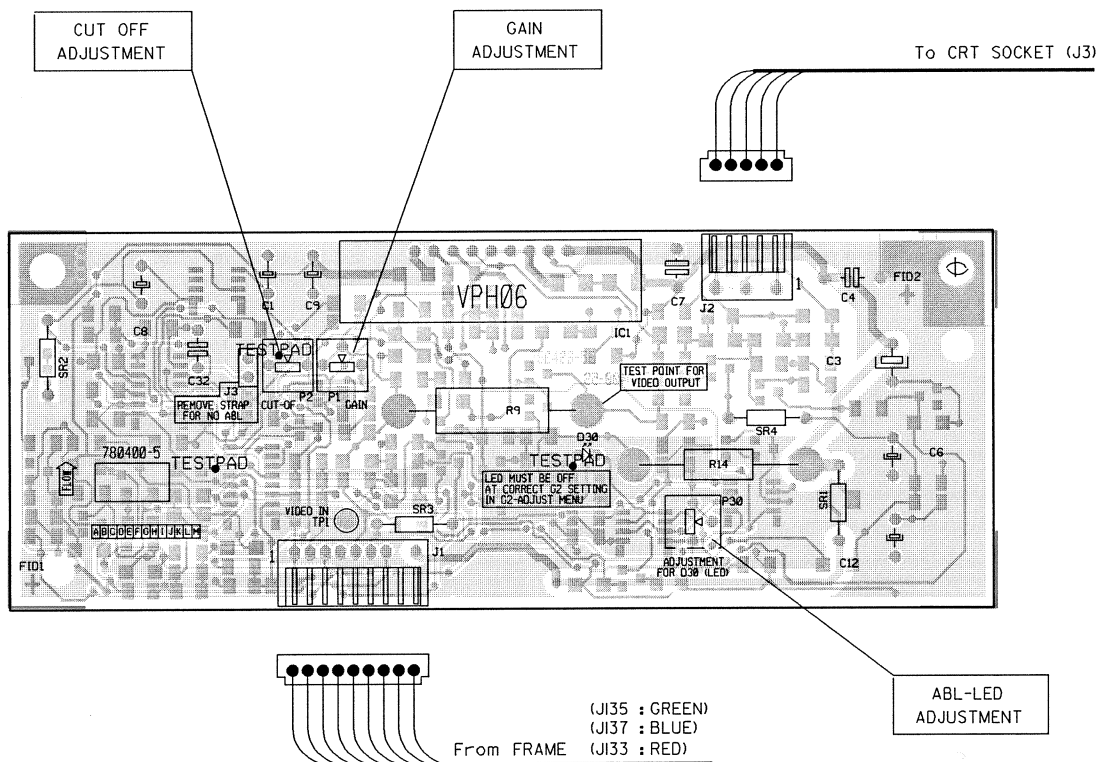
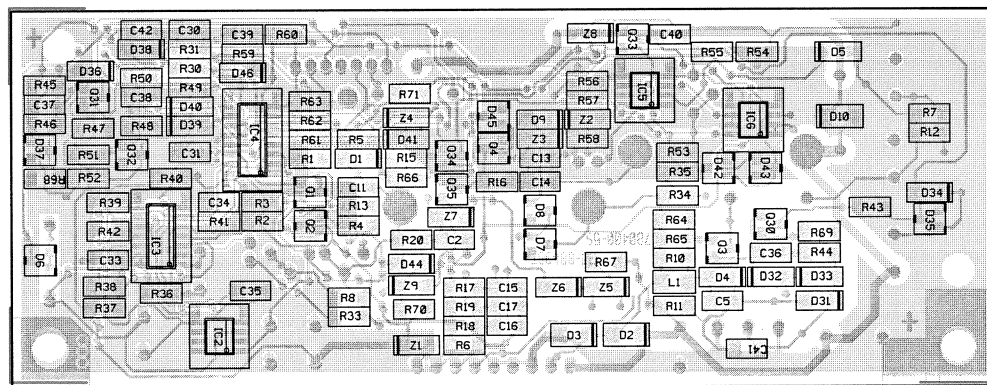


TOP VIEW



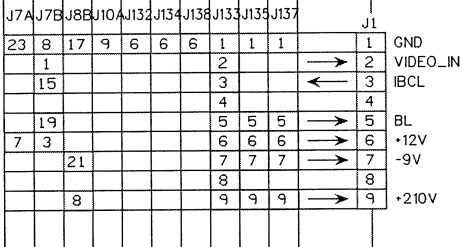
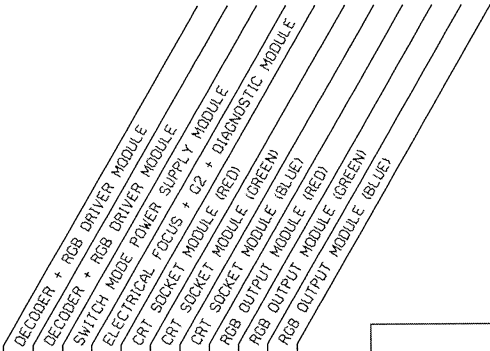
BOTTOM VIEW



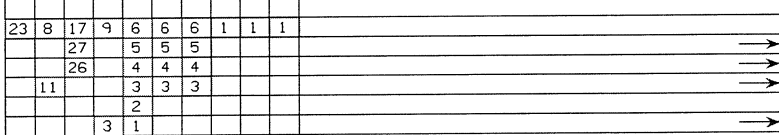
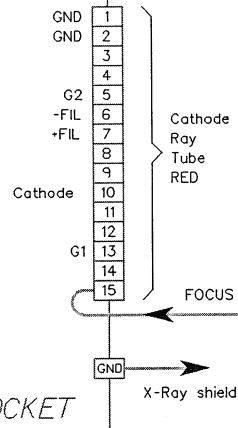
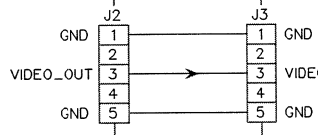
Modifications reserved

COMP.	LOC.	COMP.	LOC.	COMP.	LOC.	COMP.	LOC.	COMP.	LOC.	COMP.	LOC.
C1	B 2	D3	C 5	IC4	B 4	R7	D 4	R47	A 4	Z1	B 5
C2	B 4	D4	C 5	IC5	C 4	R8	B 5	R48	A 4	Z2	C 4
C3	D 2	D5	D 4	IC6	C 4	R9	C 2	R49	B 4	Z3	C 4
C4	D 2	D6	A 4			R10	C 4	R50	A 4	Z4	B 4
C5	C 5	D7	C 4	J1	B 2	R11	C 5	R51	A 4	Z5	C 5
C6	D 2	D8	C 4	J2	C 2	R12	D 4	R52	A 4	Z6	C 5
C7	C 2	D9	C 4	J3	B 2	R13	B 4	R53	C 4	Z7	B 4
C8	A 2	D10	D 4			R14	C 2	R54	C 4	Z8	C 4
C9	B 2	D30	C 2	L1	C 5	R15	B 4	R55	C 4	Z9	B 5
C11	B 4	D31	D 5			R16	C 4	R56	C 4		
C12	D 2	D32	C 5	P1	B 2	R17	B 5	R57	C 4		
C13	C 4	D33	D 5	P2	B 2	R18	B 5	R58	C 4		
C14	C 4	D34	D 4	P30	C 2	R19	B 5	R59	B 4		
C15	C 5	D35	D 4			R20	B 4	R60	B 4		
C16	C 5	D36	A 4	Q1	B 4	R30	B 4	R61	B 4		
C17	C 5	D37	A 4	Q2	B 4	R31	B 4	R62	B 4		
C30	B 4	D38	A 4	Q3	C 4			R63	B 4		
C31	B 4	D39	B 4	Q4	C 4	R33	B 5	R64	C 4		
C32	B 2	D40	B 4	Q30	C 4	R34	C 4	R65	C 4		
C33	A 4	D41	B 4	Q31	A 4	R35	C 4	R66	B 4		
C34	B 4	D42	C 4	Q32	A 4	R36	A 5	R67	C 4		
C35	B 5	D43	C 4	Q33	C 4	R37	A 5	R68	A 4		
C36	C 4	D44	B 4	Q34	B 4	R38	A 5	R69	D 4		
C37	A 4	D45	C 4	Q35	B 4	R39	A 4	R70	B 5		
C38	A 4	D46	B 4			R40	B 4	R71	B 4		
C39	B 4	FID1	A 2	R1	B 4	R41	B 4				
C40	C 4	FID2	D 2	R2	B 4	R42	A 4	SR1	D 2		
C41	C 5			R3	B 4	R43	D 4	SR2	A 2		
C42	C 4	IC1	C 2	R4	B 4	R44	D 4	SR3	B 2		
D1	B 4	IC2	B 5	R5	B 4	R45	A 4	SR4	C 2		
D2	C 5	IC3	A 4	R6	B 5	R46	A 4				

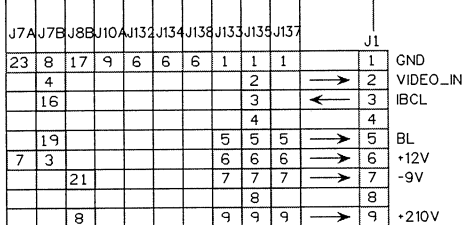
Name	RGB OUTPUT	Article nr.	76 21735-5
Date	27-02-1995	Drawn	JVDY
		Checked	PDG
BARCO PROJECTION SYSTEMS			



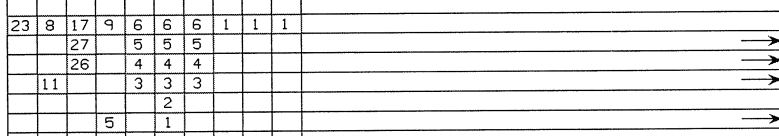
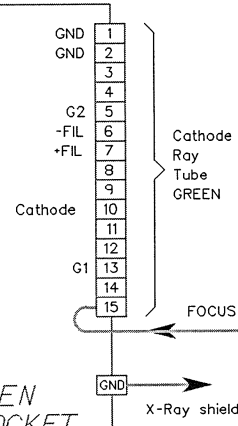
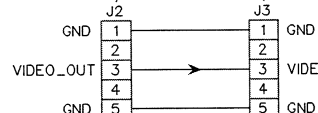
RED  
OUTPUT



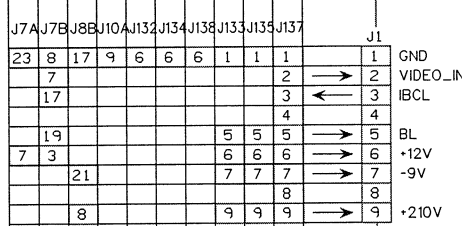
RED  
CRT SOCKET



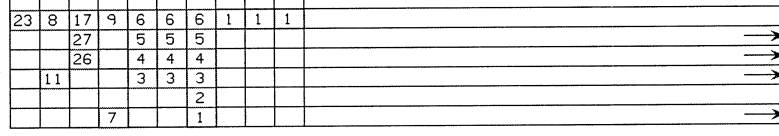
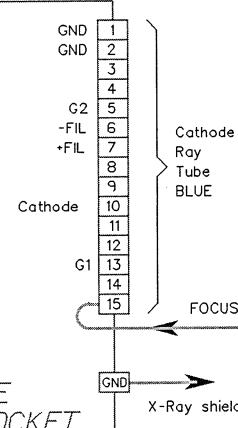
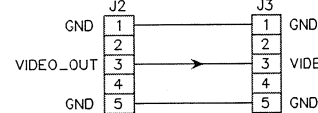
GREEN  
OUTPUT



GREEN  
CRT SOCKET



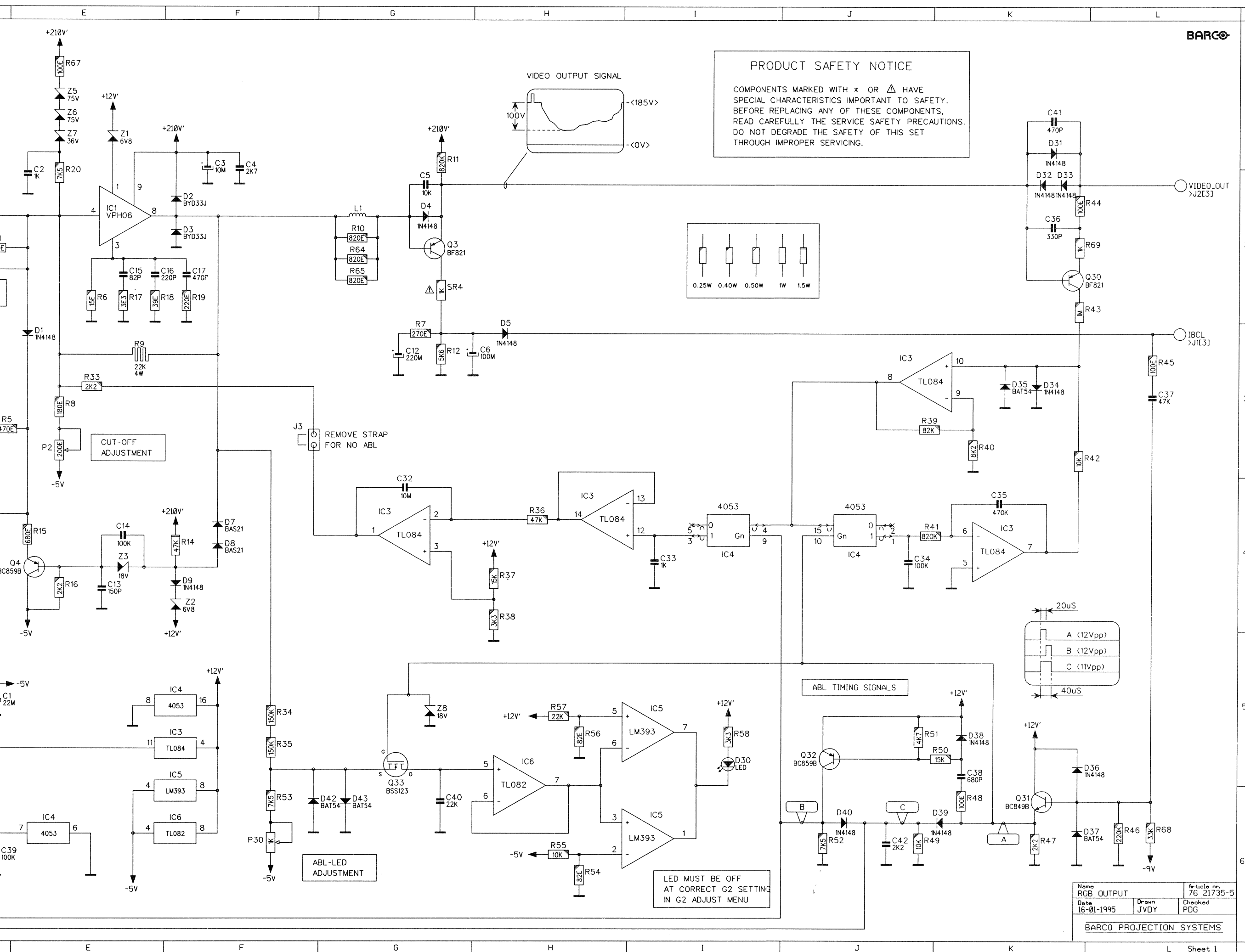
BLUE  
OUTPUT



BLUE  
CRT SOCKET

Name OUTPUT & CRT SOCKET		Article nr. 76 21735
Date 11-01-1995	Drawn JVDY	Checked PDG
BARCO PROJECTION SYSTEMS		

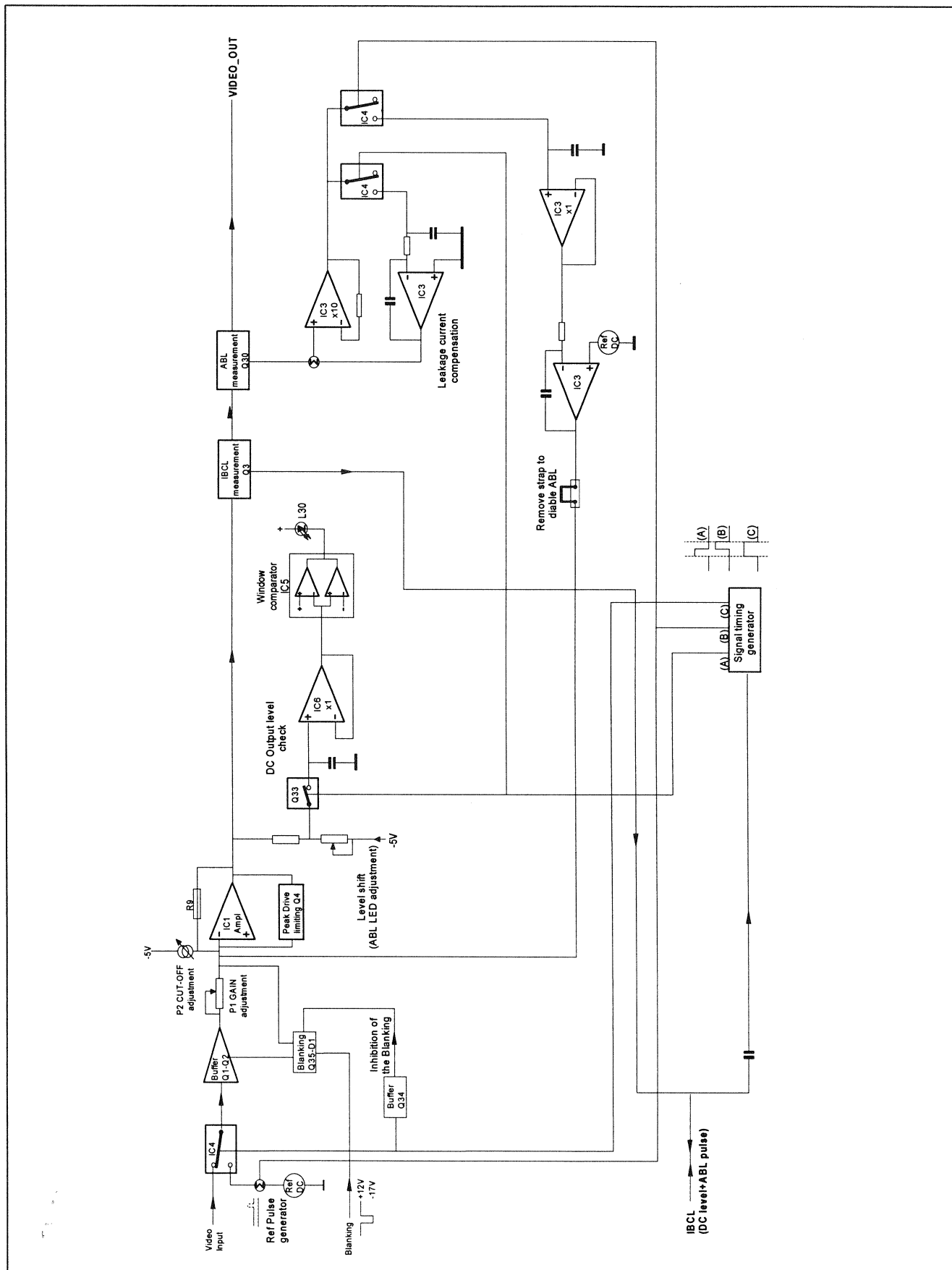
Modifications reserved



COMP.	LOC.	COMP.	LOC.
C1	D 5	R15	E 4
C2	F 1	R16	E 4
C3	F 1	R17	F 2
C4	G 1	R18	F 2
C5	H 3	R19	F 1
C6	H 3	R20	F 3
C7	C 6	R30	B 3
C8	C 6	R31	B 3
C9	C 6	R33	F 5
C11	D 2	R34	F 5
C12	D 3	R35	F 5
C13	F 4	R36	H 4
C14	F 4	R37	H 4
C15	F 2	R38	H 4
C16	F 2	R39	J 3
C17	F 2	R40	K 3
C30	B 3	R41	J 4
C31	B 2	R42	K 3
C32	C 3	R43	K 2
C33	I 4	R44	K 2
C34	J 4	R45	L 3
C35	K 4	R46	L 6
C36	K 2	R47	K 6
C37	L 3	R48	K 6
C38	K 5	R49	J 6
C39	D 6	R50	K 5
C40	G 6	R51	J 5
C41	K 1	R52	J 6
C42	J 6	R53	F 6
D1	F 3	R54	H 6
D2	F 2	R55	H 6
D3	F 2	R56	H 5
D4	G 2	R57	H 5
D5	H 2	R58	I 5
D6	C 5	R59	D 6
D7	F 4	R60	D 6
D8	F 4	R61	A 2
D9	F 4	R62	B 2
D10	C 5	R63	B 2
D30	I 5	R64	O 2
D31	K 1	R65	O 2
D32	K 1	R66	C 4
D33	K 1	R67	F 1
D34	K 5	R68	L 6
D35	K 5	R69	K 2
D36	L 6	R70	D 2
D37	L 6	R71	C 2
D38	K 5	SR1	C 5
D39	K 6	SR2	C 5
D40	J 6	SR3	C 6
D41	D 4	SR4	G 2
D42	G 6	TP1	A 2
D43	G 6	Z1	E 1
D44	C 2	Z2	F 4
D45	C 3	Z3	F 4
D46	A 3	Z4	C 4
IC1	B 5	Z5	C 1
IC2	D 5	Z6	F 1
IC3	H 4	Z7	F 1
IC3	G 4	Z8	G 5
IC3	J 3	Z9	D 2
IC4	K 4		
IC4	F 5		
IC4	J 4		
IC4	B 2		
IC5	I 6		
IC5	F 5		
IC5	I 5		
IC6	F 6		
IC6	H 5		
IC6	A 6		
J1	A 3		
J2	A 4		
J3	F 3		
L1	G 2		
P1	D 2		
P2	F 3		
P30	F 6		
Q1	C 2		
Q2	D 1		
Q3	G 2		
Q4	E 4		
Q30	K 2		
Q31	K 6		
Q32	J 5		
Q33	G 5		
Q34	C 4		
Q35	D 2		
R1	A 2		
R2	C 1		
R3	D 2		
R4	D 2		
R5	D 3		
R6	E 2		
R7	G 2		
R8	E 3		
R9	E 3		
R10	G 2		
R11	G 1		
R12	G 3		
R13	D 2		
R14	F 4		



A	B	C	D	
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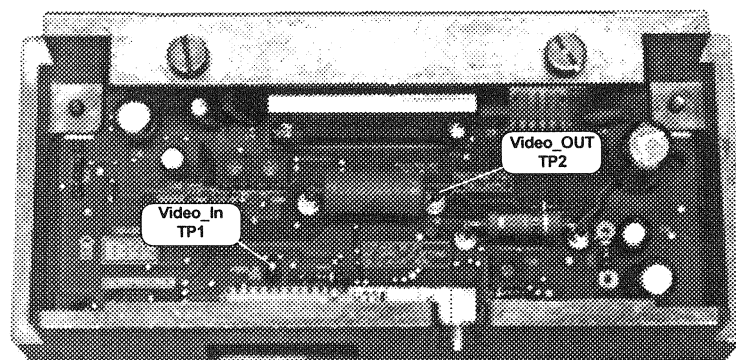


## Preparation

Supply an external signal to the projector (e.g. a color bar signal)

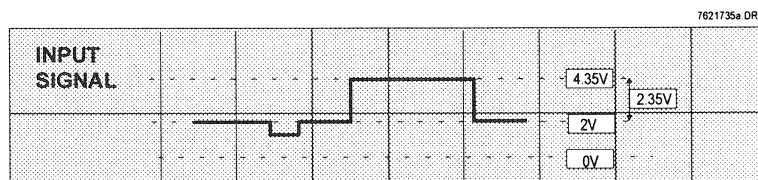
Connect the first measuring probe to the video input signal, testpoint TP1 'VIDEO\_IN'.

Connect the second measuring probe to the cathode output (use node R11/C5) or testpoint TP2.

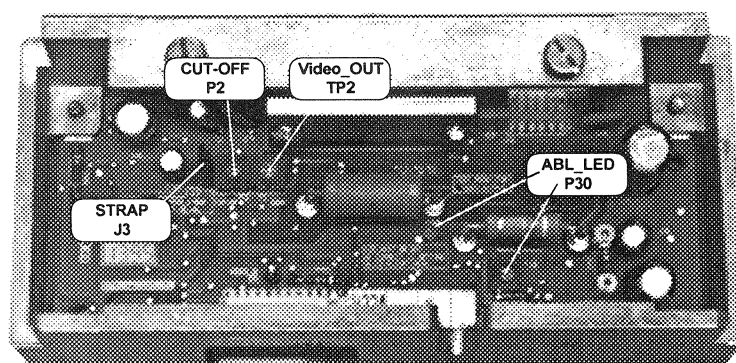


Adjust the projector brightness control until the DC blacklevel of the video input reaches 2V.

Adjust the contrast control until the video input information reaches an amplitude of 2.35V.



## Location of controls



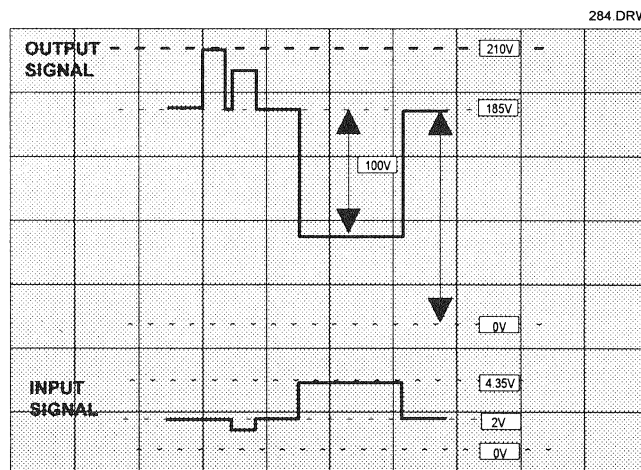
## Adjustment

**Remove the strap J3 for the adjustment of P1 (gain), P2 (cut-off) and P30**

Adjust **P2 (blacklevel adjustment)** and simultaneously **P1 (gain control)** for an output blacklevel of 185V and a video output amplitude of 100Vpp (neglecting the blanking pulse).

Important: both adjustments affect each other.

UPPER TRACK:  
e.g. Green output signal  
LOWER TRACK:  
e.g. Green input signal



## Adjustment of the ABL\_LED

IMPORTANT: Remove the testprobe on resistor R9 'VIDEO\_OUTPUT'.

Adjust the potentiometer P30 until the LED D30 'ABL\_LED' just stops lighting up.

**Reinstall the strap J3 to allow proper ABL operation**

## Operational verification

### Preventing CRT damage

After a technical intervention on the R, G or B output module, proceed to the following operating tests in order to prevent CRT damage

### Control of the presence of the blanking pulses

Connect an oscilloscope to testpoint TP2 and verify the presence of the blanking pulses. (These pulses are situated between the black level on 185V and the power supply voltage on 210V. Absence of the blanking pulses can lead to CRT burning in.

### Control of the operation of the IBCL circuit

Connect a resistor of 15 kOhm between testpoint TP2 and the +210V power supply. The measured voltage on the output, pin 3 of connector J1, must be around the +6V DC.  
Bad working of the IBCL circuit (Individual Current Beam Limiter) can lead to CRT damage.



## Parts listing RGB Out 76 21735

SIT.	ITEM NO.	DESCRIPTION	QUANTITY	SIT.	ITEM NO.	DESCRIPTION	QUANTITY
1060	R133039	SPRL 8 D4 D1.2 C	2	D 41	P234099	D#4148 R DMMELF	1
1070	R3133921	JMD JMP P1 E1SN	1	D 42	P234055	D#BAT54 SCH SOT23	1
1050	R315315	JRVT MBT D2 L14	4	D 43	P234055	D#BAT54 SCH SOT23	1
1012	R3626685	SCR D921 M3 X 6 SI	1	D 44	P234099	D#4148 R DMMELF	1
1022	R3626696	SCR D921 M3 X 8 SI	2	D 45	P234055	D#BAT54 SCH SOT23	1
1014	R3631059	SCR D933 M3 X 8 XIC	2	D 46	P234099	D#4148 R DMMELF	1
1013	R3631089	SCR D933 M3 X 16 XIC	2	I 1	R134301	U 06 VPH	1
1000	R805843	FRM PJ56 G808 RGBOUT HTSN	1	I 2	P230273	U#79L05A LM SO8 P	1
1010	R805844	FRM PJ56 G808 RGB SCR N	1	I 3	P230203	U#084 TL SO14 P	1
C 1	R111510	C EL RA 22M M 25E2 85	1	I 4	P230030	U#4053 SO16 I	1
C 2	P210013	C# COG MU 1N J 50 1206	1	I 5	P230028	U#393 LM SO8 P	1
C 3	R111569	C EL RA 10M M250E2 85	1	I 6	P230293	U#082 TL SO8 P	1
C 4	R112830	C CE DI 2N7S400E3	1	J 1	R313949	JCT H MBS P9 M2SN	1
C 5	P210092	C# X7R MU 10N K 50 1206	1	J 2	R313945	JCT H MBS P5 M2SN	1
C 6	R111477	C EL RA 100M Z 25E2 85	1	J 3	R3132862	JMD1 MBT P2 E1SN	1
C 7	R1140426	C POMERA 100N K250E2 85	1	L 1	P250005	L(S)FFECH 0.47M M160	1
C 8	R111467	C EL RA 220M Z 16E2 85	1	P 1	R107004	R TCE H200E K0W5 S 7TS	1
C 9	R111510	C EL RA 22M M 25E2 85	1	P 2	R107004	R TCE H200E K0W5 S 7TS	1
C 11	P210165	C# COG MU 39P J 50 1206	1	P 30	R107006	R TCE H 1K K0W5 S 7TS	1
C 12	R111467	C EL RA 220M Z 16E2 85	1	PC	R780400	PCD#PJ56 G808 RGB OUT	1
C 13	P210158	C# COG MU 150P J 50 1206	1	Q 1	P232044	Q#BC859B P SS SOT23	1
C 14	P210122	C# X7R MU 100N K 50 1206	1	Q 2	P232043	Q#BC849B N SS SOT23	1
C 15	P210073	C# COG MU 82P J 50 1206	1	Q 3	P232149	Q#BF821 P SS SOT23	1
C 16	P210076	C# COG MU 220P J 50 1206	1	Q 4	P232044	Q#BC859B P SS SOT23	1
C 17	P210102	C# COG MU 470P J 50 1206	1	Q 30	P232149	Q#BF821 P SS SOT23	1
C 30	P210013	C# COG MU 1N J 50 1206	1	Q 31	P232043	Q#BC849B N SS SOT23	1
C 31	P210010	C# COG MU 68P J 50 1206	1	Q 32	P232044	Q#BC859B P SS SOT23	1
C 32	R111678	C EL BRA 10M M 25E2 85	1	Q 33	P232046	Q#BSS123 F SS SOT23	1
C 33	P210013	C# COG MU 1N J 50 1206	1	Q 34	P232043	Q#BC849B N SS SOT23	1
C 34	P210122	C# X7R MU 100N K 50 1206	1	Q 35	P232101	Q#BC859C P SS SOT23	1
C 35	P210148	C# Y5V MU 470N Z 50 1206	1	R 1	P200398	R# CE H300E F 0W12 1206	1
C 36	P210121	C# COG MU 330P J 50 1206	1	R 2	P200071	R# CE H820E J 0W12 1206	1
C 37	P210045	C# X7R MU 47N K 50 1206	1	R 3	P200073	R# CE H 1K J 0W12 1206	1
C 38	P210026	C# COG MU 680P J 50 1206	1	R 4	P200045	R# CE H 68E J 0W12 1206	1
C 39	P210122	C# X7R MU 100N K 50 1206	1	R 5	P200065	R# CE H470E J 0W12 1206	1
C 40	P210068	C# X7R MU 22N K 50 1206	1	R 6	P200029	R# CE H 15E J 0W12 1206	1
C 41	P210102	C# COG MU 470P J 50 1206	1	R 7	P200059	R# CE H270E J 0W12 1206	1
C 42	P210029	C# COG MU 2N2J 50 1206	1	R 8	P200055	R# CE H180E J 0W12 1206	1
C 42	P210029	C# COG MU 2N2J 50 1206	1	R 9	R1033521	R MO H 22K J 4W	1
D 1	P234099	D#4148 R DMMELF	1	R 10	P200071	R# CE H820E J 0W12 1206	1
D 2	P234196	D#BYD37J AVA SOD87	1	R 11	P200143	R# CE H820K J 0W12 1206	1
D 3	P234196	D#BYD37J AVA SOD87	1	R 12	P200091	R# CE H 5K6 J 0W12 1206	1
D 4	P234099	D#4148 R DMMELF	1	R 13	P200009	R# CE H 2E2 J 0W12 1206	1
D 5	P234099	D#4148 R DMMELF	1	R 14	R103256	R MO H 47K J 2W	1
D 6	P234055	D#BAT54 SCH SOT23	1	R 15	P200069	R# CE H680E J 0W12 1206	1
D 7	P234195	D#BAS21 SW SOT23	1	R 16	P200081	R# CE H 2K2 J 0W12 1206	1
D 8	P234195	D#BAS21 SW SOT23	1	R 17	P200013	R# CE H 3E3 J 0W12 1206	1
D 9	P234099	D#4148 R DMMELF	1	R 18	P200039	R# CE H 39E J 0W12 1206	1
D 10	P234196	D#BYD37J AVA SOD87	1	R 19	P200057	R# CE H220E J 0W12 1206	1
D 30	R131667	D LED D3 T GN	1	R 20	P200432	R# CE H 7K5 F 0W12 1206	1
D 31	P234099	D#4148 R DMMELF	1	R 30	P200436	R# CE H 11K F 0W12 1206	1
D 32	P234099	D#4148 R DMMELF	1	R 31	P200421	R# CE H 2K7 F 0W12 1206	1
D 33	P234099	D#4148 R DMMELF	1	R 33	P200081	R# CE H 2K2 J 0W12 1206	1
D 34	P234099	D#4148 R DMMELF	1	R 34	P200463	R# CE H150K F 0W12 1206	1
D 35	P234055	D#BAT54 SCH SOT23	1	R 35	P200463	R# CE H150K F 0W12 1206	1
D 36	P234099	D#4148 R DMMELF	1	R 36	P200113	R# CE H 47K J 0W12 1206	1
D 37	P234055	D#BAT54 SCH SOT23	1	R 37	P200101	R# CE H 15K J 0W12 1206	1
D 38	P234099	D#4148 R DMMELF	1	R 38	P200085	R# CE H 3K3 J 0W12 1206	1
D 39	P234099	D#4148 R DMMELF	1	R 39	P200119	R# CE H 82K J 0W12 1206	1
D 40	P234099	D#4148 R DMMELF	1				

# RGB Output+ABL

76 21735

R 40	P200095	R# CE H 8K2 J 0W12 1206	1	R 65	P200071	R# CE H820E J 0W12 1206	1
R 41	P200143	R# CE H820K J 0W12 1206	1	R 66	P200097	R# CE H 10K J 0W12 1206	1
R 42	P200097	R# CE H 10K J 0W12 1206	1	R 67	P200049	R# CE H100E J 0W12 1206	1
R 43	P200145	R# CE H 1M J 0W12 1206	1	R 68	P200109	R# CE H 33K J 0W12 1206	1
R 44	P200049	R# CE H100E J 0W12 1206	1	R 69	P200073	R# CE H 1K J 0W12 1206	1
R 45	P200049	R# CE H100E J 0W12 1206	1	R 70	P200097	R# CE H 10K J 0W12 1206	1
R 46	P200129	R# CE H220K J 0W12 1206	1	R 71	P200089	R# CE H 4K7 J 0W12 1206	1
R 47	P200081	R# CE H 2K2 J 0W12 1206	1				
R 48	P200049	R# CE H100E J 0W12 1206	1	SR 1△	R1011009	R CFFH 1E J 0W25	1
R 49	P200097	R# CE H 10K J 0W12 1206	1	SR 2△	R1011129	R CFFH 10E J 0W25	1
R 50	P200101	R# CE H 15K J 0W12 1206	1	SR 3△	R1011009	R CFFH 1E J 0W25	1
R 51	P200089	R# CE H 4K7 J 0W12 1206	1	SR 4△	R1011369	R CFFH 1K J 0W25	1
R 52	P200432	R# CE H 7K5 F 0W12 1206	1				
R 53	P200432	R# CE H 7K5 F 0W12 1206	1	TP 1	R313729	J PIN TESTEYE	1
R 54	P200047	R# CE H 82E J 0W12 1206	1				
R 55	P200435	R# CE H 10K F 0W12 1206	1	Z 1	P234268	D#BZV55C6V8 DMMELF	1
R 56	P200047	R# CE H 82E J 0W12 1206	1	Z 2	P234268	D#BZV55C6V8 DMMELF	1
R 57	P200443	R# CE H 22K F 0W12 1206	1	Z 3	P234021	D#ZEN 18V 0W5 C DMMELF	1
R 58	P200085	R# CE H 3K3 J 0W12 1206	1	Z 4	P234268	D#BZV55C6V8 DMMELF	1
R 59	P200121	R# CE H100K J 0W12 1206	1	Z 5	P234102	D#ZEN 75V 0W5 B DMMELF	1
R 60	P200121	R# CE H100K J 0W12 1206	1	Z 6	P234102	D#ZEN 75V 0W5 B DMMELF	1
R 61	P200398	R# CE H300E F 0W12 1206	1	Z 7	P234101	D#ZEN 36V 0W5 B DMMELF	1
R 62	P200398	R# CE H300E F 0W12 1206	1	Z 8	P234021	D#ZEN 18V 0W5 C DMMELF	1
R 63	P200398	R# CE H300E F 0W12 1206	1	Z 9	P234178	D#ZEN 9V1 0W5 C DMMELF	1
R 64	P200071	R# CE H820E J 0W12 1206	1				

