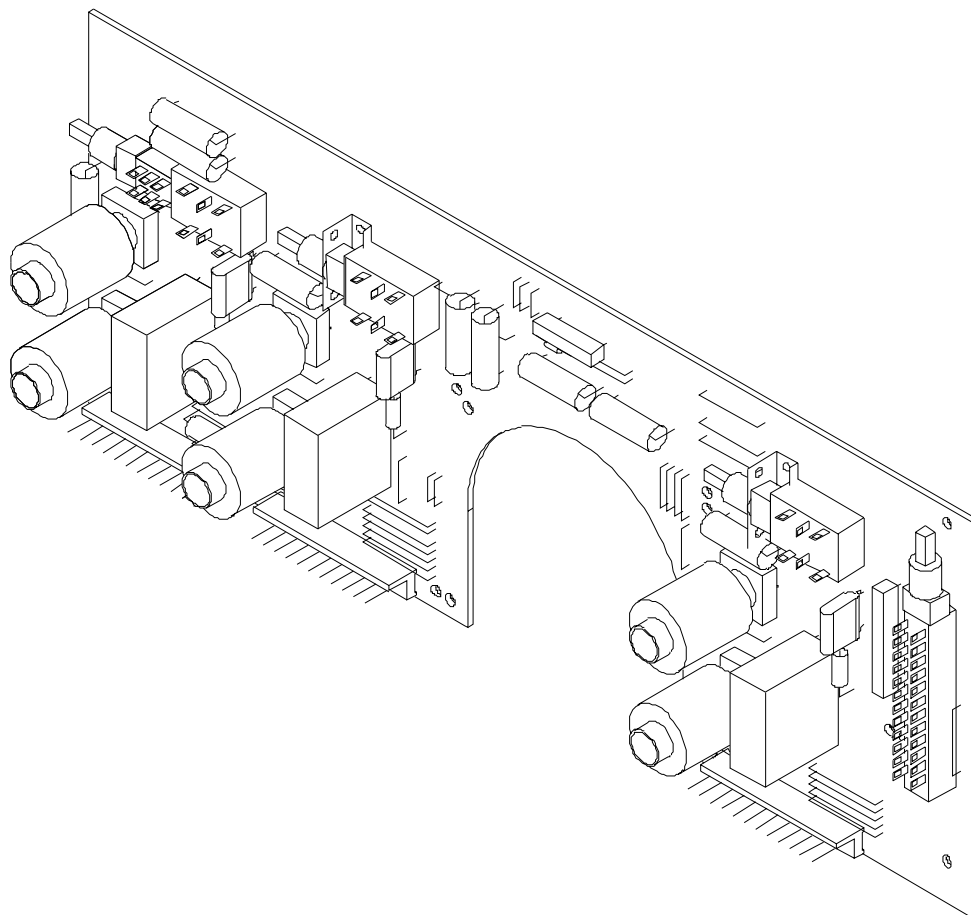
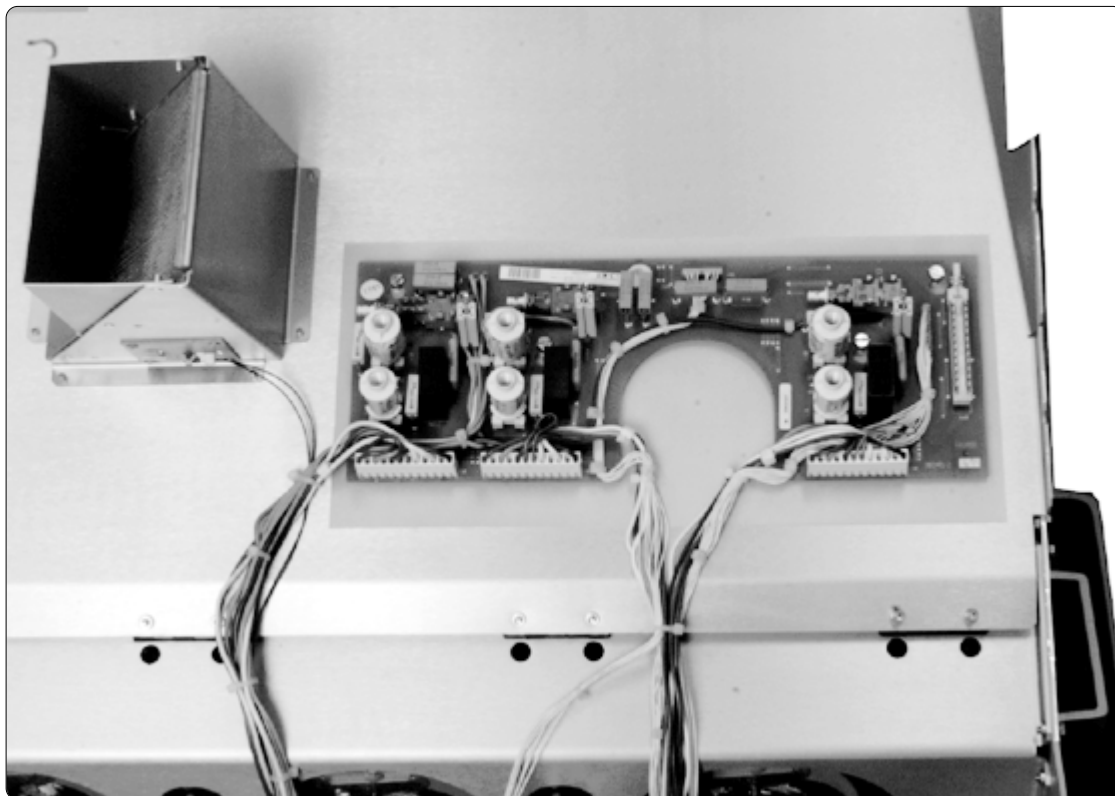


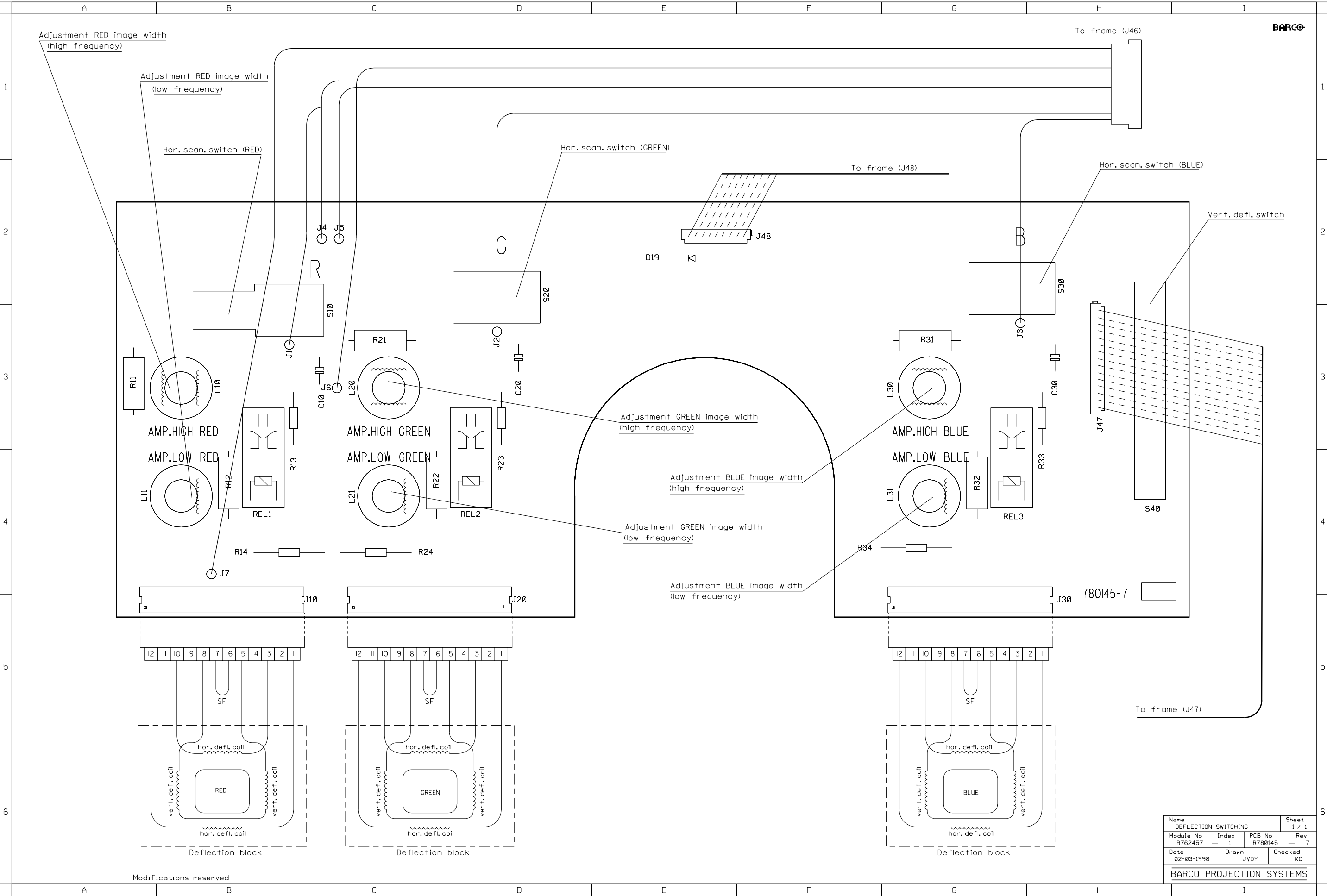


BARCO Projection Systems

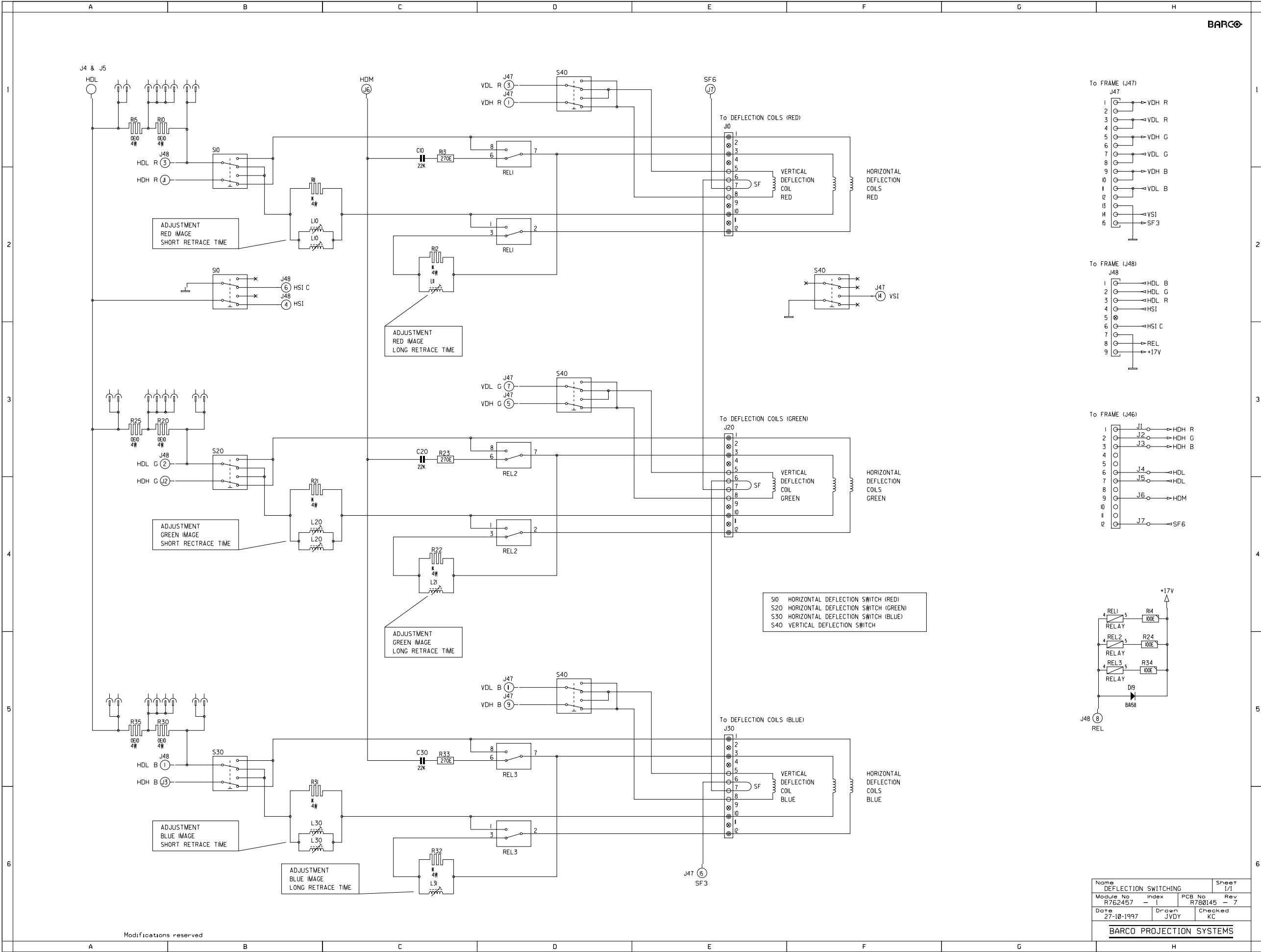
SECTION **R**

service sheet



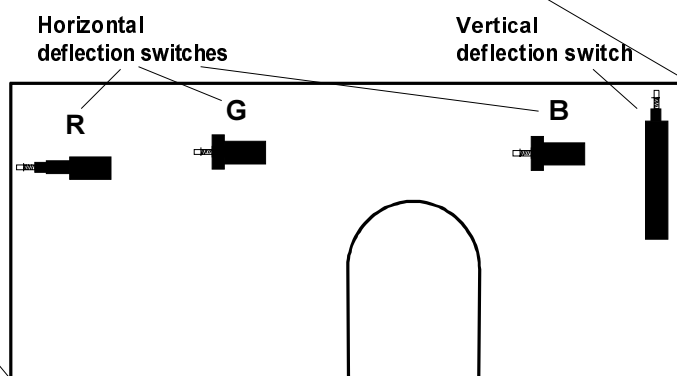
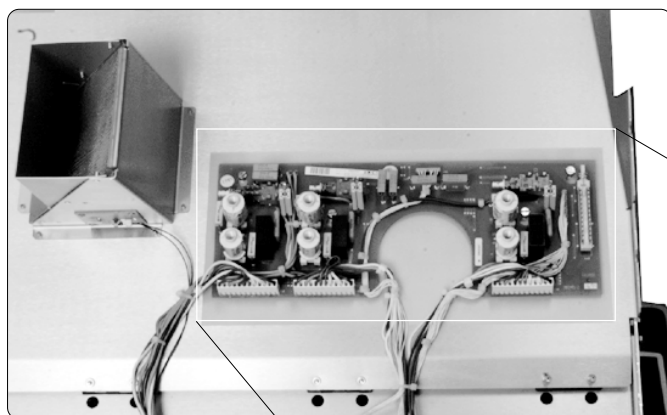


Name DEFLECTION SWITCHING			Sheet 1 / 1
Module No R762457	Index — 1	PCB No R780145	Rev — 7
Date 02-03-1998	Drawn JVDY	Checked KC	
BARCO PROJECTION SYSTEMS			



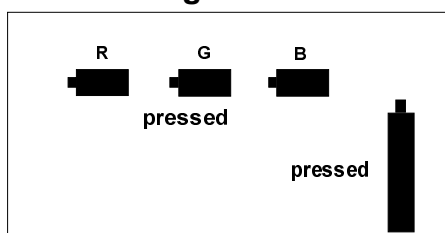
COMP.	LOC.
C10	C 1
C20	C 3
C30	C 5
D19	H 5
J1	H 3
J2	H 3
J3	H 3
J4	H 3
J5	H 3
J6	H 4
J7	H 4
J10	E 1
J20	E 3
J30	E 5
J47	H 1
J48	H 2
J148	A 5
J149	A 5
J150	A 5
J151	A 5
J152	B 5
J153	B 5
J154	B 5
J155	B 5
J156	A 3
J157	A 3
J158	A 3
J159	A 3
J160	B 3
J161	B 3
J162	B 3
J163	B 3
J164	A 1
J165	A 1
J166	A 1
J168	A 1
J169	B 1
J170	B 1
J171	B 1
J172	B 1
L10	B 2
L11	C 2
L12	F 2
L13	B 4
L20	B 4
L21	C 4
L22	C 4
L23	C 4
L30	B 6
L31	C 6
L32	C 6
L33	C 6
R10	A 1
R11	B 2
R12	C 1
R13	C 1
R14	H 4
R15	A 1
R20	A 3
R21	B 4
R22	C 4
R23	C 4
R24	H 4
R25	A 3
R30	A 5
R31	B 5
R32	C 6
R33	C 6
R34	H 5
R35	A 5
REL1	D 2
REL2	D 3
REL3	D 4
REL4	H 5
REL5	D 6
REL6	D 6
S10	B 1
S20	B 2
S30	B 3
S40	D 1
S41	D 2
S42	D 3
S43	D 4
S44	D 5

Projector configuration: deflection switches set up

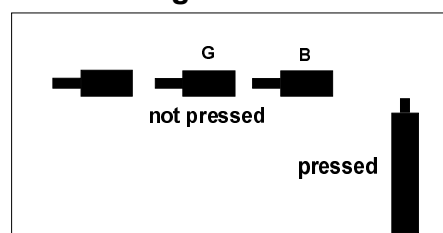


Projector configurations (Switch settings)

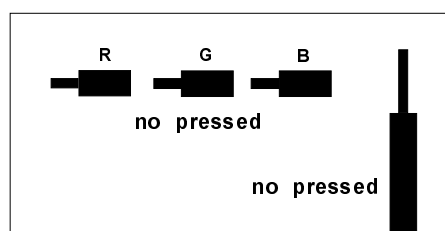
Front-ceiling



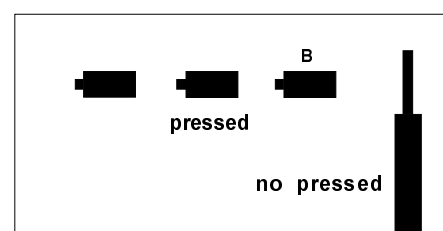
Rear-ceiling



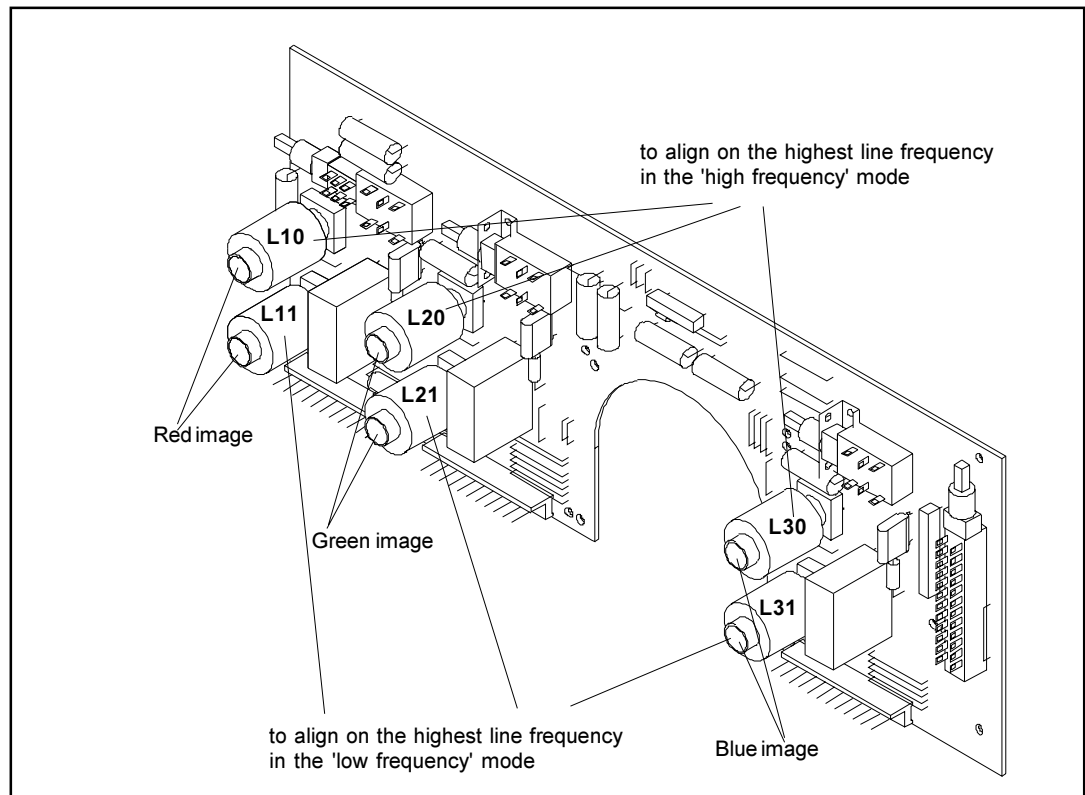
Front-table



Rear-table



Adjustment procedure for the image width coils



Adjustment procedure

- Decrease the contrast and increase the brightness to reveal the (background) raster.

Highest frequency 134 kHz

- Provide either an internally or externally generated source of **134kHz** to the projector.
- Disable the convergence by entering the Geometry mode and select the Raster Shift adjustment (refer to owner's manual).
- Gently turn the cores of **L10**, **L20** and **L30** in a clockwise direction until there is no more adjustment, i.e. core is fully turned into PCB.
- Identify which raster (R, G or B) has the smallest raster width and adjust the remaining raster via **L10**, **L20** or **L30** in a counter clockwise manner to match the raster with the smallest width. In order to facilitate these adjustments, you may wish to use the horizontal shift control for the raster (R, G or B) that you are adjusting. Disregard any horizontal static convergence errors at this time, they will be corrected later.

Lowest frequency 60 kHz

- Provide either an internally or externally generated source of **60kHz** to the projector.
- Disable the convergence by entering the Geometry mode and select the Raster Shift adjustment (refer to owner's manual).
- Gently turn the cores of **L11**, **L21** and **L31** in a clockwise direction until there is no more adjustment, i.e. core is fully turned into PCB.
- Identify which raster (R,G or B) has the smallest raster width and adjust the

remaining raster via **L11**, **L21** or **L31** in a counter clockwise manner to match the raster with the smallest width. In order to facilitate these adjustments, you may wish to use the horizontal shift control for the raster (R, G or B) that you are adjusting. Disregard any horizontal static convergence errors at this time, they will be corrected later.

Scan coil switching (762457)

Each horizontal deflection yoke consists of two horizontal windings which may be connected in either a series or parallel configuration. The inductance of the parallel connection is obviously lower than the series configuration (parallel and series inductance uses the same formula as resistance) therefore they are connected in parallel for the "high" frequency mode.

The lower inductance in the parallel configuration causes the resonant frequency of the flyback pulse to increase, thereby producing a more rapid horizontal retrace.

Note: HDM is the mid-point of the two series connected deflection MOSFETS. HDL is the common connection to the three horizontal yoke windings, that supplies the yokes with the +HTHD voltage, after passing through Q3 and the linearity coil.

The DC horizontal shift voltage from the "Focus and Shift Board (76 2271) is applied between HDHX and HDLX (X stands for R, G or B or the Red, Green or Blue) of the red, green and blue deflection yokes. The HDLX is in fact a feedback to the "Focus + SHIFT" board in order to to stabilise the horizontal width.

In the LOWFREQ mode, the two horizontal width alignment coils are in series. When switched to the "High Freq." mode only one coil is in the circuit, (see schematics).

S10, S20 and S30 allow the horizontal scan to be inverted to adapt the projector for a front or rear projection. S10 is also used to provide the HSIC information to the controller board, so that the controller board will know the configuration of the horizontal scan switches.

The HSI also goes to the "HOR SHIFT+FOCUS" board and is used by Q1 and Q2 to invert the shift voltages on P1 and P2 (horizontal shift Red and Blue).

Note that this board also contains the switch for the inversion of the vertical scan. Here the same VSI info can be used for both, the controller and the Vert Defl board (similar to Hor Defl).

The Scan Fail loop (SF3-SF4-SF5-SF6) passes through two contacts of the deflection connectors. In the event that one of these yoke connectors is disconnected, the projector will go into scan fail, terminating the EHT.

Deflection Switching Module

762457

PARTS LISTING

ITEM NO.	SIT.	DESCRIPTION		ITEM NO.	SIT.	DESCRIPTION	
20	R133039	SPR L 8 D 1,2D 4 CE	9	R 10	R103600	R WW H E1 K 4W	1
10	R3153151	J RVT MBT D 2.3L12.7	24	R 15	R103600	R WW H E1 K 4W	1
30	R348019	CBLA TIE B L100 W2,4 -	7	R 20	R103600	R WW H E1 K 4W	1
	R3421991	WU UL1015 AWG18 ST GY 1	1	R 25	R103600	R WW H E1 K 4W	1
	R348314	CD SL \$FT P12 650	1	R 30	R103600	R WW H E1 K 4W	1
	R3484094	CD CT \$FTMT P 9 820	1	R 35	R103600	R WW H E1 K 4W	1
	R3484159	CD CT \$FTMT P15 850	1	R 11	R103660	R WW H 1K K 4W	1
C 10	R1041988	R WWFV270E K 2W	1	R 12	R103660	R WW H 1K K 4W	1
C 20	R1041988	R WWFV270E K 2W	1	R 21	R103660	R WW H 1K K 4W	1
C 30	R1041988	R WWFV270E K 2W	1	R 22	R103660	R WW H 1K K 4W	1
C 1	R114132	C POMERA 100N K250E4 85	1	R 31	R103660	R WW H 1K K 4W	1
D 19	R131637	D R BA158 600400 DO7	1	R 32	R103660	R WW H 1K K 4W	1
J 10	R3134685	J MTA MBT P12 M3,96 FL RO	1	R 13	R114166	C POMERA 220N K400E9 85	1
J 20	R3134685	J MTA MBT P12 M3,96 FL RO	1	R 23	R114166	C POMERA 220N K400E9 85	1
J 30	R3134685	J MTA MBT P12 M3,96 FL RO	1	R 33	R114166	C POMERA 220N K400E9 85	1
L 11	R774151	COILAMP PJ45 HOR DATA	1	R 14	V1026005	R MF H100E F 0W6 E4	1
L 21	R774151	COILAMP PJ45 HOR DATA	1	R 24	V1026005	R MF H100E F 0W6 E4	1
L 31	R774151	COILAMP PJ45 HOR DATA	1	R 34	V1026005	R MF H100E F 0W6 E4	1
L 10	R774163	COILAMP PJ45 HOR GR	1	REL1	R324360	RLY 12V 2C BV MNS M UL	1
L 20	R774163	COILAMP PJ45 HOR GR	1	REL2	R324360	RLY 12V 2C BV MNS M UL	1
L 30	R774163	COILAMP PJ45 HOR GR	1	REL3	R324360	RLY 12V 2C BV MNS M UL	1
PC	R780145	PCB G1200 DEF SW	1	S 20	R3247155	SW MNS NE18 2C	1
				S 30	R3247155	SW MNS NE18 2C	1
				S 40	R324791	SW F 8C	1
				S 10	R324793	SW MNS NE18 2C/2C	1

