

**DataGeneral**

---

---

**TECHNICAL  
STATEMENT**

---

---

TEXT LISTING

068-000161-03

PROGRAM

MEMORY CHECKERBOARD 5A

TEXT TAPE

097-000161-03

ABSTRACT

CHECKERBOARD 5 IS A MAINTENANCE PROGRAM DESIGNED TO PRODUCE WORST CASE NOISE CONDITIONS ON THE SENSE/INHIBIT WIRES. THE PROGRAM SHOULD BE RUN TO INSURE PROPER OPERATION OF THE MEMORY SYSTEM.



10003 .MAIN

0004 .MAIN

\*\*00000 TOTAL ERRORS, 00000 PASS 1 ERRORS

```

16. PROGRAM DESCRIPTION
; CHECKERBOARD V GENERATES THE WORST CASE NOISE
; PATTERN BY A SERIES OF 16 "STA" INSTRUCTIONS
; STORING EITHER ALL ZEROS OR ALL ONES. WHEN ALL
; DATA IS STORED THE CHECK CYCLE IS ENTERED. CHEC
; OF THE ZEROS CONSIST OF 16 "DSZ" INSTRUCTIONS WH
; COMPLEMENT ALL THE ZEROS TO ONES.
; THIS IS FOLLOWED BY 16 ISZ INSTRUCTIONS, EACH OF
; WHICH SHOULD SET MEMORY BACK TO ZEROS AND SKIP
; IF ALL WAS CORRECT. CHECKING OF ONES
; IS PERFORMED BY A SERIES OF 16 "ISZ" INSTRUCTIONS
; EACH OF WHICH SETS MEMORY TO ZEROS AND SKIPS
; IF ALL BITS ARE CORRECT. A SERIES OF
; 16 DSZ INSTRUCTIONS WILL RESTORE THE ZEROS TO
; ONES. THE ONES ARE THEN CHECKED VIA "LDA" INSTR
; THE COMBINATION OF ISZ/DSZ INSTRUCTIONS TO
; PERFORM BIT CHECKING AND COMPLEMENT FUNCTIONS
; PERMITS VERY FAST PROGRAM EXECUTION.

17. MISC
; BECAUSE OF THE NATURE OF THE TEST, THE WORD
; IN ERROR MAY NOT ACCURATELY DESCRIBE THE FAILED
; BIT.

```

.EOT

01  
02  
03  
04  
05  
06  
07  
08  
09  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28