

TANDBERG

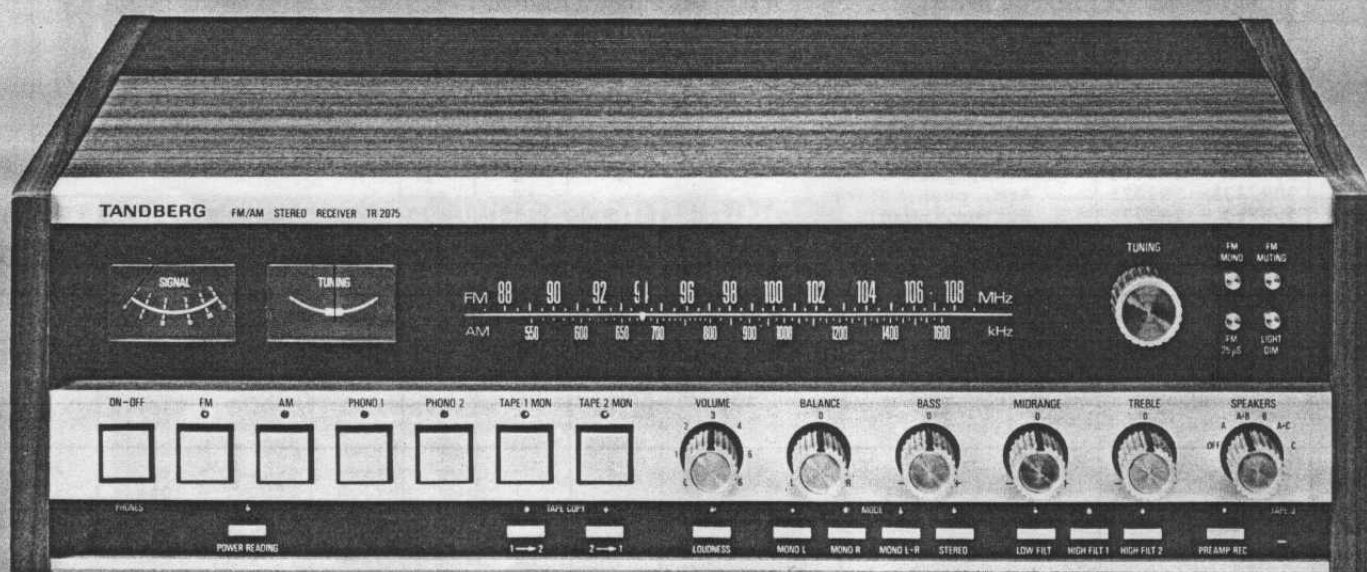
TR-2075

Illustrated Parts List

INSTRUCTIONS FOR ORDERING OF REPLACEMENT PARTS

The serial number, which is a seven digit number found on the rear of the apparatus, should always be given when ordering replacement parts. Please give the ordering number together with the full description when ordering mechanical parts.

Example: 307085 - TR2075, Surround, DIN socket, plastic



MECHANICAL PARTS

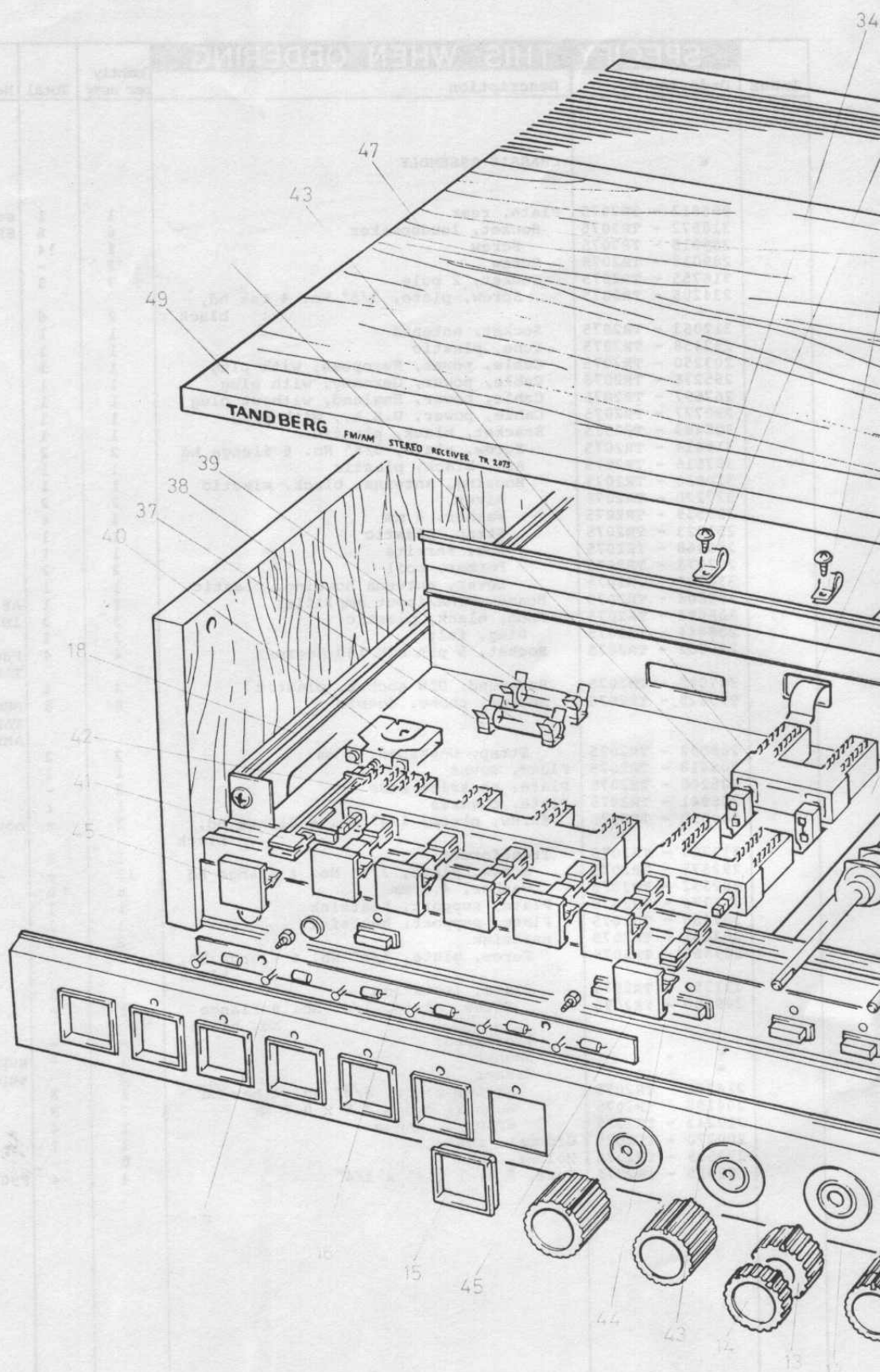
Parts belonging together are arranged in order with the main part first followed by the associated parts.

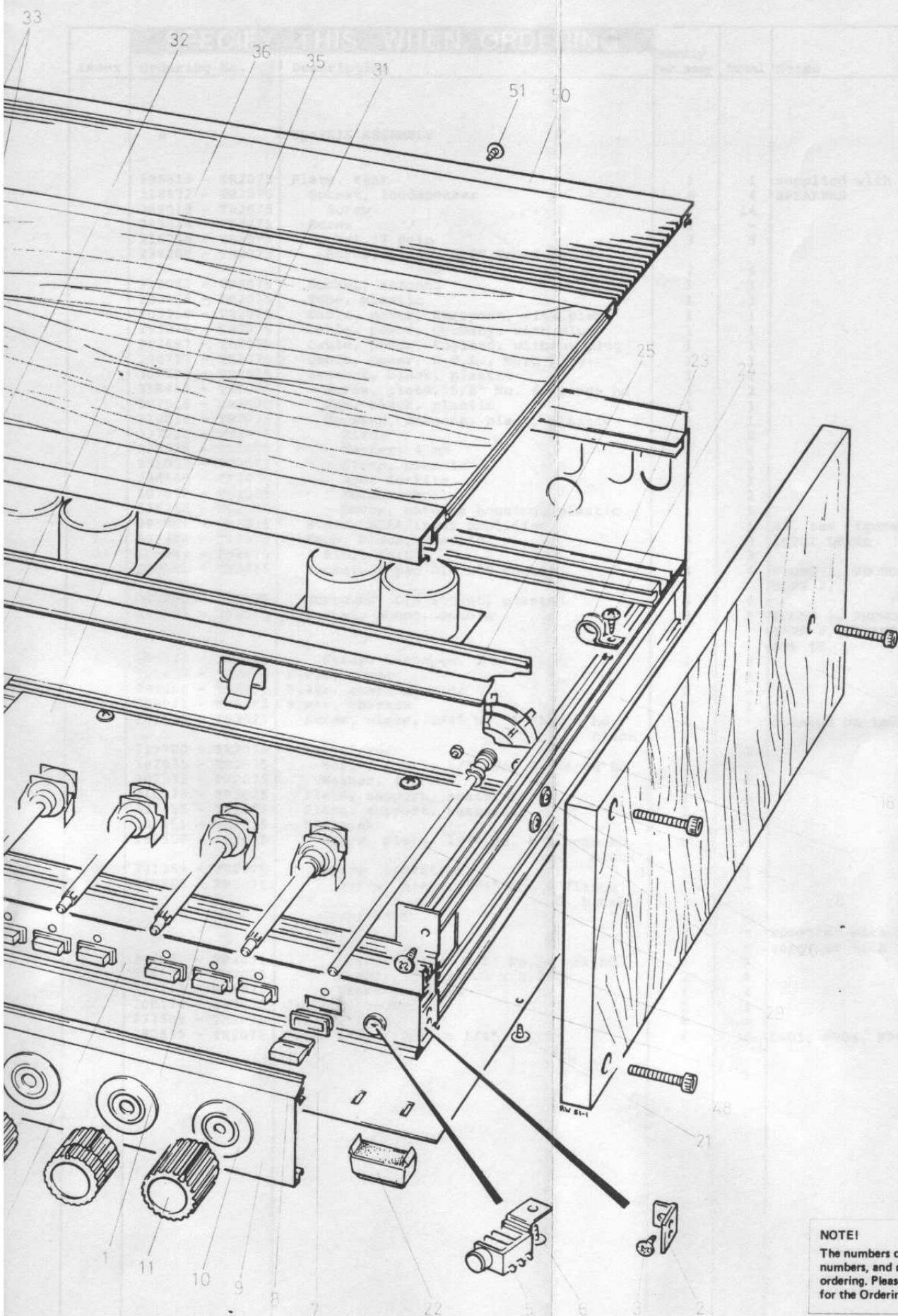
The description of the associated parts are indented. The description of the sub-group of the parts are further indented.

* These parts are not available as replacement parts.

Chassis assembly

Index	SPECIFY THIS WHEN ORDERING		Quantity per assy	Total	Notes
	Ordering No.	Description			
	*	CHASSIS ASSEMBLY			
1	305612 - TR2075	Plate, chassis	1	1	
2	305964 - TR2075	Bracket, angle	2	2	
3	292875 - TR2075	Screw, plate, 3/8" No. 4 flange hd	2	46	
4	311345 - TR2075	Plate, lower front	1	1	
5	840030A- TR2075	Socket, jack, 3 pole 1/4 in.	3	3	PHONES, TAPE 3
6	292875 - TR2075	Screw, plate, 3/8" No. 4 flange hd	2	-	
7	308062 - TR2075	Surround, push button, plastic	12	12	
8	308414 - TR2075	Button, push	10	10	POWER READING, TAPE COPY, MODE, FILTERS, PREAMP REC.
9	308974 - TR2075	Plate, front	1	1	
10	307710 - TR2075	Bearing, 4 mm, nylon	3	3	
11	318622 - TR2075	Knob	3	3	VOLUME, BALANCE, SPEAKERS
12	306029 - TR2075	Bearing, 6 mm, nylon	3	3	
13	995817 - TR2075	Knob	3	3	BASS, MIDRANGE, TREBLE
14	316941 - TR2075	Knob	3	3	BASS, MIDRANGE, TREBLE
15	306381 - TR2075	Surround, push button, plastic	7	7	
16	995806 - TR2075	Board, light diodes, program select	1	1	see figure 6 index 8
17	292675 - TR2075	Screw, plate, 1/4" No. 4 hex hd	2	14	
18	305260 - TR2075	Plate, chassis, side	2	2	
19	292875 - TR2075	Screw, plate, 3/8" No. 4 flange hd	2	-	
20	307437 - TR2075	Cover, bottom	1	1	
21	292875 - TR2075	Screw, plate, 3/8" No. 4 flange hd	8	-	
22	991042 - TR2075	Foot, rubber, with housing	5	5	
23	202684 - TR2075	Clamp, cable, nylon, 5 mm	1	2	
24	292875 - TR2075	Screw, plate, 3/8" No. 4 flange hd	1	-	
25	306589 - TR2075	Plate, chassis	1	1	
26	292875 - TR2075	Screw, plate, 3/8" No. 4 flange hd	4	-	
27	308766 - TR2075	Switch, selector	1	1	
28	318766 - TR2075	Nut, 4 mm	2	2	
29	305052 - TR2075	Spindle	1	1	
30	201003 - TR2075	Ring, retaining, external, 4 mm	2	3	
31	309901 - TR2075	Board	2	2	
32	289714 - TR2075	Clip	2	2	
33	336387 - TR2075	Clamp, cable, nylon, 4 mm	2	2	
34	292875 - TR2075	Screw, plate, 3/8" No. 4 flange hd	2	-	
35	995803 - TR2075	Board, preamplifier	1	1	A4, see figure 6 index 13
36	995805 - TR2075	Board, program select/voltage regulator	1	1	A7, see figure 6 index 9
37	277509 - TR2075	Holder, fuse	4	26	
38	310124 - TR2075	Bulb, 12 V 3 W	1	7	
39	282300 - TR2075	Fuse, 1.25 A, 1 1/4" x 1/4"	1	2	F601
40	315131 - TR2075	Switch, push	1	1	
41	317975 - TR2075	Arm, push button	1	1	
42	334835 - TR2075	Switch, push	1	1	
43	334792 - TR2075	Switch, push	2	2	
44	309743A- TR2075	Arm, push button	16	16	
45	306733 - TR2075	Button, push	7	7	ON-OFF, FM, AM, PHONO 1, PHONO 2, TAPE 1 MON, TAPE 2 MON.
46	315469 - TR2075	Arm, push button	2	2	
47	313084 - TR2075	Panel, walnut	1	1	
48	318407 - TR2075	Screw, 4 x 20 mm ch hd, black	6	6	
49	307997 - TR2075	Moulding, front	1	1	
50	309132 - TR2075	Plate, top	1	1	
51	289550 - TR2075	Screw, plate, 1/4" No. 6 flange hd, black	2	29	



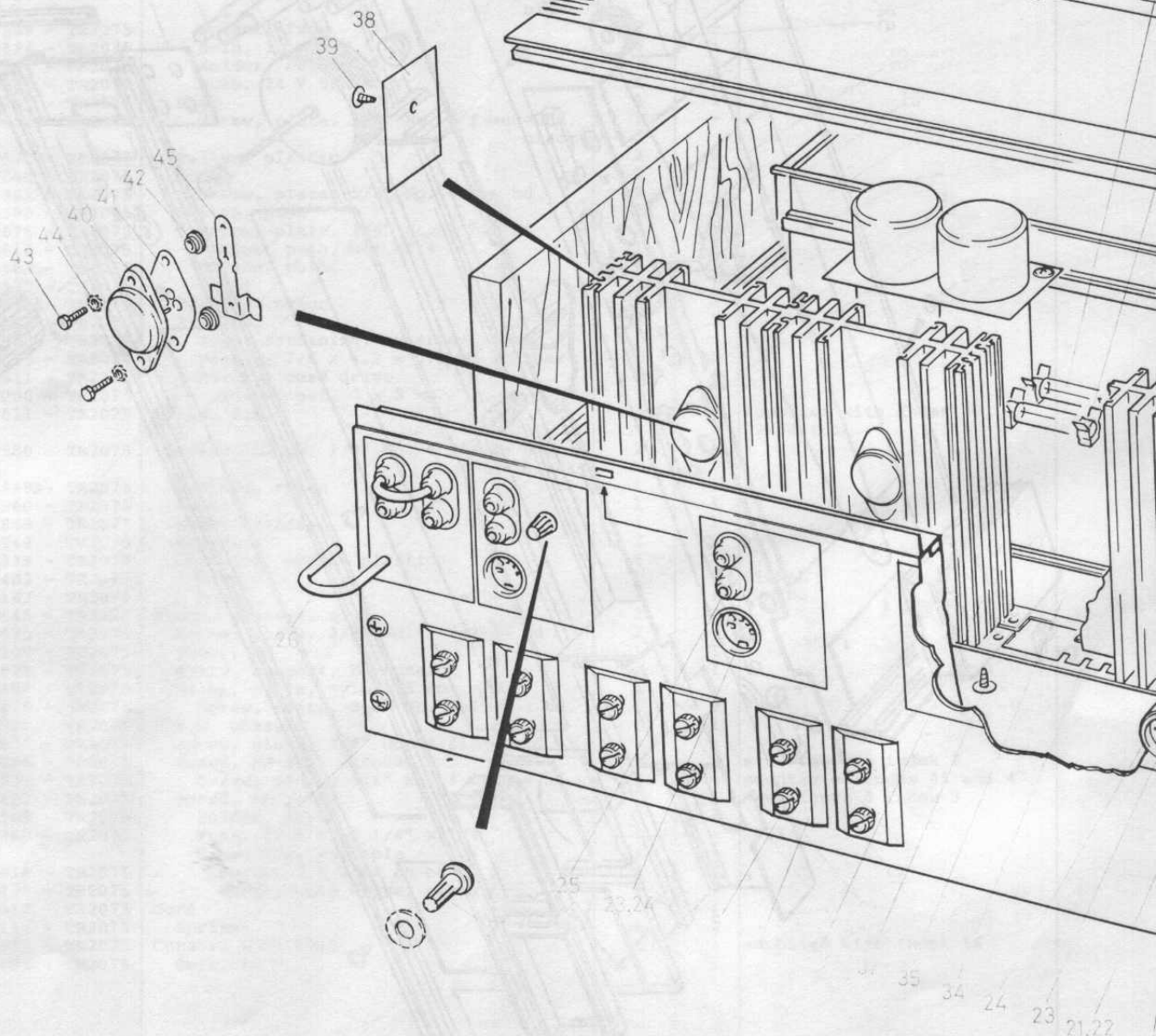


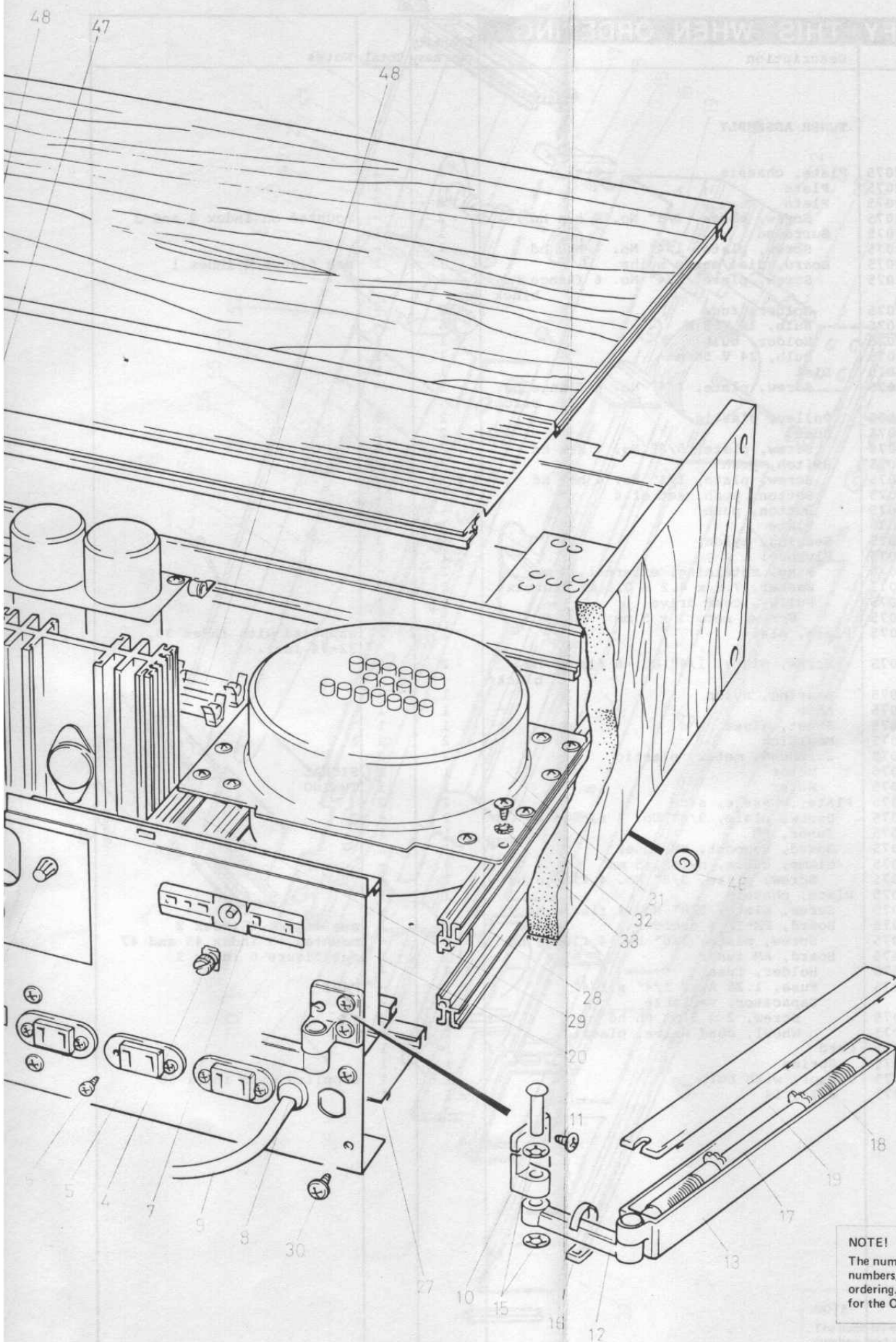
NOTE!
The numbers on this page are index numbers, and must not be used when ordering. Please refer to the parts list for the Ordering No. and Description.

Fig. 1 Chassis assembly — front view

Chassis assembly

SPECIFY THIS WHEN ORDERING					
Index	Ordering No.	Description	Quantity per assy	Total	Notes
	*	CHASSIS ASSEMBLY			
1	995813 - TR2075	Plate, rear	1	1	supplied with index 2-7 incl. SPEAKERS
2	318572 - TR2075	Socket, loudspeaker	6	6	
3	289018 - TR2075	Screw	2	14	
4	289018 - TR2075	Screw	2	-	
5	316755 - TR2075	Socket, 2 pole	3	3	
6	234206 - TR2075	Screw, plate, 3/8" No. 4 csk hd, black	2	6	
7	312063 - TR2075	Socket, antenna	1	1	
8	292458 - TR2075	Tube, plastic	1	1	
9	203250 - TR2075	Cable, power, European, with plug	1	1	
10	255276 - TR2075	Cable, power, Germany, with plug	1	1	
11	267697 - TR2075	Cable, power, England, without plug	1	1	
12	290777 - TR2075	Cable, power, U.S.A., with plug	1	1	
13	308493 - TR2075	Bracket, black, plastic	1	1	
14	318414 - TR2075	Screw, plate, 5/8" No. 6 flange hd	2	2	
15	307516 - TR2075	Arm, black, plastic	1	1	
16	310016 - TR2075	Housing, antenna, black, plastic	1	1	
17	337220 - TR2075	Rivet	2	2	
18	335539 - TR2075	Washer, 4 mm	4	4	
19	251023 - TR2075	Strap, plastic	1	1	
20	286468 - TR2075	Rod, ferrite	1	1	
21	207073 - TR2075	Former, coil	2	2	
22	336250 - TR2075	Cover, antenna housing, plastic	1	1	
23	995804 - TR2075	Board, RIAA/input amplifier	1	1	A6, see figure 6 index 4
24	305404 - TR2075	Knob, black, plastic	3	3	INPUT LEVEL
25	208444 - TR2075	Ring, felt	3	3	
26	226282 - TR2075	Socket, 5 pin DIN 180 degrees	4	4	PHONO 1, PHONO 2, TAPE 1, TAPE 2.
27	307085 - TR2075	Surround, DIN socket, plastic	4	4	
28	995829 - TR2075	Socket, phono, double	8	8	PHONO 1, PHONO 2, TAPE 1, TAPE 2, PREAMP OUT, MAIN AMP IN.
29	288882 - TR2075	Strap, U-shaped, 3 mm	2	2	
30	305418 - TR2075	Plate, cover	1	1	
31	305260 - TR2075	Plate, chassis, side	2	-	
32	306941 - TR2075	Plate, chassis	1	1	
33	289550 - TR2075	Screw, plate, 1/4" No. 6 flange hd, black	2	-	mounted on index 28 and 29
34	319700 - TR2075	Transformer	1	1	
35	292875 - TR2075	Screw, plate, 3/8" No. 4 flange hd	12	-	
36	202332 - TR2075	Washer, 4.3 mm	8	8	
37	316776 - TR2075	Plate, support, heatsink	1	1	
38	307465 - TR2075	Plate, support, heatsink	1	1	
39	307451 - TR2075	Heatsink	2	2	
40	289550 - TR2075	Screw, plate, 1/4" No. 6 flange hd, black	6	-	
41	331359 - TR2075	Plate, isolation	1	1	
42	289550 - TR2075	Screw, plate, 1/4" No. 6 flange hd, black	1	-	
43	*	Transistor	-	-	
44	*	Washer	1	-	supplied with index 40
45	*	Washer	2	-	supplied with index 40
46	214961 - TR2075	Screw, plate, 5/8" No. 4 hex hd	2	8	
47	204105 - TR2075	Washer, 8.5 x 3.5 x 0.7 mm	2	8	
48	317243 - TR2075	Bracket, angle	1	4	
49	200270 - TR2075	Grommet, rubber	1	1	
50	277509 - TR2075	Holder, fuse	8	-	
51	280555 - TR2075	Fuse, 5 A, 1 1/4" x 1/4"	4	4	F903, F904, F905, F906





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Fig. 2 Chassis assembly — rear view

Tuner assembly

SPECIFY THIS WHEN ORDERING					
Index	Ordering No.	Description	Quantity per assy	Total	Notes
	*	TUNER ASSEMBLY			
1	305339 - TR2075	Plate, chassis	1	1	
2	308270 - TR2075	Plate	1	1	
3	309678 - TR2075	Plate	2	2	
4	292675 - TR2075	Screw, plate, 1/4" No. 4 hex hd	2	-	mounted on index 2 and 3
5	308622 - TR2075	Surround	1	1	
6	292675 - TR2075	Screw, plate, 1/4" No. 4 hex hd	2	-	
7	995800 - TR2075	Board, dial/meter bulbs	1	1	see figure 6 index 1
8	289550 - TR2075	Screw, plate, 1/4" No. 6 flange hd, black	3	-	
9	277509 - TR2075	Holder, fuse	12	-	
10	310124 - TR2075	Bulb, 12 V 3 W	6	-	
11	319167 - TR2075	Holder, bulb	1	1	
12	334986 - TR2075	Bulb, 24 V 50 mA	1	1	
13	308701 - TR2075	Dial	1	1	
14	289550 - TR2075	Screw, plate, 1/4" No. 6 flange hd, black	1	-	
15	287501 - TR2075	Pulley, plastic	2	2	
16	307868 - TR2075	Bush	2	2	
17	214961 - TR2075	Screw, plate, 5/8" No. 4 hex hd	2	2	
18	311388 - TR2075	Switch, push	2	2	
19	292675 - TR2075	Screw, plate, 1/4" No. 4 hex hd	2	-	
20	995816 - TR2075	Button, push, set of 4	1	1	
	305483 - TR2075	Button, push	4	4	
21	308521 - TR2075	Plate	1	1	
22	237848A- TR2075	Bearing, nylon	1	2	
23	309197 - TR2075	Flywheel	1	1	
24	201003 - TR2075	Ring, retaining, external, 4 mm	1	-	
25	214895 - TR2075	Washer, 7.5 x 4.2 x 0.3 mm, turbax	2	2	
26	305511 - TR2075	Pulley, cord drive	1	1	
27	890000 - TR2075	Screw, set, 3 x 5 mm	1	1	
28	995811 - TR2075	Plate, dial	1	1	supplied with index 30, 32-34 incl.
29	289550 - TR2075	Screw, plate, 1/4" No. 6 flange hd, black	2	-	
30	237848A- TR2075	Bearing, nylon	1	-	
31	315260 - TR2075	Knob	1	1	
32	306668 - TR2075	Sheet, glass	1	1	
33	308349 - TR2075	Moulding	2	2	
34	305835 - TR2075	Surround, meter, plastic	2	2	
35	311482 - TR2075	Meter	1	1	SIGNAL TUNING
36	313163 - TR2075	Meter	1	1	
37	307645 - TR2075	Plate, chassis, side	2	2	
38	292875 - TR2075	Screw, plate, 3/8" No. 4 flange hd	2	-	
39	993300 - TR2075	Tuner, FM	1	1	
40	338829 - TR2075	Board, support, FM-tuner	1	1	
41	202684 - TR2075	Clamp, cable, nylon, 5 mm	1	-	
42	292875 - TR2075	Screw, plate, 3/8" No. 4 flange hd	1	-	
43	309326 - TR2075	Plate, chassis	1	1	
44	292875 - TR2075	Screw, plate, 3/8" No. 4 flange hd	4	-	
45	995808 - TR2075	Board, FM-IF + decoder	1	1	see figure 6 index 2
46	292875 - TR2075	Screw, plate, 3/8" No. 4 flange hd	2	-	mounted on index 45 and 47
47	995807 - TR2075	Board, AM tuner	1	1	see figure 6 index 3
48	277509 - TR2075	Holder, fuse	2	-	
49	282300 - TR2075	Fuse, 1.25 A, 1 1/4" x 1/4"	1	-	F401
50		Capacitor, variable	1	-	
51	221814 - TR2075	Screw, 2 x 5 mm ch hd	2	2	
52	272135 - TR2075	Wheel, cord drive, plastic	1	1	
53	995812 - TR2075	Cord	1	1	
54	204112 - TR2075	Spring	1	1	
	995815 - TR2075	Cursor, with bulb	1	1	supplied with index 56
	334605 - TR2075	Bulb, 14 V	1	1	

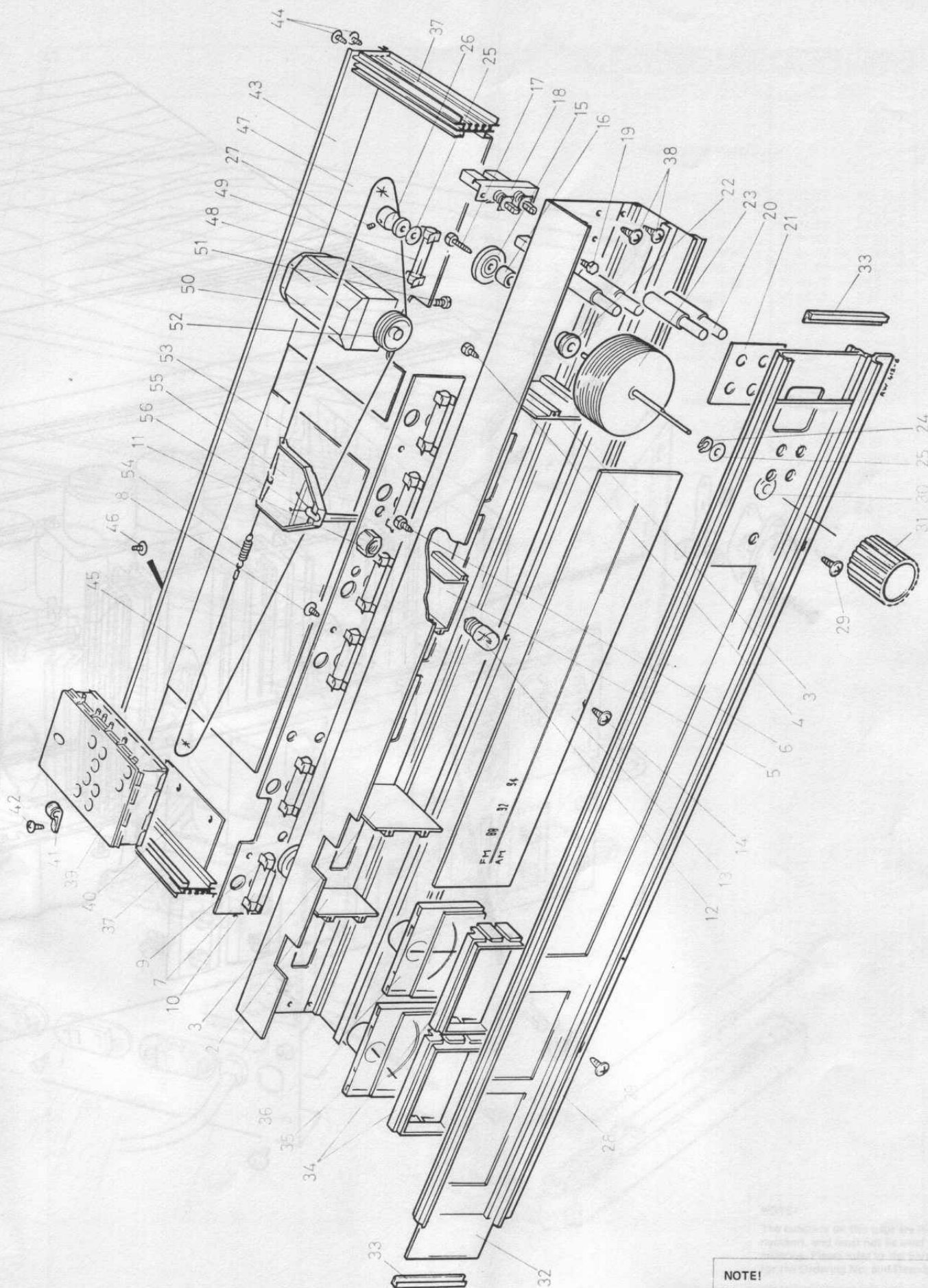


Fig. 3 Tuner assembly

Connectors

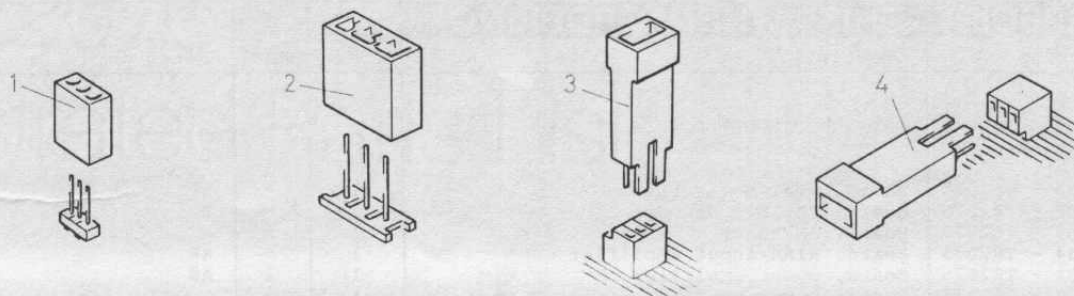


Fig. 4 Connectors

Index	SPECIFY THIS WHEN ORDERING		Quantity per assy	Total	Notes
	Ordering No.	Description			
	*	CONNECTORS			
1	995818 - TR2075	Connector, 2 pole, small		11	
	995819 - TR2075	Connector, 3 pole, small		6	
	995820 - TR2075	Connector, 4 pole, small		7	
	995821 - TR2075	Connector, 5 pole, small		3	
	995822 - TR2075	Connector, 6 pole, small		4	
	995823 - TR2075	Connector, 7 pole, small		3	
2	995824 - TR2075	Connector, 2 pole, large		2	
	995825 - TR2075	Connector, 3 pole, large		2	
	995826 - TR2075	Connector, 4 pole, large		1	
3	995827 - TR2075	Connector, 2 pole, black		2	
4	995828 - TR2075	Connector, 2 pole, horizontal, black		6	

Switches

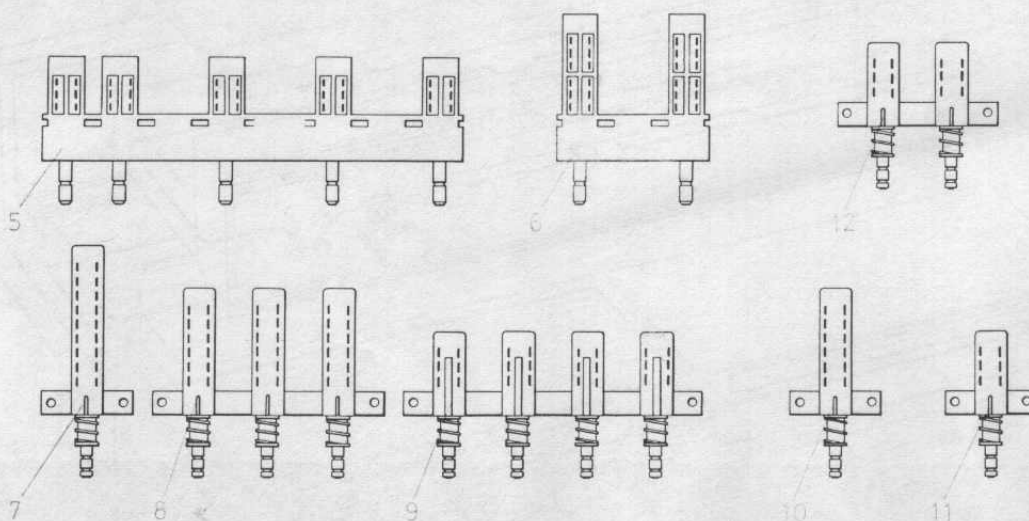


Fig. 5 Switches

Index	SPECIFY THIS WHEN ORDERING		Quantity per assy	Total	Notes
	Ordering No.	Description			
	*	SWITCHES			
5	334835 - TR2075	Switch, push	1	-	
6	334792 - TR2075	Switch, push	2	-	
7	312724 - TR2075	Switch, push	1	1	
8	310691 - TR2075	Switch, push	1	1	
9	314405 - TR2075	Switch, push	1	1	
10	313069 - TR2075	Switch, push	1	1	
11	314750 - TR2075	Switch, push	1	1	
12	311388 - TR2075	Switch, push	2	-	

Printed circuit boards

SPECIFY THIS WHEN ORDERING					
Index	Ordering No.	Description	Quantity per assy	Total	Notes
	*	PRINTED CIRCUIT BOARDS			
1	995800 - TR2075	Board, dial/meter bulbs	1	-	
2	995808 - TR2075	Board, FM-IF + decoder	1	-	A2
3	995807 - TR2075	Board, AM tuner	1	-	A3
	995804 - TR2075	Board, RIAA/innut amplifier	1	-	A6
	995801 - TR2075	Board, power amplifier	1	1	A8
6	995809 - TR2075	Board, power reading	1	1	
7	995810 - TR2075	Board, light diodes, tape copy	1	1	
8	995806 - TR2075	Board, light diodes, program select	1	-	
9	995805 - TR2075	Board, program select/voltage regulator	1	-	A7
10	995814 - TR2075	Board, light diodes, filter	1	1	
11	995802 - TR2075	Board, mode/filter	1	1	A5
12	331359 - TR2075	Plate, isolation	1	1	
13	995803 - TR2075	Board, preamplifier	1	1	A4

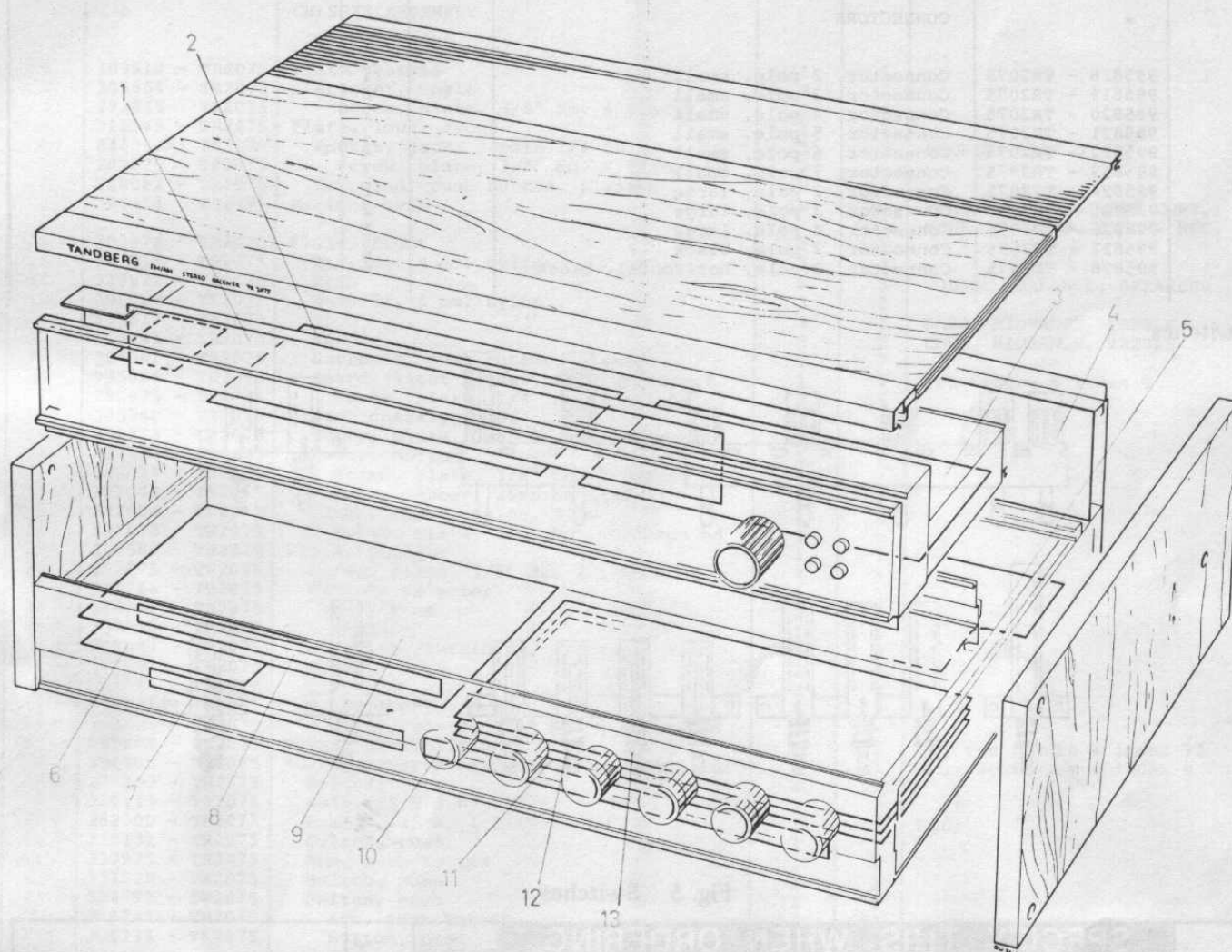


Fig. 6 Printed circuit boards

NOTE!

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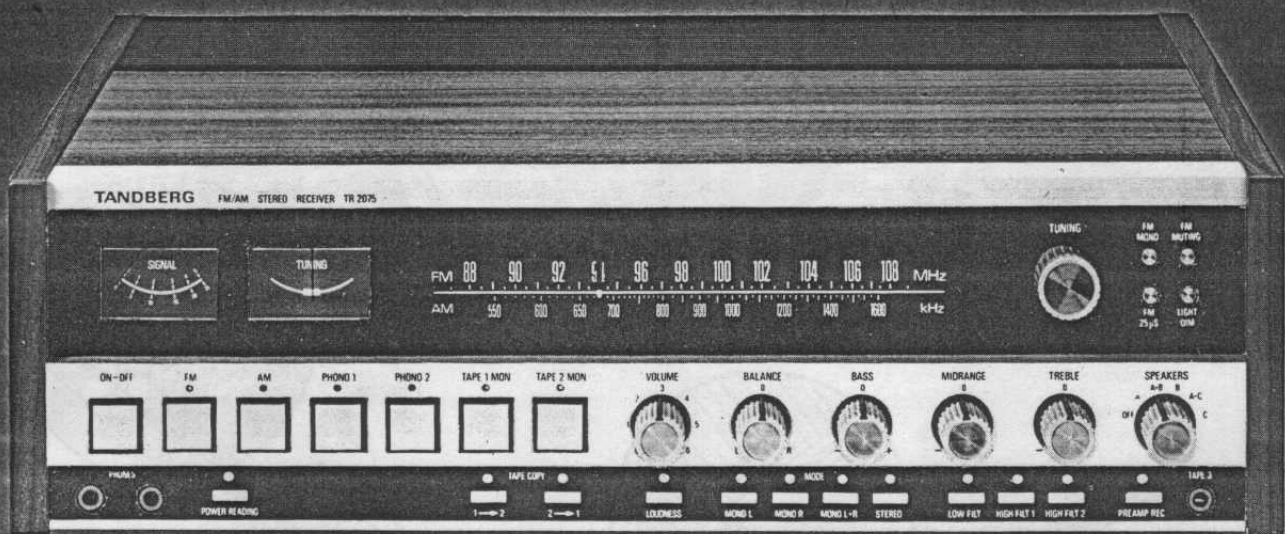
TANDBERGS RADIOFABRIKK A/S
Postboks 9, Korsvoll, Oslo 8
Norway

TANDBERG
The European Alternative

Tandberg A/S, Post Office Box 55, Bogerud,
N-0slo 6, Norway

Service Manual

TR-2075

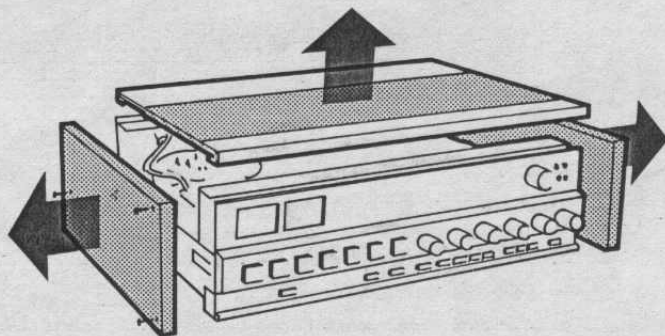


TANDBERG

MECHANICAL SERVICE

Removing the cabinet.

Unscrew the screws in the side plates and take the plates off.
The top plate is then free to be removed as shown in the figure.



FM and AM tuner.

Swing the tuner up to the position shown in Figure 1.
Put a screwdriver or similar into the hole in the cooling fin as shown in Figure 2.

Figure 1.

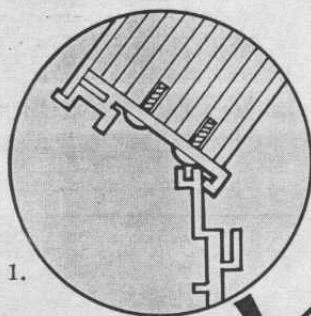
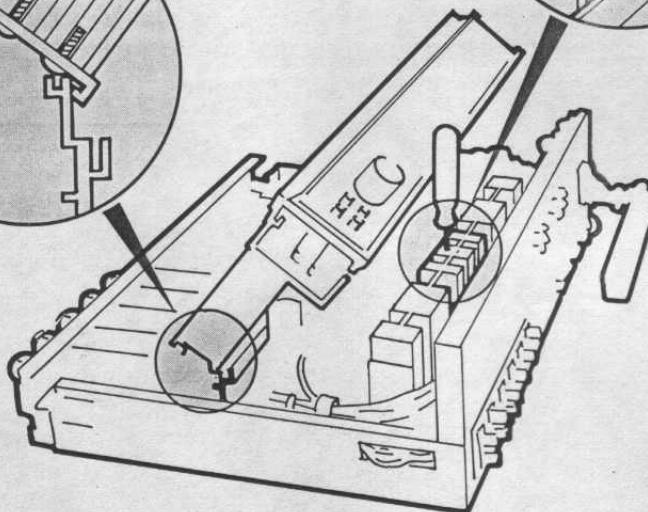
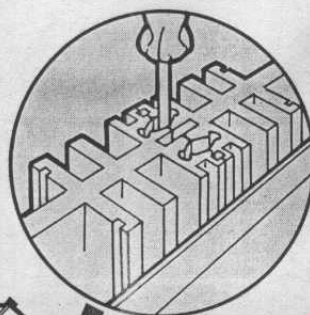


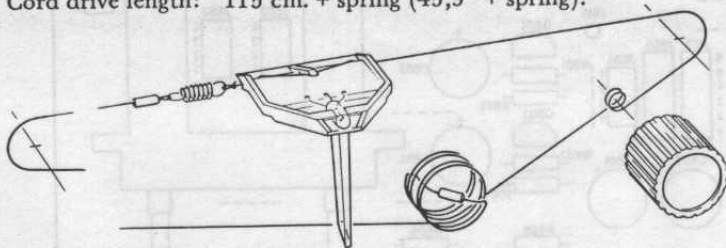
Figure 2.



Cord drive.

The cord drive is shown below.

Cord drive length: 115 cm. + spring (45,3" + spring).



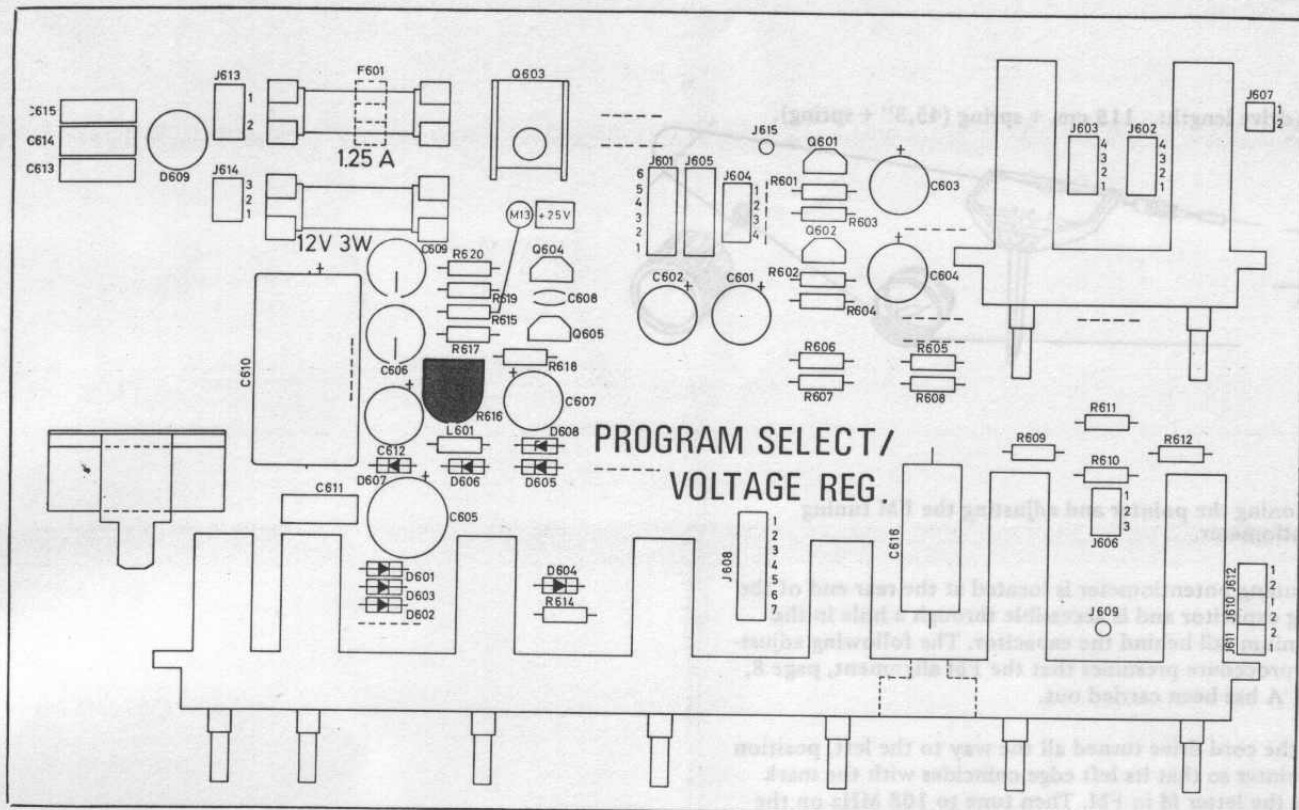
Positioning the pointer and adjusting the FM tuning potentiometer.

The tuning potentiometer is located at the rear end of the tuning capacitor and is accessible through a hole in the aluminium rail behind the capacitor. The following adjustment procedure presumes that the FM alignment, page 8, step 1 A has been carried out.

With the cord drive turned all the way to the left, position the pointer so that its left edge coincides with the mark below the letter M in FM. Then tune to 108 MHz on the dial and check that the voltage at terminal C121 on the tuner is 22 volts. If not, loosen the centre screw on the tuning potentiometer and adjust the potentiometer by moving the small plastic disc to achieve the correct voltage. Tighten the centre screw after the alignment.

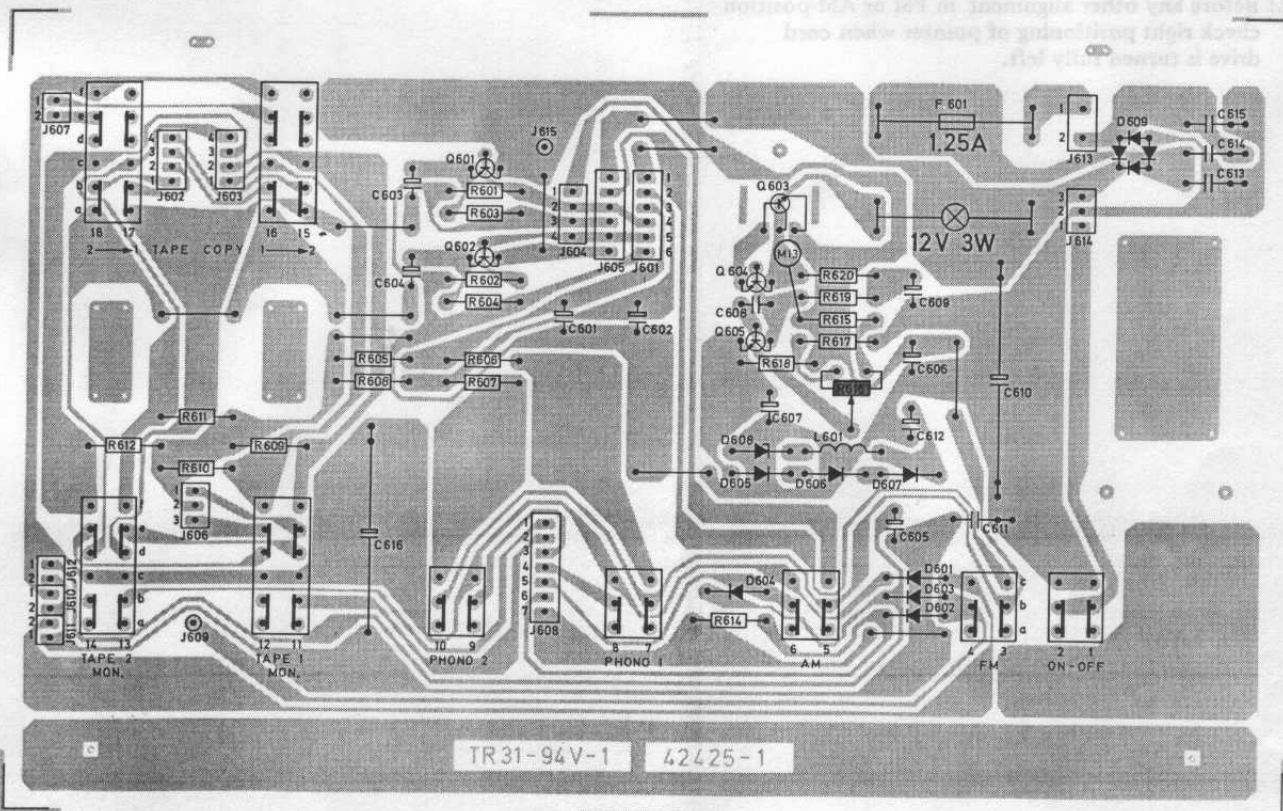
NOTE! Before any other alignment in FM or AM-position check right positioning of pointer when cord drive is turned fully left.

A7

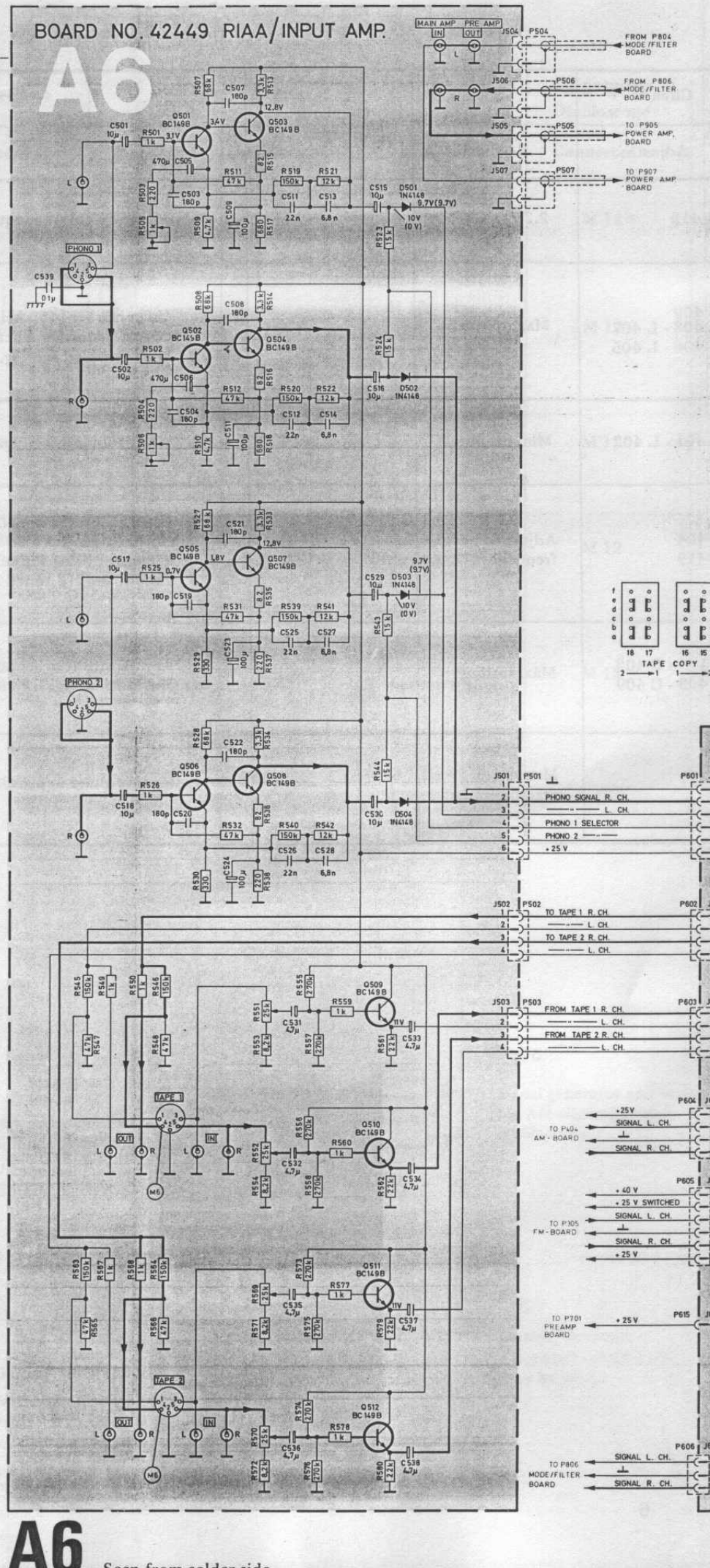
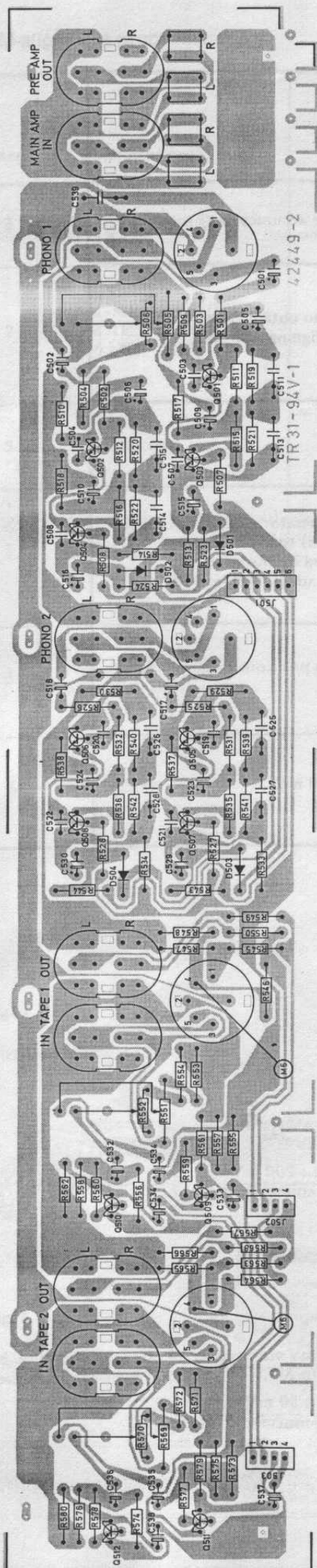


Seen from component side.

A7

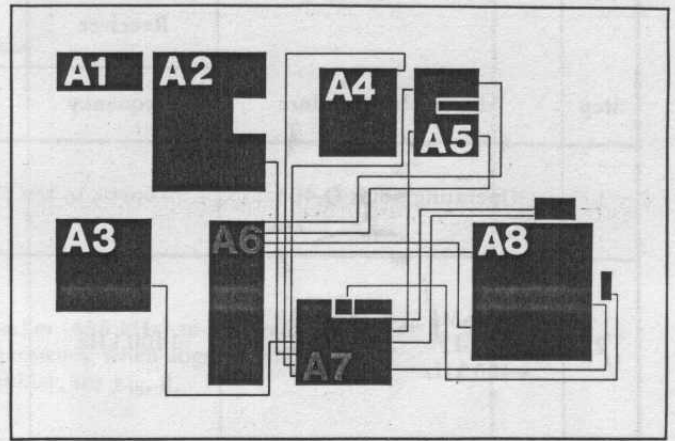


Seen from solder side.

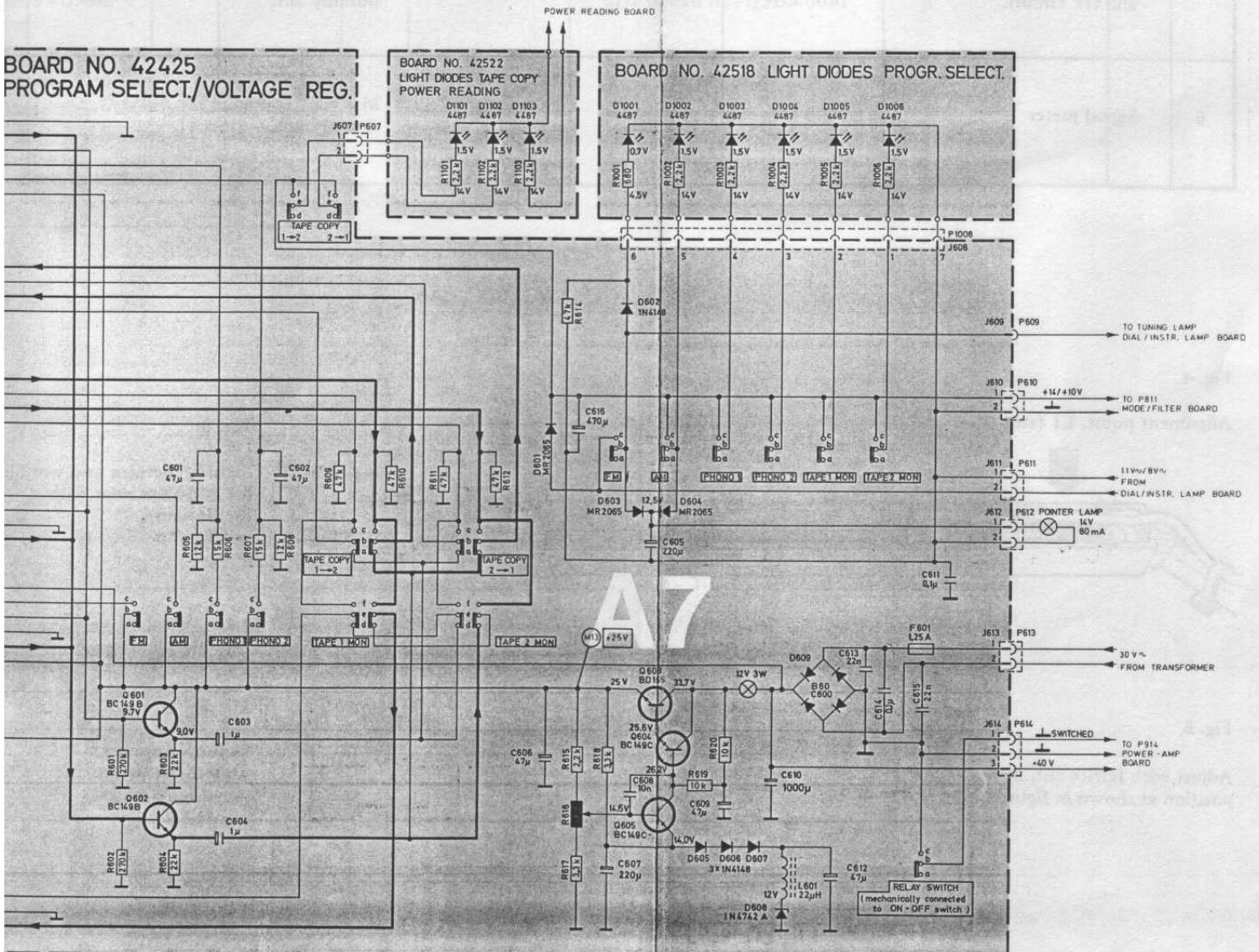
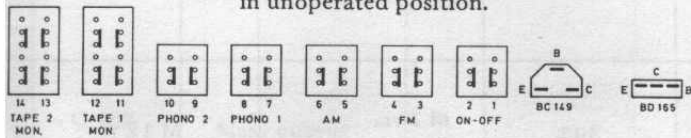


A6 Seen from solder side.

Location.



All selectors are shown in unoperated position.



AM-alignment procedure

Step	Alignment procedure	Receiver	Generator			Outputmeter */ Oscilloscope
		Frequency	Frequency	Modulation	Applied to	Connected to
1	Operating point Q 404					M 11 *
2	AM -MF 3. MF(IF) AM -IF 2. MF(IF) 455 kHz 1. MF(IF)	1400 kHz	455 kHz	30%	M 10 via M 9 0.1 μ F M 8 Fig. 6	M 12
3	455 kHz trap	518 kHz	455 kHz	30%	M 7 via dummy ant.	M 12
4	Oscillator	600 kHz 1400 kHz	600 kHz 1400 kHz	30%	M 7 via dummy ant.	M 12
5	Antenna circuit, ferrite and HF circuit.	600 kHz 1400 kHz	600 kHz 1400 kHz	30%	M 7 via dummy ant.	M 12
6	Signal meter	1400 kHz	1400 kHz	30%	M 7 via dummy ant.	

Fig. 4.

Alignment point, L1 (step 5).

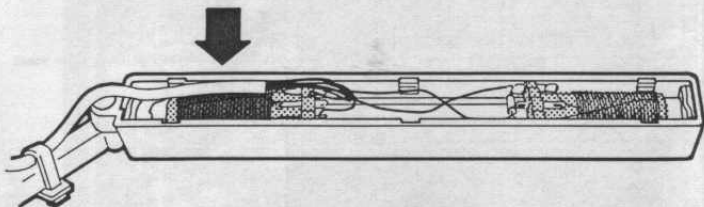


Fig. 5.

Adjust with ferrite ant. in position as shown in figure.

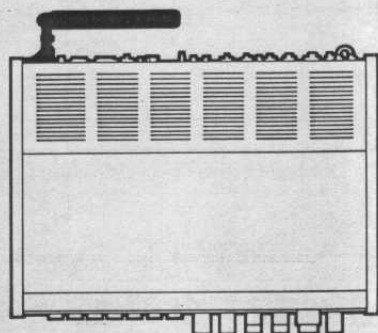


Fig. 6.

Signal generator and wobbler for AM-alignment with oscilloscope.

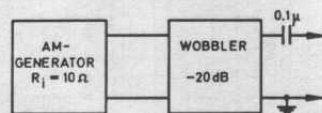
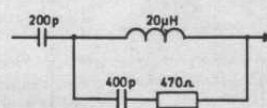


Fig. 7.

Dummy antenna. A capacitiv of 200 pF may be used.



Circuits	Reading	Oscillator voltage	Notes
Adjust			
413	2.2V DC		Use a VTVM of adequate accuracy.
409 408 - L 407 406 - L 405	Max. output		Use a marker (455 kHz) to obtain correct center frequency when aligning AM - IF. With wobbler, see Fig. 8.
401 - L 402	Min. output		With Wobbler, see Fig. 9
404 419	Adjust to beat frequency	Gate 2, Q 404: 1V	Use a calibrated signal generator, and further a marker (455 kHz) to avoid the alignment being influenced by the antenna circuit, and HF tuned circuit (L 403 - c 410).
1 - C 402 403 - C 409	Max. output		Adjust with ferrite ant. in position as shown in Fig. 4/5.
431	Max. meter reading		Signal voltage approx. 100 mV

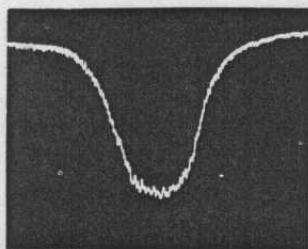


Fig. 8. MW.

Signal: $U_{in} = 100 \mu V$ via wobbler (Fig. 6/7) applied to M7.

Oscilloscope: Vert.: 200 mV/dev.
Hor.: 2 kHz/dev., connected to M12.

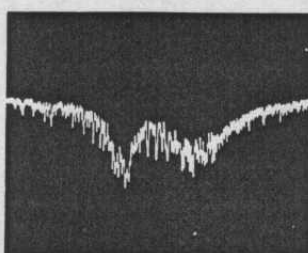


Fig. 9. 455 kHz trap.

Signal: $U_{in} = 200 mV$ via wobbler (Fig. 6/7) applied to M7.

Oscilloscope: Vert.: 50 mV/dev.
Hor.: 2 kHz/dev., connected to M12.

AM-TUNER

OSCILLATOR

AM-IF 455kHz

AM-AERIAL CIRCUIT

OPERATING POINT Q404

455kHz TRAPS

F401 5A SLOW

METER

TP401

M10

M11

M12

Q401

Q402

Q403

Q404

Q405

Q406

Q407

Q408

Q409

Q410

Q411

Q412

Q413

Q414

Q415

Q416

Q417

Q418

Q419

Q420

Q421

Q422

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Q668

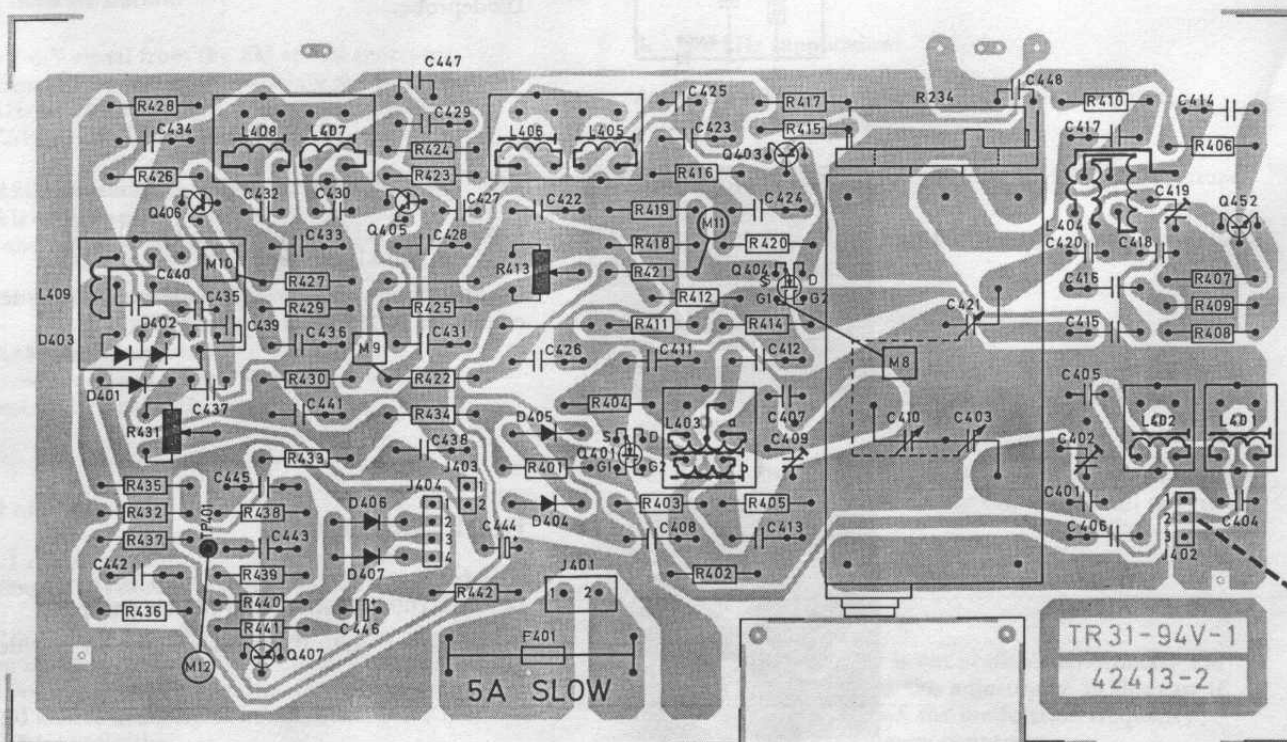
Q669

Q670

Q671

Q672

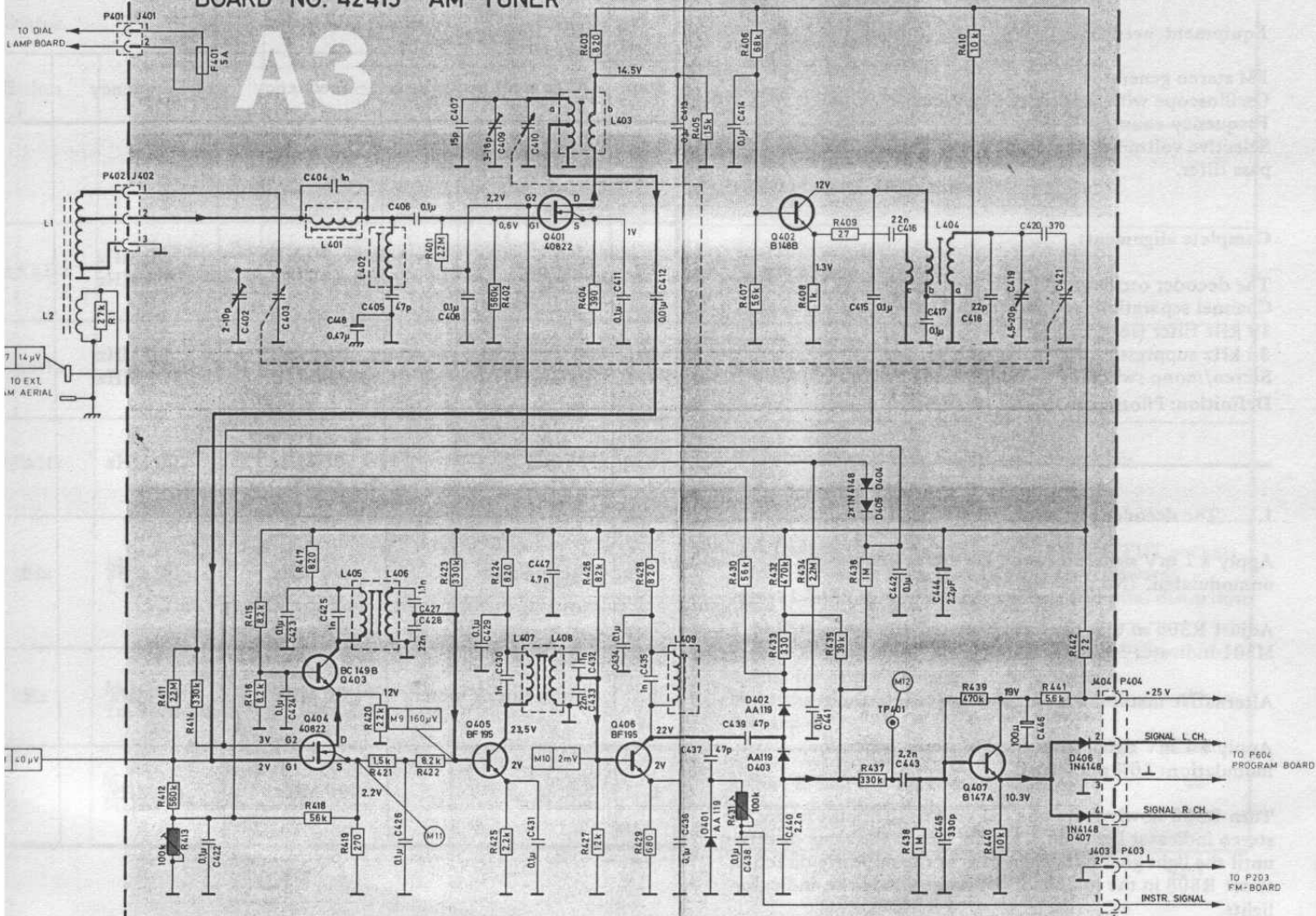
A3



Seen from solder side.

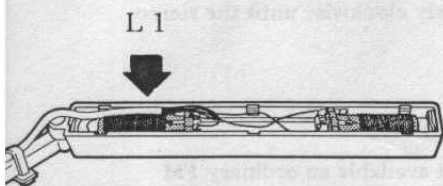
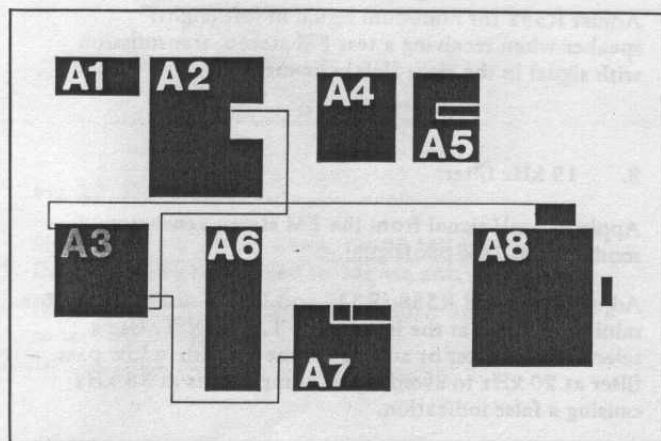
BOARD NO. 42413 AM-TUNER

A3



AM-SECTION - 42599

Location.



ALIGNMENT OF STEREO-DECODER

Equipment needed:

FM stereo generator
Oscilloscope with sensitivity 5 mV/cm
Frequency counter
Selective voltmeter or a.c. voltmeter and 20 kHz low pass filter.

Complete alignment:

The decoder oscillator: 19 kHz (see paragraph 1).
Channel separation (see paragraph 2).
19 kHz filter (see paragraph 3).
38 kHz suppression (see paragraph 4).
Stereo/mono switching threshold (see paragraph 5).
Definition: Pilotsignal 19 kHz (± 2 Hz).

1. The decoder oscillator: 19 kHz

Apply a 1 mV signal from the FM stereo generator, unmodulated. (No pilot signal applied).

Adjust R306 so that the frequency counter connected to M301 indicates 19 kHz.

Alternative method without the frequency counter:

Apply a 1 mV signal from the FM stereo generator, modulation: 10% pilotsignal.

Turn R306 slowly from one extreme to the point where the stereo indicator lights up. Turn further in the same direction until the light goes out. Then turn in the opposite direction to set R808 in the middle of the range where the indicator lights.

2. Channel separation:

Apply a 1 mV signal from the FM stereo generator, modulation: 10% pilotsignal. Modulate the right channel with 1 kHz at 30% deviation. Connect the oscilloscope to the TAPE OUT (L) socket.

Adjust R322 to minimum deflection on the scope. Check this adjustment with the 1 kHz signal in the left channel and measure the output of the right channel.

Alternative method without the stereo generator:

Adjust R332 for minimum signal in left (right) speaker when receiving a test FM stereo, transmission with signal in the right (left) channel only.

3. 19 kHz filter:

Apply a 1 mV signal from the FM stereo generator, modulation: 10% pilotsignal.

Adjust R334 and R338 (R335 and R339) alternatively for minimum signal at the left (right) TAPE OUT. Use a selective voltmeter or an a.c. voltmeter with a low pass filter at 20 kHz to avoid signal components at 38 kHz causing a false indication.

FM-alignment procedure

Step	Alignment procedure	Receiver		
		Frequency	Frequency	D
1A	25V for varicap			
1B	FM $\pm$ osc.	90 MHz 105 MHz	90 MHz 105 MHz	$\pm$
2	Aerial circuit	90 MHz 105 MHz	90 MHz 105 MHz	$\pm$
3	FM - IF	90 MHz	90 MHz	$\pm$
4	Discriminator	90 MHz	90 MHz	$\pm$
5	Center tuning meter	90 MHz	90 MHz	$\pm$
6	Signal indicator	90 MHz	90 MHz	

4. 38 kHz suppression:

Apply a 1 mV signal from the FM stereo generator, modulated with 19 kHz.

Adjust R301 for minimum signal at TAPE OUT, measure wideband.

Note! Before aligning the 38 kHz suppression, paragraph 3 must be satisfied.

5. Stereo/mono switching threshold:

Apply a 10 μ V signal from the FM stereo generator to the 75 ohm antenna input and adjust the generator for 10% pilotsignal.

Set R220 fully counterclockwise (seen from the component side) and then turn R220 slowly clockwise until the stereo indicator lights up.

Alternative method:

If a FM stereo generator is not available an ordinary FM generator can be used for this adjustment. In this case it may be necessary to check the modulation frequency (19 kHz) with the frequency counter.

Generator		Oscilloscope	Circuits	Notes
Variation	Applied to	Connected to	Adjust	
			R 616	Meter connected to M13 (Board A7). Adjust to 25V DC reading.
2.5 kHz	M 1	M 4 via diode-probe Fig. 10	R 203	Check 95 and 100 MHz.
10 kHz	M 1	M 4 via diode-probe Fig. 10	L101-L102-L103 C103-C107-C110	Adjust for max. curve height (see Fig. 11)
10 kHz	M 1	M 4 via diode-probe Fig. 10	L 106 - L 107	Adjust for max. curve height and symmetry (see Fig. 11) FM - IF 10.6 - 10.8 MHz.
1 kHz	M 1 1 mV/75 ohm	M 6 via Fig. 10	L 202 - L 203	Dist./voltm. connected to M6, TAPE OUTPUT socket: Adjust L203 for max. output voltage. Afterwards adjust L202 for min. output voltage and min. distortion
				See Fig. 12.
1 kHz	M 1 1mV/75 ohm		R 233	Adjust for center position of the pointer. When the receiver is tuned to min. distortion. See step 4.
	M 1 50 mV/75 ohm		R 222	Adjust R 222 for max. meter reading at a signal voltage of about 50 mV.

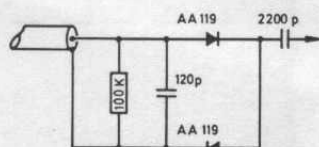


Fig. 10.

Diodeprobe.

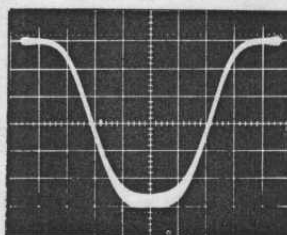


Fig. 11. FM-IF curve.

Signal: $U_{in} = 150 \mu V/75 \text{ ohms}$, $f = 90 \text{ MHz}$.
Dev. = $\pm 200 \text{ kHz}$ applied to M1 via ant. plug.

Oscilloscope: Vert.: 5 mV/dev., Hor.: 50 kHz/dev.
connected to M4 via diodeprobe (Fig. 10).

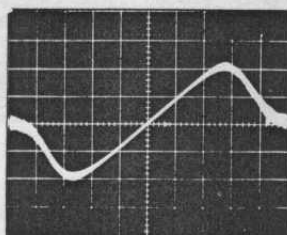
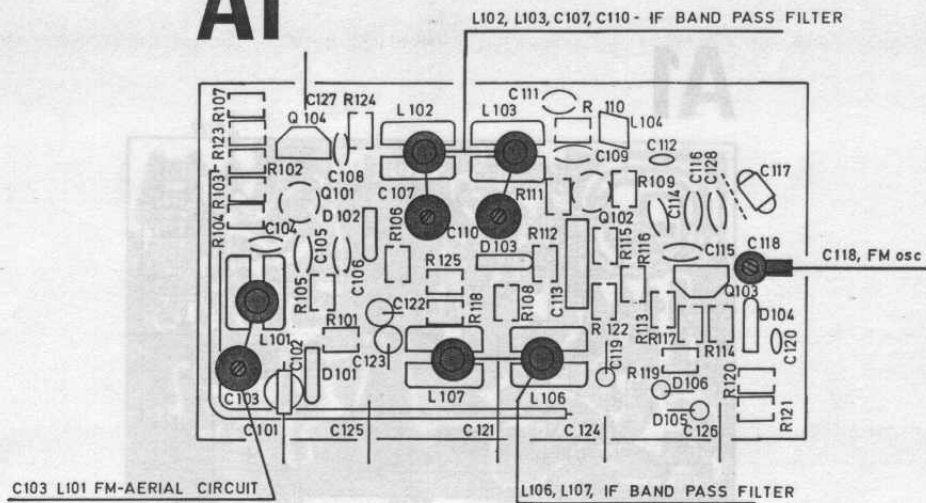


Fig. 12. Discriminator.

Signal: $U_{in} = 2 \mu V/75 \text{ ohms}$, $f = 90 \text{ MHz}$.
Dev. = $\pm 200 \text{ kHz}$ applied to M1 via ant. plug.

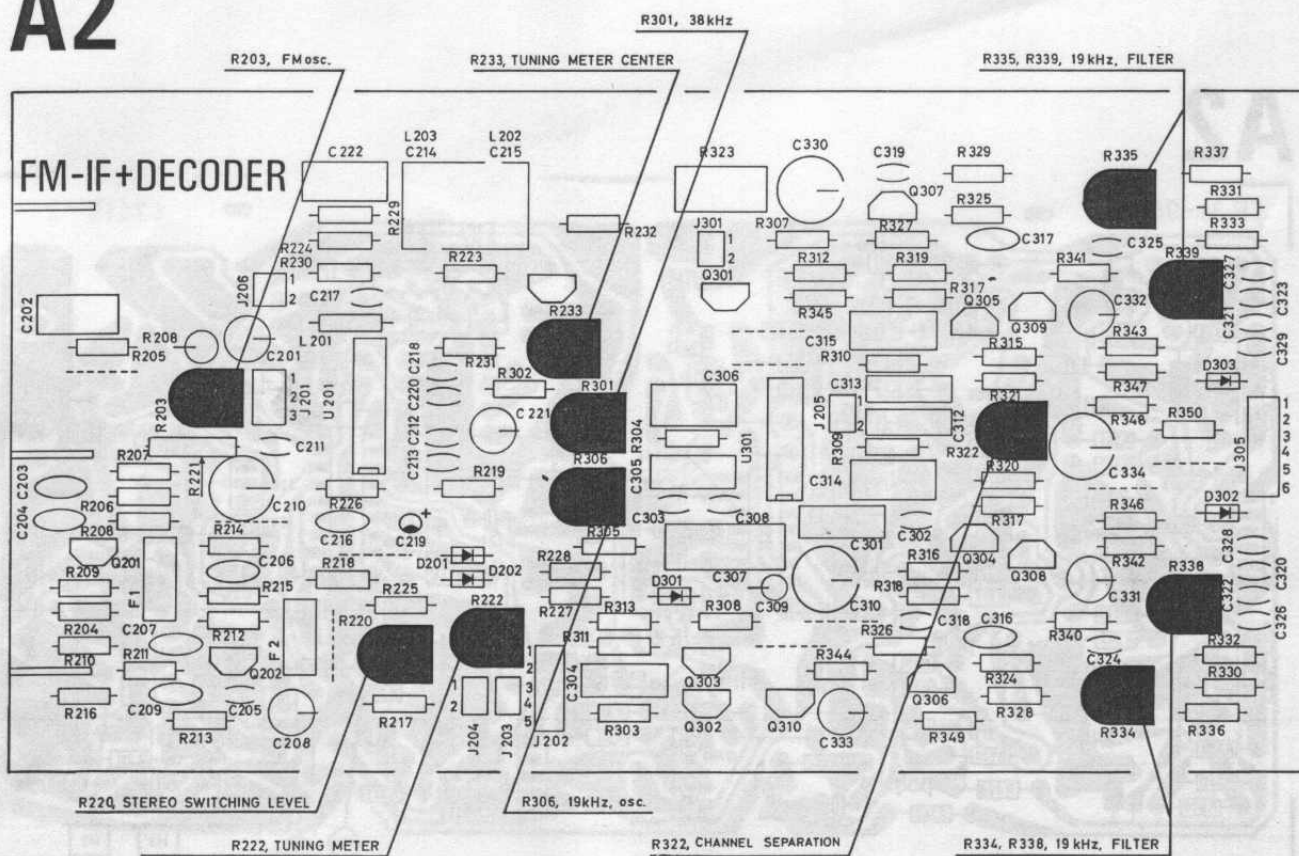
Oscilloscope: Vert.: 0.2 μV /dev. Hor.: 50 kHz/dev.
connected to M6.

A1



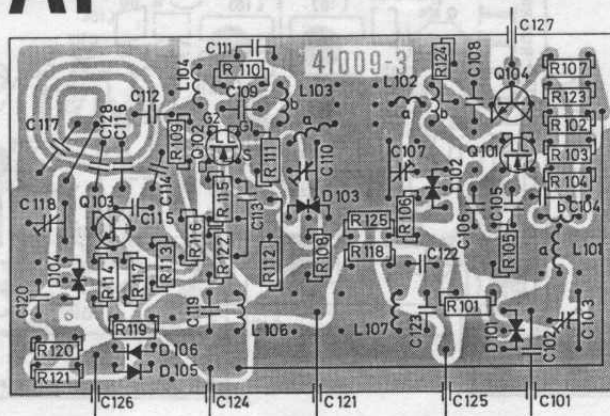
Seen from component side.

A2



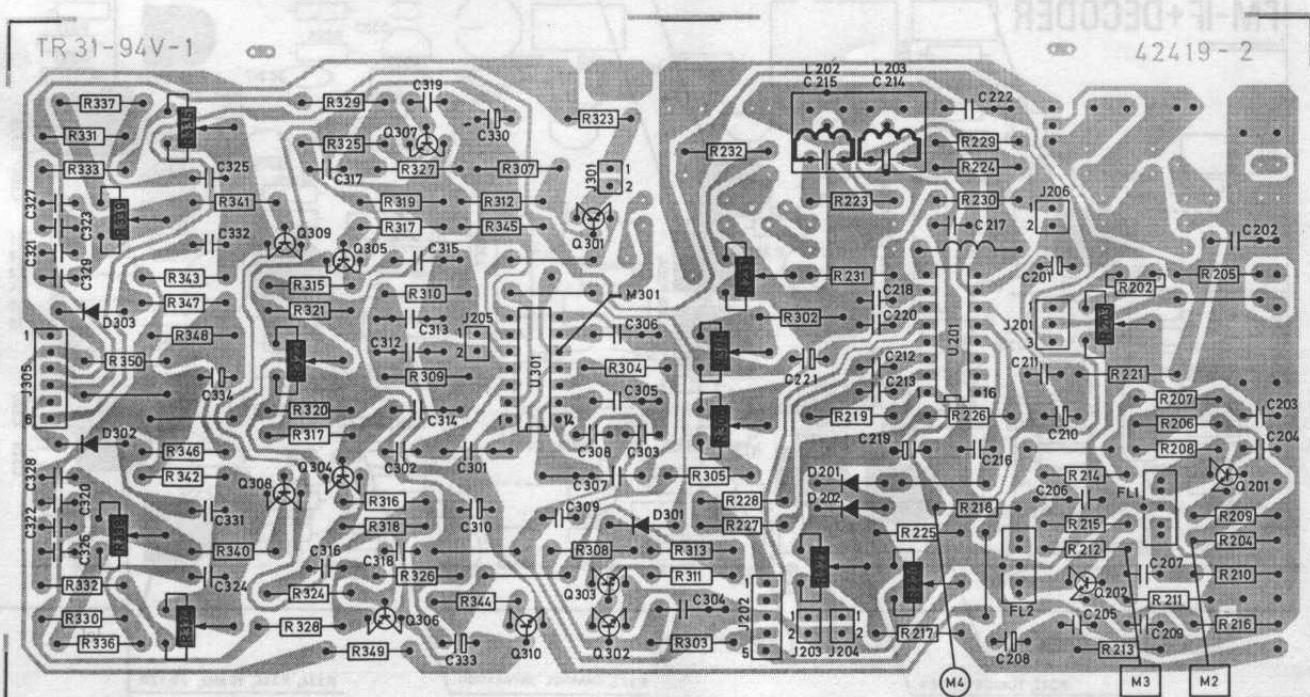
Seen from component side.

A1

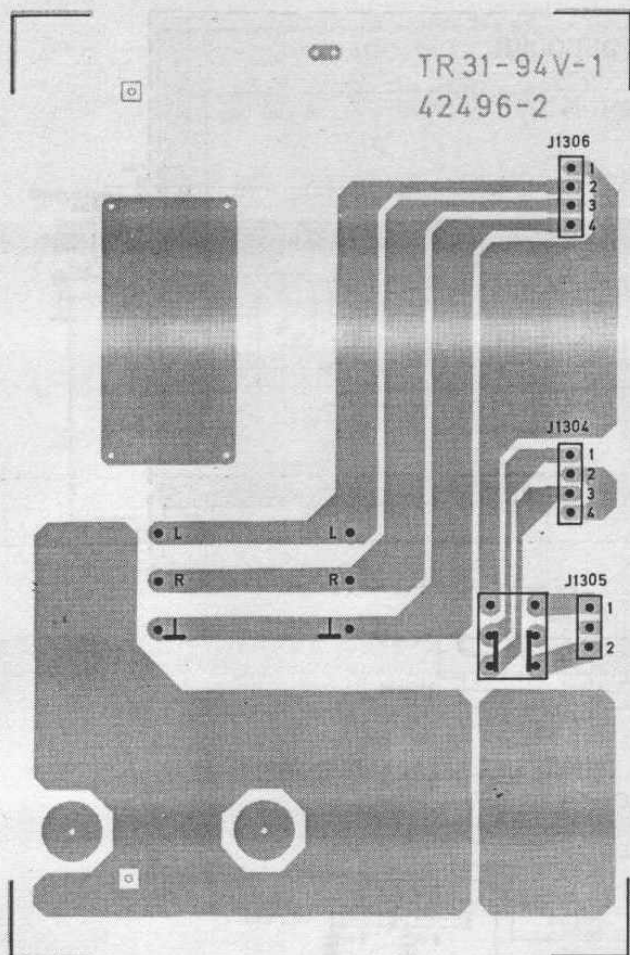


Seen from solder side.

A2

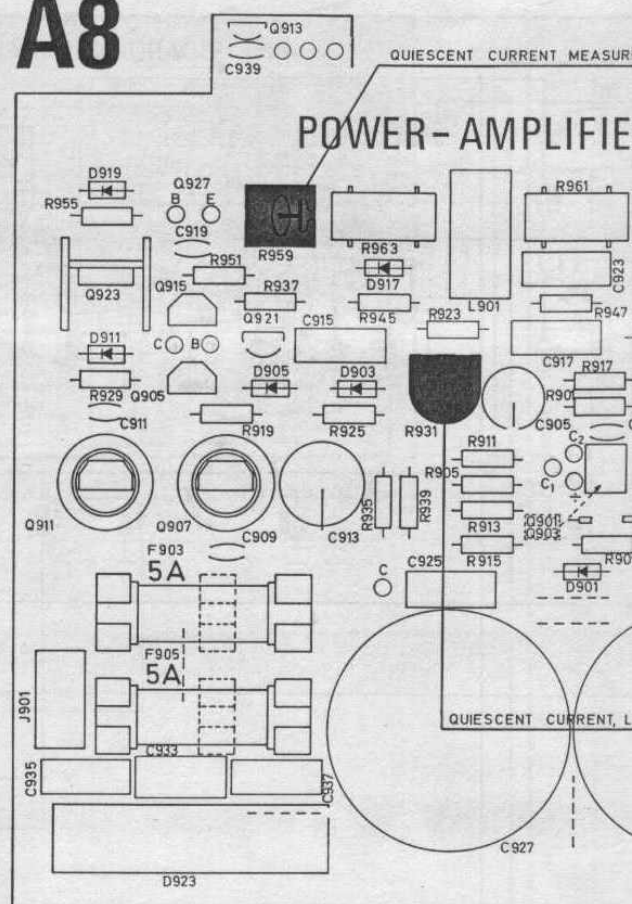


Seen from solder side.



Seen from solder side. **POWER READING BOARD**

A8



BOARD NO. 42397
DIAL/INSTR. LAMPS

TO P401
AM-BOARD
TO P302
FM-BOARD
TO P609
PROGR. SELECT
BOARD
TO P611
PROGR. SELECT
BOARD

FM-STEREO
LAMP
24V 50mA

SIGNAL
LAMP
12V 3W

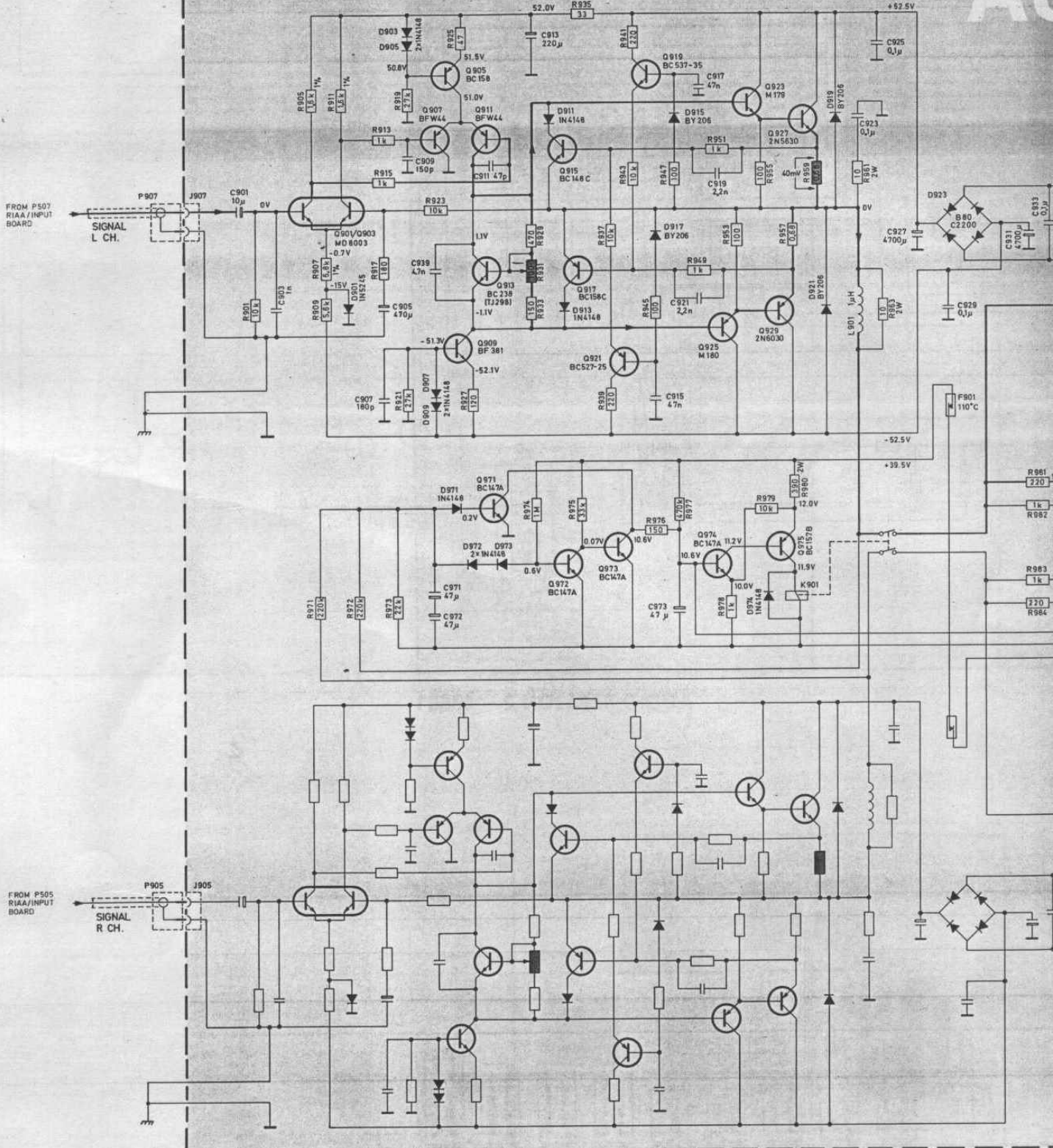
TUNING
LAMP
12V 3W

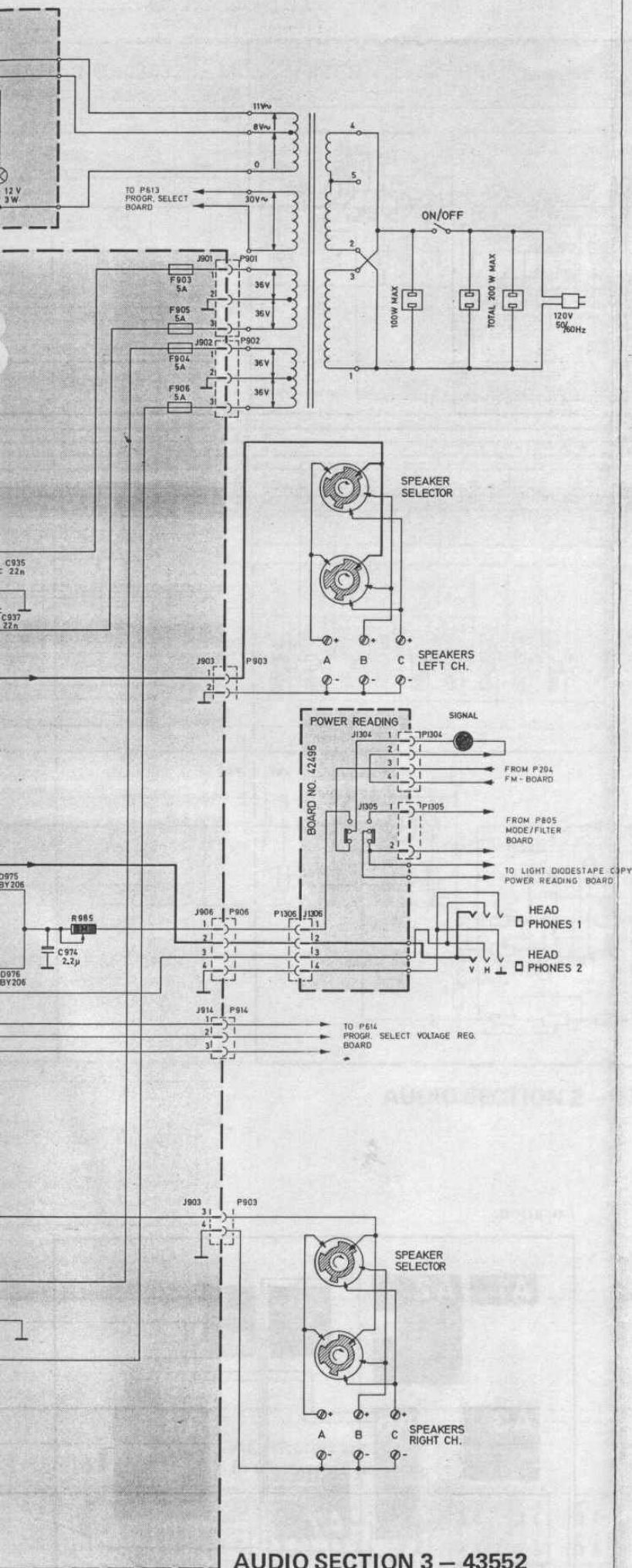
DIAL
LAMP
12V 3W

DIAL
LAMP
12V 3W

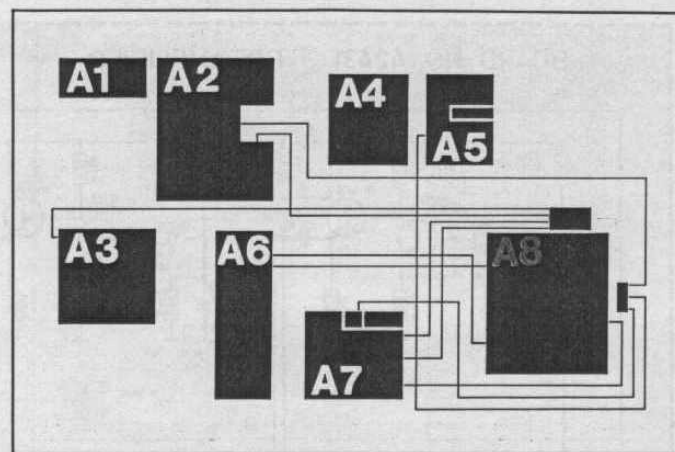
DIAL
LAMP
12V 3W

BOARD NO.42391 POWER - AMPLIFIER





Location.



AF—adjustments.

Quiescent current.

Connect a DC VTVM across the emitter resistor R959 (left channel) and R960 (right channel). After 10 minutes warm-up (with the volume control in minimum position), the voltage should be 40 mV.

If necessary, adjust with R931 (left channel) and R932 (right channel).

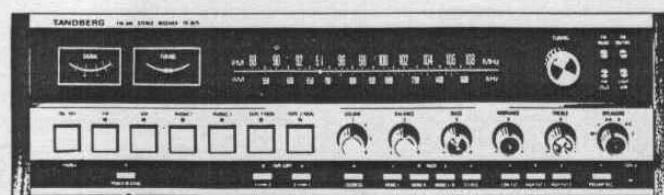
The most convenient place to connect the voltmeter is between the top of emitter resistors R959/R957 (left channel) and R960/R958 (right channel), on the component side of the board.

Output power indicator (SIGNAL meter).

Depress the button **POWER READING**. Apply a signal to **TAPE 1** input and measure the a.c. voltage across the speaker output.

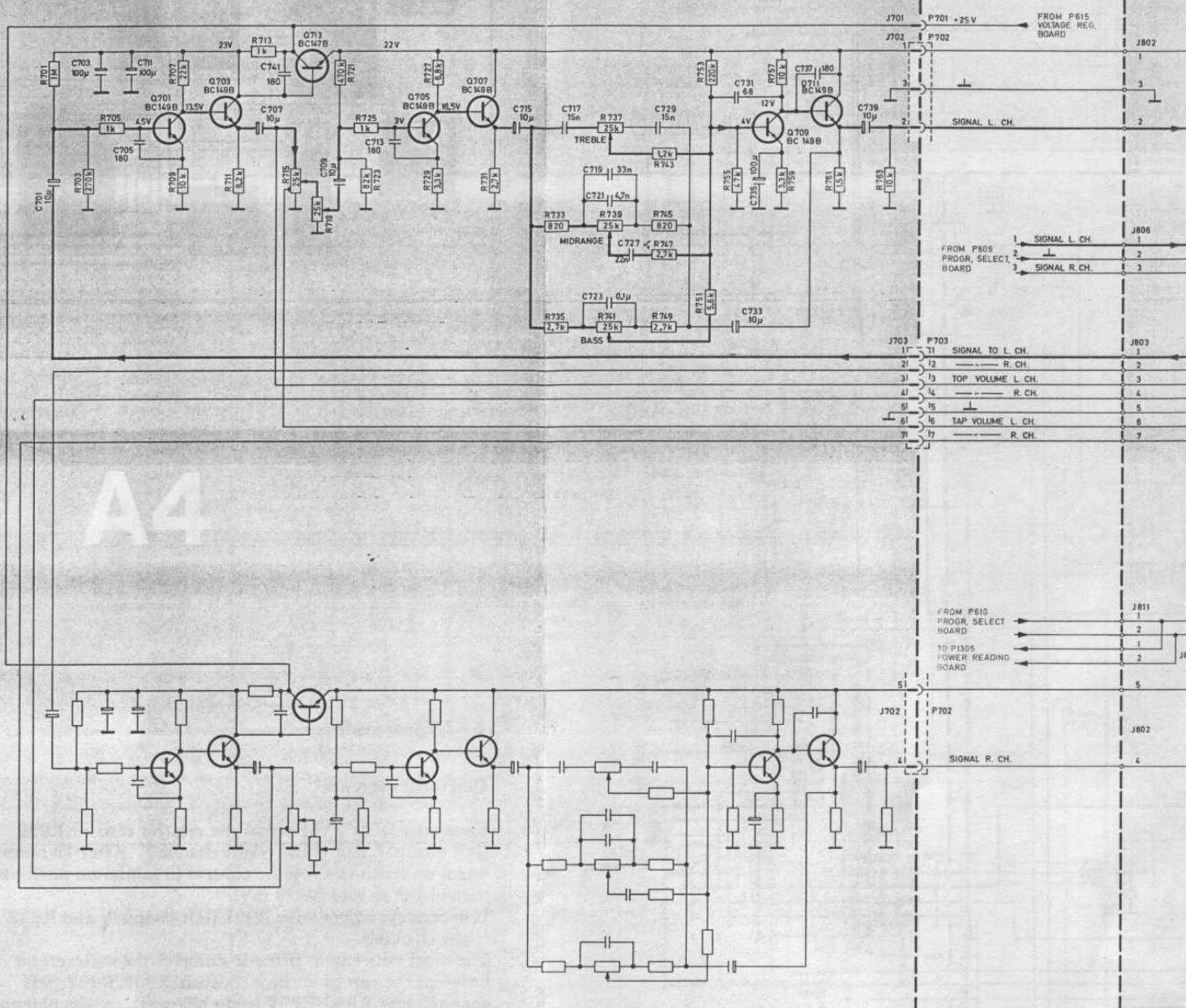
Adjust the input voltage or the **VOLUME** until the output voltage is 25 volts.

Adjust R985 for the same reading on the **SIGNAL** meter.

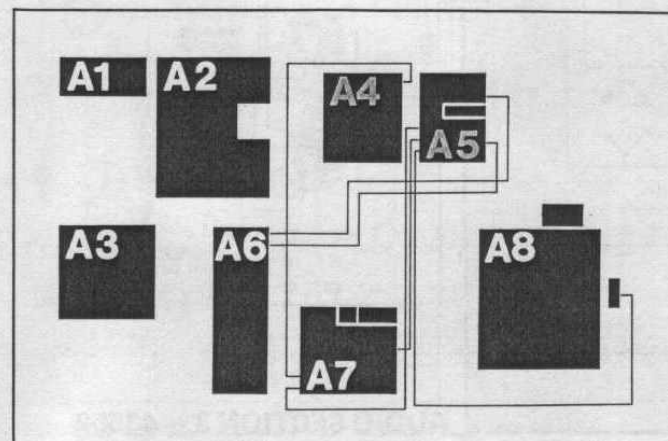


POWER READING

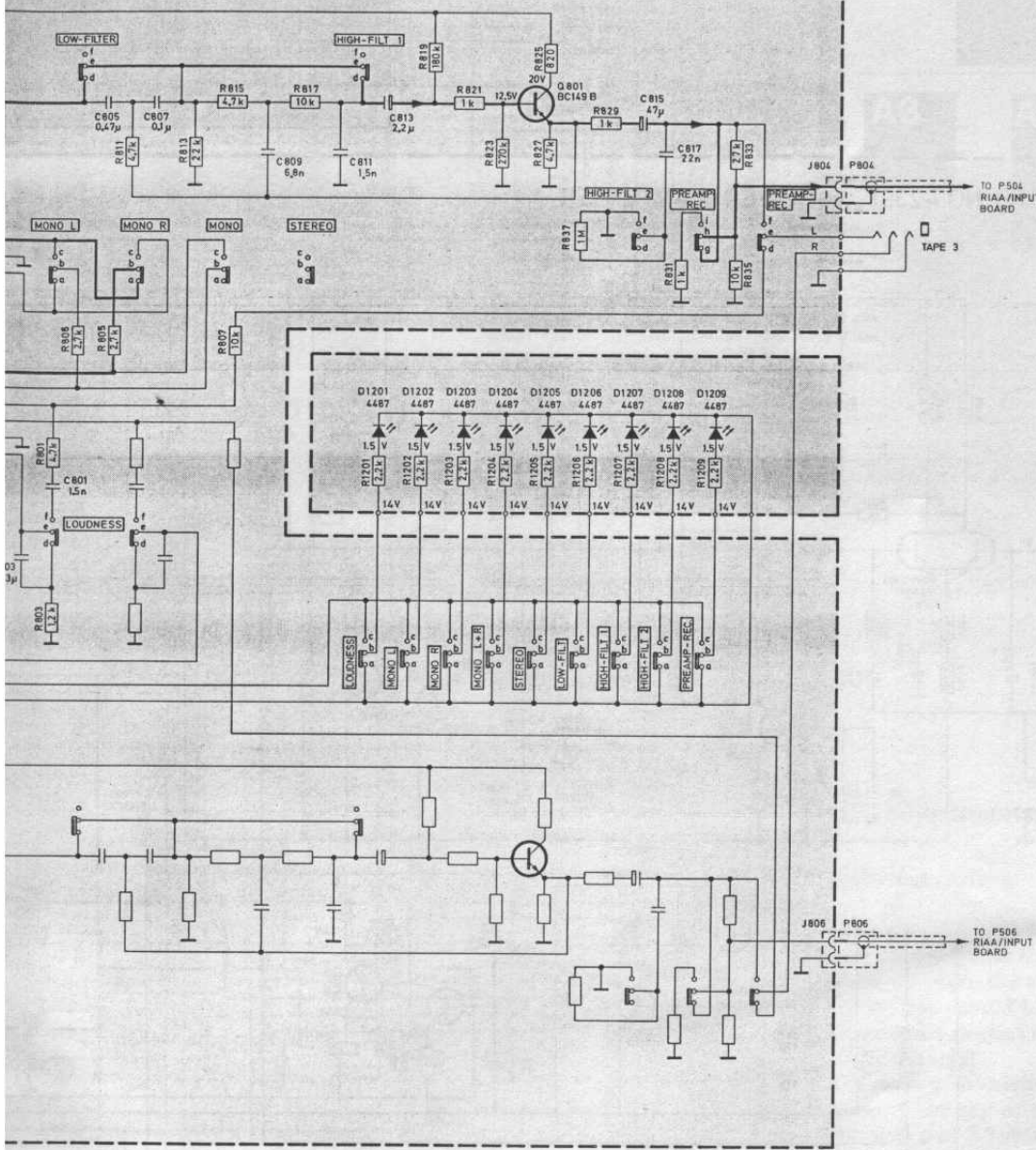
BOARD NO. 42431 PREAMPLIFIER



Location.

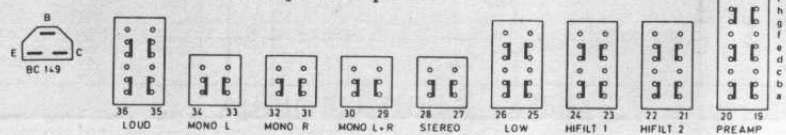


BOARD NO. 42437 MODE/FILTER

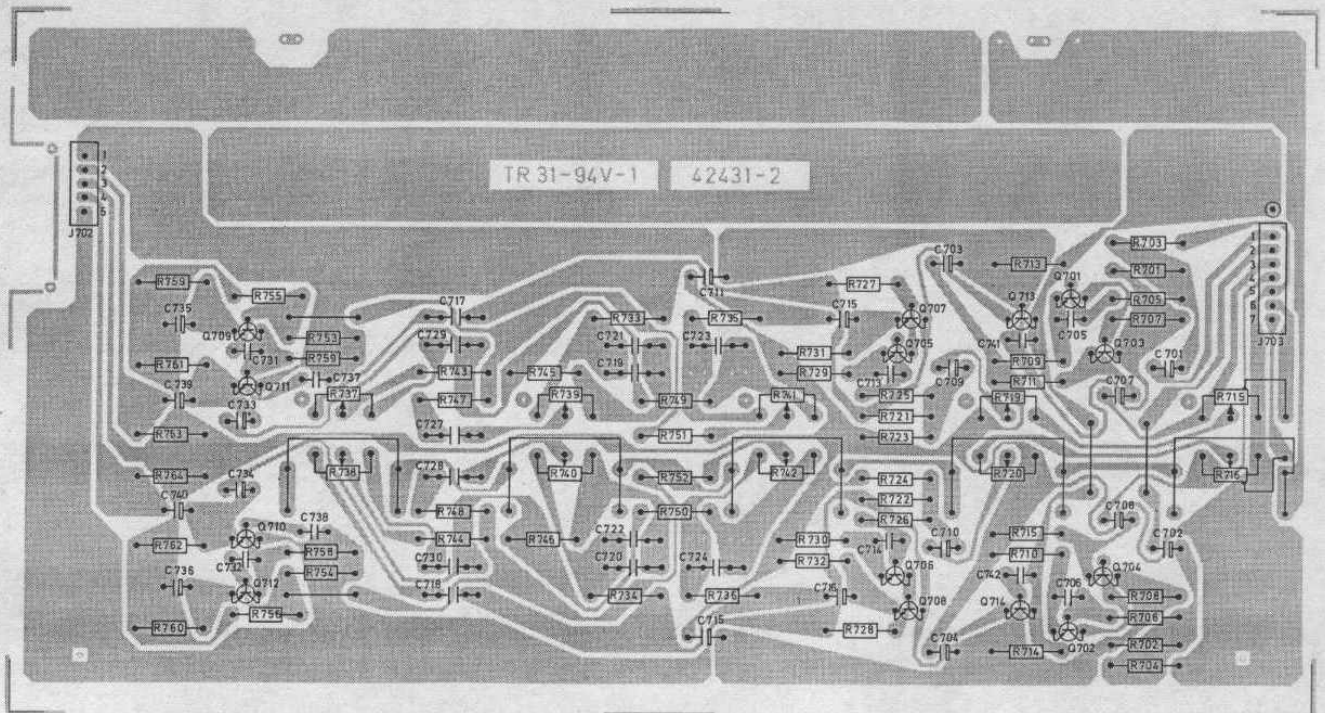


AUDIO SECTION 2 - 43551

All selectors are shown in unoperated position.

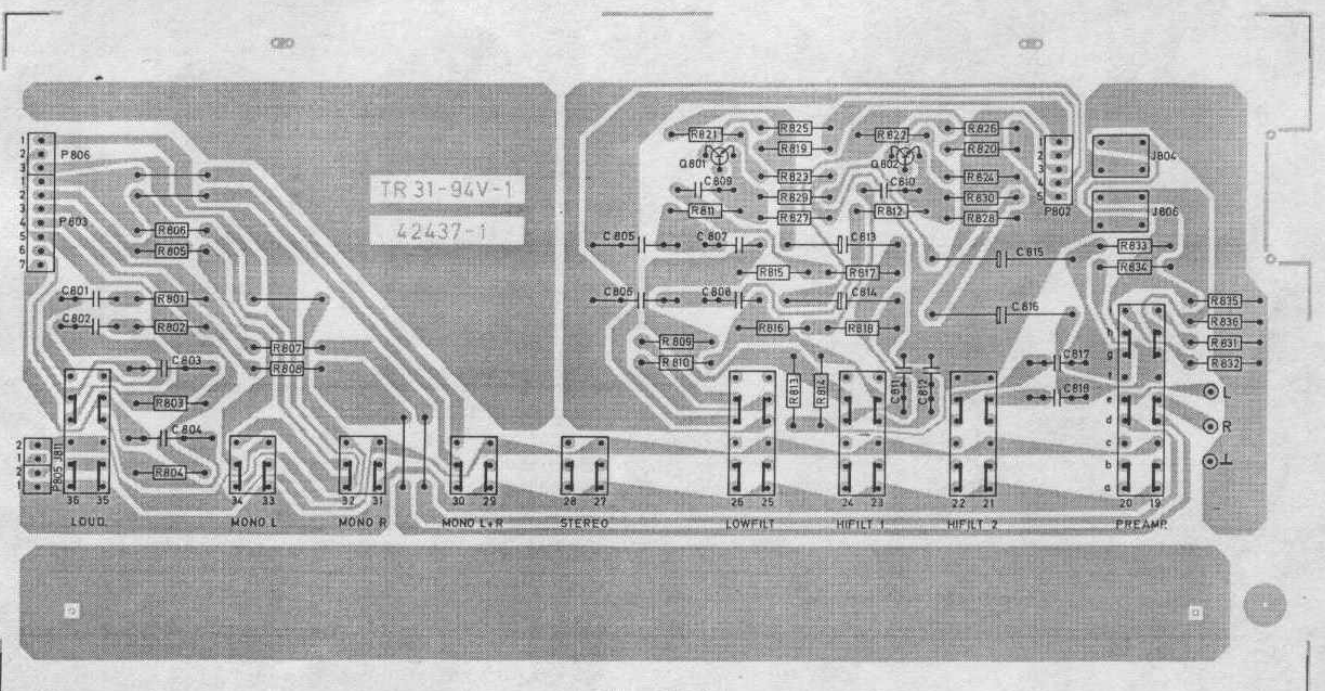


A4



Seen from solder side.

A5



Seen from solder side.

TANDBERG
The European Alternative

Tandberg A/S, Post Office Box 55, Bogerud,
N-Oslo 6, Norway
