

DIAGNOSTIC FUNCTION TEST REPRODUCTION

READ-PUNCH

A. PURPOSE OF TEST

TO TEST THE READ-PUNCH CIRCUITRY BY PUNCHING 20 CARDS WITH A 60-CHARACTER TABLE IN RIPPLE FASHION. THE DETAIL CARDS USED IN THIS TEST ARE SIMILAR TO THE ONES USED IN THE PRINT-READ TEST (BLOCK NUMBER 1060).

B. LOADING PROCEDURES

1. PLACE TEST IN 1402 READ HOPPER AND DEPRESS LOAD KEY.
2. WHEN RUNNING TEST FROM TAPE, ENTER A 1 IN 1262 AND 1263. PLACE DETAIL CARDS IN 1402 READ HOPPER.

C. PROGRAM CONTROL

B ON PERMITS THE EXECUTION OF THE READ-PUNCH INSTRUCTION AS OFTEN AS DESIRED. SINCE THIS INSTRUCTION COMBINES THE OPERATION OF PUNCHING ONE CARD AND READING THE NEXT CARD, PUNCHING AND CARD FEEDING WILL CONTINUE UNTIL THE READ FEED HOPPER OR THE PUNCH FEED HOPPER IS EMPTY.

OFF TO CONTINUE

D ON MAY BE USED ONLY WHEN THIS TEST IS RUN SEPARATELY. TO REPEAT THE TEST AS OFTEN AS DESIRED THE 20 CARDS PUNCHED DURING THIS TEST MAY BE REMOVED FROM THE PUNCH STACKER AND PLACED IN THE READ FEED HOPPER.

OFF TO CONTINUE

D. TEST PROCEDURE

AFTER CLEARING THE READ AREA AND SETTING A WORD MARK IN LOCATION 001, A READ INSTRUCTION IS EXECUTED TO FEED THE FIRST DETAIL CARD. THE INFORMATION IN THE READ AREA IS THEN TRANSFERRED TO THE PUNCH AREA. LOCATION 001 IS NEXT TESTED FOR NO-ZONE. IF ZONE IN 001 THE PROGRAM PROCEEDS TO READ-PUNCH. IF NO-ZONE THE PROGRAM BRANCHES TO A READ-PUNCH AND BRANCH INSTRUCTION. A FAILURE TO BRANCH WILL STOP THE MACHINE.

E. STOPS

459 IN STORAGE ADDRESS REGISTER: ERROR-FAILED TO BRANCH.

F. PRINTOUTS

TITLE PRINT ONLY.

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ENG. CHG. NO.	110378	117628	TA 1976				

IBM

DIAGNOSTIC FUNCTION TEST

PART NO. 451424
SHEET 2 OF 6
BLOCK NO. 1070B

G. COMMENTS

REPRODUCTION

THE 20 CARDS PUNCHED IN THIS TEST SHOULD BE EXACT DUPLICATES OF THE 20
DETAIL CARDS (27-46) FURNISHED WITH THE TEST DECK.

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DIAGNOSTIC FUNCTION TEST

PART NO. 451424
 SHEET 4 OF 6
 BLOCK NO. 10708

REPRODUCTION

PROGRAM LISTING FOR USE WITH FLOW CHART

READ-PUNCH

10708

INSTRUCTION
 ADDRESS OP A B

REMARKS

377	377	B	494	S621	*USE WHEN TESTS ARE RUN FROM TAPE	
385	385	B	S88		..	
393	393	M	388	380	BYPASS DETAIL CARDS ON TAPE	
400	400	/	332		START TEST	
404	404	/			..	
405	405	B	S00	S521	BR TO TITLE PRINT ROUTINE IF 1 IN S52	
413	413	B	420		BRANCH TO CONTINUE	
420	420	/	080		CLEAR READ AREA	
424	424	+	001		SET WM IN READ AREA	
428	428	1			READ	
429	429	L	080	180	LOAD PUNCH AREA	
436	436	V	454	0012	BRANCH IF NO ZONE IN 001	
444	444	S			READ-PUNCH	
445	445	B	444	B	B ON TO SCOPE	SS
450	450	B	464		BRANCH TO MODIFY CHAIN. ROUTINE	
454	454	S	459		READ-PUNCH AND BRANCH	
458	458	.			ERROR STOP IF NO BRANCH	
459	459	B	454	B	B ON TO SCOPE	SS
464	464	B	420	D	SENSE SW D ON TO SCOPE	SS
469	469	B	485	3488	BRANCH WHEN TEST IS ON TAPE	
477	477	B	361	080A	BRANCH WHEN TEST IS ON CARDS	
485	485	B	522	A	BRANCH ON LAST CARD	SS
490	490	B	429		REPEAT PROGRAM	
494	494	B	393	S631	USE WHEN TESTS ARE RUN FROM TAPE	
502	502	B	348		..	
506	506	/	180		CLEAR ANY GM WM	
510	510	/	080		..	
514	514	.	001		SET WM FOR CARDS	
518	518	B	348		BRANCH TO CHAINING ROUTINE	
522	522	L	080	180	PUNCH LAST CARD	
529	529	4	506		..	
533	533				WORDMARK	

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REPRODUCTION

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 READ-PUNCH 10708 0A
 .008015,022029,033033N 1001 SET WORDMARK CARD 10708 02
 L067367,340344,348349,3573611001,008012,00110011B361080AB429/340080 10708 03
 L069404,377385,393400,4044051001 B494S621BS88 M388380/332/ 10708 04
 L071443,413420,424428,4294361001BS00S521B420 /080,0011L080180V4540012 10708 05
 L057468,445450,454458,45946410015B444884645459.845488420D 10708 06
 L069505,477485,490494,5025061001B48534888361080AB522AB429B393S631B348 10708 07
 L072545,510514,518522,5295331001/180/080,0018348L0801804506 10708 08
 L053520,S01S05,S12S13,S17S2110012,049L0772772/2772420 10708 09
 /333080N CLEAR WORDMARK CARD 10708 10
 ,019027,031,038042B031T98GB400L046352BWO4BS88 READ-PUNCH 10708 11

DETAIL CARDS

AKT4 BLUSGCMV6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCM10708. 12
 M E S M Z Z M
 KT4 BLUSGCMV6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCMV10708 13
 M E S M Z Z M
 T4 BLUSGCMV6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCMV610708 14
 M E S M Z Z M
 4 BLUSGCMV6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCMV6 10708 15
 M E S M Z Z M
 BLUSGCMV6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCMV6 D10708 16
 M E S M Z Z M
 BLUSGCMV6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCMV6 DN10708 17
 M E S M Z Z M
 LUSGCMV6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCMV6 DNW10708 18
 M E S M Z Z M
 USGCMV6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCMV6 DNW710708 19
 M E S M Z Z M
 SGCMV6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCMV6 DNW7D10708 20
 M E S M Z Z M
 GCMV6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCMV6 DNW7DE10708 21
 E S M Z Z M E
 CMV6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCMV6 DNW7DE010708 22
 E S M Z Z M E
 MV6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCMV6 DNW7DEOX10708 23
 E S M Z Z M E
 V6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCMV6 DNW7DEOX810708 24
 E S M Z Z M E
 6 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLUSGCMV6 DNW7DEOX8 10708 25
 E S M Z Z M E

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1401 DATA PROCESSING SYSTEM
DIAGNOSTIC FUNCTION TEST

PART NO. 451424
SHEET 6 OF 6
BLOCK NO. 10708

REPRODUCTION

DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLU5GCMV6 DNW7DEOX8 F10708 26
 E S M Z Z M E
 DNW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLU5GCMV6 DNW7DEOX8 FPI0708 27
 E S M Z Z M E
 NW7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLU5GCMV6 DNW7DEOX8 FPY10708 28
 E S M Z Z M E
 W7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLU5GCMV6 DNW7DEOX8.FPY910708 29
 E S M Z Z M E
 7DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLU5GCMV6 DNW7DEOX8 FPY9T10708 30
 E S M Z Z M E S
 DEOX8 FPY9TGQZO HR#TI-,a +\$%IP.* /2 □JS3MAKT4 BLU5GCMV6 DNW7DEOX8 FPY9T610708 31
 S M Z Z M E S

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