



Quality Products. Service Excellence.

## Tube Guitar Amplifier - Power Transformers 290 Series

### REPLACEMENT & UPGRADES

#### Features



- Designed for drop in replacement of original units.
- Physically, parts were designed to look similar to original factory units (where possible).
- Material used & design specs. were kept as close as possible to the original part to preserve the stock "tone".



#### Fender (Power Transformers)

Part No.	VA	Primary		A.C.	Bias Tap on High	Secondary #1	Filament #2	Heater #1
		VAC	Hz.	High Voltage Secondary R.M.S.	Voltage Secondary VAC	VAC	VAC	VAC
290AAX	52	120	60	490Vct @ 90 mA			6.3V @ 1.25A	
290ABX	76	120/240	50/60	293.5V @ 100 mA	34Vct @ 95 mA	9V @ 1.25A	6.3V @ 5A	
290ACX	55	120	60	300V @ 100 mA	34Vct @ 100 mA	9V @ 1.5A	6.6V @ 1.5A	
290AX	94	120V	60	650/550Vct @ 100 mA			6.3Vct @ 2.25A	5V @ 3A
290BAX	171	120	60	60Vct @ 2.85A				
290BX	138	120	60	660Vct @ 138 mA	50V Bias		6.3V @ 3A	5V @ 3A
290BEX	138	240	50/60	660Vct @ 138 mA	50V Bias		6.3V @ 3A	5V @ 3A
290CX	161	120	60	650Vct @ 180 mA	50V Bias		6.3V @ 4.5A	5V @ 3A
290CEX	161	240	50/60	650Vct @ 180 mA	50V Bias		6.3V @ 4.5A	5V @ 3A
290D2X	260	120	60	710Vct/610Vct @ 300 mA	50V Bias		6.3Vct @ 5A	5V @ 3A
290D2EX	260	120/210/220/230/240	50/60	710Vct/610Vct @ 300 mA	50V Bias		6.3Vct @ 5A	5V @ 3A
290DX	190	120	60	650Vct @ 230 mA	50V Bias		6.3Vct @ 4A	5V @ 3A
290DEX	190	240	50/60	650Vct @ 230 mA	50V Bias		6.3Vct @ 4A	5V @ 3A
290EAX	358	120	60	365Vct @ 850 mA		27.5V @ 100 mA	6.3V @ 7A	
290EBZ	213	120	60	340V @ 500 mA		50V @ 100 mA	6.3V @ 6A	
290EEBZ	213	120/230/240	50/60	340V @ 500 mA		50V @ 100 mA	6.3V @ 6A	
290EEX	207	120/210/230/240	50/60	660Vct @ 275 mA	53V Bias		6.3Vct @ 4A	
290EEZ	211	240	50/60	660Vct @ 250 mA	50V Bias		6.3V @ 4A	5V @ 4A
290EX	207	120	60	660Vct @ 275 mA	53V Bias		6.3Vct @ 4A	
290EZ	206	120	60	640Vct @ 250 mA	50V Bias		6.3V @ 4A	5V @ 4A
290EZB	208	120	60	340V @ 500 mA		50V @ 100 mA	6.3V @ 6A	
290FX	368	120	60	640Vct @ 518 mA	60V Bias		6.5V @ 5.5A	

Part No.	VA	Primary		A.C.	Bias Tap on High	Secondary #1	Filament #2	Heater #1
		VAC	Hz.	High Voltage Secondary R.M.S.	Voltage Secondary VAC	VAC	VAC	VAC
290FEX	368	240	50/60	640Vct @ 518 mA	60V Bias		6.5V @ 5.5A	
290HAX	86	120	60	550Vct @ 100 mA	50V Bias		6.3Vct @ 2.5A	5V @ 3A
290HAEX	86	120V/210/230V/240	50/60	550Vct @ 100 mA	50V Bias		6.3Vct @ 2.5A	5V @ 3A
290RX	404	120V	60	337Vct @ 1.1A		54V @ 250 mA	6.4V @ 3A	
290REX	404	100/120/220/240	50/60	337Vct @ 1.1A		54V @ 250 mA	6.4V @ 3A	
290S2Z	383	117	60	780Vct @ 400 mA	55V Bias		6.3Vct @ 8A	5V @ 4A
290SX	404	120/230/240	50/60	337Vct @ 1.1A		54V @ 250 mA	6.4V @ 3A	
290TX	371	120	60	696Vct @ 500 nA	52V Bias		6.5V @ 2A	5V @ 2A
290UX	112	117	60	308.5V @ 250 mA		39V @ 250 mA	6.6V @ 3.75A	
290UEX	112	240	50/60	308.5V @ 250 mA		39V @ 250 mA	6.6V @ 3.75A	
290VX	208	117	60	342V @ 500 mA		52Vct @ 250 mA	6.3V @ 3.75A	
290VEX	208	240	50/60	342V @ 500 mA		52Vct @ 250 mA	6.3V @ 3.75A	
290WX	19	120	60	237V @ 50 mA			6.6V @ 1.05A	
290WEX	19	240	50/60	237V @ 50 mA			6.6V @ 1.05A	
290XX	66	117V	60	260V @ 170 mA		20V @ 100 mA	6.3V @ 3A	
290XEX	66	240	50/60	260V @ 170 mA		20V @ 100 mA	6.3V @ 3A	
290XXA	19	117	60	260V @ 170 mA			6.3V @ 3A	
290YX	243	120	60	372Vct @ 400 mA		56V @ 100 mA	6.3Vct @ 4A	
290YEX	243	240	50/60	372Vct @ 400 mA		56V @ 100 mA	6.3Vct @ 4A	
291AEX	95	120/220/230/240	50/60	650/550Vct @ 100 mA			6.3Vct @ 2.25A	5V @ 3A
291ZZ	462	120	60	364Vct @ 1A	53V @ 1A		6.3Vct @ 7A	
291ZEZ	462	120/240	50/60	364Vct @ 1A	53V @ 1A		6.3Vct @ 7A	

### Marshall (Power Transformers)

Part No.	Primary	Marshall Model Names	Equivalent To Marshall Part No.	Bobbin/Paper Wound
290MAZ	117/234VAC 50/60 Hz.	Studio 15 "Little Fatty"	294-285/6	BOBBIN
290PAZ	120/240 VAC 50/60 Hz.	18 Watt Combo	-	BOBBIN
290GX	120/220/240 VAC 50/60 Hz.	JCM 800, JMP - 50 watt	-	BOBBIN
290HX	120/220/240 VAC 50/60 Hz.	JCM 800 & JMP - 100 watt	-	PAPER
290KX	120/240 VAC 50/60 Hz.	JCM 900 - 50 watt	-	BOBBIN
290JX	120/240 VAC 50/60 Hz.	JCM 900 - 100 watt	-	BOBBIN
290LEX	100/120/220/230/240 VAC 50/60 Hz.	JMT 45	-	BOBBIN
290LX	120/240 VAC 50/60 Hz.	General	-	BOBBIN
290QX	120/240 VAC 50/60 Hz.	JTM30	-	BOBBIN

### VOX (Power Transformers)

Part No.	Primary	VOX Model Names	Equivalent To VOX Part No.	Bobbin/Paper Wound
290PX	120/240 VAC 50/60 Hz.	AC15	-	BOBBIN
290CZ	120 VAC 60 Hz.	AC15C1	-	BOBBIN
290CEZ	120/240 VAC 50/60 Hz.	AC15C1	-	BOBBIN
290NX	100/120/220/230/240 VAC 50/60 Hz.	AC30 Vintage	-	PAPER
290MX	120/240 VAC 50/60 Hz.	AC30 Reissue	-	BOBBIN
290MAX	120/240 VAC 50/60 HZ.	TB35C2 TONY BRUNO	-	BOBBIN

### Yorkville/ Traynor (Power Transformers)

Part No.	Primary	Yorkville / Traynor Model Names	Equivalent to Yorkville / Traynor Part No.	Bobbin/Paper Wound
99145 <sup>1</sup>	115VAC / 60Hz.	Mono Block2 Bass Amp	A1305	-
98965 <sup>1</sup>	120/240VAC 50/60 Hz.	100 Watt	A1380	-
79465 <sup>1</sup>	120VAC 60 Hz.	YBA2-B	A1314	PAPER
79691 <sup>1</sup>	120V 60 Hz	YBA-3	A1315	-

<sup>1</sup> Special order only. Please contact Hammond's sales team for more information.

## AMPEG (Power Transformers)

Part No.	Primary	AMPEG Model Names	Equivalent To AMPEG Part No.	Bobbin/Paper Wound
290CAZ	117 VAC 60 Hz.	GEMINI VI 25W	PT 113	BOBBIN
290ETX	120 VAC 60 Hz.	SUPER ECHO TWIN	PT-109	BOBBIN

**\*DISCLAIMER:** Hammond Mfg. is not affiliated with Fender Musical Instruments Corp., Marshall Amplification, Yorkville/Traynor, AMPEG or VOX Amplification companies. Amplifier model names are trademarks of the Amplifier companies and are just listed here for reference purpose only.

*Data subject to change without notice*

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