



Internal Use Only

<http://biz.lgservice.com>

Room Air Conditioner

SVC MANUAL(Exploded View)

**MODEL : AS-W093WSA7(LS090HEV)
AS-W123BSA7(LS120HEV)**

CAUTION

Before Servicing the unit, read the safety precautions in General SVC manual.
Only for authorized service personnel.

1. Specification

Model		Set	LS090HEV	LS120HEV	
		Indoor Unit	LSN090HEV	LSN120HEV	
		Outdoor Unit	LSU090HEV	LSU120HEV	
Cooling Capacity		kW	0.90~2.5~2.79	0.9~3.5~3.8	
		Btu/h	3070~8500~9500	3070~12000~13000	
Heating Capacity		kW	0.90~2.7~3.15	0.9~3.8~4.2	
		Btu/h	3070~9000~10500	3070~12000~14300	
Power Input	Cooling/Heating	W	780/780	1,170/980	
Running Current	Cooling/Heating	A	3.6/3.6	5.2/4.4	
Starting Current	Cooling/Heating	A	3.6/3.6	5.2/4.4	
EER/COP		W/W	3.19/3.38	3.00/3.59	
		Btu/h.W	10.90/11.54	10.26/12.24	
SEER			16.3	16.3	
HSPF			8.3	8.5	
Power Supply		Ø / V / Hz	1, 208~230, 60	1, 208~230, 60	
Power Factor		%	97.1%	98.3%	
Air Flow Rate	Inddor, Max	m³/min(CFM)	8(283)	10(353)	
	Outdoor,Max	m³/min(CFM)	27(953)	27(953)	
Moisture Removal		l/h (pts/hr)	0.83(1.76)	1.01(2.14)	
Sound Level	Indoor,H/M/L/S-Low	dB(A)+3	39/33/25/19	39/33/25/19	
	Outdoor,Max	dB(A)+3	47	47	
Refrigerant & Charge(at 7.5m)		g	R410A, 750	R410A, 750	
Additional Refrigerant Charge		g/m(oz/ft)	20(0.22)	20(0.22)	
Compressor	Type		1P Rotary	1P Rotary	
	Model		GA092MMA	GA092MAB	
	Motor Type		Brushless DC Motor	Brushless DC Motor	
	Oil Type		PVE(FVD68D)	PVE(FVD68D)	
	Oil Charge	cc	310	310	
	O.L.P Name		-	-	
Fan(Indoor)	Type		Cross Flow Fan	Cross Flow Fan	
	Motor Type		BLDC	BLDC	
	Motor Output	W	20	20	
Fan(outdoor)	Type		Propeller, Fan	Propeller, Fan	
	Motor Type		AC	AC	
	Motor Output	W	75	75	
Circuit Breaker		A	15	15	
Power Supply Cable		No.*mm²	3*1.0	3*1.0	
Power and Transmission Cable		No.*mm² + No.*mm²	4*0.75	4*0.75	
Piping Connections	Liquid Side	mm(in)	6.35(1/4)	6.35(1/4)	
	Gas Side	mm(in)	9.52(3/8)	9.52(3/8)	
Drain Hose (O.D/I.D)		mm(in)	21.5,16.0(0.85,0.63)	21.5,16.0(0.85,0.63)	
Dimension	Indoor(W*H*D)	mm	756*265*184	885*285*210	
		inch	29.8*10.4*7.2	35.2*11.2*8.3	
	Outdoor(W*H*D)	mm	717*483*230	717*483*230	
		inch	28.2*19.0*9.1	28.2*19.0*9.1	
Net Weight	Indoor	kg(lbs)	7.2(15.9)	9(19.8)	
	Outdoor	kg(lbs)	23.2(51.1)	22.0(48.5)	
Gross Weight	Indoor	kg(lbs)	8.6(19.0)	11(24.2)	
	Outdoor	kg(lbs)	24.8(54.7)	23.6(52.1)	
Operation Range	Cooling(Outdoor)	°C(°F)	18 ~ 48 (64.4 ~ 118.4)	18 ~ 48 (64.4 ~ 118.4)	
	Heating(Outdoor)	°C(°F)	-5 ~ 24 (23 ~ 75.2)	-5 ~ 24 (23 ~ 75.2)	
Max. Piping Length		m(ft)	15(49.2)	15(49.2)	
Chargeless		m(ft)	-	-	
Max. Elevation Difference		m(ft)	7(23)	7(23)	
Tool Code(Chassis)	Indoor + Outdoor		SW + UA3 Plus	SB + UA3 Plus	
Fuctions	Temperature Control		○	○	
	Allergy Free Filter		-	-	
	Plasma Filter		-	-	
	Prefilter(washable/anti-fungus)		○	○	
	Auto Clean		○	○	
	CHAOS Wind(Auto Wind)		○	○	
	Steps, Fan/Cool/Heat		3/4/3	3/4/3	
	Airflow Direction Control(up& Down)		○	○	
	Airflow Direction Control(left & right)		-	-	
	Remote Controller Type		Wireless LCD(Better-Remocon)	Wireless LCD(Better-Remocon)	
	Setting Temperature	Cooling		18-30	18-30
		Heating		16-30	16-30
	Auto Operation (Micom Control)		-	-	
	Auto Changeover (Micom Control)		○	○	
	Self Diagnosis		○	○	
	Timer		○	○	
	Sleep Operation		○	○	
	Soft Dry Operation		○	○	
	Restart Delay(minute)		3	3	
	Deice Control(Defrost)		○	○	
	Hot Start		○	○	
	Jet Cool, Jet Heat		○	○	
	Low Ambient Operation		-	-	
	Special Function		-	-	

Note:

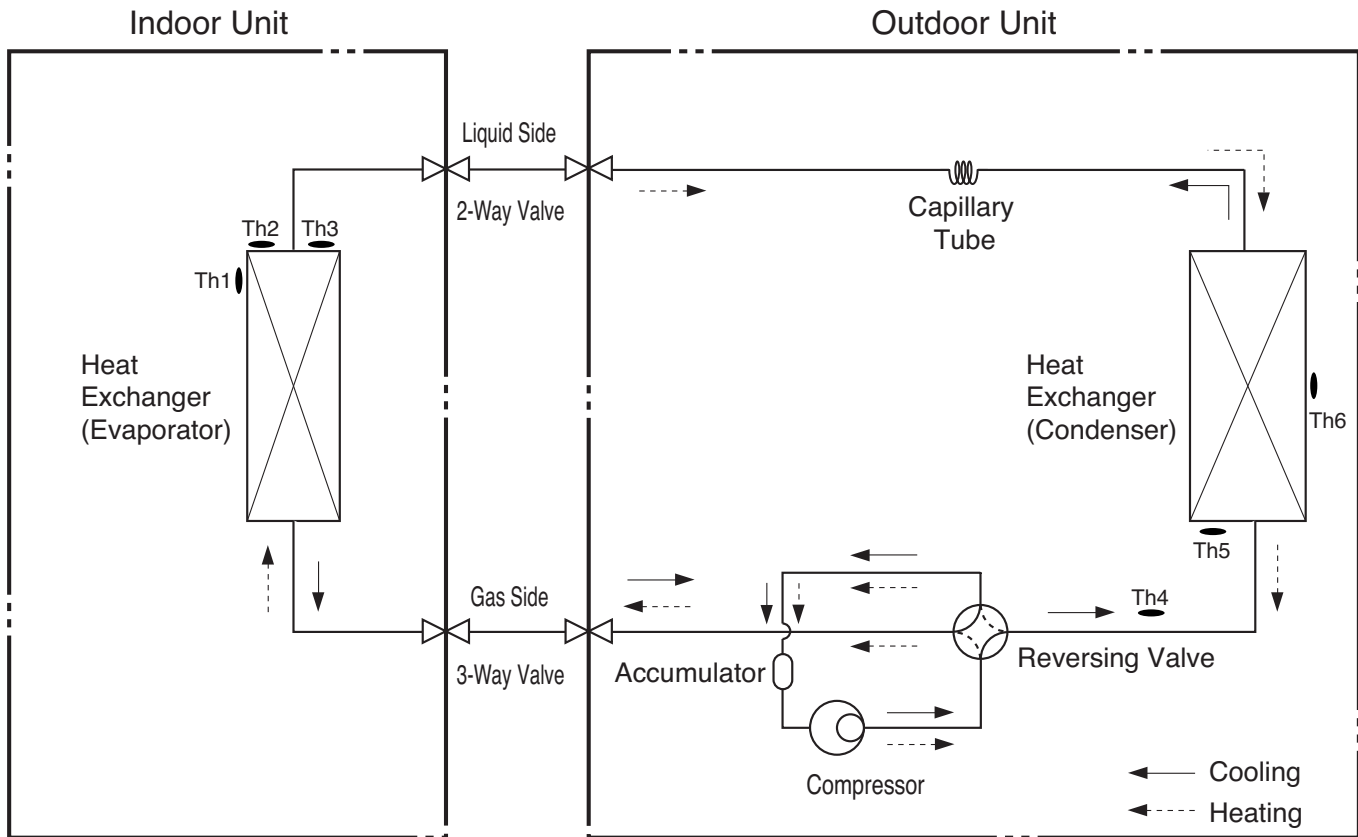
○ : Applied, - : No relation

* For circuit breaker rating, please conform to local standards wherever necessary.

* Some of functions are slightly different depending upon models.

* The specification may be subject to change without notice for purpose of improvement.

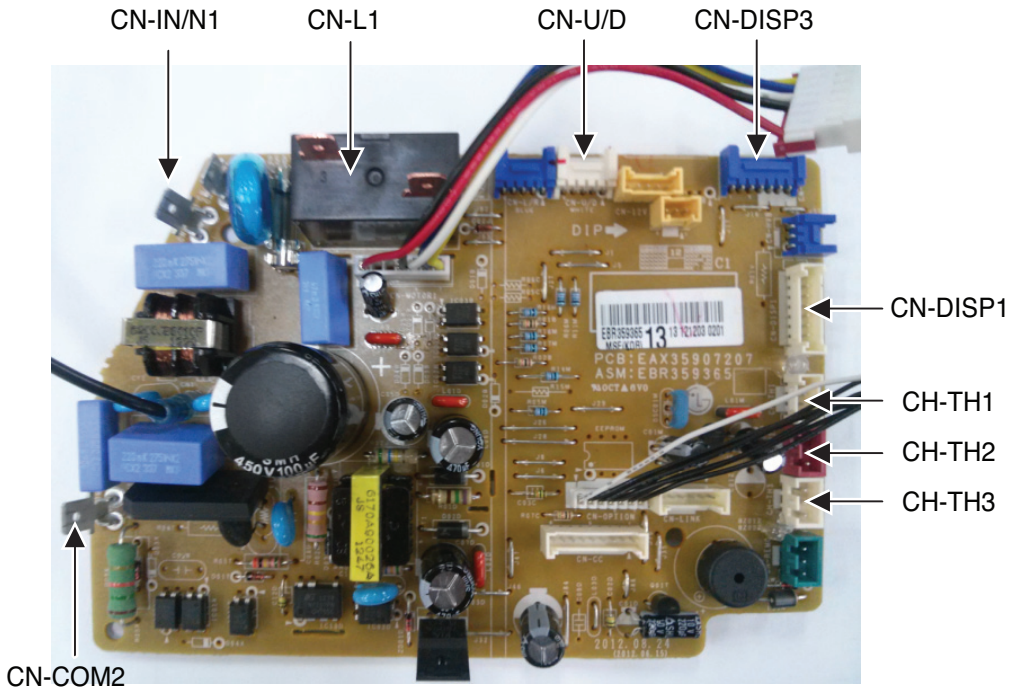
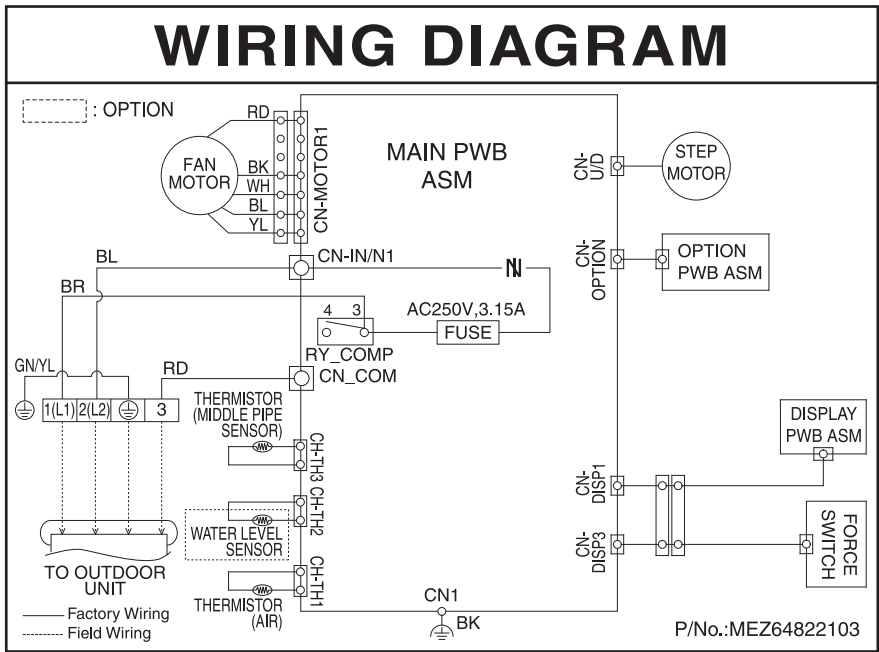
2. Piping Diagrams



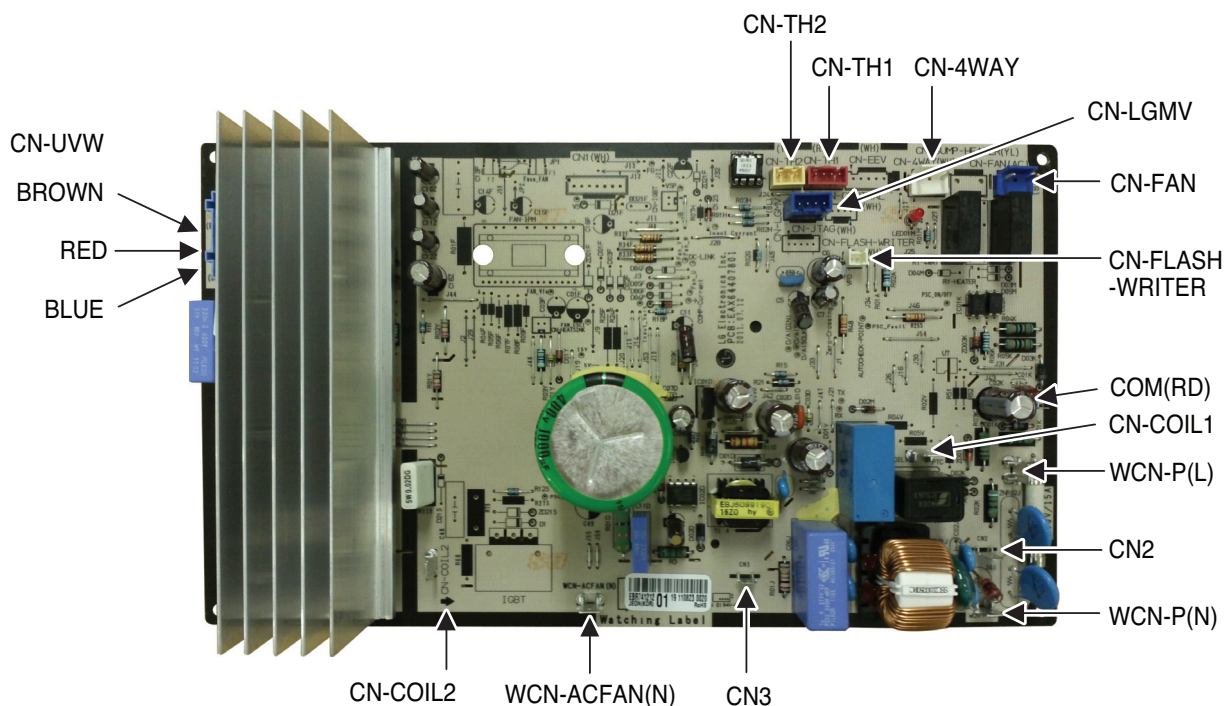
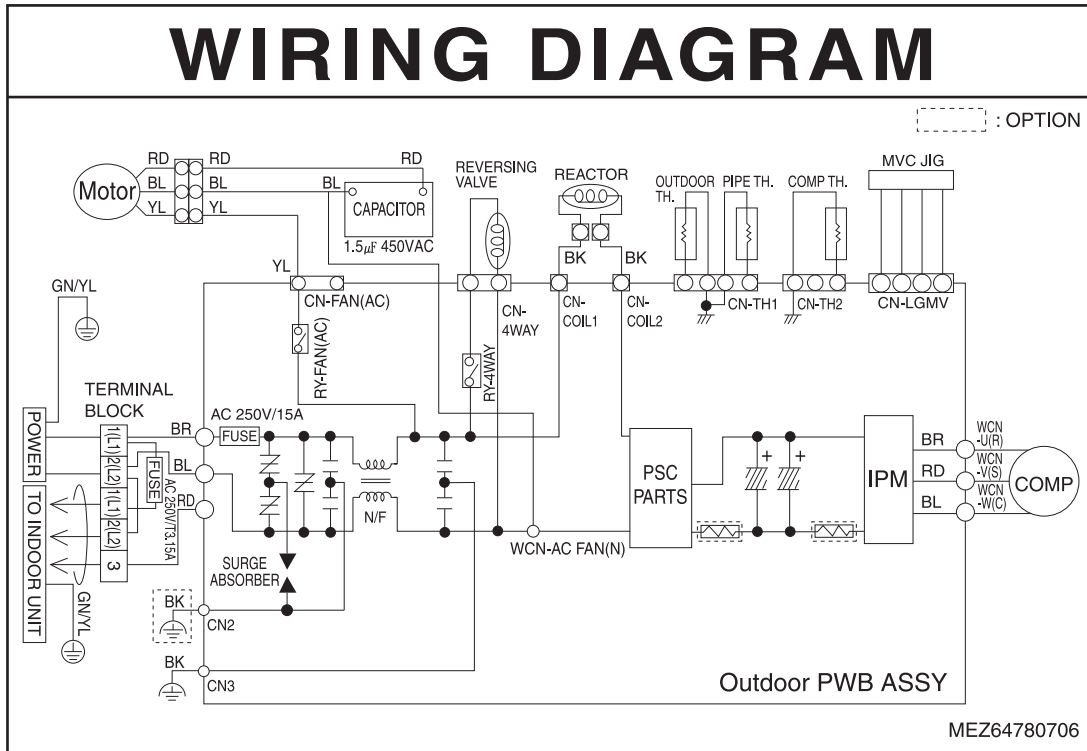
LOC	Description	PCB Connector
Th1	Thermistor for indoor air temperature	CH-TH1(Indoor)
Th2	Water level sensor (Option)	CH-TH2(Indoor)
Th3	Thermistor for evaporating temperature	CH-TH3(INDOOR)
Th4	Thermistor for discharge pipe temperature	CN-TH2(OUTDOOR)
Th5	Thermistor for condensing temperature	CN-TH1(OUTDOOR)
Th6	Thermistor for outdoor air temperature	CN-TH1(OUTDOOR)

3. Wiring Diagrams

Indoor Unit

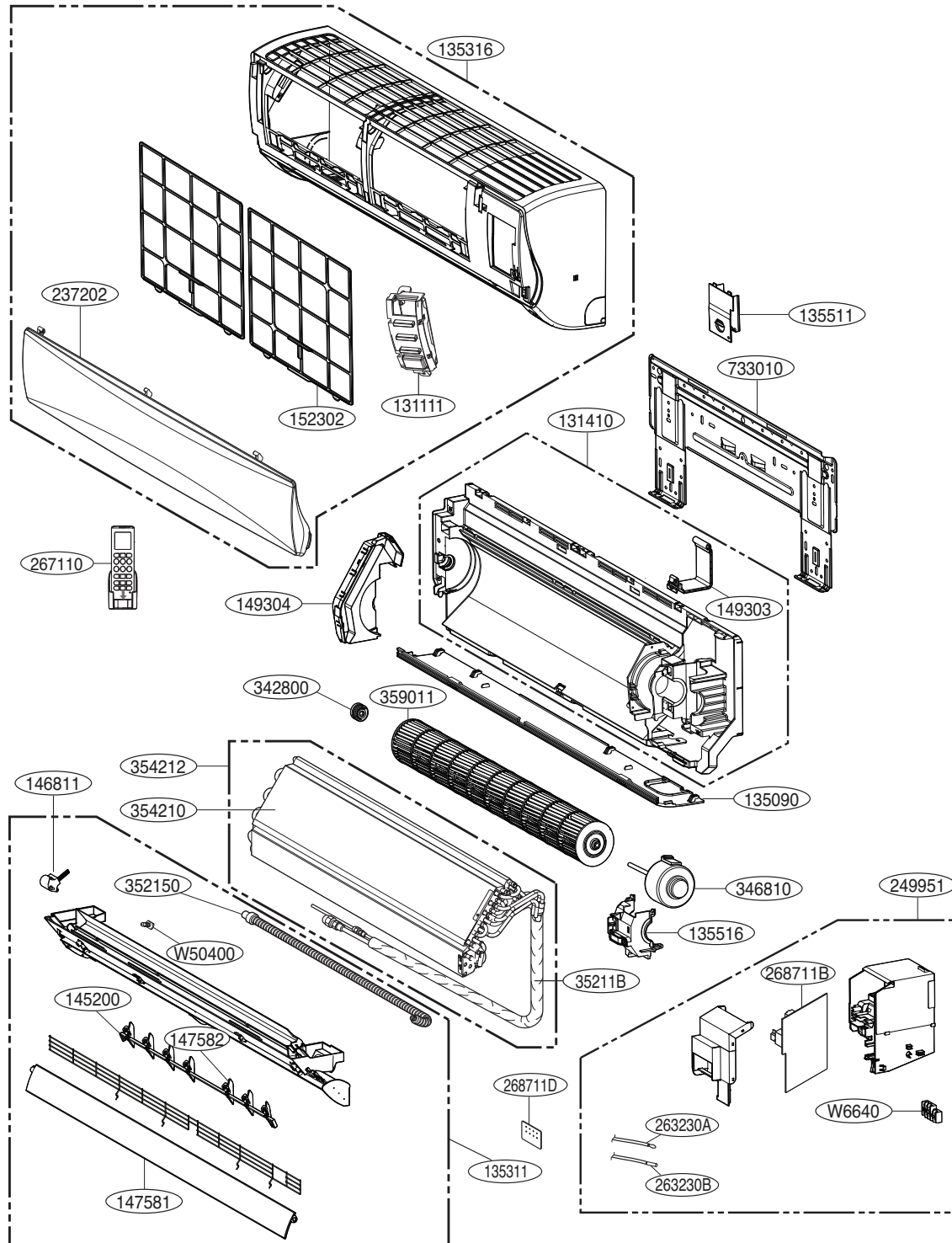


Outdoor Unit



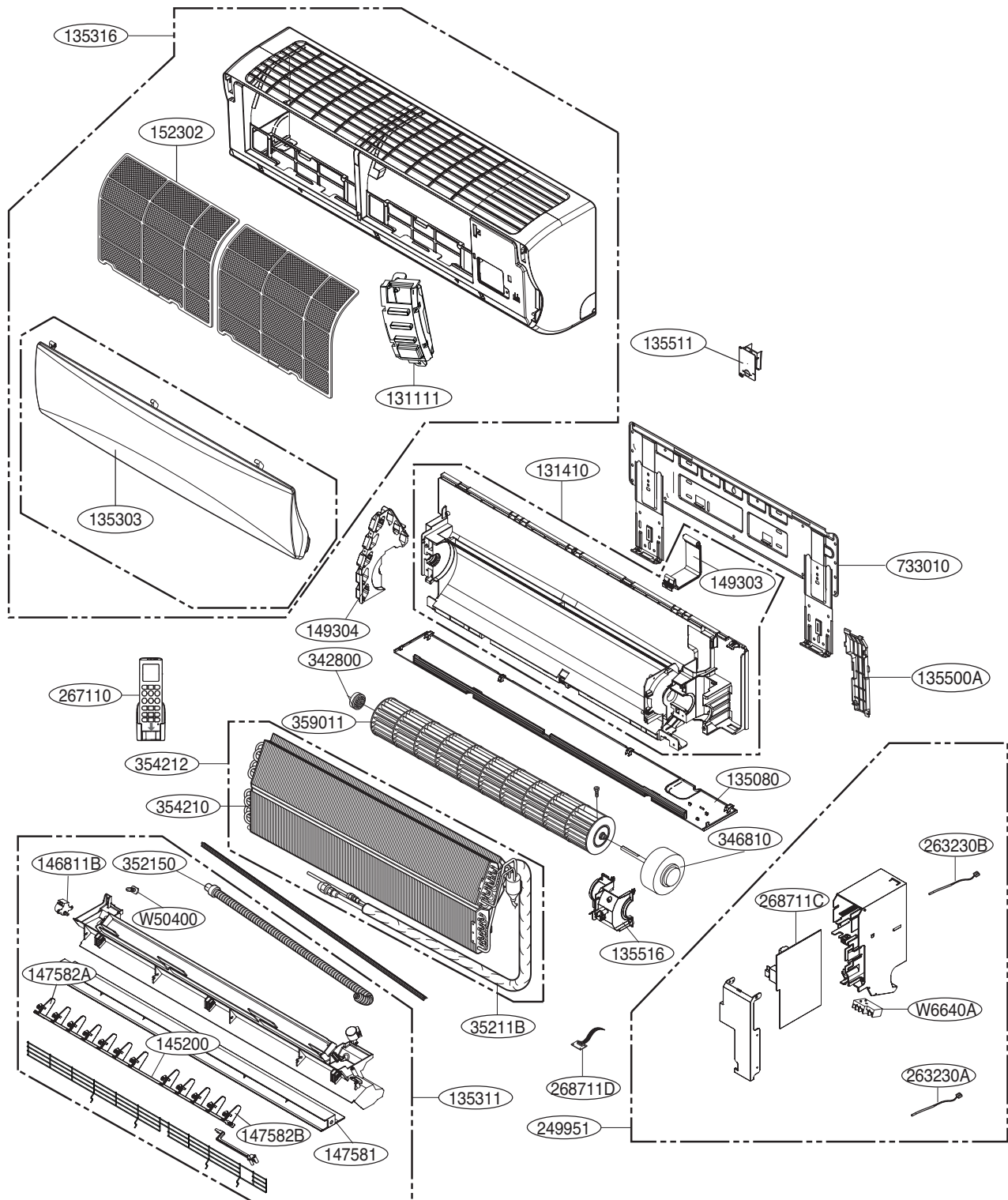
4. Exploded View

Indoor Unit ASNW093WSA7



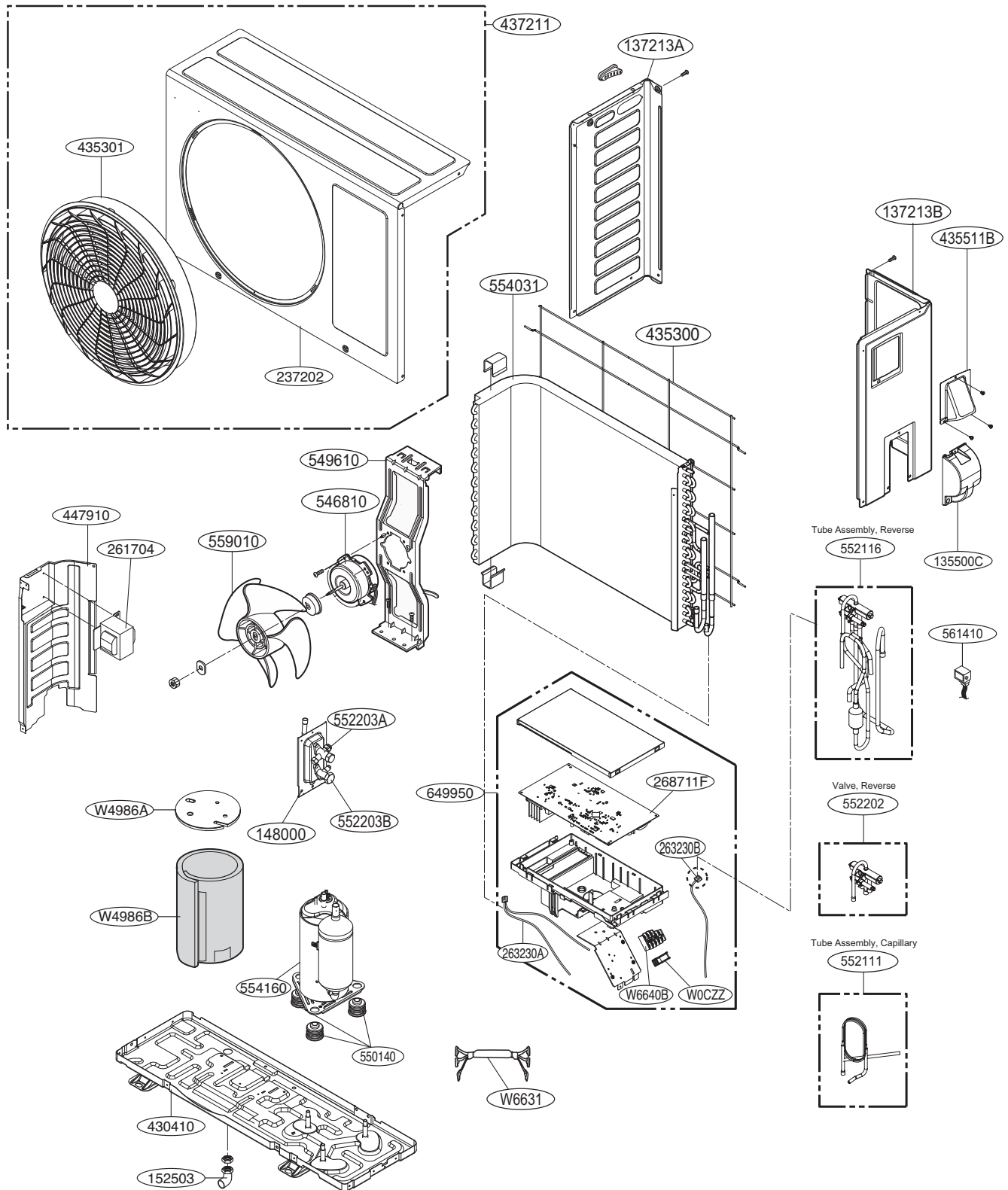
LOC.	Description	PCB Connector
263230A	Thermistor for indoor air temperature	CN-TH1(Indoor)
263230B	Thermistor for evaporating temperature	CN-TH3(Indoor)

ASNW123BSA7



LOC.	Description	PCB Connector
263230A	Thermistor for indoor air temperature	CN-TH1(Indoor)
263230B	Thermistor for evaporating temperature	CN-TH3(Indoor)

Outdoor Unit ASUW093WSA7/ASUW123BSA7



LOC.	Description	PCB Connector
263230A	Thermistor for condensing temperature	CN-TH1(Outdoor)
263230B	Thermistor for discharge pipe temperature	CN-TH2(Outdoor)



P/NO : MFL67499915

February, 2015