KRIESLER
AUSTRALASIA PTY. LIMITED

TECHNICAL ADVISORY SERVICE
SERVICE SHEET NO. 133

BOX 107 P.O. CARINGBAH N.S.W. 524-0444

PLEASE CIRCULATE TO YOUR SERVICE DEPARTMENT

STEREOPHONIC RADIOGRAM MODEL 11-140

July, 1970

DESCRIPTION:

This model is a 3-piece modular Broadcast Band stereophonic radiogram in the "World Series" range. The 15-transistor, 5-diode chassis is essentially the same as used in Models 11-124 etc. but does not employ a regulated power supply. Zener diode regulation is provided for the radio tuner supply.

POWER OUTPUT: 5W r.m.s. per channel at 10% T.H.D. Music power total 10W (I.H.F.) (5% distortion).

MAINS SUPPLY: 240V, 50Hz. Power Transformer tapped for 260V (nom.) operation. The chassis is suitable for operation on a mains frequency of 40, 50 or 60 Hz but the record changer motor must be changed for operation on other than 50 Hz.

FUSES:
High Tension: 2A Type 3AG (in holder)
Dial Lamps: 0.012" diameter tinned copper wire.

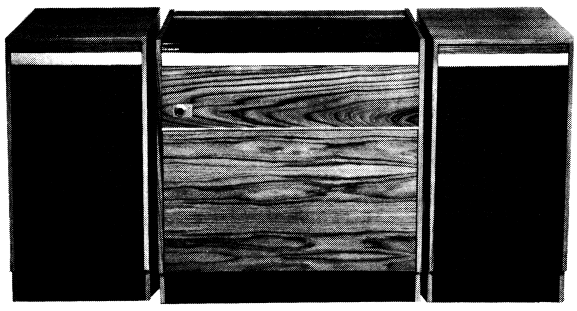
RANGE OF TONE CONTROLS:
Treble: +10 dB to −10 dB at 10 kHz.
Bass: +12 dB to −15 dB at 50 Hz.

NOTE: The volume control is provided with a loudness compensation network; the above figures were taken with this control at mid-position.

AMPLIFIER BIAS PRESET ADJUSTMENT: The preset R44 enables the drive current of TR7 to be set at the correct level for maximum output and minimum distortion irrespective of the Beta spread in the transistors. Check adjustment of R44 if TR9 or TR10 have been replaced.

To adjust:
1. Inject 1 kHz signal at low level into the P.U. input of each channel in turn.
2. Connect a C.R.O. to the negative side of the speaker coupling capacitor C36.
3. Increase generator signal until clipping just becomes visible on the C.R.O.
4. Adjust R44 until the clipping is equal on both positive and negative half-cycles. Repeat for other channel.

CLEANING TINTED ACRYLIC COVER: Fingermarks and dust particles are best removed by wiping gently with a soft cloth moistened with methylated spirits. This process also removes any electrostatic charge on the acrylic, so preventing further attraction of dust particles for a time. For this reason, do not wipe completely dry.



MODEL 11-140

NOTE: The circuit diagram attached to this model is for technical guidance only and may differ in some aspects from the actual circuit used.

DIMENSIONS:

Unit	Height	Width	Depth
Command Module	25½"	24 3/8"	15"
Satellite Modules	25½"	13"	15"

RECORD CHANGER	CARTRIDGE	STYLUS
B.S.R. MA65	Tetrad 2	C2D Diamond

LOUDSPEAKERS:

8" Twin-Cone. Magnavox 8ER/8 ohm v.c.

CAUTION: Switch off before connecting or disconnecting speakers. An accidental short-circuit on the speaker jacks may damage the output transistors. The amplifiers are designed to operate into an 8 ohm impedance load. If additional speakers are used, the total load match per channel must not be less than 6 ohms.

TRANSPORT PRECAUTIONS: Before transporting the unit, the record changer transit screws must be tightened and the pick-up arm clipped to its rest to prevent damage. On installation, the transit screws must be loosened and the pick-up arm unclipped before operating the changer.

ALIGNMENT PROCEDURE

STEP	SIGNAL GEN. FREQUENCY	CONNECT SIGNAL GENERATOR TO –	WITH TUNING GANG –	PROCEED AS FOLLOWS
1	455 KHz	Base of TR 1	Closed	Peak core of IFT 3
2	455 KHz	via 0.22 μF.	Closed	Peak core of IFT 2
3	455 KHz		Closed	Peak core of IFT 1
4	–		–	Repeat until no further gain is obtainable
5	455 KHz	Radiate into Aerial	Closed	Check alignment of IFT 1
6	525 KHz	Radiate into Aerial	Closed	Adjust oscillator coil until signal is heard
7	1635 KHz	Radiate into Aerial	Open	Tune oscillator trimmer until signal is heard
8	600 KHz	Radiate into Aerial	at 600 KHz	Peak aerial coil
9	1500 KHz	Radiate into Aerial	at 1500 KHz	Peak aerial trimmer
10	Repeat 8 and 9 until no further gain is obtainable			

CARE OF CABINET: Polish with any reputable make of furniture polish. If alcoholic spirits are accidentally spilled on woodwork, the effect cannot be removed unless wiped off immediately. Beer, soft drinks or milk beverages may be removed by wiping with a soft absorbent cloth. Polish if necessary. The anodised aluminium surfaces are reasonably impervious to fingermarks, most household foodstuffs, soft drinks and alcohol, but they should be wiped off without delay. Milk, lemon juice, some household cleansers and some bleaches produce a stain which, though usually discernible at certain viewing angles only, is indelible. Rubbing with steel wool will produce a prominent mark; therefore, **VERY LIGHT** rubbing should only be resorted to if the mark so produced if less disfiguring than the original stain. A soft cloth moistened with water, to which a few drops of detergent have been added, will remove substances which do not stain. After cleaning, the surface should be dried with a soft cloth.

RESISTORS

R1	1M	5	½W	RMB DUCON
R2	100	10	"	" "
R3	10	10	"	" "
R4	560	10	"	" "
R5	470	10	"	" "
R6	3.9k	10	"	" "
R7	470k	5	"	" "
R8	1.5k	10	"	" "
R9	390k	5	"	" "
R10	100k	10	"	" "
R11	1k	10	"	" "
R12	100	10	"	" "
R13	10k	10	"	" "
R14	220k	10	"	" "
R15	68k	10	"	" "
R16	680k	10	"	" "
R17	2.2M	10	"	" "
R18	6.8k	10	"	" "
R25	15k	10	½W	RME DUCON
R26	2.2k	10	"	" "
R27	4.7k	10	"	" "
R28	25k	VOLUME		32-10213
R29	50k	BALANCE		32-10214
R30	500k	BASS		32-10215
R31	47k	10	½W	RMB DUCON
R32	47k	10	"	" "
R33	22k	10	"	" "
R34	10k	10	"	" "
R35	250k	TONE		32-10216
R36	2.2M	10	½W	RMB DUCON
R37	12k	10	"	" "
R38	120k	10	"	" "
R39	68k	10	"	" "
R40	4.7.	10	½W	MORGANITE
R41	680	10	½W	RMB DUCON
R42	1.2k	10	"	" "
R43	680	10	"	" "
R44	2k	Bias Preset. P6. I.R.H.		
R45	10	10	½W	RMB DUCON
R46	22	10	"	" "
R47	15	Themistor		E215AB/P15E
R48	330	10	½W	RMB DUCON
R49	330	10	"	" "
R50	0.47	10	"	BW½ I.R.H.
R51	0.47	10	"	" "
R52	15	10	5W	PWS I.R.H.
R53	100	10	½W	RMB DUCON
R55	680	10	1W	RMC DUCON
R56	120	10	½W	RMB DUCON
R57	56	10	1W	RMC DUCON
R58	10k	10	½W	RMB DUCON
C1	5-55	Trimmer		CWA/O DUCON
C2	3-30	Trimmer		CW DUCON
C3	Tuning Gang			MSP 63-8234
C4	0.047	-20+80	25V	Ceramic
C5	0.047	"	"	"
C6	47p	10	500V	"
C7	0.01	20	25V	"
C8	0.1	-20+80	25V	"

C9	0.0036	5	50V	Styroseal
C10	2.2	-10+100	12VW	Electro.
C11	0.0036	5	50V	Styroseal
C12	2.2	-10+100	12VW	Electro.
C13	0.047	-20+80	25V	Ceramic
C14	0.0047	"	"	"
C18	0.1	10	50V	Polyester
C19	82p	5	500V	Ceramic
C20	10p	"	"	"
C22	2.2	-10+100	12VW	Electro.
C23	2.2	"	"	"
C24	0.1	10	50V	Polyester
C25	0.1	"	"	"
C26	0.0039	20	100V	"
C27	0.0039	"	"	"
C28	0.0022	10	50V	"
C29	0.0022	"	"	"
C30	0.047	"	"	"
C31	0.047	"	"	"
C32	680p	20	100V	Styroseal
C33	0.22	20	50V	Polyester
C34	100	-10+100	10VW	Electro.
C35	0.01	10	50V	Polyester
C36	640	-10+100	16VW	Electro.
C37	0.01	20	25V	Ceramic
C40	2200	-10+100	35VW	Electro.
C41	220	"	25VW	"
C42	470	"	12VW	"
C43	100	"	25VW	"

MISCELLANEOUS

L1	Compensating Coil	34-4657
L2	Loopstick Ass'y	14-8315
L3	Oscillator Coil	14-8229
IFT1A	Philips	CZ.651.000
IFT1B	Philips	CZ.651.006
IFT2	Philips	CZ.651.004
IFT3	Philips	CZ.651.005
T1	Power Trans.	18-11502

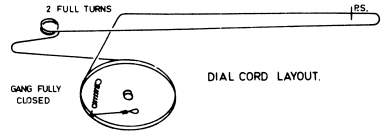
Tuning Indicator	Toyo Type 14 Case A
Function Switch	17-10206
D.I.N. Socket	Type 7505
Stereophone Jack	JL029S
Speaker Sockets	733-23-6
Fuse 2A Australux	Type 3AG
Fuseholder M.S.P.	Type 36546
Stocks 3.5mm	MOJBISR
Jacks Lamps	6.3V, 0.32A.MES

MODEL 11·140

ISSUE 2 1-8-1970.

NOTES

1. FOR REPLACEMENT, USE TRANSISTORS FROM PHILIPS SELECTED KIT 40820 IN POSITIONS TR1, 2 & 3
   TR1 IS STAMPED LETTER 'B'.
   TR2 IS STAMPED LETTER 'C'.
   TR3 IS STAMPED LETTER 'D'.
2. ALL VOLTAGES SHOWN ARE RELATIVE TO EARTH, NO SIGNAL CONDITIONS, USING A 40,000 Ω/VOLT METER
3. A WIRED FUSE IS IN SERIES WITH FILAMENT WINDING OF T1. (0·012" TINNED COPPER WIRE).



DIAL CORD LAYOUT.

R.F/I.F ASSY

FUNCTION SWITCH. shown in OFF position

DISC. RADIO TAPE OFF

R.H AMPLIFIER INPUT.

L.H. AMPLIFIER INPUT.

TETRAD 2. CARTRIDGE. C.2D. STYLUS.

TUNING INDICATOR.

TO DIN SOCKET (AUX. INPUTS)

TO FUNCTION SWITCH.

DIN SOCKET VIEWED FROM WIRING SIDE.

VOLUME BALANCE BASS TREBLE

STEREO JACK.

MA 65 RECORD CHANGER.

240 VOLTS A.C. 50 Hz.

RIGHT HAND CHANNEL ONLY SHOWN.

R.H. & L.H. CHANNELS ON SINGLE BOARD. (L.H. CHANNEL AS IN R.H. CHANNEL SHOWN ABOVE)

BASE CONNECTIONS

OSCILLATOR COIL

I.F.T.

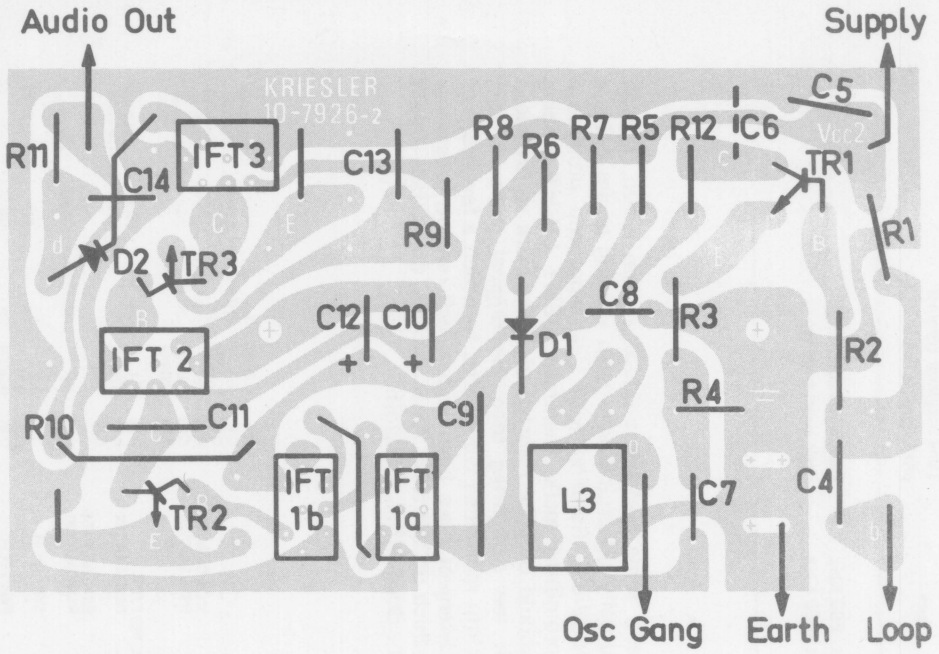
AD 161. AD 162

BF 184 BF 185 OR BF 194 BF 195

AC 128

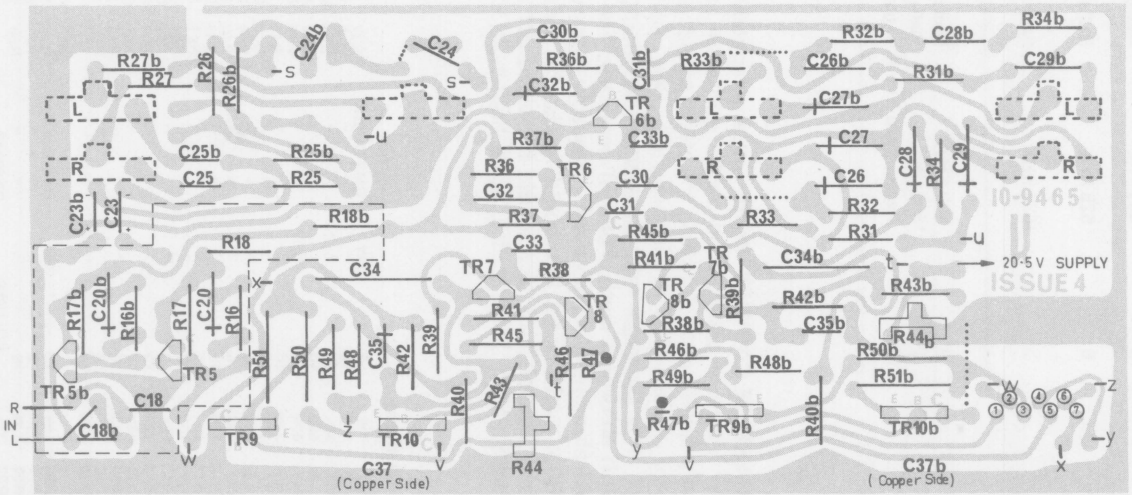
BC107 BC108 BC109 OR BC 147 BC 148 BC 149

SOCKET 1. CONNECTIONS MARKED →



R.F./I.F. BOARD

ALL VIEWS FROM PRINTED WIRING SIDE



MAIN AMPLIFIER BOARD