ten Wholesale/Retail Automated Accounting Package provides the System Ten user with a complete set of business application programs for sales order entry and processing, inventory control, invoicing, and accounts receivable. In addition, the program provides managers with detailed sales analysis reports by customer, inventory, product class, region, and salesman.

The Wholesale/Retail Automated Accounting Program incorporates a wide range of options which allow the user maximum flexibility in processing and presentation. The program is designed in a modular fashion so that each program can be modified easily to suit the unique business and operating requirements of the System Ten user. Because of this modular design, most modifications can be made with a minimum of effort.

The program is designed to operate in a minimum System Ten configuration of one 10K processor, one disc drive, and one workstation. In this configuration the program can accommodate up to 2,000 customers, 13,000 inventory items, and a maximum of 50 classes of products.

The program operates under the control of the System Ten Disc Management Facility (DMF), and can be expanded to operate in any System Ten configuration.

1. MASTER FILE CREATION

CREATING THE MASTER FILES

To create and list the master files require a card punch, card reader, and line printer in addition to the minimum System Ten configuration. The master files must be created as the first steps in using the Wholesale/Retail Automated Accounting Package.

The basic steps are:

Build a standard DMF disc pack containing all the pools and files according to the procedures described in the Disc Management Facility Reference Manual, Number 40-225. See Figure 1 for the control cards required. File all programs in SYSPØL. See Table 1 for the pool and data file names.

Build the card deck for the DMF SORT program.

Build the data (master file) decks.

Build the GENEDT parameter decks.

Create the master files (see Operating Procedures for each program). See Appendix A for the file record layouts.

TABLE 1. POOL AND FILE LIST

Pool Name	Limits ¹	File Name	Description
SYSPOL	101,10000		All programs, system files, system utilities
CUSMAS	10001,21000	CUSMST CUSIDX	Customer file Customer file index
INVMAS	30001,70000	INVMST INVIDX	Inventory file Inventory file index
ORDER	21001,25000	OPNORD OPNIDX	Open order Open order index
SUMMRY	25001,26000	ORDSUM INVSUM	Order summary file Invoice summary file
INVCON	26001,27000	BAKORD	Back order file
SYSPOL		PRODCL	Product class file
INVCHG	28000,30000	NETCHG	Inventory net change
EDIPTL	work pack	EDITFL	Generalized edit output

1 - Size listed is for distribution purposes only. The actual size will be determined for each installation.

```

CREATE EDIPTL, LIMITS=(41001,43000), 'GENEDT POOL';
CREATE INVCHG, LIMITS=(28001,30000);
CREATE INVCON, LIMITS=(26001,27000);
CREATE CUSMAS, LIMITS=(10001,21000);
CREATE EDIPTL, LIMITS=(141001,143000), 'GENEDT POOL';
CREATE SUMMRY, LIMITS=(27001,28000);
CREATE ORDER, LIMITS=(21001,26000);
CREATE INVMAS, LIMITS=(30001,41000);

```

— Limits in initial distribution of package. Actual limits to be determined with each installation. NOTE:

— Work pool placed on Drive 1.

```

FILE ORDER.OPNORD
000001 OPEN ORDER HEADER RECORD *****
999999 OPEN ORDER FILE TRAILER RECORD *****

```

```

FILE INVCHG.NETCHG
0000000000000000 NET CHANGE FILE HEADER RECORD*****

```

```
FILE CUSMAS.CUSMST
```

```
FILE INVMAS.INVMST
```

```

FILE INVCON.BAKORD
IBACK ORDER FILE HEADER RECORD *****
9999999999999999 BACK ORDER FILE TRAILER RECORD *****

```

```
FILE INVCON.BAKRPT
```

```

FILE SUMMRY.INVSUM
INVOICE REGISTER FILE HEADER RECORD *****

```

```

FILE SUMMRY.ORDSUM
ORDER SUMMARY FILE HEADER RECORD *****

```

```
FILE EDIPTL.EDITFL
```

```

INDEX ORDER.OPNORD, INAME=OPNIDX, KL=7, KD=0, NENTRIES=1;
INDEX CUSMAS.CUSMST, INAME=CUSIDX, KL=/, NENTRIES=5;
INDEX INVMAS.INVMST, INAME=INVIDX, KL=16, NENTRIES=3;

```

```

DISPLAY CUSMAS.CUSMST
DISPLAY INVMAS.INVMST
DISPLAY PRODCL
DISPLAY=ALL
DISPLAY ORDER.OPNORD
DISPLAY INVCON.BAKORD
DISPLAY INVCHG.NETCHG
DISPLAY EDIPTL.EDITFL

```

— Optional

```

DELETE CUSMAS.=POOL;
DELETE ORDER.=ALL
DELETE ORDER.=POOL
DELETE CUSMAS.=ALL;
DELETE INVMAS.=POOL
DELETE SUMMRY.=POOL
DELETE SUMMRY.=ALL
DELETE INVMAS.=ALL
DELETE INVCON.=POOL
DELETE INVCON.=ALL

```

— Optional

FIGURE 1. DMF CONTROL CARD LIST

Customer Master
File Data Deck

The customer master file data deck can have as many as seven cards for each customer. Cards 1, 2, and 3 are mandatory. Cards 4 and 5 are required only if the shipping address is different from the billing address. Cards 6 and 7 are used if customer historical data is needed. Refer to Figure 2 for the card format; the cards are to be punched as detailed below.

Card 1

Columns 1 through 6 - 6-digit customer number.
Columns 7 and 8 - Card identifier, C1.
Columns 9 through 11 - Salesman number.
Columns 12 and 13 - Sales region (numeric).
Column 14 - Ship via code (numeric).
Column 15 - Freight; 0 = prepaid, 1 = collect.
Column 16 - Terms code (numeric).
Column 17 - Tax code (numeric).
Column 18 - Customer class code (numeric).
Column 19 - Price code (numeric).
Columns 20 through 24 - Credit limit XXXXX (numeric, no cents).
Columns 25 through 34 - Telephone number XXXXXXXXXXXX.
Columns 35 through 37 - Service charge X,XX percent computed monthly (decimal point not punched).
Columns 38 through 44 - Accounts receivable balance XXXXX.XX (decimal point not punched).
Columns 45 through 52 - Year to date sales XXXXXX.XX (decimal point not punched).
Columns 53 through 60 - Year to date cost XXXXXX.XX (decimal point not punched).
Columns 61 through 67 - Prior year's sales XXXXXX (no cents).
Columns 68 through 74 - Prior year's cost XXXXXX (no cents).

Card 2

Columns 1 through 6 - 6-digit customer number.
Columns 7 and 8 - Card identifier, C2.
Columns 9 through 33 - Customer name (sold to), alphanumeric.
Columns 34 through 53 - Customer (sold to or billing) address, first line (alphanumeric).

Card 3

Columns 1 through 6 - 6-digit customer number.
Columns 7 and 8 - Card identifier, C3.
Columns 9 through 28 - Customer (sold to or billing) address, second line (alphanumeric).
Columns 29 through 43 - City.
Columns 44 and 45 - State (standard U.S. Post Office ZIP code abbreviation).
Columns 46 through 50 - ZIP code.

Cards 4 and 5

NOTE: These cards are used if the Ship To information is different from the Sold To (or Billing) information. Cards 4 and 5 are punched exactly like Cards 2 and 3, respectively, except that the identifiers in columns 7 and 8 are C4 and C5, respectively.

Cards 6 and 7

NOTE 1: These cards are used only if the sales and cost information is required for a specific installation.

NOTE 2: Both cards are punched identically. Card 6 begins with the information for one month, 12 months ago, and ends with seventh month. Card 7 begins with the sixth month and ends with last month.

NOTE 3: All entries require six digits. Use leading zeroes if necessary.

Columns 1 through 6 - 6-digit customer number.

Columns 7 and 8 - Card identifier, C6 or C7 as required.

Columns 9 through 14 - Sales for one month, 12 months ago XXXXXX
(no cents).

Columns 15 through 20 - Cost for one month, 12 months ago XXXXXX
(no cents).

The remaining sales and cost fields are punched in the same way.

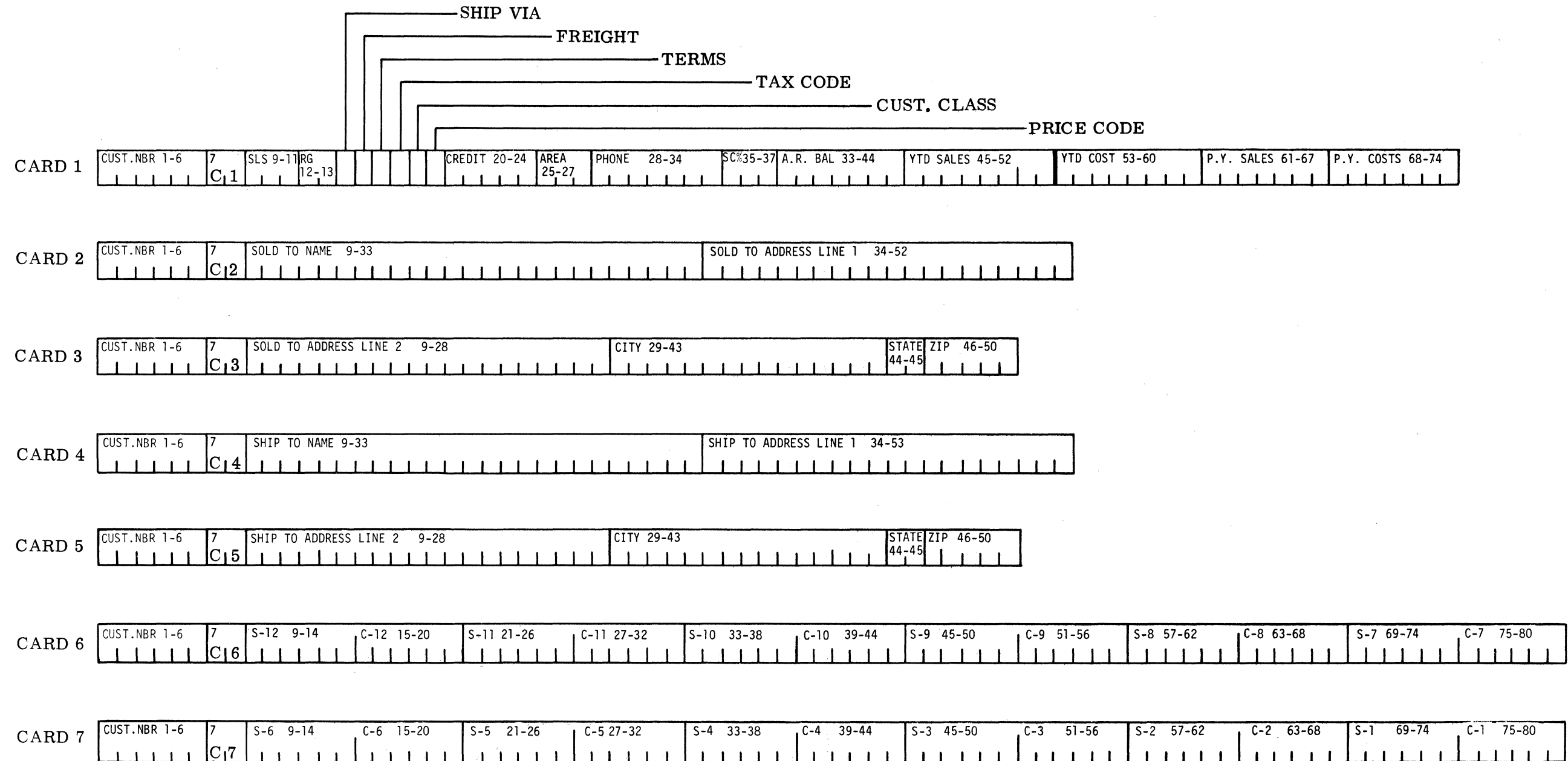


FIGURE 2. CUSTOMER MASTER FILE DATA CARDS

Inventory Master
File Data Deck

The inventory master file data deck can have as many as three cards for each item in the inventory. Cards 1 and 2 are mandatory. Card 3 is optional and is used only if the information is required for a specific installation. Refer to Figure 3 for the card format; the cards are to be punched as detailed below.

Card 1

Columns 1 through 15 - Part number. Can be any combination of characters.

1. If the part number starts with a letter, the number will be left-justified and remaining columns in the field filled with zeroes. Thus, part number ABC-100234 will appear as ABC-10023400000.
2. If the part number starts with a number, the number will be right-justified, and the leading columns filled with zeroes. Thus, part number 57395-03-5734 will appear as 0057395-03-5734.

Columns 16 through 55 - Description (alphanumeric). NOTE: Some programs such as SBIN01 print the 40-character description on two 20-character lines. Use care when punching this field to avoid confusing or unsightly word breaks.

Columns 56 through 61 - Quantity on hand (numeric). Right-justified, punch leading zeroes.

Columns 62 through 67 - Minimum quantity desired to be on hand (numeric). Right-justified, punch leading zeroes.

Columns 68 through 70 - Vendor code. Either all alphabetic or all numeric.

Columns 71 through 73 - Internal bin location. Either all alphabetic or all numeric.

Columns 74 through 77 - Unit of sale: each doz., cwt., etc.

Column 78 - Blank.

Columns 79 and 80 - Card identifier, I1.

Card 2

Columns 1 through 15 - Part number, same as in Card 1.
Columns 16 through 21 - Cost XXX.XXX (decimal point not punched).
Columns 22 through 27
Columns 28 through 33
Columns 34 through 39 - Five prices available XXXX.XX (decimal point not punched).
Columns 40 through 45
Columns 46 through 51 Quantity discount amount. Begin with largest
Columns 52 through 55 quantity such as 1000, then 500, then 250.
Columns 59 through 62 - Right-justified, punch zeroes in leading
Columns 66 through 69 blanks.
Columns 56 through 58
Columns 63 through 65 - Quantity discount percent XX.X for each
Columns 70 through 72 quantity amount (decimal point not punched).
Columns 73 through 76 - Salesman's commission XX.XX (decimal point not punched).
Columns 77 and 78 - Product code from product code master file.
Columns 79 and 80 - Card identifier, I2.

Card 3

NOTE: This card is optional. Use only if the information is required for a specific installation.

Columns 1 through 15 - Part number, same as in Card 1.
Columns 16 through 22 - Prior year's sales in dollars only.
Columns 23 through 28 - Prior year's first quarter volume (numbers sold). Right-justified, punch zeroes in leading blanks.
Columns 29 through 34 - Prior year's second quarter volume.
Columns 35 through 40 - Prior year's third quarter volume.
Columns 41 through 46 - Prior year's fourth quarter volume.
Columns 47 through 52 - This year's first quarter volume (number sold). Right-justified, punch zeroes in leading blanks.
Columns 53 through 58 - This year's second quarter volume.
Columns 59 through 64 - This year's third quarter volume.
Columns 65 through 70 - This year's fourth quarter volume.
Columns 71 through 76 - Quantity on order.
Columns 77 and 78 - Blank.
Columns 79 and 80 - Card identifier, I3.

CARD 1	PART NUMBER 1-15	DESCRIPTION 16-55	DSC II					QUAN ON HAND 56-61	MINIMUM QUAN 62-67	VENDOR 68-70	LOCATION 71-73	UNIT 74-77	I 1			
CARD 2	PART NUMBER 1-15	COST 16-21	PRI 1 22-27	PRI 2 28-33	PRI 3 34-39	PRI 4 40-45	PRI 5 46-51	QUAN-1 52-55	% 56-58	QUAN-2 59-62	% 63-65	QUAN-3 66-69	% 70-72	COMMISSION 73-76	PC 77-78	I 2
CARD 3	PART NUMBER 1-15	PY SAL 16-22	PYQTR 1 23-28	PYQTR 2 29-34	PYQTR 3 35-40	PYQTR 4 41-46	TYSAL 1 47-52	TYSAL 2 53-58	TYSAL 3 59-64	TYSAL 4 65-70	ON ORDER 71-76		I 3			

FIGURE 3. INVENTORY MASTER FILE DATA CARDS

GENERAL EDIT PROGRAM - GENEDT

Description

GENEDT is used to edit the data decks when creating the master files. The editing criteria for each file are described to GENEDT by a parameter deck. Four types of edits are available: numeric test, non-blank test, range test, and constant test. All edits are exhaustive; that is, all errors in a card are flagged during a single editing pass. NOTE: Each card in the data deck is edited individually.

GENEDT causes the contents of all valid cards to be stored on the disc in the edit output file EDIPTL.EDITFL, and prints the contents of all cards on the line printer. All errors discovered in a card will have the errors underscored with asterisks and an error diagnostic will be printed.

Creating The GENEDT Parameter Deck

One GENEDT parameter deck is required for each file to be edited; for example, one deck for the customer master file and another deck for the inventory master file.

Each deck must begin with an EDIT* card punched in columns 1 through 5. Columns 6 through 80 of this card can be used for the heading on the list printed by GENEDT, for example, CUSTOMER MASTER FILE. This heading is optional.

The next cards are mandatory. They are identifier cards to identify each individual card in the data deck. Thus, if there are two cards for each inventory item, there must also be an identifier card for each.

Following each identifier card there are as many editing cards as there are fields to be edited on the corresponding data card.

The last card in the deck must have END punched in columns 1 through 3.

NOTE: In addition to the EDIT* card, each GENEDT parameter deck may contain a maximum of 100 cards, including the END card.

Example:

Editing An Inventory Master File Data Deck

This example shows how to build a GENEDT parameter deck for an inventory master file data deck (see Figure 3).

Refer to Figure 4 for the parameter deck card format, and to Table 2 for the complete list of GENEDT editing parameters.

Card 1

Columns 1 through 5 - EDIT* Required. Identifies the parameter deck to GENEDT.

Columns 6 through 26 - INVENTORY MASTER FILE
Optional heading to be printed by GENEDT on the printer as a result of the editing operation.

Card 2

Column 1 - I Card identifier. Tells GENEDT to look for a card identifier.

Columns 2 and 3 - 79 Indicates that the search is to start in column 79.

Columns 4 and 5 - 01 Look only at column 79.

Column 6 - I Look for an I in column 79.

Card 3

Column 1 - I Look for a card identifier.

Columns 2 and 3 - 80 Look at column 80.

Columns 4 and 5 - 01 Look only at column 80.

Column 6 - 1 Look for a 1 in column 80.

Card 1 in the data source deck is now identified and verified as I1.

Card 4

Column 1 - B Make sure there are no blanks in the part number.

Columns 2 and 3 - 01 Start search in column 1.

Columns 4 and 5 - 15 The part number field is 15 digits long.

The part number field of Card 1 is now verified to contain no blanks.

Card 5

Column 1 - N Verify that the fields for quantity on hand and for minimum quantity contain numbers only.

Columns 2 and 3 - 56 Start search in column 56.

Columns 4 and 5 - 12 Combined length of both fields is 12 columns.

The quantity on hand and minimum quantity fields of Card 1 are now verified to contain numeric data only.

Card 6

Column 1 - R Verify that the vendor code is within the range specified.

Columns 2 and 3 - 68 Start search in column 68.

Columns 4 and 5 - 03 The field length is three columns.

Columns 6 through 11 - AAAZZZ
The vendor code can be within the range AAA through ZZZ.

NOTE: The maximum range test that can be performed is four characters at the low limit and four characters at the high limit, for a total range of eight characters.

The vendor code on Card 1 is now verified to be within the proper range.

Card 7

Column 1 - R Verify that the bin location code is within the range specified.

Columns 2 and 3 - 71 The bin location code starts in column 71.

Columns 4 and 5 - 03 The field length is three columns.

Columns 6 through 11 - 001015
The bin location code can be within the range 001 through 015. See note under Card 6 above.

Card 8

Column 1 - C Verify that the basic unit by which items are sold is the same for each item in the inventory.

Columns 2 and 3 - 74 Start search in column 74.

Columns 4 and 5 - 04 The field length is four columns.

Columns 6 through 9 - EACH
Verify that the word EACH is punched in this field for every item in inventory.

The unit code is now verified to be a constant.

Every Card 1 (I1) in the inventory master file data deck has now been edited. Proceed in the same way for Card 2 (I2) and for Card 3 (I3) if it is used. Then put an END card at the end of the deck. The GENEDT parameter deck for the inventory master file data deck is now built.

Operating Procedures

See Figure 6 under SBF GCF or Figure 8 under SBF GIF for flow diagram. To execute GENEDT, proceed as follows:

1. Load the GENEDT parameter deck.
2. Load the master file data deck. NOTE: The sequence of the cards is unimportant; the DMF SORT will sort the file later.
3. Follow the data deck with one Unit Separator.
4. Run the program.

GENEDT will store the contents of all valid cards on the edit output file EDIPTL.EDITFL and also print the contents of all cards on the line printer. Errors will be underscored with asterisks and a diagnostic will be printed. Repunch the data cards correctly and rerun GENEDT until the edit output file is complete. NOTE: Rerun with only the repunched cards, not the entire deck.

TABLE 2. GENEDT PARAMETER TABLE

Descriptor	Starting Column	Field Length	Data	Remarks
I	Beginning column of card identifier	Always 1	Card identifier constant	Two required for each type of card in source deck.
N	Beginning (left) column or field to be edited.	Length of field to be edited. (10 max.)	Not used.	Performs numeric test.
R	Beginning (left) column or field to be edited.	Length of field to be edited.	First half is low limit; second half is limit. Maximum 8 characters.	Performs range test.
C	Beginning (left) column or field to be edited.	Length of field to be edited.	The constant to be edited.	Performs constant edit.
B	Beginning (left) column or field to be edited.	Length of field to be edited.	Not used.	Performs non-blank edit.
D	Beginning (left) column or field to be edited.	Always 6	Not used.	Performs date edit on MMDDYY formatted field.

1 - If a field longer than ten columns is to be edited, insert an additional card for columns 11 through n.

**SORTING THE EDIT
OUTPUT FILE - DMF SORT**

Description

The DMF SORT sorts the edit output file created by GENEDT to prepare the file for the master file creating program. SORT puts the file in proper sequence as determined by the SORT Parameter cards.

**Operating
Procedures**

See the System Ten DMF Disc SORT Reference Manual, Number 40-244, and also Figure 6 under SBFGCF or Figure 8 under SBFGIF in this manual for flow diagram. Proceed as follows:

1. Build the DMF SORT parameter control card deck as shown in Figure 5.
2. Load the deck into the card reader and call the program.

SORT will print its standard operating messages.

```
SORT  KEY=(1,8,A,C)
WORK  LIMITS=(150000,154000)
INPUT FILE=EDIPTL.EDITFL,RECSIZE=94,BLKSIZE=94
OUTPUT FILE=EDIPTL.EDITFL
END
```

Customer Master File

```
SORT  KEY=(01,15,A,C),(79,02,A,C)
INPUT FILE=EDIPTL.EDITFL,RECSIZE=94,BLKSIZE=94
OUTPUT FILE=EDIPTL.EDITFL
WORK  LIMITS=(150000,154000)
END
```

Inventory Master File

**FIGURE 5. SORT CARD LISTS FOR WHOLESALE/RETAIL
AUTOMATED ACCOUNTING PACKAGE**

CREATING THE CUSTOMER MASTER FILE - SBFDCF

Description

SBFDCF uses the edit output file created by GENEDT and sorted by DMF SORT to create the customer master file CUSMAS.CUSMST. If SBFDCF detects any errors in the set of cards for a customer, it will print the erroneous data. A typical error might be a duplicated customer number which makes the entire set invalid. SBFDCF creates complete customer records only.

Operational Diagram

See Figure 6.

Operating Procedures

Call the DMF conversational loader and type SBFDCG followed by the ENTER key. The program will run.

To correct any errors, repunch the cards, run them through GENEDT and the DMF SORT, then call and run SBFDCF again.

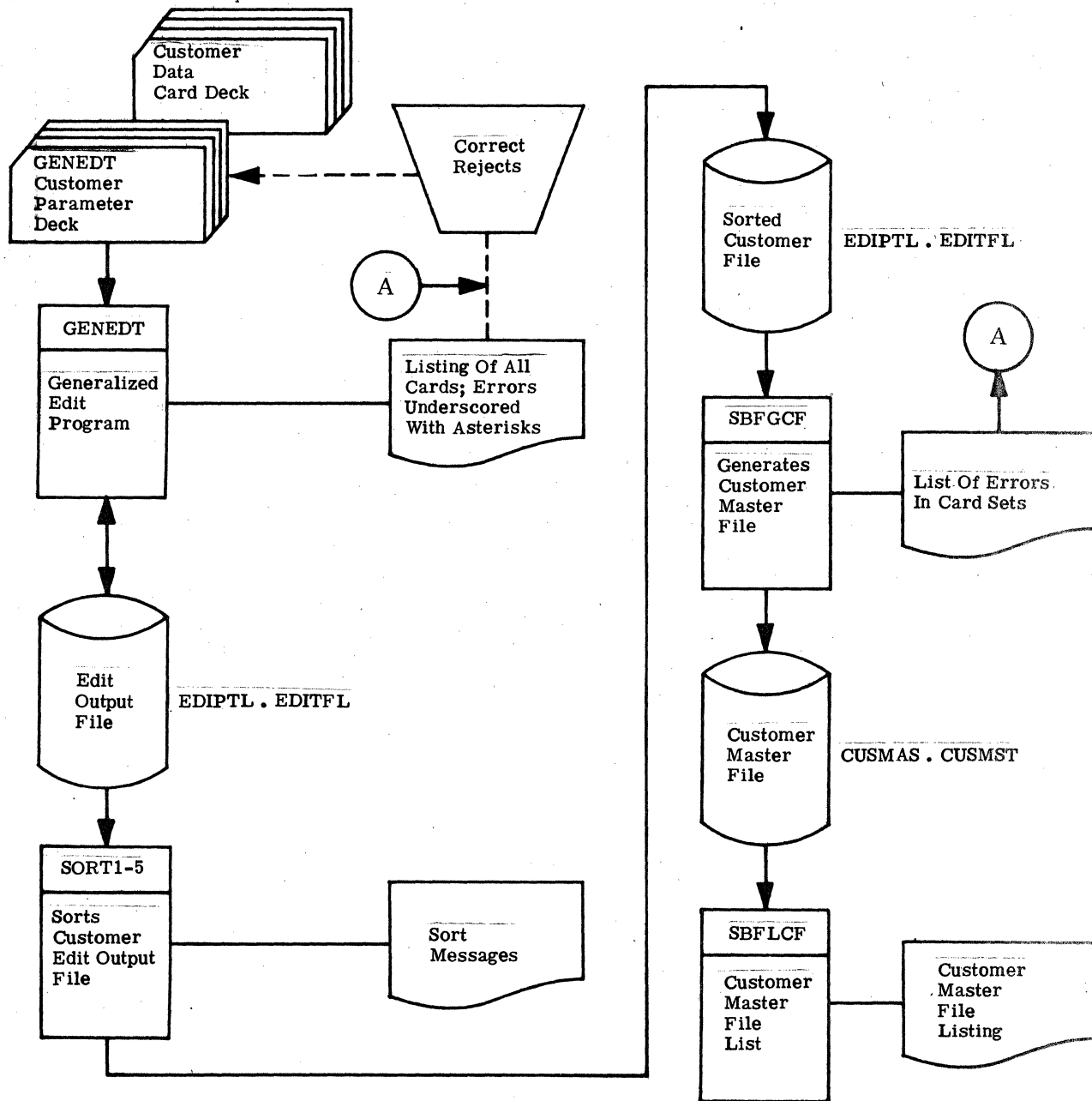


FIGURE 6. CREATING AND LISTING THE CUSTOMER MASTER FILE

LISTING THE CUSTOMER MASTER FILE - SBFLCF

Description

SBFLCF reads the customer master file, formats it for easy reading, and prints it on the line printer.

Operational Diagram

See Figure 6.

Sample Listing

See Figure 7.

Operating Procedures

Be sure the line printer is loaded with stock paper and has a control tape with top of form and overflow punches.

Call the DMF conversational loader and type SBFLCF followed by the ENTER key. The program will respond with

ENTER DATE EIGHT CHARACTERS

Enter the date in the form MM-DD-YY. If you make an error, depress the ENTER key again and re-enter the date.

If the line printer is not on line, the program will type

NO LINE PRINTER - END OF JOB

A) ENTER PROGRAM NAME

Otherwise, the program lists the report on the line printer and, when it is finished, types

A) ENTER PROGRAM NAME

The program can be terminated at any time by depressing both the LOAD and LOCAL switches.

FIGURE 7. SAMPLE OF CUSTOMER MASTER FILE LISTING

1-24

DATE 03-25-71		CUSTOMER RECORD LISTING										PAGE 009	COMMENTS
CUSTOMER 003012		SLSMN 011	REG 02	A/R BAL.	4,321.95	CR LIMIT 10,000	PHONE 212 555-3971	***					
SOLD TO		SHIP TO				MO TO DATE		PRIOR YR	YR TO DATE				
ABC NOVELTY CO		SAME				SELL	5555.12	7,700	000				
987 MAIN ST						COST	4000.00	5,100	000				
DETROIT		MI 48207				SHP-3 FT-0 TERM-2 TX-3 CL-4 \$-2 SC%-2.50							
MONTHS AGO	1	2	3	4	5	6	7	8	9	10	11	12	
SELL	300	700	900	800	300	800	400	900	300	800	500	1,000	
COST	100	500	600	700	200	700	300	600	200	400	300	500	
CUSTOMER 003013		SLSMN 003	REG 10	A/R BAL.	900.00	CR LIMIT 8,754	PHONE 415 555-1911	***					
SOLD TO		SHIP TO				MO TO DATE		PRIOR YR	YR TO DATE				
ACME SERVICES		ACME SERVICES				SELL	333.45	7,700	000				
793 ST AUBIN		894 JEFFERSON				COST	111.11	5,100	000				
SAN LEANDRO		CA 95000		OAKLAND		CA 95001		SHP-1 FT-0 TERM-1 TX-1 CL-1 \$-1 SC%-0.15					
MONTHS AGO	1	2	3	4	5	6	7	8	9	10	11	12	
SELL	300	700	900	800	300	800	400	900	300	800	500	1,000	
COST	100	500	600	700	200	700	300	600	200	400	300	500	

CREATING THE INVENTORY MASTER FILE - SBFGIF

Description

SBFGIF uses the edit output file created by GENEDT and sorted by the DMF SORT to create the inventory master file INVMAS,INVMST. If SBFGIF detects any errors in the set of cards for an inventory item, it will print the erroneous data. A typical error might be a duplicated part number which makes the entire set invalid. SBFGIF creates complete inventory item records only.

Operational Diagram

See Figure 8.

Operating Procedures

Call the DMF conversational loader and type SBFGIF followed by the ENTER key. The program will run.

To correct any errors, repunch the cards, run them through GENEDT and the DMF SORT, then call and run SBFGIF again.

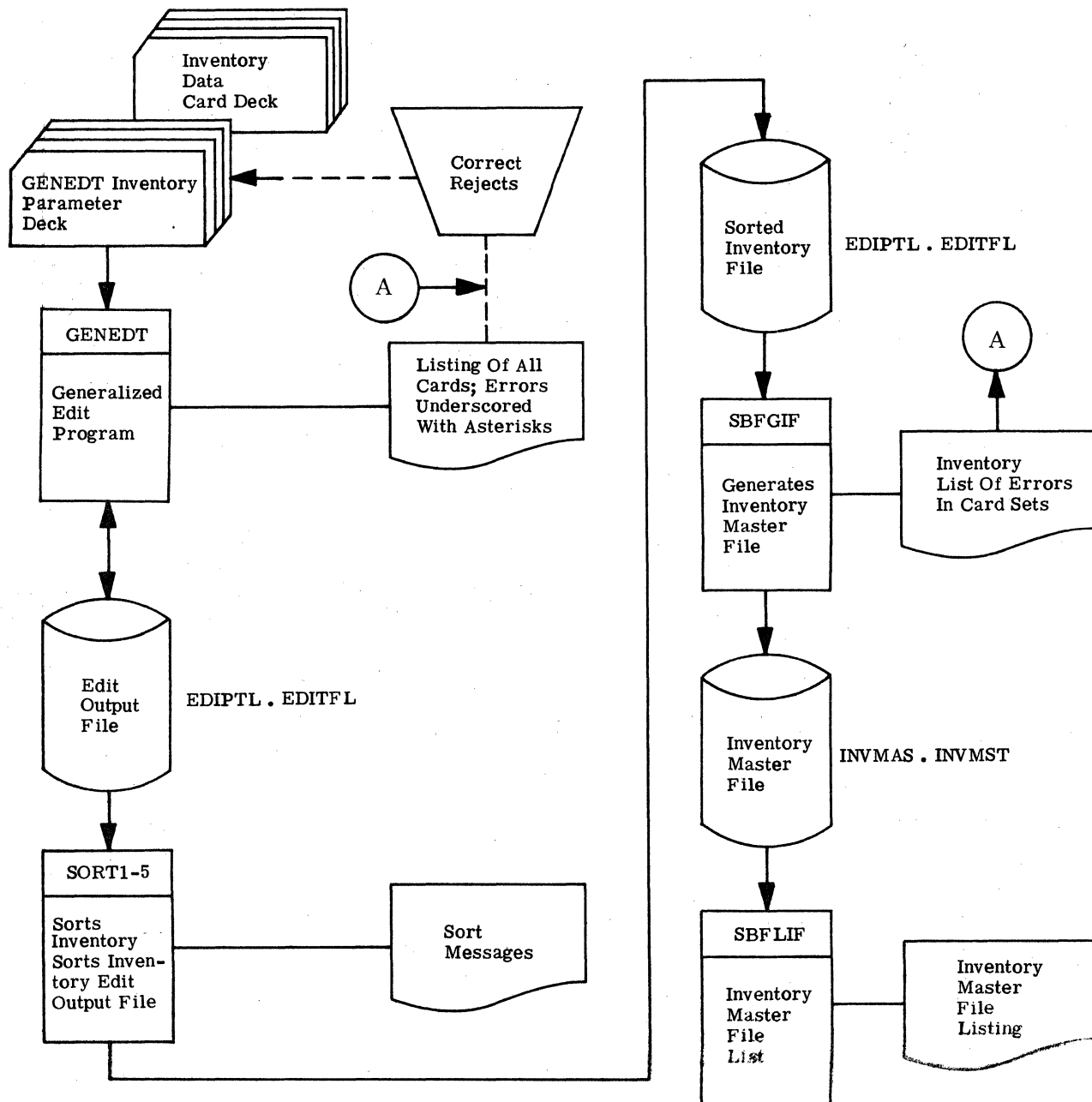


FIGURE 8. CREATING AND LISTING THE INVENTORY MASTER FILE

LISTING THE INVENTORY
MASTER FILE - SBFLIF

Description

SBFLIF reads the inventory master file, formats it for easy reading, and prints it on the line printer. On the extreme right of the listing SBFLIF prints the total value in dollars and cents of the units on hand for each item (cost times the quantity on hand).

Operational
Diagram

See Figure 8.

Sample Listing

See Figure 9.

Operating
Procedures

Be sure the line printer is loaded with stock paper and has a control tape with top of form and overflow punches.

Call the DMF conversational loader, type SBFLIF followed by the ENTER key. The program will respond with

ENTER DATE - 8 CHARACTERS

Enter the date in the form MM-DD-YY. If you make an error, depress the ENTER key again and re-enter the date.

If the line printer is not on line, the program will type

NO LINE PRINTER - END OF JOB

A) ENTER PROGRAM NAME

Otherwise, the program lists the report on the line printer and, when it is finished, types

A) ENTER PROGRAM NAME

The program can be terminated at any time by depressing both the Load and Local switches.

CREATING THE PRODUCT CLASS FILE

Description

The product class file is used by the sales analysis report programs. The product class file can contain a maximum of 50 classes when used in a 10K System Ten configuration. modate more classes.

Creating The Product Class Data Deck

Columns 1 and 2 - Product class number, two digits.
Columns 3 through 20 - Description.
Columns 21 through 80 - Not used.

Operating Procedures

File the product class deck using the DMF FILE utility, then list the file using DISPLAY function of the DMF MAINT utility. Visually determine that the file is correct, and that the items are listed in sequence.

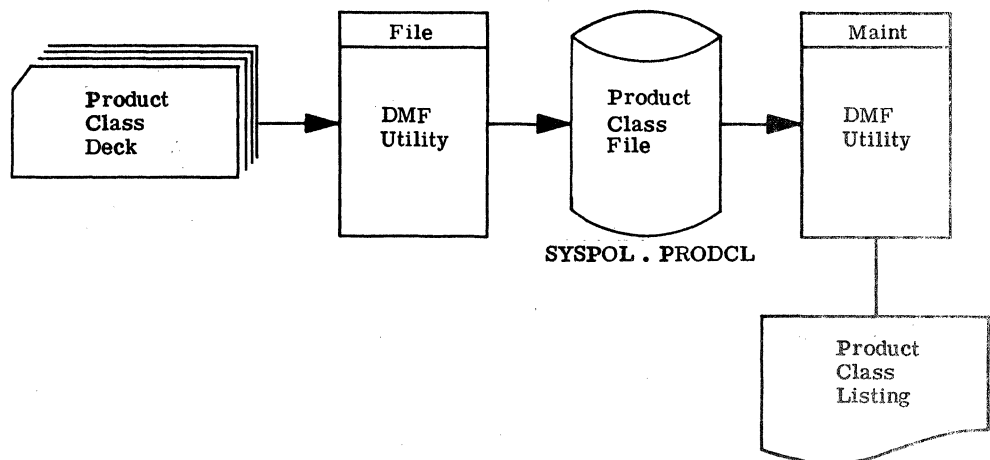


FIGURE 10. PRODUCT CLASS FILE CREATION FLOW DIAGRAM

**2. PROGRAM DESCRIPTIONS
AND
OPERATIONAL DIAGRAMS**



MAINTAINING THE MASTER FILES

This section describes the programs used to maintain the master files. SBFMCF modifies the customer master file; SBFMIF the inventory master file. SBCFAD is used to make additions to or deletions from the customer master file; SBINAD is for the inventory master file. Updating the customer master file (usually on a monthly basis) is done with SBMCTU. The inventory master file is updated (Usually monthly) by SBMITU. Sales orders can be cancelled with the program SBDLØØ.

CUSTOMER MASTER
FILE MODIFICATION -
SBFMCF

Description

SBFMCF allows customer records in the customer master file to be modified. NOTE: To add or delete an entire customer record, use the program SBCFAD.

SBFMCF can be used in either the random or sequential mode of operation. In the random mode, any field of any customer record can be altered. In the sequential mode, the same field of all or of a range of customer records can be altered.

The field to be altered is identified by a key word printed at the workstation at the user's option. The key word is used by the program to look at the key word table which contains the name of the field, the key word, the sector within the record, the starting location within the sector, and the length of the field.

Operational Diagram

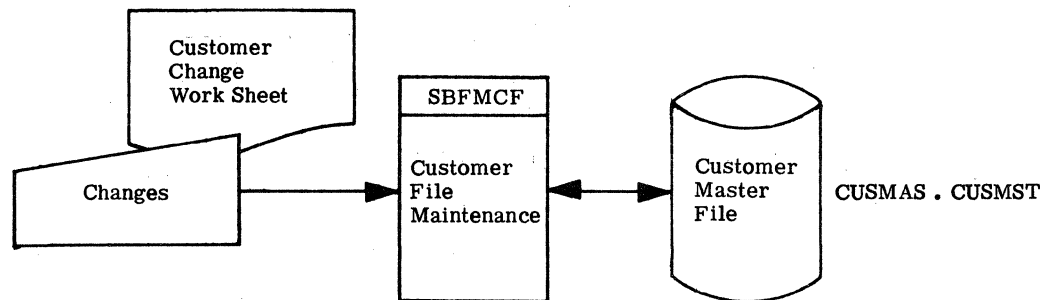


FIGURE 11. SBFMCF OPERATION

INVENTORY MASTER
FILE MODIFICATION -
SBFMIF

Description

SBFMIF allows records in the inventory master file to be modified. NOTE: To add or delete an entire inventory item record, use the program SBIFAD.

SBFMIF can be used in either the random or sequential mode of operation. In the random mode, any field of any inventory item record can be altered. In the sequential mode, the same field of all or of a range of inventory item records can be altered.

The field to be altered is identified by a key word printed at the workstation at the user's option. The key word is used by the program to look at the key word table which contains the name of the field, the key word, the sector within the record, the starting location within the sector, and the length of the field.

Operational Diagram

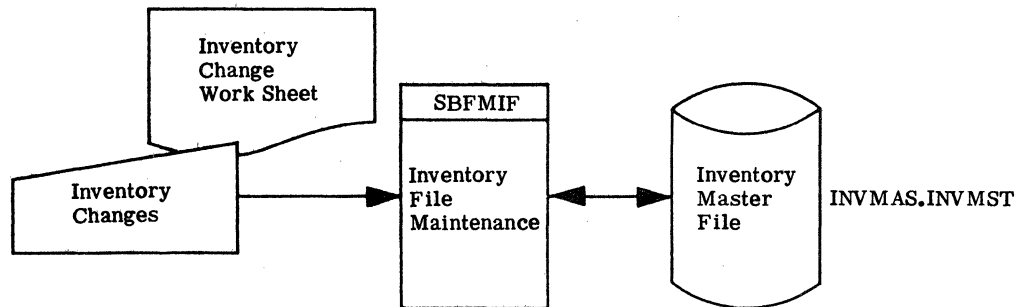


FIGURE 12. SBFMIF OPERATION

CUSTOMER MASTER
FILE ADDITIONS AND
DELETIONS - SBCFAD

Description

SBCFAD is used to add or delete an entire customer record from the customer master file. NOTE: To modify the customer master file, use the program SBFMCF. When a customer record is deleted, SBCFAD automatically calls the index constructor and re-indexes the customer master file. This operation is done at the end of the job.

Operational Diagram

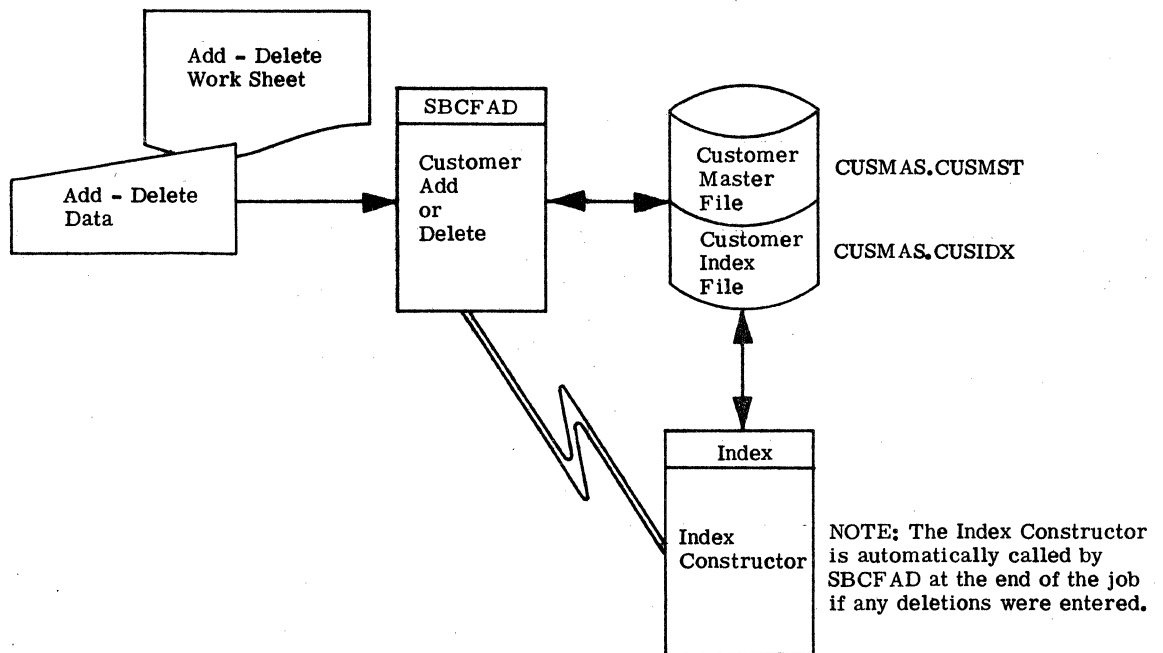


FIGURE 13. SBCFAD OPERATION

INVENTORY MASTER FILE ADDITIONS AND DELETIONS - SBINAD

Description

SBINAD is used to add or delete an entire inventory item record from the inventory master file. NOTE: To modify the inventory master file, use the program SBFMIF. When an inventory record is deleted, SBINAD automatically calls the index constructor and re-indexes the inventory master file. This operation is done at the end of the job.

Operational Diagram

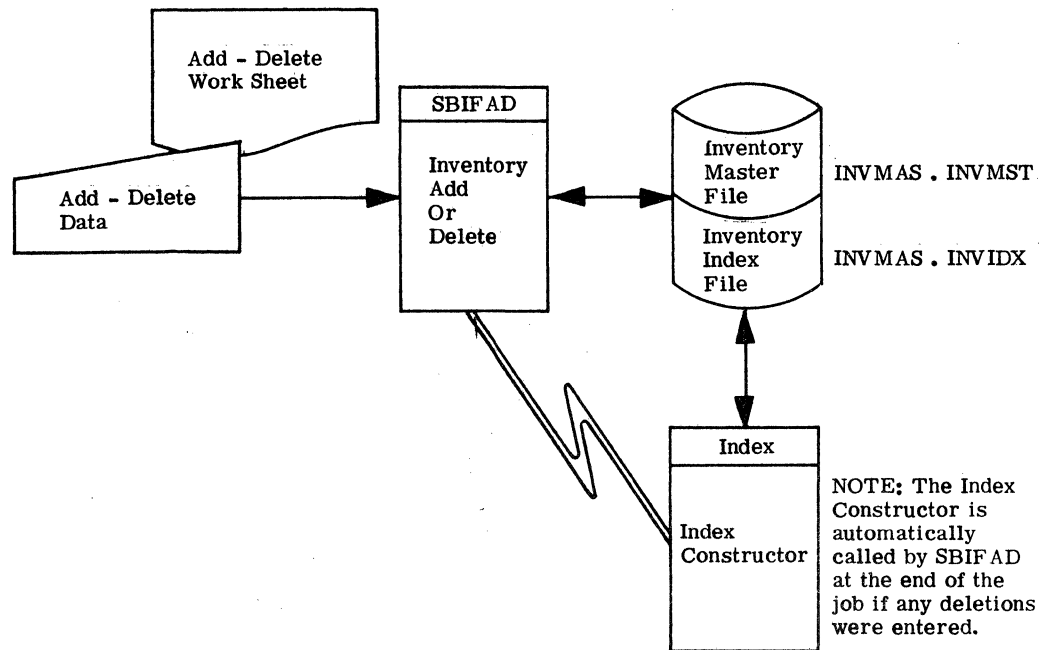


FIGURE 14. SBINAD OPERATION

UPDATING CUSTOMER
MASTER FILES -
SBMCTU

Description

SBMCTU should be run at the end of each month to roll all totals in the customer master file. At the end of the year the previous year's figures are updated. The program prints all totals by month, the year to date, and the previous year.

In addition, the program provides the user with an optional listing of a sales analysis report in customer sequence.

Operational Diagram

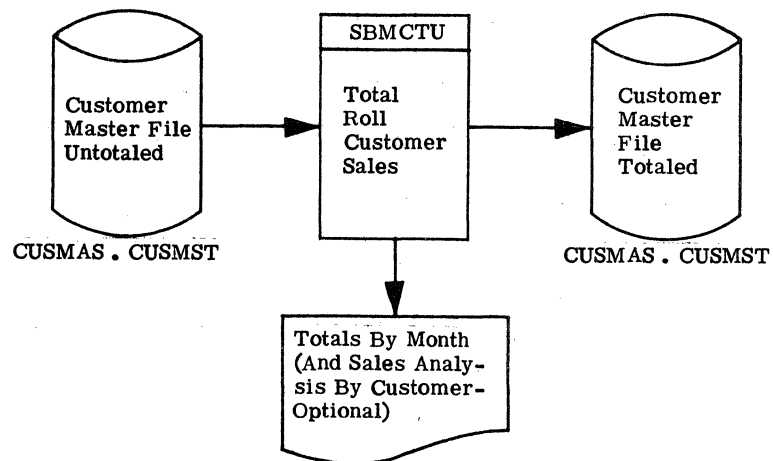


FIGURE 15. SBMCTU OPERATION

UPDATING INVENTORY
MASTER FILES -
SBMITU

Description

SBMITU updates the totals on the inventory master file. The program adds the current month's sales (both the quantities and dollar amounts) to the current quarter and year to date sales figures. At the end of the year the previous year's figures are updated. The program prints totals for the month, the year to date, and the previous year.

Operational Diagram

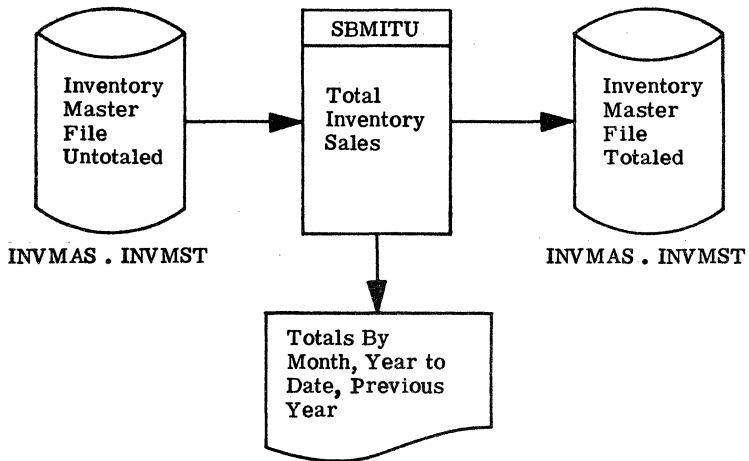


FIGURE 16. SBMITU OPERATION

SALES ORDER
 CANCELLING/DELETING -
 SBDLØØ

Description

SBDLØØ performs a twofold operation: it deletes from the open order file all orders that have been completely filled and invoiced; and it permits the user to cancel open orders that are not to be filled provided that these orders do not contain back ordered items. Back ordered items must be previously deleted by the program SBBØRL before they can be deleted from the open order file by SBDLØØ. At the end of the job the program automatically calls the index constructor and re-indexes the open order file.

NOTE: SBDLØØ should be run as often as possible (weekly is recommended) to free as much disc storage as possible.

Operational Diagram

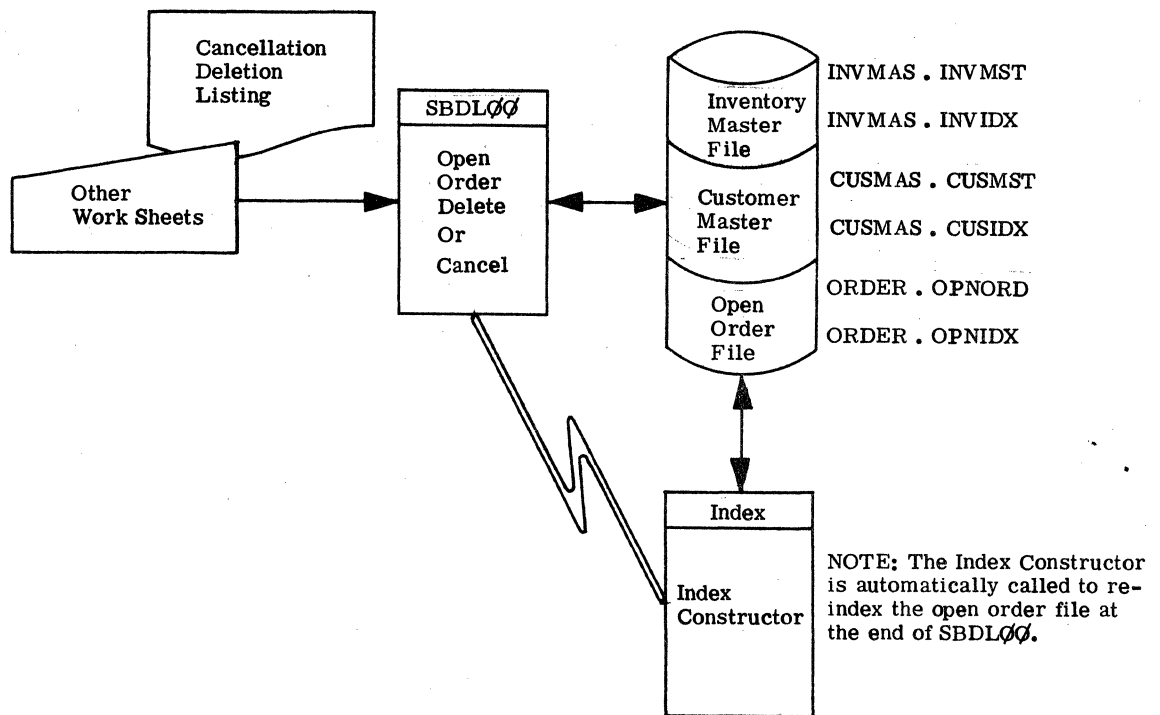


FIGURE 17. SBDLØØ OPERATION

SALES ORDER PROCESSING

This section describes the three programs used for sales order processing. SBØE01 is used to enter and process sales orders, SBØE02 is used to provide a sales order register (a list of all sales orders written that day or since the last report was run), and SBBØRL is used to release back orders so they can be filled.

SALES ORDER
ENTRY AND
PROCESSING -
SBØE01

Description

SBØE01 creates open orders to be filled, invoiced, and, if necessary, back ordered. The program extracts the information from both the customer and inventory master files to perform its operations. SBØE01 increments the quantity reserved field in the inventory file, determines whether the item is critical, establishes orders in the open order file, and places records in the order summary file for later reports. The critical item is when the quantity on hand minus the quantity in reserve is less than minimum. The printed output from the program is usually a multi-part form which can include the order, shipping information, pick list, bin location, packer, and so forth.

NOTE: Separate versions of this program exist for both single and multi-partition operation. When operating in a multi-partition and multi-workstation environment, the program is called SBØEMP.

Operational Diagram

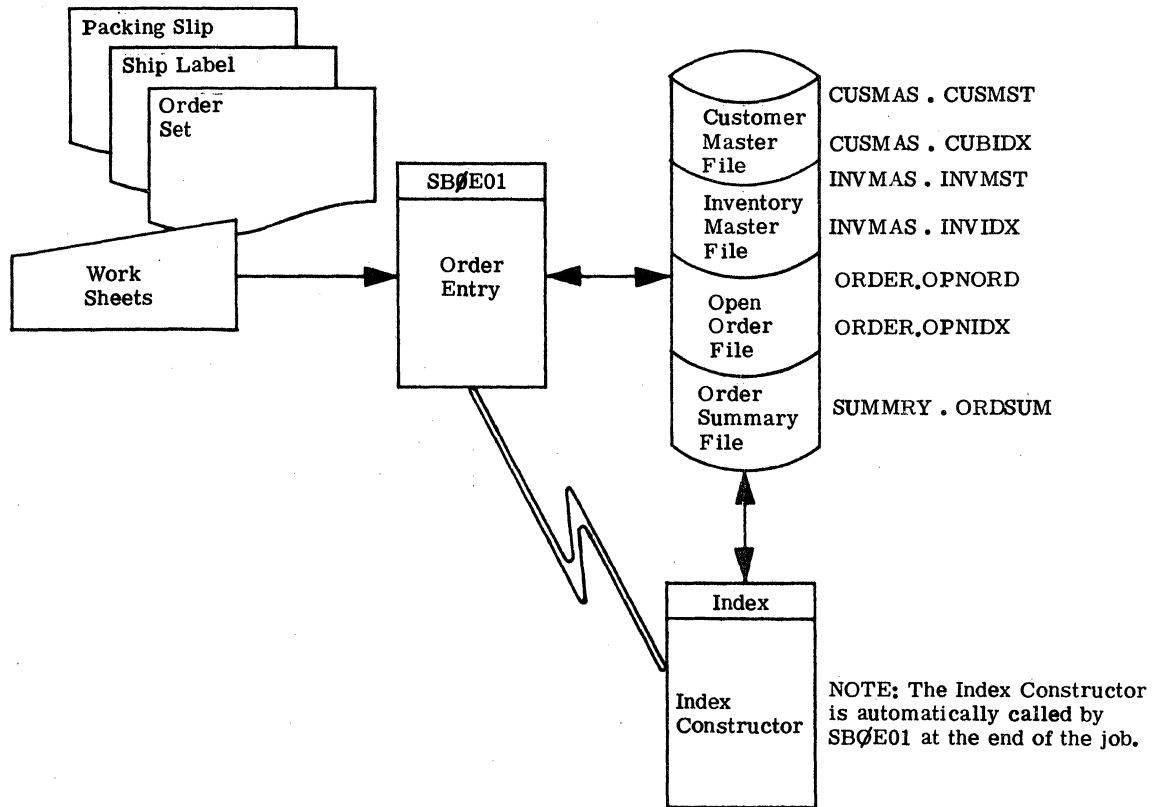


FIGURE 18. SBØE01 OPERATION

SALES ORDER
REGISTER -
SBØE02

Description

SBØE02 uses the order summary file created by SBØE01 and produces a report of the day's orders. The sales order register includes the date, order number, customer number, customer name, region, salesman, customer purchase order, total sales price of the order, total cost of the order, and the gross profit. The last line is a totals line consisting of the number of orders written that day, the total sales for the day, the total cost of sales for the day, and the day's gross profit.

NOTE: The order summary file is destroyed by SBØE02; therefore the program can be run again only after more orders are processed.

Operational Diagram

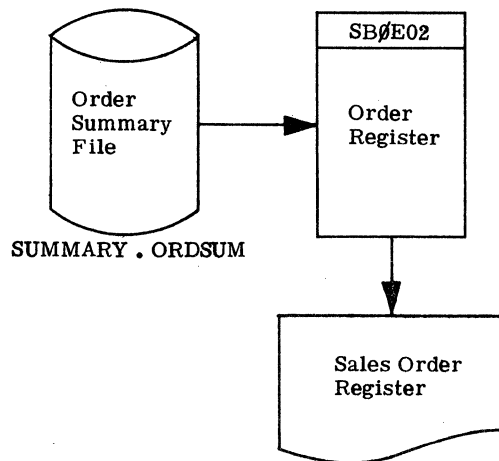


FIGURE 19. SBØE02 OPERATION

RELEASING BACK
ORDERS FOR
FILLING - SBBØRL

Description

When inventory is replenished and the inventory receipts program SBIR02 is run to record the receipts, it prints a work sheet listing the back orders which could be affected. After the decision is made to release these back orders, SBBØRL is run to print a new sales order and to establish them in the open order file so that they can be invoiced. At this point, they are flagged in the open order file so that they may be deleted by SBDLØØ.

Operational Diagram

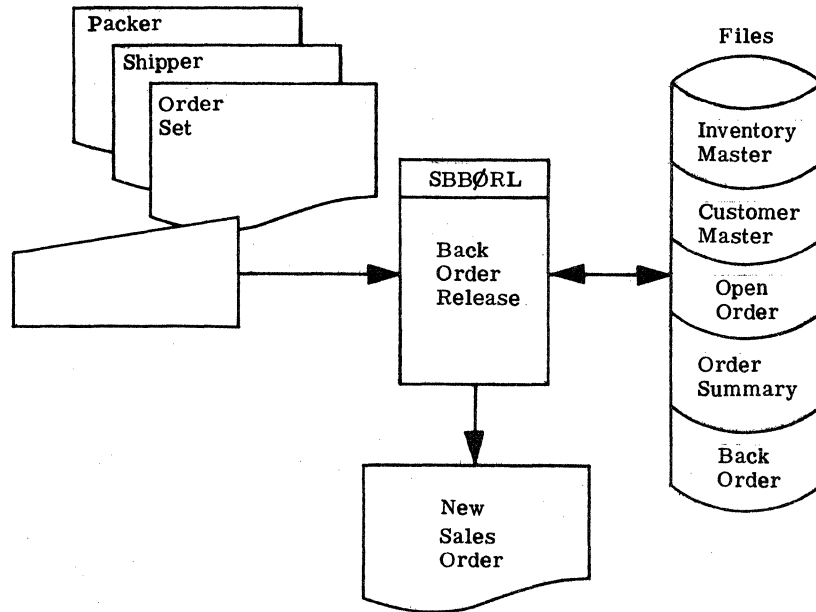


FIGURE 20. SBBØRL OPERATION

INVOICING

This section describes the programs used in invoicing and related operations. SBIN01 produces an invoice from the sales orders entered from SBØE01. SBØEIN is a combined sales order entry and invoicing program. SBIN02 produces an invoice register of all invoices written that day, and SBIR01 reports outstanding back orders.

INVOICE
 PRODUCTION -
 SBIN01

Description

SBIN01 produces an invoice. The program closes the orders established by SBØE01 or SBBØRL, updates the quantities on hand in the inventory master file, clears open orders, and establishes any required back orders in a back order file. The program also updates the invoice summary file for later sales analysis reports and for input data for the accounts receivable programs. In producing the invoice SBIN01 extracts from the customer and inventory master files such information as price, shipping instructions, discounts, and so forth.

NOTE: There are separate versions of SBIN01 for both single and multi-partition operation. When operating in a multi-partition and multi-workstation environment, the program is called SBINMP.

Operational Diagram

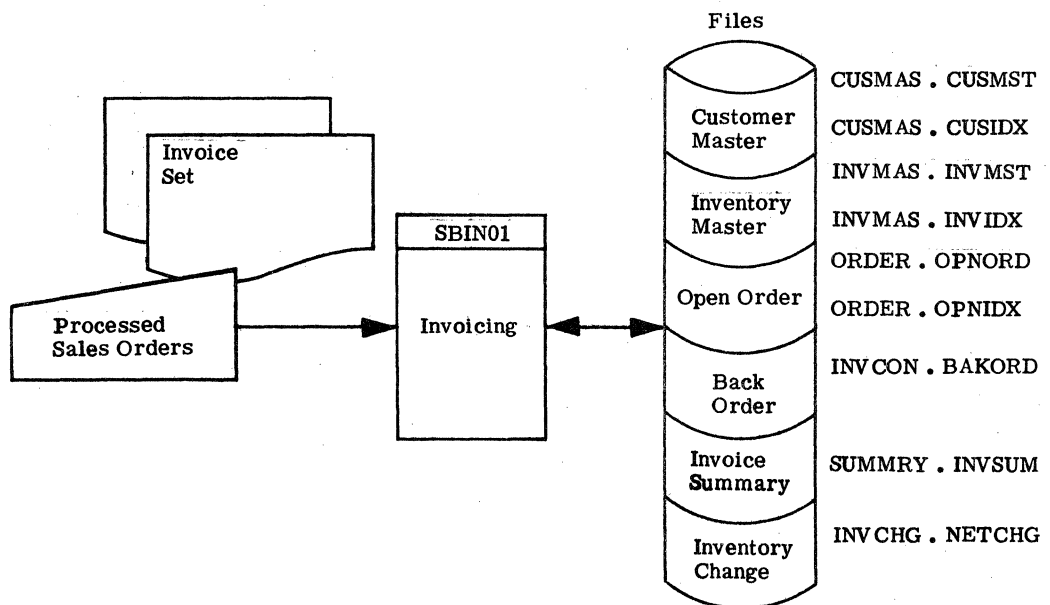


FIGURE 21. SBIN01 OPERATION

COMBINED SALES
ORDER ENTRY AND
INVOICING - SBØEIN

Description

SBØEIN combines the functions of SBØE01, sales order entry and processing, and SBIN01, invoice production, to produce a combined sales order/invoice set.

NOTE: There are separate versions of SBØEIN for both single and multi-partition operation. When operating in a multi-partition and multi-workstation environment, the program is called SBØIMP.

Operational Diagram

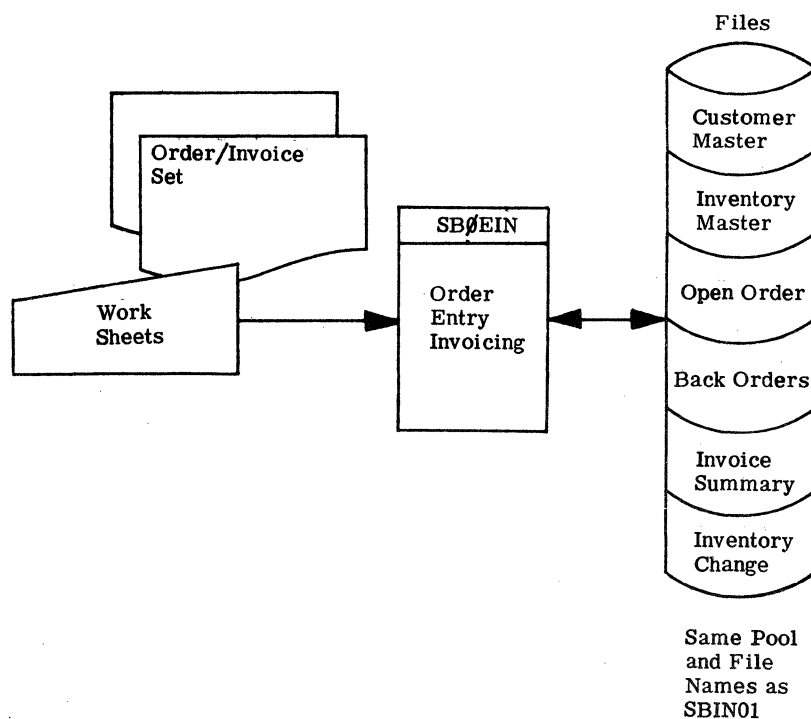


FIGURE 22. SBØEIN OPERATION

INVOICE
REGISTER -
SBIN02

Description

SBIN02 uses the invoice summary file created by either SBIN01 or SBØEIN to produce a report of the day's invoicing activity. The file created by SBIN02 is retained as part of the back-up system.

The invoice register contains the date the invoice was written, the invoice number, customer number, customer name, region, salesman, selling price, discount, cost of the sale, gross profit, tax, freight, and salesman's commission. At the end of the register the program prints a totals line consisting of the total number of invoices and the totals of all dollar amounts.

Operational Diagram

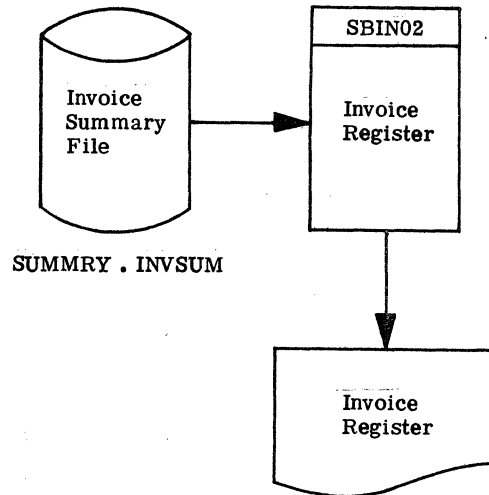


FIGURE 23. SBIN02 OPERATION

BACK ORDER
REPORT - SBIR01

Description

SBIR01 prints on the workstation a report of outstanding back orders. The program has four printing options: today's back orders, this month's back orders, the previous month's back orders, and all back orders.

Operational Diagram

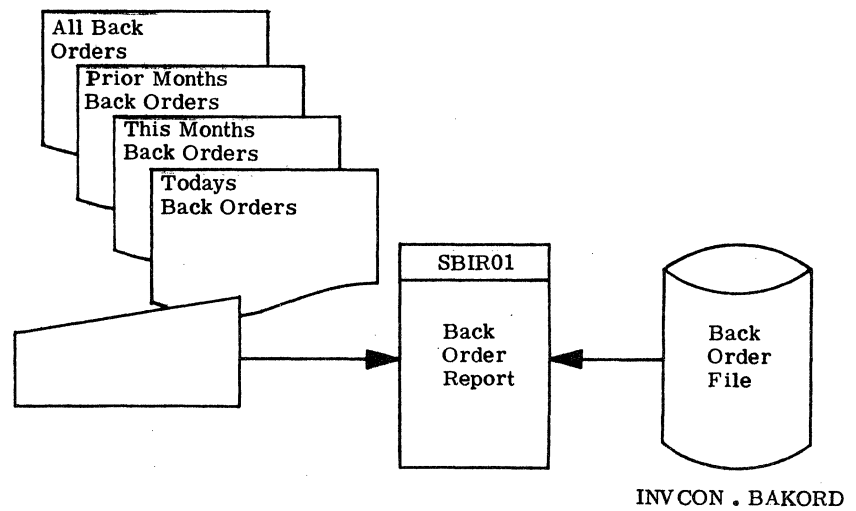


FIGURE 24. SBIR01 OPERATION

INVENTORY CONTROL

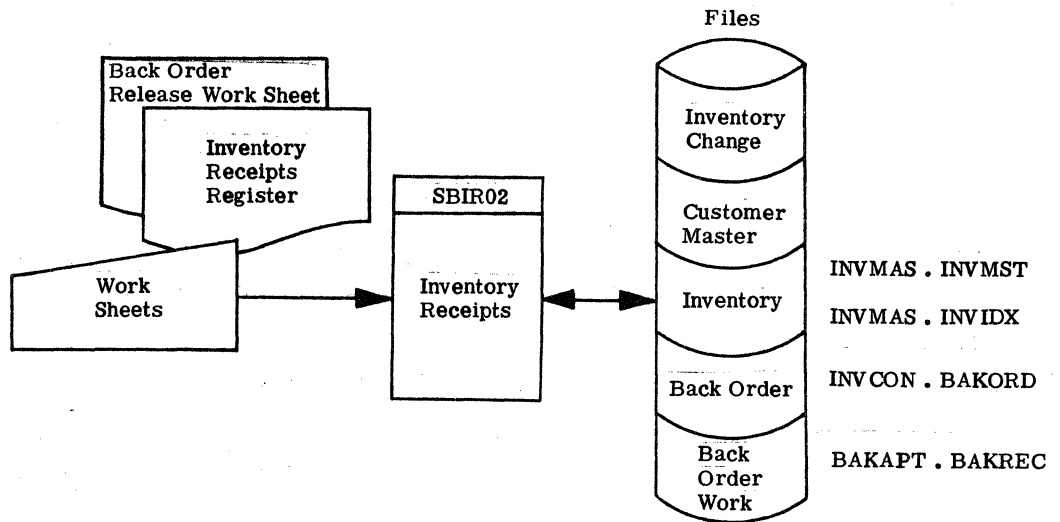
This section describes the programs used for inventory control. SBIR02 processes incoming inventory, SBICCI reports on the status of the entire inventory, and SBIFIQ prints the status of an individual inventory item.

PROCESSING
INVENTORY
RECEIPTS - SBIR02

Description

SBIR02 performs three operations. First, it updates the inventory master file when items are received. Second, it produces an inventory receipts register which shows the status of the inventory items when the receipts are added. Third, at the end of the job, it produces a back order release work sheet which shows all the back orders that could be affected by these inventory receipts.

Operational Diagram



NOTE: The Back Order Work File is a DMF Work File and exists for the duration of the job only.

FIGURE 25. SBIR02 OPERATION

**INVENTORY
STATUS REPORT
(ENTIRE INVEN-
TORY) - SBICCI**

Description

SBICCI searches the entire inventory master file and provides an inventory status report. Four different options are provided: today's critical items (caused by today's sales orders or invoicing), cumulative critical items, out of stock items, and the status of a range of inventory items (or the entire inventory if desired). An item is defined as critical if, after subtracting the reserved quantity from the quantity on hand, the result is less than the minimum.

Operational Diagram

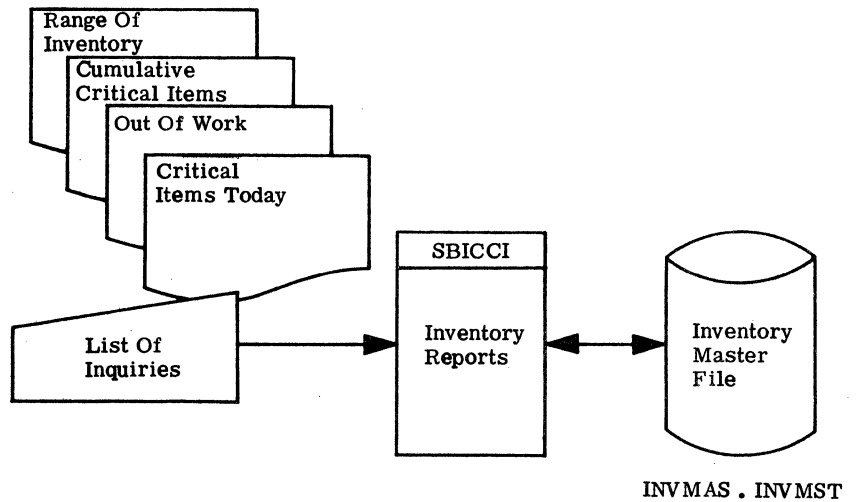


FIGURE 26. SBICCI OPERATION

INVENTORY
STATUS REPORT
(INDIVIDUAL ITEM) -
SBIFIQ

Description

SBIFIQ allows the user to inquire on a random basis into the status of any item in the inventory. The program prints a one line report showing quantity on hand, quantity on order, quantity reserved, quantity back ordered, and the minimum quantity. Each item reported on is flagged as critical, out of stock, or normal. An item is defined as critical if, after subtracting the reserved quantity from the quantity on hand, the result is less than the minimum.

Operational Diagram

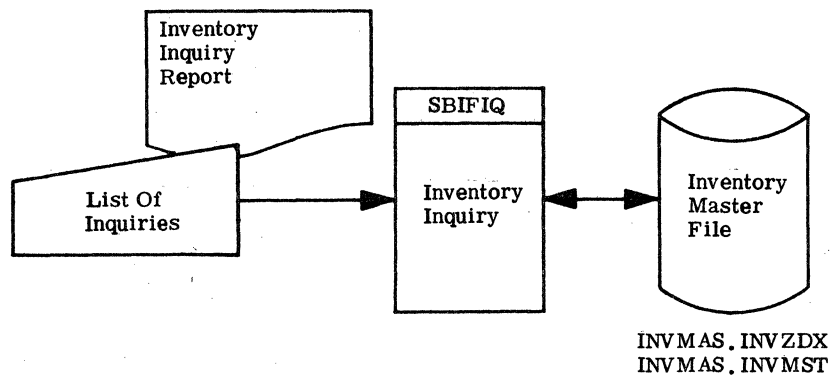


FIGURE 27. SBIFIQ OPERATION

SALES ANALYSIS

The programs provide company managers with sales analysis reports to gauge progress. SBSA01 provides a sales analysis by product class. SBSA02 provides an analysis by region, salesman, and customer.

SALES ANALYSIS
BY PRODUCT CLASS -
SBSA01

Description

SBSA01 summarizes the sales figures in the inventory master file and matches them to the product class categories in the product class file. The program then prints a report showing month and year to date figures as well as this year's and the previous year's sales by quarters.

Operational Diagram

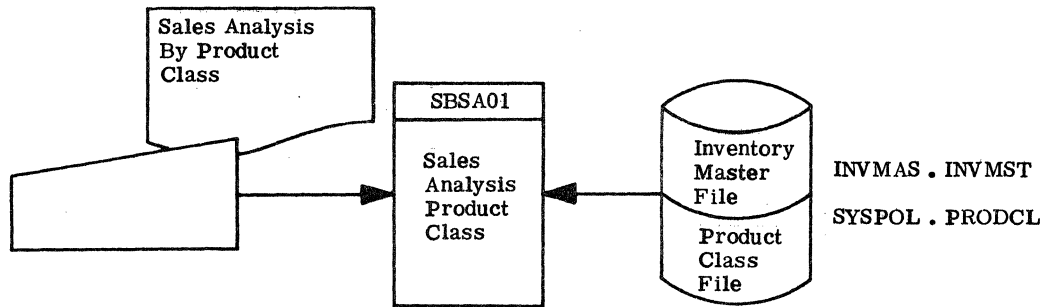


FIGURE 28. SBSA01 OPERATION

SALES ANALYSIS
 BY REGION,
 SALESMAN,
 CUSTOMER -
 SBSA02

Description

SBSA02 produces a sales analysis report by region, salesman, and customer in the order specified by the user. A TAG SORT program is also used to produce the report as follows:

The TAG SORT program performs a tag sort of the customer master file into region, salesman, customer sequence. Then SBSA02 uses the sorted file as a reference to the customer master file to produce the report. The printed data includes sales for the month and year to date, sales for the past twelve months, and sales for the same month last year.

Operational Diagram

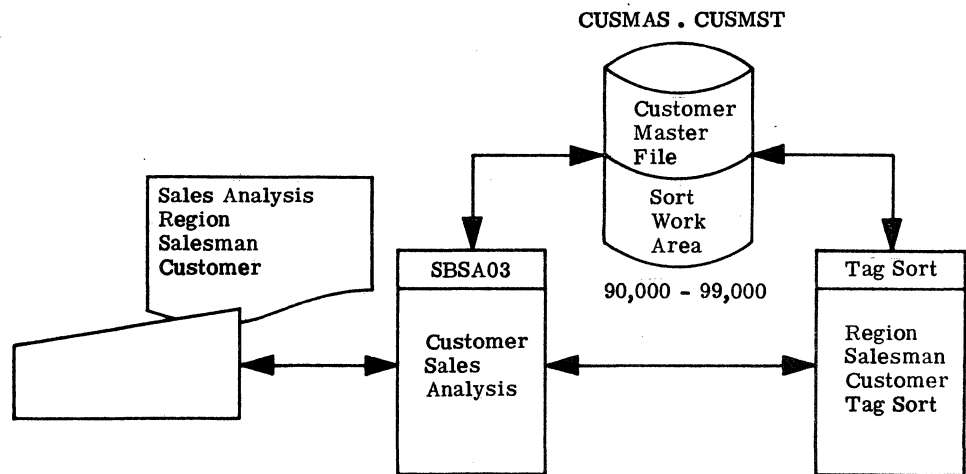


FIGURE 29. SBSA02 OPERATION

3. PROGRAM OPERATING PROCEDURES

OPERATING PROCEDURES

This section contains operating procedures for all programs in the package except those programs used to create the master files. For operating procedures for these programs, see the section MASTER FILE CREATION.

**CUSTOMER
MASTER FILE
MODIFICATION -
SBFMCF**

DMF Conversational
Loader:

A) ENTER PROGRAM NAME

Operator:

Type SBFMCF and then press the ENTER key.

SBFMCF:

PROGRAM SBFMCF BEGINNING EXECUTION
DISPLAY KEY WORD TABLE ? REPLY Y OR N.

Operator:

Type a Y or an N depending on whether or not you want the key word
table printed.

SBFMCF:

Bypasses key word table if N was typed. Prints table (shown below)
if Y was typed.

KEY WORD LIST

COST MONTH TO DATE	CTD	08
COST PRIOR YEAR	CPY	07
CREDIT LIMIT	LMT	05
CURRENT BALANCE	BAL	07
CUSTOMER CLASS	CLS	01
FREIGHT CODE	FRT	01
PHONE	PHO	10
PRICE CODE	PRI	01
PRIOR MONTH COST 1	C01	06
PRIOR MONTH SALES 1	S01	06
PRIOR MONTH COST 2	C02	06
PRIOR MONTH SALES 2	S02	06
PRIOR MONTH COST 3	C03	06
PRIOR MONTH SALES 3	S03	06
PRIOR MONTH COST 4	C04	06
PRIOR MONTH SALES 4	S04	06
PRIOR MONTH COST 5	C05	06
PRIOR MONTH SALES 5	S05	06
PRIOR MONTH COST 6	C06	06
PRIOR MONTH SALES 6	S06	06
PRIOR MONTH COST 7	C07	06
PRIOR MONTH SALES 7	S07	06
PRIOR MONTH COST 8	C08	06
PRIOR MONTH SALES 8	S08	06
PRIOR MONTH COST 9	C09	06
PRIOR MONTH SALES 9	S09	06
PRIOR MONTH COST 10	C10	06
PRIOR MONTH SALES 10	S10	06
PRIOR MONTH COST 11	C11	06
PRIOR MONTH SALES 11	S11	06
PRIOR MONTH COST 12	C12	06
PRIOR MONTH SALES 12	S12	06
REGION	REG	02
SALESMAN NUMBER	SLM	03

SALES MONTH TO DATE	STD	08
SALES PRIOR YEAR	SPY	07
SOLD TO NAME	SNA	25
SOLD TO ADDRESS 1	SA1	20
SOLD TO ADDRESS 2	SA2	20
SOLD TO CITY	SCT	14
SOLD TO STATE	SST	02
SOLD TO ZIP CODE	SZP	05
SHIP TO NAME	PNA	25
SHIP TO ADDRESS 1	PA1	20
SHIP TO ADDRESS 2	PA2	20
SHIP TO CITY	PCT	14
SHIP TO STATE	PST	02
SHIP TO ZIP CODE	PZP	05
SERVICE CHARGE	CHG	03
SHIP VIA CODE	VIA	01
TAX CODE	TAX	01
TERMS CODE	TMS	01
YEAR TO DATE COST	YDC	07
YEAR TO DATE SALES	YDS	07

SBFMCF: RANDOM OR SEQUENTIAL UPDATE ? REPLY R OR S.

Operator: Type either R or S. If you type R, go to A. If you type S, go to B.

A

SBFMCF: ENTER CUSTOMER NUMBER.

At this point you may terminate the program by pressing the CTL 13 key.

Operator: Type the customer number, then press the ENTER key.

SBFMCF: Prints the customer name and illuminates Indicator Lights A, B, C, D, and E.

Operator: If this is the correct customer, press the CTL 1 key. The indicator lights will go out. If you have the wrong customer, press the ENTER key. The program will ask for the customer number again.

SBFMCF: ENTER KEY WORD.

Operator: Type the desired key word. If you type the wrong key word, the program asks for the key word again.

SBFMCF: OLD = xxxxxxxxxxxx NEW =

Operator: Type the new data, then press the ENTER key.

SBFMCF: Illuminates Indicator Lights A, B, C, D, and E.

Operator: If the data you entered was correct, press the CTL 1 key. If you had made a mistake, press the ENTER key. The program will print the OLD/NEW line again.

SBFMCF: Illuminates Indicator Light A.

Operator: Press the CTL 1 key to make more changes for this customer. The program will ask for the new key word.

If you are finished with this customer, press the CTL 2 key.

At the end of the job, press the CTL 13 key.

NOTE: At the end of the run, the program prints

PROGRAM SBFMCF NORMAL END OF JOB

GO TO A

B

SBFMCF: ENTER CUSTOMER NUMBER.

At this point you may terminate the program by pressing the CTL 13 key.

Operator: Type the customer number, then press the ENTER key.

SBFMCF: Prints the customer name and illuminates Indicator Lights A, B, C, D, and E.

Operator: If this is the correct customer, press the CTL 1 key. The indicator lights will go out. If you have the wrong customer, press the ENTER key. The program will ask for the customer number again.

SBFMCF: ENTER KEY WORD.

Operator: Type the desired key word. If you type the wrong key word, the program will ask for the key word again.

SBFMCF: DO YOU WISH TO ENTER A RANGE ? REPLY Y OR N.

CAUTION

If you do not specify a range, you cannot abort the program before it reaches the end of the customer file. You must let the program print every customer in the customer file.

Operator: Type a Y or an N. If you type Y, go to C. If you type N, go to D.

C

- SBFMCF:** ENTER STARTING CUSTOMER NUMBER.
- Operator:** Type the number of the first customer to be changed, then press the ENTER key. NOTE: The range must begin with the lowest number and end with the highest.
- SBFMCF:** ENTER ENDING CUSTOMER NUMBER.
- Operator:** Type the number of the last customer to be changed, then press the ENTER key.
- SBFMCF:** Prints the first customer's number and name and illuminates Indicator Light B.
- Operator:** Press the CTL 1 key if you do not want to change this customer's data.
- Press the ENTER key to enter new data.
- SBFMCF:** OLD = xxxx NEW = xxxx Indicator Light B is illuminated.
- Operator:** Enter the new data and then press the ENTER key.
- SBFMCF:** Illuminates Indicator Lights A, B, C, D, and E.
- Operator:** Press the CTL 1 key if the data is valid.
- If you had entered the wrong data, press the ENTER key. The program will print the OLD/NEW line again so that you can re-enter the data correctly.
- SBFMCF:** Prints the next customer's number and name. The procedure is the same until the range specified is exhausted. Then the program prints
- PROGRAM SBFMCF NORMAL END OF JOB
- DMF Conversational Loader:** A) ENTER PROGRAM NAME.

D

SBFMCF: Prints the number and name of the first customer in the customer master file and illuminates Indicator Light B.

Operator: Press the CTL 1 key if you do not want to change this customer's data.

Press the ENTER key to enter new data.

SBFMCF: OLD = xxx NEW = xxx Indicator Light B is illuminated.

Operator: Enter the new data and then press the ENTER key.

SBFMCF: Illuminates Indicator Lights A, B, C, D, and E.

Operator: Press the CTL 1 key if the data is valid.

If you had entered the wrong data, press the ENTER key. The program will print the OLD/NEW line again so that you can re-enter the data correctly.

SBFMCF: Prints the next customer's number and name. The procedure is the same until every customer in the customer master file has been displayed and the customer either bypassed or changed. Then the program prints

PROGRAM SBFMCF NORMAL END OF JOB

DMF Conversational Loader:

A) ENTER PROGRAM NAME.

**INVENTORY
MASTER FILE
MODIFICATION -
SBFMIF**

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Type SBFMIF and then press the ENTER key.

SBFMIF:

PROGRAM SBFMIF BEGINNING EXECUTION
DISPLAY KEY WORD TABLE ? REPLY Y OR N.

Operator:

Type a Y or an N depending on whether or not you want the key word
table printed.

SBFMIF:

Bypasses key word table if N was typed. Prints table (shown below)
if Y was typed.

KEY WORD LIST

COST	CST	06
COMMISSION RATE	COM	04
DESCRIPTION	DSC	40
DISCOUNT RATE 1	DS1	03
DISCOUNT RATE 2	DS2	03
DISCOUNT RATE 3	DS3	03
LOCATION CODE	LOC	03
MINIMUM QUANTITY	MIN	06
MONTH TO DATE \$	MO\$	07
MONTH TO DATE QUAN	MOQ	06
PRIOR YEARS SALES	PYD	07
PRIOR YEAR QTR 1	PQ1	06
PRIOR YEAR QTR 2	PQ2	06
PRIOR YEAR QTR 3	PQ3	06
PRIOR YEAR QTR 4	PQ4	06
PRICE 1	PR1	06
PRICE 2	PR2	06
PRICE 3	PR3	06
PRICE 4	PR4	06
PRICE 5	PR5	06
PART CLASS	PTC	02
QUANTITY BREAK 1	QB1	04
QUANTITY BREAK 2	QB2	04
QUANTITY BREAK 3	QB3	04
QUANTITY ON HAND	QOH	06
QUANTITY ON ORDER	QOO	06
QUANTITY RESERVED	RES	06
QUANTITY ON BACK ORD	QBO	06
THIS YEAR QTR 1	TQ1	06
THIS YEAR QTR 2	TQ2	06
THIS YEAR QTR 3	TQ3	06
THIS YEAR QTR 4	TQ4	06
UNIT OF MEASURE	UMS	04

VENDOR CODE
YEAR TO DATE SALES

VEN 03
YTD 07

SBFMIF: **RANDOM OR SEQUENTIAL UPDATE ? REPLY R OR S.**

Operator: **Type either R or S. If you type R, go to A. If you type S, go to B.**

A

SBFMIF: ENTER ITEM NUMBER

At this point you may terminate the program by pressing the CTL 13 key.

Operator: Type the part number and then press the ENTER key.

SBFMIF: ENTER KEY WORD

Operator: Type the desired key word. If you type the wrong key word, the program will print INVALID KEY WORD
ENTER NEW KEY WORD

Retype the key word correctly.

SBFMIF: ITEM NO xxxxxxxxxxxxxxxx
ENTER NEW DATA

Operator: Type the new data and then press the ENTER key.

SBFMIF: xxxxxxxx (old data) CHANGED TO xxxxxxxxxxxx
CTL 1 = VALID CTL 2 = VOID

Operator: If the change is correct, press the CTL 1 key. If the change is incorrect, press the CTL 2 key.

SBFMIF: VALIDATED or VOIDED depending on the control key pressed in the step above.

ENTER ITEM NUMBER

Operator: Repeat the above procedure or press the CTL 13 key.

SBFMIF: PROGRAM SBFMIF SUCCESSFUL END OF JOB (if CTL 13 pressed)

DMF Conversational
Loader: A) ENTER PROGRAM NAME.

B

SBFMIF: ENTER KEY WORD

Operator: Type the desired key word. If you type the wrong key word, the program will print INVALID KEY WORD
ENTER NEW KEY WORD

Retype the key word correctly.

SBFMIF: DO YOU WISH TO VERIFY ? REPLY Y OR N

Operator: If you type Y, the program will wait at the end of every change for you to verify the change. If you type an N, the program will not pause for you to verify the change.

SBFMIF: SPECIFY RANGE ? Y OR N

CAUTION

If you do not specify a range, you cannot abort the program before it reaches the end of the inventory file. You must let the program print every item in the file.

Operator: Type a Y or an N. If you type Y, go to C. If you type N, go to D.

D

SBFMIF: ITEM NO xxxxxxxxxxxxxxxx (first part number in the inventory)
ENTER NEW DATA

Operator: Enter the new data and then press the ENTER key, or press the
CTL 1 key to bypass the change for this item.

SBFMIF: xxxxxx (old data) CHANGED TO xxxxxxxx
CTL 1 = VALID CTL 2 = VOID (only if verification was
requested in B)

Operator: Press the control key desired.

SBFMIF: Prints the next part number. The process continues until the entire
inventory file has been listed. At the end of the job the program will
print

PROGRAM SBFMIF SUCCESSFUL END OF JOB

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

**CUSTOMER
MASTER FILE
ADDITIONS AND
DELETIONS -
SBCFAD**

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Type SBCFAD and then press the ENTER key.

SBCFAD:

mm-dd-yy BEGIN CUSTOMER ADDITIONS AND DELETIONS
ENTER A FOR ADDITIONS D FOR DELETIONS

Operator:

Type either an A or a D and then press the ENTER key.

If you type A, go to A. If you type D, go to B.

A

SBCFAD: ENTER CUSTOMER NUMBER

At this point you may terminate the run by pressing the CTL 13 key. After pressing this key there may be a rather long delay while the program comes to an orderly termination. Do not do anything until the DMF Conversational Loader types the message A) ENTER PROGRAM NAME.

Operator: Type the customer number and then press the ENTER key. If the customer number already exists on the file, the program will type

CUSTOMER NUMBER CURRENTLY BEING USED
ENTER CUSTOMER NUMBER

Enter another number.

NOTE: The following parameters are defined in the section entitled CREATING THE CUSTOMER MASTER FILE DATA DECK in the first section of this manual.

SBCFAD: SALESMAN

Operator: Type the salesman's number and then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: REGION

Operator: Type the region code and then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: SHIP VIA

Operator: Type the shipping code and then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: FREIGHT

Operator: Type the freight code and then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: TERMS

Operator: Type the terms code and then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: TAX

Operator: Type the tax code and then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: CUSTOMER CLASS
Operator: Type the customer class code and then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: PRICE
Operator: Type the price code and then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: CREDIT LIMIT
Operator: Type the credit limit and then press the ENTER key. The program will add any leading zeroes to the code. To skip the entry, press the ENTER key only.

SBCFAD: PHONE
Operator: Type the telephone number with the area code first in the form AAAPPPPPP, then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: SERVICE CHARGE
Operator: Type the service charge and then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: SOLD TO NAME
Operator: Type the sold to name and then press the ENTER key. The program will add any trailing blanks necessary. To skip the entry, press the ENTER key only.

SBCFAD: SOLD TO ADDRESS 1
Operator: Type the first line of the sold to address (up to 20 characters) and then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: SOLD TO ADDRESS 2
Operator: Type the second line of the sold to address (up to 20 characters) and then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: SOLD TO CITY
Operator: Type the city name and press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: SOLD TO STATE
Operator: Type the sold to state and then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: SOLD TO ZIP

Operator: Type the sold to ZIP code and then press the ENTER key. To skip the entry, press the ENTER key only.

SBCFAD: SHIP TO NAME

Operator: Type SAME and then press the ENTER key. The program will bypass the ship to requests. If you enter a name at this point, the program will ask the same questions as it did for the sold to information.

SBCFAD: ARE ALL ENTRIES VALID?

Operator: Press either CTL 1 or CTL 2.

CTL 1 signals that you indeed want the record added to the customer file. After adding the record to the file, SBCFAD responds by asking for another customer number.

CTL 2 indicates that you do not want the record added to the customer file after all, SBCFAD responds by asking for another customer number.

GO TO A

B

SBCFAD: ENTER CUSTOMER NUMBER

At this point you may terminate the run by pressing the CTL 13 key. After pressing this key there may be a rather long delay while the program comes to an orderly termination. Do not do anything until the DMF Conversational Loader types the message A) ENTER PROGRAM NAME.

Operator: Type the customer number and then press the ENTER key. If the customer is not on the file, the program types the message RECORD NOT ON FILE and asks for another customer number.

SBCFAD: Types customer name and accounts receivable balance.

Operator: Press either CTL 9 or CTL 1.

CTL 9 indicates that you indeed want the customer record deleted. SBCFAD prints the message RECORD DELETED and requests another customer number.

CTL 1 indicates that you do not want to delete the customer record. SBCFAD responds with the message RECORD NOT DELETED and requests another customer number.

GO TO B

**INVENTORY
MASTER FILE
ADDITIONS AND
DELETIONS -
SBINAD**

A

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Enter SBINAD and then press the ENTER key.

SBINAD:

mm-dd-yy BEGIN INVENTORY ADDITIONS & DELETIONS
ENTER A FOR ADDITION D FOR DELETIONS

Operator:

Enter either an A or a D and then press the ENTER key.

GO TO B (if making additions)

GO TO C (if making deletions)

B

SBINAD: ENTER ITEM NUMBER

At this point you may terminate the run by pressing CTL 13. After pressing CTL 13 there may be a rather long delay while the program comes to an orderly termination. Do not do anything until the DMF Conversational Loader types the message A) ENTER PROGRAM NAME.

Operator: Enter an item number and then press the ENTER key. If the item number already exists on the file, the program will type

ITEM NUMBER CURRENTLY BEING USED
ENTER ITEM NUMBER

Enter another number.

NOTE: The following parameters are defined in the section entitled CREATING THE INVENTORY MASTER FILE DATA DECK in the first section of this manual.

SBINAD: DESCRIPTION

Operator: Enter the item's description and then press the ENTER key. To skip this entry merely press the ENTER key.

SBINAD: VENDOR CODE

Operator: Enter a vendor code and then press the ENTER key. To skip this entry merely press the ENTER key.

SBINAD: LOCATION CODE

Operator: Enter a location code and then press the ENTER key. To skip this entry merely press the ENTER key.

SBINAD: PRODUCT CLASS

Operator: Enter a product class code and then press the ENTER key. To skip this entry merely press the ENTER key.

SBINAD: ITEM COST

Operator: Enter an amount and then press the ENTER key. To skip this entry merely press the ENTER key. Note the following examples:

123456 = \$ 1,234.56
19 = \$.19
2345 = \$ 23.45

SBINAD: Asks for up to five prices. The messages read as follows:

PRICE ONE
PRICE TWO
PRICE THREE
PRICE FOUR
PRICE FIVE

Operator: In response to each message, type an amount (see the examples under ITEM COST, above) and then press either the ENTER key or CTL 1.

CTL 1 signals that you wish to skip the remaining price entries.

The ENTER key signals that you wish to proceed with the next price entry.

SBINAD: Asks for up to three discount quantities. The messages read as follows:

QUANTITY BREAK 1
QUANTITY BREAK 2
QUANTITY BREAK 3

Operator: In response to each message, type a quantity and then press either CTL 1 or the ENTER key.

CTL 1 signals that you wish to skip the remaining discount quantity entries.

The ENTER key signals that you wish to proceed with the next discount quantity entry.

SBINAD: Asks for up to three discount percentages (discount percentage 1 is associated with discount quantity 1, etc.). The messages read as follows:

DISCOUNT 1
DISCOUNT 2
DISCOUNT 3

Operator: In response to each message, enter a discount percentage and then press either the ENTER key or CTL 1. Note the following examples:

250 = 25 %
005 = $\frac{1}{2}$ %
035 = $3\frac{1}{2}$ %

CTL 1 signals that you wish to skip the remaining discount percentage entries.

The ENTER key signals that you wish to proceed to the next discount percentage entry.

SBINAD: UNIT OF MEASURE

Operator: Enter the units in which the item is available (such as EACH, PAIR, etc.) and then press the ENTER key.

SBINAD: COMMISSION RATE

Operator: Enter an amount (see the examples under UNIT COST, above) and then press the ENTER key. To skip this entry, merely press the ENTER key.

SBINAD: HAVE ALL ENTRIES BEEN VERIFIED IF YES PRESS CTL 1 TO ADD.

Operator: Press either CTL 1 or CTL 2.

CTL 1 signals that you indeed want the record added to the inventory file. After adding the record to the file, SBINAD responds by asking for another item number.

CTL 2 signals that you do not want the record added to the inventory file after all. SBINAD responds by asking for another item number.

GO TO B

C

SBINAD: ENTER ITEM NUMBER

At this point you may terminate the run by pressing CTL 13. After pressing CTL 13 there may be a rather long pause while the program comes to an orderly termination. Do not do anything until the DMF Conversational Loader types the message A) ENTER PROGRAM NAME.

Operator: Enter an item number and then press the ENTER key.

If the item is not on file, SBINAD types the message NOT ON FILE and asks for another item number.

If the item is back ordered, SBINAD types the message ITEM BACK ORDERED and asks for another item number.

SBINAD: Types the item description and the quantity on hand.

Operator: Press CTL 1 or CTL 9.

CTL 1 signals that you do NOT wish to delete the particular item record after all. SBINAD responds by asking for another item number.

CTL 9 confirms that you indeed want the item record deleted. After it deletes the record, SBINAD asks for another item number.

GO TO C

**UPDATING
CUSTOMER
MASTER FILES -
SBMCTU**

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Type SBMCTU and then press the ENTER key.

SBMCTU:

UPDATE OF MONTHLY SALES AND COST STATISTICS
REPORT TO BE PRINTED? ENTER Y OR N

Operator:

If you type Y (for YES), the program will print the report with the sales for each customer included.

If you type N (for NO), the program will bypass the customer report and print the totals only.

SBMCTU:

IS THIS A YEAR END REPORT ENTER Y OR N

Operator:

Type Y (for YES) or N (for NO) as appropriate. The program will adjust the totals correctly.

SBMCTU:

POSITION FORM FOR REPORT

Operator:

Press the NEW LINE key and position the forms correctly. Then press the CTL 1 key.

SBMCTU:

Prints the report.

**UPDATING
INVENTORY
MASTER FILES -
SBMITU**

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Type SBMITU, then press the ENTER key.

SBMITU:

BEGIN MONTHLY INVENTORY TOTAL UPDATE
ENTER 2 DIGIT MONTH OF REPORT

Operator:

Type the month number in the form 01, 02, etc., then press the ENTER key.

SBMITU:

POSITION PAPER FOR CONTROL TOTALS PRINT

Operator:

Press the NEW LINE key and position the paper correctly in the workstation, then press the CTL 1 key.

SBMITU:

TOTAL MONTH SALES xx,xxx,xx
TOTAL Y-T-D SALES x,xxx,xxx
TOTAL PRIOR YR SALES xx,xxx,xxx
PROCESS COMPLETED

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

**SALES ORDER
CANCELLING/
DELETING -
SBDLØØ**

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Type SBDLØØ and then press the ENTER key.

SBDLØØ:

ALIGN FORM CTL KEY 1 WHEN READY

Operator:

Press the NEW LINE key and position the paper as required, then press the CTL 1 key.

SBDLØØ:

CANCELLATION Y OR N

Operator:

Type a Y to enter specific numbers. Go to A.

Type an N to skip the cancellations and only delete the orders which have been shipped. Go to B.

A

SBDLØØ: Prints the headings and illuminates the SELECT light.

Operator: Type the 6 digit order number.

At this point you may terminate the program by pressing the CTL 3 key.

SBDLØØ: Prints the customer name or indicates that it no longer in the file. Illuminates the SELECT light.

Operator: Type V to void the cancellation. Press the ENTER key to verify the cancellation.

SBDLØØ: Prints one of the following messages:

COMPLETE Cancelled, all inventory is returned.

ALREADY COMPLETED Will be deleted when the filled orders are deleted later by the program.

BACK ORDERS CANNOT CANCEL Back orders must be released by SBBØRL first.

GO TO B

B

SBDLØØ: END OF ENTRIES
CANCELLATIONS AND SHIPMENTS DELETED FROM FILE
Prints list of everything deleted.
END OF DELETE INDEX IN PROCESS
The index constructor messages print. Wait until the DMF Conversational Loader prints

A) ENTER PROGRAM NAME.

**SALES ORDER
ENTRY AND
PROCESSING -
SBØE01**

NOTE: The multi-partition version of this program is called SBØEMP.

A

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Enter SBØE01 and then press the ENTER key.

SBØE01:

START OF ORDER ENTRY
ENTER DATE XX-XX-XX

Operator:

Enter the current date in the form MM-DD-YY and then press either the ENTER key or the ERROR key.

The ENTER key signals that you wish to proceed.

The ERROR key signals that you made a mistake and wish to re-enter the date.

SBØE01:

ENTER STARTING ORDER NUMBER 6 DIGITS.

Operator:

Enter an order number and then press either the ENTER key or the ERROR key. The number entered will be used as the number of the first sales order. The number is automatically incremented by one for each subsequent sales order produced during the run.

The ENTER key signals that you wish to proceed.

The ERROR key signals that you made a mistake and wish to enter a different order number.

SBØE01:

LOAD FORMS, POSITION, PRESS KEY 1

Operator:

Do one or more carriage returns and then press CTL 1.

B

SBØE01: Illuminates the NON-PRINT light and Indicator Light A.

At this point you may terminate the entire run by pressing CTL 13. After pressing CTL 13 there may be a rather long delay. Do not do anything until the DMF Conversational Loader prints the message A) ENTER PROGRAM NAME.

Operator: Enter a customer number and then press the ENTER key.

If the customer number is not on file, Indicator Lights A, B, C, D, and E are illuminated. When this happens, press CTL 1 and enter another customer number.

SBØE01: Types the "Customer Sold to/Ship to" information, order date, order number, customer number, region code, and salesman code.

Operator: Enter the customer purchase order number and then press the ENTER key.

Enter the desired shipping date in the form MM-DD-YY (if there is none, press the ENTER key).

Enter the special shipping instructions and press the ENTER key or merely press the ENTER key (in the latter case, the shipping instructions are extracted from the file and typed).

C

SBØE01: Illuminates the NON-PRINT light and Indicator Light C.

At this point you can move on to the next sales order (B) by pressing CTL 10 and returning to B.

Operator: Enter an item number followed by a slash followed by the quantity being ordered and then press the ENTER key.

If the item number is not on file, Indicator Lights A, C, and E are illuminated. When this happens, press CTL 1 and enter another item number.

SBØE01: Types the line number, item number, quantity being ordered, item description, the units in which the item is available, and the item's location.

At this point the NON-PRINT light is illuminated and all the Indicator Lights are off.

Operator: If the line is OK, press the ENTER key.

If something about the line is improper, enter a V (this automatically voids the line).

GO TO C

**SALES ORDER
REGISTER -
SBØE02**

NOTE: This program may be run only once following each SBØE01 run. SBØE02 prints all orders which have been entered since the previous time it was run.

**DMF Conversational
Loader:**

A) ENTER PROGRAM NAME.

Operator:

Enter SBØE02 and then press the ENTER key.

SBØE02:

POSITION FORM .. TOUCH CTL 1 WHEN READY

Operator:

Do one or more carriage returns and then press CTL 1.

SBØE02:

Types the sales order register.

**DMF Conversational
Loader:**

A) ENTER PROGRAM NAME.

**RELEASING
BACK ORDERS
FOR FILLING -
SBBØRL**

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Type SBBØRL and then press the ENTER key.

SBBØRL:

START OF ORDER ENTRY
ENTER DATE XX-XX-XX

Operator:

Enter the current date in the form MM-DD-YY and then press either the ENTER key or the ERROR key. The ENTER key signals that you wish to proceed. The ERROR key signals that you made a mistake and wish to re-enter the date.

Enter the customer purchase order number and then press the ENTER key.

SBBØRL:

LOAD FORMS, PRESS CTL 1 KEY. Illuminates Indicator Lights D and E.

Operator:

Type the 6-digit order number from the Back Order Register.

SBBØRL:

Indicator Light E goes out.

Operator:

Type the 2-digit line number from the Back Order Register.

SBBØRL:

Indicator Light D goes out, Indicator Light E comes on.

Operator:

Type the quantity you want to ship and then press the ENTER key.

SBBØRL:

Prints the sales order headings and a one-line sales order. Prints the "Customer Sold To/Ship To" information, order date, order number, customer number, region code, and salesman code. When this order is finished, the program illuminates NON PRINT and lights Indicator Lights D and E.

Operator:

Press the CTL 10 key to process another order for another customer.

Press the CTL 13 key to stop the program.

**INVOICE
PRODUCTION -
SBIN01**

NOTE: The multi-partition version of this program is called SBINMP.

A

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Enter SBIN01 and then press the ENTER key.

SBIN01:

START OF INVOICING
ENTER STARTING INVOICE NUMBER 6 DIGITS

Operator:

Enter an invoice number and then press either the ENTER key or the ERROR key. The number entered will be used as the number of the first invoice. The number is automatically incremented by one for each subsequent invoice produced during the run.

The ENTER key signals that you wish to proceed.

The ERROR key signals that you made a mistake and wish to enter a different invoice number.

SBIN01:

LOAD FORMS, POSITION, PRESS KEY 1.

Operator:

Do one or more carriage returns and then press CTL 1.

B

SBIN01: Illuminates the NON-PRINT light and Indicator Light A.

At this point you may terminate the entire run by pressing CTL 13.

Operator: Enter a customer number and then press the ENTER key. (Customer number must be same as assigned in order entry). If the customer number is not on file, Indicator Lights A, C, and E are illuminated. When this happens, press CTL 1 and enter another customer number.

SBIN01: Types the "Customer Sold To/Ship To" information, the invoice number, and the invoice date.

Operator: Enter the actual shipping date in the form MM-DD-YY (if you have no date to enter, press the ENTER key).

Enter the special payment terms and then press the ENTER key or merely press the ENTER key (in the latter case, the payment terms are extracted from the file and typed).

SBIN01: Types the order number, order date, customer number, region code, salesman code, purchase order number, requested shipping date, and the shipping instructions.

Illuminates the NON-PRINT light and Indicator Light B.

Operator: Press either CTL 2, CTL 3, or CTL 4.

CTL 2 signals that you have no changes to make and that you wish the entire invoice to be typed.

CTL 3 signals that you wish to change the quantity shipped in one or more lines of the invoice and that you do NOT want the back order file to be affected by the changes.

CTL 4 signals that you wish to change the quantity shipped in one or more lines and that you want the back order file to be updated accordingly.

SBIN01: If you pressed CTL 2, SBIN01 types the entire invoice.

GO TO D.

If you pressed either CTL 3 or CTL 4, SBIN01 types the line number, item number, and quantity ordered. At this point the NON-PRINT light is illuminated and all the Indicator Lights are off.

GO TO C.

C

Operator:

Enter the quantity shipped and then press either the ENTER key or CTL 12 (if you do not want to alter the quantity shipped in the current line, merely press the ENTER key).

The ENTER key signals that you wish to move on to the next line of the invoice. SBIN01 types the remainder of the current line (quantity back ordered, item description, the units in which the item is available, the unit price, and the total price for the line) plus the first three fields of the next line (line number, item number, and quantity ordered). At this point the NON-PRINT light is illuminated and all the Indicator Lights are off.

GO TO C

CTL 12 signals that you have no more changes to make in the entire invoice. SBIN01 types the remainder of the current line plus all remaining lines in the invoice.

GO TO D

D

SBIN01: Types the gross amount for the invoice.

At this point the NON-PRINT light is illuminated and all the Indicator Lights are off.

Operator: Enter a three digit discount percentage rate. Note the following examples:

010 = 1 %
035 = 3½ %
150 = 15 %
270 = 27 %

SBIN01: Types the discount percentage rate, the discount amount, the net amount, and the tax.

At this point the NON-PRINT light is illuminated and all the Indicator Lights are off.

Operator: Enter the shipping charge and then press the ENTER key. If there is no shipping charge, merely press the ENTER key. Note the following examples:

12300 = \$123.00
1545 = \$15.45
123456789123 = \$1,234,567,891.23
123456 = \$1,234.56

SBIN01: Types the grand total for the invoice. The grand total is calculated as follows:

gross amount
- discount amount
+ tax
+ shipping charge

GO TO B

**COMBINED
ORDER ENTRY
AND INVOICING -
SBØEIN**

NOTE: The multi-partition version of this program is called SBØIMP.

A

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Enter SBØEIN and then press the ENTER key.

SBØEIN:

START OF INVOICING
ENTER DATE XX-XX-XX

Operator:

Enter the current date in the form MM-DD-YY.

SBØEIN:

ENTER STARTING INVOICE NUMBER 6 DIGITS.

Operator:

Enter an invoice number and then press either the ENTER key or the ERROR key. The number entered will be used as the number of the first invoice. The number is automatically incremented by one for each subsequent invoice produced during the run.

The ENTER key signals that you wish to proceed.

The ERROR key signals that you made a mistake and wish to enter another number.

SBØEIN:

LOAD FORMS, POSITION, PRESS KEY 1

Operator:

Do one or more carriage returns and then press CTL 1.

B

SBØEIN: Illuminates the NON-PRINT light and Indicator Light A.

At this point you may terminate the run by pressing CTL 13.

Operator: Enter a customer number and then press the ENTER key.

If the customer number is not on file, Indicator Lights A, C, and E are illuminated. When this happens, press CTL 1 and enter another customer number.

SBØEIN: Types the "Customer Sold To/Ship To" information, the invoice number, and the invoice date.

Operator: Enter the actual shipping date in the form MM-DD-YY (if you have no date to enter, merely press the ENTER key).

Enter the special payment terms and then press the ENTER key or merely press the ENTER key (in the latter case, the payment terms are extracted from the file and printed).

SBØEIN: Illuminates the NON-PRINT light and Indicator Light B.

Operator: Press either CTL 2, CTL 3, or CTL 4.

CTL 2 signals that you do NOT want to enter the quantity shipped or price per unit for any line in the entire invoice (these two items will be extracted from the file automatically).

CTL 3 signals that you wish to enter the quantity shipped and the price per unit for one or more lines in the invoice and that you do NOT want the back order file to be affected by the entries.

CTL 4 signals that you wish to enter the quantity shipped and the price per unit for one or more lines in the invoice and that you want the back order file to be updated accordingly.

C

SBØEIN: Illuminates the NON-PRINT light and Indicator Light C.

At this point you may proceed to the next invoice (B) by pressing CTL 10.

Operator: Enter the item number followed by a slash followed by the quantity ordered.

If the item number is not on file, Indicator Lights A, C, and E are illuminated. When this happens, press CTL 1 and enter another item number.

SBØEIN: Types the line number, item number, and the quantity ordered.

Operator: Enter the quantity shipped and press the ENTER key.

SBØEIN: Types the quantity ordered but not yet shipped, the item description, and the units in which the item is available.

Operator: Enter the price per unit and press the ENTER key.

SBØEIN: Types the price per unit and the total price of the units shipped.

GO TO C

**INVOICE
REGISTER -
SBIN02**

NOTE: This program may only be run once following each SBIN01 run. SBIN02 summarizes all invoices which have been entered since the previous time it was run.

**DMF Conversational
Loader:**

A) ENTER PROGRAM NAME.

Operator:

Enter SBIN02 and then press the ENTER key.

SBIN02:

POSITION FORM .. TOUCH CTL 1 WHEN READY

Operator:

Do one or more carriage returns and then press CTL 1.

SBIN02:

Types the invoice summaries.

**DMF Conversational
Loader:**

A) ENTER PROGRAM NAME.

**BACK ORDER
REPORT -
SBIR01**

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Enter SBIR01 and then press the ENTER key.

SBIR01:

CTL 1 = TODAYS BACK ORDERS
CTL 2 = THIS MONTHS BACK ORDERS
CTL 3 = PRIOR MONTHS BACK ORDERS
CTL 4 = ALL BACK ORDERS

Operator:

Press one of the four CTL keys.

SBIR01:

PLEASE POSITION PAPER WHEN READY HIT CTL 1

Operator:

Do one or more carriage returns and then press CTL 1.

SBIR01:

Types the appropriate back order report.

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

**PROCESSING
INVENTORY
RECEIPTS -
SBIR02**

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Type SBIR02 and then press the ENTER key.

SBIR02:

POSITION PAPER CTL 1

Operator:

Press the NEW LINE key and position the paper correctly. Then press the CTL 1 key.

SBIR02:

Prints report headings and then illuminates Indicator Light A and NON-PRINT.

Operator:

Type the part number and then press the ENTER key.

SBIR02:

Prints the part number, the description, current on hand, and current on order, then stops and illuminates Indicator Light B and NON-PRINT.

Operator:

Type the quantity received and then press the ENTER key.

SBIR02:

Prints the rest of the line, stops, and turns on Indicator Lights A, B, C, D, and E.

Operator:

Press the CTL 1 key to verify the entry. Press the CTL 2 key if the line is incorrect.

SBIR02:

If the CTL 1 key was pressed in the previous step, the program will return to the next line, illuminate Indicator Light A and NON-PRINT.

If the CTL 2 key was pressed in the previous step, the program will return the carriage and print the letter H over the entire line to blot it out.

Operator:

Enter a new part number or press the CTL 13 key to end the inventory receipts.

SBIR02:

When the CTL 13 key is pressed, the program will skip a few lines and print

POSITION PAPER CTL 1

Operator:

Press the NEW LINE key, then position the paper if necessary. Now press the CTL 1 key.

SBIR02:

Prints the back order release work sheet.

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

**INVENTORY STATUS
REPORT (ENTIRE
INVENTORY) -
SBICCI**

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Enter SBICCI and then press the ENTER key.

SBICCI:

CTL KEY1 FOR TODAYS CRITICAL INVENTORY
CTL KEY2 FOR CRITICAL INVENTORY
CTL KEY3 FOR INVENTORY
CTL KEY4 FOR OUT OF STOCK

NOTE: The CTL 1 option should be used only once following an invoice run. CTL 1 prints only those items which were made critical during the particular invoice run.

Operator:

Press one of the four CTL keys.

SBICCI:

POSITION FORM .. TOUCH CTL 1 WHEN READY

Operator:

Do one or more carriage returns and then press CTL 1.

SBICCI:

Types the appropriate inventory report. The report can be terminated before normal completion by pressing the LOAD and LOCAL switches simultaneously.

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

**INVENTORY STATUS
REPORT (INDIVIDUAL
ITEM) - SBIFIQ**

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Enter SBIFIQ and then press the ENTER key.

SBIFIQ:

PART NO.

At this point the NON-PRINT light is illuminated and all the Indicator Lights are off.

Operator:

Enter a part number and then press the ENTER key.

SBIFIQ:

If the part number is not on file, SBIFIQ illuminates Indicator Light A and types the message NOT ON FILE.

If the part number is on file, SBIFIQ types an inventory line for the specified part.

Operator:

Press either CTL 1 or CTL 2.

CTL 1 signals that you wish to inquire about another part.

CTL 2 terminates the run. If you press CTL 2, the DMF Conversational Loader responds with the message A) ENTER PROGRAM NAME.

**SALES ANALYSIS
BY PRODUCT
CLASS -
SBSA01**

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Type SBSA01 and then press the ENTER key.

SBSA01:

ALIGN 1ST LINE - THEN ENTER

Operator:

Press the NEW LINE key and align the paper, then press the ENTER key.

SBSA01:

Prints the report.

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

NOTE: You may terminate the report at any time by depressing both the LOAD and LOCAL switches simultaneously.

**SALES ANALYSIS
BY REGION,
SALESMAN,
CUSTOMER -
SBSA02**

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

Operator:

Type SBSA02 and then press the ENTER key.

SBSA02:

SORT IN PROCESS
(some time elapses for the sort)
INTERNAL SORT COMPLETED CUST. = xxxx
EXTERNAL SORT COMPLETED EOJ
CTL KEY 5 FOR TOTALS ONLY - ELSE TOUCH ENTER

Operator:

Press the CTL 5 key for a report with salesman and region totals only.

Press the ENTER key for a report with all of customer, region, and salesman totals.

SBSA02:

ALIGN FORM THEN ENTER

Operator:

Press the NEW LINE key, position the paper if necessary, then press the ENTER key.

SBSA02:

Prints the report. At the end of the report, prints END.

DMF Conversational
Loader:

A) ENTER PROGRAM NAME.

NOTE: You may terminate the report at any time by depressing both the LOAD and LOCAL switches simultaneously.

**4. SPECIAL NOTES
ON
PROGRAM STRUCTURE**

FILE CONTENTION

To allow multi-partition operation among the various main processing programs, and to process those files in which extension occurs, such as the order summary and invoice summary files, a special technique for file contention has been developed.

The technique involves the use of COMMON core and requires two control characters for each file being processed. The first control character is a user count and the second is a contention control flag. Also, an area must be reserved in COMMON for the FCB for each file.

The first user of the FCB is responsible for opening the file. This is accomplished as follows: If the user count is zero, the program sets both the FCB control flag and user count to one (1). The file is then opened and the FCB is placed in COMMON. The control flag is then set to zero. If the user count is greater than zero, the program adds one to the user count and copies the FCB from COMMON into the program FCB area.

The technique for processing is that a "read" of a file is always allowed. However, any program which updates a record must check to see if the FCB control flag is zero. If the control flag is zero, it indicates that the file is not being updated. The program sets the control flag to one, retrieves the records, and performs the update as required. The control flag is then reset to zero. If the control flag is one (meaning the FCB is in use), the program does a branch and switch.

The technique is carried one step further in processing extend files in that the FCB is moved from COMMON to the program for extension and then returned to COMMON. This ensures that the FCB will always reflect the most current status of the file.

In closing the files the process is reversed. The program subtracts one from the user count. If the result is zero, the program will then close the files and exit. If the result is non-zero, the program will bypass the close and will exit.

DELETIONS FROM INDEXED FILES

Special consideration must be given when deleting records from files which are being processed in a random mode. If a record that has an index record associated with it is deleted and later referenced by DMF to begin looking for a following non-indexed record, unpredictable results may occur.

The solution used by the programs that process in this mode is:

1. Records to be deleted are retrieved.
2. Key information is displayed for operator verification.
3. The record is marked for deletion and updated.
4. At the end of the job the file is read sequentially and the records marked for deletion are actually deleted.
5. The index constructor is called and the file is re-indexed.

CALLING THE INDEX CONSTRUCTOR

Several of the programs delete from or make extensive additions to indexed files. Since the package configuration does not require a card reader, an alternate method is required to re-index the files.

The package uses an object module which calls the constructor program directly. This is accomplished through the use of the DMF LOCATOR program. Since the MAINT program is not used in this operation, it is unnecessary for the system to have a card reader. Bypassing MAINT does, however, require extreme care in the setup of the parameter table which is passed to INDEX. This is because the syntax analyzer program of DMF is also bypassed. The syntax analyzer is the program which interprets control cards, verifies parameters, and develops the parameter table for the various DMF functions.

CONTENTS REQUIRED:

RINDEX	DM	C' INDEX XXXX @ INVMAS @ INVMST @ INVIDX @ 016 @ 0000 @ 000000 @ 999999 @ INDEX to INYMT XXXX @ 03 @@' (This exact format is what the index constructor expects to find in core location 600)
RPRØG	DM	C' _INDEX' (Calls the index constructor program)
DSAVE	DM	C6 (Save address of index call routine)
	MC	_LC04,DSAVE (Save address of index call routine)

Store address of the index call module at beginning of the program.

MC	RINDEX (72),600 (move index parameters to location 600 for the index constructor)
MC	RPRØG (6),594 (name of index constructor program must be in this location)
MC	DSAVE, _LC04 (name of index call routine is moved)
BC	60(5) (loader brings in index call routine)

Call the index call module which brings in the index constructor.

OVERLAY CALLS

The system makes extensive use of overlays in the order entry, invoicing, and back order release programs. The overlay technique employed consists of the use of an overlay loader which is part of resident segment of the program. This loader, which is located in low core (location 300), is overlaid by the DMF OPEN/CLOSE routines, thereby reducing the resident core requirements to a minimum.

The overlay loader was written using the feature of DMF whereby an overlay is called but not executed. This consists of placing an "L" in LC08 and a branch instruction in LC01. The loader branches to LC01 rather than to the overlay when this technique is employed. The following is a sample of this code in the overlay loader:

```
.
.
.
Blank    DM    C' '
ELL      DM    C' L'   Letter L
ADDSBA   DM    C6      Subroutine address

.
.
.
MC ELL,LC08           Move L to LC08. (Sets load only mode)
MC *+20(10),LC01    Move branch to LC01. (Sets return to this
                        routine)
BC 60(5)              Branch to DMF loader. (Loads program)
BC *+10(5)           Branch Instruction. (Return from routine)
MC LC04,ADDSBA       Save address of subroutine. (Save address
                        of the overlay)
MC Blank,LC08       Move a blank to LC08. (Sets the loader in
                        execute mode)
```

NOTE: User should be familiar with DMF low core definitive and the function of the DMF loader and have a general knowledge of DMF.

To call the overlay (subroutine), it is only necessary to place the subroutine address in LC04 and branch to location 60 which is in the resident loader.

```
.
.
.
MC ADDSBA,LC04      Move subroutine address.
BC 60(5)              Branch to loader.
```

Another note about using overlays is that it is possible to hide overlay calls behind carriage returns and other workstation "write control" operations. This makes overlay loading less noticeable to the user.

INSTRUCTION MODIFICATION

Three of the programs make use of instruction modification. The programs are the generalized edit program GENEDT, and the two file maintenance programs SBFMCF and SBFMIF. The instruction modification consists of changing the length characters in MC, FN, and C instructions. This is done to allow the programs to be generalized and extract the length of fields to be manipulated from tables.

Whenever this is done, the instruction to be modified is redefined by "ØRG ing" a DM on top of the instruction and associating labels with the LA and LB portions of the instruction.

EXAMPLE:

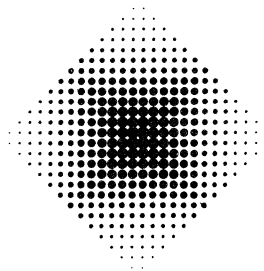
ADJMC	MC	FIELD A, FIELD B
	ØRG	ADJMC
MCLA	DM	C1
	DM	C4
MCLB	DM	C1
	ØRG	

To modify this instruction to move 31 characters, the program would do the following:

MN	THREE, MCLA
MN	ONE, MCLB

In actual practice, the values moved would be parameters from a table rather than program constants.

APPENDIX A
FILE RECORD LAYOUT



SYSTEM TEN BY SINGER

RECORD LAYOUT

CUSTOMER MASTER POOL: CUSMAS FILE: CUSMST	CUST NO	SMN	REGION	SHIP VIA	FREIGHT	TERMS	TAX CODE	CUST CLASS	PRICE CODE	 	CREDIT LIMIT	PHONE		SVC CHG %	CURRENT A/R BAL	SALES MONTH TO DATE	COST MONTH TO DATE	SALES PRIOR YEAR	COST PRIOR YEAR	POINTER TO A/R FILE	 	DMF ADDR	
	5	10	15	15	15	15	15	15	15		30	A/C	NUMBER	45	50	55	60	65	70	75		80	95
RECORD 1																							

RECORD 2	CUST NO	SOLD TO DATA													STATE	DMF ADDR		
	5	10	15	20	25	30	35	40	45	50	55	60	65	70			75	80
		NAME																
		ADDRESS 1																
		ADDRESS 2																
		CITY																
		ZIP																

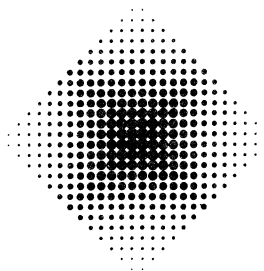
RECORD 3	CUST NO	SHIP TO DATA													STATE	DMF ADDR		
	5	10	15	20	25	30	35	40	45	50	55	60	65	70			75	80
		NAME																
		ADDRESS 1																
		ADDRESS 2																
		CITY																
		ZIP																

RECORD 4	CUST NO	MONTH-12		MONTH-11		MONTH-10		MONTH-9		MONTH-8		MONTH-7		 	DMF ADDR		
		SALES	COST	SALES	COST	SALES	COST	SALES	COST	SALES	COST	SALES	COST				
		10	15	20	25	30	35	40	45	50	55	60	65			70	75

RECORD 5	CUST NO	MONTH-6		MONTH-5		MONTH-4		MONTH-3		MONTH-2		MONTH-1		YEAR TO DATE		DMF ADDR	
		SALES	COST	SALES	COST	SALES	COST	SALES	COST	SALES	COST	SALES	COST	SALES	COST		
		10	15	20	25	30	35	40	45	50	55	60	65	70	75		80

	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	95	95	100
--	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	95	95	100
--	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----



SYSTEM TEN BY SINGER

RECORD LAYOUT

INVENTORY MASTER POOL: INVMAS FILE: INVMST RECORD 1	ITEM NUMBER	1	DESCRIPTION										VDR CDE	WHS LOC	QTY ON HAND	QTY ON ORDER	QTY RES	MIN QTY	QTY BACK ORDER	PRT CLS	DMF ADDR

RECORD 2	ITEM NUMBER	2	BACK ORDER ADDR	COST	PRICE 1	PRICE 2	PRICE 3	PRICE 4	PRICE 5	QTY BRK 1	DISC 1	QTY BRK 2	DISC 2	QTY BRK 3	DISC 3	UNIT OF MEAS	COMMIS RTE	<small>Critical</small> 	DMF ADDR

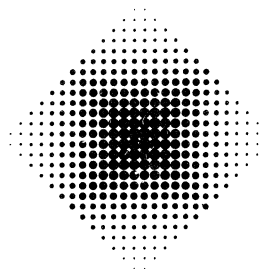
RECORD 3	ITEM NUMBER	3	PRIOR YEARS SALES \$	PRIOR YEARS SALES QTR 1 UNITS	PRIOR YEARS SALES QTR 2 UNITS	PRIOR YEARS SALES QTR 3 UNITS	PRIOR YEARS SALES QTR 4 UNITS	THIS YEARS SALES QTR 1 UNITS	THIS YEARS SALES QTR 2 UNITS	THIS YEARS SALES QTR 3 UNITS	THIS YEARS SALES QTR 4 UNITS	SALES THIS MONTH \$	SALES THIS MONTH UNITS	SALES YTD DOLLARS		DMF ADDR

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



SYSTEM TEN BY SINGER

RECORD LAYOUT

INVOICE SUMMARY FILE POOL: SUMMRY FILE: INVSUM	INVOICE NO	INVOICE DATE MO DA YR	CUST NUMBER	CUSTOMER NAME	REGION	SMN	SELL	DISC	COST	TAX	FREIGHT	COMMIS	DMF ADDR
	5	10	15	20 25 30 35 40	45		55	60	65 70	75	80 85	90	95 100

ORDER SUMMARY FILE POOL: SUMMRY FILE: ORDSUM	ORDER NO	ORDER DATE MO DA YR	CUST NUMBER	CUSTOMER NAME	REGION	SMN	CUSTOMER PURCHASE ORDER NUMBER	SELL	COST	DMF ADDR			
	5	10	15	20 25 30 35 40	45		55	60	65 70	75	80 85	90	95 100

OPEN ORDER FILE POOL: ORDER FILE: OPNORD HEADER RECORD	ORDER NO	ORDER DATE OR *COMPLETE	CUST NO	REGION	SMN	CUSTOMER PURCHASE ORDER NUMBER	REQUESTED SHIP DATE	SHIP VIA	LINE 1		CONT INDIC *PART	DMF ADDR	
									ITEM NO	QTY			
	5	10	15	20	25	30 35	40	45	50 55	60 65	70 75 80	85 90	95 100

DETAIL RECORD	ORDER NO	LINE 2-6-10-14		LINE 3-7-11-15		LINE 4-8-12-16		LINE 5-9-13-17		CONT INDIC	DMF ADDR
		ITEM NO	QTY	ITEM NO	QTY	ITEM NO	QTY	ITEM NO	QTY		
	5	10 15	20 25	30 35	40 45	50 55	60 65	70 75	80 85	90	95 100

BACK ORDER FILE POOL: INVCON FILE: BAKORD	ITEM NUMBER	BACK ORDER 1				BACK ORDER 2				BACK ORDER 3				CONT INDIC	DMF ADDR				
		CUST NUMBER	ORDER NUMBER	LINE	QTY	ORDER DATE	CUST NUMBER	ORDER NUMBER	LINE	QTY	ORDER DATE	CUST NUMBER	ORDER NUMBER			LINE	QTY	ORDER DATE	
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95 100

INVENTORY NET CHANGE POOL: INVCHG FILE: NETCHG	ITEM NUMBER	QTY	CODE	DMF ADDR															
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95 100

PRODUCT CLASS FILE POOL: SYSPOL FILE: PRODCL	CLASS	DESCRIPTION	DMF ADDR																
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95 100

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