
Title:

INSTALLATION MANUAL FOR
PT-3 FORMATTER



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RCSL No: 44-RT 1447

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Abstract:

This paper contains the description of the installation of formatter to PT-3 (MTO313) to mag. tape Channel RC3685.

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DESCRIPTION

1. Installation of Formatter in Chassis

The PT-3 formatter is installed in the chassis together with the unmodified NRZI formatter called the ISO formatter.

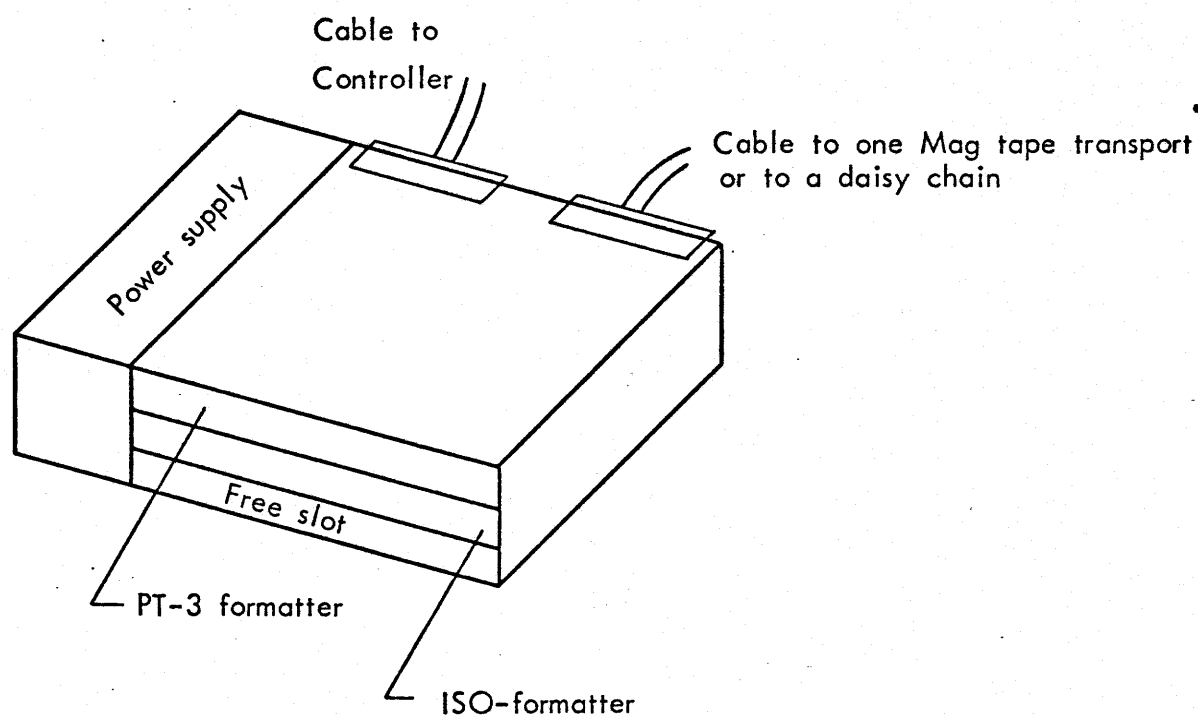


Fig. 1 . Installation of PT-3 formatter together with ISO-formatter.

2. Modifications When Formatter Drives One NRZI Magtape Transport

Tape Transport 6840

- 2.1. The high-density switch is disabled and the indicator is permanently lit.

To enable the high-density switch, cut the print between test point TP and jack 38-5 (NHID) on DATA E19 BOARD.

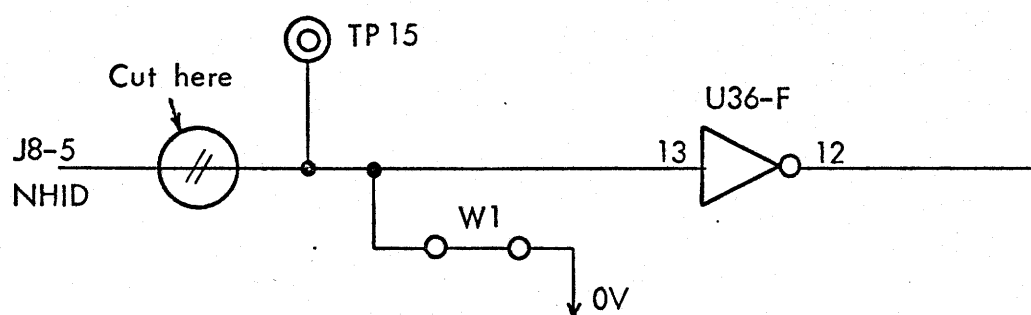


Fig. 2. Modification in tape transport.

Note: If the tape transport is equipped with DATA E9 BOARD, the print must be cut between Test Point TP1 and jack 31-5 (NHID).

- 2.2. On the print TAPE CONTROL 'C' the wire from U23 pin 6 to J101 pin F is cut. A wire is connected from U23 pin 6 on TAPE CONTROL 'C' to J103 pin 10 on DATA E19 BOARD. J103 pin 10 is not normally used on DATA E19 BOARD.

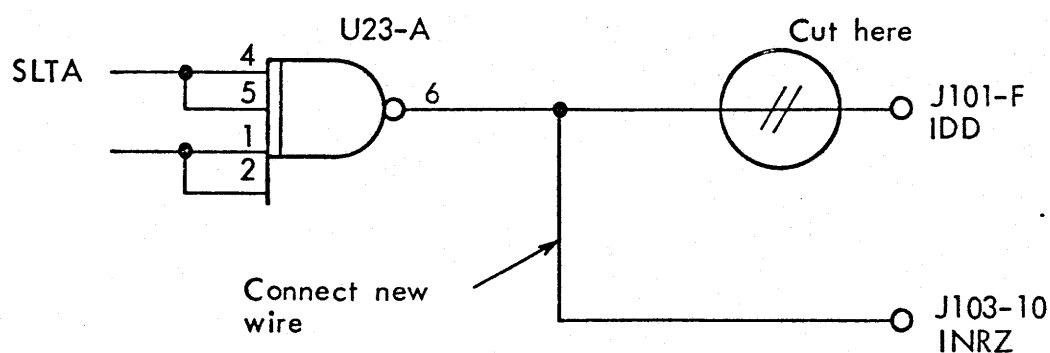


Fig. 3. Modification in tape transport.

Note: The wire is connected from one printed circuit to another.

After the modification the operation of the density switch is as follows:

A INDICATOR IS LIT ~ ISO STANDARD

B INDICATOR IS NOT LIT ~ PT-3 STANDARD

3.. Modification When Dual (PE/NRZI) Tape Transport Is Used for (PT-3/ISO)

3.1. Tape transport 6640

When a dual (PE/NRZI) tape transport is used, the transport must be forced in the NRZI mode independently of the High-Density Switch. But the switch must be able to control the INRZ output signal on J103 pin L.

3.2. Modification on printed circuit board TAPE CONTROL C2.

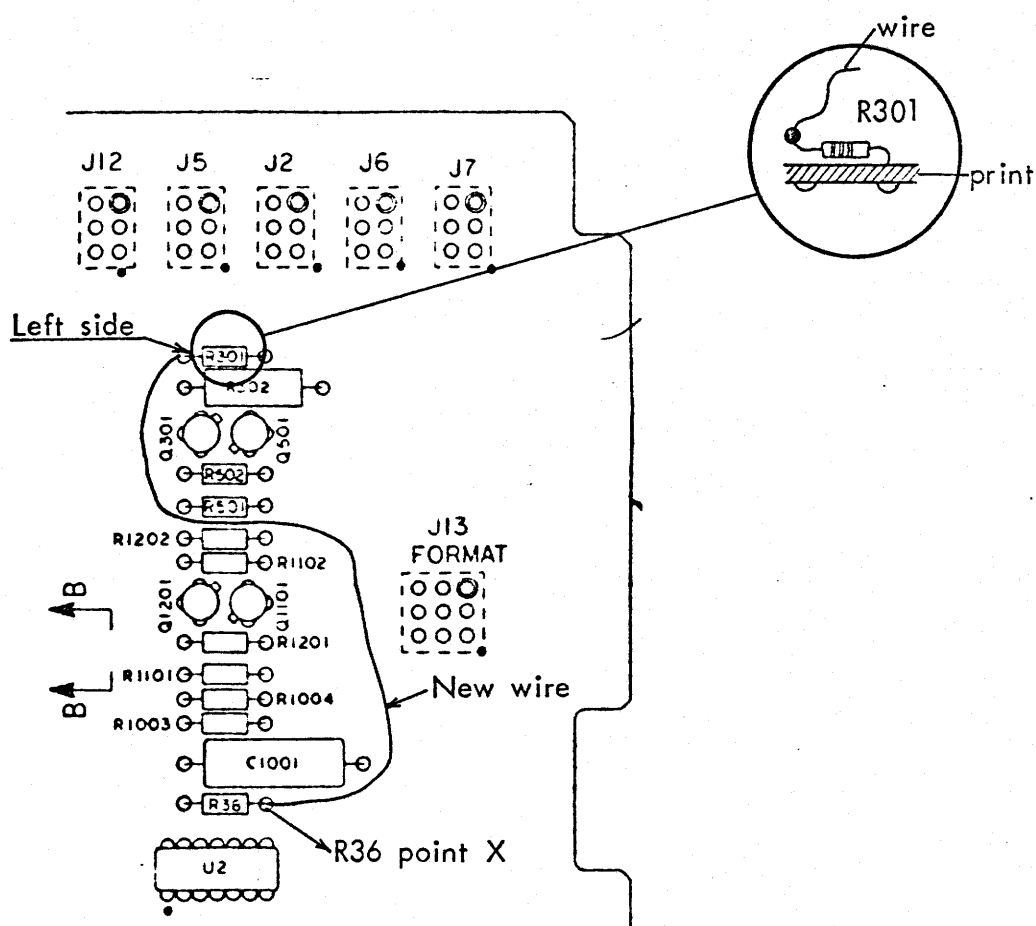


Fig. 4. Part of TAPE CONTROL C2 with modifications.

3.2.1. Cut printed circuit connection between R36 point X and U2 ben 11. (Fig. 3).

3.2.2. Disconnect R301 left side and solder a wire to the resistor. (See Fig. 3).

3.2.3. The other end of the wire from 3.2.2 must be connected to R36 point X.

3.3. Modifications on printed circuit board DATA K1.

3.3.1. Cut printed circuit connection to U57 pins 4 and 5.

3.3.2. Connect a wire from U57 pins 4 and 5 to R36 point X on TAPE CONTROL C2 board.

After modification the operation of the density switch is as follows:

A INDICATOR IS LIT ~ PT3 STANDARD

B INDICATOR NOT LIT ~ ISO STANDARD

4. Modifications When Formatter Drives a Daisy Chain

The formatter can drive a daisy chain with two to four transports. This can be 7-track and 9-track tape transports.

4.1. A transport which is to be used for PT-3/ISO magtape is modified as described in section 2 or 3 in this paper.

4.2. The Multiple Transport Adapter for the PT-3/ISO magtape transport has to be modified in the following way:

WII (NRZ) must be removed.

5. Test of Equipment

The PT-3 modification is tested by the Test Program

RC 3600 - MAGNETIC TAPE RELIABILITY

PT-3 POLISH STANDARD

RCSL: 44-RT 1240

BINARY: RCSL 44-RT 1245 DEVICE CODE 30

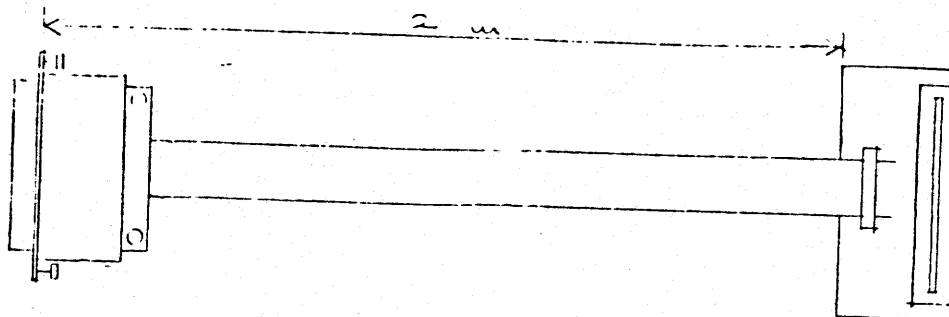
BINARY: RCSL 44-RT 1246 DEVICE CODE 44

The ISO formatter is tested the normal way.

6. Indication of Modification

Mark the printed circuit boards so that it is easy to see that a circuit board has been modified to PT-3 standard.

I
100 pol.
kabelstik
plug



II
2x50 pol.
kartstik

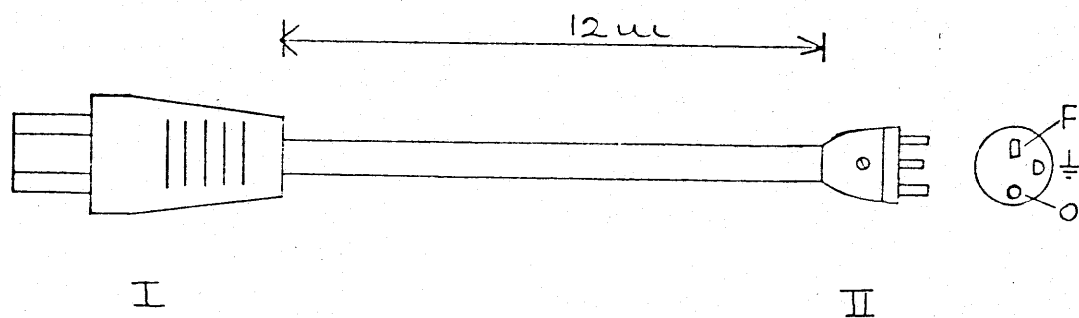
- 1 kabelstik plug 2DD100 P
- 100 kontakt pin 031-9540-000
- 1 kabelclamp DD24661
- 2 låseskruesæt male D 20420-15
- 2 m kabel 2x50x0,14 mm²
- 1 kartstik PEC 101392-01C

I		II	I		II	I		II
1		B1	43		B19	69		B33
2		B2	42		B20	70		B32
3		A1	41		A19	71		A34
4		A2	40		A20	72		A35
5		B3	39		B21	73		B36
6		B2	38		B20	74		B35
7		A3	37		A21	75		A36
8		A2	36		A20	100		A35
9		B4	35		B22	99		B37
10		B5	34		B23	98		B36
11		A4	33		A22	97		A37
12		A5	32		A23	96		A38
13		B7	31		B24	95		B39
14		B8	30		B23	94		B38
15		A9	29		A24	93		A39
16		A8	28		A23	92		A38
17		B10	27		B25	91		B40
18		B11	52		B26	90		B41
19		B12	53		A25	89		A40
20		B11	54		A26	88		A41
21		A12	55		B27	87		B42
22		A11	56		B26	86		B41
23		B13	57		A27	85		A42
24		B14	58		A26	84		A41
25		A13	59		B28	83		B6
26		A14	60		B29	82		B5
51		B16	61		A28			
50		B17	62		A29			
49		A16	63		B30			
48		A17	64		B29			
47		B18	65		A30			
46		B17	66		A29			
45		A18	67		A31			
44		A17	68		A32			

R 21/89

GBL 096

JAK



- 1 netstik, 220V 10A m. jord, plug LK.
- 1 netstik, 220V 10A m. jord, socket
- 12m netkabel 3 x 1,50 mm²

I		II
L	— brun	F
N	— blå	O
⊥	— gul/grøn	⊥

~~5-6-73~~
19.10.73

R.21190

CBL 105

1 PEC kabel 101577 01 C
15m ledning 2x0,20 mm² rød, blå

JAK

MTT 301/302/303
(PEC transport)

J102

J103

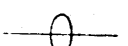
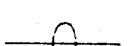
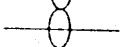
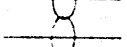
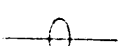
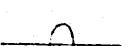
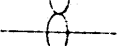
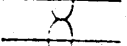
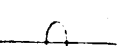
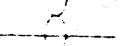
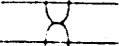
J101

J102

MTC 301/302/303
(PEC formatter)

PEC kabel 101577 01 C tilføjes følgende trådnings:

3.8.73

(2x50) formatt. J102			(2x18) transp. J103		(2x50) formatt. J102		(2x18) transp. J102
A48		rød	5		A42		B
B48		blå	E		A41		2
A49		rød	6		B43		D
B49		blå	F		B44		4
A50		rød	7		A43		H
B50		blå	H		A44		7

CONNECTOR I: PERTEC PRINTKORT m. 2x50 POL. KANTSTIK

II: 2x18 POL. KANTSTIK

III: 2x18 POL. KANTSTIK

IV: 2x18 POL. KANTSTIK

V: AMP SPADESKO

HC KABEL : 21x2x0,14 mm² m. SKÆRM
LÆNGDE : 3 rde a 12 m.

I		II	I		III	I		IV
A28		B	B2		A	B15		A
A29		2	B1		1	B14		1
B30		C	A2		B	B16		C
B29		3	A1		2	B17		3
A30		D	B2		C	B18		E
A29		4	B3		3	B17		5
E31		E	A2		D	A18		F
B32		5	A3		4	A17		6
A31		F	A5		J	A21		L
A32		6	A6		8	A20		10
B33		H	B8		K	B22		M
B32		7	B7		9	B23		11
B34		K	A8		L	A22		N
B35		9	A7		10	A23		12
A34		L	B8		M	B24		P
A35		10	B9		11	B23		13
B36		M	A8		N	A24		R
B35		11	A9		12	A23		14
A36		N	B11		P	B25		S
A35		12	B10		13	B26		15
B37		P	A11		R	A25		T
B38		13	A10		14	A26		16
A37		R	B11		S	B27		U
A38		14	B12		15	B26		17
A39		T	B14		U	A27		V
A38		16	B13		17	A26		18
B40		U	A14		V	A42		B
B41		17	A13		18	A41		2
B42		J	* B48		E	B43		D
B41		8	* A48		5	B44		4
			* B49		F	A43		H
			* A49		6	A44		7
			* B50		H			
			* A50		7			
	SKÆRM	V		SKÆRM	V		SKÆRM	V

* / FØRES GENNEM HUL I PRINTKORT.

CBL 311

BLAD 4

P 211921

Connector I : 24 PIN A 5 CD 12C P
 Connector II : 100 PINS 031-95110 000
 Cable : 1 UD 24661
 Connector II : 11ALE D 20420-15
 Cable : PERTEC PLUG "INTERFACE B"
 Length : 2 x 50 x 0.14 mm²
 Length : 2 m

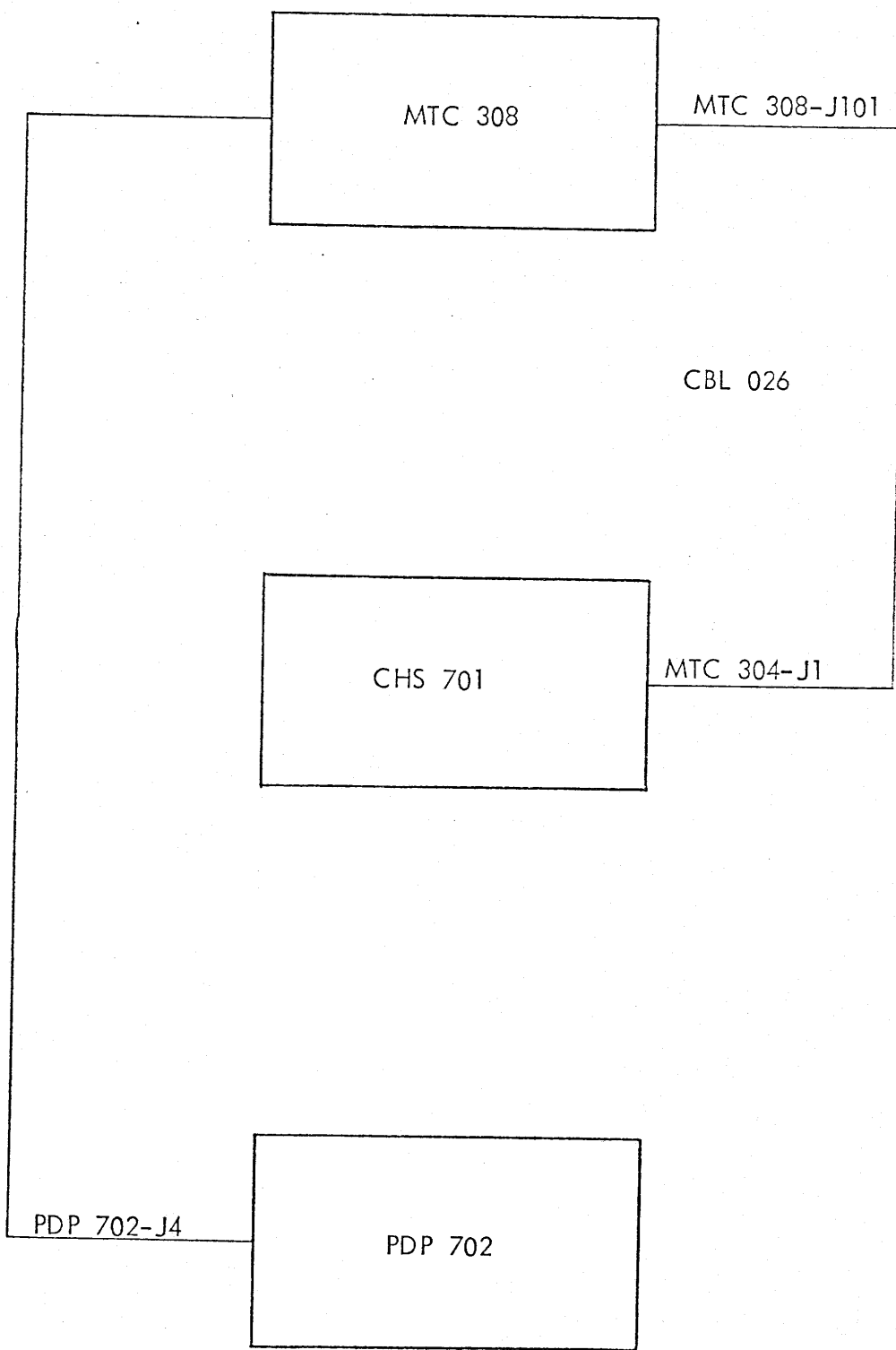
I PIN		II PIN	I PIN		II PIN	I PIN		II PIN
1	⊗	B1	43	⊗	B19	69	⊗	B33
2	⊗	B2	42	⊗	B20	70	⊗	B32
3	⊗	A1	41	⊗	A19	71	⊗	A34
4	⊗	A2	40	⊗	A20	72	⊗	A35
5	⊗	B3	39	⊗	B21	73	⊗	B36
6	⊗	B2	38	⊗	B20	74	⊗	B35
7	⊗	A3	37	⊗	A21	75	⊗	A36
8	⊗	A2	36	⊗	A20	100	⊗	A35
9	⊗	B4	35	⊗	B22	94	⊗	B37
10	⊗	B5	34	⊗	B23	98	⊗	B38
11	⊗	A4	33	⊗	A22	97	⊗	A37
12	⊗	A5	32	⊗	A23	96	⊗	A38
13	⊗	B7	31	⊗	B24	95	⊗	B39
14	⊗	B8	30	⊗	B23	94	⊗	B38
15	⊗	A9	29	⊗	A24	93	⊗	A39
16	⊗	A8	28	⊗	A23	92	⊗	A38
17	⊗	B10	27	⊗	B25	91	⊗	B40
18	⊗	B11	52	⊗	B26	90	⊗	B41
19	⊗	B12	53	⊗	A25	89	⊗	A40
20	⊗	B11	54	⊗	A26	88	⊗	A41
21	⊗	A12	55	⊗	B27	87	⊗	B42
22	⊗	A11	56	⊗	B26	86	⊗	B41
23	⊗	B13	57	⊗	A27	85	⊗	A42
24	⊗	B14	58	⊗	A26	84	⊗	A41
25	⊗	A13	59	⊗	B28	83	⊗	B6
26	⊗	A14	60	⊗	B29	82	⊗	B5
51	⊗	B16	61	⊗	A28		⊗	
50	⊗	B17	62	⊗	A29		⊗	
49	⊗	A16	63	⊗	B30		⊗	
48	⊗	A17	64	⊗	B29		⊗	
47	⊗	B18	65	⊗	A30		⊗	
46	⊗	B17	66	⊗	A29		⊗	
45	⊗	A18	67	⊗	A31		⊗	
44	⊗	A17	68	⊗	A32		⊗	

JEMI

76.11.25

261172 JFA 261172 ML

A/S REGNECENTRALEN	Designed by	21173 JFA	Drawn by		Dwg. Office Check	Design Check	Replaces Dwg. No.	due to ECN	Replaced by Dwg. No.

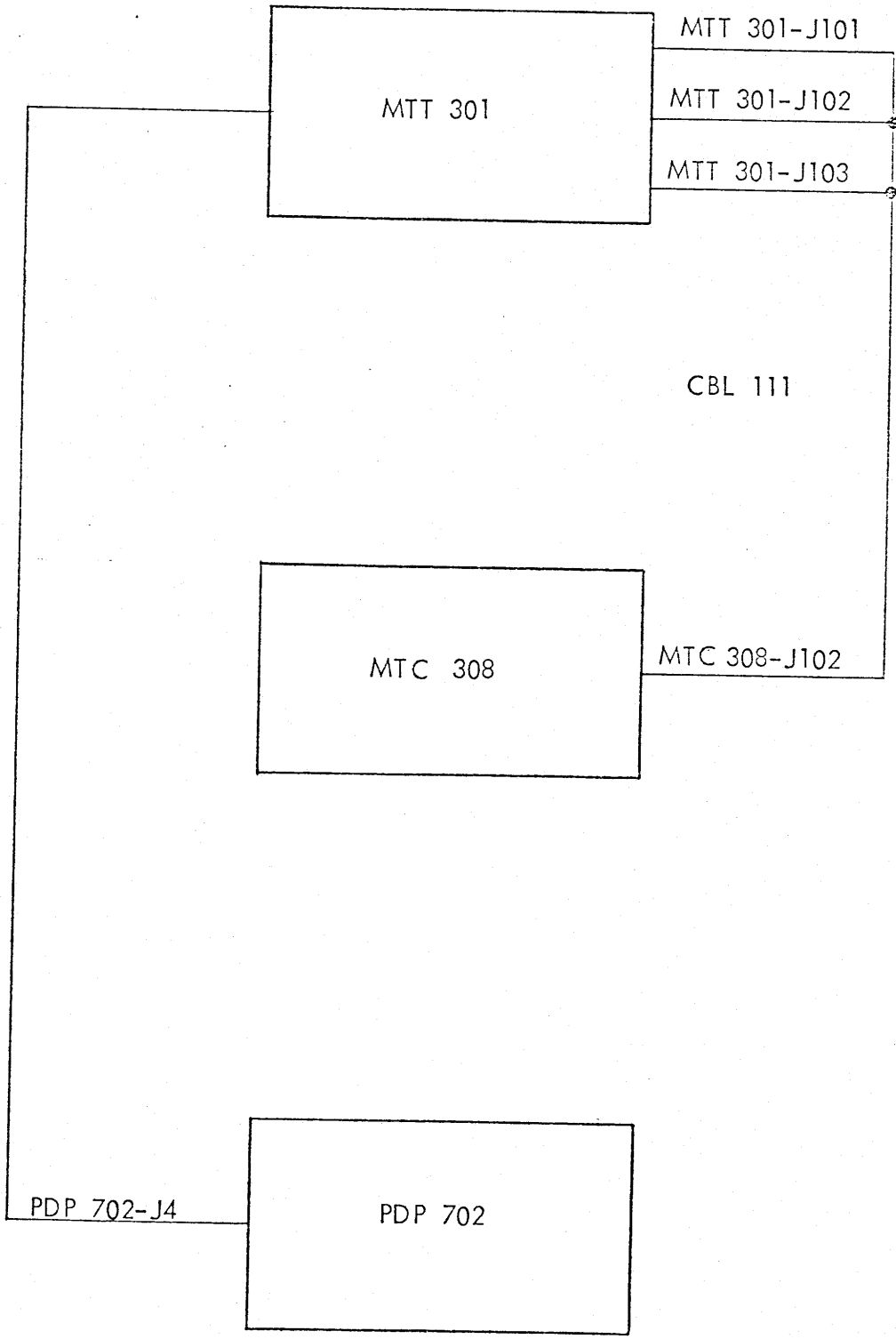


Unit *0.007*
R24194
 Engineer
 44-RT 733-22

MTC 308 Formatter connected to
 MTC 304 Controller

Interconnection Diagram.

A/S REGNOCENTRALEN	Designed by	211173 JFA	Dwg. Office Check	Design Check	Replaces Dwg. No.	due to ECN	Replaced by Dwg. No.

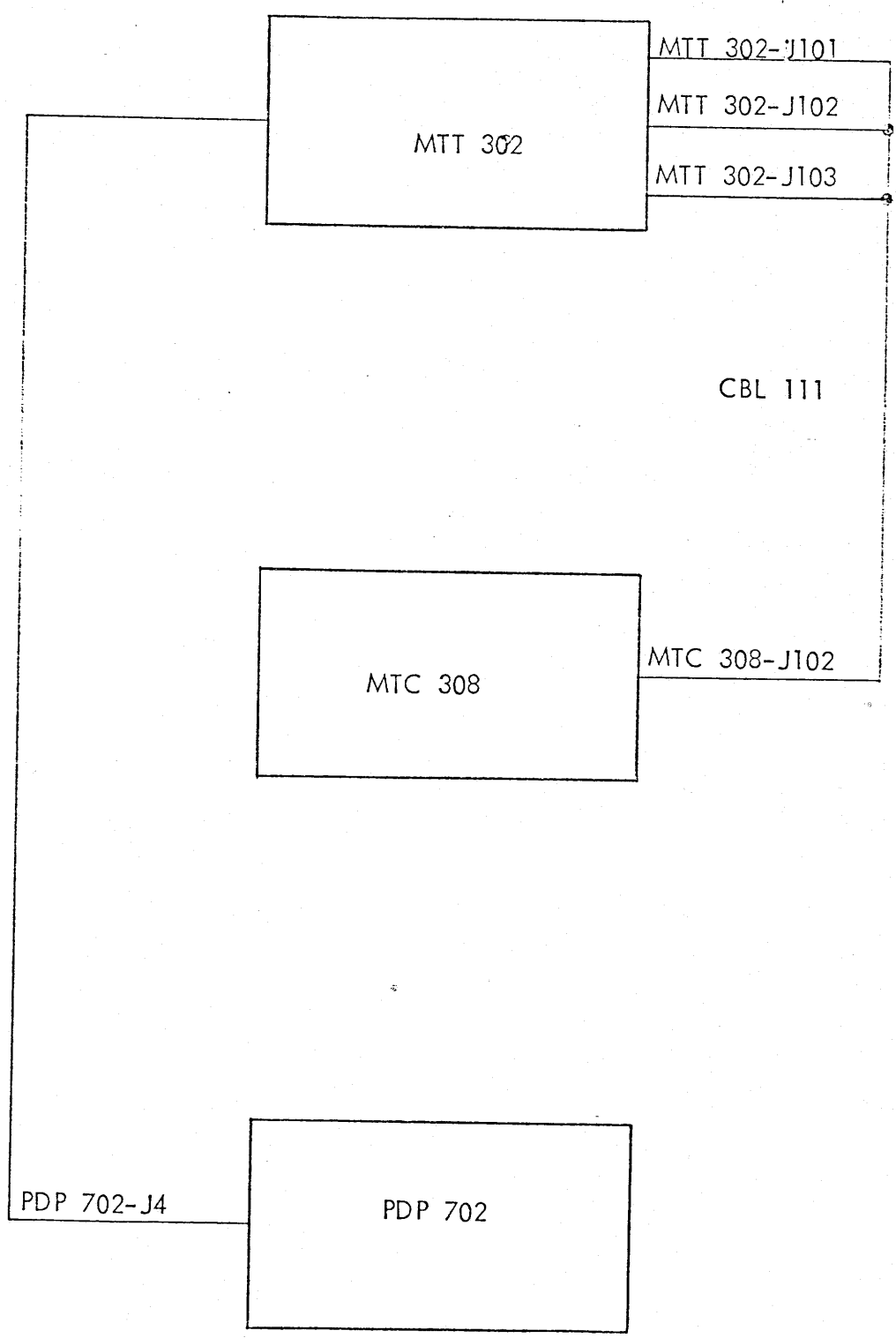


Unit 21173
R21195
 Cag. 110
 44-RT-733-23.

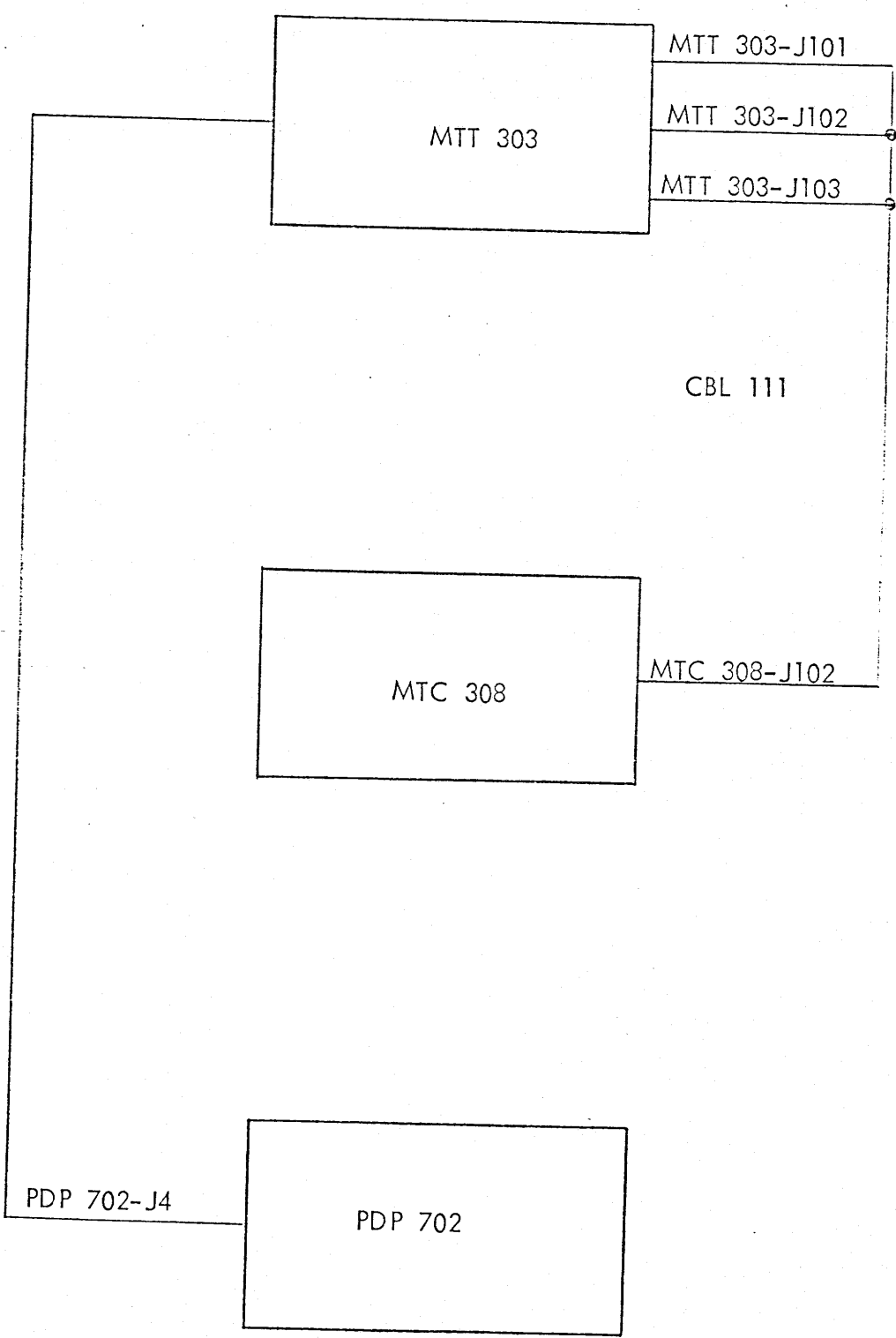
MTT 301 Transport connected to MTC 308 formatter

Interconnection Diagram.

A/S REGNECENTRALEN	Designed by	21173	JFA	Drawn by		Dwg. Office Check		Design Check		Replaces Dwg. No.		due to ECN		Replaced by Dwg. No.	
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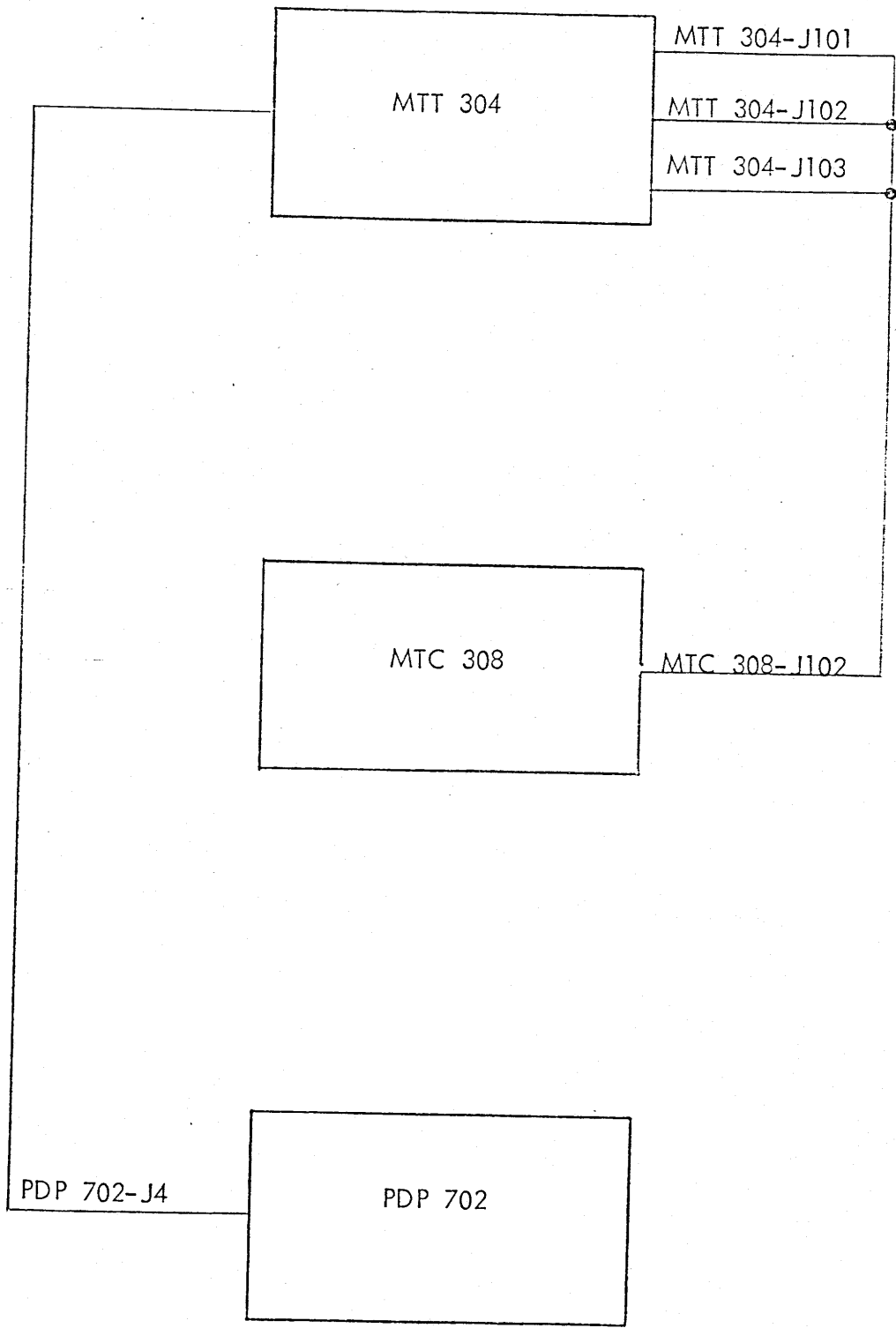
A/S REGNOCENTRALEN	Designed by	211173 JFA	Drawn by		Dwg. Office Check	Design Check	Replaces Dwg. No.	due to ECN	Replaced by Dwg. No.



Unit Designation
R21197
 Designation
 44-RT 733-25

MTT 303 Transport connected to MTC 308 Formatter

A/S REGNENCENTRALEN	Designed by	Drawn by	Dwg. Office Check	Design Check	Replaces Dwg. No.	due to ECN	Replaced by Dwg. No.
	21173	JFA					



Unit 21173
221198
 44-RT-733-26

MTT 304 Transport connected to MTC 308 Formatter

A/S REGNECENTRALEN

Designed by

211173

JFA

Drawn by

Dwg. Office Check

Design Check

Replaces Dwg. No.

due to ECN

Replaced by Dwg. No.

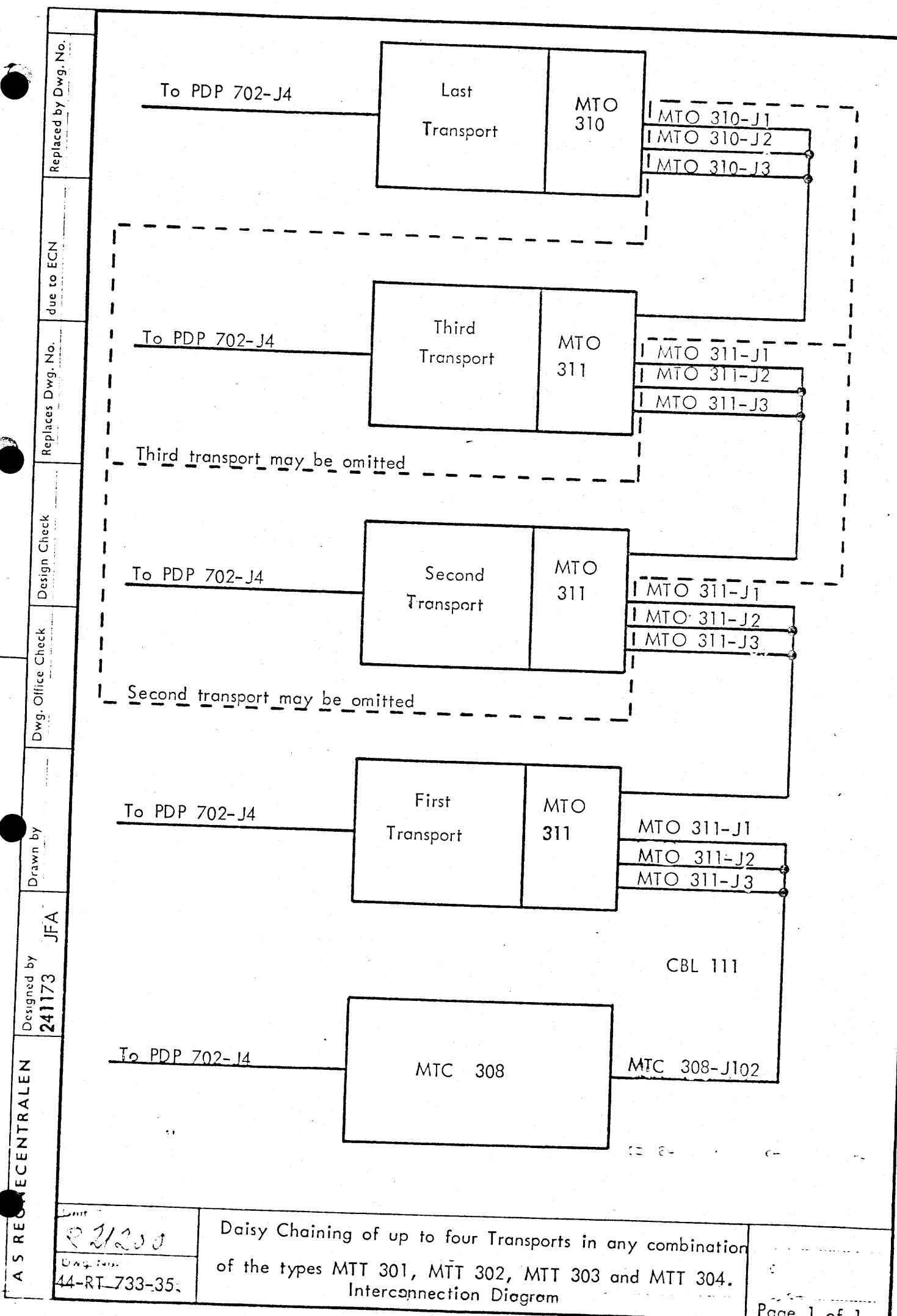
PDP 702-J4

PDP 702

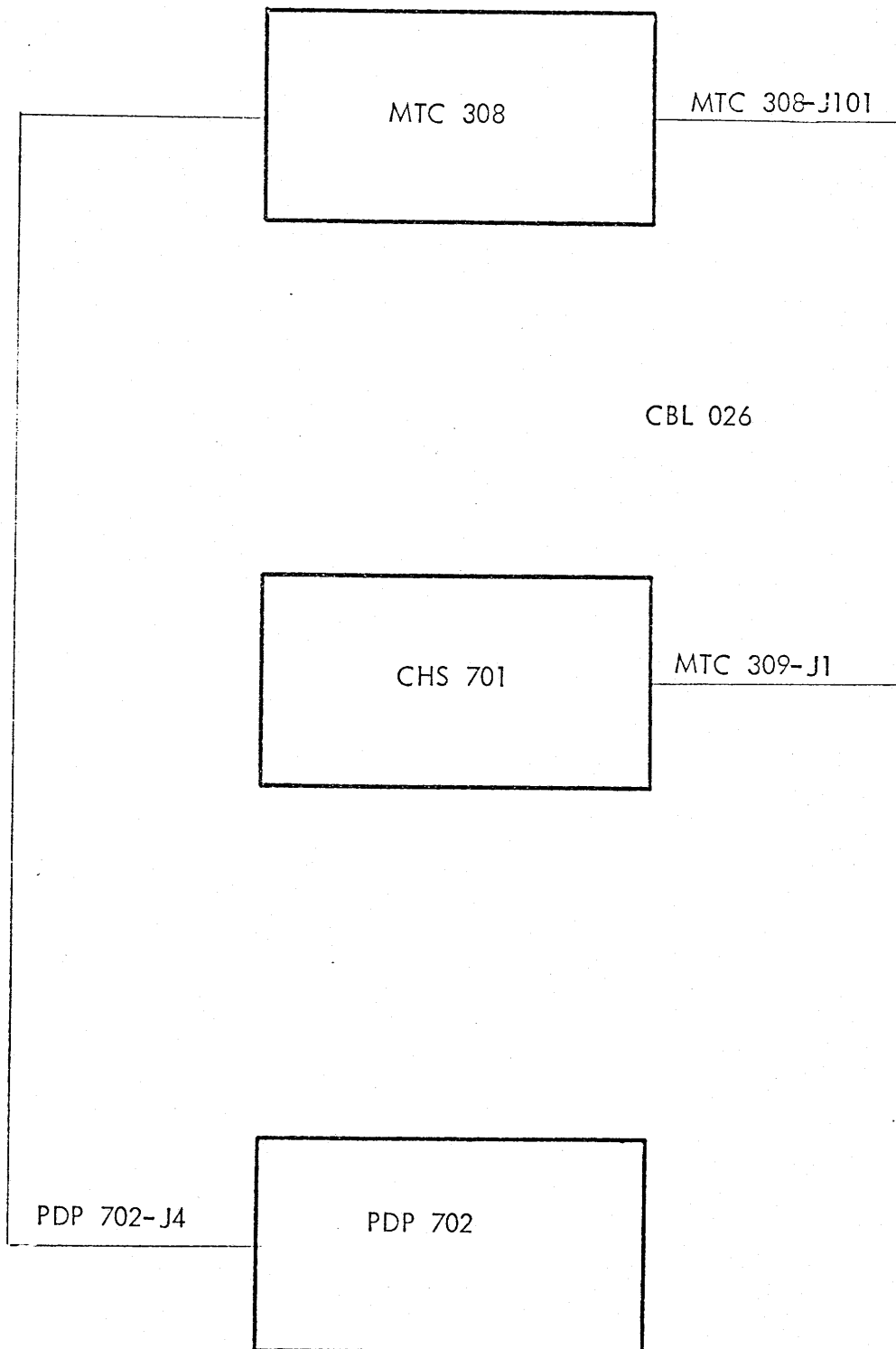
FAN 704

FAN 704 Fan connected to PDP 702 Power Panel.

Interconnection Diagram.



A/S REGNECENTRALEN	Designed by	300574 JFA	Dwg. Office Check	Design Check	Replaces Dwg. No.	due to ECN	Replaced by Dwg. No.
	Drawn by						



Unit No.
221201
 Dwg. No.
 44-RT-733-46

MTC 308 Formatter connected to
 MTC 309 Controller

Interconnection Diagram

A/S REGNECENTRALEN	Designed by	770222 JEMI	Drawn by		Dwg. Office Check		Design Check		Replaces Dwg. No.		due to ECN		Replaced by Dwg. No.	
	Refer to PERTEC Operating and Service Manual for Model 6640 Synchronous Read after Write Tape Transport Section VI													
Unit														
Dwg. No.		MAINTENANCE MAGNETIC TAPE CHANNEL												
R 21084														