

Service Manual

Room Air Conditioner

CS-A281KR/CU-A281KR



⚠ 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.

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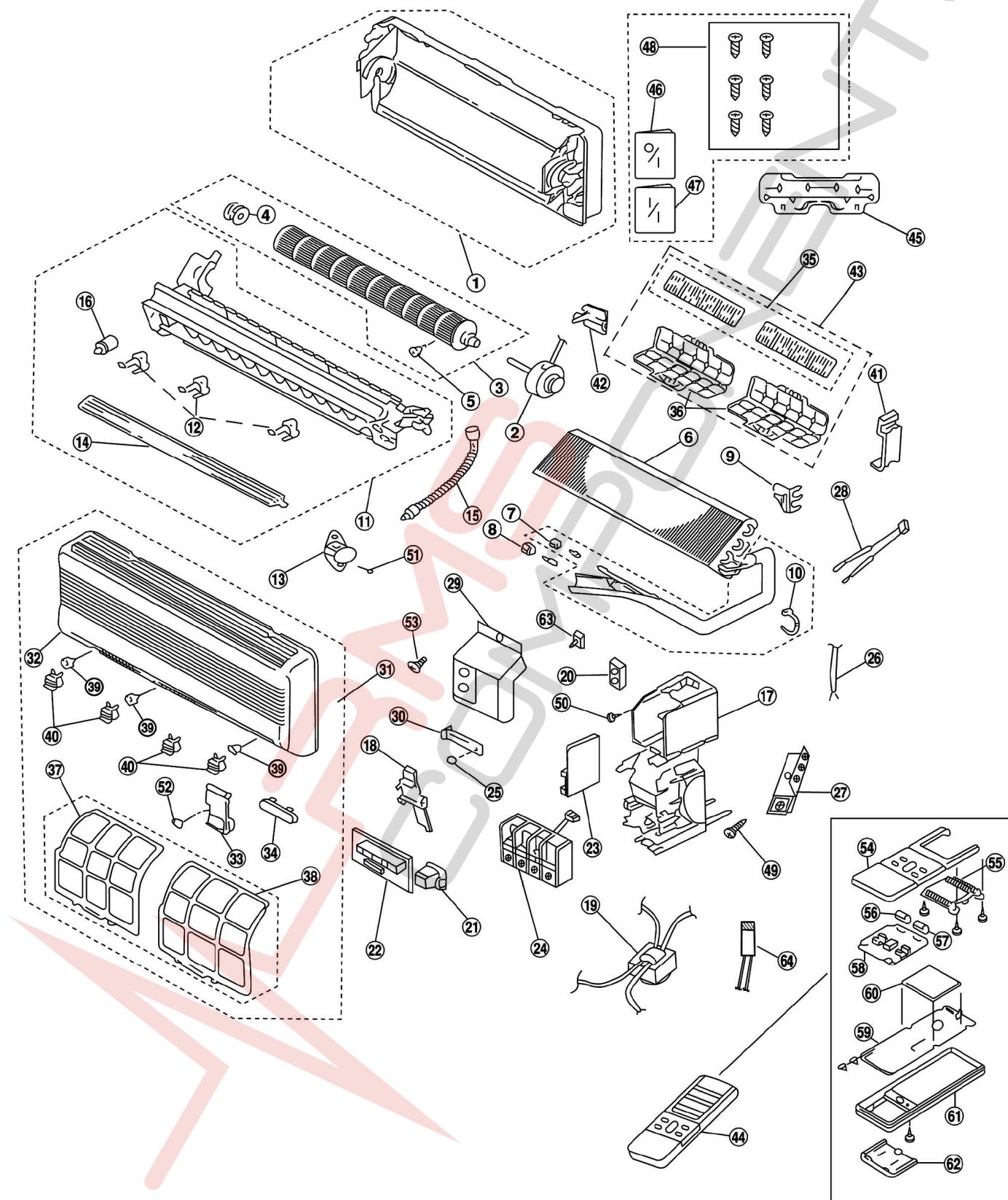
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Panasonic

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15 Exploded View

CS-A281KR



16 Replacement Parts List

<Model: CS-A281KR>

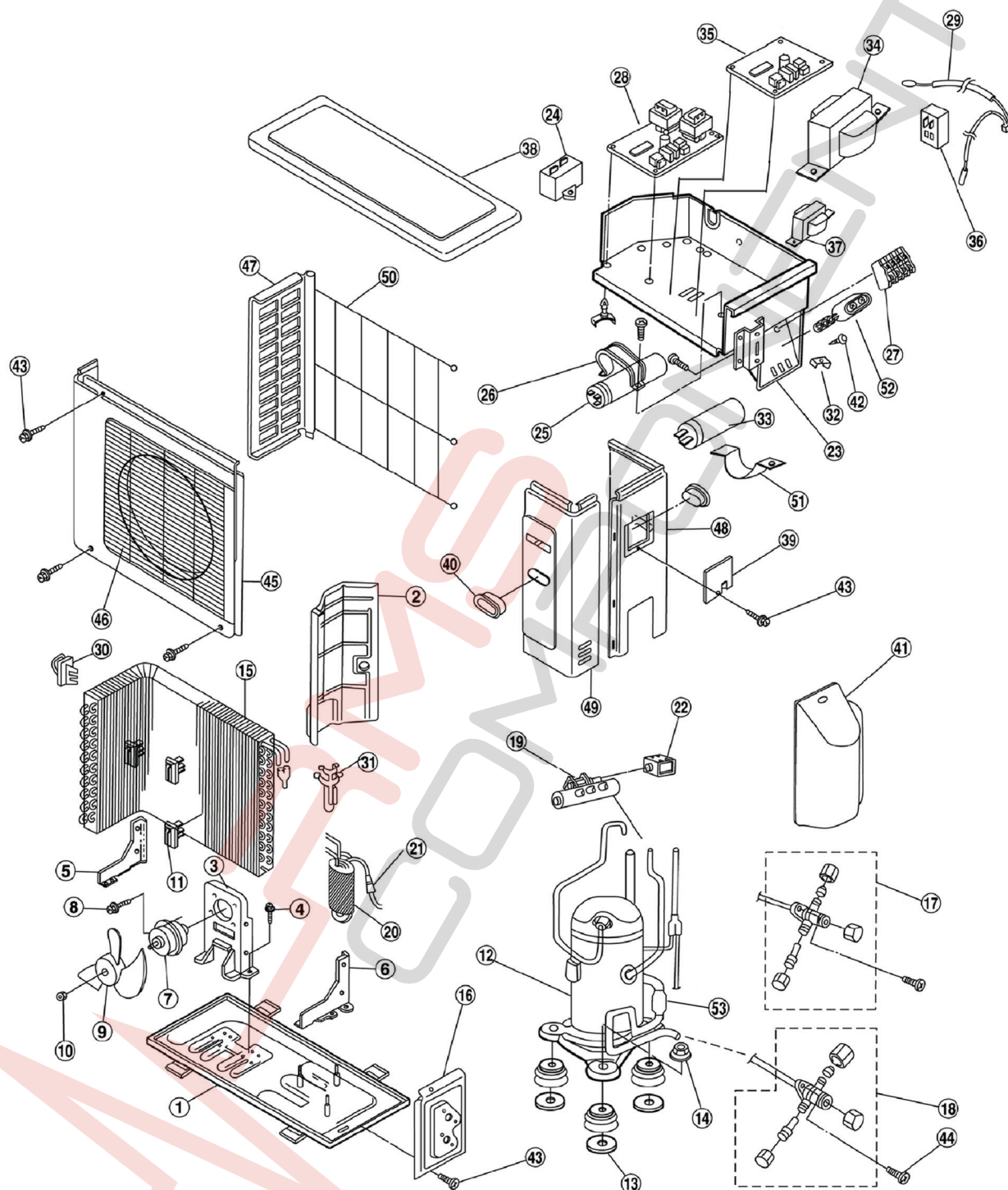
NO	DESCRIPTION & NAME	QTY	CS-A281KR	REMARKS
1	CHASSIS COMPLETE	1	CWD5239970C	●
2	FAN MOTOR	1	CWA4301370	■●
3	CROSS FLOW FAN COMPLETE	1	CWD5707210C	●
4	BEARING ASS'Y	1	CWH4059190K	●
5	SCREW (CROSS FLOW FAN)	1	CWH4582660	●
6	EVAPORATOR	1	CWB6325300	●
7	FLARE NUT (1/4")	1	CWT6002240	●
8	FLARE NUT (5/8")	1	CWT6002270	●
9	SENSOR HOLDER	1	CWH5040130	●
10	BAND (EVAPORATOR - TUBE ASS'Y COMPLETE)	1	CWH4620170	●
11	DISCHARGE GRILLE COMPLETE	1	CWD5011920C	●
12	FULCRUM	3	CWH4525110	●
13	MOTOR - AIR SWING	1	CWA4107010	■●
14	VANE AIR DEFLECTOR ASS'Y	1	CWH5050870K	●
15	DRAIN HOSE	1	CWH5881720	●
16	TAP - DRAIN TRAY	1	CWH4639770	●
17	CONTROL BOARD ASS'Y	1	CWH4719220K	●
18	PARTICULAR PLATE	1	CWH4945600	■●
19	TRANSFORMER	1	CWA4017690	■●
20	CIRCUIT ASS'Y (OPERATION BUTTON COMPLETE)	1	CWA3919420(D)K	■●
21	CIRCUIT ASS'Y (RECEIVER COMPLETE)	1	CWA3919420(C)K	■●
22	CIRCUIT ASS'Y (DISPLAY COMPLETE)	1	CWA3919420(B)K	■●
23	CIRCUIT ASS'Y (ELECTRONIC CONTROLLER)	1	CWA3919420(A)K	■●
24	TERMINAL BOARD ASS'Y	1	CWA4706600K	■●
25	SCREW	1	XTT4+14C	●
26	POWER SUPPLY COMPLETE	1	CWA4102330C	●
27	TERMINAL BOARD COMPLETE	1	CWA4706620C	●
28	SENSOR COMPLETE	1	CWA3900230C	■●
29	CONTROL BOARD TOP COVER	1	CWH4945590	●
30	HOLDER - P.S. CORD	1	CWH4627040	●
31	FRONT GRILLE COMPLETE	1	CWE5053360C	■●
32	INTAKE GRILLE COMPLETE	1	CWE5010960C	●
33	DOOR	1	CWE5002270	●
34	DECORATING PLATE COMPLETE	1	CWE5027410C	●
35	AIR PURIFYING FILTER	2	CZ-SFD30N	■●
36	AIR PURIFYING FILTER (FRAME)	2	CWDPR2-90026-1	●
37	AIR FILTER (LEFT)	1	CWD4209180	■●
38	AIR FILTER (RIGHT)	1	CWD4209180	■●
39	SCREW - FRONT GRILLE	4	XTT4+16C	●
40	CAP (FRONT GRILLE COMPLETE)	4	CWH5060060	●
41	PARTICULAR PLATE	1	CWH4945610	●
42	RAIN COVER (HOLDER - EVAPORATOR TUBE ASS'Y	1	CWH4631410	●
43	BAG COMPLETE (AIR PURIFYING FILTER)	1	CWE4649570C	●
44	REMOTE CONTROL COMPLETE ASS'Y	1	CWA75C556	■▲
45	INSTALLATION PLATE	1	CWH8010540	●
46	OPERATING INSTRUCTIONS	1	CWF8036900	●
47	INSTALLATION INSTRUCTIONS	1	CWF8039140	●
48	BAG COMPLETE - INSTALLATION SCREW	1	CWH4649210	●
49	SCREW	1	XTT4+12C	●
50	SCREW	1	XTT4+16C	●
51	SCREW	1	XTN4+8C	●
52	SCREW	1	XTT4+10C	●
53	SCREW	1	XTT4+8C	●
54	REMOTE CONTROL UPPER CASE	1	CWE15C241	▲
55	CONTROL PANEL	1	CWE311064	▲
56	KNOB	1	CWE17196A	▲
57	KNOB	1	CWE17197A	▲
58	CONTACTOR	1	CWA65036C	▲
59	ELECTRONIC CONTROLLER	1	CWA74224	▲
60	INDICATOR	1	CWE39199	▲
61	REMOTE CONTROL LOWER CASE	1	CWE15128A	▲
62	COVER	1	CWB80040A	▲
63	CAP (BUTTON)	1	CWE5060120	■●
64	FUSE COMPLETE	1	CWA4023070C	■●

(Note)

- "■" marked parts are recommended to be kept in stock.
- "●" marked parts are supplied from TAMACO, Taiwan.
- "▲" marked parts are supplied from MACC, Malaysia.

17 Exploded View

CU-A281KR



18 Replacement Parts List

<Model: CU-A281KR>

NO	DESCRIPTION & NAME	QTY	CU-A281KR	REMARKS
1	CHASSIS ASS'Y	1	CWH5244200AKA	●
2	SOUND PROOF	1	CWH5236060	●
3	FAN MOTOR BRACKET	1	CWH5241830	●
4	SCREW - (FAN MOTOR BRACKET)	6	XTT4D10CXW	●
5	PARTICULAR PLATE - LEFT (HOLD - FAN MOTOR)	1	CWH4934850	●
6	PARTICULAR PLATE - RIGHT (HOLD - FAN MOTOR)	1	CWH4934860	●
7	FAN MOTOR	1	CWA4301380	■ ●
8	SCREW - FAN MOTOR	3	XTT4D10CXW	●
9	PROPELLER FAN ASS'Y	1	CWH5700500	■ ●
10	NUT - PROPELLER FAN	1	CWH4583020	●
11	HOLDER - FOR F/MOTOR & LEAD WIRES	3	CWH4620110	●
12	COMPRESSOR ASS'Y	1	CWB6815280K	■ ●
13	PACKING - COMP. MOUNT	3	CWH4604010	●
14	NUT - COMP. MOUNT	3	CWH4521130	●
15	CONDENSER	1	CWB6305570	●
16	HOLDER - COUPLING ASS'Y	1	CWH5240070AKA	●
17	3-WAYS VALVE (LIQUID)	1	CWB4034150	■ ●
18	3-WAYS VALVE (GAS)	1	CWB4034170	■ ●
19	4-WAYS VALVE ASS'Y	1	CWB4034740K	■ ●
20	TUBE ASS'Y (CAPILLARY TUBE, CHECK VALVE)	1	CWB5932090	●
21	STRAINER	1	CWB4042340	●
22	V-COIL COMPLETE	1	CWA4019380C	■ ●
23	CONTROL BOARD ASS'Y	1	CWH4712690	●
24	CAPACITOR - FAN MOTOR	1	CWA4069960	■ ●
25	CAPACITOR - COMPRESSOR	1	CWA4069780	■ ●
26	HOLDER - CAPACITOR	1	CWH4828750	●
27	TERMINAL BOARD ASS'Y	1	CWA4706590	■ ●
28	ELECTRONIC CONTROLLER	1	CWA741315	■ ▲
29	SENSOR COMPLETE	1	CWA50C622	■ ▲
30	HOLDER - SENSOR	1	CWH32089	●
31	HOLDER - SENSOR (FOR TUBE)	1	CWH5040120	●
32	U METAL PIECE	1	CWE4825120	●
33	CAPACITOR - COMPRESSOR START	1	CWA4069970	■ ●
34	INDUCTOR	1	CWA3915030	■ ●
35	SOFT START ELECTRONIC CONTROLLER	1	CWA3919400	■ ●
36	TERMINAL BOARD ASS'Y	1	CWA4706610K	●
37	TRANSFORMER	1	CWA4017740	■ ●
38	CABINET TOP PLATE ASS'Y	1	CWE5030520AKA	●
39	CONTROL BOARD COVER	1	CWE4936960A	●
40	HANDLE	2	CWE4520120	●
41	RAIN COVER	1	CWE4631880	●
42	SCREW	1	XSD4+6BNS	●
43	SCREW	20	CWE4585520	●
44	SCREW	4	CWE4580930	●
45	CABINET FRONT PLATE ASS'Y COMPLETE	1	CWE5030940ACA	●
46	WIRE NET	1	CWE4537630	●
47	CABINET SIDE PLATE (LEFT)	1	CWE5030720A	●
48	CABINET REAR PLATE COMPLETE	1	CWE5030820ACA	●
49	CABINET FRONT PLATE ASS'Y	1	CWE5030640K	●
50	WIRE NET (REAR)	1	CWE4537530A	●
51	HOLDER - CAPACITOR	1	CWH4828800	●
52	HOLDER - PS,CORD	1	CWH4627100	●
53	MUFFLER	1	CWB6040210	●

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19 Electronic Parts List

Electronic Controller: C3919-420A (CS-A281KR)

SYMBOL	DESCRIPTION & NAME	PART NO.
IC1	INTEGRATED CIRCUIT	C4083-910
IC2	INTEGRATED CIRCUIT	C4083-450
IC3	INTEGRATED CIRCUIT	C4083-860
IC4	INTEGRATED CIRCUIT	C4083-730
IC5	INTEGRATED CIRCUIT	C4083-720
PC1	PHOTO COUPLER	C4094-040
Q1	TRANSISTOR	C4086-060T
Q2	TRANSISTOR	C4086-240T
Q3, Q5	TRANSISTOR	J4086-080T
D1 ~ D4	DIODE	E4060-020T
ZD1	ZENER DIODE	C4082-100T
ZNR1, ZNR2, ZNR3	ZNR	C4084-150
RY-HOT	RELAY ELECTRO MAGNETIC	C4104-180
RY-HI, ME, LO	RELAY ELECTRO MAGNETIC	C4104-170
RY-COMP	RELAY ELECTRO MAGNETIC	C4076-310
SSR1	SSR	C4092-070
SW1, SW2	PUSH SWITCH	C4001-200
FUSE	FUSE	XBA2C31TR0
X1	RESONATOR	F4090-010T
BZ	BUZZER (SOUND GENERATOR)	C4091-030
Q6~ Q8	TRANSISTOR	C4086-250T

Note

- All parts are supplied from TAMACO, Taiwan.

Electronic Controller: CWA741315 (CU-A281KR)

SYMBOL	DESCRIPTION & NAME	PART NO.
IC1	INTEGRATED CIRCUIT	A52C78414Y
IC2	INTEGRATED CIRCUIT	A52C094
IC3	INTEGRATED CIRCUIT	A52C040
IC4	INTEGRATED CIRCUIT	A52MPA2003C
Q1	TRANSISTOR	A55C1740STPQ
Q2	TRANSISTOR	A55DTC113ZST
D1 ~ D6	DIODE	A54MA165TA5
DB1, DB2	DIODE BRIDGE	A54CS1VB20E
ZD1	ZENER DIODE	A54D7.5EL1TB
ZNR2 ~ ZNR4	ZNR	A54C353
T1, T2	TRANSFORMER	A40378
CR1	SURGE ABSORBER	A59014
CR2	SURGE ABSORBER	A59014
RY-HOT	RELAY	A00160
RY-DEICE	RELAY	A00160
RY-OFF	RELAY	A00160
RY-H/L	RELAY	A00160
RY-V	RELAY	A00160
FUSE	FUSE	XBA2C31TR0
X1	RESONATOR	A45ST4.0MGWT

Note

- All parts are supplied from MACC, Malaysia (Vendor Code: 086).

Electronic Controller: C3919-400 (CU-A281KR)

SYMBOL	DESCRIPTION & NAME	PART NO.
IC1, IC2	INTEGRATED CIRCUIT	J4083-070
Q1, Q2	TRANSISTOR	C4086-250T
D1 ~ D5, D7	DIODE	E4060-020T
RY-C, RY-L	RELAY ELECTRO MAGNETIC	C4076-310
Q3	TRANSISTOR	J4086-080T

Note

- All parts are supplied from TAMACO, Taiwan.