ADDENDUM FOR HAMTRONICS® LPA 6-25R 6-METER REPEATER POWER AMPLIFIER

The 6M version of the Power Amplifier for repeater service is similar to the one for two meters, with the exception of actual components used. Following is a component location diagram showing the differences.

The unit runs 20-25W output with 1.5-2W drive. It draws about 4Amp on 13.6 Vdc.

Construction is similar to that described in the manual for the 2M version with a few exceptions. First, be sure to use the component location and schematic diagram in this addendum in place of those in the basic manual. Circuitry is about the same, but implemented differently, especially in the area of the base bias network.

Input coil L1 is a molded coil to save winding one; however, it is important to remove the tuning slug, using the proper A28 tuning tool.

The base bias network consists of two rf chokes connected in series by joining the leads with solder. There is no pad for this on the board. R1 consists of two resistors tack soldered across L6. R3 and R4 are tack soldered from base to ground as shown.

Other parts are installed like their counterparts on the 2M version, but use coil and capacitor data in the parts list of this addendum in place of info in the basic 2M manual. Some parts, such as C4-C7, on the 2M model are not used in the 6M version.

PARTS LIST FOR LPA 6-25R SIX METER POWER AMPL.

Ref Desig	Description	(marking)
C1	15 pf disc cap	
C2	30pf var cap (greer	ı)
C3	20pf var cap (red o	r pink)
C4-C7	Not assigned	
C8-C9	10-100pf mica var	(703)
C10	.001 uF chip capaci	tor
C11	0.1 uf chip capacito	or
C12	47uf electrolytic ca	р
C13-C14	150pf disc cap (151)

L1	6½ turn (blue) molded coil	
L2	with no slug & no shield 0.33uH rf choke	
	(red-gold-orn-orn)	
L3	5T #14 bus on 3/8 in. i.d.	
	with turns barely spaced	
L4	15T #20 bus on 5/16 in.	i.d.,
	turns barely spaced	
L5	4T #14 bus on 3/8 in. i.d.	
	with turns barely spaced	
L6	100uH rf choke	
	(sil-brn-blk-brn-sil)	
	in series between L2 &	
	gnd with R1&R2 in parallel	
Q1	2N6081	
R1	2 ea 27 Ω , ¼W in parallel with L6	
R2-R4	10Ω, ¼W resistor	
Z1	Ferrite bead	
Z2	2½ turn ferrite choke	

