

LPS15 Active

LPS15.3 Active

LPS SUB Active

AMPLIFIED LOUDSPEAKER SYSTEM

SERVICE MANUAL

Schematic Diagrams



CODE : 277323



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Notice

Service must be carried out by qualified personnel only. Any tampering carried out by unqualified personnel during the guarantee period will forfeit the right to guarantee.

For a correct operation of the instrument, after having switched off, be careful to wait at least 3 seconds before switching on again. To improve the device's specifications, the schematic diagrams may be subject to change without prior notice.

Schematic Notes

All components marked by this symbol have special safety characteristics, when replacing any of these components use only manufacturer's specified parts.

The (μ) micro symbol of capacitance value is substituted by U. The (Ω) omega symbol of resistance value is substituted by E. The electrolytic capacitors are 25Vdc rated voltage unless otherwise specified. All resistors are 1/8W unless otherwise specified. All switches shown in the "OFF" position. All DC voltages measured to ground with a voltmeter 20KOhm/V.

- | | |
|---------------------------------------------------------------------------|-------------------------|
| ← Soldering point. | ⤴ Supply voltage. |
| • Male connector. | ⤵ Logic supply ground. |
| ○ Female connector. | ⤶ Analog supply ground. |
| ⊞ M/F faston connector. | ⤷ Signal ground. |
| ⬭ Flag joined with one or more flags with the same signal name inscribed. | ⤸ Chassis ground. |
| | ⤹ Earth ground. |



ATTENTION

Observe precautions when handling electrostatic sensitive devices

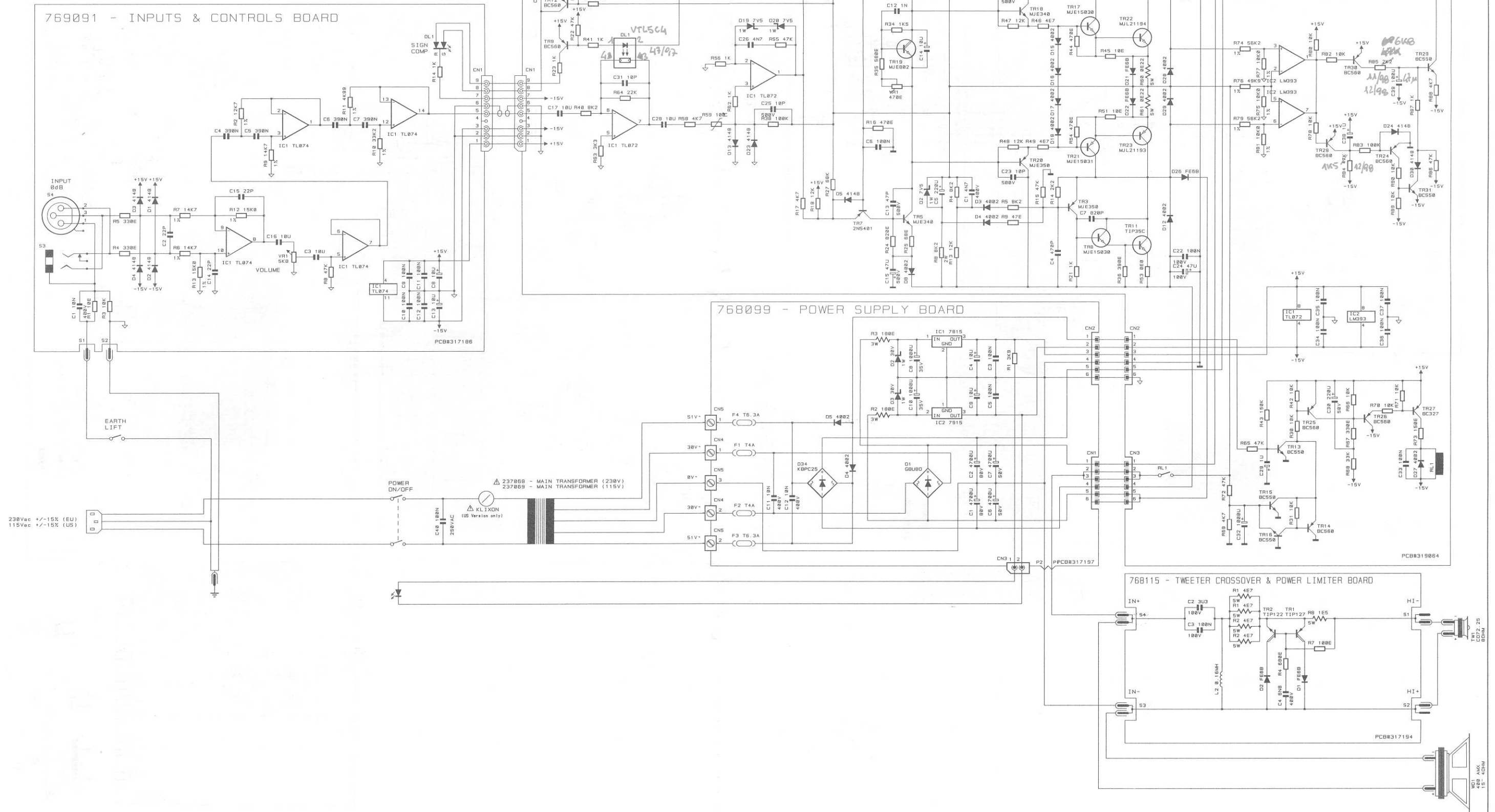
SCHEMA CON CORREZIONI E/O MODIFICHE

768094 - POWER AMPLIFIER BOARD

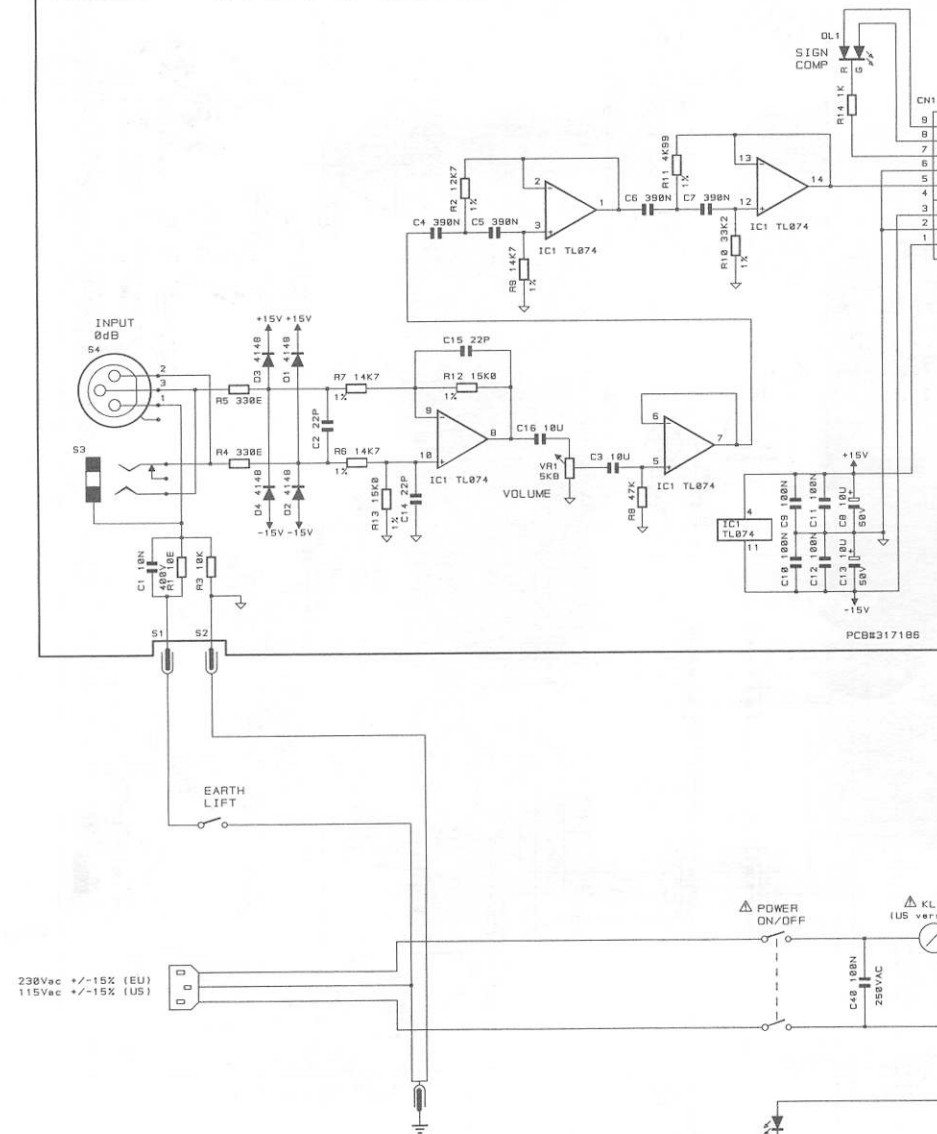
769091 - INPUTS & CONTROLS BOARD

768099 - POWER SUPPLY BOARD

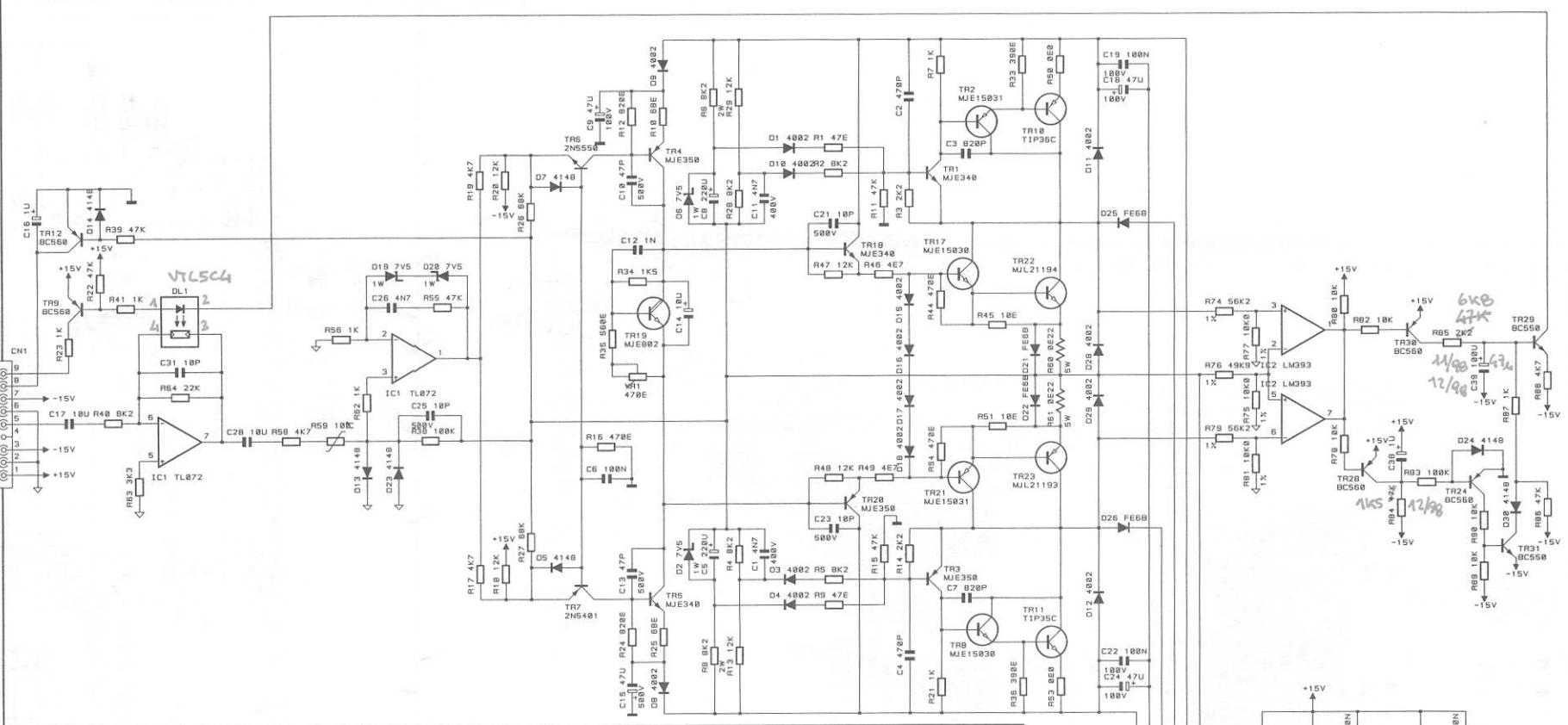
768115 - TWEETER CROSSOVER & POWER LIMITER BOARD



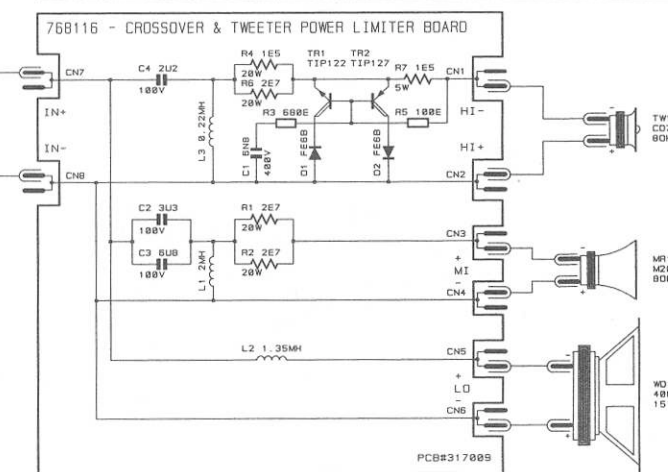
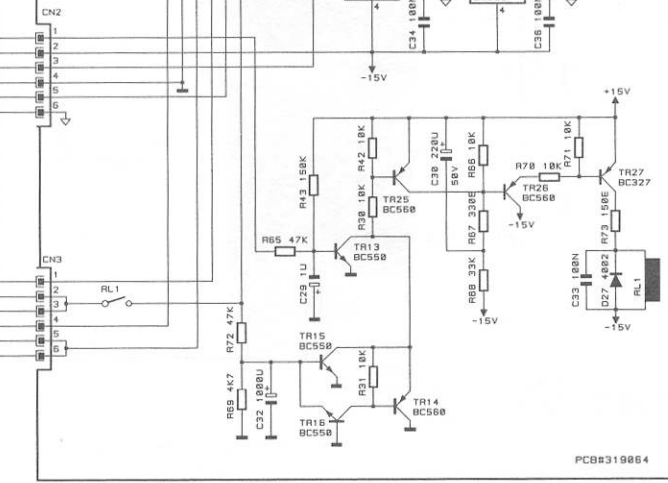
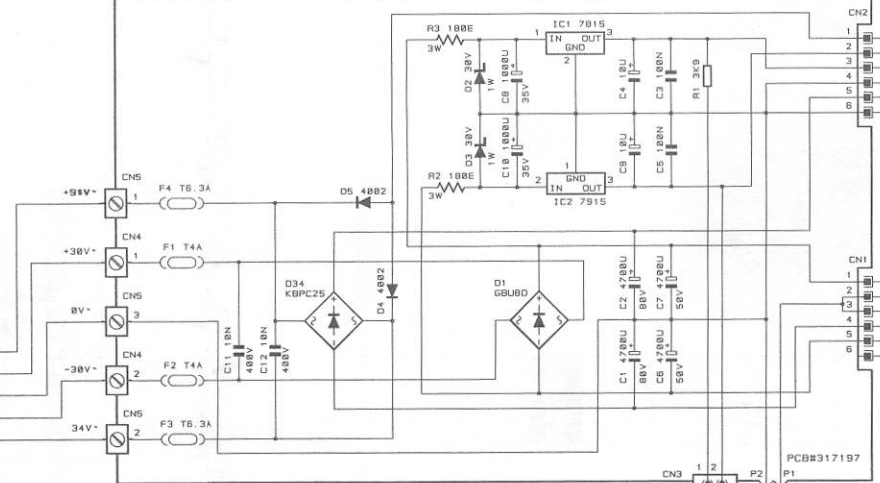
769091 - INPUTS & CONTROLS BOARD



768094 - POWER AMPLIFIER BOARD



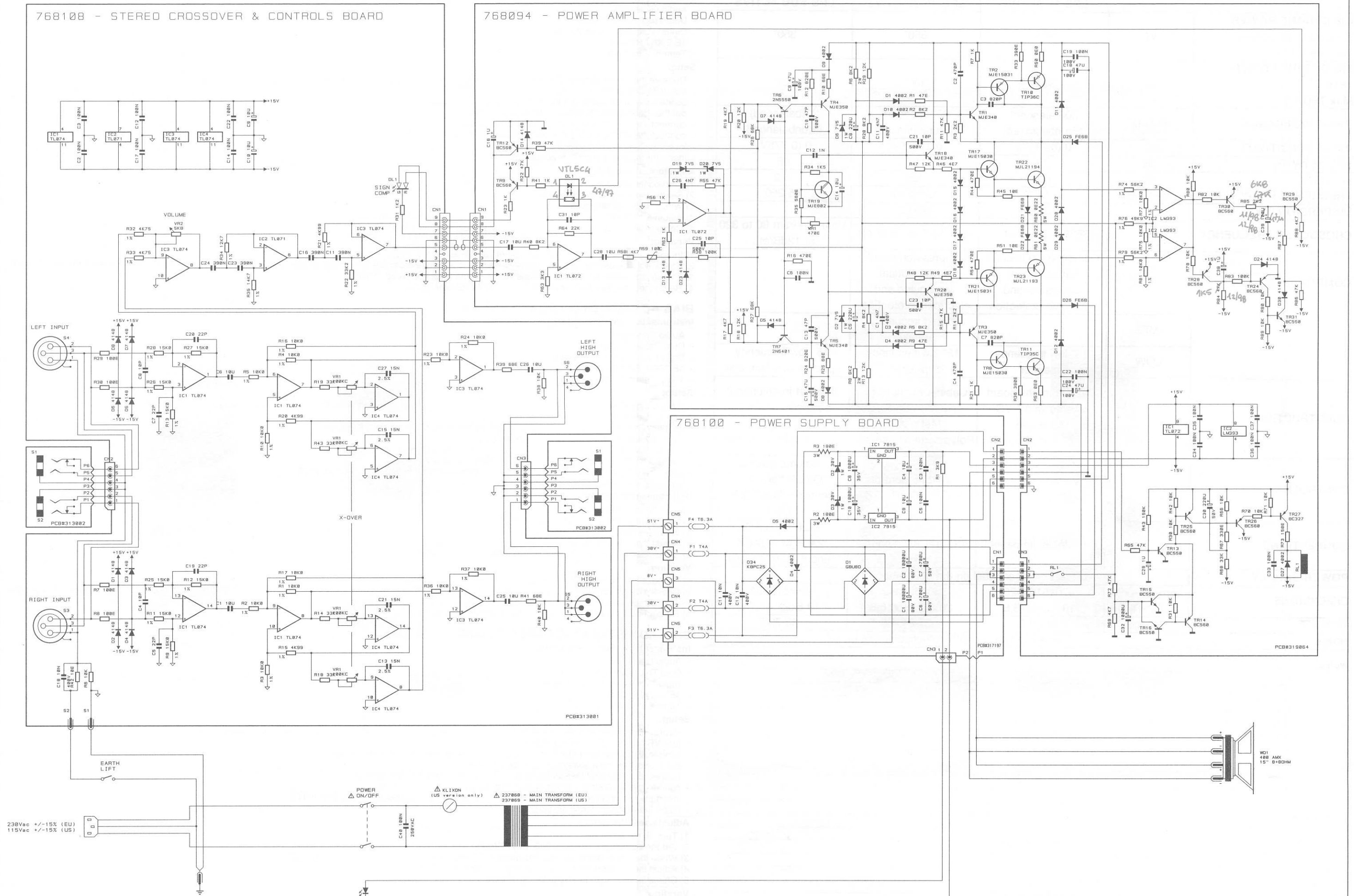
768099 - POWER SUPPLY BOARD



768108 - STEREO CROSSOVER & CONTROLS BOARD

768094 - POWER AMPLIFIER BOARD

768100 - POWER SUPPLY BOARD



SPARE PARTS - LPS 15 Active

ACCESSORIES	
887069	Signal Cable (15m)
277305	Owner's Manual
VARIOUS	
667594	Power Amplifer Panel
659027	Cyl. Knob White Cap
237068	350W Transformer (EU)
237069	350W Transformer (US)
190133	Lateroid Insulator For Screw Block
110614	Mains Socket
110291	Power Switch
110029	T4A Fuse 5x20mm (EU)
110018	T6.3A Fuse 5x20mm (EU)
110037	T6.3A Fuse 6.3x32mm (US)
110036	T4A Fuse 6.3x32mm (US)
080607	Kbpc25 25a 200V Bridge Rec Dio
717044	Wooden Part
667631	Metal Grid
347341	Elliptical Horn
347287	Plastic Handle
347286	Plastic Setted Handle
347263	Plastic Flange
347187	Plastic Grip
229034	8 ohm Tweeter
227045	15" Woofer
210215	Adhesive Rubber
130297	Mains Cord (EU)
130283	Mains Cord (US)

Crossover & Tweeter Power Limiter Board

768115 Crossover & Tweeter Power Limiter Board (PCB#317194)	
230536	* 0.16mh 1mm Crossover Coil
090559	* TIP122 TO220 Npn Darlington Transistor
090558	* TIP127 TO220 Pnp Darlington Transistor
080171	* Fe6b 6a 100V Fast Recovery Diode

Inputs & Controls Board

768091 * Inputs & Controls Board (PCB#317186)	
141187	** XLR Female Horizontal Connector
140929	** 9 Contacts Vert Male Connector
140217	** Horizontal Jack Stereo Slim Socket
100084	** TL074 Quad J-Fet Operational Amplifier
080734	** Led 2.5x5mm Rect Diff Red-Grn
080103	** 1N4148 100mA 75V Signal Diode
074570	** 5K lin. 31 clicks Potentiometer
042665	** 33K2 1/4w 1% Metalized Film Resistor
042625	** 15K0 1/4w 1% Metalized Film Resistor
042621	** 14K7 1/4w 1% Metalized Film Resistor
042614	** 12K7 1/4w 1% Metalized Film Resistor
042565	** 4K99 1/4w 1% Metalized Film Resistor

Power Supply Board

768099 * Power Supply Board (PCB#317197)	
140917	** 2 Contacts Vert Male Connector
140081	** H 2c P=10 Terminal Block
140069	** H 3c P=10mm Terminal Block
110119	** Fuse Clip 10A max (EU) (US)
100060	** 7815 +15V 1A Voltage Regulator
100049	** 7915 -15v 1a Voltage Regulator
080606	** GBU8D 8A Rectifier Diodes Bridge
080342	** 30V 1w 5% Zener Diode
080156	** 1N4002 1A 100V Rectifier Diode
030722	** 1000u 35v 20% Vert Electrolytic Capacitor
030560	** 4700u 80v 20% Snap-In Electrolytic Capacitor
030555	** 4700u 50V 20% Snap-In Electrolytic Capacitor

350W Power Amplifer Board

768094 * 350W Power Amplifer Board (PCB#318094)	
757942	** Photores Coupler
140929	** 9 Contacts Vert Male Connector
140927	** 24 Contacts Vert Male Strip
110316	** Relay 24V / 1 Switch no 16A 250V
100904	** LM393 Dual Comparator
100061	** TL072 Dual J-Fet Operational Amplifier
090917	** MJE350 TO126 Pnp Transistor
090916	** MJE340 TO126 Npn Transistor
090201	** 2n5401 To92 Pnp Transistor
090200	** 2n5550 To92 Npn Transistor
090194	** BC560 TO92 LN Pnp Transistor
090183	** Bc550 To92 Ln Npn Transistor

090153	** BC327 TO92 Pnp Transistor
080245	** 7V5 1w 5% Zener Diode
080171	** Fe6b 6a 100V Fast Recovery Diode
080156	** 1N4002 1A 100V Rectifier Diode
080103	** 1N4148 100mA 75V Signal Diode
070105	** 470e 20% Vertical Linear Trimmer
042695	** 56K2 1/4w 1% Metalized Film Resistor
042605	** 10K0 1/4w 1% Metalized Film Resistor
030715	** 1000u 6v3 20% Vert Electrolytic Capacitor
030565	** 220u 25V 20% Vert Electrolytic Capacitor
030564	** 220u 50V 20% Vert Electrolytic Capacitor
010595	** 100n 50V -20+80% Ceramic Cap. Multilayer
010462	** 1n 50V 10% CL2 Ceramic Capacitor
090924	* Mjl21194 To264 Npn Transistor
090923	* Mjl21193 To264 Pnp Transistor
090920	* Mje803 To126 Npn Darl Transistor
090919	* Mje15031 To220 Pnp Transistor
090918	* MJE15030 TO220 Npn Transistor
090863	* TIP36C TO218 Pnp Transistor
090862	* TIP35C TO218 Npn Transistor
080821	* Ptc 90 Pth59f04be222ts

SPARE PARTS - LPS 15.3 Active

ACCESSORIES	
887069	Signal Cable (15m)
277305	Owner's Manual

VARIOUS

667594	Power Amplifer Panel
659027	Cyl. Knob White Cap
237068	350W Transformer (EU)
237069	350W Transformer (US)
190133	Lateroid Insulator For Screw Block
110614	Mains Socket
110291	Power Switch
110029	T4A Fuse 5x20mm (EU)
110018	T6.3A Fuse 5x20mm (EU)
110037	T6.3A Fuse 6.3x32mm (US)
110036	T4A Fuse 6.3x32mm (US)
080607	Kbpc25 25a 200V Bridge Rec Dio
667632	Metal Grid
347341	Elliptical Horn
347287	Plastic Handle
347286	Plastic Setted Handle
347263	Plastic Flange
347187	Plastic Grip
229034	8 ohm Tweeter
228009	8" Speaker
227044	15" Woofer
210215	Adhesive Rubber
277305	Owner's Manual
130297	Mains Cord (EU)
130283	Mains Cord (US)

Crossover & Tweeter Power Limiter Board

768116 Crossover & Tweeter Power Limiter Board (PCB#317009)	
230548	* 2mh 0.82mm Crossover Coil
230546	* 1.35mh 1mm Crossover Coil
230537	* 0.22mh 0.75mm Crossover Coil
090559	* TIP122 TO220 Npn Darlington Transistor
090558	* TIP127 TO220 Pnp Darlington Transistor
080171	* Fe6b 6a 100V Fast Recovery Diode

Inputs & Controls Board

768091 * Inputs & Controls Board (PCB#317186)	
141187	** XLR Female Horizontal Connector
140929	** 9 Contacts Vert Male Connector
140217	** Horizontal Jack Stereo Slim Socket
100084	** TL074 Quad J-Fet Operational Amplifier
080734	** Led 2.5x5mm Rect Diff Red-Grn
080103	** 1N4148 100mA 75V Signal Diode
074570	** 5K lin. 31 clicks Potentiometer
042665	** 33K2 1/4w 1% Metalized Film Resistor
042625	** 15K0 1/4w 1% Metalized Film Resistor
042621	** 14K7 1/4w 1% Metalized Film Resistor
042614	** 12K7 1/4w 1% Metalized Film Resistor
042565	** 4K99 1/4w 1% Metalized Film Resistor

Power Supply Board

768099 * 350W Power Supply Board (PCB#317197)	
140917	** 2 Contacts Vert Male Connector

140081	** H 2c P=10 Terminal Block
140069	** H 3c P=10mm Terminal Block
110119	** Fuse Clip 10A max (EU) (US)
100060	** 7815 +15V 1A Voltage Regulator
100049	** 7915 -15v 1a Voltage Regulator
080606	** GBU8D 8A Rectifier Diodes Bridge
080342	** 30V 1w 5% Zener Diode
080156	** 1N4002 1A 100V Rectifier Diode
030722	** 1000u 35v 20% Vert Electrolytic Capacitor
030560	** 4700u 80v 20% Snap-In Electrolytic Capacitor
030555	** 4700u 50V 20% Snap-In Electrolytic Capacitor

Power Amplifer Board

768094 * Power Amplifer Board (PCB#318094)	
757942	** Photores Coupler
40929	** 9 Contacts Vert Male Connector
140927	** 24 Contacts Vert Male Strip
110316	** Relay 24V / 1 Switch no 16A 250V
100904	** LM393 Dual Comparator
100061	** TL072 Dual J-Fet Operational Amplifier
090917	** MJE350 TO126 Pnp Transistor
090916	** MJE340 TO126 Npn Transistor
090201	** 2n5401 To92 Pnp Transistor
090200	** 2n5550 To92 Npn Transistor
090194	** BC560 TO92 LN Pnp Transistor
090183	** Bc550 To92 Ln Npn Transistor
090153	** BC327 TO92 Pnp Transistor
080245	** 7V5 1w 5% Zener Diode
080171	** Fe6b 6a 100V Fast Recovery Diode
080156	** 1N4002 1A 100V Rectifier Diode
080103	** 1N4148 100mA 75V Signal Diode
070105	** 470e 20% Vertical Linear Trimmer
042695	** 56K2 1/4w 1% Metalized Film Resistor
042605	** 10K0 1/4w 1% Metalized Film Resistor
030715	** 1000u 6v3 20% Vert Electrolytic Capacitor
030565	** 220u 25V 20% Vert Electrolytic Capacitor
030564	** 220u 50V 20% Vert Electrolytic Capacitor
010595	** 100n 50V -20+80% Ceramic Cap. Multilayer
010462	** 1n 50V 10% CL2 Ceramic Capacitor
090924	* Mjl21194 To264 Npn Transistor
090923	* Mjl21193 To264 Pnp Transistor
090920	* Mje803 To126 Npn Darl Transistor
090919	* Mje15031 To220 Pnp Transistor
090918	* MJE15030 TO220 Npn Transistor
090863	* TIP36C TO218 Pnp Transistor
090862	* TIP35C TO218 Npn Transistor
080821	* Ptc 90 Pth59f04be222ts

SPARE PARTS - LPS SUB Plus

ACCESSORIES	
887069	Signal Cable (15m)
277305	Owner's Manual

VARIOUS

659027	Cyl. Knob White Cap
659026	Cyl. Knob Orange Cap
237068	350W Transformer (EU)
237069	350W Transformer (US)
210215	Adhesive Rubber
190133	Lateroid Insulator For Screw Block
177475	Transformer Shield
110614	Mains Socket
110291	Power Switch
110029	T4A Fuse 5x20mm (EU)
110018	6.3A Fuse 5x20mm (EU)
110037	T6.3A Fuse 6.3x32mm (US)
110036	T4A Fuse 6.3x32mm (US)
080607	Kbpc25 25a 200V Bridge Rec Dio
717046	Wooden Part
667633	Metal Grid
347287	Plastic Handle
347286	Plastic Setted Handle
347263	Plastic Flange
347187	Plastic Grip
227050	15" Speaker
210215	Adhesive Rubber
130297	Mains Cord (EV)
130283	Mains Cord (US)

Inputs & Controls Board

768109 * Inputs & Controls Boards (PCB#313002)	
140217	** Horizontal Jack Stereo Slim Socket

768108 * Inputs & Controls Boards (PCB#313001)	
141187	** XLR Female Horizontal Connector
141186	** XLR Male Horizontal Connector
140929	** 9 Contacts Vert Male Connector
140908	** 6 Contacts Vert Male Small Connector
100084	** TL074 Quad J-Fet Operational Amplifier
100019	** TI071 Ln J-Fet Op Amp
080734	** Led 2.5x5mm Rect Diff Red-Grn
080103	** 1N4148 100mA 75V Signal Diode
074570	** 5K lin. 31 clicks Potentiometer
042665	** 33K2 1/4w 1% Metalized Film Resistor
042625	** 15K0 1/4w 1% Metalized Film Resistor
042621	** 14K7 1/4w 1% Metalized Film Resistor
042614	** 12K7 1/4w 1% Metalized Film Resistor
042605	** 10K0 1/4w 1% Metalized Film Resistor
042565	** 4K99 1/4w 1% Metalized Film Resistor
042564	** 4K75 1/4w 1% Metalized Film Resistor
030247	** 10u 25V 20% Vert Electrolytic Bipolar Capacitor
030245	** 10u 50V 20% Vert Electrolytic Capacitor

Power Supply Board

768100 * 350W Power Supply Board (PCB#317197)	
140917	** 2 Contacts Vert Male Connector
140081	** H 2c P=10 Terminal Block
140069	** H 3c P=10mm Terminal Block
110119	** Fuse Clip 10A max (EU) (US)
100060	** 7815 +15V 1A Voltage Regulator
100049	** 7915 -15v 1a Voltage Regulator
080606	** GBU8D 8A Rectifier Diodes Bridge
080342	** 30V 1w 5% Zener Diode
080156	** 1N4002 1A 100V Rectifier Diode
030722	** 1000u 35v 20% Vert Electrolytic Capacitor
030555	** 4700u 50V 20% Snap-In Electrolytic Capacitor

Power Amplifer Board

768094 Power Amplifer Board (PCB#319064)	
757942	* Photores Coupler
140929	* 9 Contacts Vert Male Connector
140927	* 24 Contacts Vert Male Strip
110316	* Relay 24V / 1 Switch no 16A 250V
100904	* LM393 Dual Comparator
100061	* TL072 Dual J-Fet Operational Amplifier
090917	* MJE350 TO126 Pnp Transistor
090916	* MJE340 TO126 Npn Transistor
090201	* 2n5401 To92 Pnp Transistor
090200	* 2n5550 To92 Npn Transistor
090194	* BC560 TO92 LN Pnp Transistor
090183	* Bc550 To92 Ln Npn Transistor
090153	* BC327 TO92 Pnp Transistor
080245	* 7V5 1w 5% Zener Diode
080171	* Fe6b 6a 100V Fast Recovery Diode
080156	* 1N4002 1A 100V Rectifier Diode
080103	* 1N4148 100mA 75V Signal Diode
070105	* 470e 20% Vertical Linear Trimmer
042695	* 56K2 1/4w 1% Metalized Film Resistor
042605	* 10K0 1/4w 1% Metalized Film Resistor
030715	* 1000u 6v3 20% Vert Electrolytic Capacitor
030565	* 220u 25V 20% Vert Electrolytic Capacitor
030564	* 220u 50V 20% Vert Electrolytic Capacitor
010595	* 100n 50V -20+80% Ceramic Cap. Multilayer
010462	* 1n 50V 10% CL2 Ceramic Capacitor
090924	* Mjl21194 To264 Npn Transistor
090923	* Mjl21193 To264 Pnp Transistor
090920	* Mje803 To126 Npn Darl Transistor
090919	* Mje15031 To220 Pnp Transistor
090918	* MJE15030 TO220 Npn Transistor
090863	* TIP36C TO218 Pnp Transistor
090862	* TIP35C TO218 Npn Transistor
080821	* Ptc 90 Pth59f04be222ts

Notes:

Each spare part is single quantity unless otherwise specified	
Asterisk prefix explanation:	
Omitted	= First level spare part.
One asterisk	= Second level, part of previous listed first level part.
Two asterisk	= Third level, part of previous listed second level part.
Three asterisk =.....	
Any request for not above mentioned part must encompass specific description including:	
1) Model name,	
2) Section,	
3) Module code,	
4) Reference name,	
5) Quantity number.	