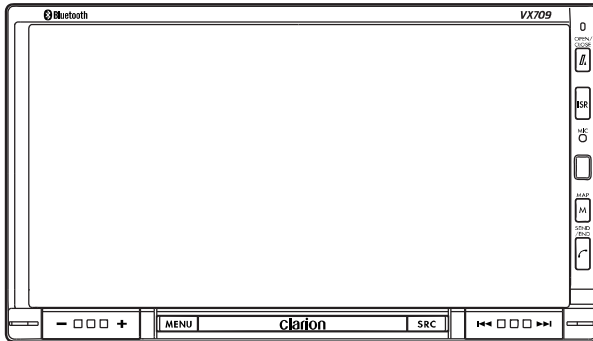


Service Manual



2-DIN DVD Multimedia Station
 With CeNET & 7-inch Touch Panel
 Control

Model **VX709**
 (QZ-6074B-A)



This product is a lead free model.
 Lead free solder is used in PWB stamped LF mark.
 Please keep the following conditions when you repair.

1. Use lead free solder.
 - * Koki's lead free solder S3X-55M 0.6mm
 (CLARION Parts No.642-0231-01)
 - * Koki's lead free solder S3X-55M 1.0mm
 (CLARION Parts No.642-0231-02)
2. Use a nitrogen solder system.
3. Do not use "General solder" and "Lead free solder" together.

ORIGINAL SERVICE MANUAL

The base of this model is MAX685BT. This manual chiefly publishes the difference point with the base model. Please refer to the following service manual of the basic model.

| Original model | Manual No. |
|----------------------|-------------|
| MAX685BT(QZ-6072B-A) | 298-6566-00 |

NOTES

- * The tuner of this unit is DSP type. When the tuner pack is exchanged, it is necessary to adjust for S-meter etc. The special equipment is used for an accurate adjustment.
- * DSP IC(IC1) cannot be removed with an ordinary soldering iron because of the pad type.
- * It is different from the adjustment display published in the original service manual according to the connected navigation unit.
- * Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

Laboratories.

- * This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a license from MSLGP.
- * We cannot supply PWB with component parts in principle. When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.
- * Specification and design are subject to change without notice for further improvement.

To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.

The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.
2. Place the parts and wiring back in their original positions after replacement or re-wiring.

For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.

If extended damage is caused due to negligence during re-

pin 93: AUDIO DO : O : Audio data output.
pin 94: GATE : O : Gate signal input.
pin 95: D VDD : - : Positive voltage supply for the digital section.
pin 96: NU : - : Not in use.
pin 97: NU : - : Not in use.
pin 98: NU : - : Not in use.
pin 99: NU : - : Not in use.
pin100: D VSS : - : Digital ground.

052-7079-40 Toshiba TC58FVM5B3AFTG65
CMOS Flash Memory

Terminal Description

pin 1: A 15 : IN: Address signal input.
pin 2: A 14 : IN: Address signal input.
pin 3: A 13 : IN: Address signal input.
pin 4: A 12 : IN: Address signal input.
pin 5: A 11 : IN: Address signal input.
pin 6: A 10 : IN: Address signal input.
pin 7: A 9 : IN: Address signal input.
pin 8: A 8 : IN: Address signal input.
pin 9: A 19 : IN: Address signal input.
pin 10: A 20 : IN: Address signal input.
pin 11: WE : IN: Write enable signal input.
pin 12: RESET : IN: Reset signal input.
pin 13: NU : - : Not in use.
pin 14: WP/ACC : IN: The write protection signal input / The acceleration signal input.
pin 15: RY/BY : O : The ready/busy signal output.
pin 16: A 18 : IN: Address signal input.
pin 17: A 17 : IN: Address signal input.
pin 18: A 7 : IN: Address signal input.
pin 19: A 6 : IN: Address signal input.
pin 20: A 5 : IN: Address signal input.
pin 21: A 4 : IN: Address signal input.
pin 22: A 3 : IN: Address signal input.
pin 23: A 2 : IN: Address signal input.
pin 24: A 1 : IN: Address signal input.
pin 25: A 0 : IN: Address signal input.
pin 26: CE : IN: Chip enable signal input.
pin 27: VSS : - : Negative supply voltage.
pin 28: OE : IN: Output enable signal input.
pin 29: D 0 : I/O: Data input/output.
pin 30: D 8 : I/O: Data input/output.
pin 31: D 1 : I/O: Data input/output.
pin 32: D 9 : I/O: Data input/output.
pin 33: D 2 : I/O: Data input/output.
pin 34: D 10 : I/O: Data input/output.
pin 35: D 3 : I/O: Data input/output.
pin 36: D 11 : I/O: Data input/output.
pin 37: VDD : - : Positive supply voltage.
pin 38: D 4 : I/O: Data input/output.
pin 39: D 12 : I/O: Data input/output.
pin 40: D 5 : I/O: Data input/output.
pin 41: D 13 : I/O: Data input/output.
pin 42: D 6 : I/O: Data input/output.
pin 43: D 14 : I/O: Data input/output.
pin 44: D 7 : I/O: Data input/output.
pin 45: D 15/A-1 : I/O: Data input/output. A-1 address input.
pin 46: VSS : - : Negative supply voltage.
pin 47: BYTE/WORD : IN: Byte / Word selection.
pin 48: A 16 : IN: Address signal input.

ELECTRICAL PARTS LIST

The following parts are different from MAX685BT. The other parts are the same as MAX685BT.

Main PWB(B2) section

(Please refer to page 30 of service manual for MAX685BT.)

| REF No. | PART No. | DESCRIPTION |
|---------|-------------|------------------------------------|
| IC402 | 052-7079-40 | TC58FVM5B3ATG65 |
| IC408 | 051-5331-90 | MM1228XFBE |
| IC503 | ----- | uPD70F3348GJ-UEN-A (032500-052) |
| R443 | 119-1211-15 | 1/10W 120 ohm |

LCD PWB(B3) section

(Please refer to page 32 of service manual for MAX685BT.)

| REF No. | PART No. | DESCRIPTION |
|---------|-------------|------------------------|
| IC901 | 060-8086-91 | UGZZ5-618B(B/T module) |
| R875 | 032-0140-81 | 1/10W 3.9k ohm F |
| R876 | 119-5611-15 | 1/10W 560 ohm |
| R878 | 119-4731-15 | 1/10W 47k ohm |
| R887 | 119-2231-15 | 1/10W 22k ohm |

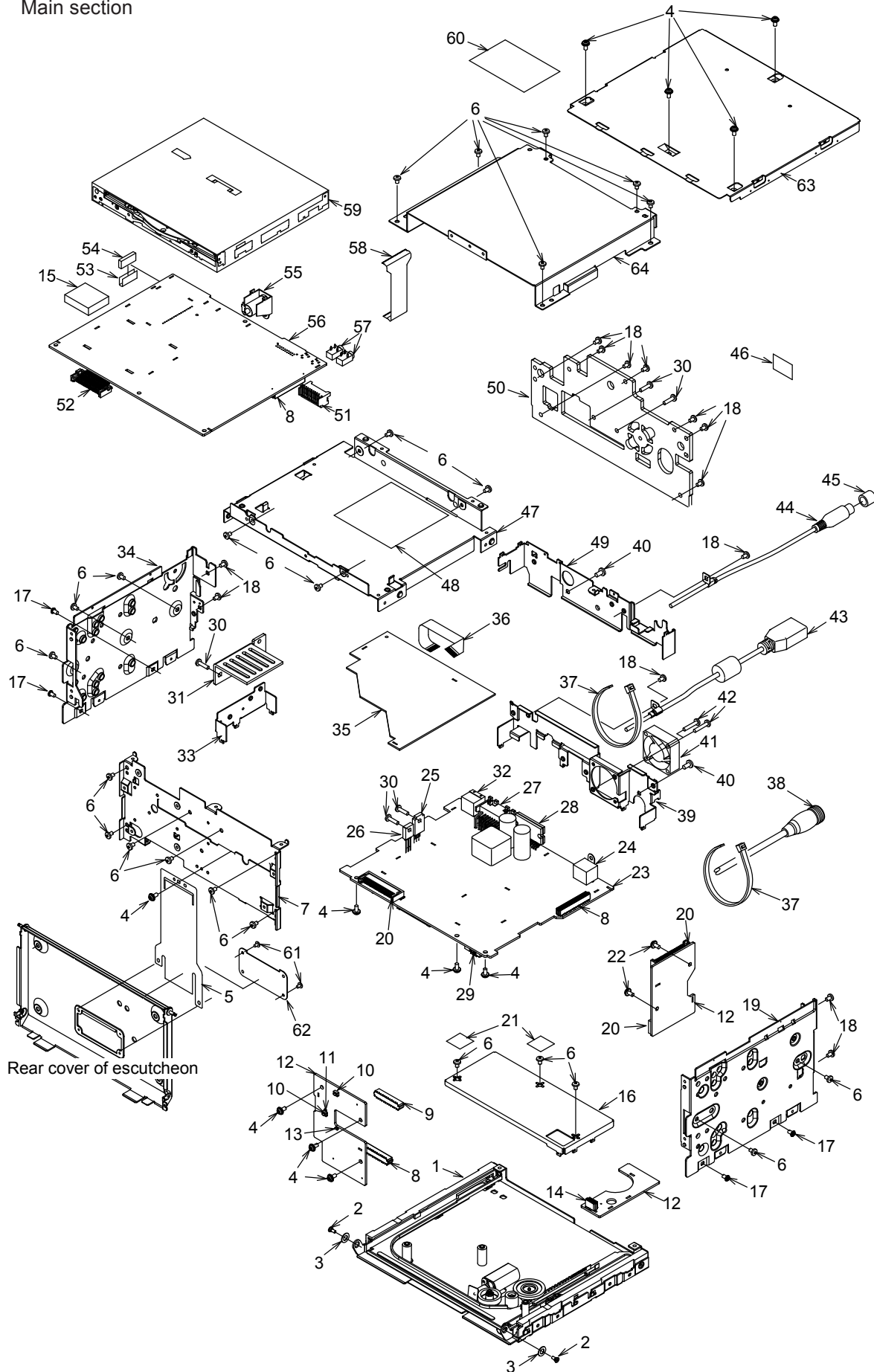
USB PWB(B6) section

(Please refer to page 36 of service manual for MAX685BT.)

| REF No. | PART No. | DESCRIPTION |
|---------|-------------|-------------------|
| IC2 | 052-3409-20 | TMP92CD28AFG-7D07 |

EXPLODED VIEW / PARTS LIST

Main section

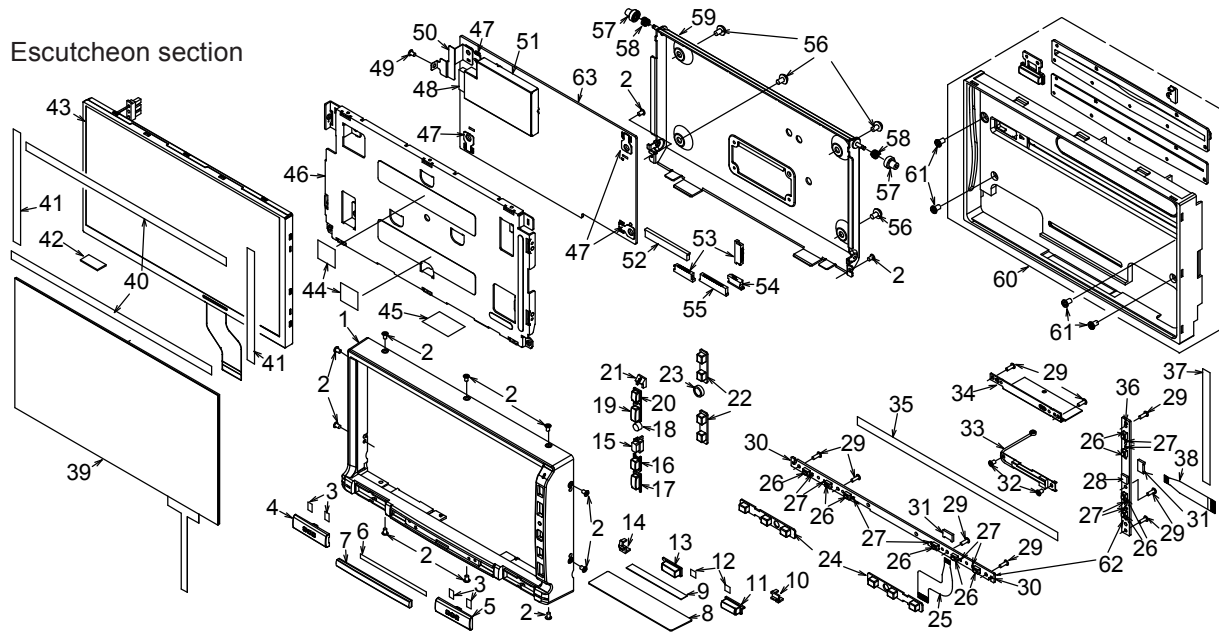


| NO. | PART NO. | DESCRIPTION | Q'TY | NO. | PART NO. | DESCRIPTION | Q'TY |
|-----|-------------|------------------------|------|-----|-------------|----------------------|------|
| 1 | 932-0121-80 | SLIDE MECH | 1 | 33 | 331-4504-00 | IC HOLDER | 1 |
| 2 | 716-3577-00 | DECORAT. SCREW | 2 | 34 | 312-0492-00 | SIDE CHASSIS-L | 1 |
| 3 | 335-7903-00 | BUSH | 2 | 35 | ----- | USB PWB | 1 |
| 4 | 716-0878-50 | SCREW(M2.6X5) | 11 | 36 | 816-3028-50 | FLAT WIRE | 1 |
| 5 | 039-3224-00 | FPC | 1 | 37 | 335-0833-01 | LEAD HOLDER | 2 |
| 6 | 714-2604-8B | MACHINE SCREW (M2.6x4) | 24 | 38 | 855-0645-50 | EXTENSION LEAD | 1 |
| 7 | 309-0853-00 | FRONT PLATE | 1 | 39 | 331-4501-00 | CONNECT HOLD-M | 1 |
| 8 | 074-3014-82 | SOCKET (32P) | 3 | 40 | 714-3004-8B | MACHINE SCREW(M3x4) | 2 |
| 9 | 074-3014-76 | SOCKET (26P) | 1 | 41 | 020-3053-00 | DC-MOTOR | 1 |
| 10 | 013-6312-50 | SWITCH | 2 | 42 | 780-2614-50 | SCREW(M2.6x14)(LOCK) | 2 |
| 11 | 001-7064-92 | DIODE | 1 | 43 | 855-0613-52 | USB CABLE | 1 |
| 12 | ----- | JOINT PWB | 1 | 44 | 855-5436-51 | RCA PIN CORD | 1 |
| 13 | 001-7038-92 | DIODE | 1 | 45 | 345-3799-20 | RUBBER PART | 1 |
| 14 | 074-3013-58 | SOCKET (8P) | 1 | 46 | 347-8527-00 | SHADE | 1 |
| 15 | 880-2091D | TUENR PACK | 1 | 47 | 312-0494-00 | LOWER CHASSIS | 1 |
| 16 | 331-4503-00 | PWB HOLDER | 1 | 48 | 347-8504-00 | INSHLATOR | 1 |
| 17 | 780-2604-51 | SCREW(M2.6x4)(LOCK) | 4 | 49 | 331-4502-00 | CONNECT HOLD-T | 1 |
| 18 | 714-2606-8H | MACHINE SCREW(M2.6x6) | 13 | 50 | 313-2031-00 | HEAT SINK | 1 |
| 19 | 312-0493-00 | SIDE CHASSIS-R | 1 | 51 | 076-0714-20 | PLUG | 1 |
| 20 | 076-3011-82 | PLUG | 3 | 52 | 076-3011-76 | PLUG | 1 |
| 21 | 347-8599-00 | NSULATOR | 2 | 53 | 347-8507-00 | E SHEET | 1 |
| 22 | 780-2604-50 | IT SCREW(M2.6x4) | 2 | 54 | 345-8504-00 | CUSHION | 1 |
| 23 | ----- | MAIN PWB | 1 | 55 | 092-4000-51 | ANT-RECEPT | 1 |
| 24 | 074-1231-08 | SOCKET (8P MIN) | 1 | 56 | ----- | TUNER PWB | 1 |
| 25 | 101-1018-30 | TRANSISTOR | 1 | 57 | 075-0339-00 | JACK | 2 |
| 26 | 102-3420-50 | TRANSISTOR | 1 | 58 | 039-3223-00 | FPC (MECH) | 1 |
| 27 | 074-4030-00 | SOCKET (18P) | 1 | 59 | 929-2150-80 | DVD-MECH-MODULE | 1 |
| 28 | 051-2060-00 | IC | 1 | 60 | 276-0605-00 | SETPLATE | 1 |
| 29 | 076-3006-58 | PLUG | 1 | 61 | 716-1851-00 | SCREW(M2x2)(LOCK) | 2 |
| 30 | 714-2610-8B | MACHINE SCREW(M2.6x10) | 5 | 62 | 039-3276-00 | PWB | 1 |
| 31 | 313-2032-00 | HEAT SINK-C | 1 | 63 | 310-1831-01 | UPPER CASE | 1 |
| 32 | 074-1194-00 | SOCKET (13P Ce-NET) | 1 | 64 | 312-0495-00 | UPPER CHASSIS | 1 |

NOTE

- * No.17, No.42 and No.61 are the screw of lock type. Please do not reuse.
- * When internal parts of DVD mechanism module(No. 59) are exchanged, it is necessary to do inspection and adjustment with special equipment. Please do not exchange internal parts of DVD mechanism module(No. 59) without the special equipment.

Escutcheon section



| NO. | PART NO. | DESCRIPTION | Q'TY | NO. | PART NO. | DESCRIPTION | Q'TY |
|-----|-------------|---------------------|------|-----|-------------|---------------------|------|
| 1 | 370-6315-04 | ESCUTCHEON | 1 | 33 | 060-8084-00 | BLUETOOTH ANT | 1 |
| 2 | 780-2003-03 | SCREW(M2x3)(LOCK) | 12 | 34 | 331-4498-00 | ANT-HOLDER | 1 |
| 3 | 347-8501-00 | SHADE | 4 | 35 | 347-8475-00 | FILM | 1 |
| 4 | 382-8553-01 | BUTTON (- / +) | 1 | 36 | 001-7103-90 | DIODE | 1 |
| 5 | 382-8552-01 | BUTTON (<< / >>) | 1 | 37 | 347-8476-00 | FILM | 1 |
| 6 | 347-8477-00 | DOUBLE FACE | 1 | 38 | 039-3225-00 | FPC | 1 |
| 7 | 378-0556-01 | BADGE | 1 | 39 | 013-9718-00 | TOUCH PANEL SWITCH | 1 |
| 8 | 347-8478-00 | COVER FILM | 1 | 40 | 347-8474-00 | SPACER | 2 |
| 9 | 347-8500-00 | SPACER | 1 | 41 | 347-8473-00 | SPACER | 2 |
| 10 | 335-8196-00 | ILLUMI PLATE | 1 | 42 | 347-8511-00 | SPACER | 1 |
| 11 | 382-8554-01 | BUTTON (SRC) | 1 | 43 | 379-0474-00 | INDICATOR (LCD) | 1 |
| 12 | 347-8502-00 | SHADE | 2 | 44 | 347-8498-00 | DOUBLE FACE | 2 |
| 13 | 382-8555-01 | BUTTON(MENU) | 1 | 45 | 347-8499-00 | COVER FILM | 1 |
| 14 | 335-8197-00 | ILLUMI PLATE | 1 | 46 | 331-4497-00 | LCD HOLER | 1 |
| 15 | 335-8195-00 | IR-FILTER | 1 | 47 | 073-0762-90 | TERMINAL | 4 |
| 16 | 382-8550-02 | BUTTON (M) | 1 | 48 | 076-0529-02 | PLUG | 1 |
| 17 | 382-8551-02 | BUTTON (TEL) | 1 | 49 | 781-2002-50 | SCREW(M2x2) | 1 |
| 18 | 345-6222-00 | CUSHION | 1 | 50 | 331-4532-00 | EARTH PLATE | 1 |
| 19 | 382-8549-02 | BUTTON (ISR) | 1 | 51 | 331-4499-00 | SHIELD CASE | 1 |
| 20 | 382-8548-01 | BUTTON (OPEN/CLOSE) | 1 | 52 | 074-2233-60 | SOCKET (60P) | 1 |
| 21 | 335-8200-00 | ILLUMI PART | 1 | 53 | 074-2225-66 | SOCKET (16P) | 2 |
| 22 | 345-6129-00 | RUBBER SHEET | 2 | 54 | 074-2219-54 | SOCKET (4P) | 1 |
| 23 | 081-0041-00 | MICROPHONE | 1 | 55 | 074-2226-80 | SOCKET (30P) | 1 |
| 24 | 345-6130-00 | RUBBER SHEET | 2 | 56 | 716-1611-50 | SCREW(M2.6x4) | 4 |
| 25 | 039-3226-00 | FPC | 1 | 57 | 335-7074-00 | ROLLER | 2 |
| 26 | 013-6312-50 | SWITCH | 10 | 58 | 750-6746-10 | ROLLER SPRING | 2 |
| 27 | 001-7097-90 | DIODE | 10 | 59 | 331-4500-00 | REAR-CVR | 1 |
| 28 | 060-4017-90 | IR-RECIEVER | 1 | 60 | 940-8228-02 | INNER-ES ASSY | 1 |
| 29 | 778-2004-01 | PAD SCREW (M2x6) | 9 | 61 | 780-2604-52 | SCREW(M2.6x4)(LOCK) | 4 |
| 30 | 001-7098-90 | DIODE | 2 | 62 | ----- | SWITCH PWB | 1 |
| 31 | 074-2236-65 | SOCKET (15P) | 2 | 63 | ----- | LCD PWB | 1 |
| 32 | 716-1468-01 | SCREW (M2x2.5) | 2 | | | | |

NOTE

* No.2 and No.61 are the screw of lock type. Please do not reuse.