5F1 CHAMP PREMIUM PACK: PARTS LIST

SKU **AP-5F1PPP** · Evatco Electronic Valve & Tube Company · www.evatco.com.au

Fender 5F1 Champ: 5W single-ended Class A, 12AX7 preamp, 6V6GT power valve, 5Y3GT rectifier, cathode biased, one volume and two inputs. This Premium pack has the upgraded Hammond 1760C output transformer (4, 8 or 16Ω speaker) and premium Sprague axial and Sozo capacitors. Every item and quantity in the pack, with colour codes for every resistor. Tick each part off as you check it. Reference numbers (R1, C1, V1 and so on) match Rob Robinette's 5F1 layout. His drawings are for 120V mains, so read the 240V notes on page 2. Check every part against the schematic and layout you build from.

PARTS

✓	Item	Qty
CHASSIS, BOARD & HARDWARE		
☐	5F1 Tweed Champ Chassis, pre-punched	1
☐	5F1 Turret Board	1
☐	Fender-Style Octal Ceramic Socket (V2 6V6, V3 5Y3)	2
☐	9-Pin Valve Socket (V1 12AX7)	1
☐	Clip-Type Octal Valve Retainer	2
☐	M3 and M4 Screws, Nuts & Washers (6 pack)	2
☐	Locking Earth Solder Lugs (one dedicated to mains earth)	4
☐	Rubber Grommets, 10mm (transformer leads)	2
TRANSFORMERS		
☐	PT: Hammond 291AEX Power Transformer, 240V primary, 325-0-325V, 6.3V CT and 5V heaters	1
☐	OT: Hammond 1760C Single-Ended Output Transformer, multi-tap 3.2 / 8 / 16Ω secondaries (4, 8 or 16Ω speaker)	1
VALVES / TUBES		
☐	V1: JJ 12AX7 / ECC83S Preamp Valve	1
☐	V2: JJ 6V6S Power Valve	1
☐	V3: JJ 5Y3S Rectifier Valve	1
CAPACITORS		
☐	C1, C2: Sozo 0.022µF 500V Polyester (coupling)	2
☐	C3: Sprague 16µF 500V Axial (B+1 filter)	1
☐	C4, C5: Sprague 8µF 450V Axial (B+2, B+3 filters)	2
☐	C6: Sprague 25µF 50V Axial (6V6 cathode bypass)	1
☐	C7: Sprague 25µF 50V Axial (optional V1A cathode bypass)	1

✓	Item	Qty
CONTROLS, JACKS & PILOT LIGHT		
☐	R12: Alpha 1MΩ Audio (Log) Volume Pot with Power Switch	1
☐	Black Knob for Volume Pot	1
☐	In 1, In 2: Switchcraft Type 11 Mono Input Jack	2
☐	Spkr: Switchcraft Type 11 Mono Speaker Jack	1
☐	Pilot Light Assembly & Green Jewel	1
☐	6.3V Pilot Lamp Bulb	1
MAINS, FUSE & WIRING		
☐	F1: 3AG Panel-Mount Fuse Holder	1
☐	F1: Slow-Blow Fuse, 500mA to 1A for 240V (keep spares)	2+
☐	3-Core Earthed 240V Mains Lead	1
☐	Cable Gland / Strain Relief	1
☐	Heat Shrink Pack	1
☐	Vintage Cloth Pushback Wire	3m
☐	Twisted Heater Wire	1m
☐	18AWG Buss Wire	1
☐	Speaker Wire, jack to speaker	As req.

RESISTORS AND COLOUR CODES

How to read the bands: hold the resistor with the **gold band on the right** and read from the left. Bands 1 and 2 are the first two digits, band 3 is the multiplier, and the gold band 4 means ±5% tolerance.

Example: Brown (1) Black (0) Green (×100k) Gold = 10 × 100,000 = 1,000,000Ω = **1MΩ**. Always confirm with a multimeter before fitting.

✓	Qty	Value	Type	Band 1	Band 2	Band 3	Band 4
RESISTORS: 1 WATT CARBON FILM							
☐	1	**1MΩ** R1: input jack grid resistor	1W Carbon Film	Brown	Black	Green	Gold
RESISTORS: 1 WATT METAL OXIDE							
☐	2	**68kΩ** R2, R3: grid stoppers	1W Metal Oxide	Blue	Grey	Orange	Gold
☐	2	**1.5kΩ (1k5)** R4: V1A cathode; R6: V1B cathode	1W Metal Oxide	Brown	Green	Red	Gold
☐	2	**100kΩ** R5, R7: V1 plate loads	1W Metal Oxide	Brown	Black	Yellow	Gold
☐	1	**220kΩ** R9: V2 grid leak	1W Metal Oxide	Red	Red	Yellow	Gold
☐	1	**22kΩ** R13: negative feedback	1W Metal Oxide	Red	Red	Orange	Gold
RESISTORS: POWER							
☐	1	**10kΩ** R10: B+ voltage dropping	2W Metal Oxide	Brown	Black	Orange	Gold
☐	1	**22kΩ** R11: B+ voltage dropping	2W Metal Oxide	Red	Red	Orange	Gold
☐	1	**470Ω** R8: 6V6 cathode (bias) resistor	5W Cement	*No colour bands. Value printed on the body.*			

COLOUR CHART colour · digit · multiplier

Black	Brown	Red	Orange	Yellow	Green	Blue	Violet	Grey	White
0 · ×1	1 · ×10	2 · ×100	3 · ×1k	4 · ×10k	5 · ×100k	6 · ×1M	7 · ×10M	8 · –	9 · –

Look-alikes to watch: there are two 22kΩ resistors with the same colours (Red Red Orange): R13 is 1W and R11 is the larger 2W, so sort them by size. 220kΩ (Red Red Yellow) differs from 22kΩ only in band 3.

Building on 240V: wire the 291AEX's 240V primary tap and insulate each unused primary lead with heat shrink; follow Hammond's wiring diagram, as lead colours vary. Australian mains colours: Brown = Active, Blue = Neutral, Green/Yellow = Earth. The fuse and the power switch (on the volume pot) both go in the Active line. The earth wire goes to its own star-washered solder lug near the mains entry and is never removed. Use a slow-blow fuse (500mA to 1A), not the 2A shown on US layouts.

Not included: cabinet and speaker. The 1760C has three secondary taps, so wire the one that matches your speaker: 4Ω speaker → 3.2Ω tap, 8Ω → 8Ω tap, 16Ω → 16Ω tap. Insulate the unused taps. Speaker ideas: Jensen P8R, WGS G8C or WGS G8A for an original-size cabinet; Jensen P10R or WGS G10A for a larger one. Never run a valve amp without a speaker connected.

DANGER: HIGH VOLTAGE. Valve amps run at lethal voltages, and the filter capacitors can hold a charge after the amp is switched off and unplugged. This is a component pack, not a kit: no instructions or build support are included. For experienced builders and technicians only. Have your mains wiring checked by a qualified person before first power-up, and use a variac or bulb limiter for the first power-up.