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LOCTR OBJECT TEXT      STMT SOURCE STATEMENT      COPYRIGHT IBM CORP 1976
3  ***** COPY LOG7869 ***** ** MAP EC HISTOPY **
4  *****
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6  *****
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001800
000232
00180C
00180E
001810
001818
00181A
00189A
00189C
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0018A0
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LOCTR OBJECT TEXT      STMT SOURCE STATEMENT      COPYRIGHT IBM CORP 1976
002500 25A6 198 ***** DC A(ENTPT) ***** POINT TO MAP ENTRY POINT TABLE
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001800
000232
00180C
00180E
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001818
00181A
00189A
00189C
00189E
0018A0
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0019DA
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0019F8
001A02
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001A16

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LOCTR OBJECT TEXT STMT SOURCE STATEMENT COPYRIGHT IBM CORP 1976
308 *****
309 *****
310 **
311 ** STEP AND RULE ADDRESS TABLE **
312 **
313 *****
314 *****
002502 2530 DC AL2(N00001)
002504 0001 DC XL2'0001'

LOCTR OBJECT TEXT STMT SOURCE STATEMENT COPYRIGHT IBM CORP 1976
0025A4 0000 422 DC AL2(DUMMY)
0025A6 423 ENTPT EQU *
424 *****
425 *****
426 **
427 ** ENTRY POINT TABLE **
428 **
429 *****
430 *****
0025A6 C140 431 ENTPT EP=A,STEP=00001
0025A8 2530 432+ DC CL2'A'

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LOCTR OBJECT TEXT      STMT SOURCE STATEMENT
002662 539+SCITD EQU DEV1
00266A 540+DCBUF EQU *
00266A 541+DCB1 DC A(*-*)
00266C 542+DCB2 DC A(*-*)
00266E 543+DCB3 DC A(*-*)
002670 544+DCB4 DC A(*-*)
002672 545+DCB5 DC A(*-*)
002674 546+DCB6 DC A(*-*)
002676 547+DCB7 DC A(*-*)
002678 548+DCB8 DC A(*-*)
00267A 549+*
00267A 550+CSBUF EQU *
00267A 551+CSTL1 DC A(*-*)
00267C 552+CSTL2 DC A(*-*)
00267E 553+CSTL3 DC A(*-*)
002680 554+CSTL4 DC A(*-*)
002682 555+CSTL5 DC A(*-*)
002684 556+CSTL6 DC A(*-*)
002686 557+CSTL7 DC A(*-*)
002688 558+CSTL8 DC A(*-*)
00268A 559+*
00268A 560+$SUBN DC A(*-*)
00268C 561+$DATA DC 2A(*-*)
002690 562+$INTL DC X'0021'
002692 563+$TURTN DC A(*-*)
002694 564+$DVID DC X'00B2'
002696 565+$VVAL DC A(DEVADD)
002698 566+ DC A(*-*)
567+*
568+* THIS TEST UNIT WILL RETURN TO MDI WITHOUT DOING ANY PROGRAM
569+* FUNCTION. THE RESULTS THAT WERE SET UP IN THE RESULTS AREA ARE
570+* STILL VALID BUT A DIFFERENT TEST IS TO BE PERFORMED.
571+*
00269A 572+T3C02 MVWI X'3C02', $TUID SET UP TEST UNIT ID
0026A0 573+ BXS (R7) RETURN TO MDI SUPER
574+* COPY COMREQ
575+*
576+* *****
577+*
578+* EQUATED NAMES FOR SUPPORTED SVC'S
579+*
580+* *****
581+ OUT EQU 0 OUT SVC
582+ OUTIN EQU 1 OUTIN SVC
583+ IDLE EQU 2 IDLE SVC
584+ ASCII EQU 3 HEX TO ASCII SVC
585+ CHANGE EQU 4 CHANGE LEVEL SVC
586+ PGMCK EQU 5 ALLOW RETURN ON PROGRAM CHECK SVC
587+ EXIT EQU 6 EXIT SVC
588+ TERM EQU 7 TERMINATE SVC
589+ RESET EQU 8 RESET DEVICE SVC
590+ RID EQU 9 READ ID SVC
591+ START EQU 10 START CYCLE STEAL SVC
592+ STCSS EQU 11 START CYCLE STEAL STATUS SVC
593+ PREP EQU 12 PREPARE DEVICE SVC
594+ READ0 EQU 13 READ WITH FUNCTION BIT 3 OFF SVC
595+ READ1 EQU 14 READ WITH FUNCTION BIT 3 ON SVC
596+ WRIT0 EQU 15 READ STATUS SVC
597+ WRIT1 EQU 16 WRITE WITH FUNCTION BIT 3 OFF SVC
598+ WRIT2 EQU 17 WRITE WITH FUNCTION BIT 3 ON SVC
599+ CTRL EQU 18 CONTROL SVC
600+ RIBC EQU 19 RELEASE INTERRUPT CONTROL BLOCK SVC
601+ CIBC EQU 20 CONNECT INTERRUPT CONTROL BLOCK SVC
602+ HIO EQU 21 HALT ALL I/O
603+ RECSO EQU 22 REQUEST USE OF DCP DISK SVC
604+ RELSD EQU 23 RELEASE USE OF DCP DISK SVC
605+ HALT EQU 24 HALT SVC
606+ ETOH EQU 25 EBCDIC TO HEX SVC (STRING)
607+ HTOH EQU 26 HEX TO EBCDIC SVC (STRING)
608+ ATOH EQU 27 ASCII TO HEX SVC (STRING)
609+ HTOA EQU 28 HEX TO ASCII SVC (STRING)
610+ ATOA EQU 29 EBCDIC TO ASCII SVC (STRING)
611+ ATOE EQU 30 ASCII TO EBCDIC SVC (STRING)
612+ READI EQU 31 READ DATA SETS FOR MDI/UTIL
613+ WRITI EQU 32 WRITE DATA SETS FOR UTIL
614+*
615+* *****
616+*
617+* EQUATES USED BY TU'S AS CONSTANTS
618+*
619+* *****
620+ PLUS EQU C'+1 PLUS CHAR
621+ MINUS EQU C'-1 MINUS CHAR
622+ ZERO EQU 0
623+ ONE EQU 1
624+ TWO EQU 2
625+ THREE EQU 3
626+ FOUR EQU 4
627+ FIVE EQU 5
628+ SIX EQU 6
629+ SEVEN EQU 7
630+ EIGHT EQU 8
631+ NINE EQU 9
632+ TEN EQU 10
633+ ELEVN EQU 11
634+ TWELV EQU 12
635+ THRTN EQU 13
636+ FIVTN EQU 14
637+ SIXTN EQU 15
638+ SEVNTN EQU 16
639+ EIGHTN EQU 17
640+ NINTN EQU 18
641+ ONETN EQU 19
642+ TWOTN EQU 20
643+ ONEK EQU 1024
644+ TWOK EQU 2048
645+ THREK EQU 3072
646+ FOURK EQU 4096
647+ M1 EQU -1
648+ M2 EQU -2
649+ M3 EQU -3
650+ M4 EQU -4
651+ M5 EQU -5
652+ M6 EQU -6
653+*
654+*
655+* THE FOLLOWING ARE EQUATES FOR BIT DISPLACEMENTS FROM THE
656+* BEGINNING OF THE BYTE TO EACH BIT IN THE WORD OF SWITCHES.
657+*

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LOCTR OBJECT TEXT      STMT SOURCE STATEMENT
000000 658 *****
000001 659 BS0 EQU 0
000002 660 BS1 EQU 1
000003 661 BS2 EQU 2
000004 662 BS3 EQU 3
000005 663 BS4 EQU 4
000006 664 BS5 EQU 5
000007 665 BS6 EQU 6
000008 666 BS7 EQU 7
000009 667 BS8 EQU 8
000010 668 BS9 EQU 9
000011 669 BS10 EQU 10
000012 670 BS11 EQU 11
000013 671 BS12 EQU 12
000014 672 BS13 EQU 13
000015 673 BS14 EQU 14
000016 674 BS15 EQU 15
000017 675 COPY T7899
000018 676 T7899 TUIT $ERR$
000019 677 *****06PEB76**
000020 678+*
000021 679+*
000022 680+* TEST UNIT
000023 681+*
000024 682+* FORMAT ROUTINE
000025 683+*
000026 684+* PURPOSE
000027 685+*
000028 686+* THIS ROUTINE WILL FORMAT OR TEST (WP/PD) SELECTED CYLINDER,
000029 687+* USING THE PARMETERS (CYL,HEAD,SECTOR) SUPPLIED BY 'TUINPUT'.
000030 688+*
000031 689+* CALLING SEQUENCE
000032 690+*
000033 691+* 'TUINPUT' FORMAT IS AS FOLLOWS:
000034 692+* FORMAT/TEST MULTI-SECTOR CYLINDER HEAD SECTOR
000035 693+* 00-TEST 00-NO 0000-CYL0 00-HD0 00-SEC 0
000036 694+* 01-FORMAT 01-YES 012E-CYL302 01-HD1 3B-SEC 59
000037 695+* 02-ATLEPNATE ASSIGNMENT 80-87 FIXED HEADS
000038 696+*
000039 697+* FLAG BYTE ID WRITTEN NORMAL OR SKEWED
000040 698+* 00-GOOD SECTOR 00= ID TO BE WRITTEN NORMAL
000041 699+* 01-GOOD ALTERNATE SECTOR (CYL1) 01= ID TO BE WRITTEN SKEWED
000042 700+* 02-DEFECTIVE SECTOR
000043 701+* 03-DEFECTIVE ALTERNATE (CYL1)
000044 702+* EX:FORMAT;MULTI-SECTOR MODE;CYL 302;HEAD 1;SECTOP 0;FLAG 0;NORMAL
000045 703+* INPUT= F0101 012E 0100 0000
000046 704+*
000047 705+* IN MULTI-SECTOR MODE,TEST OR FORMAT WILL START WITH THE SELECTED
000048 706+* SECTOR AND CONTINUE TO THE END OF TRACK.
000049 707+*
000050 708+* PROGRAM PASSES STATUS OF TEST OR FORMAT TO MDI AS FOLLOWS:
000051 709+* NO STATUS RETURNED
000052 710+*
000053 711+* RETURN CONTROL
000054 712+*
000055 713+* B TUPTN* RETURN TO MDI SUPERVISOR
000056 714+*
000057 715+* *****
0026A2 6F0D 2692 7899 MVW F7 $TURTN SAVE RETURN ADDRESS
0026A6 4020 269A MVWI X'7899', $TUID SET UP TEST UNIT ID
0026AC 4424 2694 MVB OFTN1, R4 CLEAR DEV DEP STG AND CONNECT I/O BL
0026B0 6E03 3290 BAL $CONC, R6 ERROR ADPS FOR INVALID PPEP
0026B4 32C4 DC A($ERR$)
721+*
0026B6 4724 327C MVA IOBLK, P7 SETUP IOBLK
0026BA 6008 SVC RESET ISSUE IO RESET
0026BC C020 0232 MVB CPUID, R0 DETERMINE TYPE OF PROCESSOR
0026C0 F025 CBT 37, R0 *
0026C2 1804 JNE T78TC JUMP IF NOT 4955
0026C4 4020 26D4 254C MVWI X'254C', T78T1+2 LOAD TIME CONSTANT FOR 2 SEC
0026C8 5003 J T78T1
0026CC 4020 26D4 0C0E T78TC MVWI X'0C0E', T78T1+2 (4953) LOAD TIME CONS FOR 2 SEC
0026D2 4024 0000 T78T1 MVWI X'0000', P0 TIME OUT 2 SEC
0026D8 6002 SVC IDLE *
0026DA B8FE JCT T785, P0 *
0026DC 4C9C TBTR (R4, R60) RESET ALT ASSIGNMENT ALPEADY MADE
0026DE 4C9D TBTR (R4, B61) RESET DATA UNRECOVERABLE FLAG
0026E0 4C9E TBTR (P4, B62) PESET SDD FLAG
0026E2 4020 307C 0000 MVWI 0, LGSEC INIT LGSEC
0026E4 4020 3124 0100 MVWI X'0100', SRD+8 SETUP COUNT TO CLEAR READ BUFFER
0026E6 4020 3096 0003 MVWI 3, CTR02 INIT RETRY COUNTER
0026E8 4020 3098 0003 MVWI 3, CTR03 *
0026EA 4020 3000 2662 MVA SCTID, RSDCB+14 LOAD BUFFER ADDRESS IN RD SECT ID DCB
0026EC 4020 3030 2DC2 MVA WRBUF, WRDCB+14 LOAD BUFFER ADDRESS IN WRT DCB
0026EE 4020 3050 2EC2 MVA RDDEF, RDCB+14 LOAD BUFFER ADDRESS IN READ DCB
002700 6E03 2D68 BAL $WBUT, R6 INIT WRITE BUFFER
002702 6E03 30FA BAL $RECI, R6 RECALIBRATE
002704 32C4 DC A($ERR$) EPROR
002706 4CA1 TBTR (R4, ER) INTERRUPT EPROR?
002708 6A00 32C4 BON $ERR$ YES-LOGOUT ERROR
00270A 4020 2FF6 0F00 MVWI X'0B00', RSDCB+4 READ SECTOR 6 TO DETERMINE IF SECTOR
00270C 4C64 TBTS (R4, XE) * IS WRITTEN IN GSD OR SDD FORMAT
00270E 6E03 3102 BAL $RDID, R6 READ ID
002710 4020 2666 0600 DC A($ERR$) SDD FORMAT?
002712 1801 CWT X'6000', SCTID+4 NO
002714 1801 JNE P401 YES
002716 4C5E TBTS (R4, B62) SET SDD FLAG
002718 402B 1948 0200 RT401 TWI X'0200', TUINPT ALT SECTOR ASSIGNMENT MODE?
00271A 6A00 298E BON ASMD YES
00271C 4020 3002 0005 MVWI X'0005', SKDCB SEEK CONTROL WORD-NO CHAIN
00271E 8828 194A 3004 MVW TUINPT+2, SKDCB+2 GET CYLINDER #
002720 8028 194C 300A MVB TUINPT+4, SKDCB+8 GET HEAD #
002722 32C4 BAL $SEK, P6 SEEK
002724 4CA1 DC A($ERR$) ERROR
002726 6A00 32C4 TBTR (P4, EP) INTERRUPT ERROR?
002728 402B 1948 0100 BON $ERR$ YES-LOGOUT ERROR
00272A 6A00 2874 EOU P401 YES
00272C 8028 184D 307D MVB TUINPT+5, LGSEC+1 GET LOG SECT# FROM OPER
00272E 6E03 30B0 BAL CONV, R6 CONVERT TO PHYSICAL SECT# MINUS ONE
002730 8028 307E 2FF6 MVB PHYSC+1, RSDCB+4 LOAD DCB WITH PHY SECT#
002732 6E03 3102 BAL $RDID, P6 READ SECTOR ID
002734 32C4 DC A($ERR$) EPROR
002736 4CA1 TBTR (R4, ER) INTERRUPT ERROR
002738 6A00 2D06 BON WPRD1 YES

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LOCTR OBJECT TEXT STMT SOURCE STATEMENT
002B0E 4CA1 1001 TBTR (R4,ER) INTERRUPT ERROR?
002B10 6A00 32C4 1002 \$ERR\$ YES-LOGOUT ERROR
1003 *
1004 * RECOVER DATA IF POSSIBLE
1005 *
002B14 8028 194D 307D 1006 MVB TUINPT+5, LGSEC+1 GET SECT # FROM USER
002B1A 6E03 30B0 1007 BAL CONV T, R6 CONVERT LOG TO PHYSICAL-1
002B1E 4C1C 1008 TBT (R4, B60) ALT ALREADY ASSIGNED?

LOCTR OBJECT TEXT STMT SOURCE STATEMENT
1115 * 2. READ RECORD WRITTEN.
1116 *
1117 * CALLING SEQUENCE - BAL WRRD, R6
1118 * THE FOLLOWING PARAMETERS MUST BE SETUP PRIOR TO CALLING:
1119 * 1. SECTOR ID SEARCH ARGUMENT (SCTJD)
1120 *
1121 * RETURN - B (\$WRET+2)
1122 *
1123 *
1124 *
002C74 6E0D 2D04 1125 WRRD MVB R6, \$WRET+2 SETUP RETURN ADDRESS
002C78 4020 3022 0001 1126 MVI X'0001', WRDCB CONTROL WORD - NO CHAINING
002C7E 8828 2664 3028 1127 MVB SCTID+2, WRDCB+6 SETUP CYLINDER
002C84 8028 2663 3027 1128 MVB SCTID+1, WRDCB+5 SETUP FLAG
002C8A 8828 2666 302A 1129 MVB SCTID+4, WRDCB+8 SETUP SECTOR
002C90 8028 300A 302A 1130 MVB SKDCB+8, WRDCB+8 SETUP HEAD
002C96 4020 302E 0100 1131 MVI X'0100', WRDCB+12 SETUP BYTE COUNT
002C9C 4020 3032 200C 1132 MVI X'200C', WRDCB VERIFY CONTROL WORD - NO CHAIN
002CA2 8828 3028 3038 1133 MVB WRDCB+6, WRDCB+6 SETUP CYLINDER
002CA8 8828 302A 303A 1134 MVB WRDCB+8, WRDCB+8 SETUP HEAD, SECTOR
002CBE 4020 3027 3037 1135 MVB WRDCB+5, WRDCB+5 SETUP FLAG
002CBA 6E03 3138 0100 1136 MVI X'0100', WRDCB+12 SETUP SECTOR
002CBE 32C4 1137 BAL \$WRT, R6 WRITE BYTE COUNT
002CC0 4CA1 1138 DC A(\$ERR\$) ERROR
002CC2 6A00 2D06 1139 TBTR (R4, ER) INTERRUPT ERROR?
002CC6 6E03 3130 1140 BON WRRD1 YES
002CCA 32C4 1141 BAL \$RDVY, R6 VERIFY
002CCB 32C4 1142 DC A(\$ERR\$) ERROR
002CCD 4CA1 1143 TBTR (R4, ER) INTERRUPT ERROR?
002CCE 6A00 2D06 1144 BON WRRD1 YES
002CD2 4020 304E 0100 1145 MVI X'0100', RDCB+12 SETUP BYTE COUNT
002CDE 4020 3042 2009 1146 MVI X'2009', RDCB CONTROL WORD - NO CHAINING
002CDE 8828 2664 3047 1147 MVB SCTID+2, RDCB+6 SETUP CYLINDER
002CEA 8828 2666 304A 1148 MVB SCTID+1, RDCB+5 SETUP FLAG
002CEA 8828 2666 304A 1149 MVB SCTID+4, RDCB+8 SETUP SECTOR
002CF0 8028 300A 304A 1150 MVB SKDCB+8, RDCB+8 SETUP HEAD
002CF6 6E03 311C 1151 BAL \$RD, R6 READ
002CFA 32C4 1152 DC A(\$ERR\$) ERROR
002CFC 4CA1 1153 TBTR (R4, ER) INTERRUPT ERROR?
002CFE 6A00 2D06 1154 BON WRRD1 YES
002D02 6802 0000 1155 \$WRET B RETURN TO CALLER
1156 *
002D06 4324 265C 1157 WRRD1 MVA \$IOIN, R3 SAVE COND CODE, ISB DCB AND CS-STATUS
002D0A 4524 2DC2 1158 MVA WRBUF, R5 *
002D0E 0F26 1159 MVB 38, R7 *
002D10 2B84 1160 MVI (R3), (R5) *
002D12 8028 307C 0000 1161 J LGSEC INIT LGSEC LOCATION
002D18 8028 194D 307D 1162 MVB TUINPT+5, LGSEC+1 GET SECTOR#
002D1E 6E03 30B0 1163 BAL CONV T, R6 CONVERT LOG TO PHY SECT #
002D22 8028 307F 2FF6 1164 MVB PHYSIC+1, RSDCB+4 LOAD DCB
002D28 8028 307F 3066 1165 MVB PHYSIC+1, RKDCB+4 *
002D2E 4C64 1166 TBTS (R4, XE) SET EXPECTED ERROR
002D30 6E03 3140 1167 BAL \$RKEW, R6 READ ID SKEWED
002D34 32C4 1168 DC A(\$ERR\$) *
002D36 4CA1 1169 TBTR (R4, ER) INTERRUPT ERROR?
002D38 1005 1170 JOFF WRRD3 NO-ID WRITTEN SKEWED
002D3A 4C64 1171 TBTS (R4, XE) SET EXPECTED ERROR
002D40 32C4 3102 1172 BAL \$RD, R6 READ ID
002D42 5003 1173 DC A(\$ERR\$) *
002D44 402C 2662 8000 1174 J \$ERR LOG OUT
002D44 9028 2DC2 265C 1175 WRRD3 OVI X'8000', SCTID SET SKEWED INDICATION
002D50 8828 2DC6 2660 1176 \$SETR MVD WRBUF, \$IOIN RESTORE COND CODE, ISB & IA ST IO
002D56 4324 266A 1177 MVB WRBUF+4, LSTIO *
002D5A 4524 2DD0 1178 MVA DCB1, R3 RESTORE ORIGINAL DCB AND CSSTATUS
002D5E 0F18 1179 MVA WRBUF+14, R5 *
002D60 2964 1180 MVB 24, R7 *
002D62 2964 1181 MVI (R5), (R3) *
002D62 6802 32C4 1182 B \$ERR\$ LOG OUT
1183 *
002D66 3B00 1184 SEC59 DC X'3B00' SECTOR 59
000232 1185 CEUID EQU X'0232'
1186 *
1187 *
1188 *
1189 *
1190 * SUBROUTINE
1191 *
1192 * PURPOSE - INITIALIZE WRITE BUFFER TO 'DEB66BED'.
1193 *
1194 * CALLING SEQUENCE - BAL \$WBUF, R6
1195 *
1196 * RETURN - BXS (R6)
1197 *
1198 *
1199 *
1200 * \$WBUF EQU *
1201 MVI X'0100', R7 WRITE BUFFER SIZE
1202 MVA WRBUF, R2 WRITE BUFFER ADDR
1203 MVD WDATA, (R2)+ INIT BUFFER
1204 AWI -4, R7 DECREMENT BYTE COUNT
1205 BNZ WB2 *
1206 MVB WDATA, DEV4 DATA PATTERN FOR PRINTOUT
1207 BXS (R6) RETURN TO CALLER
1208 *
1209 *
1210 *
1211 * SUBROUTINE
1212 *
1213 * PURPOSE - CONVERT INPUT TO SDD IF SDD FORMAT.
1214 *
1215 * CALLING SEQUENCE - BAL T99P, R6
1216 *
1217 * RETURN - B *
1218 *
1219 *
1220 *
002D84 6E0D 2DB4 1221 T99P MVB R6, T99RR+2 SET UP RETURN
002D88 4C1E 1222 TBT (R4, B62) SDD FORMAT?
002D8A 1013 1223 JOFF T99RR NO-RETURN TO CALLER
002D8C D020 3084 1224 MVD WRSID, R0 MOVE FLAG, CYL AND HEAD IN R0 & R1
002D90 C220 3088 1225 MVB WRSID+4, R2 MOVE SECTOR # IN R2
002D94 8028 3088 3088 1226 MVB WRSID, WRSID+4 POSITION FLAG
002D9A 3045 1227 SLLD 8, R0 POSITION CYL IN R0, HEAD IN R1
002D9C 3039 1228 SLL 7, R0 POS CYL IN R0
002D9E 7907 8000 1229 TWI X'8000', R1 FIXED HEADS?

I7869 --- FORMAT OR WRITE P/N=1635393 EC=755285 PAGE 06

LOCTR	OBJECT TEXT	STMT	SOURCE STATEMENT	COPYRIGHT IBM CORP 1976
002DA2	1209	1230	JON FXH1	YES
002DA4	3112	1231	SRL 2,R1	POS HEAD
002DA6	7101	1232	OW R1,R0	POS HEAD IN R0
002DA8	7201	1233	OW R2,R0	POS SECTOR IN R0
002DAA	680D 3084	1234	STOR MVW R0,WPSID	LOAD WR SECTOR BUFFER (SDD FORMAT)
002DAE	680D 3086	1235	MVW R0,WPSID+2	*
002DB2	6802 0000	1236	T99RR B	RETURN TO CALLER
002DB6	3112	1237	FXH1 SRL 2,R1	POS FIXED HEAD
002DB8	7923 C000	1238	OWI X'CO00',R1	INSERT FIXED HEAD INDICATOR
002DBC	7221	1240	OW R2,R1	POS SECTOR
002DBE	7104	1241	MVW R1,R0	
002DC0	50F4	1242	J STOR	
002DC2	0000000000000000	1243	*	
002EC2	0000000000000000	1244	*	
		1245	*	
		1246	*	
		1247	*	
		1248	*	
		1249	WRBUF DC 128A(*-*)	
		1250	RDBUF DC 128A(*-*)	
		1251	COPY T7869DCB	
		1252	** (T7869DCB)	
		1253	*****4/28/77*****	
		1254	*	
		1255	*****4/28/77*****	
		1256	*	
		1257	DCB TABLES AND DC'S	
		1258	*	
		1259	*****	
		1260	*	
		1261	***** DIAGNOSTIC DCB *****	
002FC2	2008	1262	DGDCB DC X'2008'	DIAGNOSTIC DCB
002FC4	0000	1264	DC X'0000'	NOT USED
002FC6	0000	1265	DC A(*-*)	0-7 = PHYSICAL SECTOR # MINUS ONE
002FC8	0000	1266	DC X'0000'	NOT USED
002FCA	0000	1267	DC X'0000'	NOT USED
002FCC	0000	1268	DC A(*-*)	CHAINING ADDRESS
002FCE	0100	1269	DC X'0100'	BYTE COUNT
002FD0	0000	1270	DC A(*-*)	DATA ADDRESS
		1271	*	
		1272	*	
		1273	***** RECALIBRATE DCB *****	
		1274	*	
002FD2	0007	1275	CLDCB DC X'0007'	RECALIBRATE DCB
002FD4	0000000000000000	1276	DC 7A(*-*)	
		1277	*	
		1278	***** WRITE SECTOR ID **	
		1279	*	
002FE2	0002	1280	WSDCB DC X'0002'	WRITE SECTOR ID CONTROL WORD
002FE4	0000	1281	DC X'0000'	NOT USED
002FE6	0000	1282	DC A(*-*)	0-7 = PHYSICAL SECTOR # MINUS ONE
002FE8	0000	1283	DC A(*-*)	NOT USED
002FEA	0000	1284	DC A(*-*)	NOT USED
002FEC	0000	1285	DC A(*-*)	CHAIN ADDRESS
002FEE	0006	1286	DC X'0006'	BYTE COUNT
002FF0	3084	1287	DC A(WPSID)	ADDR OF SECTOR ID DATA
		1288	***** READ SECTOR ID DCB *****	
		1289	*	
002FF2	200A	1290	RSDCB DC X'200A'	READ SECTOR ID
002FF4	0000	1291	DC X'0000'	NOT USED
002FF6	0000	1292	DC X'0000'	0-7 = PHYSICAL SECTOR # MINUS ONE
002FF8	0000	1293	DC X'0000'	NOT USED
002FFA	0000	1294	DC X'0000'	NOT USED
002FFC	0000	1295	DC X'0000'	CHAIN ADDRESS
002FFE	0006	1296	DC X'0006'	BYTE COUNT FOR READ SECTOR ID
003000	2662	1297	DC A(SCTID)	SECTOR ID DATA ADDRESS
		1298	*	
		1299	*	
		1300	*	
		1301	***** SEEK DCB *****	
		1302	*	
003002	0005	1303	SKDCB DC X'0005'	SEEK DCB
003004	0000	1304	DC X'0000'	BIT 0-3=0; BIT 4=DIRECTION; 5-15=DIFFER
003006	0000	1305	DC F'0'	
003008	0000	1306	DC F'0'	
00300A	0000	1307	DC X'0000'	0-7 = HEAD; 8-15 NOT USED
00300C	0000	1308	DC A(*-*)	CHAIN ADDRESS
00300E	0000	1309	DC F'0'	NOT USED
003010	0000	1310	DC F'0'	NOT USED
		1311	*	
		1312	***** CYCLE STEAL STATUS DCB *****	
		1313	*	
003012	2000	1314	CSDCB DC X'2000'	CONTROL WORD
003014	0000	1315	DC F'0'	NOT USED
003016	0000	1316	DC F'0'	NOT USED
003018	0000	1317	DC F'0'	NOT USED
00301A	0000	1318	DC F'0'	NOT USED
00301C	0000	1319	DC F'0'	NOT USED
00301E	0008	1320	DC X'0008'	4 WORDS OF STATS
003020	267A	1321	DC A(CSBUF)	ADDRESS OF CYCLE STEAL STATUS DATA
		1322	*	
		1323	***** WRITE DCB *****	
		1324	*	
003022	0001	1325	WRDCB DC X'0001'	WRITE CONTROL WORD
003024	0000	1326	DC F'0'	NOT USED
003026	0000	1327	DC X'0000'	0-7=0; 8-15 = FLAG BYTE
003028	0000	1328	DC X'0000'	SEARCH ARGUMENT CYLINDER
00302A	0000	1329	DC X'0000'	SEARCH ARGUMENT HEAD-SECTOR
00302C	0000	1330	DC A(*-*)	CHAIN ADDRESS
00302E	0000	1331	DC F'0'	BYTE COUNT
003030	0000	1332	DC A(*-*)	WRITE DATA ADDRESS
		1333	*	
		1334	***** VERIFY DCB *****	
		1335	*	
003032	200C	1336	VPDCB DC X'200C'	CONTROL WORD
003034	0000	1337	DC F'0'	NOT USED
003036	0000	1338	DC X'0000'	0-7=0; 8-15 = FLAG BYTE
003038	0000	1339	DC X'0000'	CYLINDER
00303A	0000	1340	DC X'0000'	HEAD - SECTOR
00303C	0000	1341	DC A(*-*)	CHAIN ADDRESS
00303E	0000	1342	DC F'0'	BYTE COUNT
003040	0000	1343	DC A(*-*)	VERIFY DATA ADDRESS
		1344	*	

I7869 --- FORMAT OR WRITE P/N=1635393 EC=755285 PAGE 06A

LOCTR	OBJECT TEXT	STMT	SOURCE STATEMENT	COPYRIGHT IBM CORP 1976
003042	2009	1345	***** READ DCB *****	
003044	0000	1346	*	
003046	0000	1347	RDDCB DC X'2009'	READ DCB CONTROL WORD
003048	0000	1348	DC F'0'	NOT USED
00304A	0000	1349	DC X'0000'	0-7=0; 8-15 = FLAG BYTE
00304C	0000	1350	DC X'0000'	SEARCH ARGUMENT CYLINDER
00304E	0101	1351	DC X'0101'	SEARCH ARGUMENT H-R
00304C	0000	1352	DC A(*-*)	CHAIN ADDRESS
00304E	0000	1353	DC F'0'	BYTE COUNT
003050	0000	1354	DC A(*-*)	FEAD DATA ADDRESS
		1355	*	
		1356	***** WRITE SECTOR ID SKEWED *****	
		1357	*	
003052	0003	1358	WKDCB DC X'0003'	CONTROL WORD
003054	0000	1359	DC X'0000'	NOT USED
003056	0000	1360	DC A(*-*)	0-7 = PHYSICAL SECTOR # MINUS ONE
003058	0000	1361	DC A(*-*)	NOT USED
00305A	0000	1362	DC A(*-*)	NOT USED
00305C	0000	1363	DC A(*-*)	CHAIN ADDRESS
00305E	0006	1364	DC X'0006'	BYTE COUNT
003060	3084	1365	DC A(WPSID)	ADDR OF SECTOR ID DATA
		1366	*	
		1367	***** READ SECTOR ID SKEWED *****	
		1368	*	
003062	200B	1369	RKDCB DC X'200B'	CONTROL WORD
003064	0000	1370	DC X'0000'	NOT USED
003066	0000	1371	DC X'0000'	0-7 = PHYSICAL SECTOR # MINUS ONE
003068	0000	1372	DC X'0000'	NOT USED
00306A	0000	1373	DC X'0000'	NOT USED
00306C	0000	1374	DC A(*-*)	CHAIN ADDRESS
00306E	0006	1375	DC X'0006'	BYTE COUNT FOR FEAD SECTOR ID
003070	2662	1376	DC A(SCTID)	SECTOR ID DATA ADDRESS
		1377	*	
		1378	***** CONSTANTS AND DEFINED STORAGE LOCATIONS *****	
003072	0000	1379	ZERO DC X'0000'	CONSTANT ZERO
003074	0001	1380	ONE DC X'0001'	CONSTANT ONE
003076	0000	1381	JOE DC A(*-*)	WRITE PARAMETER POINTER
003078	0000	1382	WDATA DC X'DEB6'	WRITE DATA
00307A	6EB6	1383	DC X'6EB6'	*
00307C	0000	1384	LGSEC DC X'0000'	LOGICAL SECTOR #
00307E	0000	1385	PHYS DC X'0000'	CONVERTED PHYSICAL SEC #
003080	1D00	1386	CB29 DC X'1D00'	CONSTANT BYTE 29
003082	3B00	1387	FIVE9 DC X'3B00'	CONSTANT BYTE 59
003084	0000	1388	WRSID DC X'0000'	FLAG,CYLINDER (WRT SECTOR ID DATA)
003086	0000	1389	DC X'0000'	CYLINDER,HEAD
003088	0000	1390	DC X'0000'	LOG SECTOR,NOT USED
00308A	FF34	1391	WSIDT DC X'FF34'	WRITE SECTOR ID TEST DATA
00308C	5678	1392	DC X'5678'	*
00308E	9A00	1393	DC X'9A00'	*
003090	0000	1394	SCTST DC X'0000'	READ SECTOR ID TEST DATA ;UFFEP
003092	0000	1395	DC X'0000'	*
003094	0000	1396	DC X'0000'	*
003096	0000	1397	CTP02 DC X'0000'	COUNTER
003098	0000	1398	CTR03 DC X'0000'	COUNTER
		1399	*	
		1400	*****4/05/77*****	
		1401	*	
		1402	SUBROUTINE	
		1403	*	
		1404	PURPOSE	
		1405	*	
		1406	COMPARE READ SECTOR ID DATA TO WRITE SECTOR ID DATA	
		1407	*	
		1408	CALLING SEQUENCE	
		1409	*	
		1410	BAL CMPFW,R6 (NORMAL)	
		1411	*	
		1412	RETURN	
		1413	*	
		1414	BXS (P6,2) - NORMAL	
		1415	*	
		1416	*	
		1417	*****	
		1418	*	
00309A	4724 0005	1419	CMPRW MVWI 5,P7	COMPARE BYTE COUNT
00309E	4324 2663	1420	MVA SRTID+1,R3	ADDR OF RD SEC ID DATA
0030A2	4524 3084	1421	MVA WRTID,R5	ADDR OF WR SEC ID DATA
0030A6	2E46	1422	CFEN (R3),(R5)	COMPARE ID DATA
0030A8	68C0 0002	1423	BE (R6,2)	BCH IF WRITE ID DATA OK
0030AC	68D2 0000	1424	B (P6)*	COMPARE EPROP
		1425	*	
		1426	*****4/06/77*****	
		1427	*	
		1428	SUBROUTINE	
		1429	*	
		1430	PURPOSE	
		1431	CONVERT LOGICAL SECTOR NUMBER TO A PHYSICAL SECTOR MINUS ONE	
		1432	ONE	
		1433	SETUP LOGICAL SECTOR # IN LOCATION 'LGSEC'	
		1434	PHYSICAL SECTOR # WILL BE LOADED IN LOCATION 'PHYS'	
		1435	*	
		1436	LOGICAL SECTOR# TO PHYSICAL SECTOR# CONVERSION	
		1437	* LOGICAL- X 00, 1E, 01, 1F, 02, 20, 03, 21, 04, 22, 05, 23, 06, 24,	
		1438	* PHYSICAL X 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B, 0C, 0D,	
		1439	*	
		1440	* LOGICAL- 07, 25, 08, 26, 09, 27, 0A, 28, 0B, 29, 0C, 2A, 0D, 2B,	
		1441	* PHYSICAL 0E, 0F, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B,	
		1442	*	
		1443	* LOGICAL- 0E, 2C, 0F, 2D, 10, 2E, 11, 2F, 12, 30, 13, 31, 14, 32,	
		1444	* PHYSICAL 1C, 1D, 1E, 1F, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29,	
		1445	*	
		1446	* LOGICAL- 15, 33, 16, 34, 17, 35, 18, 36, 19, 37, 1A, 38, 1B, 39,	
		1447	* PHYSICAL 2A, 2B, 2C, 2D, 2E, 2F, 30, 31, 32, 33, 34, 35, 36, 37,	
		1448	*	
		1449	* LOGICAL- 1C, 3A, 1D, 3B, X	
		1450	* PHYSICAL 38, 39, 3A, 3B, X	
		1451	*	
		1452	*	
		1453	CALLING SEQUENCE	
		1454	*	

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1459 * B (TT304+2)
1460 *
1461 * *****
0030B0 6F0D 30F0 1463 CONV T MVT R6,TT304+2 SETUP RETURN ADDR
0030B4 802B 3072 307D 1464 CB ZER00, LGSEC+1 CK FOR LOG # ZERO
0030BA 100D 1465 JE TT303 BCH IF LOG # IS ZERO
0030BC 802B 307D 3080 1466 CB LGSEC+1,CB29 COMP LOG TO 29
0030C2 1C0D 1467 JGE RTT01 BCH IF LGSEC EQ OR LESS THAN CB29
0030C4 4024 0002 1468 MVWI 2,R0 SETUP MULTIPLIER
0030C8 E821 307D 1469 HB LGSEC+1,R0 LOG SECTOR # TIMES 2
0030CC 7802 003C 1470 SWI 60,R0 LOG SEC TIMES 2 MINUS 60
0030D0 C028 307F 1471 MVB R0,PHYS+1 PHYSICAL SECTOR NUMBER
0030D4 500C 1472 J TT304 RETURN TO CALLER
0030DC 8028 3082 307F 1473 MVB FIVE9,PHYS+1 PHYSICAL SECTOR # 59
0030DE 4024 0002 1474 J TT304 RETURN TO CALLER
0030E2 E821 307D 1475 MVWI 2,R0 LOAD MULTIPLIER
0030E6 7802 0001 1476 HB LGSEC+1,R0 LOG SECTOR # TIMES 2
0030EA C028 307F 1477 SWI 1,R0 SUBTRACT ONE
0030EE 6802 0000 1478 MVB R0,PHYS+1 LOAD PHYSICAL SECTOR #
1479 TT304 B *-4 RETURN TO CALLER
1480 *
1481 *
1482 * EXECUTE INPUT & OUTPUT COMMANDS
1483 * TO EXECUTE ALL I/O COMMANDS FROM A COMMON PLACE.
1484 * EACH OF THESE ENTRIES SET R7 WITH THE ADRS OF ITS PAPA METERP
1485 * LIST AND ANY SPECIAL SWITCHES BEFORE BRANCHING TO THE
1486 * SUPVR CALL.
1487 *
1488 *
1489 * THIS SUBROUTINE WILL CHECK FOR THE FOLLOWING:
1490 *
1491 * 1. LOST INTERRUPTS BY TIMING OUT A COUNTING LOOP
1492 * 2. ERROR INTERRUPTS RECEIVED FROM SUPVR
1493 *
1494 * THIS ROUTINE HAS THE FOLLOWING ENTRIES:
1495 *
1496 * 1 BAL \$RKEW,R6 READ SECTOR ID SKEWED
1497 * 2 BAL \$WKEW,R6 WRITE SECTOR ID SKEWED
1498 *
1499 * 3 BAL \$WSEC,R6 WRITE SECTOR ID
1500 *
1501 * 4 BAL \$DIAG,R6 DIAGNOSTIC
1502 *
1503 * 5 BAL \$XIOCS,R6 CYCLE STEAL STATUS
1504 *
1505 * 6 BAL \$SSEEK,R6 SEEK
1506 *
1507 * 7 BAL \$RECL,R6 RECALIBRATE
1508 *
1509 * 8 BAL \$RDID,R6 READ SECTOR ID
1510 *
1511 * 9 BAL \$RD,P6 READ
1512 *
1513 * 10 BAL \$RDVY,R6 READ VERIFY
1514 *
1515 * 11 BAL \$WRT,R6 WRITE
1516 *
1517 *
1518 *
1519 \$SSEEK MVA SKDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
1520 J XIO
1521 *
1522 \$RECL MVA CLDCB,IODCB SET UP BLOCK FOR SVC CALL
1523 J XIO
1524 *
1525 \$RDID MVA RSDCE,IODCB SET UP BLOCK FOR SVC CALL
1526 MVBI X'FFF',R3 SET BUFFER TO F'S
1527 MVA SCTID,R5 SETUP READ SECTOR ID BUFFER ADPS
1528 MVWI 6,R7 SETUP BUFFER LENGTH
1529 FFN R3,(R5) INIT READ SECTOR ID BUFFER
1530 MVA SCTID,RSDCB+14 DATA ADDR
1531 J XIO
1532 *
1533 \$RD MVBI X'FFF',R3 SETRD BUFFER TO ALL F'S
1534 MVW RDCB+14,R5 SET UP READ BUFFER ADPS
1535 MVWI X'0100',R7 SET UP BUFFER LENGTH
1536 FFN R3,(R5) CLEAR READ BUFFER
1537 \$RD\$ MVA RDCB,IODCB SET UP BLOCK FOR SVC CALL
1538 J XIO
1539 *
1540 \$RDVY MVA VRDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
1541 J XIO
1542 *
1543 \$WRT MVA WRDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
1544 J XIO
1545 *
1546 \$RKEW MVA RKDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
1547 MVBI X'FFF',R3 SET BUFFER TO F'S
1548 MVA SCTID,R5 SETUP READ SECTOR ID BUFFER ADPS
1549 MVWI 6,R7 SETUP BUFFER LENGTH
1550 FFN R3,(R5) INIT READ SECTOR ID BUFFER
1551 MVA SCTID,RKDCB+14 DATA ADDR
1552 J XIO
1553 *
1554 \$WKEW MVA WKDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
1555 MVA WRSID,WKDCB+14 DATA ADDR
1556 J XIO
1557 *
1558 \$WSEC MVA WSDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
1559 MVA WRSID,WSDCB+14 DATA ADDR
1560 J XIO
1561 *
1562 \$DIAG MVA DGDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
1563 J XIO
1564 XEQIT
1565 *****29JUL76**
1566 *
1567 * SUB-ROUTINE
1568 * EXECUTE INPUT AND OUTPUT COMMANDS
1569 *
1570 * PURPOSE
1571 *
1572 * TO EXECUTE ALL I/O COMMANDS FROM A COMMON PLACE.
1573 *

LOCTR OBJECT TEXT STMT SOURCE STATEMENT COPYRIGHT IBM CORP 1976
1574** THIS SUBROUTINE WILL DO THE FOLLOWING FUNCTIONS:
1575**
1576** 1. SAVE THE ADDRESS THAT POINTS TO THE INSTRUCTION THAT STARTED
1577** THE I/O COMMAND.
1578** 2. SAVED THE DCB BLOCK USED UNLESS IT IS A START CYCLE STATUS
1579** ISSUED BY THIS SUBROUTINE.
1580** 3. CLEAR OUT THE CYCLE STEAL STATUS STORAGE UNLESS THE
1581** START CYCLE STATUS WAS ISSUED BY THIS SUBROUTINE.
1582** 4. RESETS THE INTERRUPT INDICATOR AND CHECKS FOR ANY INTEPRUPT
1583** SINCE THE LAST EXPECTED INTERRUPT. IF AN INTERRUPT IS FOUND,
1584** MYSTERY INTERRUPT (MI) CONTROL BIT IS SET.
1585** 5. MOVES THE ADDRESS OF THE I/O CONTROL BLOCK IN R7, SET THE
1586** EXPECTED INTERRUPT CONTROL BIT AND ISSUE THE 'SVC START'.
1587** 6. WHEN THE SUPVR RETURNS AFTER ISSUING THE I/O COMMAND, TIMING
1588** STARTS TO DETERMINE A LOST INTERRUPT.
1589** 7. EXCEPT THE INTERRUPT AND GATHER INFORMATION TO DETERMINE IF IT
1590** WAS AN ERROR OR OKAY AND EXIT OUT THE INTERRUPT LEVEL.
1591** 8. CHECK IF THERE WAS A WRONG INTERRUPT LEVEL.
1592** 9. CHECK IF AN ERROR WAS EXPECTED AND IF THERE WAS RETURN.
1593** 10. CHECK IF THERE WAS AN ERROR CONDITION, IF NOT RETURN.
1594** 11. CHECK TO SEE IF THE EXECISER IS TO BE TERMINATED.
1595** 12. CHECK IF A CYCLE STEAL OPERATION WAS IN PROGRESS THAT WAS
1596** ISSUED BY THIS SUBROUTINE.
1597** 13. CHECK THE ISB BITS THAT ARE ON. IF BIT 0 IS ON, ISSUE A
1598** CYCLE STEAL STATUS COMMAND. CHECK FOR ANY OTHER BIT BEING ON,
1599** COUNT IT AND SET UP THE PROPER ERROR MESSAGE TO BE PRINTED.
1600**
1601** CALLING SEQUENCE
1602**
1603** THIS ROUTINE HAS THE FOLLOWING ENTRIES:
1604**
1605** --> BAL XIO OR YEQ ANY CYCLE STEAL COMMAND, MOD=0
1606** --> BAL XIO1 MOD PARM PRELOADED IN 'IOMOD'
1607** --> BAL XIOCS,R6 OR YEQ START CYCLE STEAL STATUS, MOD=F
1608** --> BAL XIOCS-4,P6 AUTO CS STATUS (FOLLOWING OTHER XIO
1609** AND DOES NOT POST INTERRUPT STATUS)
1610**
1611** RETURN CONTROL
1612**
1613** BXS (R6,2) RETURN TO USER NO ERROR
1614** OR B (R6) RETURN AND RETRY ON ERROR
1615** *****
1617+XIO MVWZ IOMOD,R3 SET MOF OF 0 FOR CYCLE STEAL OF
1618+ J XIO1 CS I/O'S ARE NOT RETRIED
1619**
1620+ TBTR (R4,CE) RESET CS STATUS INTRP ERROR INDICAT.
1621+ TBTS (R4,CS) SET 'CYCLE STEAL STATUS' IN PROGRESS
1622+XIOCS MVA CSDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
1623+ MVWI X'000F',IOMOD SET CYCLE STEAL MODIFIER
1624+ TBTR (R4,CS) IS CS IN PROGRESS, ERROR CONDITION
1625+ JON XIO2 * YES, BYPASS SAVING I/O ADPS
1626+XIO1 MVW R6,ISTIO SAVE IAE FOR RETRY IF REQUESTED
1627+ MVA DCBUF,R3 SET UP TO ADPS TO MOVE DCB TABLE
1628+ MVA IODCB,R5 * AND THE FROM ADPS, ALONG WITH
1629+ MVBI 16,R7 * THE NUMBER OF MOVES
1630+ MVFN (R5),(R3) MOVE 1 STATUS WORD AND ADJUST
1631+ MVBI 255,R3 CLEAR CYCLE STATUS BUFFER
1632+ MVA CSBUF,R5 * TO ALL ONES *
1633+ MVBI 16,R7 *
1634+ FFN R3,(R5) *
1635+ MVWI X'0708',SIOIN OVERLAY OLD CONDITION CODES
1636+ MVWZ \$ISB,R3 ZERO OUT OLD ISB VALUE
1637**
1638+ TBTR (R4,ER) RESET ANY ERROR BEFORE I/O COMMAND
1639+XIO2 TBTR (R4,IN) CLEAR INTERRUPT RECEIVED CNTL BIT
1640+ MVA IEBLK,R7 SET UP CONTROL BLOCK FOR SUPVR
1641+ TBTF (R4,SIE) RESET LEVEL ERROR INDICATOR
1642+ TBTS (R4,XI) SET EXPECTED INTR CONTROL BIT
1643+ SVC START CALL SUPVR FOR I/O COMMAND
1644**
1645+ TBTR (R4,NI) IS AN INTR EXPECTED
1646+ BN (R6,2) * NO, RETURN TO USER
1647**
1648** THE INTR SHOULD OCCUR WHILE SPINNING IN THE NEXT SECTION
1649**
1650+ MVBI X'00',R5 SET UP WORK REG FOR 'LOST INTR'
1651+XIO8 TBTR (R4,IN) HAS INTERRUPT BEEN RECEIVED
1652+ JON XIOCK * YES, CHECK IF ALL WAS SATISFACTORY
1653+ SVC IDLE ALLOW ANOTHER PPROGRAM A CHANCE TO RUN
1654** SUPVR WILL RETURN HERE
1655+ ANI 1,R5 ADVANCE TIME OUT COUNT
1656+ JNZ XIO8 BCH IF TIME OUT NOT REACHED
1657+ TBTS (R4,ER) SET ON ERROR CONTROL BIT
1658+ B (R6)* ERR 'NO INTERRUPT'
1660+*****03FEB76**
1661**
1662** SUBROUTINE
1663**
1664** I/O EXECUTE ERROR HANDLING ROUTINE
1665**
1666** PURPOSE
1667**
1668** THIS ROUTINE WILL COLLECT INFORMATION TO HELP DETERMINE THE
1669** PROBLEM THAT WAS FOUND WHEN THE I/O COMMAND WAS ISSUED BY THE
1670** SUPERVISOR AND IT WAS NOT ACCEPTED.
1671**
1672** CALLING SEQUENCE
1673**
1674** SUPVR WILL ENTEP WHEN AN ERROR OCCURS ON AN I/O COMMAND
1675**
1676** RETURN CONTROL
1677**
1678** B (R6)* RETURN TO USERS ERROR HANDLER
1679**
1680+*****
1681**
1682** CC 0= DEVICE NOT ATTACHED
1683** FOR 1= DEVICE BUSY
1684** I/O 2= DEVICE BUSY AFTEP PESET
1685** 3= COMMAND REJECT
1686** 4= INTERVENTION REQUIRED
1687** 5= INTERFACE DATA CHECK
1688** 6= CONTROLLER BUSY
1689** 7= I/O COMMAND EXCEPTED

LOCTR OBJECT TEXT STMT SOURCE STATEMENT COPYRIGHT IBM CORP 1976
1690**
1691+XIOER DC X'706E' COPY STATUS ANY LEVEL INTO P3
1692+ SRL 13,R3 POSITION CC CODE TO BITS 13-15
1693+ MVB R3,\$IOIN * PUT IN LOG OUT AREA
1694+ B (R6)* RETURN TO USER ERROR HANDLER
1696+*****14APR76**
1697+**
1698** SUB-ROUTINE
1699**
1700** EPROR INTERRUPT RUNS ON INTERRUPT LEVEL 'SINTL'
1701**
1702** PURPOSE
1703**
1704** THIS ROUTINE WILL BE ENTERED WHEN THE SUPVR DETECTS AN ERROR
1705** OF THE INTERRUPTING CONDITION CODE DOES NOT AGREE WITH THE
1706** EXPECTED CODE.
1707**
1708** CALLING SEQUENCE
1709**
1710** SUPVR WILL ENTER WHEN AN ERROR OCCURS ON AN I/O INTERRUPT
1711**
1712** RETURN CONTROL
1713**
1714** SVC EXIT RETURN TO USER VIA SUPVR
1715**
1716+*****
1717+**
1718** CC 0= CONTROLLER END TSE 0= ADD STATUS
1719** FOR 1= PROGRAM CONTROL INTERRUPT BITS 1= COMD REJECT
1720** INTR 2= EXCEPTION INTERRUPT FOP 2= INCOR LENGTH
1721** 3= DEVICE END INTERRUPT INTR 3= DCB SPEC CK
1722** 4= ATTENTION INTERRUPT 4= STG DATA CK
1723** 5= ATTENTION / PROGRAM CNTL INTR 5= INV STG ADRS
1724** 6= ATTENTION / EXCEPTION INTR 6= PROTPCT CK
1725** 7= ATTENTION / DEVICE END INTR 7= I-FACE DATA
1726**
1727+INTER DC X'706E' COPY STATUS ANY LEVEL INTO P3
1728+ SRL 13,R3 POSITION INDICATORS IN R3
1729+ MVA OPN1,R4 SET UP BASE ADRS
1730+ TBT (R4,CS) IS CS IN PROGRESS
1731+ JOFF INTES * NO
1732+ TBTS (R4,CE) TURN ON CYCLE STEAL INTER EPROR
1733+ MVB R7,CSTL8 SAVE CS ERR ISB VALUE, BITS 0-7
1734+ MVB R3,CSTL8+1 * AND THE COND CODE
1735+ J INTR1
1736+INTES TBT (R4,XE) TEST EXPECTED ATTN / EPROR IND
1737+ JOFF INTES BCH IF NOT EXPECTED
1738+ CBI 4,R3 IS THIS AN 'ATTENTION' INTR
1739+ JE INTR1 * YES, BCH TO END INTR SEQUENCE
1740+INTET TBTS (R4,ER) SET ERROR ON I/O COMMAND CNTL BIT
1741+ J INTR1
1742+** THE ERROR INTERRUPT USES THE SAME
1743+** ENDING SEQUENCE AS THE NORMAL INTR
1744+*****14APR76**
1745+*****
1746+**
1747** SOUBROUTINE
1748**
1749** OKAY INTERRUPT RUNS ON INTERRUPT LEVEL 'SINTL'
1750**
1751** PURPOSE
1752** TO CHECK THE INTERRUPT AND CONTINUE THE TEST
1753**
1754** CALLING SEQUENCE
1755**
1756** SUPERVISOR WILL ENTER HERE IF INTR CC IS AS REQUESTED
1757** THE ERROR INTERRUPT HANDLER WILL BRANCH TO THIS ROUTINE
1758** AFTER THE SPECIAL PART HAS BEEN COMPLETED AND THE
1759** COMMON SECTION IS HANDLED HERE.
1760**
1761** RETURN CONTROL
1762**
1763** SVC EXIT RETURN TO USER VIA SUPVR
1764**
1765+*****
1766+*****
1767+INTOK DC X'706E' COPY STATUS ANY LEVEL INTO P3
1768+ SRL 13,R3 POSITION INDICATORS IN R3
1769+ MVA OPN1,R4 SET UP BASE ADRS
1770+INTR1 TBTS (R4,IN) SET INTERRUPT RECEIVED
1771+ TBT (R4,CS) IS 'CS IN PROGRESS' ON
1772+ JON INTR2 * YES, BCH AROUND UPDATE
1773+ MVB R3,\$IOIN+1 SAVE INTERRUPTING CC CODE
1774+ MVB R7,\$ISE SAVE INTR STATUS AND DEV ADRS
1775+INTR2 EQU *
1776+** CACL R5 CURRENT LEVEL COPIED BY DCP
1777+** SLL 4,R5 POSITION INTR LEVEL AND PUT
1778+** RBT 1,R5 * IN 'I' BIT
1779+** CW \$INTL,R5 IS THIS THE CORRECT INTR LEVEL
1780+** JE INTR3 * YES, GO EXIT THIS LEVEL
1781+** TBTS (R4,\$LE) SET INTR LEVEL ERROR CONTROL BIT
1782+** TBTS (R4,ER) SET ERROR ON I/O COMMAND CNTL BIT
1783+INTR3 TBTF (R4,XI) WAS INTERRUPT EXPECTED
1784+** JON INTRX * YES, EXIT OFF THIS INTR LEVEL
1785+** TBTS (R4,MI) * NO, SET MYSTERY INTR CONTROL BIT
1786+** CBI 4,R3 ATTENTION INTERRUPT?
1787+** JE INTRX YES
1788+** TBT (R4,NG) ERROR, UNEXPECTED INTERRUPT
1789+INTRX SVC EXIT EXIT THIS LEVEL VIA SUPVR TO PGM
1790+*****03FEB76**
1791+*****
1792+**
1793** THIS IS THE CONTINUATION OF EXECUTE I/O AFTER THE INTERRUPT
1794** HAS BEEN SERVICED. THE EXERCISEF FINDS AN INTERRUPT HAS BEEN
1795** RECEIVED AND BRANCHES HERE TO CHECK FOR ANY ERROR CONDITIONS.
1796**
1797**
1798+XIOCK TBTF (R4,XE) WAS AN FRORR EXPECTED
1799+ BN (R6,2) * YES, EXIT THIS ROUTINE
1800+ TBT (R4,CS) WAS AUTO CS IN PROGRESS
1801+ JOFF XIOCV * NO, CONTINUE CHECKING
1802+ TBT (R4,CE) IS CS IN AN ERR CONDITION
1803+ JOFF XIOCO * NO, BCH
1804+ B (R6)* CS ERROR
1805+XIOCO TBTS (R4,CSA) TURN ON CS STATS AVAIL FLAG
1806+ BXS (R6,2) GO TO USEP

LOCTR OBJECT TEXT STMT SOURCE STATEMENT COPYRIGHT IBM CORP 1976
00325C 4C21 1807+XIOCV TBT (R4,ER) WAS ERROR INTR CONTROL BIT ON
00325E 100B 1808+ JOFF XIOCK * NO, EXIT THIS ROUTINE
1809+**
1810+ MVB \$IOIN+1,R5 GET LAST INTP CC CODE
1811+ CBI 2,R5 IS THIS CC=2
1812+ BNE (R6)* * NO, BCH TO ERROR HANDLER
1813+XIOCV MVB \$ISB,R5 GET LAST ISB DATA BYTE AND IF CS
1814+ BN XIOCS-4 * AVAILABLE, GO AND GET IT
1815+ B (R6)* ERROR
1816+XIOCV MVWZ OPTN3,R3 CLEAR OUT OPTION 3 CNTL BITS
1817+ BXS (R6,2) RETURN TO USER VIA REG 6
1818+**
1819+** I/O PARAMETER LIST
1820+**
1821+IOBLK DC A(DEVADD) ADRS OF DEVICE ADRS
1822+ DC A(XIOER) ERROR ROUTINE ADRS
1823+IODCB DC A(*-*) DCB ADRS OF LEVEL & INTR
1824+IOMOD DC A(*-*) MODIFIER
1825+ DC A(*-*) ADRS OF LAST SVC CALL
1826+IORSF DC A(*-*) SECOND WORD OF LAST IDCB
1827+**
1828+** INTERRUPT CONTROL BLOCK FOR I/O COMMANDS
1829+**
1830+INTBL DC A(DEVADD) ADRS OF DEVICE ADRS
1831+ DC A(INTOK) INTERRUPT OK RETURN ADRS
1832+ DC A(INTR) INTERRUPT ERROR ADRS
1833+INTCC DC X'0003' INTERRUPT CODE EXPECTED
1835+*****11MAY76**
1836+**
1837+** SUBROUTINE
1838+**
1839+** CONNECT INTERRUPT CONTROL BLOCK & PREPARE DEVICE
1840+**
1841+** PURPOSE
1842+** TO CONNECT THE INTERRUPT CONTROL BLOCK TO THIS DEVICE AND
1843+** PREPARE ON THE DESIRED INTERRUPT LEVEL AND TO ALLOW THE DEVICE
1844+** TO INTERRUPT.
1845+**
1846+** CALLING SEQUENCE
1847+**
1848+** THIS SUBROUTINE HAS THE FOLLOWING ENTRIES:
1849+**
1850+**
1851+** --> BAL \$CONC,R6 CLEAR DEV DEP STG AND CONNECT I/O BLK
1852+** --> BAL \$CONP,R6 PREPARE DEVICE ONLY, ALREADY CONNECT
1853+**
1854+** RETURN CONTROL
1855+**
1856+** BXS (R6,2) RETURN TO USER VIA REG 6 IF OKAY
1857+** OR B (R6)* IF THE DEVICE COULD NOT BE CONNECTED
1858+**
1859+*****
1860+\$CONC MVB 6,R7 NUMBER OF BYTE TO CLEAR
1861+ MVB 0,R3 * AND THE DATA TO USE
1862+ MVA DEV1,R5 * ALONG WITH THE ADRS TO USE
1863+ PFN R3,(R5) *
1864+ MVWZ OPTN3,R3 CLEAR OLD CONTROLS FOR NEW ROUTINE
1865+ MVA INTBL,R7 SET R7 TO CONTROL BLOCK AND
1866+ SVC CIBC * CONNECT IT TO THIS DEVICE
1867+ BN (R6)* EPROR RETURN TO USER
1868+**
1869+\$CONP MVW \$INTL,IODCB PUT IN LEVEL & INTR PARAMETER
1870+ MVA IOBLK,R7 SET R7 TO CONTROL BLOCK TO PREPARE
1871+ MVWI X'0706', \$IOIN INITIALIZE CONDITION CODE STORAGE
1872+ MVWZ \$ISB,R3 * AND CLEAR OLD ISB VALUE
1873+ MVW R6,\$STIO SET UP ADDRESS THAT STARTED LAST I/O
1874+ SVC PRFP * AND CALL ON SUPVR
1875+ BXS (R6,2) RETURN TO USER
1877+*****06APR76**
1878+**
1879+** SUBROUTINE
1880+**
1881+** DISCONNECT THE INTERRUPT CONTROL BLOCK AND LOG ERRORS
1882+**
1883+** PURPOSE
1884+**
1885+** DISCONNECT THE INTERRUPT CONTROL BLOCK TO THIS DEVICE AND
1886+** SET THE 'NO GOOD' CONTROL BIT, THEN LOG THE DATA THAT HAS
1887+** BEEN FOUND TO HELP THE OPERATOR DEFINE THE EPROR CONDITION.
1888+**
1889+** CALLING SEQUENCE
1890+**
1891+** THIS SUBROUTINE HAS THE FOLLOWING ENTRIES:
1892+**
1893+** --> B \$ERRS SET 'NG' BIT AND CONVERT DATA TO LOG
1894+** --> B \$CONX RETURN TO MDI SUPERVISOR TO TEST STS
1895+**
1896+** RETURN CONTROL
1897+**
1898+** B TURTN* RETURN TO MDI
1899+** OR B (R6)* IF THE DEVICE COULD NOT BE CONNECTED
1900+**
1901+*****
1902+\$ERRS MVWI X'8000',TUSTATUS SET ON 'NO GOOD' STATUS BIT
1903+ MVA HEBLK,R7 GET ADRS OF CONTROL BLOCK
1904+ SVC HTOE CONVERT HEX TO EBC VIS DCP
1905+\$PRNT MVEI 3,R5
1906+ MVA TWORK,R3 SET UP BUFFER STORAGE
1907+ MVB R3,BUFF
1908+ MVA LINE1,R1
1909+ MVB 4,R7
1910+ MVB 8,R6
1911+MVBUF MVFN (R3),(R1)
1912+ MVB 4,R7
1913+ MVB X'40',R2
1914+ MVB R2,(R1)+
1915+ JCT MVBUF,R6
1916+ MVB 8,R6
1917+ MVI 4,R1
1918+ JCT MVBUF,R5
1919+ MVWI PIDMS\$10,PID+2
1920+ MVA FAKETU,@DCADD1
1921+ MVA DC2PT,@DCADD2
1922+ OWI BIT0080,SUPSTAT

LOCTR	OBJECT TEXT	STMT	SOURCE STATEMENT	COPYRIGHT IBM CORP 1976
003300	4324 265A	1923+	MVA \$TUID,R3	SET UP BUFFER STORAGE
003310	6F13 18BA	1924+	BAL TUMSG4TR*,R7	GO TO MESSAGE WRITER
003314		1925+*		
003314		1926+*	SCONX EQU *	
003314	C720 19D0	1927+	MVB DEVADD,R7	GET DEVICE ADDRESS FROM MDI
003318	6013	1928+	SVC R1CB	RELEASE INTERRUPT CONTROL BLOCK
00331A	6812 2692	1929+	B TUPTN*	RETURN TO MDI SUPERVISOR
00331E	0007	1930+*		
003320	0008	1931+*	BEGIN DC A(0007)	NUMBER OF LINES TO PRINT
003322	5C5C40C1C2D6D9E3	1932+	DC A(0008)	LINE LENGTH = 8 CHAR
003324	0028	1933+	DC C'***ABORT'	
00332C	E3E4C9C440C9D6C9D	1934+	DC A(0004)	LINE LENGTH = 40 CHAR
003334	0028	1935+	DC C'TUID IOIN ISB INST	DEV1 DEV2 DEV3 DEV4
003336	40404040404040404040	1936+	DC A(0040)	LINE LENGTH = 40 CHAR
003337	0028	1937+*	DC C'	
003338	C3D5E3D340C43C2F	1938+	DC A(0040)	LINE LENGTH = 40 CHAR
00333A	0028	1939+	DC C'CNTRL DCB2 DCB3 DCB4	DCB5 CHAD BYCT ADRS
00333D	0028	1940+	DC A(0040)	LINE LENGTH = 40 CHAR
00333E	0028	1941+*	DC C'	
00333F	0028	1942+	DC A(0040)	LINE LENGTH = 40 CHAR
003340	0028	1943+	DC C'RSID CS-2 CS-3 CS-4	CS-5 CS-6 CS-7 CS-8
003342	0000	1944+	DC A(0040)	LINE LENGTH = 40 CHAR
003426	0000	1945+*	DC C'	
003428	331E	1947+*	DC A(*-*)	
00342A	0101	1948+*	DC A(BEGIN)	
00342C	0101	1949+*	DC X'0101'	
00342E	0101	1950+*	DC X'0101'	
003430	0000	1951+*	EQU X'F1F0'	
003432	181A	1952+*	EQU X'0080'	
003434	0030	1953+*		
003436	265A	1954+*		
003438	181A	1955+*		
003440		1956+*	HEBLK DC A(48)	NUMBER OF BYTES TO CONVERT
003442		1957+*	DC A(\$TUID)	FROM ADRS
003444		1958+*	DC A(TUWORK)	AND THE TO ADPS
003446		1959+*	DC X'01DEC76	
003448		1960	COPI T7897	01DEC76
003450		1961	TUIT \$ERRS	
003452		1962	T7897	
003454		1963+*		*****06FEB76**
003456		1964+*		
003458		1965+*	TEST UNIT	
003460		1966+*		
003462		1967+*	4962 VERIFICATION (GSD AND SDD)	5/06/77
003464		1968+*		
003466		1969+*	PURPOSE	
003468		1970+*		
003470		1971+*		
003472		1972+*		
003474		1973+*		
003476		1974+*	CALLING SEQUENCE	
003478		1975+*		
003480		1976+*		
003482		1977+*		
003484		1978+*		
003486		1979+*		
003488		1980+*		
003490		1981+*		
003492		1982+*		
003494		1983+*		
003496		1984+*		
003498		1985+*		
003500		1986+*		
003502		1987+*		
003504		1988+*		
003506		1989+*		
003508		1990+*		
003510		1991+*		
003512		1992+*		
003514		1993+*		
003516		1994+*		
003518		1995+*		
003520		1996+*		
003522		1997+*		
003524		1998+*		
003526		1999+*		
003528		2000		
003530		2001		
003532		2002		
003534		2003		
003536		2004		
003538		2005		
003540		2006		
003542		2007		
003544		2008		
003546		2009		
003548		2010		
003550		2011		
003552		2012		
003554		2013		
003556		2014		
003558		2015		
003560		2016		
003562		2017		
003564		2018		
003566		2019		
003568		2020		
003570		2021		
003572		2022		
003574		2023		
003576		2024		
003578		2025		
003580		2026		
003582		2027		
003584		2028		
003586		2029		
003588		2030		
003590		2031		
003592		2032		
003594		2033		
003596		2034		
003598		2035		
003600		2036		
003602		2037		
003604		2038		

LOCTR	OBJECT TEXT	STMT	SOURCE STATEMENT	COPYRIGHT IBM CORP 1976
003504	6800 3690	2039	BE TS69E	YES-GO TO END
003508	4020 3004 0001	2040	MVWI 1,SKDCB+2	SET SEEK DIFFERENCE OF ONE
003512	4020 300A 0000	2041	MVWI 0,SKDCB+8	SELECT HEAD 0
003516	402F 3038 0001	2042	CWI 1,VRDCB+6	CYL# 1
003520	100E	2043	JE TS69F	YES
003524	4020 303A 0000	2044	MVWI 0,VPDCB+8	SELECT HEAD ZERO
003528	50DB	2045	J TS69D	
003532	4020 3004 0000	2046	TS69W MVWI 0,SKDCB+2	SELECT HEAD TWO
003536	4020 300A 0200	2047	MVWI X'0200',SKDCB+8	*
003540	4020 303A 0200	2048	MVWI X'0200',VRDCB+8	INPUT HEAD 2 IN VERIFY DC3
003544	50D1	2049	J TS69D	
003548	6E03 30F2	2050	TS69F BAL \$SEK,R6	SEEK TO TRACK 1 OR SELECT HEAD 1
003552	3C4	2051	DC A(\$ERR\$)	
003556	4CA1	2052	TBTR (R4,ER)	INTERRUPT ERROR?
003560	6A00 32C4	2053	BON \$ERR\$	YES
003564	4020 307C 0000	2054	MVWI 0,LGSEC	INIT LOG SECTOR TO 0
003568	6E03 30E0	2055	TS69L BAL CONVT,R6	CONVERT LOG TO PHYSICAL
003572	8028 307F 2FF6	2056	MVB PHYSIC+1,RSDCB+4	LOAD DCB WITH PHYSICAL SECTOR#
003576	8028 307F 3066	2057	MVB PHYSIC+1,RKDCB+4	LOAD DCB WITH PHYSICAL SECTOR#
003580	4C64	2058	TBTS (R4,XE)	SET EXPECTED EPROF
003584	6E03 3102	2059	BAL \$RDI,R6	READ SECTOR ID
003588	32C4	2060	DC A(\$ERR\$)	
003592	4CA1	2061	TBTR (R4,ER)	ANY ERROR?
003596	1298	2062	JON TS69D	YES
003600	8028 3072 2663	2063	CB ZER00,SCID+1	VALID FLAG (00)?
003604	180C	2064	JNE ONESK	NO
003608	402F 2664 0001	2065	CWI 1,SCID+2	ALTERNATE SECTOR ASSIGNMENT
003612	1848	2066	JNE TS699	YES
003616	4029 307C 0001	2067	AWI 1,LGSEC	INCREMENT LOG SECTOR
003620	402F 307C 003C	2068	TS69Q CWI X'003C',LGSEC	SECTOR 61?
003624	100E	2069	JE TS69K	YES-END
003628	50E2	2070	J TS69L	LOOP
003632	4C64	2071	ONESK TBTS (R4,XE)	SET EXPECTED EPROF
003636	6E03 3140	2072	BAL \$PKW,R6	READ ID SKEWED
003640	32C4	2073	DC A(\$ERR\$)	
003644	4028	2074	TBTR (R4,ER)	ANY ERROR?
003648	10A5	2075	JOFF	NO-ID WRITTEN SKEWED
003652	4C64	2076	TBTS (R4,XE)	SET EXPECTED ERROR
003656	6E03 3102	2077	BAL \$RDI,R6	READ ID
003660	32C4	2078	DC A(\$ERR\$)	
003664	5035	2079	J TS699	LOG OUT BAD SECTOR
003668	4C5F	2080	ONESK TBTS (R4,B63)	SET SKEWED FLAG
003672	5033	2081	J TS699	LOG OUT BAD SECTOR
003676	402F 19D4 00CA	2082	TS69K CWI X'00CA',DEVADD+4	LARGE FILE?
003680	100B	2083	JE TS69Z	YES
003684	802B 3072 300A	2084	CB ZER00,SKDCB+8	HEAD ZERO?
003688	180F	2085	JNE TS69H	NO-FINISHED WITH CYL ONE
003692	4020 3004 0000	2086	MVWI 0,SKDCB+2	SELECT HEAD ONE
003696	4020 300A 0100	2087	MVWI X'0100',SKDCB+8	*
003700	50BD	2088	J TS69P	
003704	402F 300A 0000	2089	TS69Z CWI 0,SKDCB+8	HEAD ZERO SELECTED?
003708	1008	2090	JE TS69I	YES
003712	402F 300A 0100	2091	CWI X'0100',SKDCB+8	HEAD ONE SELECTED?
003716	100B	2092	JE TS69J	YES
003720	4020 3038 0001	2093	TS69M MVWI 1,VRDCB+6	SELECT CYL 1
003724	5091	2094	J TS69B	
003728	4020 3004 0000	2095	TS69I MVWI 0,SKDCB+2	SELECT HEAD ONE
003732	4020 300A 0100	2096	MVWI X'0100',SKDCB+8	*
003736	50AA	2097	J TS69P	
003740	4020 3004 0000	2098	TS69J MVWI 0,SKDCB+2	SELECT HEAD 2
003744	4020 300A 0200	2099	MVWI X'0200',SKDCB+8	*
003748	5033	2100	J TS69P	
003752	8028 307F 3066	2101	TS69H MVB PHYSIC+1,RKDCB+4	PHYSICAL SECTOR IN RD SKEWED DCB
003756	4C64	2102	TS69P TBTS (R4,XE)	SET EXPECTED EPROF
003760	6E03 3140	2103	BAL \$RKEW,R6	READ ID SKEWED
003764	32C4	2104	DC A(\$ERR\$)	
003768	4CA1	2105	TBTR (R4,ER)	ANY ERROR?
003772	1201	2106	JON TS699	YES
003776	4C5F	2107	TBTS (R4,B63)	SET SKEWED FLAG
003780	882C 3038 3ACC	2108	TS699 MVW VRDCB+6,ERLST*	ACTUAL CYL NUM
003784	4029 3ACC 0002	2109	AWI 2,ERLST	INCREMENT LIST ADDRESS
003788	882B 18C4 3ACC	2110	CW TULAST,ERLST	CHECK STORAGE SIZE
003792	6F01 3824	2111	BLGE \$\$\$	STORAGE SIZE TOO SMALL
003796	802C 300A 3ACC	2112	MVE SKDCB+8,ERLST*	ACTUAL HEAD
003800	4029 3ACC 0001	2113	AWI 1,ERLST	INCREMENT LIST ADDRESS
003804	882B 18C4 3ACC	2114	CW TULAST,ERLST	CHECK STORAGE SIZE
003808	6F01 3824	2115	BLGE \$\$\$	STORAGE SIZE TOO SMALL
003812	802C 307D 3ACC	2116	MVB LGSEC+1,ERLST*	ACTUAL SECTOR
003816	4029 3ACC 0001	2117	AWI 1,EPLST	INCREMENT LIST ADDRESS
003820	882B 18C4 3ACC	2118	CW TULAST,ERLST	CHECK STORAGE SIZE
003824	6F01 3824	2119	BLGE \$\$\$	STORAGE SIZE TOO SMALL
003828	4029 3ACA 0001	2120	AWI 1,ERRCT	INCREMENT ERROR COUNTER
003832	6E03 39FE	2121	BAL \$SDD,R6	CONVERT SDD TO GSD
003836	882C 2662 3ACC	2122	MVW SCTID,ERLST*	SYNC AND FLAG
003840	495F	2123	TBTR (R4,B63)	SKEWED FLAG ON?
003844	1003	2124	JOFF LST6	NO
003848	403C 3ACC 8000	2125	OWI X'8000',ERLST*	SET SKEWED BIT ON
003852	4029 3ACC 0002	2126	LSTG AWI 2,ERLST	INCREMENT LIST ADDRESS
003856	882B 18C4 3ACC	2127	CW TULAST,ERLST	CHECK STORAGE SIZE
003860	6F01 3824	2128	BLGE \$\$\$	STORAGE SIZE TOO SMALL
003864	902C 2664 3ACC	2129	MVD SCTID+2,ERLST*	LIST CYL HEAD,SECTOR
003868	4029 3			

LOC TR	OBJECT TEXT	STMT	SOURCE STATEMENT	COPYRIGHT IBM CORP 1976
0036CE	4324 3E92	2153	MVA ERSEC,R3	SET UP FOR OP CONSOLE
0036D2	6C08 3ACA	2154	MVW EPRCT,R4	SET UP FOR OP CONSOLE
0036D6	4724 3AA6	2155	MVA HEAD2,R7	PARM ADDRESS
0036DA	6000	2156	SVC OUT	PRINT HEADING
0036DC	4724 3A40	2157	MVA HEAD,R7	PARM ADDRESS
0036E0	6000	2158	SVC OUT	PRINT HEADING
0036E2	6808 3ACA	2159	MVW EPRCT,R0	NUMBER OF ERROR SECTORS
0036E4	4020 3A3C 3A77	2160	TT69R MVI FILL+1,BLK+4	ADDRESS OF OUTPUT BUFFER
0036E6	0905	2161	MVW FILL,R1	NUMBER OF WORDS TO BE CONVERTED
0036E8	4724 3A38	2162	TT69S MVI BLK,R7	PARM ADDRESS
0036F2	601A	2163	SVC HTOE	CONVERT HEX TO EBC
0036F4	4029 3A3A 0002	2164	AWI 2,BLK+2	INCREMENT FROM ADDRESS
0036FA	4029 3A3C 0009	2165	AWI 9,BLK+4	INCREMENT TO ADDRESS
003700	B9F6	2166	JCT TT69S,P1	LOOP
003702	4724 3A72	2167	MVA DATAA,R7	PARM ADDRESS
003706	6000	2168	SVC OUT	PRINT ERROR SECTORS
003708	H8EE	2169	JCT TT69R,R0	LOOP
00370A	6802	2170	B \$CONX	EXIT
00370E	4020 3004 0000	2171	TS69X MVW 0,SKDCB+2	SELECT FIXED HEAD
003710	4020 300A 8000	2172	MVW X'4000',SKDCB+8	
003714	4020 3038 8098	2173	MVW X'4008',VRDCB+8	
003718	4020 303A 8000	2174	MVW X'8000',VRDCB+6	SELECT FIXED HEAD CYL #
003720	4020 303A 8000	2175	MVW X'8000',VRDCB+8	SELECT FIXED HEAD 0 IN DCB
003726	6E03 30F2	2176	TS69A BAL \$SEEK,R6	*
00372A	32C4	2177	DC A(\$ERR\$)	
00372C	4C64	2178	TBTS (R4,XE)	SET EXPECTED ERFOP
00372E	6E03 3130	2179	BAL \$RDVY,R6	READ VERIFY FIXED HEADS
003732	32C4	2180	DC A(\$ERR\$)	ERROR
003734	4CA1	2181	TBTR (R4,ER)	ANY ERROR?
003736	1002	2182	JOFF TS69Y	NO
003738	6E03 3752	2183	BAL TT69,R6	GOTO ERROR ROUTINE
00373C	4020 300A 8000	2184	TS69Y AWI X'0100',SKDCB+8	SELECT NEXT FIXED HEAD
00373E	4020 300A 8800	2185	CWI X'8800',SKDCB+8	ALL FIXED HEADS TESTED?
003740	10A7	2186	JE TS69J	YES
003744	4029 303A 0100	2187	AWI X'0100',VRDCB+8	INCREMENT FIXED HEAD IN DCB
003750	50EA	2188	J TS69A	LOOP
		2189	*	
		2190	*	
		2191	*	
		2192	*	
		2193	TT69 MVW R6,TT69Z+2	SETUP RETURN ADDRESS
003752	6E0D 3790	2194	MVW X'0100',VRDCB+12	BYTE COUNT 100 (ONE SECTOR)
003756	4020 303E 0100	2195	MVW ZEP00,VRDCB+9	SET SECTOR ZERO
00375C	8028 3072 303B	2196	TT69L CB SEC61,VRDCB+9	SECTOR 61?
003760	100C	2197	J TS69J	YES-RETURN TO CALLER
003764	4C64	2198	TBTS (R4,XE)	SET EXPECTED ERROR
00376C	6E03 3130	2199	BAL \$RDVY,R6	READ VERIFY
003770	32C4	2200	DC A(\$ERR\$)	
003772	4CA1	2201	TBTR (R4,ER)	ANY ERROR?
003774	1002	2202	JOFF TT69A	NO
003776	6E03 3792	2203	BAL \$LIST,R6	LIST ERROR
00377A	4029 303A 0001	2204	TT69A AWI 1,VRDCB+8	INCREMENT SECTOR NUMBER
003780	50F0	2205	J TS69J	
003782	8028 3072 303B	2206	TT69Y MVW ZER00,VRDCB+9	SET SECTOR ZERO
003784	4020 303E 3C00	2207	MVW X'3C00',VRDCB+12	FULL BYTE COUNT
00378E	6802 0000	2208	TT69Z B *-*	RETURN TO CALLER
		2209	*	
		2210	\$LIST EQU *	LOGOUT BAD SECTORS
003792	6E0D 384A	2211	MVW R6,\$LISTZ+2	SETUP RETURN ADDRESS
003794	8028 303B 307D	2212	MVB VRDCB+9,LGSEC+1	SECTOR THAT FAILED
003796	6E03 30B0	2213	BAL CONVT,P6	CONVERT LOG TO PHYSICAL
00379C	8028 307F 3066	2214	MVB PHYSIC+1,FKDCB+4	PHYSICAL SECTOR IN DCB
0037A0	8028 307F 2FF6	2215	MVB PHYSIC+1,RSDCB+4	*
0037A6	4C64	2216	TBTS (R4,XE)	SET EXPECTED ERFOP
0037AC	6E03 3102	2217	BAL \$PDIID,P6	READ SECTOR ID
0037B2	32C4	2218	DC A(\$ERR\$)	
0037B4	4CA1	2219	TBTR (R4,ER)	ANY ERROR?
0037B6	10A7	2220	JOFF TS69J	NO
0037B8	4C64	2221	TBTS (R4,XE)	SET EXPECTED ERFOP
0037BA	6E03 3140	2222	BAL \$PKVY,R6	READ SECTOR ID SKEWED
0037BE	32C4	2223	DC A(\$ERR\$)	
0037C0	4CA1	2224	TBTR (R4,ER)	ANY ERFOP?
0037C2	1201	2225	JON \$LIST	YES
0037C4	4C5F	2226	TBTS (R4,B63)	SET SKEWED FLAG
0037C6	882C 3038 3ACC	2227	\$LSTF MVW VRDCB+6,ERLST*	ACTUAL CYLINDER NUMBER
0037CC	4029 3ACC 0002	2228	AWI 2,ERLST	INCREMENT LIST ADDRESS
0037D2	882B 18C4 3ACC	2229	CW TULAST,ERLST	CHECK STORAGE SIZE
0037D8	1F25	2230	JLGE \$FE	STORAGE SIZE TOO SMALL
0037DA	802C 300A 3ACC	2231	MVB SKDCB+8,ERLST*	ACTUAL HEAD SELECTED
0037E0	4029 3ACC 0001	2232	AWI 1,EFLST	INCREMENT LIST ADDRESS
0037E6	882B 18C4 3ACC	2233	CW TULAST,ERLST	CHECK STORAGE SIZE
0037EC	1F1B	2234	JLGE \$FE	STORAGE SIZE TOO SMALL
0037EE	802C 307D 3ACC	2235	MVB LGSEC+1,FRLST*	ACTUAL LOGICAL SECTOR NUMBER
0037F4	4029 3ACC 0001	2236	AWI 1,EFLST	INCREMENT LIST ADDRESS
0037FA	882B 18C4 3ACC	2237	CW TULAST,EFLST	CHECK STORAGE SIZE
003800	1F11	2238	JLGE \$FE	STORAGE SIZE TOO SMALL
003802	6E03 39FE	2239	BAL \$SDD,P6	CONVERT SDD TO GSD
003806	882C 2662 3ACC	2240	MVW SCTID,EPLST*	SYNC BYTE AND FLAG
00380C	4C9F	2241	TBTR (R4,B63)	SKEWED FLAG SET?
00380E	1003	2242	JOFF \$LISTG	NO
003810	403C 3ACC 8000	2243	OWI X'8000',ERLST*	SFT SKEWED BIT ON
003816	4029 3ACC 0002	2244	\$LSTG AWI 2,EFLST	INCREMENT LIST ADDRESS
00381C	882B 18C4 3ACC	2245	CW TULAST,ERLST	CHECK STORAGE SIZE
003822	1F05	2246	JLLT \$LIST	STORAGE SIZE SUFFICIENT
003824	4020 18C8 0001	2247	\$SE MVW 1,TURESUL	TURN ON STORAGE TOO SMALL BIT
00382A	6802 3698	2248	B TS69U	LOG OUT ERRORS DETECTED SO FAR
00382E	4029 3ACA 0001	2249	\$LST AWI 1,EPRCT	INCREMENT ERFOP COUNT
003834	902C 2664 3ACC	2250	MVD SCTID+2,ERLST*	LIST CYL HEAD,SECTOR
00383A	4029 3ACC 0004	2251	AWI 4,ERLST	INCREMENT LIST ADDRESS
003840	882B 18C4 3ACC	2252	CW TULAST,ERLST	CHECK STORAGE SIZE
003846	1FEE	2253	JLGE \$FE	STORAGE SIZE TOO SMALL
003848	6802 0000	2254	\$LSTZ B *-*	RETURN TO CALLER
		2255	*	
00384C	802B 3AD0 2663	2256	TSK CB TWO2,SCTID+1	DEFECTIVE FLAG?
003852	1001	2257	JE TSKEW	YES
003854	50B8	2258	J \$LSTF	LOG OUT
		2259	*	
003856	4C64	2260	TSKEW TBTS (R4,XE)	SET EXPECTED ERFOP
003858	6E03 3140	2261	BAL \$PKVY,R6	READ ID SKEWED
00385C	32C4	2262	DC A(\$ERR\$)	
00385E	4CA1	2263	TBTR (R4,ER)	ANY ERFOP?
003860	1005	2264	JOFF SKW	NO-ID WRITTEN SKEWED
003862	4C64	2265	TBTS (R4,XE)	SET EXPECTED ERFOP
003864	6E03 3102	2266	BAL \$RDID,P6	READ ID

LOC TR	OBJECT TEXT	STMT	SOURCE STATEMENT	COPYRIGHT IBM CORP 1976
003868	32C4	2267	DC A(\$ERR\$)	
00386A	50AD	2268	J \$LSTF	
00386C	4C5F	2269	TBTS (R4,B63)	SET SKEWED FLAG
00386E	50AB	2270	J \$LSTF	
		2271	*	
003870	4C5E	2272	SDD TBTS (R4,B62)	SET SDD FLAG
003872	4020 3AD6 3B00	2273	MVW X'3B00',EV00+4	LOAD PHYSICAL SECTOR IN DCB
003878	4020 3CB6 0000	2274	MVW X'0000',OD01+4	*
00387E	4C64	2275	TBTS (R4,XE)	SETR EXPECTED ERROR
003880	6E03 3990	2276	BAL \$RDID,R6	READ ID IMM
003884	32C4	2277	DC A(\$ERR\$)	
003886	4CA1	2278	TBTR (R4,ER)	ANY ERFOP?
003888	1006	2279	JOFF SDD1	NO
00388A	4020 307C 0000	2280	MVW 0,LGSEC	INIT LOG SECTOR TO 0
003890	6E03 3934	2281	BAL SDD2,R6	DETERMINE AND LOG ERROR
003894	5002	2282	J SDD12	LOOP
003896	6E03 38FA	2283	SDD1 BAL SDD7,R6	CHECK FOR DEFECTIVE FLAG
00389A	402F 19D4 00CA	2284	CWI X'00CA',DEVADD+4	LARGE FILE?
0038A0	100E	2285	JE SDD3	YES
0038A2	402F 300A 0100	2286	CWI X'0100',SKDCB+8	HEAD ONE?
0038A8	1012	2287	JE SDD4	YES
0038AA	4020 3004 0000	2288	SDD5 MVW 0,SKDCB+2	SELECT HEAD 1
0038B0	4020 300A 0100	2289	MVW X'0100',SKDCB+8	*
0038B6	6E03 30F2	2290	SDD6 BAL \$SEEK,R6	*
0038BA	32C4	2291	DC A(\$ERR\$)	
0038BC	50D9	2292	J SDD	LOOP
0038BE	402F 300A 0000	2293	SDD3 CWI 0,SKDCB+8	HEAD ZERO?
0038C4	10F2	2294	JE SDD5	YES
0038C6	402F 300A 0100	2295	CWI X'0100',SKDCB+8	HEAD ONE?
0038CC	100F	2296	JE SDD11	YES
0038CE	4029 3038 0001	2297	SDD4 AWI 1,VRDCB+6	INCREMENT CYLINDER NUM
0038D4	402F 3038 012F	2298	CWI X'012F',VRDCB+6	END OF TRACK?
0038DA	6800 399A	2299	BE T69EE	GO CHECK FOR FIXED HEADS
0038DE	4020 3004 0001	2300	MVW 1,SKDCB+2	SEEK TO NEXT TACKS
0038E4	4020 300A 0000	2301	MVW 0,SKDCB+8	SELECT HEAD ZERO
0038EA	50E5	2302	J SDD6	GO SEEK
0038EC	4020 3004 0000	2303	SDD11 MVW 0,SKDCB+2	SELECT HEAD 2
0038F2	4020 300A 0200	2304	MVW X'0200',SKDCB+8	*
0038F8	50DE	2305	J SDD6	*
		2306	*	
		2307	*	CHECK FOR DEFECTIVE FLAG
		2308	*	
0038FA	6E0D 3932	2309	SDD7 MVW R6,SDD9+2	SETUP RETURN ADDRESS
0038FE	4124 003B	2310	MVW X'003B',R1	INIT COUNT
003902	4224 003D	2311	MVW X'003D',R2	INIT COUNT
003906	4020 3076 3ADA	2312	MVA EV00+8,JOE	ADDR OF FLAG
00390C	7A42 0001	2313	SDD8 SWI 1,R2	60 FLAGS TESTED
003910	100F	2314	JZ SDD9	YES
003912	403B 3076 0002	2315	TWI X'0002',JOE*	TEST FOR ERROR FLAG
003918	1204	2316	JON SDD10	ERROR FLAG
00391A	4029 3076 0010	2317	AWI 16,JOE	INCREMENT FLAG POINTER
003920	50F5	2318	J SDD8	LOOP
003924	722A	2319	SDD10 SWI R2,R1	GET FAILING SECTOR NUM
003928	690D 0001	2320	AWI 1,R1	ADJ SECTOR NUMBER
00392C	690D 307C	2321	MVW 1,LGSEC	LOAD LGSEC WITH FAILING SECTOR NUM
00392E	6E03 3934	2322	BAL SDD2,R6	DETERMINE AND LOG ERROR
003930	6802 0000	2323	SDD9 B *-*	RETURN TO CALLER
		2324	*	
		2325	*	
		2326	*	
003934	6E0D 398E	2327	SDD2 MVW R6,SDD13+2	SETUP RETURN ADDRESS
003938	6E03 30F0	2328	T69LL BAL CONVT,R6	CONVERT LOG TO PHYSICAL
00393C	8028 307F 2FF6	2329	MVB PHYSIC+1,RSDCB+4	LOAD DCB WITH PHYSICAL SECTOR#
003942	8028 307F 3066	2330	MVB PHYSIC+1,FKDCB+4	LOAD DCB WITH PHYSICAL SECTOR#
003948	4C64	2331	TBTS (R4,XE)	SET EXPECTED ERROR
00394A	6E03 3102	2332	BAL \$RDID,R6	READ SECTOR ID
00394E	32C4	2333	DC A(\$ERR\$)	
003950	4CA1	2334	TBTR (R4,ER)	ANY ERROR?
003952	6A00 35F2	2335	BON TS69H	YES
003956	402B 2666 0002	2336	TWI X'0002',SCTID+4	DEFECTIVE FLAG
00395C	1208	2337	JON SDD16	YES
00395E	4029 307C 0001	2338	AWI 1,LGSEC	INCREMENT LOG SECTOR
003964	402F 307C 003C	2339	T69QQ CWI X'003C',LGSEC	SECTOR 61?
00396A	1010	2340	JE SDD13	YES-END
00396C	50E5	2341	J T69LL	LOOP
00396E	4C64	2342	SDD16 TBTS (R4,XE)	SET EXPECTED ERROR
003970	6E03 3140	2343	BAL \$RKEW,R6	READ ID SKEWED
003974	32C4	2344	DC A(\$ERR\$)	
003978	4C64	2345	TBTR (R4,ER)	ANY ERFOP?
00397A	4CA1	2346	JOFF ONSKS	NO-ID WRITTEN SKEWED
00397C	6E03 3102	2347	TBTS (R4,XE)	SET EXPECTED ERROR
00397E	32C4	2348	BAL \$RDID,R6	READ ID
003980	32C4	2349	DC A(\$ERR\$)	
003982	6802 3606	2350	B TS699	LOG OUT BAD SECTOR
003986	4C5F	2351	ONSKS TBIS (R4,B63)	SET SKEWED FLAG
003988	6802 3606	2352	B TS699	LOG OUT BAD SECTOR
00398C	6802 0000	2353	SDD13 B *-*	RETURN TO CALLER
003990	4020 3280 3AD2	2354	\$RDIM MVA EV00,IODCB	SET UP CONTROL BLOCK FOR SVC CALL
003996	6802 317E	2355	B XIO	
		2356	*	
00399A	4224 19D4	2357	T69EE MVA DEVADD+4,R2	FIXED HEADS
00399E	4A0B	2358	TBT (R2,11)	*
0039A0	1202	2359	JON T69XX	YES
0039A2	6802 3698	2360	B TS69U	LOG OUT AND EXIT
0039A6	4020 3004 0000	2361	T69XX MVW 0,SKDCB+2	SELECT FIXED HEAD
0039AC				

LOCTR	OBJECT TEXT	STMT	SOURCE STATEMENT	COPYRIGHT IBM CORP 1976
0039FC	50DD	2381	J T69XA	LOOP
		2382	*	
		2383	CONVERT SDD TO GSD	
		2384	*	
		2385	*	
0039FE	6E0D 3A36	2386	\$SDD MVW R6,*SDDA+2	SET UP RETURN ADDRESS
003A02	4C1E	2387	TET (R4,B62)	SDD FORMAT?
003A04	1017	2388	JOFF \$SDDA	NO-RETURN TO CALLER
003A06	D120 2664	2389	MVD SCTID+2,R1	GET SDD CYL,HEAD,SEC
003A0A	7920 00FF	2390	NWT X'00FF',R1	* AND OFF UNWANTED BITS
003A0E	310D	2391	SLLD 1,R1	* POSITION CYL IN R2
003A10	7906 0180	2392	Y'0180',R1	IS THIS FIXED HEADS?
003A14	1403	2393	JLT \$SDDB	* NO,GO POSITION IT
003A16	7923 0040	2394	OWI X'0040',R1	* YES,SET ON FIXED HEAD BIT
003A1A	5003	2395	J \$SDDC	
003A1C	690D 2664	2396	\$SDDB MVW R1,SCTID+2	LOAD CYL# IN BUFFER
003A20	0900	2397	MVBI 0,R1	CLEAR R1 FOR HEAD ADJ
003A22	310D	2398	\$SDDC SLLD 1,R1	* AND POSITION HEAD IN R1
003A24	C128 2666	2399	MVB R1,SCTID+4	LOAD HEAD
003A28	8028 2667 2663	2400	MVE SCTID+5,SCTID+1	MOVE FLAG
003A2E	3252	2401	SRL 10,R2	POSITION SECTOR AND
003A30	C228 2667	2402	MVB R2,SCTID+5	* MOVE
003A34	6802 0000	2403	\$SDDA B	RETURN TO CALLER
		2404	*	
		2405	*	
		2406	*	
003A38	0002	2407	PLK DC X'0002'	
003A3A	0000	2408	DC A(*-*)	'FROM'
003A3C	0000	2409	DC A(*-*)	'TO'
		2410	*	
003A3E	0080	2411	DC X'0080'	
003A40	3A44	2412	DC A(HEAD4)	
003A42	E261C260C3E8D3404	2413	DC C'5/E-CYL HD/SC IS-SYN/FLG CYL HD/SC	
003A44	0000	2414	DC X'0000'	END OF PRINT CHARACTER
003A46	0000	2415	DC X'0000'	
003A48	0000	2416	DC A(FILL)	
003A4A	0000	2417	DC X'786F'	
003A4C	0000	2418	DC C'	INDICATION FOR OP CONSOLE,
003A4E	0000	2419	DC X'00'	END OF PRINT CHARACTER
003A50	0000	2420	DC X'0000'	
003A52	0000	2421	DC A(HEAD3)	
003A54	0000	2422	DC C'GSD ERROR OR ALTERNATE SECTORS'	
003A56	0000	2423	DC X'00'	END OF PRINT CHARACTER
003A58	0000	2424	DC X'3C00'	SECTOR 61 CONSTANT
003A5A	0000	2425	DC A(*-*)	ERROR COUNTER
003A5C	0000	2426	DC A(*-*)	ERROR LIST ADDRESS
003A5E	0000	2427	DC X'0300'	CYL ONE ERROR FLAG
003A60	0200	2428	DC X'0200'	ERROR FLAG
		2429	MACRO	
		2430	EX DCBT 8A,8B,8C,8D,8E,8F,8G,8H	
		2431	LCLC 8J,8K,8L,8M,8N,8O,8P,8Q	
		2432	EJ SETC '0000'(1,4-K'8A) . '8A'	
		2433	EX DC X'8J'	CONTROL WORD
		2434	EK SETC '0000'(1,4-K'8B) . '8B'	
		2435	DC X'8K'	DIRECT / # OF TRACKS
		2436	EL SETC '0000'(1,4-K'8C) . '8C'	
		2437	DC X'8L'	PHY SEC / FLAG
		2438	EM SETC '0000'(1,4-K'8D) . '8D'	
		2439	DC X'8M'	CYLINDER NUMBER
		2440	EN SETC '0000'(1,4-K'8E) . '8E'	
		2441	DC X'8N'	HEAD # / LOG SEC
		2442	ATF ('8F' EQ '') . 0	
		2443	EO SETC '8F'	
		2444	AGO .F	
		2445	.O ANOP	
		2446	EO SETC '0000'	
		2447	.F ANOP	
		2448	DC A(8O)	CHAIN ADDRESS OF NEXT DCB
		2449	EP SETC '0000'(1,4-K'8G) . '8G'	
		2450	DC X'8P'	BYTE COUNT
		2451	ATF ('8H' EQ '') . 0	
		2452	EQ SETC '8H'	
		2453	AGO .H	
		2454	.O ANOP	
		2455	EO SETC '0000'	
		2456	.H ANOP	
		2457	DC A(8Q)	BUFFER ADDRESS
		2458	DC MEND	
		2459	*	EVEN ID SECTOR DCB'S
		2460	*	
		2461	*	EVEN SECTOR I/O COMMAND STARTS HERE
		2462	*	
003AD2	A00A	2463	EV00 DCBT A00A,3B00,,01,*,+06,6,*-10	
003AD4	0000	2464	DC X'A00A'	CONTROL WORD
003AD6	3B00	2465	DC X'0000'	DIRECT / # OF TRACKS
003AD8	0000	2466	DC X'3B00'	PHY SEC / FLAG
003ADA	0001	2467	DC X'0000'	CYLINDER NUMBER
003ADC	3AE2	2468	DC X'0001'	HEAD # / LOG SEC
003ADE	0006	2469	DC A(*+06)	CHAIN ADDRESS OF NEXT DCB
003AE0	3AD6	2470	DC X'0006'	BYTE COUNT
		2471	DC A(*-10)	BUFFER ADDRESS
		2472	EV02 DCBT A00E,0300,,02,*,+06,6,*-10	
003AE2	A00E	2473	DC X'A00E'	CONTROL WORD
003AE4	0000	2474	DC X'0000'	DIRECT / # OF TRACKS
003AE6	0300	2475	DC X'0300'	PHY SEC / FLAG
003AE8	0000	2476	DC X'0000'	CYLINDER NUMBER
003AEA	0002	2477	DC X'0002'	HEAD # / LOG SEC
003AEC	3AF2	2478	DC A(*+06)	CHAIN ADDRESS OF NEXT DCB
003AEE	0006	2479	DC X'0006'	BYTE COUNT
003AF0	3AE6	2480	DC A(*-10)	BUFFER ADDRESS
		2481	EV04 DCBT A00E,0500,,03,*,+06,6,*-10	
003AF2	A00E	2482	DC X'A00E'	CONTROL WORD
003AF4	0000	2483	DC X'0000'	DIRECT / # OF TRACKS
003AF6	0500	2484	DC X'0500'	PHY SEC / FLAG
003AF8	0000	2485	DC X'0000'	CYLINDER NUMBER
003AFA	0003	2486	DC X'0003'	HEAD # / LOG SEC
003AFC	3B00	2487	DC A(*+06)	CHAIN ADDRESS OF NEXT DCB
003AFE	0006	2488	DC X'0006'	BYTE COUNT
003B00	3AF6	2489	DC A(*-10)	BUFFER ADDRESS
		2490	EV06 DCBT A00E,0700,,04,*,+06,6,*-10	
003B02	A00E	2491	DC X'A00E'	CONTROL WORD
003B04	0000	2492	DC X'0000'	DIRECT / # OF TRACKS
003B06	0700	2493	DC X'0700'	PHY SEC / FLAG
003B08	0000	2494	DC X'0000'	CYLINDER NUMBER

LOCTR	OBJECT TEXT	STMT	SOURCE STATEMENT	COPYRIGHT IBM CORP 1976
003B0A	0004	2495+	DC X'0004'	HEAD # / LOG SEC
003B0C	3B12	2496+	DC A(*+06)	CHAIN ADDRESS OF NEXT DCB
003B0E	0006	2497+	DC X'0006'	BYTE COUNT
003B10	3B06	2498+	DC A(*-10)	BUFFER ADDRESS
		2499	EV08 DCBT A00E,0900,,05,*,+06,6,*-10	
003B12	A00E	2500+	DC X'A00E'	CONTROL WORD
003B14	0000	2501+	DC X'0000'	DIRECT / # OF TRACKS
003B16	0900	2502+	DC X'0900'	PHY SEC / FLAG
003B18	0000	2503+	DC X'0000'	CYLINDER NUMBER
003B1A	0005	2504+	DC X'0005'	HEAD # / LOG SEC
003B1C	3B22	2505+	DC A(*+06)	CHAIN ADDRESS OF NEXT DCB
003B1E	0006	2506+	DC X'0006'	BYTE COUNT
003B20	3B16	2507+	DC A(*-10)	BUFFER ADDRESS
		2508	EV10 DCBT A00E,0B00,,06,*,+06,6,*-10	
003B22	A00E	2509+	DC X'A00E'	CONTROL WORD
003B24	0000	2510+	DC X'0000'	DIRECT / # OF TRACKS
003B26	0E00	2511+	DC X'0E00'	PHY SEC / FLAG
003B28	0000	2512+	DC X'0000'	CYLINDER NUMBER
003B2A	0006	2513+	DC X'0006'	HEAD # / LOG SEC
003B2C	3B32	2514+	DC A(*+06)	CHAIN ADDRESS OF NEXT DCB
003B2E	0006	2515+	DC X'0006'	BYTE COUNT
003B30	3B26	2516+	DC A(*-10)	BUFFER ADDRESS
		2517	EV12 DCBT A00E,0D00,,07,*,+06,6,*-10	
003B32	A00E	2518+	DC X'A00E'	CONTROL WORD
003B34	0000	2519+	DC X'0000'	DIRECT / # OF TRACKS
003B36	0D00	2520+	DC X'0D00'	PHY SEC / FLAG
003B38	0000	2521+	DC X'0000'	CYLINDER NUMBER
003B3A	0007	2522+	DC X'0007'	HEAD # / LOG SEC
003B3C	3B42	2523+	DC A(*+06)	CHAIN ADDRESS OF NEXT DCB
003B3E	0006	2524+	DC X'0006'	BYTE COUNT
003B40	3B36	2525+	DC A(*-10)	BUFFER ADDRESS
		2526	EV14 DCBT A00E,0F00,,08,*,+06,6,*-10	
003B42	A00E	2527+	DC X'A00E'	CONTROL WORD
003B44	0000	2528+	DC X'0000'	DIRECT / # OF TRACKS
003B46	0F00	2529+	DC X'0F00'	PHY SEC / FLAG
003B48	0000	2530+	DC X'0000'	CYLINDER NUMBER
003B4A	0008	2531+	DC X'0008'	HEAD # / LOG SEC
003B4C	3B52	2532+	DC A(*+06)	CHAIN ADDRESS OF NEXT DCB
003B4E	0006	2533+	DC X'0006'	BYTE COUNT
003B50	3B46	2534+	DC A(*-10)	BUFFER ADDRESS
		2535	EV16 DCBT A00E,1100,,09,*,+06,6,*-10	
003B52	A00E	2536+	DC X'A00E'	CONTROL WORD
003B54	0000	2537+	DC X'0000'	DIRECT / # OF TRACKS
003B56	1100	2538+	DC X'1100'	PHY SEC / FLAG
003B58	0000	2539+	DC X'0000'	CYLINDER NUMBER
003B5A	0009	2540+	DC X'0009'	HEAD # / LOG SEC
003B5C	3B62	2541+	DC A(*+06)	CHAIN ADDRESS OF NEXT DCB
003B5E	0006	2542+	DC X'0006'	BYTE COUNT
003B60	3B56	2543+	DC A(*-10)	BUFFER ADDRESS
		2544	EV18 DCBT A00E,1300,,0A,*,+06,6,*-10	
003B62	A00E	2545+	DC X'A00E'	CONTROL WORD
003B64	0000	2546+	DC X'0000'	DIRECT / # OF TRACKS
003B66	1300	2547+	DC X'1300'	PHY SEC / FLAG
003B68	0000	2548+	DC X'0000'	CYLINDER NUMBER
003B6A	000A	2549+	DC X'000A'	HEAD # / LOG SEC
003B6C	3B72	2550+	DC A(*+06)	CHAIN ADDRESS OF NEXT DCB
003B6E	0006	2551+	DC X'0006'	BYTE COUNT
003B70	3B66	2552+	DC A(*-10)	BUFFER ADDRESS
		2553	EV20 DCBT A00E,1500,,0B,*,+06,6,*-10	
003B72	A00E	2554+	DC X'A00E'	CONTROL WORD
003B74	0000	2555+	DC X'0000'	DIRECT / # OF TRACKS
003B76	1500	2556+	DC X'1500'	PHY SEC / FLAG
003B78	0000	2557+	DC X'0000'	CYLINDER NUMBER
003B7A	000B	2558+	DC X'000B'	HEAD # / LOG SEC
003B7C	3B82	2559+	DC A(*+06)	CHAIN ADDRESS OF NEXT DCB
003B7E	0006	2560+	DC X'0006'	BYTE COUNT
003B80	3B76	2561+	DC A(*-10)	BUFFER ADDRESS
		2562	EV22 DCBT A00E,1700,,0C,*,+06,6,*-10	
003B82	A00E	2563+	DC X'A00E'	CONTROL WORD
003B84	0000	2564+	DC X'0000'	DIRECT / # OF TRACKS
003B86	1700	2565+	DC X'1700'	PHY SEC / FLAG
003B88	0000	2566+	DC X'0000'	CYLINDER NUMBER
003B8A	000C	2567+	DC X'000C'	HEAD # / LOG SEC
003B8C	3B92	2568+	DC A(*+06)	CHAIN ADDRESS OF NEXT DCB
003B8E	0006	2569+	DC X'0006'	BYTE COUNT
003B90	3B86	2570+	DC A(*-10)	BUFFER ADDRESS
		2571	EV24 DCBT A00E,1900,,0D,*,+06,6,*-10	
003B92	A00E	2572+	DC X'A00E'	CONTROL WORD
003B94	0000	2573+	DC X'0000'	DIRECT / # OF TRACKS
003B96	1900	2574+	DC X'1900'	PHY SEC / FLAG
003B98	0000	2575+	DC X'0000'	CYLINDER NUMBER
003B9A	000D	2576+	DC X'000D'	HEAD # / LOG SEC
003B9C	3BA2	2577+	DC A(*+06)	CHAIN ADDRESS OF NEXT DCB
003B9E	0006	2578+	DC X'0006'	BYTE COUNT
003BA0	3B96	2579+	DC A(*-10)	BUFFER ADDRESS
		2580	EV26 DCBT A00E,1B00,,0E,*,+06,6,*-10	
003BA2	A00E	2581+	DC X'A00E'	CONTROL WORD
003BA4	0000	2582+	DC X'0000'	DIRECT / # OF TRACKS
003BA6	1B00	2583+	DC X'1B00'	PHY SEC / FLAG
003BA8	0000	2584		

Table with columns: LOCTR, OBJECT TEXT, STMT, SOURCE STATEMENT, COPYRIGHT IBM CORP 1976. Contains assembly code for tracks 003BD4 to 003C9E.

Table with columns: LOCTR, OBJECT TEXT, STMT, SOURCE STATEMENT, COPYRIGHT IBM CORP 1976. Contains assembly code for tracks 003CA0 to 003D62.

Table with columns: LOCTR, OBJECT TEXT, STMT SOURCE STATEMENT, COPYRIGHT IBM CORP 1976. Contains assembly code for tracks 0000 to 0006.

Table with columns: LOCTR, OBJECT TEXT, STMT SOURCE STATEMENT, COPYRIGHT IBM CORP 1976. Contains assembly code for tracks 0000 to 0006, including error handling and sector error list.

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
0	.R0.	ABSOLUTE. HEX VALUE(00000000) 724 725 730 732 1224 1227 1228 1232 1233 1234 1235 1241 1468 1469 1470 1471 1475 1476 1477 1478 2159 2169
0	.R1.	ABSOLUTE. HEX VALUE(00000001) 1229 1231 1232 1238 1239 1240 1241 1908 1911 1914 1917 2161 2166 2310 2319 2320 2321 2389 2390 2391 2392 2394 2396 2397 2398 2399
0	.R2.	ABSOLUTE. HEX VALUE(00000002) 1236 1237 1238 1243 1244 1913 1914 1994 2137 2138 2311 2313 2319 2357 2358 2401 2402
0	.R3.	ABSOLUTE. HEX VALUE(00000003) 1157 1160 1178 1181 1420 1422 1526 1529 1533 1536 1547 1550 1617 1627 1630 1631 1634 1636 1692 1693 1728 1734 1738 1768 1773 1786 1816 1861 1863 1864 1872 1906 1907 1911 1923 2142 2153
0	.R4.	ABSOLUTE. HEX VALUE(00000004) 718 733 734 735 746 749 754 762 771 806 810 821 844 848 860 876 880 909 917 923 927 932 940 959 965 983 1007 1008 1012 1015 1017 1026 1029 1031 1034 1037 1041 1044 1049 1051 1053 1057 1063 1071 1075 1139 1143 1153 1166 1169 1171 1222 1620 1621 1624 1638 1639 1641 1642 1645 1651 1657 1729 1730 1732 1736 1740 1769 1770 1771 1781 1782 1783 1785 1788 1798 1800 1802 1805 1807 1990 2003 2007 2010 2015 2018 2030 2052 2058 2061 2071 2074 2076 2080 2102 2105 2107 2123 2132 2143 2149 2154 2177 2180 2198 2201 2216 2219 2221 2224 2226 2241 2260 2263 2265 2269 2272 2275 2278 2331 2334 2342 2345 2347 2351 2368 2371 2387
0	.R5.	ABSOLUTE. HEX VALUE(00000005) 1158 1160 1179 1181 1421 1422 1527 1529 1534 1536 1548 1550 1628 1630 1632 1634 1650 1655 1777 1778 1779 1810 1811 1813 1862 1863 1905 1918
0	.R6.	ABSOLUTE. HEX VALUE(00000006) 719 743 744 750 760 767 769 783 798 799 804 808 812 836 837 842 846 850 874 878 882 907 915 921 925 930 935 938 955 957 981 995 999 1007 1013 1027 1032 1038 1042 1047 1055 1061 1069 1073 1125 1137 1141 1151 1163 1167 1172 1207 1221 1423 1424 1463 1626 1646 1658 1694 1799 1804 1806 1812 1815 1817 1857 1873 1875 1910 1915 1916 1951 2005 2011 2016 2020 2028 2050 2055 2059 2072 2077 2103 2121 2175 2178 2182 2193 2199 2203 2211 2213 2217 2222 2239 2261 2266 2276 2281 2283 2290 2309 2322 2327 2328 2332 2343 2348 2364 2369 2374 2376 2386
0	.R7.	ABSOLUTE. HEX VALUE(00000007) 573 716 722 1081 1085 1089 1159 1180 1201 1204 1419 1528 1535 1549 1629 1633 1640 1733 1774 1860 1865 1870 1903 1909 1912 1924 1927 1988 2146 2155 2157 2162 2167
2247	\$\$E	ADDRESS. HEX LOCATION(00003824) IN CSECT(I7869) LENGTH(6) 2111 2115 2119 2128 2230 2234 2238 2253
1176	\$\$ERR	ADDRESS. HEX LOCATION(00002D4A) IN CSECT(I7869) LENGTH(6) 1174
1860	\$CONC	ADDRESS. HEX LOCATION(00003290) IN CSECT(I7869) LENGTH(2) 719 1991
1926	\$CONX	ADDRESS. HEX LOCATION(00003314) IN CSECT(I7869) LENGTH(1) 786 788 817 820 856 859 1077 1083 1087
1562	\$DIAG	ADDRESS. HEX LOCATION(00003176) IN CSECT(I7869) LENGTH(6) 1091 2148 2170
1902	\$ERR\$	ADDRESS. HEX LOCATION(000032C4) IN CSECT(I7869) LENGTH(6) 719 745 747 751 761 763 770 805 807 820 845 845 847 876 877 879 887 893 898 904 908 910 916 922 924 926 931 933 939 941 958 960 982 984 996 998 1000 1002 1014 1028 1033 1039 1043 1045 1048 1050 1056 1058 1062 1064 1070 1072 1074 1076 1138 1142 1152 1168 1173 1182 1992 2006 2008 2012 2017 2029 2031 2051 2053 2060 2073 2078 2104 2176 2179 2200 2218 2223 2262 2267 2277 2291 2333 2344 2349 2365 2370
562	\$INTL	ADDRESS. HEX LOCATION(00002690) IN CSECT(I7869) LENGTH(2) 1779 1869
532	\$IOIN	ADDRESS. HEX LOCATION(0000265C) IN CSECT(I7869) LENGTH(2) 1157 1176 1635 1633 1773 1810 1871
533	\$ISB	ADDRESS. HEX LOCATION(0000265E) IN CSECT(I7869) LENGTH(2) 1636 1774 1813 1872
517	\$LE	ABSOLUTE. HEX VALUE(00000026) 1641 1781
2210	\$LIST	ADDRESS. HEX LOCATION(00003792) IN CSECT(I7869) LENGTH(1) 2203
2249	\$LST	ADDRESS. HEX LOCATION(0000382E) IN CSECT(I7869) LENGTH(6) 2246
2227	\$LSTF	ADDRESS. HEX LOCATION(000037C6) IN CSECT(I7869) LENGTH(6) 2225 2258 2268 2270
2244	\$LSTG	ADDRESS. HEX LOCATION(00003816) IN CSECT(I7869) LENGTH(6) 2242
2254	\$LSTZ	ADDRESS. HEX LOCATION(00003848) IN CSECT(I7869) LENGTH(4) 2211
1533	\$RD	ADDRESS. HEX LOCATION(0000311C) IN CSECT(I7869) LENGTH(2) 737 1151
1525	\$RDID	ADDRESS. HEX LOCATION(00003102) IN CSECT(I7869) LENGTH(6) 750 769 808 846 938 957 1027 1172 2011
2354	\$RDIM	ADDRESS. HEX LOCATION(00003990) IN CSECT(I7869) LENGTH(6) 2059 2077 2217 2266 2332 2348 2276 2369
1540	\$RDVY	ADDRESS. HEX LOCATION(00003130) IN CSECT(I7869) LENGTH(6) 915 925 1073 1141 2016 2178 2199
1522	\$RECL	ADDRESS. HEX LOCATION(000030FA) IN CSECT(I7869) LENGTH(6) 744 995 1055 2005
1546	\$RKEW	ADDRESS. HEX LOCATION(00003140) IN CSECT(I7869) LENGTH(6) 878 1032 1038 1167 2072 2103 2222 2261 2343
2386	\$SDD	ADDRESS. HEX LOCATION(000039FE) IN CSECT(I7869) LENGTH(4)

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
2403	\$SDDA	2121 2239 ADDRESS. HEX LOCATION(00003A34) IN CSECT(I7869) LENGTH(4) 2386 2388
2396	\$SDDB	ADDRESS. HEX LOCATION(00003A1C) IN CSECT(I7869) LENGTH(4) 2393
2398	\$SDDE	ADDRESS. HEX LOCATION(00003A22) IN CSECT(I7869) LENGTH(2) 2395
1519	\$SEEK	ADDRESS. HEX LOCATION(000030F2) IN CSECT(I7869) LENGTH(6) 760 907 921 930 999 1061 2028 2050 2175 2290 2364
531	\$TUID	ADDRESS. HEX LOCATION(0000265A) IN CSECT(I7869) LENGTH(2) 572 717 1923 1957 1989
1200	\$WBUF	ADDRESS. HEX LOCATION(00002D68) IN CSECT(I7869) LENGTH(1) 743
1554	\$WKEW	ADDRESS. HEX LOCATION(0000315A) IN CSECT(I7869) LENGTH(6) 874 1042
1155	\$WRET	ADDRESS. HEX LOCATION(00002D02) IN CSECT(I7869) LENGTH(4) 1125
1543	\$WRT	ADDRESS. HEX LOCATION(00003138) IN CSECT(I7869) LENGTH(6) 1065 1137
1558	\$WSEC	ADDRESS. HEX LOCATION(00003168) IN CSECT(I7869) LENGTH(6) 804 842 981 1047
102	@CADD1	ADDRESS. HEX LOCATION(000019B8) IN CSECT(I7869) LENGTH(1) 1920
103	@CADD2	ADDRESS. HEX LOCATION(000019BA) IN CSECT(I7869) LENGTH(1) 1921
39	@FIXT	ABSOLUTE. HEX VALUE(00000101) 378
41	@GOTO	ABSOLUTE. HEX VALUE(00000200) 360 397 417
43	@INPT	ABSOLUTE. HEX VALUE(00000300) 387
46	@NVLD	ABSOLUTE. HEX VALUE(00000600) 415
38	@QUES	ABSOLUTE. HEX VALUE(00000100) 357 381
40	@STOP	ABSOLUTE. HEX VALUE(00000102) 384
45	@TUXX	ABSOLUTE. HEX VALUE(00000500) 366 403
903	ASMD	ADDRESS. HEX LOCATION(0000298E) IN CSECT(I7869) LENGTH(6) 756
1089	ASMDA	ADDRESS. HEX LOCATION(00002C08) IN CSECT(I7869) LENGTH(4) 1052
954	ASMDD	ADDRESS. HEX LOCATION(00002A58) IN CSECT(I7869) LENGTH(6) 918 928
993	ASMDF	ADDRESS. HEX LOCATION(00002AF0) IN CSECT(I7869) LENGTH(6) 970
971	ASMDI	ADDRESS. HEX LOCATION(00002AA0) IN CSECT(I7869) LENGTH(6) 962 964
955	ASMDR	ADDRESS. HEX LOCATION(00002A5E) IN CSECT(I7869) LENGTH(4) 972
976	ASMD2	ADDRESS. HEX LOCATION(00002AA8) IN CSECT(I7869) LENGTH(6) 943
948	ASMD3	ADDRESS. HEX LOCATION(00002A40) IN CSECT(I7869) LENGTH(6) 945
935	ASMD4	ADDRESS. HEX LOCATION(00002A0C) IN CSECT(I7869) LENGTH(4) 949
1085	ASMD5	ADDRESS. HEX LOCATION(00002BFE) IN CSECT(I7869) LENGTH(4) 949
930	ASMD6	ADDRESS. HEX LOCATION(000029FA) IN CSECT(I7869) LENGTH(4) 952
1022	ASMD7	ADDRESS. HEX LOCATION(00002B3C) IN CSECT(I7869) LENGTH(6) 1009 1016
1051	ASMD8	ADDRESS. HEX LOCATION(00002B94) IN CSECT(I7869) LENGTH(2) 1046
1081	ASMD9	ADDRESS. HEX LOCATION(00002BF4) IN CSECT(I7869) LENGTH(4) 1054
1037	ASME1	ADDRESS. HEX LOCATION(00002B6E) IN CSECT(I7869) LENGTH(2) 1030
1047	ASME2	ADDRESS. HEX LOCATION(00002B88) IN CSECT(I7869) LENGTH(4) 1035 1041
1042	ASME3	ADDRESS. HEX LOCATION(00002B7A) IN CSECT(I7869) LENGTH(4) 1036
1931	BEGIN	ADDRESS. HEX LOCATION(0000331E) IN CSECT(I7869) LENGTH(2) 1948
1952	BIT0080	ABSOLUTE. HEX VALUE(00000080) 1922
2407	BLK	ADDRESS. HEX LOCATION(00003A38) IN CSECT(I7869) LENGTH(2) 2152 2160 2162 2164 2165
1947	BUFPT	ADDRESS. HEX LOCATION(00003426) IN CSECT(I7869) LENGTH(2) 1907
492	B60	ABSOLUTE. HEX VALUE(0000001C) 733 965 1008 1051
493	B61	ABSOLUTE. HEX VALUE(0000001D) 734 1017 1053
494	B62	ABSOLUTE. HEX VALUE(0000001E) 735 754 821 860 1222 2003 2132 2149 2272
495	B63	ABSOLUTE. HEX VALUE(0000001F) 2387 2080 2107 2123 2226 2241 2269 2351
1386	CB29	ADDRESS. HEX LOCATION(00003080) IN CSECT(I7869) LENGTH(2) 1466
521	CE	ABSOLUTE. HEX VALUE(0000002A) 1620 1732 1802
601	CICB	ABSOLUTE. HEX VALUE(00000014) 1866
1275	CLDCB	ADDRESS. HEX LOCATION(00002FD2) IN CSECT(I7869) LENGTH(2) 1522
1419	CMPRW	ADDRESS. HEX LOCATION(0000309A) IN CSECT(I7869) LENGTH(4) 812 850 882
1463	CONVT	ADDRESS. HEX LOCATION(000030B0) IN CSECT(I7869) LENGTH(4) 767 799 837 935 955 1007 1163 2055 2213
1185	CPUID	ABSOLUTE. HEX VALUE(00000232) 728
519	CS	ABSOLUTE. HEX VALUE(00000028) 1621 1624 1730 1771 1800
520	CSA	ABSOLUTE. HEX VALUE(00000029) 1805
550	CSBUF	ADDRESS. HEX LOCATION(0000267A) IN CSECT(I7869) LENGTH(1)

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
1314	CSDCB	1321 1632 ADDRESS. HEX LOCATION(00003012) IN CSECT(I7869) LENGTH(2)
558	CSTL8	1622 ADDRESS. HEX LOCATION(00002688) IN CSECT(I7869) LENGTH(2)
1397	CTR02	1733 1734 ADDRESS. HEX LOCATION(00003096) IN CSECT(I7869) LENGTH(2)
1398	CTR03	738 814 852 889 891 896 ADDRESS. HEX LOCATION(00003098) IN CSECT(I7869) LENGTH(2)
2416	DATAA	739 853 885 888 ADDRESS. HEX LOCATION(00003A72) IN CSECT(I7869) LENGTH(2)
540	DCBUF	2167 ADDRESS. HEX LOCATION(0000266A) IN CSECT(I7869) LENGTH(1)
541	DCB1	1627 ADDRESS. HEX LOCATION(0000266A) IN CSECT(I7869) LENGTH(2)
1948	DC2PT	1178 ADDRESS. HEX LOCATION(00003428) IN CSECT(I7869) LENGTH(2)
105	DEVADD	1921 ADDRESS. HEX LOCATION(000019D0) IN CSECT(I7869) LENGTH(1)
535	DEV1	565 1821 1830 1927 2021 2082 2137 2284 2357 ADDRESS. HEX LOCATION(00002662) IN CSECT(I7869) LENGTH(2)
538	DEV4	539 1862 ADDRESS. HEX LOCATION(00002668) IN CSECT(I7869) LENGTH(2)
1263	DGDCB	1206 ADDRESS. HEX LOCATION(00002FC2) IN CSECT(I7869) LENGTH(2)
67	DUMMY	10 10 1011 1562 ABSOLUTE. HEX VALUE(00000000)
423	ENTPT	348 422 440 ADDRESS. HEX LOCATION(000025A6) IN CSECT(I7869) LENGTH(1)
47	EQ	198 ABSOLUTE. HEX VALUE(00000000)
512	ER	369 406 ABSOLUTE. HEX VALUE(00000021)
		746 762 771 806 810 844 848 876 880 909 917 923 927 932 940 959 983 997 1001 1015 1029 1034 1040 1044 1049 1057 1063 1071 1075 1139 1143 1153 1169 1638 1657 1740 1782 1807 2007 2018 2030 2052 2061 2074 2105 2180 2201 2219 2224 2263 2278 2334 2345 2371
2426	ERLST	ADDRESS. HEX LOCATION(00003ACC) IN CSECT(I7869) LENGTH(2)
		2004 2108 2109 2110 2112 2113 2114 2116 2117 2118 2122 2125 2126 2127 2129 2130 2227 2228 2229 2231 2232 2233 2235 2236 2237 2240 2243 2244 2245 2250 2251 2252
2425	ERRCT	ADDRESS. HEX LOCATION(00003ACA) IN CSECT(I7869) LENGTH(2)
3008	ERSEC	1996 2120 2140 2143 2154 2159 2249 ADDRESS. HEX LOCATION(00003E92) IN CSECT(I7869) LENGTH(2)
2464	EV00	2004 2142 2152 2153 ADDRESS. HEX LOCATION(00003AD2) IN CSECT(I7869) LENGTH(2)
587	EXIT	2273 2312 2354 2366 ABSOLUTE. HEX VALUE(00000006)
1950	FAKETU	1789 ADDRESS. HEX LOCATION(0000342C) IN CSECT(I7869) LENGTH(2)
2418	FILL	1920 ADDRESS. HEX LOCATION(00003A76) IN CSECT(I7869) LENGTH(45)
1387	FIVE9	2160 2416 ADDRESS. HEX LOCATION(00003082) IN CSECT(I7869) LENGTH(2)
804	FIXH1	1473 ADDRESS. HEX LOCATION(0000281A) IN CSECT(I7869) LENGTH(4)
1238	FXH1	897 ADDRESS. HEX LOCATION(00002DB6) IN CSECT(I7869) LENGTH(2)
448	F00017	1230 ADDRESS. HEX LOCATION(000025B4) IN CSECT(I7869) LENGTH(1)
452	F00155	361 ADDRESS. HEX LOCATION(000025BA) IN CSECT(I7869) LENGTH(1)
458	F00172	379 ADDRESS. HEX LOCATION(000025F8) IN CSECT(I7869) LENGTH(1)
462	F00334	385 ADDRESS. HEX LOCATION(0000260A) IN CSECT(I7869) LENGTH(1)
470	F00350	398 ADDRESS. HEX LOCATION(00002634) IN CSECT(I7869) LENGTH(1)
2412	HEAD	418 ADDRESS. HEX LOCATION(00003A40) IN CSECT(I7869) LENGTH(2)
2421	HEAD2	2157 ADDRESS. HEX LOCATION(00003AA6) IN CSECT(I7869) LENGTH(2)
2422	HEAD3	2146 2155 ADDRESS. HEX LOCATION(00003AA8) IN CSECT(I7869) LENGTH(30)
2413	HEAD4	2144 2145 2151 2421 ADDRESS. HEX LOCATION(00003A42) IN CSECT(I7869) LENGTH(45)
1956	HEBLK	2412 ADDRESS. HEX LOCATION(0000342E) IN CSECT(I7869) LENGTH(2)
61	HEX	1903 ABSOLUTE. HEX VALUE(00000001)
607	HTOE	388 ABSOLUTE. HEX VALUE(0000001A)
583	IDLE	1904 2163 ABSOLUTE. HEX VALUE(00000002)
514	IN	731 1653 ABSOLUTE. HEX VALUE(00000023)
1830	INTBL	1639 1651 1770 ADDRESS. HEX LOCATION(00003288) IN CSECT(I7869) LENGTH(2)
1727	INTER	1865 ADDRESS. HEX LOCATION(000031F0) IN CSECT(I7869) LENGTH(2)
1736	INTES	1832 ADDRESS. HEX LOCATION(00003208) IN CSECT(I7869) LENGTH(2)
1740	INTET	1731 ADDRESS. HEX LOCATION(00003210) IN CSECT(I7869) LENGTH(2)
1767	INTOK	1737 ADDRESS. HEX LOCATION(00003214) IN CSECT(I7869) LENGTH(2)
63	INTRNL	1831 ABSOLUTE. HEX VALUE(00000000)
1789	INTRX	364 401 421 ADDRESS. HEX LOCATION(00003244) IN CSECT(I7869) LENGTH(2)
1770	INTR1	1784 1787 ADDRESS. HEX LOCATION(0000321C) IN CSECT(I7869) LENGTH(2)
1775	INTR2	1735 1739 1741 ADDRESS. HEX LOCATION(0000322A) IN CSECT(I7869) LENGTH(1)
1783	INTR3	1772 ADDRESS. HEX LOCATION(00003238) IN CSECT(I7869) LENGTH(2)
1821	IOBLK	1780 ADDRESS. HEX LOCATION(0000327C) IN CSECT(I7869) LENGTH(2)
		722 1640 1870

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
1823	IODCB	ADDRESS. HEX LOCATION(00003280) IN CSECT(I7869) LENGTH(2)
		1519 1522 1525 1537 1540 1543 1546 1554 1558
1824	IOMOD	ADDRESS. HEX LOCATION(00003282) IN CSECT(I7869) LENGTH(2)
37	I7869	1617 1623 CSECT. START(00002500) LENGTH(6804) ESDID(0)
1381	JOE	37 ADDRESS. HEX LOCATION(00003076) IN CSECT(I7869) LENGTH(2)
1384	LGSEC	2312 2315 2317 ADDRESS. HEX LOCATION(0000307C) IN CSECT(I7869) LENGTH(2)
		736 766 792 818 819 835 857 858 934 944 946 954 969 971 1006 1161 1162 1464 1466 1469 1476 1995 2054 2067 2068 2116 2131 2212 2235 2280 2321 2338 2339 2373
1937	LINE1	1908 ADDRESS. HEX LOCATION(00003356) IN CSECT(I7869) LENGTH(40)
2126	LSTG	2124 ADDRESS. HEX LOCATION(00003662) IN CSECT(I7869) LENGTH(6)
534	LSTIO	ADDRESS. HEX LOCATION(00002660) IN CSECT(I7869) LENGTH(2)
1094	MESS	1177 1626 1873 ADDRESS. HEX LOCATION(00002C14) IN CSECT(I7869) LENGTH(2)
1095	MESS1	1081 ADDRESS. HEX LOCATION(00002C16) IN CSECT(I7869) LENGTH(35)
1099	MESS2	1094 ADDRESS. HEX LOCATION(00002C3C) IN CSECT(I7869) LENGTH(2)
1100	MESS3	1085 ADDRESS. HEX LOCATION(00002C3E) IN CSECT(I7869) LENGTH(23)
1104	MESS4	1099 ADDRESS. HEX LOCATION(00002C58) IN CSECT(I7869) LENGTH(2)
1105	MESS5	1089 ADDRESS. HEX LOCATION(00002C5A) IN CSECT(I7869) LENGTH(25)
511	MI	1104 ABSOLUTE. HEX VALUE(00000020)
1911	MVBUF	1785 ADDRESS. HEX LOCATION(000032E2) IN CSECT(I7869) LENGTH(2)
523	NG	1915 1918 ABSOLUTE. HEX VALUE(0000002C)
518	NI	1788 ABSOLUTE. HEX VALUE(00000027)
357	N00001	1645 ADDRESS. HEX LOCATION(00002530) IN CSECT(I7869) LENGTH(2)
360	N00002	315 433 ADDRESS. HEX LOCATION(00002534) IN CSECT(I7869) LENGTH(2)
366	N00003	318 ADDRESS. HEX LOCATION(00002540) IN CSECT(I7869) LENGTH(2)
378	N00004	321 358 ADDRESS. HEX LOCATION(00002552) IN CSECT(I7869) LENGTH(2)
381	N00005	324 ADDRESS. HEX LOCATION(00002556) IN CSECT(I7869) LENGTH(2)
384	N00006	327 367 436 ADDRESS. HEX LOCATION(0000255A) IN CSECT(I7869) LENGTH(2)
387	N00007	330 ADDRESS. HEX LOCATION(0000255E) IN CSECT(I7869) LENGTH(2)
397	N00008	333 382 439 ADDRESS. HEX LOCATION(00002578) IN CSECT(I7869) LENGTH(2)
403	N00009	336 ADDRESS. HEX LOCATION(00002584) IN CSECT(I7869) LENGTH(2)
415	N00010	339 389 ADDRESS. HEX LOCATION(00002596) IN CSECT(I7869) LENGTH(2)
417	N00011	342 ADDRESS. HEX LOCATION(00002598) IN CSECT(I7869) LENGTH(2)
2737	OD01	345 404 ADDRESS. HEX LOCATION(00003CB2) IN CSECT(I7869) LENGTH(2)
2071	ONESK	2278 2367 ADDRESS. HEX LOCATION(00003586) IN CSECT(I7869) LENGTH(2)
2080	ONSK	2064 ADDRESS. HEX LOCATION(0000359C) IN CSECT(I7869) LENGTH(2)
2351	ONSKS	2075 ADDRESS. HEX LOCATION(00003986) IN CSECT(I7869) LENGTH(2)
476	OPTN1	2346 ADDRESS. HEX LOCATION(00002654) IN CSECT(I7869) LENGTH(2)
499	OPTN3	718 1729 1769 1990 ADDRESS. HEX LOCATION(00002658) IN CSECT(I7869) LENGTH(2)
581	OUT	1816 1864 ABSOLUTE. HEX VALUE(00000000)
64	PARM	1082 1086 1090 2147 2156 2158 2168 ABSOLUTE. HEX VALUE(00000000)
101	PARMAFA	390 ADDRESS. HEX LOCATION(0000196E) IN CSECT(I7869) LENGTH(1)
1385	PHYSC	376 413 ADDRESS. HEX LOCATION(0000307E) IN CSECT(I7869) LENGTH(2)
		769 800 801 838 839 872 873 936 937 956 1010 1022 1023 1024 1025 1164 1165 1471 1473 1478 2056 2057 2101 2214 2215 2329 2330
69	PID	ADDRESS. HEX LOCATION(00001800) IN CSECT(I7869) LENGTH(1)
		71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 1919
1951	PIDMSG10	ABSOLUTE. HEX VALUE(0000F1F0)
593	PREP	1919 ABSOLUTE. HEX VALUE(0000000C)
1251	RDRUF	1874 ADDRESS. HEX LOCATION(00002EC2) IN CSECT(I7869) LENGTH(2)
1347	RDDCB	742 ADDRESS. HEX LOCATION(00003042) IN CSECT(I7869) LENGTH(2)
589	RESET	742 1145 1146 1147 1148 1149 1150 1534 1537 ABSOLUTE. HEX VALUE(00000008)
600	RICB	722 ABSOLUTE. HEX VALUE(00000013)
1369	RKDCB	1928 ADDRESS. HEX LOCATION(00003062) IN CSECT(I7869) LENGTH(2)
1290	RSDCB	873 1023 1165 1546 1551 2057 2101 2214 2330 ADDRESS. HEX LOCATION(00002FF2) IN CSECT(I7869) LENGTH(2)
		740 748 768 800 838 936 956 1022 1164
1475	RT01	1525 1530 2009 2056 2215 2329 ADDRESS. HEX LOCATION(000030DE) IN CSECT(I7869) LENGTH(4)
755	RT401	1467 ADDRESS. HEX LOCATION(00002732) IN CSECT(I7869) LENGTH(6)
		753

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
783	RT405	ADDRESS. HEX LOCATION(000027B0) IN CSECT(I7869) LENGTH(4)
828	RT416	ADDRESS. HEX LOCATION(00002874) IN CSECT(I7869) LENGTH(6)
842	RT417	ADDRESS. HEX LOCATION(000028BC) IN CSECT(I7869) LENGTH(4)
871	RT419	ADDRESS. HEX LOCATION(0000292A) IN CSECT(I7869) LENGTH(6)
872	RT420	ADDRESS. HEX LOCATION(00002930) IN CSECT(I7869) LENGTH(6)
837	RT500	ADDRESS. HEX LOCATION(000028A4) IN CSECT(I7869) LENGTH(4)
539	SCTID	ADDRESS. HEX LOCATION(00002662) IN CSECT(I7869) LENGTH(2)
2272	SDD	ADDRESS. HEX LOCATION(00003870) IN CSECT(I7869) LENGTH(2)
2283	SDD1	ADDRESS. HEX LOCATION(00003896) IN CSECT(I7869) LENGTH(4)
2319	SDD10	ADDRESS. HEX LOCATION(00003922) IN CSECT(I7869) LENGTH(2)
2303	SDD11	ADDRESS. HEX LOCATION(000038EC) IN CSECT(I7869) LENGTH(6)
2284	SDD12	ADDRESS. HEX LOCATION(0000389A) IN CSECT(I7869) LENGTH(6)
2353	SDD13	ADDRESS. HEX LOCATION(0000398C) IN CSECT(I7869) LENGTH(4)
2135	SDD14	ADDRESS. HEX LOCATION(0000368C) IN CSECT(I7869) LENGTH(4)
2342	SDD16	ADDRESS. HEX LOCATION(0000396E) IN CSECT(I7869) LENGTH(2)
2327	SDD2	ADDRESS. HEX LOCATION(00003934) IN CSECT(I7869) LENGTH(4)
2293	SDD3	ADDRESS. HEX LOCATION(000038BE) IN CSECT(I7869) LENGTH(6)
2297	SDD4	ADDRESS. HEX LOCATION(000038CE) IN CSECT(I7869) LENGTH(6)
2288	SDD5	ADDRESS. HEX LOCATION(000038AA) IN CSECT(I7869) LENGTH(6)
2290	SDD6	ADDRESS. HEX LOCATION(000038B6) IN CSECT(I7869) LENGTH(4)
2309	SDD7	ADDRESS. HEX LOCATION(000038FA) IN CSECT(I7869) LENGTH(4)
2313	SDD8	ADDRESS. HEX LOCATION(0000390C) IN CSECT(I7869) LENGTH(4)
2323	SDD9	ADDRESS. HEX LOCATION(00003930) IN CSECT(I7869) LENGTH(4)
1184	SEC59	ADDRESS. HEX LOCATION(00002D66) IN CSECT(I7869) LENGTH(2)
2424	SEC61	ADDRESS. HEX LOCATION(00003AC7) IN CSECT(I7869) LENGTH(2)
1303	SKDCB	ADDRESS. HEX LOCATION(00003002) IN CSECT(I7869) LENGTH(2)
2269	SKW	ADDRESS. HEX LOCATION(0000386C) IN CSECT(I7869) LENGTH(2)
591	STAPT	ABSOLUTE. HEX VALUE(0000000A)
1234	STOR	ADDRESS. HEX LOCATION(00002DAA) IN CSECT(I7869) LENGTH(4)
104	SUPSTAT	ADDRESS. HEX LOCATION(000019C4) IN CSECT(I7869) LENGTH(1)
2427	THRE	ADDRESS. HEX LOCATION(00003ACE) IN CSECT(I7869) LENGTH(2)
2256	TSK	ADDRESS. HEX LOCATION(0000384C) IN CSECT(I7869) LENGTH(6)
2260	TSKEW	ADDRESS. HEX LOCATION(00003856) IN CSECT(I7869) LENGTH(2)
2152	TSS9	ADDRESS. HEX LOCATION(000036C8) IN CSECT(I7869) LENGTH(6)
2175	TS69A	ADDRESS. HEX LOCATION(00003726) IN CSECT(I7869) LENGTH(4)
2037	TS69B	ADDRESS. HEX LOCATION(000034F8) IN CSECT(I7869) LENGTH(6)
2015	TS69C	ADDRESS. HEX LOCATION(000034A8) IN CSECT(I7869) LENGTH(2)
2028	TS69D	ADDRESS. HEX LOCATION(000034DA) IN CSECT(I7869) LENGTH(4)
2137	TS69E	ADDRESS. HEX LOCATION(00003690) IN CSECT(I7869) LENGTH(4)
2050	TS69F	ADDRESS. HEX LOCATION(00003538) IN CSECT(I7869) LENGTH(4)
2021	TS69G	ADDRESS. HEX LOCATION(000034B8) IN CSECT(I7869) LENGTH(6)
2101	TS69H	ADDRESS. HEX LOCATION(000035F2) IN CSECT(I7869) LENGTH(6)
2095	TS69I	ADDRESS. HEX LOCATION(000035D6) IN CSECT(I7869) LENGTH(6)
2098	TS69J	ADDRESS. HEX LOCATION(000035E4) IN CSECT(I7869) LENGTH(6)
2082	TS69K	ADDRESS. HEX LOCATION(000035A0) IN CSECT(I7869) LENGTH(6)
2055	TS69L	ADDRESS. HEX LOCATION(0000354A) IN CSECT(I7869) LENGTH(4)
2093	TS69M	ADDRESS. HEX LOCATION(000035CE) IN CSECT(I7869) LENGTH(6)
2033	TS69P	ADDRESS. HEX LOCATION(000034E8) IN CSECT(I7869) LENGTH(6)
2068	TS69Q	ADDRESS. HEX LOCATION(0000357C) IN CSECT(I7869) LENGTH(6)
2149	TS69R	ADDRESS. HEX LOCATION(000036BE) IN CSECT(I7869) LENGTH(2)

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
2025	TS69T	ADDRESS. HEX LOCATION(000034C8) IN CSECT(I7869) LENGTH(6)
2140	TS69U	ADDRESS. HEX LOCATION(00003698) IN CSECT(I7869) LENGTH(6)
2046	TS69W	ADDRESS. HEX LOCATION(00003524) IN CSECT(I7869) LENGTH(6)
2171	TS69X	ADDRESS. HEX LOCATION(0000370F) IN CSECT(I7869) LENGTH(6)
2183	TS69Y	ADDRESS. HEX LOCATION(0000373C) IN CSECT(I7869) LENGTH(6)
2089	TS69Z	ADDRESS. HEX LOCATION(000035BE) IN CSECT(I7869) LENGTH(6)
2108	TS699	ADDRESS. HEX LOCATION(00003606) IN CSECT(I7869) LENGTH(6)
1473	TT303	ADDRESS. HEX LOCATION(000030D6) IN CSECT(I7869) LENGTH(6)
1479	TT304	ADDRESS. HEX LOCATION(000030EE) IN CSECT(I7869) LENGTH(4)
2193	TT69	ADDRESS. HEX LOCATION(00003752) IN CSECT(I7869) LENGTH(4)
2204	TT69A	ADDRESS. HEX LOCATION(0000377A) IN CSECT(I7869) LENGTH(6)
2196	TT69L	ADDRESS. HEX LOCATION(00003762) IN CSECT(I7869) LENGTH(6)
2160	TT69R	ADDRESS. HEX LOCATION(000036E6) IN CSECT(I7869) LENGTH(6)
2162	TT69S	ADDRESS. HEX LOCATION(000036EE) IN CSECT(I7869) LENGTH(4)
2206	TT69Y	ADDRESS. HEX LOCATION(00003782) IN CSECT(I7869) LENGTH(6)
2208	TT69Z	ADDRESS. HEX LOCATION(0000378E) IN CSECT(I7869) LENGTH(4)
100	TUINPT	ADDRESS. HEX LOCATION(00001948) IN CSECT(I7869) LENGTH(1)
96	TULAST	ADDRESS. HEX LOCATION(000018C4) IN CSECT(I7869) LENGTH(1)
92	TUMSGWTR	ADDRESS. HEX LOCATION(000018BA) IN CSECT(I7869) LENGTH(1)
98	TUFESUL	ADDRESS. HEX LOCATION(000018C8) IN CSECT(I7869) LENGTH(1)
563	TURTN	ADDRESS. HEX LOCATION(00002692) IN CSECT(I7869) LENGTH(2)
74	TUSTATUS	ADDRESS. HEX LOCATION(00001818) IN CSECT(I7869) LENGTH(1)
75	TUWOPK	ADDRESS. HEX LOCATION(0000181A) IN CSECT(I7869) LENGTH(1)
2428	TW02	ADDRESS. HEX LOCATION(00003AD0) IN CSECT(I7869) LENGTH(2)
2357	T69EE	ADDRESS. HEX LOCATION(0000399A) IN CSECT(I7869) LENGTH(4)
2328	T69LL	ADDRESS. HEX LOCATION(00003938) IN CSECT(I7869) LENGTH(4)
2339	T69QQ	ADDRESS. HEX LOCATION(00003964) IN CSECT(I7869) LENGTH(6)
2364	T69XA	ADDRESS. HEX LOCATION(000039B8) IN CSECT(I7869) LENGTH(4)
2376	T69XB	ADDRESS. HEX LOCATION(000039E2) IN CSECT(I7869) LENGTH(4)
2377	T69XC	ADDRESS. HEX LOCATION(000039E6) IN CSECT(I7869) LENGTH(6)
2361	T69XX	ADDRESS. HEX LOCATION(000039A6) IN CSECT(I7869) LENGTH(6)
729	T78TC	ADDRESS. HEX LOCATION(000026CC) IN CSECT(I7869) LENGTH(6)
730	T78T1	ADDRESS. HEX LOCATION(000026D2) IN CSECT(I7869) LENGTH(4)
731	T785	ADDRESS. HEX LOCATION(000026D6) IN CSECT(I7869) LENGTH(2)
1988	T7897	ADDRESS. HEX LOCATION(00003434) IN CSECT(I7869) LENGTH(4)
716	T7899	ADDRESS. HEX LOCATION(000026A2) IN CSECT(I7869) LENGTH(4)
779	T99A	ADDRESS. HEX LOCATION(0000279C) IN CSECT(I7869) LENGTH(6)
854	T99B	ADDRESS. HEX LOCATION(000028E4) IN CSECT(I7869) LENGTH(6)
888	T99C	ADDRESS. HEX LOCATION(00002966) IN CSECT(I7869) LENGTH(6)
787	T99D	ADDRESS. HEX LOCATION(000027C0) IN CSECT(I7869) LENGTH(6)
857	T99E	ADDRESS. HEX LOCATION(000028F0) IN CSECT(I7869) LENGTH(6)
792	T99F	ADDRESS. HEX LOCATION(000027D8) IN CSECT(I7869) LENGTH(6)
818	T99G	ADDRESS. HEX LOCATION(0000284A) IN CSECT(I7869) LENGTH(6)
799	T99H	ADDRESS. HEX LOCATION(00002800) IN CSECT(I7869) LENGTH(4)
885	T99K	ADDRESS. HEX LOCATION(0000295A) IN CSECT(I7869) LENGTH(6)
891	T99L	ADDRESS. HEX LOCATION(00002974) IN CSECT(I7869) LENGTH(6)
874	T99M	ADDRESS. HEX LOCATION(0000293C) IN CSECT(I7869) LENGTH(4)
1221	T99P	ADDRESS. HEX LOCATION(00002884) IN CSECT(I7869) LENGTH(4)
896	T99R	ADDRESS. HEX LOCATION(00002980) IN CSECT(I7869) LENGTH(6)
1236	T99RR	ADDRESS. HEX LOCATION(00002DB2) IN CSECT(I7869) LENGTH(4)
865	T9991	ADDRESS. HEX LOCATION(00002912) IN CSECT(I7869) LENGTH(6)
826	T9992	ADDRESS. HEX LOCATION(0000286C) IN CSECT(I7869) LENGTH(6)
1336	VRDCB	ADDRESS. HEX LOCATION(00003032) IN CSECT(I7869) LENGTH(2)

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
		2044 2048 2093 2108 2173 2174 2186 2194 2195 2196 2204 2206 2207 2212 2227 2297 2298 2363
1203	WB2	ADDRESS. HEX LOCATION(00002D70) IN CSECT(I7869) LENGTH(4) 1205
1382	WDATA	ADDRESS. HEX LOCATION(00003078) IN CSECT(I7869) LENGTH(2) 1203 1206
1358	WKDCB	ADDRESS. HEX LOCATION(00003052) IN CSECT(I7869) LENGTH(2) 872 1025 1554 1555
1250	WPBUF	ADDRESS. HEX LOCATION(00002DC2) IN CSECT(I7869) LENGTH(2) 741 1011 1158 1176 1177 1179 1202
1325	WRDCB	ADDRESS. HEX LOCATION(00003022) IN CSECT(I7869) LENGTH(2) 741 1065 1066 1067 1068 1126 1127 1128 1129
1125	WRRD	ADDRESS. HEX LOCATION(00002C74) IN CSECT(I7869) LENGTH(4) 783
1157	WRRD1	ADDRESS. HEX LOCATION(00002D06) IN CSECT(I7869) LENGTH(4) 772 776 778 780 782 1140 1144 1154
1175	WRRD3	ADDRESS. HEX LOCATION(00002D44) IN CSECT(I7869) LENGTH(6) 1170
1388	WRSID	ADDRESS. HEX LOCATION(00003084) IN CSECT(I7869) LENGTH(2) 793 794 795 796 797 823 824 826 830 831 832 833 834 862 863 865 869 871 966 967 968 969 976 977 978 979 980 988 989 990 991 992 1059 1224 1225 1226 1226 1234 1235 1287 1365 1421 1555 1559
1280	WSDCB	ADDRESS. HEX LOCATION(00002FE2) IN CSECT(I7869) LENGTH(2) 801 839 937 1024 1558 1559
515	XE	ABSOLUTE. HEX VALUE(00000024) 749 1012 1026 1031 1037 1166 1171 1736 1798 2010 2015 2058 2071 2076 2102 2177 2198 2216 2221 2260 2265 2275 2331 2342 2347 2368
513	XI	ABSOLUTE. HEX VALUE(00000022) 1642 1783
1617	XIO	ADDRESS. HEX LOCATION(0000317E) IN CSECT(I7869) LENGTH(4) 1520 1523 1531 1538 1541 1544 1552 1556 1560 1563 2355
1798	XIOCK	ADDRESS. HEX LOCATION(00003246) IN CSECT(I7869) LENGTH(2) 1652
1805	XIOCO	ADDRESS. HEX LOCATION(00003258) IN CSECT(I7869) LENGTH(2) 1803
1622	XIOCS	ADDRESS. HEX LOCATION(00003188) IN CSECT(I7869) LENGTH(6) 1814
1807	XIOCV	ADDRESS. HEX LOCATION(0000325C) IN CSECT(I7869) LENGTH(2) 1801
1816	XIOCX	ADDRESS. HEX LOCATION(00003276) IN CSECT(I7869) LENGTH(4) 1808
1691	XIOER	ADDRESS. HEX LOCATION(000031E4) IN CSECT(I7869) LENGTH(2) 1822
1626	XIO1	ADDRESS. HEX LOCATION(00003198) IN CSECT(I7869) LENGTH(4) 1618
1639	XIO2	ADDRESS. HEX LOCATION(000031BE) IN CSECT(I7869) LENGTH(2) 1625
1651	XIO8	ADDRESS. HEX LOCATION(000031D2) IN CSECT(I7869) LENGTH(2) 1656
1379	ZERO0	ADDRESS. HEX LOCATION(00003072) IN CSECT(I7869) LENGTH(2) 773 942 1464 2063 2084 2195 2206