

MOVE AND ZERO SUPPRESS

REPRODUCTION

A. PURPOSE

TO TEST THE MOVE AND ZERO SUPPRESS CIRCUITRY

B. LOADING PROCEDURES

1. PLACE TEST IN 1402 READ HOPPER AND DEPRESS LOAD KEY.
2. NO SELECTION DIGIT IS REQUIRED WHEN TEST IS RUN FROM TAPE.

C. PROGRAM CONTROL

1. SENSE SWITCHES

- B. ON TO REPEAT FOR SCOPING  
OFF TO CONTINUE
- C. ON TO PRINT CORRECT RESULTS  
OFF TO CONTINUE
- D. ON TO REPEAT SAME DETAIL CARD  
OFF TO CONTINUE
- E. ON TO STOP ON ERROR  
OFF TO PRINT ERROR

2. COUNTER

A COUNTER (LOCATION 967-970) IS USED TO ALLOW THE PROGRAM TO REPEAT 90 TIMES FOR EACH DETAIL CARD. WHEN SENSE SWITCH C IS ON, ONLY ONE CORRECT PRINTOUT OCCURS PER DETAIL CARD. AN ERROR TEST IS MADE EACH TIME THE PROGRAM IS REPEATED. AN ERROR PRINTOUT OCCURS FOR EACH FAILURE.

D. TEST PROCEDURE

INFORMATION FROM THE DETAIL CARD IS MOVED INTO THE PRINT AREA FOR PRINTING PURPOSES.

WITHIN THE DETAIL CARDS, THE A FIELD IS LOCATED IN COLUMNS 1-10; THE B-FIELD, COLUMNS 21-30; AND THE RESULT SHOULD BE FIELD, COLUMNS 41-50.

WITHIN THE PRINT AREA, THE A FIELD IS MOVED AND ZERO SUPPRESSED, INTO THE RESULT IS FIELD. A COMPARISON OF THE RESULT SHOULD BE FIELD TO THE RESULT IS FIELD CHECKS THE OPERATION.

E. STOPS

920 IN STORAGE ADDRESS REGISTER: ERROR WITH SENSE E ON.

DATE	2-2-61	3-17-63	10.5.63	25.6.63			
ENG. CHG. NO.	110378	116745	TA-1844	TA-1844A			

REPRODUCTION

F. PRINTOUTS

1. CORRECT

A FIELD	B FIELD	RESULT SHOULD BE	RESULT IS
00,000,80I		809	809
00,050T00Q		50T Q	50T Q
00,400Z0Z		40D Z 9	40D Z 9

2. ERROR

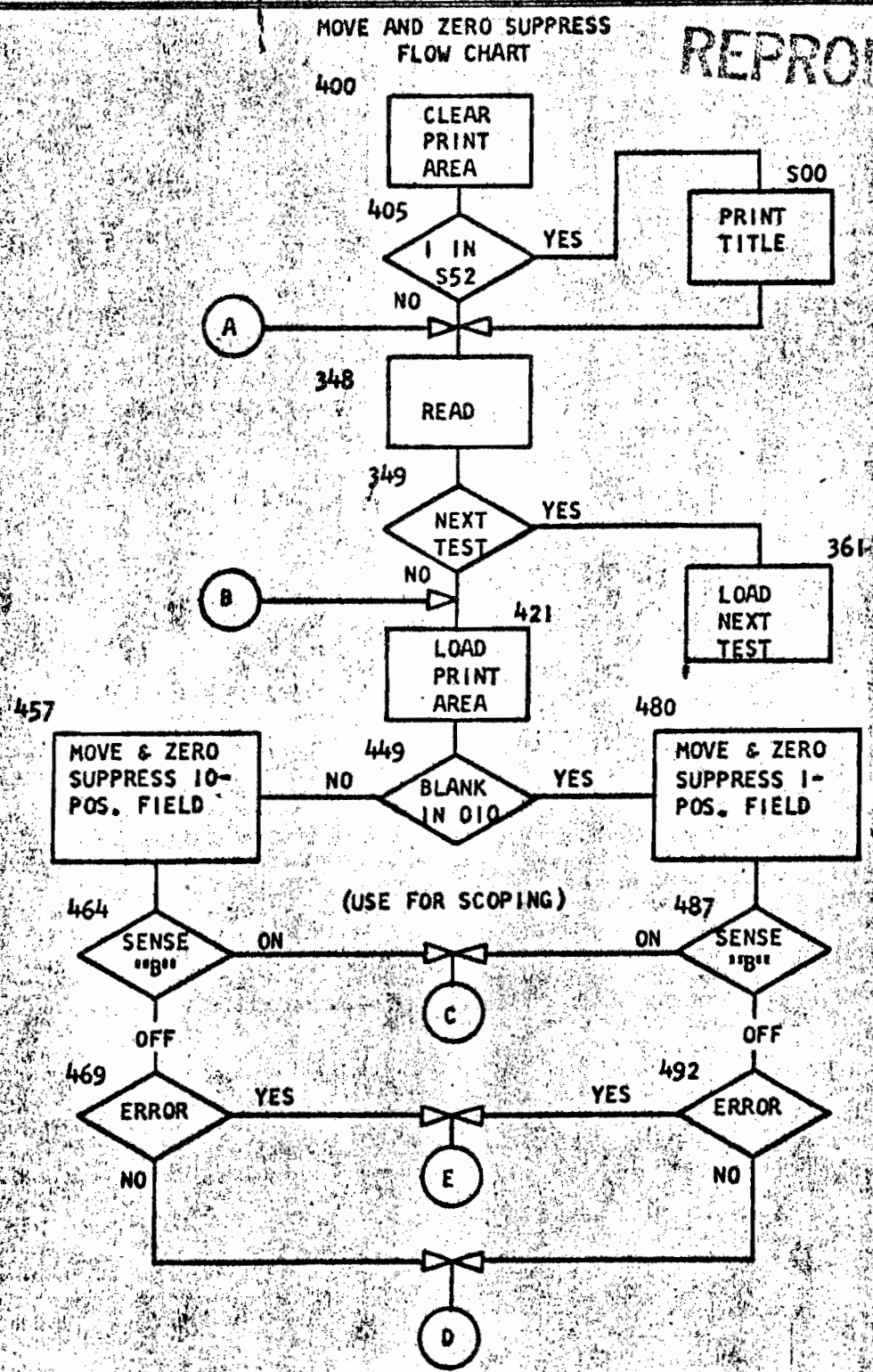
A FIELD	B FIELD	RESULT SHOULD BE	RESULT IS	
00,000,80I		809	80I	ERROR
00,050T00Q		50T Q	50T0Q	ERROR
00,400Z0Z		40D Z 9	40D0Z	ERROR

G. COMMENTS

THE BRANCH INSTRUCTION AT LOCATION 927 CAN BE CHANGED MANUALLY TO CAUSE THE PROGRAM TO LOOP AS FEW AS 1 OR AS MANY AS 9,000 TIMES PER DETAIL CARD. THE PROGRAM CALLS FOR 90 LOOPS PER CARD.

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ENG. CHG. NO.	110378	116745	TA-1844	TA-1844A			

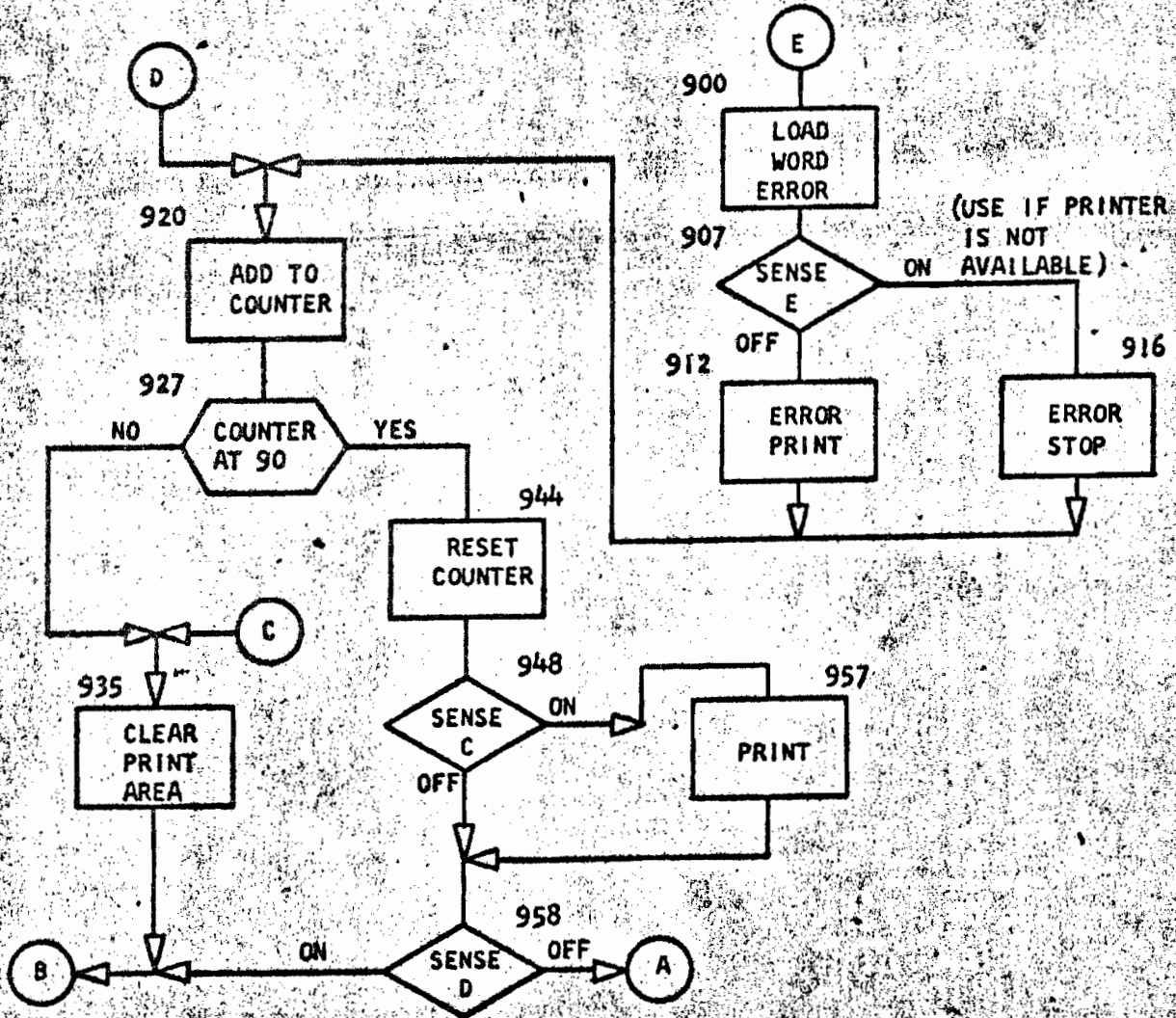
REPRODUCTION



DATE	2-2-61	3-17-63	10.5.63	25.6.63			
ENG. CHG. NO.	110378	116745	TA-1844	TA-1844A			



REPRODUCTION



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ENG. CHG. NO.	110378	116745	TA-1844	TA-1844A			

1401 DATA PROCESSING SYSTEM  
DIAGNOSTIC FUNCTION TEST

PROGRAM LISTING FOR USE WITH FLOW CHART

REPRODUCTION

MOVE + ZERO SUPPRESS

02308

INSTRUCTION ADDRESS	OP	A	B	REMARKS
377	377	B	389	USE WHEN TESTS ARE RUN FROM TAPE
385	385	B	588	''
389	389	N	000	''
393	393	M	360 392	''
400	400	/	332	START TEST
404	404	/		''
405	405	B	500 5521	BR TO TITLE PRINT ROUTINE IF J IN S52
413	413	/	080	CLEAR READ AREA
417	417	B	348	BRANCH TO PROGRAM CHAINING ROUTINE
421	421	,	001 078	LOAD PRINT AREA
428	428	L	080 299	''
435	435	L	072 272	''
442	442	,	241 265	DEFINE COMP FIELD + B FIELD
449	449	B	480 010	GO TO SINGLE CHARACTER FIELD
457	457	Z	210 270	MOVE ZERO SUPPRESS 10 CHARACTER FIELD
464	464	B	935 B	LOOP ON SW B SS
469	469	C	270 250	COMP B FIELD TO CORRECT RESULT
476	476	B	499	GO CHECK THE OPERATION
480	480	Z	201 261	MOVE ZERO SUPPRESS SINGLE CHARACTER
487	487	B	935 B	LOOP ON SW B SS
492	492	C	261 241	COMP B FIELD TO CORRECT RESULT
499	499	B	900 /	BRANCH ERROR
504	504	B	920	GO TO CORRECT ROUTINE
508	508			WORDMARK
900	900	L	/14 285	BEGIN ERROR PRINT ROUTINE
907	907	B	916 E	E ON TO ERROR STOP SS
912	912	Z	920	ERROR PRINT
916	916	,	920	ERROR STOP
920	920	A	920 970	ADD ONE TO OPERATION COUNTER
927	927	B	944 9699	BRANCH AFTER 90 OPERATIONS C FOR TA
935	935	/	332	CLEAR PRINT AREA
939	939	/		''
940	940	B	421	BRANCH TO REPEAT
944	944	S	970	RESET OPERATION COUNTER
948	948	B	957 C	C ON FOR CORRECT PRINT SS
953	953	B	958	BRANCH TO SENSE D
957	957	Z		PRINT CORRECT RESULTS
958	958	B	421 D	D ON TO REPEAT SS
963	963	B	348	BRANCH TO PROG. CHAINING ROUTINE
967	967	O	00+	OPERATION COUNTER
1110	1110	E	RRO R	CONSTANTS
1115	1115			''

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ENG. CHG. NO.	110378	116745	TA-1844	TA-1844A			

DIAGNOSTIC FUNCTION TEST

1120 /20 A FI ELD     ::  
 1140 /40 B FI ELD     ::  
 1160 /60 R ESU LT SHOULD BE     ::  
 1180 /80 R ESU LT IS     ::

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DIAGNOSTIC FUNCTION TEST

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TABLE OF UNPRINTABLE CHARACTERS

LP-LEFT PARENTHESIS	12 5 8	SE-SEMICOLON	11 6 8	DE-DELTA	11 7 8
WS-WORD SEPARATOR	0 5 8	LT-LESS THAN	12 6 8	PZ-PLUS ZERO	12 0
TS-TAPE SEGMENT MARK	0 7 8	GT-GREATER THAN	6 8	TM-TAPE MARK	7 8
GM-GROUP MARK	12 7 8	MZ-MINUS ZERO	11 0	CO-COLON	5 8
RP-RIGHT PARENTHESIS	11 5 8	AP-APOSTROPHE	0 6 8		

.008015,022029,033033N	1001	MOVE + ZERO SUPPRESS	0230800A
.008015,022029,033033N	1001	SET WORDMARK CARD	02308 02
L067367,340344,348349,3573611001,008012,00110011B361080AB421/340080			02308 03
L069404,377385,389393,4004041001	B389	BS88N000M360392/332/	02308 04
L069441,413417,421428,4354421001B500S521/080B348,001078L080299L072272			02308 05
L070479,449457,464469,4764761001,241265B480010	Z210270B935BC270250B499		02308 06
L060507,487492,499504,5085081001Z201261B935BC261241B900/8920			02308 07
L071938,907912,916920,9279351001L/14285B916E2920.920A920970B9449699/332			02308 08
L056962,940944,948953,9579581001/B421S970B957CB9582B421D			02308 09
L040970,967971,971971,9719711001B348000P			02308 10
	Z		
L065/39□/07/07,/10/15,/20/401001	ERROR	A FIELD	02308 11
L072/79,/60/80,/80/80,/80/801001B	FIELD	RESULT SHOULD BE	02308 12
L070S17,S00S01,S05S12,S13S171001	RESULT IS	2,049L0772772/2772	02308 13
L059S44,S25S29,S36S37,S41S451001□/40/60□/80L/892702/2702413			02308 14
/333080N		CLEAR WORDMARK CARD	02308 15
.019027,031,038042B031T98GB400LD46352BW04BS88		MOVE + ZERO SUPPRESS	02308 16

DETAIL CARDS

00,000,000		02308 17
00,000,009	9	02308 18
00,000,090	90	02308 19
00,000,801	809	02308 20
00,00070AP	70A	02308 21
	Z	
00,0060KOR	60K 9	02308 22
00,050TQMH	50T Q	02308 23
	Z	
00,4000Z0Z	40D Z 9	02308 24
0030N0+0-□	30N + -	02308 25
020W0\$0*07	20W \$ * 7	02308 26
10G0□0#0□0	10G □ # 0	02308 27
7	7	02308 28
R	9	02308 29
+		02308 30
*		02308 31
0		02308 32
.		02308 34

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DETAIL CARDS FOR PERIOD - COMMA INVERSION

00.000.000  
 00.000.009  
 00.000.090  
 00.000.801  
 00.00070AE  
 00.0060KOR  
 00.050TQQ-  
 00.40D0Z0Z  
 0030N0&0-#  
 020W0\$0#07  
 10G0#0#020

7  
R  
&  
#  
0  
,

9  
 90  
 809  
 70A  
 60K 9  
 50T Q  
 40D Z 9  
 30N & -  
 20W \$ # 7  
 10G # # a  
 7  
 9

#

02308 17  
 02308 18  
 02308 19  
 02308 20  
 02308 21  
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 02308 31  
 02308 32  
 02308 34

DATE	TA 1844A							
16. CHG. NO.	25.6.63							