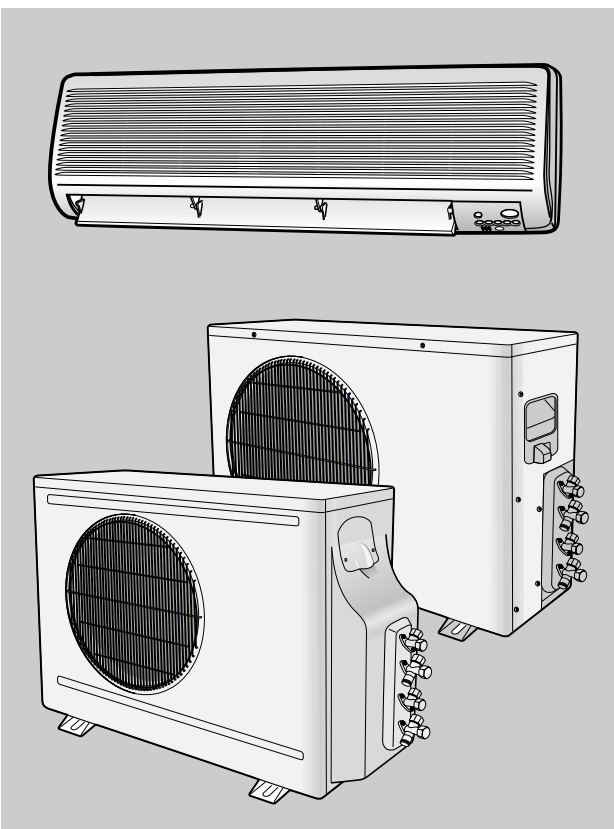
SAMSUNG

ROOM AIR CONDITIONER

INDOOR UNIT	OUTDOOR UNIT
AD26B1C13	UD26B1C2
AD18B1C09	UD18B1C2

SERVICE Manual

AIR CONDITIONER



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Ⓔ DB98-05645A(1)

1. Installation

1-1 Refrigerant Refill Procedure

If connecting pipe of more than 5 metres is installed, additional refrigerant should be charged by extra metre. You don't have to charge additional refrigerant up to 5 metres of connecting pipe.

1. Remove the valve stem cap and service port of 3-way valve.

↓

2. Connect the charging hose of low pressure side of Manifold gauge to the packed valve having a charging port(1/2" Packed valve) as shown at the right figure.

↓

3. Operate the unit at the cooling mode.

↓

4. Slowly open the valve of the low pressure side of Manifold gauge counterclockwise until the low pressure of manifold gauge indicates 4.8 to 5.5 kg/cm^2 (68 a 78psi) at the high cool operation (1-unit operation) and the standard temperature.

   It is recommend that refrigerant should be slowly put in. If the refrigerant is put in too quickly, compressor will be damaged.

↓

5. Stop operation of the air conditioner.

↓

6. Disconnect the charge hose of manifold gauge.

↓

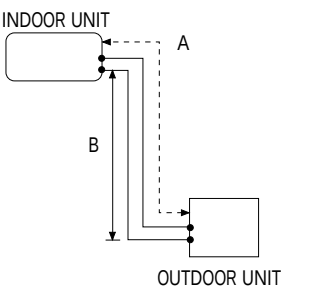
7. Close the cap of each valve.

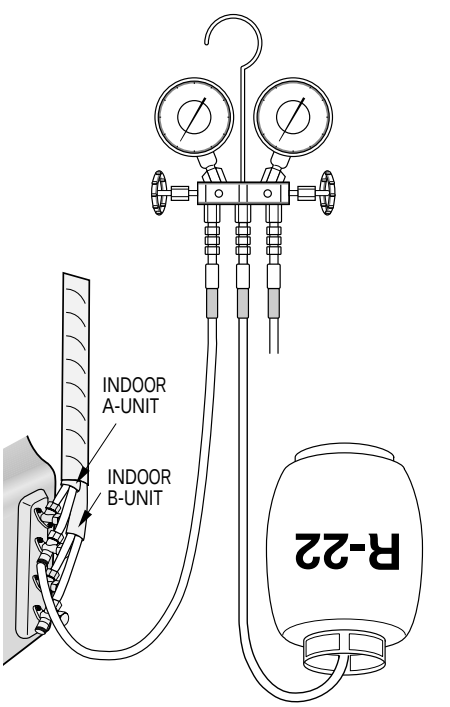
• Piping length and the height

		Pipe Size		Max.piping length A	Max height B
		LIQUID	GAS		
AD26B1C13	A-UNIT	1/4"	1/2"	15m(49ft 3in)	7m(23ft)
	B-UNIT	1/4"	1/2"	15m(49ft 3in)	7m(23ft)
AD18B1C09	A-UNIT	1/4"	3/8"	15m(49ft 3in)	7m(23ft)
	B-UNIT	1/4"	3/8"	15m(49ft 3in)	7m(23ft)

Additional refrigerant charge (R22,g)

• When length of the pipe is over 5u by the unit, you should charge the refrigerant Formulas
A-UNIT : 20gx(L_a-5)/m
B-UNIT : 20gx(L_b-5)/m
(La:the length of A-unit's pipe L_b:the length of B-unit's pipe)





1-2 “Pump down” Procedure

1. Confirm that both the 2-way and 3-way valves are set to the open position.
   (1) Remove the valve stem caps.
   (2) Be sure to use a hexagonal wrench to operate the Gas side valve stems.

2. Operate the unit for 10 to 15 minutes.

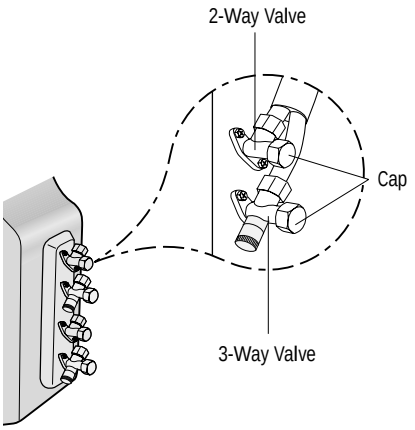
3. Stop operation and wait for 3 minutes, then connect the charge set to the service port of the 3-way valve.
   (1) Connect the charge hose with the push pin to the service port.

4. Air purging of the charge hose.
   (1) Open the low-pressure valve on the charge set slightly to air purge from the charge hose.

5. Set the liquid side 2-way valve to the closed position.

6. Operate the air conditioner at the cooling cycle and stop operation immediately after setting the 3-way valve to the closed position when the gauge indicates 0 kg/cm²G.
   If the unit can not be operated at the Cooling Mode(weater is rather cool), operate the unit at the Trubo Mode.
   So that the unit can be operated.

7. Disconnect the charge set, and mount the both 3-way valve’s stem nuts and the service port cap.



Relocation of the air conditioner

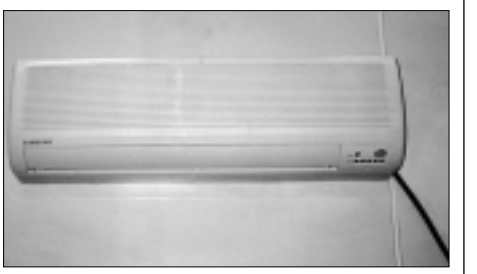
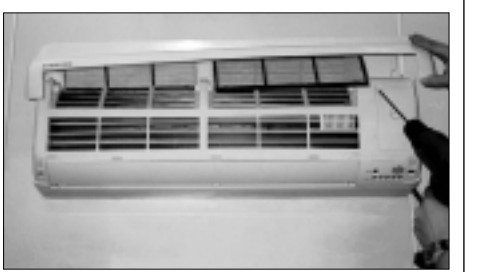
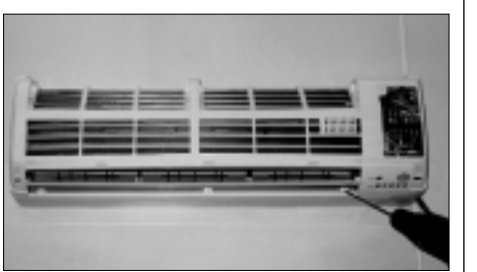
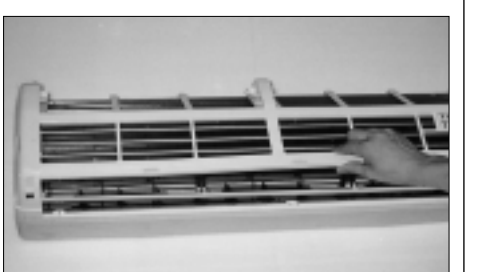
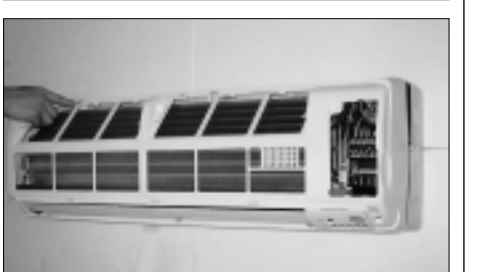
- Refer to this procedure when the unit is relocated.

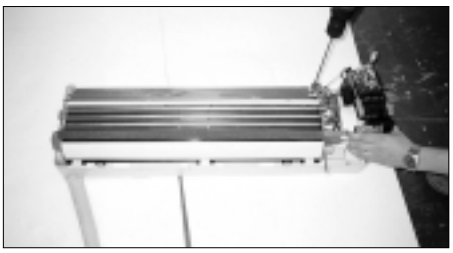
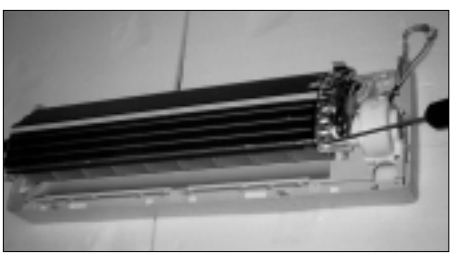
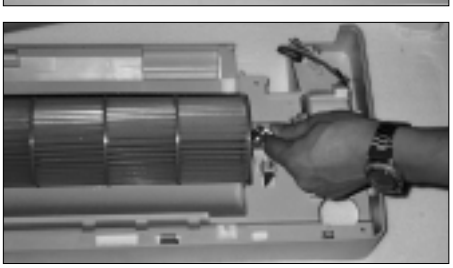
1. Carry out the pump down procedure (refer to the details of ‘pump down’).
2. Remove the power cord.
3. Disconnect the assembly cable from the indoor and outdoor units.
4. Remove the flare nut connecting the indoor unit and the pipe.
   At this time, cover the pipe of the indoor unit and the other pipe using a cap or vinyl plug to avoid foreign material entering.
5. Disconnect the pipe connected to the outdoor unit.
   At this time, cover the valve of the outdoor unit and the other pipe using a cap or vinyl plug to avoid foreign material entering.
6. Make sure you do not bend the connection pipes in the middle and store together with the cables.
7. Move the indoor and outdoor units to a new location.
8. Remove the mounting plate for the indoor unit and move it to a new location.

2. Disassembly and Reassembly

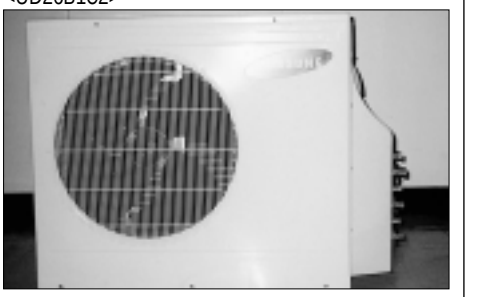
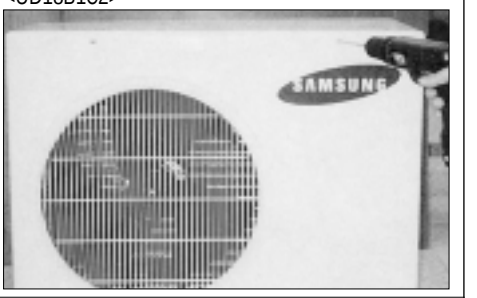
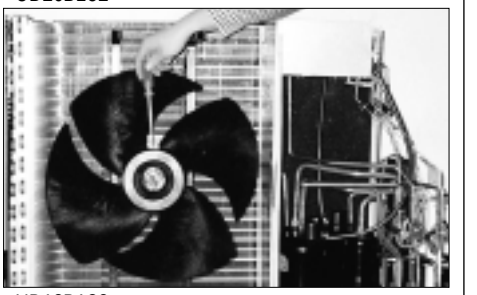
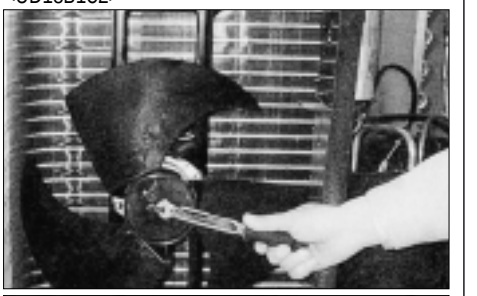
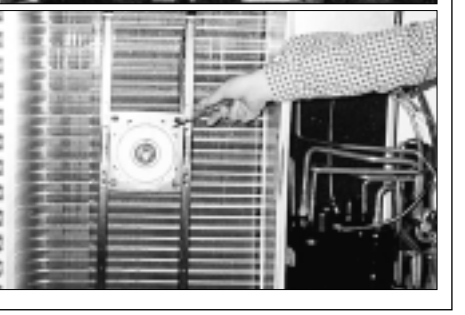
Stop operation of the air conditioner and remove the power cable before repairing the unit.

2-1 Indoor Unit

No	Parts	Procedure	Remark
1	Front Grille	1) Stop the air conditioner operation and block the main power. 2) Separate tape of front panel upper.	
		3) Contract the second finger to the left, and right handle and pull to open the inlet grille. 4) Take the left and right filter out. *Taking off the deodorizing filter. 5) Loosen one of the right fixing screw and separate the terminal cover.	
		6) Loosen three fixing screws of front grille.	
		7) Pull the upper left and right of discharge softly for the outside cover to be pulled out.	
		8) Pull softly the lower part of discharge and push it up. **Caution;** Assemble the front panel and fix the hooks of left and right.	

No	Parts	Procedure	Remark
2	Electrical Parts (Main PCB)	1) Do “1”above. 2) Take all the connector of PCB upper side out. (Inclusion Power cord) 3) Separate the outdoor unit connection wire from the terminal block. 4) If pulling the Main PCB up. it will be taken out.	
3	Ass’y Tray Drain.	1) Do “1”, “2”, above. Separate the drain hose from the extension drain hose. 2) Pull tray drain out from the back body.	
4	Heat Exchanger	1) Do “1” and “2”, “3”, above. 2) Loosen two fixing earth screws of right side. 3) Separate the connection pipe. 4) Separate the holder pipe at the rearside. 5) Loosen the three fixing screws of right and left side. 6) Lifting the heat exchanger up a little to push the up side for separation from the indoor unit.	 
5	Fan Motor and Cross Fan	1) Do “1”, “2”, ”3”, “4”, above. 2) Loosen the fixing two screws and separate the motor holder. 3) Loosen the fixing screw of fan motor. (By use of M3 wrench) 4) Separate the fan motor from the fan. 5) Separate the fan from the left holder bearing.	 

2-2 Outdoor Unit

No	Parts	Procedure	Remark
1	Cabinet	1) Turn off the unit and remove the power cable. 2) Remove the top cover. 3) Remove the control box cover. 4) Unplug the ass'y cable. 5) Remove the cabi-side. 6) Remove the cabi-front. * When you assemble the parts, check if the each parts and electric connectors are fixed firmly.	<UD26B1C2>  <UD18B1C2> 
2	Fan Motor & Propeller Fan	1) Do Procedure “1” above. 2) Remove the nut flange. (Turn to the right to remove as it is a left turned screw) 3) Disassemble the propeller fan.	<UD26B1C2>  <UD18B1C2>  

3. Troubleshooting

3-1 Items to be checked first

1) The input voltage should be rating voltage ±10% range.
   The airconditioner may not operate properly if the voltage is out of this range.

2) Is the link cable linking the indoor unit and the outdoor unit linked properly?
   The indoor unit and the outdoor unit shall be linked by 5 cables.
   Check the terminals if the indoor unit and outdoor unit are properly linked by the same number of cables. Otherwise the airconditioner may not operate properly.

3) When a problem occurs due to the contents illustrated in the table below it is a symptom not related to the malfunction of the airconditioner.

NO	Operation of air conditioner	Explanation
1	The STD operation indication LED blinks when a power plug of the indoor unit is plugged in for the first time.	It indicates power is on. The LED stops blinking if the operation ON/OFF button on the remote control unit is pushed.
2	In a COOL operation mode, the compressor does not operate at a room temperature higher than the setting temperature that the IN DOOR FAN should operate. In a HEAT operation mode, the compressor does not operate at a room temperature lower than the setting temperature that indoor fan should operate.	In happens after a delay of 3 minutes when the compressor is reoperated. The same phenomenon occurs when a power is on. As a phenomenon that the compressor is reoperated after a delay of 3 minutes, the indoor fan is adjusted automatically with reference to a temperature of the air blew
3	Fan speed setting is not allowed in AUTO or DRY mode.	The speed of the indoor fan is set to LL in DRY mode. Fan speed is 5 steps is selected automatically in AUTO mode.
4	Compressor stops operation intermittently in DRY mode.	Compressor operation is controlled automatically in DRY mode depending on the room temperature and humidity.
5	Compressor of the outdoor unit is operating although it is turned off in a HEAT mode.	When the unit is turned off while de-ice is activated, the compressor continues operation for up to 9 minutes (maximum) until the deice is completed.
6	Timer LED only of the indoor unit lights up and the air conditioner does not operate.	Timer is being activated and the unit is in ready mode. The unit operates normally if the timer operation is cancelled.
7	The compressor and indoor fan stop intermittently in HEAT mode.	The compressor and indoor fan stop intermittently if room temperature exceeds a setting temperature in order to protect the compressor from overheated air in a HEAT mode.
8	Indoor fan and outdoor fan stop operation intermittently in a HEAT mode.	The compressor operates in a reverse cycle to remove exterior ice in a HEAT mode, and indoor fan and outdoor fan do not operate intermittently for within 20% of the total heater operation
9	The compressor stops intermittently in a COOL mode or DRY mode, and fan speed of the indoor unit decreases.	The compressor stops intermittently or the fan speed of the indoor unit decreases to prevent inside/outside air frozen depending on the inside/outside air temperature.

4) Indoor unit observes operation condition of the air conditioner, and displays self diagnosis details on the display panel.

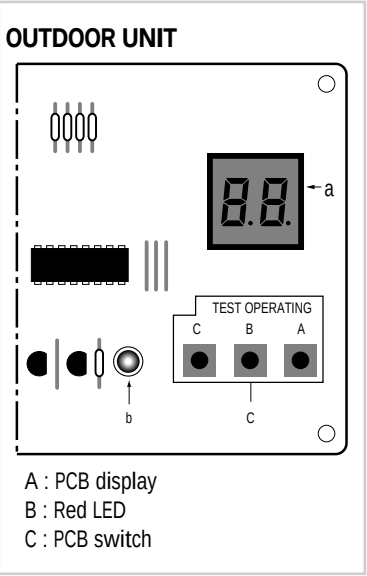
NO	Display				Self Diagnosis
	Standard	Timer	Nature	Power	
1	◐ (GREEN)	X	X	X	Restore from power failure (input initial power)
2	X	◐	X	X	Indoor unit Room sensor Error (open or short)
3	◐ (GREEN)	◐	X	X	Indoor unit heat exchanger temperature sensor Error (open or short)
4	X	X	◐	X	Indoor fan malfunctioning (for speed is below 450rpm)
5	X	◐	◐	X	In case that the communication between the indoor unit and outdoor unit is not made for 60 seconds
6	◐ (GREEN)	X	◐	X	Outdoor sensor Error (open or short) - Outdoor sensor - Pipe sensor A, B
7	◐ (GREEN)	X	◐	◐	The malfunction ot 4way valve in heat mode operation.

3-2 Checking and Testing Operations (Outdoor Unit)

To complete the installation, perform the following checks and tests to ensure that the air conditioner is operating correctly.

1. Review all the following elements in the installation:
   - Installation site strength
   - Piping connection tightness to detect any gas leakages
   - Connection wiring
   - Heat-resistant insulation of the piping
   - Drainage
   - Earthing wire connection
   - Correct operations (follow the steps below)
   - Room select switch in the indoor unit

2. Apply the power to the outdoor unit.
   - Check the fuse (250V~, 5A) : The fuse is open when the power line (L1, N2) is short.



A : PCB display
B : Red LED
C : PCB switch

3. Check the connection of PCB communication of outdoor unit.
   (Check whether the red LED of outdoor unit PCB is flickering.)

   - The communication lamp is flickering after the display of each unit on the outdoor PCB display part. (every one second).
     LED is not flikering, if the connection is bad or the room select switch is located in the wrong position.
     - LED lamp (red) flickering after display of A (0.5 sec)
     - LED lamp (red) flickering after display of b (0.5 sec)
     - LED lamp (red) flickering after display of C (0.5 sec)
     Note : PCB switch "C" is used for triple split multi air conditioner.

   Result : If all of three units display lamps are flickering, the connection wires and the room option connections are good.

If the lamp is not flickering, check as follows:

A. Check the display part of indoor unit of each unit (A,B) after outdoor unit PCB switch S/W-A is on.
Check the status of each unit indoor room select switch.
(Adjust the select switch suitable to the unit A, B.)
- A unit : STANDARD LED on, TIMER LED flickering
- B unit : STANDARD LED on, TIMER and NATURE LED flickering
- C unit : STANDARD LED on, TIMER and NATURE, POWER LED flickering (In case of triple split multi air conditioner)

UNIT	STANDARD	TIMER	NATURE	POWER
A	○	◐	●	●
B	○	◐	◐	●
C	○	◐	◐	◐

○ Lamp ON ● Lamp OFF ◐ Lamp Flasher

4. Check the test operation status by pressing the PCB switch S/W-A and S/W-B of outdoor unit.
- Check the operation status by pushing the switch one at time.
- Perform the test operation only for the unit selected last.
- Check the pipe pressure and the other operation status during the test operation.
- Check items when the error occurs during the test operation (each unit)
  - Check there is enough refrigerant.
  - Check pipe connections.

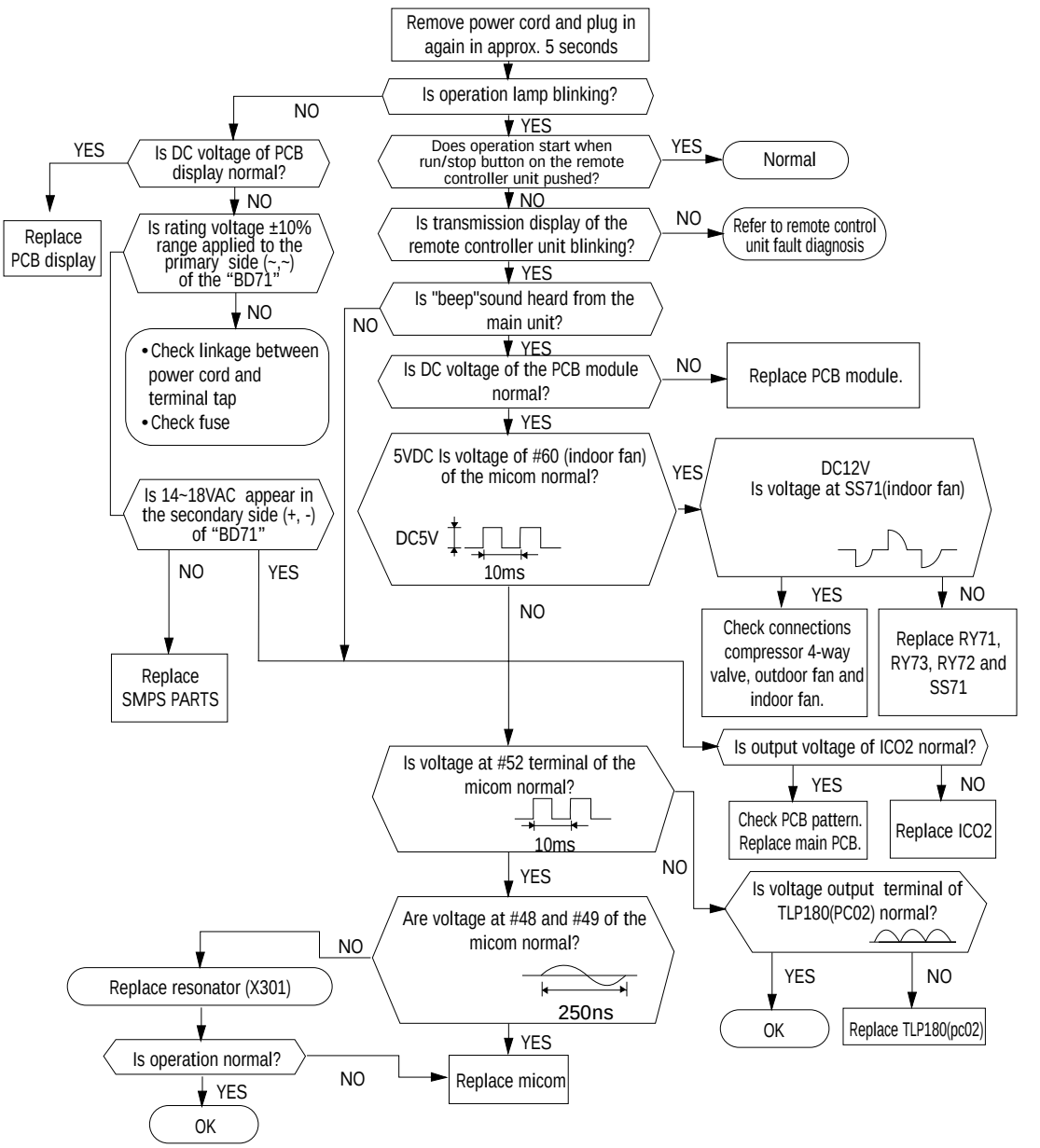
DISPLAY	EXPLANATION	REMARK
Er→t0	Outdoor sensor error (Short/Open)	Be sure to check after applying the power to the outdoor unit.
Er→tA	Outdoor A cond pipe sensor error (Short/Open)	
Er→tb	Outdoor B cond pipe sensor error (Short/Open)	
Er→tC	Outdoor C cond pipe sensor error (Short/Open)	
Er→ A	A unit test operation error	Display when the test operation finishes. • When the pipe temperature difference of indoor unit (pipe temperature 4 minutes before - Actual pipe temperature) is less than 5˚C.
Er→ b	B unit test operation error	
Er→ C	C unit test operation error	
Er→CA	A unit test communication error	Be sure to check during the test operation.
Er→Cb	B unit test communication error	
Er→CC	C unit test communication error	
Er→C0	A,B,C unit all communication error	Display of power application.
6d→ A	A room test operation OK	Display 4 minutes after the COMP is on.
6d→ b	B room test operation OK	
6d→ C	C room test operation OK	
A	Communication unit number display : A unit	• Normal operation Unit A,B and C are changed every one second. ┌A→b→C┐ The communication lamp is flickering after display of each unit. (possibility to check the communication status) • During the test operation the unit under test is on and off every 0.25s.
b	Communication unit number display : B unit	
C	Communication unit number display : C unit (In case of triple split multi air conditioner)	
Er→ 6	Refrigerant leaks	
Er→AC	High temperature of the A cond	
Er→6C	High temperature of the B cond	

3-3 Fault Diagnosis by Symptom

3-3-1 No Power (completely dead)-Initial diagnosis

1) Checklist :
   (1) Is input voltage normal?
   (2) Is AC power linked correctly?
   (3) Is output voltage of DC regulator IC KA7805 (IC02) normal? (4.5VDC-5.5VDC)

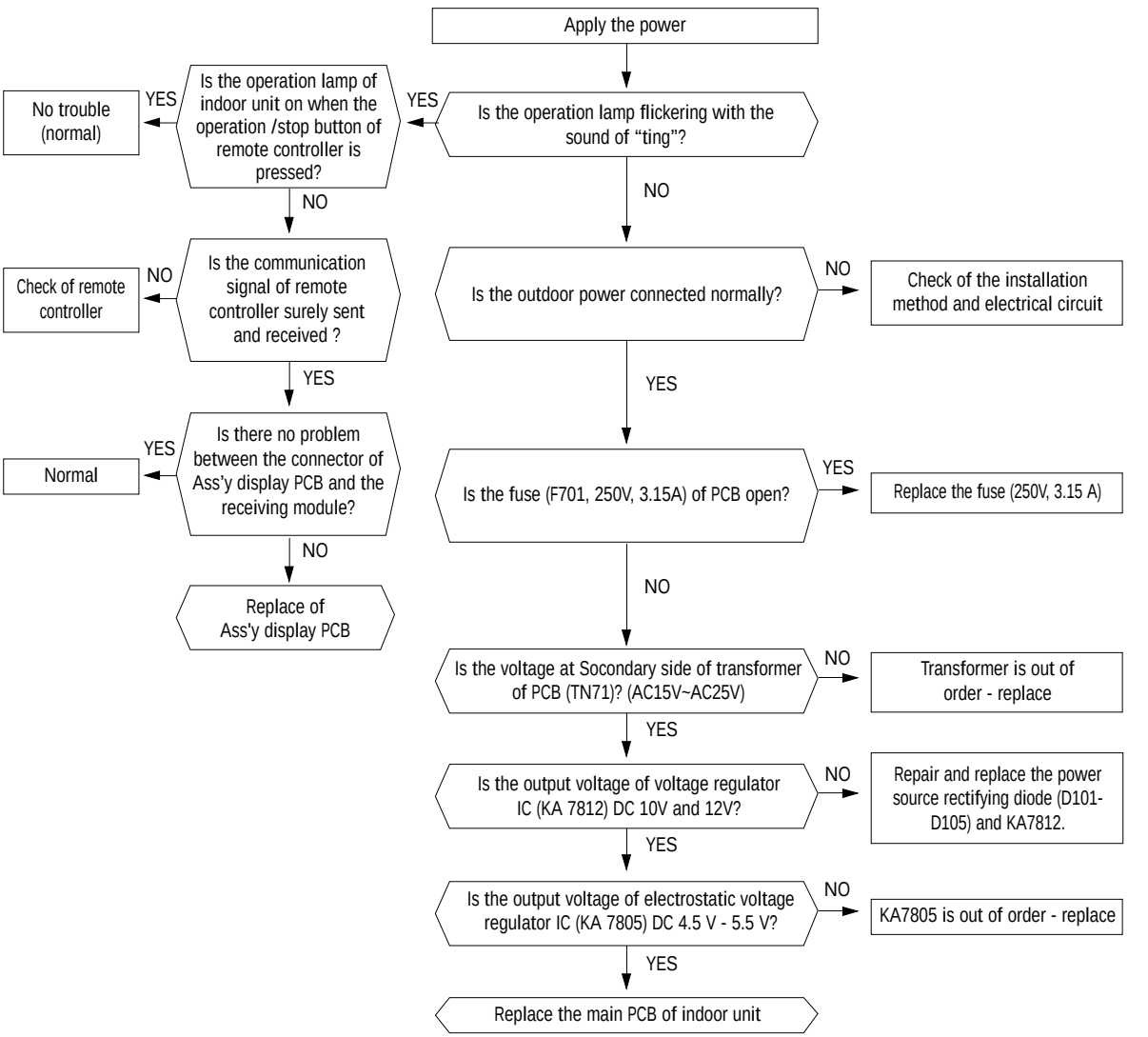
2) Troubleshooting procedure



3-3-2 When the power voltage is not available

1) Inspection items
   (1) Is the power voltage is normal? (The rating voltage ±10% range)
   (2) Is the power cord is correctly connected and is the contact good?
   (3) Does the sound "ting" come out with the operation lamp (green) flickering when the power is applied?
   If it is not flickering, do inspect and repair in accordance with the following inspection sequence.

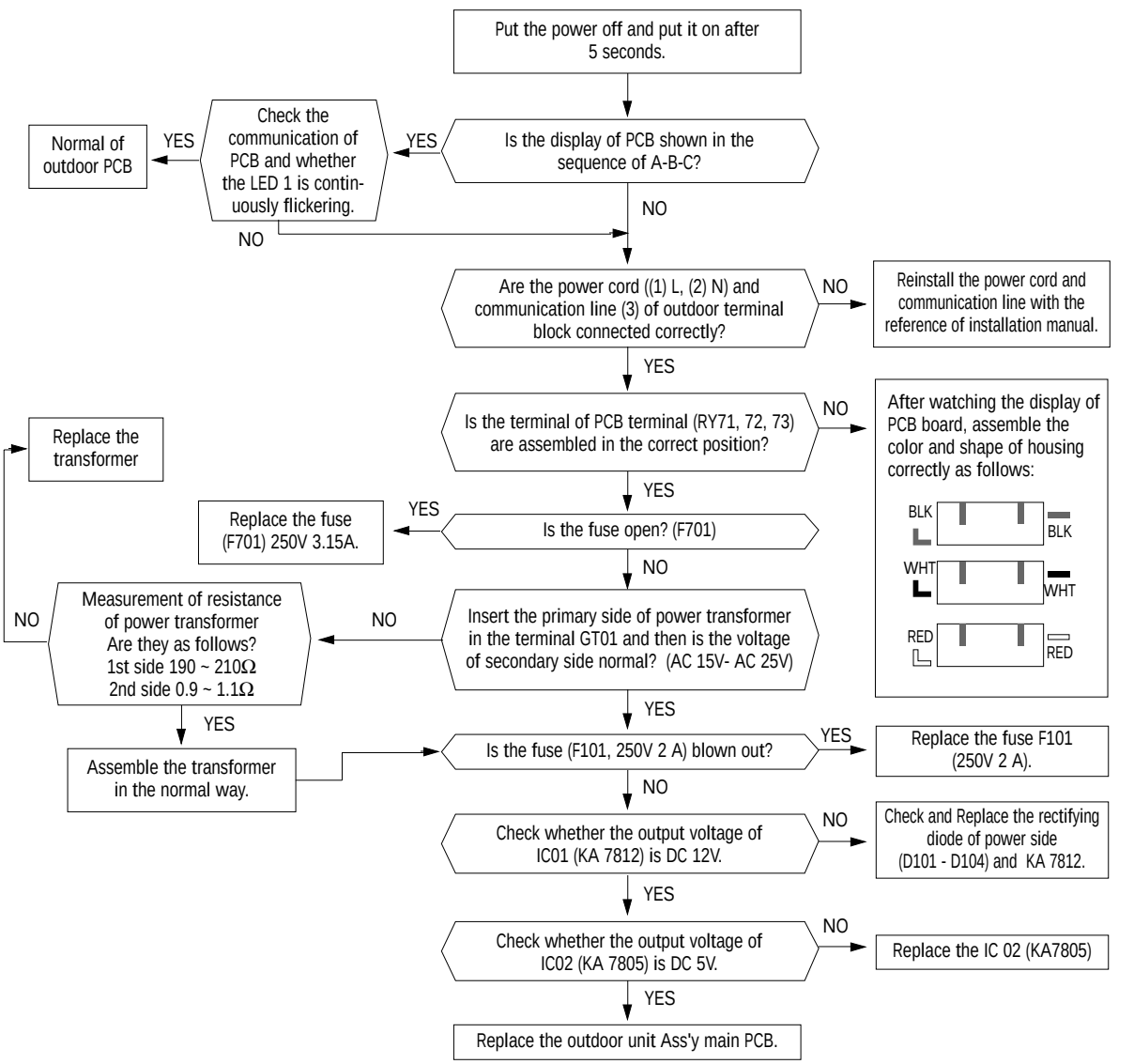
2) Inspection sequence



3-3-3 No Power (Outdoor unit)

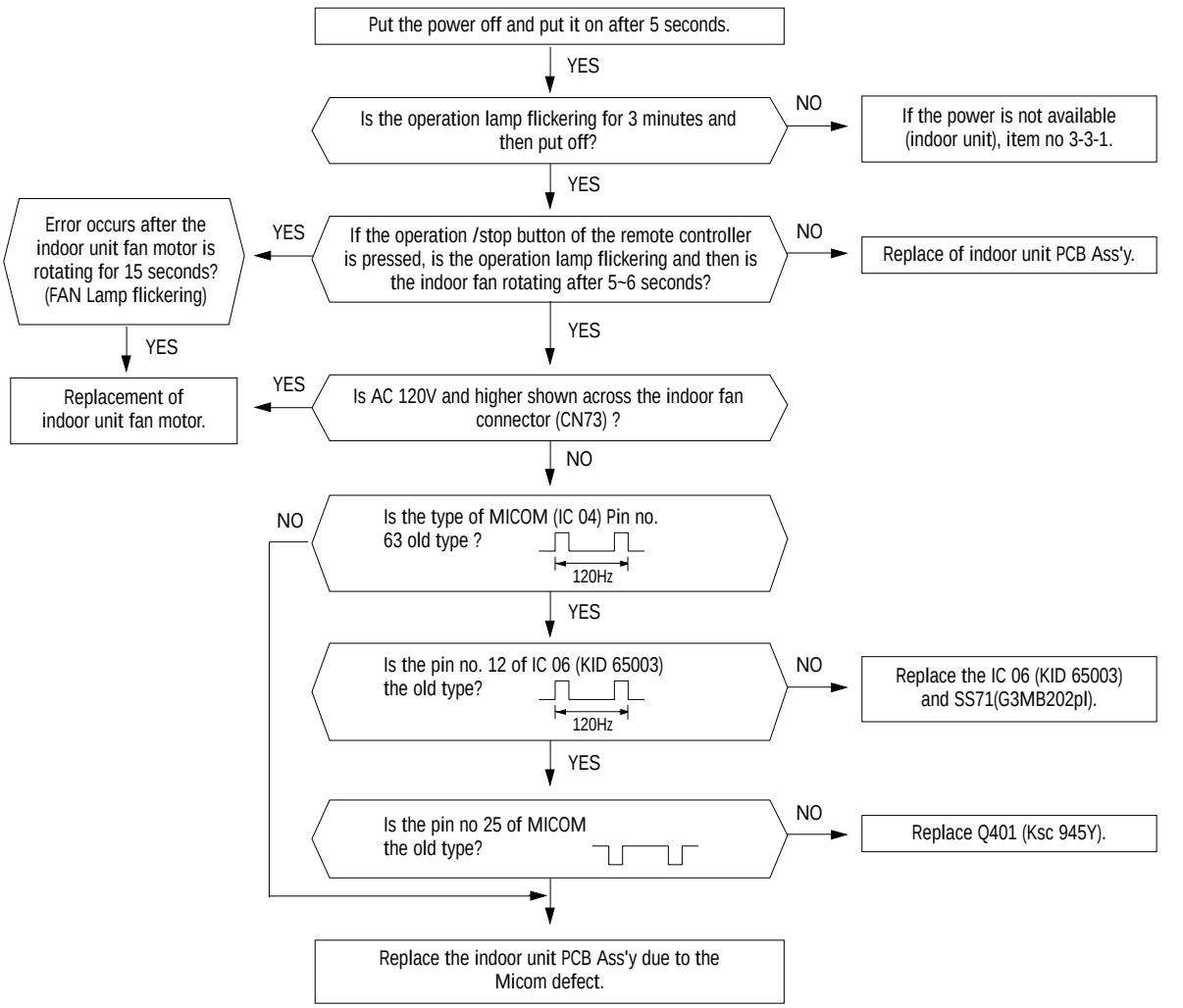
1) Inspection items
   (1) Á Is the power source normal (The rating Voltage ±10% range)?
   (2) Is the outdoor power connected normally? ((1) of terminal : L, (2) of terminal : N, (3) of terminal : communication) ?
   (3) Check whether the display of outdoor PCB(SEG1) is shown in the order of A- B - C when the power is applied.
   If the display (SEG 1) is not shown the inspection and repair shall be performed in the sequence of the following:

2) Inspection sequence



3-3-4 When the fan of indoor unit does not operate

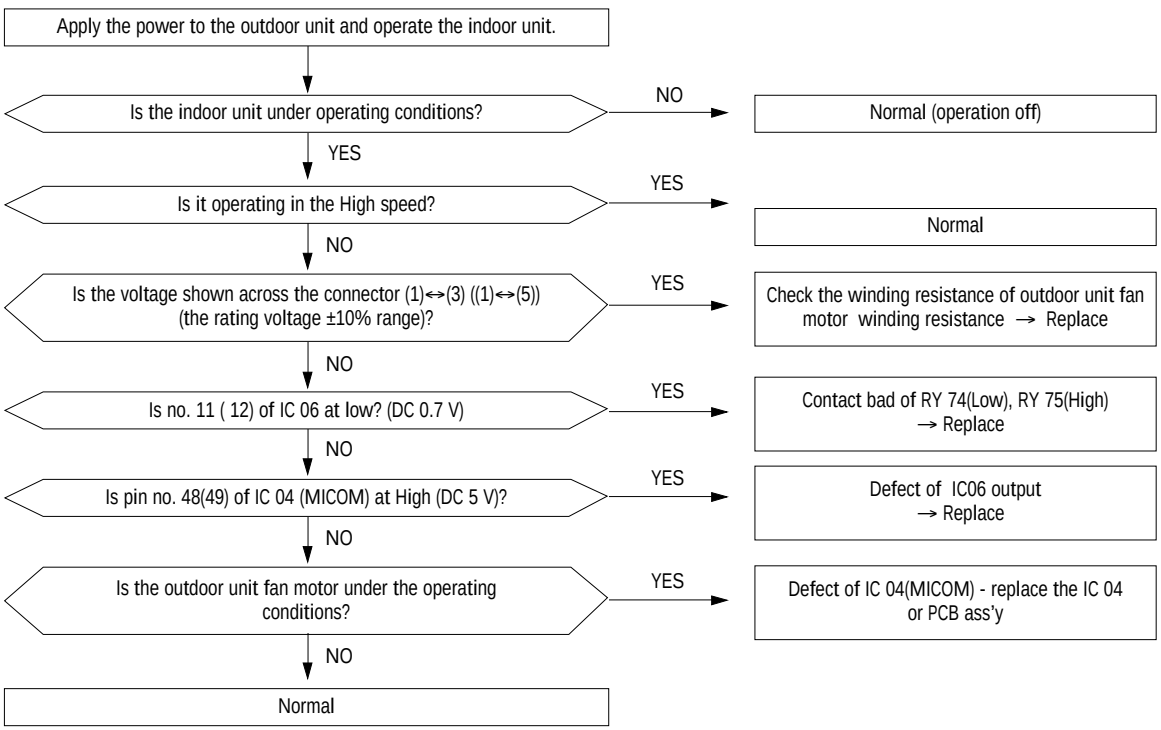
1) Inspection items
   (1) Is the power voltage normal?
   (2) Is the connector of indoor fan with the good contact? (CN73)
   (3) Is the soldering status of running condenser (CR71) with the good contact?
   (4) Is connector of the Hall IC with the good contact (CN 43) ?
   (5) Is the indoor fan rotating when it is under operation mode?
   (6) Is the FAN LED (green) flickering when the indoor fan stalled (for more than 15 seconds) and the trouble condition of speed detecting part?



3-3-5 When the outdoor unit fan does not operate

1) Inspection items
   (1) The outdoor unit fan motor operates only when the operating conditions are satisfied and is selected by the RY74(LOW) and PY75(HI) to rotate.
   (2) Is the power voltage normal?
   (3) Is the contact of outdoor unit fan motor (CN 73) good?
   (4) Is the winding resistance of outdoor unit fan motor 58Ω at Hi side and 143Ω at low side?
   (5) The outdoor unit fan motor operates with Hi at over 28°C and low at below 26°C during the cooling operation, and operates with Hi at below 14°C and low at over 15°C during the heating operation.

2) Inspection sequence

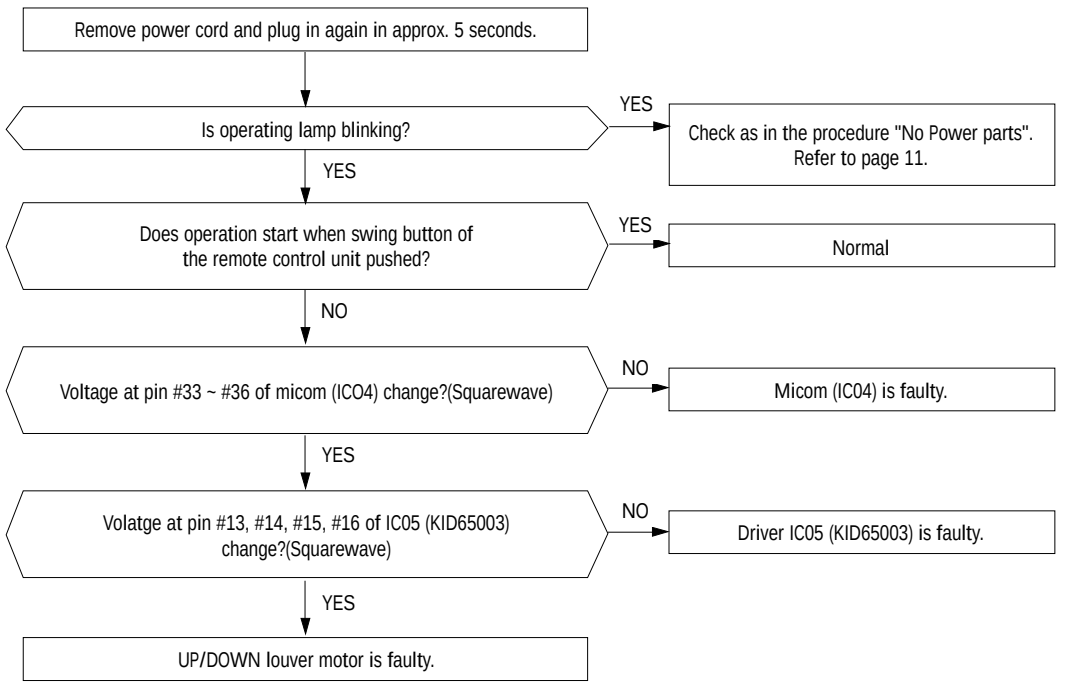


* Operating specification of the FAN of outdoor unit
(1) When the COMP is under the COMP ON condition during the cooling and heating operation, Hi or LOW operation is selected according to the temperature condition of outdoor room.
(2) When A room and B room are mixed to operate , it is always under low operation.
(3) Perform the comp ON/OFF control in the dry mode.
(4) When it is under the operation of anti-freezing, overload protection, defrost operation, it may be Low, high or Off.
(5) Hi = High speed, Low = Low speed

3-3-6 When the UP/DOWN Louver Moter Does Not Operate. (Initial Diagnosis)

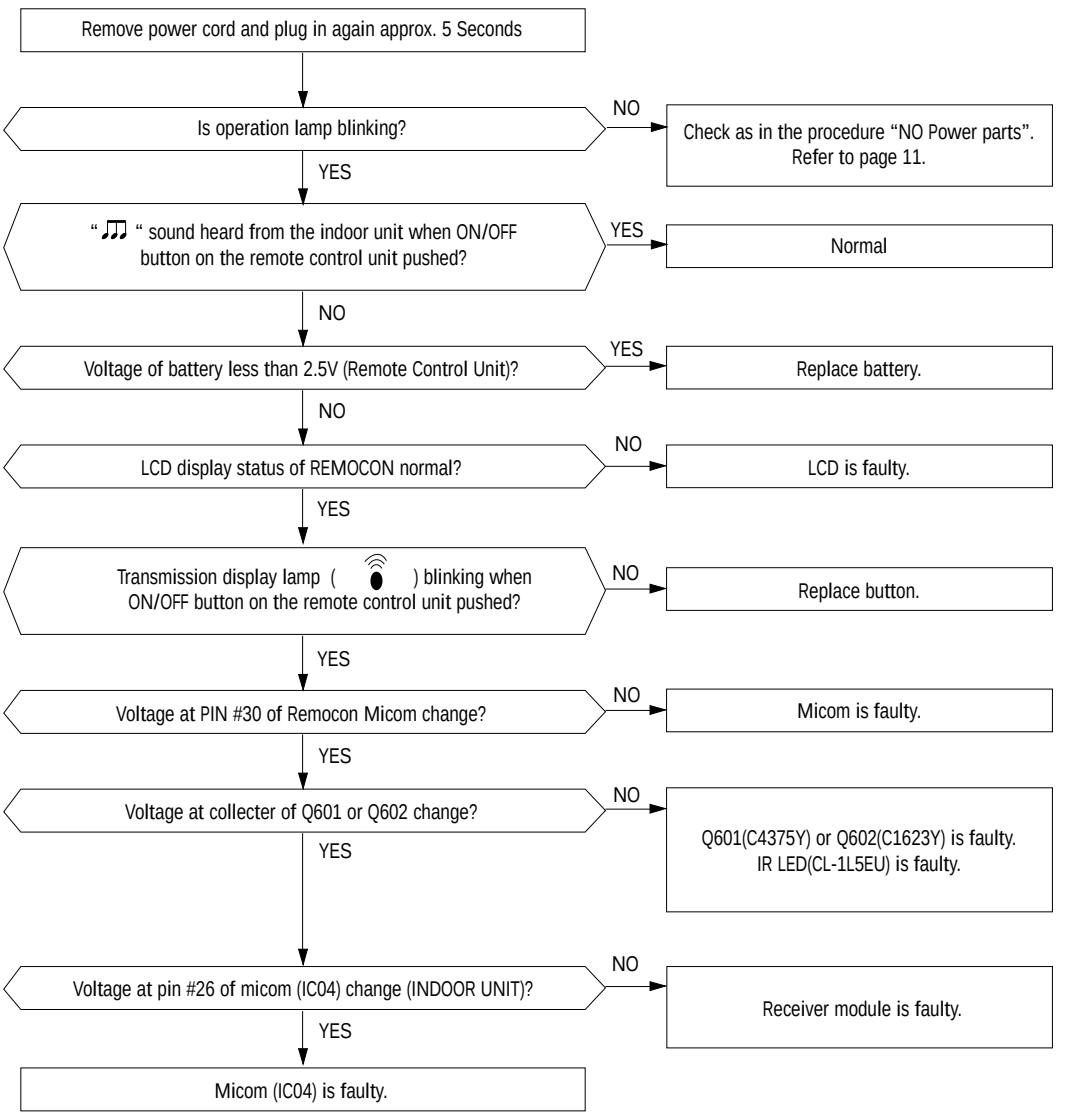
1) Checklist :
   (1) Is input voltage normal?
   (2) Is the UP/DOWN louver motor properly connected with the connector (CN61)?

2) Troubleshooting procedure



3-3-7 If Operation By Remote Control Unit Is Impossible. (Initial Diagnosis)

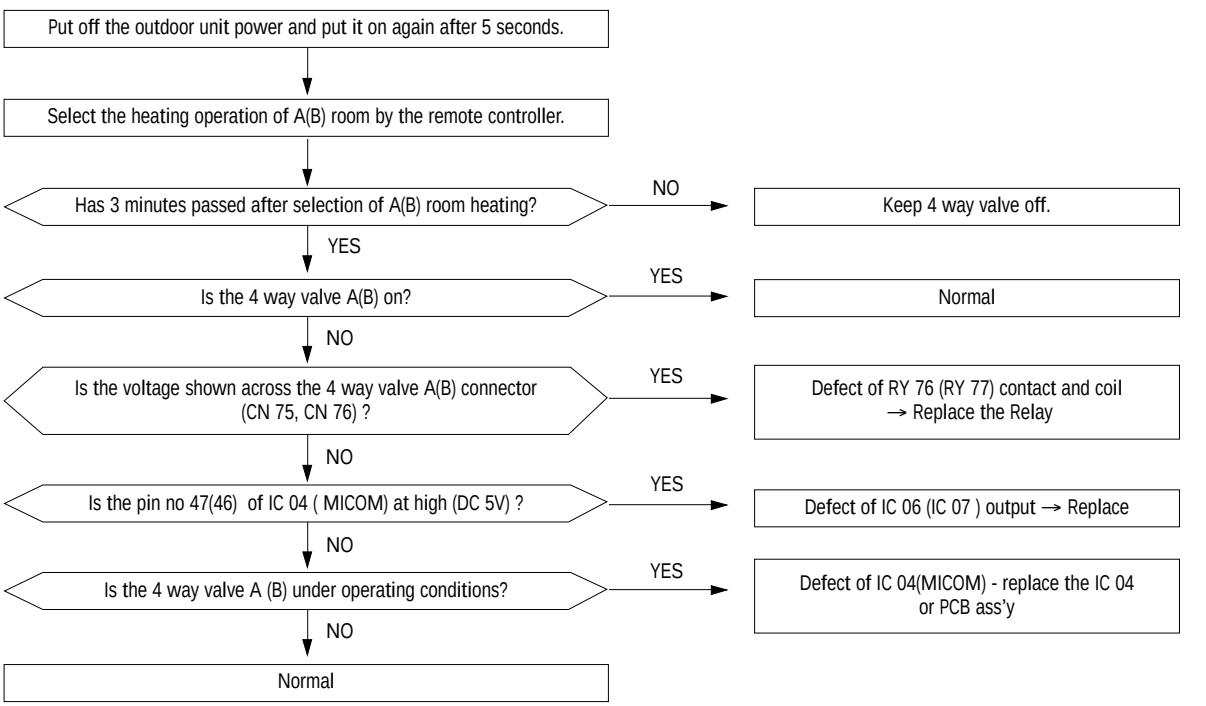
1) Troubleshooting procedure



3-3-8 When the 4 way valve (A,B) is not operating

1) Inspection items
   (1) Are the 4 way valve A and B under the operating conditions?
   (When the COMP A (4 way valve A) and COMP B (4 way valve B) are on during the heating operating)
   (2) Is the power voltage normal?
   (3) Is the connecting of 4 way valve A (CN 75) and B (CN 76) good?

2) Inspection sequence

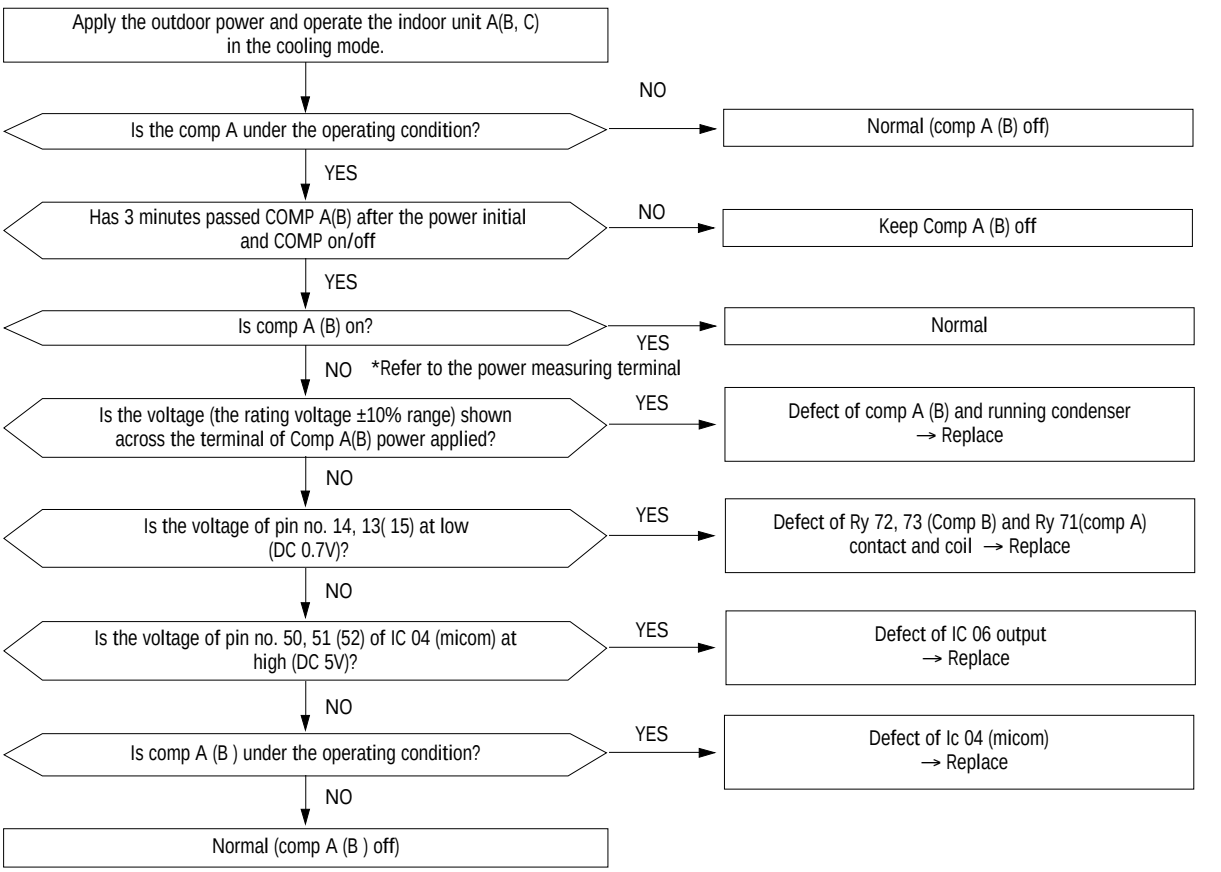


*4 way valve operating conditions
(1) During the defrost control, put the 4 way valve A(B) off.
(2) During the heating operation put the 4 way valve A(B) on.
(3) The changeover of heating to cooling : put the 4 way valve off immediately (in case of B and C room).
(4) The changeover of cooling to heating : it is on after 170 seconds delay.

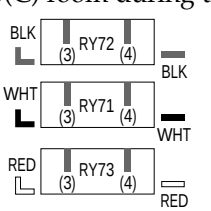
3-3-9 When the compressor does not operate

1) Inspection items
   (1) Is the COMP A under the operating conditions? (cooling operating of A, B(C) room)
   (2) Is the power voltage normal? (the rating voltage ±10% range)
   (3) Are the connector connection of COMP A(RY 72, 73) and B(RY 71) good?
   (4) The COMP A(B) is operated on and off in accordance with the operating conditions of indoor unit of A (B. C) room.

2) Inspection sequence



* Comp A (B) operating conditions
(1) Comp A : Comp on /off control in accordance with the A room during the heating and cooling indoor unit operation
(2) Comp B : Comp on /off control in accordance with the B(C) room during the heating and cooling indoor unit operation



* Comp A(B) power measuring terminal
(1) Comp A measuring ; RY 73 (4) ´ RY 72 (4)
(2) Comp B measuring ; RY 71 (4) ´ RY 72 (4)
(3) Power input ; RY 72 (3) ´ RY 73(3)

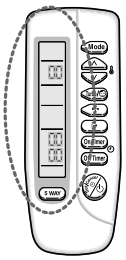
3-4 Set up the Model option

The Method for Setting up the model option with remocon

- **It is necessary to set up option code after replacing the main-PCB as a service parts.**
  Make sure that you can set up the option of code the remote controller after you replace the main PBA otherwise, the unit won't be working properly and all LED lamps on display will be flickering.

Step 1 : Preparing the remocon to main PCB option set

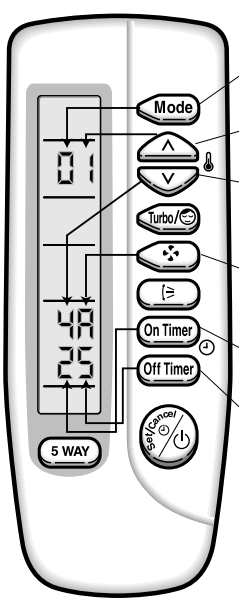
1st Remove the battery from the remocon.
2nd Press the temperature raise/down button simultaneously and insert the battery again.
3rd Make sure the remocon display shown as 00 00 00.



Step 2 : Second stage preparation of the remocon option set.

✵ **Note** ; In case the wrong letter has been selected, continue to press the button until the correct letter appears.

1st If the first stage number "0" appears on the display, proceed to the second stage.
2nd Every time the ① and ⑦ button, "0" and " | " each continue to appear.
3rd Whenever pressing the ②, ③, ④, ⑤, ⑥, ⑧, ⑨, ⑩, ⑪, ⑫ button, the number increase from 0~9(0123456789) and A, b, C, d, E, F each time.



① If the first number is 0, it is correct otherwise press Mode until 0 appear.

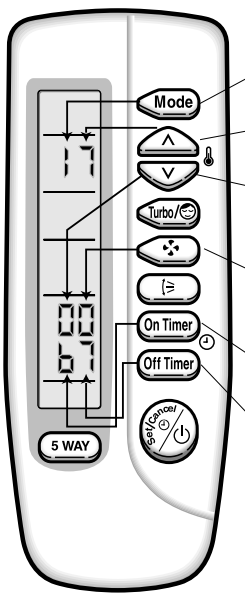
② When pressing the ∧ button 0 ~ F appear on the display, select one of them.

③ When pressing the ∨ button 0 ~ F appear on the display, select one of them.

④ When pressing the Turbo/ button 0 ~ F appear on the display, select one of them.

⑤ When pressing the On Timer button 0 ~ F appear on the display, select one of them.

⑥ When pressing the Off Timer button 0 ~ F appear on the display, select one of them.



① If the first number is 1, it is correct otherwise press Mode until 1 appear.

② When pressing the ∧ button 0~F appear on the display, select one of them.

③ When pressing the ∨ button 0~F appear on the display, select one of them.

④ When pressing the fan button 0~F appear on the display, select one of them.

⑤ When pressing the On Timer button 0~F appear on the display, select one of them.

⑥ When pressing the Off Timer button 0~F appear on the display, select one of them.

Step 3 : Reconfirming option set after completion

(in case of ex. 000000-1700b7)

After pressing Mode selector for the 0 mode, the display shown as 00 00 00.
After pressing Mode selector for the 1 mode, the display shown as 17 00 b7.

Step 4 : Pressing the ON/OFF button (⏻)

When pressing the operation ON/OFF key with the direction of remote controller for unit, the sound "Ding" or "Diriring" is heard and the first LED lamp on the left side is flickering at the same time, then the input of option is completed. (If the diriring sound isn't heard, try again pressing the ON/OFF button.)

Step 5 : Unit operation test-run

First, Remove the battery from the remote controller.
Second, Re-insert the battery into the remote controller.
Third, Press ON/OFF key with the direction of remote controller for set.

• Error Mode

1st If all lamps of indoor unit are flickering, Plug out and plug in again and pressing ON/OFF key to retry.

2nd If the unit is not working properly or all lamps are continuously flickering after setting the option code, see if the correct option code is set up for it's model.

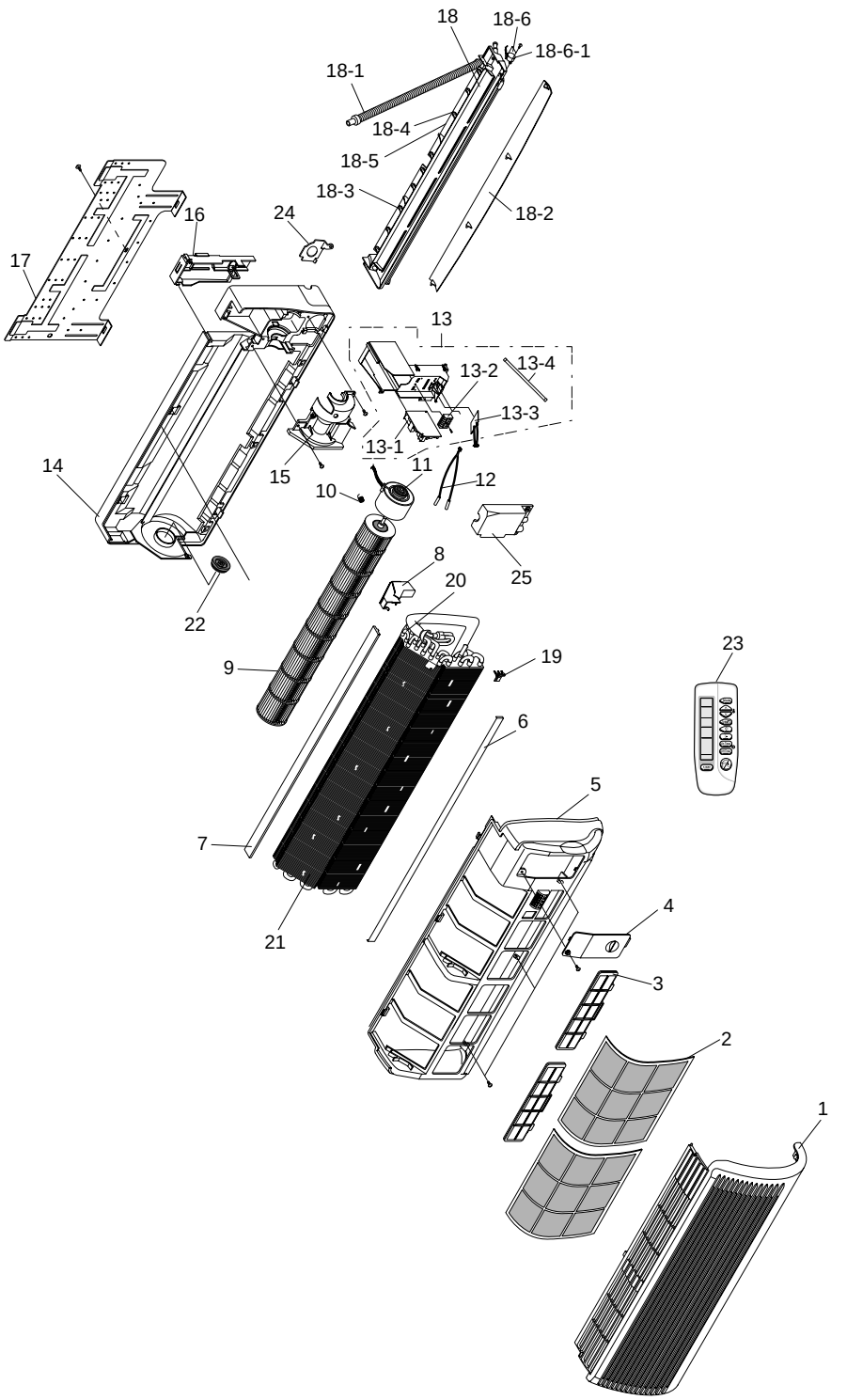
<Table of the option code>

MODEL	OPTION CODE
AD26B1C13	015773-100373
AD18B1C09	015223-10020C

MEMO

4. Exploded Views and Parts List

4-1 Indoor Unit

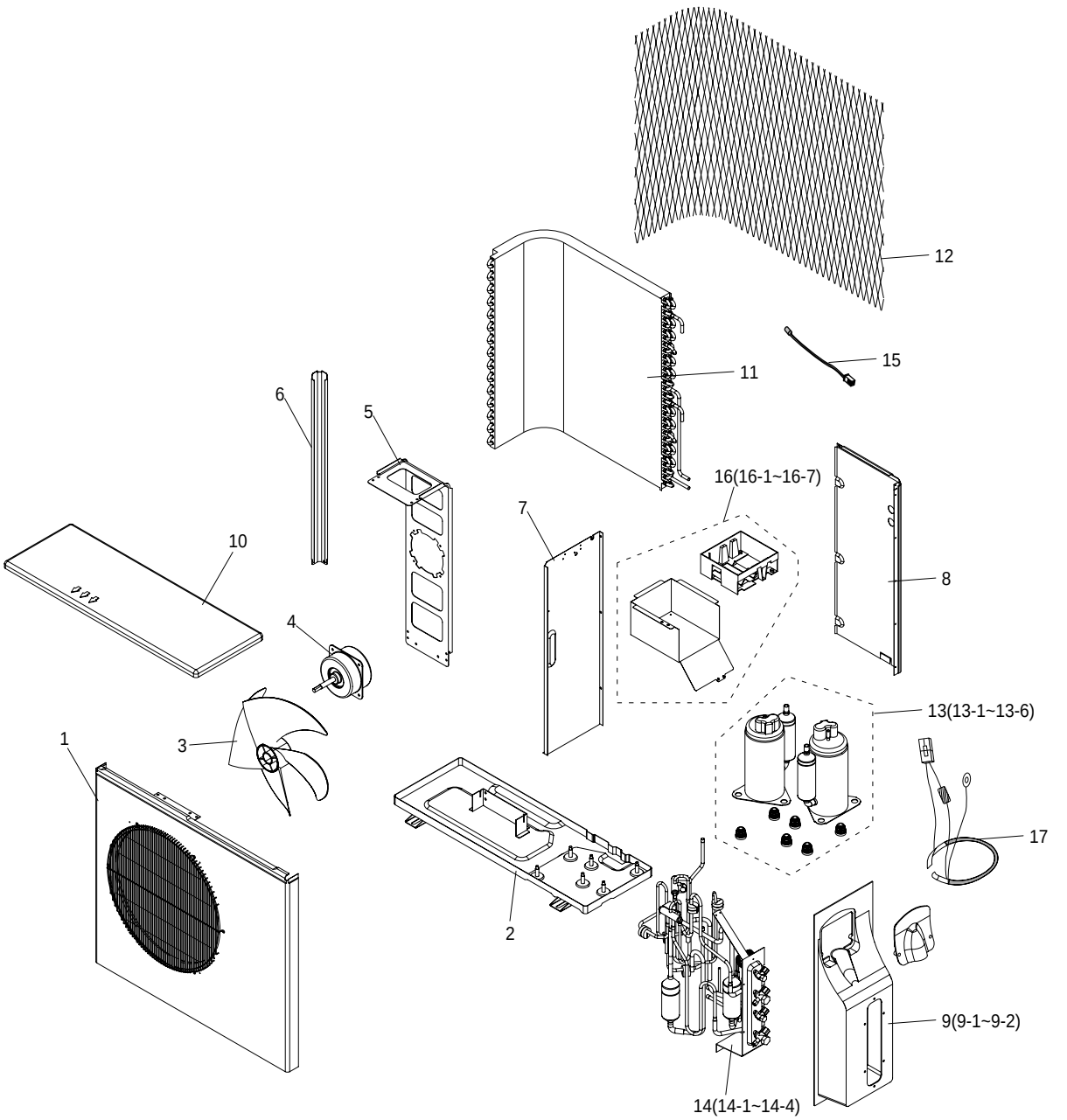


■ Parts List

No.	CODE NO	Description	Q'TY		REMARK
			AD18B1C09	AD26B1C13	
1	DB64-00085A	GRILLE AIR INLET	1	1	
2	DB63-00064B	GUARD-AIR FILTER	2	2	
3	DB95-00287K	FILTER CLEANER ASS´Y	1	1	
4	DB63-00067A	COVER TEMINAL	1	1	
5	DB92-00031L	ASS´Y PANEL	1	1	
6	DB67-00051A	SPACER EVAP LOW	1	1	
7	DB67-00032A	SPACER EVAP UP	1	1	
8	DB63-00083A	COVER U BEND	1	1	
9	DB94-00020A	ASS´Y FAN CROSS	1	1	
10	DB60-20011A	BOLT SPECIAL	1	1	
11	DB31-00071B	MOTOR FAN IN	1	1	
12	DB32-00020A	THERMISTOR WIRE ASS´Y	1	1	
13	DB93-01223A	ASS'Y CONTROL IN	1	1	
13-1	DB93-00319B	ASS´Y PCB MAIN	1	1	
13-2	DB65-00046A	TERMINAL BLOCK ASS´Y	1	1	
13-3	DB93-00268A	ASS´Y PCB DISPLAY	1	1	
13-3-1	2202-000780	C CERAMIC,MLC-AXIAL	1	1	
13-3-2	DB32-00037A	MODULE REMOCON	1	1	
13-4	DB39-00147A	CONNECT WIRE PCB	1	1	
14	DB94-00056E	ASS´Y BACK BODY(RIGHT SIDE)	1	1	
15	DB94-00104A	ASS´Y HOLDER MOTOR	1	1	
16	DB61-00165A	HOLDER PIPE	1	1	
17	DB70-00036A	PLATE HANGER	1	1	
18	DB94-00058F	ASS´Y TRAY DRAIN(RIGHT SIDE)	1	1	
18-1	DB94-00062E	ASS´Y DRAIN HOSE	1	1	
18-2	DB66-00127B	BLADE H	1	1	
18-3	DB66-00128A	BLADE V,A	3	3	
18-4	DB66-00128B	BLADE V,B	6	6	
18-5	DB63-00082A	SCREEN SAFETY WIRE	1	1	
18-6	DB95-20138A	ASS´Y MOTOR STEPPING	1	1	
18-6-1	DB31-10129A	MOTOR STEPPING; GSP 24RW	1	1	
19	DB61-40251A	HOLDER SENSOR	1	1	
20	DB67-60030A	SPRING SENSOR	1	1	
21	DB96-01123K DB96-01123J	ASS'Y CYCLE IN(EVAPORATOR)	1 -	- 1	
22	DB94-40003A	ASS´Y BEARING	1	1	
23	DB93-00861B	ASS´Y REMOCON	1	1	
24	DB70-00114A	PLATE-KNOCKOUT	1	1	
25	DB63-00226A	COVER TERMINAL BLOCK	1	1	

4-2 Outdoor Unit

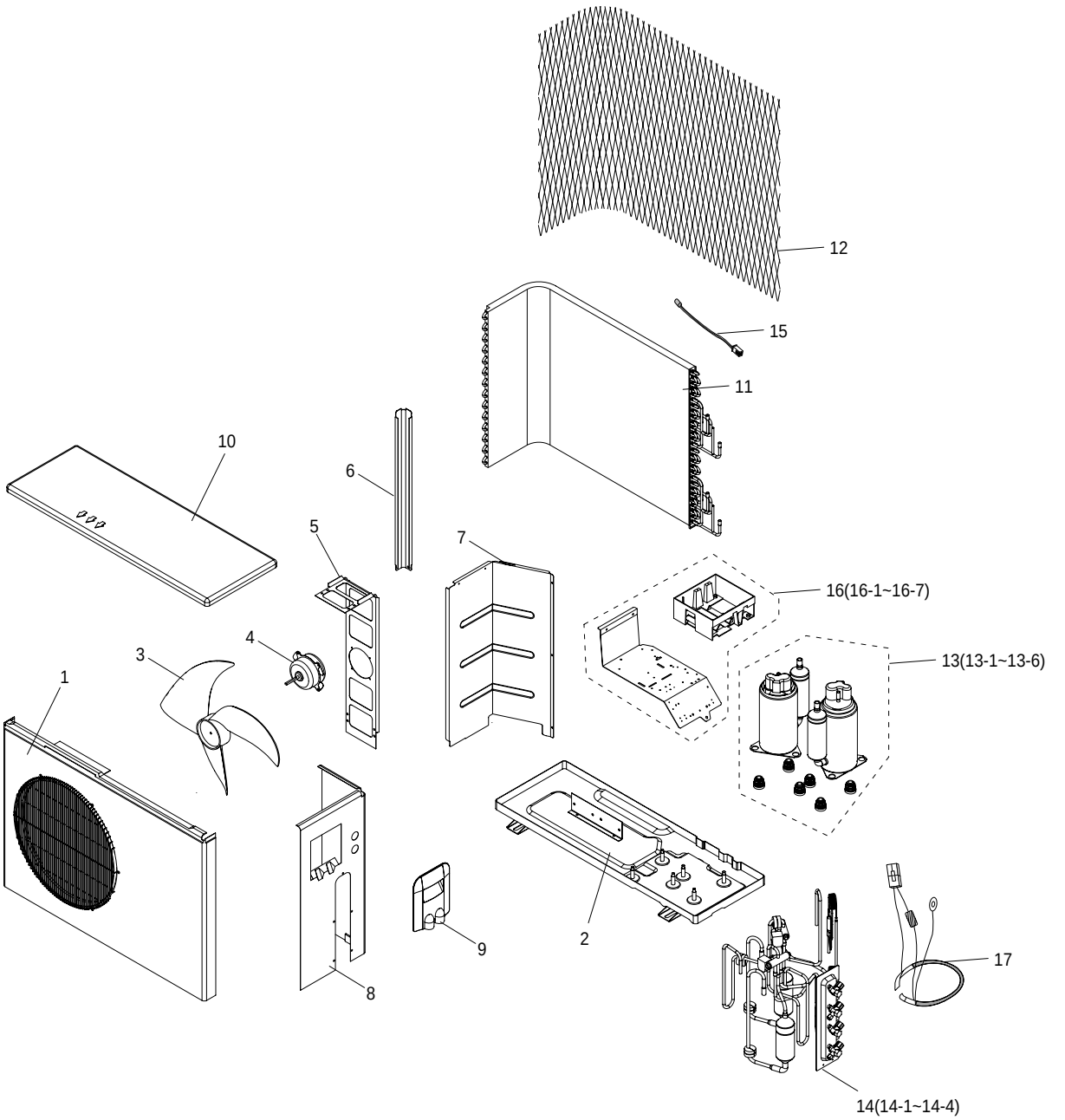
4-2-1 UD26B1C2



■ Parts List

No.	CODE NO	Description	Specification	Q'TY	REMARK
				UD26B1C2	
1	DB90-00075D	ASSY CABI FRONT	ASS'Y	1	
2	DB90-20207A	ASSY BASE OUT	ASS'Y	1	
3	DB67-50067A	FAN PROPELLER	AS+G/F20%, D495	1	
4	DB31-00095A	MOTOR FAN	OSM-738SRC	1	
5	DB61-20093A	BASE MOTOR	SGCC-M, T1.2	1	
6	DB63-30027C	GUARD COND	SC-90073T	1	
7	DB94-50041D	ASSY PARTITION	ASS'Y	1	
8	DB90-10574B	ASSY CABI SIDE	ASS'Y	1	
9	DB90-40120B	ASSY COVER	ASS'Y	1	
9-1	DB63-10434B	COVER	PP	1	
9-2	DB63-10433B	COVER CONTROL	PP	1	
10	DB90-00742A	ASSY CABI UPPER	ASS'Y	1	
11	DB96-01356K	ASSY COND-UNIT	UD26B1C2	1	
12	DB63-30110J	SCREEN GUARD	P.E.H 100%	1	
13	48D135IU1EL	ROTARY COMPRESSOR	48D135IU1EL	2	
13-1	DB60-30018A	NUT FLANGE	PI0.8, M5	2	
13-2	DB60-30028A	NUT WASHER	HEX, 2C, M8	6	
13-3	DB63-10165D	COVER TERMINAL	PBT, 2.5	2	
13-4	DB63-20002A	GASKET	EPDM, T0.8	2	
13-5	DB73-00067A	GROMMET ISOLATOR	NR 40°	6	
13-6	DB35-00015H	OLP	RAC12074-9622	2	
14	DB99-00224A	ASSY VALVE	ASS'Y	1	
14-1	DB99-00225A	ASSY VALVE CHECK A	ASS'Y	1	
14-2	DB99-00226A	ASSY VALVE CHECK B	ASS'Y	1	
14-3	DB99-00222A	ASSY VALVE 4WAY A	ASS'Y	1	
14-3-1	DB95-00243C	ASSY SOLENOIDE COIL	ASS'Y	1	
14-4	DB99-00223A	ASSY VALVE 4WAY B	ASS'Y	1	
14-4-1	DB95-00243D	ASSY SOLENOIDE COIL	ASS'Y	1	
15	DB32-00025B	THERMISTOR OUT ASS'Y	103AT	1	
16	DB93-01232A	ASSY CONTROL OUT	ASS'Y	1	
16-1	2301-001379	C-OIL	4uF, 450V	1	
16-2	2501-001237	C-OIL	35uF, 450V	2	
16-3	DB26-10070A	TRANS POWER	DC17, AC230, 600mA	1	
16-4	DB61-00585A	CASE PCB	ABS	1	
16-5	DB61-00584A	CASE CONTROL OUT	SGCC-M, T0.8	1	
16-6	DB65-40072F	TERMINAL BLOCK	ASS'Y	1	
16-7	PD-UD18B1-01	ASSY PCB PARTS	ASS'Y	1	
17	DB95-00329A	ASSY HEATER	ASS'Y	2	

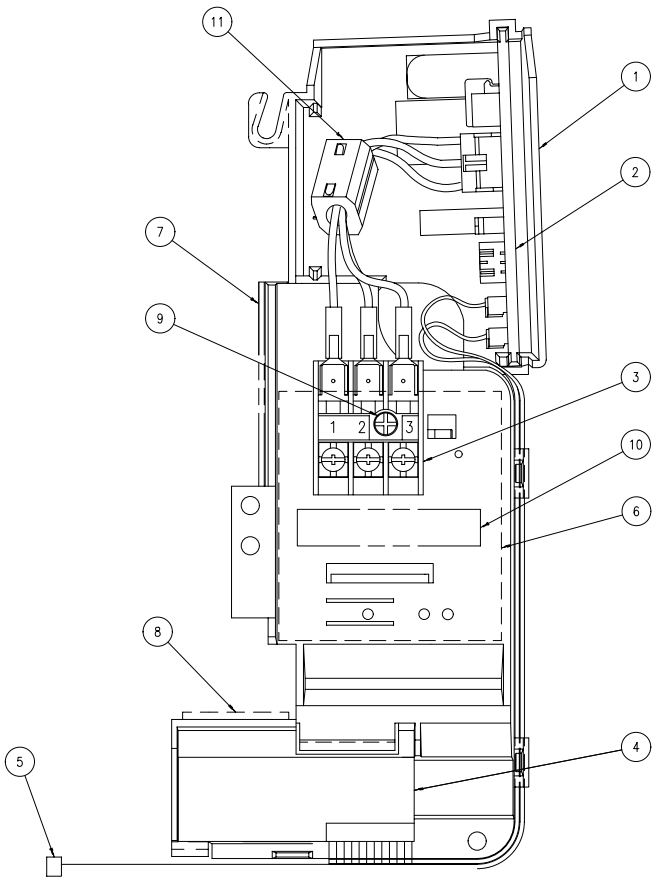
4-2-2 UD18B1C2



■ Parts List

No.	CODE NO	Description	Specification	Q'TY	REMARK
				UD18B1C2	
1	DB90-00734A	ASSY CABI FRONT	ASS'Y	1	
1-1	DB63-00320A	GUARD FAN	SC-90073T	1	
2	DB90-00733A	ASSY BASE OUT	ASS'Y	1	
3	DB67-50063A	FAN PROPELLER	AS+G/F20%, D405	1	
4	DB31-00001A	MOTOR FAN	IC-9630SLJ5A	1	
5	DB61-20008C	BASE MOTOR	SGCC-M,T1.2	1	
6	DB63-00343A	GUARD COND	SC-90073T	1	
7	DB94-00180A	ASSY PARTITION	ASS'Y	1	
8	DB90-00737B	ASSY CABI SIDE RH	ASS'Y	1	
9	DB90-40176B	ASSY COVER CONTROL	ASS'Y	1	
10	DB90-00742A	ASSY CABI UPPER	ASS'Y	1	
11	DB96-01717B	ASSY COND-UNIT	ASS'Y	1	
12	DB61-00821D	GUIDE SCREEN	P.E.H 100%	1	
13	44B102IU2EL	ROTARY COMPRESSOR	44B092JW1EL	2	
13-1	DB60-30018A	NUT FLANGE	PI0.8, M5	2	
13-2	DB60-30028A	NUT WASHER	HEX, 2C, M8	6	
13-3	DB63-10165D	COVER TERMINAL	PBT, 2.5	2	
13-4	DB63-20002A	GASKET	EPDM, T0.8	2	
13-5	DB73-00070A	GROMMET ISOLATOR	NR 35°	6	
13-6	DB35-00015C	OLP	RAC12067-9622	2	
14	DB99-00231A	ASSY VALVE	ASS'Y	1	
14-1	DB99-00227A	ASSY VALVE CHECK A	ASS'Y	1	
14-2	DB99-00228A	ASSY VALVE CHECK B	ASS'Y	1	
14-3	DB94-00229A	ASSY VALVE 4WAY A	ASS'Y	1	
14-3-1	DB95-00243A	ASSY SOLENOIDE COIL	ASS'Y	1	
14-4	DB99-00230A	ASSY VALVE 4WAY B	ASS'Y	1	
14-4-1	DB95-00243B	ASSY SOLENOIDE COIL	ASS'Y	1	
15	DB32-00025A	THERMISTOR OUT ASS'Y	103AT	1	
16	DB93-01234A	ASSY CONTROL OUT	ASS'Y	1	
16-1	2301-001370	C-OIL	2.5uF, 450V	1	
16-2	2501-001235	C-OIL	25uF, 450V	1	
16-3	DB26-10070A	TRANS POWER	DC17, AC230, 600mA	1	
16-4	DB61-00585A	CASE PCB	ABS	1	
16-5	DB61-00891A	CASE CONTROL OUT	SGCC-M, T0.8	1	
16-6	DB65-40072F	TERMINAL BLOCK	ASS'Y	1	
16-7	PD-UD18B1-01	ASSY PCB PARTS	ASS'Y	1	
17	DB95-00329B	ASSY HEATER	ASS'Y	2	

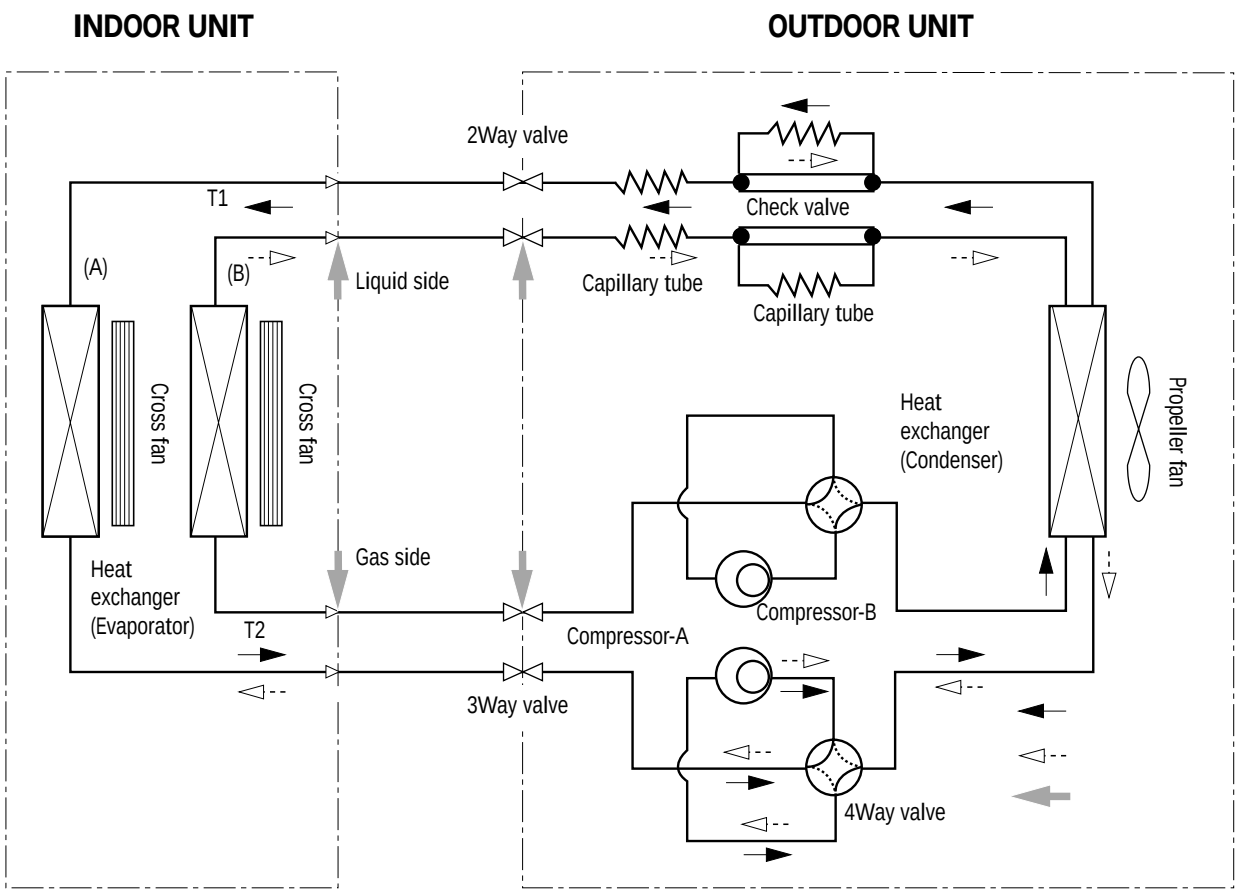
4-3 ASS'Y CONTROL IN (DB93-01223A)



■ Parts List

No	Description	Specification	Remark
1	HOLDER CONTROL	DB61-00160B	
2	ASS'Y MAIN PCB	DB93-00319B	
3	TERMINAL BLOCK ASSY	DB65-00046A	
4	ASSY DISPLAY PCB	DB93-00268A	
5	CONNECTOR WIRE PCB U/D	DB39-00147A	
6	HOLDER CLAMP IN	DB61-00219A	
7	SEAL CONTROL SIDE	DB72-10191T	
8	SEAL H/CONTROL FRONT	DB72-00127V	
9	SCREW MACHINE	-	
10	LABEL	-	
11	CORE	DB31-40005A	

5. Refrigerating Cycle Block Diagram

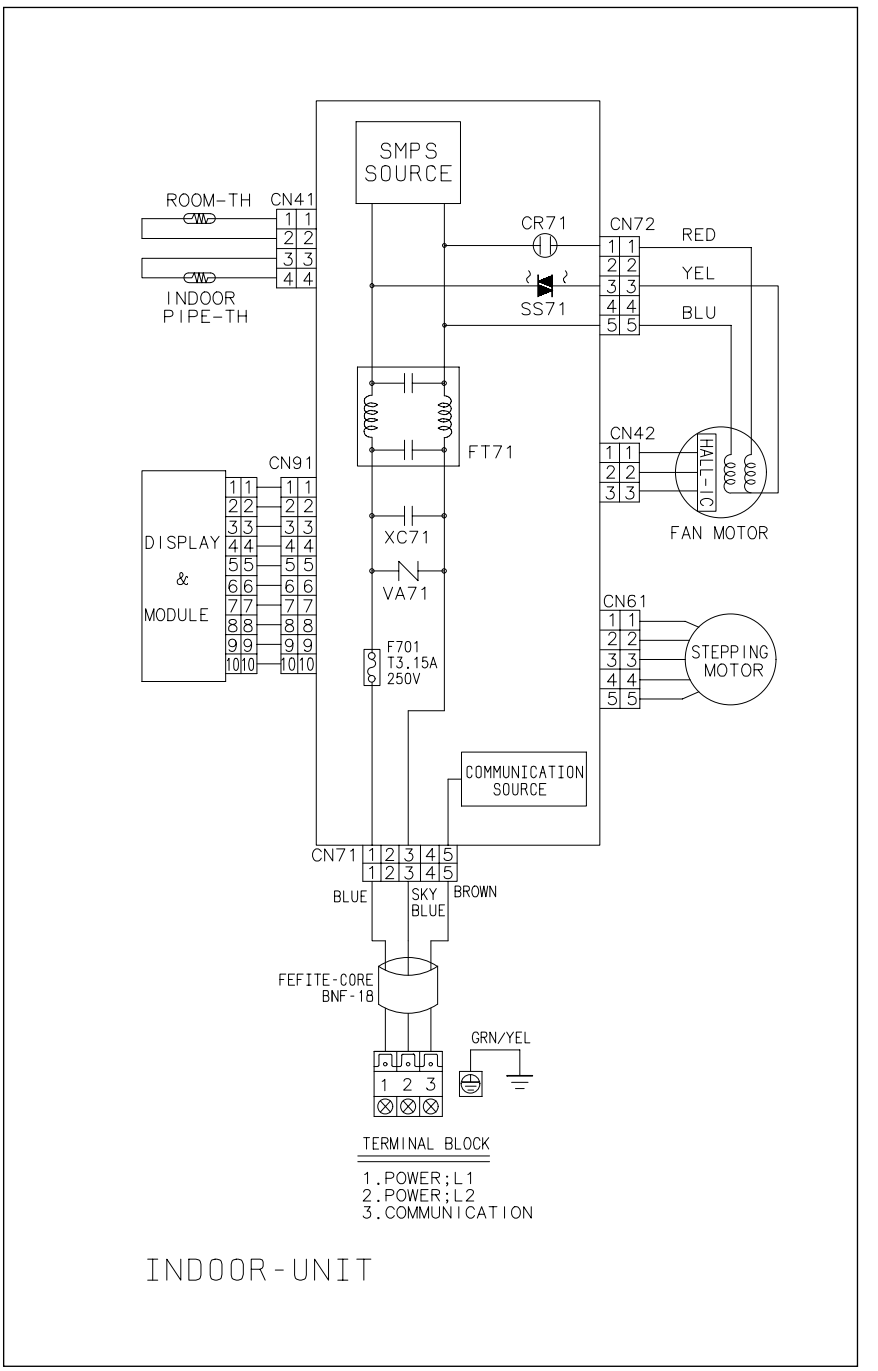


Refrigerating cycle temperature and pressure

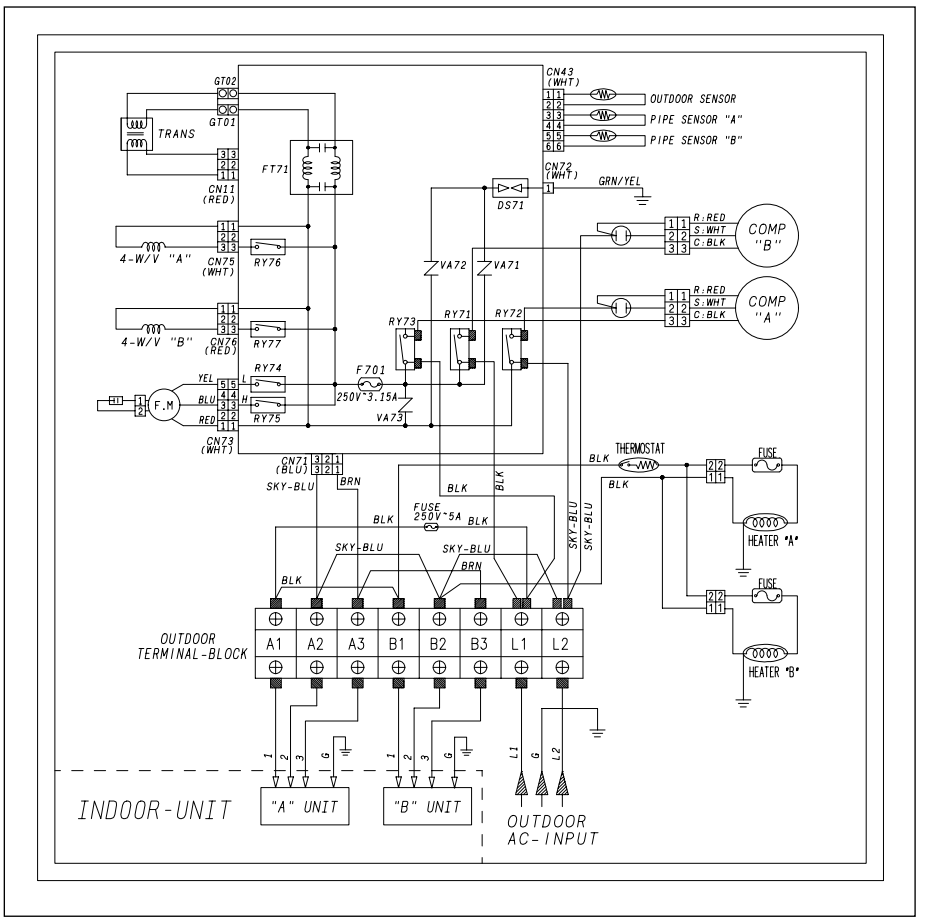
Operating Condition		STD Pressure (psi) 3-WAY V/V	Piping Temp.(°F)		Temp. Condition (°F)			
			T1	T2	Indoor		Outdoor	
					DB	WB	DB	WB
Cooling	Standard	57-71	50-54	50-54	80	67	95	75
	Max over load	-	61-64	61-64	80	67	115	75
	Low temp.	-	34-39	34-39	67	57	67	57
Heating	Standard	242-284	90-97	140-158	70	60	47	43
	Max over load	-	97-104	149-167	80	-	75	65
	Deice	-	82-90	104-113	70	60	35	33

6. Wiring Diagrams

6-1 Indoor Unit

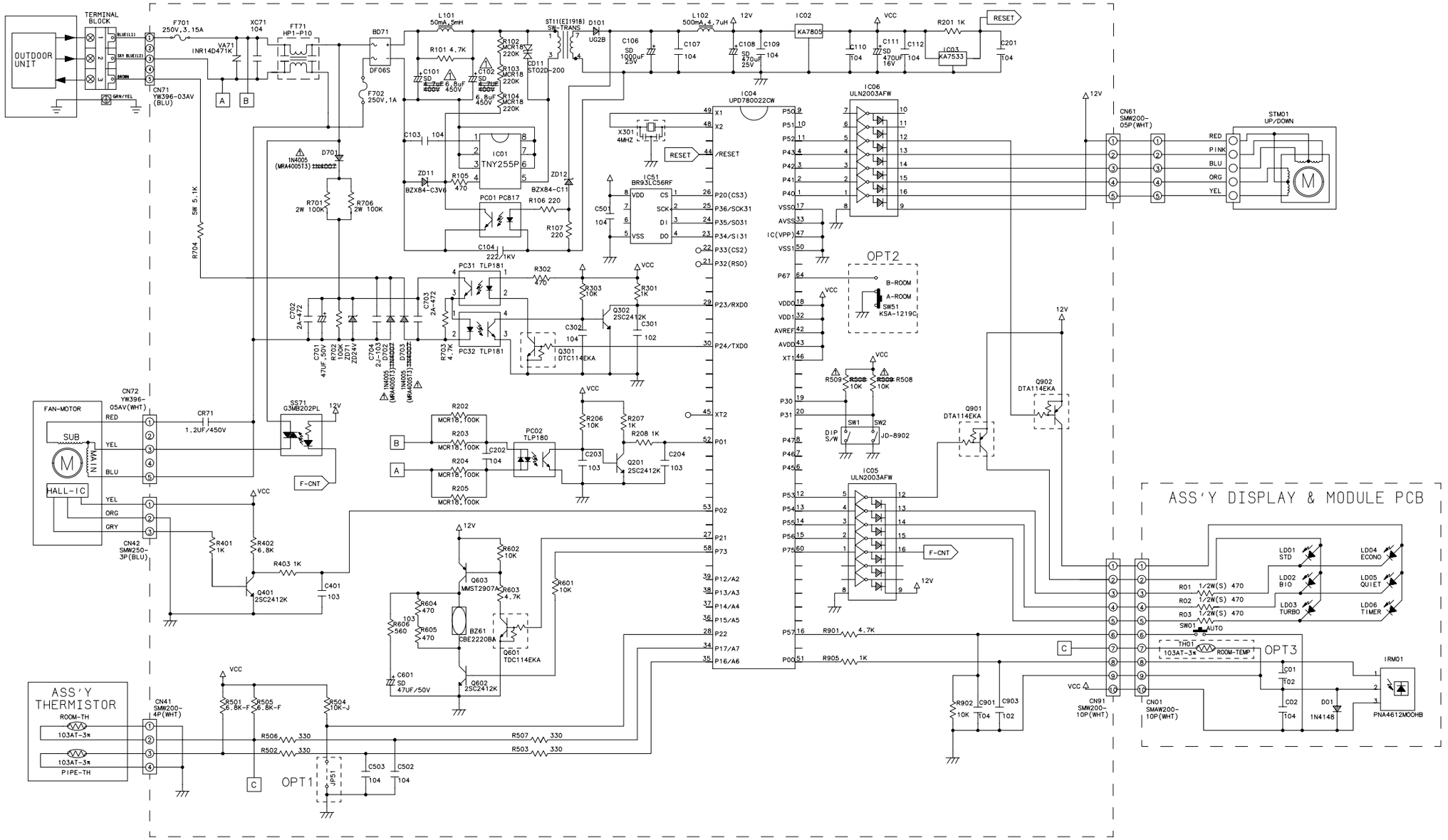


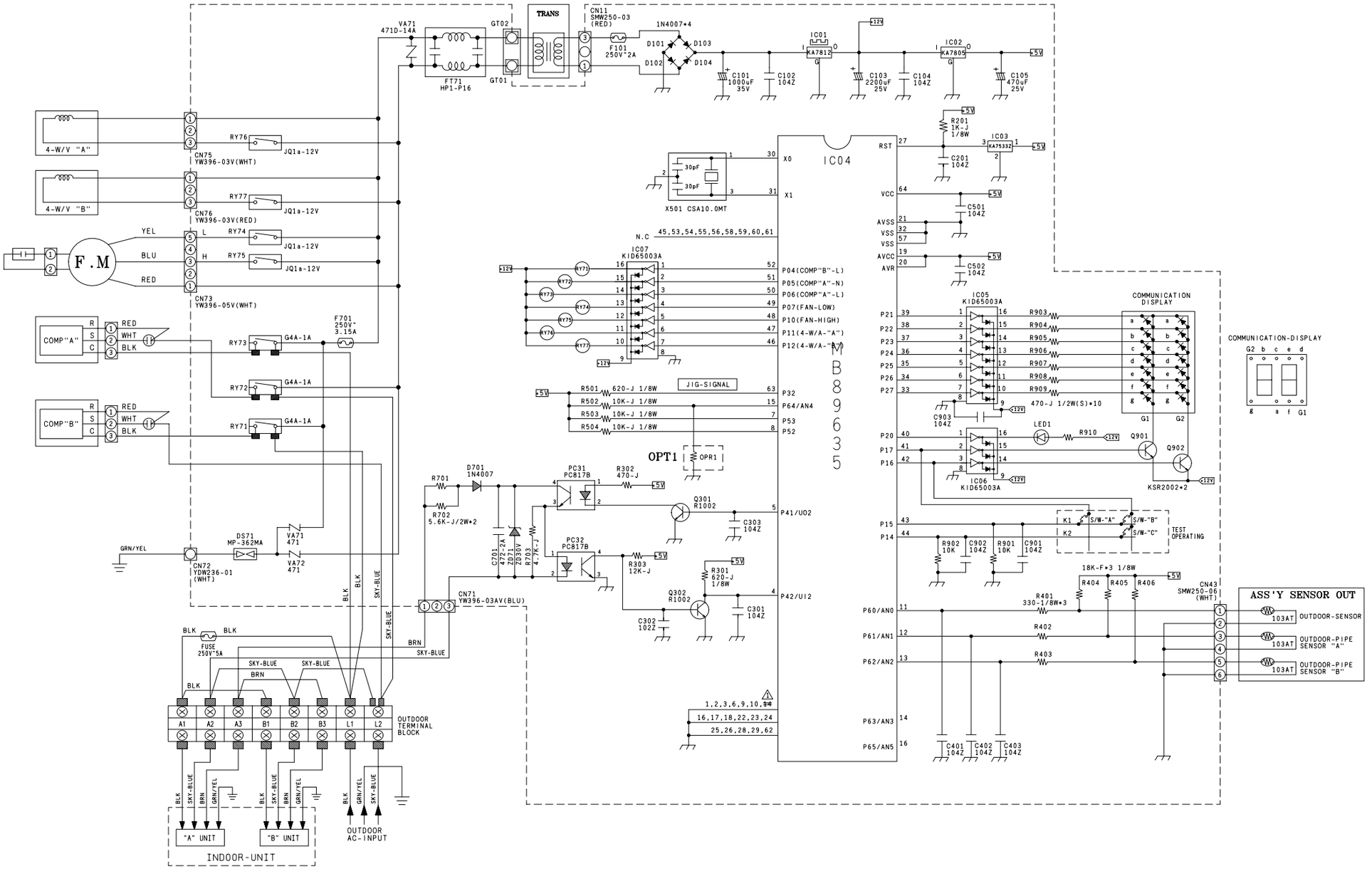
6-2 Outdoor Unit



7. Schematic Diagrams

7-1 Indoor Unit





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