

# Service Manual

Microwave Oven  
**NE-1457**  
**NE-1057**



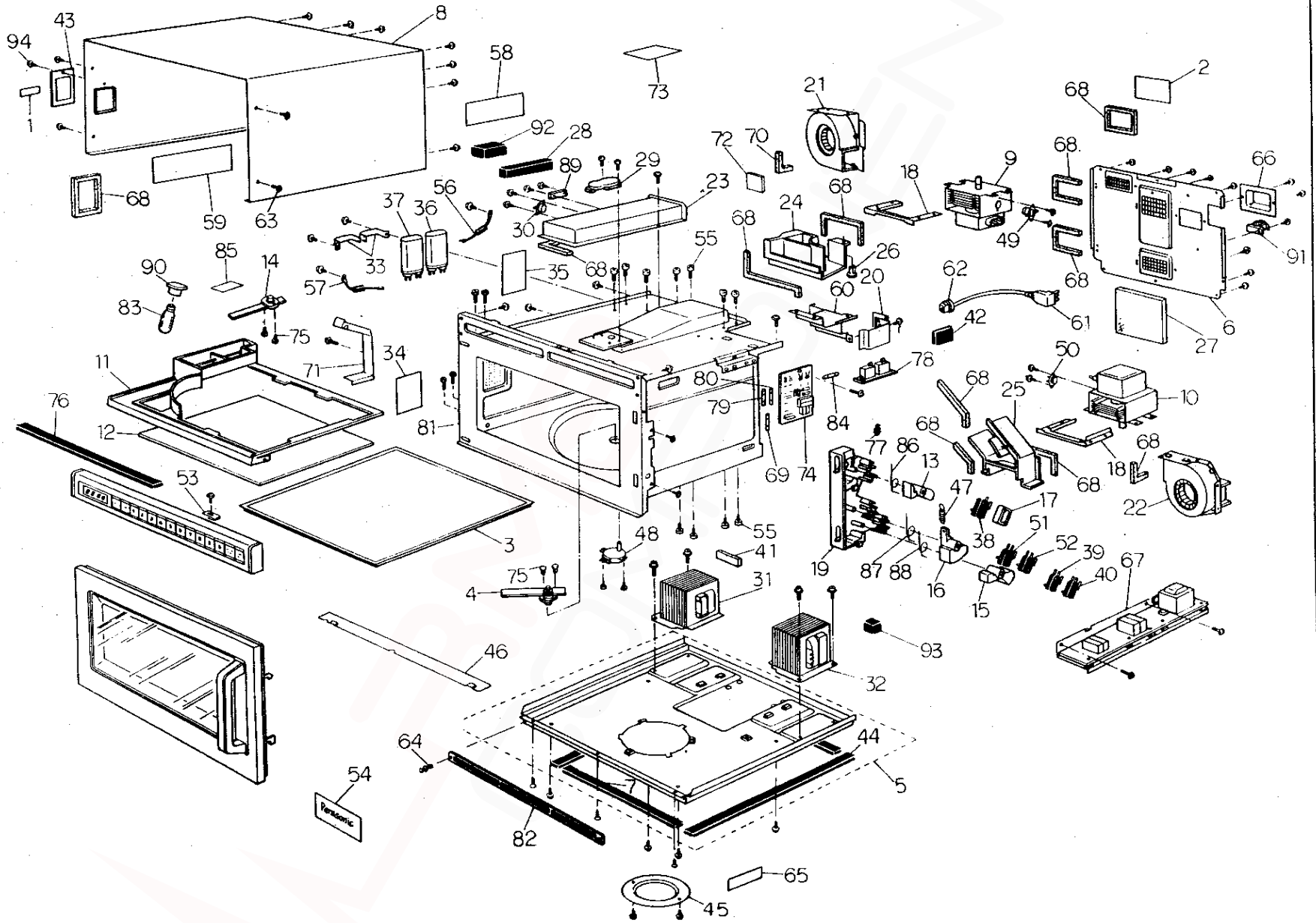
## Specifications

		NE-1457 QPQ	NE-1057 QPQ
Power Source :		240V AC, 50 Hz	240V AC, 50 Hz
Power Requirement :		2,790 W, 12.0 A	1,980 W, 8.7 A
High Frequency Output :	HIGH	1,400 W	1,000 W
	MED	700 W	500 W
	DEF	280 W	280 W
Oscillation Frequency :		2,450 MHz	
Timer :		15 min. ... HIGH and MED power for single stage. 30 min. ... DEF power for single stage.	
Outside Dimensions :		422 mm (W) × 508 mm (D) × 335 mm (H)	
Oven Cavity Dimensions :		330 mm (W) × 310 mm (D) × 175 mm (H)	
Weight :		31 kg	28 kg
Specifications subject to change without notice.			

# Panasonic

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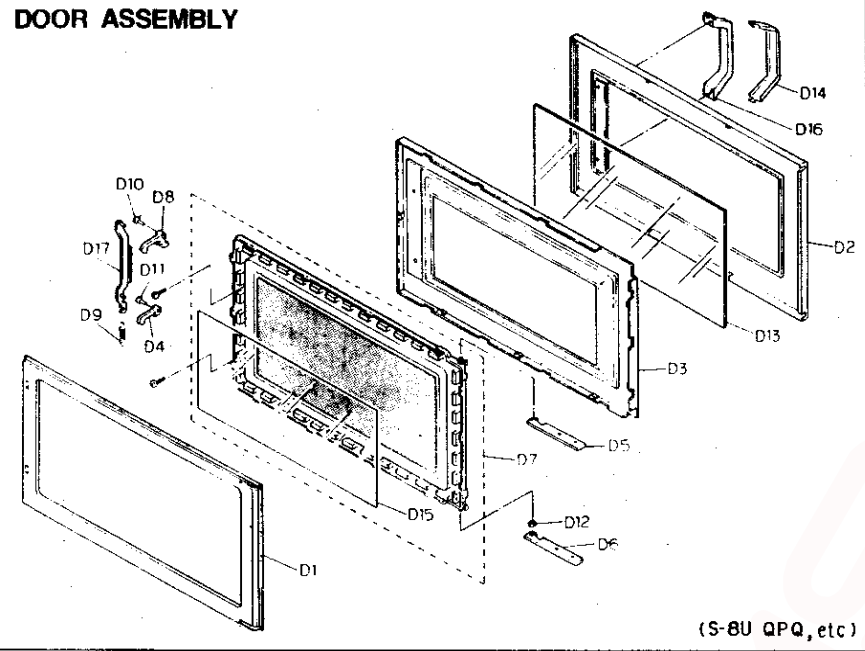
EXPLODED VIEW



EXPLODED VIEW AND PARTS LIST

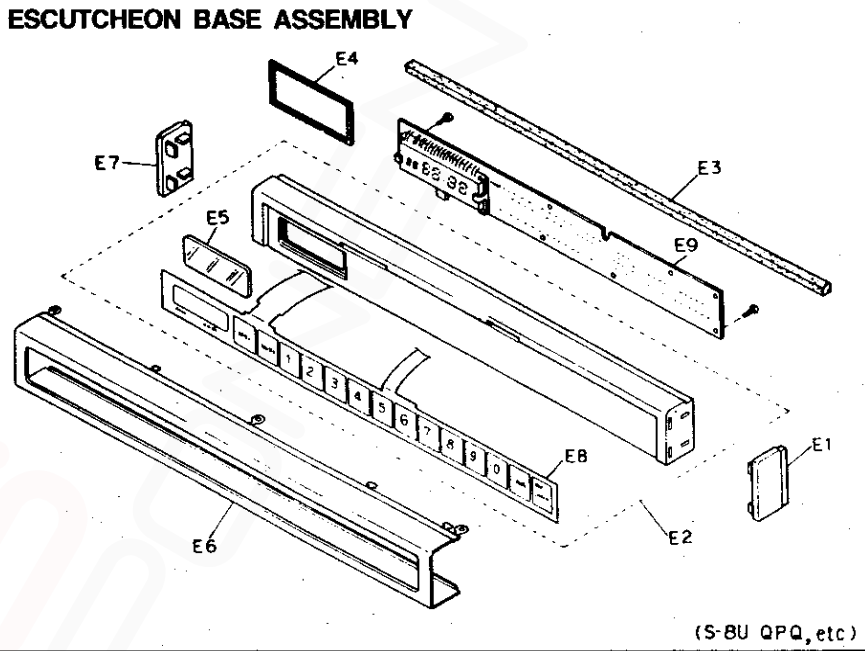
(S-8U QPQ, etc)

### DOOR ASSEMBLY



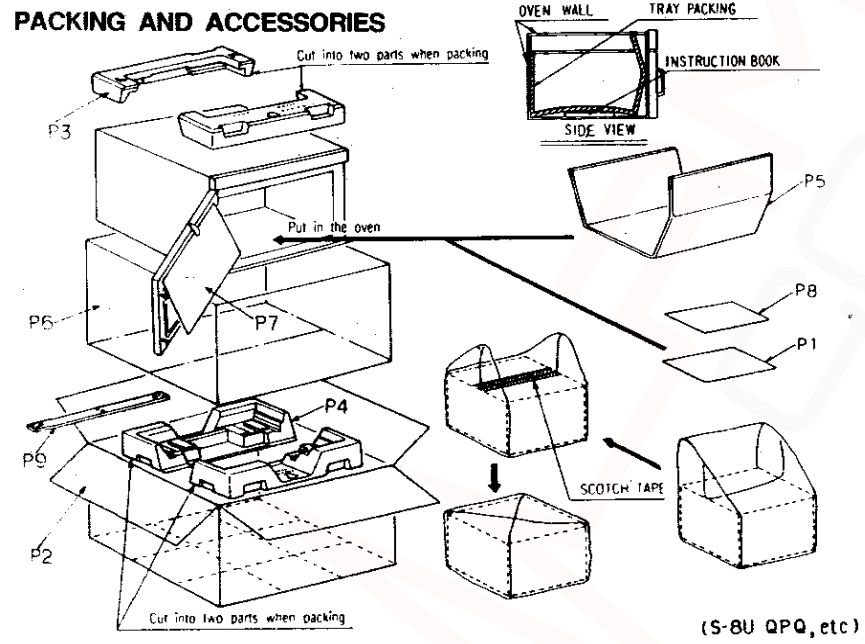
(S-8U QPQ, etc)

### ESCUTCHEON BASE ASSEMBLY



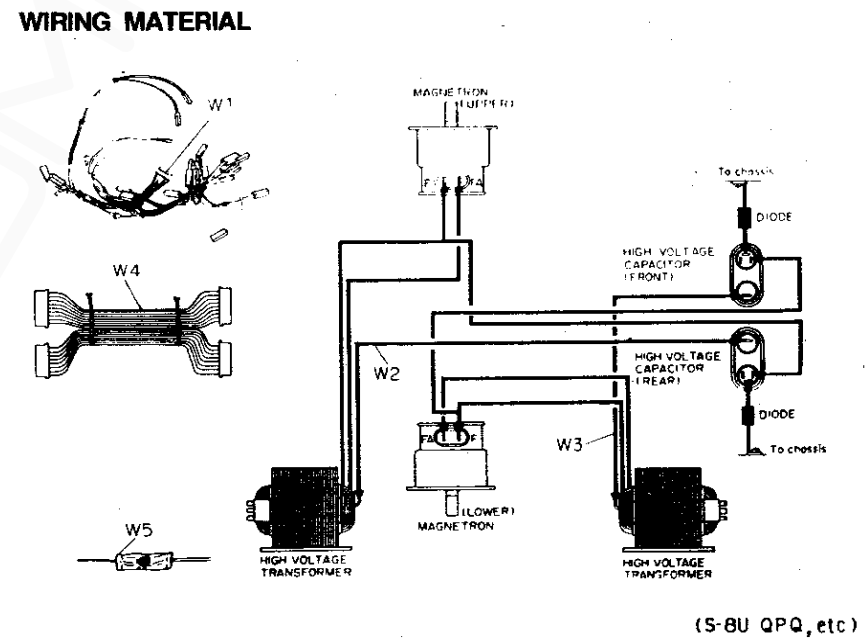
(S-8U QPQ, etc)

### PACKING AND ACCESSORIES



(S-8U QPQ, etc)

### WIRING MATERIAL



(S-8U QPQ, etc)

**PARTS LIST**

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

Do not use description of the part.

2: Important safety notice:

Components identified by  $\Delta$  mark have special characteristics important for safety.

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

Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks
1	ANE0072L20AP	Oven lamp label	1		61	ANE900CP30QN	AC coad W/plug	1	NE-1457
2	A00065460JP	Warning label	1		62	ANE90272Q0BP	Cord bushing	1	NE-1057
3	ANE010T8U0AP	Shelf	1		62	ANE9027H00BP	Cord bushing	1	NE-1457
4	ANE202V8U0AP	Antenna B	1	(Moving antenna) (Lower)	63	XTC4+10BC	Screw 4X10	4	Cabinet body
5	ANE100A8U0AP	Base	1	(NOTE 3)	64	ANE90828U0BP	Clip	1	
6	ANE100Q8U0AP	Back panel	1		65	ANE00078U0QP	Name plate	1	NE-1057
7	ANE10088U0AP	Rubber foot	2		65	ANE00078V0QP	Name plate	1	NE-1457
8	ANE10098U0AP	Cabinet body assy	1		66	ANE11548U0AP	Back panel cover	1	
9,10	$\Delta$ 2M210-M1	Magnetron	2		67	ANE692M8U0BP	L.V.Transformer assy	1	
11	ANE20358U0AP	Ceiling plate rail A	1		68	ANE000Z000AA	Cushion rubber A	11	
12	$\Delta$ ANE20118U0AP	Ceiling plate	1		69	$\Delta$ ANE6595Q50GS	Fuse B	1	(1.25A)
13	ANE31368U0AP	Hook spacer A	1		70	ANE000Z000AB	Cushion rubber A	1	
14	ANE202K8U0AP	Antenna	1	(Moving antenna) (Upper)	71	ANE66058U0BP	Oven lamp cover A	1	
15	ANE31378U0AP	Hook spacer B	1		72	ANE21208U0AP	Spacer	1	
16	ANE31388U0AP	Hook spacer C	1		73	ANE02678V0AP	Caution label	1	
17	ANE6238X20AP	Spacer	2		74	ANE692Y8U0BP	Noise filter assy	1	
18	ANE50328U0AP	Magnetron bracket	1		75	ANE90078V0AP	Clip	4	
19	$\Delta$ ANE30208U0AP	Door hook A	1		76	ANE11748U0AP	Spacer	1	
20	ANE91448U0SP	Bracket assy	1	NE-1057	77	ANE65448U0AP	Spacer A	1	
20	ANE91448U0BP	Bracket assy	1	NE-1457	78	ANE603M8V0AP	P.C.Board B assy	1	
21,22	ANE400A8U0BP	Fan motor	2		79,80	$\Delta$ ANE6230A20GN	Fuse	2	(10A)
23	ANE400K8U0AP	Exhaust guide	1		81	$\Delta$ ANE200A8U0BP	Oven assy	1	
24	ANE40258U0AP	Air guide A	1		82	ANE400B8U0AP	Air filter frame	1	
25	ANE40268U0AP	Air guide B	1		83	ANE603Q50GN	Oven lamp	1	(240V, 25W)
26	ANE91628U0AP	Clip B	1		84	$\Delta$ ANE6230P10GN	Fuse	1	(16A)
27	ANE41028U0AP	Air guide cushion A	1		85	ANE0072Z70GP	Oven lamp label	1	
28	ANE0911000AG	Cushion rubber B	1	NE-1457	86,87	ANE32628U0AP	Spring B	3	
29	ANE61448V0AP	Antenna motor	1	(3W) (Upper)	88				
30	A61454000AP	Thermal cutout	1	(For oven)	89	A601L4000AP	Temp sensor	1	(Thermal protector)
31,32	$\Delta$ ANE620A8U0BP	H.V.Transformer	2	NE-1057 (1.1KVA)	90	ANE61522Q0BP	Oven lamp socket	1	
31,32	$\Delta$ ANE620A8V0BP	H.V.Transformer	2	NE-1457 (1.5KVA)	91	ANE11408A0AG	Stopper A	1	
33	ANE61888U0AP	Capacitor bracket	2		92	ANE0914000DB	Cushion rubber B	1	NE-1457
34,35	ANE60408U0AP	Oven lamp sheet	2		93	ANE10498U0BP	Cushion rubber	1	NE-1457
36,37	$\Delta$ ANE6390-8U0	H.V.Capacitor	2	NE-1057 (0.69 $\mu$ F, AC2800V)	94	XTC4+10FC	Screw 4X10	1	Lamp cover
36,37	$\Delta$ ANE6390-8V0	H.V.Capacitor	2	NE-1457 (1.0 $\mu$ F, AC2800V)					
38,39,40	$\Delta$ ANE61424L0AG	Micro switch	3	Safety switch A, B (V-16G-3C26)					
41	ANE0911000MG	Cushion rubber B	1						
42	ANE10498U0AP	Cushion rubber	1						
43	ANE10268U0AP	Lamp cover	1						
44	ANE10948U0AP	Rubber foot B	2						
45	ANE10288U0AP	Antenna motor-cover	1						
46	ANE11268U0AP	Base metal	1						
47	ANE32398U0AP	Spring	1						
48	ANE61448U0AP	Antenna motor	1	(2.5W) (Lower)					
49,50	ANE61458U0AP	Thermal cutout	2	(For magnetron)					
51,52	$\Delta$ ANE61784L0AG	Micro switch	2	Short switch (V-16G-2C25)					
53	ANE64086Q0AP	Washer	1						
54	ANE31868U0AP	Door panel	1	NE-1057					
54	ANE31868V0AP	Door panel	1	NE-1457					
55	XYEANE5+C16T	Screw 5X16	8	Magnetron					
56,57	$\Delta$ A62024000AP	Diode	2	(Si)					
58	ANE60708U0BP	Insulation sheet A	1						
59	ANE60718U0BP	Insulation sheet B	1						
60	ANE61148V0AP	Bracket	1						
61	ANE900CQ90QN	AC coad W/plug	1	NE-1057					

<b>DOOR ASSEMBLY</b>									
D1	$\Delta$	ANE30858U0AP	Door C	1					
D2	$\Delta$	ANE301A8U0AP	Door A	1					
D3		ANE30038U0AP	Window frame assy	1					
D4		ANE30198U0AP	Door key B	1					
D5,6	$\Delta$	ANE30078U0AP	Hinge	2	(Upper, Lower)				
D7	$\Delta$	ANE301Q8U0AP	Door E assy	1					
D8		ANE30188U0AP	Door key A	1					
D9		ANE30218U0AP	Door key spring	1					
D10,11		ANE30562Q0AP	Door key pin	2					
D12		ANE3081P60AP	Door hinge spacer	1					
D13		ANE31468U0AP	Door screen B	1					
D14		ANE31348U0AP	Handle piece B	1					
D15	$\Delta$	ANE31458U0AP	Door screen A	1					
D16		ANE30708U0AP	Door handle assy	1					
D17		ANE301H8A0AG	Door key lever B	1					

NE-1457, NE-1057

Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks
<b>ESCUTCHEON BASE ASSEMBLY</b>				
E1	ANE80068U0BP	Escutcheon D	1	
E2	ANE800L8U0AP	Escutcheon base assy	1	
E3	ANE82518U0AP	Escutcheon spacer	1	
E4	ANE83428U0AP	Cushion rubber B	1	
E5	ANE81268U0AP	Smoke panel	1	
E6	ANE80018U0AP	Escutcheon A	1	
E7	ANE80028U0BP	Escutcheon B	1	
E8	ANE64798U0AP	Membrane switch	1	
E9	ANE603L8U0BP	D.P.Circuit assy	1	NE-1057 (W/Component)
E9	ANE603L8V0BP	D.P.Circuit assy	1	NE-1457 (W/Component)
<b>PACKING AND ACCESSORIES</b>				
P1	ANE00038U0QP	Instruction book	1	
P2	ANE01028U0BP	Packing case, paper	1	NE-1057
P2	ANE01028V0BP	Packing case, paper	1	NE-1457
P3	ANE01048U0AP	Upper filler	1	
P4	ANE01058U0AP	Lower filler	1	
P5	ANE01088U0AP	Tray packing	1	
P6	A01065200AP	Vinyl cover	1	
P7	ANE01072Q0AP	Door sheet	1	
P8	ANE04208U0AP	Setting guide	1	
P9	ANE11348U0AP	Bracket	1	
<b>WIRING MATERIAL</b>				
W1	ANE030A8U0BP	Lead wire harness	1	
W2	ANE03508U0AP	Lead wire	1	
W3	ANE03518U0AP	Lead wire	1	
W4	ANE030H8U0BP	Lead wire	1	
W5	ANE604V820JN	Varistor	1	(NOTE 4)
<b>Ref.No. 67 L.V.Transformer assy</b>				
CN1	AEEMMA1FF08W	9 pin connector	1	
CN3	AEEMMA0FF08W	8 pin connector	1	
CN5	AEEMMA04907W	7 pin connector	1	
CN6	AEEMMA02506W	6 pin connector	1	
BZ1	AEFB24-4A15	Buzzer	1	
RY1,2	AEG5R51T18A	Power relay	2	(G5R5-A)
RY3,4	AEG5WA1ER18A	Power relay	2	(G5W-A)
T1	ANE62498U0BP	L.V.Transformer	1	(ETP43K119E)
T2,3	ANE66908U0BP	Current trans.	2	(ETP24C1C)
C2	ECEA1VU222QE	Capacitor	1	2200µF (±20%, 35V)
D33, 34,59, 60	MA195-(TA5)	Diode	4	(S)
ZD51, 52	AEDZ12ES1T1	Zener diode	2	(S)
F1	UN10004	Weak point element	1	
F2	ANE604K8U0BP	Weak point element	1	
	ANE61158U0AP	Bracket	1	
	ANE65448U0AP	Spacer A	6	
	ANE65458U0AP	Spacer B	2	
	XYN3+F25S	Screw 3X25	2	For L.V.Transformer

Ref. No.	Part No.	Part Name & Description	Pcs/Set	Remarks
<b>Ref.No. 78 P.C.Board B assy</b>				
CN3	AEEMMA00703W	3 pin connector	1	
RY5,6	AEG5WA1ER18A	Power relay	2	(G5W-A)
D65,66	MA150-(FV)	Diode	2	(S)
ZD53, 54	AEDZ12EB18F	Zener diode	2	(S)
<b>Ref.No. 74 Noise filter assy</b>				
C101	ECQU2A104MN	Capacitor	1	0.1µF (±20%, 250V)
C102	ANE6169A20GN	Capacitor	2	0.022µF
103				
CN7	AEEMMA1FF09W	9 pin connector	1	
CN8	AEEMMA7FF11W	11 pin connector	1	
CN9	AEEMMA24910W	10 pin connector	1	
D101, 102, 104	MA195-(TA)	Diode	3	(S)
D103, 105, 106	MA150-(FV)	Diode	3	(S)
L1	ANE621AZ70BP	Filter coil	1	
R101	ERD25FJ224S	Resistor	1	220KΩ (±5%, 1/4W)
RY7,8	AEAWAJR39069	Power relay	2	(JR1AF)
Z1	ERZC10DK621F	Varistor	1	
	ANE6231H60RN	Fuse holder	2	
	ANE6231Q50GN	Fuse holder	6	
	ERF15ZXJ240	Resistor	2	24Ω (±5%, 5W)
	ANE65448U0AP	Spacer A	1	

NOTE 3: Please order name plate together.  
4: This is assembled in lead wire harness (W1).

# DIGITAL PROGRAMMER CIRCUIT PARTS LIST (NE-1457, NE-1057)

## MISCELLANEOUS

Ref. No.	Part No.	Description	Pcs/Set	Remarks
DISP	ANE64568V0AP	Fluorescent Tube	1	
SPACER	ANE82848U0AP	Spacer Cushion	1	For DISP
CN1	AEEEMMA1FF09W	9 pin connector	1	
CN2	AEEEMWD0808	8 pin connector	1	
CN3	AEEEMMA7FF11W	11 pin connector	1	
CN4	AEEEMMA01F05W	5 pin connector	1	
CX1	AEFFT4R19GW	Ceramic Resonator	1	4.19MHZ
BATT	BR2330-1HH	Lithium Battery	1	3V

## CAPACITORS

Ref. No.	Part No.	Description	Pcs/Set	Remarks
C1,4,12	AECF055F104Z	0.1 $\mu$ F -20%+80% 50V	3	
C3	ECEA1VU221E	220 $\mu$ F $\pm$ 20% 35V	1	
C5	ECEA1CU100E	10 $\mu$ F $\pm$ 20% 16V	1	
C6,14,15	ECBT1E223ZF5	0.022 $\mu$ F -20%+80% 25V	3	
C11	AECF905F104Z	0.1 $\mu$ F -20%+80% 50V	1	
C13,43,44,51,52,61,62,81,82,91	ECBT1E103ZF5	0.01 $\mu$ F -20%+80% 25V	10	
C41,42	ECEATVU100E	10 $\mu$ F $\pm$ 20% 35V	2	
C71,72,73,74	ECBT1H102MB5	0.001 $\mu$ F $\pm$ 20% 50V	4	

## SEMICONDUCTORS

Ref. No.	Part No.	Description	Pcs/Set	Remarks
IC1	AEIC50940054	L.S.I. (MOS 4bit Microcomputer)	1	
IC2	AN6914	I.C. (Bipolar Linear IC)	1	
IC3	AEIC $\mu$ PA2004C	I.C. (Bipolar Linear IC)	1	
Q1	2SD794A-P,Q	Transistor, Si 1W	1	
Q11	UN4211	Transistor, Si 300mW	1	
Q12,41,42	2SC1685-R	Transistor, Si 250mW	3	
Q31,54,64	2SC1318-R	Transistor, Si 400mW	3	
Q51,52,61,62	UN4224	Transistor, Si 300mW	4	
Q53,63	UN4111	Transistor, Si 300mW	2	
D1,2,3	AEDNERA1502	Diode, Si	3	
D4,5,6,11,14,31,32,51,52,53,54,55,61,62,63,64,65,71,72,73,74,81	MA195-(TA5)	Diode, Si	22	
D41,42,43,44,45,46,47,48	MA196-(TA5)	Diode, Si	8	
ZD1	AEDZ6R2ES2T1	Zener Diode, Si	1	RD6.2ES2
ZD2	AEDZ4R7ES3T1	Zener Diode, Si	1	RD4.7ES3
ZD11	AEDZ3R9ES1T1	Zener Diode, Si	1	RD3.9ES1

## RESISTORS

Ref. No.	Part No.	Description	Pcs/Set	Remarks
R1,2	ERDS2TJ201T	200 $\Omega$ $\pm$ 5% 1/4W	2	
R3,11,12,13,18,22,34,47,48,55,65,83,93	ERDS2TJ103T	10k $\Omega$ $\pm$ 5% 1/4W	13	
R4	ERD2FCG390P	39 $\Omega$ $\pm$ 2% 1/4W Weak Point Element	1	
R5,6	ERDS2TJ302T	3.0k $\Omega$ $\pm$ 5% 1/4W	2	
R7,49,50,71,82,84	ERDS2TJ102T	1.0k $\Omega$ $\pm$ 5% 1/4W	6	
R8,43,45,54,64	ERDS2TJ432T	4.3k $\Omega$ $\pm$ 5% 1/4W	5	
R14,16	ERDS2TJ472T	4.7k $\Omega$ $\pm$ 5% 1/4W	2	
R15	ERDS2TJ123T	12k $\Omega$ $\pm$ 5% 1/4W	1	
R17	ERDS2TJ391T	390 $\Omega$ $\pm$ 5% 1/4W	1	
R19	ERDS1VJ222T	2.2k $\Omega$ $\pm$ 5% 1/2W	1	
R23	ERDS2TJ751T	750 $\Omega$ $\pm$ 5% 1/4W	1	
R24	ERDS2TJ203T	20k $\Omega$ $\pm$ 5% 1/4W	1	
R31	ERDS2TJ272T	2.7k $\Omega$ $\pm$ 5% 1/4W	1	
R32	ERDS2TJ202T	2.0k $\Omega$ $\pm$ 5% 1/4W	1	
R33	ERDS2TJ101T	100 $\Omega$ $\pm$ 5% 1/4W	1	
R35	ERDS2TJ332T	3.3k $\Omega$ $\pm$ 5% 1/4W	1	
R36	ERDS2TJ152T	1.5k $\Omega$ $\pm$ 5% 1/4W	1	
R37	ERDS2TJ561T	560 $\Omega$ $\pm$ 5% 1/4W	1	
R41,42	ERDS2TJ242T	2.4k $\Omega$ $\pm$ 5% 1/4W	2	
R44,46	ERDS2TJ182T	1.8k $\Omega$ $\pm$ 5% 1/4W	(2)	NE-1457
	ERDS2TJ272T	2.7k $\Omega$ $\pm$ 5% 1/4W	(2)	NE-1057
R51,52,53,61,62,63,94,95	ERDS2TJ104T	100k $\Omega$ $\pm$ 5% 1/4W	8	
R81	ERDS2TJ683T	68k $\Omega$ $\pm$ 5% 1/4W	1	
R85	ERDS2TJ333T	33k $\Omega$ $\pm$ 5% 1/4W	1	
R91	ERDS2TJ105T	1M $\Omega$ $\pm$ 5% 1/4W	1	
R92	ERDS2TJ563T	56k $\Omega$ $\pm$ 5% 1/4W	1	
Z1	EXBP84104J	100k $\Omega$ $\times$ 4 $\pm$ 5% 1/8W	1	

## SERVICE FIXTURES AND TOOLS

### EXTENSION CABLES

Ref. No.	Part No.	Description	Pcs/Set	Remarks
	AT40M003	3 pin Extension Cable	1	Cable No. 36
	AT40M005	5 pin Extension Cable	1	Cable No. 17
	AT40M006	6 pin Extension Cable	1	Cable No. 18
	AT40M007	7 pin Extension Cable	1	Cable No. 37
	AT40M008	8 pin Extension Cable	1	Cable No. 38
	AT40M009	9 pin Extension Cable	2	Cable No. 33
	AT40M011	11 pin Extension Cable	1	Cable No. 19
	AT40E006	6 pin Extension Cable	2	Cable No. 9

### DPC COMMON CHECKER AND ITS CABLE

Ref. No.	Part No.	Description	Pcs/Set	Remarks
	ANE800ZK70QP	DPC. Common Checker	1	
	AT30A8UOBP	DPC. Checker Cable	1	

Note: To be used when repairing the DPC board assembly directly on the oven for easy access of the board.

Note: To be used only when DPC common checker is available.