TECHNICAL INFORMATION MODEL RBN

7 VALVE AUTO RADIO 6 VOLT 1952

DESIGNED AND MANUFACTURED BY

RADIO (1936) LTD.

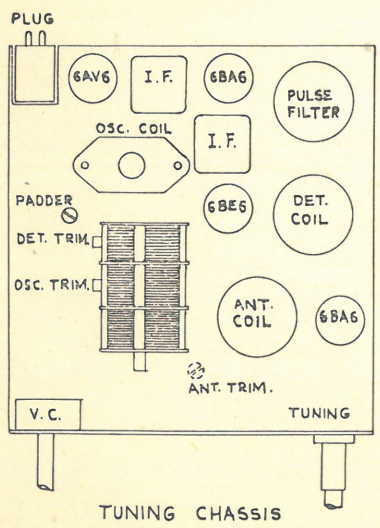
Power Supply	6v. Accum.	Speaker	Rola 6-9 H
Tuning Range	1600 KC/S - 550 KC/S	Power Output	2 watts
Rating	40 watts	I.F. Frequency	460 KC/S

CIRCUIT DESCRIPTION :

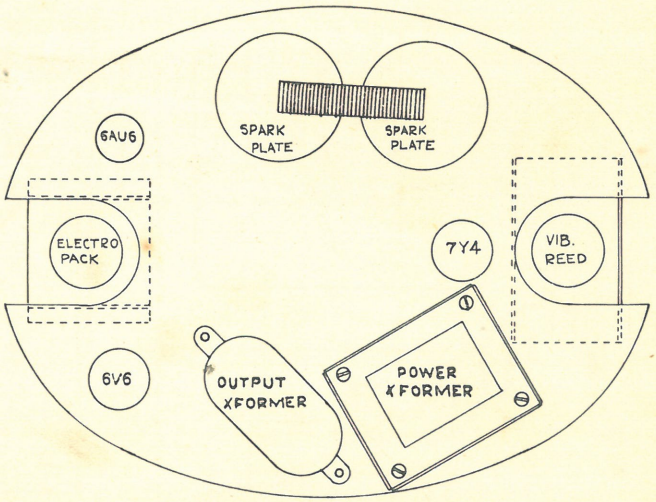
A type 6BA6 valve is employed as a radio frequency amplifier, and is coupled to a type 6BE6 frequency changer, which is in turn coupled by means of a double-tuned I.F. transformer to a type 6BA6 I.F. amplifier. A type 6AV6 valve combines the functions of detector, voltage amplifier and A.G.C. source, and is capacitively coupled to a further voltage amplifying stage employing a type 6AU6 connected as a triode. A type 6V6 is used as a power amplifier, and the 6v. D.C. source is converted to H.T. D.C. by means of a 6-volt Vibrator reed, 7Y4 valve, double-wound power transformer and filter system.

ANTENNA:

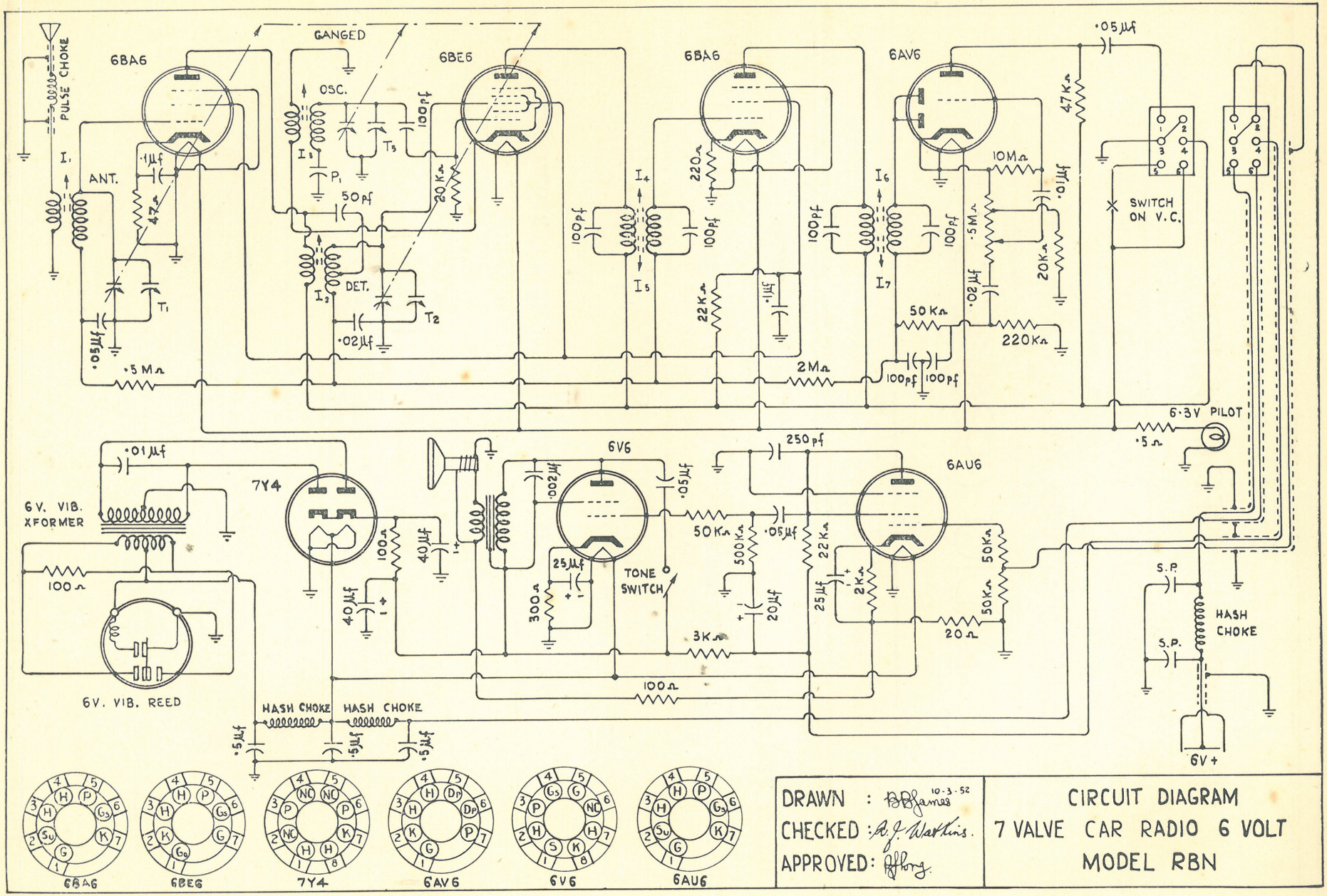
AN ANTENNA OF APPROX. 8FT. IS RECOMMENDED FOR MAX. PERFORMANCE.



TUNING CHASSIS



SPEAKER CHASSIS



DRAWN : B.B. James 10-3-52
CHECKED : A.J. Watkins.
APPROVED : A.F. Long.

CIRCUIT DIAGRAM
7 VALVE CAR RADIO 6 VOLT
MODEL RBN

6v. AUTORADIO PIN VOLTAGES.

VALVE PIN No.	1	2	3	4	5	6	7	8
6BA6 R.F. Amp.	– .5v	—	—	5.5v	195v	58v	.3v	—
6BE6 Freq Changer	– 2.5v	—	—	5.5v	195v	58v	– .5v	—
6BA6 I.F. Amp.	– .5v	—	—	5.5v	195v	58v	.6v	—
6AV6 2nd Detect.	– .7v	—	—	5.5v	– .5v	– .5v	120v	—
6AU6 Volt. Amp.	—	145v	—	5.5v	150v	150v	3v	—
6V6GT Power Amp.	—	5.5v	220v	240v	—	—	—	11.5v
7Y4 Rect.	5.5v	5.5v	275v A.C.	—	—	275v A.C.	240v	—

NOTE.—Receiver tuned off station.

Readings taken with a Vacuum Tube Voltmeter.

D.C. RESISTANCES.

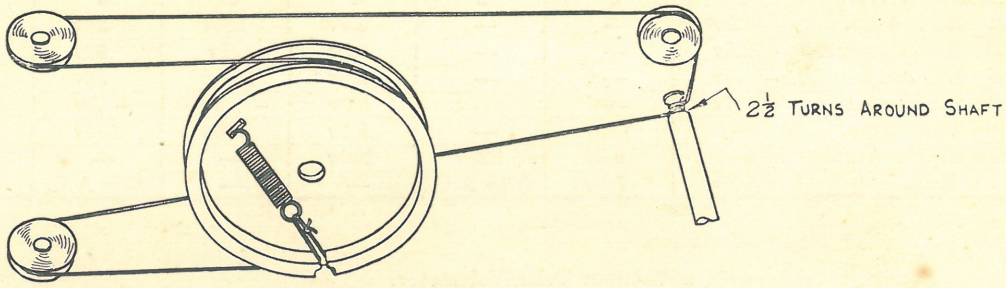
Ant. Coil Primary	.3ohms	I.F. Primary	13.0ohms
„ „ Secondary	2.0ohms	„ Secondary	13.0ohms
Det. Coil Primary	72.0ohms	Vib. Transformer Primary	.15 - C.T
„ „ Secondary	3.2ohms	„ „ Secondary	300ohms C.T.
Osc. Coil Primary	.2ohms	Speaker Transformer Primary	.4ohms
„ „ Secondary	2.0ohms	„ „ Secondary	625ohms

ALIGNMENT INFORMATION.

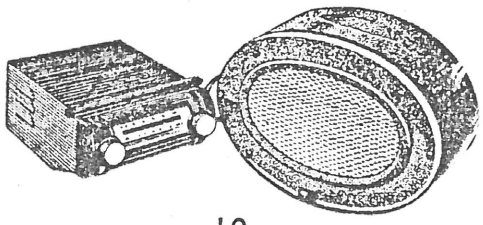
Adjust Vol. Control for max. gain.

Adjust Sig. Gen. output to no higher than is necessary to obtain output meter reading.

DUMMY ANT.	Generator coupled to	Generator Freq.	Receiver Dial Setting	ADJUST	Approx. Sens. for 50MW Output
.1 MFD	Grid 6BA6	460KC/S	550KC/S	2nd I.F. Trimmers for Max.	6000 Micro Volts
.1 MFD	Grid 6BE6	460KC/S	550KC/S	All I.F. Trimmers for Max.	40 Micro Volts
R.M.A. STANDARD	Ant. Lead	1400 KC/S	1400KC/S	Osc. Trimmer T_3	
„	„	1400 KC/S	1400KC/S	Ant. & Det. Trimmers for Max.	Better than I MV
„	„	600KC/S	600KC/S	Padder for Max.	Better than I MV



AMENDMENTS AND REMARKS:



10

RBW

7-VALVE BROADCAST AUTO RADIO (RBN)

This model is made for both 6 volt and 12 volt systems. It has been designed to fit most American, English or Continental vehicles and being in two units can be mounted without any great loss of space.

The circuit incorporates an RF. stage ~~with single ended output~~.

Special attention has been paid to reducing ignition interference by the use of additional filtering; in addition, the use of additional rubber cushions around the vibrator has resulted in reducing mechanical noises to a minimum.

On the speaker housing is a switch that operates a 2-~~stage~~ step tone control.

SPECIFICATIONS:	
VALVES:	2-6*BA*6, 1-6*BE*6, 1-6*AV*6, 1-6*V*6GT, 1-6*AU*6, 1-7*Y*4.
CURRENT CONSUMPTION	5.5 *amps for* 6 *volt.* *Approx.* 3 *amps for* 12 *volt.*
COVERAGE:	1500-550 K/C's.
SPEAKER:	*Rola* 6-9*H P.M.*
CABINET:	*Pressed Steel.*
FINISH:	*Hard-Baked Iridescent Enamel.*
DIMENSIONS:	*Speaker Box:* 10½*in. x* 8*in. oval by* 5*in. thick.* *Tuner:* 7¼*in. x* 6*in.* ~~*sect.*~~ *by* 3¼*in. thick.*