

Service Manual

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ORDER NO.SIMMC 0304019A3

Service Manual

Microwave Oven



- NN-GX36WF
NN-GX36MF

HPE(Hongkong)

MPQ(Malaysia)

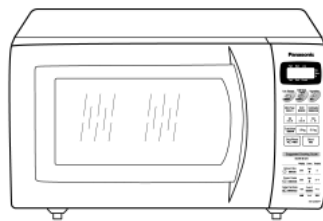
YTE(Others)

KTE(UAE, Egypt)

PTE(Iran)

ZPE(CIS Countries)

Please file and use this manual together with the service manual for Model NN-MX20/25WF (ORDER NO. SIMMC0203003C3 or SIMMC0203004C3)& NN-K366WF (ORDER NO. SIMMC9703002C3)



Specification

Model		NN-GX36WF/MF
Power Source:		240V AC Single Phase, 50Hz _ _ _ _ _ For MPQ Models 220V AC Single Phase, 50Hz _ _ _ _ _ For HPE, YTE, KTE, PTE, ZPE Models
Power Requirement:	Microwave	1170W
	Heater	1130W
Output:	Microwave(IEC705)	800W
	Heater	1100W
Microwave Frequency:		2450MHz
Timer:		29min.90sec (HIGH POWER)/99min.90sec
Outside Dimensions:		357mm(W) x 484mm(D) x 282mm(H)
Oven Cavity Dimensions:		330mm(W) x 325mm(D) x 191mm(H)
Weight:		13.6kg
PbF		This product with PbF
Output power:IEC705-88 Test Procedure		
Specifications subject to change without notice.		

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

WARNING

This product should be serviced only by trained, qualified personnel.
This service manual covers products for following markets.
When troubleshooting or replacing parts, please refer to the country/area identifications shown below for your applicable product specification.

HPE For Hongkong
MPO For Malaysia
YTE For Others
KTE For UAE, Egypt
PTE For Iran
ZPE For CIS Countries

CAUTION

About lead free solder (PbF)

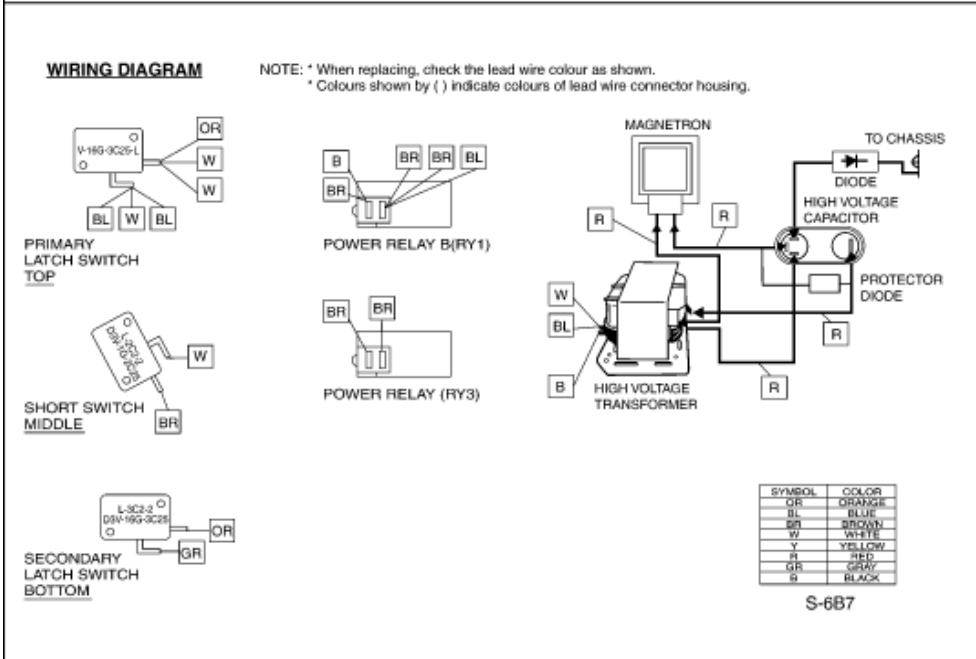
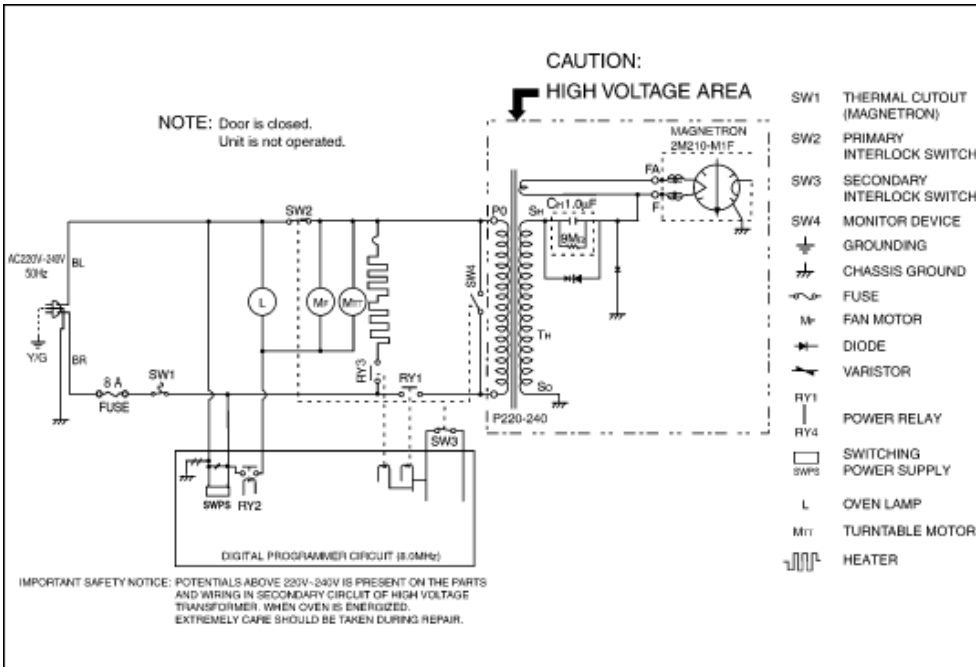
Distinction of PbF PCB: PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.

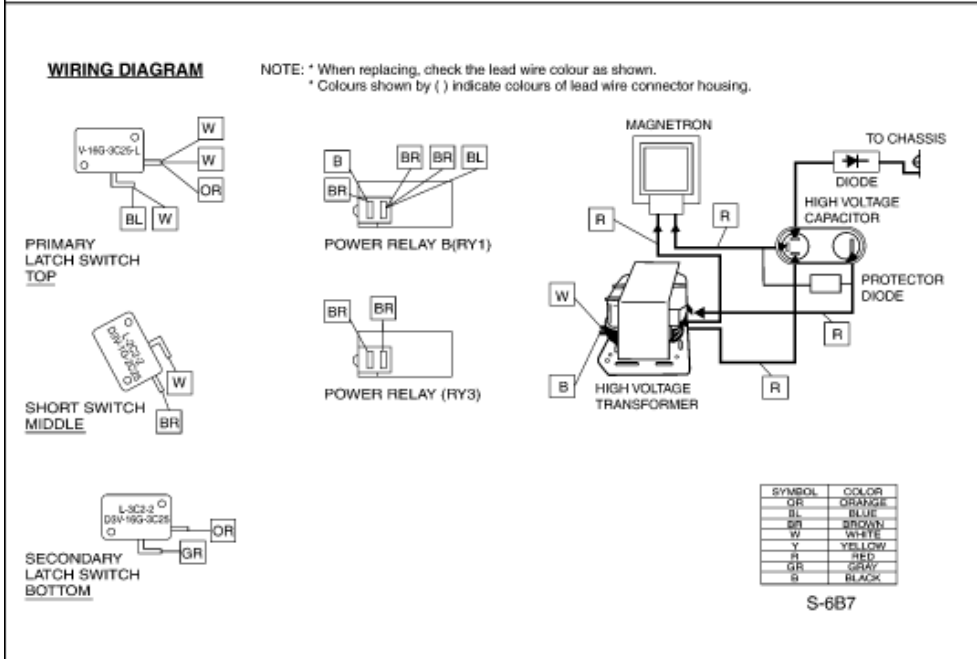
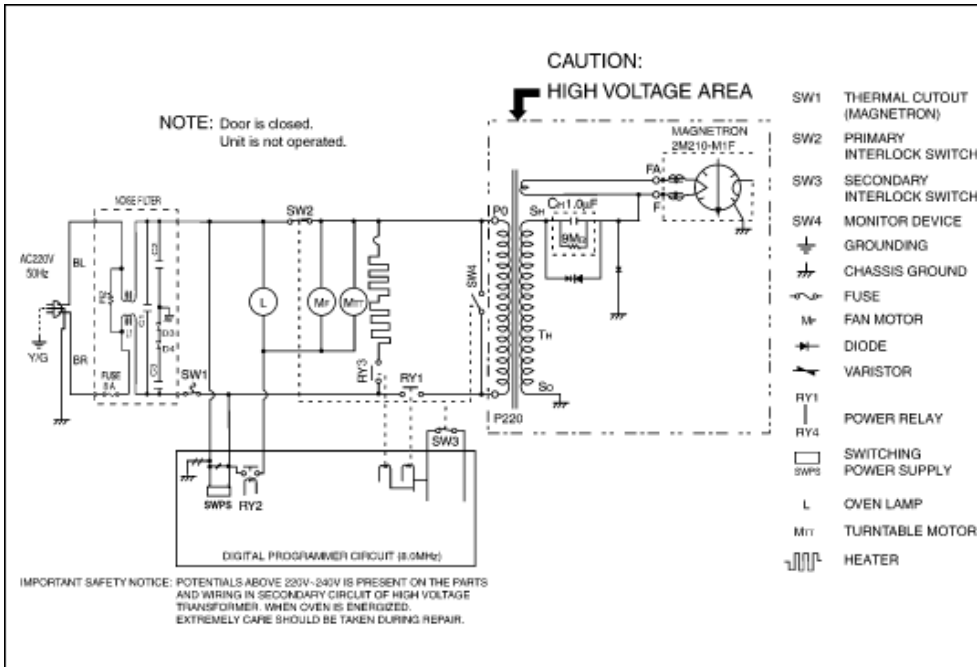
Caution: ● Pb free solder has a higher melting point than standard solder; Typically the melting point is 30 - 40°C higher. Please use a high temperature soldering iron. In case of the soldering iron with temperature control, please set it to 370 ± 10°C.

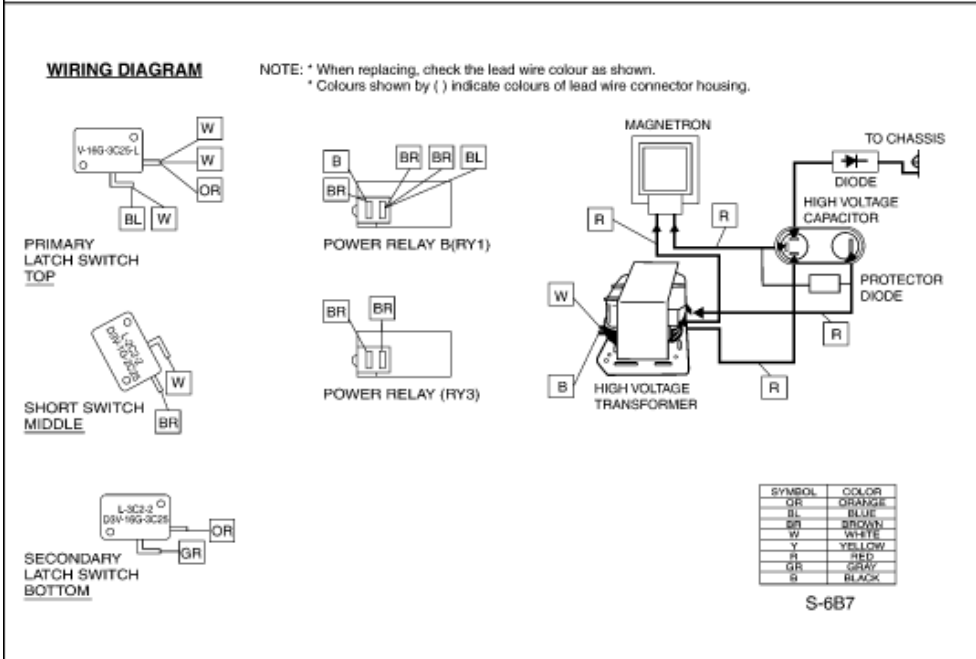
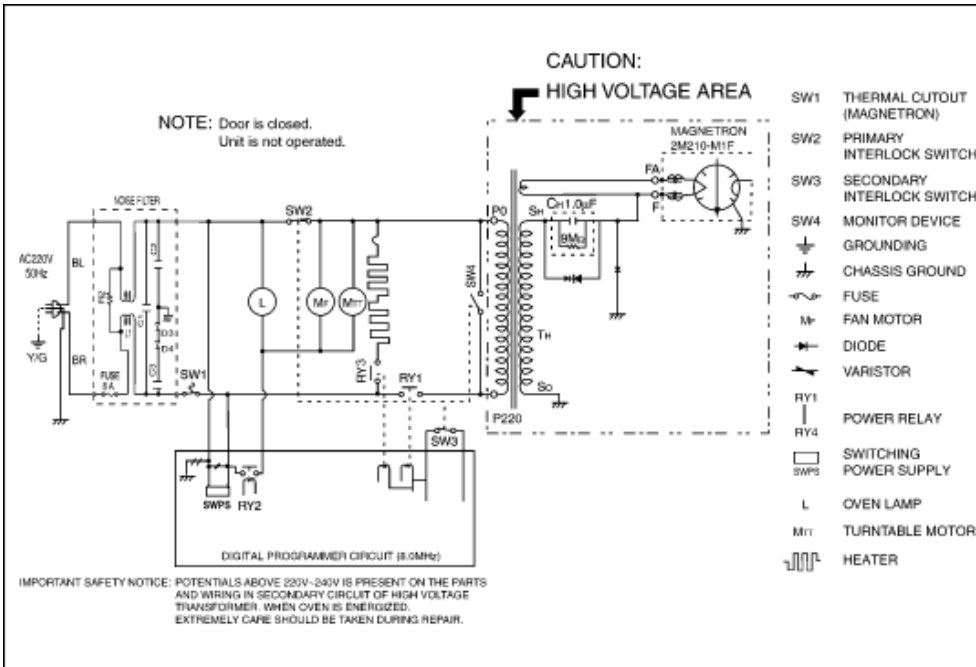
- Pb free solder will tend to splash when heated too high (about 600°C).

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3.1 Check the grounding

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Do not operate on a 2-wire extension cord. The microwave oven is designed to be used when grounded. It is imperative, therefore, to make sure it is grounded properly before beginning repair work.

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3.2 Warning about the electric charge in the high voltage capacitor

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For about 30 seconds after the oven is turned off, an electric charge remains in the high voltage capacitor. When replacing or checking parts, remove the power plug from the outlet and short the terminal of the high voltage capacitor (terminal of lead wire from diode) to chassis ground with an insulated handle screwdriver to discharge.

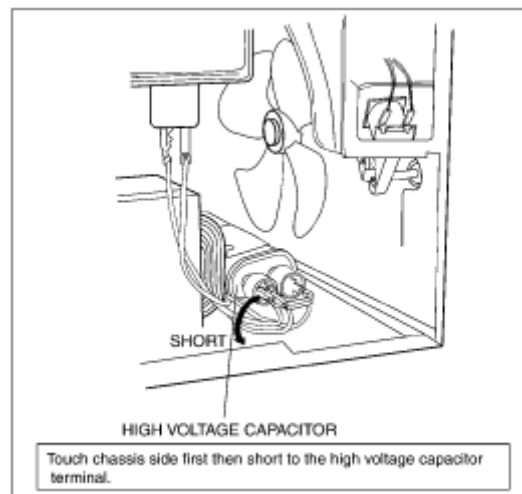
WARNING

There is high-voltage present, with high-current capabilities in the circuits of the high voltage winding and filament winding of the high voltage transformer. It is extremely dangerous to work on or near these circuits with oven energized.

DO NOT measure the voltage in the high voltage circuit including filament voltage of magnetron.

WARNING

Never touch any circuit wiring with your hand nor with an insulated tool during operation.



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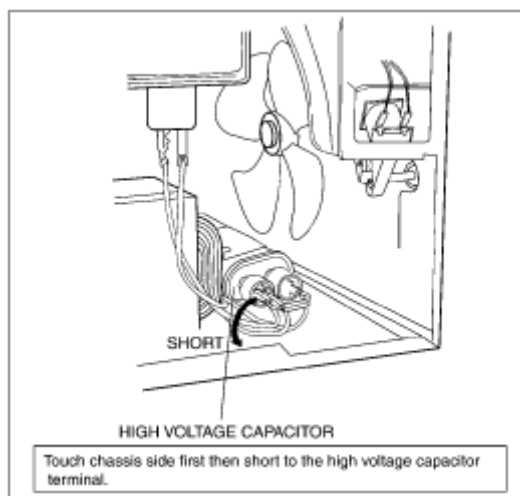
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3.4 When the 8 Amp fuse is blown due to the operation of short switch:

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WARNING

When the 15 Amp fuse is blown due to the operation of short switch, you must replace Primary latch switch and short switch. Also replace power relay B (RY1) when the continuity check reads shorted contacts(1-2).

1. This is mandatory. Refer to “Adjustments and Measurement” for these switches.
2. When replacing the fuse, confirm that it has the appropriate rating for these models.
3. When replacing faulty switches, be sure mounting tabs are not bent, broken or otherwise deficient in their ability to hold the switches.

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3.5 Avoid inserting nails, wire, etc. through any holes in the unit during operation.

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Never insert a wire, nail or any other metal object through the lamp holes on the cavity or any other holes or gaps, because such objects may work as an antenna and cause microwave leakage.

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3.6 Confirm after repair

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1. After repair or replacement of parts, make sure that the screws of the oven, etc. are neither loose nor missing.
Microwaves might leak if screws are not properly tightened.
2. Make sure that all electrical connections are tight before inserting the plug into the wall outlet.
3. Check for microwave energy leakage. (Refer to procedure for measuring microwave energy leakage.)

CAUTION
MICROWAVE RADIATION

DO NOT BECOME EXPOSED TO RADIATION FROM THE MICROWAVE GENERATOR OR OTHER PARTS CONDUCTING MICROWAVE ENERGY.

IMPORTANT NOTICE

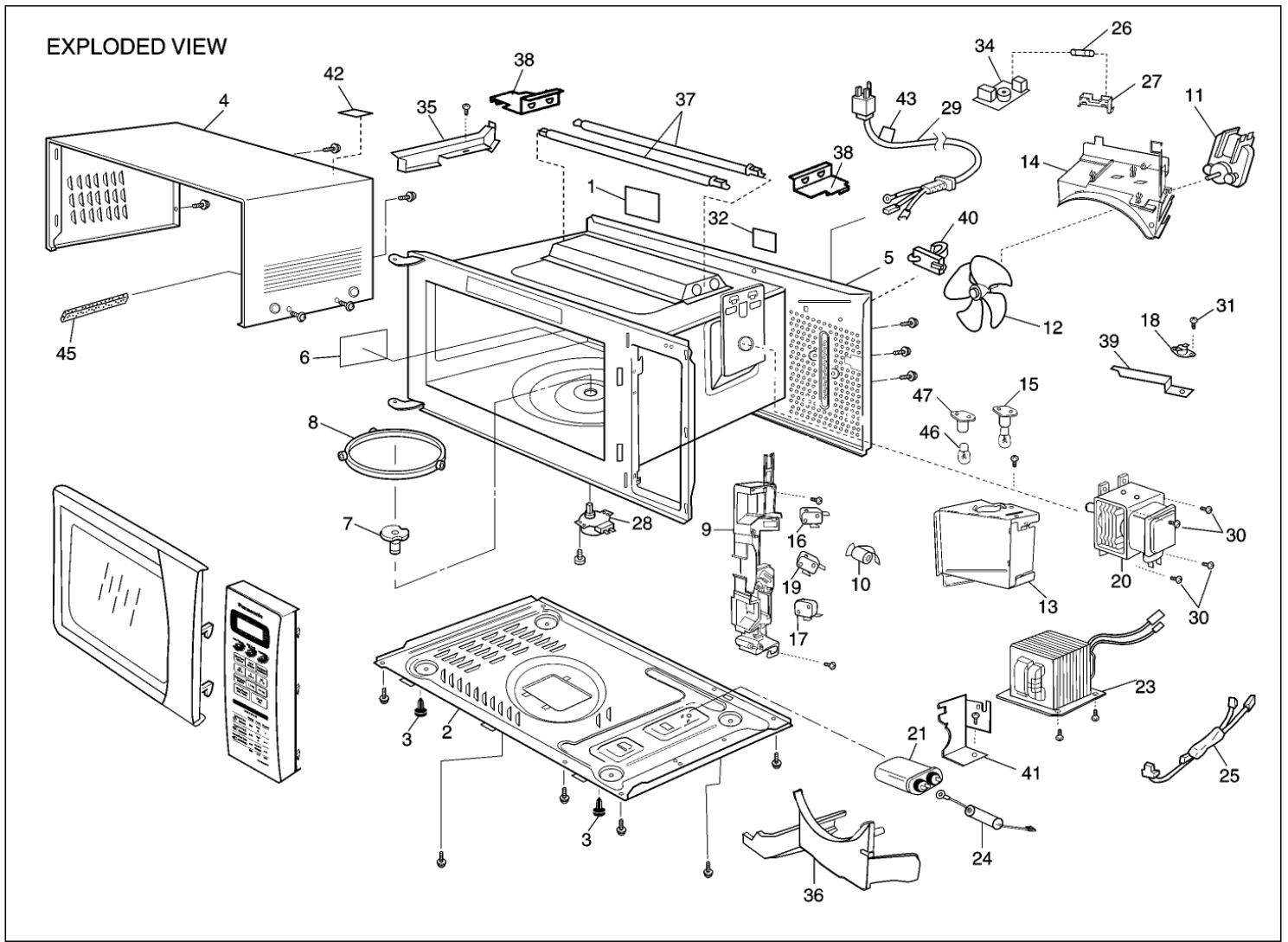
1. The following components have potentials above 2000V while the appliance is operated.

- * Magnetron
- * High voltage transformer
- * High voltage diode
- * High voltage capacitor

Pay special attention to these components.

2. When the appliance is operated with the door hinge or magnetron fixed incorrectly, the microwave leakage can reach more than 5mW/cm². After repair or exchange, it is very important to check if magnetron and the door hinge is correctly installed.

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5 PARTS LIST

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NOTE:

1. When ordering replacement part(s), please use part number(s) shown in this part list.

Do not use description of the part.

2. Important safety notice:







Components identified by mark have special characteristics important for safety.











When replacing any of these components, use only manufacture's specified parts.

NOTE:

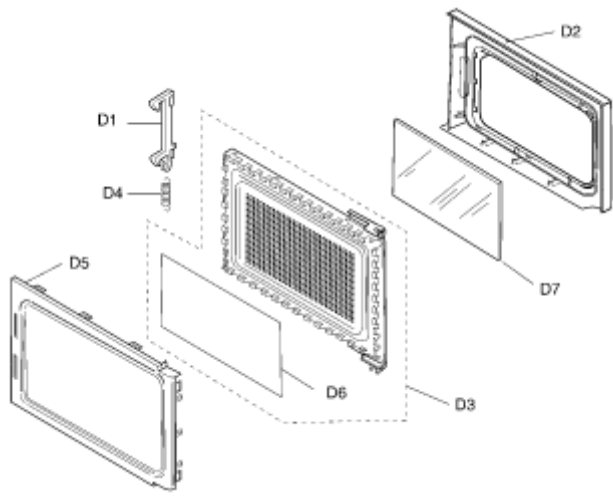
“A” parts are supplied by MOD (Japan)

“F” parts are supplied by SIMMC (China)

Ref. No.		Part No.	Part Name & Description	Pcs/Set	Remarks
<u>1</u>		F01576B70HHP	NAME PLATE	1	GX36WF HPE
1		F01576B70HYT	NAME PLATE	1	GX36WF YTE
1		F01576B70HMP	NAME PLATE	1	GX36WF MPQ
1		F01576B70HKT	NAME PLATE	1	GX36WF KTE
1		F01576B70HPT	NAME PLATE	1	GX36WF PTE
1		F01576B70HZP	NAME PLATE	1	GX36WF ZPE
1		F01576B70SZP	NAME PLATE	1	GX36MF ZPE
<u>2</u>		F10015G50XN	BASE	1	
<u>3</u>		F10084T00AP	RUBBER FOOT	2	
<u>4</u>		F110D5U50HBP	CABINET BODY	1	EXCEPT GX36MF ZPE
4		F110D5G60SXN	CABINET BODY	1	GX36MF ZPE
<u>5</u>		F200A5G50XN	OVEN	1	
<u>6</u>		F20555G10XN	COVER	1	
<u>7</u>		F21315G10XN	PULLY SHAFT	1	
<u>8</u>		F290D5G10XN	ROLLER RING (U)	1	
<u>9</u>		F30205G10XN	DOOR HOOK	1	
<u>10</u>		F31365G10XN	HOOK LEVER A	1	
<u>11</u>		F400A5U00XN	FAN MOTOR	1	
<u>12</u>		F40085G50XN	FAN BLADE	1	
<u>13</u>		F40255G10XN	AIR GUIDE A	1	
<u>14</u>		F41445G40XN	ORIFICE	1	
<u>15</u>		F612E5G10XN	INCANDESCENT LAMP (U)	1	EXCEPT HPE
<u>16</u>		F61425U30XN	MICRO SWITCH	1	(PRIMARY LATCH SWITCH)
<u>17</u>		F61415U30XN	MICRO SWITCH	1	(SECONDARY LATCH SWITCH)
<u>18</u>		F61455G60XN	THERMAL CUTOUT	1	150°C OFF
<u>19</u>		F61785U30XN	MICRO SWITCH	1	(SHORT SWITCH)

20		2M210-M1G	MAGNETRON	1	ZPE
20		2M210-M1F1CR	MAGNETRON	1	EXCEPT ZPE
21		F60905G10XN	H.V.CAPACITOR	1	
23		F621B5G10MN	H.V.TRANSFORMER	1	MPQ
23		F621B5G10XN	H.V.TRANSFORMER	1	EXCEPT MPQ
24		F62025G10XN	DIODE	1	
25		F606V5G10XN	PROTECTOR DIODE (U)	1	
26		F62305G10XN	FUSE	1	8A, 250V
27		F62315G10XN	FUSE HOLDER	1	EXCEPT ZPE
28		F63265U30XN	TURNTABLE MOTOR	1	
29		F900C5G60YK	AC CORD W/PLUG	1	EXCEPT ZPE & PTE
29		F900C5G40ZP	AC CORD W/PLUG	1	ZPE
29		F900C6B70PT	AC CORD W/PLUG	1	PTE
30		XTWFA4+12T	SCREW	4	FOR MAGNETRON
31		XTEFA3+6B	SCREW	1	FOR THERMAL CUTOUT
32		F00068100HN	CAUTION LABEL	1	EXCEPT ZPE
32		F00065E90ZP	CAUTION LABEL	1	ZPE
34		F692Y5G10QP	NOISE FILTER (U)	1	ZPE
35		F40268920XN	AIR GUIDE B	1	
36		F40305G50XN	AIR GUIDE D	1	
37		F630G5G50XN	HEATER (AU)	2	
38		F64605G50XN	HEATER MOUNTING PLATE	2	
39		F66265G60XN	THERMAL CUTOUT MOUNTING	1	
40		F11407000AP	STOPPER	1	
41		F66625G50XN	GROUNDING PLATE	1	
42		F01506B80XN	NO TOUCHING LABEL	1	GX36WF
42		F01504Y00XN	NO TOUCHING LABEL	1	GX36MF
43		F02395E20KN	CORD CAUTION LABEL	1	KTE, PTE
45		F0922000EF	CUSHION RUBBER	1	
46		F60305G60HN	INCANDESCENT LAMP	1	HPE
47		F61525H00AP	SOCKET	1	HPE

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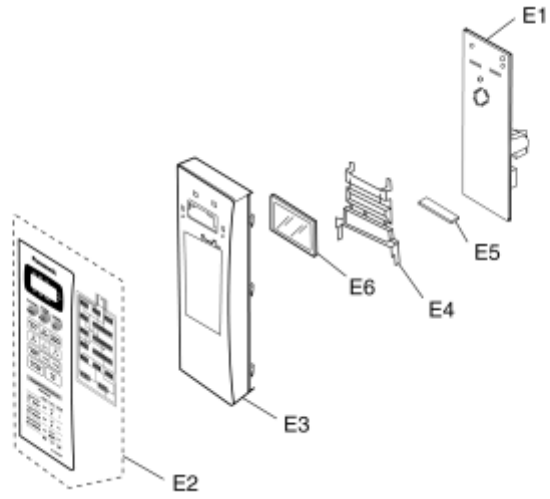
6 DOOR ASSEMBLY

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Ref. No.		Part No.	Part Name & Description	Pcs/Set	Remarks
D1		F30185G10XN	DOOR KEY A	1	
D2		F30015U40HXN	DOOR A	1	GX36WF
D2		F30015U60SBP	DOOR A	1	GX36MF
D3		F302K5G10XN	DOOR E (U)	1	
D4		F30215G10XN	DOOR KEY SPRING	1	
D5		F30855G10XN	DOOR C	1	
D6		F31455G10XN	DOOR SCREEN A	1	
D7		F31465U30XN	DOOR SCREEN B	1	

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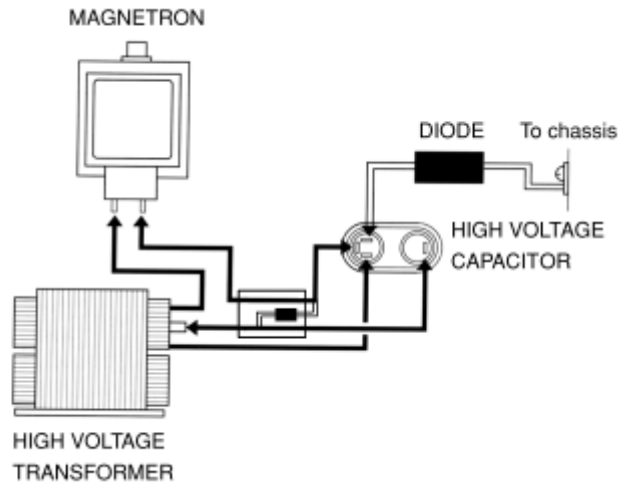
7 ESCUTCHEON BASE ASSEMBLY

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Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks
E1	F603L5G60HN	D.P.CIRCUIT	1	HPE, YTE, MPQ
E1	F603L5G60KK	D.P.CIRCUIT	1	KTE, PTE
E1	F603L5G60ZP	D.P.CIRCUIT	1	ZPE
E2	F630Y6B70HHP	MEMBRANE SWITCH (U)	1	HPE, YTE, MPQ
E2	F630Y6B70HKT	MEMBRANE SWITCH (U)	1	KTE, PTE
E2	F630Y6B70HZP	MEMBRANE SWITCH (U)	1	GX36WF ZPE
E2	F630Y6B70SZP	MEMBRANE SWITCH (U)	1	GX36MF ZPE
E3	F80345U40HXN	ESCUTCHEON BASE	1	GX36WF
E3	F80345U60SBP	ESCUTCHEON BASE	1	GX36MF
E4	F66174T00AP	DISPLAY TUBE COVER	1	
E5	A67004T00AP	RUBBER CONNECTOR	1	
E6	AEDDHJ5G40XN	DISPLAY	1	

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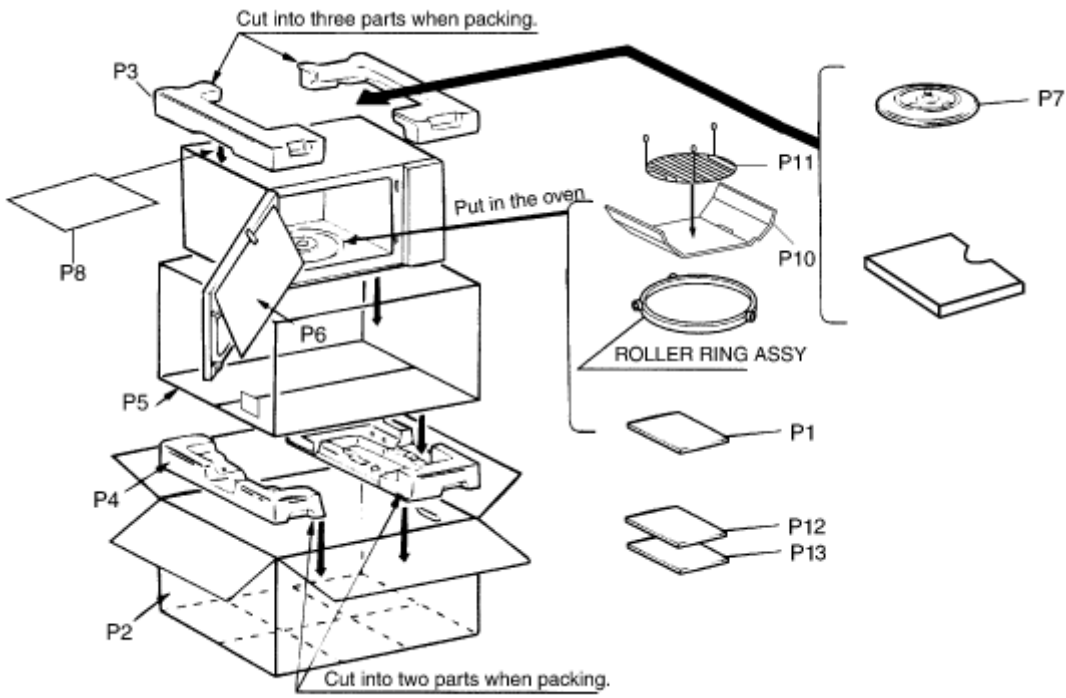
8 WIRING MATERIALS

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Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks
W1	F030A5G60XN	LEAD WIRE HARNESS	1	EXCEPT ZPE
W1	F030A5G60BP	LEAD WIRE HARNESS	1	ZPE

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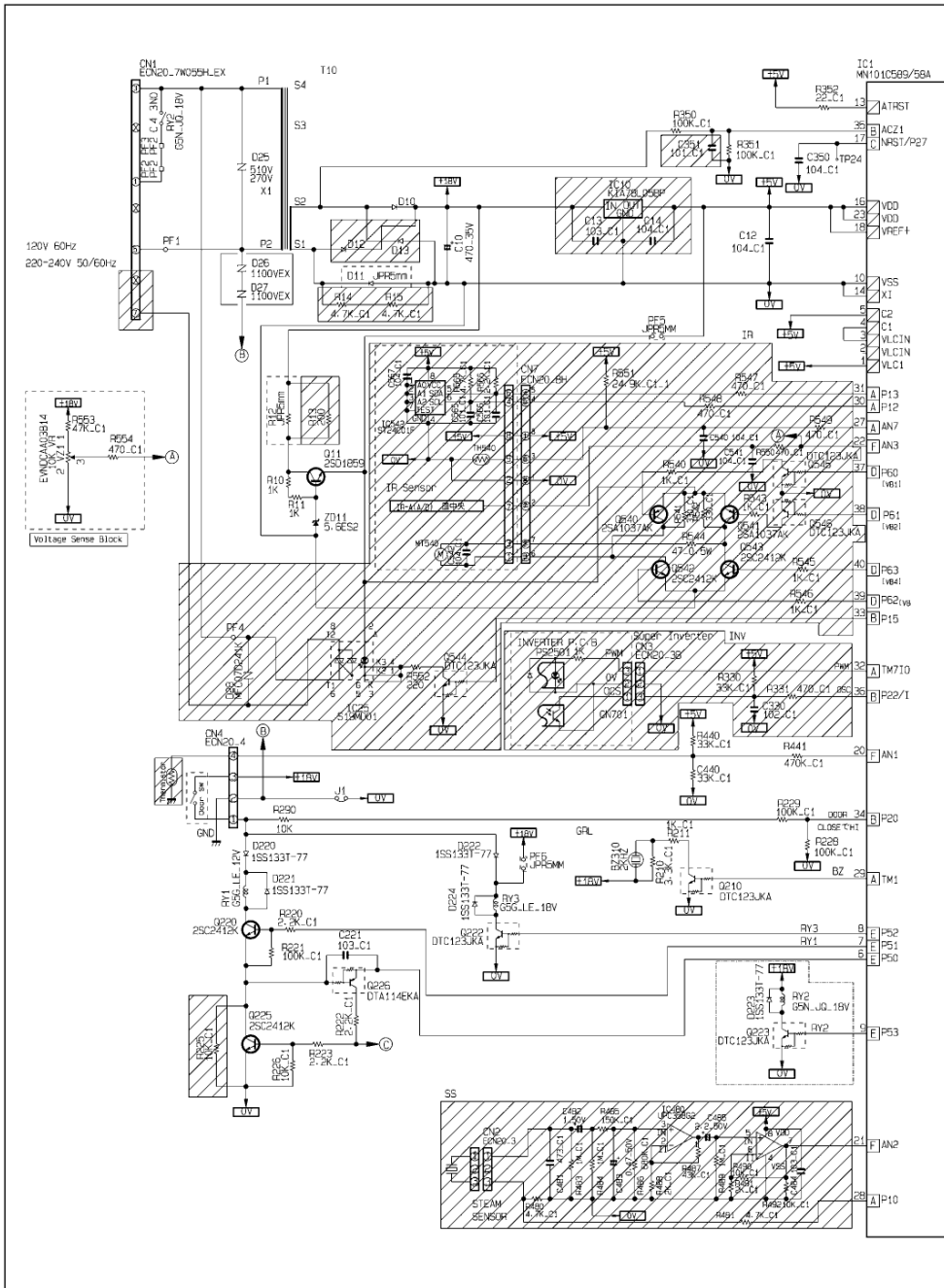
9 PACKING AND ACCESORIES

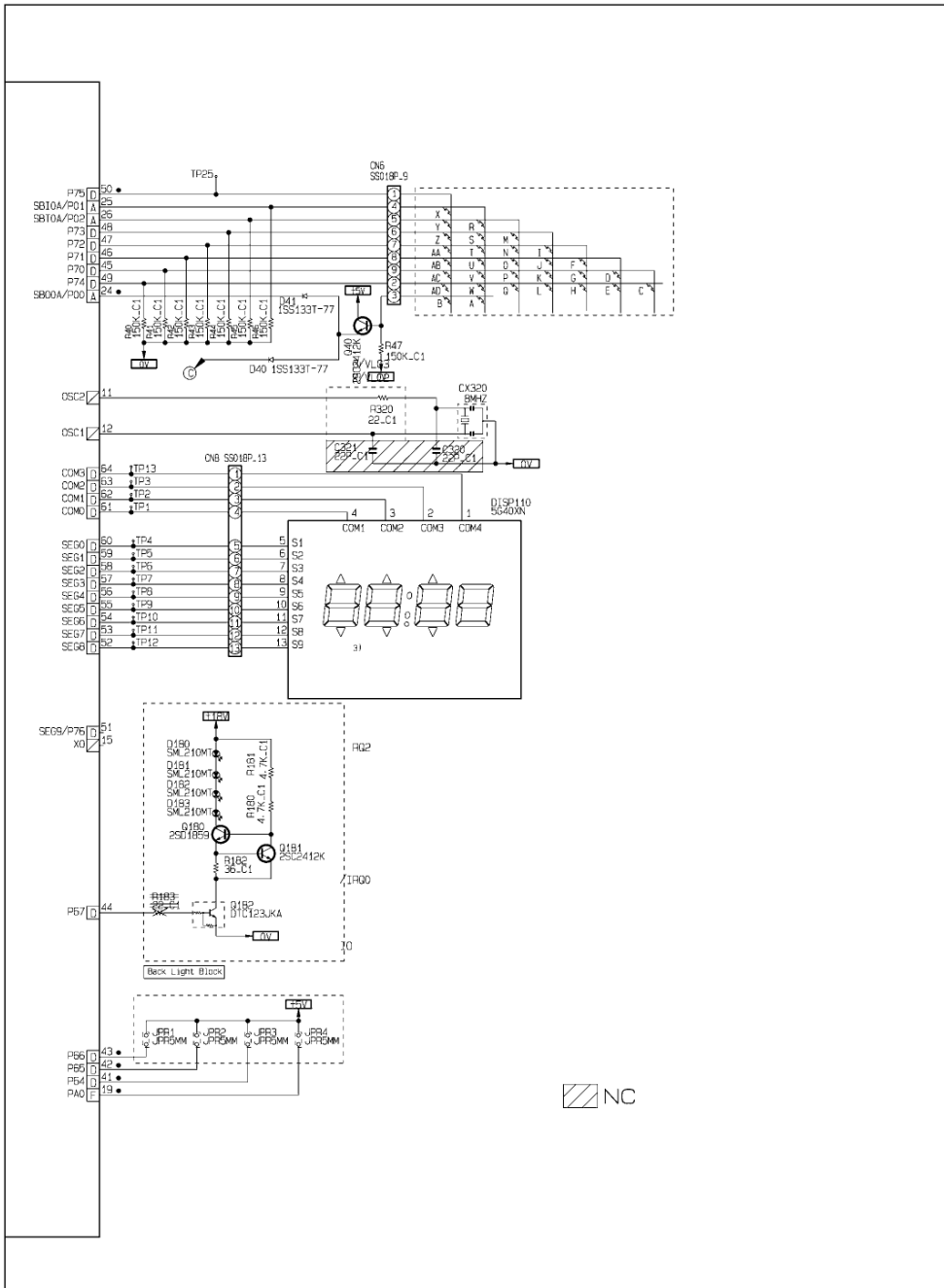
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Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks
P1	F00036B70HP	INSTRUCTION MANUAL	1	HPE, YTE, MPQ
P1	F00036B70KP	INSTRUCTION MANUAL	1	KTE, PTE
P1	F00036B70ZP	INSTRUCTION MANUAL	1	ZPE
P2	F01026B70HHP	PACKING CASE, PAPER	1	HPE, YTE, MPQ
P2	F01026B70HKT	PACKING CASE, PAPER	1	KTE, PTE
P2	F01026B70HWP	PACKING CASE, PAPER	1	GX36WF ZPE
P2	F01026B70SZP	PACKING CASE, PAPER	1	GX36MF ZPE
P3	F01045G40XN	UPPER FILLER	1	
P4	F01055G40XN	LOWER FILLER	1	
P5	F01068100XN	P.E.BAG	1	
P6	F01075G10XN	DOOR SHEET	1	
P7	F06016D00XN	COOKING TRAY	1	
P8	F01924T00AP	SHEET	1	
P10	F01085G50XN	TRAY PACKING	1	
P11	F060V5G50XN	OVEN RACK	1	
P12	F04456B70HKT	MENU LABEL	1	KTE, PTE
P13	F04456B70HKP	MENU LABEL	1	KTE, PTE

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11 DIGITAL PROGRAMMER CIRCUIT

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PARTS LIST

Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks
BZ310	AEFBAT2001	BUZZER	1	2.0KHz
C10	AECETK1V471B	AL CHEM CAPACITOR	1	470µF/35V
C221	AECUU06F103Z	CHIP CAPACITOR	1	0.01µF/50V
C12, C350	AECUT06F104Z	CHIP CAPACITOR	2	0.1µF/25V
CN1	AEEMXF01505W	CONNECTOR	1	
CN4	F0353-5G40XN	CONNECTOR	1	4 PIN
CX320	AEFOS800MG06	CERAMIC RESONATOR	1	8.00MHz
D10	AEDNERA1502	DIODE	1	
D40, D41, D220, D221-D224	AESS133T-77	DIODE	7	
D25	AERZ511KD10A	VARISTOR	1	
D26, D27	AERZ102KD10A	VARISTOR	2	
IC1	MN101C589DM	L.S.I	1	
Q11	2SD1859TV2Q	TRANSISTOR	1	
Q40, Q181, Q220	2SC2412KT146	CHIP TRANSISTOR	3	
Q210, Q222, Q223	AESC23JKE	CHIP DIGI-TRANSISTOR	3	
Q226	AESA14EKE	CHIP DIGI-TRANSISTOR	1	
R211	AERJ06J102R	CHIP RESISTOR	1	1KΩ, 1/16W, 5%
R226	AERJ06J103R	CHIP RESISTOR	1	10KΩ, 1/16W, 5%
R221, R228, R229, R350, R351	AERJ06J104R	CHIP RESISTOR	5	100KΩ, 1/16W, 5%
R40-R47	AERJ06J154R	CHIP RESISTOR	8	150KΩ, 1/16W, 5%
R320, R352	AERJ06J220R	CHIP RESISTOR	2	22Ω, 1/16W, 5%
R220, R222, R223	AERJ06J222R	CHIP RESISTOR	3	2.2KΩ, 1/16W, 5%
R210	AERJ06J332R	CHIP RESISTOR	1	3.3KΩ, 1/16W, 5%
R440, C440	AERJ06J333R	CHIP RESISTOR	2	33KΩ, 1/16W, 5%
R441	AERJ06J471R	CHIP RESISTOR	1	470Ω, 1/16W, 5%
R10, R11	AERDY2TJ102T	CARBON FILM RESISTOR	2	1KΩ, 1/4W, 5%
R290	AERDY2TJ103T	CARBON FILM RESISTOR	1	10KΩ, 1/4W, 5%
RY1, RY3	AEGG5G1A12	POWER RELAY	2	
RY2	AEBJQ1A18	POWER RELAY	1	
T10	AETP4T00QP	LOW VOLTAGE TRANSFORMER	1	
ZD11	AESZMTZJ5R6B	ZENER DIODE	1	

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