

# '59 BASSMAN

p/n 021-7100-000 (120V)

## SERVICE MANUAL



### CONTENTS:

- Notices
- Parts lists:
  - PCB assembly
  - Chassis assembly
  - Cabinet assembly
  - Miscellaneous
- Schematics/diagrams

# '59 BASSMAN

(This is the model name for warranty claims)

## SERVICE MANUAL

February 1990

### IMPORTANT NOTICE:

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Only Fender specified part numbers are to be used for warranty repair service. It is recommended they also be used for post-warranty maintenance and repair.

Parts marked with an asterisk (\*) indicate the required use of that specific part. This is necessary for RELIABILITY and SAFETY requirements. **DO NOT USE A SUBSTITUTE!**

A coded naming convention is used in the description of certain parts. The codes and what they mean are as follows:

#### **CAPACITOR CODES**

CAP AE = Aluminum Electrolytic  
CAP CA = Ceramic Axial  
CAP CD = Ceramic Disk  
CAP MPF = Metalized Polyester Film  
CAP MY = Mylar  
CAP PFF = Polyester Film/Foil

#### **RESISTOR CODES**

RES CC = Carbon Comp  
RES CF = Carbon Film  
RES FP = Flame Proof  
RES MF = Metal Film  
RES WW = Wire Wound

#### **HARDWARE CODES**

BLX = Black Oxide  
CR = Chrome Plated  
HWH = Hex Washer Head  
M = Machine Screw  
NI = Nickel Plated  
OHP = Oval Head Phillips  
PB = Particle Board  
PHP = Pan Head Phillips  
PHPS = Pan Head Phillips Sems  
SMA = Sheet Metal "A" Point  
SMB = Sheet Metal "B" Point  
SS = Stainless Steel  
TF = Thread Forming  
ZI = Zinc Plated

# '59 BASSMAN PARTS LIST

## \*\*\* PCB ASSEMBLY \*\*\*

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	036358	PCB FAB	PC1 (BLANK)
1	036359	PCB ASSEMBLY (120V)	PCB1 (STUFFED)
1	036634	PCB ASSEMBLY (EXPORT)	PCB1 (STUFFED)
2	036464	CONTROL 1M "LINEAR SPL D"	R10,11 (VOL-NOR,BRI)
1	036465	CONTROL 250K "LINEAR D"	R18 (TREB)
1	036466	CONTROL 1M "10% AUDIO"	R19 (BASS)
2	036467	CONTROL 25K "LINEAR D"	R20,23 (MID,PRES)
4	024833	CAPACITOR RF .022uF 400V	C2,3,7,8
2	024855	CAPACITOR RF .1uF 630V	C12,13
1	024846	CAPACITOR RF .047uF 630V	C15
1	024854	CAPACITOR RF .1uF 400V	C6
1	024853	CAPACITOR RF .1uF 250V	C9,10
1	069724	CAPACITOR CD 100pF 1KV	C4
1	020917	CAPACITOR CD 250pF 1KV	C5
1	020909	CAPACITOR CD 47pF 1KV	C11
2	028953	CAPACITOR AE 100uF 350V	C16,17
2	024820	CAPACITOR AE 47uF 350V	C18,19
3	<del>024855</del>	CAPACITOR AE 22uF 500V	C20,21,24
2	031069	CAPACITOR RE 10uF 100V	C22,23
1	028479	CAPACITOR RE 220uF 25V	C1
1	018764	CAPACITOR AC .01uF 125VAC	C14 (DOMESTIC ONLY)
1	036469	RESFP 4.7K 1/2W 5%	R38
1	036470	RESFP 10K 1/2W 5%	R39
2	036468	RESFP 470 1/2W 5%	R32,33
1	027353	RESCF 100K 1W 5%	R16
1	036621	RESCF 6.8K 1W 5%	R21
4	025116	RESCF 100K 1/2W 5%	R8,9,14,29
1	025115	RESCF 82K 1/2W 5%	R28
2	025109	RESCF 47 1/2W 5%	R42,43
4	025117	RESCF 220K 1/2W 5%	R34-37
4	024995	RESCF 68K 1/4W 5%	R1,2,4,5
4	025069	RESCF 1M 1/4W 5%	R3,6,24,25
2	024964	RESCF 820 1/4W 5%	R7,15
2	025060	RESCF 270K 1/4W 5%	R12,13
1	024977	RESCF 4.7K 1/4W 5%	R22
2	025059	RESCF 220K 1/4W 5%	R30,31
1	024988	RESCF 27K 1/4W 5%	R27
1	024961	RESCF 470 1/4W 5%	R26
1	024994	RESCF 56K 1/4W 5%	R41
1	024997	RESCF 100K 1/4W 5%	R17
2	024947	RESCF 47 1/4W 5%	R44,45

# '59 BASSMAN PARTS LIST

## \*\*\* PCB ASSEMBLY (CONTINUED) \*\*\*

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	028016	RESCF 22K 1/4W 5%	R40
1	064089	DIODE 1N4003	CR2
1	028503	THERMISTOR	TH-1
9	025936	STAND-OFF NY 3/8	ST1-9
7	026000	FASTON .187	CP23-25,31-34
20	025802	FASTON .250 (DOMESTIC)	CP1-7,9-11,13,17-19, 15,21,22,35-37
23	025802	FASTON .250 (EXPORT)	CP1-4,6-8,10,12-14,16 18,20-22,26-30,36,37
2	013681	FUSE 5mm 5AT	F2,6 (EXPORT)
2	013111	FUSE 5mm 500mA	F3,4 (EXPORT)
1	013109	FUSE 5mm250mA	F5 (EXPORT)
10	020775	FUSE CLIP 5mm	XF2-6 (EXPORT)
2	025996	FUSE CLIP DUAL	XF7
1	036637	WIRE SET	WS1
4	026315	FASTON .187	FT1-4 (FOR WS1)

## \*\*\* CHASSIS ASSEMBLY \*\*\*

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	036651	CHASSIS ASS'Y COMPLETE	CH1 (120V)
1	036652	CHASSIS ASS'Y COMPLETE	CH1 (240V)
1	036653	CHASSIS ASS'Y COMPLETE	CH1 (220V)
1	036654	CHASSIS ASS'Y COMPLETE	CH1 (100V)
1	036138	CHASSIS w/SCREEN - 3A	CS1 (100/120V)
1	036656	CHASSIS w/SCREEN - 1.6A	CS1 (220/240V)
1	036494	COVER, CAPACITOR	CC1
1	036483	TRANSFORMER POWER	T2 (120V)
1	036484	TRANSFORMER POWER	T2 (100/220/240V)
1	036485	TRANSFORMER OUTPUT	T1
1	036486	CHOKE	L1
1	026541	CABLE ASS'Y POWER	LC1 (100/120V)
1	033331	CABLE ASS'Y POWER	LC1 (220/240V)
4	068270	JACK PHONE	J1-4 (INPUTS)
4	024018	JACK PHONO	J5-8 (SPEAKERS)
1	036638	WIRE SET	WS2 (120V)
5	025737	FASTON .250	FT5-9 (FOR WS2)
9	026475	FASTON .250 RT. ANGLE	FT10-18 (FOR WS2)
1	036715	WIRE SET	WS3 (100/220/240V)
4	025737	FASTON .250	FT18-21 (FOR WS3)
3	026475	FASTON .250 RT. ANGLE	FT22-24 (FOR WS3)
2	023556	TUBE 6L6GC	V4,5

# '59 BASSMAN PARTS LIST

## \*\*\* CHASSIS ASSEMBLY (CONTINUED) \*\*\*

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
3	013341	TUBE 12AX7A/7025	V1-3
1	036472	RECTIFIER OCTAL	CR1
1	036570	SWITCH TOGGLE DPST	S1 (POWER ON/OFF)
1	036571	SWITCH TOGGLE SPDT	S2 (GROUND)
1	036572	SWITCH TOGGLE SPST	S3 (STANDBY)
1	036702	FUSE HOLDER 3AG	XF1 (100/120V)
1	036703	FUSE HOLDER 5mm	XF1 (220/240V)
1	077982	FUSE 3A QUICK ACTING	F1 (100/120V)
1	020793	FUSE 1.6A 5mm	F1 (220/240V)
1	039982	FUSE 4A QUICK ACTING	F7 (100/120V)
1	020794	FUSE 2A 5mm	F7 (220/240V)
1	021741	LAMP HOLDER	H1
1	032219	COLLAR	CL1
1	036595	LENS JEWEL	LN1
1	021642	LAMP T47	LA1
3	023606	SOCKET 9 PIN	V1-3
2	023580	SOCKET OCTAL	V4,5
1	026038	BUSHING STRAIN RELIEF	SR1
3	018022	BUSHING SNAP	SR2-4
2	031073	STAND OFF 3/8"	SF1,2
3	031091	TUBE CLAMP	TC1-3
6	036620	KNOB POINTER	K1-6
1	036493	BRACKET TRANSFORMER MTG	BK1
3	022293	WASHER FW .473x.750x.035	WW1-3 (AT SWITCHES)
4	031153	WASHER FW .378x.614x.021	WW4-7 (INPUT JACKS)
12	029913	SCREW TF 6-32x3/16 PHP ZI	SC1-12 (TUBE SOCKETS)
2	029913	SCREW TF 6-32x3/16 PHP ZI	SC13,14 (CHOKE)
4	029913	SCREW TF 6-32x3/16 PHP ZI	SC15-18 (CAPAC COVER)
8	022186	SCREW M 6-32x3/8 PHP NI	SC19-26 (PHONO JACKS)
9	028937	SCREW TF 6-32x5/8 PHP ZI	SC27-35 (PCB)
4	026553	SCREW M 8-32x3/8 PHP BL	SC36-39 (OUTPUT XFMR)
4	031184	SCREW M 6-32x1/4 PHP BL	SC40-43 (PCB/CHASSIS)
8	022004	NUT KEPS 8-32	NT1-8 (XFMR)
8	069393	NUT KEPS 6-32	NT9-16 (PHONO JACKS)
1	031625	NUT HEX 11/16-27	NT17 (LAMP)

## \*\*\* CABINET ASSEMBLY \*\*\*

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	036113	CABINET ASS'Y COMPLETE	CB1
1	036115	UPPER BACK ASS'Y	UB1
1	036116	LOWER BACK ASS'Y	LB1

# '59 BASSMAN PARTS LIST

## \*\*\* CABINET ASSEMBLY (CONTINUED) \*\*\*

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
8	016188	SCREW WD 6x1	SC58-65 (BACK MTG)
1	036114	GRILLE BAFFLE ASS'Y	GB1
1	036131	GRILLE CLOTH OXBLOOD	GC1
6	036618	SCREW M 6-32x1-1/2 PHS	SC44-49 (GRILLE MTG)
6	069393	NUT KEPS 6-32	NT1-6 (GRILLE MTG)
6	022327	WASHER FW	WW8-13 (GRILLE MTG)
1	036129	HANDLE	HD1
2	036478	HANDLE BRACKET LOOP	HL1,2
4	036649	SCREW M 8-32x3/4 PHS NI	SC50-53 (HANDLE MTG)
4	064162	TEE NUT 8-32	TN1-4 (HANDLE MTG)
4	024653	GLIDE	CG1-4
4	022483	GLIDE INSERT	GL1-4
4	026625	SCREW WD	SC54-57 (GLIDE MTG)
1	036343	TWEED COVERING	VY1

## \*\*\* MISCELLANEOUS \*\*\*

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
3	023598	TUBE SHIELD	VS1-3
4	036457	SPEAKER 10" 8 OHM	SP1-4
16	012749	SCREW	SC66-81 (SPEAKER MTG)
16	022004	NUT KEPS 8-32	NT7-22 (SPEAKER MTG)
2	036619	SCREW M 10-32x1-1/2 TH	SC82,83 (CHASSIS MTG)
2	025819	NUT KEPS 10-32	NT23,24 (CHASSIS MTG)
1	015990	SCREW M 10-32x1-1/2 TH	SC84 (DUMMY CHAS MTG)
1	036701	WIRE SET	WS4
4	024000	PHONO PLUG	PP1-4 (FOR WS4)
8	010735	FASTON .205	FT25-32 (FOR WS4)
1	036491	NAMEPLATE	NP1
1	036686	BRACKET XFMR SUPPORT	BX1
1	020912	BUMPER	BP1 (FOR XFM BRACKET)
1	022491	CABLE CLAMP	CM1
3	029828	SCREW PB 8x3/4 ZI	SC85-87 (CLAMP/BRACK)
4	036650	ESCUTCHEON PIN #18x3/8 NI	EP1-4
1	036655	OWNERS MANUAL	OM1
1	036357	SCHEMATIC	SM1

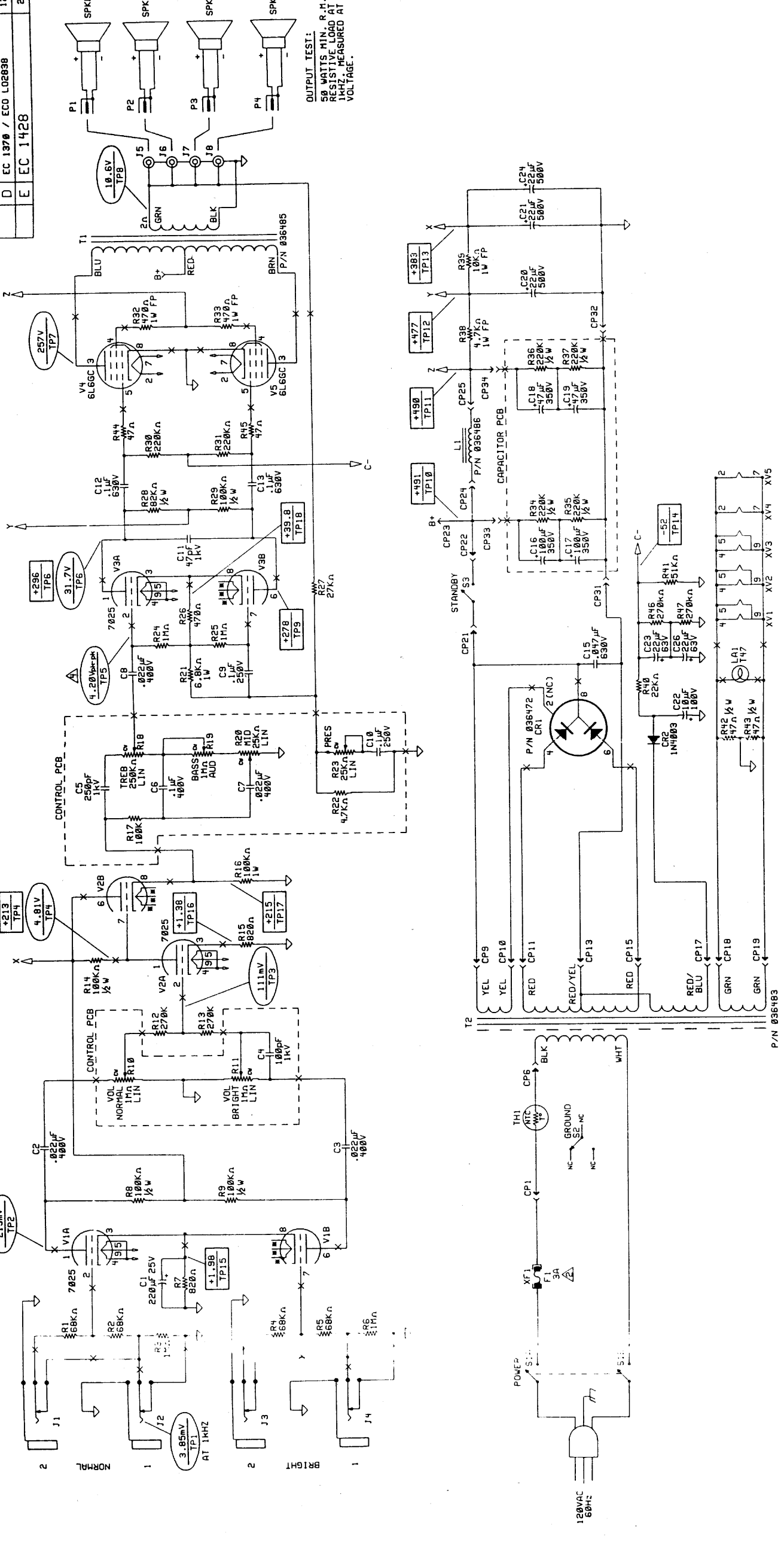






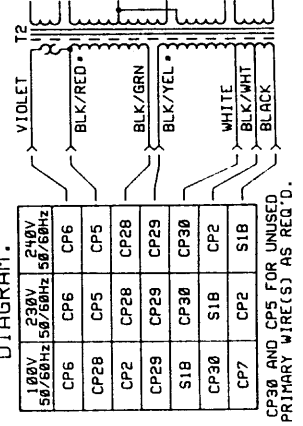


REVISIONS			
ZONE	REV. DESCRIPTION	DATE	APPROVED
	A RELEASED PR #143	2/16/90	
	B ECO L02080	8/20/90	
	C EC 784	9/11/91	
	D EC 1370 / ECO L02898	12/27/94	
	E EC 1428	2/27/95	M/W



OUTPUT TEST:  
50 WATTS MIN. R.H.S. INTO 2Ω  
RESISTIVE LOAD AT 5% T.H.D.;  
1KHZ. MEASURED AT RATED LINE  
VOLTAGE.

EXPORT TRANSFORMER  
PRIMARY WIRING  
DIAGRAM.



- NOTES:
1. ALL RESISTORS 1/4 WATT CARBON  
FILM UNLESS OTHERWISE NOTED.
  2. LINE FUSE IS 30 IN 100V AND 120V  
MODELS F1, 6A IN 200V AND 240V MODELS.
  3. ALL VOLTAGES MEASURED TO GROUND  
USING A 10V OR 100V LEADS.  
INPUT IMPEDANCE OF ALL COILS  
FULL CW DC VOLTAGES MEASURED  
WITH NO SIGNAL PRESENT. VOLTAGES  
MAY VARY +/- 20%. VOLTAGES MEASURED  
AFTER 5 MINUTE WARMUP.
  4. MEASURED WITH AN OSCILLOSCOPE  
USING A X10 PROBE.
  5. X - WIRE CONNECTION.
  6. SIX-DIGIT NUMBERS ARE FENDER  
PART NUMBERS.
  7. INSTANCES NOT USED: C14 CP3 CP4 CP8 CP12 CP14 CP16 CP20 CP26 CP27

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Corona, CA 91728 USA

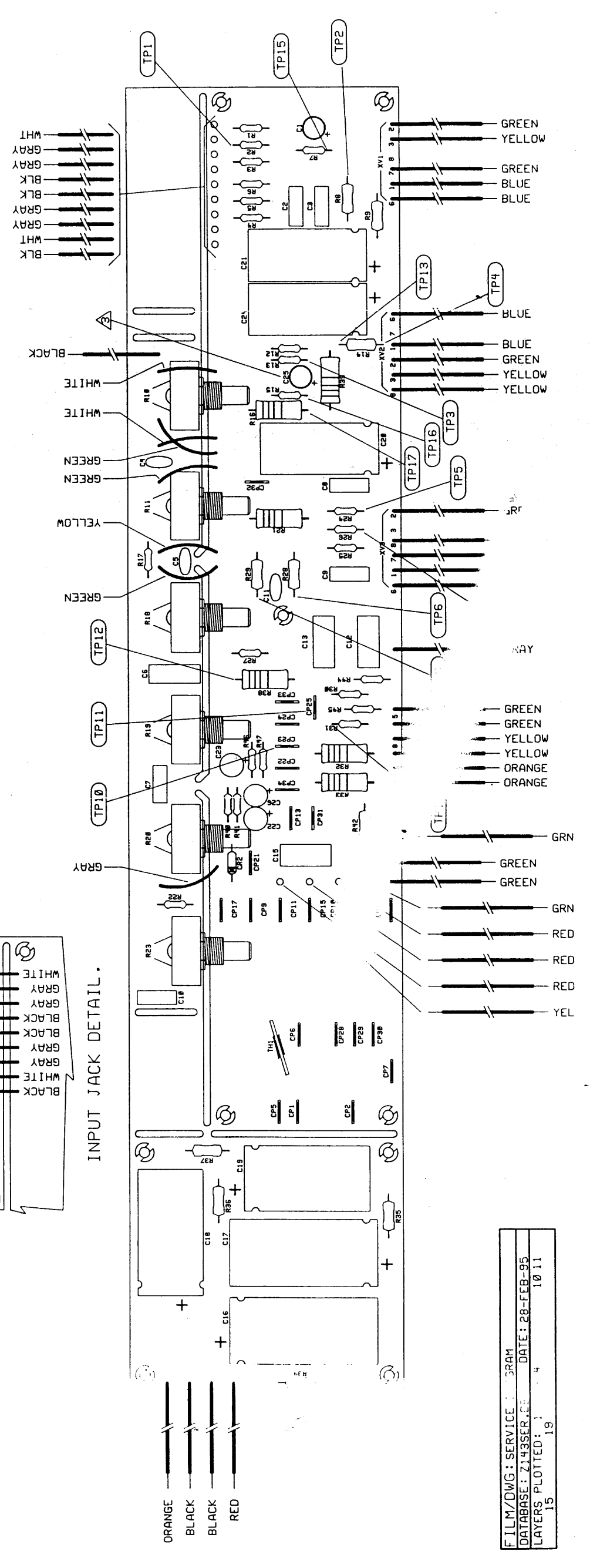
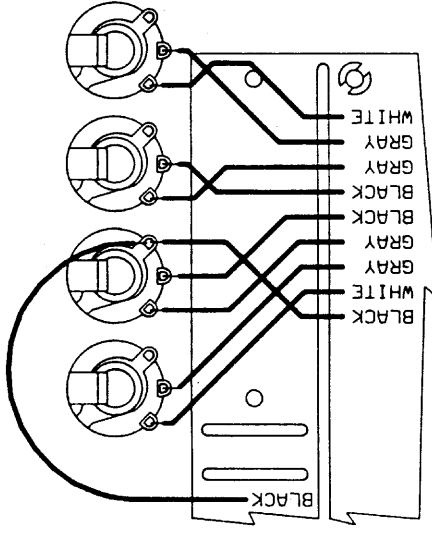
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DATE: 3/3/95  
APPROVED: *[Signature]*  
DATE: 3/3/95

TOLERANCES: ±0.1%  
±0.5%  
±1%  
±2%  
±5%  
±10%  
±20%  
±50%  
±100%

MUSICAL INSTRUMENTS  
TITLE: SCHEMATIC  
DRAWING NUMBER: 036356  
ENGINEER: WILKENS  
DRAWN BY: WILKENS  
REV. E

SCALE: NONE PLOTTED: 28-FEB-95 SHEET 1 OF 1

REVISIONS			
ZONE	REV. DESCRIPTION	DATE	APPROVED
	A RELEASED PR#143	2/16/90	
	B ECO LO 2080	8/20/90	
	C EC 784	9/11/91	
5	D EC 1370 / ECO L02838	12/27/94	
	E EC 1428	2/27/95	<i>MDW</i>



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C B A

1 2 3 4 5 6

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 2621 Research Dr-1ve  
 Corona, CA 91720 USA  
 TUBE PARTIAL: STILL NO CURE.  
 NEXT HIGHER ASSEMBLY:  
**'59 BASSMAN AMPLIFIER**

DATABASE FILE: Z143SER.DBF  
 CHECKED BY: *MDW*  
 DATE: *3/3/95*  
 APPROVED: *MDW*  
 DATE: *3/3/95*  
 TOLERANCES: UNLESS OTHERWISE NOTED  
 X.X ±0.050"  
 X.XX ±0.010"  
 X.XXX ±0.005"  
 ANGLES

**NOTES:**  
 1. TP7 IS ON V4, PIN 3.  
 2. TP8 IS AT THE GREEN LEAD OF THE OUTPUT TRANSFORMER.  
 3. OPTIONAL C25, 220µF 25V. PRESENT IN OLD MODEL 5F6, DELETED IN 5F6-A. CAPACITOR ADDS ABOUT 4 DB OF GAIN.  
 4. PCB SHOWN IN ONE PIECE, AS FABRICATED. REV. D REFLECTS THE REMOVAL OF SECONDARY FUSES IN EXPORT UNITS THAT USE POWER TRANSFORMER P/N 049179, AND REMOVAL OF THE LINE BYPASS CAPACITOR IN DOMESTIC UNITS.

FILM/DWG: SERVICE 3RAM  
 DATABASE: Z143SER.DBF DATE: 28-FEB-95  
 LAYERS PLOTTED: 15 19 4 10 11

MUSICAL INSTRUMENTS  
 2621 Research Dr-1ve  
 Corona, CA 91720 USA  
 TITLE: **'59 BASSMAN**  
 SERVICE DIAGRAM  
 SIZE: B  
 DRAWN: WILKENS  
 DRAWING NUMBER: 036360  
 ENGR: WILKENS  
 REV. E  
 CREATED: 07-NOV-89  
 PLOTTED: 28-FEB-95  
 SCALE: NONE  
 SHEET 1 OF 1