

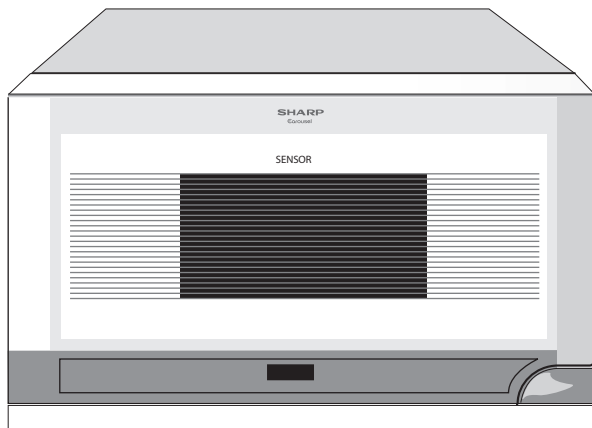
SHARP

SUPPLEMENTAL SERVICE MANUAL

S30M322R12OTCY

OVER THE COUNTER MICROWAVE MODELS

R-1210TY/1211TY



R-1210TY pictured

R-1214TY



R-1214TY pictured

THIS IS A SUPPLEMENTAL SERVICE MANUAL FOR MODELS R-1210TY, R-1211TY and R-1214TY USING THE STANDBY POWER CIRCUIT.

**MODELS NOT USING STANDBY POWER, PLEASE REFER TO SERVICE MANUAL:
(R-1210-T/1211-T & R-1214-T) - S30M322R12OTC**

THESE MODELS ARE SIMILAR TO ORIGINAL BASE MODELS R-1200 & R-1201.

In the interest of user-safety the unit should be restored to its original condition and only parts identical to those specified should be used.

WARNING TO SERVICE PERSONNEL:

This service manual is intended for use by persons having electrical and mechanical training and a level of knowledge of these subjects generally considered acceptable in the appliance repair trade. Sharp Electronics Corporation cannot be responsible, nor assume any liability, for injury or damage of any kind arising from the use of this manual.

Microwave ovens contain circuitry capable of producing very high voltage and current. Contact with the following parts may result in a severe, possibly fatal, electrical shock. (High Voltage Capacitor, High Voltage Power Transformer, High Voltage Rectifier, Heat sink, Magnetron, and High Voltage Harness etc..)

SHARP ELECTRONICS CORPORATION

This document has been published to be used for after sales service only. The contents are subject to change without notice.

SUPPLEMENTAL SERVICE MANUAL

SHARP

OVER THE COUNTER MICROWAVE OVEN

R-1210TY / R-1211TY / R-1214TY

FOREWORD

This Manual has been prepared to provide Sharp Electronics Corp. Service Personnel with Operation and Service Information for the SHARP OVER THE RANGE MICROWAVE OVENS using the Standby Power Circuit..

It is recommended that service personnel carefully study the entire text of this manual so that they will be qualified to render satisfactory customer service.

Check the interlock switches and the door seal carefully. Special attention should be given to avoid electrical shock and microwave radiation hazard.

WARNING

Never operate the oven until the following points are ensured.

- (A) The door is tightly closed.
- (B) The door brackets and hinges are not defective.
- (C) The door packing is not damaged.
- (D) The door is not deformed or warped.
- (E) There is not any other visible damage with the oven.

Servicing and repair work must be carried out only by trained service personnel.

DANGER

Certain initial parts are intentionally not grounded and present a risk of electrical shock only during servicing. Service personnel - Do not contact the following parts while the appliance is energized; High Voltage Capacitor, Power Transformer, Magnetron, High Voltage Rectifier Assembly, High Voltage Harness; If provided, Vent Hood, Fan assembly, Cooling Fan Motor.

All the parts marked “*” on parts list are used at voltages more than 250V.

Removal of the outer wrap gives access to voltage above 250V.

All the parts marked “Δ” on parts list may cause undue microwave exposure, by themselves, or when they are damaged, loosened or removed.

BEFORE SERVICING

Before servicing an operative unit, perform a microwave emission check as per the Microwave Measurement Procedure outlined in this service manual.

If microwave emissions level is in excess of the specified limit, contact SHARP ELECTRONICS CORPORATION immediately @ 1-800-237-4277.

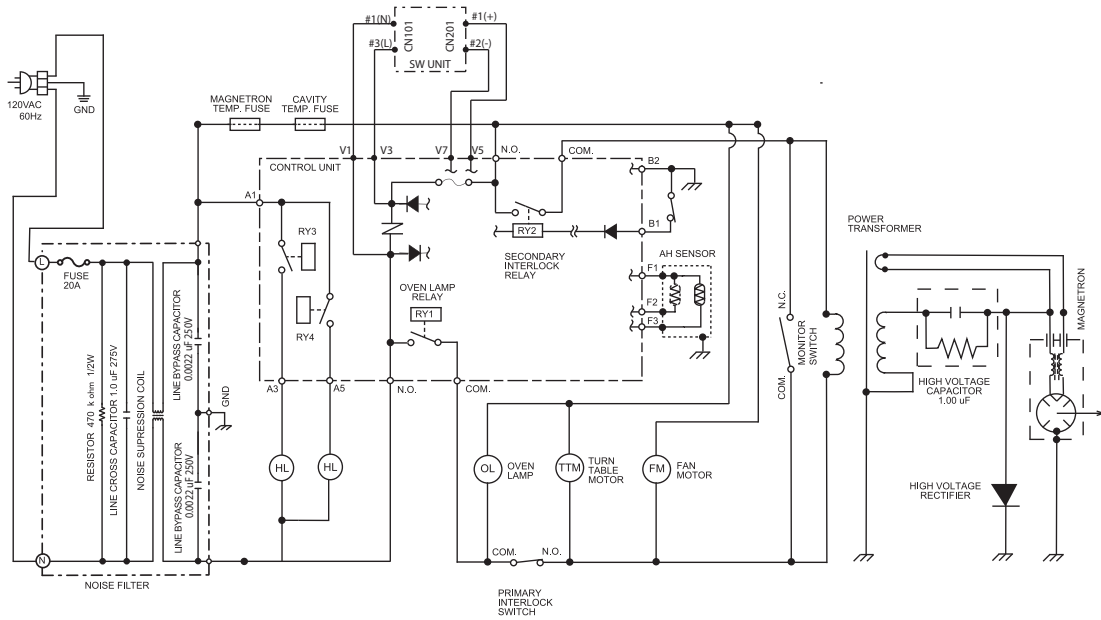
If the unit operates with the door open, service person should 1) tell the user not to operate the oven and 2) contact SHARP ELECTRONICS CORPORATION and Food and Drug Administration's Center for Devices and Radiological Health immediately.

Service personnel should inform SHARP ELECTRONICS CORPORATION of any certified unit found with emissions in excess of 4mW/cm². The owner of the unit should be instructed not to use the unit until the oven has been brought into compliance.

SHARP ELECTRONICS CORPORATION

SHARP PLAZA, MAHWAH,
NEW JERSEY 07430-2135

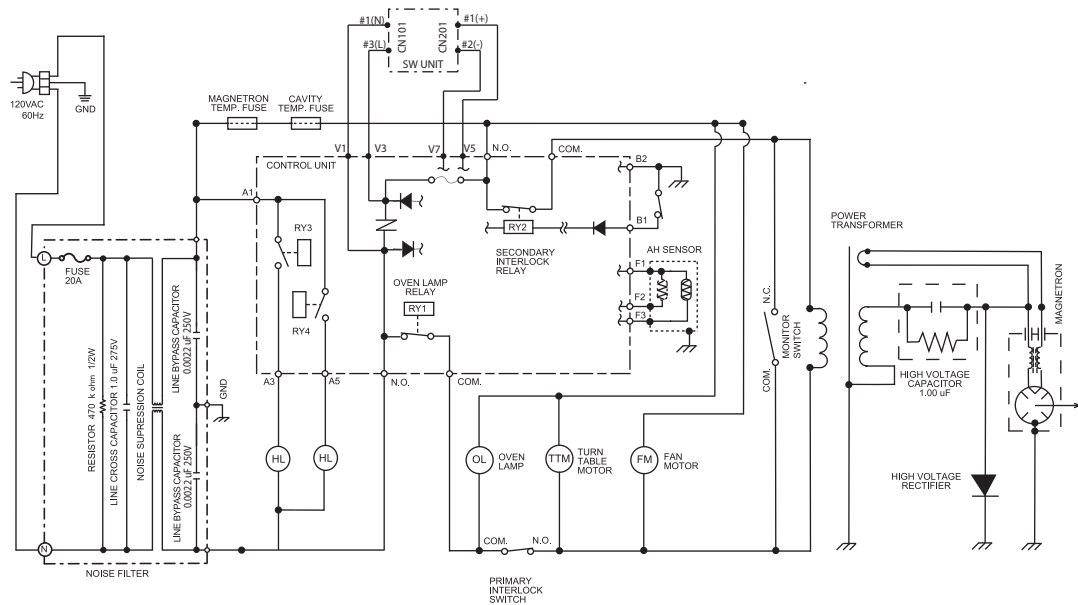
SCHEMATIC
NOTE: CONDITION OF OVEN
1. DOOR CLOSED.
2. CLOCK APPEARS ON DISPLAY.



NOTES:
1. Circuits / Wire Colors subject to change without notice
2. Terminal with projection or opposite blue mark on lamp socket must be connected to neutral wire.

Oven Schematic-Off Condition

SCHEMATIC
NOTE: CONDITION OF OVEN
1. DOOR CLOSED.
2. COOKING TIME PROGRAMMED.
3. VARIABLE COOKING CONTROL "HIGH".
4. "START" BUTTON PRESSED.

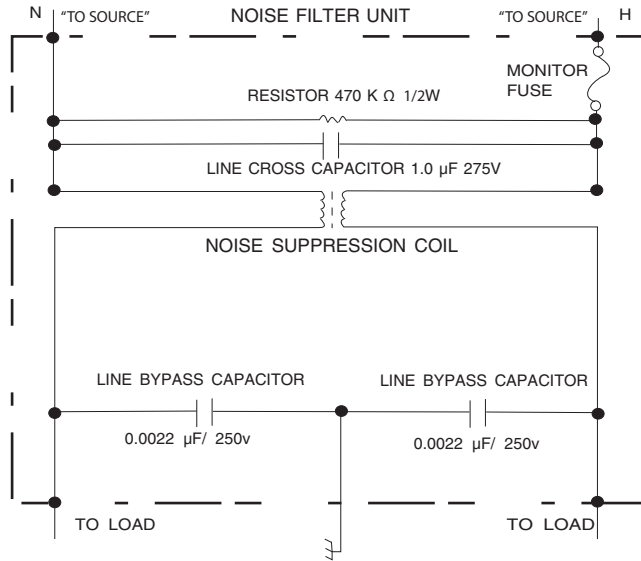


NOTES:
1. Circuits / Wire Colors subject to change without notice
2. Terminal with projection or opposite blue mark on lamp socket must be connected to neutral wire.

Oven Schematic-Cooking Condition

NOISE FILTER TEST

1. Disconnect the power supply cord, and then remove outer case.
2. Open the door and block it open.
3. Discharge high voltage capacitor.
4. Disconnect the leads to the primary of the power transformer.
5. Using an ohm-meter, check between the terminals as described in the following table:



MEASURING POINT	INDICATION OF OHM-METER
Between N and H	275 - 415Ω
Between terminal N and LOAD	Short Circuit
Between terminal H and LOAD	Short Circuit
Fuse	Short Circuit

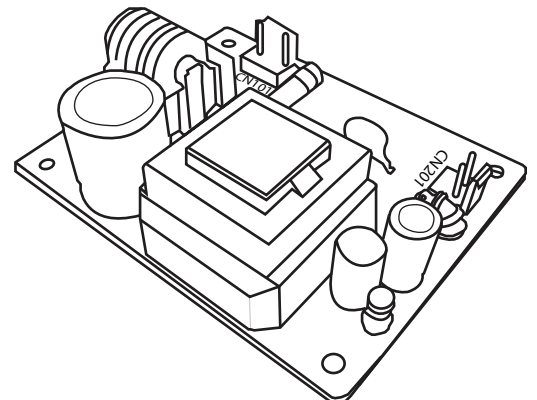
If fuse is open, replace fuse

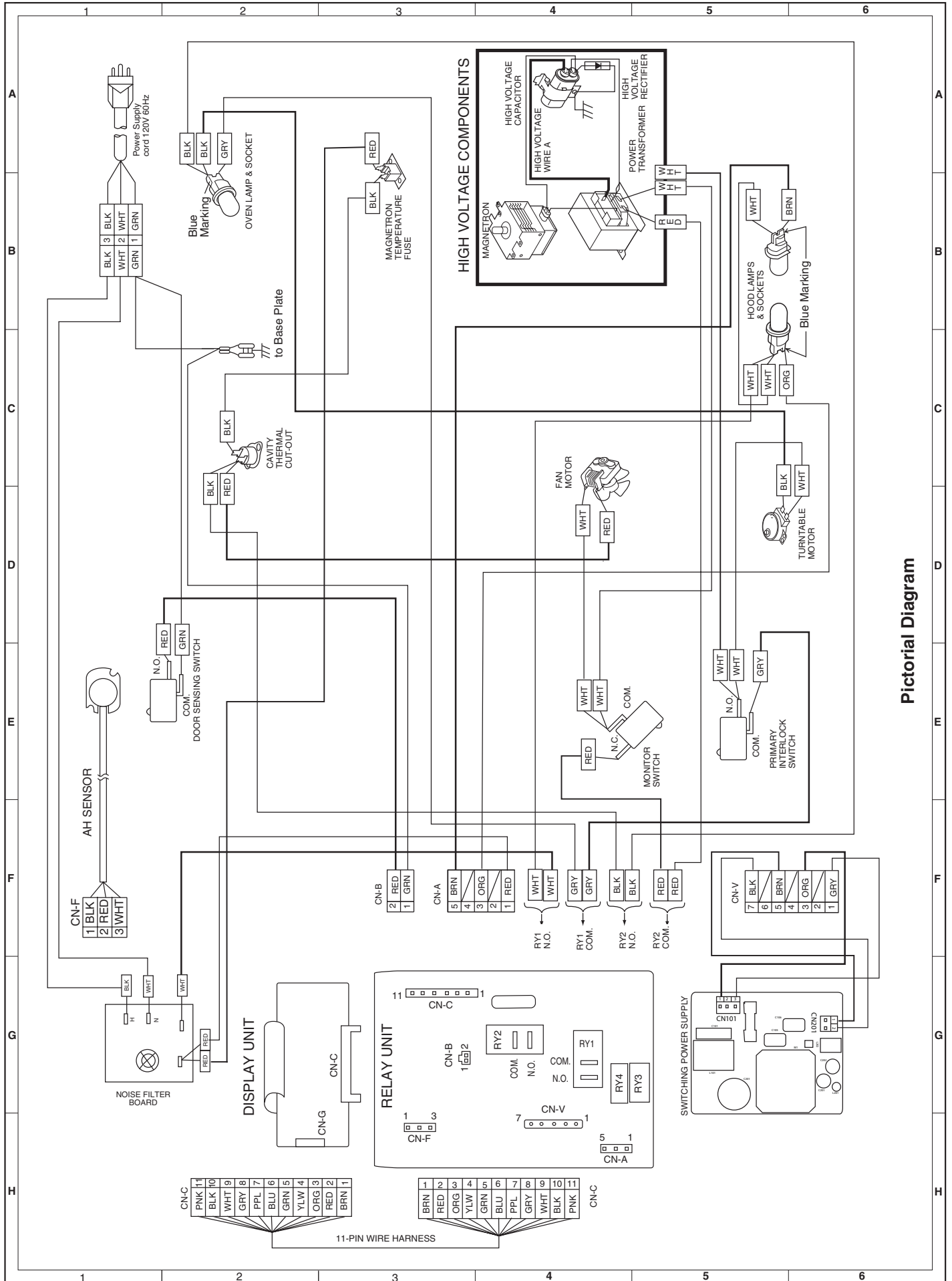
If incorrect readings are obtained, replace the noise filter.

6. Reconnect all leads removed from components during testing.
7. Re-install the outer case (cabinet).
8. Reconnect the power supply cord after the outer case is installed.
9. Run the oven and check all functions.

SWITCHING POWER SUPPLY

1. Check AC power into CN101,
if none check Main Harness.
2. Check DC power across CN201 (DC15V),
if none replace **Switching Power Supply Unit**
3. Check for DC getting from **Switching Power Supply Unit**
to PSU/ CPU, if none check Main Harness.





Pictorial Diagram

PARTS LIST

Note: The parts marked "Δ" may cause undue microwave exposure.
The parts marked "*" are used in voltage more than 250V.

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
ELECTRIC PARTS				
* 1- 1	FH-DZB028MRY0	High voltage rectifier assembly	1	AM
* 1- 2	RC-QZA336WRZZ	High voltage capacitor	1	AT
1- 3	QFS-TA013WRE0	Temperature fuse 150°C (Magnetron)	1	AG
1- 4	RMOTDA252WRZZ	Turntable motor	1	AN
1- 5	QFS-TA014WRE0	Temperature fuse 150°C (Cavity)	1	AG
1- 6	RMOTEB031MRE0	Fan motor	1	AT
1- 7	RTRN-B098MRE0	Power transformer	1	BP
* 1- 8	RV-MZA347WRZZ	Magnetron	1	BH
Δ* 1- 9	FPWBFA512WRKZ	Noise filter unit	1	AN
1-10	QSW-MA168WRZZ	Primary interlock and door sensing switches	2	AF
1-11	QSW-MA169WRZZ	Monitor switch	1	AD
1-12	FACCDB011MRE0	Power supply cord	1	AV
1-13	QSOCLA021WRE0	Oven lamp socket and hood lamp sockets	3	AG
1-14	RLMPTA086WRZZ	Oven lamp and hood lamps	3	AL
1-15	FDTCTA225WRKZ	AH sensor	1	AW
1-16	DPWB-B451DRKZ	Switching power supply	1	AZ
1-17	QFS-BA009WRE0	20A fuse	1	AF

CABINET PARTS

2- 1	HDECQB033MRF0	Bottom sash [R-1210TY]	1	AR
2- 1	HDECQB034MRF0	Bottom sash [R-1211TY]	1	AR
2- 1	FDECAB044MRK0	Bottom sash [R-1214TY]	1	AX
2- 2	GDAI-A464WRWZ	Base plate R	1	AR
2- 3	GCABUB194WRPZ	Outer case cabinet [R-1210TY]	1	BF
2- 3	GCABUB196WRPZ	Outer case cabinet [R-1211TY]	1	BK
2- 3	GCABUB198WRPZ	Outer case cabinet [R-1214TY]	1	BK
2- 4	TMAPCA836WRRZ	Schematic diagram	1	AC
2- 5	FANGKB009MRY0	Hood lamp glass assembly [R-1210TY/R-1214TY]	1	AP
2- 5	FANGKB029MRY0	Hood lamp glass assembly [R-1211TY]	1	AQ
2-5-1	LANGQB016MRP0	Hood lamp glass angle [R-1210TY/R-1214TY]	1	AM
2-5-1	LANGQB082MRP0	Hood lamp glass angle [R-1211TY]	1	AN
2-5-2	PGLSPB004MRE0	Hood lamp glass	1	AQ
2- 6	PCOVPA567WRTZ	Base cover [R-1210TY/R-1214TY]	1	AW
2- 6	PCOVPA570WRTZ	Base cover [R-1211TY]	1	AZ

RIGHT PANEL PARTS

3- 1	DPWB-B474DRKZ	Relay unit	1	AX
3- 2	HPNLCC283WRFZ	Right panel [R-1210-T]	1	AR
3- 2	HPNLCC284WRFZ	Right panel [R-1211-T]	1	AR
3- 2	HPNLCC187MRF0	Right panel [R-1214-T]	1	AR
3- 3	JBTN-B643WRFZ	Open button [R-1210-T]	1	AG
3- 3	JBTN-B644WRFZ	Open button [R-1211-T]	1	AG
3- 3	JBTN-B161MRF0	Open button [R-1214-T]	1	AH
3- 4	MSPRCA045WRE0	Button spring	1	AD
3- 5	PSHEPB078MRR0	Menu label	1	AG
3- 6	XEPS730P10XS0	Screw: 3mm x 10mm	2	AF

OVEN PARTS

4- 1	PDUC-B119MRF0	Exhaust duct	1	AP
4- 2	FROLPA097WRKZ	Turntable support assembly	1	AN
4- 3	NTNT-A108WREZ	Turntable tray	1	AW
4- 4	LBNDKA186WRPZ	Capacitor holder	1	AF
4- 5	PDUC-B155WRFZ	Magnetron duct	1	AK
4- 6	MLEVPA297WRFZ	Open lever	1	AG
4- 7	*****	Oven cavity (Not replaceable part)	1	--
4- 8	PPACGA084WRF0	Turntable motor packing	1	AE
4- 9	PHOK-A182WRFZ	Latch hook	1	AG
4-10	FANGTA176WRYZ	Unit mounting plate assembly	1	AN
4-11	NFANJA060WRFZ	Fan blade	1	AH
4-12	LBSHCA014WRE0	Cord bushing	1	AG
4-13	MLEVFA094WRPZ	Mounting lever	2	AF
4-14	PSKR-A506WRPZ	Bottom air guide	1	AM
4-15	PCOVPA554WRPZ	Waveguide cover	1	AF
4-16	MSPRTA046WRE0	Latch spring	2	AD
4-17	LANGTA479WRPZ	Chassis support	2	AK

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
4-18	LSTPPB039MRF0	Upper door stopper	1	AK
4-19	LSTPPB040MRF0	Lower door stopper	1	AK
4-20	PDOC-B159WRWZ	Fan duct	1	AM
4-21	PDOC-B173WRFZ	Orifice	1	AK
4-22	PCUSGA796WRPZ	Transformer cushion	1	AF
4-23	PCOVPA569WRPZ	Light cover	1	AQ
4-24	PCUSUA674WRPZ	Cushion	3	AF
4-25	LHLDPB004MRF0	PWB holder	1	AC
4-26	PCUSGA795WRPZ	Vibration cushion	1	AD
4-27	PCUSGA794WRPZ	Top cushion (required to keep moisture out)	1	AD

DOOR PARTS

5	CDORFB243WRKZ	Door assembly [R-1210TY]	1	BU
5	CDORFB244WRKZ	Door assembly [R-1211TY]	1	BV
5	CDORFB245WRKZ	Door assembly [R-1214TY]	1	BV
5- 1	DDORFB449WRKZ	Door panel assembly	1	BL
5- 2	FCOV-A065WRKZ	Door frame assembly [R-1210TY]	1	BQ
5- 2	FCOV-A066WRKZ	Door frame assembly [R-1211TY]	1	BS
5- 2	FCOV-A068WRKZ	Door frame assembly [R-1214TY]	1	BR
5- 3	LSTPPB023MRF0	Latch head	1	AF
5- 4	MSPRTA046WRE0	Latch spring	1	AD
5- 5	GCOVHB045MRF0	Choke cover	1	AX
5- 6	PSHEPB016MRE0	Sealer film	1	AK
5- 7	XEPS740P08000	Screw : 4mm x 8mm	2	AB

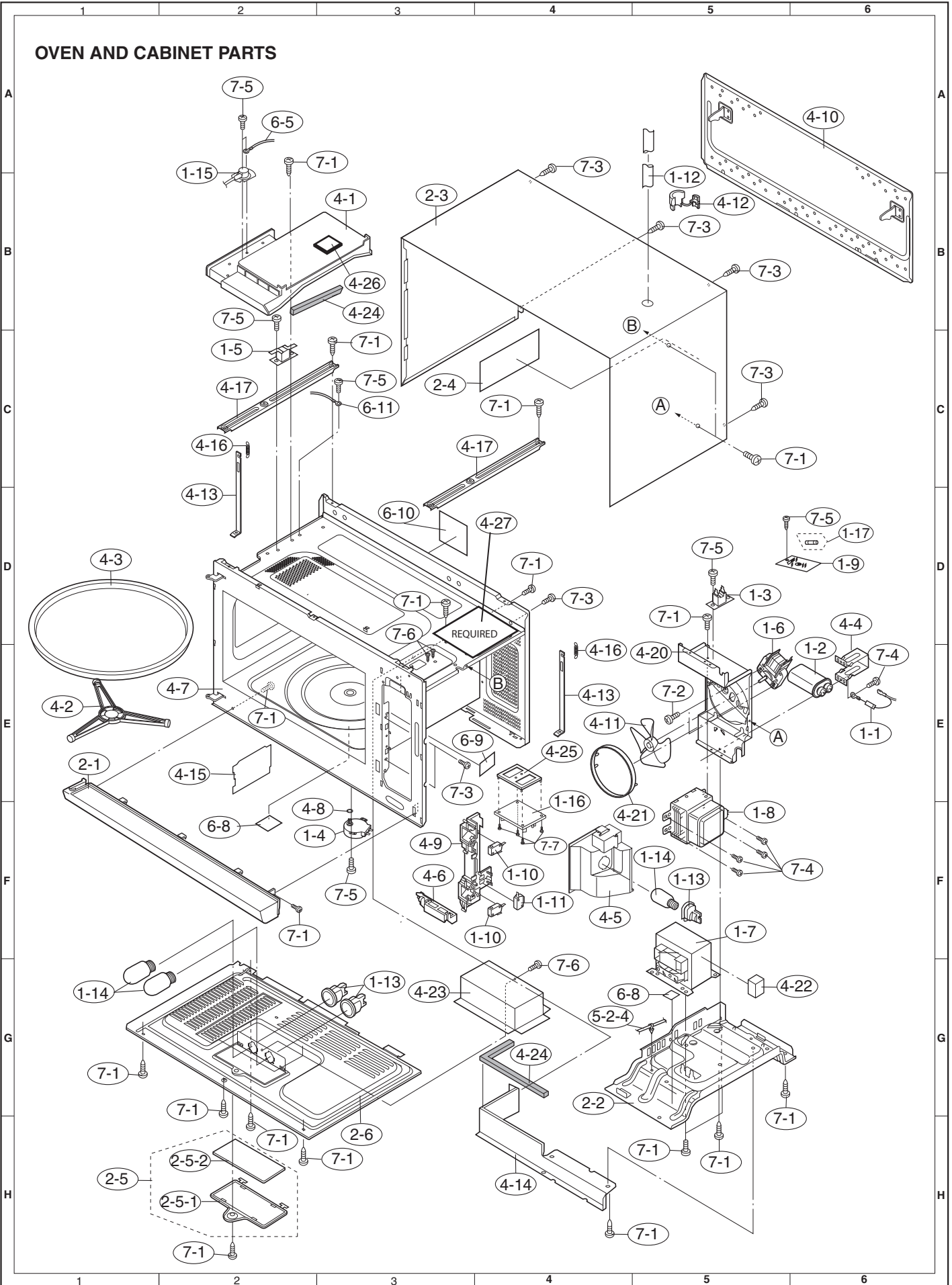
MISCELLANEOUS

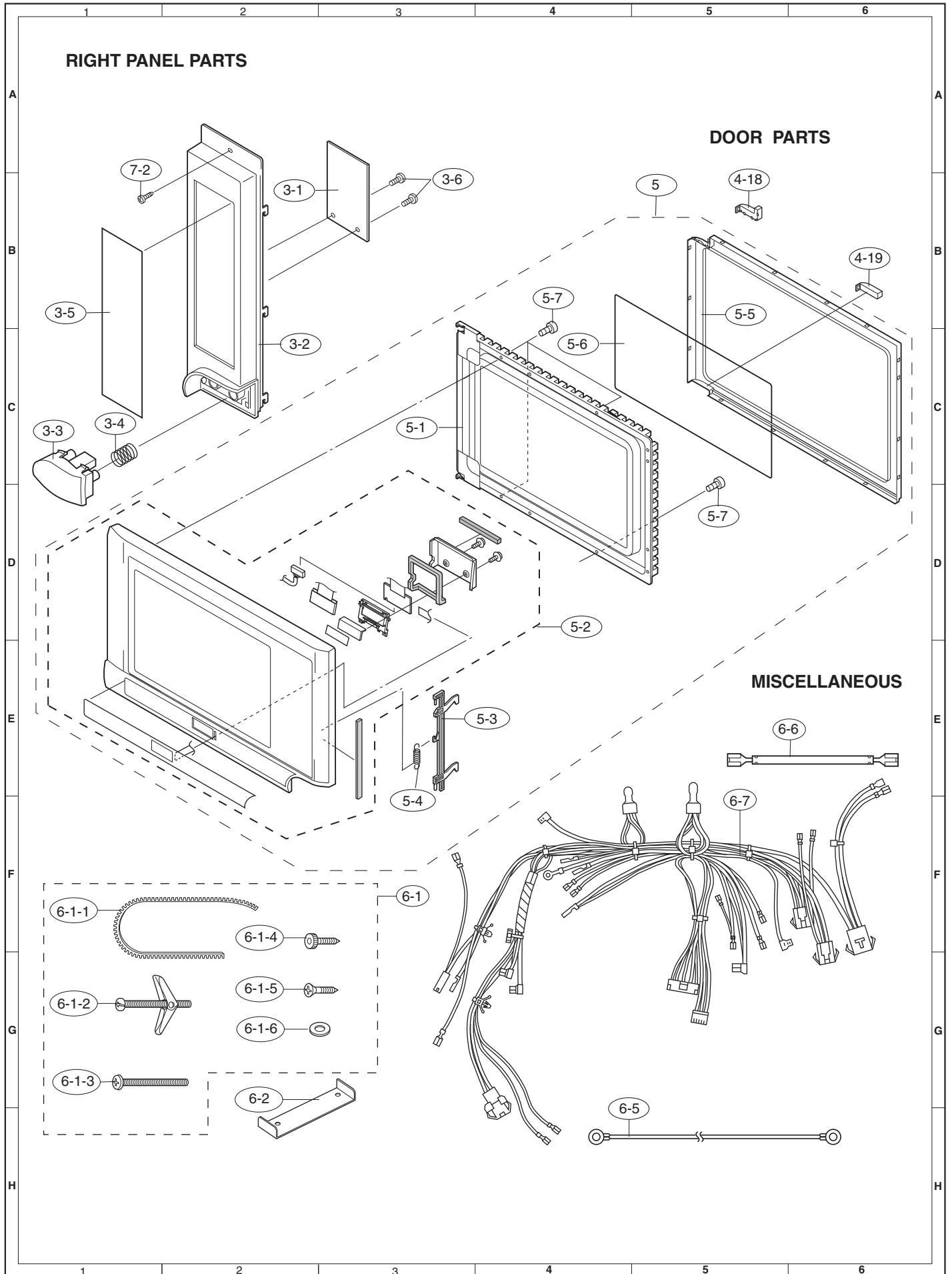
6- 1	CFZK-B681WRKZ	Installation material assembly	1	AQ
6-1-1	LBSHC0040MRE0	Grommet	1	AF
6-1-2	LX-BZ0195WRE0	Toggle screw	4	AH
6-1-3	XBRS750P60000	Screw : 5mm x 60mm	2	AK
6-1-4	XOTS740P12000	Screw : 4mm x 12mm	3	AB
6-1-5	XTSS750P35000	Screw : 5mm x 35mm	6	AD
6-1-6	XWHS750-16300	Washer	2	AG
6- 2	LANG-A138WRPZ	Scale plate	2	AF
6- 3	TINSEB390WRRZ	Operation manual	1	AG
6- 4	TINSKA034WRRZ	Top and Wall template	1	AK
6- 5	QW-VZB011MRE0	Sensor gnd wire	1	AF
6- 6	QW-QZB025MRE0	High voltage wire A	1	AF
6- 7	FW-VZC450WREZ	Main harness	1	AV
6- 8	TCAUAA302WRRZ	DHHS service caution label	2	AF
6- 9	TCAUAA301WRRZ	Monitor caution label	1	AF
6-10	TCAUAA300WRRZ	Revised DHHS/GRD C/label	1	AF

SCREWS, NUTS AND WASHERS

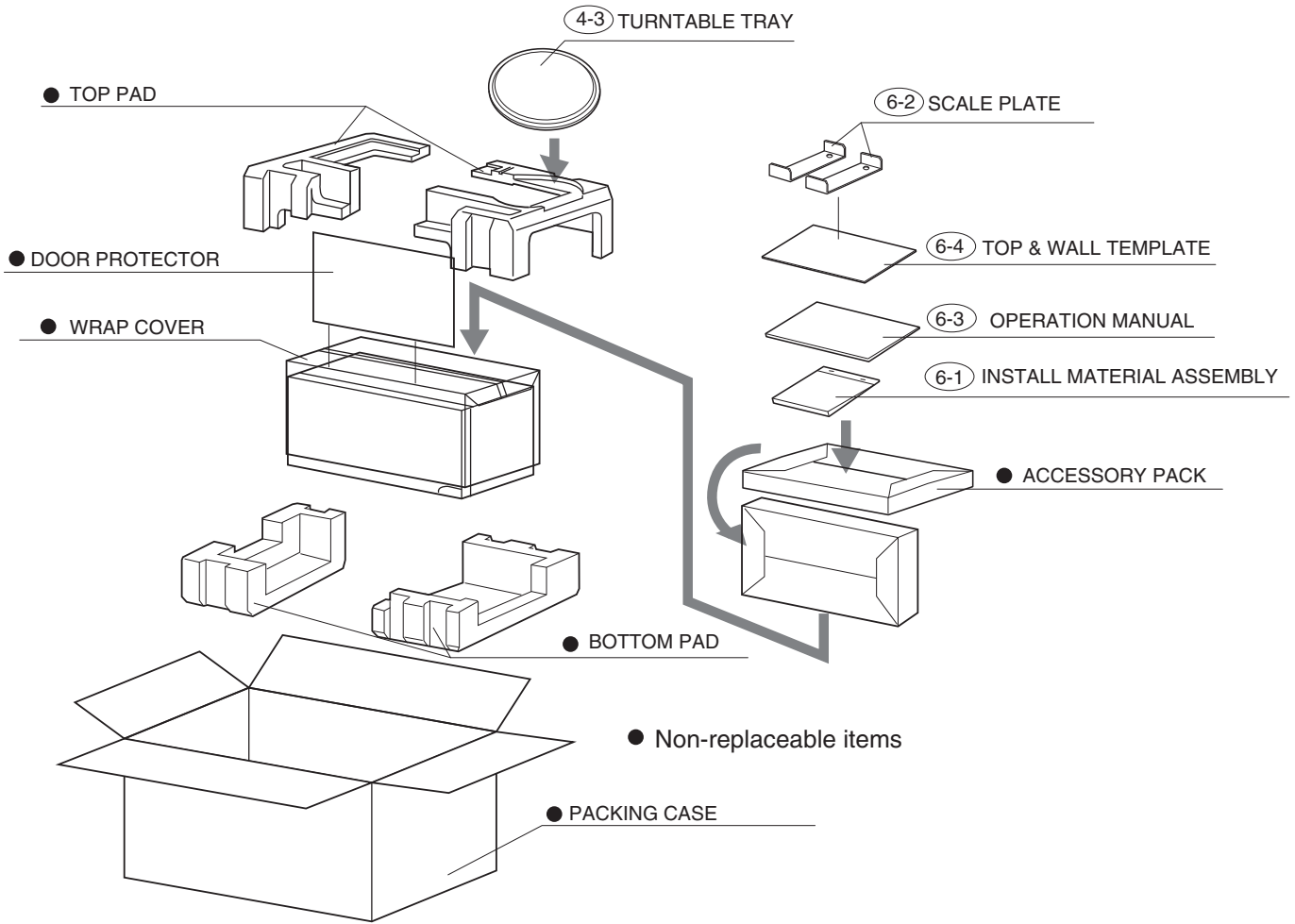
7- 1	XOTS740P12000	Screw : 4mm x 12mm	32	AB
7- 2	XHTS740P08RV0	Screw : 4mm x 8mm	2	AG
7- 3	LX-CZ0052WRE0	Special screw	2	AA
7- 4	LX-BZ0195WRE0	Special screw	5	AH
7- 5	XCBS730P08000	Screw : 3mm x 8mm	5	AC
7- 6	XOTS740P08000	Screw : 4mm x 8mm	3	AB
7- 7	XEPS730P08XS0	Screw	4	AA

OVEN AND CABINET PARTS





PACKING AND ACCESSORIES



NOTES

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