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01.00 PURPOSE:

THIS DISKETTE WILL LOAD ATTACHMENT STORAGE PROGRAMS INTO ALL NECESSARY DEVICES ON A SERIES/1 SYSTEM AND WILL SUPPLY UTILITIES FOR UPDATING THIS DISKETTE.

02.00 PREREQUISITE:

E.OU FREREGUISI

02.10 PROGRAM:
THIS PROGRAM WILL RUN WITH A CONTROL PROGRAM.

02.20 FOUTPMENTS

A SERIES/1 PROCESSING UNIT, AT LEAST ONE DISKETTE DRIVE AND OTHER SUITABLE INPUT/OUTPUT DEVICES.

ALL PROCESSING UNIT AND DISKETTE DIAGNOSTICS HAVE RUN WITHOUT ERROR.

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03.00 OPERATING PROCEDURE:

03.01 FIRST TIME USE OF ATTACHMENT STORAGE SYSTEM DISKETTE:

THE CONFIGURATION TABLE MUST BE COPIED FROM THE BASIC DISKETTE ONTO THE ATTACHMENT STORAGE SYSTEM DISKETTE. USE THE FOLLOWING PROCEDURE TO COPY IT. LOAD PROGRAM U38F0 FROM THE BASIC DISKETTE (PART NUMBER 1635001) AND SELECT PRINT OPTIONS (OPTION 03). THEN DO A DISKETTE COPY (OPTION 0D) TO THE ATTACHMENT STORAGE SYSTEM DISKETTE (PART NUMBER).

03.02 TO USE THE 5251 AS AN ALTERNATE CONSOLE:

BEFORE A 5251 DISPLAY CAN BE USED AS AN ALTERNATE CONSOLE, ATTACHMENT STORAGE PROGRAMS (E4DO AND E4DI), FOR KEYBOARD DEFINITION, MUST BE ON THE ATTACHMENT STORAGE SYSTEM DISKETTE (PART NUMBER 6847127). IF THESE PROGRAMS HAVE NOT BEEN WRITTEN ONTO DISKETTE PART NUMBER 6847127 USE THE FOLLOWING PROCEDURE TO WRITE THEM.

USE THE UTILITY PROGRAM 38F9 TO DISPLAY THE VTOC FOR DISKETTE PART NUMBER 6847127.

SEE IF DATA SET(S) 'E4DO' AND 'E4D1' ARE ON THE DISKETTE.
IF DATA SET 'E4DO' IS NOT ON DISKETTE WRITE IT THERE FROM DISKETTE PART NUMBER 6826590.

IF DATA SET 'E4D1' IS ON DISKETTE PART NUMBER 6826590 THEN IT MUST ALSO COPIED TO DISKETTE PART NUMBER 6847147. IS NOT ON DISKETTE PART NUMBER 6826590 THEN IT IS NOT REQUIRED FOR THE ALTERNATE CONSOLE SUPPORT.

03.03 TO USE THE 3101 ATTACHED TO THE MULTI FUNCTION ATTACHMENT AS AN ALTERNATE CONSOLE:

BEFORE A 3101 DISPLAY ATTACHED TO A MULTI FUNCTION ATTACHMENT CAN BE USED AS AN ALTERNATE CONSOLE THE ATTACHMENT STORAGE PROGRAM (66C0), FOR ATTACHMENT DEFINITION, MUST BE ON THE ATTACHMENT STORAGE SYSTEM DISKETTE (PART NUMBER 6847127). IF THE FOLLOWING PROCEDURE TO WRITE IT.

USE THE UTILITY PROGRAM 38F9 TO DISPLAY THE VTOC FOR DISKETTE PART NUMBER 6847127.

SEE IF DATA SET 'E6CO' IS ON THE DISKETTE.
IF DATA SET 'E6CO' IS NOT ON DISKETTE WRITE IT THERE FROM DISKETTE PART NUMBER 6031185.

03.04 OPERATING PROCEDURE:

THE STANDARD DCP LOADING, OPERATING AND TERMINATION PROCEDURES ARE USED IN THIS PROGRAM. TO USE THIS DISKETTE:
INSERT DISKETTE PN= INTO DISKETTE DRIVE.

- 1) TO LOAD ATTACHMENT STORAGE PROGRAMS INTO DEVICES.

 A) SET MODE SWITCH TO NORMAL FOR NORMAL OPERATION.
 SET MODE SWITCH TO DIAGNOSE IF YOU WANT TO STOP AT THE ERROR STOPS WHICH WILL OCCUR IF THERE ARE ERRORS. THE ERROR STOPS ARE DESCRIBED IN SECTIONS 05.00 AND 06.00.
 - B) PRESS AND RELEASE IPL PUSHBUTTON.

ALL ATTACHMENT STORAGE PROGRAMS CONFIGURED FOR THIS SYSTEM WILL BE LOADED.

- 2) TO CHANGE THE ATTACHMENT STORAGE SYSTEM DISKETTE. A) AFTER THE IPL, ENTER 'B3AFO'.
 - B) ALTERNATE CONSOLE WILL PRINT:

**

**

**

**

ATTACHMENT STORAGE PROGRAM SYSTEM UTILITY OPTIONS

00=ADD ATTACHMENT STORAGE LOAD/FROGRAM

01=DELETE ATTACHMENT STORAGE LOAD/FROGRAM

02=ADD DEVICE ADDRESS DATA

03=DELETE DEVICE ADDRESS DATA

04=PATCH EXISTING ATTACHMENT STORAGE PROGRAM

05=LIST LOAD/PROGRAM DEVICE ADDRESS

06=LOAD ATTACHMENT STORAGE PROGRAM INTO STORAGE

07=COMPRESS ATTACHMENT STORAGE SYSTEM DISKETTE

08=OPTION MENU PRINT CONTROL

09=TERMINATE

SELECT ONE OPTION

ENTER

PROGRAMMER CONSOLE WILL STOP WITH 3A82 IN LIGHTS.

C) SELECT DESIRED OPTION
USE ALTERNATE CONSOLE TO ENTER
FXX
OR ENTER ON THE PROGRAMMER CONSOLE
(B) 1F (1)
(B) XX00 (1)(1)

AT THIS TIME SPECIFIC PROCEDURES FOR EACH OPTION MUST BE FOLLOWED. ALL OPERATOR INPUT WILL USE THE DCP COMMAND 'F' (REPLY TO PROGRAM) EXCEPT WHEN A QUESTION (?) IS ANSWERED. USE DCP COMMAND 'I' FOR YES OR DCP COMMAND 'O' FOR NO.

FOR COMMAND/DATA ENTRY FROM THE PROGRAMMER'S CONSOLE SEE MAP 0010 SECTION 07.01.00.

IN THE FOLLOWING EXAMPLES THE DATA TO BE ENTERED BY THE OPERATOR WILL BE FOLLOWED BY **.

IN THE FOLLOWING EXAMPLES XXXX = THE MESSAGE NUMBER SEEN IN THE PROGRAMMER CONSOLE LIGHTS.

02FEB81 PN6847171 EC869592 PEC864728 PAGE 4 OF 18

04.00 MENU OF OPTIONS:

THE FOLLOWING IS A PRINTOUT OF THE OPTION TABLE.

ATTACHMENT STORAGE PROGRAM SYSTEM UTILITY OPTION MENU 01=DELETE ATTACHMENT STORAGE LOAD/PROGRAM 01=DELETE ATTACHMENT STORAGE LOAD/PROGRAM 02=ADD DEVICE ADDRESS DATA 03=DELETE DEVICE ADDRESS DATA 04=PATCH EXISTING ATTACHMENT STORAGE PROGRAM 05=LIST LOAD/PROGRAM DEVICE ADDRESSES 06=LOAD ATTACHMENT STORAGE PROGRAM INTO STORAGE 07=COMPRESS ATTACHMENT STORAGE SYSTEM DISKETTE 08=OPTION MENU PRINT CONTROL SYSTEM DISKETTE 09=TERMINATE SELECT ONE OPTION ENTER (LIGHTS 3A82)

04.01 OPTION 00:

THIS OPTION IS USED TO LOAD A ATTACHMENT STORAGE LOAD/PROGRAM ON THE DISKETTE. ENTER 'F00' TO SELECT THIS OPTION. THE UTILITY WILL PROMPT FOR INFORMATION. THE FIRST QUESTION WILL BE DEVICE ADDRESS= 'ANSWER THIS QUESTION WITH THE DEVICE ADDRESS (00-FF) OF THE DEVICE YOU DESIRE THE OPTION TO USE.

THE FOLLOWING IS AN EXAMPLE:

SELECT ONE OPTION ENTER (LIGHTS 3A82)

(FROM DISKETTE) DEVICE ADDRESS= ENTER (LIGHTS 3A84) F22 **

ADD ATTACHMENT STORAGE LOAD/PROGRAM IS - FROM - DISKETTE LOADED? ENTER (LIGHTS 3A86)

IS - TO - DISKETTE LOADED?

RAM45 PROGRAM PN=01234567 EC/REA=8901234 ADDED TO DISKETTE

04.02 OPTION 01:

THIS OPTION IS USED TO DELETE A ATTACHMENT STORAGE LOAD/PROGRAM FROM THE DISKETTE. ENTER 'F01' TO SELECT THIS OPTION. THE UTILITY WILL PROMPT FOR THE FOLLOWING INFORMATION: PART NUMBER AND EC OR REA NUMBER. YOU MUST ENTER EIGHT (8) DIGITS FOR THE PART NUMBER AND SEVEN (7) DIGITS FOR THE COR REA NUMBER. IF THE PART NUMBER DOES NOT CONTAIN EIGHT (8) DIGITS OR THE EC OR REA NUMBER DOES NOT CONTAIN SEVEN (7) DIGITS, THEN IT MUST BE RIGHT ALIGNED.

THE FOLLOWING IS AN EXAMPLE:

SELECT ONE OPTION ENTER (LIGHTS 3A82) F01 **

DELETE ATTACHMENT STORAGE LOAD/PROGRAM LOAD/PROGRAM PN= ENTER (LIGHTS 3A89) F01234567 **

LOAD/PROGRAM EC/REA= ENTER (LIGHTS 3A8A) F8901234 **

LOAD/PROGRAM PN=01234567 EC/REA=8901234 DELETED

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MAP 0026-4

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04.03 OPTION 02:

THIS OPTION ADDS DEVICE ADDRESSES WHICH WILL RECEIVE A SPECIFIC LOAD/PROGRAM. ENTER 'F02' TO SELECT THIS OPTION. THE UTILITY WILL PROMPT FOR THE FOLLOWING INFORMATION: LOAD/PROGRAM PART NUMBER, LOAD/PROGRAM EC OR REA NUMBER, AND DEVICE ADDRESS. YOU MUST ENTER EIGHT (8) DIGITS FOR THE PART NUMBER AND SEVEN (7) DIGITS FOR THE EC OR REA NUMBER. IF THE PART NUMBER DOES NOT CONTAIN EIGHT (8) DIGITS OR THE EC OR REA NUMBER DOES NOT CONTAIN SEVEN (7) DIGITS, THEN IT MUST BE RIGHT ALIGNED.

THE FOLLOWING IS AN EXAMPLE:

SELECT ONE OPTION ENTER (LIGHTS 3A82)

SYSTEM (TO DISKETTE) WILL USE IPL ADDRESS XX LOD DEVICE ADDRESS DATA LOAD/PROGRAM PN= LOAD/PN= L

LOAD/PROGRAM EC/REA= ENTER (LIGHTS=3A8A) F2468246 **

DEVICE ADDRESS= ENTER (LIGHTS=3A8C)

ADDRESS 04 ADDED ADD ANOTHER ADDRESS TO PN=12345678 EC/REA=2468246? ENTER (LIGHTS=3A8E)

IF THE DEVICE ADDRESS IS ALREADY IN USE IN THE SAME LOAD/PROGRAM THE FOLLOWING MESSAGE WILL PRINT:

ADDRESS 04 IN USE PN=PNPNPNPN EC/REA=ECECECE CAN NOT BE ADDED TWICE TO SAME LOAD/PROGRAM

IF THE DEVICE ADDRESS IS ALREADY IN USE IN ANOTHER LOAD/PROGRAM THE FOLLOWING MESSAGE WILL PRINT:

ADDRESS 04 IN USE PN=PNPNPNPN EC/REA=ECECECE CONTINUE TO ADD DUPLICATE DEVICE ADDRESS? ENTER (LIGHTS=3A9C) 1 **

04.04 OPTION 03:

THE FOLLOWING IS AN EXAMPLE:

SELECT ONE OPTION ENTER (LIGHTS 3A82) F03 **

SYSTEM (TO DISKETTE) WILL USE IPL ADDRESS XX DELETE DEVICE ADDRESS DATA LOAD/PROGRAM PN= ENTER (LIGHTS=3A89) F12345678 **

LOAD/PROGRAM EC/REA= ENTER (LIGHTS=3A8A) F2468246 **

DEVICE ADDRESS= ENTER (LIGHTS=3A8C)

DELETE ANOTHER ADDRESS FROM PN=12345678 EC/REA=2468246?

IF THE DEVICE ADDRESS IS NOT FOUND IN THIS LOAD PROGRAM, THE FOLLOWING MESSAGE WILL PRINT: ADDRESS 04 NOT FOUND (LIGHTS 3AAB)

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04.05 OPTION 04:

THIS OPTION WILL PATCH AN EXISTING ATTACHMENT STORAGE PROGRAM. ENTER 'F04' TO SELECT THIS OPTION. YOU MUST ENTER EIGHT (8) DIGITS FOR THE PART NUMBER AND SEVEN (7) DIGITS FOR THE EC OR REA NUMBER. IF THE PART NUMBER DOES NOT CONTAIN EIGHT (8) DIGITS OR THE EC OR REA NUMBER DOES NOT CONTAIN SEVEN (7) DIGITS, THEN IT MUST BE RIGHT ALIGNED.

THE FOLLOWING IS AN EXAMPLE:

SELECT ONE OPTION ENTER (LIGHTS 3A82) F04 **

SYSTEM (TO DISKETTE) WILL USE IPL DEVICE ADDRESS 02 PATCH EXISTING ATTACHMENT STORAGE LOAD/PROGRAM PN= ENTER (LIGHTS 3A89) F12345678 **

LOAD/PROGRAM EC/REA= ENTER (LIGHTS 3A8A) F9012345 **

DO YOU WANT TO PATCH THE LOADER?

OFFSET IN HEXE ENTER (LIGHTS 3A95)

WORD COUNT= ENTER (LIGHTS 3A93) F0003 **

0124 0018 68A2 0000 DO YOU WANT TO PATCH THIS DATA? ENTER (LIGHTS 3A91)

DATA ENTER (LIGHTS 3A94) F1234 5678 **

DATA ENTER (LIGHTS 3A94) F90AB **

LOAD/PROGRAM PN=12345678 EC/REA=9012345 PATCH COMPLETE

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04.06 OPTION 05:

THIS OPTION WILL LIST THE LOAD/PROGRAMS ON THE DISKETTE AND THEIR DEVICE ADDRESSES. ENTER 'F05' TO SELECT THIS OPTION.

THIS IS AN EXAMPLE OF THE PRINTOUT FROM OPTION 05 LIST LOAD/PROGRAM DEVICE ADDRESSES.

SELECT ONE OPTION (LIGHTS 3A82)

SYSTEM (TO DISKETTE) WILL USE IPL DEVICE ADDRESS 02 LIST ATTACHMENT STORAGE LOAD/PROGRAM DEVICE ADDRESSES NAME PN# EC/REA# ADDRESSES

80 88 84 FF FE FD FC FE EE DD CC AA 99 00 09 02 10 31 22 13 23 14 24 29 53 44 48 50 60

ALL LOAD/PROGRAMS LISTED

04.07 OPTION 06:

THIS OPTION WILL LOAD A LOAD/PROGRAM FROM THE DISKETTE INTO THE PROCESSING UNIT STORAGE AT A SELECTED LOCATION. YOU MUST ENTER EIGHT (8) DIGITS FOR THE PART NUMBER AND SEVEN (7) DIGITS FOR THE EC OR REA NUMBER DOES NOT CONTAIN EIGHT (8) DIGITS OR THE EC OR REA NUMBER DOES NOT CONTAIN SEVEN (7) DIGITS, THEN IT MUST BE RIGHT ALIGNED.

THE FOLLOWING IS AN EXAMPLE:

SELECT ONE OPTION ENTER (LIGHTS 3A82)

LOAD ATTACHMENT STORAGE PROGRAM INTO STORAGE STORAGE ADDRESS= ENTER (LIGHTS 3A9A) F2100 **

LOAD/PROGRAM EC/REA= ENTER (LIGHTS 3A8A) F9012345 **

LOAD/PROGRAM PN=23456789 EC/REA=9012345 IS AT ADDRESS 2100

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04.08 OPTION 07:
```

THIS OPTION WILL COMPRESS THE DATA SETS ON THE DISKETTE THAT IS LOADED ON THE IPL DEVICE. TO USE THIS OPTION, ENTER 'F05'. THE UTILITY WILL COMPRESS THE VIOC FIRST, REMOVING ALL ENTRIES THAT HAD BEEN DELETED, THEN THE DATA SETS WILL ALL BE MOVED TO USE THE AREAS THAT HAVE BEEN DELETED.

NOTE: WHILE THIS OPTION IS EXECUTING A RECORD NUMBER WILL BE DISPLAYED IN THE DATA LAMPS. THE DISPLAY IN THE LAMPS IS ONLY TO LET THE OPERATOR KNOW THE OPTION IS EXECUTING.

THE FOLLOWING IS AN EXAMPLE:

SELECT ONE OPTION ENTER (LIGHTS 3A82)

COMPRESS ATTACHMENT STORAGE SYSTEM DISKETTE COMPRESS COMPLETE (LIGHTS 3A85)

04.09 OPTION 08:

THIS OPTION WILL CONTROL THE DISPLAYING OF THE OPTION MENU EACH TIME. TO USE THIS OPTION, ENTER 'FOB'. THE UTILITY WILL OUTPUT THE OPTION MENU EACH TIME AN OPTION IS COMPLETED. WHEN THIS OPTION IS SELECTED THE OPTION MENU WILL NOT BE DISPLAYED BUT A MESSAGE 'SELECT ONE OPTION' WILL APPEAR. ENTER 'FOB' AGAIN HILL CAUSE THE OPTION MENU TO START DISPLAYING AGAIN. THIS OPTION IS USED IN MOST EXAMPLES.

ATTACHMENT STORAGE PROGRAM SYSTEM UTILITY OPTIONS 00=ADD ATTACHMENT STORAGE LOAD/PROGRAM 01=DELETE ATTACHMENT STORAGE LOAD/PROGRAM 02=ADD DEVICE ADDRESS DATA 03=DELETE DEVICE ADDRESS DATA 04=PATCH EXISTING ATTACHMENT STORAGE PROGRAM 05=LIST LOAD/PROGRAM DEVICE ADDRESSES 06=LOAD ATTACHMENT STORAGE PROGRAM INTO STORAGE 07=COMPRESS ATTACHMENT STORAGE SYSTEM DISKETTE 08=OPTION MENU PRINT CONTROL 09=TERMINATE SELECT ONE OPTION ENTER (LIGHTS 3A82)

SELECT ONE OPTION ENTER (LIGHTS 3A82) FO8 **

ATTACHMENT STORAGE PROGRAM SYSTEM UTILITY OPTIONS
00=ADD ATTACHMENT STORAGE LOAD/PROGRAM
01=DELETE ATTACHMENT STORAGE LOAD/PROGRAM
02=ADD DEVICE ADDRESS DATA
03=DELETE DEVICE ADDRESS DATA
04=PATCH EXISTING ATTACHMENT STORAGE PROGRAM
05=LIST LOAD/PROGRAM DEVICE ADDRESSES
06=LOAD ATTACHMENT STORAGE PROGRAM INTO STORAGE
07=COMPRESS ATTACHMENT STORAGE SYSTEM DISKETTE
08=OPTION MENU PRINT CONTROL
09=TERMINATE
09=TERMINATE
SELECT ONE OPTION
ENTER (LIGHTS 3A82)

04.10 OPTION 09:

THIS OPTION WILL CAUSE THE UTILITY PROGRAM TO BE TERMINATED. TO USE THIS OPTION, ENTER 'F09'. THIS OPTION WILL NOT EXECUTE WHILE ANOTHER OPTION IS BEING EXECUTED. THE FOLLOWING IS AN EXAMPLE:

SELECT ONE OPTION ENTER (LIGHTS 3A82) F09 ** PT RDY ENTER

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05.00 HALT CODES FOR MESSAGES:(NORMAL AND ERROR MESSAGES)- NO ALTERNATE CONSOLE
IF YOU HAVE ANY PROBLEM WITH ENTRY, PRESS SYSTEM RESET AND START OVER. SEE SECTION 6.0 FOR
MESSAGE DESCRIPTIONS.

```
PROGRAMMER OR C E CONSOLE DATA LAMPS MESSAGES.
                       PROGRAM STOPS FOR CE USE IN DIAGNOSE OPERATION
MESSAGES WHICH NEED A RESPONSE ARE INDICATED BY **.
  A. THOSE ENDING IN A QUESTION MARK (?) NEED A YES (COMMAND '1') OR NO (COMMAND '0') RESPONSE.

B. ALL OTHERS NEED DATA (F ) RESPONSE.
                                                                                              MESSAGE AND COMMENTS
                 CODE
                                                                                            DISKETTE ERROR
PREPARE OPERATION - BAD CONDITION CODE
READ ID ATA ERROR
READ ID ATA ERROR
READ INTERPREPARE TO ATTACHMENT - BAD CONDITION CODE
WRITE ATTACHMENT STORAGE TO ATTACHMENT - BAD INTERRUPT CONDITION CODE
WRITE ATTACHMENT STORAGE TO ATTACHMENT - READ BACK COMPARE BAD
                 ICAA
ICAA
ICAE
ICB2
ICB6
ICBA
ICC0
                                                                                        MESSAGE AND COMMENTS

ATTACHMENT STORAGE PROGRAM PN= EC/REA=
DA= LOADED

OC=ADD ATTACHMENT STORAGE LOAD/PROGRAM
01=DELETE ATTACHMENT STORAGE LOAD/PROGRAM
02=ADD DEVICE ADDRESS DATA
03=DELETE DEVICE ADDRESS DATA
04=PATCH EXISTING ATTACHMENT STORAGE PROGRAM
05=LST LOAD/PROGRAM DEVICE ADDRESS
06=LOAD ATTACHMENT STORAGE PROGRAM INTO STORAGE
07=COMPRESS ATTACHMENT STORAGE SYSTEM DISKETTE
08=OPTION MENU PRINT CONTROL
09=TERMINATE
SELECT ONE OPTION
SYSTEM (TO DISKETTE) WILL USE IPL DEVICE ADDRESS XX POS 1
(FROM DISKETTE HILL USE POS 1
FROM DISKETTE WILL USE POS 2
COMPRESS COMPLETE
IS - FROM - DISKETTE LOADED?
IS - TO - DISKETTE LOADED?
DEVICE ADDRESS ADDED
ADD ANOTHER ADDRESS TO PN= EC/REA= PATCH COMPLETE
DEVICE ADDRESS DELETED

DEVICE ADDRESS DELETED

DEVICE ADDRESS PROM PN= EC/REA= ?
ADDRESS DELETED

DEVICE ADDRESS ADDED
ADD ANOTHER ADDRESS FROM PN= EC/REA= ?
ADDRESS DELETED

DELETE ANOTHER ADDRESS FROM PN= EC/REA= ?
ADDRESS DELETED

DEVICE ADDRESS DELETED

DEVICE ADDRESS PROM PN= EC/REA= ?
ADDRESS DELETED

DEVICE ADDRESS PROM PN= EC/REA= ?
ADDRESS DELETED

DEVICE ADDRESS TO PN= EC/REA= ?
ADDRESS DELETED

DEVICE ADDRESS ADDED
ADD ANOTHER ADDRESS FROM PN= EC/REA= ?
ADDRESS DELETED

DEVICE ADDRESS DELETED

DEVICE ADDRESS BELETED

DEVICE ADDRESS BELETED

DEVICE ADDRESS BELETED

DEVICE ADDRESS DELETED

DEVICE ADDRESS ADDRESS TO PN= EC/REA= ?
ADDRESS DELETED

DEVICE ADDR
                 CODE IN
                                                                                             MESSAGE AND COMMENTS
                 ADDED TO DISKETTE
                                                              **
                   9993456788899ABCDE
                                                               **
```

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```
CODE IN MESSAGE AND COMMENTS

3AA1
3AA2
3AA2
3AA2
3AA2
3AA3
4 NOT LOODED DISKETTE ERROR OR WRONG DISKETTE
3AA3
5 NOT LOODED SYSTEM DISKETTE
3AA3
6 DISKETTE ERROR
3AA4
3 NOT LOODED SYSTEM DISKETTE
3AA4
6 HOTER HIST VALLO— COMPRESS DISKETTE USE 'U38F9'
3AA6
7 LP PROGRAM PNE
7 PNE
7 PNE
7 PROGRAM PNE
7 PNE
7 PNE
7 PROGRAM PNE
7 PNE
```

THE CODES ARE DESCRIBED IN MORE DETAIL IN SECTION 6.0.

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06.00 HALT CODE MESSAGES AND REQUIRED ACTIONS:

IF YOU HAVE ANY PROBLEM WITH ENTRY, PRESS SYSTEM RESET AND START OVER. THE HALT CODES ARE DESCRIBED BELOW.

THE FOLLOWING HALT CODES ARE NOT MESSAGE STOPS. THESE STOPS WILL OCCUR ONLY WHEN THERE IS AN ERROR WHEN LOADING A ATTACHMENT STORAGE PROGRAM. THE MODE SHITCH MUST BE ON 'DIAGNOSE' FOR THESE STOPS TO OCCUR.

CODE 1CA6:

DISKETTE ERROR REGISTER 3 - DEVICE ADDRESS

CODE ICAA:

EPARE OPERATION - BAD CONDITION CODE REGISTER 3 - DEVICE ADDRESS REGISTER 4 - LEVEL STATUS REGISTER CONTENTS

CODE 1CAE:

READ ID OPERATION - BAD CONDITION CODE REGISTER 3 - DEVICE ADDRESS REGISTER 4 - LEVEL STATUS REGISTER CONTENTS

CODE 1CB2:

READ ID DATA ERROR
PEGISTER 3 - DEVICE ADDRESS
REGISTER 4 - READ ID RECEIVED
REGISTER 5 - READ ID EXPECTED
REGISTER 6 - MASK. THIS IS USED TO MASK OUT BITS
IN RECEIVED READ IDENTIFICATION BEFORE
COMPARE WITH THE EXPECTED IDENTIFICATION.

CODE ICB6:

WRITE ATTACHMENT STORAGE TO ATTACHMENT - BAD CONDITION CODE REGISTER 3 - DEVICE ADDRESS REGISTER 4 - LEVEL STATUS REGISTER CONTENTS

CODE 1CBA:

WRITE ATTACHMENT STORAGE TO ATTACHMENT - BAD INTERRUPT CONDITION CODE REGISTER 3 - DEVICE ADDRESS REGISTER 4 - LEVEL STATUS REGISTER CONTENTS

CODE 1CC0:

WRITE ATTACHMENT STORAGE TO ATTACHMENT - READ BACK COMPARE BAD REGISTER 3 - DEVICE ADDRESS REGISTER 4 - LEVEL STATUS REGISTER CONTENTS

THE FOLLOWING HALT CODES WILL OCCUR ON THE PROGRAMMER CONSOLE, OR THE MESSAGES WILL PRINT ON THE ALTERNATE CONSOLE.

CODE 3A80:

ATTACHMENT STORAGE PROGRAM PN= EC/REA=

CODE 3A81:

DA= LOADED

CODE 3A82:

2:

00=ADD ATTACHMENT STORAGE LOAD/PROGRAM
01=DELETE ATTACHMENT STORAGE LOAD/PROGRAM
02=ADD DEVICE ADDRESS DATA
03=DELETE DEVICE ADDRESS DATA
04=PATCH EXISTING ATTACHMENT STORAGE PROGRAM
05=LIST LOAD/PROGRAM DEVICE ADDRESS
06=LOAD ATTACHMENT STORAGE PROGRAM INTO STORAGE
07=COMPRESS ATTACHMENT STORAGE SYSTEM DISKETTE
08=OPTION MENU PRINT CONTROL
09=TERITINATE
SELECT ONE OPTION
SELECT THE OPTION DESIRED. FOR EXAMPLE, IF YOU SELECT OPTION 01, ENTER 'F01'.

CODE 3A83:

SYSTEM (TO DISKETTE) WILL USE IPL DEVICE ADDRESS XX POS 1

XX = THE DEVICE ADDRESS OF THE TO DISKETTE. IF A 4966 IS USED, THIS NESSAGE DESCRIBES THE POSITION THE TO DISKETTE WILL USE.

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CODE 3A84:

(FROM DISKETTE) DEVICE ADDRESS=XX FROM DISKETTE WILL USE POS 1 FROM DISKETTE WILL USE POS 2

XX = THE DEVICE ADDRESS OF THE FROM DISKETTE. IF A 4966 IS USED, THIS MESSAGE DESCRIBES THE POSITION THE FROM DISKETTE WILL USE.

CODE 3A85:

COMPRESS COMPLETE

CODE 3A86:

IS - FROM - DISKETTE LOADED?

ANSWER YES (COMMAND '1') WHEN THE FROM DISKETTE IS READY IN THE DISKETTE DRIVE. ** ENTER AS (0) OR (1).

CODE 3A87:

IS - TO - DISKETTE LOADED?

ANSWER YES (COMMAND '1') WHEN THE TO DISKETTE IS READY IN THE DISKETTE DRIVE.
** ENTER AS (0) OR (1).

CODE 3A88:

LP PROGRAM PN= EC/REA=

ADDED TO DISKETTE

CODE 3A89:

LOAD/PROGRAM PN=

CODE 3A8A:

LOAD/PROGRAM EC/REA=

ANSWER WITH THE LOAD/PROGRAM EC OR REA NUMBER. SEVEN (7) DIGITS MUST BE ENTERED. IF THE EC OR REA NUMBER HAS ONLY SIX (6) DIGITS, ENTER A ZERO IN FRONT SOLUTION OF THE EC OR REA NUMBER IS RIGHT ALIGNED. ** ENTER AS F.).

CODE 3A8B:

LOAD/PROGRAM PN=

EC/REA=

INDICATES THAT THE LOAD/PROGRAM HAS BEEN DELETED FROM THE DISKETTE.

CODE 3A8C:

DEVICE ADDRESS=

ANSWER WITH THE DEVICE ADDRESS. ** ENTER AS (F).

CODE 3A8D:

ADDRESS ADDED

INDICATES THAT THE DEVICE ADDRESS HAS BEEN ADDED TO THE LOAD/PROGRAM.

CODE 3A8E:

ADD ANOTHER ADDRESS TO PN=

EC/REA=

ANSWER IF YOU WANT TO CONTINUE ADDING DEVICE ADDRESSES TO THIS LOAD/PROGRAM.
** ENTER AS (0) OR (1).

CODE 3A8F:

ADDRESS DELETED

INDICATES THAT THE DEVICE ADDRESS HAS BEEN DELETED FROM THE LOAD/PROGRAM.

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CODE 3A90:

DELETE ANOTHER ADDRESS FROM PN=

EC/REA=

ANSWER YES (COMMAND '1') IF YOU WANT TO DELETE ANOTHER ADDRESS FROM THIS LOAD/PROGRAM. ANSWER NO (COMMAND '0') IF YOU DO NOT WANT TO DELETE ANOTHER ADDRESS .

** ENTER AS (0) OR (1).

CODE 3A91:

DO YOU WANT TO PATCH THIS DATA?

CHECK IF THIS IS THE CORRECT DATA TO CHANGE. (OPTION 04)
JF IT IS, ANSWER YES (1).
JF IT IS NOT, ANSWER NO (0).
** ENTER AS (0) OR (1).

CODE 3A92:

LOAD/PROGRAM PN=

EC/REA=

PATCH COMPLETE

CODE 3A93:

WORD COUNT=

NUMBER OF WORDS TO BE CHANGED. (OPTION 04) ** ENTER AS (F).

CODE 3A94:

DATA

CODE 3A95:

OFFSET IN HEX=XXXX

XXXX = THE HEXADECIMAL BYTE OFFSET INTO THE LOAD/FROGRAM WHERE THE CHANGE WILL START. (OPTION 04) THE OFFSET MUST BE A BYTE COUNT ON A WORD BOUNDARY. ** ENTER AS (F).

CODE 3A96:

XXXX YYYY YYYY YYYY YYYY YYYY YYYY

XXXX = THE OFFSET INTO THE LOAD/PROGRAM.
YYYY = THE DATA AT OFFSET XXXX.

CODE 3A97:

DO YOU WANT TO PATCH THE LOADER?

SELECT TO PATCH THE LOADER OR THE ATTACHMENT STORAGE PROGRAM.
** ENTER (0) TO PATCH THE LOADER.
** ENTER (1) TO PATCH THE ATTACHMENT STORAGE PROGRAM.

CODE 3A98:

NAME PN# EC/REA# ADDRESSES

THIS IS AN EXAMPLE OF THE PRINTOUT FROM OPTION 05, LIST ATTACHMENT STORAGE LOAD/PROGRAM DEVICE ADDRESSES.

CUDE 3A99:

ALL LOAD/PROGRAMS LISTED

INDICATES THAT ALL OF THE LOAD/PROGRAMS HAVE BEEN LISTED BY OPTION 05.

CODE 3A9A:

STORAGE ADDRESS=

CODE 3A9B:

LOAD/PROGRAM PN=

EC/REA=

IS AT ADDRESS

THE ATTACHMENT STORAGE LOAD/PROGRAM HAS BEEN LOADED INTO STORAGE AT THE INDICATED ADDRESS.

CODE 3A9C:

CONTINUE TO ADD DUPLICATE DEVICE ADDRESS?

ANSWER YES (COMMAND '1') IF YOU HANT TO CONTINUE ENTERING THIS DEVICE ADDRESS IN AN ADDITIONAL LOCATION.

ANSWER NO (COMMAND '0') IF NOT.

** ENTER AS (0) OR (1).

CODE 3A9D:

CAN NOT BE ADDED TWICE TO SAME LCAD/PROGRAM
INDICATES THAT THE DEVICE ADDRESS BEING ADDED TO AN ATTACHMENT STORAGE
LOAD/PROGRAM IS ALREADY THERE
A DEVICE ADDRESS CAN NOT BE ADDED TWICE TO THE SAME ATTACHMENT STORAGE
LOAD/PROGRAM.

CODE 3A9E:

NOT USED

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CODE 3A9F:

NOT USED

CODE 3AA0:

PROGRAM NOT FOUND - DISKETTE ERROR OR WRONG DISKETTE

CODE 3AA1:

DISKETTE ERROR

CODE 3AA2:

DA= NOT LOADED

A PROBLEM HAS OCCURRED THAT WOULD NOT PERMIT A
ATTACHMENT STORAGE LOAD/PROGRAM TO BE LOADED INTO
THE DEVICE AT THE INDICATED DEVICE ADDRESS.
USE OPTION 05 ON THE ATTACHMENT STORAGE SYSTEM
DISKETTE PART NUMBER
LOAD/PROGRAM WOULD NOT LOAD.
USE CONFIGURATION OPTION 09 ON THE BASIC
DIAGNOSTIC DISKETTE PN=16.55001 TO SEE WHAT
DEVICE IS AT THIS DEVICE ADDRESS.

CODE 3AA3:

NO LOAD/PROGRAMS ON SYSTEM DISKETTE

OPTION 05. LIST LOAD/PROGRAM DEVICE ADDRESSES. THIS MESSAGE INDICATES THAT NO LOAD/PROGRAMS ARE NOW ON THE SYSTEM DISKETTE.

CODE 3AA4:

ENTRY NOT VALID

CODE 3AA5:

DISKETTE FULL -- COMPRESS DISKETTE USE 'U38F9'

INDICATES THAT THERE IS NO MORE ROOM ON THE DISKETTE. COMPRESS THE DISKETTE WITH OPTION 07.

CODE 3AA6:

VTOC FULL -- COMPRESS DISKETTE USE 'U38F9'

INDICATES THAT THERE IS NO MORE ROOM ON THE DISKETTE.

CODE 3AA7:

PROGRAM PN=

EC/REA=

ALREADY ON DISKETTE

THE LOAD/PROGRAM THAT IS BEING LOADED ON THE SYSTEM DISKETTE IS ALREADY ON THE DISKETTE. IT CAN NOT BE LOADED TWICE ON THE SAME DISKETTE.

CODE 3AA8:

WRONG DISKETTE IN DRIVE

FIND THE CORRECT DISKETTE.

CODE 3AA9:

LOAD/PROGRAM PN=

NOT FOUND

WRONG PN, EC, OR REA ENTERED OR THIS LOAD/PROGRAM HAS NOT BEEN ADDED TO THIS DISKETTE.

EC/REA=

CODE 3AAA:

ADDRESS IN USE PN=

EC/REA=

THE DEVICE ADDRESS BEING ADDED TO THE LOAD/PROGRAM IS ALREADY IN USE IN ANOTHER LOAD/PROGRAM. A DEVICE ADDRESS CAN ONLY BE IN USE IN ONE LOAD/PROGRAM.

CODE 3AAB:

ADDRESS NOT FOUND

THE DEVICE ADDRESS BEING DELETED FROM A LOAD/PROGRAM CAN NOT BE FOUND.

USE OPTION 05 TO LOOK AT DEVICE ADDRESSES IN USE.

CODE 3AAC:

WORD COUNT ERROR

CODE 3AAD:

WORD COUNT TOO LARGE

THE WORD COUNT ENTERED IS TOO LARGE.

CODE 3AAE:

OFFSET TOO LARGE

THE OFFSET SELECTED IS PAST THE END OF THE PROGRAM. ENTER THE CORRECT OFFSET.

CODE 3AAF:

NOT USED

CODE 3AB0:

LOAD/PROGRAM WILL NOT FIT INTO STORAGE AT ADDRESS

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SELECT AN ADDRESS BETWEEN HEXADECIMAL 2000 AND THE END OF STORAGE.

THE END OF STORAGE

CODE 3AB1: ADDRESS LARGER THAN STORAGE SIZE

SELECT ANOTHER ADDRESS INSIDE THE STORAGE SIZE OF THE SYSTEM.

OF THE SYSTEM

CODE 3AB2: ADDRESS MUST BE 2000 OR LARGER

NOT USED

SELECT AN ADDRESS OF HEXADECIMAL 2000 OR LARGER.

CODE 3AB3: NOT USED

CODE 3AB4: NOT USED

CODE 3AB5: NOT USED

CODE 3AB6: NOT USED

CODE 3AB7:

CODE 3AB8:

CODE 3AB9:

NOT USED

NOT USED

CODE 3ABA:

CODE 3ABB: NOT USED

CODE 3ABC: NOT USED

CODE 3ABD: NOT USED

CODE 3ABE: NOT USED

CODE 3ABF: NOT USED

CODE 3AFO: ATTACHMENT STORAGE PROGRAM UTILITY PROGRAM

CODE 3AF1: ATTACHMENT STORAGE PROGRAM WRITE TO ATTACHMENT PROGRAM

CODE 3AF2:

**
ATTACHMENT STORAGE PROGRAM SYSTEM UTILITY OPTION MENU

CODE 3AF3: COMPRESS ATTACHMENT STORAGE SYSTEM DISKETTE

CODE 3AF4: ADD ATTACHMENT STORAGE LOAD/PROGRAM

CODE 3AF5: DELETE ATTACHMENT STORAGE LOAD/PROGRAM

CODE 3AF6: ADD DEVICE ADDRESS DATA

CODE 3AF7: DELETE DEVICE ADDRESS DATA

CODE 3AF8: PATCH EXISTING ATTACHMENT STORAGE LOAD/PROGRAM

CODE 3AF9:
LIST ATTACHMENT STORAGE LOAD/PROGRAM DEVICE ADDRESSES

CODE 3AFA:

LOAD ATTACHMENT STORAGE PROGRAM INTO STORAGE

CODE 3AFB: WRITE ATTACHMENT STORAGE PROGRAM TO ATTACHMENT

CODE 3AFC: NOT USED

CODE 3AFD: NOT USED

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CODE 3AFE:

NOT USED

CODE 3AFF:

NOT USED

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07.00 ATTACHMENT STORAGE SYSTEM DISKETTE FORMAT:

THE FOLLOWING IS THE DESCRIPTION OF THE ATTACHMENT STORAGE SYSTEM DISKETTE FORMAT: NOTE TRACK 0 (IPL TRACK) IS FORMATTED WITH 128 BYTES PER SECTOR AND 26 SECTORS PER TRACK. ALL OTHER TRACKS ARE FORMATTED WITH 256 BYTES PER SECTOR AND 15 SECTORS PER TRACK.

```
DESCRIPTION
IPL PROGRAM (3AA1)
DISKETTE DIAGNOSTIC TEST TRACKS
RESERVED
CONTROL PROGRAM (3A00)
VTOC (VOLUME TABLE OF CONTENTS)
PROBLEM PROGRAM PACE
ATTACHMENT STORAGE LOAD AND
LOADER AS MANY AS NEEDED FOR
A SYSTEM
DISKETTE DIAGNOSTIC TEST TRACKS
            74
```

07.01 VTOC ENTRY FORMAT:

THE FOLLOWING IS THE FORMAT OF A VTOC ENTRY:

EACH ENTRY IS 32 BYTES IN LENGTH WITH 8 ENTRIES/SECTOR.

DESCRIPTION

DATA SET NAME IN EBCDIC.

TO STAFFING RECORD NUMBER OF THE PROGRAM :

ENDING RECORD NUMBER OF THE PROGRAM :

TYPE OF DATA SET - 'P' PROGRAM DATA SET - 'P' NOT EXECUTABLE DATA SET.

SEE 04.01.
RESERVED.
PATCH COUNT (TIMES PROGRAM HAS HAD A PATCH).
PROGRAM PART NUMBER.
PROGRAM EC OR REA NUMBER.

07.02 CONFIGURATION TABLE ENTRY FORMAT:

FOR FORMAT OF THE CONFIGURATION TABLE (DATA SET 38F1) SEE MAP 3880 SECTION 08.01.04.

07.03 ATTACHMENT STORAGE LOADER AND LOAD FORMAT:

THE FOLLOWING IS THE FORMAT OF A DATA SET CONTAINING A ATTACHMENT STORAGE LOADER AND PROGRAM.

START AT CYLINDER 12 HEAD 0, AND GO THROUGH CYLINDER 74 HEAD 1. SECTOR DESCRIPTION

```
DEVICE ADDRESSES FOR THIS ATTACHMENT STORAGE LOADER AND PROGRAM COMMUNICATIONS TABLE AND ATTACHMENT STORAGE LOADER ATTACHMENT STORAGE LOAD AS MANY SECTORS AS NEEDED FOR THIS PROGRAM
```

MAP 0026-17

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08.00 ATTACHMENT STORAGE ONE SIDE DISKETTE FORMAT:

THE FOLLOWING IS THE DESCRIPTION OF THE ONE SIDE DISKETTE FORMAT:
THIS DISKETTE IS FORMATTED 128 BYTES/SECTOR, 26 SECTORS/TRACK.
THE FIRST SECTOR ON A TRACK IS NUMBER 1.
CYLINDER HEAD SECTOR DESCRIPTION IPL PROGRAM
IPL PROGRAM
IPL PROGRAM
IPL PROGRAM
IPL PROGRAM
IPL PROGRAM
IPL PROGRAM 000000 000000 123456 0 7 VOLUME LABEL 0 8 9 10 000 IPL PROGRAM IPL PROGRAM IPL PROGRAM IPL PROGRAM IPL PROGRAM IPL PROGRAM 000000 000000 11 12 13 14 15 16 0 0 17 COMMUNICATION AREA 1890123456

ATTACHMENT STORAGE LOAD
(3 COPIES. MAY TAKE UP TO 6 TRACKS.)
(THE REMAINDER OF DISKETTE IS NOT USED.) THREE COPIES OF THE ATTACHMENT STORAGE PROGRAM ARE ON THE DISKETTE. THEY ARE POINTED TO BY HEADER 1, HEADER 2, AND HEADER 3 RESPECTIVELY. THE REMAINDER OF THE DISKETTE IS NOT USED.

08.01 VOLUME LABEL:

0 1

1

THE VOLUME LABEL IS USED TO IDENTIFY THE VOLUME, THE OWN PERSON, THE SECURITY, AND THE SEQUENCE AND LENGTH OF THE PHYSICAL RECORDS ON THE TRACKS OF THE VOLUME. SEE IBM DISKETTE LABELS AND DATASET STRUCTURE IBM INTERDIVISIONAL STANDARD I-S 3-8010 105 1977-07 FOR THE FORMAT OF THIS RECORD.

08.02 HEADER LABEL:

THE HFADER LABEL IS USED TO IDENTIFY THE DATA SETS AND DESCRIBE THEIR LOCATION ON THE VOLUME. SEE IBM DISKETTE LABELS AND DATASET STRUCTURE IBM INTERDIVISIONAL STANDARD I-S 3-8010 105 1977-07 FOR THE FORMAT OF THIS RECORD.