

# ALIGNMENT PROCEDURES

# **MODEL 05WG-2752**

#### AM STAGES

The following is required for aligning:

An All Wave Signal Generator Which Will Provide an Accurately Calibrated Signal at the Test Frequencies as Listed.

Output Indicating Meter, Non-Metallic Screwdriver, Dummy Antennos

— .1 mf, and 50mmf.

Volume Control Maximum all Adjustments.

Connect Radio Chassis to Ground Post of Signol Generator with a Short Heavy Lead.

Allow Chassis and Signal Generator to "Heat Up" for Several Minutes.

SIGNAL GENERATOR						
FREQUENCY SETTING	CONNECT GENERATOR OUTPUT TO	THROUGH CONNECT DUMMY GROUND ANTENNA TO		GANG CONDENSER SETTING	ADJUST	ADJUST FØR
455 KC	Control Grid 1st 6BA6 Pin No. 1	.1 mf	Chassis Base	Rotor Fully Open	2nd I.F. Pri. (1) and Sec. (2)	Maximum Output
455 KC	Control Grid 68E6 Pin No. 7 1st Det.	.1 mf	Chossis Bose	Rotor Fully Open	1st I.F. Pri. (3) and Sec. (4)	Moximum Output
455 KC	Control Grid 6BE6 Pin No. 7	.1 mf	Chassis Base	Rotor Fully Open	2nd I-F Pri. (1) ond Sec. (2)	Moximum Output
1620 KC	Control Grid 6BE6 Pin No. 7	.1 mf	Chassis Bose	Rotor Fully Open	Oscillator C-41	Moximum
1400 KC	External Antenna Lead	50 mmf	Chossis Bose	Turn Rotor to Max. Output. Set Pointer to 1400 KC See Note A	Antenna C-2	Moximum Output

NOTE A-If the pointer is not at 1400 KC on the dial, reset pointer to the 1400 KC mark on the dial scale.

### FM STAGES

The following is required for oligning:

An accurately collibrated signal generator providing unmodulated signals at the test frequencies listed below.

Non-matallic scrawdriver

Dummy Antennas and I-F Loading Resistor—2500 mmf, 300 ohms

Zero center scale DC vocuum tube voltmeter hoving a range of approximately 3 volts.

(If a zero center scale meter is not ovoilable, a standard scale vacuum tube voltmeter may be used by reversing the meter connections for negative readings).

Allow chassis and signal generator to "Heat Up" for several minutes.

	SIGNAL GI	ENERATOR					
	FREQUENCY SETTING	CONNECT GENERATOR OUTPUT TO	THROUGH DUMMY ANTENNA	BAND SWITCH SETTING	GANG CONDENSER SETTING	ADJUST	ADJUST FOR
Discriminator	10.7 MC	6BA6 2nd 1-F Pin 1 and Chassis	2500 mmf	FM	Rotor Fully Open	Disc. Pri. (5) Note A	Moximum Deflection
	10.7 MC	6BA6 2nd 1-F Pin 1 and Chassis	2500 mmf	FM	Rotor Fully Open	Disc. Sec. (6) Note B	
l-F	10.7 MC Note C	6BA6 1st 1-F Pin 1 and Chassis	2500 mmf	FM	Rotor Fully Open	2nd I-F Pri. (7) Sec. (8) Note D	Moximum Deflection
Discriminotor	10.7 MC	6BA6 1st 1-F Pin 1 and Chossis	2500 mmf	FM	Rotor Fully Open	Disc. Pri. (5)	Maximum Deflection Maximum
I-F	10.7 MC	Junction C-32A & B (Duel 100 mmf cend.) And chossis	2500 mmf	FM	Rotor Fully Open	1st I-F Pri. (9) & Sec. (10) 2nd I-F Pri. (7) & Sec. (8) Disc. Pri. (5) In Order Shown Note D	Deflection
	10.7 MC	Same as obove	2500 mmf	FM	Rotor Fully Open	Disc. Sec. (6) Note B	Maximum Deflection
		RECHECK	I-F ADJUSTMENT	IN ORDER G	IVEN		
Oscill <b>o</b> tor	108.5	Disconnect built-in dipole on- tenna and connect generator to dipole terminols with re- sistor in series.	300 ohms	FM	Rotor Fully Open	O4c. C-25	Maximum Deflection
Antenna	104.5	Some as above	300 chms	FM	Tune rator for	Ant. C-39	Maximum Deflection

### FM ALIGNMENT NOTES

NOTE A—The zero center scale DC vacuum tube voltmeter is to be connected between chassis ground and the AVC line. A signoi of .1 volt must be fed into the receiver for this adjustment.

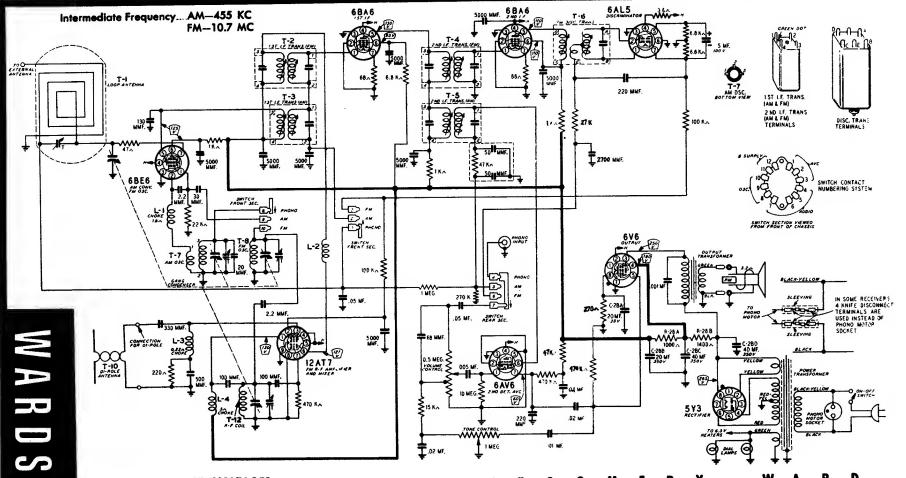
Note output voltage on the zero center DC vocuum tube voltmeter

NOTE B-Disconnect zero center DC vacuum tube voltmeter from AVC and connect it at the audio takeoff point at the 27 K ohm resistor (R-10) and its junction with the terminol strip. Adjust for zero voltage indication.

NOTE C—AM 1-F coils must be oligned before attempting to align the FM 1-F coils.

NOTE D—Connect zero center DC vacuum tube voltmeter os in Note

A. Adjust input to give some output on the zero center DC
vocuum tube voltmeter as in Note A.



DIAL STRING

# TUBE SOCKET VOLTAGES

Socket voltages are shown on the schematic diagram at the tube socket terminals. All voltages are between the socket terminal and chassis ground. Plate, screen and cathode voltages were taken with a 1000 ohm-per-volt meter with a 300 volt scale used for plate and screen voltages. Audio grid voltages were read with a vacuum tube volt-meter.

Conditions of measurement are:

Line voltage ......117 Volts AC Signal Input .......None

# MODELS O5WG-2751A & 05WG-2752B Models O5WG-2752, O5WG-2752C, DIAL BRACKET TENSION Models OFFED 45500 5000

GANG CONDENSER IN FULLY CLOSED POSITION. Models 05WG-2752, 05WG-2752C, and 15WG-2752D differ from models listed above and presented on this page in cabinet or record changer. Model 15WG-2752E also uses an AF coupling pack.

# Montgomery Ward Models O5WG-2751A, O5WG-2752B, etc.

# ALIGNMENT PROCEDURES AM STAGES

The fallowing is required for aligning:

An All Wave Signal Generator Which Will Pravide an Accurately Calibrated Signal at the Test Frequencies as Listed.

Output Indicating Meter, Nan-Metallic Screwdriver, Dummy Antennas
— .1 mf, and 50 mmf.

Valume Control Maximum all Adjustments.

Cannect Radia Chassis to Ground Post of Signal Generator with a Short Heavy Lead.

Allaw Chassis and Signal Generator to "Heat Up" for Several Minutes.

SIGNAL GENERATOR						
FREQUENCY SETTING	CONNECT GENERATOR OUTPUT TO	THROUGH CONNECT DUMMY GROUND ANTENNA TO		GANG CONDENSER SETTING	ADJUST	ADJUST FOR
455 KC	Cantral Grid 1st 6BA6 Pin Na. 1	.1 mf	Chassis Base	Ratar Fully Open	2nd I.F. Pri. (1) and Sec. (2)	Maximum Output
455 KC	Cantrol Grid 6BE6 Pin Na. 7 1st Det.	.l mf	Chassis Base	Rator Fully Open	1st I.F. Pri. (3) and Sec. (4)	Maximum Output
455 KC	Cantral Grid 6BE6 Pin Na. 7	.1 mf	Chassis Base	Ratar Fully Open	2nd I-F Pri. (1) and Sec. (2)	Maximum Output
1620 KC	Control Grid 6BE6 Pin Na. 7	.1 mf	Chassis Base	Ratar Fully Open	Oscillatar C-41	Maximum Output
1400 KC	External Antenna Terminal	50 mmf	Chassis Base	Turn Ratar ta Max. Output. Set Painter ta 1400 KC See Nate A	Antenna C-2	Maximum Output

NOTE A-If the pointer is not at 1400 KC on the dial, reset pointer to the 1400 KC mark on the dial scale.

### FM STAGES

The following is required for aligning:

An accurately calibrated signal generator providing unmodulated signals at the test frequencies listed belaw.

Nan-metallic screwdriver.

Dummy Antennas and I-F Loading Resistar-2500 mmf, 300 ahms

CICNAL CEMEDATOR

Zera center scale DC vacuum tebe valtmeter having a range of appraximately 3 valts.

(If a zera center scale meter is not available, a standard scale vacuum tube valtmeter may be used by reversing the meter connections for negative readings).

Allow chassis and signal generator to "Heat Up" for several minutes.

SIGNAL GENERATOR							
	FREQUENCY SETTING	CONNECT GENERATOR OUTPUT TO	THROUGH DUMMY ANTENNA	BAND SWITCH SETTING	GANG CONDENSER SETTING	ADJUST	ADJUST FOR
Discriminatar	10.7 MC	6BA6 2nd I-F Pin 1 and Chassis	2500 mmf	FM	Rator Fully Open	Disc. Pri. (5) Nate A	Maximum Deflection
	10.7 MC	6BA6 2nd I-F Pin 1 and Chassis	2500 mmf	FM	Rotor Fully Open	Disc. Sec. (6) Nate B	
I-F	10.7 MC Nate C	6BA6 1st I-F Pin 1 and Chassis	2500 mmf	FM	Ratar Fully Open	2nd I-F Pri. (7) Sec. (B) Nate D	Maximum Deflection
Discriminatar	10.7 MC	6BA6 1st I-F Pin 1 and Chassis	2500 mmf	FM	Rotor Fully Open	Disc. Pri. (5)	Maximum Deflection
LF	10.7 MC	Junctian C-32A & B (Dual 100 mmf cond.) And chassis	2500 mmf	FM	Rater Fully Open	1st I-F Pri. (9) & Sec. (10) 2nd I-F Pri. (7) & Sec. (8) Disc. Pri. (5) In Order Shawa Note D	Maximum Deflection
	10.7 MC	Same as above	2500 mmf	FM	Rotar Fully Open	Disc. Sec. (6) Note B	
		RECHECK	-F ADJUSTMENT	S IN ORDER C	SIVEN		
Oscillator	108.5	Disconnect built in dipole antenna and cannect generator to dipole terminals with resistar in series.	300 ahms	FM	Ratar Fully Open	Osc. C-25	<b>Deflection</b> Maximum
Antenna	104.5	Same as above	300 ohms	FM	Tune ratar far max. AVC valtage	Ant. C-39	Maximum Deflection

# RECHECK ANTENNA & OSC. ADJUSTMENTS IN ORDER GIVEN

## FM ALIGNMENT NOTES

NOTE A—The zera center scale DC vacuum tube valtmeter is to be connected between chassis ground and the AVC line.

A signal of .1 valt must be fed into the receiver for this adjustment.

Nate autput valtage on the zero center DC vacuum tube valtmeter.

B-Disconnect zera center DC vacuum tube valtmeter fram AVC and connect it at the audia takeoff point at the 27 K ohm resistar (R-10) and its junction with the terminal strip. Adjust for zero voltage indication.

NOTE C—AM I-F cails must be aligned before attempting to align the FM I-F cails.

NOTE D-Connect zera center DC vacuum tube voltmeter as in Nate
A. Adjust input ta give same autput an the zera center DC
vacuum tubo voltmeter as in Note A.