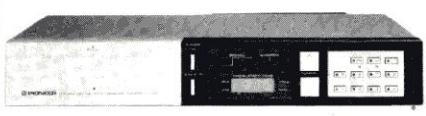




# Service Manual

**CIRCUIT DESCRIPTIONS  
REPAIR & ADJUSTMENTS**



**ORDER NO.  
ARP-027-0**

FM/MW/LW Digital Synthesized Tuner

# F-X50L

MODEL F-X50L COMES IN TWO VERSIONS DISTINGUISHED AS FOLLOWS:

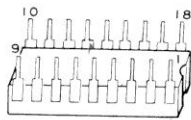
Type	Voltage	Remarks
NE	220V only	European continent model
YB	240V only	United Kingdom Model

- This service manual is applicable to the NE and YB types.
- Ce manuel d'instruction se réfère au mode de réglage, en français.
- Este manual de servicio trata del método de ajuste escrito en español.

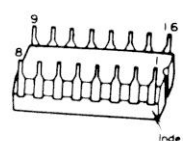
## CONTENTS

1. SPECIFICATIONS .....	2	8. SCHEMATIC DIAGRAM .....	21
2. FRONT PANEL FACILITIES .....	3	9. ELECTRICAL PARTS LIST .....	24
3. BLOCK DIAGRAM .....	5	10. PACKING .....	26
4. PARTS LOCATION .....	6	11. ADJUSTMENTS .....	27
5. CIRCUIT DESCRIPTIONS .....	8	RÉGLAGE .....	30
6. EXPLODED VIEWS AND PARTS LIST .....	14	AJUSTE .....	33
7. P.C.BOARDS CONNECTION DIAGRAM .....	18		

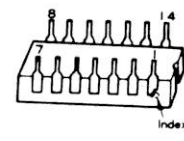
MN6147



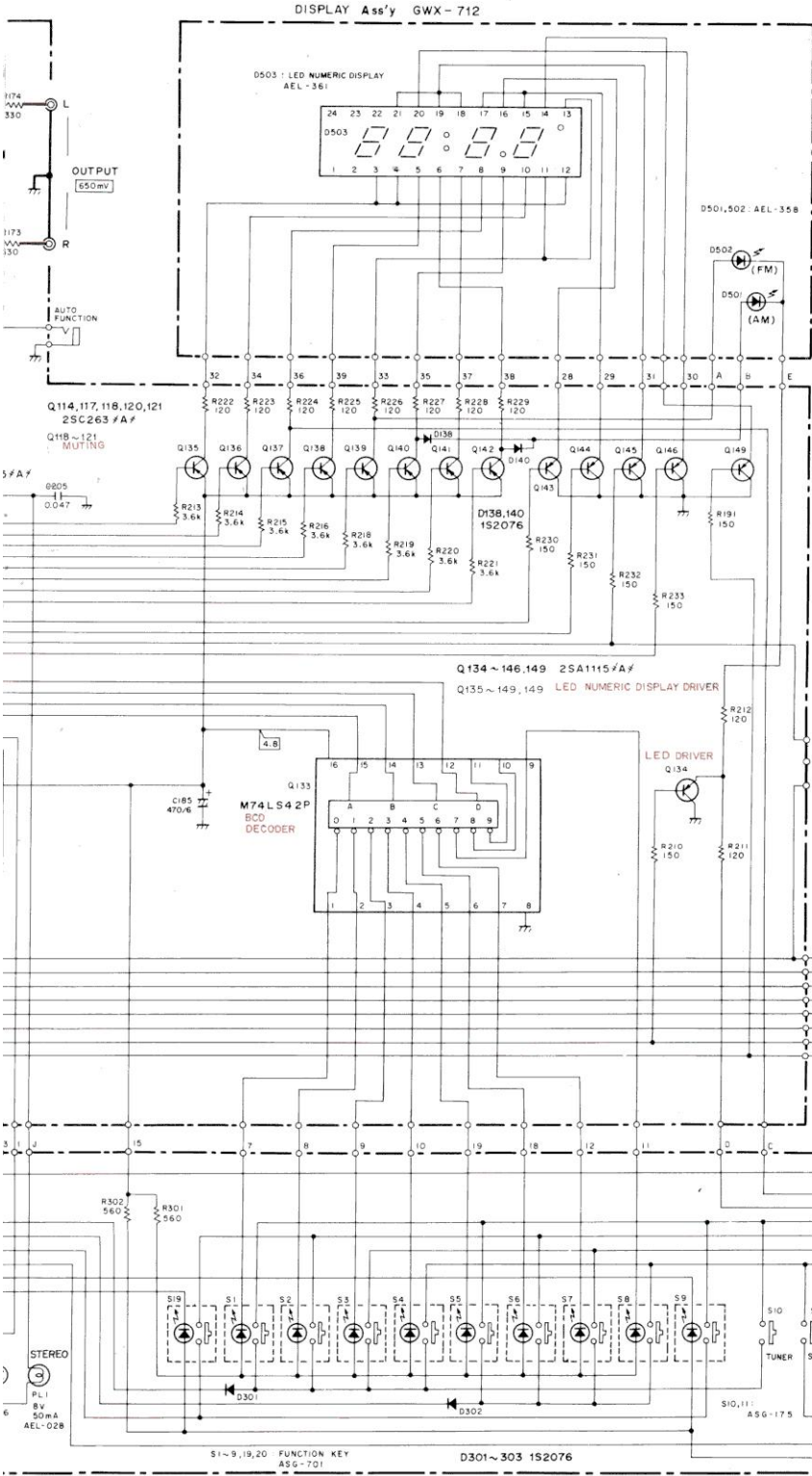
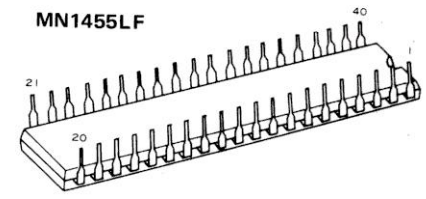
PA3001  
HA1138  
IR2E01  
M74LS42P



HA1156W

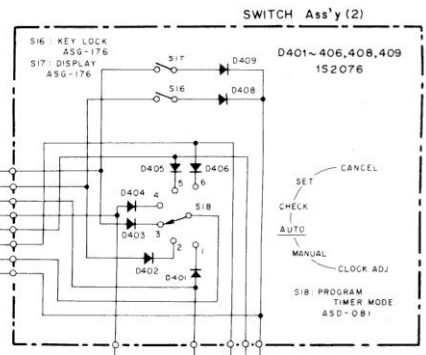


MN1455LF



1. RESISTORS:  
 Indicated in Ω, 1/4W, 1/8W, ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10%, (M) : ±20% tolerance
2. CAPACITORS:  
 Indicated in capacity (L:F) voltage (V) unless otherwise noted p : pF  
 Indication without voltage is 50V except electrolytic capacitor
3. VOLTAGE  
 DC voltage (V) at no input signal  
 Signal voltage at FM 400Hz 75kHz DEV.
4. OTHERS  
 Adjusting point.  
 The mark  $\frac{1}{2}$  on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

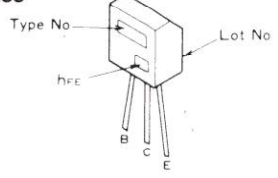
- SWITCHES
- |  |               |
|--|---------------|
| S 1 : FUNCTION KEY (1)                           | ON - OFF      |
| S 2 : FUNCTION KEY (2)                           | ON - OFF      |
| S 3 : FUNCTION KEY (3)                           | ON - OFF      |
| S 4 : FUNCTION KEY (4)                           | ON - OFF      |
| S 5 : FUNCTION KEY (5)                           | ON - OFF      |
| S 6 : FUNCTION KEY (6)                           | ON - OFF      |
| S 7 : FUNCTION KEY (7)                           | ON - OFF      |
| S 8 : FUNCTION KEY (8)                           | ON - OFF      |
| S 9 : FUNCTION KEY (9/FM)                        | ON - OFF      |
| S10 : TUNER ON                                   |               |
| S11 : STAND-BY                                   |               |
| S12 : TUNING (DOWN)                              | ON - OFF      |
| S13 : TUNING (UP)                                | ON - OFF      |
| S14 : MEMORY                                     | ON - OFF      |
| S15 : SLEEP                                      | ON - OFF      |
| S16 : KEY LOCK                                   | ON - OFF      |
| S17 : DISPLAY                                    | FM/AM - CLOCK |
| S18 : PROGRAM TIMER MODE                         |               |
| CLOCK ADJ - MANUAL - AUTO - CHECK - SET - CANCEL |               |
| S19 : FUNCTION KEY (0/MW)                        | ON - OFF      |
| S20 : FUNCTION KEY (LW)                          | ON - OFF      |
| S21 : POWER                                      | ON - OFF      |
- The underlined indicates the switch position.



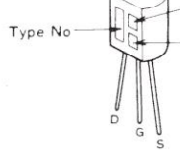
SWITCH Ass'y (1) GWS-359

ICs

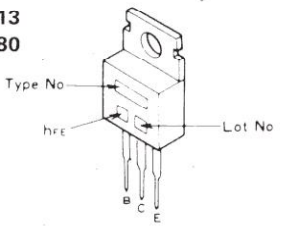
2SC461  
2SC535



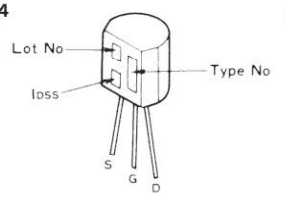
2SC945A



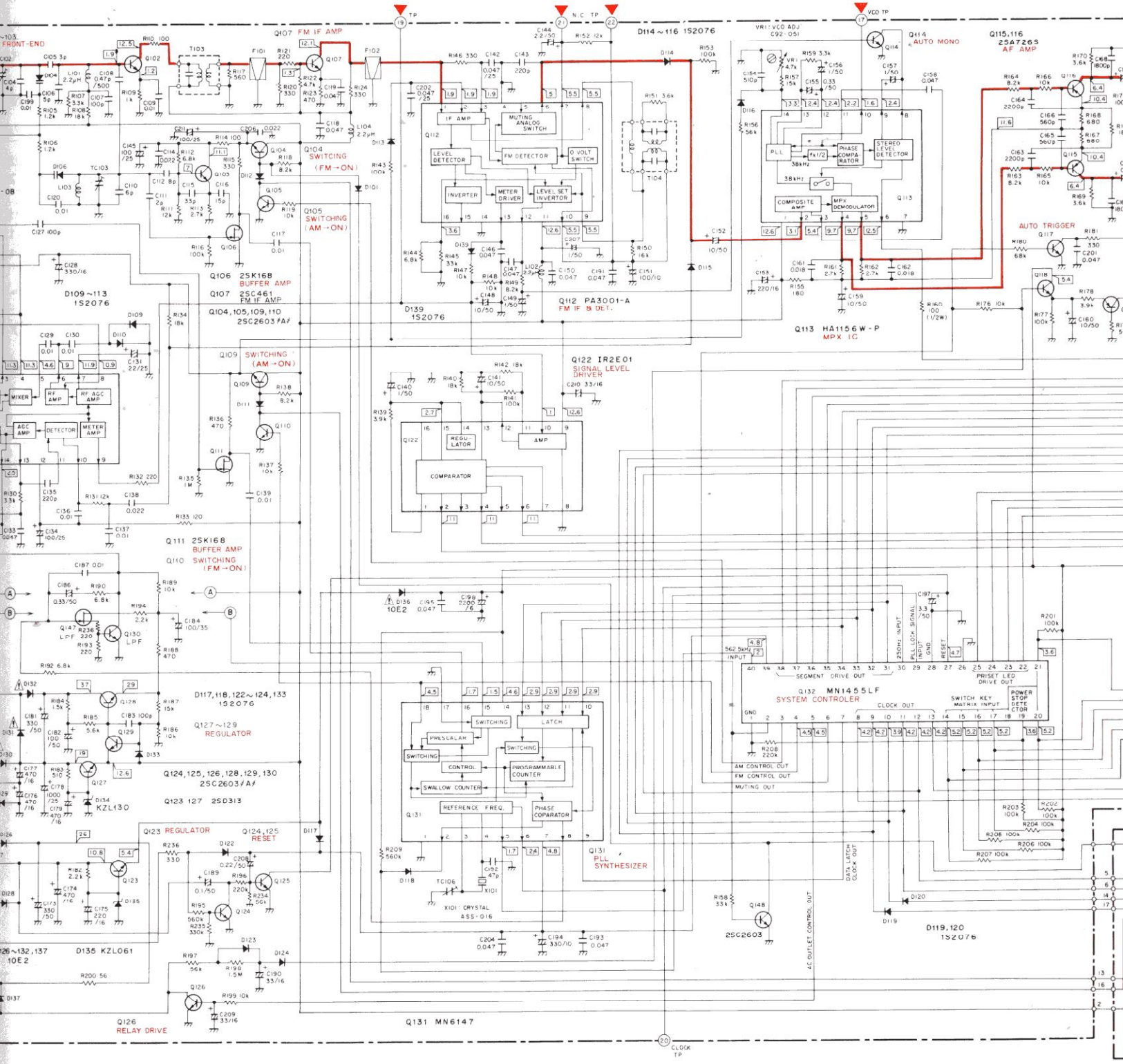
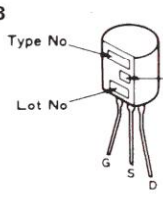
2SD313  
2SD880



2SK34



2SK168



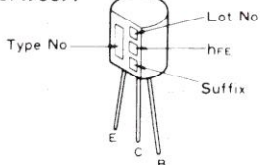
# 8. SCHEMATIC DIAGRAM

**NOTE:**

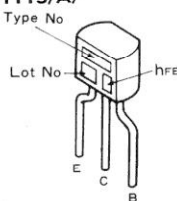
The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts list.

## External Appearance of Transistors and ICs

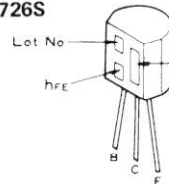
2SA733A



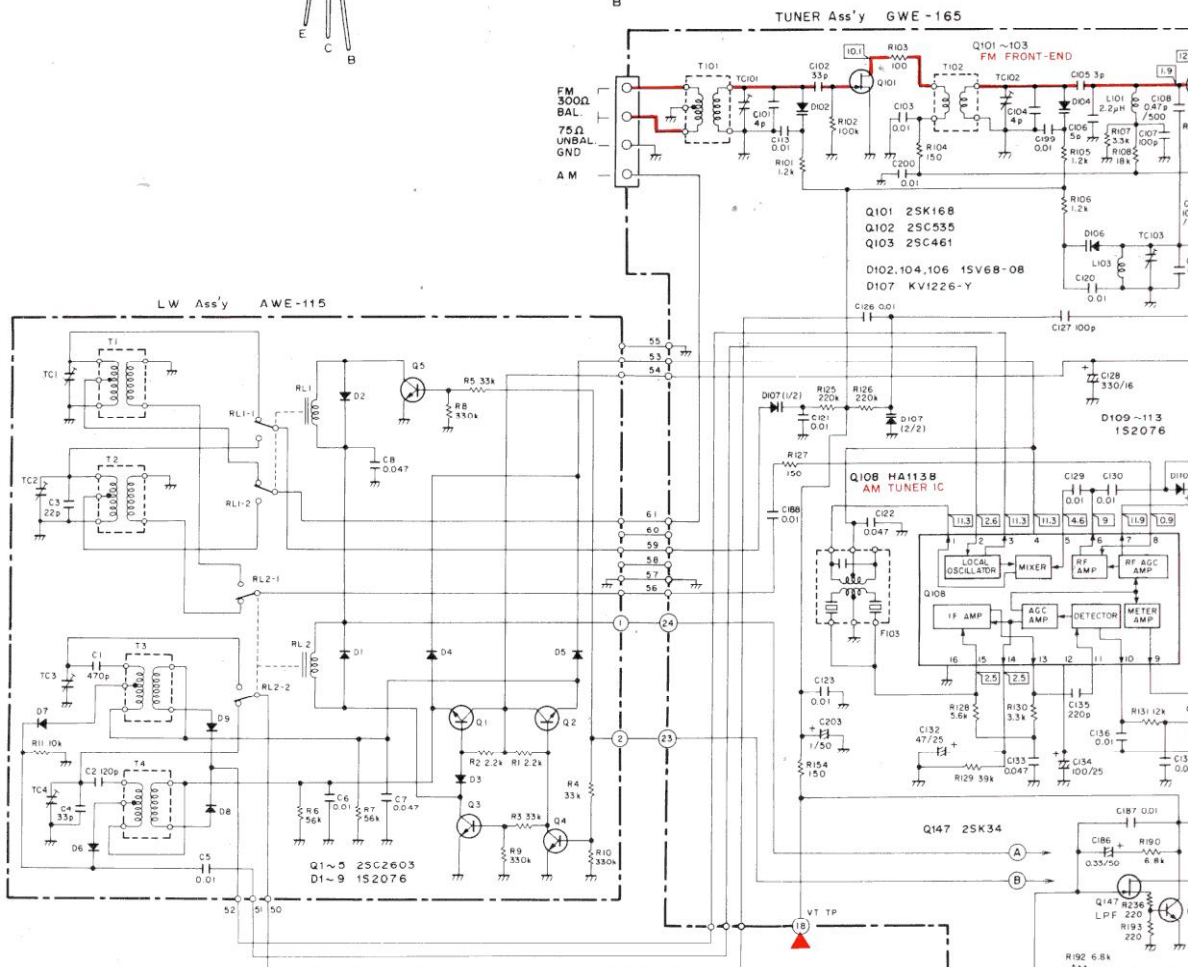
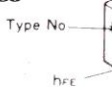
2SC2603/A/  
2SA1115/A/



2SA726S



2SC461  
2SC535



POWER SUPPLY CIRCUIT FOR YB TYPE

