

Fleetwood Grundig 3953

ALIGNMENT OF CHASSIS MODEL # 3953

Preliminary procedure:

1. Connect receiver to 117V. 60 Cy. line.
2. Set the AM (Broadcast Band) to a small marker on the right hand side of AM scale after closing gang condenser.
3. Set the FM band pointer to a small marker on the right hand side of FM scale.
4. Set the volume control to maximum, Bass and Treble controls to maximum boost. Depress tone compensation push-button marked ORCHESTRA. Set sensitivity switch to FRINGE RECEPTION position.
5. Connect output indicator to external loudspeaker terminals located at rear of chassis. Caution: In case the loudspeakers were disconnected, terminate the output with a wire-wound 3.2 ohm /10 watt resistor.
6. Connect return of signal generator to ground terminal located below AM antenna terminal.
7. Disconnect built-in FM antenna.

AM- IF ALIGNMENT

As a rule the realignment of IF transformers should be avoided. In case where it is necessary to realign the IF transformers, proceed as follows:

Tune slugs in following sequence: 1-2-3-4 for maximum output (see alignment chart No. 1)

FM- IF ALIGNMENT

Feed 10.7 MC unmodulated signal. Detune discriminator by turning slug #14 out (approximately 3 turns) and tune slugs #15, 16, 17, 18, 19 (See alignment chart No. 2)

Tune Ratio Detector slug #14 to "Zero" indication.

FM TUNER ALIGNMENT

Set FM pointer to small right hand side marker on the FM scale (see if this setting coincides with FM tuner mechanical position.)

Tune receiver to 94 MC.

Feed 94 MC signal, unmodulated (see chart).

Connect VTVM parallel to electrolytic condenser, C 408. Adjust trimmers C 20 and C 21 and C 23 for maximum output.(See alignment chart No. 2)

Following this, adjust C 21 and C22 as follows: Adjust C 22 while disconnecting B₊ from R 191 for minimum and C 21 for maximum with B₊ reconnected. Repeat those two steps till no improvement is obtained.(See alignment chart No. 2)

Note: Keep signal generator output at minimum.

	Signal Gen. Connection	Modulation	Band Selec- tor	Set		Detune	Tune	Position	Tune For	See Instr. Below		
				Signal Gen.	Receiver							
AM	Trough .005 μ Fd to grid # 1 ECH 81 tube	30 % AM	AM	472KC	1,000 KC	-	Slug # 1 in BV 788 Slug # 2 in BV 788 Slug # 3 in BV 787 Slug # 4 in BV 787	Bottom Top Bottom Top	Maximum	"A"		
	472KC			520 KC	-	Slug # 5 in BV 700	Side	Minimum				
	520KC 1600KC			520 KC 1600 KC		Slug # 6 in BV 657 Trimmer 7 (C211)	Bottom Bottom	Maximum				
	1600KC			1600 KC		Trimmer # 9 (C206)	Bottom					
	LW 150KC			150 KC	-	Slug # 10 in BV 546	Bottom					
	SW 6 MC 7 MC			6 MC 7 MC	SW-Band- spread to "0" position	Slug # 12 in BV 702 Slug # 13 in BV 725	Bottom Bottom					
FM	Trough capa- citive coupling to ECC 85 tube	Unmodu- lated.	FM	10.7 MC	100 MC	in BV 788	Slug # 14 Slug # 15 in BV 788 Slug # 16 in BV 787 Slug # 17 in BV 787 Slug # 18 in FM tuner Slug # 19 in FM tuner	Bottom Top Top Bottom Bottom Top	3 Turns out	"C"		
						-	Slug # 14 in BV 788	Bottom	Maximum			
						-	Trimmer 20	Top	"Zero" reading			
						Repeat	Trimmer 21 In Trimmer 22 FM Trimmer 23 tuner	Top Top Top Top	Maximum D C			
	To FM ant. terminals 300 Ω	Unmodu- lated	FM	94 MC	94 MC							

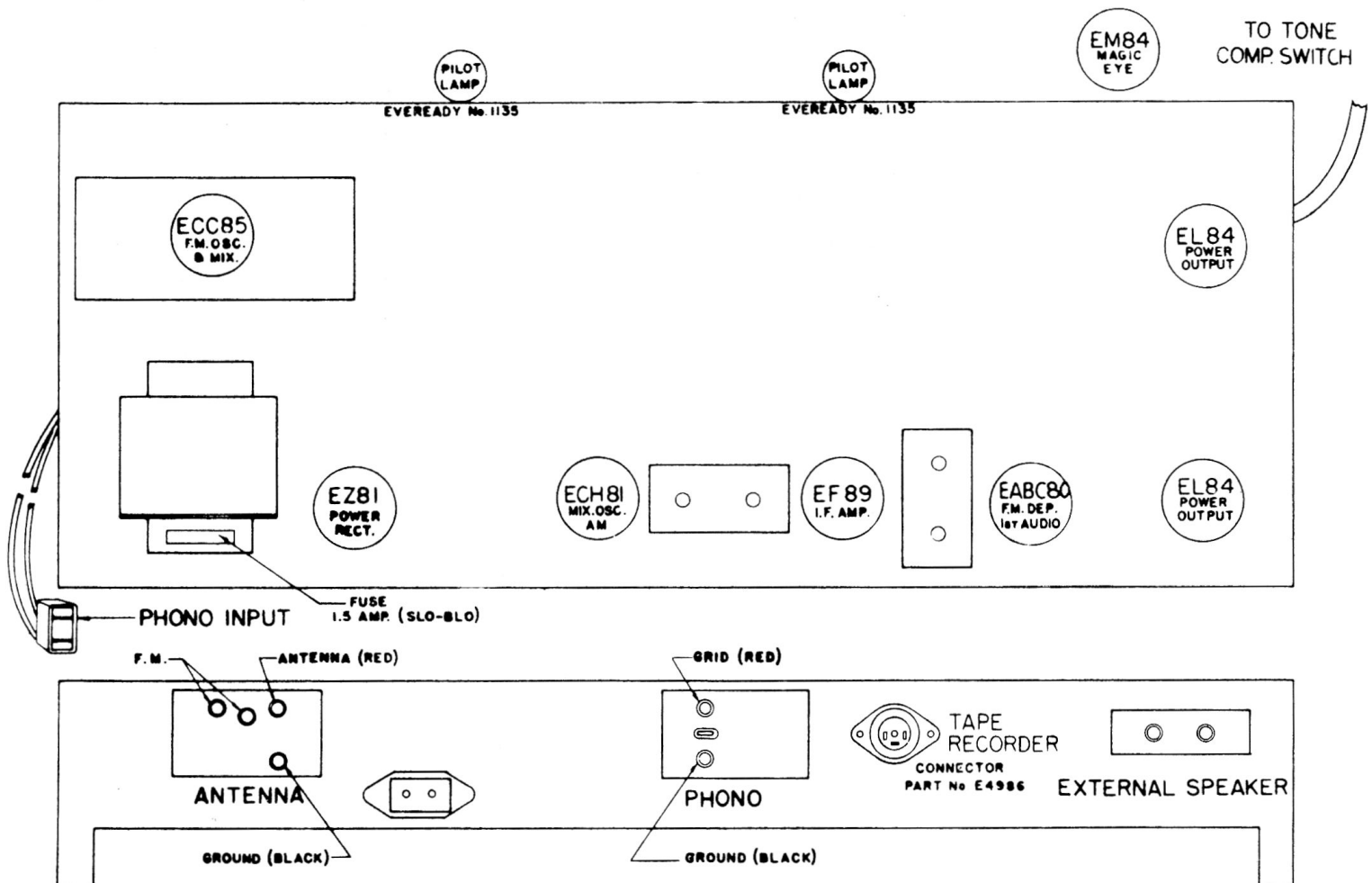
INSTRUCTIONS

"A" - AC-DC voltmeter, 1.5 V scale connected to External Loudspeaker terminals. On FM band switch off Ferrite loop antenna.

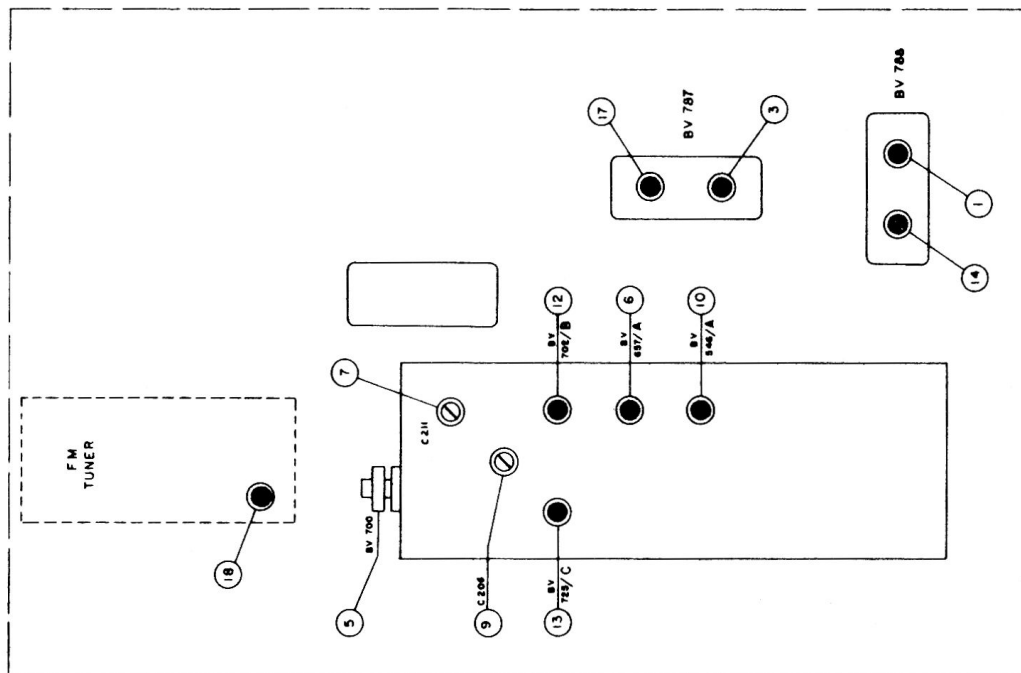
"C" - Connect VTVM to R411 (39K)

"D" - Same as "C". Only disconnect B₁ from R191. Increase Sig. gen. output.

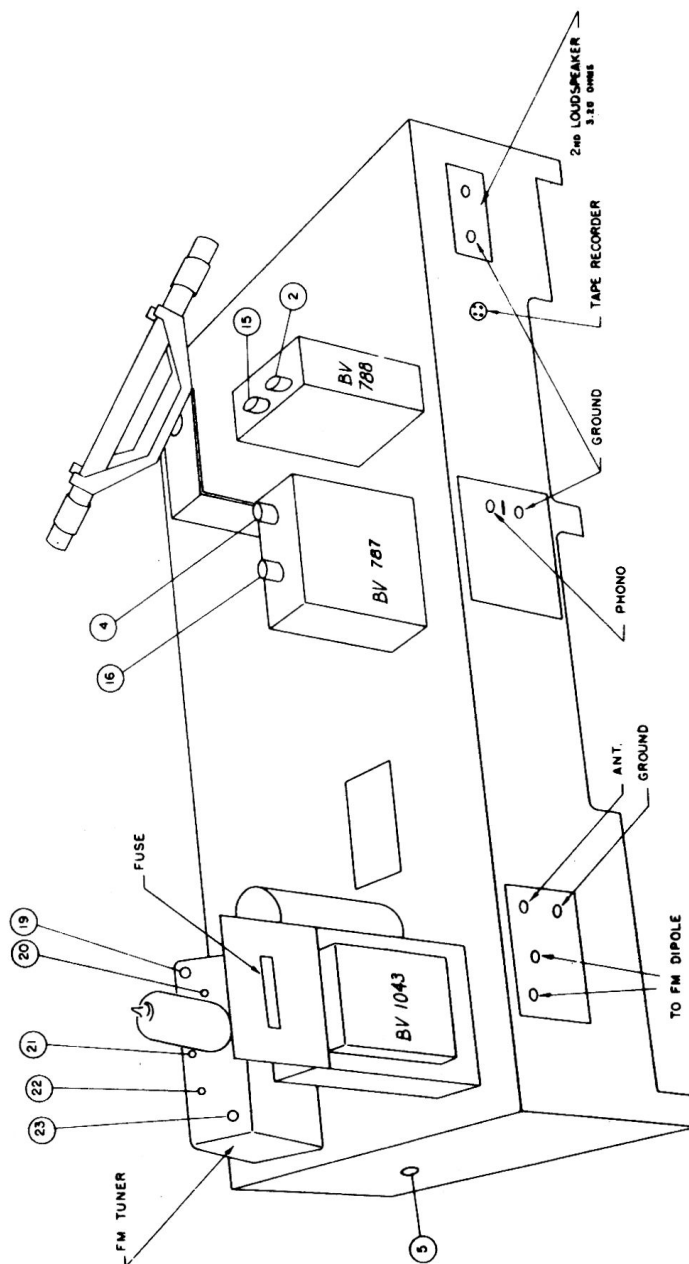
Alignment Chart No. 1



BOTTOM VIEW



TOP VIEW



Alignment Chart No. 2