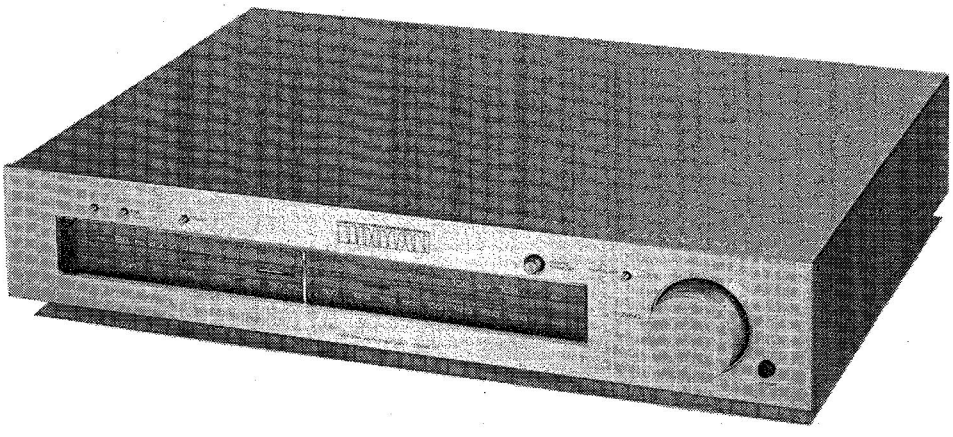
# SERVICE MANUAL

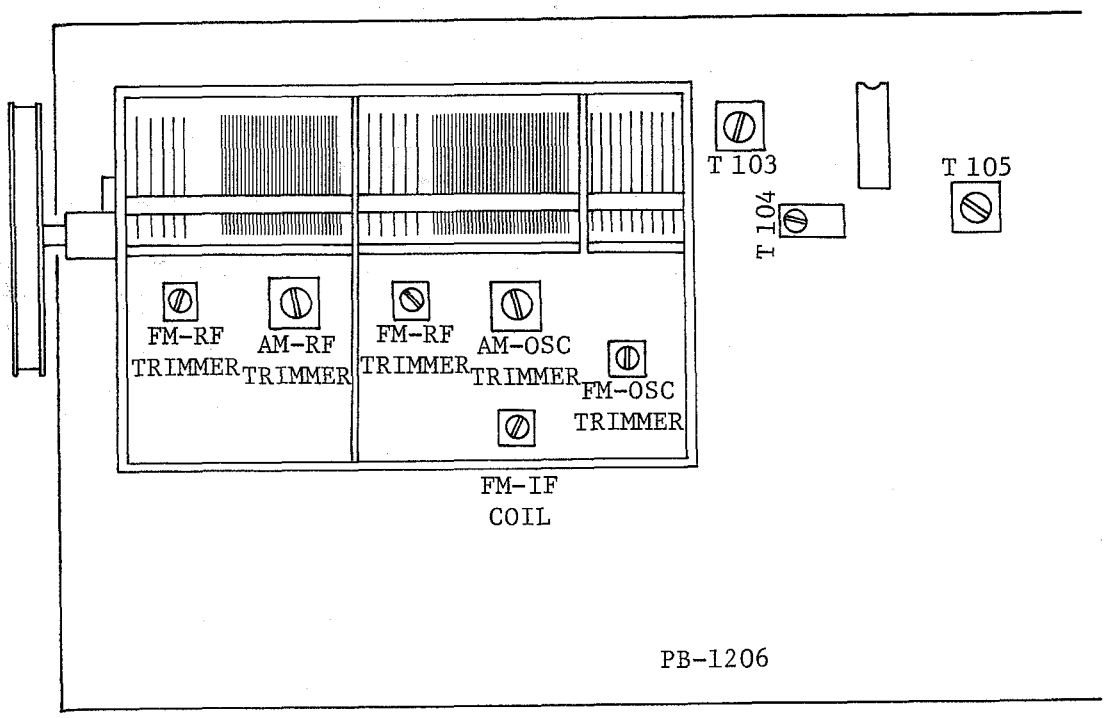
## SOLID STATE AM/FM STEREO TUNER T-2



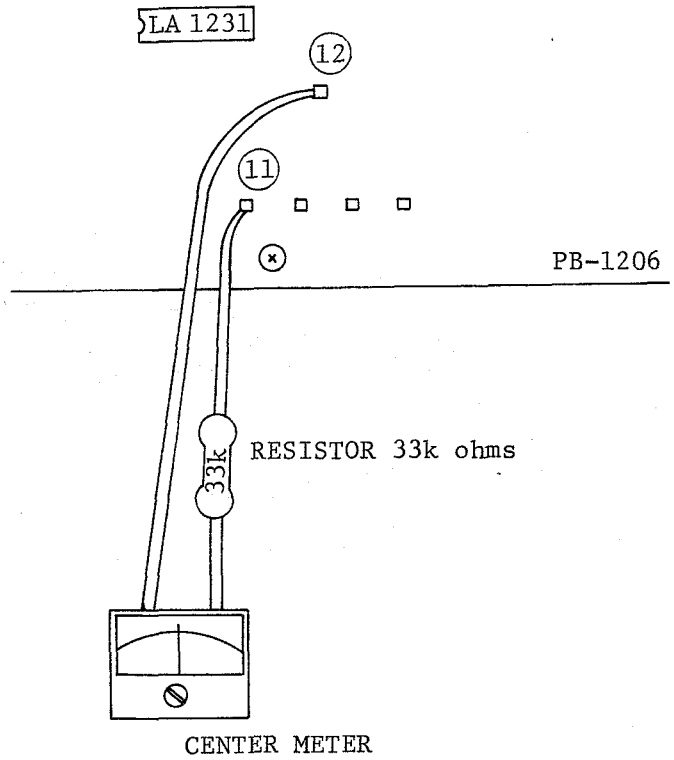
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ALIGNMENT PROCEDURE

[Location of Trimmer Capacitors and Coils]




| Step | Process |
|---|---|
| 1. | Set the VR101 to the endmost clockwise position. |
| 2. | Set the VR104, VR105 VR106 at the center. |
| 3. | Connect a resistor 33K ohms in series to the center meter (±100MA), and connect it to the terminals (11) and (12) of the PB1206. |






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4. Set each switch on the front panel in the following manner.
   a) the AM-FM selector switch to FM (depressed)
   b) the FM-MONO switch to "auto stereo" (protruded)
   c) the muting switch to "off" (depressed)
   d) the muting volume to the endmost counter-clockwise position

5. Connect the measurement instruments in the following manner.
   a) Connect the tuner output terminal on the back panel with the milli-volt meter, distortion meter and oscilloscope.
   b) Connect the output of FM SG to the 300 ohms terminal through the matching network.

- FRONT-END-

6. Reduce the output of FM SG to minimum.

7. Set the tuner at interstation position, and adjust the core of the T101 to obtain the "±0" indication at the center meter.

8. Tune in to 108MHz (Place the dial pointer at 108MHz).

9. Set FM SG at 108MHz, and obtain the output of 2uV with "400Hz, 100%" modulation.

10. Adjust the FM oscillator trimmer at front-end to receive the signals from FM SG at the center of the center tuning meter.

11. Adjust the RF trimmer and inter-stage trimmer to obtain the max. sensitivity of tuner. (See to it that the output is maximum and that distortion is minimum.)

12. Set FM SG at 87.5MHz and obtain the output of 2uV.

13. Turn the dial knob to receive the signals from FM SG at the center of the center meter.

14. Confirm that the dial calibration error in step (13) is within the width of the dial pointer.

    If the error is found beyond allowance, shift the dial pointer and repeat the steps (8) - (14).

15. Set the tuner and FM SG at the middle position of the dial scale having no broadcast station.

16. Adjust the core of front-end IFT to obtain the max. output of the tuner.

17. Set FM SG to provide "1KHz, 100%" modulation.

18. Adjust the core of the T102 to obtain the minimum distortion at the tuner's output.



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19. Reduce the FM SG output to the minimum level.

20. Adjust the core of the T101 to obtain the ±0 indication of the center meter.

21. Repeat the steps (17) - (20) 2 or 3 times so that the distortion can be suppressed down to the specified level with the center meter at the center position.

22. Set the output of FM SG at 10uV.

23. Set the output of FM SG at 10uV.

24. Vary the FM SG output and confirm that all LED's light up and put off in order.

25. Set the output of FM SG at 100uV.

25-B Confirm that the operational bandwidth of the center tuning LED is about ±10KHz during the tuning operation and that it becomes about ±50KHz in 10 sec. after center tuning is completed.

26. Turn the tuning knob, and confirm that the center position of the center meter accords to the point where 2 center tuning LED's light up. Also confirm that they light up one after another.

27. Turn in to the position where 2 center tuning LED's light up, and confirm that they are kept lit within the variation of the FM SG output from 10uV to 10mV.

28. Set the output of FM SG to 100uV.

29. Turn on the muting switch. (protruded)

30. Confirm that the muting functions in the vicinity of ±30KHz while turning the tuning knob.

31. Fix the dial pointer at the point where 2 center LED's light up.

32. Vary the FM SG outptu, and confirm that the signals are available at about 6uV.

33. Set the muting volume on the front panel to the dead clockwise position.

34. Vary the FM SG output, and confirm that the signals are available at about 300uV.

35. Remove the connection of the center meter made in the step (3)

- STEREO -

36. Set the FM SG output at 1mV with no modulation.

37. Connect a frequency counter to the terminal No. 70 and GND point on PB1206.



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38. Adjust the VR104 to read 76KHz $^{+0}_{-10}$ Hz on the frequency counter.

39. Remove the connection of the frequency counter at the step (37).

40. Set FM SG into stereo modulation (19KHz pilot signal 10%, 1KHz L+R 90%)

41. Adjust the VR105 to obtain the max. separation with proper balance between L and R.

42. Check the stereo distortion, and confirm it below the specified level.

43. Confirm that monaural reception is possible with depressing the MONO Switch on the front panel.

44. Also Confirm that all rated specs are satisfied.

- European "S" type unit requires following additional steps -

A) Set FM SG to the center position of the dial scale having no broadcast station, and provide 1mV output with "1KHz, 100%" modulation.

B) Connect a milli-volt meter to the No. 15 terminal and GND point of the PB1206.

C) Set the indication of the milli-volt meter to 0dB.

D) Set the moculation frequency to 60KHz, and confirm that the indication of the milli-volt meter is within -0.5dB.

E) Change the modulation frequency to 70KHz, and confirm that the milli-volt meter's indication exceeds -11dB.

[AM Section]

45. Set the AM-FM switch to AM position.

46. Connect the output of 455KHz Sweep Generator (SPG) to the No. 64 terminal and GND position of the PB1206.

47. Connect the SPG input to the No. 69 terminal and GND.

48. Set SPG to "output 40-50dB, sweep speed 10Hz".

49. Adjust the T104 and T105 so that the IF wave-form can be symmetrical and that the output can be maximum. At this time, it is easy to observe the wave-form if the AM tuning capacitor is set at the least capacitive position.

50. Disconnect the SPG.

51. Connect the output of AM SG to the specified loop-stick antenna.

52. Set the frequency of the AM SG at 1,400KHz, output 50dB/m, modulation 400Hz, 30R.

53. Tune into 1,400KHz on the dial scale, and adjust the trimmer of AM-Oscillator to receive the signals from AM SG.



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54. Adjust the AM RF trimmer to obtain the max. output of tuner.

55. Set the AM SG frequency to 600KHz, output 50dB/m, modulation 400Hz, 30%.

56. Turn the tuning knob to tune in at 600KHz on dial.

57. Adjust the core of the T103 to receive the signals from AM SG.

58. Adjust the core of the bar antenna to obtain the max. output of tuner.

59. Repeat the steps (52) - (58) 2 or 3 times, and confirm that the dial calibration error is within the limit of specs.

60. Set AM SG to "1MHz, 80dB/m output".

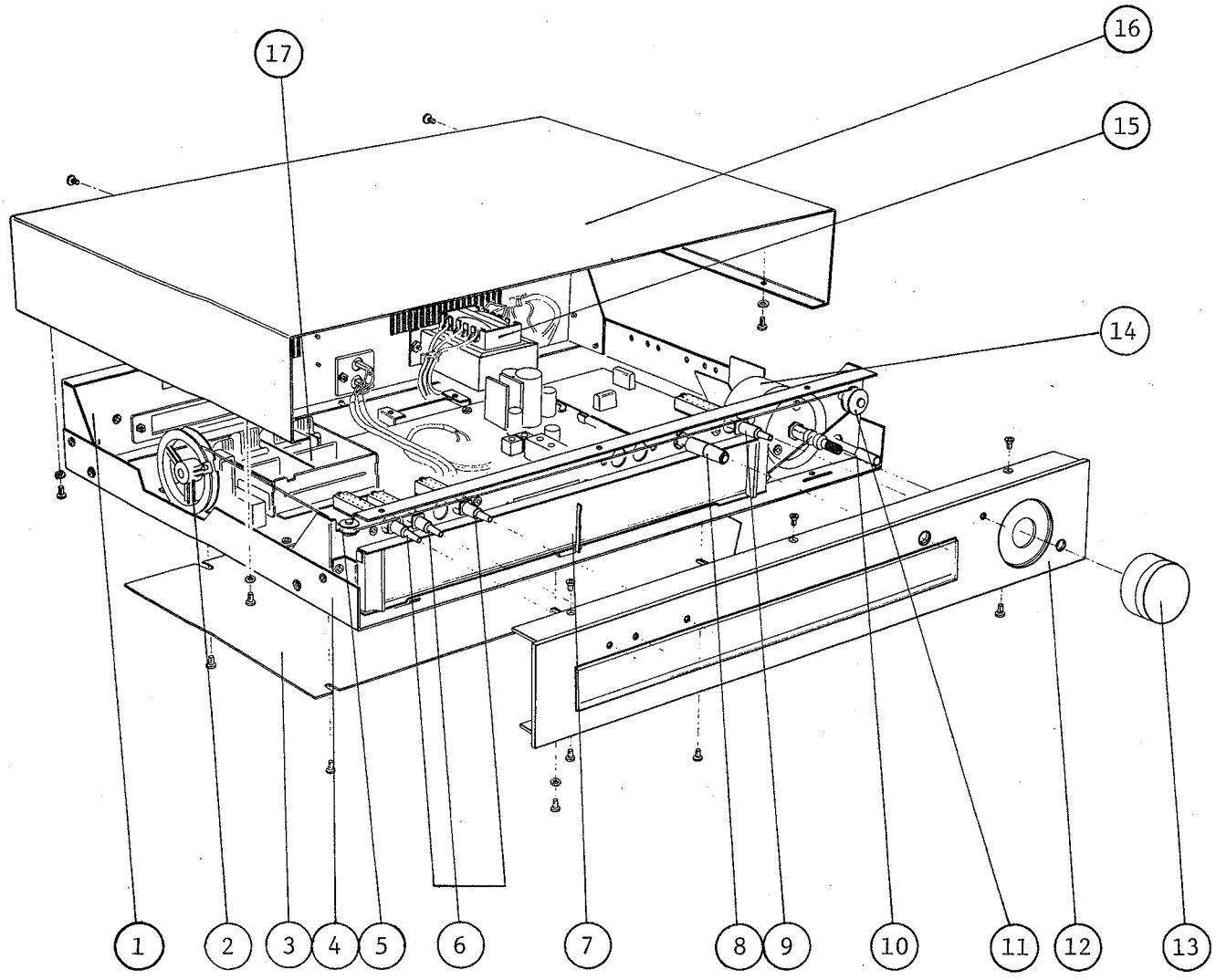
61. Adjust the VR106 so that 3 LED's should light up.

62. Confirm that all AM specs are satisfied.



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EXPLODED VIEW




1. UC1121 Rear Panel (E,S)
   UC1129 " " (U)
2. BX1006 Dial Drum
3. UE1097 Bottom Plate
4. UA1052 Chassis
5. BX0029 Pulley 13 m/m
6. WJ1107 Mould Knob
7. UZ1163 Dial Pointer
8. WH1083 Knob Set
9. WJ1107 Mould Knob
10. WJ1089 Mould Knob
11. BX7017 Pulley
12. WA1183 Panel
13. WH1082 Knob Set
14. UX1009 Fly Wheel
15. PT2301 Power Trans. (U)
    PT2302(A) " " (S)
    PT2344 " " (E)
16. UG1017 Bonnet (U)
    UG1018 " (E,S)
17. LA1909 Front End



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## Replacement Parts List

REMARKS

Capacitors: C.....ceramic, E.....electrolytic, M.....mylar, G.....G capacitor
S.....styrol, T.....tantalum, Mi....mica, MP....MP capacitor
O.....oil capacitor, TRIM.....trimmer capacitor, AC....AC capacitor
BP....electrolytic Bi-Polar type

Resistors: 5%, 1/4W, unless specified otherwise

Type: (S)...model for north European countries (E)...standard model
(U)...model for U.S.A. and CANADA (J)...model for JAPAN

PB1206A

| SYMBOL NO. | STOCK NO. | DESCRIPTIONS |
|---|---|---|
| R107 | RB0158 | R-25 100 |
| 113 | 0174 | " 470 |
| 114 | 0200 | " 5.6k |
| 115 | 0154 | " 68 |
| 116 | 0170 | " 330 |
| 117 | 0174 | " 470 |
| 118 | 0192 | " 2.7k |
| 119 | 0168 | " 270 |
| 120 | 0170 | " 330 |
| 121 | 0158 | " 100 |
| 126 | 0158 | " 100 |
| R137 | RB0210 | " 15k |
| 140 | 0198 | " 4.7k |
| 141 | 0224 | " 56k |
| 142 | 0154 | " 68 |
| 143 | 0170 | " 330 |
| 144 | 0158 | " 100 |
| R148 | RB0218 | " 33k |
| 149 | 0218 | " 33k |
| 150 | 0174 | " 470 |
| 151 | 0158 | " 100 |
| 152 | 0158 | " 100 |
| 153 | 0206 | " 10k |
| 154 | 0222 | " 47k |
| 155 | 0142 | " 22 |
| 156 | 0224 | " 56k |
| 157 | 0214 | " 22k |
| 158 | 0204 | " 8.2k |
| 159 | 0188 | " 1.8k |
| 160 | 0214 | " 22k |
| 161 | 0166 | " 220 |
| 162 | 0214 | " 22k |
| 163 | 0214 | " 22k |
| 164 | 0214 | " 22k |
| 165 | 0222 | " 47k |
| 166 | 0206 | " 10k |
| 167 | 0150 | " 47 |
| 168 | 0174 | " 470 |
| 169 | 0194 | " 3.3k |
| 170 | 0194 | " 3.3k |
| 171 | --- | |
| 172 | RB0206 | R-25 10k |
| 173 | 0206 | " 10k |
| 174 | 0174 | " 470 |
| 175 | --- | |
| 176 | 0150 | " 47 |
| 177 | 0210 | " 15k |
| 178 | 0206 | " 10k |
| 179 | 0230 | " 100k |

| SYMBOL NO. | STOCK NO. | DESCRIPTIONS |
|---|---|---|
| R180 | RB0210 | R-25 15k |
| 181 | 0182 | " 1k |
| 182 | 0222 | " 47k |
| 183 | 0222 | " 47k |
| 184 | 0194 | " 3.3k |
| 185 | 0194 | " 3.3k |
| 186 | 0182 | " 1k |
| 187 | 0206 | " 10k |
| 188 | 0206 | " 10k |
| 189 | 0194 | " 3.3k |
| 190 | 0194 | " 3.3k |
| 191 | 0206 | " 10k |
| 192 | 0222 | " 47k |
| 193 | 0230 | " 100k |
| 194 | 0230 | " 100k |
| 195 | 0190 | " 2.2k |
| 196 | 0190 | " 2.2k |
| 197 | 0198 | " 4.7k |
| 198 | 0218 | " 33k |
| 199 | 0218 | " 33k |
| 200 | 0206 | " 10k |
| 201 | 0206 | " 10k |
| 202 | 0222 | " 47k |
| 203 | 0134 | " 10 |
| 204 | 0184 | " 1.2k |
| 205 | 0142 | " 22 |
| 206 | 0142 | " 22 |
| 207 | RD0260 | R-50 270 |
| 208 | RD0051 | R1/4 270 |
| 209 | RB0134 | R-25 10 |
| 210 | 0186 | " 1.5k |
| 211 | 0166 | " 220 |
| 212 | 0170 | R-25 330 |
| 213 | 0158 | " 100 |
| 214 | 0234 | " 150k |
| 215 | 0184 | " 1.2k |
| 216 | 0216 | " 27k |
| 217 | 0164 | " 180 |
| 218 | 0198 | " 4.7k |
| 219 | 0206 | " 10k |
| 220 | 0206 | " 10k |
| 221 | 0192 | " 2.7k |
| 222 | 0216 | " 27k |
| 223 | 0200 | " 5.6k |
| RB | RB0216 | R-25 27k |
| RC | 0210 | " 15k |
| --- | 0206 | " 10k |
| --- | 0182 | " 1k |
| Jumper | RG0030 | JPW-03 |



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| SYMBOL NO. | STOCK NO. | DESCRIPTIONS |
|---|---|---|
| C101 | CK0155 | 0.01µF C |
| 102 | 0158 | 0.047µF C |
| 103 | --- | |
| 104 | --- | |
| 105 | CK0158 | 0.047µF C |
| 106 | 0158 | " C |
| 107 | 0158 | " C |
| 108 | 0158 | " C |
| 109 | --- | |
| 110 | --- | |
| 111 | CK0158 | 0.047µF C |
| 126 | CK0156 | 0.022µF C |
| 127 | CK0158 | 0.047µF C |
| 128 | 0158 | " C |
| 129 | 0158 | " C |
| 130 | 0158 | " C |
| 131 | 0158 | " C |
| 132 | 0158 | " C |
| 133 | 0158 | " C |
| 134 | CE0099 | 2.2µF 50V E |
| 135 | CK0158 | 0.047µF C |
| 136 | 0158 | " C |
| 137 | CE0213 | 0.47µF 50V E |
| 138 | CC0007 | 100pF C |
| 139 | CK0158 | 0.047µF C |
| 140 | --- | |
| 141 | CK0158 | 0.047µF C |
| 142 | --- | |
| 143 | CE0099 | 2.2µF E |
| 144 | --- | |
| 145 | --- | |
| 146 | --- | |
| 147 | CE0079 | 220µF 25V E |
| 148 | 0075 | 22µF 16V E |
| 149 | CC0011 | 470µF C |
| 150 | CE0075 | 22µF 16V E |
| 151 | CQ0170 | 470pF S |
| 152 | CQ0009 | 0.047µF M |
| 153 | CQ0170 | 470pF S |
| 154 | CE0168 | 3.3µF 50V E |
| 155 | 0098 | 1µF 50V E |
| 156 | CS0445 | 0.22µF 35V T |
| 157 | CK0155 | 0.01µF C |
| 158 | CE0099 | 2.2µF 50V E |
| 159 | CE0099 | 2.2µF 50V E |
| 160 | CE0098 | 1µF 50V E |
| 161 | CS0445 | 0.22µF 35V T |
| 162 | 0445 | 0.22µF 35V T |
| 163 | CE0084 | 4.7µF 25V E |
| 164 | CE0075 | 22µF 16V E |
| 165 | 0075 | 22µF 16V E |
| 166 | CQ0265 | 2200pF S |
| 167 | CQ0265 | 2200pF S |
| 168 | CE0075 | 22µF 16V E |
| 169 | CE0079 | 220µF 16V E |
| 170 | 0084 | 4.7µF 25V E |
| 171 | 0084 | 4.7µF 25V E |
| 172 | CE0087 | 220µF 25V E |
| 173 | 0079 | 220µF 16V E |
| 174 | CK0155 | 0.01µF C |
| 175 | CE0090 | 1000µF 25V E |
| 176 | 0090 | 1000µF 25V E |

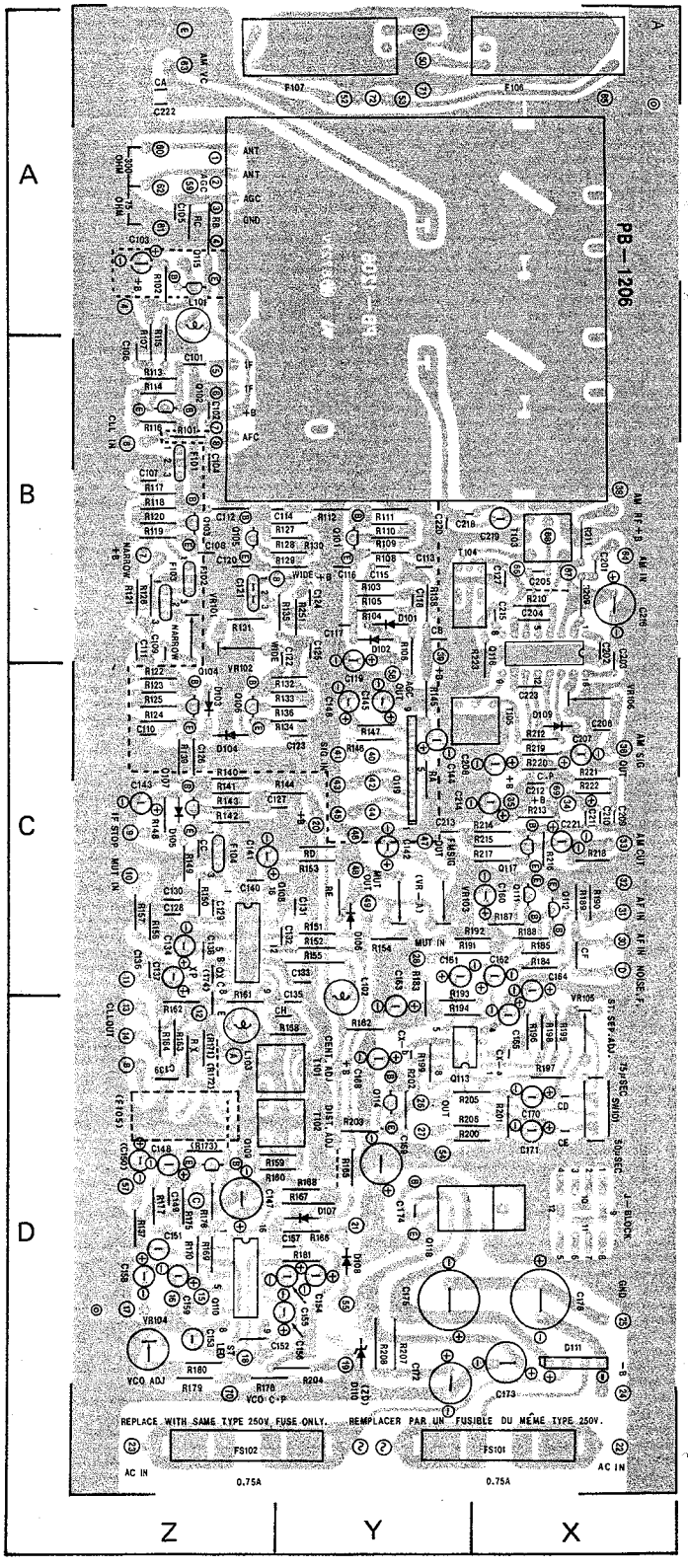
| SYMBOL NO. | STOCK NO. | DESCRIPTIONS |
|---|---|---|
| C201 | CK0156 | 0.022µF C |
| 202 | CK0158 | 0.047µF C |
| 203 | 0158 | 0.047µF C |
| 204 | 0156 | 0.022µF C |
| 205 | 0156 | 0.022µF C |
| 206 | 0158 | 0.047µF C |
| 207 | CE0074 | 10µF 16V E |
| 208 | 0168 | 3.3µF 50V E |
| 209 | CQ0168 | 0.018µF M |
| 210 | 0024 | 1500pF M |
| 211 | 0157 | 0.018µF M |
| 212 | CK0155 | 0.01µF C |
| 213 | 0158 | 0.047µF C |
| 214 | CE0074 | 10µF 16V E |
| 215 | CK0156 | 0.022µF C |
| 216 | CE0079 | 220µF 16V E |
| 217 | CK0158 | 0.047µF C |
| 218 | CC0004 | 22pF C |
| 219 | CQ0172 | 330pF S |
| 220 | CC0013 | 15pF C |
| 221 | CE0084 | 4.7µF 25V E |
| 223 | CK0126 | 1000pF C |
| Cx | CQ0218 | 750pF S |
| Q101 | --- | |
| 102 | TR0233 | 2SC535 B |
| 103 | TR0019 | 2SC1923 O |
| 104 | --- | |
| 105 | --- | |
| 106 | --- | |
| 107 | TR0019 | 2SC1923 O |
| 108 | TC0099 | LA1231 FM IC |
| 109 | TR0174 | 2SC1345 [TO-92] |
| 110 | TC0100 | µPC1173C MPX.IC |
| 111 | TR0198 | 2SC1815 GR |
| 112 | TR0198 | 2SC1815 GR |
| 113 | --- | |
| 114 | TR0198 | 2SC1815 GR |
| 115 | --- | |
| 116 | TC0021 | HA1197 AM IC |
| 117 | TR0198 | 2SC1815 GR |
| 118 | TR0047 | 2SD235 Y |
| Q301 | TC5002 | NJM4558D IC |
| D105 | TD0116 | 1S2075 Diode |
| 106 | TV0004 | KB-265 Varister |
| 107 | TD0116 | 1S2075 Diode |
| 108 | TD0116 | 1S2075 Diode |
| 109 | TV0004 | KB-265 Varister |
| 110 | TD0079 | WZ-140 Zener |
| 111 | TD0144 | SVB10-100 Diode |
| VR101 | RT0054 | 300 ohms |
| 102 | --- | |
| 103 | RT0052 | 20k ohms |
| 104 | RT0025 | 4.7k [B] |
| 105 | RT0085 | 100k ohms |
| 106 | RT0056 | 50k ohms |



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| SYMBOL NO. | STOCK NO. | DESCRIPTIONS |
|---|---|---|
| T101 | LA1147 | LUX1147 FM Trans |
| 102 | LA1148 | LUX1148 " |
| 103 | LA1073 | LUX1073 AM OSC Coil |
| 104 | LA1098 | FSN-1067 " |
| 105 | LA1100 | LA-1100 " |
| L101 | LA1143 | S-470K Choke Coil |
| 102 | LA1149 | S-180J " |
| 103 | LA1149 | S-180J " |
| F101 | LA1829 | FM Ceramic Filter Kit |
| 102 | LA1829 | |
| 104 | LA1829 | |
| 105 | LA1192 | Anti Birdie Filter [S] |
| 106 | LA1191 | Low Pass Filter |
| 107 | LA1191 | " |
| FS101 | BF0085 | Fuse 0.75A [E] [U] |
| 102 | BF0207 | Fuse 5x20 630mAT [S] |

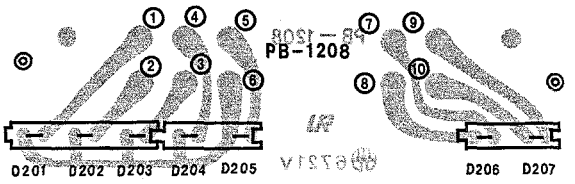
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| SYMBOL NO. | STOCK NO. | DESCRIPTION |
|---|---|---|
| | TD0149<br>TD0150 | LED LD-002R<br>LED LD-003R |




PB1235

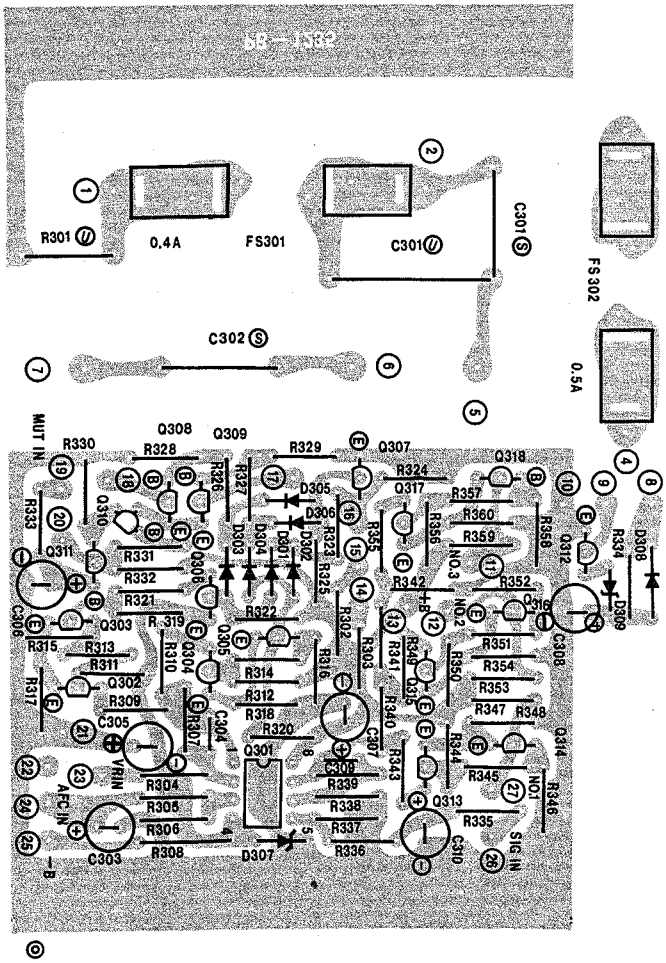
| SYMBOL NO. | STOCK NO. | DESCRIPTIONS |
|---|---|---|
| R301 | RD0100 | R-50 2.2M |
| 302 | RB0184 | R-25 1.2k |
| 303 | 0184 | " 1.2k |
| 304 | 0206 | " 10k |
| 305 | 0206 | " 10k |
| 306 | 0242 | " 330k |
| 307 | 0242 | " 330k |
| 308 | RD0134 | R-50 470 |
| 309 | RB0206 | R-25 10k |
| 310 | 0206 | " 10k |
| 311 | " | " " |
| 312 | " | " " |
| 313 | " | " " |
| 314 | " | " " |
| 315 | RB0222 | R-25 47k |
| 316 | " | " " |
| 317 | 0158 | " 100 |
| 318 | 0162 | " 150 |
| 319 | 0206 | " 10k |
| 320 | 0206 | " 10k |
| 321 | 0222 | " 47k |
| 322 | 0206 | " 10k |
| 323 | 0222 | " 47k |
| 324 | 0222 | " " |
| 325 | 0214 | " 22k |
| 326 | 0222 | " 47k |
| 327 | " | " " |
| 328 | " | " " |
| 329 | " | " " |
| 330 | RB0152 | " 56 |
| 331 | 0198 | " 4.7k |
| 332 | 0184 | " 4.7k |
| 333 | 0206 | " 10k |
| 334 | 0250 | " 680k |
| 335 | 0214 | " 22k |
| 336 | 0198 | " 4.7k |
| 337 | 0250 | " 680 |
| 338 | 0218 | " 33k |
| 339 | 0250 | " 680k |
| 340 | 0174 | " 470 |
| R341 | RB0174 | R-25 470 |
| 342 | 0174 | " 470 |
| 343 | RB0206 | " 10k |
| 344 | 0206 | " 10k |
| 345 | 0222 | " 47k |
| 346 | | |
| 347 | RB0198 | R-25 4.7k |
| 348 | 0150 | " 47 |
| 349 | RS0206 | " 10k |
| 350 | RB0206 | " 10k |
| 351 | 0222 | " 47k |
| 352 | 0206 | " 10k |
| 353 | 0198 | " 4.7k |

| SYMBOL NO. | STOCK NO. | DESCRIPTION |
|---|---|---|
| 354 | 0150 | " 47 |
| 355 | 0206 | " 10k |
| 356 | 0206 | " 10k |
| 357 | 0222 | " 47k |
| 358 | 0206 | " 10k |
| 359 | 0198 | " 4.7k |
| 360 | 0142 | " 22 |
| | | |
| C301 | CU0006 | AC Capacitor 0.022μF[E] |
| | CU0065 | AC Capacitor 0.022μF[U] |
| | CU0033 | AC Capacitor 0.022μF[S] |
| 302 | CU0006 | AC Capacitor 0.022μF[E] |
| | CU0033 | AC Capacitor 0.022μF[S] |
| 303 | CE0213 | 0.47μF 50V E |
| 304 | CK0126 | 1000pF C |
| 305 | CE0074 | 10μF 16V E |
| 306 | CE0098 | 1μF 50V E |
| 307 | CE0074 | 10μF 16V E |
| 308 | CE0075 | 22μF 16V E |
| 309 | CK0126 | 1000pF C |
| 310 | CE0099 | 2.2μF 50V E |
| | | |
| Q301 | TC5002 | NJM4558D IC |
| 302 | TR0087 | 2SA1015 Y |
| 303 | TR0087 | 2SA1015 Y |
| 304 | TR0230 | 2SC458 BC |
| 308 | TR0230 | 2SC458 BC |
| 309 | TR0230 | " |
| 310 | TR0230 | " |
| 311 | TR0230 | " |
| 312 | TR0174 | 2SC1345 [TO-92] |
| 313 | TR0230 | 2SC458 BC |
| 314 | TR0230 | " |
| 315 | TR0230 | " |
| 316 | TR0230 | " |
| 317 | TR0230 | " |
| 318 | TR0230 | " |
| | | |
| D301 | TD0116 | 1S2075 Diode |
| 302 | TD0116 | " |
| 303 | TD0116 | " |
| 304 | TD0116 | " |
| 305 | TD0116 | " |
| 306 | TD0116 | " |
| 307 | TD0164 | HZ12 C-3 14V Zener |
| 308 | TD0018 | 1K188FM-1 |
| 309 | TD0159 | HZ9 C-1 9V Zener |



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| SYMBOL NO. | STOCK NO. | DESCRIPTIONS |
|---|---|---|
| F301 | BF0072 | Fuse 0.3A [EK] [EZ] |
| | BF0216 | Fuse 5x20 125mAT [S] |
| 302 | BF0073 | Fuse 0.4A [U] |
| | BF0074 | Fuse 0.5A [U] |
| | BF0074 | Fuse 0.5A [E] |
| | AH0003 | Fuse Holder [E][U] |
| | AH0004 | Fuse Holder[S] |




PB-1235

REPLACE WITH SAME TYPE 250V FUSEONLY. REMPLACER PAR UN FUSIBLE DUMÊME TYPE 250V.

REAR PANEL

| SYMBOL NO. | STOCK NO. | DESCRIPTIONS |
|---|---|---|
| | AT0013 | 2P Pin Jack |
| | AT0053 | SP Terminal |
| | BX0027 | Antenna Holder |
| | LA1146 | Loopstick Antenna |
| | PT2301 | Power Transformer[U] |
| | PT2302A | Power Transformer[S] |
| | PT2344 | Power Transformer[E] |
| | UC1121 | Rear Panel [E] [S] |
| | UC1129 | Rear Panel [U] |

SUB PANEL

| STOCK NO. | DESCRIPTIONS |
|---|---|
| AL0050 | Lamp 12V 0.1A |
| BX0022 | Pulley No. 7017 |
| BX0029 | Pulley (small) 13mm |
| RV0208 | VR 50k-B (muting threshold) |
| SP0108 | 1-key (LW select) Push Sw. |
| SP0110 | 3-key Push Sw.(AM,FM,mono) |
| TD0096 | SLC25UR (red) LED |
| UB1045 | Sub Panel |
| UX1011 | Fly Wheel |
| WM1046 | Dial Scale |

CHASSIS

| STOCK NO. | DESCRIPTIONS |
|---|---|
| AC0013 | AC Selector Socket (E) |
| AC0014 | AC Selector Plug (E) |
| BX0016 | Dial Drum |
| BX0038 | Dial Spring |
| LA1052 | Balun |
| SP0113 | Push Sw. (power) (U) |
| SP0114 | Push Sw. ( " ) (E)(S) |
| UA1052 | Chassis |
| UZ1163 | Dial Pointer |
| WN0007 | Leg T-C |
| UE1097 | Bottom Plate |
| UG1017 | Bonnet (U) |
| UG1018 | Bonnet (E)(S) |
| WA1183 | Front Panel |
| WH1082 | Knob Set (tuning) |
| WH1083 | Knob Set (muting threshold) |
| WJ1089 | Mould Knob (power) |
| WJ1107 | Mould Knob (AM, FM, mono, muting) |



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PB1237[MW/LW CONVERTER PCB] [T-2L only]

| SYMBOL NO. | STOCK NO. | DESCRIPTIONS | |
|---|---|---|---|
| R401 | RB0204 | R-25 | 8.2K |
| 402 | 0218 | " | 33k |
| 403 | 0192 | " | 2.7k |
| 404 | 0150 | " | 47 |
| 405 | 0134 | " | 10 |
| 406 | 0204 | " | 8.2k |
| 407 | 0222 | " | 47k |
| 408 | 0192 | " | 2.7k |
| 409 | 0150 | " | 47 |
| 410 | 0134 | " | 10 |
| 411 | 0226 | " | 68k |
| | SP0119 | Push Sw.(LW/MW) | |
| C401 | --- | | |
| 402 | --- | | |
| 403 | CK0156 | 0.022μF | C |
| 404 | CK0156 | 0.022μF | C |
| 405 | CC0013 | 15pF | C |
| 406 | CQ0172 | 330pF | S |
| 407 | CC0012 | 10pF | C |
| 408 | CK0156 | 0.022μF | C |
| 409 | CC0004 | 22pF | C |
| 410 | CQ0205 | 15pF | S |
| 411 | CC0006 | 47pF | C |
| 412 | --- | | |
| 413 | CK0156 | 0.022μF | C |
| 417 | CC0006 | 47pF | C |
| --- | CC0082 | 27pF | C |
| Q401 | TR0233 | 2SC535 | B |
| 402 | TR0233 | 2SC535 | B |
| D403 | TD0018 | 1K188FM-1 | |
| TC401 | CT0008 | Trimmer Condenser | |
| 402 | CT0008 | Trimmer Condenser | |
| 403 | CT0008 | Trimmer Condenser | |
| 404 | CT0008 | Trimmer Condenser | |
| T401 | LA1073 | AM OSC Coil | |
| 402 | 1095 | LW OSC Coil | |
| L401 | LA1176 | Choke Coil | |
| 402 | LA1176 | Choke Coil | |
| R126 | RB0155 | R-25 | 10k |
| 201 | 0156 | R-25 | 22k |
| 204 | 0156 | R-25 | 22k |
| 205 | 0156 | R-25 | 22k |
| 215 | 0156 | R-25 | 22k |

| SYMBOL NO. | STOCK NO. | DESCRIPTION |
|---|---|---|
| D110 | TD0164 | HZ12 C-3 14V Zener |
| | LA1117 | Loopstick Antenna for AM |
| | WM1048 | Dial Scale |
| | WA1184 | Front Panel |
| | WJ1107 | Mould Knob (FM,AM,MW/LW, muting/mono) |
| | LA1910 | Front End |
| | UC1106 | Rear Panel |



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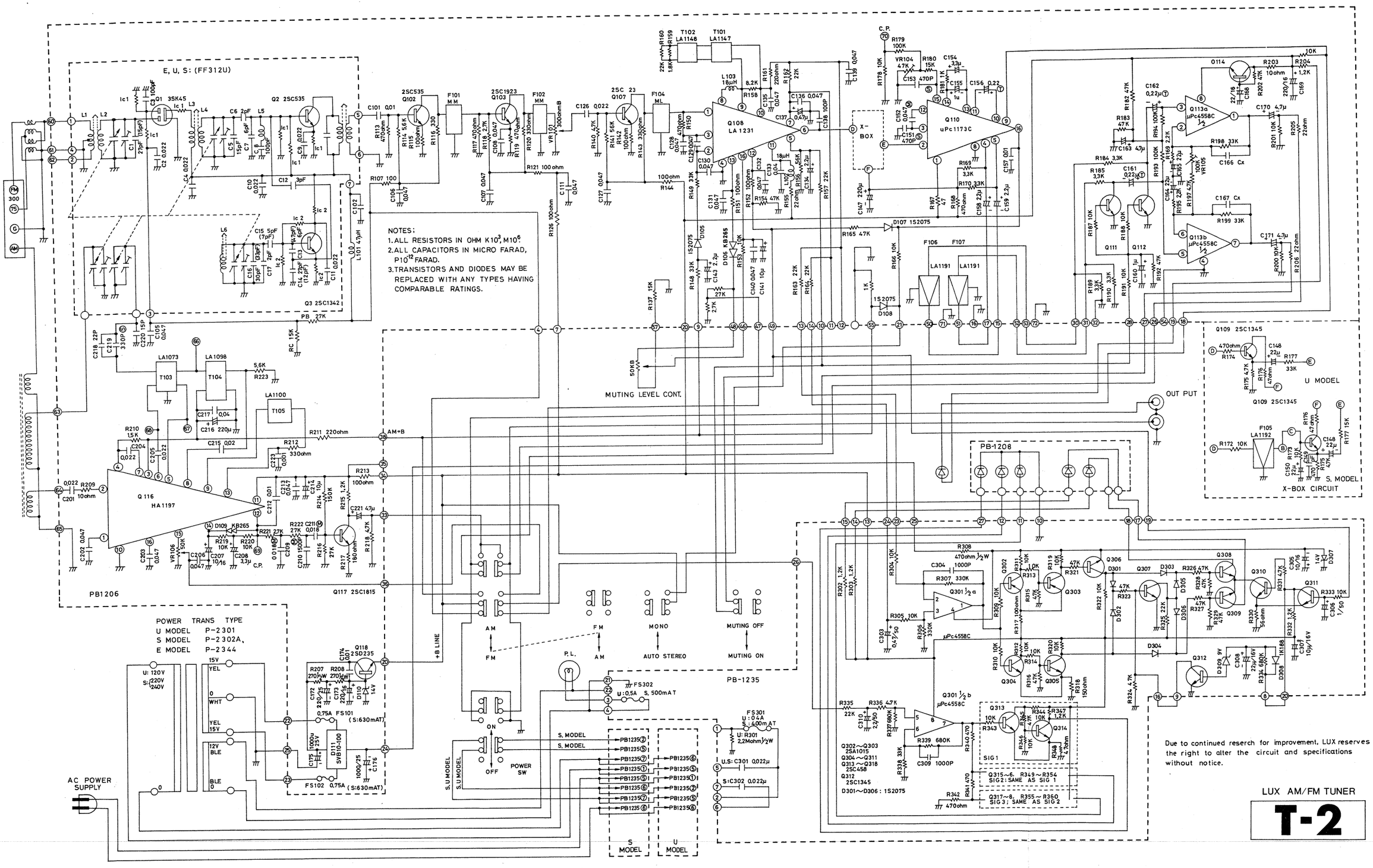
## SPECIFICATIONS

| < FM Section > | | |
|---|---|---|
| **Receiving Frequency:** | 87.5MHz – 108MHz | |
| **50dB Quieting Sensitivity:** | 75 μsec. 14.8dBf (3.0μV), 50μsec. 15.5dBf (3.3μV) | |
| **IHF Usable Sensitivity:** | 10.8dBf (1.9μV) | |
| **Signal to Noise Ratio:** | 75dB | |
| **Frequency Response:** | 30 – 15kHz (within ±1dB) | |
| **Total Harmonic Distortion** | (mono) | (stereo) |
| **100Hz:** | 0.15% | 0.3% |
| **1kHz:** | 0.15% | 0.3% |
| **6kHz:** | 0.3% | 0.5% |
| **Capture Ratio:** | 1.5dB | |
| **Adjacent Channel Selectivity:** | 10dB (±200kHz) | |
| **Alternate Channel Selectivity:** | 75dB (±400kHz) | |
| **Spurious Response Ratio:** | 80dB | |
| **IF Response Ratio:** | 80dB | |
| **Image Response Ratio:** | 55dB | |
| **AM Suppression Ratio:** | 55dB | |
| **Stereo Separation:** | 44dB (100Hz), 48dB (1kHz)<br>38dB (10kHz), 38dB (1kHz, European type with optional birdie filter) | |
| **Subcarrier Product Ratio:** | 65dB | |
| **SCA Rejection Ratio:** | 60dB | |
| **Output Voltage:** | 1V | |
| **Output Impedance:** | 100 ohms | |
| **Muting Threshold:** | 10μV – 300μV | |
| < AM Section > | (MW) | (LW for the T-2L) |
| **IHF Usable Sensitivity:** | 250μV/m | 500μV/m |
| **Image Ratio:** | 50dB (45dB for the T-2L) | 32dB |
| **IF Rejection Ratio at 1MHz:** | 40dB | 24dB |
| **Signal to Noise Ratio:** | 50dB | 50dB |
| **Total Harmonic Distortion:** | 0.6% | 0.6% |
| **Output Voltage 30% mod.:** | 0.3V | 0.3V |
| **Power Requirement:** | 10W | |
| **Additional Features:** | Center Indicator, Signal Strength Indicator, FM Muting Switch,<br>FM Muting Level Control | |
| **Dimensions:** | 438(W) x 331(D) x 84(H)mm (17-1/4" x 13-1/32" x 3-5/16")<br>(including legs, rear protrusions and knobs.) | |
| **Weight:** | Net: 5.8kgs (12.8 lbs.) | Gross: 7.3kgs (16.1 lbs.) |

*Specifications and appearance design subject to change without notice.*



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