S/M No. WF*M201700

DAEWOO ELECTRONICS

Service Manual

Wall-Mounted Front-Load Washer MINI

FACTORY MODEL: WFCM2*
WFWM2*

MINI 2.0
COMBO:
on-line: ODW-MGDM2C,
ODW30-M2CV
*** IOT: ODW-MGDM2CI**
off-line: DWM30-M2CW

WASH:
on-line: ODW30-M2WW,
ODW30-M2WS,
ODW30-M2WG
*** IOT: ODW30-M2WSI**
off-line: DWM30-M2WV

In this Manual, some parts can be changed for improving, their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List) in Service Information Center (http://webportal.dwe.co.kr/sic)

September. 2017

Contents

1. What is Wall-Mounted Front Load Washer MINI?

1. What is the Wall-Mounted Front-Load Washer MINI?

Mini 2.0 is the world's first ever wall-mounted front-load washer, which is installable in bathroom, pantry, kitchen and various locations.

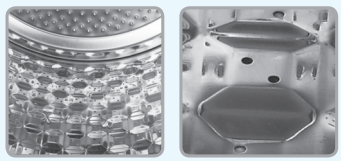
2. Features of Wall-Mounted Front-Load Washer MINI

Low Noise

Mini's customized low-noise motor reduces noise during wash, and the 4-layered dustproof pad prevents vibrations to ensure silent washing.

Emerald Drum

Emerald-shaped concave-convex drum prevents damage to fabric to keep clothes fresh.



Child Protection

'Button Lock' and 'Door Lock' functions apply to prevent kids from touching buttons and opening doors during wash.

Cleaning Programs

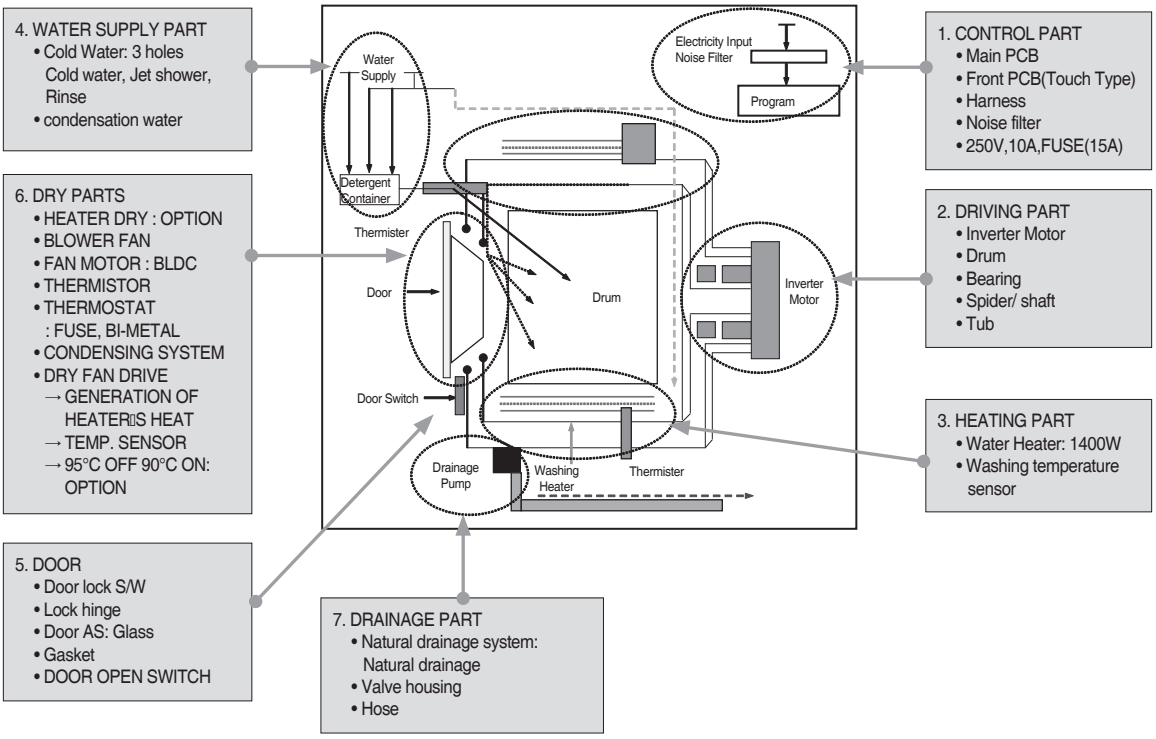
Mini's program features for various cleaning purposes and fabrics.

Alibaba Smart Living

IoT : Alibaba Smart Living Service

(Wi-Fi)

3. Power Train of Wall-Mounted Front-Load Washer MINI



- Inverter Motor: Transforms electric energy into mechanical energy
- Highly powerful and functional inverter motor rotates the system.

4. Major Features of Wall-Mounted Front-Load Washer MINI

1. Powerful Daily Cleaning
   Mini enables daily washes of towels, shirts, underwear and socks for cleaner home environment.

2. 29-Minute Wash
   As the Normal cycle takes only 29 minutes, it speeds up the laundry process and reduces water and power consumption by 64% compared to regular front-load washers.

3. Baby Clothes Cleaning
   Mini's 'Baby Care' cycle enables a complete steam wash and rinse function to protect sensitive baby skin from irritation.

4. Delicate Cleaning for High-Quality Clothes
   Mini enables daily washes of towels, shirts, underwear and socks for cleaner home environment.

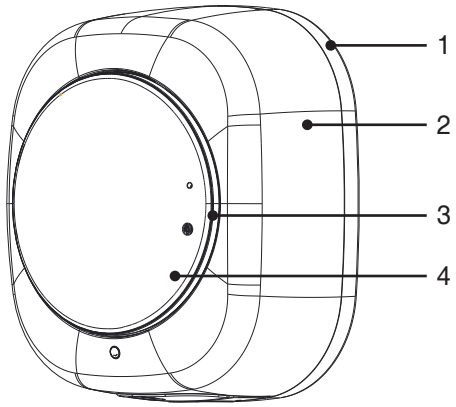
5. Digital Condensing Dry System.
   Condensing Dry System with saving energy.

6. Luxury Touch type control panel.

2. Specifications

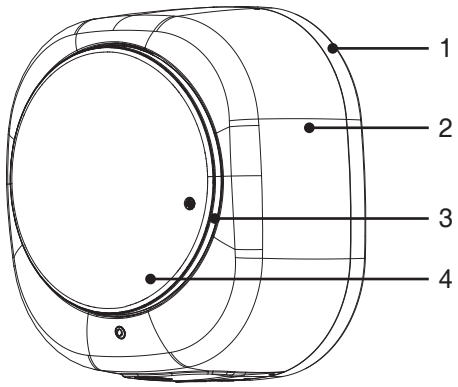
1. Parts and Components

COMBO
WFCM2*



NO	Parts
1	TUB REAR
2	BODY
3	DOOR FRAME * O
4	DOOR PROTECTOR

WASHER
WFWM2*

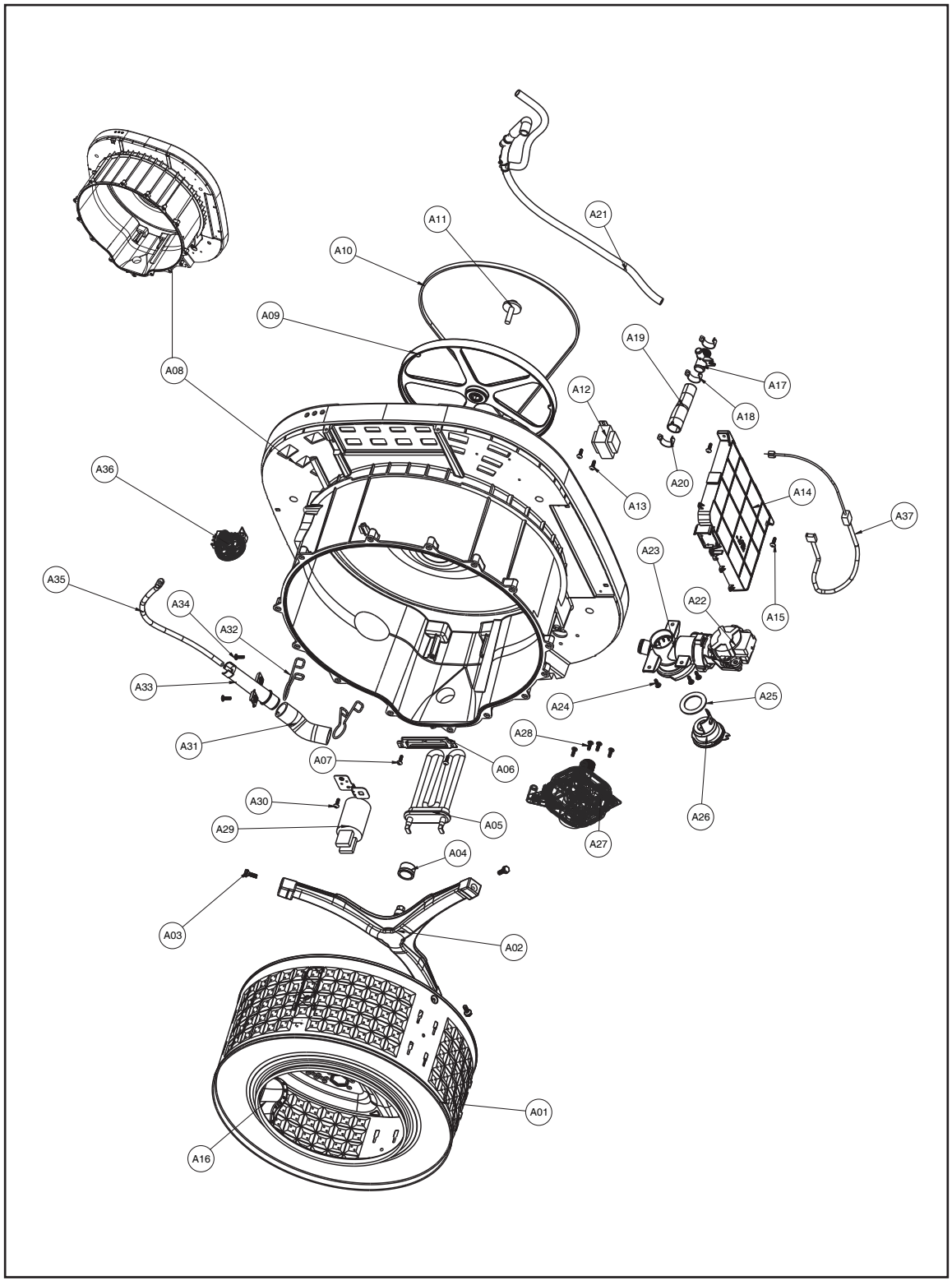


NO	Parts
1	TUB REAR
2	BODY
3	DOOR FRAME * O
4	DOOR PROTECTOR

Category		Specifications		Notes
		COMBO	WASH	
Dimension	NET	550 x 650 x 324	550 x 600 x 324	
	GROSS	615 x 712 x 399	615 x 658 x 395	
Weight	NET	19.8	17.32	
	GROSS	23.04	21.28	
Standard Volume		27L	26L	
Power		220V/50Hz	220V/50Hz	
Power Consumption	Wash	100W	100W	
	Wash Heater(230V)	1300W	1300W	
	Dry	1100W	-	
Max Load	Wash	3.0kg	3.0kg	
	Spin	1.5kg	-	
Washer Type		Front Load		
Installation		Mounted on Wall		
Water Pressure		98.1kPa~784kPa(1kgf/cm²~8kgf/cm²)		

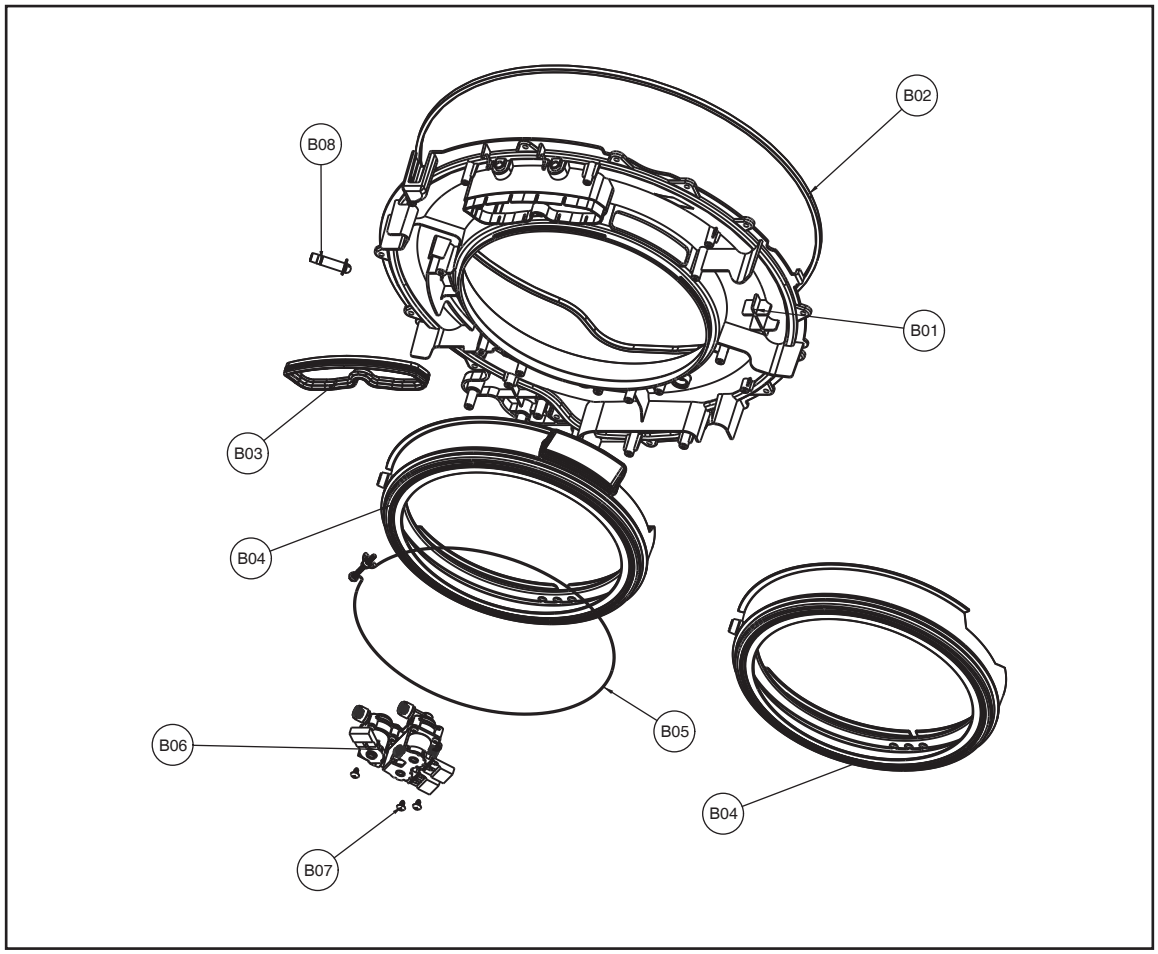
3. Assembly Part List

1. TUB AS



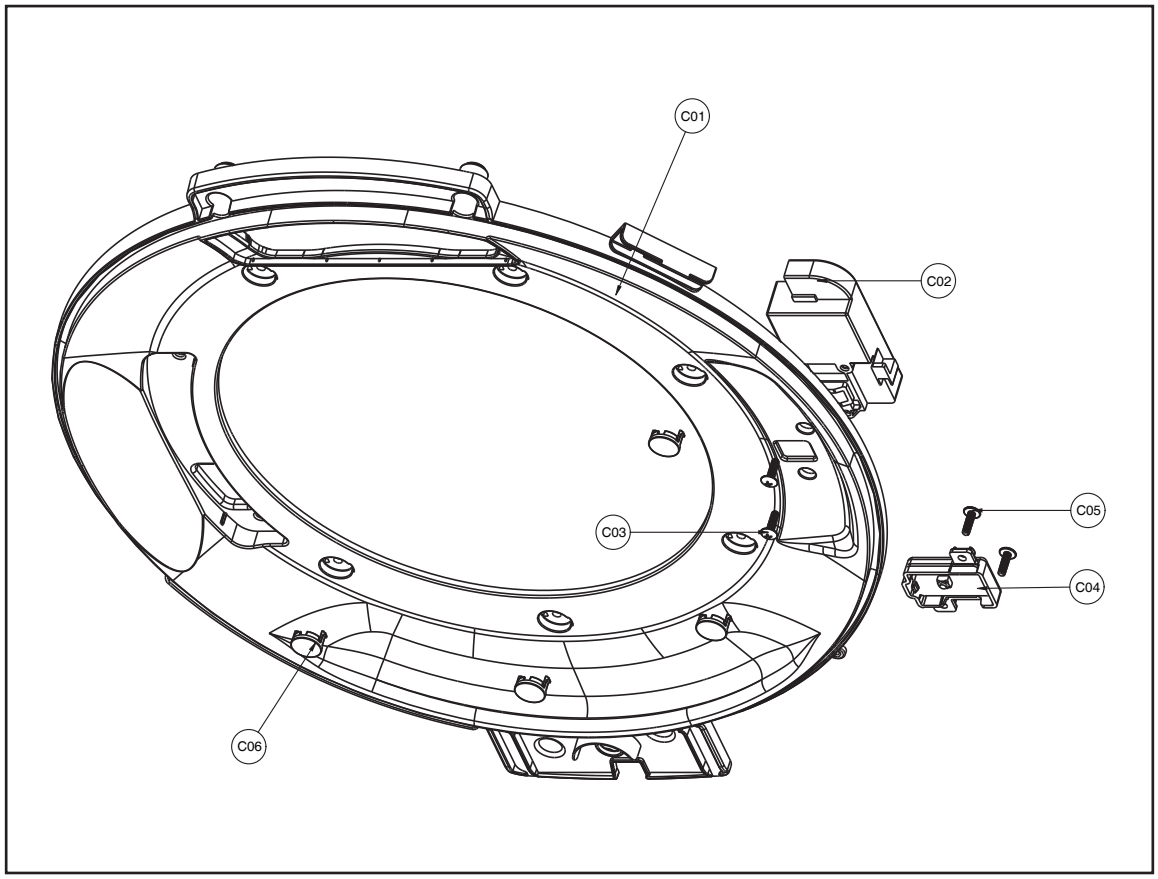
NO.	PART NAME	PART CODE	DESCRIPTION	Q'TY	SVC	REMARK
A01	DRUM AS	36170-0008200-00	STS430 0.4T MINI-2	1	Y	
A02	SPIDER AS	36190-0001700-00	SPIDER+SHAFT, MINI-II	1	Y	
A03	SPECIAL BOLT	3616063000	STS430 M6*21 SI-LOCK	3	Y	
A04	BUSHING SHAFT	36107-0000800-00	PC T=0.2 DO=17 DI=8 EURASIA	1	Y	
A05	HEATER WASH	66127-0001504-00	230V 1400W TERMINAL SUS304 NI-DI 2FUSE DHDH-XY600	1	Y	
A06	FIXTURE HEATER	36119-0003300-00	SUS304 0.6T 27X10X103 MINI FIXTURE HEATER	1	Y	
A07	SCREW TAPPING	7122401408	T2S TRS 4X14 STS	2	Y	
A08	TUB REAR AS	36196-0046900-00	FRPP 10% CY349A	1	Y	COMBO
		36196-0046800-00	FRPP 10% CY349A	1	Y	WASH
A09	PULLEY	36186-0002900-00	ALDC 12S	1	Y	
A10	BELT V	3616591700	M300/3PJ1031/GATES	1	Y	
A11	SPECIAL BOLT AS	3616063110	M8X27 S/W P/W SI-LOCK HEX:13	1	Y	
A12	UNIT REACTOR AS	66149-0001501-00	REACTOR RT-029 L=3.6MH(0A), L=5.2MH(1A)	1	Y	
A13	SCREW TAPPING	7122401408	T2S TRS 4X14 STS	2	Y	
A14	PCB MAIN AS	36199-0011400-00	MAIN PCB AS, 220V, REACTOR, EMI(CHINA)	1	Y	COMBO, ON-LINE
		36199-0011401-00	MINI-II COMBO, CHN-OFF LINE, 220V, C, LOCK, PP, W-HT			COMBO, OFF-LINE
		36199-0011300-00	MAIN PCB AS, MINI-II WASHER, 220V, REACTOR, EMI(CHINA)			WASH
		36199-0011301-00	MAIN PCB AS, MINI-II WASHER, 220V, REACTOR, EMI(CHINA-OFF)			WASH, OFF-LINE
		36199-0011302-00	MAIN PCB AS, MINI 2 WASHER, IOT, 220V, REACTOR, EMI(CHINA)			WASH, IOT
		36199-0011402-00	MINI-II COMBO, IOT, CHN1, 220V, C, LOCK, PP, W-HT			COMBO, IOT
A15	SCREW TAPPING	7122401408	T2S TRS 4X14 STS	2	Y	
A16	LIFTER WASH	3636179-0002300-00	PP MINI-II	3	Y	
A17	PIPE JOINT Y	3614426500	DRAIN PIPE JOINT D-M300, PP	1	Y	
A18	CLAMP HOSE	3611205820	ID12 W8 T0.8	2	Y	
A19	HOSE DRAIN*I	36131-0021600	EDPM , ID=16,2T ,L100	1	Y	
A20	CLAMP HOSE	36111-0012400	CLAMP HOSE MINI 2.0 ,ID=23	1	Y	
A21	HOSE VENT AS	36131-0022800	HOSE VENT AS, MINI-II	1	Y	
A22	DRAIN MOTOR AS	66149-0005702-01	NAKAGAWA,220-240V 50/60HZ,BV-DW23	1	Y	
A23	DRAIN HOUSING	36169-0000700-00	FRPP, FILTER TYPE MINI-II	1	Y	
A24	SCREW TAPPING	7122401408	T2S TRS 4X14 STS	3	Y	
A25	PACKING CAP FILTER	36137-0022700-00	NBR 40 MINI-II	1	Y	
A26	CAP FILTER DRAIN	36109-0012900-00	FRPP, GS/HG41T -NTR	1	Y	
A27	MOTOR BLDC	36189L8500	GJ-2BA003A(GNJ),DC 310V,125W,CL. F,EARTH T-X	1	Y	
A28	SPECIAL BOLT	3616067010	T/S-3 F/L 5*16 SEAL LOCK STS430	4	Y	
A29	UNIT EMI FILTER AS	66149-0001104-00	EMI FILTER, RDFC-2736, 250V 12A, MINI 2.0, BRACKET	1	Y	
A30	SCREW TAPPING	7122401408	T2S TRS 4X14 STS	1	Y	
A31	HOSE AIR TRAP	36131-0021700-00	EPDM MINI-II	1	Y	
A32	CLAMP HOSE	3611204700	ID27	2	Y	
A33	AIR TRAP	36152-0001000-00	PP ST/BJ750	1	Y	
A34	SCREW TAPPING	7122401408	T2S TRS M4X14 STS	2	Y	
A35	HOSE AIR	36131-0010001-00	EPDM ID=4 OD=8 L=390 MINI-II	1	Y	
A36	SENSOR PRESSURE AS	66143-0004000-00	DPS-KDAMD, DNAKAGAWA, 5V, 10mA, MINI2.0, NONPCB, S_COVER, 0°	1	Y	
A37	HARNESS AS	66126-0043200-00	HARNESS AS, MINI 2.0 COMBO, N-H, DRY, EMI, REACTOR	1	Y	COMBO
		66126-0042401-00	HARNESS AS MINI 2.0 WASHER , N-H, EMI, REACTOR	1	Y	WASH

2. COVER TUB AS



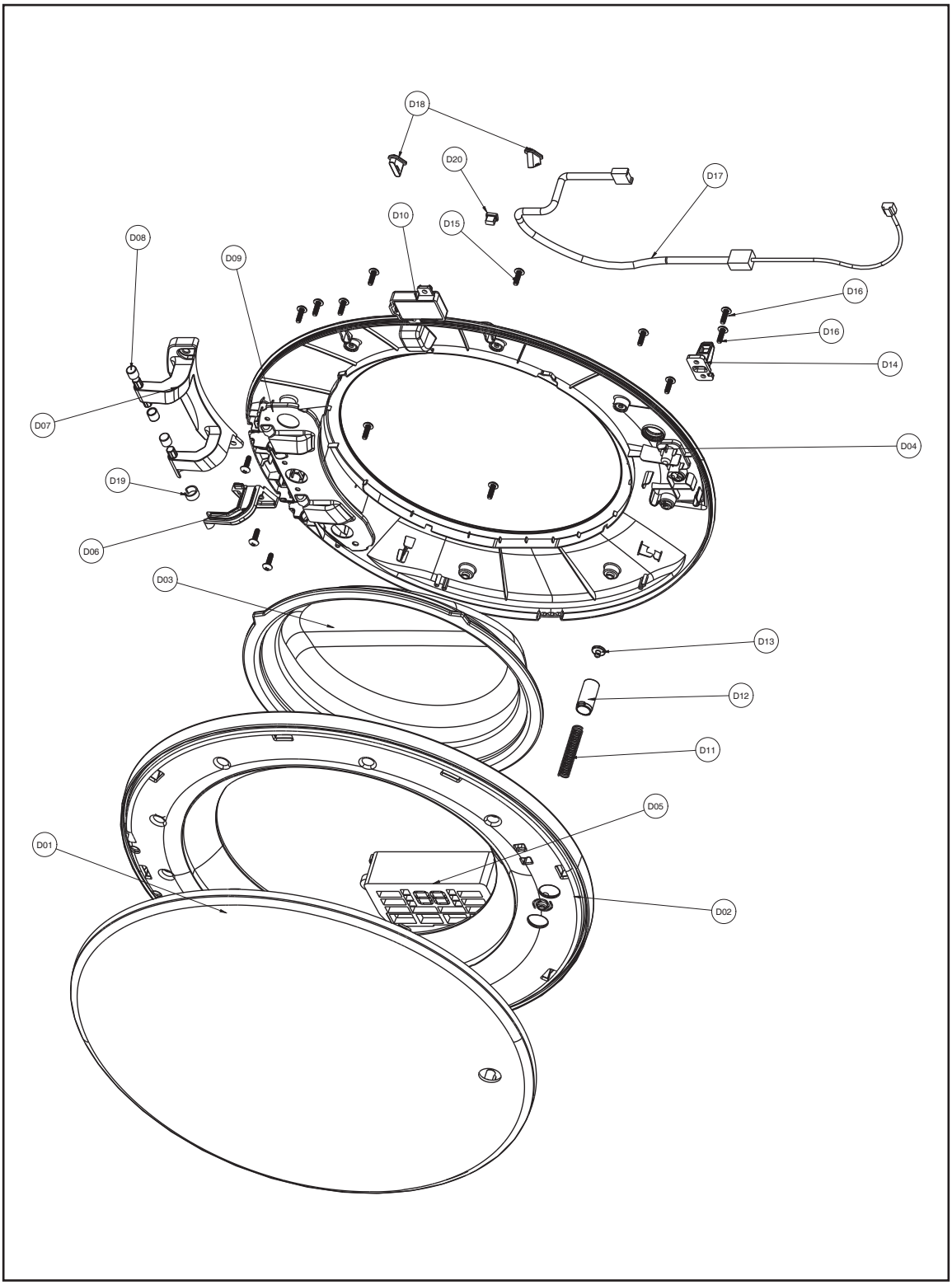
NO.	PART NAME	PART CODE	DESCRIPTION	Q'TY	SVC	REMARK
B01	COVER TUB *O	36113-0031800-00	FRPP MINI-II COMBO	1	Y	
		36113-0031801-00	FRPP MINI-II WASHER	1	Y	
B02	GASKET TUB	36123-0008700-00	EPDM, L=1300, MINI-II	1	Y	
B03	PACKING DETERGENT	36137-0022800-00	SILICON, MINI-II	1	Y	
B04	GASKET	36123-0008300-00	EPDM MINI-II COMBO	1	Y	COMBO
		36123-0008200-00	EPDM MINI-II WASHER			WASH
B05	CLAMP GASKET AS	36111-0012300-00	WIRE+SCREW, D1.4, MINI-II	1	Y	
B06	VALVE INLET SUB AS	66150-0011700-00	VALVE INLET+ELBOW+HOSE, 220-240V/50,60Hz MINI-II COMBO	1	Y	COMBO
		66150-0011800-00	VALVE INLET+ELBOW+HOSE, 220-240/50,60HZ, MINI-II WASHER	1	Y	WASH
B07	SCREW TAPPING	7122401408	T2S TRS 4X14 SUS,STS	4	Y	
B08	NOZZLE JET	36183-0010900-00	PP MINI-II	1	Y	

3. COVER BODY AS



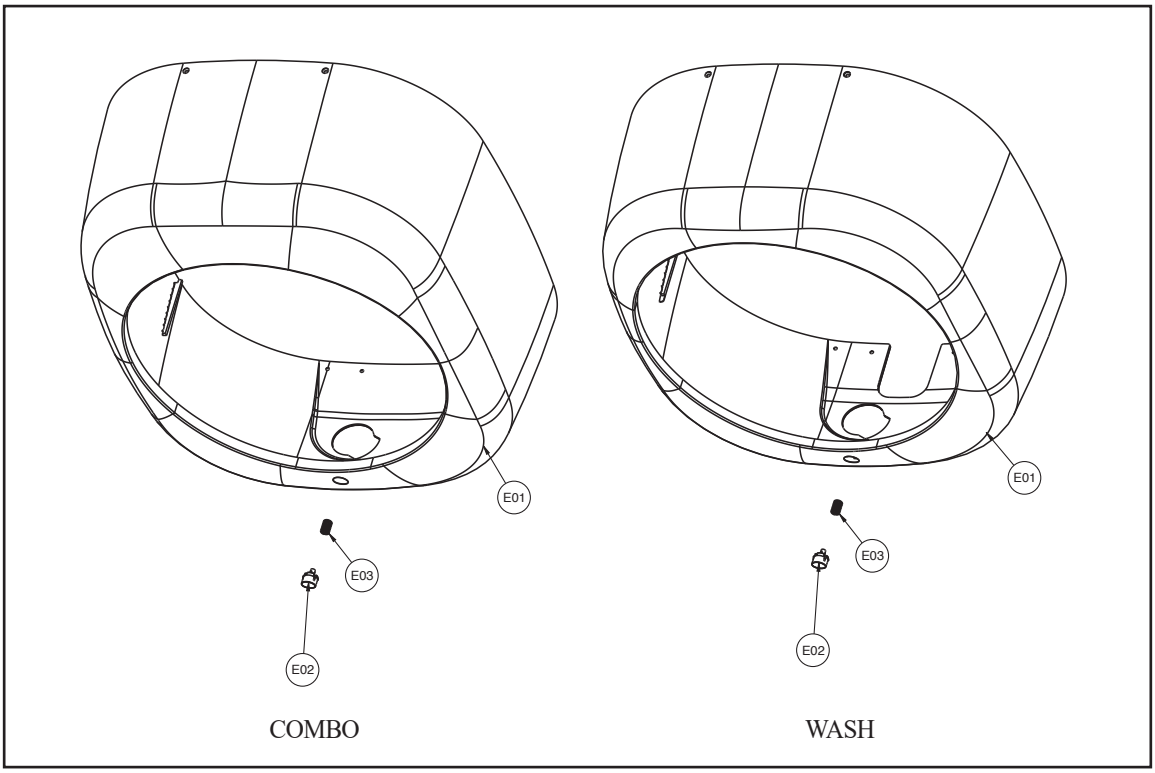
NO.	PART NAME	PART CODE	DESCRIPTION	Q'TY	SVC	REMARK
C01	COVER BODY	36113-0032100-00	ABS(GY568A), MINI-II	1	Y	
C02	SWITCH DOOR LOCK	66148-0005800-00	GVWAVE, EMZ, 220-240V, 50/60Hz, MINI 2.0	1	Y	
C03	SCREW TAPPING	7115401629	T1 FLT 4X16 SUS	2	Y	
C04	WM PCB BUTTON ASSY	40302-1119600-00	MINI 2.0 BUTTON OPTION AS	1	Y	
C05	SCREW TAPPING	7122401411	T2S TRS 4X14 MFZN	2	Y	
C06	CAP SCREW	36109-0014100-00	ABS, GY568A, MINI-II, COVER SCREW	6	Y	

4. DOOR AS



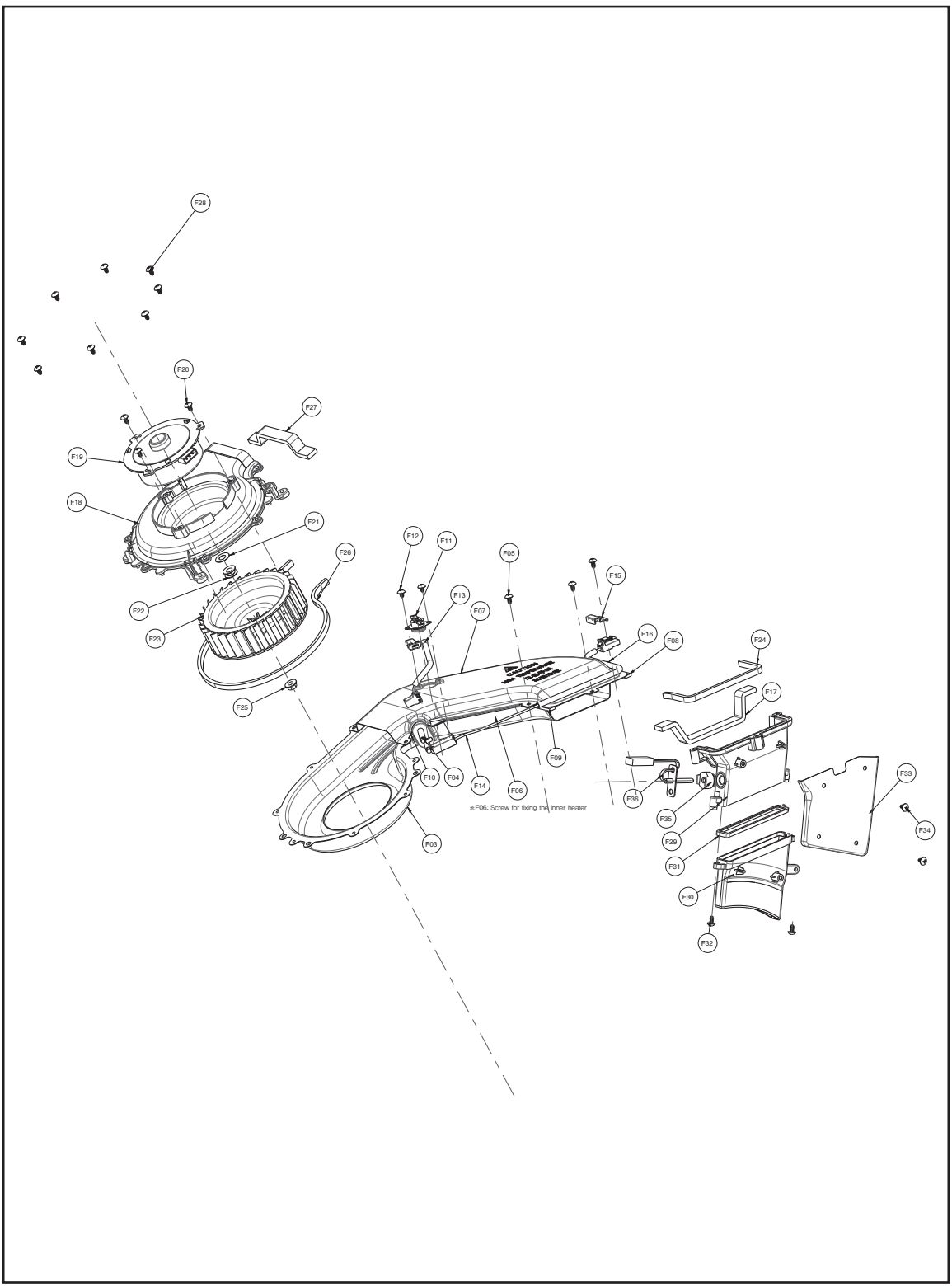
NO.	PART NAME	PART CODE	DESCRIPTION	Q'TY	SVC	REMARK
D01	PROTECTOR GLASS AS	36185-0006500-00	ABS투명 MINI-II	1	Y	
D02	FRAME DOOR *O	36121-0021800-00	ABS(GY568A), MINI-II	1	Y	
D03	DOOR GLASS	36116-0036400-00	GLASS MINI-II	1	Y	
D04	FRAME DOOR *I	36121-0021900-00	PP MINI-II	1	Y	
D05	WM PCB FRONT ASSY	40302-1119500-00	MINI 2.0 FRONT PCB AS, COMBO, CHN1(ON-LINE), N-IOT	1	Y	COMBO, ON-LINE, NON-IOT
		40302-1128300-00	MINI 2.0 FRONT PCB AS, COMBO, CHN2(OFF-LINE), N-IOT, N-AUTO			COMBO, OFF-LINE, NON-IOT
		40302-1120200-00	MINI 2.0 FRONT PCB AS, COMBO, CHN1(ON-LINE), IOT			COMBO, ON-LINE, IOT
		40302-1112700-00	MINI 2.0 FRONT PCB AS, WASHER, CHN1(ON-LINE), N-IOT			WASH, ON-LINE, NON-IOT
		40302-1112700-00	MINI 2.0 FRONT PCB AS, WASHER, CHN1(ON-LINE), N-IOT			WASH, ON-LINE, NON-IOT
		40302-1112700-00	MINI 2.0 FRONT PCB AS, WASHER, CHN1(ON-LINE), N-IOT			WASH, ON-LINE, NON-IOT
		40302-1127700-00	MINI 2.0 FRONT PCB AS, WASHER, CHN2(OFF-LINE), N-IOT, N-AUTO			WASH, OFF-LINE, NON-IOT
		40302-1120100-00	MINI 2.0 FRONT PCB AS, WASHER, CHN1(ON-LINE), IOT			WASH, OFF-LINE, ON-IOT
D06	HINGE DOOR COVER	36128-0005500-00	ALDC MINI-II	1	Y	
D07	HINGE DOOR	36128-0005400-00	ALDC MINI-II	1	Y	
D08	CAP HINGE DOOR	3610916500	POM	3	Y	
D09	SUPPORTER HINGE	36147-0006900-00	SGCC 1.0T MINI-II	1	Y	
D10	WM PCB BUTTON ASSY	40302-1119600-00	MINI 2.0 BUTTON OPTION AS	1	Y	
D11	SPRING ROD	36145-0012200-00	SUS304, Φ0.6, MINI-II	1	Y	
D12	ROD PUSH	36188-0002300-00	PP MINI-II	1	Y	
D13	ROD CUSHION	36188-0002400-00	EPDM MINI-II	1	Y	
D14	HOOK DOOR	36130-0003600-00	ZNDC MINI-II	1	Y	
D15	SCREW TAPPING	7115402008	T1S FLT 4*20 SUS430 NATURAL	12	Y	
D16	SCREW TAPPING	7125401408	T2S FLT 4X14 SUS430	2	Y	
D17	HARNESS SUB	66126-0041300-00	FRONT PCB SUB, SMH200-10H, 420MM, TOUCH PANEL DONGYANG	1	Y	
D18	CUSHION DOOR	36114-0031100-00	EPDM MINI-II	2	Y	
D19	CAP HINGE DOOR	36109-0013200-00	POM MINI-II	1	Y	
D20	CUSHION DOOR	3611559910	CUSHION DOOR SILICON, COLOR: GRAY	1	Y	

5. BODY AS



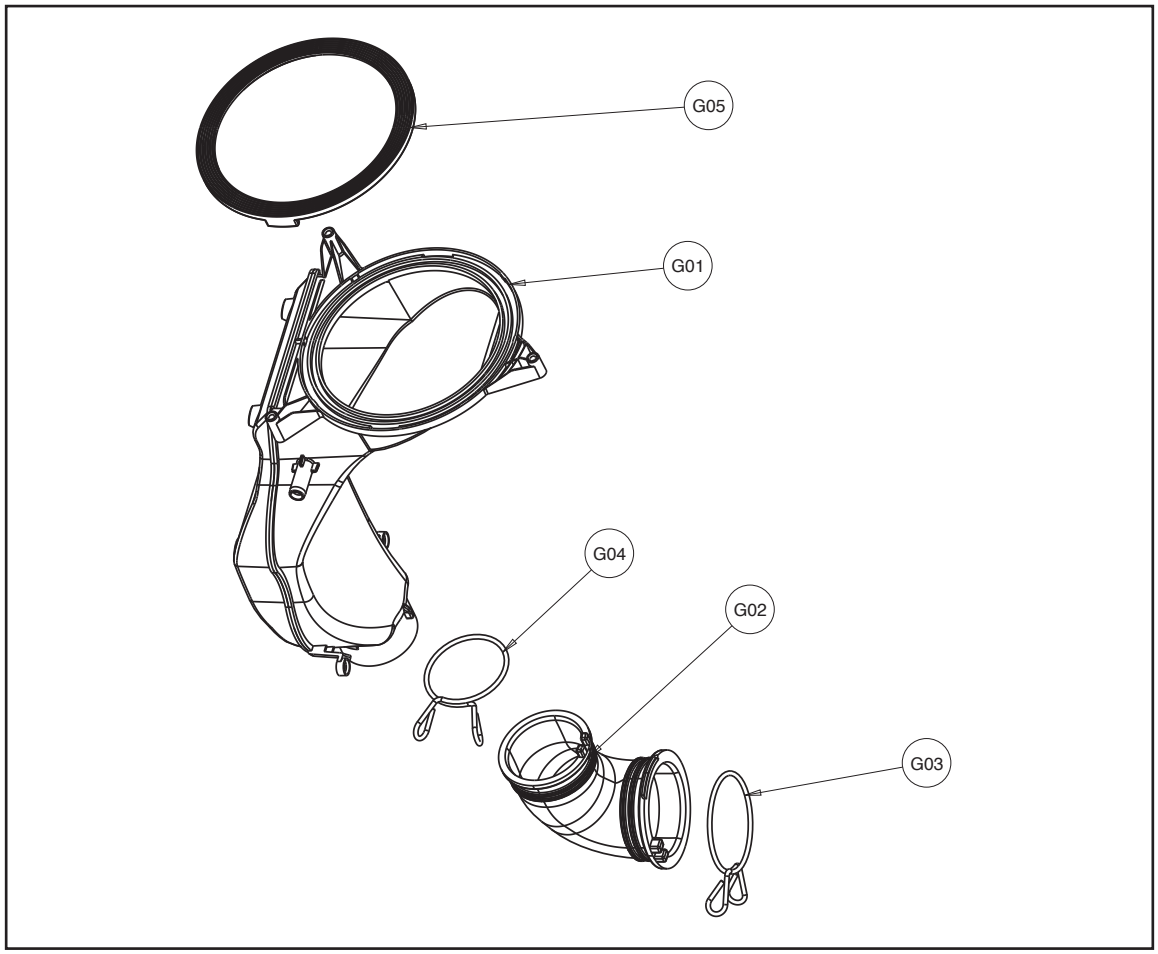
NO.	PART NAME	PART CODE	DESCRIPTION	Q'TY	SVC	REMARK
E01	BODY SUB AS	36104-0012202-00	ABS+SPRAY(GD-2401BP), BODY(WH-1404A), CHAMPAGNE GOLD, COMBO	1	N	COMBO, ODW-MGDM2C, ODW30-MGDM2CI
	BODY	36104-0011202-00	ABS(WH-1404A), MINI 2 COMBO			COMBO, DWM30-M2CW
	BODY	36104-0011100-00	ABS MINI-II WASHER			WASH, ODW30-M2WW
	BODY SUB AS	36104-0012300-00	ABS(GY-349A)+SPRAY(SV-2802BP), MINI2 WASHER			WASH, ODW30-M2WS, ODW30-M2WSI
	BODY SUB AS	36104-0012302-00	ABS(WH-1404A)+SPRAY(GD-3703BP), MINI2 WASHER			WASH, ODW30-M2WG
	BODY SUB AS	36104-0012301-00	ABS(GY-349A)+SPRAY(SV-6501BP), MINI2 WASHER			WASH, DWM30-M2WV
E02	BUTTON POWER AS	36159-0027802-00	ABS+SPRAY(GD-2401BP), BUTTON POWER(WH-1404A), CHAMPAGNE GOLD	1	Y	COMBO, ODW-MGDM2C, ODW30-MGDM2CI
	BUTTON POWER	36159-0025402-00	ABS(WH-1404A), MINI 2 COMBO			COMBO, DWM30-M2CW
	BUTTON POWER AS	36159-0027802-00	ABS+SPRAY(GD-2401BP), BUTTON POWER(WH-1404A), CHAMPAGNE GOLD			WASH, ODW30-M2WW
	BUTTON POWER AS	36159-0027900-00	ABS(GY-349A)+SPRAY(SV-2802BP), MINI2 WASHER			WASH, ODW30-M2WS, ODW30-M2WSI
	BUTTON POWER AS	36159-0027902-00	ABS(WH-1404A)+SPRAY(GD-3703BP), MINI2 WASHER			WASH, ODW30-M2WG
	BUTTON POWER AS	36159-0027901-00	ABS(GY-349A)+SPRAY(SV-6501BP), MINI2 WASHER			WASH, DWM30-M2WV
E03	SPRING BUTTON	36145-0012000-00	SUS, POWER BUTTON SPRING, MINI-II	1	Y	-
E01 + E02 + E03	BODY AS	36104-0011603-00	WH(WH-1404A), CHAMPAGNE GOLD) MINI-II COMBO	1	Y	COMBO, ODW-MGDM2C, ODW30-MGDM2CI
		36104-0011602-00	ABS(WH-1404A) MINI 2 COMBO			COMBO, DWM30-M2CW
		36104-0011500-00	WHITE, MINI-II WASHER			WASH, ODW30-M2WW
		36104-0011501-00	ABS(GY-349A)+SPRAY(SV-2802BP), MINI-II WASHER			WASH, ODW30-M2WS, ODW30-M2WSI
		36104-0011503-00	ABS(WH-1404A)+SPRAY(GD-3703BP), MINI-II WASHER			WASH, ODW30-M2WG
		36104-0011502-00	ABS(GY-349A)+SPRAY(SV-6501BP), MINI-II WASHER			WASH, DWM30-M2WV

6. DUCT *B AS(OPTION: COMBO)



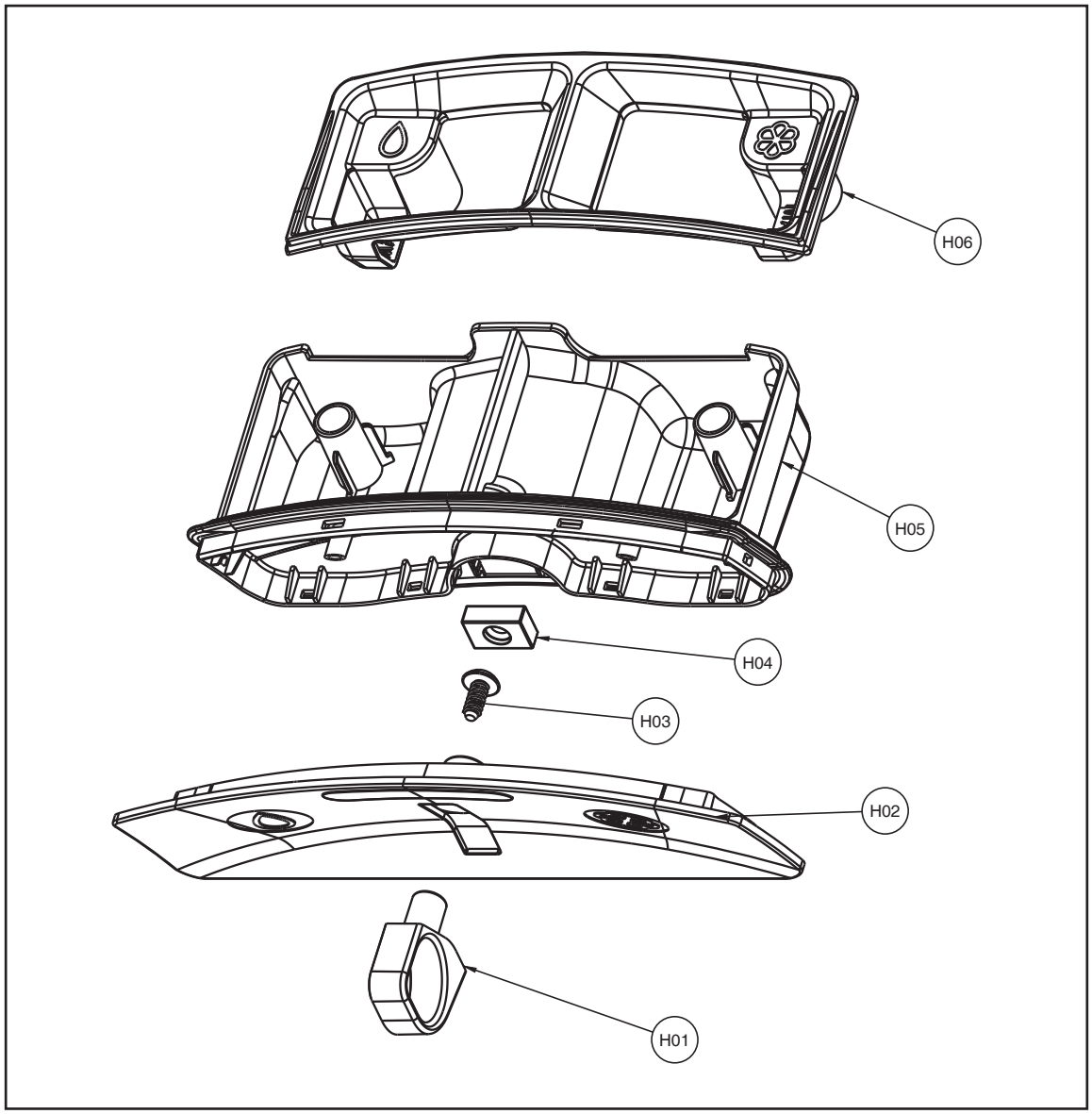
NO.	PART NAME	PART CODE	DESCRIPTION	Q'TY	SVC	REMARK
F01	DUCT_B_AS	36171-0006500-00	220V, ALCOSTA, GF+PET, MINI-II	1	Y	COMBO
F02	DUCT_B_LOWER_AS	36171-0006200-00	DUCT *B SEAMING JIG	1	Y	COMBO
F03	DUCT_B_LOWER	36171-0005900-00	ALCOSTA 0.6T MINI-II COMBO	1	Y	COMBO
F04	HEATER_DRY	66127-0002200-00	220V 1050W, TERMINAL ANGLE 90, INCOLOY800	1	Y	COMBO
F05	SCREW_TAPPING	7122400811	T2S TRS 4X14 MFZN	3	Y	COMBO
F06	SCREW_TAPPING	7122401011	T2S TRS 4*10 MFZN	1	Y	COMBO
F07	COVER_DUCT	36113-0032200-00	ALCOSTA 0.6T MINI-II COMBO	1	Y	COMBO
F08	GASKET_SEAL	36123-0009601-00	EPDM FOAM, 3TX8X380, MINI-II	1	Y	COMBO
F09	GASKET_SEAL	36123-0009701-00	EPDM FOAM, 3TX8X165, MINI-II	1	Y	COMBO
F10	GASKET_SEAL	36123-0009900-00	EPDM FOAM, 3TX8X25, MINI-II	1	Y	COMBO
F11	SWITCH_THERMOSTAT	66148-0006100-00	SWITCH THERMOSTAT, PACIFIC CONTROLS, 115°C/130°C, MINI 2.0	1	Y	COMBO
F12	SCREW_TAPPING	7122401011	T2S TRS 4*10 MFZN	2	Y	COMBO
F13	HARNESS SUB	66126-0022602-00	UL1015 AWG18 90MM #250 FLAG, HEATER DRY-THERMOSTAT	1	Y	COMBO
F14	FUSE-TEMPERATURE	66122-0000501-00	FUSE TEMPERATURE, 141°C, DONGYANG, 15A 250V, MINI 2.0, 400MM	1	Y	COMBO
F15	SUPPORTER_FUSE	36147-0006300-00	SBHG 16X16.9X8.8 1.0T EURASIA COMBO	1	Y	COMBO
F16	SCREW_TAPPING	7122401011	T2S TRS 4*10 MFZN	1	Y	COMBO
F17	GASKET_SEAL	36123-009101-00	High density EPDM FOAM, 5TX12X140, MINI-II	1	Y	COMBO
F18	COVER_FAN	36113-0032300-00	PA66+GF30% MINI-II COMBO	1	Y	COMBO
F19	UNIT_FAN_MOTOR_AS	66149-0008606-00	FAN MOTOR, NAKAGAWA, DR7806SSWC/W 17.5VDC, 1700RPM, 1.6A,CCW	1	Y	COMBO
F20	SCREW_TAPPING	7122401011	T2S TRS 4*10 MFZN	3	Y	COMBO
F21	BUSHING_SHAFT	36107-0000800-00	PC T=0.2, DO=17, DI=8 EURASIA COMBO	1	Y	COMBO
F22	SEAL_FAN	36189-0001400-00	NBR HS50 DI7.4 H5.2-6.5 EURASIA COMBO BLACK	1	Y	COMBO
F23	FAN_AS	36117-0001100-00	PA66+GF30% MINI-II COMBO	1	Y	COMBO
F24	GASKET_SEAL_ SILICONE	36123-0008900-00	SILICON, 6.5X4X200, MINI-II	1	Y	COMBO
F25	NUT_HEX	90003-0005200-00	NI-ZN PLATED M6*1 CW	1	Y	COMBO
F26	GASKET_SEAL_ SILICONE	36123-0008800-00	SILICON, 6.5X4X530, COVER FAN, MINI-II	1	Y	COMBO
F27	GASKET_SEAL_EPDM	36123-0009001-00	EPDM FOAM, 10TX12X110, MINI-II	1	Y	COMBO
F28	SCREW TAPPING	7122401011	T2S TRS 4*10 MFZN	8	Y	COMBO
F29	DUCT_GUIDE_UPPER	36171-0006000-00	EPDM FOAM, 5TX12X90, MINI-II	1	Y	COMBO
F31	DUCT_GUIDE_LOWER	36171-0006100-00	PA66+GF30% MINI-II COMBO	1	Y	COMBO
F32	PACKING_DUCT_ GUIDE	36137-0023000-00	SILICONE MINI-II COMBO	1	Y	COMBO
F33	SCREW TAPPING	7122401411	T2S TRS 4X14 MFZN	2	Y	COMBO
F34	PROTECTOR_DUCT	36185-0006000-00	SGCC 0.5T, MINI-II	1	Y	COMBO
F35	SCREW_TAPPING	7122401011	T2S TRS 4*10 MFZN	2	Y	COMBO
F36	PACKING-THEMISTOR	36137-0022900-00	SILICON MINI-II COMBO	1	Y	COMBO
F37	THERMISTOR_DRY	361AAAAC00	R40=26.065kΩ,R90=4.4278kΩ	1	Y	COMBO

7. DUCT PIPE AS(OPTION: COMBO)



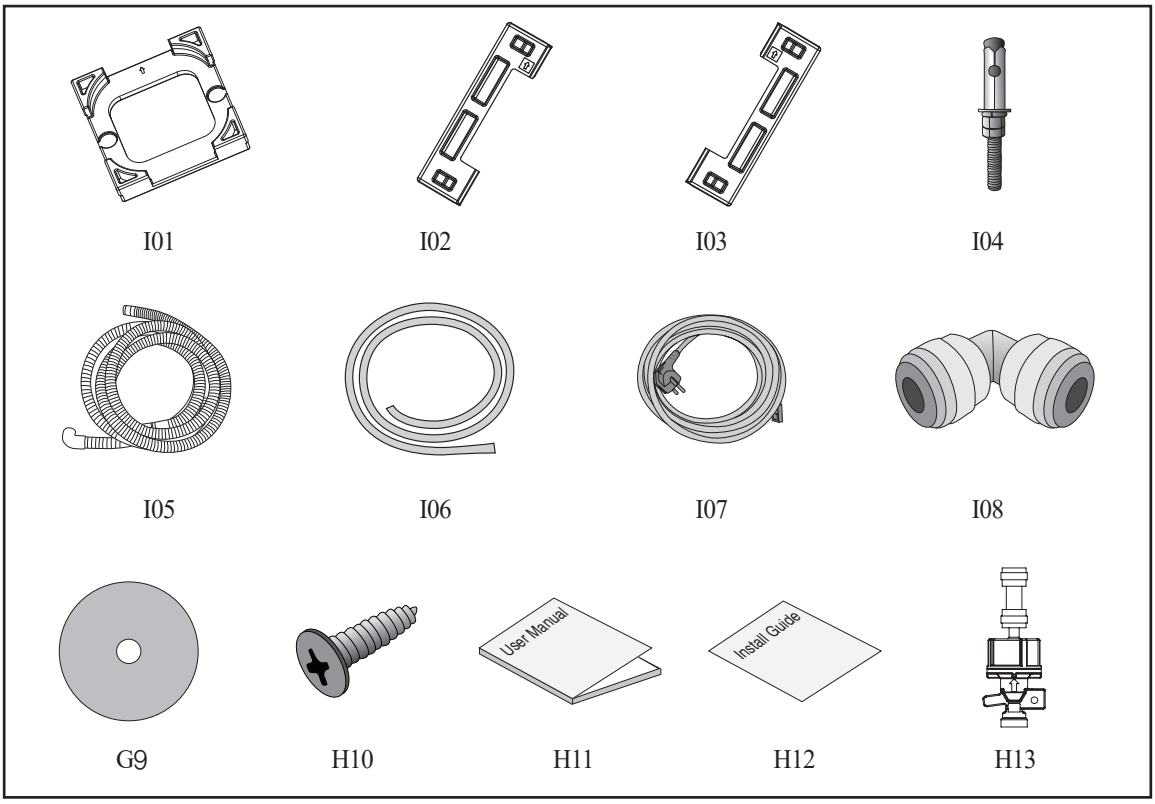
NO.	PART NAME	PART CODE	DESCRIPTION	Q'TY	SVC	REMARK
ASSY	DUCT PIPE AS	36171-0006400-00	DUCT PIPE AS, MINI-II COMBO	1	Y	COMBO
G01	DUCT PIPE SUB AS	36171-0006300-00	MINI-II COMBO	1	Y	COMBO
		36171-0005700-00	PP MINI-II COMBO	1	Y	COMBO
		36171-0005800-00	PP MINI-II COMBO	1	Y	COMBO
G02	BELLOWS DUCT	36156-0001000-00	EPDM MINI-II COMBO	1	Y	COMBO
G03	CLAMP AS	36111-0012500-00	ID55, WIRE CLAMP MINI-II	1	Y	COMBO
G04	CLAMP AS	36111-0012600-00	ID49, WIRE CLAMP, MINI-II	1	Y	COMBO
G05	GASKET SEAL	36123-0008400-00	EPDM MINI-II COMBO	1	Y	COMBO

8. CASE DETERGENT AS



NO.	PART NAME	PART CODE	DESCRIPTION	Q'TY	SVC	REMARK
ASSY	CASE DETERGENT AS	36110-0066800-00	DIGI/SILVER, MINI-II,	1	Y	
H01	HANDLE DETERGENT AS	36125-0009900-00	SPRAY, SV-4705BM+CLEAR, MINI-II	1	Y	
H02	CASE HANDLE	36110-0065700-00	ABS MINI-II	1	Y	
H03	SCREW TAPPING	7112401208	T1 TRS 4X12 SUS	1	Y	
H04	MAGNET	36197-0000200-01	ND TYPE, 15X10X5T MINI-II	1	Y	
H05	CASE DETERGENT	36110-0065600-00	PP+M/BATCH (WH1802A)	1	Y	
H06	CAP SOFTENER	36109-0013100-00	PP+M/BATCH (BLUE)	1	Y	

9. PACKING AS



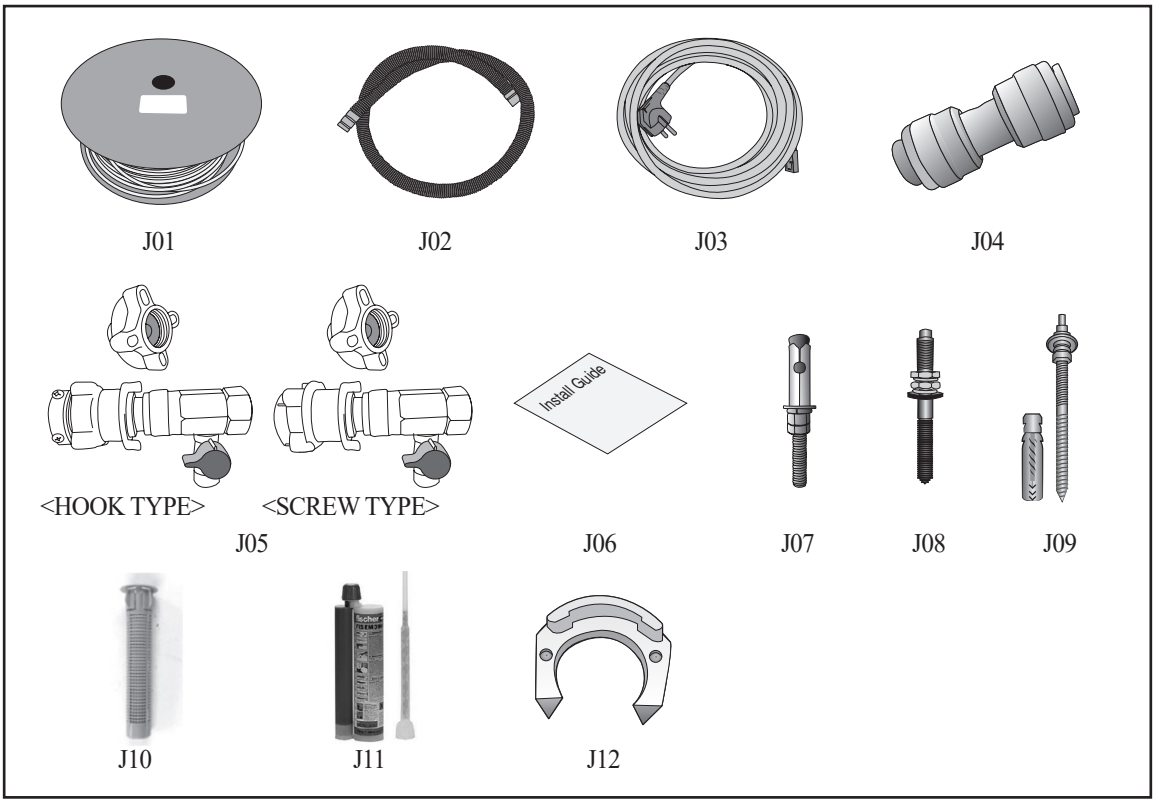
I01 I02 I03 I04

I05 I06 I07 I08

G9 H10 H11 H12 H13

NO.	PART NAME	PART CODE	DESCRIPTION	Q'TY	SVC	REMARK
I01	CUSHION BOTTOM AS	36114-0030300-00	MINI-II COMBO	1	Y	
		36114-0030200-00	MINI-II WASHER	1	Y	
I02	CUSHION SHOULDER_LEFT	36114-0029500-00	EPS, ER:55, 234X694X355, MINI-II COMBO	1	Y	
		36114-0029400-00	EPS ER:55 648X179X234 MINI-II WASHER			
I03	CUSHION SHOULDER_RIGHT	36114-0029500-00	EPS, ER:55, 234X694X355, MINI-II COMBO			
		36114-0029400-00	EPS ER:55 648X179X234 MINI-II WASHER			
I04	SPECIAL BOLT AS	3616067100	ANCHOR BOLT AS 3/8"(M10),SAE 1008B,L=6"/ BASIC, P/W 2T 30MM	4	Y	
I05	HOSE DRAIN *O AS	36131-0009404-00	D-M300. PE-LD, L=2.5M, CLAMP, ID=14,OD=18	1	Y	
I06	HOSE INLET AS	3613270995	HOSE INLET AS D-M300. DFE04 LLDPE ID=4,OD=6, L=5000	1	Y	
I07	CORD POWER AS	66112-0000808-00	LSG-31L, CHINA, 250V,10A,FUSE(15A), EARTH@ CORE, 2.5M, WH	1	Y	-
I08	ELBOW UNION	3612512800	ELBOW UNION D-M300, AEU0404W 1/4' DMT	3	Y	
I09	CUSHION PAD	3611535360	CUSHION PAD D-M300, EPDM 3T ID=10, OD=70	4	Y	
I10	SCREW TAPPING	7115401629	SCREW TAPPING T1 FLT 4X16 SUS	4	Y	
I11	MANUAL OWNERS	36136-0009700-00	WFCM211D1NN01BCCW, CHINA, MINI-II	1	Y	ODW-MGDM2C, ODW30-M2CV
		36136-0009701-00	CHINA (OFF-LINE), MINI 2 COMBO			DWM30-M2CW
		36136-0009702-00	MINI 2 IOT, COMBO, CCC			ODW30-MGDM2CI
		36136-0009600-00	WFWM211C0NN01BCCW, MINI-II			ODW30-M2WW, ODW30-M2WS, ODW30-M2WG
		36136-0009601-00	CHINA (OFF-LINE), MINI 2 WASHER			DWM30-M2WV
		36136-0009602-00	MINI 2, IOT, WASHER, CCC			ODW30-M2WSI
I12	MANUAL GUIDE	36136-0000104-00	CHINA, 120 Vellum paper, MINI	1	Y	
I13	VALVE CHECK UP	66150-0003401-00	CHECK VALVE + FILTER, 1/4", POM, MINI	1	Y	

10. FURTHER PARTS FOR INSTALL



J01 J02 J03 J04

<HOOK TYPE> <SCREW TYPE>

J05 J06 J07 J08 J09

J10 J11 J12

No.	PART NAME	PART CODE	DESCRIPTION	Q'TY	SVC	REMARK
J01	HOSE INLET	3613270980	DFE04 LLDPE ID=4,OD=6	1	Y	300M/1Roll
J02	HOSE DRAIN *O	3613275839	SVC,D-M300. PE-LD, ID=14,OD=18,L=1M	1	Y	
J03	POWER CORD AS	66112-0000808-00	LSG-31L, CHINA, 250V,10A,FUSE(15A), EARTH@CORE, 2.5M, WH	1	Y	
J04	CONNECTOR	3612512810	UNION CONNECTOR D-M300, AUC0404W 1/4' DMT	1	Y	
J05	HOSE INLET AS	3613278000	ADAPTER INLET VALVE AS D-M300, HOOK TYPE	1	Y	
		3613279000	ADAPTER INLET VALVE AS D-M300, SCREW TYPE			
J06	MANUAL GUIDE	36136-0000104-00	CHINA, 120 Vellum paper, MINI	1	Y	
J07	SPECIAL BOLT AS	3616067100	ANCHOR BOLT AS 3/8"(M10),SAE 1008B,L=6"/ BASIC, P/W 2T 30MM	4	Y	
J08	ANCHOR BOLT	361A2-0000100-00	3/8"(M10),SUS,L=8"/OPTION, P/W 2T 30MM,LOCK NUT	4	Y	
J09	SPECIAL BOLT AS	36198-0012100-00	3/8"(M10),SUS,L=8"/OPTION, P/W 2T 30MM,LOCK NUT UX 14 X75 / FISCHER/ MINI DRUM	4	Y	
J10	ANCHOR NET	361A2-0000300-00	FIS H16 X 85K MINI DRUM	4	Y	Used with J08
J11	CHEMICAL	36160-0000100-00	FIS VS 360S	1	Y	
J12	LOCK CLIP	36181-0001400-00	POM 1/4" BLUE MINI	1	Y	

4. PCB Functions

1. Cycle Programs

1-1. SEQUENCE CHART (MINI 2.0, CHINA)

CATEGORY		TIME (min)	Normal	Delicate	Night	Quick Wash	Spin	Tub Clean (WASH)	Baby Care (90min)	Intensive (40°C)	Organic	Cotton Dry	Wash & Dry	Air Refresh	Tub Clean (COMBO)
WASH		2				2			2						
	Water Supply	2	2	2	2			2		2	2		2		2
		2													
		2													
	Wash1 (Before-Heating)	2/4/5	3	5	5	3		5	2	4	2		3		5
	Wash2 (Heating)							40°C	87°C		40°C				40°C
		47						15	47	15	24				15
	Wash3 (After-Heating)														
		4	3										3		
								5							5
		6		6											
		7			7										
		8													
		9													
		10							11						
		13								21					
Wash Time			0:08	0:13	0:14	0:05	0:00	0:27	1:02	0:42	0:28	0:00	0:08	0:00	0:27
RINSE	Drain	1	1	1	1	1		1	1	1	1		1		1
	B Spin														
		1	1	1	1	1		1	1	1	1		1		1
	Middle Spin														
		2		1											
		2			1						1				
		2	1			1		1	1	2			1		1
	Water Supply	2	2	2	2	2		2	2	2	2		2		2
	Rinse 1														
		1/2	2	2	2	1		2	2	5	2		2		2
	Drain	25.80													
		1	1	1	1			1	1	1	1		1		1
	B Spin														
		1	1	1	1			1	1	1	1		1		1
	Middle Spin														
		2		1											
		2			1						1				
		2	1					1	1	2			1		1
	Water Supply	2	2	2	2			2	2	2	2		2		2
	Rinse 2														
		2	2	2	2			2	2	5	2		2		2
	Drain	1			1				1	1	1				
	B Spin														
		1			1				1	1	1				
	Middle Spin														
		2													
		2			1						1				
		2							1	2					
	Water Supply	2			2				2	2	2				
	Rinse 3														
		2			2				2	5	2				
Rinse Time			0:14	0:14	0:21	0:06	0:00	0:14	0:21	0:33	0:21	0:00	0:14	0:00	0:14
SPIN	Drain	1	2	2	2	1	1	2	2	2	2		2		2
	B Spin														
		1	1	1	1			1	1	1	1		1		1
	Main Spin														
		3		3											
		2			3						3				
		2/3	3			2	3	3	3	3			3		3
	Crease Care														
		1	1	1	1		1	1	1	1	1				
Spin Time			0:07	0:07	0:07	0:04	0:06	0:07	0:07	0:07	0:07	0:00	0:06	0:00	0:06
DRY	Dry	30, 90													
		30												35	
		59, 90										59	60		25
	Cooling	5													
Dry Time			0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:59	1:00	0:35	0:25
Total Time			0:29	0:34	0:42	0:15	0:06	0:48	1:30	1:22	0:56	0:59	1:28	0:35	1:12

1-2. Button Functions

No.	Buttons	Functional Description	Note
1	Power	When the power button is turned off, the power relay is cut offto sever the common line for electric supply and, accordingly,ensure electrical safety.	
2	Program	ON-LINE (CHINA) Washer : NORMAL → DELICATE → SPIN → BABY CARE → Speed Wash → INTENSIVE → ORGANIC → TUB_CLEAN Combo : NORMAL → DELICATE → SPIN → BABY CARE → Cotton Dry → Speed Dry → AIR REFRESH → TUB_CLEAN OFF-LINE (CHINA) Washer : NORMAL/DELICATE → NIGHT TIME → SPIN → BABY CARE → Speed Wash → INTENSIVE → ORGANIC → TUB_CLEAN Combo : NORMAL/DELICATE → INTENSIVE → SPIN → BABY CARE → Cotton Dry → Speed Dry → AIR REFRESH → TUB_CLEAN	
3	Add Rinse	Up to 8 cycles are addable for "BABY CARE, NIGHT TIME, INTENSIVE, TUB CLEAN" Up to 7 cycles are addable for "NORMAL, DELICATE, ORGANIC, WASH&DRY" Up to 5 cycles are addable for "QUICK WASH, SPIN"	
4	Start/Pause	The LED lamp for 'Program' button flickers duringand remains on when the washer stops the cycle.	
5	Time Delay	Up to 18 hours are selected by pressing the 'Time delay button'	MINI 2.0 WASHER
6	DRY	AUTO(59min, 120min, 180min) → 30min → 59min → 90min → 2H → 3H	MINI 2.0 COMBO

2. Program Functions

2-1. Wash Program

1) Wash Programs

① The default washing times and water levels apply for all the programs without sensing the load.

2) Wash Times

1. MINI 2.0

CATEGORY / PROGRAM	WATER LEVEL	TIME OF WATER SUPPLY	WASH1 (BEFORE-HEATING) (min)	WASH2 (HEATING) (min)	WASH3 (AFTER-HEATING) (min)	TOTAL WASH TIME (min)
NORMAL	DEFAULT	2	3	0	3	8
DELICATE	DEFAULT	2	5	0	6	13
NIGHT	DEFAULT	2	5	0	7	14
QUICK WASH	DEFAULT	2	3	0	0	5
TUB CLEAN(WASH)	DEFAULT	2	5	15	5	27
BABY CARE	DEFAULT	2	2	47	11	62
INTENSIVE	DEFAULT	2	4	15	21	42
ORGANIC	DEFAULT	2	2	24	0	28
WASH & DRY	DEFAULT	2	3	0	3	8
TUB CLEAN(COMBO)	DEFAULT	2	5	15	5	27

* Washing time after the water temperature reaches the target level.

① The washing time consists of heating cycle and post-heating main wash cycle. The time displayed for heating cycle elapses immediately on completion of heating cycle or remains unchanged until the heating cycle is over.

② The heating cycle is complete when the water temperature reaches the target level.

- If the water temperature doesn't reach the target level after the heating cycle under the TUB CLEAN, BABY CARE, INTENSIVE, ORGANIC, program, the time on display stops declining and an additional heating cycle applies for 10 minutes. If the water temperature doesn't reach the target level after the additional cycle, the heating cycle is suspended and the main wash cycle starts.

③ The water heater does not resume its operation after it is turned off when the water temperature reaches the target level.

3) Resupply of Water

① The water level is measured every two minutes after the initial water supply to add water if the level is lower than the pre-determined level.

② The motor stops running during the resupply of water.

③ Water is resuppliable up to 20 times during wash. On the occurrence of the 21st water supply, the "E4" error is displayed and the wash cycle is suspended. → This error doesn't usually take place because of the short duration of wash program.

- Start the pump on the occurrence of the "E4" error.

④ If the water level is below the reset level during the resupply of water, the 'IE' error is displayed and the heater is turned off.

4) Detection of Overflow

① The water level is measured every two minutes after the initial water supply to drain water if the level is above the overflow level.

② If the water level is measured above the overflow level three times, the 'E3' error is displayed and the wash cycle is suspended. However, the water continues to be drained.

③ If the water level is first measured to be above the overflow level during the "Baby Care" program, the heating cycle is skipped. The 'E3' error is displayed on the third occurrence of overflow detection, and the wash cycle is suspended. However, the water continues to be drained.

④ If the water level is measured to be above the overflow level when the wash cycle is suspended, the 'E2' error takes place but the water continues to be drained.

5) Water Level for Heating Cycle

① If the water level is measured below the preset level, the heater is turned off to prevent overheating or short circuit during the heating cycle.

2-2. Rinse Cycle

1) Drainage
① If the water is 55°C or hotter, cold water is added to lower the water temperature. When the water temperature decreases to 50°C or lower, water drainage resumes.
② After the water drainage starts, the drain pump continues to work.
③ If the water level lowers to the reset level within 60 seconds, the waiting time of 20 seconds applies. Otherwise, the waiting time of 40 seconds applies.

2) Intermediate Spin
① Intermediate spin is run at the pre-determined speed for each program.

Category / Program	RPM
NORMAL	700
DELICATE	400
NIGHT	500
QUICK WASH	700
SPIN	700
TUB CLEAN(WASH)	700
BABY CARE	700
INTENSIVE	700
ORGANIC	400
WASH & DRY	700
TUB CLEAN(COMBO)	700

3) Water Supply
① Only cold water is supplied to the rinse cycle.
② Fabric softener is added to the final rinse cycle.

4) Resupply of Water
① The water level is measured a minute after the rinse cycle starts to determine whether water needs to be added to raise the water level to the preset level.

2-3.Spin Cycle

1) Drainage
① It is equivalent to the drainage cycle for rinsing.

2-3.Spin Cycle

1) Termination of Door Lock
① After the electric signal to door lock is cut off, the door is shaken horizontally until it becomes mechanically openable.

3. Functional Structure

3-1. Water Supply Level

1) Water Supply Level

① RESET
: It is the water level to start drainage. The spin cycle starts 30 seconds after the reset level is reached. It is the minimum water level to start operating the heater.

② HEATER OFF
: It is the minimum water level to start operating the heater. The heater starts running only when the water level is above this measure.

③ Wash Low: Water level for Baby Care program.

④ Wash Mid: Water level Normal, Delicate, Night time.

⑤ Wash HIGH: -

⑥ LOCK OFF (Water level to unlock door)
: Water level to enable to open the door

⑦ LOCK ON (Water level to lock door)
: Water level to lock the door automatically due to the water in the tub.

⑧ Overflow Level
: Water level to start draining water due to overflow risk. The water supply is suspended and the water is drained to lower the level to the reset level if the overflow level is reached.

3-2. DOOR S/W

1) DOOR S/W

① Locking of Door
When the door is closed, the door is locked automatically.

② Unlocking of Door
In case of power "ON": After pressing the "Door open button",the door is opend.

③ The wash cycle is startable as the motor and other parts become available for operation when the door is locked.

④ The door is locked when the water is measured at 61°C or hotter or the water level is above the safety level after the Power button is turned on.

⑤ The door is unlocked promptly after the cycle is cpomplete. and then the door is opened.

⑥ The door is unlocked if it is openable when the cycle is suspended.

3-3. Child Lock

1) Mechanism

① If the 'Course' button is pressed(press it for over 1.5 second), the Child Lock mode starts running.

② In the Child Lock mode, all buttons except the Power button (press it for over 1.5 seconds) are unavailable for use.

③ The Child Lock mode is terminated if the 'Program' and 'Add Rinse' buttons are pressed simultaneously.

④ If the Power button is pressed for over 1.5 seconds, the Child Lock mode is terminated.

4. TEST MODE

4-1. Part Test Mode

1) Test Start

① Press the 'Course' button and then select 'Delicate' program. With the 'Course' button pressed, press the 'Rinse+' button three times to start a test.

② The product version is displayed after starting a test.

③ Press the 'Course' button to run the washer in the following sequence.

Sequence	Description	Display	Note
1	Water Level	23.41kHz => 3, 41	
2	Wash Temp Sensor	°C	
3	Dry Temp Sensor	°C	
4	IPM Temp Sensor	°C	
5	DC LINK Voltage	Voltage	
6	SOFTNER SWITCH OPEN/CLOSE	SO/SC	
7	DETERGENT SWITCH OPEN/CLOSE	dO/dC	
8	DRAIN SWITCH OPEN/CLOSE	rO/rC	
9	Wash Heater	H2	3s ON
10	Dry Heater	H1	3s ON
11	COLD VALVE	C	
12	SOFTNER VALVE	r	
13	DRAIN MOTOR	dr	
14	DRY VALVE	d	
15	OPTION VALVE	OP	
16	DETERGENT MOTOR	dt	
17	SOFTNER MOTOR	SF	
18	UV LAMP	UL	
19	--	--	
20	Motor rotation direction: Clockwise	rr	
21	--	--	
22	Motor rotation direction: Counterclockwise	LL	
23	--	--	
24	DOOR LOCK	LC/LO	
25	DRY FAN	F	COMBO

5. Error Alerts

5-1. IE (Input Error) Error - Failure in Water Supply

1) Conditions
   ① The preset water level is not reached within 15 minutes after the water supply starts or resumes.
   ② During wash: The error occurs 2 minutes after the water level remains unchanged or 15 minutes after the water level starts changing.
   ③ During rinse: The error occurs 15 minutes after the cycle starts.

2) The "LE" error flickers on the display panel.

3) If the Power button is turned off and on, the error display disappears.

5-2.OE (Output Error) Error - Failure in Water Drainage

1) Conditions
   ① The preset water level is not reached within 10 minutes after the water starts being drained.
   ② Overload situations caused by failures in drainage take place 18 times during the final main spin cycle.

2) The "LE" error flickers on the display panel.

3) If the Power button is turned off and on, the error display disappears.

5-3. LE (Lock Error) Error - Failure in Door Unlocking

1) Conditions
   ① The Start/Pause button is pressed to run the cycle when the door is open.
   ② The error disappears promptly when the door is closed and the subsequent cycle starts.

2) The "LE" error flickers on the display panel.

3) If the Power button is turned off and on, the error display disappears.

5-4. E1 Error - Error in Water Level Detection

1) Conditions
   ① The water level is below the reset level or above the overflow level in the line test mode.

2) The drainage synchronous motor continues to work until the water level drops to the reset level.

3) If the Power button is turned off and on, the error display disappears.

5-5. E2 Errors - Overflow Error

1) Conditions for E2
   ① The water supply valve is running when the washer is turned off and the operation is suspended so that the water level reaches the overflow level.
   ② If the errors are detected two times or more during operation, the '2' error appears on the display panel. The operation is suspended, but water continues to be drained.
   ③ The drainage synchronous motor continues to work until the water level drops to the reset level.
   ④ If the water is not drained until the water level drops to the reset level, the 'E2' error appears on the display panel.

2) The drainage synchronous motor continues to work until the water level drops to the reset level.

3) The "E2" error flickers on the display panel.

4) If the Power button is turned off and on, the error display disappears.

5-6. E9 Error - Error in water level sensor

1) Conditions
   ① The water level sensor transmits a frequency of 19KHz or lower or 28KHz or higher due to malfunctions.

2) The "E9" error flickers on the display panel.

3) The error warning is sounded for 10 seconds every 10 minutes.

4) If the water level sensor transmits a frequency is 21KHz or lower or 29KHz or higher, the error display disappears.

5-7. E3 Error - Error in Fan motor

1) If The Fan motor is not operated by some problem, the error occurs.

2) The fan motor stops running and the 'E3' error appears on the display panel.

3) If the Fan motor is operated, the error display disappears.
   * Situation : the 'E3' error appears on the display panel.
     Cause: Fan motor can not work. (Fan motor failure)
     countermeasures: Replace the Fan motor.

5-8. Errors in Motor

1) b1 Error (Error in HALL IC signals)

2) b2 Error (EMG or IPMFAULT)
   ① The error occurs when electric current of 15A or higher flows into the shunt resistance of IPM-MODULE. The function is to protect PCB from the motor overheating.
   ② The motor stops running, and 30 retrials are made. Then, the 'b2' error appears on the display panel.
   ③ If the Power button is turned off and on, the error display disappears.

3) b3 Error (Motor overload error)

4) b4 Error (Failure in motor arrangement)

5) b5 Error (Failure in tracking the motor speed)

6) b6 Error (Error in DC LINK overvoltage)

7) b7 Error (Error in DC LINK low voltage)

8) b8 Error (Failure in starting motor)
   ① The error is caused by failure to rotate the motor due to the initial overrunning of motor.
   ② The motor stops running, and 30 retrials are made. Then, the 'b8' error appears on the display panel.
   ③ If the Power button is turned off and on, the error display disappears.

'b1', 'number'	Number of hall sensor errors
'b2', 'number'	Number of IPM fault errors
'b3', 'number'	Number of motor overload errors
'b4', 'number'	Number of errors in motor arrangement
'b5', 'number'	Number of failures in tracking the motor speed
'b6', 'number'	Number of errors in DC LINK overvoltage
'b7', 'number'	Number of errors in DC LINK low voltage
'b8', 'number'	Number of failures in starting motor

5-10. Errors in Temperature Sensor

1) H1 Error - Open/Short error in Dry temperature sensor (Available for COMBO model only)
   ① The Dry temperature sensor fails to work or is not properly connected.
   ② The error warning is sounded for 10 seconds every 10 minutes.
   ③ If the Power button is turned off and on, the error display disappears.

2) H2 Error - Open/Short error in washer temperature sensor
   ① The washer temperature sensor fails to work or is not properly connected.
   ② The error warning is sounded for 10 seconds every 10 minutes.
   ③ If the Power button is turned off and on, the error display disappears.

3) H4 Error - Overheated washer temperature sensor
   ① The sensor temperature turns out to be 125°C or higher.
   ② If the Power button is turned off and on, the error display disappears.

4) H5 Error - Error in water temperature for Delicate program
   ① The water temperature is 45°C or higher in the Delicate program. (The error occurs during operation only when the tub contains water)
   ② If the Power button is turned off and on, the error display disappears.

5) H6 Error - Malfunction of water heater
   ① The water temperature fails to rise by 2°C within 30 minutes after the heater starts running.
   ② If the Power button is turned off and on, the error display disappears.

6) H8 Error - Overheated water heater
   ① The water temperature rises by 6°C or more within 30 seconds after the heater starts running due to the lack of water in tub or other reasons.
   ② The water heater doesn't operate although it is functional. The washer is running with the heater turned off.

6. IoT Functional Specifications

6-1. App installation

• Alibaba Smart Living service is optimized for the following specifications, and may not support all features depending on the user's smartphone. This app is available regardless of service provider.

Classification	Contents
Android	测试安卓系统4.4以上
iOS	测试ios系统8.0以上

* Please note the following before connecting to the Alibaba Smart Living service.

• To use Alibaba Smart Living service, Wi-Fi router must be installed where washing machine is used.

• To set up the connection, the washing machine, router, and smartphone should be within 10m of each other. (Any obstacles between the washing machine, smartphone, and the wireless router may impede reception .)

• Before setting up the connection, please check your router password.

• For some smartphone users, if the function to block wireless modules is activated automatically, please deactivate the function. (If the function blocking Wi-Fi module without Internet connection is activated, it may delay connecting to Alibaba Smart Living service.)

• You can turn on the function after successfully setting up the connection to Alibaba Smart Living service.

1) Download and install the Alibaba Smart Living app by scanning the QR code printed on the cover of the user manual or on the package.

2) Run Alibaba Smart Living service app and sign up.

• Please check supported router specifications (802.11b/g/n 2.4GHz).

• Go to the advanced Wi-Fi setting on the smartphone and deactivate if there is a function related to "automatically disconnecting from poor Wi-Fi connections".

• Go to the advanced Wi-Fi setting on the smartphone and check "all" the functions related to the "signal strength".

• If you are using any auto Wi-Fi connection manager, please deactivate the function.

• If the Wi-Fi router does not support dual bands, choose "Wi-Fi 2.4GHz" not "Wi-Fi 5GHz".

• Alibaba Smart Living service app design and specifications are subject to change for quality improvement without notice.

* To register or connect your smartphone, please refer to the "Setting up the Alibaba Smart Living service connection" page.

* Before setting up the connection, please check your router password.

6-2. How to register, connect and use the app

How to login, register, connect, and use the app

How to connect and register the app with mini smart washing machine.

① log-in

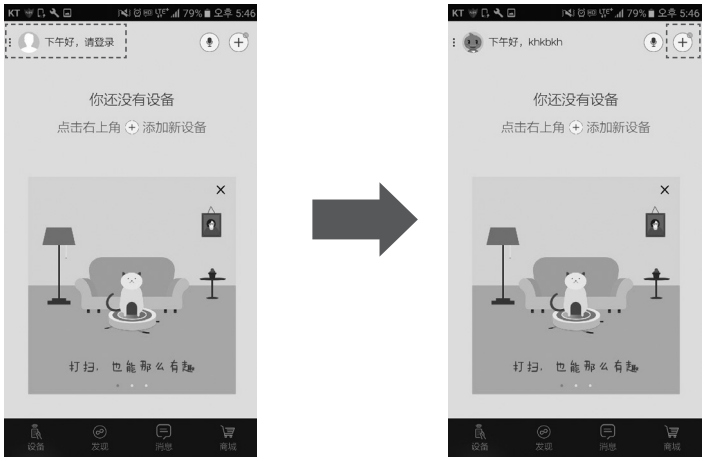
→ Touch the marked area, enter member ID and password and press Log-in.

※ **If you did not register yet, please register first.**

② After logging in/Washing machine registration preparation

→ After logging in, member ID will be displayed.

→ After logging in, touch the marked area. (You are ready to register your mini-drum washing machine.)



③ Registering the machine (preparation)

→ Press the marked area to register the machine.

④ Machine registration (search by type)

→ Press the marked “Search by type” icon.

Tip

Note: When pressing each button, please carefully read and follow the instructions and notices displayed on the screen.

⑤ Machine registration (Selecting your machine type)

→ On the list of types, find and choose the washing machine.

⑥ Machine registration (selecting model name)

→ Choose the appropriate model that you purchased
Ex) If you bought ODW30-MGDM2CI, choose the appropriate model name.

⑦ Connecting the washing machine to the smartphone.

→ Follow the instructions on your smartphone and connect the washing machine.

→ After setting up the connection, press next.

* Turn the washing machine on, press “Course” button, select ‘Quick Wash’, and press ‘Dry’ button three times. This will turn on the Wi-Fi connection status LED and start the pairing process.
* The Wi-Fi status LED will not be turned off during the pairing process, and will remain on when connected successfully.
* When the connection fails and Wi-Fi status LED is blinking at a one second interval, refer to “Reset” page.
* If your smartphone is using a function to connect to the mobile network when connected to poor Wi-Fi connections, deactivate the function.

Tip

Note: When pressing each button, please carefully read and follow the instructions and notices displayed on the screen.

⑧ Selecting/Registering AP(wireless router)

→ Select Access Point of your Wi-Fi router, and enter the password. After filling it in, press ‘search devices’.

※ Caution: Connect to the router installed in the user’s house. If there is more than one router in your home, connect to the router connected to your smartphone.

⑨ Connecting to Access Point(Router) and Registering device.

→ The connection will be made automatically. The Wi-Fi status LED will not be turned off during the pairing process, and blink when connected successfully.

⑩ Completion

→ The image below will appear after a successful connection. Now you can control the washing machine inside or outside of your house as you like with Alibaba Smart Living service.

⑪ Brief explanation

ⓐ Model name of the washing machine
ⓑ Explanation of status and options of the selected course.
ⓒ Selecting among various washing cycles of the Washer MINI (You can freely select any washing cycle.)

* Please see the next page for details.

Tip

Note: When pressing each button, please carefully read and follow the instructions and notices displayed on the screen.

Now you can control the washing machine inside or outside of your house as you want.

1. MAIN Setting screen

❶ **Move to the previous page**

❷ **Indicates the currently selected washing mode and option status**
- Display washing cycles, number of rinse cycles, remaining time for the Time Delay.

* This area will be displayed when the washer is running or paused after selecting a washing cycle.

* Pressing the area will open 'Cycle operation' page.

❸ **Selecting a washing cycle**
- You can freely select a washing cycle.

* Selecting a cycle will open 'Cycle Setting' page.
When the machine is running, cycle selection is disabled.

❹ **Wi-Fi signal strength**
- Display Wi-Fi signal strength.

2. Cycle Setting screen

*** Cycle Setting is the detailed cycle setting page that appears when a desired washing cycle is selected on the MAIN menu.**

*** The cycle setting page below is accessed by selecting NORMAL cycle on the MAIN menu for easy understanding.**

❶ **Washing Cycles**
- Display the name of selected washing cycle.

❷ **Number of Rinse cycle display**
- Display the number of Rinse cycles of the selected washing cycle.
(If the number of rinse cycles is not changed, it will be set to the default value.)

❸ **Setting the number of rinses.**
- Set the number of rinse cycles of the selected washing cycle.
(For some cycles, the number of rinse cycles cannot be changed.)

❹ **Start the selected washing cycle.**
- When the button is pressed, the washing cycle will begin, and 'Cycle Operation' page will be displayed.

Tip

Note: When pressing each button, please carefully read and follow the instructions and notices displayed on the screen.

3. Cycle Operation

❶ Remaining Time
- Display remaining time to complete the washing cycle.

❷ Current status of the washing cycle
- Display current status of the ongoing washing cycle.
ex) water supply, washing, drain, etc.

❸ CHILD LOCK ON/ON
- Use the button to block children from operating buttons during the cycle.
- When the function is activated, pause and cancel buttons will be disabled

❹ State of current cycle
- Display current status of the ongoing washing cycle by phase

❺ Cancel
- When the button is pressed, the current washing cycle will be canceled.
※When the button is pressed, MAIN menu will be displayed.

❻ Pause
- When the button is pressed during a cycle, the washing cycle will be paused and Cycle Operation page (Pause) will appear.
※Press the button to change settings or pause an ongoing cycle.

4. Cycle Operation page (Pause)

※ Cycle operation page (Pause) is displayed when the Pause button is pressed during a washing cycle.

❶ Status Display
- Display current status (pausing).

❷ Changing the Number of Rinse cycles
- Change the set value of the set Rinse cycle.
(If the number of rinse cycles cannot be changed on the selected cycle, the number will not change,)

❸ Cancel
- When the button is pressed, the current washing cycle will be canceled.
※When the button is pressed, MAIN menu will be displayed.

❹ Resume
- Press the button to resume the cycle.
※ The cycle will begin with the changed settings.
If no changes were made, the cycle will begin in the phase at which it was paused.

Tip

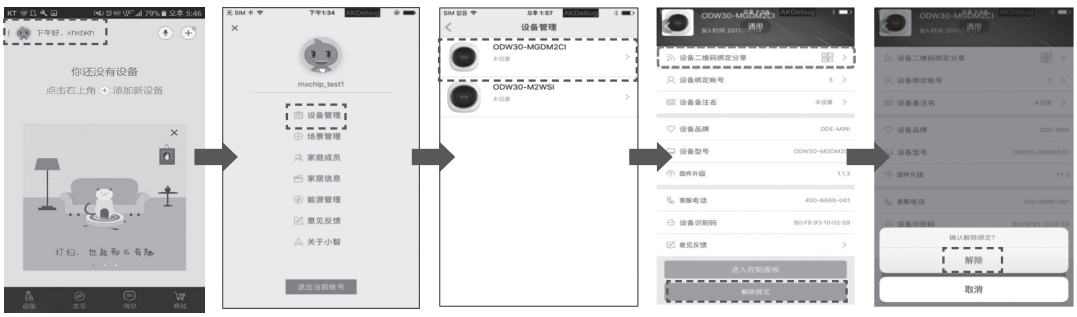
Note: When pressing each button, please carefully read and follow the instructions and notices displayed on the screen.

6-3. Resetting the app

※Resetting

− In case of Alibaba Smart Living service connection failure, wireless router malfunction, or poor reception sensitivity, please follow the instructions below.

1. Disconnecting the washing machine from the smartphone.



① Press the Account button ② Press Device Manager ③ Select the machine to disconnect ④ Press Disconnect ⑤ Remove

* Caution : When the main account (an account with the initial machine connection) is unregistered, secondary accounts (an account connected to machines by scanning the QR code from the main account) will automatically be unregistered.
* Note: How to disconnect machines from secondary accounts:
Follow the above instructions. (However, even if the secondary account is unregistered, the main account or any other accounts will not be unregistered.)

2. Deleting Wi-Fi router's properties

1) Press the 'Course' button and then select 'COMBO:WASH&DRY'(WASHER MODEL: INTENSIVE)' program. With the 'Course' button pressed, press the 'DRY(WASHER MODEL: Time Delay)' button three times to delate Wi-Fi router's properties.
2) Display LED: (PO→TA→TS→82), and then Wi-Fi router's properties are deleted.
※COMBO MODEL: Display LED(PO→TA→TS→AU)

3. Checking, fixing, changing the router or improving the router reception sensitivity.

1) If the wireless router's power is "OFF", turn "ON" the router.
2) If a LAN cable is not properly connected or not connected, please connect the LAN cable properly.
3) If the wireless router is malfunctioning, please fix the router.
4) If possible, set the router's SSID (the name of the router that appears when searching for the Wi-Fi signal) with letters, numbers, or a combination of both.
5) When the reception is poor, check if the router is within 10M from the washing machine, and to enhance the reception sensitivity, remove any obstacles nearby.
* Please check supported router specifications (802.11b/g/n 2.4GHz).
* Go to the advanced Wi-Fi setting on the smartphone and deactivate if there is a function related to "automatically disconnecting from poor Wi-Fi connections".
* Go to the advanced Wi-Fi setting on the smartphone and check "all" the functions related to the "signal strength".
* If you are using any auto Wi-Fi connection manager, please deactivate the function.
* If the Wi-Fi router does not support dual bands, choose "Wi-Fi 2.4GHz" not "Wi-Fi 5GHz".

4. Checking normal operation of the wireless router and resetting.

- After confirming the router's normal operation, please refer to '2) App log-in' page from Connecting to Alibaba Smart Living service page to register the device.

*** If the device registration failure continues, please contact the Dongbu Electronic Service Center ☎ 400-6666-061.**

6-4. View important data

1) How to access

A. When the Course button (Course + rinse button on the IOT models) is pressed for more than 5 seconds, ‘dt’ will be displayed along with a beep sound.

B. You can navigate in the + direction with the ‘Add Rinse’ button, and - direction with the ‘course’ button. The following data will be displayed.

<table>
<tr><th>Order
Rinse Plus : +,
Course : -</th><th>Contents</th><th>Remarks</th></tr>
<tr><td>1</td><td>dt</td><td></td></tr>
<tr><td>2</td><td>L/S</td><td></td></tr>
<tr><td>3</td><td>95rpm U/B</td><td></td></tr>
<tr><td>4</td><td>Laundry temperature</td><td></td></tr>
<tr><td>5</td><td>Dry temperature</td><td></td></tr>
<tr><td>6</td><td>IPM temperature</td><td></td></tr>
<tr><td>7</td><td>Current water level</td><td>2/34 => 22.34kHz</td></tr>
<tr><td>8</td><td>Desired water level</td><td>2/34 => 22.34kHz</td></tr>
<tr><td>9</td><td>Motor On/Off/RPM</td><td>by seconds</td></tr>
<tr><td>10</td><td>DC LINK</td><td></td></tr>
<tr><td>11</td><td>RPM</td><td></td></tr>
<tr><td>12</td><td>Q-side current</td><td></td></tr>
<tr><td>13</td><td>RX error counts</td><td></td></tr>
<tr><td>14</td><td>For debugging</td><td>od : Mode, St : Step, Su : SubStep for debugging</td></tr>
<tr><td>15</td><td>For debugging</td><td>AS : washing time , rI : rinsing time, SP : drain time for debugging</td></tr>
<tr><td>16</td><td>Wi-Fi Received Signal Strength Indicator(RSSI)
* Only applied to IOT MINI DRUM</td><td>When remote control is activated (Wi-Fi ON), Wi-Fi reception sensitivity and connection status will be displayed as below.
(When remote control is deactivated, '--' will be displayed)
1. Normal connection status : Only Wi-Fi received signal strength indicator(RSSI) will be displayed.
2. When a connection error occurs :Wi-Fi received signal strength and details of the communication error will be displayed at an interval of 1 second. (Refer to 12-4 for more details.)
<table>
<tr><th>Display</th><th>Contents</th></tr>
<tr><td>"PO"</td><td>Wi-Fi module is not powered on.</td></tr>
<tr><td>"dr"</td><td>When the connection between Wi-Fi module and machine’s MCU fails.</td></tr>
<tr><td>"tA"</td><td>Connection between the Wi-Fi module and the router’s access point is not established.</td></tr>
<tr><td>"tS"</td><td>Alibaba Smart Living service server connection has failed.</td></tr>
</table>
3. Wi-Fi RSSI display
'0~99(Actual value range is from 0~-99, and only the numbers except '-’ sign will be displayed)
* Must be used after turning on the Wi-Fi function.
* Depending on RSSI, signal level is divided as below on Android OS.
level 0 : -86 ~ -100 level 1 : -71 ~ -85 level 2 : -56 ~ -70 level 3 : 0 ~ -55
Depending on the actual environment, there may be a normal connection even at level 0, but in general, if it is level 0, it is determined that connection is difficult.</td></tr>
</table>

6-5. IoT abnormal notification function

* When pairing, each connection phase to connect MINI DRUM to Alibaba Smart Living service server will be displayed on 88 Display in order (PO → rd → tA → tS) and when final access is granted, Wi-Fi LED will continuously blink. In this phase, normal display(time) will be displayed on 88 Display.
If a communication error occurs during the server connection, Wi-Fi LED will blink at an interval of 1 second when the error occurs, and the following contents will be displayed on the 88 Display.

1) PO(Power On) Error - when the Wi-Fi module is not properly powered.
"PO" Error will be displayed on the 88 DISPLAY, and LED Lamp will blink at an interval of 1 second.
① Condition: • Wi-Fi Module's connector is misplaced or poorly connected.
• When the Harness of Wi-Fi Module is defective.
• When Wi-Fi Module is defective.
• When washing machine's S/W Logic is defective.
② Solution : After troubleshooting the cause of each problem, turning the machine off and on will deactivate the Error Display.

2) rd(Ready Device) Error - When the connection between IoT module and machine's MCU fails.
"rd" Error will be displayed on the 88 DISPLAY and LED Lamp will blink at an interval of 1 second.
① Condition: • When the Harness communication failure of Wi-Fi Module occurs.
• When Wi-Fi S/W Logic is defective.
• When washing machine's S/W Logic is defective.
② Solution : After troubleshooting the cause of each problem, turning the machine off and on will deactivate the Error Display.

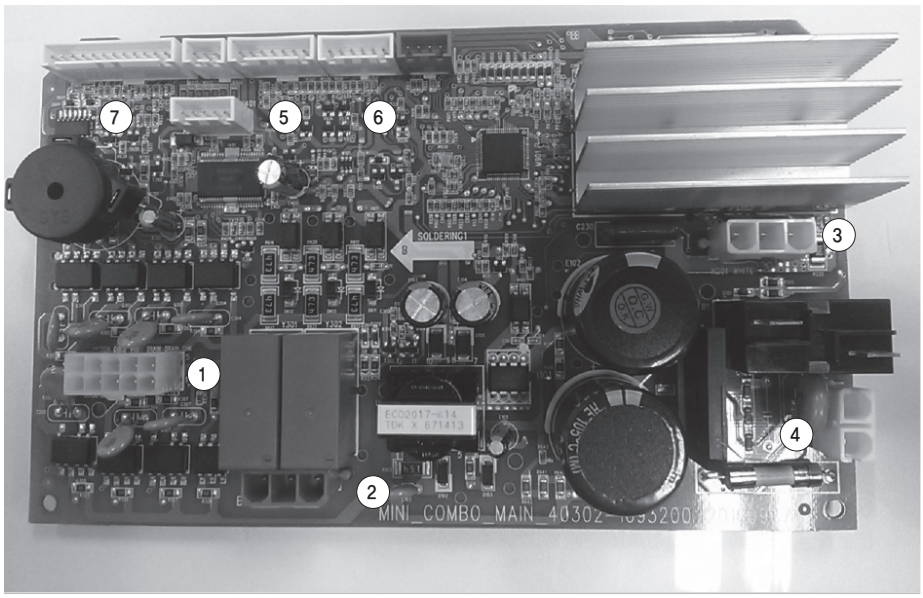
3) tA(Try Access AP) error - When the connection between Wi-Fi module and router's access point fails.
"tA" Error will be displayed on the 88 DISPLAY and LED Lamp will blink at an interval of 1 second.
① Condition: • When Wi-Fi Module is defective.
• When Wi-Fi S/W Logic is defective.
• When washing machine's S/W Logic is defective.
• When RSSI is out of a communication range(Normal access RSSI range : 0 ~ -85)
(Bad signals to access : -86 ~)
② Solution : After troubleshooting the cause of each problem, turning the machine off and on will deactivate the Error Display.

4) tS(Try Access Server) error - When Alibaba Smart Living service server connection fails.
"tS" Error will be displayed on the 88 DISPLAY and LED Lamp will blink at an interval of 1 second.
① Condition: • When Internet access is blocked
• When Alibaba Smart Living service server error occurs
• When Wi-Fi S/W Logic is defective.
• When washing machine's S/W Logic is defective.
② Solution : After troubleshooting the cause of each problem, turning the machine off and on will deactivate the Error Display.

5) IE, OE, LE, E1, E2, E3, E4, E9, b1, b2, b3, b4, b5, b6, b7, b8, H2, H4, H5, H6, H8 error App's display is fixed in the pause state.
① Condition: refer to 21P~24P
② Solution : After troubleshooting the cause of each problem, refresh the app page (by dragging from top to bottom) or turn OFF and ON, and the APP Display will work properly.

6. PCB PIN

MINI 2.0



① N301(WHITE 10PIN)
- 1 : OPTION
- 2 : COLD V/V
- 3 : SOFT V/V
- 4 : DRAIN PUMP
- 5 : DRAIN CHECK
- 6 : LOCK CHECK
- 7 : DETERGENT PUMP
- 8 : RINSE PUMP
- 9 : DRY V/V
- 10 : DOOR LOCK

② N303(BLUE 3PIN)
- 1 : DRY_HEATER_RELAY
- 2 : WASH_HEATER_RELAY
- 3 : AC1(LIVE)

③ N201(WHITE 3PIN)
- 1 : W
- 2 : V
- 3 : U

④ N101(WHITE 2PIN)
- 1 : 無
- 2 : AC1(LIVE)

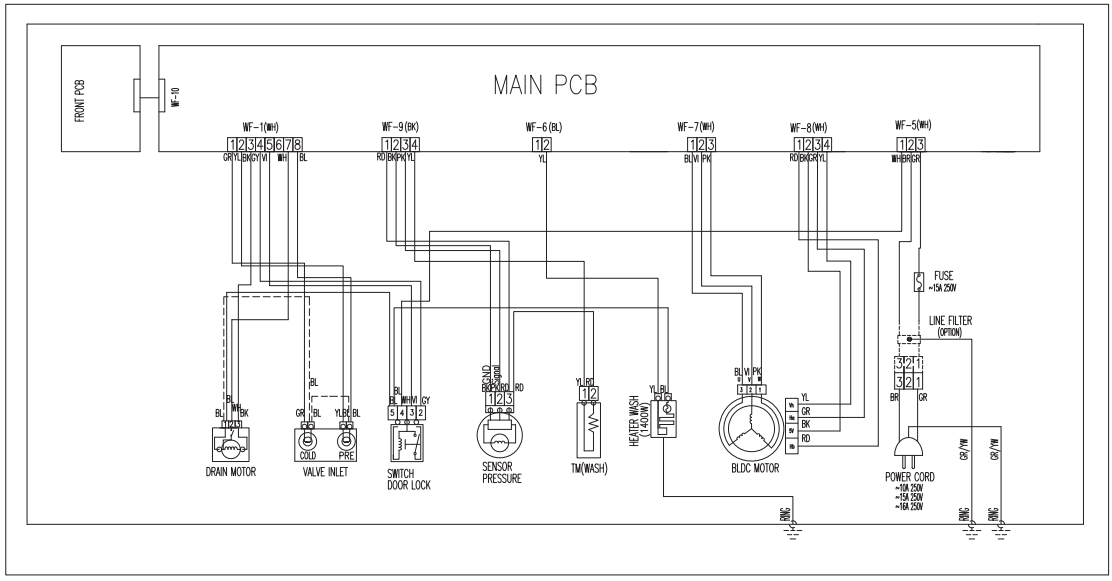
⑤ N501(WHITE 7 PIN)
- 1 : RESET
- 2 : RX_FROM_FRONT
- 3 : TX_TO_FRONT
- 4 : POWER KEY
- 5 : 5V
- 6 : GND
- 7 : 15V

⑥ N502(WHITE 6PIN)
- 1 : GND
- 2 : GND
- 3 : 5V
- 4 : RX_FROM_WIFI
- 5 : TX_TO_WIFI
- 6 : RESET

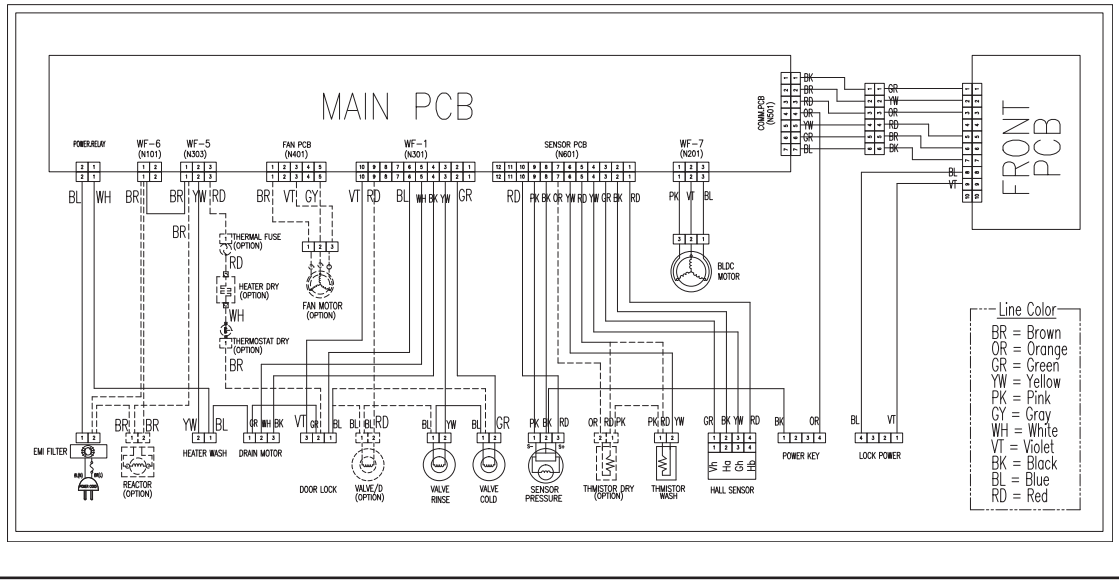
⑦ N601(WHITE 12PIN)
- 1 : 5V_STANBY
- 2 : GND
- 3 : HALL_A
- 4 : HALL_B
- 5 : 5V
- 6 : WASH_TEMP
- 7 : DRY_TEMP
- 8 : GND
- 9 : L/S OUT
- 10 : L/S IIN
- 11 : RINSE_SENSING
- 12 : DETERGENT_SENSING

5. Wiring Diagram

COMBO



WASH



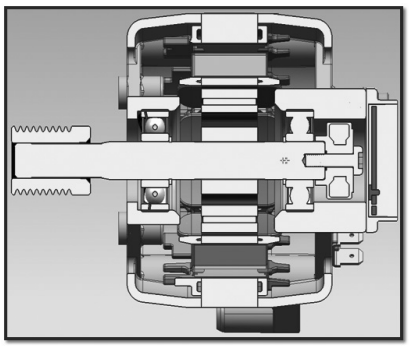
6. Part List and Major Specifications

NO	PART NAME	PART CODE	SPEC	MAKER	REMARK
1	UNIT MOTOR BLDC	36189L8500	GJ-2BA003A(GNJ),DC 310V,125W,CL, F,EARTH T-X	G&J	
		36189L8000	DWD200BL(NEWMOTECH), DC310V,125W, CL,F EARTH/T-X	New Motec	
		66182-0012500-00	DWD200BL(TONLON),DC 310V,125W,CL, F,EARTH T-X	TONLON	
2	DRAIN MOTOR AS	3919601110	NAKAGAW,220-240V~,50/60HZ, BV-DW23 2.5W	Gyeong Nam Nakagawa	
		3619601001	SAMCO, DEC D-M300, 220-240V, 50/60HZ, 3W	SAMCO	
		66149-0005702	,220-240V~,50/60HZ, BV-DW23 2.5W	Gyeong Nam Nakagawa	
3	HEATER WASH	3612804010	220V.140MM.1400W.WIRE 1R0X350001. IRCA, DONGHAI	Haiyan Donghai	
		66127-0001504	230V.140MM.1400W. SUS304 NI-DI, DONGHAI		
		66127-0001504	230V.140MM.1400W. SUS304 NI-DI,	Thermowatt	
4	THERMISTOR WASH	361AAAAB10	UL. R25=11.981K R80=1.704K	SST	
5	VALVE INLET	3615401000	AC 220~240V,50/60HZ, SV-11CWB-01,1WAY	DREAM TECH	
		3615401110	D-M300,220-240V,SV-11CWB-01,1WAY, CHECK VALVE		
		66150-0011600-00	AC 220~240V,50/60HZ, 3-WAY, WASHER	DEAHANJUNGCHUN	
		66150-0011601-00	AC 220~240V,50/60HZ, 3-WAY, COMBO		
6	REACTOR	66149-0001501-00	RT-029 L=3.6MH(0A),L=5.2MH(1A)	Namseong Electric	
			RT-029 L=3.6MH(0A),L=5.2MH(1A)	Ruikai	
		66149-0001502-00	RT-030, 3A		
7	SENSOR PRESSURE	361482532A	DL-DW12-H AIR INLET 270 HOOK, TUBE	ENTEKO	
		66143-0003700-00	NT-DD42, DC5V,10mA, Mini 1.5PJT, NON PCB, NON HOSE, 270℃		
		66143-0004000-00	NON-PCB Type	DEAHANJUNGCHUN	
8	SWITCH DOOR LOCK	66148-0005800	GVWAVE, EMZ, 220-240V, 50/60HZ, Mini-II	EMZ	
			GVWAVE, EMZ, 220-240V, 50/60HZ, Mini-II		
9	UNIT EMI FILTER AS	66149-0001104-00	EMI FILTER RDFC-2736, MINI DRUM, 250V 12A,,NEW BRACKET	RUIKAI	
10	HARNESS AS	66126-0014704-00	FULL OPTION DWD-M301 CLAMP CORE	DongYang Electronics	
		66126-0041400-00	HARNESS AS MINI WASH, N-H, EMI, N-REACTOR		
		66126-0041401-00	HARNESS AS MINI WASH, N-H, EMI, REACTOR		
		66126-0042400-00	HARNESS AS MINI 2.0 WASHER , N-H, EMI, N-REACTOR		
		66126-0042401-00	HARNESS AS MINI 2.0 WASHER , N-H, EMI, REACTOR		
11	HARNESS SUB F-PCB	66126-0041300-00	FRONT PCB SUB, SMH200-10H, 420mm, TOUCH PANEL DONGYANG	DongYang Electronics	
12	EMI SUB HARNESS	361279A621	D-M301,TR29 X 19 X 15 G5B 8TURN, FUSE	DongYang Electronics	
	Door Lock SUB Harness	66126-0043800-00	HARNESS SUB, MINI 2.0, Doorlock Sub Harness	DongYang Electronics	
13	HARNESS EARTH	66126-0044100-00	TR19 Ferrite Core	DongYang Electronics	
		66126-0044101-00	R18 Ferrite Core	DongYang Electronics	

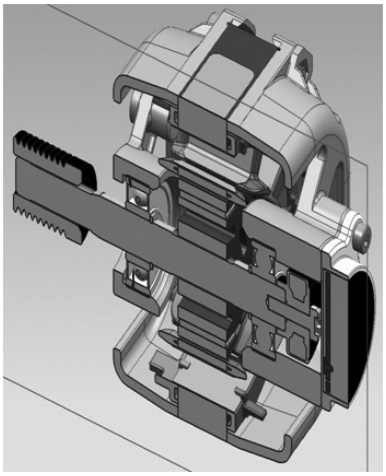
NO	PART NAME	PART CODE	SPEC	MAKER	REMARK
14	Power Cord AS	66112-0000808-00	Mini2 CHINA	Longwell/ NION Electronics	
		66112-0000807-00	Mini2 KOREA		
		66112-0000809-00	Mini2 CHILE		
		66112-0000810-00	Mini2 MEXICO		
15	HEATER DRY	66127-0002200-00	220V INCOLOY800, Ø6.6: 1050W	Haiyan Donghai	
16	SWITCH THERMOSTAT	66148-0006100	115℃/130℃ (On/Off)	Pacific CONTROLS	
17	HARNESS SUB HEATER DRY	66126-0022602-00	UL1015 AWG18 90MM #250 FLAG, HEATER DRY-THERMOSTAT	DongYang Electronics	
18	UNIT FAN MOTOR AS	66149-0008606	DR7806SSWC/W CCW, 17.5Vdc, 1.6A, 28W	Gyeong Nam Nakagawa	
19	FUSE TEMPERATURE	66122-0000501	Thermal Fuse : 128℃	DongYang Electronics	
20	THERMISTOR DRY	361AAAAC00	R40=26.065kΩ, R90=4.4278kΩ	SST	
21	Fuse (M-PCB)	40504-0002700	250 V, 8 A	ORISEL	
	Fuse (M-PCB)	-	250 V, 5 A	ORISEL	
	Fuse (M-PCB)	40504-0002700	250 V, 8 A	Littel Fuse	
	Fuse (M-PCB)	-	250 V, 5 A	Littel Fuse	
22	X-Capacitor	40C01-0014300	PCX2 335M, 275 V, 0.1 ㎌	Cowell Fashion	
	X-Capacitor	40C01-0014300	CMPP, 275 V, 0.1 ㎌	SUNGHO	
	X-Capacitor	-	CMPP, 275 V, 0.68 ㎌	SUNGHO	
	X-Capacitor	-	PCX2 335M, 275 V, 0.68 ㎌	Cowell Fashion	
23	Relay	40507-0000300	GT-1A-12D, 250 V, 25 A	GOLDEN	
	Relay	40507-0000300	SFK-112DM, 250 V, 20 A	SANYOU	
	Relay	40507-0000300	HF160F, 250 V, 25 A	HONGFA	
	Relay	40507-0000600	SMIH-S-112LM, 250 V, 16 A	SANYOU	
	Relay	40507-0000600	OMIH-SH-112LM, 250 V, 16 A	TYCO	
	Relay	40507-0000600	GA-1A-12LH, 250 V, 16 A	GOLDEN	
24	Transformer	40512-0017800	40512-0017800, Input : DC 310 V, output : DC 5 V, 15 V, Class E	TDK	
25	Varistor	40D09-0000700	SVC561-14, 560 V, 50 A	SAMHWA	
	Varistor	40D09-0002300	SVC681-14, 680 V, 50 A	SAMHWA	
26	Photo coupler	40101-0025400	EL817C, 5 kV	EVERLIGHT	
	Photo coupler	40101-0025400	PC17K1, 5 kV	KODENSI	
	Photo coupler	40101-0025400	PC-817, 5 kV	SHARP	
	Photo coupler	40101-0025400	LTV-817B, 5 kV	LITE ON	
27	PCB	40302-1093300	KB-3151C, V-0	KING BOARD	
	PCB	40302-1093200	KB-6160C, V-0	KING BOARD	
	PCB	40302-1112900	KB-5150&, V-0	KING BOARD	
	PCB	-	CCP-3400, V-0	Chang chun	
	PCB	-	CCP-508, V-0	Chang chun	
	PCB	-	ETL-XPC-204, V-0	Eternal	
	PCB	-	ETL-CEM1-502, V-0	Eternal	

1. Specifications, Operation, and Defect Inspection of Inverter Motor

1) Specifications

Category	Specifications	Configuration
Motor Type	Ternary Phase Brushless DC Motor	
Ventilation/Cooling	Open/magnetic ventilation	
For Use Load	Front load washer	
Stator Pole	9 POLE	
Rotor Pole	6 POLE	
Voltage (V)	DC 240 - 310V	
Max. Output (W)	125 W	
Stator Coil	AIEIW AL	
Hall Sensor Assembly	HALL IC A329 1K	
Power Consumption (W)	25	
Current (A)	1.0	
Revolution per Minute (RPM)	1500	
Wire Round Resistance (Ω)	2.25±5%	

2) Operation



① ROTOR — The rotor is designed in inner rotation type to transform the electric energy from stator into mechanical energy. It consists of the shaft and pulley to transmit the mechanical energy to outside. Belt is fixed on the pulley to enable set rotation.

② STATOR — The stator has a magnetic function, which requires coil winding for electric transmission to produce iron cores and electromagnets for magnetic functionality.

③ MAGNET — The magnet transmits energy and is permanently functional at all times. It doesn't require recharges even after repetitive uses.

④ SENSOR ASS' Y — It provides power to the coil of stator. It contains the hall IC to enable the assessment of motor speed.

□ Motor's Functional Mechanism

- The device transforms electric energy into mechanical energy.
- The motor contains a costly auxiliary driving gear, is controlled by semiconductors, causes low electric/ mechanical noises, and is capable of running at high speed.
- The hall IC applies to locate the rotor. It acts as a brush-type commutator.
- The hall IC locates the active rotor with the magnet attached to the rotor and sends signals from the current rotor location to the base of transistor connected to the coil producing torques.
- TR approved for signals acts as an electronic switch to send the electric current to coil, causing forces (F) between the field magnet and coil to rotate the rotor.
- As the hall IC detects the pole opposite to the initially detected one when the rotor is running, the initially started TR is turned off and another TR is turned on to send the electric current in an opposite direction to the current over coil. This leads to cause the forces (F) between the field magnet and coil consistently.
- The mechanism reiterates to run the motor consistently.

3) Motor Malfunctions and Inspections

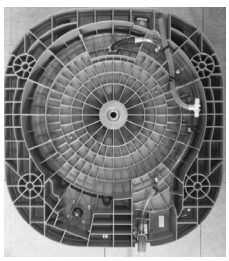
◎ Malfunction: * The b8 error (Failure in starting motor) occurs when the power is not supplied or other malfunction takes place.

* The b8 error occurs even when the motor fails to rotate properly due to defective connection of connector.

* The b2 error occurs when an excess current (15A or higher) flows into PCB.

Inspection	Repairs
* Inspect the power connector	* Normalize the connection of connector
* Inspect the connection of hall sensor connector	* Normalize the connection of harness connector
* Inspect the operation of motor * Assess the resistance in motor coil	* Exchange the motor
* Check the items specified above	* Take corrective measures after inspecting the corresponding parts (PCB, harness, drum components, etc.)

4) Motor Exchange Service



[Disassembly]

① Separate the power supply device and hall sensor connector from the motor

② Separate the belt

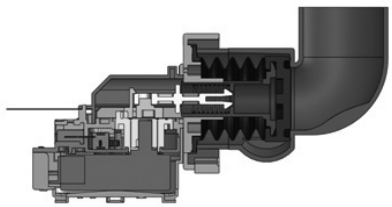
③ Disconnect 4 motor-fixing bolts

[Assembly]

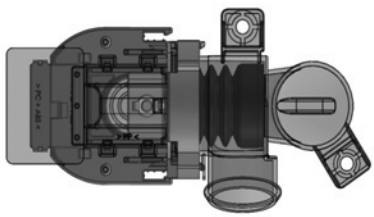
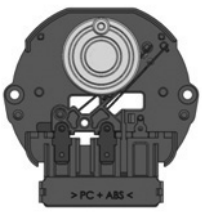
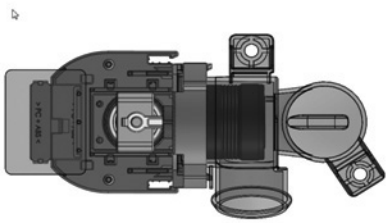
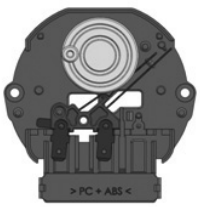
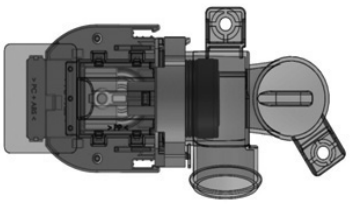
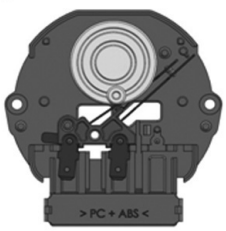
Re-assemble the parts in the opposite sequence to disassembly

2. Specifications, Operation, and Defect Inspection of Drain Motor

1) Specifications

Category	Specifications	Configuration
Type	Combination of Housing and Synchronous Motor	
Pole	Negative Pole Synchronous Motor	
Revolution per Minute	5/6R.P.M. (50/60Hz)	
Electric Current	35mA or lower	
Power Consumption	3.0W or lower	
Voltage	AC220~240V, 50/60Hz	
Opening of Bellows	11mm or higher	
Operating Duration of Bellows	1 cycle (10 seconds), opening (5 seconds)	
Blocking Power of Bellows	Water pressure of 0.09kgf/cm2 at inlet	
Coil Resistance	13.2k_±5%(20°C)	

2) Operation

Valve Operation	Location of Cam	Description
		The bellows are completely closed, the location of cam is set at 0 degree, and the connection is off. The wash cycle does not start yet.
		After the power supply is connected, the synchronous motor starts operating and the cam begins to rotate at the same time to open the bellows. (Location of cam is set at 90 degrees, and the connection is on)
		After the power supply is connected and the internal connection is turned on, the operation continues for a while (pulse signal) and the cam is set at 180 degrees to start drainage. After drainage is complete, the power supply is reconnected from PCB to maintain the operation for a while and turn off the connection, which leads to close the bellows.

☞ Set Operation

▷ When the drainage valve is on

When the internal switch is off, signals continue to be transmitted to the drain motor until the internal switch is turned on. If the internal switch is turned on, signals are sent to the drain motor for about 3.6 seconds, which is subsequently turned off.

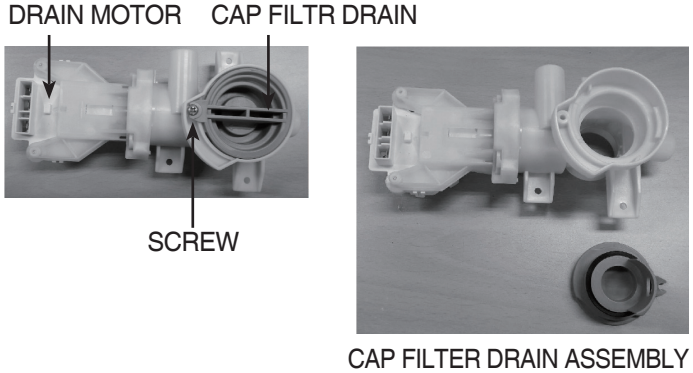
▷ When the drainage valve is off

When the internal switch is on, signals continue to be transmitted to the drain motor until the internal switch is turned off. If the internal switch is turned off, signals are sent to the drain motor for about 1.2 second, which is subsequently turned off.

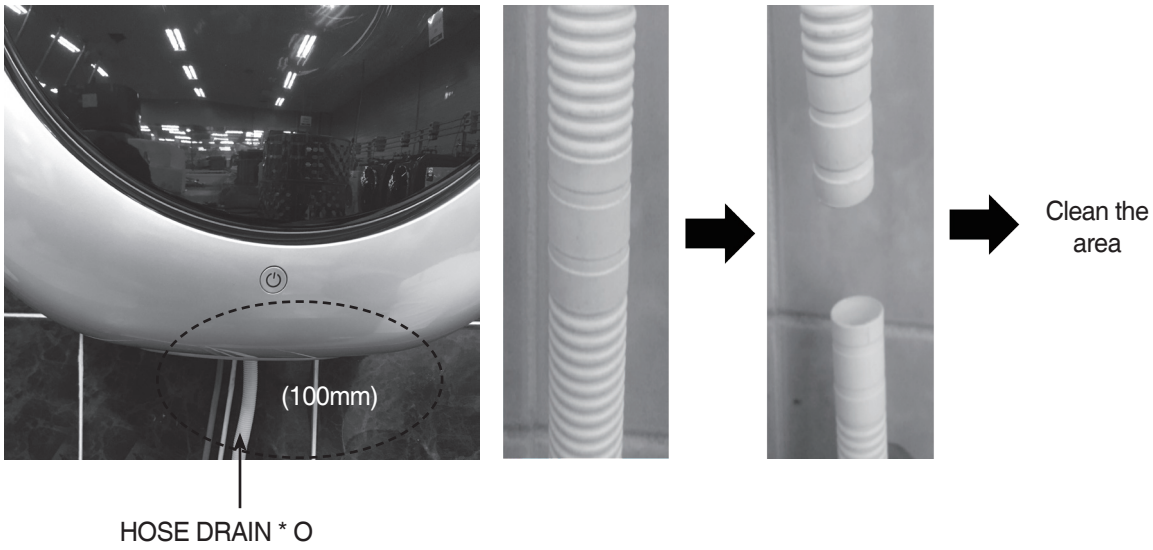
3) Drainage Malfunctions and Inspections

◎ Defects:

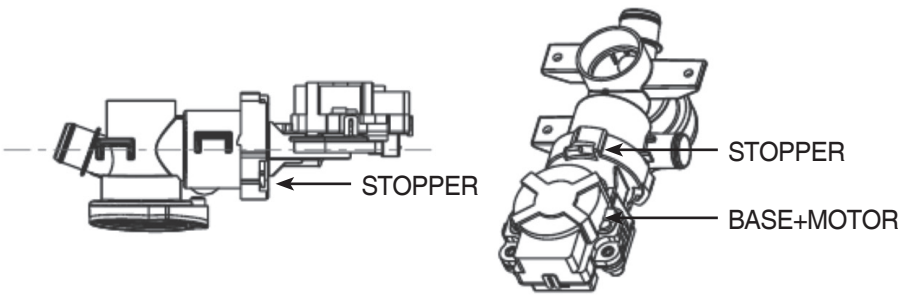
* The IE (INPUT ERROR) occurs as the water level doesn't change after the water supply starts.
  (The preset water level is not reached within 15 minutes)
* The OE (OUTPUT ERROR) occurs due to poor drainage.
  (The water level fails to reach the reset point within 10 minutes after the drainage starts)

Inspection	Repairs
* Inspect whether the hose drain is twisted orlocated too high	* Reinstall the hose drain normally
* Inspect whether the drainage valve is clogged with dust and impurities * Inspect whether any impurities exist between the bellows and housing to cause minor drainage (leaks)	* Detach the cap filter drain to the clockwise after detach the base screw * Clean the cap filter drain removing any impurities * After cleaning, turn thecap filter drain counterclockwise tightly  CAP FILTER DRAIN ASSEMBLY
* Examine the operation of drain motor * Examine the motor coil resistance	* Exchange the drain motor * Take corrective measures after inspecting relevant parts (water supply valve, pcb triac, etc.)

4) In the event of OE after remdy, follow the below directions.
Inspection method: Remove the join area around "100mm" from the hose drain.
After removal, clean the area where the foreign object was located .



5) Cleaning and Exchange of Drain Housing



DRAIN MOTOR + BELLOWS ASSEMBLY

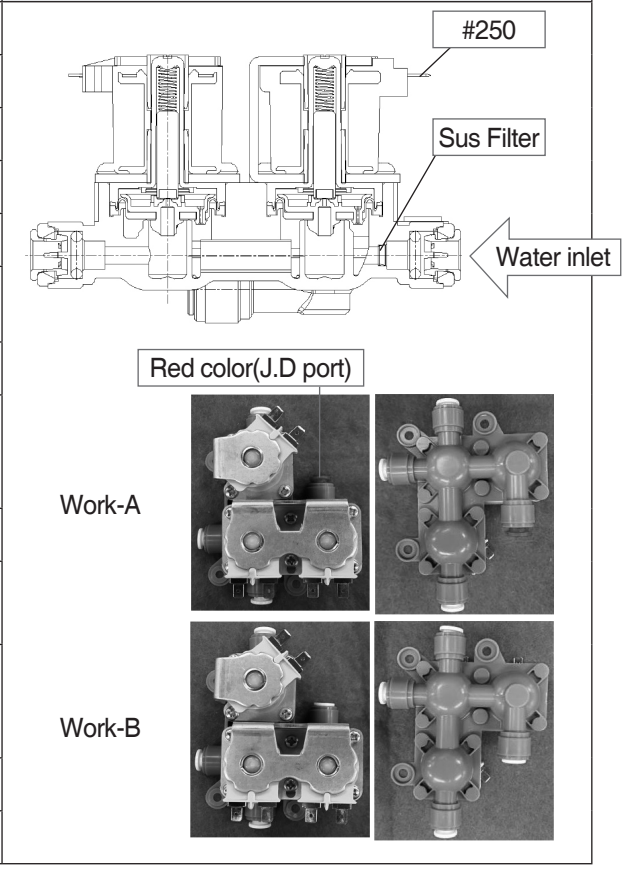
[Disassembly]

① Push the stopper of housing and turn the motor base counterclockwise to detach the bellows.
② Examine the inside to remove any impurities.
③ Exchange only the motor if the motor causes poor operation.

[Assembly] Re-assemble the parts in the opposite sequence to disassembly.

3. Specifications, Operation, and Defect Inspection of Inlet Valve [Valve for cold water and softener]

1) Specification

Category	Specification	Configuration
Type	1/4 Inch Fitting Solenoid Valve	
Voltage	AC 220 VOLT 50/60Hz	
Electric Current	35mA or less	
Rating Time	Continuous	
Power Consumption	5.5W or lower	
Terminal Angle	R-0˚, J.D-0˚, C-135˚ (Clockwise at water inlet)	
Fluid in Use	Tap water	
Flux(3kgf/cm²)	Work-A : R,C-5L or more, D-0.3~0.7L Work-B : R,J,C-5L or more	
Fluid Pressure	0.2~8kgf/cm²	
Opening and Closing Speed	1.0 sec or shorter	
Max. Temperrature	0~90°C But, applicable pressure shall not exceed 2kgf/cm² for water of 70~90°C	
Coil Resisitance	5.4kΩ±5%(20°C)	
Diaphragm Opreation	1.15mm	

2) Operation

If the power supply is connected to the water inlet valve, the rod valve is drawn by the coil's magnetic field to open the diaphragm hall and push up the diaphragm with water pressure. This leads to open the water flow and start the water supply. If the power supply is cut off, the coil's magnetic field disappears and the force of internal spring leads the rod valve to close the diaphragm hall, leading to block the water flow.

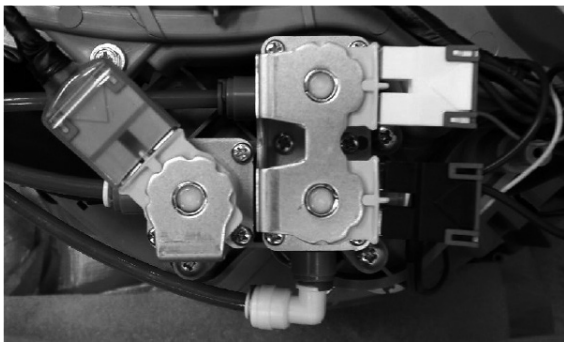
3) Inspection and Repairs of Water Inlet Valve

Defects	Descriptions	Causes	Inpsection Method	Repair Method	PCB Error Mode
Water supply unavailable	Water is not supplied despite the "drone"	Faucet is turned off.	Check whether the faucet is turned on	Turn on the faucet	"IE"
		Short coil	Check whether the inter-terminal resistance of inlet valve is 4.3kΩ	Exchange the part if it is open	"IE"
		Excessive impurities on SUS filter	Unplug the inlet hose and then check the impurities	Remove impurities and "cleanse" the filter	"IE"
Water supply unavailable	Water supply continues with the power "ON"	Impurities in valve	Check the malfunctions in valve	Exchange the inlet valve	"IE"
		Disconnected connector	Check the connection of connector with naked eyes	Reconnect the connector	"IE"
		Coil wire	Check whether the inter-terminal resistance of inlet valve is 4.3kΩ	Exchange the inlet valve	"IE"
		Disconnection in wiring	Check any disconnections in wiring → Inspect circuit	Exchange the harness	"IE"
Constant water supply (into tub)	Power is "OFF" Constant leaks on sides	Defective water level sensor	See the inspection of "Water Level" defects	Exchange the water level sensor	"E2"
		Inspect any openings and blockages in pressure hoses	Inspect any openings and blockages in pressure hoses	Exchange the defective part	"E2"
		Defective valve	Check the malfunctions in valve	Exchange the inlet valve	-
Others		Check any leaks from the sides of inlet valve	Check any leaks from the sides of inlet valve	Exchange the inlet valve	-

4) Defects and Relevant Parts

Unavailable water supply	PCB	1. Inspect the insertion of PCB pin	Easily detachable if the wire is pulled	Housing on pin connection not properly inserted	Insert the housing on pin connection completely
		2. Unavailable power or water supply to inlet valve terminal	Open or destroyed PCB inlet circuit (Water relay unavailable)	Defective inlet circuit	Exchange the PCB
Incessant water supply	PCB	1. Water supply starts promptly when the power is turned "ON".	Short circuit in PCB inlet circuit or water relay (Incessant electric transmission to valve)	Short circuit in water relay	Exchange the PCB
	Inlet Valve	1. Examine whether the water supply continues even when the power supply is cut off	Deformed water inlet valve bellows	Defective inlet valve	Exchange the inlet valve
	Synchronous Drain Motor (Valve Housing)	1. Examine the operation/ water supply of inlet valve 2. Examine the drainage through the drainage hose 3. Check any impurities in valve housing	• Unclosed due to impurities in drainage housing	• Impurities in valve housing • Impurities • Error in returns of synchronous motor	• Remove impurities • Remove impurities • Exchange the synchronous motor

5) Disassembly and Asssembly for Part Exchange



[Disassembly]

① Turn off the faucet

② Detach the housing

③ With the snap fit on inlet (red) pressed, separate the inlet hose. With the snap fit on outlet (gray) pressed, separate the inlet hose.

④ Unscrew a bolt

* Notes

① Connect the inlet hose properly to the inlet (red) and outlet (gray)

② Fasten the screw properly to prevent abrasion

③ Insert the inlet hose into valve tightly [Assembly of Inlet Valve]

4. Specifications, Defect Inspection, and Repairs of Heater

1) Specifications

Category	Specifications		Note
	Heater Washer	Heater Dry	
MAKER	DONGHAI	DONGHAI	
Voltage	230V	220V	
Power	1400W ± 5%	1050W± 5%	
Resistance	37.78 Ω	45.2 Ω	
Power Density	11.9W/㎠	2.25W/㎠	
Temperature Fuse	184℃ (In Heater)	128℃	
Thermistor	Included in Heater	NOT Included	
Materials	SUS304	INCOLOY800	
MAX. Temperature	100℃ (In water)	600℃	
Part Code	66127-0001504-00	66127-0002200-00	

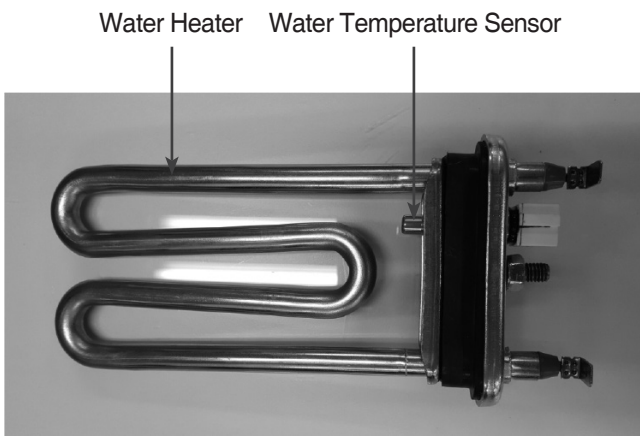
1. Heater Washer

Temperature Fuse of Water Heater (184 °C Cutoff Type)

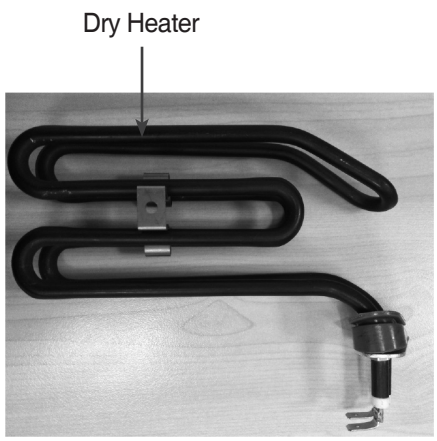
- If the heater is running without water due to a malfunction in water level sensor and other defects, it may cause fire. The inter temperature fuse is designed to be cut off about a minute after overheating to prevent such problems.
- The water heater must be used in water.

2. Heater Dry

- The heater work in the followed air flow at the Max, temperature of 600°C. The temperature in the sealing area should not exceed 110 °C.



(Heater Washer)



(Heater Dry)

2) Defect Inspection

Defects and Errors	Causes	Inspection of Defects and Errors	Resolution	PCB Error Mode
Water is not heated (Applicable for all front load washers)	Wire disconnection	Inspect the wire connection: Applicable to all models	Reconnect the disconnection	"H6"
	Disconnection in water heater or temperature fuse	Inspect the wire connection: If the inter-terminal resistance is within 34.57Ω ±5%, it is normal. → Applicable to all front load models	Exchange the water heater	"H6"
	Detachment of connector/terminal	Inspect the connection: Applicable to all front load models	Insert the terminal	"H6"
	Defective water heater or temperature sensor	Assessment of inter-terminal resistance of sensor: See the attached Water/Resistance Table	Exchange the temperature sensor	"H2"
Water is overheated	Defective water heater or temperature sensor	Assessment of inter-terminal resistance of sensor: See the attached Water/Resistance Table	Exchange the temperature sensor	"H2" or "H4"

Exchange of Heater

Exchange of Water Heater

[Disassembly]
1. Remove 4 body-fixing screws
2. Remove the detergent and softener containers
3. Remove 2 screws fixing the door hinge
4. Remove 6 cover screws fixing the cover tub
5. Remove 6 screws fixing the cover tub
6. Remove the connector of water heater
7. Remove the nut for water heater

[Assembly]
Re-assemble the parts in the opposite sequence to disassembly

*** Error Modes**

1. "H2": Open/Short error in washer temperature sensor (Defective sensor or disconnection)

2. "H4": Overheated washer temperature sensor (The sensor temperature turns out to be 95°C or higher)

3. "H5": Overheated washer temperature sensor (The water temperature is 45°C or higher in the Delicate program)

4. "H6": Malfunction of water heater (The water temperature fails to rise by 2°C within 30 minutes after the heater starts running)

5. "H8": Overheated water heater (The water temperature rises by 6°C or more within 30 seconds after the heater starts running due to the lack of water in tub)

5. Specifications, Operation, and Defect Inspection of Water Level Sensor

1) Specifications

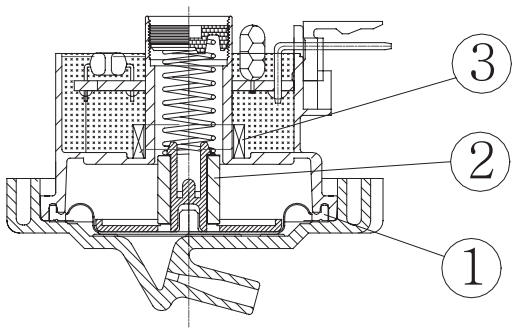
O/F: Water level at which the water must be drained due to excessively high level. Water supply is suspended and water drained until the level drops to the reset level.

RESET:
1. Drainage level. A spin cycle starts 20 to 40 seconds after the reset level is reached.

Water Level to Tunr off Heater:
1. Water level at which the heater is suspended

MODEL	MINI 2.0
PART CODE	66143-0004000
CATEGORY	Frequency
RESET	25.40
HEATER OFF	25.25
LOCK OFF	24.32
LOCK ON	24.00
WASH LOW	23.84
WASH MID	23.68(NORMAL 24.10)
WASH HIGH	23.48
WATER LEVEL OF RINSE	23.68(NORMAL 24.00)
OVERFLOW(START)	22.00
OVERFLOW(END)	23.68

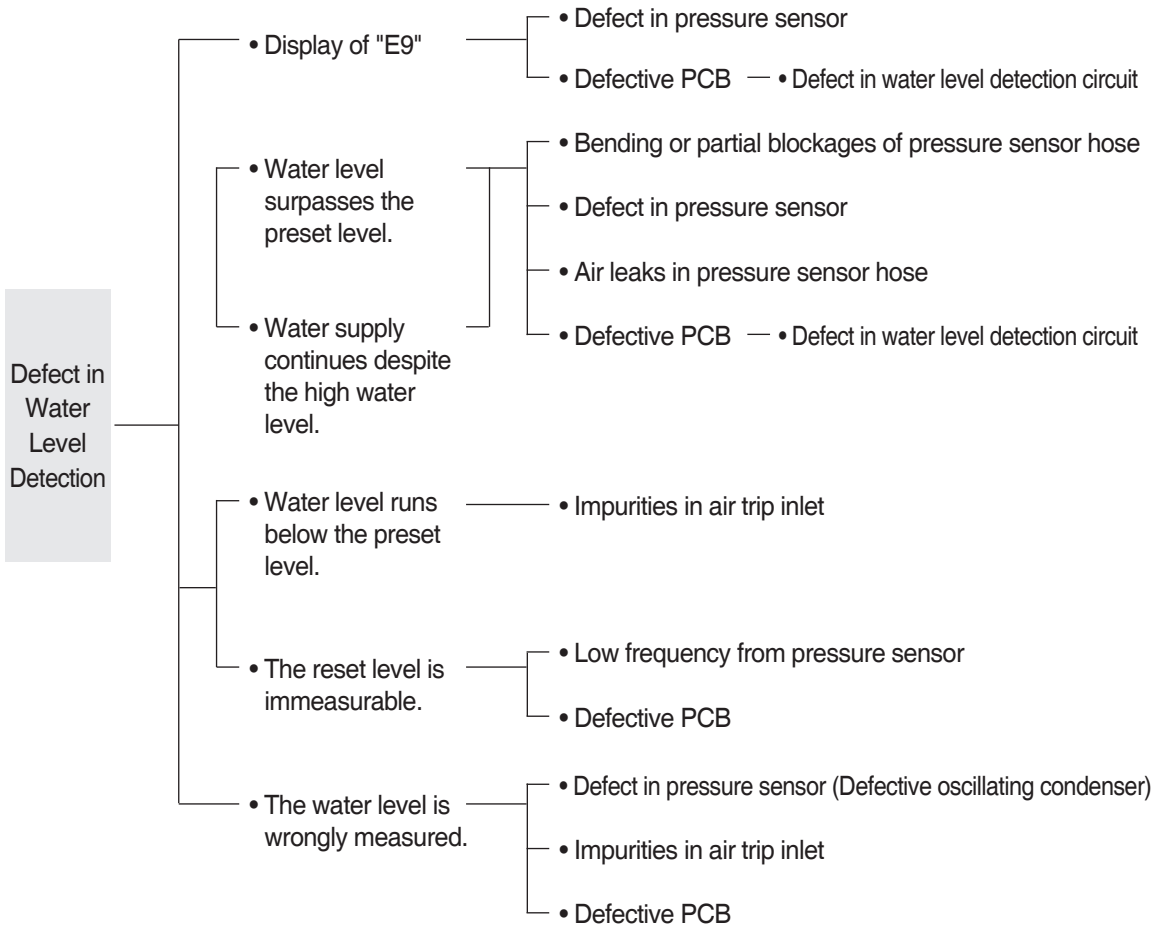
2) Functions and Operations of Pressure Sensor



After the water begins to be supplied through the inlet valve of washer, the tub is filled with water. The rising water level in the tub delivers the head pressure (mmH20), which passes through the pressure delivery hose between the tub and pressure sensor to the enclosed space. The pressure is transmitted to the ®Á diaphragm, which rises as the pressure increases. The delivered pressure immediately leads to the ®Ë metal core. As the metal core rises into the ®ÈCOIL-ASSY that is rolled in a specific format, the condensers and resistances connected to IC- 4069 buffer, a frequency oscillation circuit on C-MOS inverter using the induced electromotive force and magnetic force according to the contact of coil, are oscillated through RC, which leads the SIGN wave in frequency from the inductor to pass through the outlet buffer to be transformed into digital signals and transmit a square wave to display the oscillation cycle in a frequency format.
The frequency signals predetermined in the set play switching functions to control the head pressure in the tub. After the wash cycle is complete at the preset level and the water is drained, the head pressure declines to return the metal core to the original condition, enabling the repetitive application of function during the cycle.

2) Defect Inspection

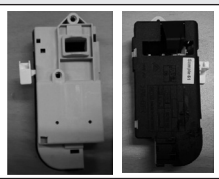
Defects and Errors	Details	Causes	Inspection of Defects and Errors	Resolution	PCB Error Mode
Incessant water supply	Water continues to be supplied although the inlet valve is functioning well.	Defect in the bellows of water level sensor	Check the frequency	Exchange the water level sensor	"E2"
		Defect in pressure sensor hoses	Check the frequency	Exchange the hose	"E2"
			Inspect any openings	Exchange the hose	"E2"
		Blockages in pressure sensor hoses	Inspect with naked eyes	Remove impurities	"E2"
Occurrence of "E9"	The water level sensor transmits the frequency of 15KHz or lower or 30KHz or higher.	Disconnected connector	Inspect the connection of connector with naked eyes	Re-insert	"E9"
		Defect in water level sensor	Check the frequency	Exchange the water level sensor	"E9"
		Disconnected wire	Inspect the wire connection → Inspect the circuit		"E9"



6. Specifications, Operation, and Defect Inspection of Door Lock Switch

1) Specifications of Door Lock Switch

TYPE	Part Code	Model	Power	Locking Mechanism
DF F01 007 DWD-M300WA	36169047230	DWD-M301WP	250V 16A	Bimetal operation on the PTC heat

Lock "On/Off" Time	Lock Off Type	Configuration
1. Forced unlocking by Solenoid	1. Forced unlocking by Solenoid	

2) Defect Inspection of Door Lock Switch

Defects and Errors	Details	Causes	Inspection of Defects and Errors	Resolution	Error Mode
A single "snapping" sound or two consecutive "snapping" sounds	A single "snapping" sound and two consecutive "snapping" sounds occur during the early operation and in the pause mode respectively: Applicable to "DF" type only	Normal noise	The noise is caused by the operation of solenoid to lock or unlock the "sliding cam" to lock or unlock the door.		-
Occurrence of "LE" Error	"LE" error occurs as the "snapping" sound continues to occur: Applicable to "DE" type only	Disconnected connector	Inspect the connection of connector with naked eyes	Insert connector	"LE"
		Terminal disconnected from connector	See the disassembly and inspection manual for door lock switch below	Insert terminal: S/W No.4 or 5 terminal	"LE"
		Door poorly closed	-	Close the door completely	"LE"
		Defect in door hook	-	Exchange the door	"LE"
	1. "LE" error occurs without any "snapping" sounds in "DF" type.	Defect in catch cam	The abnormal "snapping" sound continues to occur.	Exchange the door switch	"LE"
		Disconnected connector	Inspect the connection of connector with naked eyes	Insert connector	"LE"
		Terminal disconnected from connector	See the disassembly and inspection manual for door lock switch below	Insert terminal: S/W No.2 or 3 terminal	"LE"
	2. "LE" error occurs in "DA" type.	Disconnected solenoid coil	See the picture below	Exchange the door switch	"LE"
		Disconnected connector	Inspect the connection of connector with naked eyes	Insert connector	"LE"
		Terminal disconnected from connector	See the disassembly and inspection manual for door lock switch below	Insert terminal: S/W No.2 or 3 terminal	"LE"

Defects and Errors	Details	Causes	Inspection of Defects and Errors	Resolution	Error Mode
Non-openable Door	Power cutoff or forced shutdown during operation	After the "power cutoff" or "forced shutdown" during operation, "PCB MICOM" is not able to open the door. At least 5 minutes must pass before the door becomes openable.			
	The washer is "ON" without any power cutoffs.	Water in tub	Check whether the water level is above the safety level.		
		High temperature in tub	The door is automatically locked to prevent damage from hot laundry after the spin cycle is complete.		
	Others		The door is automatically locked when the connector, terminal, or solenoid wire gets disconnected during operation. The following instructions must apply to inspect defects.		

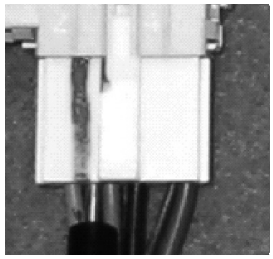
* Exchange of Door Lock Switch

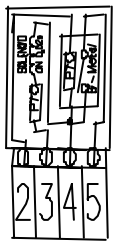
[Disassembly]
1. Remove 4 body-fixing screws
2. Remove the detergent and softener containers
3. Remove 2 screws fixing the door hinge
4. Remove 6 cover screws fixing the cover tub
5. Remove 6 screws fixing the cover tub
6. Remove 2 screws fixing the door lock switch
7. Detach the door lock switch and F-PCB connector

[Assembly]
Re-assemble the parts in the opposite sequence to disassembly .

* Check the wire connections in Door Lock Switch

PIN Arranage ment





2 3 4 5
(No.1 wire unavailable)

7. Specifications and Assembly of Cord Power Assy

1) Specifications

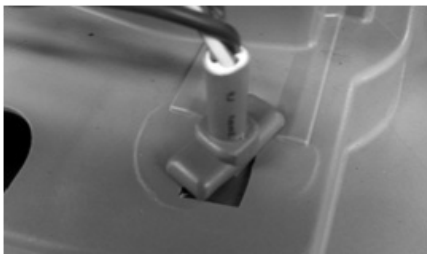
NO	COUNTRY	PART CODE				cord power(2.5m)	COMPANY
		cord power (3m)	cord power (5m)	cord power as(3m)	cord power as(5m)		
1	USA, MEXICO	3611340450	3611340470	3611340460	3611340480	-	LONGWELL
		WHITE 125V 13A,SJT 16AWG 3C UL,MEXICO/COLOMBIA					
2	Australia	3611340240	3611340260	3611340250	3611340280	-	LONGWELL
		WHITE 3X1.5SQ 250V 15A LONGWELL AUSTRALIA					
3	EU	3611339660	3611339680	3611339670	3611339690	-	HONGCHANG
		DTIII-2P-05 250V 16A,H05VV-F 3X1.5,EURO					
4	Chile	3611342840	3611342860	3611342850	3611342870	-	HONGCHANG
		DTIII-3P-01 250V 10A,H05VV-F 3X1.5,CHILE					
5	U.K(UAE)	3611342900	3611342920	3611342910	3611342930	-	LONGWELL
		LP-61L H05VV-F 3X1.5SQ 250V 13A, IMPORT-UK					
6	CHINA	3611342700	3611342720	3611342710	3611342730	66112-0000808-00(MINI 2.0)	LONGWELL
		LSG-31L 250V 16A,RVV 3X1.5 CCC CHINA				LSG-31L, CHINA, 250V,10A,FUSE(15A), EARTH@CORE, 2.5M, WH	
7	KOREA	3611308111	3611308211	3611308101	3611308201	-	SEASIN
		MINI DRUM, WHITE, EU-2PIN					
8	Brazil	3611342390	3611343390	3611342391	3611343391	-	LONGWELL
		LP-46SL 250V 16A,3X1.5,WHITE,BRAZIL ANGLELP-33					
9	Germany	3611343200	3611343220	3611343210	3611343230	-	LONGWELL
		250V16A, H05VV-F GY P-FREE,EUR					

2) Specifications and Major Test Items

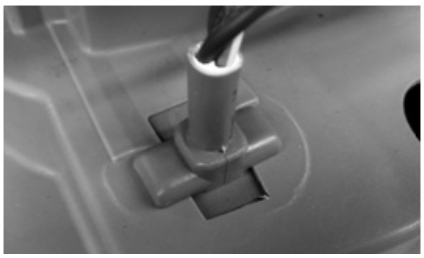
- Size of conductor: 1.5mm2
- Thickness of sheath: 0.8mm
- Thickness of insulator: 0.6mm
- External diameter of insulator: 8.4±1mm

3) Assembly

- Before fastening



- After fastening



7. Installation

Follow the installation guide to install the washing machine more conveniently.

Before installation Do not plug in the power cord when installing.

After installation Make sure to perform a test run to check for any water leakage or abnormal noise.

7-1. WHEN INSTALLING WITH THE BASIC INSTALLATION MATERIALS

1. Determine installation location

- determine the installation site, considering the structure of the area

※ It is easy to use when installed in a breast-high location
※ It is easier to use and install near the water pipe, drain and the outlet.

2. Inspect the wall

- Knock on the wall to check if the wall is concrete.

※ Install the machine on the even surface of the wall.

3. Attach the installation manual

- Attach it using a level.
- After attaching the install guide, mark the hole area.

※ Consider the actual size of the product and attach the manual according location.

4-1 Drill a hole into the tile

- Make a notch under the marked holes beforehand.
- Drill the holes, holding the tool perpendicular to the wall

※ Do not drill a hole on the edge of the wall tile.
※ Do not install the machine right below a faucet.
※ Use TE 2-S Soft Hammer drill from HILTI or a Drill.

4-2. Drill a hole into the retaining wall

- Set the hammer drill or a drill perpendicular to the surface of the wall and drill a hole into the retaining wall.

※ Follow the instructions on the diameter and depth specifications for the holes.
※ Remove dirt from the holes after drilling.

5. Insert set anchors (4 units)

-Insert set anchors into the holes
-Set anchors are included in the product packaging

※ Insert set anchors into the end of each hole.
※ the set anchor bolt parts must be 75mm or longer above the wall.

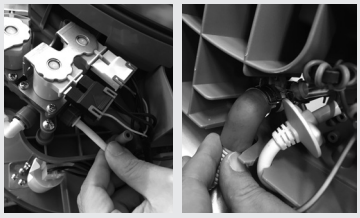
6. Fix the set anchors

- Fix set anchors with an anchor punch

※ If the anchor cap is above the wall surface after fixation, repeat the step.

7. Connect inlet and drain hoses.

- Insert the inlet hose until the elbow makes a snapping sound.
- Fix the drain hose to the synchronous motor and connect the clamp inside the synchronous motor.



※ Connect hoses properly to prevent any leakage.
※ Insert inlet and drain hoses into the back holes after connection.

8. Plug in the power cord

- Connect the power as requested by the customer (upward or downward)
- Connect the connector and fix the grounding cable.

※ Fix the power cord tightly with clamp when connected upward.
※ Fix the grounding cables with flat screws.
※ Do not use multiple grounding cables in one spot.

9. Inject chemical anchor and insert cushion pads

– Inject chemical anchors into the fixed set anchors
– Insert cushion pads onto the fixed anchors
– Push the pads to the wall.

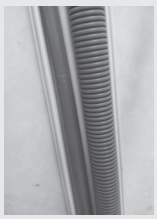

※ When injecting the chemical anchor, discard the first 10~15cm as the glue and hardener may not be mixed.

10. Install the washing machine.

– Install the washing machine stick to the wall surface.

11. Organize hoses

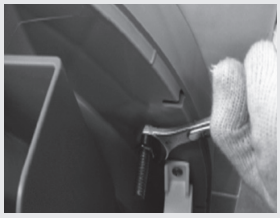
– Organize and place hoses in the hole.



※ Caution: Be careful not to jam the hoses between the wall and the washing machine.

12. Fix the washing machine

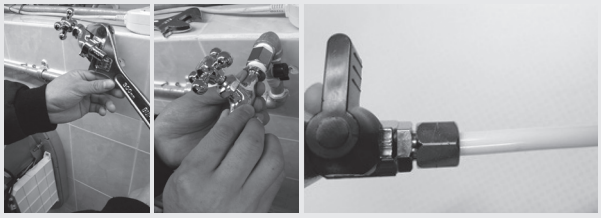
– Connect plane washer (1EA) and spring washer (1EA), and connect a regular nut (1EA) and connect a fixing nut (1EA) last.
– Tighten the nuts with ø14 spanner.



※ Excessive fastening of the nut may cause damage to the washing machine or the wall tile.
※ Fixing nut must be fastened to the end.

13–1. Install the inlet hose – Regular faucet

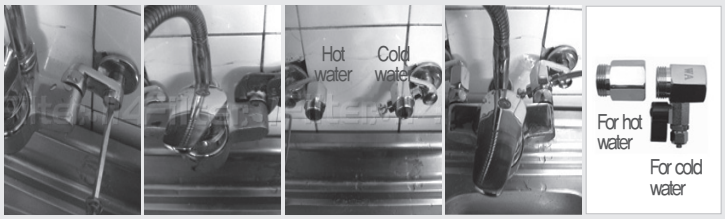
① Close the water supply valve ② Disassemble the water supply valve
③ Install the branching adapter ④ Branch off the inlet hose.



※ Wrap the connection of the branching adapter and water supply valve with Teflon tape.
※ Check leakage after installation.

13–2 Install the inlet hose – a kitchen sink or a shower

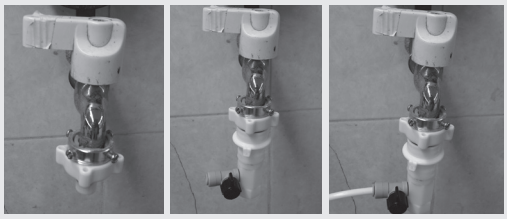
① Close the water supply valve
② Disassemble the water supply valve
③ Install the branching adapter (install adapters accordingly on cold and hot water taps)
④ Branch off the inlet hose.



13–2 Install the inlet hose – a kitchen sink or a shower

① Install the water tap connector on the faucet (skip if it is a buried faucet)
② Install the branching adapter.
③ Connect the inlet hose.

※ Check leakage after installation.



14. Test operation

– Run a test operation to check if there is any malfunction / leakage.

15. Organize the inlet and drain hoses and power cord

– Organize the inlet and drain hoses using molding and hose guide.

※ Wipe and clean the attachment area with a dry patch and attach the molding and hose guide tightly.

16. Mount the Body

– Connect the 4 upper and lower bolts after mounting the body.

※ Check if there is any space on either side.

The washing machine is recommended to be installed by a professional service engineer.

Note

– Follow the table below when drilling the tiles with tools.

Wall type	Depth of Hole	Bit diameter of hammer drill	Bit diameter of tile hole
Cement wall	45mm	ø 14mm	–
Concrete wall	45mm	ø 14mm	–
Tiled wall	The distance between the actuall wall and the tile + 45mm		ø 16mm

7-2. WHEN THE MACHINE CANNOT BE INSTALLED WITH BASIC INSTALLATION MATERIALS.

1. Determine installation location

- determine the installation site, considering the structure of the area

※ It is easy to use when installed in a breast-high location
※ It is easier to use and install near the water pipe, drain and the outlet.

2. Inspect the wall

- Knock on the wall to check if the wall is concrete.

※ Install the machine on an even surface of the wall.

3. Attach the installation manual

- Attach it using a level.
- After attaching the install guide, mark the hole area.

※ Consider the actual size of the product and attach the manual according location.

4-1 Drill a hole into the tile

- Make a notch under the marked holes beforehand.
- Drill the holes, holding the tool perpendicular to the wall

※ Do not drill a hole on the edge of the wall tile.
※ Do not install the machine right below a faucet.
※ Use TE 2-S Soft Hammer drill from HILTI or a Drill.

4-2. Drill a hole into the retaining wall

- Set the hammer drill or a drill perpendicular to the surface of the wall and drill a hole into the retaining wall.

※ Follow the instructions on the diameter and depth specifications for holes.
※ Remove dirt from the holes after drilling.

5. Insert the plastic set anchors (4 units)

- Insert the plastic anchor into the hole.

※ Insert the plastic anchor perpendicularly on the wall.

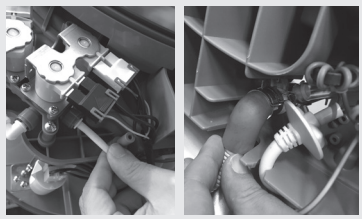
6. Fix the anchor bolts on the plastic anchor

- Fix the anchor bolt in the plastic anchor using a drill or a spanner

※ Fix the anchor bolt by inserting it to the end of screw.
※ Connect and insert the bolt to the anchor using M6 fox.
※ If the bolt falls out with the drill due to a lack of depth, drill and insert again.

7. Connect inlet and drain hoses.

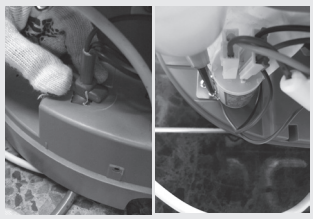
- Insert the inlet hose until the elbow makes a snapping sound.
- Fix the drain hose to the synchronous motor and connect the clamp inside the synchronous motor.



※ Connect hoses properly to prevent any leakage.
※ Insert inlet and drain hoses into the back holes after connection.

8. Plug the power cord

- Connect the power as requested by the customer (upward or downward)
- Connect the connector and fix the grounding cable.



※ Fix the power cord tight with clamp when connected upward.
※ Fix the grounding cables with flat screws.
※ Do not use multiple grounding cables in one spot.

9. Insert the cushion pad

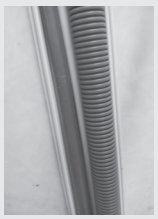
– Attach pads on the fixed anchors.
– Push the pad to the wall.

10. Install the washing machine.

– Install the washing machine stick to the wall surface.

11. Organize hoses

– Organize and place hoses in the hole.



※ Caution: Be careful not to jam the hoses between the wall and the washing machine.

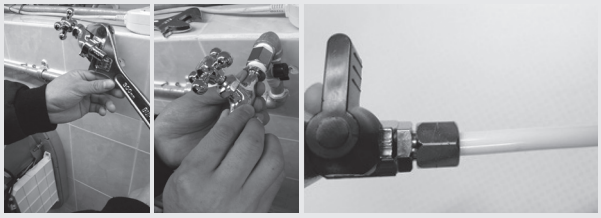
12. Fix the washing machine.

– Fix the items as follows: Rubber pad (1ea) → Plain washer (1ea) → Spring washer (1ea) → Nut (1ea) → Spring washer (1ea) →nut (1ea)
– Fasten the nut with a spanner.

※ Excessive fastening of the nut may cause damage to the washing machine or the wall tile.
※ Fixing nut must be fastened to the end.

13–1. Install the inlet hose – Regular faucet

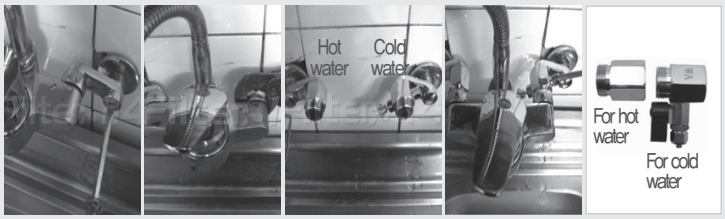
① Close the water supply valve ② Disassemble the water supply valve
③ Install the branching adapter ④ Branch off the inlet hose.



※ Wrap the connection of the branching adapter and water supply valve with Teflon tape.
※ Check leakage after installation.

13–2 Install the inlet hose – a kitchen sink or a shower

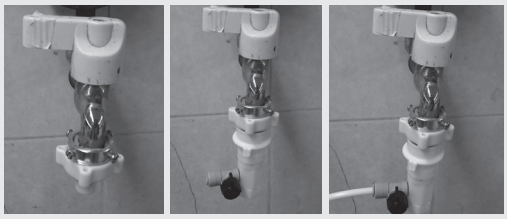
① Close the water supply valve
② Disassemble the water supply valve
③ Install the branching adapter (install adapters accordingly on cold and hot water taps)
④ Branch off the inlet hose.



13–2 Install the inlet hose – a kitchen sink or a shower

① Install the water tap connector on the faucet (skip if it is a buried faucet)
② Install the branching adapter.
③ Connect the inlet hose.

※ Check leakage after installation.



14. Test operation

– Run a test operation to check if there is any malfunction / leakage.

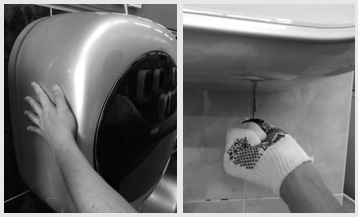
15. Organize the inlet and drain hoses and power cord

– Organize the inlet and drain hoses using molding and hose guide.

※ Wipe and clean the attachment area with a dry patch and attach the molding and hose guide tightly.

16. Mount the Body

– Connect 4 upper and lower bolts after mounting the body.



※ Check if there is any space on either side.

The washing machine is recommended to be installed by a professional service engineer.

Note

– Follow the table below when drilling the tiles with tools.

Wall type	Depth of Hole	Bit diameter of hammer drill	Bit diameter of tile hole
Hollow wall	Tile + 100mm	ø 14mm	ø 16mm
perforated wall			
Concrete wall			

7–3 WHEN IT CANNOT BE INSTALLED ACCORDING TO THE TWO INSTRUCTIONS ABOVE.

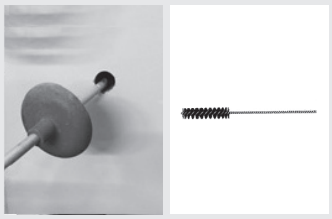
1. Drill a hole into the retaining wall.

– Set the hammer drill or a drill perpendicular to the surface of the wall and drill a hole into the retaining wall.

※ Follow the instructions on the diameter and depth specifications for the holes.
※ Remove dirt from the holes after drilling.

2. Clean the drilled area with compressed air and a brush.

– Clean the drilled hole at least 3 times with compressed air.
– Clean the inside of the drilled hole with a brush.



※ This is to achieve a higher adhesive stress.

3. Inject the chemical into the wall and fix the anchor.

– Insert a plastic net and inject the chemical.
– Insert and fix the anchor after injection.

※ If the chemical is running over the wall, it must be cleaned.
※ Start the process after 30 minutes to allow for the chemical to harden.

Note

– Follow the table below when drilling the tiles with tools.

Wall type	Depth of Hole	Bit diameter of hammer drill	Bit diameter of tile hole
Hollow wall	Tile + 100mm	ø 16mm	ø 18mm
perforated wall			
Concrete wall			
Light weight wall			

CAUTION

▶ **Make sure to ground to prevent electric shocks. Check if an earth leakage breaker is installed.**
– Contact the sales store or service center for more details.

▶ **When the power outlet has no ground terminal**
–Grounding must be done for safe use of the washing machine.
– Grounding can only be installed by the service center engineers or a qualified person.
– Contact nearby service center.

▶ **Grounding is prohibited in the following locations.**
– Gas pipe (It may cause explosion or fire.)
– Telephone line or lighting rod (It is dangerous when struck by lightning.)
– Water pipe (Many water pipes are plastic pipes.)

Exchange power cord If the power cord is damaged, contact a nearby service center or the sales store as special tools are required.

Relocation Contact a nearby service center to relocate the washing machine (Additional charges apply)


DAEWOO
ELECTRONICS

ABOUT THIS MANUAL

(주) 신광씨링
광주광역시 서구 하남대로
502번길 14

담 당	김현규 님
M O D E L	MINI 2.0 COMBO: on-line: ODW-MGDM2C, ODW30-M2CV ※ IOT: ODW-MGDM2CI off-line: DWM30-M2CW WASH: on-line: ODW30-M2WW, ODW30-M2WS, ODW30-M2WG ※ IOT: ODW30-M2WSI off-line: DWM30-M2WV
	영문 _ Service Manual
접 수	2017.08.16
M E M O	총 67p (186 x 259)

17.08.16-31p (표지, 5p, 6p, 7p, 8p, 9p, 10p, 11p, 12p, 13p, 14p, 15p, 16p, 17p, 19p, 20p, 21p, 22p, 23p, 24p, 25p, 26p, 29p, 30p, 34p, 35p, 39p, 46p, 48p, 49p, 51p _ 사진 및 일러스트컷 호환 작업 13 cut)
17.08.22-20p (1p, 6p, 7p, 8p, 9p, 10p, 12p, 13p, 27~35p (페이지 추가), 36p, 45p, 47p _ ① 수정 작업, ② 사진 및 일러스트 호환 작업 8 cut)
17.08.25-12p (1p, 2p, 3p, 7p, 10p, 11p, 12p, 13~15p 페이지 추가, 16p, 17p)
17.08.31-9p (1p, 9p, 10p, 11p, 13p, 15p, 16p 페이지 추가, 17p, 18p _ ① 수정 작업, ② 일러스트 호환 작업 4 cut)
17.09.11-9p (31p, 32p, 33p, 34p, 35p, 36p, 37p, 38p, 39p)
17.09.12-6p (3p, 18p, 32p, 34p, 35p, 37p)
17.09.14-15p (표지, 5p, 6p, 7p, 8p, 11p, 12p, 13p, 14p, 15p, 16p, 26p, 38p, 42p, 43p)
17.09.25-4p (표지, 7p, 16p, 18p)

NO NEED PRINT