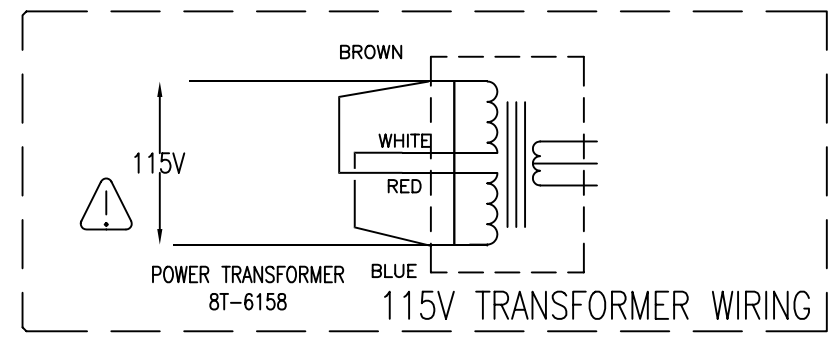
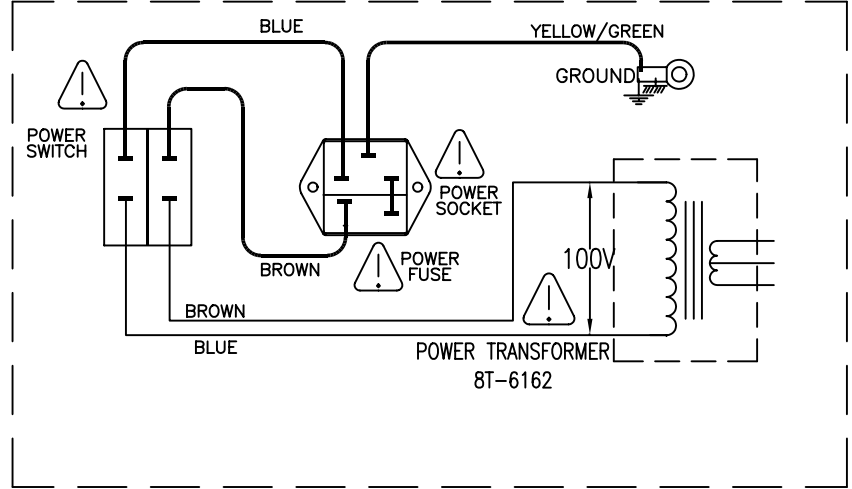
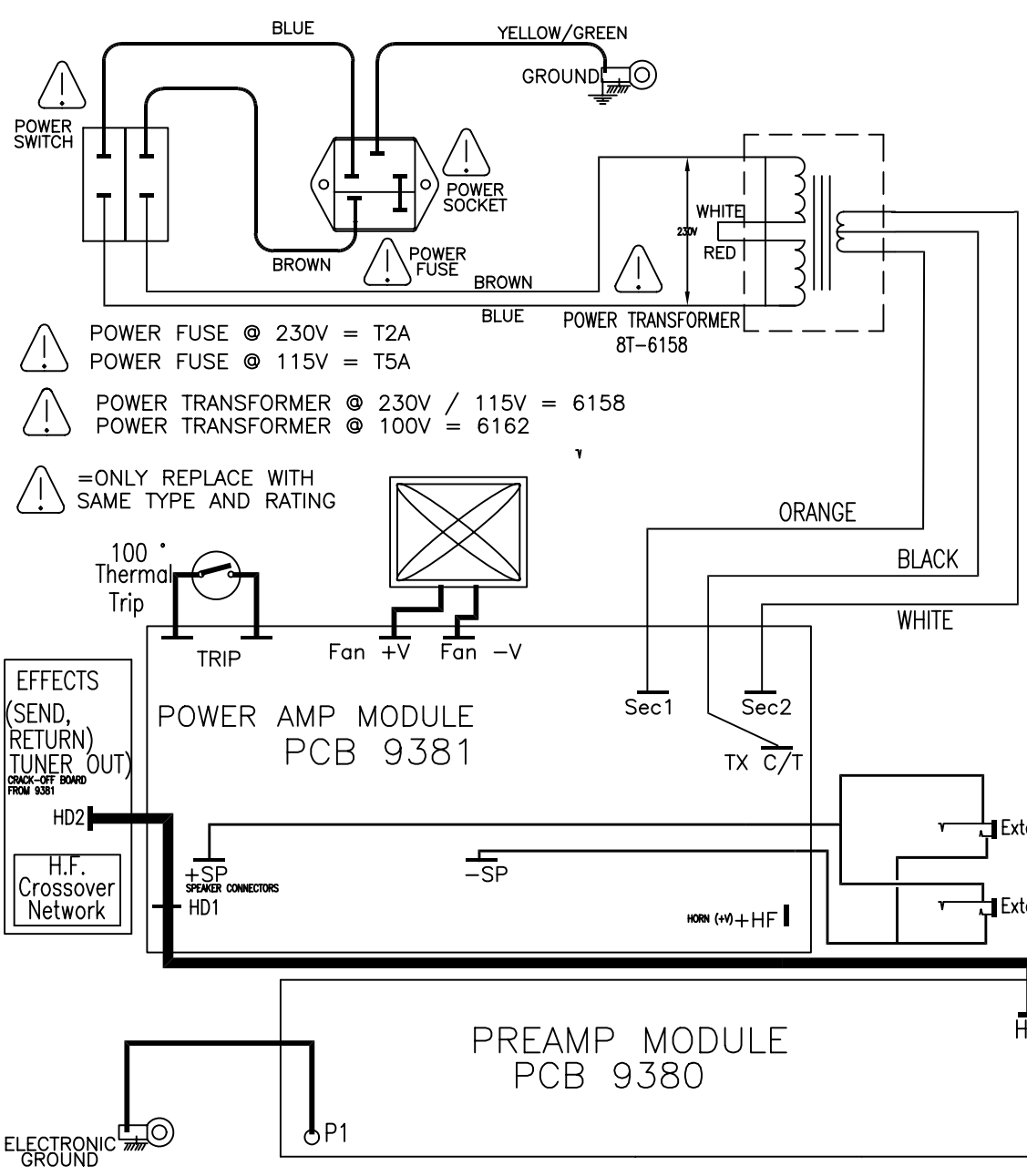


R4H
Service
Information

Laney
Classic British Amplification

Newlyn Road, Cradley Heath, West Midlands. B64 6BE
www.laney.co.uk



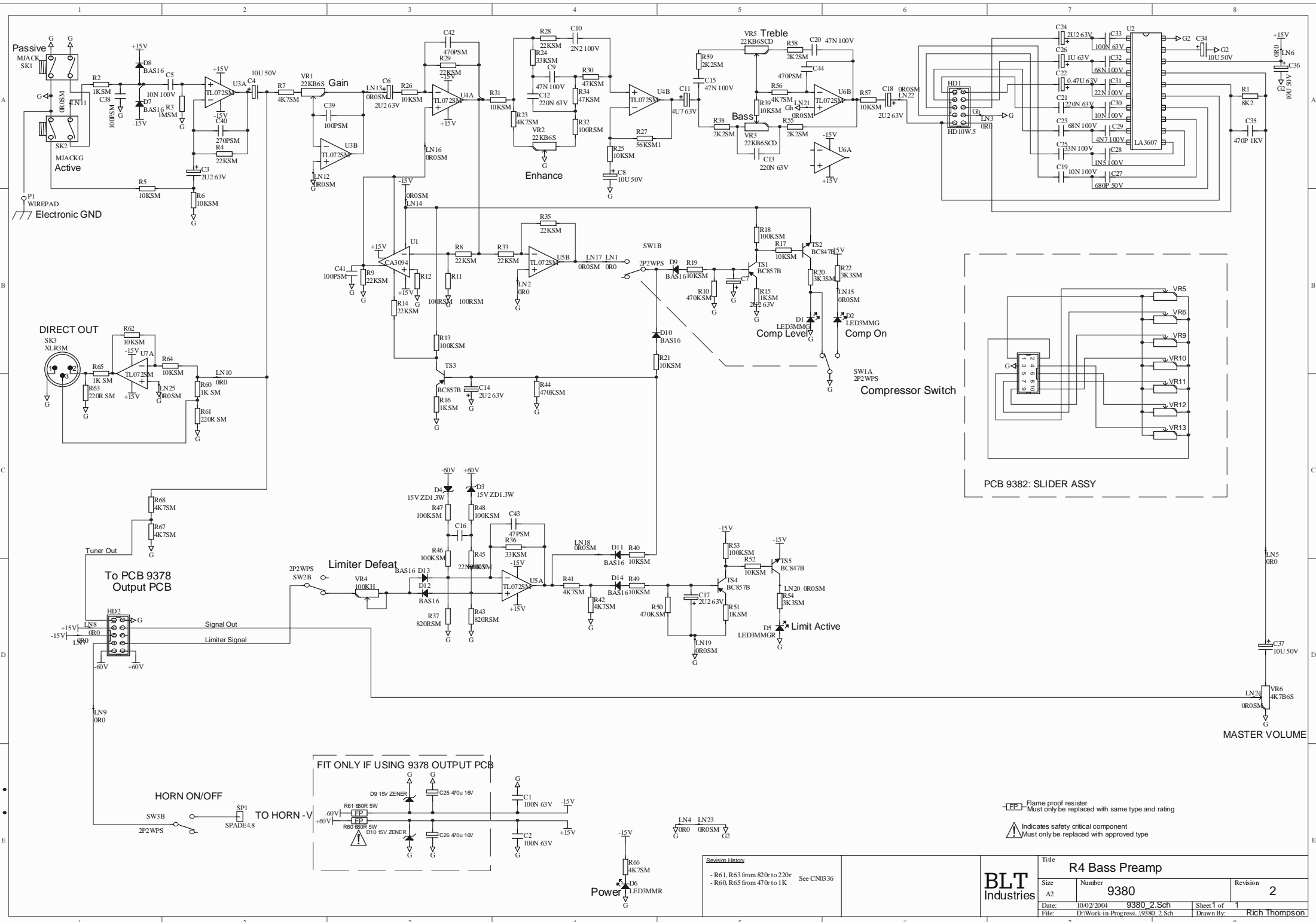
- ⚠ POWER FUSE @ 230V = T2A
- ⚠ POWER FUSE @ 115V = T5A
- ⚠ POWER TRANSFORMER @ 230V / 115V = 6158
- ⚠ POWER TRANSFORMER @ 100V = 6162
- ⚠ =ONLY REPLACE WITH SAME TYPE AND RATING

ISSUE	DESCRIPTION	APPD.	DATE

BLT
Industries Ltd.

TITLE
R4H SERVICE
DIAGRAM
PART No

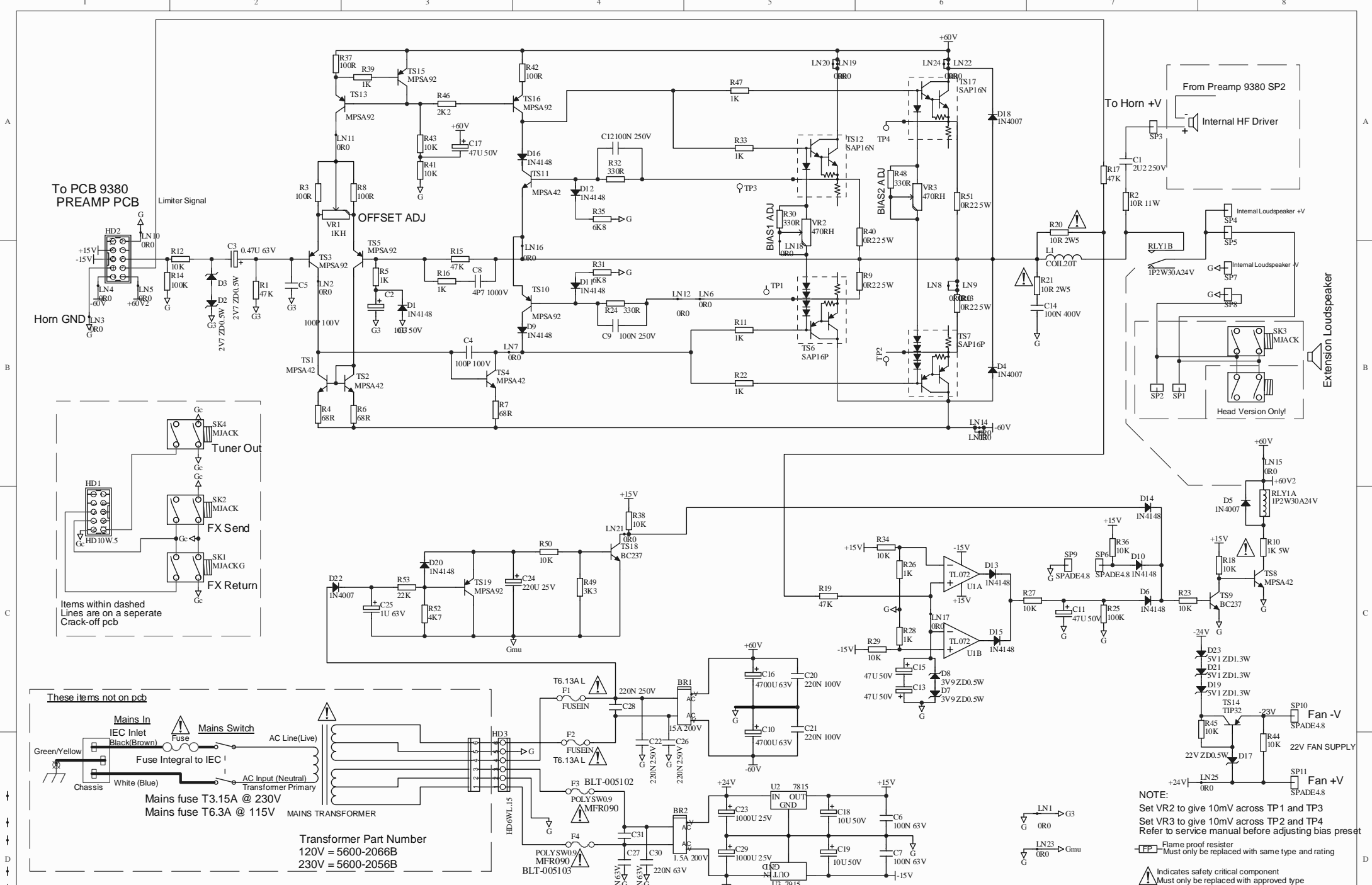
DRAWN	TRACED	CHECKED	APPROVED	DATE
R.J.F				12/12/02
DRAWING No.		3388		



Flame proof resistor
 Must only be replaced with same type and rating
 Indicates safety critical component
 Must only be replaced with approved type

Revision History	
- R61, R63 from 820k to 220k	See CN0336
- R60, R65 from 470k to 1K	

BLT Industries		Title R4 Bass Preamp	
Size A2	Number 9380	Revision 2	
Date: 10/02/2004	9380 2_Sch	Sheet 1 of 1	
File: D:\Work-in-Progress\9380 2_Sch		Drawn By: Rich Thompson	



To PCB 9380
PREAMP PCB

Limiter Signal

OFFSET ADJ

BIAS ADJ

From Preamp 9380 SP2

To Horn +V

Internal Loudspeaker +V

Internal Loudspeaker -V

Head Version Only!

Extension Loudspeaker

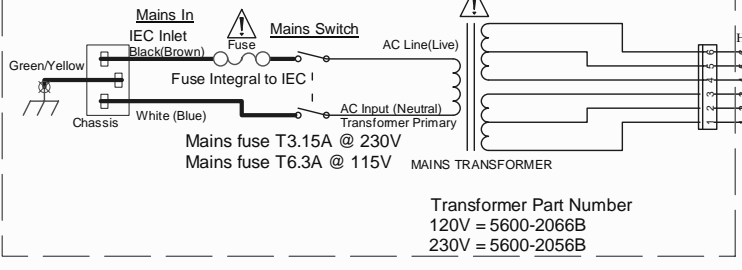
Tuner Out

FX Send

FX Return

Items within dashed Lines are on a separate Crack-off pcb

These items not on pcb



Mains fuse T3.15A @ 230V
Mains fuse T6.3A @ 115V

Transformer Part Number
120V = 5600-2066B
230V = 5600-2056B

NOTE:
Set VR2 to give 10mV across TP1 and TP3
Set VR3 to give 10mV across TP2 and TP4
Refer to service manual before adjusting bias preset
Flame proof resistor
Must only be replaced with same type and rating

Indicates safety critical component
Must only be replaced with approved type

Revision History

BLT Industries

Title		R4/R5 300W Output PCB	
Size	Number	Revision	
A3	9381		2
Date:	25/10/2003	9381 2.Sch	Sheet 1 of 1
File:	D:\9381_2\9381_2.Sch	Drawn By:	Rich Thompson

Product	Descriptor	Quantity	Price
R4HE	R4H RICHTER BASS HEAD 300W-230V		
-005594	20mm T6.3A FUSE	1.0000	
-10702	SPECIAL MAINS LEAD	1.0000	
-10969	R SERIES USER MANUAL	1.0000	
-008465	R4H CHASSIS ASSY 230	1.0000	
-005005	NEW TYPE MAINS SOCKET	1.0000	
-005308	80*80*25mm FAN 24V I	1.0000	
-005115	R4/4H/5 - IDC CABLE	1.0000	
-005116	R4/R5/SLIDER - IDC C	1.0000	
-005511	5MM SOLDER TAG	2.0000	
-005555	80mm METAL FAN GUARD	1.0000	
-005558	100mm TIE WRAP	4.0000	
-005665/C	12mm KNOB C/P	5.0000	
-006159	R4/H/R5 MAINS TX 115	1.0000	
-008322	LABEL VOLTAGE SELEC	1.0000	
-008461	R4 SLIDER PCB ASSY	1.0000	
-004001	50K LIN 20MM SLIDER	7.0000	
-005079	IDC PCB PLUG 10-WAY	1.0000	
-009382	R4 SLIDER PCB	1.0000	
-008463	R4 PREAMP PCB ASSY	1.0000	
-001043	8K2 .25W RESISTOR	1.0000	
-001300	ORO SHORTING LINK	16.0000	
-001303	100R 5% RESISTOR	3.0000	
-001304	820R 5% RESISTOR	3.0000	
-001305	2K2 5% RESISTOR	2.0000	
-001306	10K 5% RESISTOR	15.0000	
-001309	1M 5% RESISTOR	1.0000	
-001310	100K 5% RESISTOR	7.0000	
-001311	470R 5% RESISTOR	3.0000	
-001312	4K7 5% RESISTOR	9.0000	
-001315	47K 5% RESISTOR	2.0000	
-001316	22K 5% RESISTOR	6.0000	
-001319	15K 5% RESISTOR	1.0000	
-001326	3K3 5% RESISTOR	3.0000	
-001327	1K 5% RESISTOR	6.0000	
-001331	33K 5% RESISTOR	2.0000	
-001336	470K 5% RESISTOR	3.0000	
-001705	680R 5W RESISTOR	2.0000	
-001920	ZERO OHM RESISTOR	7.0000	
-001923	56KSM 1206 1% RESIST	1.0000	
-002013	10UF 50V CAPACITOR	5.0000	
-002020	470UF 16V RADIAL	2.0000	
-002024	2.2UF 63V RADIAL	7.0000	
-002025	1UF 63V RADIAL	1.0000	
-002026	.47UF 63V RADIAL	1.0000	
-002027	4.7UF 63V RADIAL	1.0000	
-002037	220N 5MM BOX POLY CA	2.0000	
-002413	1N5 100V 5mm	1.0000	
-002415	2.2NF 100V 5mm	1.0000	
-002417	4.7NF 100V 5mm	2.0000	
-002419	100NF 63V 5mm	2.0000	
-002420	22NF 100V 5mm	2.0000	
-002421	10NF 100V 5mm	3.0000	
-002423	330PF 100V 5mm	1.0000	
-002425	47NF 100V 5mm	1.0000	
-002428	33N 100V 5MM	1.0000	
-002438	68N 5MM BOXED	1.0000	
-002602	47PF 50V 10% COG	1.0000	
-002603	100PF 50V 10% COG	3.0000	
-002604	270PF 50V 10% COG	1.0000	
-002605	470PF 50V 10% COG	2.0000	
-002814	470PF 250V CERAMIC	1.0000	
-002827	680PF 50V CERAMIC	1.0000	
-003014	15V 1.3W ZENER	4.0000	
-003022	3mm GREEN LED	3.0000	
-003033	3mm LED RED	1.0000	
-003500	BAS16 DIODE	8.0000	
-003503	BC847B TRANSISTOR	2.0000	
-003504	BC857B TRANSISTOR	3.0000	
-003508	34072 IC (SMD TL072)	5.0000	
-003806	LA3607 GRAPHIC EQ DF	1.0000	
-003916	CA3094E/CA3080E IC	1.0000	
-004029	100K HORIZ PRESET	1.0000	
-004061	6mm 22K LIN POT	2.0000	
-004072	6mm 4K7 LIN POT	1.0000	
-004099	22K LIN POT	2.0000	
-005002	MONO JACK SOCKET	1.0000	
-005017	2P 2W PUSH SWITCH	3.0000	
-005079	IDC PCB PLUG 10-WAY	2.0000	
-005096	MONO JACK SOCKET-GOL	1.0000	
-005503	7.5mm ROUND BLACK BU	3.0000	
-005621	PCB SUPPORT PCB/MB	2.0000	
-005624	XLR SKT MALE 90DEG	1.0000	
-005686	4.8MM TERMINAL SPADE	1.0000	
-009234	4*1/2" AB POZI-ZINC	4.0000	
-009380	R4 BASS PREAMP	1.0000	
-008464	R4/R5 OUTPUT PCB ASS	1.0000	
-001003	1K .25W RESISTOR	7.0000	
-001005	2K2 .25W RESISTOR	1.0000	
-001006	4K7 .25W RESISTOR	1.0000	
-001007	6K8 .25W RESISTOR	2.0000	
-001008	100K .25W RESISTOR	3.0000	
-001010	47K .25W RESISTOR	3.0000	
-001013	22K .25W RESISTOR	5.0000	
-001014	10K .25W RESISTOR	13.0000	
-001021	100R .25W RESISTOR	4.0000	
-001022	3K3 .25W RESISTOR	1.0000	
-001035	68R .25W RESISTOR	3.0000	
-001042	1K5 .25W RESISTOR	2.0000	
-001500	10R 2.5W RESISTOR	2.0000	
-001701	1K 5W RESISTOR	1.0000	
-001718	10R 11W CEMENT 5%	1.0000	
-001920	ZERO OHM RESISTOR	24.0000	
-002004	47UF 50V RADIAL	4.0000	
-002009	1000UF 25V RADIAL	2.0000	
-002013	10UF 50V CAPACITOR	2.0000	
-002014	100UF 35V RADIAL	1.0000	
-002021	6800UF 63V 30*40	2.0000	
-002024	2.2UF 63V RADIAL	2.0000	

Manufacturing

Product	Description	Quantity
-002025	1UF 63V RADIAL	1.0000
-002029	220UF 25V CAPACITOR	1.0000
-002035	100N 100V 5MM BOX PC	2.0000
-002037	220N 5MM BOX POLY CA	3.0000
-002200	220NF 100V 10MM	2.0000
-002410	100NF 400V 15MM	3.0000
-002419	100NF 63V 5mm	2.0000
-002431	2.2UF 250V POLYESTER	1.0000
-002807	4.7PF 50V CERAMIC	1.0000
-002817	100PF 100V CERAMIC	2.0000
-003000	1N4007 DIODE	4.0000
-003004	2V7 .5W ZENER DIODE	2.0000
-003006	1N4148 DIODE	11.0000
-003017	1.5A 200V BRIDGE	1.0000
-003019	7V5 1.3W ZENER DIODE	2.0000
-003038	22v .5w ZENER	1.0000
-003809	15A INLINE BRIDGE RE	1.0000
-003405	BC237 TRANSISTOR	2.0000
-003411	MPSA42/43 TRANSISTOR	5.0000
-003412	MPSA92/93 TRANSISTOR	7.0000
-003611	TIP32C TRANSISTOR	1.0000
-003807	SAP15N POWER DEVICE	2.0000
-003808	SAP15P POWER DEVICE	2.0000
-003901	7815 IC VOLT'REGULATOR	1.0000
-003902	7915 IC VOLT'REGULATOR	1.0000
-003909	TL072 IC	1.0000
-004000	1K HORIZ PRESET	1.0000
-004010	470R HORIZ PRESET	2.0000
-005002	MONO JACK SOCKET	3.0000
-005006	20 TURN COIL	1.0000
-005022	PCB FUSE CARRIER	2.0000
-005030	HEATSINK TV5	3.0000
-005079	IDC PCB PLUG 10-WAY	2.0000
-005096	MONO JACK SOCKET-GOLD	1.0000
-005103	0.9A POLY SWITCH/MF-	2.0000
-005199	6W LOCKING HEADER 0.	1.0000
-005594	20mm T6.3A FUSE	2.0000
-005609	30A RELAY	1.0000
-005686	4.8MM TERMINAL SPADE	9.0000
-009381	R4/R5 BASS 300W OUTPUT	1.0000
-8M-8878	200MM FINNED HEATSINK	1.0000
-589030	15mm CUTTER PLATE	2.0000
-009161	4mm INT. SHAKEPROOF	1.0000
-009171	M5 INT SHAKEPROOF WASHER	2.0000
-009173	5*12mm PAN POZI ZINC	1.0000
-009175	M6 HEX NUT ZINC ONLY	1.0000
-009181	5mm BRASS HEX NUT	1.0000
-009187	NO.8 SPIRE FASTENER	6.0000
-009201	NO8*3/8 PLASTITE	4.0000
-009204	NO 4*1/4 PLASTITE	2.0000
-009229	8*3/8 FH POZI	5.0000
-009233	POP RIVET 4*7	3.0000
-009234	4*1/2" AB POZI-ZINC	4.0000
-10004	MONO JACK SOCKET	1.0000
-530027	DPST EQ MAINS SWITCH	1.0000
-540038	EARTH WARNING LABEL	1.0000
-541004	HC25/50 4.8 FASTON	11.0000
-586003	M8 * 60 COACH BOLT	1.0000
-586022	8MM FLAT TX WASHER 2	1.0000
-586023	8mm SHKPRF WASHER	1.0000
-588006	POP RIVET (BLACK)	2.0000
-8M-8875	R4H CHASSIS DWG.3358	1.0000
-8M-8879	R4/R5 Slider Bracket	2.0000
-8M-8880	R4/R5 Heatsink Support	2.0000
-8SP-8875	R4H PRINT COST	1.0000
-20114	R4H CABINET	1.0000
-10039	CORNER PENN P/N.C183	4.0000
-10044	CORNER PENN P/N.C182	2.0000
-10057	SMALL LANEY BADGE	1.0000
-10059	RUBBER CABINET FOOT	4.0000
-10157	PLASTIC STRAP HANDLE	1.0000
-10200	M5 x 10mm TEENUT	2.0000
-10202	5MMx25MM CSK POZI SC	2.0000
-10207	NO.6 X 5/8" CSK POZI	4.0000
-10224	35mm FINISHED NAIL	40.0000
-10231	NO8x1/2" FLANGE POZI	18.0000
-10240	10 * 1 CSK POZI	4.0000
-10243	NO4*1/2 TYPE B CSK	2.0000
-10244	FLAT SPIRE CLIP	2.0000
-10248	NO10 * 1 1/4" FLANGE	4.0000
-10301	18mm CHIPBOARD	0.2500
-10328	REPTILE BLACK	1.2500
-10477	R3H/R4H CARTON	1.0000
-10600	32/18 STAPLE	16.0000
-10622	POLY BAG 48(0) X 48	1.0000
-10981	GLUE/PAINT COST 1.25	1.0000
-8G-R3H/R	GRILL R3H R4H	1.0000
-79063	RICHTER MESH	0.1250
-8M-R3H-	R3H/R4H Grill	1.0000
-8PCG-R3	GRILL R3H-4H	1.0000
-8P-8733	RICHTER VENT	1.0000
-79003	ZINTEC SHEET/1Mx1Mx1	0.0230
-8PC-873	RBW100 VENT	1.0000
-8M-8733	Vent	1.0000