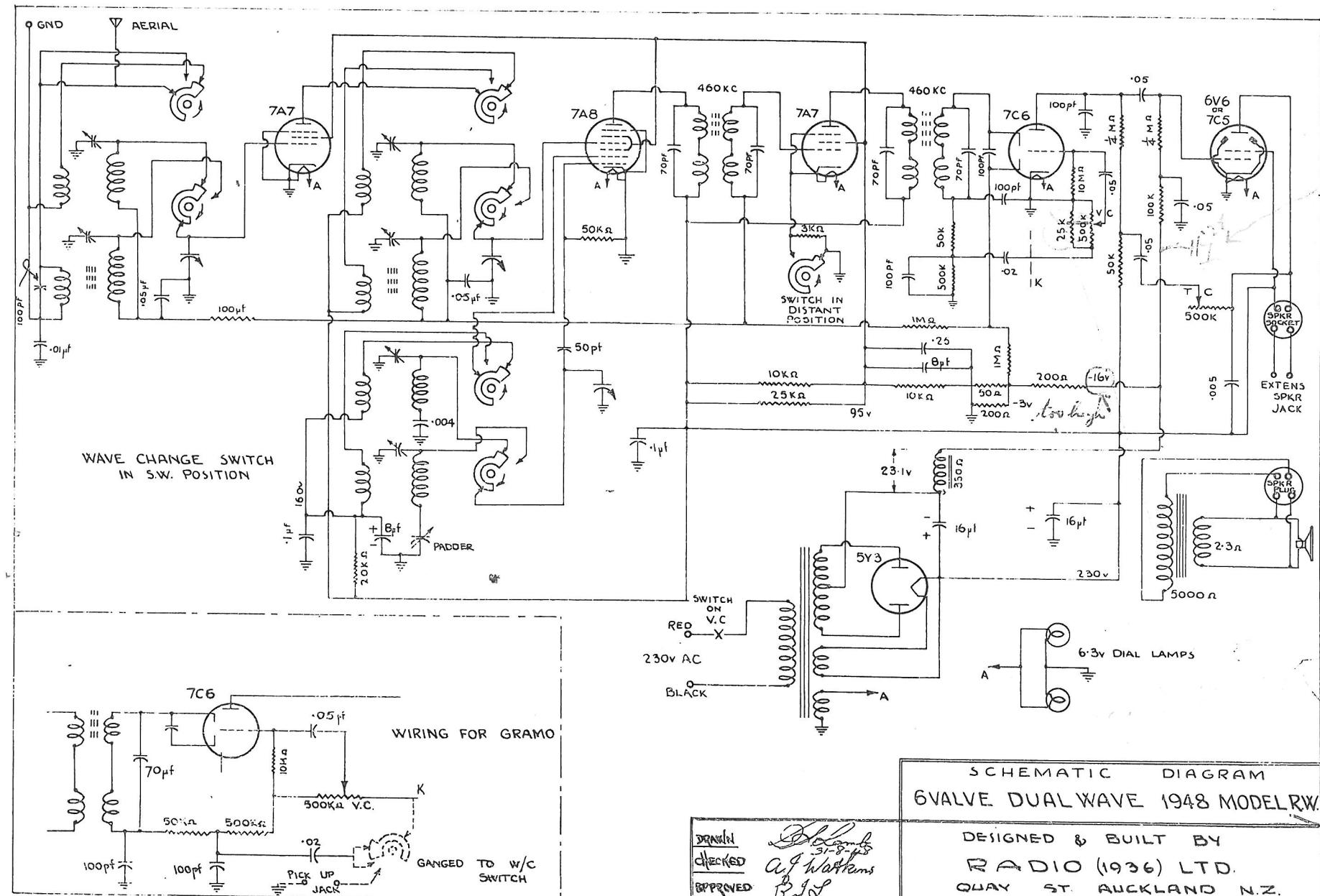


Golden Knight 6-wire DW
chassis RW 883 1948-1949

RW



July 1, 1949

For The Serviceman

ALIGNMENT AND CALIBRATION PROCEDURE 6-VALVE DUALWAVE MODEL R.W.

I.F. Alignment:

This month we present two circuits, for the Ultimatic 6-valve Dualwave 1948 Model R.W., and the Philips Model 461. Below are alignment instructions for the former.

A signal generator modulated 30 per cent. at 400 c.p.s. is coupled between the control grid of the 7A8 frequency changer and ground, by means of a 1 μ f. condenser.

I.F. cores should be adjusted in the following order: Diode core, 7A8 plate core, 7A8 grid core, and 7A7 grid core. The adjustment is made for maximum output at 460 kc/s.

An input of 30 microvolts should produce an output of 50 milliwatts.

Calibration:

Broadcast.—Adjust 1400 kc. point with trimmer T_6 and 600 kc. point with padger T_7 . Adjust 1000 kc. point by means of iron core 3. Intermediate points should be checked and oscillator section of gang condenser fanned to correct frequency.

Shortwave.—Adjust 17 mc/s. point with trimmer T_5 and 6.5 mc/s. point by fanning shortwave oscillator if broadcast calibration has been accurate.

R.F. Alignment:

Broadcast.—The signal generator is coupled to the antenna coil by means of a standard dummy antenna. Adjust for maximum output the 17 mc/s. point with trimmers T_2 and T_4 , and the 600 kc/s. point by means of iron cores 1 and 2.

If calibration has been accurate, the 1000 kc/s. point should be in alignment. Check intermediate points and connect by fanning detector and antenna sections of gang condenser.

Shortwave.—Adjust for maximum output 17 mc/s. with trimmers T_1 and T_3 . Adjust 6.5 mc/s. point by fanning detector and antenna coil inductances.

Power Transformers for Transmitting Requirements

These transformers are tapped to deliver D.C. voltages of 1250v, 1000v, and 750v, using 866A rectifiers. Swinging chokes are available for this use in the capacities listed below. All high tension terminals are ceramic insulated.



Cat. No.										
48 P 01	..	..	150	ma.	..	..	1460/1180/900	aside		
48 P 02	..	..	250	ma.	..	..	1460/1180/900	aside		
48 P 03	..	..	350	ma.	..	..	1460/1180/900	aside		

CHOKES INSULATED FOR USE WITH ABOVE POWER TRANSFORMERS

Cat. No.											
49 C 17	150	ma. Smoothing	16	Hen.	160	ohms	49 C 20	250	ma. Swinging	12	Hen.
49 C 18	150	ma. Swinging	16	Hen.	160	ohms	48 C 10	350	ma. Smoothing	85	ohms
49 C 19	250	ma. Smoothing	14	Hen.	100	ohms	48 C 13	350	ma. Swinging	85	ohms

866A FILAMENT TRANSFORMERS

Cat. No.										
48 F 06	230/2.5v. C.T.	10	amps.	2500v. D.C. wkg.	48 F 07	230/2.5v. C.T.	10	amps.	4000v. D.C. wkg.	

TABLE SHOWING PHYSICAL DIMENSIONS

Cat. No.	Height	Breadth	Depth	Mtg. Centres	Approx. Weight
48 P 01 ..	8 in.*	5 in.	3 $\frac{1}{2}$ in.	3 $\frac{1}{2}$ in. x 1 $\frac{1}{2}$ in.	14 lb.
48 P 02 ..	5 $\frac{1}{2}$ in.	10 $\frac{1}{2}$ in.*	7 in.	5 $\frac{1}{2}$ in. x 6 in.	34 lb.
48 P 03 ..	6 $\frac{1}{2}$ in.	11 $\frac{1}{2}$ in.*	8 $\frac{1}{2}$ in.	5 $\frac{1}{2}$ in. x 6 $\frac{1}{2}$ in.	46 lb.
49 C 17 ..	5 $\frac{1}{2}$ in.	4 $\frac{1}{2}$ in.	5 $\frac{1}{2}$ in.	3 in. x 5 in.	8 lb.
49 C 18 ..	5 $\frac{1}{2}$ in.	4 $\frac{1}{2}$ in.	5 $\frac{1}{2}$ in.	3 in. x 5 in.	8 lb.
49 C 19 ..	5 $\frac{1}{2}$ in.	6 $\frac{1}{2}$ in.	5 $\frac{1}{2}$ in.	3 in. x 6 in.	11 $\frac{1}{2}$ lb.
49 C 20 ..	5 $\frac{1}{2}$ in.	6 $\frac{1}{2}$ in.	5 $\frac{1}{2}$ in.	3 in. x 6 in.	11 $\frac{1}{2}$ lb.
48 C 10 ..	5 $\frac{1}{2}$ in.	6 $\frac{1}{2}$ in.	5 $\frac{1}{2}$ in.	3 in. x 6 in.	11 $\frac{1}{2}$ lb.
48 C 13 ..	5 $\frac{1}{2}$ in.	6 $\frac{1}{2}$ in.	5 $\frac{1}{2}$ in.	3 in. x 6 in.	11 $\frac{1}{2}$ lb.
48 F 06 ..	5 $\frac{1}{2}$ in.*	4 $\frac{1}{2}$ in.	3 $\frac{1}{2}$ in.	1 13/16 in. x 1 $\frac{1}{2}$ in.	
48 F 07 ..	5 $\frac{1}{2}$ in.†	4 $\frac{1}{2}$ in.	4 in.	3 $\frac{1}{2}$ in. x 3 in.	

*Includes measurements over terminals.
†Terminals project through bottom of can.

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