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MAIL LOG - PROGRAM THEORY
VOLUME I

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NASA Contract NAS1-13500
May 1979

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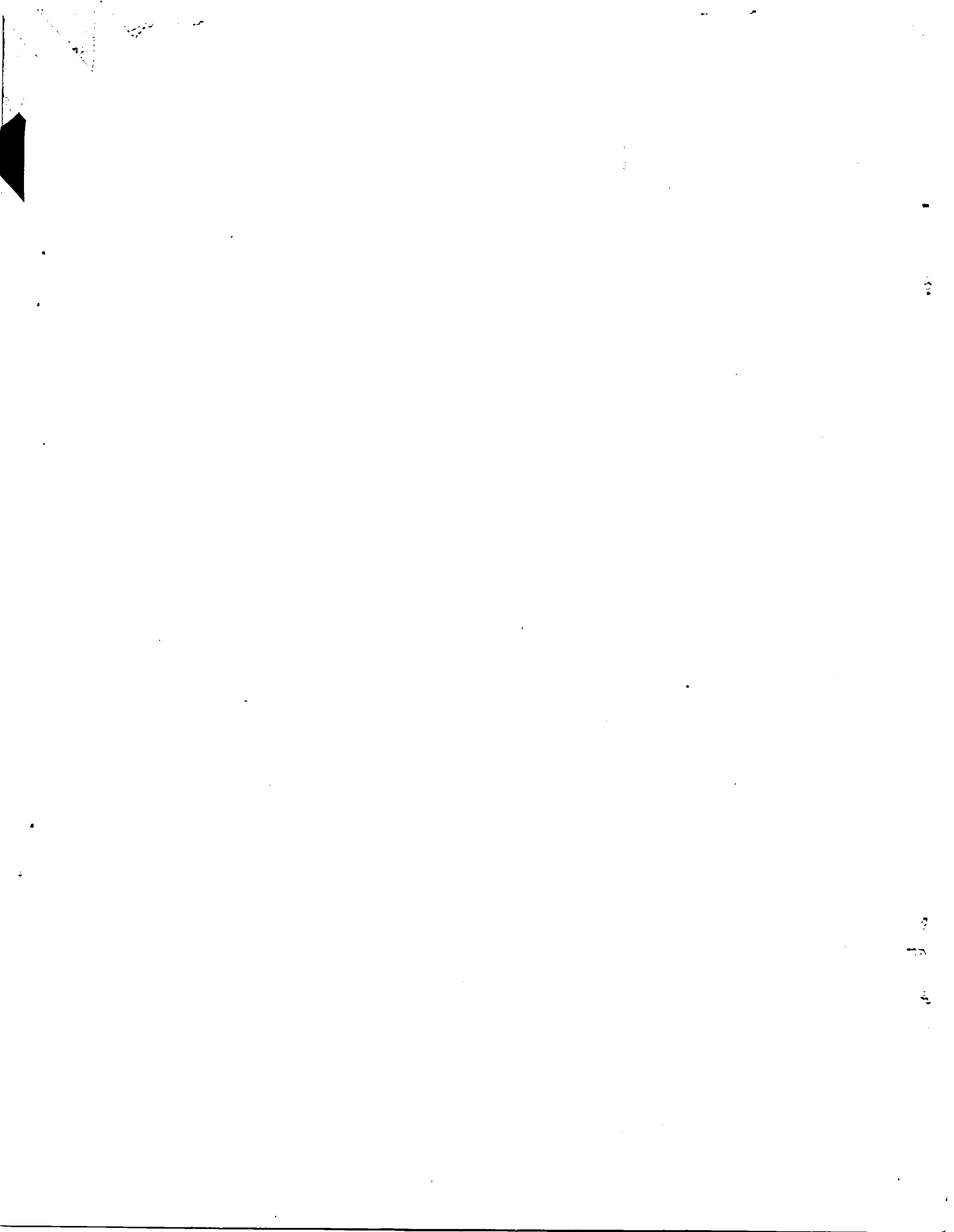
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M A I L L O G

PROGRAM THEORY

VOL. I

NASA CONTRACTOR REPORT

DANNY K. HARRIS

May 1979

N79-78232#

A program theory, containing routine descriptions, detailed flowcharts, complete data base design, external software definitions, and special software support routines, for a computerized documentation control and file management system called Mail Log.

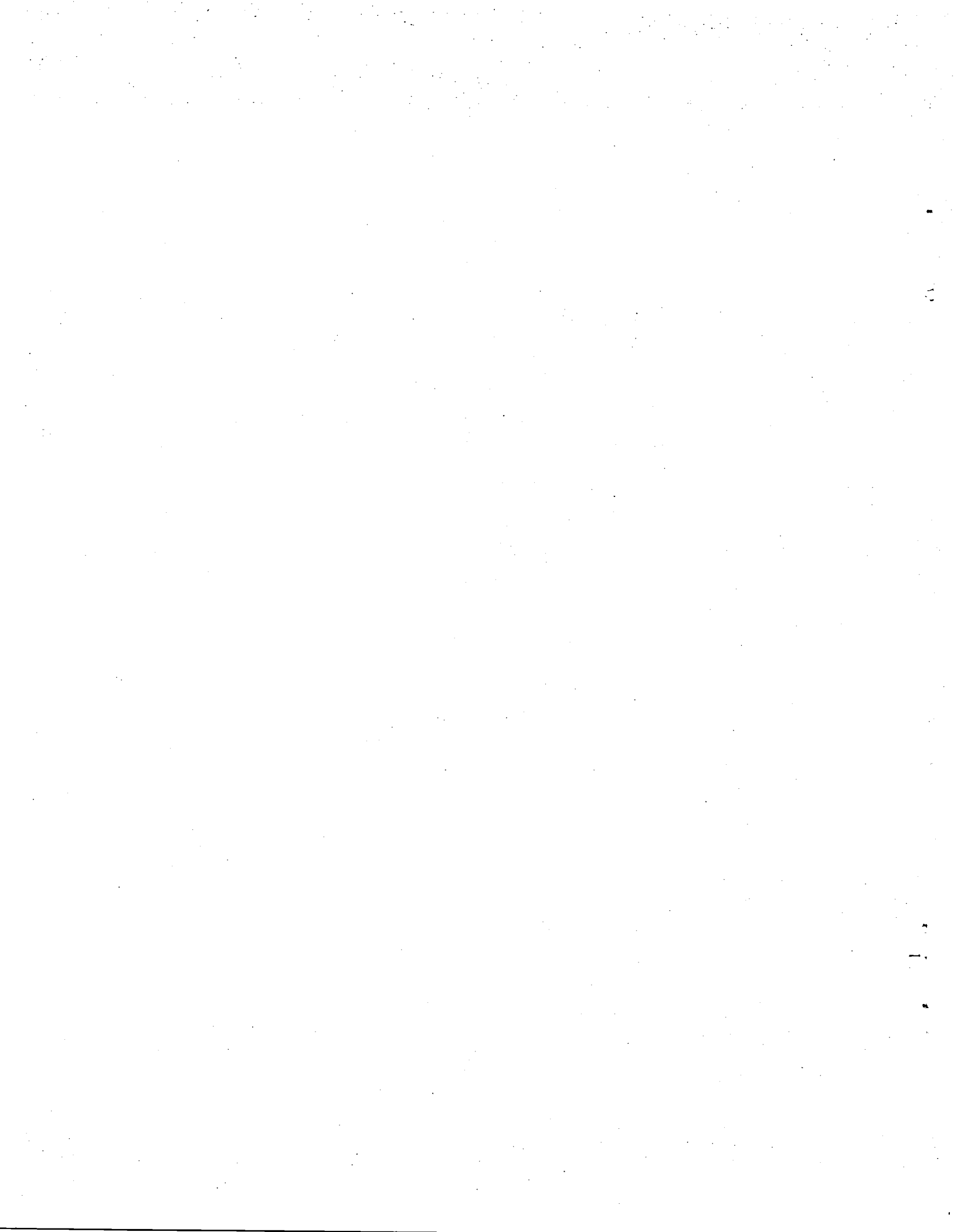


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PREFACE

During the research development and operational phases of the Scout Project, large quantities of documentation are generated to describe analytical studies, and correspondence from mission definition through postflight analysis. These documents take the form of engineering reports, drawings, analyses, procedures, specifications, test results, and contractual reports.

Retrieval of these documents is based upon a Project Office assigned code number which denotes a file cabinet and approximate location within that cabinet. Therefore, knowledge of the filing system code number is necessary for retrieval.

The Scout Project Automatic Data System, SPADS, was developed as a single entry multiple cross-reference filing system. It was implemented to improve the overall management efficiency by:

- a) reducing the number of man hours required to retrieve data from the files
- b) providing for full data availability with quick retrieval during vehicle anomaly investigations
- c) answering inquiries from NASA Headquarters and outside agencies for information on a Scout vehicle
- d) helping alleviate a rapidly growing storage problem.

The MAIL LOG portion of this automated data system satisfies the above criteria. This program, with its multiple cross-reference capability, operates in conjunction with and amplification of the existing filing system.

1.0 INTRODUCTION

This document provides the program theory used to obtain the software package, MAIL LOG, developed for the Scout Project Automatic Data System, SPADS. The program is written in FORTRAN for the PRIME 300 computer system located in Building 1192-E at NASA, Langley Research Center. This 16 bit mini-computer has a 64K word virtual memory and a 256K word physical memory. To complete the SPO's computer configuration, a 60 mega-byte disk is used for storage of all software and corresponding data files. Magnetic tape is used for a daily back-up and for physical archiving.

The MAIL LOG program has four modes of operation as shown in Figure 1.1:

- 1) INPUT - putting new records into the data base
- 2) REVISE - changing or modifying existing records in the data base
- 3) SEARCH - finding special records existing in the data base
- 4) ARCHIVE - store or put away existing records in the data base

The output includes special printouts of records in the data base and results from the INPUT and SEARCH MODES.

Documentation of the MAIL LOG program consists of two other manuals:

- 1) Users Manual - 'MAIL LOG PROGRAM OPERATING INSTRUCTIONS';
CR
- 2) Summary Manual - 'MAIL LOG PROGRAM SUMMARY AND SPECIFICATIONS';
CR

The MAIL LOG data base consists of three main subfiles (as shown in Figure 1.2);

- 1) Incoming and Outgoing Mail Correspondence
- 2) Design Information Releases (DIR) and Reports
- 3) Drawings and Engineering orders (E.O.)

SPADS
MAIL LOG
Modes of Operation

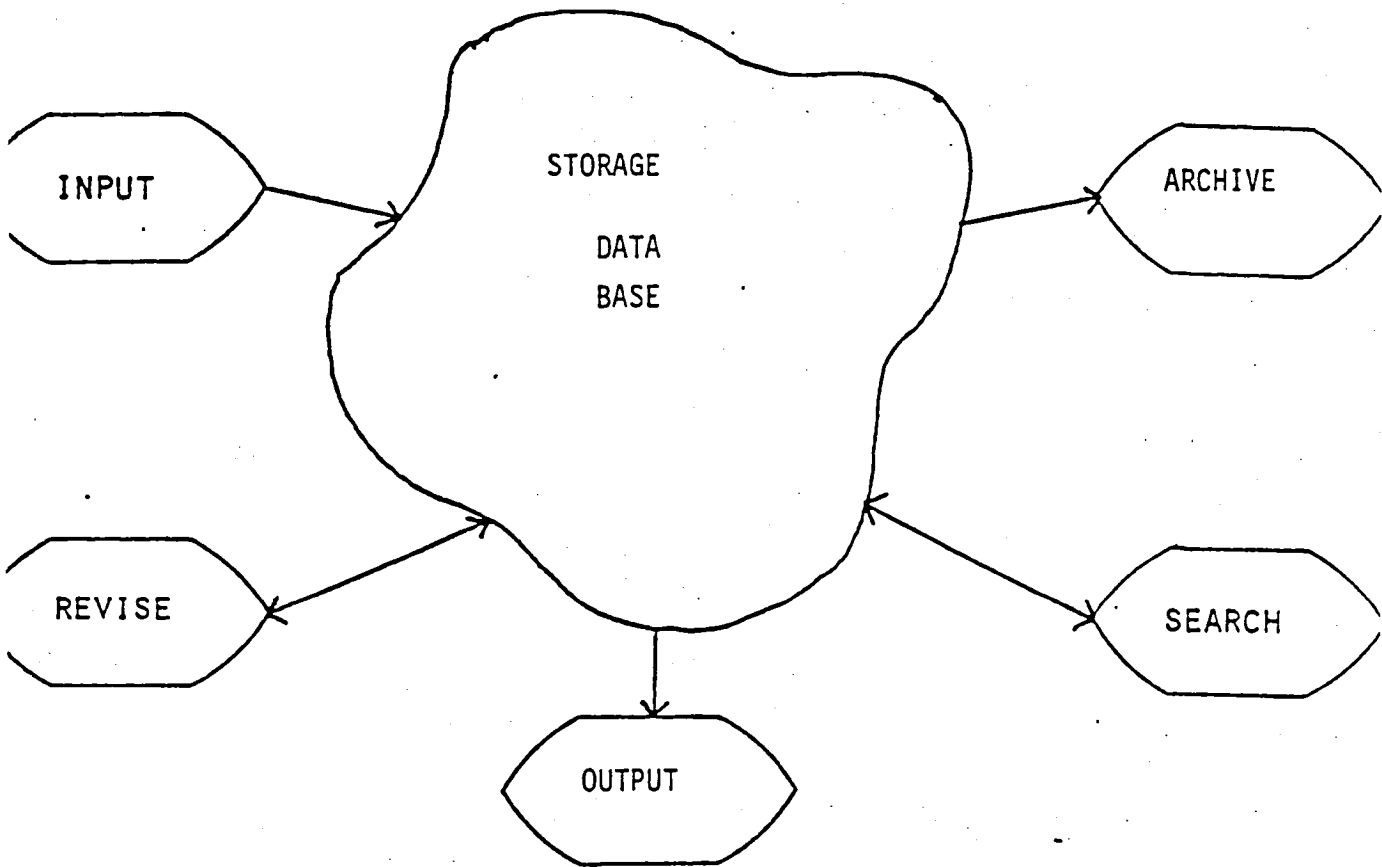


FIGURE 1.1

SPADS
MAIL LOG
Subfiled Data Base

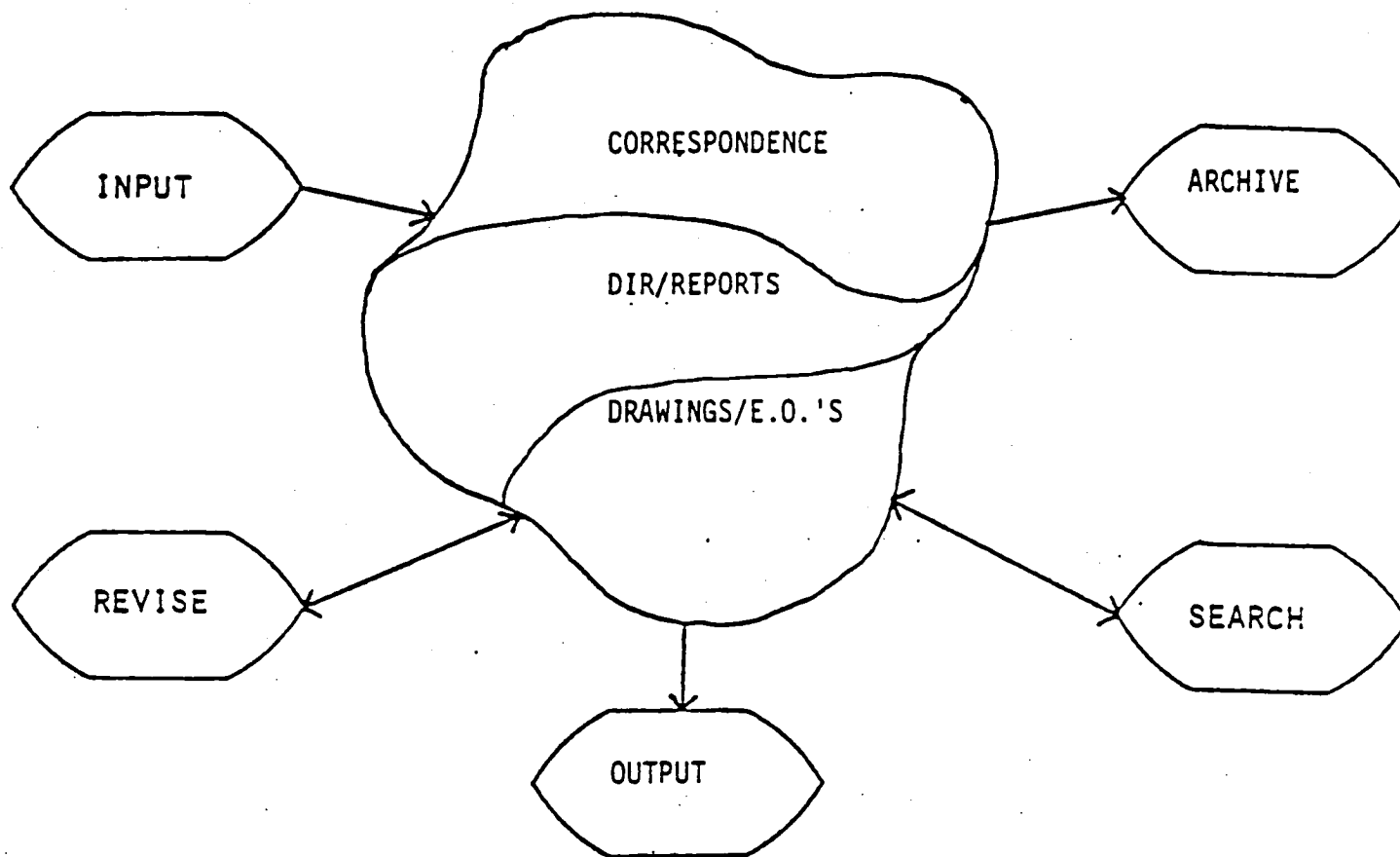


FIGURE 1.2

2.0 DEFINITIONS

2.1 TERMS, ACRONYMS, AND ABBREVIATIONS

Terms, acronyms, and abbreviations used within these documents are defined in GLOSSARY OF TERMS, Appendix A.

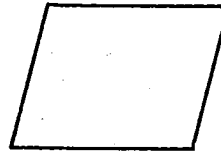
2.2 FLOWCHART CONVENTIONS

Flowcharting conventions for this manual consist of the following:

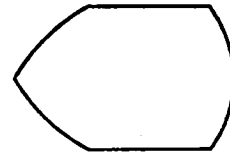
- (a) Standard IBM flowcharting symbols will be used for all diagrams.



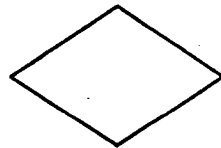
PROCESS



INPUT/OUTPUT



DISPLAY



DECISION



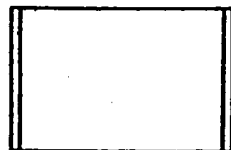
CONNECTOR



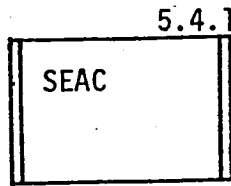
INTERRUPT

- (b) Logic always flows from top to bottom and from left to right on all pages.

- (c) All subroutines will be designated by a double sided procedure box.

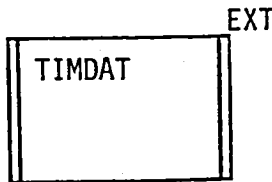


- (d) A figure number is utilized as the symbol identification for all subroutines within the set of flowcharts. By removing the 5 from each number, the description section number is given.

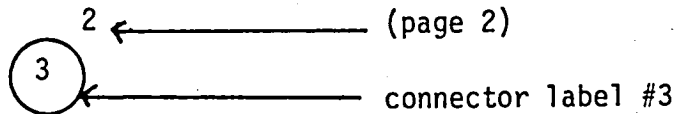


For example: Description for Figure 5.4.1 is found in Section 4.1

- (e) The abbreviation EXT. is utilized as the symbol identification for all predefined or system software routines external to the set of flowcharts.

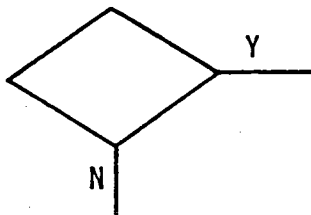


- (f) Cross referencing connectors are accomplished at the outconnectors only. The page number to the upper right of the outconnector represents the page number of the flowchart where the associated inconnector is located.

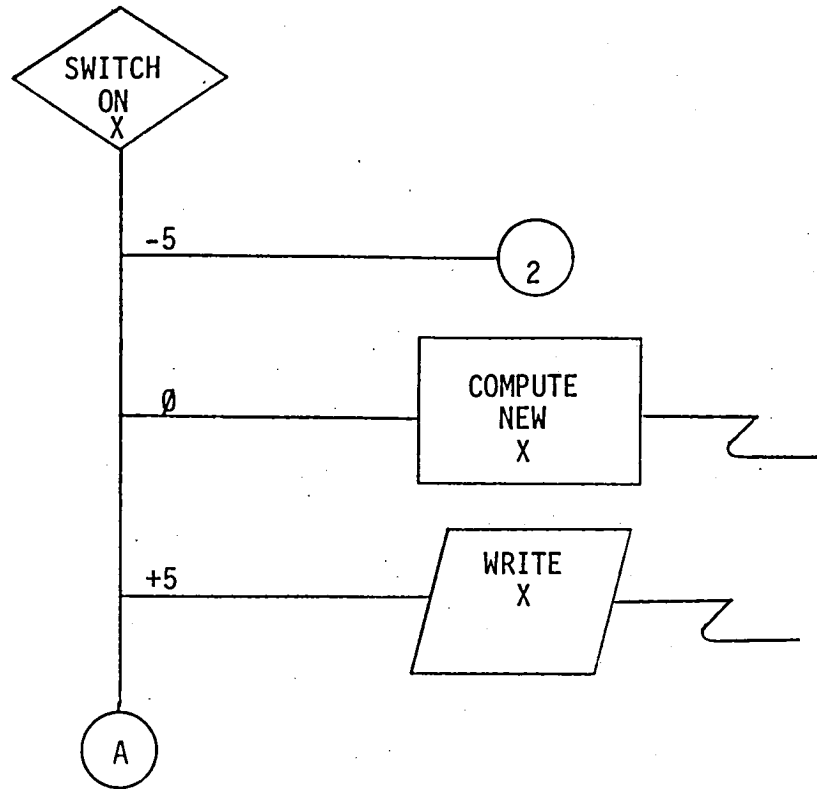


- (g) Converging or branching connectors will be designated by a number. Continuation of in-line instructions will be designated with a letter.

- (h) All decisions will branch with the YES path to the right and the NO path down. Decision comments will be stated to the positive question; this is done even though the corresponding code is written to the negative.



- (i) Multiple decisions branching in sequence will be symbolized as one decision block commented SWITCH.



- (j) Each flow diagram will be followed by its corresponding code which will use the following conventions:

- (1) CALL to system or program routines will only designate the routine name.
- (2) Format statements will not be given.
- (3) The IF on decision statements will not be given.
- (4) GO TO's, CALL EXIT's, and RETURN's will not be designated.
- (5) Blocks representing multiple statements will separate each command with a semicolon.

3.0 GENERAL PROGRAM DESCRIPTION

This section provides a description of the MAIL LOG basic operating procedures and main subfile routines.

3.1 BASIC OPERATING PROCEDURES

The purpose of this section is to provide a description and terminal interaction the user must perform in order to LOGIN to the PRIME computer system, enter the SPADS MAIL LOG program, and exit MAIL LOG program. Note that all user actions are terminated with a carriage return; designated by the key marked RETURN on the terminal.

3.1.1 LOGIN

There are two methods to enter the SPADS computer system: LOGIN XXX and LOGIN SYSTEM. Either method allows the user to access any active program on SPADS. Both require the user to enter the program selection MAIL LOG as shown in section 3.1.2. User action is designated within a rectangle. XXX represents the user initials; N is the terminal location number; HR and MN is the time the user entered the system in hours and minutes; and MMDDYY is the month, day, and year.

```
LOGIN XXX  
XXX (N) LOGGED IN AT HR'MN MMDDYY
```

3.1.1.1 LOGIN XXX

This login (where XXX is the user's ID) allows the user to perform any search and obtain the resulting outputs within the MAIL LOG subfiles. Clearance for some user ID's allow entrance into the INPUT and REVISE operation modes. No user has clearance to execute the ARCHIVE MODE.

3.1.1.2 LOGIN SYSTEM

This login allows the user to perform any search and obtain the resulting outputs within the MAIL LOG subfiles. It also allows the ARCHIVE MODE to be entered and executed. No clearance is given to execute the INPUT or REVISE MODES.

3.1.2 PROGRAM ENTRY

After system LOGIN is completed, the user must specify the program selection MAIL LOG as follows:

THE FOLLOWING IS A LIST OF CURRENT APPLICATIONS
PLEASE INDICATE YOUR APPLICATION/PROJECT BY SELECTING THE APPROPRIATE KEY

APPLICATION/PROJECT	KEY
CHANGE REQUEST	CHG
SCHEDULE 15000	150
SCHEDULE 15100	151
ANALYSIS I	ANAL
MAIL LOG	MAIL
ELOPE	ELOP
PROGRAM DEVELOPMENT	DEV
SOFTWARE MAINT	SOMA
MISCELLANEOUS	MISC

PLEASE ENTER THE APPROPRIATE KEY

MAIL

3.1.2.1 OPENING HEADER

This attaches to the F_MAIL UFD and resumes the running of the main MAIL LOG enter program, BFILE.

WELCOME TO SPADS

MAIL LOG FILE

DO YOU WISH TO WORK WITH THE DIR/REPORT DATA --- ENTER DIR
OR DRAWING DATA --- ENTER DRAW
OR DAILY CORRESPONDENCE --- COR
OR QUIT --- QU

In order for the user to select one of the four modes of operation, one of three main data base subfiles must first be designated as follows:

DRAW

This attaches the user to the F_DRAW UFD and resumes operation of the *DRAW program. Likewise, if DIR was selected, *DIR program would be resumed on the F_DIR UFD. If COR was selected, the user remains on the F_MAIL UFD and continues as normal.

3.1.2.2 OPTION MODES

PLEASE CHOOSE ONE OF THE FOLLOWING:

MODE	KEY
INPUT	INP
REVISE	REV
SEARCH	SEA
ARCHIVE	ARC
QUIT	QUIT

3.1.3 PROGRAM EXIT

To leave the program the user must enter QUIT as shown below:

PLEASE CHOOSE ONE OF THE FOLLOWING:

MODE	KEY
INPUT	INP
REVISE	REV
SEARCH	SEA
ARCHIVE	ARC
QUIT	QUIT

This provides program exit and returns the user to the program entry level on the F_MAIL UFD.

DO YOU WISH TO WORK WITH THE DIR/REPORT DATA --- ENTER DIR
OR DRAWING DATA --- ENTER DRAW
OR DAILY CORRESPONDENCE --- COR
OR QUIT --- QU

OK,

3.2 MAIL CORRESPONDENCE MAIN

This routine provides the executive operations and main program entry for the MAIL LOG program. It also contains the necessary routines to handle the Correspondence subfile. The program is called BFILE and is located within the F_MAIL UFD. If the user selects the Correspondence subfile, a USER file is built containing the user ID, time, date, and terminal location. Then the user may proceed with one of four (4) modes of operation within the Correspondence subfiles. When a user quits operation within the Correspondence subfiles, return to the executive main entry selection mode is made. The user again has the option of operating with the DIR/REPORT, DRAWING, or CORRESPONDENCE data. If either of the first two (2) areas of the data base are selected, the executive routine attaches the user to the appropriate UFD, F_DIR or F_DRAW respectively. See Sections 3.3 and 3.4 for further information regarding these main routines. Flowchart Figure 5.3-1 depicts the CORRESPONDENCE MAIN.

3.3 DESIGN INFORMATION RELEASE/REPORT MAIN

This routine provides the executive operation and main program entry for the DIR/REPORT data subfile. This program is called *DIR and is located within the F_DIR UFD. Upon entry into this program, a USER file is built containing the user ID, time, date, and terminal location. The user then may proceed with one of four (4) modes of operation within the DIR/REPORT subfile. A 'QUIT' at this level will send executive control back to the F_MAIL UFD. This is accomplished by resuming the BFILE program. Operation then proceeds as described in Section 3.2. Flowchart Figure 5.3-2 depicts the DIR/REPORT MAIN.

3.4 DRAWING/ENGINEERING ORDER MAIN

This routine provides the executive operation and main program entry for the DRAWING/E.O. data subfiles. This program is called *DRAW and is located within the F_DRAW UFD. Upon entry into this program, a USER file is built containing the user ID, time, date, and terminal location. The user then may proceed with one (1) of four (4) modes of operation within the DRAWING/E.O. subfile. A 'QUIT' at this level will send executive control back to the F_MAIL UFD. This is accomplished by resuming the BFILE program. Operation then proceeds as described in Section 3.2. Flowchart Figure 5.3-3 depicts the DRAWING/E.O. MAIN.

4.0 SUBROUTINE DESCRIPTION

This section provides descriptions of all subroutines used by MAIL CORRESPONDENCE, DESIGN INFORMATION RELEASE/REPORT, and DRAWING/ENGINEERING ORDER subfile programs.

4.1 MAIL CORRESPONDENCE

4.1.1 INPTC

This subroutine is the input routine for the SPADS MAIL LOG Correspondence subfile. The Correspondence data record for each document consists of up to sixteen (16) data items as shown in Figure 6.2.1.1. Following each complete document entry, all items are displayed on the terminal to be checked for errors at this time. After a document record has been declared correct, the specific subfile must be designated in which this document is to be stored. If all documents can not be entered in one (1) input session, the user has a WAIT option which allows the daily input to be continued at a later time. This continuation is declared upon re-entering the INPUT MODE. If the WAIT option is taken by mistake and there are no other documents to be entered, recovery is accomplished by declaring this is NOT a continuation upon re-entry into the INPUT MODE. When this has been done the user now has three (3) options from which to choose:

- a) Start a New Entry (NEW)
- b) Spool Last Output Again (LAST)
- c) Spool New Data Entered (DATA)

Option (c) DATA will spool to the high speed printer a sorted output of all documents entered for that daily input session.

When a daily input session is complete, this output is normally spooled to the printer in two (2) formats: a complete record output and a brief or partial record output. If a computer or printer malfunction occurs during this output, another copy may be obtained by re-entering the INPUT MODE as previously described and selecting option (b) LAST. Flowchart Figure 5.4.1-1 depicts the INPUT MODE of the Correspondence subfile.

4.1.2 REVSC

This subroutine is the revise routine for the SPADS MAIL LOG Correspondence subfile. To revise or delete a document, the input date and daily counter code comprise the unique identifier for its location. Additional time can be saved if the user also knows in which of the six (6) correspondence data subfiles the document is stored. When the desired document record is found, it will be displayed on the terminal for verification. If not the correct record, search for the document will continue. After the revision has been made the document record is again displayed on the terminal for user edification.

The REVISE MODE also can give the user manual revise or delete capability for documents in the ACTION DUE file. Flowchart Figure 5.4.1-2 depicts the REVISE MODE of the Correspondence subfile.

4.1.3 SEAC

This subroutine is the search routine for the SPADS MAIL LOG Correspondence subfile.

Of the sixteen (16) possible data items within a document record, eleven (11) are searchable. The resulting outputs from these searches vary from five (5) to eight (8) data items. See Figure 6.2.1.2. All searches except for the ACTION DUE DATE search have a multiple subfile selection capability in which any single or combination of the six subfiles may be used. The ACTION DUE DATE search automatically searches all six (6) subfiles. There is a specialized ALL search which outputs all document records in a specified subfile or combination of subfiles. However, it is not recommended that the general user call for the search ALL option.

The searches may also be assigned for a particular time frame. If no time frame is selected, the first valid date becomes the earliest date in the data base and the last valid date defaults to 12-31-99. Of course, the ACTION DUE DATE, DOCUMENT DATE, and INPUT DATE searches do not use the time framing capability. However, the DOCUMENT and INPUT DATE searches can retrieve entire month's or an entire year's worth of data by entering 00. For example, entering 110078 would result in finding all the documents within the data base in the eleventh month, November, for the year 1978. Likewise, an entry of 000078 would retrieve all documents for the year 1978. See Figure 6.2.1.3.

Flowchart Figure 5.4.1-3 depicts the SEARCH MODE of the Correspondence subfile.

4.1.4 ARCC

This subroutine is the archive routine for the SPADS MAIL LOG Correspondence subfile. To archive a document not only is the input date and daily counter code needed, but also the specific data subfile in which it is located. After these requirements have been satisfied, a pause of 15 to 50 seconds occurs for the system to update all files involved.

All archived document records are placed in a file called INACTS, except for those records stored in the TRANSMITTAL data subfile. These records are archived to a file called INACTL, because of their extra data item, DESCRIPTION. Flowchart Figure 5.4.1-4 depicts the ARCHIVE MODE of the Correspondence subfile.

4.1.5 SHOWC

This subroutine is used to display an entire data record on the terminal for the INPUT or REVISE MODE. Each data item is numbered in order to verify the document record as either correctly input or the correct record to be revised or deleted. Flowchart Figure 5.4.1-5 depicts the flow diagram for this subroutine.

4.1.6 INPSC

This subroutine is used by the INPUT or REVISE MODES to input or change specific data items within a document record. Flowchart Figure 5.4.1-6 depicts the flow diagram for this subroutine.

4.1.7 OPEN

This subroutine is used to open all six (6) data subfiles for read and write functions. Flowchart Figure 5.4.1-7 depicts the flow diagram for this subroutine.

4.1.8 CLOSE

This subroutine is used to close all six (6) data subfiles which are open for read and write functions. Flowchart Figure 5.4.1-8 depicts the flow diagram for this subroutine.

4.1.9 WHERE

This subroutine is used by the REVISE or SEARCH MODES to determine how many and which data subfiles are to be opened for searching purposes. These selected subfiles are then opened for the SEARCH MODE of operation. Flowchart Figure 5.4.1-9 depicts the flow diagram for this subroutine.

4.1.10 BRAKET

This subroutine is used by the SEARCH MODE to determine a first and last valid date for a time framed type of search. Defaults are 0-0-0 and 12-31-99 for the first and last valid dates, respectively. Flowchart Figure 5.4.1-10 depicts the flow diagram for this subroutine.

4.1.11 ALC

This subroutine is called by the SEARCH MODE to perform a PRINT ALL type of search. This routine may search any one or combination of subfiles. The break key is inhibited during this search. When the file(s) have been finished, this routine automatically spools the formatted output file to the high speed printer. Flowchart Figure 5.4.1-11 depicts the flow diagram for this subroutine.

4.1.12 RESEA

This subroutine is called by the SEARCH MODE to perform a RESPONSIBLE ENGINEER type of search. This routine formats document records found and builds an output file with headers. When the file(s) have been finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.1-12 depicts the flow diagram for this subroutine.

4.1.13 WHO

This subroutine is called by the SEARCH MODE to perform a WHO TO/ADDRESSEE type of search. This routine formats document records found and

builds an output file with headers. When the file(s) have been finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.1-13 depicts the flow diagram for this subroutine.

4.1.14 DDAT

This subroutine is called by the SEARCH MODE to perform an INPUT DATA DATE type of search.

This INPUT DATE search does not use the time framing capability. However, the INPUT DATE search can retrieve entire month's or an entire year's worth of data by entering 00. For example, entering 110078 would result in finding all the documents within the data base in the eleventh month, November, for the year 1978. Likewise, an entry of 000078 would retrieve all documents for the year 1978. See Figure 6.2.1.3.

Flowchart Figure 5.4.1-14 depicts the flow diagram for this subroutine.

4.1.15 CNUM

This subroutine is called by the SEARCH MODE to perform a CONTRACT NUMBER type of search. This routine formats document records found and builds an output file with headers. When the file(s) have been finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.1-15 depicts the flow diagram for this subroutine.

4.1.16 CWAID

This subroutine is called by the SEARCH MODE to perform a WORK AUTHORIZATION/ID CODE type of search. This procedure may perform partial searches using the W.A. Number only or W.A. Number in conjunction with the

first two (2) letters of the ID Code. This routine formats document records found and builds an output file with headers. When the file(s) have been finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.1-16 depicts the flow diagram for this subroutine.

4.1.17 AUSEA

This subroutine is called by the SEARCH MODE to perform an AUTHOR/SOURCE type of search. This routine formats document records found and builds an output file with headers. When the file(s) have been finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.1-17 depicts the flow diagram for this subroutine.

4.1.18 DLSEA

This subroutine is called by the SEARCH MODE to perform a DOCUMENT/LETTER NUMBER type of search. This procedure may perform partial searches as long as the desired parameter is four (4) characters in length. This routine formats document records found and builds an output file with headers. When the file(s) have been finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.1-18 depicts the flow diagram for this subroutine.

4.1.19 DATC

This subroutine is called by the SEARCH MODE to perform the DOCUMENT DATE type of search. This DOCUMENT DATE search does not use the time framing capability. However, the DOCUMENT DATE search can retrieve entire month's or an entire year's worth of data by entering 00. For example, entering 110078 would result in finding all the documents within the data base in the eleventh month, November, for the year 1978. Likewise, an entry of 000078 would retrieve all documents for the year 1978. See Figure 6.2.1.3.

Flowchart Figure 5.4.1-19 depicts the flow diagram for this subroutine.

4.1.20 SUBJ

This subroutine is called by the SEARCH MODE to perform the SUBJECT TITLE search. This procedure allows up to four (4) of the seven (7) possible words in the subject to be searched. As each subject is found containing the desired word, the entire subject is displayed on the terminal. If none are found, the user may restart this subroutine or return to the SEARCH MODE as normally done when the file(s) are finished. When the final word has been searched, document records found will be formatted to an output file with headers. Flowchart Figure 5.4.1-20 depicts the flow diagram for this routine.

4.1.21 MSTAT

This subroutine is called by the SEARCH MODE to perform a MAIL STATUS type of search. If the desired mail status is legal, the search is performed. This routine formats document records found and builds an output file with headers. When the file(s) are finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.1-21 depicts the flow diagram for this subroutine.

4.1.22 ADAT

This subroutine is called by the SEARCH MODE to perform the ACTION DUE DATE search. This procedure has two options: a complete listing of document records with an action due or search for document records within five (5) days or past due using the current date as reference. This routine formats document records found and builds an output file with headers. During this search the break key is inhibited. When the ACTION DUE subfile is finished, this routine automatically spools the output file to the high speed printer. Flowchart Figure 5.4.1-22 depicts the flow diagram for this subroutine.

4.1.23 CKIR

This subroutine is used by the REVISE MODE to check the data item selected. If MAIL STATUS, data item number one, is selected, a validity check is made to verify that the correct item was indicated. A valid or invalid flag is set according to user response and logic flow returns to the calling routine. Flowchart Figure 5.4.1-23 depicts the flow diagram for this subroutine.

4.1.24 RDSUB

This subroutine is used by the SEARCH MODE to read the selected subfile(s) desired for the specific data item search. When all subfiles are finished, a read complete flag is set. Flowchart Figure 5.4.1-24 depicts the flow diagram for this subroutine.

4.1.25 SCRND

This subroutine is used by the SEARCH MODE to format and display on the terminal the appropriate header for each data item search. Flowchart Figure 5.4.1-25 depicts the flow diagram for this subroutine.

4.1.26 SCRNP

This subroutine is used by the SEARCH MODE to format and display on the terminal the appropriate data items for a document record which was found. If many document records are found during a search and it is observed that needed information will soon disappear from the screen, the user may temporarily stop terminal display by depressing the space bar. Terminal display may be restarted by depressing the 'Q' key. This routine also increments the number of documents found counter. Flowchart Figure 5.4.1-26 depicts the flow diagram for this subroutine.

4.1.27 HARDH

This subroutine is used by the SEARCH MODE to format for the output file the appropriate header for each data item search. This header is

presented on each page of the output file. Flowchart Figure 5.4.1-27 depicts the flow diagram for this subroutine.

4.1.28 HARDPT

This subroutine is used by the SEARCH MODE to format for the output file the appropriate data items for a document record which was found during a specific data item search. Flowchart Figure 5.4.1-28 depicts the flow diagram for this subroutine.

4.1.29 UPDATE

This subroutine is used by the INPUT MODE to delete or change document records in the ACTION DUE DATE subfile. The updating of this file is determined by checks on specified words in the subject of the referencing document. Flowchart Figure 5.4.1-29 depicts the flow diagram for this subroutine.

4.2 DESIGN INFORMATION RELEASE/REPORT

4.2.1 INPTDR

This subroutine is the input routine for the SPADS MAIL LOG DIR/REPORT subfile. The DIR/REPORT data record for each document consists of up to nine (9) data items. See Figure 6.2.2.1. The first item entered is the DIR/REPORT Number. The file is then checked for a previous entry containing this number. If the number is found, the user has the option to enter the REVISE MODE. Normally, changes are required only to two (2) data items: (8) Revision and (9) Revision Date. Following each completed document entry, all items are displayed on the terminal. Flowchart Figure 5.4.2-1 depicts the INPUT MODE of the DIR/REPORT subfile.

4.2.2 SEADR

This subroutine is the search routine for the SPADS MAIL LOG DIR/REPORT subfile.

Of the nine (9) possible data items within a DIR/REPORT record, all but one, REVISION, are searchable. It should also be noted that the Revision Date is searched during a DATE search. This allows the DATE search to check only the most recent date associated with a document. See Figure 6.2.2.2. The DATE search has the capability of retrieving an entire month's or year's worth of data by entering 00 for the day or month. For example, entering 110078 would result in finding all the documents within the data base in the eleventh month, November, for the year 1978. Likewise, an entry of 000078 would retrieve all documents for the year 1978.

There is a specialized ALL search which outputs all documents in the DIR/REPORT subfile. This ALL search has an optional output along with the normal output consisting of the entire nine (9) item record. This optional output only displays the number of documents found on the terminal and automatically spools to the high speed printer the DIR Number and Revision.

The VEHICLE search also has a special quality. A group of vehicles may be found by using the first and last valid vehicle options. For example,

if a user declares the first valid vehicle as 198 and is searching for vehicle number 200, not only would all documents containing vehicle 200 be found, but also those with numbers 198S, 199S, and 200S; where S represents all subsequent vehicles. Default for the first valid vehicle number is zero (0) whereas, the last valid vehicle number becomes 999.

Flowchart Figure 5.4.2-2 depicts the SEARCH MODE of the DIR/REPORT subfile.

4.2.3 REVSDR

This subroutine is the revise routine for the SPADS MAIL LOG DIR/REPORT subfile.

The only information needed in order to revise or delete a DIR or Report is the DIR or REPORT Number. Note that the REVISE MODE may be entered in two (2) ways: a direct REVISE command or thru an INPUT MODE option. If a DIR or REPORT is entered and found already to be in the file, the user may change to the REVISE MODE for modification of old data items.

Otherwise, when the desired document record is found, it will be displayed on the terminal for verification. If it is not the correct record, search for the document will continue. After the revision has been made, the document record is again displayed on the terminal for user edification. Flowchart Figure 5.4.2-3 depicts the REVISE MODE of the DIR/REPORT subfile.

4.2.4 ARCDR

This subroutine is the archive routine for the SPADS MAIL LOG DIR/REPORT subfile.

The necessary information needed in order to archive a DIR or Report is the DIR Number. The user may also designate how many documents to be archived at one session. The file in which all archived records are placed is called INACT. Flowchart Figure 5.4.2-4 depicts the ARCHIVE MODE of the DIR/REPORT subfile.

4.2.5 SHOWDR

This subroutine is used to display an entire data record on the terminal for the INPUT or REVISE MODES. Each data item is numbered in order to verify the data record as either correctly input or the correct record to be revised or deleted. Flowchart Figure 5.4.2-5 depicts the flow diagram for this subroutine.

4.2.6 INPSDR

This subroutine is used by the INPUT or REVISE MODES to input or change specific data items within a data record. Flowchart Figure 5.4.2-6 depicts the flow diagram for this subroutine.

4.2.7 ALDR

This subroutine is called by the SEARCH MODE to perform a PRINT ALL type of search. This routine has two (2) options: a complete listing of DIR/REPORT records containing the entire data record or a partial listing only containing the DIR/REPORT Number and REVISION. When the entire data record option is used, all nine (9) data items are displayed on the terminal and formatted for output. During the partial search only multiples of 50 are displayed on the terminal. During this search the break key is inhibited.

When the DIR/REPORT data file is finished, this routine automatically spools the output file to the high speed printer. Flowchart Figure 5.4.2-7 depicts the flow diagram for this subroutine.

4.2.8 TITDR

This subroutine is called by the SEARCH MODE to perform the TITLE search. This procedure allows up to four (4) of the seven (7) possible words in the title to be searched. As each title is found containing the desired word, the entire title is displayed on the terminal. If none are found, the user may restart this subroutine or return to the SEARCH MODE which is normally done when the data file is finished. When the final word has been searched, the entire data record of document records found will be formatted to an

output file and displayed on the terminal. Flowchart Figure 5.4.2-8 depicts the flow diagram for this subroutine.

4.2.9 DIRN

This subroutine is called by the SEARCH MODE to perform the DIR/REPORT NUMBER type of search. If the desired number is not located, a special Not Found message is displayed on the terminal. When the search is finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.2-9 depicts the flow diagram for this subroutine.

4.2.10 DATDR

This subroutine is called by the SEARCH MODE to perform the DOCUMENT DATE type of search. The DATE search has the capability of retrieving an entire month's or year's worth of data by entering 00 for the day or month. For example, entering 110078 would result in finding all the documents within the data base in the eleventh month, November, for the year 1978. Likewise, an entry of 000078 would retrieve all documents for the year 1978. Flowchart Figure 5.4.2-10 depicts the flow diagram for this subroutine.

4.2.11 WANUM

This subroutine is called by the SEARCH MODE to perform a WORK AUTHORIZATION/ID CODE type of search. This procedure may perform partial searches using the W.A. Number only or W.A. Number in conjunction with the first two (2) letters of the ID Code. This routine formats document records found and builds an output file. When the file has been finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.2-11 depicts the flow diagram for this subroutine.

4.2.12 SYSDR

This subroutine is called by the SEARCH MODE to perform a SYSTEM search. This routine formats document records found and builds an output file. When the file has been finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.2-12 depicts the flow diagram for this subroutine.

4.2.13 CONN

This subroutine is called by the SEARCH MODE to perform a CONTRACT NUMBER type of search. This procedure uses the CONTRACT TABLE, CTAB, to find the W.A. Number/ID Code associated with the desired Contract Number. See Section 6.3.2 for further information concerning the CTAB Table. The routine now performs a modified W.A. NUMBER/ID CODE type of search. See Section 4.2.11 for a description of this search. Flowchart Figure 5.4.2-13 depicts the flow diagram for this subroutine.

4.2.14 VEHN

This subroutine is called by the SEARCH MODE to perform a VEHICLE NUMBER type of search. The VEHICLE search also has a special quality. A group of vehicles may be found by using the first and last valid vehicle options. For example, if a user declares the first valid vehicle as 198 and is searching for vehicle number 200, not only would all documents containing vehicle 200 be found, but also those with numbers 198S, 199S, and 200S; where S represents all subsequent vehicles. Default for the first valid vehicle number is zero (0) whereas, the last valid vehicle number becomes 999.

When the file has been finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.2-14 depicts the flow diagram for this subroutine.

4.2.15 FMAIN

This subroutine is used by the SEARCH MODE to format and display on the terminal the entire data record found during a specific data item search. This procedure also formats the data record for the output file to be spooled on the high speed printer. The Contract Number is found in the CONTRACT TABLE, CTAB, by search for the W.A. Number/ID Code. See Section 6.3.2 for further information concerning the CTAB Table.

If many document records are found during a search and it is observed that needed information will soon disappear from the screen, the user may

temporarily stop terminal display by depressing the space bar. Terminal display may be restarted by depressing the 'Q' key. Flowchart Figure 5.4.2-15 depicts the flow diagram for this subroutine.

4.2.16 CMAIN

This subroutine is used by the SEARCH MODE to format and display on the terminal the entire data record found during a CONTRACT NUMBER search, 4.2.13. This procedure also formats the data record for the output file to be spooled on the high speed printer.

If many document records are found during a search and it is observed that needed information will soon disappear from the screen, the user may temporarily stop terminal display by depressing the space bar. Terminal display may be restarted by depressing the 'Q' key. Flowchart Figure 5.4.2-16 depicts the flow diagram for this subroutine.

4.3 DRAWING/ENGINEERING ORDER

4.3.1 INPTDW

This subroutine is the input routine for the SPADS MAIL LOG DRAWING/E.O. subfile. The DRAWING subfile data record consists of eleven (11) data items. If the drawing contains more than one (1) sheet, an additional sheet record consisting of five (5) data items is kept for each sheet in the SHEET subfile. See Figure 6.2.3.1. The ENGINEERING ORDER subfile data record consists of six (6) data items. See Figure 6.2.3.3. The main body of data for these three (3) subfiles are sent from Dallas rather than manually input. Unfortunately, vehicle system and section and engineering order titles are not available in the original Dallas Data Base. However, these fields may be entered in manually input Drawings and E.O.'s.

The INPUT MODE has two (2) optional operations:

- (1) E.O. - input of new engineering orders.
- (2) Drawings and E.O.'s - input of new drawings along with their referenced E.O.'s.

During option number 2, entry of referenced E.O.'s, option number 1 is automatically performed if the E.O.'s are new to the data base.

Entry of new engineering orders may result in one (1) of three (3) terminal messages if the drawing sheet already has three (3), four (4), or more E.O.'s referenced. Flowchart Figure 5.4.3-1 depicts the INPUT MODE of the DRAWING/E.O. subfile.

4.3.2 REVSDW

This subroutine is the revise routine for the SPADS MAIL LOG DRAWING/E.O. subfile. The only information necessary in order to revise or delete a drawing or engineering order is the Drawing Number or E.O. Number. When the desired record is found, it will be displayed on the terminal for

verification. If it is not the correct record, search for the desired record will continue. After the revision has been made the entire record is again displayed on the terminal for user edification.

The REVISE MODE may change the revision of a sheet. During this modification, all engineering orders referenced by that drawing sheet are automatically deleted. The REVISE MODE may also be used as an Input operation by adding a new sheet(s) to any existing drawing.

Flowchart Figure 5.4.3-2 depicts the REVISE MODE of the DRAWING/E.O. subfile.

4.3.3 SEADW

This subroutine is the search routine for the SPADS MAIL DRAWING/E.O. subfile.

Of the eleven (11) data items within the DRAWING subfile, nine (9) are searchable. The resulting output from these searches always consists of six (6) data items. See Figure 6.2.3.2. The ENGINEERING ORDER subfile consists of six (6) item records, of which only two (2) are searchable. The resulting output from these two (2) searches consists of up to all six (6) data items. It should be noted that Revision Date is output in place of the E.O. Date when an E.O. has a revision. This allows only the most recent date to be displayed. See Figure 6.2.3.4.

Due to the data base source for drawings coming from Dallas and manual input, three (3) searches have limited capability: SYSTEM, SECTION, and DATE. The SYSTEM and SECTION searches are only usable for those drawings which are manually input. However, some Dallas drawing data will contain this information within the title. Therefore, a TITLE search can be used if either the SYSTEM or SECTION searches are found unsuccessful. The DATE search is also limited in that all Dallas drawing data will have the same date. This date represents the latest information update received from Dallas. Nevertheless, the DATE search has the capability of retrieving an entire month's or year's worth of data by entering 00 for the day or month. For example, entering 110078 would result in finding all drawings within the data base in the

eleventh month, November, for the year 1978. Likewise, an entry of 000078 would retrieve all documents for the year 1978.

There are two (2) specialized searches: REVISION ACTION DUE and PRINT ALL. REVISION ACTION DUE search finds all drawings containing sheets which reference five (5) or more engineering orders. The PRINT ALL search has two (2) options: (1) Output all drawings and their referenced E.O.'s or (2) Output all engineering orders in the data base.

The VEHICLE search also has some special qualities. First, the user may search for all drawings related to a certain vehicle, or search for all engineering orders related to a certain vehicle. Second, a group of vehicles may be found by using the first and last valid vehicle options. For example, if a user declares the first valid vehicle as 198 and is searching for vehicle number 200, not only would all records containing vehicle 200 be found, but also those with numbers 198S, 199S, and 200S; where S represents all subsequent vehicles. Default for the first valid vehicle number is zero (0); whereas, the last valid vehicle number becomes 999.

Another search also has the drawing and engineering order options. This is the E.O. NUMBER search. The user may search the ENGINEERING ORDER subfile for a specific E.O. Number or search the DRAWING subfile for all drawings referencing a specific E.O. Number. For an outline of all search capabilities see Figure 6.2.3.5.

Flowchart Figure 5.4.3-3 depicts the SEARCH MODE of the DRAWING/E.O. subfile.

4.3.4 ARCDW.

This subroutine is the archive routine for the SPADS MAIL LOG DRAWING/E.O. subfile. The only information needed in order to archive a drawing is the Drawing Number. The user may designate how many drawings are to be archived at one (1) session. Actual drawing data archived is placed in a file called INACTD. If the drawing contains more than one (1) sheet, the SHEET subfile is automatically updated. Sheet drawing data is stored in a file called INACTS.

Engineering order data records are automatically archived. E.O.'s unreferenced by any drawings are placed in a file called INACTE. Flowchart Figure 5.4.3-4 depicts the ARCHIVE MODE of the DRAWING/E.O. subfile.

4.3.5 SHOWEO

This subroutine is used to display the entire ENGINEERING ORDER data record on the terminal for the INPUT or REVISE MODES. Each data item is numbered in order to verify the data record as either correctly input or the correct record to be revised or deleted. Flowchart Figure 5.4.3-5 depicts the flow diagram for this subroutine.

4.3.6 SHOWDW

This subroutine is used to display an entire DRAWING data record from both the DRAW and SHEET subfiles. This entire data record is displayed on the terminal during the INPUT or REVISE MODES. Each data item is numbered in order to verify the data record as either correctly input or the correct record to be revised or deleted. Flowchart Figure 5.4.3-6 depicts the flow diagram for this subroutine.

4.3.7 INPSE

This subroutine is used by the INPUT or REVISE MODES to input or change specific data items within the ENGINEERING ORDER data subfile. Flowchart Figure 5.4.3-7 depicts the flow diagram for this subroutine.

4.3.8 INPSDW

This subroutine is used by the INPUT or REVISE MODES to input or change specific data items within the DRAWING and SHEET data subfiles. Revision of SHEET data records is performed by this routine, whereas, SHEET data Input is performed by another subroutine described in 4.3.9. Flowchart Figure 5.4.3-8 depicts the flow diagram for this procedure.

4.3.9 INPSS

This subroutine is used by the INPUT MODE to enter SHEET subfile data items. If referenced E.O.'s are new to the data base, the user may enter the Engineering Order Input routine described in 4.3.7. Flowchart Figure 5.4.3-9 depicts the flow diagram for this procedure.

4.3.10 FIXSHT

This subroutine is used by the REVISE MODE to prepare the SHEET data subfile for the input of a new sheet for a specified drawing. Flowchart Figure 5.4.3-10 depicts the flow diagram for this subroutine.

4.3.11 SHTADD

This subroutine is used by the REVISE MODE to input new data items in the SHEET subfile corresponding to a new sheet for a specified drawing. This procedure is performed in conjunction with FIXSHT described in 4.3.10. Flowchart Figure 5.4.3-11 depicts the flow diagram for this subroutine.

4.3.12 NEOADD

This subroutine is used by the INPUT or REVISE MODES to add a new ENGINEERING ORDER to a sheet of a specified drawing. Entry of new engineering orders may result in one (1) of three (3) terminal messages if the drawing sheet already has three (3), four (4), or more E.O.'s referenced. Flowchart Figure 5.4.3-12 depicts the flow diagram for this subroutine.

4.3.13 HEADER

This subroutine is used by the SEARCH MODE to format for the output file the appropriate header for each data item search. This header is presented on each page of the output file. Flowchart Figure 5.4.3-13 depicts the flow diagram for this subroutine.

4.3.14 MAIND

This subroutine is used by the SEARCH MODE to format and display on the terminal the appropriate DRAWING data items for each data record which was found during a REVISION ACTION DUE type of search. This procedure also formats the data items for the output file to be spooled on the high speed printer.

If many document records are found during a search and it is observed that needed information will soon disappear from the screen, the user may temporarily stop terminal display by depressing the space bar. Terminal display may be restarted by depressing the 'Q' key. Flowchart Figure 5.4.3-14 depicts the flow diagram for this subroutine.

4.3.15 DMAIN

This subroutine is used by the SEARCH MODE to format and display on the terminal the appropriate DRAWING data items for each data record which was found. This procedure also formats the data items for the output file to be spooled on the high speed printer.

If many document records are found during a search and it is observed that needed information will soon disappear from the screen, the user may temporarily stop terminal display by depressing the space bar. Terminal display may be restarted by depressing the 'Q' key. Flowchart Figure 5.4.3-15 depicts the flow diagram for this subroutine.

4.3.16 TITDW

This subroutine is called by the SEARCH MODE to perform the TITLE search. This procedure allows up to four (4) of the seven (7) possible words in the title to be searched. As each title is found containing the desired word, the entire title is displayed on the terminal. If none are found, the user may restart this subroutine or return to the SEARCH MODE which is normally done when the data file is finished. When the final word has been searched,

the appropriate data items of each DRAWING data record found will be formatted to an output file and displayed on the terminal. Flowchart Figure 5.4.3-16 depicts the flow diagram for this subroutine.

4.3.17 ALDW

This subroutine is called by the SEARCH MODE to perform a PRINT ALL type of search. This routine has two (2) options: a complete listing of all Drawing data including Engineering Orders or a listing of Engineering Orders only. During this search the break key is inhibited. Each DRAWING or ENGINEERING ORDER data record is formatted for the output file and displayed on the terminal. When the designated subfiles are finished, this routine automatically spools the output file to the high speed printer. Flowchart Figure 5.4.3-17 depicts the flow diagram for this subroutine.

4.3.18 ACTDUE

This subroutine is called by the SEARCH MODE to perform the REVISION ACTION DUE type of search. This procedure searches the DRAWING and SHEET subfiles for all Drawing data sheets referencing five (5) or more Engineering Orders. Those drawing sheets found which contain the correct number of E.O's are formatted for the output file and displayed on the terminal. During this search the break key is inhibited. When all DRAWING data records have been checked, this routine automatically spools the output file to the high speed printer. Flowchart Figure 5.4.3-18 depicts the flow diagram for this subroutine.

4.3.19 DRAWN

This subroutine is called by the SEARCH MODE to perform the DRAWING NUMBER type of search. If the desired number is not located, a special Not Found message is displayed on the terminal. When the search is finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.3-19 depicts the flow diagram for this subroutine.

4.3.20 DATDW

This subroutine is called by the SEARCH MODE to perform the DRAWING DATE type of search. The DATE search has the capability of retrieving an entire month's or year's worth of data by entering 00 for the day or month. For example, entering 110078 would result in finding all the documents within the data base in the eleventh month, November, for the year 1978. Likewise, an entry of 000078 would retrieve all documents for the year 1978. Flowchart Figure 5.4.3-20 depicts the flow diagram for this subroutine.

4.3.21 SYSDW

This subroutine is called by the SEARCH MODE to perform a SYSTEM search. This routine formats drawings found and builds an output file. When the file has been finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.3-21 depicts the flow diagram for this subroutine.

4.3.22 VEHND

This subroutine is called by the SEARCH MODE to perform a VEHICLE NUMBER type of search. This procedure has two (2) options: all the Drawings or all the Engineering Orders related to a vehicle, or set of vehicles. The Vehicle search also has a special quality. A group of vehicles may be found by using the first and last valid vehicle options. For example, if a user declares the first valid vehicle as 198 and is searching for vehicle number 200, not only would all documents containing vehicle 200 be found, but also those with numbers 198S, 199S, and 200S; where S represents all subsequent vehicles. Default for the first valid vehicle number is zero (0) whereas, the last valid vehicle number becomes 999.

Flowchart Figure 5.4.3-22 depicts the flow diagram for this subroutine.

4.3.23 SECTN

This subroutine is called by the SEARCH MODE to perform a SECTION search. This routine formats drawings found and builds an output file. When the file has been finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.3-23 depicts the flow diagram for this subroutine.

4.3.24 CODE

This subroutine is called by the SEARCH MODE to perform a VENDOR CODE type of search. This procedure checks the first three (3) numbers of each drawing number for a designated code. All drawings found with this vendor code are formatted for the output file and displayed on the terminal. When the file has been finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.3-24 depicts the flow diagram for this subroutine.

4.3.25 EONN

This subroutine is called by the SEARCH MODE to perform the ENGINEERING ORDER NUMBER type of search. This procedure has two options: locating a specific Engineering Order within the E.O. data subfile or search the DRAWING data subfiles for all sheets referencing a specific Engineering Order. If the first option is taken and the desired E.O. is not located on the E.O. subfile, a special **Not Found** message is displayed on the terminal. Regardless of the option, the routine formats for the output file and displays on the terminal the appropriate data items for data records found. When the search is finished, this routine returns to the SEARCH MODE. Flowchart Figure 5.4.3-25 depicts the flow diagram for this subroutine.

4.4 GENERAL SUBROUTINES

4.4.1 IDENT

This subroutine is used by the three (3) main subfile entrance routines to record the user identification, time and date of entry, and the terminal used. The file used to store this information is called USER in each of the three (3) program UFD's. Flowchart Figure 5.4.4-1 depicts the flow diagram for this subroutine.

4.4.2 TINPUT

This subroutine is used to perform the basic Title Input for all three (3) subfiles. This procedure is used in the INPUT MODE to build a seven (7) word, ten (10) characters per word searchable title. It is also called during the REVISE MODE to change an existing title. The routine is also used to build a compatible word for which to perform the TITLE search. Flowchart Figure 5.4.4-2 depicts the flow diagram for this subroutine.

4.4.3 RDCOM

This subroutine is used by the Title Input routine, 4.4.2, to construct the title one (1) character at a time. Editor checks are made for eraser, kill, and new line characters. Flowchart Figure 5.4.4-3 depicts the flow diagram for this subroutine.

4.4.4 GETWRD

This subroutine is used by the Title Input routine, 4.4.2, to build the searchable title in seven (7) words, ten (10) characters per word. Flowchart Figure 5.4.4-4 depicts the flow diagram for this subroutine.

4.4.5 GETWD

This subroutine is used by the Title Input routine, 4.4.2, to preserve and store the title as input. This title is used for output formatting. Flowchart Figure 5.4.4-5 depicts the flow diagram for this subroutine.

4.4.6 GETCON

This subroutine is used by the MAIL CORRESPONDENCE and DIR/REPORT subfile programs to fetch a Contract Number from the CONTRACT TABLE, CTAB. This process is performed by searching the table for a given Work Authorization Number/ID Code. See Section 6.2.3 for further information concerning the CTAB Table. If the search is unsuccessful, a special Not Found message is stored in place of the Contract Number and displayed on the terminal. Flowchart Figure 5.4.4-6 depicts the flow diagram for this subroutine.

4.4.7 IDUSER

This subroutine is used by the ARCHIVE MODE routine to check the user identification for a valid entry. If the user identification is not SYSTEM, a special invalid user message is displayed on the terminal. A special message is also sent to the system terminal to record the improper entry attempt into the ARCHIVE MODE. Flowchart Figure 5.4.4-7 depicts the flow diagram for this subroutine.

5.0

FLOWCHARTS

5.1 MAIN ENTRIES

5.1.1 MAIL CORRESPONDENCE

Figure 5.3-1 is the flowchart for the MAIL LOG Program and MAIL CORRESPONDENCE subfile main entry routine.

5.1.2 DESIGN INFORMATION RELEASE/REPORT

Figure 5.3-2 is the flowchart for the DIR/REPORT subfile main entry routine.

5.1.3 DRAWING/ENGINEERING ORDER

Figure 5.3-3 is the flowchart for the DRAWING/E.O. subfile main entry routine.

5.2 SUBROUTINES

5.2.1 MAIL CORRESPONDENCE

Figures 5.4.1-1 thru 5.4.1-29 are the flowcharts for the MAIL CORRESPONDENCE subfile subroutines.

5.2.2 DESIGN INFORMATION RELEASE/REPORT

Figures 5.4.2-1 thru 5.4.1-16 are the flowcharts for the DIR/REPORT subfile subroutines.

5.2.3 DRAWING/ENGINEERING ORDER

Figures 5.4.3-1 thru 5.4.3-25 are the flowcharts for the DRAWING/E.O. subfile subroutines.

5.2.4 GENERAL

Figures 5.4.4-1 thru 5.4.4-7 are the flowcharts for the MAIL LOG program general subroutines.

5.3

FLOWCHART FIGURES FOR MAIN ENTRIES

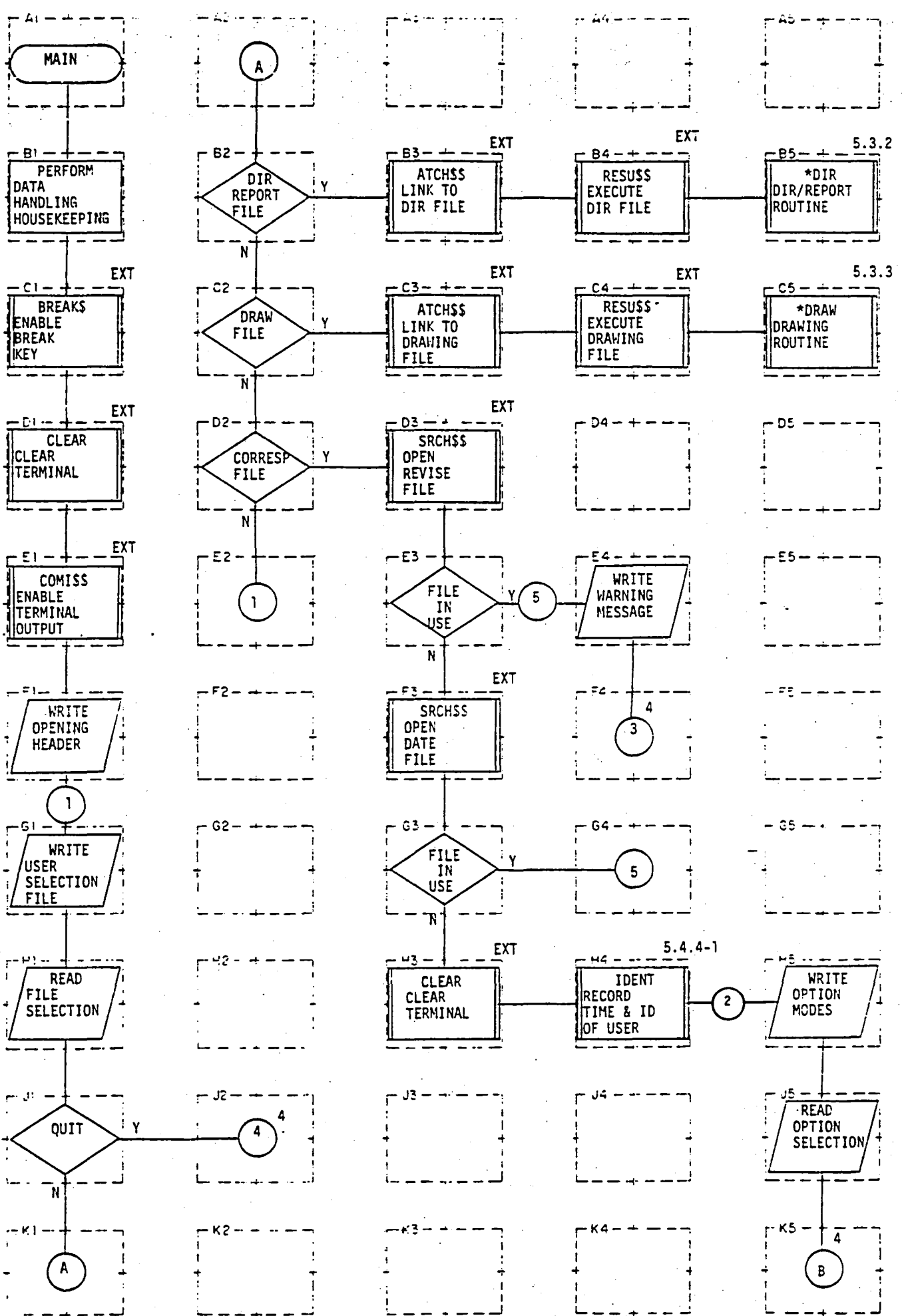


Figure 5.3-1

```

A1
B1 $INSERT SYSCOM> KEYS. F; COMMON/CDAT/CO; INTEGER*2; DOUBLE PRECISION
C1 BREAKS(.FALSE.)
D1 CLEAR
E1 COMISS('TTY',3,12,IC)
F1 WRITE (1,100) See section 3.1.2.1 page 8
G1 WRITE (1,125) See section 3.1.2.1 page 8
H1 READ (1,11) IOPT
J1 (IOPT.EQ.'QU')
K1
A2
B2 (IOPT.NE.'DI')
C2 (IOPT.EQ.'DR')
D2 (IOPT.EQ.'CO')
E2
F2
G2
H2
J2
K2
A3
B3 ATCH$$('F_DIR',5, K$ALLD,IPAS,K$IMFD+K$SETH,IC)
C3 ATCH$$('F_DRAW',6,K$ALLD,IPAS,K$IMFD+K$SETH,IC)
D3 SRCH$(K$RDWR+K$NDAM,'REVS',6,4,1,IC)
E3 (IC.NE.0)

```

Figure 5.3.-1

F3 SRCH\$\$ (K\$RDWR+K\$NDAM, 'DATE', 6, 6, 1, IC)
G3 (IC.NE.0)
H3 CLEAR
J3
K3
A4
B4 RESU\$\$ ('*DIR', 4)
C4 RESU\$\$ ('*DRAW', 5)
D4
E4 WRITE (1,1001) ('SORRY - THE MAIL LOG IS CURRENTLY IN USE PLEASE TRY
AGAIN LATER')
F4
G4
H4 IDENT
J4
K4
A5
B5 SEE B4
C5 SEE B5
D5
E5
F5
G5
H5 WRITE (1,2) See section 3.1.2.2 page 9
J5 READ (1,11)IOPT
K5

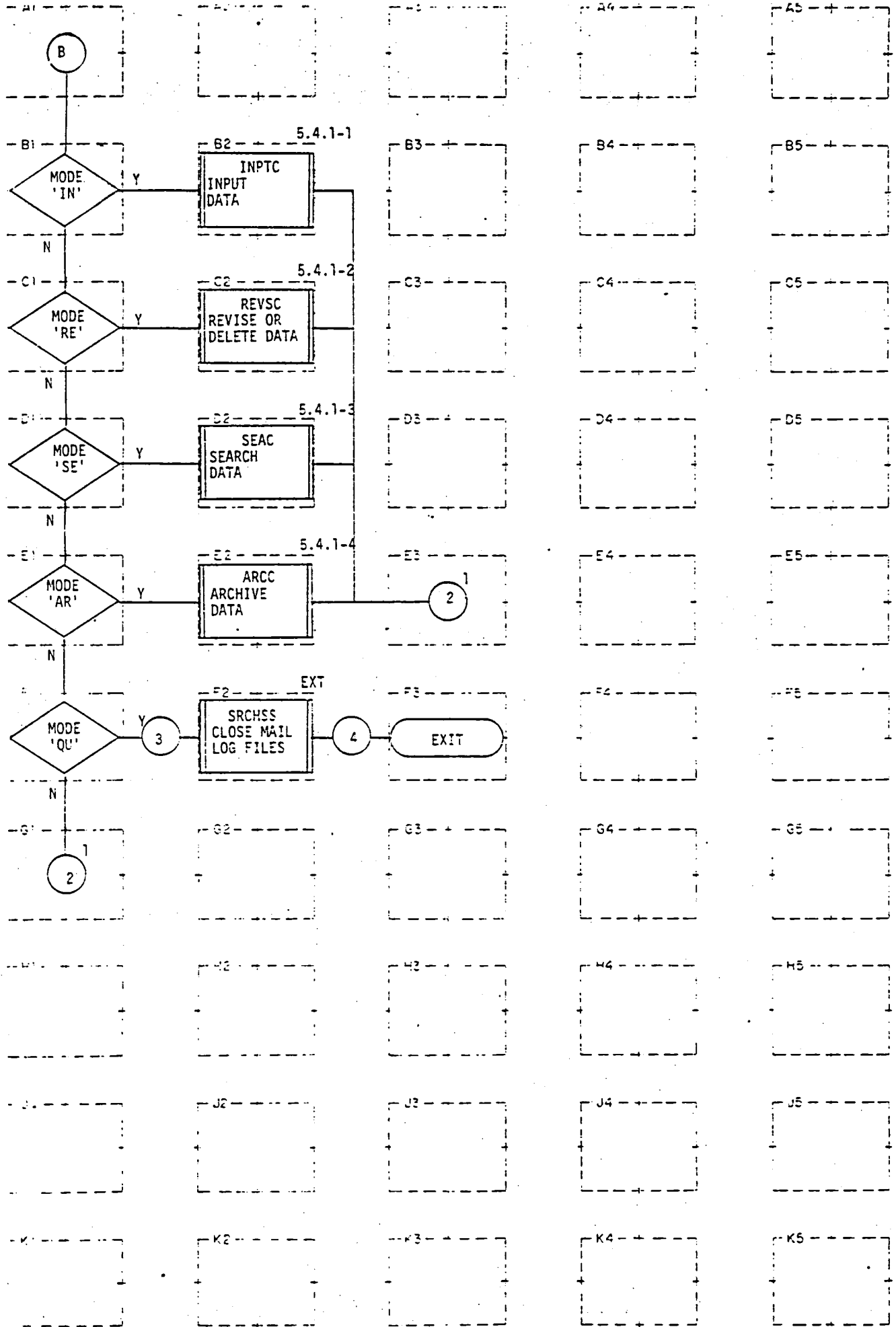


Figure 5.3-1

A1
B1 (IOPT.EQ.'IN')
C1 (IOPT.EQ.'RE')
D1 (IOPT.EQ.'SE')
E1 (IOPT.EQ.'AR')
F1 (IOPT.EQ.'QU')
G1
H1
J1
K1
A2
B2 INPTC
C2 REVSC
D2 SEAC
E2 ARCC
F2 SRCH\$\$ (K\$CLOS, 'REVS', 6, 0, 0, 0); SRCH\$\$ (K\$CLOS, 'DATE', 6, 0, 0, 0)
G2
H2
J2
K2
A3
B3
C3
D3
E3


```
A1
B1  $INSERT COMMON: $INSERT SYSCOM KEYS.F; INTEGER*2
C1  CLEAR
D1  COMISS ('TTY',6,12,IC)
E1  IDENT
F1  BREAK$(.TRUE.)
G1  SRCH$$ (K$RDWR+K$NDAM,'DIR',6,2,IT,IC)
H1  SRCH$$ (K$RDWR+K$NDAM,'REVS',6,4,IT,IC)
J1  SRCH$$ (K$RDWR+K$NDAM,'TEMP',6,6,IT,IC)
K1
A2
B2  WRITE(1,3)  See section 3.1.2.2 page 9
C2  BREAK$(.FALSE.)
D2  READ(1,4)IDES
E2  REWIND8; REWIND 10
F2
G2
H2
J2  (IC.NE.0)
K2
A3
B3
C3
D3
E3
```

Figure 5.3-2

```

F3
G3
H3
J3 WRITE(1,1002) ('DIR FILE IS IN USE - PLEASE TRY LATER')
K3
A4
B4 (IDES.EQ.'IN') INPTDR
C4 (IDES.EQ.'SE') SEADR
D4 (IDES.EQ.'RE') REVSDR
E4 (IDES.EQ.'AR') ARCDR
F4 (IDES.EQ.'QU'); IPAS(1)=' '; IPAS(2)=' '; IPAS(3)=' '
G4 SRCH$$ (K$CLOS,'DIR',6,0,0,0)
H4 SRCH$$ (K$CLOS,'REVS',6,0,0,0); SRCH$$ (K$CLOS,'TEMP',6,0,0,0)
J4 ATCH$$ ('F_MAIL',6,K$ALLD,IPAS,K$IMFD+K$SETH,IC)
K4
A5
B5
C5
D5
E5 CLEAR
F5
G5
H5
J5 RESU$$ ('BFILE',5)
K5

```


A1
B1 \$INSERT COMMON; \$INSERT SYSCOM > KEYS.F; INTEGER*2
C1 CLEAR
D1 COMISS ('TTY', 6,12,IC)
E1 IDENT
F1 BREAK\$ (.TRUE.)
G1 SRCH\$\$ (K\$RDWR+K\$NDAM, 'DRAW', 6,2,1,IC)
H1 (IC.NE.0)
J1
K1
A2
B2 (IC.NE.0)
C2
D2
E2
F2
G2
H2 SRCH\$\$ (K\$RDWR+K\$NDAM, 'EO', 6,14,1,IC)
J2 (IC.NE.0)
K2
A3
B3 WRITE(1,3) See section 3.1.2.2 page 9
C3 BREAK\$ (.FALSE.)
D3 READ(1,4)IDES
E3 REWIND 6

Figure 5.3-3

F3 REWIND 12
G3 REWIND 18
H3
J3 SRCH\$\$ (K\$RDWR+K\$NDAM, 'SHEET', 6, 7, 1, IC)
K3
A4
B4 WRITE(1, 1002) ('DRAW FILE IS IN USE - PLEASE TRY LATER')
C4 SRCH\$\$ (K\$CLOS, 'DRAW', 6, 0, 0, 0)
D4 SRCH\$\$ (K\$CLOS, 'EO', 6, 0, 0, 0)
E4 SRCH\$\$ (K\$CLOS, 'SHEET', 6, 0, 0, 0)
F4 IPAS(1)=' '; IPAS(2)=' '; IPAS(3)=' '
G4 ATCH\$\$ ('F_MAIL', 6, K\$ALLD, IPAS, K\$IMFD+K\$SETH, IC)
H4 RESU\$\$ ('BFILE', 5)
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

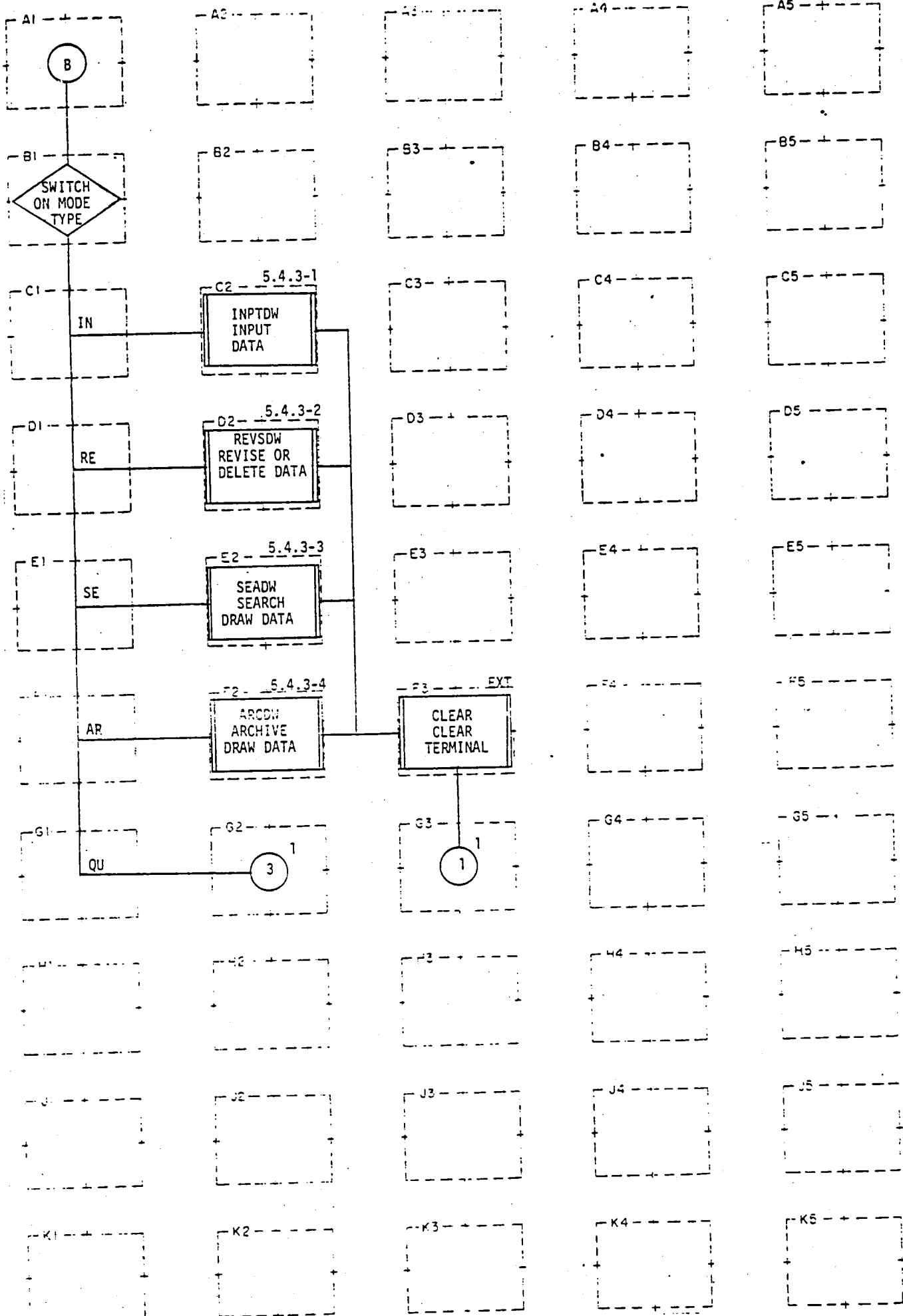


Figure 5.3-3

A1
B1 see C1 thru G1
C1 (IDES.EQ.'IN')
D1 (IDES.EQ.'SE')
E1 (IDES.EQ.'RE!')
F1 (IDES.EQ.'AR')
G1 (IDES.EQ.'QU')
H1
J1
K1
A2
B2
C2 INPTDW
D2 REVSDW
E2 SEADW
F2 ARCDW
G2
H2
J2
K2
A3
B3
C3
D3
E3

Figure 5.3-3

F3 CLEAR

G3

H3

J3

K3

A4

B4

C4

D4

E4

F4

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

5.4 FLOWCHART FIGURES FOR SUBROUTINES

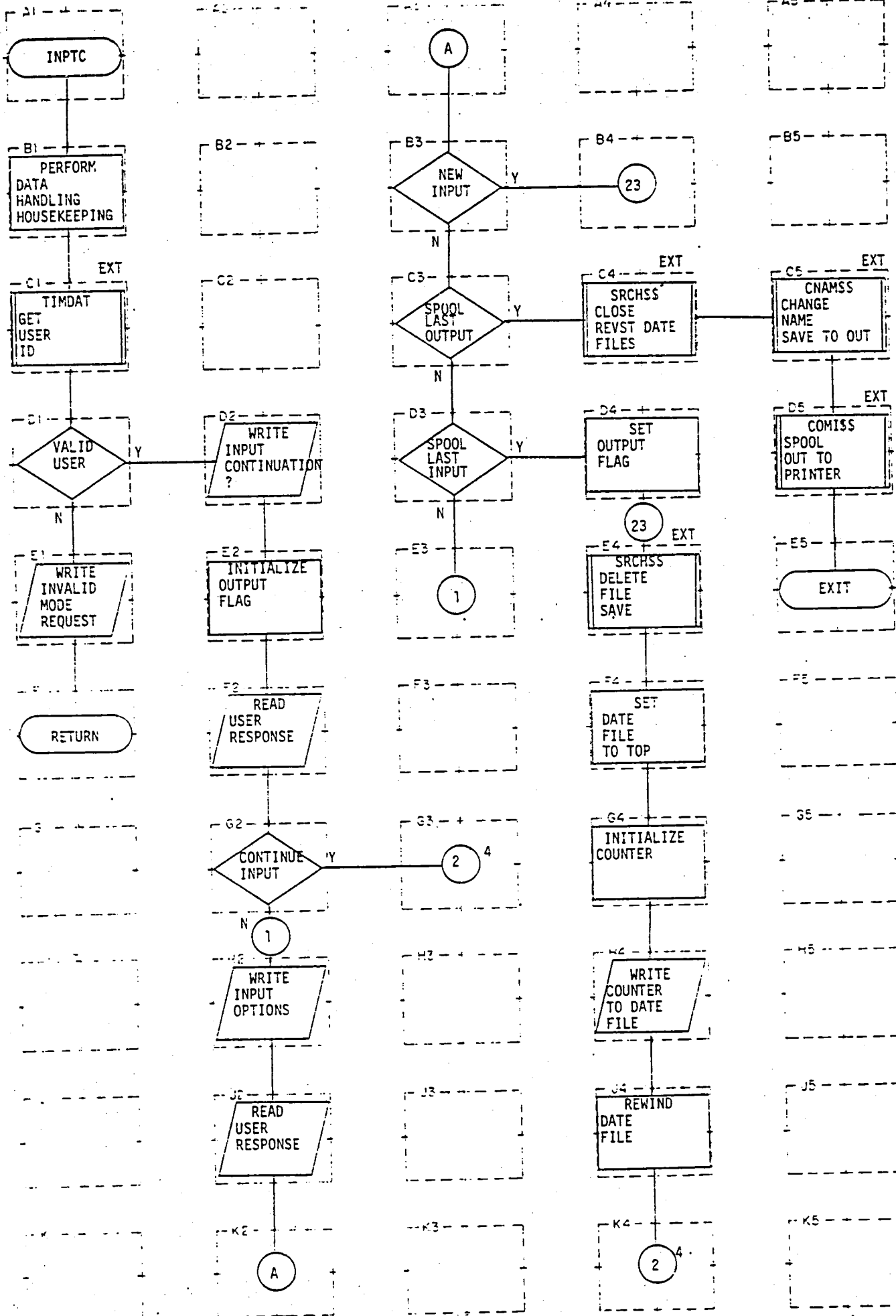


Figure 5.4.1-1

```

A1
B1  $INSERT COMMON; $INSERT SYSCOM>KEYS.F; INTEGER*4; *2
C1  TIMDAT(A,15)
D1  (A(13).EQ.'JW'.OR.A(13).EQ.'NH'.OR.A(13).EQ.'RJ'.OR.A(13).EQ.
    'DK'.OR.A(13).EQ.'GM')
E1  WRITE (1,4) ('SORRY, YOU ARE NOT VALIDATED TO USE THIS MODE.')
F1
G1
H1
J1
K1
A2
B2
C2
D2  WRITE (1,11) ('IS THIS A CONTINUATION OF INPUT (YES OR NO)')
E2  JOUT = 0
F2  READ (1,10) IOPT
G2  (IOPT.EQ.'YE'); (IOPT.NE.'NO')
H2  WRITE (1,14) SEE SECTION 4.1.1 page 12
J2  READ (1,10) IOPT
K2
A3
B3  (IOPT.EQ.'NE')
C3  (IOPT.EQ.'LA')
D3  (IOPT.EQ.'DA')
E3

```

Figure 5.4.1-1

F3
G3
H3
J3
K3
A4
B4
C4 SRCH\$(K\$CLOS,'REVS',6,0,0,0); SRCH\$(K\$CLOS,'DATE',6,0,0,0)
D4 JOUT = 1
E4 SRCH\$(K\$DELE,'SAVE',6,0,0,0)
F4 REWIND 10
G4 COUNTR = 0
H4 WRITE (10,16) COUNTR
J4 REWIND 10
K4
A5
B5
C5
D5 COMISS('SOUT',4,12,IC)
E5
F5
G5
H5
J5
K5

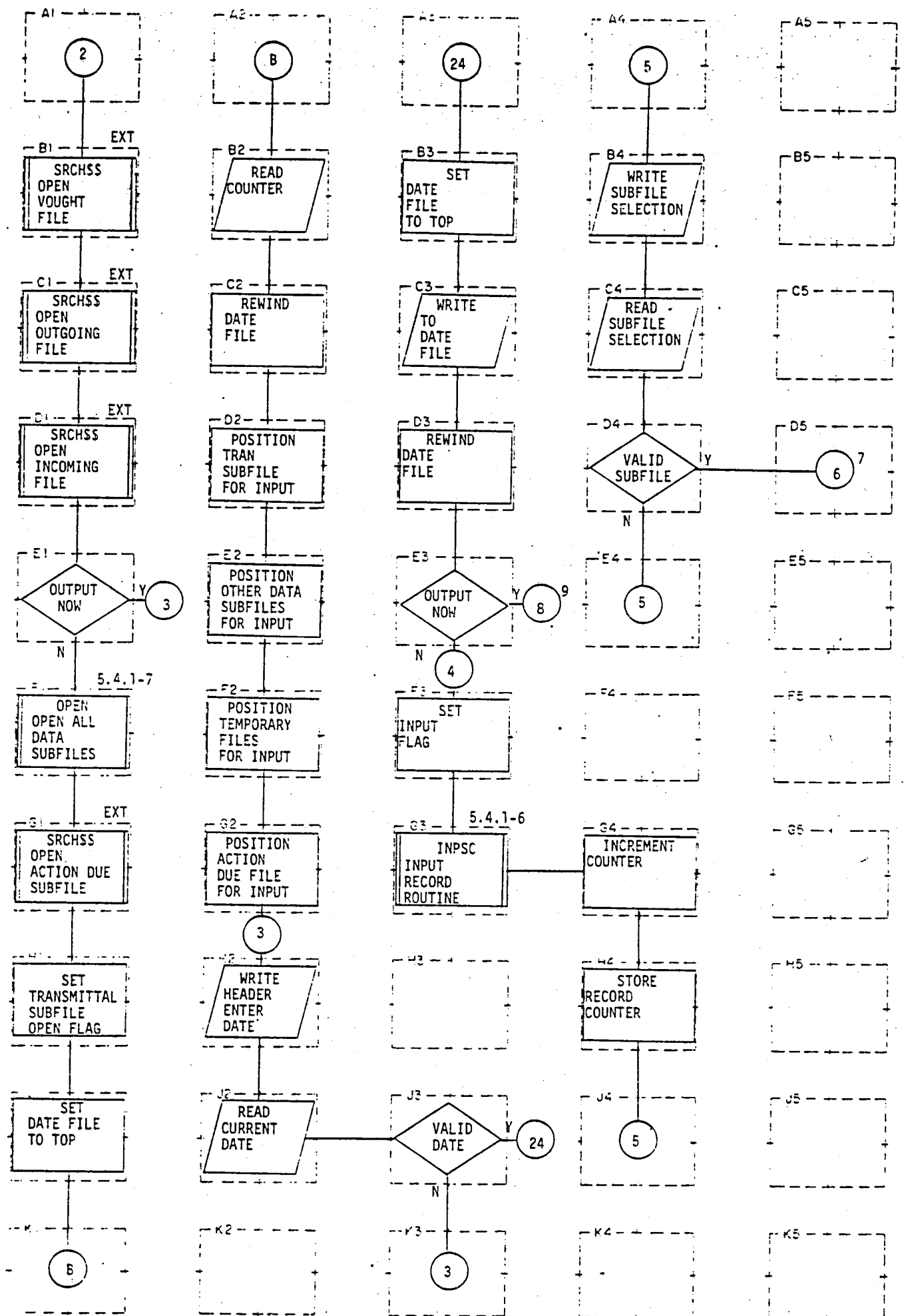


Figure 5.4.1-1

```

A1
B1  SRCH$$ (K$RDWR+K$NDAM, 'VC', 3, 14, 1, IC)
C1  SRCH$$ (K$RDWR+K$NDAM, 'OM', 3, 13, 1, IC)
D1  SRCH$$ (K$RDWR+K$NDAM, 'IM', 3, 12, 1, IC)
E1  (JOUT.EQ.1)
F1  OPEN
G1  SRCH$$ (K$RDWR+K$NDAM, 'ACTD', 6, 5, 1, IC)
H1  ITRSP = 1
J1  REWIND 10
K1
A2
B2  READ (10,16) COUNTR
C2  REWIND 10
D2  READ (6, END = 2000)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,
    CONT,ADD,TWX,FSC,NRE,DDT
E2  DO 2010 IN = 11,15; READ (IN,END = 2010)MS,ATHR,DD,TO,DLN,SUB,PTIT,
    ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,FSC,NRE
F2  DO 2005 IN = 16,18; READ (IN,END = 2005)MS,ATHR,DD,TO,DLN,SUB,PTIT,
    ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,FSC,NRE
G2  READ (9,END = 2060)ATHR,DLN,PTIT,IDD,COUNT,ADD,FSC,NRE
H2  WRITE (1,20); WRITE (1,30) ('FIRST - PLEASE ENTER THE CURRENT INPUT DATE')
J2  READ (1,40,ERR = 1001) IM,ID,IY
K2
A3
B3  REWIND 10
C3  WRITE (10,17) IM,ID,IY,COUNTR
D3  REWIND 10
E3  (JOUT.EQ.1)

```

Figure 5.4.1-1

```
F3  R = 0
G3  INPSC
H3
J3  (IM.GT.12.OR.ID.GT.31); (IY.EQ.0.OR.IM.EQ.0.OR.ID.EQ.0)
K3
A4
B4  WRITE (1,1003)
C4  READ (1,1004,ERR = 1002) IFILE
D4  (IFILE.LE.0.OR.IFILE.GT.6)
E4
F4
G4  COUNTR = COUNTR + 1
H4  COUNT = COUNTR
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5
```

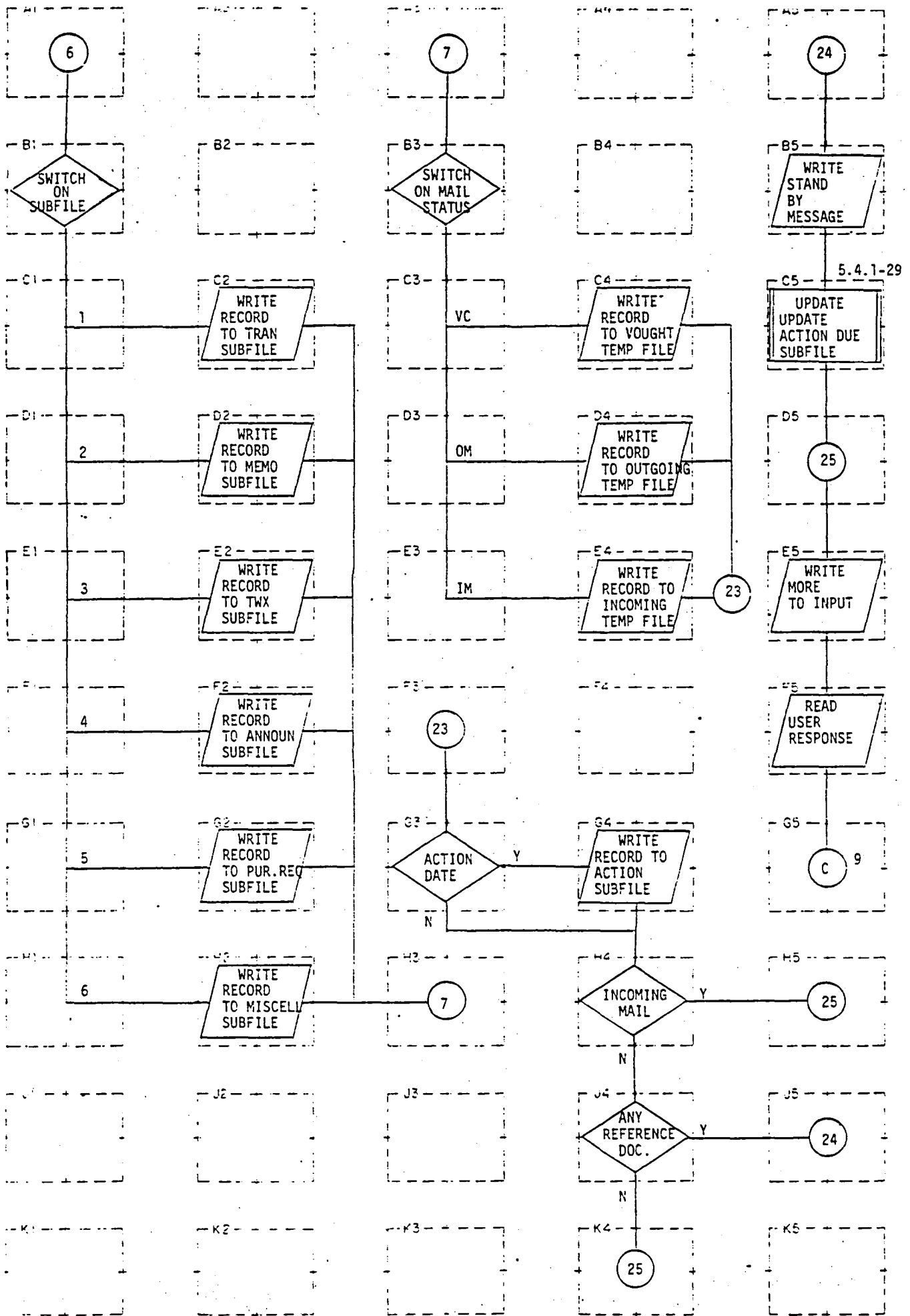



Figure 5.4.1-1

A1
 B1 (IFILE.EQ.1)
 C1 (IFILE.EQ.2)
 D1 (IFILE.EQ.3)
 E1 (IFILE.EQ.4)
 F1 (IFILE.EQ.5)
 G1 (IFILE.EQ.6)
 H1
 J1
 K1
 A2
 B2
 C2 WRITE (6) MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,
 FSC,NRE,DDT
 D2 WRITE (11) MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,
 FSC,NRE
 E2 WRITE (12) MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,
 FSC,NRE
 F2 WRITE (13) MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,
 FSC,NRE
 G2 WRITE (14) MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,
 FSC,NRE
 H2 WRITE (15) MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,
 FSC,NRE
 J2
 K2
 A3
 B3
 C3 (MS.EQ.'VC')
 D3 (MS.EQ.'OM')
 E3 (MS.EQ.'IM')

Figure 5.4.1-1

```

F3
G3  (ADD(1).NE.0)
H3
J3
K3
A4
B4
C4  WRITE (18) MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,
    FSC,NRE,DDT
D4  WRITE (17) MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,
    FSC,NRE,DDT
E4  WRITE (16) MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,
    FSC,NRE,DDT
F4
G4  WRITE (9) ATHR,DLN,PTIT,IDD,COUNT,ADD,FSC,NRE
H4  (MS.EQ.'IM')
J4  DO 3000I = 1,6; DO 3001J = 1,5; (TWX(I,J).NE.' ')
K4
A5
B5  WRITE (1,3020)
C5  UPDATE
D5
E5  WRITE (1,70)
F5  READ (1,10)IOPT
G5
H5
J5
K5

```

Figure 5.4.1-1

A1
B1 (IOPT.EQ.'YE'); (IOPT.NE.'NO')
C1 CLOSE
D1 SRCH\$\$ (K\$CLOS, 'ACTD', 6, 0, 0, 0)
E1 REWIND 10
F1 WRITE (10, 17) IM, ID, IY, COUNTR
G1 REWIND 10
H1 WRITE (1, 112)
J1 READ (1, 10) IOPT
K1
A2
B2 (IOPT.EQ.'NO')
C2 (IOPT.NE.'WA')
D2
E2
F2
G2
H2
J2
K2
A3
B3
C3 SRCH\$\$ (K\$CLOS, 'VC', 3, 0, 0, 0)
D3 SRCH\$\$ (K\$CLOS, 'OM', 3, 0, 0, 0)
E3 SRCH\$\$ (K\$CLOS, 'IM', 3, 0, 0, 0)

Figure 5.4.1-1

F3
G3
H3
J3
K3
A4
B4 IHARD = 0
C4 SRCH\$\$ (K\$RDWR+K\$NSAM, 'OUT', 6, 3, 0, 0)
D4 WRITE (1, 50)
E4 READ (1, 10) IOPT
F4 (IOPT.EQ. 'NO'); (IOPT.NE. 'YE')
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5 IHARD = 1
G5 REWIND 18; REWIND 17; REWIND 16
H5 IN = 15
J5
K5

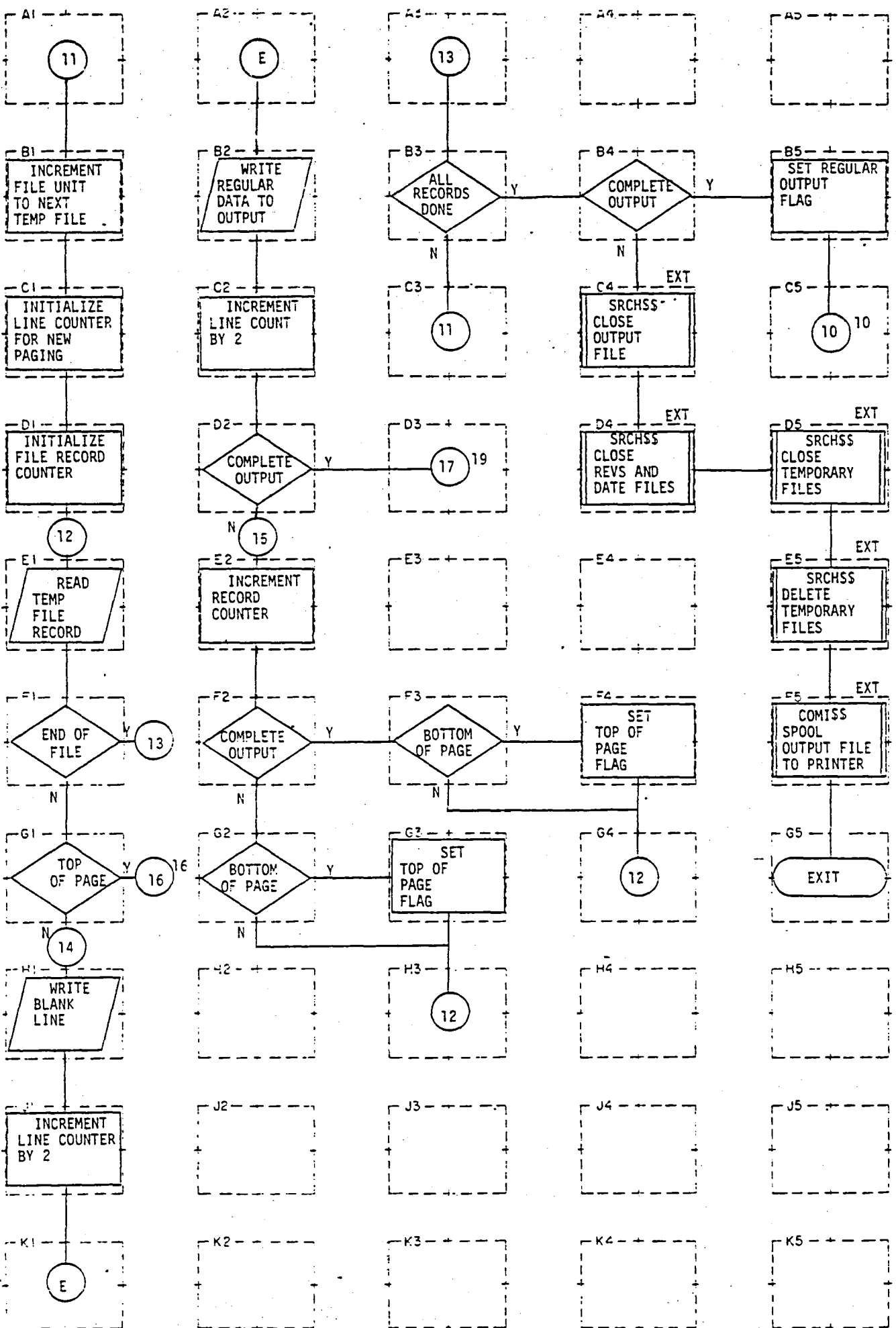


Figure 5.4.1-1

```

A1
B1  IN = IN + 1
C1  IPAGE = 0
D1  ICOUNT = 1
E1  READ (IN,END = 1090)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,
    CONT,ADD,TWX,FSC,NRE,DDT
F1  SEE E1
G1  (IPAGE.NE.0)
H1  WRITE (7,140)
J1  IPAGE = IPAGE + 2
K1
A2
B2  WRITE (7,150)ICOUNT,PTIT,DD,FSC,ATHR,TO,ROUT,DLN
C2  IPAGE = IPAGE + 2
D2  (IHARD.EQ.0)
E2  ICOUNT = ICOUNT + 1
F2  (IHARD.NE.0)
G2  (IPAGE.GE.47)
H2
J2
K2
A3
B3  (IN.NE.18)
C3
D3
E3

```

Figure 5.4.1-1

F3 (IPAGE.GE.40)
 G3 IPAGE = 0
 H3
 J3
 K3
 A4
 B4 (IHARD.EQ.0)
 C4 SRCH\$\$ (K\$CLOS, 'OUT', 6, 0, 0, 0)
 D4 SRCH\$\$ (K\$CLOS, 'DATE', 6, 0, 0, 0); SRCH\$\$ (K\$CLOS, 'REVS', 6, 0, 0, 0)
 E4
 F4 IPAGE = 0
 G4
 H4
 J4
 K4
 A5
 B5 IHARD = 0
 C5
 D5 SRCH\$\$ (K\$CLOS, 'VC', 3, 0, 0, 0); SRCH\$\$ (K\$CLOS, 'OM', 3, 0, 0, 0);
 SRCH\$\$ (K\$CLOS, 'IM', 3, 0, 0, 0)
 E5 SRCH\$\$ (K\$DELE, 'VC', 3, 0, 0, 0); SRCH\$\$ (K\$DELE, 'OM', 3, 0, 0, 0);
 SRCH\$\$ (K\$DELE, 'IM', 3, 0, 0, 0)
 F5 COMI\$\$ ('OUTS', 4, 12, IC)
 G5
 H5
 J5
 K5

Figure 5.4.1-1

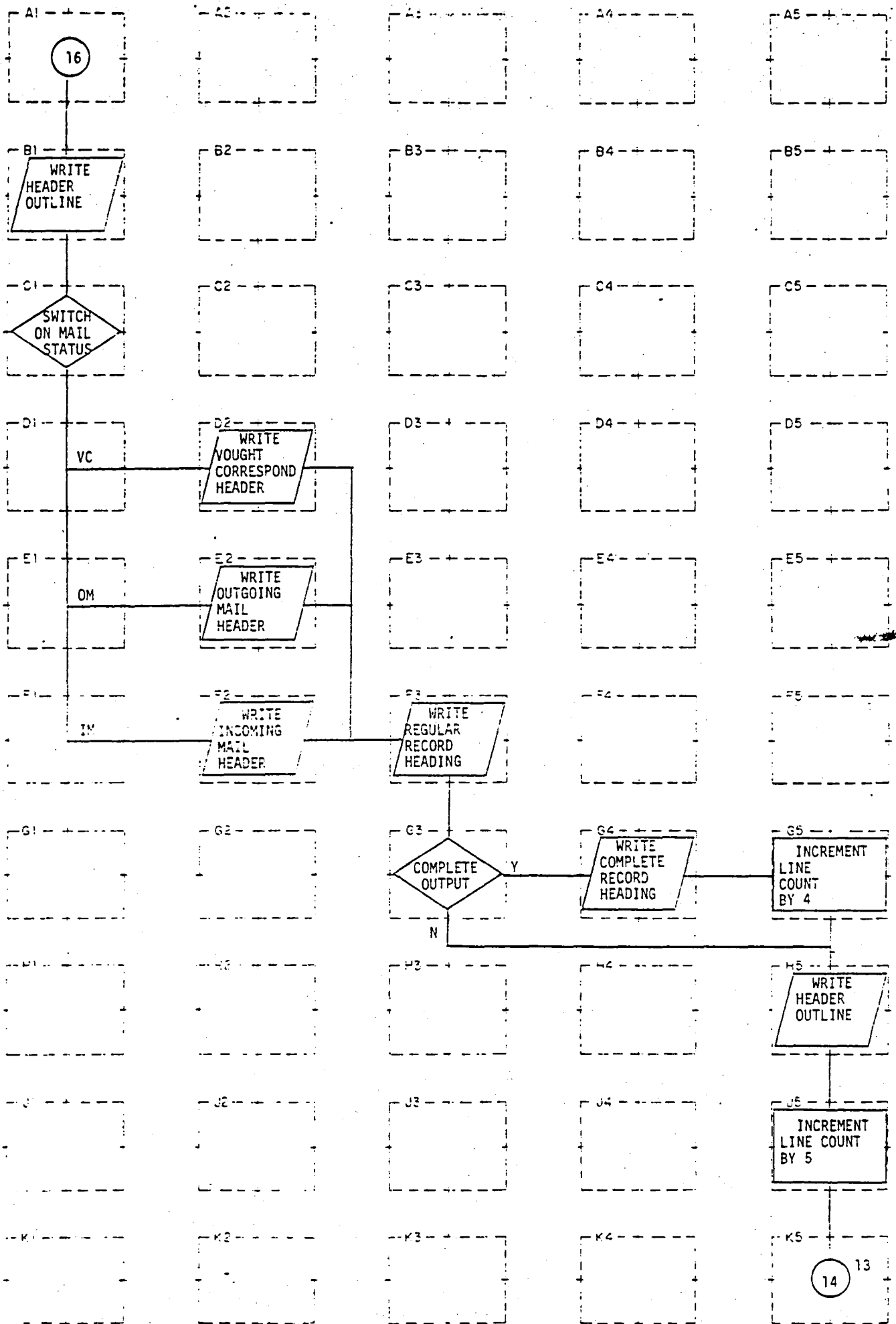


Figure 5.4.1-1

A1
B1 WRITE (7,80)
C1
D1 (IN.EQ.18)
E1 (IN.EQ.17)
F1 (IN.EQ.16)
G1
H1
J1
K1
A2
B2
C2
D2 WRITE (7,90) IM, ID, IY
E2 WRITE (7,100) IM, ID, IY
F2 WRITE (7,110) IM, ID, IY
G2
H2
J2
K2
A3
B3
C3
D3
E3

Figure 5.4.1-1

F3 WRITE (7,120)

G3 (IHARD.EQ.0)

H3

J3

K3

A4

B4

C4

D4

E4

F4

G4 WRITE (7,130)

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5 IPAGE = IPAGE + 4

H5 WRITE (7,85)

J5 IPAGE = IPAGE + 5

K5

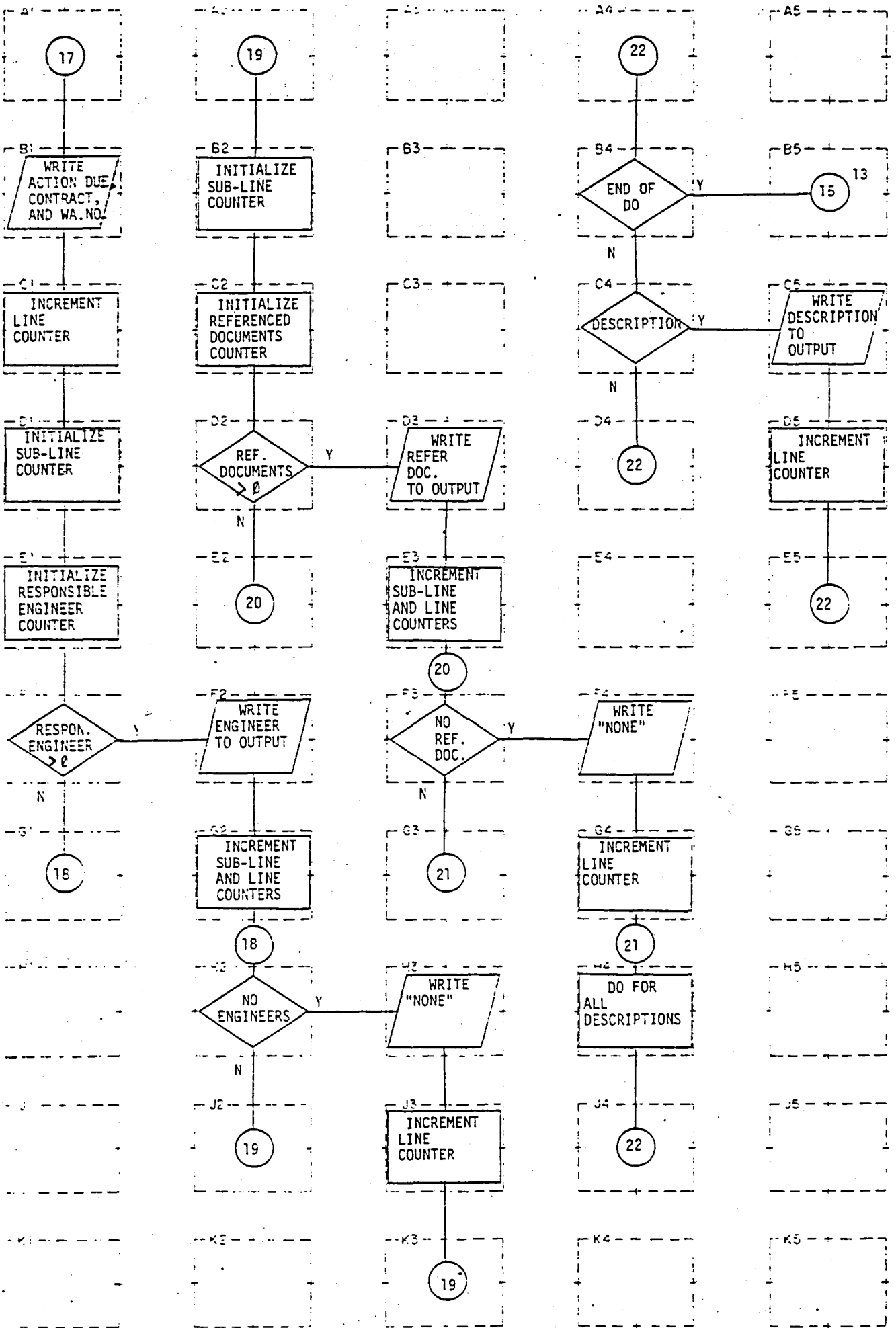


Figure 5.4.1-1

```

A1
B1 WRITE (7,160) ADD,CWA,CONT
C1 IPAGE = IPAGE + 1
D1 ILINE = 0
E1 KRE = 0
F1 DO 1301L = 1,3; (NRE(1,L).NE.' ') KRE = KRE + 1; (KRE.EQ.0)
G1
H1
J1
K1
A2
B2 ILINE = 0
C2 KTW = 0
D2 DO 1200M = 1,6; DO 1202N = 1,5; (TWX(M,N).NE.' ') KTW = KTW + 1; (KTW.EQ.0)
E2
F2 WRITE (7,170) (NRE(1,L), L = 1,3)
G2 ILINE = ILINE + 1; IPAGE = IPAGE + 1
H2 (ILINE.NE.0)
J2
K2
A3
B3
C3
D3 WRITE (7,1205) (TWX(M,N),N = 1,5)
E3 ILINE = ILINE + 1; IPAGE = IPAGE + 1

```

Figure 5.4.1-1

```
F3 (ILINE.NE.0)
G3
H3 WRITE (7,175)
J3 IPAGE = IPAGE + 1
K3
A4
B4 Performed by H4
C4 DO1401J=1,21; (DDT(I,J).NE.' ') KDD=KDD+1; (KDD.EQ.0)
D4
E4
F4 WRITE (7,1210)
G4 IPAGE = IPAGE + 1
H4 DO 1400 I = 1,30
J4
K4
A5
B5
C5 WRITE (7,180) (DDT(I,J),J = 1,21)
D5 IPAGE = IPAGE + 1
E5
F5
G5
H5
J5
K5
```



```

A1
B1
C1 $INSERT COMMON; $INSERT SYSCOM> KEYS.F; INTEGER*4; *2
D1 FINISH=0
E1 IA=0
F1 CLEAR
G1 TIMDAT(A,15)
H1 (A(13).EQ.'JW'.OR.A(13).EQ.'NH'.OR.A(13).EQ.'RJ'.OR.A(13).EQ.'DK')
J1 WRITE(1,4) ('SORRY, YOU ARE NOT VALIDATED TO USE THIS MODE')
K1
A2
B2
C2 (ITRSP.EQ.0)
D2
E2
F2
G2
H2 WRITE(1,1)
J2 READ(1,2,ERR=3) D,ICOUN
K2 WHERE
A3
B3
C3 READ(6,END=200)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,
CWA,CONT,ADD,TWX,FSC,NRE,DDT
D3 SEE B3
E3 (FINISH.EQ.1)
(ICOUN.NE.COUNT); DO110I=1,3; (IDD(I).NE.D(I))

```

F3 WRITE(8)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,
FSC,NRE,DDT
G3
H3
J3
K3
A4
B4
C4 END FILE 8
D4
E4 SHOWC
F4 WRITE(1,1700)
G4 READ(1,50)IOPT
H4 (IOPT.EQ.'NO'); (IOPT.NE.'YE')
J4
K4
A5
B5
C5 SRCH\$(K\$CLOS,'TRAN',6,0,0,0)
D5 SRCH\$(K\$DELE,'TRAN',6,0,0,0)
E5 CNAM\$('REVS',6,'TRAN',6,IC)
F5 SRCH\$(K\$RDWR+K\$NDAM,'REVS',6,4,1,IC)
G5
H5 WRITE(1,2100)
J5 READ(1,50)IOPT
K5

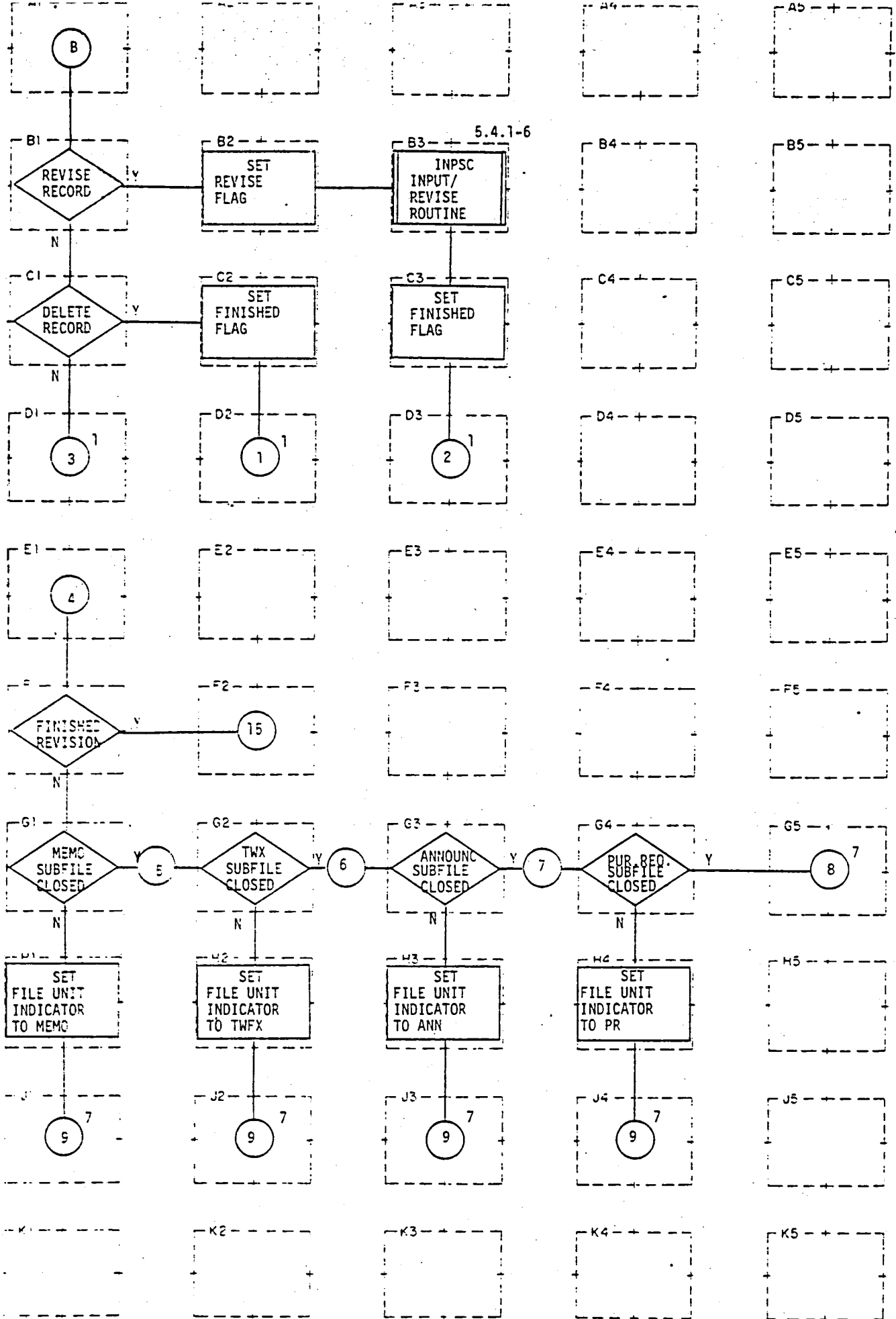


Figure 5.4.1-2

A1
B1 (IOPT.EQ.'RE')
C1 (IOPT.NE.'DE')
D1
E1
F1 (FINISH.EQ.1)
G1 (IMELE.EQ.0)
H1 IN=11
J1
K1
A2
B2 R=1
C2 FINISH=1
D2
E2
F2
G2 (ITWFX.EQ.0)
H2 IN=12
J2
K2
A3
B3 INPSC
C3 FINISH=1
D3
E3

Figure 5.4.1-2

F3
G3 (IANN.EQ.0)
H3 IN=13
J3
K3
A4
B4
C4
D4
E4
F4
G4 (IPR.EQ.0)
H4 IN=14
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

A1
B1 (IMIS.EQ.0)
C1 IN=15
D1 READ(IN,END=201)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,
CONT,ADD,TWX,FSC,NRE
E1 SEE D1
F1 (FINISH.EQ.1)
G1 (COUNT.NE.ICOUNT); DO1111I=1,3; (IDD(I).NE.D(I))
H1 WRITE(8)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,
TWX,FSC,NRE
J1
K1
A2
B2 (IA.EQ.0)
C2
D2
E2
F2
G2 (ITRSP.EQ.0)
H2 ITRSP=0
J2 IA=0
K2
A3
B3 ITRSP=1
C3 IA=0
D3 WRITE(1,1700)
E3 READ(1,50)IOPT

F3 (IOPT.EQ.'NO'); (IOPT.NE.'YE')
G3
H3
J3 SHOWC
K3
A4
B4
C4
D4
E4
F4 WRITE(1,2100)
G4 READ(1,50)IOPT
H4 (IOPT.EQ.'RE')
J4 (IOPT.NE.'DE')
K4
A5
B5 R=1
C5 INPSC
D5 FINISH=1
E5
F5
G5
H5
J5 FINISH=1
K5

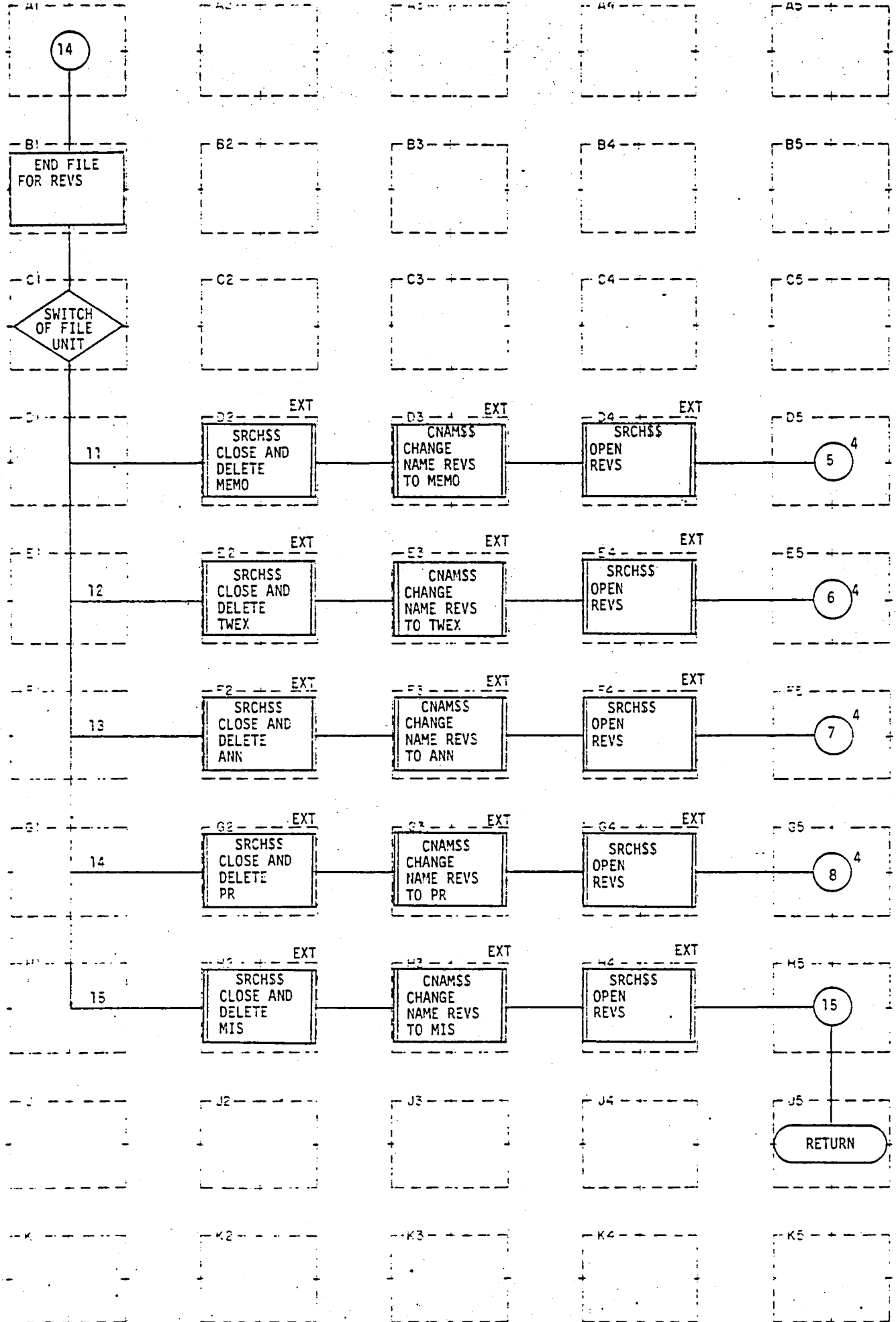


Figure 5.4.1-2

A1
B1 ENDFILE 8
C1
D1 (IN.EQ.11)
E1 (IN.EQ.12)
F1 (IN.EQ.13)
G1 (IN.EQ.14)
H1 (IN.EQ.15)
J1
K1
A2
B2
C2
D2 SRCH\$\$ (K\$CLOS, 'MEMO', 6, 0, 0, 0); SRCH\$\$ (K\$DELE, 'MEMO', 6, 0, 0, 0)
E2 SRCH\$\$ (K\$CLOS, 'TWFx', 6, 0, 0, 0); SRCH\$\$ (K\$DELE, 'TWFx', 6, 0, 0, 0)
F2 SRCH\$\$ (K\$CLOS, 'ANN', 6, 0, 0, 0); SRCH\$\$ (K\$DELE, 'ANN', 6, 0, 0, 0)
G2 SRCH\$\$ (K\$CLOS, 'PR', 6, 0, 0, 0); SRCH\$\$ (K\$DELE, 'PR', 6, 0, 0, 0)
H2 SRCH\$\$ (K\$CLOS, 'MIS', 6, 0, 0, 0); SRCH\$\$ (K\$DELE, 'MIS', 6, 0, 0, 0)
J2
K2
A3
B3
C3
D3 CNAM\$\$ ('REVS', 6, 'MEMO', 6, IC)
E3 CNAM\$\$ ('REVS', 6, 'TWFx', 6, IC)

F3 CNAM\$\$('REVS',6,'ANN',6,IC)
G3 CNAM\$\$('REVS',6,'PR',6,IC)
H3 CNAM\$\$('REVS',6,'MIS',6,IC)
J3
K3
A4
B4
C4
D4 SRCH\$\$('K\$RDWR+K\$NDAM','REVS',6,4,1,IC)
E4 SRCH\$\$('K\$RDWR+K\$NDAM','REVS',6,4,1,IC)
F4 SRCH\$\$('K\$RDWR+K\$NDAM','REVS',6,4,1,IC)
G4 SRCH\$\$('K\$RDWR+K\$NDAM','REVS',6,4,1,IC)
H4 SRCH\$\$('K\$RDWR+K\$NDAM','REVS',6,4,1,IC)
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

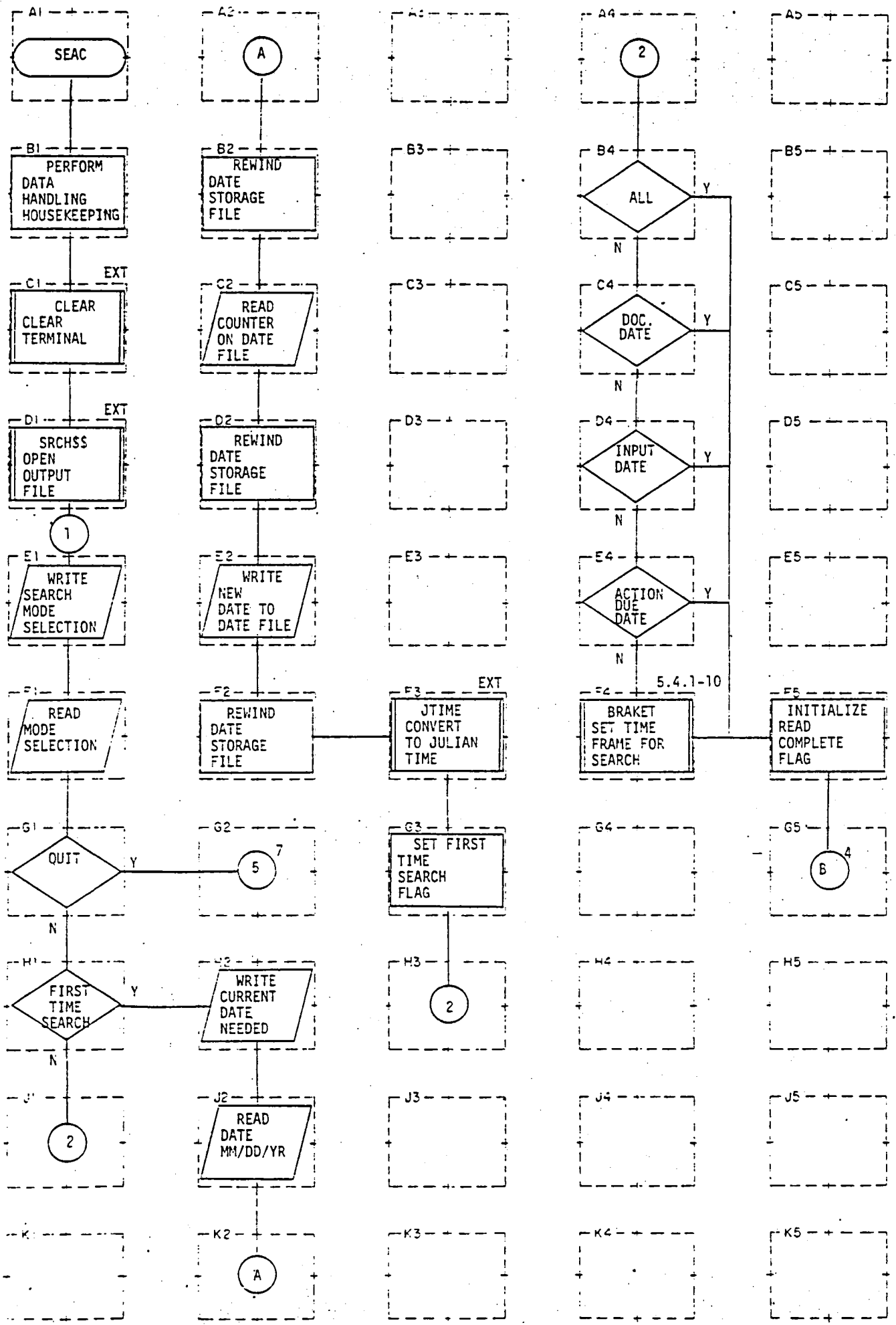


Figure 5.4.1-3

```
A1 $INSERT COMMON; $INSERT SYSCOM> KEYS.F; INTEGER*4; *2
B1 CLEAR
C1 SRCHS$(K$RDWR+K$NSAM,'OUT',6,3,0,0)
D1 WRITE (1,1)
E1 READ(1,3)IDES
F1 (IDES(1).EQ.'QU')
G1 (IRR.EQ.1)
H1
J1
K1
A2
B2 REWIND 10
C2 READ(10,2005) COUNTR
D2 REWIND 10
E2 WRITE (10,2003)IM,ID,IY,COUNTR
F2 REWIND 10
G2
H2 WRITE (1,2001)
J2 READ (1,2002,ERR=50) IM,ID,IY
K2
A3
B3
C3
D3
E3
```

Figure 5.4.1-3

F3 JTIME(IY,IM, ID,0,0,0,CD)
G3 IRR=1
H3
J3
K3
A4
B4 (IDES(1),NE. 'AL'.AND.IDES(1).NE. 'DO',AND.IDES(1).NE. 'ID'.AND.
C4 IDES(1).NE. 'AD')
D4 SEE B4-C4
E4 SEE B4-C4
F4 BRAKET
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5 IREAD=0
G5
H5
J5
K5

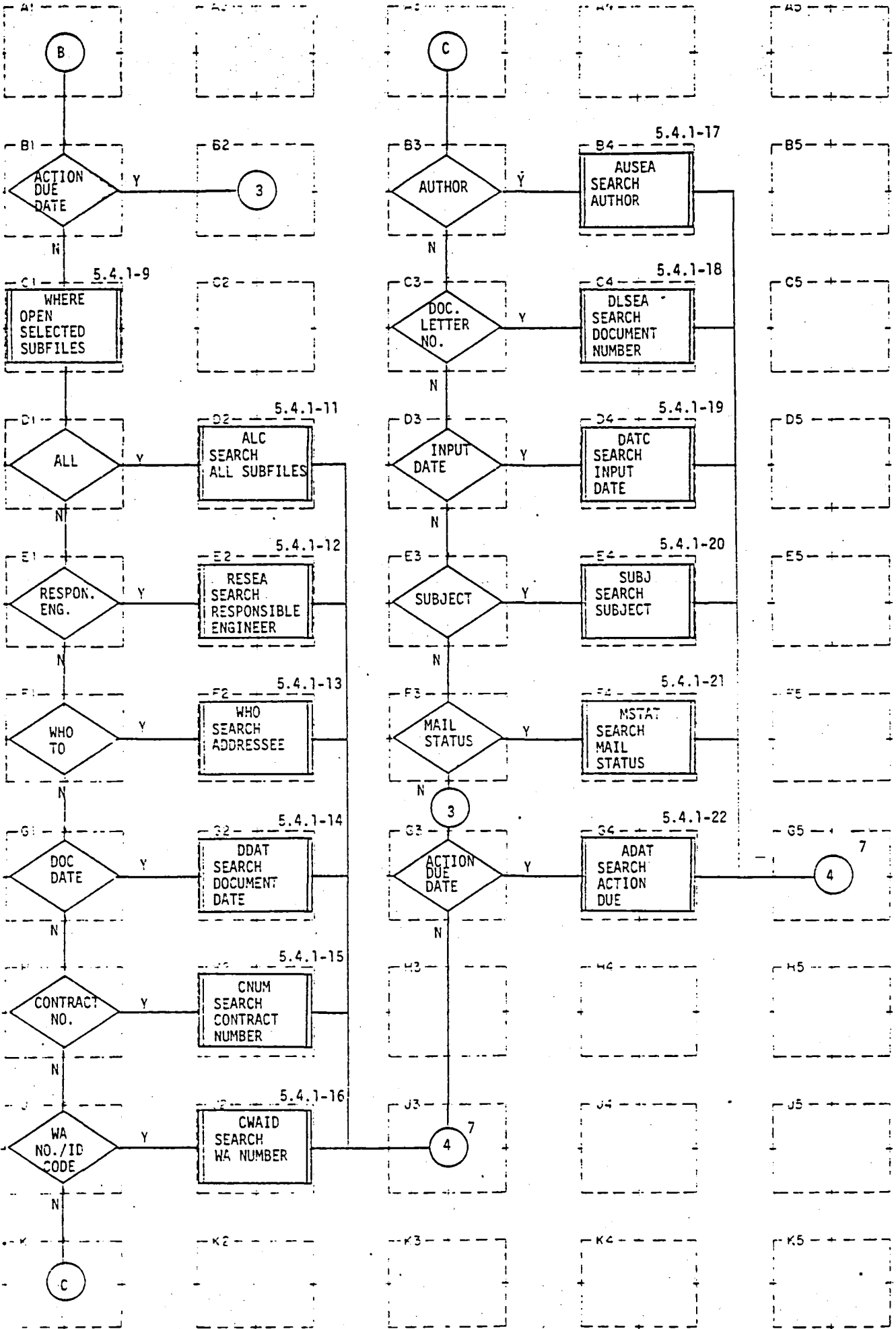


Figure 5.4.1-3

A1
B1 (IDES(1).EQ.'AD')
C1 WHERE
D1 (IDES(1).EQ.'AL')
E1 (IDES(1).EQ.'NR')
F1 (IDES(1).EQ.'TO')
G1 (IDES(1).EQ.'DO')
H1 (IDES(1).EQ.'CO')
J1 (IDES(1).EQ.'CW')
K1
A2
B2
C2
D2 ALC
E2 RESEA
F2 WHO
G2 DDAT
H2 CNUM
J2 CWAID
K2
A3
B3 (IDES(1).EQ.'AU')
C3 (IDES(1).EQ.'DL')
D3 (IDES(1).EQ.'ID')
E3 (IDES(1).EQ.'SU')

Figure 5.4.1-3

F3 (IDES(1).EQ.'MS')

G3 (IDES(1).EQ.'AD')

H3

J3

K3

A4

B4 AUSEA

C4 DLSEA

D4 DATC

E4 SUBJ

F4 MSTAT

G4 ADAT

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

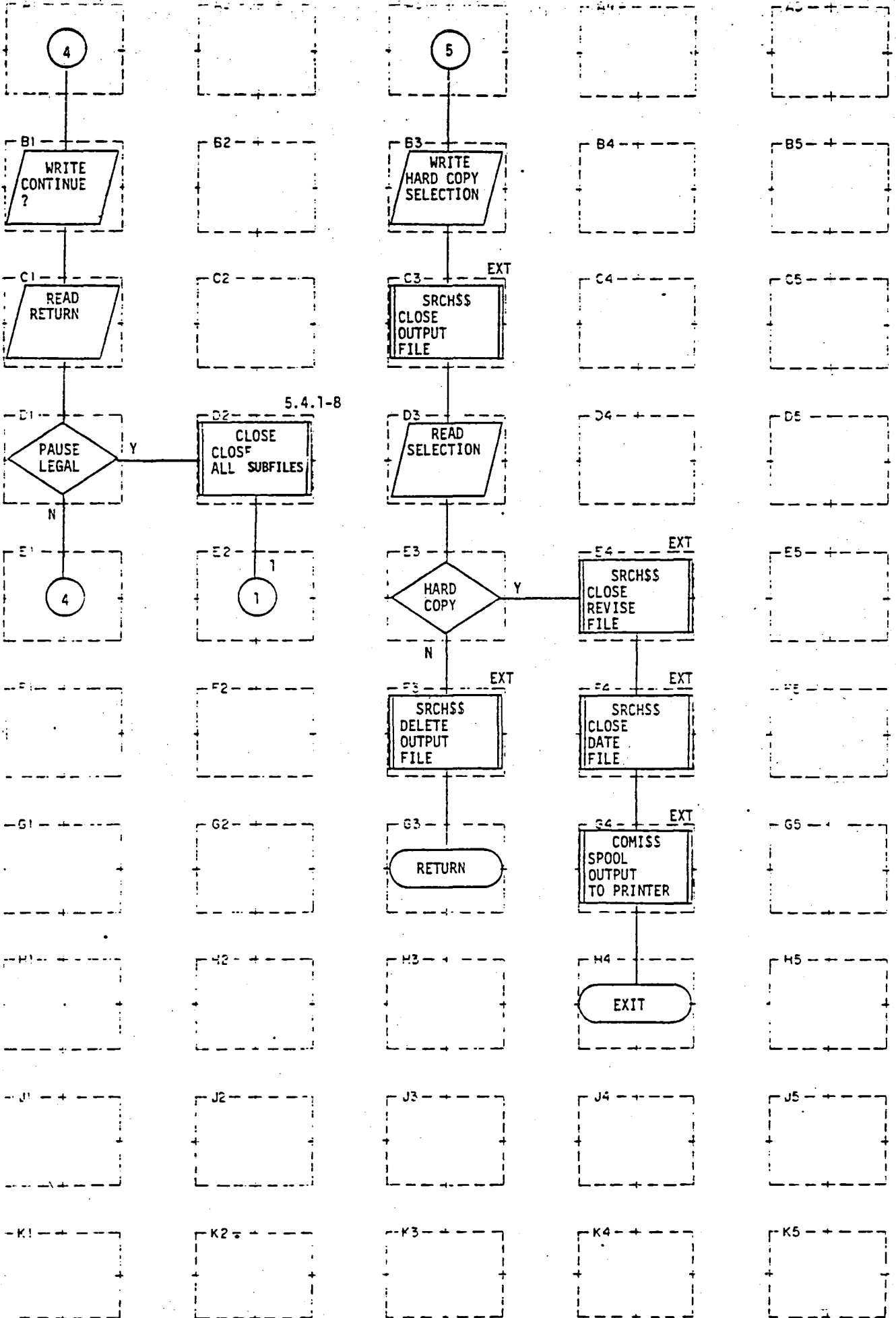


Figure 5.4.1-3

```
A1
B1 WRITE (1,101)
C1 READ (1,3) IDES
D1 (IDES(1).NE.' ')
E1
F1
G1
H1
J1
K1
A2
B2
C2
D2 CLOSE
E2
F2
G2
H2
J2
K2
A3
B3 WRITE (1,11)
C3 SRCH$$ (K$CLOS,'OUT',6,0,0,0)
D3 READ(1,5) IOPT
E3 (IOPT.EQ.'YE'); (IOPT.NE.'NO')
```

Figure 5.4.1-3

F3 SRCH\$\$ (K\$DELE, 'OUT', 6, 0, 0, 0)

G3

H3

J3

K3

A4

B4

C4

D4

E4 SRCH\$\$ (K\$CLOS, 'REVS', 6, 0, 0, 0)

F4 SRCH\$\$ (K\$CLOS, 'DATE', 6, 0, 0, 0)

G4 COMI\$\$ ('SOUT', 4, 12, IC)

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5


```

A1
B1 $INSERT COMMON; $INSERT SYSCOM> KEYS.F; INTEGER*4; *2
C1 TIMDAT(A,15)
D1 (A(13).NE.'SY')
E1 WRITE (1,701) ('SORRY YOU ARE NOT VALIDATED TO USE THIS ROUTINE.')
F1
G1
H1
J1
K1
A2
B2
C2
D2 WRITE (1,1)
E2 READ(1,2,ERR=3)D,ICOUN
F2 WRITE (1,11)
G2 READ (1,12)IANS
H2 (IANS.GT.6.OR.IANS.LT.1)
J2
K2
A3
B3 READ(9,END=20)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,
ADD,TWX,FSC,NRE,DDT
C3 REWIND 6
D3 READ(6,END=200)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,
ADD,TWX,FSC,NRE,DDT
E3 SEE D3

```

```

F3 (COUNT.NE.ICOUN); DO 110I=1,3; (IDD(I).NE.D(I))
G3 WRITE(8)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,FSC,
NRE,DDT
H3 (IANS.GE.2)
J3
K3
A4
B4
C4
D4
E4 END FILE 8; END FILE 9
F4 WRITE(9)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,TWX,
FSC,NRE,DDT
G4
H4 SRCH$$ (K$RDWR+K$NDAM,'TRAN',6,2,1,IC)
J4 SRCH$$ (K$RDWR+K$NDAM,'INACTL',6,5,1,IC)
K4
A5
B5
C5
D5
E5 SRCH$$ (K$CLOS,'REVS',6,0,0,0)
F5 SRCH$$ (K$CLOS,'INACTL',6,0,0,0)
G5 SRCH$$ (K$CLOS,'TRAN',6,0,0,0)
H5 SRCH$$ (K$DELE,'TRAN',6,0,0,0)
J5 CNAM$$ ('REVS',6,'TRAN',6,IC)
K5

```


A1
 B1
 C1 (IANS.EQ.2)
 D1 (IANS.EQ.3)
 E1 (IANS.EQ.4)
 F1 (IANS.EQ.5)
 G1 (IANS.EQ.6)
 H1
 J1
 K1
 A2
 B2
 C2 SRCH\$(K\$RDWR+K\$NDAM,'MEMO',6,7,1,IC)
 D2 SRCH\$(K\$RDWR+K\$NDAM,'TWFY',6,8,1,IC)
 E2 SRCH\$(K\$RDWR+K\$NDAM,'ANN',6,9,1,IC)
 F2 SRCH\$(K\$RDWR+K\$NDAM,'PR',6,10,1,IC)
 G2 SRCH\$(K\$RDWR+K\$NDAM,'MIS',6,11,1,IC)
 H2
 J2
 K2
 A3
 B3 REWIND IN
 C3 READ(IN,END=450)MS,ATHR,DD,TO,DLN,SUB.PTIT,ROUT,IDD,COUNT,CWA,CONT,
 ADD,TWX,FSC,NRE
 D3 SEE C3
 E3 (COUNT.NE.ICOUN); D0390I=1,3; (IDD(I).NE.D(I))

F3 WRITE(8)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,
TWX,FSC,NRE

G3 SRCH\$(K\$RDWR+K\$NDAM,'INACTS',6,5,1,IC)

H3 READ(9,END=320)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,
CONT,ADD,TWX,ESC,NRE

J3 IN=IANS+9

K3

A4

B4

C4

D4 END FILE 8; END FILE 9

E4 WRITE(9)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,ADD,
TWX,FSC,NRE

F4

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

A1
B1 SRCH\$\$ (K\$CLOS, 'REVS', 6, 0, 0, 0)
C1 SRCH\$\$ (K\$CLOS, 'INACTS', 6, 0, 0, 0)
D1
E1 (IN.NE.11)
F1 (IN.NE.12)
G1 (IN.NE.13)
H1 (IN.NE.14)
J1 (IN.NE.15)
K1 WRITE(1,480) ('AN ERROR IN FILE MANAGEMENT SYSTEM HAS OCCURRED!')
A2
B2
C2
D2
E2 SRCH\$\$ (K\$CLOS, 'MEMO', 6, 0, 0, 0)
F2 SRCH\$\$ (K\$CLOS, 'TWFY', 6, 0, 0, 0)
G2 SRCH\$\$ (K\$CLOS, 'ANN', 6, 0, 0, 0)
H2 SRCH\$\$ (K\$CLOS, 'PR', 6, 0, 0, 0)
J2 SRCH\$\$ (K\$CLOS, 'MIS', 6, 0, 0, 0)
K2
A3
B3
C3
D3
E3 SRCH\$\$ (K\$DELE, 'MEMO', 6, 0, 0, 0)

F3 SRCH\$\$ (K\$DELE, 'TWFx', 6, 0, 0, 0)
G3 SRCH\$\$ (K\$DELE, 'ANN', 6, 0, 0, 0)
H3 SRCH\$\$ (K\$DELE, 'PR', 6, 0, 0, 0)
J3 SRCH\$\$ (K\$DELE, 'MIS', 6, 0, 0, 0)
K3
A4
B4
C4
D4
E4 CNAM\$\$ ('REVS', 6, 'MEMO', 6, IC)
F4 CNAM\$\$ ('REVS', 6, 'TWFx', 6, IC)
G4 CNAM\$\$ ('REVS', 6, 'ANN', 6, IC)
H4 CNAM\$\$ ('REVS', 6, 'PR', 6, IC)
J4 CNAM\$\$ ('REVS', 6, 'MIS', 6, IC)
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5 SRCHSS (K\$RDWR+K\$NDAM, 'REVS', 6, 4, 1, IC)
K5

Figure 5.4.1-4

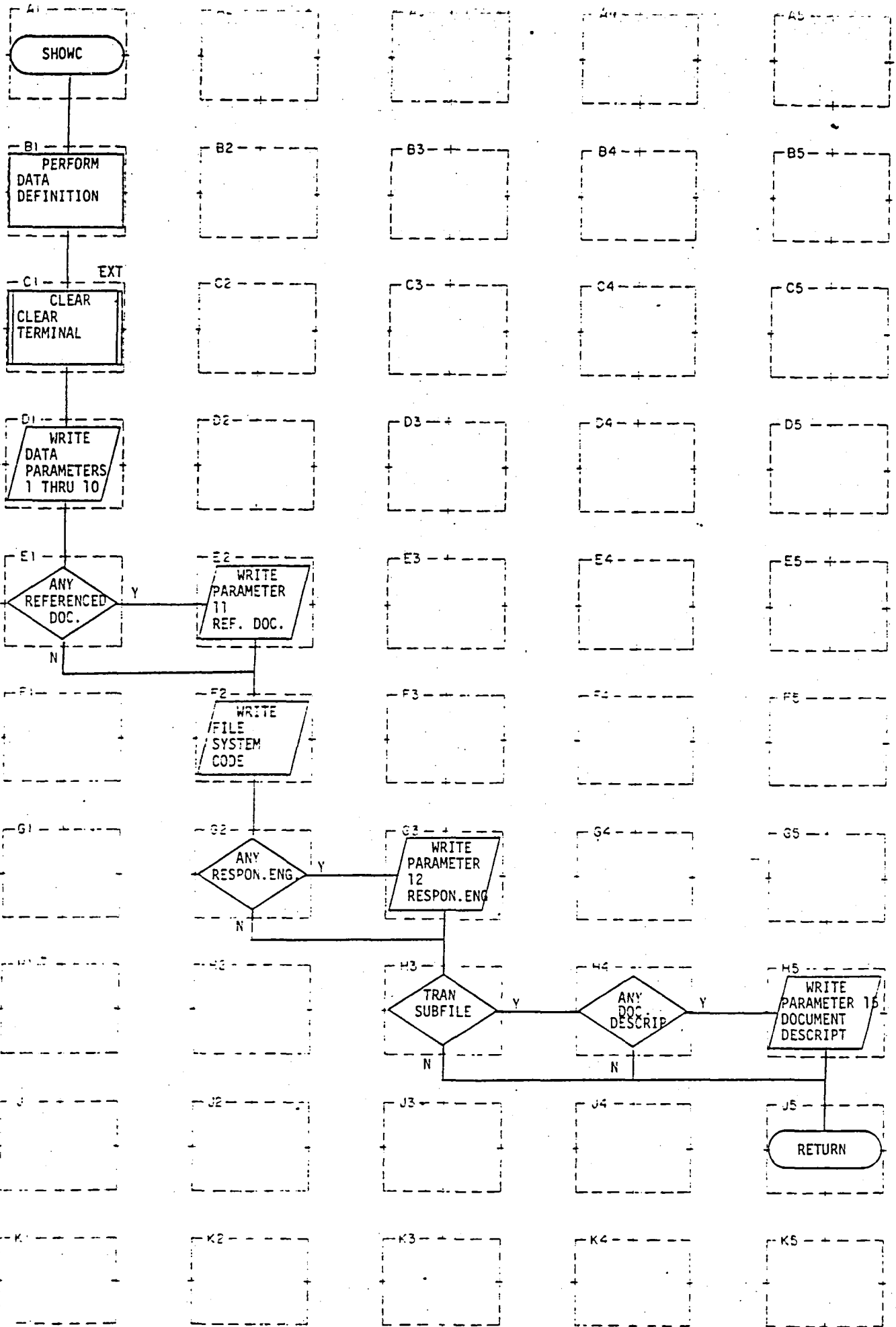


Figure 5.4.1-5

A1
B1 \$INSERT COMMON
C1 CLEAR
D1 WRITE(1,10)MS,ATHR,DD,TO,DLN,SUB,ROUT,IDD,CWA,CONT,ADD
E1 D0810M=1,6; KTW=0; D0820N=1,5; (TWX(M,N).NE.' ');
KTW=KTW+1; (KTW.EQ.0)
F1
G1
H1
J1
K1
A2
B2
C2
D2
E2 WRITE(1,800); WRITE(1,850) (TWX(M,N),N=1,5)
F2 WRITE(1,1000)FSC
G2 KRE=0; D01400L=1,3; (NRE(1,L).NE.' '); KRE=KRE+1; (KRE.EQ.0)
H2
J2
K2
A3
B3
C3
D3
E3

F3
G3 WRITE(1,1200); WRITE(1,270) (NRE(1,L),L=1,3)
H3 (ITRSP.EQ.0)
J3
K3
A4
B4
C4
D4
E4
F4
G4
H4 DO 1500I=1,30; KDD=0; DO1600J=1,21; (DDT(I,J).NE.' '); KDD=
KDD+1; (KDD.EQ.0)
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5 WRITE(1,1100); WRITE(1,180) (DDT(I,J),J=1,21)
J5
K5

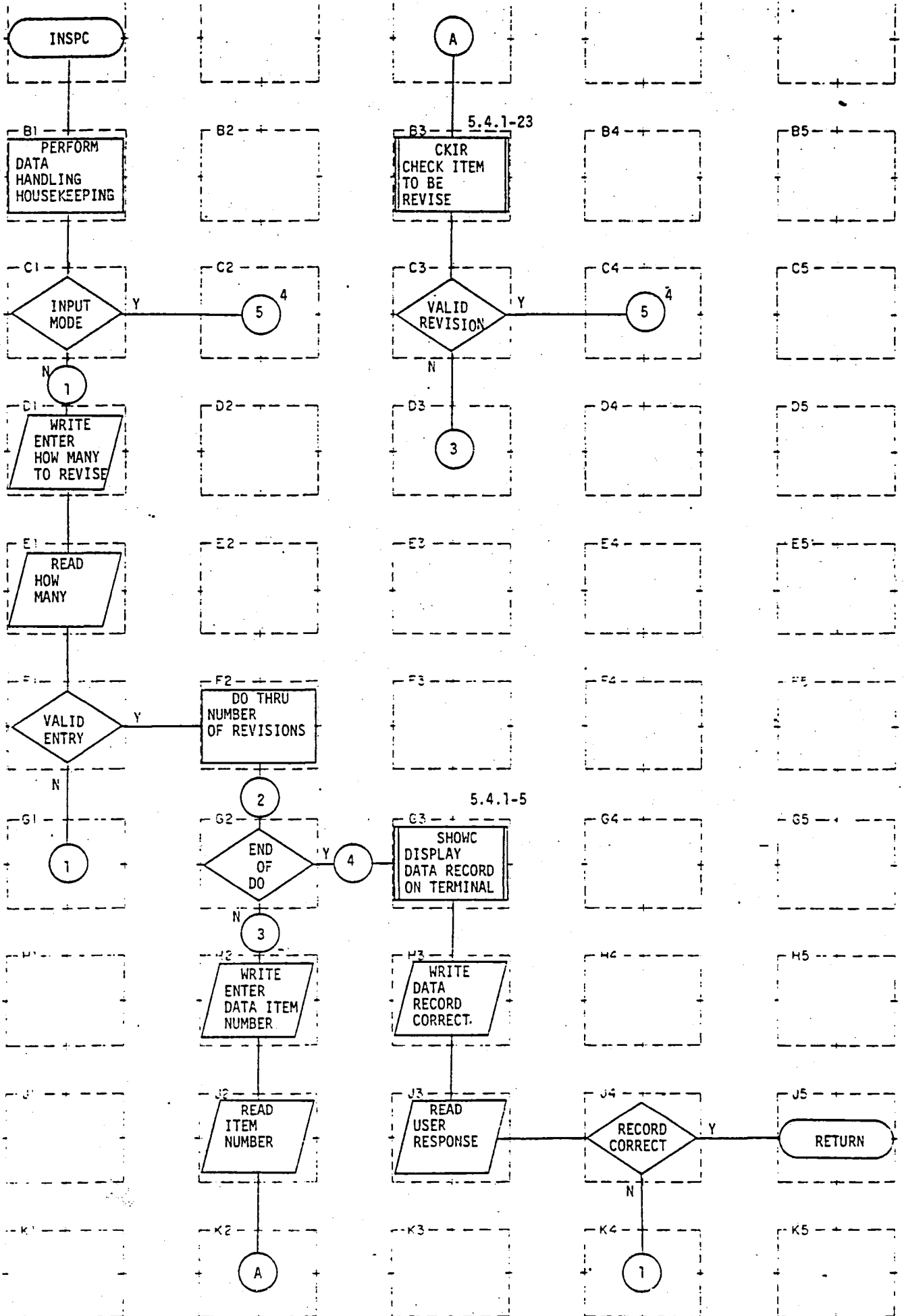


Figure 5.4.1-6

A1
B1 \$INSERT COMMON; INTEGER*4; *2
C1 (R.EQ.0)
D1 WRITE(1,1)
E1 READ(1,10,ERR=2)IKNT
F1 (IKNT.LT.0); (IKNT.GT.14)
G1
H1
J1
K1
A2
B2
C2
D2
E2
F2 DO 9999 LP = 1,IKNT,1
G2 performed by F2
H2 WRITE (1,3)
J2 READ(1,10,ERR=5)IR
K2
A3
B3 CKIR(IR,I)
C3 (I.GT.0)
D3
E3

Figure 5.4.1-6

F3

G3 SHOWC

H3 WRITE(1,2303)

J3 READ(1,2300)IOPT

K3

A4

B4

C4

D4

E4

F4

G4

H4

J4 (IOPT.EQ.'RE'); (IOPT.NE.'CO')

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

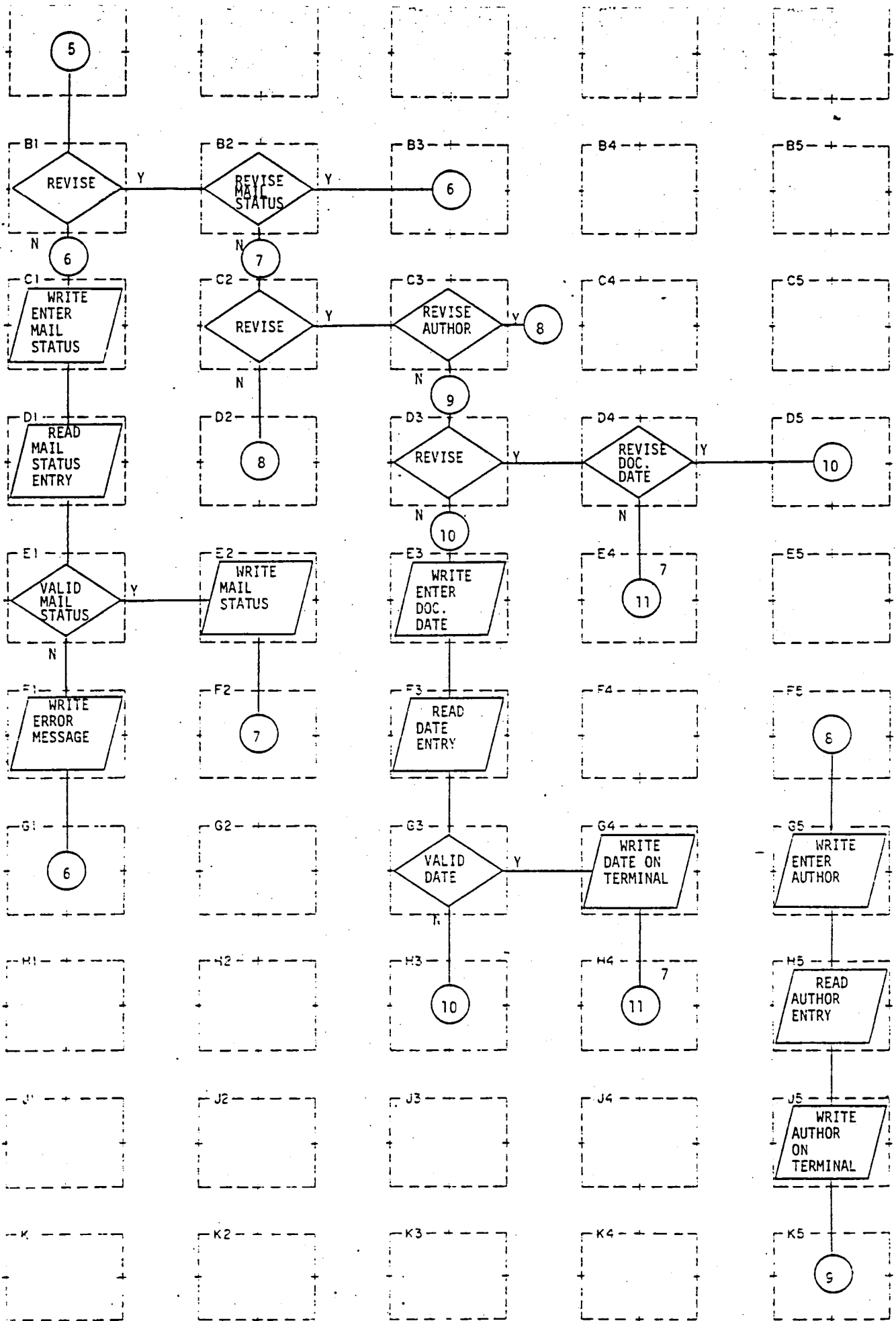


Figure 5.4.1-6

A1
B1 (R.EQ.1.AND.IR.NE.1)
C1 WRITE(1,101)
D1 READ(1,104,ERR=103)MS
E1 (MS.EQ.'VC'); (MS.EQ.'IM'); (MS.EQ.'OM')
F1 WRITE(1,106)MS
G1
H1
J1
K1
A2
B2 SEE B1
C2 (R.EQ.1.AND.IR.NE.2)
D2
E2 WRITE(1,104)MS
F2
G2
H2
J2
K2
A3
B3
C3 SEE C2
D3 (R.EQ.1.AND.IR.NE.3)
E3 WRITE(1,302)

F3 . READ (1,303,ERR=301)DD
G3 . (DD(1).GT.12); (DD(2).GT.31)
H3
J3
K3
A4
B4
C4
D4 . SEE D3
E4
F4
G4 . WRITE(1,303)DD
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5 . WRITE(1,202)
H5 . READ(1,203,ERR=201)ATHR
J5 . WRITE(1,203)ATHR
K5

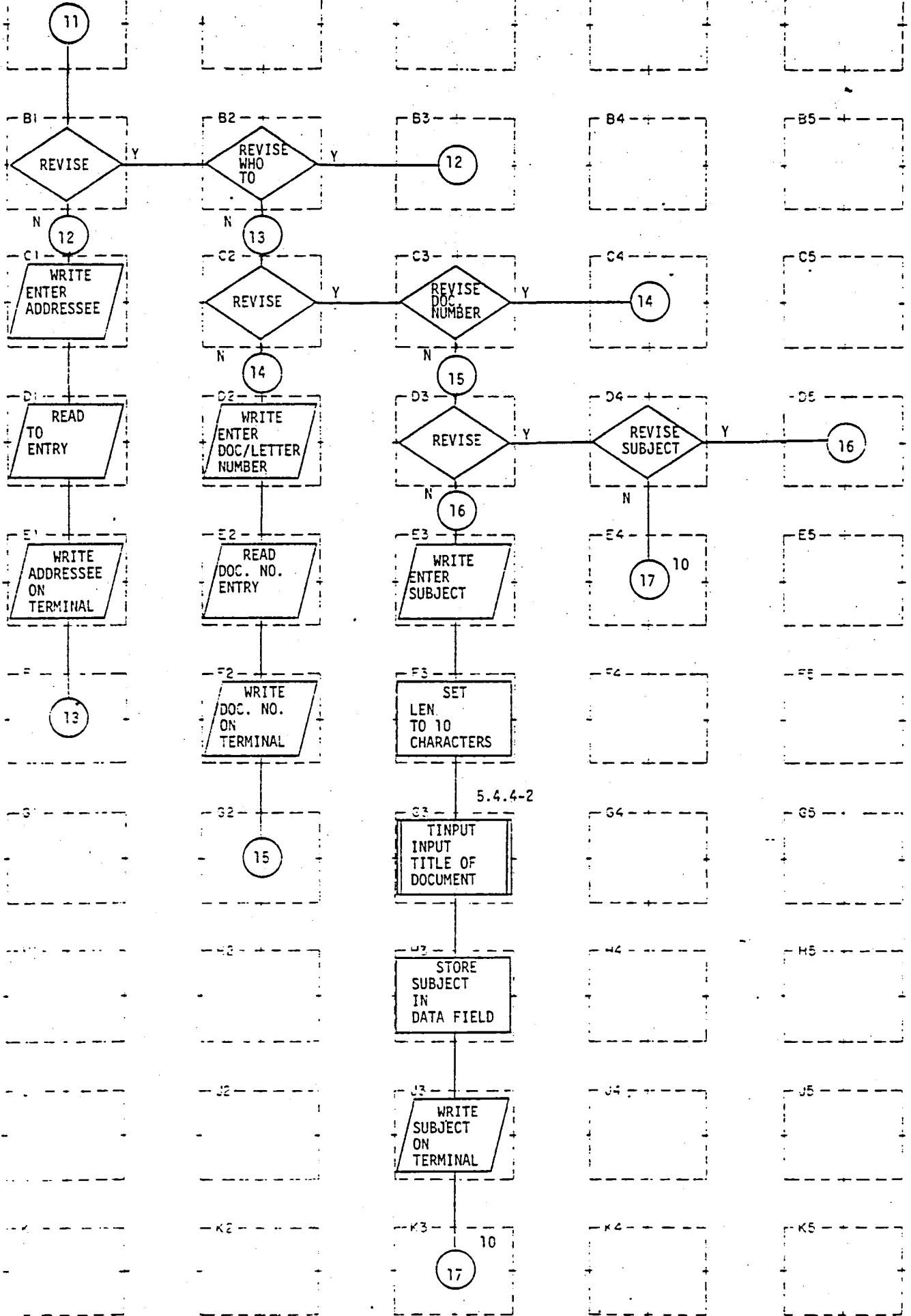


Figure 5.4.1-6

A1 (R.EQ.1.AND.IR.NE.4)
B1 WRITE(1,402)
C1 READ(1,403,ERR=401)TO
D1 WRITE(1,403)TO
E1
F1
G1
H1
J1
K1
A2
B2 SEE B1
C2 (R.EQ.1.AND.IR.NE.5)
D2 WRITE(1,502)
E2 READ(1,503,ERR=501)DLN
F2 WRITE(1,503)DLN
G2
H2
J2
K2
A3
B3
C3 SEE C2
D3 (R.EQ.1.AND.IR.NE.6)
E3 WRITE(1,602)

F3 LEN=10
G3 TINPUT(TIT,LEN)
H3 DO610IJ=1,21; SUB(IJ)=TIT(IJ)
J3 WRITE(1,603)SUB
K3
A4
B4
C4
D4 SEE D3
E4
F4
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

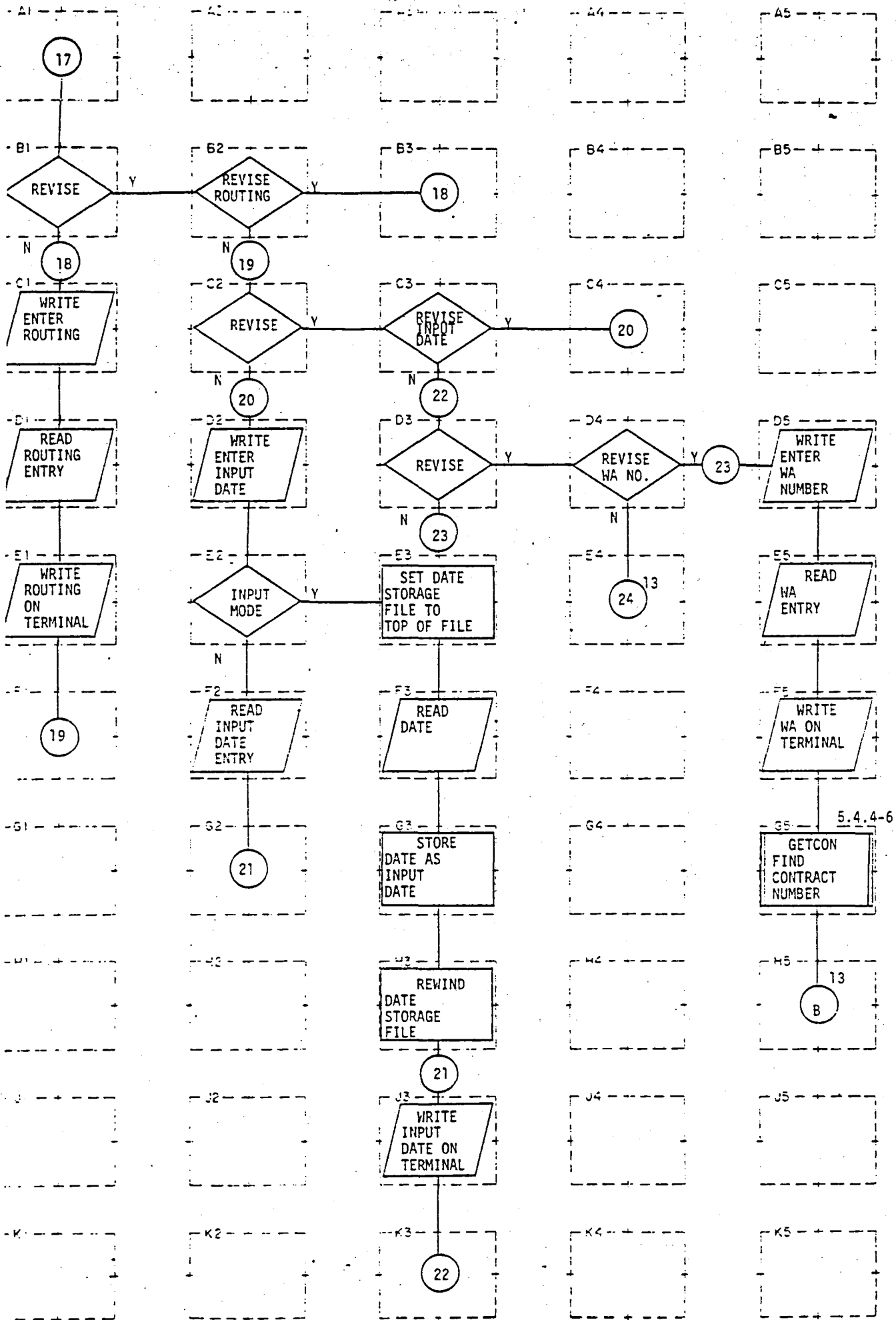


Figure 5.4.1-6

A1
B1 (R.EQ.1.AND.IR.NE.7)
C1 WRITE(1,702)
D1 READ(1,703,ERR=701)ROUT
E1 WRITE(1,703)ROUT
F1
G1
H1
J1
K1
A2
B2 SEE B1
C2 (R.EQ.1.AND.IR.NE.8)
D2 WRITE(1,802)
E2 (R.EQ.0)
F2 READ(1,803,ERR=801)IDD
G2
H2
J2
K2
A3
B3
C3 SEE C2
D3 (R.EQ.1.AND.IR.NE.9)
E3 REWIND 10

Figure 5.4.1-6

F3 READ(10,803)IM, ID, IY
G3 IDD(1)=IM; IDD(2)=ID; IDD(3)=IY
H3 REWIND 10
J3 WRITE (1,803)IDD
K3
A4
B4
C4
D4 SEE D3
E4
F4
G4
H4
J4
K4
A5
B5
C5
D5 WRITE (1,902)
E5 READ(1,903,ERR=902)CWA
F5 WRITE(1,903)CWA
G5 GETCON
H5
J5
K5

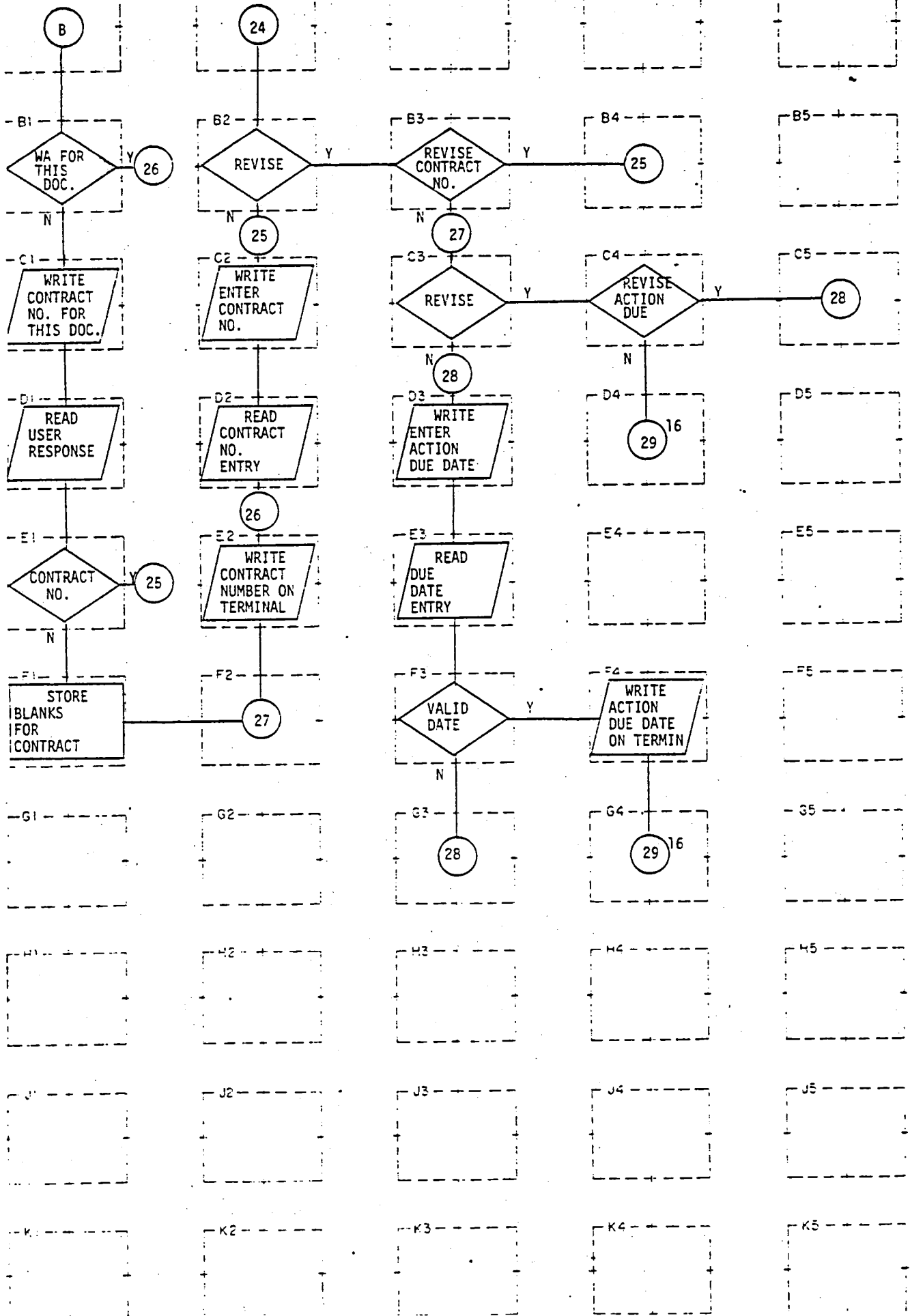


Figure 5.4.1-6

A1
B1 (CON(1).NE.' ')
C1 WRITE(1,910)
D1 READ(1,2300,ERR=909)IOPT
E1 (IOPT.EQ.'YE'); (IOPT.NE.'NO')
F1 DO1060I=1,5; CONT(I)=CON(I)
G1
H1
J1
K1
A2
B2 (R.EQ.1.AND.IR.NE.10)
C2 WRITE(1,952)
D2 READ(1,953,ERR=951)CONT
E2 WRITE(1,953) CONT
F2
G2
H2
J2
K2
A3
B3 SEE B2
C3 (R.EQ.1.AND.IR.NE.11)
D3 WRITE(1,1102)
E3 READ(1,1103,ERR=1101)ADD

Figure 5.4.1-6

F3 (ADD(1).GT.12); (ADD(2).GT.31)

G3

H3

J3

K3

A4

B4

C4 SEE C3

D4

E4

F4 WRITE(1,1103)ADD

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

A1
B1 (R.EQ.1.AND.IR.NE.12)
C1 WRITE(1,1204)
D1 LOOP1=0; D01210IA=1,6; D01211IC=1,5; TWX(IA,IC)=' '
E1 READ(1,1220,ERR=1202)LOOP1
F1 (LOOP1.EQ.0)
G1 (LOOP1.GT.6)
H1
J1
K1
A2
B2 SEE B1
C2 (R.EQ.1.AND.IR.NE.13)
D2 WRITE(1,1302)
E2 READ(1,1303,ERR=1301)FSC
F2 WRITE(1,1303)FSC
G2 D01260II=1,LOOP1
H2 Performed by G2
J2 WRITE (1,1262)
K2
A3
B3
C3 SEE C2
D3 (R.EQ.1.AND.IR.NE.14)
E3 WRITE(1,1401)

Figure 5.4.1-6

```
F3 LOOP1=0; D01408ID=1,3; NRE(1,IB)= ' '
G3 READ(1,1402,ERR=1403) LOOP1
H3
J3
K3
A4
B4
C4
D4 SEE D3
E4
F4
G4 (LOOP1.EQ.0)
H4 (LOOP1.GT.3)
J4
K4
A5
B5 READ(1,1265) (TWX(II,J),J=1,5)
C5 WRITE(1,1265) (TWX(II,J),J=1,5)
D5
E5
F5
G5 WRITE(1,1404)
H5 READ(1,1405) (NRE(1,J),J=1,3)
J5 WRITE(1,1405) (NRE(1,J),J=1,3)
K5
```

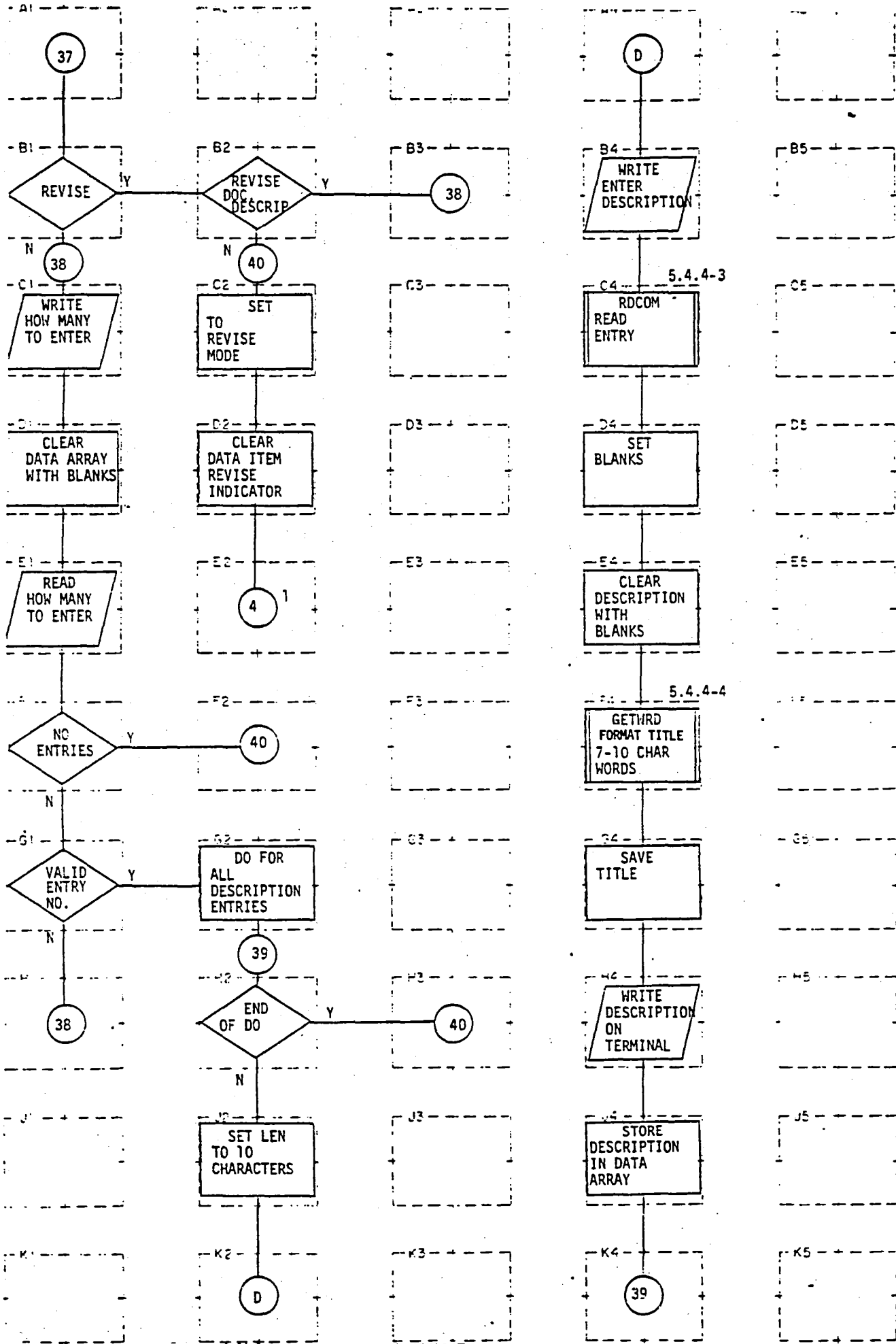


Figure 5.4.1-6

A1
B1 (R.EQ.1.AND.IR.NE.15)
C1 WRITE(1,1502)
D1 D01510IK=1,30; D01511IL=1,21; DDT(IK,IL)=
E1 READ(1,1503,ERR=1501)ILP
F1 (ILP.EQ.0)
G1 (ILP.EQ.30)
H1
J1
K1
A2
B2 SEE B1
C2 R=1
D2 IR=0
E2
F2
G2 D01504IJ=1,ILP
H2 Performed by G2
J2 LEN=10
K2
A3
B3
C3
D3
E3

Figure 5.4.1-6

```

F3
G3
H3
J3
K3
A4
B4 WRITE(1,1505)
C4 RDCOM(BUF)
D4 BLNK= ' '
E4 D01521I=1,21; TIT(I)=BLNK; ARRAY(1)=BLNK; ARRAY(2)=BLNK; ARRAY(3)=BLNK
F4 GETWRD(BUF,ARRAY,LEN)
G4 TIT(I)=ARRAY(1); TIT(I+1)=ARRAY(2); TIT(I+2)=ARRAY(3); TIT(I+3)=ARRAY(4)
H4 WRITE(1,1506) (TIT(I),I=1,21)
J4 I18=21; D02507J=1,I18; DDT(IJ,J)=' '; DDT(IJ,J)=TIT(J); TIT(J)=' '
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

```

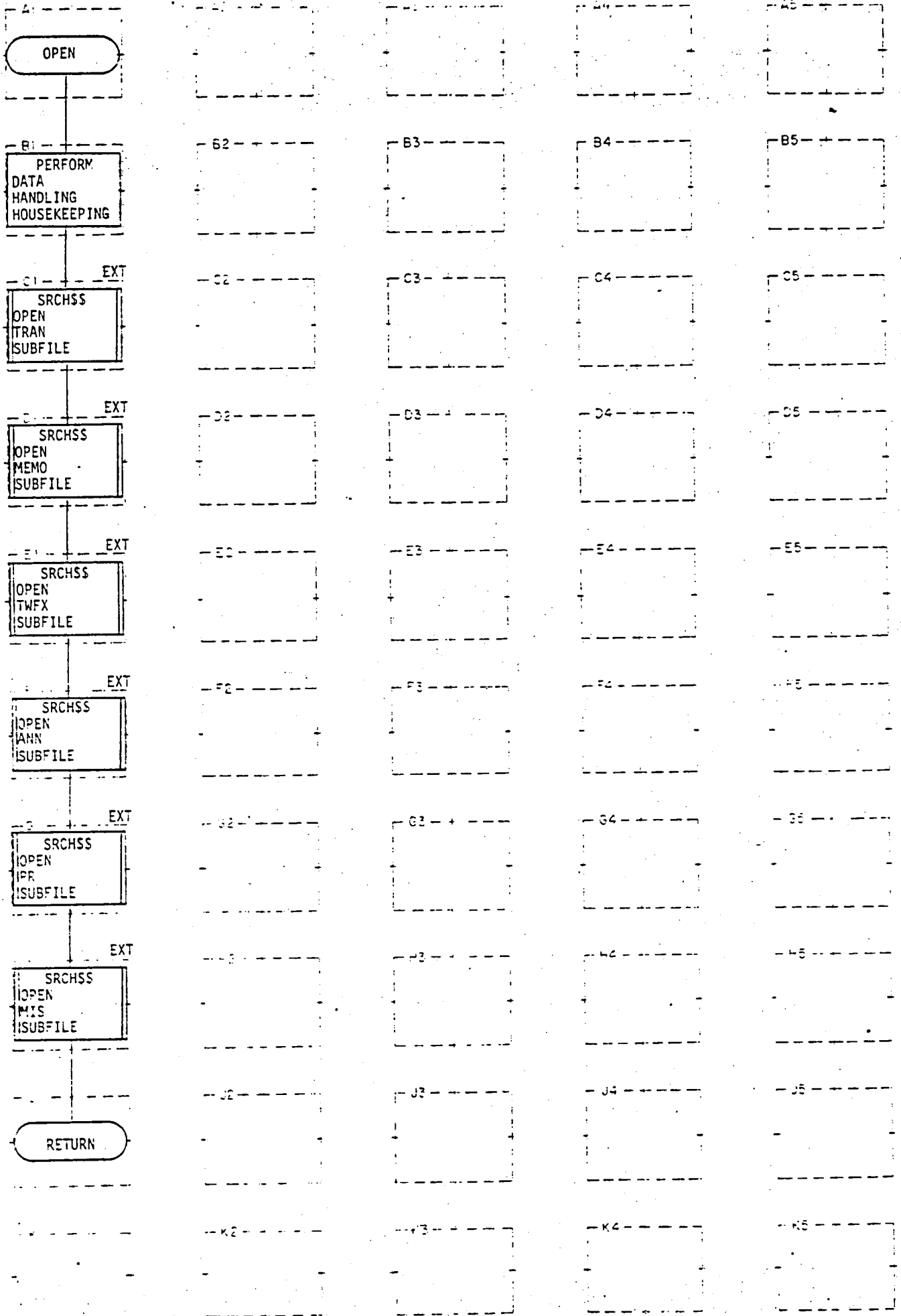


Figure 5.4.1-7

A1
B1 \$INSERT SYSCOM > KEYS.F
C1 SRCH\$\$ (KSRDWR+K\$NDAM, 'TRAN', 6, 2, 1, IC)
D1 SRCH\$\$ (KSRDWR+K\$NDAM, 'MEMO', 6, 7, 1, IC)
E1 SRCH\$\$ (KSRDWR+K\$NDAM, 'TJFX', 6, 8, 1, IC)
F1 SRCH\$\$ (KSRDWR+K\$NDAM, 'ANN', 6, 9, 1, IC)
G1 SRCH\$\$ (KSRDWR+K\$NDAM, 'PR', 6, 10, 1, IC)
H1 SRCH\$\$ (KSRDWR+K\$NDAM, 'MIS', 6, 11, 1, IC)
J1
K1
A2
B2
C2
D2
E2
F2
G2
H2
J2
K2
A3
B3
C3
D3
E3

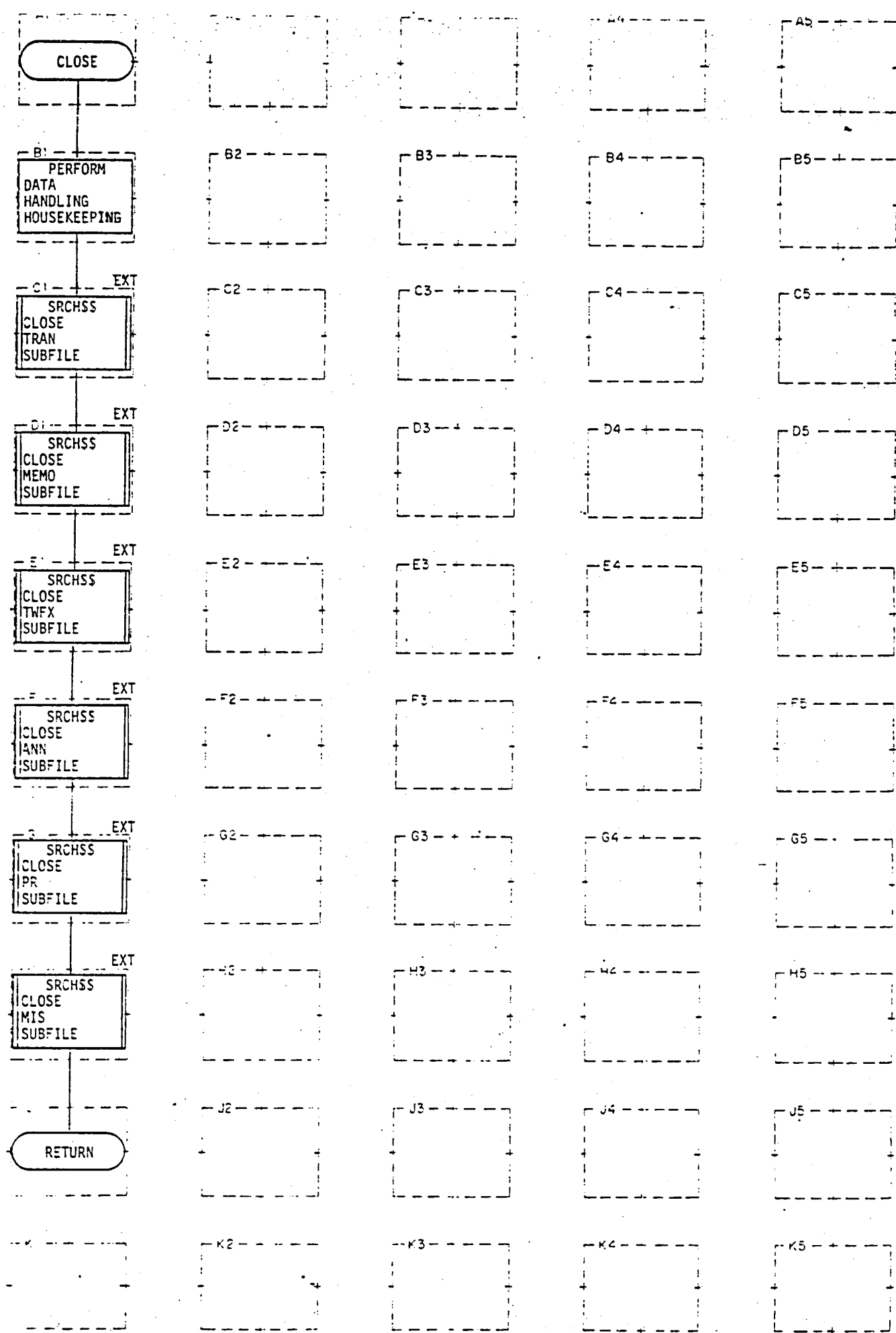


Figure 5.4.1-8

A1
B1 \$INSERT SYSCOM> KEYS.F
C1 SRCH\$\$ (K\$CLOS, 'TRAN', 6, 0, 0, 0)
D1 SRCH\$\$ (K\$CLOS, 'MEMO', 6, 0, 0, 0)
E1 SRCH\$\$ (K\$CLOS, 'TWFY', 6, 0, 0, 0)
F1 SRCH\$\$ (K\$CLOS, 'ANN', 6, 0, 0, 0)
G1 SRCH\$\$ (K\$CLOS, 'PR', 6, 0, 0, 0)
H1 SRCH\$\$ (K\$CLOS, 'MIS', 6, 0, 0, 0)
J1
K1
A2
B2
C2
D2
E2
F2
G2
H2
J2
K2
A3
B3
C3
D3
E3

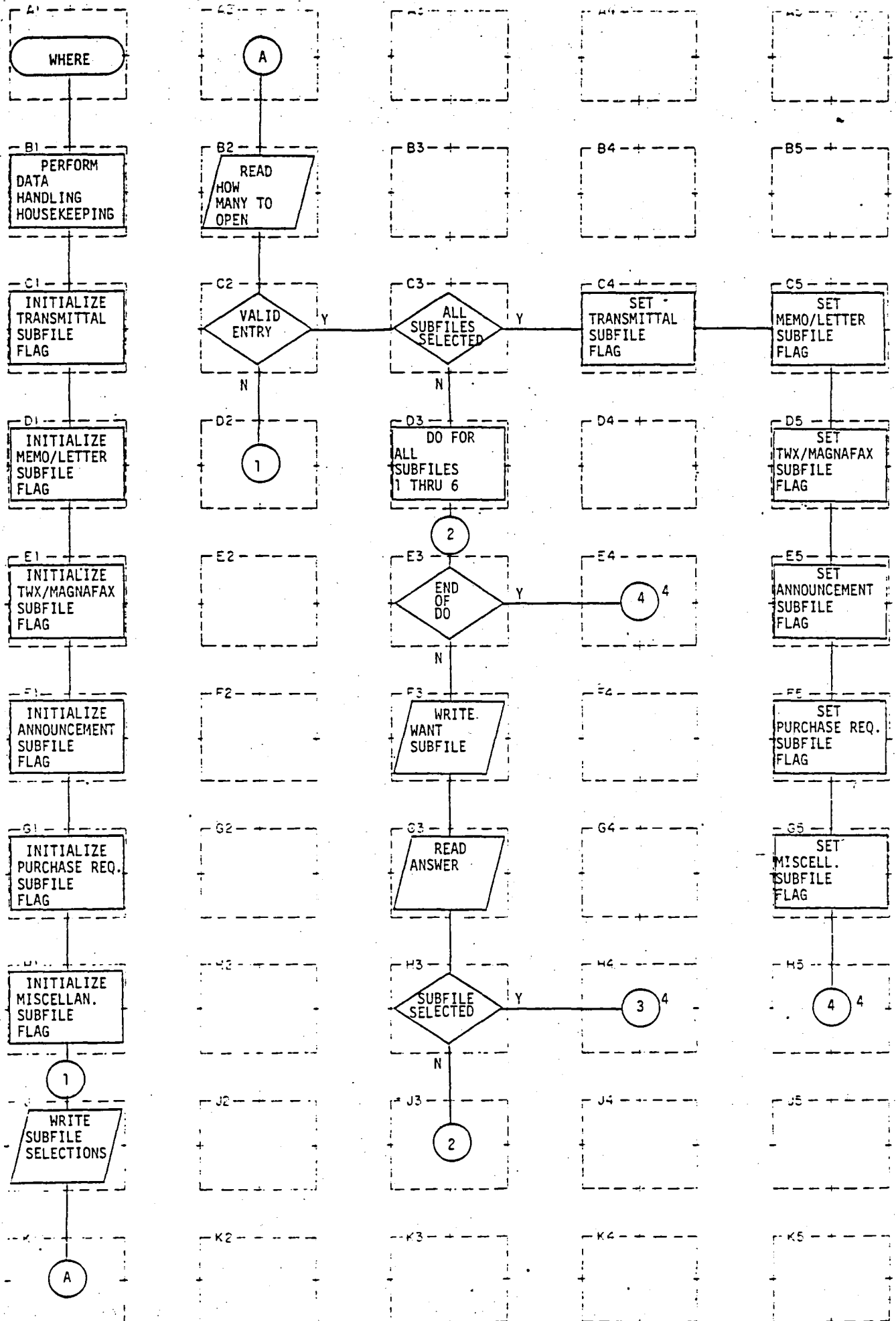


Figure 5.4.1-9

```
A1
B1 $INSERT COMMON; $INSERT SYSCOM >KEYS.F; INTEGER*2
C1 ITRSP=0
D1 IMELE=0
E1 ITWFX=0
F1 IANN=0
G1 IPR=0
H1 IMIS=0
J1 WRITE(1,100)
K1
A2
B2 READ(1,110,ERR=10)IFILE
C2 (IFILE.LE.0.OR.IFILE.GT.6)
D2
E2
F2
G2
H2
J2
K2
A3
B3
C3 (IFILE.EQ.6)
D3 DO 200 I =1,6
E3 Performed by D3
```

Figure 5.4.1-9

F3 WRITE(1,120)I
G3 READ(1,130,ERR=115)IOPT
H3 (IOPT.EQ.'NO'); (IOPT.NE.'YE')
J3
K3
A4
B4
C4 ITRSP=1
D4
E4
F4
G4
H4
J4
K4
A5
B5
C5 IMELE=1
D5 ITWFX=1
E5 IANN=1
F5 IPR=1
G5 IMIS=1
H5
J5
K5

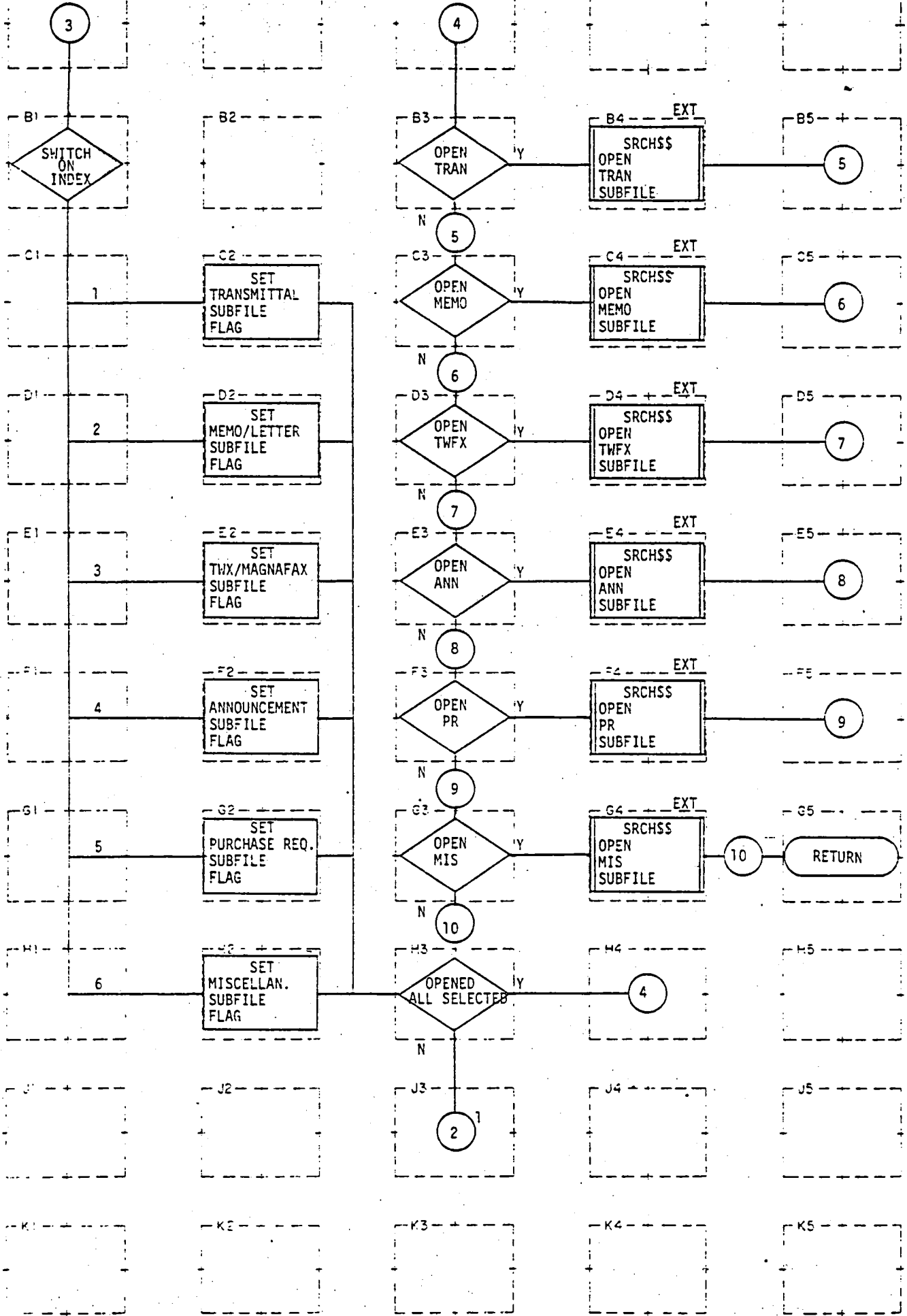


Figure 5.4.1-9

A1
B1
C1 (I.EQ.1)
D1 (I.EQ.2)
E1 (I.EQ.3)
F1 (I.EQ.4)
G1 (I.EQ.5)
H1 (I.EQ.6)
J1
K1
A2
B2
C2 ITRSP=1
D2 IMELE=1
E2 ITWFX=1
F2 IANN=1
G2 IPR=1
H2 IMIS=1
J2
K2
A3
B3 (ITRSP.EQ.1)
C3 (IMELE.EQ.1)
D3 (ITWFX.EQ.1)
E3 (IANN.EQ.1)

Figure 5.4.1-9

F3 (IPR.EQ.1)
G3 (IMIS.EQ.1)
H3 (IFILE.EQ.ITRSP+IMELE+ITWFX+IANN+IPR+IMIS)
J3
K3
A4
B4 SRCH\$\$ (K\$RDWR+K\$NDAM, 'TRAN', 6, 2, 1, IC)
C4 SRCH\$\$ (K\$RDWR+K\$NDAM, 'MEMO', 6, 7, 1, IC)
D4 SRCH\$\$ (K\$RDWR+K\$NDAM, 'TWFY', 6, 8, 1, IC)
E4 SRCH\$\$ (K\$RDWR+K\$NDAM, 'ANN', 6, 9, 1, IC)
F4 SRCH\$\$ (K\$RDWR+K\$NDAM, 'PR', 6, 10, 1, IC)
G4 SRCH\$\$ (K\$RDWR+K\$NDAM, 'MIS', 6, 11, 1, IC)
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

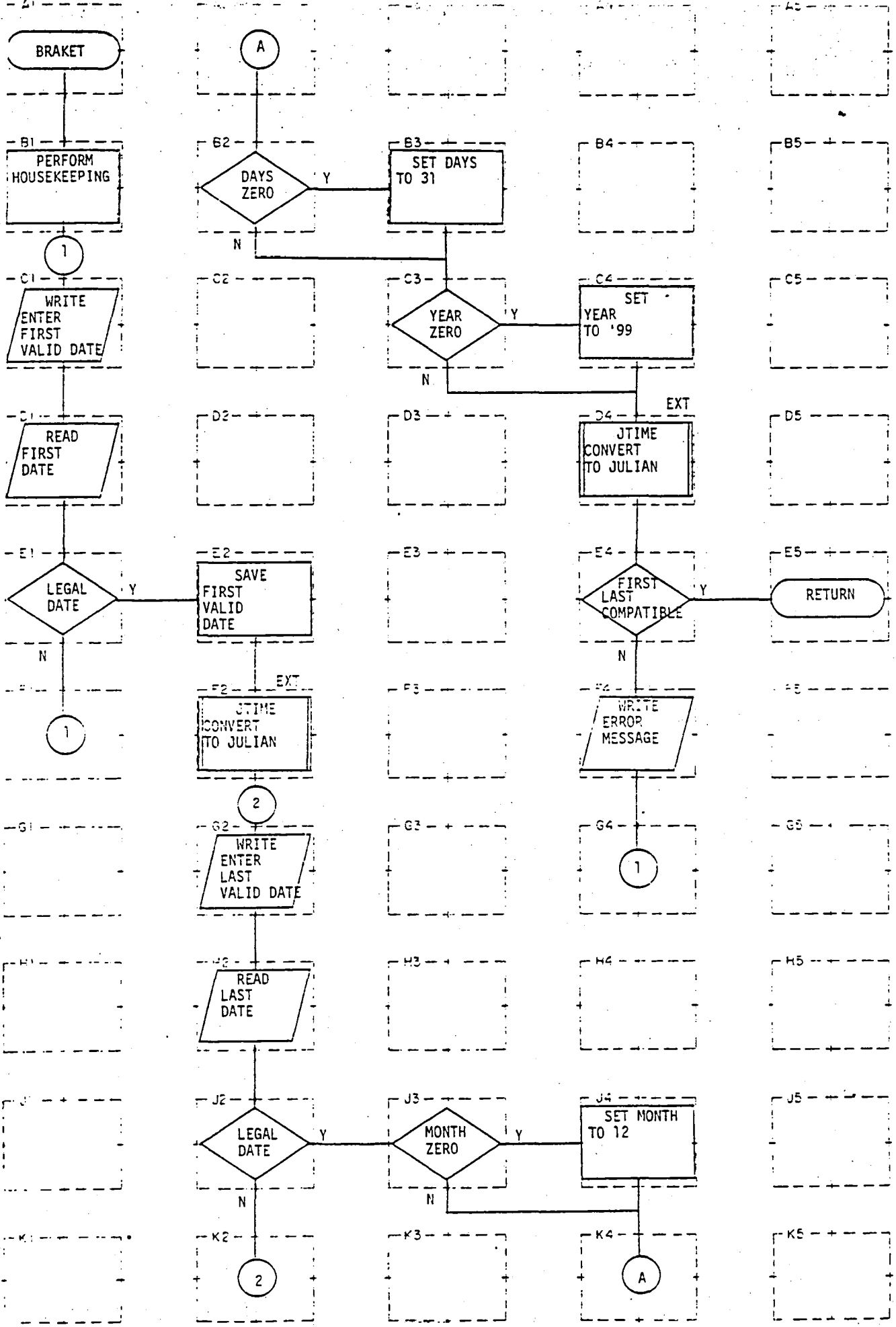


Figure 5.4.1-10

A1
B1 \$INSERT COMMON
C1 WRITE(1,881)
D1 READ(1,882,ERR=880)FVD
E1 (FVD(1).GT.12.OR.FVD(2).GT.31)
F1
G1
H1
J1
K1
A2
B2 (LVD(2).EQ.0)
C2
D2
E2 IM=FVD(1); ID=FVD(2); IY=FVD(3)
F2 JTIME(IY,IM,ID,0,0,0,TJ); TFVD=TJ
G2 WRITE(1,884)
H2 READ(1,882,ERR=885)LVD
J2 (LVD(1).GT.12.OR.LVD(2).GT.31)
K2
A3
B3 LVD(2)=31
C3 (LVD(3).EQ.0)
D3
E3

F3
G3
H3
J3 (LVD(1).EQ.0)
K3
A4
B4
C4 LVD(3)=99; IM=LVD(1); ID=LVD(2); IY=LVD(3)
D4 JTIME(IY,IM,ID,0,0,0,TJ); TLVD=TJ
E4 (TLVD.GE.TFVD)
F4 WRITE(1,887)
G4
H4
J4 LVD(1)=12
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

Figure 5.4.1-10

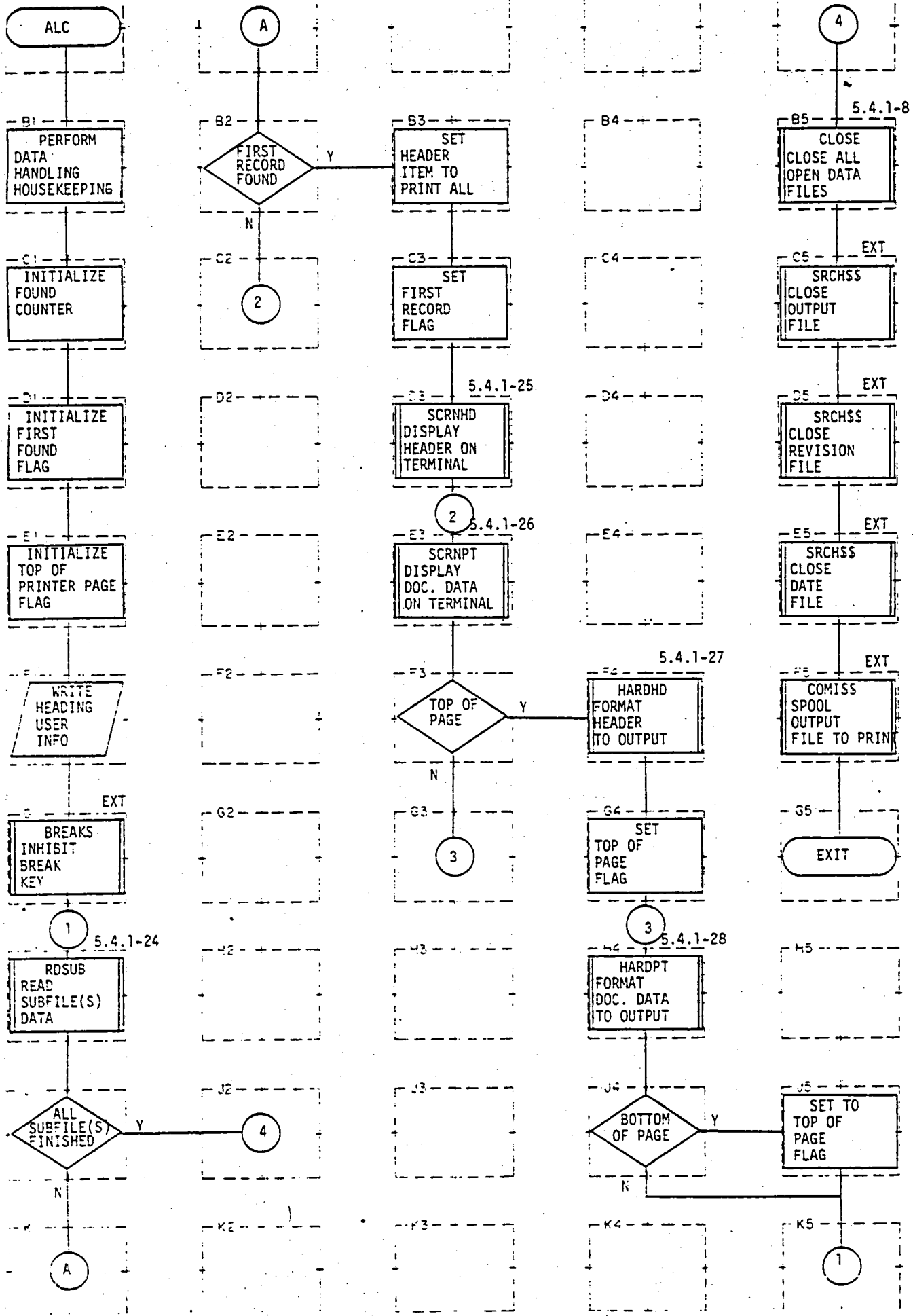


Figure 5.4.1-11

```
A1
B1 $INSERT COMMON; $INSERT SYSCOM> KEYS.F; INTEGER*2
C1 KNT=0
D1 IPAGE=0
E1 IPRINT=0
F1 WRITE(1,1)
G1 BREAK$(.TRUE.)
H1 RDSUB
J1 (IREAD.EQ.1)
K1
A2
B2 (IPAGE.NE.0)
C2
D2
E2
F2
G2
H2
J2
K2
A3
B3 ITEM=50
C3 IPAGE=1
D3 SCRINH(DITEM)
E3 SCRNP(DITEM)
```

Figure 5.4.1-11

F3 (IPRINT.NE.0)
G3
H3
J3
K3
A4
B4
C4
D4
E4
F4 HARDHD (ITEM)
G4 IPRINT=1
H4 HARDPT (ITEM)
J4 (KNT/22.EQ.KNT/22.)
K4
A5
B5 CLOSE
C5 SRCH\$\$ (KSCLOS, 'OUT', 6, 0, 0, 0)
D5 SRCH\$\$ (KSCLOS, 'REVS', 6, 0, 0, 0)
E5 SRCH\$\$ (KSCLOS, 'DATE', 6, 0, 0, 0)
F5 COMISS ('SOUT', 4, 12, IC)
G5
H5
J5 IPRINT=0
K5


```
A1
B1 $INSERT COMMON; INTEGER*2
C1 KNT=0
D1 IPAGE=0
E1 IPRINT=0
F1 WRITE(1,1)
G1 READ(1,2,ERR=3)DRE
H1 RDSUB
J1 (IREAD.EQ.1)
K1
A2
B2 IM=IDD(1); ID=IDD(2); JY=IDD(3)
C2 JTIME(IY,IM,ID,0,0,0,TIM)
D2 (TFVD.LT.TIM.AND.TIM.LE.TLVD)
E2
F2 SCRNP(TITEM)
G2 (IPRINT.NE.0)
H2
J2 WRITE(1,300); WRITE(1,250)KNT,DRE
K2
A3
B3
C3
D3 DO11J=1,3; (DRE.EQ.NRE(1,J))
E3
```

Figure 5.4.1-12

F3
G3 HARDHD(ITEM)
H3
J3
K3
A4
B4
C4
D4 (IPAGE.NE.0)
E4
F4
G4 IPRINT=1
H4 HARDPT
J4 (KNT/14.EQ.KNT/14.)
K4
A5
B5
C5
D5 ITEM=14
E5 IPAGE=1
F5 SCRINH(ITEM)
G5
H5 IPRINT=0
J5
K5


```

A1
B1  $INSERT COMMON; INTEGER*2
C1  KNT=0
D1  IPAGE=0
E1  IPRINT=0
F1  WRITE(1,1)
G1  READ(1,2,ERR=3)DTO
H1  RDSUB
J1  (IREAD.EQ.1)
K1
A2
B2  IM=IDD(1); ID=IDD(2); JY=IDD(3)
C2  JTIME(IY,IM,ID,0,0,0,TIM)
D2  (TFVD.LT.TIM.AND.TIM.LE.TLVD)
E2
F2  SCRNP(TITEM)
G2  (IPRINT.NE.0)
H2
J2  WRITE(1,300); WRITE(1,250) KNT,DTO
K2
A3
B3
C3
D3  D0101I=1,8; (TO(I).NE.DTO(I))
E3

```

F3
G3 HARDHD(ITEM)
H3
J3
K3
A4
B4
C4
D4 (IPAGE.NE.0)
E4
F4
G4 IPRINT=1
H4 HARDPT(ITEM)
J4 (KNT/14.EQ.KNT/14.)
K4
A5
B5
C5
D5 ITEM=4
E5 IPAGE=1
F5 SCRINH(ITEM)
G5
H5 IPRINT=0
J5
K5

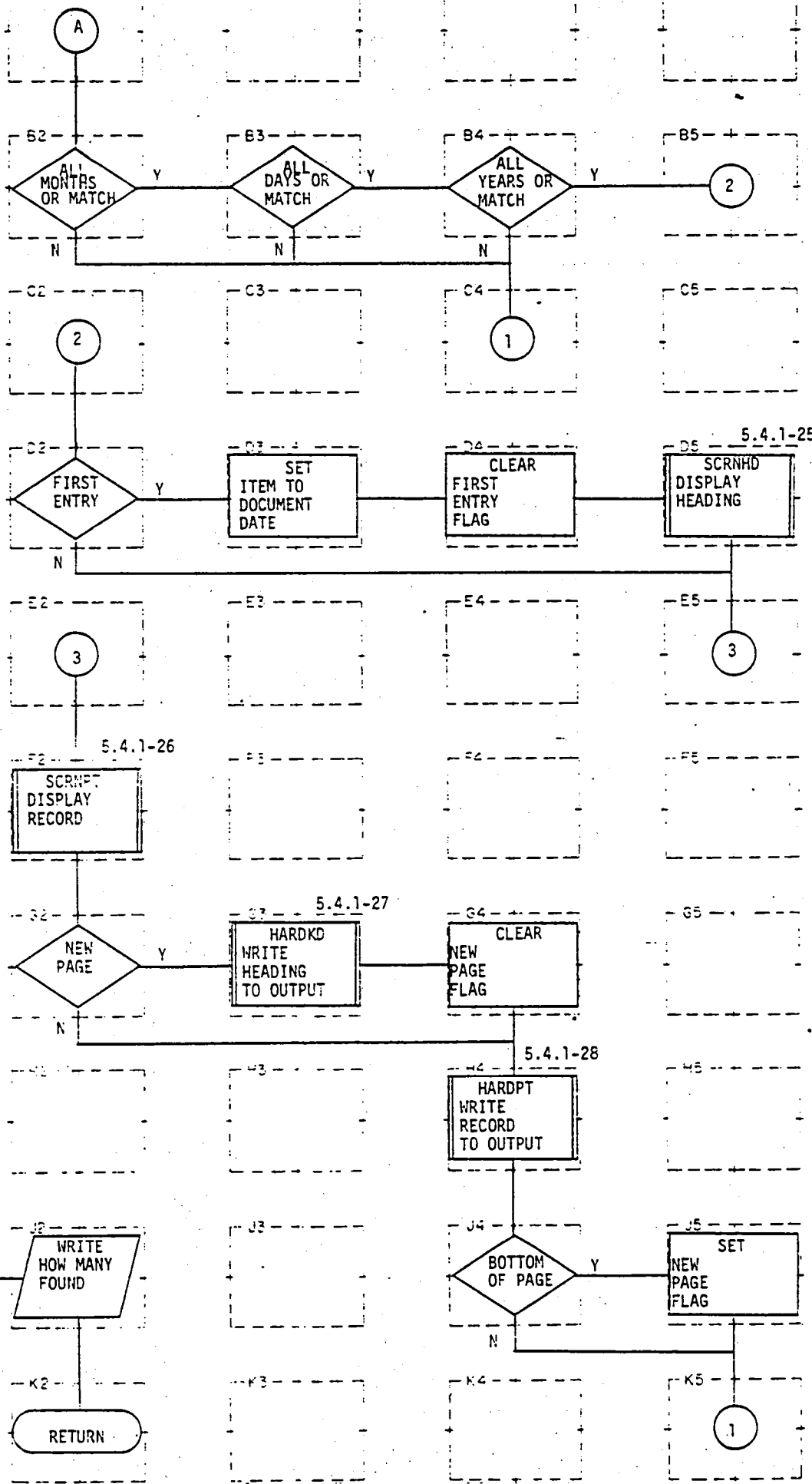
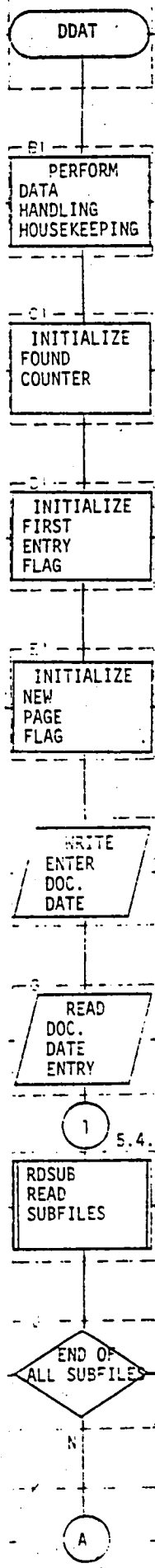


Figure 5.4.1-14

```
A1
B1  $INSERT COMMON; INTEGER*2
C1  KNT=0
D1  IPAGE=0
E1  IPRINT=0
F1  WRITE(1,11)
G1  READ(1,22,ERR=11)DDD
H1  RDSUB
J1  (IREAD.EQ.1)
K1
A2
B2  (DDD(1).EQ.0.OR.DDD(1).EQ.DD(1))
C2
D2  (IPAGE.NE.0)
E2
F2  SCRNP(TITEM)
G2  (IPRINT.NE.0)
H2
J2  WRITE(1,300); WRITE(1,250)KNT,DDD
K2
A3
B3  (DDD(2).EQ.0.OR.DD(2).EQ.DD(2))
C3
D3  ITEM=3
E3
```

F3
G3 HARDHD(ITEM)
H3
J3
K3
A4
B4 (DDD(3).EQ.0.OR.DDD(3).EQ.DD(3))
C4
D4 IPAGE=1
E4
F4
G4 IPRINT=1
H4 HARDPT(ITEM)
J4 (KNT/14.EQ.KNT/14.)
K4
A5
B5
C5
D5 SCRINH(ITEM)
E5
F5
G5
H5 IPRINT=0
J5
K5


```

A1
B1  $INSERT COMMON; INTEGER*2
C1  KNT=0
D1  IPAGE=0
E1  IPRINT=0
F1  WRITE(1,1)
G1  READ(1,2,ERR=3)DW
H1  RDSUB
J1  (IREAD.EQ.1)
K1
A2
B2  IM=IDD(1); ID=IDD(2); IY=IDD(3)
C2  JTIME(IY,IM,ID,0,0,0,TIM)
D2  (TFVD.LT.TIM.AND.TIM.LE.TLVD)
E2
F2  SCRNP(TITEM)
G2  (IPRINT.NE.0)
H2
J2  WRITE(1,300); WRITE(1,250)KNT,DW
K2
A3
B3
C3
D3  DO 660 I=1,5;  (DW(I).NE.CONT(I))
E3

```

Figure 5.4.1-15

F3
G3 HARDHD(ITEM)
H3
J3
K3
A4
B4
C4
D4 (IPAGE.NE.0)
E4
F4
G4 IPRINT=1
H4 HARDPT(ITEM)
J4 (KNT/14.EQ.KNT/14.)
K4
A5
B5
C5
D5 ITEM=10
E5 IPAGE=1
F5 SCRINH(ITEM)
G5
H5 IPRINT=0
J5
K5

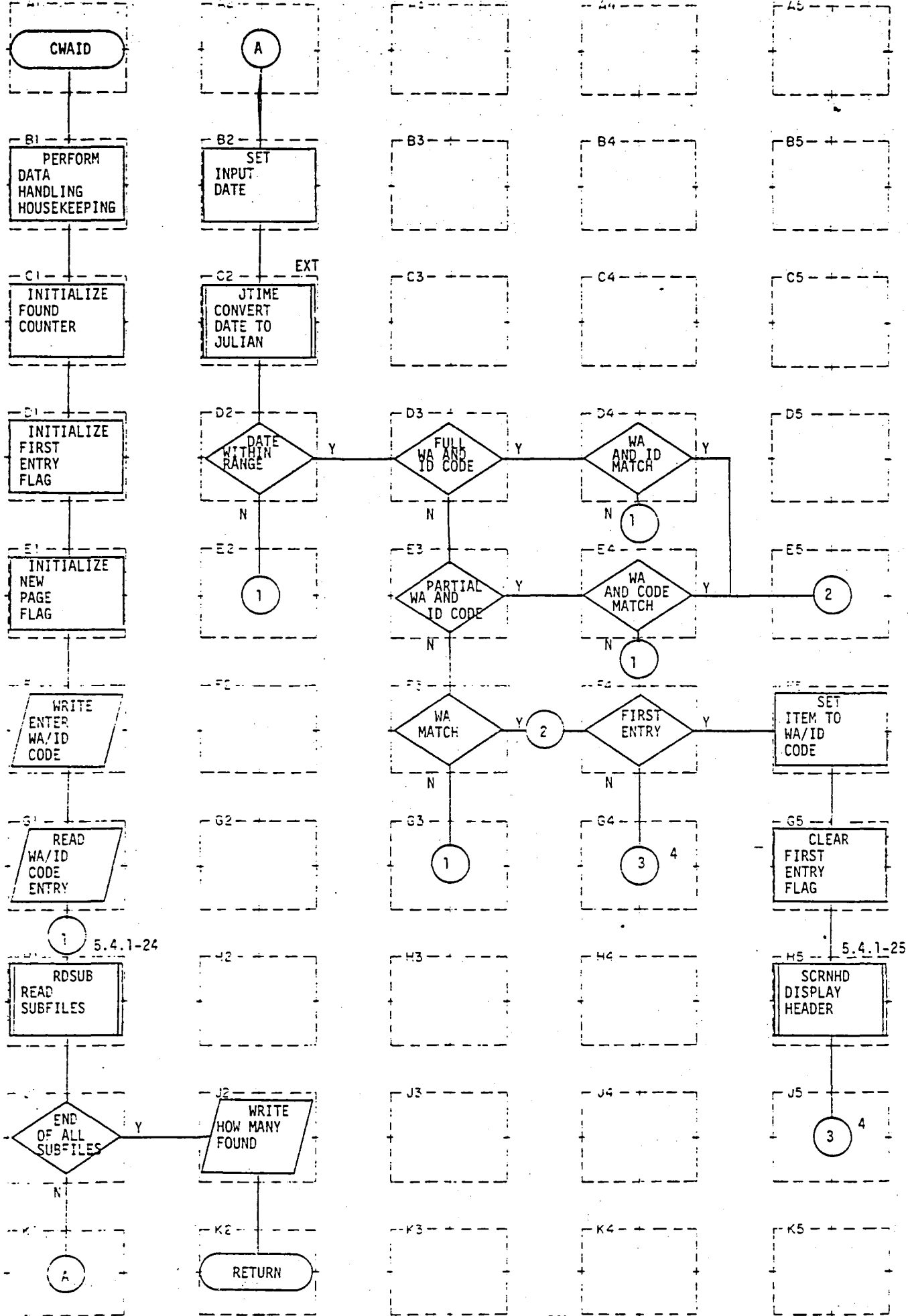


Figure 5.4.1-16

```
A1  
B1 $INSERT COMMON; INTEGER*2  
C1 KNT=0  
D1 IPAGE=0  
E1 IPRINT=0  
F1 WRITE(1,1)  
G1 READ(1,2,ERR=3)WA  
H1 RDSUB  
J1 (IREAD.EQ.1)  
K1  
A2  
B2 IM=IDD(1); ID=IDD(2); IY=IDD(3)  
C2 JTIME(IY,IM,ID,0,0,0,TIM)  
D2 (TFVD.LT.TIM.AND.TIM.LE.TLYD)  
E2  
F2  
G2  
H2  
J2 WRITE(1,300); WRITE(1,250) KNT,WA  
K2  
A3  
B3  
C3  
D3 (WA(4).NE. ' ' )  
E3 (WA(3).NE. ' ' )
```

F3 D030I=1,2; (WA(I).NE.CWA(I))
G3
H3
J3
K3
A4
B4
C4
D4 D010I=1,4; (WA(I).NE.(WA(I))
E4 D050I=1,3; (WA(I).NE.CWA(I))
F4 (IPAGE.NE.0)
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5 ITEM=9
G5 IPAGE=1
H5 SCRINH(DITEM)
J5
K5

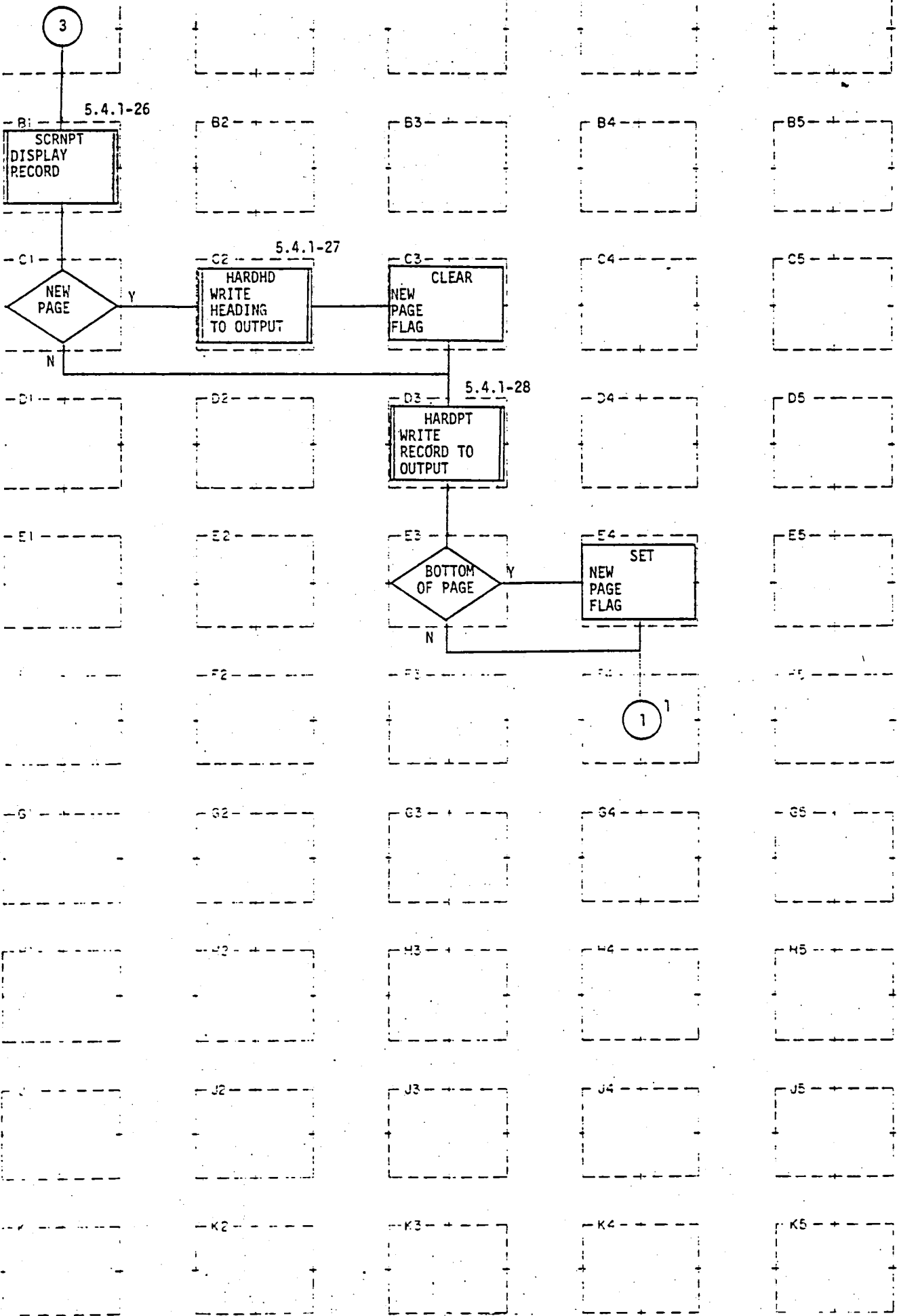


Figure 5.4.1-16

A1
B1 SCRNP (ITEM)
C1 (IPRINT.NE.0)
D1
E1
F1
G1
H1
J1
K1
A2
B2
C2 HARDHD (ITEM)
D2
E2
F2
G2
H2
J2
K2
A3
B3
C3 IPRINT=1
D3 HARDPT (ITEM)
E3 (KNT/14.EQ.KNT/14.)

Figure 5.4.1-16

F3

G3

H3

J3

K3

A4

B4

C4

D4

E4 IPRINT=0

F4

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

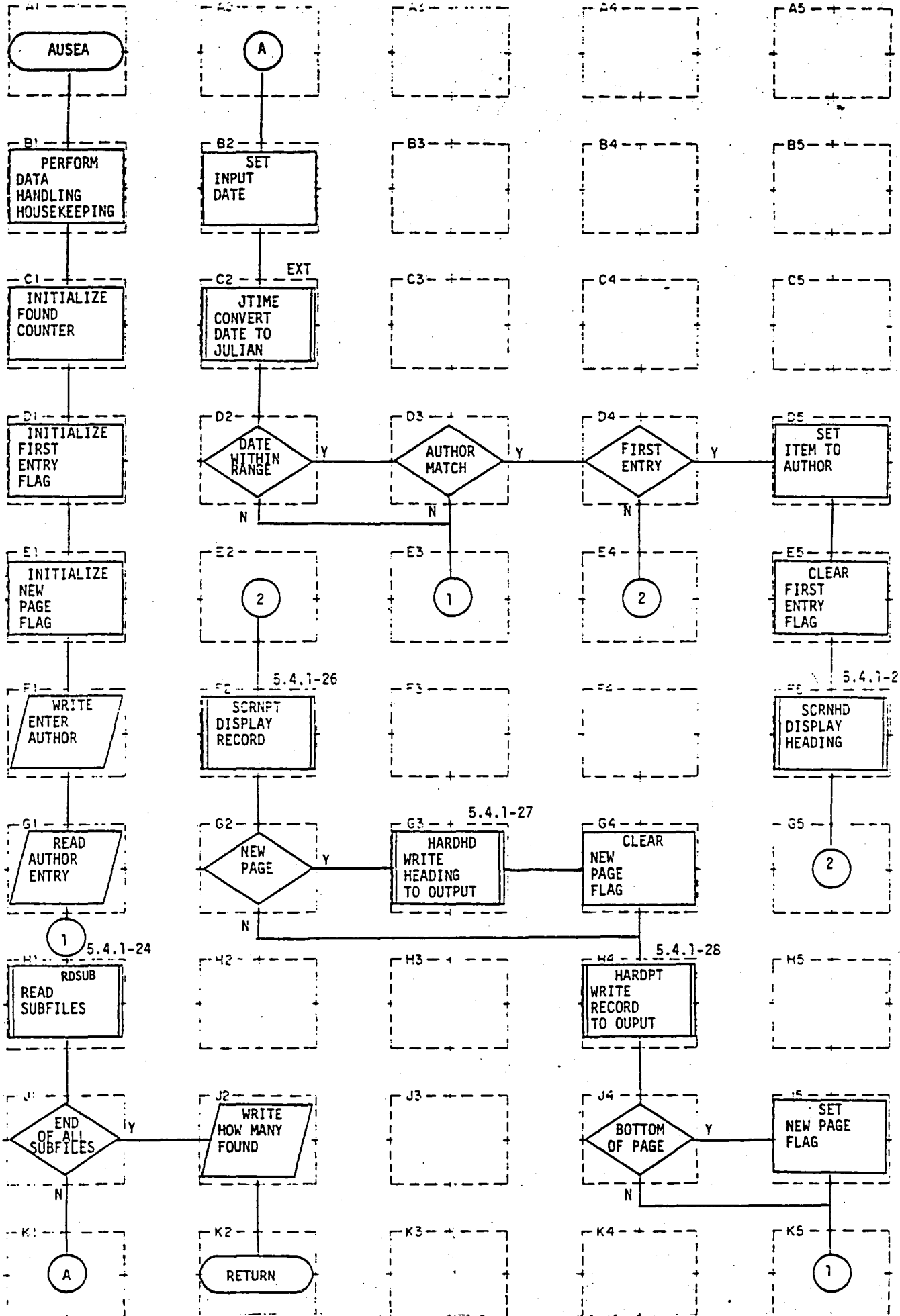


Figure 5.4.1-17


```
A1
B1  $INSERT COMMON; INTEGER*2
C1  KNT=0
D1  IPAGE=0
E1  IPRINT=0
F1  WRITE (1,1)
G1  READ (1,2,ERR=3) DA
H1  RDSUB
J1  (IREAD.EQ.1)
K1
A2
B2  IM=IDD(1); ID=IDD(2); IY=IDD(3)
C2  JTIME(IY,IM,ID,0,0,0,TIM)
D2  (TFVD.LT.TIM.AND.TIM.LE.TLVD)
E2
F2  SCRNP(TITEM)
G2  (IPRINT.NE.0)
H2
J2  WRITE(1,300); WRITE(9,1250)KNT,DA
K2
A3
B3
C3
D3  DO101I=1,7; (ATHR(I).NE.DA(I))
E3
```

F3
G3 HARDHD(ITEM)
H3
J3
K3
A4
B4
C4
D4 (IPAGE.NE.0)
E4
F4
G4 IPRINT=1
H4 HARDPT(ITEM)
J4 (KNT/14.EQ.KNT/14.)
K4
A5
B5
C5
D5 ITEM=2
E5 IPAGE=1
F5 SCRINH(ITEM)
G5
H5 IPRINT=0
J5
K5

Figure 5.4.1-17

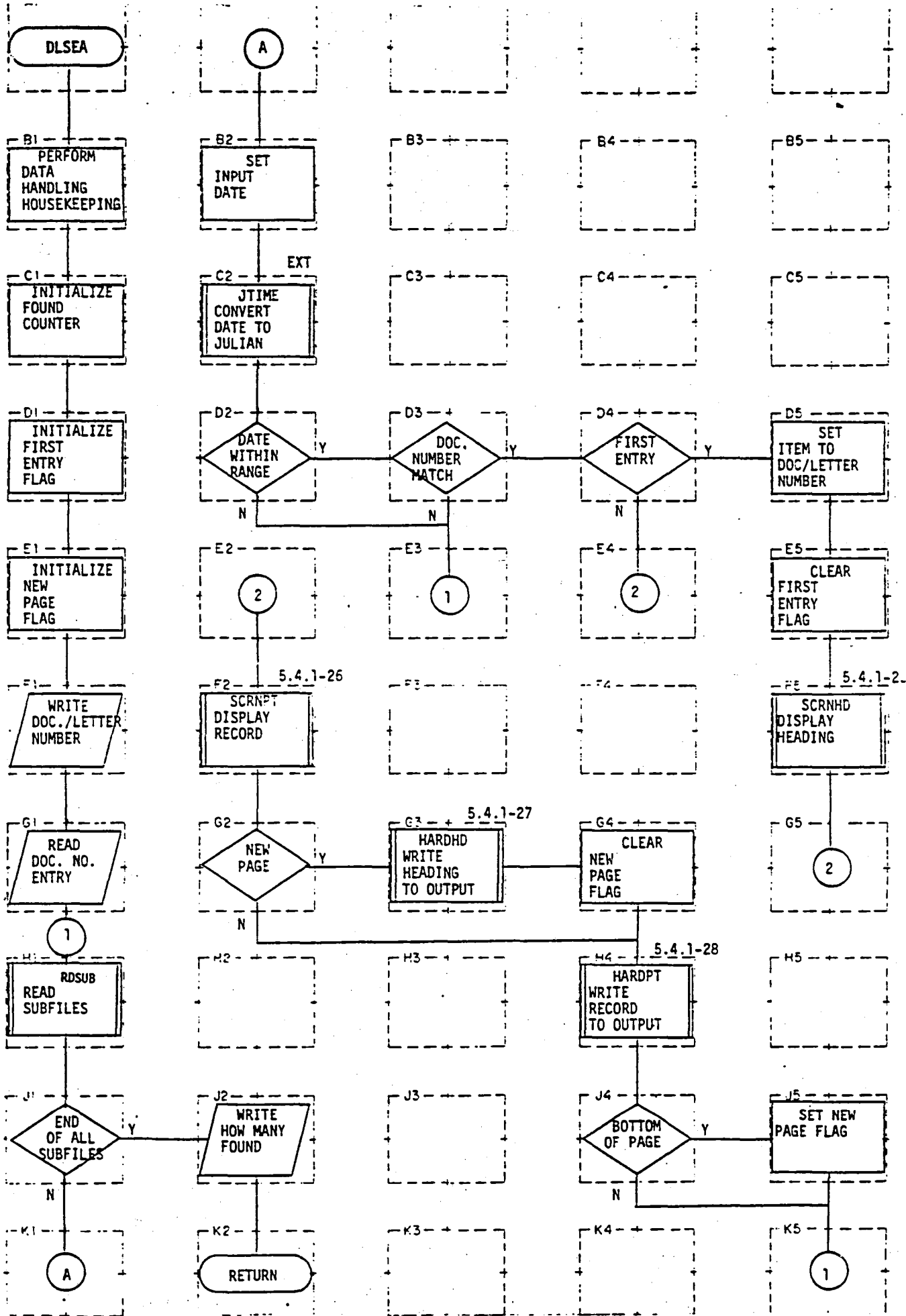


Figure 5.4.1-18

```

A1
B1  $INSERT COMMON; INTEGER*2
C1  KNT=0
D1  IPAGE=0
E1  IPRINT=0
F1  WRITE (1,1)
G1  READ (1,2,ERR=3)DL
H1  RDSUB
J1  (IREAD.EQ.1)
K1
A2
B2  IM=IDD(1); ID=IDD(2); IY=IDD(3)
C2  JTIME(IY,IM,ID,0,0,0,TIM)
D2  (TFVD.LT.TIM.AND.TIM.LE.TLVD)
E2
F2  SCRNP(TITEM)
G2  (IPRINT.NE.0)
H2
J2  WRITE (1,300); WRITE (1,250) KNT,DL
K2
A3
B3
C3
D3  DO 101I=1,5; (DL(I).NE.DLN(I))
E3

```

F3
G3 HARDHD(ITEM)
H3
J3
K3
A4
B4
C4
D4 (IPAGE.NE.0)
E4
F4
G4 IPRINT=1
H4 HARDPT(ITEM)
J4 (KNT/14.EQ.KNT/14.)
K4
A5
B5
C5
D5 ITEM=5
E5 IPAGE=1
F5 SCRINH(ITEM)
G5
H5 IPRINT=0
J5
K5


```
A1
B1  $INSERT COMMON; INTEGER*2
C1  KNT=0
D1  IPAGE=0
E1  IPRINT=0
F1  WRITE (1,11)
G1  READ (1,22,ERR=11) D
H1  RDSUB
J1  (IREAD.EQ.1)
K1
A2
B2  (D(1).EQ.0.OR.D(1).EQ.IDD(1))
C2
D2  (IPAGE.NE.0)
E2
F2  SCRNP (ITEM)
G2  (IPRINT.NE.0)
H2
J2  WRITE (1,300); WRITE (1,250) KNT,D
K2
A3
B3  (D(2).EQ.0.OR.D(2).EQ.IDD(2))
C3
D3  ITEM = 8
E3
```

F3
G3 HARDHD(ITEM)
H3
J3
K3
A4
B4
C4
D4 IPAGE = 1
E4
F4
G4 IPRINT = 1
H4 HARDPT(ITEM)
J4 (KNT/14.EQ.KNT/14.)
K4
A5
B5
C5
D5 SCRINH(ITEM)
E5
F5
G5
H5 IPRINT = 0
J5
K5

Figure 5.4.1-19

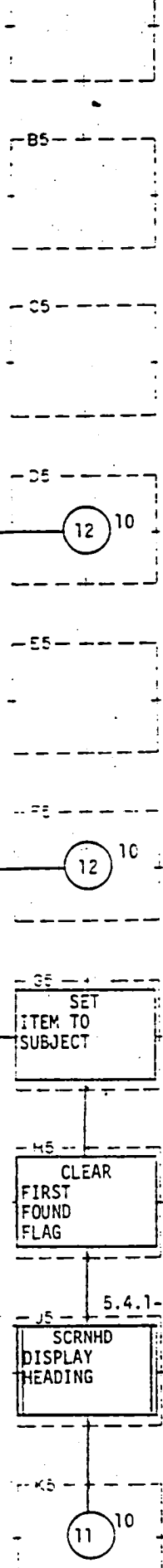
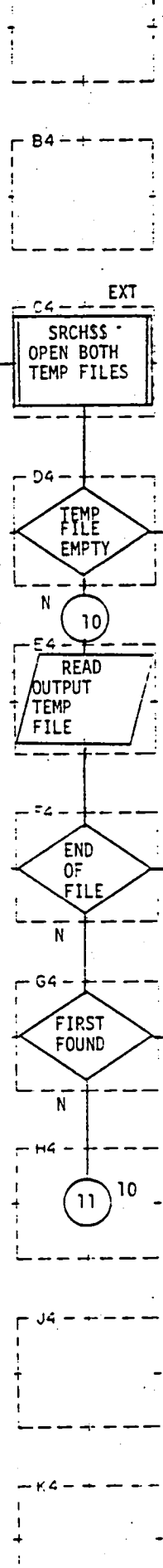
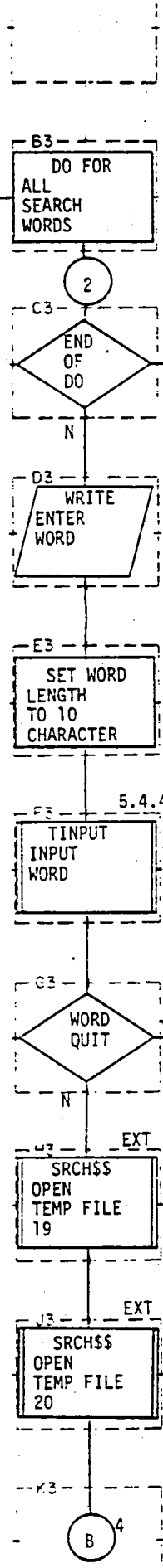
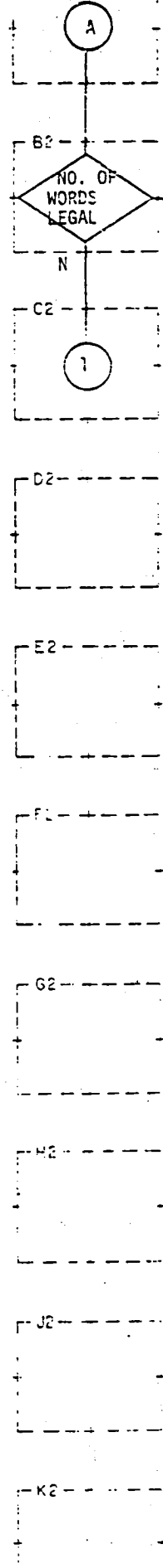
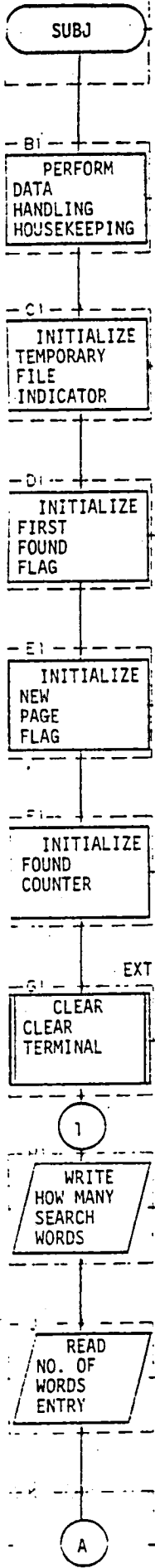


Figure 5.4.1-20

```
A1
B1  $INSERT COMMON; $INSERT SYSCOM > KEYS.F; INTEGER*4; *2
C1  T1 = 0
D1  IPAGE = 0
E1  IPRINT = 0
F1  KNT = 0
G1  CLEAR
H1  WRITE (1,2)
J1  READ (1,8,ERR=1001)ICON
K1
A2
B2  (ICON.LT.1); (ICON.GT.4)
C2
D2
E2
F2
G2
H2
J2
K2
A3
B3  DO 1000 LOOP = 1, ICON
C3  Performed by B3
D3  WRITE (1,1)
E3  LEN = 10
```

Figure 5.4.1-20

F3 TINPUT (IT,LEN)
G3 (IT(1).EQ.'QUIT')
H3 SRCH\$(K\$RDWR+K\$NDAM,'T1',2,15,1,IC)
J3 SRCH\$(K\$RDWR+K\$NDAM,'T2',2,16,1,IC)
K3
A4
B4
C4 SRCH\$(K\$RDWR+K\$NDAM,'T1',2,15,1,IC); SRCH\$(K\$RDWR+K\$NDAM,'T2',
2,16,1,IC)
D4 (DOC.LT.1)
E4 READ (IO,END=1020)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,
ADD,TWX,FSC,NRE
F4 See E4
G4 (IPAGE.NE.0)
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5 ITEM = 6
H5 IPAGE = 1
J5 SCRINH (ITEM)
K5

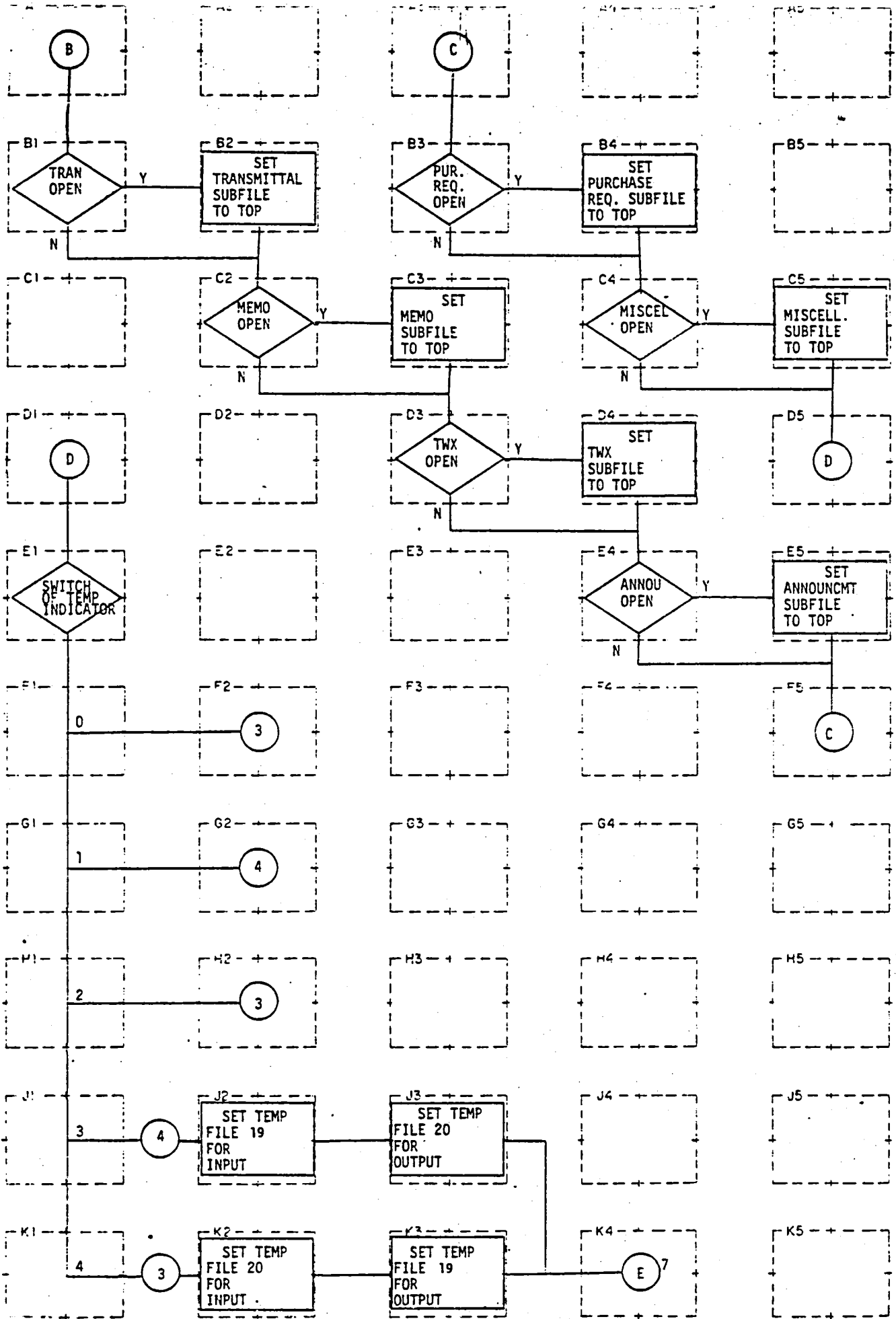


Figure 5.4.1-20

A1
B1 (ITRSP.EQ.1)
C1
D1
E1
F1 (T1.EQ.0)
G1 (T1.EQ.1)
H1 (T1.EQ.2)
J1 (T1.EQ.3)
K1 (T1.EQ.4)
A2
B2 REWIND 6
C2 (.IMELE.EQ.1)
D2
E2
F2
G2
H2
J2 IN = 19
K2 IN = 20
A3
B3 (IPR.EQ.1)
C3 REWIND 11
D3 (ITWFX.EQ.1)
E3

F3

G3

H3

J3 IO = 20

K3 IO = 19

A4

B4 REWIND 14

C4 (IMIS.EQ.1)

D4 REWIND 12

E4 (IANN.EQ.1)

F4

G4

H4

J4

K4

A5

B5

C5 REWIND 15

D5

E5 REWIND 13

F5

G5

H5

J5

K5

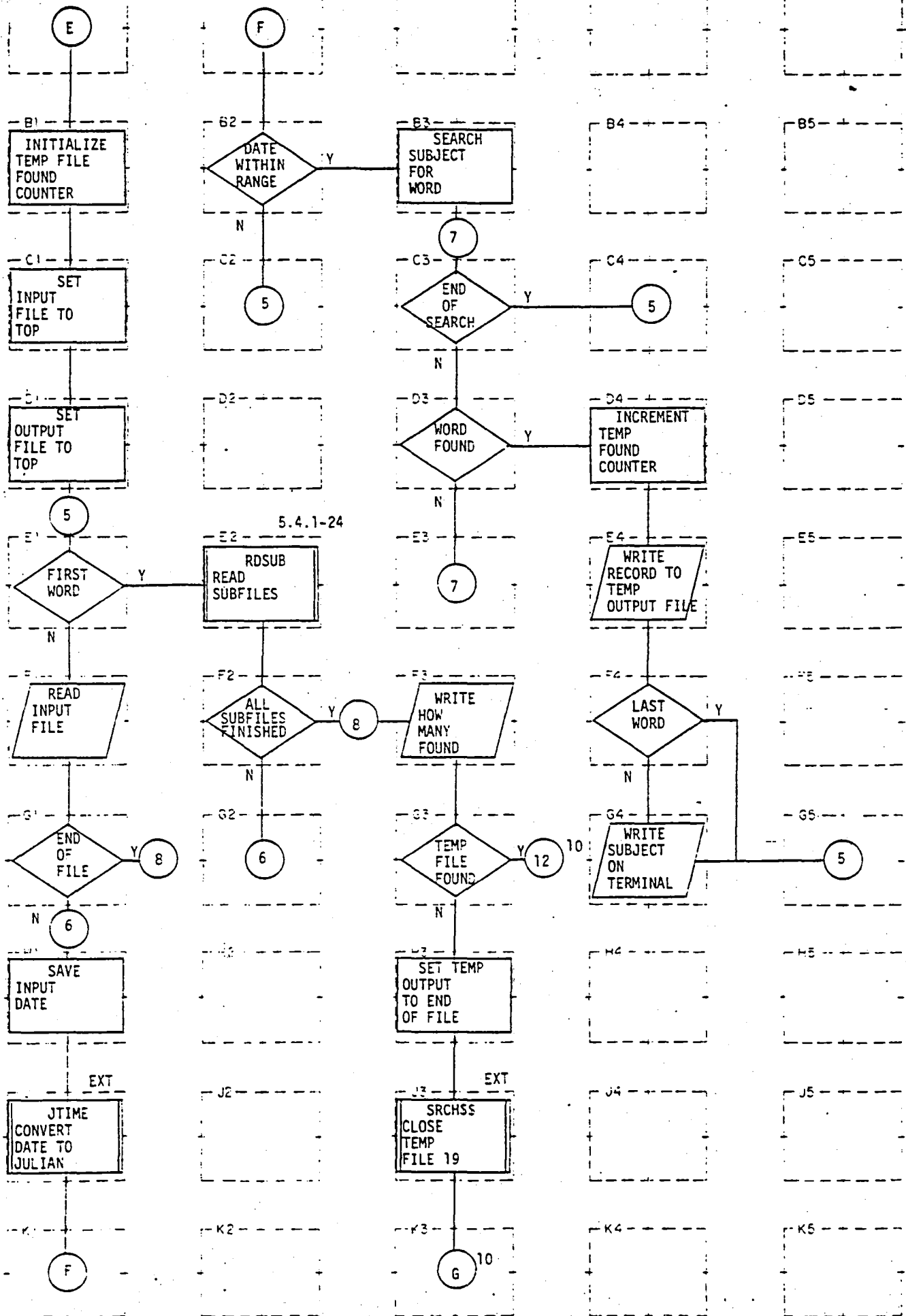


Figure 5.4.1-20

```

A1
B1   DOC = 0
C1   REWIND IN
D1   REWIND IO
EL   (T1.NE.0)
F1   READ (IN,END = 100) MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,
      CONT,ADD,TWX,FSC,NRE
G1   SEE F1
H1   IM = IDD(1); ID = IDD(2); IY=IDD(3)
J1   JTIME(IY,IM,ID,0,0,0,TIM)
K1
A2
B2   (TFVP.LT.TIM.AND.TIM.LE.TLVD)
C2
D2
E2   RDSUB
F2   (IREAD.EQ.1)
G2
H2
J2
K2
A3
B3   BLNK = '  '; DO3I=1,21; (SUB(I).EQ.BLNK); (SUB(I).NE.IT(1))
C3   SEE B3
D3   (SUB(I+1).EQ.BLNK); (IT(2).EQ.BLNK); (SUB(I+1).EQ.IT(2))
E3

```



```
F3  WRITE (1,1030) DOC,(IT(I),I = 1,3)
G3  (DOC.EQ.0)
H3  END FILE IO
J3  SRCH$(K$CLOS,'T1',2,0,0,0)
K3
A4
B4
C4
D4  DOC = DOC+1
E4  WRITE (I)) MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CNA,CONT,ADD,TWX,
    FSC,NRE
F4  (LOOP.EQ.ICON)
G4  WRITE (1,10) SUB
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5
```

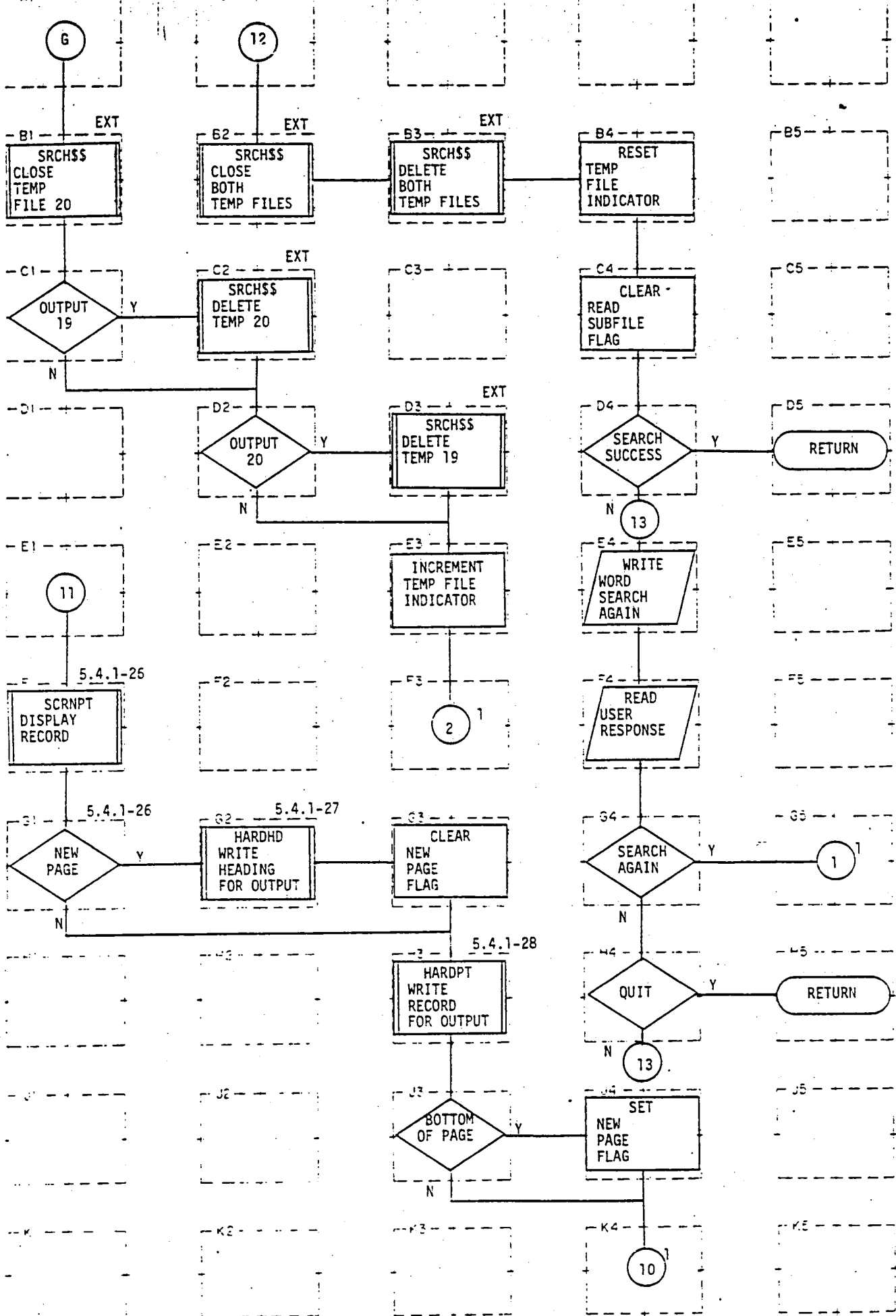


Figure 5.4.1-20

A1
B1 SRCH\$(K\$CLOS,'T2',2,0,0,0)
C1 (IO.EQ.19)
D1
E1
F1 SCRNP(TITEM)
G1 (IPRINT.NE.0)
H1
J1
K1
A2
B2 SRCH\$(K\$CLOS,'T1',2,0,0,0); SRCH\$(K\$CLOS,'T2',2,0,0,0)
C2 SRCH\$(K\$DELE,'T2',2,0,0,0)
D2 (IO.EQ.20)
E2
F2
G2 HARDHD(TITEM)
H2
J2
K2
A3
B3 SRCH\$(K\$DELE,'T1',2,0,0,0); SRCH\$(K\$DELE,'T2',2,0,0,0)
C3
D3 SRCH\$(K\$DELE,'T1',2,0,0,0)
E3 T1 = T1+1

F3
G3 IPRINT = 1
H3 HARDPT (ITEM)
J3 (KNT/14.EQ.KNT/14.)
K3
A4
B4 T1 = 0
C4 IREAD = 0
D4 (DOC.NE.0)
E4 WRITE (1,2000)
F4 READ (1,2001,ERR=1999)IOPT
G4 (IOPT.EQ.'YE')
H4 (IOPT.NE.'NO')
J4 IPRINT = 0
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

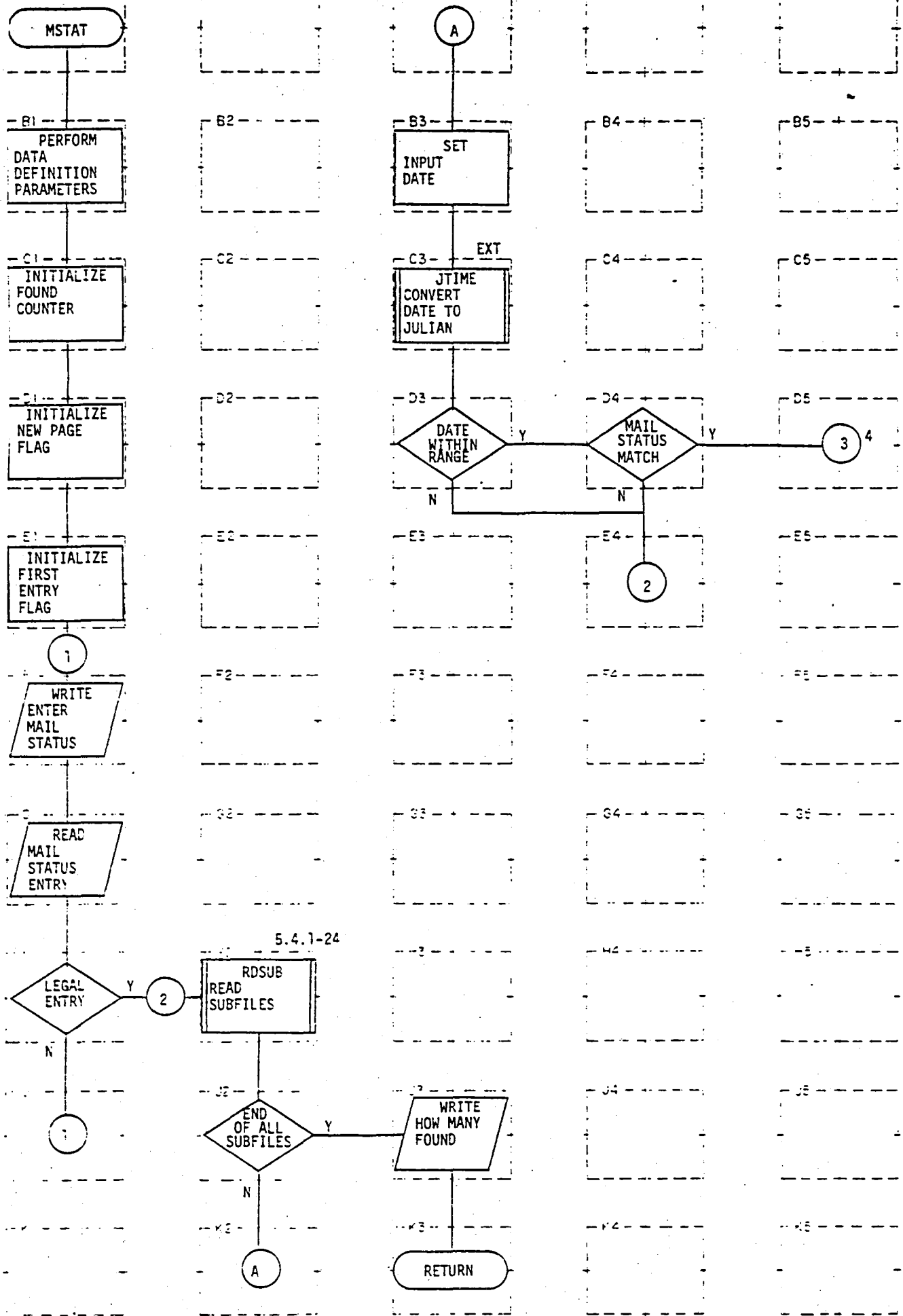


Figure 5.4.1-21

```
A1
B1 $INSERT COMMON; INTEGER*2
C1 KNT = 0
D1 IPRINT = 0
E1 IPAGE = 0
F1 WRITE (1,1)
G1 READ (1,3,ERR = 10) DM
H1 (DM.EQ.'IM'); (DM.EW.'OM'); (DM.EQ.'VC'); WRITE (1,4) DM
J1
K1
A2
B2
C2
D2
E2
F2
G2
H2 RDSUB
J2 (IREAD.EQ.1)
K2
A3
B3 IM = IDD(1); ID = IDD(2); IY= IDD(3)
C3 JTIME (IY,IM,ID,0,0,0,TJUL)
D3 (TJUL.LT.TFVD); (TJUL.GT.TLVD)
E3
```

F3

G3

H3

J3 WRITE (1,300); WRITE (1,201) KNT,DM

K3

A4

B4

C4

D4 (MS.NE.DM)

E4

F4

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

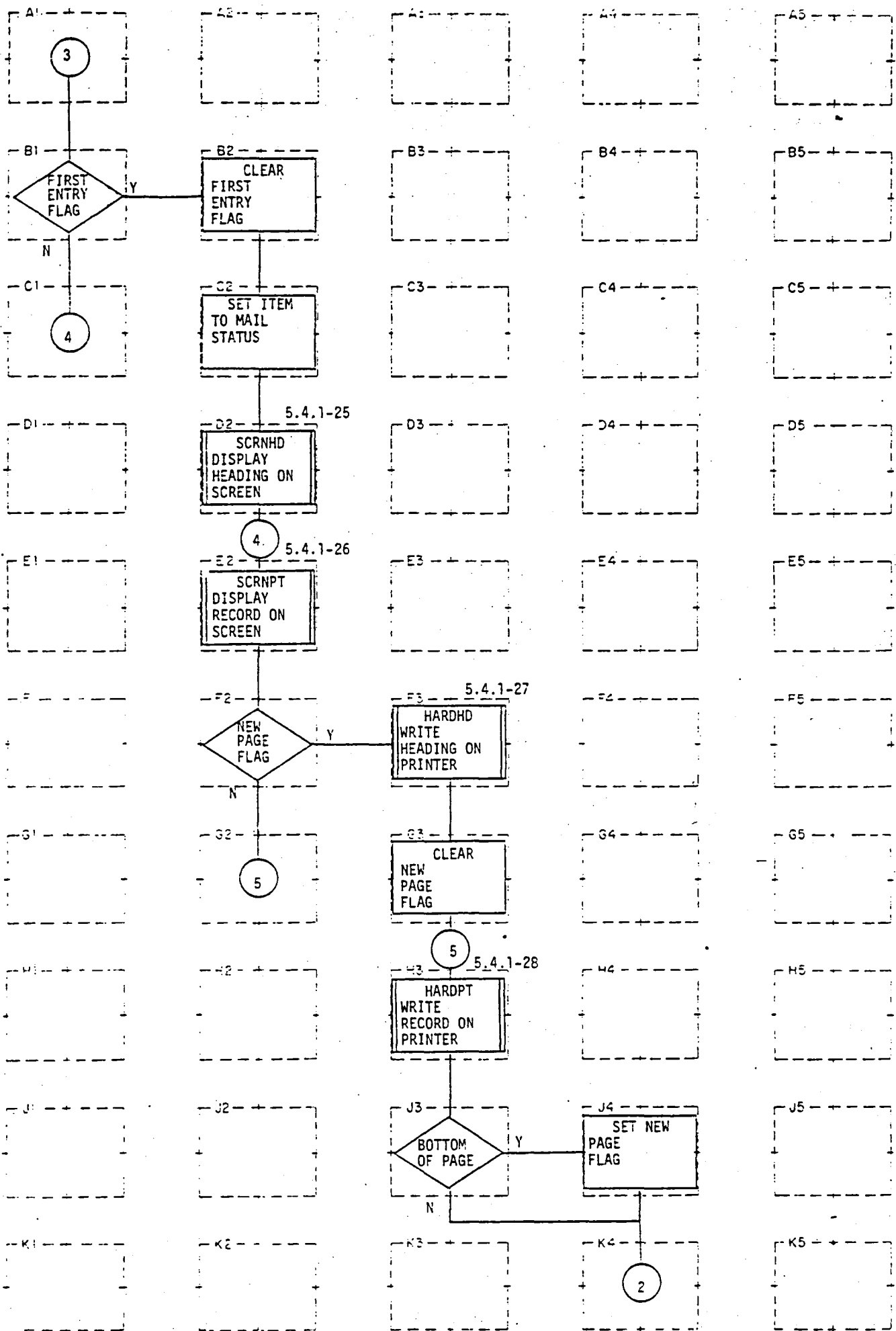


Figure 5.4.1-21

A1
B1 (IPAGE.NE.0)
C1
D1
E1
F1
G1
H1
J1
K1
A2
B2 IPAGE = 1
C2 ITEM = 1
D2 SCRINH (ITEM)
E2 SCRNP (ITEM)
F2 (IPRINT.NE.0)
G2
H2
J2
K2
A3
B3
C3
D3
E3

F3 HARDHD (ITEM)
G3 IPRINT = 1
H3 HARDPT (ITEM)
J3 (KNT/14.EQ.KNT/14.)
K3
A4
B4
C4
D4
E4
F4
G4
H4
J4 IPRINT = 0
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5


```

A1
B1 $INSERT COMMON; $INSERT SYSCOM> KEYS.F; INTEGER*2
C1 KNT = 0
D1 IPAGE = 0
E1 IPRINT = 0
F1 WRITE (1,1); WRITE (1,10)
G1 READ (1,15,ERR = 5) IOPT
H1 (IOPT.LE.0.OR.IOPT.GE.3)
J1
K1
A2
B2 READ (10,1111) IM, ID, IY
C2 REWIND 10
D2 ICURR(1) = IY; ICURR(2) = IM; ICURR(3) = ID
E2 SRCH$$ (K$RDWR + K$NDAM, 'ACTD', 6, 5, 1, IC)
F2 REWIND 9
G2
H2 BREAK$ (.TRUE.)
J2 REWIND 10
K2
A3
B3 READ (9, END = 200) ATHR, DLN, PTIT, IDD, COUNT, ADD, FSC, NRE
C3 Performed by B3
D3 (IOPT.EQ.1)
E3 IM = ADD(1); ID = ADD(2); IY = ADD(3)

```

Figure 5.4.1-22

```

F3 IACT(1)=IY; IACT(2)=IM; IACT(3)=ID
G3 IDIFF(1)=IACT(1)-ICURR(1); IDIFF(2)=IACT(2)-ICURR(2); IDIFF(3)=IACT(3)-ICURR(3)
H3 (IDIFF(1).GT.0.OR.IDIFF(2).GT.1)
J3 (IDIFF(1).EQ.0.AND.IDIFF(2).EQ.1.AND.IDIFF(3).GE.6)
K3
A4
B4 SRCHSS(KSCLOS,'ACTD',6,0,0,0)
C4 (KNT.EQ.0)
D4 WRITE (1,301)
E4
F4
G4
H4
J4
K4
A5
B5
C5 WRITE (1,201)KNT
D5 SRCHSS(KSCLOS,'OUT',6,0,0,0)
E5 SRCHSS(KSCLOS,'DATE',6,0,0,0)
F5 SRCHSS(KSCLOS,'REVS',6,0,0,0)
G5 COMISS('SOUT',4,12,IC)
H5
J5
K5

```

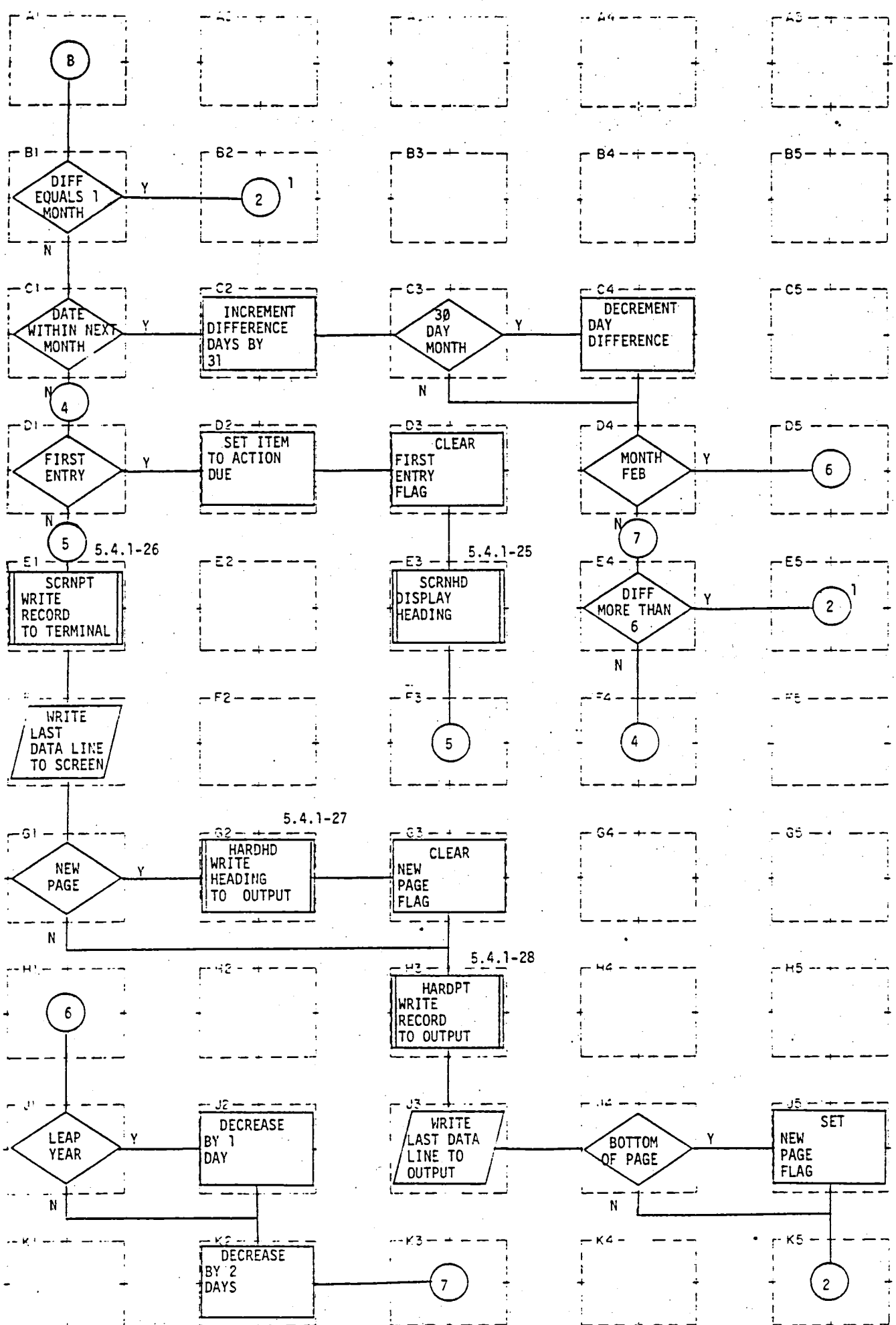


Figure 5.4.1-22

A1
 B1 (IDIFF(1).EQ.0.AND.IDIFF(2).EQ.1.AND.IDIFF(3).GE.0)
 C1 (IDIFF(1).EQ.0.AND.IDIFF(2).EQ.1)
 D1 (IPAGE.NE.0)
 E1 SCRNP (ITEM)
 F1 WRITE (1,2000)ATHR,NRE,ADD
 G1 (IPRINT.NE.0)
 H1
 J1 (ICURR(1)/4.NE.ICURR(1)/4.)
 K1
 A2
 B2
 C2 IDIFF(3) = IDIFF (3) + 31
 D2 ITEM = 11
 E2
 F2
 G2 HARDHD(ITEM)
 H2
 J2 IDIFF(3) = IDIFF(3)-1
 K2 IDIFF(3) = IDIFF(3)-Z
 A3
 B3
 C3 (ICURR(2).EQ.4.OR.ICURR(2).EQ.6.OR.ICURR(2).EQ.9.OR.ICURR(2).EQ.11)
 D3 IPAGE = 1
 E3 SCRND(ITEM)

F3
G3 IPRINT = 1
H3 HARDPT
J3 WRITE (7,2001)ATHR,NRE,ADD
K3
A4
B4
C4 IDIFF(3) = IDIFF(3)-1
D4 (ICURR(2),NE.2)
E4 (IDIFF(3).GE.6)
F4
G4
H4
J4 (KNT/14.EQ.KNT/14.)
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5 IPRINT = 0
K5

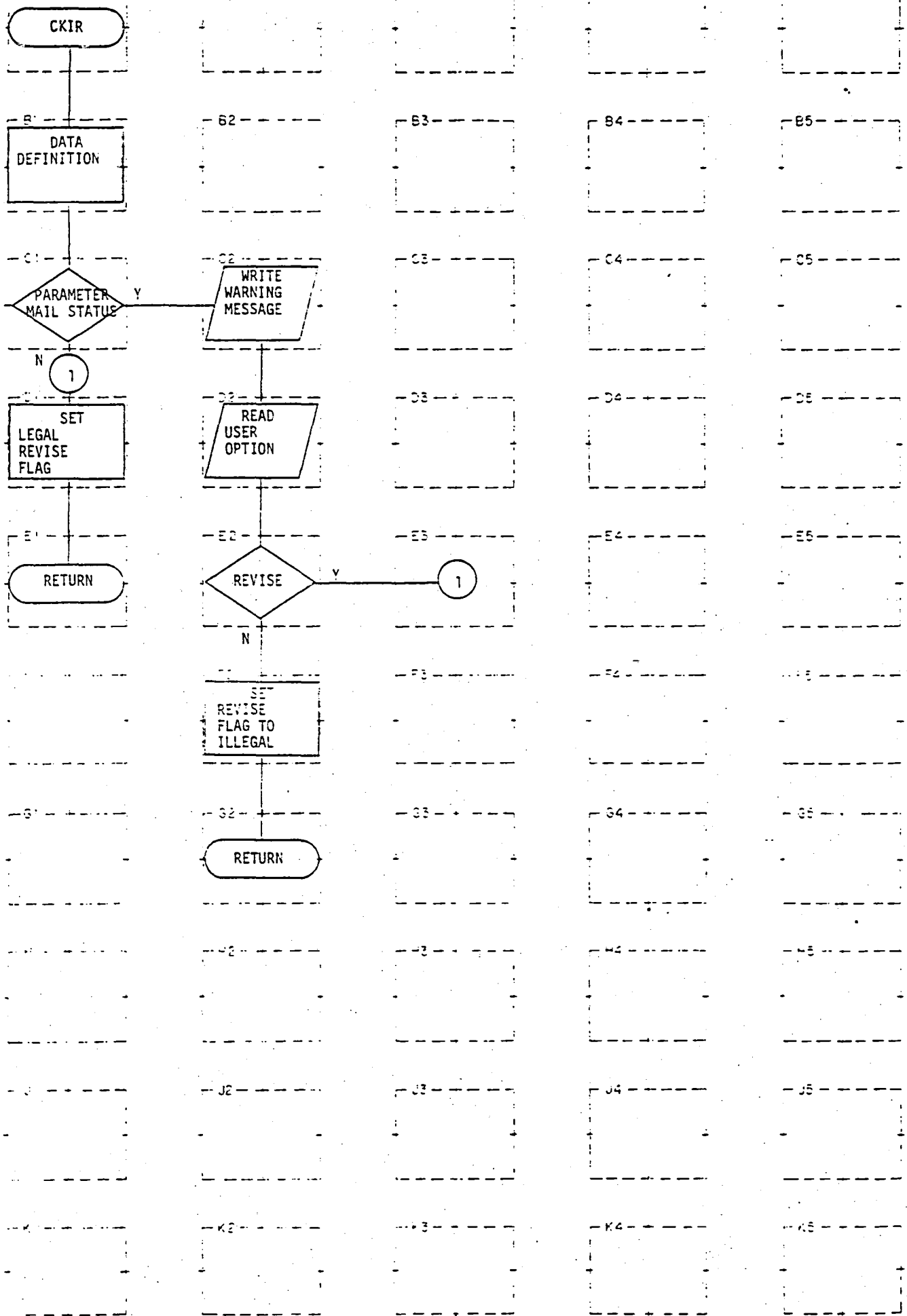


Figure 5.4.1-23

A1
B1 INTEGER*2
C1 (IR.EQ.1)
D1 I = 1
E1
F1
G1
H1
J1
K1
A2
B2
C2 WRITE (1,101)
D2 READ (1,10) IAN
E2 (IAN.EQ.'YE'); (IAN.NE.'NO')
F2 I = 0
G2
H2
J2
K2
A3
B3
C3
D3
E3

Figure 5.4.1-23

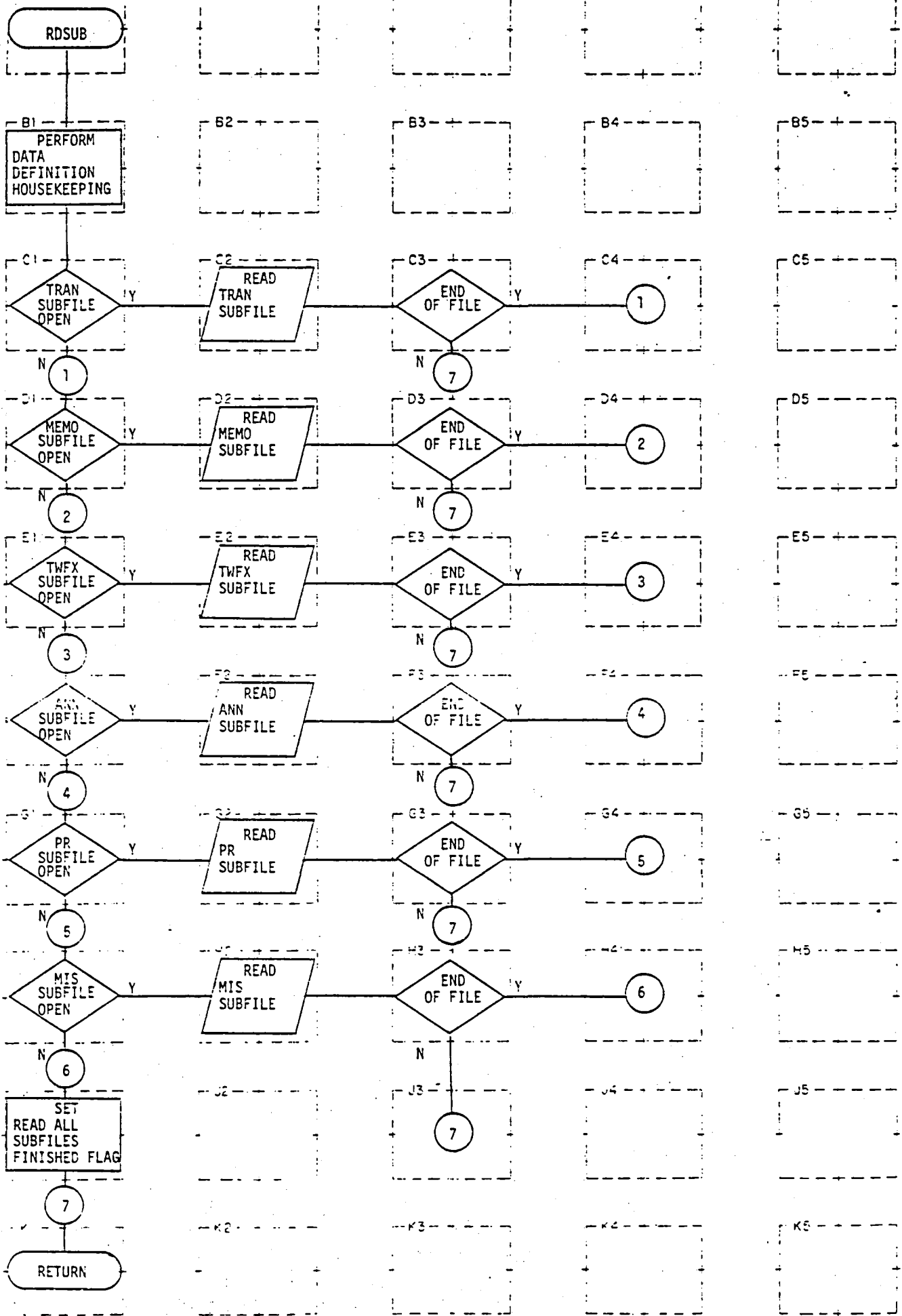


Figure 5.4.1-24

A1
 B1 \$INSERT COMMON
 C1 (ITRSP.EQ.0)
 D1 (IMELE.EQ.0)
 E1 (ITWFX.EQ.0)
 F1 (IANN.EQ.0)
 G1 (IPR.EQ.0)
 H1 (IMIS.EQ.0)
 J1 IREAD = 1
 K1
 A2
 B2
 C2 READ (6,END = 100)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,
 CONT,ADD,TWX,FSC,NRE,DDT
 D2 READ (11,END = 200)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,
 ADD,TWX,FSC,NRE
 E2 READ (12,END = 300)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,
 ADD,TWX,FSC,NRE
 F2 READ (13,END = 400)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,
 ADD,TWX,FSC,NRE
 G2 READ (14,END = 500)MS,ATHR,DD,TO,DLN,SUB,PTIT,ROUT,IDD,COUNT,CWA,CONT,
 ADD,TWX,FSC,NRE
 J2
 K2
 A3
 B3
 C3 SEE C2
 D3 SEE D2
 E3 SEE E2

F3 SEE F2

G3 SEE G2

H3 SEE H2

J3

K3

A4

B4

C4

D4

E4

F4

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

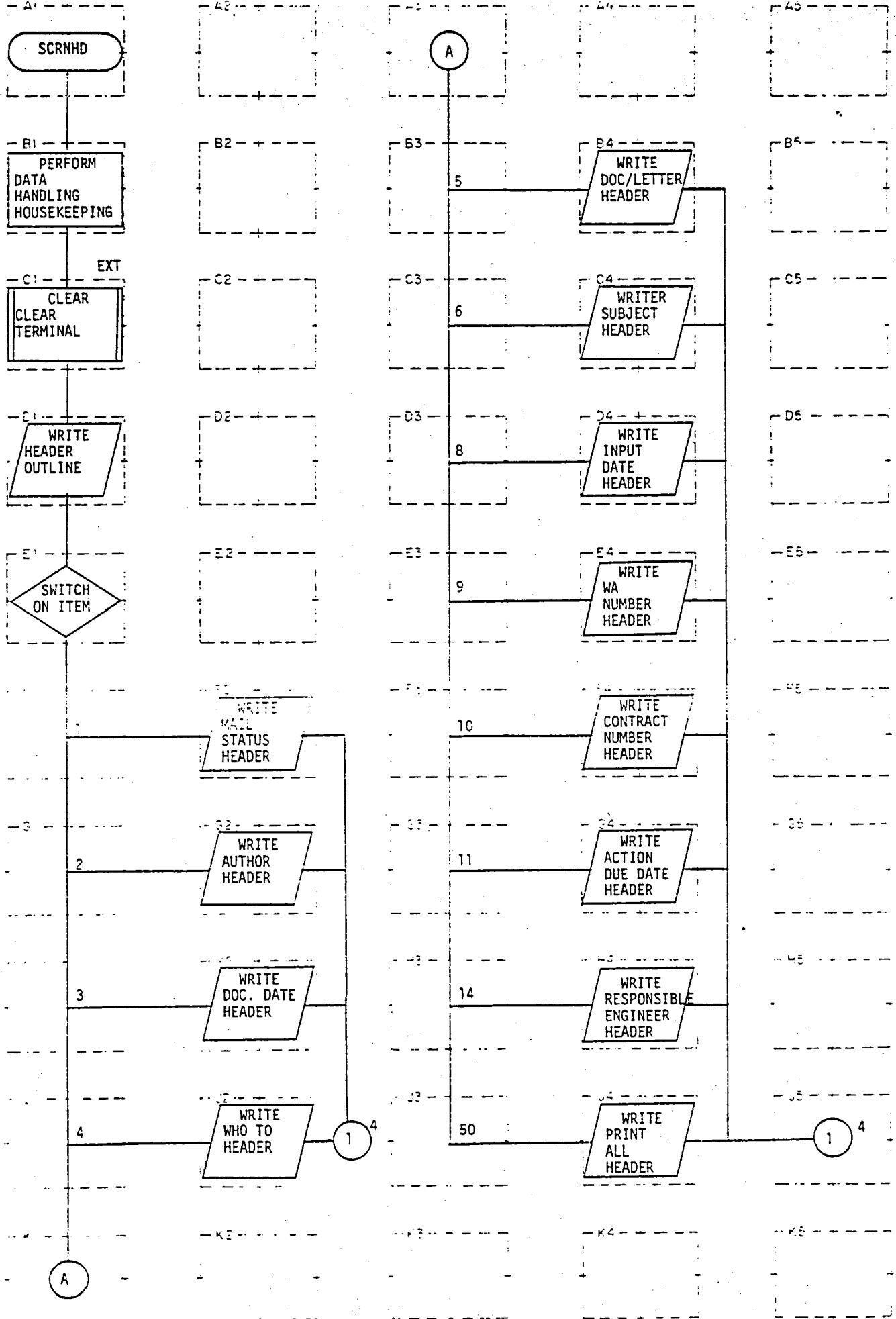


Figure 5.4.1-25

A1
B1 \$INSERT COMMON; INTEGER*2
C1 CLEAR
D1 WRITE (1,10)
E1
F1 (ITEM.EQ.1)
G1 (ITEM.EQ.2)
H1 (ITEM.EQ.3)
J1 (ITEM.EQ.4)
K1
A2
B2
C2
D2
E2
F2 WRITE (1,20)DM
G2 WRITE (1,30)DA
H2 WRITE (1,40)DDD
J2 WRITE (1,45)DT0
K2
A3
B3 (ITEM.EQ.5)
C3 (ITEM.EQ.6)
D3 (ITEM.EQ.8)
E3 (ITEM.EQ.9)

Figure 5.4.1-25

F3 (ITEM.EQ.10)
G3 (ITEM.EQ.11)
H3 (ITEM.EQ.14)
J3 (ITEM.EQ.50)
K3
A4
B4 WRITE (1,50)DL
C4 WRITE (1,60) ((IEX(I,J),J=1,3),I=1,4)
D4 WRITE (1,70)D
E4 WRITE (1,80)WA
F4 WRITE (1,90)DW
G4 WRITE (1,100)
H4 WRITE (1,120)DRE
J4 WRITE (1,15)
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

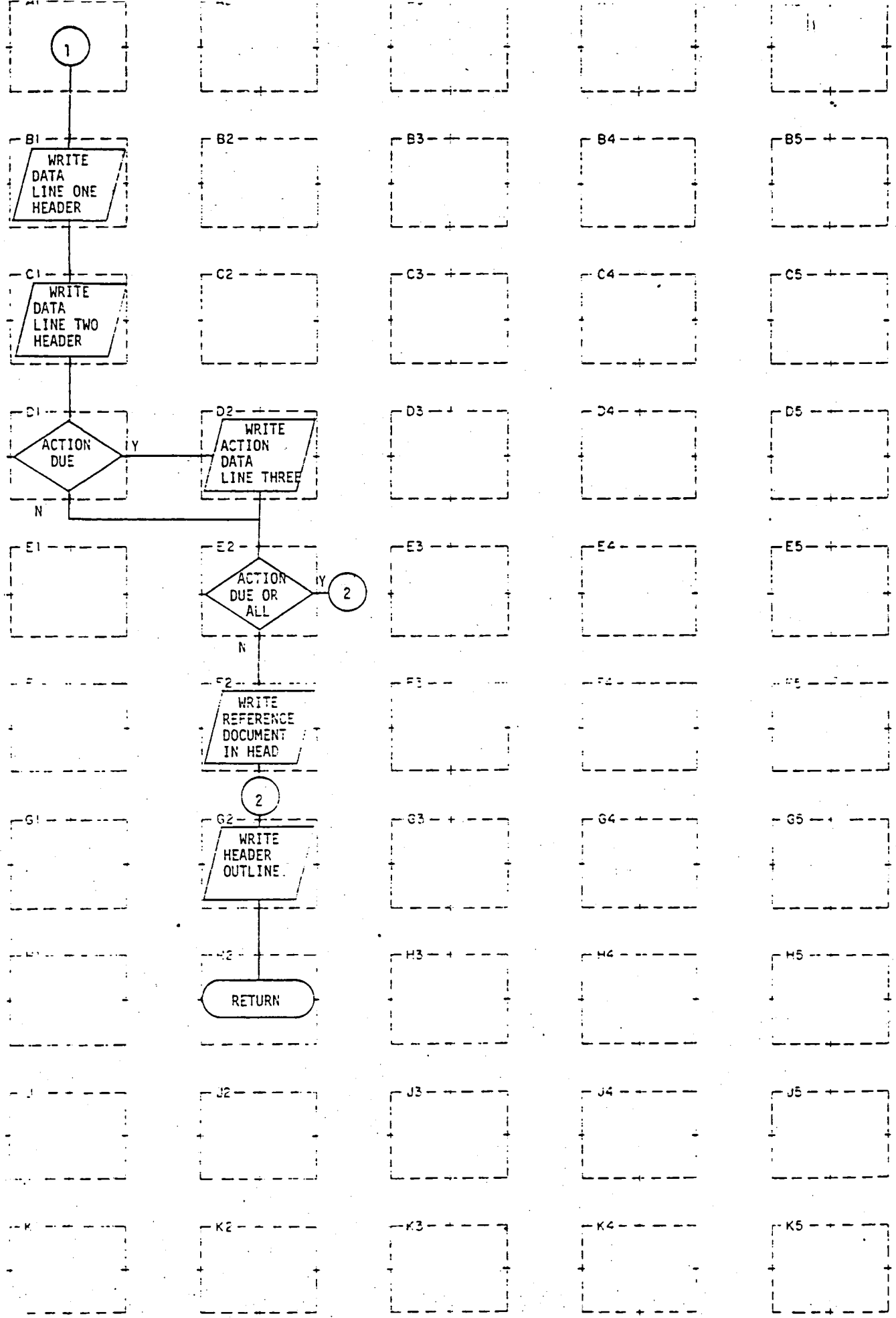


Figure 5.4.1-25

A1
B1 WRITE (1,125)
C1 WRITE (1,130)
D1 (ITEM.EQ.11)
E1
F1
G1
H1
J1
K1
A2
B2
C2
D2 WRITE (1,600)
E2 (ITEM.EQ.11.OR.ITEM.EQ.50)
F2 WRITE (1,625)
G2 WRITE (1,10)
H2
J2
K2
A3
B3
C3
D3
E3

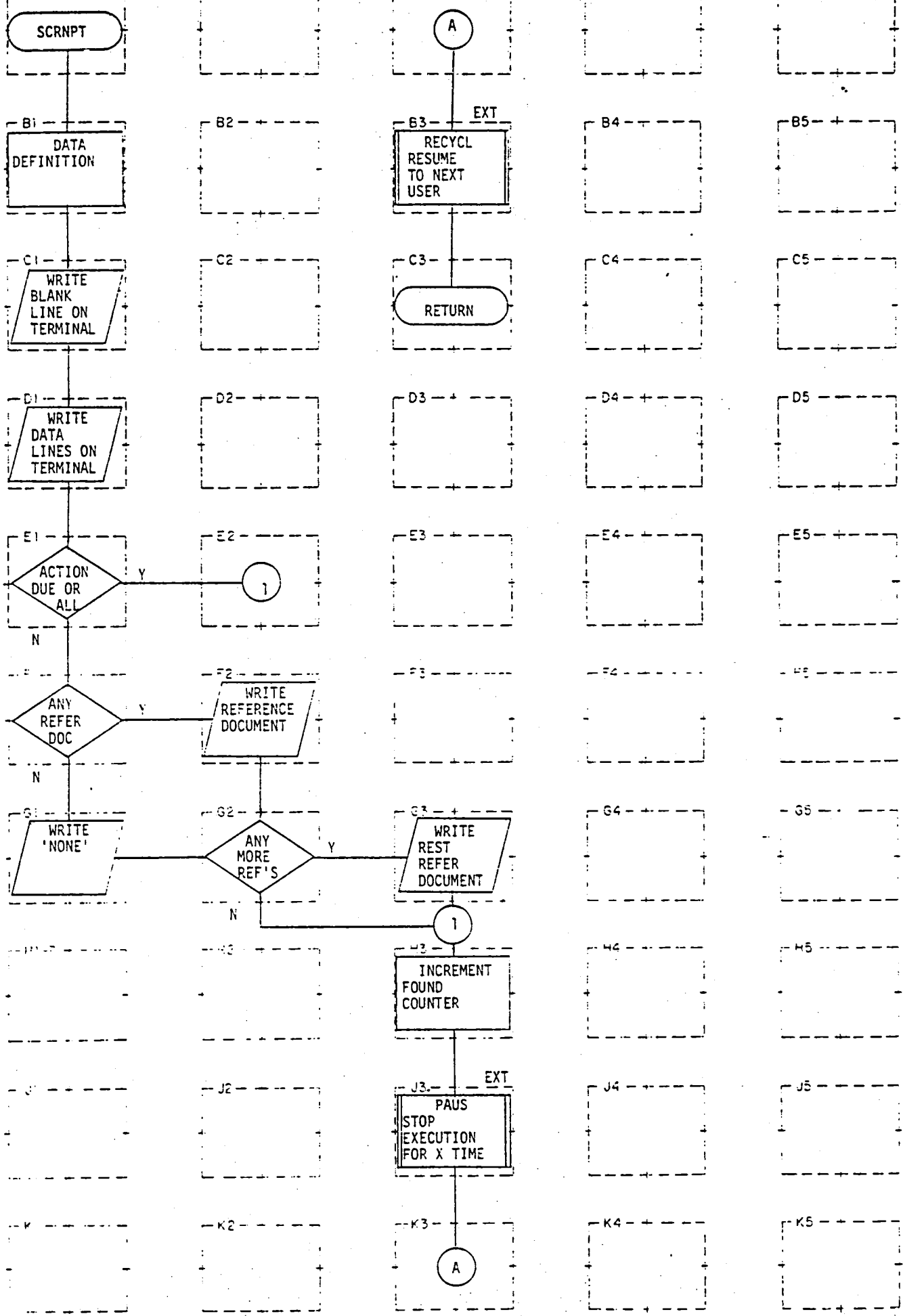


Figure 5.4.1-26

A1
B1 \$INSERT COMMON
C1 WRITE (1,5)
D1 WRITE (1,10)PTIT,DLO,FSC,IDD,COUNT
E1 (ITEM.EQ.11.OR.ITEM.EQ.50)
F1 (TWX(1,1).NE.' ')
G1 WRITE (1,172)
H1
J1
K1
A2
B2
C2
D2
E2
F2 WRITE (1,180)((TWX(I,J),J=1,5),I=1,3)
G2 (TWX(4,1).EQ.' ')
H2
J2
K2
A3
B3 RECYCL
C3
D3
E3

F3

G3 WRITE 9 (1,180) ((TWX(I,J),J=1,5),I=4,6)

H3 KNT = KNT + 1

J3 PAUS

K3

A4

B4

C4

D4

E4

F4

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

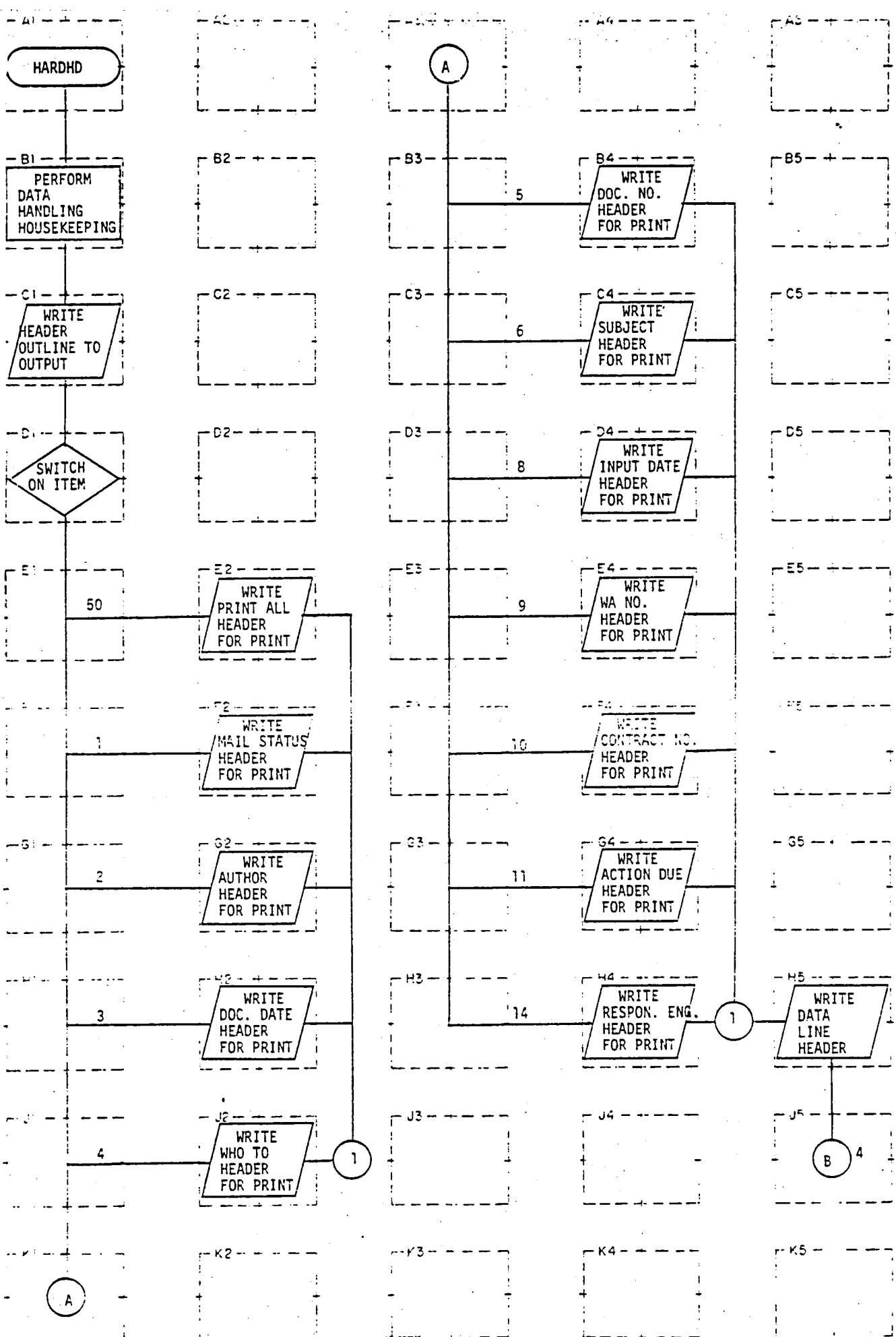


Figure 5.4.1-27

A1
B1 \$INSERT COMMON; INTEGER*2
C1 WRITE (7, 10)
D1
E1 (ITEM.EQ.50)
F1 (ITEM.EQ.1)
G1 (ITEM.EQ.2)
H1 (ITEM.EQ.3)
J1 (ITEM.EQ.4)
K1
A2
B2
C2
D2
E2 WRITE (7,15)
F2 WRITE (7,20)DM
G2 WRITE (7,30)DA
H2 WRITE (7,40)DDD
J2 WRITE (7,45)DT0
K2
A3
B3 (ITEM.EQ.5)
C3 (ITEM.EQ.6)
D3 (ITEM.EQ.8)
E3 (ITEM.EQ.9)

Figure 5.4.1-27

F3
G3 (ITEM.EQ.10)
H3 (ITEM.EQ.11)
J3 (ITEM.EQ.14)
K3
A4
B4 WRITE (7,50)DL
C4 WRITE (7,60) (IT(I),I=1,3)
D4 WRITE (7,70)D
E4 WRITE (7,80)WA
F4 WRITE (7,90)DW
G4 WRITE (7,100)
H4 WRITE (7,120)DRE
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5 WRITE (7,130)
J5
K5

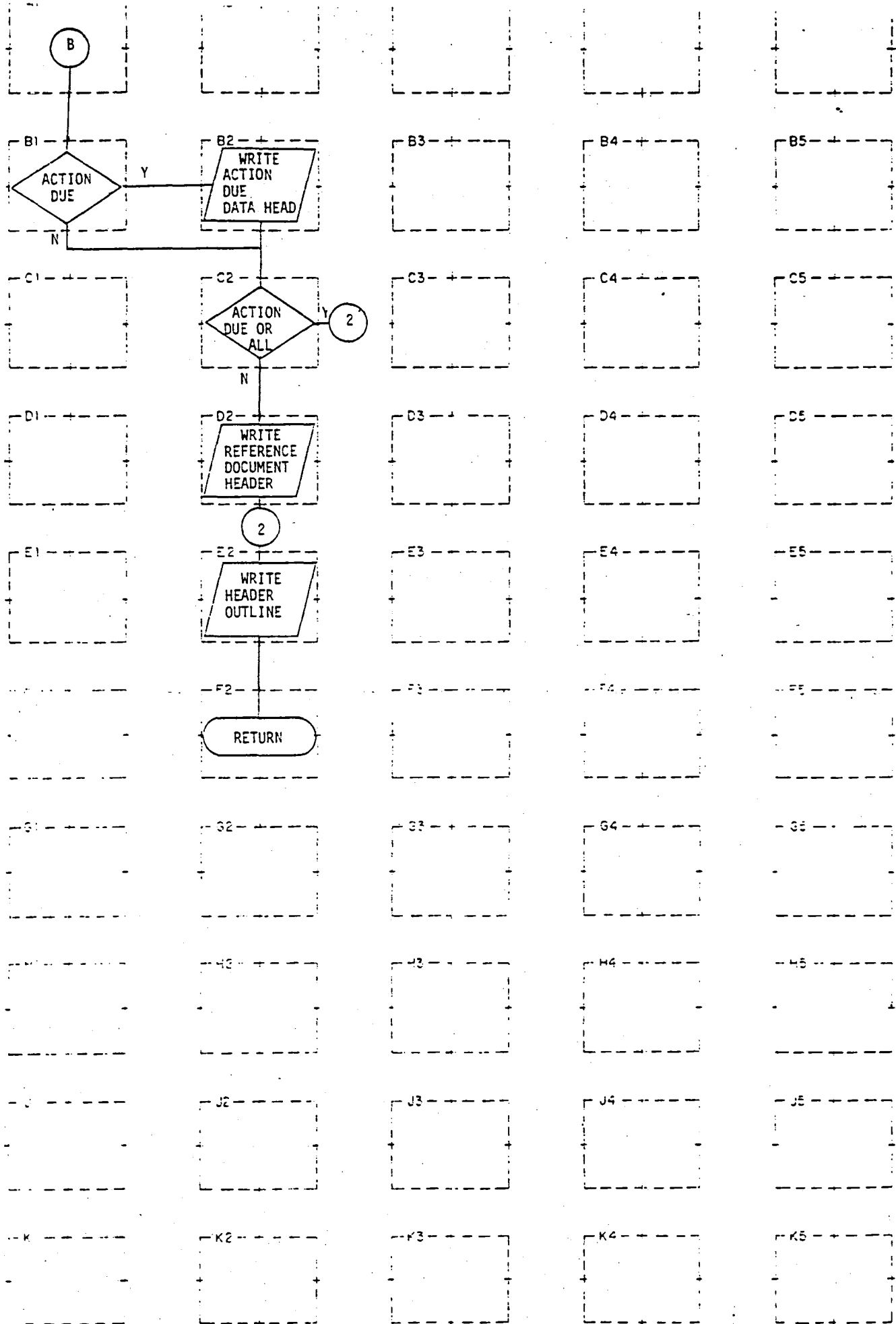


Figure 5.4.1-27

A1

B1 (ITEM.EQ.11)

C1

D1

E1

F1

G1

H1

J1

K1

A2

B2 WRITE (7,500)

C2 (ITEM.EQ.11.OR.ITEM.EQ.50)

D2 WRITE (7,600)

E2 WRITE (7,700)

F2

G2

H2

J2

K2

A3

B3

C3

D3

E3

Figure 5.4.1-27

Page (5 of 5)

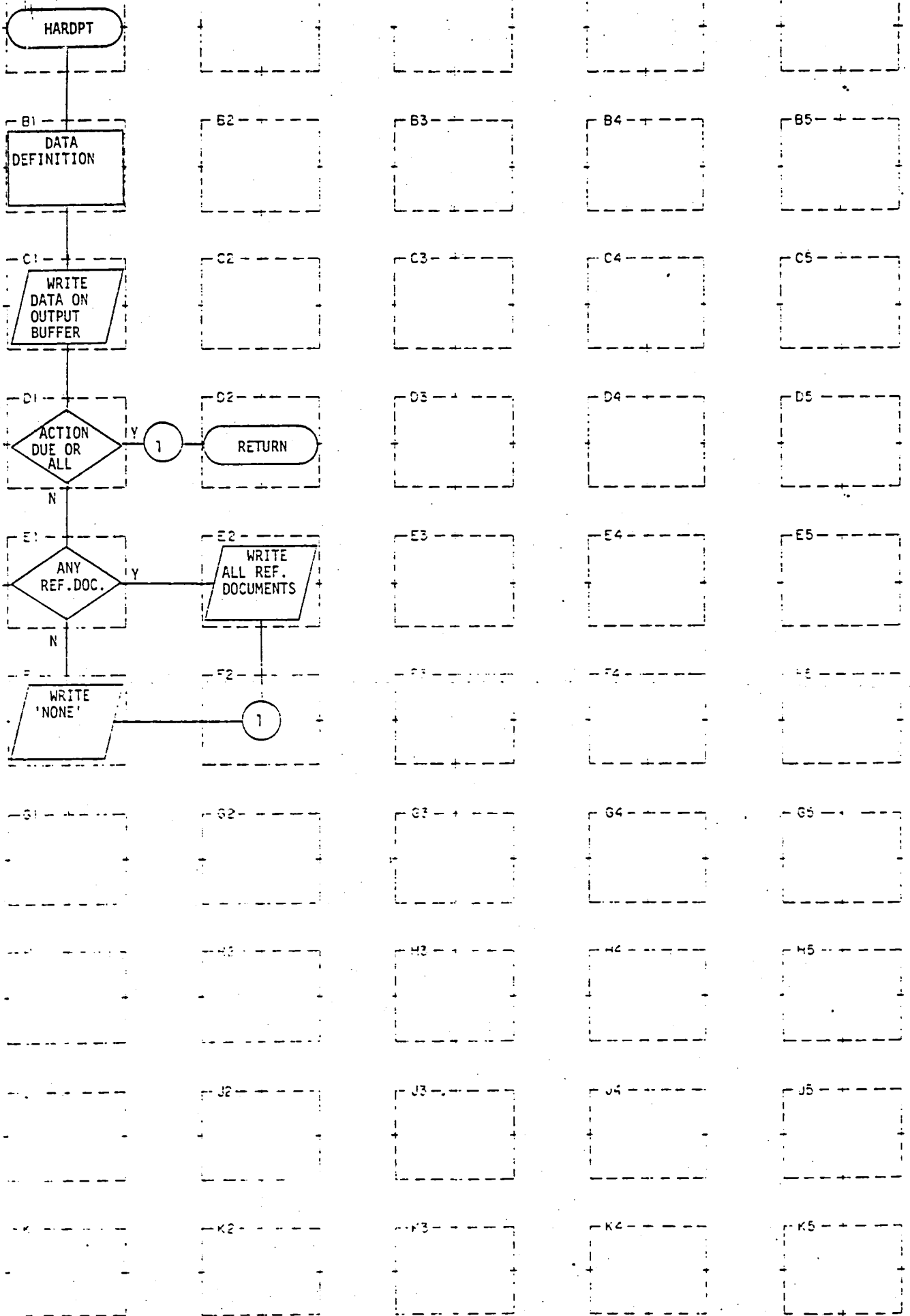


Figure 5.4.1-28

```
A1
B1 $INSERT COMMON; INTEGER*2
C1 WRITE (7,10)KNT,PTIT,DLN,FSC,IDD,COUNT
D1 (ITEM.EQ.11.OR.ITEM.EQ.50)
E1 (TWX(1,1).NE.' ')
F1 WRITE (7,172)
G1
H1
J1
K1
A2
B2
C2
D2
E2 WRITE (7,180) ((TWX(I,J),J=1,5),I = 1,6)
F2
G2
H2
J2
K2
A3
B3
C3
D3
E3
```

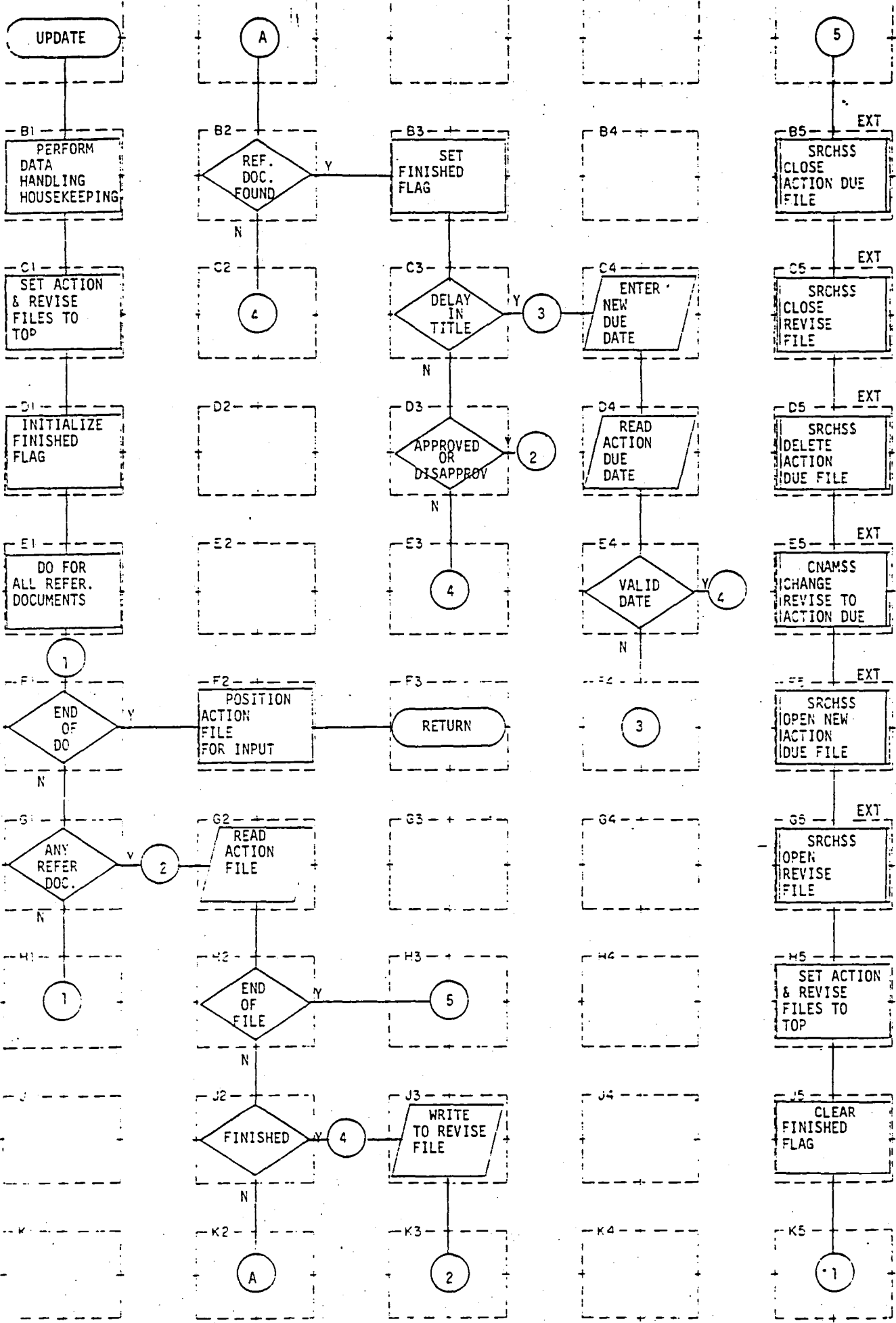


Figure 5.4.1-29

```

A1
B1 $INSERT COMMON; $INSERT SYSCOM> KEYS.F; INTEGER*4; *2
C1 REWIND 9; REWIND 8
D1 FINISH = 0
E1 DO 600 J = 1,6
F1 Performed by E1
G1 (TWX (J,1).EQ. ' ')
H1
J1
K1
A2
B2 DO 105K = 1,5; (TWX(J,K).NE.DL(K))
C2
D2
E2
F2 READ (9,END=700)DA,DL,DPT,D,KT,DDD,DF,DE
G2 READ (9,END=300)DA,DL,DPT,D,KT,DDD,DF,DE
H2 Performed by G2
J2 (FINISH.EQ.1)
K2
A3
B3 FINISH = 1
C3 DO 150L = 1,21; (SUB(L).EQ.'DELA')
D3 DO 155L = 1,21; (SUB(L).EQ.'APPR'.OR.SUB(L).EQ.'DISA')
E3

```

```

F3
G3
H3
J3 WRITE (8)DA,DL,DPT,D, KT,DDD,DF,DE
K3
A4
B4
C4 WRITE (1,165)DDD
D4 READ (1,170,ERR = 160)DDD
E4 (DDD(1).LE.0.OR.DDD(1).GE.13); (DDD(2).LE.0.OR.DDD(2).GE.32)
F4
G4
H4
J4
K4
A5
B5 SRCH$$ (K$CLOS, 'ACTD', 6, 0, 0, 0)
C5 SRCH$$ (K$CLOS, 'REVS', 6, 0, 0, 0)
D5 SRCH$$ (K$DELE, 'ACTD', 6, 0, 0, 0)
E5 CNAM$$ ('REVS', 6, 'ACTD', 6, IC)
F5 SRCH$$ (K$RDWR+K$NDAM, 'ACTD', 6, 5, 1, IC)
G5 SRCH$$ (K$RDWR+K$NDAM, 'REVS', 6, 4, 1, IC)
H5 REWIND 9; REWIND 8
J5 FINISH = 0
K5

```

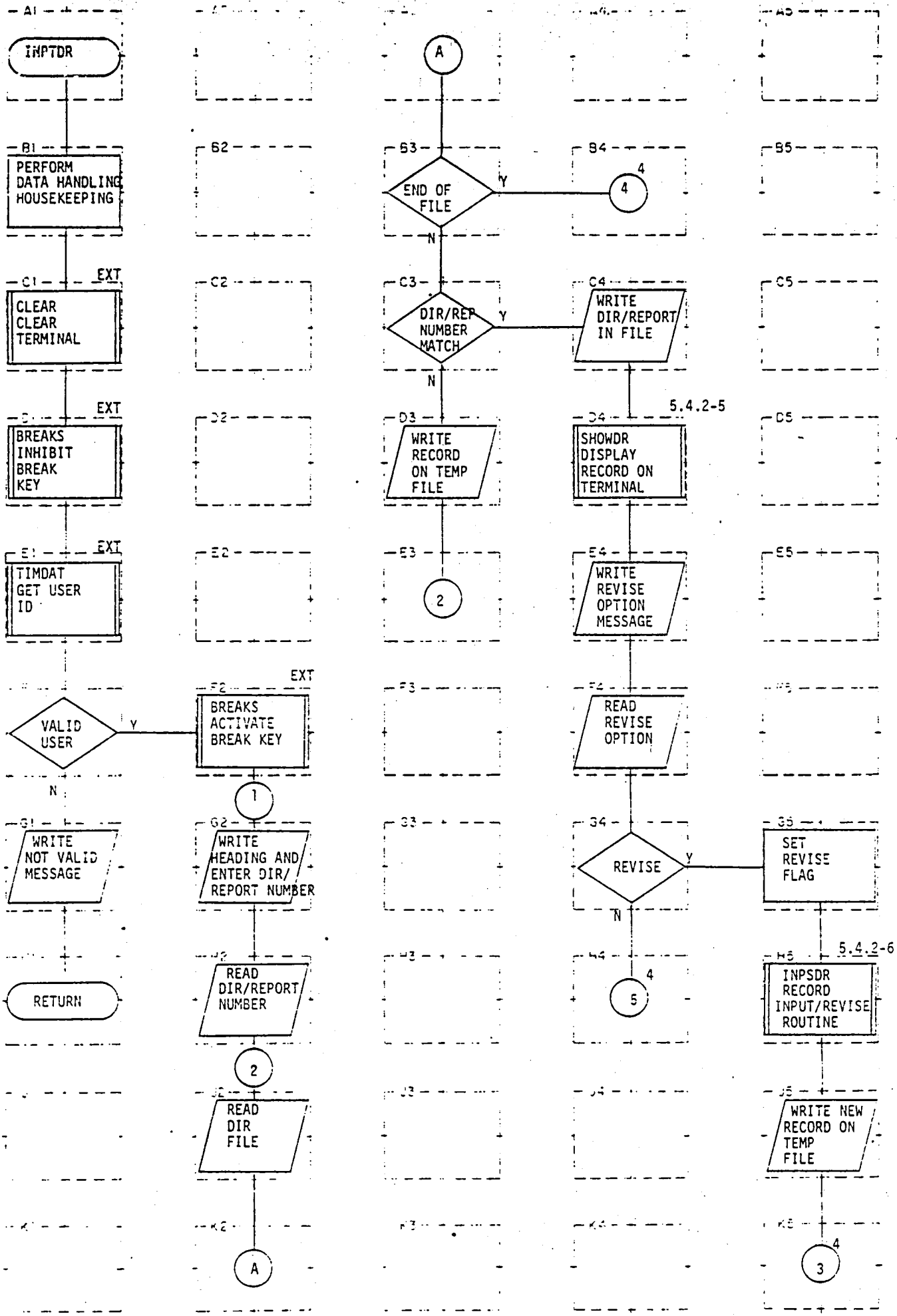


Figure 5.4.2-1


```

A1
B1      $INSERT COMMON; $INSERT SYSCOM>KEYS.F; INTEGER*2;*4
C1      CLEAR
D1      BREAK$(.TRUE.)
E1      TIMDAT(A,15)
F1      (A(13).EQ.'JW'.OR.A(13).EQ.'HN'.OR.A(13).EQ.'RJ'.OR.A(13).EQ.'DK')
G1      WRITE(1,4)
H1
J1
K1
A2
B2
C2
D2
E2
F2      BREAK$(.FALSE.)
G2      WRITE(1,1); WRITE(1,505)
H2      READ(1,510,ERR=500)DIRR
J2      READ(6,END=1010)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
K2
A3
B3      see J2
C3      DO 530I=1,4; (DIR(I).NE.DIRR(I))
D3      WRITE(10)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
E3

```

F3
G3
H3
J3
K3
A4
B4
C4 WRITE(1,540)
D4 SHOWDR
E4 WRITE(1,550)
F4 READ(1,560,ERR=545)IOPT
G4 (IOPT.EQ.'NO'); (IOPT.NE.'YE')
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5 R=1
H5 INPSDR
J5 WRITE(10)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
K5

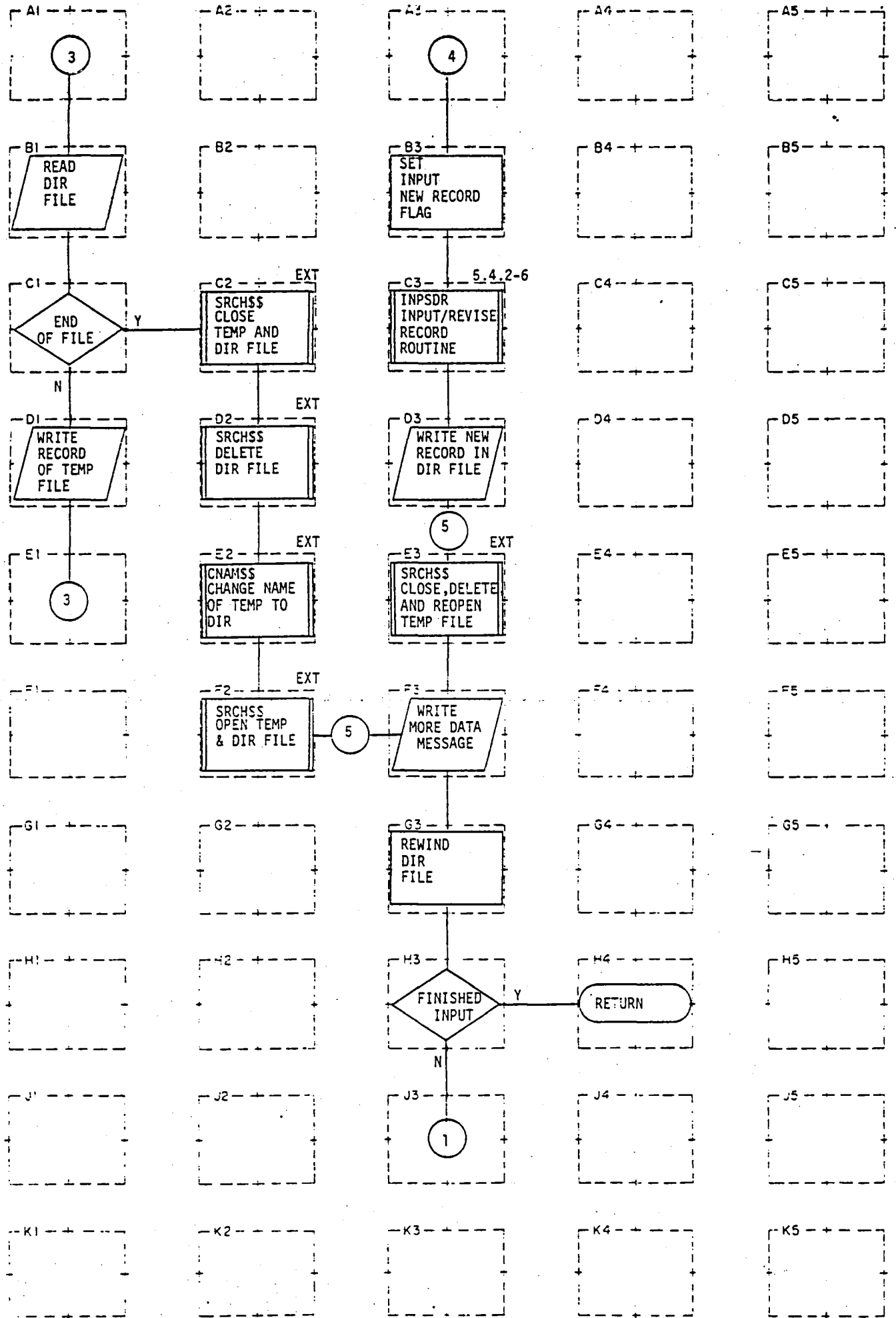
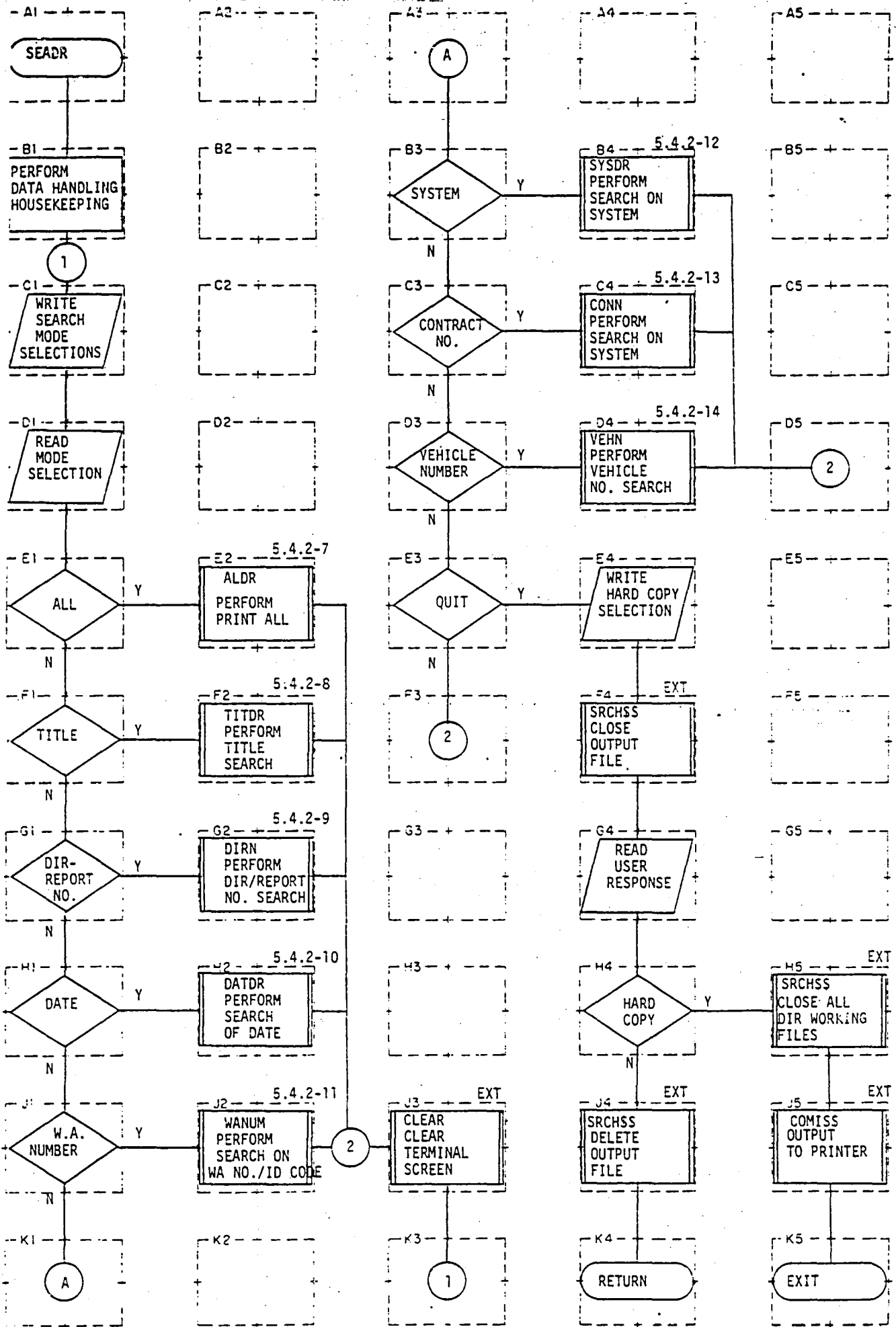


Figure 5.4.2-1

A1
 B1 READ(6,END=600)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
 C1 see B1
 D1 WRITE(10)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
 E1
 F1
 G1
 H1
 J1
 K1
 A2
 B2
 C2 SRCH\$(K\$CLOS,'TEMP',6,0,0,0);SRCH\$(K\$CLOS,'DIR',6,0,0,0)
 D2 SRCH\$(K\$DELE,'DIR',6,0,0,0)
 E2 CNAM\$('TEMP',6,'DIR',6,IC)
 F2 SRCH\$(K\$RDWR+K\$NDAM,'DIR',6,2,IT,IC);SRCH\$(K\$RDWR+K\$NDAM,
 'TEMP',6,6,IT,IC)
 G2
 H2
 J2
 K2
 A3
 B3 R=0
 C3 INPSDR
 D3 WRITE(6)TIT,PTIT,DIRR,DT,SYS,WAN,VEH,REV,RDAT
 E3 SRCH\$(K\$CLOS,'TEMP',6,0,0,0);SRCH\$(K\$DELE,'TEMP',6,0,0,0);SRCH\$(
 K\$RDWR+K\$NDAM,'TEMP',6,6,IT,IC)

Figure 5.4.2-1

```
F3      WRITE(1,1001); READ(1,1002)IANS
G3      REWIND 6
H3      (IANS.EQ.'N'); (IANS.NE.'Y')
J3
K3
A4
B4
C4
D4
E4
F4
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5
```



```

A1
B1      $INSERT SYSCOM>KEYS.F; SRCH$$ (K$RDWR+K$NSAM,'OUT',6,3,0,0)
C1      WRITE(1,1); REWIND 6.
D1      READ(1,3)IDES:
E1      (IDES(1).EQ.'AL')
F1      (IDES(1).EQ.'TI')
G1      (IDES(1).EQ.'DI')
H1      (IDES(1).EQ.'DA')
J1      (IDES(1).EQ.'WA')
K1
A2
B2
C2
D2
E2      ALDR
F2      TITDR
G2      DIRN
H2      DATDR
J2      WANUM
K2
A3
B3      (IDES(1).EQ.'SY')
C3      (IDES(1).EQ.'CO')
D3      (IDES(1).EQ.'VE')
E3      (IDES(1).EQ.'QU')

```

```

F3
G3
H3
J3      CLEAR
K3
A4
B4      SYSDR
C4      CONN
D4      VEHN
E4      WRITE(1,11)
F4      SRCH$$ (K$CLOS, 'OUT', 6,0,0,0)
G4      READ(1,3) IDES
H4      (IDES(1).EQ. 'YE'); (IDES(1).EQ. 'NO')
J4      SRCH$$ (K$DELE, 'OUT', 6,0,0,0)
K4
A5
B5
C5
D5
E5
F5
G5
H5      SRCH$$ (K$CLOS, 'DIR', 6,0,0,0); SRCH$$ (K$CLOS, 'REV', 6,0,0,0);
        SRCH$$ (K$CLOS, 'TEMP', 6,0,0,0)
J5      COMI$$ ('SOUT', 6,2,IC)
K5

```



```

A1
B1      $INSERT COMMON:- INTEGER*2,*4
C1      TIMDAT(A,15)
D1      (A(13).EQ.'JW'.OR.A(13).EQ.'NH'.OR.A(13).EQ.'RJ'.OR.A(13).EQ.'DK')
E1      WRITE(1,4)('SORRY, YOU ARE NOT VALIDATED TO USE THIS MODE.')
F1
G1
H1
J1
K1
A2
B2
C2
D2      FINISH=0
E2      WRITE(1,1)
F2      READ(1,2,ERR=5)IDIR
G2      REWIND 6
H2      READ(6,END=200)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
J2      see H2
K2
A3
B3      (FINISH.EQ.1)
C3      DO 110 I=1,4; (IDIR(I).NE.DIR(I))
D3
E3

```

F3
G3
H3
J3 SRCH\$\$ (K\$CLOS, 'DIR', 6, 0, 0, 0); SRCH\$\$ (K\$DELE, 'DIR', 6, 0, 0, 0)
K3
A4
B4
C4 SHOWDR
D4 WRITE(1, 1700)
E4 READ(1, 50) IOPT
F4 (IOPT.EQ. 'NO'); (IOPT.NE. 'YE')
G4
H4
J4 CNAM\$\$ ('REVS', 6, 'DIR', 6, IC)
K4
A5
B5
C5
D5
E5
F5 WRITE(1, 2000)
G5 READ(1, 50) IOPT
H5
J5 SRCH\$\$ (K\$RDWR+K\$NDAM, 'DIR', 6, 2, IT, IC); SRCH\$\$ (K\$RDWR+K\$NDAM, 'REV',
6, 4, IT, IC)
K5

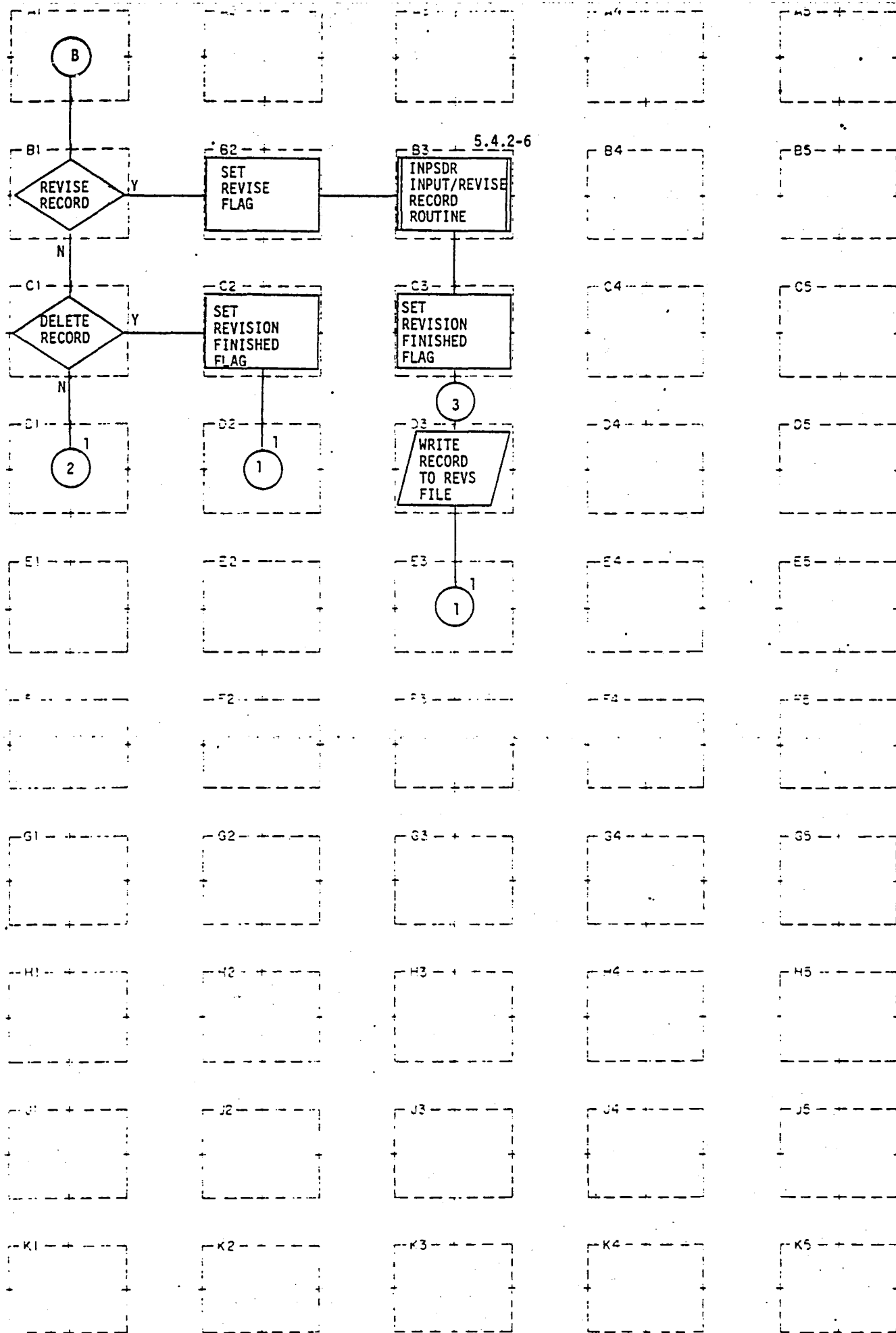


Figure 5.4.2-3

A1
B1 (IOPT.EQ.'RE')
C1 (IOPT.NE.'DE')
D1
E1
F1
G1
H1
J1
K1
A2
B2 R=1
C2 FINISH=1
D2
E2
F2
G2
H2
J2
K2
A3
B3 INPSDR
C3 FINISH=1
D3 WRITE(8)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
E3

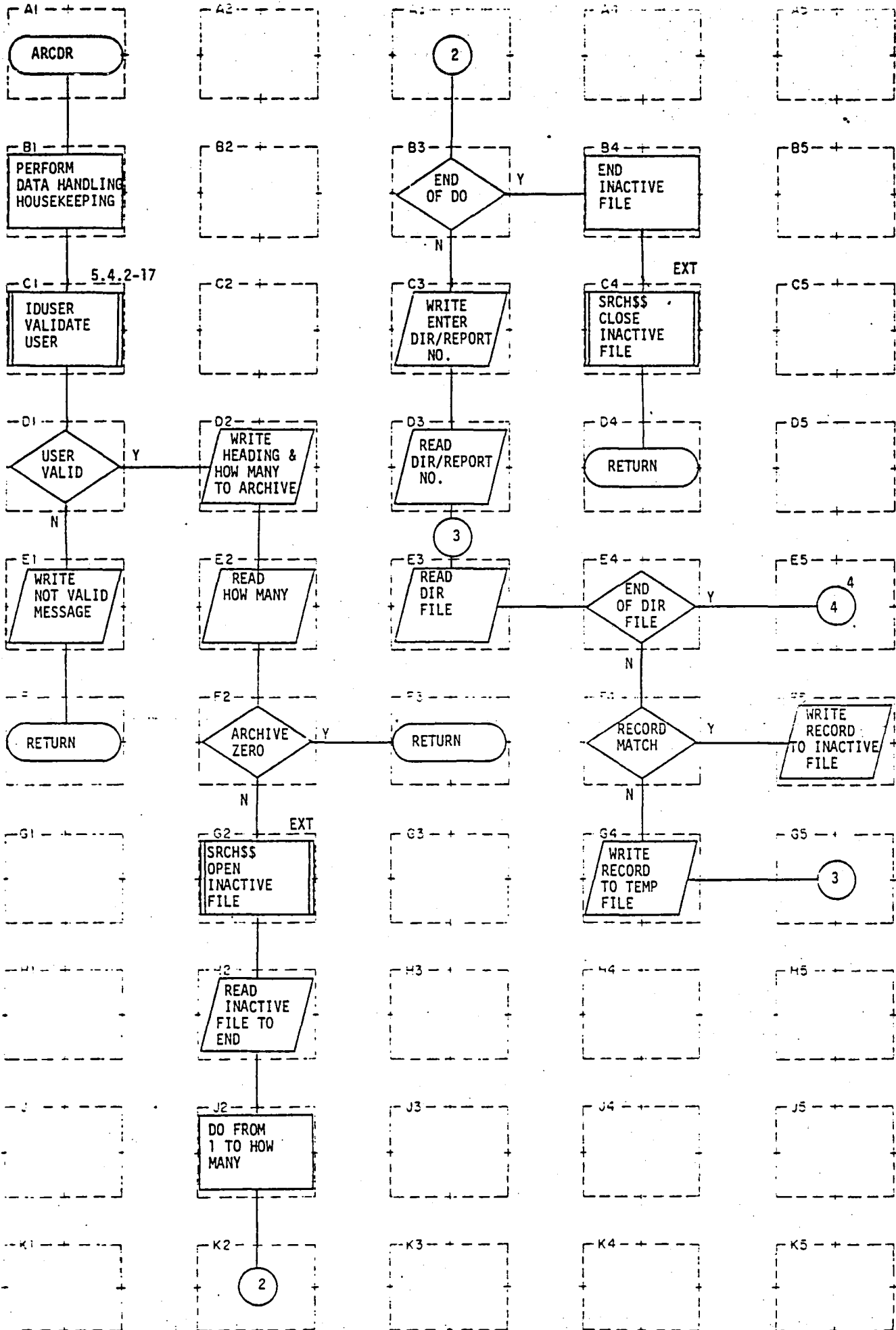


Figure 5.4.2-4

```

A1
B1      $INSERT COMMON; $INSERT SYSCOM>KEYS.F; INTEGER*4
C1      IDUSER(IAI)
D1      (IAI.EQ.'SY')
E1
F1
G1
H1
J1
K1
A2
B2
C2
D2      WRITE(1,1) ('YOU ARE NOT VALIDATED TO USE THIS ROUTINE')
E2      READ(1,2,ERR=10)IKNT
F2      (IKNT.EQ.0)
G2      SRCH$$ (K$RDWR+K$NDAM,'INACT',6,5,1,IC)
H2      READ(9,END=75)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
J2      DO 9999 ILOOP=1,IKNT
K2
A3
B3
C3      WRITE(1,80)
D3      READ(1,81,ERR=82)IDR
E3      READ(6,END=200)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT

```

F3

G3

H3

J3

K3

A4

B4 ENDFILE 9

C4 SRCH\$\$ (K\$CLOS, 'INACT', 6, 0, 0, 0)

D4

E4

F4 DO 150 I=1,4; (IDR(I).NE.DIR(I))

G4 WRITE(10)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT

H4

J4

K4

A5

B5

C5

D5

E5

F5 WRITE(9)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT

G5

H5

J5

K5

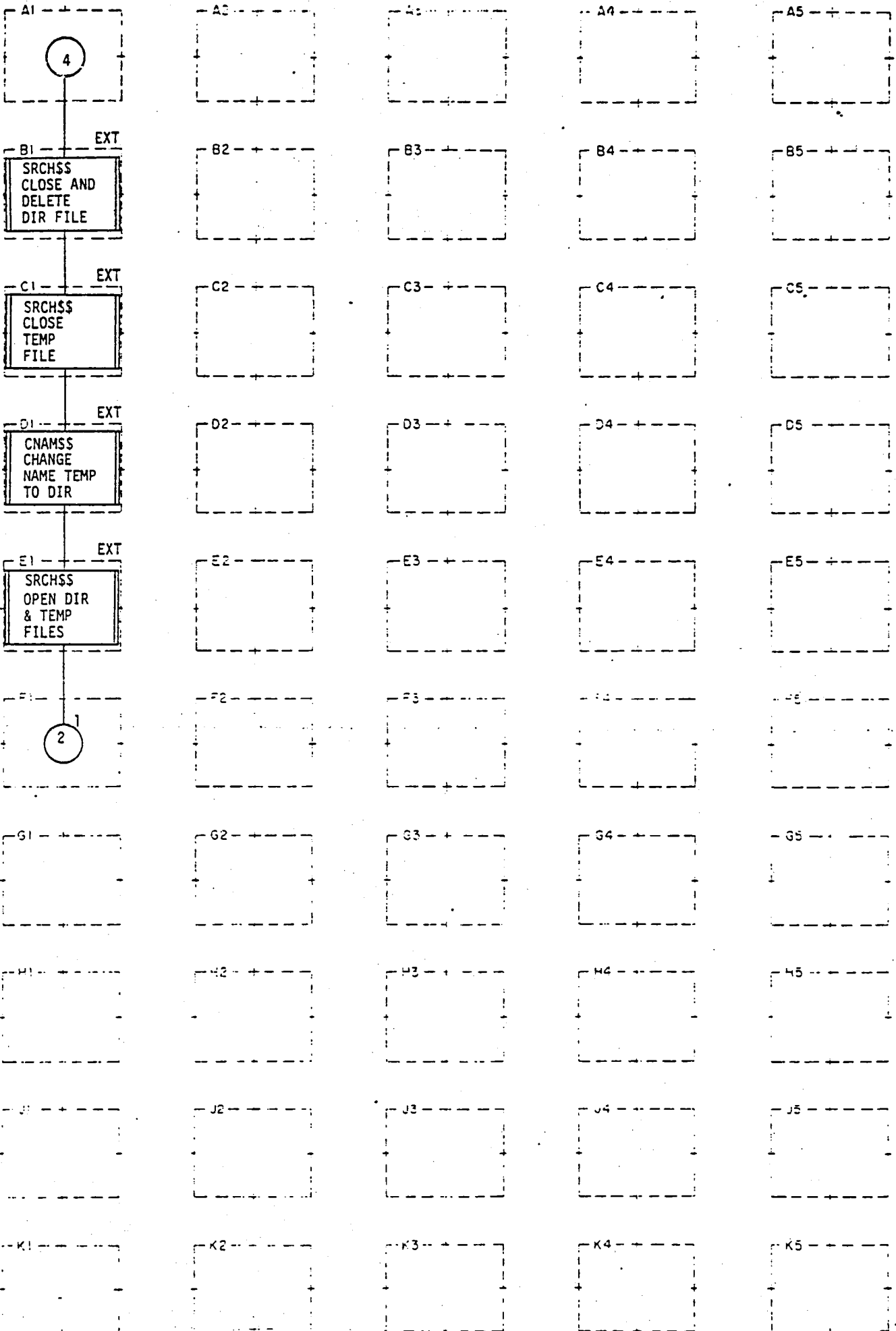


Figure 5.4.2-4

A1
B1 SRCH\$\$ (K\$CLOS, 'DIR', 6, 0, 0, 0); SRCH\$\$ (K\$DELE, 'DIR', 6, 0, 0, 0)
C1 SRCH\$\$ (K\$CLOS, 'TEMP', 6, 0, 0, 0)
D1 CNAM\$\$ ('TEMP', 6, 'DIR', 6, IC)
E1 SRCH\$\$ (K\$RDWR+K\$NDAM, 'DIR', 6, 2, IT, IC); SRCH\$\$ (K\$RDWR+K\$NDAM, 'TEMP',
6, 6, IT, IC)
F1
G1
H1
J1
K1
A2
B2
C2
D2
E2
F2
G2
H2
J2
K2
A3
B3
C3
D3
E3

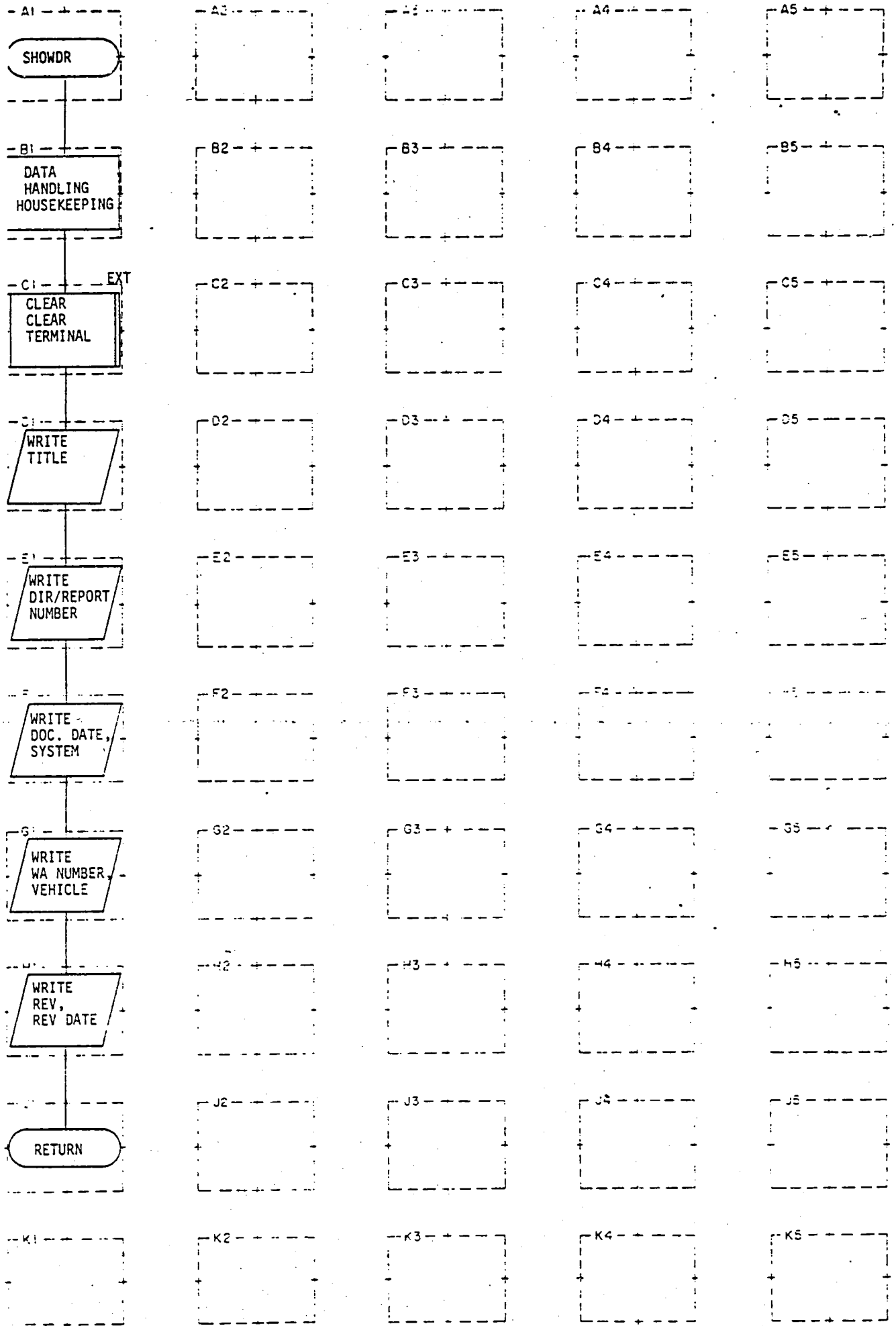


Figure 5.4.2-5

A1
B1 \$INSERT COMMON
C1 CLEAR
D1 WRITE(1,10)TIT
E1 WRITE(1,20)DIR,DT,SYS
F1 see E1
G1 WRITE(1,30)WAN,((VEH(I,J),J=1,2),I=1,2)
H1 WRITE(1,40)REV,RDAT
J1
K1
A2
B2
C2
D2
E2
F2
G2
H2
J2
K2
A3
B3
C3
D3
E3

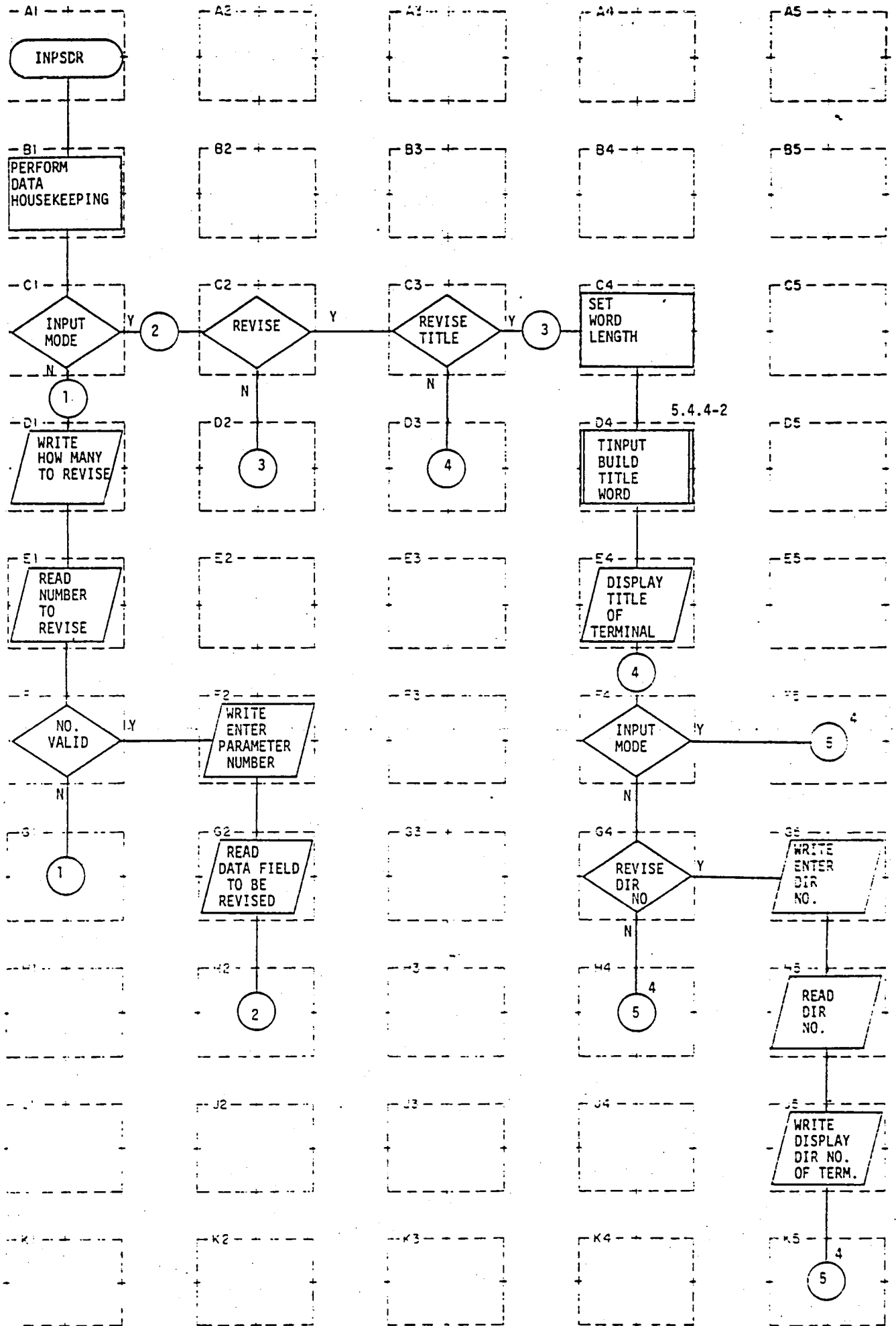


Figure 5.4.2-6

A1
B1 \$INSERT COMMON; \$INSERT SYSCOM>KEYS.F; INTEGER*2
C1 (R.EQ.0)
D1 WRITE(1,1)
E1 READ(1,10,ERR=2)IKNT
F1 (IKNT.LT.0); (IKNT.GT.8)
G1
H1
J1
K1
A2
B2
C2 (R.EQ.1.AND.IR.NE.1)
D2
E2
F2 WRITE(1,3)
G2 READ(1,10,ERR=5)IR
H2
J2
K2
A3
B3
C3 see C2
D3
E3

F3
G3
H3
J3
K3
A4
B4
C4 . LEN=10
D4 TINPUT(TIT,LEN)
E4 WRITE(1,102)TIT
F4 (R.EQ.1.AND.IR.NE.2)
G4 see F4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5 WRITE(1,202)
H5 READ(1,203,ERR=201)DIR
J5 WRITE(1,203)DIR
K5

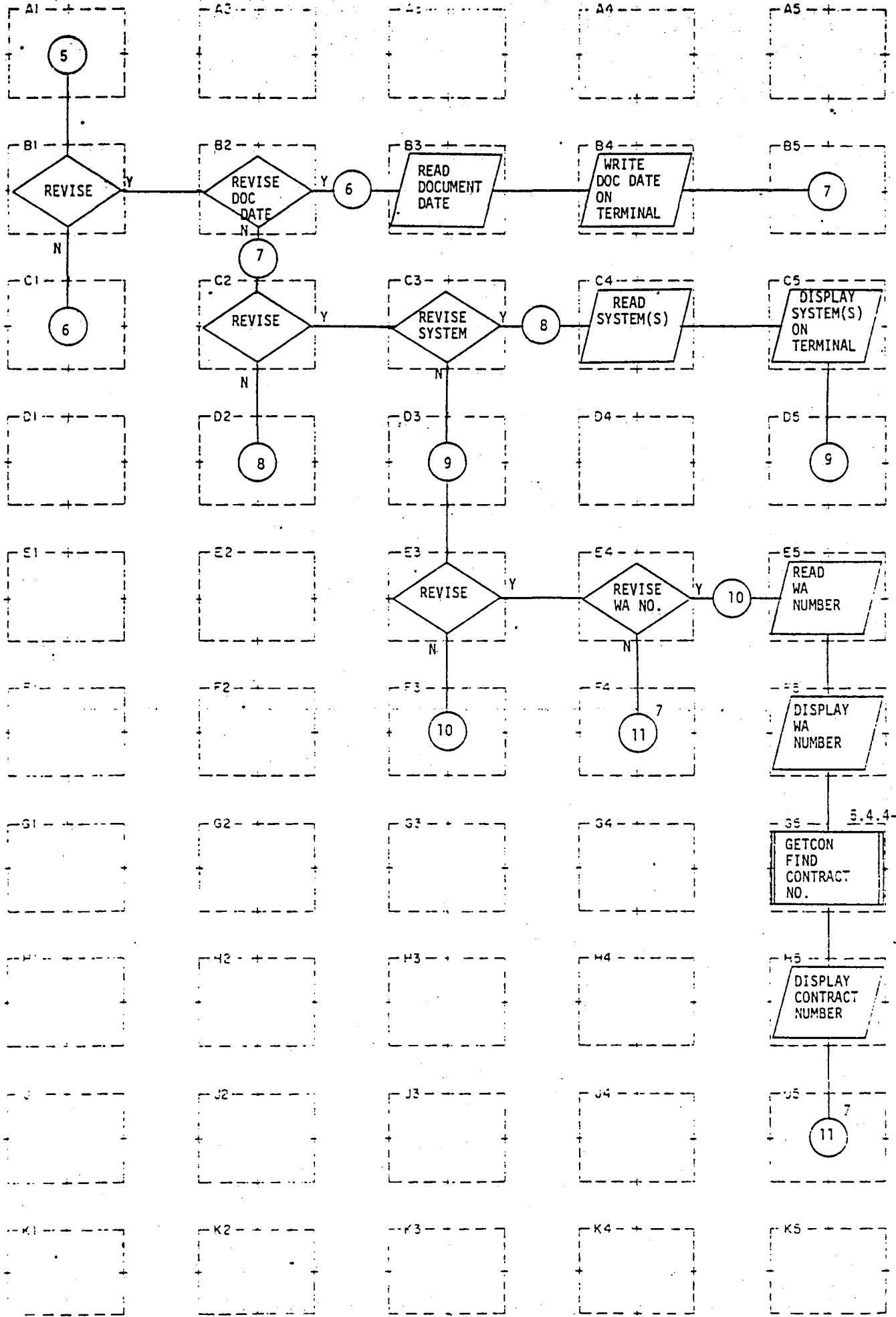


Figure 5.4.2-6

A1
B1 (R.EQ.1.AND.IR.NE.3)
C1
D1
E1
F1
G1
H1
J1
K1
A2
B2 see B1
C2 (R.EQ.1.AND.IR.NE.4)
D2
E2
F2
G2
H2
J2
K2
A3
B3 READ(1,403,ERR=401)DT
C3 see C2
D3
E3 (R.EQ.1.AND.IR.NE.5)

F3

G3

H3

J3

K3

A4

B4 WRITE(1,403)DT

C4 READ(1,503,ERR=501)SYS

D4

E4 see E3 (page 5 of 9)

F4

G4

H4

J4

K4

A5

B5

C5 WRITE(1,503) SYS

D5

E5 READ(1,603,ERR=601)WAN

F5 WRITE(1,603)WAN

G5 GETCON

H5 WRITE(1,650)CON

J5

K5

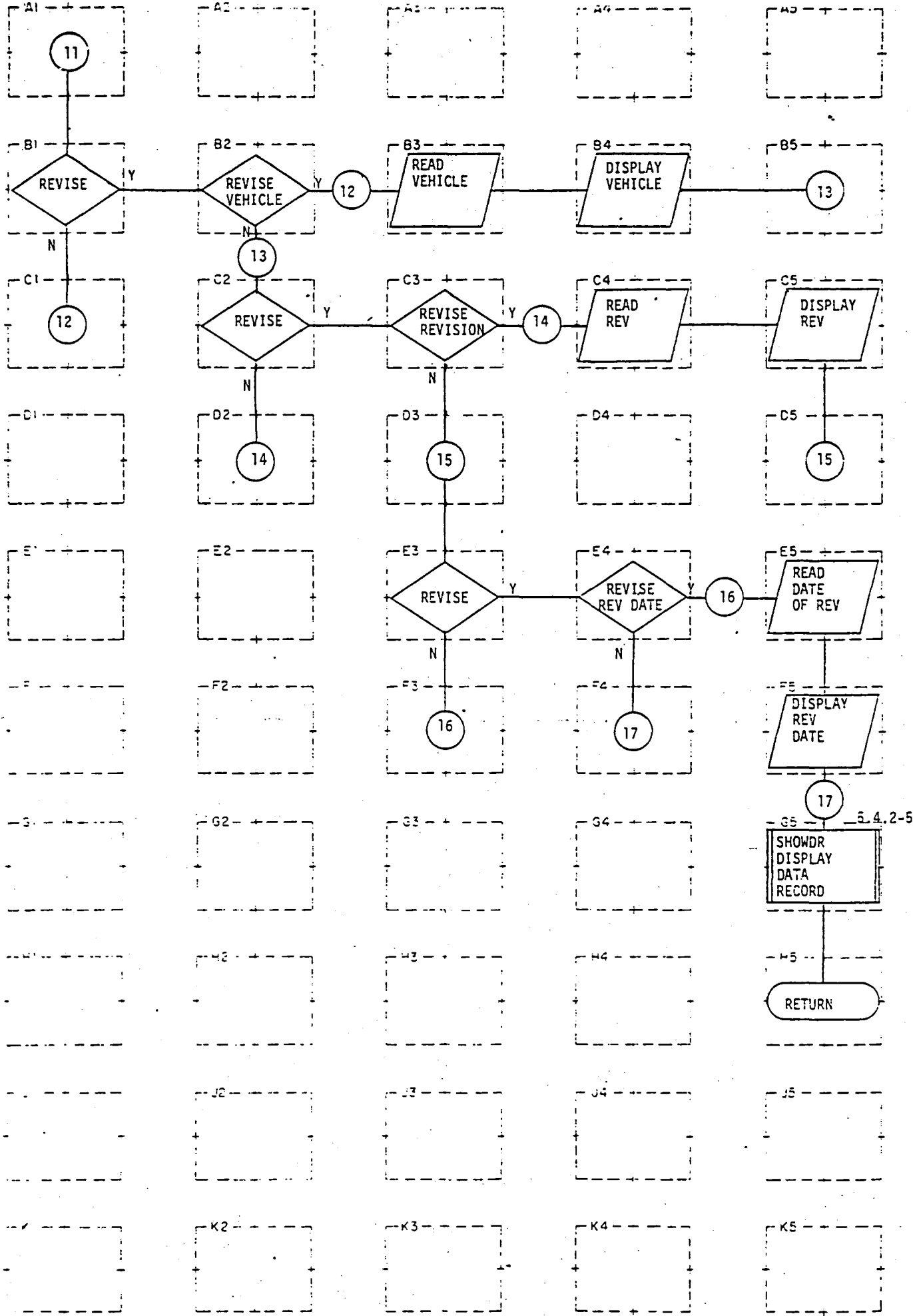


Figure 5.4.2-6

A1

B1 (R.EQ.1.AND.IR.NE.6)

C1

D1

E1

F1

G1

H1

J1

K1

A2

B2 see B1

C2 (R.EQ.1.AND.IR.NE.7)

D2

E2

F2

G2

H2

J2

K2

A3

B3 READ(1,903,ERR=901) ((VEH(I,J),J=1,2),I=1,2)

C3 see C2

D3

E3 (R.EQ.1.AND.IR.NE.8)

F3

G3

H3

J3

K3

A4

B4 WRITE(1,903)((VEH(I,J),J=1,2),I=1,2)

C4 READ(1,2202)REV

D4

E4 see E3 (page 8 of 9)

F4

G4

H4

J4

K4

A5

B5

C5 WRITE(1,2202)REV

D5

E5 READ(1,2303)RDAT

F5 WRITE(1,2303)RDAT

G5 SHOWDR

H5

J5

K5

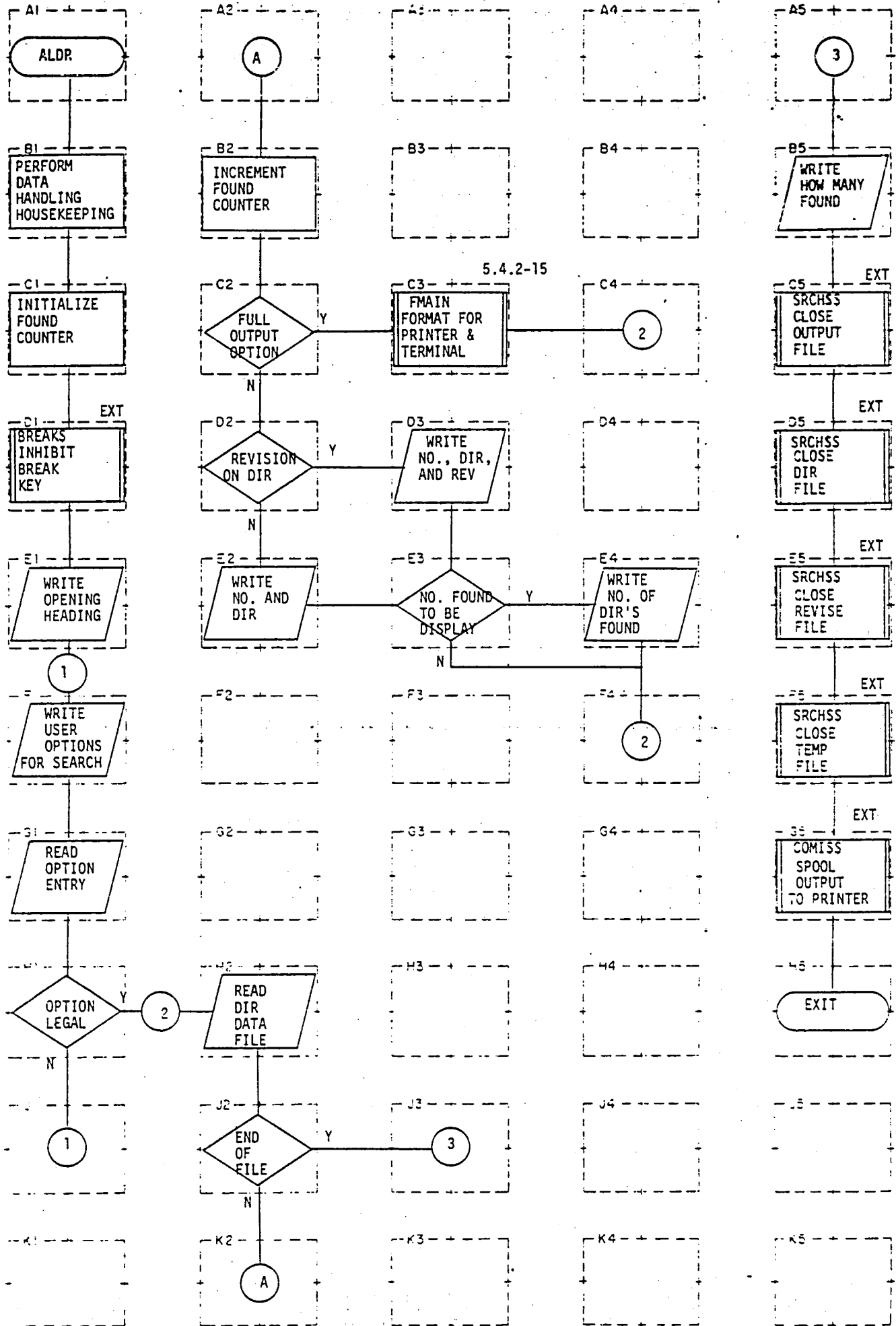


Figure 5.4.2-7

```

A1
B1      $INSERT COMMON; $INSERT SYSCOM>KEYS.F; INTEGER*2; *4
C1      KNT=0
D1      BREAK$(.TRUE.)
E1      WRITE(1,1)
F1      WRITE(1,3)
G1      READ(1,4,ERR=3)IOPT
H1      (IOPT.LT.1.OR.IOPT.GT.2)
J1
K1
A2
B2      KNT=KNT+1
C2      (IOPT.EQ.2)
D2      (REV.EQ.' ')
E2      WRITE(7,55)KNT,DIR
F2
G2
H2      READ(6,END=100)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
J2      see H2
K2
A3
B3
C3      FMAIN
D3      WRITE(7,35)KNT,DIR,REV
E3      (KNT/50.EQ.KNT/50.)

```

F3
G3
H3
J3
K3
A4
B4
C4
D4
E4 WRITE(1,70)KNT
F4
G4
H4
J4
K4
A5
B5 WRITE(1,200)KNT
C5 SRCHSS(KSCLOS,'OUT',6,0,0,0)
D5 SRCHSS(KSCLOS,'DIR',6,0,0,0)
E5 SRCHSS(KSCLOS,'REVS',6,0,0,0)
F5 SRCHSS(KSCLOS,'TEMP',6,0,0,0)
G5 COMISS('SOUT',6,12,IC)
H5
J5
K5

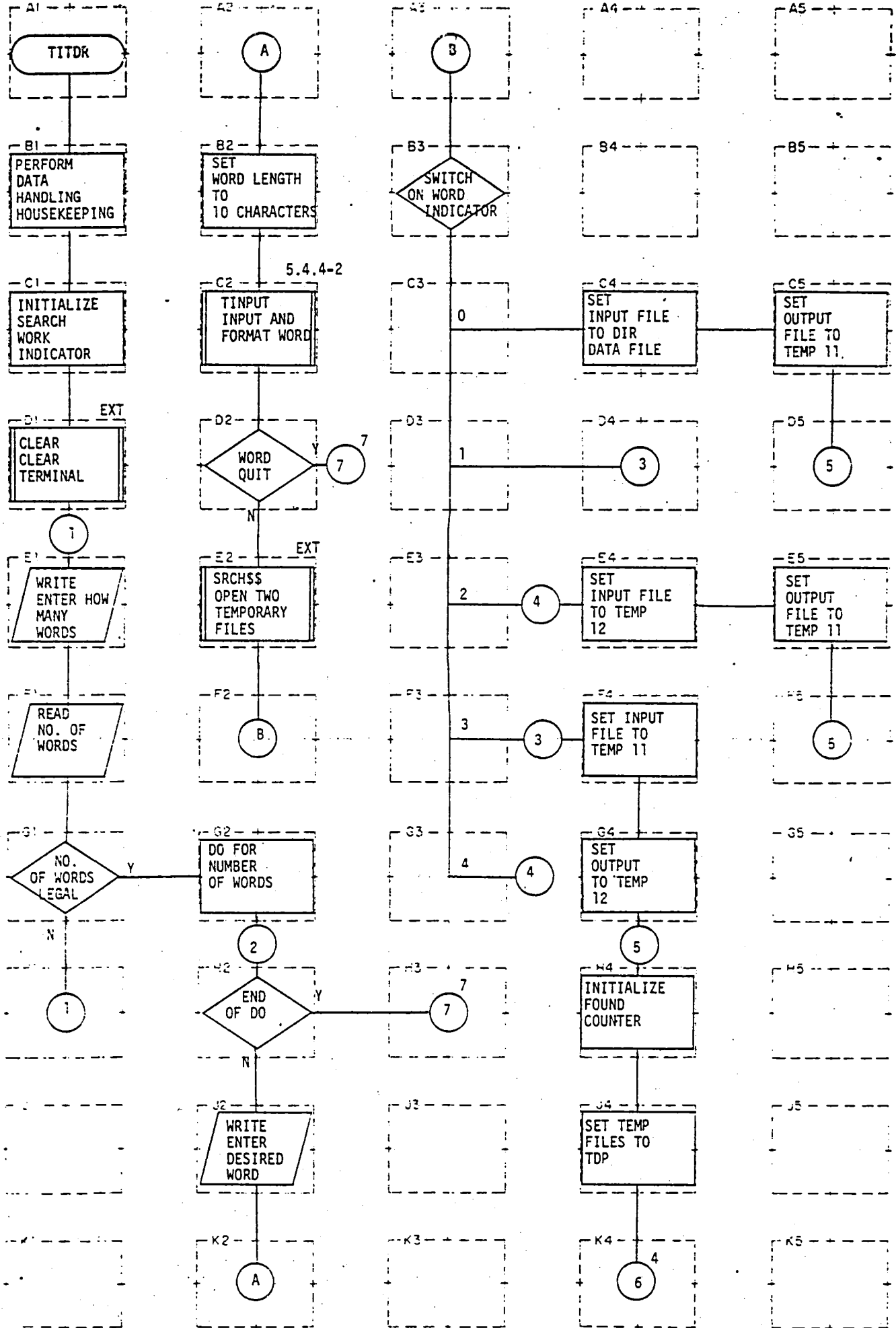


Figure 5.4.2-8

```

A1
B1      $INSERT COMMON; INTEGER *2; *4
C1      T1=0
D1      CLEAR
E1      WRITE(1,2)
F1      READ (1,8,ERR=L001)ICON
G1      (ICON.LT.1); (ICON.GT.4)
H1
J1
K1
A2
B2      LEN=10
C2      TINPUT(IT,LEN)
D2      (IT(1).EQ.'QUIT')
E2      SRCH$$ (K$RDWR+K$NDAM,T1' 6,7,ITY,IC);SRCH$$ (KSRDWR+K$NDAM,'T2',6,
F2      8,ITY,IC)
G2      DO 1000 LOOP=1,ICON
H2      performed by G2
J2      WRITE (1,1)
K2
A3
B3
C3
D3
E3

```

F3
G3
H3
J3
K3
A4
B4
C4 IN=6
D4
E4 IN=12
F4 IN=11
G4 IO=12
H4 DOC=0
J4 REWIND IN; REWIND IO
K4
A5
B5
C5 IO=11
D5
E5 IO=11
F5
G5
H5
J5
K5

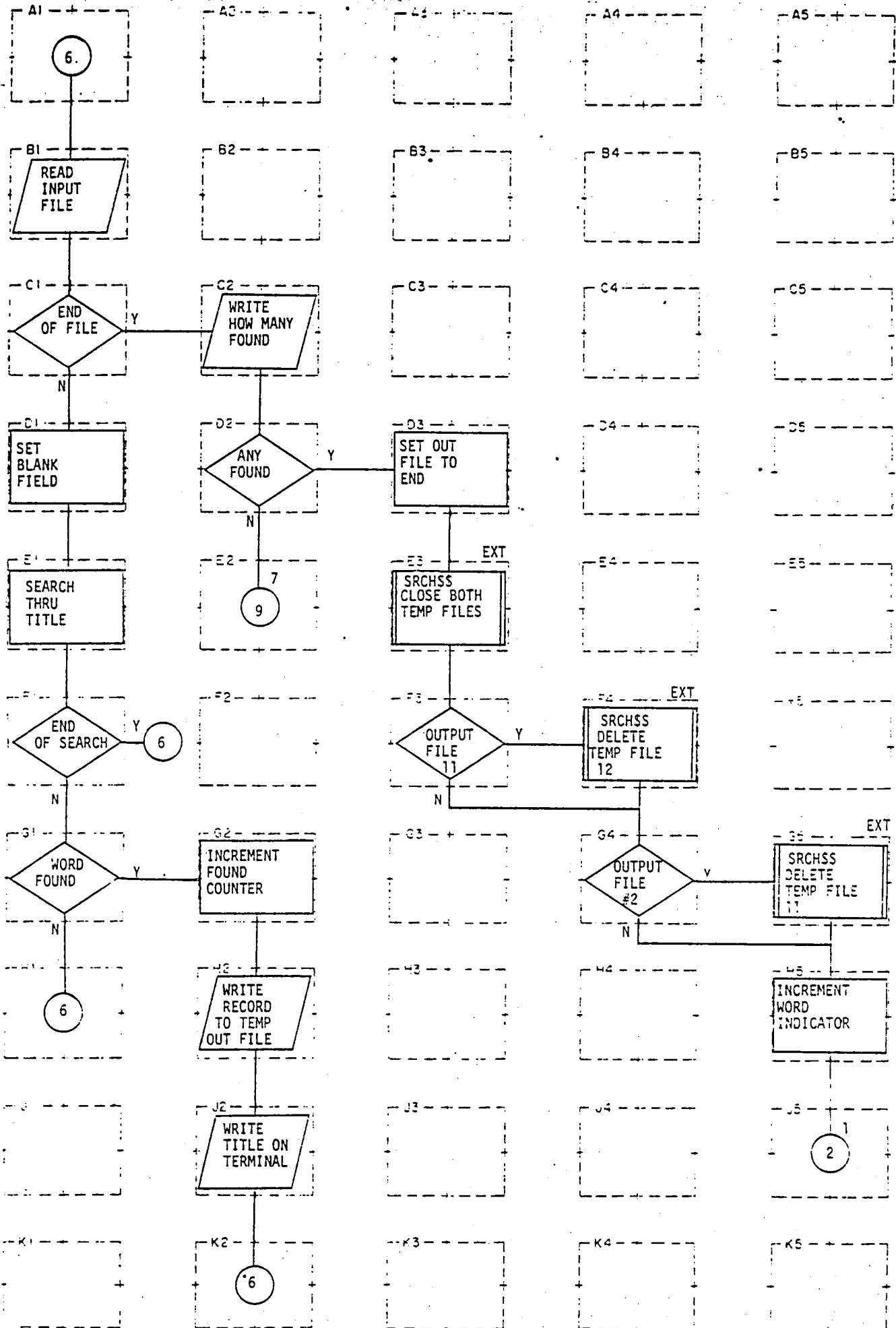


Figure 5.4.2-8

```

A1
B1      READ(IN,END=100)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
C1      see B1
D1      BLNK='
E1      DO 3 I=1,21
F1      performed by E1
G1      (TIT(I).EQ.BLNK); (TIT(I).NE.IT(1)); (TIT(I+1).EQ.
H1      BLNK); (IT(2).EQ.BLNK); (TIT(I+1).EQ.IT(2))
J1
K1
A2
B2
C2      WRITE(1,1030)DOC,IT
D2      (DOC.EQ.0)
E2
F2
G2      DOC=DOC + 1
H2      WRITE(10)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
J2      WRITE(1,10)TIT
K2
A3
B3
C3
D3      ENDFILE 10
E3      SRCH$$ (K$CLOS,'T1',6,0,0,0); SRCH$$ (K$CLOS,'T2',6,0,0,0)

```

F3 (IO.EQ.11)
G3
H3
J3
K3
A4
B4
C4
D4
E4
F4 SRCH\$\$ (K\$DELE, 'T2', 6, 0, 0, 0)
G4 (IO.EQ.12)
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5 SRCH\$\$ (K\$DELE, 'T2', 6, 0, 0, 0)
H5 T1=T1+1
J5
K5

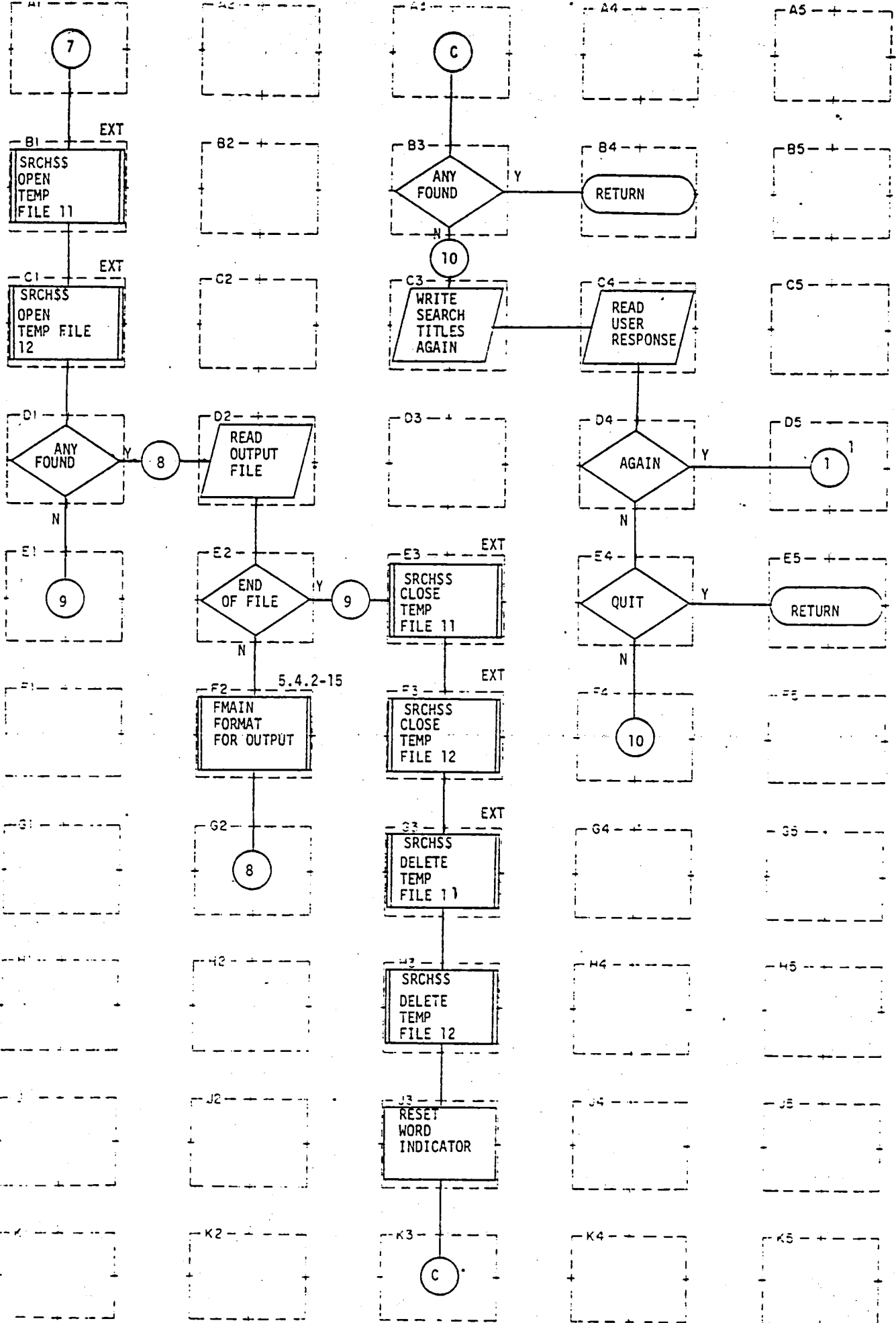


Figure 5.4.2-8

```

A1
-B1      SRCH$$ (K$RDWR+K$NDAM, 'T1', 6, 7, ITY
C1      SRCH$$ (K$RDWR+K$NDAM, 'T2', 6, 8, ITY, IC)
D1      (DOC.LT.1)
E1
F1
G1
H1
J1
K1      :
A2
B2
C2
D2      READ(IO, END=1020) TIT, PTIT, DIR, DT, SYS, WAN, VEH, REV, RDAT
E2      see D2
F2      FMAIN
G2
H2
J2
K2
A3
B3      (DOC.NE.0)
C3      WRITE(1, 2000)
D3
E3      SRCH$$ (K$CLOS, 'T1', 6, 0, 0, 0)

```


F3 SRCH\$(K\$CLOS,'T2',6,0,0,0)
G3 SRCH\$(K\$DELE,'T1',6,0,0,0)
H3 SRCH\$(K\$DELE,'T2',6,0,0,0)
J3
K3
A4
B4
C4 READ(1,2001)IOPT
D4 (IOPT.EQ.'YE')
E4 (IOPT.NE.'NO')
F4
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

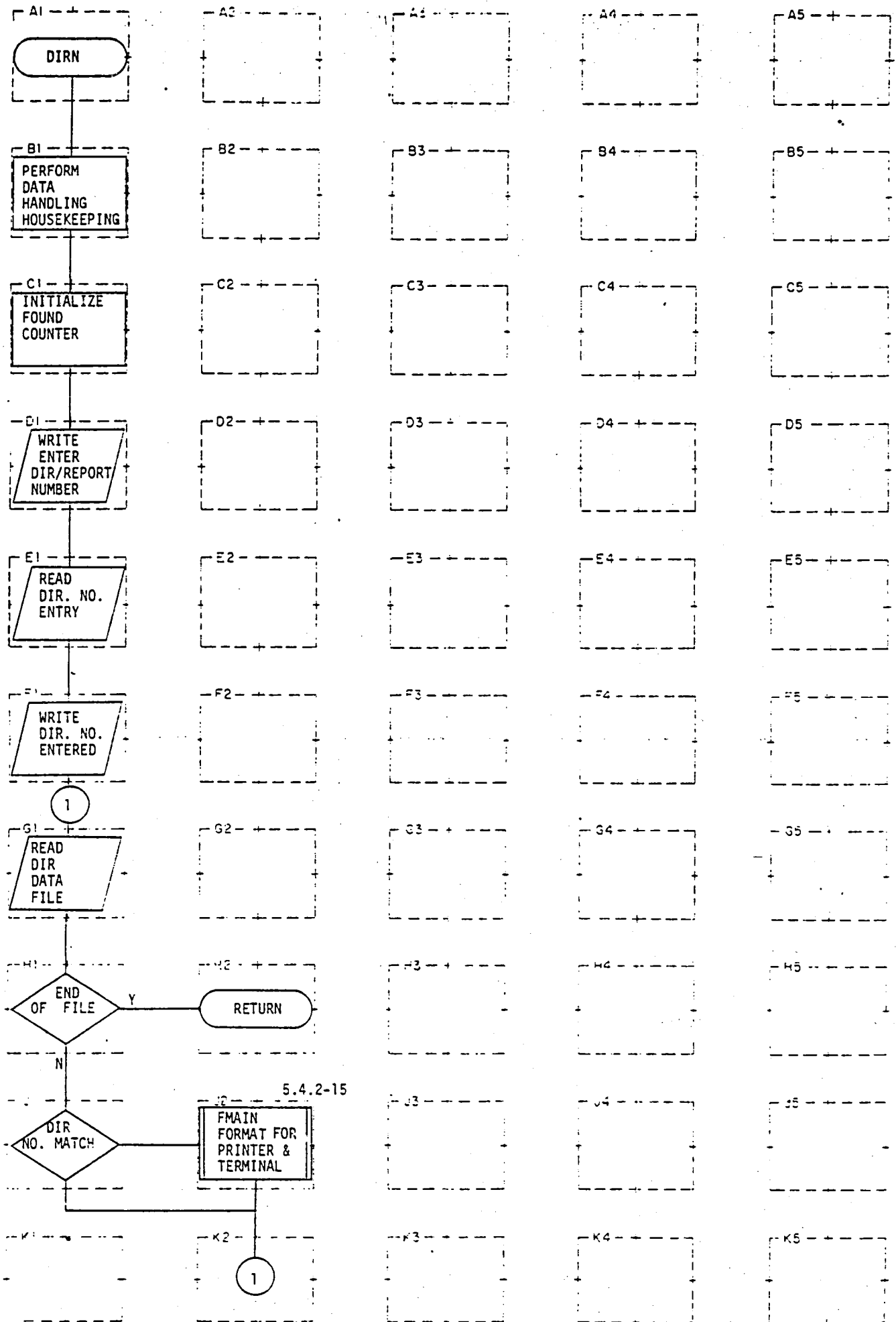


Figure 5.4.2-9

A1
B1 \$INSERT COMMON; INTEGER *4
C1 KNT=0
D1 WRITE (1,1)
E1 READ (1,2,ERR=3)IDIR
F1 WRITE (1,2)IDIR
G1 READ(6,END=200)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
H1 see G1
J1 DO 1000 I=1,4; (IDIR(I).NE.DIR(I))
K1
A2
B2
C2
D2
E2
F2
G2
H2
J2 FMAIN
K2
A3
B3
C3
D3
E3

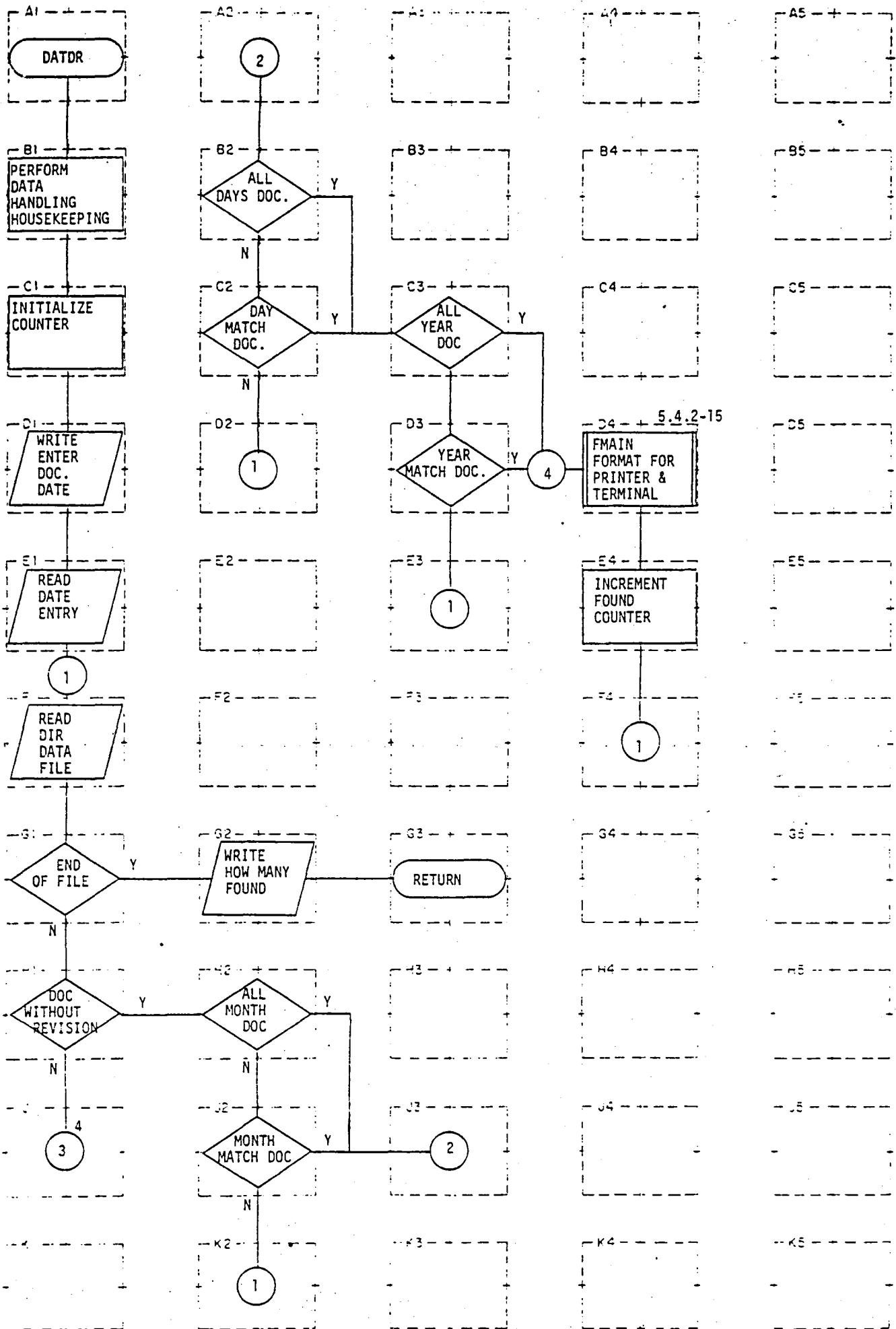


Figure 5.4.2-10

A1
B1 \$INSERT COMMON; INTEGER *2
C1 KNT=0
D1 WRITE(1,21)
E1 READ(1,22,ERR=20)D
F1 READ(6,END=200)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
G1 see F1
H1 (REV.EQ.' ')
J1
K1
A2
B2 (D(2).EQ.0)
C2 (D(2).NE.DT(2))
D2
E2
F2
G2 WRITE(1,250)KNT,D
H2 (D(1).EQ.0)
J2 (D(1).NE.DT(1))
K2
A3
B3
C3 (D(3).EQ.0)
D3 (D(3).NE.DT(3))
E3

F3

G3

H3

J3

K3

A4

B4

C4

D4 FMAIN

E4 KNT=KNT+1

F4

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

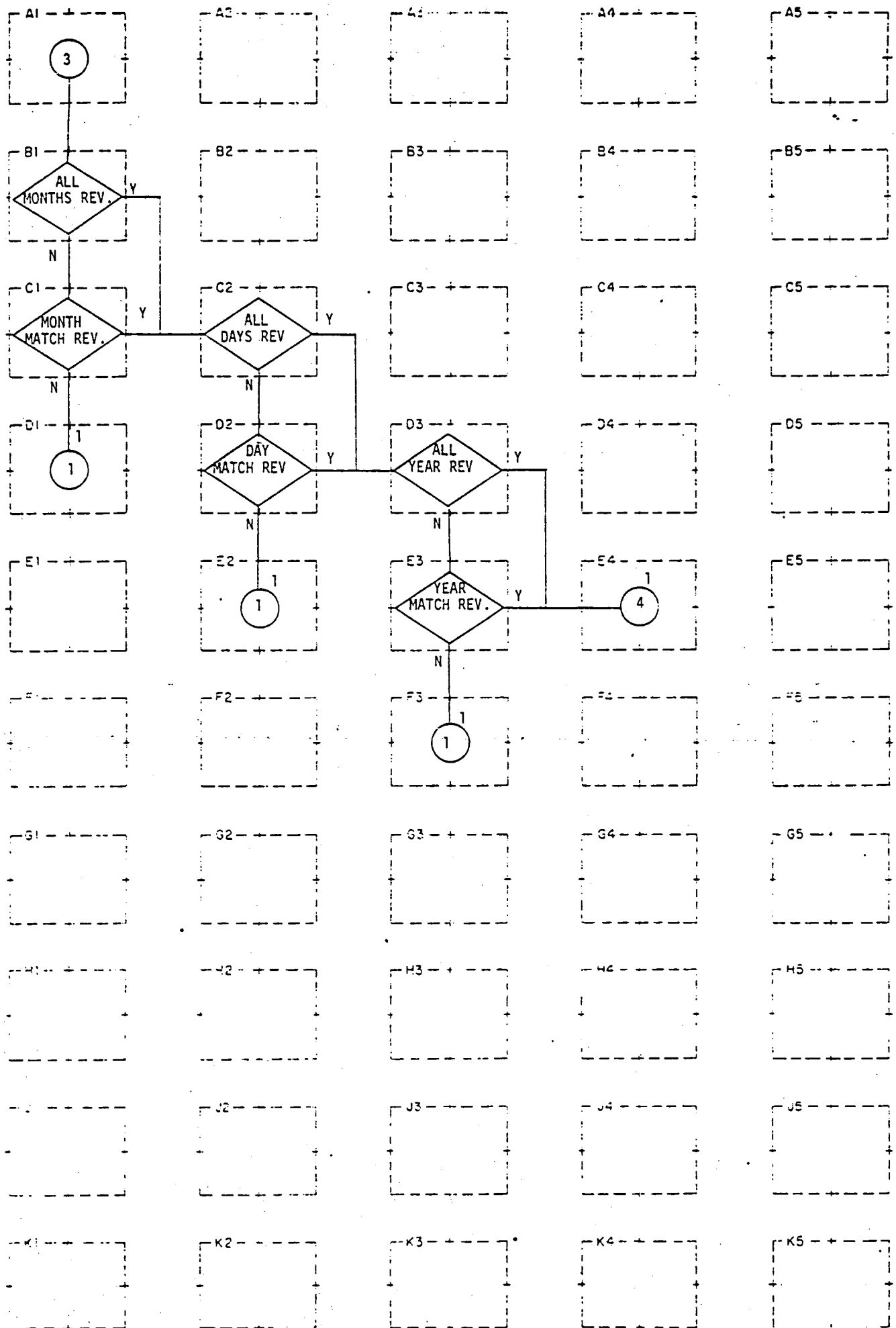


Figure 5.4.2-10

A1
B1 (D(1).EQ.0)
C1 (D(1).NE.RDAT(1))
D1
E1
F1
G1
H1
J1
K1
A2
B2
C2 (D(2).EQ.0)
D2 (D(2).NE.RDAT(2))
E2
F2
G2
H2
J2
K2
A3
B3
C3
D3 (D(3).EQ.0)
E3 (D(3).NE.RDAT(3))

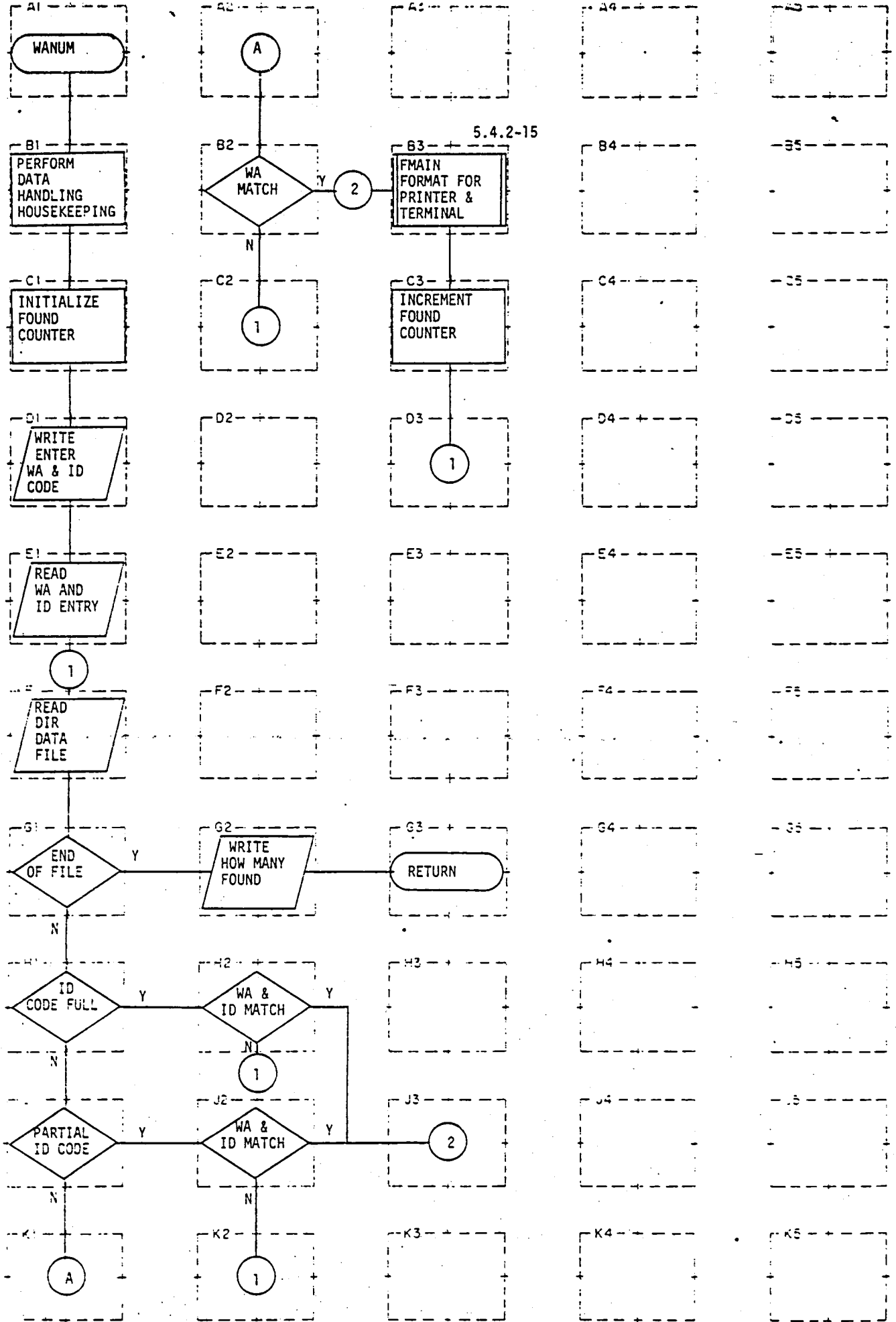


Figure 5.4.2-11

```

A1
B1 $INSERT COMMON; INTEGER*2
C1 KNT=0
D1 WRITE(1,1)
E1 READ(1,2,ERR=3)DWA
F1 READ(6,END=200)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
G1 see F1
H1 (DWA(4).NE.' ')
J1 (DWA(3).NE.' ')
K1
A2
B2 DO 30 I=1,2; (DWA(I).NE.WAN(I))
C2
D2
E2
F2
G2 WRITE(1,250)KNT,DWA
H2 DO 10 I=1,4; (DWA(I).NE.WAN(I))
J2 DO 50 I=1,3; (DWA(I).NE.WAN(I))
K2
A3
B3 FMAIN
C3 KNT=KNT+1
D3
E3

```

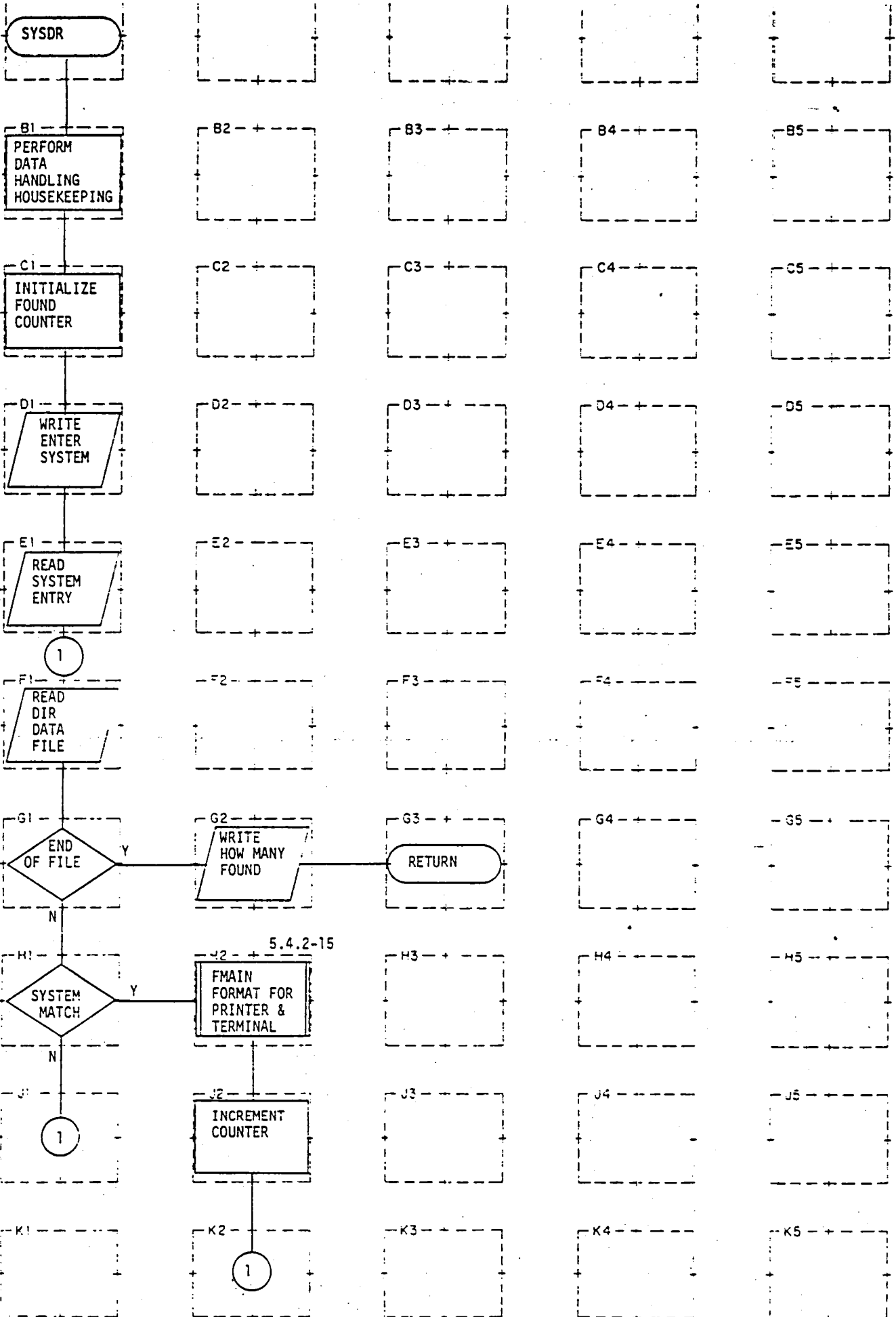


Figure 5.4.2-12

```
A1
B1  $INSERT COMMON; INTEGER*4
C1  KNT=0
D1  WRITE(1,1)
E1  READ(1,2,ERR=3)DS
F1  READ(6,END=200)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
G1  see F1
H1  DO 150 I=1,3; (DS.EQ.SYS(I))
J1
K1
A2
B2
C2
D2
E2
F2
G2  WRITE(1,250)KNT,DS
H2  FMAIN
J2  KNT=KNT+1
K2
A3
B3
C3
D3
E3
```



```

A1
B1  $INSERT COMMON; $INSERT SYSCOM >KEYS.F; INTEGER*4
C1  KNT=0
D1  WRITE(1,3)
E1  READ(1,2,ERR=1)DC
F1  SRCH$(K$RDWR+K$NDAM,'CTAB',6,14,IT,IC)
G1  READ(18,40,END=200)WA,CON
H1  see G1
J1  DO 45 I=1,5
K1  (CON(I).NE.DC(I))
A2 -
B2  READ(6,END=90)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
C2  see B2
D2  (WA(1).EQ.'38'.AND.WA(2).EQ.'04'.OR.WA(2).EQ.'09')
E2  (WAN(1).NE.WA(2)); (WAN(2).NE.WA(2))
F2
G2
H2  WRITE(1,250)KNT,DC
J2
K2
A3
B3
C3  REWIND 6
D3  DO 665 I=1,4; (WAN(I).NE.WA(I))
E3

```

F3
G3
H3 SRCH\$(K\$CLOS,'CTAB',6,0,0,0)
J3
K3
A4
B4
C4
D4 CMAIN
E4 KNT=KNT+1
F4
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

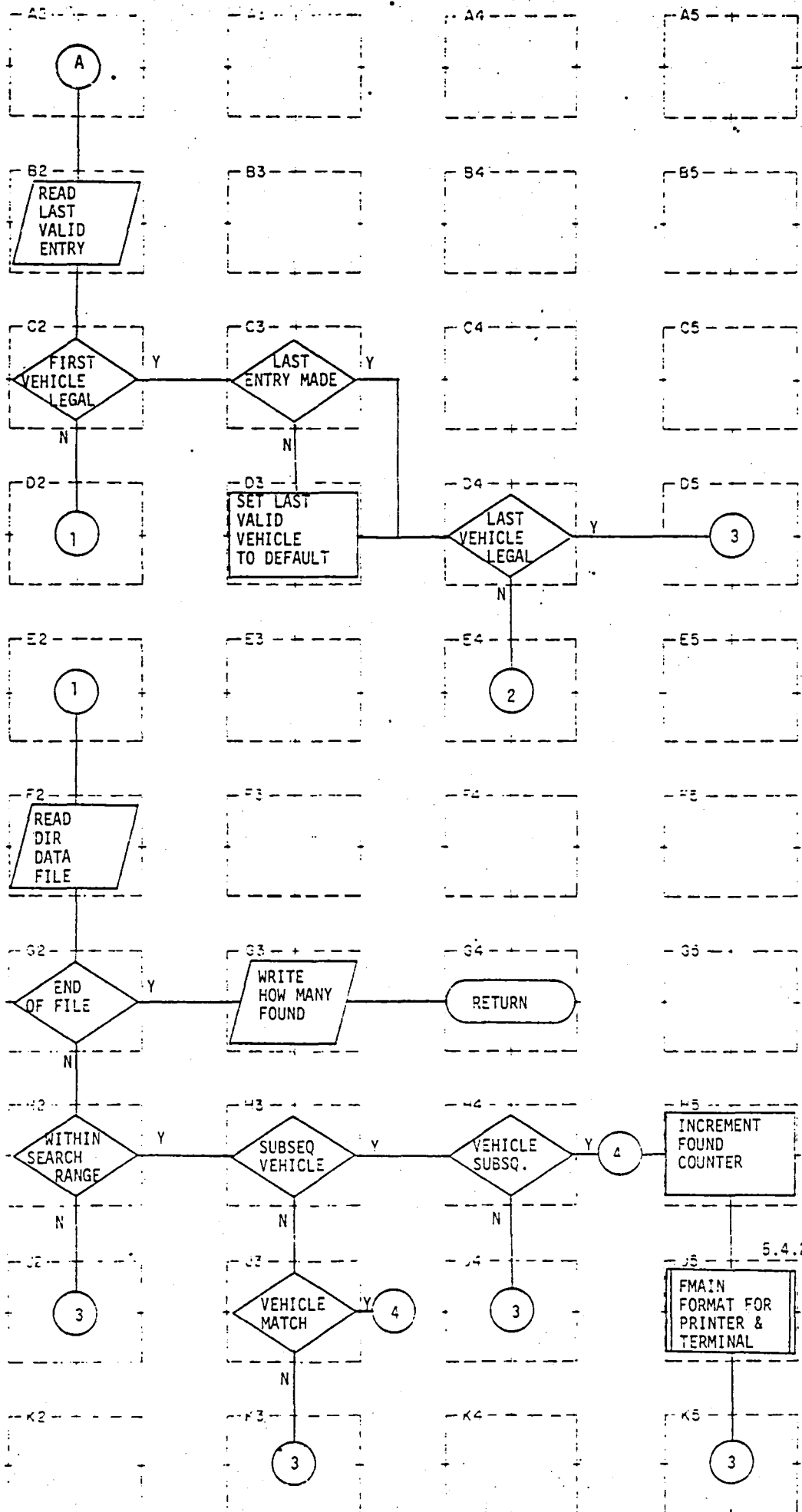
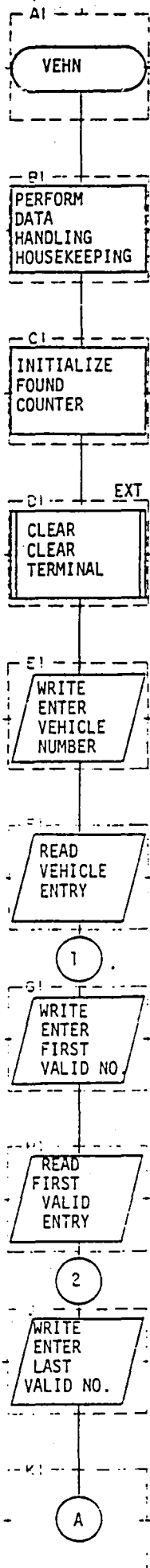


Figure 5.4.2-14


```

A1
B1  $INSERT COMMON; INTEGER*2
C1  VKNT=0
D1  CLEAR
E1  WRITE(1,2)
F1  READ(1,3,ERR=1)VEH1
G1  WRITE(1,100)
H1  READ(1,101,ERR=100)(VS(I),I=1,2)
J1  WRITE(1,102)
K1
A2
B2  READ(1,101,ERR=998)(VS(I),I=3,4)
C2  (VEH1(1).LT.VS(1))
D2
E2
F2  READ(6,END=202)TIT,PTIT,DIR,DT,SYS,WAN,VEH,REV,RDAT
G2  see F2
H2  (VEH(1,1).LT.VS(1)); (VEH(2,1).GT.VS(3))
J2
K2
A3
B3
C3  (VS(3).EQ.0)
D3  VS(3)=999
E3

```

```
F3
G3  WRITE(1,201)VKNT,VEH
H3  (VEH(1,2).NE.'S'.AND.VEH(1,1).EQ.VEH1(1))
J3  see H3, H4
K3
A4
B4
C4
D4  (VS(3).LT.VEH1(1))
E4
F4
G4
H4  (VEH(1,2).EQ.'S'.AND.VEH(1,1).LE.VEH1(1))
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5  VKNT=VKNT+1
J5  FMAIN
K5
```

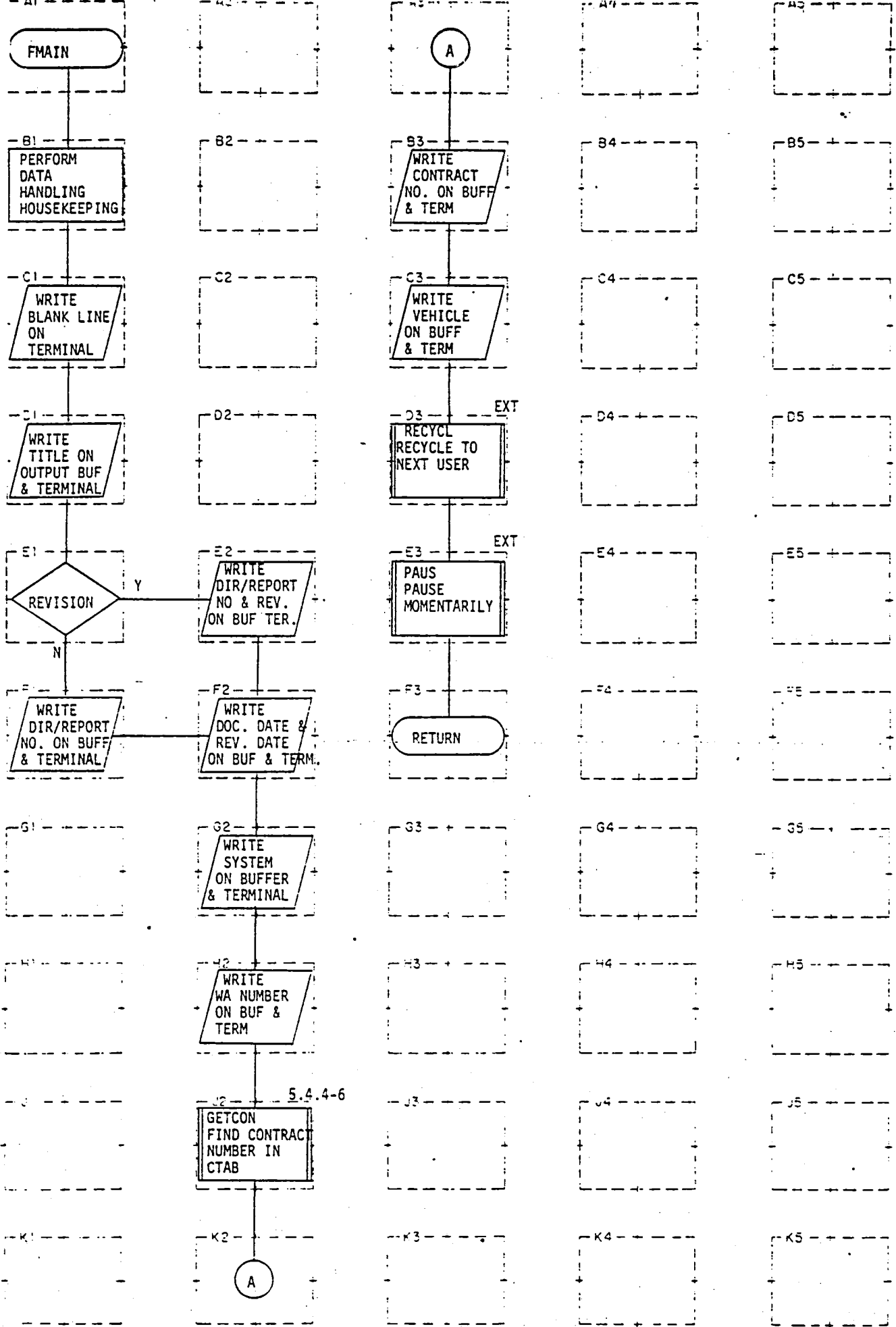


Figure 5.4.2-15

```

A1
B1  $INSERT COMMON
C1  WRITE(1,998); WRITE(7,999)
D1  WRITE(1,101); WRITE(7,101); WRITE(1,102)TIT;
E1  WRITE(7,102)TIT
    (REV.NE.' ')
F1  WRITE(1,150)DIR,REV; WRITE(7,150)DIR,REV
G1
H1
J1
K1
A2
B2
C2
D2
E2  WRITE(1,202)DIR,REV; WRITE(7,202)DIR,REV
F2  WRITE(7,402)DT,RDAT; WRITE(7,402)DT,RDAT
G2  WRITE(1,502)SYS; WRITE(7,502)SYS
H2  WRITE(1,602)WAN; WRITE(7,602)WAN
J2  GETCON
K2
A3
B3  WRITE(1,702)CON; WRITE(7,702)CON
    WRITE(1,902)((VEH(I,J),J=1,2),I=1,2); WRITE(7,902)
C3  ((VEH(I,J),J=1,2),I=1,2)
D3  RECYCL
E3  PAUS

```

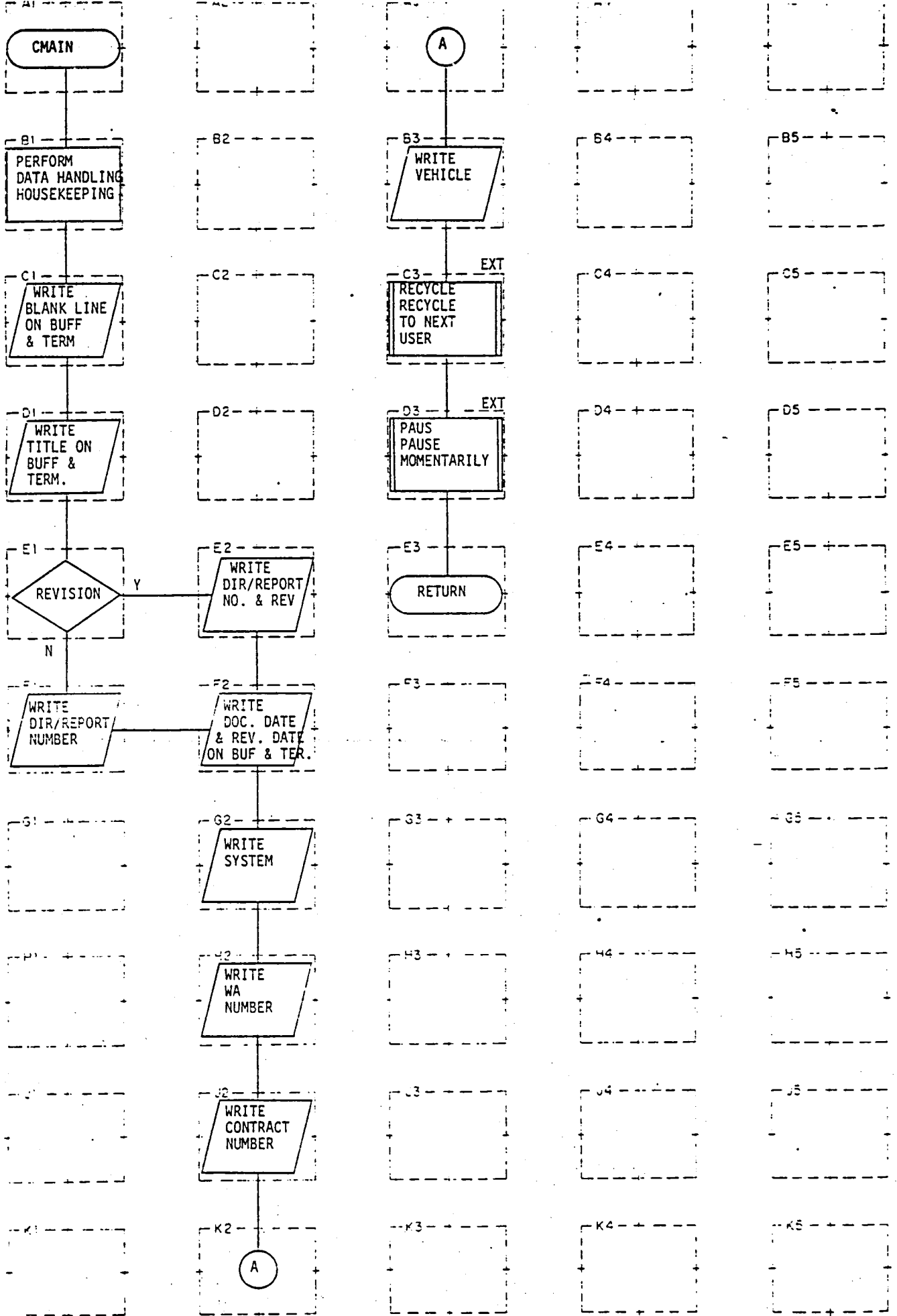


Figure 5.4.2-16

```

A1
B1  $INSERT COMMON
C1  WRITE(1,998); WRITE(7,999)
D1  WRITE(1,101); WRITE(7,101); WRITE(1,102)TIT;
E1  WRITE(7,102)TIT
    (REV.NE.' ')
F1  WRITE(1,150)DIR,REV; WRITE(7,150)DIR,REV
G1
H1
J1
K1
A2
B2
C2
D2
E2  WRITE(1,202)DIR,REV; WRITE(7,202)DIR,REV
F2  WRITE(7,402)DT,RDAT; WRITE(1,402)DT,RDAT
G2  WRITE(1,502)SYS; WRITE(7,602)WAN
H2  WRITE(1,602)WAN; WRITE(7,602)WAN
J2  WRITE(1,702)CON; WRITE(7,702)CON
K2
A3
B3  WRITE(1,902)((VEH(I,J),J=1,2),I=1,2);
    WRITE(7,902)((VEH(I,J),J=1,2),I=1,2)
C3  RECYCL
D3  PAUS
E3

```



```

A1
B1 $INSERT COMMON; INTEGER*2
C1 CLEAR
D1 FIRST=0
E1 BREAK$(.TRUE.)
F1 TIMDAT(A,15)
G1 (A(13).EQ.'JW'.OR.A(13).EQ.'NH'.OR.A(13).EQ.'RJ'.OR.A(13).EQ.'DK')
H1 WRITE(1,4) ('SORRY, YOU ARE NOT VALIDATED TO USE THIS MODE.')
J1
K1
A2
B2 READ(12,END=2003)DRW,SHTN,REV,NEO,EOREF
C2 WRITE(1,1)
D2 R=0
E2 WRITE (1,101)
F2 READ(1,1002)IANS
G2 BREAK$(.FALSE.)
H2 READ(6,END=2001)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
J2 READ(18,END= 2002)EON,ETIT,EPTIT,EOREV,EDT,ERDT,EOVEH
K2
A3
B3 INPSDW
C3 WRITE(6)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
D3 WRITE(1,1001)
E3

```


F3 (IANS.EQ.'D')
G3 (IANS.NE.'E')
H3
J3
K3
A4
B4
C4
D4 READ(1,1002)IANS
E4 (IANS.EQ.'Y'); (IANS.NE.'N')
F4
G4 INPSE
H4 WRITE(18)EDN,ETIT,EPTIT,EDREV,EDT,ERDT,EVEH
J4 READ(12,END=1000)DRW,SHTN,REV,NEO,EOREF
K4
A5
B5
C5
D5
E5 REWIND 6
F5 REWIND 12
G5 REWIND 18
H5
J5
K5

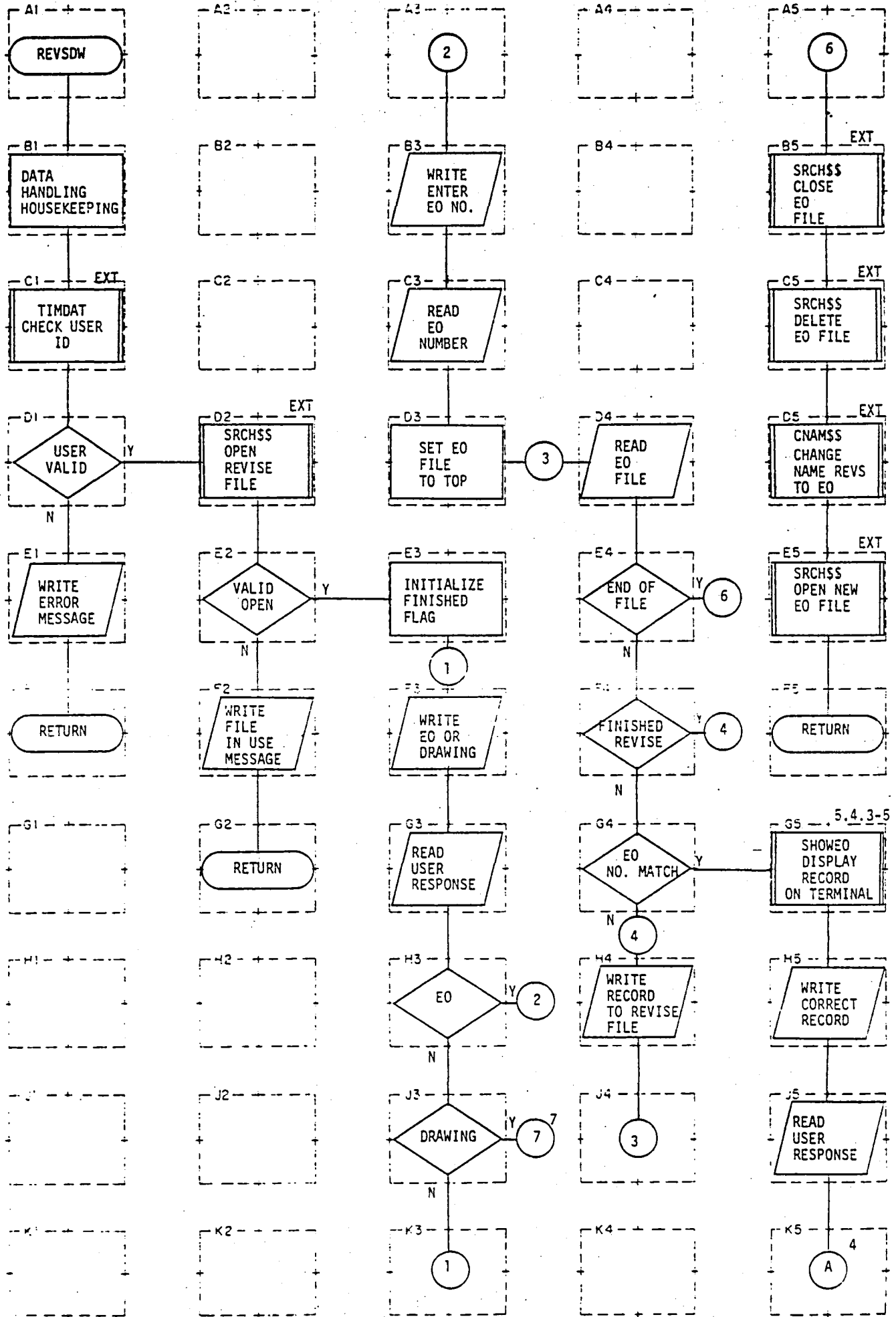


Figure 5.4.3-2

A1
B1 \$INSERT COMMON; \$INSERT SYSCOM>KEYS.F; INTEGER*4;*2
C1 TIMDAT(A,15)
D1 (A(13).EQ.'JW'.OR.A(13).EQ.'NH'.OR.A(13).EQ.'RJ'.OR.A(13).EQ.'DK')
E1 WRITE(1,4)('SORRY, YOU ARE NOT VALIDATED TO USE THIS MODE.')

F1
G1
H1
J1
K1
A2
B2
C2
D2 SRCH\$\$ (KSRDWR+K\$NDAM,'REVS',6,4,1,IC)
E2 (IC.NE.0)
F2 WRITE(1,3001)
G2
H2
J2
K2
A3
B3 WRITE(1,11)
C3 READ(1,21,ERR=31)IE0
D3 REWIND 18
E3 FINISH=0

```

F3  WRITE(1,301)
G3  READ(1,302) IANS
H3  (IANS.EQ.'E')
J3  (IANS.NE.'D')
K3
A4
B4
C4
D4  READ(18,END=201)EON,ETIT,EPTIT,EOREV,EDT,ERDT,EVEH
E4  PERFORMED BY D4
F4  (FINISH.EQ.1)
G4  DO 111 I=1,2; (IEO(I).NE.EON(I))
H4  WRITE(8)EON,ETIT,EPTIT,EOREV,EDT,ERDT,EVEH
J4
K4
A5
B5  SRCH$$ (K$CLOS,'EO',6,0,0,0)
C5  SRCH$$ (K$DELE,'EO',6,0,0,0)
D5  CNAM$$ ('REVS',6,'EO',6,IC)
E5  SRCH$$ (K$RDWR+K$NDAM,'EO',6,14,1,IC)
F5
G5  SHOWEO
H5  WRITE(1,1700)
J5  READ(1,50) IOPT
K5

```

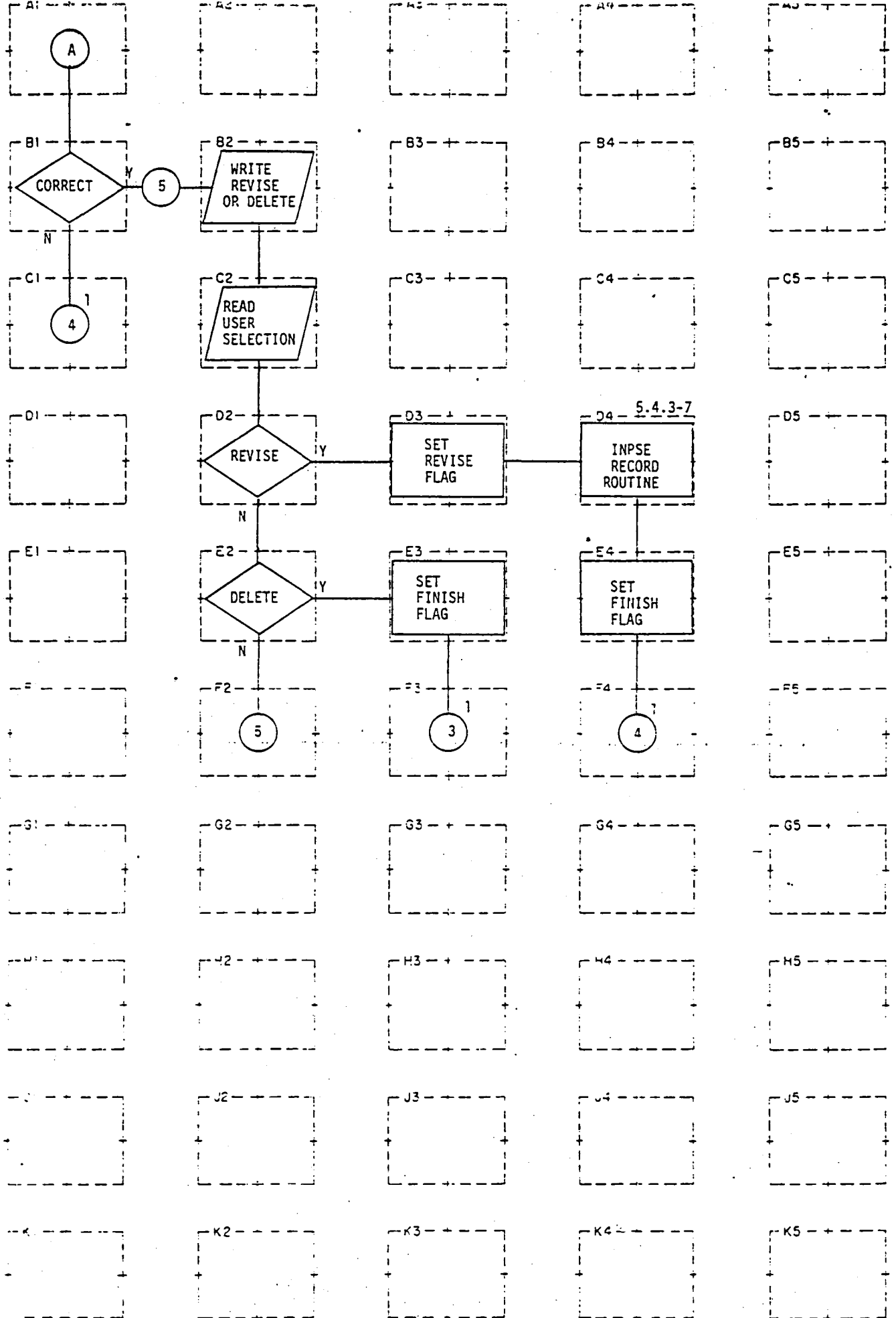


Figure 5.4.3-2

A1
B1 (IOPT.EQ.'NO'); (IOPT.NE.'YE')
C1
D1
E1
F1
G1
H1
J1
K1
A2
B2 WRITE(1,2000)
C2 READ(1,50)IOPT
D2 (IOPT.EQ.'RE')
E2 (IOPT.NE.'DE')
F2
G2
H2
J2
K2
A3
B3
C3
D3 R=1
E3 FINISH=1

Figure 5.4.3-2

F3
G3
H3
J3
K3
A4
B4
C4
D4 INPSE
E4 FINISH=1
F4
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5


```

A1
B1 WRITE(1,1)
C1 READ(1,2,ERR=5)IDRAW
D1 REWIND 6
E1 READ(6,END=200)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
F1 PERFORMED BY E1
G1 (FINISH.EQ.1)
H1 DO 110I=1,4; (IDRAW(I).NE.DRAW(I))
J1 WRITE(8)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
K1
A2
B2 SHOWDW
C2 WRITE(1,1700)
D2 READ(1,50)IOPT
E2
F2 SRCH$$ (K$CLOS,'DRAW',6,0,0,0)
G2 SRCH$$ (K$DELE,'DRAW',6,0,0,0)
H2 CNAM$$ ('REVS',6,'DRAW',6,IC)
J2 SRCH$$ (K$RDWR+K$NDAM,'DRAW',6,2,1,IC)
K2
A3
B3
C3
D3 (IOPT.EQ.'NO'); (IOPT.NE.'YE')
E3

```

F3
G3
H3
J3
K3
A4
B4
C4
D4 WRITE(1,2000)
E4 READ(1,50)IOPT
F4 (IOPT.EQ.'RE')
G4 (IOPT.EQ.'DE')
H4
J4
K4
A5
B5 R=1
C5 INPSDW
D5 FINISH=1
E5
F5
G5 FINISH=1
H5
J5
K5

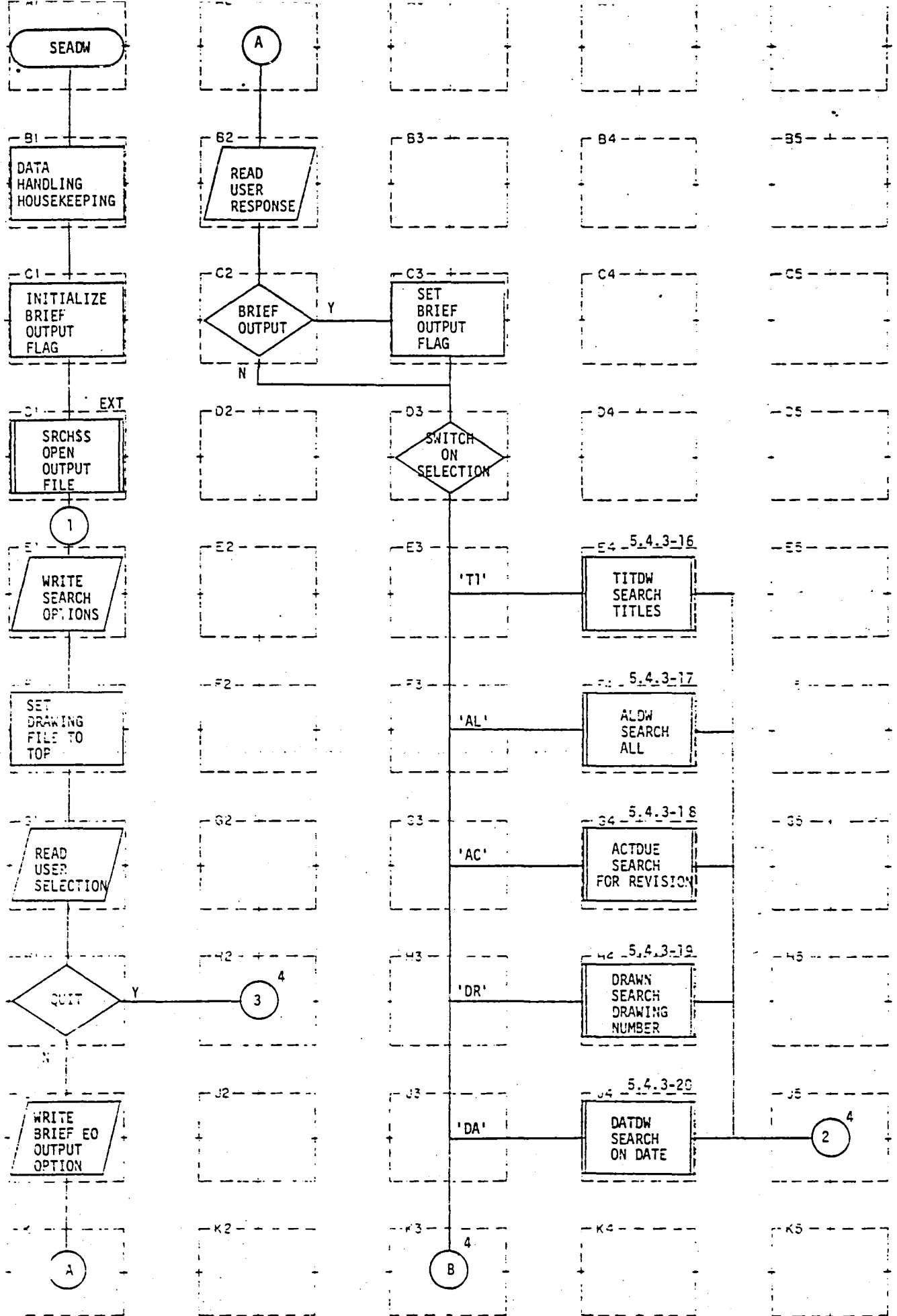


Figure 5.4.3-3

```

A1
B1 $INSERT COMMON; $INSERT SYSCOM>KEYS.F; INTEGER*2
C1 J=:401; R=0
D1 SRCH$(K$RDWR+K$NSAM,'OUT',6,3,0,0)
E1 WRITE(1,1)
F1 REWIND 6
G1 READ(1,3)IDES
H1 (IDES.EQ.'QU')
J1 WRITE(1,110)
K1
A2
B2 READ(1,3)IOPT
C2 (IOPT.EQ.'NO'); (IOPT.NE.'YE')
D2
E2
F2
G2
H2
J2
K2
A3
B3
C3 R=1
D3 PERFORMED BY E3 THRU J3 (PAGES 2 & 3) and B1 THRU F1 (PAGE 5 of 6)
E3 (IDES.EQ.'TI')

```

F3 (IDES.EQ.'AL')
G3 (IDES.EQ.'AC')
H3 (IDES.EQ.'DR')
J3 (IDES.EQ.'DA')
K3
A4
B4
C4
D4
E4 TITDW
F4 ALDW
G4 ACTDUE
H4 DRAWN
J4 DATDW
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

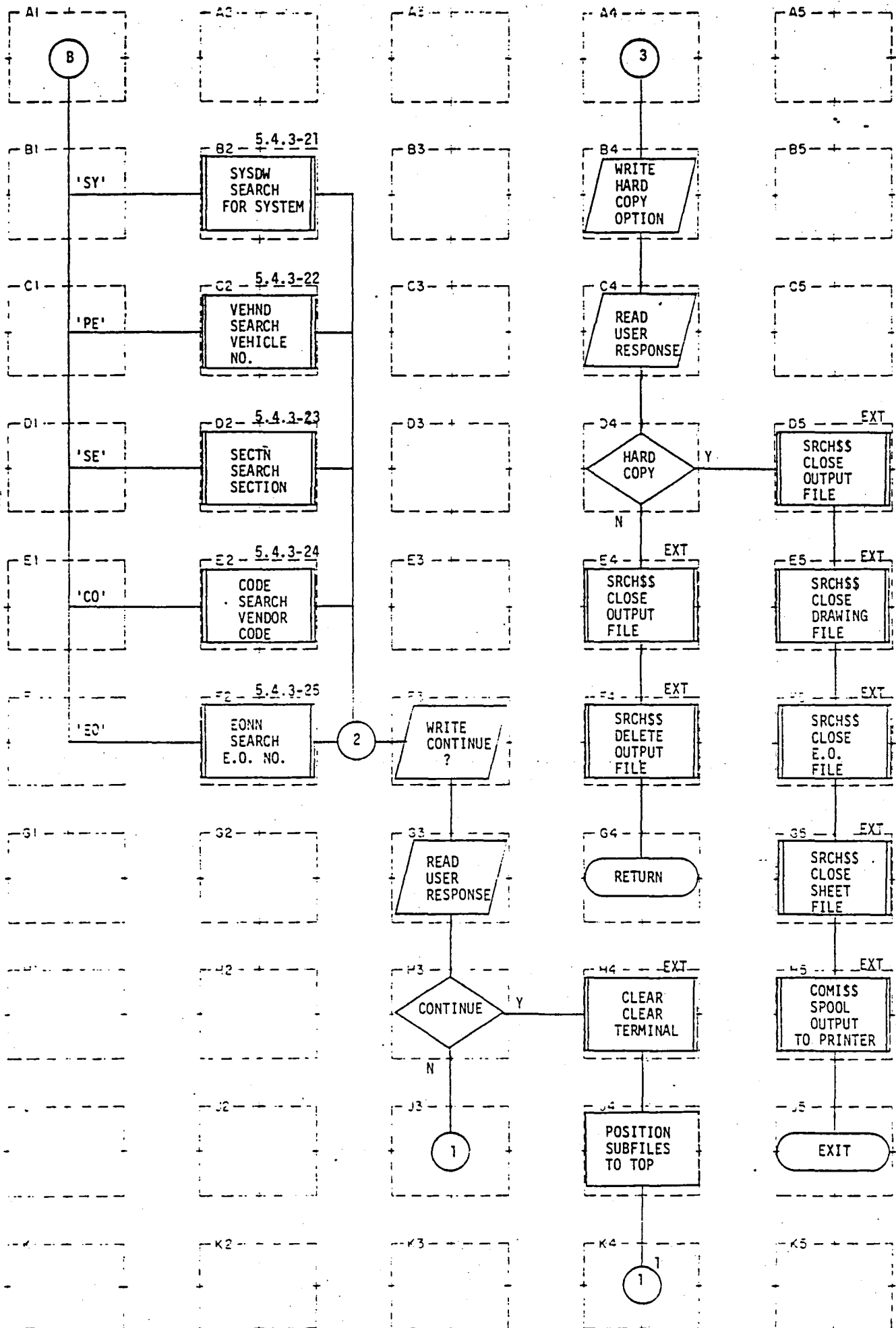


Figure 5.4.3-3

A1
B1 (IDES.EQ.'SY')
C1 (IDES.EQ.'VE')
D1 (IDES.EQ.'SE')
E1 (IDES.EQ.'CO')
F1 (IDES.EQ.'EO')
G1
H1
J1
K1
A2
B2 SYSDW
C2 VEHND
D2 SECTN
E2 CODE
F2 EONN
G2
H2
J2
K2
A3
B3
C3
D3
E3

Figure 5.4.3-3

F3 WRITE(1,98)
G3 READ(1,9999)IDES
H3 (IDES.NE.' ')
J3
K3
A4
B4 WRITE(1,11)
C4 READ(1,3)IDES
D4 (IDES.EQ.'YE'); (IDES.EQ.'NO')
E4 SRCH\$\$ (K\$CLOS,'OUT',6,0,0,0)
F4 SRCH\$\$ (K\$DELE,'OUT',6,0,0,0)
G4
H4 CLEAR
J4 REWIND 6; REWIND 12; REWIND 18
K4
A5
B5
C5
D5 SRCH\$\$ (K\$CLOS,'OUT',6,0,0,0)
E5 SRCH\$\$ (K\$CLOS,'DRAW',6,0,0,0)
F5 SRCH\$\$ (K\$CLOS,'EO',6,0,0,0)
G5 SRCH\$\$ (K\$CLOS,'SHEET',6,0,0,0)
H5 COMISS('SOUT',4,12,IC)
J5
K5

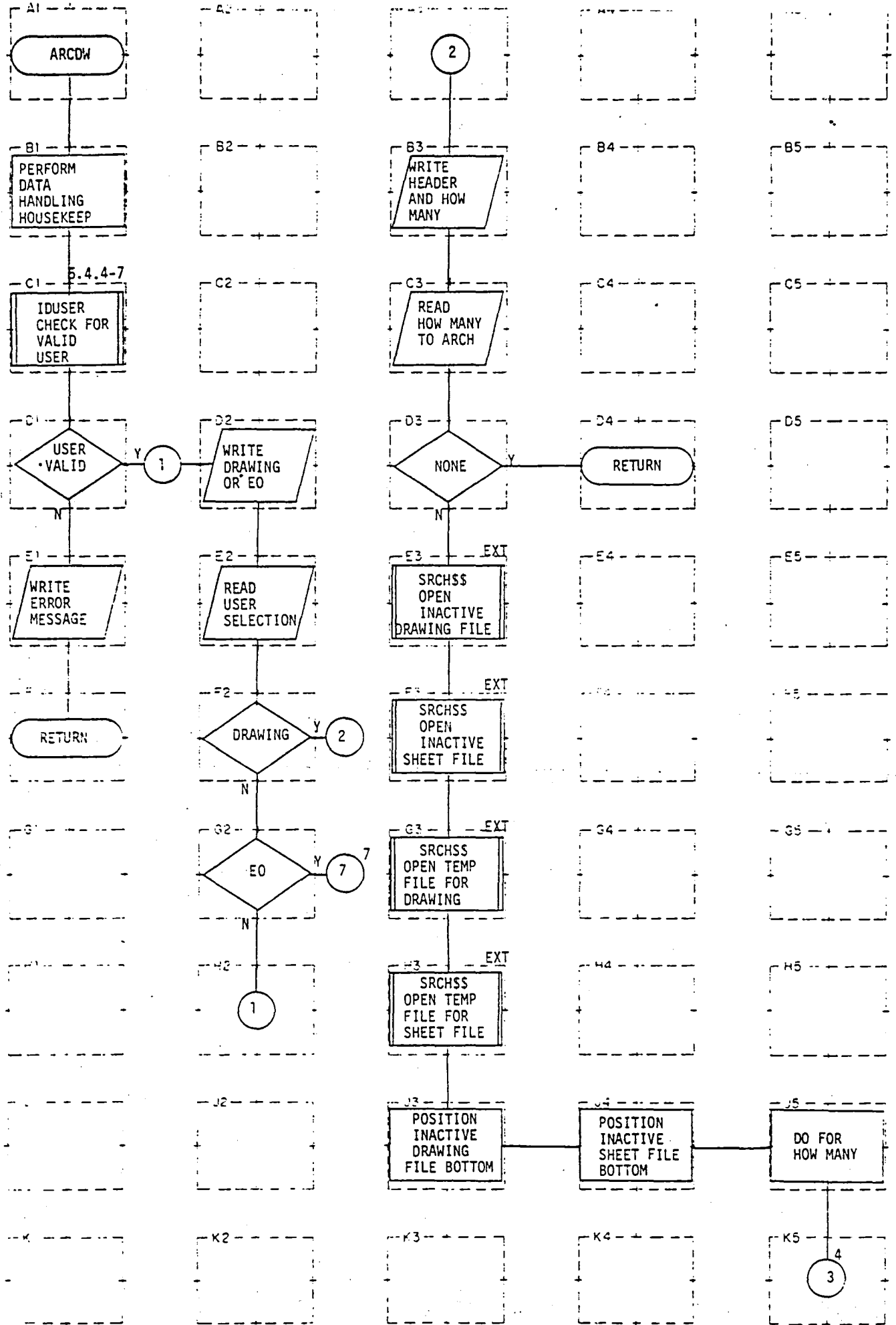


Figure 5.4.3-4

```

A1
B1 $INSERT COMMON; $INSERT SYSCOM>KEYS.F; INTEGER*2
C1 IDUSED (IAI)
D1 (IAI.EQ.'SY')
E1 WRITE(1,500) ('SORRY YOU ARE NOT VALIDATED TO USE THIS ROUTINE.')
F1
G1
H1
J1
K1
A2
B2
C2
D2 WRITE(1,6)
E2 READ(1,7)IOPT
F2 (IOPT.EQ.'DR')
G2 (IOPT.NE.'EO')
H2
J2
K2
A3
B3 WRITE(1,1)
C3 READ(1,2,ERR=10)IKNT
D3 (IKNT.EQ.0)
E3 SRCH$(K$RDWR+K$NDAM,' INACTD',6,5,1,IC)

```

Figure 5.4.3-4

F3 SRCH\$\$ (K\$RDWR+K\$NDAM, 'INACTS', 6, 7, 1, IC)
G3 SRCH\$\$ (K\$RDWR+K\$NDAM, 'TEMP', 6, 6, 1, IC)
H3 SRCH\$\$ (K\$RDWR+K\$NDAM, 'STEMP', 6, 10, 1, IC)
J3 READ(9, END=60) DRAW, TIT, PTIT, DT, SYS, VEH, SECT, NSHT, FREV, FNEO, FEOREF
K3
A4
B4
C4
D4
E4
F4
G4
H4
J4 READ(11, END=75) DRW, SHTN, REV, NEO, EOREF
K4 D09999 ILOOP=1, IKNT
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

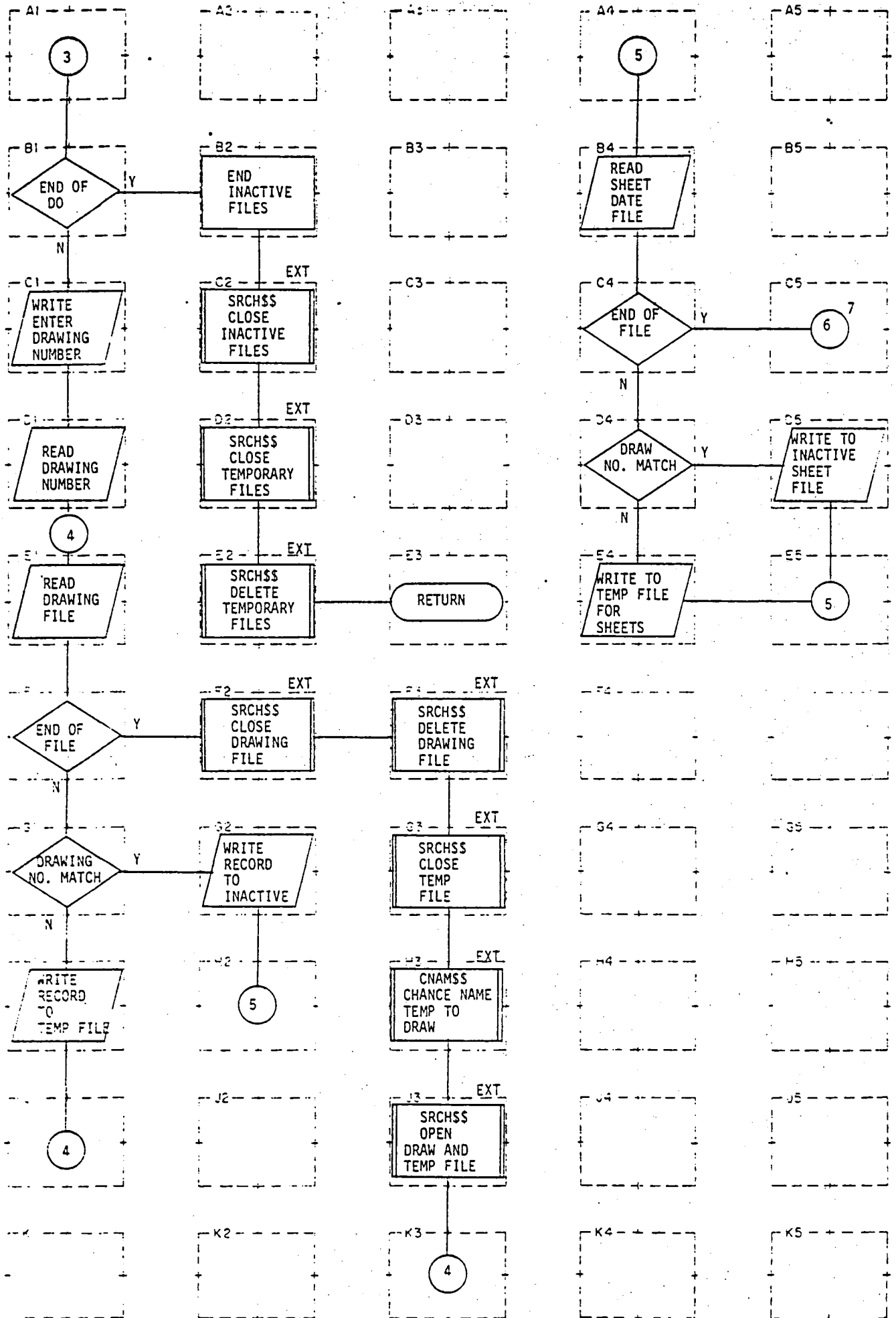


Figure 5.4.3-4

A1
B1 PERFORMED BY J5 (PAGE 3 of 12)
C1 WRITE(1,80)
D1 READ(1,81,ERR=82)IDR
E1 READ(6,END=200)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNED,FEOREF
F1 PERFORMED BY E1
G1 DO150 I =1,4; (IDR(I).NE.DRAW(I))
H1 WRITE(10)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
J1
K1
A2
B2 ENDFILE 9; ENDFILE 11
C2 SRCH\$\$ (K\$CLOS,'INACTD',6,0,0,0); SRCH\$\$ (K\$CLOS,'INACTS',6,0,0,0)
D2 SRCH\$\$ (K\$CLOS,'TEMP',6,0,0,0); SRCH\$\$ (K\$CLOS,'STEMP',6,0,0,0)
E2 SRCHSS (K\$DELE,'TEMP',6,0,0,0); SRCH\$\$ (K\$DELE,'STEMP',6,0,0,0)
F2 SRCH\$\$ (K\$CLOS,'DRAW',6,0,0,0)
G2 WRITE(9)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
H2
J2
K2
A3
B3
C3
D3
E3

F3 SRCH\$\$ (K\$DELE, 'DRAW', 6, 0, 0, 0)
G3 SRCH\$\$ (K\$CLOS, 'TEMP', 6, 0, 0, 0)
H3 CNAM\$\$ ('TEMP', 6, 'DRAW', 6, IC)
J3 SRCH\$\$ (K\$RDWR+K\$NDAM, 'DRAW', 6, 2, 1, IC); SRCH\$\$ (K\$RDWR+K\$NDAM, 'TEMP',
6, 6, 1, IC)
K3
A4
B4 READ(12, END=165) DRW, SHTN, REV, NEO, EOREF
C4 PERFORMED BY B4
D4 DO 155 K=1, 4; (IDR(K).NE.DRW(K))
E4 WRITE(14) DRW, SHTN, REV, NEO, EOREF
F4
G4
H4
J4
K4
A5
B5
C5
D5 WRITE(11) DRW, SHTN, REV, NEO, EOREF
E5
F5
G5
H5
J5
K5

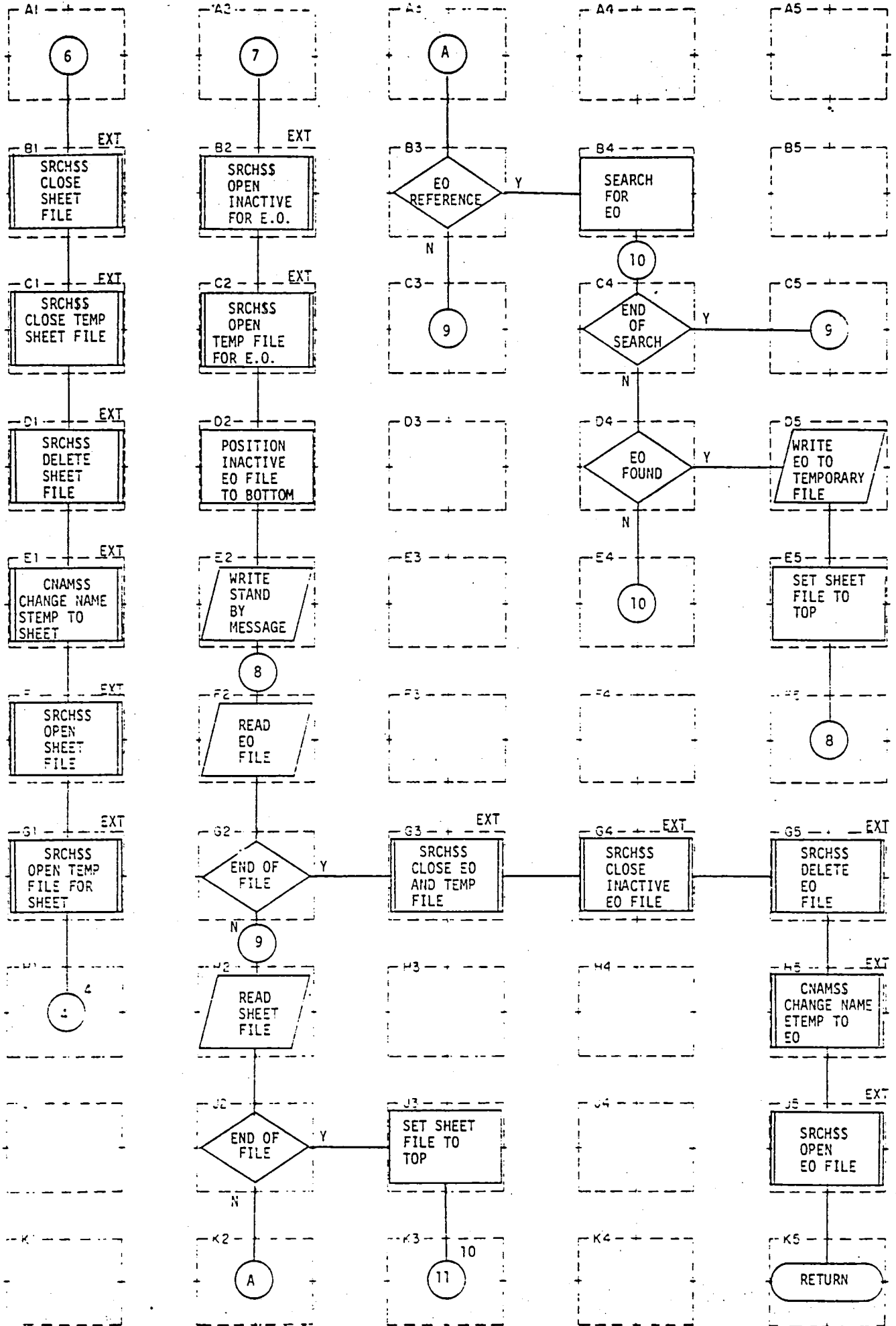


Figure 5.4.3-4

```

A1
B1  SRCH$$ (K$CLOS, 'EO', 6, 0, 0, 0); SRCH$$ (K$CLOS, 'ETEMP', 6, 0, 0, 0)
C1
D1  REWIND 12
E1
F1
G1  DO 323 I=1,10
H1  PERFORMED BY B4
J1  DO 327 J=1,2; (EOREF(I,J).NE.EON(J))
K1
A2
B2  SRCH$$ (K$CLOS, 'INACTE', 6, 0, 0, 0)
C2
D2
E2
F2
G2
H2
J2  WRITE(13) EON, ETIT, EPTIT, EOREV, EDT, ERDT, EOVH
K2  REWIND 12
A3
B3  SRCH$$ (KSDELE, 'EO', 6, 0, 0, 0)
C3  CNAM$$ ('ETEMP', 6, 'EO', 6, IC)
D3  SRCH$$ (K$RDWR+K$NDAM, 'EO', 6, 14, 1, IC)
E3

```



```

F3
G3  SRCH$$ (K$CLOS, 'SHEET', 6, 0, 0, 0)
H3  SRCH$$ (K$CLOS, 'TEMP', 6, 0, 0, 0)
J3  SRCH$$ (K$DELE, 'SHEET', 6, 0, 0, 0)
K3  CNAM$$ ('STEMP', 6, 'SHEET', 6, IC)
A4  SRCH$$ (K$RDWR+K$NDAM, 'SHEET', 6, 8, 1, IC)
B4  SRCH$$ (K$RDWR+K$NDAM, 'STEMP', 6, 11, 1, IC)
C4
D4
E4
F4
G4  SRCH$$ (K$RDWR+K$NDAM, 'INACTE', 6, 13, 1, IC)
H4  SRCH$$ (K$RDWR+K$NDAM, 'ETEMP', 6, 9, 1, IC)
J4  READ(17, END=305)EON, ETIT, EPTIT, EOREV, EDT, ERDT, EOVEH
K4  WRITE(1, 310)
A5  READ(18, END=400)EON, ETIT, EPTIT, EOREV, EDT, ERDT, EOVEH
B5  PERFORMED BY F2
C5  READ(12, END=335)DRW, SHTN, REV, NEO, EOREF
D5  PERFORMED BY H2
E5
F5
G5  (NEO.EQ.0)
H5
J5
K5

```


A1
B1 READ(6,END=350)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
C1 PERFORMED BY B1
D1 (FNEO.EQ.0)
E1
F1
G1
H1
J1
K1
A2
B2
C2 WRITE(17)EON,ETIT,EPTIT,EOREV,EDT,ERDT,EVEH
D2 DO 343 I=1,10
E2 PERFORMED BY D2
F2 DO 337 J=1,2; (FEOREF(I,J).NE.EON(J))
G2
H2
J2
K2
A3
B3
C3 REWIND 6
D3
E3

F3 WRITE(13)EON,ETIT,EPTIT,EOREV,EDT,ERDT,EVEH
G3 REWIND 6
H3
J3
K3
A4
B4
C4 REWIND 12
D4 WRITE(1,360)
E4
F4
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

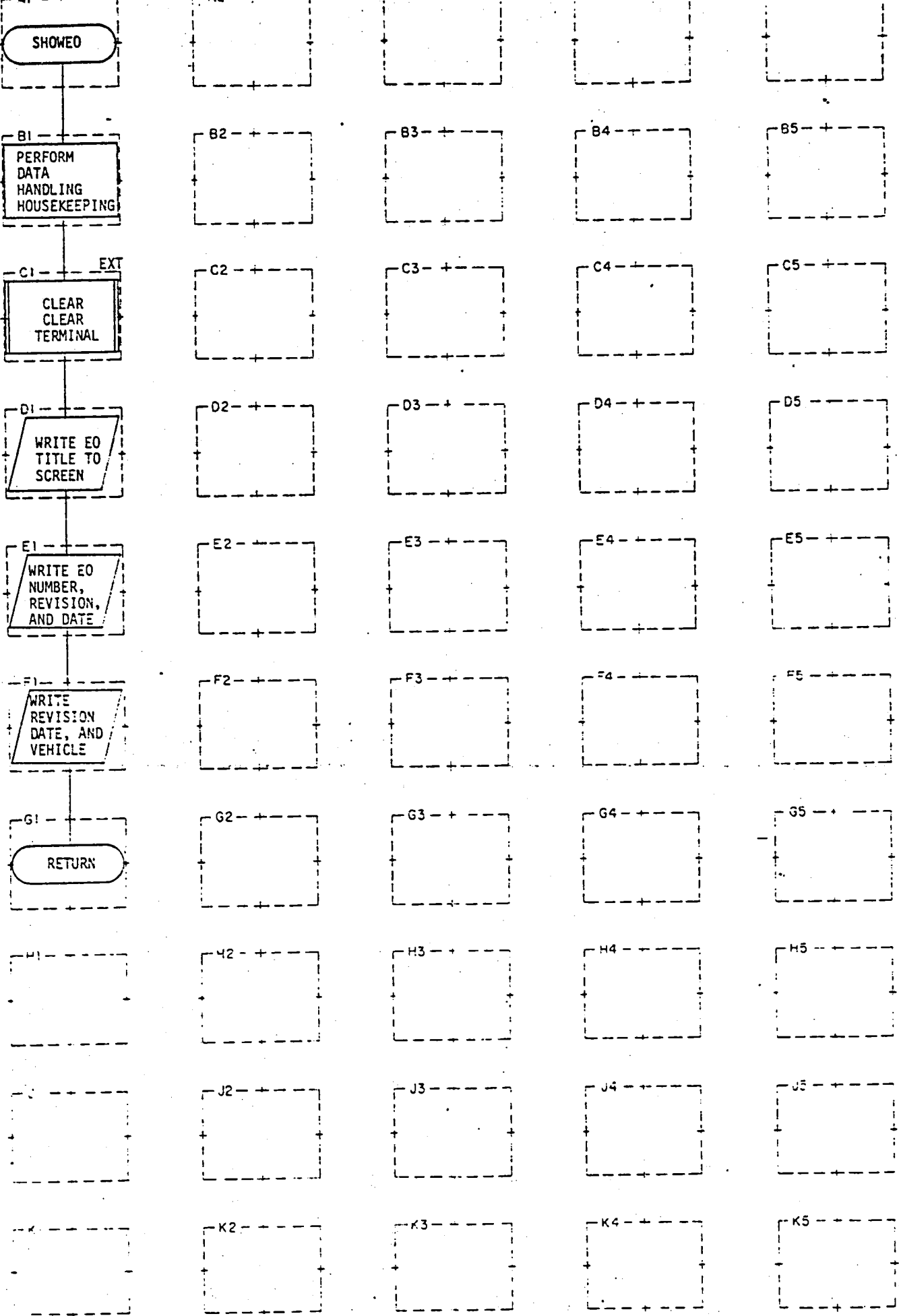


Figure 5.4.3-5

A1
B1 \$INSERT COMMON
C1 CLEAR
D1 WRITE(1,10)EPTIT
E1 WRITE(1,20)EON,EOREV,EDT
F1 WRITE(1,30)ERDT,((EOVEH(I,J),J=1,2),I=1,2)
G1
H1
J1
K1
A2
B2
C2
D2
E2
F2
G2
H2
J2
K2
A3
B3
C3
D3
E3

Figure 5.4.3-5


```

A1
B1  $INSERT COMMON
C1  CLEAR
D1  WRITE(1,10)PTIT
E1  WRITE(1,20)DRAW,DT,SYS
F1  WRITE(1,30) ((VEH(I,J),J=1,2),I=1,2),SECT,NSHT
G1  WRITE(1,35)FREV; WRITE(1,70)
H1  (FNEO.NE.0)
J1  WRITE(1,72)
K1
A2
B2  REWIND 12
C2  DO 100 L=2,NSHT
D2  PERFORMED BY C2
E2  READ(12,END=150)DRW,SHTN,REV,NEO,EOREF
F2  PERFORMED BY E2
G2
H2  DO 81 J=1,FNEO; WRITE(1,85)(FEOREF(J,K),K=1,2)
J2  (NSHT.EQ.1)
K2
A3
B3  DO 50 I=1,4; (DRAW(I).NE.DRW(I))
C3
D3  READ(12,END=300)DRW,SHTN,REV,NEO,EOREF
E3

```


F3 WRITE(1,160)DRW
G3
H3
J3
K3
A4
B4 (SHTN(2).EQ.0)
C4 WRITE(1,60)SHTN(1),REV
D4
E4
F4 (NEO.NE.0)
G4 WRITE(1,72)
H4
J4
K4
A5
B5 WRITE(1,52)(SHTN(K),K=1,2),REV
C5
D5
E5
F5 DO 80 J=1,NEO; WRITE(1,85)(EOREF(J,K),K=1,2)
G5
H5
J5
K5


```

A1
B1  $INSERT COMMON; INTEGER*2
C1  IEOADD=0
D1  (R.EQ.0)
E1  WRITE(1,1)
F1  READ(1,10,ERR=2)IKNT
G1  (IKNT.LT.0); (IKNT.GT.6)
H1
J1
K1
A2
B2  READ(1,10,ERR=5)IR
C2
D2  (R.EQ.1.AND,IR.NE,1)
E2  WRITE(1,101)
F2  LEN=10
G2  DO 3800 LOOP=1,IKNT,1
H2  PERFORMED BY G2
J2  WRITE(1,3)
K2
A3
B3  (R.EQ.1.AND,IR.NE.2)
C3  (R.EQ.0.AND.FIRST.EQ.1)
D3  PERFORMED BY D2
E3

```

Figure 5.4.3-7

F3 TINPUT(ETIT,LEN)
G3 WRITE(1,102)ETIT
H3 DO 105L=1,19; EPTIT(L)=PTIT(L)
J3 WRITE(1,110)EPTIT
K3
A4
B4 PERFORMED BY B3 (PAGE 2 of 8)
C4 PERFORMED BY C3 (PAGE 2 of 8)
D4 WRITE(1,202)
E4 READ(1,203,ERR=201)EON
F4 WRITE(1,203)EON
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

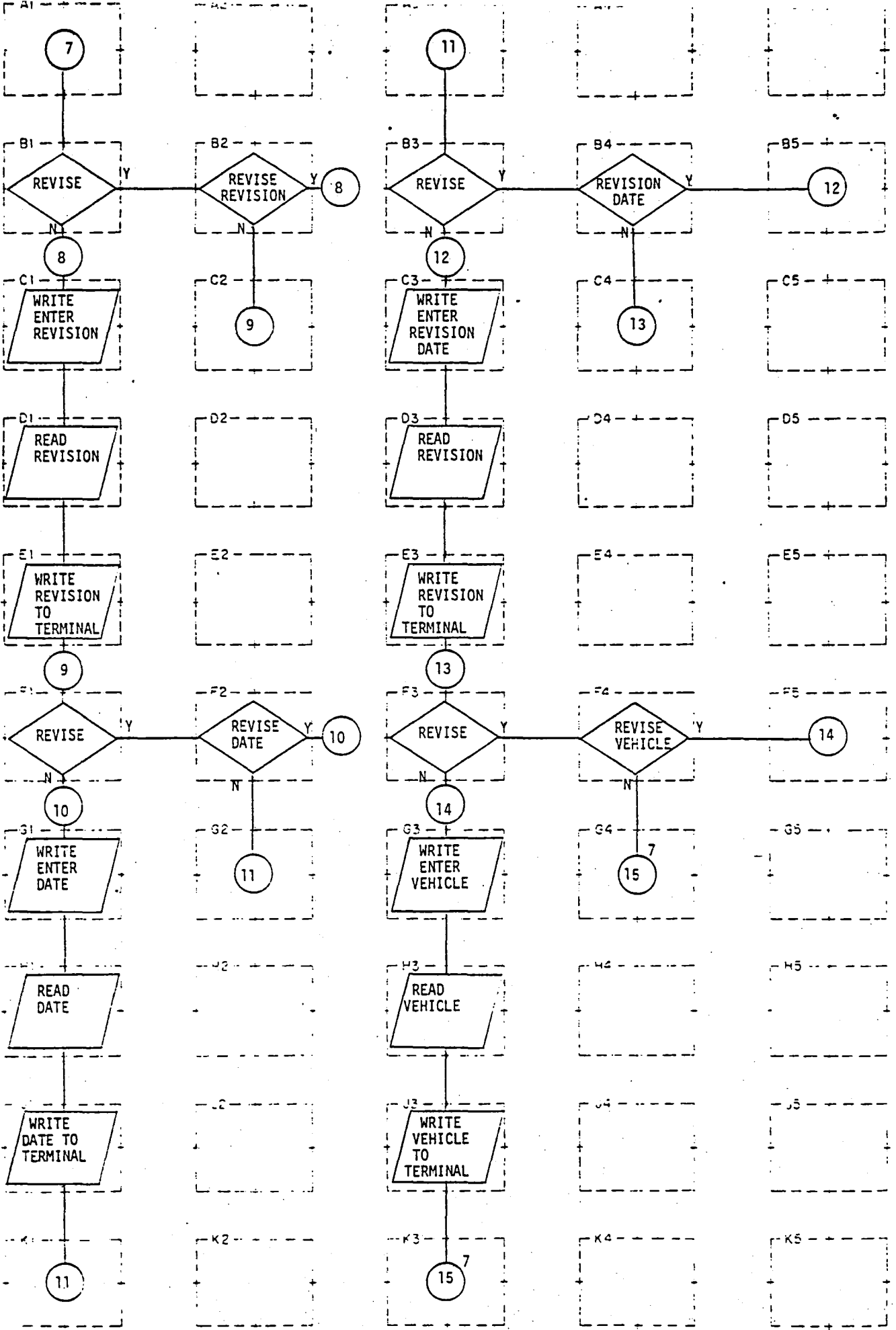


Figure 5.4.3-7

A1
B1 (R.EQ.1.AND.IR.NE.3)
C1 WRITE(1,501)
D1 READ(1,502,ERR=401)EOREV
E1 WRITE(1,502)EOREV
F1 (R.EQ.1.AND.IR.NE.4)
G1 WRITE(1,902)
H1 READ(1,903,ERR=901)EDT
J1 WRITE(1,903)EDT
K1
A2
B2 PERFORMED BY B1
C2
D2
E2
F2 PERFORMED BY F1
G2
H2
J2
K2
A3
B3 (R.EQ.1.AND.IR.NE.5)
C3 WRITE(1,1002)
D3 READ(1,903,ERR=1002)ERDT
E3 WRITE(1,903)ERDT

Figure 5.4.3-7

F3 (R.EQ.1.AND.IR.NE.6)
G3 WRITE(1,1202)
H3 READ(1,1203,ERR=1201)((EOVEH(I,J),J=1,2),I=1,2)
J3 WRITE(1,1203)((EOVEH(I,J),J=1,2),I=1,2)
K3
A4
B4 PERFORMED BY B3 (PAGE 5 of 8)
C4
D4
E4
F4 PERFORMED BY F3 (PAGE 5 of 8)
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

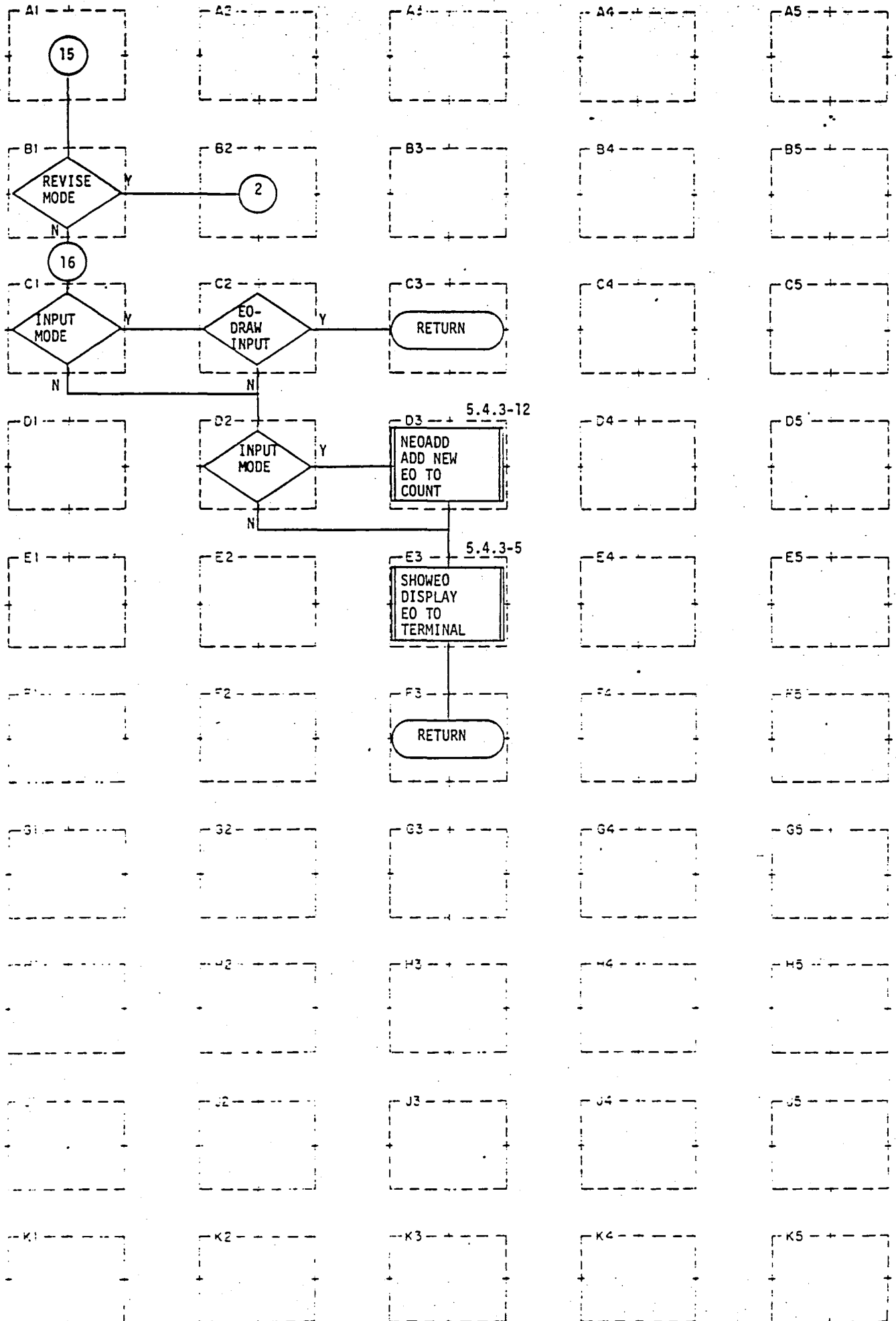


Figure 5.4.3-7

A1
B1 PERFORMED BY G2 (PAGE 2 of 8)
C1 (R.EQ.0.AND.FIRST.EQ.1)
D1
E1
F1
G1
H1
J1
K1
A2
B2
C2
D2 (R.EQ.0)
E2
F2
G2
H2
J2
K2
A3
B3
C3
D3 NEOADD
E3 SHOWEO

A1
B1 \$INSERT COMMON; \$INSERT SYSCOM> KEYS.F; INTEGER * 2
C1 IEOUN = 0
D1 NEWSHT = 0
E1 (R.EQ.0)
F1 WRITE (1,1)
G1 READ (1,10,ERR = 2) IKNT
H1 (IKNT.LT.0); (IKNT.GT.9)
J1
K1
A2
B2 WRITE (1,3)
C2 READ (1,10,ERR = 5) IR
D2 (IR.NE.8.AND.IR.NE.7)
E2 Performed by D2
F2
G2
H2 DO 3800 LOOP = 1,IKNT,1
J2 Performed by H2
K2
A3
B3 (R.EQ.1.AND.IR.NE.1)
C3 WRITE (1,101)
D3 LEN = 10
E3 (IR.EQ.8)

Figure 5.4.3-8

F3 WRITE (1,11)
G3 READ (1,25,ERR = 9)IOPT
H3 (IOPT.EQ.'YE'); (IOPT.NE.'NO')
J3
K3
A4
B4 Performed by B3 (Page 2 of 21)
C4
D4 TINPUT (TIT,LEN)
E4 WRITE (1,20)
F4 READ (1,25,ERR = 19)IOPT
G4 (IOPT.EQ.'NO'); (IOPT.NE.'YE')
H4 NEWSHT = 1
J4
K4
A5
B5
C5
D5 WRITE (1,102)TIT; WRITE (1,105)PTIT
E5 DO 104 I = 1,19; TTIT(I) = PTIT(I)
F5
G5 IEOUN = 1
H5
J5
K5

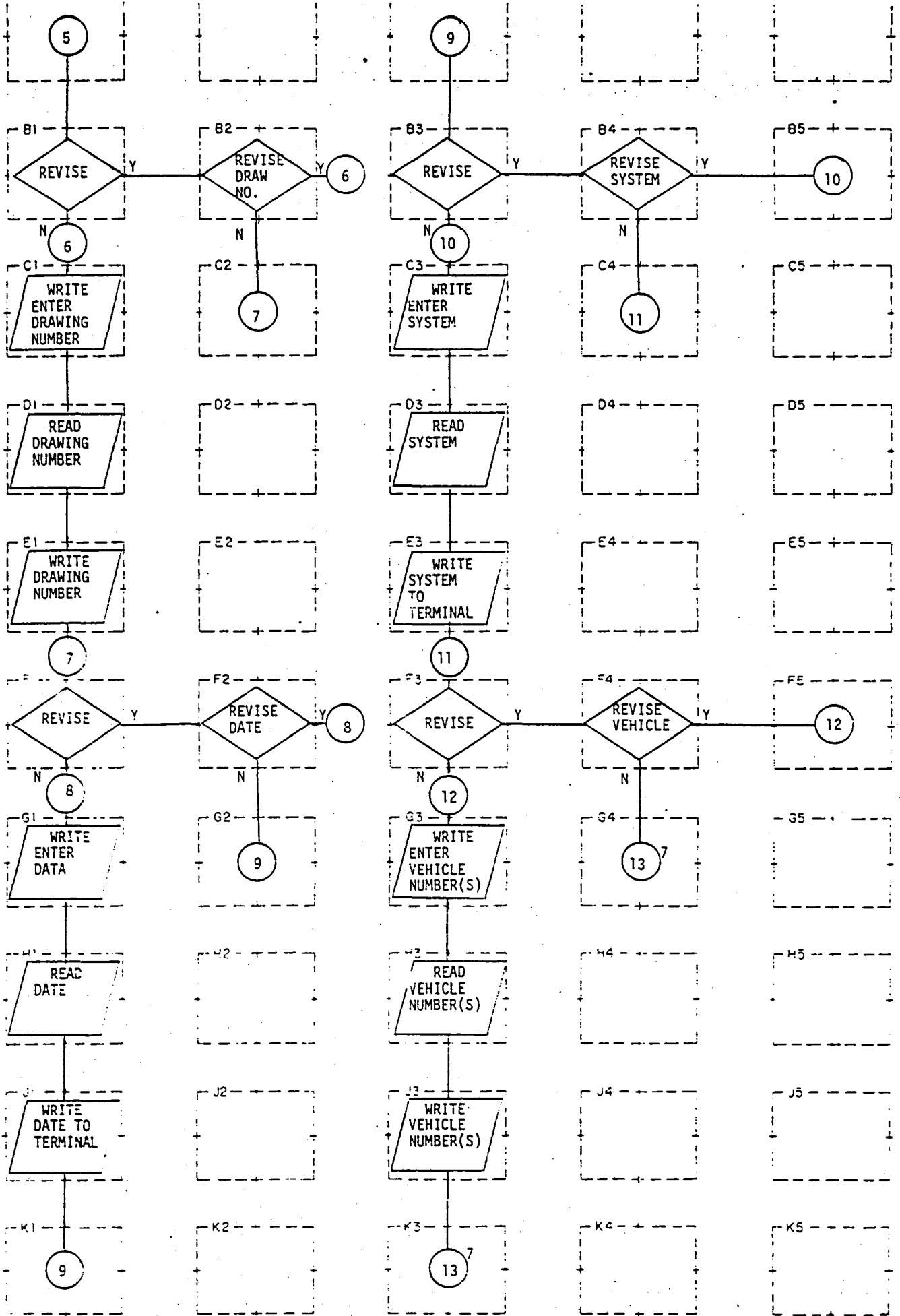


Figure 5.4.3-8

A1
B1 (R.EQ.1.AND.IR.NE.2)
C1 WRITE (1,202)
D1 READ (1,203,ERR = 201) DRAW
E1 WRITE (1,203) DRAW
F1 (R.EQ.1.AND.IR.NE.3)
G1 WRITE (1,402)
H1 READ (1,403,ERR = 401)DT
J1 WRITE (1,403)DT
K1
A2
B2 Performed by B1
C2
D2
E2
F2 Performed by F1
G2
H2
J2
K2
A3
B3 (R.EQ.1.AND.IR.NE.4)
C3 WRITE (1,502)
D3 READ (1,503,ERR = 501) SYS
E3 WRITE (1,503) SYS

Figure 5.4.3-8

F3 (R.EQ.1.AND.IR.NE.5)
G3 WRITE (1,902)
H3 READ (1,903,ERR = 901) ((VEH(I,J),J = 1,2),I = 1,2)
J3 WRITE (1,903)((VEH(I,J),J = 1,2),I = 1,2)
K3
A4
B4 Performed by B3 (Page 5 of 21)
C4
D4
E4
F4
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

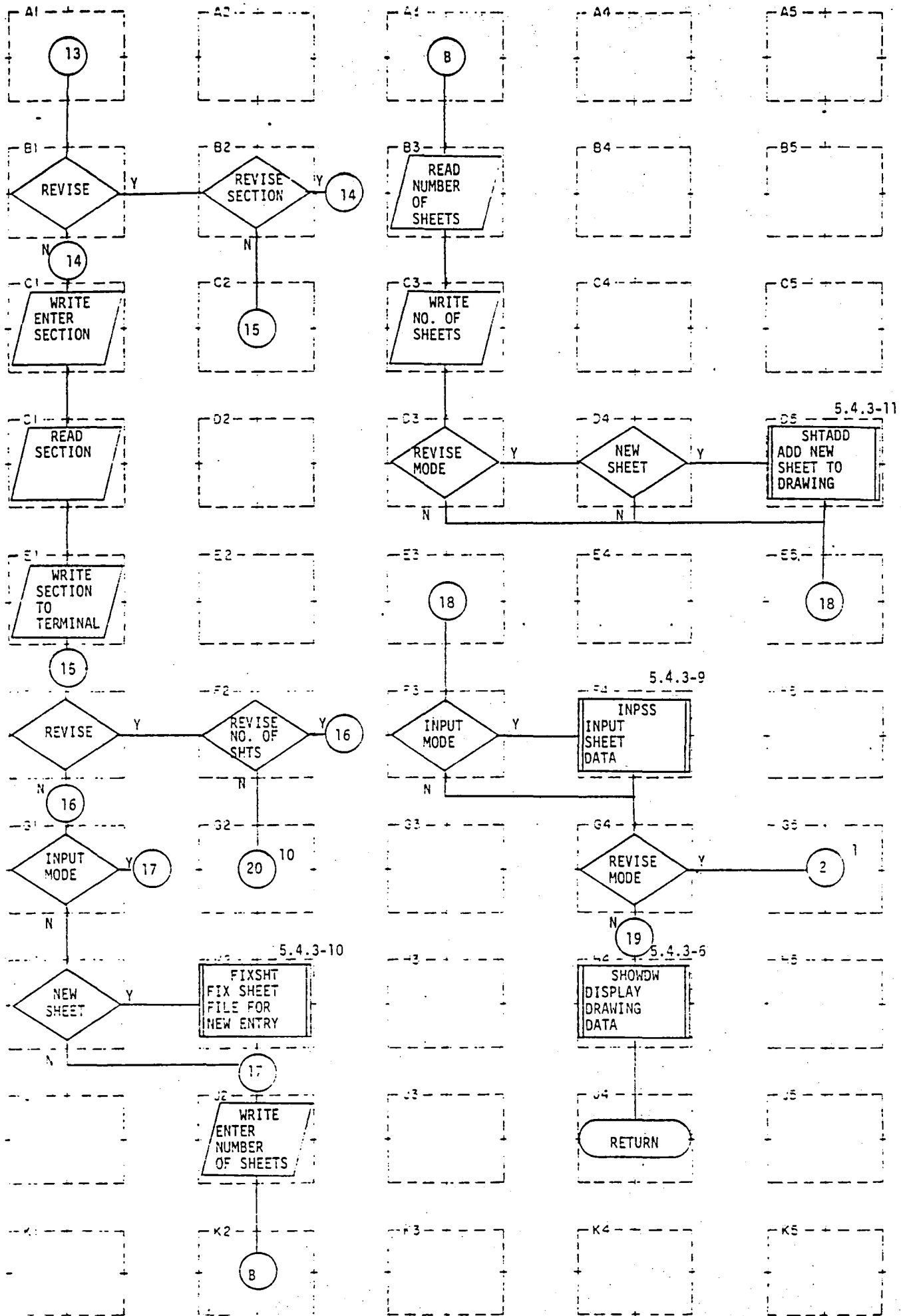


Figure 5.4.3-8

A1
B1 (R.EQ.1.AND.IR.NE.6)
C1 WRITE (1,2202)
D1 READ (1,2203,ERR = 2201)SECT
E1 WRITE (1,2203)SECT
F1 (R.EQ.1.AND.IR.NE.7)
G1 (R.EQ.0)
H1 (NEWSHT.EQ.1)
J1
K1
A2
B2 Performed By B1
C2
D2
E2
F2 Performed By F1
G2
H2 FIXSHT
J2 WRITE (1,2302)
K2
A3
B3 READ (1,2303,ERR = 2301)NSHT
C3 WRITE (1,2303)NSHT
D3 (R.EQ.1.AND.NEWSHT.EQ.1)
E3

F3 (R.EQ.0)

G3

H3

J3

K3

A4

B4

C4

D4 Performed By D3 (Page 8 of 21)

E4

F4 INPSS

G4 Performed By H2 (Page 2 of 21)

H4 SHOWDW

J4

K4

A5

B5

C5

D5 SHTADD

E5

F5

G5

H5

J5

K5

A1 .
B1 (R.EQ.1.AND.IR.NE.8)
C1 WRITE (1,2408)
D1 FINISH = 0
E1 READ (1,2409,ERR = 2407) (ISHTN(K),K = 1,2)
F1 (ISHTN(1).NE.1.OR.ISHTN(2).NE.0)
G1 SRCH\$\$ (K\$RDWR + K\$NDAM,'STEMP',6,10,1,IC)
H1 REWIND 12
J1 READ (12,END = 2470)DRW,SHTN,REV,NEO,EOREF
K1
A2
B2 Performed By B1
C2
D2
E2
F2 WRITE (1,2402)
G2
H2
J2
K2
A3
B3 Performed By J1
C3 (FINISH.EQ.1)
D3 DO 2415I = 1,4; (DRAW(I).NE.DRW(I))
E3

```

F3  READ (1,2403,ERR = 2448)FREV
G3  (IEOUP.EQ.0)
H3  (FNEO.NE.0)
J3
K3
A4
B4  SRCH$$ (K$CLOS, 'STEMP', 6,0,0,0)
C4
D4  DO 2420I = 1,2; (ISHTN(I).NE.SHTN(I))
E4
F4
G4
H4  FNEO = 0
J4  DO 2449 K = 1,10; FEOREF(K,1) = '  '; FEOREF(K,1) = '  '
K4
A5
B5  SRCH$$ (K$CLOS, 'SHEET', 6,0,0,0)
C5  SRCH$$ (K$DELE, 'SHEET', 6,0,0,0)
D5  CNAM$$ ('STEMP', 6, 'SHEET', 6, IC)
E5  SRCH$$ (K$RDWR + K$NDAM, 'SHEET', 6,8, 1, IC)
F5
G5
H5
J5
K5

```

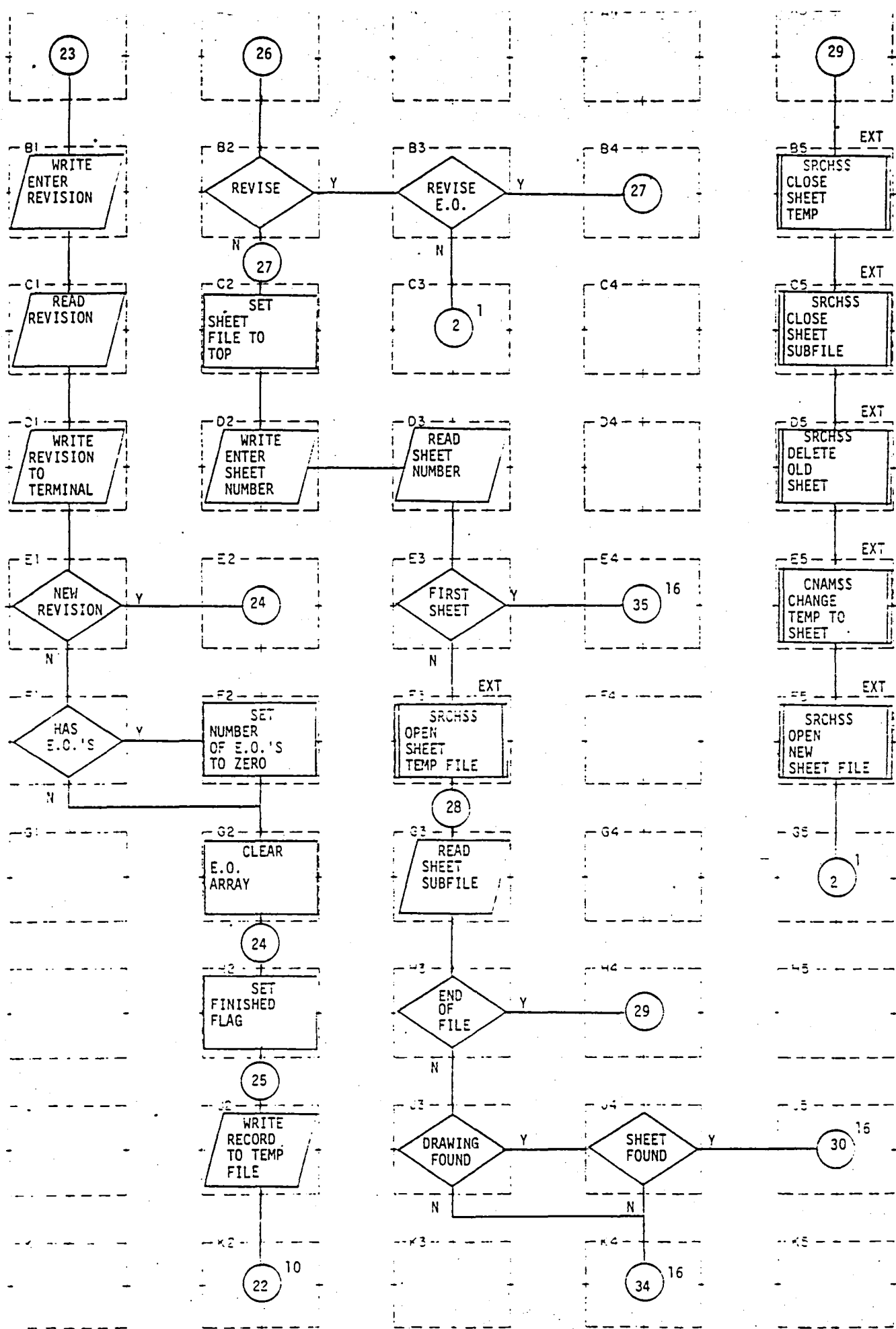


Figure 5.4.3-8

A1
B1 WRITE (1,2402)
C1 READ (1,2403,ERR = 2448) REV
D1 WRITE (1,2403) REV
E1 (IEOUP.EQ.0)
F1 (NEO.NE.0)
G1
H1
J1
K1
A2
B2 (R.EQ.1.AND.IR.NE.9)
C2 REWIND 12
D2 WRITE (1,2511)
E2
F2 NEO = 0
G2 DO 2450 K = 1,10; EOREF(K,1) = ' '; EOREF(K,2)=' '
H2 FINISH = 1
J2 WRITE (14) DRW, SHTN, REV, NEO, EOREF
K2
A3
B3 Performed by B2
C3
D3 READ (1,2512,ERR = 2510) (ISHTN(K),K = 1,2)
E3 (ISHTN(1).NE.1.OR.ISHTN(2).NE.0)

F3 SRCH\$\$ (K\$RDWR + K\$NDAM, 'STEMP', 6, 10, 1, IC)
G3 READ (12, END=2800) DRW, SHTN, REV, NEO, EOREF
H3 Performed by G3
J3 DO 2520 I = 1, 4; (DRAW(I).NE.DRW(I))
K3
A4
B4
C4
D4
E4
F4
G4
H4
J4 DO 2530 I = 1, 2; (ISHTN(I).NE.SHTN(I))
K4
A5
B5 SRCH\$\$ (K\$CLOS, 'STEMP', 6, 0, 0, 0)
C5 SRCH\$\$ (K\$CLOS, 'SHEET', 6, 0, 0, 0)
D5 SRCH\$\$ (K\$DELE, 'SHEET', 6, 0, 0, 0)
E5 CNAM\$\$ ('STEMP', 6, 'SHEET', 6, IC)
F5 SRCH\$\$ (K\$RDWR + K\$NDAM, 'SHEET', 6, 8, 1, IC)
G5
H5
J5
K5

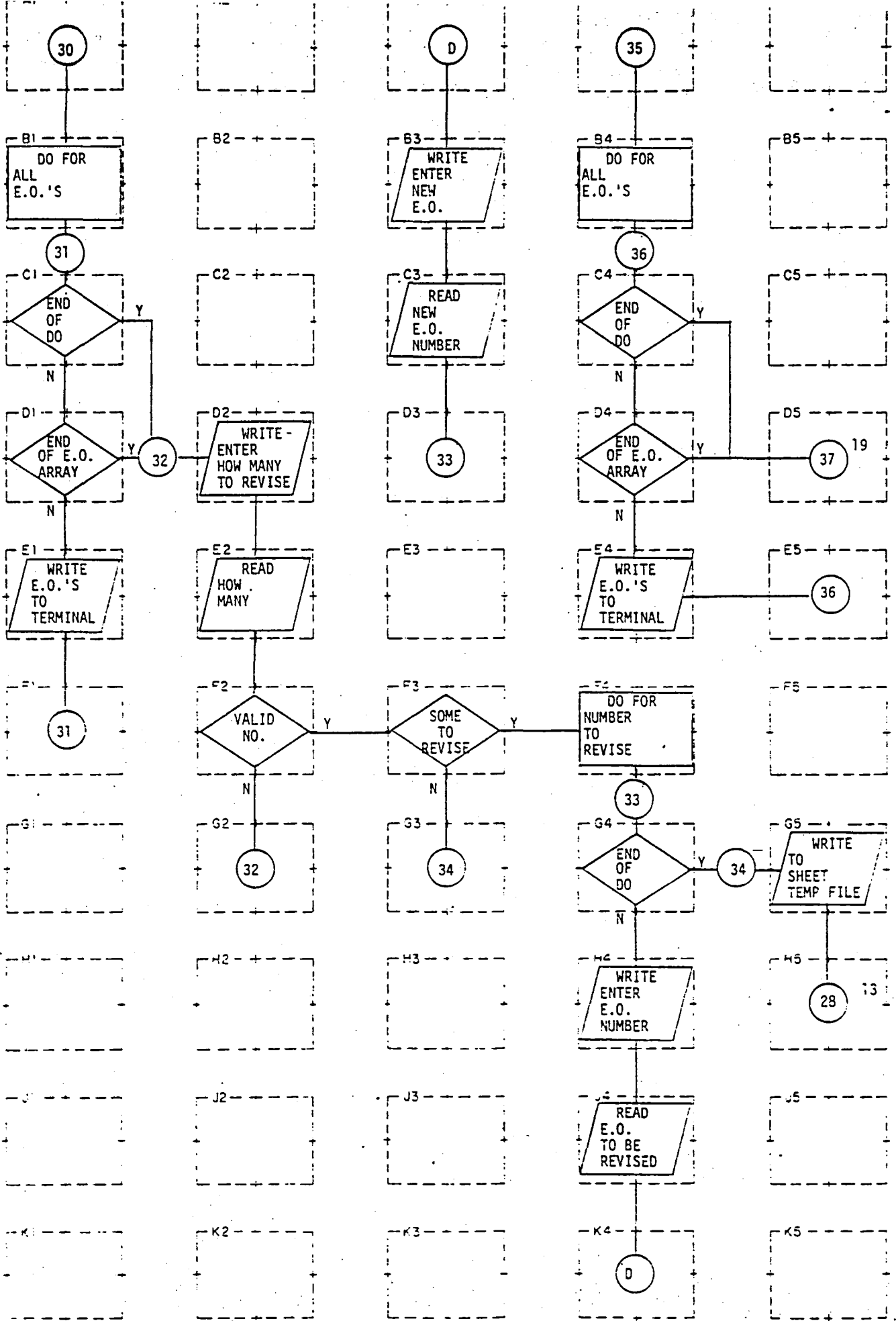


Figure 5.4.3-8

A1
B1 DO 2600 I = 1, 10
C1 Performed by B1
D1 (EOREF(I,1).NE.' ')
E1 WRITE (1,2505) I,(EOREF (I,J), J = 1,2)
F1
G1
H1
J1
K1
A2
B2
C2
D2 WRITE (1,2605)
E2 READ (1,2620,ERR = 2603)IOPT
F2 (IOPT.LT.0.OR.IOPT.GT.I)
G2
H2
J2
K2
A3
B3 WRITE (1,2660)
C3 READ (1,2670,ERR = 2660) (EOREF(K,N),N = 1,2)
D3
E3

F3 (IOPT.EQ.0)
G3
H3
J3
K3
A4
B4 DO 2550 I = 1,10
C4 Performed by B4
D4 (FEOREF (I, 1).NE.' ')
E4 WRITE (1,2505)I,(FEOREF(I,J),J=1,2)
F4 DO 2700 J = 1,IOPT
G4 Performed by F4
H4 WRITE (1,2650) I
J4 READ (1,2620,ERR = 2640)K
K4
A5
B5
C5
D5
E5
F5
G5 WRITE (14)DRW,SHTN,REV,NEO,EOREF
H5
J5
K5

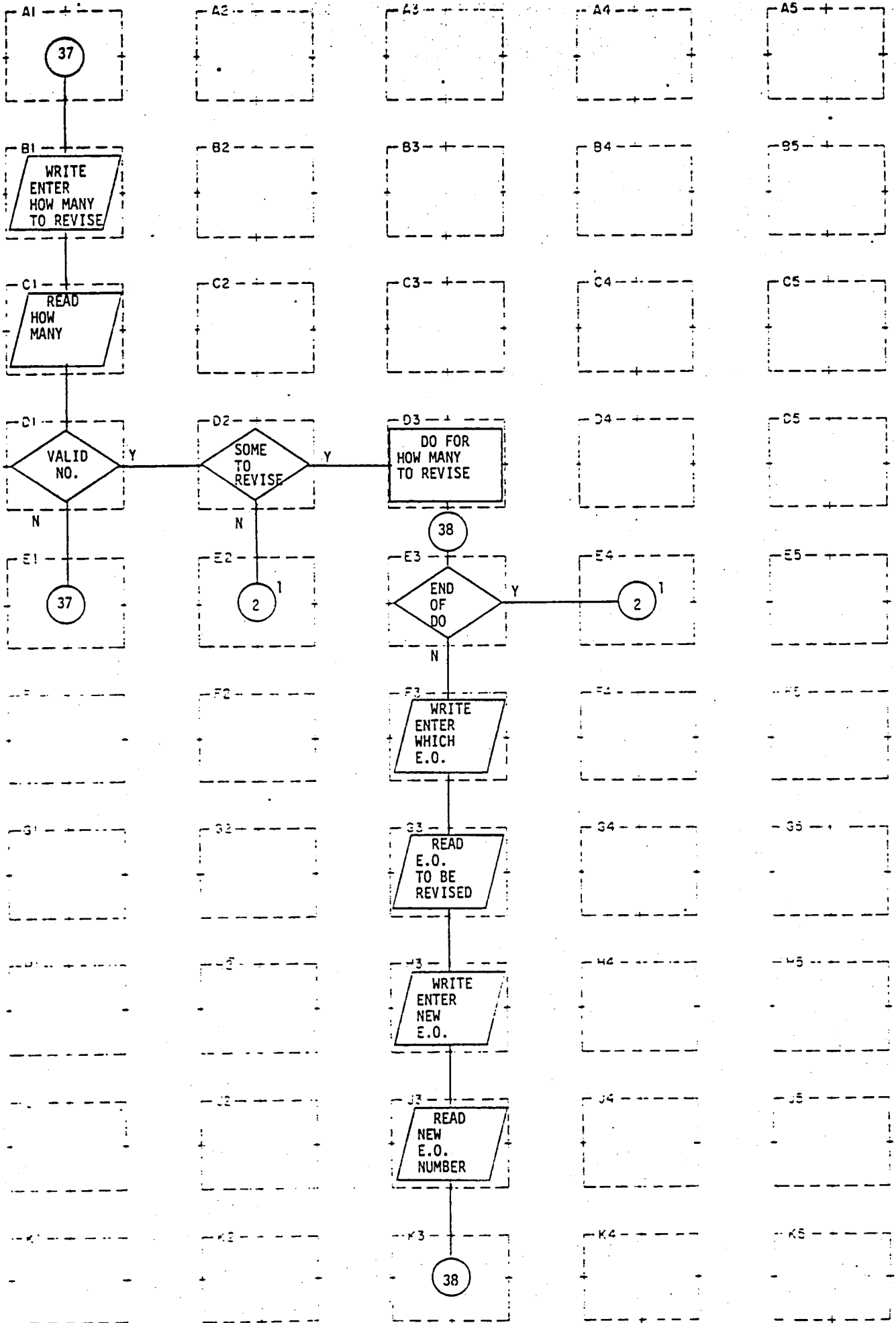


Figure 5.4.3-8

A1
B1 WRITE (1,2605)
C1 READ (1,2620,ERR = 2563)IOPT
D1 (IOPT.LT.0.OR.IOPT.GT.I)
E1
F1
G1
H1
J1
K1
A2
B2
C2
D2 (IOPT.EQ.0)
E2
F2
G2
H2
J2
K2
A3
B3
C3
D3 DO 2570 J = 1, IOPT
E3 Performed by D3

Figure 5.4.3-8

F3 WRITE (1,2650)I
G3 READ (1,2620,ERR = 2564)K
H3 WRITE (1,2660)
J3 READ (1,2670,ERR = 2565) (FEOREF(K,N),N = 1,2)
K3
A4
B4
C4
D4
E4
F4
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

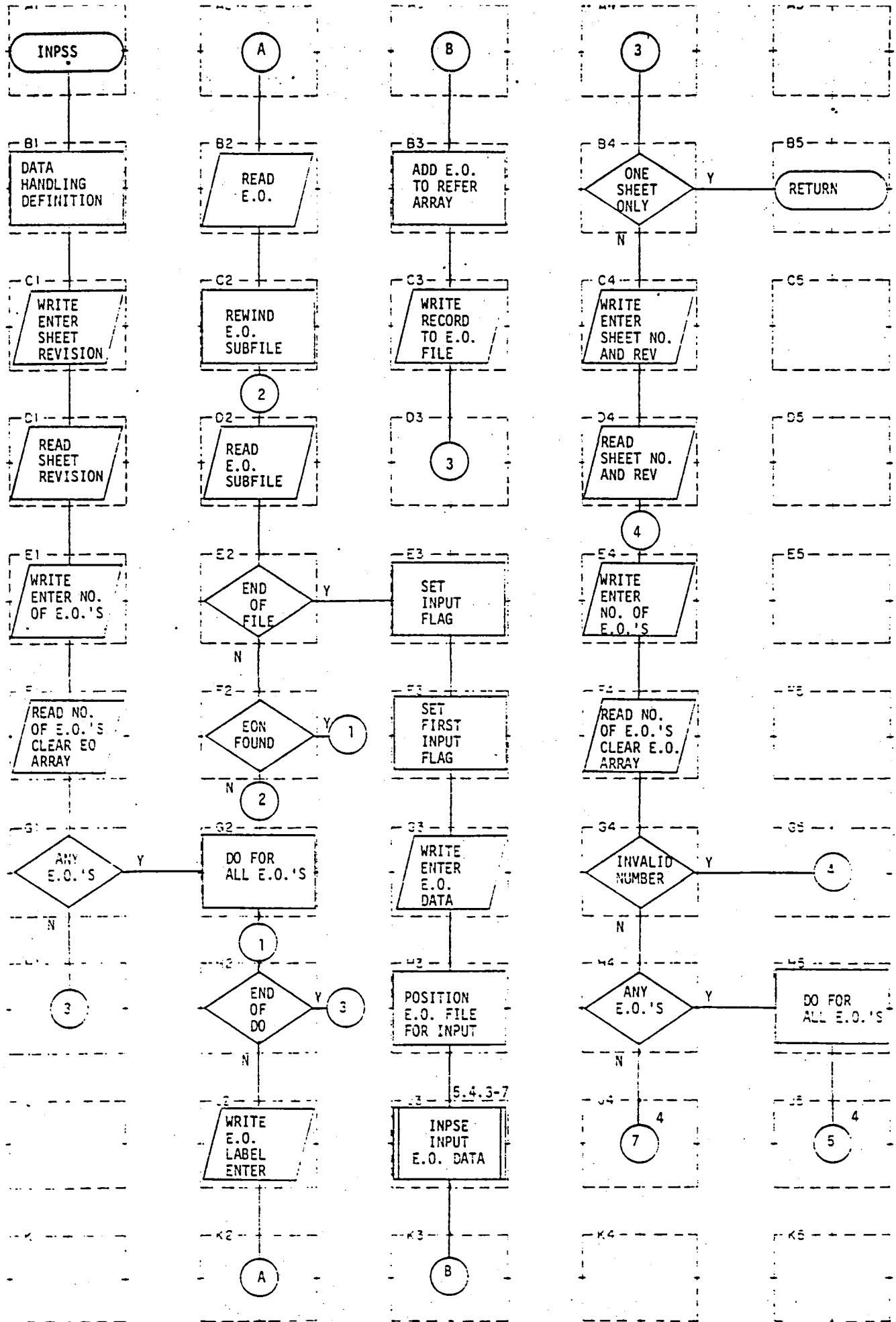


Figure 5.4.3-9

```

A1
B1 $INSERT COMMON
C1 WRITE(1,1001)
D1 READ(1,1003,ERR=1000)FREV
E1 WRITE(1,1006)
F1 READ(1,1008,ERR=1005)FNEO; D01009 I=1,10; D01010 J=1,2; FEOREF(I,J)=' '
G1 (FNEO.EQ.0)
H1
J1
K1
A2
B2 READ(1,2520,ERR=1201) (FEOREF(K,L),L=1,2)
C2 REWIND 18
D2 READ(18,END=1210)EON,ETIT,EPTIT,EOREV,EDT,ERDT,EOVEH
E2 PERFORMED BY D2
F2 D01206 L=1,2; (EON(L).NE.FEOREF(K,L))
G2 D01200 K=1,FNEO
H2 PERFORMED BY G2
J2 WRITE(1,2510)
K2
A3
B3 D01216 M=1,2; EON(M)=FEOREF(K,M)
C3 WRITE(18)EON,ETIT,EPTIT,EOREV,EDT,ERDT,EOVEH
D3
E3 R=0

```


F3 FIRST=1
G3 WRITE(1,1205)
H3 READ(18,END=1215)EON,ETIT,EPTIT,EOREV,EDT,ERDT,EOVEH
J3 INPSE
K3
A4
B4 (NSHT.LT.2)
C4 D02800 J=2,NSHT; WRITE(1,2402)
D4 READ(1,2403; ERR=2401) (SHTN(K),K=1,2); READ(1,1003,ERR=2404)REV
E4 WRITE(1,1006)
F4 READ(1,1008,ERR=2406)NEO; D02451 K=1,10; D02450 L=1,2 EOREF(K,L)=' '
G4 (NEO.LT.0)
H4 (NEO.EQ.0)
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5 D02550 K=1,NEO
J5
K5

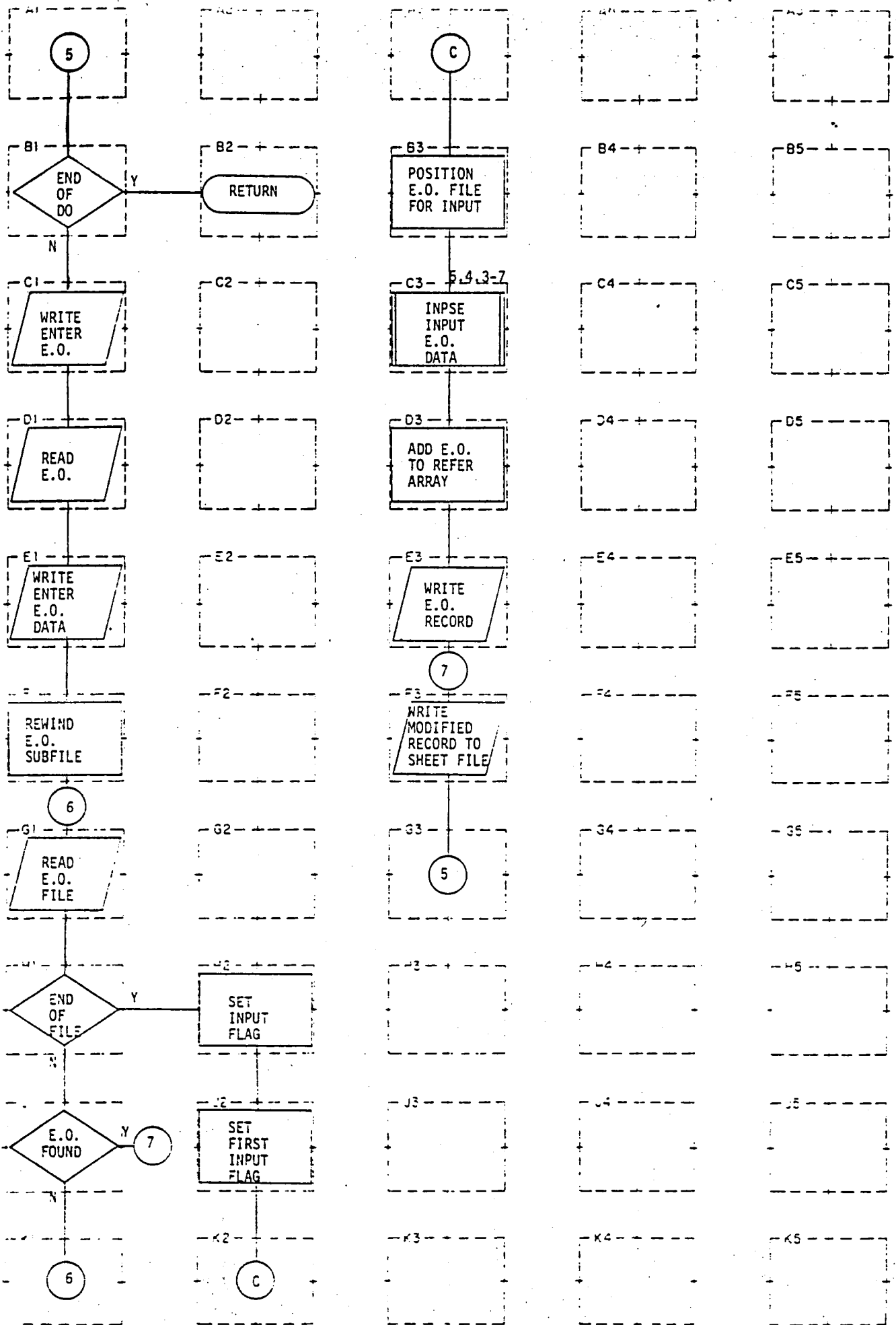


Figure 5.4.3-9

A1

B1 PERFORMED BY H5 (Page 1 of 6)

C1 WRITE(1,2510)

D1 READ(1,2520,ERR=2508) (EOREF(K,L),L=1,2)

E1 WRITE(1,1205)

F1 REWIND 18

G1 READ(18,END=1240)EON,ETIT,EPTIT,EOREV,EPT,ERDT,EVEH

H1 PERFORMED BY G1

J1 D02532 L=1,2; (EON(L).NE.EOREF(K,L))

K1

A2

B2

C2

D2

E2

F2

G2

H2 R=0

J2 FIRST=1

K2

A3

B3 READ(18,END=2545)EON,ETIT,EPTIT,EOREV,EPT,ERDT,EVEH

C3 INPSE

D3 D02546 M=1,2; EON(M)=EOREF(K,M)

E3 WRITE(18)EON,ETIT,EPTIT,EOREV,EDT,ERDT,EVEH

F3 WRITE(12)DRAW,SHTN,REV,NEO,EOREF

G3

H3

J3

K3

A4

B4

C4

D4

E4

F4

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

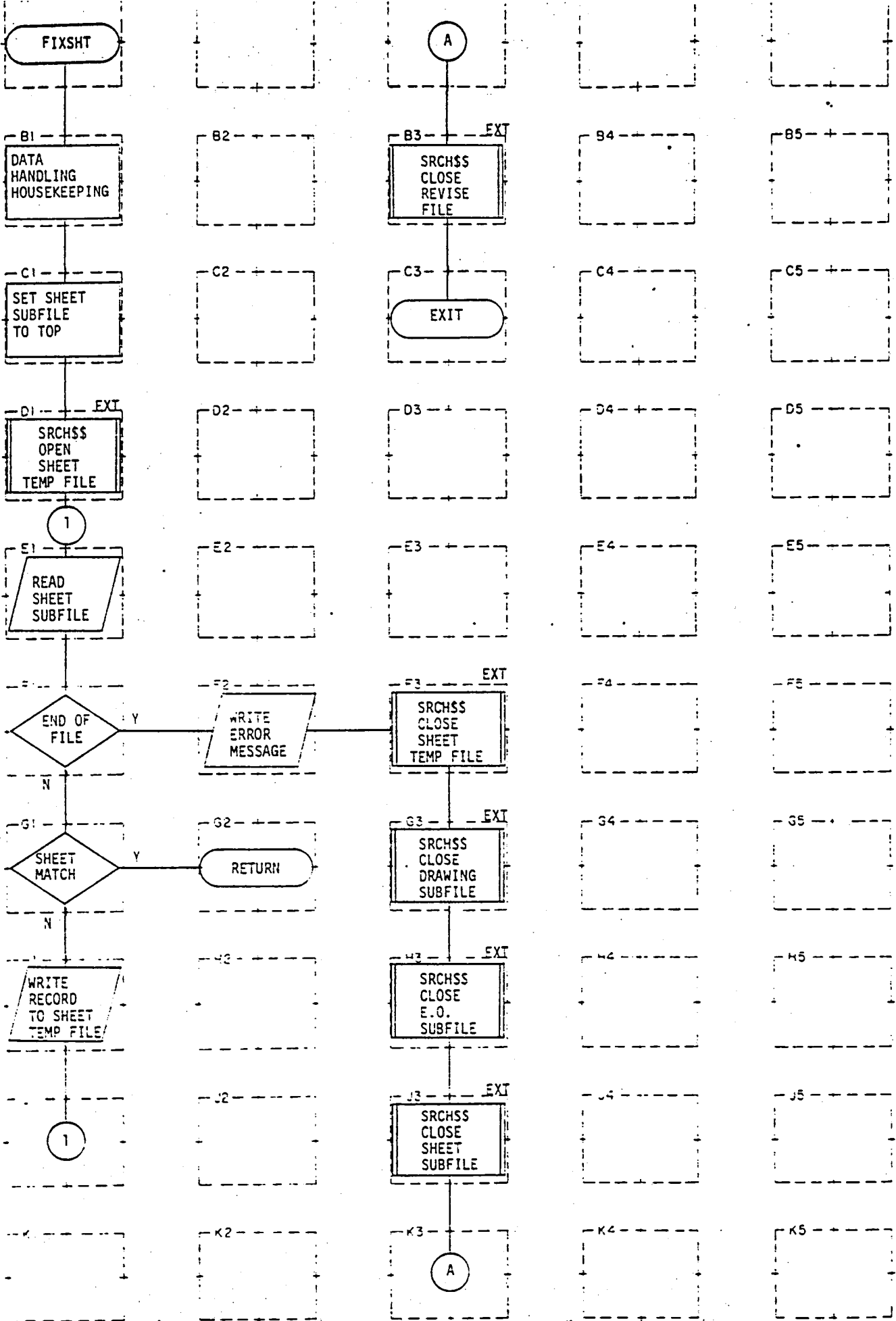


Figure 5.4.3-10

A1
B1 \$INSERT COMMON; \$INSERT SYSCOM> KEYS.F
C1 REWIND 12
D1 SRCH\$\$ (K\$RDWR+K\$NDAM, 'STEMP', 6, 10, 1, IC)
E1 READ(12, END=1000) DRW, SNTN, REV, NEO, EOREF
F1 PERFORMED BY E1
G1 DO 100 I=1,4; (DRAW(I).NE.DRW(I))
H1 WRITE(14) DRW, SHTN, REV, NEO, EOREF
J1
K1
A2
B2
C2
D2
E2
F2 WRITE(1, 300)
G2
H2
J2
K2
A3
B3 SRCH\$\$ (K\$CLOS, 'REVS', 6, 0, 0, 0)
C3
D3
E3

F3 SRCH\$\$ (K\$CLOS, 'STEMP', 6, 0, 0, 0)

G3 SRCH\$\$ (K\$CLOS, 'DRAW', 6, 0, 0, 0)

H3 SRCH\$\$ (K\$CLOS, 'EO', 6, 0, 0, 0)

J3 SRCH\$\$ (K\$CLOS, 'SHEET', 6, 0, 0, 0)

K3

A4

B4

C4

D4

E4

F4

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5


```

A1
B1  $INSERT COMMON; $INSERT SYSCOM>KEYS.F; INTEGER*2; *4
C1  FINISH=0
D1  WRITE(1,10)
E1  READ(1,15,ERR=5) (IISHTN(N),N=1,2)
F1  (IISHTN(1).EQ.1)
G1  (IISHTN(1).EQ.SHTN(1))
H1  DO 20 I=1,4; (DRW(I).NE.DRAW(I))
J1
K1
A2
B2  IIREV='NC'
C2  IINEO=0
D2  WRITE(14)DRW,IISHTN,IIREV,IINEO,IIEORE
E2  WRITE(14)DRW,SHTN,REV,NEO,EOREF
F2  FINISH=1
G2
H2  READ(12,END=200)DRW,SHTN,REV,NEO,EOREF
J2  PERFORMED BY H2
K2
A3
B3
C3  (FINISH.EQ.0)
D3
E3

```

F3

G3

H3

J3

K3

A4

B4 WRITE(14)DRW,SHTN,REV,NEO,EOREF

C4

D4

E4

F4

G4

H4

J4

K4

A5

B5 SRCHSS(KSCLOS,'SHEET',6,0,0,0)

C5 SRCHSS(KSCLOS,'STEMP',6,0,0,0)

D5 SRCHSS(K\$DELE,'SHEET',6,0,0,0)

E5 CNAMSS('STEMP',6,'SHEET',6,IC)

F5 SRCHSS(K\$DWR+K\$NDAM,'SHEET',6,8,1,IC)

G5

H5

J5

K5

A1
B1 \$INSERT COMMON; \$INSERT SYSCOM > KEYS.F; INTEGER*2
C1 WRITE(1,2)
D1 READ(1,3,ERR=1)IOPT
E1 (IOPT.LE.0)
F1
G1
H1
J1
K1
A2
B2
C2
D2
E2 D0300 I=1,IOPT
F2 PERFORMED BY E2
G2 REWIND 12
H2 WRITE(1,5)
J2 READ(1,6,ERR=4)IDR
K2
A3
B3 WRITE(1,8)
C3 READ(1,3,ERR=7)IANS
D3 (IANS.LE.0)
E3

F3

G3

H3

J3

K3

A4

B4

C4

D4 D0250 J=1, IANS

E4 PERFORMED BY E4

F4 WRITE(1,13)

G4 READ(1,15,ERR=12) (ISHT(N),N=1,2)

H4 (ISHT(1).LE.0)

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

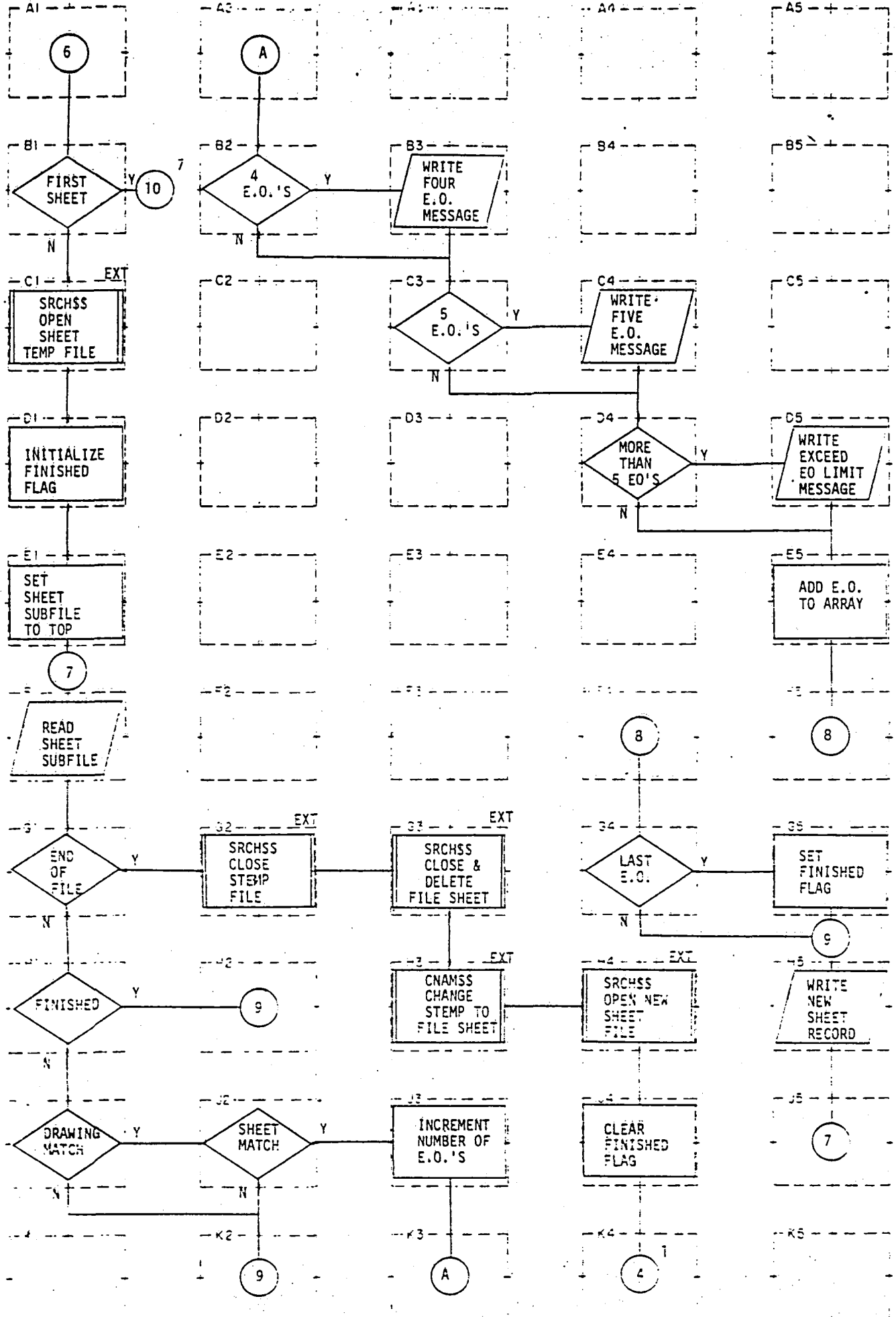


Figure 5.4.3-12

```

A1
B1 (ISHT(1).EQ.1.AND.ISHT(2).EQ.0)
C1 SRCH$$ (K$RDWR+K$NDAM, 'STEMP', 6, 10, 1, IC)
D1 FINISH=0
E1 REWIND 12
F1 READ(12, END=200) DRW, SHTN, REV, NEO, EOREF
G1 (FINISH.EQ.1)
H1 DO20 L=1,4; (IDR(L).NE.DRW(L))
J1
K1
A2
B2 (NEO.EQ.4)
C2
D2
E2
F2
G2 SRCH$$ (K$CLOS, 'STEMP', 6, 0, 0, 0)
H2
J2 DO25 N=1,2; (ISHT(N).NE.SHTN(N))
K2
L2
E3 WRITE(1, 30) (ISHT(N), N=1, 2), DRW
O3 (NEO.EQ.5)
Q3
E3

```

```

F3
G3  SRCH$$ (K$CLOS, 'SHEET', 6, 0, 0, 0); SRCH$$ (K$DELE, 'SHEET', 6, 0, 0, 0)
H3  CNAM$$ ('STEMP', 6, 'SHEET', 6, IC)
J3  NEO=NEO+1
K3
A4
B4
C4  WRITE(1, 40) (ISHT(N), N=1, 2), DRW
D4  (NEO.GE. 6)
E4
F4
G4  (J.EQ. IANS)
H4  SRCH$$ (K$RDWR+K$NDAM, 'SHEET', 6, 8, 1, IC)
J4  FINISH=0
K4
A5
B5
C5
D5  WRITE(1, 50) (ISHT(N), N=1, 2), DRW, NEO
E5  DO150 K=1, 2; EOREF(NEO, K)=EON(K)
F5
G5  FINISH=1
H5  WRITE(14) DRW, SHTN, REV, NEO, EOREF
J5
K5

```

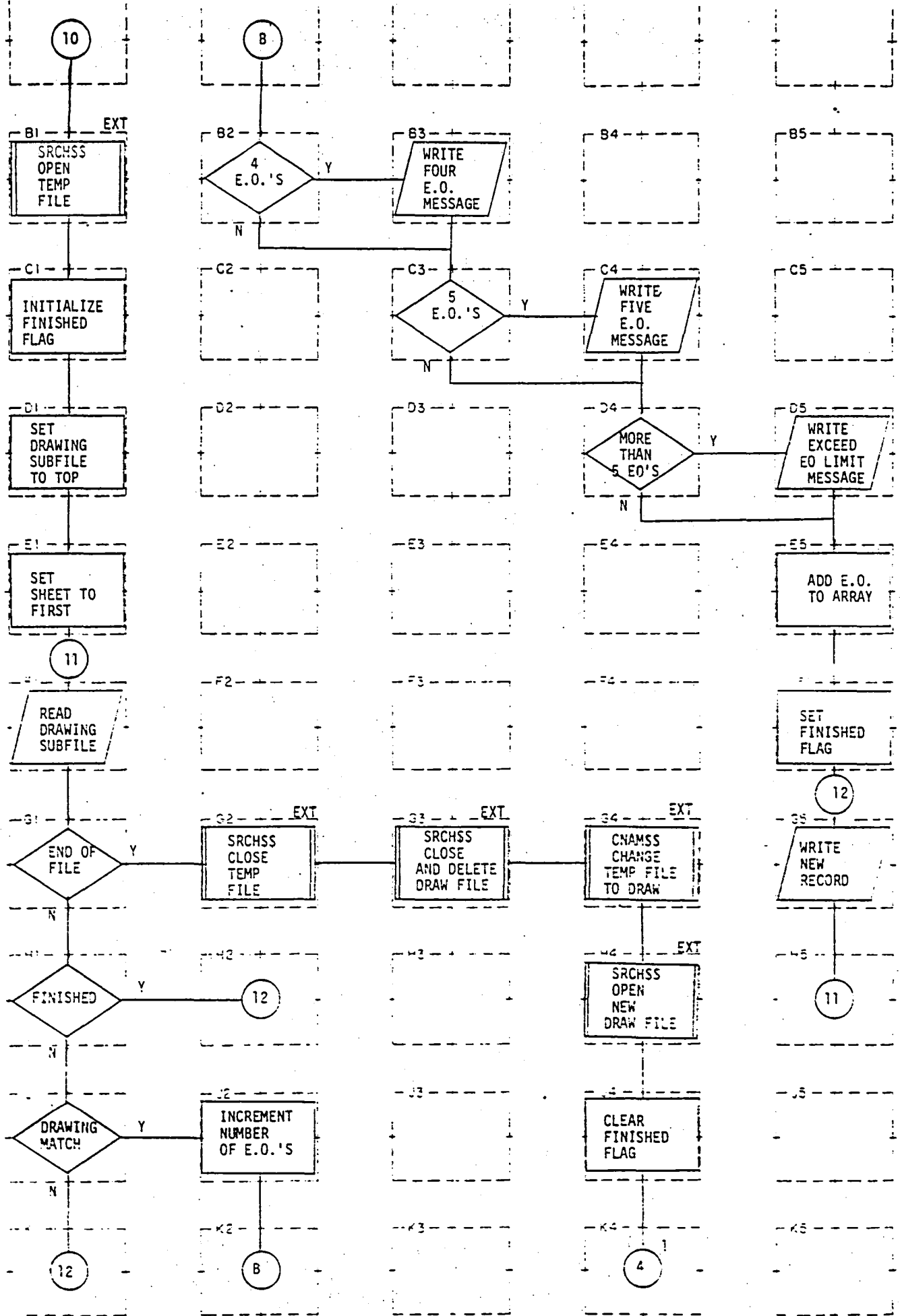



Figure 5.4.3-12

A1
B1 SRCH\$\$ (K\$RDWR+K\$NDAM, 'TEMP', 6, 6, 1, IC)
C1 FINISH=0
D1 REWIND 6
E1 ISHT(1)=1; ISHT(2)=0
F1 READ(6, END=285) DRAW, TIT, PTIT, DT, SYS, VEH, SECT, NSHT, FREV, FNEO, FEOREF
G1 PERFORMED BY F1
H1 (FINISH.EQ.1)
J1 D0265 L=1, 4; (IDR(L).NE.DRAW(L))
K1
A2
B2 (FNEO.EQ.4)
C2
D2
E2
F2
G2 SRCH\$\$ (K\$CLOS, 'TEMP', 6, 0, 0, 0)
H2
J2 FNEO=FNEO+1
K2
A3
B3 WRITE(1, 30) (ISHT(N), N=1, 2), DRAW
C3 (FNEO.EQ.5)
D3
E3

```

F3
G3  SRCH$$ (K$CLOS, 'DRAW', 6, 0, 0, 0); SRCH$$ (K$DELE, 'DRAW', 6, 0, 0, 0)
H3
J3
K3
A4
B4
C4  WRITE(1, 40) (ISHT(N), N=1, 2), DRAW
D4  (FNEO.GE. 6)
E4
F4
G4  CNAM$$ ('TEMP', 6, 'DRAW', 6, IC)
H4  SRCH$$ (K$RDWR+K$NDAM, 'DRAW', 6, 2, 1, IC)
J4  FINISH=0
K4
A5
B5
C5
D5  WRITE(1, 50) (ISHT(N), N=1, 2), DRAW, FNEO
E5  D0270 K=1, 2; FEOREF(FNEO, K)=EON(K)
F5  FINISH=1
G5  WRITE(10) DRAW, TIT, PTIT, DT, SYS, VEH, SECT, NSHT, FREV, FNEO, FEOREF
H5
J5
K5

```

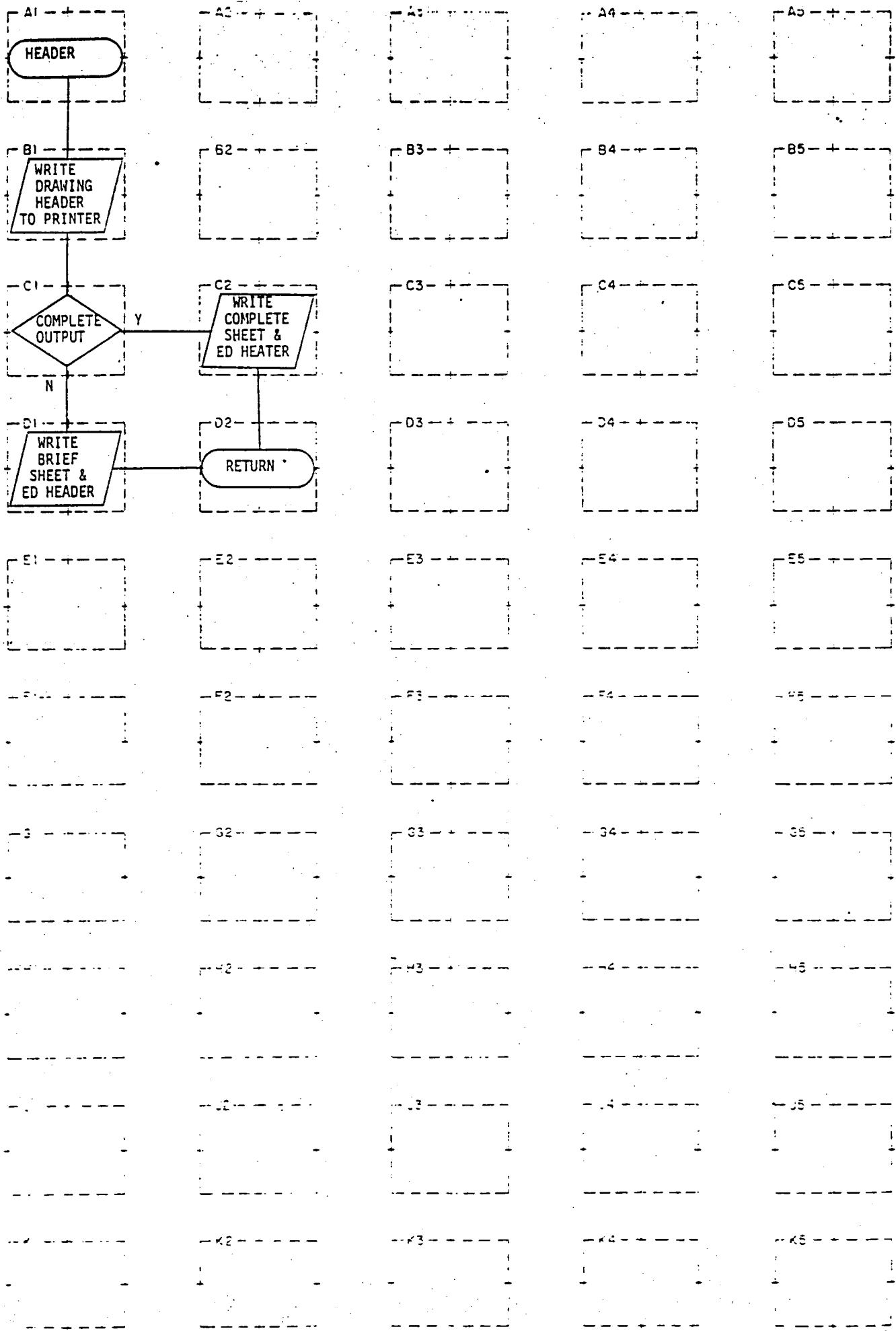


Figure 5.4.3-13

A1
B1 WRITE(7,200)
C1 (R.EQ.1)
D1 WRITE(7,500)
E1
F1
G1
H1
J1
K1
A2
B2
C2 WRITE(7,300)
D2
E2
F2
G2
H2
J2
K2
A3
B3
C3
D3
E3

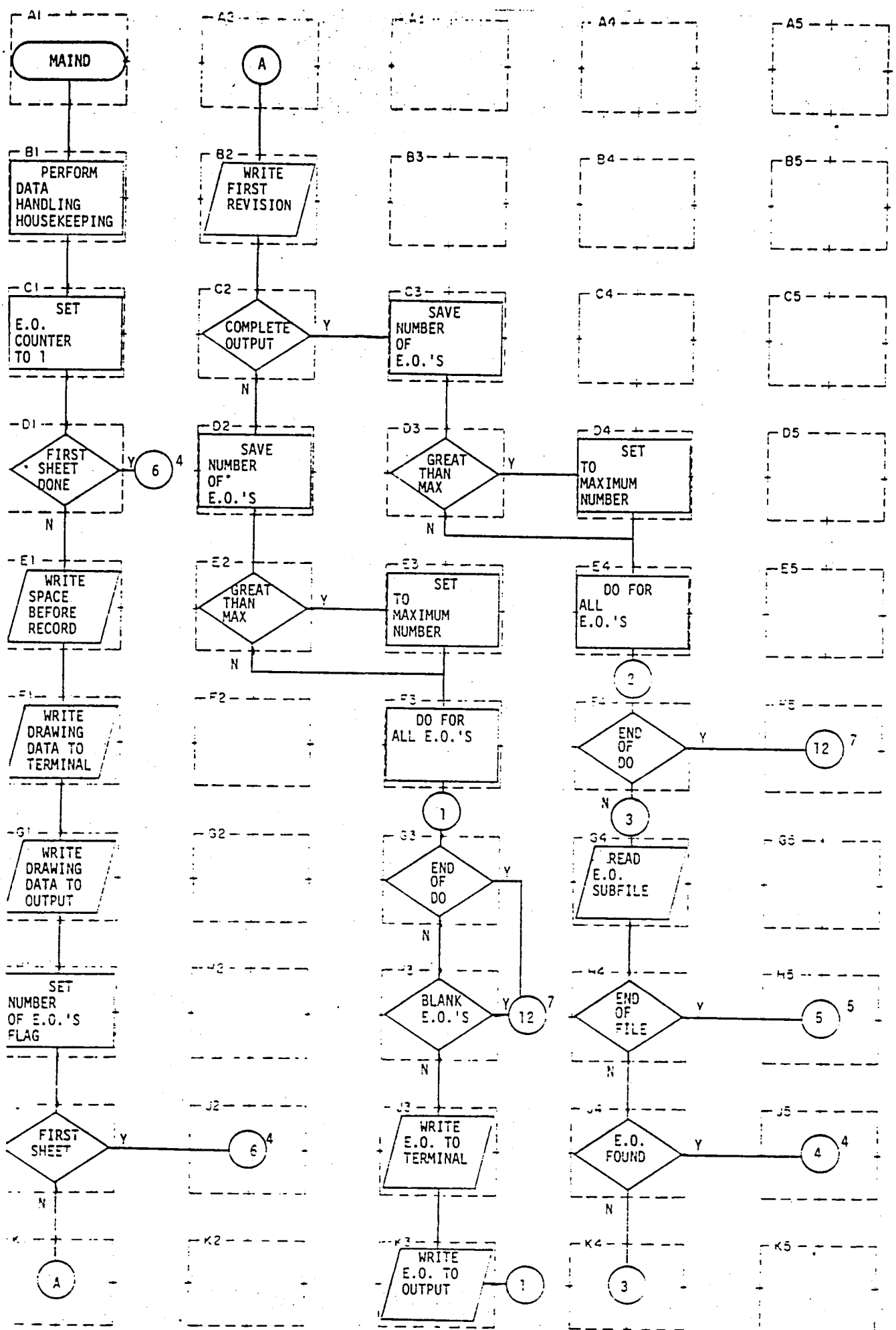


Figure 5.4.3-14

A1
B1 \$INSERT COMMON; INTEGER*2
C1 EOKNT = 1
D1 (INEO.EQ.1.AND.SECOND.EQ.1)
E1 WRITE (1,998); WRITE (7,999)
F1 WRITE (1,100)KNT,PTIT; WRITE (1,120)DRAW,DT
G1 WRITE (7,220)KNT,PTIT,DRAW,DT
H1 INEO = 1
J1 (FIRST.EQ.0)
K1
A2
B2 WRITE (1,160)FREV; WRITE (7,160)FREV
C2 (R.EQ.0)
D2 II = FNEO
E2 (FNEO.GT.10)
F2
G2
H2
J2
K2
A3
B3
C3 II = FNEO
D3 (FNEO.GT.10)
E3 II = 10

```

F3 DO 35 I = 1,II
G3 Performed by F3
H3 (FEOREF(I,1).EQ.' ')
J3 WRITE (1,38)I,(FEOREF(I,K),K = 1,2)
K3 WRITE (7,38)I,(FEOREF(I,K),K = 1,2)
A4
B4
C4
D4
E4 DO 30I = 1,II
F4 Performed by E4
G4 READ (18,END = 90)EON,ETIT,EPTIT,EOREV,EDT,ERDT,E0VEH
H4 Performed by G4
J4 DO 400I = 1,2; (EON(N).NE.EOREF(I,N))
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

```

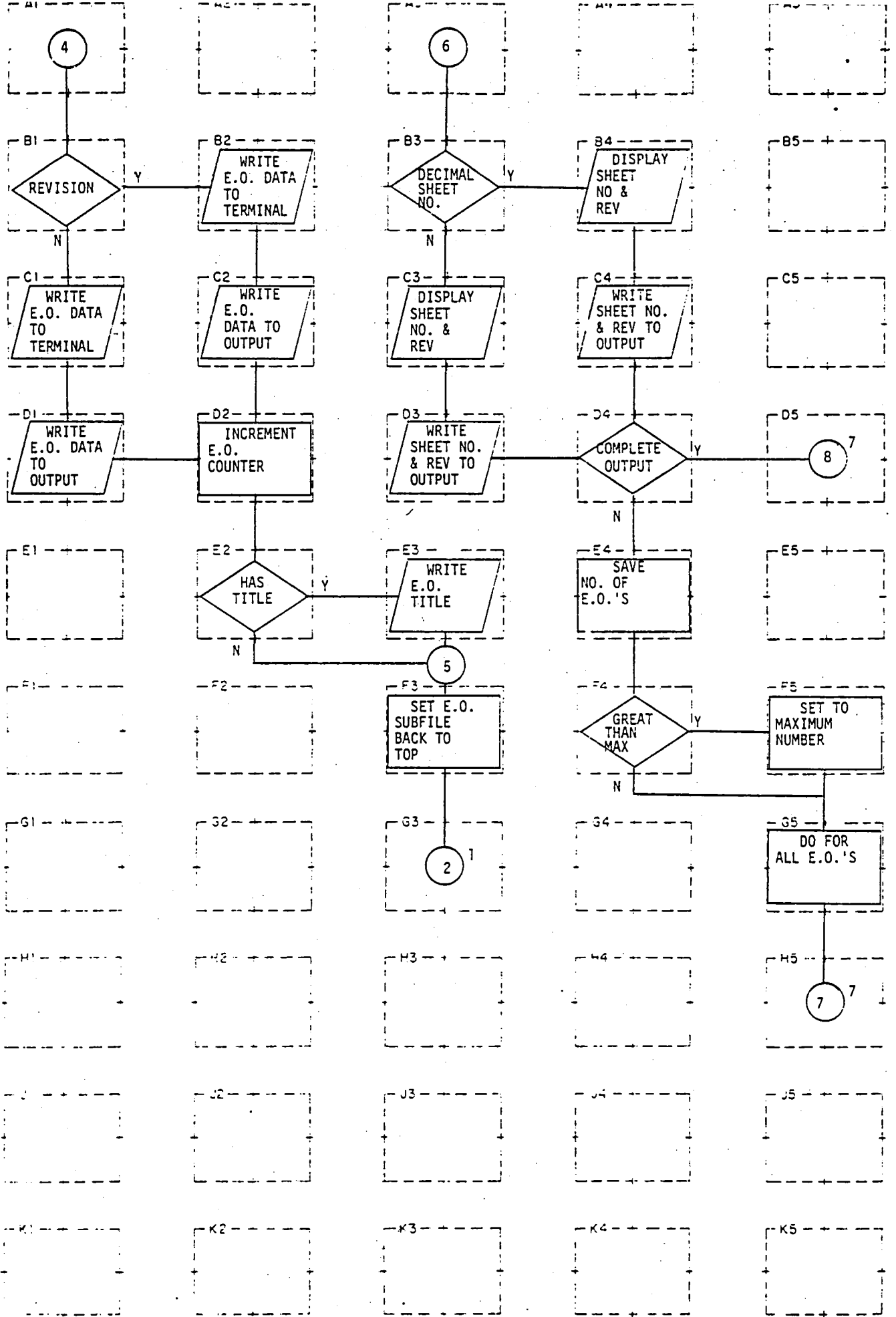



Figure 5.4.3-14

```

A1
B1 (EOREV.EQ.'NC')
C1 WRITE (1,140)EOKNT,EON,EOREV,EDT
D1 WRITE (7,230)EOKNT,EON,EOREV,EDT,EPTIT
E1
F1
G1
H1
J1
K1
A2
B2 WRITE (1,140)EOKNT,EON,EOREV,FRDT
C2 WRITE (7,230)EOKNT,EON,EOREV,ERDT,EPTIT
D2 EOKNT = EOKNT + 1
E2 (EPTIT(1),NE.' ')
F2
G2
H2
J2
K2
A3
B3 (SHTN(2).EQ.0)
C3 WRITE (1,270)SHTN(1),REV
D3 WRITE (7,270)SHTN(1),REV
E3 WRITE (1,130)EPTIT

```

Figure 5.4.3-14

F3 REWIND 18
G3
H3
J3
K3
A4
B4 WRITE (1,260) (SHTN(K),K = 1,2), REV
C4 WRITE (7,260) SHTN,REV
D4 (R.EQ.0)
E4 II = NEO
F4 (NEO.GT.10)
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5 II = 10
K5 DO 37 = 1,II

Figure 5.4.3-14


```

A1
B1  Performed by G5 (Page 6 of 9)
C1  (EOREF(I,1).EQ.' ')
D1  WRITE (1,38) I, (EOREF(I,K),K = 1,2)
E1  WRITE (7,38) I, (EOREF(I,K),K = 1,2)
F1
G1
H1  II = NEO
J1  (NEO.GT.10)
K1
A2
B2  DO 300 I = 1,II
C2  Performed by B2
D2  READ (18,END = 90)EON,ETIT,EPTIT,EOREV,EDT,ERDT,E0VEH
E2  Performed by C2
F2  DO 400 N = 1,2; (EON(N).NE.EOREF(I,N))
G2
H2
J2  II = 10
K2
A3
B3
C3  RECYCL
D3
E3  REWIND 18

```

F3 (EOREV.EQ.'NC')

G3 WRITE (1,140)EOKNT,EON,EOREV,EDT

H3 WRITE (7,230)EOKNT,EDN,EOREV,EDT,EPTIT

J3

K3

A4

B4

C4 PAUS

D4

E4

F4 WRITE (1,140)EOKNT,EON,EOREV,ERDT

G4 WRITE (7,230)EOKNT,EON,EOREV,ERDT,EPTIT

H4 EOKNT = EOKNT + 1

J4 (EPTIT(1).NE.'')

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5 WRITE (1,230)EPTIT

K5

A1
B1 \$INSERT COMMON; INTEGER * 2
C1 INEO = 0
D1 EOKNT = 1
E1 WRITE (1,998); WRITE (7,999)
F1 WRITE (1,100)KNT,PTIT; WRITE (1,120)DRAW,DT
G1 WRITE (7,220)KNT,PTIT,DRAW,DT
H1 WRITE (1,231)FREV; WRITE (7,231)FREV
J1 (FNEO.EQ.0)
K1
A2
B2 II = FNEO
C2 (FNEO.GT.10)
D2
E2
F2
G2
H2
J2 (R.EQ.0)
K2
A3
B3
C3 II = 10
D3 DO 35I = 1,II
E3 Performed by D3


```
F3 (FEOREF(I,1).EQ.' ')
G3 WRITE (1,38)I,(FEOREF(I,K),K = 1,2)
H3 WRITE (1,38)I,(FEOREF(K,K),K = 1,2)
J3
K3
A4
B4 II = FNEO
C4 (FNEO.GT.10)
D4
E4
F4
G4
H4
J4
K4
A5
B5
C5 II = 10
D5 DO 301 I = 1,II
E5
F5
G5
H5
J5
K5
```

Figure 5.4.3-15

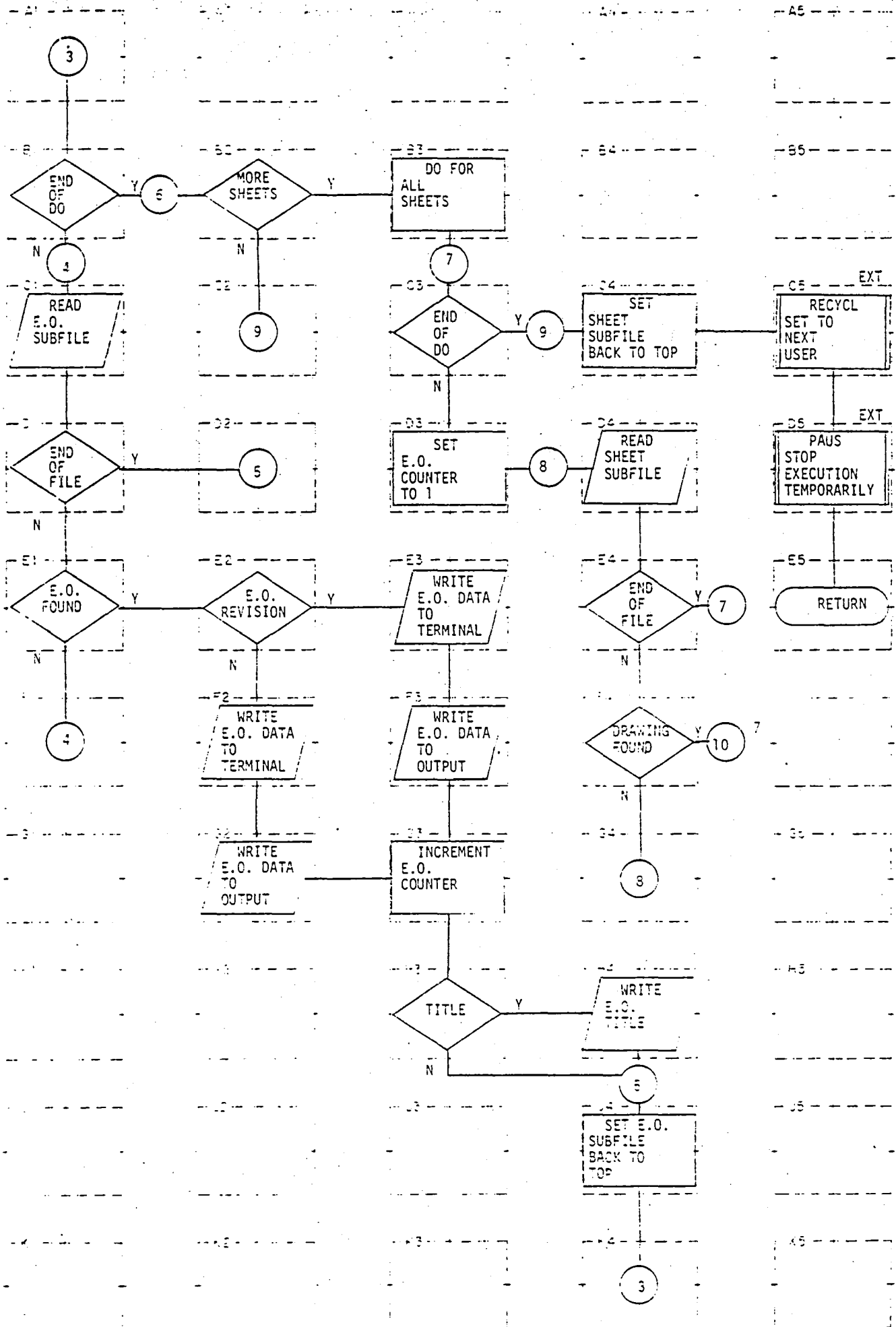


Figure 5.4.3-15

```

A1
B1   Performed by D5 (Page 3 of 12)
C1   READ (18,END = 91)EON,ETIT,EPTIT,EOREV,EDT,ERDT,EVEH
D1   Performed by C1
E1   DO 401 N = 1,2; (EON(N).NE.FEOREF(I,N))
F1
G1
H1
J1
K1
A2
B2   (NSHT.EQ.1)
C2
D2
E2   (EOREV.EQ.'NC')
F2   WRITE (1,140)EOKNT,EON; EOREV,EDT
G2   WRITE (7,240)EOKNT,EON,EOREV,EDT,EPTIT
H2
J2
K2
A3
B3   DO 190 K = 2,NSHT
C3   Performed by B3
D3   EOKNT = 1
E3   WRITE (1,140)EOKNT,EON,EOREV,ERDT

```

F3 WRITE (7,230)EOKNT,EON,EOREV,ERDT,EPTIT
G3 EOKNT = EOKNT + 1
H3 (EPTIT(1).NE.' ')
J3
K3
A4
B4
C4 REWIND 12
D4 READ (12,END = 190)DRW,SHTN,REV,NEO,EOREF
E4 Performed by D4
F4 DO 170 J = 1,4; (DRW(J).NE.DRAW(J))
G4
H4 WRITE (1,130)EPTIT
J4 REWIND 18
K4
A5
B5
C5 RECYCL
D5 PAUS
E5
F5
G5
H5
J5
K5

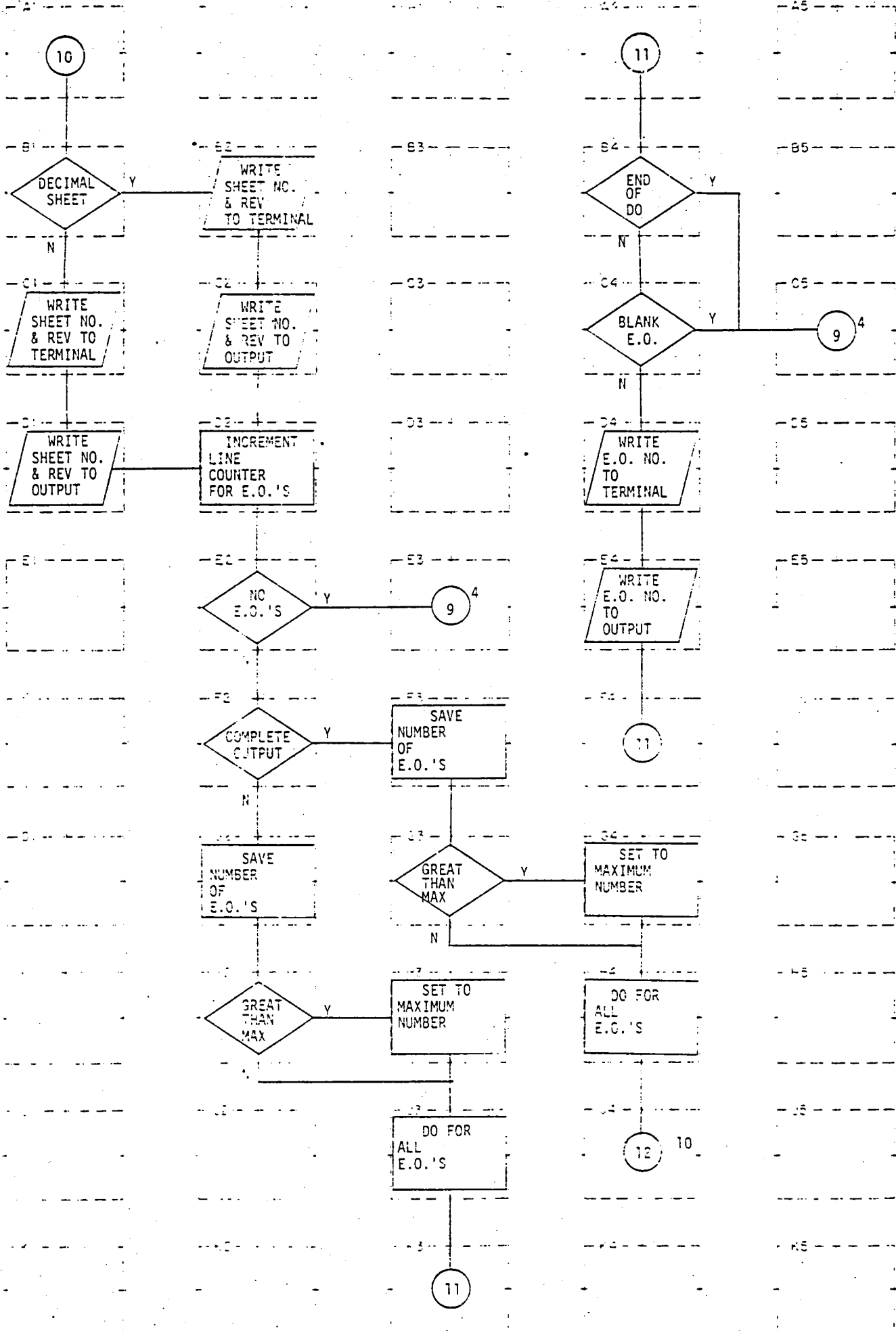


Figure 5.4.3-15

A1
B1 (SHTN(2).EQ.0)
C1 WRITE (1,270) SHTN(1),REV
D1 WRITE (7,270) SHTN(1),REV
E1
F1
G1
H1
J1
K1
A2
B2 WRITE (1,260) (SHTN(J),J = 1,2), REV
C2 WRITE (7,260) (SHTN(J),J = 1,2), REV
D2 INEO = INEO + NEO
E2 (NEO.EQ.0)
F2 (R.EQ.0)
G2 II = NEO
H2 (NEO.GT.10)
J2
K2
A3
B3
C3
D3
E3

```
F3   II = NEO
G3   (NEO.GI.10)
H3   II = 10
J3   DO 37 I = 1, II
K3
A4
B4   Performed by J3
C4   (EOREF(I,1).EQ.' ')
D4   WRITE (1,38) I, (EOREF(I,K), K = 1,2)
E4   WRITE (7,38) I, (EOREF(I,K), K = 1,2)
F4
G4   II = 10
H4   DO 300 I = 1, II
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5
```

Figure 5.4.3-15

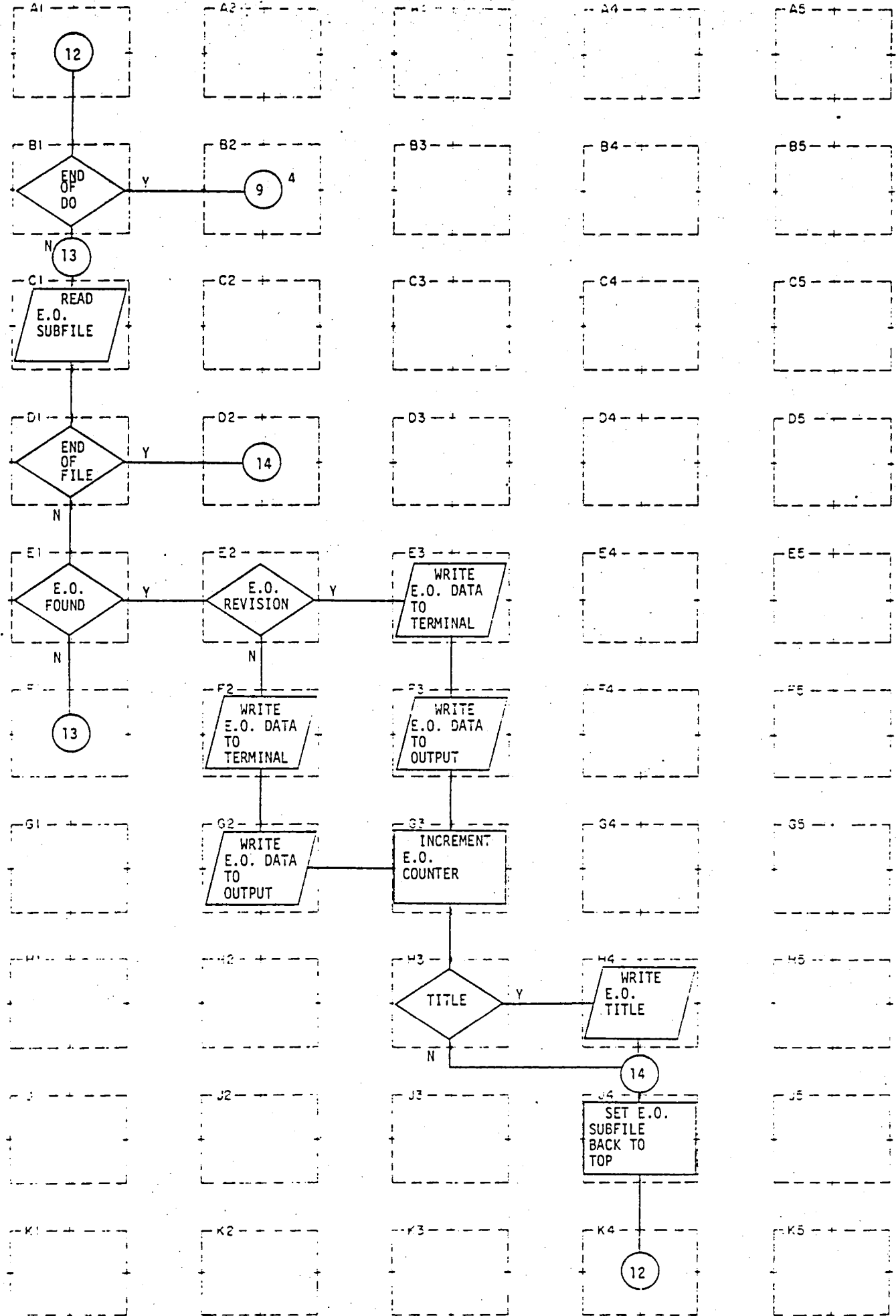


Figure 5.4.3-15

A1
B1 Performed by H4 (Page 9 of 12)
C1 READ (18, 90)EON,ETIT,EPTIT,EOREV,EDT,ERDT,EOVEH
D1 Performed by C1
E1 DO 400 N = 1,2; (EON(N).NE.EOREF(I,N))
F1
G1
H1
J1
K1
A2
B2
C2
D2
E2 (EOREV.EQ.'NC')
F2 WRITE (1,140)EOKNT,EON,EOREV,EDT
G2 WRITE (7,240)EOKNT,EON,EOREV,EDT,EPTIT
H2
J2
K2
A3
B3
C3
D3
E3 WRITE (1,140)EOKNT,EON,EOREV,ERDT

```
F3 WRITE (7,230)EOKNT,EON,EOREV,ERDT,EPTIT
G3 EOKNT = EOKNT + 1
H3 (EPTIT(1).NE.' ')
J3
K3
A4
B4
C4
D4
E4
F4
G4
H4 WRITE (1,130)EPTIT
J4 REWIND 18
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5
```



```

A1
B1  $INSERT COMMON; $INSERT SYSCOM>KEYS.F; INTEGER*4; *2
C1  T1 = 0
D1  IPAGE = 0
E1  ILINE = 0
F1  DO 8003 I = 1,4; DO 8004 J = 1,3; IEX(I,J) = ' '
G1  CLEAR
H1  WRITE (1,2)
J1  READ (1,8,ERR = '1001')ICON
K1
A2
B2  (ICON.LT.1); (ICON.GT.4)
C2
D2
E2
F2
G2
H2
J2
K2
A3
B3  DO 1000 LOOP = 1,ICON
C3  Performed by B3
D3  WRITE (1,1)
E3  LEN = 10

```

```

F3  TINPUT (IT,LEN)
G3  (IT(1).EQ.'QUIT')
H3  SRCH$$ (K$RDWR+K$NDAM,'T1',6,9,1,IC); SRCH$$ (K$RDWR+K$NDAM,'T2')
    6,10,1,IC)
J3  DO 8006 K = 1,3; IEX (LOOP,K) = IT(K)
K3
A4
B4
C4  SRCH$$ (K$RDWR+K$NDAM,'T1',6,9,1,IC)
D4  SRCH$$ (K$RDWR+K$NDAM,'T2',6,10,1,IC)
E4  (DOC.LT.1)
F4  DO 9999 I = I,DOC
G4  Performed by F4
H4  READ (IO,END=1020)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,
    FEOREF
J4  Performed by H4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

```

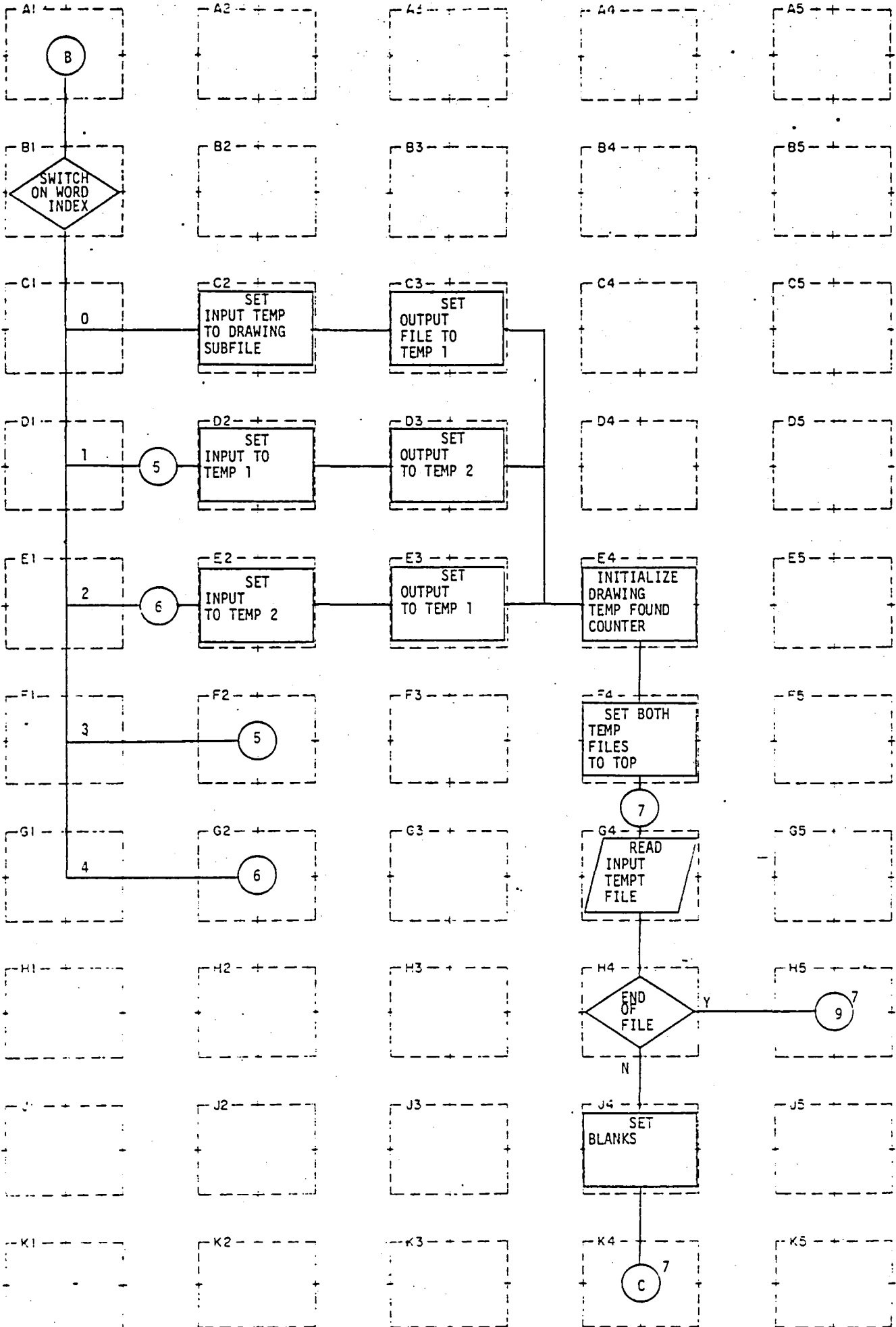


Figure 5.4.3-16

A1
B1 Performed by C1 Thru G1
C1 (T1.EQ.0)
D1 (T1.EQ.1)
E1 (T1.EQ.2)
F1 (T1.EQ.3)
G1 (T1.EQ.4)
H1
J1
K1
A2
B2
C2 IN = 6
D2 IN = 13
E2 IN = 14
F2
G2
H2
J2
K2
A3
B3
C3 IO = 13
D3 IO = 14
E3 IO = 13

Figure 5.4.3-16

F3
G3
H3
J3
K3
A4
B4
C4
D4
E4 DOC = 0
F4 REWIND IN; REWIND IO
G4 READ(IN,END=100)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
H4 Performed by G4
J4 BLNK = ' '
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

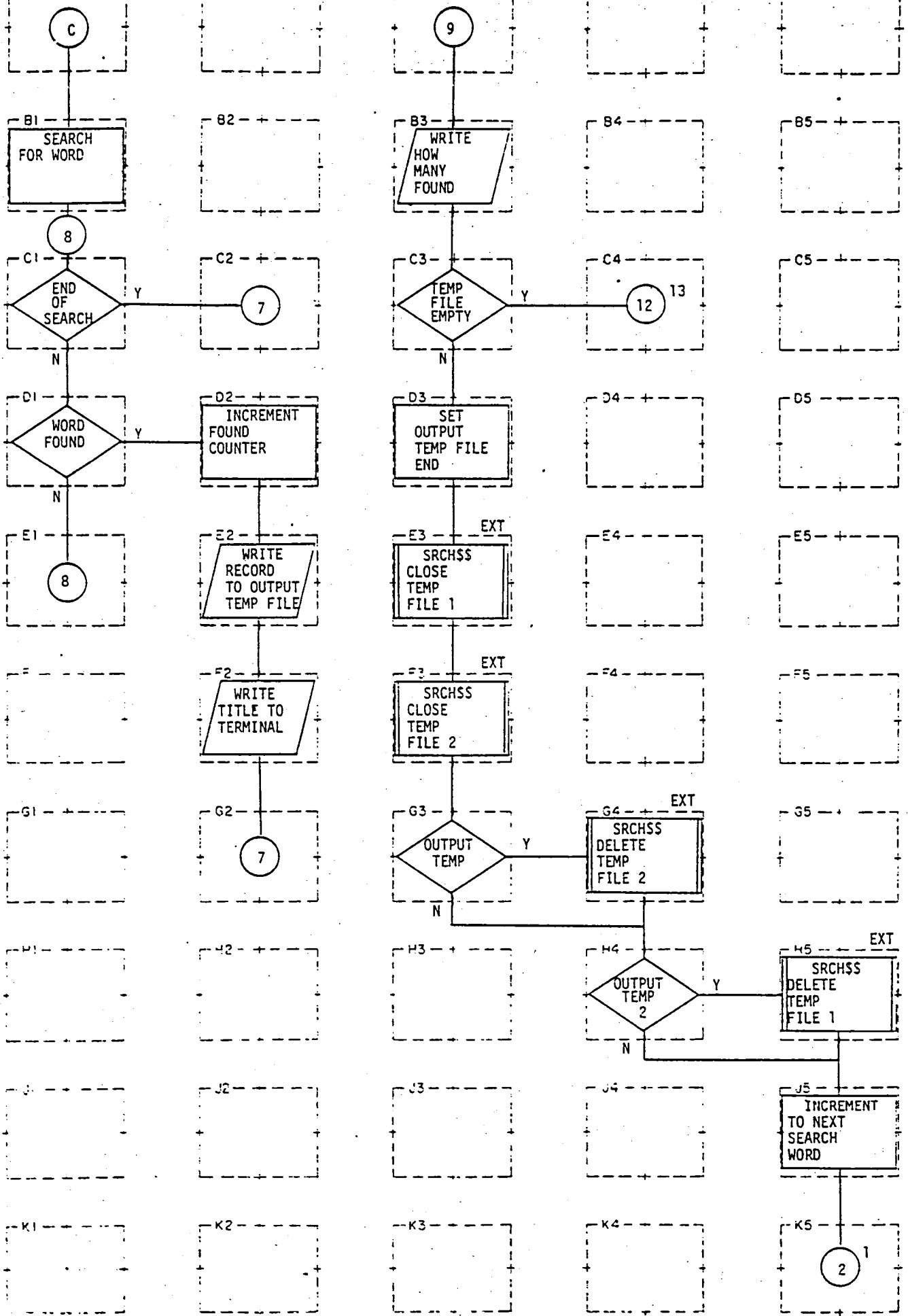


Figure 5.4.3-16

```

A1
B1 DO 3 I = 1,21
C1 Performed By B1
D1 (TIT(I).EQ.BLNK); (TIT(I).NE.IT(1)); (TIT(I+1).EQ.BLNK); (IT(2).EQ.BLNK)
(TIT(I+1).EQ.IT(2))
E1
F1
G1
H1
J1
K1
A2
B2
C2
D2 DOC = DOC + 1
E2 WRITE (10)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF;
WRITE (1,10)TIT
F2
G2
H2
J2
K2
A3
B3 WRITE (1,1030)DOC,IT
C3 (DOC.EQ.0)
D3 END FILE IO
E3 SRCHSS(K$CLOS,'T1',6,0,0,0)

```

F3 SRCH\$\$ (K\$CLOS, 'T2', 6, 0, 0, 0)
G3 (IO.EQ.13)
H3
J3
K3
A4
B4
C4
D4
E4
F4
G4 SRCH\$\$ (K\$DELE, 'T2', 6, 0, 0, 0)
H4 (IO.EQ.14)
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5 SRCH\$\$ (K\$DELE, 'T1', 6, 0, 0, 0)
J5 $T1 = T1 + 1$
K5

Figure 5.4.3-16

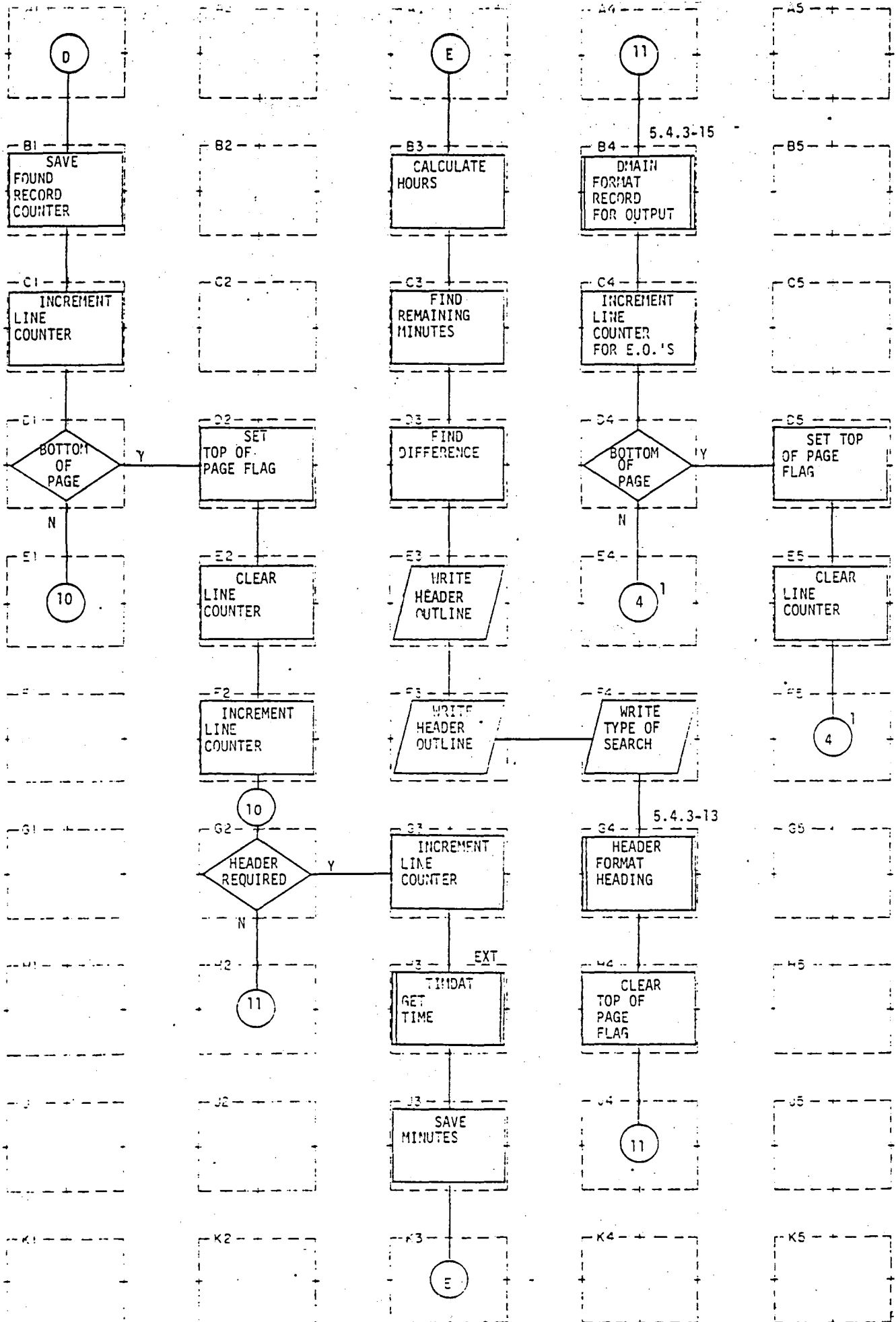


Figure 5.4.3-16

```

A1
B1 KNT = 1
C1 ILINE = ILINE + FNEO + NSHT + 3
D1 (ILINE.LE.45)
E1
F1
G1
H1
J1
K1
A2
B2
C2
D2 IPAGE = 0
E2 ILINE = 0
F2 ILINE = FNEO + NSHT + 3
G2 (IPAGE.NE.0)
H2
J2
K2
A3
B3 AH = AMIN/60.0; IH = AH
C3 IMN = IH * 60
D3 IMIN = AMIN; IDM = IMIN-IMM
E3 WRITE (7,8008) IH,IDM,(ARRAY(J),J = 1,3)

```

```
F3  WRITE (7,8000)
G3  ILINE = ILINE + 12
H3  TIMDAT (ARRAY,15)
J3  AMIN = ARRAY (4)
K3
A4
B4  DMAIN
C4  ILINE = ILINE + INEO
D4  (ILINE.LE.45)
E4
F4  WRITE (7,8001) ((IEX(K,L),L = 1,3),K=1,4)
G4  HEADER
H4  IPAGE = 1
J4
K4
A5
B5
C5
D5  IPAGE = 0
E5  ILINE = 0
F5
G5
H5
J5
K5
```

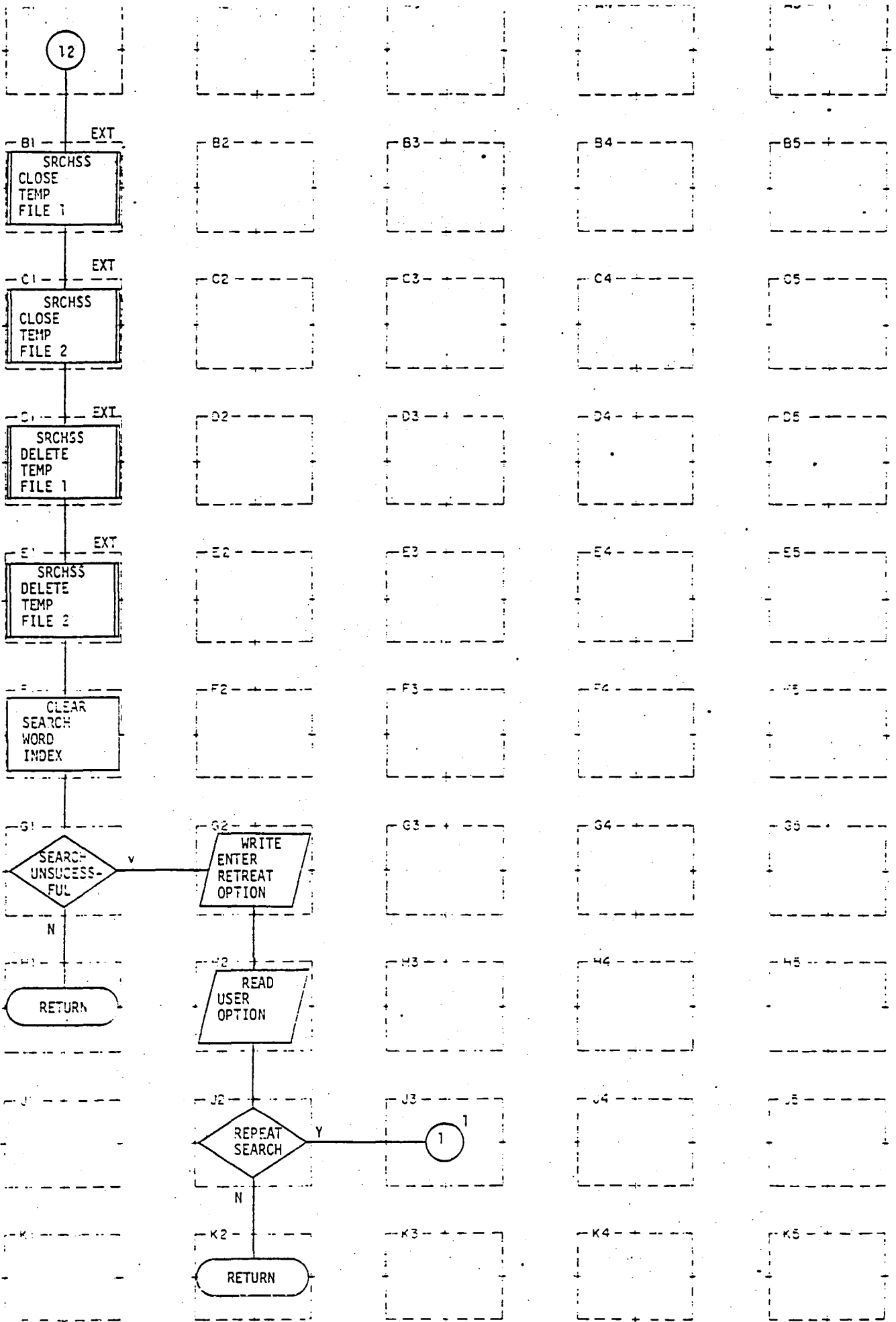


Figure 5.4.3-16

A1
B1 SRCH\$\$ (K\$CLOS, 'T1', 6, 0, 0, 0)
C1 SRCH\$\$ (K\$CLOS, 'T2', 6, 0, 0, 0)
D1 SRCH\$\$ (K\$DELE, 'T1', 6, 0, 0, 0)
E1 SRCH\$\$ (K\$DELE, 'T2', 6, 0, 0, 0)
F1 T1 = 0
G1 (DOC.NE.0)
H1
J1
K1
A2
B2
C2
D2
E2
F2
G2 WRITE (1, 2000)
H2 READ (1, 2001, ERR = 1999) IOPT
J2 (IOPT.EQ. 'YE'); (IOPT.NE. 'NO')
K2
A3
B3
C3
D3
E3

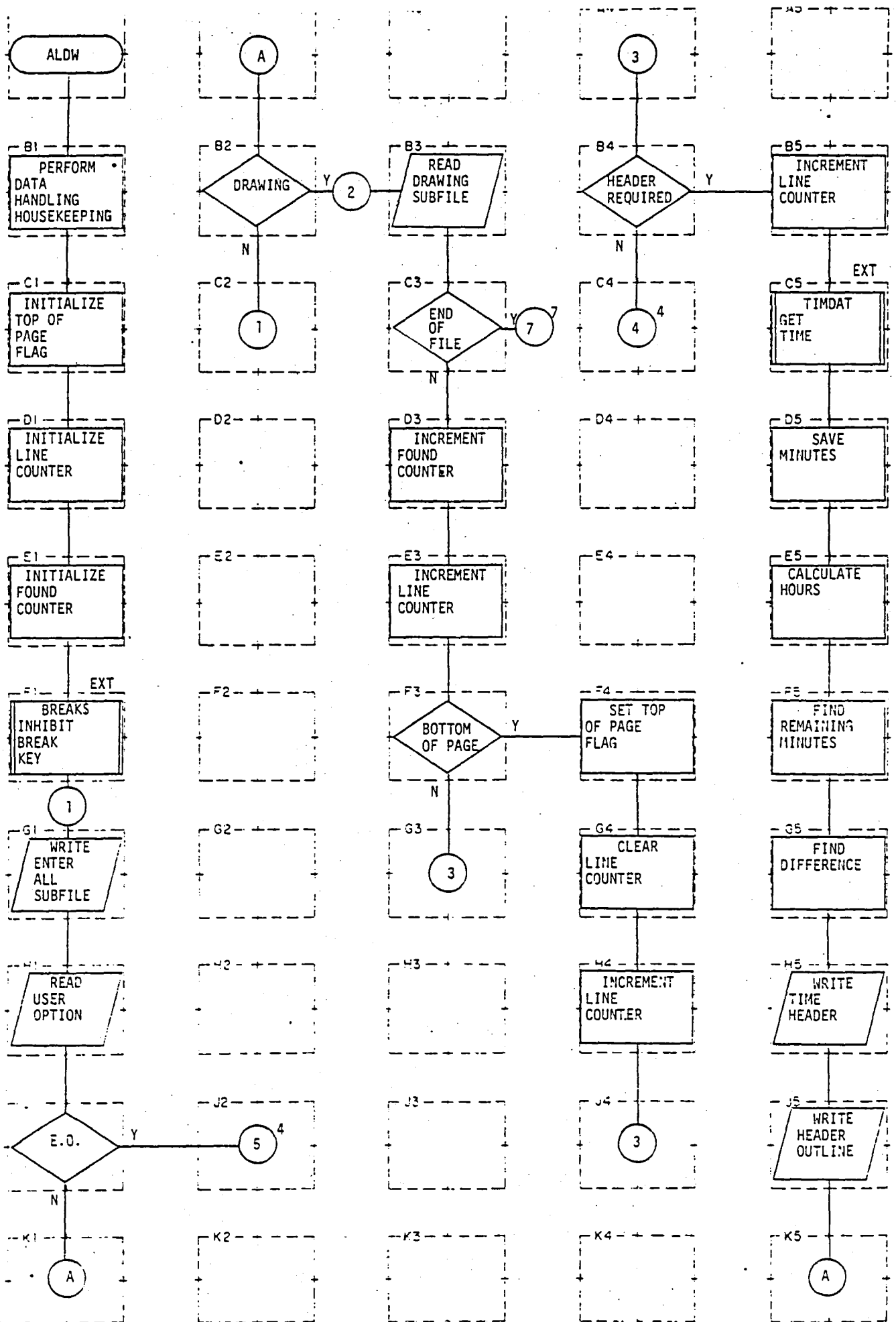


Figure 5.4.3-17

```

A1
B1  $INSERT COMMON; $INSERT SYSCOM> KEYS.F; INTEGER * 2
C1  IPAGE = 0
D1  ILINE = 0
E1  KNT = 0
F1  BREAK$(.TRUE.)
G1  WRITE (1,2)
H1  READ (1,3)IOPT
J1  (IOPT.EQ.'EO')
K1
A2
B2  (IOPT.NE.'DE')
C2
D2
E2
F2
G2
H2
J2
K2
A3
B3  READ (6,END = 100) DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
C3  Performed by B3
D3  KNT = KNT + 1
E3  ILINE = ILINE + FNEO + NSHT + 3

```

```

F3  (ILINE.LE.45)
G3
H3
J3
K3
A4
B4  (IPAGE.NE.0)
C4
D4
E4
F4  IPAGE = 0
G4  ILINE = 0
H4  ILINE = FNEO + NSHT + 3
J4
K4
A5
B5  ILINE = ILINE + 12
C5  TIMDAT (ARRAY,15)
D5  AMIN = ARRAY (4)
E5  AH = AMIN/60.0; IH = AH
F5  IMM = IH * 60
G5  IMIN = AMIN; IDM = IMIN - IMM
H5  WRITE (7,8008)IH,IDM,(ARRAY(I),I = 1,3)
J5  WRITE (7,8000)
K5

```

Figure 5.4.3-17

A1
B1 WRITE (7,8001)
C1 HEADER
D1 IPAGE = 1
E1 DMAIN
F1 ILINE = ILINE + INEO
G1 (ILINE.LE.45)
H1
J1
K1
A2
B2 READ (18,END = 350)EON,ETIT,EPTIT,EOREV,EDT,ERDT,E0VEH
C2 Performed by B2
D2 KNT = KNT + 1
E2 (IPAGE.NE.0)
F2
G2 IPAGE = 0
H2
J2
K2
A3
B3
C3 WRITE (1.360)KNT
D3
E3 TIMDAT (ARRAY,15)

F3
G3 ILINE = 0
H3
J3
K3
A4
B4
C4
D4
E4 AMIN = ARRAY (4)
F4 AH = AMIN/60.0; IH = AH
G4 IMM = IH * 60
H4 IMIN = AMIN; IDM = IMIN-IMM
J4 WRITE (7,8008)IH,IDM,(ARRAY(I),I = 1,3)
K4
A5
B5 WRITE (7,300)
C5 IPAGE = 1
D5
E5
F5
G5
H5
J5
K5

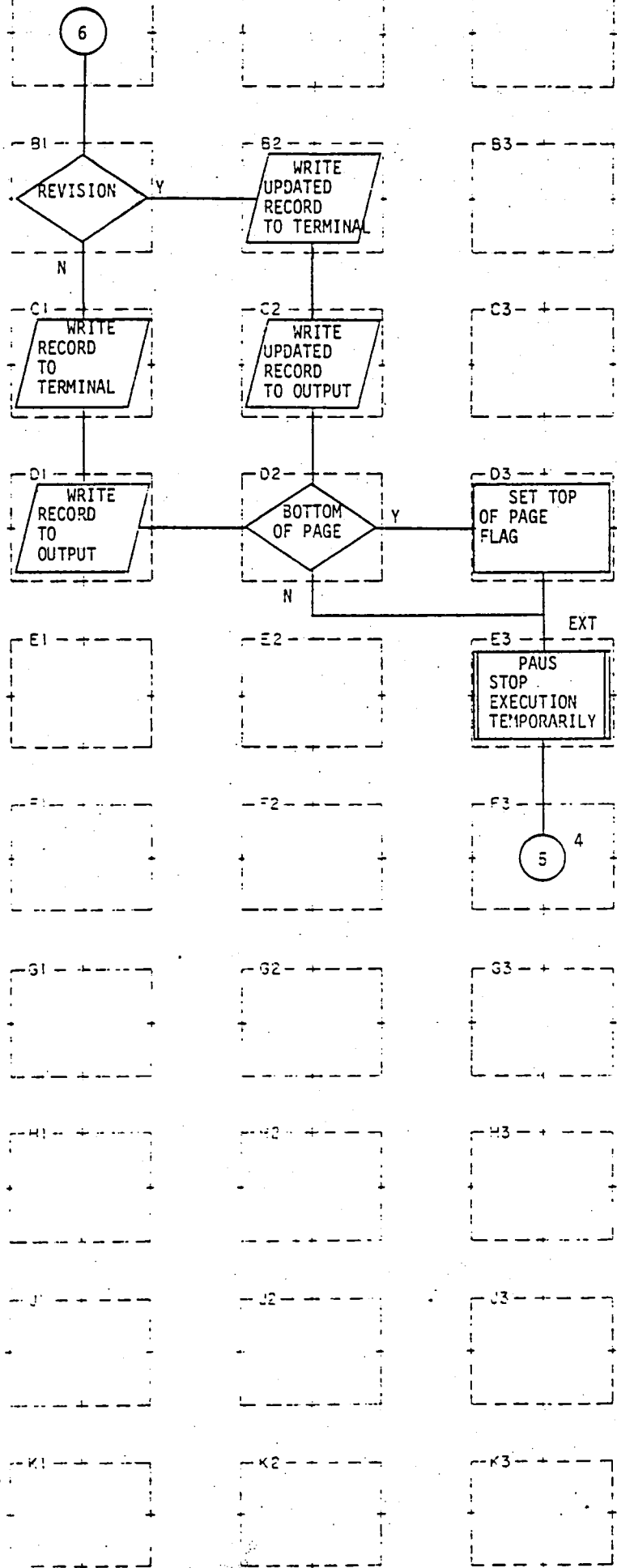
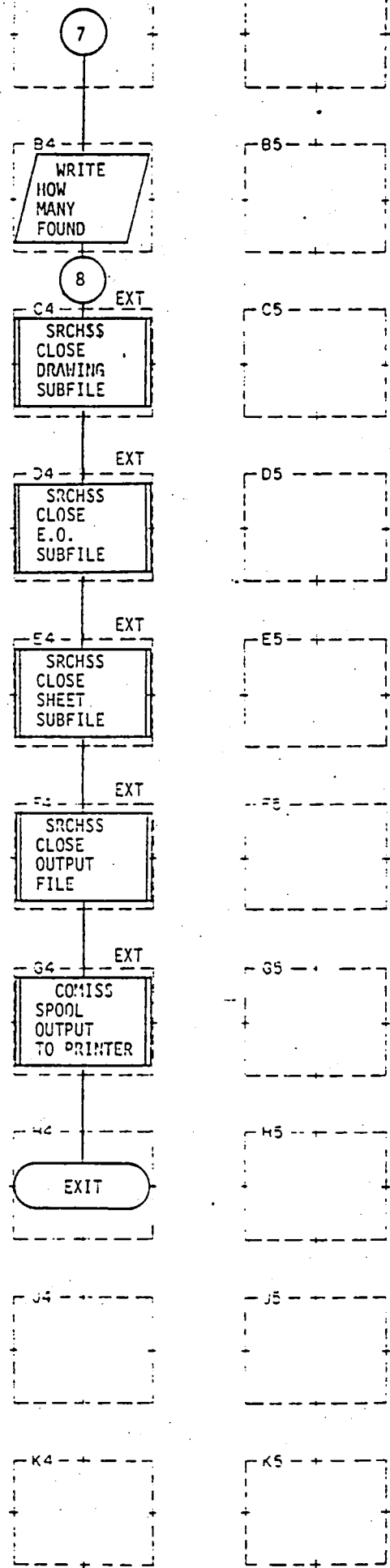


Figure 5.4.3-17



A1
B1 (EOREV.EQ.'NC')
C1 WRITE (1,140)KNT,EON,EOREV,EDT,((EOVEH(I,J),J = 1,2),I = 1,2)
D1 WRITE (7,230)KNT,EON,EOREV,EDT,EPTIT
E1
F1
G1
H1
J1
K1
A2
B2 WRITE (1,140)KNT,EON,EOREV,ERDT,((EOVEH(I,J),J = 1,2),I = 1,2)
C2 WRITE (7,230)KNT,EON,EOREV,ERDT,EPTIT
D2 (KNT/21.EQ.KNT/21.)
E2
F2
G2
H2
J2
K2
A3
B3
C3
D3
E3 PAUS

F3
G3
H3
J3
K3
A4
B4 WRITE (1,200)KNT
C4 SRCH\$\$ (K\$CLOS, 'DRAW', 6, 0, 0, 0)
D4 SRCH\$\$ (K\$CLOS, 'EO', 6, 0, 0, 0)
E4 SRCH\$\$ (K\$CLOS, 'SHEET', 6, 0, 0, 0)
F4 SRCH\$\$ (K\$CLOS, 'OUT', 6, 0, 0, 0)
G4 COMI\$\$ ('SOUT', 4, 12, IC)
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

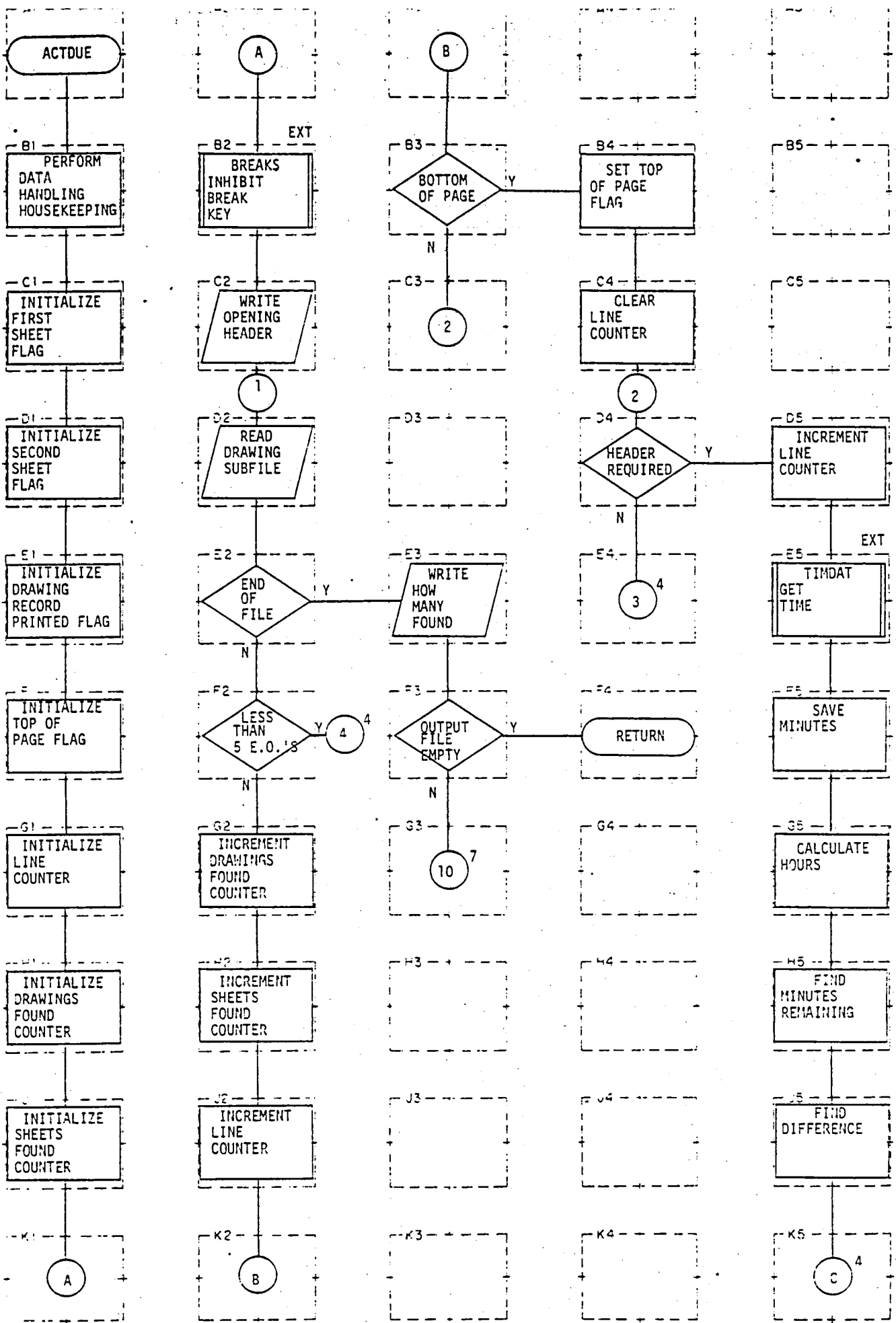


Figure 5.4.3-18

```

A1
B1 $INSERT COMMON; $INSERT SYSCOM>KEYS.F; INTEGER * 4; * 2
C1 FIRST = 0
D1 SECOND = 0
E1 INEO = 0
F1 IPAGE = 0
G1 ILINE = 0
H1 KNT = 0
J1 KNTT = 0
K1
A2
B2 BREAK$(.TRUE.)
C2 WRITE (1,1)
D2 READ (6,END=100)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
E2 Performed by D2
F2 (FNEO.LT.5)
G2 KNT = KNT + 1
H2 KNTT = KNTT + 1
J2 ILINE = ILINE + FNEO + 4
K2
A3
B3 (ILINE.LE.45)
C3
D3
E3 WRITE (1,200)KNT,KNTT

```

F3 (KNT.EQ.0)
G3
H3
J3
K3
A4
B4 IPAGE = 0
C4 ILINE = 0
D4 (IPAGE.NE.0)
E4
F4
G4
H4
J4
K4
A5
B5
C5
D5 ILINE = ILINE + 12
E5 TIMDAT (ARRAY,15)
F5 AMIN = ARRAY (4)
G5 AH = AMIN/60.0; IH = AH
H5 IMM = IH * 60
J5 IMIN = AMIN; IDM = IMIN-IMM
K5


```

A1
B1  WRITE (7,8008)IH,IOM,(ARRAY(I),I = 1,3)
C1  WRITE (7,8000)
D1  WRITE (7,8001)
E1  HEADER
F1  IPAGE = 1
G1  FIRST = 1
H1  MAIND
J1  (NSHT.GT.1)
K1  FIRST = 0
A2
B2  DO 150 J = 2,NSHT
C2  Performed by B2
D2  READ (12,END = 1000)DRW,SHTI,REV,NEO,EOREF
E2  Performed by D2
F2  DO 25 K = 1,4; (DRW(K).NE.DRAW(K))
G2
H2
J2
K2
A3
B3
C3  FIRST = 0; SECOND = 0; INEO = 0
D3
E3  WRITE (1,1001)

```

F3 (NEO.LT.5)
G3 SECOND = 1
H3 (FIRST.EQ.0)
J3
K3
A4
B4 ILINE = ILINE + NEO + 4
C4 (ILINE.LE.45)
D4
E4
F4
G4
H4 KNT = KNT + 1
J4 KNTT = KNTT + 1
K4
A5
B5
C5 IPAGE = 0
D5 ILINE = 0
E5
F5
G5
H5
J5
K5

Figure 5.4.3-18

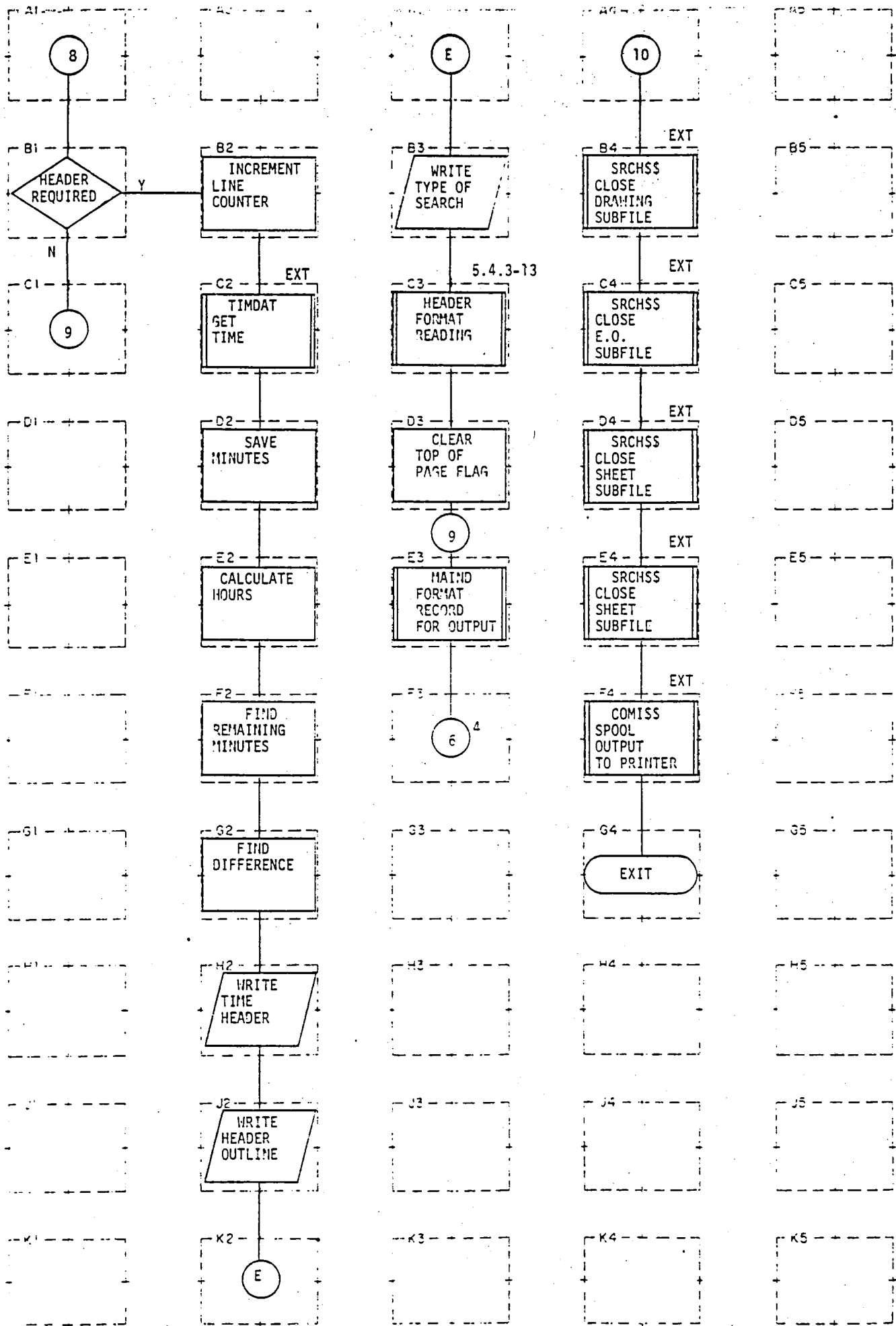


Figure 5.4.3-18

A1
B1 (IPAGE.NE.0)
C1
D1
E1
F1
G1
H1
J1
K1
A2
B2 ILINE = ILINE + 12
C2 TIMDAT(ARRAY,15)
D2 AMIN = ARRAY(4)
E2 AH = AMIN/60.0; IH = AH
F2 IMM = IH * 60
G2 IMIN = AMIN; IDM = IMIN-IMM
H2 WRITE (7,8008)IH,IDM,(ARRAY(I),I = 1,3)
J2 WRITE (7,8000)
K2
A3
B3 WRITE (7,8001)
C3 HEADER
D3 PAGE = 1
E3 MAIND

F3
G3
H3
J3
K3
A4
B4
C4
D4
E4
F4
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

SRCH\$\$ (K\$CLOS, 'DRAW', 6, 0, 0, 0)
SRCH\$\$ (K\$CLOS, 'EO', 6, 0, 0, 0)
SRCH\$\$ (K\$CLOS, 'SHEET', 6, 0, 0, 0)
SRCH\$\$ (K\$CLOS, 'OUT', 6, 0, 0, 0)
COMI\$\$ ('SOUT', 4, 12, IC)

Figure 5.4.3-18

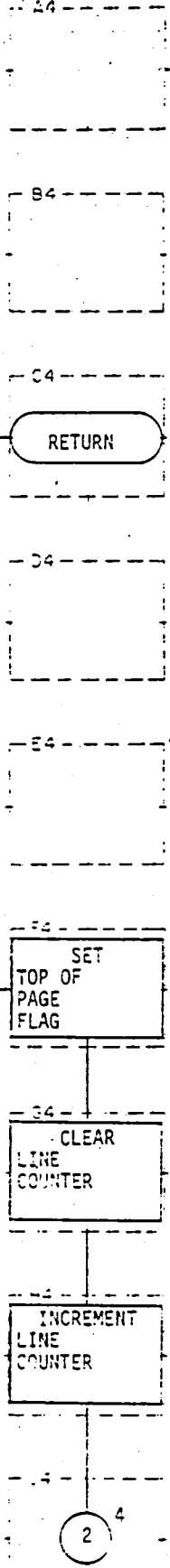
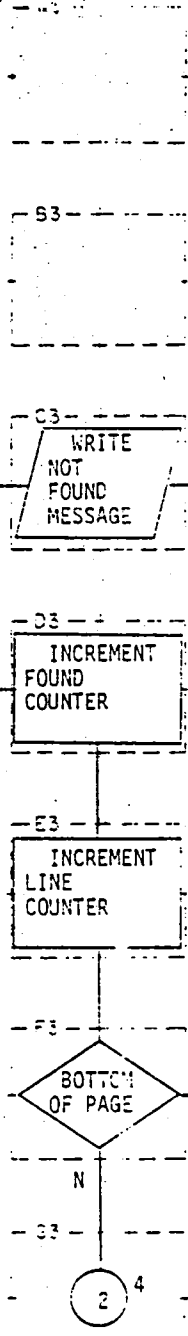
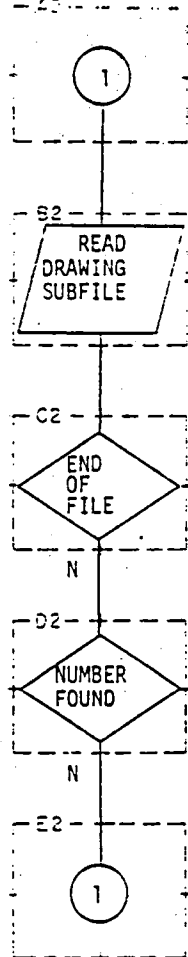
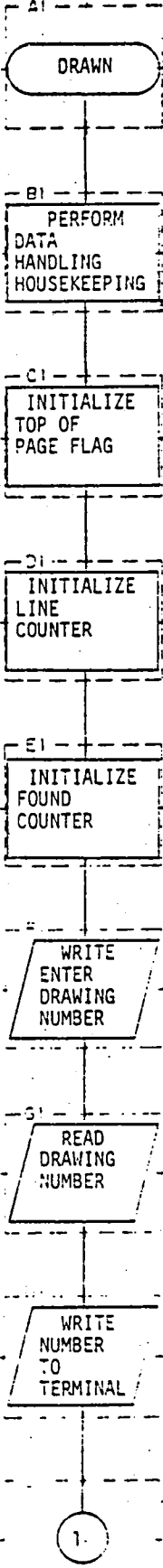


Figure 5.4.3-19

```

A1
B1 $INSERT COMMON; INTEGER * 4; * 2
C1 IPAGE = 0
D1 ILINE = 0
E1 KNT = 0
F1 WRITE (1,1)
G1 READ (1,2,ERR = 3)IDRAW
H1 WRITE (1,2)IDRAW
J1
K1
A2
B2 READ(6,END=200)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
C2 Performed by B2
D2 DO 1000 I = 1,4; (IDRAW(I).NE.DRAW(I))
E2
F2
G2
H2
J2
K2
A3
B3
C3 WRITE (1,250)IDRAW
D3 KNT = KNT + 1
E3 ILINE = ILINE + FNEO + NSHT + 3

```

F3 (ILINE.LE.45)
G3
H3
J3
K3
A4
B4
C4
D4
E4
F4 IPAGE = 0
G4 ILINE = 0
H4 ILINE = FNEO + NSHT + 3
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

Figure 5.4.3-19

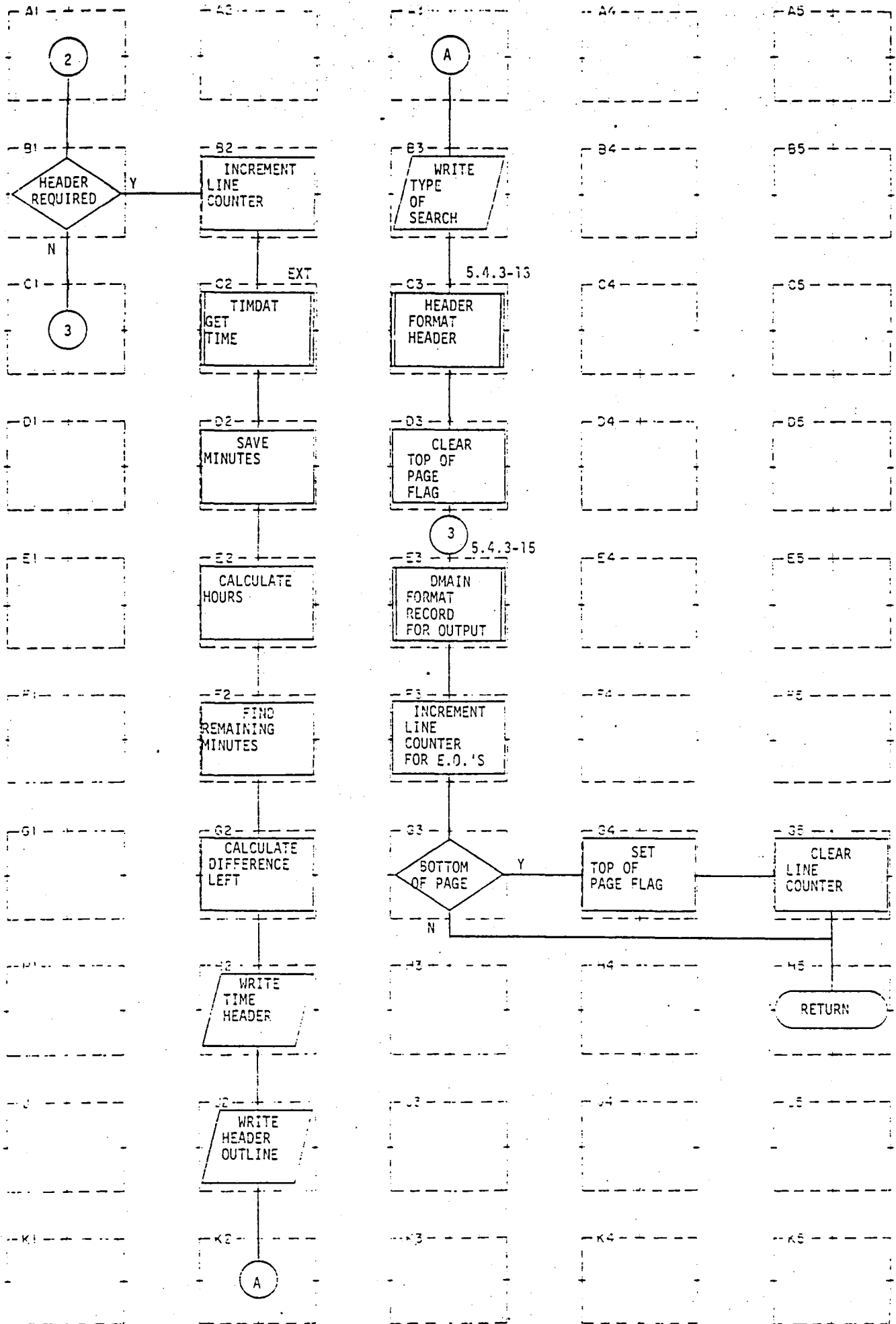


Figure 5.4.3-19

A1
B1 (IPAGE.NE.0)
C1
D1
E1
F1
G1
H1
J1
K1
A2
B2 ILINE = ILINE + 12
C2 TIMDAT (ARRAY, 15)
D2 AMIN + ARRAY (4)
E2 AH = AMIN/60.0; IH = AH
F2 IMM = IH * 60
G2 IMIN = AMIN; IDM = IMIN - IMM
H2 WRITE (7,8008)IH,IDM,(ARRAY(I)=1,3)
J2 WRITE (7,8000)
K2
A3
B3 WRITE (7,8001)IDRAW
C3 HEADER
D3 IPAGE = 1
E3 DMAIN

F3 ILINE = ILINE + INEO
G3 (ILINE.LE.45)
H3
J3
K3
A4
B4
C4
D4
E4
F4
G4 IPAGE = 0
H4 ILINE = 0
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

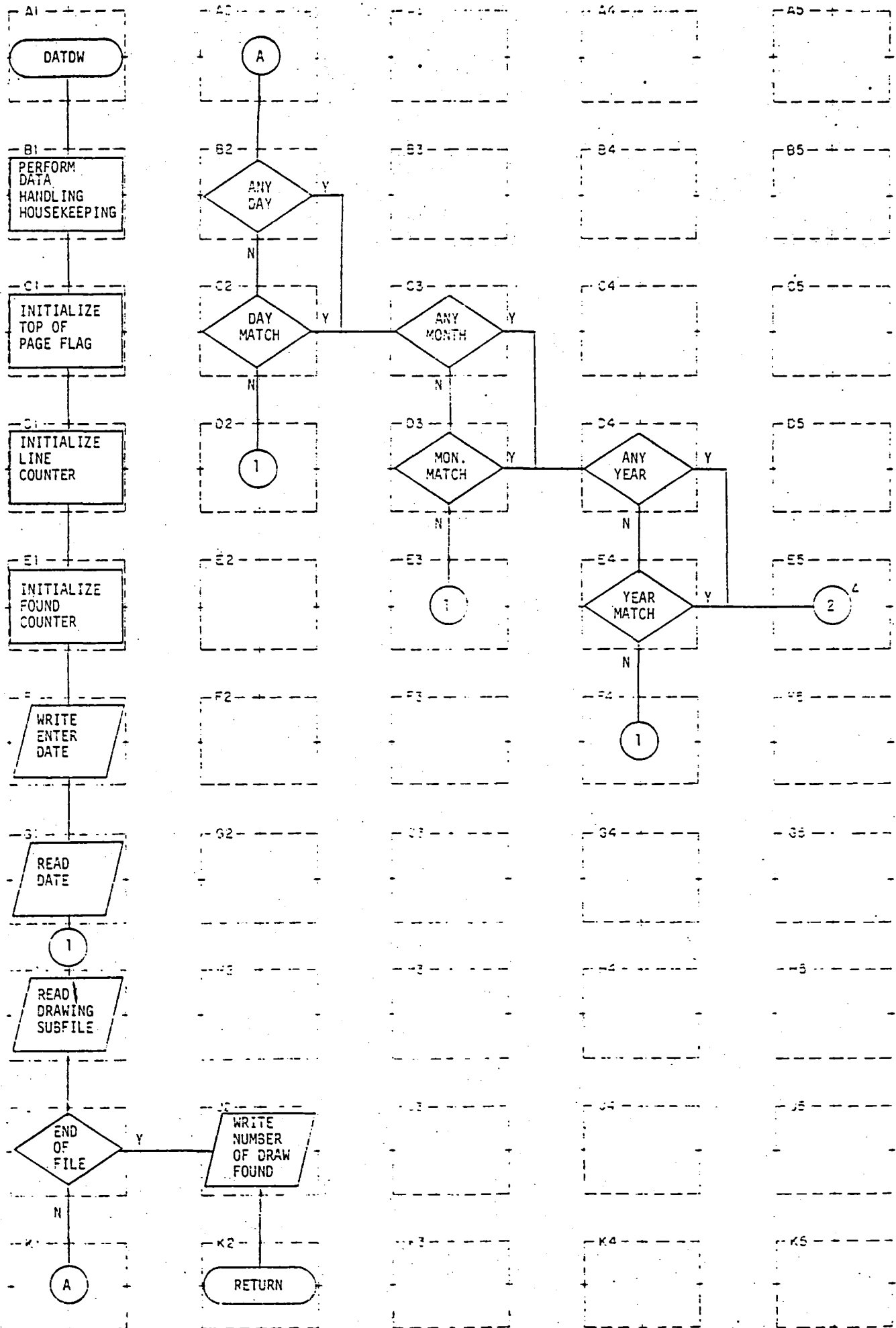


Figure 5.4.3-20

A1
B1 \$INSERT COMMON; INTEGER*2
C1 IPAGE=0.
D1 ILINE=0
E1 KNT=0
F1 WRITE(1,21)
G1 READ(1,22,ERR=2) D
H1 READ(6,END=200)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
J1 PERFORMED BY H1
K1
A2
B2 (D(1).EQ.0)
C2 (D(1).NE.DT(1))
D2
E2
F2
G2
H2
J2 WRITE(1,250)KNT,D
K2
A3
B3
C3 (D(2).EQ.0)
D3 (D(2).NE.DT(2))
E3

F3
G3
H3
J3
K3
A4
B4
C4
D4
E4
F4
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

(D(3).EQ.0)

(D(3).NE.DT(3))

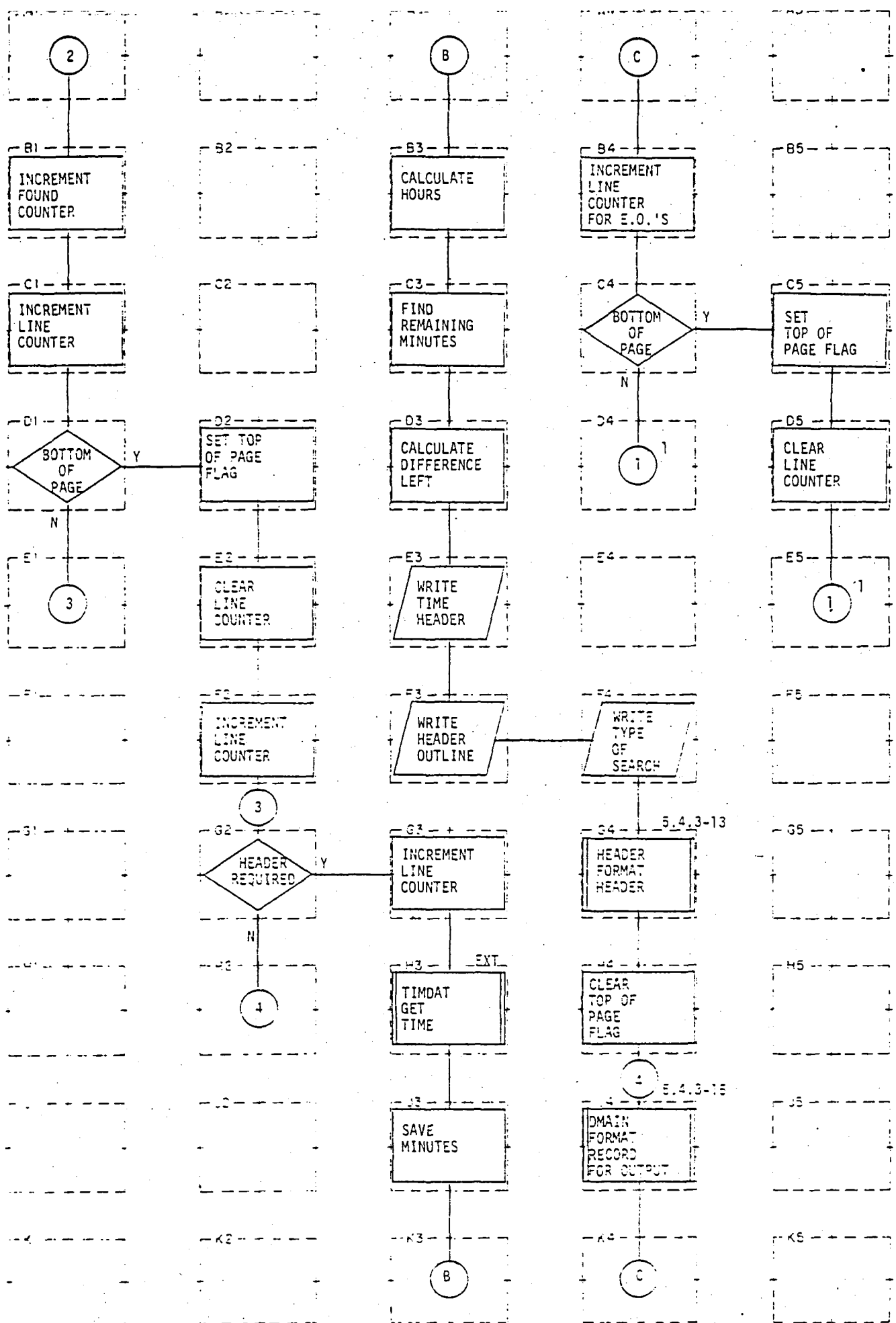


Figure 5.4.3-20

A1
B1 KNT=KNT+1
C1 ILINE=ILINE+FNEO+NSHT+3
D1
E1
F1
G1
H1
J1
K1
A2
B2
C2
D2 IPAGE=0
E2 ILINE=0
F2 ILINE=FNEO+NSHT+3
G2 (IPAGE.NE.0)
H2
J2
K2
A3
B3 AH=AMIN/60.0; IH=AH
C3 IMM=IH*60
D3 IMIN=AMIN; IDM=IMIN-IMM
E3 WRITE(7,8008)IH, IDM, (ARRAY(I), I=1,3)

Figure 5.4.3-20

```
F3  WRITE(7,8000)
G3  ILINE=ILINE+12
H3  TIMDAT(ARRAY,15)
J3  AMIN=ARRAY(4)
K3
A4
B4  ILINE=ILINE+INEO
C4  (ILINE.NE.45)
D4
E4
F4  WRITE(7,8001)D
G4  HEADER
H4  IPAGE=1
J4  DMAIN
K4
A5
B5
C5  IPAGE=0
D5  ILINE=0
E5
F5
G5
H5
J5
K5
```

Figure 5.4.3-20

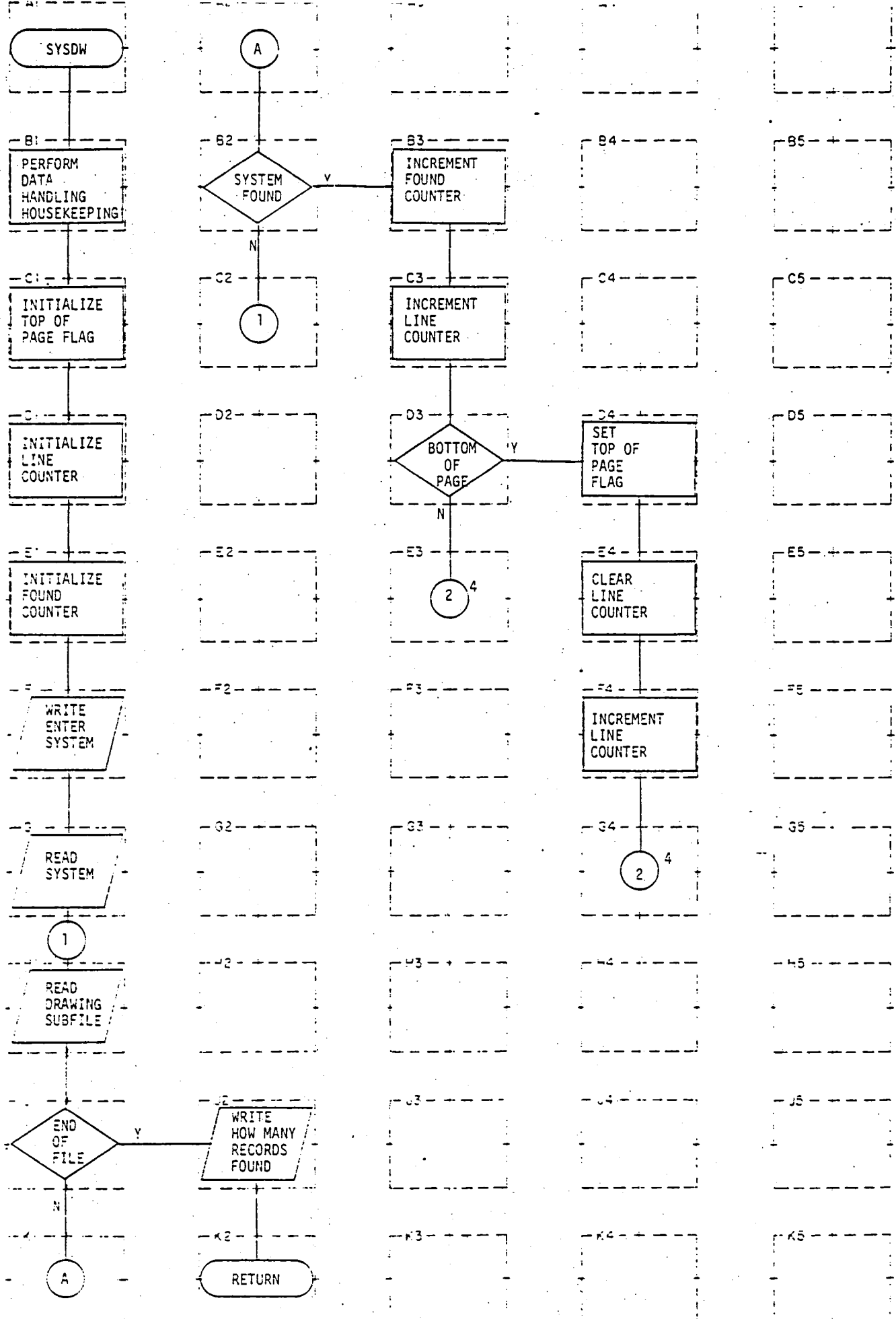


Figure 5.4.3-21

```
A1  $INSERT COMMON; INTEGER*4; *2
B1  IPAGE=0
C1  ILINE=0
D1  KNT=0
E1  WRITE(1,1)
F1  READ(1,2,ERR=3)DS
G1  READ(6,END=200)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
H1  PERFORMED BY H1
J1
K1
A2
B2  DO 150 I=1,3; (DS.EQ.SYS(I))
C2
D2
E2
F2
G2
H2
J2  WRITE(1,250)KNT,DS
K2
A3
B3  KNT=KNT+1
C3  ILINE=ILINE+FNEO+NSHT+3
D3  (ILINE.LE.45)
E3
```


F3
G3
H3
J3
K3
A4
B4
C4
D4 IPAGE=0
E4 ILINE=0
F4 ILINE=FNEO+NSHT+3
G4
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

Figure 5.4.3-21

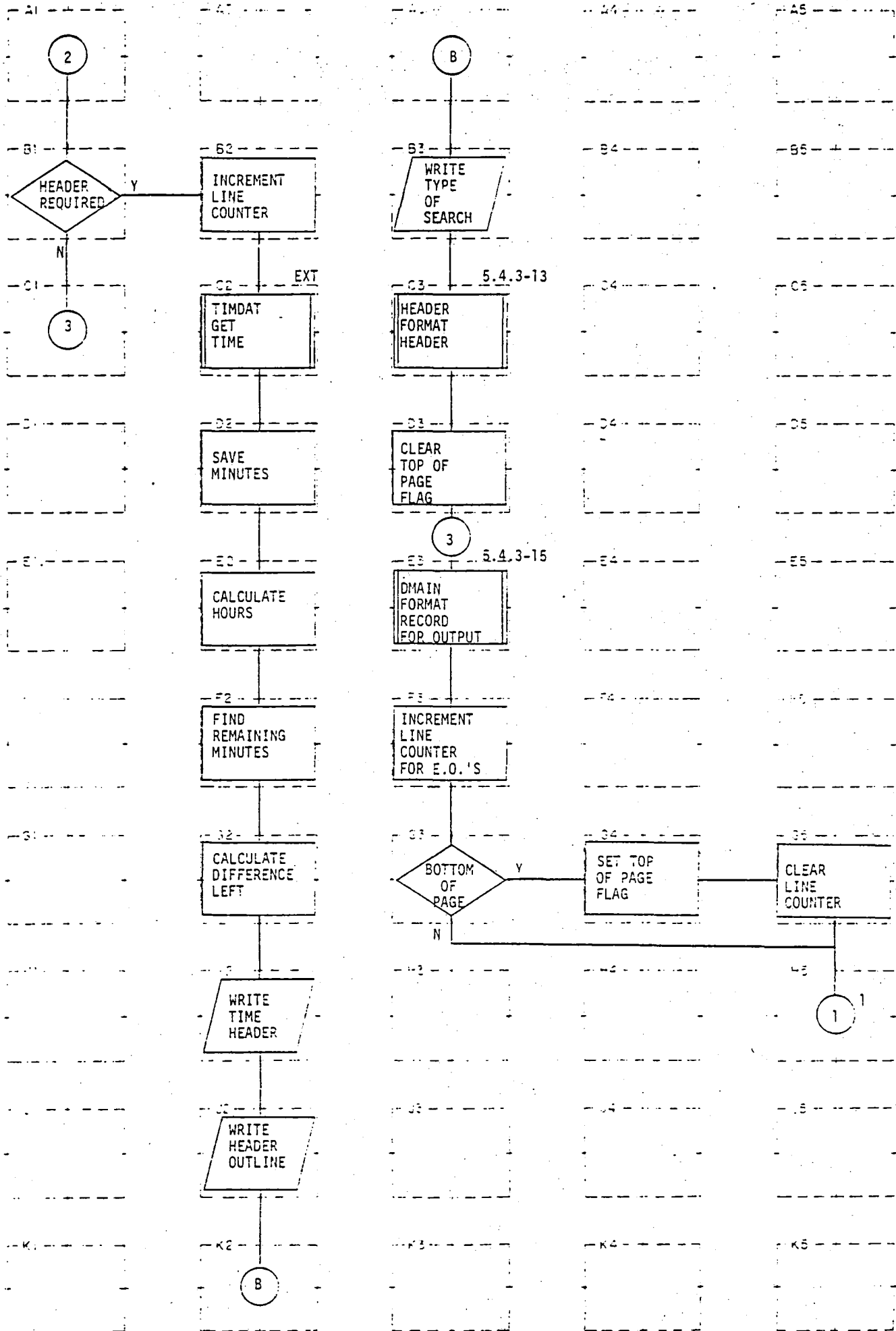


Figure 5.4.3-21

```
A1
B1  (IPAGE.NE.0)
C1
D1
E1
F1
G1
H1
J1
K1
A2
B2  ILINE=ILINE+12
C2  TIMDAT(ARRAY,15)
D2  AMIN=ARRAY(4)
E2  AH=AMIN/60.0; IH=AH
F2  IMM=IH*60
G2  IMIN=AMIN; IDM=IMIN-IMM
H2  WRITE(7,8008)IH,IDM,(ARRAY(I),I=1,3)
J2  WRITE(7,8000)
K2
A3
B3  WRITE(7,8001)DS
C3  HEADER
D3  IPAGE=1
E3  DMAIN
```

Figure 5.4.3-21

F3 ILINE=ILINE+INEO
G3 (ILINE.LE.45)
H3
J3
K3
A4
B4
C4
D4
E4
F4
G4 IPAGE=0
H4 ILINE=0
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

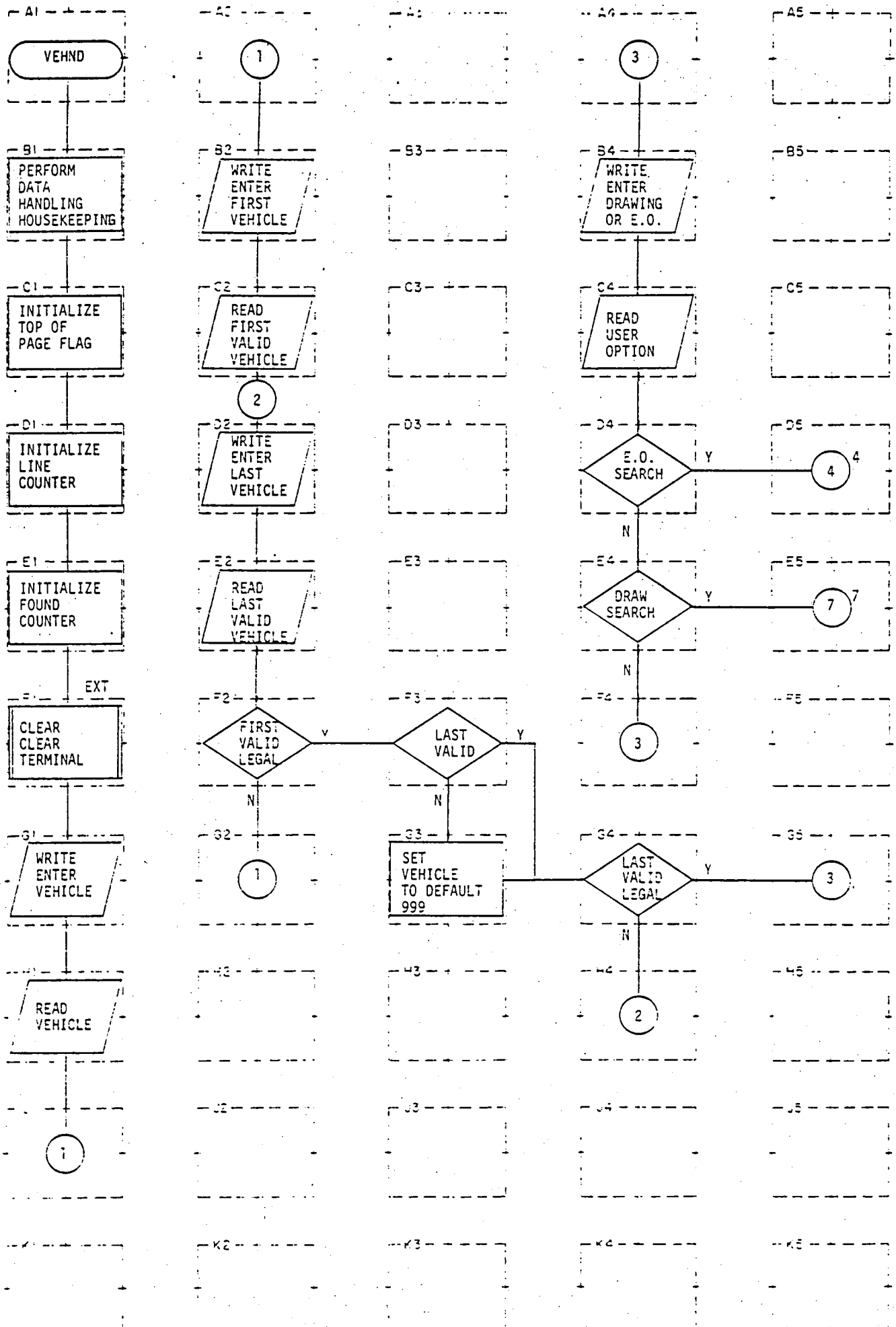


Figure 5.4.3-22

A1
B1 \$INSERT COMMON; INTEGER*2
C1 IPAGE=0
D1 ILINE=0
E1 KNT=0
F1 CLEAR
G1 WRITE(1,2)
H1 READ(1,3,ERR=1)VEH1
J1
K1
A2
B2 WRITE(1,100)
C2 READ(1,101,ERR=999)(VS(I),I=1,2)
D2 WRITE(1,102)
E2 READ(1,101,ERR=998)(VS(I),I=3,4)
F2 (VEH1(1).LT.VS(1))
G2
H2
J2
K2
A3
B3
C3
D3
E3

Figure 5.4.3-22

F3 (VS(3).EQ.0)
G3 VS(3)=999
H3
J3
K3
A4
B4 WRITE(1,11)
C4 READ(1,12)IOPT
D4 (IOPT.EQ.'EO')
E4 (IOPT.NE.'DR')
F4
G4 (VS(3).LT.VEH1(1))
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

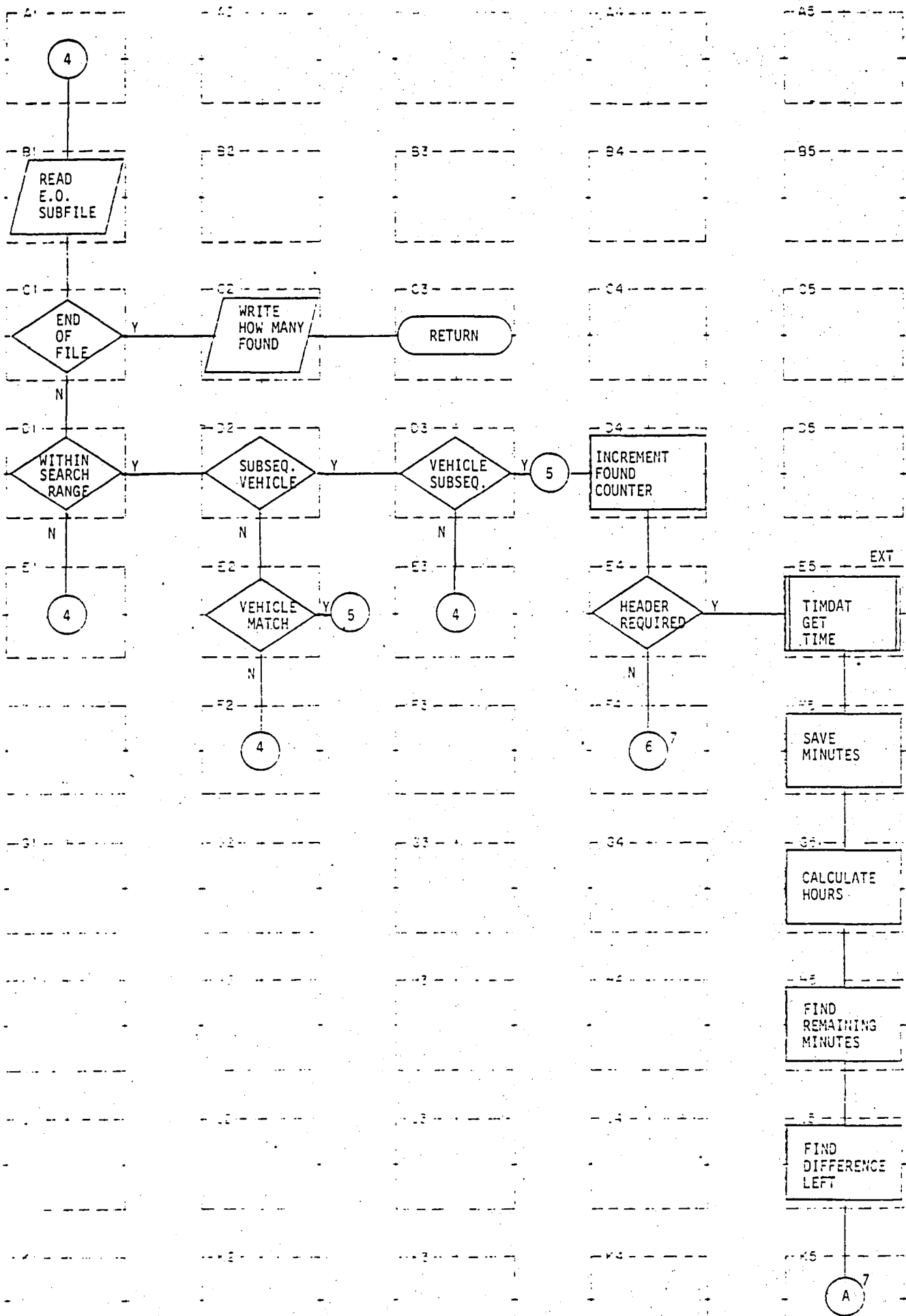


Figure 5.4.3-22

A1
B1 READ(18,END=400)EON,ETIT,EPTIT,EOREV,EDT,ERDT,EVOEH
C1 PERFORMED BY B1
D1 (EOVEH(1,1).LT.VS(1)); (EOVEH(2,1).GT.VS(3))
E1
F1
G1
H1
J1
K1
A2
B2
C2 WRITE(1,402)KNT,VEH1
D2 (EOVEH(1,2).NE.'S'.AND.EOVEH(1,1).EQ.VEH1(1))
E2
F2
G2
H2
J2
K2
A3
B3
C3
D3 (EOVEH(1,2).EQ.'S'.AND.EOVEH(1,1).LE.VEH1(1))
E3

F3
G3
H3
J3
K3
A4
B4
C4
D4 KNT=KNT+1
E4 (IPAGE.NE.0)
F4
G4
H4
J4
K4
A5
B5
C5
D5
E5 TIMDAT (ARRAY,15)
F5 AMIN=ARRAY(5)
G5 AH=AMIN/60.0; IH=AH
H5 IMM=IH*60
J5 IMIN=AMIN; IDM=IMIN-IMM
K5

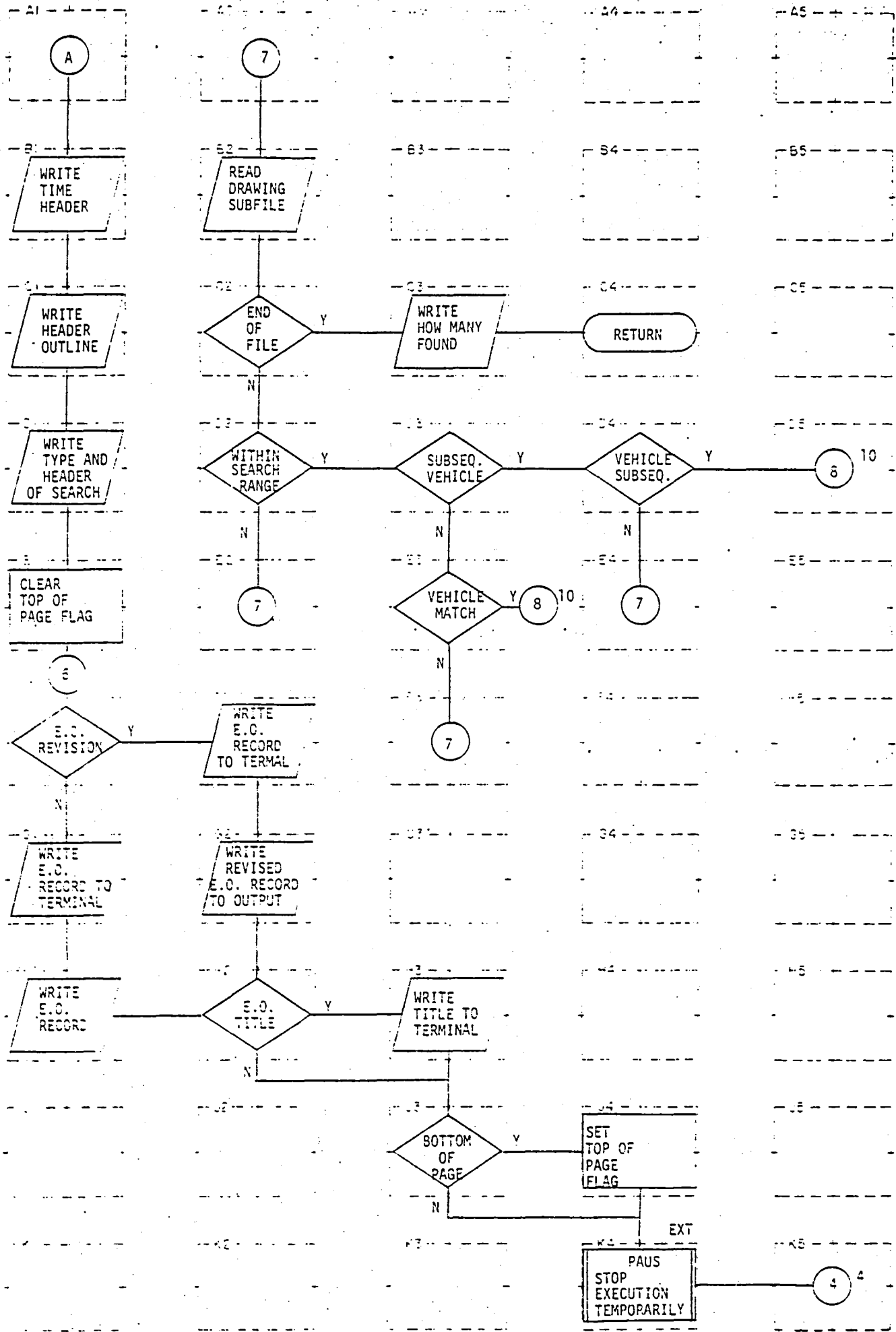


Figure 5.4.3-22

```

A1
B1  WRITE(7,8008)IH,IDM,(ARRAY(I),I=1,3)
C1  WRITE(7,8000)
D1  WRITE(7,349)VEH1; WRITE(7,351)
E1  IPAGE=1
F1  (EOREV.EQ.'NC')
G1  WRITE(1,310)KNT,EON,EOREV,EDT
H1  WRITE(7,320)KNT,EON,EOREV,EDT,EPTIT
J1
K1
A2
B2  READ(6,END=202)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
C2  PERFORMED BY B2
D2  (VEH(1,1).LT.VS(1)); (VEH(2,1).GT.VS(3))
E2
F2  WRITE(1,310)KNT,EON,EOREV,ERDT
G2  WRITE(7,320)KNT,EON,EOREV,ERDT,EPTIT
H2  (EPTIT(1).NE.' ')
J2
K2
A3
B3
C3  WRITE(1,201)KNT,VEH1
D3  (VEH(1,2).NE.'S'.AND.VEH(1,1).EQ.VEH1(1))
E3  PERFORMED BY D3

```

F3
G3
H3 WRITE(1,311)EPTIT
J3 (KNT/21.EQ.KNT/21.)
K3
A4
B4
C4
D4 (VEH(1,2).EQ.'S'.AND.VEH(1,1).LE.VEH1(1))
E4
F4
G4
H4
J4 IPAGE=0
K4 PAUS
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

Figure 5.4.3-22

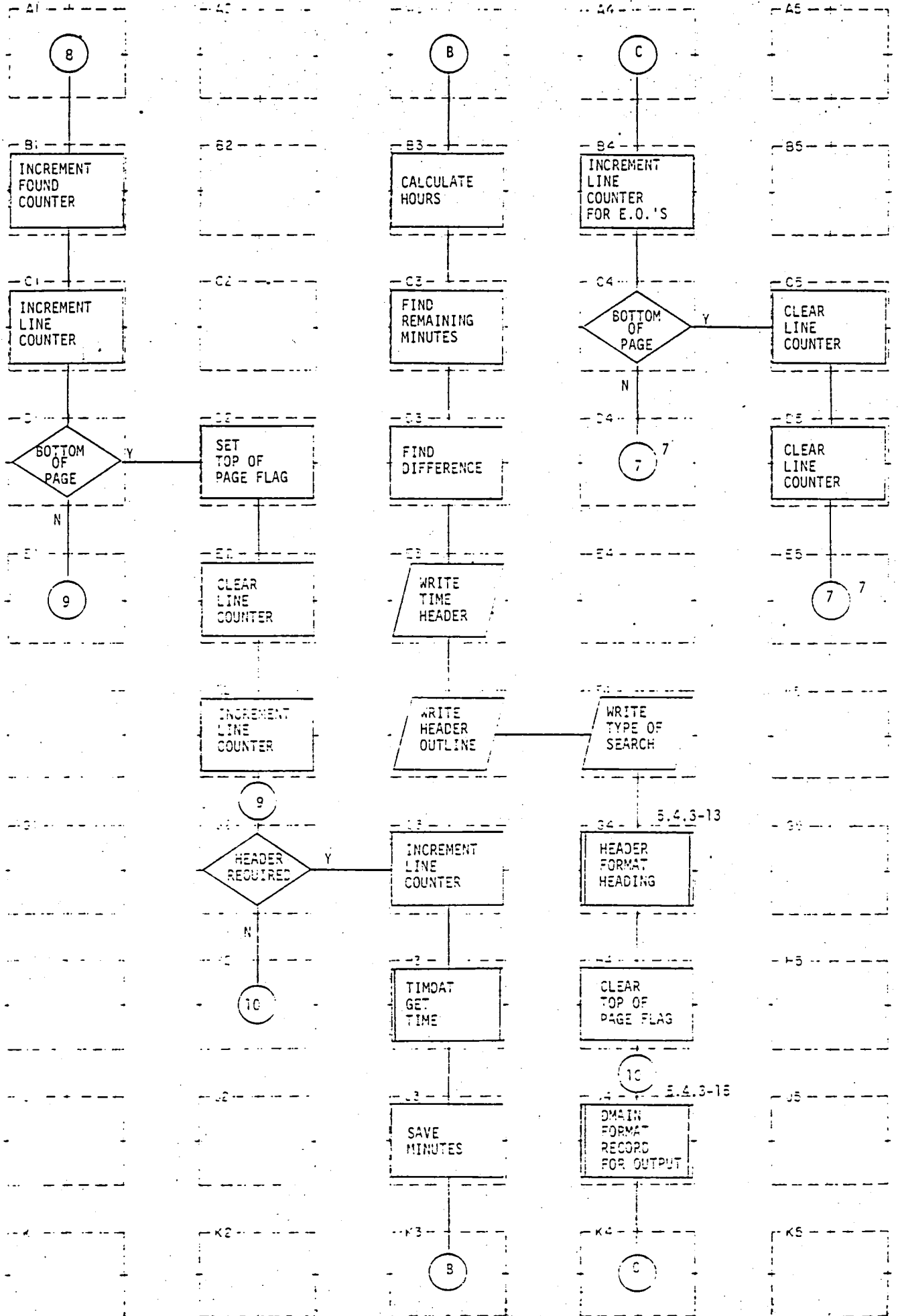


Figure 5.4.3-22

```
A1
B1   KNT=KNT+1
C1   ILINE=ILINE+FNEO+NSHT+3
D1   (ILINE.LE.45)
E1
F1
G1
H1
J1
K1
A2
B2
C2
D2   IPAGE=0
E2   ILINE=0
F2   ILINE=FENO+NSHT+3
G2   (IPAGE.NE.0)
H2
J2
K2
A3
B3   AH=AMIN/60.0; IH=AH
C3   IMM=IH*60
D3   IMIN=AMIN; IDM=IMIN-IMM
E3   WRITE(7,8008)IH,IDM,(ARRAY(I),I=1,3)
```

Figure 5.4.3-22

F3 WRITE(7,8000)
G3 ILINE=ILINE+12
H3 TIMDAT(ARRAY,15)
J3 AMIN=ARRAY(4)
K3
A4
B4 ILINE=ILINE+INEO
C4 (ILINE.LE.45)
D4
E4
F4 WRITE(7,8001)VEH1
G4 HEADER
H4 IPAGE=1
J4 DMAIN
K4
A5
B5
C5 IPAGE=0
D5 ILINE=0
E5
F5
G5
H5
J5
K5

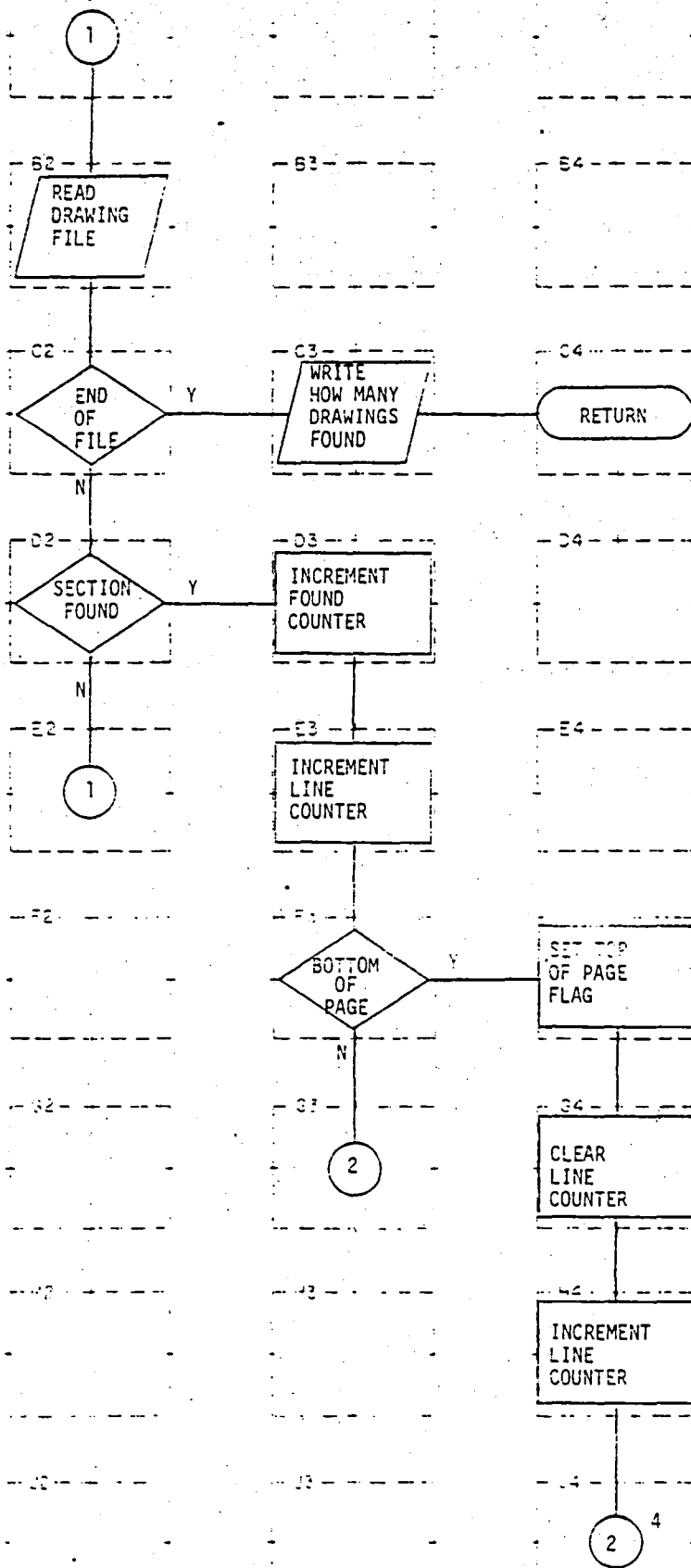
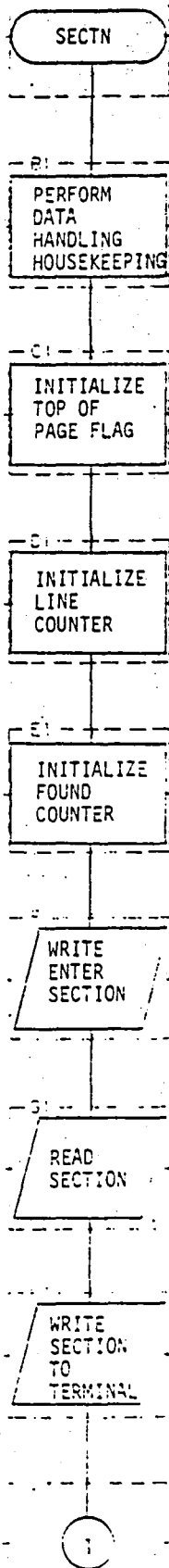


Figure 5.4.3-23

```
A1
B1  $INSERT COMMON; INTEGER*4; *2
C1  IPAGE=0
D1  ILINE=0
E1  KNT=0
F1  WRITE(1,1)
G1  READ(1,2,ERR=3)ISECT
H1  WRITE(1,2)ISECT
J1
K1
A2
B2  READ(6,END=200)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
C2  PERFORMED BY B2
D2  DO 1000 I=1,3; (ISECT(I).NE.SECT(I))
E2
F2
G2
H2
J2
K2
A3
B3
C3  WRITE(1,250)KNT,ISECT
D3  KNT=KNT+1
E3  ILINE=ILINE+FNEO+NSHT+3
```

Figure 5.4.3-23

F3 (ILINE.LE.45)
G3
H3
J3
K3
A4
B4
C4
D4
E4
F4 IPAGE=0
G4 ILINE=0
H4 ILINE=FNEO+NSHT+3
J4
K4
A5
B5
C5
D5
E5
F5
G5
H5
J5
K5

Figure 5.4.3-23

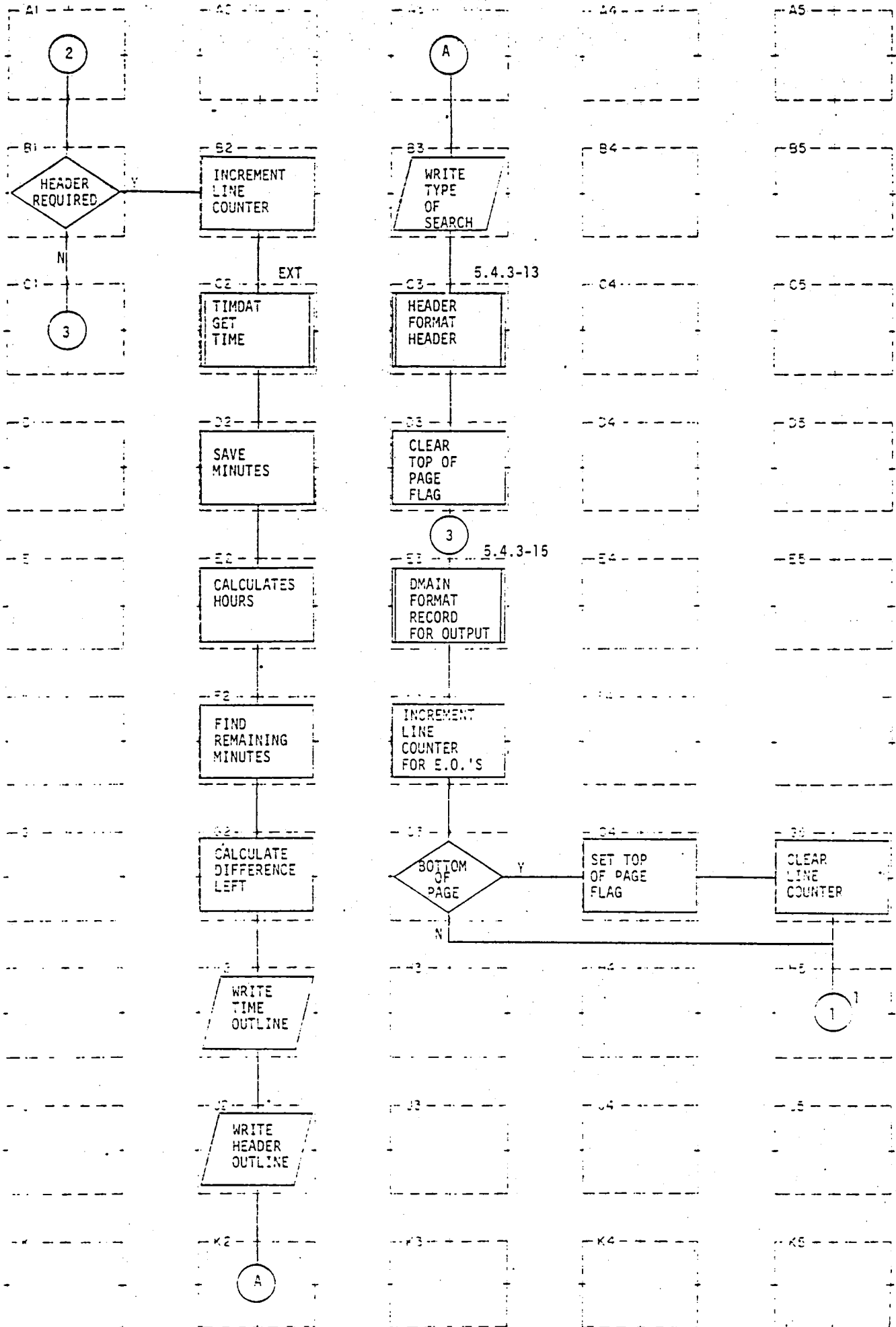


Figure 5.4.3-23

A1
B1 (IPAGE.NE.0)
C1
D1
E1
F1
G1
H1
J1
K1
A2
B2 ILINE = ILINE + 12
C2 TIMDAT (ARRAY, 15)
D2 AMIN = ARRAY (4)
E2 AH = AMIN/60.0; IH = AH
F2 IMM = IH * 60
G2 IMIN = AMIN; IDM = IMIN - IMM
H2 WRITE (7,8008) IH, IDM, (ARRAY(I), I = 1,3)
J2 WRITE (7,8000)
K2
A3
B3 WRITE (7,8001) ISECT
C3 HEADER
D3 IPAGE = 1
E3 DMAIN

F3 ILINE = ILINE + INEO
G3 (ILINE.LE.45)
H3
J3
K3
A4
B4
C4
D4
E4
F4
G4 IPAGE = 0
H4
J4
K4
A5
B5
C5
D5
E5
F5
G5 ILINE = 0
H5
J5
K5

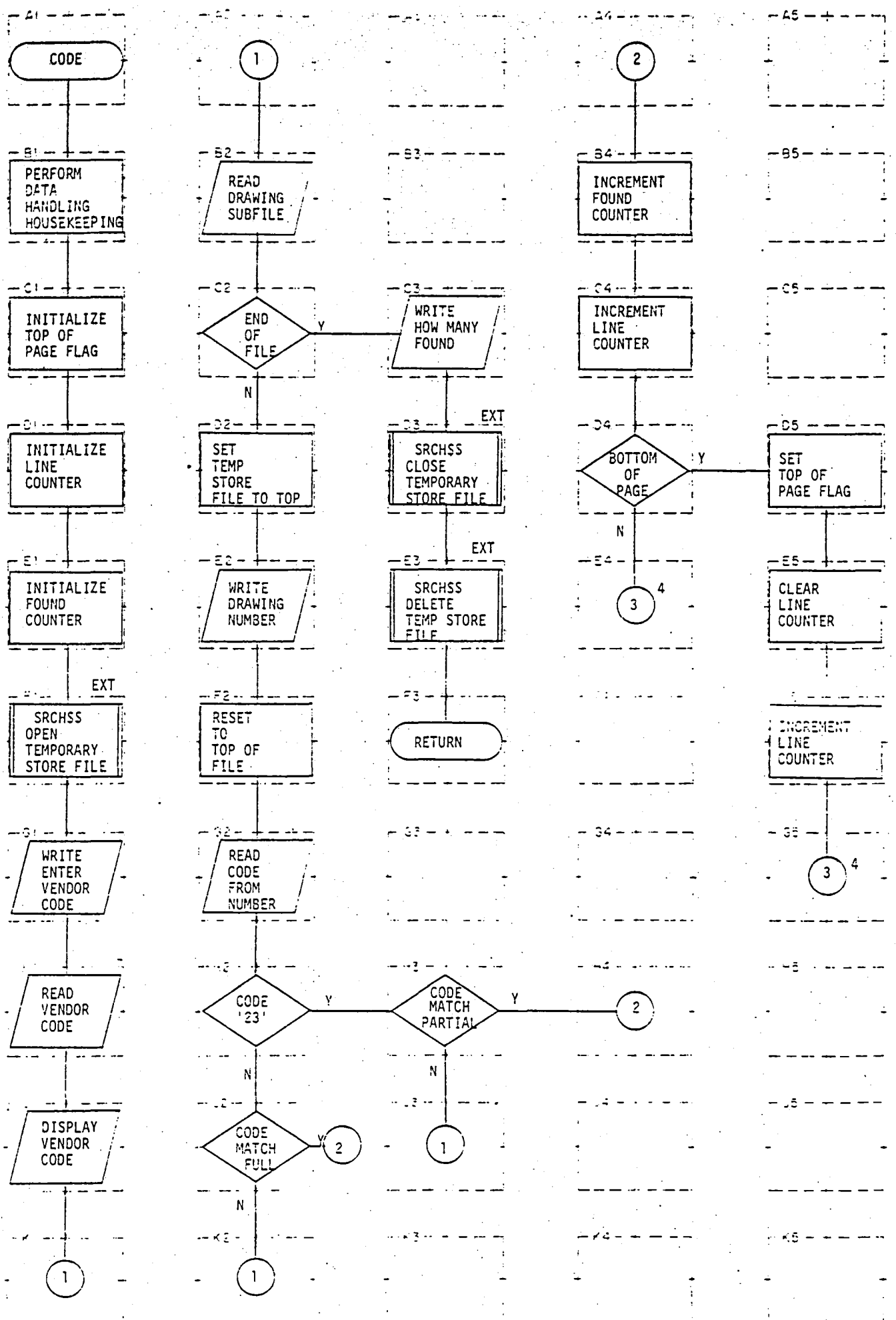


Figure 5.4.3-24

```

A1
B1  $INSERT COMMON; $INSERT SYSCOM>KEYS.F; INTEGER *.2
C1  IPAGE = 0
D1  ILINE = 0
E1  KNT = 0
F1  SRCH$$ (K$RDWR + K$NDAM, 'T3', 6, 6, 1, IC)
G1  WRITE (1, 1)
H1  READ (1, 2, ERR = 3) ICODE
J1  WRITE (1, 2) ICODE
K1
A2
B2  READ (6, END=200) DRAW, TIT, PTIT, DT, SYS, VEH, SECT, NSHT, FREV, FNEO, FEOREF
C2  Performed by B2
D2  REWIND 10
E2  WRITE (10, 5) DRAW (1)
F2  REWIND 10
G2  READ (10, 2) COD
H2  (ICODE(1).EQ. '23')
J2  DO 20 I = 1, 2; (ICODE(I).NE. COD(I))
K2
A3
B3
C3  WRITE (1, 250) KNT
D3  SRCH$$ (K$CLOS, 'T3', 6, 0, 0, 0)
E3  SRCH$$ (K$DELE, 'T3', 6, 0, 0, 0)

```


F3
G3
H3 (ICODE(1).NE.COD(1))
J3
K3
A4
B4 KNT = KNT + 1
C4 ILINE = ILINE + FNEO + NSHT + 3
D4 (ILINE.LE.45)
E4
F4
G4
H4
J4
K4
A5
B5
C5
D5 IPAGE = 0
E5 ILINE = 0
F5 ILINE = ILINE + NSHT + 3
G5
H5
J5
K5

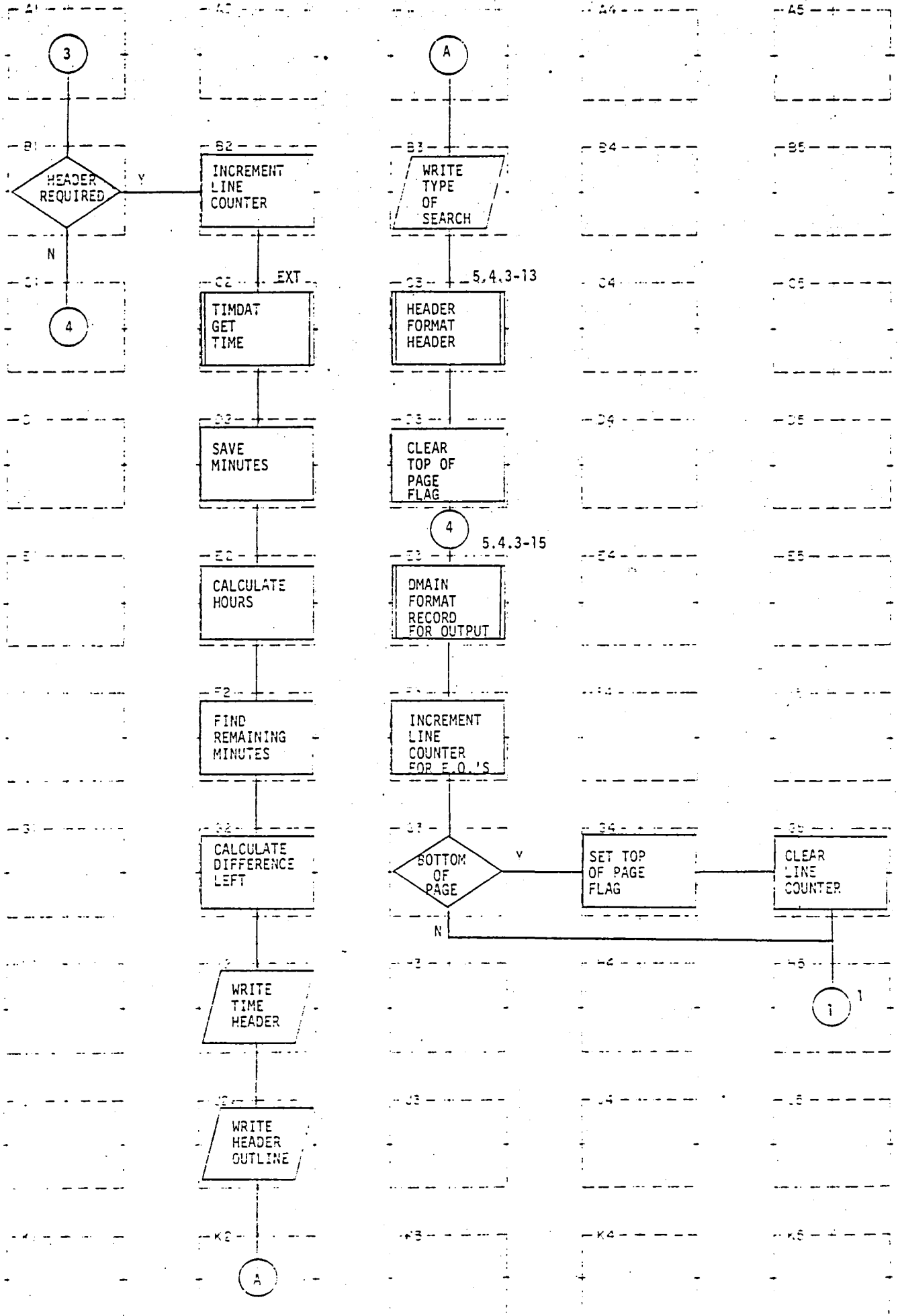


Figure 5.4.3-24

```

A1
B1 (IPAGE.NE.0)
C1
D1
E1
F1
G1
H1
J1
K1
A2
B2 ILINE = ILINE + 12
C2 TIMDAT (ARRAY,15)
D2 AMIN = ARRAY (4)
E2 AH = AMIN/60.0; IH = AH
F2 IMM = IH * 60
G2 IMIN = AMIN; IDM = IMIN - IMM
H2 WRITE (7,8008) IH,IDM, (ARRAY(I),I = 1,3)
J2 WRITE (7,8000)
K2
A3
B3 WRITE (7,8001) ICODE
C3 HEADER
D3 IPAGE = 1
E3 DMAIN

```

Figure 5.4.3-24

F3 ILINE = ILINE + INEO

G3 (ILINE.LE.45)

H3

J3

K3

A4

B4

C4

D4

E4

F4

G4 IPAGE = 0

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5 ILINE = 0

H5

J5

K5

Figure 5.4.3-24

Page (6 of 6)

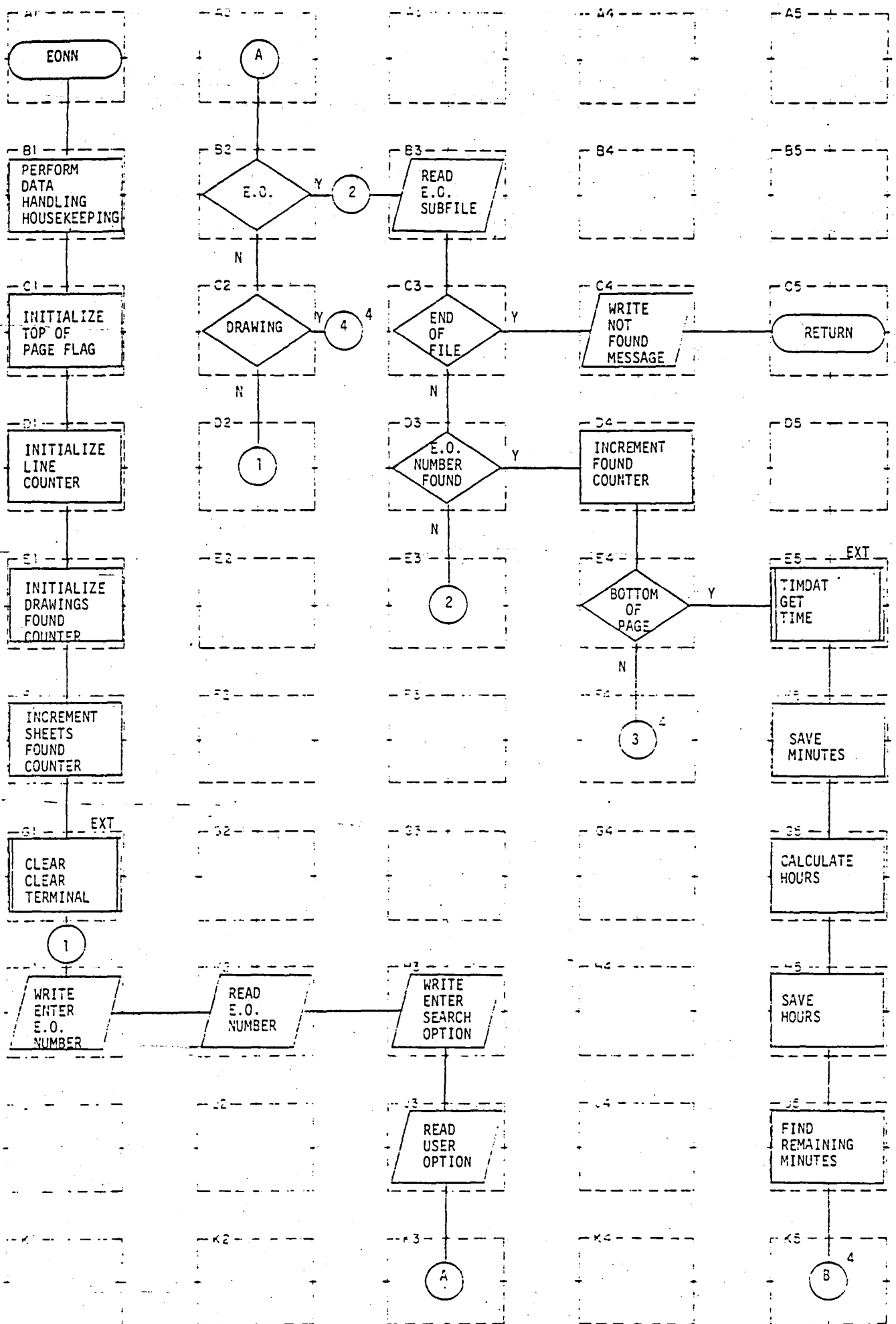


Figure 5.4.3-25

```
A1
B1  $INSERT COMMON; INTEGER * 4; * 2
C1  IPAGE = 0
D1  ILINE = 0
E1  KNT = 0
F1  KNTT = 0
G1  CLEAR
H1  WRITE (1,2)
J1
K1
A2
B2  (IOPT.EQ.'EO')
C2  (IOPT.NE.'DR')
D2
E2
F2
G2
H2  READ (1,3,ERR = 1) IEON
J2
K2
A3
B3  READ (18,END = 350) EON,ETIT,EPTIT,EOREV,EDT,ERDT,EVEH
C3  Performed by B3
D3  DO 266 I = 1,2; (IEON(I).NE.EON(I))
E3
```

F3
G3
H3 WRITE (1,105)
J3 READ (1,110,ERR = 99) IOPT
K3
A4
B4
C4 WRITE (1,360)IEON
D4 KNT = KNT + 1
E4 (IPAGE.NE.0)
F4
G4
H4
J4
K4
A5
B5
C5
D5
E5 TIMDAT (ARRAY,15)
F5 AMIN + ARRAY (4)
G5 AH = AMIN/60.0
H5 IH = AH
J5 IMM = IH * 60
K5

Figure 5.4.3-25

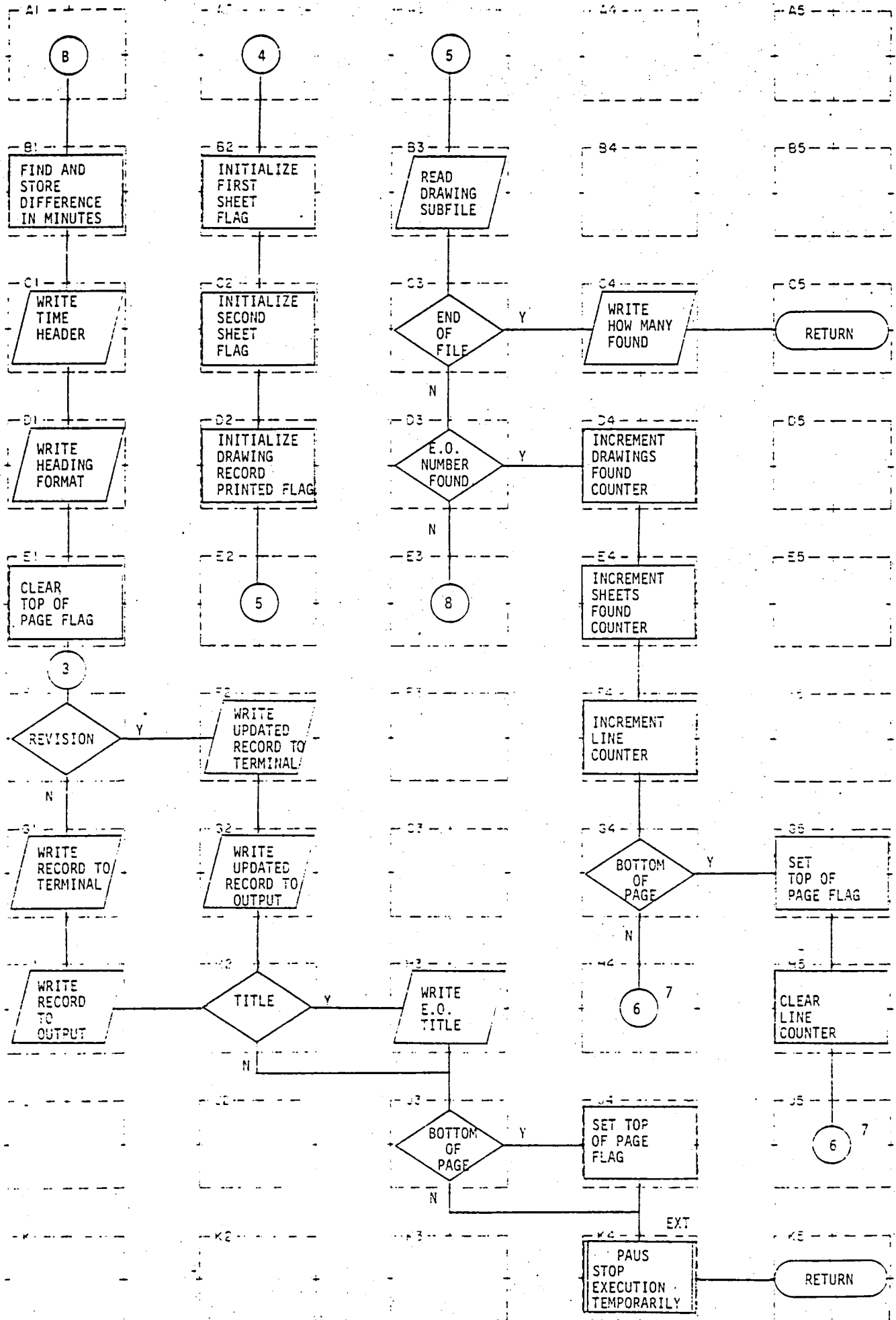


Figure 5.4.3-25


```

A1
B1  IMIN = AMIN; IDM = IMIN - IMM
C1  WRITE (7,1000)IH,IDM,(ARRAY(I),I = 1,3)
D1  WRITE (7,300)
E1  IPAGE = 1
F1  (EOREV.EQ.'NC')
G1  WRITE (1,140)KNT,EON,EOREV,EDT((EOVEH(I,J)J=1,2),I = 1,2)
H1  WRITE (7,230)KNT,EON,EOREV,EDT,EPTIT
J1
K1
A2
B2  FIRST = 0
C2  SECOND = 0
D2  INEO = 0
E2
F2  WRITE (1,140)KNT,EON,EOREV,ERDT,((EOVEH(I,J),J = 1,2),I = 1,2)
G2  WRITE (7,230)KNT,EON,EOREV,ERDT,EPTIT
H2  (EPTIT(1).NE.' ')
J2
K2
A3
B3  READ (6,END=100)DRAW,TIT,PTIT,DT,SYS,VEH,SECT,NSHT,FREV,FNEO,FEOREF
C3  Performed By B3
D3  DO 2000 I=1,6; (IEON(1).NE.FEOREF(I,1)); (IEON(2).EQ.FEOREF(I,2))
E3

```

Figure 5.4.3-25

F3
G3
H3 WRITE (1,130)EPTIT
J3 (KNT/21.EQ.KNT/21.)
K3
A4
B4
C4 WRITE (1,200)KNT,KNTT,IEON
D4 KNT = KNT + 1
E4 KNTT = KNTT + 1
F4 ILINE = ILINE + FNEO + 4
G4 (ILINE.LE.45)
H4
J4 IPAGE = 0
K4 PAUS
A5
B5
C5
D5
E5
F5
G5 IPAGE = 0
H5 ILINE = 0
J5
K5

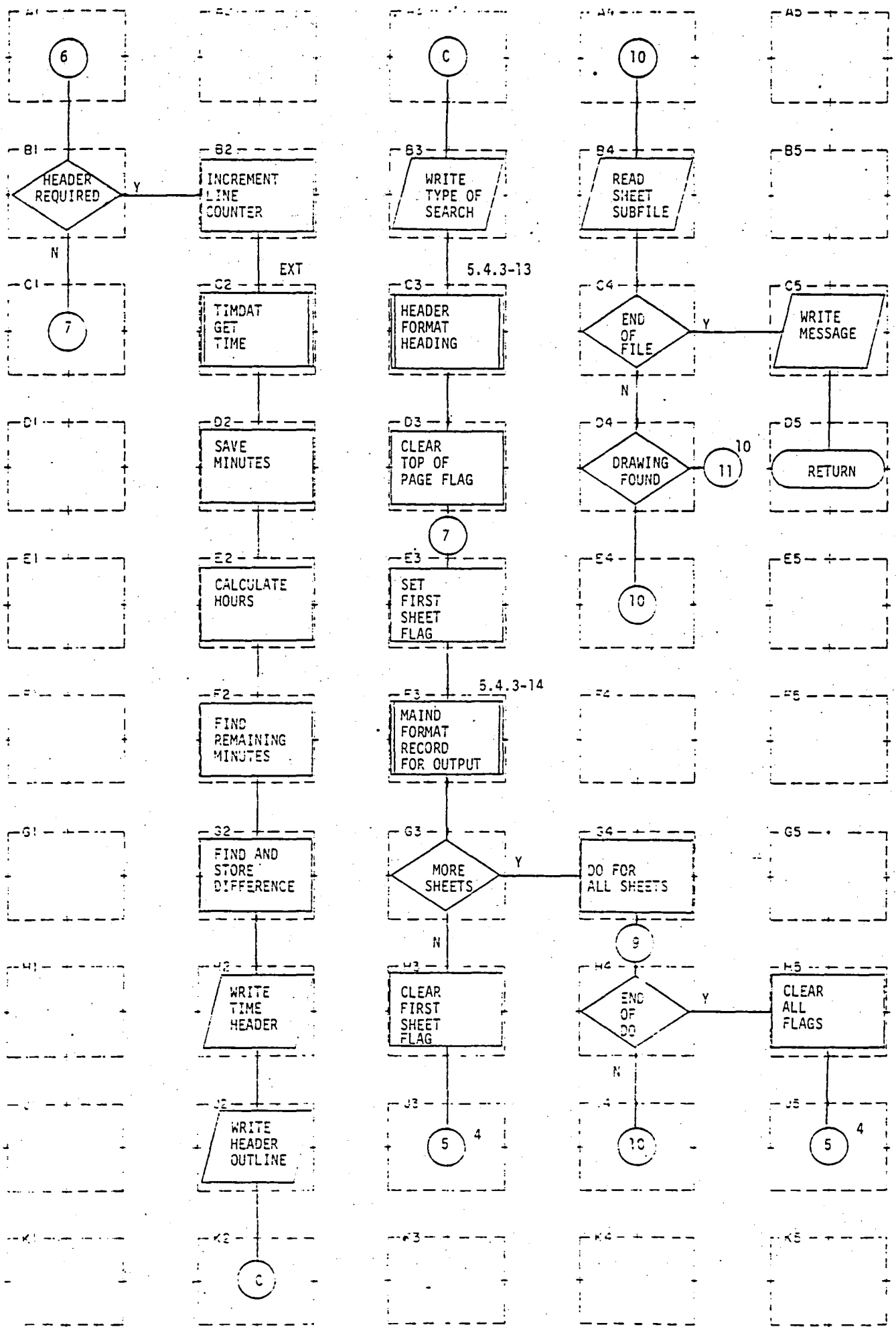


Figure 5.4.3-25

A1
B1 (IPAGE.NE.0)
C1
D1
E1
F1
G1
H1
J1
K1
A2
B2 ILINE = ILINE + 12
C2 TIMDAT (ARRAY, 15)
D2 AMIN = ARRAY (4)
E2 AH = AMIN/60.0; IH = AH
F2 IMM = IH * 60
G2 IMIN = AMIN; IDM = IMIN - IMM
H2 WRITE (7,8008)IH,IDM,(ARRAY(I),I = 1,3)
J2 WRITE (7,8000)
K2
A3
B3 WRITE (7,8001)IEON
C3 HEADER
D3 IPAGE = 1
E3 FIRST = 1

Figure 5.4.3-25

```
F3  MAIND
G3  (NSHT.GT.1)
H3  FIRST = 0
J3
K3
A4
B4  READ (12,END = 1001)DRW,SHTN,REV,NEO,EOREF
C4  Performed by B4
D4  DO 25 K = 1,4; (DRW(K).NE.DRAW(K))
E4
F4
G4  DO 150 J = 2,NSHT
H4  Performed by G4
J4
K4
A5
B5
C5  WRITE (1,1002)
D5
E5
F5
G5
H5  FIRST = 0; SECOND = 0; INEO = 0
J5
K5
```

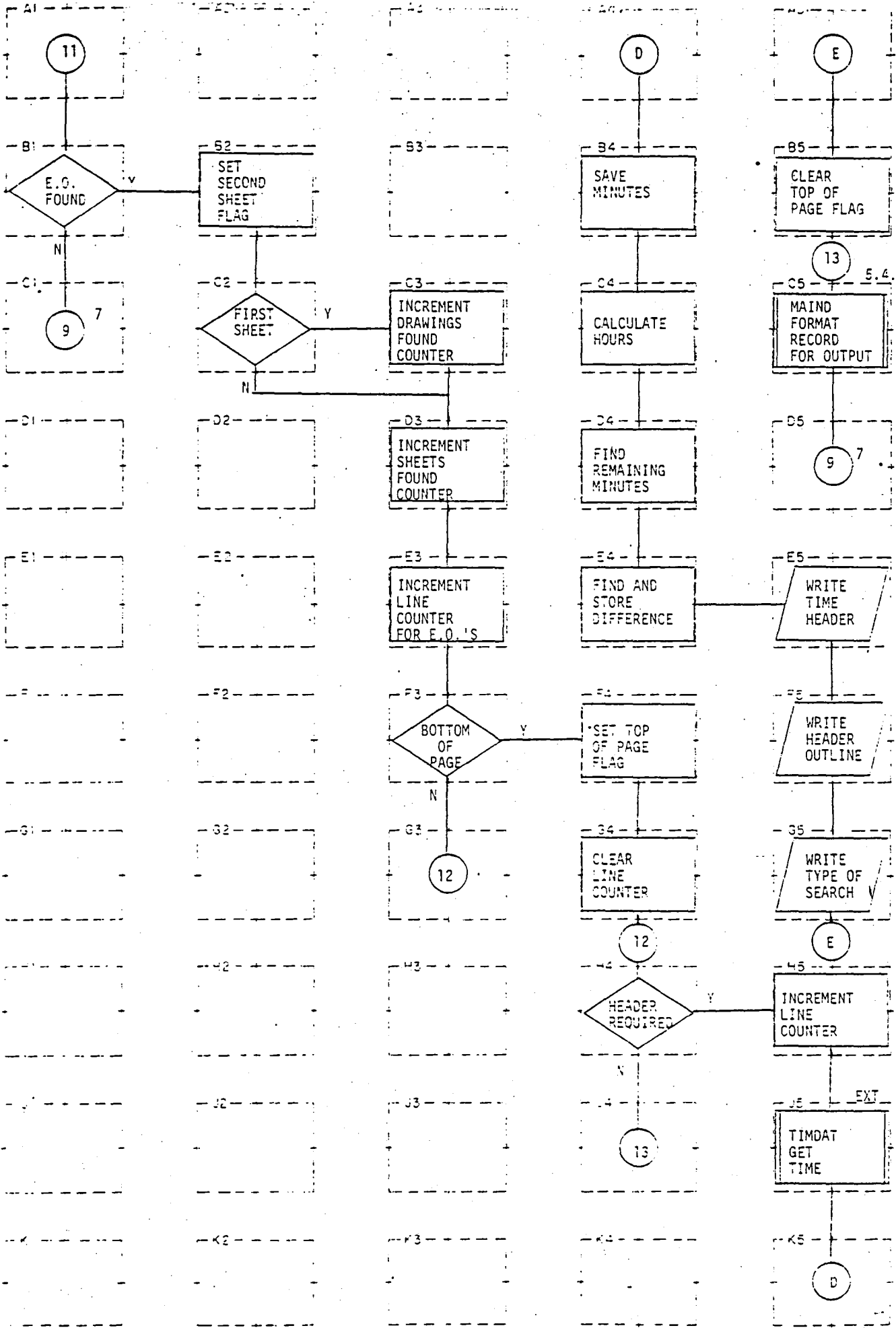


Figure 5.4.3-25

A1
B1 DO 2500I = 1,6; (IEON(1).NE.EOREF(I,1)); (IEON(2).EQ.EOREF(I,2))
C1
D1
E1
F1
G1
H1
J1
K1
A2
B2 SECOND = 1
C2 (FIRST.EQ.0)
D2
E2
F2
G2
H2
J2
K2
A3
B3
C3 KNT = KNT + 1
D3 KNNT = KNNT + 1
E3 ILINE = ILINE + NEO + 4

```

F3 (ILINE.LE.45)
G3
H3
J3
K3
A4
B4 AMIN = ARRAY (4)
C4 AH = AMIN/60.0; IH = AH
D4 IMM = IH * 60
E4 IMIN = AMIN; IDM = IMIN - IMM
F4 IPAGE = 0
G4 ILINE = 0
H4 (IPAGE.NE.0)
J4
K4
A5
B5 IPAGE = 1
C5 MAIND
D5
E5 WRITE (7,8008)IH,IDM,(ARRAY(I),I = 1,3)
F5 WRITE (7,8000)
G5 WRITE (7,8001)IEON
H5 ILINE = ILINE + 12
J5 TIMDAT (ARRAY,15)
K5

```

Figure 5.4.3-25

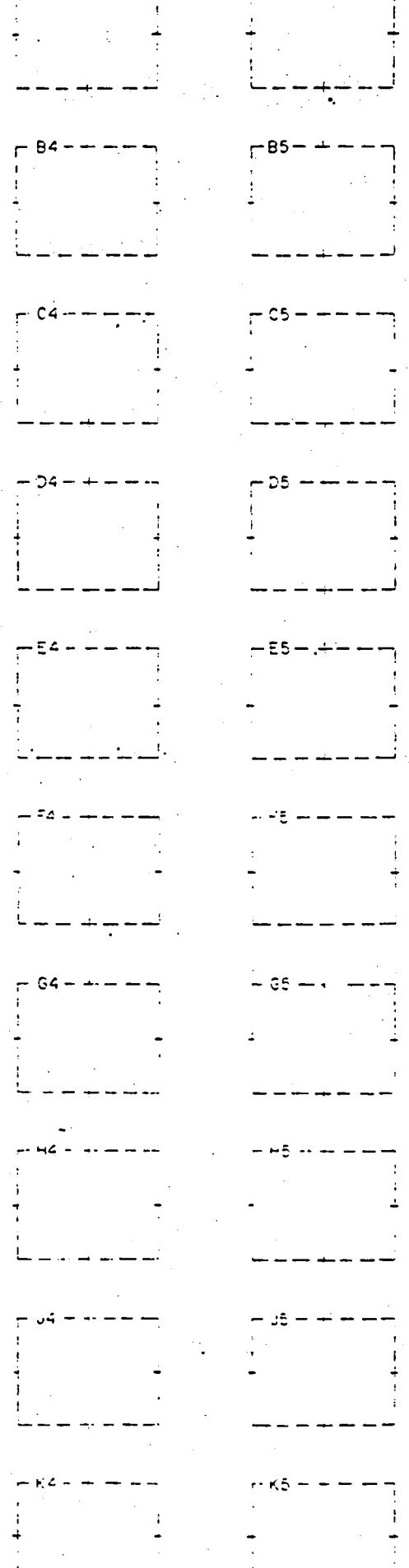
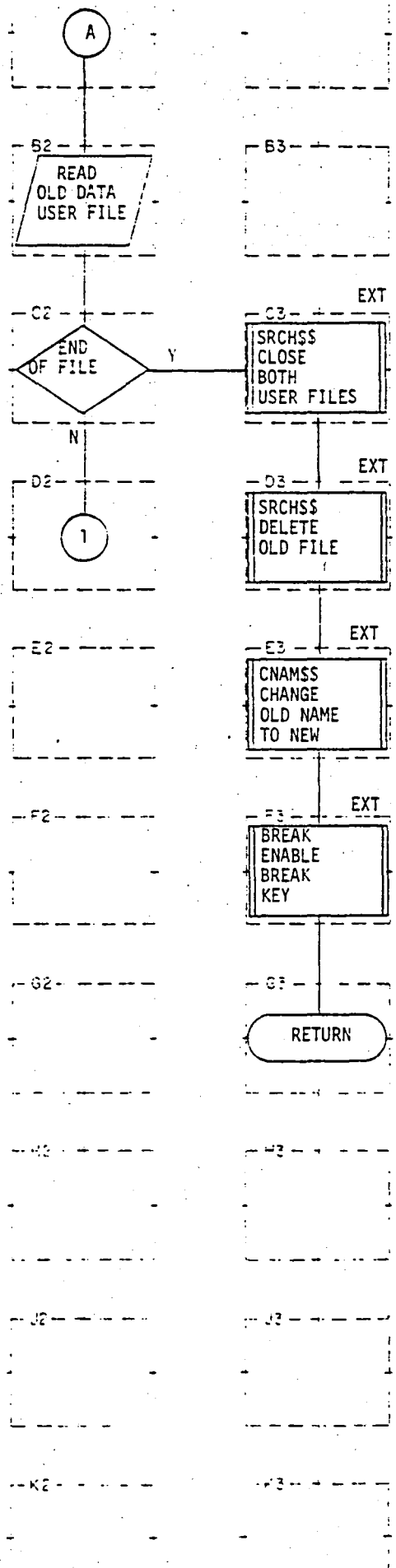
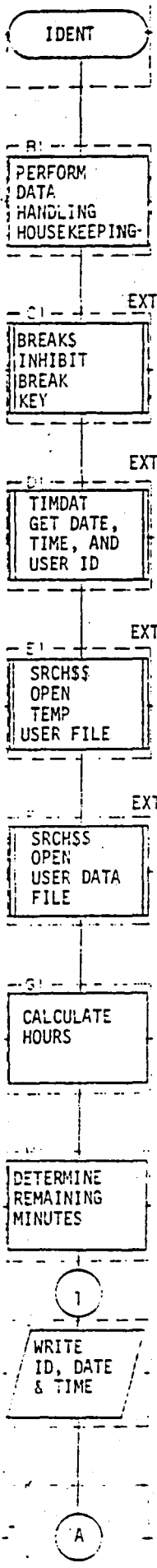


Figure 5.4.4-1

```

A1
B1  $INSERT SYSCOM>KEYS.F; INTEGER*2
C1  BREAK$ (.TRUE.)
D1  TIMDAT(ARRAY,15)
E1  SRCH$$ (K$NDAM+K$RDWR,'TUSER',5,16,1,IC)
F1  SRCH$$ (K$NDAM+K$RDWR,'USER',4,15,1,IC)
G1  AMIN=ARRAY(4); AH=AMIN/60.0; IH=AH
H1  IMM=IH*60; IMIM=AMIN; IDM=IMIN-IMM
J1  WRITE(20,1)(ARRAY(I),I=13,15),IH,IDM,ARRAY(5),
    (ARRAY(I),I=1,3),ARRAY(12)
K1
A2
B2  READ(19,2,END=50)(ARRAY(I),I=13,15),IH,IDM,ARRAY(5),
    (ARRAY(I),I=1,3),ARRAY(12)
C2  see B2
D2
E2
F2
G2
H2
J2
K2
A3
B3
C3  SRCH$$ (K$CLOS,'USER',4,0,0,0); SRCH$$ (K$CLOS,'TUSER',5,0,0,0);
D3  SRCH$$ (K$DELE,'USER',4,0,0,0)
E3  CNAM$$ ('TUSER',5,'USER',4,IC)

```

F3 BREAK\$(.FALSE.)

G3

H3

J3

K3

A4

B4

C4

D4

E4

F4

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

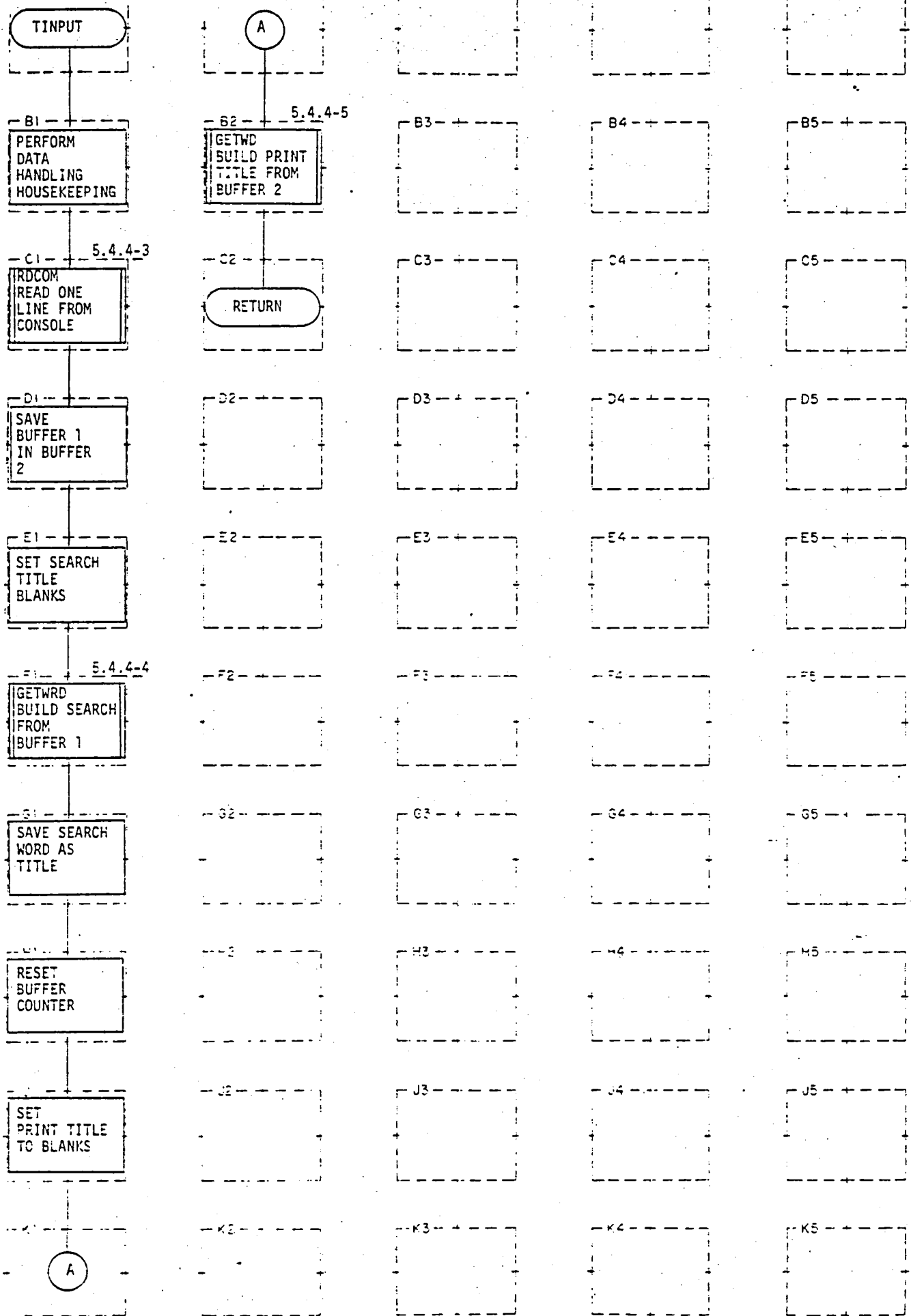


Figure 5.4.4-2

```

A1
B1  $INSERT COMMON; COMMON/X/PEDL; INTEGER*2; *4
C1  RDCOM(BUF)
D1  DO 5I=1,76; BUFF(I)=BUF(I)
E1  BLNK='  '; DO1I=1,21; TIL(I)=BLNK
F1  GETWRD(BUF,ARRAY,LEN)
G1  TIL(I)=ARRAY(1);TIL(I+1)=ARRAY(2); TIL(I+2)=ARRAY(3);
H1  TIL(I+3)=TIL=ARRAY(4)
I=I+2; PEDL=1
J1  DO 200 I=1,19; PTIT(I)=BLNK
K1
A2
B2  GETWD(BUFF,PTIT)
C2
D2
E2
F2
G2
H2
J2
K2
A3
B3
C3
D3
E3

```

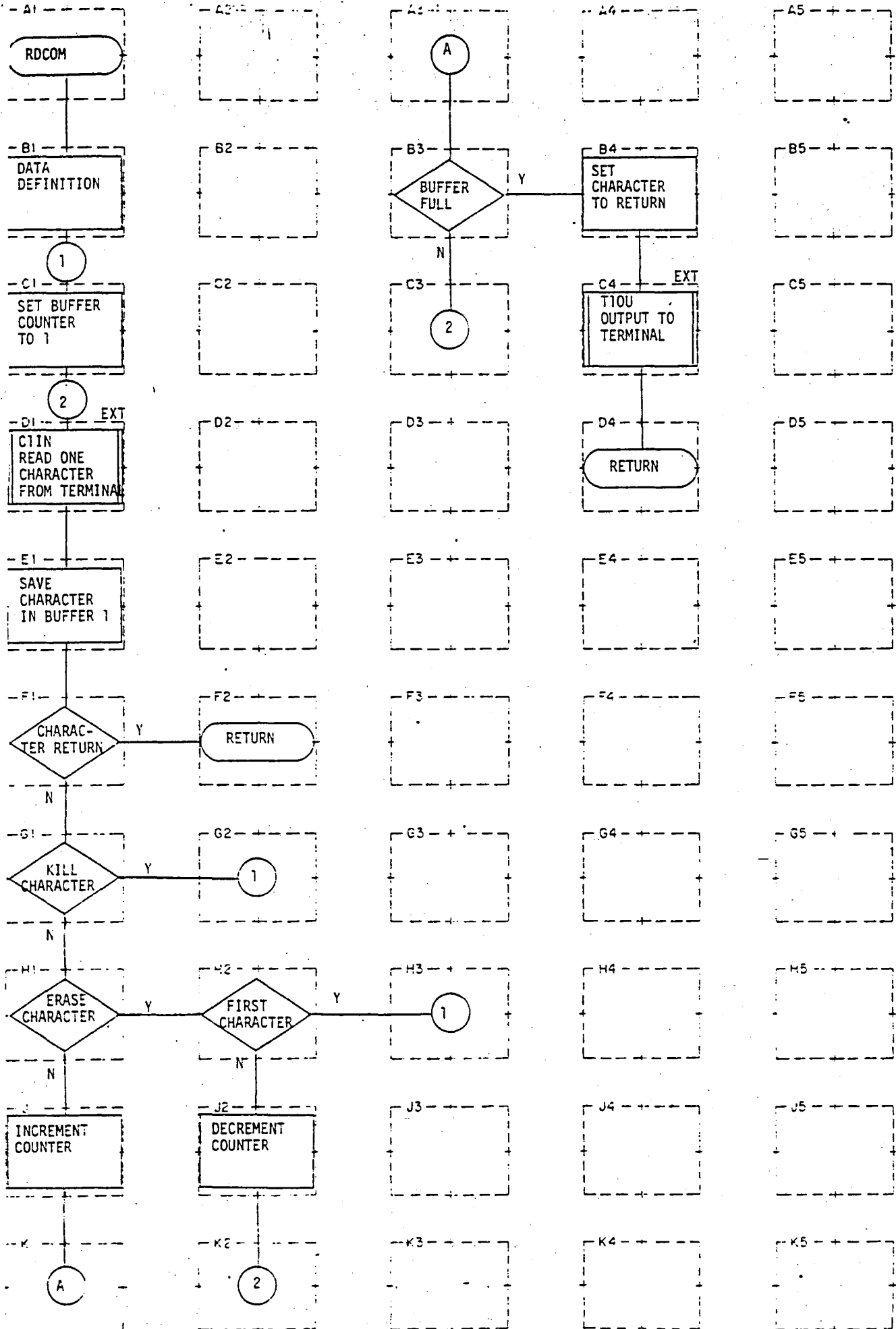


Figure 5.4.4-3

A1
B1 COMMON/X/PEDL; INTEGER
C1 PEDL=1; N=1
D1 C1IN(CHAR)
E1 BUF(N)=CHAR
F1 (CHAR.EQ.ANL)
G1 (CHAR.EQ.AKILL)
H1 (CHAR.EQ.AERASE)
J1 N=N+1
K1
A2
B2
C2
D2
E2
F2
G2
H2 (N.LE.2)
J2 N=N-1
K2
A3
B3 (N.GT.77)
C3
D3
E3

F3

G3

H3

J3

K3

A4

B4 ILF=:212

C4 T10U(ILF)

D4

E4

F4

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

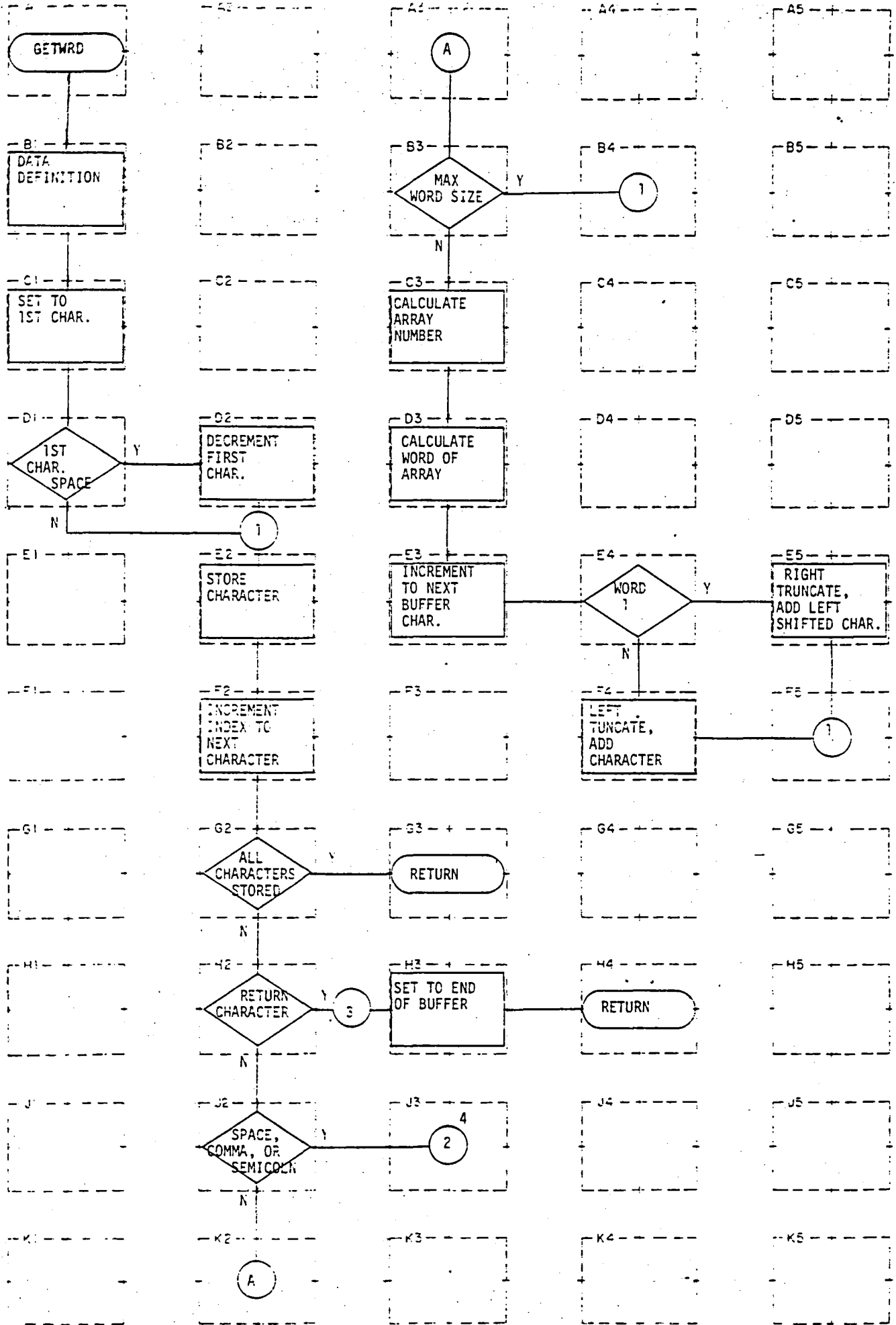


Figure 5.4.4-4

```

A1
B1  COMMON/X/PEDL; INTEGER
C1  DO 140 I=1,3; NAME(I)=ASPSP; N=1
D1  (BUF(1).NE.ASP)
E1
F1
G1
H1
J1
K1
A2
B2
C2
D2  DO 999 I=2,77; II=I-1; BUF(II)=BUF(I)
E2  CHAR=BUF(PEDL)
F2  PEDL=PEDL+1
G2  (PEDL.GT.77)
H2  (CHAR.EQ.ASP.OR.CHAR.EQ.ACOMMA.OR.CHAR.EQ.ASCOL)
J2
K2
A3
B3  (N.GT.LEN)
C3  I=(N+1)/2
D3  J=N-2*(N/2)
E3  N=N+1

```

F3
G3
H3 PEDL=77
J3
K3
A4
B4
C4
D4
E4 (J.EQ.1)
F4 NAME(I)=LT(NAME(I),8)+CHAR
G4
H4
J4
K4
A5
B5
C5
D5
E5 NAME(I)=RT(NAME(I),8)+LS(CHAR,8)
F5
G5
H5
J5
K5

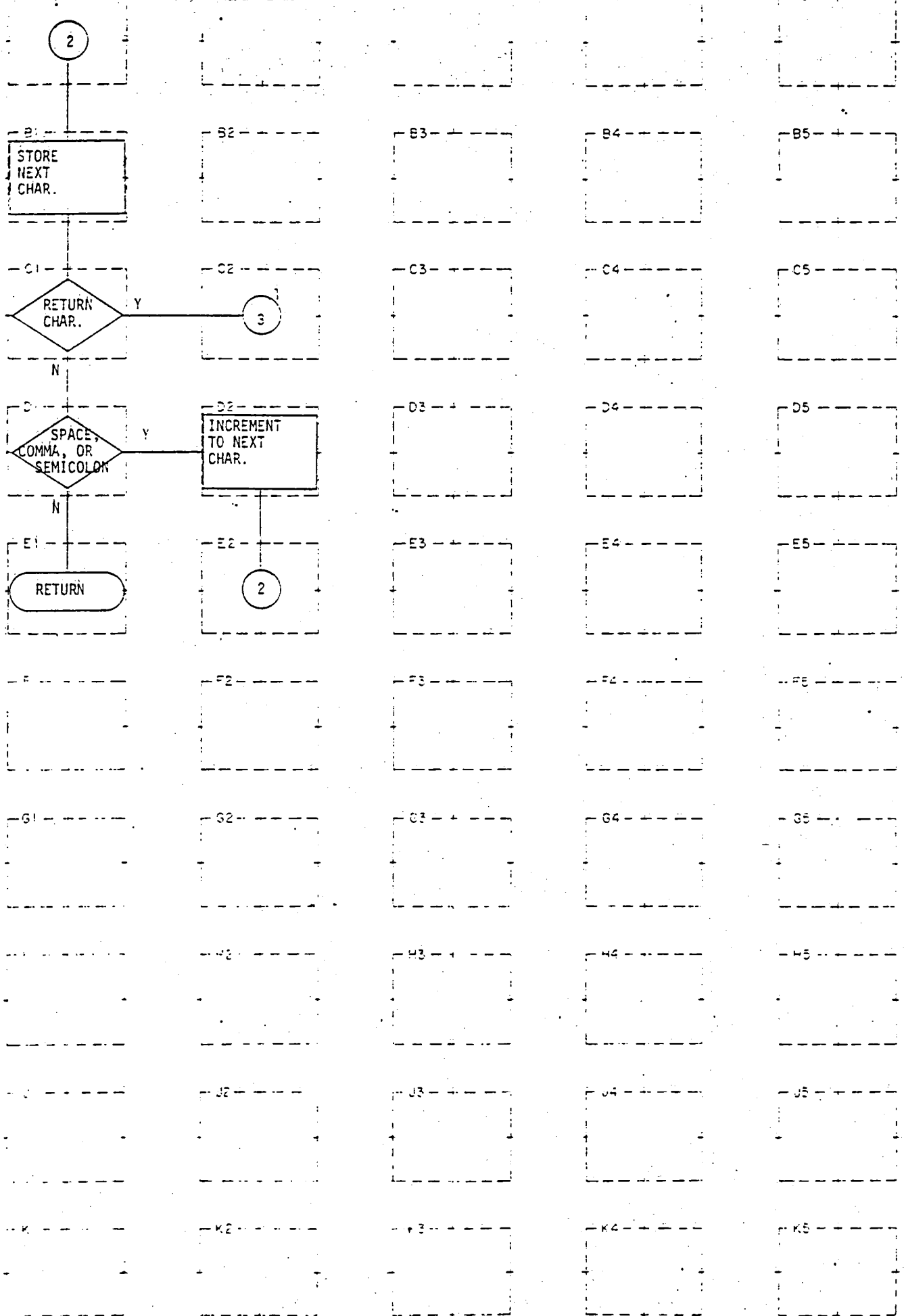


Figure 5.4.4-4

A1
B1 CHAR=BUF(PEDL)
C1 (CHAR.EQ.ANL)
D1 CHAR.NE.ASP.AND.CHAR.NE.ACOMMA.AND.CHAR.NE.ASCOL)
E1
F1
G1
H1
J1
K1
A2
B2
C2
D2 PEDL=PEDL+1
E2
F2
G2
H2
J2
K2
A3
B3
C3
D3
E3

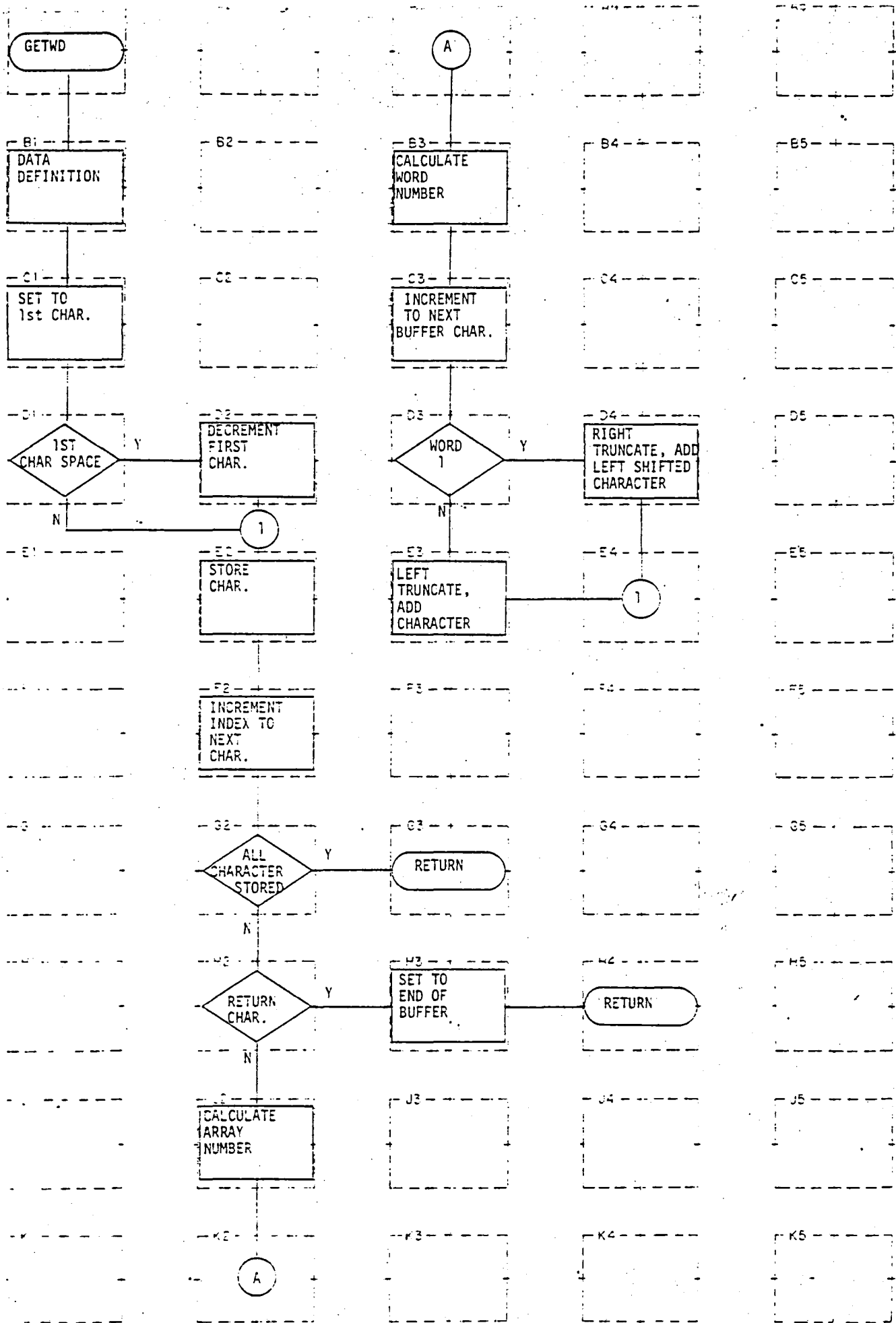


Figure 5.4.4-5

```

A1
B1  COMMON/X/PEDL; INTEGER
C1  DO 100 I=1,19; NAME(I)=ASPSP; N=1
D1  (BUFF(1).NE.ASP)
E1
F1
G1
H1
J1
K1
A2
B2
C2
D2  DO 999 I=2,77; II=I-1; BUFF(II)=BUFF(I)
E2  CHAR=BUFF(PEDL)
F2  PEDL=PEDL+1
G2  IPEDL.GT.77)
H2  (CHAR.EQ.ANL)
J2  I=(N+1)/2
K2
A3
B3  J=N-2*(N/2)
C3  N=N+1
D3  (J.EQ.1)
E3  NAME(I)=LT(NAME(I),8)+CHAR

```

F3

G3

H3 PEDL=77

J3

K3

A4

B4

C4

D4 NAME(I)=RT(NAME(I),8)+LS(CHAR,8)

E4

F4 -

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

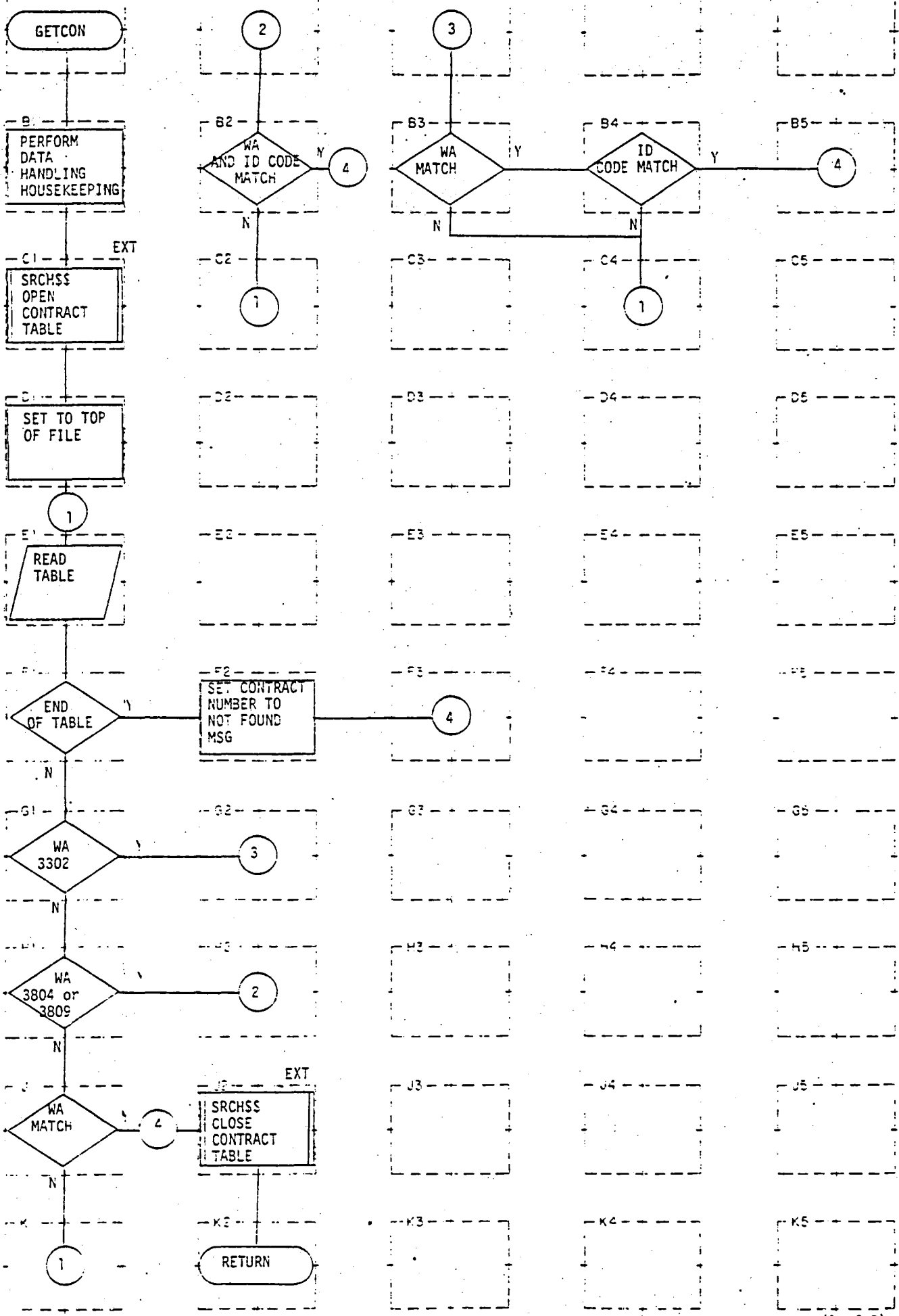


Figure 5.4.4-6

```

A1
B1  $INSERT COMMON; $INSERT SYSCOM>KEYS.F
C1  SRCHSS (KSRDWR+KSN DAM,'CTAB',6,14,IT,IC)
D1  REWIND 18
E1  READ(18,655,END=690)WA,CON
F1  see E1
G1  (WAN(1).EQ.'33'.AND.WAN(2).EQ.'02')
H1  (WAN(1).EQ.'38'.AND.WAN(2).EQ.'04'.OR.WAN(2).EQ.'09')
J1  (WAN(1).NE.WAN(1));(WAN(2).NE.WA(2))
K1
A2
B2  DO 665 I=1,4; (WAN(I).NE.WA(I))
C2
D2
E2
F2  CON(1)='WA N'; CON(2)='OT F'; CON(3)='OUND'; CON(4)='SEE';
    CON(5)='RJK'
G2
H2
J2  SRCHSS(KSCLOS,'CTAB',6,0,0,0)
K2
A3
B3  (WAN(1).NE.WA(1));(WAN(2).NE.WA(2))
C3
D3
E3

```

F3

G3

H3

J3

K3

A4

B4 (WAN(3).NE.'AB').AND.WAN(3).NE.'BA');(WAN(3).EQ.'AB'.AND.WA(3).EQ.'A');
(WAN(3).EQ.'BA'.AND.WA(3).EQ.'B')

C4

D4

E4

F4

G4

H4

J4

K4

A5

B5

C5

D5

E5

F5

G5

H5

J5

K5

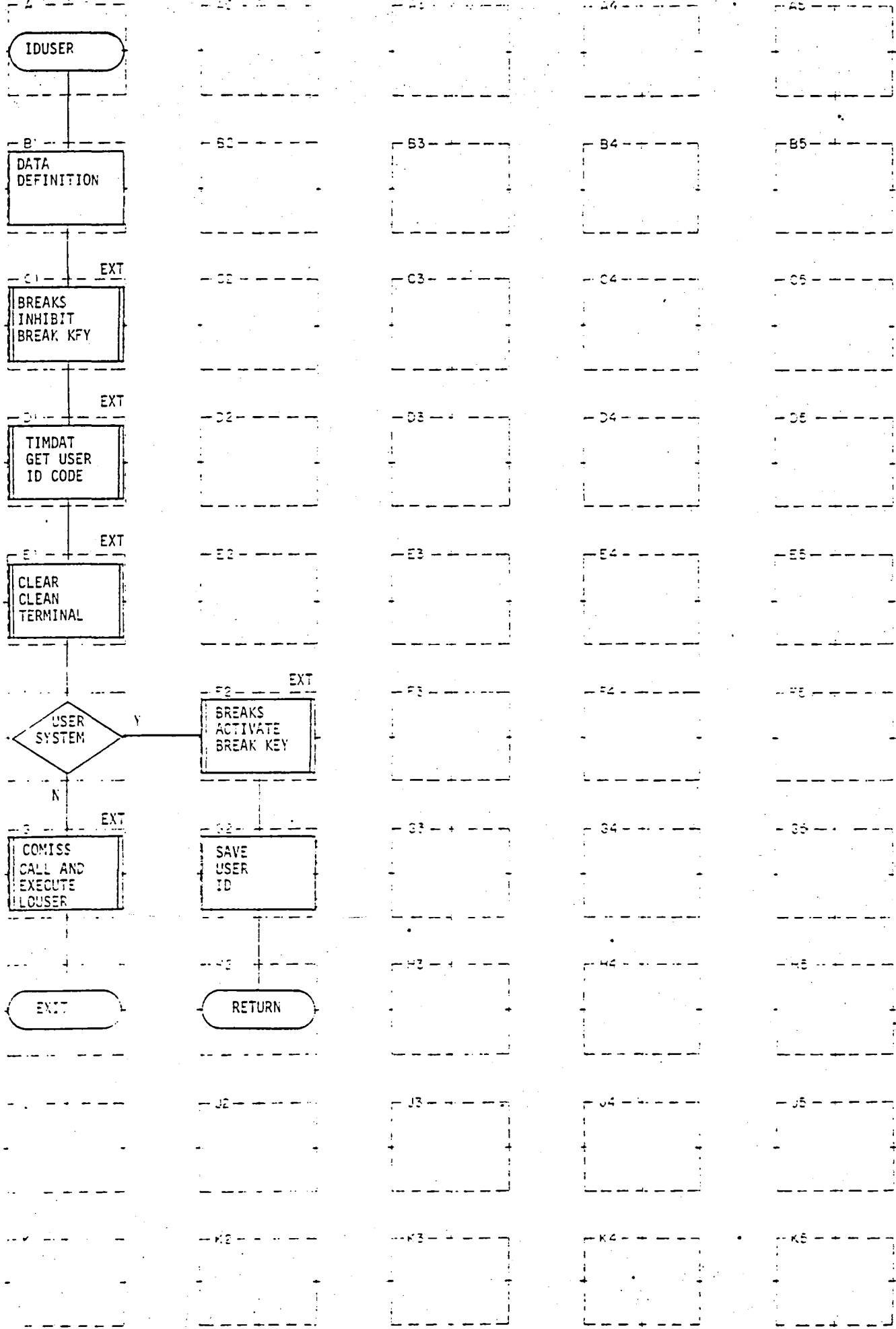


Figure 5.4.4-7

```
A1
B1    INTEGER*2
C1    BREAK$ (.TRUE.)
D1    TIMDAT (IA,15)
E1    CLEAR
F1    (IA(13).NE.'SY'); (IA(14).NE.'ST'); (IA(15).NE.'EM')
G1    COMISS ('LOUSER',6,12,IC)
H1
J1
K1
A2
B2
C2
D2
E2
F2    BREAKS(.FALSE.)
G2    IAI=IA(13)
H2
J2
K2
A3
B3
C3
D3
E3
```

6.0 DATA BASE DESIGN

6.1 FILE STRUCTURE

6.1.1 DATA SUBFILES

6.1.1.1 MAIL CORRESPONDENCE DATA

The Mail Correspondence portion of the Mail Log data base is further subdivided into six (6) subfiles representing the six (6) types of documents. There also exists a seventh data file used for storage of special action due date items. This file provides fast and efficient access to data during the ACTION DUE DATE SEARCH, see Section 4.1.22, which is otherwise scattered throughout the six (6) data subfiles listed below:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>FUNIT</u>	<u>PUNIT</u>
TRAN	TRANSMITTALS and SPECIFICATIONS	6	2
ACTD	ACTION DUE DATE	9	5
MEMO	MEMO's and LETTERS	11	7
TWFX	TWX's, MAGNAFAX's and RAPIFAX's	12	8
ANN	ANNOUNCEMENTS	13	9
PR	PURCHASE REQUESTS	14	10
MIS	MISCELLANEOUS DOCUMENTS and REPORTS	15	11

6.1.1.2 DESIGN INFORMATION RELEASE/REPORT DATA

The Design Information portion of the Mail Log data base consists of one (1) subfile.

<u>NAME</u>	<u>DESCRIPTION</u>	<u>FUNIT</u>	<u>PUNIT</u>
DIR	DIR's and REPORT's	6	2

6.1.1.3 DRAWING/ENGINEERING ORDER DATA

The Drawing portion of the Mail Log data base is further subdivided into three (3) subfiles:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>FUNIT</u>	<u>PUNIT</u>
DRAW	DRAWING	6	2
SHEET	SHEET	12	8
EO	ENGINEERING ORDERS (E.O.'s)	18	14

The DRAWING subfile contains all sheet one (1) information pertaining to a specific drawing. If the drawing has more than one (1) sheet, additional information pertaining to each following sheet is contained in the SHEET subfile. Therefore, the DRAWING and SHEET subfiles together form all drawing data contained within the data base. The E.O. subfile contains pertinent information related to all Engineering Orders.

6.1.2 STORAGE FILES

6.1.2.1 MAIL CORRESPONDENCE

All archived document records are stored in one (1) of two (2) inactive files called INACTS or INACTL. Transmittal data records which are actively stored in the TRAN subfile (see Section 6.1.1.1), will be archived to INACTL. Any data records which are actively stored in any of the other five (5) subfiles will be archived to INACTS. These data records do not contain the sixteenth data item, DESCRIPTION, which is found only in the TRANSMITTAL subfile.

Another storage file, called USER, is used to record the user ID, time, date, and terminal location number for each entry.

<u>NAME</u>	<u>DESCRIPTION</u>	<u>FUNIT</u>	<u>PUNIT</u>
INACTL	INACTIVE FILE (LONG RECORDS)	9	5
INACTS	INACTIVE FILE (SHORT RECORDS)	9	5
USER	USER LOG	19	15

6.1.2.2 DESIGN INFORMATION RELEASE/REPORT

All DIR/REPORT data records are stored in an inactive file called INACT when archived.

Another storage file, called USER, is used to record the user ID, time, date, and terminal location number for each entry.

<u>NAME</u>	<u>DESCRIPTION</u>	<u>FUNIT</u>	<u>PUNIT</u>
INACT	INACTIVE FILE	9	5
USER	USER LOG	19	15

6.1.2.3 DRAWING/ENGINEERING ORDER

Each of the three (3) data subfiles described in Section 6.1.1.3 has a corresponding inactive file for archive purposes. The DRAW subfile data

records are archived to INACTD. The SHEET subfile data records are archived to INACTS. Finally, the EO subfile data is archived to INACTE.

Another storage file, called USER, is used to record the user ID, time, date, and terminal location number for each entry.

<u>NAME</u>	<u>DESCRIPTION</u>	<u>FUNIT</u>	<u>PUNIT</u>
INACTD	INACTIVE FILE (DRAW)	9	5
INACTS	INACTIVE FILE (SHEET)	11	7
INACTE	INACTIVE FILE (EO)	17	13
USER	USER LOG	19	15

6.1.3 TEMPORARY WORKING STORES

6.1.3.1 MAIL CORRESPONDENCE

The CORRESPONDENCE program uses several temporary working storage files for outputting, rebuilding, restructuring, or sorting various subfile data records.

<u>NAME</u>	<u>DESCRIPTION</u>	<u>FUNIT</u>	<u>PUNIT</u>
OUT	OUTPUT FILE	7	3
REVS	REVISION DATA FILE	8	4
DATE	CURRENT DATE & DAILY DOCUMENT COUNTER	10	6
IM	DAILY INCOMING MAIL	16	12
OM	DAILY OUTGOING MAIL	17	13
VC	DAILY VOUGHT CORRESPONDENCE	18	14
T1	SUBJECT SEARCH FOUND FILE	19	15
T2	SUBJECT SEARCH FOUND FILE	20	16

6.1.3.2 DESIGN INFORMATION RELEASE/REPORT

The DIR/REPORT program uses several temporary working storage files for outputting and rebuilding data records.

<u>NAME</u>	<u>DESCRIPTION</u>	<u>FUNIT</u>	<u>PUNIT</u>
OUT	OUTPUT FILE	7	3
REVS	REVISION DATA FILE	8	4
TEMP	REBUILDING DATA FILE	10	6
T1	TITLE SEARCH FOUND FILE	11	7
T2	TITLE SEARCH FOUND FILE	12	8

6.1.3.3 DRAWING/ENGINEERING ORDER

The DRAWING/E0 program uses several temporary working storage files for outputting and rebuilding data records.

<u>NAME</u>	<u>DESCRIPTION</u>	<u>FUNIT</u>	<u>PUNIT</u>
OUT	OUTPUT FILE	7	3
REVS	REVISION DATA FILE	8	4
TEMP	DRAW REBUILDING DATA FILE	10	6
ETEMP	EO REBUILDING DATA FILE	13	9
T1	TITLE SEARCH FOUND FILE	13	9
STEMP	SHEET REBUILDING DATA FILE	14	10
T2	TITLE SEARCH FOUND FILE	14	10

6.2 DATA RECORDS

This Section provides a description of each data record for all three (3) main MAIL LOG subfiles. A table of searchable data items is given along with the items formatted for output during the SEARCH MODE.

6.2.1 MAIL CORRESPONDENCE

The Correspondence data record for each document consists of up to sixteen (16) data items, as shown in Figure 6.2.1.1. All but the DAILY COUNTER are input manually by the operator. The INPUT DATE and DAILY COUNTER are assigned automatically by the computer software. The CONTRACT NUMBER may also be assigned by using the WA/ID CODE - CONTRACT TABLE, CTAB, described in Section 6.4.2. There are two (2) subjects stored in each data record: SUB, as indicated in Figure 6.2.1.1, is the searchable subject; PTIT, not shown in Figure 6.2.1.1, represents a complete subject which is used for output purposes. During the SEARCH MODE eleven (11) of these sixteen (16) data items are searchable with up to eight (8) data items being formatted for output. See Figures 6.2.1.2 and 6.2.1.3.

6.2.2 DESIGN INFORMATION RELEASE/REPORT

The DIR/REPORT data record for each document consists of up to nine (9) data items as shown in Figure 6.2.2.1. The CONTRACT NUMBER is assigned automatically by the WA/ID CODE - CONTRACT TABLE, CTAB, described in Section 6.4.2. The CONTRACT NUMBER is therefore never actually saved within the data record. There are two (2) titles stored in each data record: TIT, as indicated in Figure 6.2.2.1, is the searchable title; PTIT, not shown in Figure 6.2.2.1, represents a complete title which is used for output purposes.

During the SEARCH MODE eight (8) of nine (9) data items are searchable with the entire data record being formatted for output. See Figure 6.2.2.2.

6.2.3 DRAWING/ENGINEERING ORDER

All drawings are divided into two (2) subfiles: DRAW and SHEET. DRAW contains all first sheet data and items indicating any further sheets and

E.O.'s referenced. Each data record in this subfile contains up to ten (10) data items, as shown in Figure 6.2.3.1. There are two (2) titles stored in each data record: TIT, as indicated in Figure 6.2.3.1, is the searchable title; and PTIT represents the complete title which is used for output purposes.

If a drawing has more than one (1) sheet, each subsequent sheet forms a data record in the SHEET subfile. Each data record in this subfile contains up to five (5) data items as shown in Figure 6.2.3.1.

During the SEARCH MODE, the DRAWING subfiles contain eight (8) searchable data items with up to eight (8) data items being formatted for output. There also exists a ninth searchable data item, VENDOR CODE, which is actually a partial search on the DRAWING NUMBER data item. See Figure 6.2.3.2.

Engineering Order data records consist of up to six (6) data items, as shown in Figure 6.2.3.3. Each EO data record contains two (2) titles: ETIT, as indicated in Figure 6.2.3.3, is the searchable title; and EPTIT represents the complete title which is used for output purposes.

During the SEARCH MODE only two (2) of the data items are searchable with up to all six (6) items being formatted for output. See Figure 6.2.3.4.

Special information pertaining to the SEARCH MODE for all three (3) subfiles is given in Figure 6.2.3.5.

CORRESPONDENCE
RECORD DESCRIPTION

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>VARIABLE</u>	<u>SIZE</u>	<u>TYPE</u>
1	MAIL STATUS	MS	2 characters	ALPHA
2	AUTHOR/SOURCE	ATHR	28 characters	ALPHA
3	DOCUMENT DATE	DD	6 characters - MMDDYY	NUMERIC
4	TO/ADDRESSEE	TO	32 characters	ALPHA
5	DOCUMENT LETTER NUMBER	DLN	18 characters	ALPHA
6	SUBJECT	SUB	10 characters/word - 7 words	ALPHA
7	ROUTING	ROUT	3 characters - 6 entries	ALPHA
8	INPUT DATE	IDD	6 characters - MMDDYY	NUMERIC
9	DAILY COUNTER	COUNT	4 characters	NUMERIC
10	WA NUMBER/ID CODE	WA	8 characters	ALPHA
11	CONTRACT NUMBER	CONT	20 characters	ALPHA
12	ACTION DUE DATE	ADD	6 characters - MMDDYY	NUMERIC
13	REFERENCED DOCUMENTS	TWX	18 characters - 6 entries	ALPHA
14	FILE SYSTEM CODE	FSC	10 characters - 2 entries	ALPHA
15	RESPONSIBLE ENGINEER	NRE	3 characters - 3 entries	ALPHA
16	* DESCRIPTION	DDT	10 characters/word - 7 words - 30 entries	ALPHA

* ONLY USED IN TRANSMITTAL SUBFILE

FIGURE 6.2.1.1

CORRESPONDENCE
SEARCHABLE DATA ITEMS

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>SEARCHABLE</u>	<u>OUTPUT</u>
1	MAIL STATUS	*	
2	AUTHOR/SOURCE	*	
3	DOCUMENT DATE	*	
4	TO/ADDRESSEE	*	
5	DOCUMENT LETTER NUMBER	*	*
6	SUBJECT	*	*
7	ROUTING		
8	INPUT DATE	*	*
9	DAILY COUNTER		*
10	W.A. NUMBER/ID CODE	*	
11	CONTRACT NUMBER	*	
12	ACTION DUE DATE	*	**
13	REFERENCED DOCUMENTS		***
14	FILE SYSTEM CODE		*
15	RESPONSIBLE ENGINEER	*	**
16	**** DESCRIPTION		

* OUTPUT IN ALL SEARCHES

** ONLY OUTPUT DURING AN ACTION DUE SEARCH

*** OUTPUT IN ALL BUT AN ACTION DUE OR ALL SEARCH

**** ONLY USED IN TRANSMITTAL SUBFILE

FIGURE 6.2.1.2

CORRESPONDENCE

SEARCHES

<u>DESCRIPTION</u>	<u>SUBFILE SELECTION</u>	<u>TIME FRAME</u>
MAIL STATUS	ANY 6	ANY
AUTHOR	ANY 6	ANY
DOCUMENT DATE	ANY 6	DAY/MONTH/YEAR
TO	ANY 6	ANY
DOCUMENT LETTER NUMBER	ANY 6	ANY
SUBJECT	ANY 6	ANY
INPUT DATE	ANY 6	DAY/MONTH/YEAR
W.A. NUMBER/ID CODE	ANY 6	ANY
CONTRACT NUMBER	ANY 6	ANY
ACTION DUE	ALL 6	NONE
RESPONSIBLE ENGINEER	ANY 6	ANY
ALL	ANY 6	ANY

FIGURE 6.2.1.3

DIR/REPORT

RECORD DESCRIPTION

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>VARIABLE</u>	<u>SIZE</u>	<u>TYPE</u>
1	TITLE	TIT	10 characters/word - 7 words	ALPHA
2	DIR/REPORT NUMBER	DIR	14 characters	ALPHA
3	DATE	DT	6 characters - MMDDYY	NUMERIC
4	SYSTEM	SYS	4 characters - 3 entries	ALPHA
5	VEHICLE	VEH	4 characters - 2 entries	ALPHA
6	W.A. NUMBER/ID CODE	WAN	8 characters	ALPHA
7	* CONTRACT NUMBER	CONT	20 characters	ALPHA
8	REVISION	REV	2 characters	ALPHA
9	REVISION DATE	RDAT	6 characters - MMDDYY	NUMERIC

* NOT STORED IN DATA BASE SUBFILE
CONTAINED IN WA/CONTRACT TABLE

FIGURE 6.2.2.1

DIR/REPORT

SEARCHABLE DATA ITEMS

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>SEARCHABLE</u>	<u>OUTPUT</u>
1	TITLE	*	*
2	DIR/REPORT NUMBER	*	*
3	DATE	*	*
4	SYSTEM	*	*
5	VEHICLE	*	*
6	W.A. NUMBER/ID CODE	*	*
7	*** CONTRACT NUMBER	*	*
8	REVISION		*
9	REVISION DATE	**	*

** INCLUDED WITHIN THE DATE SEARCH
 *** NOT STORED IN DATA BASE SUBFILE
 CONTAINED IN W.A./CONTRACT TABLE

FIGURE 6.2.2.2

DRAWING RECORD DESCRIPTION

<u>ITEM NO.</u>	<u>DRAW SUBFILE DESCRIPTION</u>	<u>VARIABLE</u>	<u>SIZE</u>	<u>TYPE</u>
1	TITLE	TIT	10 characters/word - 7 words	ALPHA
2	DRAWING NUMBER	DRAW	14 characters	ALPHA
	* VENDOR CODE		3 characters	ALPHA
3	DATE	DT	6 characters - MMDDYY	NUMERIC
4	**SYSTEM	SYS	4 characters - 3 entries	ALPHA
5	VEHICLE	VEH	4 characters - 2 entries	ALPHA
6	**SECTION	SECT	12 characters	ALPHA
7	NUMBER OF SHEETS	NSHT	2 characters	NUMERIC
8	SHEET REVISION	FREV	2 characters	ALPHA
9	NUMBER OF E.O.'s	FNEO	2 characters	NUMERIC
10	E.O.'s REFERENCED	FEOREF	8 characters - 10 entries	ALPHA

<u>ITEM NO.</u>	<u>SHEET SUBFILE DESCRIPTION</u>	<u>VARIABLE</u>	<u>SIZE</u>	<u>TYPE</u>
1	DRAWING NUMBER	DRW	14 characters	ALPHA
2	SHEET NUMBER	SHTN	2 characters - 2 entries	NUMERIC
3	REVISION	REV	2 characters	ALPHA
4	NUMBER OF E.O.'s	NEO	2 characters	NUMERIC
5	E.O.'s REFERENCED	EOREF	8 characters - 10 entries	ALPHA

* CONTAINED WITHIN DRAWING NUMBER

**NOT CONTAINED IN DALLAS DATA

FIGURE 6.2.3.1

SEARCHABLE DRAWING DATA ITEMS

<u>ITEM NO.</u>	<u>DRAWING SUBFILE</u>	<u>SEARCHABLE</u>	<u>OUTPUT</u>
1	TITLE	*	*
2	DRAWING NUMBER	*	*
	VENDOR CODE	*	
3	DATE	*	*
4	SYSTEM	*	
5	VEHICLE	*	
6	SECTION	*	
7	NUMBER OF SHEETS		
8	SHEET REVISION		*
9	NUMBER OF E.O.'s	**	
10	E.O.'s REFERENCED	*	*
	<u>SHEET SUBFILE</u>		
1	DRAWING NUMBER		
2	SHEET NUMBER		*
3	REVISION		*
4	NUMBER OF E.O.'s		
5	E.O.'s REFERENCED		*

** NUMBER OF E.O.'s CHECKED WHEN PERFORMING A REVISION ACTION DUE SEARCH

FIGURE 6.2.3.2

ENGINEERING ORDER RECORD DESCRIPTION

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>VARIABLE</u>	<u>SIZE</u>	<u>TYPE</u>
1	* E.O. TITLE	ETIT	10 characters/word - 7 words	ALPHA
2	E.O. NUMBER	EON	8 characters	ALPHA
3	E.O. REVISION	EOREV	2 characters	ALPHA
4	E.O. DATE	EDT	6 characters - MMDDYY	NUMERIC
5	E.O. REVISION DATE	ERDT	6 characters - MMDDYY	NUMERIC
6	VEHICLE	EOVEH	4 characters - 2 entries	ALPHA

* NOT PRESENT IN DALLAS DATA

FIGURE 6.2.3.3

SEARCHABLE ENGINEERING ORDER DATA ITEMS

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>SEARCHABLE</u>	<u>OUTPUT</u>
1	E.O. TITLE		*
2	E.O. NUMBER	*	*
3	E.O. REVISION		*
4	E.O. DATE		*
5	E.O. REVISION DATE		*
6	VEHICLE	*	**

** NOT OUTPUT DURING A VEHICLE SEARCH

FIGURE 6.2.3.4

DRAWING/ENGINEERING ORDER SEARCHES

<u>DESCRIPTION</u>	<u>SPECIAL NOTATION</u>
DRAWING NUMBER	
DATE	DALLAS DATA ALL ONE DATE
SYSTEM	NOT APPLICABLE WITH DALLAS
SECTION	NOT APPLICABLE WITH DALLAS
VEHICLE	TWO OPTIONS: E.O.'s OR DRAWINGS
VENDOR CODE	
TITLE	**
REVISION ACTION DUE	FIVE (5) OR MORE E.O.'s
ALL	TWO OPTIONS: E.O.'s OR DRAWINGS
E.O. NUMBER	TWO OPTIONS: E.O.'s OR DRAWINGS

** DALLAS DATA TITLES SOMETIMES
CONTAIN SYSTEM AND/OR SECTION

FIGURE 6.2.3.5

6.3 MISCELLANEOUS VARIABLES AND ARRAYS

This Section provides a description of all Miscellaneous Variables and Arrays used by each MAIL LOG subfile program. The following items are given for each:

- (A) Variable or Array name
- (B) Description of Variable or Array name
- (C) Size of Variable or Array in characters
- (D) Type of characters

6.3.1 MAIL CORRESPONDENCE

This Section provides a description of all variables and arrays used by the CORRESPONDENCE subroutines 4.1.1 through 4.1.29.

<u>VARIABLE/ARRAY</u>	<u>DESCRIPTION</u>	<u>SIZE</u>	<u>TYPE</u>
A	ARRAY CONTAINING USER ID	30	ALPHA
BLNK	BLANK	2	ALPHA
CD	CURRENT DATE IN JULIAN	DOUBLE PRECISION	NUMERIC
CON	CONTRACT NUMBER	20	ALPHA
COUNTR	DAILY COUNTER STORAGE	4	NUMERIC
D	DESIRED INPUT DATE	6	NUMERIC
DA	DESIRED AUTHOR	28	ALPHA
DDD	DESIRED DOCUMENT DATE	6	NUMERIC
DE	RESPONSIBLE ENGINEER FOR ACTION DUE	3	ALPHA
DF	FILE SYSTEM CODE FOR ACTION DUE	10	ALPHA
DL	DESIRED DOCUMENT LETTER NUMBER	18	ALPHA
DM	DESIRED MAIL STATUS	2	ALPHA
DOC	DOCUMENT RECORD COUNTER FOR EACH SUBJECT FOUND USING WORD SEARCH	2	NUMERIC
DPT	PRINT SUBJECT FOR ACTION DUE	77	ALPHA
DRE	DESIRED RESPONSIBLE ENGINEER	3	ALPHA
DTO	DESIRED ADDRESSEE/TO	32	ALPHA
DW	DESIRED CONTRACT NUMBER	20	ALPHA
FINISH	FLAG FOR REVISION OF DATA BASE COMPLETED	1	NUMERIC
FVD	FIRST VALID DATE	6	NUMERIC
IA	CHANGE IN TRAN SUBFILE FLAG	1	NUMERIC
IACT	ACTION DUE DATE	6	NUMERIC
IAN	USER RESPONSE STORAGE	2	ALPHA
IANN	ANNOUNCEMENT SUBFILE OPEN FLAG	1	NUMERIC
IANS	SUBFILE SELECTOR VALUE	2	NUMERIC
ICON	NUMBER OF WORDS IN SUBJECT TO BE SEARCHED	2	NUMERIC
ICOUN	DESIRED DAILY COUNTER	4	NUMERIC

<u>VARIABLE/ARRAY</u>	<u>DESCRIPTION</u>	<u>SIZE</u>	<u>TYPE</u>
ICOUNT	FILE DAILY RECORD COUNTER	4	NUMERIC
ICURR	CURRENT DATE	6	NUMERIC
ID	DAY	2	NUMERIC
IDES	USER RESPONSE FOR SEARCH MODE	2 char.- 2 entries	ALPHA
IDIFF	DIFFERENCE BETWEEN ICURR AND IACT	6	NUMERIC
IEX	WORDS USED FOR SUBJECT SEARCH	10 char.- 4 entries	ALPHA
IFILE	NUMBER OF FILES TO BE OPENED OR SPECIFIC FILE TO BE INPUT	2	NUMERIC
IHARD	COMPLETE OUTPUT OPTION FLAG	1	NUMERIC
IKNT	NUMBER OF DATA ITEMS TO BE REVISED	2	NUMERIC
ILINE	ARRAY LINE COUNTER	2	NUMERIC
ILP	NUMBER OF DESCRIPTIONS TO BE INPUT	2	NUMERIC
IM	MONTH	2	NUMERIC
IMELE	MEMO LETTER SUBFILE OPEN FLAG	1	NUMERIC
IMIS	MISCELLANEOUS SUBFILE OPEN FLAG	1	NUMERIC
IN	INPUT FILE FUNIT	2	NUMERIC
IO	OUTPUT FILE FUNIT	2	NUMERIC
IOPT	USER RESPONSE STORAGE	2	ALPHA
IPAGE	PAGE LINE COUNTER OR FIRST MATCH FOUND FLAG	2	NUMERIC
IPR	PURCHASE REQUEST SUBFILE OPEN FLAG	1	NUMERIC
IPRINT	TOP OF PAGE FLAG	1	NUMERIC
IR	NUMBER OF A DATA ITEM TO BE REVISED	2	NUMERIC
IREAD	FINISHED READING ALL SUBFILES FLAG	1	NUMERIC
IRR	FIRST TIME SEARCH FLAG	1	NUMERIC
IT	TEMPORARY SUBJECT STORAGE	77	ALPHA
ITEM	DATA ITEM NUMBER INDICATOR	2	NUMERIC
ITRSP	TRANSMITTAL SUBFILE OPEN FLAG	1	NUMERIC
ITWFX	TWX SUBFILE OPEN FLAG	1	NUMERIC
IY	YEAR	2	NUMERIC
JOUT	SPOOL NEW DATA OUTPUT AGAIN FLAG	1	NUMERIC
KNT	DOCUMENTS FOUND COUNTER	4	NUMERIC

<u>VARIABLE/ARRAY</u>	<u>DESCRIPTION</u>	<u>SIZE</u>	<u>TYPE</u>
KT	DAILY COUNTER FOR ACTION DUE	4	NUMERIC
LEN	NUMBER OF CHARACTERS/WORD	2	NUMERIC
LVD	LAST VALID DATE	6	NUMERIC
R	INPUT-REVISE FLAG	1	NUMERIC
T1	SUBJECT SEARCH WORD COUNTER	2	NUMERIC
TFVD	FIRST VALID DATE IN JULIAN	DOUBLE PRECISION	NUMERIC
TIM	DOCUMENT DATE IN JULIAN	DOUBLE PRECISION	NUMERIC
TJ	RETURN VALUE FROM JTIME SUBROUTINE	DOUBLE PRECISION	NUMERIC
TJUL	RETURN VALUE FROM JTIME SUBROUTINE	DOUBLE PRECISION	NUMERIC
TLVD	LAST VALID DATE IN JULIAN	DOUBLE PRECISION	NUMERIC
WA	DESIRED WA/ID CODE	8	ALPHA

6.3.2 DESIGN INFORMATION RELEASE/REPORT

This Section provides a description of all variables and arrays used in the DIR/REPORT subroutines 4.2.1 through 4.2.16.

<u>VARIABLE/ARRAY</u>	<u>DESCRIPTION</u>	<u>SIZE</u>	<u>TYPE</u>
A	ARRAY CONTAINING USER ID	30	ALPHA
BLNK	BLANK	2	ALPHA
CON	CONTRACT NUMBER	20	ALPHA
D	DATE	6	NUMERIC
DC	DESIRED CONTRACT NUMBER	20	ALPHA
DIRR	DIR/REPORT NUMBER	14	ALPHA
DOC	DOCUMENT RECORD COUNTER FOR EACH DIR/REPORT FOUND DURING WORD TITLE SEARCH	2	NUMERIC
DS	DESIRED SYSTEM	12	ALPHA
DWA	DESIRED WA NUMBER	8	ALPHA
FINISH	FLAG FOR REVISION OF DATA BASE COMPLETED	1	NUMERIC
IAN5	USER RESPONSE STORAGE	1	ALPHA
IC	RETURN ERROR CODE	2	NUMERIC
ICON	NUMBER OF WORDS TO SEARCH IN TITLE	2	NUMERIC
IDIR	DIR/REPORT NUMBER STORAGE	14	ALPHA
IDR	DIR/REPORT NUMBER STORAGE	14	ALPHA
IKNT	NUMBER OF RECORD TO BE ARCHIVED	2	NUMERIC
IN	INPUT FILE FUNIT	2	NUMERIC
IO	OUTPUT FILE FUNIT	2	NUMERIC
IOPT	USER RESPONSE STORAGE	2	ALPHA
IPAS	PASSWORD FOR UFD ATTACHMENT	2	ALPHA
IR	NUMBER OF A DATA ITEM TO BE REVISED	2	NUMERIC
IT	FILE TYPE OR TEMPORARY TITLE	2 or 77	ALPHA
ITY	FILE TYPE RETURN CODE	2	NUMERIC
KNT	DIR/REPORT FOUND COUNTER	4	NUMERIC
LEN	NUMBER OF CHARACTERS/WORD	2	NUMERIC
R	INPUT-REVISE FLAG	1	NUMERIC

<u>VARIABLE/ARRAY</u>	<u>DESCRIPTION</u>	<u>SIZE</u>	<u>TYPE</u>
T1	TITLE SEARCH WORD COUNTER	1	NUMERIC
VEH1	DESIRED VEHICLE	4	ALPHA
VKNT	VEHICLE FOUND COUNTER	2	NUMERIC
VS	FIRST AND LAST VALID VEHICLE	8	ALPHA
WA	WORK AUTHORIZATION/ID CODE	8	ALPHA

6.3.3 DRAWING/ENGINEERING ORDER

This Section provides a description of all variables and arrays used in the DRAWING/E.O. subroutines 4.3.1 through 4.3.25.

<u>VARIABLE/ARRAY</u>	<u>DESCRIPTION</u>	<u>SIZE</u>	<u>TYPE</u>
A	ARRAY CONTAINING USER ID	30	ALPHA
BLNK	BLANK	2	ALPHA
COD	VENDOR CODE PORTION OF THE DRAWING NUMBER	3	ALPHA
D	DATE DESIRED	6	NUMERIC
DOC	DOCUMENT RECORD COUNTER FOR EACH DRAWING FOUND DURING WORD TITLE SEARCH	2	NUMERIC
DS	SYSTEM DESIRED	12	ALPHA
EOKNT	E.O. COUNTER FOR EACH SHEET	2	NUMERIC
FINISH	FLAG FOR REVISION OF DATA BASE COMPLETED	1	NUMERIC
FIRST	FLAG FOR FIRST SHEET OPERATION; DRAW SUBFILE	1	NUMERIC
IAN5	USER RESPONSE STORAGE	1	ALPHA
IC	RETURN ERROR CODE	2	NUMERIC
ICODE	DESIRED VENDOR CODE	3	ALPHA
ICON	NUMBER OF WORDS TO SEARCH IN TITLE	2	NUMERIC
ID5	USER RESPONSE STORAGE	2	ALPHA
IDR	TEMPORARY DRAWING NUMBER STORAGE	14	ALPHA
IDRAW	DRAWING NUMBER DESIRED	14	ALPHA
IEO	E.O. NUMBER DESIRED	8	ALPHA
IEOUP	E.O. UPDATE FLAG FOR NEW REVISION	1	NUMERIC
IEX	WORDS OF TITLE SEARCHED	10 char.- 4 entries	ALPHA
II	NUMBER OF E.O.'s ON 1ST SHEET	2	NUMERIC
IIEORF	REFERENCED E.O.'s FOR NEW SHEET	8 char.- 10 entries	ALPHA
IINEO	NUMBER OF E.O.'s FOR NEW SHEET	2	NUMERIC
IIREV	REVISION FOR NEW SHEET	2	ALPHA
IISHTN	SHEET NUMBER FOR NEW SHEET	4	NUMERIC
IKNT	NUMBER OF DATA ITEMS TO BE REVISED	2	NUMERIC
ILINE	OUTPUT PAGE LINE COUNTER	2	NUMERIC

<u>VARIABLE/ARRAY</u>	<u>DESCRIPTION</u>	<u>SIZE</u>	<u>TYPE</u>
IN	INPUT FILE FUNIT	2	NUMERIC
INEO	NUMBER OF E.O.'s FOR SHEET	2	NUMERIC
IO	OUTPUT FILE FUNIT	2	NUMERIC
IOPT	USER RESPONSE STORAGE	2	ALPHA
IPAGE	NEW PAGE FLAG	1	NUMERIC
IPAS	PASSWORD FOR UFD ATTACHMENT	6	ALPHA
IR	NUMBER OF A DATA ITEM TO BE REVISED	2	NUMERIC
ISECT	SECTION DESIRED	12	ALPHA
ISHT	SHEET NUMBER	4	NUMERIC
ISHTN	SHEET NUMBER	4	NUMERIC
IT	FILE TYPE OR TEMPORARY TITLE	2 or 77	ALPHA
ITY	FILE TYPE RETURN CODE	2	ALPHA
KNT	DRAWINGS FOUND COUNTER	4	NUMERIC
KNTT	SHEETS OF DRAWING FOUND COUNTER	2	NUMERIC
LEN	NUMBER OF CHARACTERS/WORD	2	NUMERIC
NEWSHT	NEW SHEET FLAG	1	NUMERIC
T1	TITLE SEARCH WORD COUNTER	1	NUMERIC
TTIT	TEMPORARY TITLE	77	ALPHA
VEH1	VEHICLE DESIRED	4	ALPHA
VS	FIRST AND LAST VALID VEHICLES	4 char.- 2 entries	ALPHA

6.3.4 GENERAL

This Section provides a description of all variables and arrays used in the general subroutines 4.4.1 through 4.4.7.

<u>VARIABLE/ARRAY</u>	<u>DESCRIPTION</u>	<u>SIZE</u>	<u>TYPE</u>
ACOMMA	COMMA CHARACTER	3	NUMERIC
AERASE	ERASE CHARACTER	3	NUMERIC
AH	ACTUAL HOURS	2	NUMERIC
AKILL	KILL CHARACTER	3	NUMERIC
AMIN	ACTUAL MINUTES	2	NUMERIC
ANL	NEW LINE CHARACTER	3	NUMERIC
ARRAY	ARRAY CONTAINING A TITLE WORD	30	ALPHA
ASCOL	SEMICOLON CHARACTER	3	NUMERIC
ASP	SPACE CHARACTER	3	NUMERIC
ASPS	RETURN CHARACTER	3	NUMERIC
BLNK	BLANK	2	ALPHA
BUF	TEMPORARY TITLE BUFFER	76	ALPHA
BUFF	TEMPORARY TITLE BUFFER	76	ALPHA
CON	CONTRACT NUMBER	20	ALPHA
CHAR	CHARACTER FROM TERMINAL	1	ALPHA
IA	RETURN ARRAY CONTAINING USER ID	30	ALPHA
IAI	RETURN ARRAY CONTAINING USER ID	30	ALPHA
IDM	MINUTES OF DAY	2	NUMERIC
IH	HOURS OF DAY	2	NUMERIC
IMIN	TEMPORARY MINUTE STORAGE	2	NUMERIC
IMM	MINUTES PASSED	2	NUMERIC
LEN	NUMBER OF CHARACTERS/WORD	2	NUMERIC
NAME	TITLE WORD BUILT	10	ALPHA
PEDL	NUMBER OF CHARACTER	2	NUMERIC
TIL	TEMPORARY TITLE BUILT	77	ALPHA
WA	WORK AUTHORIZATION/ID CODE	8	ALPHA

6.4 TABLES

This Section describes the tables used by the MAIL LOG software.

6.4.1 SYSCOM KEYS.F

Table SYSCOM KEYS.F represents the File System Key Definitions as shown:

```

-----
NOLIST
C
C   TABSET 6 11 28 69
C
  INTEGER*2 K$READ, K$WRIT, K$POSN, K$TRNC, K$RPOS, K$PRER, K$PREA,
X   K$POSR, K$POSA, K$CONV, K$RDWR, K$CLOS, K$DELE, K$EXST,
X   K$IUFD, K$ISEG, K$CACC, K$NSAM, K$NDAM, K$NSGS, K$NSGD,
X   K$CURR, K$IMFD, K$ICUR, K$SETC, K$SETH, K$ALLD, K$SPOS,
X   K$GOND, K$MSIZ, K$MENT, K$ENTR, K$SENT, K$GPOS, K$UPOS,
X   K$PROT, K$DTIM, K$DMPB, K$NRIN, K$SRIN, K$IRIN
C
  PARAMETER
X
X /*****
X /*
X /*
X /*      KEY DEFINITIONS
X /*
X /*
X /***** PRWF$$ *****/
X /*      ***** RWKEY *****
X   K$READ = :1,      /* READ
X   K$WRIT = :2,      /* WRITE
X   K$POSN = :3,      /* POSITION ONLY
X   K$TRNC = :4,      /* TRUNCATE
X   K$RPOS = :5,      /* READ CURRENT POSITION
X /*      ***** POSKEY *****
X   K$PRER = :0,      /* PRE-POSITION RELATIVE
X   K$PREA = :10,     /* PRE-POSITION ABSOLUTE
X   K$POSR = :20,     /* POST-POSITION RELATIVE
X   K$POSA = :30,     /* POST-POSITION ABSOLUTE
X /*      ***** MODE *****
X   K$CONV = :400,    /* CONVENIENT NUMBER OF WORDS
X /*
X /***** SRCH$$ *****/
X /*      ***** ACTION *****
X /* K$READ = :1,      /* OPEN FOR READ
X /* K$WRIT = :2,      /* OPEN FOR WRITE
X   K$RDWR = :3,      /* OPEN FOR READING AND WRITING
X   K$CLOS = :4,      /* CLOSE FILE UNIT
X   K$DELE = :5,      /* DELETE FILE
X   K$EXST = :6,      /* CHECK FILE'S EXISTENCE

```

```

X /*          ***** REF          *****
X   K$IUFD = :0,      /* FILE ENTRY IS IN UFD
X   K$ISEG = :100,   /* FILE ENTRY IS IN SEGMENT DIRECTORY
X   K$CACC = :1000,  /* CHANGE ACCESS
X /*          ***** NEWFIL        *****
X   K$NSAM = :0,     /* NEW SAM FILE
X   K$NDAM = :2000,  /* NEW DAM FILE
X   K$NSGS = :4000,  /* NEW SAM SEGMENT DIRECTORY
X   K$NSGD = :6000,  /* NEW DAM SEGMENT DIRECTORY
X   K$CURR = :17777, /* CURRENTLY ATTACHED UFD
X /*
X /***** ATCH$$ *****/
X /*          ***** KEY          *****
X   K$IMFD = :0,     /* UFD IS IN MFD
X   K$ICUR = :2,     /* UFD IS IN CURRENT UFD
X /*          ***** KEYMOD        *****
X   K$SETC = :0,     /* SET CURRENT UFD (DO NOT SET HOME)
X   K$SETH = :1,     /* SET HOME UFD (AS WELL AS CURRENT)
X /*          ***** NAME          *****
X   K$HOME = :0,     /* RETURN TO HOME UFD (KEY=K$IMFD)
X /*          ***** LDISK         *****
X   K$ALLD = :10000, /* SEARCH ALL DISKS
X /* K$CURR = :17777, /* SEARCH MFD OF CURRENT DISK
X /*
X /***** SGDR$$ *****/
X /*          ***** KEY          *****
X   K$SPOS = :1,     /* POSITION TO ENTRY NUMBER IN SEGDIR
X   K$GOND = :2,     /* POSITION TO END OF SEGDIR
X   K$GPOS = :3,     /* RETURN CURRENT ENTRY NUMBER
X   K$MSIZ = :4,     /* MAKE SEGDIR GIVEN NR OF ENTRIES
X   K$MVNT = :5,     /* MOVE FILE ENTRY TO NEW POSITION
X /*
X /***** RDEN$$ *****/
X /*          ***** KEY          *****
X /* K$READ = :1,     /* READ NEXT ENTRY
X   K$RSUB = :2,     /* READ NEXT SUB-ENTRY
X /* K$GPOS = :3,     /* RETURN CURRENT POSITION IN UFD
X   K$UPOS = :4,     /* POSITION IN UFD
X /*
X /***** SATR$$ *****/
X /*          ***** KEY          *****
X   K$PROT = :1,     /* SET PROTECTION
X   K$DTIM = :2,     /* SET DATE/TIME MODIFIED
X   K$DMPB = :3,     /* SET DUMPED BIT
X /*
X /***** ERRPR$$ *****/
X /*          ***** KEY          *****
X   K$NRIN = :0,     /* NEVER RETURN TO USER
X   K$SRIN = :1,     /* RETURN AFTER START COMMAND
X   K$IRIN = :2,     /* IMMEDIATE RETURN TO USER
X /*
X /*
X /*****

```

6.4.2 CTAB

Table CTAB represents the WORK AUTHORIZATION/ID CODE - CONTRACT NUMBER TABLE. This table is referenced in operation of the DIR/REPORT and CORRESPONDENCE subfiles only.

<u>WA/ID CODE</u>	<u>CONTRACT/TASK</u>	<u>WA/ID CODE</u>	<u>CONTRACT/TASK</u>
2902	I.R.&D.	3219	NAS1-6049
2903	BID/PROPOSAL	3221	NAS1-5610
3050	NAS1-1295	3223	NAS1-5883
3079	NAS1-900	3228	NAS1-5880
3081	NAS1-1113	3232	NAS1-6020
3082	NAS1-1255	3234	NAS1-6748
3089	NAS1-1255	3242	NAS1-6020
3091	NAS1-1481	3245	NAS1-6935
3116	NAS1-1807	3246	NAS1-6935
3117	NAS1-900	3258	NAS1-6868
3118	NAS1-1928	3263	NAS1-6957
3119	NAS1-1481	3270	NAS1-7199
3123	NAS1-2165	3275	NAS1-6935
3125	NAS1-2189	3282	NAS1-7256
3126	NAS1-1113	3284	NAS1-7256
3129	NAS1-2455	3288	A.F.4701-68-C-0252
3130	NAS1-1295	3293	NAS1-7256
3132	NAS1-1946	3300	NAS1-9258
3133	NAS1-1295	3302	NAS1-6935
3154	NAS1-2650	3302A	NAS1-6935-36
3157	NAS1-2165	3302B	NAS1-6935-41
3160	NAS1-2617	3303	ARMY-DAH60-70-C0041
3164	NAS1-3420	3305	A.F.4701-69-C-0392
3165	NAS1-3420	3313	NAS1-9994
3170	NAS1-3589	3329	NAS1-10534
3171	NAS1-3615	3333	NAS1-10000
3172	NAS1-3683	3334	NAS1-10000/TASK J
3176	NAS1-3657	3335	NAS1-10000/TASK M
3180	NAS1-3899	3336	NAS1-10000/TASK R
3182	NAS1-3899	3337	NAS1-10000/TASK S
3183	NAS1-3915	3340	NAS1-10500
3187	NAS1-4325	3341	NAS1-10500
3192	NAS1-3589	3342	NAS1-10500
3195	NAS1-5539	3343	NAS1-10500
3196	NAS1-4899	3347	NAS1-10848
3202	NAS1-4664	3354	NAS1-11000
3207	NAS1-4664	3359	NAS1-10000/TASK W
3210	NAS1-5592	3362	NAS1-10000/TASK V

WA/ID CODECONTRACT/TASK

3381	NAS1-12500
3382	NAS1-12500/TASK J
3383	NAS1-12500/TASK M
3384	NAS1-12500/TASK R
3385	NAS1-12500/TASK S
3507	NAS1-12500/TASK W
3525	NAS1-15000
3526	NAS1-15100
3527	NAS1-15100
3532	NAS1-14500
3801	NAS1-6024
3804AAAJ	NAS1-3405
3804AABM	NAS1-6020
3804EABB	NAS1-5369
3804EABN	NAS1-7888
3809AAAB	NAS1-1013
3809AAAD	NAS1-2215
3809AAAE	NAS1-2478
3809AAAF	NAS1-553
3809AAAH	NAS1-3311
3809AAAM	NAS1-4494
3809AAAN	NAS1-4664
3809BAAL	NAS1-1255
3809BAAM	NAS1-1255
3809EABP	NAS1-5539
3811	NAS1-2165
3812	NAS1-3420
3859	NAS1-3420

7.0 MAIL LOG OUTPUTS

Outputs generated by the SPADS MAIL LOG program are described and exhibited in Section 7.0 of the Program Summary and Specification Manual. If this document is not available, a similar set of outputs and descriptions may be found in Section 5.0 of the Operating Instructions Manual.

8.0 EXTERNAL CALLS

The purpose of this section is to provide a reference list for all subroutines used by, but external to, the SPADS MAIL LOG software package.

8.1 SYSTEM SOFTWARE ROUTINES

A description of each of the following routines may be found in the PRIME REFERENCE GUIDES:

PDR3110 - "File Management System"	(FMS)
PDR3106 - "Software Library"	(SL)
PDR3057 - "Fortran Programmer's Guide"	(FPG)

<u>ROUTINE</u>	<u>FMS</u>	<u>SL</u>	<u>FPG</u>
ATCH\$\$	X	X	X
BREAK\$	X	X	
CTIN	X	X	
CNAM\$\$	X	X	X
COMI\$\$	X	X	X
ENDFILE			X
EXIT	X		X
LS		X	X
LT		X	X
RECYCL	X	X	
RESU\$\$	X	X	X
REWIND			X
RT		X	X
SRCH\$\$	X	X	X
T10U		X	
TIMDAT	X		

8.2 MISCELLANEOUS ROUTINES

The following subroutines are used by the SPADS MAIL LOG software package, but are not found within the PRIMOS operation system. These routines are defined at load time and shown in Appendix E.

8.2.1 CLEAR

This subroutine is used to clear the user terminal. Appendix E, Figure 1 depicts the source code for this subroutine.

8.2.2 PAUS

This subroutine performs the following functions:

If many document records are found during a search and it is observed that needed information will soon disappear from the screen, the user may temporarily stop terminal display by depressing the space bar. Terminal display may be restarted by depressing the 'Q' key.

At this time the source code for this subroutine is not available. However, a routine used by this PAUS routine, CHKLIN, is available. Appendix E, Figure 2 depicts the source code for the Check Line subroutine.

8.2.3 JTIME

This subroutine is only used in the MAIL CORRESPONDENCE portion of program. This procedure converts a given date, month, date, and year, into Julian time. Appendix E, Figure 3 depicts the source code for this subroutine.

9.0 SPECIAL SUPPORT ROUTINES

The main body of the DRAWING/E.0. subfile data must be converted from magnetic tape to disk and reformatted for the SPADS MAIL LOG data base subfile structure. See Section 6.1.1.3.

To accomplish this conversion, the following steps and special support routines are used:

- (a) MAGRST data from tape to disk; designate data as DDATA file.
- (b) Manually examine the DDATA file using the EDITOR. Delete all records referencing to SEI's. Note: SEI's are usually the first 25 to 50 records on the file.
- (c) Begin execution of conversion by using routine PHASE 1. This is accomplished by entering R *PHASE 1. This routine picks out the necessary data from the Dallas data and builds a new data file called NEW.
- (d) PHASE 2 is executed in the same manner as PHASE 1. This routine modifies the vehicle numbers and builds a searchable title. The procedure also formats all data for data base subfile compatibility. The new data file constructed during this phase is called FINAL.
- (e) PHASE 2 has a checking routine called TTEST. This routine displays on the terminal each data record within FINAL.
- (f) PHASE 3 is actually made up of several subroutines which build the DRAW and SHEET subfiles from the FINAL data file. Each subfile has its own checking routine:
 - (1) DRAW is checked by TEST. The TEST routine builds an output file called OUT containing all DRAW data items for each data record.

(2) SHEET is checked by CHECKS. The CHECKS routine builds an output file called SHT containing all SHEET data items for each data record.

The output files must be manually spooled.

- (g) PHASE 4 must be executed overnight due its long running time. This routine builds the Engineering Order data file, E0, from the FINAL data file. Each E.O. number entered is checked for a previous entry. This process becomes progressively more time consuming as the E.O. data file builds and exceeds 1500 records.
- (h) All data subfiles must be transferred from the TRANSPOSEDRAW UFD to the F_DRAW UFD. After the old subfiles have been deleted or their names changed.
- (i) The E.O. data file may now be checked by executing an E.O. PRINT ALL search in the MAIL LOG program.

Note that all these routines are located in the TRANSPOSEDRAW UFD in MFD 1. The source code for each of these routines are given in Appendix F.

Figure 1	PHASE 1
Figure 2	PHASE 2
Figure 3	PHASE 3
Figure 4	PHASE 4
Figure 5	TTEST
Figure 6	TEST
Figure 7	CHECKS

