



'59 BASSMAN

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

SERVICE MANUAL



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'59 BASSMAN
(This is the model name for warranty claims)

SERVICE MANUAL

February 1990

IMPORTANT NOTICE:

The information contained herein is CONFIDENTIAL and PROPRIETARY to Fender Musical Instruments Corp. It is disclosed solely for use by qualified technicians for purposes of equipment maintenance and service. It may not be disclosed to others without the expressed permission of Fender Musical Instruments Co. All specifications subject to change without notice.

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	024855	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 (XFMRs)
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

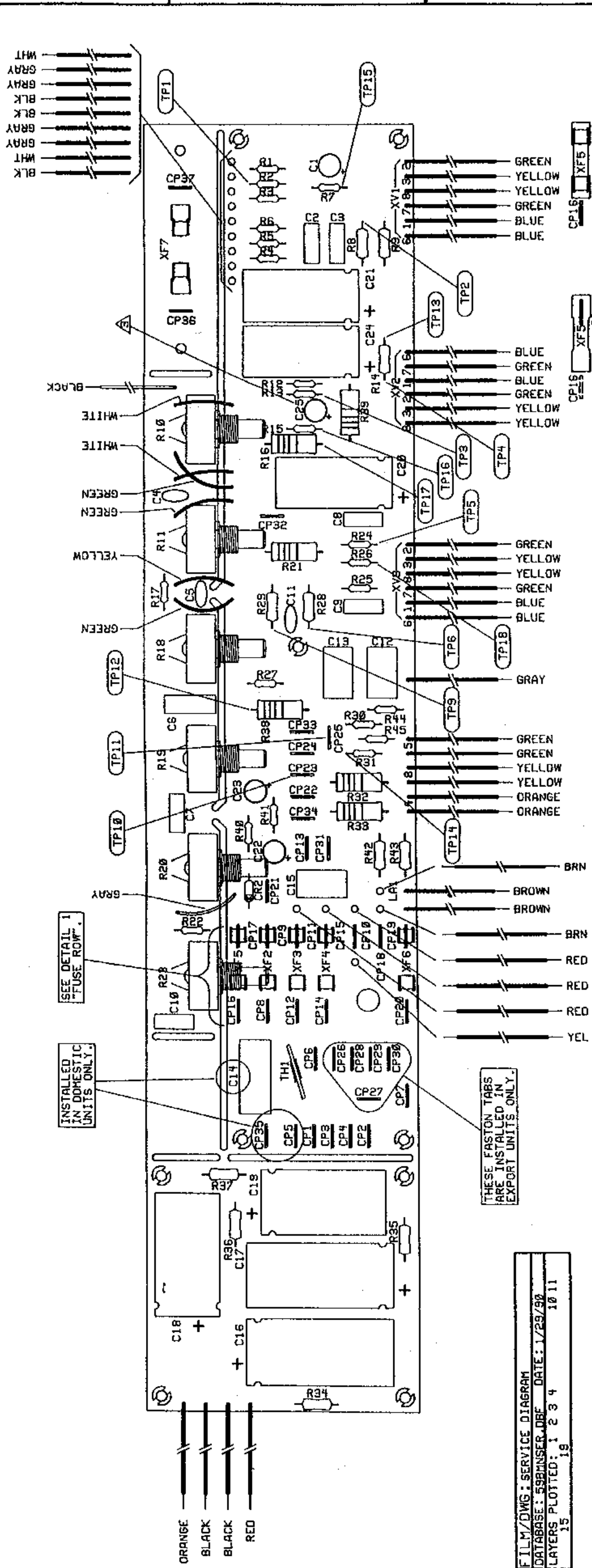
*** CABINET ASSEMBLY (CONTINUED) ***

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

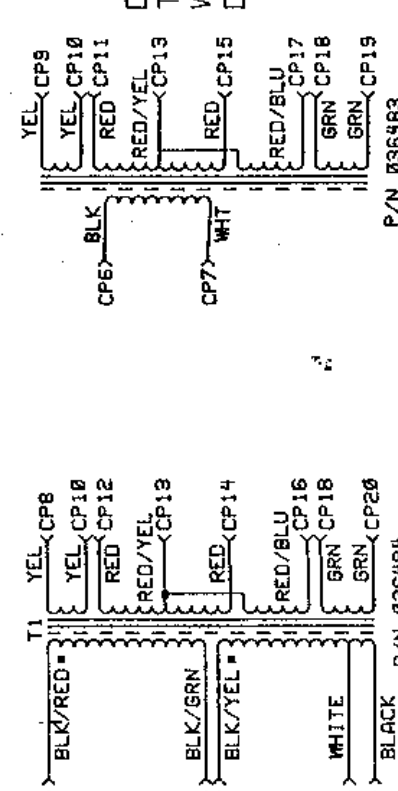
REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	A	RELEASED PR#143	2-16-90



EXPORT TRANSFORMER WIRING DIAGRAM.

	100V 50/60HZ	120V 60HZ	220V 50/60HZ	240V 50/60HZ
CP6	CP6	CP6	CP6	CP6
CP28	CP28	CP7	CP28	CP28
CP30	CP26	CP26	CP29	CP29
CP29	CP7	CP30	CP7	CP30
CP27	CP29	CP27	CP30	CP7

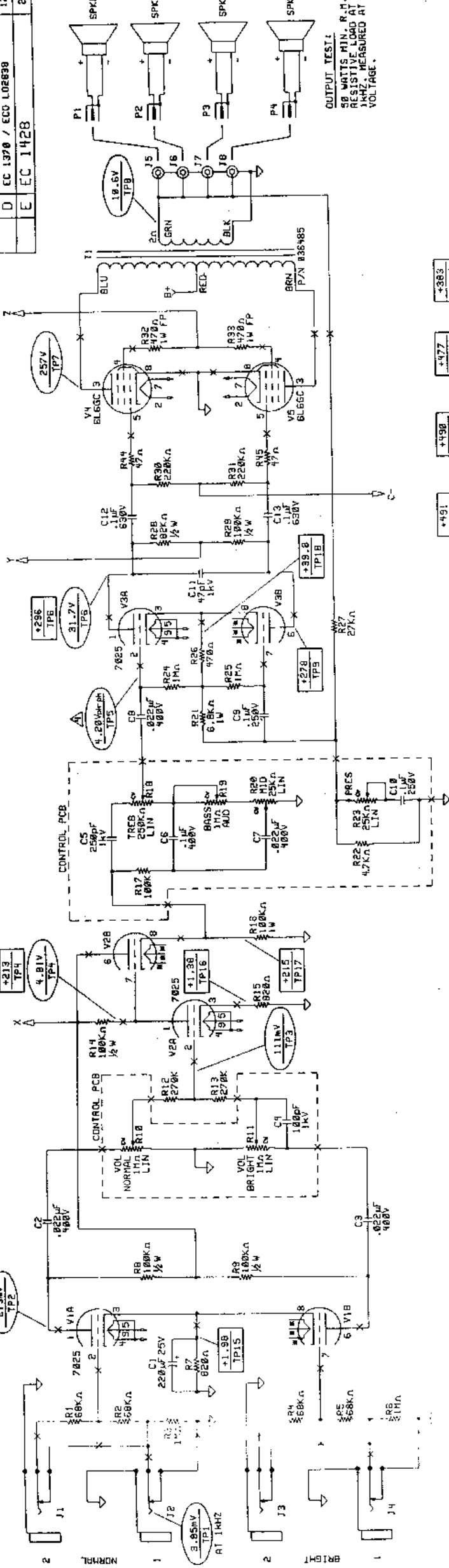
DOMESTIC
TRANSFORMER
WIRING
DIAGRAM



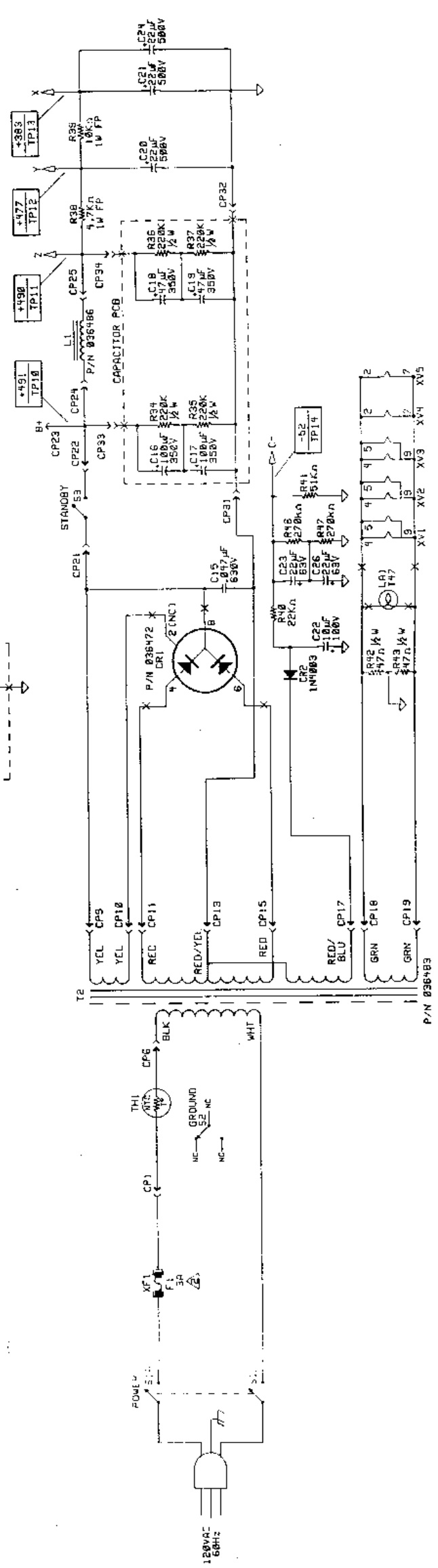
NOTES: 1. TP7 IS ON V4, PIN 3.
2. TP8 IS AT THE GREEN LEAD OF THE OUTPUT TRANSFORMER.
3. OPTIONAL C25, 220W, 25V. PRESENT IN OLD MODEL 5F6. DELETED IN 5F6-A. CAPACITOR ADDS ABOUT 4 dB OF GAIN AT 1 KHZ.
4. PCB SHOWN IN ONE PIECE, AS FABRICATED.

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	SIZE B	DRAWING NUMBER 036360	DATE: 2/12/98 SHEET 1 OF 1
FROM: HIGHER ASSEMBLY: 59 BASSMAN AMPLIFIER			

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	RELEASED PR #143	2/16/98	
	B	ECO L02080	8/28/98	
	C	EC 784	9/11/91	
	D	EC 1370 / ECO L02839	12/27/94	
	E	EC 1428	2/27/95	WJW



OUTPUT TEST:
80 WATTS MIN. R.M.S. INTO 2Ω
RESISTIVE LOAD AT 5% T.H.O.
100 KHZ. MEASURED AT RATED LINE
VOLTAGE.



NOTES:

- 1.) ALL RESISTORS 1/4 WATT CARBON FILM UNLESS OTHERWISE NOTED.
- 2.) LINE FUSE IS 3A IN 100V AND 120V MODELS, F1.6A IN 230V AND 240V MODELS.
- 3.) ALL VOLTAGES MEASURED TO GROUND USING A DVM OF AT LEAST 100 INPUT IMPEDANCE, ALL CONTROLS 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 FINDER PART NUMBERS.
- 7.) INSTANCES NOT USED: C14 CP3 CP4 CP8 CP12 CP14 CP16 CP20 CP26 CP27

EXPORT TRANSFORMER
PRIMARY WIRING
DIAGRAM.

100V 50/60Hz	230V 50/60Hz	240V 50/60Hz
CP6	CP6	CP6
CP28	CP5	CP5
CP2	CP28	CP28
CP29	CP29	CP29
S18	CP30	CP30
CP30	S18	CP2
CP7	CP2	S18

CP30 AND CP5 FOR UNUSED
PRIMARY WIRE(S) AS REQ'D.

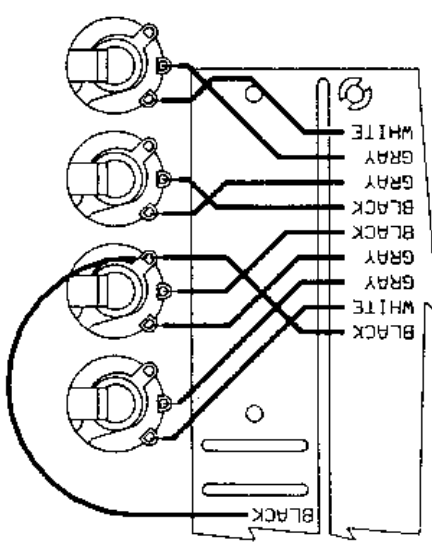
ALTERNATE EXPORT
POWER TRANSFORMER
P/N 049179

[illegible]

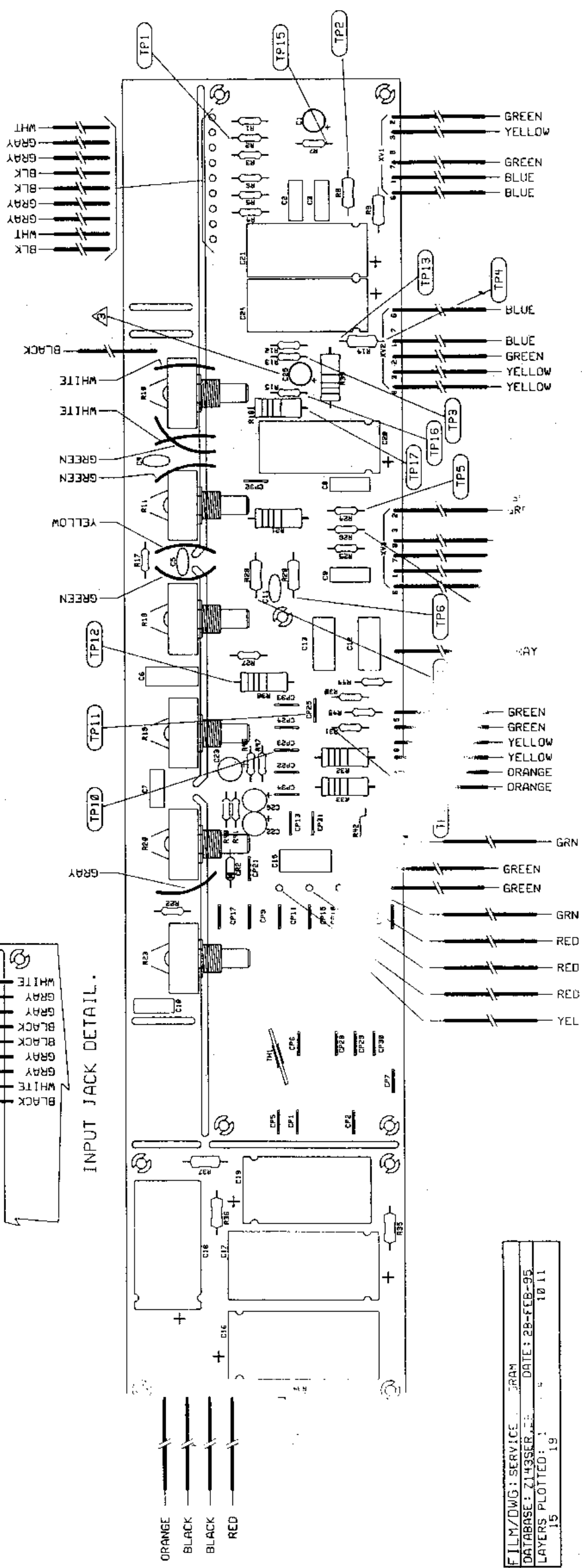
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REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	A	RELEASED PR#143	2/16/90
	B	ECO LO 2080	8/20/90
	C	EC 784	9/11/91
	D	EC 1370 / ECO L02838	12/27/94
	E	EC 1428	2/27/95

NON



INPUT JACK DETAIL.



FILM/DWG: SERVICE	GRAM
DATABASE: Z143SER	DATE: 28-FEB-95
LAYERS PLOTTED: 1	10 11

NOTES:

1. TP7 IS ON V4, PIN 3.
2. TP8 IS ON THE GREEN LEAD OF THE OUTPUT TRANSFORMER.
3. OPTIONAL C25, 220µF 25V, PRESENT IN OLD MODE. SF6, DELETED IN SF6-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.

DATABASE FILE:
Z143SER.DBF

CHECKED BY: **NON**
DATE: **3/3/95**

APPROVED: **NON**
DATE: **3/3/95**

TOLERANCES: UNLESS OTHERWISE SPECIFIED
X.X ±0.050"
X.XX ±0.010"
X.XXX ±0.005"
ANGLES AS SHOWN

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CORONA, CA 91720 USA
TUBE: 6X4, 6X5, 6X6, 6X7, 6X8, 6X9, 6X10, 6X11, 6X12, 6X13, 6X14, 6X15, 6X16, 6X17, 6X18, 6X19, 6X20, 6X21, 6X22, 6X23, 6X24, 6X25, 6X26, 6X27, 6X28, 6X29, 6X30, 6X31, 6X32, 6X33, 6X34, 6X35, 6X36, 6X37, 6X38, 6X39, 6X40, 6X41, 6X42, 6X43, 6X44, 6X45, 6X46, 6X47, 6X48, 6X49, 6X50, 6X51, 6X52, 6X53, 6X54, 6X55, 6X56, 6X57, 6X58, 6X59, 6X60, 6X61, 6X62, 6X63, 6X64, 6X65, 6X66, 6X67, 6X68, 6X69, 6X70, 6X71, 6X72, 6X73, 6X74, 6X75, 6X76, 6X77, 6X78, 6X79, 6X80, 6X81, 6X82, 6X83, 6X84, 6X85, 6X86, 6X87, 6X88, 6X89, 6X90, 6X91, 6X92, 6X93, 6X94, 6X95, 6X96, 6X97, 6X98, 6X99, 6X100

59 BASSMAN
AMPLIFIER

MUSICAL INSTRUMENTS
2621 Research Drive
Corona, CA 91720 USA

TITLE: **'59 BASSMAN**
SERVICE DIAGRAM

SIZE: **B**
DRAWING NUMBER: **036360**
REV. **E**

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

6 5 4 3 2 1