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.ENABL ABS,AMA  
.-2000  
.NLIST CND,MD,MEB,ME  
.TITLE USER DOCUMENTATION  
.SBTTL IDENTIFICATION

: IDENTIFICATION  
: -----

: PRODUCT CODE: AC-B061C-MC

: PRODUCT NAME: CVMBACO BDV11-AA DIAG

: MAINTAINER: DIAGNOSTIC ENGINEERING

: AUTHOR: MARY MCNALLY 18-AUG-77

: REVISED: BILL HEAVEY MAY,1979

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.SBTTL GENERAL PROGRAM INFORMATION

: PROGRAM PURPOSE: THIS DIAGNOSTIC WILL BE USED TO ESTABLISH
: CONFIDENCE THAT THE MODULE IS FUNCTIONING
: PROPERLY. IT WILL PROVIDE CHECKSUM VERI-
: FICATION OF THE CONTENTS OF THE DIAGNOSTIC
: ROMS AND ANY ADDITIONAL ROM OR EPROM. IN
: ADDITION, IT WILL VERIFY THAT THE PROPER
: DIAGNOSTIC ROMS ARE INSERTED IN THE MODULE
: BY COMPARING THE ACTUAL CHECKWORDS IN THE
: ROMS TO THOSE SPECIFIED IN THE DIAGNOSTIC
: PROGRAM. IT WILL ALSO ACCEPT CHECKWORDS
: FROM AN OPERATOR FOR USE IN TESTING ANY
: ADDITIONAL ROM/EPROM. THE DIAGNOSTIC WILL
: ALSO TEST THE PROGRAMMABLE REGISTERS AND
: EXERCISE THE LED'S FOR OPERATOR INSPECTION.

: SYSTEM REQUIREMENTS:
:   HARDWARE:      LSI-11 PROCESSOR
:                  16K WORDS OF MEMORY
:                  CONSOLE TERMINAL
:                  DIAGNOSTIC PROGRAM LOAD DEVICE

: RELATED DOCUMENTS AND STANDARDS:
:   CHQUSB XXDP+/SUPR USER MAN (AC-F348B-MC) TO REFERENCE
:   THE DIAGNOSTIC SUPERVISOR COMMAND INSTRUCTIONS.
:   DIAGNOSTIC SUPERVISOR FUNCTIONAL SPEC (176-681-001)
:   APT/DIAGNOSTIC SUPERVISOR INTERFACE SPEC (176-681-003)

: DIAGNOSTIC HIERARCHY PRERFQUISITES:  NONE, ALTHOUGH IT IS ASSSUMED THAT
:   THE CPU IS FUNCTIONING PROPERLY.

: ASSUMPTIONS:
:   --WHEN RUNNING UNDER APT, ALL ROCKER
:   SWITCHES ARE IN THE 'ON' POSITION.
:   THE EXCEPTION TO THIS OCCURS ONLY
:   WHEN AN OPERATOR CHANGES THE HARD-
:   WARE P-TABLE TO CORRESPOND TO THE NEW
:   SWITCH SETTINGS.
:   --THE ADDRESS JUMPERS ARE CONFIGURED
:   AND MEMORY CHIPS INSTALLED PROPERLY.
:   NO TWO CHIPS CAN RESPOND TO THE SAME
:   ADDRESS.
:   --THE MODULE UNDER TEST RESIDES IN THE
:   SAME BACKPLANE AS THAT FROM WHICH THE
:   LINE TIME CLOCK IS GENERATED.
:   --THE CPU IS WORKING PROPERLY.
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:3. TO RESTART  
: THE RESTART COMMAND IS SIMILAR TO THE START COMMAND EXCEPT  
: THAT ALL PARAMETERS ARE ASSUMED TO BE ALREADY DEFINED, AND NO  
: OPERATOR DIALOGUE IS PERFORMED PRIOR TO RUNNING THE DIAGNOSTIC.  
: IF THE OPERATOR WISHES TO ALTER THE TYPE OF ADDITIONAL MEMORY  
: TO TEST, OR CHANGE THE ADDRESSES, LOCATION 'PASS' MUST BE  
: CLEARED MANUALLY PRIOR TO RESTARTING, SINCE THIS INFORMATION  
: IS SET UP ON THE FIRST PASS OF THE DIAGNOSTIC.  
:  
: RESTART/TEST:<TESTNOS>/PASS:<PASSCNT>/FLAG:<CF>:<CF>...  
:4. TO RETURN TO PROGRAM  
:  
: TO RESUME EXECUTION OF THE DIAGNOSTIC AT THE FIRST INSTRUCTION  
: FOLLOWING THE CURRENT SUPERVISOR CALL, AT WHICH TIME NEW FLAGS  
: MAY BE ASSIGNED.  
:  
: CONTINUE/FLAG:<CF>:<CF>:...  
:5. TO LOAD AND START THE DIAGNOSTIC  
: TO LOAD AND START THE DIAGNOSTIC USING DEFAULT PARAMETERS  
:  
: RUN<FILESPEC>/TEST:<TESTNOS>/PASS:<PASSCNT>/UNIT:<DEVN>/FLAG:<CF>...  
:  
: NOTE: TEST NUMBERS AND UNIT NUMBERS MAY BE SPECIFIED  
: AS SINGLE NUMBERS, RANGES OF NUMBERS (I.E. 1-6 ),  
: OR COMBINATIONS OF BOTH.  
:  
: SPECIAL ENVIRONMENTS: APT  
: TEST 7, THE TEST OF ALL RESIDENT MEMORY, WILL NOT RUN  
: UNDER APT, AS IT REQUIRES USER INTERVENTION.



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.SBTTL ERROR INFORMATION

: ERROR REPORTING PROCEDURES:  
: IN GENERAL, ALL ERROR REPORTS WILL CONTAIN THE FOLLOWING  
: INFORMATION:  
: 1. A HEADER OF TEST IDENTIFICATION INFORMATION.  
: THIS INCLUDES THE PROGRAM NAME, TYPE OF ERROR,  
: ERROR NUMBER, TEST AND SUBTEST NUMBERS, UNIT  
: NUMBER, AND AN OPTIONAL ADDITIONAL MESSAGE.  
: 2. BASIC ERROR INFORMATION.  
: THIS IS A SPECIFIC STATEMENT OF WHAT THE ERROR  
: IS AND WHICH REGISTER OR ROM WAS INVOLVED.  
: 3. EXTENDED ERROR INFORMATION.  
: THIS IS OPTIONAL INFORMATION WHICH IS USED  
: PRIMARILY TO GIVE THE EXPECTED AND ACTUAL  
: CONTENTS OF THE APPROPRIATE DEVICE REGISTER  
: DURING REGISTER TESTS.  
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002156 017042  
 002160 020656  
 002162 065162  
 002164 161744  
 002166 124453  
 002170 113667  
 002172 056040  
 002174 044734  
 002176

;THE SOFTWARE P-TABLE IS USED TO STORE THE CHECKWORDS  
 ;FOR THE DIAGNOSTIC ROM WHICH IS TESTED IN TEST 6.

.WORD 17042 ;ROMA: PAGE 0,1  
 .WORD 20656 ;ROMB: PAGE 2,3  
 .WORD 65162 ;ROMC: PAGE 4,5  
 .WORD 161744 ;ROMD: PAGE 6,7  
 .WORD 124453 ;ROME: PAGE 10,11  
 .WORD 113667 ;ROMF: PAGE 12,13  
 .WORD 56040 ;ROMG: PAGE 14,15  
 .WORD 44734 ;ROMH: PAGE 16,17  
 ENDSW

L10001:





































































































PARAMETER CODING  
CVMBAC.P11

MACY11 30A(1052)  
19-JUN-79 08:46

M 5  
19-JUN-79 08:52 PAGE 64  
TEST 7: TEST ALL ADDITIONAL MEMORY

PAGE: 0064

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2990  
2991  
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.TITLE PARAMETER CODING  
.SBTTL IDENTIFICATION



PARAMETER CODING  
CVMBAC.P11

19-JUN-79

MACY11 30A(1052)  
08:46

19-JUN-79 08:52 PAGE 66  
HARDWARE PARAMETER CODING SECTION

3049	014654	044103	051440	052105
3050	014662	044524	043516	000123
3051				
3052				
3053	014670			
3054				
3055	014670			

.EVEN

ENDHRD

.EVEN

L10100:

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3067 014670  
3068 014670 000161  
3069 014672  
3070 014672  
3071 014672 000032  
3072 014674 015014  
3073 014676 177777  
3074 014700 000000  
3075 014702 177777  
3076 014704  
3077 014704 001032  
3078 014706 015071  
3079 014710 177777  
3080 014712 000000  
3081 014714 177777  
3082 014716  
3083 014716 002032  
3084 014720 015107  
3085 014722 177777  
3086 014724 000000  
3087 014726 177777  
3088 014730  
3089 014730 003032  
3090 014732 015125  
3091 014734 177777  
3092 014736 000000  
3093 014740 177777  
3094 014742  
3095 014742 004032  
3096 014744 015143  
3097 014746 177777  
3098 014750 000000  
3099 014752 177777  
3100 014754  
3101 014754 005032  
3102 014756 015161  
3103 014760 177777  
3104 014762 000000  
3105 014764 177777  
3106 014766  
3107 014766 006032  
3108 014770 015177  
3109 014772 177777  
3110 014774 000000  
3111 014776 177777

.SBTTL SOFTWARE PARAMETER CODING SECTION

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..+.  
: THE SOFTWARE PARAMETER CODING SECTION CONTAINS MACROS  
: THAT ARE USED BY THE SUPERVISOR TO BUILD P-TABLES. THE  
: MACROS ARE NOT EXECUTED AS MACHINE INSTRUCTIONS BUT ARE  
: INTERPRETED BY THE SUPERVISOR AS DATA STRUCTURES. THE  
: MACROS ALLOW THE SUPERVISOR TO ESTABLISH COMMUNICATIONS  
: WITH THE OPERATOR.  
:--
```

BGNSFT

```
.WORD L10101-L$SOFT/2  
L$SOFT: :  
GPRMD CKW1,0,0,-1,0,177777,YES  
.WORD T$CODE  
.WORD CKW1  
.WORD -1  
.WORD T$LOLIM  
.WORD T$HILIM  
GPRMD CKW2,2,0,-1,0,177777,YES  
.WORD T$CODE  
.WORD CKW2  
.WORD -1  
.WORD T$LOLIM  
.WORD T$HILIM  
GPRMD CKW3,4,0,-1,0,177777,YES  
.WORD T$CODE  
.WORD CKW3  
.WORD -1  
.WORD T$LOLIM  
.WORD T$HILIM  
GPRMD CKW4,6,0,-1,0,177777,YES  
.WORD T$CODE  
.WORD CKW4  
.WORD -1  
.WORD T$LOLIM  
.WORD T$HILIM  
GPRMD CKW5,10,0,-1,0,177777,YES  
.WORD T$CODE  
.WORD CKW5  
.WORD -1  
.WORD T$LOLIM  
.WORD T$HILIM  
GPRMD CKW6,12,0,-1,0,177777,YES  
.WORD T$CODE  
.WORD CKW6  
.WORD -1  
.WORD T$LOLIM  
.WORD T$HILIM  
GPRMD CKW7,14,0,-1,0,177777,YES  
.WORD T$CODE  
.WORD CKW7  
.WORD -1  
.WORD T$LOLIM  
.WORD T$HILIM
```



































X\$FALS= 000040	353#													
X\$OFFS= 000400	353#	3035	3120											
X\$TRUE= 000020	353#													
ZERR 003112	742#	823												
. = 015310	2#	652#	653#	654#	729#	1268	1305	1328	1351	1374	1395	1418	1441	
	1464	1491	1520	1553	1576	1600	1623	1646	1668	1690	1713	1740	1769	
	1795	1854	1926#	1954	1976	2008	2070	2113#	2175	2209	2255	2481	2546	
	2726	2821	2831	2841	2851	2858	3035	3120	3151#	3158#				

. ABS. 015310 000

ERRORS DETECTED: 0

DSKZ:CVMBAC,DSKZ:CVMBAC/SOL/CRF:SYM/NL:TOC=DSKZ:CVMBAC/ML,DSKZ:CVMBAC.P11  
 RUN-TIME: 99 89 7 SECONDS  
 RUN-TIME RATIO: 530/196=2.7  
 CORE USED: 15K (29 PAGES)