

Application Program

Y20-0346-0

**System/360 Problem Language Analyzer (PLAN) (DOS/OS)
(360A-CX-26X, 360A-CX-27X)**

Volume II – Flowcharts

System Manual

This manual contains detailed flowcharts showing the internal logic of the OS and DOS 360 Problem Language Analyzer (PLAN). It is intended to assist systems programmers and field engineers in obtaining a fuller understanding of the logic and programming aspects of the PLAN system.

RESTRICTED DISTRIBUTION

INTRODUCTION

THE CHARTS IN THIS MANUAL SHOW THE DETAILED LOGIC OF THE DOS/OS 360 PROBLEM LANGUAGE ANALYZER (PLAN). THEY SHOULD BE USEFUL TO THOSE DESIRING A BETTER UNDERSTANDING OF THE INTERNAL LOGIC OF THE PLAN SYSTEM.

THE CHARTS ARE ARRANGED IN TWO SECTIONS. SECTION 1 CONTAINS THE FLOWCHARTS FOR EXECUTABLE PLAN MODULES. SECTION 2 CONTAINS THE FLOWCHARTS FOR THE PLAN SUBROUTINES. THE FLOWCHART SYMBOLS ARE LABELED TO AGREE WITH THE CARD SEQUENCE NUMBERING FIELD IN THE SOURCE DECKS. THESE LABELS MAY BE USED TO CROSS REFERENCE THE FLOWCHARTS TO THE ASSEMBLER OR FORTRAN LISTINGS OF THE PLAN SYSTEM. VOLUMES III AND IV OF THE DOS/OS PLAN SYSTEMS MANUALS CONTAIN THE PROGRAM LISTINGS FOR DOS (Y20-0350) AND OS (Y20-0351). THE NARRATIVES DESCRIBING THESE FLOWCHARTS ARE FOUND IN VOLUME I OF THE DOS/OS PLAN SYSTEMS MANUAL (Y20-0345). EXTERNAL SPECIFICATIONS FOR THE MODULES SHOWN IN THIS MANUAL CAN BE FOUND IN THE PLAN PROGRAM DESCRIPTION MANUAL (H20-0594).

FOR MOST PLAN MODULES THE SAME PROGRAMMING SUFFICED FOR BOTH THE DOS AND OS VERSIONS OF PLAN. IN CASES WHERE THIS IS NOT TRUE SEPARATE FLOWCHARTS ARE PROVIDED FOR BOTH THE OS AND DOS MODULES.

THE INDEX THAT FOLLOWS IS ARRANGED IN ALPHABETICAL ORDER BY COMPONENT NAME.

First Edition (March 1969)

Significant changes or additions to the specifications contained in this publication will be reported in subsequent revisions or Technical Newsletters.

This edition applies to Version 1, Modification Level 0 of System/360 Problem Language Analyzer (PLAN) (DOS/OS) (360A-CX-26X, 360A-CX-27X) and to all subsequent versions and modifications until otherwise indicated in new editions or Technical Newsletters.

Changes are continually made to the specifications herein. Therefore, before using this publication, consult the latest System/360 SRL Newsletter (N20-0360) for the editions that are applicable and current.

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DOS/OS PLAN MODULE CHART DIRECTORY

NAME	DESCRIPTION	CHART
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GENERAL	PLAN SYSTEM LOGIC FLOW.....	GEN
DFJDIOCS	DOS SEQUENTIAL FILE ICCS ROUTINE.....	AAA
DFJCNTRL	DOS TRACE CONTROL ROUTINE.....	AAC
DFJCRDIR	OS IN-CORE DIRECTORY BUILD ROUTINE.....	AAE
DFJGMERG	DOS/OS PERMANENT FILE MERGE ROUTINE.....	AAG
DFJGSRTA	DOS/OS PERMANENT FILE SORT ROUTINE.....	AAI
DFJGSRTB	DOS/OS PERMANENT FILE SORT ROUTINE.....	AAK
DFJINIT	DOS FILE INITIALIZATION ROUTINE.....	AAM
DFJLLIST	CS JOBPAC BUILD ROUTINE.....	AAO
DFJLCDER	OS PROGRAM LOADER,SIOCS,DIOCS,CORE CLEAN....	AAQ
DFJPCDMP	DOS/OS COMMUNICATION ARRAY DUMP.....	AAS
DFJPCDIAG	DOS/OS LITERAL PROCESSING ROUTINE.....	AAU
DFJPEDMP	DOS/OS ERROR QUEUE FILE DUMP.....	AAW
DFJPERRS	DOS/OS ERROR MESSAGE PROCESSOR.....	AAZ
DFJPFDMF	DOS/OS FILE DUMP UTILITY.....	ABA
DFJPHRAS	DOS/OS PHRASE DICTIONARY MAINTENANCE.....	ABC
DFJPIDMP	DOS/OS COMMAND DUMP ROUTINE.....	ABE
DFJPIOCS	DOS/OS DEVICE SWITCHING ROUTINE.....	ABG
DFJPLAN	DOS RESIDENT MAINLINE.....	ABI
DFJPLAN	OS RESIDENT MAINLINE.....	ABK
DFJPLENG	DOS/OS PAGE LENGTH CONTROL ROUTINE.....	ABM
DFJPLITL	DOS/OS LITERAL PROCESSING ROUTINE.....	ABO
DFJPMERG	DOS/OS DYNAMIC FILE MERGE ROUTINE.....	AAG
DFJPSCAN	DOS/OS COMMAND PROCESSOR.....	ABQ
DFJPSRTB	DOS/OS DYNAMIC FILE SORT ROUTINE.....	AAK
DFJPSRTA	DOS/OS DYNAMIC FILE SORT ROUTINE.....	AAI
DFJPSTSV	DOS/OS STATEMENT SAVE PROCESSOR.....	ABS
DFJPTDMP	DOS/OS PHRASE TABLE DUMP ROUTINE.....	ABU
DFJPTDP1	DOS/OS DFJPTDMP LCACL MODULE.....	ABW
DFJPTDP2	DOS/OS DFJPTDMP LCACL MODULE.....	ABY
DFJPTDP3	DOS/OS DFJPTDMP LCACL MODULE.....	ACA
DFJPTDP5	DOS/OS DFJPTDMP LCACL MODULE.....	ACC
DFJPTDP6	DOS/OS DFJPTDMP LCACL MODULE.....	ACE
DFJRETN	DOS FINAL EXECUTION MODULE.....	ACM
DFJRETN	OS FINAL EXECUTION MODULE.....	ACO
DFJSIOCS	DOS SEQUENTIAL FILE ICCS ROUTINE.....	ACG
DFJTRACE	DOS TRACE FACILITY ROUTINE.....	ACI
DFJTRACE	OS TRACE FACILITY ROUTINE.....	ACK
\$\$BDFJD	DOS TRANSIENT DUMP ROUTINE.....	ACQ
\$\$BDFJDO	DOS TRANSIENT DIRECT ACCESS OPEN ROUTINE....	ACS
\$\$BDFJI	DOS TRANSIENT INITIALIZATION ROUTINE.....	ACU
\$\$BDFJSO	DOS TRANSIENT SEQUENTIAL FILE OPEN ROUTINE..	ACW

DOS/OS PLAN SUBROUTINE CHART DIRECTORY

NAME	DESCRIPTION	CHART
BREAK	DOS/OS UTILITY SUBROUTINE.....	BAA
CIOEN	OS COMMON ENTRY SUBROUTINE.....	BAC
CIOEP	OS COMMON ENTRY SUBROUTINE.....	BAC
DFJCGET	DOS/OS CONVERSION CONTROL SUBROUTINE.....	BAE
DFJDLOAD	DOS PROGRAM LOAD SUBROUTINE.....	BAG
DFJDSL	DOS/OS CONVERSION CONTROL SUBROUTINE.....	BAI
DFJFMAIN	DOS CORE DEALLOCATION SUBROUTINE.....	BAM
DFJGMAIN	DOS CORE ALLOCATION SUBROUTINE.....	BAO
DFJMPSCB	DOS PCB TABLE MOVE SUBROUTINE.....	BAQ
DFJPEOUT	DOS/OS E FORMAT CONVERSION SUBROUTINE.....	BAS
DFJPFOUT	DOS/OS F FORMAT CONVERSION SUBROUTINE.....	BAS
DFJPFIN	DOS/OS F FORMAT CONVERSION SUBROUTINE.....	BAU
DFJPIIN	DOS/OS I FORMAT CONVERSION SUBROUTINE.....	BAW
DFJPIOUT	DOS/OS I FORMAT CONVERSION SUBROUTINE.....	BAY
DFJSCHB	DOS DRIVE TABLE SEARCH SUBROUTINE.....	BBA
DFJSCHN	DOS FILE TABLE SEARCH SUBROUTINE.....	BBC
DFJSLOAD	DOS PROGRAM LOAD SUBROUTINE.....	BAG
DFJTCON	DOS IBCCM REPLACEMENT SUBROUTINE.....	BBE
DFJUMC	OS FREE CORE CONTROL SUBROUTINE.....	BBG
DFJUNC	OS FREE CORE CONTROL SUBROUTINE.....	BBG
ERLST	DOS/OS ERROR INTERFACE SUBROUTINE.....	BBI
ERRAT	DOS/OS ERROR INTERFACE SUBROUTINE.....	BBK
ERRET	DOS/OS ERROR INTERFACE SUBROUTINE.....	BBK
ERREX	DOS/OS ERROR INTERFACE SUBROUTINE.....	BBK
ERROR	DOS/OS ERROR INTERFACE SUBROUTINE.....	BBK
EUSER	DOS/OS USER-EXIT SUBROUTINE.....	BDE
EWRIT	DOS/OS ERROR INTERFACE SUBROUTINE.....	BBM
FALSE	DOS/OS UTILITY SUBROUTINE.....	BFC
FIND	DOS/OS DYNAMIC FILE PROCESSING ROUTINE.....	BBG
GDATA	DOS/OS PERMANENT FILE PROCESSING ROUTINE.....	BBQ
GDATA1	DOS/OS PERMANENT FILE PROCESSING ROUTINE.....	BBQ
GMERG	DOS/OS PERMANENT FILE MERGE SUBROUTINE.....	BBS
GSORT	DOS/OS PERMANENT FILE SORT SUBROUTINE.....	BBU
GTVAL	DOS/OS ARRAY TRANSMISSION SUBROUTINE.....	BFA
GUSER	DOS/OS USER-EXIT SUBROUTINE.....	BDE
INPUT	DOS/OS COMMAND PROCESSING SUBROUTINE.....	BBW
IOCS	DOS DEVICE SWITCHING SUBROUTINE.....	BBY
IOCS	OS DEVICE SWITCHING SUBROUTINE.....	BCA
IUSER	DOS/OS USER-EXIT SUBROUTINE.....	BDE

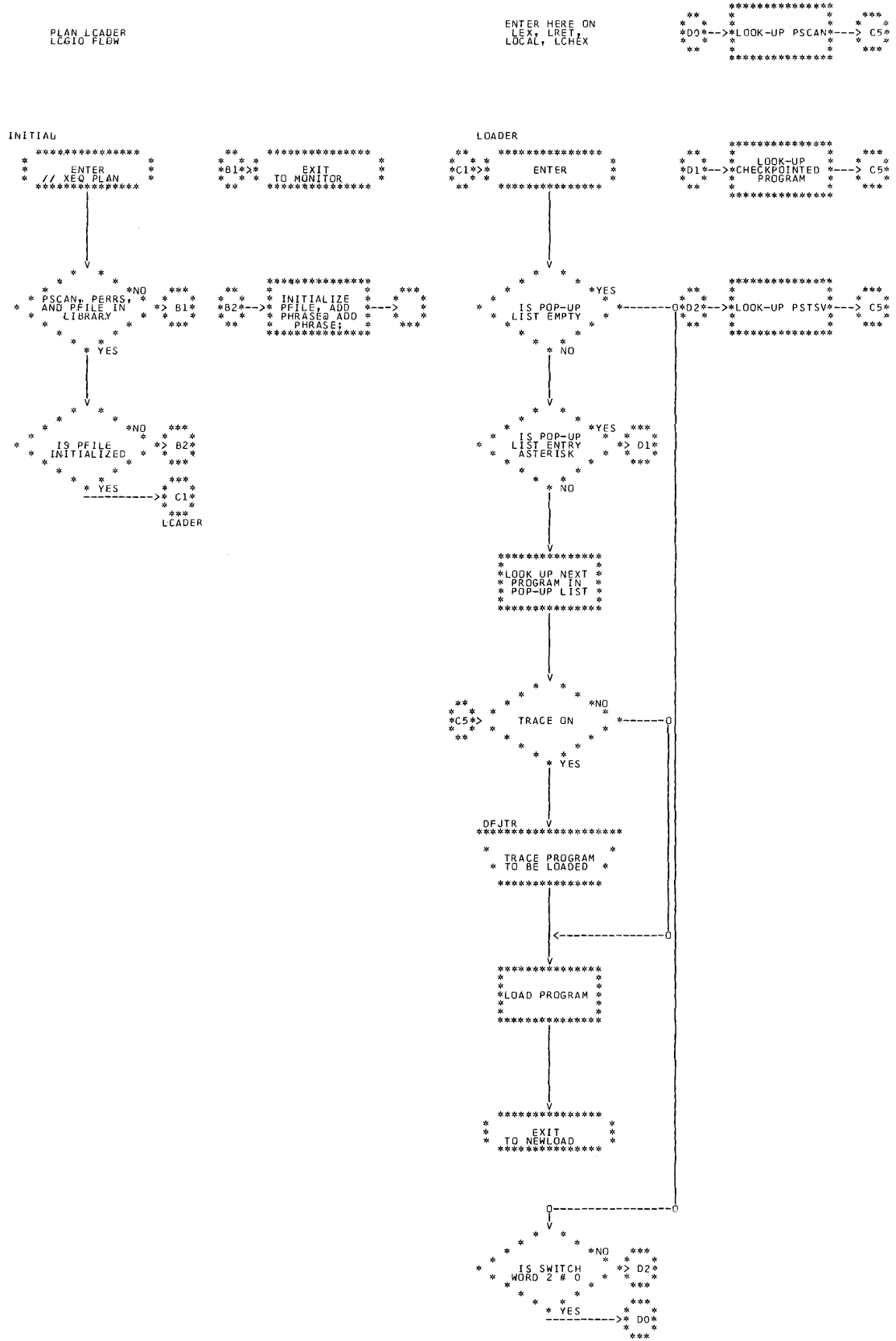
DOS/OS PLAN SUBROUTINE CHART DIRECTORY

NAME	DESCRIPTION	CHART
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LCHEX	DOS LOADER INTERFACE SUBROUTINE.....	BCC
LCHEX	OS LOADER INTERFACE SUBROUTINE.....	BCE
LEX	DOS/OS LOADER INTERFACE SUBROUTINE.....	BCG
LIST	DOS/OS LOADER INTERFACE SUBROUTINE.....	BCI
LISTB	DOS/OS LOADER INTERFACE SUBROUTINE.....	BCK
LNRET	DOS LOADER INTERFACE SUBROUTINE.....	BCM
LNRET	OS LOADER INTERFACE SUBROUTINE.....	BCO
LOCAL	DOS LOADER INTERFACE SUBROUTINE.....	BCQ
LOCAL	OS LOADER INTERFACE SUBROUTINE.....	BCS
LREPT	DOS/OS LOADER INTERFACE SUBROUTINE.....	BCU
LRET	DOS/OS LOADER INTERFACE SUBROUTINE.....	BCY
LRLD	DOS/OS LOADER INTERFACE SUBROUTINE.....	BDA
LSAV	DOS/OS LOADER INTERFACE SUBROUTINE.....	BDA
NDEF	DOS/OS UTILITY SUBROUTINE.....	BDC
NUSER	DOS/OS USER-EXIT SUBROUTINE.....	BDE
PAIN	DOS/OS A FORMAT CCNVERSION SUBROUTINE.....	BDG
PAOUT	DOS/OS A FORMAT CONVERSION SUBROUTINE.....	BDG
PARGI	DOS/OS ARRAY TRANSMISSIN SUBROUTINE.....	BDI
PARGO	DOS/OS ARRAY TRANSMISSIN SUBROUTINE.....	BDI
PBFTR	DOS/OS BUFFER TRANSFER SUBROUTINE.....	BDK
PBTST	DOS/OS BIT MANIPULATION SUBROUTINE.....	BDM
PCCTL	DOS/OS CARRIAGE CCNTROL SUBROUTINE.....	BDO
PCOMP	DOS/OS UTILITY SUBROUTINE.....	BDQ
PENDF	DOS SEQUENTIAL FILE CLOSE SUBROUTINE.....	BDS
PENDF	OS SEQUENTIAL FILE CLOSE SUBROUTINE.....	BDU
PEQF	DOS/OS SEQUENTIAL FILE EOF TEST ROUTINE.....	BDW
PEOUT	DOS/OS CONVERSION CONTROL SUBROUTINE.....	BDY
PFIN	DOS/OS CONVERSION CONTROL SUBROUTINE.....	BDY
PFND1	DOS/OS DYNAMIC FILE PROCESSING ROUTINE.....	BBO
PFOUT	DOS/OS CONVERSION CONTROL SUBROUTINE.....	BDY
PFSPC	DOS/OS DYNAMIC FILE TEST SUBROUTINE.....	BEA
PHIN	DOS/OS LITERAL PRGCESSING SUBROUTINE.....	BEC
PHOUT	DOS/OS LITERAL PROCESSING SUBROUTINE.....	BEE
PHJQE	DOS/OS UTILITY SUBROUTINE.....	BEG
PIDMP	DOS/OS PSCAN SPECIAL SUBROUTINE.....	BEI
PIIN	DOS/OS CONVERSION CONTROL SUBROUTINE.....	BDY
PIOC	DOS/OS SEQUENTIAL FILE TEST SUBROUTINE.....	BEK
PIOUT	DOS/OS CONVERSION CONTROL SUBROUTINE.....	BDY

DOS/OS PLAN SUBROUTINE CHART DIRECTORY

NAME	DESCRIPTION	CHART
----	-----	-----
PLINP	DOS/OS SEQUENTIAL FILE INPUT SUBROUTINE.....	BEM
PLOUT	DOS/OS SEQUENTIAL FILE OUTPUT SUBROUTINE.....	BEO
PMERG	DOS/OS DYNAMIC FILE MERGE SUBROUTINE.....	BBS
PPACK	DOS/OS UTILITY SUBROUTINE.....	BEQ
PPAGL	DOS/OS PAGE LENGTH CONTROL SUBROUTINE.....	BES
PRED1	DOS/OS DYNAMIC FILE PROCESSING ROUTINE.....	BBO
PREL1	DOS/OS DYNAMIC FILE PROCESSING ROUTINE.....	BBO
PSORT	DOS/OS DYNAMIC FILE SORT SUBROUTINE.....	BBU
PUNPK	DOS/OS UTILITY SUBROUTINE.....	BEU
PUSH	DOS/OS COMMAND PROCESSING SUBROUTINE.....	BEW
PWRT1	DOS/OS DYNAMIC FILE PROCESSING ROUTINE.....	BBO
READ	DOS/OS DYNAMIC FILE PROCESSING ROUTINE.....	BBO
RELES	DOS/OS DYNAMIC FILE PROCESSING ROUTINE.....	BBO
RDATA	DOS/OS PERMANENT FILE PROCESSING ROUTINE....	BEY
RDAT1	DOS/OS PERMANENT FILE PROCESSING ROUTINE....	BEY
STVAL	DOS/OS ARRAY TRANSMISSION SUBROUTINE.....	BFA
TRUE	DOS/OS UTILITY SUBROUTINE.....	BFC
WDATA	DOS/OS PERMANENT FILE PROCESSING ROUTINE....	BEY
WDAT1	DOS/OS PERMANENT FILE PROCESSING ROUTINE....	BEY
WRITE	DOS/OS DYNAMIC FILE PROCESSING ROUTINE.....	BBO
XACES	DOS/OS DFJPTDMP SPECIAL SUBROUTINE.....	BFE
XBIT	DOS/OS DFJPTDMP SPECIAL SUBROUTINE.....	BFG
XPRNT	DOS/OS DFJPTDMP SPECIAL SUBROUTINE.....	BFI
XTRAC	DOS/OS DFJPTDMP SPECIAL SUBROUTINE.....	BFK

CHART GEN: GENERAL PLAN LOGIC
GENERAL LOGIC OF THE PLAN SYSTEM



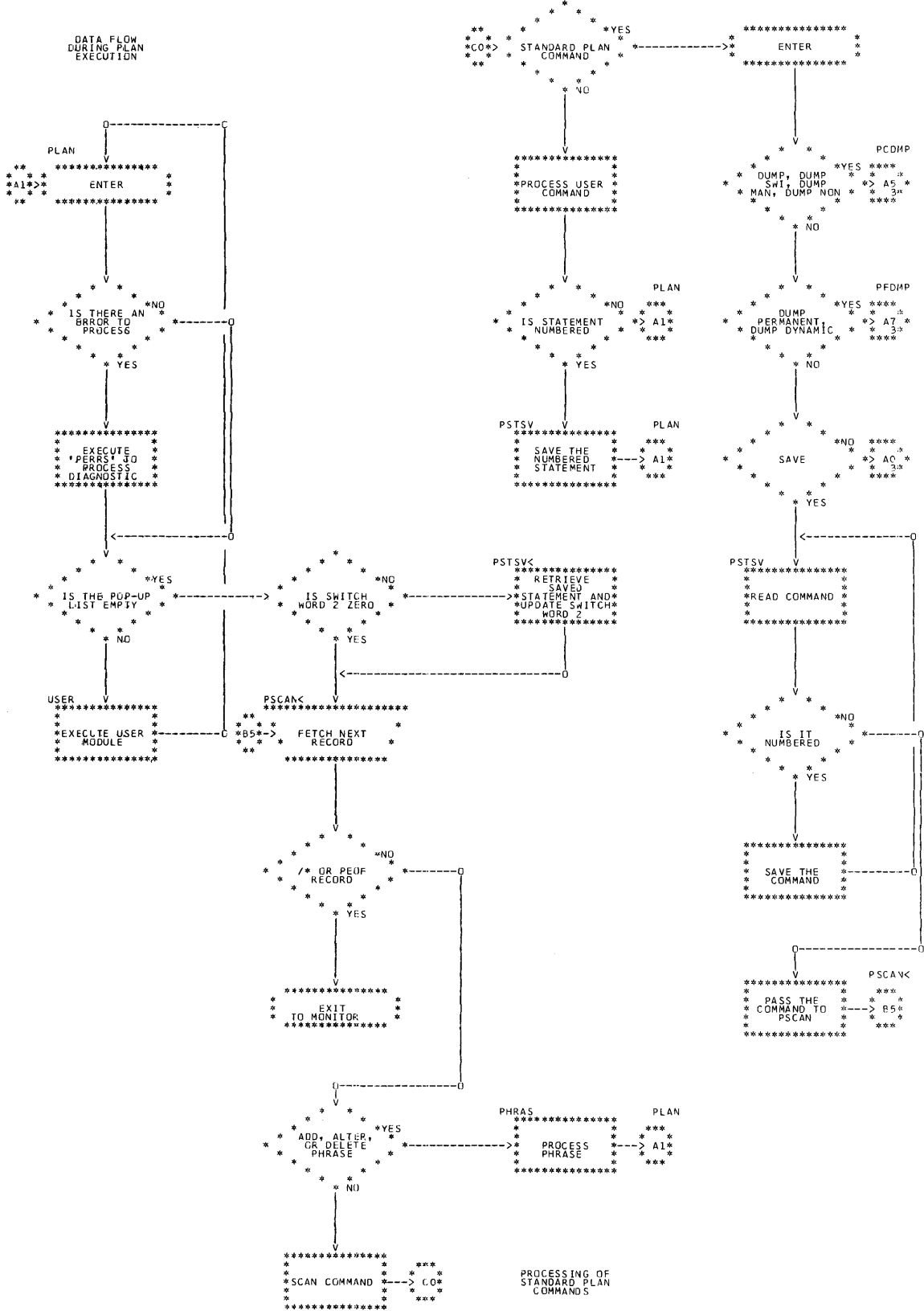


CHART GEN: GENERAL PLAN LOGIC
 GENERAL LOGIC OF THE PLAN SYSTEM

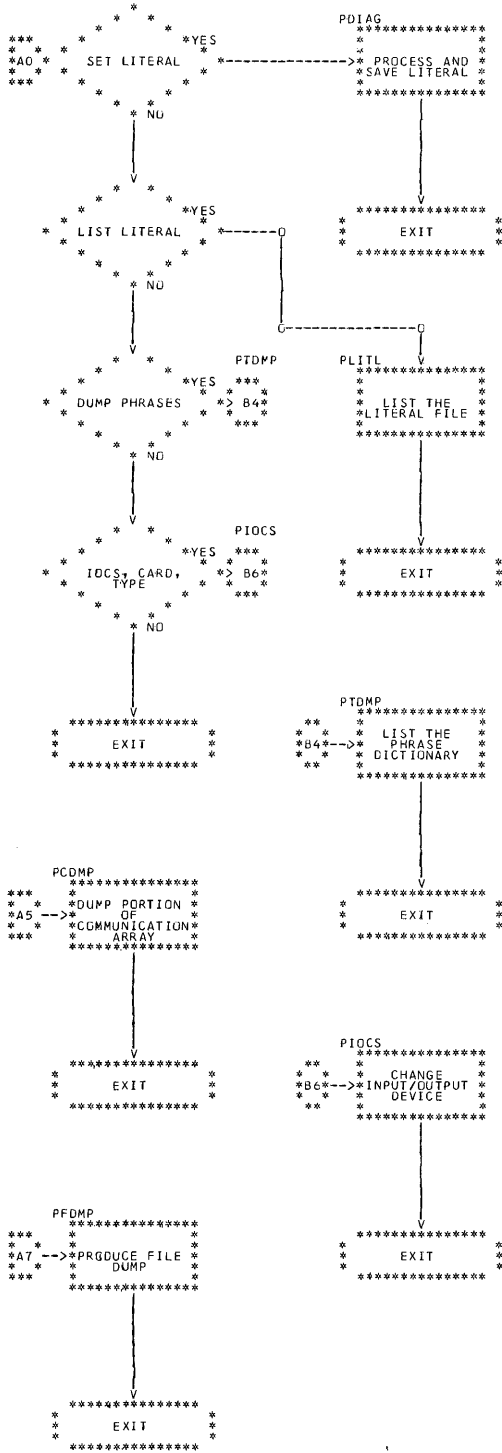


CHART GEN: GENERAL PLAN LOGIC
GENERAL LOGIC OF THE PLAN SYSTEM

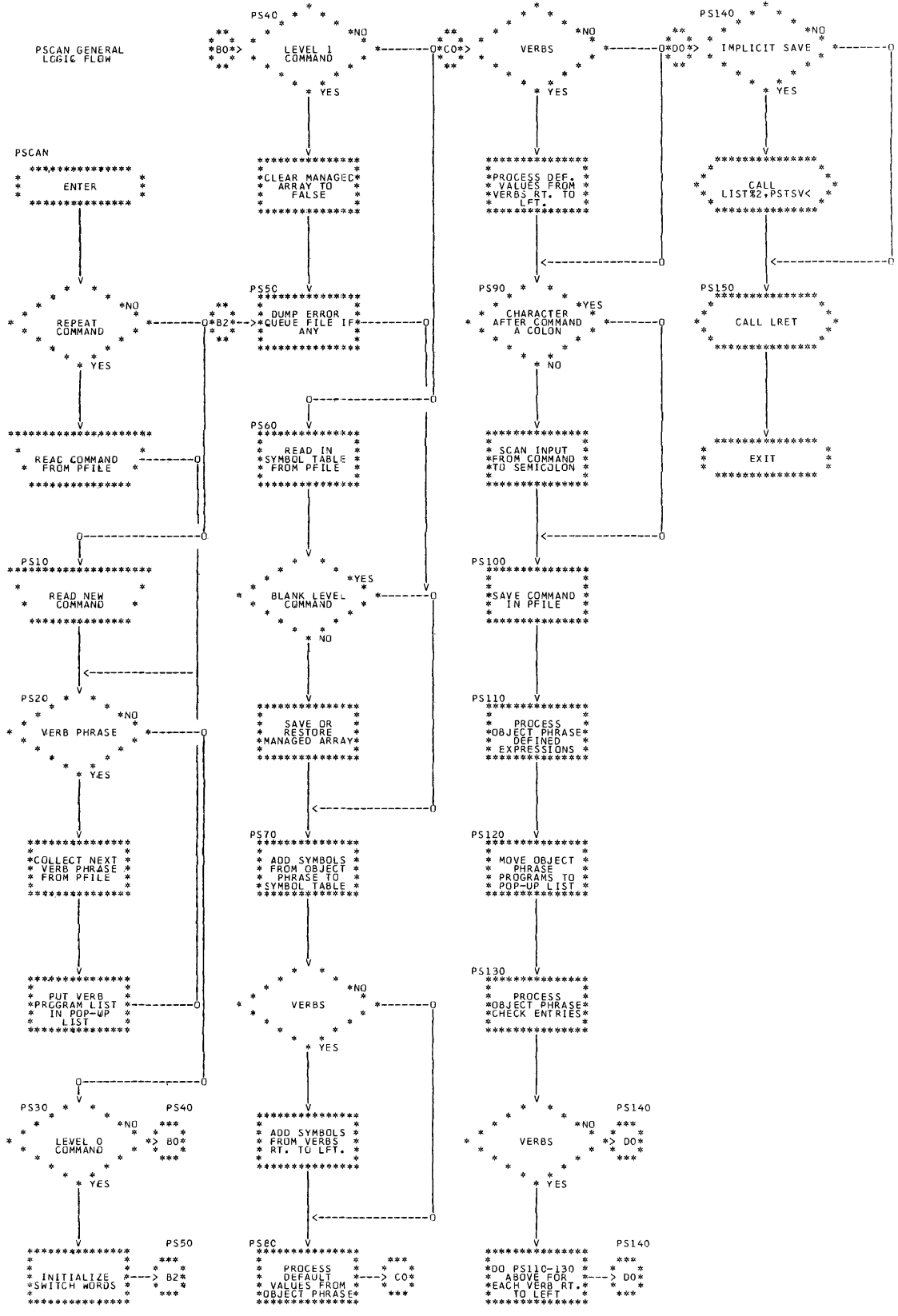
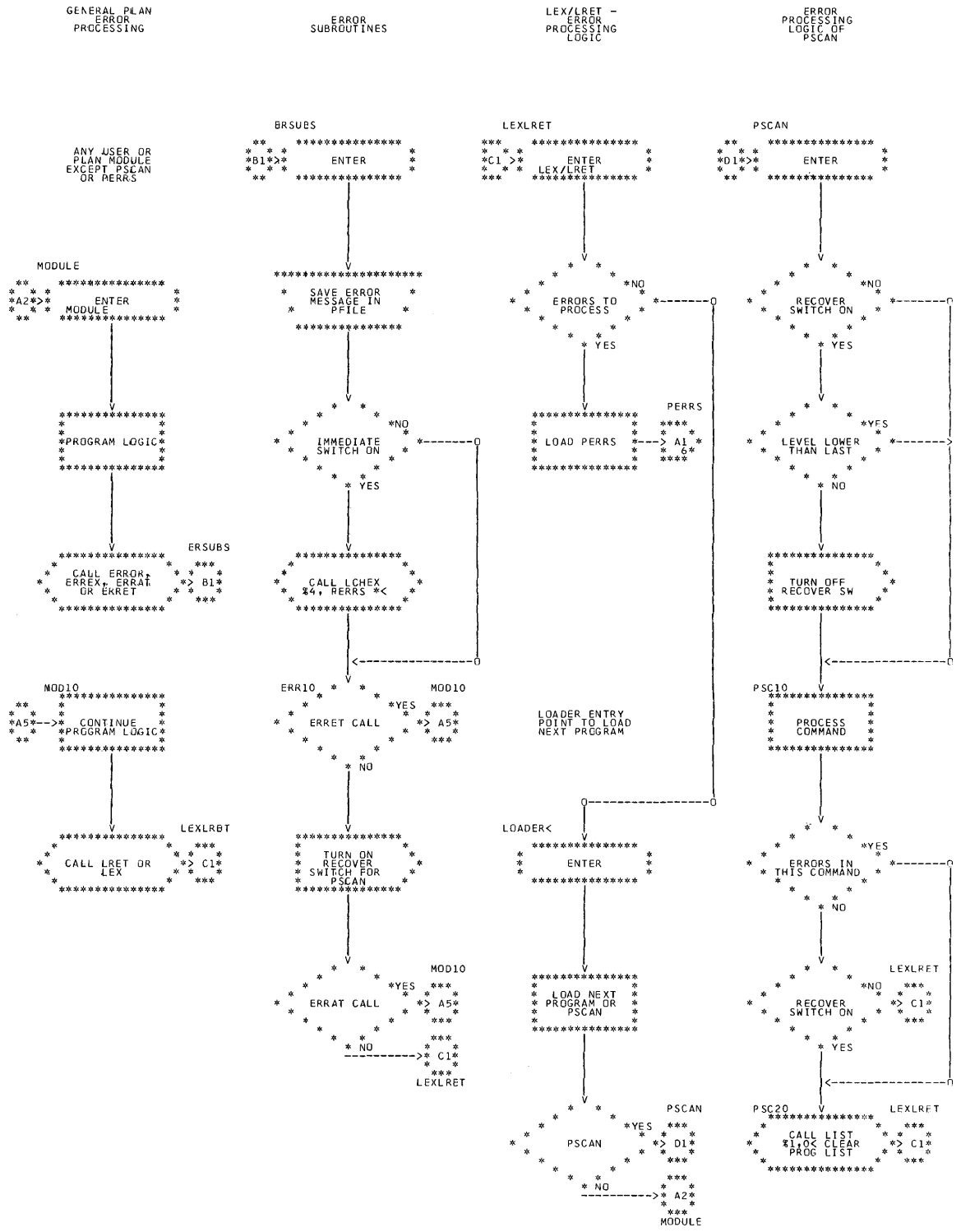


CHART GEN: GENERAL PLAN LOGIC
 GENERAL LOGIC OF THE PLAN SYSTEM



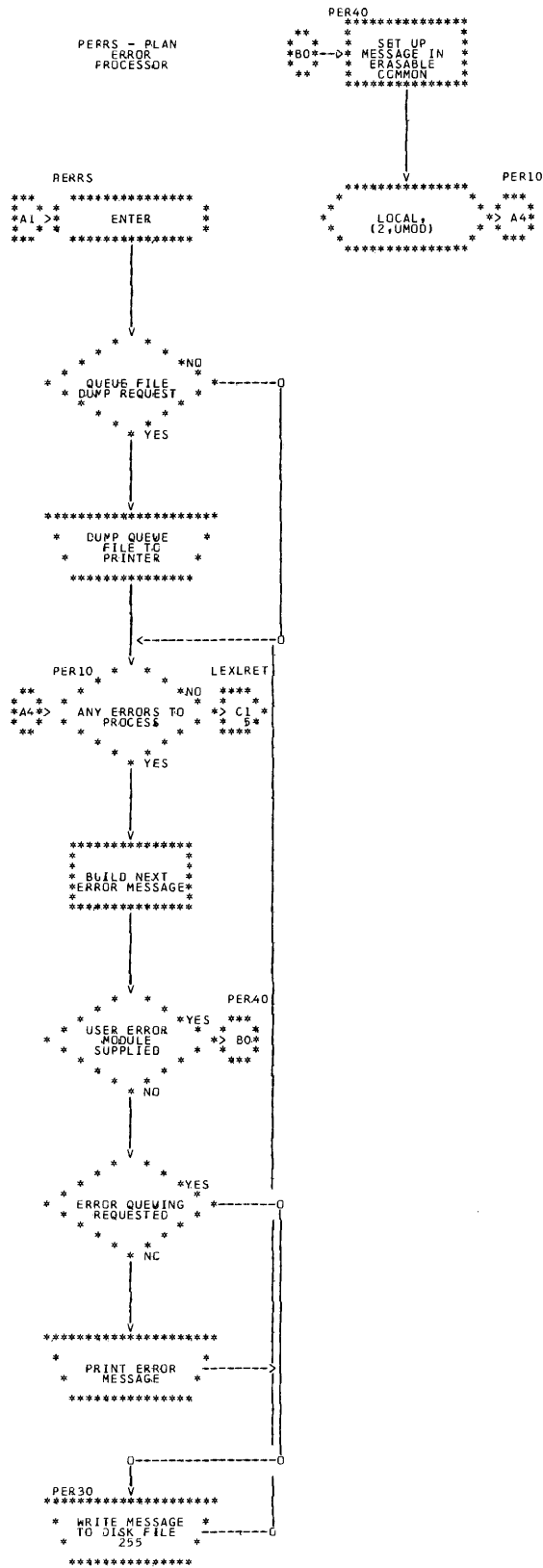
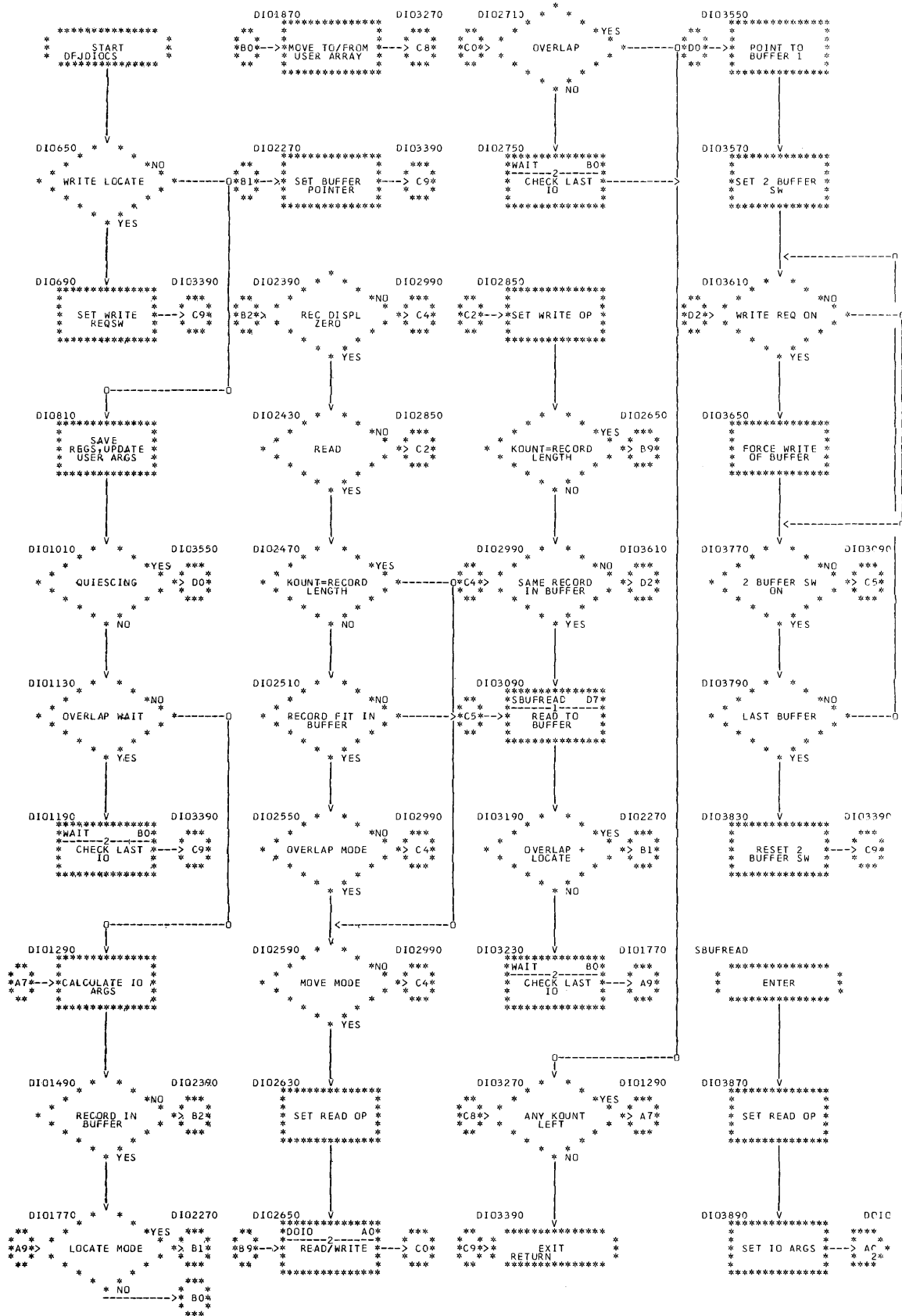
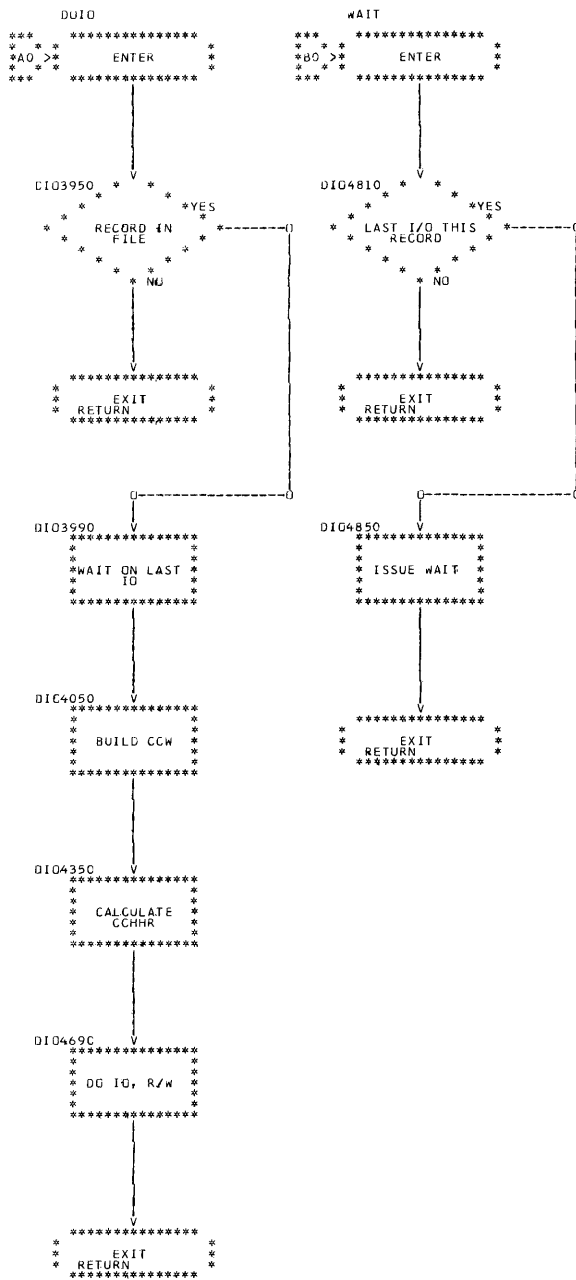
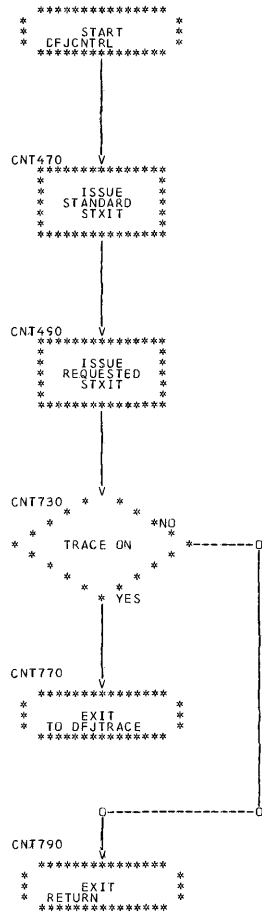
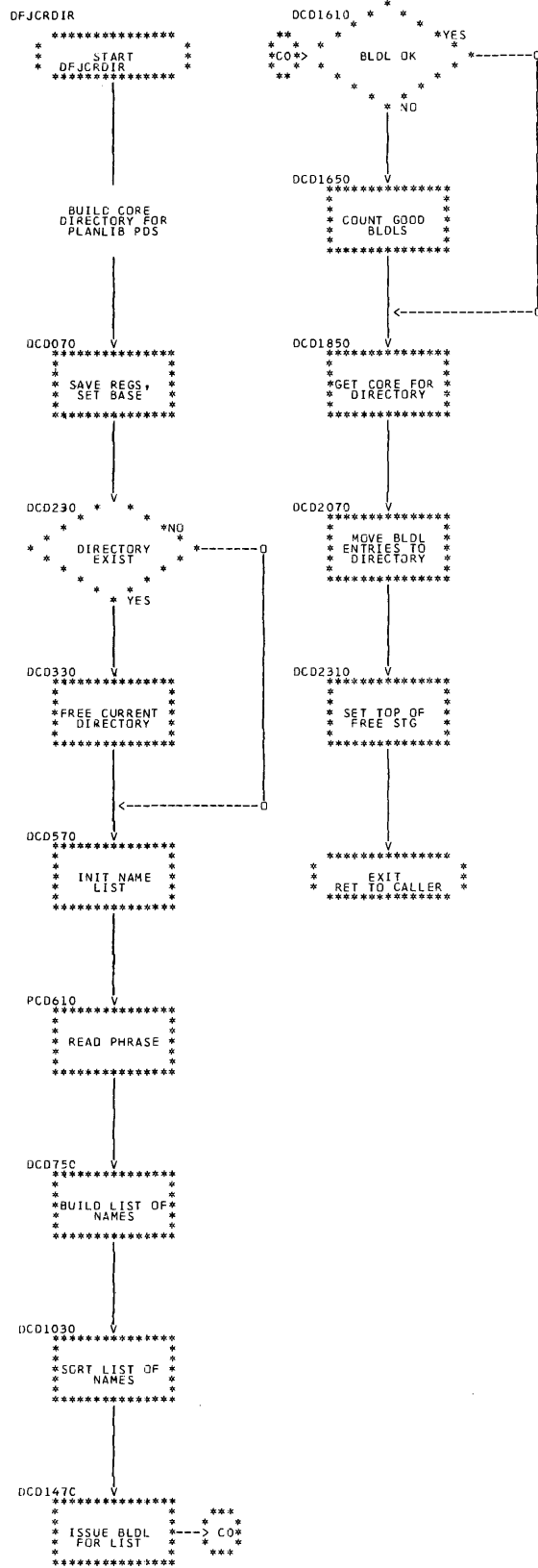


CHART AAA: DFJDIOCS
DOS DIRECT ACCESS IOCS ROUTINE









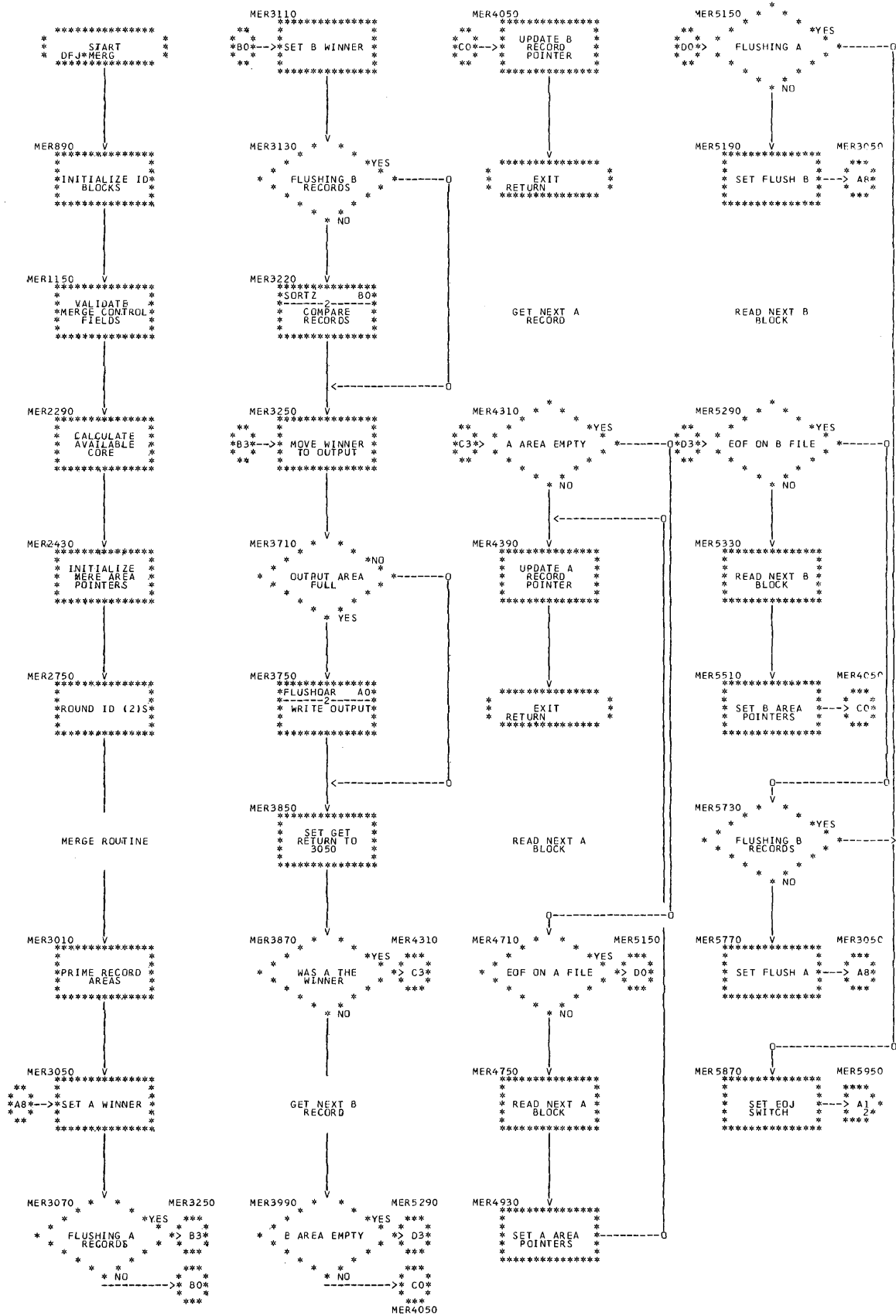
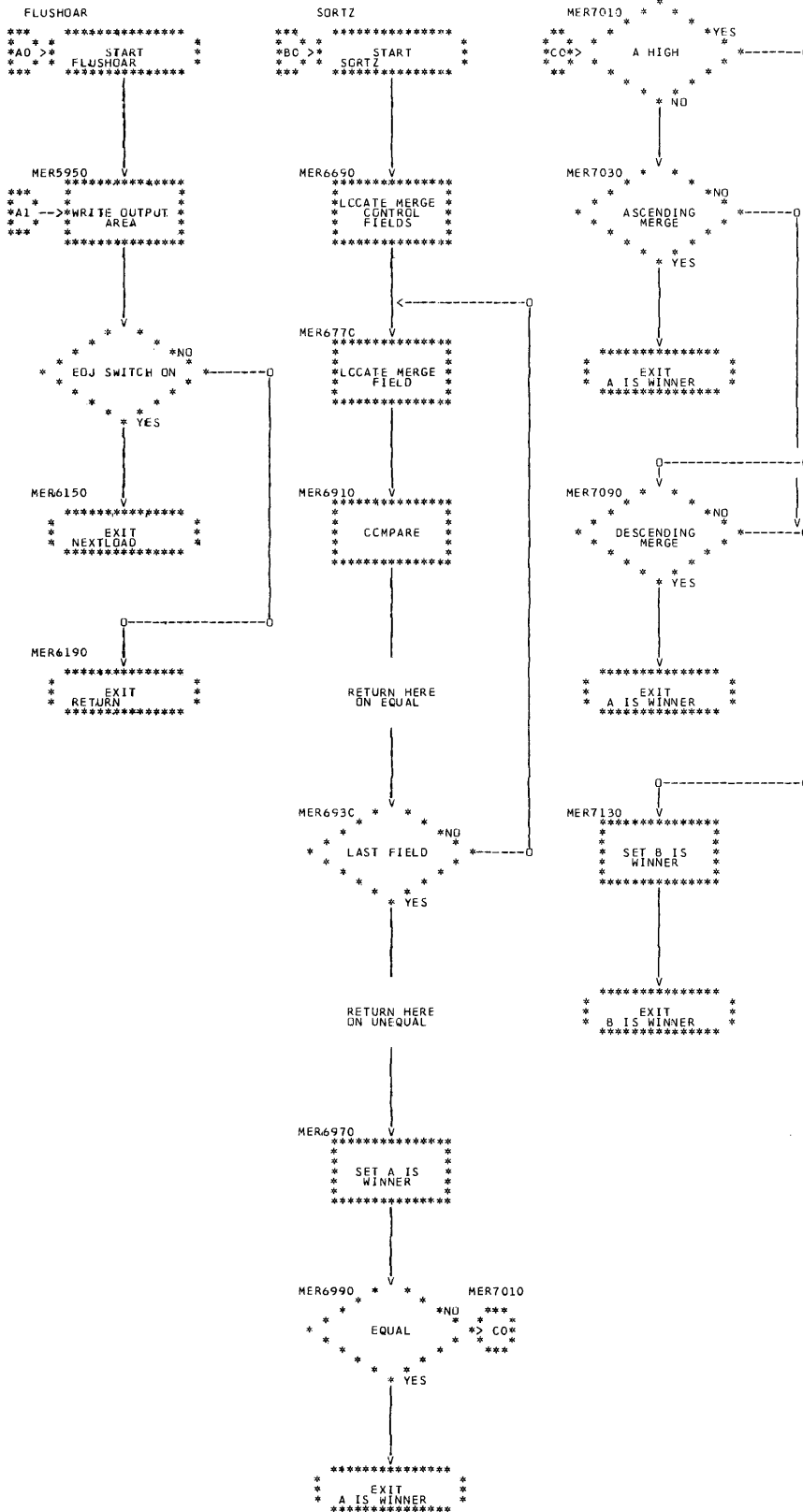
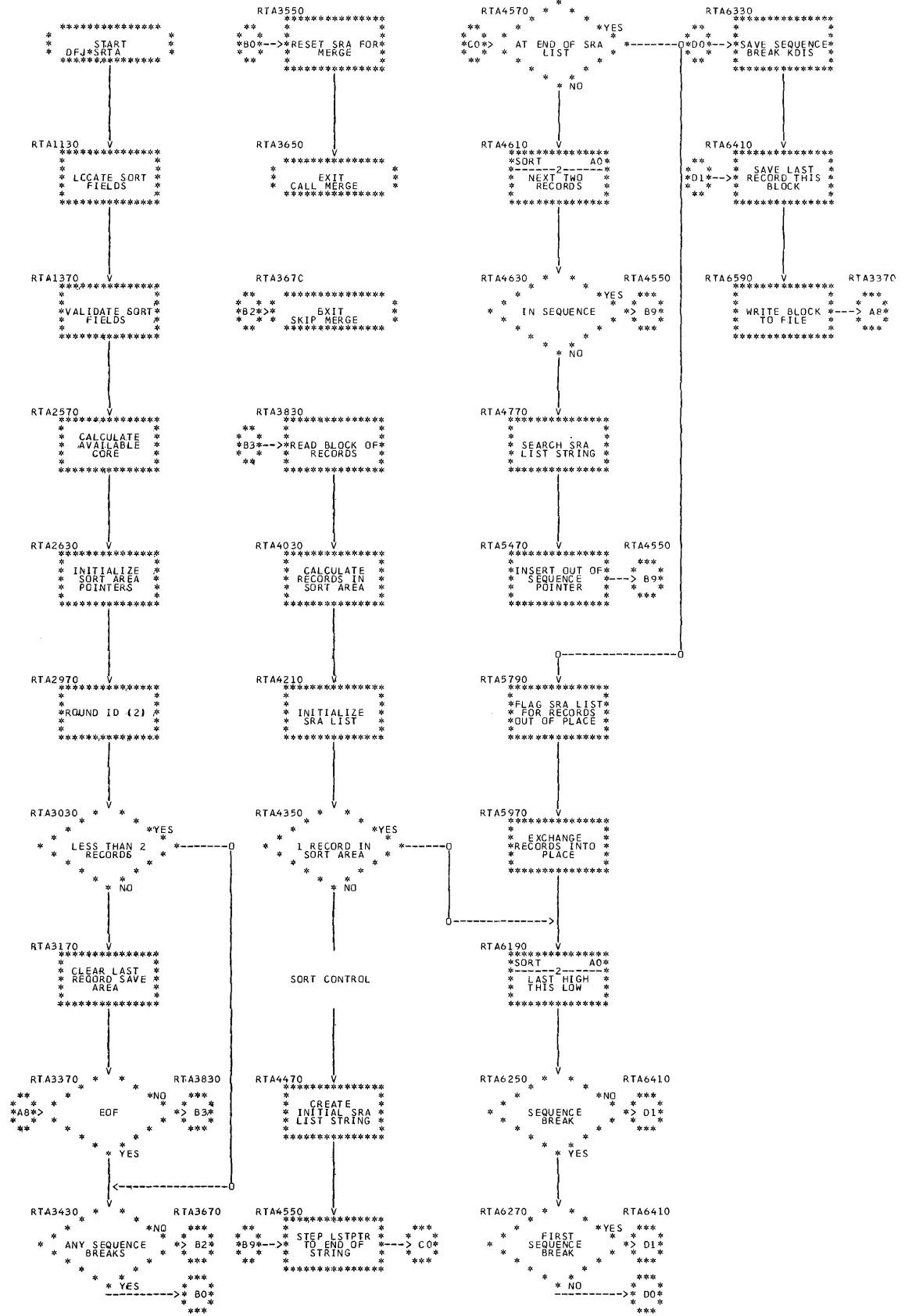
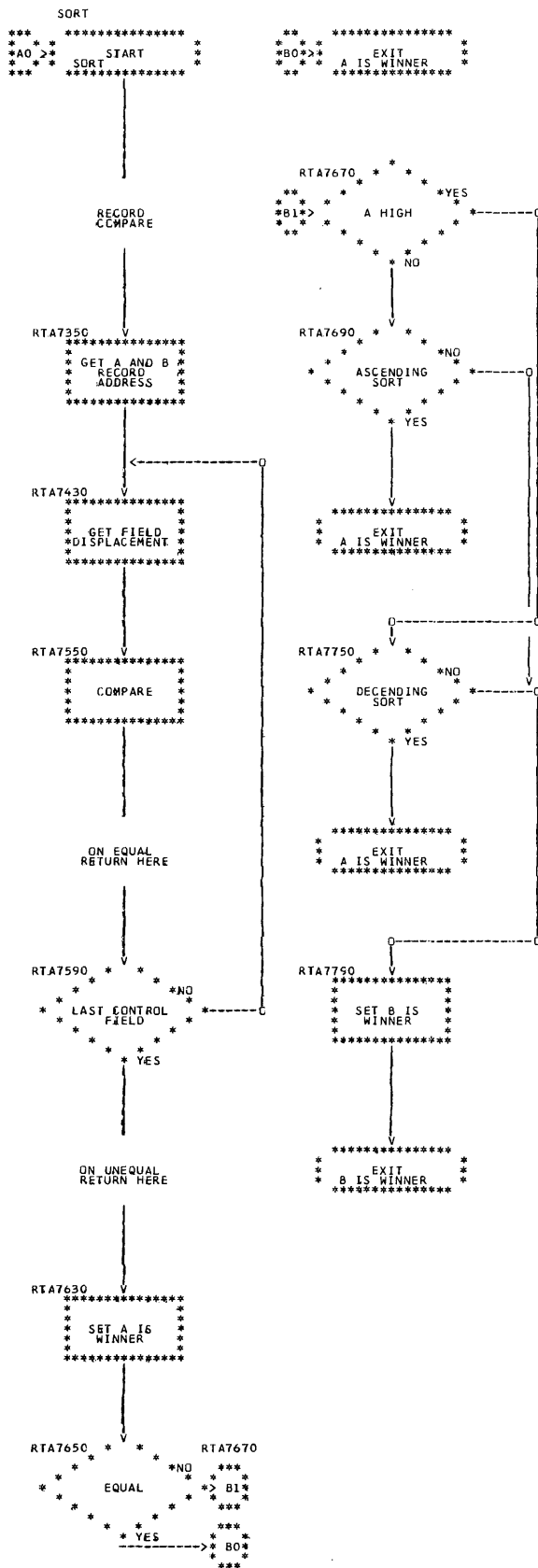
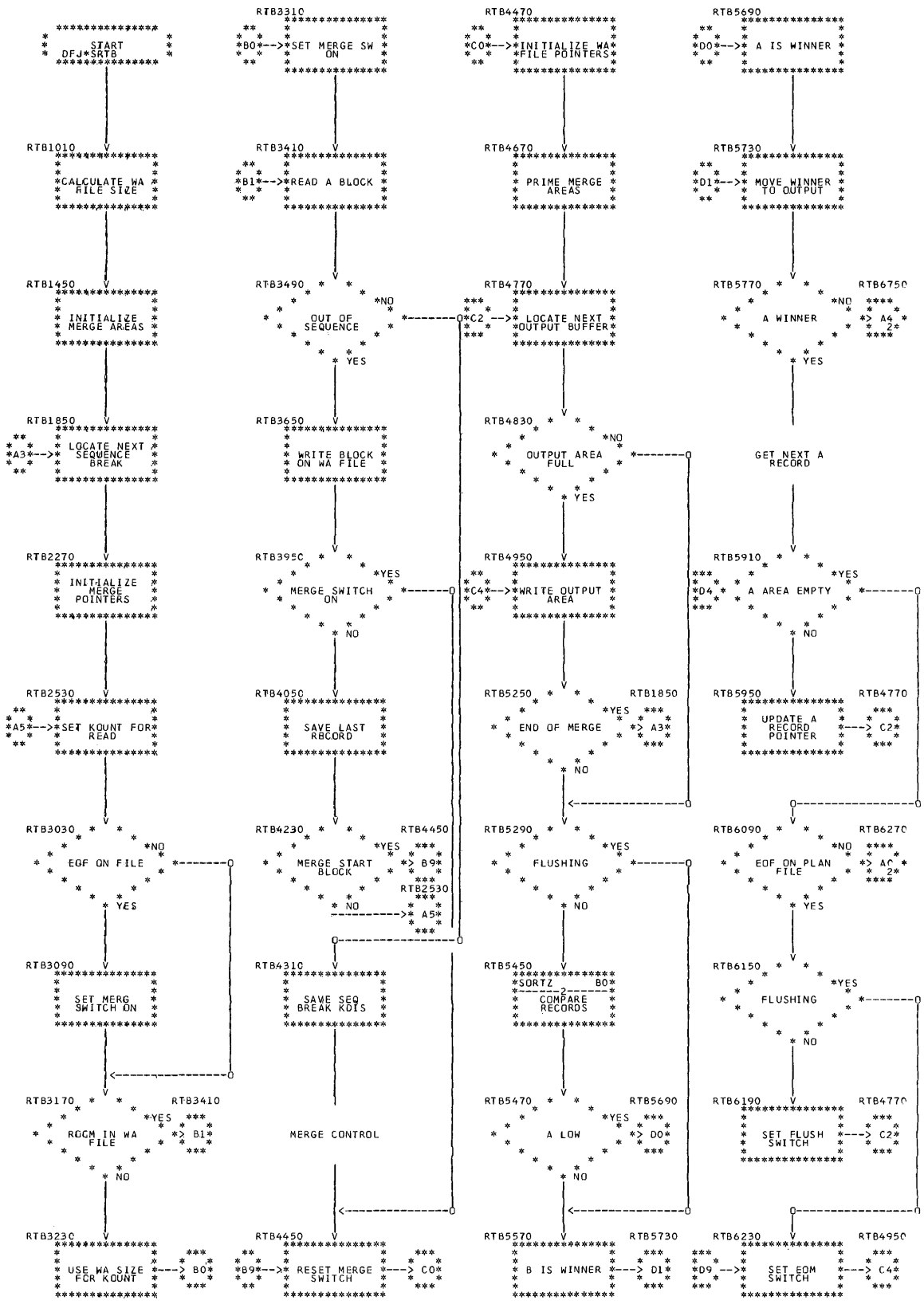


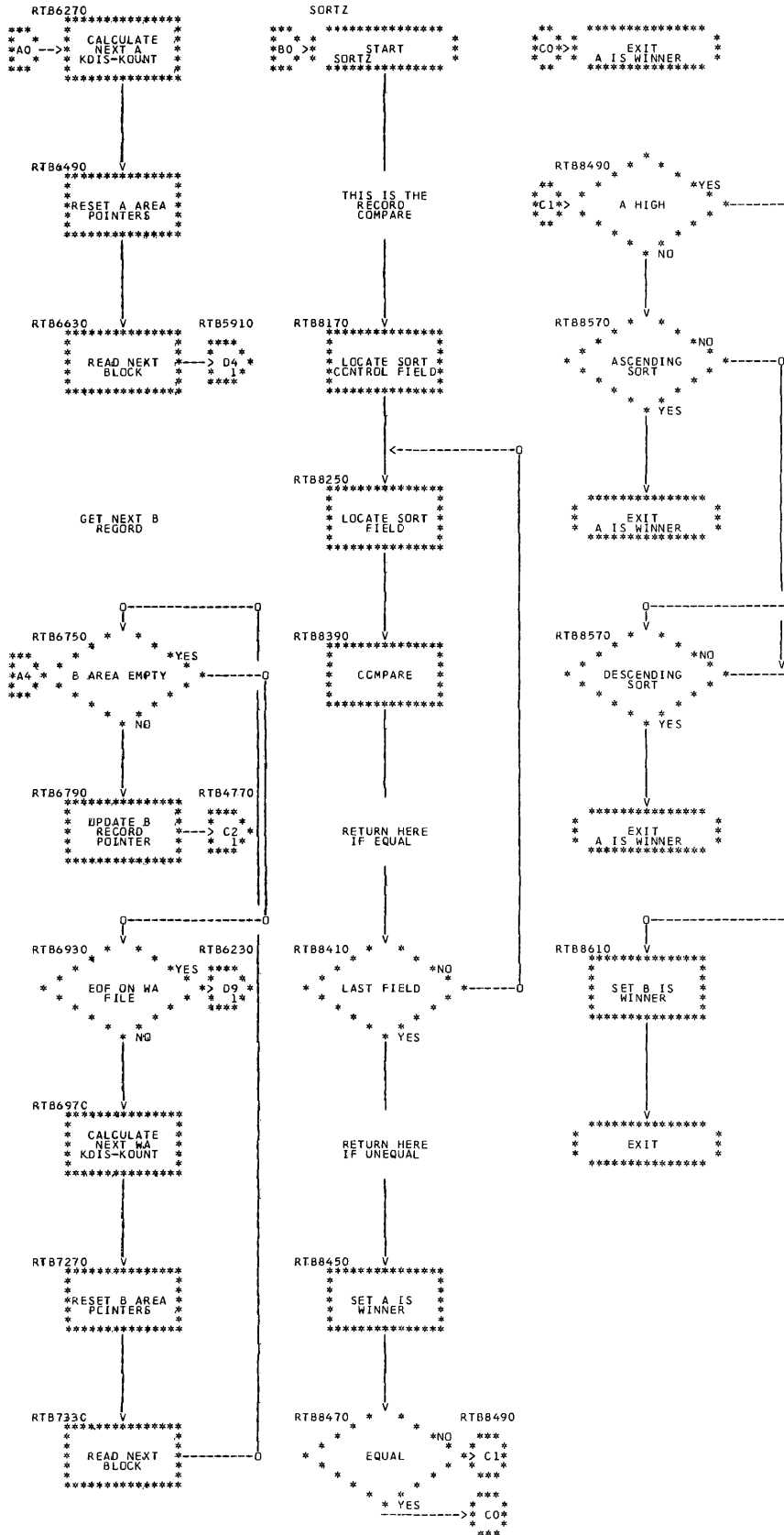
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 DGS/GS MERGE ROUTINE

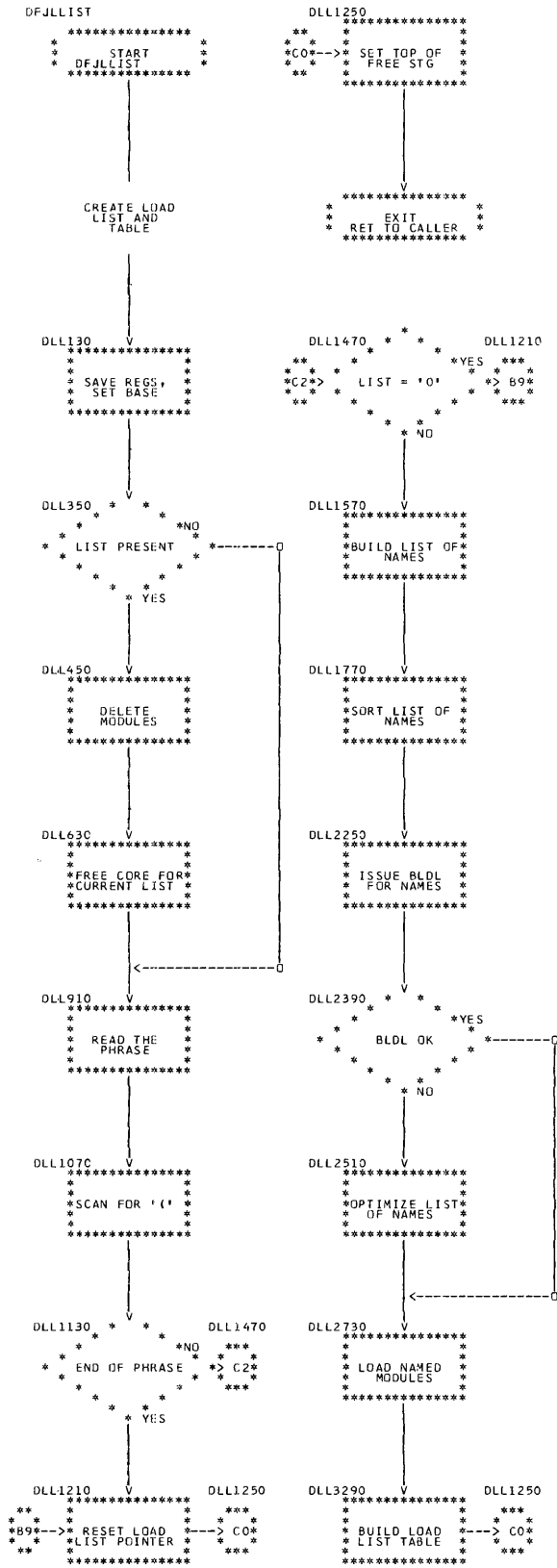


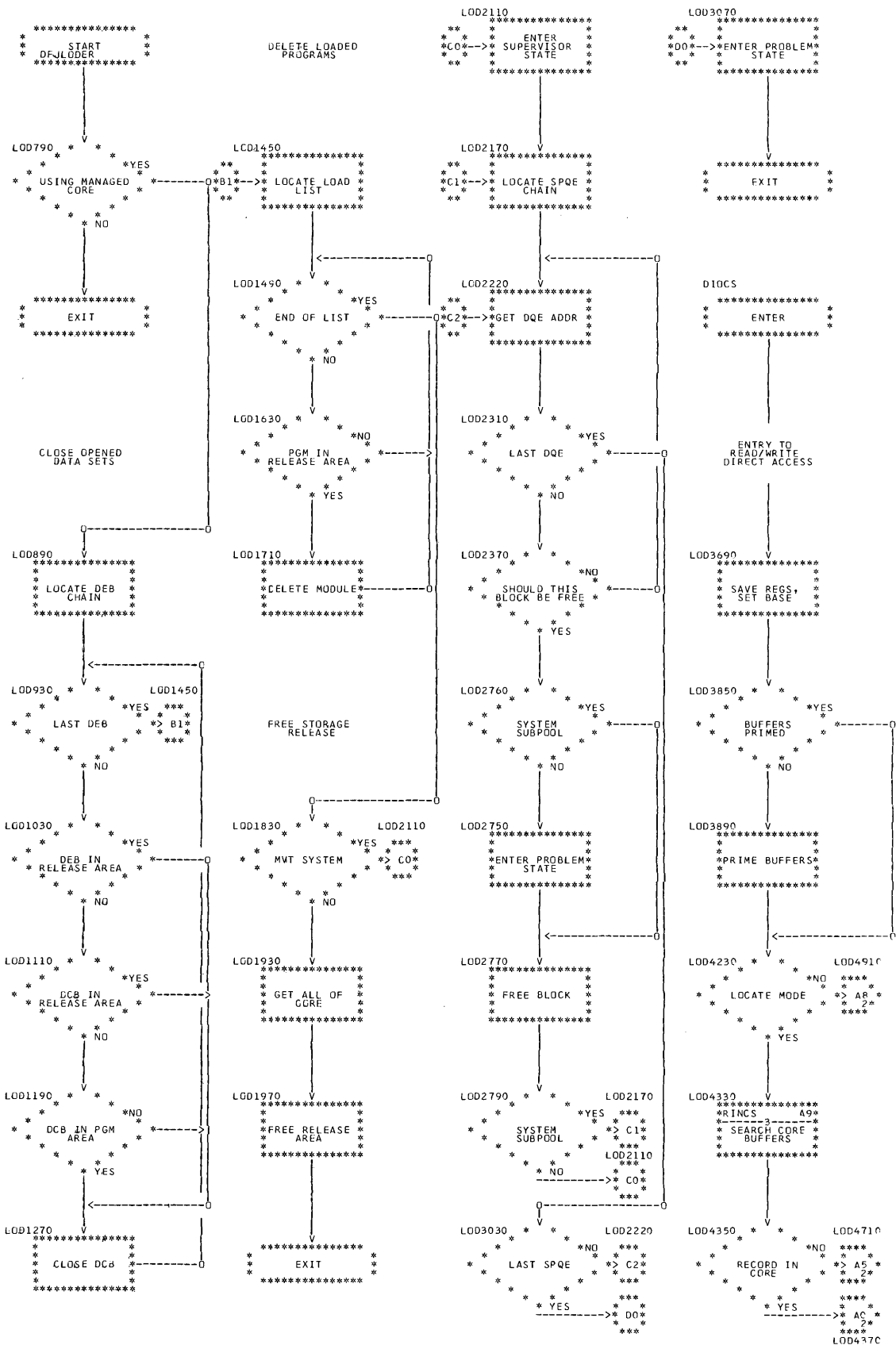


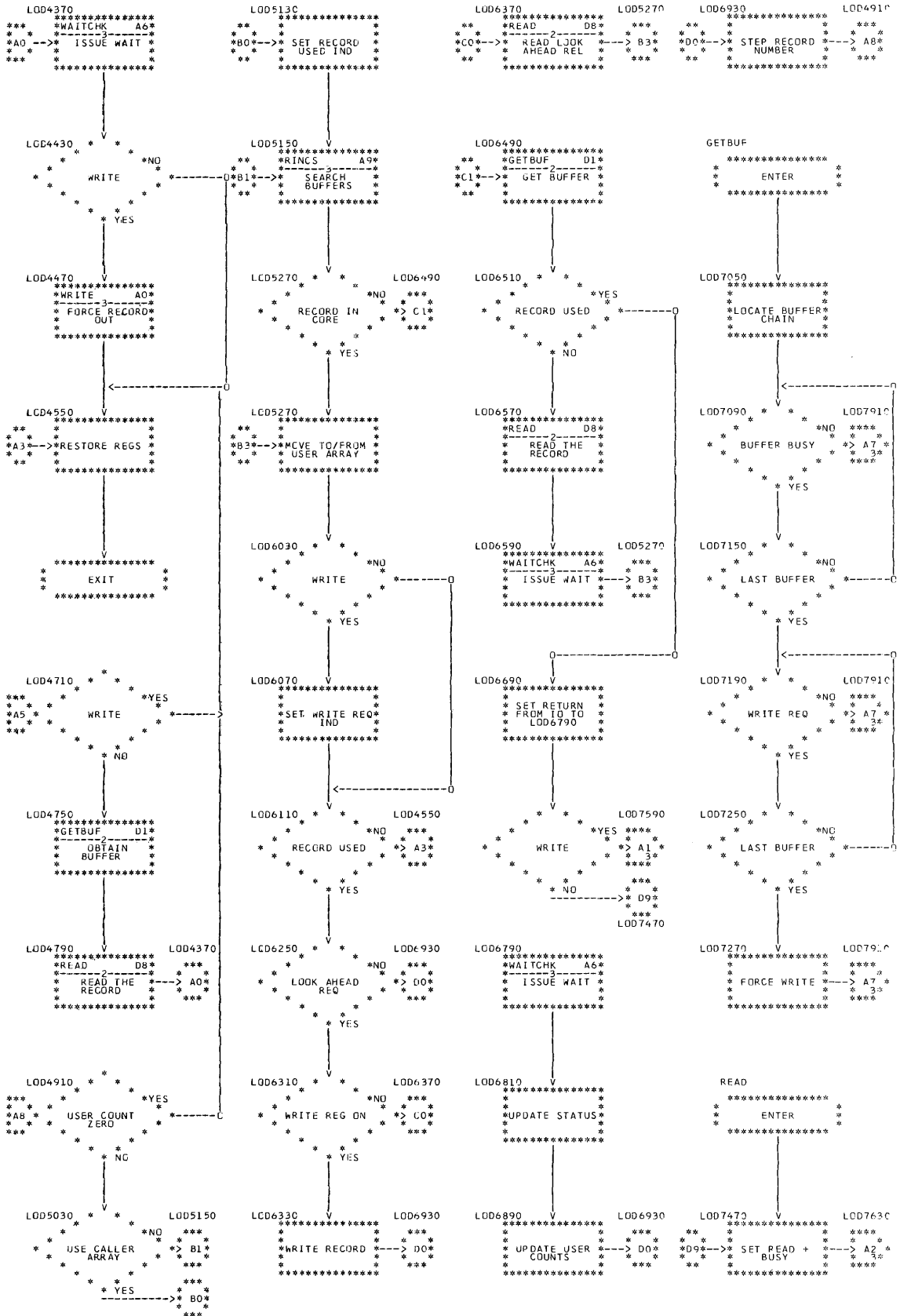


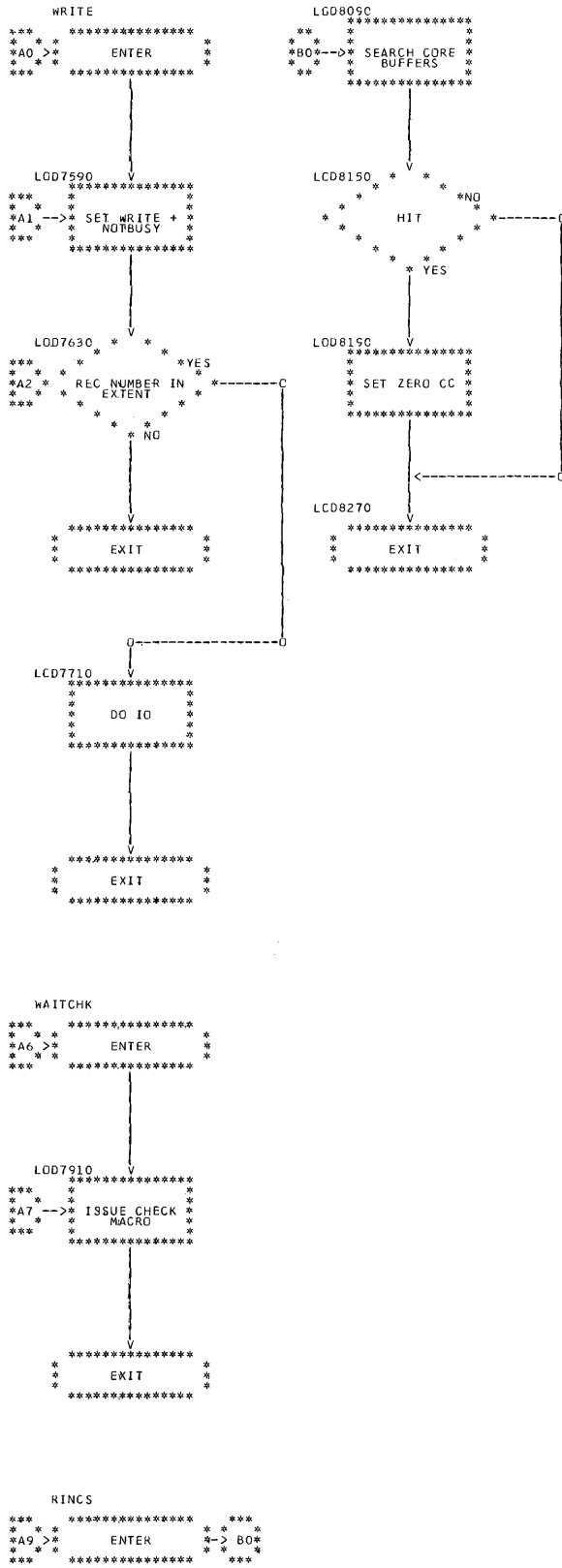


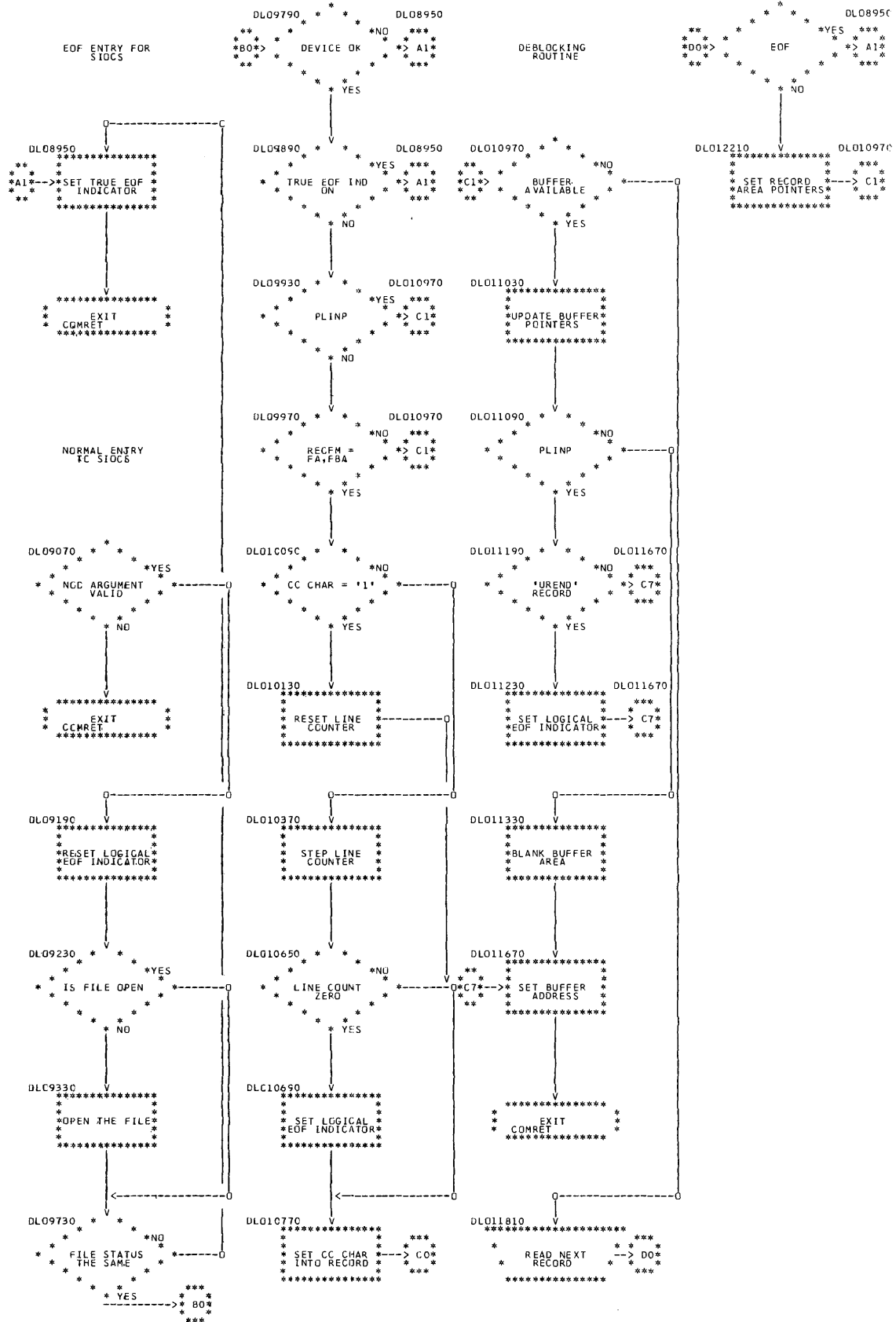


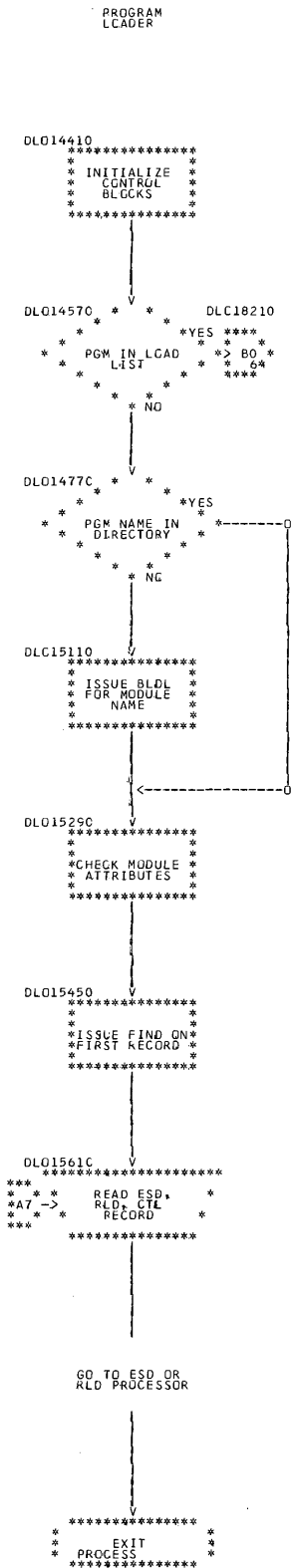


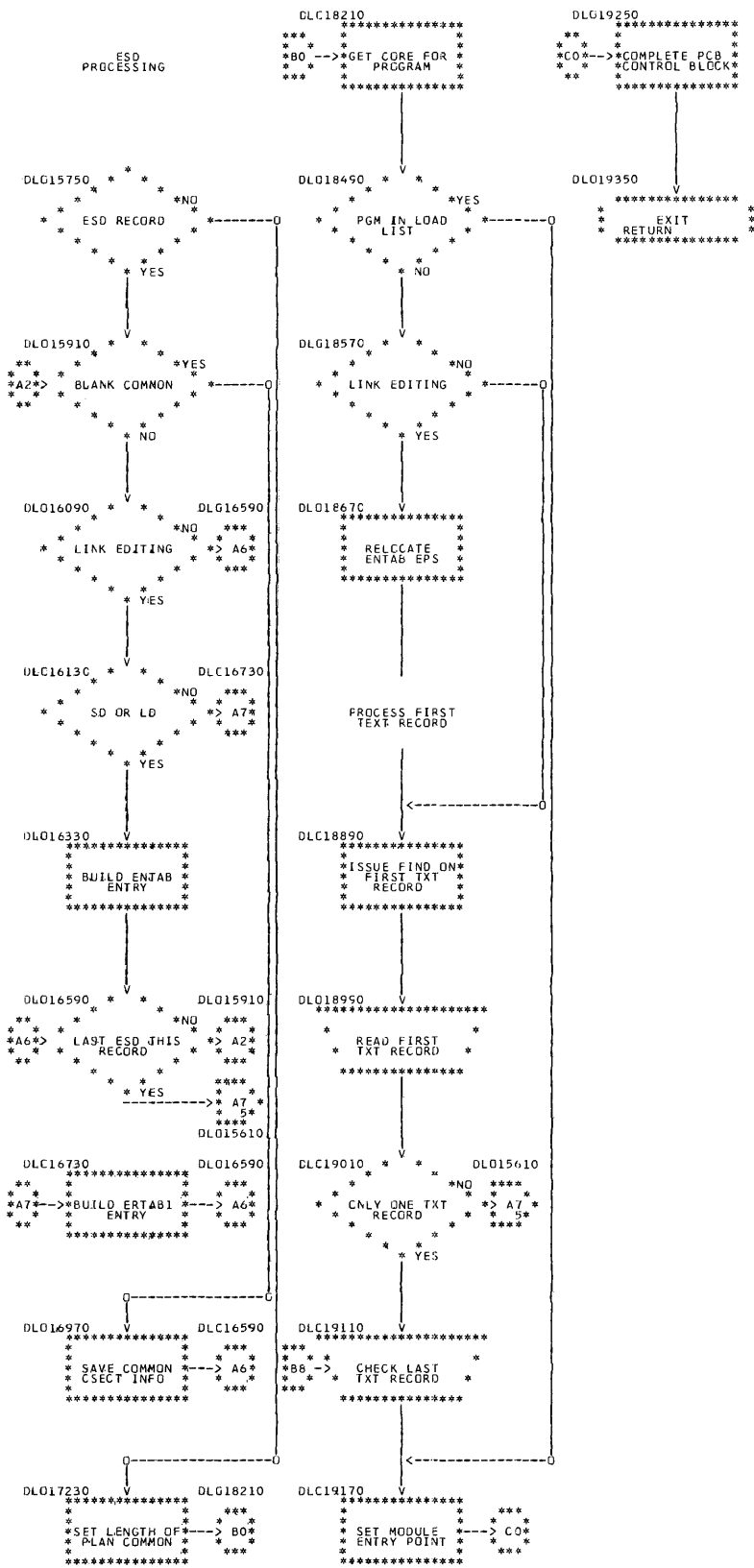


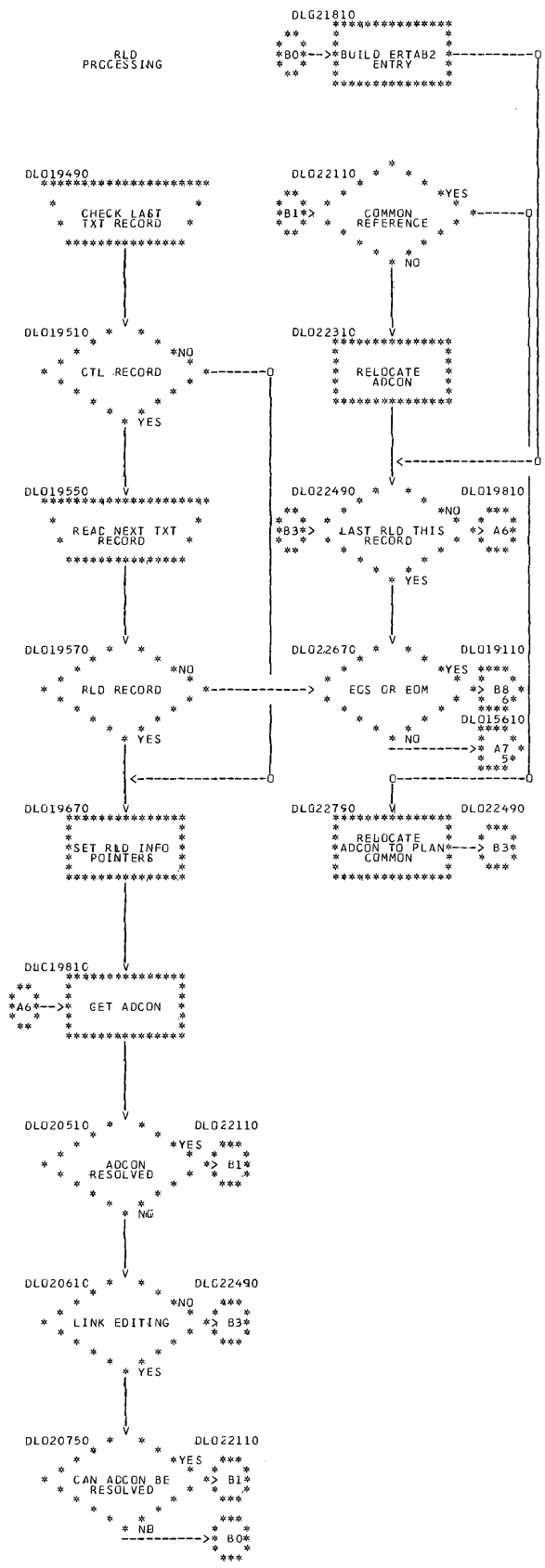


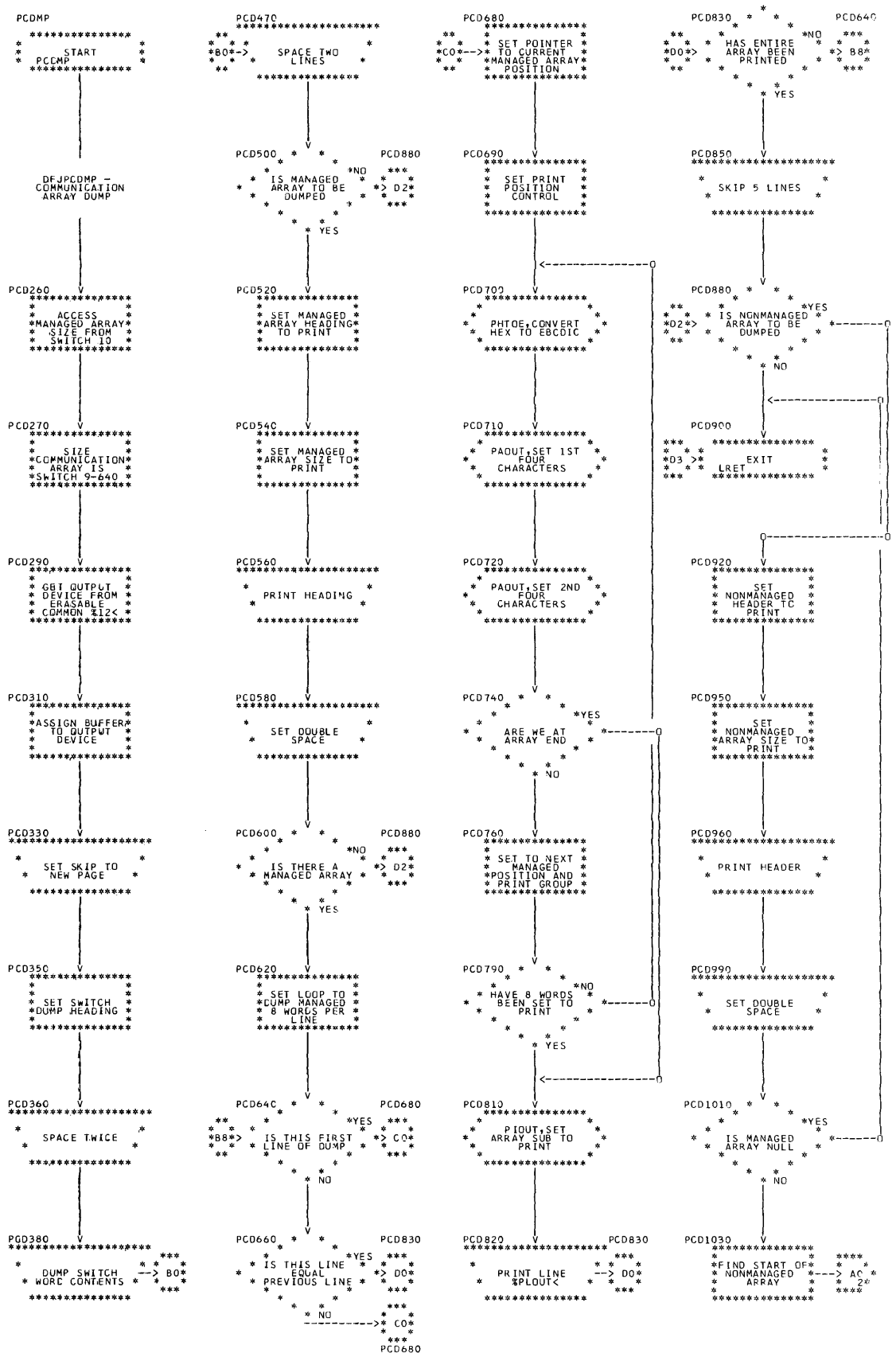












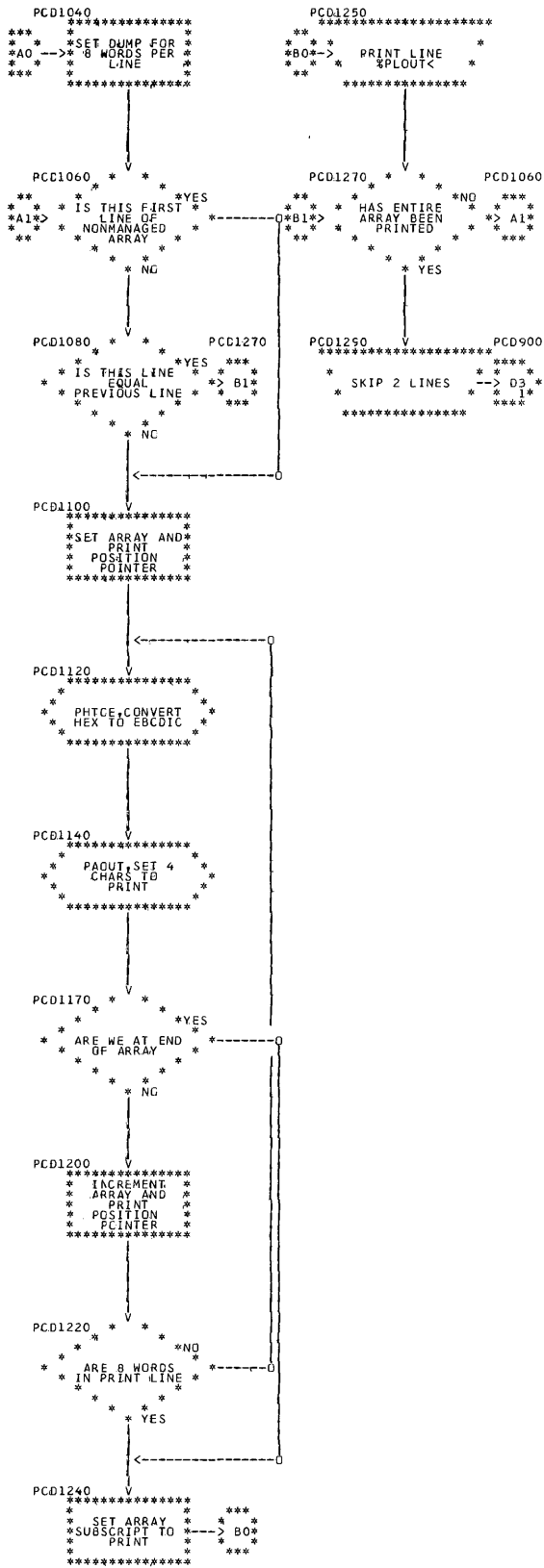
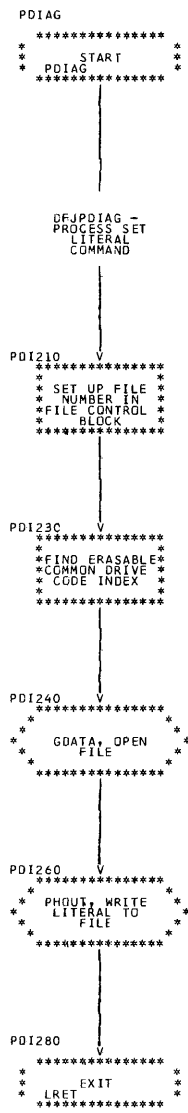


CHART AAU: DFJPDIAG
DOS/OS LITERAL PROCESSING ROUTINE



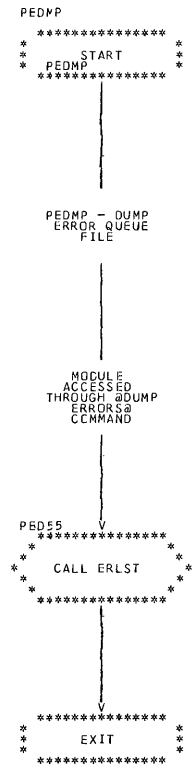


CHART AAY: DFJPERRS
 DDS/OS ERROR MESSAGE PROCESSING ROUTINE

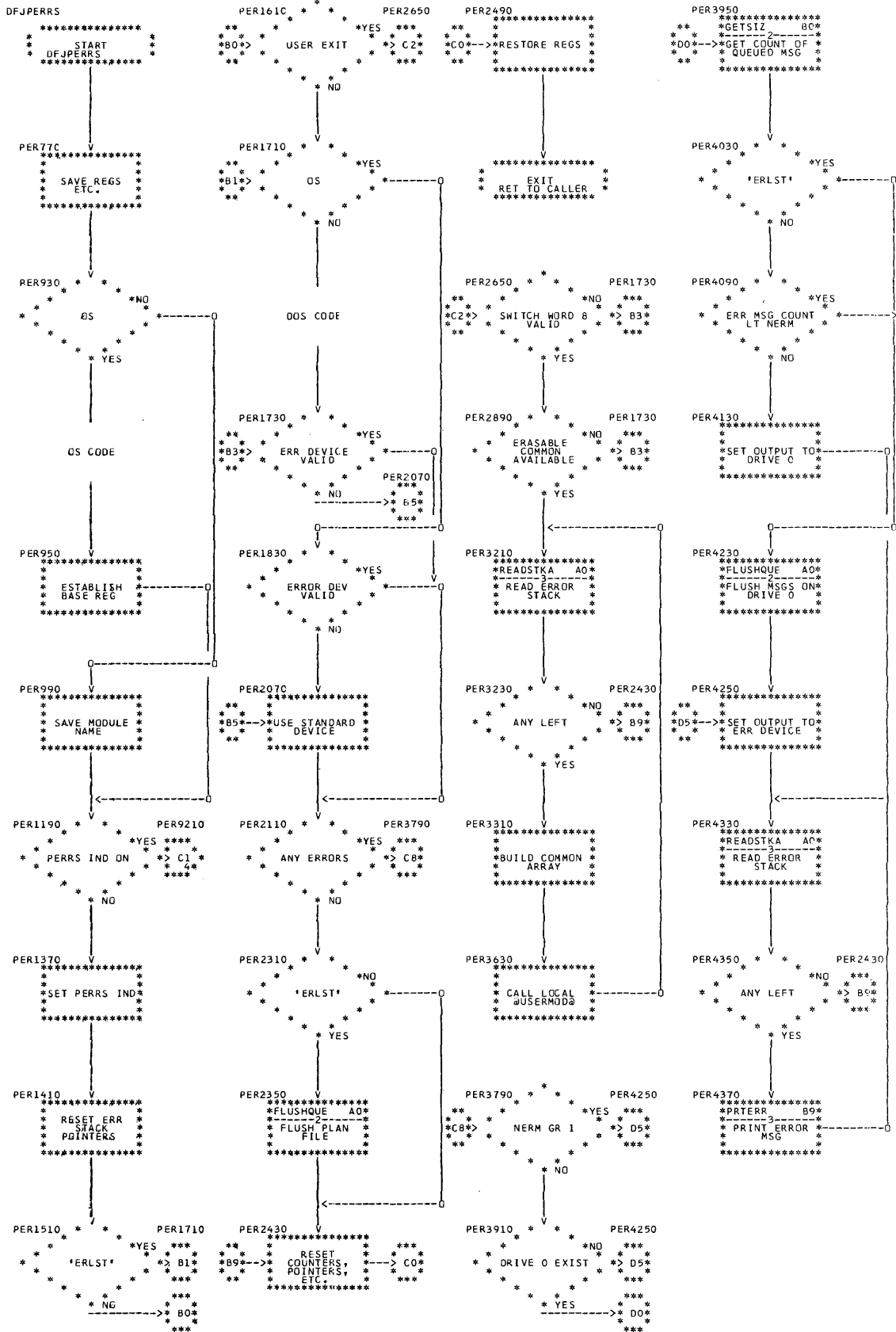
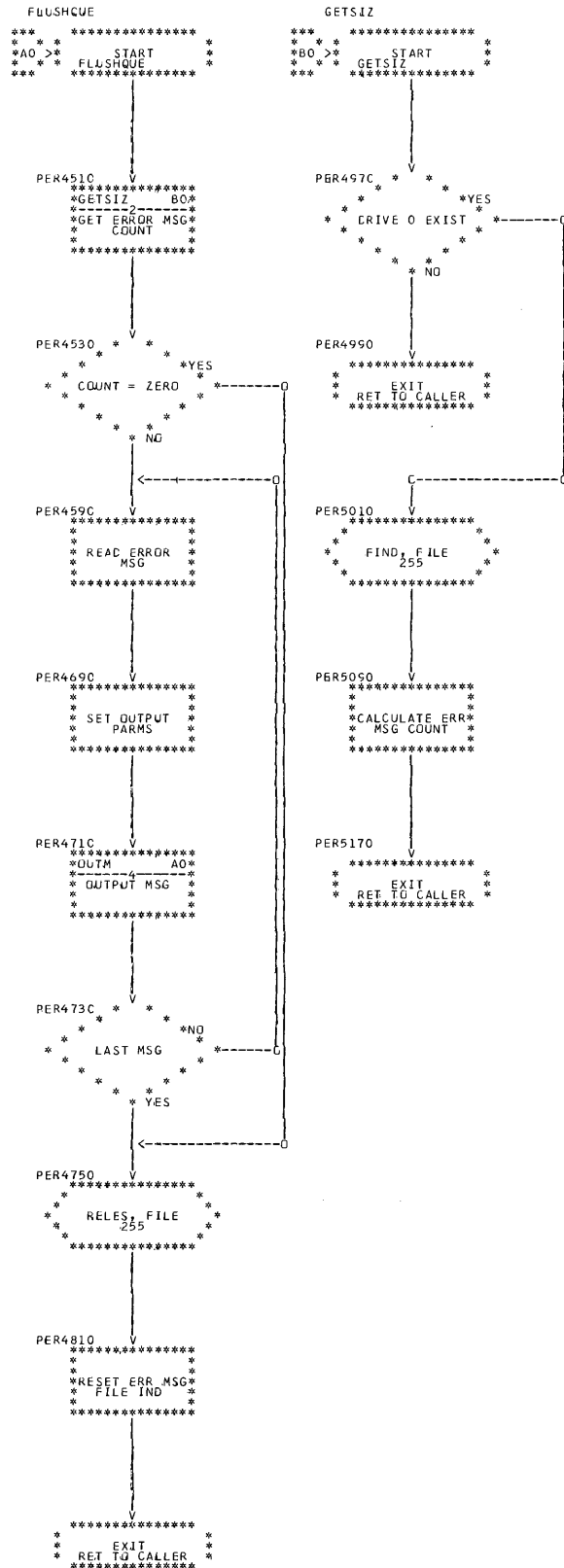


CHART AAY: DFJPERRS
DCS/CS ERROR MESSAGE PROCESSING ROUTINE



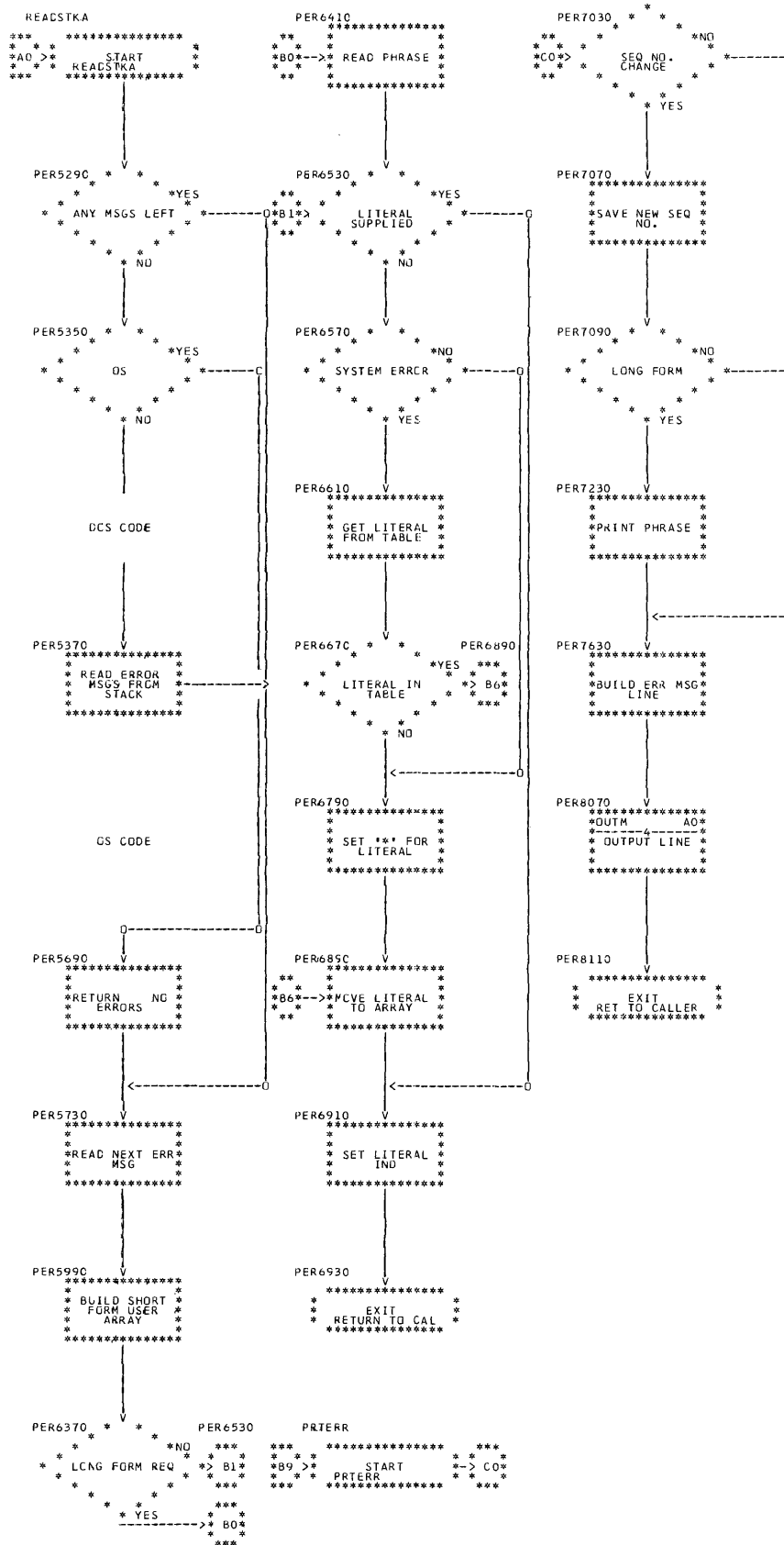


CHART AAY: DFJPERRS
DCS/CS ERROR MESSAGE PROCESSING ROUTINE

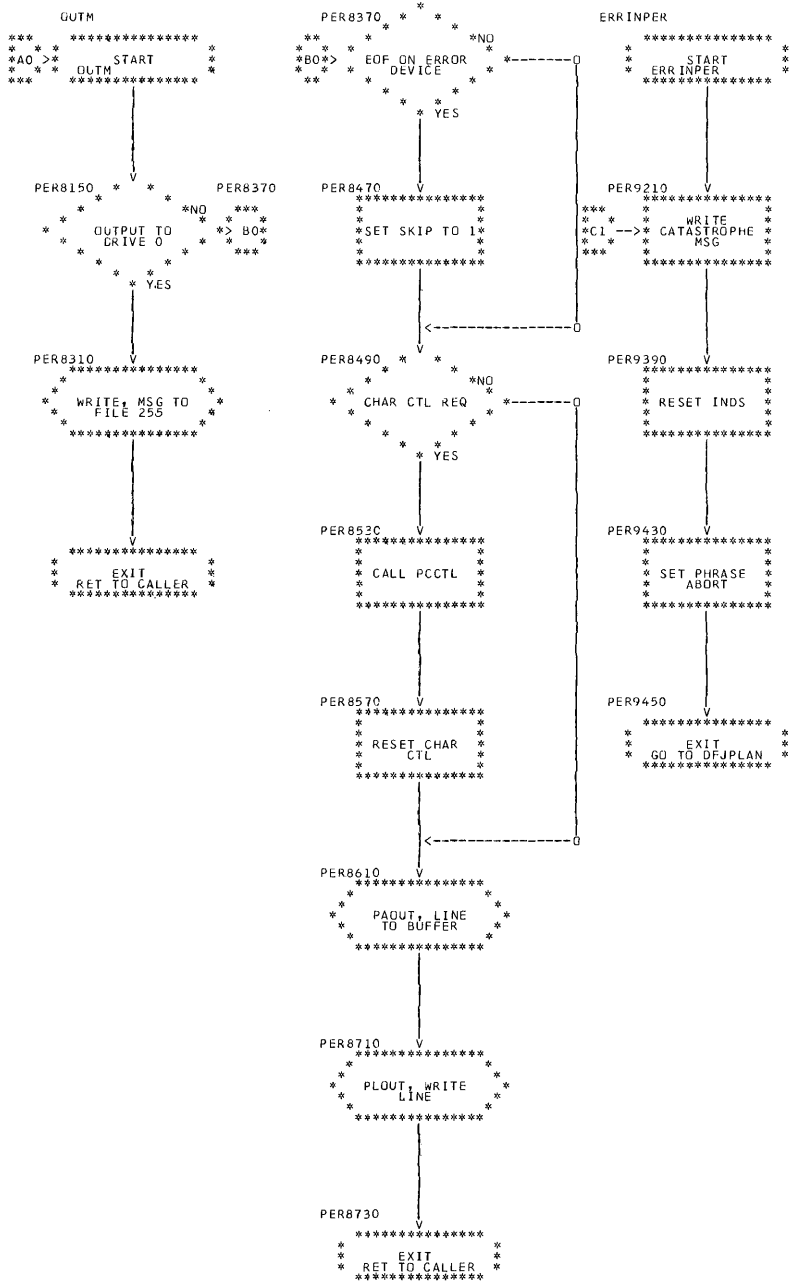
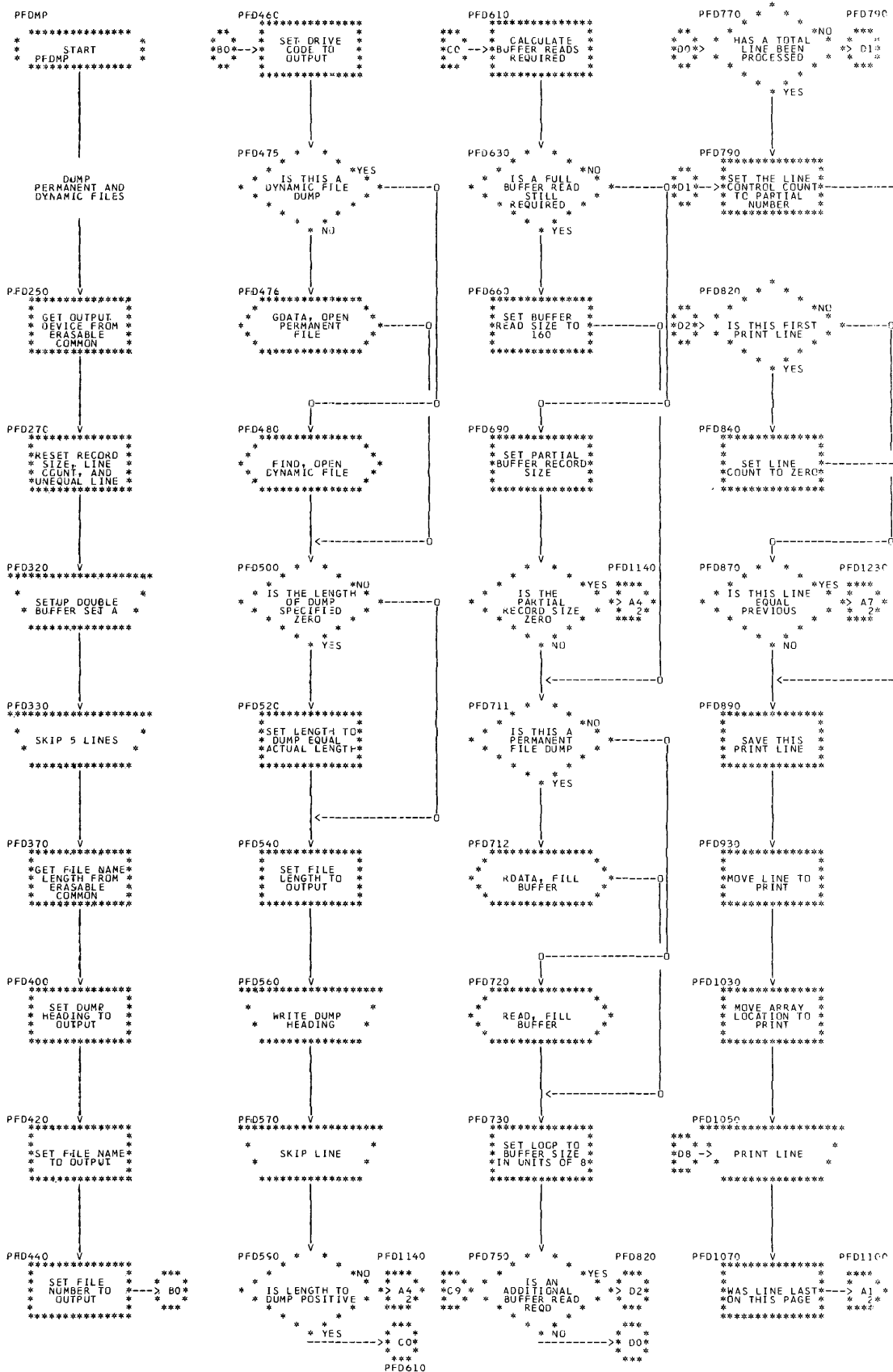


CHART ABA: DFJPFDMF
 DQS/OS FILE DUMP ROUTINE



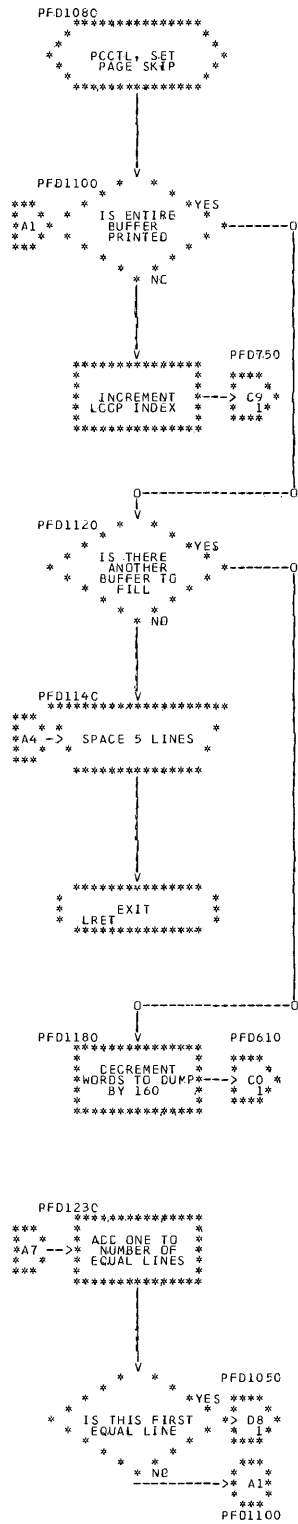


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 DCS/CS PHRASE DICTIONARY MAINTENANCE ROUTINE

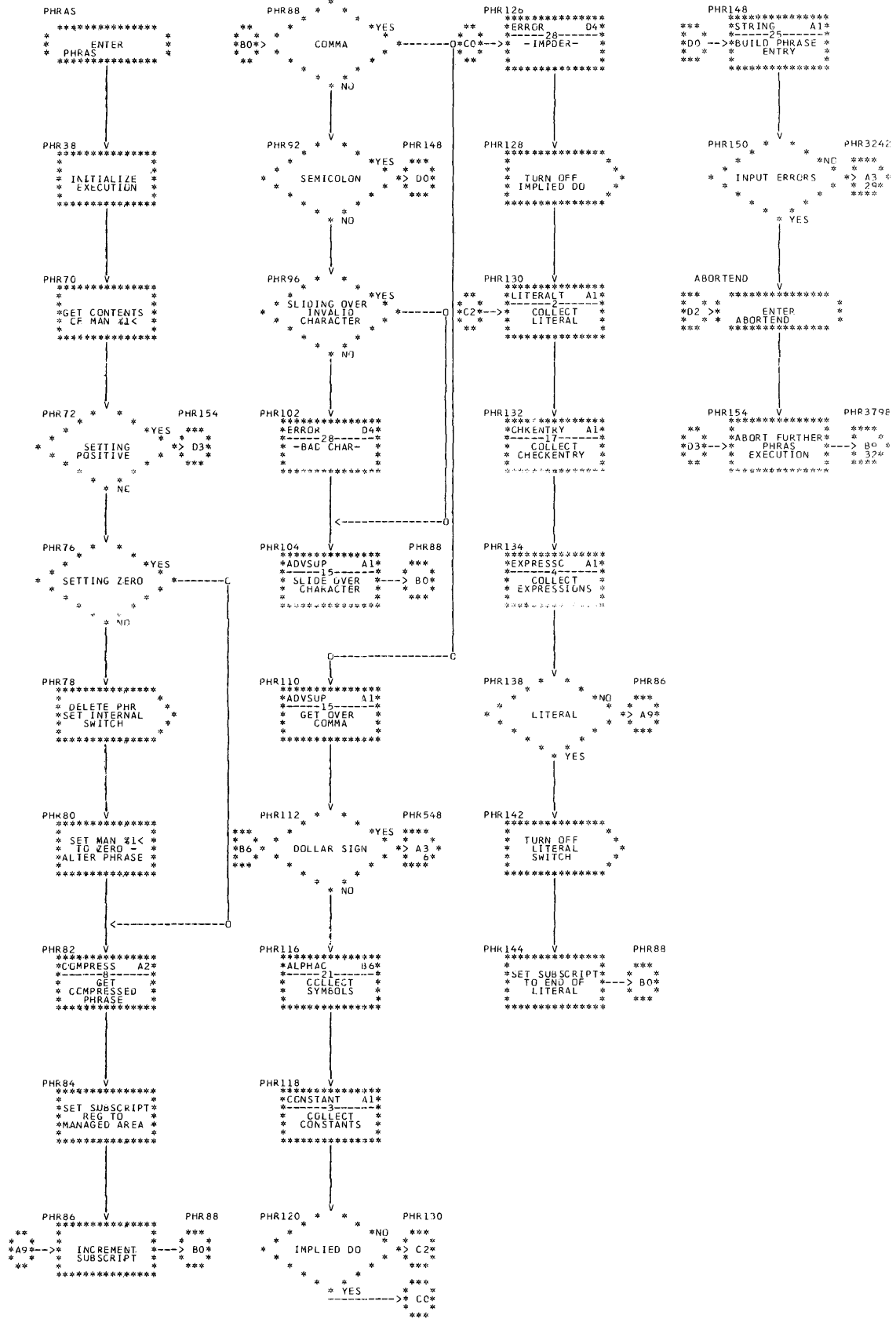


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 DOS/OS PHRASE DICTIONARY MAINTENANCE ROUTINE

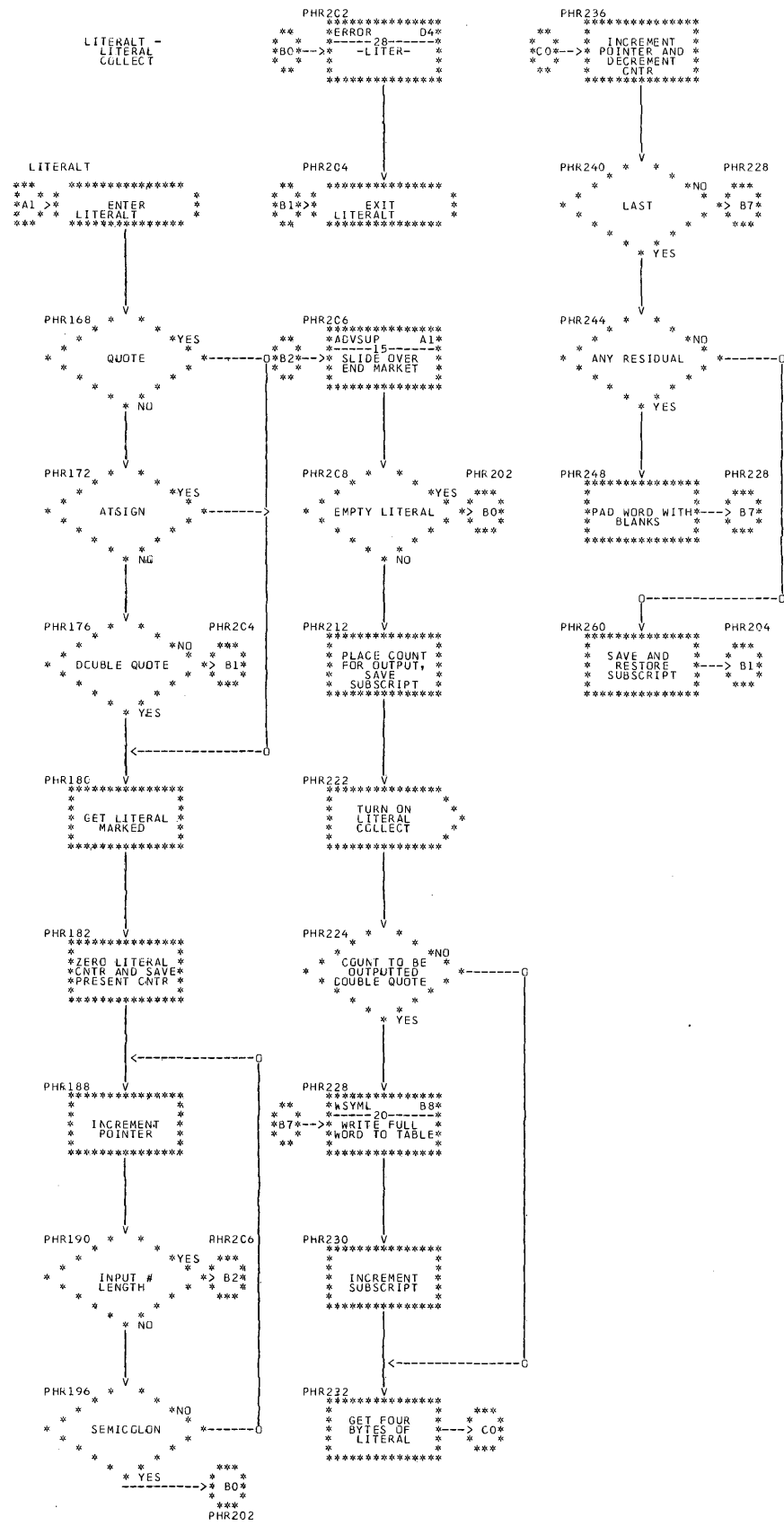


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 DQS/OS PHRASE DICTIONARY MAINTENANCE ROUTINE

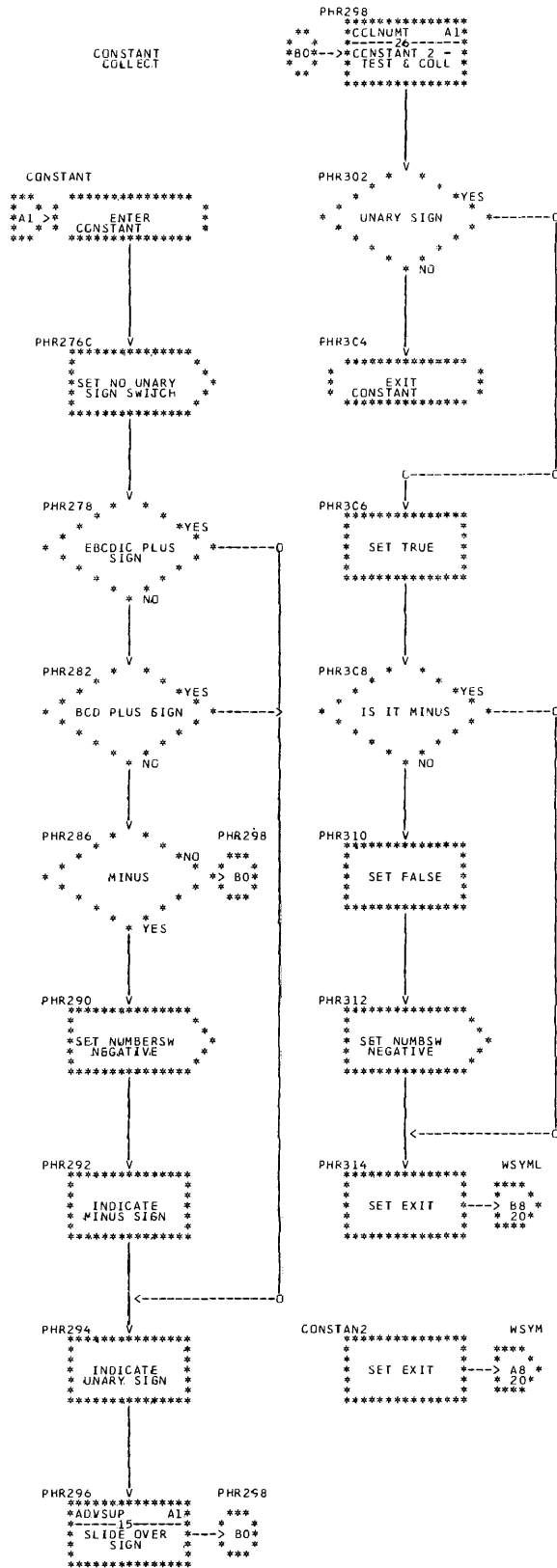
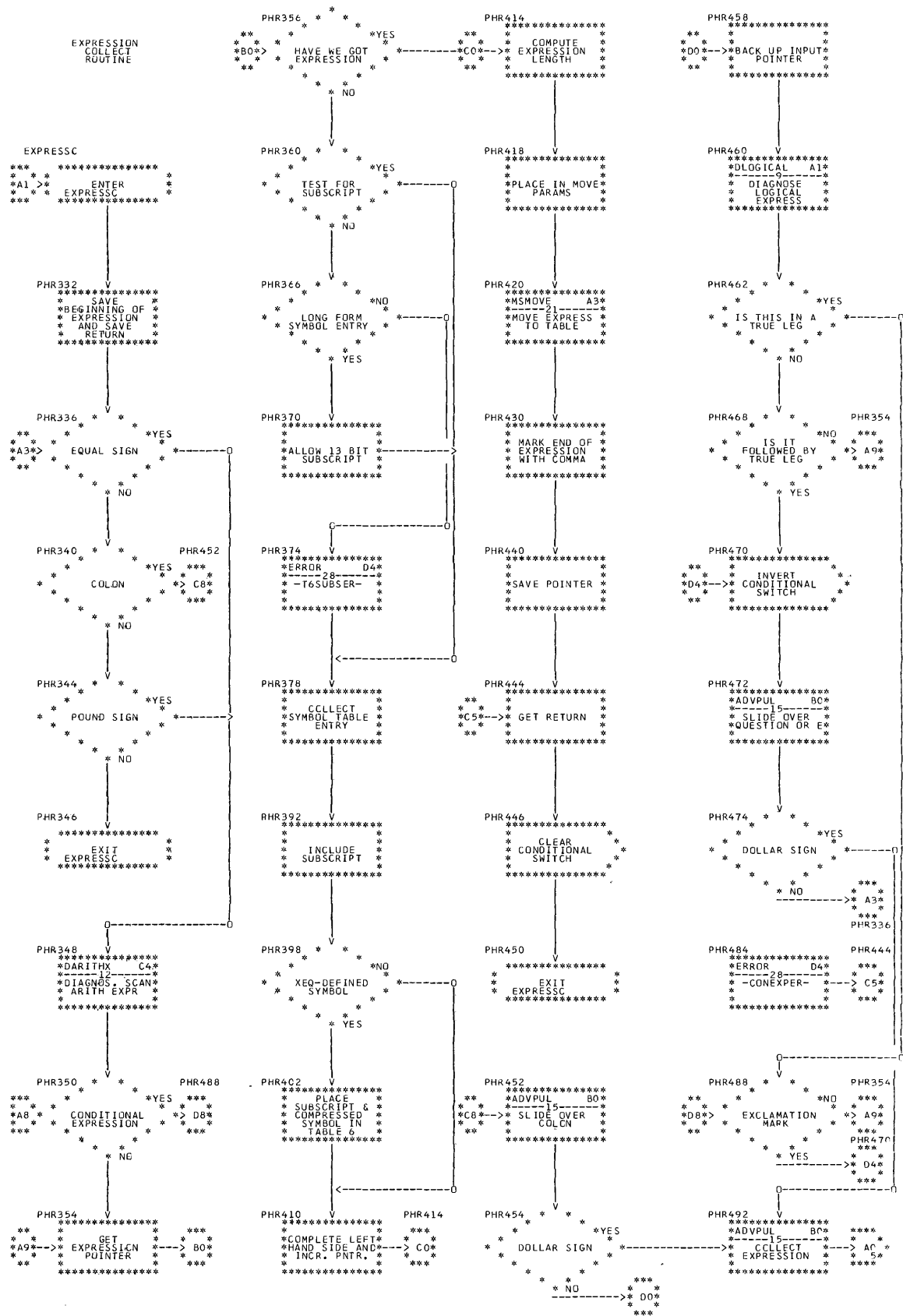
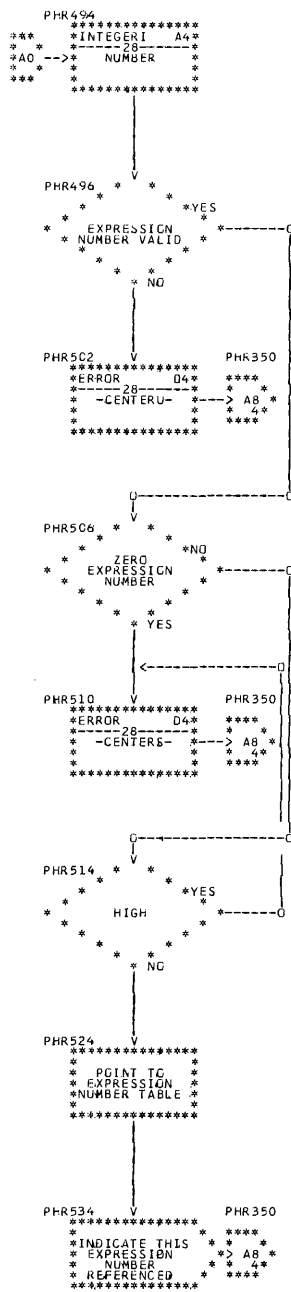
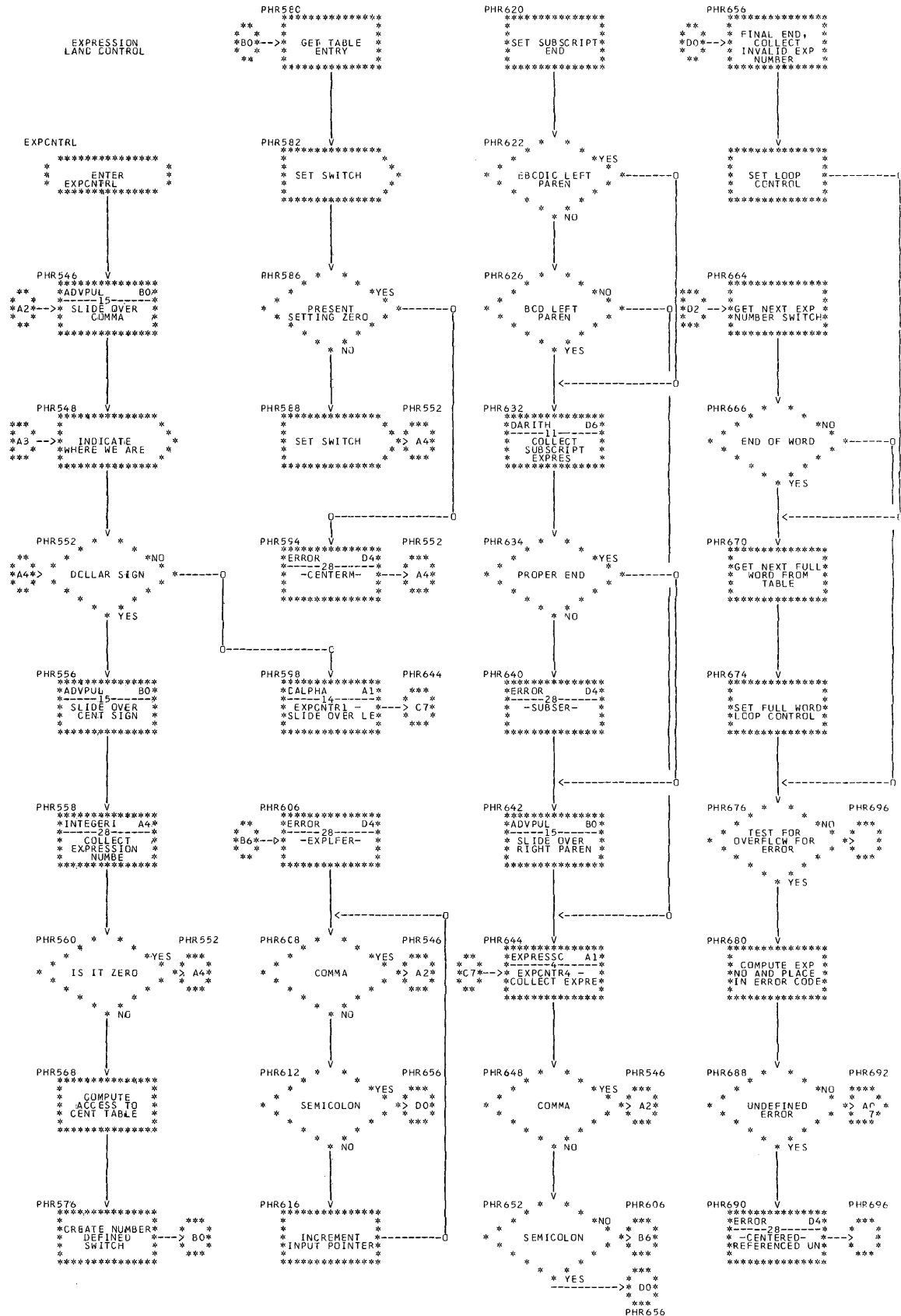


CHART ABC: DFJPHRAS
 DCS/GS PHRASE DICTIONARY MAINTENANCE ROUTINE







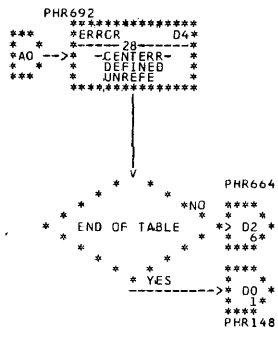


CHART ABC: DFJPHRAS
DCS/CS PHRASE DICTIONARY MAINTENANCE ROUTINE

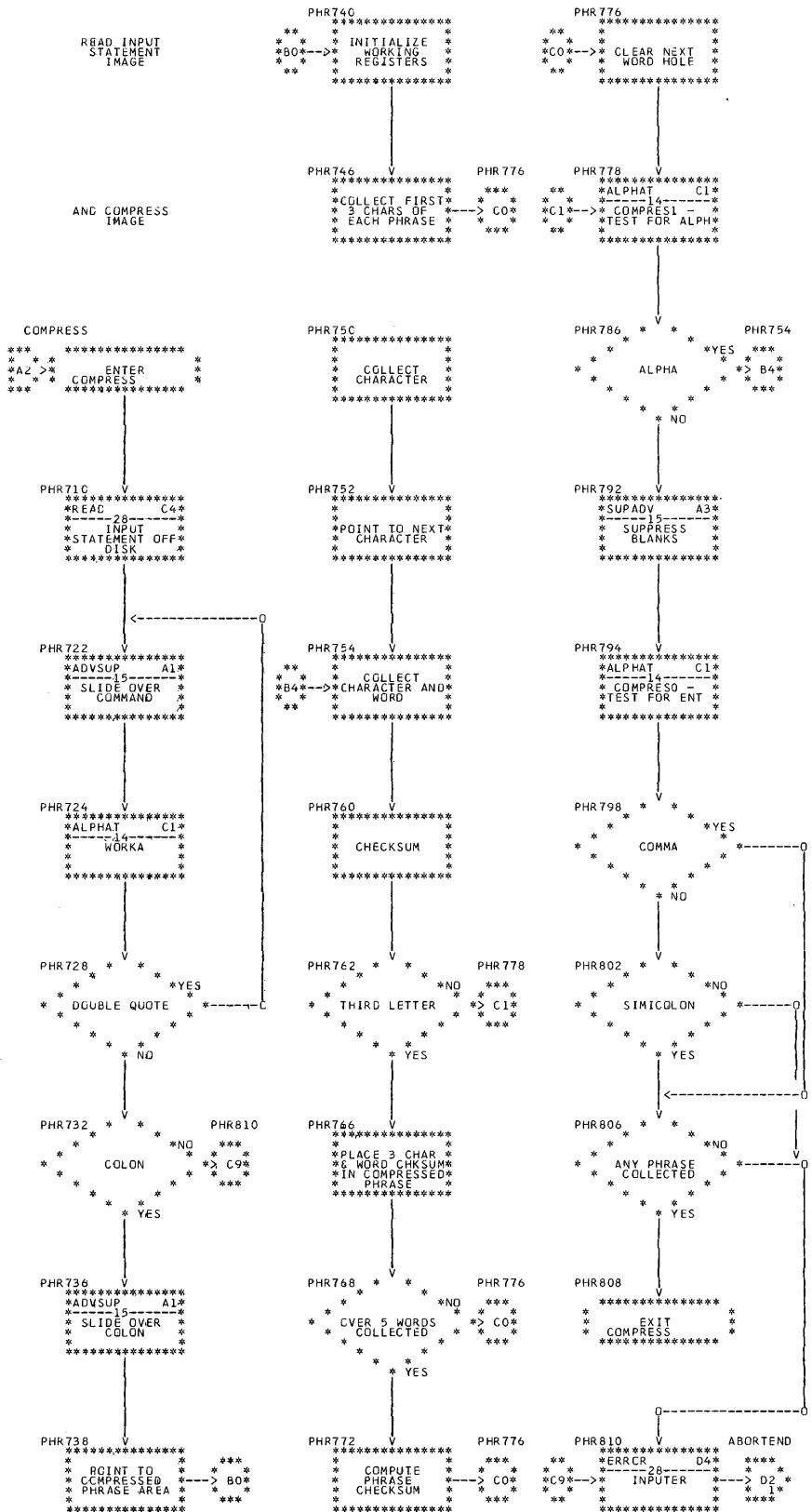
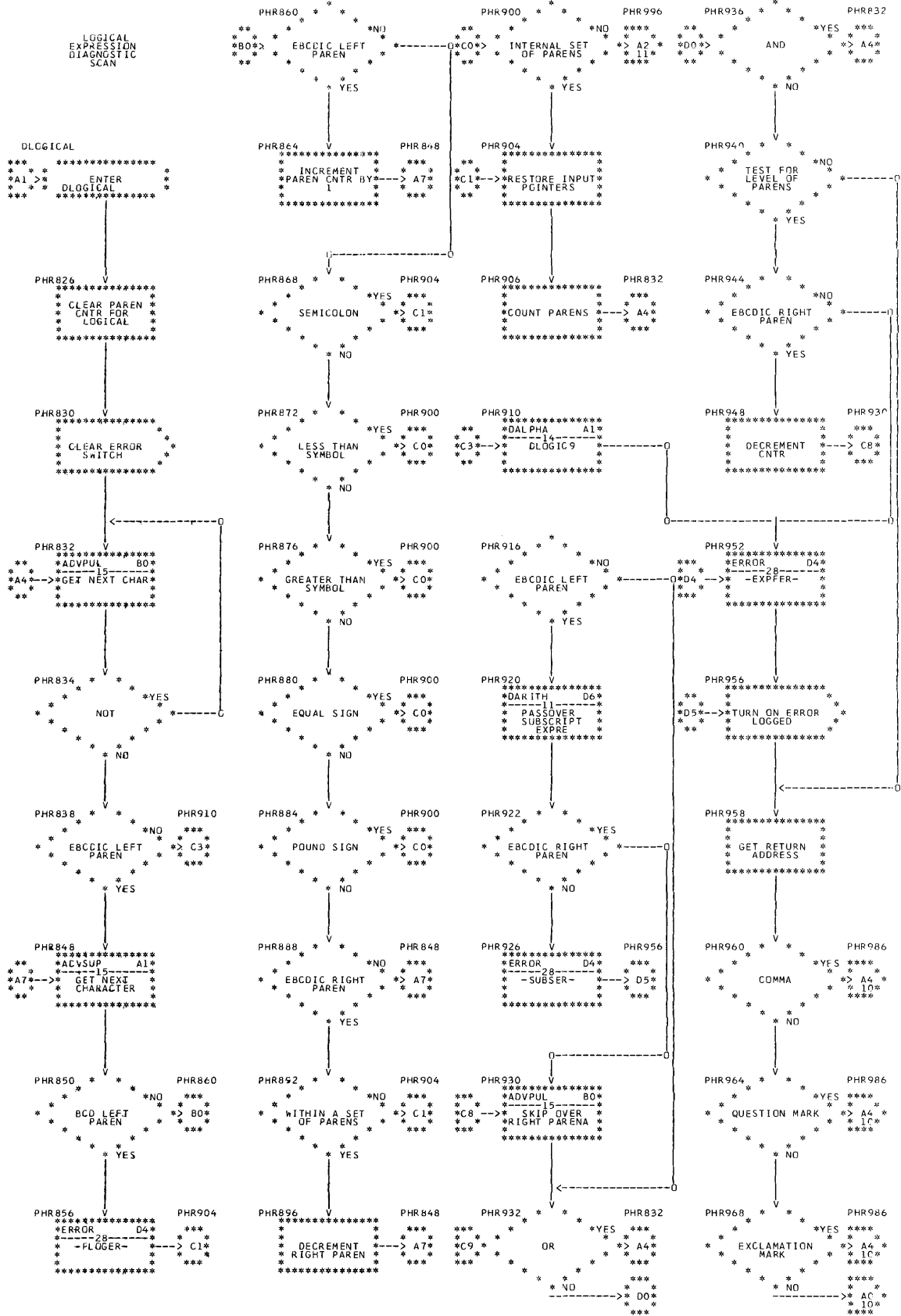
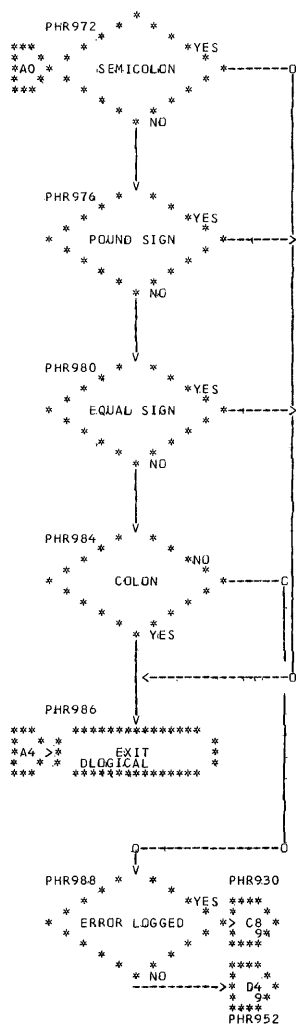
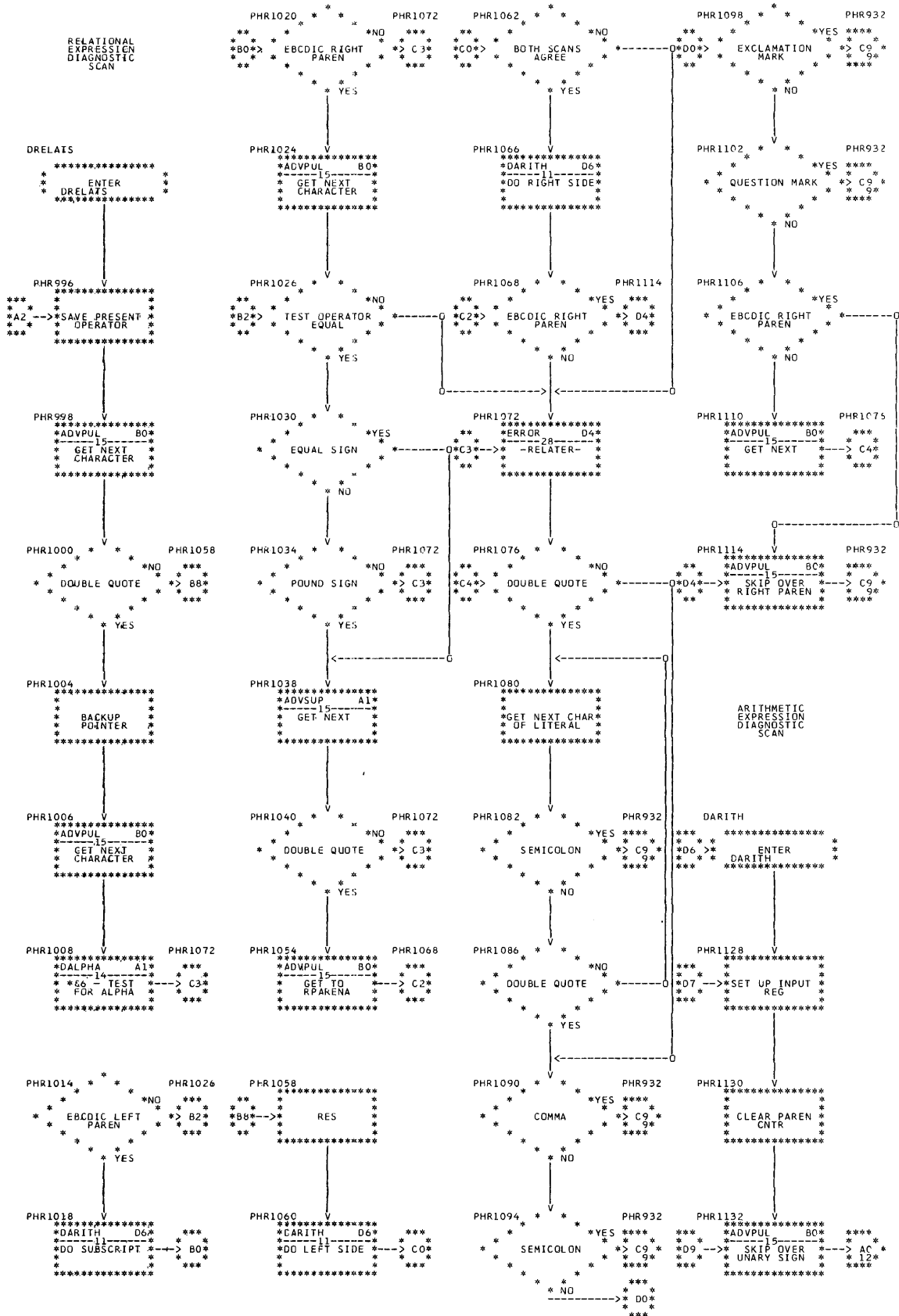
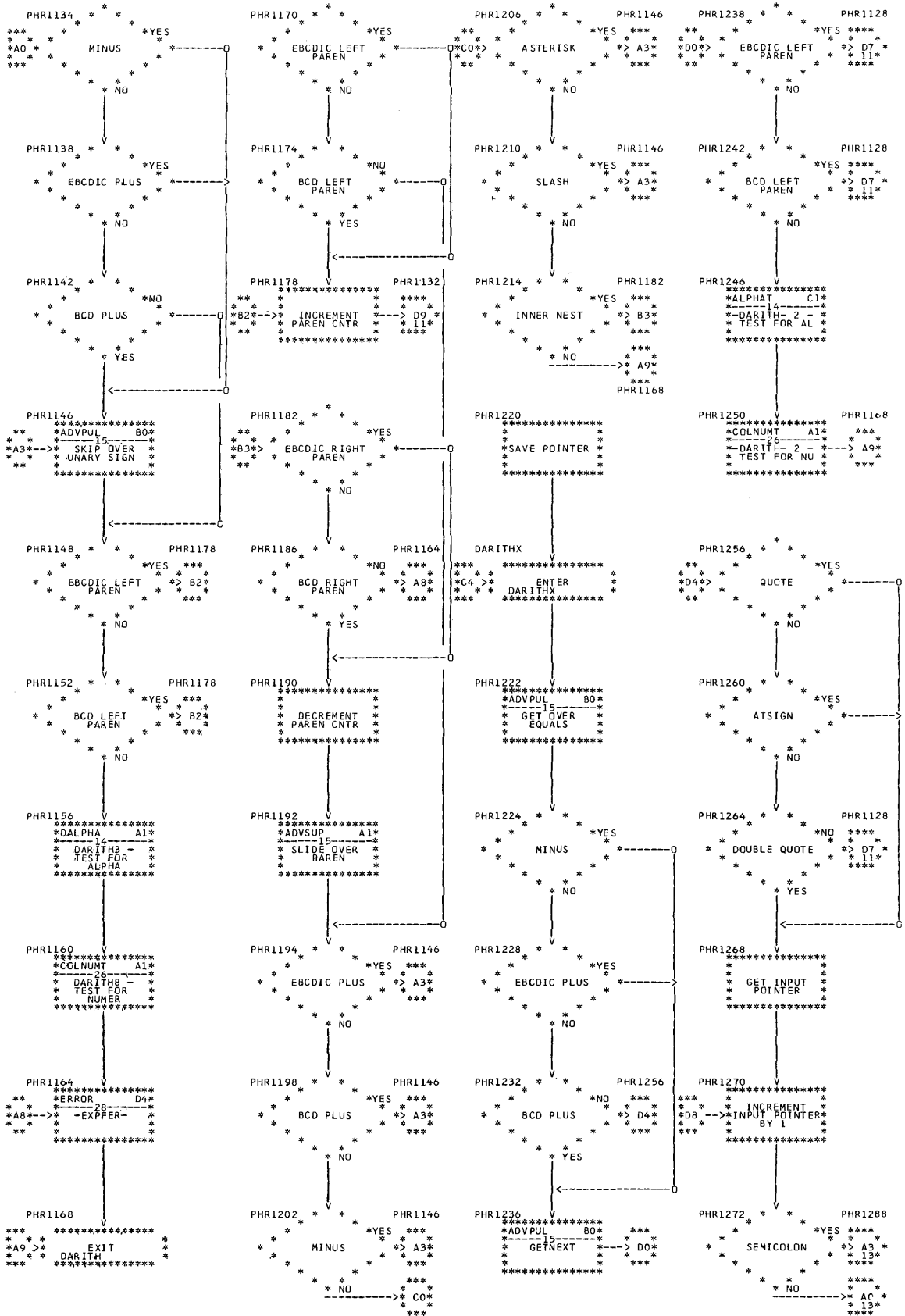


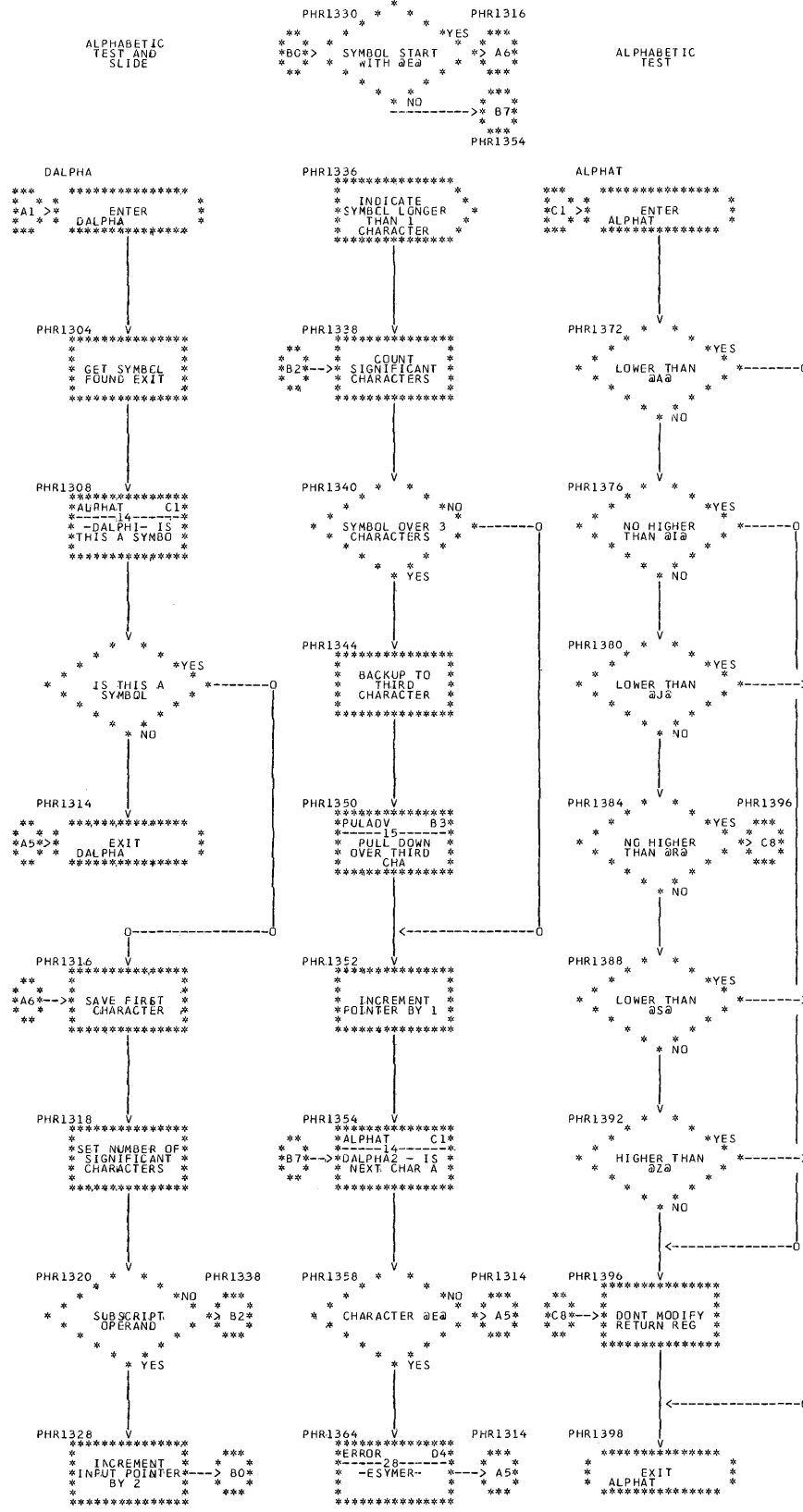
CHART ABC: DFJPHRAS
DCS/CS PHRASE DICTIONARY MAINTENANCE ROUTINE











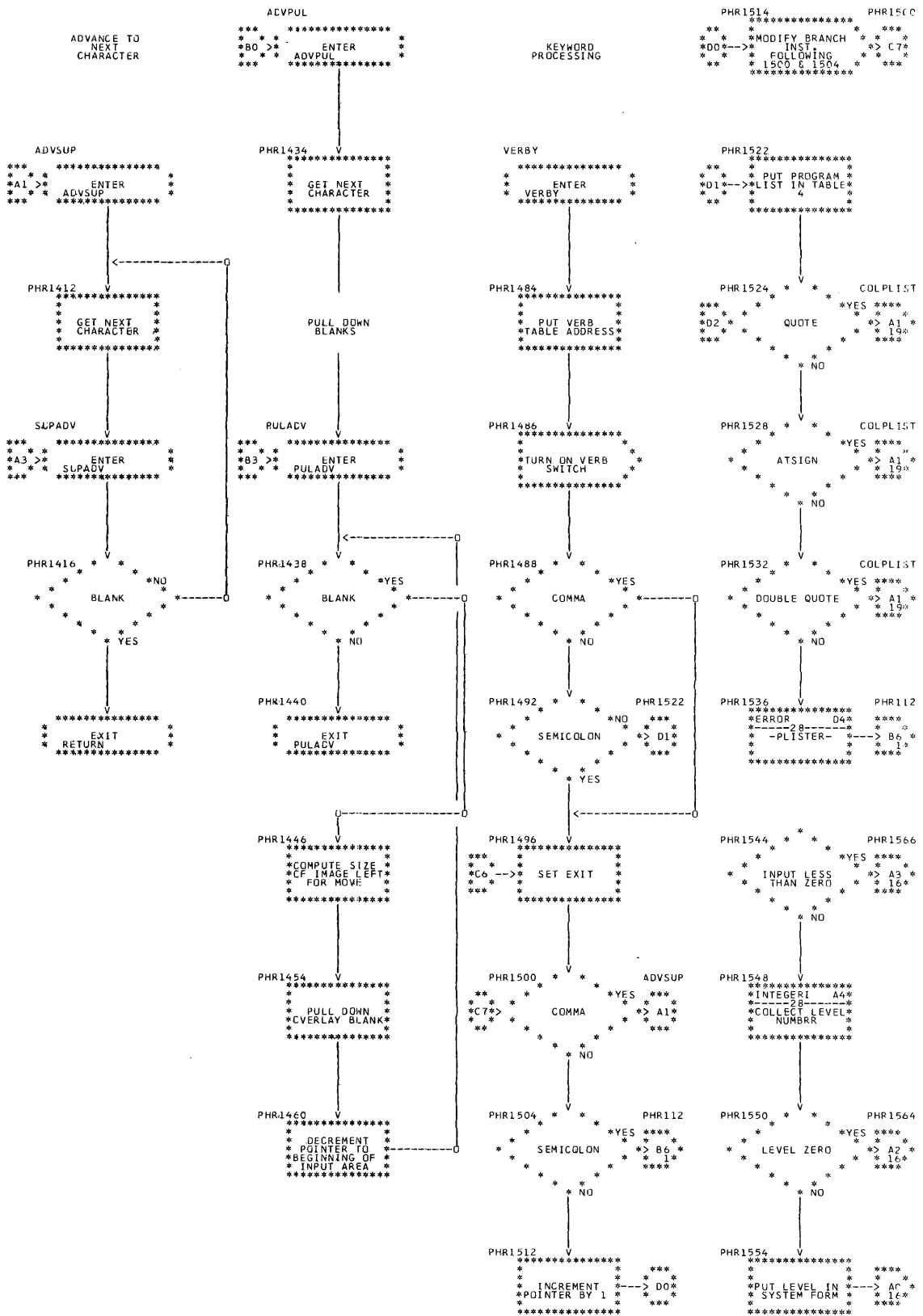


CHART ABC: DFJPHRAS
 DQS/QS PHRASE DICTIONARY MAINTENANCE ROUTINE

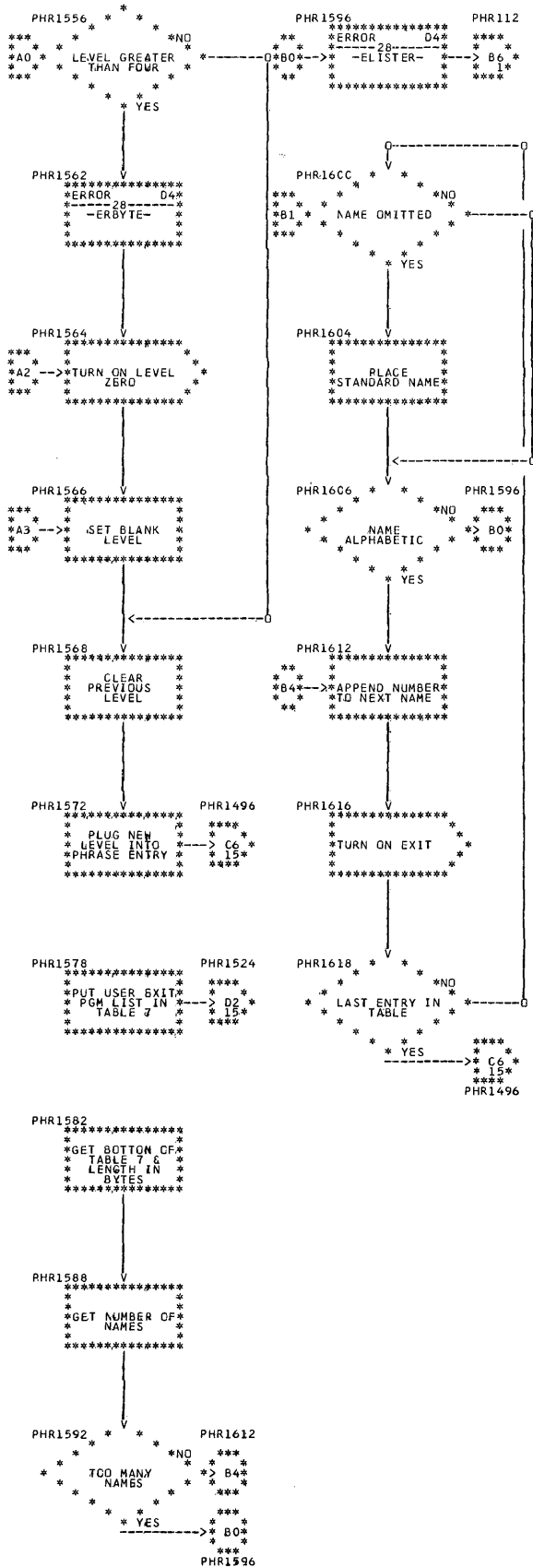


CHART ABC: DFJPHRAS
DCS/OS PHRASE DICTIONARY MAINTENANCE ROUTINE

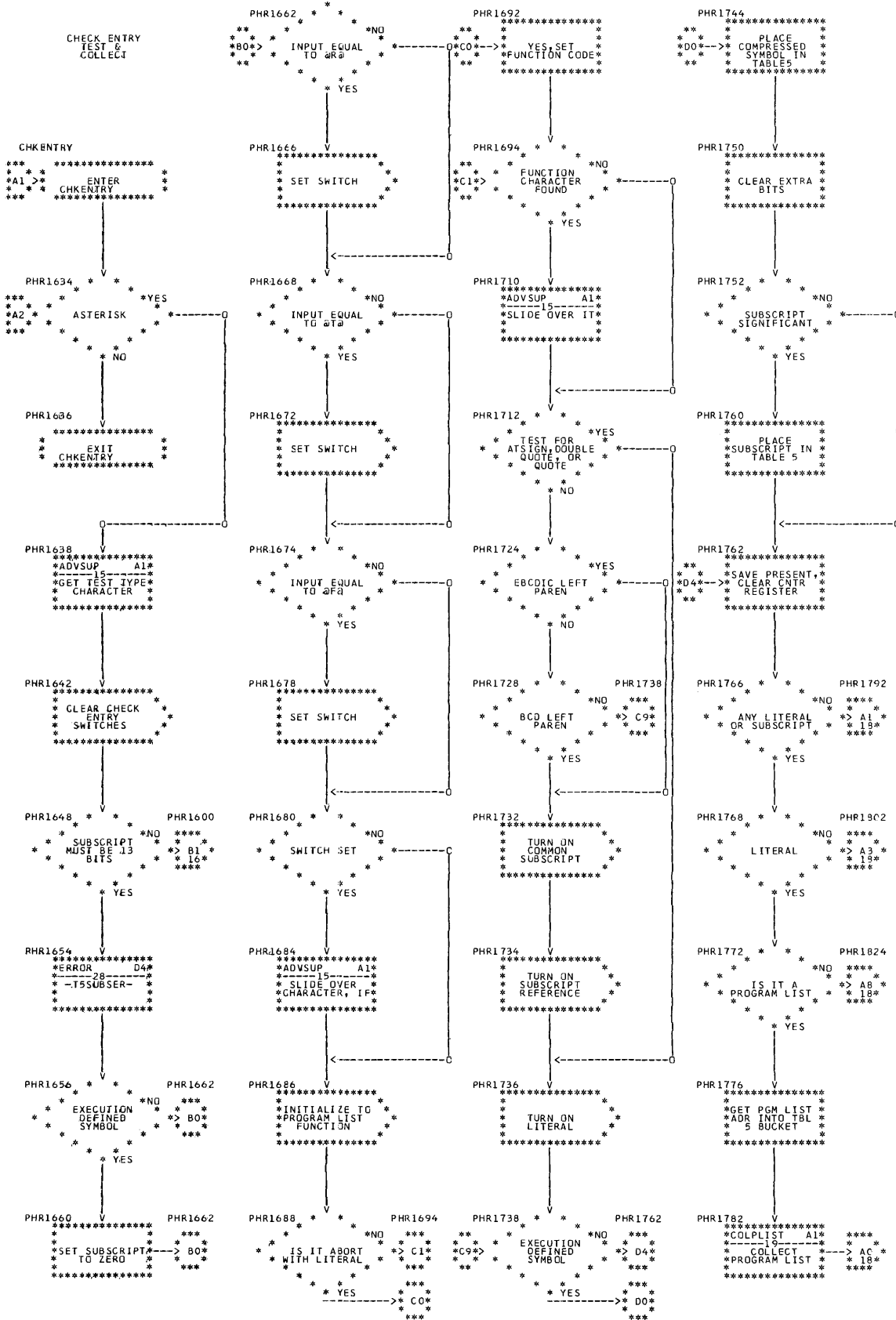
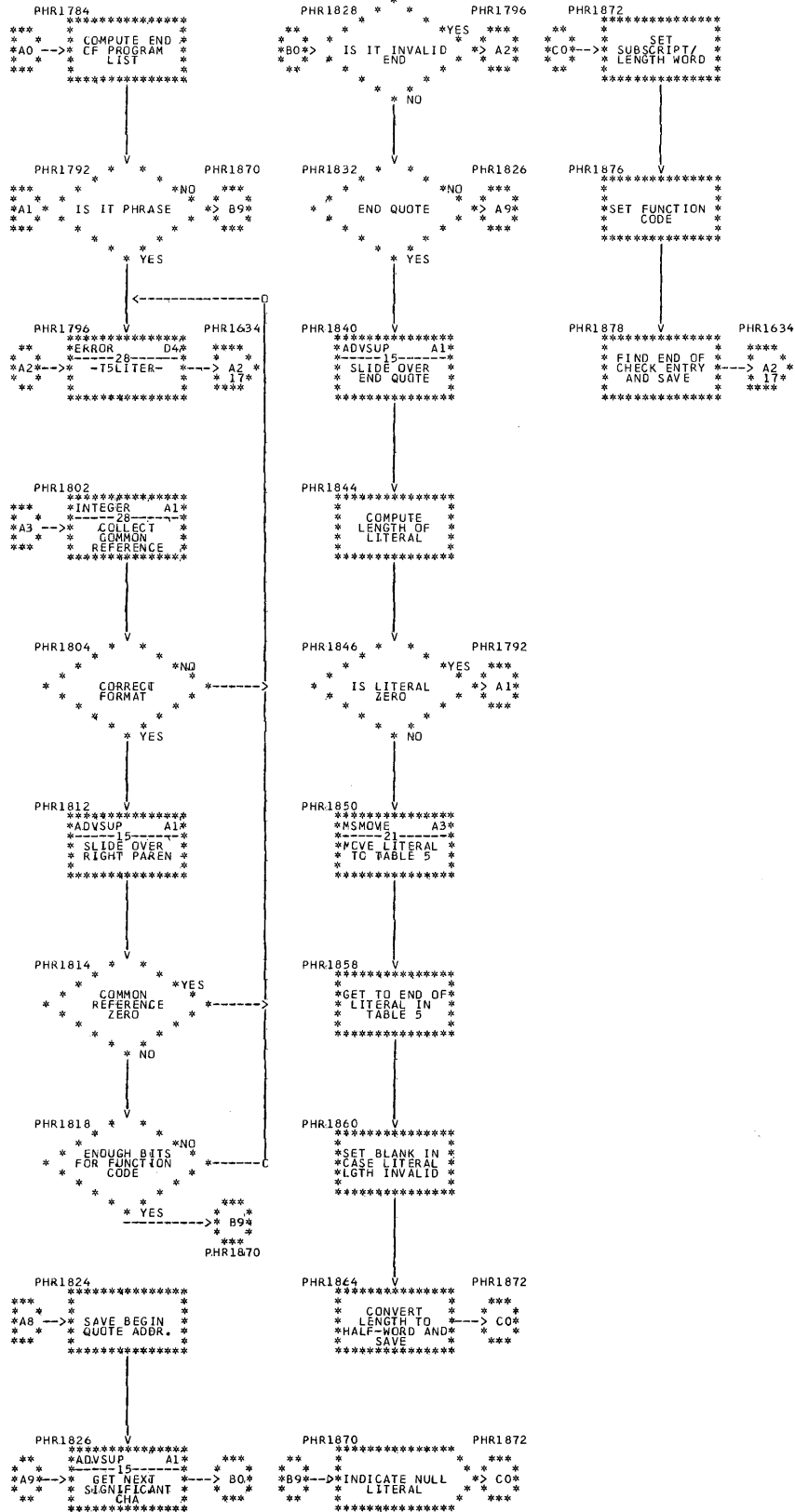
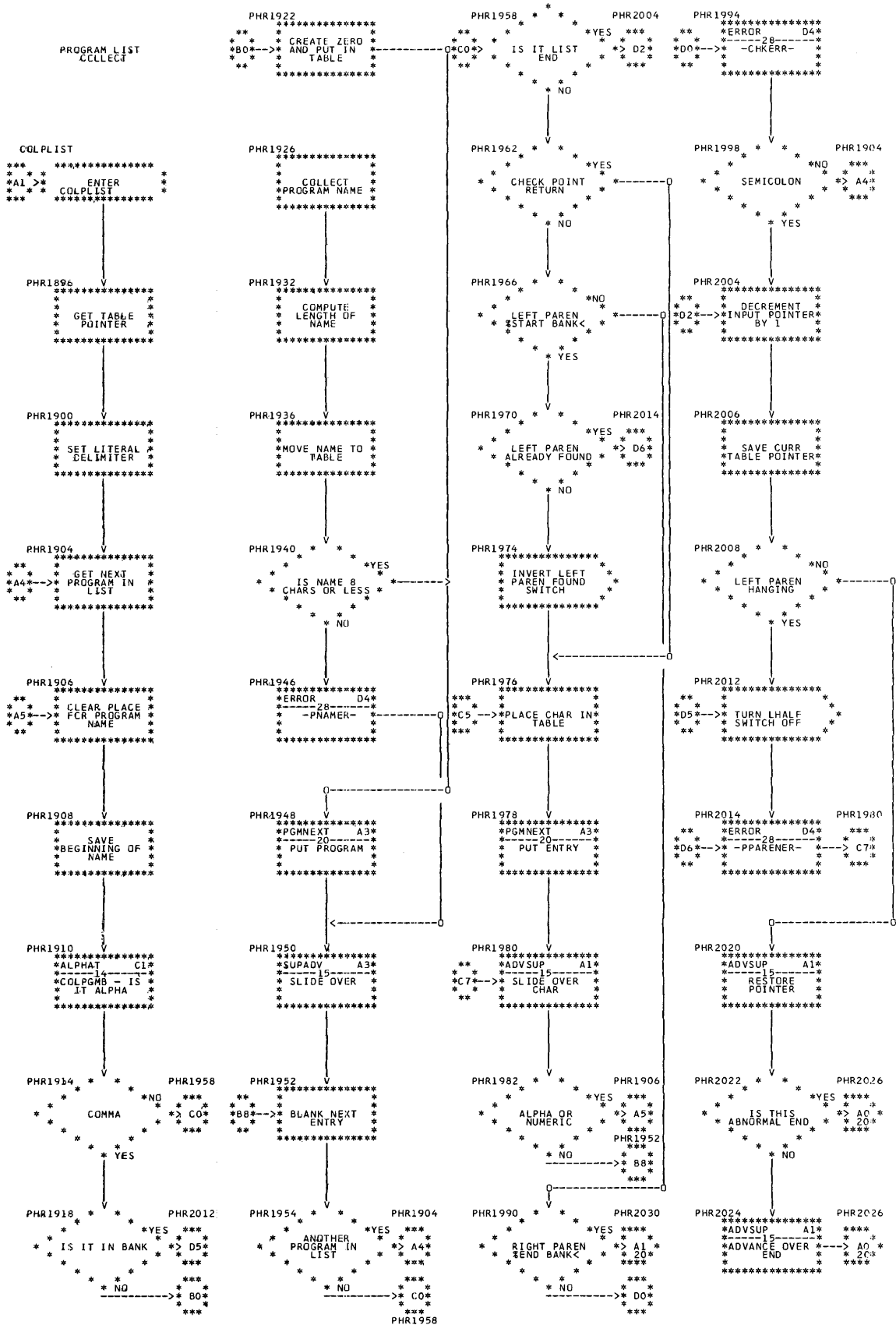
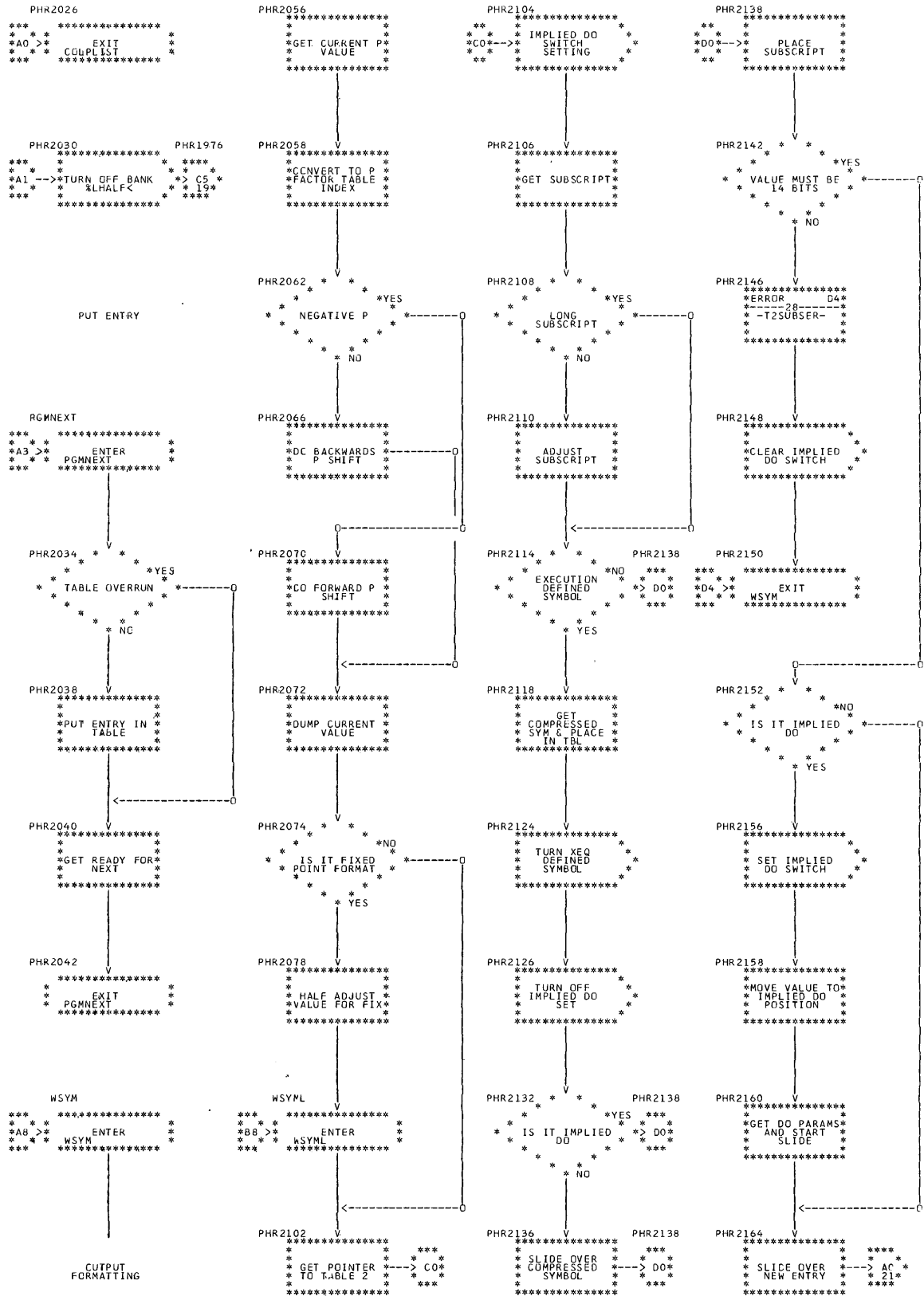
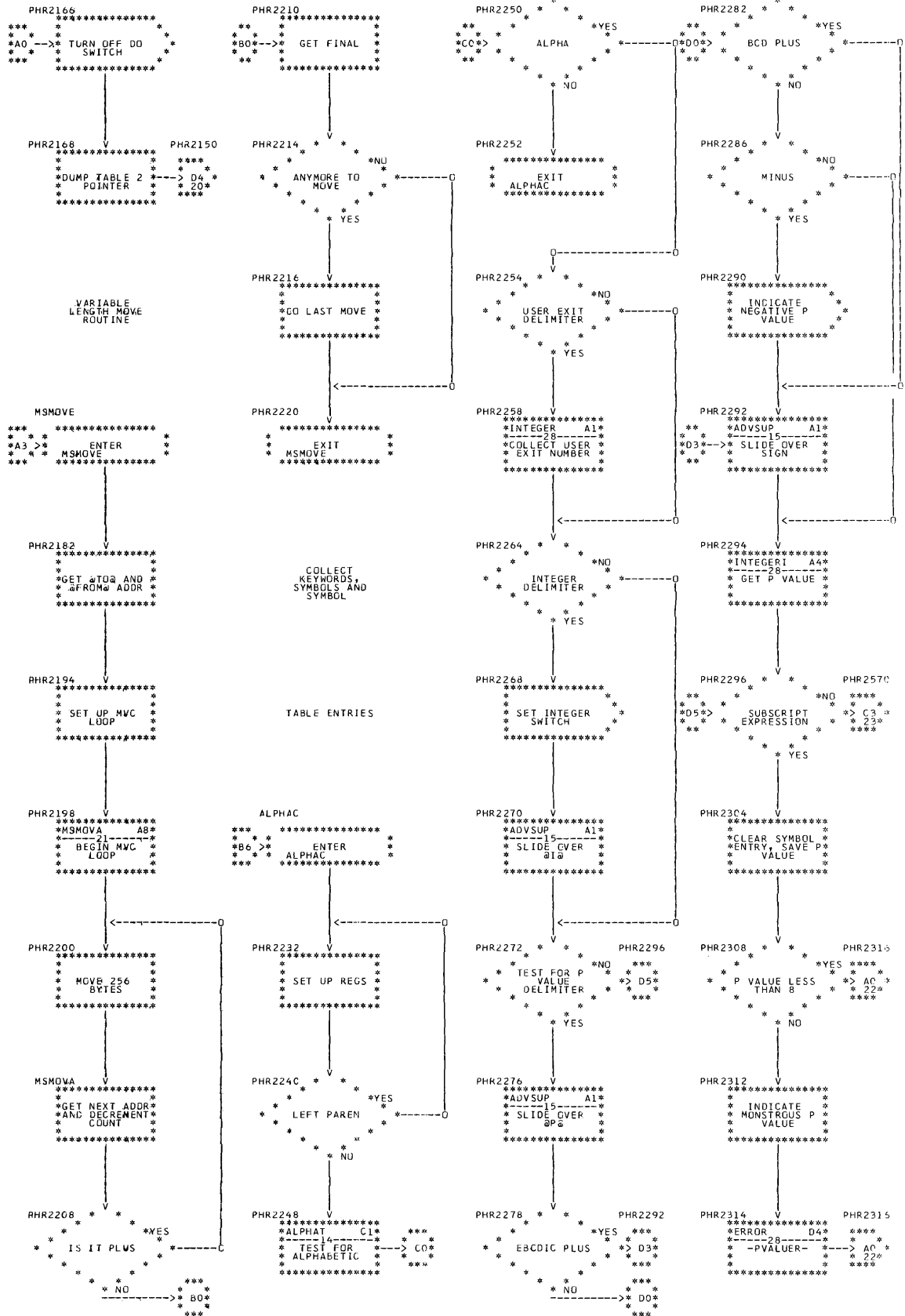


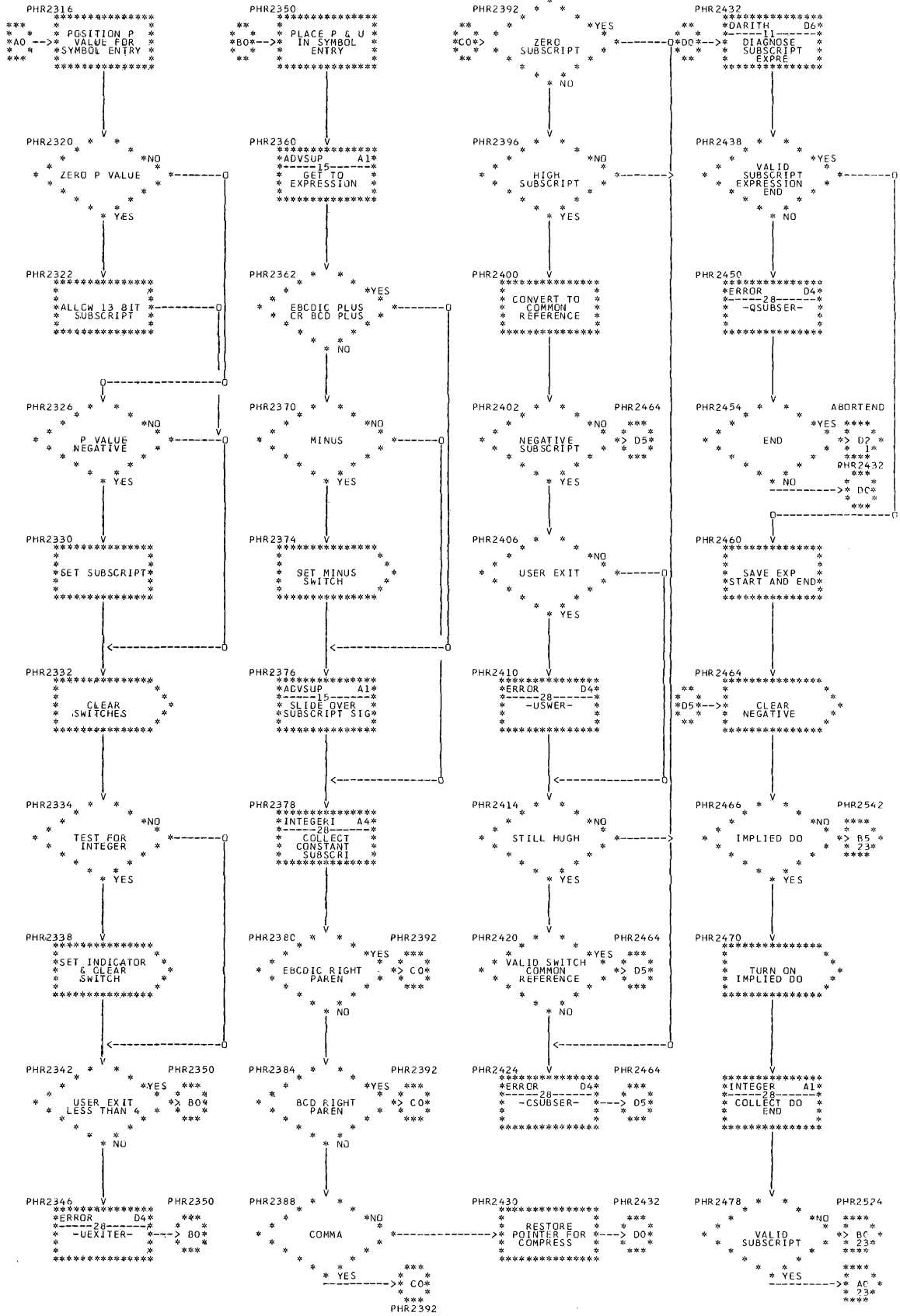
CHART ABC: DFJPHRAS
 DOS/OS PHRASE DICTIONARY MAINTENANCE ROUTINE

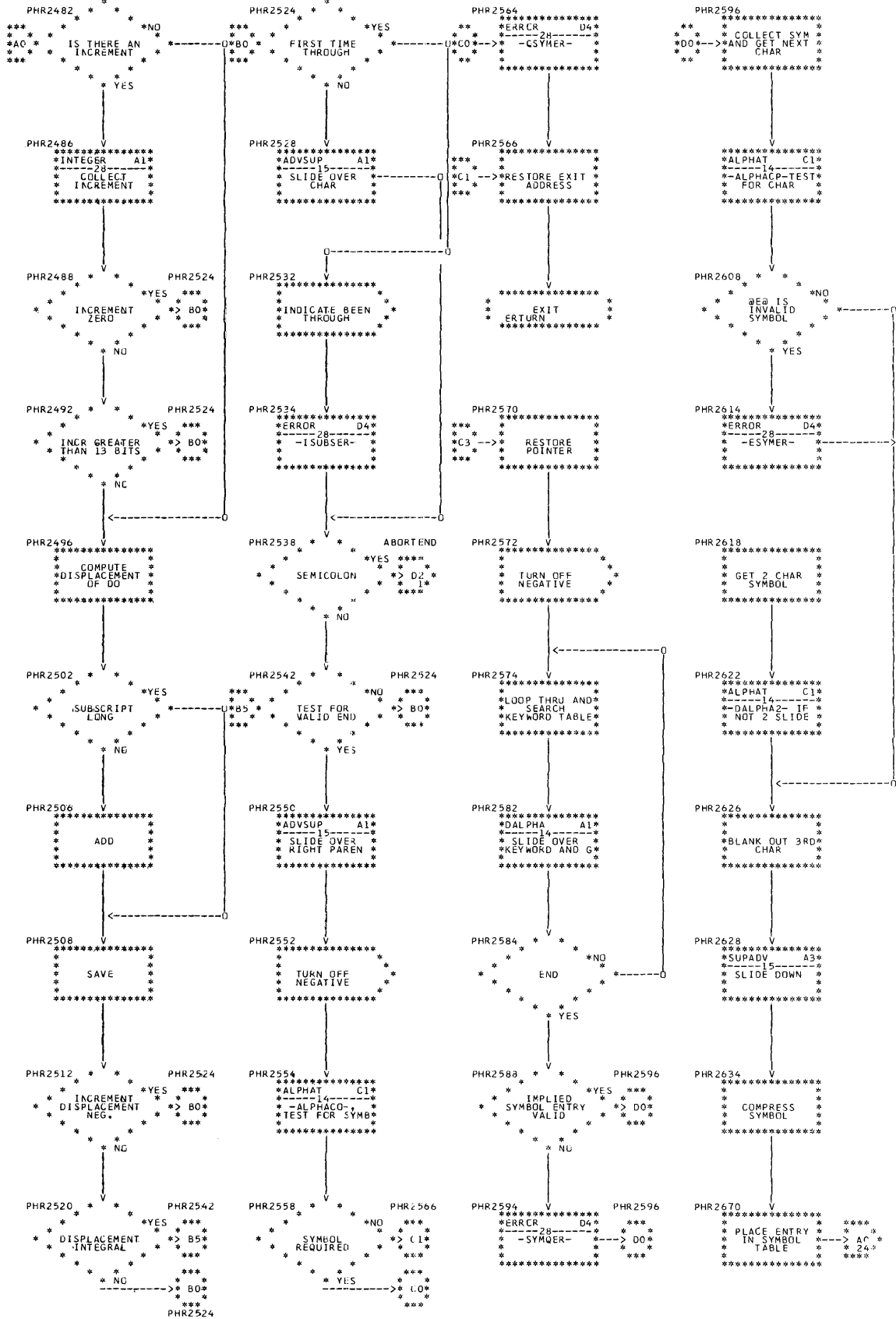


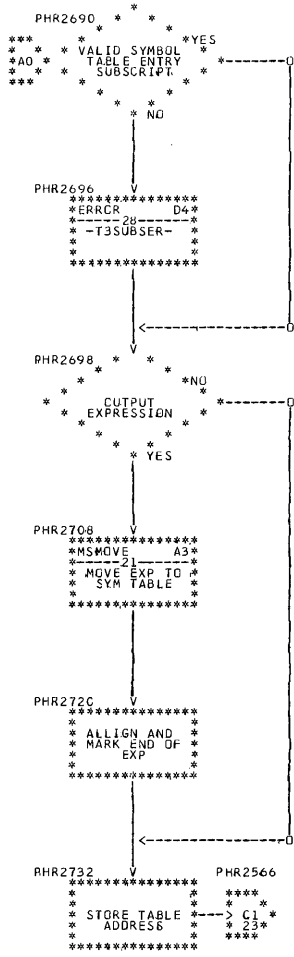


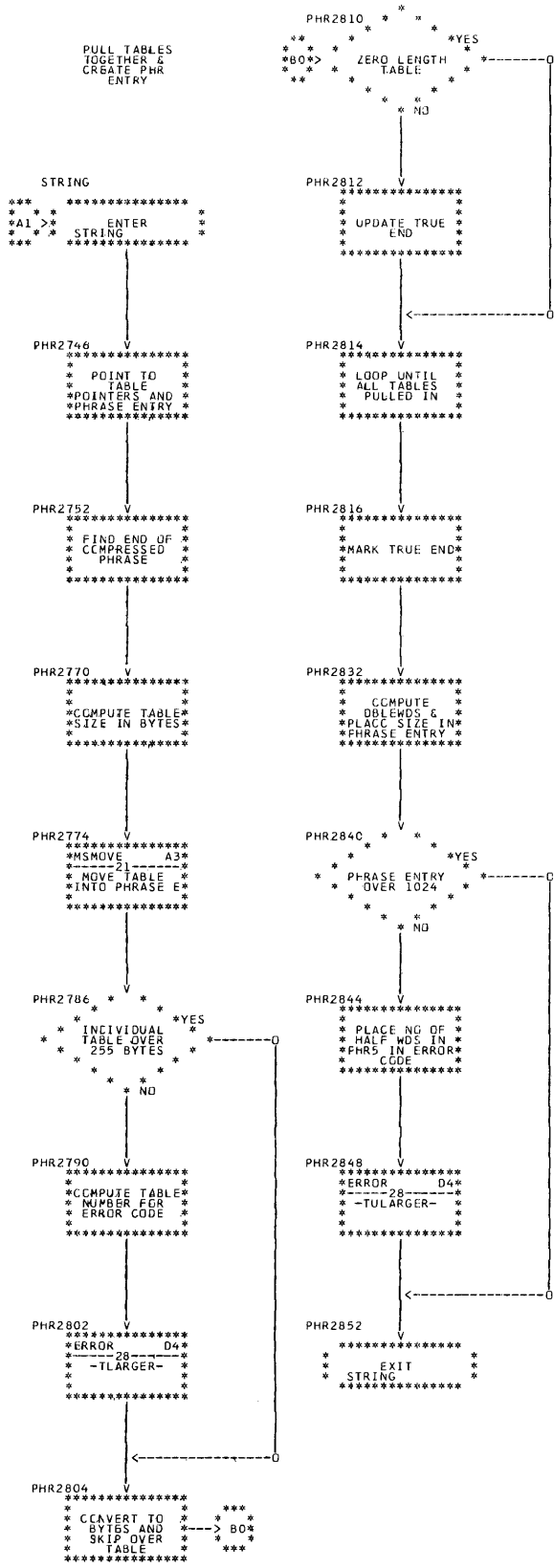


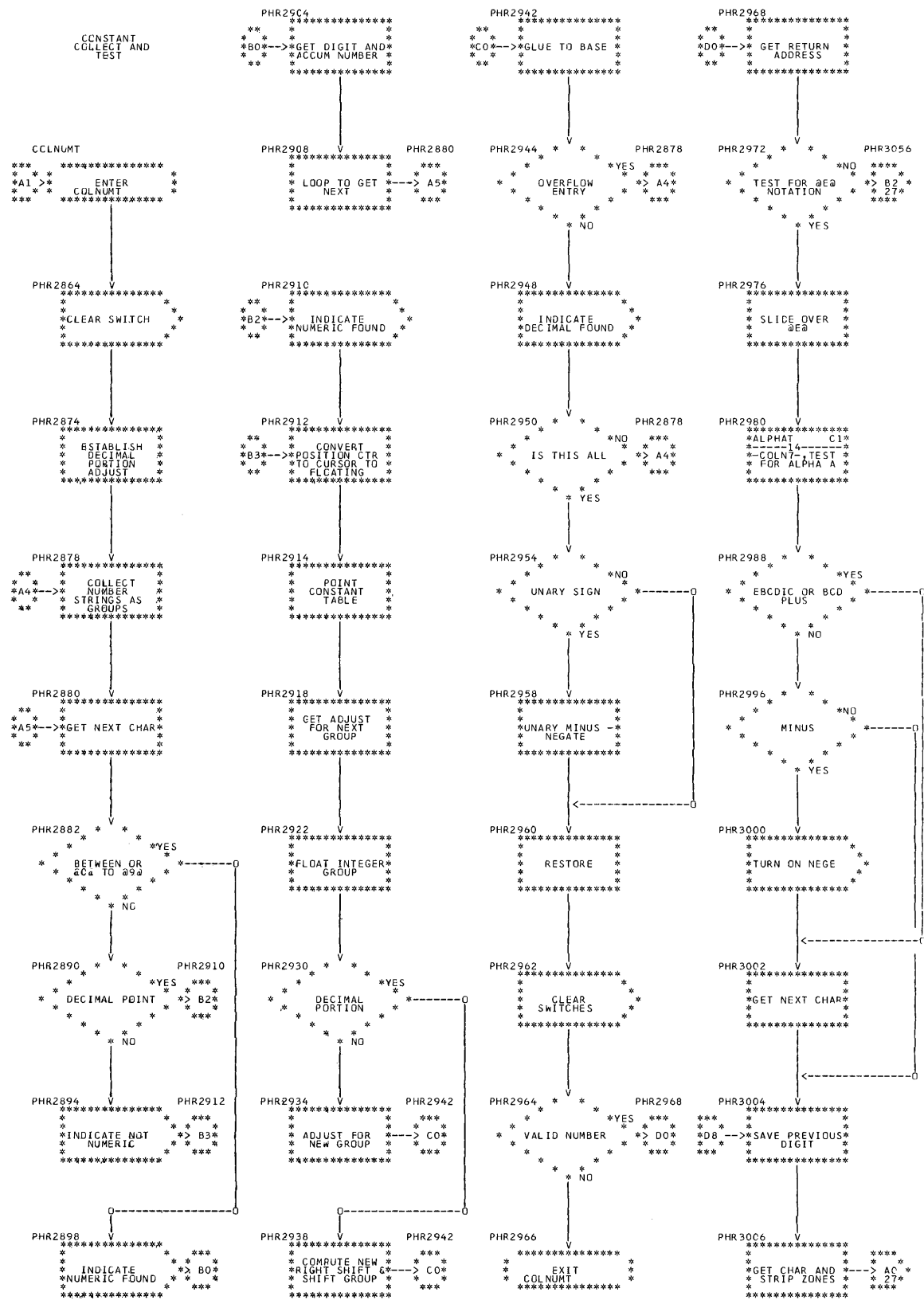


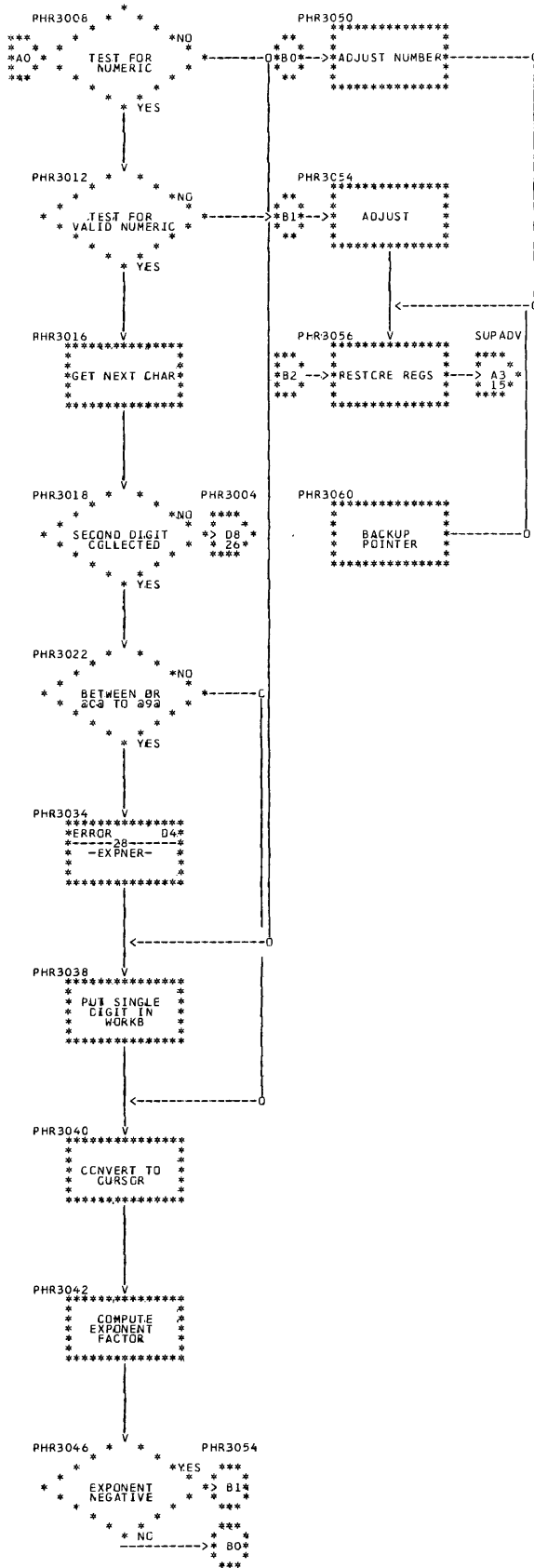


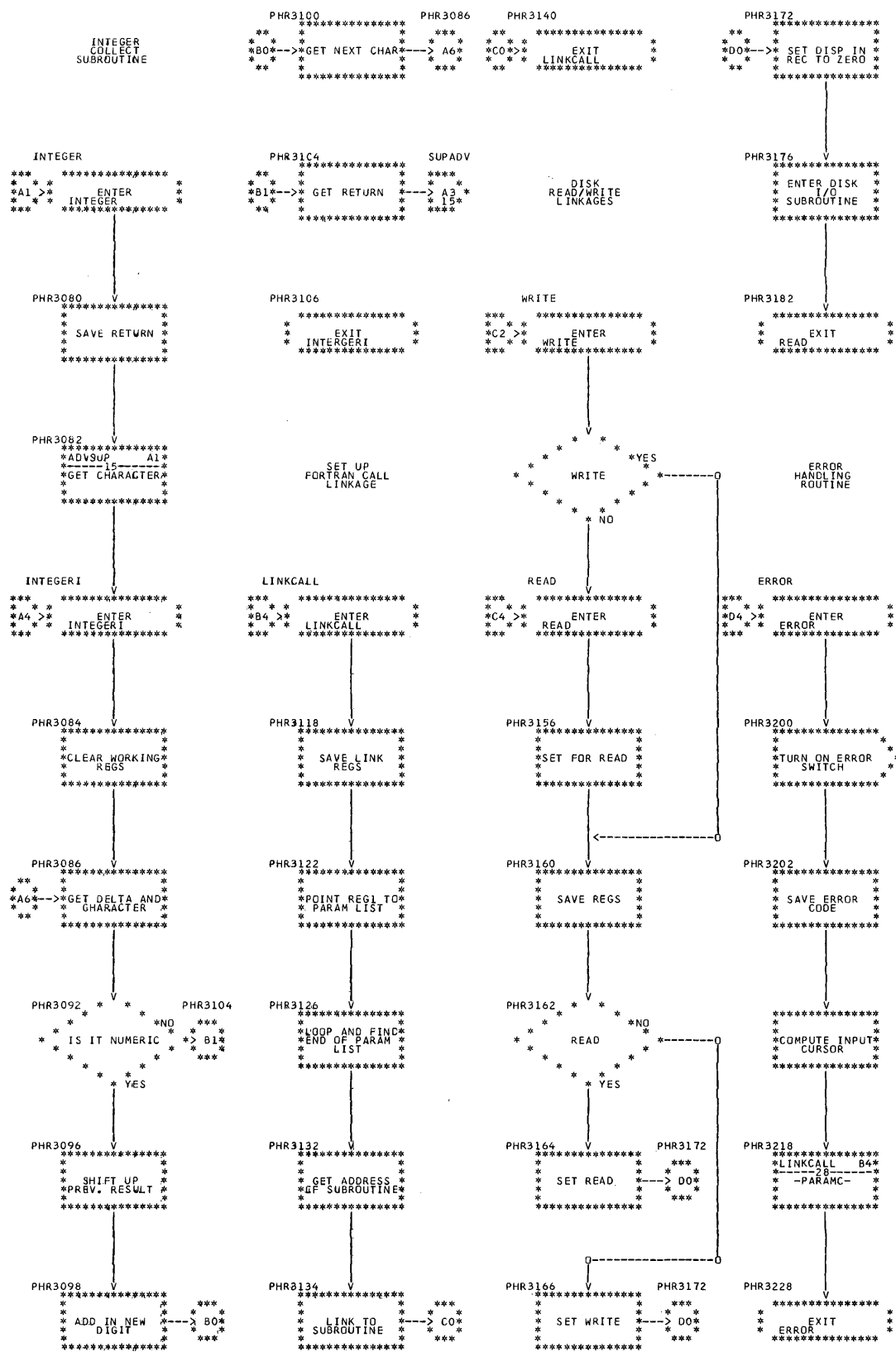












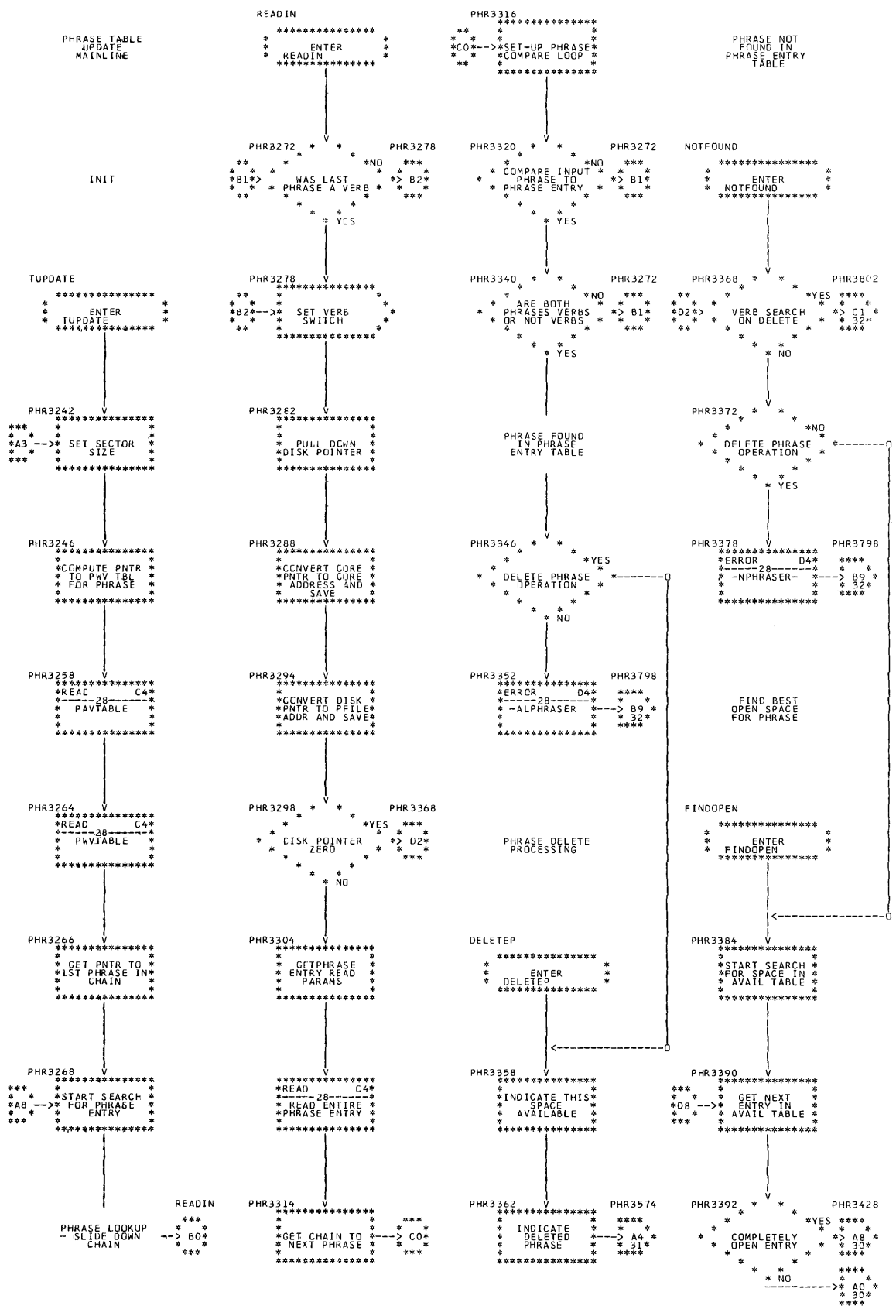
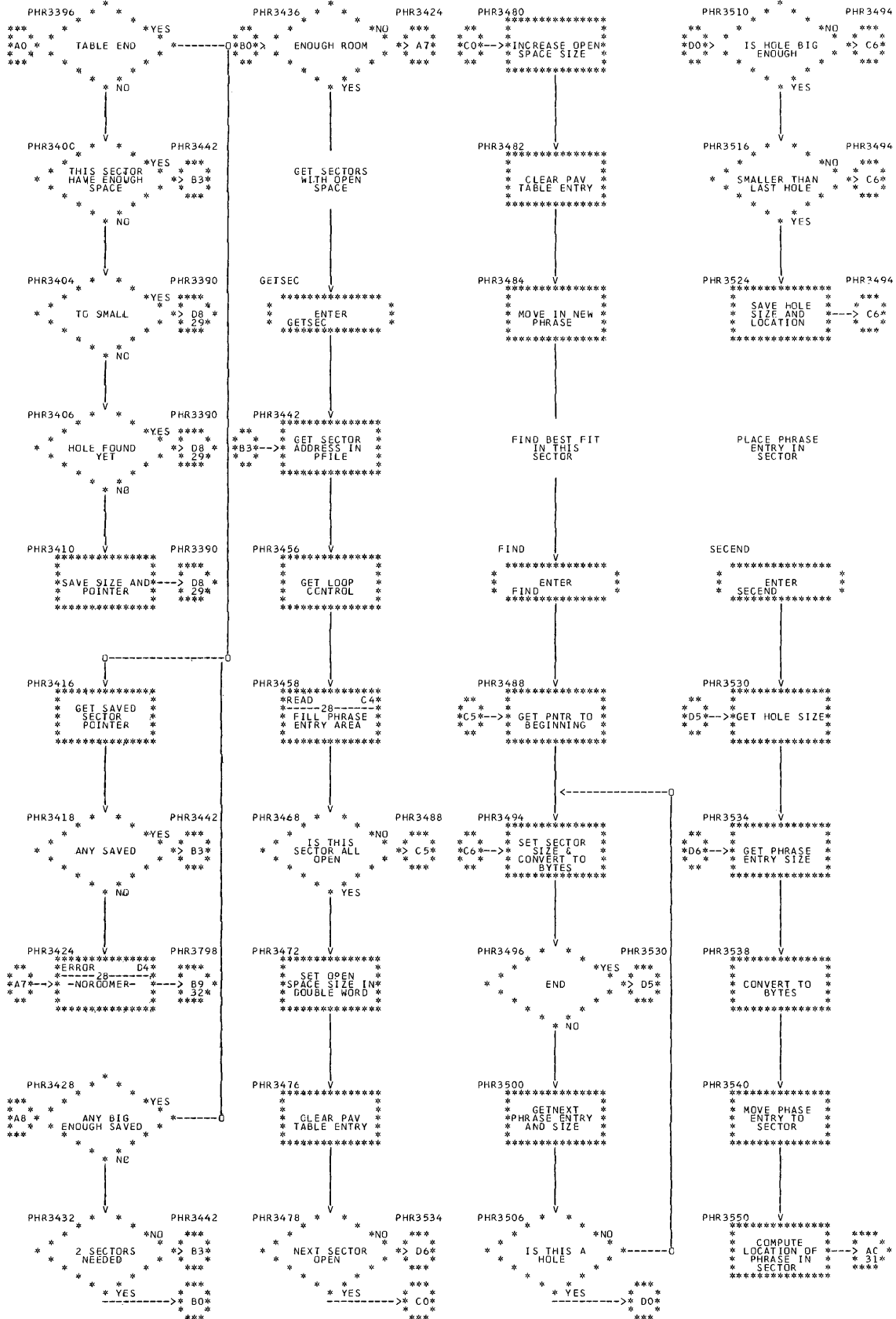


CHART ABC: DFJPHRAS
 DOS/CS PHRASE DICTIONARY MAINTENANCE ROUTINE



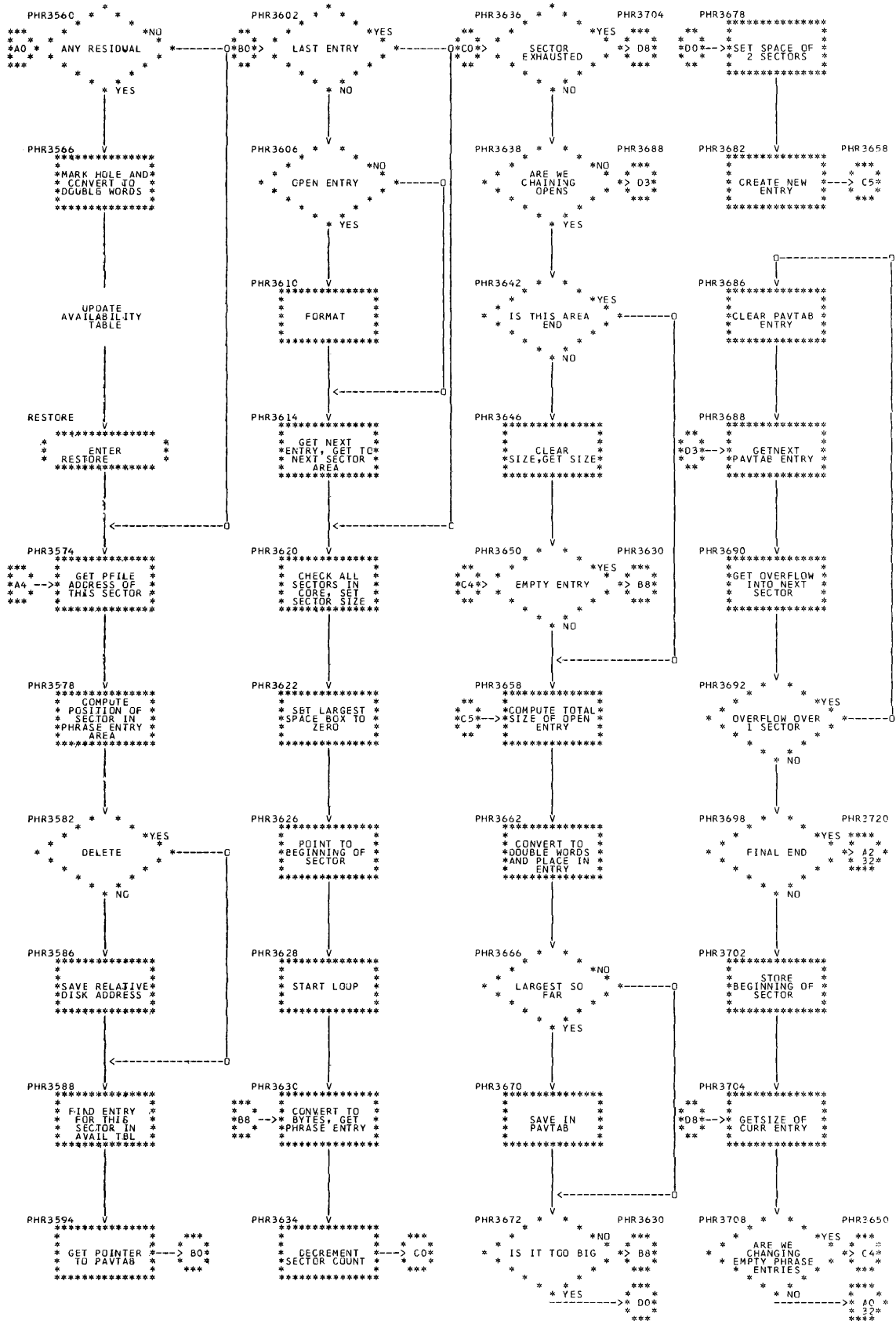


CHART ABC: OFJPHRAS
 DOS/OS PHRASE DICTIONARY MAINTENANCE ROUTINE

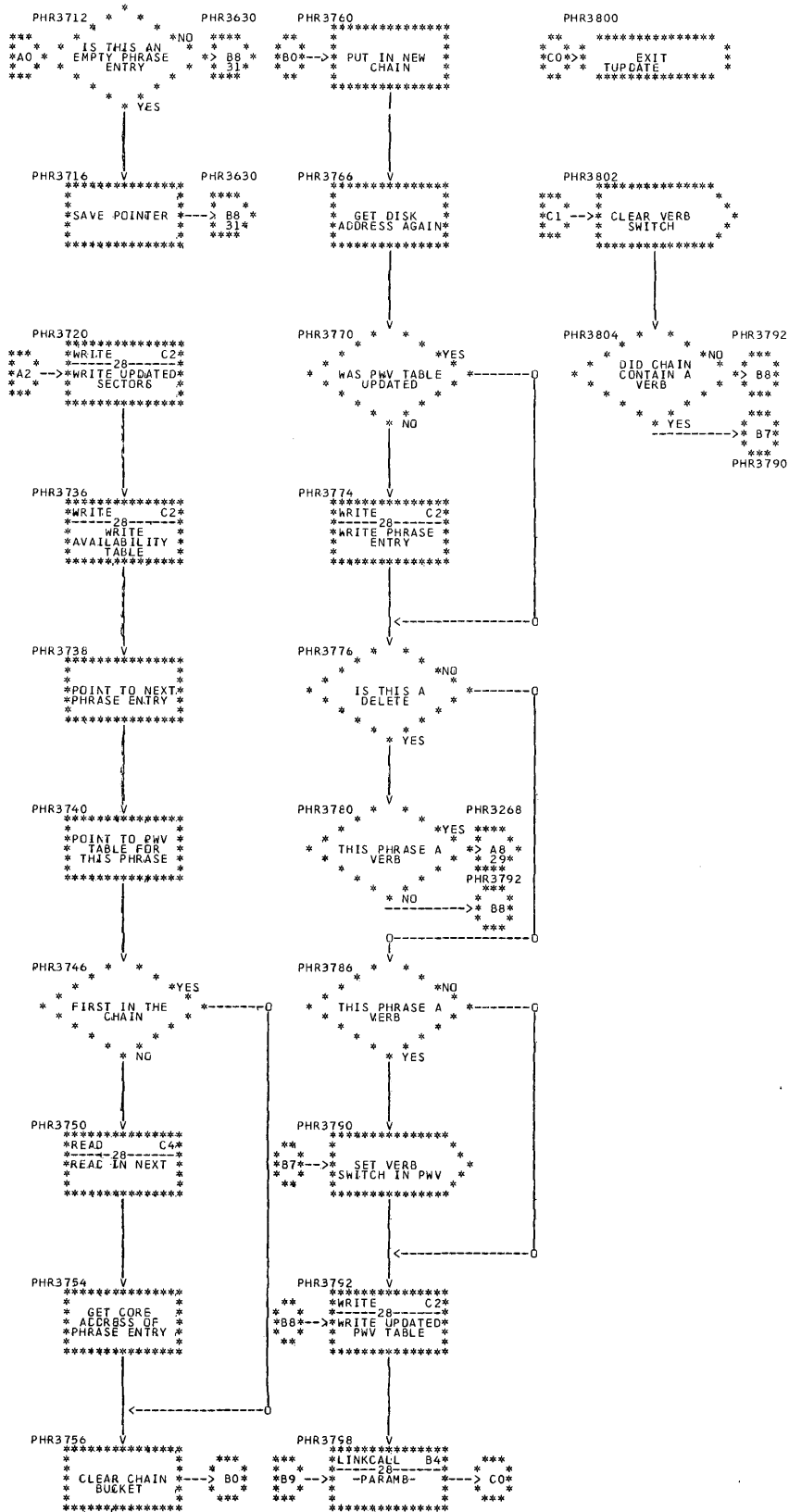
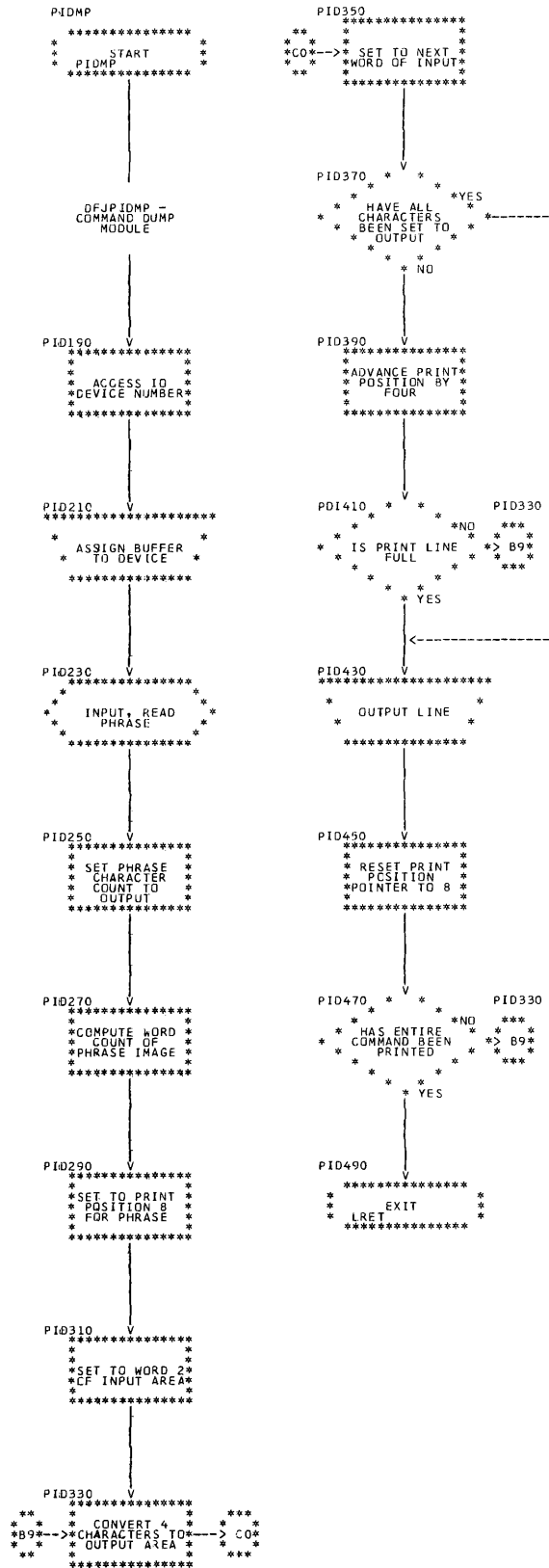
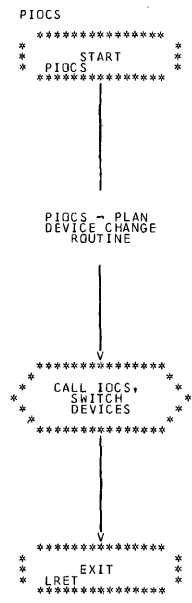
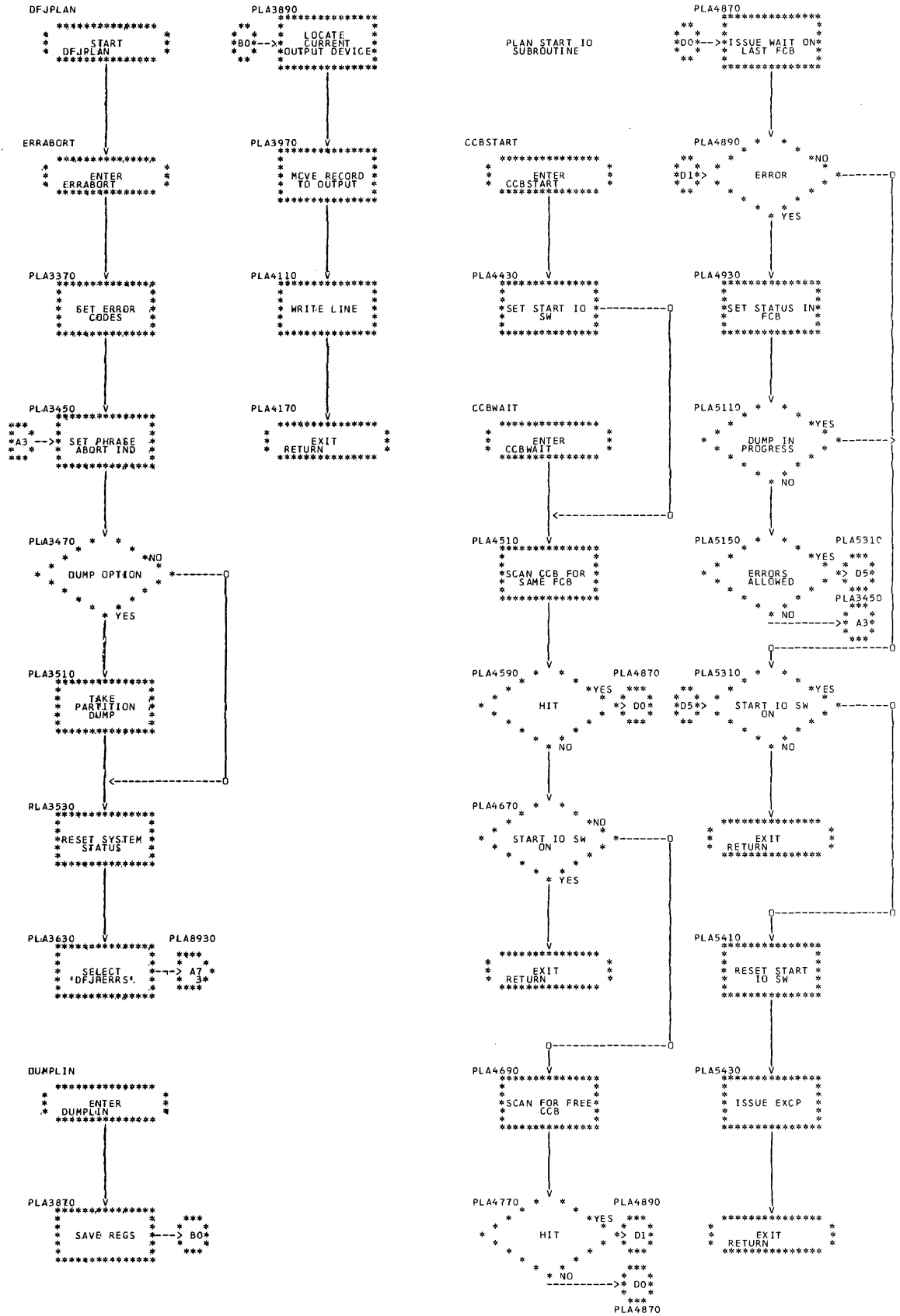
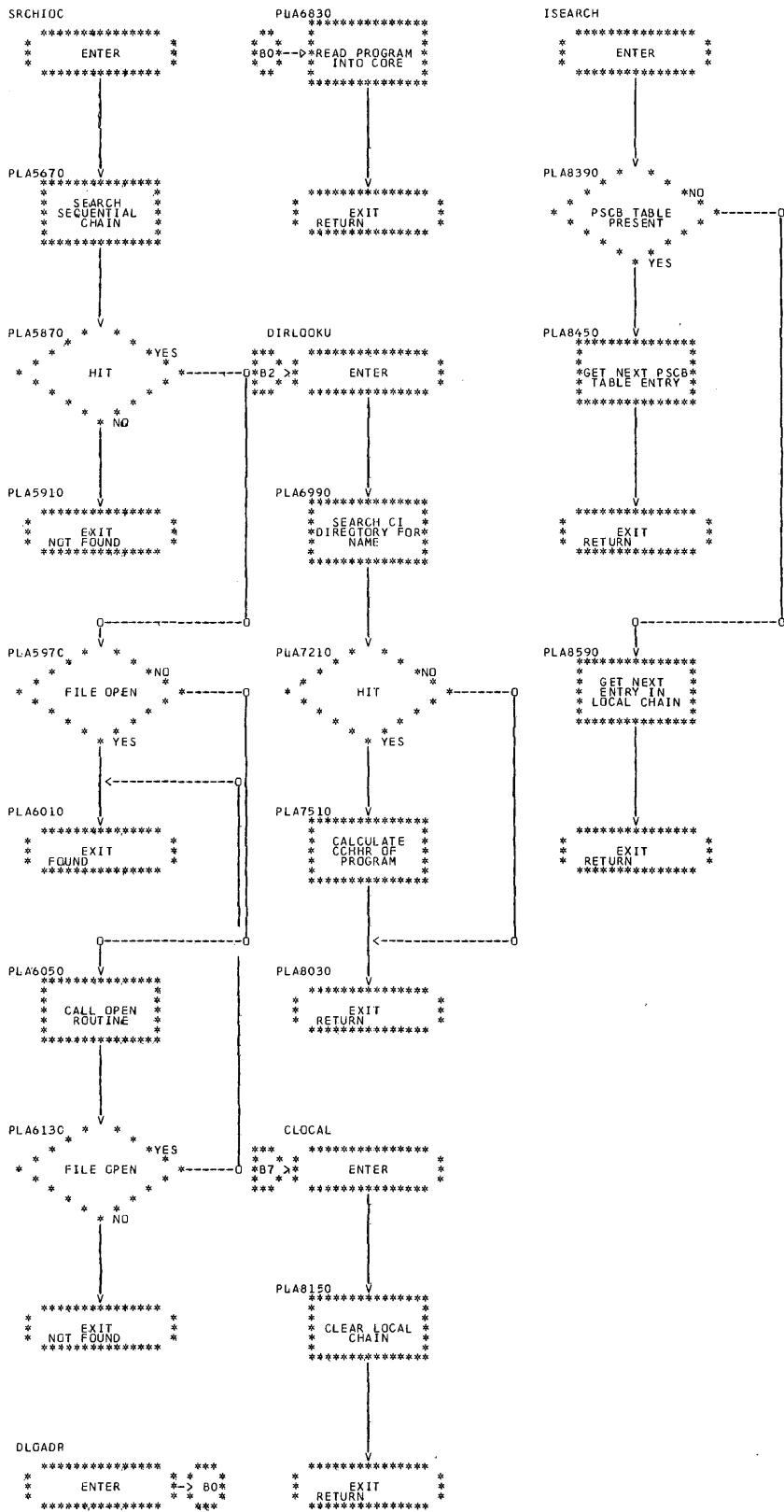


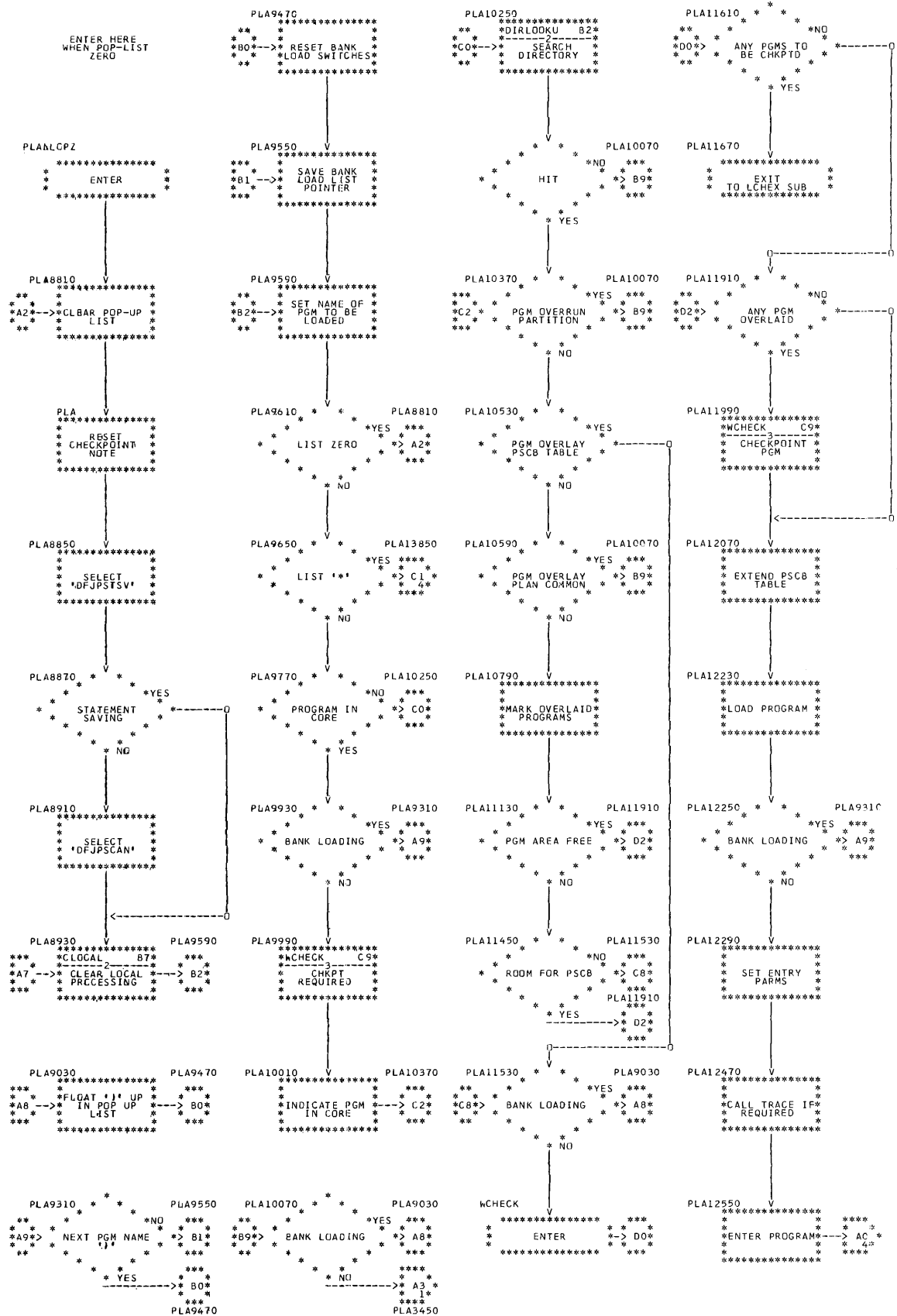
CHART ABE: DFJPIDMP
DCS/CS COMMAND DUMP ROUTINE

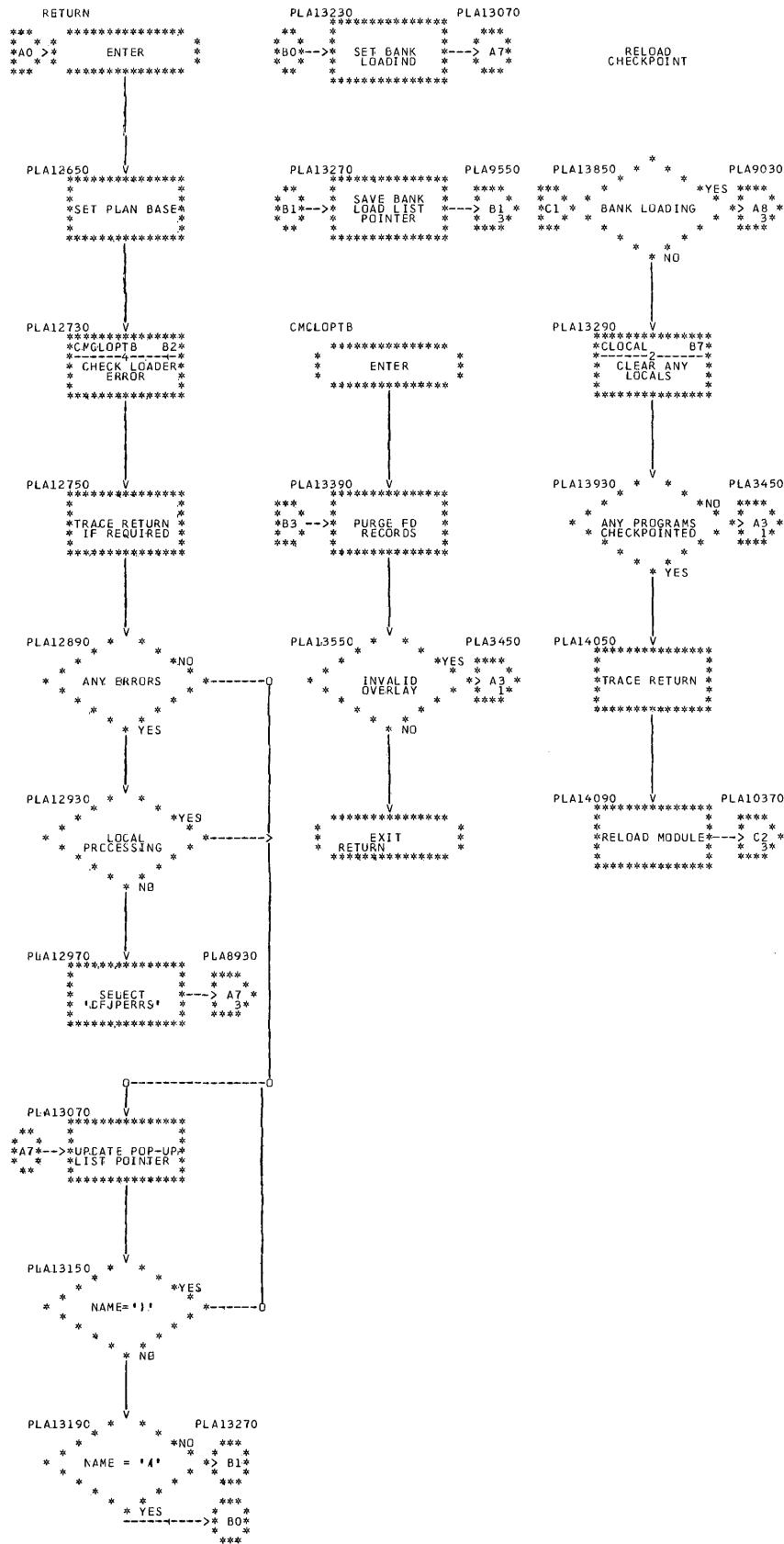


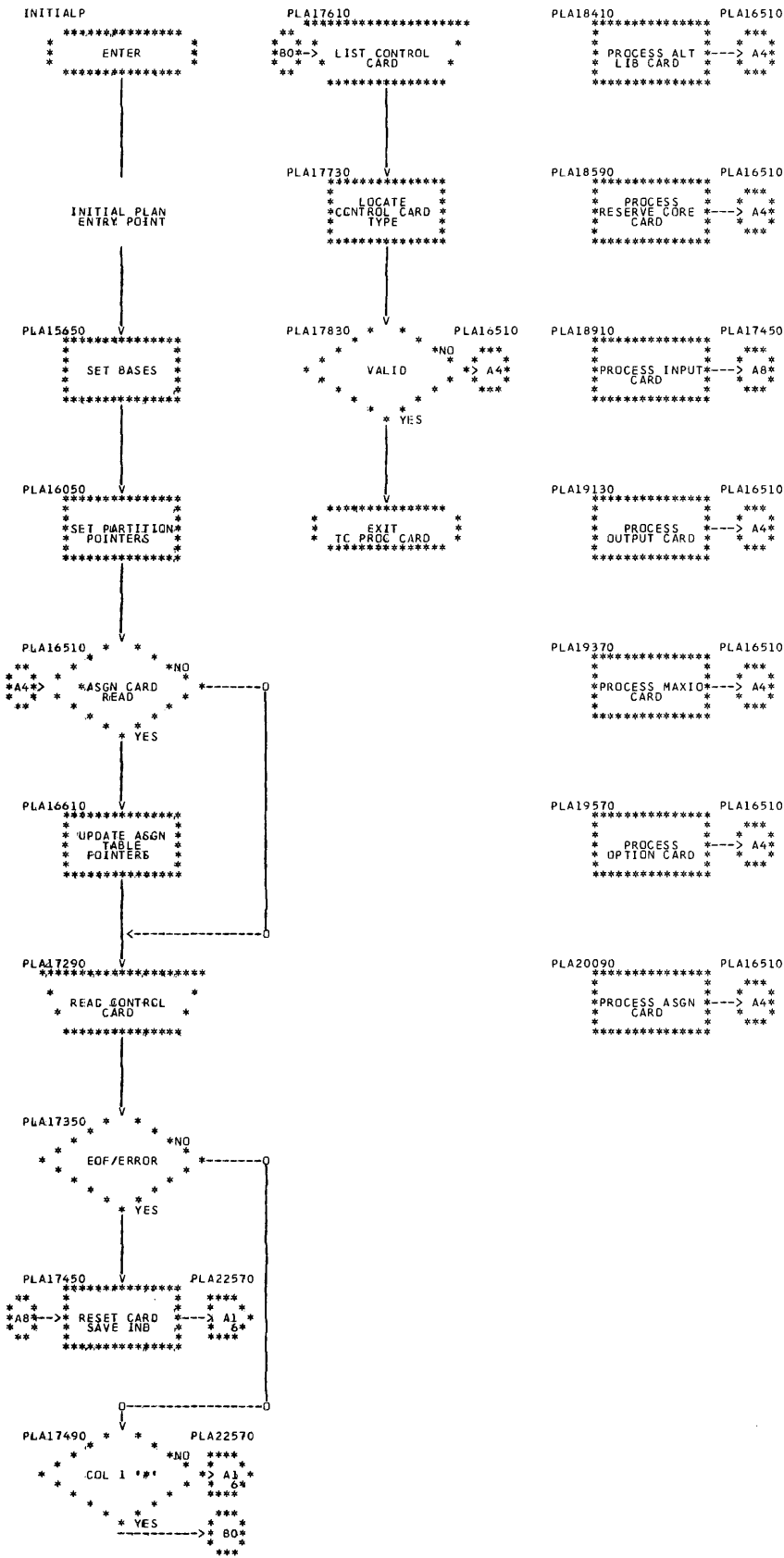


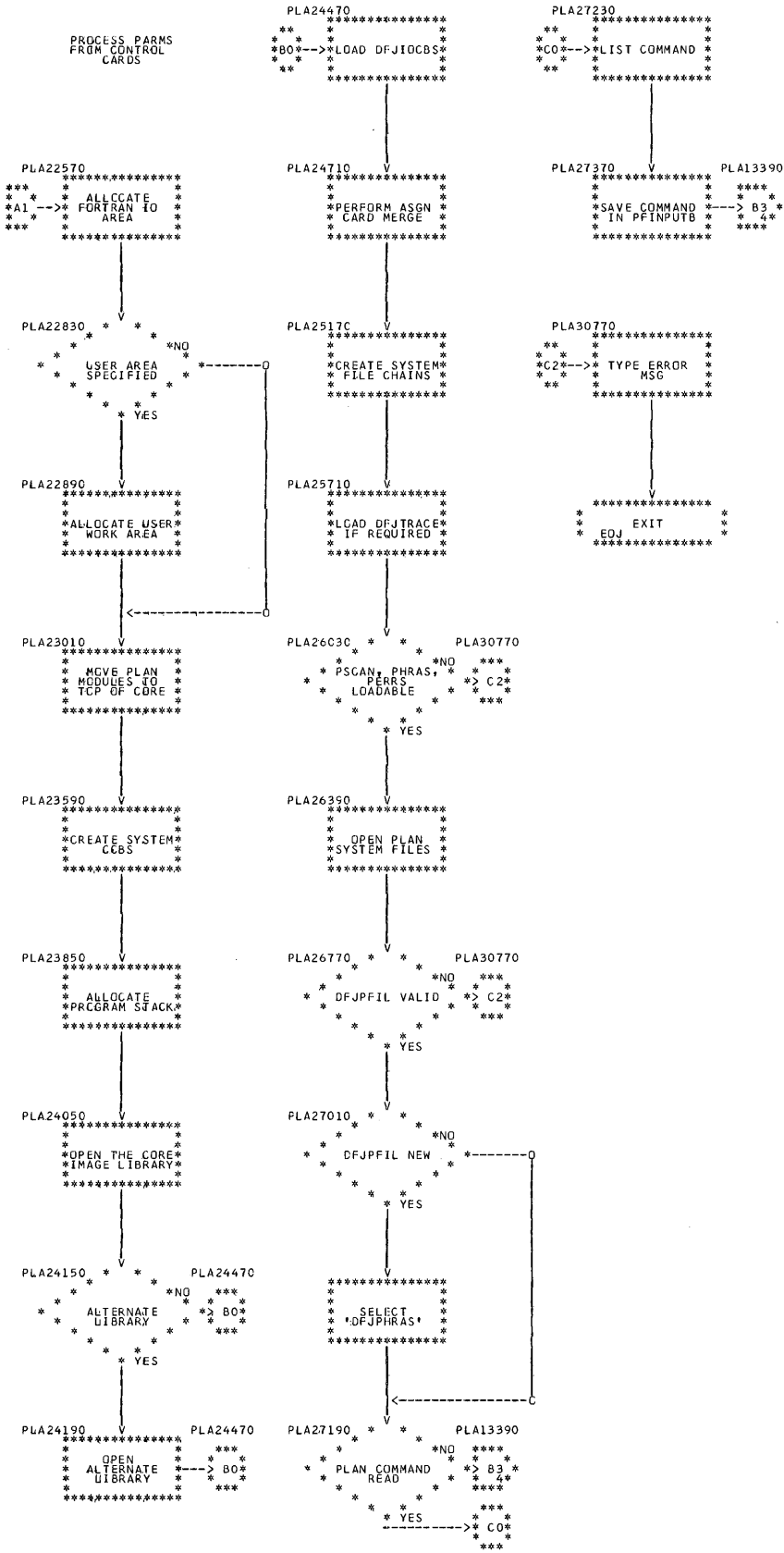


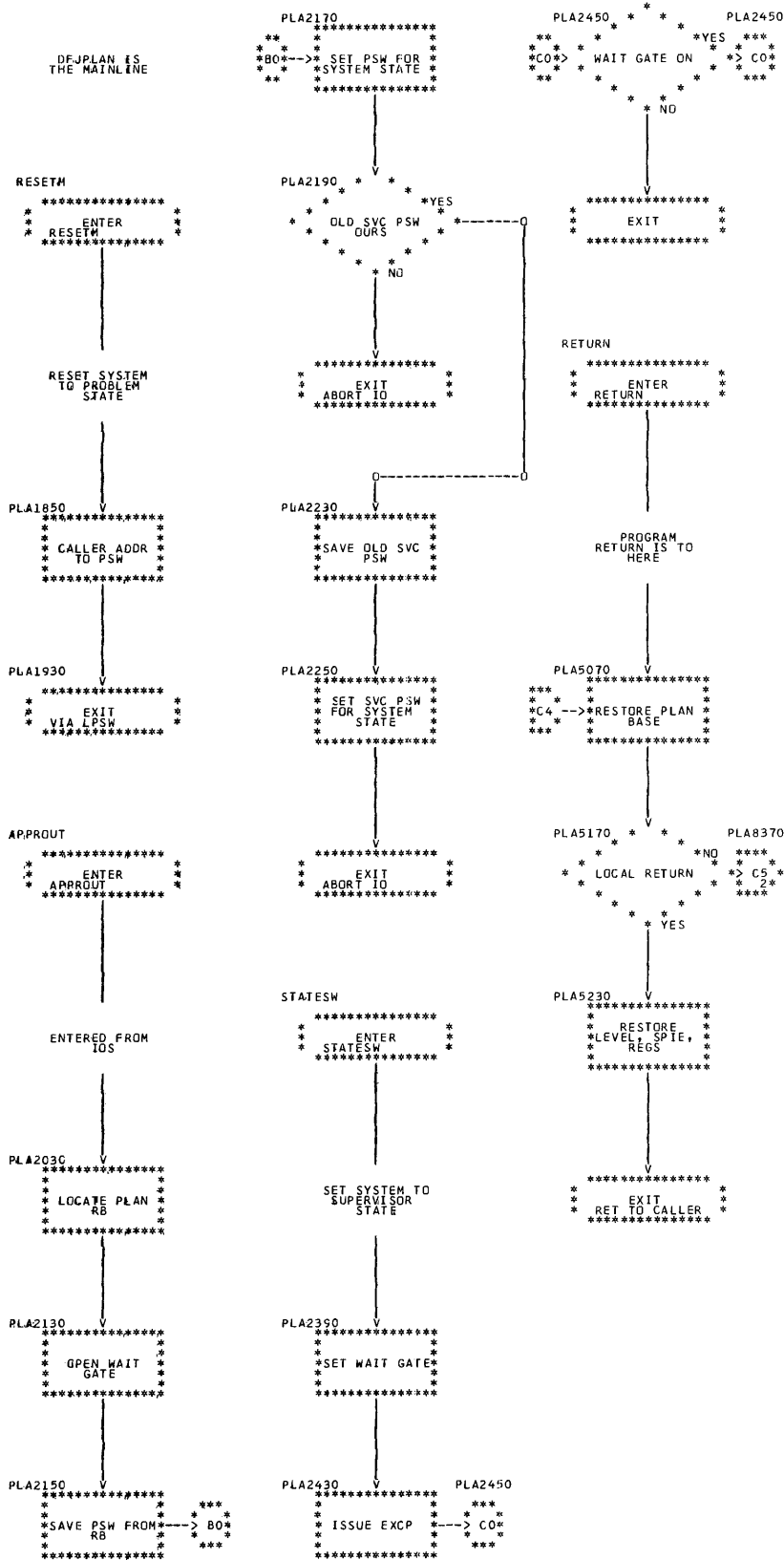


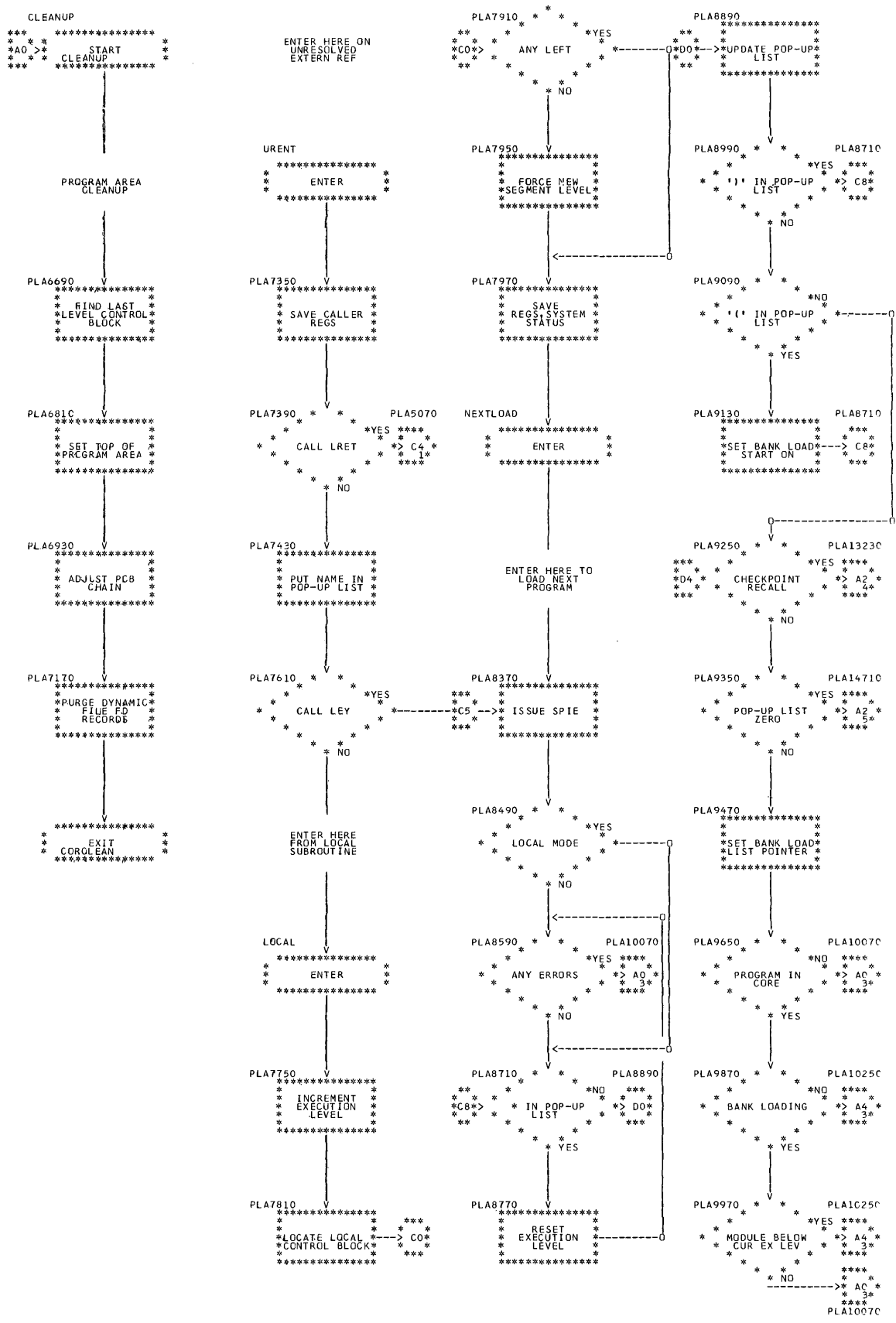


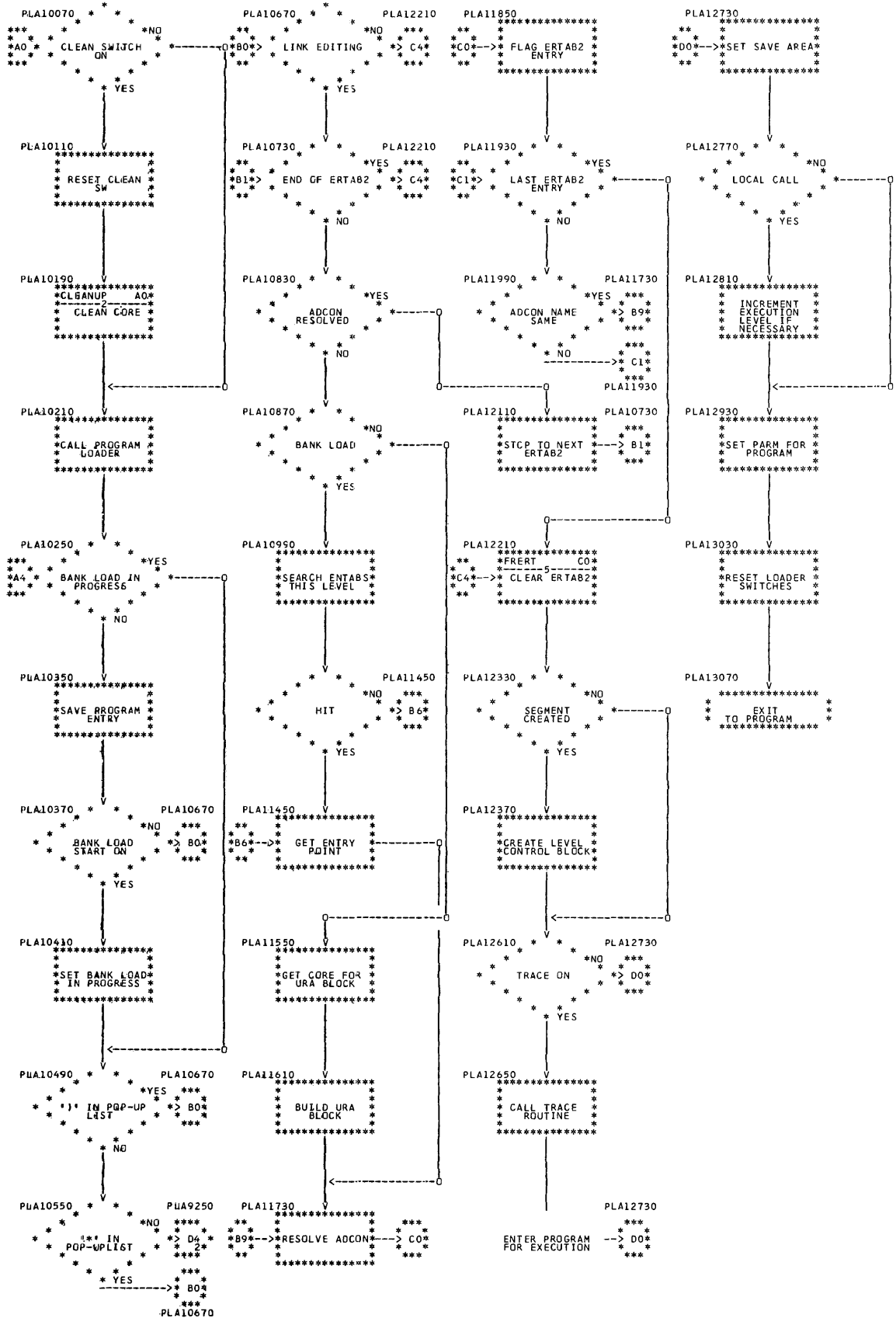


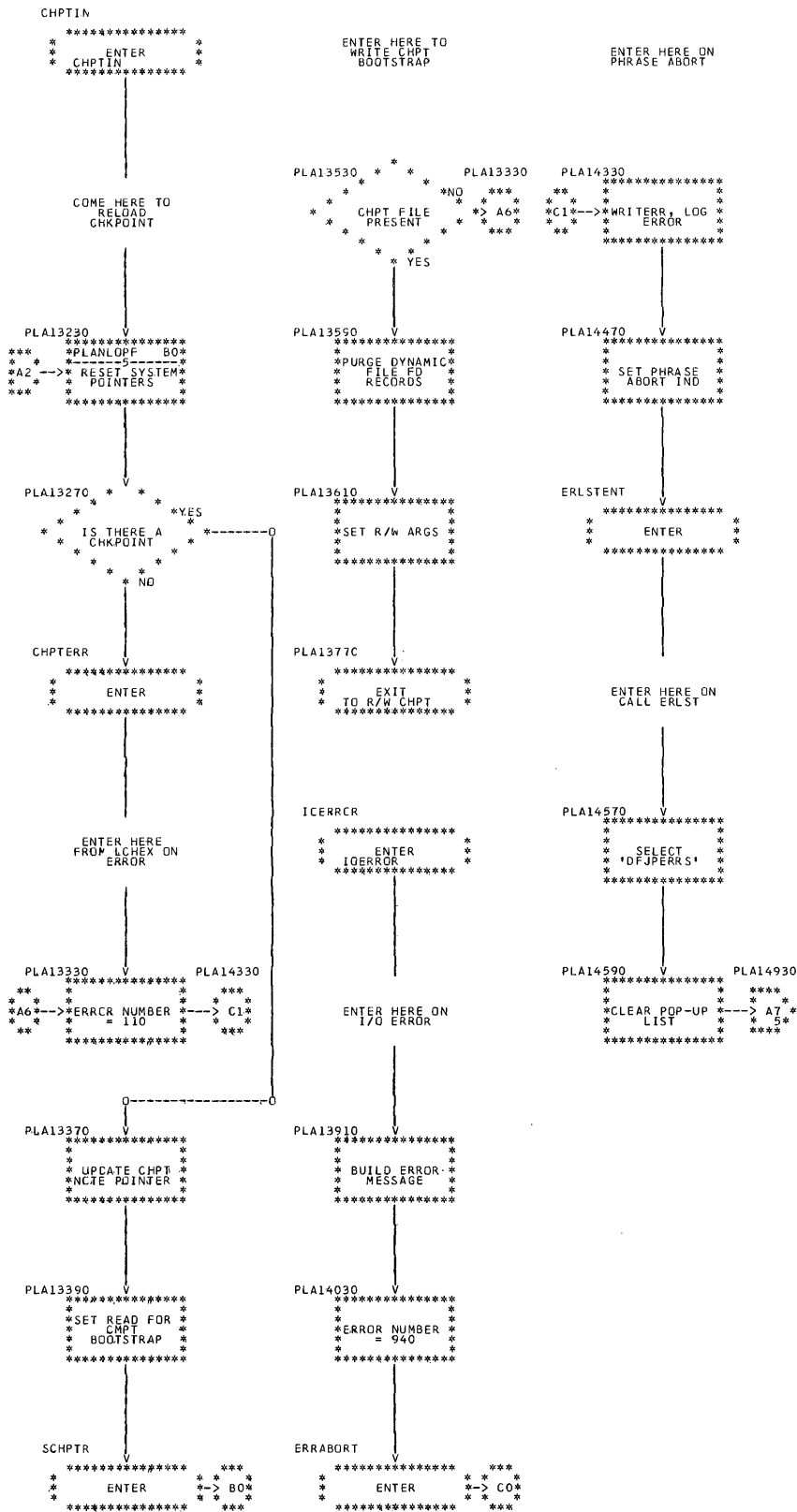


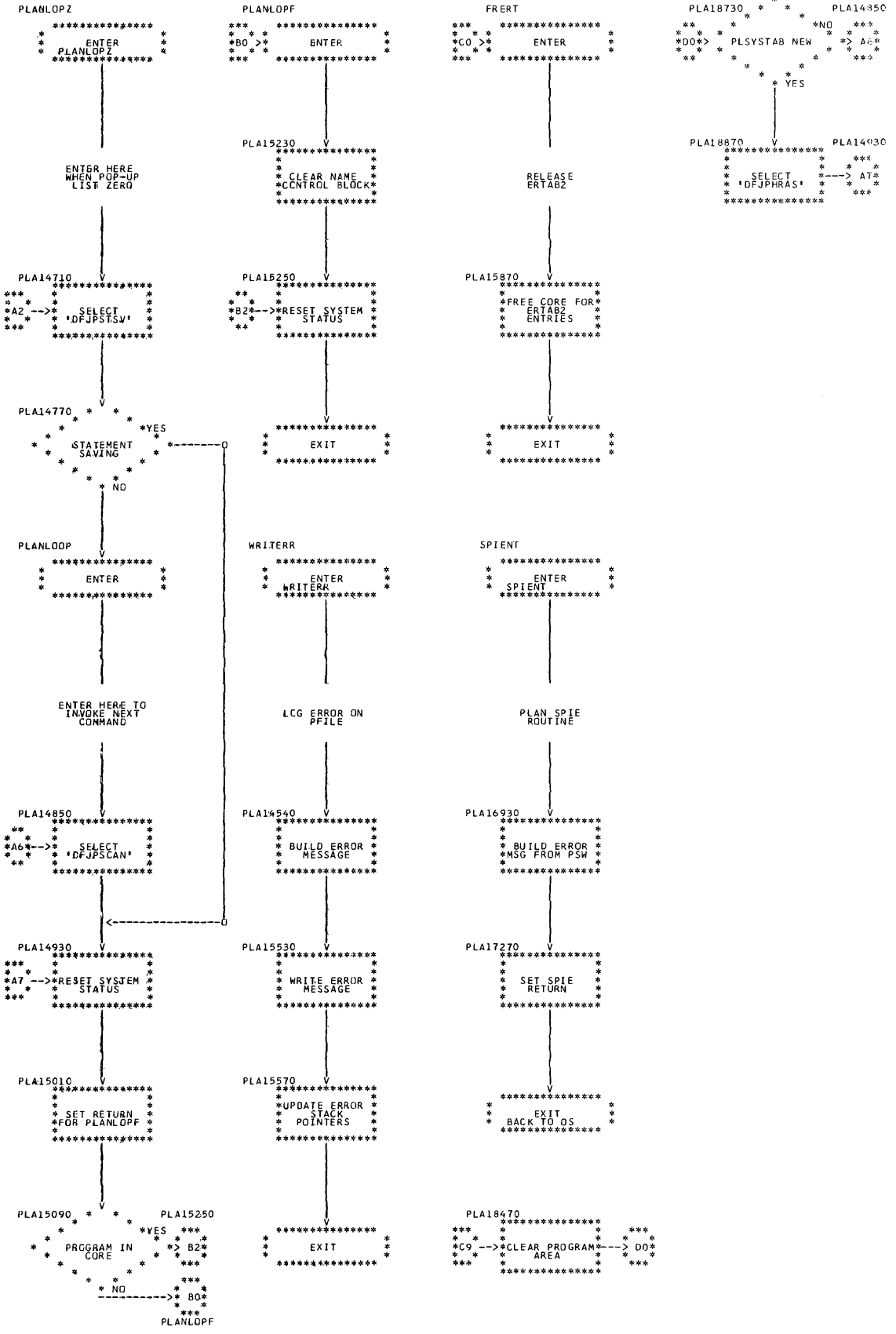


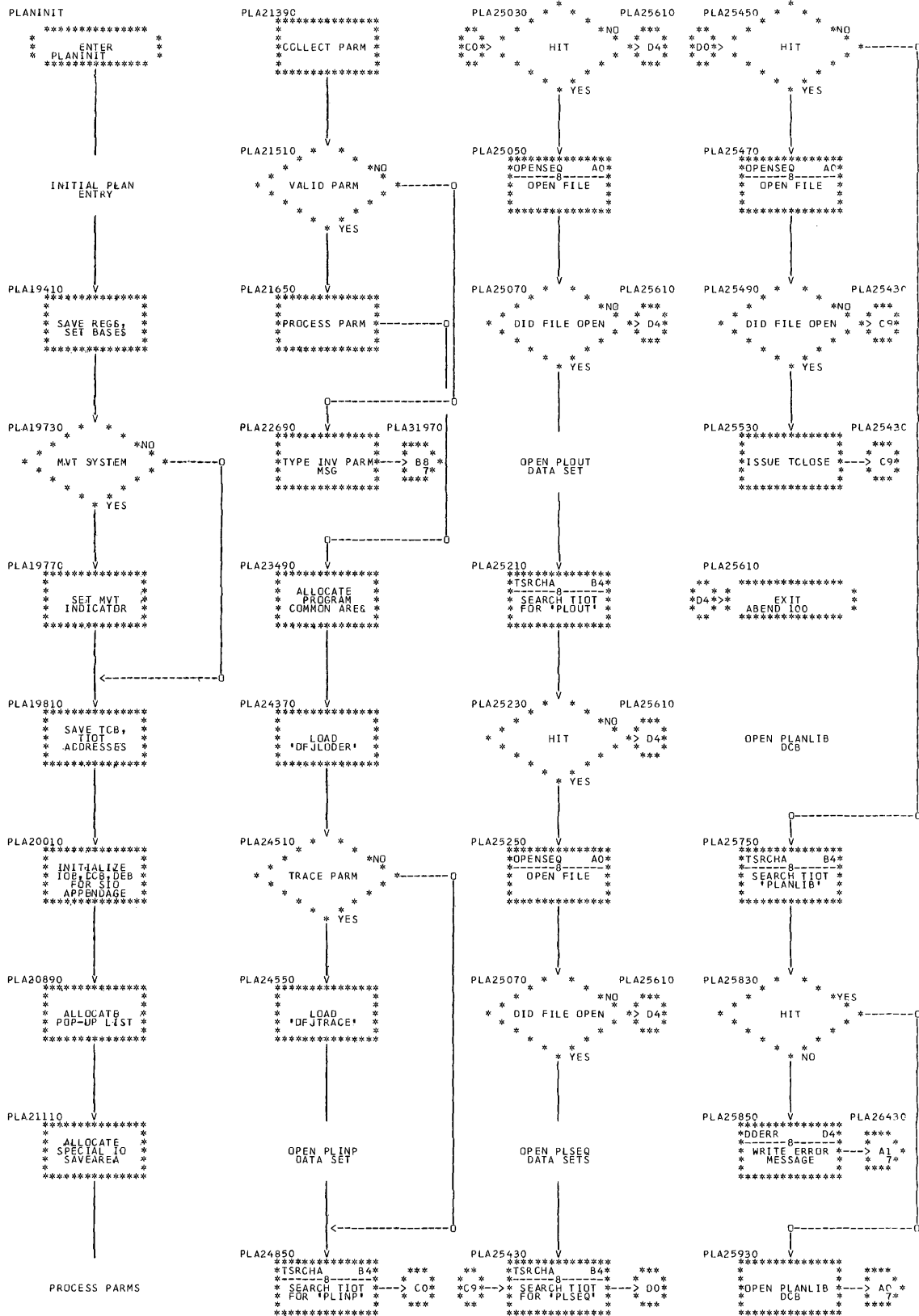


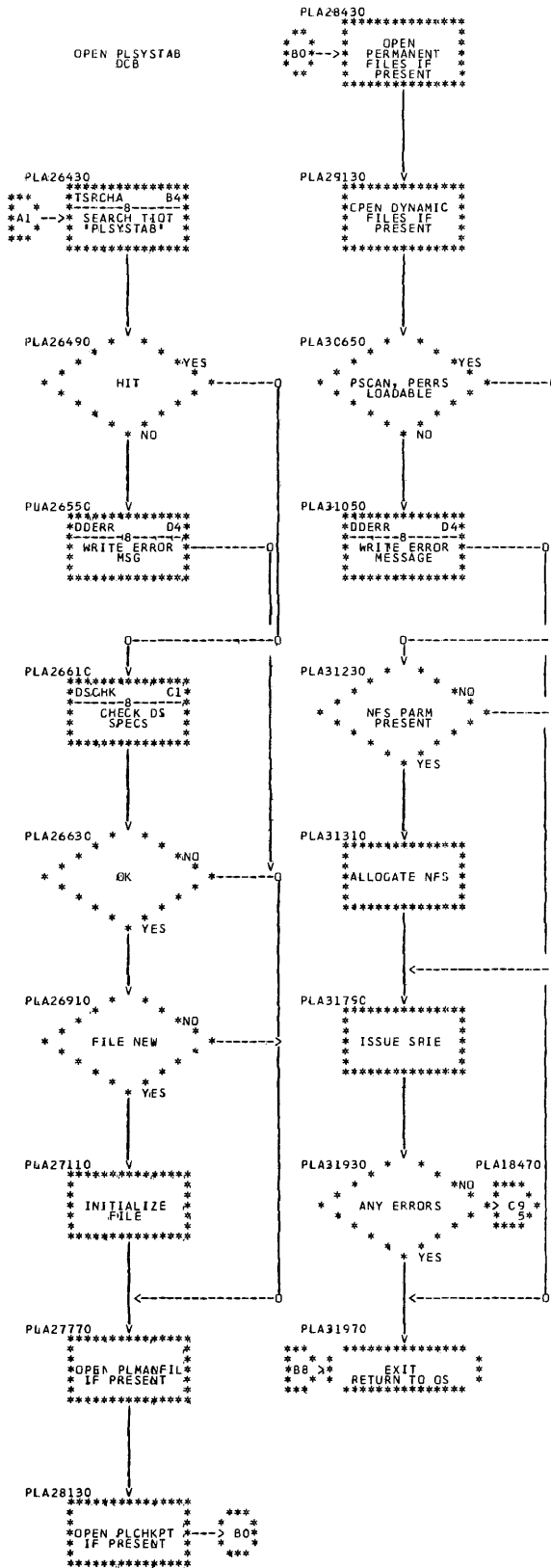


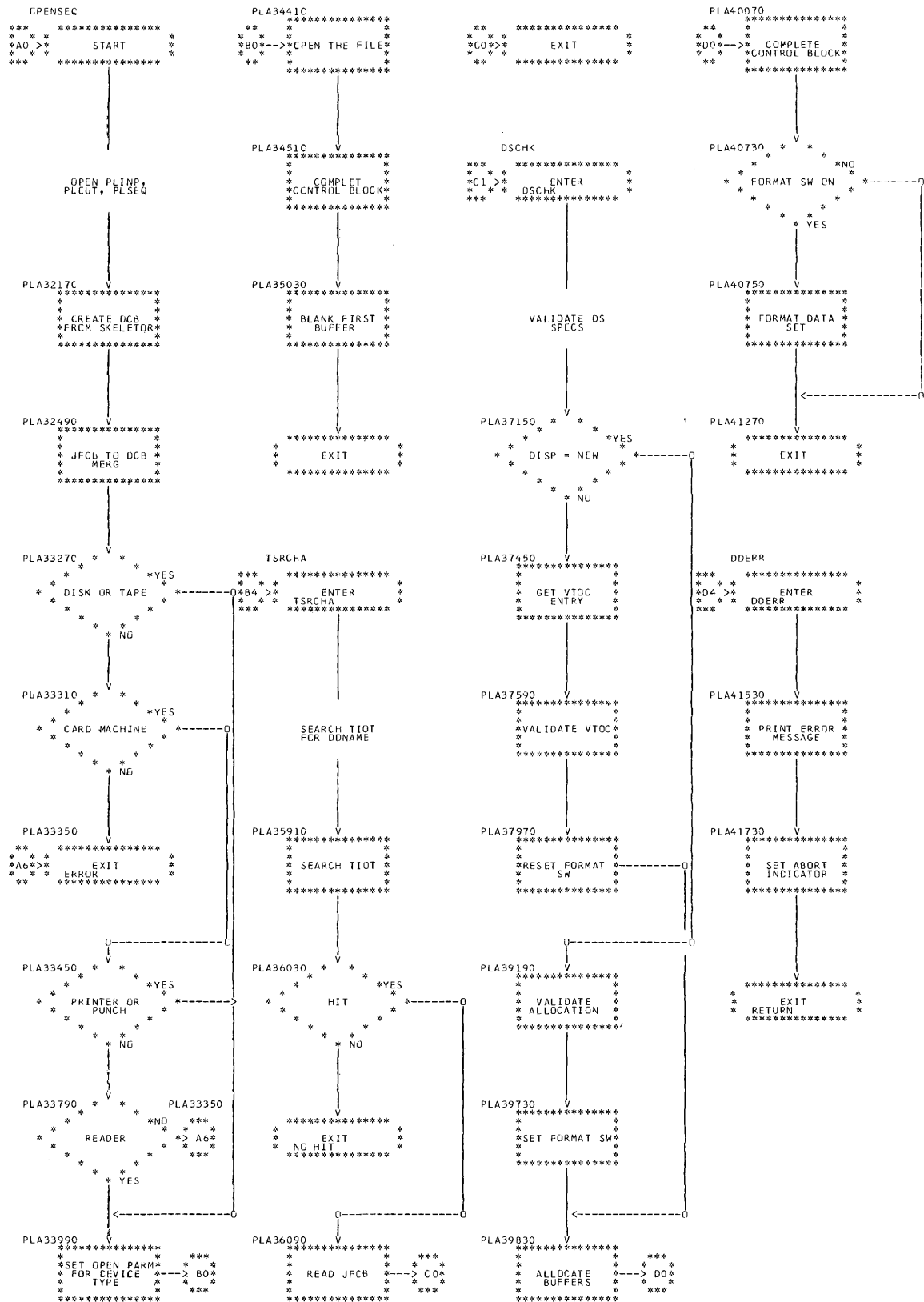












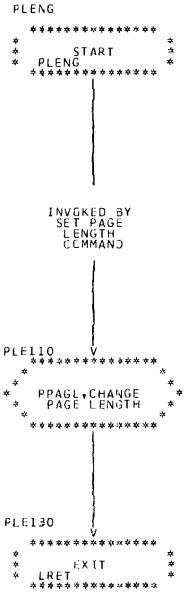


CHART A80: DFJPLITL
DCS/CS LITERAL PROCESSING ROUTINE

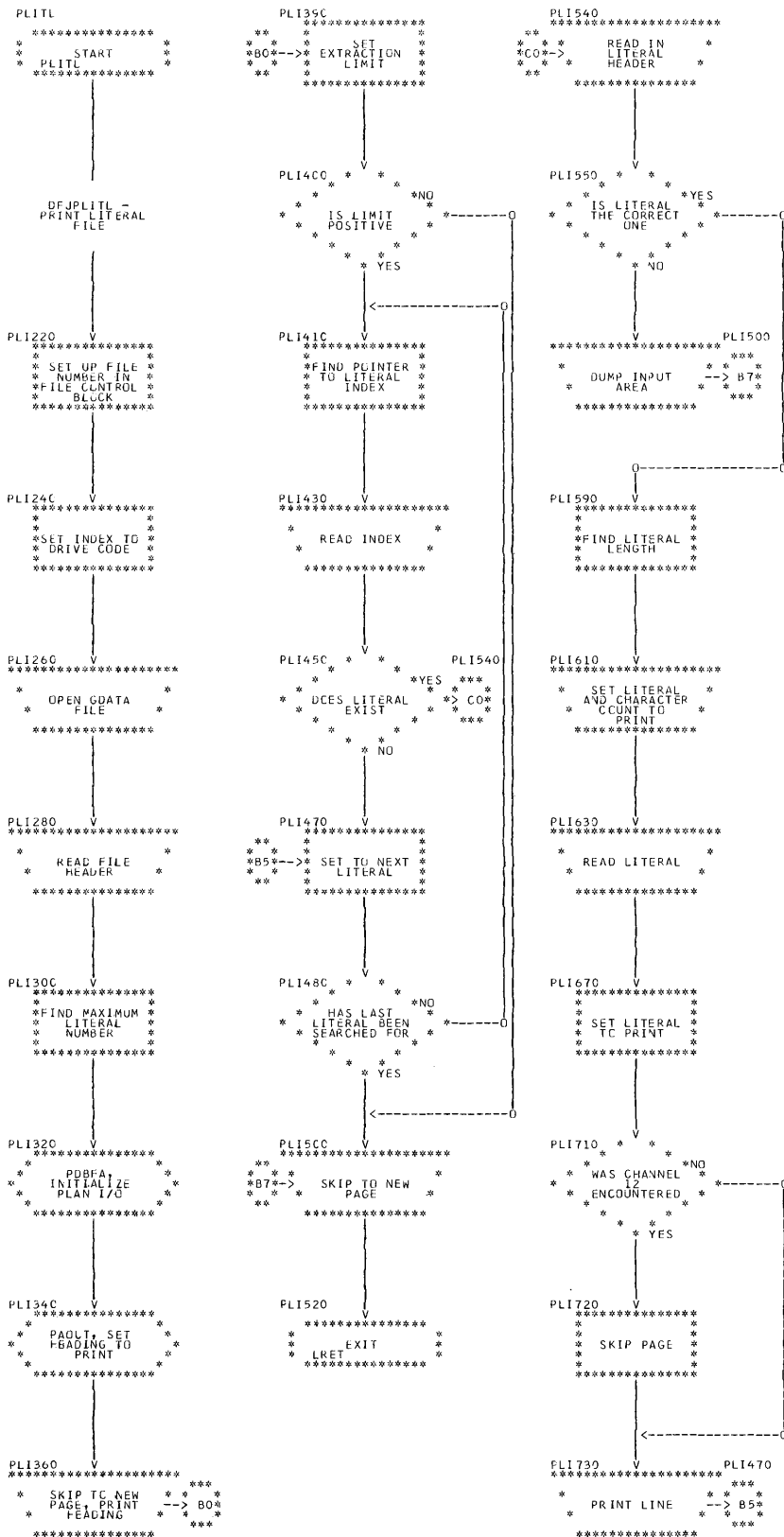


CHART ABQ: DFJPSCAN
 CCS/CS COMMAND PROCESSING ROUTINE

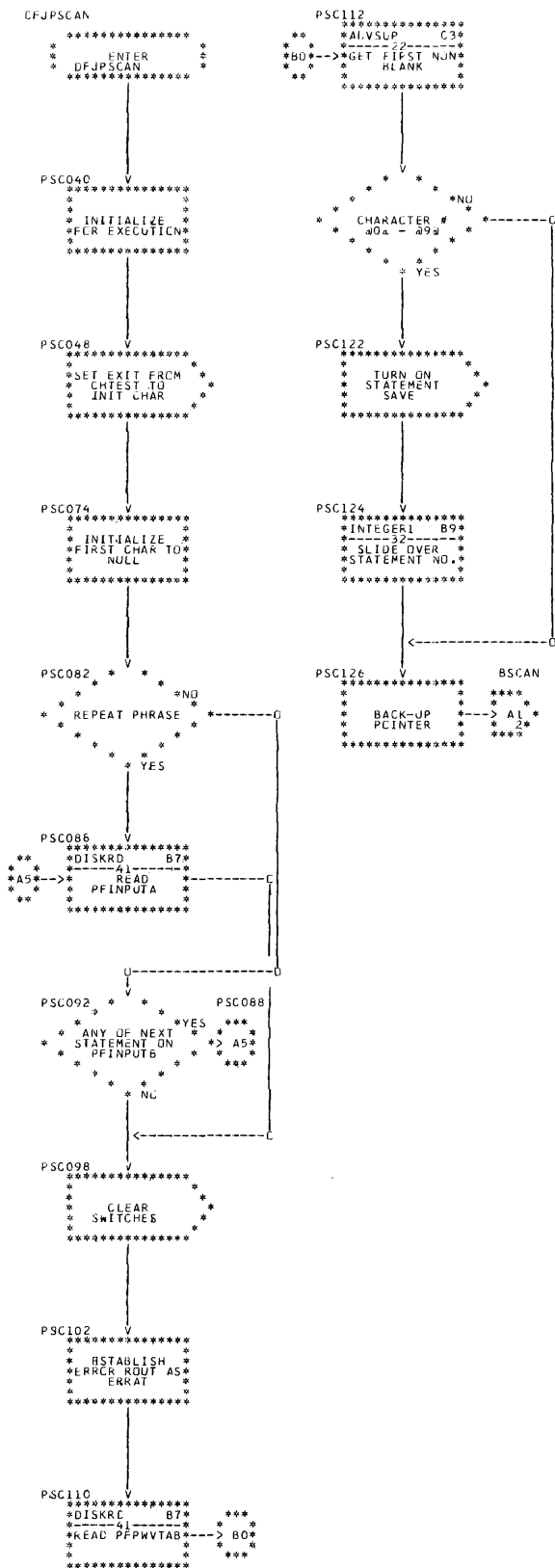


CHART ABQ: DFJPCAN
DGS/CS COMMAND PROCESSING ROUTINE

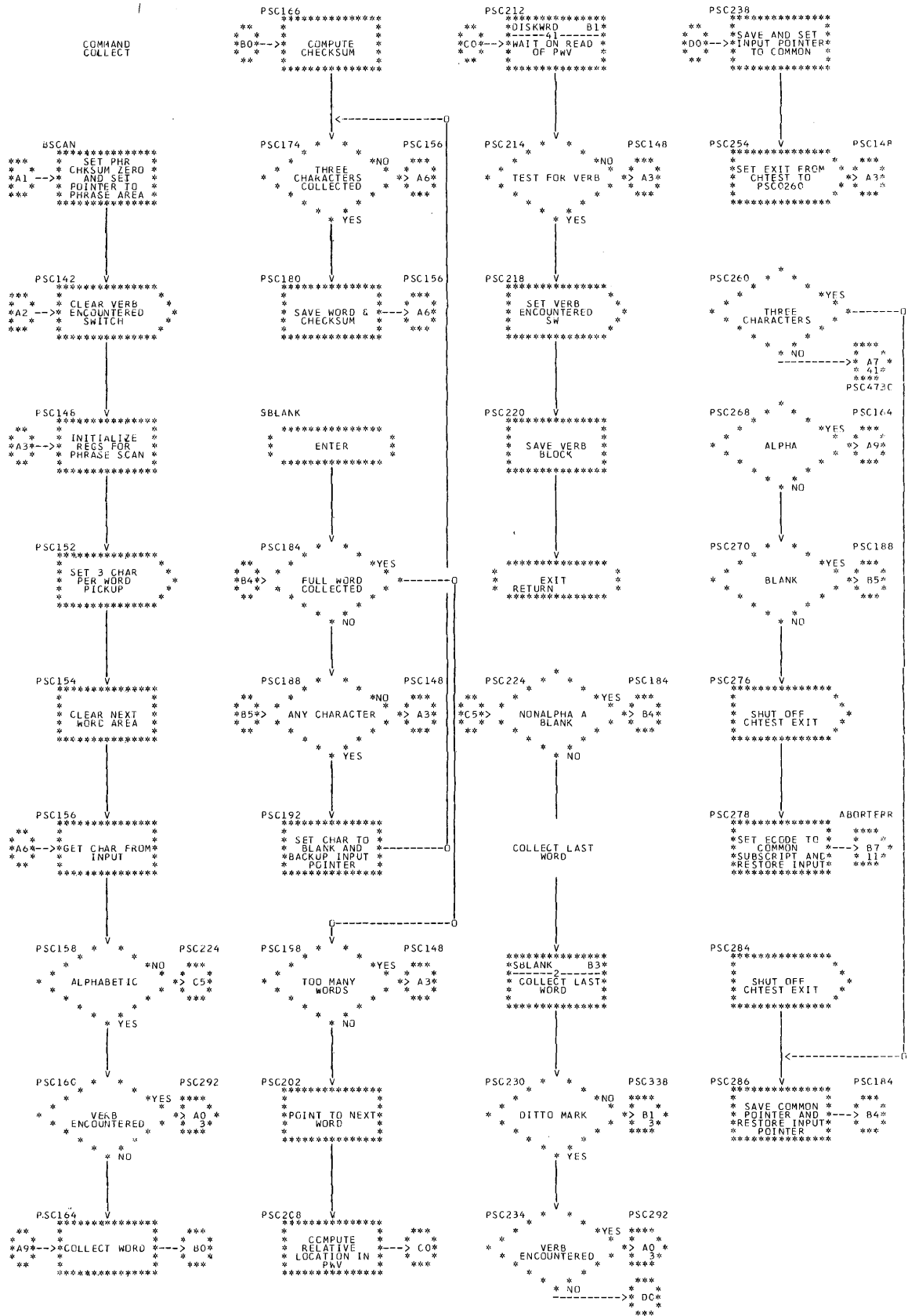
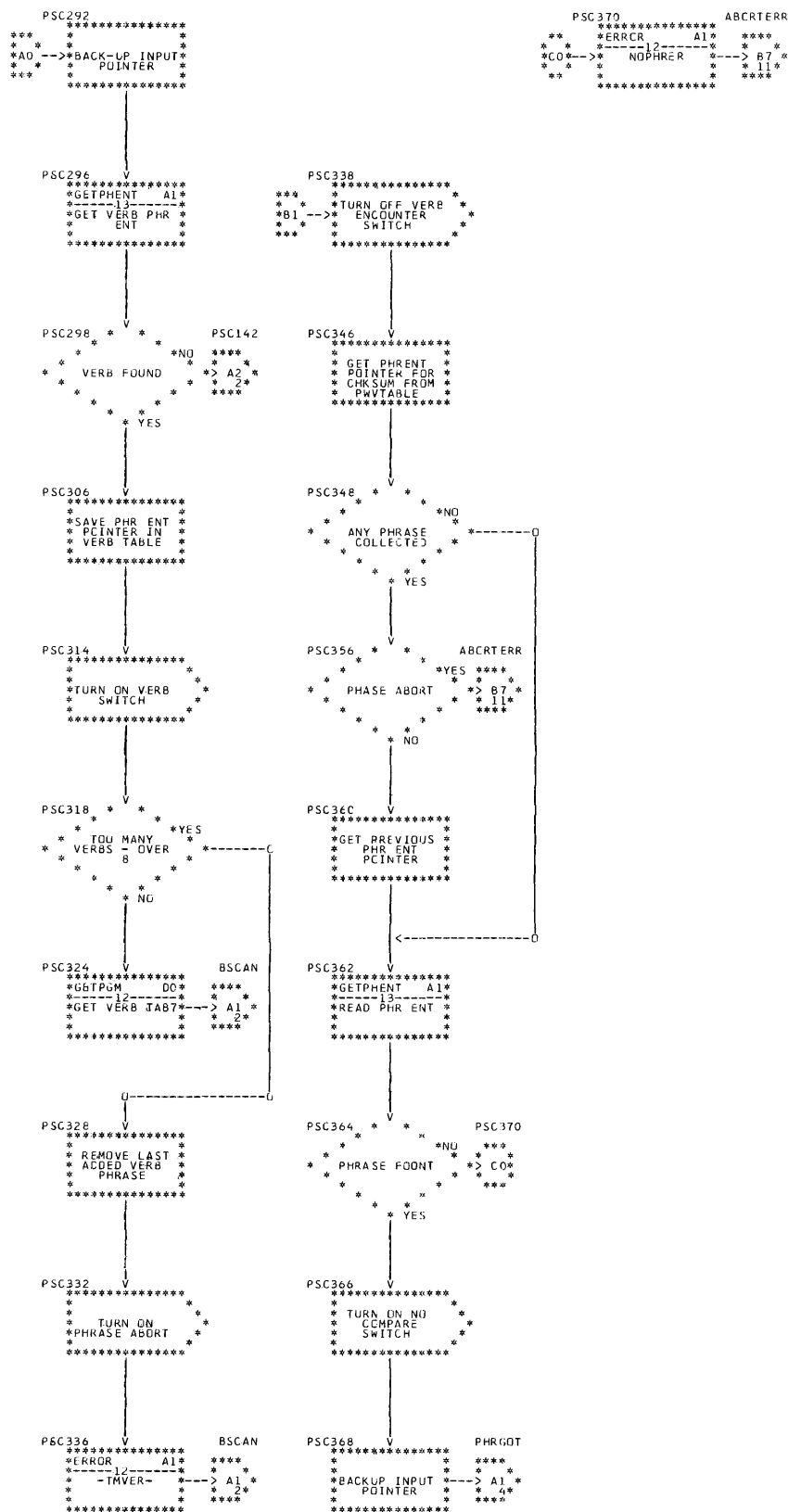
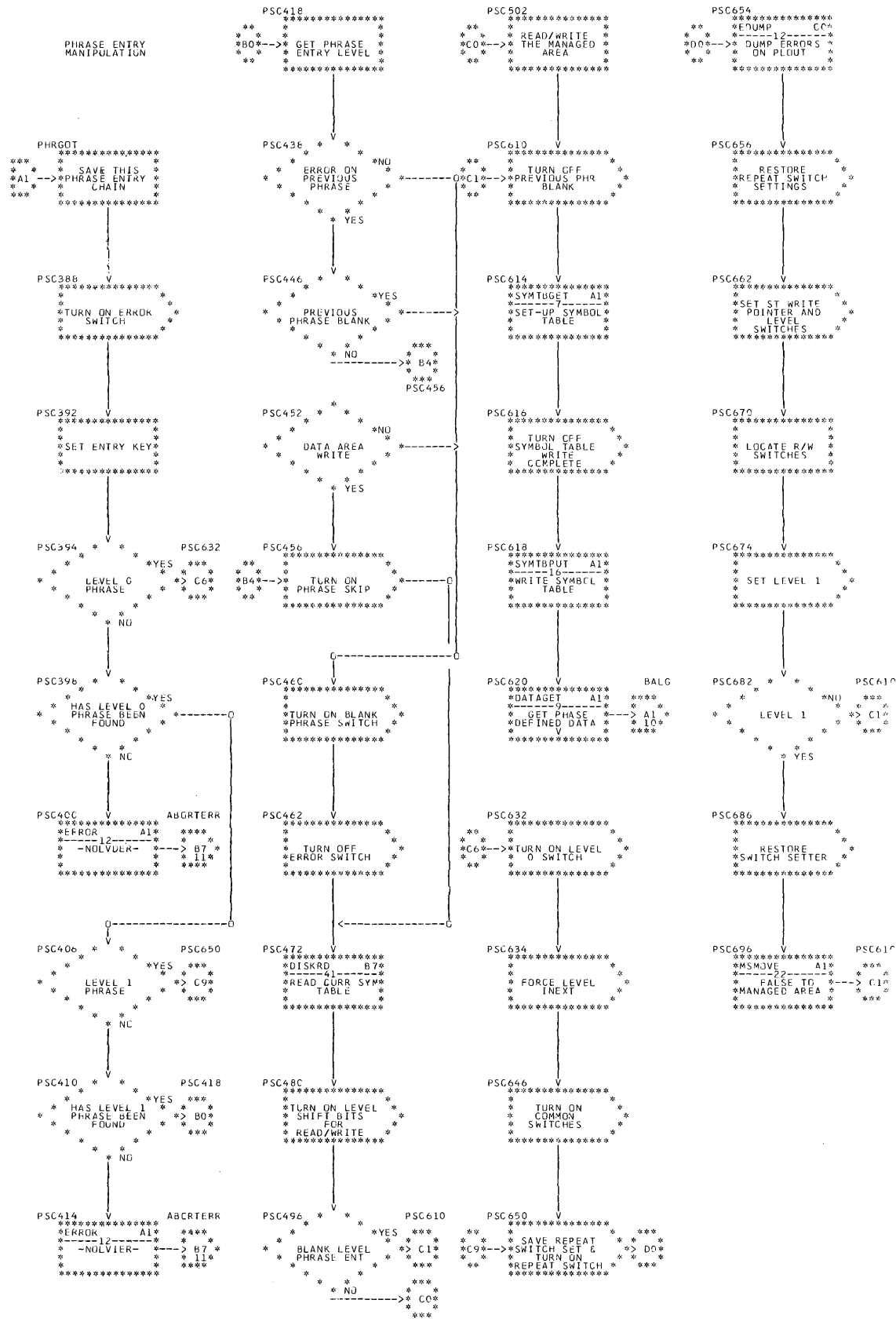


CHART ABQ: DFJPSKAN
DGS/GS CGMMAND PROCESSING ROUTINE





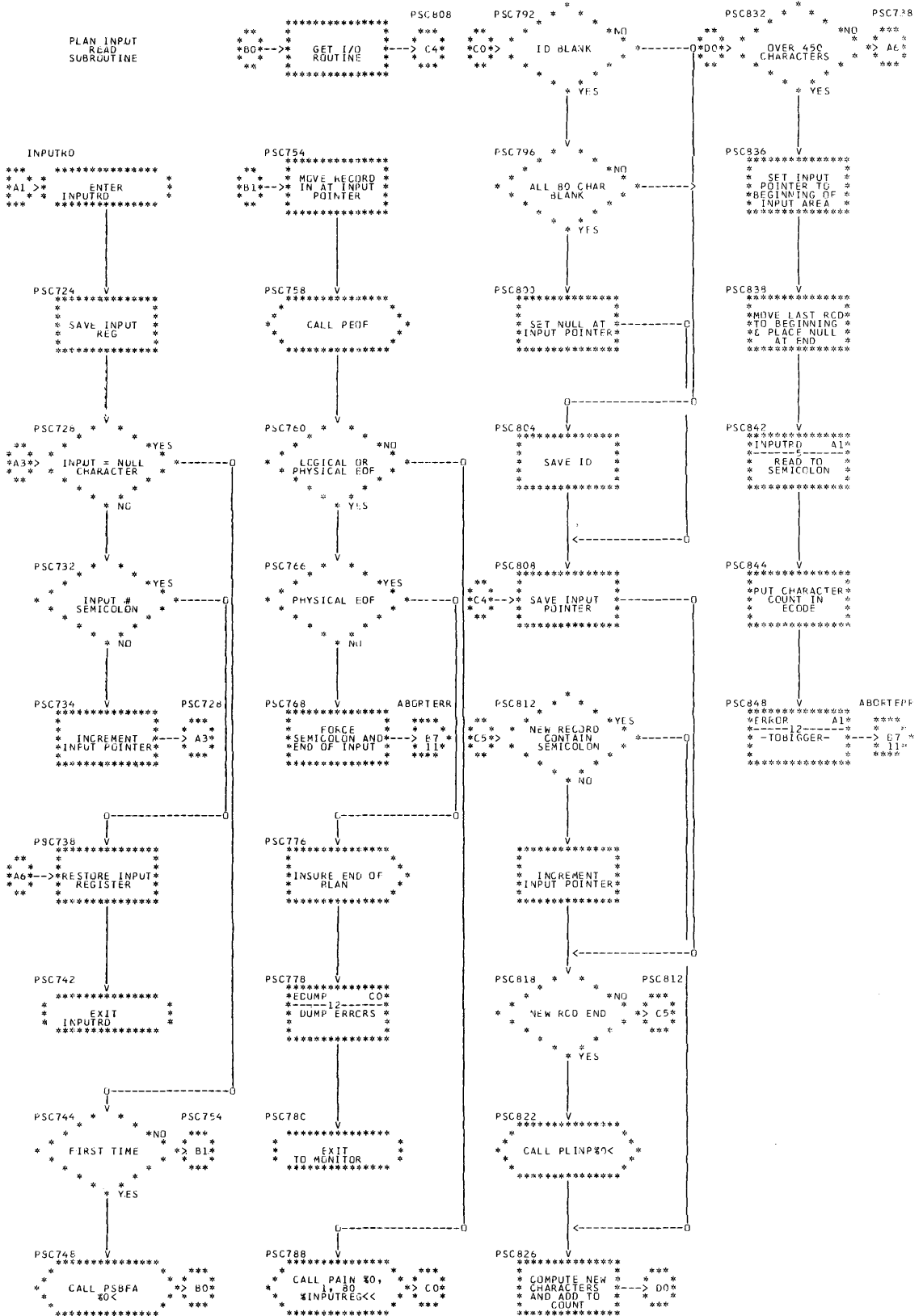
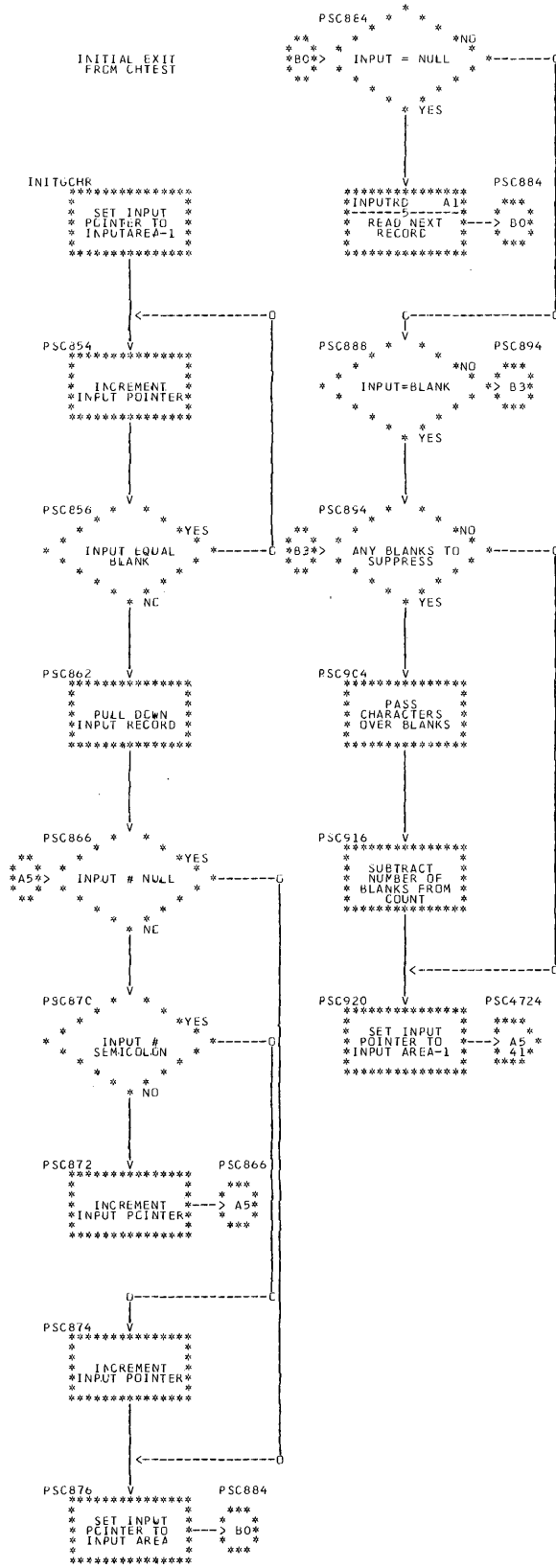
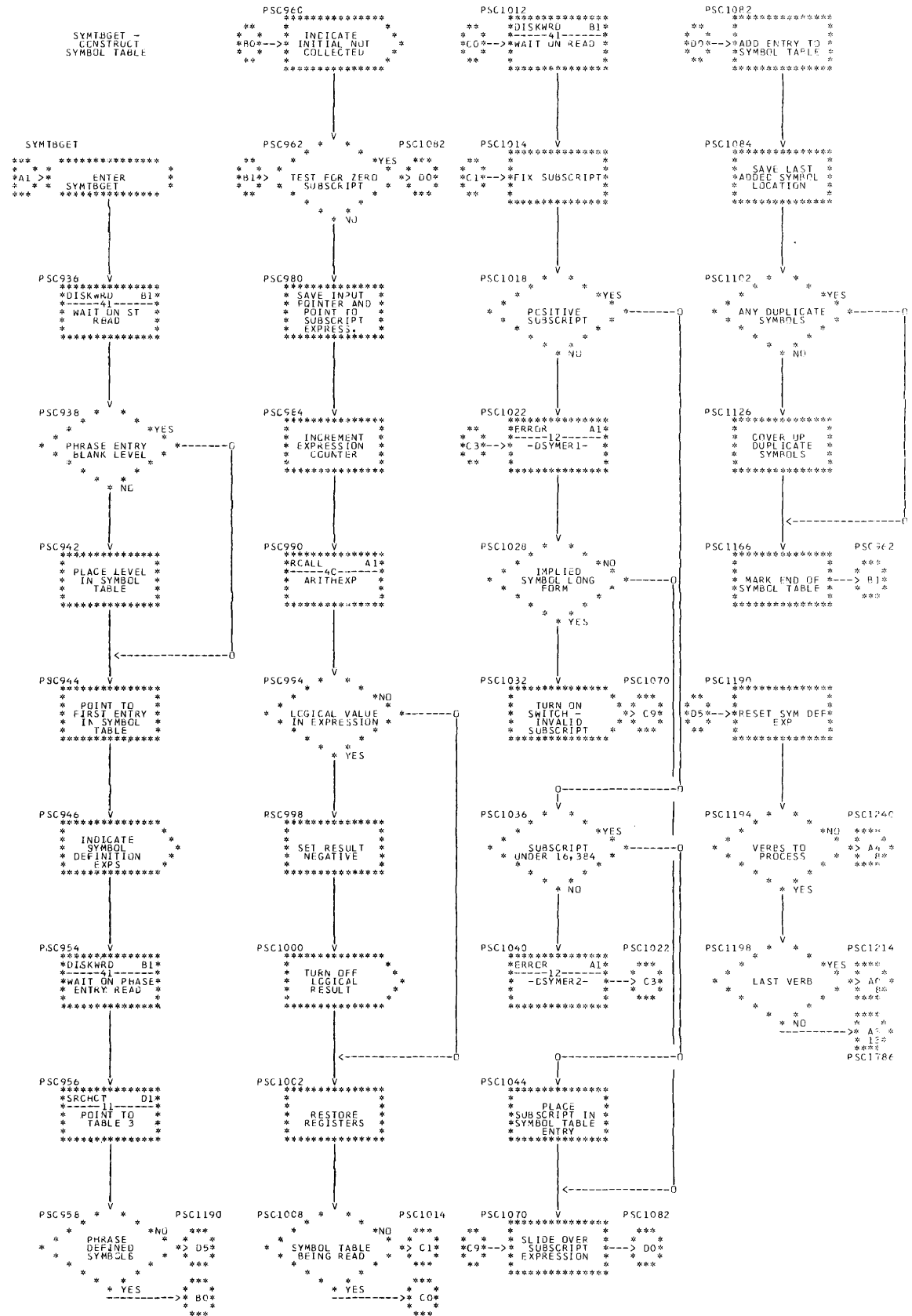
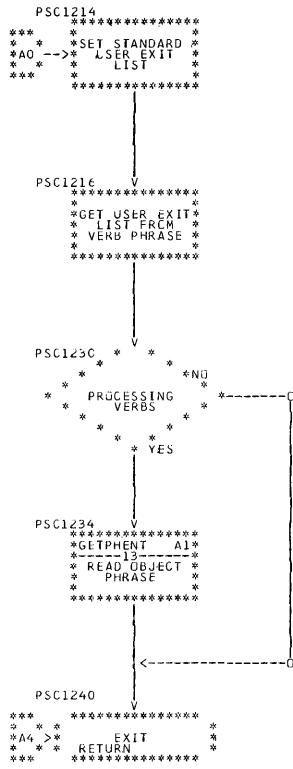
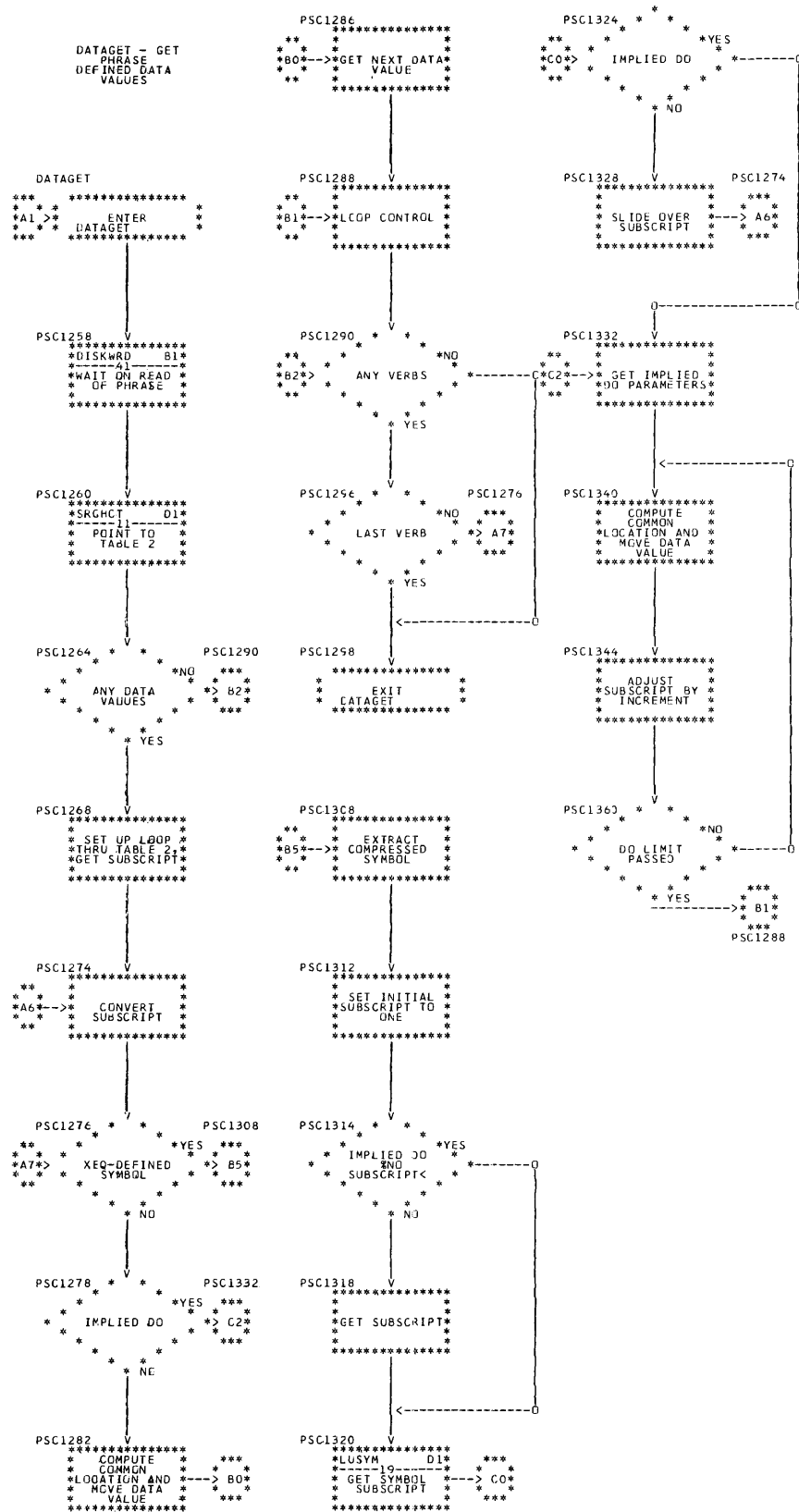


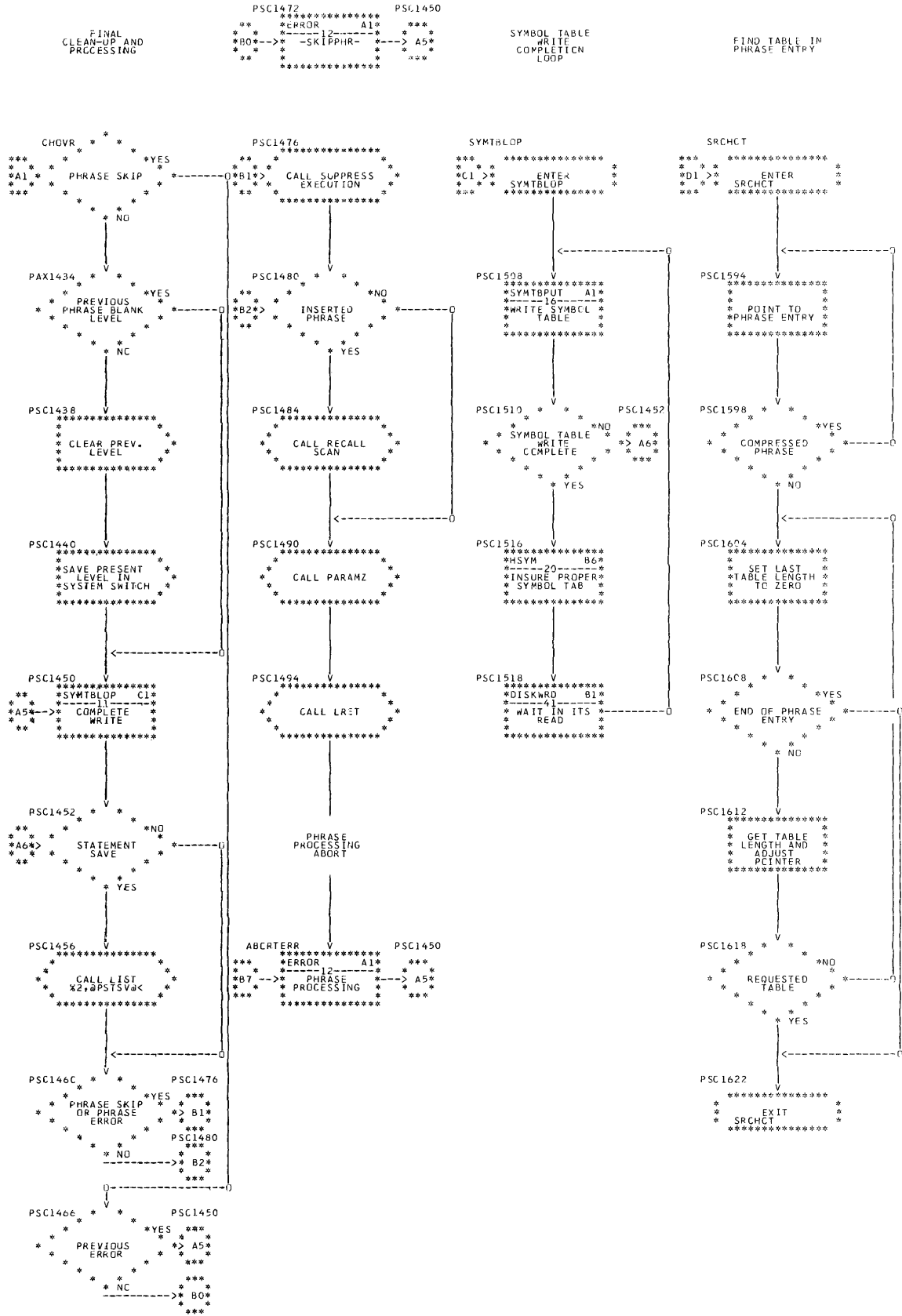
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 DGS/CS CMMAND PROCESSING ROUTINE

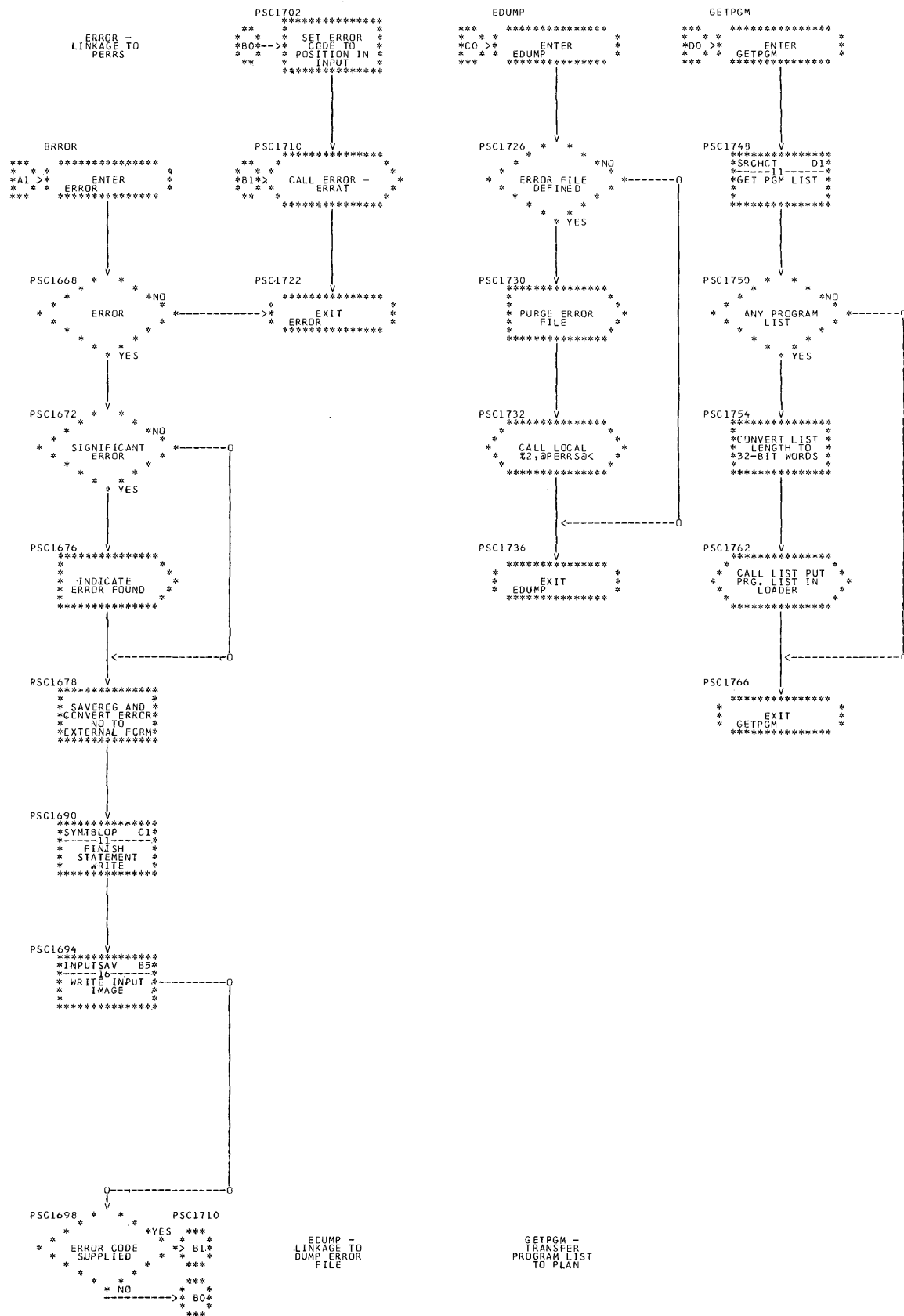


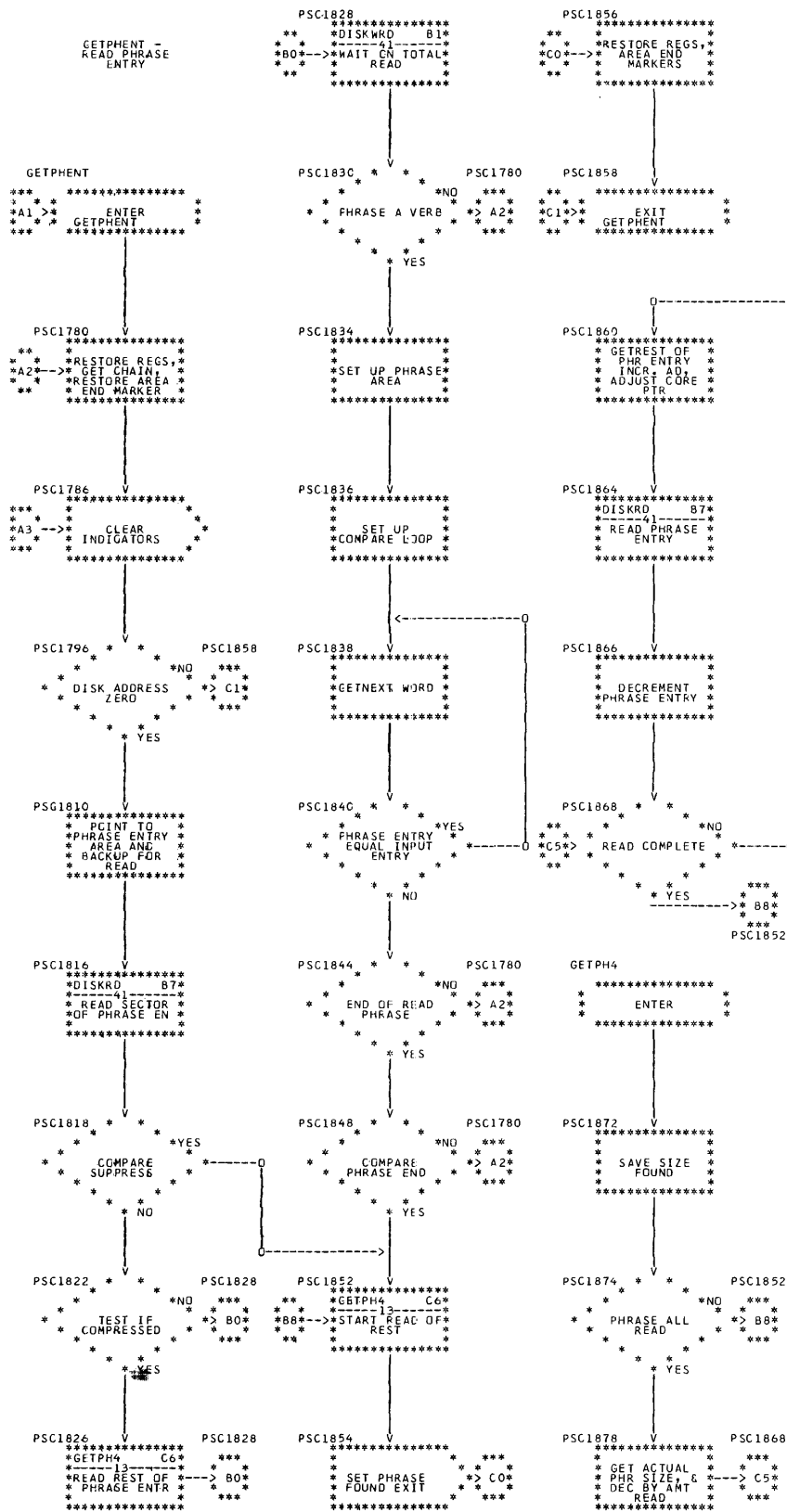


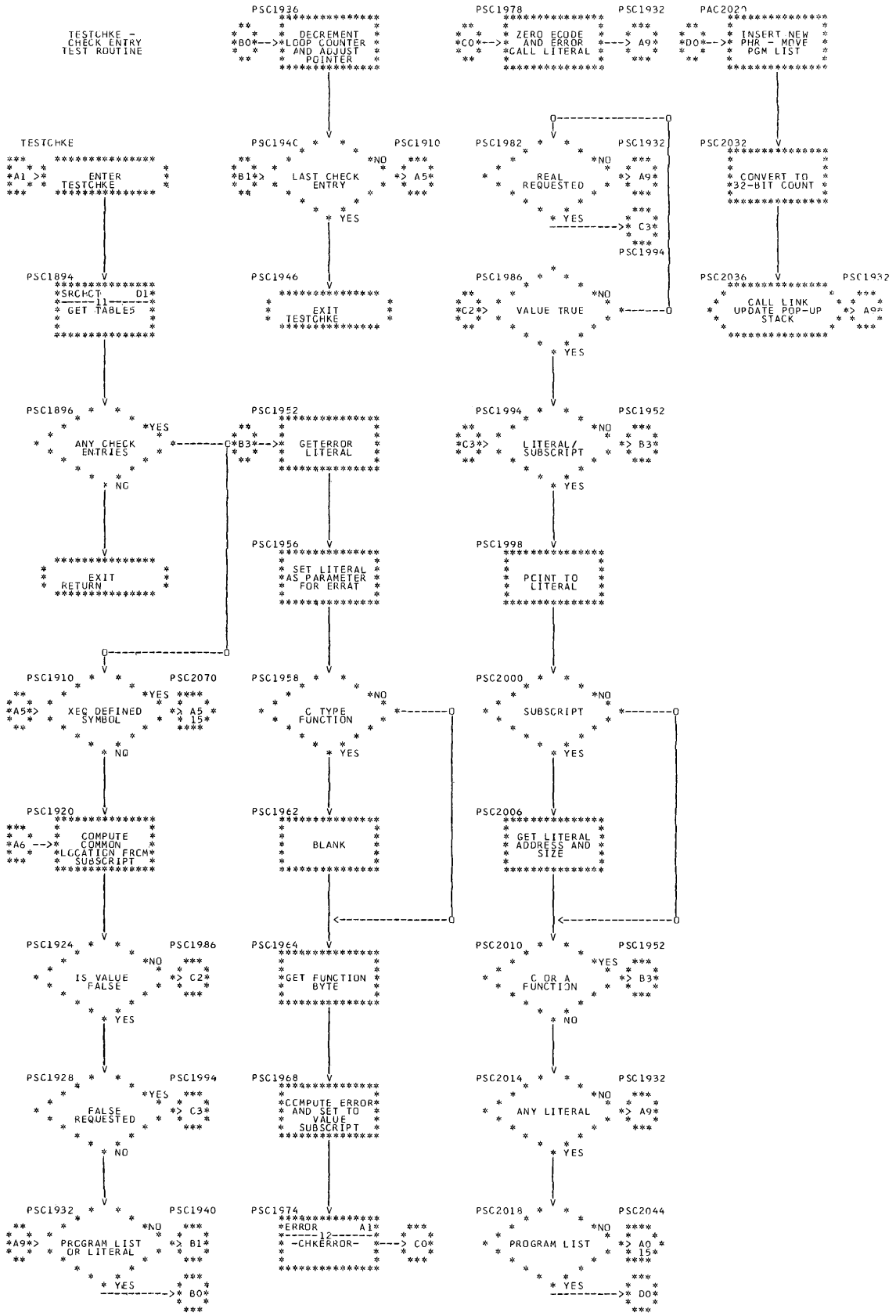


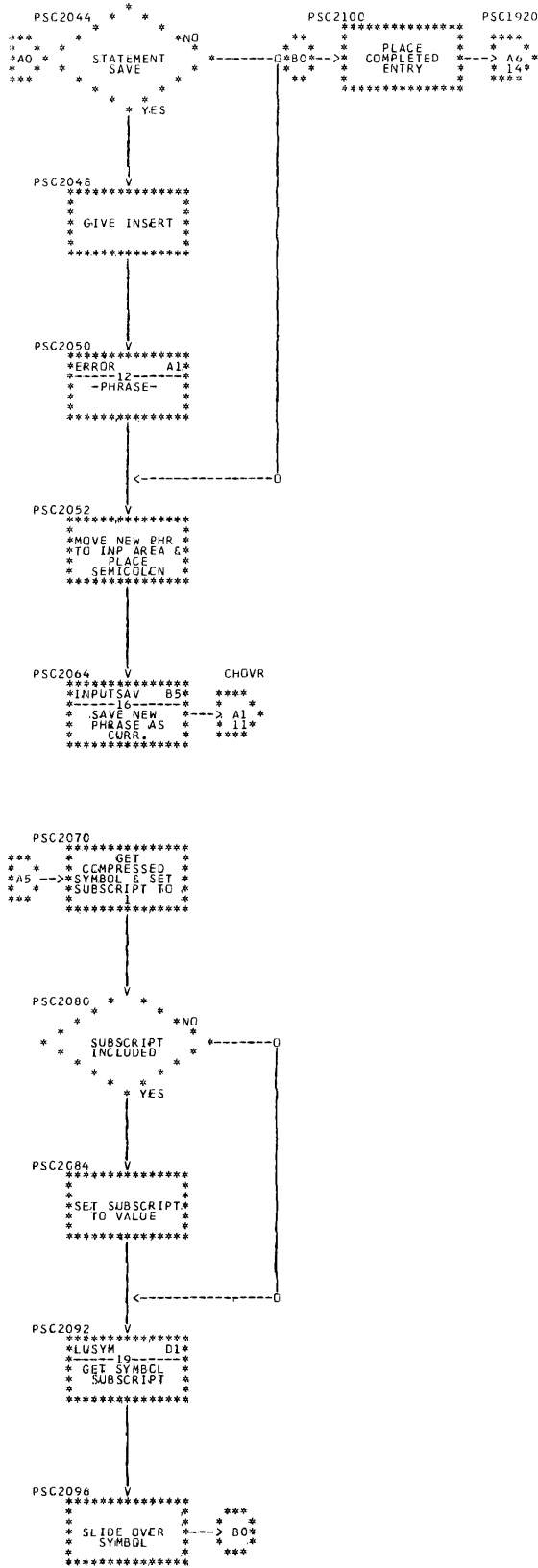


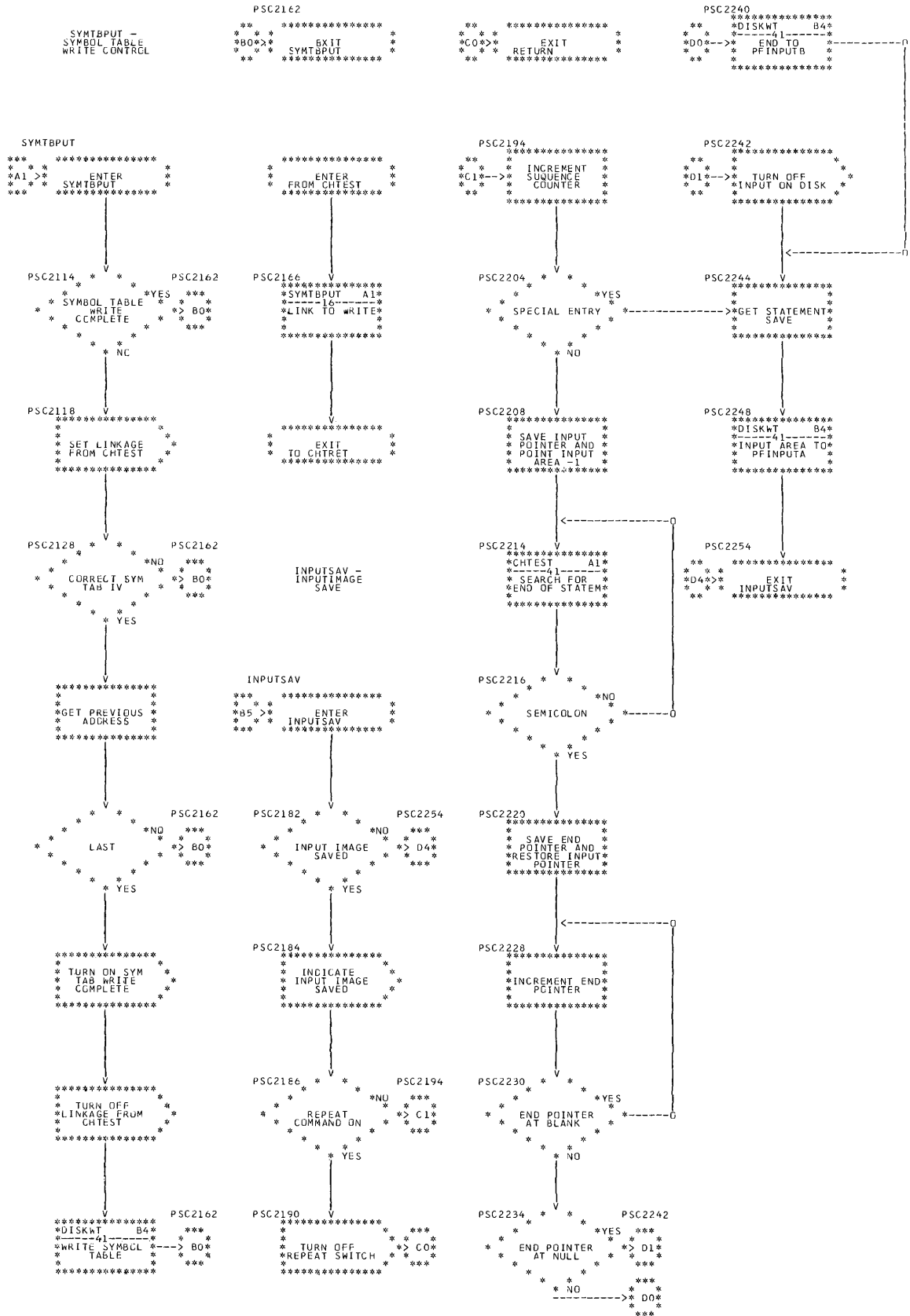


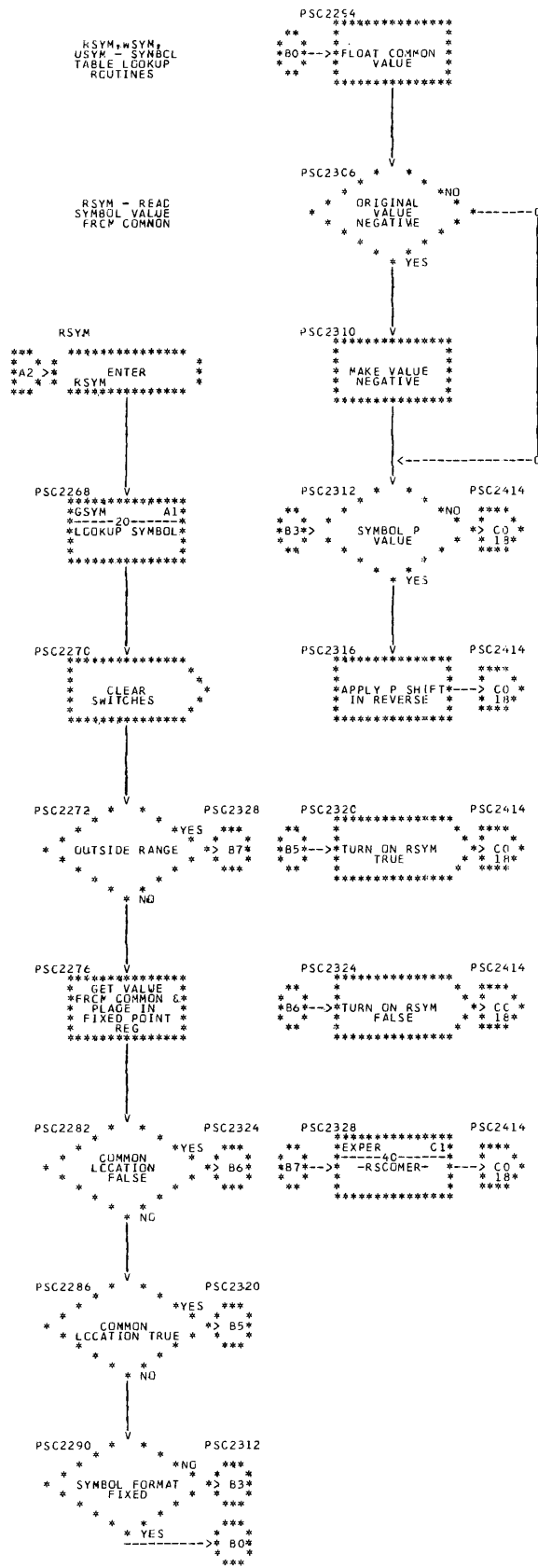


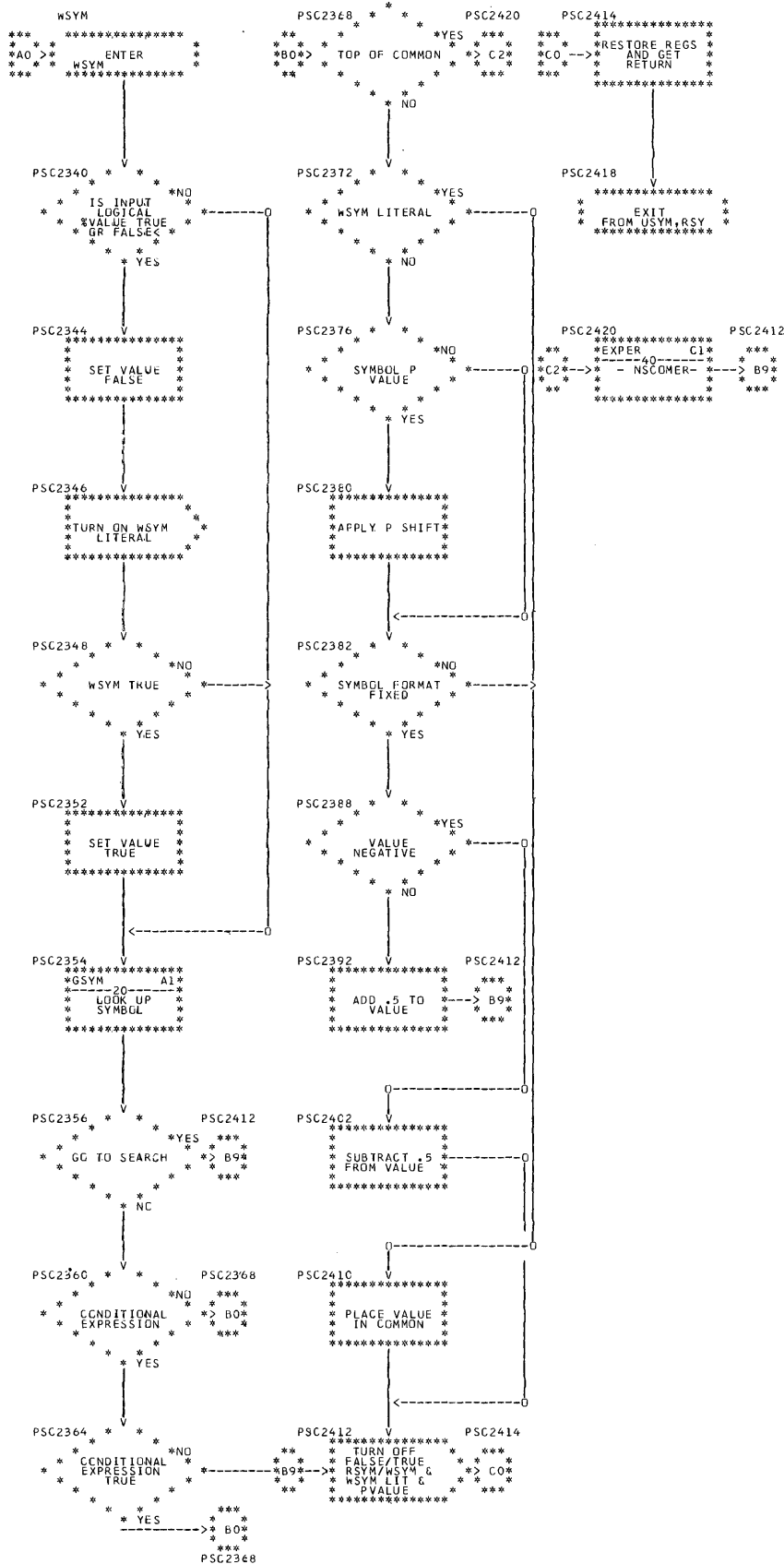


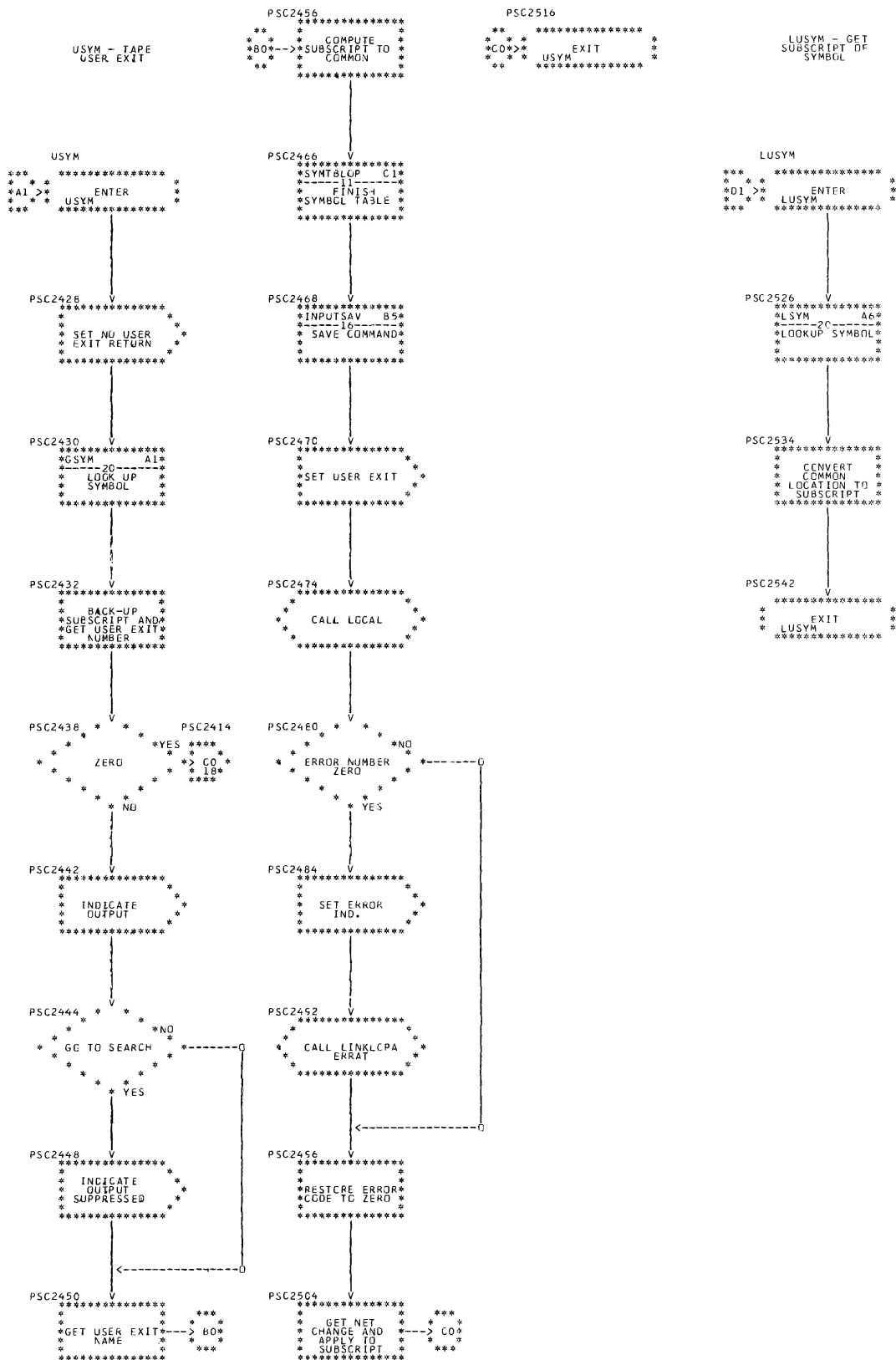


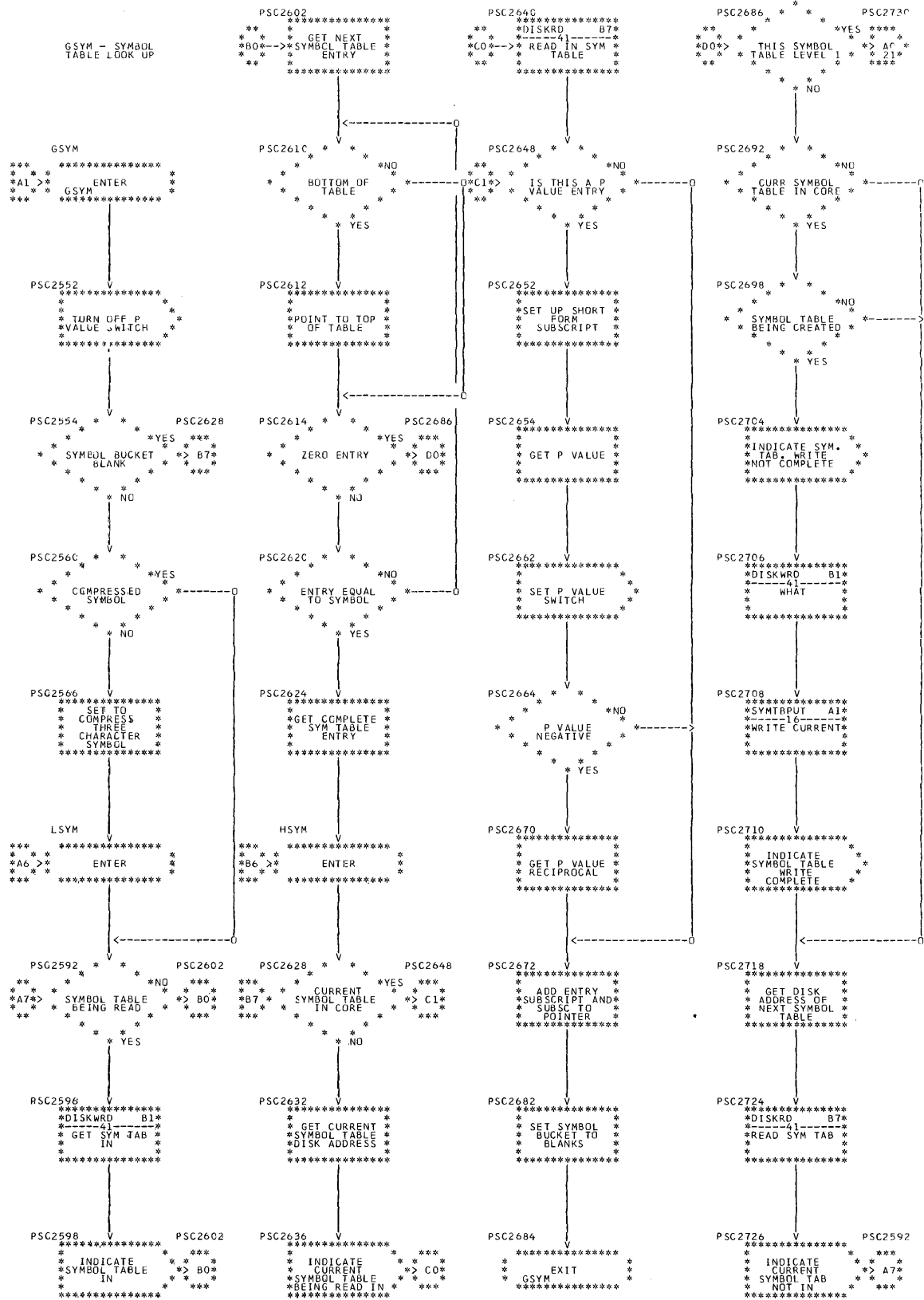


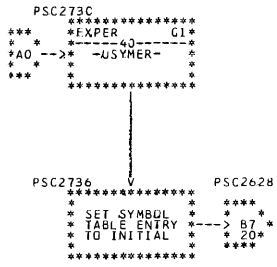


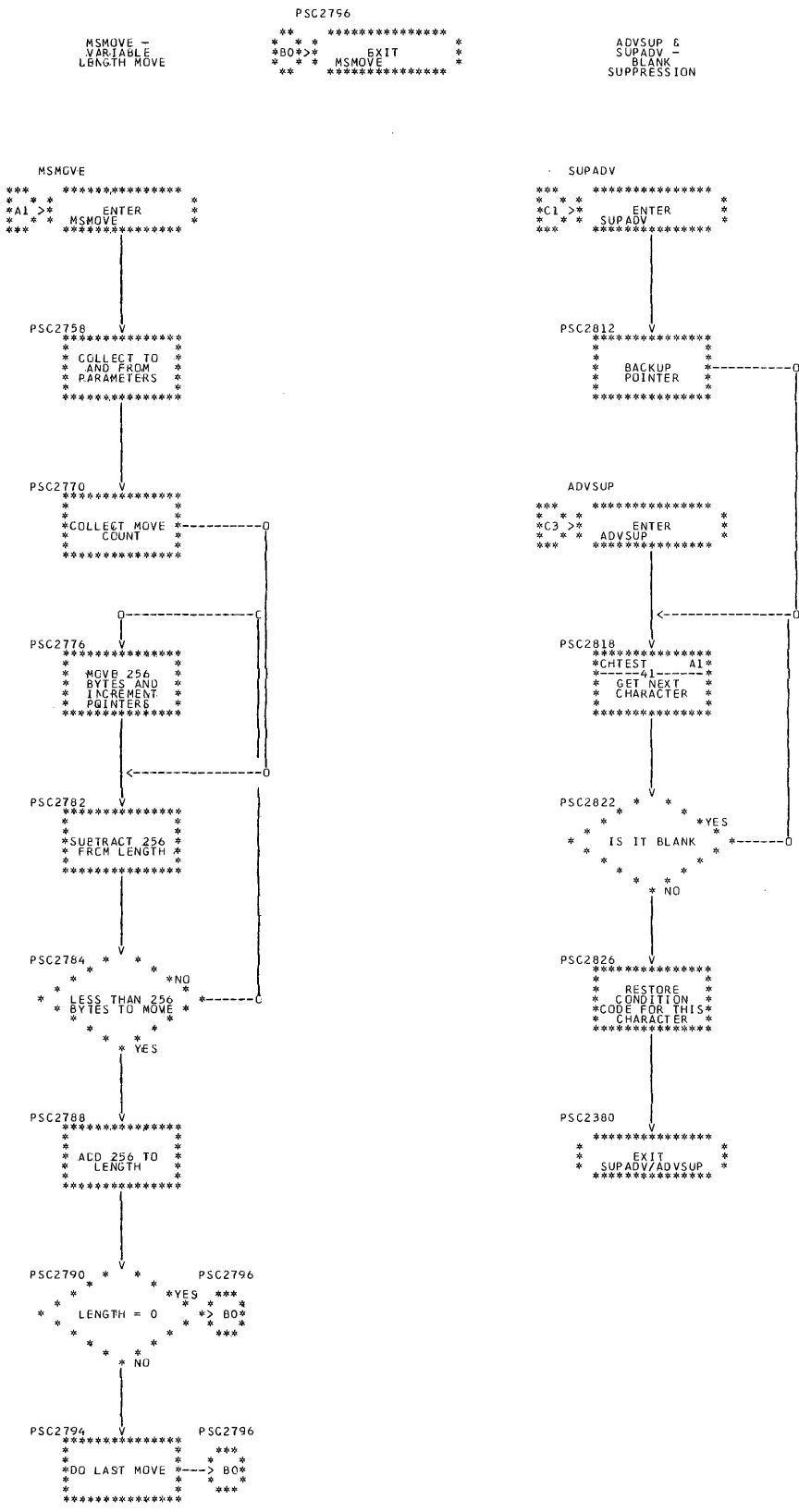


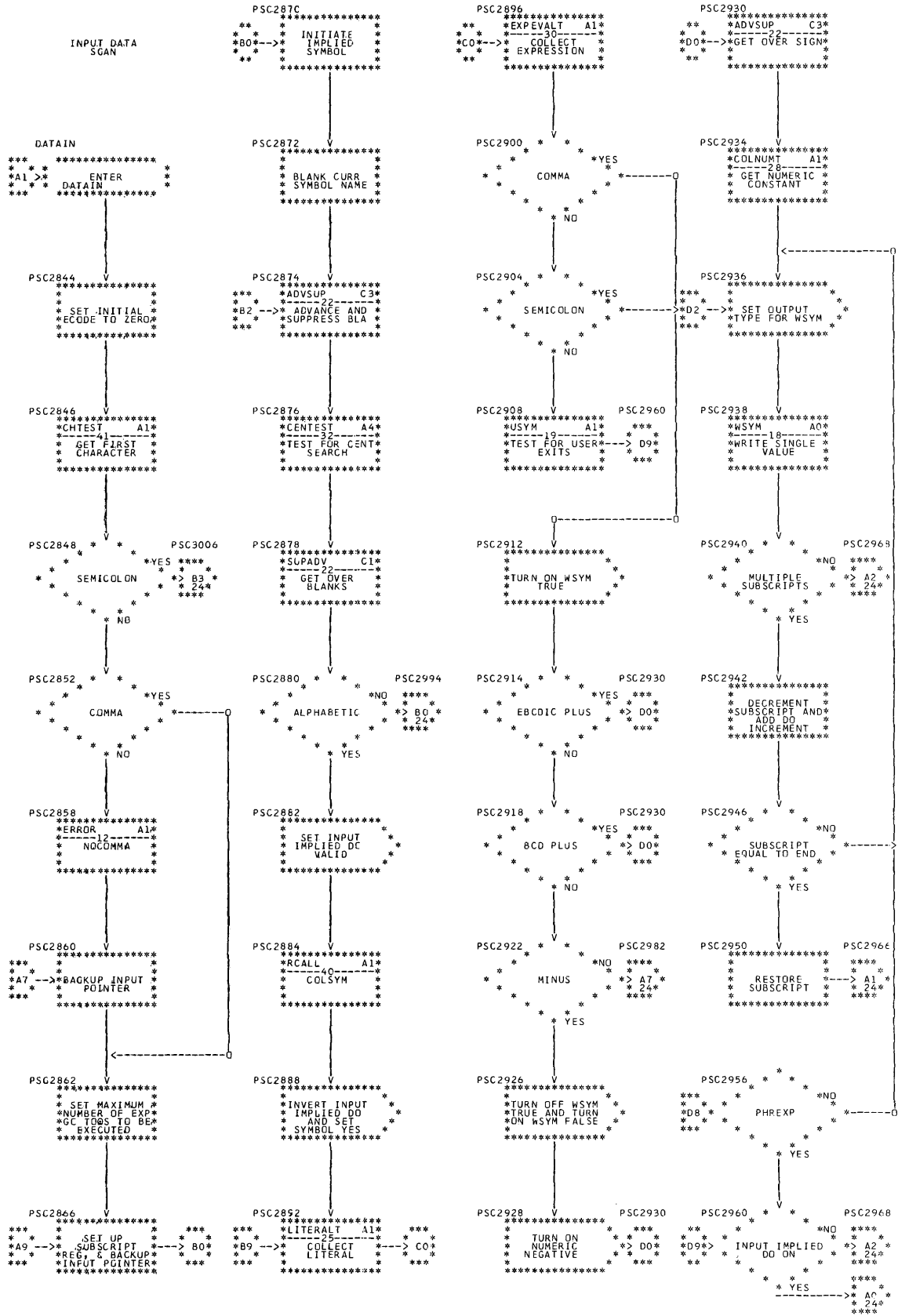


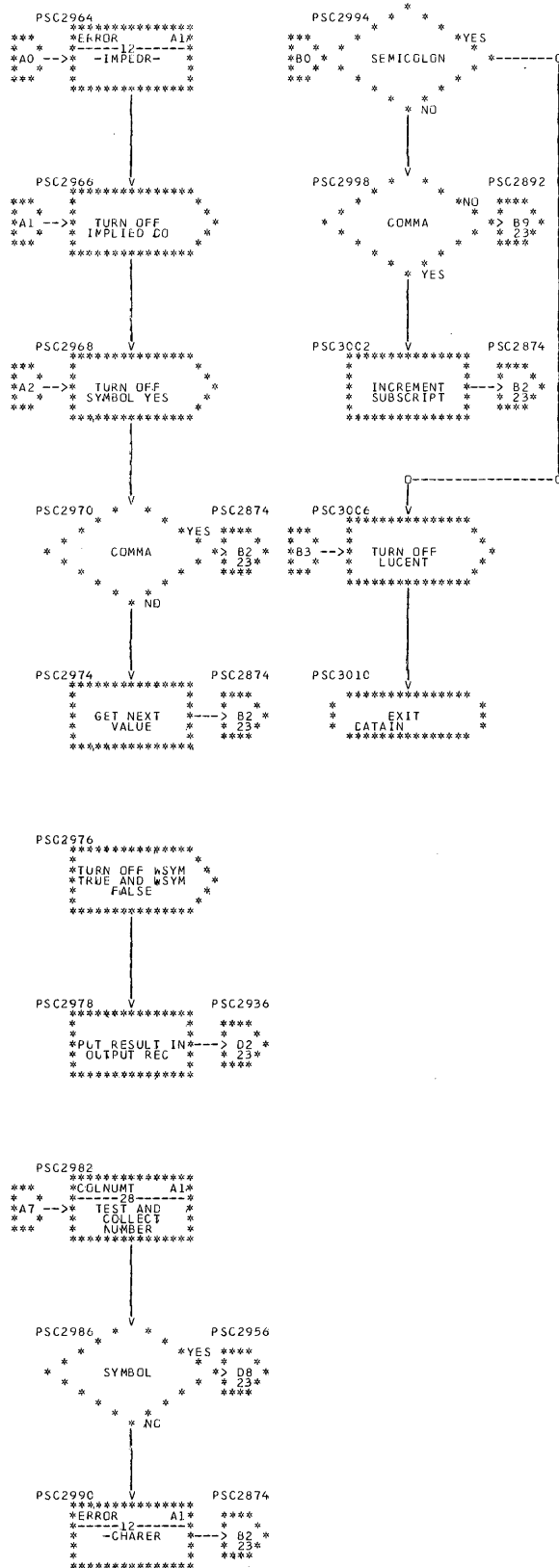


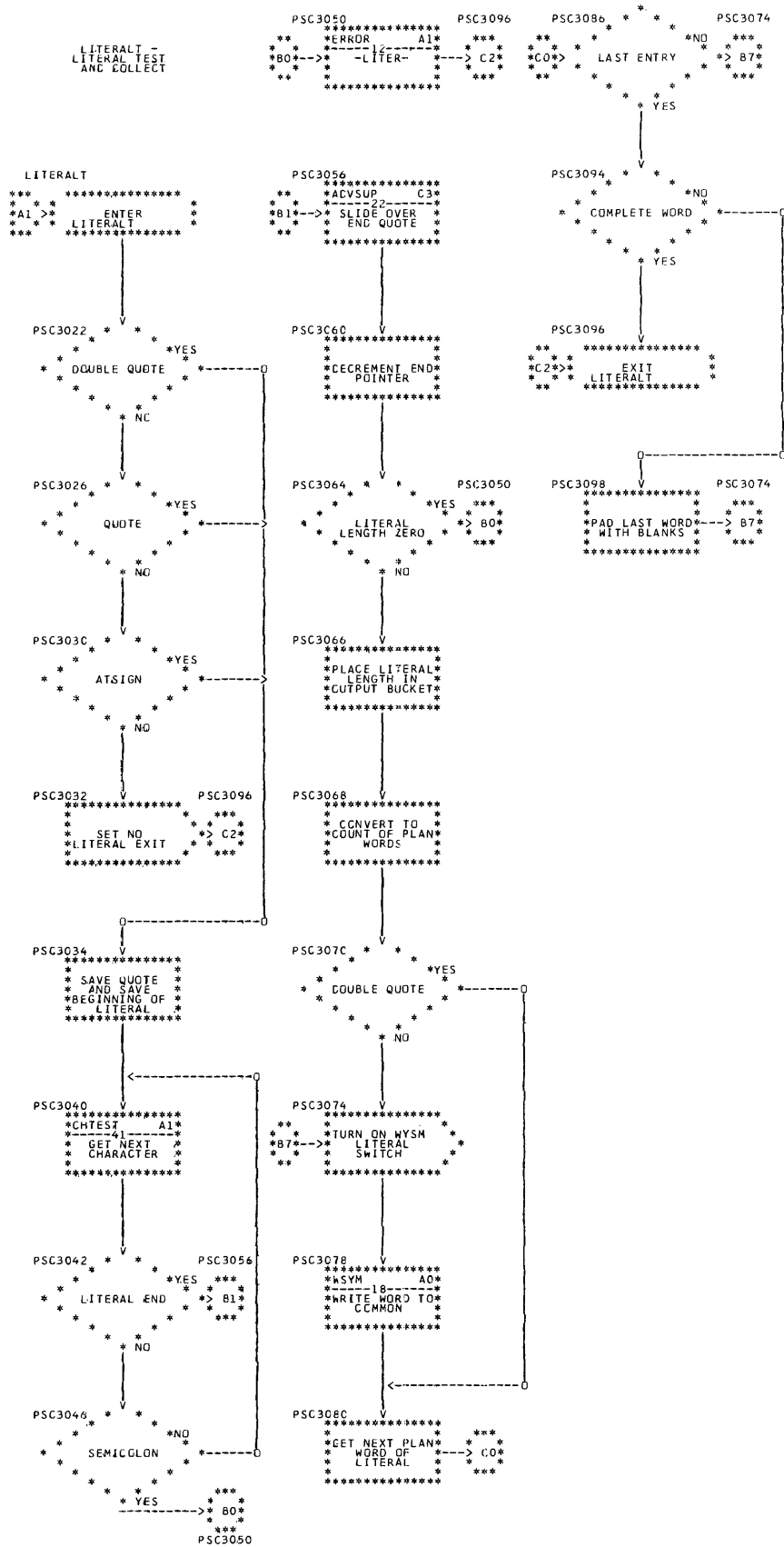


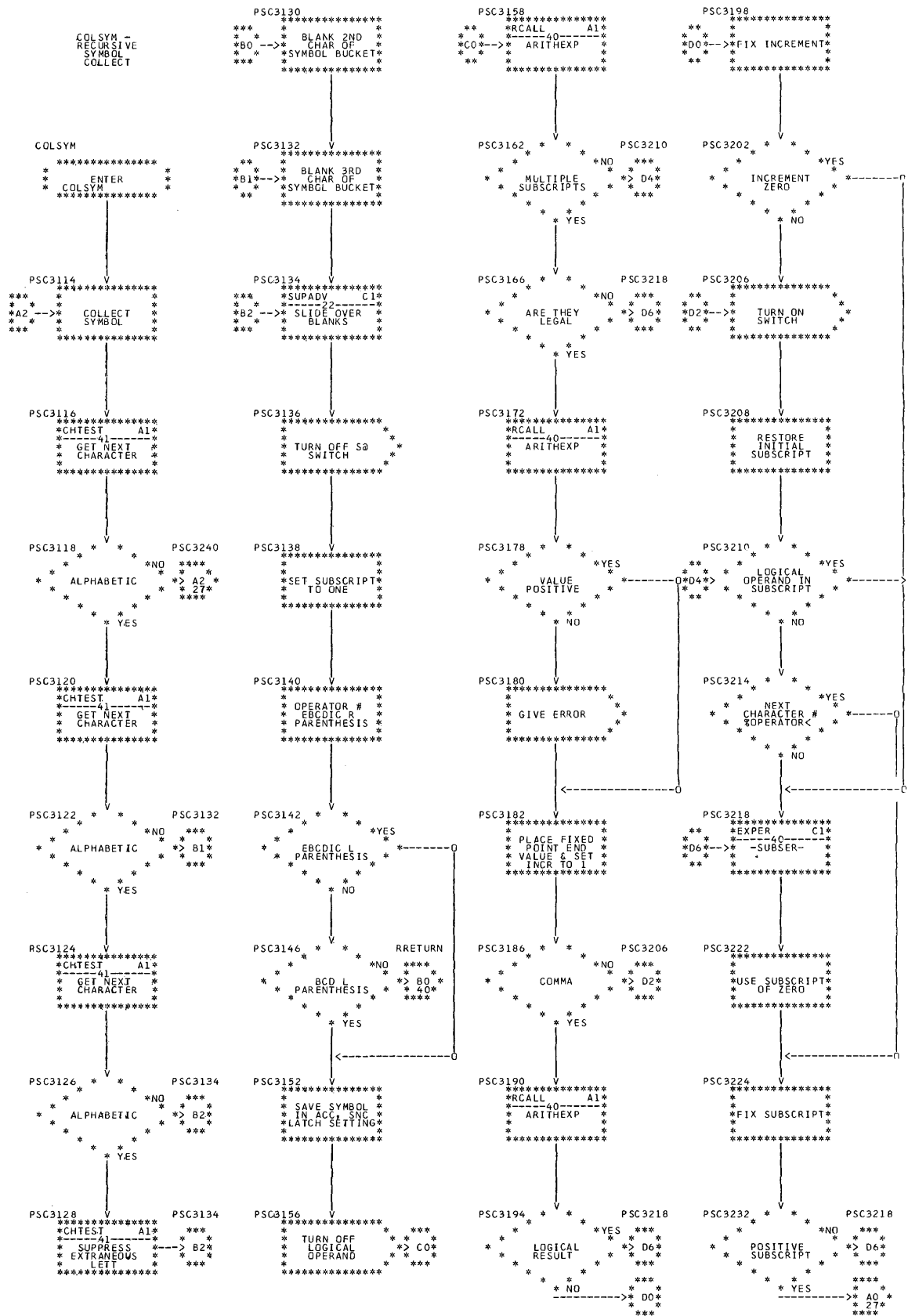


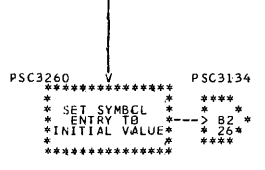
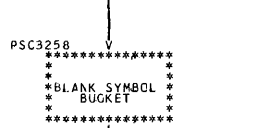
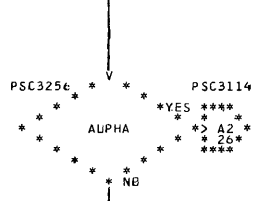
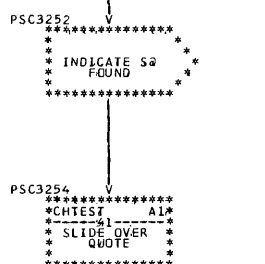
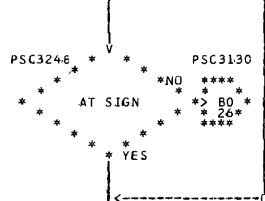
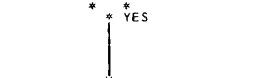
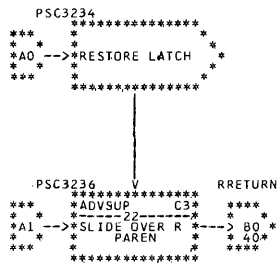


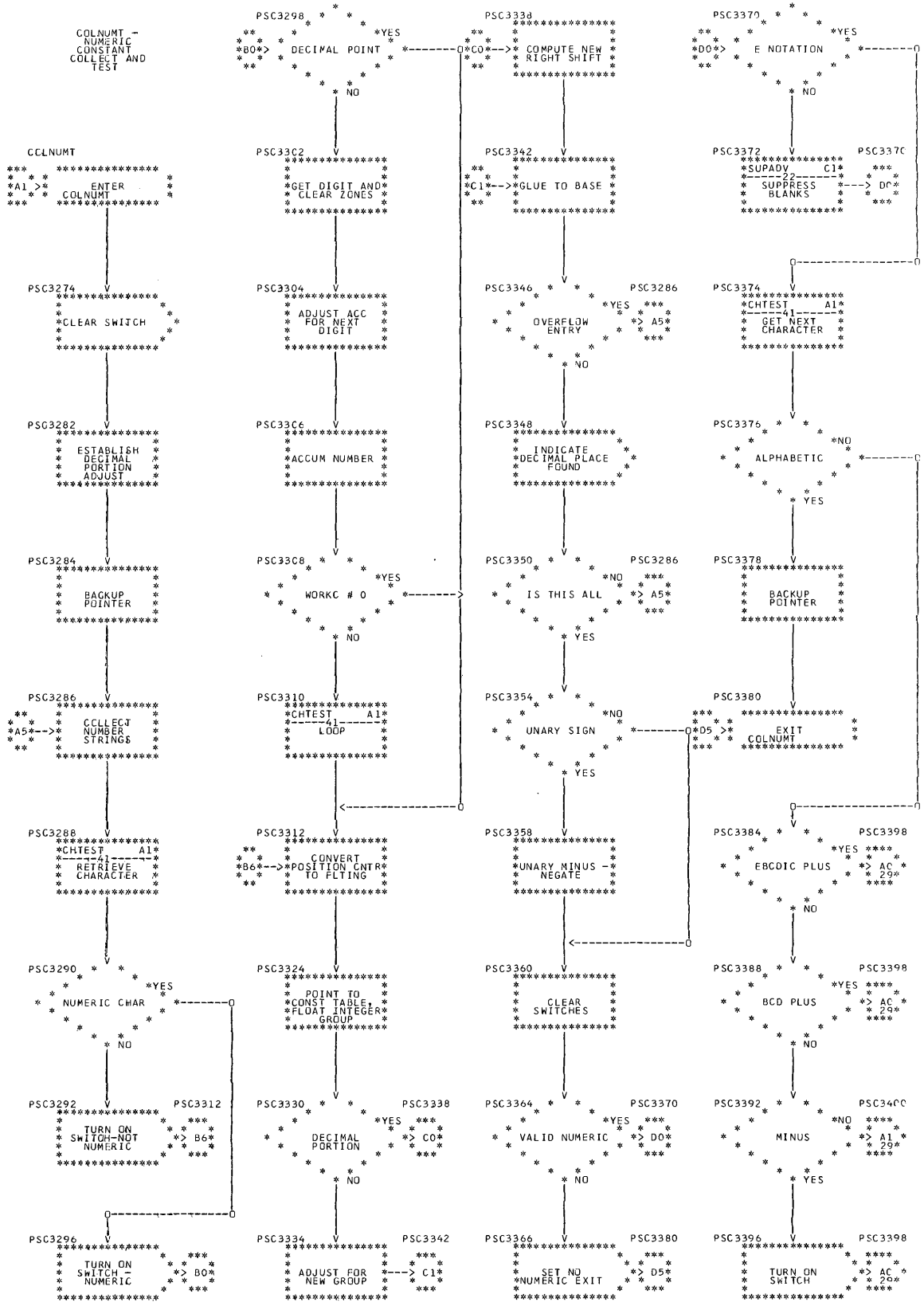


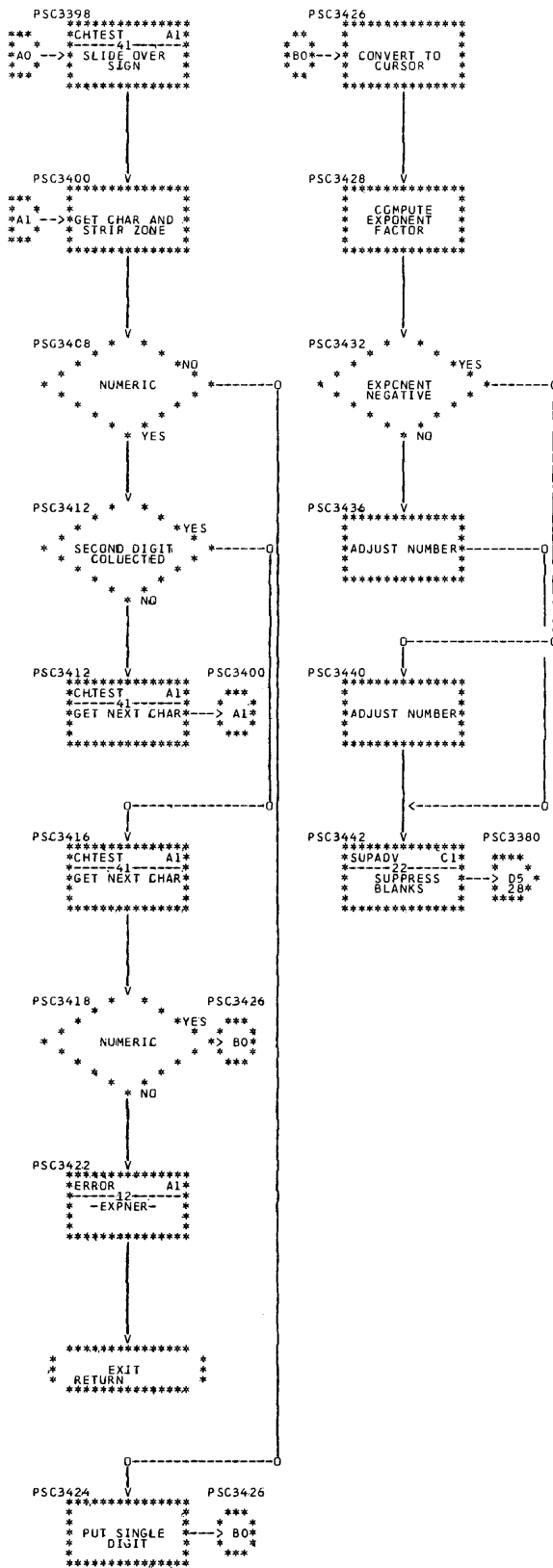












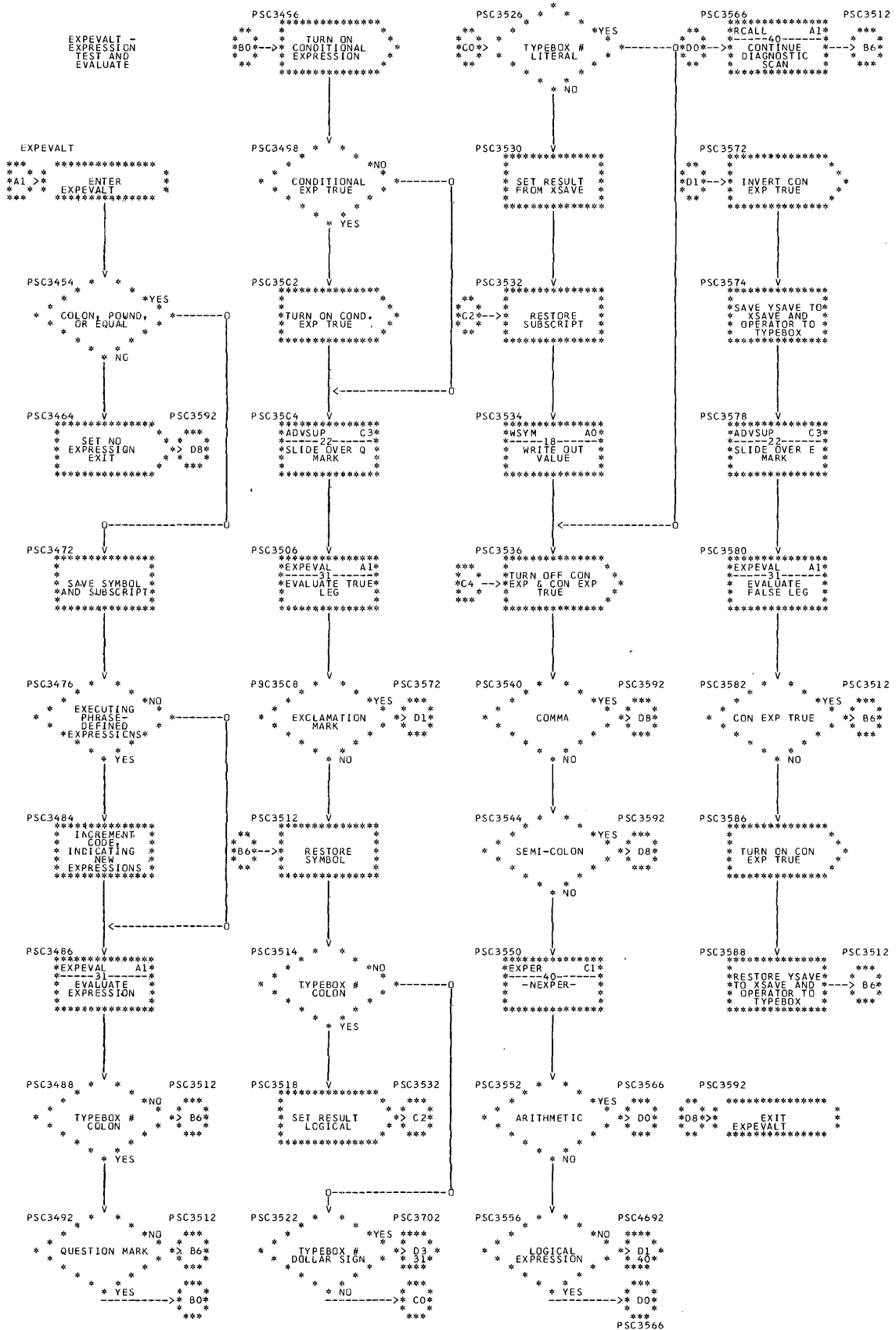
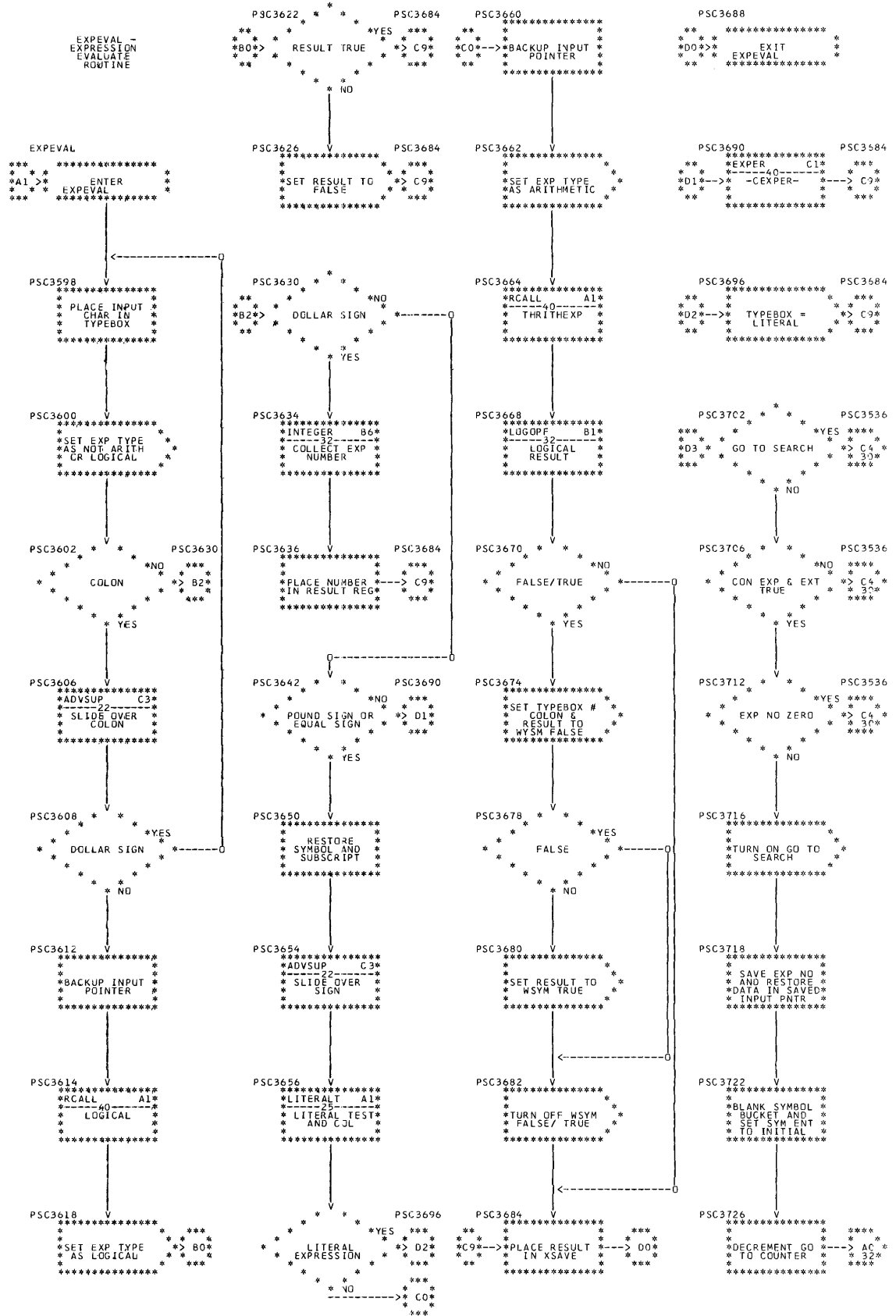
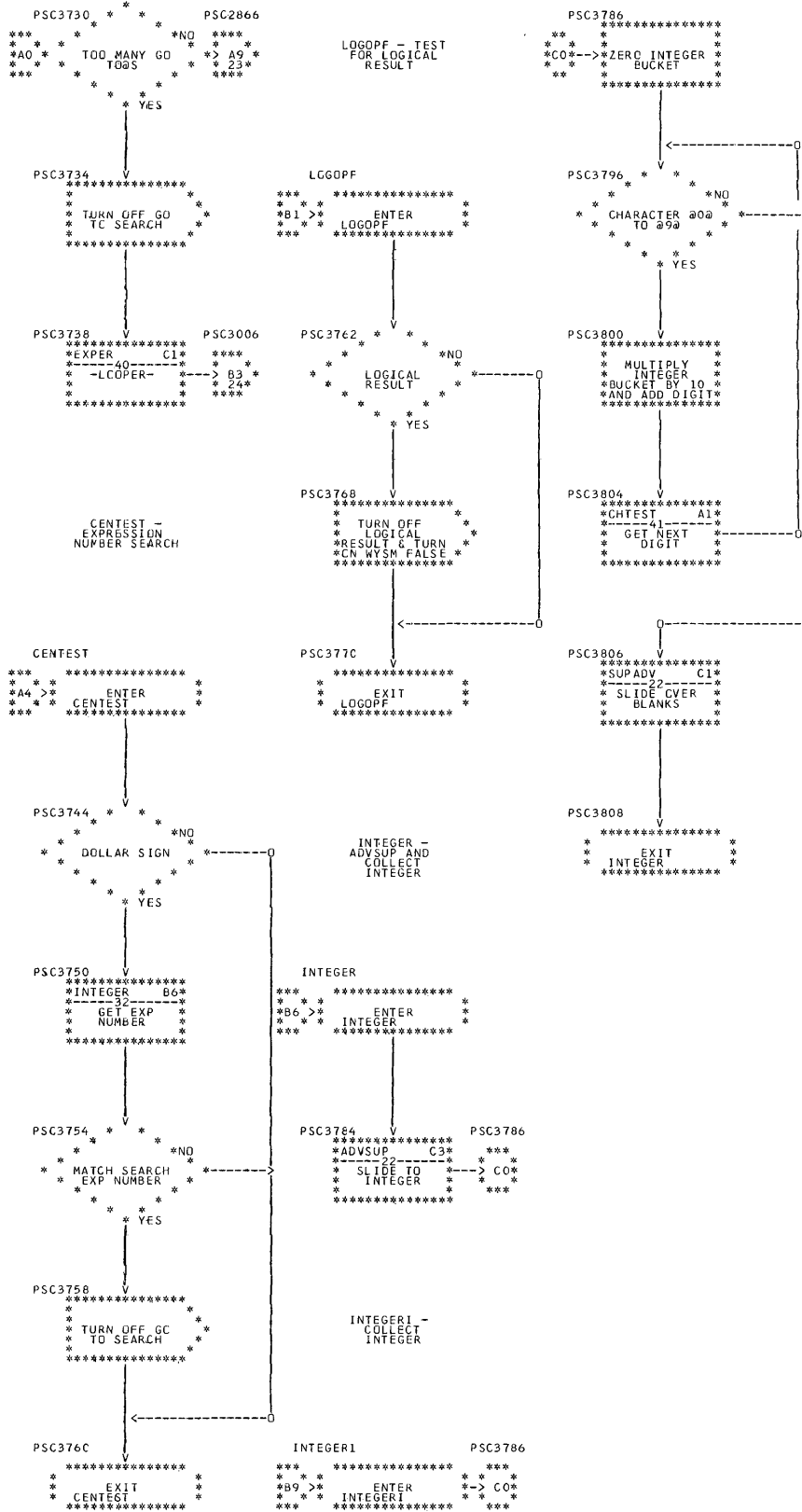
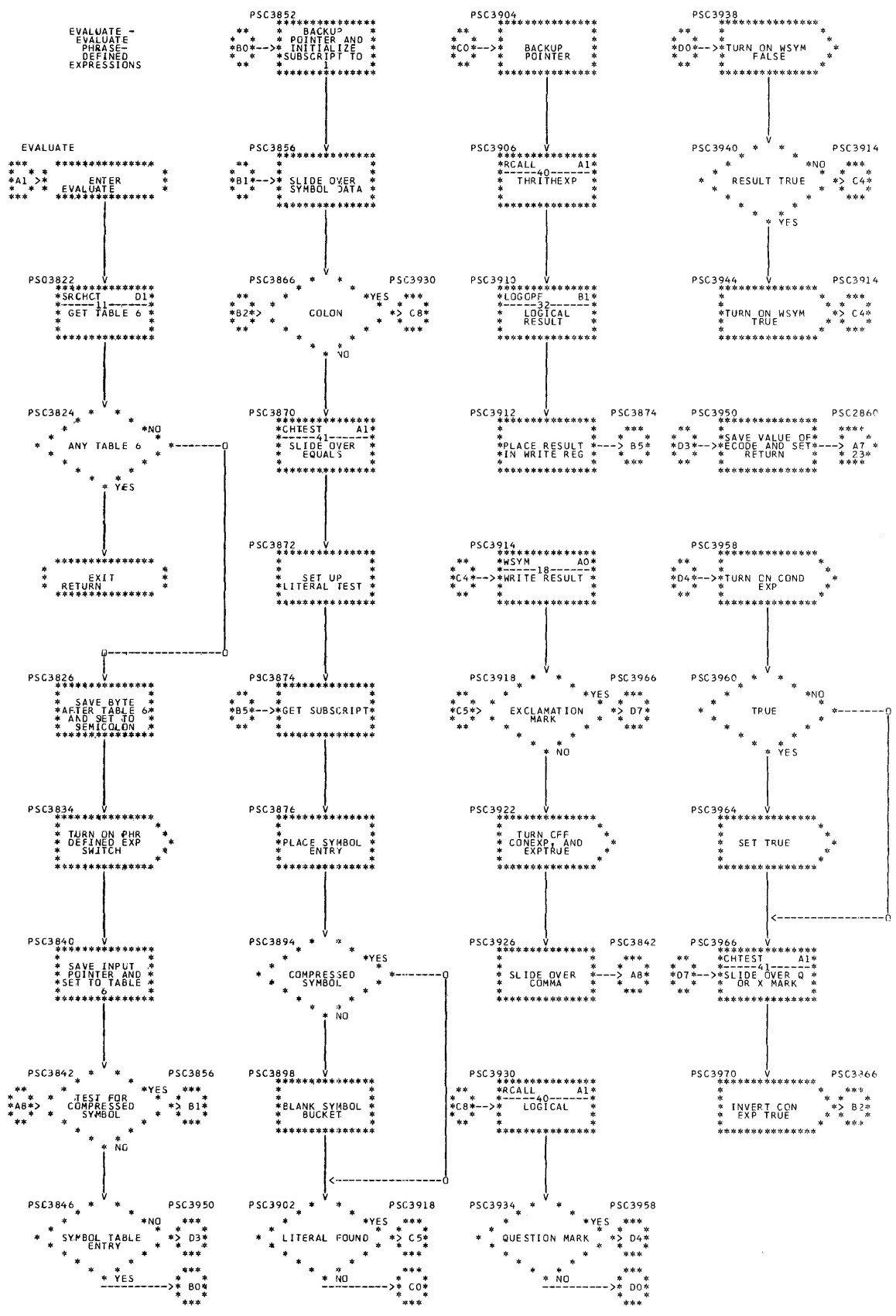
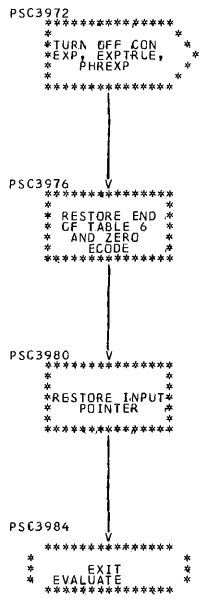


CHART ABQ: DFJPSCAN
DOS/CS CGMMAND PROCESSING ROUTINE









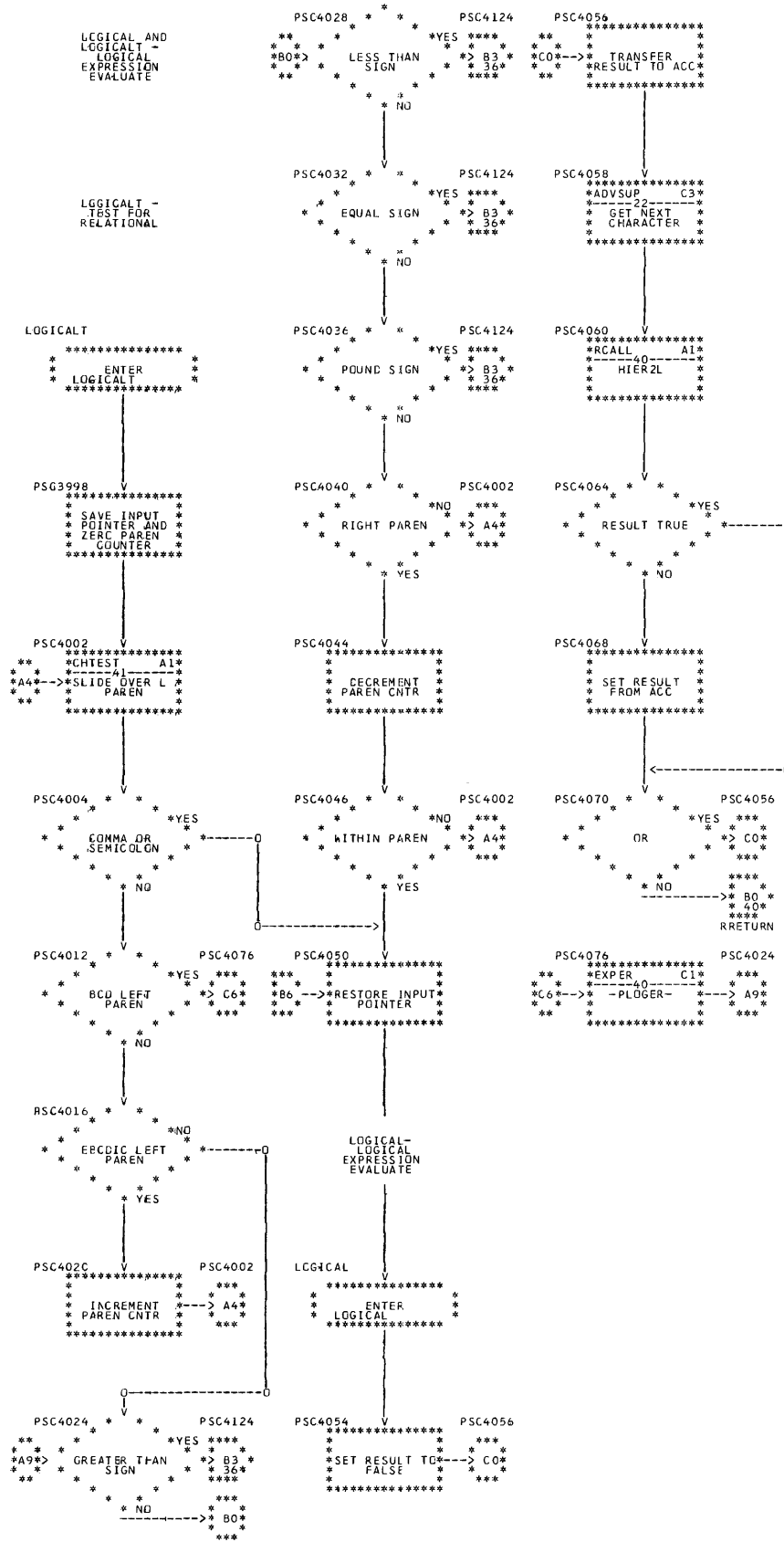
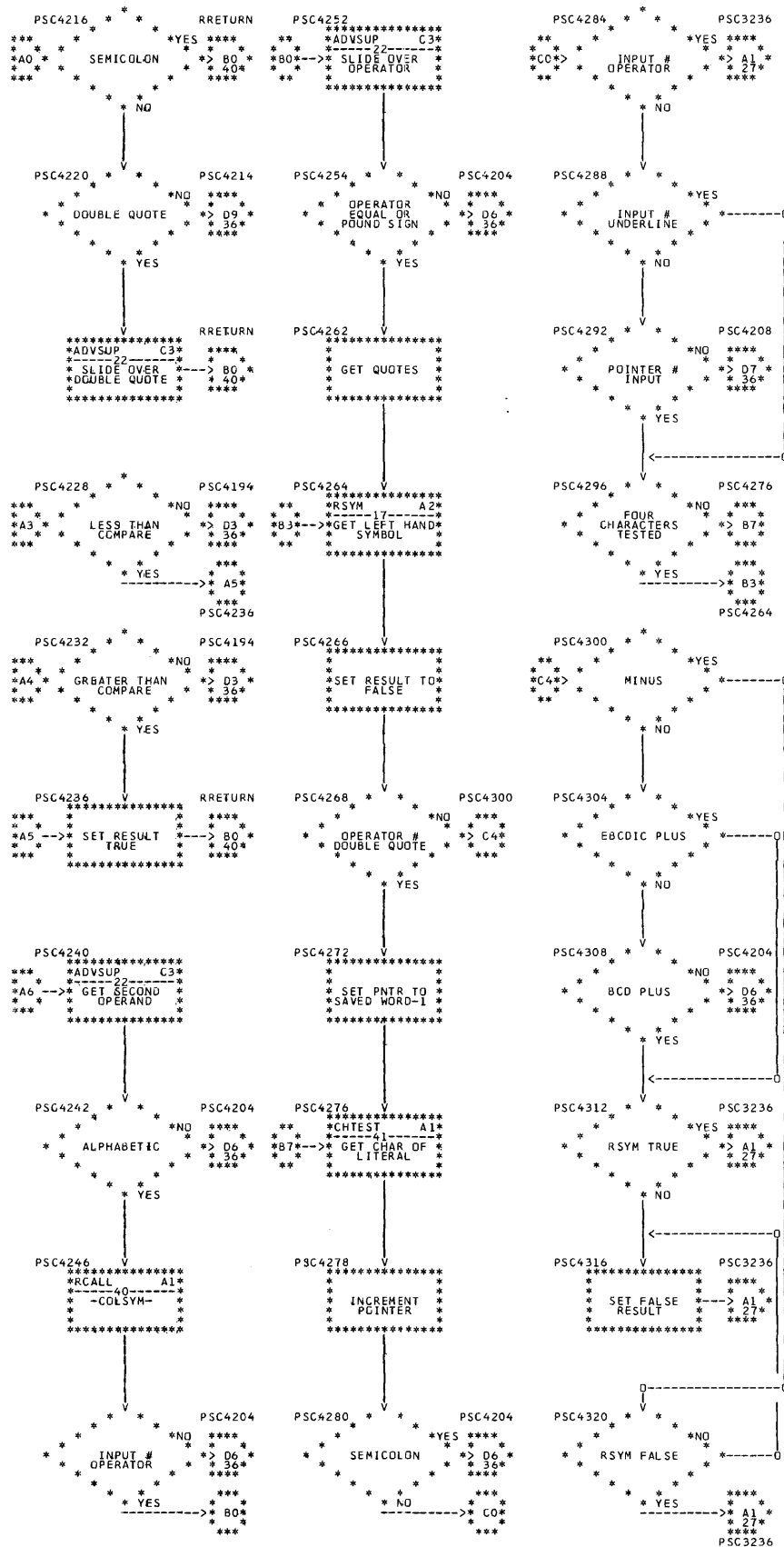
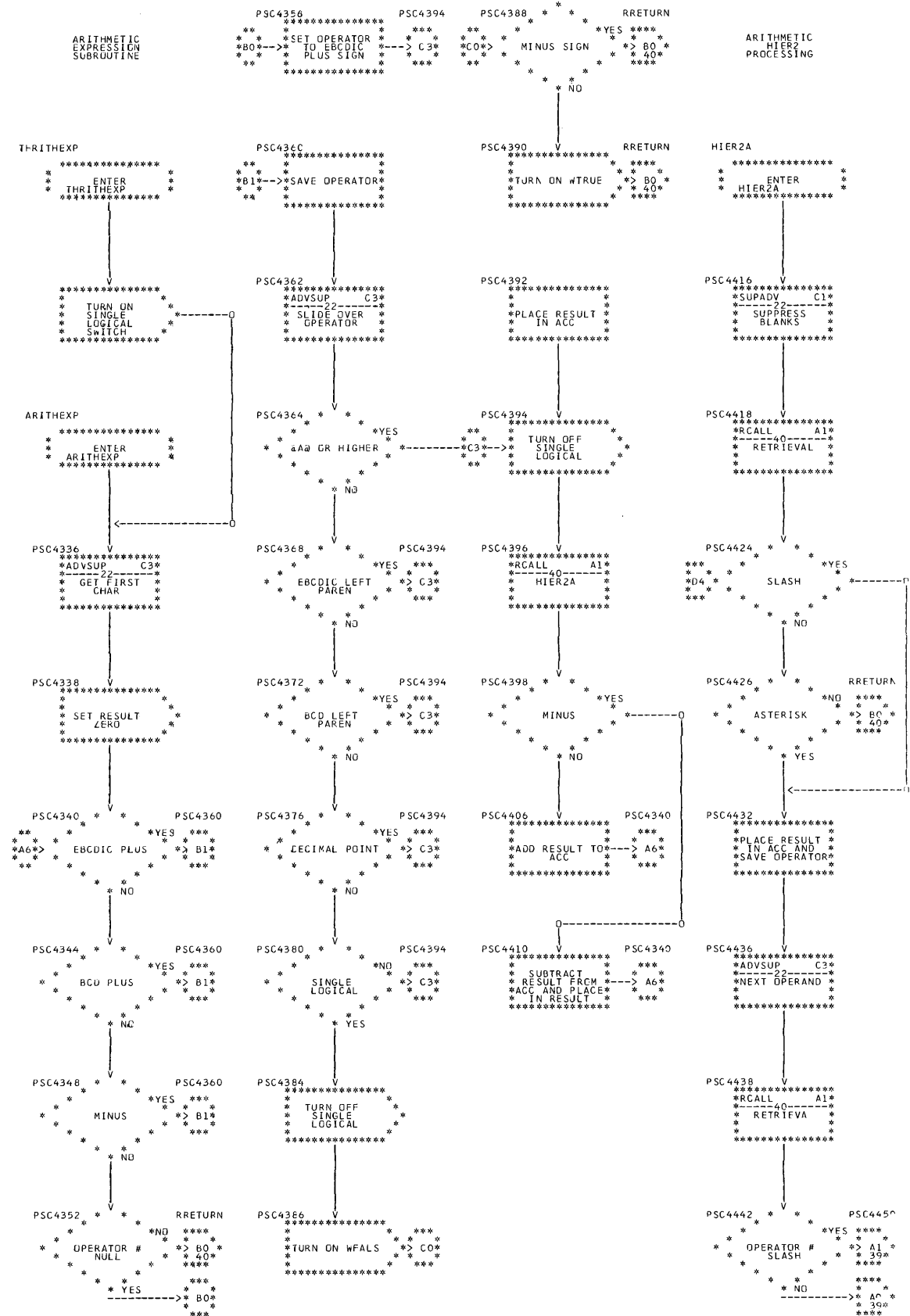
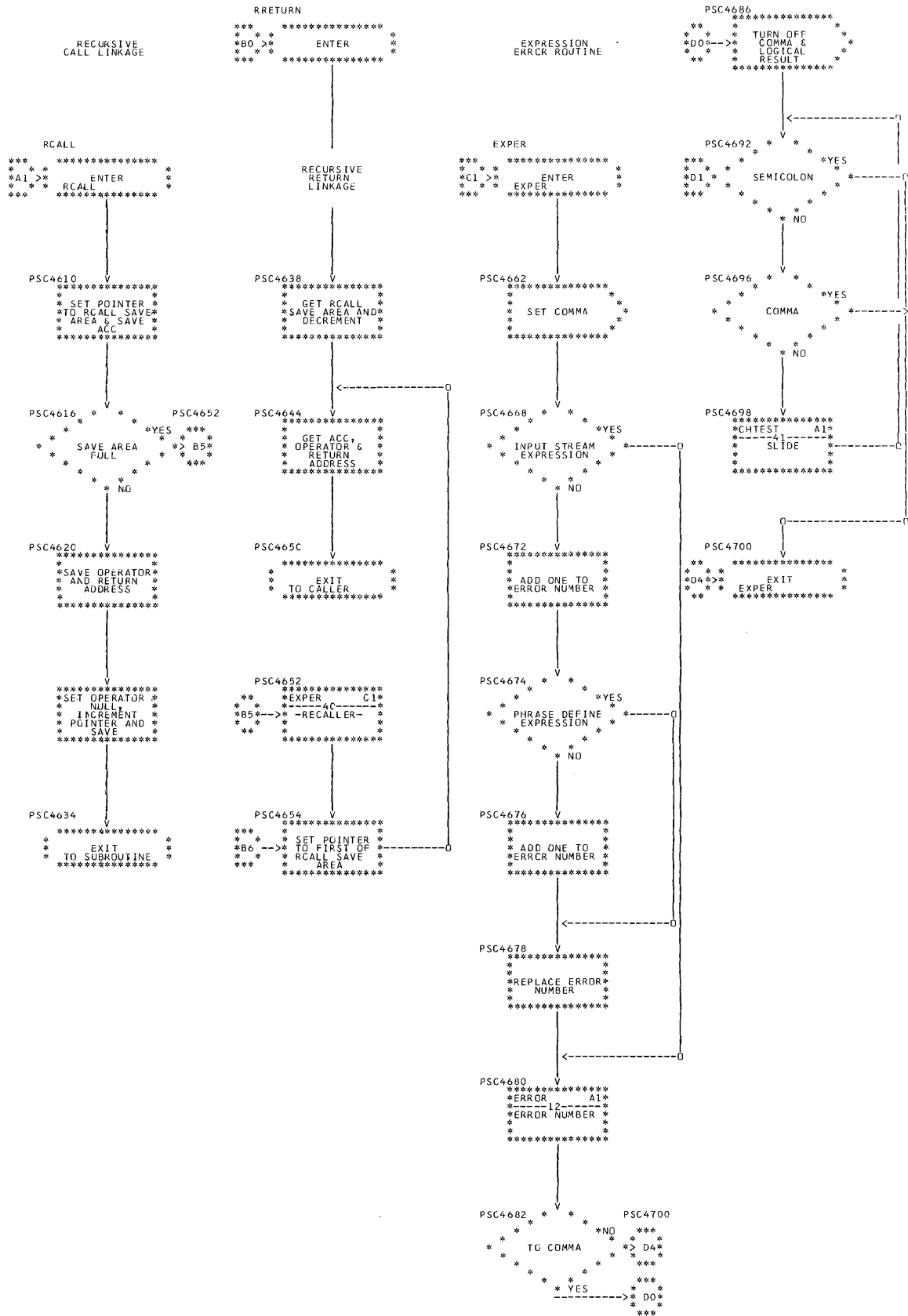


CHART ABQ: DFJPSKAN
DOS/GS COMMAND PROCESSING ROUTINE







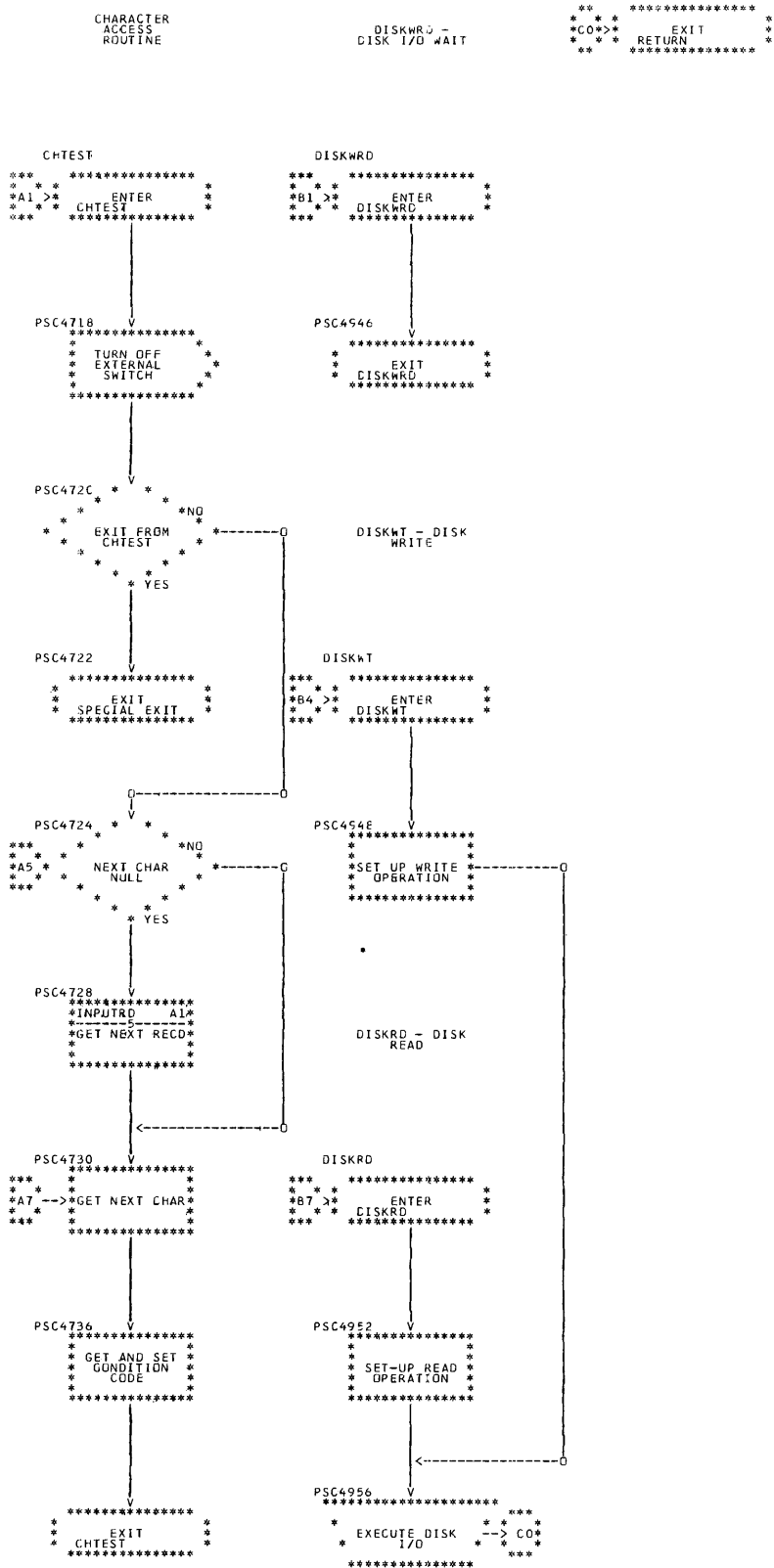
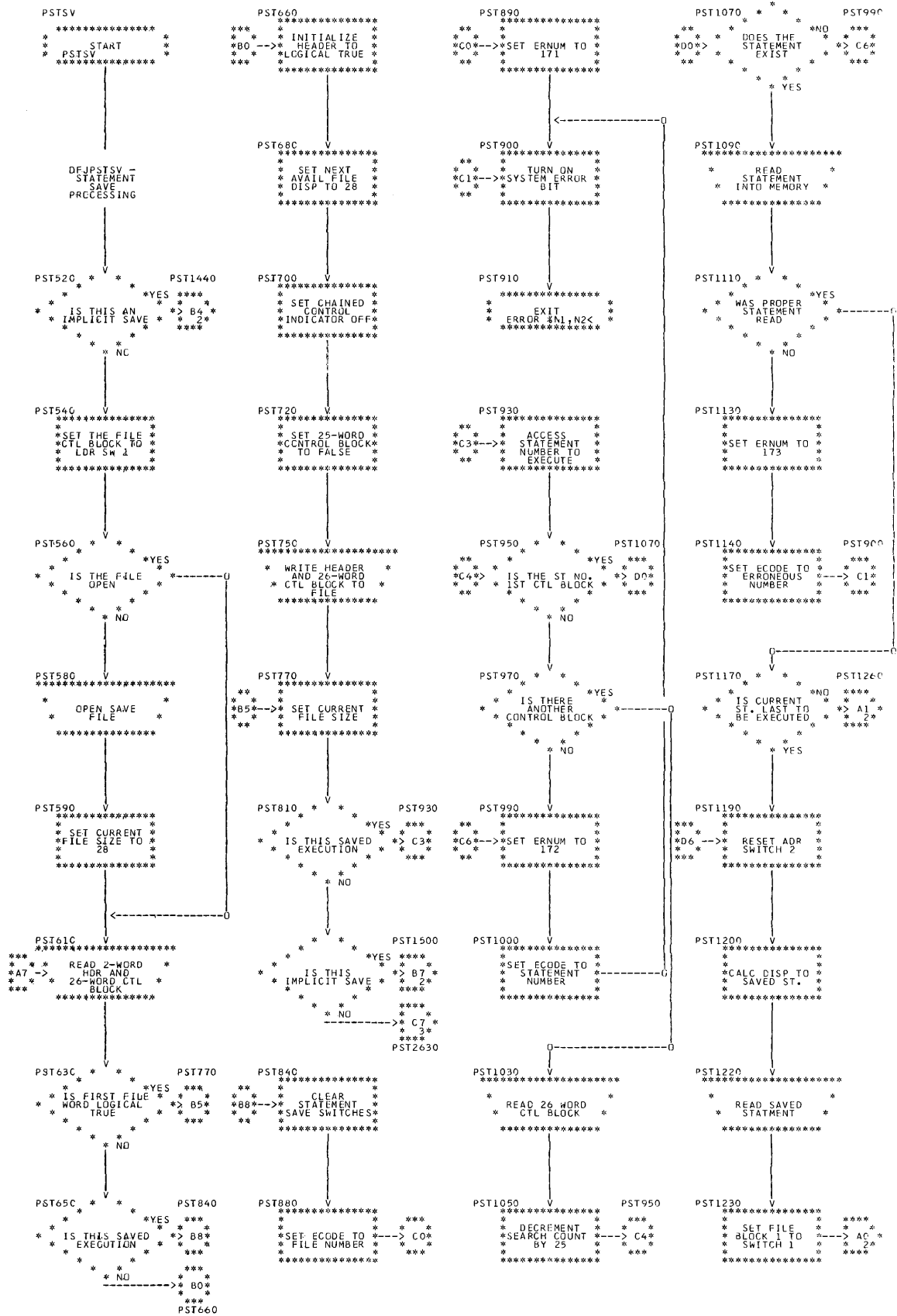


CHART ABS: DFJPSTSV
DCS/CS STATEMENT SAVE PROCESSING ROUTINE



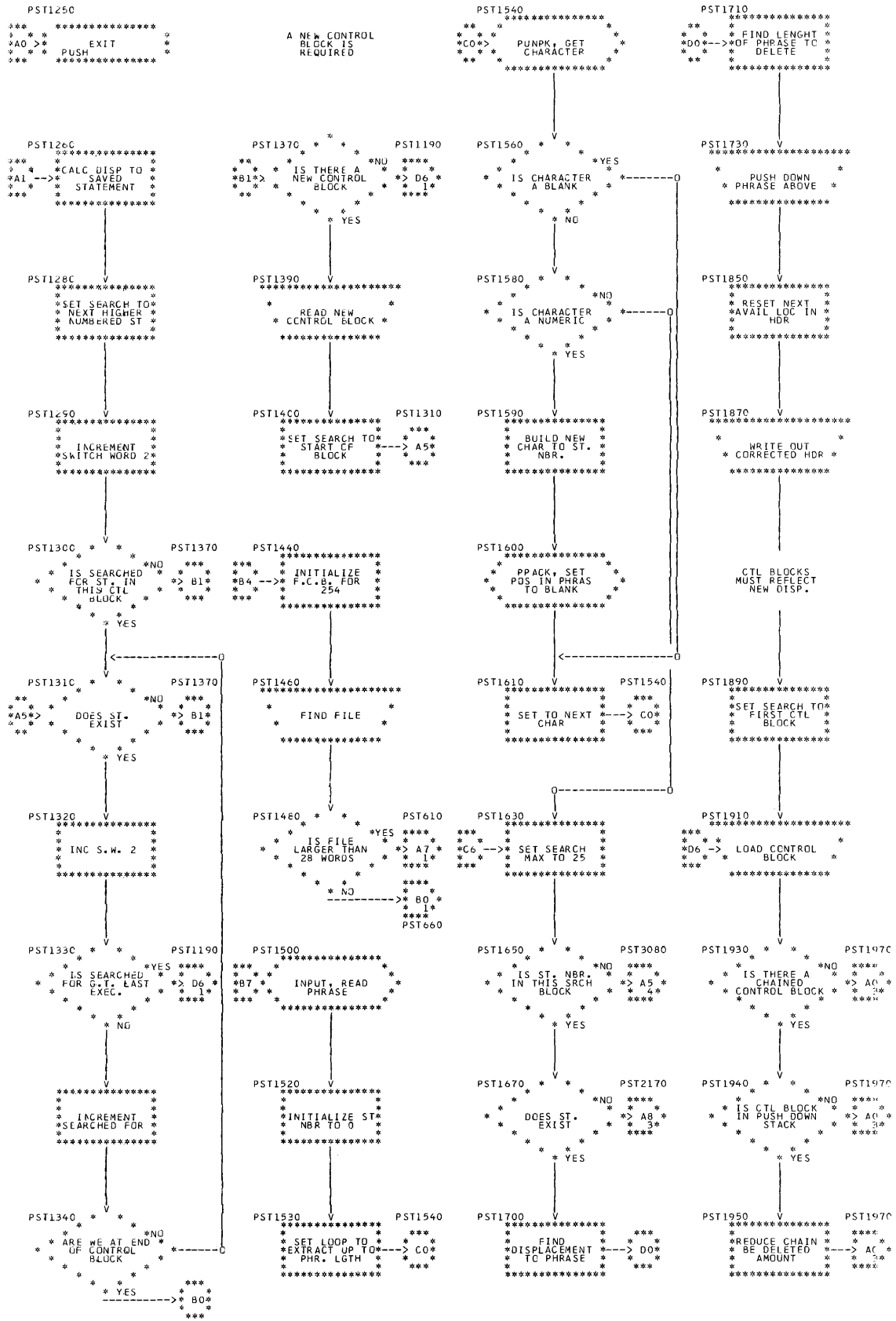
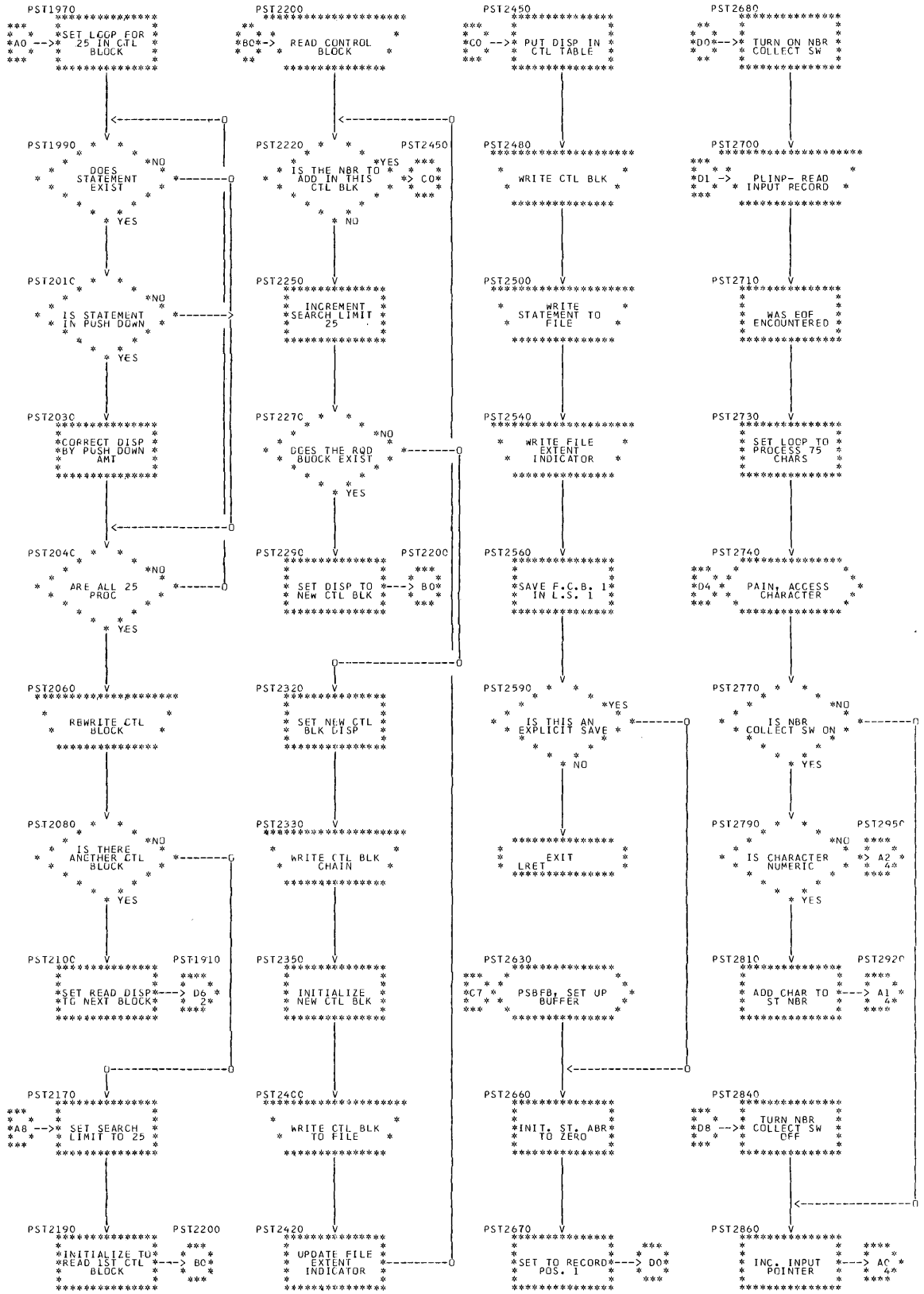


CHART ABS: DFJPSTSV
DGS/GS STATEMENT SAVE PROCESSING ROUTINE



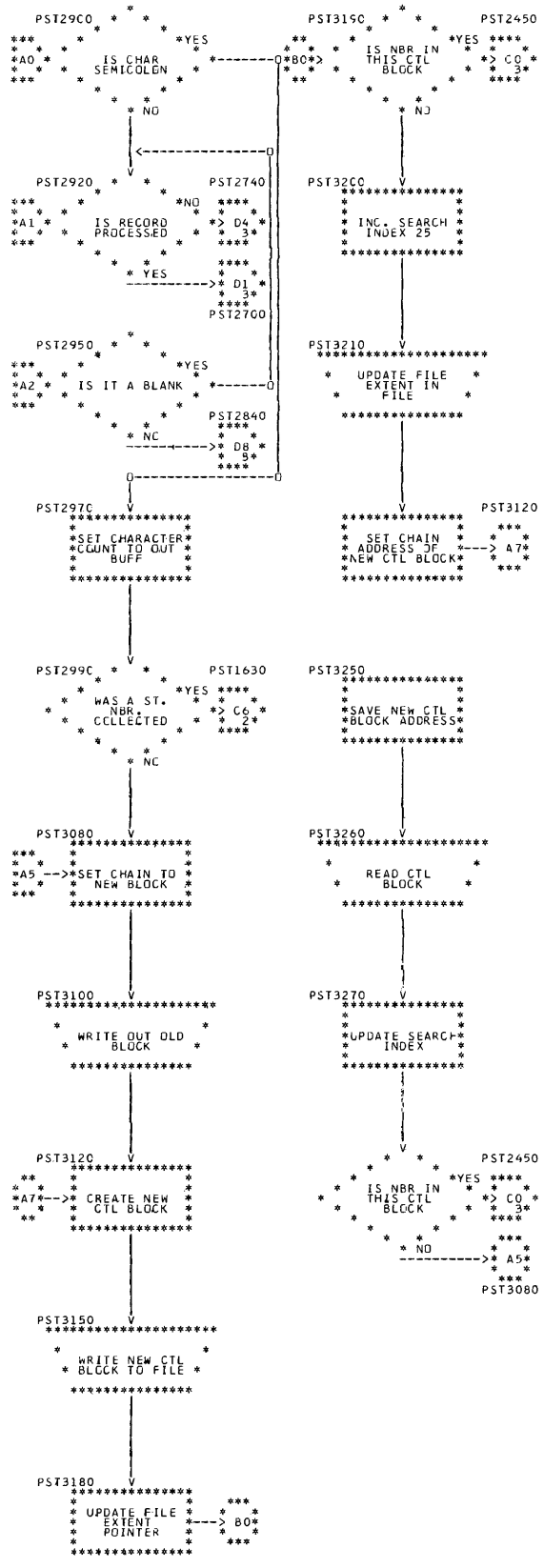
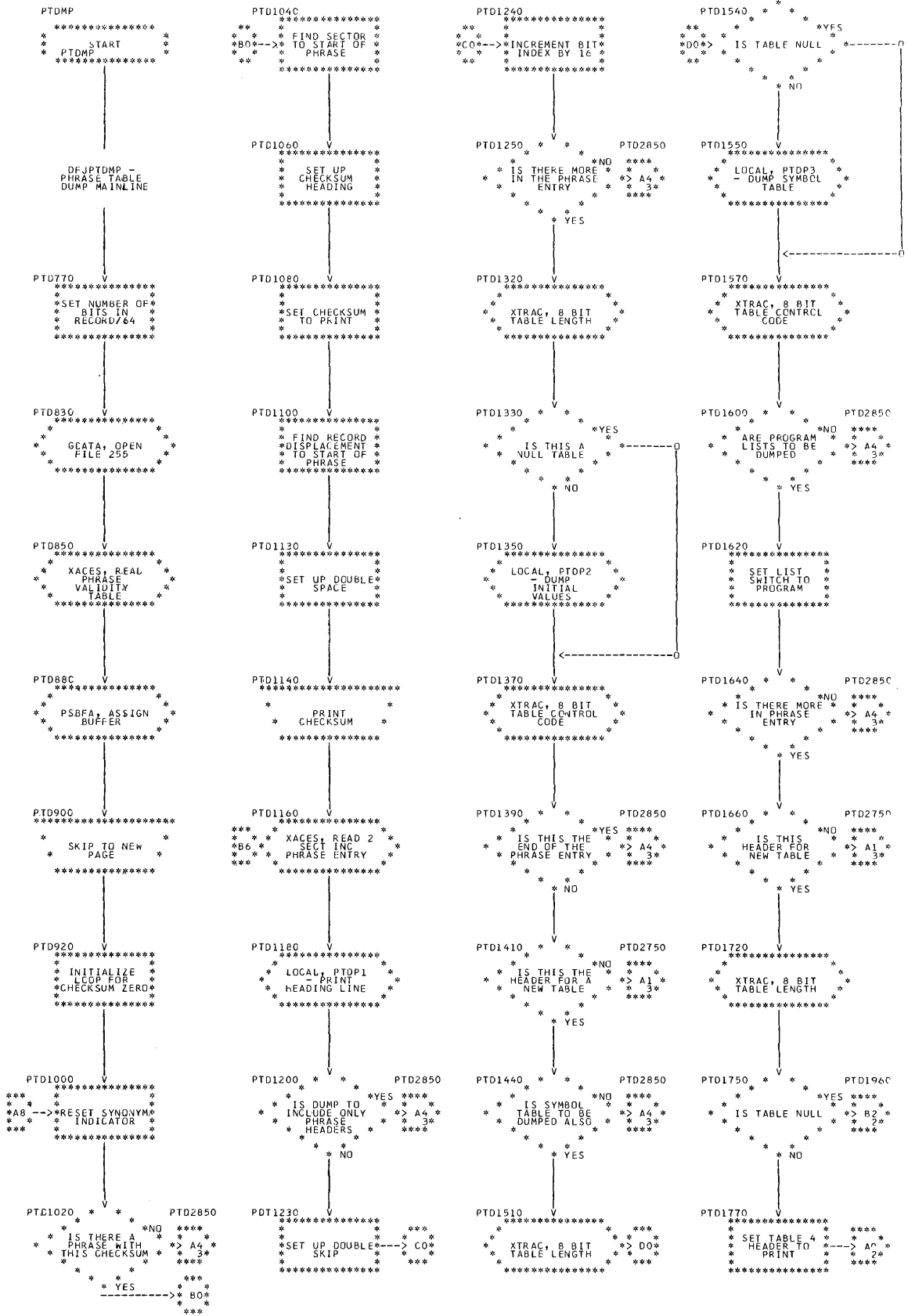
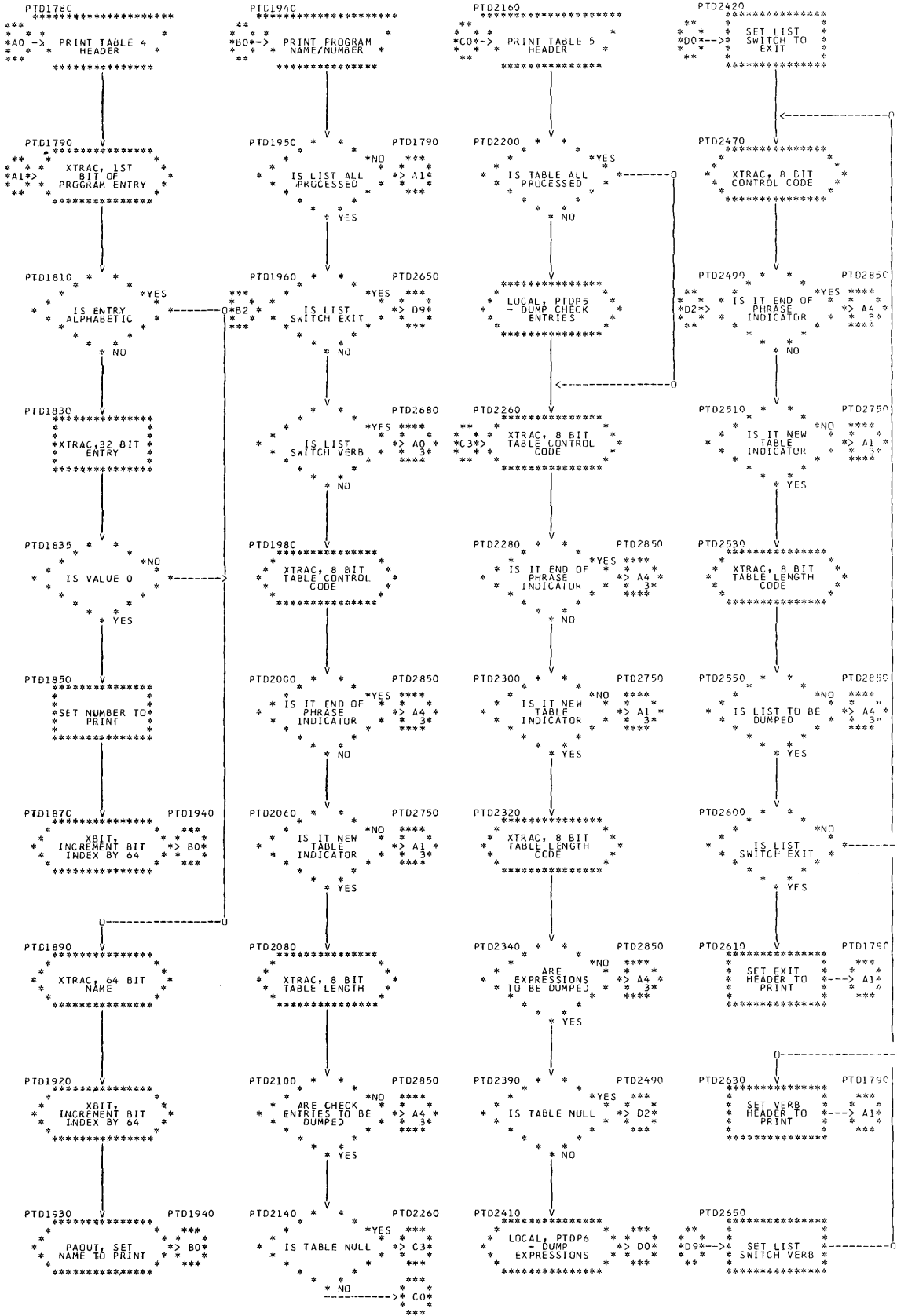
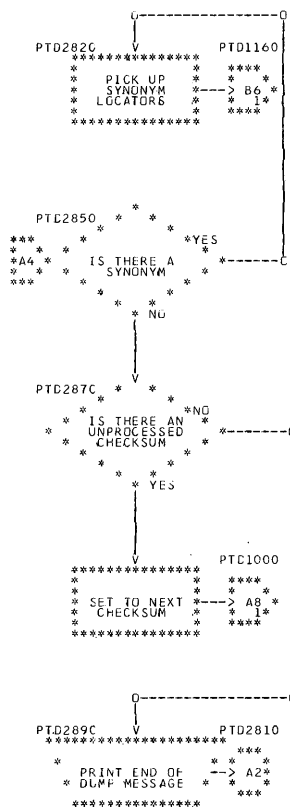
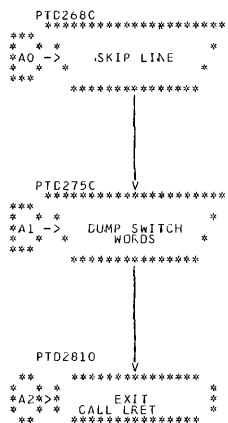


CHART ABU: DFJPTDMP
DOS/OS PHKASE TABLE DUMP ROUTINE







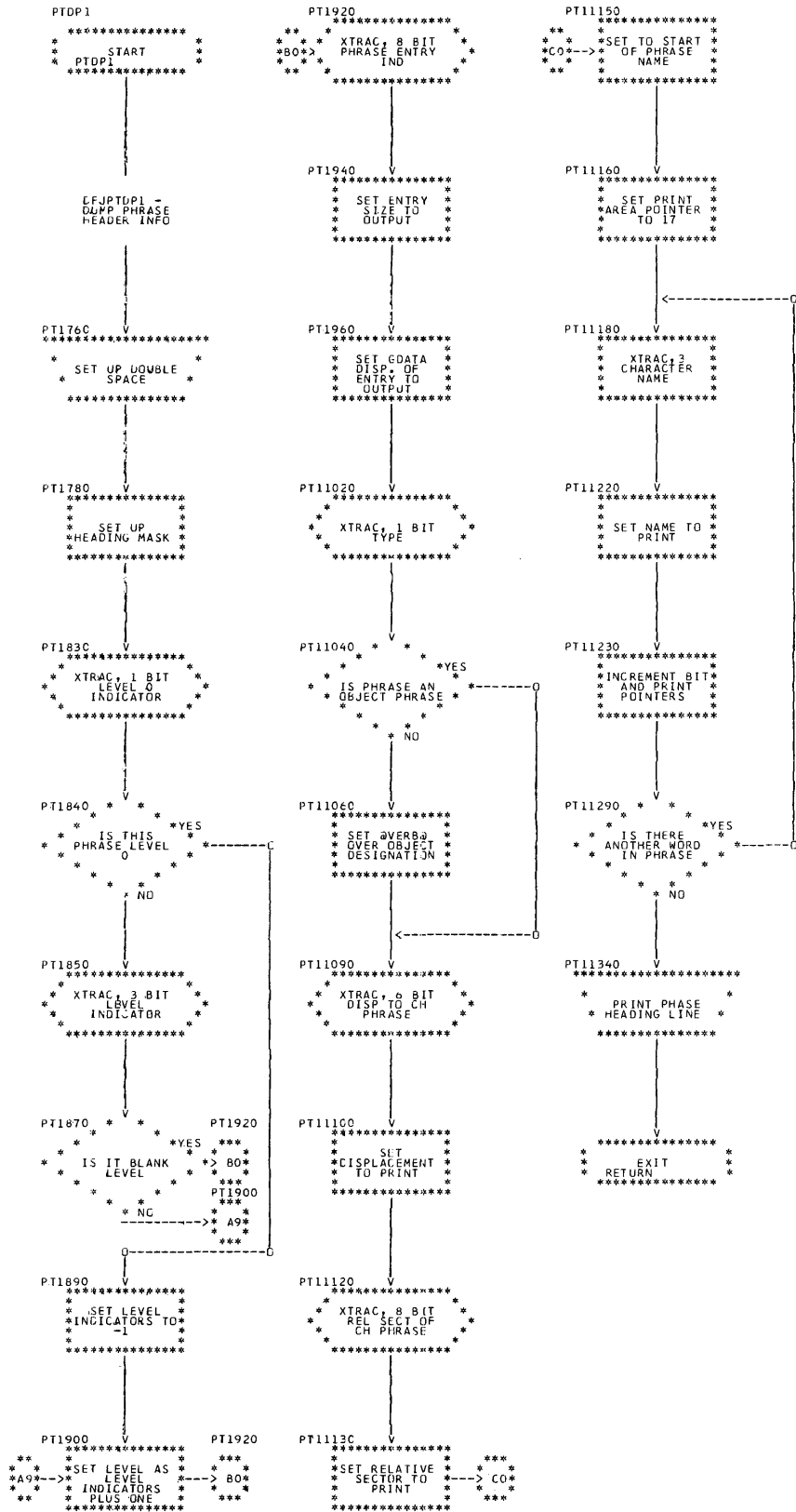
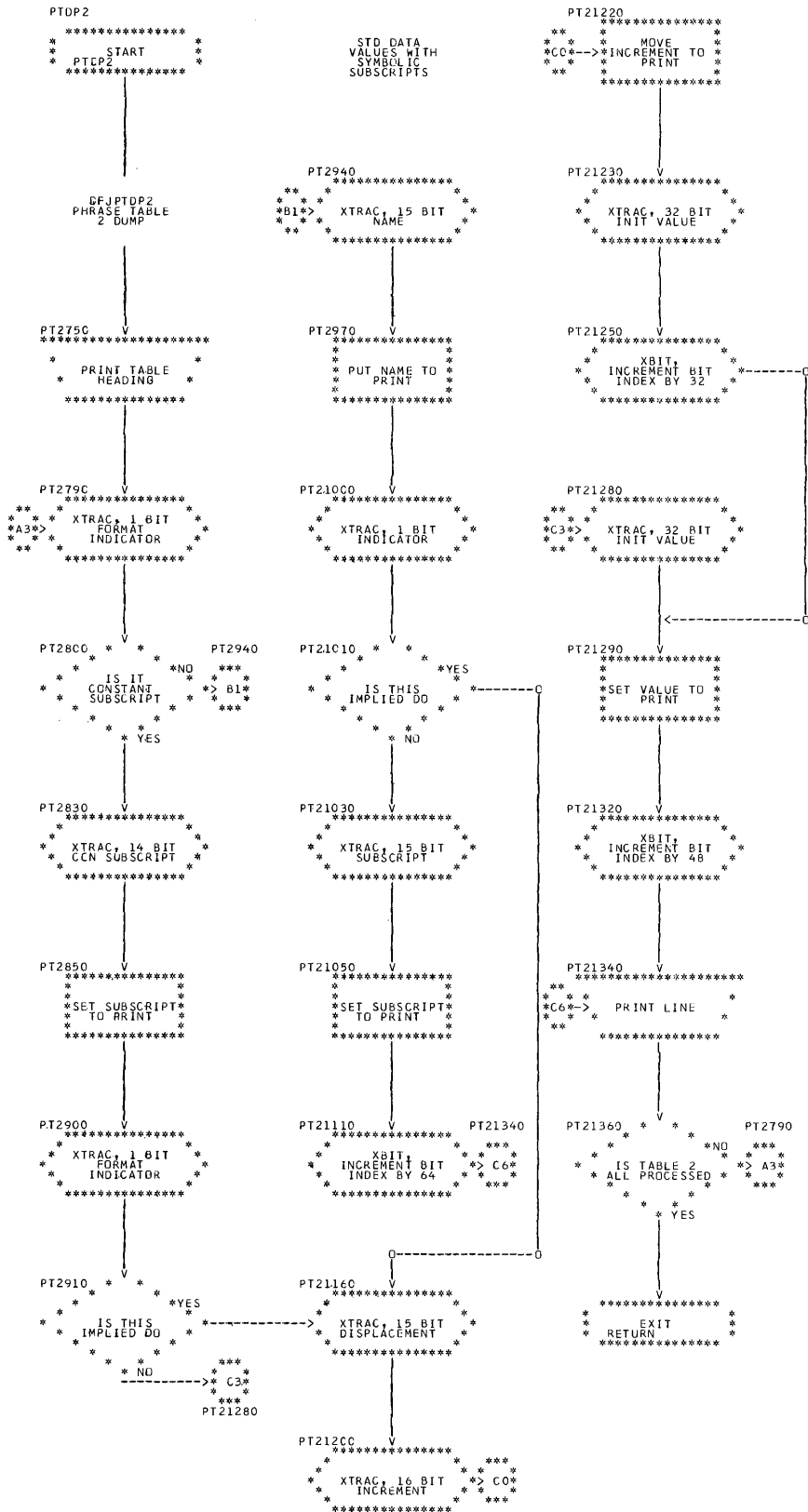
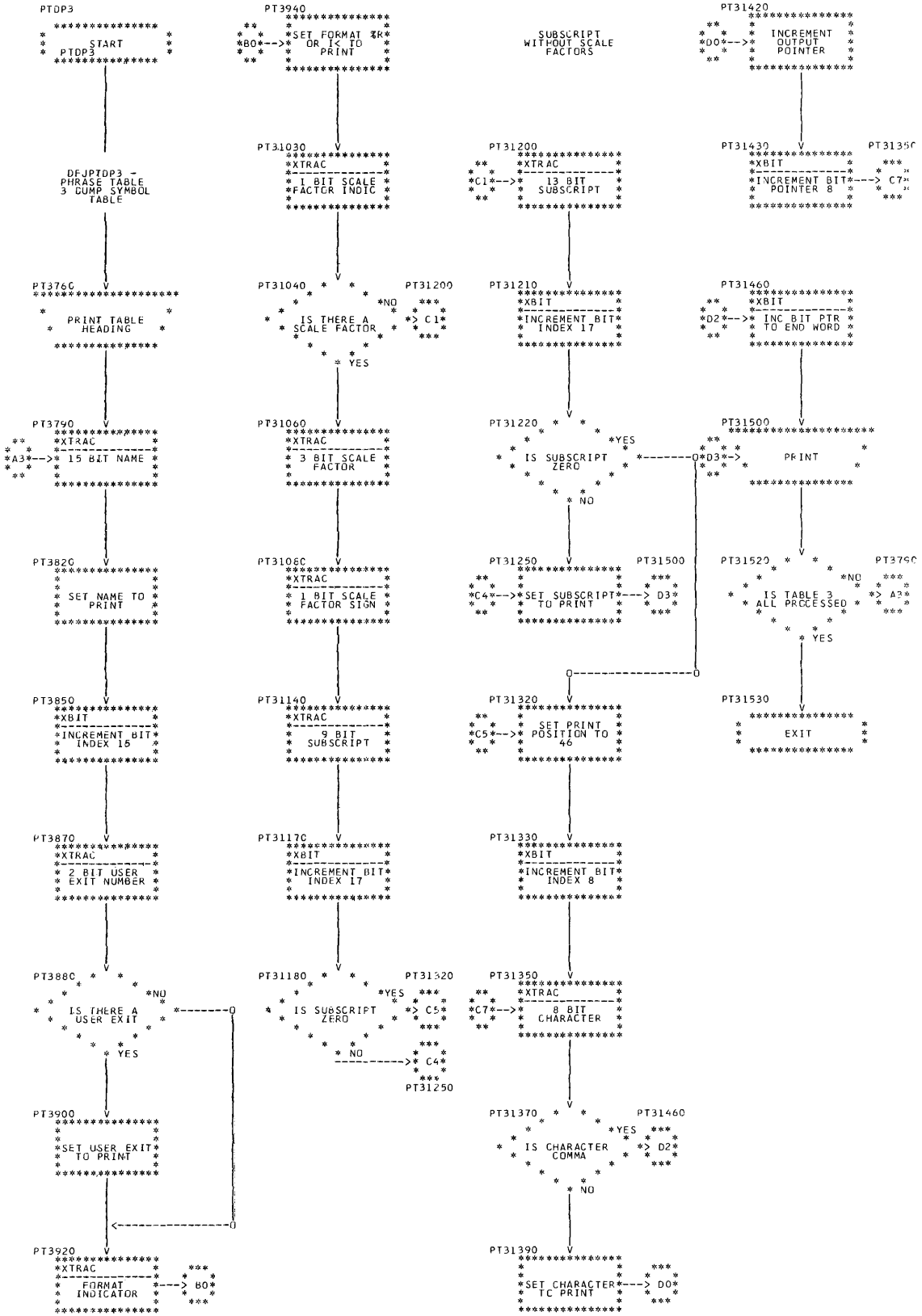
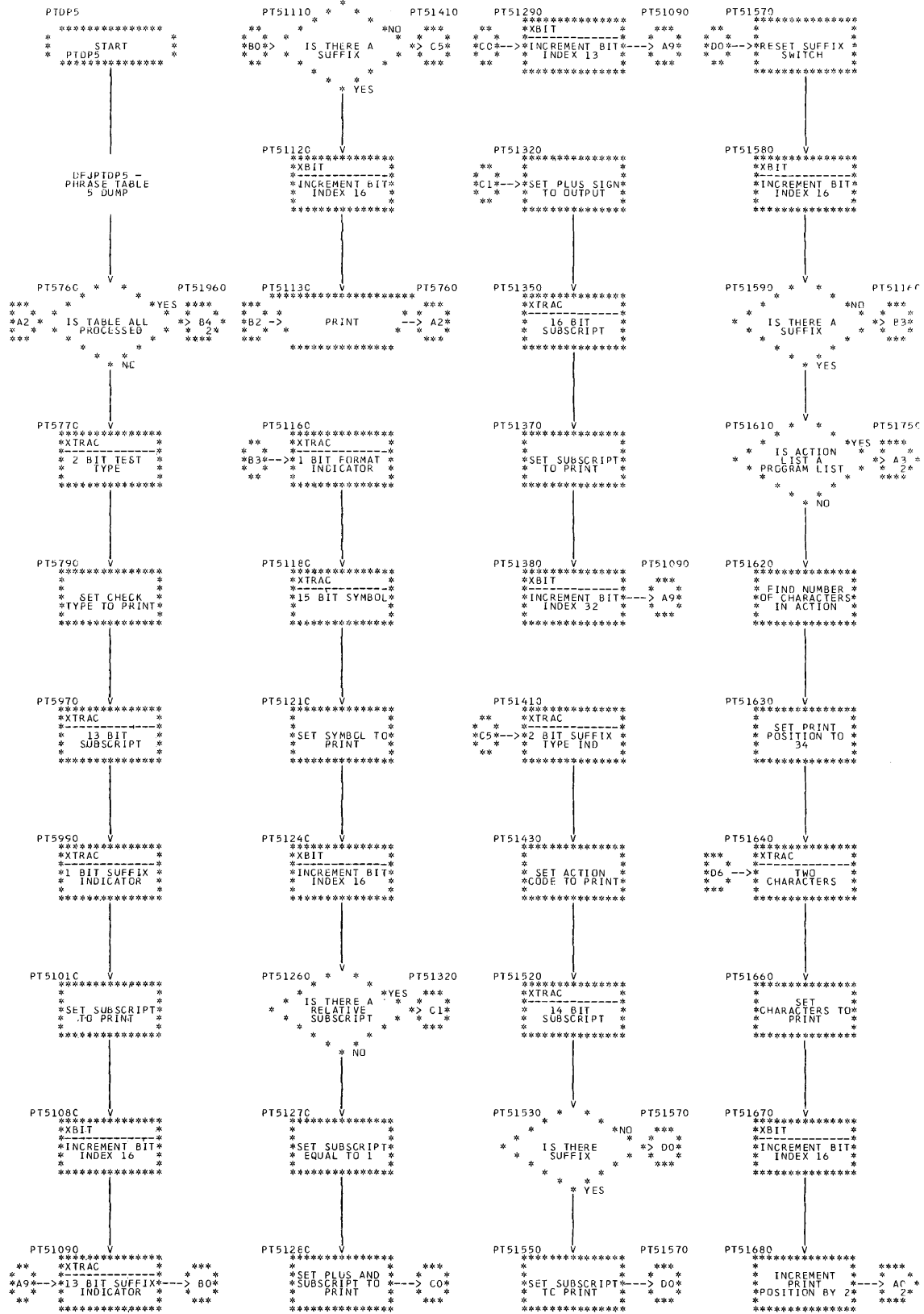
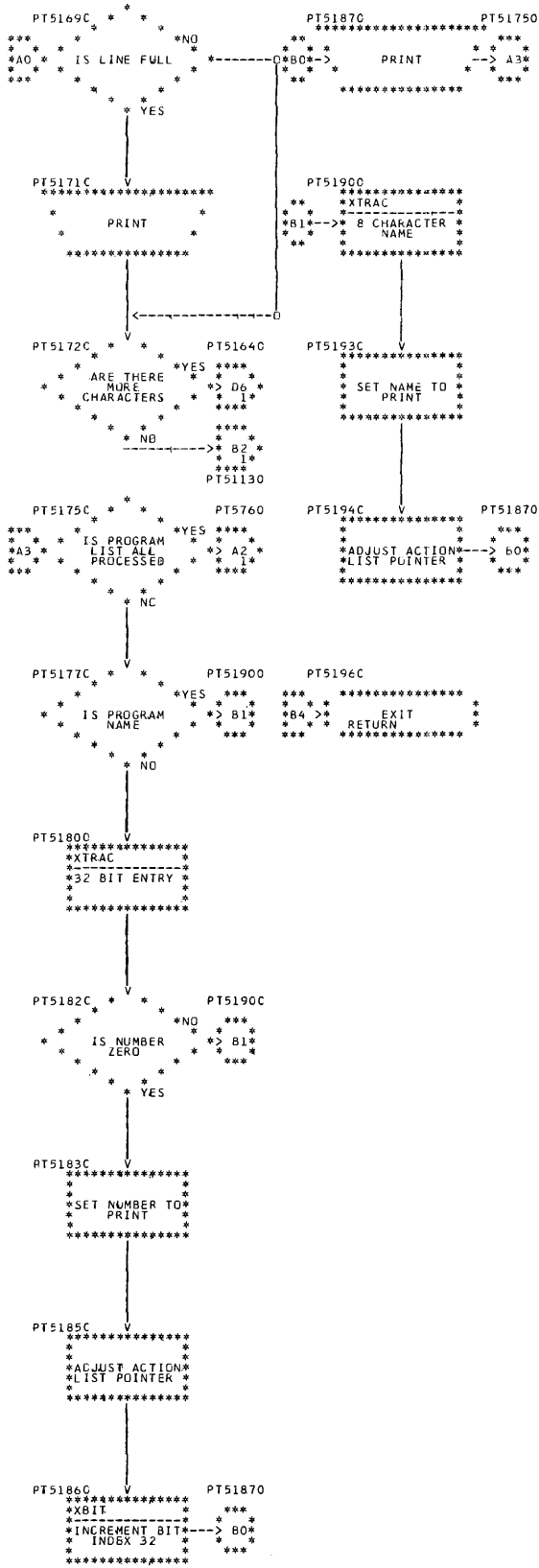


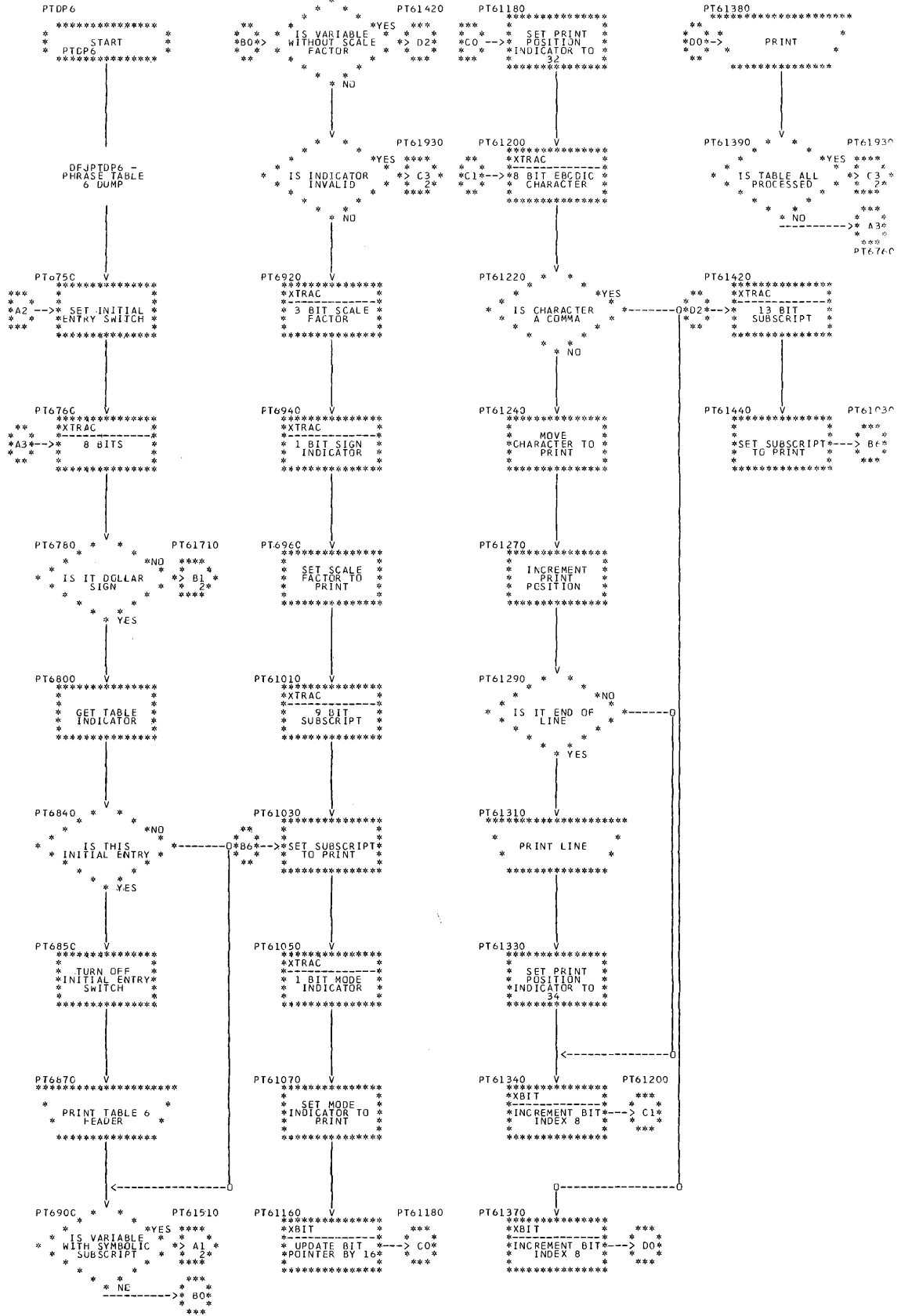
CHART ABY: DFJPTDP2
 DGS/GS DFJPTDMP LOCAL ROUTINE











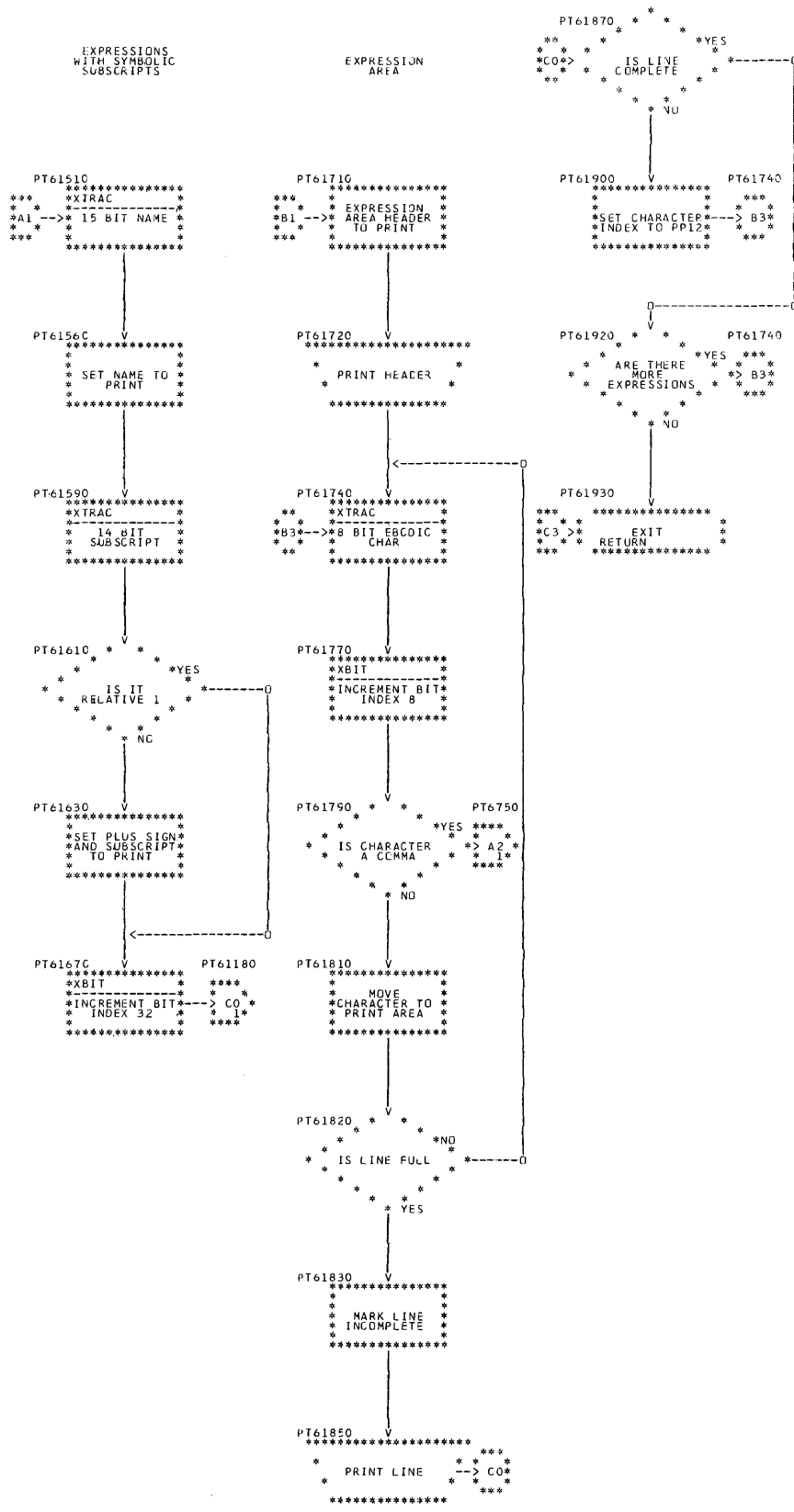
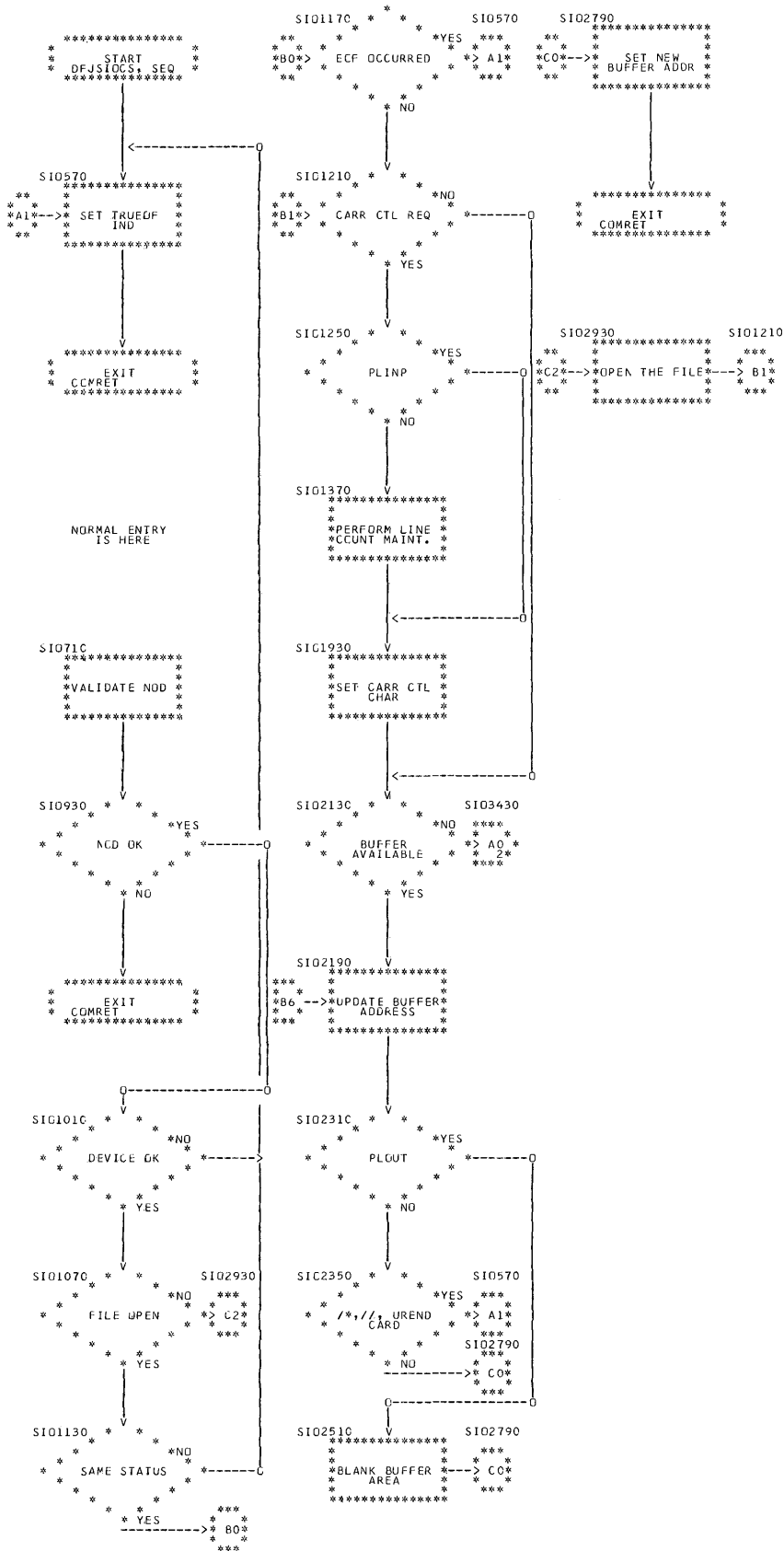
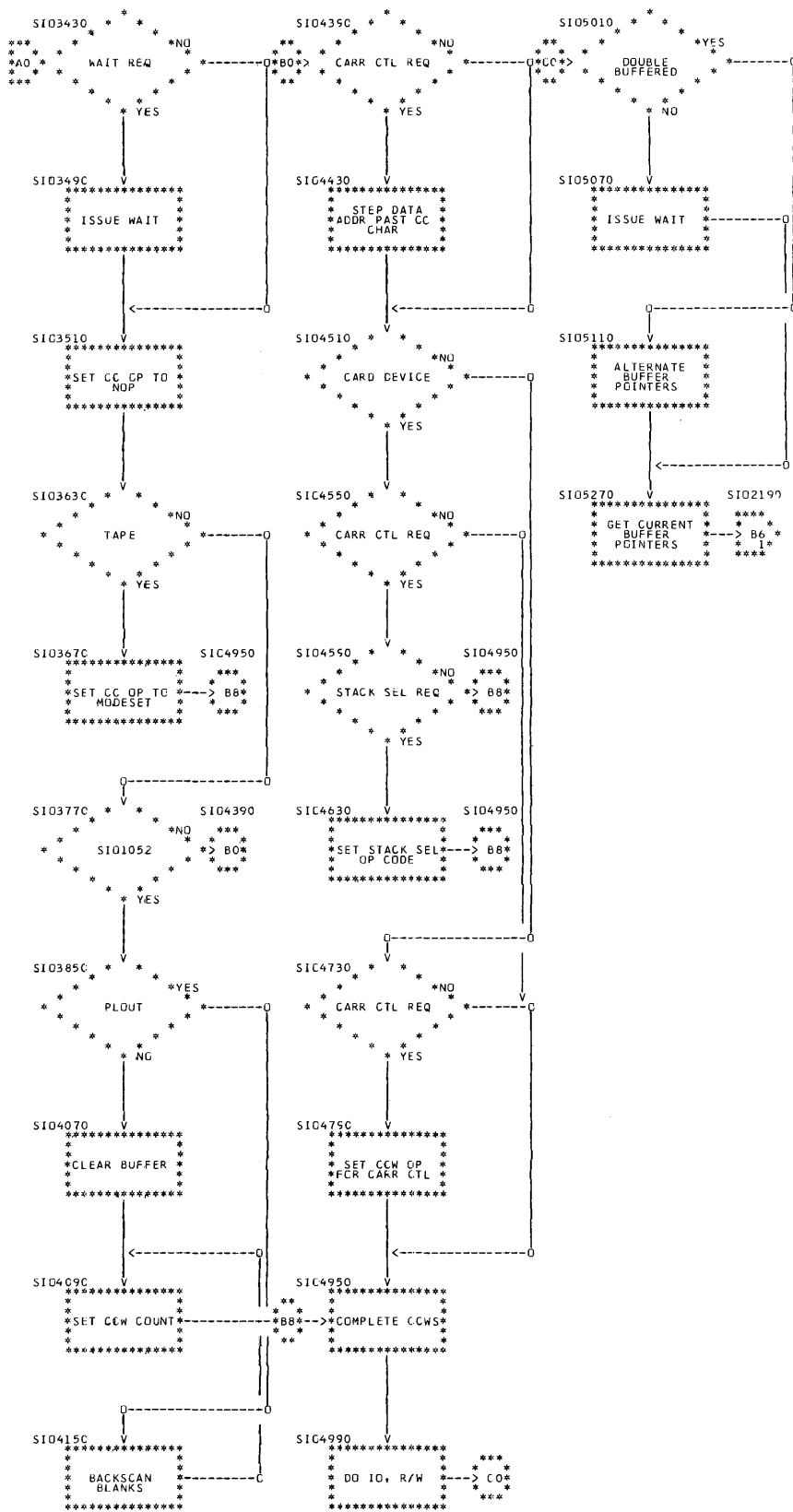


CHART ACG: DFJSIOCS
 DUS SEQUENTIAL FILE ICCS ROUTINE





DFJTRACE

```
*****  
*          START          *  
*        DFJTRACE        *  
*****
```

V

DTR210

```
*****  
*          LOCATE          *  
*        CURRENT          *  
*      OUTPUT BUFFER      *  
*****
```

V

DTR27C

```
*****  
*        BUILD TRACE      *  
*       LINE IMAGE       *  
*****
```

V

DTR610

```
*****  
*          MOVE CIGEN TC  *  
*        WORK AREA      *  
*****
```

V

DTR65C

```
*****  
*          SET RETURN     *  
*        FROM SICCS      *  
*****
```

V

DTR770

```
*****  
*          EXIT           *  
*        TC SICCS        *  
*****
```

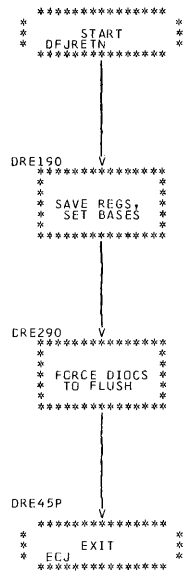
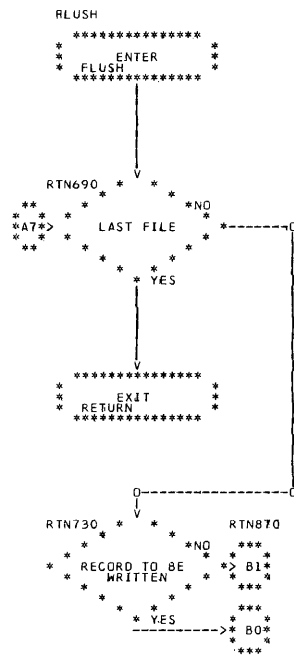
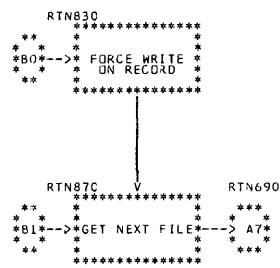
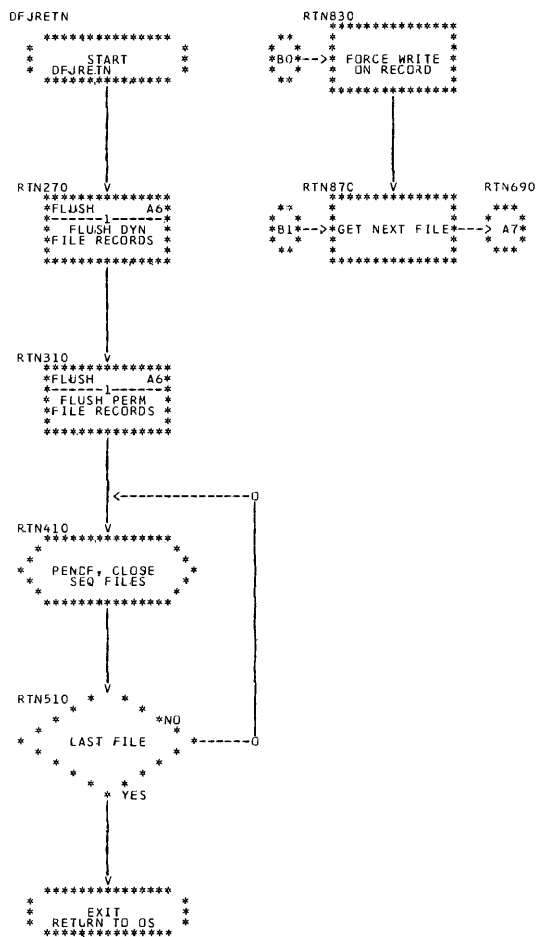
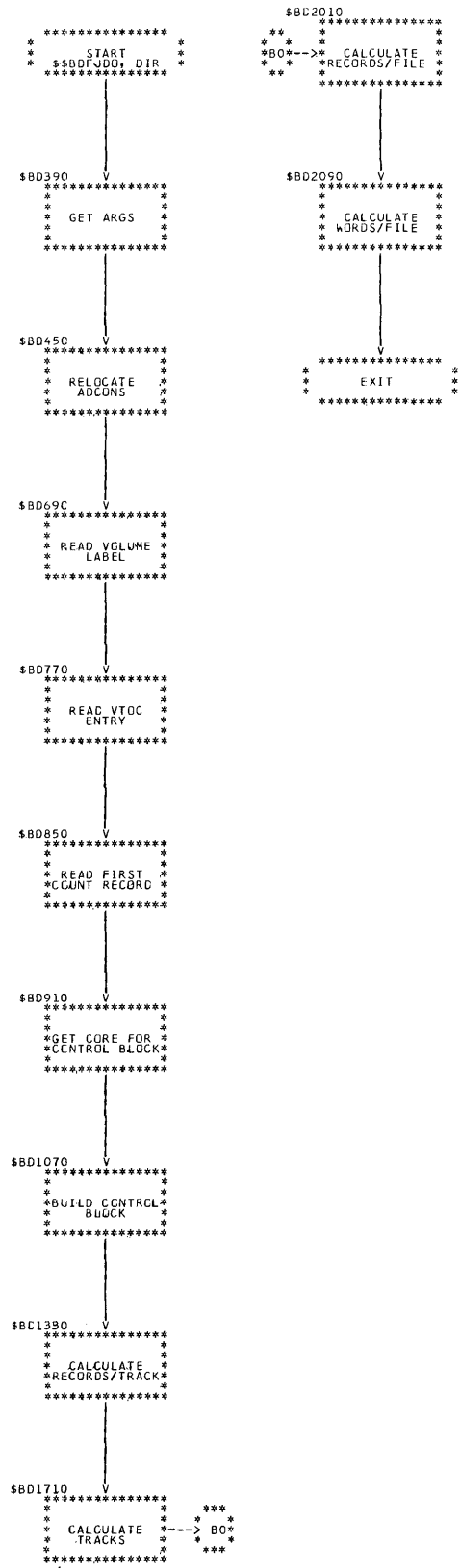
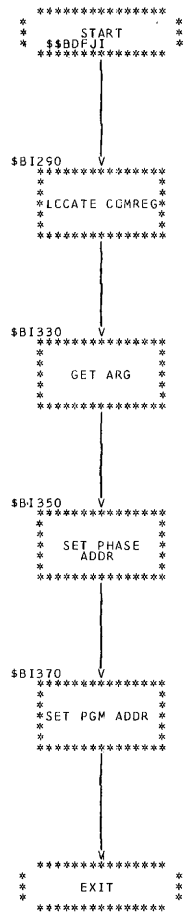
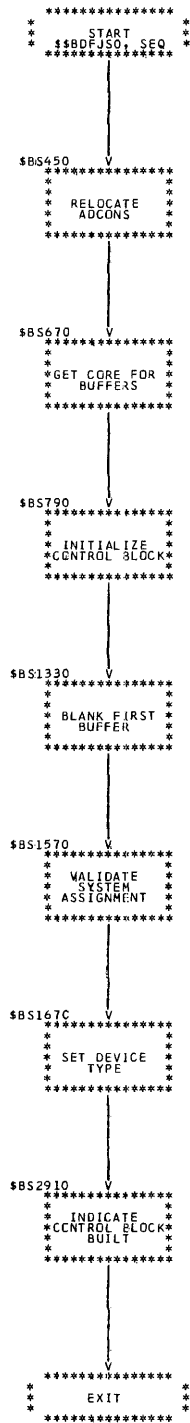


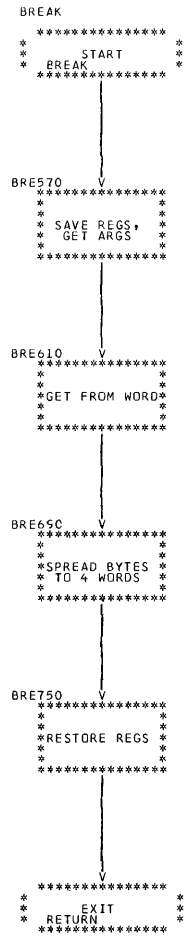
CHART ACO: DFJRETN
 OS FINAL CLEANUP ROUTINE

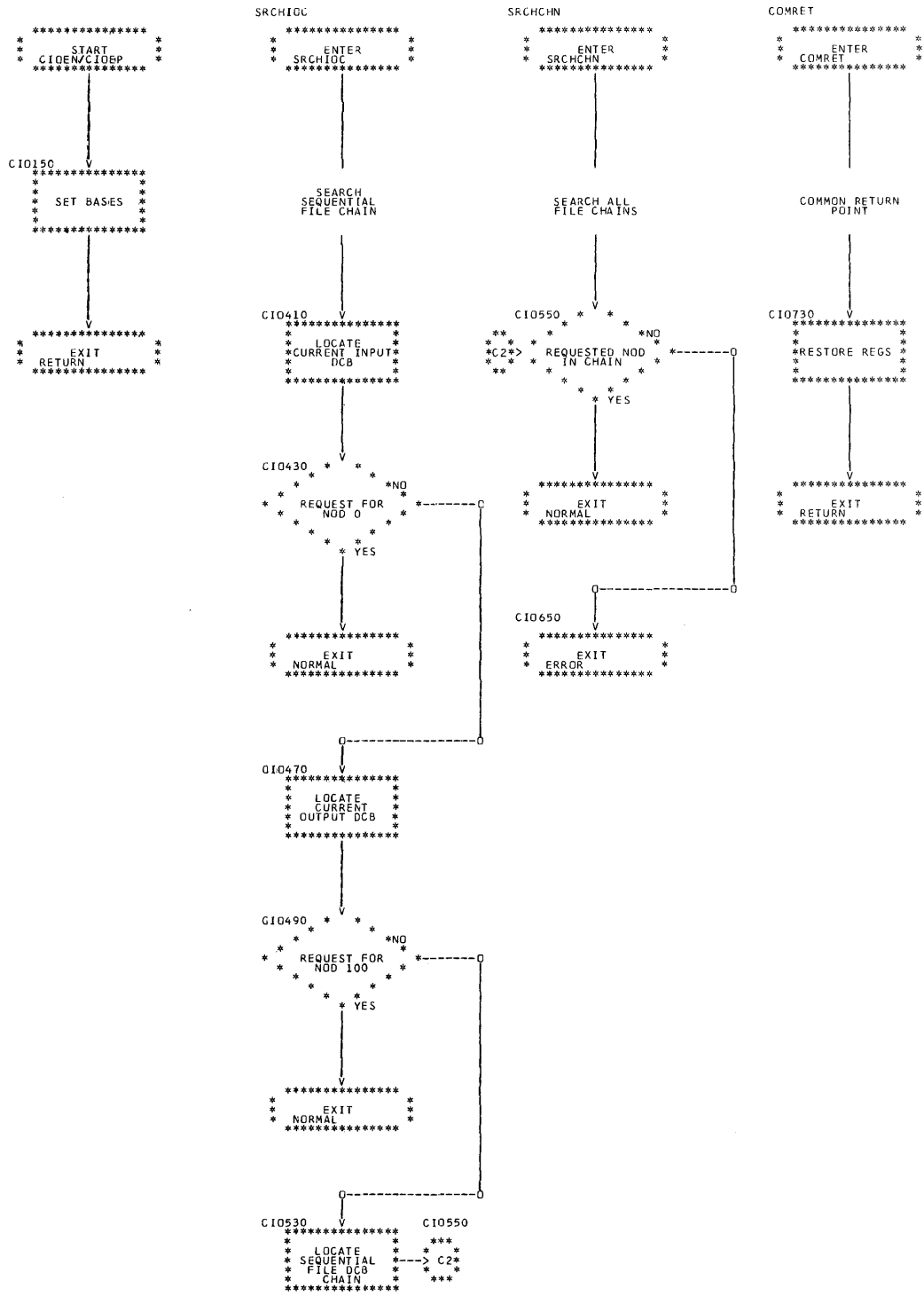


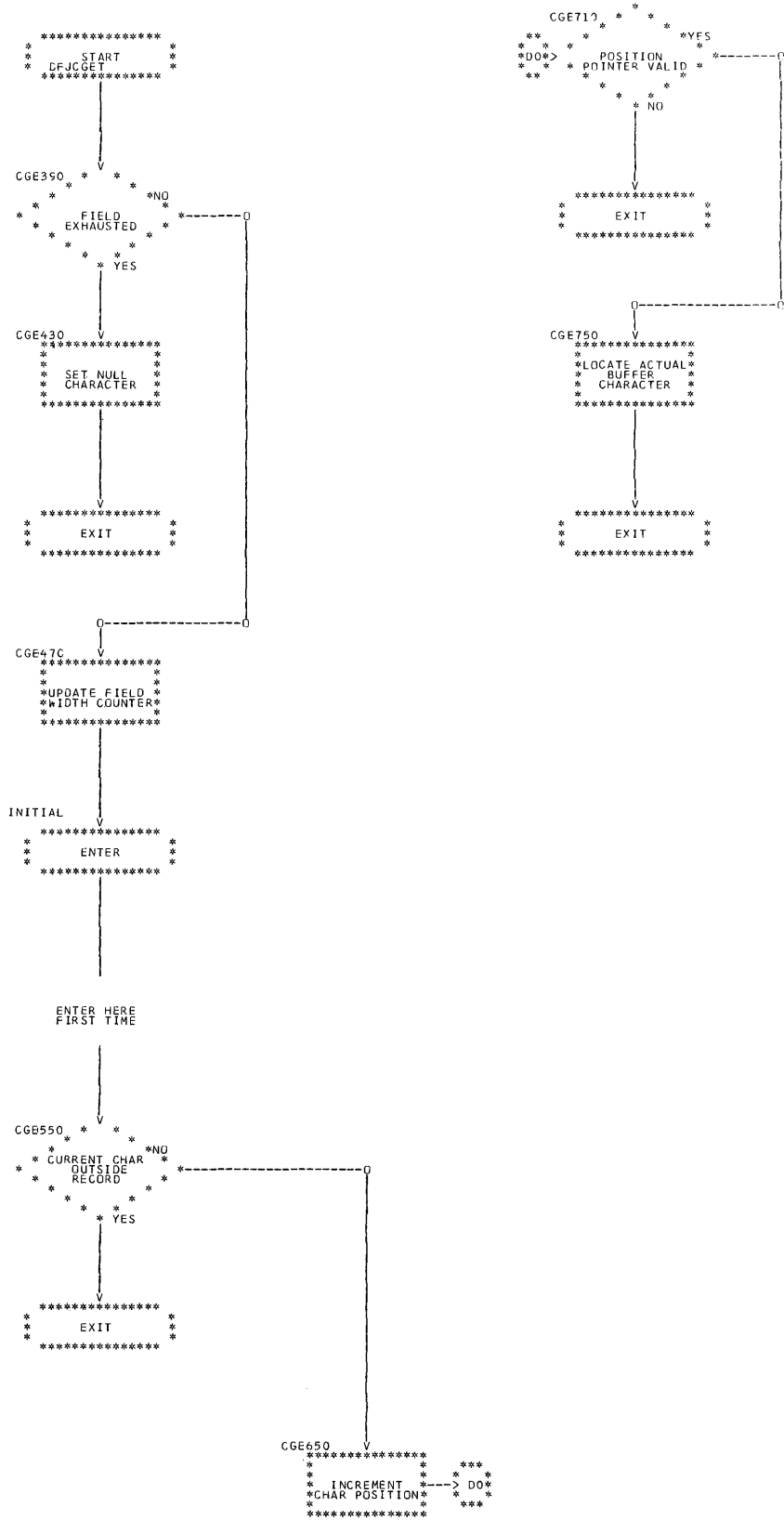


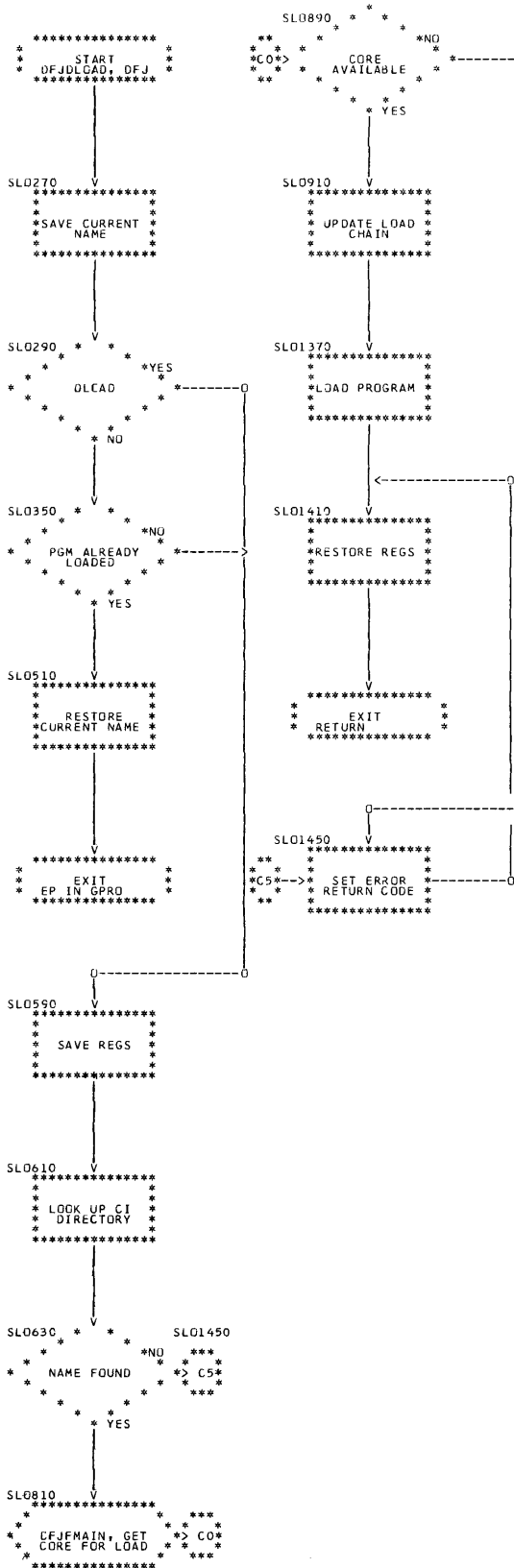


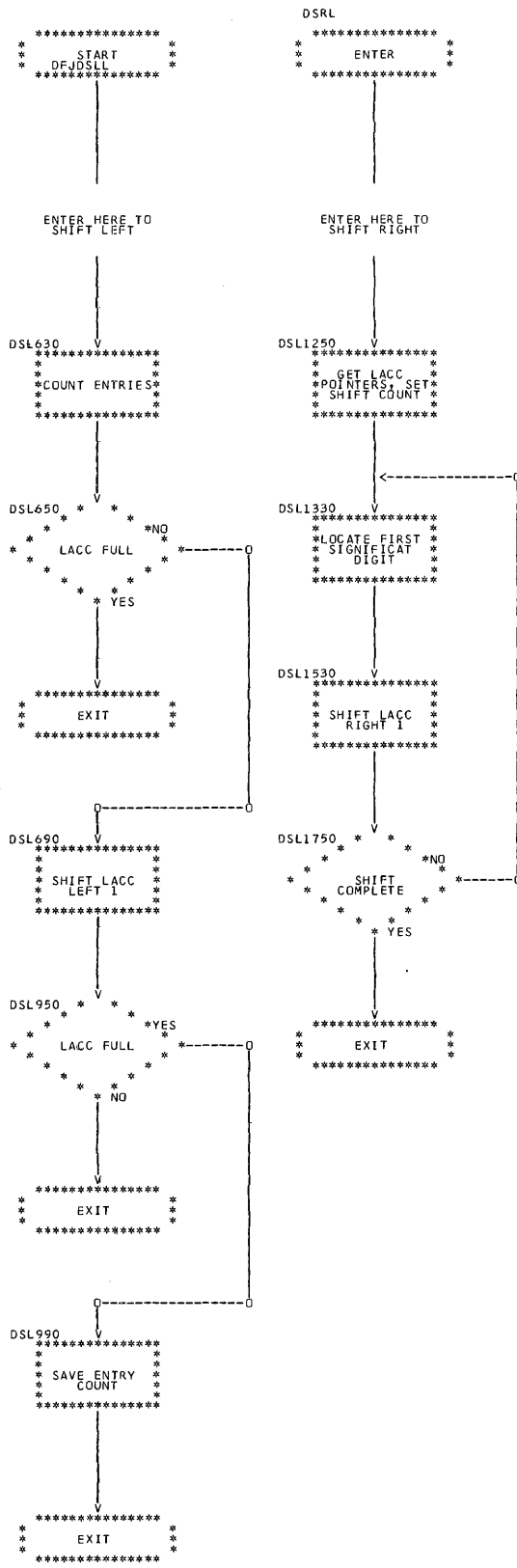












DFJFMAIN

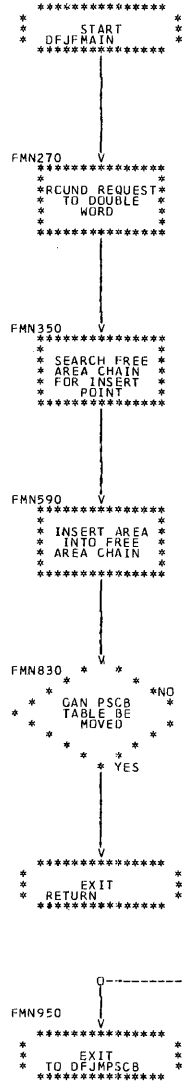
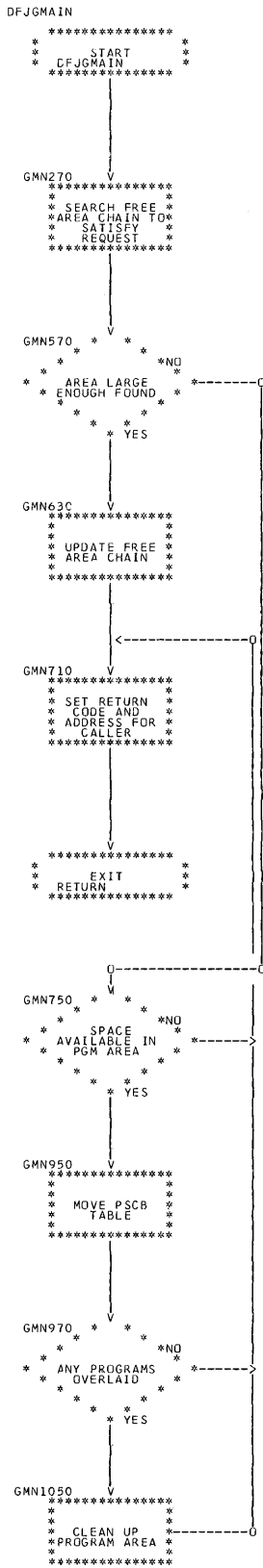
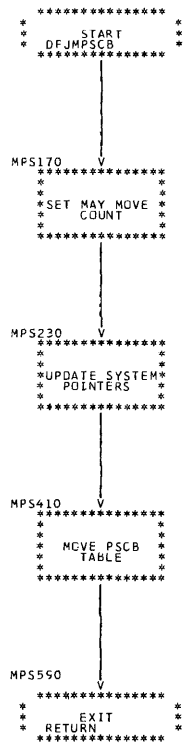
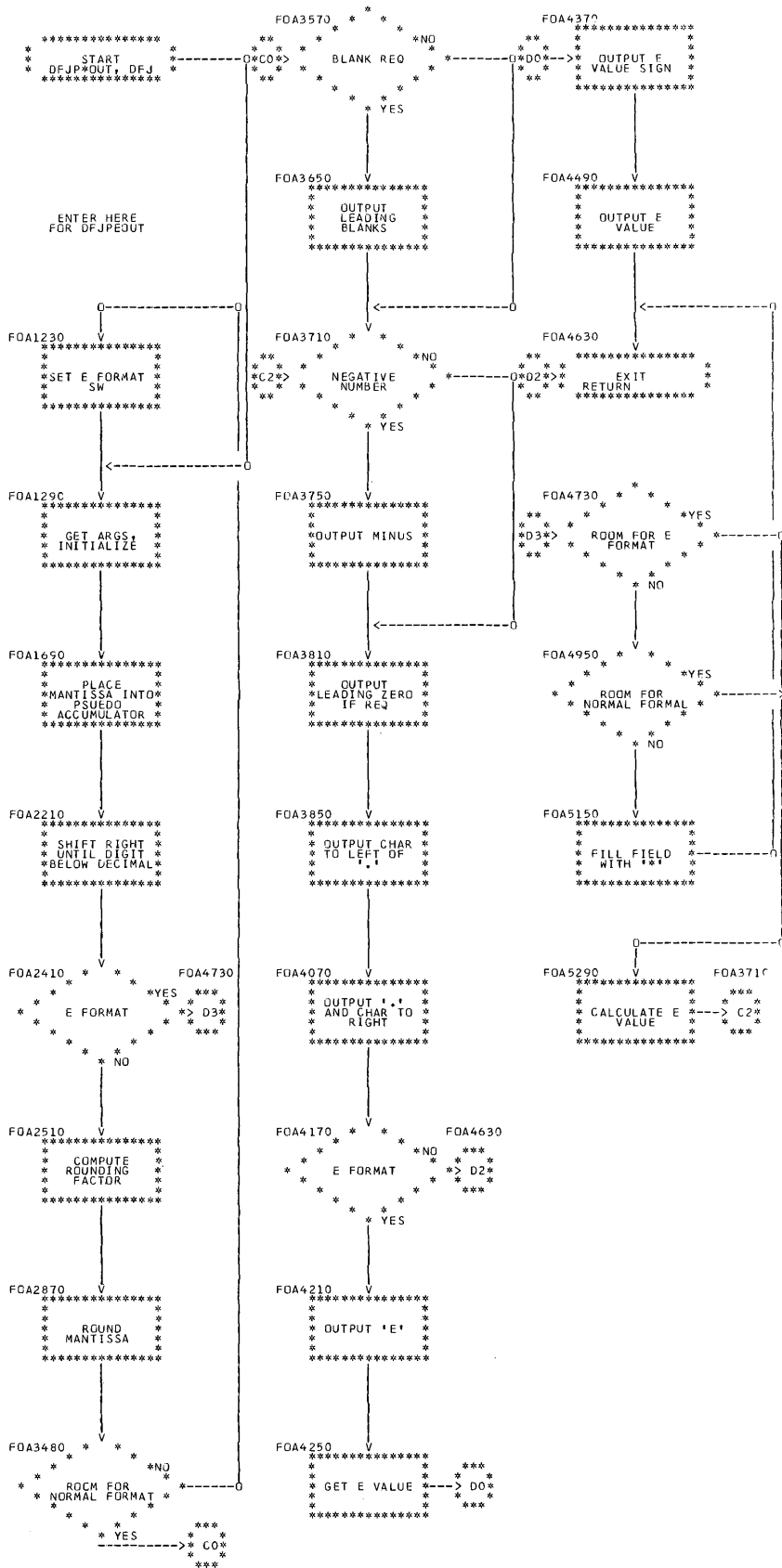


CHART BAO: DFJGMAIN
DCS CORE DEALLOCATION SUBROUTINE







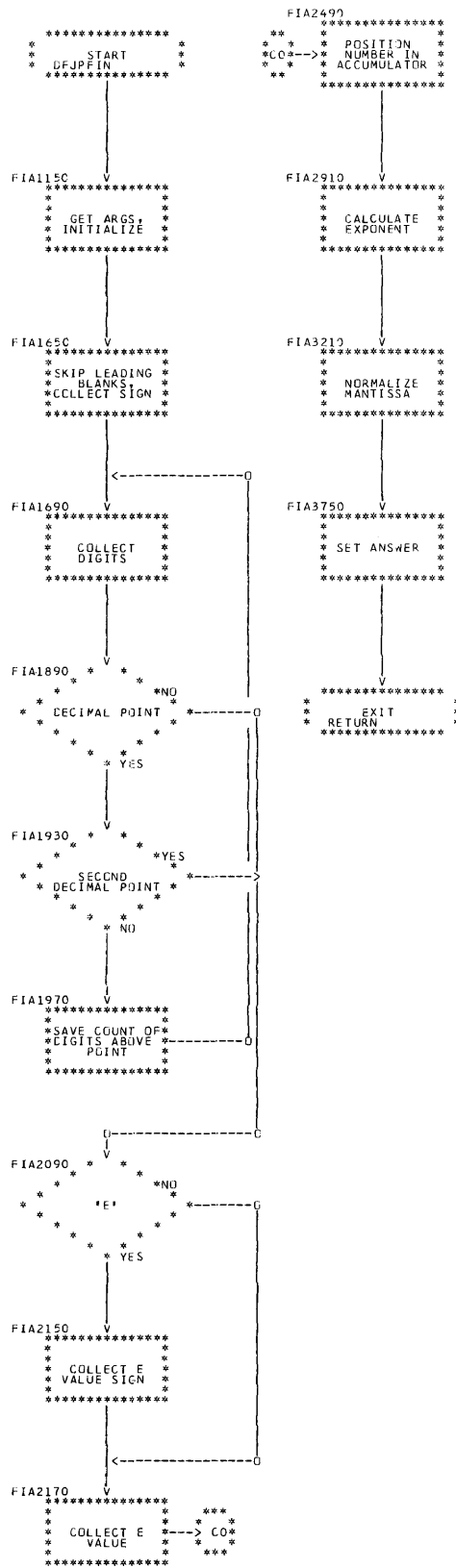
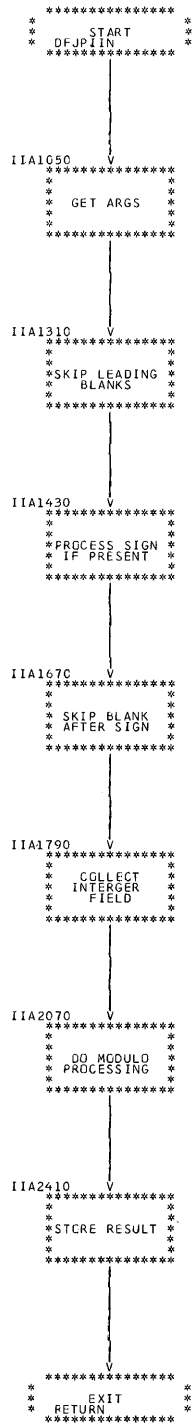


CHART BAW: DFJPIIN
DOS/CS CONVERSION ROUTINE



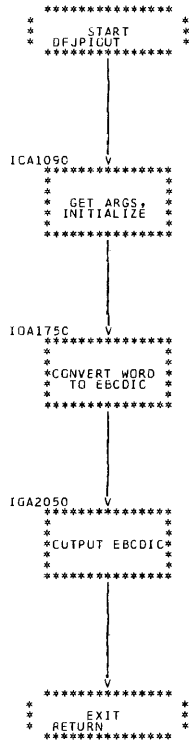


CHART BBC: DFJSCHN
DOS TABLE SEARCH SUBROUTINE

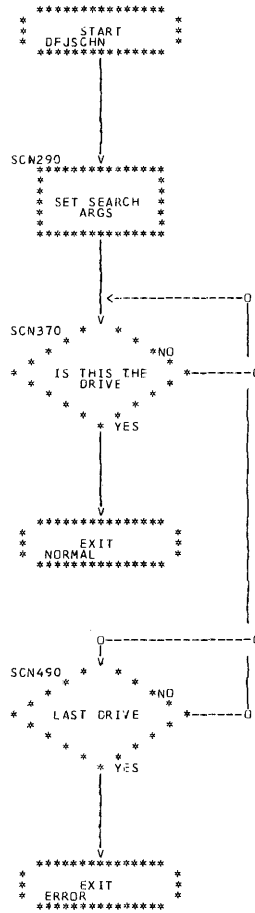
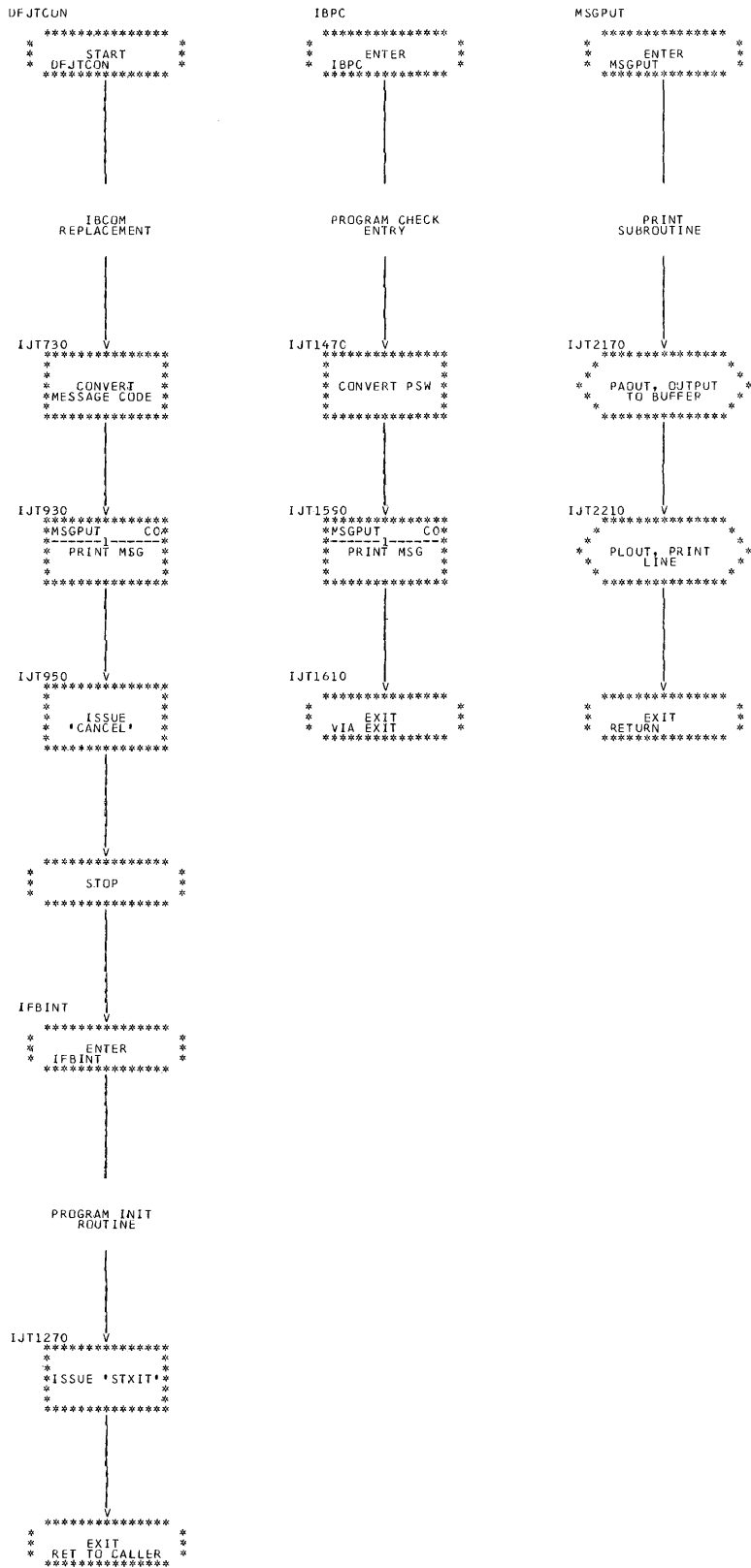
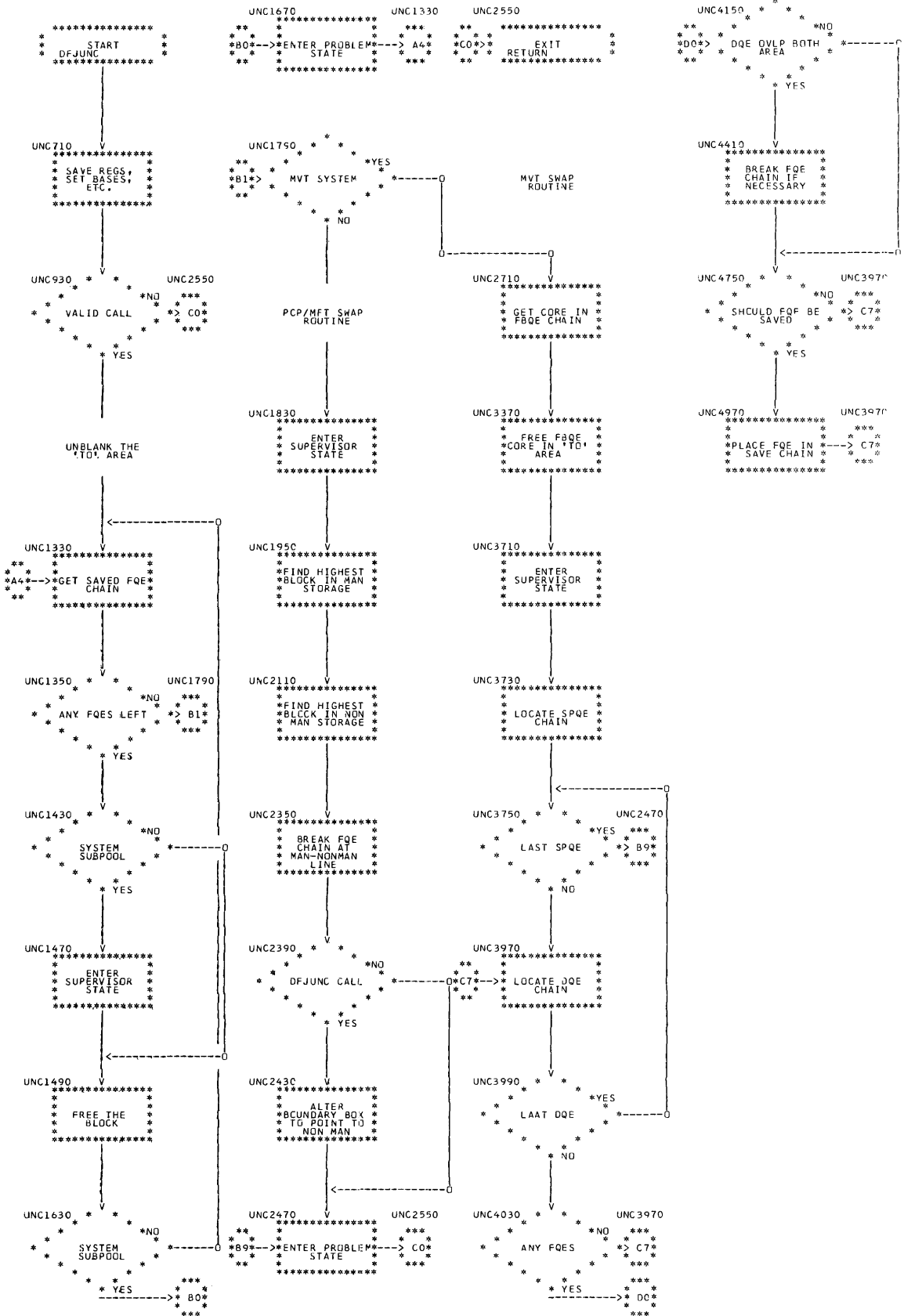


CHART BBE: DFJTCON
 DOS IBCOM REPLACEMENT SUBROUTINE





ERRET,
 SUBROUTINES
 ERROR, ERREX,
 ERRET, ERRAT

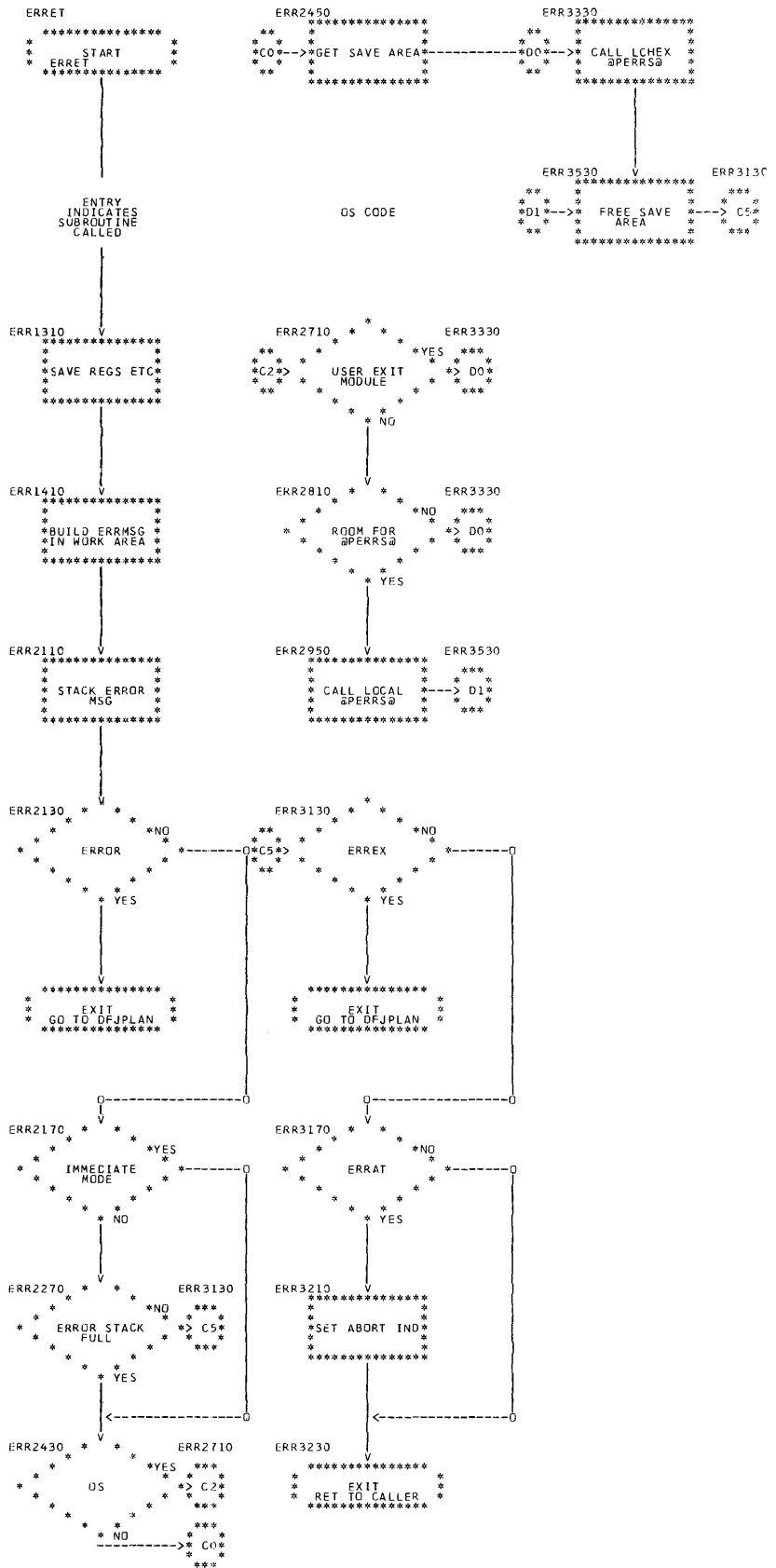
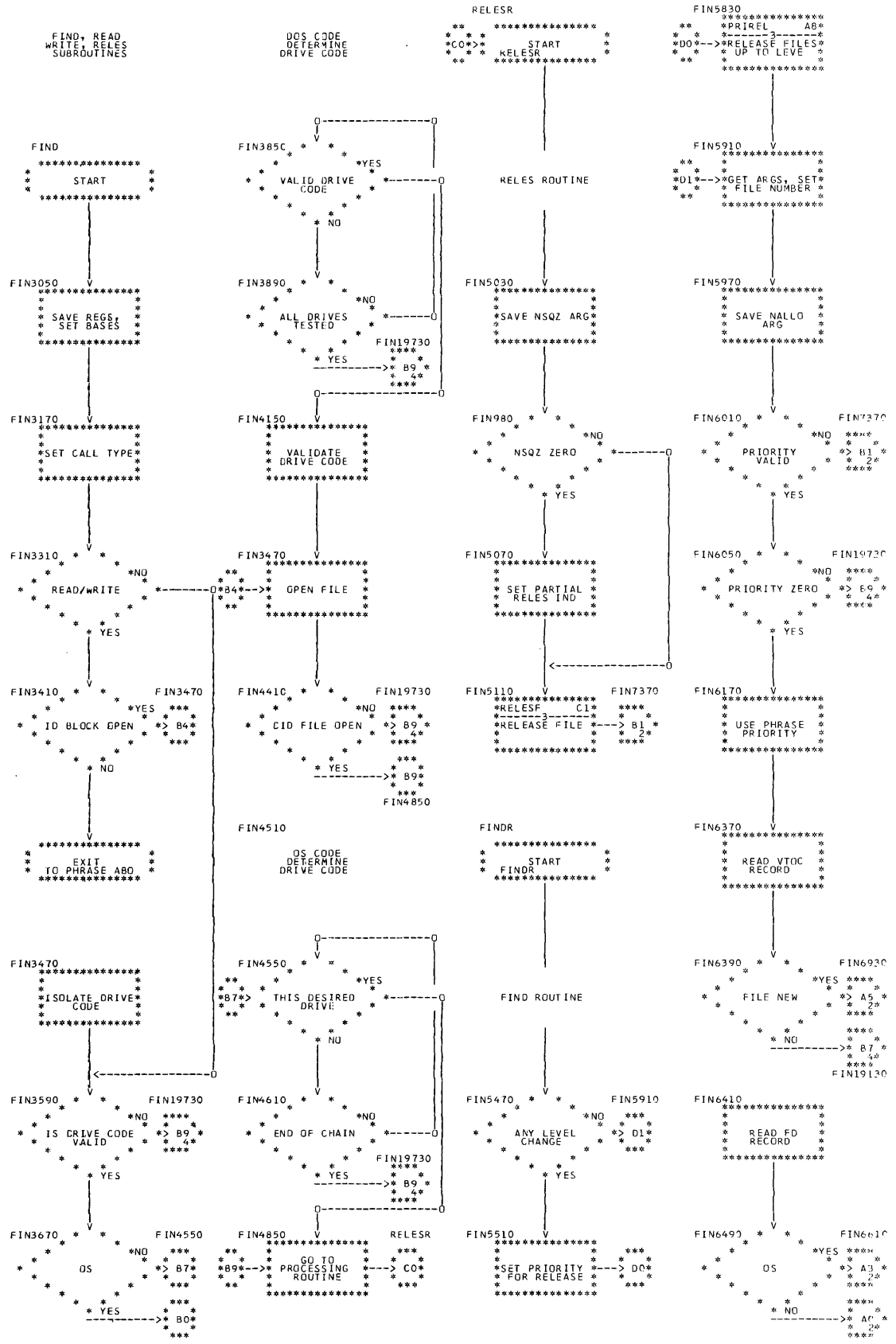


CHART 880: FIND, READ, WRITE, RELES
 DOS/OS DYNAMIC FILE PROCESSING SUBROUTINES



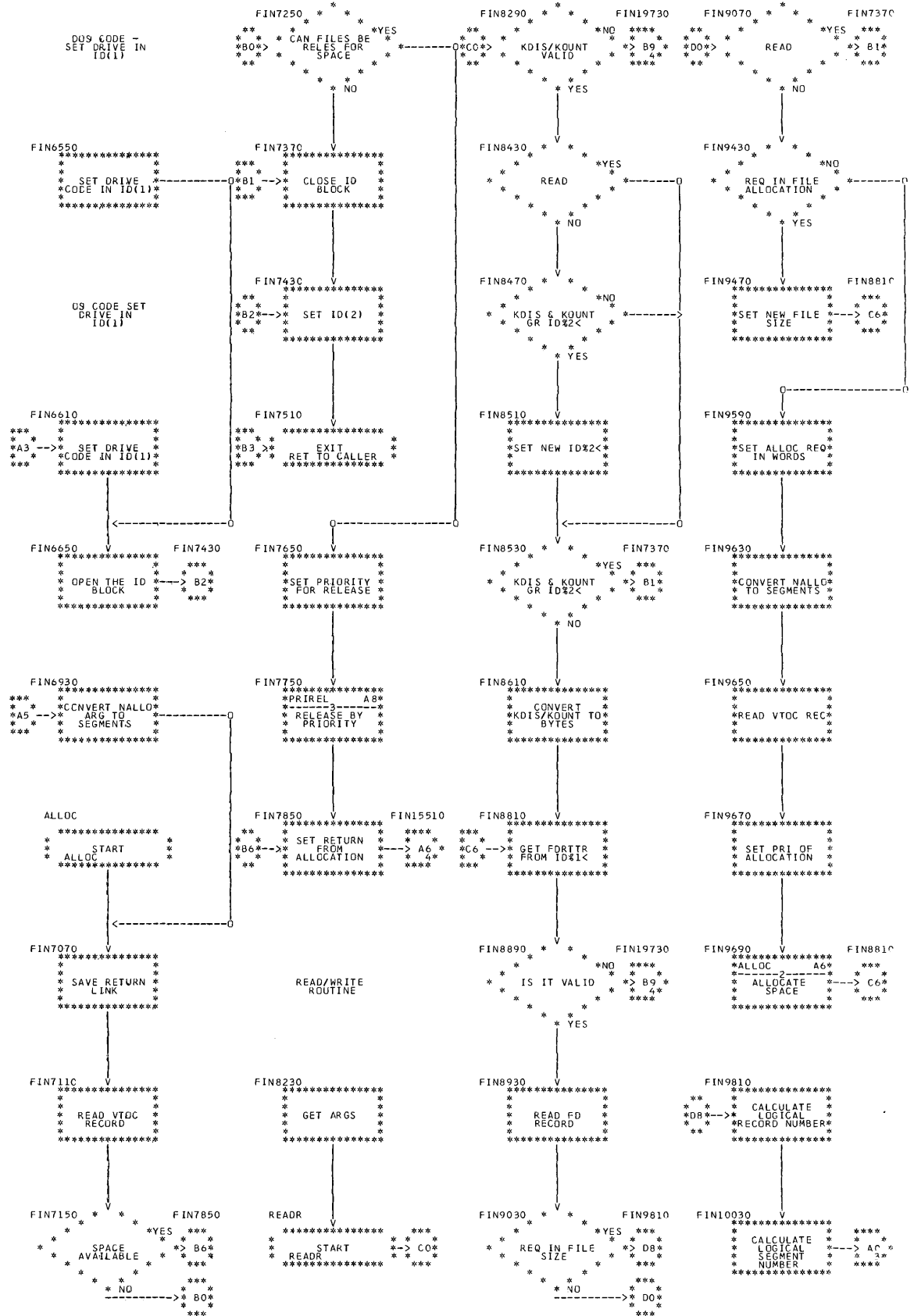
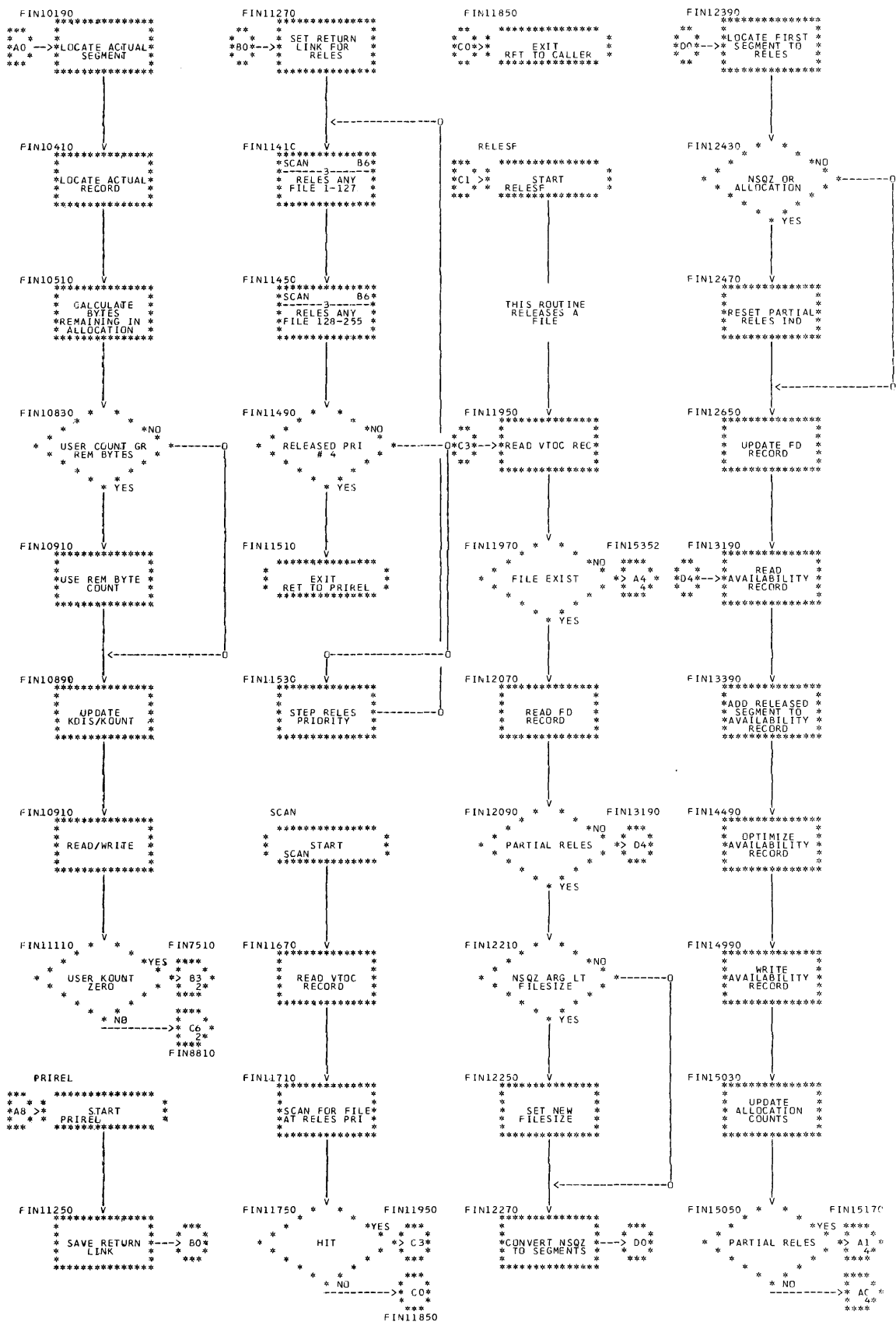
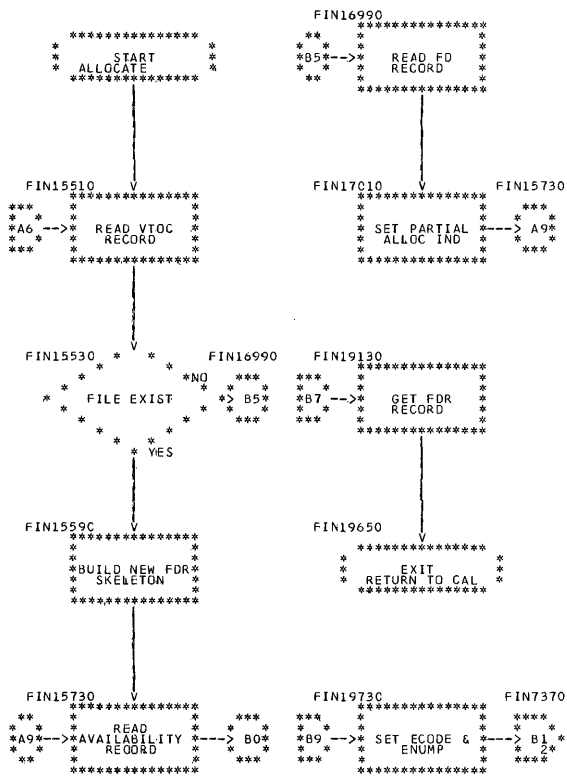
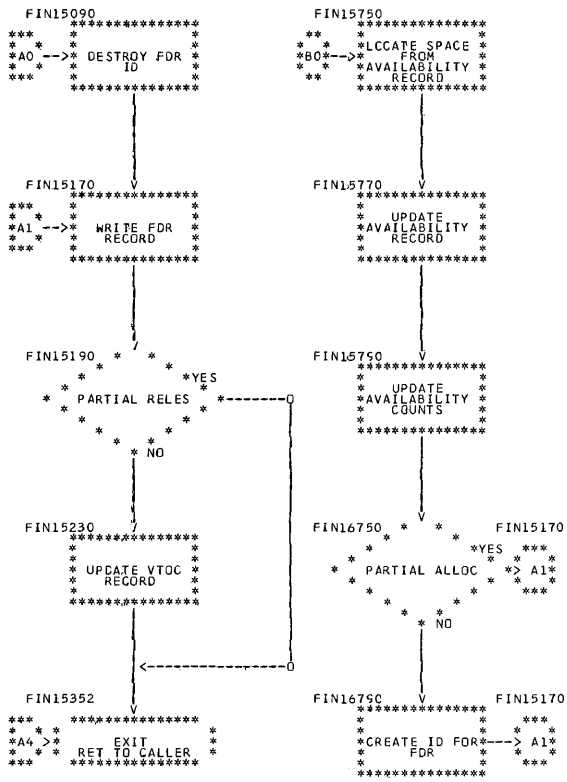


CHART B80: FIND,READ,WRITE,RELES
 DDS/GS DYNAMIC FILE PROCESSING SUBROUTINES





DGS/OS SUBROUTINE GDATA
 DGS/CS PERMENT FILE OPEN SUBROUTINES

GDATA,
 GDATA-GDAT1
 SUBROUTINE

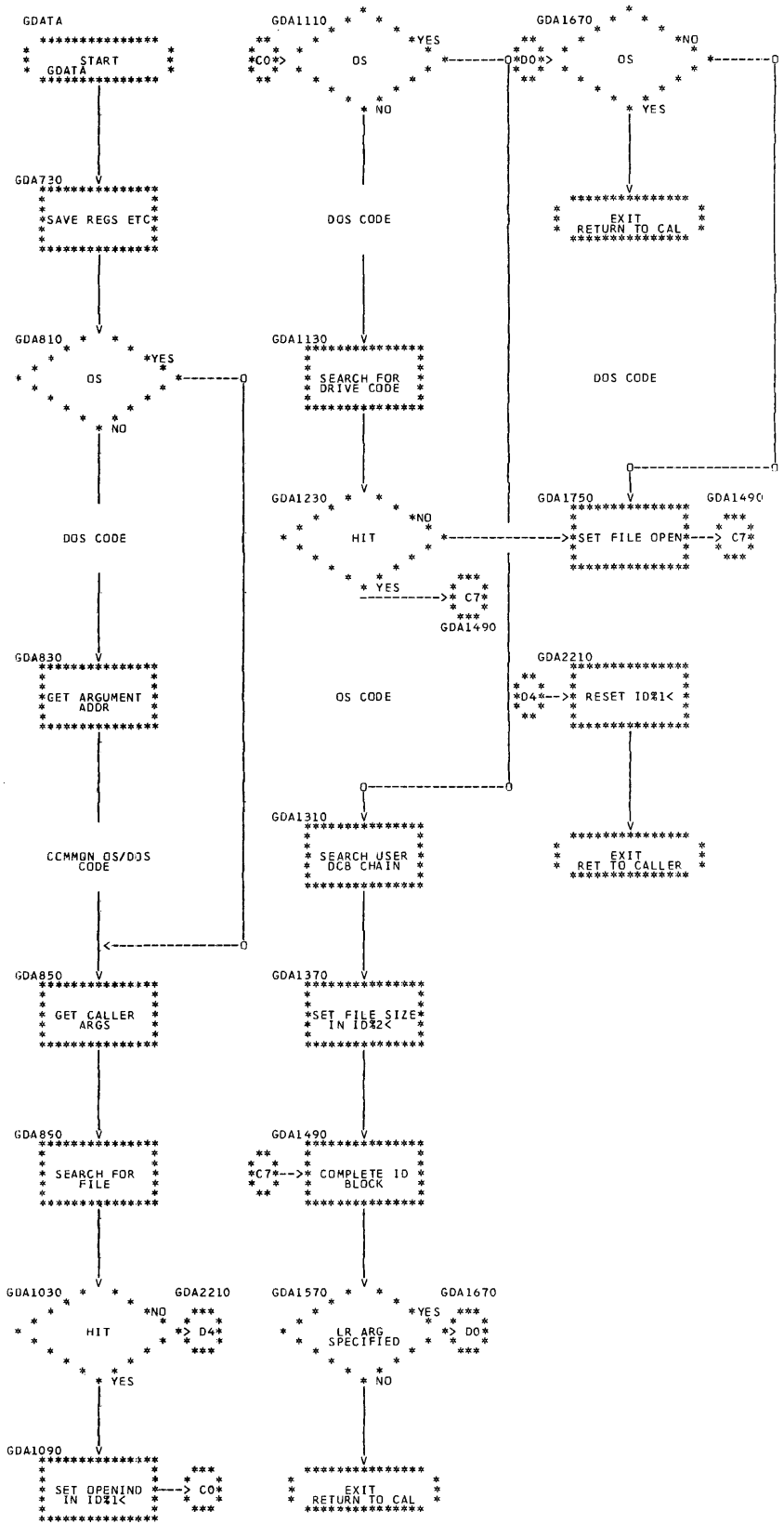
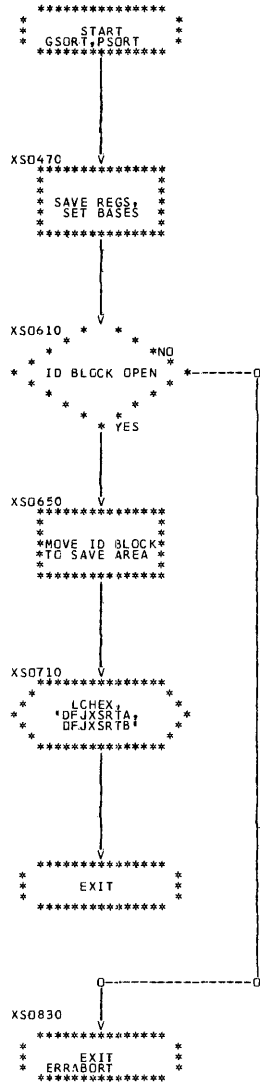
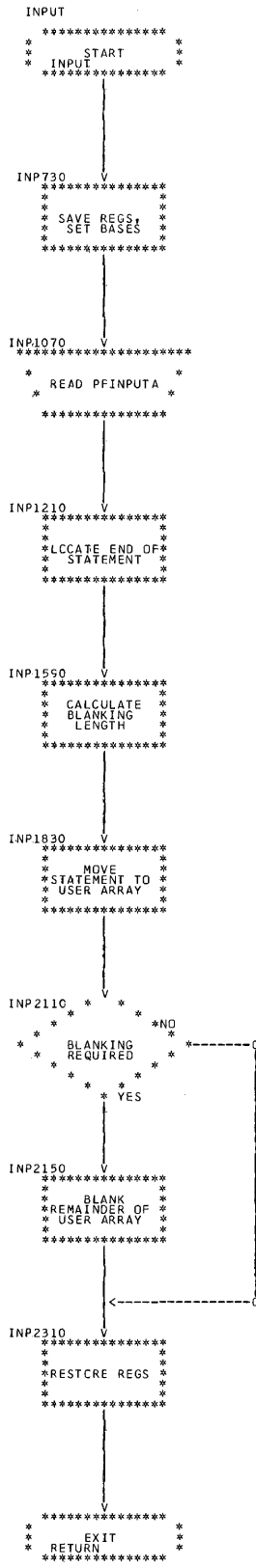


CHART BBU: GSORT,PSORT
DCS/CS SORT INTERFACE SUBROUTINES





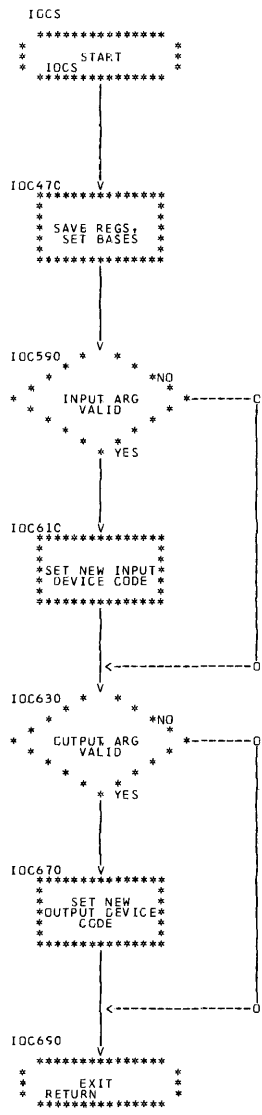
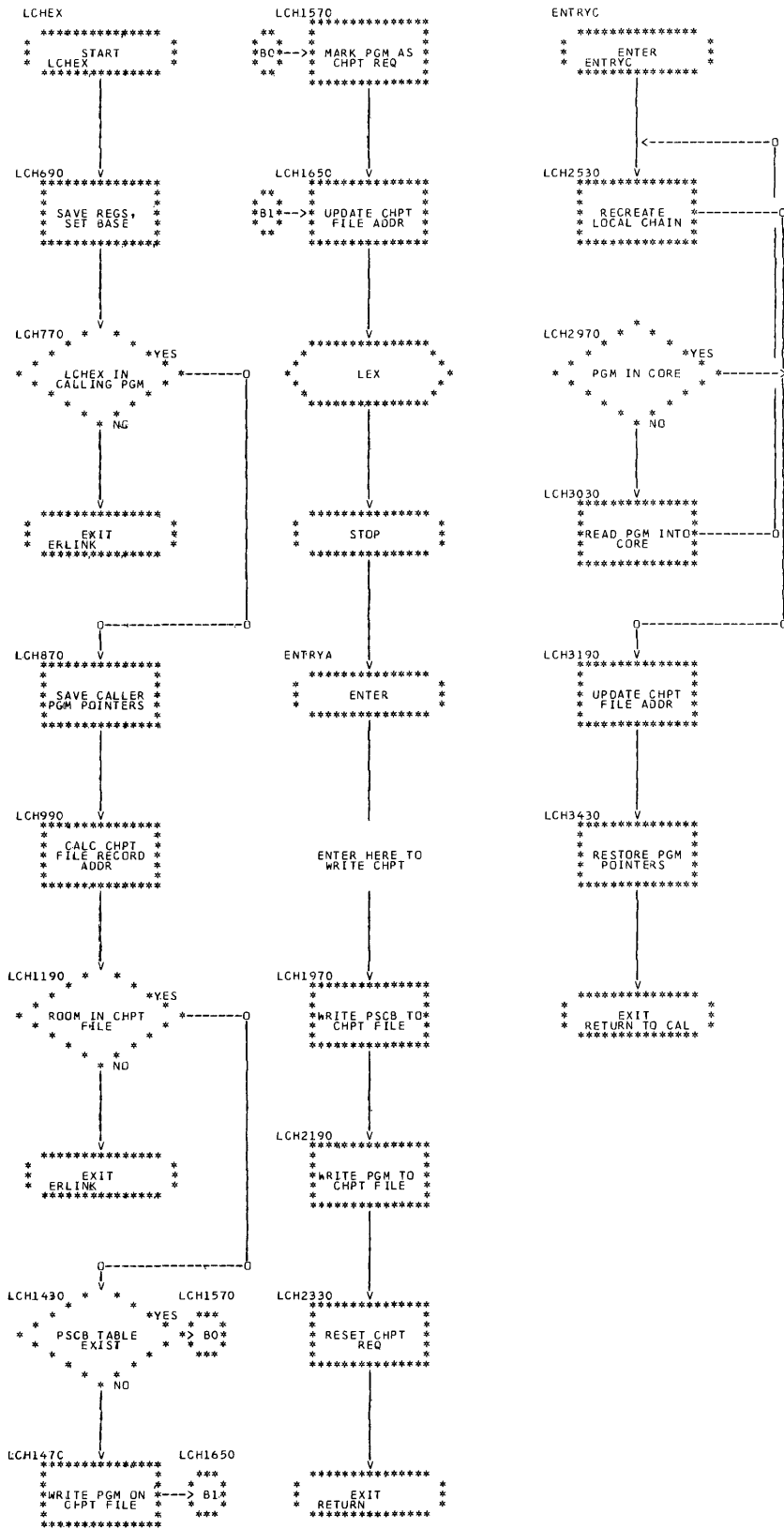
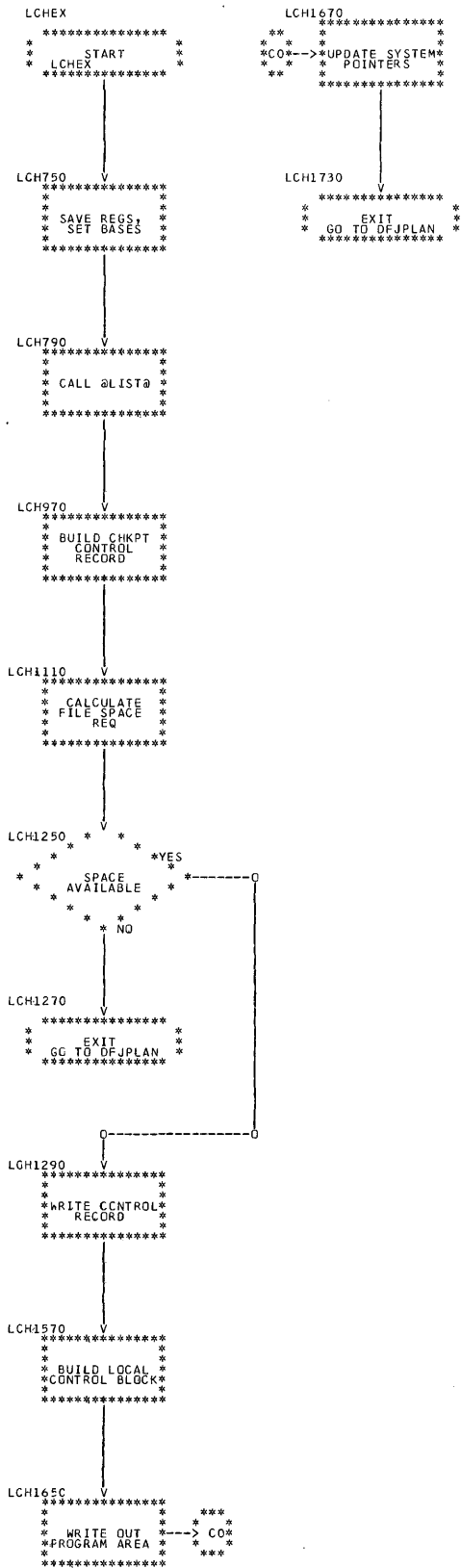


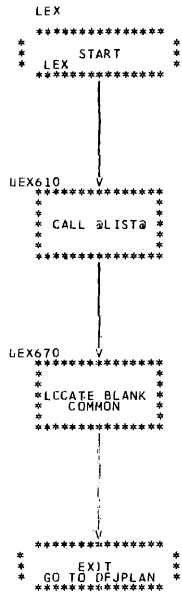
CHART BCC: LCHEX
DCS LGADER INTERFACE SUBROUTINE



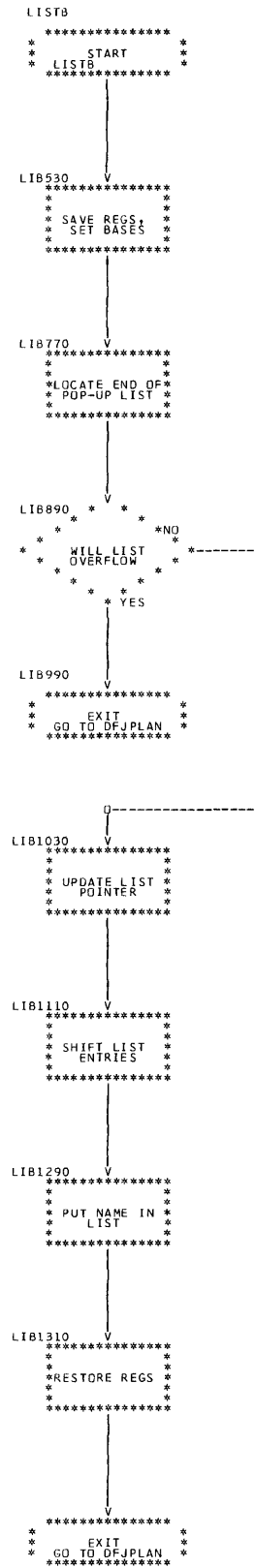
LCHEX
 SUBROUTINE



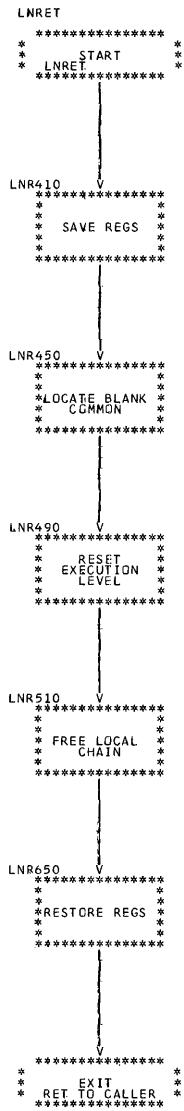
LEX
SUBROUTINE



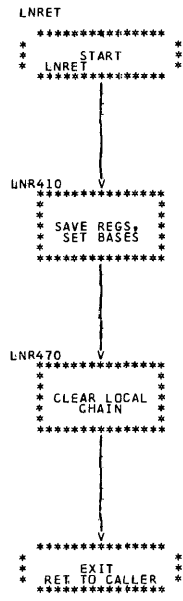
LISTB
SUBROUTINE



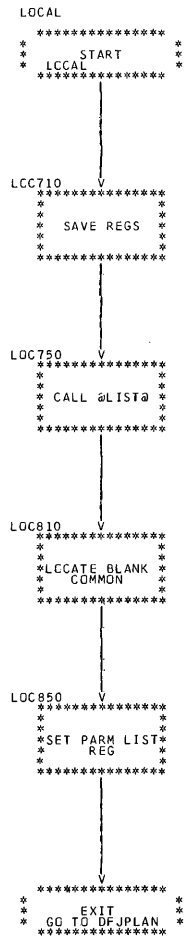
LNRET
SUBROUTINE



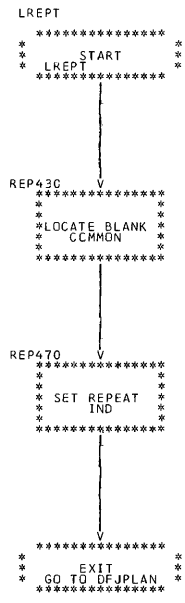
LNRET
SUBROUTINE



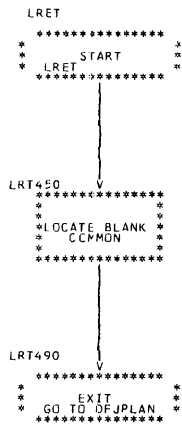
LOCAL
SUBROUTINE

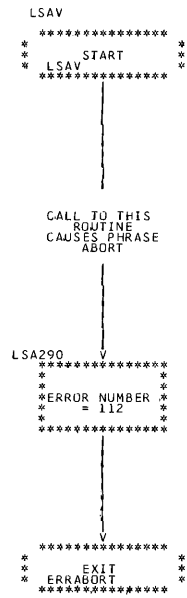


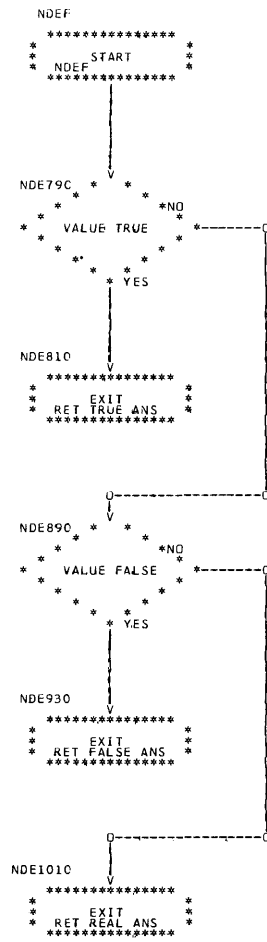
LREPT
SUBROUTINE

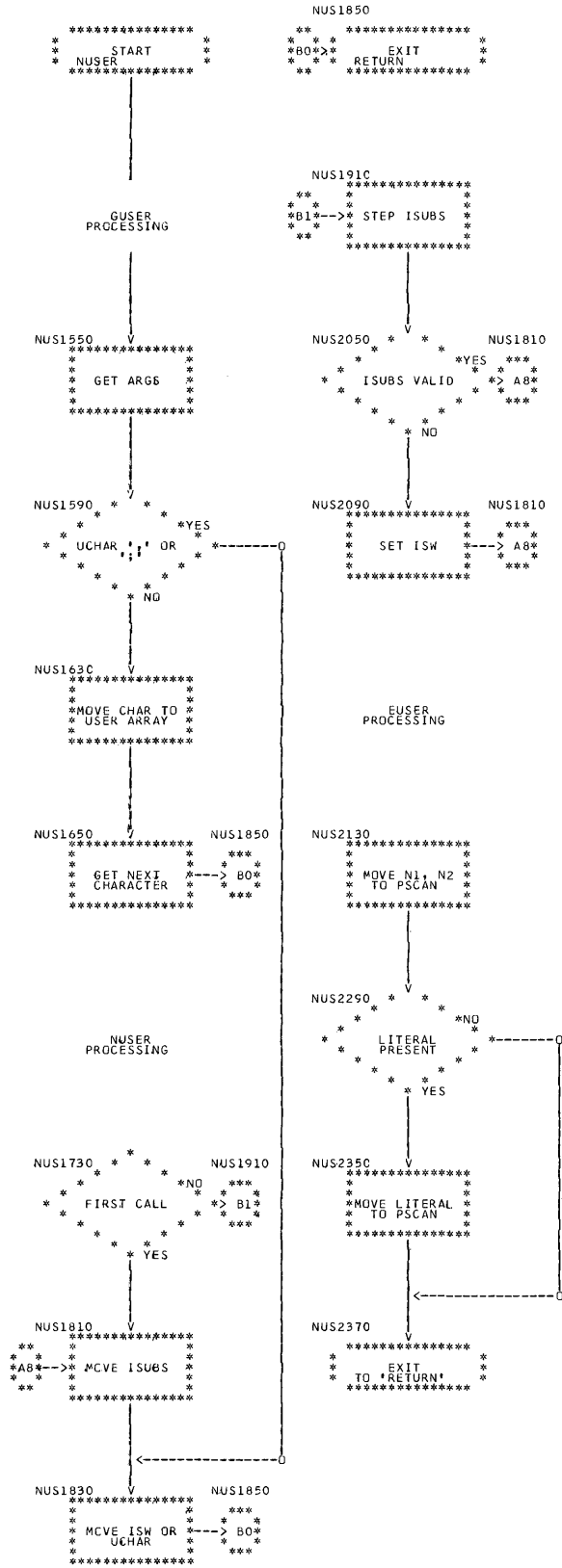


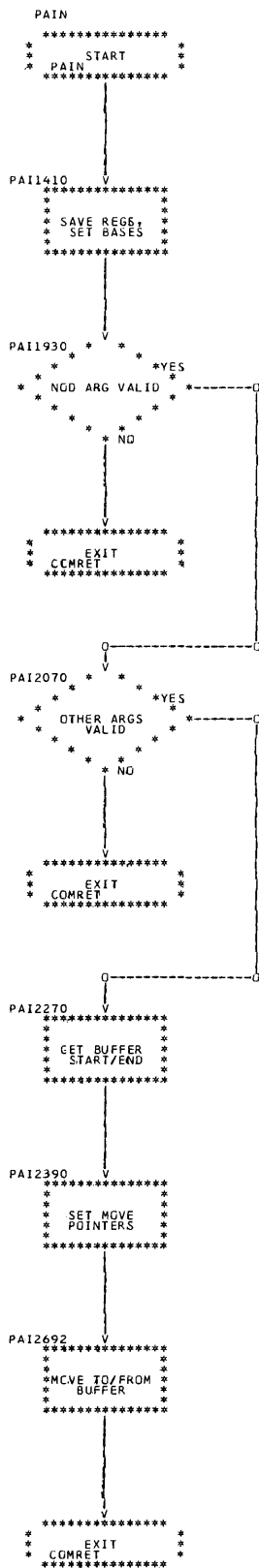
LRET
SUBROUTINE

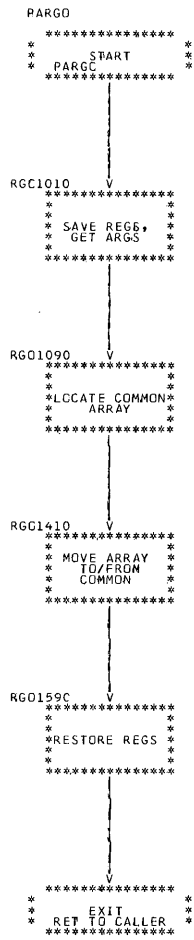












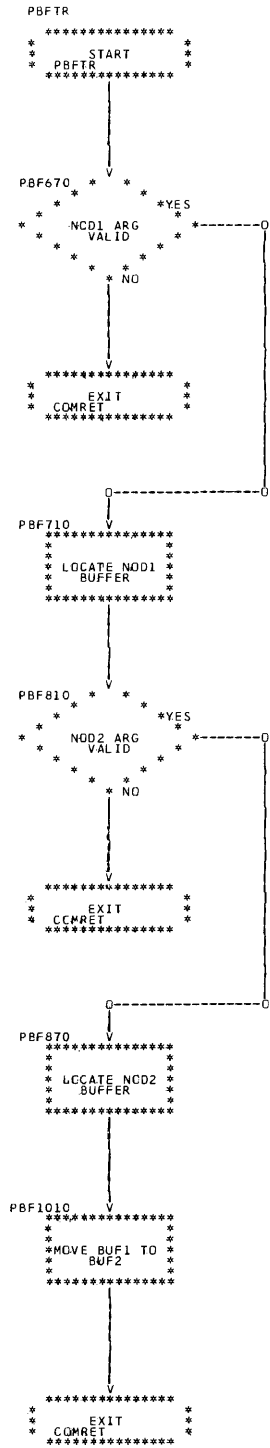
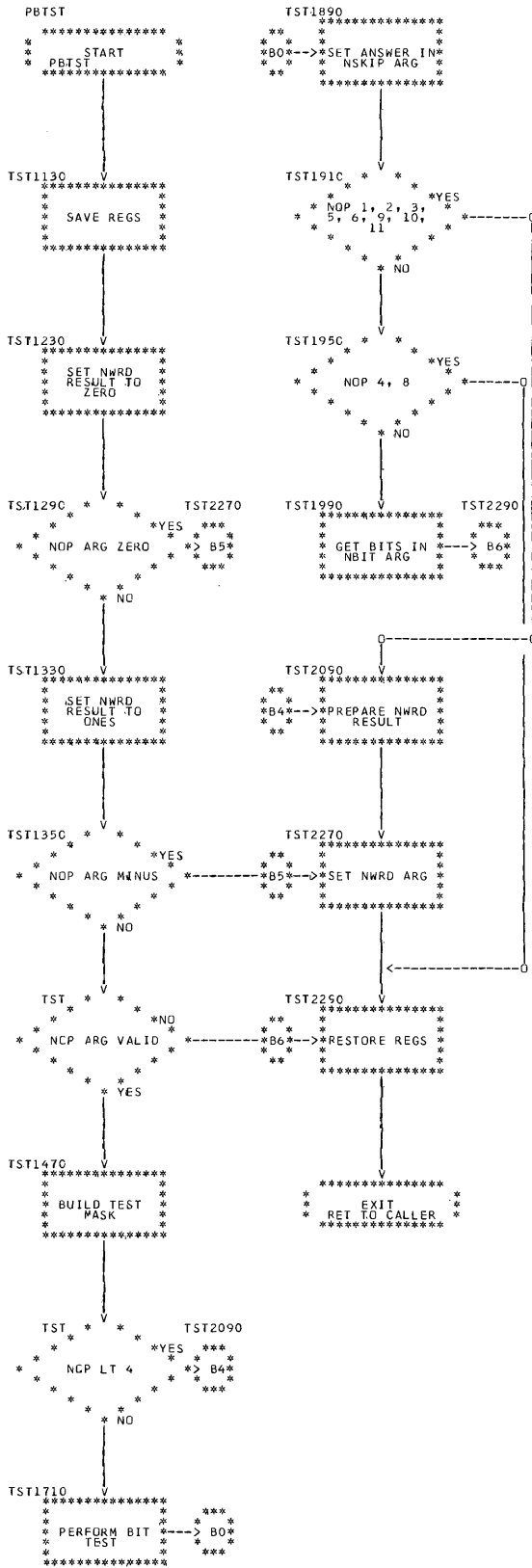
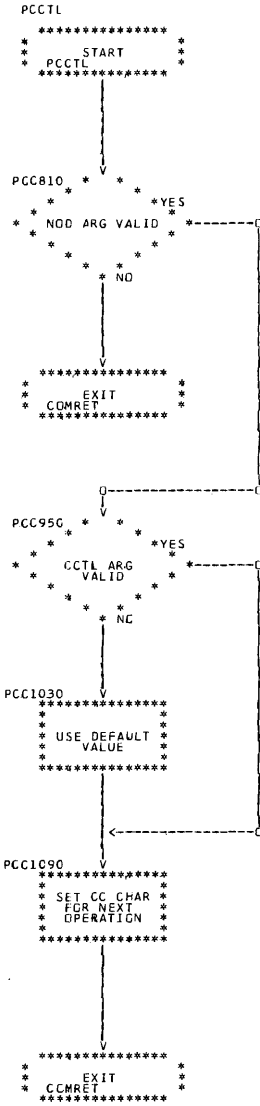
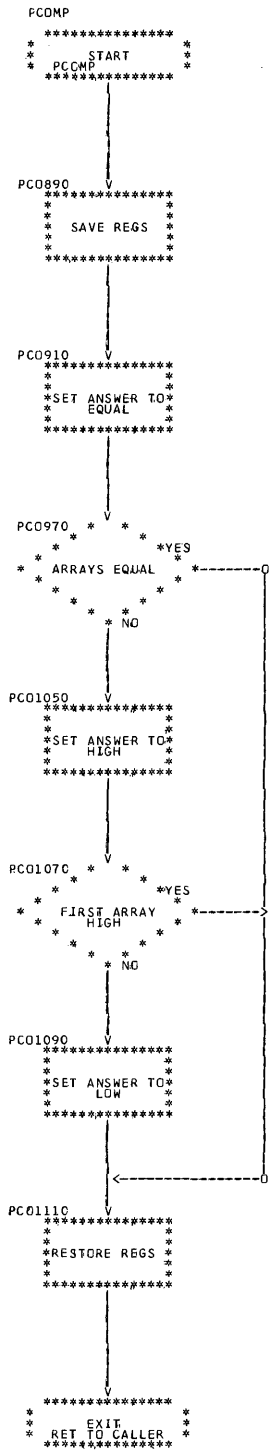


CHART BDM: PBTST
DCS/GS BIT MANIPULATION SUBROUTINE







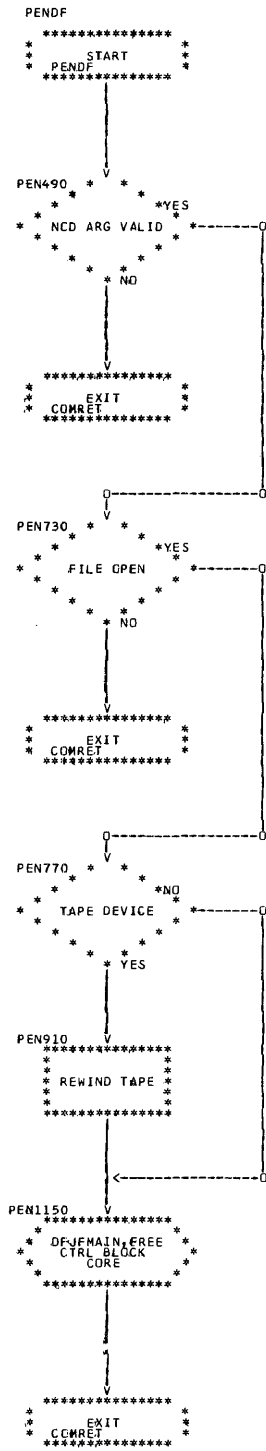
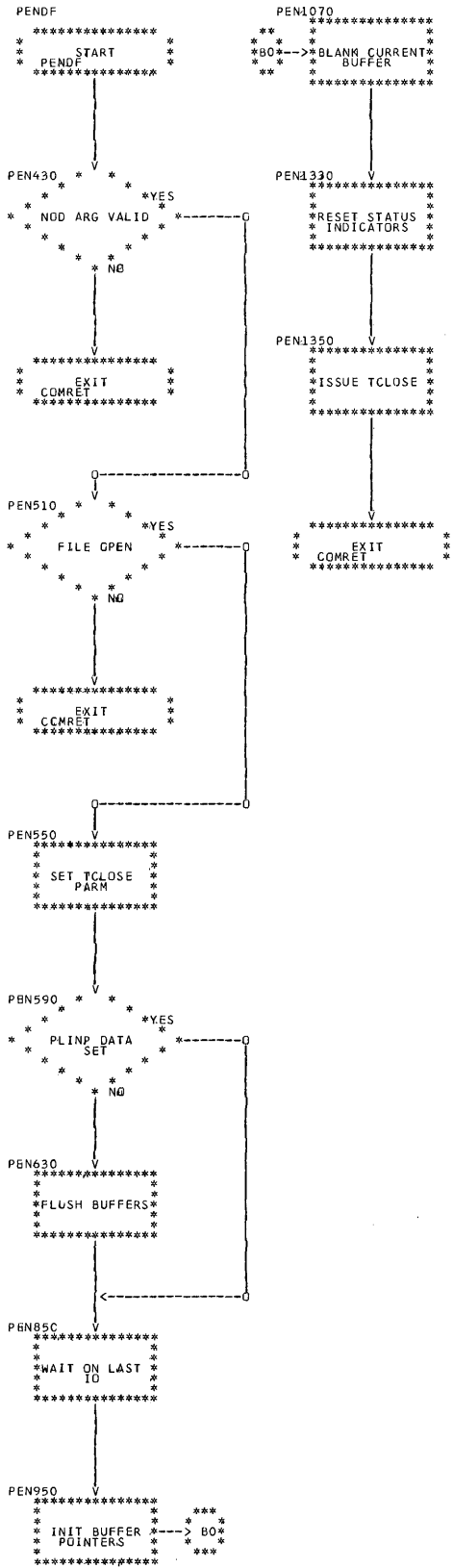
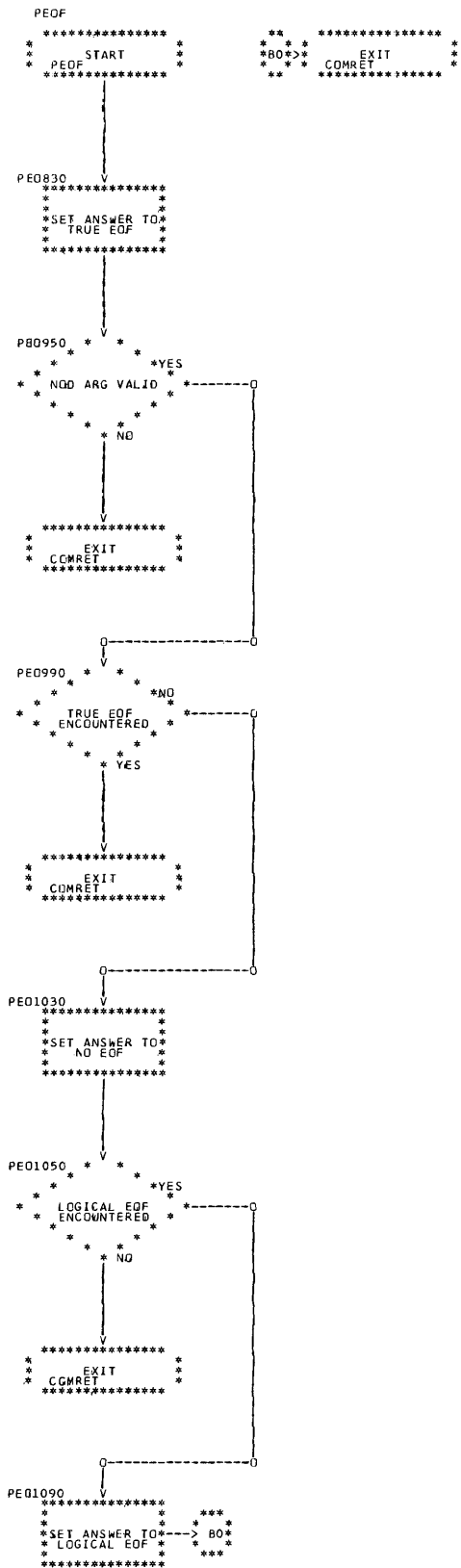
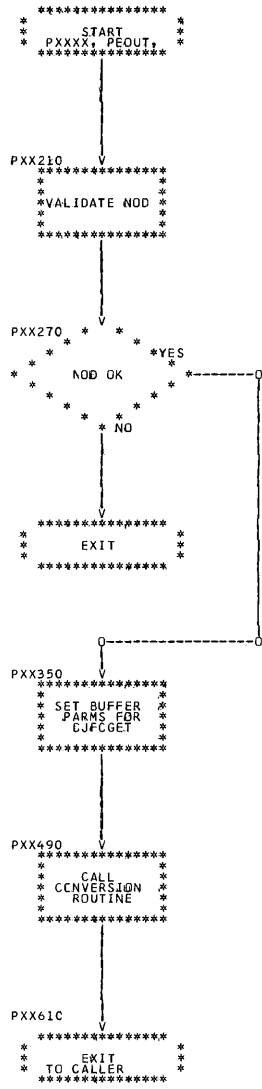


CHART BDU: PENDF
 OS SEQUENTIAL FILE CLOSE SUBROUTINE







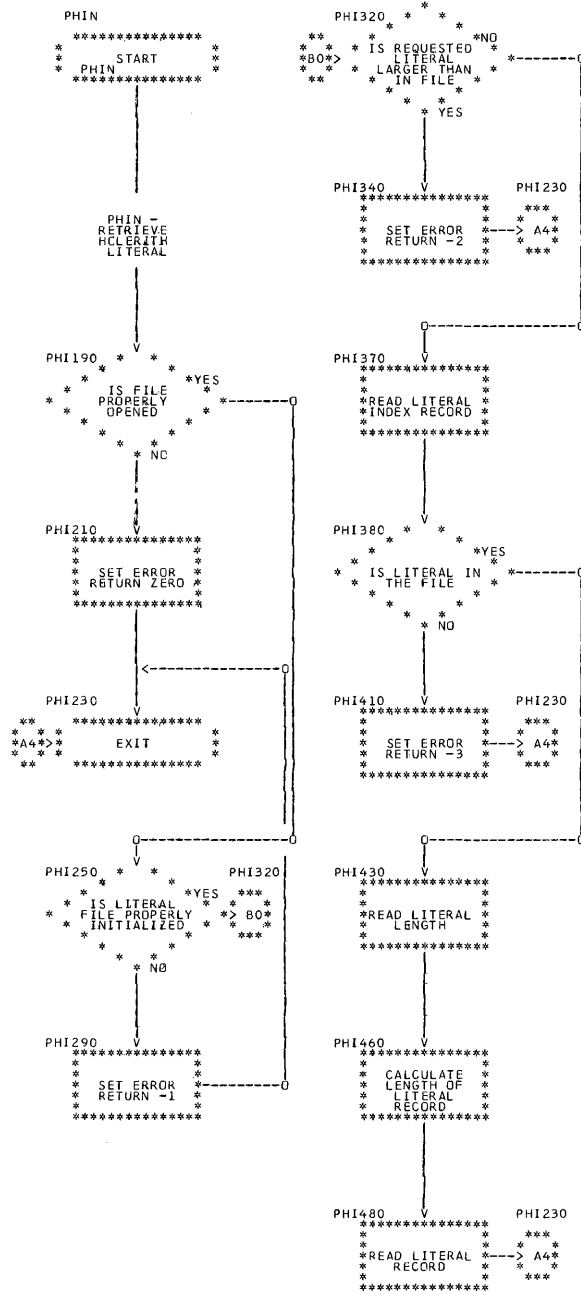
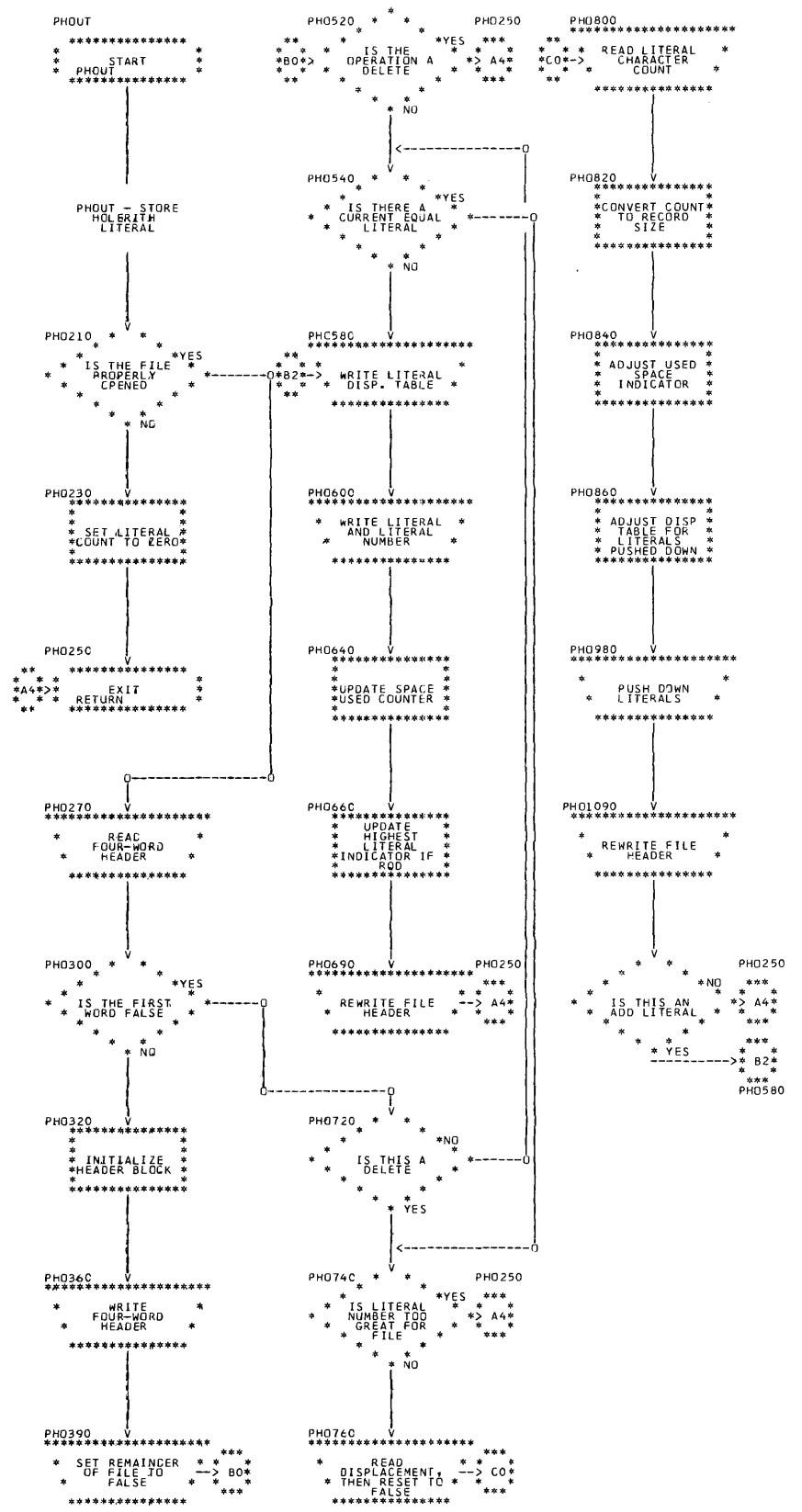
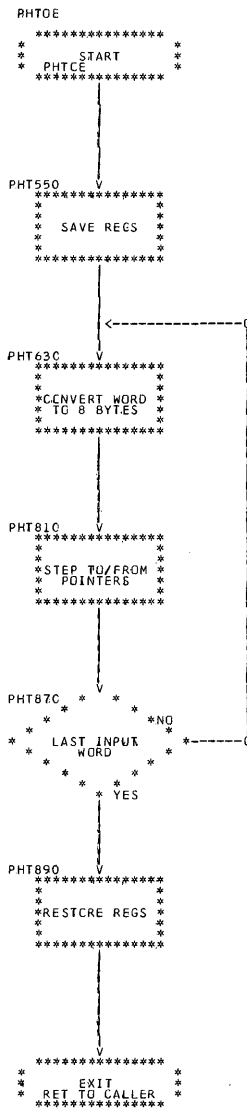
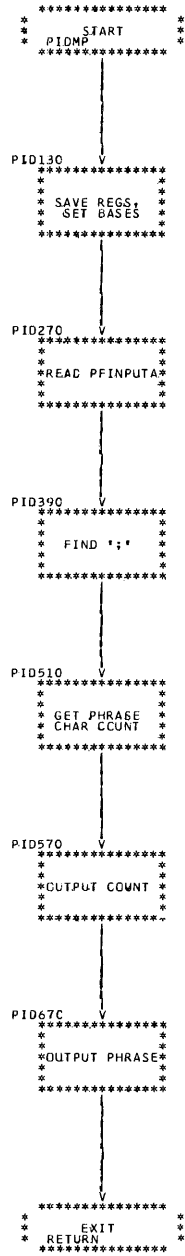
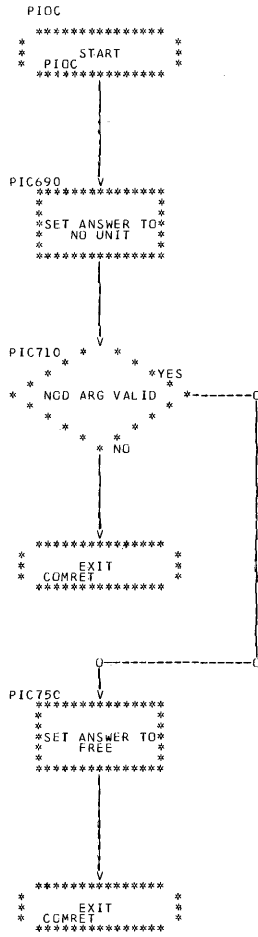


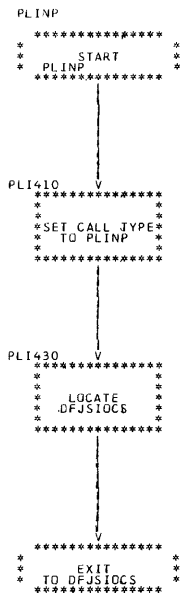
CHART BEE: PHOUT
 DGS/CS LITERAL PROCESSING SUBROUTINE

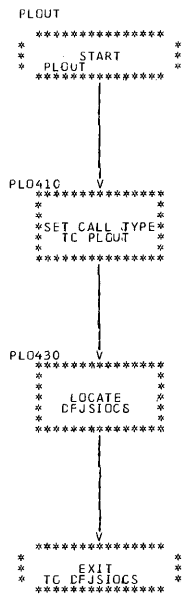


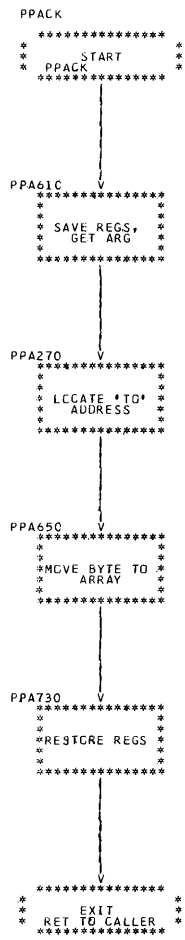


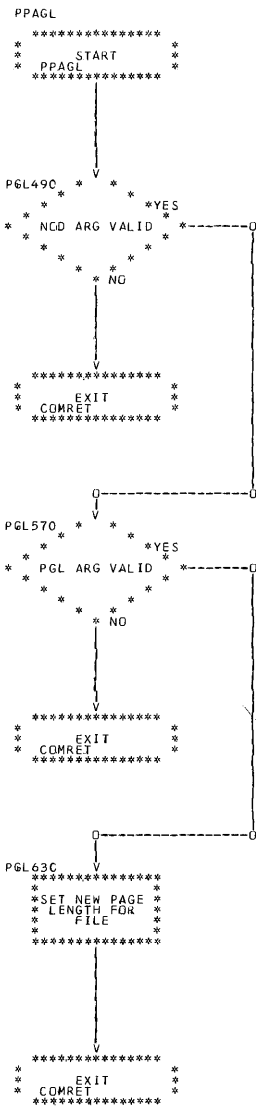


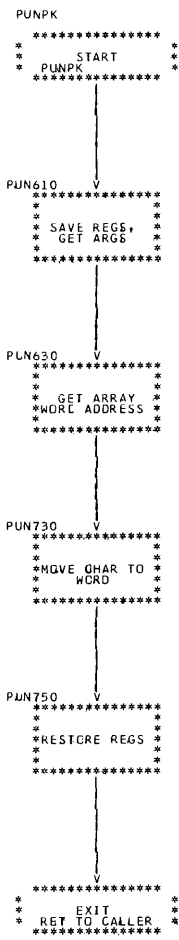


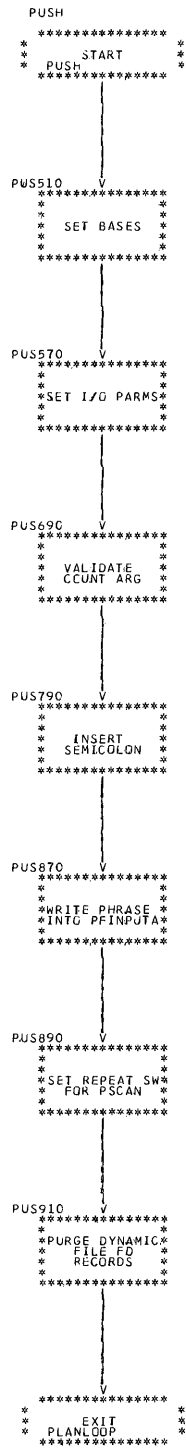


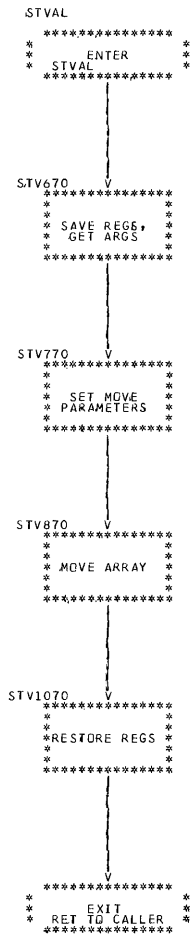


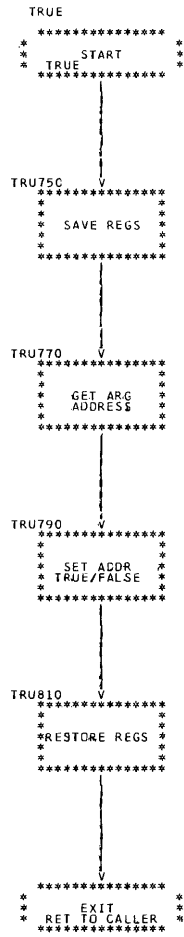


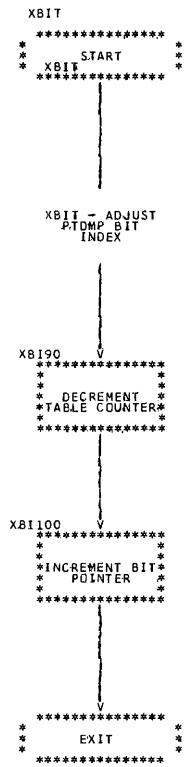


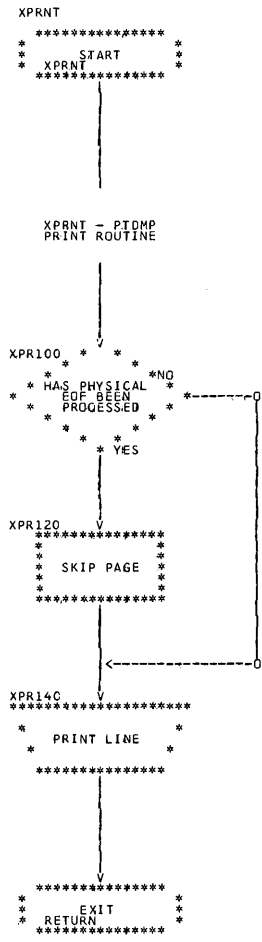


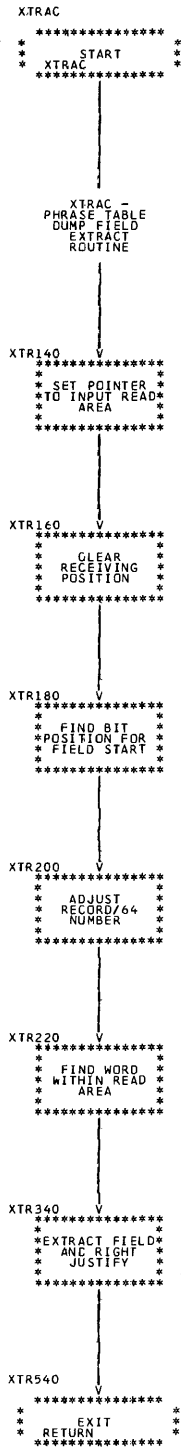












International Business Machines Corporation
Data Processing Division
112 East Post Road, White Plains, N. Y. 10601
(USA Only)

IBM World Trade Corporation
821 United Nations Plaza, New York, New York 10017
(International)