

General Description: The SRX60 series chassis is an advanced high-fidelity instrument fitted to a range of Music Centres. A 3-wave-band tuner, with six pre-set F.M. stations, is combined with an integrated amplifier capable of up to 40 watts R.M.S. per channel output.

The printed circuit board assemblies are mounted on three sub-chassis. The main amplifiers and power supply are located on a rear panel assembly which includes the power amplifier heatsinks and external input/output sockets. The tuner and pre-amplifier sections are mounted on two sub-chassis which are, in turn, mounted together on the front escutcheon assembly.

The mains transformer is remotely located in the cabinet and connects to the chassis via multi-way connectors.

Loudspeaker enclosures suitable for use with this chassis include Dynatron models LS3238CR, LS5638PY, LS6038PW and LS6138PM. These are 8 ohm three-way enclosures with a power handling capacity of 50 watts D.I.N.

A socket is provided on the front panel for the connection of headphones of 8–600 ohm impedance, such as Dynatron models SP5 and SP6.

The models listed are fitted with a belt-driven transcription record player, type 22GC037/59, a Philips GP401 Mk. 2 stereo magnetic cartridge and a Dynatron model CD780 Dolby* system stereo cassette tape deck which is described in the 1976–7 volume of *Radio and Television Servicing*.

*Dolby is the registered trade mark of Dolby Laboratories.

Important Note

Safety Components: This equipment contains certain components which have been specially chosen to ensure safety under both normal and fault conditions. Should a safety component need to be replaced, it is essential to use a component of identical type, mounted in exactly the same manner.

Mains Supplies: 240 volts, 50Hz.

Wave-bands: L.W. 150–285kHz; M.W. 525–1630kHz;
F.M. 87.5–104MHz.

Loudspeaker: 8 ohms impedance.

Note: On some models a 2 amp thermal fuse was fitted. The correct value is now 1 amp thermal and replacements should be of this type.

RECORD PLAYER

3 OFF NUTS AND WASHERS ON
UNDERSIDE OF MOTORBOARD

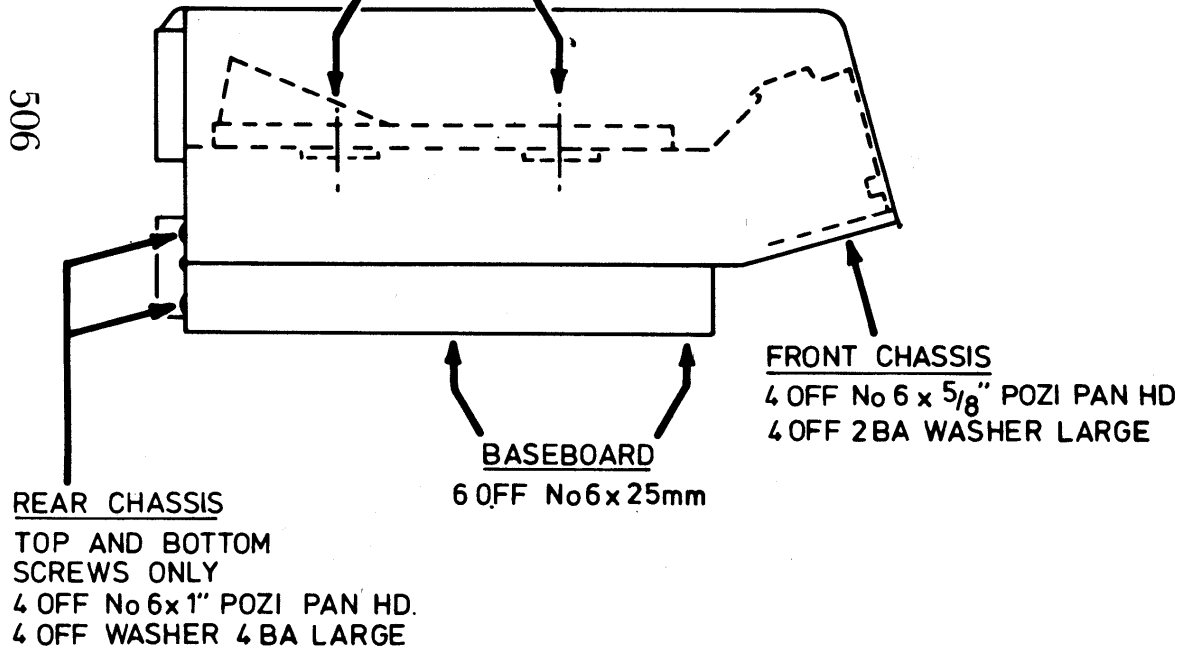
MOTORBOARD ASSEMBLY

6 OFF SCREWS ON TOP OF MOTORBOARD
REMOVE MOTORBOARD ASSEMBLY TO GAIN
ACCESS TO TAPE DECK AND RECORD
PLAYER MOUNTINGS ON UNDERSIDE

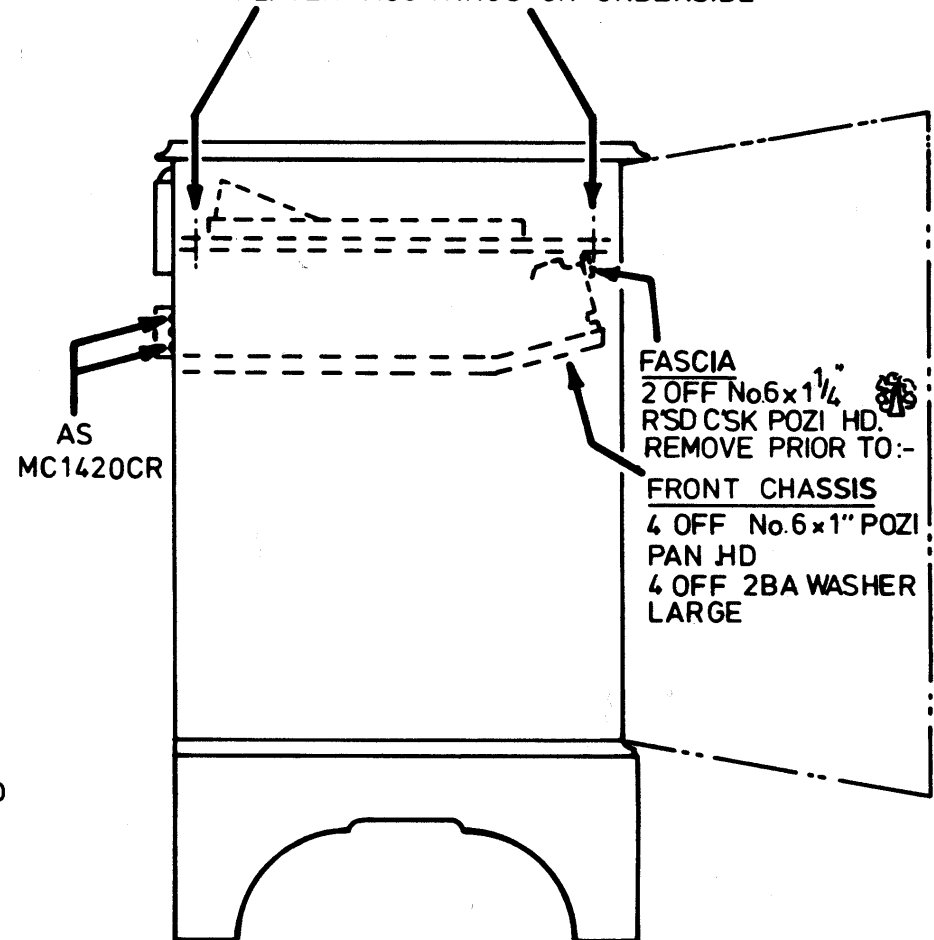
TAPE DECK

L.H. { 2 OFF SCREWS FROM
SIDE { TOP OF MOTORBOARD (SLACKEN ONLY)
R.H. { 2 OFF NUTS AND
SIDE { WASHERS ON UNDERSIDE

506



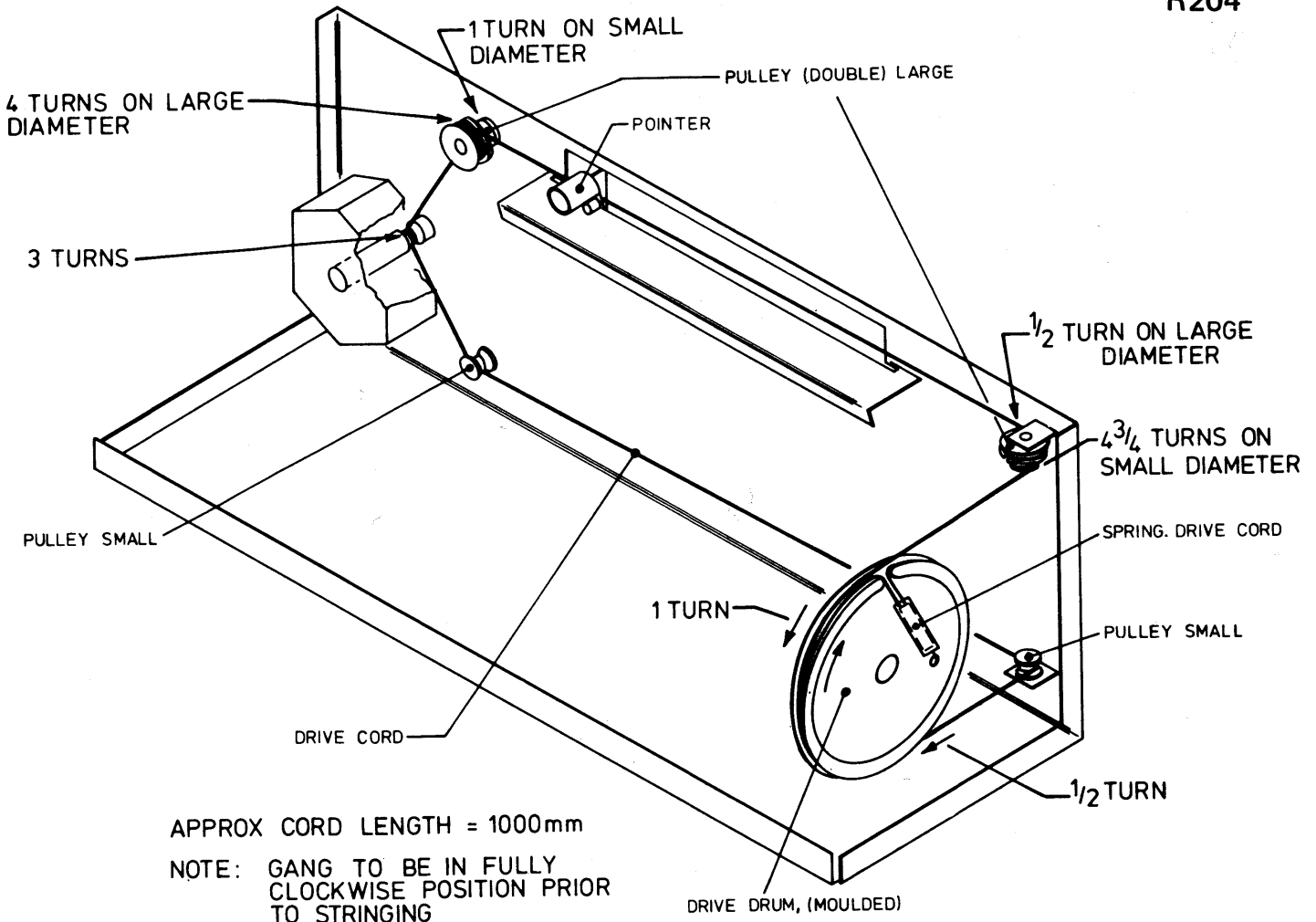
MC1420CR



MC1120PW: MC1220PY: MC1320PM

DYNATRON

R204



(R204) DRIVE CORD—SRX60 CHASSIS

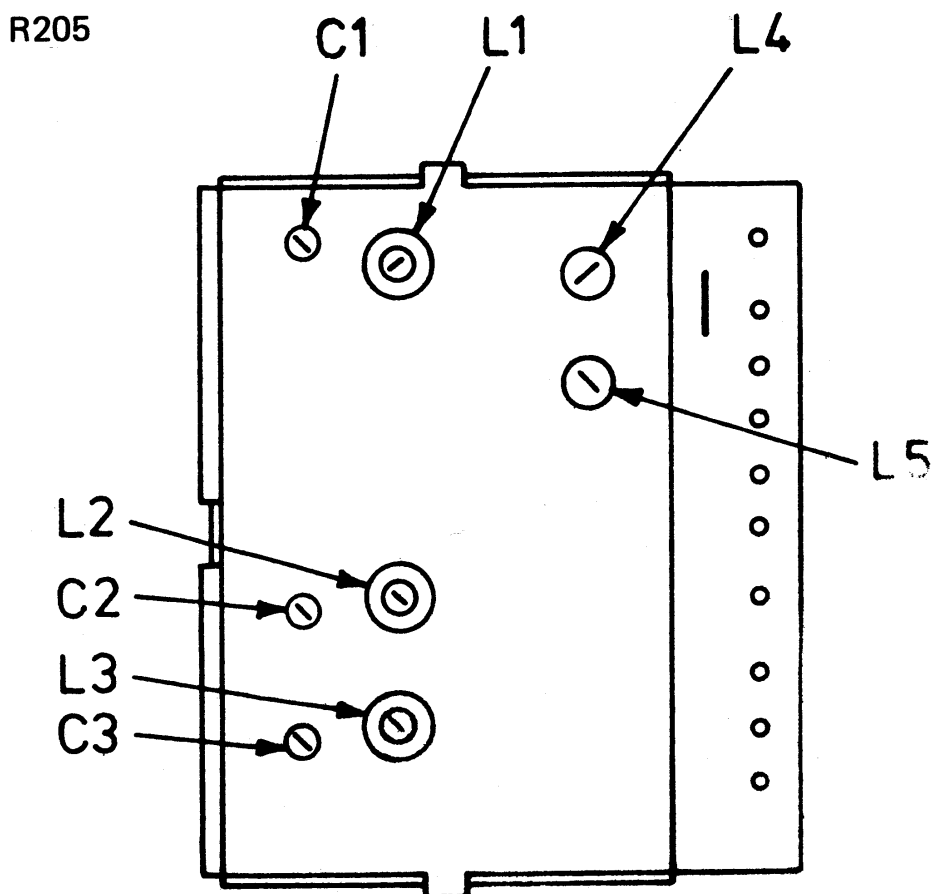
Alignment Procedure, F.M. I.F.

<i>Apply signal as below:</i>	<i>Set receiver controls to:</i>	<i>Adjust in order for maximum output</i>
1. 87.5MHz to F.M. aerial socket SKT 502	Manual tune to L.F. end Mute button In, A.F.C. Out	R303
2. As (1) but 104MHz	Manual tune to H.F. end Mute button in, A.F.C. Out	R302
3. Repeat (1) and (2) until frequency coverage obtained.	Manual tune to signal Mute and A.F.C. (2)	Check scale calibration 92MHz ±0.3MHz
4. As (1) but 92MHz	Manual tune to signal Mute and A.F.C. as (2)	Check scale calibration 100MHz ±0.3MHz
5. As (1) but 100MHz		
6. If results of steps (1) to (5) are not obtained, see V.H.F. Tuner alignment.	Tune to signal (max. indication on tuning meter)	With 500μV signal strength: L302 (critical)
7. As (4)	Mute and A.F.C. as (2)	
8. No signal input with Mute button in Out position	Mute pre-set pot R319 fully anti-clockwise	R319 to reduce noise output by 26dB
9. Stereo-encoded signal (88-104MHz)	Tune to signal	R332 to mid-position on LED DIG switch-on points. Ensure F.M. stereo channel separation achieved.
10. As (1)	Check F.M. pre-set can be tuned to signal.	
11. As (1) but 104MHz	Check F.M. pre-sets can be tuned to signal	

Alignment—V.H.F./F.M. Tuner Unit

Apply signal as below:	Set receiver controls to:	Adjust in order for maximum output
1. Using VVM, adjust R303 for 2.5V at socket 3/7/7 (Socket 3, 7 way, pin 7)		
2. Adjust R302 for 13V at socket 3/7/6		
3. Repeat (1) and (2) until correct voltages obtained		
4. Inject 87.5MHz into SKT 502	Manual tune to L.F. end	Adjust L1 to receive
5. Inject 104MHz into SKT 502	Manual tune to H.F. end	Adjust C1 to receive
6. Repeat (4) and (5) until band coverage obtained		
7. As (4) but 92MHz	Manual tune to signal	Adjust L2 and L3 for maximum sensitivity
8. As (4) but 102MHz	Manual tune to signal	Adjust C2 and C3 for maximum sensitivity
9. Repeat (7) and (8) until no further improvement obtained		
10. Inject 92MHz 3 μ V input. modulated 75kHz deviation (100%)		Adjust L4 and L5 for maximum sensitivity with minimum distortion
11. If distortion at (10) is excessive, re-check steps (7) and (8).		

N.B. After aligning the V.H.F./F.M. tuner unit, re-check F.M. I.F. alignment



(R205) V.H.F. TUNER ADJUSTMENTS—SRX60 CHASSIS

Alignment Procedure, M.W./L.W.

<i>Apply a 30% modulated signal as below:</i>	<i>Set receiver controls to:</i>	<i>Adjust in order for maximum output</i>
1. 470kHz to rod aerial via standard loop	M.W. band (Check pointer datum)	Cores of T404, T403 and T402
2. 600kHz to rod aerial via standard loop	600kHz scale reference triangle	Core of T401 and position of L401 on rod
3. As (2), but 140kHz	1400kHz scale reference triangle	Trimmer C406 and C434
4. Repeat (2) and (3) until no further improvement can be obtained.		
5. 200kHz to rod aerial via standard loop	L.W. band 200kHz (1500 metres)	C436 and position of L402 on rod

Main Amps/Power Supply Test Procedures

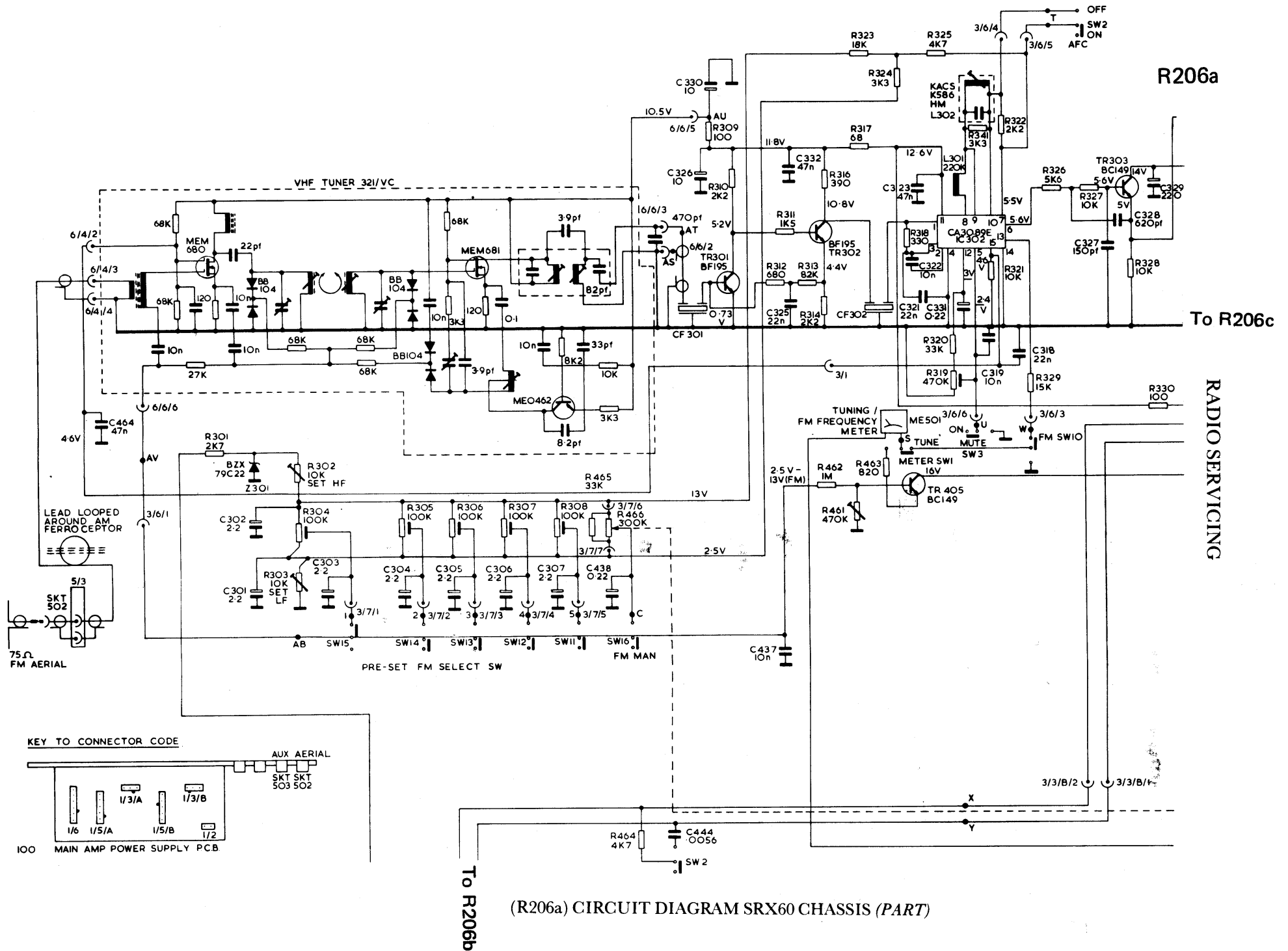
Mains Transformer Primary Check: Without unit connected to the mains supply, switch on and measure the D.C. resistance of the mains transformer primary to be 12·3 ohms.

Main Amplifier Quiescent Current Check:

- (a) Remove Amplifier H.T. fuses F101 and F102 from holders.
- (b) Set volume control to minimum, ensure no loudspeaker load connected.
- (c) Connect to 240V A.C. supply and switch on.
- (d) Connect two multi-meters (set to read D.C. amps in the range 0–1A) between the fuse holder connections. Check quiescent current of the amplifier—should be less than 200mA on each holder.

Note: The power supply consists of both a positive and negative supply relative to earth. If only one meter is available, remove only one fuse at a time to check quiescent current.

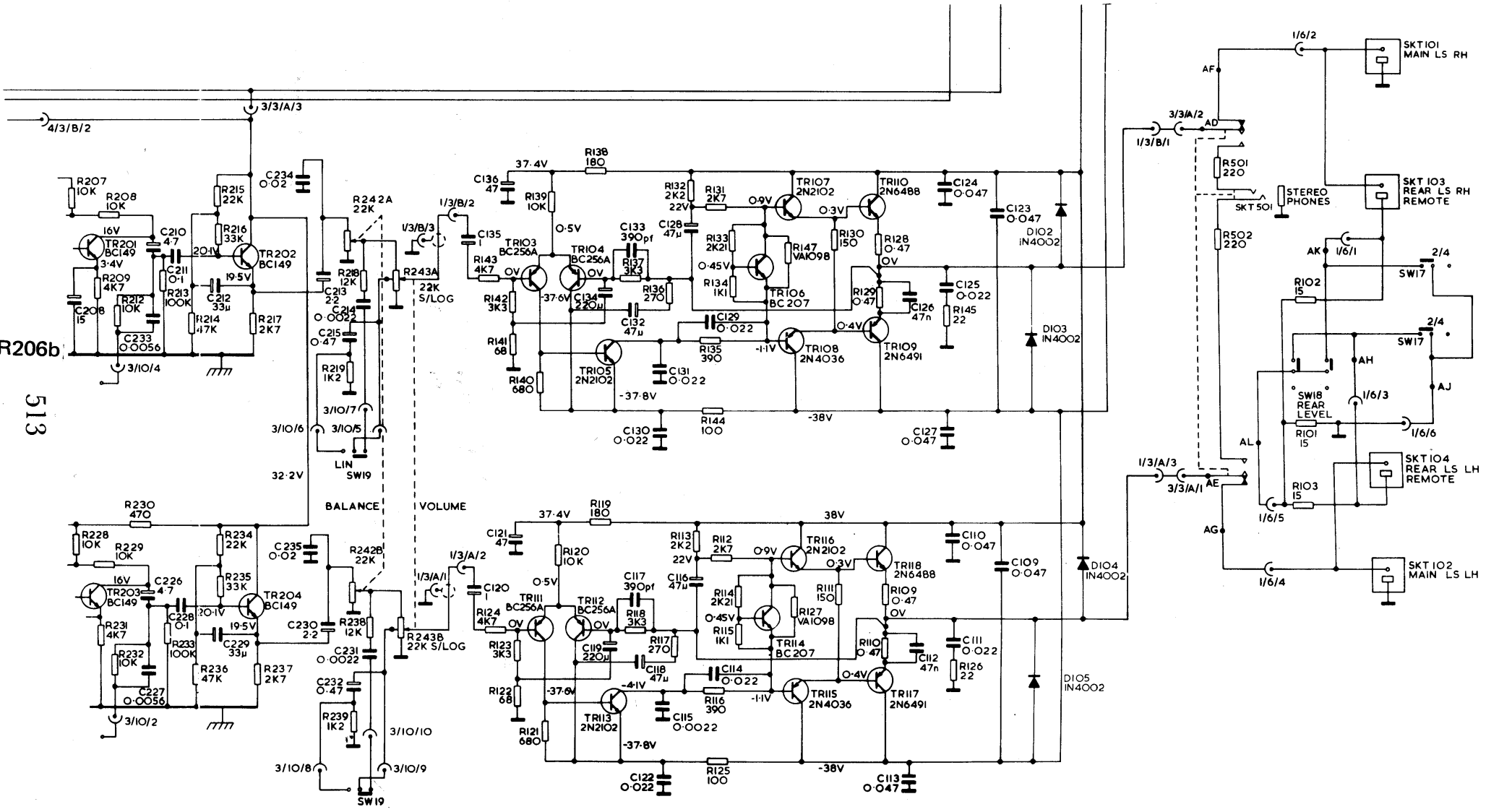
- (e) Connect a multi-meter, set to read D.C. volts in the range 0–3V, to each loudspeaker socket. Check the D.C. off-set voltage for not more than 0·1V.



513

From R206b

From R206c



(R206d) CIRCUIT DIAGRAM—SRX60 CHASSIS (CONTINUED)

R206d