

DIAGNOSTIC FUNCTION TEST REPRODUCTION

PUNCH CHECK PLANE TEST

A. PURPOSE OF TEST

1. TO EXERCISE PUNCH AND READ AREAS BETWEEN PUNCH OPERATIONS TO TEST FOR CORRECT CHECK PLANE OPERATION.
2. TO RUN PUNCH IN PUNCH-FEED-READ MODE IF THIS FEATURE IS ON THE MACHINE.

B. LOADING PROCEDURES

DO NOT RUN THIS TEST IF PUNCH RELEASE IS NOT AVAILABLE ON YOUR MACHINE.

1. TO RUN TEST FROM CARDS, 1402:
 - A. PLACE 25 BLANK CARDS IN THE PUNCH HOPPER.
 - B. REMOVE CARD 19 IF PFR IS NOT ON MACHINE.
 - C. PLACE CARD DECK, 3504, IN READ HOPPER.
 - D. TURN I/O CHECK STOP SWITCH OFF.
 - E. PRESS LOAD KEY ON 1402.

NOTE: IF THE I/O CHECK STOP SWITCH IS ON, THE MACHINE WILL STOP AND NOT PRINT-OUT ON ERROR.

2. TO RUN THIS TEST ONLY FROM THE TEST TAPE.
 - A. FOR PFR FEATURE, PLACE 1 IN 1272.
 - B. ENTER 3504 IN STORAGE LOCATIONS 1273-1276.
 - C. PLACE 1 IN STORAGE LOCATION 1279.
 - D. PLACE 25 BLANK CARDS IN THE PUNCH HOPPER.
 - E. SET SENSE SWITCH F TO THE ON POSITION.

C. PROGRAM CONTROL

SENSE SWITCH B ON - LOOPS TEST WITHOUT PRINTING OR ERROR STOP AND WITHOUT REGARD TO CARD COUNT. USED FOR SCOPING.

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DIAGNOSTIC FUNCTION TEST REPRODUCTION

PART NO 451929
SHEET 2 OF
BLOCK NO 3504A

- SENSE SWITCH C ON - PRINT CORRECT RESULT
- SENSE SWITCH D ON - REPEATS ENTIRE TEST
- SENSE SWITCH E ON - HALTS ON ERROR IF SWITCH B IS OFF. SWITCH D CAN BE USED TO LOOP TEST.
- SENSE SWITCH F - USE WHEN TEST IS RUN FROM TAPE.

D. TEST PROCEDURE

THE PUNCH AND READ AREA IS CLEARED, AND A PUNCH RELEASE OR A PUNCH-FEED-READ RELEASE OPERATION IS STARTED.

CARD 19 MUST BE MANUALLY REMOVED FROM THE DECK, IF A PUNCH RELEASE OPERATION IS DESIRED.

STORAGE LOCATIONS WITHIN THE READ AND PUNCH AREAS ARE USED AS ADDRESSES OF INSTRUCTIONS TO EXERCISE THESE AREAS.

AFTER APPROXIMATELY 42 MS OF DELAY, THE PUNCH OR PUNCH-FEED-READ INSTRUCTION IS EXECUTED. ERROR CHECKS ARE MADE, AND THE OPERATION IS REPEATED FOR A TOTAL OF 20 CARDS.

E. STOPS

STORAGE ADDR REG	TYPE OF HALT
599	ERROR

F. PRINTOUTS

1. WITHOUT ERRORS:

PUNCH CHECK PLANE TEST 3504A

PFR RELEASE OP	WITH I/O CHECK STOP SWITCH OFF	NO PUNCH ERROR	CARD 001
PFR RELEASE OP	WITH I/O CHECK STOP SWITCH OFF	NO PUNCH ERROR	CARD 002

PUNCH CHECK PLANE TEST 3504A

PUNCH RELEASE OP	WITH I/O CHECK STOP SWITCH OFF	NO PUNCH ERROR	CARD 001
PUNCH RELEASE OP	WITH I/O CHECK STOP SWITCH OFF	NO PUNCH ERROR	CARD 002

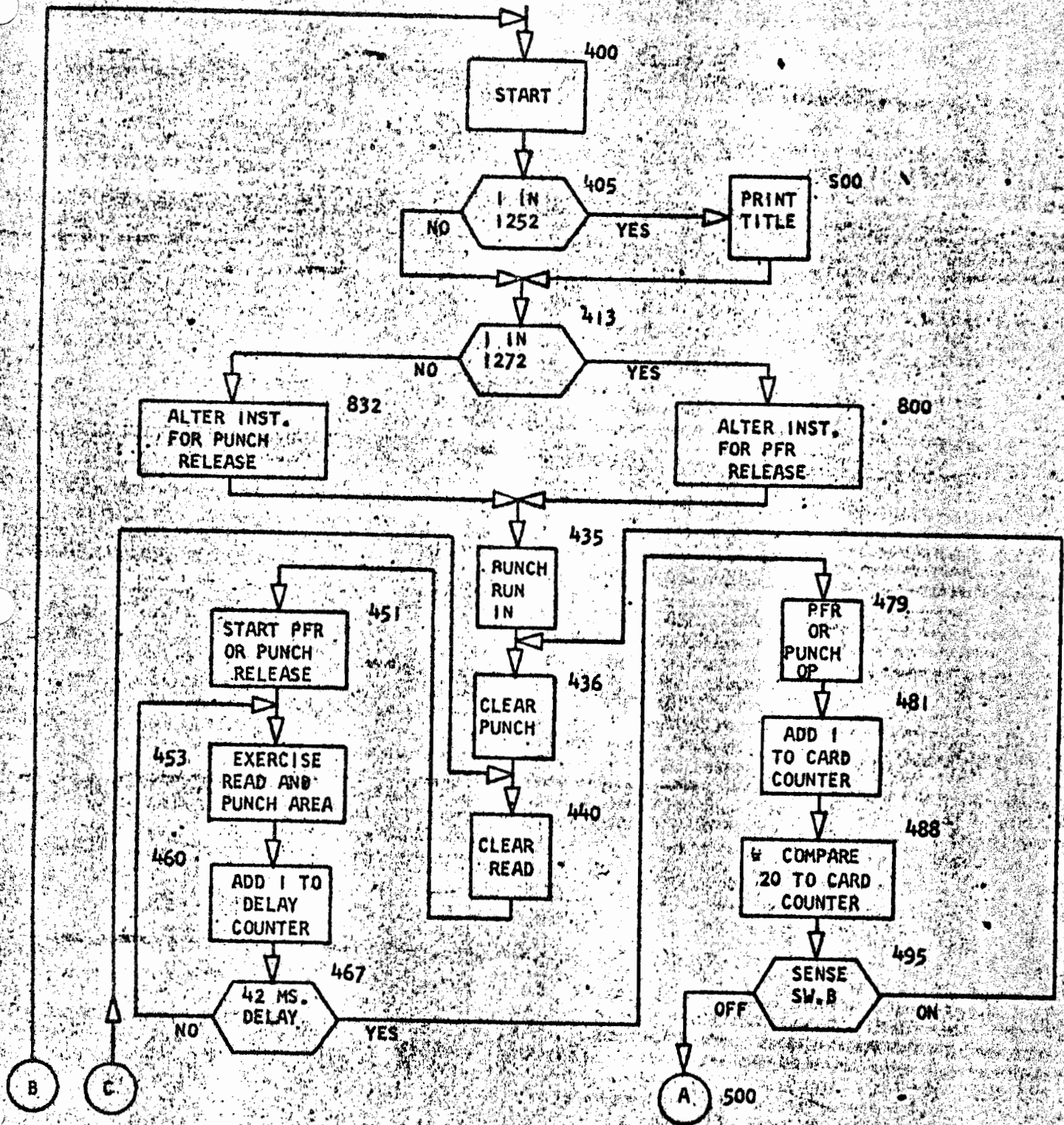
2. WITH ERRORS:

PUNCH RELEASE OP	WITH I/O CHECK STOP SWITCH OFF	PUNCH ERROR	CARD 003
PUNCH RELEASE OP	WITH I/O CHECK STOP SWITCH OFF	PUNCH ERROR	CARD 004

PFR RELEASE OP	WITH I/O CHECK STOP SWITCH OFF	PUNCH ERROR	CARD 019
PFR RELEASE OP	WITH I/O CHECK STOP SWITCH OFF	PUNCH ERROR	CARD 020

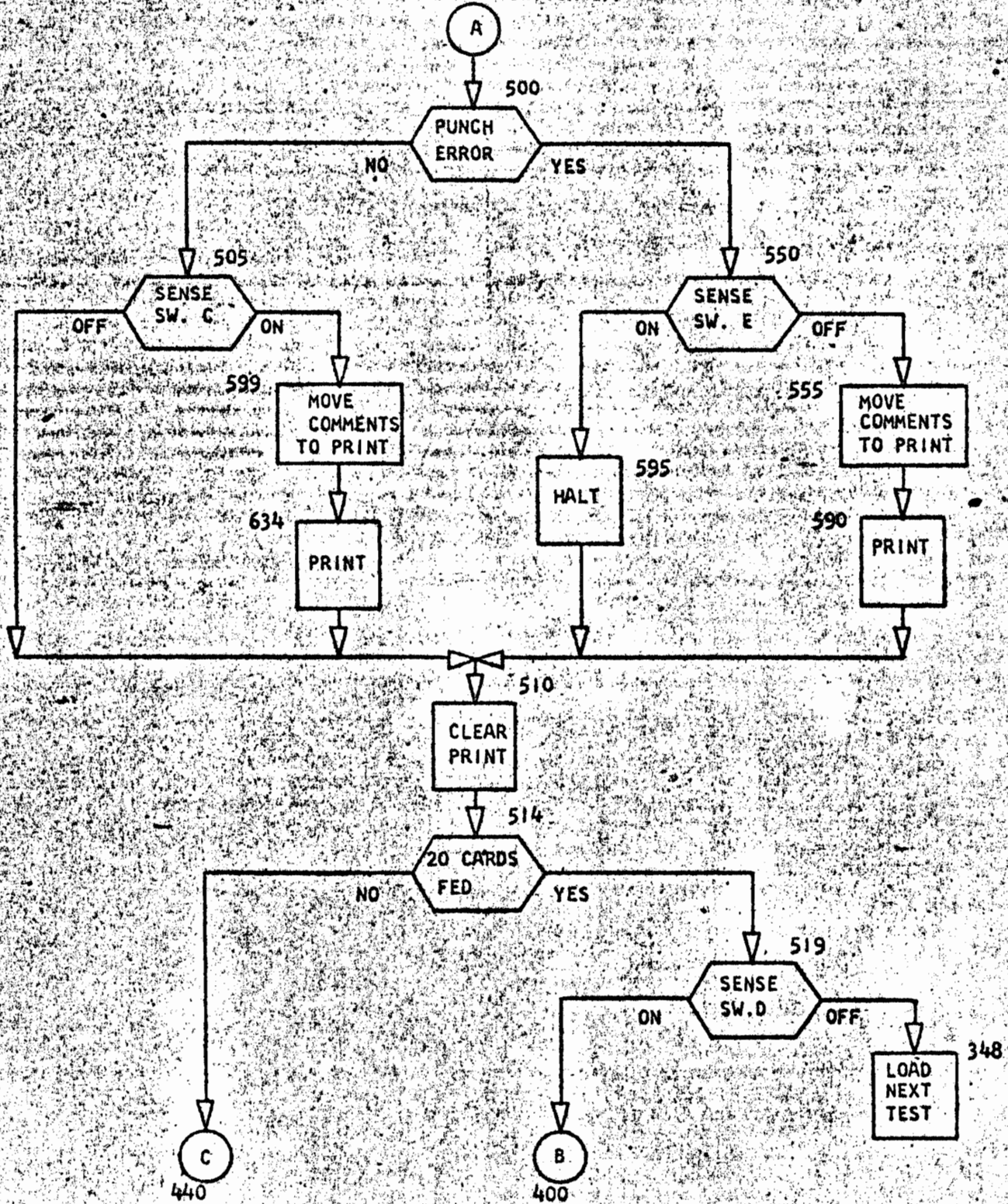
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PUNCH CHECK PLANE TEST



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I/O CHECK STOP SWITCH OFF



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REPRODUCTION

PROGRAM LISTING FOR USE WITH FLOW CHART

PUNCH CHECK PLANE TEST 3504A

INSTRUCTION ADDRESS	OP	A	B	REMARKS
377	377	B	389 5791	USE WHEN TESTS ARE RUN FROM TAPE
388	388	B	588	..
389	389	N	000	..
393	393	M	360 392	..
400	400	/	332	START TEST
404	404	/		• ASTERISK DENOTES INSTRUCTION CHANGE
405	405	B	500 5521	BR TO TITLE PRINT ROUTINE IF 1 IN 1262
413	413	B	800 5721	BRANCH FOR PFR RELEASE
421	421	B	832	BRANCH FOR PUNCH RELEASE
435	435	4		PUNCH RUN IN
436	436	/	180	CLEAR PUNCH AREA
440	440	/	080	CLEAR READ AREA
444	444	.	001 101	SET WM
451	451	9	X	• START PFR OR PUNCH RELEASE
453	453	M	070 180	EXERCISE PUNCH AREA
460	460	A	741 003	ADD 001 TO DELAY COUNTER
467	467	C	743 002	COMPARE 020 TO DELAY COUNTER
474	474	B	453 /	TEST FOR 42 MS DELAY
479	479	4	X	• START PFR OR PUNCH OP
481	481	A	741 103	ADD 001 TO CARD COUNTER
488	488	C	743 102	COMPARE 020 TO CARD COUNTER
495	495	B	436 B	B ON TO SCOPE
500	500	B	550 -	BR IF PUNCH ERROR WITH I/O SW OFF
505	505	B	599 C	C ON TO PRINT CORRECT RESULTS
510	510	/	299	CLEAR PRINT AREA
514	514	B	440 /	TEST FOR 20 CARDS FED
519	519	B	400 D	D ON TO REPEAT TEST
524	524	B	348	BR TO NEXT TEST
550	550	B	595 E	E ON TO ERROR STOP
555	555	M	702 284	LOAD PRINT AREA
562	562	M	675 256	..
569	569	M	664 244	..
576	576	M	103 288	..
583	583	M	XXX 216	..
590	590	2		PRINT ERROR RESULTS
591	591	B	510	BR TO CHECK FOR 20 CARDS
595	595	.	510	HALT IF ERROR AND E ON
599	599	M	702 284	LOAD PRINT AREA
606	606	M	683 264	..
613	613	M	664 244	..
620	620	M	103 288	..
627	627	M	XXX 216	..

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634	634	2			PRINT CORRECT RESULTS
635	685	8	510		BR TO CHECK FOR 20 CARDS
646	646	M	ITH	1/0 CHECK STOP	
688	665	S	WIT	CH OFF	-NO
684	684	P	UNC	H ERROR	CARD
703	703	P	UNC	H RELEASE	OP
719	719	P	FR	RELEASE	OP
733	733	7	32		CONSTANT
736	736	7	18		..
730	730	0	01		..
742	742	0	20		..
745	745	R			..
800	800	M	745	452	ALTER INST FOR PFR RELEASE
807	807	M	745	480	..
814	814	M	735	586	..
821	821	M	735	630	..
828	828	B	435		BR TO START TBST
832	832	M	739	452	ALTER INST FOR PUNCH RELEASE
839	839	M	739	480	..
846	846	M	738	586	..
855	855	M	738	630	..
860	860	B	435		BR TO START TBST
1272	572	1			PFR SELECTION CARD

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REPRODUCTION

TABLE OF UNPRINTABLE CHARAGTERS

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		

008015,022029,033033M 1001 PUNCH CHECK PLANE TEST 3504A00A
 008015,022029,033033M 1001 SET WORDMARK CARD 3504A 02
 L067367,340344,348349,3573611001,008012,0011001B361080AB413/340080 3504A 03
 L069404,377385,389393,4004041001 83895791BS88N000M360392/332/ 3504A 04
 L071443,413421,435436,4404441001BS005521880057218832 4/180/080 3504A 05
 L069480,451453,460467,4744791001,0011019XM070180A741003C743002B453/4X 3504A 06
 L070518,488495,60505,5105141001A741103C743102B4368B550M8599C/299B440/ 3504A 07
 Z
 L068554,924550,555555,5555551001B40008348 B596E 3504A 08
 L072594,562549,576583,5905911001M702284M675256M864244M103288MXXX216285103504A 09
 L072634,599606,613620,6276341001,510M702284M83264M684244M103288MXXX21623504A 10
 L072674,646665,665665,6856651001B510 WITH I/O CHECK STOPSWITCH OFF 3504A 11
 L072714M675675,684703,7037031001 NOPUNCH ERROR CARDPUNCH RELEASE 3504A 12
 L0597418715715,719733,7367391001E OPPFR RELEASE OP732718001 3504A 13
 L072781,745745,745745,7457451001020R 3504A 14
 L0718204782782,800807,8148211001 M745452M745480M735586 3504A 15
 L071859,828832,839846,8538601001M7358308435M739452M739480M738586M738630 3504A 16
 L072899,801001,001001,0010011001B435 3504A 17
 L057524,601605,612518,61751810012,049L0772772/27728413 3504A 18
 L038572,801801,801801,00100110011 3504A 19
 /388080M CLEAR WORDMARK CARD 3504A 20
 019027,031,038042803179868400L0463528M048588 PUNCH CHECK PLANE TEST 3504A 21

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