## Collins S-Line 32S-3 Transmitter Service Voltages (as measured by N7OTQ & K7RMT)

Tube	Pin	Function	Mode Sw	Conditions	Measured	Units
V11	6	Tone Osc.	CW	Any	330	Vp-p
V2	9	Tone Osc. Injection	CW	Pout Mic Gain = 110 Watts 3.6 MHz, Mic Gain = 2:45	Full	Pout
V4A	2	PTO Injection 1st Mixer	Lock Key	Mic Gain = 0 or 3:00 freq = 2.6 MHz	4.0	Vp-p
V5	2	VIF Input @ Grid 2nd Mixer	Lock Key	Mic Gain = 0 or Full Power freq = 3.054 MHz	4.6	Vp-p
V5	3	Xtal Osc Inject. 2nd Mixer	Lock Key	6.755 MHz, Slight variation with Pout	8.8-9.0	Vp-p
V5	6	2nd Mixer Plate	Lock Key	Mic Gain = 0 No variation w/ drive & 5 to 6 Vp-p Harmonic Content	22	V-p-p
V6	1	RF Amplifier Grid	Lock Key	3.7 mHz Mic Gain up or Down Approx. 0.8 Vp-p VIF Bleed	4	Vp-p
V6	5	RF Amplifier Plate	Lock Key	Mic Gain = 0 Mic Gain = 2:45 freq = 3.7 MHz	0.0 30.0	Vp-p
V7	2	Driver Grid	Lock Key	Mic Gain = 2:45 freq = 3.7 MHz		
V8/V9	5	PA Grid	Lock Key	Full Power 3.7 MHz	180-190	Vp-p
DC Measurements as Table Supplement						
V5	7 2			Otherwise DC Table Conditions	-0.2 0	Vdc Vdc
V6 *	1 5 6 * Ass	Grid Plate Screen ociated with cor	te Table Conditions			Vdc Vdc Vdc

## From Bud's Guide These appear to be minimums

V11 - Pin 6 80-100VAC

V1 - Pin 2 0.4 VAC

Arm of mike gain variable 0-15 VAC

V2 - Pin 8 balance mod side C-9 0 - 2.5

V3 - Pin 1 variable with mic 0-1 VAC

V4 - Pin 2 variable 2.5 - 3.5

Junction C30-R32 variable 0 - 1.8

V6 - Pin 1 variable 0 - 1.8 RF Amp Grid

V7 - Pin 2 variable with mic 0-15 VAC 6CL6 Grid

V8 & V9 - Pin 5 mike up 80-90 VAC PA Grid

(Must have over 55V to get grid drive)