



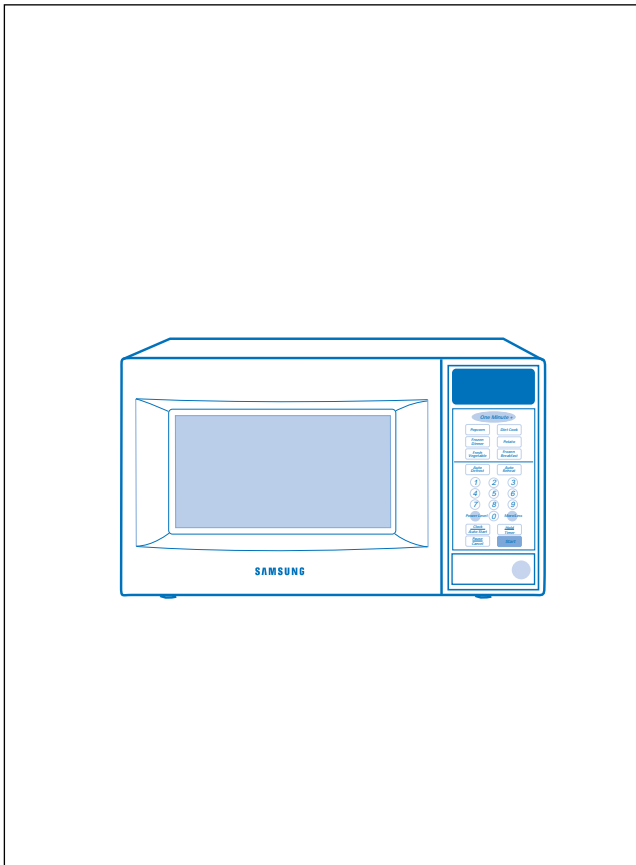
MICROWAVE OVEN

MR5483G / MR5484W

SERVICE Manual Supplement

THIS SUPPLEMENT CONTAINS EXPLODED VIEW AND PARTS LIST FOR MODEL MR5483G/MR5484W. FOR MORE SERVICING INFORMATION, PLEASE CONSULT THE PREVIOUS SERVICE MANUAL FOR MR5481G/MR5482W WHICH WAS DISTRIBUTED IN APRIL 1998.

MICROWAVE OVEN



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Specifications

TIMER	99 MINUTES 99 SECONDS
POWER SOURCE	120V/60Hz, AC
POWER CONSUMPTION	MICROWAVE : 1,300W
OUTPUT POWER	90W/900W (IEC-705 TEST PROCEDURE)
OPERATING FREQUENCY	2,450MHz
MAGNETRON	OM75PH(31)ESS
COOLING METHOD	COOLING FAN MOTOR
OUTSIDE DIMENSIONS	20 ^{11/32} (W) x 11 ^{11/32} (H) x 14 ^{5/8} (D)

1. Precaution

Follow these special safety precautions. Although the microwave oven is completely safe during ordinary use, repair work can be extremely hazardous due to possible exposure to microwave radiation, as well as potentially lethal high voltages and currents.

1-1 Safety precautions (⚠)

1. All repairs should be done in accordance with the procedures described in this manual. This product complies with Federal Performance Standard 21 CFR Subchapter J (DHHS).
2. Microwave emission check should be performed prior to servicing if the oven is operative.
3. If the oven operates with the door open : Instruct the user not to operate the oven and contact the manufacturer and the center for devices and radiological health immediately.
4. Notify the Central Service Center if the microwave leakage exceeds 5 mW/cm²
5. Check all grounds.
6. Do not power the MWO from a "2-prong" AC cord. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.
7. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.
8. Make sure that there are no cabinet openings through which people--particularly children--might insert objects and contact dangerous voltages. Examples: Lamp hole, ventilation slots.
9. Inform the manufacturer of any oven found to have emission in excess of 5 mW/cm², Make repairs to bring the unit into compliance at no cost to owner and try to determine cause. Instruct owner not to use oven until it has been brought into compliance.
10. Service technicians should remove their watches while repairing an MWO.
11. To avoid any possible radiation hazard, replace parts in accordance with the wiring diagram. Also, use only the exact replacements for the following parts: Primary and secondary interlock switches, interlock monitor switch.
12. If the fuse is blown by the Interlock Monitor Switch: Replace all of the following at the same time: Primary and secondary switches, as well as the Interlock Monitor Switch. The correct adjustment of these switches is described elsewhere in this manual. Make sure that the fuse has the correct rating for the particular model being repaired.
13. Design Alteration Warning: Use exact replacement parts only, i.e., only those that are specified in the drawings and parts lists of this manual. This is especially important for the Interlock switches, described above. Never alter or add to the mechanical or electrical design of the MWO. Any design changes or additions will void the manufacturer's warranty. Always unplug the unit's AC power cord from the AC power source before attempting to remove or reinstall any component or assembly.
14. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
15. Some semiconductor ("solid state") devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs). Examples include integrated circuits and field-effect transistors.

Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground.
16. Always connect a test instrument's ground lead to the instrument chassis ground *before* connecting the positive lead; always remove the instrument's ground lead last.

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1-2 Special Servicing Precautions (Continued)

17. When checking the continuity of the witches or transformer, always make sure that the power is OFF, and one of the lead wires is disconnected.
18. Components that are critical for safety are indicated in the circuit diagram by shading, ▲ or ▲ .
19. Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

1-3 Special High Voltage Precautions

1. High Voltage Warning
Do not attempt to measure any of the high voltages--this includes the filament voltage of the magnetron. High voltage is present during any cook cycle.

Before touching any components or wiring, always unplug the oven and discharge the high voltage capacitor (See Figure 1-1)
2. The high-voltage capacitor remains charged about 30 seconds after disconnection. Short the negative terminal of the high-voltage capacitor to the oven chassis. (Use a screwdriver.)
3. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.

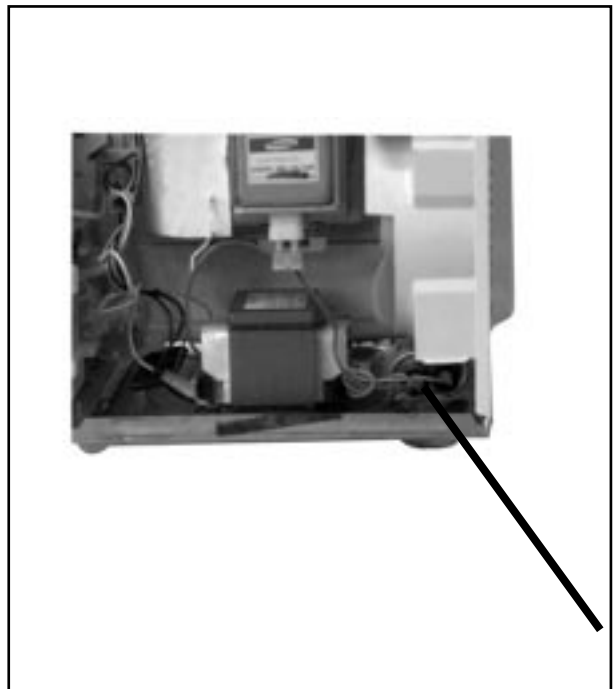
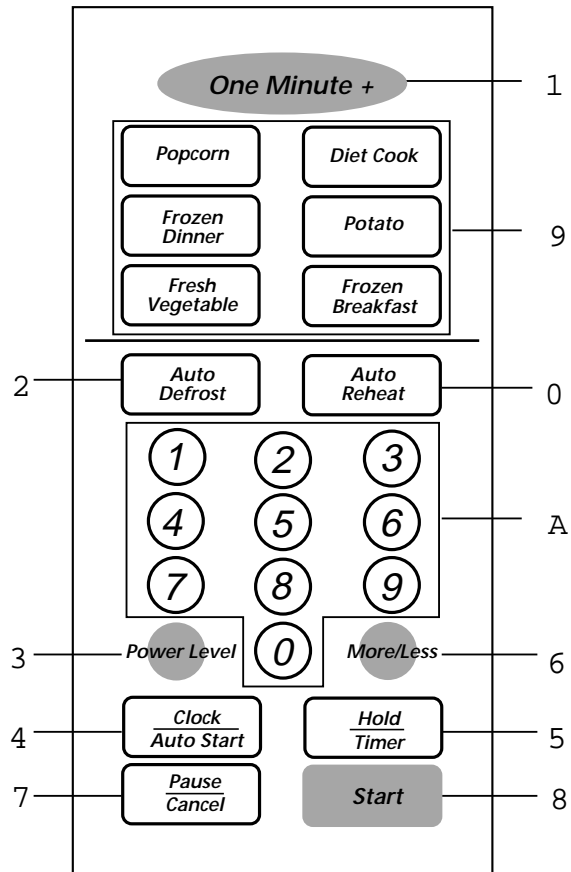


Fig. 1-1. Discharging the High Voltage Capacitor

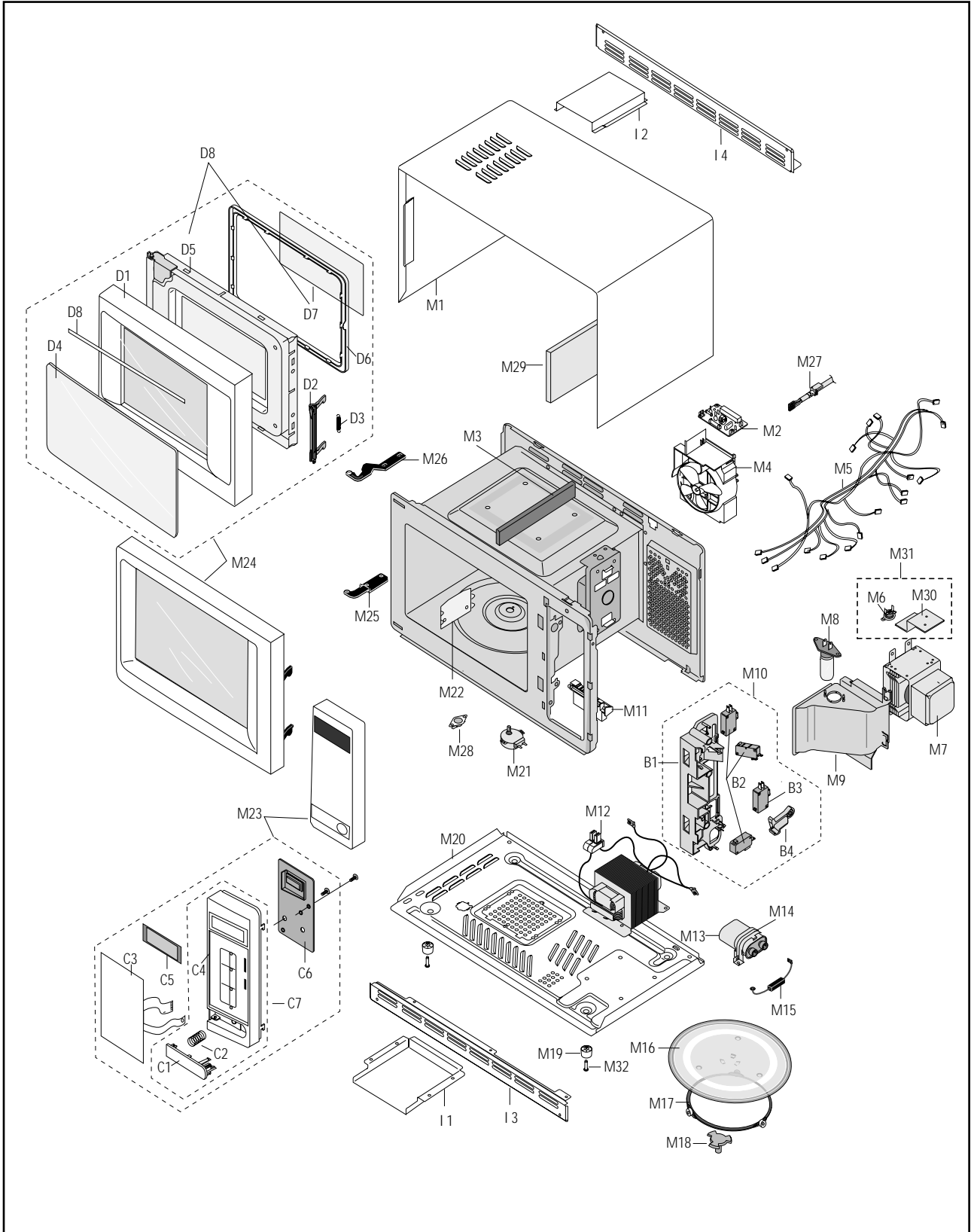
2. Control Panel



- | | |
|---------------------------------|-------------------------|
| 1. One Minute + Button | 7. Pause Canel Button |
| 2. Auto Defrost Button | 8. Start Button |
| 3. Power Level Selection Button | 9. Instant Cook Buttons |
| 4. Clock/Auto Start Button | 10. Auto Reheat Button |
| 5. Hold/Timer Button | 11. Number Key Buttons |
| 6. More/Less Button | |

3. Exploded Views and Parts List

3-1 Exploded Views



3-2 Main Parts List

Ref. No.	Parts No.	Description/Specification	Q'ty	Remarks
M 1	DE70-30001W	PANEL-OUTER;V/STEEL T0.5+T0.2 W360 L1128	1	MR5483G
M 1	DE70-30001U	PANEL-OUTER;SECC T0.6 W360 L1128 WHT MR548	1	MR5484W
M 2	DE91-40100A	ASSY NOISE FILTER;SN-U15A 250V 15A SECA	1	
M 3	DE63-90192A	CUSHION-GUIDE;PUT-FOAM T35 W20 L325 BLK MR54	1	
M 4	DE31-10156B	MOTOR-FAN;SMF-557UC 120/60 2600 MW5574W	1	
M 5	DE39-40594A	WIRE HARNESS-A;120V60HZ MR6471G/MR5471G R/V	1	
M 6	DE47-20009A	THERMOSTAT;CS-7SA(160/60)187Y 250V7.5A 1	1	
M 7	DE03-30035A	MAGNETRON;OM75PH(31)ESS	1	▲
M 8	4713-001012	LAMP-INCANDESCENT;130V,-,40W,ORG,B/L,-,2	1	
M 9	DE71-60016A	COVER-AIR;PP 2 WHT M945/MB45	1	
M 10	DE93-20001B	ASSY BODY LATCH;MW5371G 2ND-W1 R/V	1	
M 11	DE66-90013A	LEVER-DOOR;POM(F20-01) NTR MW5630T	1	
M 12	DE26-10134A	TRANS-H.V;SHV-5574UC1 120V 2160V/3.35V	1	▲
M 13	2501-001011	C-OIL;910nF,2100V,BK,54x35x75,20mm	1	
M 14	DE61-50106A	BRACKET-HVC;SECC T0.8 W31 L125.8	1	
M 15	DE91-70063A	ASSY-H.V.D;V2M6 PI9.0 0.05MT	1	
M 16	DE74-20015B	TRAY-COOKING;GLASS T6.0 PI318 1050G MW56	1	
M 17	DE92-90189D	ASSY-GUIDE ROLLER;D19 STD	1	
M 18	DE67-60026C	COUPLER;PTFE 12G WHT MB245	1	
M 19	DE61-40065A	FOOT;PP BLK T2x22x17mm	2	
M 20	DE80-10001C	BASE-PLATE;SGCC T0.8 W345 L565 MR5481G	1	
M 21	DE31-10154A	MOTOR-DRIVE;M2HJ49ZR02,ST-16 21V 5/6	1	
M 22	DE71-60011A	COVER-MGT;PP T2.0 WHT M745	1	
M 23		ASSY CONTROL-BOX;120V60Hz MR5483G/XAA D/GRY	1	MR5483G ▲ ●
M 23		ASSY CONTROL-BOX;120V60Hz MR5484W/XAA WHT	1	MR5484W ▲ ●
M 24		ASSY DOOR;TOUCH GRAY MW5471G	1	MR5483G ▲ ●
M 24		ASSY DOOR;TOUCH WHT MW5470W 800W	1	MR5484W ▲ ●
M 25	DE61-80003A	HINGE-LOWER;SCP1 T2.3 26 77 ZPC3 WHT CHR	1	
M 26	DE61-80002A	HINGE-UPPER;SCP1 T2.3 26 77 ZPC3 WHT CHR	1	
M 27	DE39-20037G	ASSY POWER CORD;KKP-30B 120V60HZ 1150 GRY	1	
M 28	DE47-20173A	THERMOSTAT;PW-2N(90/60)30 187Y 250V7.5A	1	
M 29	DE63-90035G	CUSHION-RUBBER;DFA20 T2 W190 L100 BLK	1	
M 30	DE61-50490A	BRACKET-TCO;SECC1 T0.6 34 58	1	
M 31	DE91-70101C	ASSY-THERMOSTAT;MW5574W 160/60 187-HORIZ	1	
M 32	DE60-60025A	PIN-FOOT;PP-JI350 BLK	1	

● : Option Parts

▲ : Warning

▲ :Electrostatically Sensitive Devices

3-3 Door Parts List

Ref. No.	Parts No.	Description/Specification	Q'ty	Remarks
D 1	DE64-40241B	DOOR-A;ABS WHT (HR0370) GRY MW5471G	1	MR5483G
D 1	DE64-40241A	DOOR-A;ABS WHT M841	1	MR5484W
D 2	DE64-40006A	DOOR-KEY;POM(TC3005) T2.0 12GR BLK CE945G	1	MR5483G
D 2	DE64-40006B	DOOR-KEY;POM(TC3005) T2 12GR WHT MW5574	1	MR5484W
D 3	DE61-70032A	SPRING-KEY;ES HSWR PI0.6 D5.4 L25 MW8640	1	
D 4	DE67-20157B	SCREEN-DOOR;PC T0.5 181.5 331.5 GRY MW5471G	1	MR5483G
D 4	DE67-20157A	SCREEN-DOOR;PC T0.5 188 331 PURE-WHT NEWGU	1	MR5484W
D 5	DE92-50127G	ASSY DOOR-E;WELDING T0.8	1	
D 6	DE64-40012A	DOOR-C;RESIN-PP(TB53) T2.0 CE945GF BLACK	1	
D 7	DE01-00002B	FILM-DOOR;PC T0.15 275 175 MW5574W	1	
D 8	DE92-40207B	ASSY DOOR-SUB;MW5575G BLK DOOR-FILM	1	MR5483G
D 8	DE92-40207A	ASSY DOOR-SUB;MW5574W WHT DOOR-FILM	1	MR5484W

3-4 Control Parts List

Ref. No.	Parts No.	Description/Specification	Q'ty	Remarks
C 1	DE66-20010B	BUTTON-PUSH;ABS D-GRY MW4371G	1	MR5483G
C 1	DE66-20010A	BUTTON-PUSH;ABS (VH-080) WHT 17.6G MW4370W	1	MR5484W
C 2	DE61-70076A	SPRING-BUTTON;HSWR PI0.6	1	
C 3	DE34-10217Y	SWITCH-MEMBRANE;PET W91.5 L174.5 MR5483G 120V	1	MR5483G
C 3	DE34-10217Z	SWITCH-MEMBRANE;PET W91.5 L174.5 MR5484W 120V	1	MR5484W
C 4	DE72-70161B	CONTROL-PANEL;ABS(HR0370U) GRY MW5471G	1	MR5483G
C 4	DE72-70161A	CONTROL-PANEL;ABS(VH-0800) PURE-WHT MW5470W	1	MR5484W
C 5	DE67-40003A	WINDOW-DISPLAY;ACRYL T2.3 W36.8 L91.8 SM	1	
C 6	DE91-10368A	ASSY P.C.B-MAIN;120V/60HZ NS V.F.D N/HEL	1	
C 7	DE93-30402F	ASSY CONTROL-PANEL;MR5481G WINDOW SHEET	1	MR5483G
C 7	DE93-30402J	ASSY CONTROL-PANEL;M94B/SBW	1	MR5484W

7-5 Body Latch Parts List

Ref. No.	Parts No.	Description/Specification	Q'ty	Remarks
B 1	DE66-40001A	LATCH-BODY;POM(F20-02) 40GR NTR	1	
B 2	3405-000178	SWITCH-MICRO;VP-533A-OF-PS(T85) 250V,15A	3	
B 3	3405-000175	SWITCH-MICRO;VP-531A-OF(T85) 250V,15A,20	1	
B 4	DE66-90001A	LEVER-SWITCH;P.O.M(F20-02) 2 6 NTR 2ND-W	1	

3-6 Standard Parts List

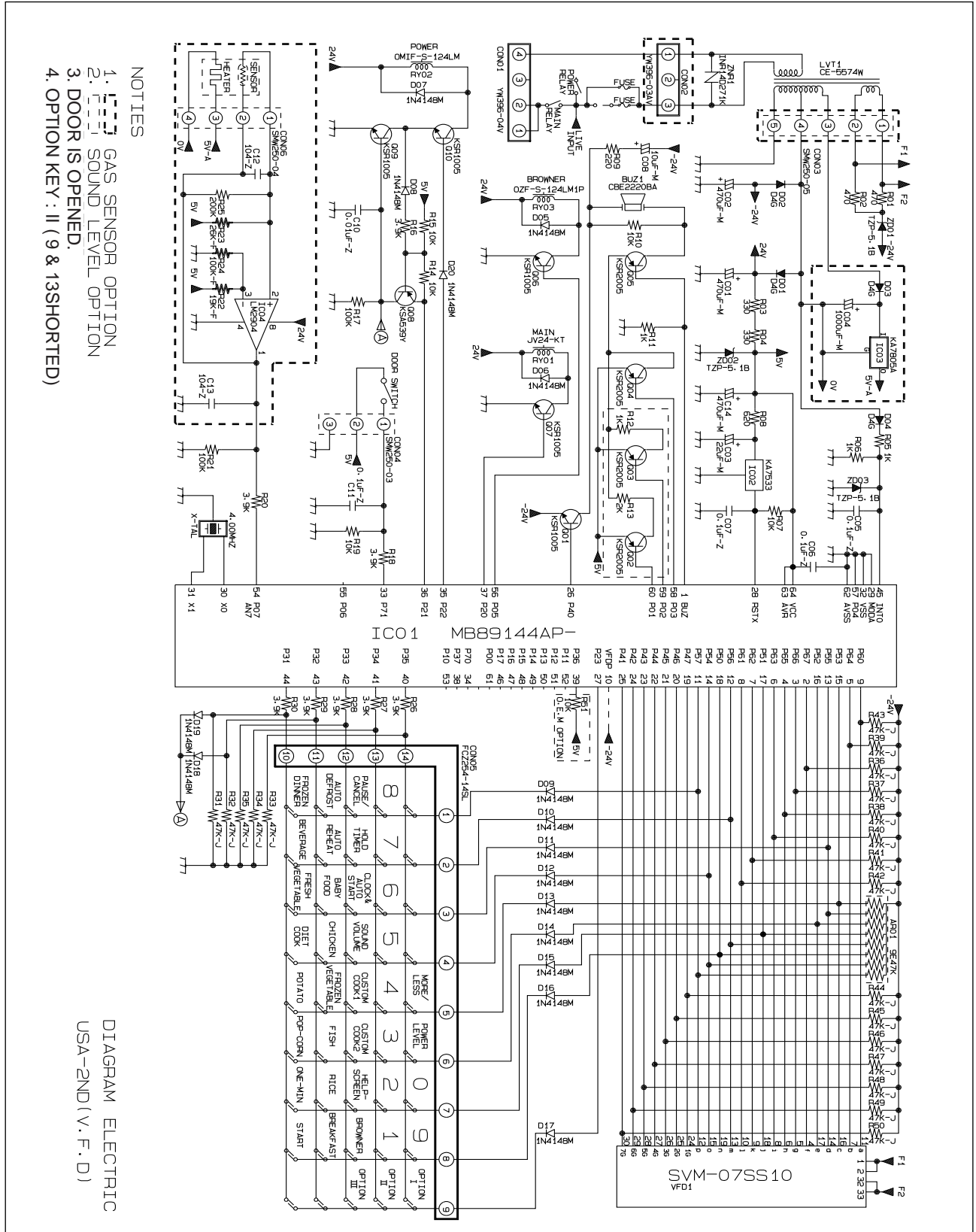
Parts No.	Description / Specification	Q'ty	Remarks
DE60-10082A	SCREW-A;M4 L12 2S TOOTHED	2	BASE
DE60-10088A	SCREW-TAP PH;PH M3 L8 FEFZY PLAIN	2	PCB
DE60-10082A	SCREW-A;M4 L12 2S TOOTHED	2	B-LATC
DE60-10082A	SCREW-A;M4 L12 2S TOOTHED	2	C-PANE
DE60-10082A	SCREW-A;M4 L12 2S TOOTHED	5	O-PANEL
DE60-10082A	SCREW-A;M4 L12 2S TOOTHED	1	P/EART
DE60-10080A	SCREW-WASHER;M5 L12 2S	4	HVT
DE60-10080A	SCREW-WASHER;M5 L12 2S	4	MGT
DE60-10033A	SCREW-TH;TH + M4 L10 MSWR10 FEFZY	2	HI-LOW
DE60-10082A	SCREW-A;M4 L12 2S TOOTHED	2	C-BLOW
DE60-10033A	SCREW-TH;TH + M4 L10 MSWR10 FEFZY	2	HI-UPP
DE60-10045A	SCREW-TAP PH;PH M3 L6 FEFZY	2	MGT-TC
DE60-10082A	SCREW-A;M4 L12 2S TOOTHED	1	MEM-PN
DE60-10098A	SCREW-ASSY TAPTITE;PH TC M4X8 SWRCH18A Z	1	CV-TCO
DE60-10098A	SCREW-ASSY TAPTITE;PH TC M4X8 SWRCH18A Z	2	M/GEAR
DE60-10113A	SCREW-TAP PH;2S-4X12 FE ZPC3	1	FUSE-H
DE60-10188A	SCREW-ASSY TAP;2S-4X8 MSW3ZPC YEL WS	1	B/HVC

3-7 Installation Parts List

Ref. No.	Parts No.	Description/Specification	Q'ty	Remarks
I 1	DE70-40311A	PLATE-BOTTOM;SGCC T0.6 W253 L264.5 MR5481	1	
I 2	DE72-50092A	DUCT-AIR;SGCC T0.6 W150 L212 MR5481G	1	
I 3		TRIMMER-LOWER	1	
I 4		TRIMMER-UPPER	1	

4. P.C.B Diagrams

4-1 P.C.B Diagrams



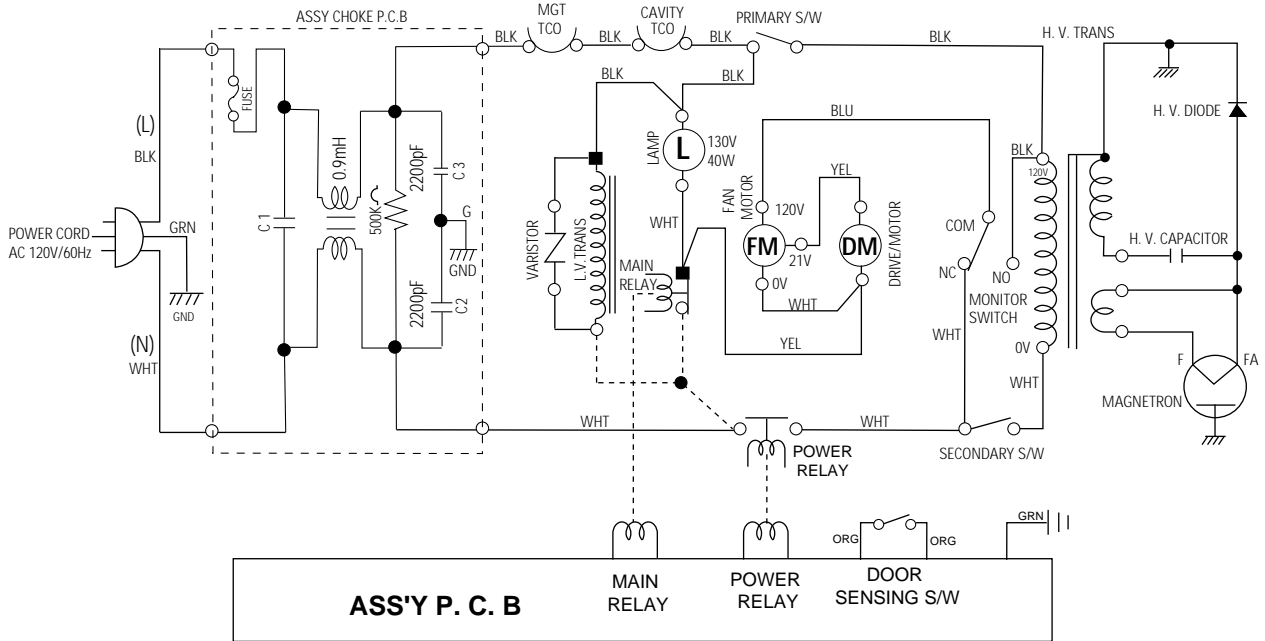
4-2 P.C.B Parts List

Parts No.	Description / Specification	Q'ty	Remarks
0401-001002	DIODE-SWITCHING;1N4148M,100V,200mA,500mW	16	D05-20
0402-000559	DIODE-RECTIFIER;D4G,400V,1A,T-1	3	D01,02,04
0501-000283	TR-SMALL SIGNAL;KSA539-Y,PNP,400mW,TO-92	1	Q08
0504-001014	TR-DIGITAL;KSR1005,NPN,300mW,4.7K-10K,TO	5	Q01,06,07,09,10
0504-001015	TR-DIGITAL;KSR2005,PNP,300mW,4.7K-10K,TO	4	Q02-05
1405-000129	VARISTOR;INR14D271K 270V,4500A 17X12MM,T	1	ZNR1
2001-000037	R-CARBON(S);330ohm,5%,1/2W,AA,TP,2.4x6.4	2	R03-04
2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2mm	2	R17,21
2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	5	R07,10,14,15,19
2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	4	R05,06,11,12
2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	1	R09
2001-000577	R-CARBON;2Kohm,5%,1/8W,AA,TP,1.8x3.2mm	1	R13
2001-000613	R-CARBON;3.9Kohm,5%,1/8W,AA,TP,1.8x3.2mm	8	R16,18,20,26-30
2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	2	R01,02
2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	20	R31-50
2001-000904	R-CARBON;620ohm,5%,1/8W,AA,TP,1.8x3.2mm	1	R08
2011-000582	R-NETWORK;47Kohm,5%,1/8W,A,SIP,9P,TP	1	AR01
2202-000121	C-CERAMIC,MLC-AXIAL;UP050B101KBB 100PF,1	1	C09
2202-000127	C-CERAMIC,MLC-AXIAL;TP050F103ZB 10NF,+80	1	C10
2202-000780	C-CERAMIC,MLC-AXIAL;UP050F104Z 100NF,+80	4	C05-07,11
2401-000247	C-AL;1SA1ANB107MAN 100UF,20%,10V,GP 6.3X	1	C14
2401-000466	C-AL;CESSM1V100M0507 10UF,20%,35V,GP 5X7	1	C08
2401-000914	C-AL;CESSL1C220M0511AA 22UF,20%,16V,GP 5	1	C03
2401-001412	C-AL;1SG1VFB477MAN 470UF,20%,35V,GP 10X1	2	C01,02
2802-000161	RESONATOR-CERAMIC;CST4.00MGW-TF01-3/CN 4	1	X-TAL
3501-001014	RELAY-POWER;OM1F-S-124LM 24V,21.8MA,17A	1	RY02
3501-001016	RELAY-MINIATURE;JV24-KT 24V,12.5MA,5A 1F	1	RY01
3708-000529	CONNECTOR-FPC/FC/PIC;FCZ254-14SL,BLK 14P	1	CON05
3711-000240	CONNECTOR-HEADER;1WALL,4P,1R,3.96mm,STRA	1	CON01
3711-000881	CONNECTOR-HEADER;SMW250-03,WHT BOX,3P,1R	1	CON04
A4106-0154	DIODE-ZENER;TZP5.1B 5.1/5.7V 40MA T 1W	3	ZD01-03
DE07-10035A	V.F.DISPLAY;SVM-07SS10 SEA	1	VFD1
DE09-30491A	IC-MCU;MB89143AP-168 8K DIP 64PIN	1	IC01
DE13-20009A	IC;KA7533 DIP	1	IC02
DE26-20144A	TRANS-L.V;DN-5574W,CE-5574W 120V 60HZ AC	1	LVT1
DE30-20016A	BUZZER;CBE2220BA STICK	1	BUZ1
DE39-60001A	WIRE-SO COPPER;PI0.6 SN T 52MM	25	J01-25
DE60-60012A	PIN-EYELET;ID2.1 OD2.5 L3.0 SN BSP T0.25	8	
DE61-90164A	HOLDER-DIGITRON;NYLON#66 T1.8 BLK MW4370	1*	

5. Schematic Diagrams

NOTE : FOR SERVICE REPLACEMENT USE 16 GA 105° C THERMOPLASTIC COVERED WIRE EXCEPT FOR HIGH VOLTAGE LEADS OR AS NOTED ON SPECIAL LEADS.

WARNING
POWER MUST BE DISCONNECTED BEFORE SERVICING THIS APPLIANCE



CONDITION

1. INPUT : 120V 60HZ
2. DOOR : OPEN
3. LAMP : ON
4. - - - : P.C.B PATTERN
5. ■ : P.C.B IN/OUT POINT (CON1)

WHT : WHITE
BLK : BLACK
YEL : YELLOW
BLU : BLUE
ORG : ORANGE
GRN : GREEN
RED : RED

