

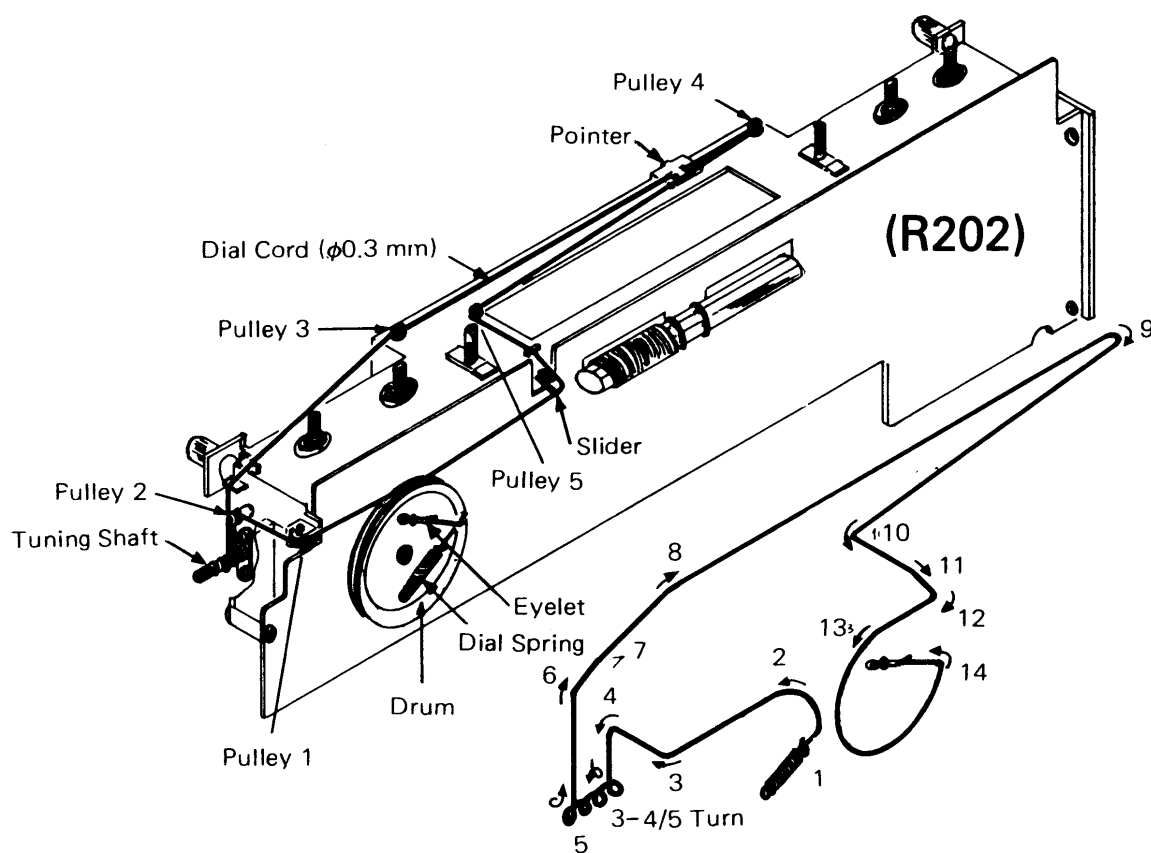
General Description: A portable stereo cassette tape-recorder and A.M. /F.M. radio powered by mains or battery supplies. Integrated circuits are used in the I.F., decoder, cassette and power output stages of the instrument and sockets are provided for the connection of auxiliary inputs and outputs.

Mains Supplies: 220, 240 volts, 50Hz.

Batteries: 7.5 volts, (5 × 1.5 volts).

Wavebands: L.W. 150–300kHz; M.W. 520–1605kHz; F.M. 88–108MHz.

Loudspeakers: 4 ohms impedance.



(R202) DRIVE CORD—MODEL CR41

Alignment

M.W./L.W. I.F. Alignment:

| Step | Signal source connector | Set signal to | Alignment indicator connector | Set radio dial to | Adjust | Adjust for |
|------|--|---------------|--|----------------------------|-------------|----------------|
| 1 | A.M. signal generator and standard radiation loop ant. | 455kHz | V.T.V.M. oscilloscope across the speaker (4 ohm) | M.W. band 515kHz (low end) | CF 2 T 6 | Maximum output |

M.W. R.F. Alignment:

| <i>Step</i> | <i>Signal source connector</i> | <i>Set signal to</i> | <i>Alignment indicator connector</i> | <i>Set radio dial to</i> | <i>Adjust</i> | <i>Adjust for</i> |
|-------------|---|----------------------|---|--------------------------|-------------------------|-------------------|
| 1 | A.M. signal generator and standard radiation loop antenna | 145kHz | V.T.V.M. oscilloscope Connect across the speaker (4 ohm) | 145kHz (low end) | L.W. Osc. coil T4 | Maximum output |
| 2 | A.M. signal generator and standard radiator loop antenna | 315kHz | V.T.V.M. oscilloscope Connect across the speaker (4 ohm) | 315kHz (high end) | L.W. Osc. trimmer TC 2 | Maximum output |
| 3 | A.M. signal generator and standard radiation loop antenna | 180kHz | V.T.V.M. oscilloscope Connect across the speaker (4 ohm) | 180kHz | L.W. Ant. coil L5 | Maximum output |
| 4 | A.M. signal generator and standard radiation loop antenna | 280kHz | V.T.V.M. oscilloscope Connect across the speaker (4 ohm) | 280kHz | L.W. Ant. trimmer TC 3C | Maximum output |

L.W. R.F. Alignment:

| <i>Step</i> | <i>Signal source connector</i> | <i>Set signal to</i> | <i>Alignment indicator connector</i> | <i>Set radio dial to</i> | <i>Adjust</i> | <i>Adjust for</i> |
|-------------|---|----------------------|---|--------------------------|-------------------------|-------------------|
| 1 | A.M. signal generator and standard radiation loop antenna | 525kHz | V.T.V.M. oscilloscope Connect across the speaker (4 ohm) | 1650kHz (high end) | Osc. coil T5 | Maximum output |
| 2 | A.M. signal generator and standard radiation loop antenna | 1650kHz | V.T.V.M. oscilloscope Connect across the speaker (4 ohm) | 1650kHz (high end) | M.W. Osc. trimmer TC 3D | Maximum output |
| 3 | A.M. signal generator and standard radiation loop antenna | 600kHz | V.T.V.M. oscilloscope Connect across the speaker (4 ohm) | 600kHz | M.W. Antenna coil L5 | Maximum output |
| 4 | A.M. signal generator and standard radiation loop antenna | 1400kHz | V.T.V.M. oscilloscope Connect across the speaker (4 ohm) | 1400kHz | M.W. Ant. trimmer TC 1 | Maximum output |

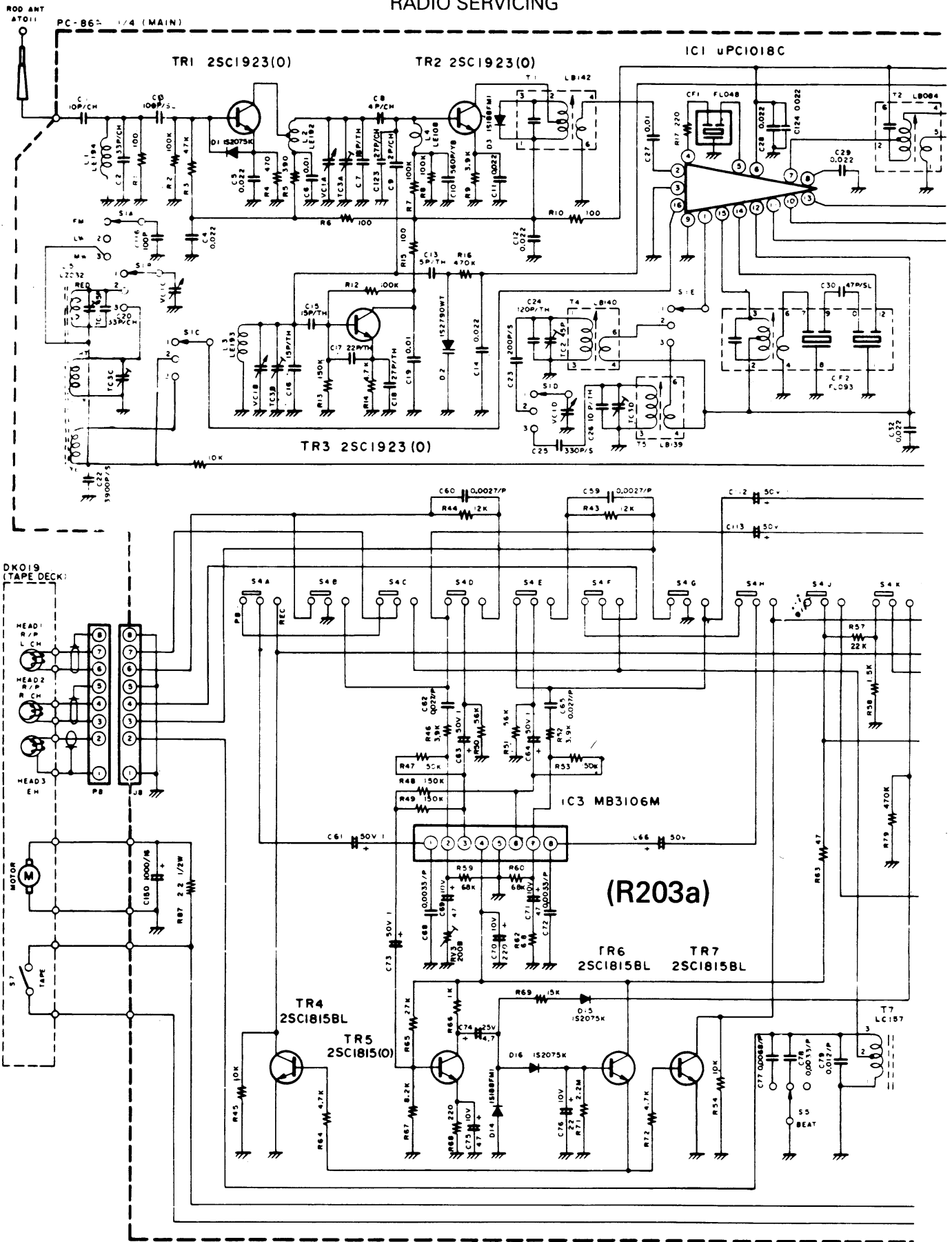
F.M. I.F. Alignment:

| <i>Step</i> | <i>Signal source connector</i> | <i>Set signal to</i> | <i>Alignment indicator connector</i> | <i>Set radio dial to</i> | <i>Adjust</i> | <i>Adjust for</i> |
|-------------|--------------------------------|-----------------------|---|--------------------------|----------------|-------------------------------------|
| 1 | F.M. I.F. sweep generator | Sweep centred 10.7MHz | Oscilloscope across the F.M. out terminal R23 | 88MHz Min. frequency | T1 T2 T3 | Max. gain and symmetrical 'S' curve |

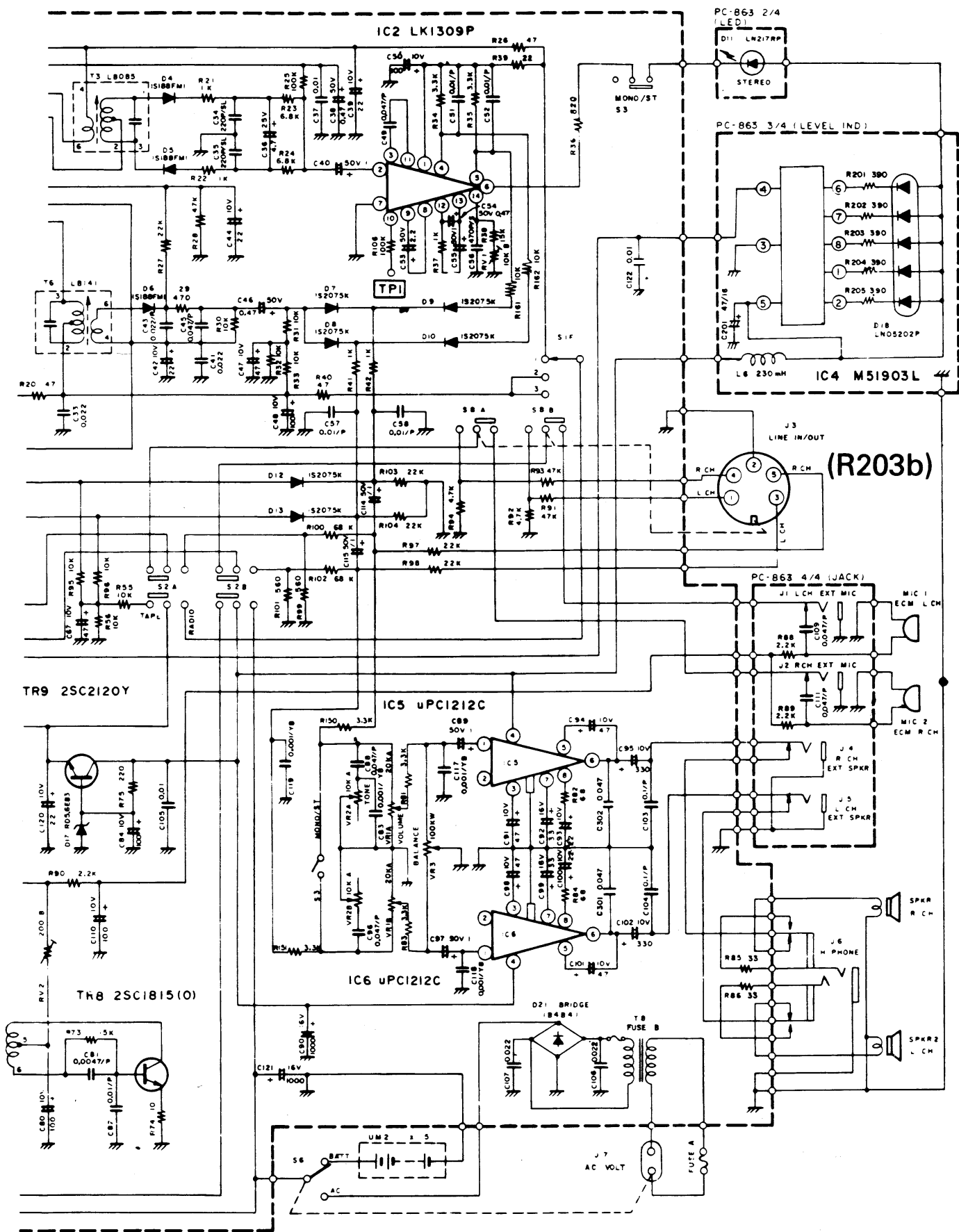
F.M. R.F. Alignment:

| <i>Step</i> | <i>Signal source connector</i> | <i>Set signal to</i> | <i>Alignment indicator connector</i> | <i>Set radio dial to</i> | <i>Adjust</i> | <i>Adjust for</i> |
|-------------|--------------------------------------|----------------------|---|--------------------------|---------------|-------------------|
| 1 | F.M. signal generator Ant. 75 ohm | 87.5MHz | V.T.V.M. oscilloscope Connect across the speaker | 87.5MHz (low end) | L3 | Maximum output |
| 2 | F.M. signal generator Ant. 75 ohm | 108.5MHz | V.T.V.M. oscilloscope Connect across the speaker | 108.5MHz (high end) | TC 3A | Maximum output |
| 3 | F.M. signal generator Ant. 75 ohm | 90MHz | V.T.V.M. oscilloscope Connect across the speaker | 90MHz | L2 | Maximum output |
| 4 | F.M. signal generator Ant. 75 ohm | 106MHz | V.T.V.M. oscilloscope Connect across the speaker | 106MHz | TC 3B | Maximum output |

RADIO SERVICING



(R203a) CIRCUIT DIAGRAM—MODEL CR41 (PART)



(R203b) CIRCUIT DIAGRAM—MODEL CR41 (CONTINUED)