

ASTOR JN
6-Valve A.C. D/W.

1.5MFD Paper Condenser		44 100,000 Ohm Carbon Resistor	10% 1 watt
.35MFD consists of a .25 and a .1MFD condenser		45 60,000 Ohm Carbon Resistor	10% 1 watt
2 .25MFD Paper Condenser		46 50,000 Ohm Carbon Resistor	10% 1 watt
.1MFD Paper Condenser		47 50,000 Ohm Carbon Resistor	10% 1 watt
3 .1MFD Paper Condenser		48 25,000 Ohm Carbon Resistor	10% 1 watt
.07MFD consists of a .05 and a .02 MFD condenser		49 50,000 Ohm Carbon Resistor	10% 1 watt
4 .05MFD Paper Condenser	20% 200V.DCW	50 25,000 Ohm Carbon Resistor	10% 1 watt
.02MFD Paper Condenser	20% 400V.DCW	51 10,000 Ohm—consists of three 30,000 Ohm resistors	10% 1 watt
5 .05MFD Paper Condenser	20% 400V.DCW	30,000 Ohm Carbon Resistor	10% 1 watt
6 .05MFD Paper Condenser	20% 200V.DCW	52 10,000 Ohm Carbon Resistor	10% 1 watt
7 .05MFD Paper Condenser	20% 200V.DCW	53 1500 Ohm Carbon Resistor	10% 1 watt
8 .05MFD Paper Condenser	20% 200V.DCW	54 1000 Ohm Carbon Resistor	10% 1 watt
9 .05MFD Paper Condenser	20% 200V.DCW	55 1000 Ohm Carbon Resistor	10% 1 watt
10 .05MFD Paper Condenser	20% 200V.DCW	56 300 Ohm Wire Wound Resistor	10% 1 watt
11 .03MFD Paper Condenser	20% 200V.DCW	57 300 Ohm Wire Wound Resistor	10% 1 watt
12 .02MFD Paper Condenser	20% 400V.DCW	58 150 Ohm Wire Wound Resistor	10% 1 watt
13 .02MFD Paper Condenser	20% 400V.DCW	59 50 Ohm Wire Wound Resistor	10% 1 watt
14 .02MFD Paper Condenser	20% 400V.DCW	60 50 Ohm Wire Wound Resistor	10% 1 watt
15 .002MFD Paper Condenser	20% 600V.DCW	61 20 Ohm Wire Wound Resistor	10% 1 watt
16 16MFD Electrolytic Condenser	20% 525PV.	62 .5 Megohm Carbon Potentiometer tapped at 40K. Ohms	
17 16MFD Electrolytic Condenser	20% 525PV.	63 100,000 Ohm Carbon Potentiometer	
18 25MFD Electrolytic Condenser	20% 40FV.	64 500 Ohm Carbon Resistor	
19 115MMFD Silvered Mica Condenser	2 1/2% 1000VT.	65	
20 .0001MFD Mica Condenser	10% 1000VT.	66 No. 1 I.F. Transformer (455 Kcs.)	
21 .0001MFD Mica Condenser	10% 1000VT.	67 No. 2 I.F. Transformer (455 Kcs.)	
22 .0001MFD Mica Condenser	10% 1000VT.	68 Antenna Transformer (B/cast)	
23 .00005MFD Mica Condenser	10% 1000VT.	69 Antenna Transformer (S/wave)	
24 .00005MFD Mica Condenser	10% 1000VT.	70 R.F. Transformer (B/cast)	
25 .004MFD Mica Condenser	5% 1000VT.	71 R.F. Transformer (S/wave)	
26 450MFD Mica Condenser	2 1/2% 1000VT.	72 Power Transformer (200-250V. 50 cycles)	
27 8MMFD Silvered Mica		Power Transformer (200-260V. 40 cycles)	
28 1.5-18MMFD Trimmer		73 Choke, B+ Filter	
29 3-55MMFD Trimmer	} Double Trimmer Assembly	74 Oscillator Coil (B/cast)	
30 1.5-18MMFD Trimmer		75 Oscillator Coil (S/wave)	
31 1.5-18MMFD Trimmer	} Double Trimmer Assembly	76 Dial Lamp, Min, Screw Base, T3 1/2 size Bulb, 6-8V. .25A	
32 0-30MMFD Trimmer wire wound		77 Speaker, 8" Perm. with 5,000 Ohms Imped. Input Trans.	
33 0-30MMFD Trimmer wire wound		78 Wave-change Switch	
34 3 Gang variable condenser		Socket - 8 Pin	
35 Neutralizing Condenser (3" of parallel pair flex)		Terminal - Press-down Type	
36		Valve Shield (4)	
37 3 Megohm Carbon Resistor	10% 1/2 watt	Tube Type 6U7G RF stage	
38 1.75 Megohm Carbon Resistor	10% 1/2 watt	Tube Type 6J8GA Converter	
39 1.75 Megohm Carbon Resistor	10% 1/2 watt	IF. Amplifier	
40 1 Megohm Carbon Resistor	10% 1/2 watt	Diode Detector, AVC., 1st Audio	
41 .5 Megohm Carbon Resistor	10% 1/2 watt	Power Output Amplifier	
42 .25 Megohm Carbon Resistor	10% 1 watt	Tube Type 6B6G 2nd Det.	
43 100,000 Ohm Carbon Resistor	10% 1/2 watt	Tube Type 6V6GT/G Power Output	
		Tube Type 5Y3GT/G Rectifier	

<u>TUBE COMPLEMENT</u> —Type 6U7G	RF. Amplifier
" 6J8GA	Converter
" 6U7G	IF. Amplifier
" 6B6G	Diode Detector, AVC., 1st Audio
" 6V6GT/G	Power Output Amplifier
" 5Y3GT/G	Full Wave Rectifier

INTERMEDIATE FREQUENCY—455Kcs.

<u>TUNING RANGE</u> —Broadcast: 540-1640 Kilocycles
555-182.9 Metres
Shortwave: 5.8-18.5 Megacycles
50-16 Metres

CALIBRATION—Straight Line Frequency

POWER CONSUMPTION—65 Watts (approx.)

Voltage Table

Tube	Fil.	Plate	Screen	Cathode	Oscl. Plate
6U7G (RF.)	6.3V	270V	74V		
6J8GA	6.3V	270V	107V	2.9V	150V
6U7G (IF.)	6.3V	270V	90V		
6B6G	6.3V	75V			
6V6GT/G	6.3V	260V	270V	14V	
5Y3GT/G	5V	323/323V RMS. The initial surge voltage across the first electrolytic condenser (circuit No. 16) is 380 volts dropping to the normal operating voltage of 320 volts. DC. voltage across the 520 Ohm filter choke is 50 volts.			

Power consumption: 65 watts (approx.).

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Alignment Conditions: Load Impedance - 5000 Ohms
 Output Level - 50 Milliwatts
 Volume Control - Max. volume (fully clockwise)
 Tone Control - Treble position
 I.F. Attenuator - Connected between 6U7G I.F. tube control grid and chassis during alignment of aerial and RF. stages.

Alignment: Intermediate frequency 455 Kcs.

Operation No.	Generator Connection	Generator Frequency	Dummy Antenna	Instructions
TURN WAVE-CHANGE SWITCH (ROLL DIAL) TO B/CAST POSITION.				
1.	To control grid of 6U7G I.F. tube	455 Kcs.	.01MFD mica capacitor in series with generator	Leave grid clip on tube. Peak 2nd I.F. trans. primary and secondary
2.	To control grid of 6J8GA tube	455 Kcs.	" "	Leave grid clip on tube. Turn gang plates full out. Peak 1st I.F. trans. primary and secondary.
3.				Connect I.F. attenuator between 6U7G I.F. tube control grid and chassis during remainder of alignment.
4.	To antenna terminal	600 Kcs.	200MMFD Mica capacitor in series with generator	Turn gang and dial pointer to 600 Kcs. Adjust B/cast. oscl. coil inductance trimmer (iron core) for max. output. Rock the gang to and fro through the signal while adjusting.
5.	To antenna terminal	1400 Kcs.	" "	Turn gang and dial pointer to 1400 Kcs. Adjust B/cast. oscl. coil trimmer for logging and peak B/cast. antenna and R.F. transformer trimmers.
6.				Repeat operations Nos. 4 and 5.

TURN WAVE CHANGE SWITCH (ROLL DIAL) TO S/WAVE POSITION

7.	To antenna terminal	16Mcs.	400 Ohm non-inductive resistor in series with generator	Turn gang and dial pointer to 16 Mcs. Adjust S/wave oscl. coil trimmer for logging and peak S/wave, antenna and R.F. transformer trimmers. Rock the gang to and fro through the signal while adjusting.
8.	"	7 Mcs.	" "	Check tracking at 7 Mcs.

