

# RADIO DATA SHEET No. 109

**DESCRIPTION:** Kriesler "Twinni", Model 11-113 is a light-weight portable, solid state radiogram; covering the broadcast band, the gram reproduction being monaural. The circuitry includes 7 transistors and 3 diodes, with complementary symmetry output configuration. The unit is housed in a poly-propylene case, available in a variety of currently-fashionable colours.

**RADIO TUNER:** 3 Silicon transistor stages, overload diode and diode demodulator.

**AERIAL:** Ferrite rod, 6" x 3/4". Complete Assembly, Part No. 14-4396.

**TUNING RANGE:** 525-1800 KHz. I.F. 455 KHz.



**MODEL 11-113**

## ALIGNMENT PROCEDURE

STEP	SIGNAL GEN. FREQUENCY	CONNECT SIGNAL GENERATOR TO—	WITH TUNING GANG—	PROCEED AS FOLLOWS
1. ....	455 Kc/s	Base of TR 1	Closed	Peak core of IFT 3
2. ....	455 Kc/s	<b>IMPORTANT</b>	Closed	Peak core of IFT 2
3. ....	455 Kc/s	Connect generator earth to emitter of TR 1	Closed	Peak core of IFT 1
4. ....	--		--	Repeat until no further gain is obtainable.
5. ....	455 Kc/s	Radiate into Aerial	Closed	Check alignment of IFT 1
6. ....	525 Kc/s	Radiate into Aerial	Closed	Adjust oscillator coil until signal is heard.
7. ....	1800 Kc/s	Radiate into Aerial	Open	Tune oscillator trimmer until signal is heard
8. ....	600 Kc/s	Radiate into Aerial	at 600 Kc/s	Peak aerial coil
9. ....	1700 Kc/s	Radiate into Aerial	at 1700 Kc/s	Peak aerial trimmer.
10. ....	Repeat 8 and 9 until no further gain is obtainable.			

**NOTE:** Inject 455 Kc/s signal to base of TR 1 via a 0.22 uF capacitor.

**RECORD CHANGER:** BSR Type TU12, four speed. **CARTRIDGE:** Tropic proof C1 ceramic. **STYLUS:** Type ST3, Sapphire.

**STYLUS PRESSURE:** 6-8 grammes.

**CONTROL:** Three. a) Off-on/Volume. b) Tuning. c) Speed Selector/Radiogram switching.

**NOTE:** Radio operates only when the speed selector is placed in the "R" position. **CAUTION:** Always return motor speed selector to neutral ("R") when unit is not in use, to avoid forming a "flat" on the idler wheel. The motor has no automatic "stop" but the Off-on/Volume control switch disconnects power from the motor which, with no power applied, is stopped by hand.

**POWER SUPPLY:** 220-260 V.A.C. Mains, 50 Hz. Change motor if supply frequency is 40 or 60 Hz.

**SPEAKER:** 4", 10Q, Rola type 4D00/10.

**DIMENSIONS:** 17" Wide, 11" High, plus handle, 5" Deep. **WEIGHT:** 10 lb.

**CHASSIS ACCESS:** Place unit upside down, on lid. From the back, remove the outer screw from each of the two black polythene feet, and the two silver-plated mushroomhead screws near the bottom edge. Remove one screw adjacent to each end of the lower section of the carrying handle. Lift off back to expose chassis and components.

**RESISTOR DATA:** All resistors are  $\frac{1}{2}W \pm 10\%$  except as follows:-  
 R1, R8 and R10,  $\pm 5\%$ . R103, Volume Pot/Off-on Switch, Part No. 32-7110.  
 R109, Termistor, Philips B8 01A/130E. R113, R114,  $\frac{1}{2}W$  wirewound.

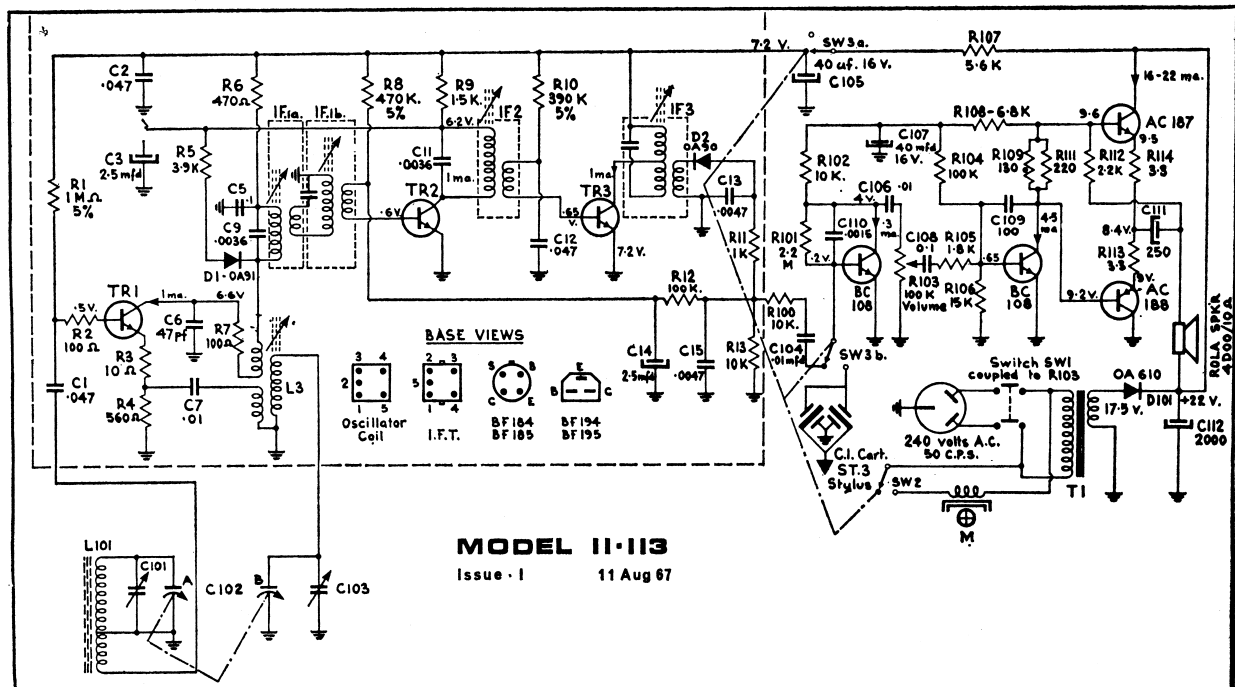
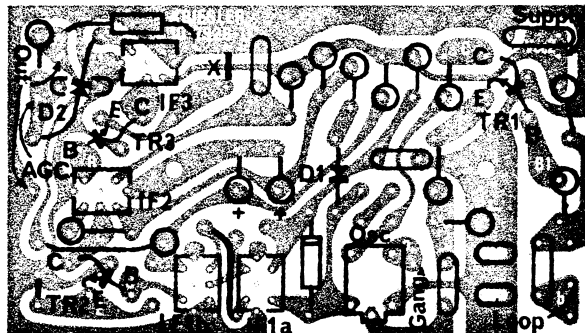
**CAPACITOR DATA**

C9	.047uF	25V	Ceramic	C1	.047uF	25V	Ceramic	C105	40uF	16V	Electro
C10	.0047	25V	Ceramic	C2	.047uF	25V	Ceramic	C106	.01uF	25V	Ceramic
C11	2.5uF	16V	Electro	C3	2.5uF	16V	Electro	C107	40uF	16V	Electro
C12	.0047	25V	Ceramic	C4	0.1uF	25V	Ceramic	C108	0.1uF	25V	Ceramic
C101	Trimmer	5/55pF	CWA/o	C5	47pF	500V	Ceramic	C109	100pF	600V	Styroseal
C102	Tuning Gang	63-8563		C6	0.01uF	25V	Ceramic	C110	.0015uF	200V	Styroseal
C103	Trimmer Wire	3/30pF		C7	.0036uF	50V	Styroseal	C111	250uF	16V	Electro
C104	.01uF	125V	Poly	C8	.0036uF	50V	Styroseal	C112	2000uF	25V	Ducon ET 5D

L101 Loopstick Assembly 14-4396  
 IF1a I.F. Transformer CZ651-000  
 IF1b I.F. Transformer CZ651-006  
 IF2 I.F. Transformer CZ651-004  
 IF3 I.F. Transformer CZ651-005

T1 Power Transformer 18-8562

Switch SW2 Cherry 111  
 Switch SW3 MSP Series 500 Part No 90-8564  
 Knobs 20-7940  
 Knob Insert, Radio 16-8561  
 Knob Insert, Volume 16-7940



**NOTE:** TR1 - TR2 - TR3. Irrespective of Transistor Type Number,  
 TR1 is colour-coded RED, stamped with LETTER 'B'  
 TR2 - " " BLUE " " 'C'  
 TR3 - " " GREEN " " 'D'

SW3 a, SW3 b and SW2 are drawn in "Radio" position.  
 Voltages are positive with respect to earth measured with  
 a 20,000  $\Omega$ /Volt D.C. Meter

KRIEGLER MODEL 11-113 K21, a