DUMONT

First with the Finest in Television

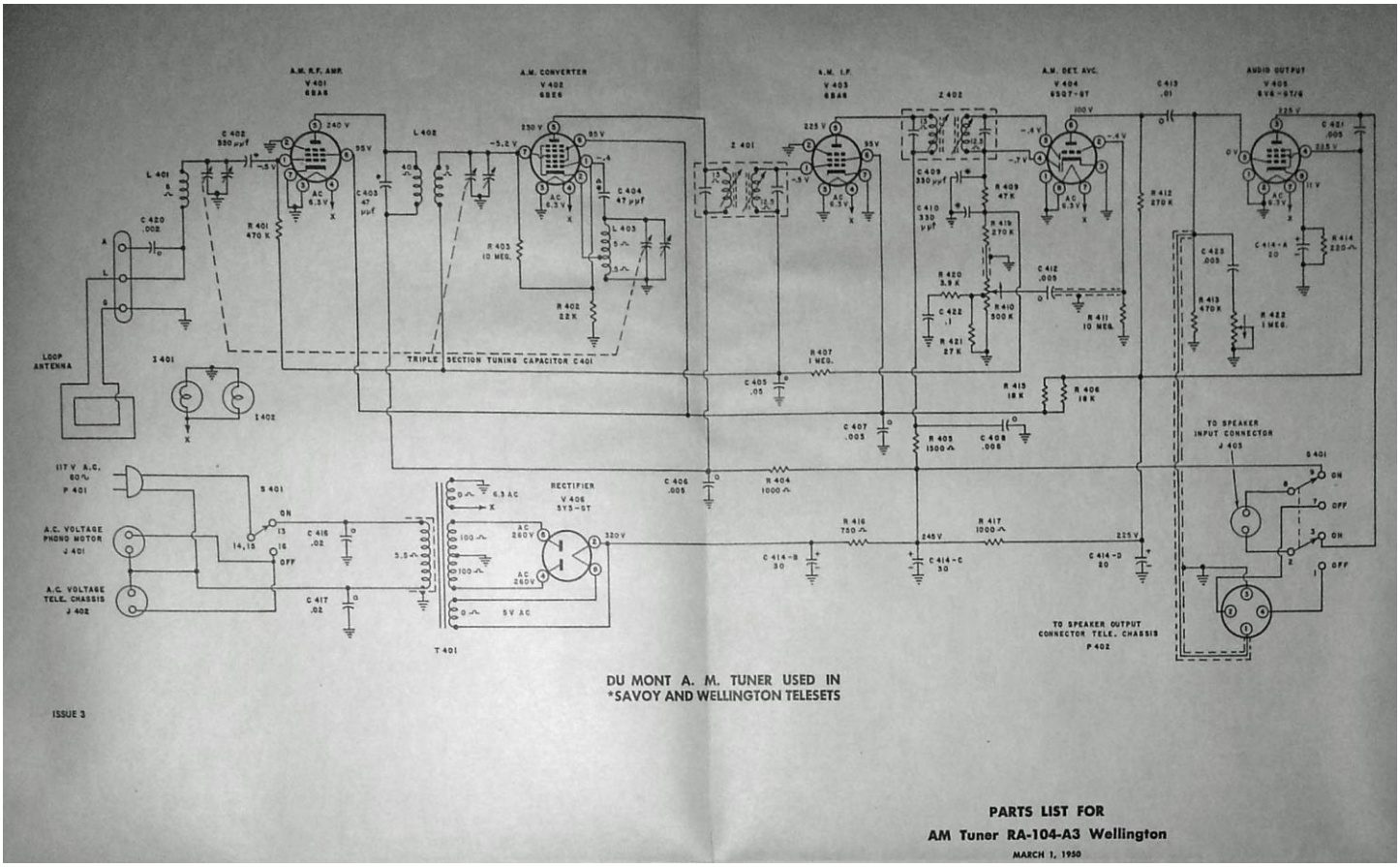
SCHEMATIC DIAGRAM
and
ALIGNMENT PROCEDURE
for
AM TUNER
in
TELESET MODELS

RA-103C
SAVOY
WINTHROP

RA-104A
WELLINGTON

ALLEN B. DU MONT LABORATORIES, INC.
TELESET SERVICE CONTROL DEPT.
MARKET STREET, EAST PATERSON, NEW JERSEY

FIRST EDITION MARCH, 1950



DU MONT A. M. TUNER USED IN
*SAVOY AND WELLINGTON TELESETS

ISSUE 3

PARTS LIST FOR

AM Tuner RA-104-A3 Wellington

MARCH 1, 1950

ALIGNMENT PROCEDURE FOR DU MONT AM TUNER

The alignment should be made with the volume control fully on and tone control set for high frequency response. The output from the signal generator should be maintained as low as possible to prevent A. V. C. action from interfering with the correct alignment.

Connect an output meter across the voice coil of the speaker. Turn on signal generator and AM Tuner for approximately five minutes to stabilize. Connect a common ground to each unit. When connecting the signal generator output leads to the receiver, place a .25 mfd condenser in series with the inner conductor of the signal generator output lead.

1. Turn the tuning dial to the extreme low frequency end. (Gang condenser fully closed.)

2. Connect the signal generator output lead to the converter stator of the tuning capacitor C401.

3. Set signal generator to 455 KC, and adjust tuning slugs on I. F. coils Z402 and Z401 (secondary and primary) in the order given for maximum deflection, reducing generator output as required. Repeat tuning until maximum output is obtained.

4. Connect generator to antenna input terminal.

5. Turn tuning dial pointer to 1500 KC. Feeding in a 1500 KC signal from generator adjust RF, converter and oscillator trimmers on tuning capacitor C401 for maximum audio output.

*WINTHROP AND SAVOY TELESETS ARE IDENTICAL EXCEPT FOR CABINET.

PARTS LIST FOR

AM Tuner RA-104-A3 Wellington

MARCH 1, 1950

Symbol No.	Part Number	Description
C401	03018551	Cap V 3 sections
C402	03014390	Cap Ce 330 mmf 20% 350V
C403	03012730	Cap Ce 47 mmf 10% 500V
	03014200	
C404	Same as C403	
C405	03000950	Cap Pa .05 mf 25% 200V
C406	03001570	Cap Pa .005 mf 25% 600V
C407	Same as C406	
C408	Same as C406	
C409	Same as C402	
C410	Same as C402	
C412	Same as C406	
C413	03012560	Cap Pa .01 mf 25% 600V
C414	03014400	Cap E 30/30/20/20 mf
C416	03018570	Cap F Pa .02 mf 20% 600V
	02018560	
C417	Same as C416	
C420	03014430	Cap Pa .002 mf 10% 600V
C421	Same as C406	
C422	03013910	Cap Pa .1 mf 25% 200V
C423	Same as C406	
I401	12000840	Lamp inc .25 amp 6.3V
I402	Same as I401	
J403	09015921	Connector Asy
L401	21004321	Antenna Coil Asy
L402	21004331	Asy RF Coil
L403	21004451	Coil Osc Asy
P401	50002980	Cable Asy Power
P402	09006472	Connector Asy
R401	02032580	Res F C 470K 20% ½W
	02042580	
	02052580	
R402	02032500	Res F C 22K 20% ½W
	02042500	
	02052500	
R403	02032660	Res F C 10 meg 20% ½W
	02042660	
	02052660	
R404	02032420	Res F C 1K 20% ½W
	02042420	
	02052420	
R405	02032430	Res F C 1.5K 20% ½W
	02042430	
	02052430	
R406	02037920	Res F C 18K 10% 2W
R407	02032600	Res F C 1 meg 20% ½W
	02042600	
	02052600	
R409	02032520	Res F C 47K 20% ½W
	02042520	
	02052520	
R410	01006670	Res V C 500K 20% ¼W
	01017200	
	01012200	
R411	Same as R403	
R412	02032060	Res F C 270K 10% ½W
	02042060	
	02052060	
R413	02032090	Res F C 470K 10% ½W
	02042090	
	02052090	
R414	02037690	Res F C 220 ohms 10% 2W
R415	Same as R406	
R416	02107830	Res F W 750 5% 10W
R417	02037770	Res F C 1K 10% 2W
R419	Same as R412	
R420	02031840	Res F C 3.9K 10% ½W
	02041840	
	02051840	
R421	02031940	Res F C 27K 10% ½W
	02041940	
	02051940	
R422	01007070	Res V C 1 meg 20% ¼W
	01012100	
S401	05003821	Switch AM Tuner
T401	20004151	Transformer Power
V401	25000240	Tube Elec 6BA6
V402	25000250	Tube Elec 6BE6
V403	Same as V401	
V404	25000210	Tube Elec 6SQ7GT/G
V405	25000090	Tube Elec 6V6GT/G
V406	25000220	Tube Elec 5Y3GT
Z401	20004041	Transformer IF
Z402	20004042	Transformer IF
	35006771	Bracket Mounting
	42001591	Shield Light
	38001451	Grommet Shock Mount
	43000321	Bushing
	34001100	Socket Tube Octal
	34001740	Socket Tube 7 Prong
	38000600	Strain Relief
	51000940	Terminal Lug Ring
	09000880	Connector Female 2 contact
		Assembly Dial
	41001321	Insulator Sheet Coil
	41001361	Insulator Sheet
	12002792	Dial Light Asy
	12002781	Bracket Dial Light
	43000443	Spacer
	30008292	Pulley
	30008300	Belting
	30008601	Spring AM Tuner
	30012831	Shaft AM Tuner
	30010161	Bearing Sleeve
	45001581	Plate Front
	45001711	Pointer Dial
	45001591	Dial AM Tuner
	64000140	Button Plug

PARTS LIST FOR SAVOY AND WINTHROP TUNERS SAME AS ABOVE, EXCEPT FOR THE FOLLOWING

AM TUNER
RA-103-A

JANUARY 28, 1949

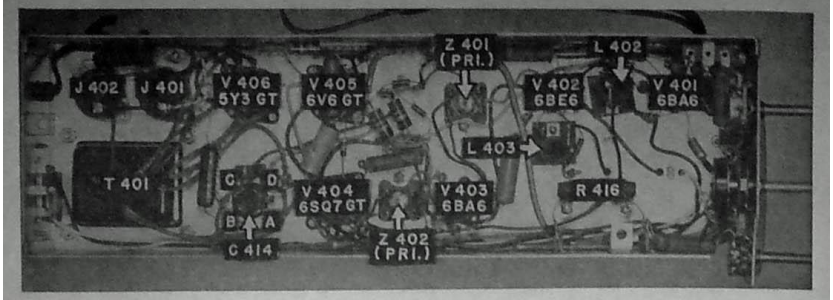
Symbol No.	Part Number	Description
C401	3C-12714	Cap V 3 section
C419	3-1439	Cap F Ce 330 mmf 20% 350V
J403	9-486	Connector asy female 2 contact
P402	9-501	Cable asy male 2 contact
S401	5C-12914	Switch

AM TUNER
RA-103C

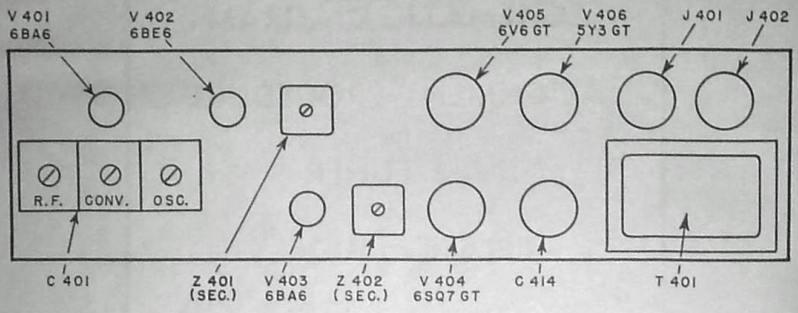
JANUARY 28, 1949

Symbol No.	Part Number	Description
C401	3C-12714	Cap V 3 section
J403	9A-13516	Connector asy
P402	9B-13514	Connector asy
S401	05003251	Switch

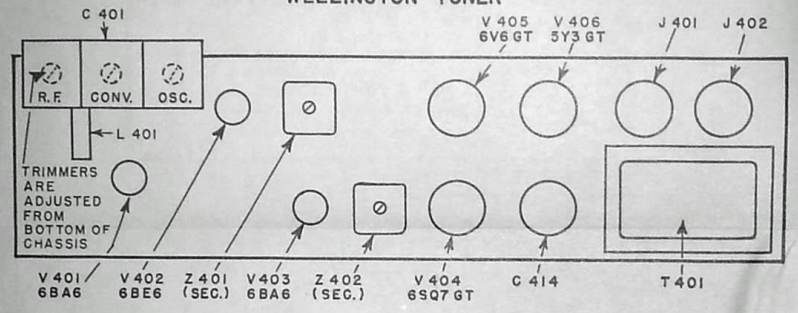
SAVOY TUNER — BOTTOM VIEW

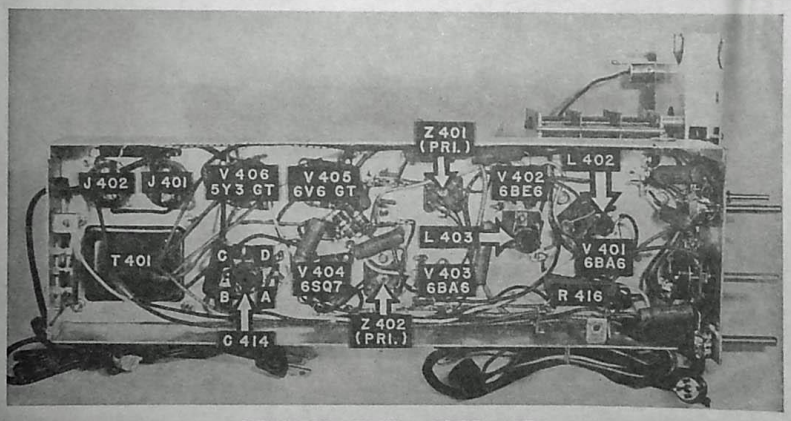


SAVOY TUNER



WELLINGTON TUNER





WELLINGTON TUNER — BOTTOM VIEW

Resistance Measurements — All Readings to Ground

RA-103C and RA-104A AM Tuner

Tube	1	2	3	4	5	6	7	8
V401	2M	0	0	.05	Inf	Inf	0	
V402	20K	0.5	0	.05	Inf	Inf	1.5M	
V403	1.5M	0	0	.05	Inf	Inf	0	
V404	0	10M	0	600K	600K	Inf	.05	0
V405	0	0	Inf	Inf	470K	Nc	.05	220
V406	Nc	Inf	Inf	109	Inf	116	Nc	Inf

Instrument used — RCA model 195-A Voltohmyst for voltage and resistance.
All readings in ohms. K = thousand M = million

Resistance Readings of Coils

All readings in ohms.
All readings shown were taken with coils disconnected.

Symbol	*Resistance in ohms*	
	Pri.	*Sec.*
L401	8.0	
L402	40.0	9.0
L403	.5	5.0
Z401	13.0	12.5
Z402	13.0	12.5
T401	5.5	200.0