9 T 0 4 A

A. PURPOSE OF TEST

1. TO CHECK ACCURACY OF INFORMATION WRITTEN ON ONE TAPE FRAME AND READ ON ANOTHER

B. METHOD OF TEST

1. THIS PROGRAM WRITES 400 RANDOM LENGTH, RANDOM WORD RECORDS. THEN READS AND CHECKS THESE RECORDS AND REWINDS. HERE THE PROGRAM HALTS TO PERMIT THIS TAPE REEL TO BE PLACED ON A DIFFERENT FRAME TO BE READ AND CHECKED.

2. THIS PROGRAM IS WRITTEN FOR UNIT 1 ON CHANNEL A AND USES 9IOM TO ADJUST FOR DESIRED CHANNELS

3. THIS PROGRAM USES THE STANDARD 709 ERROR PRINT ROUTINE 9DEPR FOR ERROR INDICATION AND PROGRAM CONTROL.

C. AREA OF MACHINE REQUIRED

1. UNITS MF, CF, CR, PR, DS AND TAPE UNITS TO BE TESTED

2. STORAGE LOCATIONS

00000 TO 02233	9T04 DIAGNOSTIC
05500 TO 06476	9IOM MODIFYING ROUTINE
06500 TO 07675	9DEPR ERROR ROUTINE

D. PROGRAM CONTROL

1. DECK

000	9LD01 LOADER
001 - 017	9T04 DIAGNOSTIC
018 - 041	9IOM MODIFICATION ROUTINE
042 - 070	9DEPR ERROR ROUTINE
072	TRANSFER CARD - TRA 30
072 - 073	BLANK CARDS

2. SENSE SWITCH CONTROL

SENSE SWITCHES 1, 3, 3, AND 4 ARE USED BY 9DEPR. SEE WRITE UP FOR 9DEPR FOR DETAILED DESCRIPTION OF THEIR USE WHICH IS BRIEFLY AS FOLLOWS

A. SWITCH 1 UP - TEST SENSE SWITCH 4

SWITCH 1 DN - REPEAT TEST LOOP

B. SWITCH 2 UP - INDICATE ERROR - TEST SSW3 TO PRINT OR HALT

SWITCH 2 DN - BYPASS ERROR INDICATION - TEST SSW1

C. SWITCH 3 UP - PRINTOUT IF SSW 2 UP THEN TEST SSW1

SWITCH 3 DN - STOP ON ERROR. IF SSW2 IS UP, THEN TEST SSW1

D. SWITCH 4 UP - PROCEED TO NEXT TEST ROUTINE

SWITCH 4 DN - REPEAT SECTION N TIMES, OR IF ERROR OCCURS TO NEXT SECTION.

E. SWITCH 5 UP - GO TO 9IOM TO ADJUST PROGRAM FOR NEXT CHANNEL OR UNIT

SWITCH 5 DN - HALT - THEN PRESS START TO REPEAT READ ON SAME CHANNEL

F. SWITCH 6 UP - END TEST - CALL IN NEXT PROGRAM

SWITCH 6 DN - TEST SSW 5

E. NORMAL STOPS

1. STOPS AT BEGINNING OF PROGRAM TO ENTER ON KEYS THE CONTROL WORDS FOR CHANNELS AN UNITS USED IN MODIFICATION ROUTINE 9IOM. ONE, TWO OR THREE STOPS WILL OCCUR CORRESPONDING TO THE NUMBER OF DS TO BE TESTED AS SPECIFIED BY THE TAG BITS OF THE FIRST CONTROL WORD.

A TAG OF 1 SPECIFIES CHN A AND/OR B
A TAG OF 2 SPECIFIES CHN C AND/OR D
A TAG OF 4 SPECIFIES CHN E AND/OR F

IF MORE THEN ONE DS IS TO BE TESTED, THEN THE FIRST

CONTROL WORD SHOULD CONTAIN A MULTIPLE TAG.

05517 ENTER CONTROL WORD FOR FIRST DS ON KEYS
TAG FOR ALL DS TO BE TESTED
PRESS START

05533 ENTER CONTROL WORD FOR CHN C AND/OR D
PRESS START

05540 ENTER CONTROL WORD FOR CHN E AND/OR F
PRESS START

05525 CONTROL WORD FAILED TO CONTAIN A TAG FOR ANY
DS. RE-ENTER FIRST CONTROL WORD WITH TAG
PRESS START

SEE CONTROL WORD FORMAT

NOTE - ONLY 1 TAPE FRAME PER CHANNEL SHOULD BE
CALLED FOR IN CONTROL WORDS

F. ERROR STOPS

1. 9DEPR ERROR INDICATION STOPS WITH SSW3 DOWN

06517 INDEX REGISTER C CONTAINS THE TWOS COMPLEMENT
OF THE ERROR EXIT ADDRESS. READ LIGHTS THAT ARE
OUT AND ADD 1 AND CONSULT THAT ADDRESS IN PROGRAM
LISTING FOR ERROR ANALYSIS.

06545 SAME AS ABOVE
PUSH START TO CONTINUE PROGRAM

G. ERROR PRINT OUTS

SEE WRITE UP FOR 9DEPR FOR EXAMPLE AND DESCRIPTION
OF PRINT OUT.

TEST LOC IS ADDRESS OF ENTRY TO ROUTINE IN WHICH
ERROR OCCURRED. OPN IS THE INSTRUCTION MOST BASIC
TO THE CONDITION BEING TESTED IN FAILING ROUTINE.
ERROR ADR IS THE EXIT FROM THE FAILING ROUTINE TO
9DEPR.

H. COMMENTS

1. TWO POST RESTARTS ARE USED IN THIS PROGRAM. DURING
WRITE THE RESTART WILL RETURN TO THE BEGINNING OF

THE WRITE SECTION AND DURING READ TO THE BEGINNING
OF THE READ SECTION.
ANY TIME THE CONSOLE IS RESET, PRESSING START WILL
TRANSFER THE PROGRAM TO BEGIN TESTING THE CURRENT
FRAME.

2. ONE OF THE MOST IMPORTANT FUNCTIONS OF THE ERROR PRINT OUT IS THE ERROR ADR. BY REFERRING TO THIS ADDRESS IN THE PROGRAM LISTING. THE ROUTINE WHICH FAILED MY BE LOCATED. BY ANALYZING THE ROUTINE WITH THE AID OF THE PROGRAM COMMENTS. IT IS HOPED THE CUSTOMER ENGINEER WILL BE ABLE TTO DETERMINE THE MANNER IN WHICH THE MACHINES FAILED AND SO HAVE SUFFICIENT INFORMATION TO DIAGNOSE THE CAUSE OF THE MALFUNCTION.

J. TABLE OF TEST ROUTINES AND ADDRESSES OF ENTRY
IN ORDER OF PERFORMANCE

1.	WRITE RANDOM BINARY RECS	BEGINS AT	00066
2.	READ CHECK RANDOM RECS	BEGINS AT	00153

File Attachments: Source Cards Deck

```
*                          9 T 0 4 A

*               729 TAPE FRAME INTERCHANGEABILITY TEST


                  00030         ORG 24
00030  0761 00 0 00000         NOP
00031  0760 00 0 00163  AA     SWT 3
00032  0020 00 0 00034         TRA *+2         TO PRINT OUT IDENTITY
00033  0020 00 0 00035         TRA *+2         BYPASS PRINT
00034  0074 00 4 00365  IDN    TSX PRID,4      GO TO PRINT TEST IDENTITY

00035  0074 00 4 05514         TSX IOC,4       ENTER ON KEY IN THE USUAL
                                               MANNER, I-O CONTROL WORDS
                                               CALLING FOR 1 TAPE FRAME
                                               ON EACH CHN DESIRED TO
                                               BE TESTED
00036  0074 00 4 05513  RUC    TSX IOCNT,4     GO TO RESET UNIT COUNT

00037  0500 00 0 05500  INTL   CLA CTRL1
00040  0120 00 0 00044         TPL *+4         CHECK IF PROGRAM READ
                                               FROM CARDS
00041  0500 00 0 00524         CLA WTBA1       YES - L WTBA 1
00042  0601 00 0 00527         STO WTB
00043  0020 00 0 00050         TRA *+5
00044  0500 00 0 00525         CLA WTBA2       NOT READ FROM CARDS -
00045  0601 00 0 00527         STO WTB         SET WTBA 2
00046  0500 00 0 00526         CLA RTB         L RTBA 1
00047  0601 00 0 00360         STO FINL1

00050  0500 00 0 05504         CLA CTRA        CHECK FOR CHN A UNIT
00051  0100 00 0 00355         TZE TCTX        NO UNIT -
00052  0500 00 0 00106         CLA B21+1       L WTB CURRENT UNIT
00053  0340 00 0 00527         CAS WTB
00054  0020 00 0 00056         TRA *+2
00055  0020 00 0 00061         TRA *+4
00056  0074 00 4 05512         TSX CTX,4
00057  0003 46 0 00065         HTR B19-1,0,PASS+1 MODIFCATION AREA
00060  0020 00 0 00052         TRA *-6

00061  0500 00 0 00065         CLA *+4         L TRA B19
00062  0601 00 0 00000         STO 0           POST RESTART FOR WRITE

00063  0760 00 0 00166         SWT 6
00064  0000 00 0 00063         HTR *-1
00065  0020 00 0 00066         TRA B19

*            SENSE SWITCH 6 MUST BE DOWN TO CHECK MULTIPLE FRAMES.  AS
*            LONG AS SENSE SWITCH 6 IS DOWN THE PROGRAM WILL HALT AFTER
*            EACH FRAME IS READ AND CHECKED TO PERMIT CHANGING FRAMES.
*            PRESS START TO CONTINUE.  AS LAST FRAME IS CHECKED SENSE
*            SWITCH 6 MAY BE RAISED TO CALL IN THE NEXT PROGRAM.
```

```
*             WRITE 400 RANDOM BINARY RECORDS

00066  0772 00 0 01201  B19    REWA 1
00067  0534 00 1 00545         LXA K3+4,1     L10
00070 -0500 00 1 00603         CAL K10+8,1    INITIALIZE RANDOM
00071  0602 00 1 00613         SLW K11+8,1    GENERATOR
00072  2 00001 1 00070         TIX  *-2,1,1
00073  0020 00 0 00075         TRA B20

00074  666322216001            BCD 1WTBA 1
00075  0534 00 2 00530  B20    LXA K2,2       L NO OF RECORDS IN XRB

00076  0534 00 2 00530         LXA K2,2       L +400
00077  0500 00 0 00530         CLA K2         L NUMBER OF RECORDS
00100  0400 00 0 00377         ADD ONE        L +1
00101  0601 00 0 06557         STO RECNO
00102  0022 00 0 00103  B21A   TRCA *+1       TURN REDUNDANCY TAPE
                                              CHECK OFF
00103  0760 00 0 00005         IOT            TURN INPUT-OUTPUT CHECK
00104  0020 00 0 00105         TRA *+1        LIGHT OFF

00105  0074 00 4 00304  B21    TSX GEN1,4     TO GENERATE RANDOM
                                              BINARY RECORDS

00106  0766 00 0 01221         WTBA 1         WRITE RANDOM BINARY
                                              RECORDS
00107  0022 00 0 00110         TRCA *+1       TURN OFF TRC IND IF ON
00110  0540 00 0 00415         RCHA CT10      TRANSFER REC TO TAPE

                                              DELAY BEFORE DISCONNECT
00111 -0060 00 0 00113         TCNA B23       UNIT SHOULD NOT BE IN
                                              OPERATION
00112  0060 00 0 00111         TCOA *-1

00113  0074 00 4 06560  B23    TSX RDNCK,4    REDUNDANCY CHECK
00114  0020 00 0 00075         TRA B20        IF A TAPE CHECK OCCURS
                                              THERE WILL BE NO
                                              ATTEMPT TO REWRITE THE
                                              RECORD
00115  0500 00 0 00612         CLA K11+7
00116  0760 00 0 00001         LBT
00117  0020 00 0 00151         TRA B29        DO NOT BACKSPACE READ
00120  0020 00 0 00122         TRA B25


                                              BACKSPACE READ AFTER
                                              WRITING CURRENT LAST RECORD

00121  516322216001            BCD 1RTBA 1
00122  0761 00 0 00000  B25    NOP
00123  0764 00 0 01201         BSRA 1
00124  0762 00 0 01221         RTBA 1         READ RECORD WRITTEN
00125  0540 00 0 00417         RCHA CT12
00126 -0060 00 0 00130         TCNA B26
00127  0020 00 0 00126         TRA *-1
```

```
00130  0074 00 4 06560  B26    TSX RDNCK,4    CHECK REDUNDANCY TAPE
00131  0020 00 0 00122         TRA B25        CHECK

00132  0074 00 4 00327         TSX GEN3,4


00133  0534 00 1 00517         LXA WDCT,1     WORD COUNT
00134  0500 00 0 00517         CLA WDCT       L NUMBER OF WORDS
00135  0400 00 0 00377         ADD ONE        L +1
00136  0601 00 0 06556         STO WDNO
00137  0500 00 1 00000  B27    CLA 0,1        WRFLD
00140  0560 00 1 00000         LDQ 0,1        RDFLDT
00141  0340 00 1 00000         CAS 0,1
00142  0020 00 0 00144         TRA *+2        COMPARISON ERROR
00143  0020 00 0 00146         TRA *+3

00144  0074 00 4 06502         TSX ERROR-2,4  COMPARISON ERROR
00145  0020 00 0 00122         TRA B25

00146  2 00001 1 00137         TIX B27,1,1    DECEMENT WORD NUMBER

                                               PHYSICAL
00147 -0760 00 0 01000  B28    ETTA           END OF TAPE TEST
00150  0020 00 0 00066         TRA B19

00151  2 00001 2 00102  B29    TIX B21A,2,1   DECEMENT RECORD NUMBER
00152  0770 00 0 01201         WEFA 1         WRITE END OF FILE


*             REWIND AND READ VARIABLE LENGTH BINARY RECORDS

00153  0534 00 1 00545         LXA K3+4,1     L10
00154 -0500 00 1 00603         CAL K10+8,1    INITIALIZE RANDOM
00155  0602 00 1 00613         SLW K11+8,1    GENERATOR
00156  2 00001 1 00154         TIX *-2,1,1
00157  0020 00 0 00161         TRA B30
00160  516322216001            BCD 1RTBA 1
00161  0772 00 0 01201  B30    REWA 1
00162  0060 00 0 00162         TCOA *         DELAY
00163  0760 00 0 00005         IOT            TURN IOT IND OFF IF ON
00164  0761 00 0 00000         NOP

00165  0500 00 0 00301         CLA B37A+4     L TRA B30-6
00166  0601 00 0 00000         STO 0          POST RESTART FOR READ

00167  0534 00 2 00530  B31    LXA K2,2       L +1000
00170  0500 00 0 00530         CLA K2         L NUMBER OF RECORDS
00171  0400 00 0 00377         ADD ONE        L +1
00172  0601 00 0 06557         STO RECNO

00173  0074 00 4 00304  B31A   TSX GEN1,4     GENERATE RANDOM RECORD

00174  0022 00 0 00175         TRCA *+1       TURN OFF RDNCY IND IF ON
00175  0762 00 0 01221         RTBA 1         READ TAPE BINARY
00176  0540 00 0 00417         RCHA CT12      TRANSFER CONTROL WORD
```

```
                                                    TO BUFFER
00177 -0060 00 0 00201          TCNA B34            TRA WITH CHAN NOT IN OPN
00200  0020 00 0 00177          TRA *-1
00201  0074 00 4 06560  B34     TSX RDNCK,4
00202  0020 00 0 00161          TRA B30
00203  0074 00 4 00327          TSX GEN3,4          FORM COMPARE ADDRESSES

00204  0534 00 1 00517          LXA WDCT,1          WORD COUNT
00205  0500 00 0 00517          CLA WDCT            L NUMBER OF WORDS
00206  0400 00 0 00377          ADD ONE             L +1
00207  0601 00 0 06556          STO WDNO
00210  0500 00 1 00000  B35     CLA 0,1             WORD WRITTEN
00211  0560 00 1 00000          LDQ 0,1             WORD READ
00212  0340 00 1 00000          CAS 0,1             AND COMPARE
00213  0020 00 0 00215          TRA B36             ERROR
00214  0020 00 0 00220          TRA B36+3

00215  0074 00 4 06502  B36     TSX ERROR-2,4
00216  0020 00 0 00161          TRA B30

00217  0760 00 0 00142          SLN 2               TURN ON SL2 ON ERROR
00220  2 00001 1 00210          TIX B35,1,1         DECREASE WORD COUNT BY
                                                    1
00221 -0760 00 0 00142          SLT 2               TEST SL2
00222  0020 00 0 00251          TRA B36B            OFF
00223 -0500 00 0 00612          CAL K11+7
00224 -0760 00 0 00001          PBT
00225  0020 00 0 00251          TRA B36B            DO NOT BACKSPACE READ

*             BACKSPACE READ AFTER READING
*             CURRENT LAST RECORD

00226  0764 00 0 01201          BSRA 1
00227  0762 00 0 01221          RTBA 1
00230  0540 00 0 00417          RCHA CT12
00231  0060 00 0 00231          TCOA *              DELAY
00232  0074 00 4 06560          TSX RDNCK,4         CHECK REDUNDANCY
00233  0761 00 0 00161          NOP B30

00234  0074 00 4 00327          TSX GEN3,4

00235  0534 00 1 00517          LXA WDCT,1
00236  0500 00 0 00517          CLA WDCT
00237  0400 00 0 00377          ADD ONE             L +1
00240  0601 00 0 06556          STO WDNO
00241  0500 00 1 00000  B36A    CLA 0,1
00242  0560 00 1 00000          LDQ 0,1
00243  0340 00 1 00000          CAS 0,1
00244  0020 00 0 00246          TRA *+2
00245  0020 00 0 00250          TRA *+3
00246  0074 00 4 06502          TSX ERROR-2,4       COMPARISON ERROR
00247  0761 00 0 00161          NOP B30
00250  2 00001 1 00241          TIX B36A,1,1        DECREMENT WORD NUMBER

00251  2 00001 2 00173  B36B    TIX B31A,2,1        DECREMENT RECORD NUMBER
00252  0020 00 0 00254          TRA B37             GO TO READ NEXT VARIABLE
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```
                                                    LENGTH BINARY RECORD
00253  662526216001             BCD 1WEFA 1
00254  0762 00 0 01221  B37     RTBA 1
00255  0540 00 0 00546          RCHA K4
00256  0060 00 0 00256          TCOA *          DELAY
00257  0640 00 0 00550          SCHA K4+2       DSC CONTROL WORD
00260  0560 00 0 00552          LDQ K4+4
00261  0500 00 0 00550          CLA K4+2
00262  0340 00 0 00552          CAS K4+4
00263  0020 00 0 00265          TRA *+2         ERROR
00264  0020 00 0 00275          TRA B37A        SHOULD XFER
00265  0340 00 0 00551          CAS K4+3
00266  0020 00 0 00270          TRA *+2
00267  0020 00 0 00273          TRA *+4
00270  0074 00 4 06503          TSX ERROR-1,4   FAILURE TO DISCN CORRECTLY
                                                OR FAILED TO SCH CORRECTLY
00271  0761 00 0 00254          NOP B37
00272  0020 00 0 00275          TRA B37A
00273  0074 00 4 06503          TSX ERROR-1,4   FALSE EOR READ AT EOF
00274  0761 00 0 00254          NOP B37

00275  0030 00 0 00300  B37A    TEFA *+3        EOF SHOULD BE ON
00276  0074 00 4 06503          TSX ERROR-1,4   FAILED TO READ EOF
00277  0761 00 0 00254          NOP B37
00300  0074 00 4 06511          TSX OK,4
00301  0020 00 0 00153          TRA B30-6

00302  0761 00 0 00000          NOP
00303  0020 00 0 00345          TRA PASS

                                                    RANDOM BINARY GENERATOR

00304  0560 00 0 00612  GEN1    LDQ K11+7       RANDOM NUMBER GENERATOR
00305  0500 00 0 00376          CLA ZERO        CLEAR ACC
00306 -0763 00 0 00011          LGL 9
00307  0400 00 0 00541          ADD K3          L+1
00310  0734 00 1 00003          PAX 3,1         FORM NO.OF WORDS PER REC
00311  0634 00 1 00517          SXA WDCT,1      SET UP WORD COUNT IN
00312 -0634 00 1 00415          SXD CT10,1
00313 -0634 00 1 00417          SXD CT12,1
00314  0401 00 0 00542          ADM K3+1        INITIAL ADDR OF WR FLD
00315  0621 00 0 00323          STA GEN2+2
00316  0754 00 1 00000          PXA 0,1
00317  0400 00 0 00544          ADD K3+3        START OF RANDOM NO. FLD
00320  0621 00 0 00322          STA GEN2+1

00321 -0500 00 0 00612  GEN2    CAL K11+7       GENERATE N-RANDOM WORDS
00322  0401 00 1 00000          ADM 0,1
00323  0602 00 1 00000          SLW 0,1
00324  2 00001 1 00322          TIX *-2,1,1
00325  0602 00 0 00612          SLW WRFLD-1
00326  0020 00 4 00001          TRA 1,4         EXIT

00327  0500 00 0 00542  GEN3    CLA K3+1        INITIAL ADDR WRITE FIELD
00330  0400 00 0 00517          ADD WDCT        WORD COUNT
00331  0621 00 0 00137          STA B27
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00332  0621 00 0 00210         STA B35
00333  0621 00 0 00241         STA B36A
00334  0500 00 0 00543         CLA K3+2       INITIAL ADDR READ FIELD
00335  0400 00 0 00517         ADD WDCT
00336  0621 00 0 00140         STA B27+1
00337  0621 00 0 00141         STA B27+2
00340  0621 00 0 00211         STA B35+1
00341  0621 00 0 00212         STA B35+2
00342  0621 00 0 00242         STA B36A+1
00343  0621 00 0 00243         STA B36A+2

00344  0020 00 4 00001         TRA 1,4        CONTINUE PROGRAM


00345  0772 00 0 01201  PASS   REWA 1         REWIND TEST FRAME
00346  0760 00 0 00163         SWT 3          TEST SENSE SWITCH 3
00347  0020 00 0 00371         TRA PRT1       GO TO PRINT PASS COMPLETE


00350  0760 00 0 00166  FINL   SWT 6
00351  0020 00 0 00360         TRA FINL1
00352  0760 00 0 00165         SWT 5
00353  0020 00 0 00355         TRA TCTX
00354  0000 00 0 00153         HTR B30-6

*    REMOVE TAPE REEL FROM FRAME 1 AND PLACE IT ON NEXT FRAME TO BE
*    TESTED.   SET DIAL OF NEW TEST FRAME TO 1 AND PASS FRAME TO 0.
*    PRESS START


00355  0074 00 4 05512  TCTX   TSX CTX,4
00356  0003 46 0 00065         HTR B19-1,0,PASS+1   MODIFICATION AREA
00357  0020 00 0 00066         TRA B19

00360  0762 00 0 01321  FINL1  RCDA           SELECT CARD READER
00361  0540 00 0 00364         RCHA FNLX      READ IN
00362  0544 00 0 00000         LCHA 0         NEXT
00363  0020 00 0 00001         TRA 1          PROGRAM

00364 -1 00003 0 00000  FNLX   MON 0,0,3


*             PRINT - NOW PERFORMING DIAGNOSTIC TEST 9T04

00365  0766 00 0 01361  PRID   WPRA 1         PRINT
00366  0760 00 0 01363         SPRA 3         DOUBLE SPACE
00367  0540 00 0 00411         RCHA CT1       TEST IDENTITY
00370  0020 00 4 00001         TRA 1,4


*             PRINT - 9T04  PASS COMPLETE

00371  0766 00 0 01361  PRT1   WPRA 1         PRINT
00372  0760 00 0 01363         SPRA 3         DOUBLE SPACE
00373  0540 00 0 00413         RCHA CT2       PASS COMPLETE
00374  0020 00 0 00350         TRA FINL
```

```
*             CONSTANT

00375 -377777777777     ONES   OCT -3777777777777
00376 +000000000000     ZERO   OCT 0000000000000
00377 +000000000001     ONE    OCT +1
00400 +000000000002     TWO    OCT +2
00401 +000000000003     THREE  OCT +3
00402 +000000000004     FOUR   OCT +4
00403 +000000000005     FIVE   OCT +5
00404 +000000000006     SIX    OCT +6
00405 +000000000007     SEVEN  OCT +7
00406 +000000000010     EIGHT  OCT +10
00407 +000000000011     NINE   OCT +11
00410 +000000000012     TEN    OCT +12

00411  0000 30 0 00421  CT1    IOCD PRIDN,0,24
00412  0000 00 0 00000         HTR 0         PROGRAM PROTECT - I-O DISC
00413  0000 30 0 00451  CT2    IOCD PR1,0,24
00414  0000 00 0 00000         HTR 0         PROGRAM PROTECT - I-O DISC
00415  0000 00 0 00613  CT10   IOCD WRFLD    CONTROL WORD FOR
                                             WRITING RANDOM BINARY
00416  0000 00 0 00000         HTR 0         RECORDS
00417  0000 00 0 01613  CT12   IOCD RDFLD,0,0 CONTROL WORD FOR READ
00420  0000 00 0 00000         HTR           REC BINARY


*   PRINT  -  NOW PERFORMING DIAGNOSTIC TEST 9T04

00421 +002241004010     PRIDN  OCT +002241004010  9 ROW LEFT
00422 +000000000000            OCT +0             9 ROW RIGHT
00423 +000000000000            OCT +000000000000  8 L
00424 +000000000000            OCT +0
00425 +010010200000            OCT +010010200000  7 L
00426 +000000000000            OCT +0
00427 +141400040000            OCT +141400040000  6 L
00430 +000000000000            OCT +0
00431 +204020100200            OCT +204020100200  5 L
00432 +000000000000            OCT +0
00433 +000102000001            OCT +000102000001  4 L
00434 +000000000000            OCT +0
00435 +000000012444            OCT +000000012444  3 L
00436 +000000000000            OCT +0
00437 +000000020100            OCT +000000020100  2 L
00440 +000000000000            OCT +0
00441 +000000400000            OCT +000000400000  1 L
00442 +000000000000            OCT +0
00443 +040000030546            OCT +040000030546  0 L
00444 +000000000000            OCT +0
00445 +312720140000            OCT +312720140000  11 L
00446 +000000000000            OCT +0
00447 +005053606200            OCT +005053606200  12 L
00450 +000000000000            OCT +0

*    PRINT  -  9T04   PASS COMPLETE
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```
00451 +010000000000     PR1    OCT +010000000000  9 ROW LEFT
00452 +000000000000            OCT +0              9 ROW RIGHT
00453 +000000000000            OCT +000000000000  8 L
00454 +000000000000            OCT +0
00455 +000010020000            OCT +000010020000  7 L
00456 +000000000000            OCT +0
00457 +000000100000            OCT +000000100000  6 L
00460 +000000000000            OCT +0
00461 +000000005000            OCT +000000005000  5 L
00462 +000000000000            OCT +0
00463 +001000040000            OCT +001000040000  4 L
00464 +000000000000            OCT +0
00465 +004000212000            OCT +004000212000  3 L
00466 +000000000000            OCT +0
00467 +000003000000            OCT +000003000000  2 L
00470 +000000000000            OCT +0
00471 +000004000000            OCT +000004000000  1 L
00472 +000000000000            OCT +0
00473 +006003002000            OCT +006003002000  0 L
00474 +000000000000            OCT +0
00475 +000010170000            OCT +000010170000  11 L
00476 +000000000000            OCT +0
00477 +000004205000            OCT +000004205000  12 L
00500 +000000000000            OCT +0


00501 +000000000000     CONST  OCT 0000000000000
00502 +000000000100            OCT 0000000000100
00503 +000000000172            OCT 0000000000172
00504 +000000000440            OCT 0000000000440
00505 +000000000000            OCT 0000000000000
00506 +000000000000            OCT 0000000000000
00507 +000000000000     XRA    OCT 0
00510 +000000000000     XRB    OCT 0
00511 +000000000000     XRC    OCT 0
00512 +000000000000     TEMP   OCT
00513 +000000000000     TEMP1  OCT 0000000000000
00514 +000000000000     TEMP2  OCT 0000000000000
00515 +000000000000     TEMP3  OCT 0000000000000
00516  0000 07 0 01613         HTR RDFLD,0,7
00517 +000000000000     WDCT   OCT
00520 +000000000000            OCT             INITIAL WR ADDR + COUNT

00521 +000000000000     IOCTT  OCT +0          TAPE FRAME COUNT

00522 +000000000760     CTR1   OCT +760
00523 +000000076000     CTR2   OCT +76000


00524  0766 00 0 01221  WTBA1  WTBA 1
00525  0766 00 0 01222  WTBA2  WTBA 2
00526  0762 00 0 01221  RTB    RTBA 1
00527 +000000000000     WTB    OCT 0
```

```
00530 +000000000400     K2     OCT +400       RANDOM RECORD COUNT
00531 +000000000622            OCT 622
00532 +000000000300            OCT 300
00533 +000000000060            OCT 60
00534 +000000000026            OCT +26
00535  0020 00 0 00031          TRA AA         REPEAT PROGRAM
00536 +000000000400            OCT +400
00537 +000000007000            OCT +7000
00540 +000000000375            OCT +375
00541 +000000000001     K3     OCT +1

00542  0000 00 0 00613          HTR WRFLD
00543  0000 00 0 01613          HTR RDFLD
00544  0000 00 0 00603          HTR K11
00545 +000000000010            OCT 10
00546  2 00036 0 01613  K4     PTW RDFLD,0,30 TRIGGER 1 ON
00547  0 00000 0 00547          PZE K4+1       NO TRIGGERS ON
00550  0000 00 0 00000          HTR
00551  0 00550 0 00547          PZE K4+1,0,K4+2
00552  2 00547 0 01613          IORP RDFLD,0,K4+1

00553 +000000004043     K5     OCT 00000004043
00554 +000000000017     K6     OCT +17
00555 +000000001000            OCT +1000
00556 +000000001001            OCT +1001
00557 +000000000100            OCT +100
00560 +000000000101            OCT +101
00561 +000000000036            OCT +36
00562 +000000000020            OCT +20
00563 +000000000102            OCT +102
00564 +377777777767     K8     OCT +377777777767
00565 -343677616030            OCT -343677616030  MASK FOR PASS PRINT
00566 +012301230123     K9     OCT +012301230123
00567 +171717171717            OCT +171717171717
00570 +175757575757            OCT +175757575757
00571 +121212121212            OCT +121212121212
00572 +125252525252            OCT +125252525252
00573 -331011416132     K10    OCT -331011416132
00574 +033420275437            OCT +033420275437
00575 -126044765051            OCT -126044765051
00576 -202037467555            OCT +602037467555
00577 -305552746526            OCT -305552746526
00600 -134703564071            OCT -134703564071
00601 +364271003007            OCT +364271003007
00602 +060203746526            OCT +60203746526
                 00603  K11    EQU K10+8

                 00613  WRFLD  EQU K11+8
                 01613  RDFLD  EQU WRFLD+512


                 06504  ERROR  EQU 3396
                 06511  OK     EQU 3401
                 06560  RDNCK  EQU 3440
                 06556  WDNO   EQU 3438
                 06557  RECNO  EQU 3439
```

```
05500  CTRL1  EQU 2880
05504  CTRA   EQU 2884
05512  CTX    EQU 2890
05513  IOCNT  EQU 2891
05514  IOC    EQU 2892

00000         END
```

EOF*