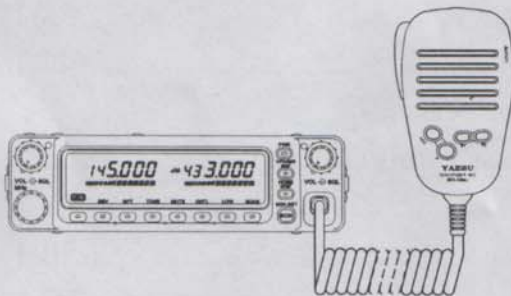


# YAESU FT-8100R

## Technical Supplement



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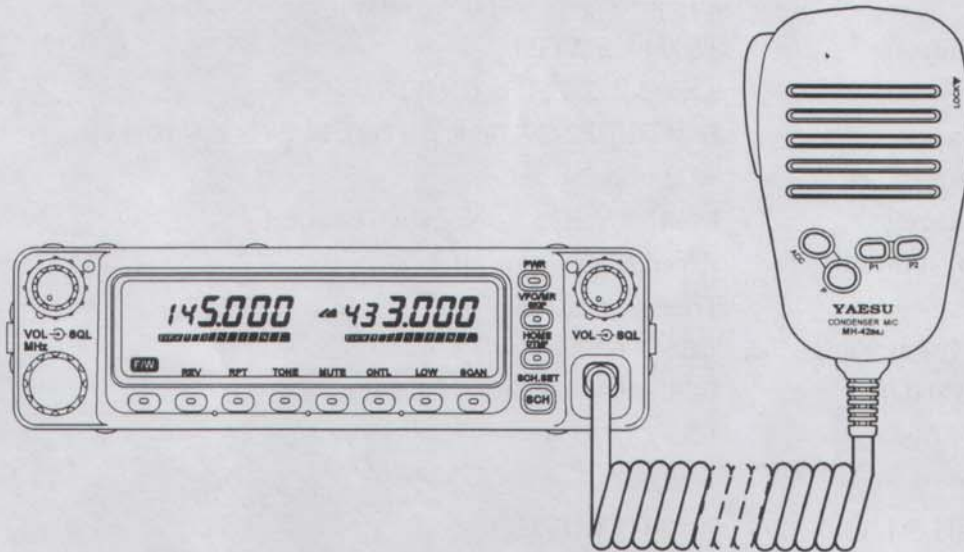
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Cut out the label at the right, and place it behind the clear plastic window in the spine of the manual.

 **FT-8100R**  
**Technical Supplement**



The manual provides the technical information necessary for servicing the FT-8100R Dual-Band mobile amateur transceiver.

Servicing this equipment requires expertise in handling surface-mount chip components. Attempts by non-qualified persons to service this equipment may result in permanent damage not covered by the warranty, and may be illegal in some countries.

Two PCB layout diagrams provided for each double-sided board in this transceiver. Each side of the board is referred to by the type of the majority of components installed on that side ("lead-

ed" or "chip-only"). In most cases one side has only chip components, and the other has either a mixture of both chip and leaded components (trimmers, coils, electrolytic capacitors, ICs, etc.), or leaded components only.

While we believe the information in this manual to be correct, Yaesu Musen assumes no liability for damage that may occur as a result of typographical or other errors that may be present. Your cooperation in pointing out any inconsistencies in the technical information would be appreciated.

# Specifications

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## General

Frequency Range:	(RX) 110 ~ 550 MHz, 750 ~ 1300 MHz* <i>*: cellular blocked</i> (TX) 144 ~ 148 MHz, 430 ~ 450 MHz
Channel Step:	5/10/12.5/15/20/25/50 kHz
Frequency Stability:	±10 ppm (-20 °C ~ +60 °C, VHF) ±5 ppm (-5 °C ~ +60 °C, UHF)
Repeater Shift:	±600 kHz (VHF) ±1.6/5.0/7.6 MHz (UHF)
Emission Type:	F3 (G3E), F2 (1200bps packet), F1 (9600bps packet)
Antenna Impedance:	50 Ω unbalanced
Supply Voltage:	DC 13.8 V ±15 %, Negative Ground
Current Consumption:	Receive; less than 1.0 A Transmit; 10.0 A
Operating Temp. Range:	-20 to +60 °C
Case Size (WHD):	140 × 40 × 165 (w/o knob)
Weight (approx.):	1.0 kg

## Transmitter

RF Output(H/M/L):	50/20/5 W (VHF) 30/20/5 W (UHF)
Modulation Type:	Variable reactance
Max Deviation:	±5 kHz
Spurious Emission:	>60 dB below carrier
Distortion (@ 70% MOD.):	less than 3%
Microphone Impedance:	2 kΩ

## Receiver

Circuit Type:	Double-conversion superheterodyne
IFs:	45.05 MHz/455 kHz (VHF) 58.525 MHz/455 kHz (UHF)
12 dB SINAD Sensitivity:	<0.18 μV (MAIN) <0.25 μV (SUB)
Selectivity (-6/-60dB):	12/24 kHz
Image Rejection:	better than 70 dB
Squelch Sensitivity:	better than 0.13 μV
AF Output:	2W @ 8 Ω for 5% THD
AF Output Impedance:	4 ~ 16 Ω (8 Ω internal speaker)

*Specifications subject to change without notice or obligation.*

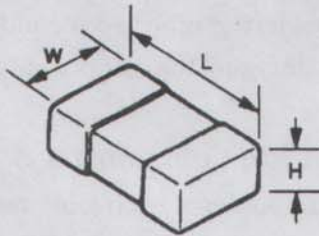
*Specifications guaranteed within amateur bands only.*

*Frequency range and repeater shift vary according to transceiver version.*

# Chip Component Information

The diagrams below indicate some of the distinguishing features of common chip components.

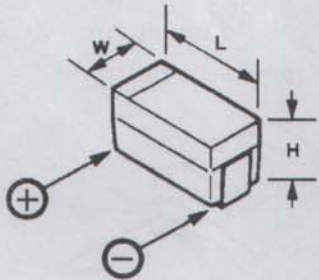
## Capacitors



(Unit: mm)

Type	L	W	H
2125	2.0	1.25	0.35 ~ 0.5
1608	1.6	0.8	0.65 ~ 0.95
1005	1.0	0.5	0.45 ~ 0.55

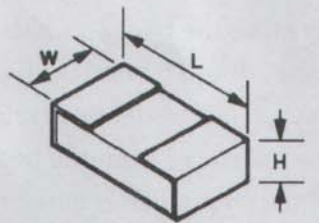
## Tantalum Capacitors



(Unit: mm)

Type	L	W	H
P	2.0	1.25	1.2
A	3.2	1.6	1.6
B	3.4	2.8	1.9
C	5.8	3.2	2.3

## Resistors



Indicated Letters

**1 2 3 4 5 6 7 : 9 0 .**

(Unit: mm)

Type	L	W	H
1/10	2.0	1.25	0.5
1/16	1.6	0.8	0.45
1/16S	1.0	0.5	0.35

Marking\* 100, 222, 473...

473

Tens	Ones	Multiplier
0	0	10 <sup>0</sup>
1	1	10 <sup>1</sup>
2	2	10 <sup>2</sup>
3	3	10 <sup>3</sup>
4	4	10 <sup>4</sup>
5	5	10 <sup>5</sup>
6	6	10 <sup>6</sup>
7	7	10 <sup>7</sup>
8	8	10 <sup>8</sup>
9	9	10 <sup>9</sup>

Examples: 100 = 10Ω  
222 = 2.2kΩ  
473 = 47kΩ

# Chip Component Information

## Replacing Chip Components

Chip components are installed at the factory by a series of robots. The first one places a small spot of adhesive resin at the location where each part is to be installed, and later robots handle and place parts using vacuum suction.

For single sided boards, solder paste is applied and the board is then baked to harden the resin and flow the solder. For double sided boards, no solder paste is applied, but the board is baked (or exposed to ultra-violet light) to cure the resin before dip soldering.

In our laboratories and service shops, small quantities of chip components are mounted manually by applying a spot of resin, placing with tweezers, and then soldering by very small dual streams of hot air (without physical contact during soldering). We remove parts by first removing solder using a vacuum suction iron, which applies a light steady vacuum at the iron tip, and then breaking the adhesive with tweezers.

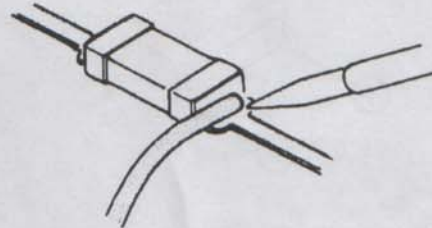
The special vacuum/desoldering equipment is recommended if you expect to do a lot of chip replacements. Otherwise, it is usually possible to remove and replace chip components with only a tapered, temperature-controlled soldering iron, a set of tweezers and braided copper solder wick. Soldering iron temperature should be below 280°C (536°F).

## Precautions for Chip Replacement

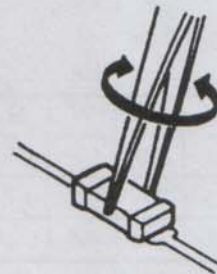
- Do not disconnect a chip forcefully, or the foil pattern may peel off the board.
- Never re-use a chip component. Dispose of all removed chip components immediately to avoid mixing with new parts.
- Limit soldering time to 3 seconds or less to avoid damaging the component and board.

## Removing Chip Components

- Remove the solder at each joint, one joint at a time, using solder wick whetted with nonacidic fluxes as shown below. Avoid applying pressure, and do not attempt to remove tinning from the chip's electrode.



- Grasp the chip on both sides with tweezers, and gently twist the tweezers back and forth (to break the adhesive bond) while alternately heating each electrode. Be careful to avoid peeling the foil traces from the board. Dispose of the chip when removed.
- After removing the chip, use the copper braid and soldering iron to wick away any excess solder and smooth the land for installation of the replacement part.



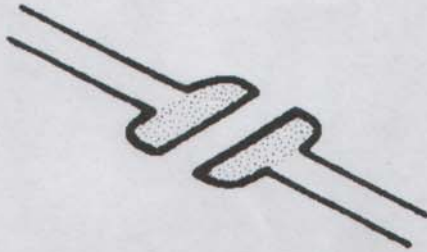
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## Chip Component Information

### *Installing a Replacement Chip*

As the value of some chip components is not indicated on the body of the chip, be careful to get the right part for replacement.

- Apply a small amount of solder to the land on one side where the chip is to be installed. Avoid too much solder, which may cause bridging (shorting to other parts).



- Hold the chip with tweezers in the desired position, and apply the soldering iron with a motion line as indicated by the arrow in the diagram below. Do not apply heat for more than 3 seconds.



- Remove the tweezers and solder the elec trode on the other side in the manner just described.

# Transceiver Disassembly & PCB Access

## 144M-Main Unit Access

- ❑ Remove 2 screws from each side of the top and bottom cover and 2 from the top (Figure 1).

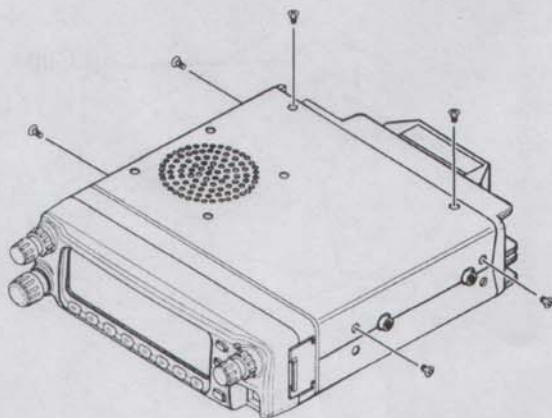


Figure 1

- ❑ Tilt the rear of the top cover upward, unplug the speaker wire connector from J1001 on the 144M-Main Unit, then slide it out from the chassis (Do not use force to remove the top cover). This exposes the component side of the 144M-Main Unit (Figure 2).

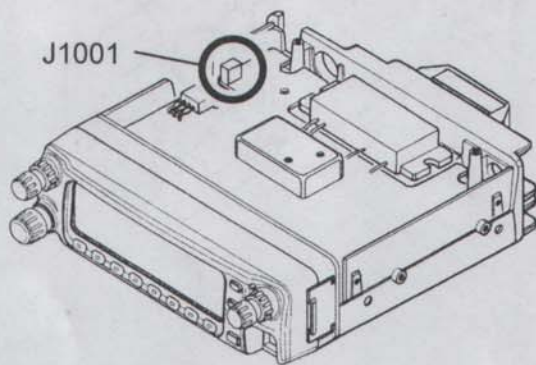


Figure 2

## 430M-Main Unit Access

- ❑ Place the set upside-down, and remove 2 screws from each side of the bottom cover and 2 from the top (Figure 3).

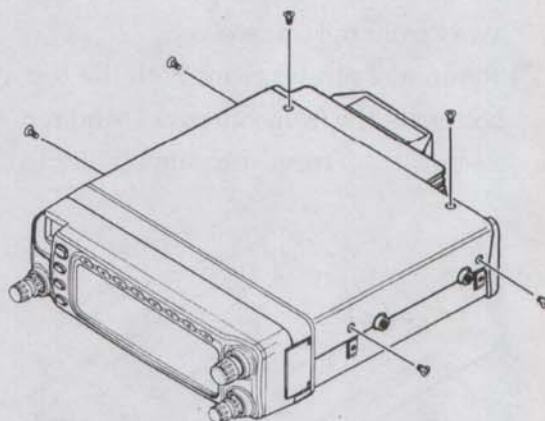


Figure 3

- ❑ Tilt the rear of the bottom cover upward, then slide it out from the chassis, to expose the component side of the 430M-Main Unit.



# Transceiver Disassembly & PCB Access

## Connect Unit Access

- ❑ After removing the top and bottom covers, to remove the front panel by slightly prying open the latch on the side of the transceiver. Next, slide the panel out ward and away from the transceiver.
- ❑ Remove 2 screws from both the top and bottom of the front sub panel. And remove a screw from front sub panel (Figure 4).

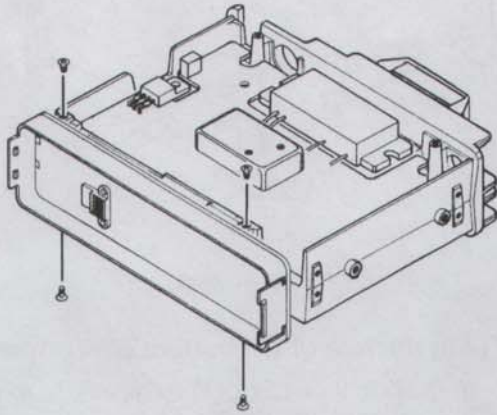


Figure 4

- ❑ Pull the front sub panel to slightly from the transceiver, and unplug the connector from J1010 on the 144M-Main Unit, to expose the 144M-Main Unit.

## Panel Unit Access

- ❑ After removing the front panel from the transceiver, remove 2 screws from rear side of the front panel (Figure 5).

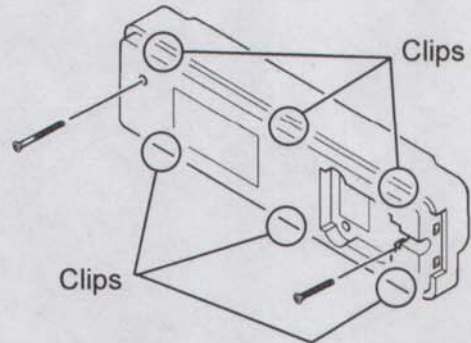


Figure 5

- ❑ Carefully separate the rear case from the front panel (it clips at 6 points at both the top and bottom edges). Disconnect the flat ribbon cable from J3001 on the DISP Unit to expose the DISP Unit (Figure 6).

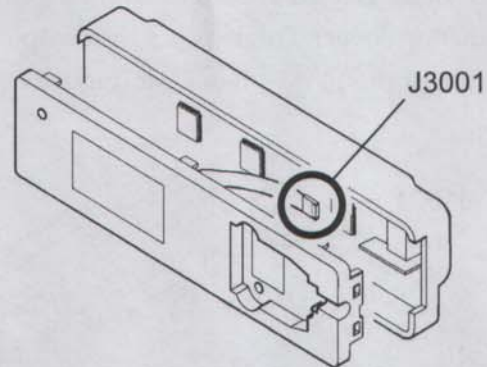


Figure 6

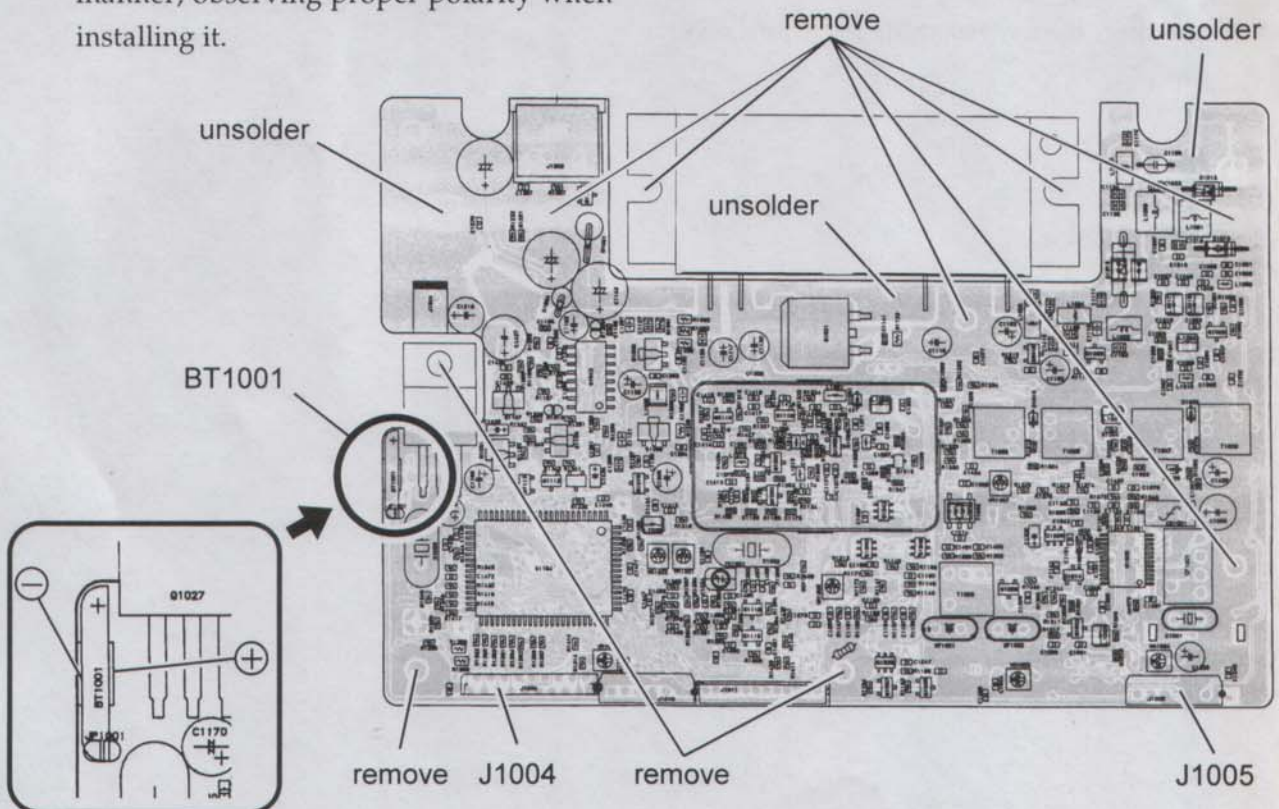
# Lithium Battery Replacement

## Lithium Battery Replace

- Remove the top cover. Locate Lithium Battery BT1001 (P/N Q9000696) on the 144M-Main Unit. Note the polarity and correct mounting of the cell terminals.
- Unplug the wire connector from J1004, J1005 on the 144M-Main Unit.
- Remove the 9 screws from 144M-Main Unit. Note the location of the 9 screws, as indicate below.
- Unsolder the 3 studs from 144M-Main Unit. Note the location of the 3 studs, as indicate below.
- Unsolder the battery terminals and remove the old cell.

*Note: Do not dispose of the old battery in fire, and ensure small children cannot play with, or possibly ingest the cell.*

- Mount the replacement cell in the similar manner, observing proper polarity when installing it.

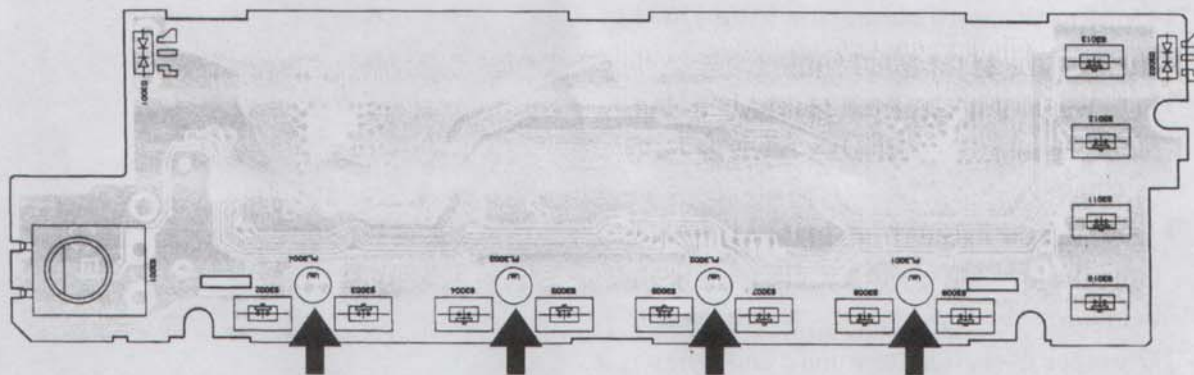


# Pilot Lamp Replacement

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## Pilot Lamp Replacement

- Remove and separate the front panel as previously described. Note the location of the 4 lamps, as indicated below.



- To remove a failed lamp, use a low wattage soldering iron and forceps to unsolder and free each lead, then gently lift the bulb out of the hole.
- Install replacement bulbs in the reverse manner, then reassemble the transceiver case.

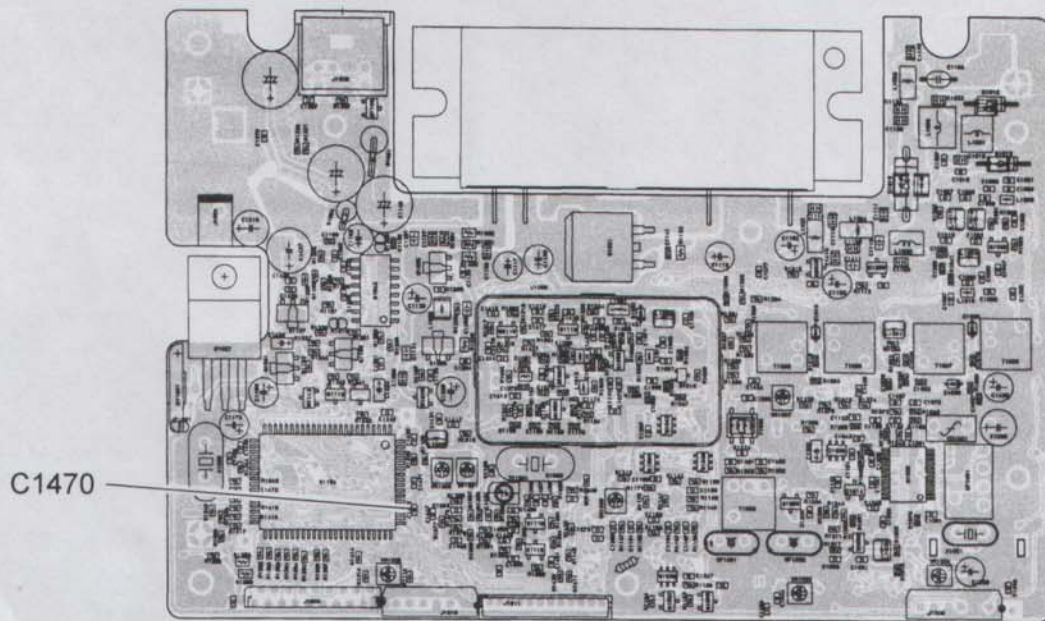
## Resetting the CPU

### Resetting the CPU

Resetting the CPU clears all memories, repeater shifts and other setting to their defaults, and leaves the transceiver CPU in the same state as when it left the factory.

A *soft* reset can be done by holding the D/MR and REV keys while switching the transceiver on. If a CPU-related problem remains after the soft reset, a *hard* reset can be done as follows:

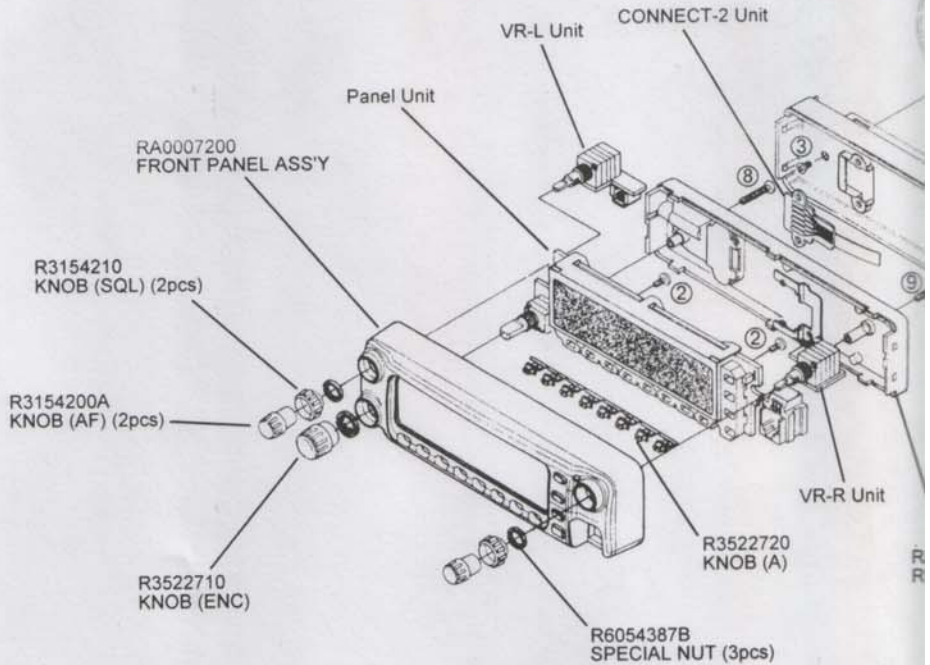
- Turn the transceiver off, and disconnect all cables.
- Remove the top cover.
- Temporarily short across capacitor C1470.  
Note the location of the C1470, as indicated below.



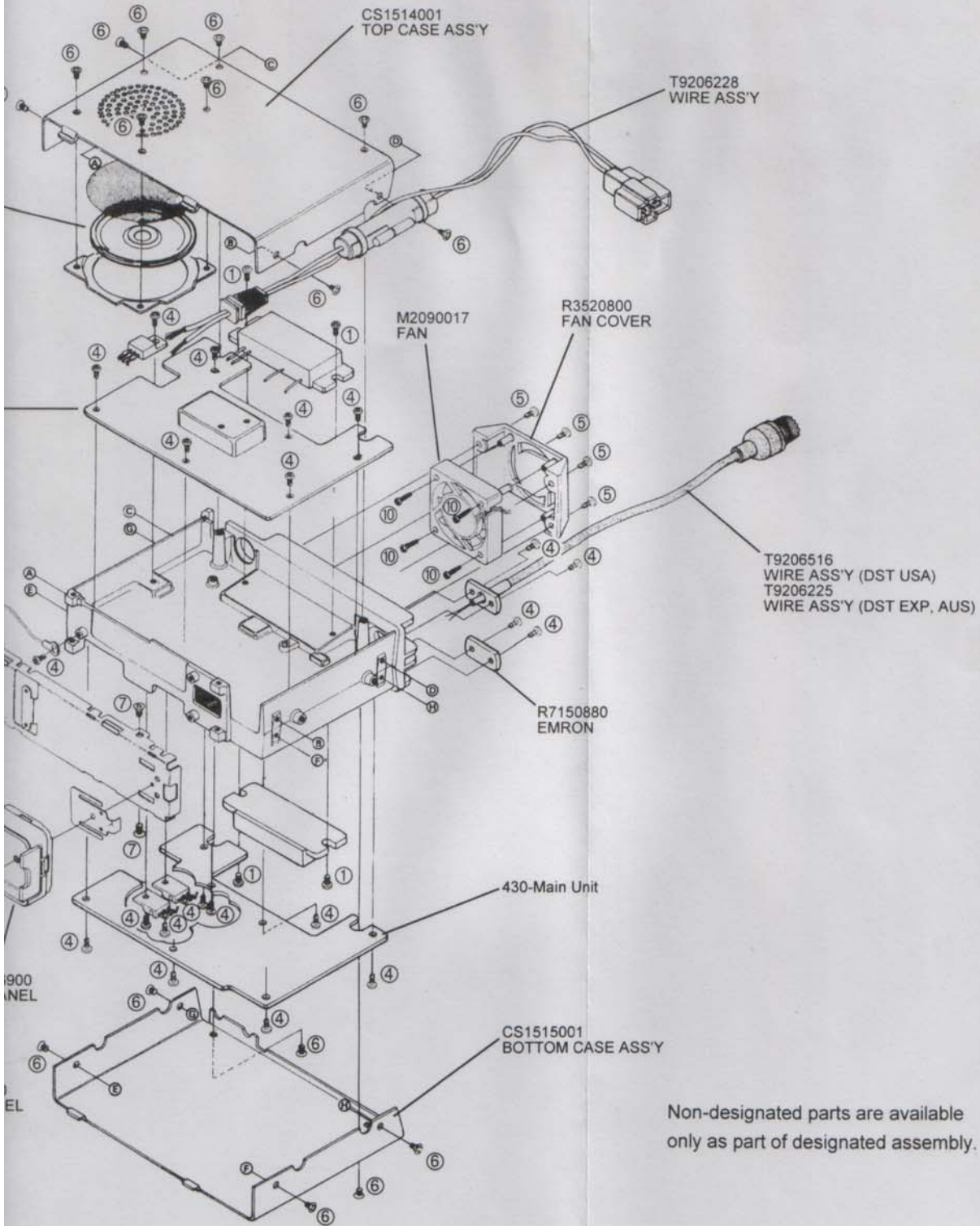
REF.	YAESU P/N	Description	Qty.
①	U20306001	BINDING HEAD SCREW M3×6	4
②	U23106001	TAPTITE SCREW M2×6	2
③	U07430107	PAN HEAD SCREW M2.6×3B#1	2
④	U24205001	TAPTITE SCREW M2.6×5	21
⑤	U24206007	TAPTITE SCREW M2.6×6B	4
⑥	U31204007	OVAL HEAD SCREW M2.6×4B	16
⑦	U34206001	TAPTITE SCREW M2.6×6	4
⑧	U43112007	TAPTITE SCREW M2×12B	1
⑨	U43116007	TAPTITE SCREW M2×16B	1
⑩	U9900057	TAPTITE SCREW M2×6B	4

M4090107  
SPEAKER  
T9206438  
T9206438A (Lot. 5-)  
WIRE ASS'Y

144-Main U



# Exploded View & Miscellaneous Parts



Non-designated parts are available only as part of designated assembly.

## Alignment

The FT-8100R is carefully aligned at the factory for the specified performance across the amateur bands. Realignment should therefore not be necessary except in the event of a component failure. All component replacement and service should be performed only by an authorized Yaesu representative, or the warranty policy may be voided.

The following procedures cover the sometimes critical and tedious adjustments that are not normally required once the transceiver has left the factory. However, if damage occurs and some parts subsequently be replaced, realignment may be required. If a sudden problem occurs during normal operation, it is likely due to component failure; realignment should not be done until after the faulty component has been replaced.

We recommend that servicing be performed only by authorized Yaesu service technicians who are experienced with the circuitry and fully equipped for repair and alignment. Therefore, if a fault is suspected, contact the dealer from whom the transceiver was purchased for instructions regarding repair. Authorized Yaesu service technicians realign all circuits and make complete performance checks to ensure compliance with specifications after replacing any faulty components.

Those who do undertake any of the following alignments are cautioned to proceed at their own risk. Problems caused by unauthorized attempts at realignment are not covered by the warranty policy. Also, Yaesu must reserve the right to change circuits and alignment procedures in the interest of improved performance, without notifying owners.

Under no circumstances should any alignment

be attempted unless the normal function and operation of the transceiver are clearly understood, the cause of the malfunction has been clearly pinpointed and any faulty components replaced, and the need for realignment determined to be absolutely necessary.

The following test equipment (and thorough familiarity with its correct use) is necessary for complete realignment. Correction of problems caused by misalignment resulting from use of improper test equipment is not covered under the warranty policy. While most steps do not require all of the equipment listed, the interactions of some adjustments may require that more complex adjustments be performed afterwards. Do not attempt to perform only a single step unless it is clearly isolated electrically from all other steps. Rather, have all test equipment ready before beginning, and follow all of the steps in a section in the order presented.

### *Required Test Equipment*

- RF Signal Generator with calibrated output level at 500 MHz
- Deviation Meter (Linear Detector)
- AC Voltmeter
- SINAD Meter
- Inline Wattmeter with 5% accuracy at 500 MHz
- Regulated DC Power Supply adjustable from 10 to 17 V, 15 A
- 50- $\Omega$  Dummy Load: 100 Watts at 500 MHz
- Frequency Counter: 100 Hz resolution and  $\pm$  0.2 ppm accuracy at 500 MHz
- AF Signal Generator
- DC Voltmeter: high impedance
- UHF Sampling Coupler

# Alignment

## Alignment Preparation & Precautions

A 50-Ω dummy load and inline wattmeter must be connected to the antenna jack in all procedures that call for transmission, except where specified otherwise. Correct alignment is not possible with an antenna.

After completing one step, read the following step to determine whether the same test equipment will be required. If not, remove the test equipment (except power supply, dummy load and wattmeter, if connected) before proceeding.

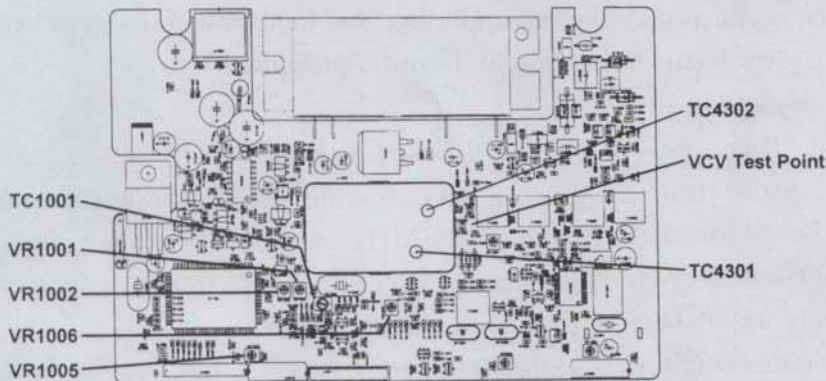
Correct alignment requires that the ambient temperature be the same as that of the transceiver and test equipment, and that this temperature be held constant between 20 and 30 °C (68 ~ 86 °F). If the transceiver is brought into the shop from hot or cold air it should be allowed some

time for equalization with the environment before alignment.

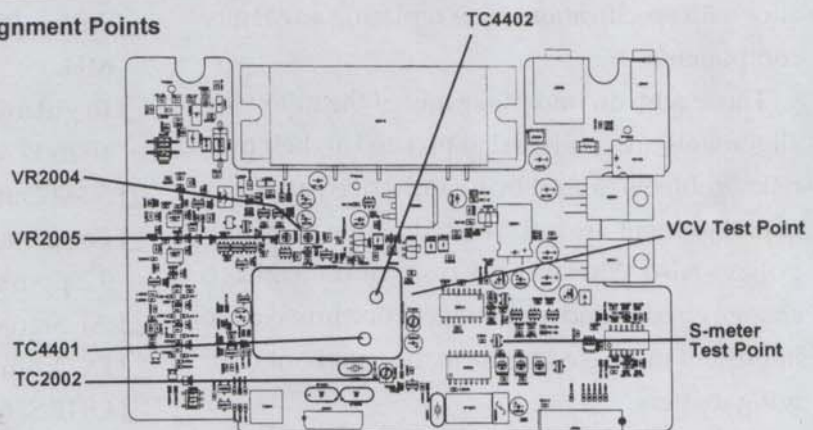
Whenever possible, alignments should be made with oscillator shields and circuit boards firmly affixed in place. Also, the test equipment must be thoroughly warmed up before beginning.

Most alignment procedures call for tuning the transceiver to the high or low band edge, or to band center. The actual frequency differs between different versions, so the technician should make sure of the band limits of each set to be aligned before beginning.

*Note: Signal levels in dB referred to in the alignment procedure are based on 0 dBμ = 0.5 dBμV.*



VHF PLL & Transmitter Alignment Points

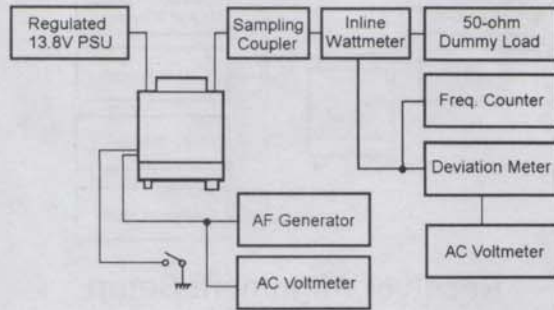


UHF PLL & Transmitter Alignment Points



## PLL & Transmitter

Set up the test equipment as shown for transmitter alignment. Maintain the supply voltage at 13.8V DC for all steps.



### Transmitter Alignment Setup

PLL VCV (*Varactor Control Voltage*)

VHF Band

- Connect Voltmeter between **VCV** test point on the 144-Main Unit and chassis ground.
- Refer to the chart below, transmit and adjust **TC4302** on the 144-VCO Unit for the indicated voltage at that listed frequency. Adjust **TC4301** as necessary for the required voltage while receiving.

Rx & Tx VCV Alignment Data							
Main Band				Sub Band			
Frequency		Voltage		Frequency		Voltage	
Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx
146	146	3.5V	2.0V	440	-	2.5V	-
440	440	3.0V	4.0V	146	-	3.0V	-

UHF Band

- Connect Voltmeter between **VCV** test point on the 430-Main Unit and chassis ground.
- Tune to the required channel, transmit and adjust **TC4402** on the 430-VCO Unit for the voltage indicated in the table.
- While receiving, adjust **TC4401** for the corresponding voltage for that frequency.

Transmitters

VHF Power Output

- Couple the frequency counter to sample the RF output.
- Tune to band center (for the version being aligned), and press the **LOW** button if necessary, to select low power output.
- Key the transmitter and adjust **TC1001** on the 144-Main Unit to match the display to the counter frequency (within 100 Hz).
- Tune to band center (for the version being aligned), and press the **LOW** button, if necessary, to select high power output.
- Key the transmitter and adjust **VR1001** on the 144-Main Unit for 50 watts on the wattmeter.
- Press the **LOW** button to select **MID** power, key the transmitter, and confirm 15 to 25 watts on the wattmeter.
- Press the **LOW** button to select **LOW** power, key the transmitter and adjust **VR1002** on the 144-Main Unit for 4 to 6 watts on the wattmeter.

VHF Transmitter Deviation

- While tuned to the center of the band, adjust the AF generator attenuator for 50 mV output at 1 kHz to the MIC jack.
- Key the transmitter and adjust **VR1006** on the 144-Main Unit for  $\pm 4.5$  kHz (Vers. USA  $\pm 4.0$  kHz) deviation on the deviation meter.
- Reduce the AF injection until the deviation meter shows  $\pm 3.0$  kHz (Vers. USA:  $\pm 2.7$  kHz) deviation, and confirm that the injection level is 5.5 mV.

# Alignment

## UHF Power Output

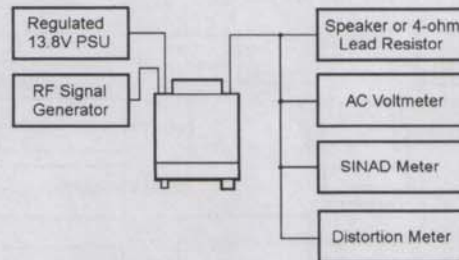
- Couple the frequency counter to sample the RF output.
- Tune to band center (for the version being aligned), and press the **LOW** button if necessary, to select low power output.
- Key the transmitter and adjust **TC2002** on the 430-Main Unit to match the display to the counter frequency (within 100 Hz).
- Tune to band center (for the version being aligned), and press the **LOW** button, if necessary, to select high power output.
- Key the transmitter and adjust **VR2004** on the 430-Main Unit for 35 watts on the wattmeter.
- Press the **LOW** button to select **MID** power, key the transmitter, and confirm 15 to 25 watts on the wattmeter.
- Press the **LOW** button to select **LOW** power, key the transmitter and adjust **VR2005** on the 430-Main Unit for 4 to 6 watts on the wattmeter.

## UHF Transmitter Deviation

- While tuned to the center of the band, adjust the AF generator attenuator for 50 mV output at 1 kHz to the MIC jack.
- Key the transmitter and adjust **VR1005** on the 144-Main Unit for  $\pm 4.5$  kHz (Vers. USA  $\pm 4.0$  kHz) deviation on the deviation meter.
- Reduce the AF injection until the deviation meter shows  $\pm 3.0$  kHz (Vers. USA:  $\pm 2.7$  kHz) deviation, and confirm that the injection level is 5.5 mV.

## Receivers

Set up the test equipment as shown here for receiver alignment.



## Receiver Alignment Setup

### VHF Interstage Transformers

- Connect Voltmeter between S-meter test point on the 144-Main Unit and chassis ground.
- Tune the transceiver and RF signal generator to the center of the VHF band. Modulate the RF signal generator with  $\pm 3.5$  kHz deviation of a 1 kHz tone.
- Adjust **T1003** and **T1005 ~ T1008** on the 144-Main Unit for maximum voltage on the voltmeter.
- Confirm  $-8$  dB $\mu$  or better 12 dB SINAD at the high and low band edges.

### UHF Interstage Transformers

- Connect voltmeter between S-meter test point on the 430-Main Unit and chassis ground.
- Tune the transceiver and RF signal generator to the center of the UHF band. Modulate the RF signal generator with  $\pm 3.5$  kHz deviation of a 1 kHz tone.
- Adjust **T2004** on the 430-Main Unit for maximum voltage on the voltmeter.
- Confirm  $-8$  dB $\mu$  or better 12 dB SINAD at the high and low band edges.

# Alignment

## VHF Squelch Preset

- Tune to the center of the VHF band. With no signal at the antenna jack.
- Set the **SQL** control to the 10-o' clock position, and adjust **VR1003** on the 144-Main Unit so the squelch just closes.

## UHF Squelch Preset

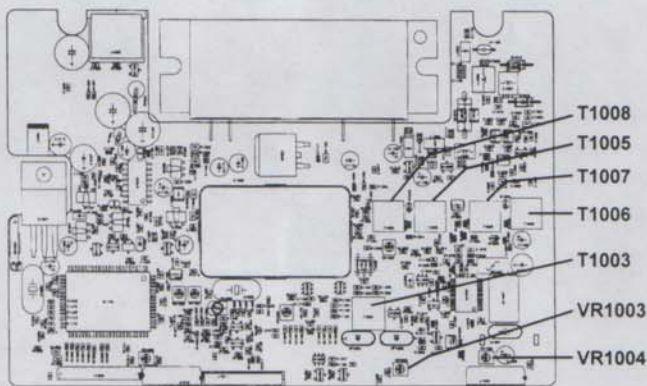
- Tune to the center of the UHF band. With no signal at the antenna jack.
- Set the **SQL** control to the 10-o' clock position, and adjust **VR2002** so the squelch just closes.

## VHF S-Meter Calibration

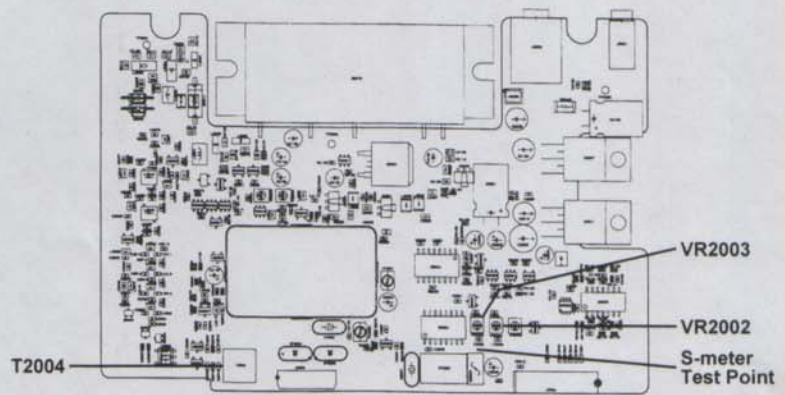
- At the center of the VHF band, inject 25 dB $\mu$  RF modulated with  $\pm 3.5$  kHz deviation of a 1 kHz tone to the antenna connector. Adjust **VR1004** on the 144-Main Unit so that all S-meter segments are just on.

## UHF S-Meter Calibration

- Tune the transceiver and RF signal generator to the center of the UHF band and with the same injection level and modulation, adjust **VR2003** so that all S-meter segments are just on.



VHF Receiver Alignment Points



UHF Receiver Alignment Points

## Circuit Description

The FT-8100R circuitry consists of three major boards: the 144 and 430-Main Units, the Panel Unit and numerous minor boards that mount on these. The Main Unit includes the receiver front ends, IF and PLL subsystem ICs, and supports daughter boards for transmit stages, local VCOs, supply regulation and switching circuits, the microprocessors, and tone generator/ decoder chips. While reading this description, you can refer to the block diagram for an overview of the major circuit blocks, and to the schematic diagrams for component details.

### *Antenna Duplexer*

Incoming RF from the antenna jack passes through a high-pass and low-pass filter network on the 430-Main Unit before application to two band-switching networks: coil L2031, diodes D2005, D2014, D2030 and capacitors C2146, C2147, C2148, C2152, and resistor R2115 on the 430-Main Unit for UHF signals; and coil L1025, diodes D1012, D1019, and D1064 on the 144-Main Unit, and capacitors C1147, C1148, C1120, resistor R1106 on the 144-Main Unit for VHF signals. These networks filter VHF signals from the UHF receiver and UHF signals from the VHF receiver, allowing each band to operate independently while sharing the same antenna connection.

### *VHF Reception*

VHF signals passed by the duplexer are applied to a varactor-tuned band-pass filter consisting of T1006, T1007, D1008 and D1009, after RF amplification by Q1002 (**SGM2016M**). The amplified RF is passed through another RF amplifier Q1001 (**3SK131-V12**), then band-pass filtered again by varactor-tuned resonators T1005, T1008, D1010, and D1011, then fed through diode switch D1003 (**MA80WK**) to the FET Balanced Mixer T1002/T1003 and Q1100/Q1101

(**2SK302GR**).

Buffered 155.05 ~ 219.05 MHz output from the 144-VCO Unit is amplified by Q1007 (**2SC3120**) and applied to the 1st mixer. The resulting 45.05-MHz 1st mixer product is passed through monolithic crystal filters XF1001 and XF1002 to strip away all but the desired signal, which is then amplified by Q1003 (**2SC2714Y**) before delivery to FM IF subsystem IC Q1009 (**TK10930V**), containing the 2nd mixer, 2nd local oscillator, limiter amplifier, noise amplifier, S-meter amplifier and squelch gates. A 2nd local signal is generated from 45.505 MHz crystal X1001, which produces the 455 kHz 2nd IF when mixed with the 1st IF signal within Q1009. The 2nd IF is passed through ceramic filter CF1001 to strip away unwanted mixer products, and is then applied to the limiter amp in Q1009, which removes amplitude variations in the 455 kHz IF before detection of the speech by ceramic discriminator CD1001.

### *VHF Squelch Control*

When no carrier is received, noise at the output of the detector stage in Q1009 is amplified and band-pass filtered by the noise amp section of Q1009 and the network between pin 19 and 20, and then rectified by D1014. The resulting DC squelch control voltage is passed to pin 79 of CPU Q1104. While no carrier is received, pin 8 on Q1104 remains "Low," signaling pin 8 of CPU Q1104 (**M37702E4**) which produces the **BUSY** indication on the display when the squelch is open.

### *VHF AF Output*

Detected audio from pin 12 of Q1009 passes through the de-emphasis network consisting of R1048 and C1078, and high-pass filter consisting of Q1114-3 (**NJM2902M**) and associated circuit-

## Circuit Description

ry, and the squelch gate, then is applied to pin 11 of Q2044 (**M51132FP**).

Normally, the VHF AF signal appears from pin 10 of Q2044, then passes through AF amplifier Q2035-4 (**NJM2902M**), and low pass filter Q2035-3 to audio amplifier Q2037 (**TDA2003H**). The amplified audio signal is applied to the loudspeaker.

When an external speaker is connected to the **UHF SPKR** jack on the rear panel, the VHF AF signal is applied from pin 7 of Q2052, then passed through AF amplifier Q2035-4, and low-pass filtered by Q2035-3 before application to audio amplifier Q2037 (**TDA2003H**). Amplified audio is delivered via **UHF SPKR** jack to the external speaker.

### *UHF Reception*

The UHF signal is amplified by Q2001 (**SGM2016M**) before it gets to the input band-pass filter (BPF). It then is amplified by Q2002 (**SGM2016M**) and passes through the BPF before it arrives at diode switch D2004 (**MA80WK**) and is applied to the FET Balanced Mixer consisting of T2002, T2004, and Q2056/Q2057 (**2SK302GR**).

A local signal generated from the 430-VCO Unit is fed through diode switch D2011 (**MA80WK**) to buffer amplifier Q2007 (**2SC3120**). The buffered local signal then passed through another diode switch D2010 (**MA80WK**), before application to the FET Balanced Mixer.

The resulting 58.525 MHz 1st IF signal product is passed through monolithic crystal filters XF2001 and XF2002 to strip away all but the desired signal, which is then amplified by Q2003 (**2SC2714Y**) before delivery to FM IF subsystem IC Q2004 (**MC3372ML**), which contains the 2nd mixer, 2nd local oscillator, limiter amplifier, noise amplifier, and S-meter amplifier.

A 2nd local signal is generated from 58.07 MHz crystal X2001, to produce the 455 kHz 2nd IF when mixed with the 1st IF signal within Q2004. The 2nd IF passes through ceramic filter CF2001 (**KBF-455R-15A**) to strip away unwanted mixer products, and is then applied to the limiter amp in Q2004, which removes amplitude variations in the 455 kHz IF before detection of speech by ceramic discriminator CD2001 (**CDB455C7**).

### *UHF Single-Band Dual Receive*

When UHF single-band dual receive operation is active, a portion of the received UHF RF passes through high-pass and low-pass filters and antenna switching network before reaching RF amplifier Q2001 (**SGM2016M**). The amplified RF signal is passed through the band-pass filter consisting of C2052, C2053, C2068, C2069, C2077, L2012 and L2018, and is amplified again by Q2006 (**2SC3356-R24**), and is then fed through the diode switch D2007 (**MA80WK**) to the 144-Main Unit.

In the 144-Main Unit, the UHF signal passes through diode switch D1007 (**HSU277**) to the FET Balanced Mixer consisting of T1002, T1003, and Q110/Q1101 (**2SK302GR**).

The local signal for the sub-receiver (generated from the 144-VCO Unit) is fed through diode switch D1018 (**MA80WK**) to doubler Q1006 (**2SC3120**). The doubled local signal passes through the high-pass filter consisting of the C1057, C1087 and C1088 to the FET Balanced Mixer Q1100, Q1101.

The resulting 45.05 MHz sub receiver 1st IF signal is received just as a VHF signal would be in "normal" VHF operation.

### *UHF Squelch Control*

When no carrier is present, noise at the out-

## Circuit Description

put of the detector stage in Q2004 is band-pass filtered by the filter/amp section of Q2004 and associated circuitry. The filtered noise signal is rectified by D2001 (**MA716**), and the resulting DC squelch control voltage is applied on pin 75 of CPU Q1104 (**M37702E4**) on the 144-Main- Unit.

When a carrier appears at the discriminator, noise is removed from the output, causing pin 51 of Q1104 (**M37702E4**) to go "Low," signaling microprocessor Q1104 to activate the SQL transistor Q2061 (**IMH5**).

### *UHF Audio*

Detected audio from pin 9 of Q2004 is passed through the de-emphasis circuit consisting of R2012 and C2018, a high-pass filter consisting of Q2009-2 (**M5223FP**) and associated circuitry, and the squelch gate, then is applied to pin 15 of Q2044 (**M51132FP**).

Normally, the UHF AF signal appears from pin 6 of Q2052, and then passes through AF amplifier Q2035-4 (**NJM2902M**), low-pass filter Q2035-3 and on to audio amplifier Q2037 (**TDA2003H**). The amplified audio signal is then applied to the loudspeaker.

When an external speaker is connected to the **UHF SPKR** jack on the rear panel, the UHF AF signal appearing from pin 1 of Q2052 passes through AF amplifier Q2035-1, low-pass filter Q2035-2 and on to audio amplifier Q2041 (**TDA2003H**). The amplified audio signal is delivered via the **UHF SPKR** jack to the external speaker.

### *Transmit Signal Path*

The modulated audio signal originates at the condenser microphone. The AF high frequency component is pre-emphasized by C1179, R1142, R1145, R1160, and Q1032-2 (**NJM2902M**) and amplified by the microphone amplifier circuit.

Then, the modulated signal is subjected to amplitude limiting by an IDC (Instantaneous Deviation Control) circuit made up of C1180, R1143, R1146, and Q1032-3 (**NJM2902M**). The signal is then passes through a splatter filter consisting of C1181, C1187, C1193, C1194, R1147, R1155, R1156, R1157, R1172, and Q1032-4 (**NJM2902M**). During 144 MHz transmission, the modulated signal is delivered via deviation control VR1006 to pin 4 of the 144-VCO Unit. In the case of 430 MHz band transmission, the modulated signal is delivered to deviation control VR1005, adjusted to the proper deviation level, then applied to pin 4 of the 430-VCO Unit.

DTMF, Beep, CTCSS tone, or tone burst signals for transmit are generated from the 144 - Main - Unit and applied to the buffer amplifier circuit.

### *VHF Transmit Signal Path*

The modulated signal input to pin 4 of J4302 ("MOD" terminal) of the 144-VCO Unit frequency-modulates the transmitting VCO made up of D4306 (**1SV229**), Q4304 (**2SC3356-R24**), etc.

The frequency-modulated signal is buffer-amplified by Q4305 (**2SC3356-R24**) and exits from pin 1 of J4301 of the 144-VCO Unit. The signal output from pin 1 of J4301 of the 144-VCO Unit is buffer-amplified by Q1015 (**2SC3356-R24**) and applied to Q1056 (**2SC3357**) and Q1055 (**2SC2954**).

The signal output from Q1055 is applied for amplification to pin 1 of the Q1014 power module (**M67781L**) and exits from pin 4 of the power module. The power module's gain is controlled by the APC circuit.

Power module output passes through a low-pass filter made up of C1109, C1111, C1113, C1114, C1126, L1022, and L1024 to the antenna

## Circuit Description

switch circuit and further to the duplexer circuit, and is delivered to the antenna from the antenna terminal.

### *VHF Tx APC circuit*

A portion of the power module output is rectified by Schottky diodes D1059 and D1060 (**MA716**), etc. and delivered to the APC circuit made up of Q1023 (**FMS1**), Q1022 (**IMX1**), and Q1021 (**2SA1870E**) as a DC voltage which is proportional to the output level of the power module.

The control data for RF output levels are set by CPU Q1104 (**M37702E4**) on the 144 - Main - Unit. This control data is sent to CPU Q1104 (**M37702E4**) from which a voltage appropriate to the control data input to Q1057 (**IMH5**) is derived.

Q1023 (**FMS1**) differentially-amplifies the rectified DC voltage from the power module and the reference voltage from the VR1001. Q1022 (**IMX1**) converts these into the control voltage for Q1021. The Q1021 (**2SA1870E**) APC control circuit outputs an APC voltage appropriate to the control voltage and varies the APC voltages, thereby controlling transmitter output. It is possible to select "High", "Mid", or "Low" for the transmission output.

If the PLL circuit unlocks during transmission, pin 2 of Q1033 (**SC370651F**) turns "High" and an unlock signal is sent from Q1035 (**2SA1179 - M6**). This unlock signal is applied to Q1022 (**IMX1**) to stop the operation of Q1022. At the same time, Q1021 (**2SA1870E**) (APC control circuit) stops operating, causing the APC voltage to become 0 V. Transmission is stopped when the APC voltages of the power module and 144-drive circuit, respectively, become 0 V. During reception, a voltage similar to an unlock signal

is delivered to Q1022 (**IMX1**) and as the APC voltage of the power module becomes 0 V, transmission is disabled.

### *UHF Transmit Signal Path*

The modulated signal input to pin 4 of J4402 ("MOD" terminal) of the 430-VCO Unit frequency modulates the transmitting VCO made up of D4406 (**1SV229**), D4407 (**1SV230**), Q4403 (**2SC3356-R24**), etc.

The signal is buffer-amplified by Q4404 (**2SC3356-R24**) and exits from pin 5 of J4401 of the 430-VCO Unit.

The signal from pin 5 of J4401 of the 430-VCO Unit is buffer amplified by Q2016 (**2SC3356-R24**) and delivered to the 430-drive circuit, which consists of Q2050 (**2SC3357**) and Q2051 (**2SC2954**).

The signal from the 430-drive circuit is sent for amplification to pin 1 of power module Q2015 (**M57788MR**) and exits from pin 5 of the power module. The power module's gain is controlled by the APC circuit.

The output from the power module passes through a low-pass filter made up of C2121, C2131, C2135, C2275, L2028, and L2029 to the antenna switch circuit, on to the duplexer circuit, and finally to the antenna from the antenna terminal of the 144-Main Unit.

### *UHF Tx APC circuit*

A portion of the output from the power module is rectified by Schottky diodes D2022 and D2028 (**MA716**), etc. and sent to the APC circuit made up of Q2022 (**FMS1**), Q2021 (**IMX1**), and Q2024 (**2SA1870E**) as a DC voltage which is proportional to the output level of the power module.

The control data for RF output level is preset by CPU Q1104 (**M37702E4**) on the 144 - Main -

## Circuit Description

Unit. This control data is sent to shift register Q2039 (**μPD4094BG**), from which a voltage appropriate to the control data value is sent to Q2022 as a reference voltage.

Q2022 (**FMS1**) differentially-amplifies the rectified DC voltage from the power module and the reference voltage from the shift register. Q2021 (**IMX1**) converts this difference into the control voltage for Q2022. APC controller Q2024 (**2SA1870E**) outputs an appropriate control voltage and varies the APC voltage at pin 2 of the power module and 430-drive circuit, thereby controlling the RF output level. It is possible to select "High", "Mid", or "Low" for the RF output power levels.

If the PLL circuit unlocks during transmission, pin 2 of Q2032 (**SC370651F**) turns "High" and an unlock signal is sent from Q2036 (**DTA143EK**). This unlock signal is input to Q2021 (**IMX1**) to disable Q2021 (**IMX1**). At the same time, APC controller Q2024 (**2SA1870E**) voltage to become 0 V, thus disabling transmission from the power module and 430-drive circuit. During reception, a voltage similar to an unlock signal is sent to Q2021 (**IMX1**), and the APC voltages of the power module and 430-drive circuit become 0 V, transmission is disabled.

### VHF PLL

The PLL circuit consists of PLL subsystem IC Q1033 (**SC370651F**), which includes a comparative frequency divider, reference frequency divider, phase comparator, charge pump, shift register, latch, etc.

The output from pin 2 of J4301 of the 144-VCO Unit is divided by the comparative frequency divider according to the frequency dividing data that is associated with the setting frequency input from the CPU. It is then sent to the phase

comparator.

The 12.8 MHz frequency of the reference oscillator circuit made up of X1002 and Q1029 (**2SC2812-L6**) is divided by the reference frequency divider into 2,560 or 2,048 parts to become 5 kHz or 6.25 kHz comparative reference frequencies, which are utilized by the phase comparator. Either of the comparative reference frequencies is selected according to frequency steps: 5 kHz is selected for the 5/ 10/ 15/ 20 kHz steps, and 6.25 kHz is selected for the 12.5/ 25/ 50 kHz steps.

The phase comparator compares the phase between the frequency-divided oscillation frequency of the VCO circuit and comparative reference frequency (5 kHz or 6.25 kHz) and its output is a pulse corresponding to the phase difference. This pulse is integrated by the charge pump and loop filter into a control voltage (**VCV**) to control the oscillation frequency of the VCO circuit.

When the power is turned on or the tx/rx operation is switched, the frequency and the frequency dividing ratio data for the reference frequency divider are serially transmitted from the CPU to the divider. This serial data is converted by the shift register and latch into parallel data to control the reference frequency divider and comparative frequency divider.

The presence or absence of phase difference as the result of comparison by the phase comparator is sent as an "Unlock" signal from the lock detector circuit inside the PLL IC. This signal is sent to the APC circuit to disable transmission when the PLL circuit is unlocked.

### UHF PLL

The PLL circuit consists of PLL subsystem IC Q2032 (**SC370651F**), which includes a compar-



## Circuit Description

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ative frequency divider, reference frequency divider, phase comparator, charge pump, shift register, latch, etc.

The output from pin 2 of J4401 of the 430-VCO Unit is divided by the comparative frequency divider according to the frequency dividing data that is associated with the setting frequency input from the CPU. It is then sent to the phase comparator.

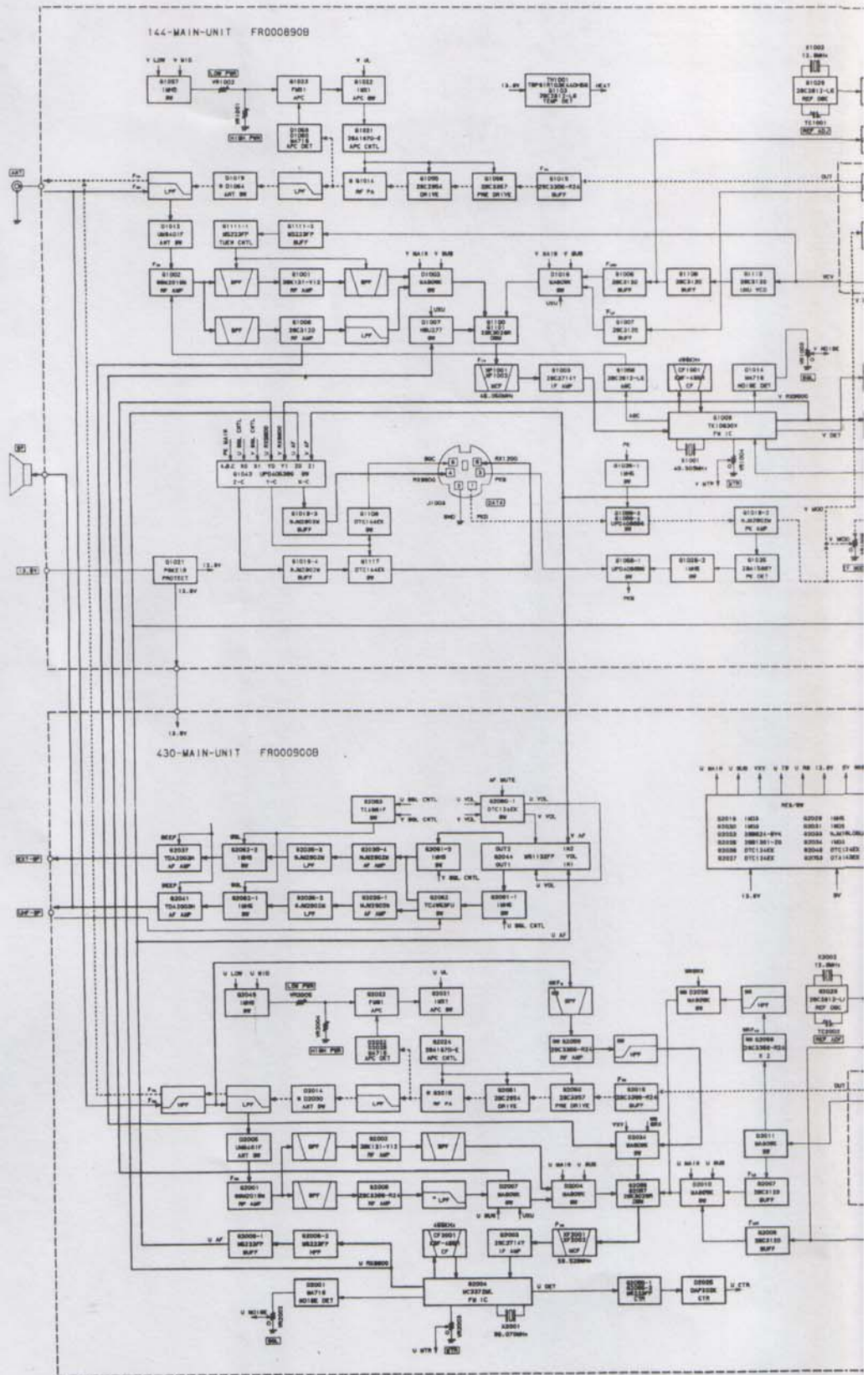
The 12.8 MHz frequency of the reference oscillator circuit made up of X2002 and Q2029 (**2SC2812-L6**) is divided by the reference frequency divider into 2,560 or 2,048 parts to become 5 kHz or 6.25 kHz comparative reference frequencies, which are utilized by the phase comparator. Either of the comparative reference frequencies is selected according to frequency steps: 5 kHz is selected for the 5/ 10/ 15/ 20 kHz steps, and 6.25 kHz is selected for the 12.5/ 25/ 50 kHz steps.

The phase comparator compares the phase between the frequency-divided oscillation frequency of the VCO circuit and comparative reference frequency (5 kHz or 6.25 kHz) and its output is a pulse corresponding to the phase difference. This pulse is integrated by the charge pump and loop filter into a control voltage (**VCV**) to control the oscillation frequency of the VCO circuit.

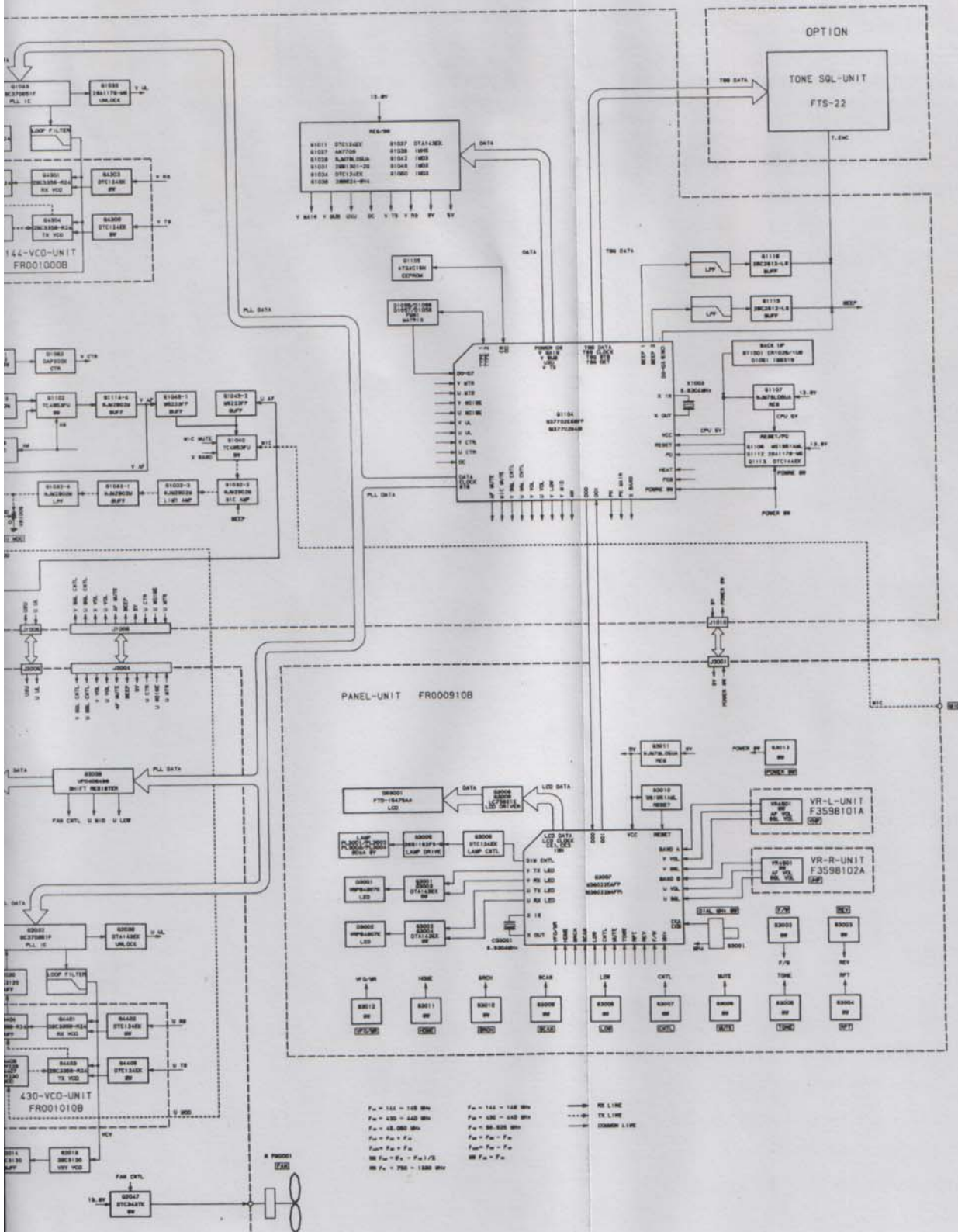
When the power is turned on or the tx/rx operation is switched, the frequency and the frequency dividing ratio data for the reference frequency divider are sent serially from the CPU to the PLL IC. This serial data is converted by the shift register and latch into parallel data to control the reference frequency divider and comparative frequency divider.

The presence or absence of phase difference

as the result of comparison by the phase comparator is sent as an "**Unlock**" signal from the lock detector circuit inside the PLL IC. This signal is sent to the APC circuit to disable transmission when the PLL circuit is unlocked.



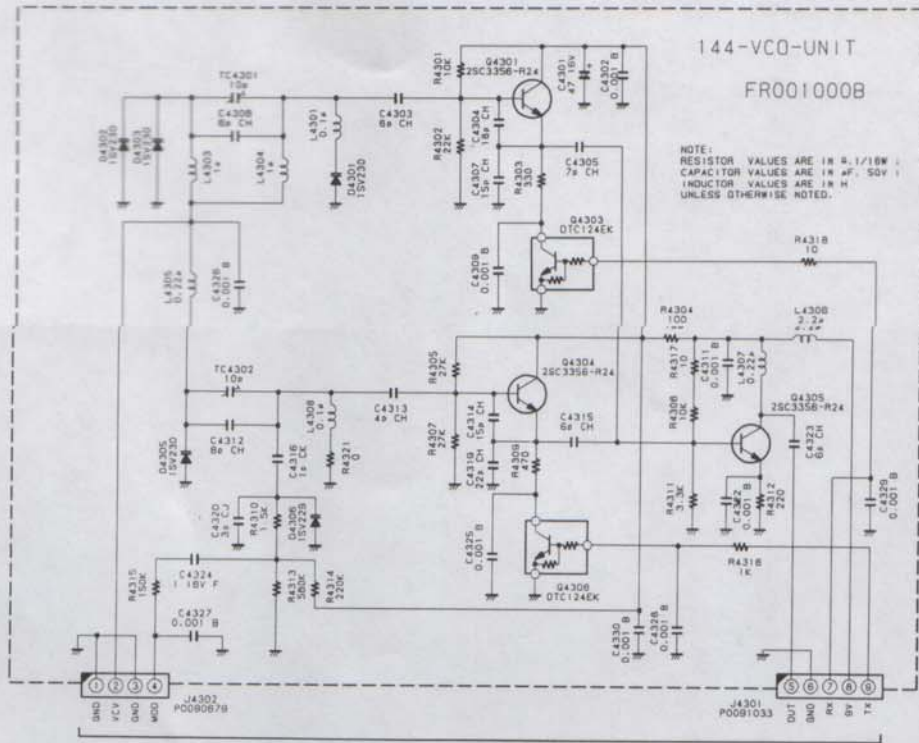
# Block Diagram



$F_n = 142 - 148 \text{ MHz}$        $F_n = 142 - 148 \text{ MHz}$       ——— RE LINE  
 $F_n = 130 - 140 \text{ MHz}$        $F_n = 130 - 140 \text{ MHz}$       - - - - TX LINE  
 $F_n = 42,000 \text{ MHz}$              $F_n = 90,000 \text{ MHz}$   
 $F_n = F_n \times F_n$                  $F_n = F_n \times F_n$   
 $F_n = F_n \times F_n$                  $F_n = F_n \times F_n$   
 $90 \text{ MHz} = F_n - F_n / 2$          $90 \text{ MHz} = F_n$

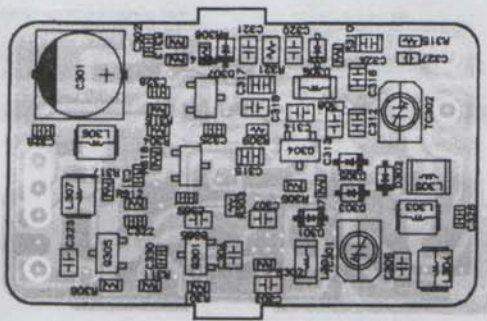
# 144-VCO Unit

## Circuit Diagram

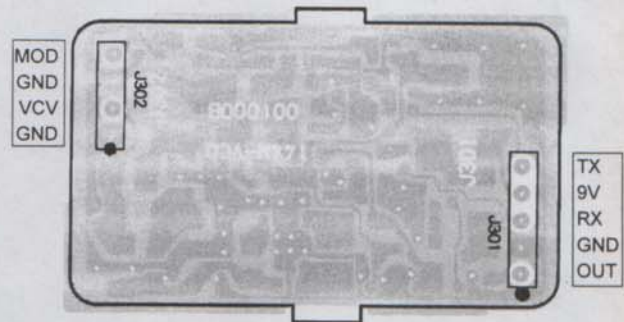


To 144-Main Unit (See Page 4E-1, 4E-5)

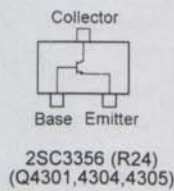
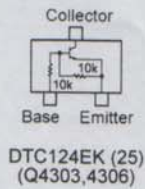
## Parts Layout



obverse view of component side



obverse view of connector side



# 144-VCO Unit

## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** 144-VCO UNIT ***									
	PCB with Components					CB0129001		-14	
	PCB with Components					CB0129004	VERSION A1	15-	
	PCB with Components					CB0129005	VERSION A2	15-	
	PCB with Components					CB0129006	VERSION A3	15-	
	PCB with Components					CB0129007	VERSION B1	15-	
	PCB with Components					CB0129008	VERSION B2	15-	
	PCB with Components					CB0129009	VERSION B3	15-	
	PCB with Components					CB0129010	VERSION C1	15-	
	PCB with Components					CB0129011	VERSION C2	15-	
	PCB with Components					CB0129012	VERSION C3	15-	
	PCB with Components					CB0129013	VERSION D1	15-	
	PCB with Components					CB0129014	VERSION D2	15-	
	PCB with Components					CB0129015	VERSION H1	15-	
	PCB with Components					CB0129016	VERSION H2	15-	
	Printed Circuit Board					FR001000B		1-	
C 4301	AL ELECTRO. CAP.	47uF	16V		ECEV1CA470SP	K48120005		1-	
C 4302	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 4303	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207		1-	
C 4304	CHIP CAP.	18pF	50V	CH	GRM40CH180J50PT	K22170217		1-	
C 4305	CHIP CAP.	7pF	50V	CH	GRM40CH070D50PT	K22170208	VERSION A1	1-	
C 4305	CHIP CAP.	7pF	50V	CH	GRM40CH070D50PT	K22170208	VERSION A2	1-	
C 4305	CHIP CAP.	7pF	50V	CH	GRM40CH070D50PT	K22170208	VERSION A3	1-	
C 4305	CHIP CAP.	3pF	50V	CJ	GRM40CJ030C50PT	K22170204	VERSION B1	1-	
C 4305	CHIP CAP.	3pF	50V	CJ	GRM40CJ030C50PT	K22170204	VERSION B2	1-	
C 4305	CHIP CAP.	7pF	50V	CH	GRM40CH070D50PT	K22170208	VERSION B3	1-	
C 4305	CHIP CAP.	3pF	50V	CJ	GRM40CJ030C50PT	K22170204	VERSION C1	1-	
C 4305	CHIP CAP.	3pF	50V	CJ	GRM40CJ030C50PT	K22170204	VERSION C2	1-	
C 4305	CHIP CAP.	7pF	50V	CH	GRM40CH070D50PT	K22170208	VERSION C3	1-	
C 4305	CHIP CAP.	3pF	50V	CJ	GRM40CJ030C50PT	K22170204	VERSION D1	1-	
C 4305	CHIP CAP.	3pF	50V	CJ	GRM40CJ030C50PT	K22170204	VERSION D2	1-	
C 4305	CHIP CAP.	7pF	50V	CH	GRM40CH070D50PT	K22170208	VERSION H1	1-	
C 4305	CHIP CAP.	7pF	50V	CH	GRM40CH070D50PT	K22170208	VERSION H2	1-	
C 4306	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207		1-	
C 4307	CHIP CAP.	15pF	50V	CH	GRM40CH150J50PT	K22170215		1-	
C 4309	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 4311	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 4312	CHIP CAP.	8pF	50V	CH	GRM40CH080D50PT	K22170209		1-	
C 4313	CHIP CAP.	4pF	50V	CH	GRM40CH040C50PT	K22170205		1-	
C 4314	CHIP CAP.	15pF	50V	CH	GRM40CH150J50PT	K22170215		1-	
C 4315	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207		1-	
C 4316	CHIP CAP.	1pF	50V	CK	GRM40CK010C50PT	K22170202		1-	
C 4319	CHIP CAP.	22pF	50V	CH	GRM40CH220J50PT	K22170219		1-	
C 4320	CHIP CAP.	3pF	50V	CJ	GRM40CJ030C50PT	K22170204		1-	
C 4322	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 4323	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207	VERSION A1	1-	
C 4323	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207	VERSION A2	1-	
C 4323	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207	VERSION A3	1-	
C 4323	CHIP CAP.	5pF	50V	CH	GRM40CH050C50PT	K22170206	VERSION B1	1-	
C 4323	CHIP CAP.	5pF	50V	CH	GRM40CH050C50PT	K22170206	VERSION B2	1-	
C 4323	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207	VERSION B3	1-	
C 4323	CHIP CAP.	5pF	50V	CH	GRM40CH050C50PT	K22170206	VERSION C1	1-	
C 4323	CHIP CAP.	5pF	50V	CH	GRM40CH050C50PT	K22170206	VERSION C2	1-	
C 4323	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207	VERSION C3	1-	
C 4323	CHIP CAP.	5pF	50V	CH	GRM40CH050C50PT	K22170206	VERSION D1	1-	
C 4323	CHIP CAP.	5pF	50V	CH	GRM40CH050C50PT	K22170206	VERSION D2	1-	
C 4323	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207	VERSION H1	1-	

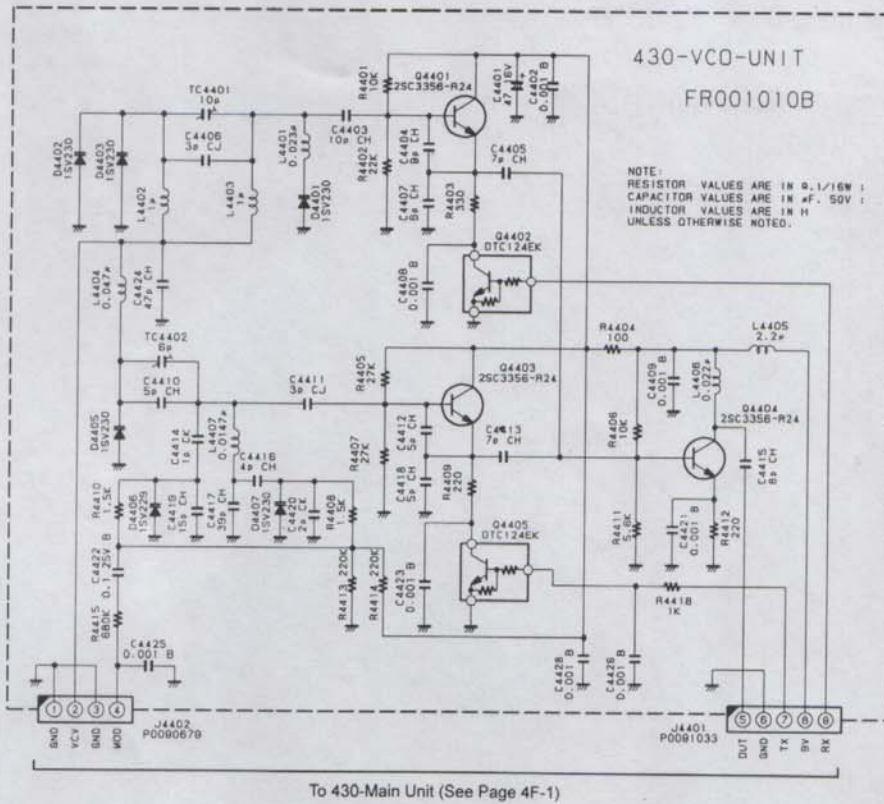
# 144-VCO Unit

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
C 4323	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207	VERSION H2	1-	
C 4324	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-	
C 4324	CHIP CAP.	1uF	16V	F	EMK212F105Z00T	K22121001		9-	
C 4325	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 4326	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 4327	CHIP CAP.	47pF	50V	CH	GRM39CH470J50PT	K22174227		1-	
C 4327	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		9-	
C 4328	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 4329	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 4330	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 4331	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	VERSION B1	1-	
C 4331	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	VERSION B2	1-	
C 4331	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	VERSION C1	1-	
C 4331	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	VERSION C2	1-	
C 4331	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	VERSION D1	1-	
C 4331	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	VERSION D2	1-	
C 4332	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	VERSION B1	1-	
C 4332	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	VERSION B2	1-	
C 4332	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	VERSION C1	1-	
C 4332	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	VERSION C2	1-	
C 4332	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	VERSION D1	1-	
C 4332	CHIP CAP.	12pF	50V	CH	GRM39CH120J50PT	K22174213	VERSION D2	1-	
D 4301	DIODE				1SV230 TPH3	G2070126		1-	
D 4302	DIODE				1SV230 TPH3	G2070126		1-	
D 4303	DIODE				1SV230 TPH3	G2070126		1-	
D 4305	DIODE				1SV230 TPH3	G2070126		1-	
D 4306	DIODE				1SV229 TPH3	G2070256		1-	
J 4301	CONNECTOR				9210B-1-05-T	P0091033		1-	
J 4302	CONNECTOR				9210B-1-04-T	P0090679		1-	
L 4301	CHIP COIL	0.1uH			LQN1AR10J04	L1690260		1-	
L 4303	M.RFC	1uH			ELJ-FA1R0MF	L1690402		1-	
L 4304	M.RFC	1uH			ELJ-FA1R0MF	L1690402		1-	
L 4305	M.RFC	0.22uH			ELJ-FAR22MF	L1690396		1-	
L 4306	M.RFC	2.2uH			ELJ-FA2R2MF	L1690399		1-	
L 4307	M.RFC	0.22uH			ELJ-FAR22MF	L1690396		1-	
L 4308	CHIP COIL	0.1uH			LQN1AR10J04	L1690260		1-	
L 4309	M.RFC	0.056uH			HK1608 56NJ-T	L1690525	VERSION B1	1-	
L 4309	M.RFC	0.056uH			HK1608 56NJ-T	L1690525	VERSION B2	1-	
L 4309	M.RFC	0.056uH			HK1608 56NJ-T	L1690525	VERSION C1	1-	
L 4309	M.RFC	0.056uH			HK1608 56NJ-T	L1690525	VERSION C2	1-	
L 4309	M.RFC	0.056uH			HK1608 56NJ-T	L1690525	VERSION D1	1-	
L 4309	M.RFC	0.056uH			HK1608 56NJ-T	L1690525	VERSION D2	1-	
Q 4301	TRANSISTOR				2SC3356-T2B R24	G3333567D		1-	
Q 4303	TRANSISTOR				DTC124EK T146	G3070034		1-	
Q 4304	TRANSISTOR				2SC3356-T2B R24	G3333567D		1-	
Q 4305	TRANSISTOR				2SC3356-T2B R24	G3333567D		1-	
Q 4306	TRANSISTOR				DTC124EK T146	G3070034		1-	
R 4301	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 4302	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 4303	CHIP RES.	330	1/16W	5%	RMC1/16 331JATP	J24185331		1-	
R 4304	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 4305	CHIP RES.	27k	1/16W	5%	RMC1/16 273JATP	J24185273		1-	
R 4306	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 4307	CHIP RES.	27k	1/16W	5%	RMC1/16 273JATP	J24185273		1-	
R 4309	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	
R 4310	CHIP RES.	1.5k	1/16W	5%	RMC1/16 152JATP	J24185152		1-	
R 4311	CHIP RES.	3.3k	1/16W	5%	RMC1/16 332JATP	J24185332		1-	

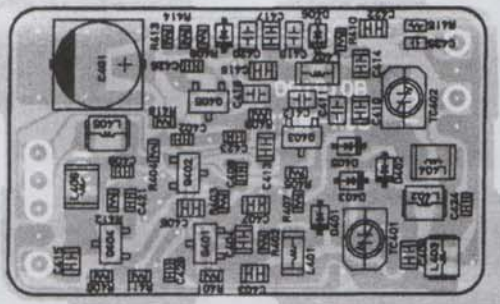
# 144-VCO Unit

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 4312	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 4313	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		1-	
R 4313	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		9-	
R 4314	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		1-	
R 4315	CHIP RES.	150k	1/16W	5%	RMC1/16 154JATP	J24185154		1-	
R 4316	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 4317	CHIP RES.	10	1/16W	5%	RMC1/16 100JATP	J24185100		1-	
R 4318	CHIP RES.	10	1/16W	5%	RMC1/16 100JATP	J24185100		1-	
R 4321	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
TC4301	TRIMMER CAP.	10pF			ECR-KN010C61X	K91000226		1-	
TC4302	TRIMMER CAP.	10pF			ECR-KN010C61X	K91000226		1-	

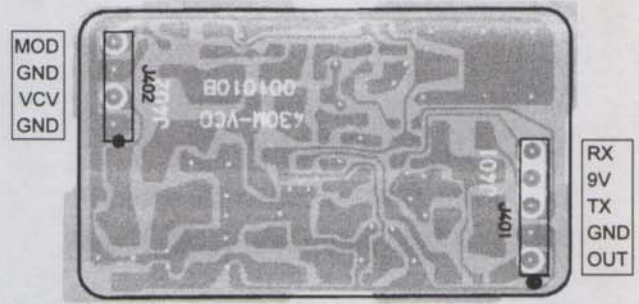
## Circuit Diagram



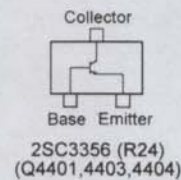
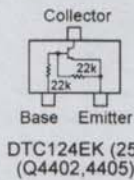
## Parts Layout



obverse view of chip side



obverse view of connector side





# 430-VCO Unit

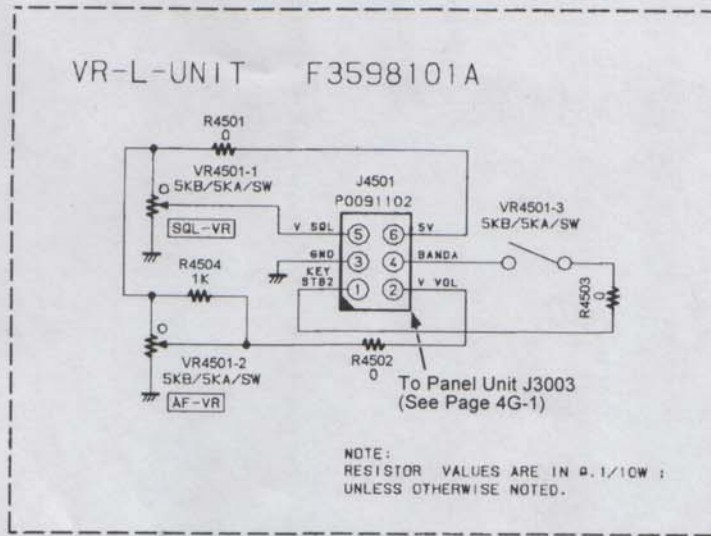
## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** 430-VCO UNIT ***									
PCB with Components						CB0130001			
Printed Circuit Board						FR001010B			
C 4401	AL.ELECTRO.CAP.	47uF	16V		ECEV1CA470SP	K48120005			1-
C 4402	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			1-
C 4403	CHIP CAP.	10pF	50V	CH	GRM40CH100D50PT	K22170211			1-
C 4404	CHIP CAP.	9pF	50V	CH	GRM40CH090D50PT	K22170210			1-
C 4405	CHIP CAP.	7pF	50V	CH	GRM40CH070D50PT	K22170208			1-
C 4406	CHIP CAP.	3pF	50V	CJ	GRM40CJ030C50PT	K22170204			1-
C 4407	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207			1-
C 4408	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			1-
C 4409	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			1-
C 4410	CHIP CAP.	5pF	50V	CH	GRM40CH050C50PT	K22170206			1-
C 4411	CHIP CAP.	3pF	50V	CJ	GRM40CJ030C50PT	K22170204			1-
C 4412	CHIP CAP.	5pF	50V	CH	GRM40CH050C50PT	K22170206			1-
C 4413	CHIP CAP.	7pF	50V	CH	GRM40CH070D50PT	K22170208			1-
C 4414	CHIP CAP.	1pF	50V	CK	GRM40CK010C50PT	K22170202			1-
C 4415	CHIP CAP.	8pF	50V	CH	GRM40CH080D50PT	K22170209			1-
C 4416	CHIP CAP.	4pF	50V	CH	GRM40CH040C50PT	K22170205			1-
C 4417	CHIP CAP.	39pF	50V	CH	GRM40CH390J50PT	K22170225			1-
C 4418	CHIP CAP.	5pF	50V	CH	GRM40CH050C50PT	K22170206			1-
C 4419	CHIP CAP.	15pF	50V	CH	GRM40CH150J50PT	K22170215			1-
C 4420	CHIP CAP.	2pF	50V	CK	GRM40CK020C50PT	K22170203			1-
C 4421	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			1-
C 4422	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811			1-
C 4423	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			1-
C 4424	CHIP CAP.	47pF	50V	CH	GRM39CH470J50PT	K22174227			1-
C 4425	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			1-
C 4426	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			1-
C 4428	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			1-
D 4401	DIODE				1SV230 TPH3	G2070126			1-
D 4402	DIODE				1SV230 TPH3	G2070126			1-
D 4403	DIODE				1SV230 TPH3	G2070126			1-
D 4405	DIODE				1SV230 TPH3	G2070126			1-
D 4406	DIODE				1SV229 TPH3	G2070256			1-
D 4407	DIODE				1SV230 TPH3	G2070126			1-
J 4401	CONNECTOR				9210B-1-05-T	P0091033			1-
J 4402	CONNECTOR				9210B-1-04-T	P0090679			1-
L 4401	CHIP COIL	0.023uH			LQN1A23NJ04	L1690252			1-
L 4402	M.RFC	1uH			ELJ-FA1R0MF	L1690402			1-
L 4403	M.RFC	1uH			ELJ-FA1R0MF	L1690402			1-
L 4404	CHIP COIL	0.047uH			LQN2A47NM	L1690007			1-
L 4404	CHIP COIL	0.047uH			LQN21A47NJ04	L1690617			15-
L 4405	M.RFC	2.2uH			ELJ-FA2R2MF	L1690399			1-
L 4406	CHIP COIL	0.022uH			LQN2A22NM	L1690002			1-
L 4406	CHIP COIL	0.022uH			LQN21A22NJ04	L1690613			15-
L 4407	CHIP COIL	0.0147uH			LQN1A15NJ04	L1690251			1-
Q 4401	TRANSISTOR				2SC3356-T2B R24	G3333567D			1-
Q 4402	TRANSISTOR				DTC124EK T146	G3070034			1-
Q 4403	TRANSISTOR				2SC3356-T2B R24	G3333567D			1-
Q 4404	TRANSISTOR				2SC3356-T2B R24	G3333567D			1-
Q 4405	TRANSISTOR				DTC124EK T146	G3070034			1-
R 4401	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103			1-
R 4402	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223			1-
R 4403	CHIP RES.	330	1/16W	5%	RMC1/16 331JATP	J24185331			1-
R 4404	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101			1-
R 4405	CHIP RES.	27k	1/16W	5%	RMC1/16 273JATP	J24185273			1-

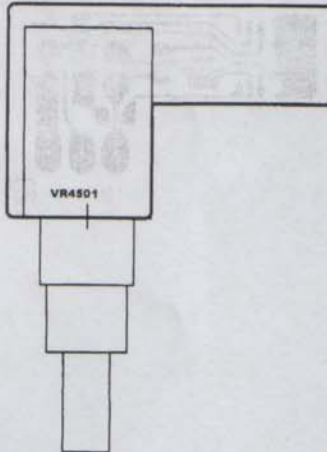
# 430-VCO Unit

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 4406	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 4407	CHIP RES.	27k	1/16W	5%	RMC1/16 273JATP	J24185273		1-	
R 4408	CHIP RES.	1.5k	1/16W	5%	RMC1/16 152JATP	J24185152		1-	
R 4409	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 4410	CHIP RES.	1.5k	1/16W	5%	RMC1/16 152JATP	J24185152		1-	
R 4411	CHIP RES.	5.6k	1/16W	5%	RMC1/16 562JATP	J24185562		1-	
R 4412	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 4413	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		1-	
R 4414	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		1-	
R 4415	CHIP RES.	680k	1/16W	5%	RMC1/16 684JATP	J24185684		1-	
R 4418	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
TC4401	TRIMMER CAP.	10pF			ECR-KN010C61X	K91000226		1-	
TC4402	TRIMMER CAP.	6pF			ECR-KN006A61X 6P	K91000225		1-	

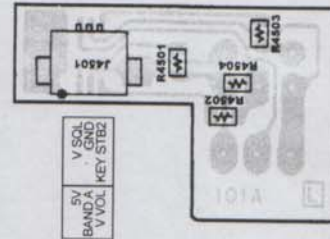
## Circuit Diagram



## Parts Layout



obverse view of component side

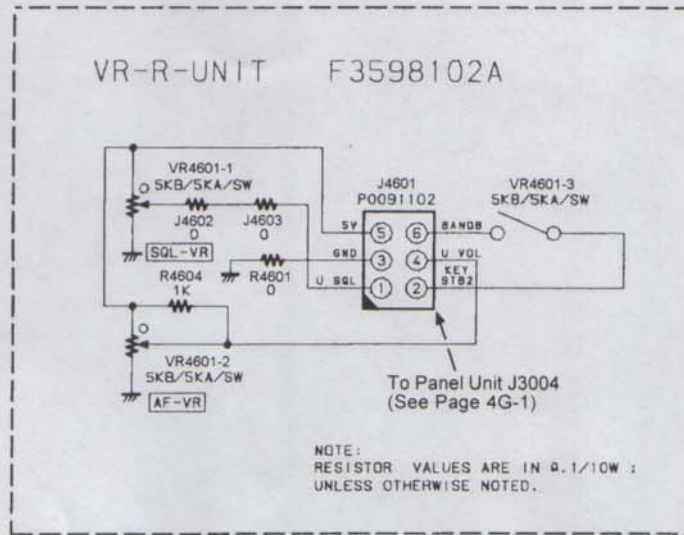


obverse view of connector side

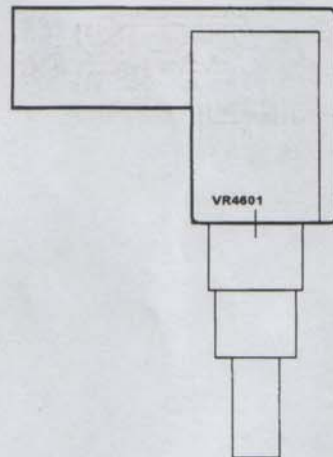
## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** VR-L UNIT ***									
PCB with Components						CB0131001			
Printed Circuit Board						F3598101A		1-	
J 4501	CONNECTOR				IL-WX-6PB-HF-HD-S-B-E1000	P0091102		1-	
R 4501	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 4502	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 4503	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 4504	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		4-	
VR4501	POT.				TP96D00A17.5FB5KX2	J62800118		1-	

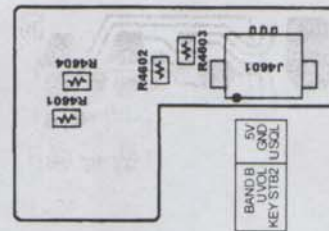
## Circuit Diagram



## Parts Layout



obverse view of component side

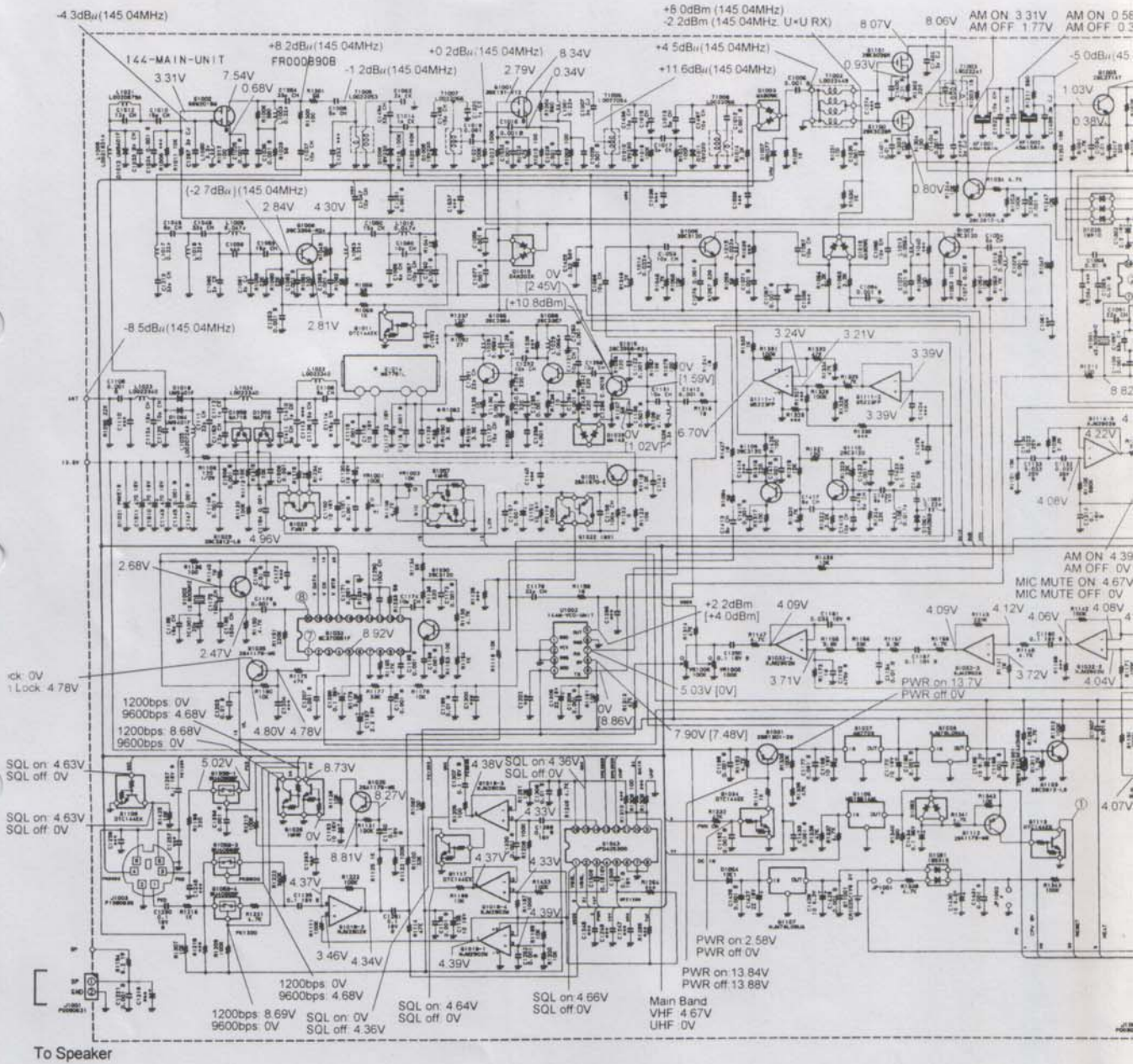


obverse view of connector side

## Parts List

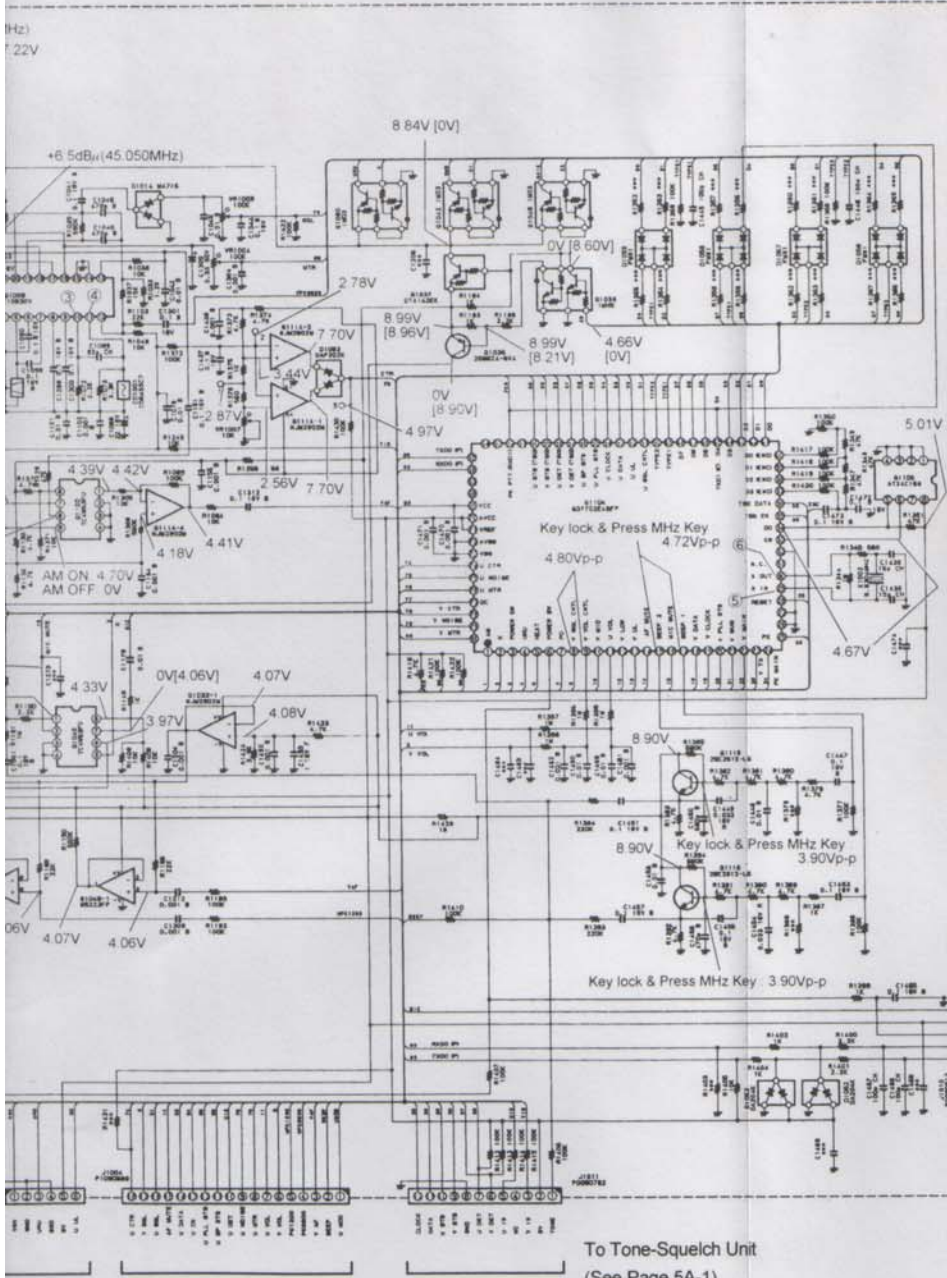
REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** VR-R UNIT ***									
PCB with Components						CB0132001			
Printed Circuit Board						F3598102A		1-	
J 4601	CONNECTOR				IL-WX-6PB-HF-HD-S-B-E1000	P0091102		1-	
R 4601	CHIPRES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 4602	CHIPRES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 4603	CHIPRES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 4604	CHIPRES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		4-	
VR4601	POT.				TP96D00A17.5FB5KX2	J62800118		1-	

# Circuit Diagram

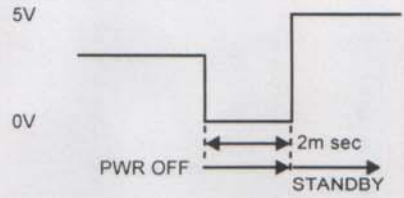


RX XX  
TX [XX]  
U+U RX [XX]

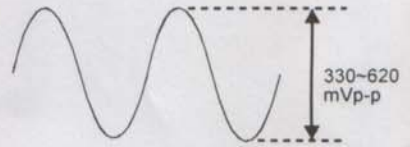
# 144-Main Unit



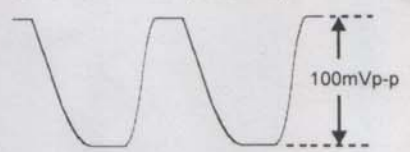
① Q1113 Collector



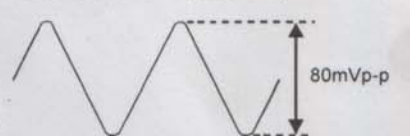
② Q1009 Pin 2 (45.050MHz)



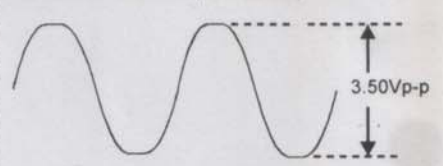
③ Q1009 Pin 10 (455kHz)



④ Q1009 Pin 11 (455kHz)

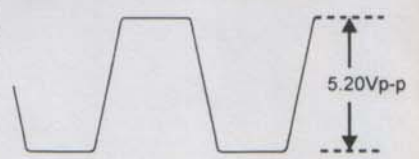


⑤ Q1104 Pin 29 (9.83MHz)

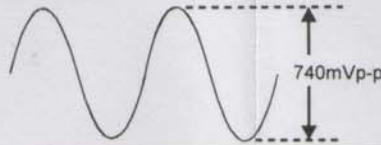


To Connect-1 Unit  
(See Page 4H-1)

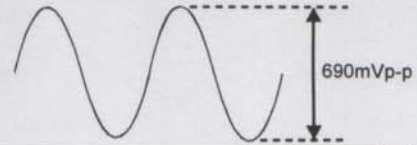
⑥ Q1104 Pin 30 (9.83MHz)



⑧ Q1033 Pin 20 (12.8MHz)

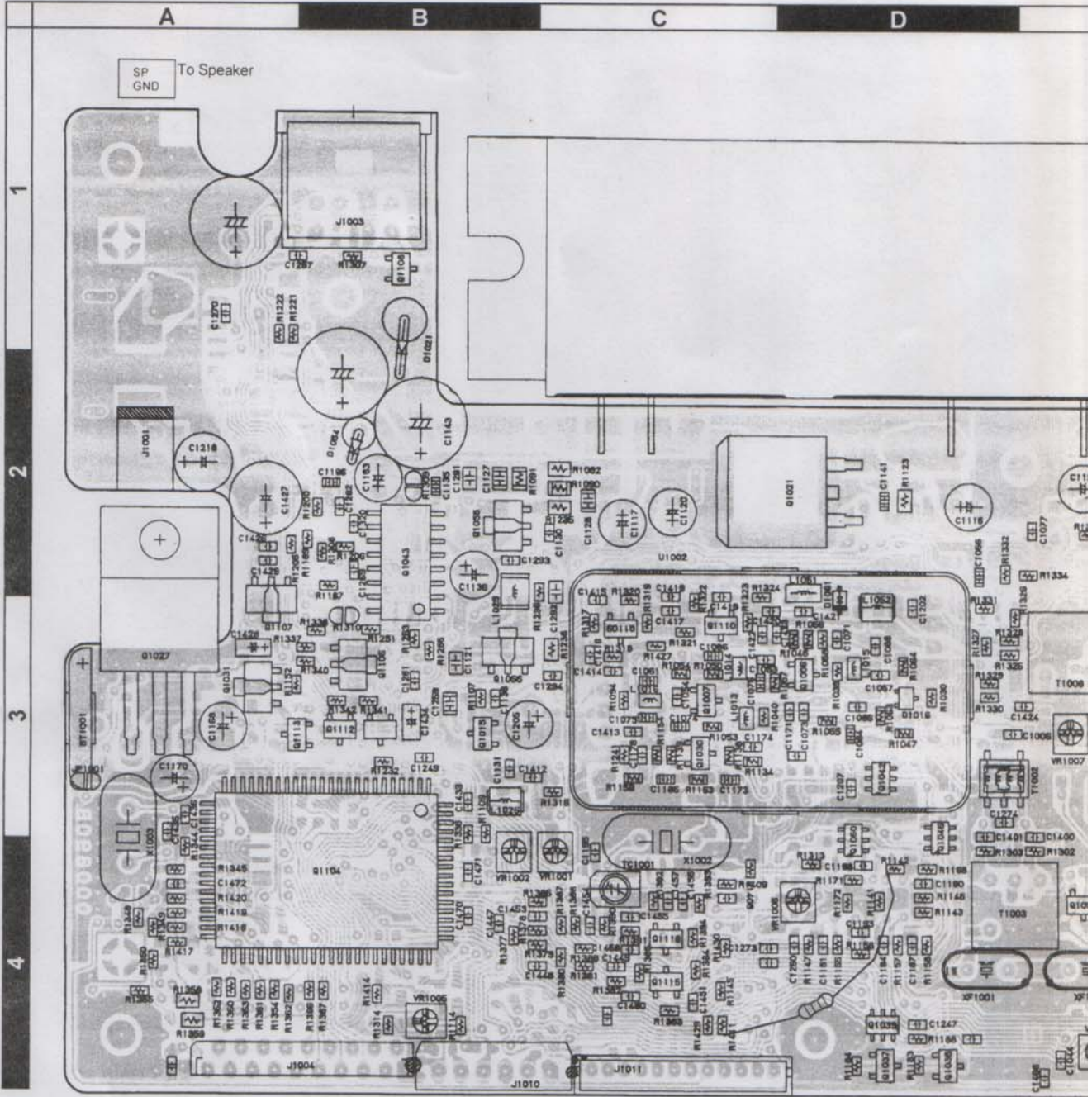


⑦ Q1033 Pin 1 (12.8MHz)



144-Main Unit  
To 430M-Main Unit  
J2004  
(See Page 4F-1)

# Parts Layout



To 430M-Main Unit J2004  
(See Page 4F-3)

U NOISE	U DET
U MTR	U SP STB
U VOL	U PLL STB
V VOL	U CK
PK1200	U DATA
PK9500	AF MUTE
V AF	U SOL
BEEP	V SOL
U MOD	U CTR

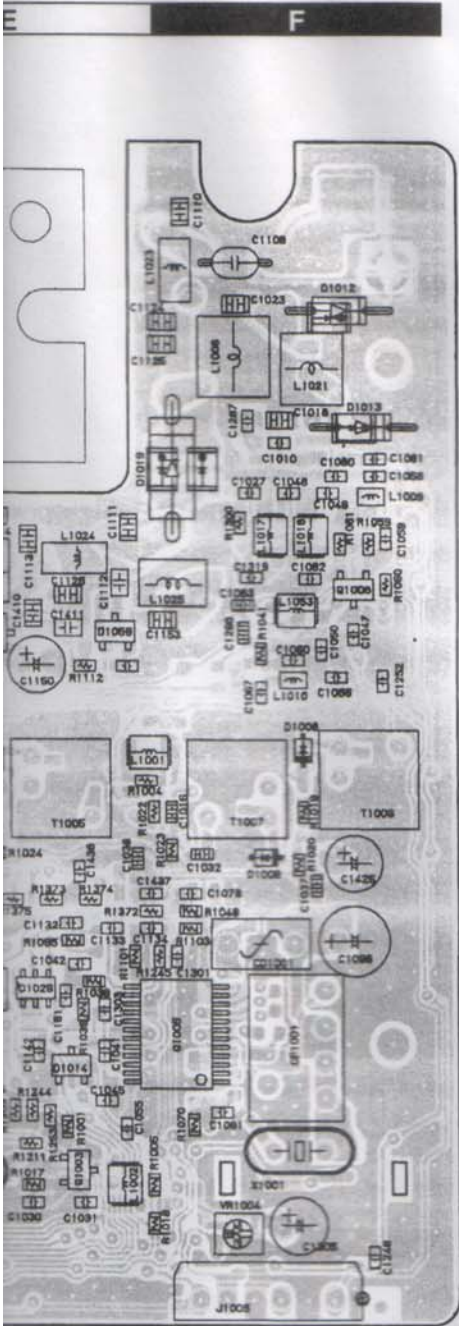
D00	POWER SW
D01	9V
	MIC
	GND

To Connect-1 Unit  
(See Page 4H-1)

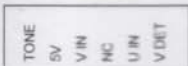
TONE	5V
V IN	NC
U IN	V DET
U DET	GND
V STB	U STB
DATA	CLOCK

To Tone-Squelch Unit  
(See Page 5A-1)

# 144-Main Unit



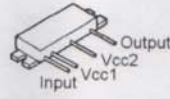
obverse view of component side



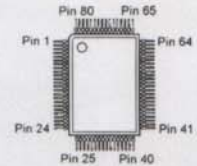
To 430M-Main Unit J2005  
(See Page 4F-3)



TK10930V  
(Q1009)



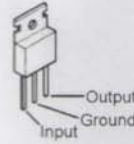
M67781L  
(Q1014)



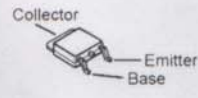
M37702  
(Q1104)



uPD4053BG  
(Q1043)



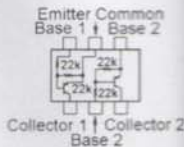
AN7709  
(Q1027)



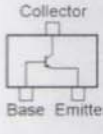
2SA1870  
(Q1021)



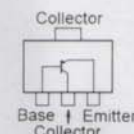
NJM78L05UA (8C)  
(Q1107)



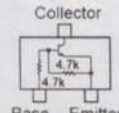
IMH5 (H5)  
(Q1039)



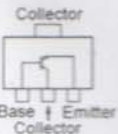
2SB624  
(Q1036)



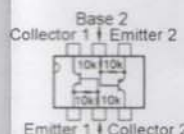
2SB1301  
(Q1031)



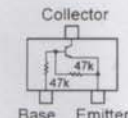
DTA143EK  
(D1037)



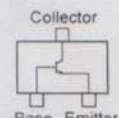
2SC3357 (RK)  
(Q1056)  
2SC2954 (QK)  
(Q1055)



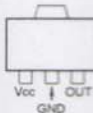
IMD3 (D3)  
(Q1042, 1046, 1060)



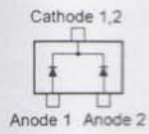
DTC144EK  
(Q1108, 1113)



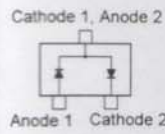
2SC2714Y (QY)  
(Q1003)  
2SC2812 (L6)  
(Q1058, 11115, 11116)  
2SC3120 (HB)  
(Q1006, 1007, 1008,  
1030, 1110)  
2SC3356 (R24)  
(Q1015)



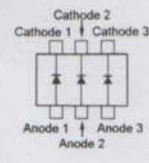
M51951  
(Q1106)



MA80WK  
(D1016)



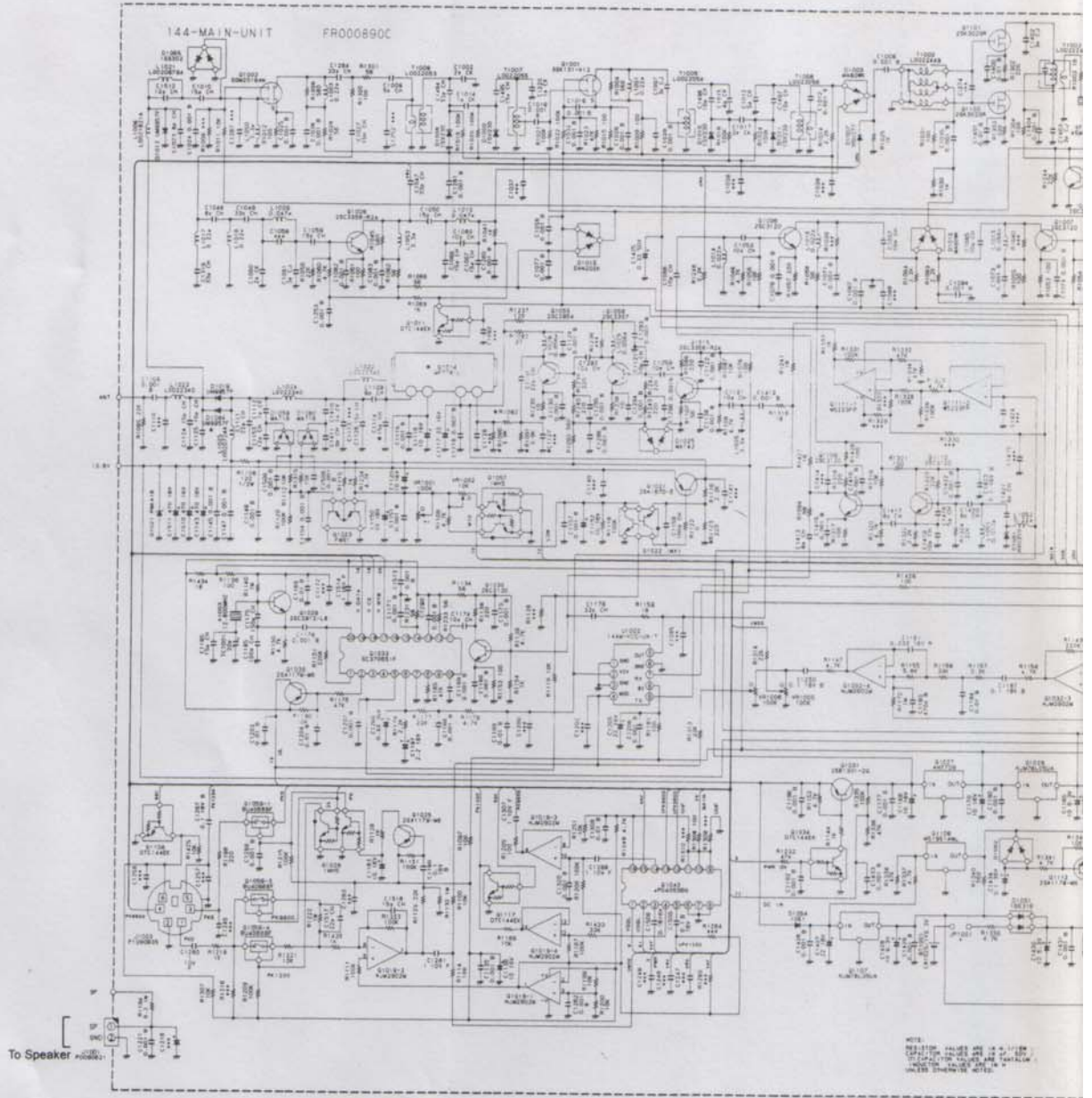
MA716 (M1U)  
(D1014, 1059, 1060)



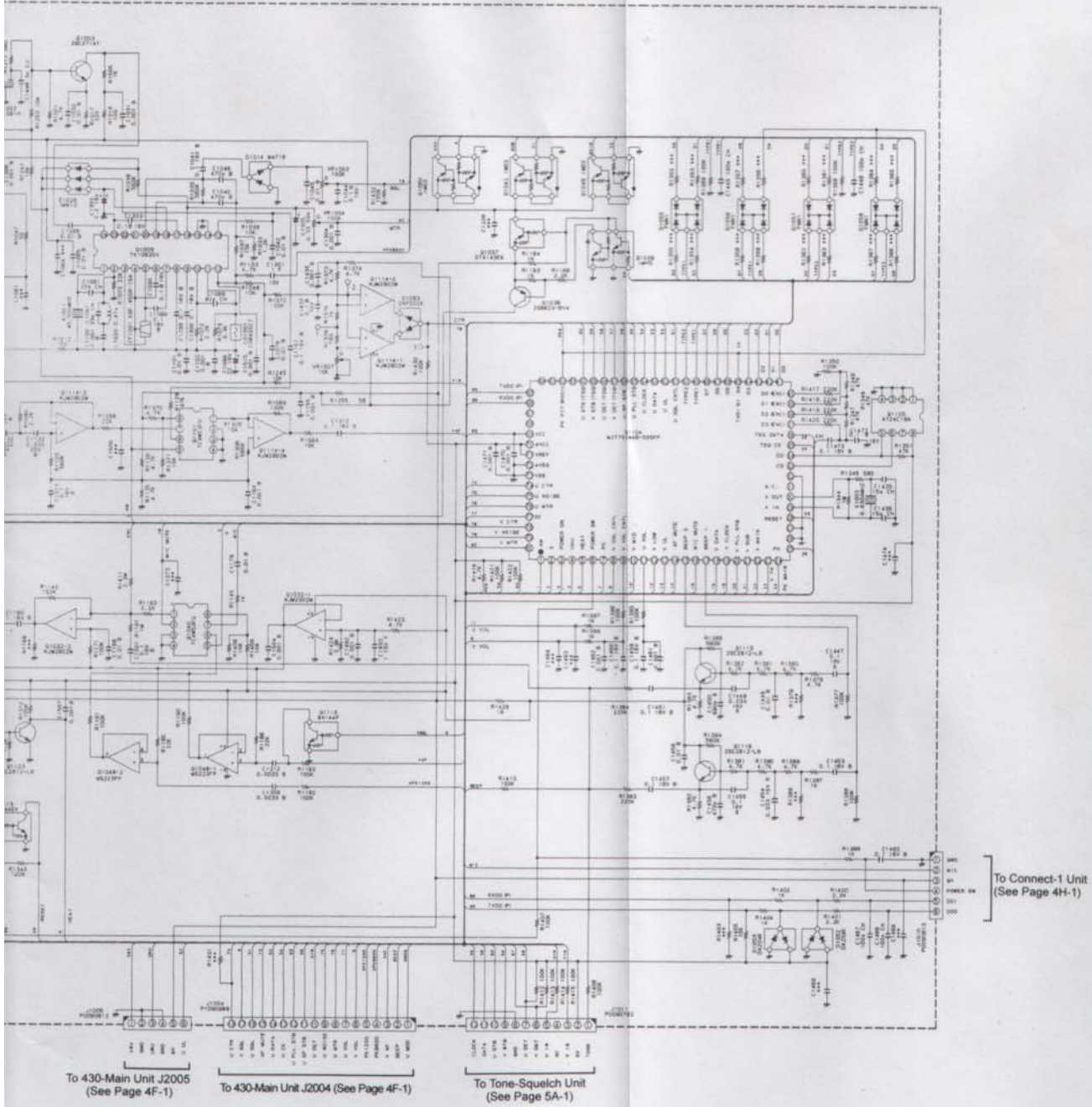
IMN10 (N10)  
(D1026)



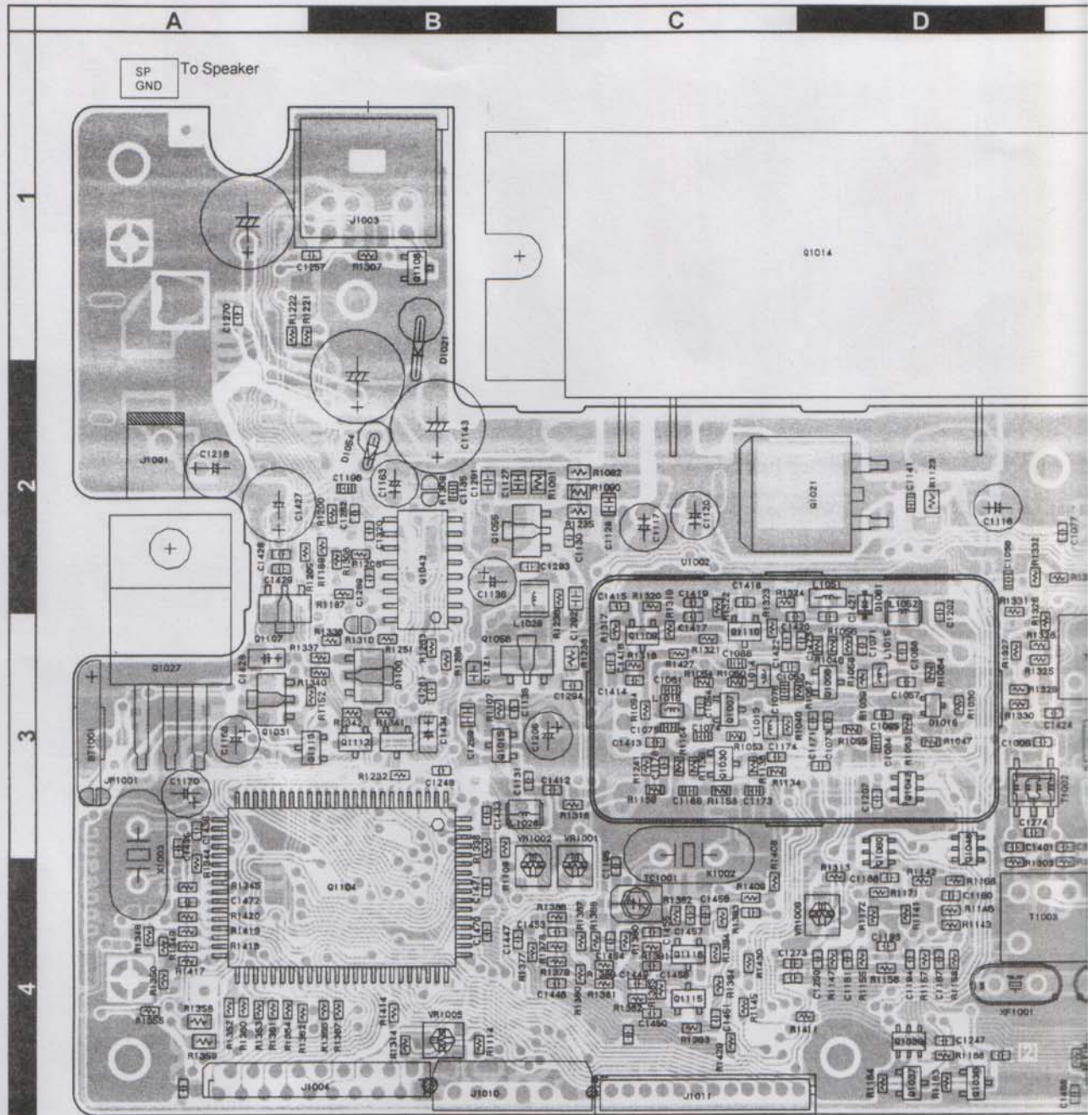
# Circuit Diagram



# 144-Main Unit (Lot. 3~)



# Parts Layout



To 430M-Main Unit J2004  
(See Page 4F-3)

U NOISE	U DET
U MTR	U SP STB
U VOL	U PLL STB
V VOL	U CK
PK1200	U DATA
PK6500	AF MUTE
V AF	U SOL
BEEP	V SOL
U MOD	U CTR

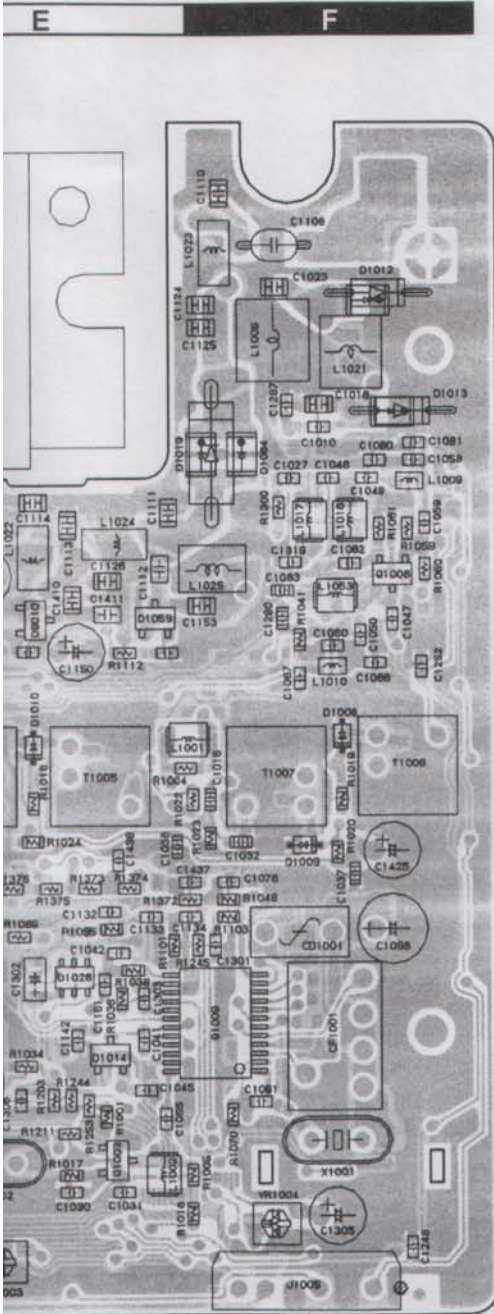
D00	POWER SW
D01	9V
	MIC
	GND

To Connect-1 Unit  
(See Page 4H-1)

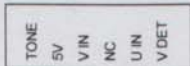
5V	TONER
V IN	5V
NC	V IN
U IN	V DET
V DET	U DET
U DET	GND
V STB	V STB
U STB	U STB
DATA	DATA
CLOCK	CLOCK

To Toner-Squelch Unit  
(See Page 5A-1)

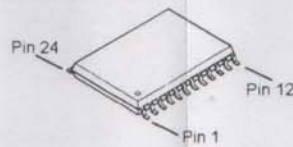
# 144-Main Unit (Lot. 3~)



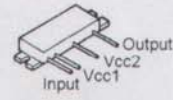
obverse view of component side



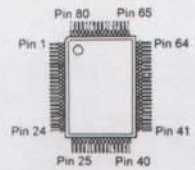
To 430M-Main Unit J2005  
(See Page 4F-3)



TK10930V  
(Q1009)



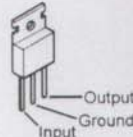
M67781L  
(Q1014)



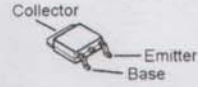
M37702  
(Q1104)



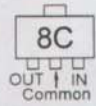
μPD4053BG  
(Q1043)



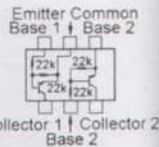
AN7709  
(Q1027)



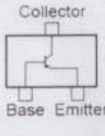
2SA1870  
(Q1021)



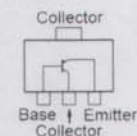
NJM78L05UA (8C)  
(Q1107)



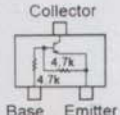
IMH5 (H5)  
(Q1039)



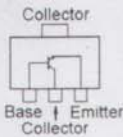
2SB624  
(Q1036)



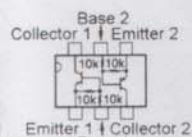
2SB1301  
(Q1031)



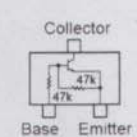
DTA143EK  
(D1037)



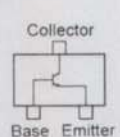
2SC3357 (RK)  
(Q1056)  
2SC2954 (QK)  
(Q1055)



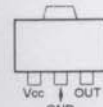
IMD3 (D3)  
(Q1042, 1046, 1060)



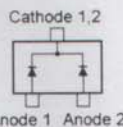
DTC144EK  
(Q1108, 1113)



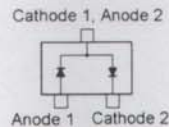
2SC2714Y (QY)  
(Q1003)  
2SC2812 (L6)  
(Q1058, 11115, 11116)  
2SC3120 (HB)  
(Q1006, 1007, 1008,  
1030, 1110)  
2SC3356 (R24)  
(Q1015)



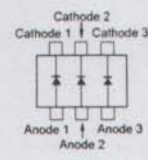
M51951  
(Q1106)



MA80WK  
(D1016)



MA716 (M1U)  
(D1014, 1059, 1060)



IMN10 (N10)  
(D1026)

# 144-Main Unit

## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** 144-MAIN UNIT ***									
	PCB with 144-VCO UNIT (USA)					CP5794003	VERSION A2		
	PCB with 144-VCO UNIT (EXPORT)					CP5794004	VERSION A1		
	PCB with 144-VCO UNIT (EXPORT)					CP5794005	VERSION A2		
	PCB with 144-VCO UNIT (EXPORT)					CP5794006	VERSION A3		
	PCB with 144-VCO UNIT (EXPORT)					CP5794007	VERSION B1		
	PCB with 144-VCO UNIT (EXPORT)					CP5794008	VERSION B2		
	PCB with 144-VCO UNIT (EXPORT)					CP5794009	VERSION B3		
	PCB with 144-VCO UNIT (EXPORT)					CP5794010	VERSION C1		
	PCB with 144-VCO UNIT (EXPORT)					CP5794011	VERSION C2		
	PCB with 144-VCO UNIT (EXPORT)					CP5794012	VERSION C3		
	PCB with 144-VCO UNIT (EXPORT)					CP5794013	VERSION D1		
	PCB with 144-VCO UNIT (EXPORT)					CP5794014	VERSION D2		
	PCB with 144-VCO UNIT (AUSTRALIA)					CP5794015	VERSION H1		
	PCB with 144-VCO UNIT (AUSTRALIA)					CP5794016	VERSION H2		
	Printed Circuit Board					FR000890B		1-	
	Printed Circuit Board					FR000890C		3-	
BT1001	LITHIUM BATT.		3V		CR1025/1VS	Q9000696		1-	
C 1002	CHIP CAP.	2pF	50V	CK	GRM39CK020C50PT	K22174203		1-	
C 1006	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1007	CHIP CAP.	3pF	50V	CJ	GRM39CJ030C50PT	K22174204		1-	
C 1009	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206		1-	
C 1010	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		1-	
C 1012	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1013	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206		1-	
C 1014	CHIP CAP.	1pF	50V	CK	GRM39CK010C50PT	K22174202		1-	
C 1015	CHIP CAP.	4pF	50V	CH	GRM39CH040C50PT	K22174205		1-	
C 1016	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1017	CHIP CAP.	2pF	50V	CK	GRM39CK020C50PT	K22174203		1-	
C 1019	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1022	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1023	CHIP CAP.	8pF	50V	CH	GRM40CH080D50PT	K22170209		1-	
C 1024	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1025	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1027	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1028	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1029	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1030	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1031	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1032	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1035	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1036	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1040	CHIP CAP.	470pF	50V	B	GRM39B471M50PT	K22174805		1-	
C 1041	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1042	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1044	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1045	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1046	CHIP CAP.	470pF	50V	B	GRM39B471M50PT	K22174805		1-	
C 1047	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1047	CHIP CAP.	33pF	50V	CH	GRM39CH330J50PT	K22174223		3-	
C 1048	CHIP CAP.	6pF	50V	CH	GRM39CH060D50PT	K22174207		1-	
C 1049	CHIP CAP.	33pF	50V	CH	GRM39CH330J50PT	K22174223		1-	
C 1050	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		1-	
C 1053	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1054	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206		1-	
C 1055	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1056	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	

# 144-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
C 1057	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1059	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		1-	
C 1060	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1065	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1066	CHIP CAP.	6pF	50V	CH	GRM39CH060D50PT	K22174207		1-	
C 1066	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		3-	
C 1067	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1067	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		3-	
C 1071	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1073	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1074	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1075	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1076	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1077	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1078	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1080	CHIP CAP.	2pF	50V	CK	GRM39CK020C50PT	K22174203		1-	
C 1081	CHIP CAP.	3pF	50V	CJ	GRM39CJ030C50PT	K22174204		1-	
C 1082	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1083	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1084	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1085	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1086	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1087	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1089	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235		1-	
C 1089	CHIP CAP.	82pF	50V	CH	GRM39CH820J50PT	K22174233		2-	
C 1090	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1091	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		1-	
C 1097	CHIP CAP.	33pF	50V	CH	GRM39CH330J50PT	K22174223		1-	
C 1098	AL.ELECTRO.CAP.	22uF	16V		16V220M5X7TR2	K46120005		1-	
C 1099	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1100	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1101	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1102	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1108	CERAMIC CAP.	0.001uF	50V	B	DD104-979B102K50	K26171614		1-	
C 1109	CHIP CAP.	9pF	50V	CH	GRM40CH090D50PT	K22170210		1-	
C 1111	CHIP CAP.	22pF	50V	CH	GRM40CH220J50PT	K22170219		1-	
C 1112	CHIP CAP.	1pF	50V	CK	GRM40CK010C50PT	K22170202		1-	
C 1114	CHIP CAP.	15pF	50V	CH	GRM40CH150J50PT	K22170215		1-	
C 1115	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1116	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 1117	AL.ELECTRO.CAP.	22uF	16V		RC2-16V220M-T34(4X7)	K46120008		1-	
C 1118	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1120	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 1121	CHIP CAP.	10pF	50V	CH	GRM40CH100D50PT	K22170211		1-	
C 1122	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1124	CHIP CAP.	15pF	50V	CH	GRM40CH150J50PT	K22170215		1-	
C 1125	CHIP CAP.	10pF	50V	CH	GRM40CH100D50PT	K22170211		1-	
C 1126	CHIP CAP.	15pF	50V	CH	GRM40CH150J50PT	K22170215		1-	
C 1127	CHIP CAP.	15pF	50V	CH	GRM40CH150J50PT	K22170215		1-	
C 1129	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1130	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1131	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1132	CHIP CAP.	0.022uF	25V	B	GRM39B223K25PT	K22144807		1-	
C 1133	CHIP CAP.	0.022uF	25V	B	GRM39B223K25PT	K22144807		1-	
C 1134	CHIP CAP.	0.022uF	25V	B	GRM39B223K25PT	K22144807		1-	
C 1135	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1136	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	

# 144-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
C 1138	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1139	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1143	AL.ELECTRO.CAP.	470uF	16V		RE3-16V471M 470UF	K40129066		1-	
C 1145	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1147	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1148	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1150	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 1151	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1152	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 1153	CHIP CAP.	12pF	50V	CH	GRM40CH120J50PT	K22170213		1-	
C 1154	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1155	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1157	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1158	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235		1-	
C 1160	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1161	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1163	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 1164	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1165	CHIP TA.CAP.	10uF	6.3V		TEMSVA0J106M-8R	K78080027		1-	
C 1166	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1168	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 1169	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1170	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 1171	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1173	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1174	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1175	CHIP CAP.	150pF	50V	CH	GRM39CH151J50PT	K22174239		1-	
C 1176	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1177	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1178	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		1-	
C 1179	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1180	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1181	CHIP CAP.	0.033uF	16V	R	GRM39R333K16PT	K22124801		1-	
C 1185	CHIP CAP.	150pF	50V	CH	GRM39CH151J50PT	K22174239		1-	
C 1185	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235		6-	
C 1186	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1187	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1188	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1189	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1190	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1192	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1193	CHIP CAP.	470pF	50V	B	GRM39B471M50PT	K22174805		1-	
C 1194	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1195	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		1-	
C 1196	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1197	CHIP TA.CAP.	2.2uF	16V		TEMSVA1C225M-8R	K78120015		1-	
C 1198	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1199	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1203	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1204	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		9-	
C 1205	AL.ELECTRO.CAP.	22uF	16V		RC2-16V220M-T34(4X7)	K46120008		1-	
C 1207	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1208	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1212	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1212	CHIP CAP.	0.0033uF	50V	B	GRM39B332M50PT	K22174815		3-	
C 1220	CHIP CAP.	1pF	50V	CK	GRM39CK010C50PT	K22174202		1-	
C 1221	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	

# 144-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
C 1250	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1253	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1259	CHIP CAP.	10pF	50V	CH	GRM40CH100D50PT	K22170211		1-	
C 1260	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1261	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1262	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1264	CHIP CAP.	33pF	50V	CH	GRM39CH330J50PT	K22174223		1-	
C 1266	CHIP TA.CAP.	0.1uF	35V		TESVA1V104M1-8R	K78160025		1-	
C 1266	CHIP TA.CAP.	0.33uF	35V		TESVA1V334M1-8R	K78160028		9-	
C 1267	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1269	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1269	CHIP CAP.	1uF	10V	F	GRM39F105Z10PT	K22105001		9-	
C 1274	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1280	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1280	CHIP CAP.	1uF	10V	F	GRM39F105Z10PT	K22105001		9-	
C 1281	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1281	CHIP CAP.	1uF	10V	F	GRM39F105Z10PT	K22105001		9-	
C 1287	CHIP CAP.	3pF	50V	CJ	GRM39CJ030C50PT	K22174204		1-	
C 1288	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1290	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235		1-	
C 1290	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809	USA	3-	
C 1290	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809	EXPORT	3-	
C 1290	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809	AUSTRALIA	3-	
C 1291	CHIP CAP.	22pF	50V	CH	GRM40CH220J50PT	K22170219		1-	
C 1292	CHIP CAP.	10pF	50V	CH	GRM40CH100D50PT	K22170211		1-	
C 1293	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1294	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1295	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1296	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1298	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1299	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1300	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1301	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1301	CHIP CAP.	1uF	10V	F	GRM39F105Z10PT	K22105001		9-	
C 1302	CHIP TA.CAP.	2.2uF	16V		TEMSVA1C225M-8R	K78120015		1-	
C 1303	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1304	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1305	AL.ELECTRO.CAP.	0.33uF	50V		50VR33M4X7TR2	K46170028		1-	
C 1306	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1307	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1307	CHIP CAP.	1uF	10V	F	GRM39F105Z10PT	K22105001		9-	
C 1308	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1309	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1309	CHIP CAP.	0.0033uF	50V	B	GRM39B332M50PT	K22174815		3-	
C 1312	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1313	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1319	CHIP CAP.	33pF	50V	CH	GRM39CH330J50PT	K22174223		1-	
C 1320	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1400	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1401	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1402	CHIP CAP.	3pF	50V	CJ	GRM39CJ030C50PT	K22174204		1-	
C 1403	CHIP CAP.	3pF	50V	CJ	GRM39CJ030C50PT	K22174204		1-	
C 1404	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1410	CHIP CAP.	1pF	50V	CK	GRM40CK010C50PT	K22170202		1-	
C 1411	CHIP CAP.	9pF	50V	CH	GRM40CH090D50PT	K22170210		1-	
C 1412	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1413	CHIP CAP.	8pF	50V	CH	GRM39CH080D50PT	K22174209		1-	



# 144-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
C 1415	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1416	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1417	CHIP CAP.	8pF	50V	CH	GRM39CH080D50PT	K22174209		1-	
C 1418	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206		1-	
C 1419	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1420	CHIP CAP.	6pF	50V	CH	GRM39CH060D50PT	K22174207		1-	
C 1421	CHIP CAP.	9pF	50V	CH	GRM39CH090D50PT	K22174210		1-	
C 1422	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1423	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1425	AL. ELECTRO. CAP.	0.33uF	50V		50VR33M4X7TR2	K46170028		1-	
C 1426	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1427	AL. ELECTRO. CAP.	22uF	16V		RC2-16V220M-T34(4X7)	K46120008		1-	
C 1428	CHIP TA. CAP.	10uF	6.3V		TEMSVA0J106M-8R	K78080027		1-	
C 1429	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1430	CHIP TA. CAP.	10uF	6.3V		TEMSVA0J106M-8R	K78080027		1-	
C 1431	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1433	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1434	CHIP TA. CAP.	0.1uF	35V		TESVA1V104M1-8R	K78160025		1-	
C 1435	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		1-	
C 1436	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		1-	
C 1437	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1438	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1445	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235		1-	
C 1446	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235		1-	
C 1447	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1448	CHIP CAP.	0.033uF	16V	R	GRM39R333K16PT	K22124801		1-	
C 1448	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		2-	
C 1449	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1449	CHIP CAP.	0.033uF	16V	R	GRM39R333K16PT	K22124801		2-	
C 1450	CHIP CAP.	680pF	50V	B	GRM39B681M50PT	K22174807		1-	
C 1451	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1453	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1454	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1454	CHIP CAP.	0.033uF	16V	R	GRM39R333K16PT	K22124801		2-	
C 1455	CHIP CAP.	0.033uF	16V	R	GRM39R333K16PT	K22124801		1-	
C 1455	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		2-	
C 1456	CHIP CAP.	470pF	50V	B	GRM39B471M50PT	K22174805		1-	
C 1457	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1458	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 1459	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1459	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		2-	
C 1459	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		3-	
C 1460	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1460	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		2-	
C 1460	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		3-	
C 1461	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1462	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1465	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1466	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235		1-	
C 1467	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235		1-	
C 1470	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1471	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1472	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1473	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1492	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1493	CHIP CAP.	1uF	16V	F	EMK212F105Z00T	K22121001		1-	
C 1494	CHIP CAP.	33pF	50V	CH	GRM39CH330J50PT	K22174223		1-	

# 144-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
C 1495	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		1-	
C 1496	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1497	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 1498	CHIP CAP.	1pF	50V	CK	GRM39CK010C50PT	K22174202		1-	
C 1499	CHIP CAP.	3pF	50V	CJ	GRM39CJ030C50PT	K22174204		1-	
C 1501	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1504	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1505	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1506	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 1507	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1508	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1509	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 1510	AL.ELECTRO.CAP.	470uF	16V		RE3-16V471M 470UF	K40129066		2-	
C 1511	AL.ELECTRO.CAP.	470uF	16V		RE3-16V471M 470UF	K40129066		2-	
C 1512	CHIP CAP.	12pF	50V	CH	GRM40CH120J50PT	K22170213		2-	
C 1513	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809	AUSTRALIA	3-	
C 1513	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809	USA	3-	
C 1513	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809	EXPORT	3-	
C 1514	CHIP CAP.	1uF	16V	F	EMK212F105Z00T	K22121001	AUSTRALIA	3-	
C 1514	CHIP CAP.	1uF	16V	F	EMK212F105Z00T	K22121001	EXPORT	3-	
C 1514	CHIP CAP.	1uF	16V	F	EMK212F105Z00T	K22121001	USA	3-	
C 1515	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		9-	
C 1516	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		9-	
C 1517	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		9-	
CD1001	CERAMIC DISC				CDB455C7	H7900180		1-	
CF1001	CERAMIC FILTER				KBF-455R-15A	H3900394		1-	
D 1003	DIODE				MA80WK-(TX)	G2070528		1-	d-3
D 1007	DIODE				HSU277TRF	G2070118		1-	d-3
D 1008	DIODE				1SV230 TPH3	G2070126		1-	F-3
D 1009	DIODE				1SV230 TPH3	G2070126		1-	F-3
D 1010	DIODE				1SV230 TPH3	G2070126		1-	E-3
D 1011	DIODE				1SV230 TPH3	G2070126		1-	e-3
D 1012	DIODE				UM9401F/TR	G2070516		1-	F-1
D 1012	DIODE				UM9957F/TR	G2070562		3-	F-1
D 1014	DIODE				MA716-(TX)	G2070342		1-	E-4
D 1015	DIODE				DAN202K T146	G2070182		1-	f-2
D 1016	DIODE				MA80WK-(TX)	G2070528		1-	D-3
D 1019	DIODE				UM9401F/TR	G2070516		1-	F-2
D 1019	DIODE				UM9957F/TR	G2070562		3-	F-2
D 1021	SURGE ABSORBER				P6KE18	Q9000534		1-	B-1
D 1021	SURGE ABSORBER				P6KA18	Q9000721		15-	B-1
D 1025	DIODE				MA143-(TX)	G2070536		1-	b-3
D 1026	DIODE				IMN10 T108	G2070078		1-	E-3
D 1051	DIODE				1SS319 TE85R	G2070080		1-	a-3
D 1052	DIODE				DA204K T146	G2070388		1-	b-4
D 1053	DIODE				DA204K T146	G2070388		1-	b-4
D 1054	DIODE				10E1	G2090306		1-	B-2
D 1055	DIODE				FMN1 T99	G2070068		1-	a-4
D 1056	DIODE				FMN1 T99	G2070068		1-	a-4
D 1057	DIODE				FMN1 T99	G2070068		1-	a-4
D 1058	DIODE				FMN1 T99	G2070068		1-	a-4
D 1059	DIODE				MA716-(TX)	G2070342		1-	E-2
D 1060	DIODE				MA716-(TX)	G2070342		1-	E-2
D 1061	DIODE				HVU359TRF	G2070452		1-	D-3
D 1063	DIODE				DAP202K T146	G2070180		1-	e-3
D 1064	DIODE				UM9401F/TR	G2070516		1-	F-2
D 1064	DIODE				UM9957F/TR	G2070562		3-	F-2

# 144-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT	LAY ADR
D 1065	DIODE				1SS302 TE85R	G2070088		10-	f-2
J 1001	CONNECTOR				SC25-02WS	P0090621		1-	
J 1003	CONNECTOR				MDC-086	P1090935		1-	
J 1004	CONNECTOR				18FMN-BTRK	P1090989		1-	
J 1005	CONNECTOR				SB20-06WS	P0090613		1-	
J 1010	CONNECTOR				SB20-06WS	P0090613		1-	
J 1011	CONNECTOR				B12B-ZR	P0090782		1-	
L 1001	M.RFC	0.22uH			ELJ-FAR22MF	L1690396		1-	
L 1003	M.RFC	0.22uH			ELJ-FAR22MF	L1690396		1-	
L 1006	COIL A1				6.5T3.5D0.6UEW R	L0021821A		1-	
L 1009	M.RFC	0.047uH			HK2125 47NK-T	L1690385		1-	
L 1010	M.RFC	0.047uH			HK2125 47NK-T	L1690385		1-	
L 1013	M.RFC	0.056uH			HK2125 56NK-T	L1690386		1-	
L 1014	M.RFC	0.022uH			HK2125 22NK-T	L1690381		1-	
L 1015	M.RFC	0.022uH			HK2125 22NK-T	L1690381		1-	
L 1016	M.RFC	0.056uH			HK2125 56NK-T	L1690386		1-	
L 1017	M.RFC	0.22uH			ELJ-FAR22MF	L1690396		1-	
L 1018	M.RFC	0.22uH			ELJ-FAR22MF	L1690396		1-	
L 1020	M.RFC	0.47uH			ELJ-FAR47MF	L1690397		1-	
L 1021	COIL A1				4.5T3.5D0.6UEW R	L0020679A		2-	
L 1022	COIL A1				2.5T4.0D0.8UEW R	L0022340		1-	
L 1023	COIL A1				2.5T4.0D0.8UEW R	L0022340		1-	
L 1024	COIL A1				2.5T4.0D0.8UEW R	L0022340		1-	
L 1025	COIL A1				8.5T3.0D0.5UEW R	L0020724A		1-	
L 1026	M.RFC	3.3uH			ELJ-FA3R3MF	L1690400		1-	
L 1028	CHIP COIL	0.056uH			LQN2A56NM	L1690008		1-	
L 1028	CHIP COIL	0.056uH			LQN21A56NJ04	L1690618		15-	
L 1029	CHIP COIL	0.056uH			LQN2A56NM	L1690008		1-	
L 1029	CHIP COIL	0.056uH			LQN21A56NJ04	L1690618		15-	
L 1050	M.RFC	3.3uH			ELJ-FA3R3MF	L1690400		1-	
L 1051	CHIP COIL	0.017uH			LQN1A17NJ04	L1690249		1-	
L 1052	CHIP COIL	0.22uH			LQN2AR22K	L1690003		1-	
L 1052	CHIP COIL	0.22uH			LQN21AR22J04	L1690600		15-	
L 1053	M.RFC	0.22uH			ELJ-FAR22MF	L1690396		1-	
L 1053	M.RFC	3.3uH			ELJ-FA3R3MF	L1690400		3-	
Q 1001	FET				3SK131-T2B V12	G4801317B		1-	f-3
Q 1002	FET				SGM2016M-T7	G4070005		1-	f-2
Q 1002	FET				SGM2016AM-T7	G4070012		15-	f-2
Q 1003	TRANSISTOR				2SC2714YTE85R	G3327147Y		1-	E-4
Q 1006	TRANSISTOR				2SC3120TE85R	G3331207		1-	D-3
Q 1007	TRANSISTOR				2SC3120TE85R	G3331207		1-	C-3
Q 1008	TRANSISTOR				2SC3120TE85R	G3331207		1-	F-2
Q 1008	TRANSISTOR				2SC3356-T2B R24	G3333567D		2-	F-2
Q 1009	IC				TK10930VT1	G1091606		1-	F-4
Q 1011	TRANSISTOR				DTC144EK T146	G3070033		1-	f-2
Q 1014	IC				M67781L	G1091642		1-	D-1
Q 1015	TRANSISTOR				2SC3356-T2B R24	G3333567D		1-	B-3
Q 1019	IC				NJM2902M-T2	G1090908		1-	b-2
Q 1021	TRANSISTOR				2SA1870 TL E	G3118708E		1-	D-2
Q 1022	TRANSISTOR				IMX1 T110	G3070024		1-	d-2
Q 1023	TRANSISTOR				FMS1 T148	G3070008		1-	e-2
Q 1025	TRANSISTOR				2SA1179M6-TA	G3111797F		1-	b-2
Q 1026	TRANSISTOR				IMH5 T108	G3070027		1-	b-2
Q 1027	IC				AN7709	G1091753		1-	A-3
Q 1028	IC				NJM78L05UA TE1	G1091325		1-	a-3
Q 1029	TRANSISTOR				2SC2812L6-TA	G3328127F		1-	c-3
Q 1030	TRANSISTOR				2SC3120TE85R	G3331207		1-	C-3

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REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
Q 1031	TRANSISTOR				2SB1301-T2 ZQ	G3213017Q		1-	A-3
Q 1032	IC				NJM2902M-T2	G1090908		1-	d-4
Q 1033	IC				SC370651FR2	G1091937		1-	c-3
Q 1034	TRANSISTOR				DTC144EK T146	G3070033		1-	a-3
Q 1035	TRANSISTOR				2SA1179M6-TA.	G3111797F		1-	c-2
Q 1036	TRANSISTOR				2SB624-T2B BV4	G3206247D		1-	D-4
Q 1037	TRANSISTOR				DTA143EK T146	G3070010		1-	D-4
Q 1039	TRANSISTOR				IMH5 T108	G3070027		1-	D-4
Q 1040	IC				TC4W53FU TE12L	G1091675		1-	c-4
Q 1042	TRANSISTOR				IMD3 T108	G3070053		1-	D-3
Q 1043	IC				UPD4053BG-T2	G1091034		1-	B-2
Q 1046	TRANSISTOR				IMD3 T108	G3070053		1-	D-4
Q 1049	IC				M5223FP-600C	G1090990		1-	c-4
Q 1055	TRANSISTOR				2SC2954-T2	G3329547		1-	B-2
Q 1056	TRANSISTOR				2SC3357-T2	G3333577		1-	B-3
Q 1057	TRANSISTOR				IMH5 T108	G3070027		1-	b-4
Q 1058	TRANSISTOR				2SC2812L6-TA	G3328127F		1-	E-4
Q 1059	IC				UPD4066BG-T2	G1091035		1-	a-1
Q 1059	IC				BU4066BF-E2	G1092593		2-	a-1
Q 1060	TRANSISTOR				IMD3 T108	G3070053		1-	D-4
Q 1100	FET				2SK302GR TE85R	G3803027G		1-	d-4
Q 1101	FET				2SK302GR TE85R	G3803027G		1-	e-4
Q 1102	IC				TC4W53FU TE12L	G1091675		1-	e-4
Q 1103	TRANSISTOR				2SC2812L6-TA	G3328127F		1-	b-3
Q 1104	IC				M37702E4BFP R0145	G1092604	USA	1-	B-4
Q 1104	IC				M37702E4BFP R0145	G1092604	EXPORT	1-	B-4
Q 1104	IC				M37702E4BFP R0145	G1092604	AUSTRALIA	1-	B-4
Q 1104	IC				M37702E4BFP R0154	G1092626	USA	3-	B-4
Q 1104	IC				M37702E4BFP R0154	G1092626	EXPORT	3-	B-4
Q 1104	IC				M37702E4BFP R0154	G1092626	AUSTRALIA	3-	B-4
Q 1104	IC				M37702M4B-596FP	G1092686	USA	8-	B-4
Q 1104	IC				M37702M4B-596FP	G1092686	EXPORT	8-	B-4
Q 1104	IC				M37702M4B-596FP	G1092686	AUSTRALIA	8-	B-4
Q 1105	IC				AT24C16N-10SI-2.7TER	G1091743		1-	a-4
Q 1106	IC				M51951AML-600C	G1091131		1-	B-3
Q 1107	IC				NJM78L05UA TE1	G1091325		1-	A-3
Q 1108	TRANSISTOR				DTC144EK T146	G3070033		1-	B-1
Q 1109	TRANSISTOR				2SC3120TE85R	G3331207		1-	C-3
Q 1110	TRANSISTOR				2SC3120TE85R	G3331207		1-	C-3
Q 1111	IC				M5223FP-600C	G1090990		1-	d-3
Q 1112	TRANSISTOR				2SA1179M6-TA	G3111797F		1-	B-3
Q 1113	TRANSISTOR				DTC144EK T146	G3070033		1-	B-3
Q 1114	IC				NJM2902M-T2	G1090908		1-	e-3
Q 1115	TRANSISTOR				2SC2812L6-TA	G3328127F		1-	C-4
Q 1116	TRANSISTOR				2SC2812L6-TA	G3328127F		1-	C-4
Q 1117	TRANSISTOR				DTC144EK T146	G3070033		1-	b-2
Q 1118	TRANSISTOR				BA1A4P	G3090079		1-	b-2
R 1001	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1003	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 1004	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 1005	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1006	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 1009	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1011	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1012	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1014	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 1015	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	

# 144-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 1016	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1017	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 1018	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1019	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1020	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1021	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1022	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1023	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1024	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1025	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1029	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 1030	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1031	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1033	CHIP RES.	1.2k	1/16W	5%	RMC1/16 122JATP	J24185122		1-	
R 1034	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1035	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	
R 1036	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		1-	
R 1036	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		3-	
R 1037	CHIP RES.	15k	1/16W	5%	RMC1/16 153JATP	J24185153		1-	
R 1038	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1041	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1045	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 1046	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1047	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 1048	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1050	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1053	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1054	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1055	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1056	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1057	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 1058	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 1059	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 1060	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 1060	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		3-	
R 1061	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1062	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 1063	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 1064	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 1066	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 1069	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1070	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 1072	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 1073	CHIP RES.	3.3k	1/16W	5%	RMC1/16 332JATP	J24185332		1-	
R 1076	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1082	CHIP RES.	1	1/10W	5%	RMC1/10T 1R0J	J24205010		1-	
R 1084	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1085	CHIP RES.	22k	1/10W	5%	RMC1/10T 223J	J24205223		1-	
R 1086	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 1087	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1089	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1090	CHIP RES.	3.9k	1/10W	5%	RMC1/10T 392J	J24205392		1-	
R 1091	CHIP RES.	3.9k	1/10W	5%	RMC1/10T 392J	J24205392		1-	
R 1092	CHIP RES.	27	1/4W	5%	RMC1/4 270JATP	J24245270		1-	
R 1093	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 1094	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 1095	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	

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REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 1096	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 1097	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1100	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1100	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		2-	
R 1100	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		9-	
R 1101	CHIP RES.	15k	1/16W	5%	RMC1/16 153JATP	J24185153		1-	
R 1103	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 1103	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		9-	
R 1105	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	
R 1106	CHIP RES.	120	1/2W	5%	RMC1/2 121JATE	J24275121		1-	
R 1107	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 1108	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1109	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1111	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1112	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1114	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1114	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		9-	
R 1115	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1116	CHIP RES.	2.2k	1/10W	5%	RMC1/10T 222J	J24205222		1-	
R 1118	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1119	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1120	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1122	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 1123	CHIP RES.	100	1/10W	5%	RMC1/10T 101J	J24205101		1-	
R 1123	CHIP RES.	220	1/10W	5%	RMC1/10T 221J	J24205221		3-	
R 1125	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1125	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		9-	
R 1128	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1128	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		9-	
R 1129	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1130	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1131	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1132	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1132	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		9-	
R 1134	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 1135	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1136	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1138	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 1139	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1140	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	
R 1141	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	
R 1142	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		1-	
R 1142	CHIP RES.	150k	1/16W	5%	RMC1/16 154JATP	J24185154		2-	
R 1143	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	
R 1143	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		2-	
R 1144	CHIP RES.	1k	1/10W	5%	RMC1/10T 102J	J24205102		1-	
R 1145	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1146	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1147	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1150	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1151	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		1-	
R 1152	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1153	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1154	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1155	CHIP RES.	5.6k	1/16W	5%	RMC1/16 562JATP	J24185562		1-	
R 1156	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		1-	
R 1157	CHIP RES.	3.3k	1/16W	5%	RMC1/16 332JATP	J24185332		1-	

# 144-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 1158	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1159	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 1160	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 1161	CHIP RES.	2.2M	1/16W	5%	RMC1/16 225JATP	J24185225		1-	
R 1161	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		2-	
R 1165	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1171	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1172	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	
R 1175	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1177	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		1-	
R 1177	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		9-	
R 1178	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1178	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		9-	
R 1179	CHIP RES.	3.3k	1/16W	5%	RMC1/16 332JATP	J24185332		1-	
R 1179	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		9-	
R 1180	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1181	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1183	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1184	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1185	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 1186	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 1187	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1188	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 1189	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1190	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	
R 1190	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		3-	
R 1191	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	
R 1191	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		3-	
R 1192	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1193	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1194	CHIP RES.	8.2	1W	5%	RMC1 8R2JTE	J24305829		1-	
R 1198	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 1199	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1200	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1203	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1203	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		3-	
R 1205	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1206	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1209	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1211	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 1212	CARBON FILM RES.	100	1/6W	5%	RD16PJ101 100	J01225101		1-	
R 1212	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		3-	
R 1215	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1216	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1218	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1221	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1221	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		9-	
R 1222	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	
R 1222	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		9-	
R 1223	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1231	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 1231	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		3-	
R 1232	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1233	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 1234	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1235	CHIP RES.	10	1/10W	5%	RMC1/10T 100J	J24205100		1-	
R 1237	CHIP RES.	120	1/10W	5%	RMC1/10T 121J	J24205121		1-	

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REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 1238	CHIP RES.	10	1/10W	5%	RMC1/10T 100J	J24205100		1-	
R 1239	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 1240	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 1241	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 1242	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 1243	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 1244	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1244	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		3-	
R 1245	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1246	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1247	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1248	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 1251	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1252	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1253	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1255	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 1259	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 1300	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1301	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 1302	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 1303	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 1304	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1305	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1306	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	
R 1307	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1308	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1311	CHIP RES.	1.2k	1/16W	5%	RMC1/16 122JATP	J24185122		1-	
R 1312	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1313	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1313	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		9-	
R 1314	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1314	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		9-	
R 1315	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1316	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 1317	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1318	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 1319	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1320	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1321	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1322	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 1323	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 1324	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 1325	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1326	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1328	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1331	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1332	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1333	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1334	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1335	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1336	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1337	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1338	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1339	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1340	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 1341	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1342	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	



# 144-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 1343	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1344	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	
R 1345	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 1347	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1348	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1349	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1350	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1351	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 1352	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION A1	1-	
R 1352	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION A2	1-	
R 1352	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION A3	1-	
R 1352	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION H1	1-	
R 1352	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION H2	1-	
R 1353	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION H1	1-	
R 1353	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION H2	1-	
R 1354	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B1	1-	
R 1354	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B2	1-	
R 1354	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B3	1-	
R 1354	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C1	1-	
R 1354	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C2	1-	
R 1354	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C3	1-	
R 1354	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION D1	1-	
R 1354	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION D2	1-	
R 1358	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION A1	1-	
R 1358	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION B1	1-	
R 1358	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION C1	1-	
R 1358	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION D1	1-	
R 1358	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION H1	1-	
R 1359	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION A1	1-	
R 1359	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION A2	1-	
R 1359	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION B1	1-	
R 1359	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION B2	1-	
R 1359	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION C1	1-	
R 1359	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION C2	1-	
R 1359	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION D1	1-	
R 1359	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION D2	1-	
R 1359	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION H1	1-	
R 1359	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000	VERSION H2	1-	
R 1360	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION A1	1-	
R 1360	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION A2	1-	
R 1360	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION A3	1-	
R 1360	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B1	1-	
R 1360	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B2	1-	
R 1360	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B3	1-	
R 1360	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION D1	1-	
R 1360	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION D2	1-	
R 1361	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B1	1-	
R 1361	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B2	1-	
R 1361	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B3	1-	
R 1361	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C1	1-	
R 1361	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C2	1-	
R 1361	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C3	1-	
R 1362	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION D1	1-	
R 1362	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION D2	1-	
R 1362	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION H1	1-	
R 1362	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION H2	1-	
R 1365	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION A1	1-	

# 144-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 1365	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION A2	1-	
R 1365	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION A3	1-	
R 1365	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B1	1-	
R 1365	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B2	1-	
R 1365	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B3	1-	
R 1365	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C1	1-	
R 1365	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C2	1-	
R 1365	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C3	1-	
R 1365	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION D1	1-	
R 1365	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION D2	1-	
R 1365	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION H1	1-	
R 1365	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION H2	1-	
R 1366	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B1	1-	
R 1366	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B2	1-	
R 1366	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B3	1-	
R 1366	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C1	1-	
R 1366	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C2	1-	
R 1366	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C3	1-	
R 1366	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION D1	1-	
R 1366	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION D2	1-	
R 1367	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B1	1-	
R 1367	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B2	1-	
R 1367	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION B3	1-	
R 1367	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C1	1-	
R 1367	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C2	1-	
R 1367	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION C3	1-	
R 1367	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION D1	1-	
R 1367	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	VERSION D2	1-	
R 1368	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1369	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1370	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1371	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1372	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1373	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1374	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1375	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1376	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 1377	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1378	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1380	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1381	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1382	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1383	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1384	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1384	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		2-	
R 1385	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	
R 1386	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1387	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 1387	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		2-	
R 1389	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1390	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1391	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1392	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1393	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1393	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		2-	
R 1394	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	
R 1395	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	

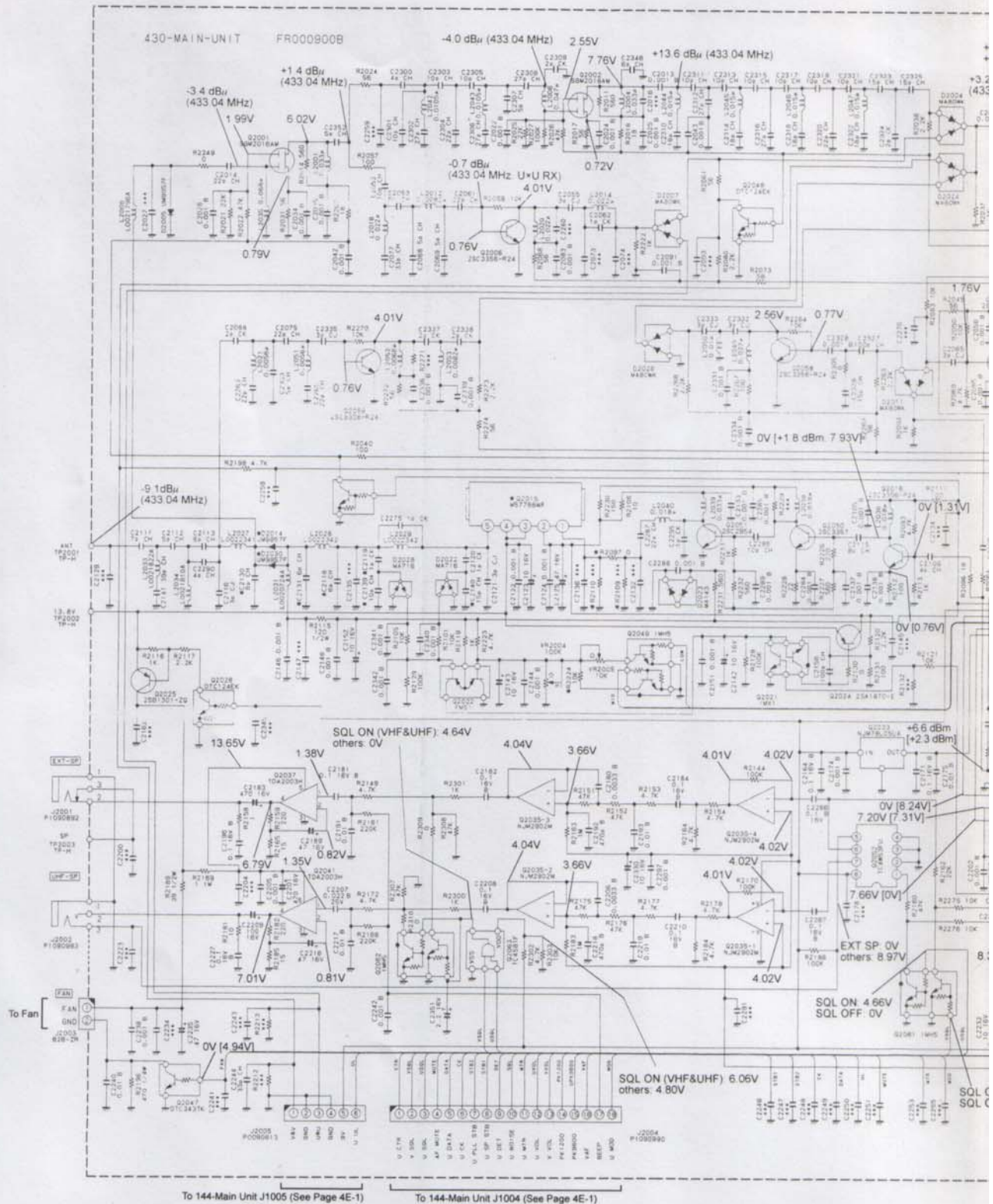
# 144-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 1395	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		2-	
R 1395	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		3-	
R 1396	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1396	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		2-	
R 1396	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		3-	
R 1397	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1397	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		2-	
R 1397	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		3-	
R 1398	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1398	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		2-	
R 1398	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		3-	
R 1399	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1400	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 1401	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 1402	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1404	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 1405	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1406	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1406	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		2-	
R 1407	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1408	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1409	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1410	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1411	CARBON FILM RES.	2.2M	1/6W	5%	RD16PJ225 2.2M	J01225225		1-	
R 1412	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1413	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1414	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1415	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1416	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1417	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1417	CHIP RES.	150k	1/16W	5%	RMC1/16 154JATP	J24185154		3-	
R 1417	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		9-	
R 1418	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1418	CHIP RES.	150k	1/16W	5%	RMC1/16 154JATP	J24185154		3-	
R 1418	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		9-	
R 1419	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1419	CHIP RES.	150k	1/16W	5%	RMC1/16 154JATP	J24185154		3-	
R 1419	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		9-	
R 1420	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1420	CHIP RES.	150k	1/16W	5%	RMC1/16 154JATP	J24185154		3-	
R 1420	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		9-	
R 1421	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1422	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1423	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 1424	CHIP RES.	3.9k	1/16W	5%	RMC1/16 392JATP	J24185392		1-	
R 1425	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1426	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 1427	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 1428	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 1429	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 1430	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		2-	
R 1432	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1433	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 1433	CHIP RES.	33k	1/16W	5%	RMC1/16 333JATP	J24185333		9-	
R 1434	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	AUSTRALIA	3-	
R 1434	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	EXPORT	3-	
R 1434	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180	USA	3-	

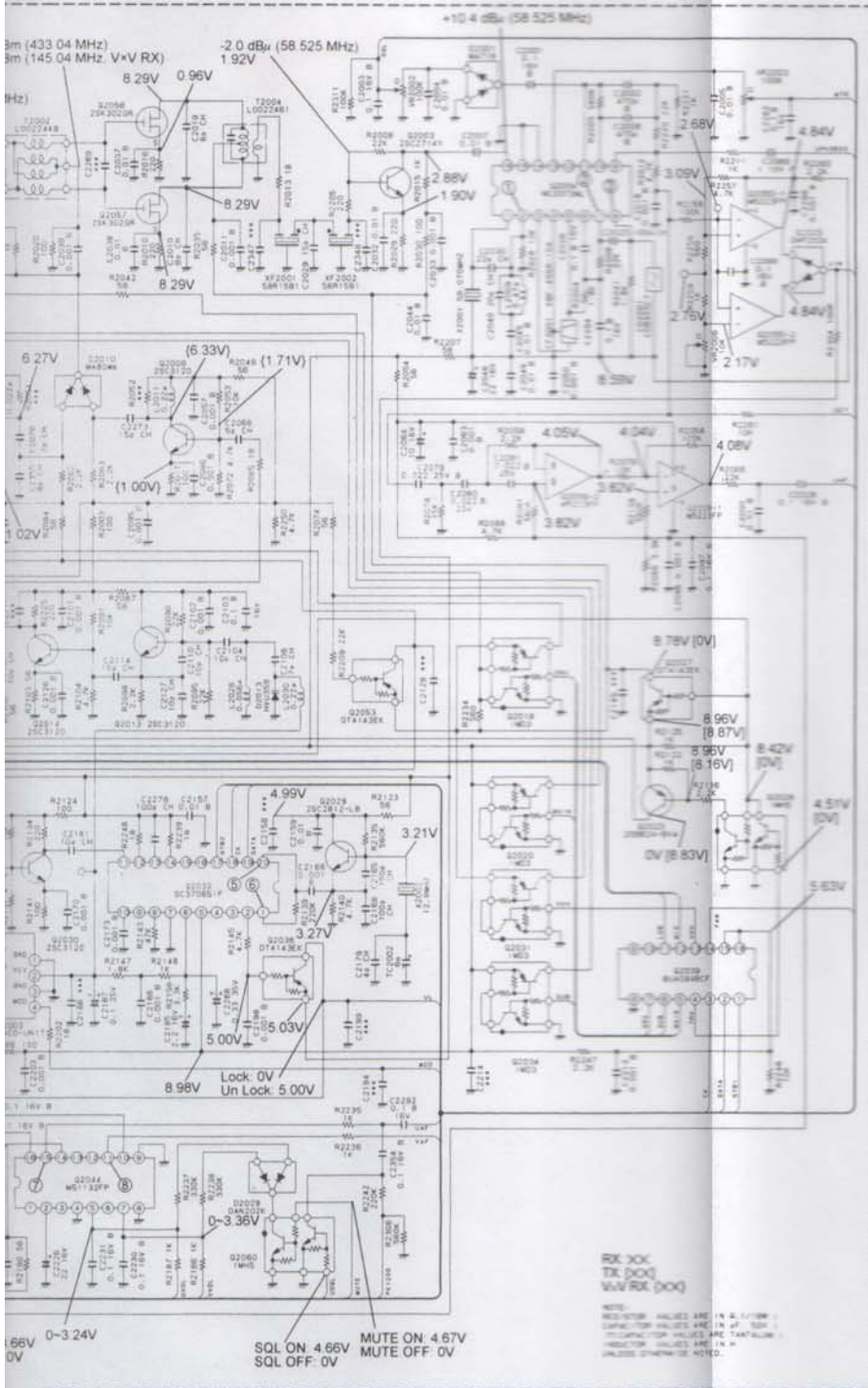
# 144-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 1435	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		9-	
T 1002	COIL 04WIDE				4BLH-4	L0022449		1-	
T 1003	COIL 07RF				600GCS-7835N	L0022241		1-	
T 1005	COIL 07RF	160MHz			160M R12-K908X	L0022054		1-	
T 1006	COIL 07RF	160MHz			160M R12-K905X	L0022053		1-	
T 1007	COIL 07RF	160MHz			160M R12-K907X	L0022055		1-	
T 1008	COIL 07RF	160MHz			160M R12-K906X	L0022056		1-	
TC1001	TRIMMER CAP.	20pF			ECR-KN020E61X	K91000213		1-	
TH1001	THERMISTOR				TBPS1R103K440H5Q	G9090067		1-	
VR1001	POT.	100k			EVN-5ESX50B15	J51811104		1-	
VR1002	POT.	10k			EVN-5ESX50B14	J51811103		1-	
VR1003	POT.	100k			EVN-5ESX50B15	J51811104		1-	
VR1004	POT.	100k			EVN-5ESX50B15	J51811104		1-	
VR1005	POT.	100k			EVN-5ESX50B15	J51811104		1-	
VR1006	POT.	100k			EVN-5ESX50B15	J51811104		1-	
VR1007	POT.	10k			EVN-5ESX50B14	J51811103		1-	
X 1001	XTAL UM-1	45.505MHz			45.505MHZ	H0103132		1-	
X 1002	XTAL HC-49/T	12.8MHz			12.800MHZ	H0102801		1-	
X 1003	XTAL LP-3.5.2S	9.8304MHz			9.8304MHZ	H0103148		1-	
XF1001	XTAL FILTER				45M15B1H	H1102253		1-	
XF1002	XTAL FILTER				45M15B1H	H1102253		1-	
	HOLDER (3pcs)				XTAL	R3129530		1-	
	RUBBER (2pcs)					R7151830		3-	
	SPONGE RUBBER					R7152310		1-	
	SHIELD CASE					R0149190A		1-	
	TAPTITE SCREW (7pcs)			M2.6X5		U24205001		1-	
	BINDING HEAD SCREW (2pcs)			M3X6		U20306001		1-	
	LEAF SPRING					R0132100	VERSION B1	1-	
	LEAF SPRING					R0132100	VERSION B2	1-	
	LEAF SPRING					R0132100	VERSION C1	1-	
	LEAF SPRING					R0132100	VERSION C2	1-	
	LEAF SPRING					R0132100	VERSION D1	1-	
	LEAF SPRING					R0132100	VERSION D2	1-	

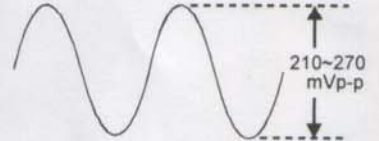
# Circuit Diagram



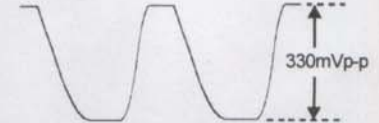
# 430-Main Unit



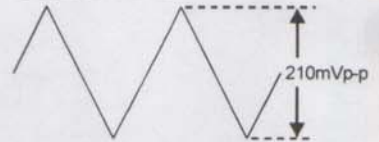
① Q2004 Pin 2 (58.070 MHz)



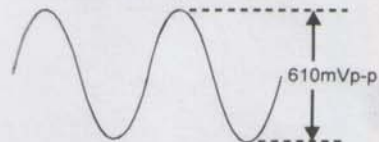
② Q2004 Pin 7



③ Q2004 Pin 8



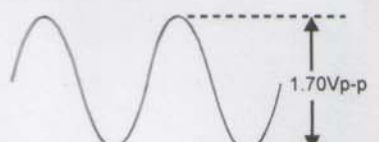
④ Q2032 Pin 1 (12.8 MHz)



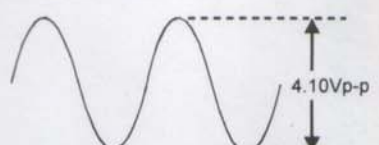
⑤ Q2032 Pin 20 (12.8 MHz)



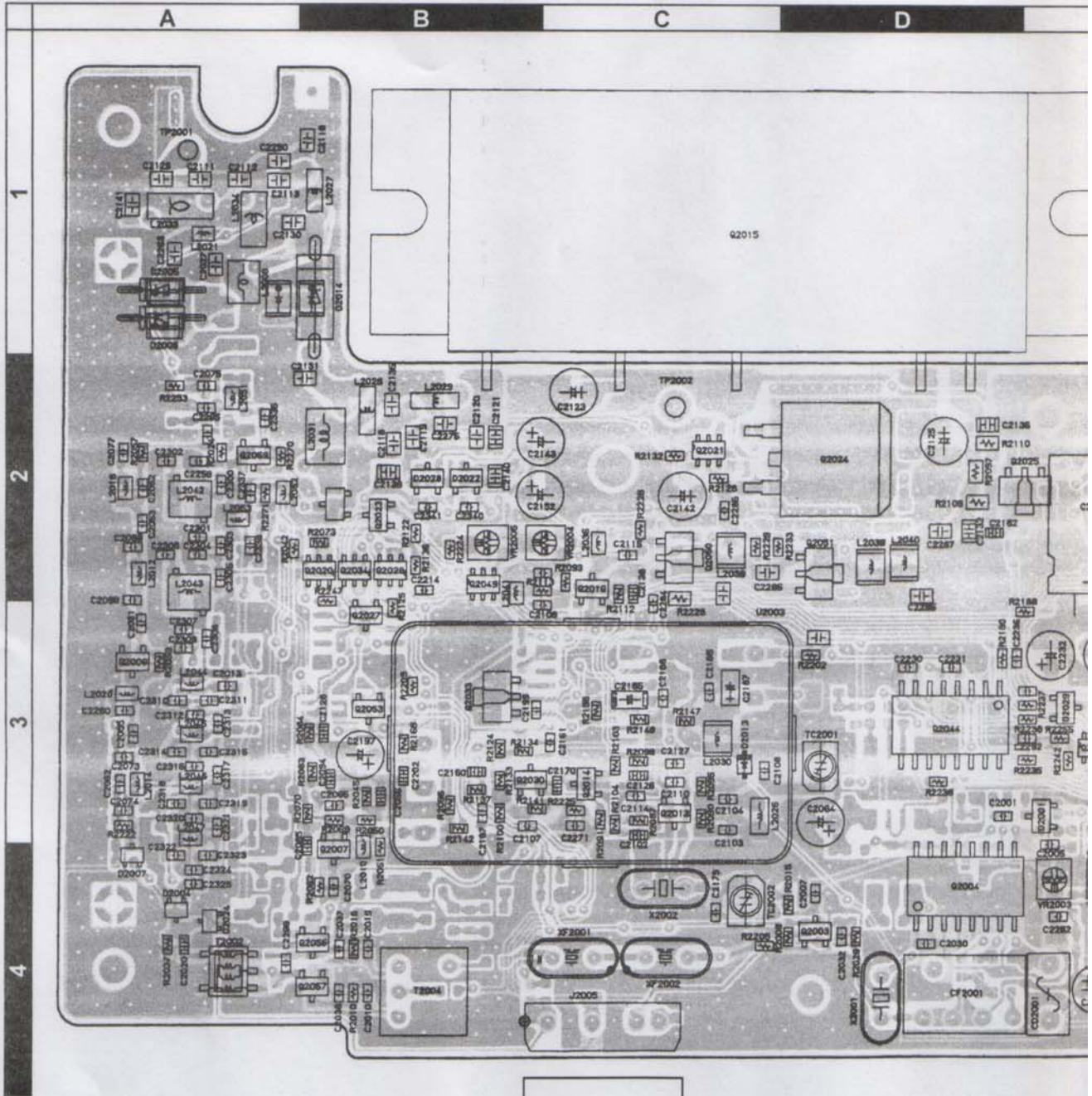
⑥ Q2044 Pin 11



⑦ Q2044 Pin 15



# Parts Layout

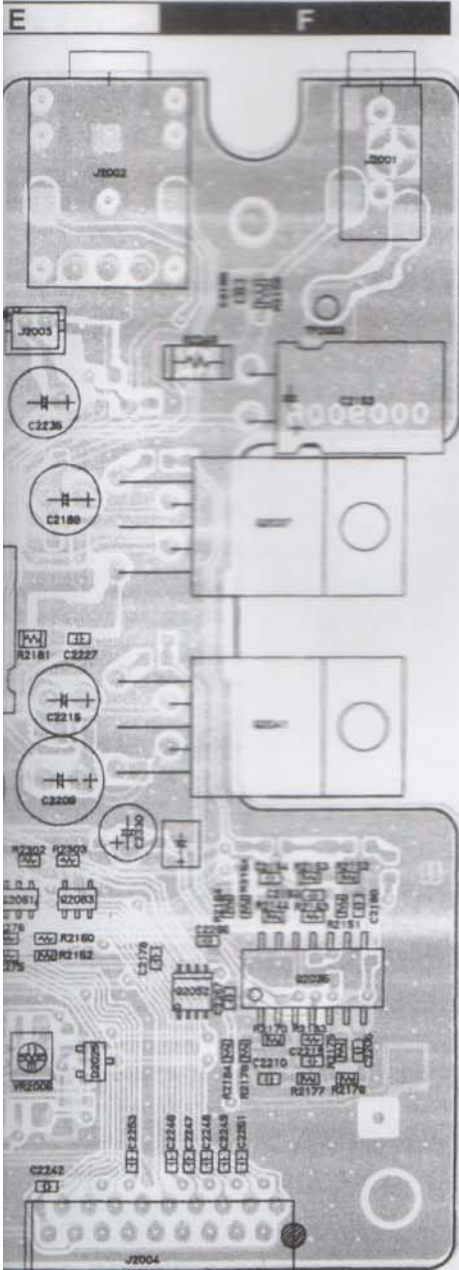


V & V  
 GND  
 U & U  
 GND  
 5V  
 UUL

To 144M-Main Unit J1005  
 (See Page 4E-3)

obverse view of component side

# 430-Main Unit

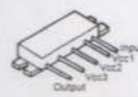


To 144M-Main Unit J1004  
(See Page 4E-3)

U DET	U SP STB	U PLL STB	U CK	U DATA	AF MUTE	U SOL	V SOL	U CTR
U NOISE	U MTR	U VOL	V VOL	PK1200	PK9600	V AF	BEEP	U MOD



MC3372ML  
(Q2004)  
M51132FP  
(Q2044)



M57788MR  
(Q2015)



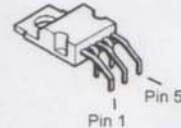
NJM2902M  
(Q2035)



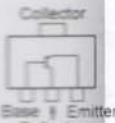
TC4W53FU  
(Q2052)



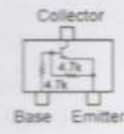
2SA1870  
(Q2024)



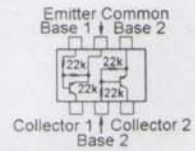
TDA2003H  
(Q2037, 2041)



2SB1301  
(Q2025)



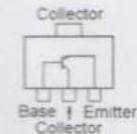
DTA143EK (13)  
(Q2027, 2053)



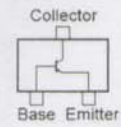
IMH5 (H5)  
(Q2028, 2049, 2060, 2061)



NUM7BL05UA (8C)  
(Q2033)



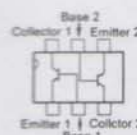
2SC2954 (QK)  
(Q2051)  
2SC3357 (RK)  
(Q2050)



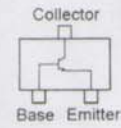
2SB624 (BV3)  
(Q2023)



TC4S81F  
(Q2063)



IMX1 (X1)  
(Q2021)



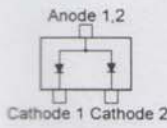
2SC2714Y (QY)  
(Q2003)  
2SC3120 (HB)  
(Q2007, 2013,  
2014, 2030)  
2SC3356 (R24)  
(Q2006, 2016, 2059)



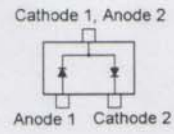
IMD3 (D3)  
(Q2020, 2034)



DAN202K  
(D2029)  
MAB0VK  
(D2004, 2007, 2024)



DAP202K  
(D2025)



MA716 (M1U)  
(D2001, 2022, 2028)



# 430-Main Unit

## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** 430-MAIN UNIT ***									
	PCB with 430-VCO UNIT					CP5798002		-14	
	PCB with 430-VCO UNIT					CP5798004	VERSION A1	15-	
	PCB with 430-VCO UNIT					CP5798005	VERSION A2	15-	
	PCB with 430-VCO UNIT					CP5798006	VERSION A3	15-	
	PCB with 430-VCO UNIT					CP5798007	VERSION B1	15-	
	PCB with 430-VCO UNIT					CP5798008	VERSION B2	15-	
	PCB with 430-VCO UNIT					CP5798009	VERSION B3	15-	
	PCB with 430-VCO UNIT					CP5798010	VERSION C1	15-	
	PCB with 430-VCO UNIT					CP5798011	VERSION C2	15-	
	PCB with 430-VCO UNIT					CP5798012	VERSION C3	15-	
	PCB with 430-VCO UNIT					CP5798013	VERSION D1	15-	
	PCB with 430-VCO UNIT					CP5798014	VERSION D2	15-	
	PCB with 430-VCO UNIT					CP5798015	VERSION H1	15-	
	PCB with 430-VCO UNIT					CP5798016	VERSION H2	15-	
	Printed Circuit Board					FR000900B		1-	
C 2001	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2002	CHIP CAP.	470pF	50V	B	GRM39B471M50PT	K22174805		1-	
C 2003	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2004	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2005	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2006	CHIP CAP.	470pF	50V	B	GRM39B471M50PT	K22174805		1-	
C 2007	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2010	CHIP CAP.	8pF	50V	CH	GRM39CH080D50PT	K22174209		1-	
C 2011	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2013	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2014	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		1-	
C 2018	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2019	CHIP CAP.	8pF	50V	CH	GRM39CH080D50PT	K22174209		1-	
C 2020	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2022	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2023	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235		1-	
C 2024	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2025	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2026	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2028	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2029	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		1-	
C 2030	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		1-	
C 2032	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2033	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2034	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2035	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2037	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2038	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2039	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2040	CHIP CAP.	33pF	50V	CH	GRM39CH330J50PT	K22174223		1-	
C 2040	CHIP CAP.	20pF	50V	CH	GRM39CH200J50PT	K22174218		5-	
C 2042	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2043	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2044	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2045	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2046	AL. ELECTRO. CAP.	22uF	16V		RC2-16V220M-T34(4X7)	K46120008		1-	
C 2049	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2050	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2052	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2053	CHIP CAP.	6pF	50V	CH	GRM39CH060D50PT	K22174207		1-	
C 2055	CHIP CAP.	3pF	50V	CJ	GRM39CJ030C50PT	K22174204		1-	

# 430-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
C 2056	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2057	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2061	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		1-	
C 2062	CHIP CAP.	1pF	50V	CK	GRM39CK010C50PT	K22174202		1-	
C 2063	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2064	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 2065	CHIP CAP.	3pF	50V	CJ	GRM39CJ030C50PT	K22174204		1-	
C 2066	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206		1-	
C 2068	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206		1-	
C 2069	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206		1-	
C 2070	CHIP CAP.	7pF	50V	CH	GRM39CH070D50PT	K22174208		1-	
C 2075	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		1-	
C 2077	CHIP CAP.	33pF	50V	CH	GRM39CH330J50PT	K22174223		1-	
C 2079	CHIP CAP.	0.022uF	25V	B	GRM39B223K25PT	K22144807		1-	
C 2080	CHIP CAP.	0.022uF	25V	B	GRM39B223K25PT	K22144807		1-	
C 2081	CHIP CAP.	0.022uF	25V	B	GRM39B223K25PT	K22144807		1-	
C 2083	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2085	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2086	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2088	CHIP CAP.	2pF	50V	CK	GRM40CK020C50PT	K22170203		1-	
C 2089	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2089	CHIP CAP.	1uF	10V	F	GRM39F105Z10PT	K22105001		9-	
C 2090	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2091	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2094	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2095	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2096	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2097	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2101	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2102	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2103	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2104	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2105	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2106	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2107	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2108	CHIP CAP.	7pF	50V	CH	GRM39CH070D50PT	K22174208		1-	
C 2109	CHIP CAP.	4pF	50V	CH	GRM39CH040C50PT	K22174205		1-	
C 2110	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2111	CHIP CAP.	7pF	50V	CH	GRM40CH070D50PT	K22170208		1-	
C 2112	CHIP CAP.	5pF	50V	CH	GRM40CH050C50PT	K22170206		1-	
C 2113	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207		1-	
C 2114	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		1-	
C 2115	CHIP CAP.	8pF	50V	CH	GRM39CH080D50PT	K22174209		1-	
C 2116	CHIP CAP.	3pF	50V	CJ	GRM40CJ030C50PT	K22170204		1-	
C 2118	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207		1-	
C 2119	CHIP CAP.	1pF	50V	CK	GRM40CK010C50PT	K22170202		1-	
C 2120	CHIP CAP.	1pF	50V	CK	GRM40CK010C50PT	K22170202		1-	
C 2121	CHIP CAP.	3pF	50V	CJ	GRM40CJ030C50PT	K22170204		1-	
C 2122	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2123	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 2124	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2125	AL.ELECTRO.CAP.	47uF	16V		RC2-16V470M-T34(5X7)	K46120010		1-	
C 2126	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2127	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2130	CHIP CAP.	8pF	50V	CH	GRM40CH080D50PT	K22170209		1-	
C 2131	CHIP CAP.	6pF	50V	CH	GRM40CH060D50PT	K22170207		1-	
C 2133	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	

# 430-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
C 2137	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2138	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2139	CHIP CAP.	12pF	50V	CH	GRM40CH120J50PT	K22170213		1-	
C 2140	CHIP CAP.	15pF	50V	CH	GRM40CH150J50PT	K22170215		1-	
C 2141	CHIP CAP.	33pF	50V	CH	GRM40CH330J50PT	K22170223		1-	
C 2141	CHIP CAP.	39pF	50V	CH	GRM40CH390J50PT	K22170225		2-	
C 2142	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 2143	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 2144	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2146	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2148	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2151	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2152	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 2156	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235		1-	
C 2157	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2159	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2160	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2161	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2164	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2165	CHIP CAP.	150pF	50V	CH	GRM39CH151J50PT	K22174239		1-	
C 2166	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2167	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		1-	
C 2168	CHIP CAP.	150pF	50V	CH	GRM39CH151J50PT	K22174239		1-	
C 2168	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235		4-	
C 2170	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2171	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2173	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2174	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2175	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2179	CHIP CAP.	33pF	50V	CH	GRM39CH330J50PT	K22174223		1-	
C 2179	CHIP CAP.	4pF	50V	CH	GRM39CH040C50PT	K22174205		4-	
C 2180	CHIP CAP.	0.0033uF	50V	B	GRM39B332M50PT	K22174815		1-	
C 2181	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2182	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2183	AL.ELECTRO.CAP.	470uF	16V		RE3-16V471M 470UF	K40129066		1-	
C 2184	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2185	CHIP TA.CAP.	2.2uF	16V		TEMSVA1C225M-8R	K78120015		1-	
C 2187	CHIP TA.CAP.	0.1uF	35V		TESVA1V104M1-8R	K78160025		1-	
C 2188	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2189	AL.ELECTRO.CAP.	47uF	16V		RC2-16V470M-T34(5X7)	K46120010		1-	
C 2191	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2192	CHIP CAP.	470pF	50V	B	GRM39B471M50PT	K22174805		1-	
C 2193	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2196	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2197	AL ELECTRO CAP	22uF	16V		RC2-16V220M-T34(4X7)	K46120008		1-	
C 2198	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2201	AL.ELECTRO.CAP.	470uF	16V		RE3-16V471M 470UF	K40129066		1-	
C 2202	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2203	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2205	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2206	CHIP CAP.	0.0033uF	50V	B	GRM39B332M50PT	K22174815		1-	
C 2207	CHIP CAP.	0.022uF	25V	B	GRM39B223K25PT	K22144807		1-	
C 2208	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2209	AL.ELECTRO.CAP.	100uF	16V		16V101M6X7TR2	K46120007		1-	
C 2210	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2213	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2216	AL.ELECTRO.CAP.	47uF	16V		RC2-16V470M-T34(5X7)	K46120010		1-	

# 430-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
C 2217	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2218	CHIP CAP.	470pF	50V	B	GRM39B471M50PT	K22174805		1-	
C 2219	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2226	AL.ELECTRO.CAP.	22uF	16V		RC2-16V220M-T34(4X7)	K46120008		1-	
C 2227	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2230	TANTALUM CAP.	2.2uF	16V		TPDN1C2R2M8S(MX0)	K76120015		1-	
C 2230	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		2-	
C 2230	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		3-	
C 2231	TANTALUM CAP.	2.2uF	16V		TPDN1C2R2M8S(MX0)	K76120015		1-	
C 2231	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		2-	
C 2231	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		3-	
C 2232	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 2235	AL.ELECTRO.CAP.	47uF	16V		RC2-16V470M-T34(5X7)	K46120010		1-	
C 2236	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2238	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2240	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 2242	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2244	CHIP CAP.	33pF	50V	CH	GRM39CH330J50PT	K22174223		1-	
C 2250	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	VERSION B1	1-	
C 2250	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	VERSION B2	1-	
C 2250	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	VERSION C1	1-	
C 2250	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	VERSION C2	1-	
C 2250	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	VERSION D1	1-	
C 2250	CHIP CAP.	0.001uF	50V	B	GRM39B102K50PT	K22174821	VERSION D2	1-	
C 2262	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2263	CHIP CAP.	22pF	50V	CH	GRM40CH220J50PT	K22170219		1-	
C 2265	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		1-	
C 2266	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2267	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2268	CHIP TA. CAP.	0.1uF	35V		TESVA1V104M1-8R	K78160025		1-	
C 2268	CHIP TA. CAP.	0.33uF	35V		TESVA1V334M1-8R	K78160028		9-	
C 2273	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		1-	
C 2275	CHIP CAP.	1pF	50V	CK	GRM40CK010C50PT	K22170202		1-	
C 2278	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235		1-	
C 2284	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2285	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2286	CHIP CAP.	5pF	50V	CH	GRM40CH050C50PT	K22170206		1-	
C 2286	CHIP CAP.	10pF	50V	CH	GRM40CH100D50PT	K22170211		3-	
C 2287	CHIP CAP.	22pF	50V	CH	GRM40CH220J50PT	K22170219		1-	
C 2288	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2289	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2290	CHIP CAP.	4pF	50V	CH	GRM40CH040C50PT	K22170205		1-	
C 2292	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2294	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2295	CHIP CAP.	1pF	50V	CK	GRM40CK010C50PT	K22170202		1-	
C 2297	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2298	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2299	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2300	CHIP CAP.	4pF	50V	CH	GRM39CH040C50PT	K22174205		1-	
C 2301	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2302	CHIP CAP.	27pF	50V	CH	GRM39CH270J50PT	K22174221		1-	
C 2303	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2304	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		1-	
C 2305	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2306	CHIP CAP.	27pF	50V	CH	GRM39CH270J50PT	K22174221		1-	
C 2307	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206		1-	
C 2308	CHIP CAP.	27pF	50V	CH	GRM39CH270J50PT	K22174221		1-	

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REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
C 2309	CHIP CAP.	2pF	50V	CK	GRM39CK020C50PT	K22174203		1-	
C 2310	CHIP CAP.	18pF	50V	CH	GRM39CH180J50PT	K22174217		1-	
C 2311	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2312	CHIP CAP.	27pF	50V	CH	GRM39CH270J50PT	K22174221		1-	
C 2313	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2314	CHIP CAP.	18pF	50V	CH	GRM39CH180J50PT	K22174217		1-	
C 2315	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2316	CHIP CAP.	27pF	50V	CH	GRM39CH270J50PT	K22174221		1-	
C 2317	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2318	CHIP CAP.	18pF	50V	CH	GRM39CH180J50PT	K22174217		1-	
C 2319	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2320	CHIP CAP.	27pF	50V	CH	GRM39CH270J50PT	K22174221		1-	
C 2320	CHIP CAP.	22pF	50V	CH	GRM39CH220J50PT	K22174219		2-	
C 2321	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2322	CHIP CAP.	18pF	50V	CH	GRM39CH180J50PT	K22174217		1-	
C 2323	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		1-	
C 2324	CHIP CAP.	2pF	50V	CK	GRM39CK020C50PT	K22174203		1-	
C 2325	CHIP CAP.	10pF	50V	CH	GRM39CH100D50PT	K22174211		1-	
C 2325	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		2-	
C 2326	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2327	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235		1-	
C 2328	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2329	CHIP CAP.	15pF	50V	CH	GRM39CH150J50PT	K22174215		1-	
C 2330	AL ELECTRO CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-	
C 2331	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2332	CHIP CAP.	3pF	50V	CJ	GRM39CJ030C50PT	K22174204		1-	
C 2333	CHIP CAP.	3pF	50V	CJ	GRM39CJ030C50PT	K22174204		1-	
C 2334	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2335	CHIP CAP.	3pF	50V	CJ	GRM39CJ030C50PT	K22174204		1-	
C 2336	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2337	CHIP CAP.	2pF	50V	CK	GRM39CK020C50PT	K22174203		1-	
C 2338	CHIP CAP.	2pF	50V	CK	GRM39CK020C50PT	K22174203		1-	
C 2339	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2340	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2341	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2342	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 2343	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2344	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2346	CHIP CAP.	6pF	50V	CH	GRM39CH060D50PT	K22174207		1-	
C 2351	CHIP TA. CAP.	2.2uF	16V		TEMSVA1C225M-8R	K78120015		1-	
C 2352	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206		1-	
C 2353	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206		1-	
C 2354	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 2355	CHIP CAP.	8pF	50V	CH	GRM39CH080D50PT	K22174209		1-	
C 2356	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206	VERSION B1	1-	
C 2356	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206	VERSION C1	1-	
C 2356	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206	VERSION C2	1-	
C 2356	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206	VERSION D1	1-	
C 2356	CHIP CAP.	5pF	50V	CH	GRM39CH050C50PT	K22174206	VERSION D2	1-	
C 2357	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243	VERSION B1	1-	
C 2357	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243	VERSION B2	1-	
C 2357	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243	VERSION C1	1-	
C 2357	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243	VERSION C2	1-	
C 2357	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243	VERSION D1	1-	
C 2357	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243	VERSION D2	1-	
CD2001	CERAMIC DISC				CDB455C7	H7900180		1-	
CF2001	CERAMIC FILTER				KBF-455R-15A	H3900394		1-	

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REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
D 2001	DIODE				MA716-(TX)	G2070342		1-	E-4
D 2004	DIODE				MA80WK-(TX)	G2070528		1-	A-4
D 2005	DIODE				UM9401F/TR	G2070516		1-	A-1
D 2005	DIODE				UM9957F/TR	G2070562		3-	A-1
D 2007	DIODE				MA80WK-(TX)	G2070528		1-	A-4
D 2010	DIODE				MA80WK-(TX)	G2070528		1-	b-4
D 2011	DIODE				MA80WK-(TX)	G2070528		1-	b-4
D 2013	DIODE				HVU359TRF	G2070452		1-	C-3
D 2014	DIODE				UM9401F/TR	G2070516		1-	B-1
D 2014	DIODE				UM9957F/TR	G2070562		3-	B-1
D 2022	DIODE				MA716-(TX)	G2070342		1-	B-2
D 2023	DIODE				MA143-(TX)	G2070536		1-	c-3
D 2024	DIODE				MA80WK-(TX)	G2070528		1-	A-4
D 2025	DIODE				DAP202K T146	G2070180		1-	E-4
D 2026	DIODE				MA80WK-(TX)	G2070528		1-	a-4
D 2028	DIODE				MA716-(TX)	G2070342		1-	B-2
D 2029	DIODE				DAN202K T146	G2070182		1-	E-3
D 2030	DIODE				UM9401F/TR	G2070516		1-	A-1
D 2030	DIODE				UM9957F/TR	G2070562		3-	A-1
J 2001	CONNECTOR				HSJ1456-01-210	P1090892		1-	
J 2002	CONNECTOR				HSJ6062-01-440	P1090983		1-	
J 2003	CONNECTOR				B2B-ZR	P0090647		1-	
J 2004	CONNECTOR				18FMN-STRK	P1090990		1-	
J 2005	CONNECTOR				SB20-06WS	P0090613		1-	
L 2001	M.RFC	0.033uH			HK2125 33NK-T	L1690383		1-	
L 2004	M.RFC	0.033uH			HK2125 33NK-T	L1690383		1-	
L 2006	M.RFC	0.047uH			HK2125 47NK-T	L1690385		1-	
L 2008	COIL A1				5.5T1.5D0.4UEW R	L0021796A		1-	
L 2009	M.RFC	0.47uH			ELJ-FAR47MF	L1690397		1-	
L 2010	M.RFC	0.022uH			HK2125 22NK-T	L1690381		1-	
L 2011	M.RFC	0.22uH			ELJ-FAR22MF	L1690396		1-	
L 2012	M.RFC	0.0082uH			HK2125 8N2K-T	L1690376		1-	
L 2014	M.RFC	0.022uH			HK2125 22NK-T	L1690381		1-	
L 2018	M.RFC	0.022uH			HK2125 22NK-T	L1690381		1-	
L 2020	M.RFC	0.022uH			HK2125 22NK-T	L1690381		1-	
L 2021	M.RFC	0.0056uH			HK2125 5N6K-T	L1690374		1-	
L 2026	CHIP COIL	0.056uH			LQN1A56NJ04	L1690257		1-	
L 2027	COIL A1				1.5T3.0D0.8UEW R	L0022341		1-	
L 2028	COIL A1				1.5T3.5D0.8UEW R	L0022342		1-	
L 2029	COIL A1				1.5T3.5D0.8UEW R	L0022342		1-	
L 2030	CHIP COIL	0.22uH			LQN2AR22K	L1690003		1-	
L 2030	CHIP COIL	0.22uH			LQN21AR22J04	L1690600		15-	
L 2031	COIL A1				8.5T3.0D0.5UEW R	L0020724A		1-	
L 2033	COIL A1				1.5T4.0D0.6UEW R	L0021822A		1-	
L 2034	COIL A1				1.5T3.0D0.6UEW R	L0021810A		1-	
L 2035	M.RFC	0.068uH			HK2125 68NK-T	L1690387		1-	
L 2036	M.RFC	0.018uH			HK2125 18NK-T	L1690380		1-	
L 2038	CHIP COIL	0.018uH			LQN2A18NM	L1690004		1-	
L 2038	CHIP COIL	0.018uH			LQN21A18NJ04	L1690612		15-	
L 2039	CHIP COIL	0.033uH			LQN2A33NM	L1690005		1-	
L 2039	CHIP COIL	0.033uH			LQN21A33NJ04	L1690615		15-	
L 2040	CHIP COIL	0.018uH			LQN2A18NM	L1690004		1-	
L 2040	CHIP COIL	0.018uH			LQN21A18NJ04	L1690612		15-	
L 2042	M.RFC	0.0105uH			33CS 655LY-02M=P3	L1690241		1-	
L 2043	M.RFC	0.0105uH			33CS 655LY-02M=P3	L1690241		1-	
L 2044	M.RFC	0.015uH			HK2125 15NK-T	L1690379		1-	
L 2045	M.RFC	0.015uH			HK2125 15NK-T	L1690379		1-	

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REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
L 2046	M.RFC	0.015uH			HK2125 15NK-T	L1690379		1-	
L 2047	M.RFC	0.015uH			HK2125 15NK-T	L1690379		1-	
L 2049	M.RFC	0.022uH			HK2125 22NK-T	L1690381		1-	
L 2050	M.RFC	0.01uH			HK2125 10NK-T	L1690377		1-	
L 2051	M.RFC	0.0056uH			HK2125 5N6K-T	L1690374		1-	
L 2052	M.RFC	0.0068uH			HK2125 6N8K-T	L1690375		1-	
L 2053	M.RFC	0.0082uH			HK2125 8N2K-T	L1690376		1-	
L 2054	M.RFC	0.022uH			HK1608 22NJ-T	L1690520	VERSION B1	1-	
L 2054	M.RFC	0.022uH			HK1608 22NJ-T	L1690520	VERSION B2	1-	
L 2054	M.RFC	0.022uH			HK1608 22NJ-T	L1690520	VERSION C1	1-	
L 2054	M.RFC	0.022uH			HK1608 22NJ-T	L1690520	VERSION C2	1-	
L 2054	M.RFC	0.022uH			HK1608 22NJ-T	L1690520	VERSION D1	1-	
L 2054	M.RFC	0.022uH			HK1608 22NJ-T	L1690520	VERSION D2	1-	
Q 2001	FET				SGM2016M-T7	G4070005		1-	a-2
Q 2001	FET				SGM2016AM-T7	G4070012		15-	a-2
Q 2002	FET				SGM2016M-T7	G4070005		1-	a-3
Q 2002	FET				SGM2016AM-T7	G4070012		15-	a-3
Q 2003	TRANSISTOR				2SC2714YTE85R	G3327147Y		1-	D-4
Q 2004	IC				MC3372ML	G1091108		1-	D-4
Q 2006	TRANSISTOR				2SC3356-T2B R24	G3333567D		1-	A-3
Q 2007	TRANSISTOR				2SC3120TE85R	G3331207		1-	B-4
Q 2008	TRANSISTOR				2SC3120TE85R	G3331207		1-	b-4
Q 2009	IC				M5223FP-600C	G1090990		1-	d-3
Q 2013	TRANSISTOR				2SC3120TE85R	G3331207		1-	C-3
Q 2014	TRANSISTOR				2SC3120TE85R	G3331207		1-	C-3
Q 2015	IC				M57788MR	G1091122		1-	C-1
Q 2016	TRANSISTOR				2SC3356-T2B R24	G3333567D		1-	C-2
Q 2018	TRANSISTOR				IMD3 T108	G3070053		1-	b-3
Q 2020	TRANSISTOR				IMD3 T108	G3070053		1-	B-3
Q 2021	TRANSISTOR				IMX1 T110	G3070024		1-	C-2
Q 2022	TRANSISTOR				FMS1 T148	G3070008		1-	b-2
Q 2023	TRANSISTOR				2SB624-T2B BV4	G3206247D		1-	B-2
Q 2024	TRANSISTOR				2SA1870 TL E	G3118708E		1-	D-2
Q 2025	TRANSISTOR				2SB1301-T2 ZQ	G3213017Q		1-	D-2
Q 2026	TRANSISTOR				DTC124EK T146	G3070034		1-	e-2
Q 2027	TRANSISTOR				DTA143EK T146	G3070010		1-	B-2
Q 2028	TRANSISTOR				IMH5 T108	G3070027		1-	B-2
Q 2029	TRANSISTOR				2SC2812L6-TA	G3328127F		1-	c-4
Q 2030	TRANSISTOR				2SC3120TE85R	G3331207		1-	B-3
Q 2031	TRANSISTOR				IMD3 T108	G3070053		1-	b-3
Q 2032	IC				SC370651FR2	G1091937		1-	c-3
Q 2033	IC				NJM78L05UA TE1	G1091325		1-	B-3
Q 2034	TRANSISTOR				IMD3 T108	G3070053		1-	B-2
Q 2035	IC				NJM2902M-T2	G1090908		1-	F-3
Q 2036	TRANSISTOR				DTA143EK T146	G3070010		1-	b-3
Q 2037	IC				TDA2003H	G1090815		1-	F-2
Q 2039	IC				UPD4094BG-T2	G1091043		1-	b-3
Q 2039	IC				BU4094BCF-E2	G1092684		9-	b-3
Q 2041	IC				TDA2003H	G1090815		1-	F-3
Q 2044	IC				M51132FP 600C	G1091930		1-	D-3
Q 2047	TRANSISTOR				DTC343TK T146	G3070081		1-	e-2
Q 2048	TRANSISTOR				DTC124EK T146	G3070034		1-	a-4
Q 2049	TRANSISTOR				IMH5 T108	G3070027		1-	B-2
Q 2050	TRANSISTOR				2SC3357-T2	G3333577		1-	C-2
Q 2051	TRANSISTOR				2SC2954-T2	G3329547		1-	D-2
Q 2052	IC				TC4W53FU TE12L	G1091675		1-	F-3
Q 2053	TRANSISTOR				DTA143EK T146	G3070010		1-	B-3

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REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
Q 2055	IC				M5223FP-600C	G1090990		1-	e-4
Q 2056	FET				2SK302GR TE85R	G3803027G		1-	B-4
Q 2057	FET				2SK302GR TE85R	G3803027G		1-	B-4
Q 2058	TRANSISTOR				2SC3356-T2B R24	G3333567D		1-	a-4
Q 2059	TRANSISTOR				2SC3356-T2B R24	G3333567D		1-	A-2
Q 2060	TRANSISTOR				IMH5 T108	G3070027		1-	E-3
Q 2061	TRANSISTOR				IMH5 T108	G3070027		1-	E-3
Q 2062	TRANSISTOR				IMH5 T108	G3070027		1-	f-3
Q 2063	IC				TC4S81F TE85R	G1090895		1-	E-3
R 2003	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 2004	CHIP RES.	1.8k	1/16W	5%	RMC1/16 182JATP	J24185182		1-	
R 2005	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	
R 2006	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 2008	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 2010	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 2011	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 2012	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2013	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 2014	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 2015	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2016	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 2017	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2018	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 2020	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 2021	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 2022	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 2024	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2025	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 2026	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 2027	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 2028	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2029	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 2030	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 2031	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2035	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2037	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2038	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 2040	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 2041	CHIP RES.	1.8k	1/16W	5%	RMC1/16 182JATP	J24185182		1-	
R 2042	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2045	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2046	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2048	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2050	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2053	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2054	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2056	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 2057	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 2058	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 2059	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2061	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2062	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 2063	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 2064	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 2065	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 2066	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 2068	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	



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REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 2069	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2070	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 2071	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 2072	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2073	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2074	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2076	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2078	CHIP RES.	15k	1/16W	5%	RMC1/16 153JATP	J24185153		1-	
R 2080	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 2081	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	
R 2083	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2084	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2086	CHIP RES.	3.9k	1/16W	5%	RMC1/16 392JATP	J24185392		1-	
R 2087	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2088	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2090	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 2091	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2093	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2094	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2095	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 2096	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 2097	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 2098	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 2100	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2101	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2103	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2104	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2105	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2106	CHIP RES.	10	1/10W	5%	RMC1/10T 100J	J24205100		1-	
R 2111	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 2112	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 2113	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2115	CHIP RES.	120	1/2W	5%	RMC1/2 121JATE	J24275121		1-	
R 2116	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2117	CHIP RES.	2.2k	1/10W	5%	RMC1/10T 222J	J24205222		1-	
R 2119	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2120	CHIP RES.	2.2k	1/10W	5%	RMC1/10T 222J	J24205222		1-	
R 2121	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2122	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2123	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2124	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 2125	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2128	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 2129	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 2130	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 2131	CHIP RES.	100	1/10W	5%	RMC1/10T 101J	J24205101		1-	
R 2133	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2134	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 2135	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	
R 2136	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 2137	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2138	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	
R 2139	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		1-	
R 2140	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2141	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 2142	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 2143	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	

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REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 2144	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 2145	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2147	CHIP RES.	1.8k	1/16W	5%	RMC1/16 182JATP	J24185182		1-	
R 2148	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2149	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2151	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 2152	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 2153	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2154	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2156	CHIP RES.	3.3k	1/16W	5%	RMC1/16 332JATP	J24185332		1-	
R 2158	CHIP RES.	1	1/10W	5%	RMC1/10T 1R0J	J24205010		1-	
R 2158	CHIP RES.	10	1/10W	5%	RMC1/10T 100J	J24205100		3-	
R 2158	CHIP RES.	1	1/10W	5%	RMC1/10T 1R0J	J24205010		8-	
R 2159	CHIP RES.	220	1/10W	5%	RMC1/10T 221J	J24205221		1-	
R 2160	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 2161	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		1-	
R 2162	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 2163	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	
R 2164	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2165	CHIP RES.	15	1/10W	5%	RMC1/10T 150J	J24205150		1-	
R 2166	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 2168	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		1-	
R 2169	CHIP RES.	1	1W	5%	RMC1 1R0JTE	J24305010		1-	
R 2170	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 2172	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2175	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 2176	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 2177	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2178	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2181	CHIP RES.	1	1/10W	5%	RMC1/10T 1R0J	J24205010		1-	
R 2181	CHIP RES.	10	1/10W	5%	RMC1/10T 100J	J24205100		3-	
R 2182	CHIP RES.	220	1/10W	5%	RMC1/10T 221J	J24205221		1-	
R 2183	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	
R 2184	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2185	CHIP RES.	15	1/10W	5%	RMC1/10T 150J	J24205150		1-	
R 2186	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2187	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2188	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 2189	CHIP RES.	39	1/2W	5%	RMC1/2 390JTE	J24275390		1-	
R 2190	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2196	CHIP RES.	470	1/4W	5%	RMC1/4 471JATP	J24245471		1-	
R 2198	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2202	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 2205	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 2207	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2209	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 2211	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 2211	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		9-	
R 2220	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 2221	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2222	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2223	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2224	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2225	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 2226	CHIP RES.	220	1/16W	5%	RMC1/16 221JATP	J24185221		1-	
R 2227	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 2228	CHIP RES.	22	1/10W	5%	RMC1/10T 220J	J24205220		1-	

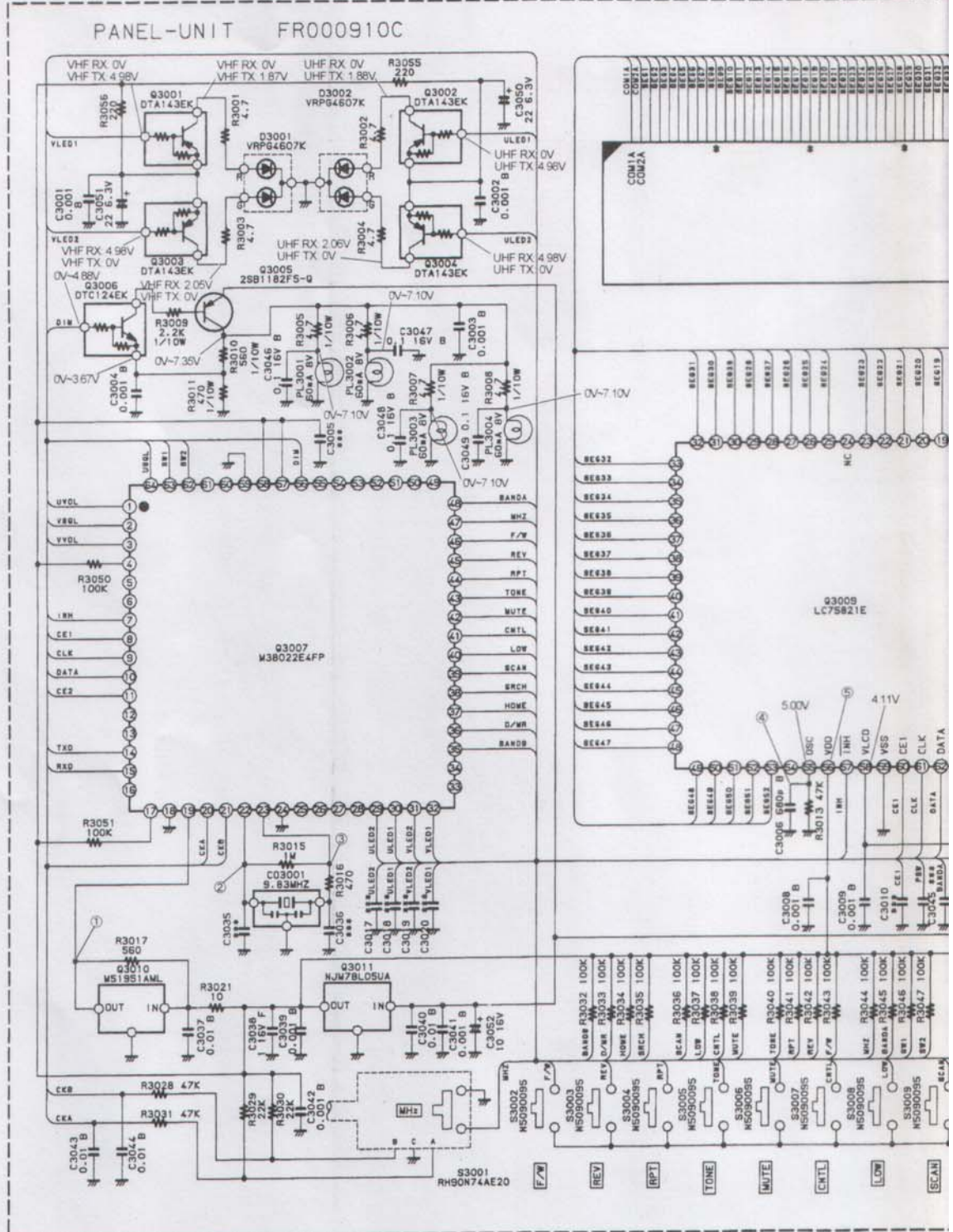
# 430-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 2229	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2230	CHIP RES.	220	1/10W	5%	RMC1/10T 221J	J24205221		1-	
R 2230	CHIP RES.	150	1/10W	5%	RMC1/10T 151J	J24205151		3-	
R 2231	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 2232	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 2233	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2233	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		3-	
R 2234	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 2235	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2236	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2237	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 2237	CHIP RES.	330k	1/16W	5%	RMC1/16 334JATP	J24185334		3-	
R 2238	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 2238	CHIP RES.	330k	1/16W	5%	RMC1/16 334JATP	J24185334		3-	
R 2239	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 2242	CHIP RES.	220k	1/16W	5%	RMC1/16 224JATP	J24185224		1-	
R 2246	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2247	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 2248	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 2249	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 2250	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2256	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 2257	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2258	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 2259	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2260	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 2261	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2262	CHIP RES.	18	1/16W	5%	RMC1/16 180JATP	J24185180		1-	
R 2263	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 2264	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2267	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101		1-	
R 2268	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 2269	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2270	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2272	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2273	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 2274	CHIP RES.	56	1/16W	5%	RMC1/16 560JATP	J24185560		1-	
R 2275	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2276	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2300	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2301	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2302	CHIP RES.	4.7k	1/16W	5%	RMC1/16 472JATP	J24185472		1-	
R 2303	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 2304	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 2304	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		3-	
R 2305	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 2306	CHIP RES.	560k	1/16W	5%	RMC1/16 564JATP	J24185564		1-	
R 2307	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 2308	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 2309	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 2310	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000		1-	
R 2311	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
T 2002	COIL 04WIDE				4BLH-4	L0022449		1-	
T 2004	COIL 07RF				600GCS-7835N	L0022241		1-	
T 2004	COIL 07RF	45.1MHz			45.1M 222846	L0022461		3-	
TC2002	TRIMMER CAP.	20pF			ECR-KN020E61X	K91000213		1-	
TC2002	TRIMMER CAP.	6pF			ECR-KN006A61X 6P	K91000225		4-	

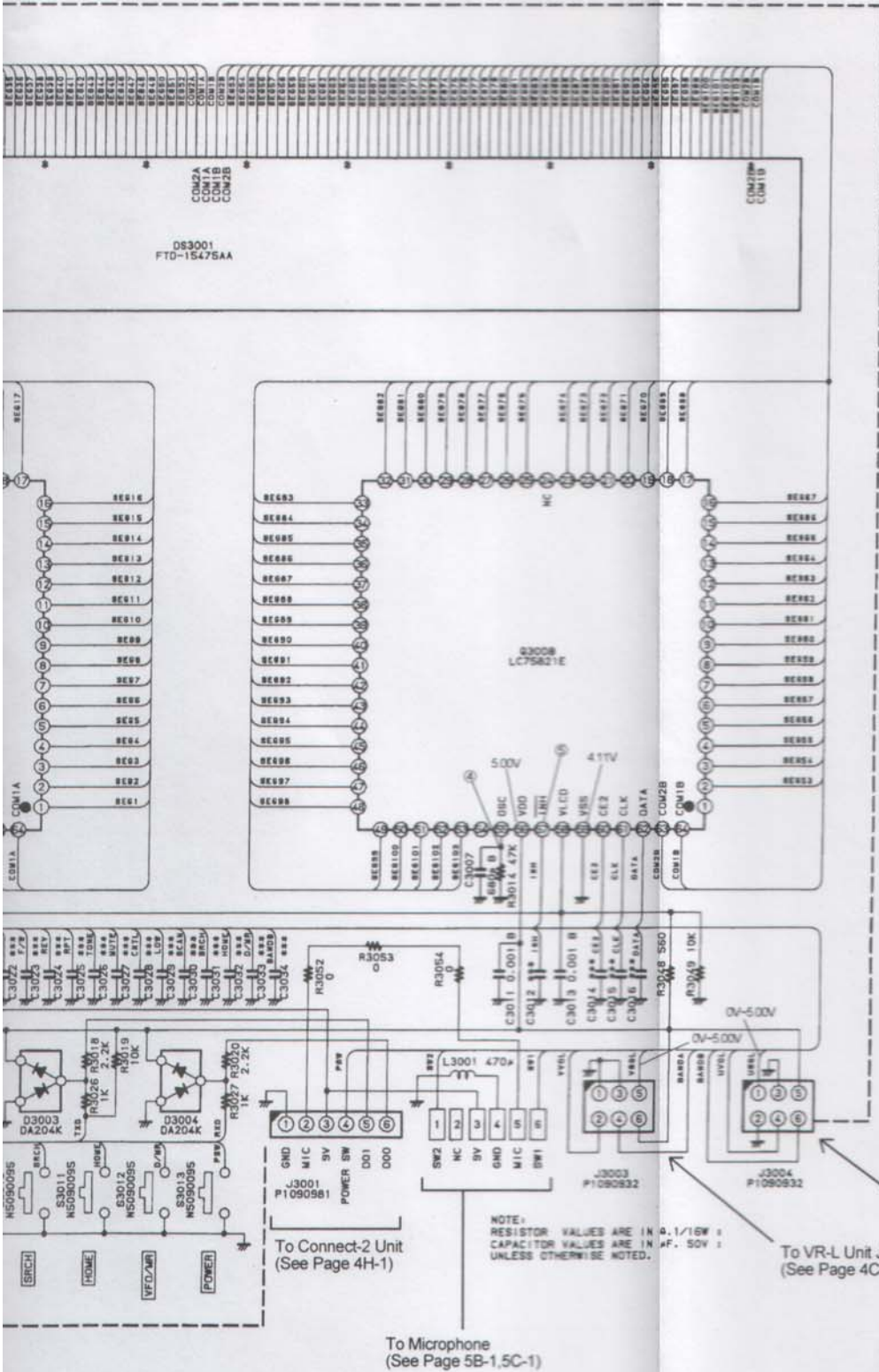
# 430-Main Unit

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
TP2001	TERMINAL				TP-H MK-10160	Q5000037		1-	
TP2002	TERMINAL				TP-H MK-10160	Q5000037		1-	
TP2003	TERMINAL				TP-H MK-10160	Q5000037		1-	
VR2002	POT.	100k			EVN-5ESX50B15	J51811104		1-	
VR2003	POT.	100k			EVN-5ESX50B15	J51811104		1-	
VR2004	POT.	100k			EVN-5ESX50B15	J51811104		1-	
VR2005	POT.	10k			EVN-5ESX50B14	J51811103		1-	
VR2006	POT.	10k			EVN-5ESX50B14	J51811103		1-	
X 2001	XTAL UM-1	58.07MHz			58.070MHZ	H0103096		1-	
X 2001	XTAL UM-1	58.07MHz			58.070MHZ	H0103137		4-	
X 2002	XTAL UM-1	12.8MHz			12.800MHZ	H0102912		1-	
X 2002	XTAL UM-5	12.8MHz			12.8MHZ	H0103164		4-	
XF2001	XTAL FILTER				58R15B1	H1102254		1-	
XF2002	XTAL FILTER				58R15B1	H1102254		1-	
	SHIELD CASE					R0149190A		1-	
	HOLDER (4pcs)				XTAL	R3129530		1-	
	HOLDER (3pcs)				XTAL	R3129530		5-	
	SPONGE RUBBER					R7152310		1-	
	BINDING HEAD SCREW (2pcs)				M3X6	U20306001		1-	
	TAPTITE SCREW (9pcs)				M2.6X5	U24205001		1-	
	LEAF SPRING (2pcs)					R0140031		1-	

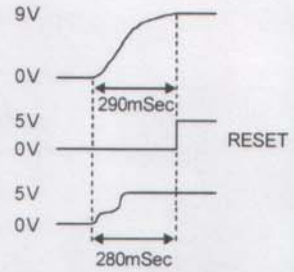
# Circuit Diagram



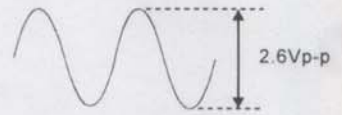
# Panel Unit



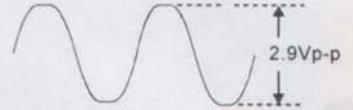
① Q3007 Pin 19



② Q3007 Pin 22 (9.83MHz)



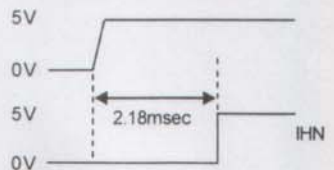
③ Q3007 Pin 23 (9.83MHz)



④ Q3008,3009 Pin 55



⑤ Q3008,3009 Pin 55



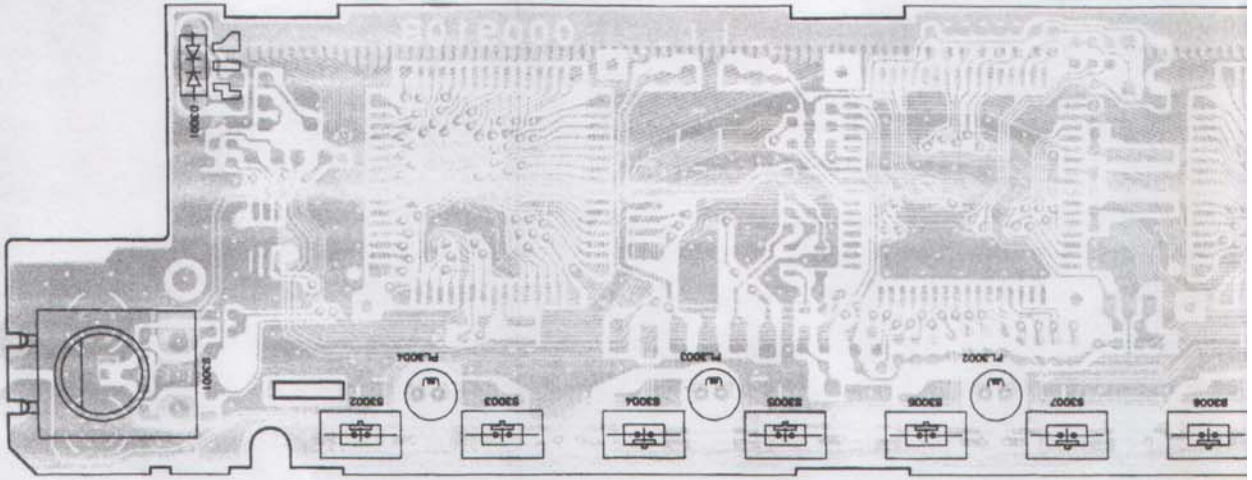
To VR-R Unit J4601  
(See Page 4D-1)

To VR-L Unit J4501  
(See Page 4C-1)

NOTE:  
RESISTOR VALUES ARE IN Ω, 1/16W ;  
CAPACITOR VALUES ARE IN µF, 50V ;  
UNLESS OTHERWISE NOTED.

To Microphone  
(See Page 5B-1.5C-1)

# Parts Layout

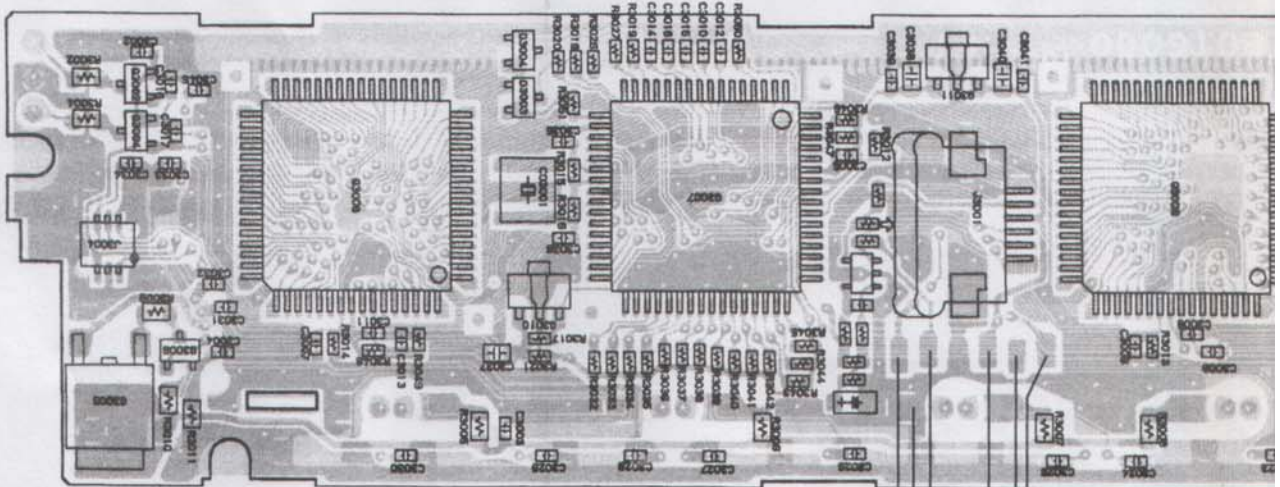


VR-R	BAND B
VR-R	BAND L
VR-R	BAND R
VR-R	GND

 To VR-R Unit J4601  
 (See Page 4D-1)

To Connect-2 Unit  
 (See Page 4H-1)
 

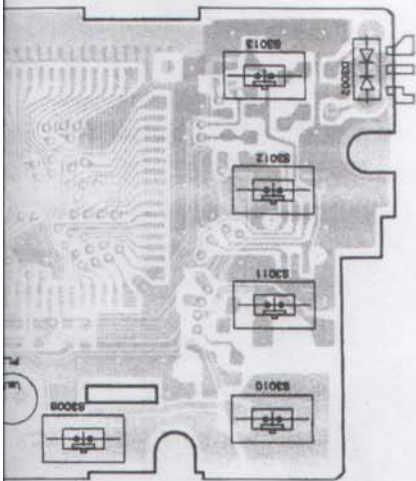
GND
MIC
9V
POWER SW
D01
D00



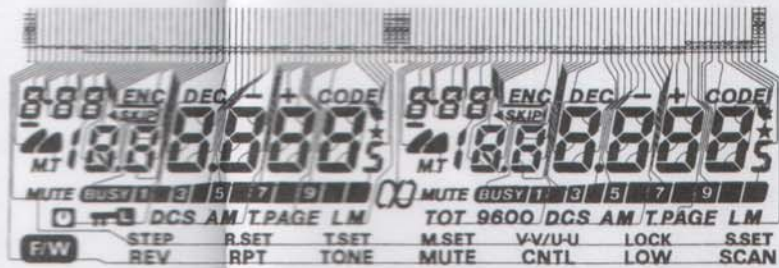
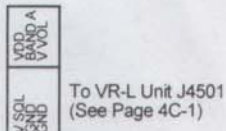
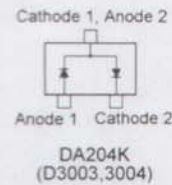
Pin 6
Pin 4
Pin 5
Pin 3
Pin 2
Pin 1

 To Connector J0001

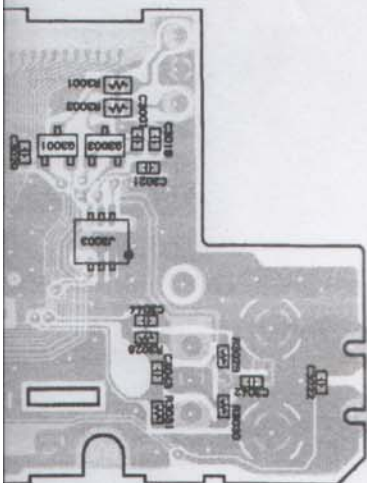
# Panel Unit



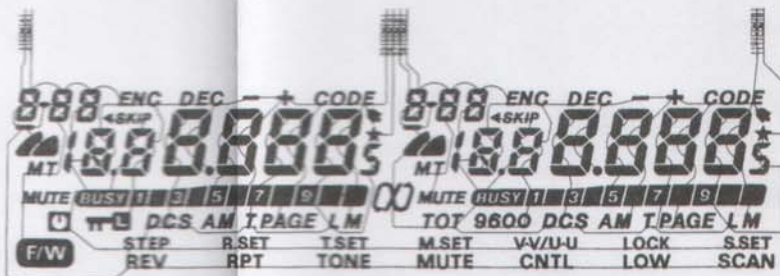
obverse view of LCD Side



LCD Segmentation Circuit Diagram



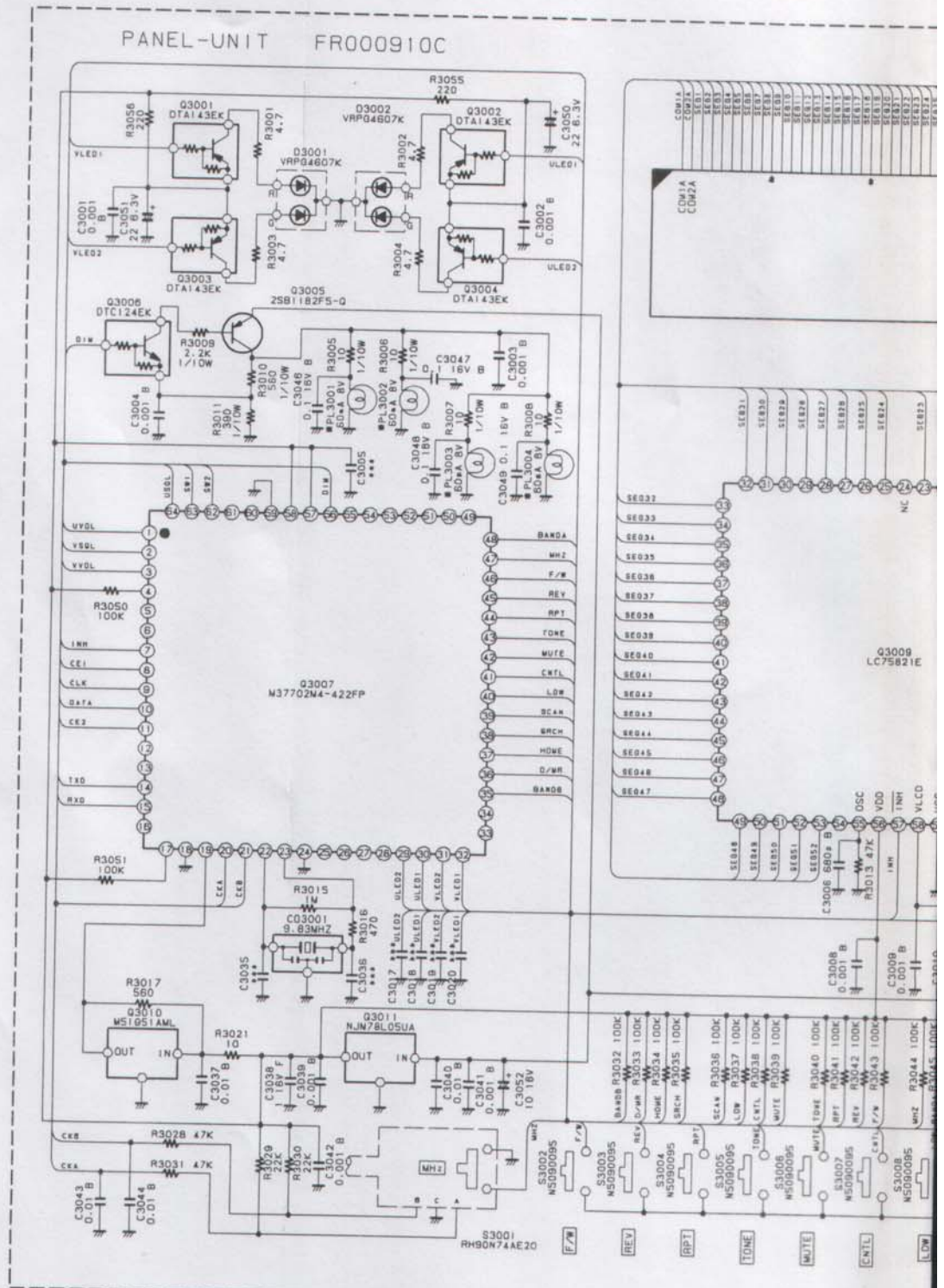
verse view of component side



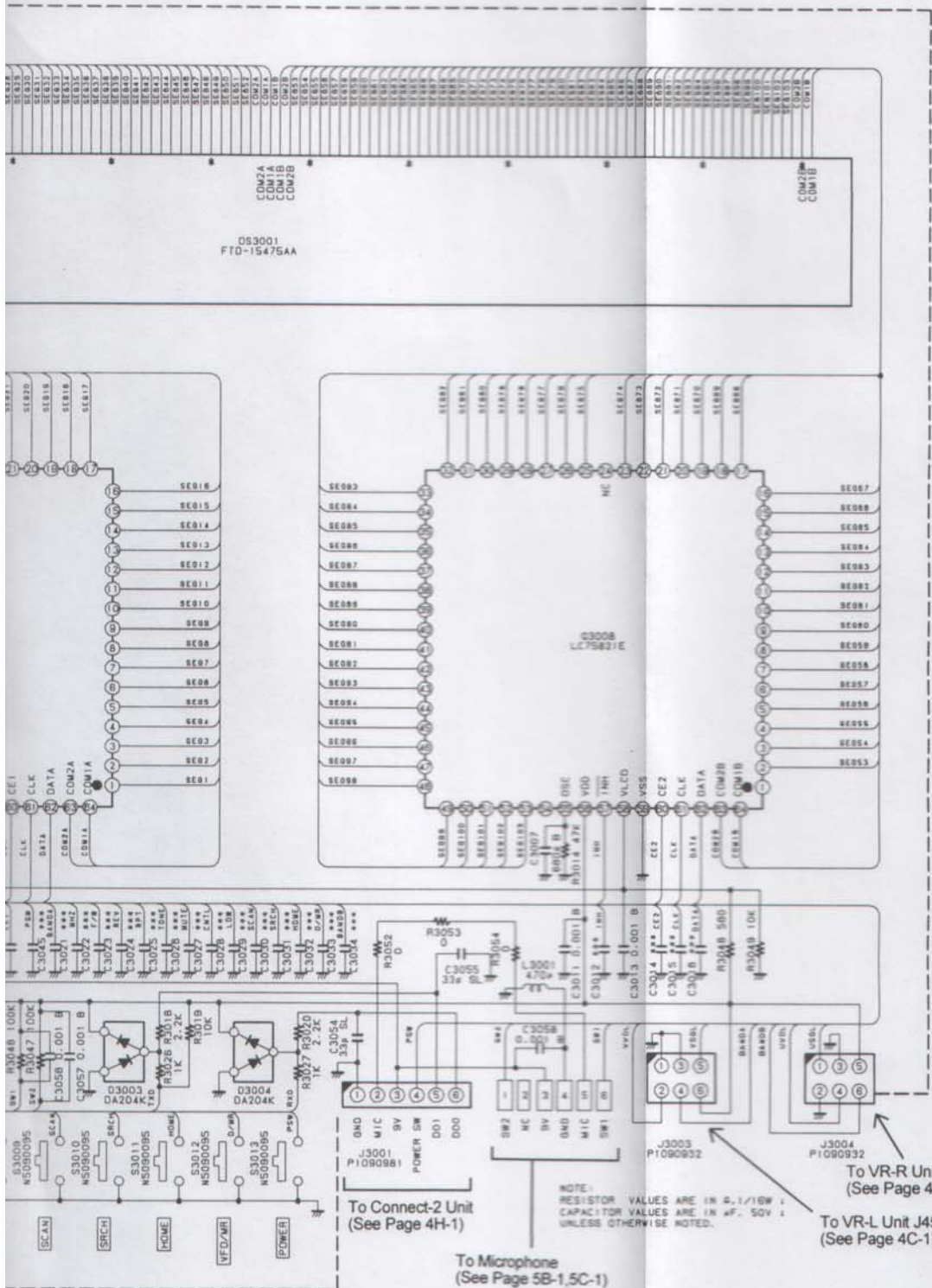
LCD Backplane Circuit Diagram



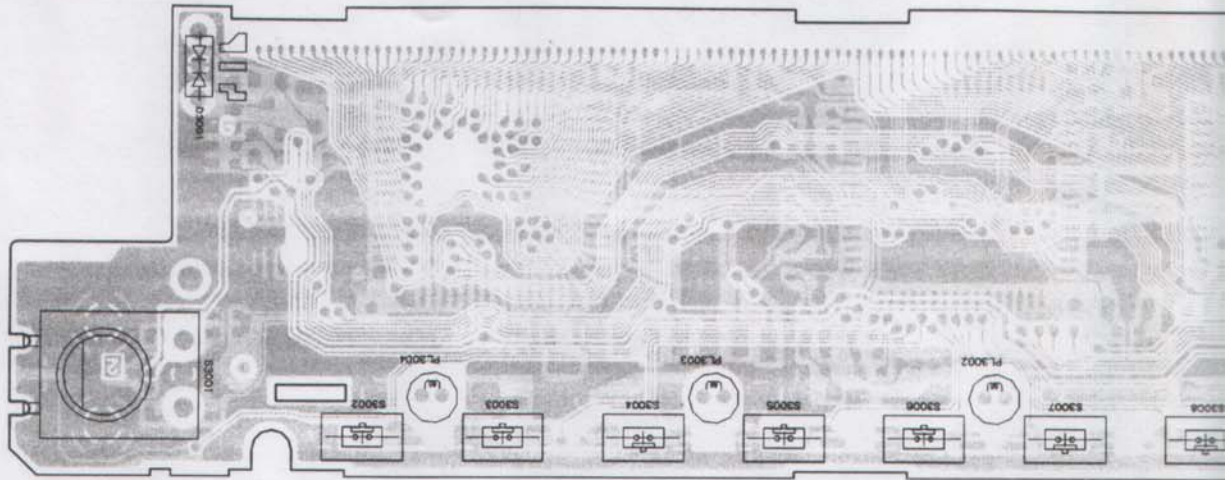
# Circuit Diagram



# Panel Unit (Lot. 3~)

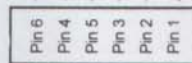
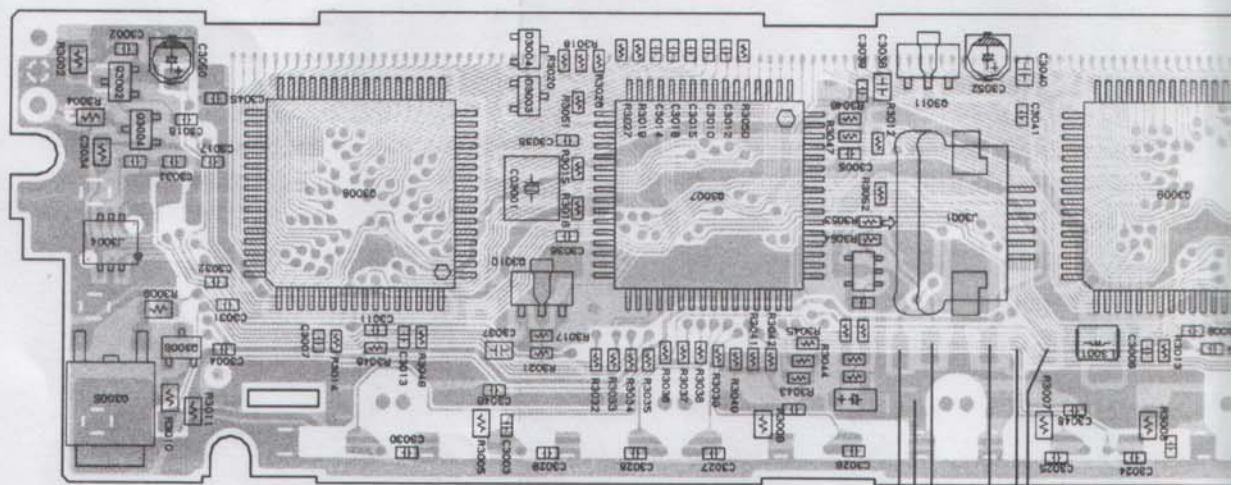
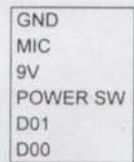


# Parts Layout



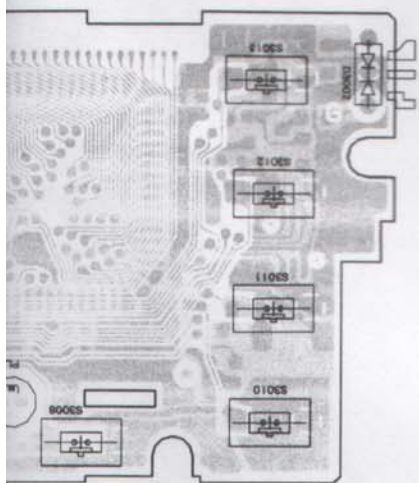
To VR-R Unit J4601  
(See Page 4D-1)

To Connect-2 Unit  
(See Page 4H-1)

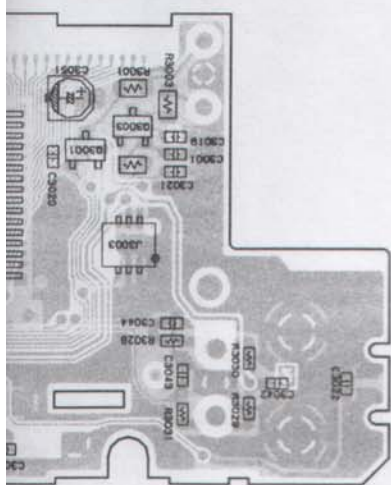
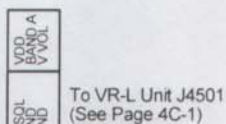
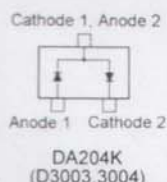
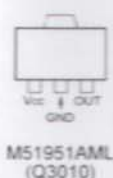
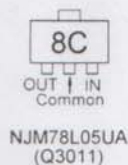
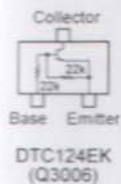


To Connector  
J0001

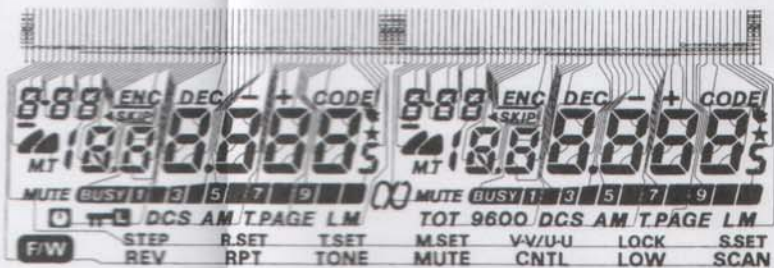
# Panel Unit (Lot. 3~)



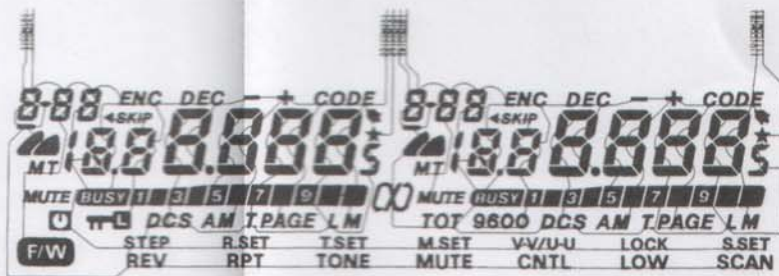
obverse view of LCD Side



obverse view of component side



LCD Segmentation Circuit Diagram



LCD Backplane Circuit Diagram

## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** PANEL UNIT ***									
	PCB with Components					CS1541002	USA		
	PCB with Components					CS1541003	EXPORT		
	PCB with Components					CS1541004	AUSTRALIA		
	Printed Circuit Board					FR000910B		1-	
	Printed Circuit Board					FR000910C		3-	
C 3001	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 3002	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 3003	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 3004	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 3006	CHIP CAP.	680pF	50V	B	GRM39B681M50PT	K22174807		1-	
C 3007	CHIP CAP.	680pF	50V	B	GRM39B681M50PT	K22174807		1-	
C 3008	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 3009	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 3011	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 3013	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 3037	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-	
C 3038	CHIP CAP.	1uF	16V	F	EMK212F105Z00T	K22121001		1-	
C 3039	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 3040	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-	
C 3041	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 3042	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		1-	
C 3043	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 3044	CHIP CAP.	0.01uF	50V	B	GRM39B103M50PT	K22174823		1-	
C 3046	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 3047	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 3048	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 3049	CHIP CAP.	0.1uF	16V	B	GRM39B104K16PT	K22124805		1-	
C 3050	AL.ELECTRO.CAP.	47uF	6.3V		RC2-6V470MS(4X7)	K40089023		1-	
C 3050	AL.ELECTRO.CAP.	22uF	6.3V		ECEV0JS220WR	K48080007		3-	
C 3051	AL.ELECTRO.CAP.	47uF	6.3V		RC2-6V470MS(4X7)	K40089023		1-	
C 3051	AL.ELECTRO.CAP.	22uF	6.3V		ECEV0JS220WR	K48080007		3-	
C 3052	AL.ELECTRO.CAP.	10uF	16V		RC2-16V100M(4X7)	K40129012		1-	
C 3052	AL.ELECTRO.CAP.	10uF	16V		ECEV1CS100SR	K48120001		3-	
C 3054	CERAMIC CAP.	33pF	50V	SL	UP050SL330J-A-B	K28179030		2-	
C 3055	CERAMIC CAP.	33pF	50V	SL	UP050SL330J-A-B	K28179030		2-	
C 3056	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		6-	
C 3057	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809		6-	
C 3058	CHIP CAP.	0.001uF	50V	B	GRM40B102M50PT	K22170805		1-	
CO3001	CERAMIC OSC	9.83MHz			CSTCS9.83MT-TC	H7901180		1-	
D 3001	LED				VRPG4607K	G2090641		1-	
D 3002	LED				VRPG4607K	G2090641		1-	
D 3003	DIODE				DA204K T146	G2070388		1-	
D 3004	DIODE				DA204K T146	G2070388		1-	
DS3001	LCD				FTD-15475AA	G6090120		1-	
J 3001	CONNECTOR				00 6200 506 130 000	P1090981		1-	
J 3003	CONNECTOR				IL-WX-6SB-VF-B-E1000	P1090932		1-	
J 3004	CONNECTOR				IL-WX-6SB-VF-B-E1000	P1090932		1-	
L 3001	M.RFC	470uH			LAL03NA471K	L1190226		1-	
L 3001	M.RFC	470uH			FLC32T-471J	L1690235		3-	
PL3001	LAMP	60mA	8V		8V60MA T-3 R210	Q1000084		1-	
PL3002	LAMP	60mA	8V		8V60MA T-3 R210	Q1000084		1-	
PL3003	LAMP	60mA	8V		8V60MA T-3 R210	Q1000084		1-	
PL3004	LAMP	60mA	8V		8V60MA T-3 R210	Q1000084		1-	
Q 3001	TRANSISTOR				DTA143EK T146	G3070010		1-	
Q 3002	TRANSISTOR				DTA143EK T146	G3070010		1-	
Q 3003	TRANSISTOR				DTA143EK T146	G3070010		1-	

# Panel Unit

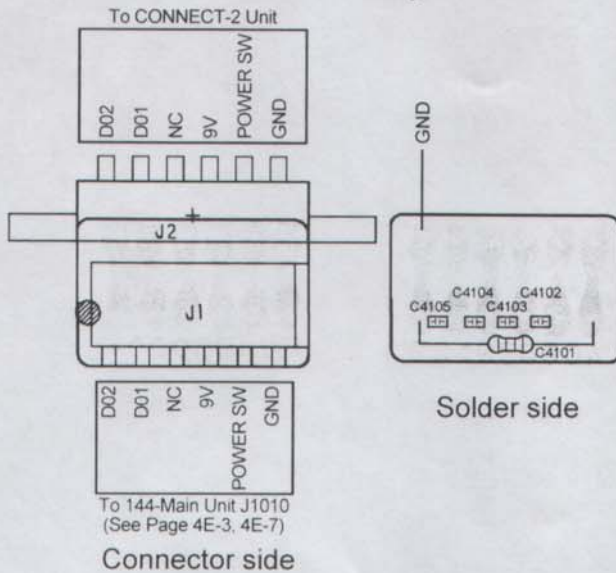
REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
Q 3004	TRANSISTOR				DTA143EK T146	G3070010		1-	
Q 3005	TRANSISTOR				2SB1182-TLQ	G3070063		1-	
Q 3006	TRANSISTOR				DTC124EK T146	G3070034		1-	
Q 3007	IC				M38022E4FP R0143	G1092602		1-	
Q 3007	IC				M38022M4-422FP	G1092687		8-	
Q 3008	IC				LC75821E	G1092191		1-	
Q 3009	IC				LC75821E	G1092191		1-	
Q 3010	IC				M51951AML-600C	G1091131		1-	
Q 3011	IC				NJM78L05UA TE1	G1091325		1-	
R 3001	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	
R 3002	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	
R 3003	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	
R 3004	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	
R 3005	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	
R 3005	CHIP RES.	10	1/10W	5%	RMC1/10T 100J	J24205100		3-	
R 3006	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	
R 3006	CHIP RES.	10	1/10W	5%	RMC1/10T 100J	J24205100		3-	
R 3007	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	
R 3007	CHIP RES.	10	1/10W	5%	RMC1/10T 100J	J24205100		3-	
R 3008	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	
R 3008	CHIP RES.	10	1/10W	5%	RMC1/10T 100J	J24205100		3-	
R 3009	CHIP RES.	2.2k	1/10W	5%	RMC1/10T 222J	J24205222		1-	
R 3010	CHIP RES.	560	1/10W	5%	RMC1/10T 561J	J24205561		1-	
R 3011	CHIP RES.	470	1/10W	5%	RMC1/10T 471J	J24205471		1-	
R 3011	CHIP RES.	390	1/10W	5%	RMC1/10T 391J	J24205391		3-	
R 3013	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 3014	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 3015	CHIP RES.	1M	1/16W	5%	RMC1/16 105JATP	J24185105		1-	
R 3016	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471		1-	
R 3017	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	
R 3018	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 3019	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 3020	CHIP RES.	2.2k	1/16W	5%	RMC1/16 222JATP	J24185222		1-	
R 3021	CHIP RES.	10	1/16W	5%	RMC1/16 100JATP	J24185100		1-	
R 3026	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 3027	CHIP RES.	1k	1/16W	5%	RMC1/16 102JATP	J24185102		1-	
R 3028	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 3029	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 3030	CHIP RES.	22k	1/16W	5%	RMC1/16 223JATP	J24185223		1-	
R 3031	CHIP RES.	47k	1/16W	5%	RMC1/16 473JATP	J24185473		1-	
R 3032	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3033	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3034	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3035	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3036	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3037	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3038	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3039	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3040	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3041	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3042	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3043	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3044	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3045	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3046	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3047	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3048	CHIP RES.	560	1/16W	5%	RMC1/16 561JATP	J24185561		1-	

# Panel Unit

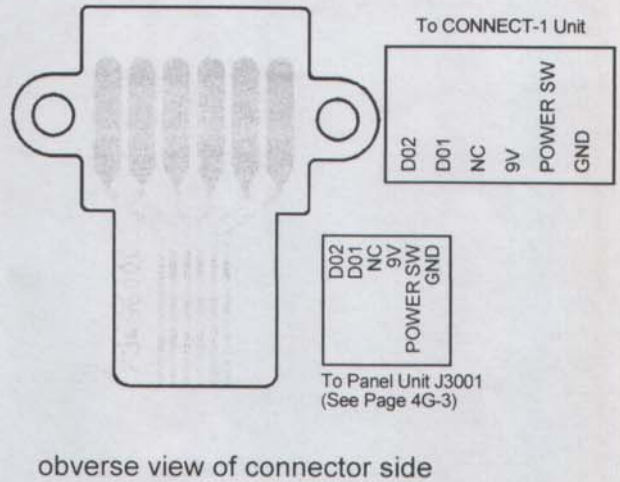
REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 3049	CHIP RES.	10k	1/16W	5%	RMC1/16 103JATP	J24185103		1-	
R 3050	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3051	CHIP RES.	100k	1/16W	5%	RMC1/16 104JATP	J24185104		1-	
R 3052	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	
R 3053	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	
R 3054	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	
R 3055	CARBON FILM RES.	220	1/6W	5%	RD16PJ221 220	J01225221		1-	
R 3055	CHIP RES.	220	1/10W	5%	RMC1/10T 221J	J24205221		3-	
R 3056	CARBON FILM RES.	220	1/6W	5%	RD16PJ221 220	J01225221		1-	
R 3056	CHIP RES.	220	1/10W	5%	RMC1/10T 221J	J24205221		3-	
S 3001	ROTARY ENCODER				RH90N74AE20	Q9000662		1-	
S 3002	TACT SWITCH				EVQPJX05M	N5090095		1-	
S 3003	TACT SWITCH				EVQPJX05M	N5090095		1-	
S 3004	TACT SWITCH				EVQPJX05M	N5090095		1-	
S 3005	TACT SWITCH				EVQPJX05M	N5090095		1-	
S 3006	TACT SWITCH				EVQPJX05M	N5090095		1-	
S 3007	TACT SWITCH				EVQPJX05M	N5090095		1-	
S 3008	TACT SWITCH				EVQPJX05M	N5090095		1-	
S 3009	TACT SWITCH				EVQPJX05M	N5090095		1-	
S 3010	TACT SWITCH				EVQPJX05M	N5090095		1-	
S 3011	TACT SWITCH				EVQPJX05M	N5090095		1-	
S 3012	TACT SWITCH				EVQPJX05M	N5090095		1-	
S 3013	TACT SWITCH				EVQPJX05M	N5090095		1-	
	TAPTITE SCREW (2pcs)				M2X6	U23106001		1-	
	LCD HOLDER					R0522670A		1-	
	LIGHT GUIDE				(LCD)	R3808700		1-	
	RUBBER CONNECTOR				0.05X91X8.4X2	S2000049		1-	
	REFLECTOR (4pcs)					RA0010500		1-	
	REFLECTOR					R7154430		1-	
	LCD FILTER					R7154440		1-	
	SHEET					R8154530		1-	
	SHEET					R7154540		1-	
	LCD FILTER					R7154250		1-	

# CONNECT-1, -2 Unit

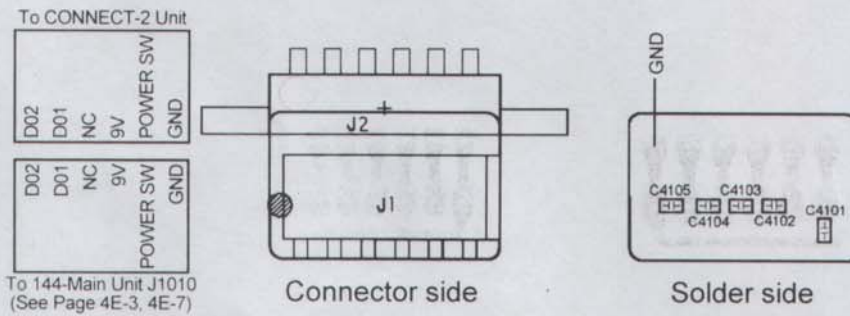
## CONNECT-1 Unit Parts Layout



## CONNECT-2 Unit Parts Layout



## CONNECT-1 Unit Parts Layout (Lot. 3~)



## CONNECT-1 UNIT Parts List

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** CONNECT-1 UNIT ***									
PCB with Components						CB0134001			
Printed Circuit Board						F3495000A		1-	
Printed Circuit Board						F3495000B		3-	
C 4101	CERAMIC CAP.	33pF	50V	SL	UP050SL330J-A-B	K28179030		1-	
C 4101	CHIP CAP.	47pF	50V	CH	GRM40CH470J50PT	K22170227		3-	
C 4102	CHIP CAP.	47pF	50V	CH	GRM40CH470J50PT	K22170227		1-	
C 4103	CHIP CAP.	0.001uF	50V	B	GRM40B102M50PT	K22170805		1-	
C 4104	CHIP CAP.	0.001uF	50V	B	GRM40B102M50PT	K22170805		1-	
C 4105	CHIP CAP.	0.001uF	50V	B	GRM40B102M50PT	K22170805		1-	
J 4101	CONNECTOR				CLE9006-0101R	P1090681		1-	
JP4101	WIRE ASSY				A1178	T9206620A		1-	

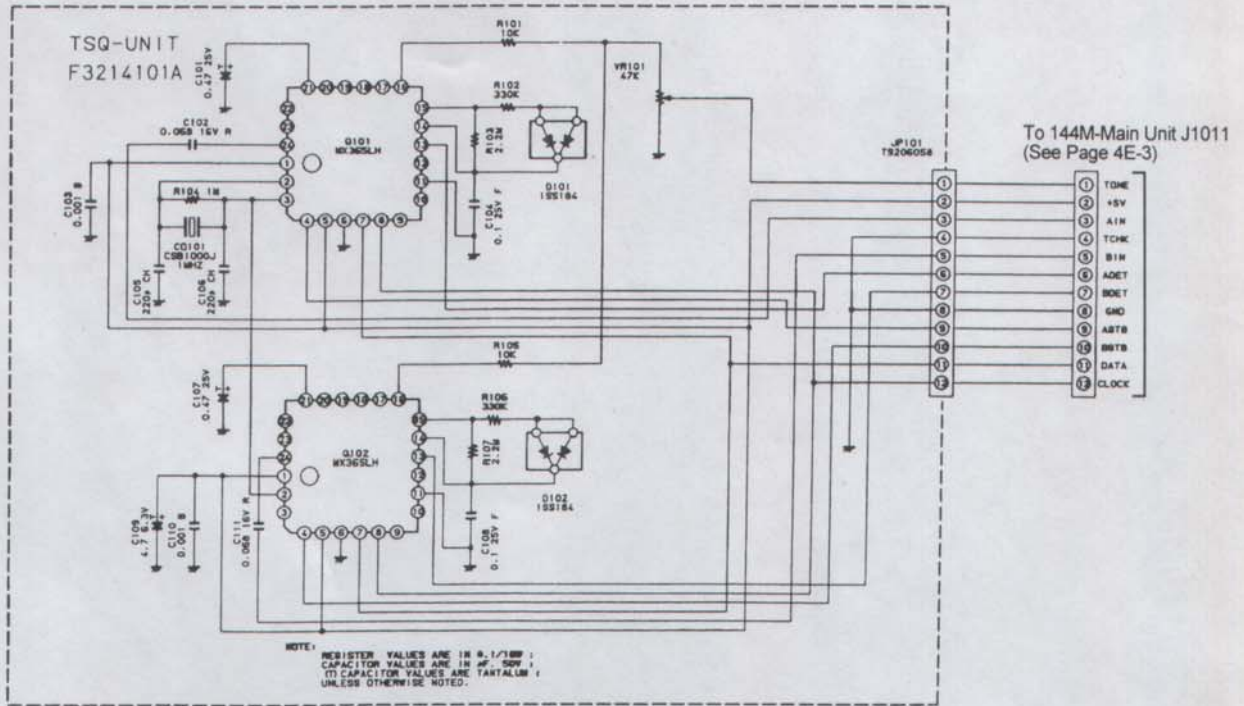
## CONNECT-2 UNIT Parts List

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** CONNECT-2 UNIT ***									
PCB with Components						CB0135001			
Printed Circuit Board						F3496000		1-	
P 4201	WIRE ASSY				A0512	T9206436		1-	

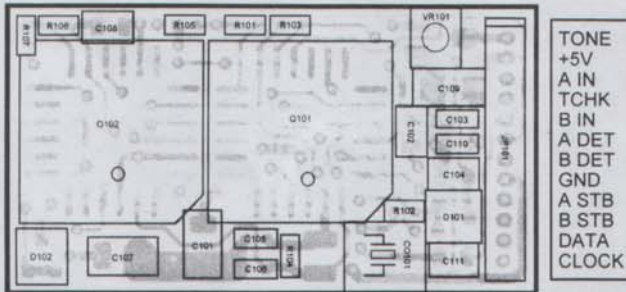


# FTS-22 Tone Squelch Unit

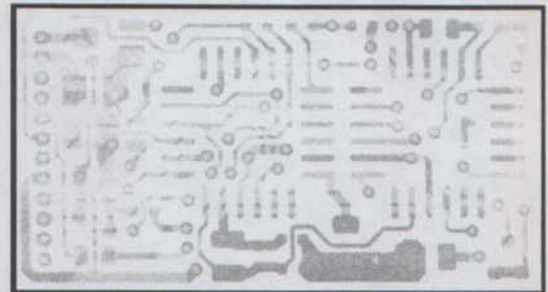
## Circuit Diagram



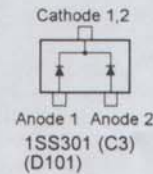
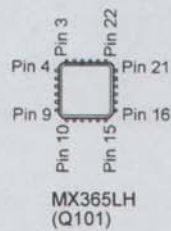
## Parts Layout



obverse view of connector side



obverse view of solder side



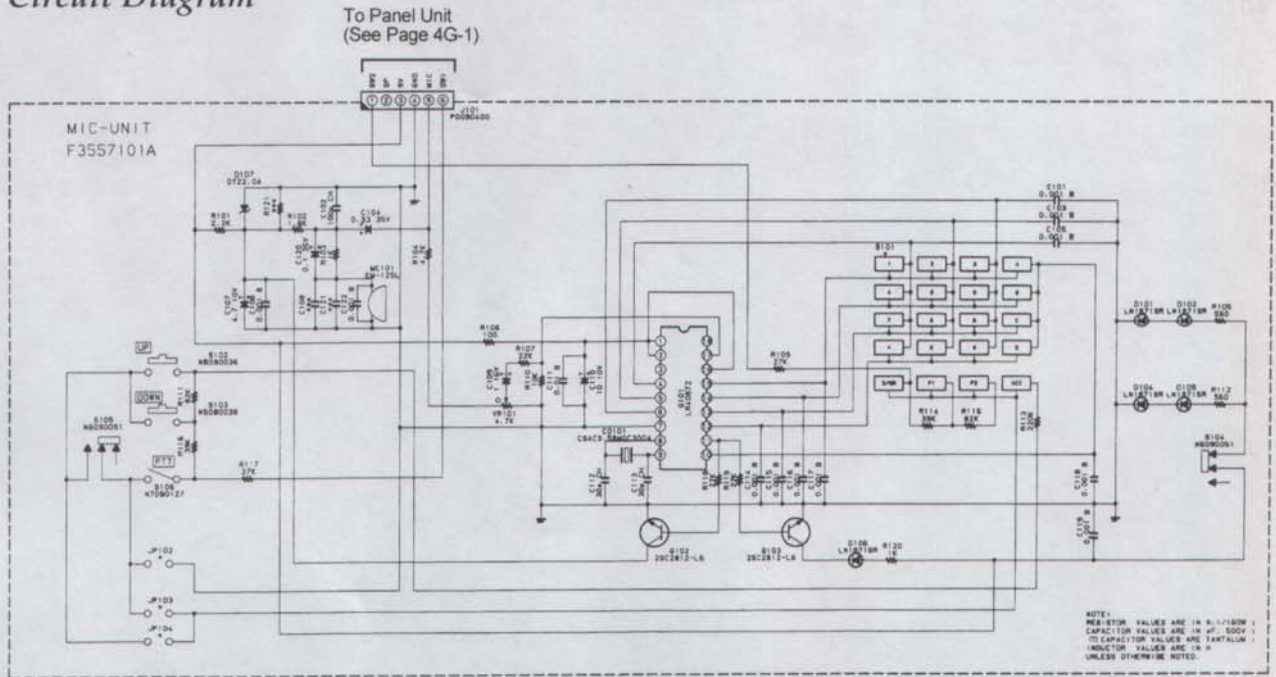
# FTS-22 Tone Squelch Unit

## Parts List

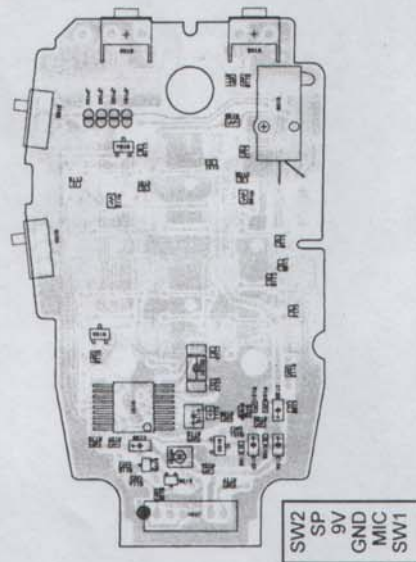
REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** FTS-22 ***									
Printed Circuit Board						F3214101A			
C 0101	TANTALUM CHIP CAP.	0.47uF	25V		F951E474MRAAF1Q2	K78140012			
C 0102	CHIP CAP.	0.068uF	16V	R	GRM40R683M16PT	K22120805			
C 0103	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
C 0104	CHIP CAP.	0.1uF	25V	F	GRM40F104Z25PT	K22141005			
C 0105	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243			
C 0106	CHIP CAP.	220pF	50V	CH	GRM39CH221J50PT	K22174243			
C 0107	TANTALUM CHIP CAP.	0.47uF	25V		F951E474MRAAF1Q2	K78140012			
C 0108	CHIP CAP.	0.1uF	25V	F	GRM40F104Z25PT	K22141005			
C 0109	TANTALUM CHIP CAP.	4.7uF	6.3V		F950J475MSAAF1Q2	K78080002			
C 0110	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
C 0111	CHIP CAP.	0.068uF	16V	R	GRM40R683M16PT	K22120805			
CO0101	CERAMIC OSC	1MHz			CSB1000J221T	H7900550			
D 0101	DIODE				1SS184 TE85R	G2070009			
D 0102	DIODE				1SS184 TE85R	G2070009			
JP0101	WIRE-ASSY					T9206058			
Q 0101	IC				MX265LH-TR	G1091588			
Q 0102	IC				MX265LH-TR	G1091588			
R 0101	CHIP RES.	10K	1/16W		RMC1/16 103JATP	J24185103			
R 0102	CHIP RES.	330K	1/16W		RMC1/16 334JATP	J24185334			
R 0103	CHIP RES.	2.2M	1/16W		RMC1/16 225JATP	J24185225			
R 0104	CHIP RES.	1M	1/16W		RMC1/16 105JATP	J24185105			
R 0105	CHIP RES.	10K	1/16W		RMC1/16 103JATP	J24185103			
R 0106	CHIP RES.	330K	1/16W		RMC1/16 334JATP	J24185334			
R 0107	CHIP RES.	2.2M	1/16W		RMC1/16 225JATP	J24185225			
VR0101	POT.	47K			RH03AYAS4X	J51778473			
	DOUBLE FACE ADHESIVE					R7134820			

# MH-36B6J DTMF Microphone

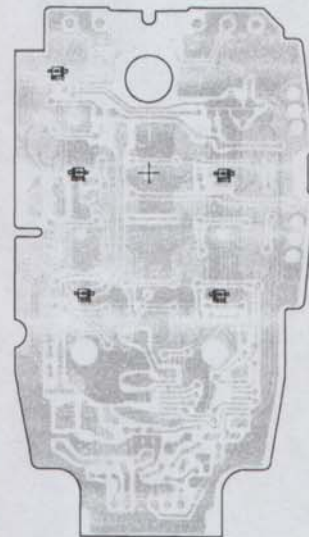
## Circuit Diagram



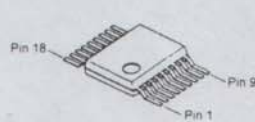
## Parts Layout



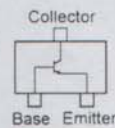
Connector Side



Solder Side



LR40872  
(Q101)



2SC2812 (L6)  
(Q102, 103)

# MH-36B6J DTMF Microphone

## Parts List

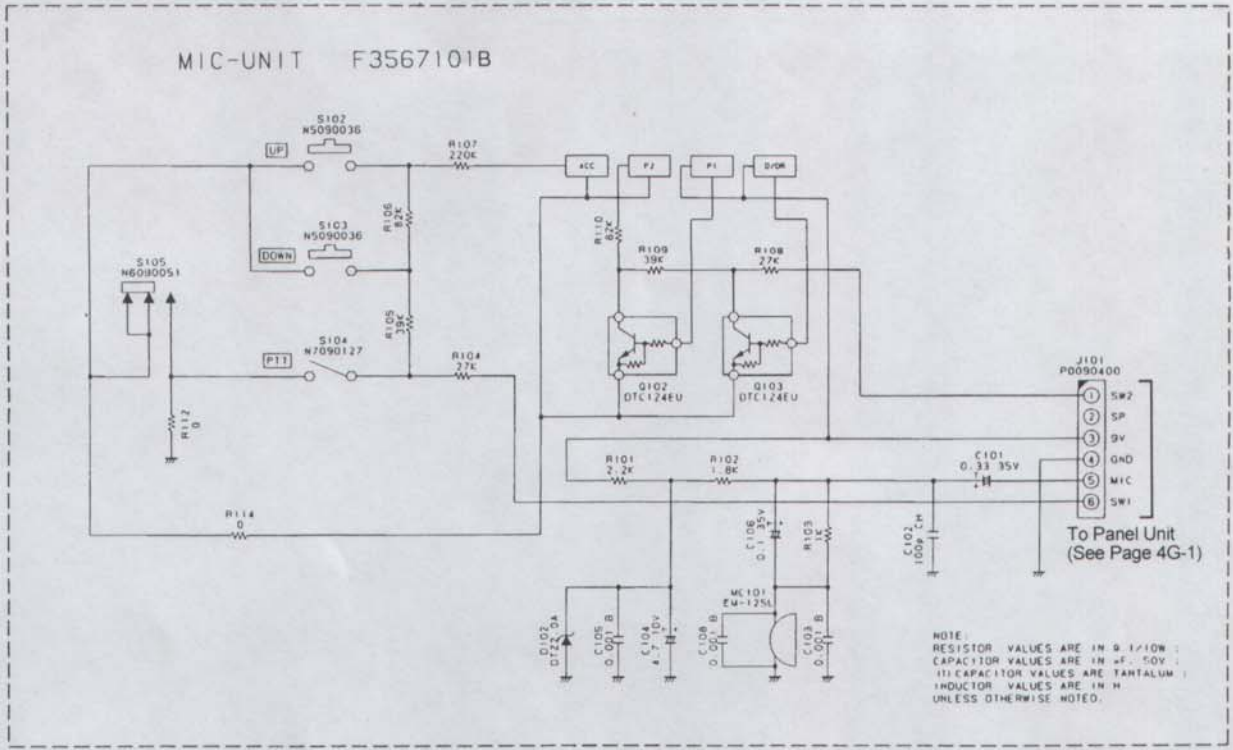
REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** MH-36B6J ***									
Printed Circuit Board						F3557101A			
C 0101	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
C 0102	CHIP CAP.	100pF	50V	CH	GRM39CH101J50PT	K22174235			
C 0103	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
C 0104	TANTALUM CHIP CAP.	0.33uF	35V		TESVA1V334M1-8R	K78160028			
C 0105	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
C 0106	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
C 0107	TANTALUM CHIP CAP.	4.7uF	10V		TEMSVA1A475M-8R	K78100022			
C 0108	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
C 0109	TANTALUM CHIP CAP.	1uF	16V		TESVA1C105M1-8R	K78120009			
C 0110	TANTALUM CHIP CAP.	10uF	10V		TEMSVB21A106M-8R	K78100017			
C 0111	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817			
C 0112	CHIP CAP.	30p	50V	CH	GRM39CH300J50PT	K22174222			
C 0113	CHIP CAP.	30p	50V	CH	GRM39CH300J50PT	K22174222			
C 0114	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
C 0115	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
C 0116	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
C 0117	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
C 0118	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
C 0119	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
C 0120	TANTALUM CHIP CAP.	0.1uF	35V		TESVA1V104M1-8R	K78160025			
C 0122	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
CO0101	CERAMIC OSC				CSAC3.58MGC300A-TC	H7900790			
D 0101	LED				LN1871SR-(TRP)	G2070398			
D 0102	LED				LN1872SR-(TRP)	G2070398			
D 0104	LED				LN1873SR-(TRP)	G2070398			
D 0105	LED				LN1874SR-(TRP)	G2070398			
D 0106	LED				LN1875SR-(TRP)	G2070398			
D 0107	DIODE				DTZ2.0A TT11	G2070246			
J 0101	CONNECTOR				B6B-PH-K-S	P0090400			
MC0101	MIC ELEMENT				EM-125L	M3290019			
P 0101	WIRE ASSY					T9206569			
Q 0101	IC				LR408721	G1092196			
Q 0102	TRANSISTOR				2SC2812L6-TA	G3328127F			
Q 0103	TRANSISTOR				2SC2812L6-TA	G3328127F			
Q 0105	TRANSISTOR				DTC124EU T107	G3070045			
Q 0106	TRANSISTOR				DTC124EU T107	G3070045			
R 0101	CHIP RES.	2.2K	1/16W	5%	RMC1/16 222JATP	J24185222			
R 0102	CHIP RES.	1.8K	1/16W	5%	RMC1/16 182JATP	J24185182			
R 0103	CHIP RES.	470	1/16W	5%	RMC1/16 471JATP	J24185471			
R 0104	CHIP RES.	4.7K	1/16W	5%	RMC1/16 472JATP	J24185472			
R 0105	CHIP RES.	560	1/10W	5%	RMC1/10T 561J	J24205561			
R 0106	CHIP RES.	100	1/16W	5%	RMC1/16 101JATP	J24185101			
R 0107	CHIP RES.	22K	1/16W	5%	RMC1/16 223JATP	J24185223			
R 0109	CHIP RES.	27K	1/16W	5%	RMC1/16 273JATP	J24185273			
R 0110	CHIP RES.	10K	1/16W	5%	RMC1/16 103JATP	J24185103			
R 0111	CHIP RES.	82K	1/16W	5%	RMC1/16 823JATP	J24185823			
R 0112	CHIP RES.	560	1/10W	5%	RMC1/10T 561J	J24205561			
R 0113	CHIP RES.	220K	1/16W	5%	RMC1/16 224JATP	J24185224			
R 0114	CHIP RES.	39K	1/16W	5%	RMC1/16 293JATP	J24185393			
R 0115	CHIP RES.	82K	1/16W	5%	RMC1/16 823JATP	J24185823			
R 0116	CHIP RES.	39K	1/16W	5%	RMC1/16 393JATP	J24185393			
R 0117	CHIP RES.	27K	1/16W	5%	RMC1/16 273JATP	J24185273			
R 0118	CHIP RES.	22K	1/16W	5%	RMC1/16 223JATP	J24185223			
R 0119	CHIP RES.	22K	1/16W	5%	RMC1/16 223JATP	J24185223			
R 0120	CHIP RES.	1K	1/10W	5%	RMC1/10T 102J	J24205102			
S 0102	TACT SWITCH				SKHHLN	N5090036			
S 0103	TACT SWITCH				SKHHLN	N5090036			

# MH-36B<sub>6</sub>J DTMF Microphone

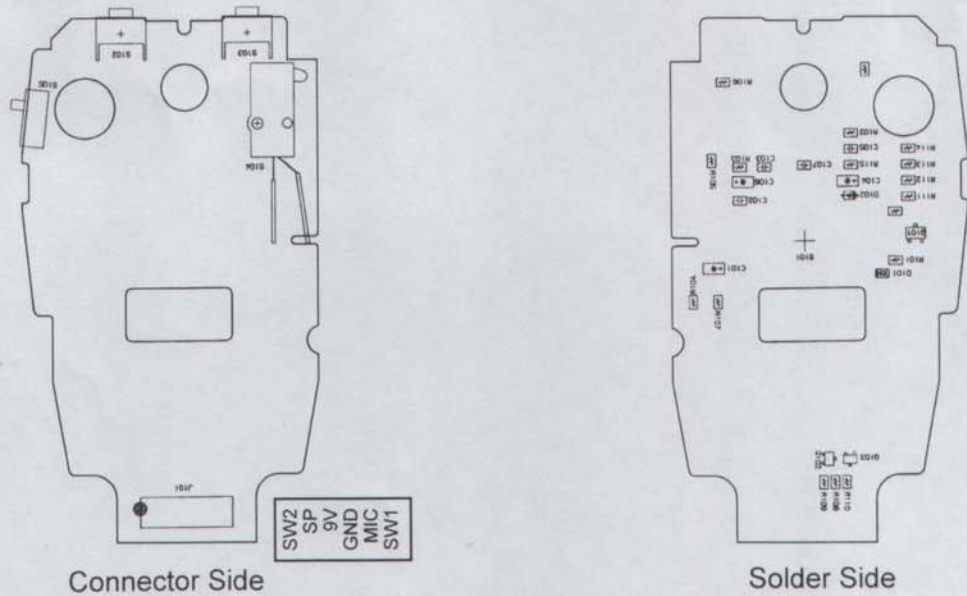
REF.	DESCRIPTION	VALUE	WV	TOL	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
S 0104	SLIDE SWITCH				SSS212299	N6090051			
S 0105	SLIDE SWITCH				SSS212299	N6090051			
S 0106	MICRO SWITCH				MQS-2AU	N7090127			
VR0101	POT.	4.7K			EVM-7JS-X30-BQ3	J51788472			
	HANGER ASSY					R0153530			
	MIC HOLDER					R3130400A			
	HOOK					R3153300			
	RUBBER KNOB 20KEY					R3153500			
	KNOB LOCK (2pcs)					R3153520			
	KNOB UP/DWN					R3522130			
	FRONT PANEL					R3523000			
	KNOB PTT					R3808500			
	REAR PANEL					R3808520			

# MH-42B<sub>6</sub>J Hand Scanning Microphone

## Circuit Diagram



## Parts Layout



# MH-42B6J Hand Scanning Microphone

## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** MH-42B6J ***									
Printed Circuit Board						F3567101B			
C 0101	TANTALUM CHIP CAP.	0.33uF	35V		TESVA1V334M1-8R	K78160028			
C 0102	CHIP CAP.	100pF	50V	CH	GRM40CH101J50PT	K22170235			
C 0103	CHIP CAP.	0.001uF	50V	B	GRM40B102M50PT	K22170805			
C 0104	TANTALUM CHIP CAP.	4.7uF	10V		TEMSVA1A475M-8R	K78100022			
C 0105	CHIP CAP.	0.001uF	50V	B	GRM40B102M50PT	K22170805			
C 0106	TANTALUM CHIP CAP.	0.1uF	35V		TESVA1V104M1-8R	K78160025			
C 0108	CHIP CAP.	0.001uF	50V	B	GRM39B102M50PT	K22174809			
D 0102	DIODE				DTZ2.0A TT11	G2070246			
J 0101	CONNECTOR				B6B-PH-K-S	P0090400			
MC0101	MIC ELEMENT				EM-125L	M3290019			
P 0001	WIRE ASSY				CW-ASSY A0753	T9206569			
Q 0102	TRANSISTOR				DTC124EU T106	G3070045			
Q 0103	TRANSISTOR				DTC124EU T106	G3070045			
R 0101	CHIP RES.	2.2K	1/10W	5%	RMC1/10T 222J	J24205222			
R 0102	CHIP RES.	1.8K	1/10W	5%	RMC1/10T 182J	J24205182			
R 0103	CHIP RES.	1K	1/10W	5%	RMC1/10T 102J	J24205102			
R 0104	CHIP RES.	27K	1/10W	5%	RMC1/10T 273J	J24205273			
R 0105	CHIP RES.	39K	1/10W	5%	RMC1/10T 393J	J24205393			
R 0106	CHIP RES.	82K	1/10W	5%	RMC1/10T 823J	J24205823			
R 0107	CHIP RES.	220K	1/10W	5%	RMC1/10T 224J	J24205224			
R 0108	CHIP RES.	27K	1/10W	5%	RMC1/10T 273J	J24205273			
R 0109	CHIP RES.	39K	1/10W	5%	RMC1/10T 393J	J24205393			
R 0110	CHIP RES.	82K	1/10W	5%	RMC1/10T 823J	J24205823			
R 0112	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000			
R 0114	CHIP RES.	0	1/10W	5%	RMC1/10T 000J	J24205000			
S 0102	TACT SWITCH				SKHHLN	N5090036			
S 0103	TACT SWITCH				SKHHLN	N5090036			
S 0104	MICRO SWITCH				MQS-2AU	N7090127			
S 0105	SLIDE SWITCH				SSS212299	N6090051			
	WEIGHT					R0153310			
	HANGER ASSY					R0153530			
	MIC HOLDER					R3130400A			
	HOOK					R3153300			
	KNOB LOCK					R3153520			
	KNOB UP/DWN					R3522130			
	FRONT PANEL					R3522990			
	KNOB PTT					R3808500			
	REAR PANEL					R3808570			
	RUBBER KNOB 4KEY					R3808580			
	SPONGE					R7153720			
	HIMERON					R7153730			

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