



# Champion™ 600

(This is the model name for warranty claims)

p/n 233-0100-000 (120V)

# SERVICE MANUAL



## **ATTENTION:**

### **WARRANTY SERVICE PROCEDURES**

The Champion 600 Amplifier is **not** available for warranty field service. However; any Champion 600 that is presented for warranty service should be tested for bad tubes. If the defect is due to a failed tube, and the tube warranty has expired, the consumer/dealer will be responsible for tube replacement costs. If the tube warranty has not expired contact FMIC Customer Service for replacement tubes. If the defect is not tube related please contact FMIC Customer Service to arrange for a replacement amplifier.



June, 2007

**IMPORTANT NOTICE**

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specifications are subject to change without notice. This information and any copies produced electronically or otherwise must be surrendered upon demand of Fender® Musical Instruments Corporation.

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

**PARTS LIST CODES**

The description codes used in the itemized Parts Lists are defined below:

**CAPACITOR CODES**

CAP AE = Aluminum Electrolytic  
CAP CA = Ceramic Axial  
CAP CD = Ceramic Disk  
CAP CR = Ceramic Radial  
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 MOX = Metal Oxide  
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



## SPECIFICATIONS

**Model Name:** Champion 600

**Release Number:** PR 722

<b>Part Numbers</b>	<b>CHAMPION 600 120V</b>	233-0100-000
	<b>CHAMPION 600 120V DS</b>	233-0100-900
	<b>CHAMPION 600 110V TW DS</b>	233-0101-900
	<b>CHAMPION 600 240V AUS DS</b>	233-0103-900
	<b>CHAMPION 600 230V UK DS</b>	233-0104-900
	<b>CHAMPION 600 230V ARG DS</b>	233-0105-900
	<b>CHAMPION 600 230V EUR DS</b>	233-0106-900
	<b>CHAMPION 600 100V JPN DS</b>	233-0107-900
	<b>CHAMPION 600 220V ROK DS</b>	233-0109-900

**Power Requirement:** 25 W

**Fuses:**  
F 1A, 250V for 100V versions  
F 1A, 250V for 120V versions  
F 500mA, 250V for 240V versions  
F 500 mA, 250V for 230V versions

**Input Sensitivity:** 25 mV (volume at maximum for full power)

**Power Output:** 5W RMS into 4 ohms @ < 5%THD, 1000Hz

**Impedances**                      **Input:** >1M Ohms

**Speaker Complement:** 6", 4 ohm

**Dimensions**

<b>Height:</b>	11 in	(28 cm)
<b>Width:</b>	12 in	(12 cm)
<b>Depth:</b>	7.5 in	(19 cm)

**Weight:** 15 lbs (7 kg)

*Product specifications are subject to change without notice*

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### SERVICE NOTES

1. **CHASSIS REMOVAL** is accomplished by first removing the two (2) screws from the control panel then the two screws on the side of the cabinet. Remove the four (4) screws from the

back panel and unplug the speaker. The chassis can now slide out, giving access to the electronics.



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## PARTS LIST

1	0073904000	Speaker 6" Champion 600	
1	0073905000	**XFMR Power Champion 600	T1
1	0073906000	XFMR Output Champion 600	T2
1	0073907000	Knob Volume Champion 600	
1	0073908000	Handle Champion 600	
2	0073909000	Jack Input Champion 600	J1, J2
1	0073910000	Jack Output Champion 600	J3
1	0073911000	Switch Power Champion 600	S1
1	0073912000	Potentiometer 1MA Champion 600	R13
1	0073913000	Light Pilot ASSY Champion 600	
4	0073914000	Cabinet Glides Cabinet Champion 600	
1	0994024000	Tube 6V6 STR391	V1
1	0994024000	Tube 12AX7WC/7025 Russian	V2
1	0020789000	**Fuse QA 20mm X 5mm 250V 1A	F1 100V & 120V Versions
1	0020786000	**Fuse QA 20mm X 5mm 250V 500ma	F1 230V & 240V Versions

\* Non-serviceable part. Replace complete parent assembly. See PCB EXCHANGE POLICY section above.

*shaded* Unique Fender® part. Order directly from the FMIC Parts Department.

*shaded +* \* Access to this part or assembly is controlled. Please contact the FMIC Customer Service Department.

\*\* Safety Requirement part. Replacement must match Safety Agency...-Value, if specified -Type, if specified -Approval Mark(s) if on part.

*shaded +* \*\* Both a unique Fender® part and a Safety Requirement part as defined above.

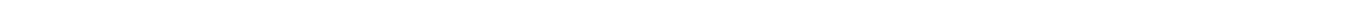


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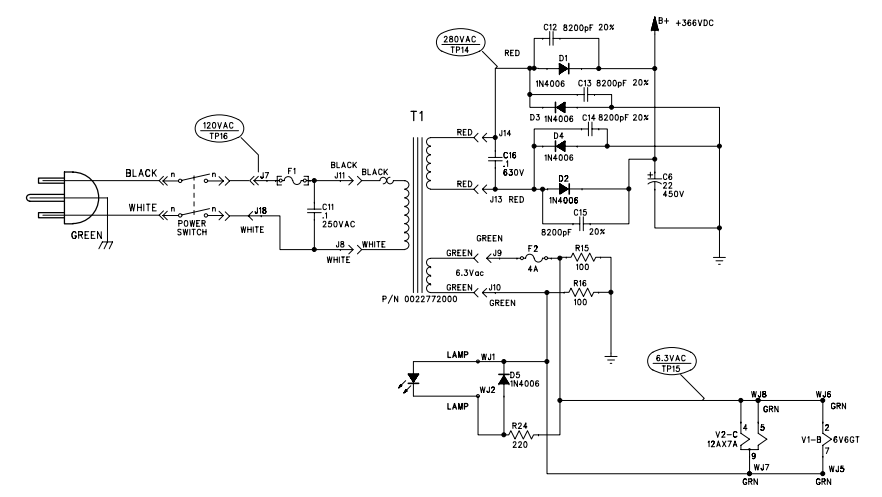
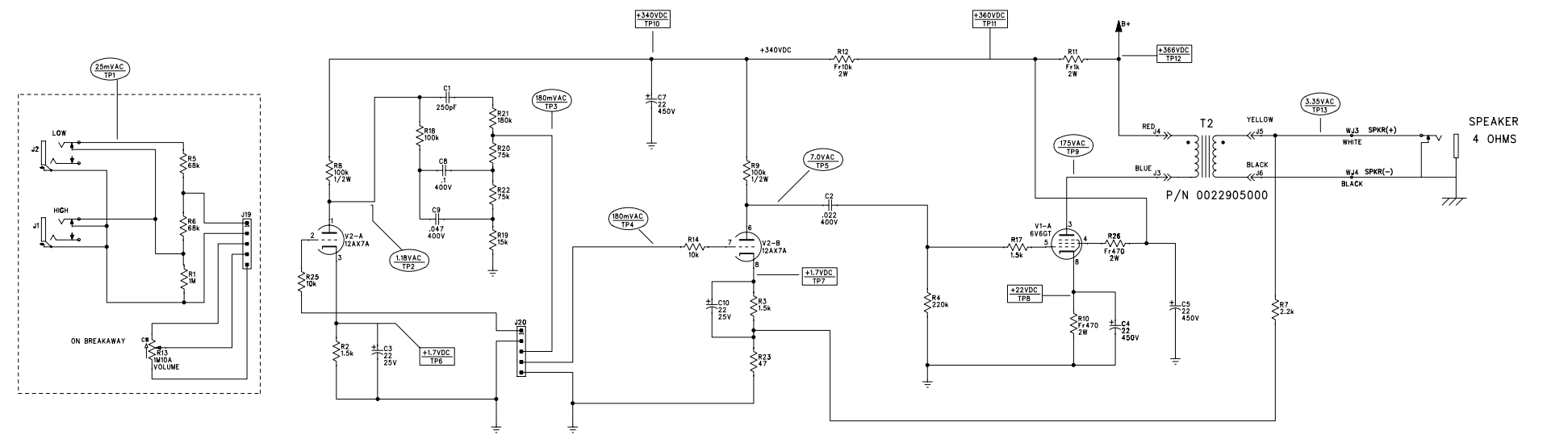
## Service Diagram List

Service Diagram (Schematic) .....Champion™ 600 PC



8 7 6 5 4 3 2 1

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR722	05-MAY-06	LEL

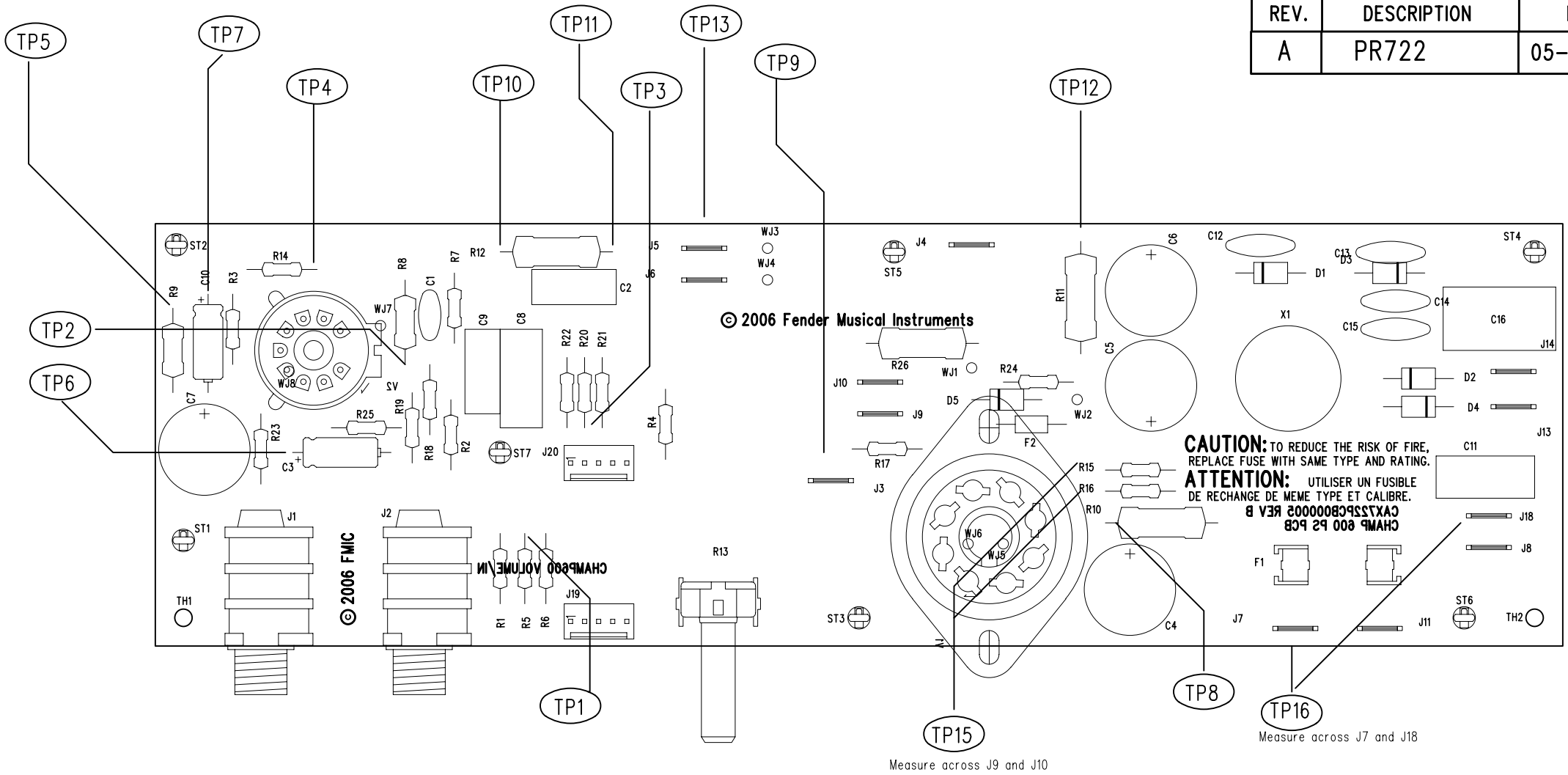


- 6. ALL AC VOLTAGES ARE +/- 10%.
  - 5. THIS SCHEMATIC IS FOR PCB FABRICATION P/N CAX722PCP000005 AND PCB ASSEMBLY P/N CAX722PCAO000005.
  - 4. ALL DC VOLTAGES ARE MEASURED WITH NO SIGNAL.
  - 3. ALL POLARIZED CAPACITORS IN uF, 20% OR BETTER; 50V MINIMUM.
  - 2. ALL UNPOLARIZED CAPACITORS IN uF, 10% OR BETTER; 50V MINIMUM. (POWER SUPPLY BYPASS CAPACITORS ARE 20%).
  - 1. ALL RESISTORS IN OHMS, 5%; 1/4W.
- NOTES: (UNLESS OTHERWISE NOTED)

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CHECKED BY:	DATE:	TITLE: SERVICE DIAGRAM, COMBINED (schematic) CHAMPION 600 AMPLIFIER	
APPROVED BY:	DATE:	SIZE: <b>D</b>	DRAWING NUMBER: <b>722CAX003</b>
DRAWN: LORENZEN ENGR: LORENZEN		REV.:	<b>A</b>
DATABASE FILE: CAX722PCB000005.PCB		RELEASE DATE: 05-MAY-06	SHEET: 1 OF 2

8 7 6 5 4 3 2 1

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR722	05-MAY-06	L E L




TP14  
Measure across J13 and J14

TP15  
Measure across J9 and J10

TP16  
Measure across J7 and J18

FILM/DWG: SERVICE DIAGRAM  
DATABASE: CAX722PCB000005.PCB DATE: 05-MAY-06

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CHECKED BY: _____ DATE: _____		TITLE: SERVICE DIAGRAM, COMBINED (PCB assy) CHAMPION 600 AMPLIFIER	
APPROVED BY: _____ DATE: _____		SIZE <b>B</b>	DRAWING NUMBER <b>722CAX003</b>
DRAWN: PKCORBIN    ENGR: LORENZEN		REV. <b>A</b>	
DATABASE FILE: CAX722PCB000005.PCB		05-MAY-06	SHEET 2 OF 2