

Service
Service
Service



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Service Manual

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"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne".

PHILIPS

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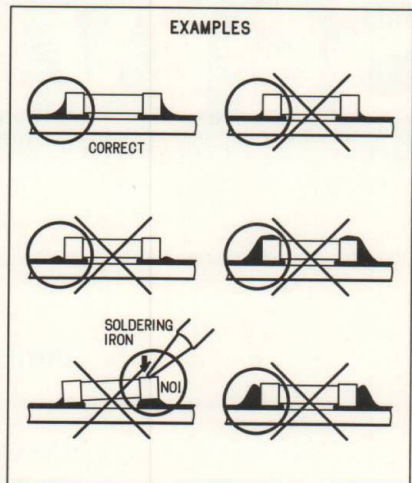
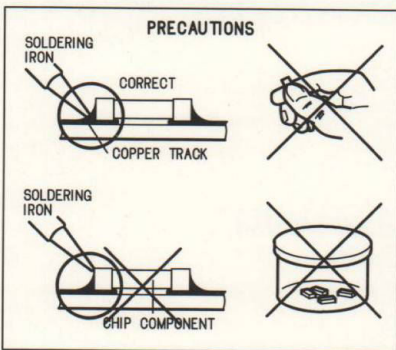
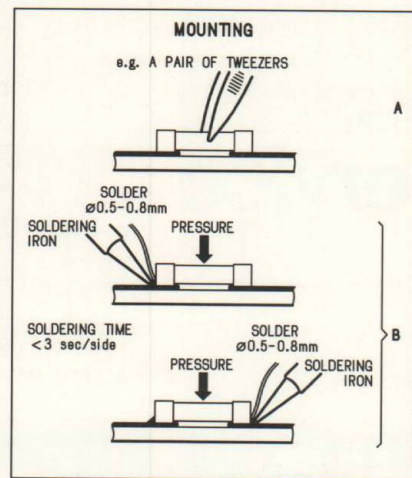
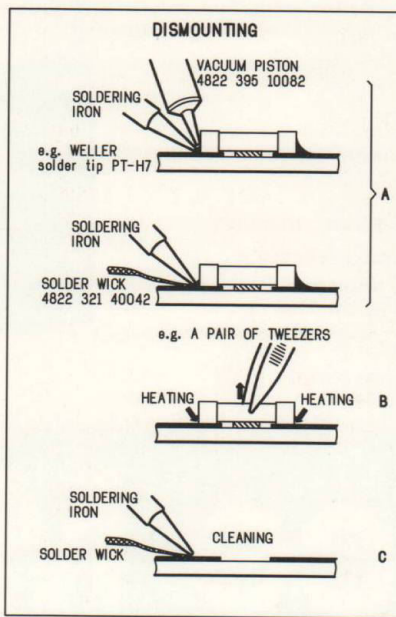
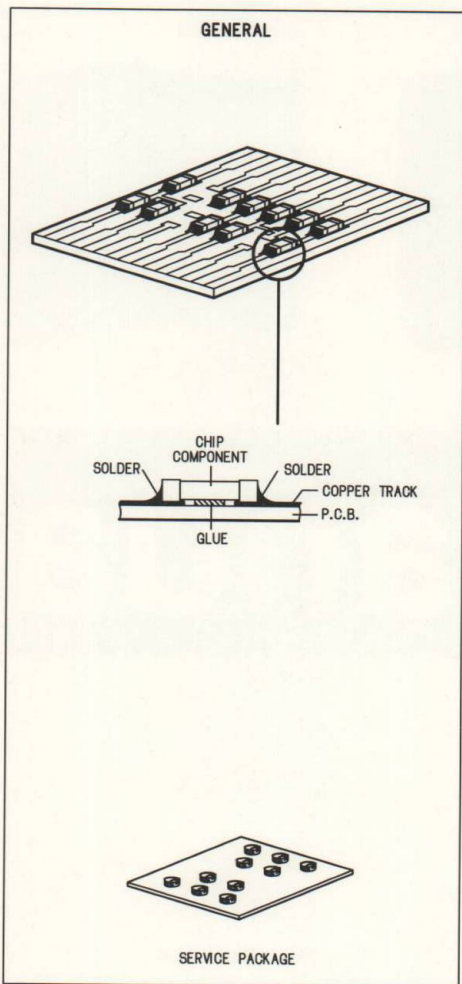
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Handling chip components



GB WARNING

All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools at this potential.

F ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation. Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfilez le bracelet sert d'une résistance de sécurité. Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.



D WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD). Unvorsichtige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren. Sorgen Sie dafür, daß sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind. Halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

NL WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladungen (ESD). Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen vermindern. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat. Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

I AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD). La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione. Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un bracciale a resistenza. Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

GB

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

D

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Gerätes darf nicht verändert werden. Für Reparaturen sind Originalersatzteile zu verwenden.

I

Le norme di sicurezza estigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

NL

Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

F

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

Specification:

General:

Nominal Voltage	: 3 V
Current consumption	: 40 mA in FM
(with headphone 32 Ω)	: 50 mA in AM
	: 10 μA in Radio off (Clock)
Low Voltage auto shutoff	: < 2,2 V
Low Batt detection	: 2,4 ± 0,1 V
Battery lifetime (alkalyn)	: > 15 hours
External DC	: 3 V / 150 mA

FM Part:

Frequency range	: 87,5 – 108 MHz
Tuning Step	: 100 kHz
IF Frequency	: 10,7 MHz
Sensitivity	
mono S/N = 26 dB	: 2 μV
stereo S/N = 46 dB	: 80 μV
- 3 dB limiting point	: 3 μV
Search sensitivity	: > 3 μV
Stereo switching level	: > 3 μV
Distortion at f = 75 kHz	: 2 %
Image Rejection	: 26 dB
IF suppression	: 70 dB
Channel separation	
at 10 V	: > 5 dB
at 100 V	: 26 dB
at 1000 V	: 26 dB
IF bandwidth	: 150 ± 40kHz
LOCAL – DX	: 20 – 30 dB attenuation
AF Frequency response	: 20 Hz – 17 kHz

LF-Part:

Output power	
Stereo Headphone 32 Ω	: 2 x 10 mW
Loudspeaker 32 Ω	: 80 mW
Volume Control	
Control range	: 70 dB min.
Control signal	: PWM 32 Hz 30 steps
5kHz suppression for AM	: 30 dB
Mute attenuation	: 60 dB

AM Part:

Frequency range	: 147 – 29995 kHz
Tuning steps	
147 – 516 kHz	: 3 kHz
522 – 1701 kHz	: 9 kHz
520 – 1700 kHz	: 10 kHz } ext. switchable
1705 – 29995 kHz	: 5 kHz
Search sensitivity	
LW	: > 500 V/m
MW	: > 300 V/m
SW	: > 10 V
1st IF frequency	: 55,845 MHz
2nd IF frequency	: 450 kHz
LOCAL – DX	: 20 – 30 dB attenuation
AF Frequency response	: 20 Hz – 2,2 kHz

Connection & Controls

Adjusting time, date and alarmtime (1003 Clock foil)

Adjust successively the timezone, hours and minutes:

- Keep TIME button pressed.
- One or more place names start blinking in the display.
- Adjust the timezone using the DISPLAY SET + or – buttons and then release the TIME button.
- Repeat this procedure for adjusting the hours and the minutes.

Note: When you press any other function button during this procedure, time setting starts all from the beginning.

Adjust successively the years, months and days:

- Keep the DATE button pressed.
- The 'years' indication starts blinking in the display.
- Adjust the years using the DISPLAY + or – buttons and then release the DATE button.
- Repeat this procedure for adjusting the months and the days.

Adjust successively the hours and the minutes:

- Keep the ALARM button pressed.
- The 'hours' indication starts blinking in the display.
- Adjust the hours using the DISPLAY + or – buttons and then release the ALARM button.
- Repeat this procedure for adjusting the minutes.

World time

In the display at the right side you can read the time in another city or part of the world.

- Press CITY SCAN EAST or WEST briefly each time until you reach the desired city or timezone. The 'city-time' appears in the display.

Note: The set does not take summertime in account.

Radio

9 / 10 KHz – 24 / 12 hours switch (1401)

With the 9 / 10 KHz switch you can select the size of the frequency step between adjacent channels in the AM (=MW) band.

At the same time you select the 12 or 24 hours clocksystem:

- 9 KHz corresponds with the 24 hours clock.
- 10 KHz corresponds with the 12 hours clock.

In North- and South America it should be set to 10 KHz / 12 hours clock. In all other parts of the world to 9 KHz / 24 hours clock.

In case of the 12 hours clock, the AM or PM indicator appears in the display.

Antenna

- For FM, pull out the telescopic antenna(417). To improve FM-reception, incline and turn the antenna. Reduce its length if the FM-signal is too strong (very close to a station). To improve FM reception use the supplied SW antenna (type SBC 3581).
- For AM (=MW) and LW, the set is provided with a built-in antenna, so there is no need to use the telescopic antenna. The antenna can be directed by turning the whole set.
- For SW, the telescopic antenna must be pulled out and placed in the vertical position. To improve SW-reception, vary the length of the antenna or use the supplied SW-antenna (type SBC 3581).

Local / distance

With the local / distance switch (1005 Tuner foil) you can adjust the sensitivity of the radio.

- Press LOCAL / DISTANCE. 'LOCAL' indication appears in the display. Only strong transmitters are received, and weak transmitters or interference (caused by computers, TV-sets etc.) will be suppressed.

News or music

With the NEWS or MUSIC button, you can influence the sound:

- Press NEWS(1503); the high tones are increased which is more suitable for listening to newsreports.
- Press MUSIC(1504); the bass tones are increased which is more suitable for listening to the music.

Tuning (1005 Tuner foil)

There are 3 possibilities to tune to a frequency:

Automatic tuning

- Keep TUNING + or – pressed until indication A (automatic tuning) appears in the display; then release the button. Tuning stops when a strong station is found.
- If this is not the station of your choice, simply repeat this operation.

Manual tuning

- Keep TUNING + or – pressed until you approach the required frequency and then release the button.

- Then press TUNING + or – briefly each time. In this way the frequency is changed step by step until the desired frequency is found.

Direct tuning

When you already know the frequency of the desired station, you can directly tune to this frequency:

- Select the digits of the frequency with the PRESET buttons 1...9.
- Press the FM or AM button.

Memory presets

You can store the frequencies of 18 radiostations: 9 on FM and 9 on the other bands (AM/LW/SW).

Manual programming of preset stations

- Tune to the radiostation you want to store.
- Keep MEMORY button pressed. The PRESET symbol starts blinking.
- Now press the desired PRESET button 1...9. The chosen PRESET button is shown in the display and the frequency is stored. Note: a stored frequency is only erased from the memory by storing another frequency in its place.

Tuning to preset stations

- Press FM or AM.
- Press the MEMORY button.
- Press the desired PRESET button 1...9.

Autostore presets

You can store the frequencies of 18 radiostations: 9 on FM and 9 on the other bands (AM/LW/SW).

Automatic programming of preset stations

- Press AUTO STORE button for more than 2 seconds. Then release this button. 9 stations in the desired waveband will now be stored automatically in the memory.
- When AUTO STORE is finished, the stored stations are scanned once automatically and you hear each station for 3 seconds.
- To stop auto store, press any button.

Tuning to autostore presets

- Press the AUTOSTORE button.
- Press the desired PRESET button 1...9.

General information

Lock switch (1402)

To prevent accidental pressing of buttons the set is provided with a LOCK switch.

- Set LOCK switch to position LOCK. All buttons will be locked, except ALARM REPEAT, BUZZER OFF, VOLUME, MUSIC, NEWS and POWER ON/OFF.

Reset

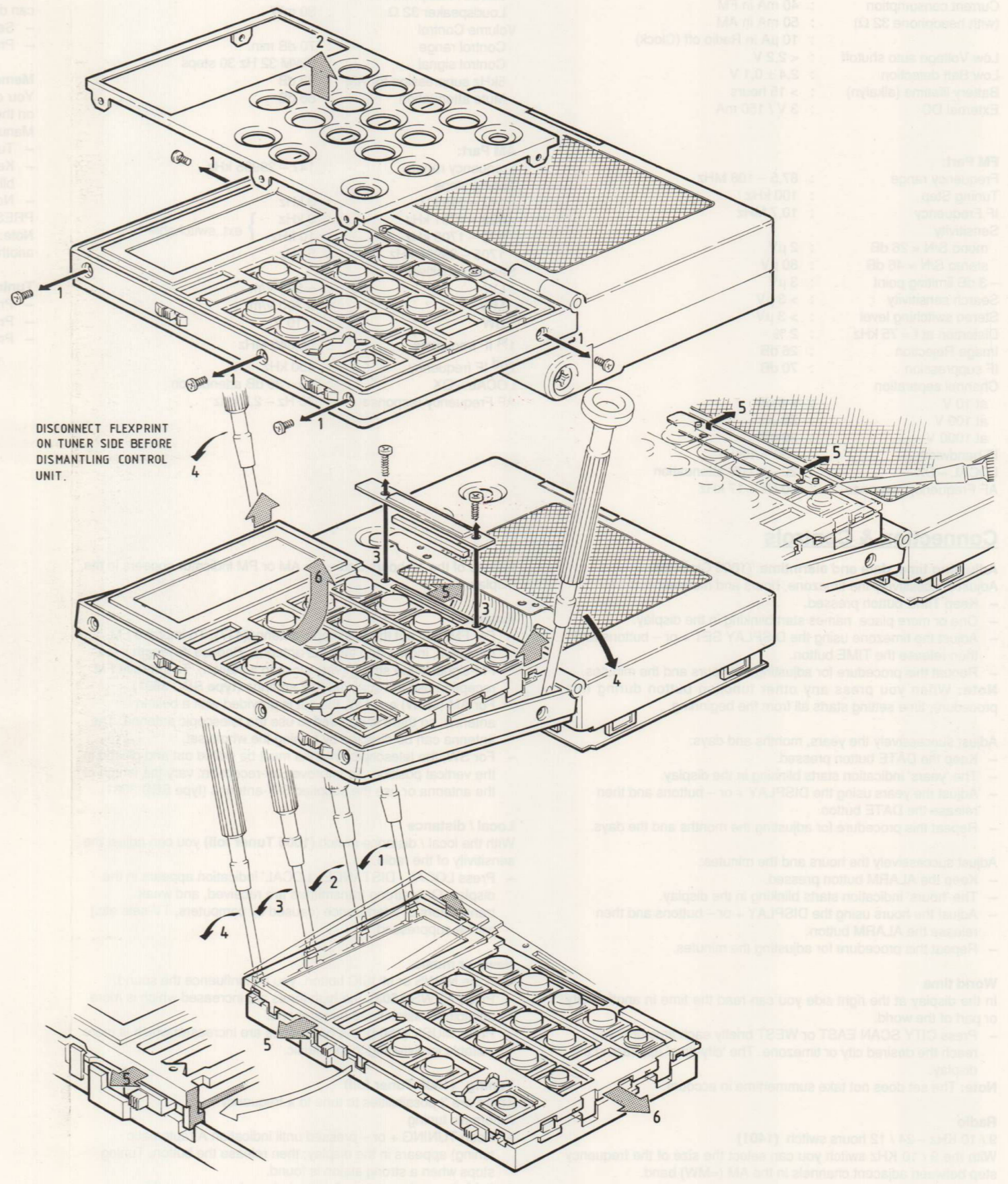
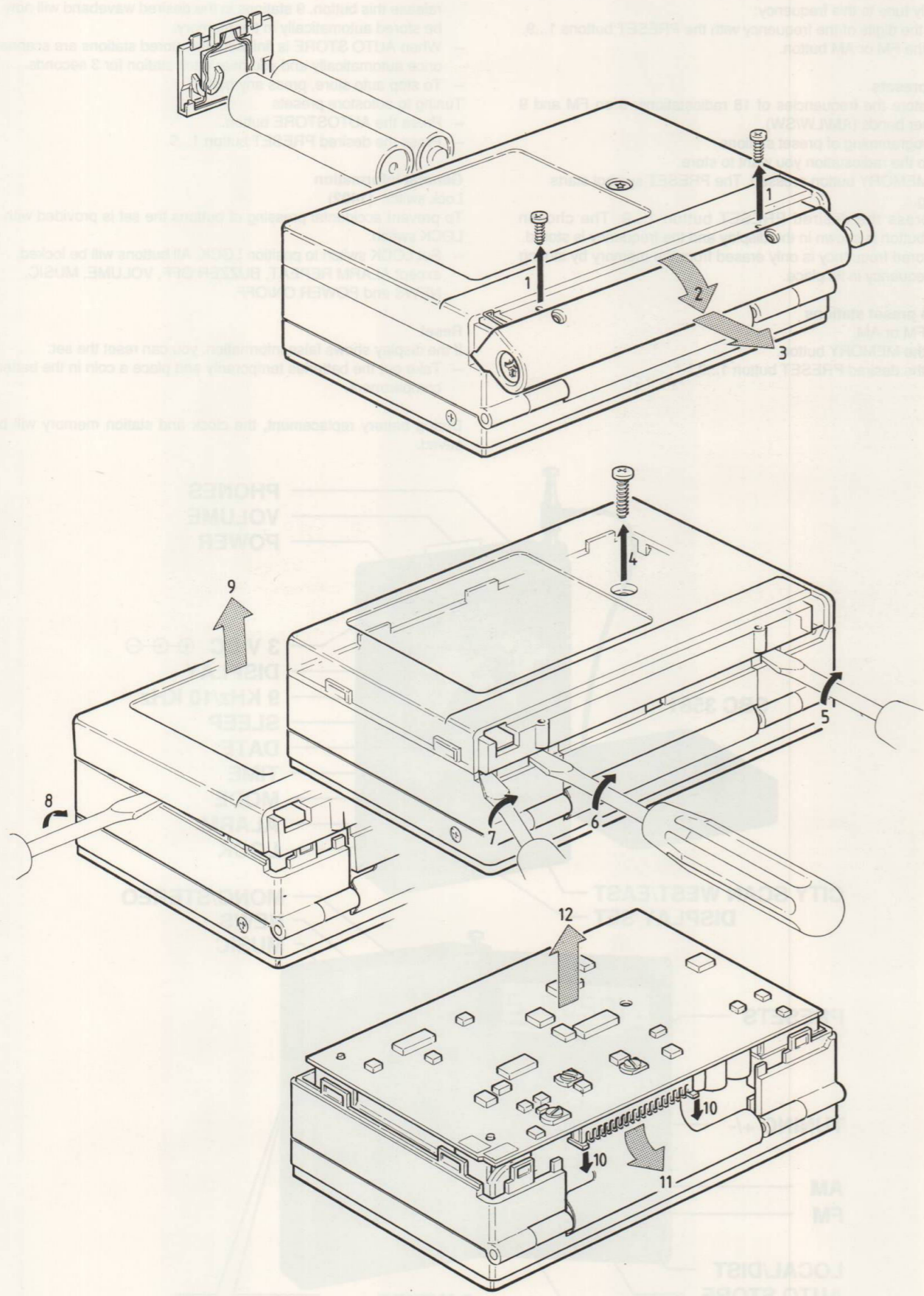
If the display shows false information, you can reset the set:

- Take out the batteries temporarily and place a coin in the battery compartment.

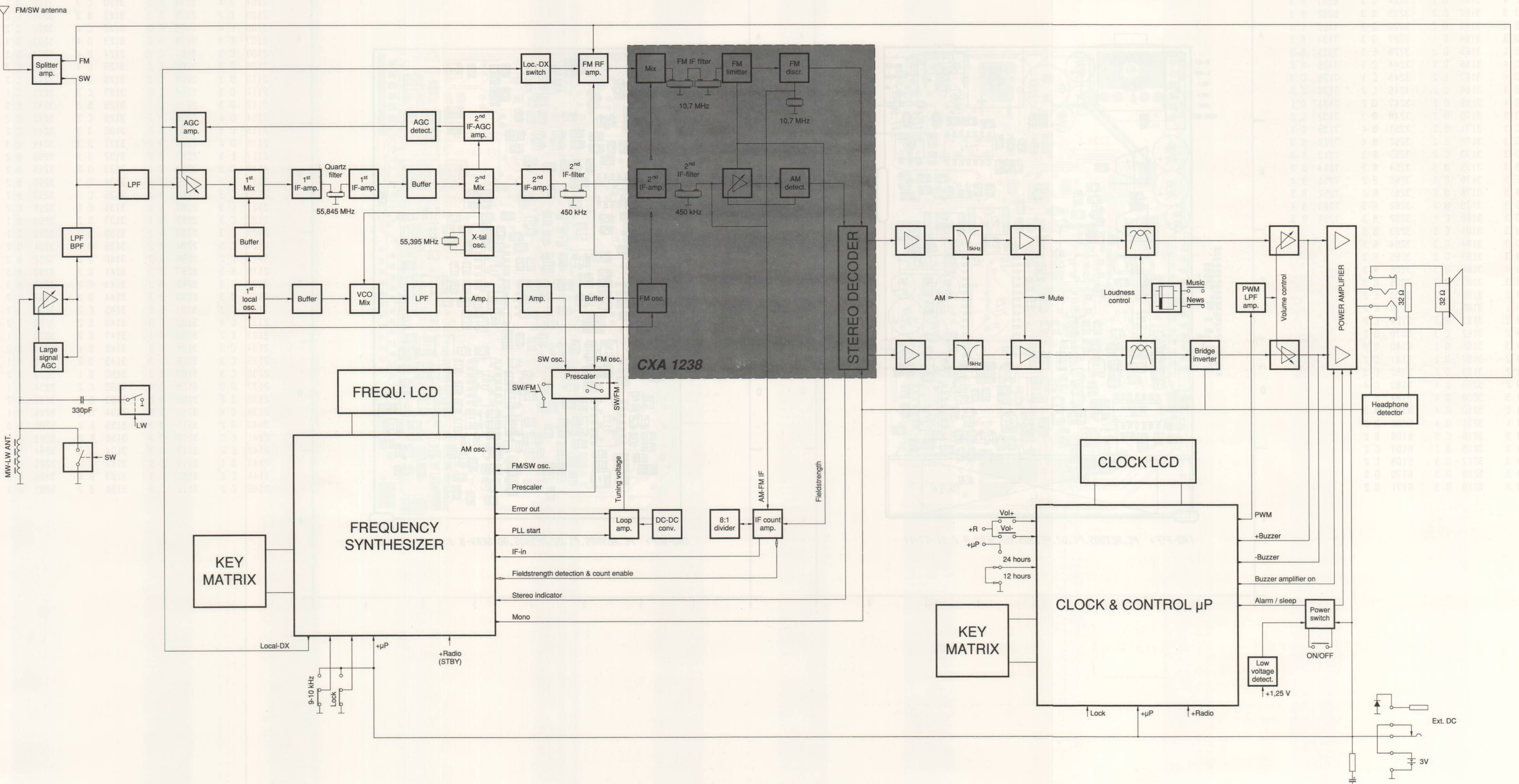
During battery replacement, the clock and station memory will be saved.

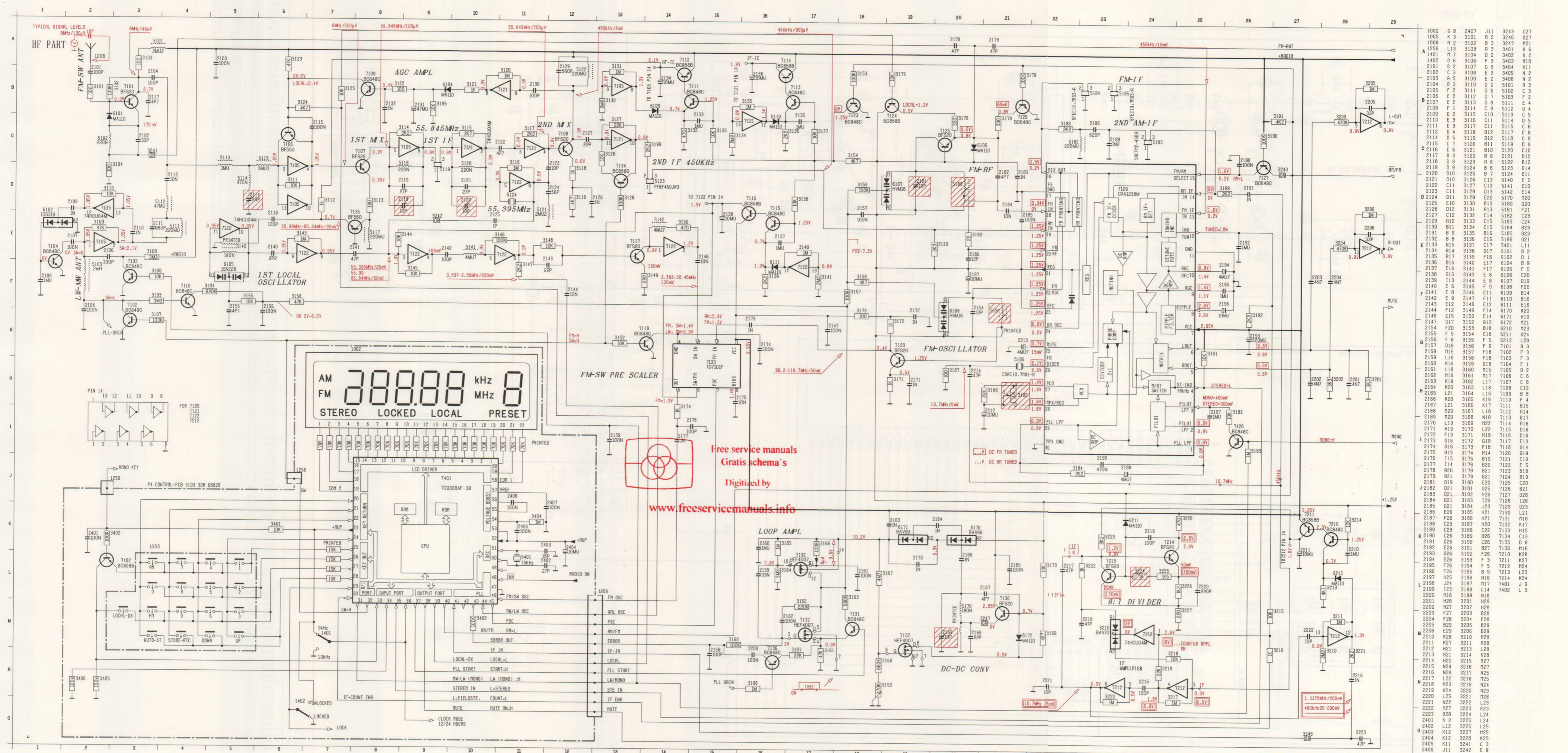


DISMANTLING HINTS



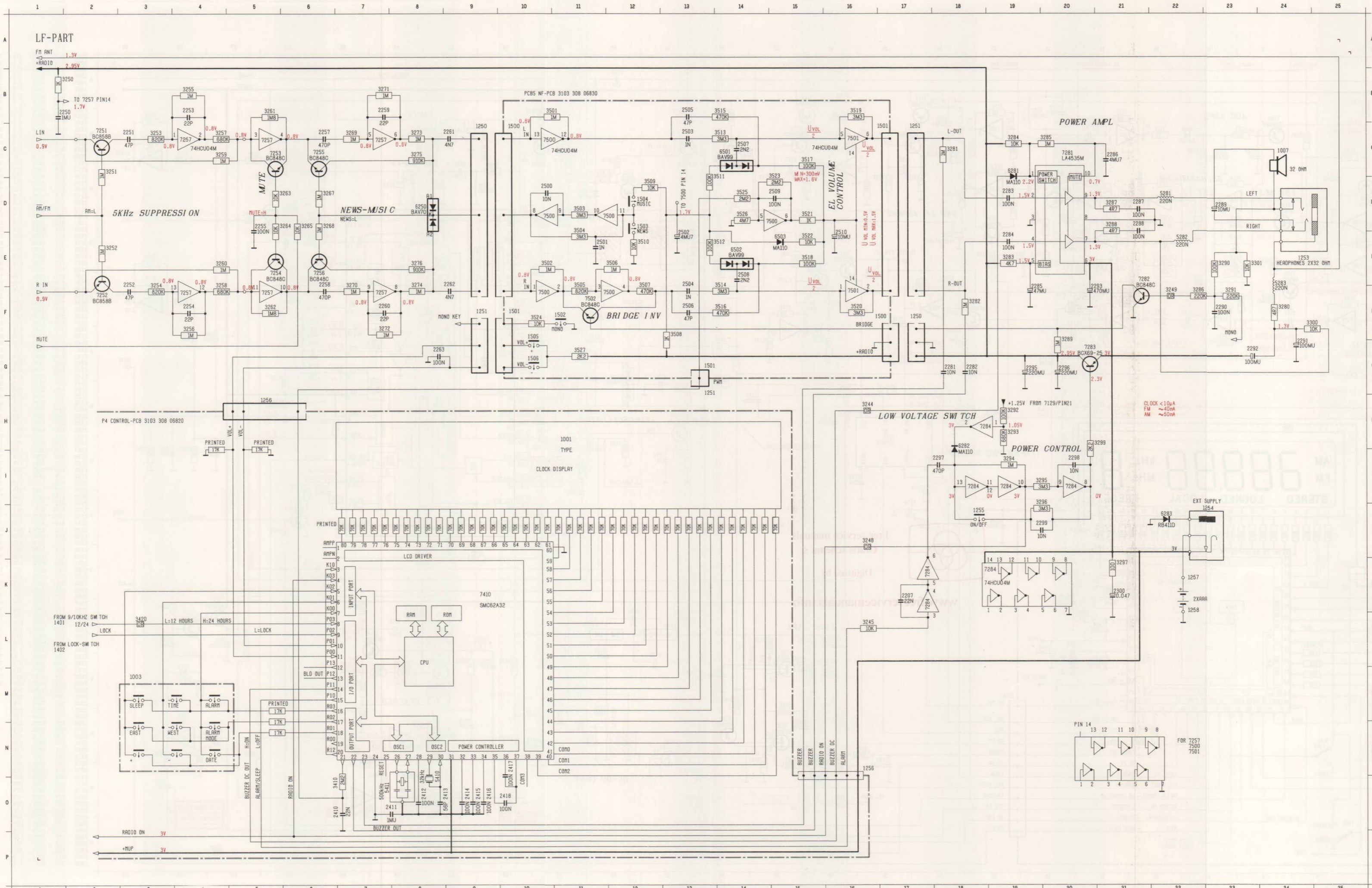
BLOCKDIAGRAM





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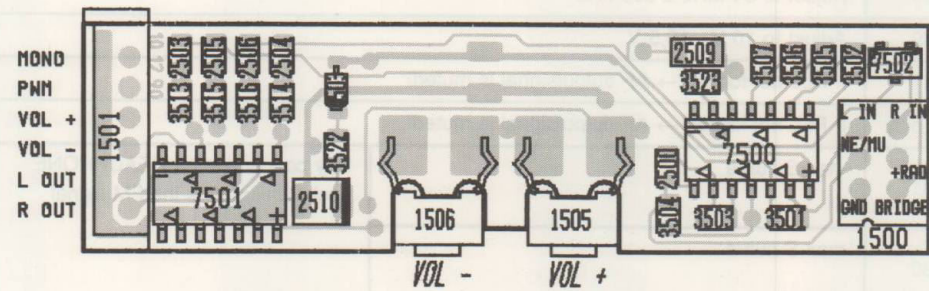
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1005	K 3	3101	B 2	3246	O21
1008	A 2	3102	B 3	3247	M2
1256	L13	3103	A 3	3401	K 6
1401	H 7	3104	D 2	3402	K 2
1402	O 6	3105	F 3	3403	M10
2101	B 2	3107	G 3	3404	K11
2102	C 3	3108	E 3	3405	N 2
2103	A 5	3109	E 2	3406	N 2
2104	B 3	3110	D 2	5101	A 3
2105	F 2	3111	D 6	5102	C 3
2106	E 2	3112	O 7	5103	Z 2
2107	E 2	3113	O 8	5111	E 4
2108	F 1	3114	C 9	5112	D 4
2109	D 2	3115	O 10	5113	C 5
2110	E 3	3116	C11	5114	D 6
2111	E 3	3117	C11	5115	C 6
2112	D 4	3118	O12	5117	E 8
2114	O 5	3119	O12	5118	C 9
2115	C 7	3120	B11	5119	O 9
2116	E 6	3121	B10	5120	C10
2117	B 3	3122	B 8	5121	O12
2118	O 9	3123	A 6	5122	B12
2119	O 9	3124	B 6	5123	O14
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2161	L18	3160	M15	7105	O 2
2162	M16	3161	M17	7110	C 6
2163	K19	3162	L17	7107	C 8
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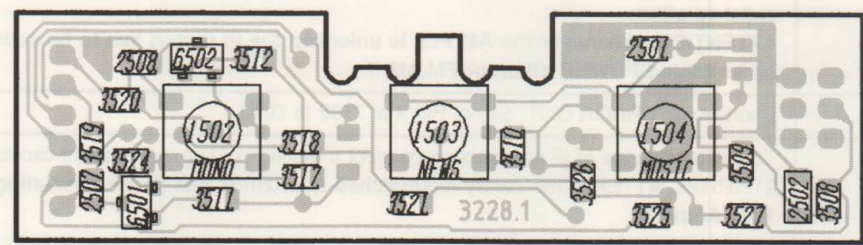
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LF BOARD / COMPONENTSIDE VIEW / AE3905



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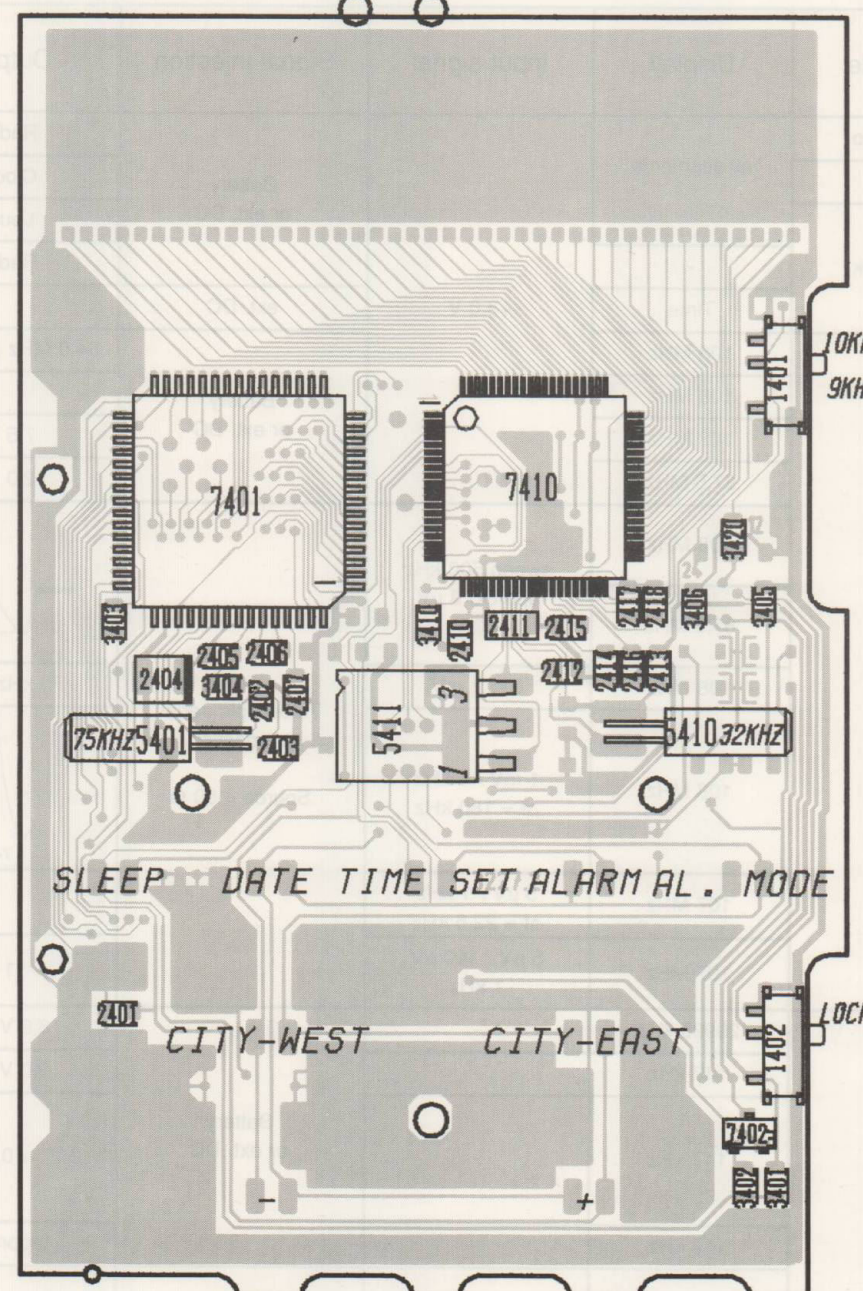
LF BOARD / COPPERSIDE VIEW / AE3905



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2501 A 3	3508 B 4	3512 A 2	3520 A 1	3526 B 3	

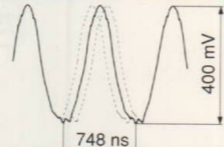

CONTROL BOARD / COMPONENTSIDE VIEW / AE3905

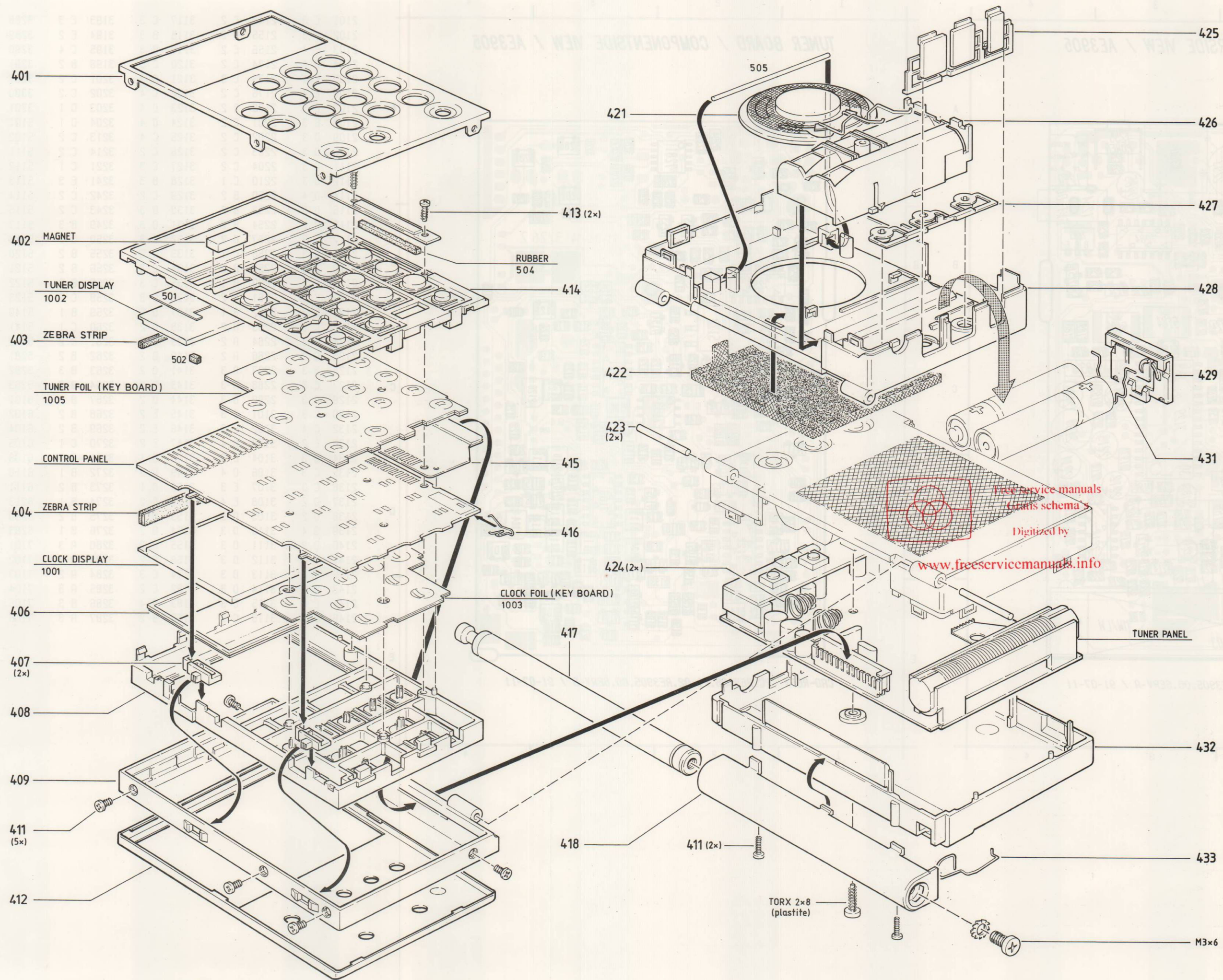


CAD-REF: PC.AE3905.P4.D2.AE3905.00.SERV-B / 91-07-15

1401 B 4
1402 D 4
2401 D 1
2402 C 2
2403 C 2
2404 C 2
2405 C 2
2406 C 2
2407 C 2
2410 C 3
2411 C 3
2412 C 3
2413 C 3
2414 C 3
2415 C 3
2416 C 3
2417 C 3
2418 C 3
3401 E 4
3402 E 4
3403 C 1
3404 C 2
3405 C 4
3406 C 3
3410 C 2
3420 C 3
5401 C 2
5410 C 3
5411 C 2
7401 B 2
7402 E 4
7410 B 3

Adjustment & Test Instruction

Adjust / Test	Mode	Display	Input signal	Signal injection	Output signal	Measuring point	Adjust	Remarks	
Radio LCD	Radio	all segments	+3,0 V	Battery or ext. DC	Radio display	-	-	Press any RADIO key before connecting supply voltage	
Clock LCD	-				Clock display	-	-	press WEST, EAST, MODE at same time	
Buzzer on	Clock				-	Loudspeaker	-	-	press WEST, EAST, MODE at same time - buzzer is beeping
Sleep / Alarm					-	Radio display	-	-	Press sleep → Radio is switched on
Stand by		Time		ext. DC	-	ext. DC socket	-	Current should be less than 10 μA	
DC - DC Converter	FM	108 MHz	sweep 500 kHz approx. 3 μV	Telescopic aerial connection Source = 50 Ω	84,0 MHz / 25 mV at 50 Ω	Collector 7130	2169	Adjust to 84 MHz ± 500 kHz	
FM OSC		108 MHz			10 V	Pin 14 of 7132	3199	Adjust to 10 V - 10,5 V	
FM RF		108 MHz			7,5 V ± 0,2 V	Pin 5 or 12 of 7132	5181	If PLL not locked → AF outputsignal is muted!	
		87,5 MHz			2,0 V ± 0,2 V		check only	If PLL not locked → AF outputsignal is muted!	
MPX - VCO	108 MHz	CW 1 mV			75 kHz / 100 mVpp	Pin 4 of 7129	3185	Adjust to 76 kHz ± 500 Hz	
FM IF 8:1 Divider	108 MHz	1 mV / 1 kHz Δf = 180 kHz				2223	3224	Shortcircuit pin 1 of 7212 to GND to switch on counter amplifier. Adjust to a single curve with a frequency of 1,3375 MHz.	
Search sensitivity	107 MHz	5 μV / 1 kHz Δf = 22,5 kHz						Stop at 107,0 MHz	
Local DX	107 MHz	5 μV / 100 μV 1 kHz			1 kHz AF	Headphones		For LOCAL increase inputsignal to 100 μV for same volume.	
AM 1 st Osc.	AM	29995 kHz	-	Battery or ext. DC	8,0 V - 8,5 V DC	Pin 5 or 12 of 7132	-	If PLL not locked → AF outputsignal is muted!	
PLL - Start		147 kHz	-		2,0 V - 2,5 V DC		-	If PLL not locked → AF outputsignal is muted!	
Tuning Voltage Limiter		147 kHz	-		2 V → 0,5 V → 2 V DC			Shortcircuit tuning voltage for a moment to GND → set will be muted until power is switched off/on. ATTENTION: Whenever the AM PLL is unlocked the PLL start has to be activated by switching POWER off/on or FM/AM !!	
1 st AM IF		147 kHz	-		approx. 4 V DC			Shortcircuit "ERROR OUT" Signal Pin 3 of 7132 to GND.	
1 st IF Trap	29995 kHz	Sweepsignal Level: 100 mV Frequ: 55,845 MHz Span : 60 kHz				Pin 8 of 7121 with 1 MΩ probe	2114	To avoid influence of IF suppression connect a resistor 1 kΩ over resonant circuit 2129/5122. ATTENTION: Totally mismatched quartzfilter can cause oscillating of 1st IF Amplifier.	
Search sensitivity	29000 kHz	10 μV / 29 MHz 30% AM			LCD, Loudspeaker			Disadjust IF-Trap for max outputsignal Adjust to max amplitude and min ripple Adjust to max amplitude and min ripple Adjust to min. amplitude (1 st IF Rejection)	
Local DX	29000 kHz	100 μV			LCD, Loudspeaker			repeat For LOCAL increase inputsignal to 100 μV for same volume	
5 kHz suppression	FM	108 MHz	1 mV / 5 kHz Δf = 22,5 kHz	Telescopic aerial connection	5 kHz AF	Headphone		Shortcircuit Collector - Emitter of 7251, 7252 → 5 kHz will be reduced more than 20 dB	
Low voltage shut off	FM	108 MHz	< 2,2 V	Battery	-	-	-	Radio is switched off automatically	
			< 2,6 V	ext. DC	-	-	-	Radio is switched off automatically	



MECHANICAL PARTS

401	4822 454 21057	TUNER COVER PRINTED
402	4822 526 20197	MAGNET
406	4822 450 61796	WINDOW PRINTED
407	4822 410 61596	KNOB PRINTED
408	4822 410 61593	CLOCK BUTTON PRINTED
409	4822 464 70584	FRAME LACQUERED
411	4822 502 13871	SCREW TAPPING
412	4822 454 21056	CLOCK COVER PRINTED
413	4822 502 13872	SCREW PLASTITE
414	4822 410 61594	TUNER BUTTON PRINTED
416	4822 492 70987	SPRING
418	4822 404 10856	ANTENNA SUPPORT
422	4822 458 30621	SPEAKER GRILL
422	4822 492 70783	LS-spring
424	4822 535 93271	AXLE
425	4822 410 61595	KEY SET (VOLUME)
427	4822 410 61592	KEY SET (MUSIC/NEWS)
428	4822 423 51094	FRONT PRINTED
429	4822 423 41157	BATTERY LID
431	4822 290 81457	CONTACT SPRING
432	4822 421 20054	REAR CABINET
433	4822 290 81453	CONTACT SPRING
1003	4822 466 10613	CLOCK FOIL ASSY
1005	4822 466 10614	TUNER FOIL ASSY
1007	4822 240 30602	LOUDSPEAKER
1008	4822 303 30408	TELESCOPIC AERIAL
1010	4822 210 10453	TUNER (complete)
1040	4822 214 51925	CONTROL PRINT (assy)
1050	4822 214 51926	LF PRINT (complete)
8001	4822 267 41024	ZEBRA STRIP (Clock)
8002	4822 267 41025	ZEBRA STRIP (Tuner)
8003	4822 214 51924	FLEX PCB
	4822 156 31045	SHORT WAVE ANTENNA
	4822 015 20383	SBC3137 (EAR PHONE)

MISCELLANEOUS

1001	4822 130 91043	LCD (CLOCK)
1002	4822 130 91042	LCD (TUNER)
1003	4822 466 10613	CLOCK FOIL ASSY
1005	4822 466 10614	TUNER FOIL ASSY
1007	4822 240 30602	LOUDSPEAKER
1008	4822 303 30408	TELESCOPIC AERIAL
1010	4822 210 10453	TUNER (complete)
1040	4822 214 51925	CONTROL PRINT (assy)
1050	4822 214 51926	LF PRINT (complete)
1253	4822 267 31421	PHONE JACK
1254	4822 267 31149	EXT. DC SOCKET
1255	4822 276 13202	TACT SWITCH
1257	4822 290 81452	BATTERY SPRING
1258	4822 290 81452	BATTERY SPRING
1401	4822 277 21575	SLIDE SWITCH
1402	4822 277 21575	SLIDE SWITCH
1502	4822 276 13171	SWITCH TACT
1503	4822 276 13171	SWITCH TACT
1504	4822 276 13171	SWITCH TACT
1505	4822 276 13176	TACT SWITCH
1506	4822 276 13176	TACT SWITCH
8001	4822 267 41024	ZEBRA STRIP (Clock)
8002	4822 267 41025	ZEBRA STRIP (Tuner)
8003	4822 214 51924	FLEX PCB

DIODES

6101	4822 130 80727	MA110
6102	4822 130 82832	1S5319
6104	4822 130 80727	MA110
6105	4822 130 82833	1SV228
6106	4822 130 80727	MA110
6107	4822 130 81789	HVM16TR
6108	4822 130 81789	HVM16TR
6109	4822 130 80727	MA110
6110	4822 130 80727	MA110
6111	4822 130 80727	MA110
6170	5322 130 34337	BAV99
6171	5322 130 34337	BAV99
6172	4822 130 80727	MA110
6210	5322 130 34331	BAV70
6211	4822 130 80727	MA110
6213	4822 130 80727	MA110
6250	5322 130 34331	BAV70
6281	4822 130 80727	MA110
6282	4822 130 80727	MA110
6283	4822 130 82834	RB411D
6501	5322 130 34337	BAV99
6502	5322 130 34337	BAV99
6503	4822 130 80727	MA110

TRANSISTORS

7101	5322 130 42718	BFS20 (CHIP)
7102	5322 130 42136	BC848C(CHIP)
7103	5322 130 42136	BC848C(CHIP)
7104	5322 130 42136	BC848C(CHIP)
7106	4822 130 42131	BF550
7107	5322 130 42718	BFS20 (CHIP)
7108	5322 130 42718	BFS20 (CHIP)
7109	5322 130 42136	BC848C(CHIP)
7110	5322 130 42136	BC848C(CHIP)
7111	5322 130 42136	BC848C(CHIP)
7112	5322 130 41983	BC858B(CHIP)
7113	5322 130 42136	BC848C(CHIP)
7114	5322 130 41983	BC858B(CHIP)
7115	5322 130 42136	BC848C(CHIP)
7116	5322 130 41983	BC858B(CHIP)
7117	5322 130 42718	BFS20 (CHIP)

TRANSISTORS

7118	5322 130 42136	BC848C(CHIP)
7120	5322 130 42718	BFS20 (CHIP)
7123	5322 130 42136	BC848C(CHIP)
7124	5322 130 41983	BC858B(CHIP)
7125	5322 130 42718	BFS20 (CHIP)
7126	5322 130 42136	BC848C(CHIP)
7127	5322 130 42136	BC848C(CHIP)
7128	5322 130 42136	BC848C(CHIP)
7130	5322 130 42718	BFS20 (CHIP)
7131	5322 130 42136	BC848C(CHIP)
7134	5322 130 41983	BC858B(CHIP)
7135	4822 130 42131	BF550
7136	5322 130 42136	BC848C(CHIP)
7210	5322 130 42136	BC848C(CHIP)
7211	5322 130 41983	BC858B(CHIP)
7213	5322 130 42718	BFS20 (CHIP)
7214	5322 130 42718	BFS20 (CHIP)
7251	5322 130 41983	BC858B(CHIP)
7252	5322 130 41983	BC858B(CHIP)
7253	5322 130 42136	BC848C(CHIP)
7254	5322 130 42136	BC848C(CHIP)
7255	5322 130 42136	BC848C(CHIP)
7256	5322 130 42136	BC848C(CHIP)
7282	5322 130 42136	BC848C(CHIP)
7283	4822 130 61919	BCX69-25
7402	5322 130 41983	BC858B(CHIP)
7502	5322 130 42136	BC848C(CHIP)

INTEGRATED CIRCUITS

7105	4822 209 30606	MM74HCU04M
7121	4822 209 30606	MM74HCU04M
7122	4822 209 30606	MM74HCU04M
7129	4822 209 73851	CXA1238M
7132	4822 209 73849	HEF4007UBT
7133	4822 209 30605	TD7101F
7212	4822 209 30606	MM74HCU04M
7257	4822 209 30606	MM74HCU04M
7281	4822 209 30432	LA4535 M
7284	4822 209 30606	MM74HCU04M
7500	4822 209 30606	MM74HCU04M
7501	4822 209 30606	MM74HCU04M

COILS

5101	4822 157 63626	2,2μH
5102	4822 157 63624	220nH
5103	4822 526 10547	FERRITE ANTENNA
5111	4822 157 63621	220μH
5112	4822 157 63628	47μH
5113	4822 157 63625	1μH
5114	4822 157 63622	470nH
5115	4822 157 63629	3,3μH
5117	4822 157 63621	220μH
5118	4822 157 63624	220nH
5119	4822 242 81022	X-TAL 55,845MHz
5120	4822 157 63624	220nH
5121	4822 157 63626	2,2μH
5122	4822 157 63621	220μH
5123	4822 242 81024	CER FILTER 450kHz
5124	4822 242 81023	X-TAL 55,3925MHz
5140	4822 157 63623	180nH
5141	4822 157 63627	4,7μH
5142	4822 157 63627	4,7μH
5170	4822 157 63623	180nH
5180	4822 157 60592	COIL VAR. FM-RF
5181	4822 157 60592	COIL VAR. FM-RF
5182	4822 157 63621	220μH

Service
Service
Service

Product Service Group CE Audio

Service Information

To avoid unintentional pressing the POWER ON/OFF button, the front and the rear cabinet have been changed in production week 9210.

Therefore in case of damage of the front (pos. 428) **or** the rear cabinet (pos. 432) it's necessary to change **both** parts if the set is older than production week 9210.