



FIELD CHANGE ORDER

FIG. 14-013

RCSL: 44-RT 1196

MANDATORY	☒	RETROFIT ON FAILURE	☐	OPTIONAL	☐
WARRANTY	☒	NON WARRANTY	☐		

PAGE 1 of 2
RE: ECFI NO. 14-013

MANUFACTURING EFFECTUATION LPC 307/17 and upwards.	EQUIPMENT AFFECTED RC 3600 / 6000 RC3641, 3642 / LPT709, 718 and LPC307 Lineprinters and Controller.
NOTE This FCO effects all LPC 307 as indicated under "Manufacturing Effectuation", but also RC3641 (LPT709) and RC3642 (LPT718), if connected to LPC 307.	

SCOPE 1. The paper fault signal is moved to another pin, both in the controller and in the printers, to avoid grounding. 2. Change of character decoding ROM in the controller, to let the character VT (13 octal) set interrupt. 3. Remove the 'printing' signal in the printers, to let RC 3641 and RC 3642 be interface-compatible with RC 3643.
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CONT'D ☐

FIELD INSTRUCTION See page 2.

CONT'D ☐

ADDITIONAL COMMENTS This FCO converts LPT 709 to LPT 724 and LPT 718 to LPT 725.
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QTY	PARTS REQUIRED	RC - P/N	DOCUMENTATION ENCLOSED
1	ROM 422		1. Provisional logic diagrams for LPC 307 (2 pages). 2. Provisional logic diagrams for LPT 724 and LPT 725 (RC3641 and RC3642) (4 pages). 3. Switchsettings in LPC 307, pos. 116 (1 page). 4. Provisional cable descriptions (2 pages).

TIME REQUIRED 1 hour	DATE 77.10.10	SIGN. <i>LK</i>
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FIELD CHANGE ORDER

NO.	14-013
PAGE	2 OF 2

FIELD INSTRUCTION :

A. Modification on LPC 307.

1. Remove the connection 1004A4 → 139-13
2. Remove the connection 1004A18 → ground
3. Insert the connection 1004A4 → 116-6
4. Insert the connection 116-11 → 116-12 → 139-13
5. Insert the connection 1004A18 → 116-5
6. Replace Rom 419 with Rom 422
7. Set the switches (S21, S22) in position 116 to (on,off)
8. Code the FCO-Label 14-013.

Printers connected to LPC 307 (RC3642, 3641).

B. Modification on the I/O Board.

1. Remove the connection W to ground.
2. The connection going to P is moved to W.
3. Connect P to ground.
4. Remove the connection 19 to d.
5. Connect d to ground.
6. Place a FCO-Label on the I/O Board and code it 14-013.

C. Modification on the VFU-Board.

1. Connect U66-9 to U39-2.
2. Remove U66-9 to TBI-17
3. Place a FCO-Label on the VFU-Board and code it 14-013.

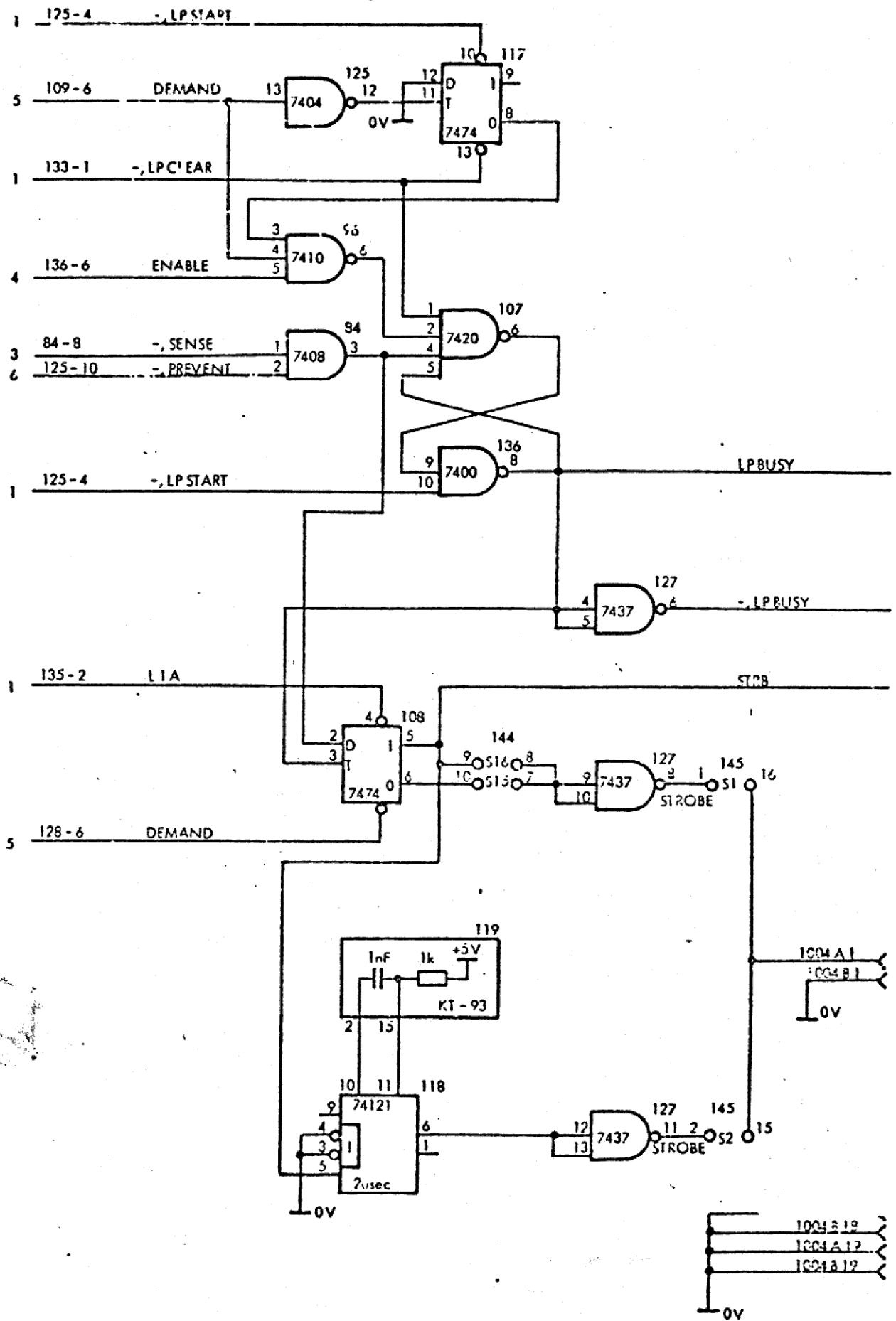
D. Modification on the Logic Board.

For RC 3641, LPT 709:

1. Remove the connection U38-4 to U60-3.
2. Remove the connection U60-4 to J6-17.
3. Place a FCO-Label on the Logic Board and code it 14-013.

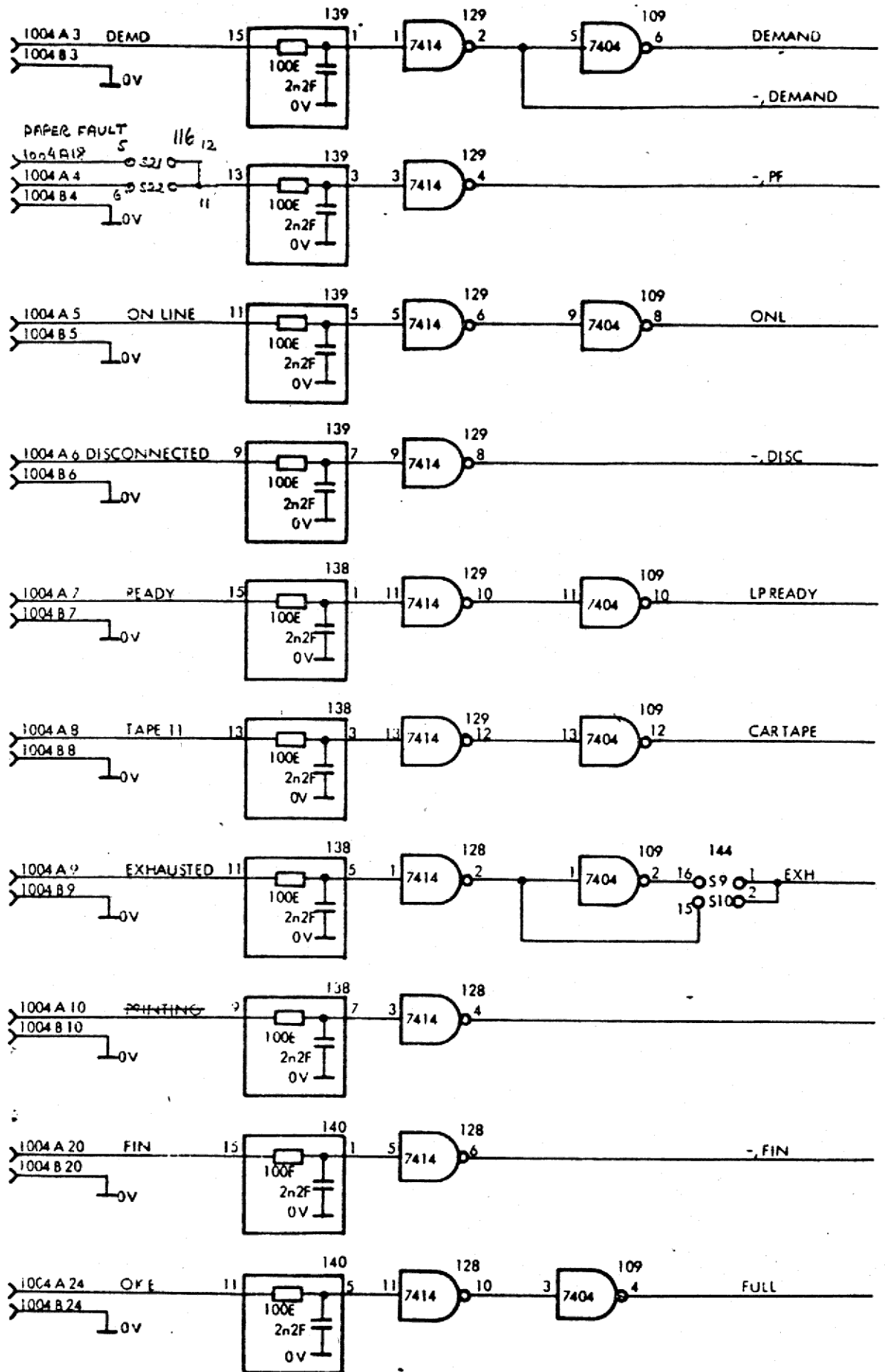
For RC 3642, LPT 718:

1. Remove the connection U27-9 to U47-3.
2. Remove the connection U47-4 to J6-17.
3. Place a FCO-Label on the Logic Board and code it 14-013.



030475 JFA 100576 ERC

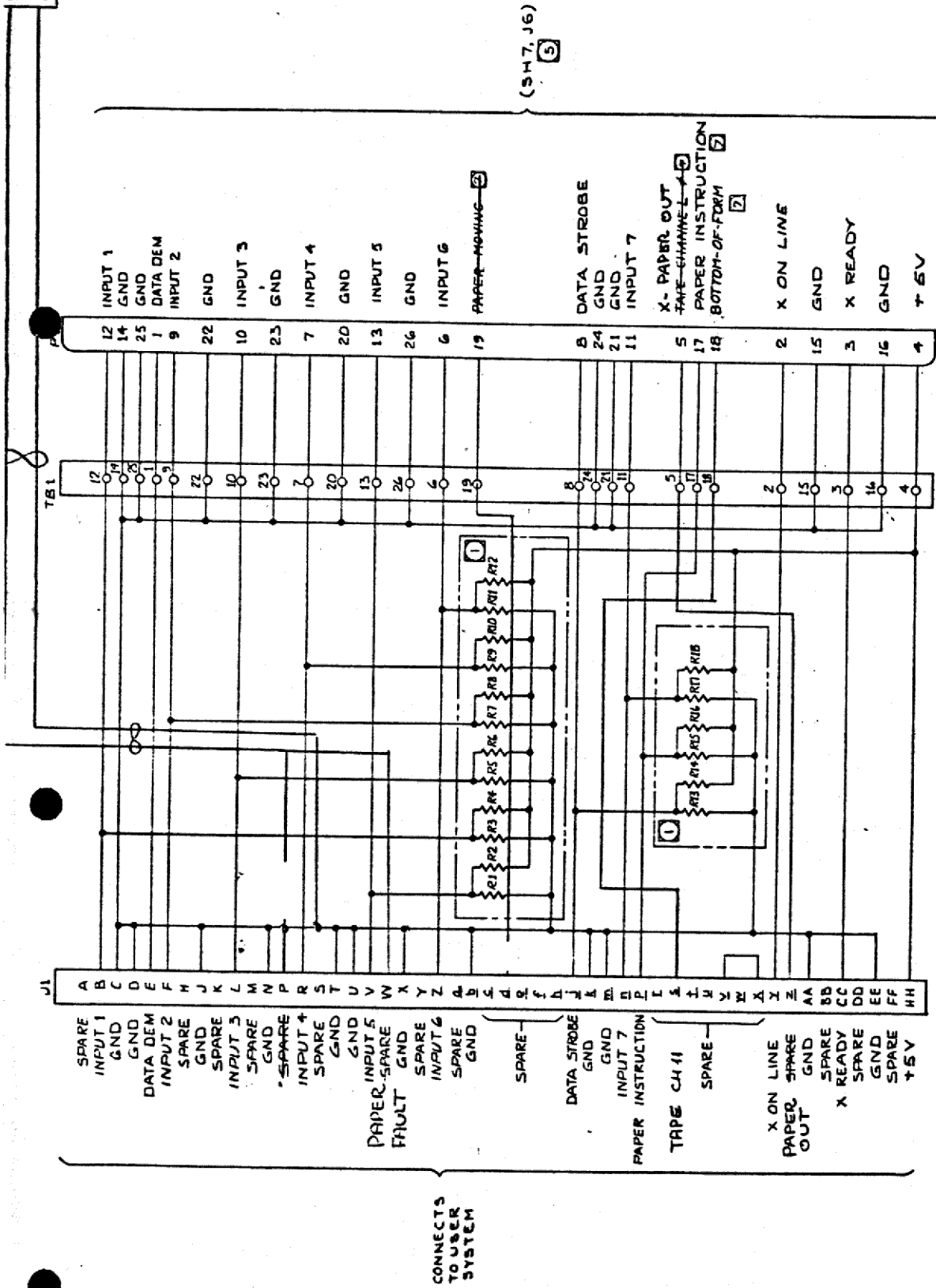
LPC 307
R-11564BUSY AND STROBE LOGIC
LOGIC DIAGRAMLPC
7



060475 JFA 100576 ERC

98

RC 3641/3642



CONNECTS
TO USER
SYSTEM

(5H7, J6)

X- PAPER OUT
TAPE CHANNEL ☒
PAPER INSTRUCTION ☒
BOTTOM-OF-FORM ☒

6 FOR SCHEMATIC SEE DWG NO. 235733.

5 IF THE VFU AND/OR SELF-TEST OPTIONS ARE IMPLEMENTED, REFER TO THE FOLLOWING LIST FOR PG CONNECTION:

OPTION	P6 MATING CONNECTOR
VFU	SH 16, J3
SELF-TEST OR VFU AND SELF-TEST	SH 15, J1

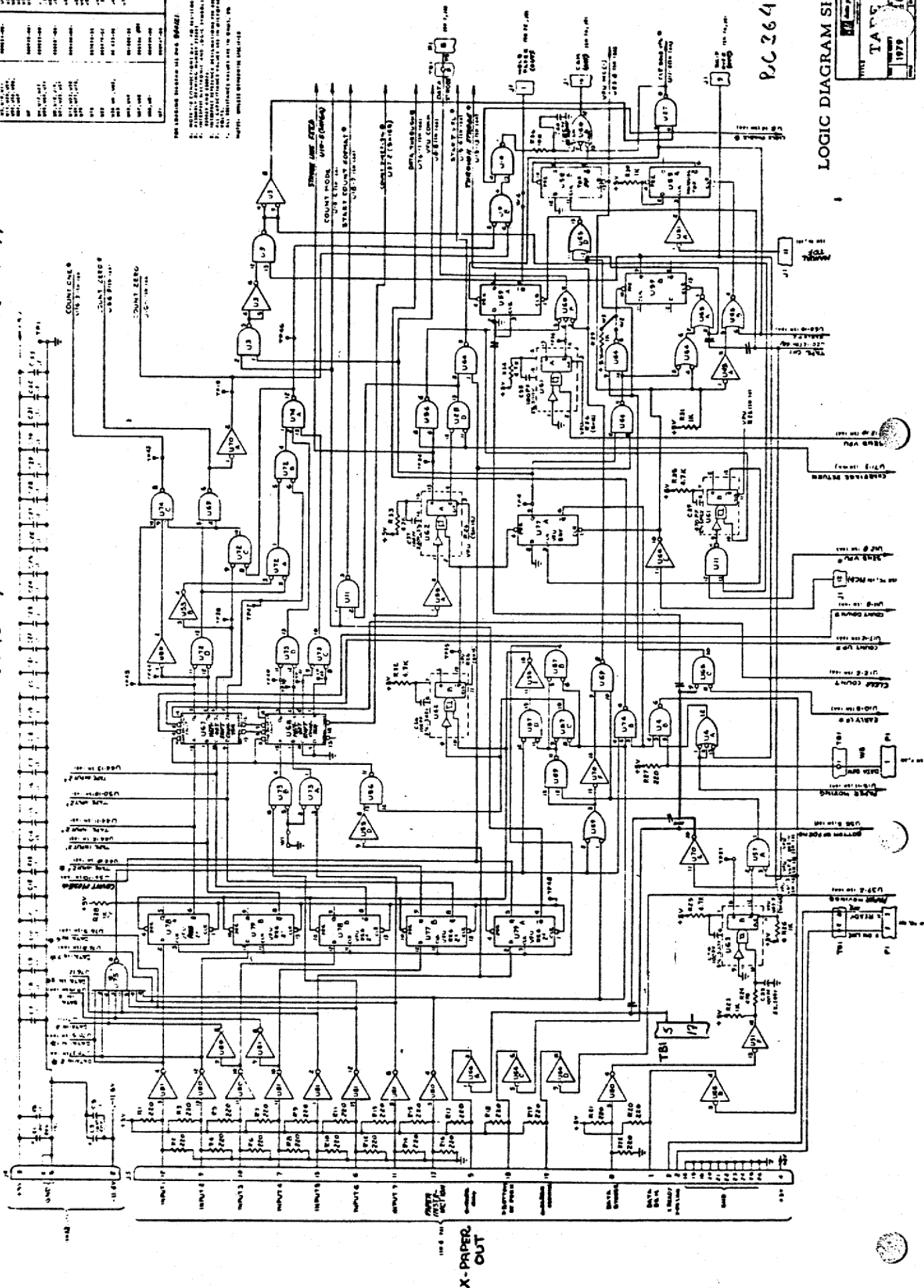
4. ASSEMBLY DRAWING NUMBER 235750.
5. INTERPRET ELECTRONIC SYMBOLS PER BS0026.
6. INTERPRET REFERENCE DESIGNATIONS PER BS0027.

1 MAXIMUM COMPONENT CONFIGURATION SHOWN, STANDARD I/O CIRCUIT CARD DOES NOT INCLUDE THESE RESISTORS. REFER TO APPLICABLE ADDENDUM ATTACHED TO THIS MANUAL FOR COMPONENT CONFIGURATION VALUE IF I/O CIRCUIT CARD IS OTHER THAN STANDARD.

NOTE: UNLESS OTHERWISE SPECIFIED

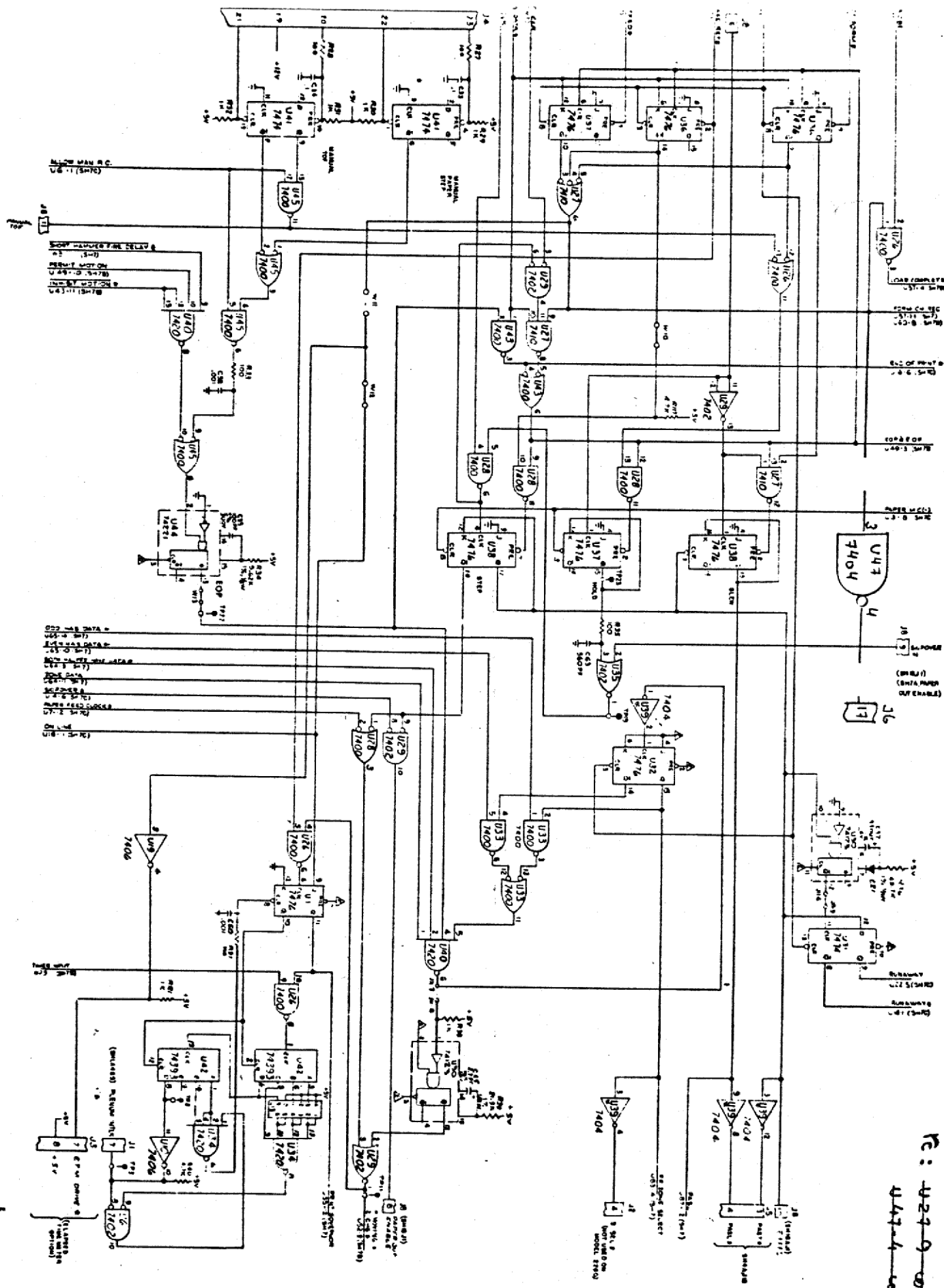
VIOLATION ONLY.

(U66-1) (U70-10)
(U66-5) (U59-3)
(U65-9) (U59-3)
(U65-3) (U70-11)

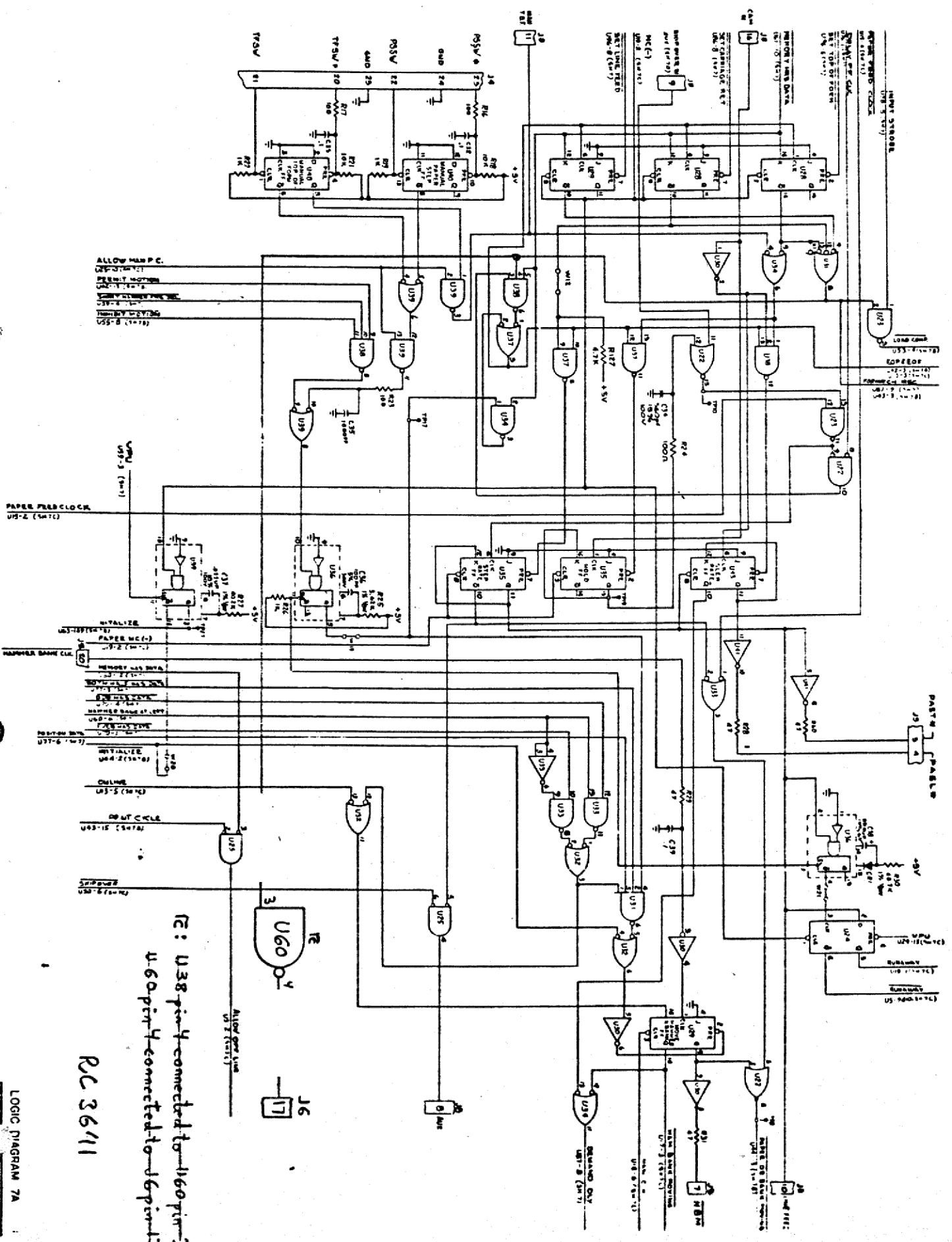


PC 3641/3642

RC: 4299 connected to 447-5
447-4 connected to 40-15



RC 3642



IC: U38 pin 4 connected to 160 pin 3.
 U60 pin 4 connected to 160 pin 17.
 RC 3611

Pos 116

Switch	Printer Type		
	I	II	III
S17	open	open	closed
S18	open	closed	open
S19		not used	
S20	open	open	closed
S21	closed	open	open
S22	open	closed	closed
S23		not used	
S24		not used	

7.3 DEVICE CODE SWITCH SETTINGS

The device codes used are (octal values):

	Printer Type		
	I	II	III
First controller	17	37	37
Second controller	57	67	67

Pos 146

Switch	Device Code			
	17	37	57	67
S25		not used		
S26		not used		
S27	closed	closed	open	open
S28	closed	open	closed	open
S29	open	open	open	closed
S30	open	open	open	open
S31	open	open	open	open
S32	open	open	open	open

Connector I : CANNON 2DB 52P,
 Connector II : WINCHESTER MRAC 50P
 Cable : MKP - S-K 25 x 2 x 0.14mm² + 4 x 0.50mm² + shield
 Length : 12m

I			II			I			II		
SIGNAL NAME	PIN	WIRE	PIN	SIGNAL NAME	SIGNAL NAME	PIN	WIRE	PIN	SIGNAL NAME		
STROBE	1	⊗	i	DATA STROBE	0V PAPER	18	—	W	0V		
0V	2	⊗	m	0V	0V FAULT	36	—	Y	0V		
PAPER INST	3	⊗	p	PAPER INST	0V	37	—	a	0V		
0V	4	⊗	s	0V	0V	38	—	c	0V		
DEMND	5	⊗	E	DATA DEM	Chassis	51	shield	e	0V		
0V	6	⊗	C	0V	Chassis	52	shield	h	0V		
PAPER FAULT 0V	7	⊗	P	PAPER FAULT			⊗				
0V	8	⊗	M	0V			⊗				
ON LINE	9	⊗	y	ON LINE			⊗				
0V	10	⊗	AA	0V			⊗				
DISCONNECTED	11	⊗	x	DISC			⊗				
0V	12	⊗	v	0V			⊗				
READY	13	⊗	CC	READY			⊗				
0V	14	⊗	EE	0V			⊗				
TAPE (7111)	15	⊗	S	TAPE CH11			⊗				
0V	16	⊗	U	0V			⊗				
EXHAUSTED	17	⊗	z	PAPER OUT			⊗				
0V	35	⊗	BB	0V			⊗				
PRINTING 0V	34	⊗	d	PRINTING 0V			⊗				
0V	33	⊗	f	0V			⊗				
DT 6	32	⊗	n	INPUT 7			⊗				
0V	31	⊗	k	0V			⊗				
DT 5	30	⊗	Z	INPUT 6			⊗				
0V	29	⊗	b	0V			⊗				
DT 4	28	⊗	V	INPUT 5			⊗				
0V	27	⊗	X	0V			⊗				
DT 3	26	⊗	R	INPUT 4			⊗				
0V	25	⊗	T	0V			⊗				
DT 2	24	⊗	L	INPUT 3			⊗				
0V	23	⊗	N	0V			⊗				
DT 1	22	⊗	F	INPUT 2			⊗				
0V	21	⊗	J	0V			⊗				
DT 0	20	⊗	B	INPUT 1			⊗				
0V	19	⊗	D	0V			⊗				

701021 LMJ 701021 ACB

211625

CBL 033

Connecting LPT 701, 702, 703, 704, 705 or 710 to LPT 306
 LPT 722, 724, 725 to LPT 307

Connector	Gen. addr.	Signal Name	Connector	Gen. addr.	Signal Name	Connector
1004			LPC 306-J1			LPC 306-J1
A 1		STROBE	1		DT3	26
B 1		0V	2		0V	25
A 2		PAPER INST	3		DT2	24
B 2		0V	4		0V	23
A 3		DEMND	5		DT1	22
B 3		0V	6		0V	21
A 4		PAPER-FAULT 0V	7		DT0	20
B 4		0V	8		0V	19
A 5		ON LINE	9		0V PAPER FAULT	18
B 5		0V	10		0V	36
A 6		DISCONNECTED	11		0V	37
B 6		0V	12		0V	38
A 7		READY	13		- , TEST	39
B 7		0V	14		0V	40
A 8		TAPE (7: 11)	15			41
B 8		0V	16			42
A 9		EXHAUSTED	17			43
B 9		0V	35			44
A10		PRINTING 0V	34			45
B10		0V	33			46
A11		DT6	32			47
B11		0V	31			48
A12		DT5	30			49
B12		0V	29			50
A13		DT4	28		Chassis	51
B13		0V	27		Chassis	52

FIELD CHANGE ORDER



NO: 14-015

ISSUE WEEK 16-78

RCSL: 44 - RT 1634

MANDATORY	☒	RETROFIT ON FAILURE	☐
WARRANTY	☒	NON WARRANTY	☐

PAGE 1 OF 3

RE: ECN NO: 14-015

SERIAL EFFECTIVITY

Units shipped after February 1978 have this change installed.

EQUIPMENT AFFECTED

RC 3600/6000

RC 3641/LPT 724

RC 3642/LPT 725

NOTE

REASON FOR CHANGE

To avoid loss of one line when the paper is out.

This occurs when the printer is receiving CR-LF and no skip to channel 1 between the forms.

DESCRIPTION OF CHANGE

See page 2 for changes on LPT 724.

See page 3 for changes on LPT 725.

ADDITIONAL COMMENTS

This FCO introduces changes to both the VFU-board, and the logic board, but the VFU-boards will still be interchangeable between the two printers.

QTY:	PARTS REQUIRED	RC -P/N
	None	

DOCUMENTATION ENCLOSED

Diagrams for RC 3641 (2 pages)

Diagrams for RC 3642 (2 pages)

KITS FREE OF CHARGE FROM ISS:	YES ☐	NO ☐
RETURN CHANGED PARTS TO ISS:	YES ☐	NO ☐

ESTIMATED INSTALLATION TIME: 1 hour.

PROJECT ENGINEER		DEVELOPMENT MANAGER		SYS. PRODUCTION MANAGER		TECH. SERVICE MANAGER	
SIGN.	DATE	SIGN.	DATE	SIGN.	DATE	SIGN.	DATE
<i>[Signature]</i>	78.0401	<i>[Signature]</i>	78.0401	<i>[Signature]</i>	78.0331	<i>[Signature]</i>	78.0401

RC 3641 - LPT 724

A. VFU board.

1. Cut the connections from J1 - 9 to U59 - 9, U3 - 13 and U4 - 13.
2. Insert connection between :
U59 - 9 → U3 - 13 → U4 - 13
U55 - 12 → J1 - 9
3. Code the FC0-Label 14-015.

B. Logic board.

1. Cut the following connections :
J8 - 9 → U22 - 11
U10 - 1 → U6 - 3
U5 - 3 → U13 - 1
2. Insert the following connections :
U22 - 11 → U22 - 12
J8 - 9 → U48 - 13
U15 - 2 → U48 - 1
U27 - 1 → U48 - 2
U48 - 12 → U34 - 9 → U37 - 5
U34 - 8 → U30 - 11
U30 - 10 → U6 - 3
U5 - 3 → U37 - 4
U37 - 6 → U30 - 13
U30 - 12 → U13 - 1
U10 - 1 → U34 - 10
3. Code the FC0-Label 14-015.



RC 3642 - LPT 725

A. VFU board.

1. Cut the connections from J1 - 9 to U59 - 9, U3 - 13 and U4 - 13.
2. Insert connections between :
U59 - 9 → U3 - 13 → U4 - 13
U55 - 12 → J1 - 9
3. Code the FC0-Label 14-015.

B. Logic board.

1. Cut the following connections :
J8 - 9 → U35 - 2
U9 - 10 → U16 - 3
U18 - 8 → U16 - 8
2. Insert the following connections :
U35 - 2 → U35 - 3
J8 - 9 → U62 - 5
U5 - 1 → U62 - 4
U62 - 6 → U53 - 11
U9 - 10 → U53 - 9
U53 - 8 → U99 - 11
U53 - 10 → U99 - 12 → U99 - 9
U99 - 13 → U16 - 3
U18 - 8 → U89 - 13
U89 - 12 → U99 - 8
U99 - 10 → U16 - 8
U7 - 4 → U62 - 3
3. Code the FC0-Label 14-015.

IC: U27 pin 2 connected to J6 pin 5
 U11 pin 8 connected to U26 pin 1
 U26 pin 2 connected to J6 pin 18

RC 3641

A/S RECENTRALEN

Designed by

Drawn by

Dwg. Office

Design Check

Replaces Dwg. No.

due to ECN

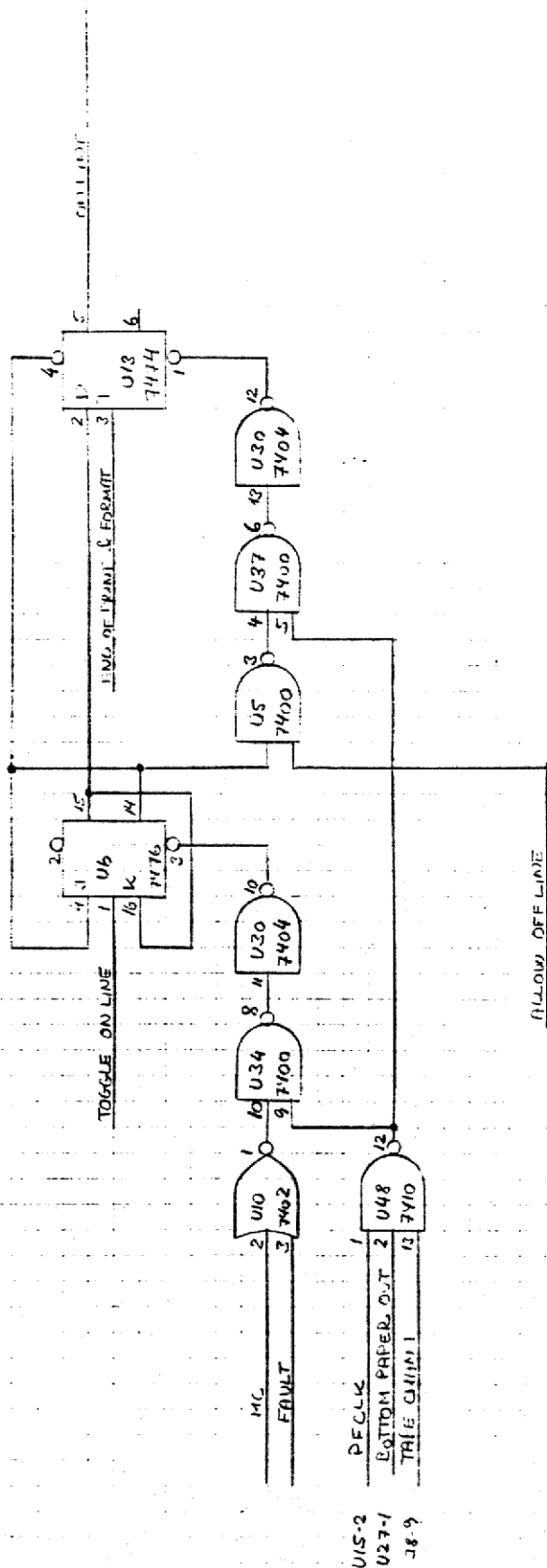
Revised by Dwg. No.

Unit

Dwg. No.

LOT 724

LOGIC BOARD CHANGE PL 364 / LOT=24 / DP 2230



See next page

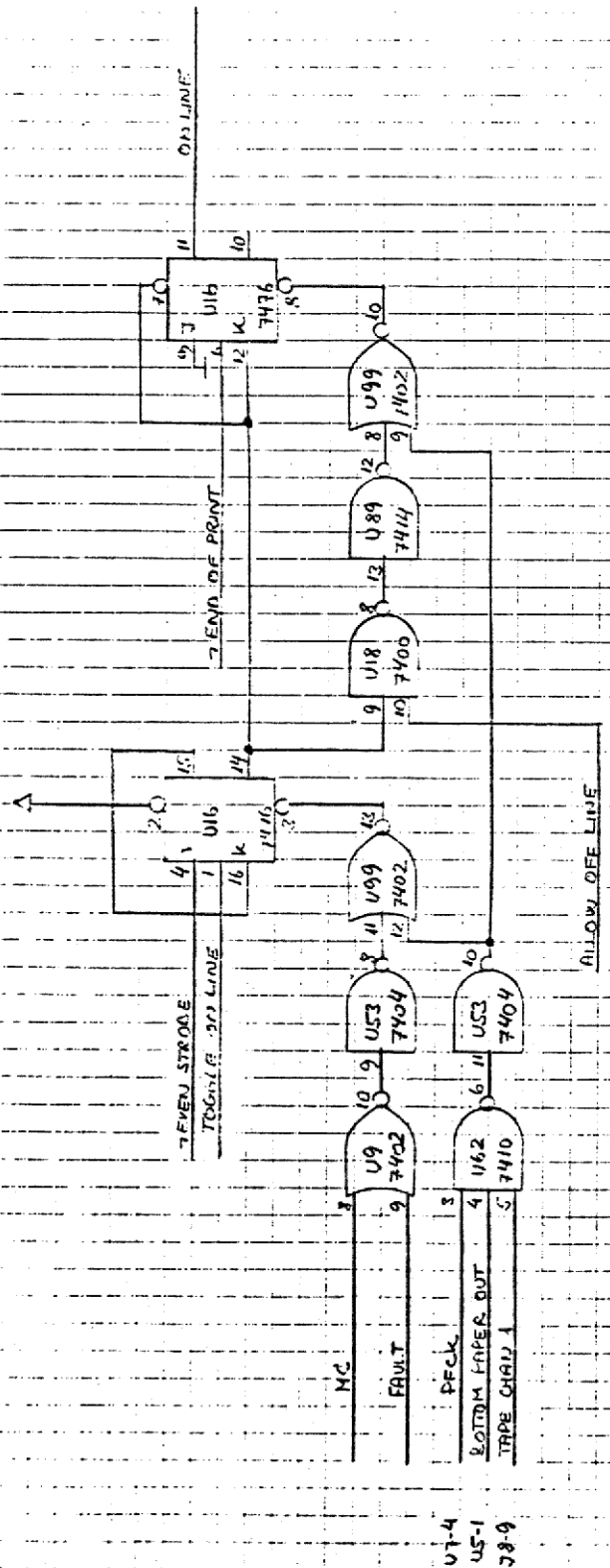


AC 404 VS 100

A/S R	ECENTRALEN	Designed by	Drawn by	Dwg. Office	Design Check	Replaces Dwg. No.	due to ECN	Revised by Dwg. No.
		2.5.1.78 [14]						

Unit
LDT 725
Dwg. No.

LOGIC BOARD CHANGE RL2642 / LDT 725 / DP 2260



Supplement to FCO 14-015

It has come to my knowledge that there might be some difficulties in finding the integrated circuit U99 on the Logic board.

On most boards U99 is positioned in its "natural" position (which means after U98), but in some cases it is positioned between U46 and U54, as shown on the lay-out enclosed.

Kind regards

A/S Regnecentralen

Kai Lundgaard

RCSL: 44 - RT 1911

MANDATORY ☐	RETROFIT ON FAILURE ☒
WARRANTY ☒	NON WARRANTY ☐

PAGE 1	OF 1
RE: ECN NO: 14-019	

SERIAL EFFECTIVITY LPC 308/247 and upwards	EQUIPMENT AFFECTED RC 3600 RC 3640, 3641, 3642, 3643 / LPC 308 Controller
NOTE	

REASON FOR CHANGE

RC 3643 is not able to run 900 lpm in some cases. This is caused by 1) Wrong prom set in the printer (see additional comments) and 2) Missing grounding of the "printing" signal in the printer. This FCO grounds this signal in the controller, using a micro-switch.

DESCRIPTION OF CHANGE

- Insert following connections: (1004 A10) - (146-1).
(146-16) - 0 V.
set switch S25 (In pos. 146) the following way:
ON: Type 1 printer
OFF: Type 2 and 3 printer.
- Code the FCO-label: 14-019.

ADDITIONAL COMMENTS

To have any influence on RC 3643 this FCO must be followed by a change in the printer prom set, Data Products FCO no. 419 or 420.

THE FCO-KIT CAN BE ORDERED AT THE SPARE PART STOCK
UNDER RC-PARTNUMBER: 8-0419
ADDRESS: HOVEDVEJEN 9, DK-2600 GLOSTRUP DENMARK

KITS FREE OF CHARGE	YES ☒	NO ☐
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THE FCO-KIT INCLUDES:

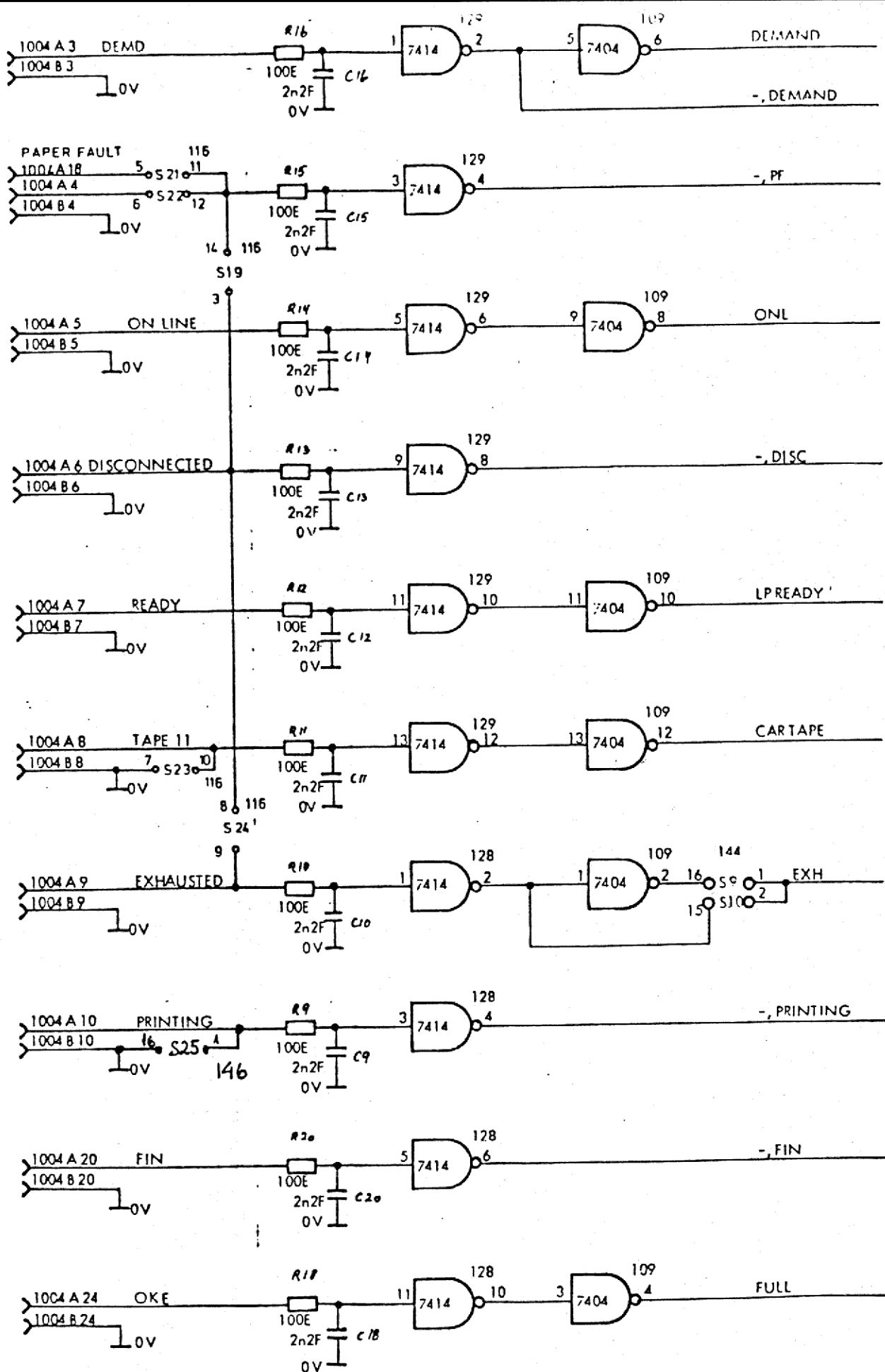
QTY	DESCRIPTION	RC P/N
0.1 m	Mini Wrap Wire	4-4910

DOCUMENTATION ENCLOSED

New page LPC 5 in LPC 308 Technical Manual.

ESTIMATED INSTALLATION TIME: 0.5 hour.

PROJECT ENGINEER SIGN: <i>[Signature]</i> DATE: 2/5-81	DEVELOPMENT MANAGER SIGN: <i>[Signature]</i> DATE: 2/5-	SYS. PRODUCTION MANAGER SIGN: <i>[Signature]</i> DATE: 2/6-81	TECH. SERVICE MANAGER SIGN: <i>[Signature]</i> DATE: 3/6-81
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RCSL: 44 - RT 1911

MANDATORY ☐	RETROFIT ON FAILURE ☒
WARRANTY ☒	NON WARRANTY ☐

PAGE 1 OF 1
RE: ECN NO:

SERIAL EFFECTIVITY LPC308, S/N 301 and upwards	EQUIPMENT AFFECTED RC3600 LPC308 Line Printer Controller
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NOTE This FCO is only necessary if LPC308 controls a band printer.
Drum printers etc. are not affected.

REASON FOR CHANGE To match the LPC308 line printer controller to the RC3742 and RC3743 band printers.

DESCRIPTION OF CHANGE 1. Replace the PROM ROM422 in position 89 by ROC108 2. Fill in the FCO label.

ADDITIONAL COMMENTS

THE FCO-KIT CAN BE ORDERED AT THE SPARE PART STOCK
UNDER RC-PARTNUMBER: _____
ADDRESS: HOVEDVEJEN 9, DK-2600 GLOSTRUP DENMARK

KITS FREE OF CHARGE	YES ☒	NO ☐
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THE FCO-KIT INCLUDES:

QTY	DESCRIPTION	RC P/N
1	PROM, ROC108	

DOCUMENTATION ENCLOSED

Updated page 48 of the Technical
Manual for LPC308, 44RT.1946

ESTIMATED INSTALLATION TIME: 15 minutes

PROJECT ENGINEER SIGN. <i>W. H. H.</i> DATE 20/9-83	DEVELOPMENT MANAGER SIGN. <i>H. H.</i> DATE 21/9-83	SYS. PRODUCTION MANAGER SIGN. <i>W. H. H.</i> DATE 21/9-83	TECH. SERVICE MANAGER SIGN. <i>S. H.</i> DATE 21/9-83
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9. ROM CONTENTS

9.

ROC 108	PIN			
Address (octal)	9	10	11	12
0-14	0	1	1	1
15	0	1	0	1
16-37	0	1	1	1
40-137	1	1	1	1
140-176	1	0	1	1
177	1	1	1	1
200-377	1	0	1	1