

TOSHIBA

Toshiba FD-9839 Service Manual

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Controles de operación

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FD-9839

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Diagrama a bloques

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900mhz cordless telephone (36 pages)

[Cordless Telephone Toshiba FT-8981 Service Manual](#)

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[Cordless Telephone Toshiba FT-1000 Owner's Manual](#)

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[Cordless Telephone Toshiba FT-6603 Owner's Manual](#)

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900mhz cordless telephone (21 pages)

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[Page 4: Operating Controls](#)

T-P (TONE-PULSE) switch TEL LINE Jack Ringer ON/OFF switch Speaker Antenna LED Display VOLUME button DELETE button 900MHz CALLER ID FD-9839 MEMO/2WAY REC button OGM button PLAY/STOP button ANSWER button PAGE button REPEAT button SKIP button PIN button Rec Time Switch (ANN/4/1)

[Page 5: Alignment Procedure](#)

ALIGNMENT PROCEDURE Base Unit Transmitter Section Connections BASE Unit Spectrum Analyzer FM Deviation Meter Test Point (J1) AC Adapter (120V 60Hz) Preset a) Remove the solder on the pattern (refer to the illust. below). b) Set the "TONE / PULSE" switch to PULSE. c) Connect the AC adapter to the base unit while pressing the "PAGE"...

[Page 6](#) Receiver Section Connections BASE Unit Test Point (J1) DC IN Discriminator DC Voltmeter 9V Jack Test Point AC 120V 60Hz Adapter Preset a) Remove the solder on the pattern (refer to the illust. below). b) Set the "TONE/PULSE" switch to PULSE. c) Connect the AC adapter to the base unit while pressing the "PAGE"...

[Page 7](#) Handset Unit Transmitter Section Connection Handset Unit Spectrum Analyzer FM Deviation Meter Test Batt Point (J601) Connector DC Power Supply 3.8V Preset a) Remove the solder on the pattern (refer to the illust. below). b) Connect DC power supply to battery connector on the handset unit. c) Turn the DC power supply On while pressing "...

[Page 8](#) Receiver Section Connections HANDSET Unit RF SG Test Point (J601) Battery Discriminator DC Power Supply DC Voltmeter Connector Test Point DC 3.8V Preset 1) Remove the solder on the pattern (refer to the illust. below). 2) Connect DC power supply to battery connector on the handset unit. 3) Turn the DC power supply ON while pressing "...

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BLOCK DIAGRAMS Base Unit, Main...

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SCHEMATIC DIAGRAMS Base Unit, Main...

[Page 13](#) Base Unit, Key...

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[Page 15: Troubleshooting Hints](#)

TROUBLESHOOTING HINTS 1. The bell does not ring. See 2. The bell does not ring When the PAGE SW of the & page does not ring. base is pressed, does the ringer on the handset ring? When the TEL SG is joined Check IC5 and TEL network with the base to make bell circuit.

[Page 16](#) 2. The bell does not ring & page does not ring. Can the base and handset be See 3. The base and handset connected? cannot be connected. Press handset DIAL key When the key of the handset is Check IC606. while in TALK MODE.

[Page 17](#) 3. The base and handset cannot be connected. Check whether the base Check IC4 and its is able to set in the test peripheral circuit. mode 1. Check the TX POWER Check base RF

unit. and the TX FREQUENCY on the base unit. Press "PAGE"...

[Page 18](#) Press "3" key, check whether there is a Check whether there is Check IC602 and its whether deviation of the pulse data waveform at a pulse data waveform at peripheral circuit. TX data is app. $\pm 23\text{kHz}$ C630. pin 40 of IC602. $\sim \pm 46\text{kHz}$ Dev.

[Page 19](#) 4. Cannot make a phone call (pulse). Can the base and handset See 3. The base and handset be connected? cannot be connected. While in TALK MODE, press Check IC8 and its peripheral dial key of the handset. circuit. Check whether square waveform from pin 46 of IC8 is fed.

[Page 20](#) 6. Voice cannot be transmitted to other party (outgoing call). Can the base and handset be See 3. The base and handset connected? cannot be connected. The 1 kHz, 3.3mV sine Check Q606 and its waveform is applied to peripheral circuit.

[Page 21](#) 7. The voice of the caller cannot be heard (incoming call). Can the base and handset be See 3. The base and handset connected? cannot be connected. The 1 kHz, 82.0mV sine Check the base TEL-line waveform is applied to TEL- circuit and REPLAY control line of the base, can the 1 kHz circuit.

[Page 22](#) 8. The voice of the caller cannot be recorded. Check hearing the OGM Check around IC402 and when push OGM key. IC408. When 1 kHz -20dBm sine Can the sine wave be seen Check TEL network primary waveform is applied to TEL- at C29? circuit.

[Page 23: Ic And Transistor Voltage Chart](#)

IC AND TRANSISTOR VOLTAGE CHART Base Unit Unit[V] Unit[V] Ref. No. PIN STBY TALK NOTE Ref. No. PIN STBY TALK NOTE Sine wave Pulse Random Random Sine wave Sine wave Pulse Random Pulse Pulse Sine wave Sine wave Sine wave...

[Page 24](#) Unit[V] Unit[V] Ref. No. PIN STBY TALK NOTE Ref. No. PIN STBY TALK NOTE Sine wave Sine wave Random Random Random Random Random Pulse IC401 IC402...

[Page 25](#) Unit[V] Unit[V] Ref. No. PIN STBY TALK NOTE Ref. No. PIN STBY TALK NOTE Sine wave Sine wave IC402 IC402 Pulse...

[Page 26](#) Unit[V] Unit[V] Ref. No. PIN STBY TALK NOTE Ref. No. PIN STBY TALK NOTE IC402 IC408 IC404 Pulse Pulse Pulse IC407 IC409 IC408...

[Page 27](#) Unit[V] Unit[V] Ref. No. PIN STBY TALK NOTE Ref. No. PIN STBY TALK NOTE Random Random Random Q401 Q402 Q403 Random Random Q404 Random Pulse Pulse Q405 Pulse Q406 Q407 11.2 10.6...

[Page 28](#) Handset Unit[V] Unit[V] Ref. No. PIN STBY TALK NOTE Ref. No. PIN STBY TALK NOTE OPEN OPEN 0.8-2.8 Pulse Pulse OPEN OPEN OPEN OPEN 0.0-2.8 Pulse OPEN OPEN OPEN OPEN OPEN OPEN OPEN OPEN 0.0-2.8 Pulse OPEN OPEN 0.0-2.8 Pulse 0.6-2.6 0.6-2.6 Float...

[Page 29](#) Unit[V] Unit[V] Ref. No. PIN STBY TALK NOTE Ref. No. PIN STBY TALK NOTE OPEN OPEN 0.0-2.8 Pulse 2.8-3.0 Pulse 2.8-3.0 Pulse 2.8-3.0 Pulse 2.8-3.0 Pulse IC606 OPEN OPEN 0.0-2.8 0.0-2.8 Pulse 0.0-2.8 Pulse Pulse/Tone 0.0-3.0 0.0-3.0 Pulse Pulse 0.0-2.8 Pulse 0.0-2.8 Pulse...

[Page 30: Semiconductor Lead Identification](#)

SEMICONDUCTOR LEAD IDENTIFICATION Base Unit D5/D7/D8/D14/D25/D407/D409 D2/D4/D6/D10 D1/D23/D24/D26 : 1N4148 /D413/D417/D418/D419 : RLS4148 /D11/D12/D13 : DCA010 D3 : HZ7C3 D414 : HZK6C D16 : HSM88WA D9 : HZ33CP D20 : HZ4A1 Anode D21 : HZ7A1 Anode Anode Cathode D22 : HZ9B2 D405 :LTD-482P Cathode Cathode...

[Page 31](#) IC9 : RH5VL40AA μ PD780024AGC IC407 : RH5VL45AA IC401 MC34119D P50/A8 P71/TI01 P51/A9 P70/TI00/TO0 P52/A10 P03/INTP3/ADTRG P53/A11 P02/INTP2 P54/A12 P01/INTP1 IC404 P55/A13 P00/INTP0 TC74HC132AF P56/A14 P57/A15 RESET P34/SI31 P35/SO31 P10/ANIO IC402 D16559 CD11 CD12 IC408 CD13 KM29W040AT CD14 CD15 CA10 CA11 R / B GPIO15 CA12...

[Page 32](#) Handset D616 : S1ZB20 D613 : RLS4148 D611 : DCC010 D608/D609/D610 : PG3822K D614/D615 : 1S5226 Cathode / Anode Cathode Anode Anode Cathode Cathode Anode Q604/Q606/Q607/Q609 /Q610/Q611/Q612 : 2SC1623 Q605 : 2SC2714 D619 : RB500V D617 : RB420D Q608/Q613 : 2SA812(M) Cathode Cathode Anode...

[Page 33: Electrical Parts Location](#)

ELECTRICAL PARTS LOCATION Base Unit Main PCB...

[Page 34](#) Base Unit Key PCB...

[Page 35](#) Handset Main PCB...

[Page 36: Wiring Diagrams](#)

WIRING DIAGRAMS Base Unit...

[Page 37](#) Handset...

[Page 38: Exploded View And Mechanical Parts List](#)

EXPLODED VIEWS AND MECHANICAL PARTS LIST Base Unit SPEAKER KEY PCB MAIN PCB RF MODULE (BASE) ANTENNA...

[Page 39](#) Base Unit LOC. REF. PART NO. DESCRIPTION RC009047 GNBZ443202Z BUTTON, FUNCTION RC009045 GCAS243201Z CASE, BOTTOM RC009044 GCAS243200Z CASE, TOP RC008414 HTML442750Z CHARGE TERMINAL C5191(PBP) RC005608 RCUN451804Z CUSHION NEOPRENE RC005439 GCAS254442Z DISPLAY WINDOW PMMA RC002384 LFUT428079Z FOOT BUMPON SJ-5916 1.6T RC008013 RBLD459155A HIMELON RC008891...

[Page 40](#) Handset RF MODULE (HANDSET) MAIN PCB ASSY...

[Page 41](#) Handset LOC. REF. PART NO. DESCRIPTION RC008346 RBLD442400Z BLIND RC009055 GNBZ443171Z BUTTON, FUNCTION RC009052 GCAS343203Z CASE, FRONT RC009051 GCAS343168A CASE, REAR RC008342 HTML442336Z CHARGE TERMINAL C2680(BSP) RC008703 GCAS457897Z COVER, ANTENNA ELASTOMER RC009053 GCAS443169Z COVER, BATTERY RC008347 RCUM441150Z CUSHION MOLTPRENE,40×20×8 RC008348 RCUN442433Z CUSHION NEOPRENE...

[Page 42: Parts List](#)

PARTS LIST PRODUCT SAFETY NOTE : Products marked with a have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice of this service manual. Don't degrade the safety of the product through important servicing. Symbol Symbol ±...

[Page 43](#) LOC. REF. PART NO. DESCRIPTION RC008318 BCML815625Z CERAMIC M/L (1608) 0.0056UF 50V K B RC008270 BCML811235Z CERAMIC M/L (1608) 0.012UF 50V K B RC005208 BCML814725Z CERAMIC M/L (1608) 0.0047UF 50V K B RC005206 BCML812225Z CERAMIC M/L (1608) 0.0022UF 50V K B RC008485 BCMM813914Z CERAMIC M/L (1608) 390PF 50V J CH...

[Page 44](#) LOC. REF. PART NO. DESCRIPTION C118 RC005205 BCML811035Z CERAMIC M/L (1608) 0.01UF 50V K B C121 RC008731 BCXK311050Z CERAMIC M/L (2125) 1UF 16V Z F C122 RC005204 BCML811025Z CERAMIC M/L (1608) 0.001UF 50V K B C151 RC005205 BCML811035Z CERAMIC M/L (1608) 0.01UF 50V K B C152 RC005204 BCML811025Z...

[Page 45](#) LOC. REF. PART NO. DESCRIPTION C417 RC008270 BCML811235Z CERAMIC M/L (1608) 0.012UF 50V K B C418 RC005204 BCML811025Z CERAMIC M/L (1608) 0.001UF 50V K B C419 RC005204 BCML811025Z CERAMIC M/L (1608) 0.001UF 50V K B C420 RC005206 BCML812225Z CERAMIC M/L (1608) 0.0022UF 50V K B C421 RC005202 BCML311045Z...

[Page 46](#) LOC. REF. PART NO. DESCRIPTION C611 RC005202 BCML311045Z CERAMIC M/L (1608) 0.1UF 16V K B C612 RC008296 BCSH901006Z TANTALUM CHIP 10UF 6.3V M C-122 C613 RC008296 BCSH901006Z TANTALUM CHIP 10UF 6.3V M C-122 C614 RC008296 BCSH901006Z TANTALUM CHIP 10UF 6.3V M C-122 C615 RC005210 BCMM811014Z CERAMIC M/L (1608) 100PF

50V J CH...

[Page 47](#) LOC. REF. PART NO. DESCRIPTION C660 RC008646 BCMN812204Z CERAMIC M/L (1608) 22PF 50V J RH C661 RC003284 BCFZ901016Z ELECTROLYTIC 100UF 6.3V M C-258 C670 RC005276 BCML818225Z CERAMIC M/L (1608) 0.0082UF 50V K B C671 RC005208 BCML814725Z CERAMIC M/L (1608) 0.0047UF 50V K B DIODES RC002236 BDAY0246003...

[Page 48](#) LOC. REF. PART NO. DESCRIPTION D615 RC001635 BDAY0274001 1SS226 D616 RC004904 BDAY0792001 BRIDGE S1ZB20-4062 D617 RC008448 BDAY1065001 RB420D D619 RC008083 BDAY1063001 RB500V-40 FILTERS RC008652 BFLY0967001 CERAMIC FL-967 FFE1054MS11SBL RC008653 BFLY0984001 CERAMIC FL-984 SFE10.54MHY13-A FT601 RC008652 BFLY0967001 CERAMIC FL-967 FFE1054MS11SBL FT602 RC008653 BFLY0984001 CERAMIC FL-984 SFE10.54MHY13-A...

[Page 49](#) LOC. REF. PART NO. DESCRIPTION RC008490 BLZY0203102 INDUCTOR:MOLDED CHIP LZ-203 MMZ1608R102AT 1000 RC008656 BLZY0156826 INDUCTOR:MOLDED LZ-156 LL1608-FH 0.0082UH L401 RC008490 BLZY0203102 INDUCTOR:MOLDED CHIP LZ-203 MMZ1608R102AT 1000 L602 RC004877 BLZY0087120 INDUCTOR:MOLDED CHIP LZ-087 12UH J L603 RC008654 BLBY1173001 COIL LB-1173 218ANS-2736Z RC003234 BTFY0265001 TRANSFORMER:HYBRID...

[Page 50](#) LOC. REF. PART NO. DESCRIPTION Q613 RC008275 BDBA0812695 2SA812(M)-M6A RESISTORS RC005240 BRFC161024Z CARBON FIXED CHIP 1K 1/16W J RC005432 BRFC161544Z CARBON FIXED CHIP 150K 1/16W J RC005252 BRFC163314Z CARBON FIXED CHIP 330 1/16W J RC005241 BRFC161034Z CARBON FIXED CHIP 10K 1/16W J RC005245 BRFC161834Z CARBON FIXED CHIP...

[Page 51](#) LOC. REF. PART NO. DESCRIPTION RC005280 BRFC161534Z CARBON FIXED CHIP 15K 1/16W J RC005260 BRFC166834Z CARBON FIXED CHIP 68K 1/16W J RC005260 BRFC166834Z CARBON FIXED CHIP 68K 1/16W J RC005286 BRFC165644Z CARBON FIXED CHIP 560K 1/16W J RC005259 BRFC166814Z CARBON FIXED CHIP 680 1/16W J RC002804 BRFC181544Z...

[Page 52](#) LOC. REF. PART NO. DESCRIPTION RC005262 BRFC168234Z CARBON FIXED CHIP 82K 1/16W J RC005285 BRFC165634Z CARBON FIXED CHIP 56K 1/16W J RC002821 BRFC184744Z CARBON FIXED CHIP 470K 1/8W J RC002821 BRFC184744Z CARBON FIXED CHIP 470K 1/8W J R100 RC005262 BRFC168234Z CARBON FIXED CHIP 82K 1/16W J R101 RC005240...

[Page 53](#) LOC. REF. PART NO. DESCRIPTION R143 RC005311 BRFC160004Z CARBON FIXED CHIP 0 1/16W J R144 RC005261 BRFC168224Z CARBON FIXED CHIP 8.2K 1/16W J R145 RC005261 BRFC168224Z CARBON FIXED CHIP 8.2K 1/16W J R146 RC004174 BRPA611024Z CARBON 1K 1/6W J R147 RC004174 BRPA611024Z CARBON 1K 1/6W J...

[Page 54](#) LOC. REF. PART NO. DESCRIPTION R194 RC009036 BRFC181814Z CARBON FIXED CHIP 180 1/8W J R195 RC008493 BRFC183914Z CARBON FIXED CHIP 390 1/8W J R196 RC008493 BRFC183914Z CARBON FIXED CHIP 390 1/8W J R197 RC005311 BRFC160004Z CARBON FIXED CHIP 0 1/16W J R198 RC002899 BRFC180004Z CARBON FIXED CHIP...

[Page 55](#) LOC. REF. PART NO. DESCRIPTION R432 RC005240 BRFC161024Z CARBON FIXED CHIP 1K 1/16W J R433 RC005311 BRFC160004Z CARBON FIXED CHIP 0 1/16W J R434 RC008767 BRFC163344Z CARBON FIXED CHIP 330K 1/16W J R435 RC005240 BRFC161024Z CARBON FIXED CHIP 1K 1/16W J R436 RC005240 BRFC161024Z CARBON FIXED CHIP...

[Page 56](#) LOC. REF. PART NO. DESCRIPTION R480 RC002799 BRFC181024Z CARBON FIXED CHIP 1K 1/8W J R481 RC002899 BRFC180004Z CARBON FIXED CHIP 0 1/8W J R482 RC002899 BRFC180004Z CARBON FIXED CHIP 0 1/8W J R484 RC005257 BRFC164734Z CARBON FIXED CHIP 47K 1/16W J R485 RC005240 BRFC161024Z CARBON FIXED CHIP...

[Page 57](#) LOC. REF. PART NO. DESCRIPTION R645 RC005240 BRFC161024Z CARBON FIXED CHIP 1K 1/16W J R646 RC005288 BRFC168244Z CARBON FIXED CHIP 820K 1/16W J R647 RC005281 BRFC162224Z CARBON FIXED CHIP 2.2K 1/16W J R648 RC005284 BRFC163334Z CARBON FIXED CHIP 33K 1/16W J R649 RC005242 BRFC161044Z CARBON FIXED CHIP...

[Page 58](#) LOC. REF. PART NO. DESCRIPTION R702 RC005242 BRFC161044Z CARBON FIXED CHIP 100K 1/16W J R703 RC005242 BRFC161044Z CARBON FIXED CHIP 100K 1/16W J R704

RC005241 BRFC161034Z CARBON FIXED CHIP 10K 1/16W J R705 RC005286 BRFC165644Z
CARBON FIXED CHIP 560K 1/16W J R706 RC005246 BRFC162204Z CARBON FIXED CHIP...

[Page 59](#) LOC. REF. PART NO. DESCRIPTION R792 RC005248 BRFC162234Z CARBON FIXED
CHIP 22K 1/16W J R793 RC005257 BRFC164734Z CARBON FIXED CHIP 47K 1/16W J R794
RC005257 BRFC164734Z CARBON FIXED CHIP 47K 1/16W J R797 RC002899 BRFC180004Z
CARBON FIXED CHIP 0 1/8W J SWITCHES RC003604 BSWY0755001...

[Page 60: Assembly Parts List](#)

100×100×0.1T RC008423 VNYL3102500 VINYL BAG 100×250×0.1T ASSEMBLY PARTS LIST
NOTE: Following part numbers are not available as replacement parts. Order parts necessary for
repair or contact the Toshiba Factory Service Center. LOC. REF. PART NO. DESCRIPTION
RC009060 AC625BLBA BASE MAIN PCB ASSEMBLY...

[Page 61: Specifications](#)

SPECIFICATIONS MEASUREMENT CONDITIONS 1. Standard Voltage :Portable Unit ..DC 3.8V ±
0.025V :Base Unit ..AC 120V ± 3V 60Hz 2. Temperature :25°C ± 5°C 3. Channel Portable(TX
Frequency) Base(TX Frequency) 902.119024MHz 924.996683MHz 902.218927MHz
925.096585MHz 902.318829MHz 925.196488MHz 902.418732MHz 925.296390MHz
902.518634MHz 925.396293MHz 902.618537MHz...

[Page 62](#) BASE UNIT RECEIVER UNIT NOMINAL LIMIT 1. Sensitivity 12 dB SINAD with CCITT
Filter -110 < -104 2. Frequency Response (Ref:1kHz) 0.3kHz -2.5 -6.5~+1.5 3.0kHz -1.5
-5.5~+2.5 3. Distortion at 1 mV RF Input < 5 4. S/N ratio at 1 mV RF Input with CCITT Filter 50
<...

[Page 63](#) HANDSET UNIT RECEIVER UNIT NOMINAL LIMIT 1. Sensitivity 12 dB SINAD with CCITT
Filter -110 < -104 2. Frequency Response (Ref:1kHz) 0.3kHz -4.0~+4.0 3.0kHz -4.0 -8.0~0 VOL.
HAC 135~175 3. Audio Output Level VOL. HIGH 70~110 VOL. MEDIUM 30~70 VOL. LOW 20~40
4.