

FENDER LONDON REVERB AMPLIFIER (223700, 223701, 223702, 223703, 223708) (PARTS LIST)

LONDON TOP

021179 Cabinet w/hdw.
021185 Grill Frame w/hdw.
019553 Cabinet Back

LONDON 1-12

019388 Cabinet w/hdw.
020910 12" Speaker
010129 12" EV Speaker

LONDON 2-10

019390 Cabinet w/hdw.
021258 10" Speaker
019576 10" EV Speaker
019540 Grill Frame w/hdw.
019552 Upper Cabinet Back
019553 Lower Cabinet Back
019170 Handle w/insert
019279 Handle Cap
019308 Glide Assy.
024695 Corner (two-screw)
024752 Chassis Strap
019252 Power Transformer
019585 Tolex (Black)
018252 Grill Cloth
020489 Reverb Pan
020900 Reverb Cable 36"
020902 Reverb Cable 23"

CAPACITORS

020883 10 pf disc
004026 22 pf disc
020909 47 pf disc
020925 120 pf disc
007029 220 pf disc
020867 330 pf disc
020842 500 pf disc
017518 560 pf disc
060962 1000 pf disc
065862 1200 pf disc
023257 2000 pf disc
020875 3000 pf disc
019952 .0033 uf met poly
019956 .0068 uf met poly
019959 .01 uf met poly
019961 .015 uf met poly
019978 .018 uf met poly
019963 .022 uf met poly
019964 .027 uf met poly
019969 .047 uf met poly
019971 .068 uf met poly
019972 .082 uf met poly
019973 .10 uf met poly
019977 .15 uf met poly
019979 .22 uf met poly
019985 .47 uf met poly
017497 .1 uf ceramic
019742 1 uf NP lytic
019744 10 uf 16V
015126 100 uf 16V
021094 2200 uf 25V
018456 6000 uf 125V
021022 .1 uf 200V
018764 .01 uf 125V
015124 10 uf 16V

RESISTORS

016929 46.4 ohm 1% 1/4W
016930 56.2 ohm 1% 1/4W
016934 100 ohm 1% 1/4W
016937 178 ohm 1% 1/4W
016938 215 ohm 1% 1/4W
016943 464 ohm 1% 1/4W
016944 562 ohm 1% 1/4W
016945 681 ohm 1% 1/4W
016946 825 ohm 1% 1/4W
015718 1K 1% 1/4W
016951 1.21K 1% 1/4W
016952 1.47K 1% 1/4W
016953 1.78K 1% 1/4W
016955 2.15K 1% 1/4W
016957 2.74K 1% 1/4W
016958 3.32K 1% 1/4W
015580 4.64K 1% 1/4W
016960 5.62K 1% 1/4W

016961 6.81K 1% 1/4W
015582 10K 1% 1/4W
016965 12.1K 1% 1/4W
016966 14.7K 1% 1/4W
016968 21.5K 1% 1/4W
016971 33.2K 1% 1/4W
016973 38.3K 1% 1/4W
015583 46.4K 1% 1/4W
016974 56.2K 1% 1/4W
015585 100K 1% 1/4W
016979 215K 1% 1/4W
016984 464K 1% 1/4W
035590 2.2 ohm 10% 1/2W
061218 4.7 ohm 10% 1/2W
021170 100 ohm 10% 1/2W
070128 680 ohm 10% 1/2W
021220 2.2K 10% 1/2W
069823 5.6K 10% 1/2W
038180 4.7 meg 10% 1/2W
021096 15 ohm 10% 1W
012545 33 ohm 10% 1W
011310 33 ohm 10% 2W
020740 .22 ohm 10% 5W
020736 .10 ohm 10% 7W

TRANSISTORS

013569 RCA 29B
013568 RCA 30B
016537 MJ 15003
014409 MPS A18
016739 2N4401

DIODES

006260 1N4448
015003 1N5234B
018030 1N5393
020591 LED (power on)
022312 LED

CONTROLS

025674 1.5KL trim
019995 250KL trim
019734 10KRA (gain)
021899 10KA (effects send)
021931 50KA (effects receive)
019710 50KA (channel 1 bass)
019712 50KRA (channel 2 treble)
019715 50KA (channel 1 volume)
019708 50KL (channel 1 treble, master)
019714 50KA (channel 2 volume)
019709 50KL (reverb 1 & 2)
019713 50KRA (channel 2 bass)
019795 50KL (graphic equalizer)
019736 50KL (mid 1 & 2, treble)

SCREWS

011231 Reverb mounting
019277 Speaker mounting
022103 Corner mounting
022160 Glide mounting
022244 Handle mounting
022152 Logo mounting
010099 Heatsink mounting
014170 Transistor cover mounting
022491 Cable clamp mounting
030866 Chassis mounting (back lip)

WASHERS

022384 Lock, internal (jacks & effects controls)
016469 Lock, internal (fuseholders)
021505 Lock, internal (controls)
022293 Finish (on/off & ground switch)
020885 Flat (controls)
031153 Finish (input jack)
043760 Neoprene (fuseholders)

NUTS

021972 Handle mounting
016352 Input jack & effect's controls
020886 Control mounting
022012 On/off & ground switch mounting
031666 Fuseholder mounting
092494 Speaker mounting

CONNECTORS

020823 4-pin (PCB male)
020863 4-pin (PCB female)

020849 5-pin (PCB male)
020864 5-pin (PCB female)
021158 6-pin (PCB male)
022351 6-pin (PCB male)
021157 6-pin (PCB female)
020837 7-pin (PCB male)
020851 7-pin (PCB male)
020866 7-pin (PCB female)
020829 8-pin (PCB male)
017700 8-pin (PCB male)
013545 8-pin (PCB female)
021766 8-pin (PCB female)
020831 10-pin male
022370 10-pin (PCB female)
021357 12-pin (PCB male)
022352 12-pin (PCB male)
021341 12-pin (PCB female)
020021 5-pin (female, footswitch)
020496 3-pin (female)

MISCELLANEOUS

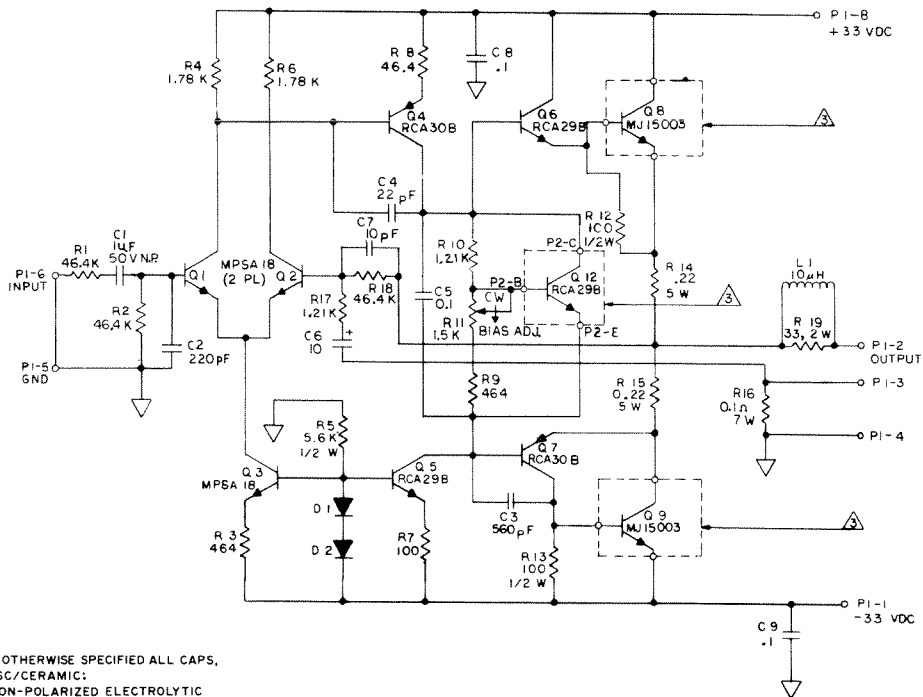
014521 Knob, effect's controls
019798 Knob, controls
007565 Bushing, strain relief (line cord)
022491 Cable clamp (line cord, reverb cables)
035897 Jack (effects send, preamp out)
014715 Jack (effects receive, power amp in)
021626 Jack (speaker)
020772 Jack (reverb in & out)
018594 Jack (input)
021667 Fuse 1A-250V slo-blo
019808 Knob, slide controls
016081 Clamp, cap.
017037 Clip fuseholder
037588 Fuse 5A-250V (speaker)
021584 Fuse 2A-250V slo-blo (line)
017171 Fuseholder
021198 Toggle switch (on/off)
010023 SPDT switch (ground)
020202 Slide switch (effects)
013528 IC, dual op-amp
019944 IC, CMOS
016652 IC, analog switch
020421 IC, dual d flip flop
020422 IC, hex Schmidt trigger
020270 IC, analog switch
014748 10 uhy inductor
019850 Heatsink
020050 Heatsink (mini)
020580 Line cord
013594 Rectifier diode bridge
023737 Accessory outlet
074211 Mica (TO-3)
017974 Mica (TO-220)
016348 Power transistor socket
020556 Transistor cover
019666 Control panel
020814 Rear panel, speaker
020817 Rear panel, power

EXPORT MODELS ONLY

020815 Rear panel, speaker (S/220V & 240V)
021106 Rear panel, power (S/220V & 240V)
061663 Toggle switch, on/of (S/220V & 240V)
013005 Fuseholder (S/220V & 240V)
013002 Line cord (S/220V & 240V)
010401 Bushing, strain relief, line cord (S/220V & 240V)
013113 Fuse, 1.25AT 250V (S/220V & 240V)
020798 Fuse, 5A 250V (S/220V & 240V)
020799 Fuse, 6.3A 250V secondary (S/220V)
016573 Fuseholder, clip type (S/220V)
016546 Insulation plate, fuseholder (S/220V)
013014 Clamp, strain relief (S/220V & 240V)
015701 Screw, clamp mounting (S/220V & 240V)
097360 Nut, clamp & fuse clip mounting (S/220V)
034769 Screw, fuse clip mounting (S/220V)
021564 Shield, fuseholder (S/220V)
021565 Shield, on/off switch (S/220V & 240V)
021124 240V label (240V)

Specifications Subject to Change Without Notice



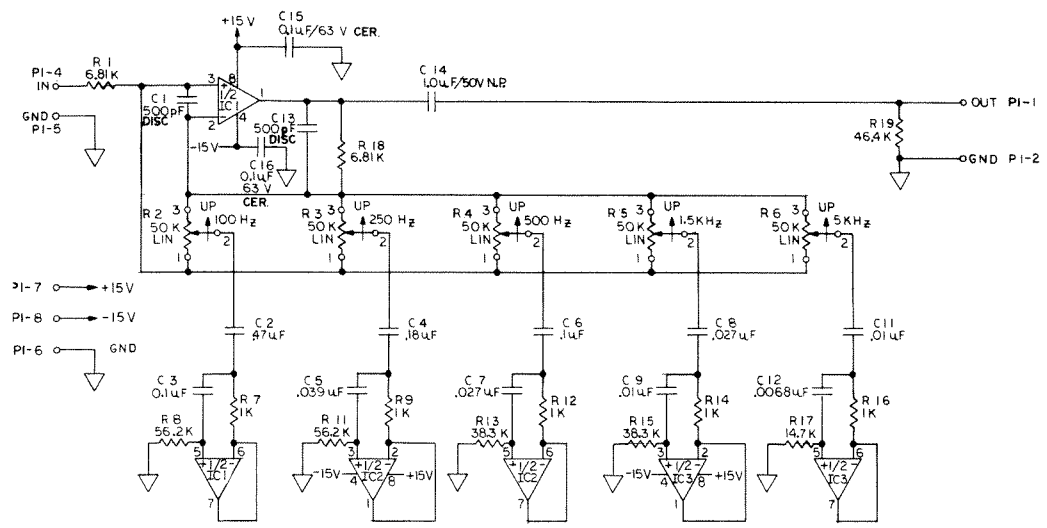


8. UNLESS OTHERWISE SPECIFIED ALL CAPS. ARE DISC/CERAMIC:
 NP = NON-POLARIZED ELECTROLYTIC
 P = POLARIZED ELECTROLYTIC
7. TRANSISTORS Q5,6 ARE RCA29A P/N 013569
 6. TRANSISTORS Q4,7 ARE RCA30A P/N 013368
 5. TRANSISTORS Q1,2,3 ARE M.P.S. A18 P/N 014409
 4. DIODES D1 & D2 ARE P/M 006260
- ▲ MOUNTED ON HEAT SINK**
2. ALL CAPACITOR VALUES ARE IN MICROFARADS
 1. ALL RESISTOR VALUES ARE IN OHMS ±1%, 1/4 W
- NOTE: UNLESS OTHERWISE SPECIFIED

Fender / ROGERS / Rhodes
 CBS MUSICAL INSTRUMENTS - A DIVISION OF CBS, INC.
 FULLERTON, CALIFORNIA 92631

PART NAME
**SCHEMATIC -
 75 WATT POWER AMPLIFIER**

RELEASE 7/72	SIZE C	PART NO. 019369	REV B
SCALE	MODEL NO.		



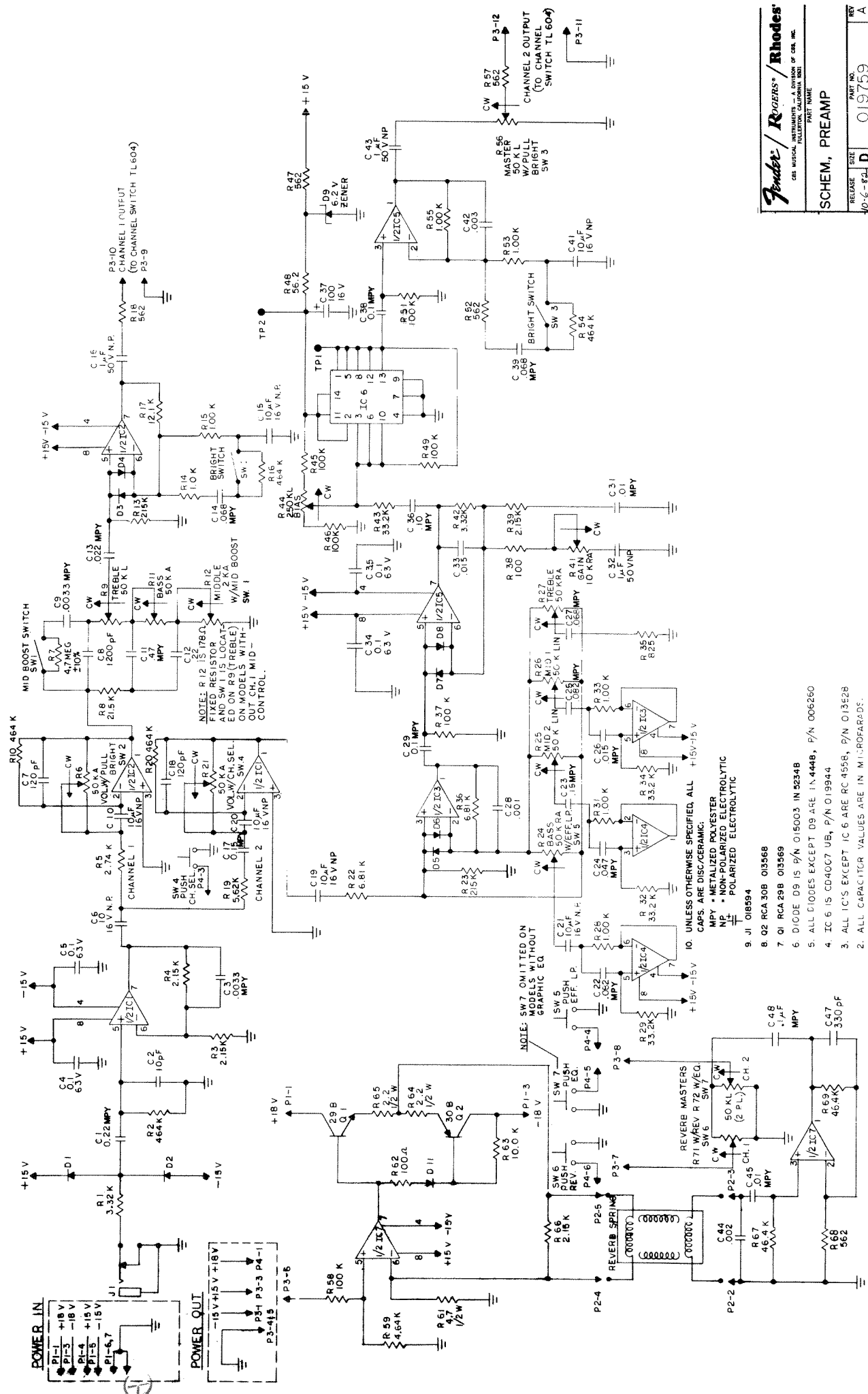
5. UNLESS OTHERWISE SPECIFIED, ALL CAPS. ARE METALLIZED POLYESTER.
 NP = NON-POLARIZED ELECTROLYTIC
4. ITEM DESIGNATIONS IN DECADES OF 10 ARE OMITTED.
 3. ALL IC'S ARE RC4558, P/N 013528.
 2. ALL CAPACITORS ARE 16V MINIMUM RATING.
 1. ALL RESISTOR ARE OHMS ±1%, 1/4 WATT.
- NOTES: UNLESS OTHERWISE SPECIFIED

Fender / ROGERS / Rhodes
 CBS MUSICAL INSTRUMENTS - A DIVISION OF CBS, INC.
 FULLERTON, CALIFORNIA 92631

PART NAME
**SCHEMATIC, 5 BAND GRAPHIC
 EQUALIZER**

RELEASE 4-10/77/82	SIZE C	PART NO. 019550	REV A
SCALE	MODEL NO. LONDON		





POWER IN

PI-1 +18V
PI-2 -18V
PI-3 +15V
PI-4 -15V
PI-5 -15V
PI-6,7

POWER OUT

P3-15 +15V
P3-14 -15V
P3-13 P4-1
P3-12

REVERB MASTERS

R71 W/REV R 72 W/REV
SW 6 SW 7

REVERB SPRING

P2-2
P2-3
P2-4
P2-5
P2-6
P2-7

REVERB MASTERS

R71 W/REV R 72 W/REV
SW 6 SW 7

REVERB SPRING

P2-2
P2-3
P2-4
P2-5
P2-6
P2-7

REVERB MASTERS

R71 W/REV R 72 W/REV
SW 6 SW 7

REVERB SPRING

P2-2
P2-3
P2-4
P2-5
P2-6
P2-7

REVERB MASTERS

R71 W/REV R 72 W/REV
SW 6 SW 7

REVERB SPRING

P2-2
P2-3
P2-4
P2-5
P2-6
P2-7

REVERB MASTERS

R71 W/REV R 72 W/REV
SW 6 SW 7

REVERB SPRING

P2-2
P2-3
P2-4
P2-5
P2-6
P2-7

REVERB MASTERS

R71 W/REV R 72 W/REV
SW 6 SW 7

REVERB SPRING

P2-2
P2-3
P2-4
P2-5
P2-6
P2-7

REVERB MASTERS

R71 W/REV R 72 W/REV
SW 6 SW 7

REVERB SPRING

P2-2
P2-3
P2-4
P2-5
P2-6
P2-7

NOTES: UNLESS OTHERWISE SPECIFIED

Fender / Rhodes® / Rhodes
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 FULLERTON, CALIFORNIA 92631

SCHEM, PREAMP

RELEASE SIZE PART NO. REV
 10-6-82 D 019759 A
 SCALE MODEL TEST USED ON INO. MOUNT LONDON

1. ALL RESISTOR VALUES ARE IN OHMS, /4 A., ± 1%

2. ALL CAPACITOR VALUES ARE IN MICROFARADS.

3. ALL IC'S EXCEPT IC 6 ARE RC 4558, P/N 013E28

5. ALL DIODES EXCEPT D9 ARE IN 4448, P/N 006260

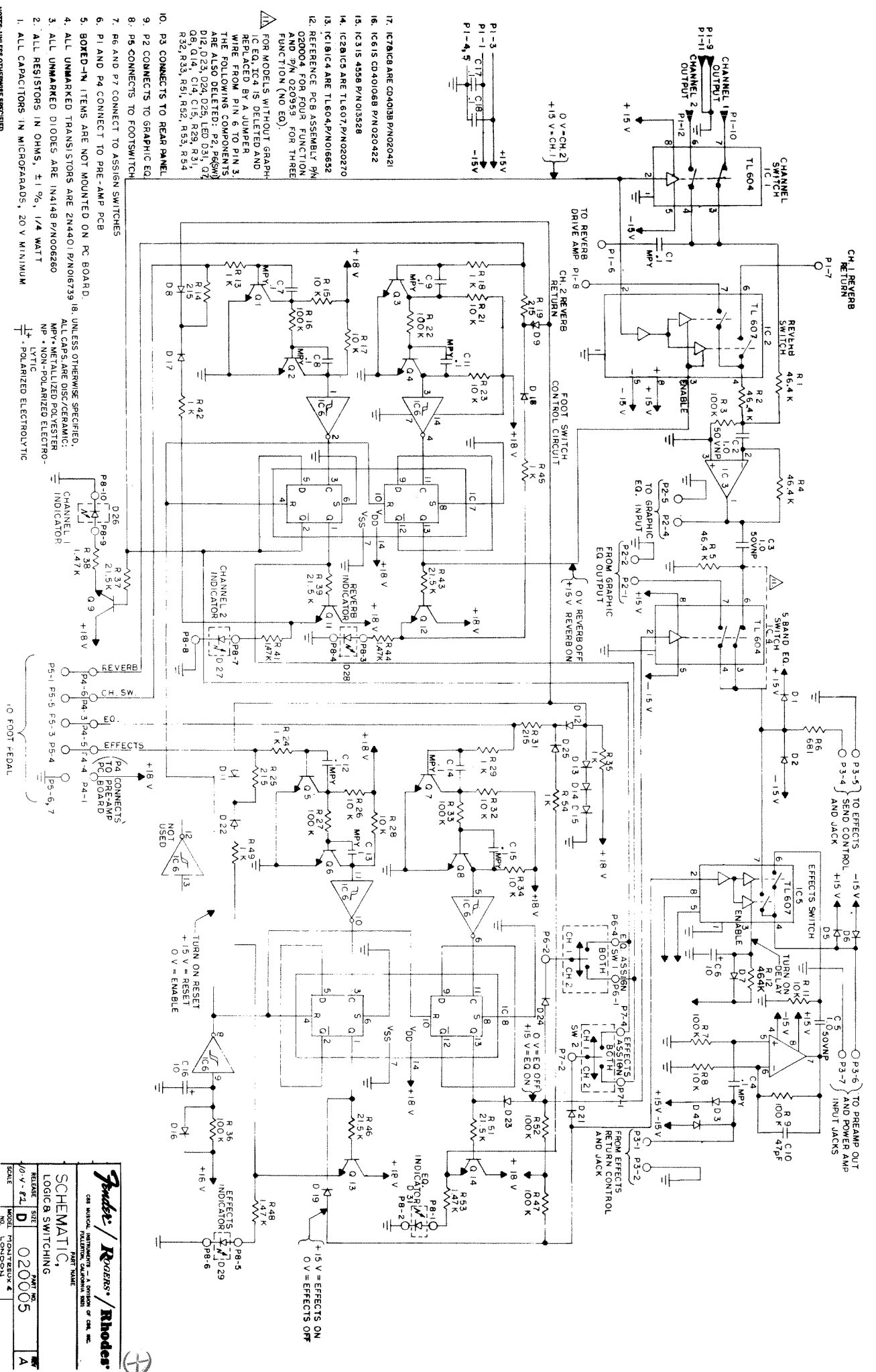
6. D10E D9 IS P/N 015003 IN 92348

7. 01 RCA 298 013569

8. 02 RCA 308 013568

9. J1 018594

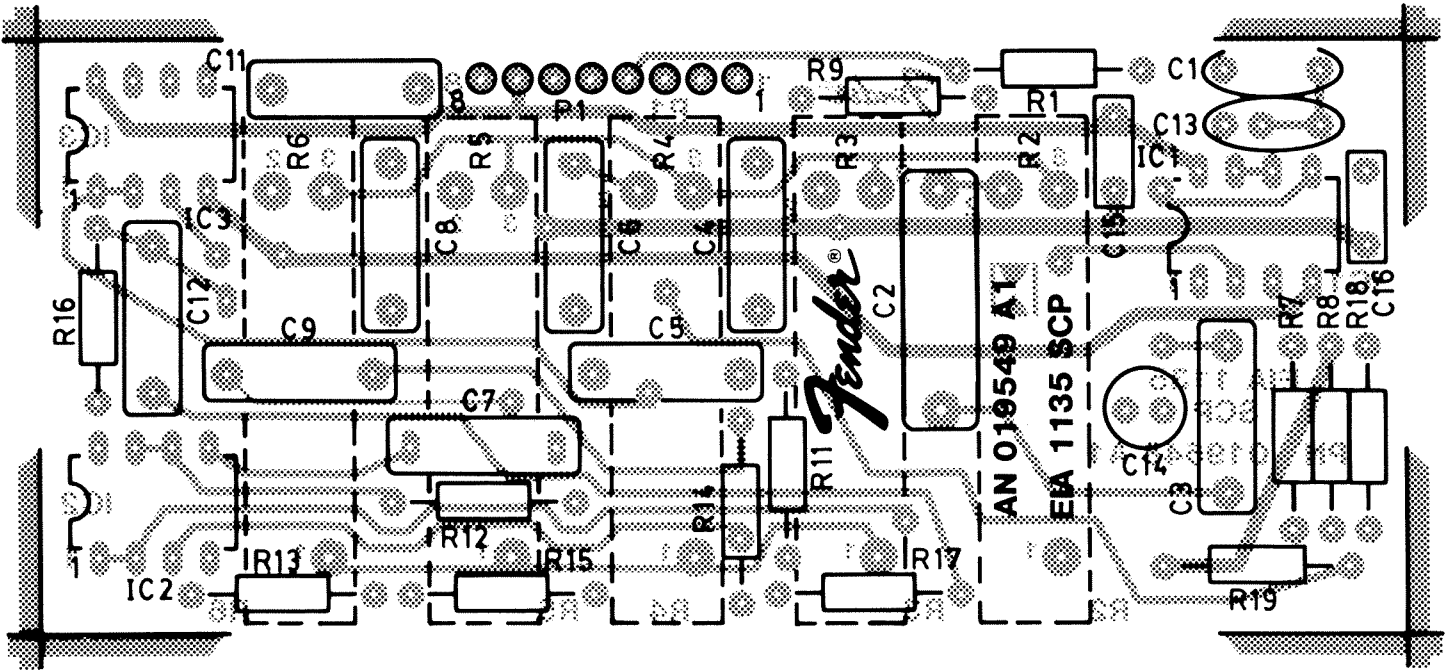
10. UNLESS OTHERWISE SPECIFIED ALL +15V-15V CAPS. ARE DISC/CERAMIC.
 MPY = METALIZED POLYESTER
 NP = NON-POLARIZED ELECTROLYTIC
 P = POLARIZED ELECTROLYTIC



1. IC7813A ARE CD4013B P/N020421
 2. IC615 CD40106B P/N020422
 3. IC315 4558 P/N015528
 4. IC2815 ARE TL607 P/N020270
 5. IC181C4 ARE TL604 P/N016692
 6. REFERENCE PCB ASSEMBLY P/N 020004 FOR FOUR FUNCTION AND P/N 020959 FOR THREE FUNCTION (NO EQ).
 7. FOR MODELS WITHOUT GRAPHIC EQ, REMOVE AND DETELED AND REWIRE FROM PIN 6 TO PIN 3. THE FOLLOWING COMPONENTS ARE ALSO DELETED: P2, P6SW, D12, D23, D24, D25, LED D31, D7, D8, D14, C14, C15, R29, R31, R32, R33, R51, R52, R53, R54
 8. P2 CONNECTS TO GRAPHIC EQ
 9. P5 CONNECTS TO FOOT SWITCH
 10. P6 AND P7 CONNECT TO ASSIGN SWITCHES
 11. P1 AND P4 CONNECT TO PRE-AMP PCB
 12. BORED-IN ITEMS ARE NOT MOUNTED ON PC BOARD
 13. ALL UNMARKED TRANSISTORS ARE 2N4401 P/N016739
 14. ALL UNMARKED DIODES ARE 1N4148 P/N006280
 15. ALL RESISTORS IN OHMS, $\pm 1\%$, 1/4 WATT
 16. ALL CAPACITORS IN MICROFARADS, 20 V MINIMUM
- NOTES: UNLESS OTHERWISE SPECIFIED:
 ALL CAPS ARE DISC/CERAMIC
 NP - NON-POLARIZED ELECTROLYTIC
 LYTC - POLARIZED ELECTROLYTIC

	SCHMATIC C₁ LOGIC & SWITCHING
PART NO. 020005 REV. 1/0-V-87L	PART NO. A

**FENDER LONDON REVERB & SHOWMAN AMPLIFIER
P.C. BOARD ASSEMBLY (019549-000)
(PARTS LIST)**



CAPACITORS

020842	500 pf 10% disc	C1, 13
019956	.0068 uf 10% met poly	C12
019959	.01 uf 10% met poly	C9, 11
019964	.027 uf 10% met poly	C7, 8
019967	.039 uf 10% met poly	C5
019973	.100 uf 10% met poly	C3, 6
019978	.18 uf 10% met poly	C4
019985	.47 uf 10% met poly	C2
017497	.1 uf 63V Ceramic	C15, 16
019742	1 uf 50V NP lytic	C14

RESISTORS

015718	1K 1% 1/4W	R7, 9, 12, 14, 16
016961	6.81K 1% 1/4W	R1, 18
016966	14.7K 1% 1/4W	R17
016973	38.3K 1% 1/4W	R13, 15
015583	46.4K 1% 1/4W	R19
016974	56.2K 1% 1/4W	R8, 11

CONTROLS

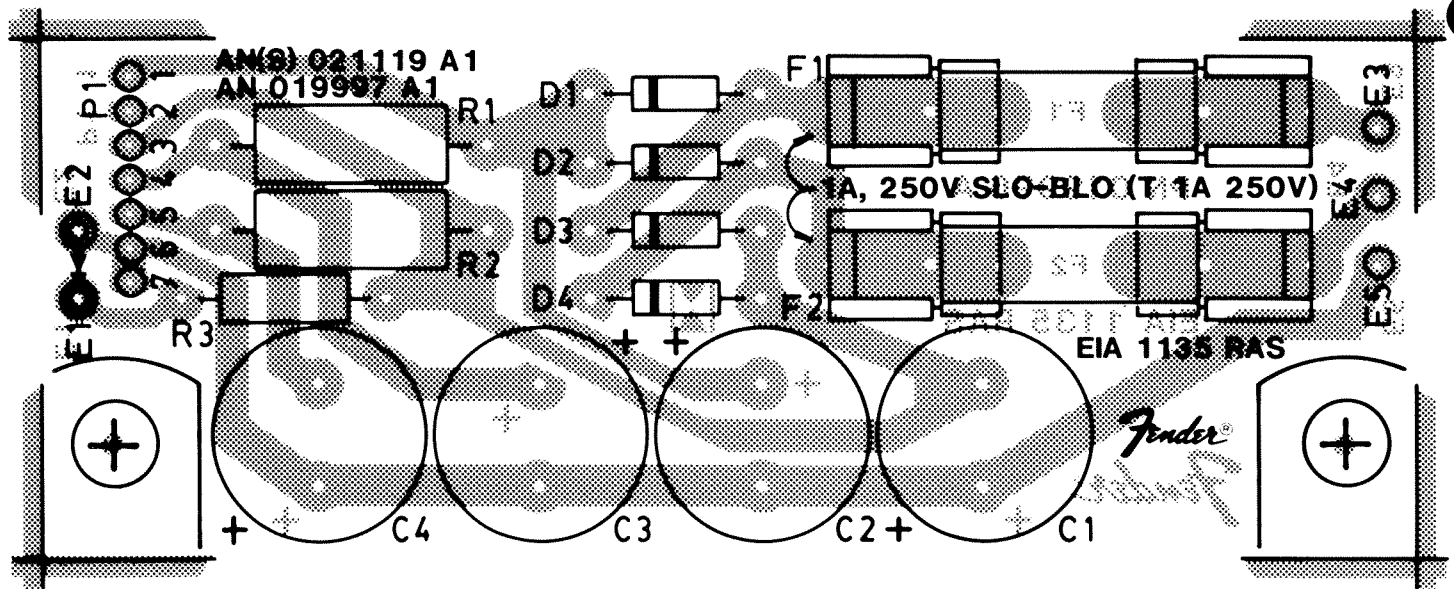
019795	50KL	R2, 3, 4, 5, 6
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MISCELLANEOUS

013528	Dual op-amp RCA4558	IC1, 2, 3
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FENDER LONDON REVERB & MONTREUX & SHOWMAN AMPLIFIER
P.C. BOARD ASSEMBLY (019997-000)
(PARTS LIST)



CAPACITORS

021094	2200 uf 25V	C1, 2, 3, 4
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RESISTORS

021220	2.2K 10% 1/2W	R3
021096	15 ohm 10% 1W	R1
012545	33 ohm 10% 1W	R2

DIODES

018030	1N5393	D1, 2, 3, 4
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MISCELLANEOUS

021667	Fuse, 1A-250V Slo Blo	F1, 2
017037	Clip fuseholder	
020894	Bracket	



FENDER LONDON REVERB & SHOWMAN AMPLIFIER

P.C. BOARD ASSEMBLY

(019758-000)

(PARTS LIST)

CAPACITORS

020883	10 pf disc	C2
020925	120 pf disc	C7, 18
020867	330 pf disc	C47
060962	1000 pf disc	C28
065862	1200 pf disc	C8
023257	2000 pf disc	C44
020875	3000 pf disc	C42
019952	.0033 uf met poly	C3, 9
019959	.01 uf met poly	C31, 45
019961	.015 uf met poly	C26, 33
019963	.022 uf met poly	C13
019969	.047 uf met poly	C24
019971	.068 uf met poly	C14, 27, 39
019972	.082 uf met poly	C22, 25
019973	.10 uf met poly	C29, 36, 38, 48
019977	.15 uf met poly	C17, 23
019979	.22 uf met poly	C1, 12
019985	.47 uf met poly	C11
017497	.1 uf ceramic	C4, 5, 34, 35
019742	1 uf NP lytic	C16, 32, 43
019744	10 uf 16V	C6, 10, 15, 19, 20, 21, 41
015126	100 uf 16V	C37

RESISTORS

016930	56.2 ohm 1% 1/4W	R48
016934	100 ohm 1% 1/4W	R38, 62
016937	178 ohm 1% 1/4W	R12
016944	562 ohm 1% 1/4W	R47, 52, 57, 68
016946	825 ohm 1% 1/4W	R35
015718	1K 1% 1/4W	R14, 15, 28, 31, 33, 53, 55
016955	2.15K 1% 1/4W	R3, 4, 39, 66
016957	2.74K 1% 1/4W	R5
016958	3.32K 1% 1/4W	R1, 42
015580	4.64K 1% 1/4W	R59
016960	5.62K 1% 1/4W	R19
016961	6.81K 1% 1/4W	R22, 36
015582	10K 1% 1/4W	R18, 63
016965	12.1K 1% 1/4W	R17
016968	21.5K 1% 1/4W	R8
016971	33.2K 1% 1/4W	R29, 32, 34, 43
015583	46.4K 1% 1/4W	R67, 69
015585	100K 1% 1/4W	R37, 45, 46, 49, 51, 58
016979	215K 1% 1/4W	R13, 23
016984	464K 1% 1/4W	R2, 10, 16, 20, 54
038180	4.7 meg 10% 1/4W	R7
035590	2.2 ohm 10% 1/2W	R64, 65
061218	4.7 ohm 10% 1/2W	R61

TRANSISTORS

013569	RCA 29B	Q1
013568	RCA 30B	Q2

DIODES

006260	1N4448	D1, 2, 3, 4, 5, 6, 7, 8, 11
015003	1N5234B	D9

CONTROLS

019995	250KL	R44
019734	10KRA	R41
019736	50KL	R25, 26
019710	50KA	R11
019712	50KRA	R27
019715	50KA	R6
019708	50KL	R9, 56
019714	50KA	R21
019709	50KL	R71, 72
019713	50KRA	R24

CONNECTORS

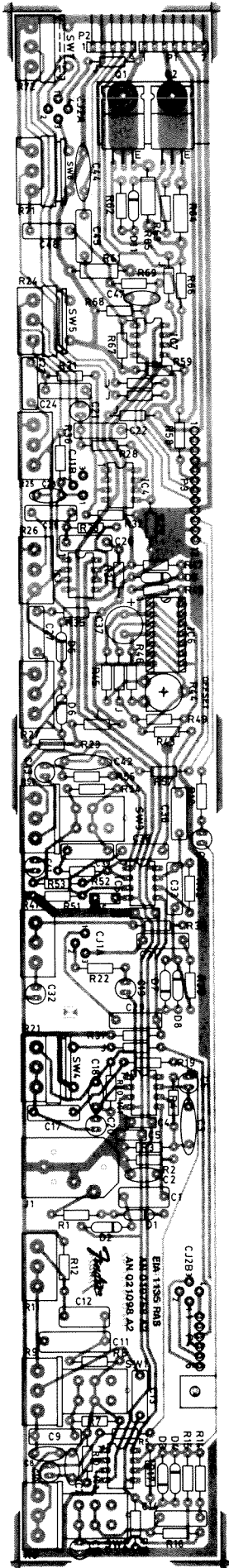
020849	5-pin (male)	P2
022351	6-pin (male)	P4
020851	7-pin (male)	P1
022352	12-pin (male)	P3

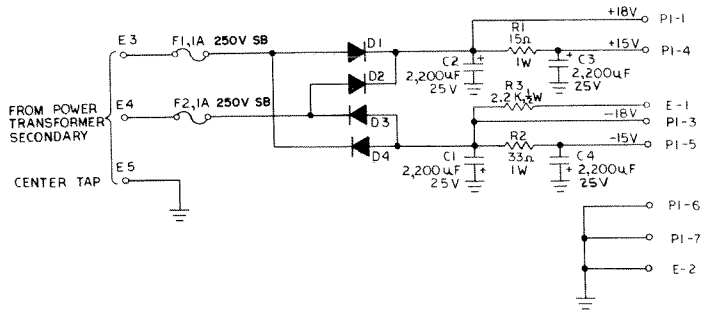
MISCELLANEOUS

018594	Phone jack	J1
013528	Dual op-amp RCA4558	IC1, 2, 3, 4, 5, 7
019944	CMOS	IC6
022178	Screw	
097360	Lock nut	



FENDER LONDON REVERB & SHOWMAN AMPLIFIER
P.C. BOARD ASSEMBLY
(019758-000)





1. DIODES ARE 1.5 AMP 200 VOLT, P/N 018030

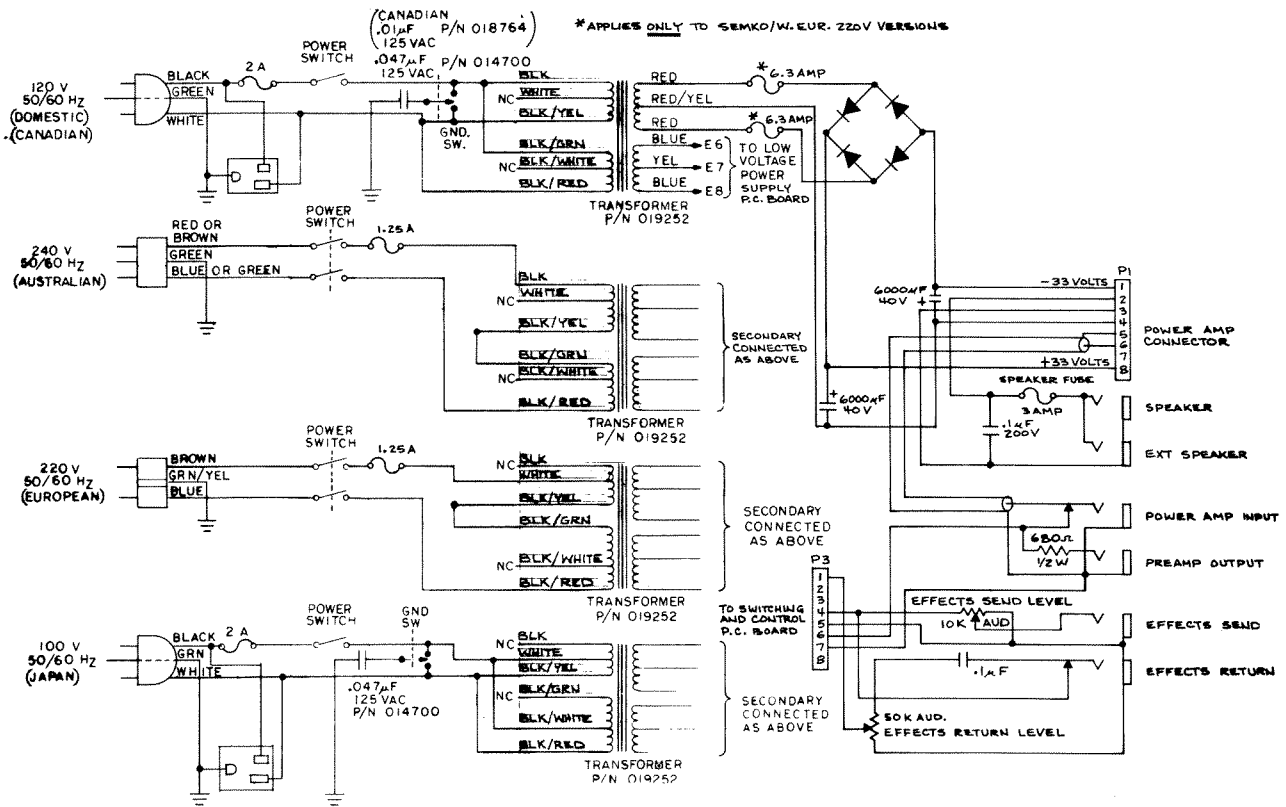
Fender/Rogers/Rhodes
 CBS MUSICAL INSTRUMENTS — A DIVISION OF CBS, INC.
 FOLEY, CALIFORNIA 92333

PART NAME
SCHEMATIC, LOW VOLTAGE P/S

RELEASE # 10-7-82
 SCALE 1/8"=1"

PART NO. 020051
 MODEL USED ON LONDON, MONT.

REV. A



NOTE: UNLESS OTHERWISE SPECIFIED

Fender/Rogers/Rhodes
 CBS MUSICAL INSTRUMENTS — A DIVISION OF CBS, INC.
 FOLEY, CALIFORNIA 92333

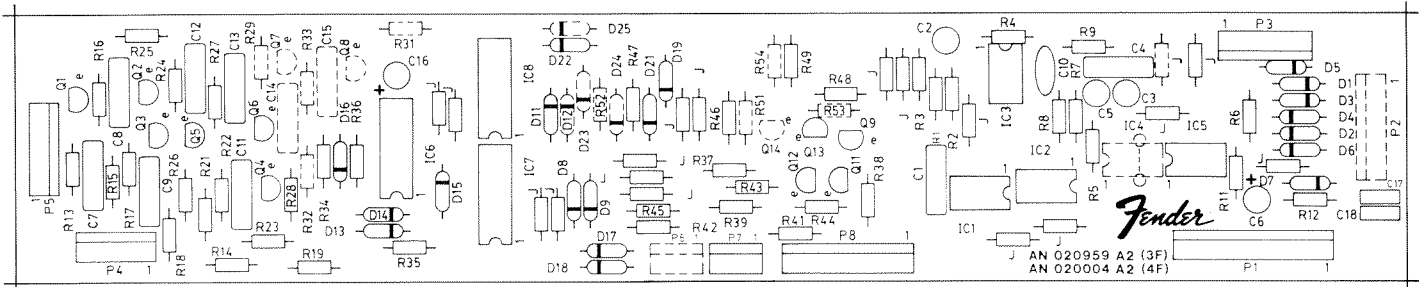
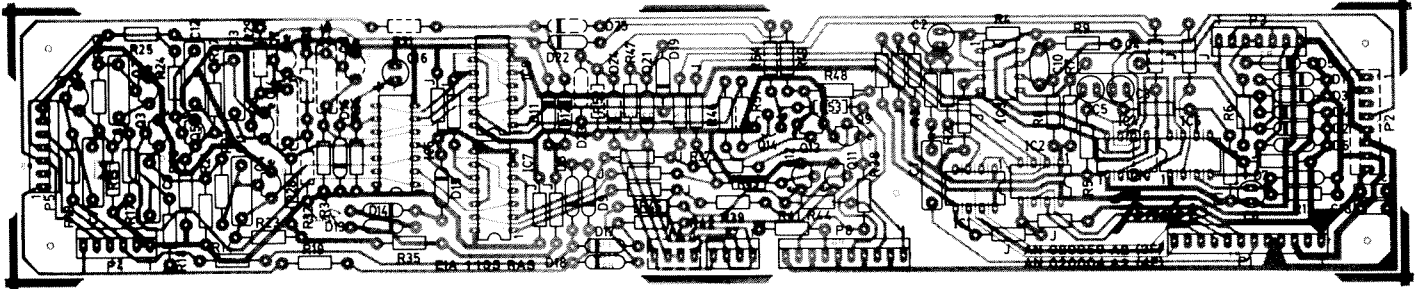
PART NAME
SCHEMATIC, A.C. WIRING MONTREUX/LONDON

RELEASE # 10-4-84
 SCALE 1/8"=1"

PART NO. 020450
 MODEL

REV. C

FENDER LONDON REVERB & SHOWMAN AMPLIFIER P.C. BOARD ASSEMBLY (020004-000) (PARTS LIST)



CAPACITORS

020909	47 pf disc
020925	120 pf disc
019973	.1 uf met poly
017497	.1 uf ceramic
019742	1 uf NP lytic
015124	10 uf 16V

RESISTORS

016938	215 ohm 1% 1/4W
016945	681 ohm 1% 1/4W
015718	1k 1% 1/4W

016952	1.47K 1% 1/4W
015582	10K 1% 1/4W

016968	21.5K 1% 1/4W
015583	46.4K 1% 1/4W
015585	100K 1% 1/4W

016984	464K 1% 1/4W
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TRANSISTORS

016739	2N4401
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C10
C7, 9, 12, 14
C1, 4, 8, 11, 13, 14
C17, 18
C2, 3, 5
C6, 16

R14, 19, 25, 31
R6
R13, 18, 24, 29, 35, 42, 45, 49, 54
R38, 41, 44, 48, 53
R8, 11, 15, 17, 21, 23, 26, 28, 32, 34
R37, 39, 43, 46, 51
R1, 2, 4, 5
R3, 7, 9, 16, 22, 27, 33, 36, 47, 52
R12

Q1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14
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DIODES

006260	1N4448
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D1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25
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CONNECTORS

020823	4-pin (male)
021158	6-pin (male)
020828	7-pin (male)
020829	8-pin (male)
020831	10-pin (male)
021357	12-pin (male)

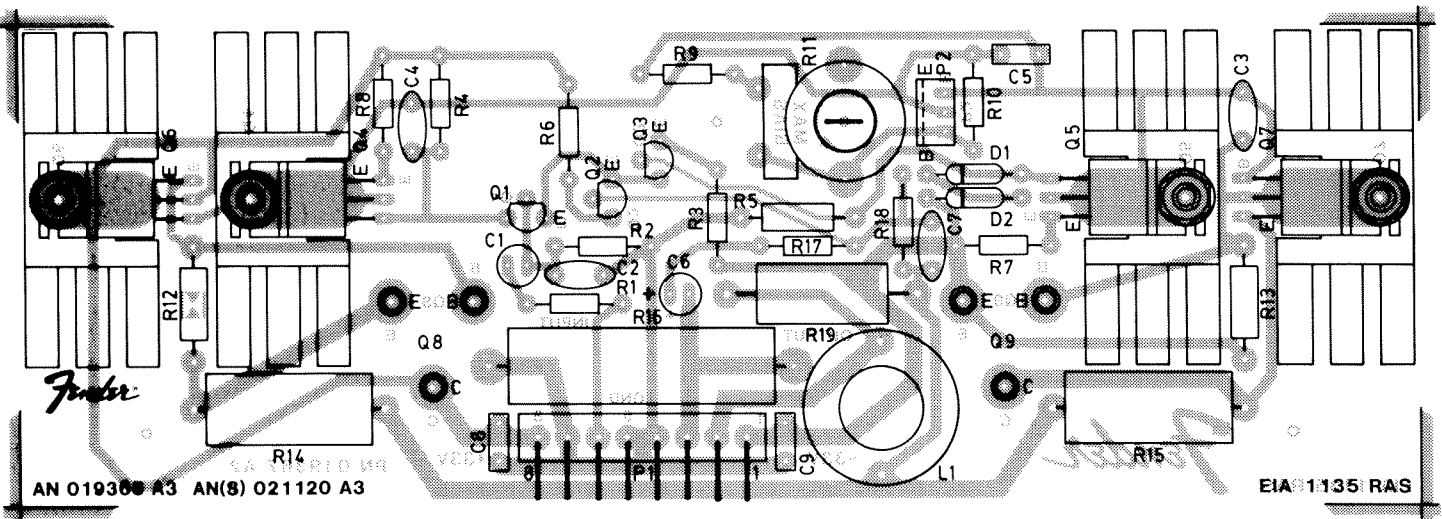
P6, 7
P4
P3, 5
P2
P8
P1

MISCELLANEOUS

013528	Dual op-amp RCA4558
016652	Analog sw. TL604
020421	Dual D flip flop CD40138
020422	Hex Schmidt Trigger CD401068
020270	Analog sw. TL607

IC3
IC1, 4
IC7, 8
IC6
IC2, 5

FENDER LONDON REVERB & MONTREUX AMPLIFIER P.C. BOARD ASSEMBLY (019368-000) (PARTS LIST)



CAPACITORS

020883	10 pf disc	C7
004026	22 pf disc	C4
007029	220 pf disc	C2
017518	560 pf disc	C3
017497	.1 uf ceramic	C5, 8, 9
019742	1 uf NP lytic	C1
015124	10 uf 16V	C6

RESISTORS

016929	46.4 ohm 1% 1/4W	R8
016934	100 ohm 1% 1/4W	R7
016943	464 ohm 1% 1/4W	R3, 9
016951	1.21K 1% 1/4W	R10, 17
016953	1.78K 1% 1/4W	R4, 6
015583	46.4K 1% 1/4W	R1, 2, 18
021170	100 ohm 10% 1/2W	R12, 13
069823	5.6K 10% 1/2W	R5
011310	33 ohm 10% 2W	R19
020740	.22 ohm 10% 5W	R14, 15
020736	.10 ohm 10% 7W	R16

TRANSISTORS

014409	MPS A18	Q1, 2, 3
013569	RCA 29B	Q5, 6
013568	RCA 30B	Q4, 7

DIODES

006260	1N4448	D1, 2
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CONTROLS

025674	1.5KL	R11
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CONNECTORS

017700	8-pin (male)	P1
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MISCELLANEOUS

014748	10 uhy inductor	L1
017415	Socket pin	
022178	Screw	
097360	Lock nut	
020050	Heatsink	



