

**SAMSUNG**

# ROOM AIR CONDITIONER

## INDOOR UNIT

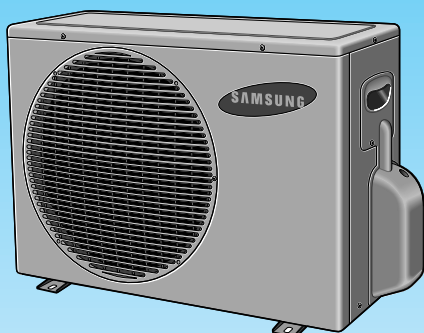
AS12\*5(6)MB  
AS12\*5(6)ME  
AS09\*5(6)ME  
SC09Z\*5(6)  
AS07\*5(6)ME  
SC07Z\*5(6)  
AS09\*7(8)ME  
SC09Z\*7(8)  
AS07\*7(8)ME  
SC07Z\*7(8)  
AS09\*7(8)MD  
AS07\*7(8)MD  
AS09\*7(8)MB  
AS07\*7(8)MB  
AS12\*9(0)ME  
SC12Z\*9(0)  
AS07\*5(6)MA  
AS09\*5(6)MA

## OUTDOOR UNIT

US12\*5(6)MB  
US12\*5(6)ME  
US09\*5(6)ME  
SC09Z\*5(6)X  
US07\*5(6)ME  
SC07Z\*5(6)X  
US09\*7(8)ME  
SC09Z\*7(8)X  
US07\*7(8)ME  
SC07Z\*7(8)X  
US09\*7(8)MD  
US07\*7(8)MD  
US09\*7(8)MB  
US07\*7(8)MB  
US12\*9(0)ME  
SC12Z\*9(0)X  
US07\*5(6)MA  
US09\*5(6)MA

# ***SERVICE*** Manual

## AIR CONDITIONER



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## 1. Precautions

1. Warning: Prior to repair, disconnect the power cord from the circuit breaker.
2. Use proper parts: Use only exact replacement parts. (Also, we recommend replacing parts rather than repairing them.)
3. Use the proper tools: Use the proper tools and test equipment, and know how to use them. Using defective tools or test equipment may cause problems later-intermittent contact, for example.
4. Power Cord: Prior to repair, check the power cord and replace it if necessary.
5. Avoid using an extension cord, and avoid tapping into a power cord. This practice may result in malfunction or fire.
6. After completing repairs and reassembly, check the insulation resistance.  
Procedure: Prior to applying power, measure the resistance between the power cord and the ground terminal. The resistance must be greater than 30 megohms.
7. Make sure that the grounds are adequate.
8. Make sure that the installation conditions are satisfactory.  
Relocate the unit if necessary.
9. Keep children away from the unit while it is being repaired.
10. Be sure to clean the unit and its surrounding area.

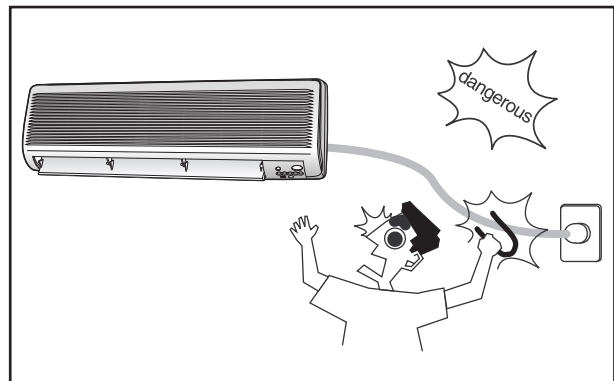


Fig. 1-1 Avoid Dangerous Contact

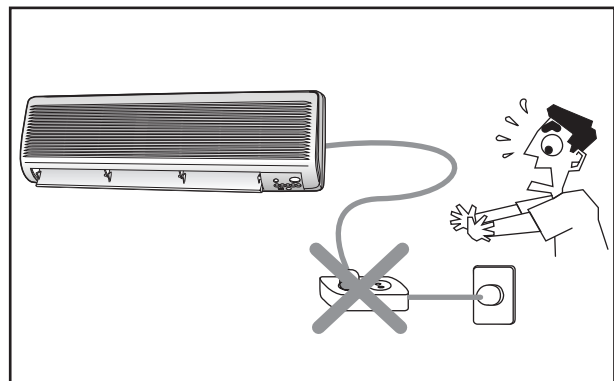


Fig. 1-2 No Tapping and No Extension Cords

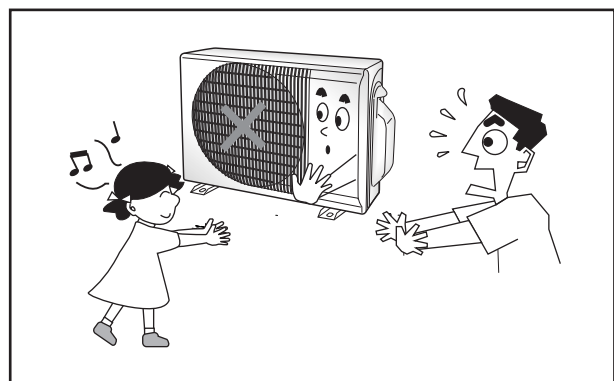


Fig. 1-3 No Kids Nearby!

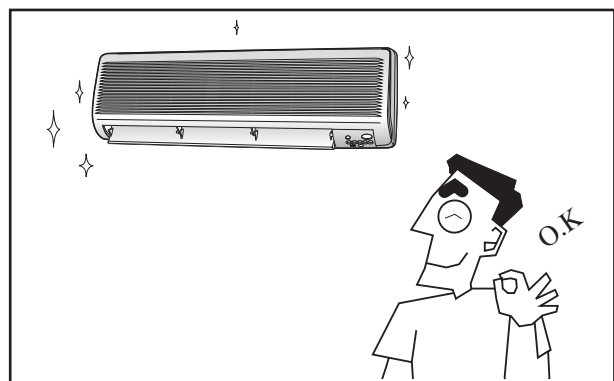


Fig. 1-4 Clean the Unit

# MEMO

2. Product Specifications

2-1 Table

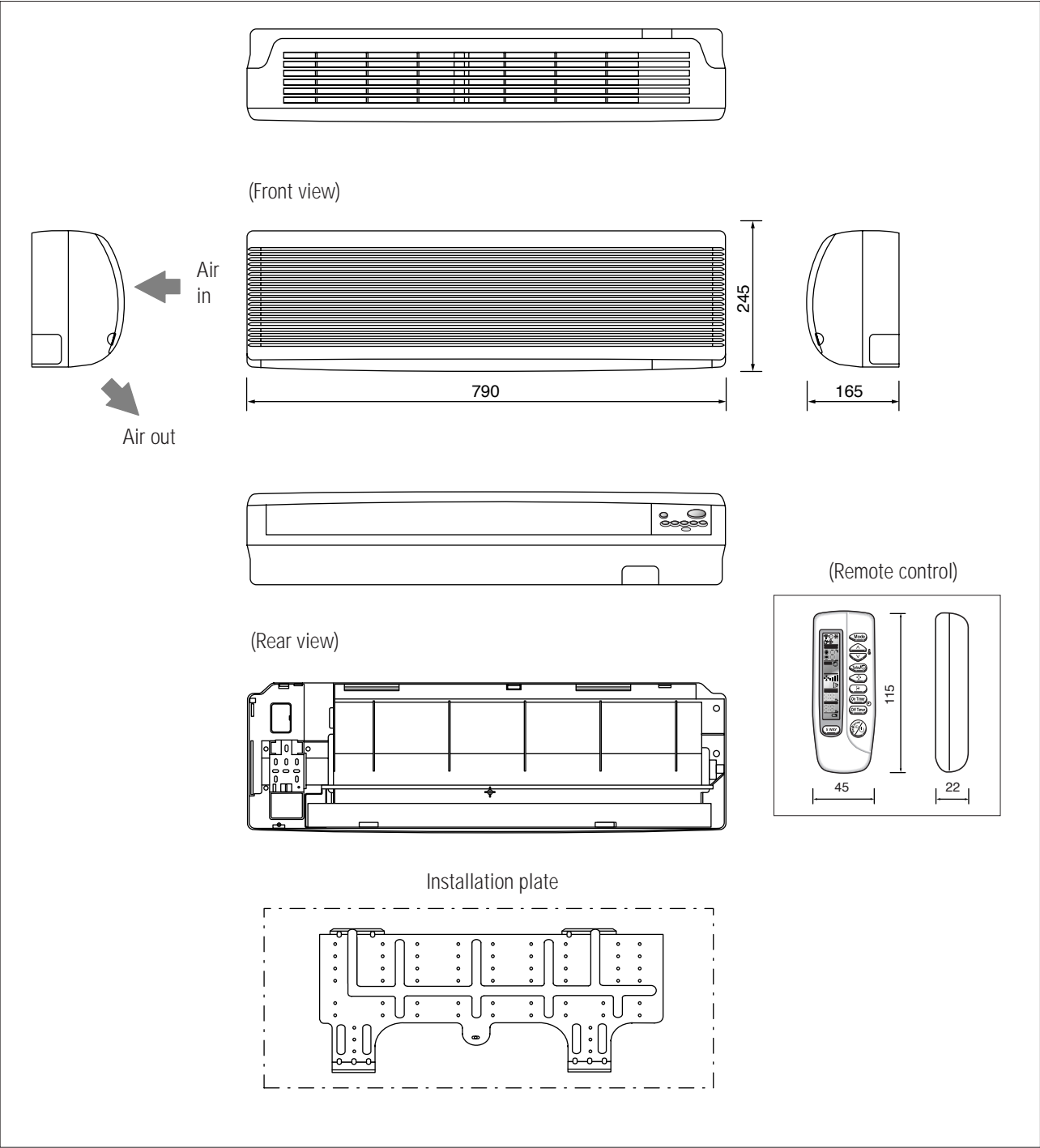
| Item                        |                         |                           |              | Model            | AS12*5(6)MB   |                  | AS12*5(6)ME                     |                  | AS09*5(6)ME/SC09Z*5(6) |                  | AS07*5(6)ME/SC07Z*5(6) |                  | AS09*7(8)ME/SC09Z*7(8)                                 |                  | AS07*7(8)ME/SC07Z*7(8)          |              |
|-----------------------------|-------------------------|---------------------------|--------------|------------------|---|------------------|---------------------------------|------------------|------------------------|------------------|------------------------|------------------|--|------------------|---------------------------------|--------------|
|                             |                         |                           |              |                  | Indoor unit   | Outdoor unit     | Indoor unit                     | Outdoor unit     | Indoor unit            | Outdoor unit     | Indoor unit            | Outdoor unit     | Indoor unit  | Outdoor unit     | Indoor unit                     | Outdoor unit |
| Type                        |                         |                           |              | -                | Wall-mounting   |                  | Wall-mounting                   |                  | Wall-mounting          |                  | Wall-mounting          |                  | Wall-mounting  |                  | Wall-mounting                   |              |
| Perfor-<br>mance            | Cooling                 |                           |              | BTU/h(KW)        | 12000   |                  | 12000 (3.5)                     |                  | 9000 (2.72)            |                  | 7500 (2.3)             |                  | 9000 (2.64)  |                  | 7500 (2.2)                      |              |
|                             | Heating                 |                           |              | BTU/h(KW)        | -   |                  | -                               |                  | -                      |                  | -                      |                  | -  |                  | -                               |              |
|                             | Dehumiditing            |                           |              | l/h              | 1.9   |                  | 1.9                             |                  | 1.4                    |                  | 0.9                    |                  | 1.4  |                  | 0.9                             |              |
|                             | Air volume              | Cooling                   | m3/min       |                  | 7.4   | 19               | 7.4                             | 19               | 6.0                    | 18               | 5.6                    | 18               | 6.0  | 20.5             | 6.0                             | 20.5         |
|                             |                         | Heating                   |              |                  | -   | -                | -                               | -                | -                      | -                | -                      | -                | -  | -                |                                 |              |
|                             | Noise                   | Cooling                   | dB           |                  | 41  | 53               | 41                              | 53               | 38                     | 51               | 35                     | 50               | 38   | 50               | 38                              | 50           |
|                             |                         | Heating                   |              |                  | -   | -                | -                               | -                | -                      | -                | -                      | -                | -  | -                |                                 |              |
|                             | Energy efficiency ratio | Cooling                   | BTU/h.W      |                  | 9.375   | 10.3             | 9.474                           | 10.0             | 9.47                   | 10.0             | -                      | -                | -  | -                | -                               | -            |
|                             |                         | Heating                   |              |                  | -   | -                | -                               | -                | -                      | -                | -                      | -                | -  | -                |                                 |              |
| Power                       |                         |                           |              | V-Hz             | 1-220 -60   |                  | 1-220 / 240-50                  |                  | 1-220 / 240-50         |                  | 1-220 / 240-50         |                  | 1-220 / 240-50   |                  | 1-220 / 240-50                  |              |
| Power                       | Power Consumption       | Cooling                   | W            | 1280             | 1170  | 950              | 750                             | 950              | 750                    |                  |                        |                  |  |                  |                                 |              |
|                             |                         | Heating                   |              | -                | -   | -                | -                               | -                | -                      | -                |                        |                  |  |                  |                                 |              |
|                             | Operating Current       | Cooling                   | A            | 6.0              | 5.0   | 4.2              | 3.3                             | 4.1              | 3.2                    |                  |                        |                  |  |                  |                                 |              |
|                             |                         | Heating                   |              | -                | -   | -                | -                               | -                | -                      |                  |                        |                  |  |                  |                                 |              |
|                             | Power factor            | Cooling                   | %            | 96.7             | 101.7   | 98.3             | 98.8                            | 100.7            | 101.9                  |                  |                        |                  |  |                  |                                 |              |
|                             |                         | Heating                   |              | -                | -   | -                | -                               | -                | -                      |                  |                        |                  |  |                  |                                 |              |
|                             | Starting current        |                           |              | A                | 30  | 30               | 30                              | 30               | 30                     | 30               |                        |                  |  |                  |                                 |              |
|                             | Power cord              | Length                    | m            | -                | -   | -                | -                               | -                | -                      | -                |                        |                  |  |                  |                                 |              |
| Number of core wire         |                         |                           | -            | -                | -   | -                | -                               | -                |                        |                  |                        |                  |  |                  |                                 |              |
| Fuse capacity               |                         |                           |              | A                | 250V / 3.15A  |                  | 250V / 3.15A                    |                  | 250V / 3.15A           |                  | 250V / 3.15A           |                  | 250V / 3.15A   |                  | 250V / 3.15A                    |              |
| Size                        | Outer Dimension         | Width x Height<br>x Depth | mm           | 790 x 245 x 165  | 762 x 532 x 280                                       | 790 x 245 x 165  | 762 x 532 x 280                 | 790 x 245 x 165  | 660 x 497 x 235        | 790 x 245 x 165  | 660 x 497 x 235        | 790 x 245 x 165  | 660 x 470 x 242  | 790 x 245 x 165  | 660 x 470 x 242                 |              |
|                             |                         |                           | inch         | 31.1 x 9.6 x 6.5 | 30 x 20.9 x 11  | 31.1 x 9.6 x 6.5 | 30 x 20.9 x 11                  | 31.1 x 9.6 x 6.5 | 26 x 19.6 x 9.3        | 31.1 x 9.6 x 6.5 | 26 x 19.6 x 9.3        | 31.1 x 9.6 x 6.5 | 26 x 18.5 x 9.5  | 31.1 x 9.6 x 6.5 | 26 x 18.5 x 9.5                 |              |
|                             | Weight                  |                           |              |                  | 7.7   | 34.5             | 7.7                             | 34.5             | 7.7                    | 28.5             | 7.7                    | 28.5             | 7.7  | 24               | 7.7                             | 24           |
|                             | Refrigerant pipe        | Liquid                    | mm x L(MT)   | ø6.35 x 5        |   | ø6.35 x 5        |                                 | ø6.35 x 5        |                        | ø6.35 x 5        |                        | ø6.35 x 5        |  | ø6.35 x 5        |                                 |              |
|                             |                         | GAS                       | mm x L(MT)   | ø12.7 x 5        |   | ø12.7 x 5        |                                 | ø9.52 x 5        |                        | ø9.52 x 5        |                        | ø9.52 x 5        |  | ø9.52 x 5        |                                 |              |
|                             | Drain hose              |                           |              | D x L(mm)        | ø18 x 2000  |                  | ø18 x 2000                      |                  | ø18 x 2000             |                  | ø18 x 2000             |                  | ø18 x 2000   |                  | ø18 x 2000                      |              |
|                             | Compressor              | Type                      |              |                  | Rotary  |                  | Rotary                          |                  | Rotary                 |                  | Rotary                 |                  | Rotary   |                  | Rotary                          |              |
|                             |                         | Motor                     | Type         |                  | -   | -                | -                               | -                | -                      | -                | -                      | -                | -  | -                | -                               | -            |
|                             |                         |                           | Rated output |                  | -   | -                | -                               | -                | -                      | -                | -                      | -                | -  | -                | -                               | -            |
|                             | Blower                  | Type                      |              |                  | Cross-flow  | Propeller        | Cross-flow                      | Propeller        | Cross-flow             | Propeller        | Cross-flow             | Propeller        | Cross-flow   | Propeller        | Cross-flow                      | Propeller    |
|                             |                         | Motor                     | Type         |                  | Resin   | steel            | Resin                           | steel            | Resin                  | steel            | Resin                  | steel            | Resin  | steel            | Resin                           | steel        |
|                             |                         | Rated output              | W            | 15               | 25  | 15               | 25                              | 15               | 25                     | 15               | 25                     | 15               | 25   | 15               | 25                              |              |
| Heat exchanger              |                         |                           |              |                  | 2ROW 12STEP   | 1ROW 20STEP      | 2ROW 12STEP                     | 1ROW 20STEP      | 2ROW 12STEP            | 1ROW 18STEP      | 2ROW 12STEP            | 1ROW 18STEP      | 2ROW 12STEP  | 1ROW 18STEP      | 2ROW 12STEP                     | 1ROW 18STEP  |
| Refrigerant control unit    |                         |                           |              |                  | CAPILLARY TUBE  |                  | CAPILLARY TUBE                  |                  | CAPILLARY TUBE         |                  | CAPILLARY TUBE         |                  | CAPILLARY TUBE   |                  | CAPILLARY TUBE                  |              |
| Freezer oil capacity        |                         |                           |              |                  | 410   |                  | 410                             |                  | 360                    |                  | 360                    |                  | 360  |                  | 360                             |              |
| Refrigerant to change(R-22) |                         |                           |              |                  | 750   |                  | 750                             |                  | 570                    |                  | 560                    |                  | 600  |                  | 600                             |              |
| Protection device           |                         |                           |              |                  | MRA 12002-9200 / MRA 12002-12008                      |                  | MRA 12030-12008 / RAC12030-9622 |                  | RAC 12054-12008        |                  | RAC 12086-12008        |                  | MRA 12110-12008 / RAC12054-9622                        |                  | MRA 12086-12008 / RAC12086-9622 |              |
| Cooling test Condition      |                         |                           |              |                  | INDOOR UNIT : DB27 <sub>i</sub> C WB19 <sub>i</sub> C |                  |                                 |                  |                        |                  |                        |                  | OUTDOOR UNIT : DB35 <sub>i</sub> C WB24 <sub>i</sub> C |                  |                                 |              |
| Maximum operation Condition |                         |                           |              |                  | INDOOR UNIT : DB32 <sub>i</sub> C WB23 <sub>i</sub> C |                  |                                 |                  |                        |                  |                        |                  | OUTDOOR UNIT : DB43 <sub>i</sub> C WB26 <sub>i</sub> C |                  |                                 |              |

Table

| Item                        |                         |                     |              | Model   |                  | AS09*7(8)MD     |                  | AS07*7(8)MD     |                  | AS09*7(8)MB     |                  | AS07*7(8)MB     |                  | AS07*5(6)MA     |                  | AS09*5(6)MA  |               | AS12*9(0)ME/SC12Z*9(0) |              |
|-----------------------------|-------------------------|---------------------|--------------|---|------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|--|---------------|------------------------|--------------|
|                             |                         |                     |              | Indoor unit   | Outdoor unit     | Indoor unit     | Outdoor unit     | Indoor unit     | Outdoor unit     | Indoor unit     | Outdoor unit     | Indoor unit     | Outdoor unit     | Indoor unit     | Outdoor unit     | Indoor unit  | Outdoor unit  | Indoor unit            | Outdoor unit |
| Type                        |                         |                     |              | -   | Wall-mounting    |                 | Wall-mounting    |                 | Wall-mounting    |                 | Wall-mounting    |                 | Wall-mounting    |                 | Wall-mounting    |  | Wall-mounting |                        |              |
| Perfor-<br>mance            | Cooling                 |                     | BTU/h(KW)    | 9000  |                  | 7500            |                  | 9000            |                  | 7500            |                  | 7500            |                  | 9000            |                  | 12000 (3.5)  |               |                        |              |
|                             | Heating                 |                     | BTU/h(KW)    | -   |                  | -               |                  | -               |                  | -               |                  | -               |                  | -               |                  | -  |               |                        |              |
|                             | Dehumiditing            |                     | l/h          | 1.4   |                  | 0.9             |                  | 1.4             |                  | 0.9             |                  | 0.9             |                  | 1.4             |                  | 1.9  |               |                        |              |
|                             | Air volume              | Cooling             | m3/min       | 6.0   | 20.5             | 5.6             | 20.5             | 6.0             | 20.5             | 5.6             | 20.5             | 5.6             | 20.5             | 6.0             | 20.5             | 7.4  | 19            |                        |              |
|                             |                         | Heating             |              | -   | -                | -               | -                | -               | -                | -               | -                | -               | -                | -               | -                |  |               |                        |              |
|                             | Noise                   | Cooling             | dB           | 38  | 50               | 35              | 50               | 38              | 50               | 35              | 50               | 35              | 50               | 38              | 50               | 41   | 53            |                        |              |
|                             |                         | Heating             |              | -   | -                | -               | -                | -               | -                | -               | -                | -               | -                | -               | -                |  |               |                        |              |
|                             | Energy efficiency ratio | Cooling             | BTU/h.W      | 9.47  |                  | 10.0            |                  | 9.47            |                  | 11.5            |                  | 11.0            |                  | 10.0            |                  | 10.3   |               |                        |              |
|                             |                         | Heating             |              | -   |                  | -               |                  | -               |                  | -               |                  | -               |                  | -               |                  | -  |               |                        |              |
| Power                       |                         |                     | V-Hz         | 1-220-50  |                  | 1-220-50        |                  | 1-220-50        |                  | 1-220-60        |                  | 1-115-60        |                  | 1-115-60        |                  | 1-220 / 240-50   |               |                        |              |
| Power                       | Power Consumption       | Cooling             | W            | 950   |                  | 750             |                  | 950             |                  | 750             |                  | 680             |                  | 900             |                  | 1170   |               |                        |              |
|                             |                         | Heating             |              | -   |                  | -               |                  | -               |                  | -               |                  | -               |                  | -               |                  | -  |               |                        |              |
|                             | Operating Current       | Cooling             | A            | 4.4   |                  | 3.2             |                  | 4.4             |                  | 3.0             |                  | 6.4             |                  | 8.5             |                  | 5.0  |               |                        |              |
|                             |                         | Heating             |              | -   |                  | -               |                  | -               |                  | -               |                  | -               |                  | -               |                  | -  |               |                        |              |
|                             | Power factor            | Cooling             | %            | 98.1  |                  | 101.9           |                  | 98.1            |                  | 98.5            |                  | 92.4            |                  | 92.1            |                  | 101.7  |               |                        |              |
|                             |                         | Heating             |              | -   |                  | -               |                  | -               |                  | -               |                  | -               |                  | -               |                  | -  |               |                        |              |
|                             | Starting current        |                     |              | A   | 30               |                 | 30               |                 | 30               |                 | 30               |                 | 32A              |                 | 47A              |  | 30            |                        |              |
|                             | Power cord              | Length              |              | m   | -                |                 | -                |                 | -                |                 | -                |                 | -                |                 | -                |  | -             |                        |              |
|                             |                         | Number of core wire |              |   | -                |                 | -                |                 | -                |                 | -                |                 | -                |                 | -                |  | -             |                        |              |
| Fuse capacity               |                         |                     | A            | 250V / 3.15A  |                  | 250V / 3.15A    |                  | 250V / 3.15A    |                  | 250V / 3.15A    |                  | 250V / 3.15A    |                  | 250V-3.15A      |                  | 250V-3.15A   |               |                        |              |
| Size                        | Outer Dimension         | Width x Height      |              | mm  | 790 x 245 x 165  | 660 x 470 x 242 | 790 x 245 x 165  | 660 x 470 x 242 | 790 x 245 x 165  | 660 x 470 x 242 | 790 x 245 x 165  | 660 x 470 x 242 | 790 x 245 x 165  | 660 x 470 x 242 | 790 x 245 x 165  | 720 x 532 x 245  |               |                        |              |
|                             |                         | x Depth             |              | inch  | 31.1 x 9.6 x 6.5 | 26 x 18.5 x 9.5 | 31.1 x 9.6 x 6.5 | 26 x 18.5 x 9.5 | 31.1 x 9.6 x 6.5 | 26 x 18.5 x 9.5 | 31.1 x 9.6 x 6.5 | 26 x 18.5 x 9.5 | 31.1 x 9.6 x 6.5 | 26 x 18.5 x 9.5 | 31.1 x 9.6 x 6.5 | 28.3 x 20.9 x 9.6                                      |               |                        |              |
|                             | Weight                  |                     |              |   | 7.7              | 24              | 7.7              | 24              | 7.7              | 24              | 7.7              | 24              | 7.7              | 24              | 7.7              | 38.5   |               |                        |              |
|                             | Refrigerant pipe        | Liquid              | mm x L(MT)   | ø6.35 x 5   |                  | ø6.35 x 5       |                  | ø6.35 x 5       |                  | ø6.35 x 5       |                  | ø6.35 x 5       |                  | ø6.35 x 5       |                  | ø6.35 x 5  |               |                        |              |
|                             |                         | GAS                 | mm x L(MT)   | ø9.52 x 5   |                  | ø9.52 x 5       |                  | ø9.52 x 5       |                  | ø9.52 x 5       |                  | ø9.52 x 5       |                  | ø9.52 x 5       |                  | ø12.7 x 5  |               |                        |              |
|                             | Drain hose              |                     |              | D x L(mm)   | ø18 x 2000       |                 | ø18 x 2000       |                 | ø18 x 2000       |                 | ø18 x 2000       |                 | ø18 x 2000       |                 | ø18 x 2000       |  | ø18 x 2000    |                        |              |
|                             | Compressor              | Type                |              |   | Rotary           |                 | Rotary           |                 | Rotary           |                 | Rotary           |                 | Rotary           |                 | Rotary           |  | Rotary        |                        |              |
|                             |                         | Motor               | Type         |   | -                | -               | -                | -               | -                | -               | -                | -               | -                | -               | -                | -  | -             |                        |              |
|                             |                         |                     | Rated output |   | -                | -               | -                | -               | -                | -               | -                | -               | -                | -               | -                | -  | -             |                        |              |
|                             | Blower                  | Type                |              |   | Cross-flow       | Propeller       | Cross-flow       | Propeller       | Cross-flow       | Propeller       | Cross-flow       | Propeller       | Cross-flow       | Propeller       | Cross-flow       | Propeller  | Cross-flow    | Propeller              |              |
|                             |                         | Motor               | Type         |   | Resin            | steel           | Resin            | steel           | Resin            | steel           | Resin            | steel           | Resin            | steel           | Resin            | steel  | Resin         | steel                  |              |
|                             |                         |                     | Rated output |   | W                | 15              | 25               | 15              | 25               | 15              | 25               | 15              | 25               | 15              | 25               | 15   | 25            |                        |              |
| Heat exchanger              |                         |                     |              | 2ROW 12STEP   | 1ROW 18STEP      | 2ROW 12STEP     | 1ROW 18STEP      | 2ROW 12STEP     | 1ROW 18STEP      | 2ROW 12STEP     | 1ROW 18STEP      | 2ROW 12STEP     | 1ROW 18STEP      | 2ROW 12STEP     | 1ROW 18STEP      | 2ROW 12STEP  | 2ROW 20STEP   |                        |              |
| Refrigerant control unit    |                         |                     |              | CAPILLARY TUBE  |                  | CAPILLARY TUBE  |                  | CAPILLARY TUBE  |                  | CAPILLARY TUBE  |                  | CAPILLARY TUBE  |                  | CAPILLARY TUBE  |                  | CAPILLARY TUBE   |               |                        |              |
| Freezer oil capacity        |                         |                     |              | 360   |                  | 360             |                  | 360             |                  | 360             |                  | 360             |                  | 360             |                  | 410  |               |                        |              |
| Refrigerant to change(R-22) |                         |                     |              | 600   |                  | 600             |                  | 600             |                  | 600             |                  | 600             |                  | 600             |                  | 1040   |               |                        |              |
| Protection device           |                         |                     |              | MRA12067-12007  |                  | MST24AMM-12008  |                  | MRA12049-12008  |                  | MRA12043-12008  |                  | MRA98706-12008  |                  | MRA 12093-12007 |                  | MRA 12030-12008 / RAC12030-9622                        |               |                        |              |
| Cooling test Condition      |                         |                     |              | INDOOR UNIT : DB27 <sub>i</sub> C WB19 <sub>i</sub> C |                  |                 |                  |                 |                  |                 |                  |                 |                  |                 |                  | OUTDOOR UNIT : DB35 <sub>i</sub> C WB24 <sub>i</sub> C |               |                        |              |
| Maximum operation Condition |                         |                     |              | INDOOR UNIT : DB32 <sub>i</sub> C WB23 <sub>i</sub> C |                  |                 |                  |                 |                  |                 |                  |                 |                  |                 |                  | OUTDOOR UNIT : DB43 <sub>i</sub> C WB26 <sub>i</sub> C |               |                        |              |

## 2-2 Dimensions

### 2-2-1 Indoor Unit



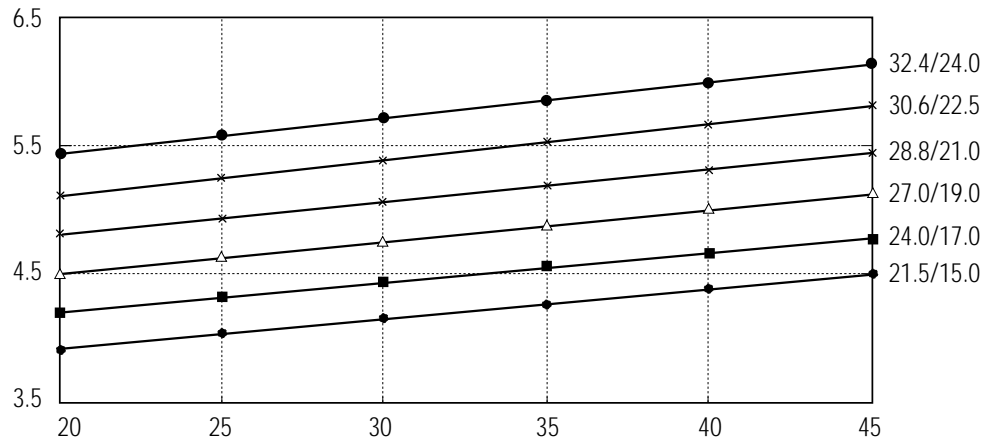
## 2-2-2 Outdoor Unit

|  |  |
|--|--|
| US12*5(6)M*  |  |
| US09*5(6)M*<br>US07*5(6)M*<br>SC09Z*5(6)X*<br>SC07Z*5(6)X* |  |
| US09*7(8)M*<br>US07*7(8)M*<br>SC09Z*7(8)X<br>SC07Z*7(8)X   |  |
| US12*9(0)M*<br>SC12Z*9(0)X                                 |  |

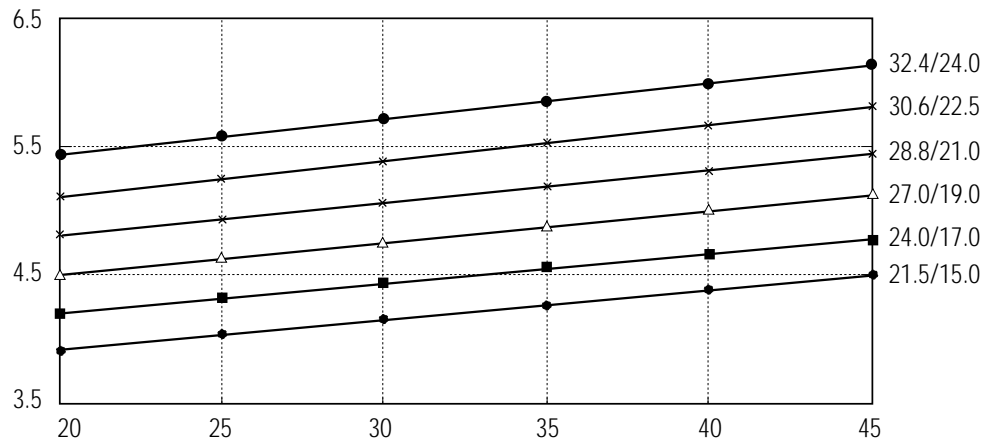


## 2-3 Pressure Graph

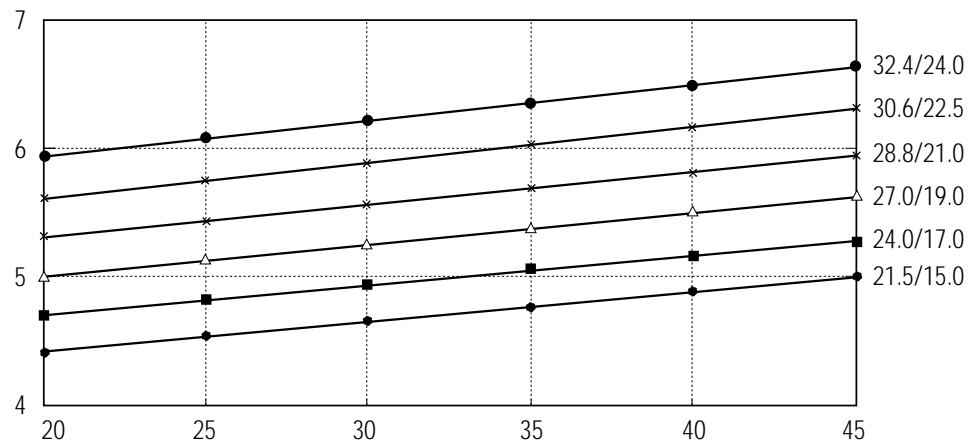
### 12K BTU



### 9K BTU



### 7K BTU


































# MEMO

## 3. Operating Instructions and Installation

### 3-1 Operating Instructions

#### 3-1-1 Name & Function of Key in remote controller

| NO | NAMED OF KEY   | FUNCTION OF KEY  |
|----|--|--|
| 1  |         | Power On/Off button to start and stop airconditioner or timer set up   |
| 2  |  (UP)   | Temp. up button. To increase the temperature by the pressing the temperature button  |
|    |  (DOWN) | Temp. down button. To decrease the temperature by the pressing the temperature button  |
| 3  |         | <p>Each time you press this button Mode is changed in the following order</p> <p>  →  →  →  </p> <p>  : Auto Mode     : Fan Only<br/>  : Cool Mode<br/>  : Dry Mode </p> |
| 4  |       | Press  until the appearance. the air condition cools or heats the room as quickly as possible. after 30minutes, the air, the airconditioner is reset automatically to the previous mode   |
|    |  | Press  until the appearance. the sleep timer can be used when you are cooling or heating your room to switch the air conditioner off automatically after a period of six hours.   |
| 5  |       | <p>Each time you press this button, FAN SPEED is changed in the following order.</p> <p>  →  →  →  </p>  |
| 6  |       | Adjust air flow vertically.  |
| 7  |       | The ON Timer enables you to <b>switch on</b> the air conditioner automatically after a given period of time that is from 30 minutes to 24 hours. To cancel the On Time, press the  (Set/Cancel) button.   |
| 8  |       | The Off Timer enables you to <b>switch off</b> the air conditioner automatically after a given period of time that is from 30 minutes to 24 hours. To cancel the On Time, press the  (Set/Cancel) button.   |
| 9  |       | <p>To select the 5 way function with the remote control, press the 5 way button one or more times until the desired mode is selected..</p> <p>Each time you press the 5 way button</p> <p>  →  →  →  →  </p> <p>Each 5 way indicator on the indoor unit comes on in order.</p>  |

### 3-1-1 Name & Function of Key in remote controller

1. **AUTO MODE** : In this mode, operation mode(COOL) is selected automatically by the room temperature of initial operation.


| Room Temp                                | Operation Type                          |
|--|---|
| $T_r \geq 21^{\circ}\text{C} + \Delta T$ | Cool Operation (Set Temp: AUTO SETTING) |


$\Delta T = -1^{\circ}\text{C}, -2^{\circ}\text{C}, 0^{\circ}\text{C} + 1^{\circ}\text{C} + 2^{\circ}\text{C}$


$\Delta T$  is controlled by setting temperature up/down key of remote controller


2. **COOL MODE** : The unit operates according to the difference between the setting and room temperature. ( $18^{\circ}\text{C} \sim 30^{\circ}\text{C}$ )
3. **DRY MODE** : Has 3 states, each determined by room temperature.  
The unit operates in DRY mode.  
\*Compressor ON/OFF Time is controlled compulsorily (can not set up the fan speed, always breeze).  
\*Protective function : Low temperature release. (Prevention against freeze)
4. **TURBO MODE** : This mode is available in AUTO, COOL, DRY, FAN MODE.  
When this button is pressed at first, the air conditioner is operated "powerful" state for 30 minutes regardless of the set temperature, room temperature.  
When this button is pressed again, or when the operating time is 30 minutes, turbo operation mode is canceled and returned to the previous mode.  
\*But, if you press the TURBO button in DRY or FAN mode that is changed with AUTO mode automatically.
5. **SLEEP MODE** : Sleep mode is available only in COOL or mode.  
The operation will stop after 6 hours.  
\*In COOL mode : The setting temperature is automatically raised by  $1^{\circ}\text{C}$  each 1 hour  
When the temperature has been raised by total of  $2^{\circ}\text{C}$ , that temperature is maintained.
6. **FAN SPEED** : Manual (3 step), Auto (4 step)  
Fan speed automatically varies depending on both the difference between setting and the room temperature.
7. **COMPULSORY OPERATION** :  
For operating the air conditioner without the remote controller.  
\*AUTO : The operating is the same function that AUTO MODE in the remote controller. And each time you press the button the 5WAY function is changed as follow.  
STD → NATURE → POWER → SAVING → SILENCE → POWER OFF  
Each time you press This button, 5WAY function is changed in the following order  
STD(standard) → NATURE → POWER(High-speed) → Saving(Power-Saving) → SILENCE → POWER OFF

\* STD(standard)(): General operation Mode

\* NATURE(): The unit is operated according to health pattern control

\* POWER(): The unit is operated in powerful state




\* SAVING(): The unit is operated in power saving state


\* SILENCE(): The unit is operated quietly


Each mode has Auto, Cool and SLEEP operation designed in advance.

9. SWING : BLADE-H is rotated vertically by the stepping motor.

\*Memory louver : When ON/OFF button is pressed at stop state, the BLADE-H returns to its original location which is operating state before stop

\*Swing Set : Press the  button under the remote control is displayed on LCD the  and the blades move up and down. If the one more time press the  button, blades location is stop.





































10. 24-Hour ON/OFF Real Setting Timer. : The air conditioner is turned ON at a specified time using .

OFF TIMER : The air Conditioner is turned OFF at a specified time using .

\*ON TIMER : Only timer LED lights on.

\*OFF TIMER : Both timer and operation LED lights on.

## 11. SELF Diagnosis

| Check Point  | LED DISPLAY   |   |   |   |   |   |
|--|---|---|---|---|---|---|
|  | TIMER   | STD   | NATURE  | POWER   | SAVING  | SILENCE   |
|  |  |  |  |  |  |  |
| Indoor unit room temperature sensor error(open or short)           |  |  |  |  |  |  |
| Indoor unit heat exchanger temperature sensor error(open or short) |  |  |  |  |  |  |
| Indoor fan mal function  |  |  |  |  |  |  |
| EEPROM error   |  |  |  |  |  |  |
| Option error(option wasn't set up or option data error)            |  |  |  |  |  |  |

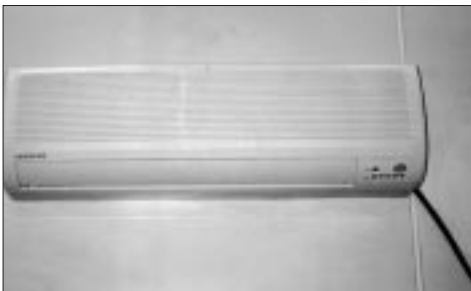

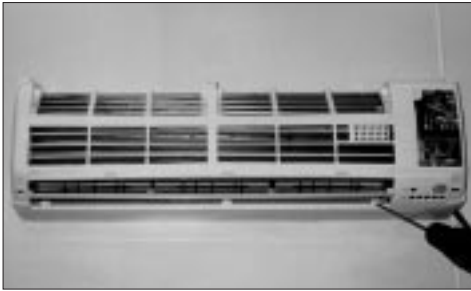
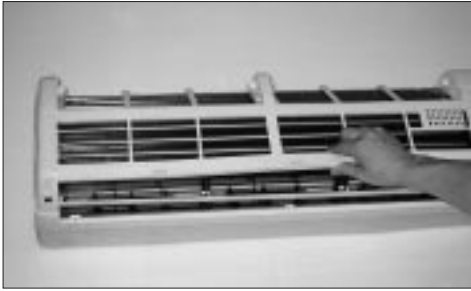
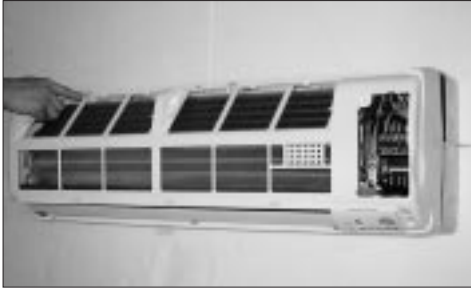
 : LED blinking       : LED off






12. BUZZER SOUND : Whenever the ON/OFF button is pressed or whenever change occurs to the condition which is set up or select, the compulsory operation mode, buzzer is sounded "beep"


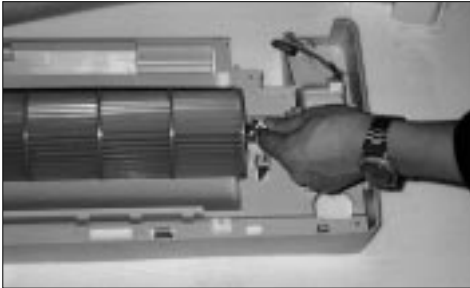
## 4. Disassembly and Reassembly

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

### 4-1 Indoor Unit

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


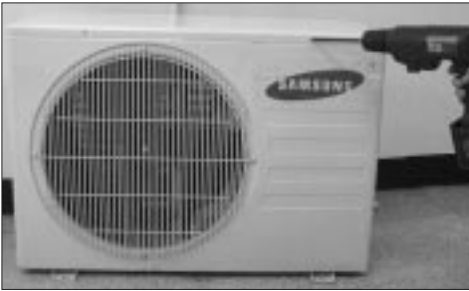


| No | Parts                          | Procedure  | Remark  |
|----|--------------------------------|--|---|
| 2  | Electrical Parts<br>(Main PCB) | <ol style="list-style-type: none"> <li>1) Do "1" above</li> <li>2) Take all the connector of PCB upper side out.<br/>(Inclusion Power cord)</li> <li>3) Separate the outdoor unit connection wire from the terminal block.</li> <li>4) If pulling the Main PCB up. it will be taken out.</li> </ol>  |   |
| 3  | Ass'y Tray Drain.              | <ol style="list-style-type: none"> <li>1) Do "1", "2", above<br/>Separate the drain hose from the extension drain hose.</li> <li>2) Pull tray drain out from the back body.</li> </ol>   |   |
| 4  | Heat Exchanger                 | <ol style="list-style-type: none"> <li>1) Do "1" and "2", "3", above</li> <li>2) Loosen two fixing earth screws of right side.</li> <li>3) Separate the connection pipe.</li> <li>4) Separate the holder pipe at the rearside.</li> <li>5) Loosen the three fixing screws of right and left side.</li> <li>6) Lifting the heat exchanger up a little to push the up side for separation from the indoor unit.</li> </ol> | <br><br> |

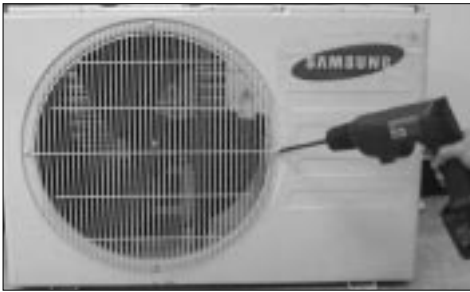

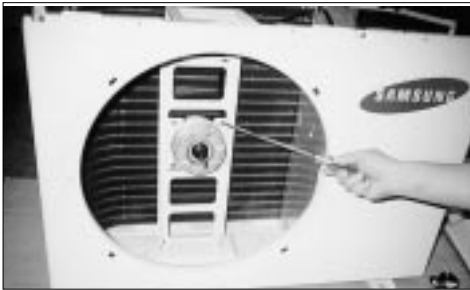
| No | Parts                   | Procedure   | Remark   |
|----|-------------------------|---|--|
| 5  | Fan Motor and Cross Fan | <ol style="list-style-type: none"><li>1) Do "1" "2" "3" "4", above.</li><li>2) Loosen the fixing two screws and separate the motor holder.</li><li>3) Loosen the fixing screw of fan motor.<br/>(By use of M3 wrench)</li><li>4) Separate the fan motor from the fan.</li><li>5) Separate the fan from the left holder bearing.</li></ol> | <br> |








## 4-2 Outdoor Unit



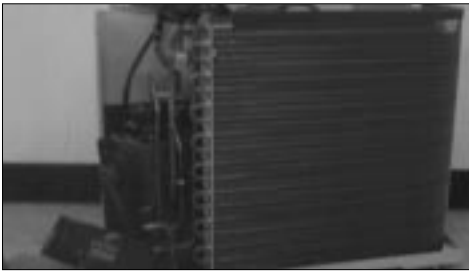


### • US12\*5(6)M\*

| No | Parts       | Procedure  | Remark   |
|----|-------------|--|--|
| 1  | Common Work | <p>1) Loosen the fixing screw and separate the Handle-Cabi RH.</p> <p>2) Separate the connection wire from the terminal block.</p> <p>3) Loosen 6 fixing screws and separate the upper cabinet.</p> <p>4) Loosen the fixing screw of Ass'y E-part.</p> <p>5) Loosen 5 fixing screws and separate the side cabinet.</p> |     |






| No | Parts     | Procedure  | Remark  |
|----|-----------|--|---|
| 2  | Fan-Motor | <p>1) Loosen 4 fixing screw of the Guard-Fan.</p> <p>2) Remove the nut flange (Turn to the right to remove, as it is a left hand screw)</p> <p>3) Separate the fan.</p> <p>4) Loosen four fixing screws to separate the motor.</p> |    |






- SC09Z\*5(6)X
- US09\*5(6)\*
- SC07Z\*5(6)X
- US07\*5(6)\*

| No | Parts         | Procedure   | Remark   |
|----|---------------|---|--|
| 1  | Common Work   | <p>1) Loosen the fixing two screws and separate the cover E-parts.</p> <p>2) Separate the connection wire from the terminal block.</p> <p>3) Loosen five fixing screws and separate the cabi Upper.</p> <p>4) Loosen two fixing screws of Ass'y E-part.</p> <p>5) Loosen nine fixing screws and separate the cabi side.</p> |     |
| 2  | Fan and Motor | <p>1) Do "1", above.</p> <p>2) Loosen four screws and separate Guard Fan from front cabinet</p>   |    |






| No | Parts          | Procedure  | Remark   |
|----|----------------|--|--|
|    |                | 2) Remove the nut flange (Turn to the right to remove, as it is a left hand screw)<br><br>3) Separate the fan.<br><br><br>4) Loosen four fixing screws to separate the motor.  |      |
| 3  | Heat Exchanger | 1) Do "1", 2 above.<br>2) Loosen two fixing screws of left and right side.<br>3) Disassemble the inlet and outlet pipe by welding.<br>4) Separate the heat exchanger.  |   |
| 4  | Compressor     | 1) Do "1", above.<br>2) Loosen the nut on the terminal cover and open the terminal cover.<br>3) Disassemble the inlet and outlet pipe of compressor by welding.<br>4) Disassemble the inlet and outlet pipe of condenser by welding<br>5) Loosen the three bolts of the lower part.<br>6) Separate the compressor. |    |






- SC09Z\*7(8)X/SC07Z\*7(8)X
- US09\*7(8)\*/US07\*7(8)\*

| No | Parts       | Procedure   | Remark  |
|----|-------------|---|---|
| 1  | Common Work | <p>1) Loosen the fixing tow screws and separate the COVER TERMINAL</p> <p>2) Loosen the fixing two screws and separate the cover control</p> <p>3) Separate the connection wire from the terminal block.</p> <p>4) Loosen six fixing screws and separate the cabi front.</p> <p>5) Loosen the one fixing screw of Ass'y E-part.</p> <p>6) Loosen 12 fixing screws and separate the cabi side.</p> |      |

| No | Parts          | Procedure   | Remark  |
|----|----------------|---|---|
| 2  | Fan and Motor  | <ol style="list-style-type: none"> <li>1) Do "1", above.</li> <li>2) Remove the nut flange (Turn to the right to remove, as it is a left hand screw)</li> <li>3) Separate the fan.</li> <li>4) Loosen Four fixing screws to separate the motor.</li> <li>5) Loosen two fixing screws and separate the motor bracket from the base.</li> </ol> |       |
| 3  | Heat Exchanger | <ol style="list-style-type: none"> <li>1) Do "1", "2", above.</li> <li>2) Loosen two fixing screws of left and right side.</li> <li>3) Disassemble the inlet and outlet pipe by welding.</li> <li>4) Separate the heat exchanger.</li> </ol>  |    |
| 4  | Compressor     | <ol style="list-style-type: none"> <li>1) Do "1", "2", "3", above.</li> <li>2) Open the terminal cover of compressor and unscrew the connection terminal.</li> <li>3) Disassemble the inlet and outlet pipe of compressor by welding.</li> <li>4) Loosen the three bolts of the lower part.</li> <li>5) Separate the compressor.</li> </ol>   |   |

- US12\*9(0)M\*
- SC12Z\*9(0)X

| No | Parts         | Procedure  | Remark   |
|----|---------------|--|--|
| 1  | Common Work   | <p>1) Loosen the fixing two screws and separate the cover E-parts.</p> <p>2) Separate the connection wire from the terminal block.</p> <p>3) Loosen five fixing screws and separate the cabi Upper.</p> <p>4) Loosen two fixing screws of Ass'y E-part.</p> <p>5) Loosen seven fixing screws and separate the cabi side.</p> |     |
| 2  | Fan and Motor | <p>1) Do "1", above.</p> <p>2) Losen four serews and sepearaate Guard Fan from front cabinet</p>   |    |




| No | Parts          | Procedure  | Remark  |
|----|----------------|--|---|
|    |                | 2) Remove the nut flange (Turn to the right to remove, as it is a left hand screw)<br><br>3) Separate the fan.<br><br><br><br>4) Loosen four fixing screws to separate the motor.  | <br>    |
| 3  | Heat Exchanger | 1) Do "1", 2 above.<br>2) Loosen two fixing screws of left and right side.<br>3) Disassemble the inlet and outlet pipe by welding.<br>4) Separate the heat exchanger.  | <br> |
| 4  | Compressor     | 1) Do "1", above.<br>2) Loosen the nut on the terminal cover and open the terminal cover.<br>3) Disassemble the inlet and outlet pipe of compressor by welding.<br>4) Disassemble the inlet and outlet pipe of condenser by welding<br>5) Loosen the three bolts of the lower part.<br>6) Separate the compressor. |   |



## 5. Troubleshooting

### 5-1 Items to be checked first

- 1) The input voltage should be rating voltage  $\pm 10\%$  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 happens after a delay of 3 minutes when the compressor is reoperated. The same phenomenon occurs when a power is on.<br>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.<br>  | The speed of the indoor fan is set to LL in DRY mode.<br>Fan speed is 5 steps is selected automatically in AUTO mode.   |
| 4  | Compressor stops operation intermittently in DRY mode.<br>  | Compressor operation is controlled automatically in DRY mode depending on the room temperature and humidity.  |
| 5  | 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.<br>The unit operates normally if the timer operation is cancelled.  |
| 6  | 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  |
|----|----------------------------------|---|
| 1  | STD LED blinking (1Hz)           | Restore from power failure (input initial power)                    |
| 2  | TIMER LED blinking (1Hz)         | Indoor unit Room sensor Error (open or short)                       |
| 3  | STD and TIMER LED blinking (1Hz) | Indoor unit heat exchanger temperature sensor Error (open or short) |
| 4  | NATURE LED blinking (1Hz)        | Indoor fan malfunctioning (for speed is Below 450rpm)               |

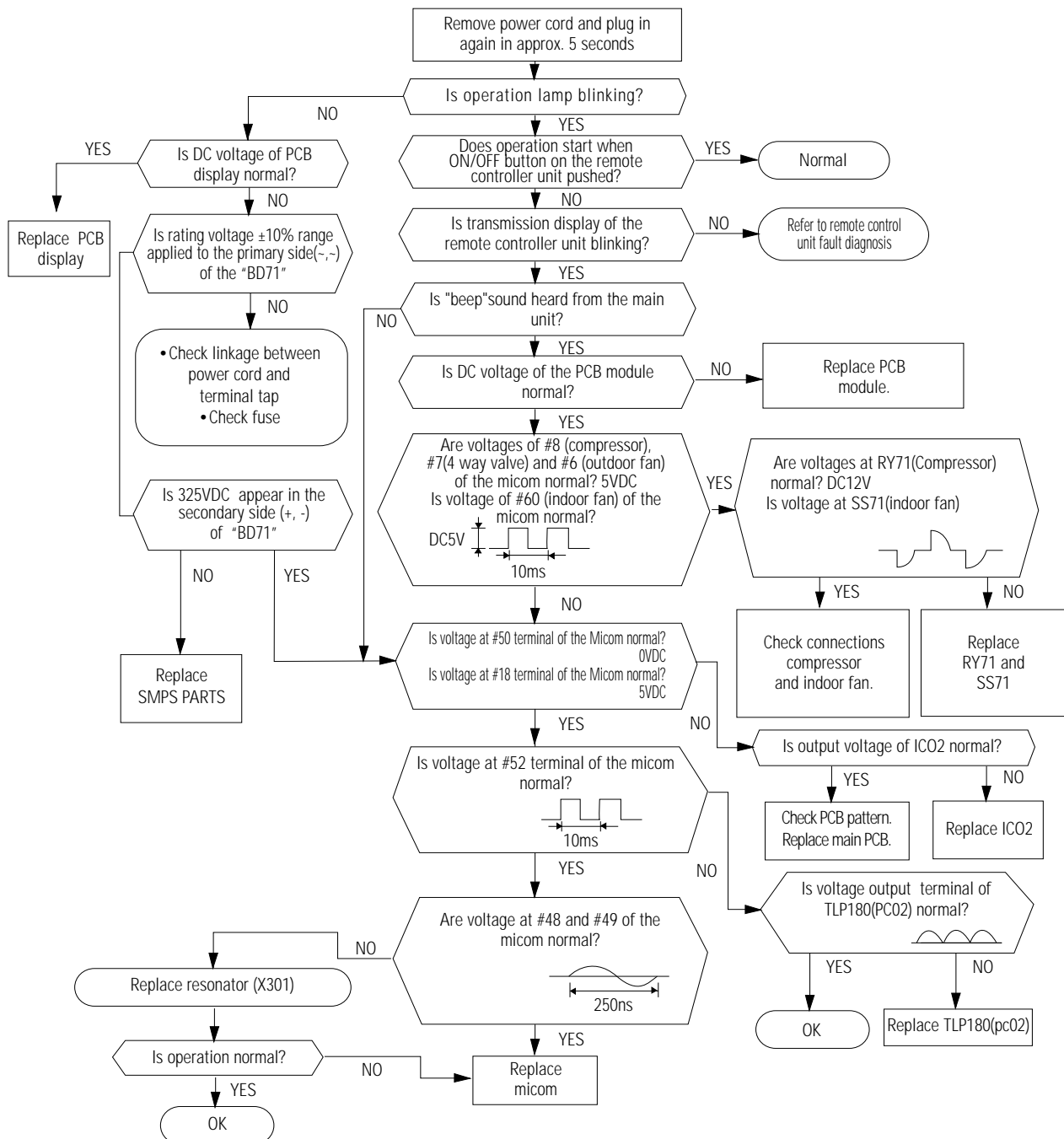
## 5-2 Fault Diagnosis by Symptom

### 5-2-1 No Power (completely dead)-Initial diagnosis

1) Checklist :

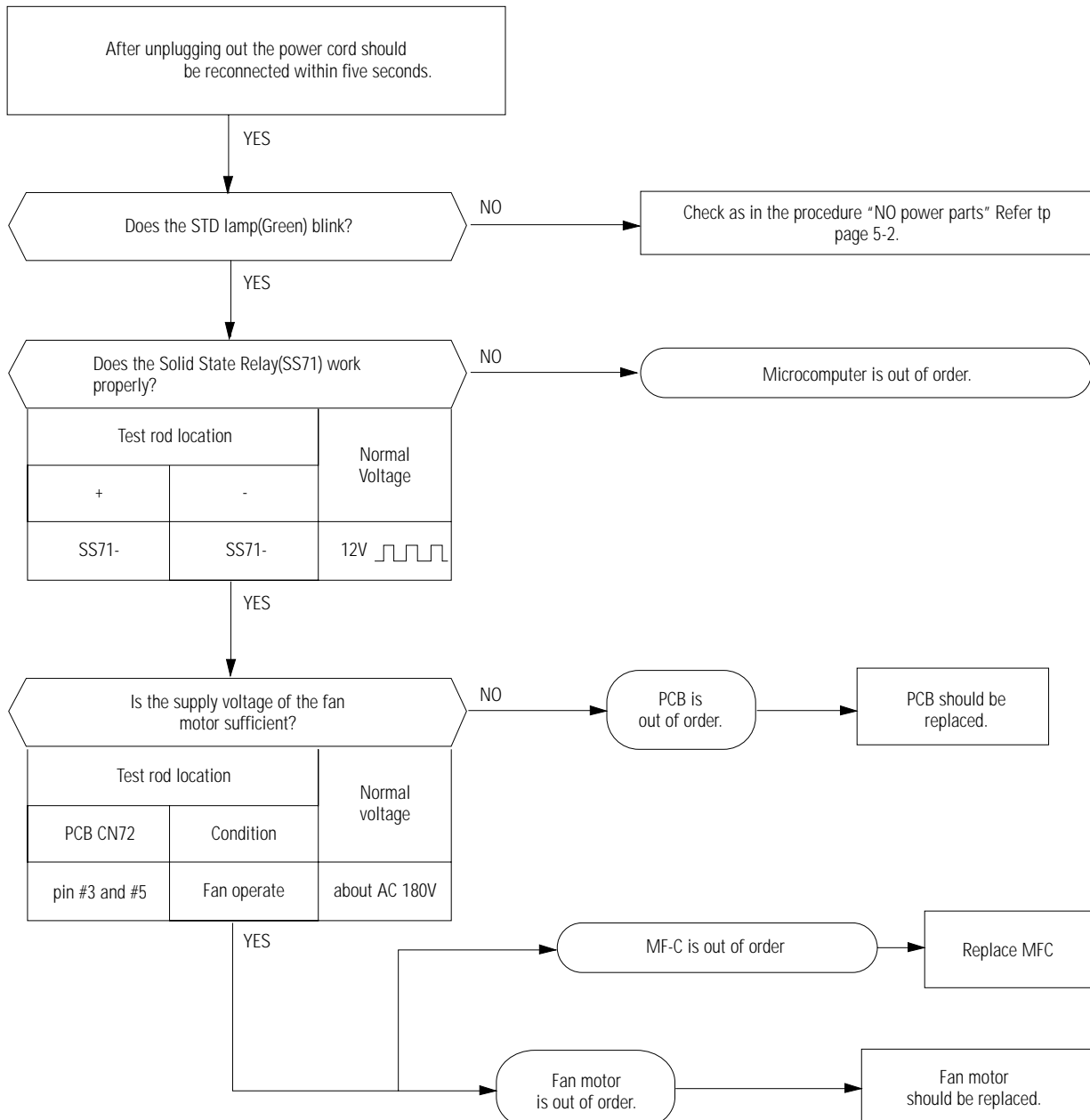
- (1) Is input voltage normal?
- (2) Is AC power linked correctly?
- (3) Is output voltage of DC regulator IC KA7805 (IC02) normal? (4.5VDC-5.5VDC)

2) Troubleshooting procedure



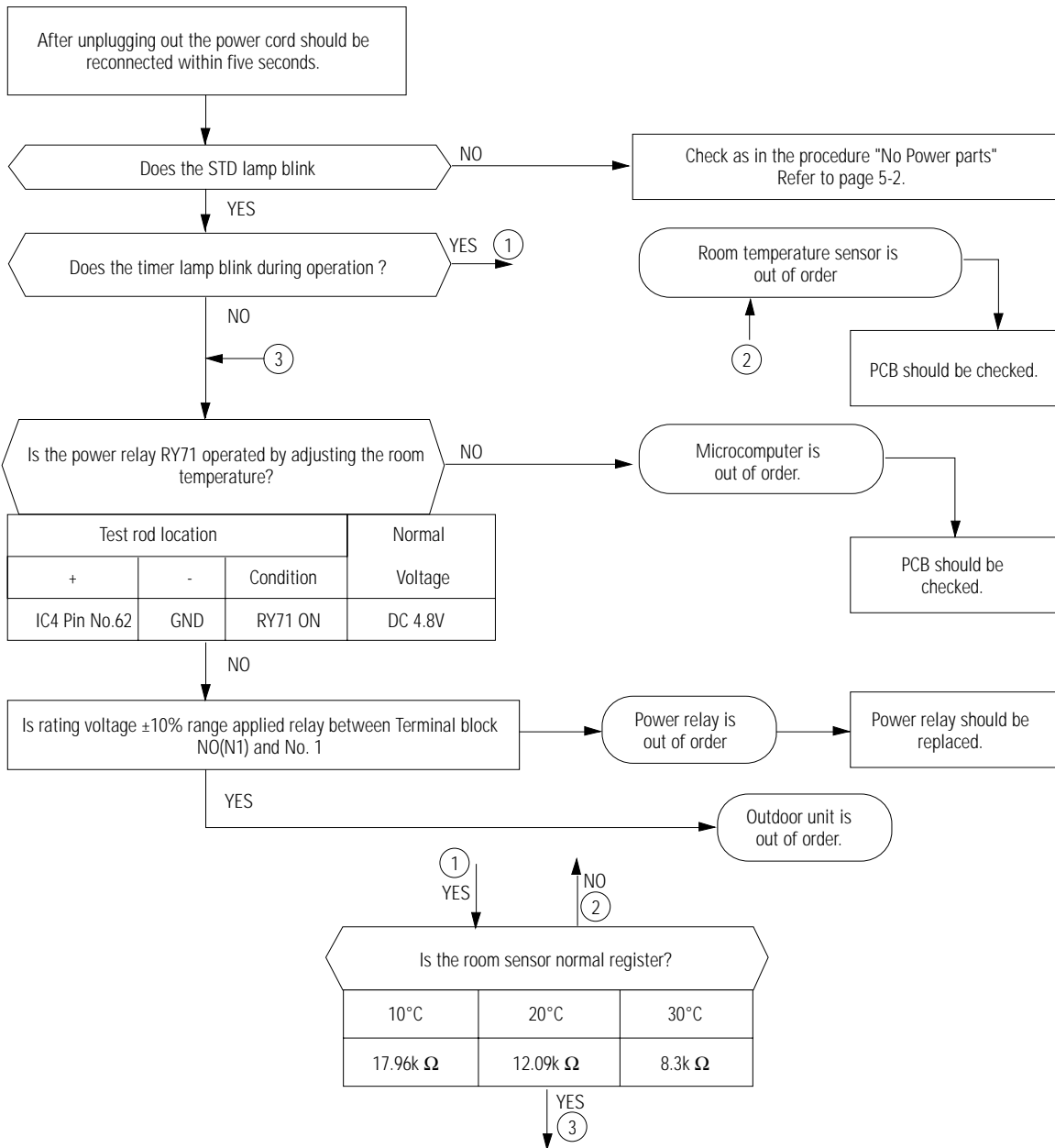
## 5-2-2 When the Indoor Unit Fan Does Not Operate. (Initial Diagnosis)

- 1) Checklist :
  - (1) Is the indoor unit fan motor properly connected with the connector (CN72)?
  - (2) Is the AC voltage correct?
  - (3) Is HALL IC in indoor fan motor properly connected with the connector (CN42)?
  - (4) Is the running capacitor (CR71) properly connected with PCB board?
- 2) Troubleshooting procedure



### 5-2-3 When the Outdoor Unit Does Not Operate. (Initial Diagnosis)

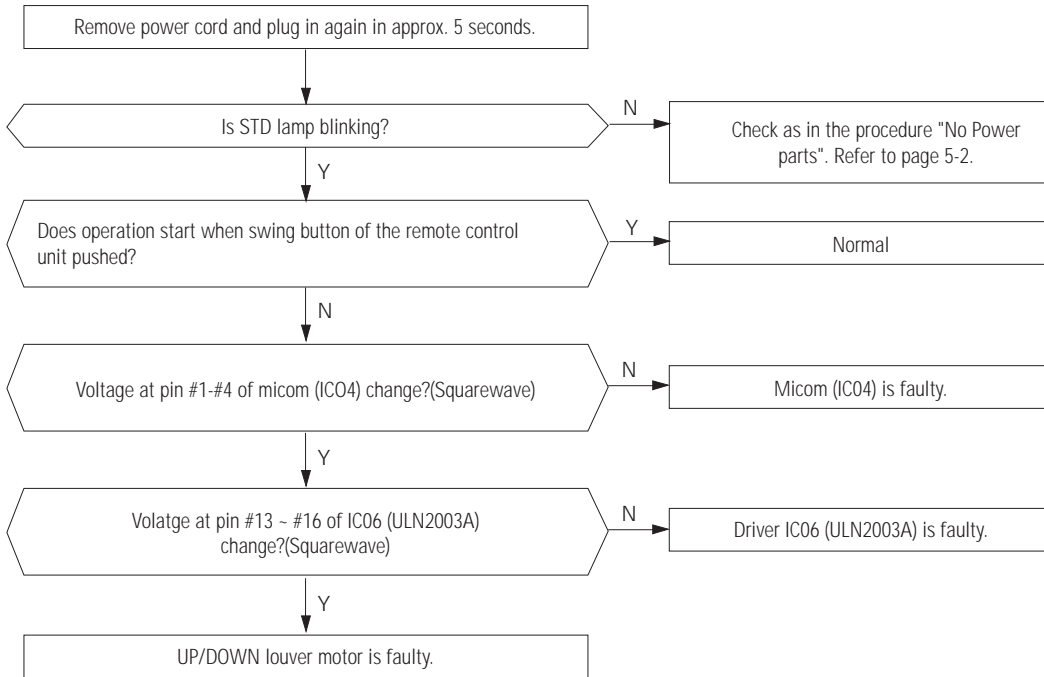
- 1) Checklist :
  - (1) Is input voltage normal?
  - (2) Is the set temperature of the remote control higher than room temperature in COOL mode?
  - (3) Is the POWER IN connector (CN71) linked correctly?
  - (4) Is the outdoor unit properly connected with the TERMINAL BLOCK connector((N1), 1)?
- 2) Troubleshooting procedure



#### 5-2-4 When the UP/DOWN Louver Motor Does Not Operate. (Initial Diagnosis)

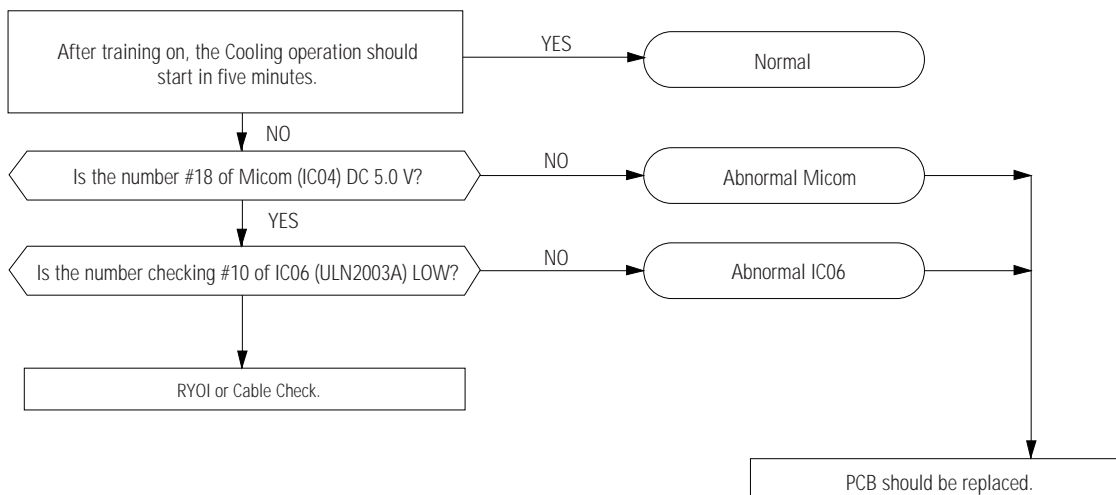
- 1) Checklist :
  - (1) Is input voltage normal?
  - (2) Is the UP/DOWN louver motor properly connected with the connector (CN61)?

#### 2) Troubleshooting procedure



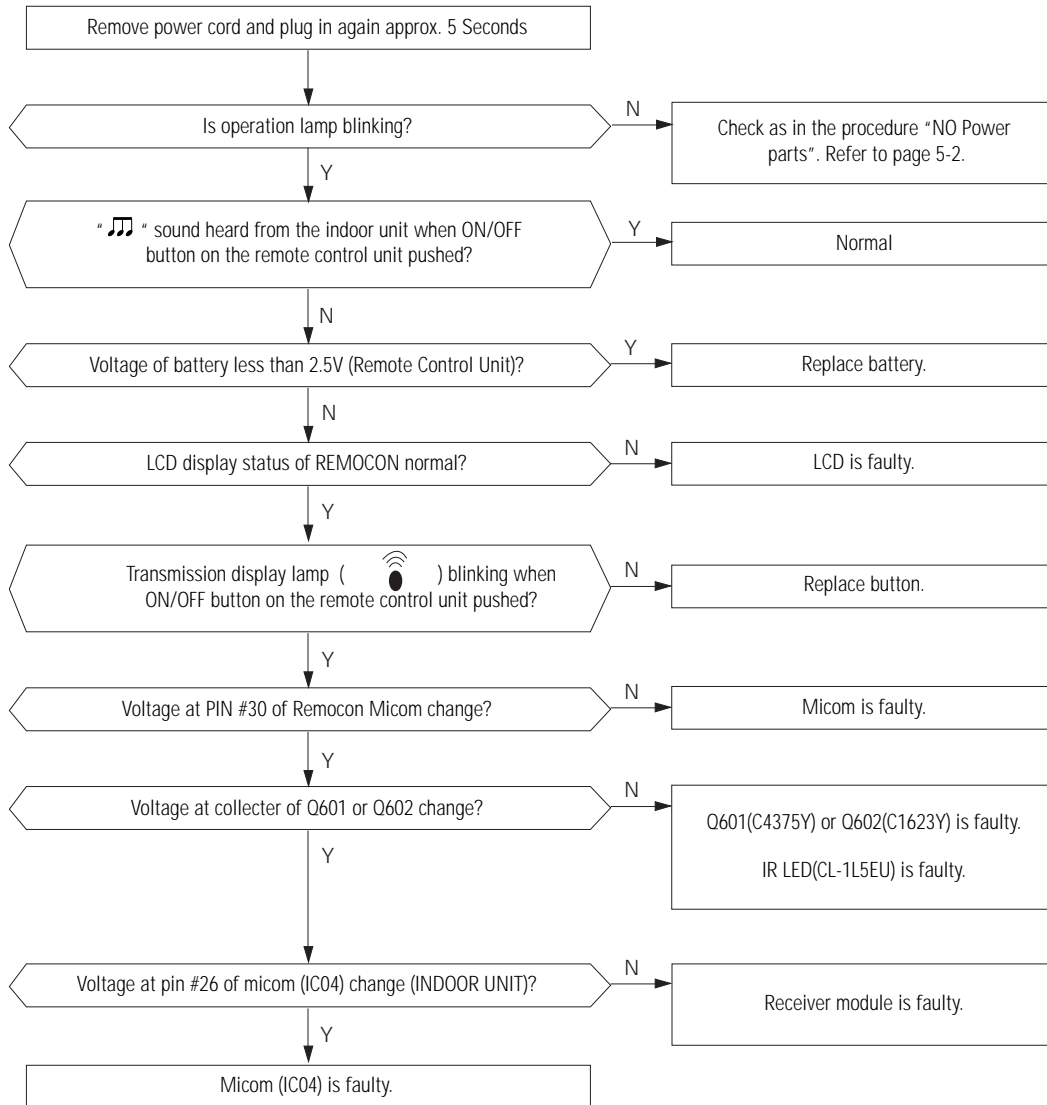
#### 5-2-5 In the mode, When there is no cool air current. Check this first;

- (1) Is the set temperature of Remote Control lower than room temperature in Cool mode?
- (2) Is the Indoor PCB properly connected with the CN71 connector?



## 5-2-6 If Operation By Remote Control Unit Is Impossible. (Initial Diagnosis)

### 1) Troubleshooting procedure



## 5-3 PCB Inspection

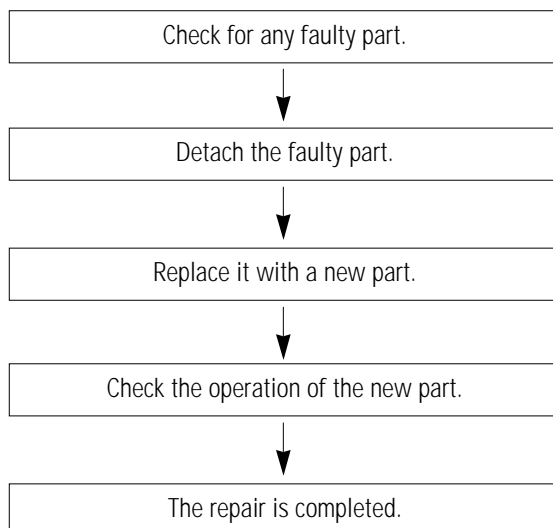
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### 5-3-1 Cautions for Part Replacement

1. The human body carries much static electricity. Before touching a part for repair, replacement or the similar purpose, be sure to touch a grounded metallic portion by hand to let the static electricity go through the metallic portion to the earth. Especially when handling any micro computer or IC, carefully remove such static electricity before touching them.
2. When repairing any part on a work bench, be sure to place an insulative sheet on the bench and always keep the sheet surface neat without any metal fragments. If any such fragment touches a part, a secondary trouble will possibly be caused in the part.
3. Before replacing any parts, be sure to turn off the power supply. If such replacement is done with the power supply kept on, an electric shock, short circuit or destruction of a part may result.
4. During replacement or repair of a part, carefully handle it : The printed circuit board has fine lead wires (jumper wires) and glass-made parts (diode) on its substrate. So if a circuit board is roughly handled, such lead wires and parts will be easily broken or damaged by bending or shock.
5. When soldering the lead wires of any new part, be sure to polish them using an emery paper or the like before soldering them. Since the lead wires of any new part are covered with an oxide film, solder cannot adhere to the lead wires if not polished.
6. When soldering any part, care should be exercised not to apply any high-wattage soldering iron to the part for a long time. Some parts are of so low a heat resistance that they may be broken or have the properties changed if a soldering iron is so applied (Otherwise, the pattern may possibly be separated and raised).
7. The heat of the soldering iron should be transferred to the entire object to be soldered. If the solder pieces are not well fused due to insufficient transfer of the heat from the soldering iron, no satisfactory electrical continuity can be assured even if the soldered objects appear well connected to each other.
8. The solder used should be limited to a minimum. If excessive solder is used, it will cause inter-pattern contact, which may cause malfunction of the circuit.

### 5-3-2 Procedure

The parts should be replaced in the following procedure.



### 5-3-3 Detailed Procedure

| No. | Malfunction   | Checking point (symptoms)  | Causes  |
|-----|---|--|---|
| 1   | Pull out the power plug from the AC terminal and confirm the fuse on the PCB assembly | 1. Is the broken(open)?  | <ul style="list-style-type: none"> <li>▷ Voltage over</li> <li>▷ Indoor unit fan motor short-circuit</li> </ul> |
| 2   | Turn the power on.  | Voltage check  | SMPS circuit is faulty  |
|     |   | 1. AC voltage at BD71(-,-)?<br>: rating voltage $\pm$ 10% range                          | ▷ SMPS circuit is faulty  |
|     |   | 2. DC voltage at BD71(+,-)?<br>: about 325[v] $\pm$ 10%                                  |   |
|     |   | 3. DC voltage at IC02<br>: IN-GND → DC12[v]<br>: OUT-GND → DC5[v]                        |   |
|     |   | 4. Voltage waveform at Q201<br>: collector-GND → squarewave                              | ▷ PC02, R202-R205   |
| 3   | Set the TURBO mode  | Voltage check  | SMPS circuit is faulty  |
|     |   | 1. check voltage of IC06<br>(pin#10,pin#8)<br>: relay on → 0.7[v]<br>: relay off → 12[v] | ▷ IC06 is faulty  |
|     |   | 2. Voltage at terminal block<br>((N1) -1) → rating voltage                               | ▷ RY71 is faulty  |

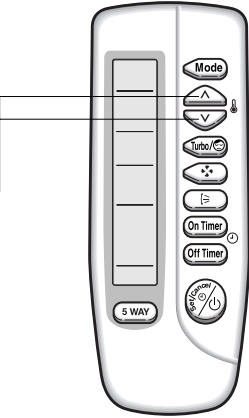
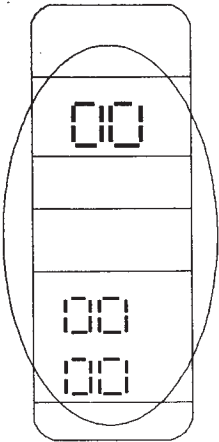
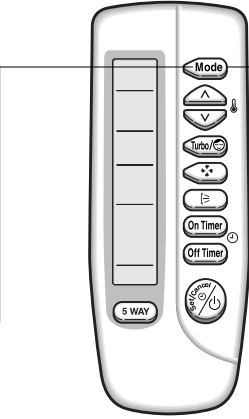
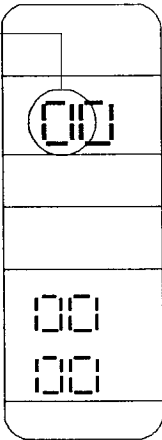
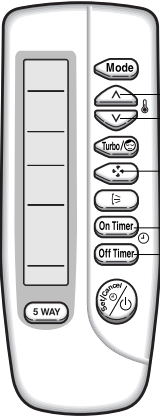
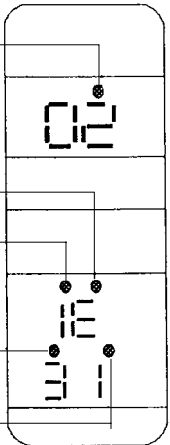



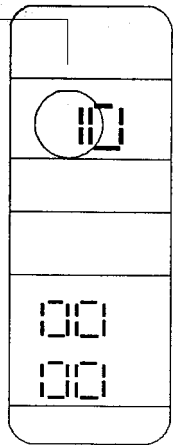
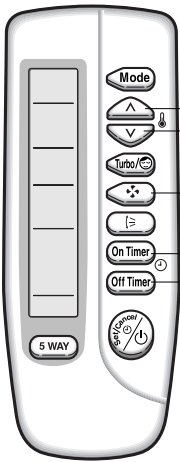
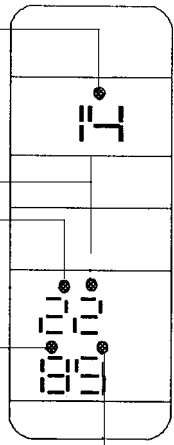
## 5-4 Fault Diagnosis of Major Parts

| Parts                                       | Diagnosis   |  |            |         |                    |      |      |      |
|---|---|--|------------|---------|--------------------|------|------|------|
| Temp.Sensor<br><br>Heat ex. Sensor          | Measure resistance with a tester.                                   |  |            |         |                    |      |      |      |
|   | Normal  | Ambient temperature                                | 15°C       | 20°C    | 25°C               | 30°C | 35°C | 40°C |
|   |   | Resistance of thermistor[kΩ]                       | 14.68      | 12.09   | 10                 | 8.31 | 6.94 | 5.83 |
|   | Abnormal  | ∞, 0 Ω ... open or short                           |            |         |                    |      |      |      |
| Indoor Fan Motor                            | Measure resistance between terminals (CN72) with a tester           |  |            |         |                    |      |      |      |
|   | Normal  | At ambient temperature (10°C ~ 30°C)               |            |         |                    |      |      |      |
|   |   | between  | Voltage    |         |                    |      |      |      |
|   |   | Red, Blue  | 410±10%    |         | Main               |      |      |      |
|   |   | Red, Yellow  | 325±10%    |         | Sub                |      |      |      |
|   | Abnormal  |  |            |         |                    |      |      |      |
|   | Measure the voltage between ground and signal wire of the fan motor |  |            |         |                    |      |      |      |
| Normal                                      | between   | Voltage  |            |         |                    |      |      |      |
|   | Gray, Orange  | 05V~4.5V   |            |         |                    |      |      |      |
|   | Yellow, Orange  | 5V   |            |         |                    |      |      |      |
|   | Abnormal  | Abnormal if voltage does not change from 0V to 5V. |            |         |                    |      |      |      |
| Outdoor Fan Motor                           | Normal  | At ambient temperature (10°C ~ 30°C)               |            |         |                    |      |      |      |
|   |   |  | ***7(*8)** |         | ***5(*6)(*9)(*0)** |      |      |      |
|   |   | between  | Resistance |         |                    |      |      |      |
|   |   | Black, Red   | 304±10%    |         | 360±10%            |      | Main |      |
|   | Black, White  | 289±10%  |            | 257±10% |                    | Sub  |      |      |
|   | Abnormal  | ∞, 0 Ω ... open or short                           |            |         |                    |      |      |      |
| Stepping Motor<br><br>(UP/DOWN swing motor) | Measure resistance between red wire and each terminal.              |  |            |         |                    |      |      |      |
|   | Normal  | Approx. 380Ω at ambient temperature (20°C ~30°C)   |            |         |                    |      |      |      |
|   | Abnormal  | ∞, 0 Ω ... open or short                           |            |         |                    |      |      |      |

## 5-5 Set up the Model option

- ✳ If you make the replacement of the ASS'Y CONTROL-IN or MAIN PCB ,  
Be sure to be set up the model option as follow the steps

| Remote controller operation method as per the step  | Applicable key  | Display status  |
|---|---|---|
| <p>1st step Method)</p> <p>① Remove the battery of remote controller</p> <p>② Press the temperature raise/down key simultaneously</p> <p>③ Insert the battery again</p> <p>(Result)</p> <p>If the screen of remocon displays as shown in the right, go to the second step</p> |    |    |
| <p>2nd step Method)</p> <p>If the first digit of LCD is 0 on the remocon screen, go to the 3rd step.</p> <p>✳ If it is 1, press the mode key once to change to 0 and go to the 3rd step.</p>  |  |   |
| <p>3rd step Method)</p> <p>Press the marked key to input the option number.<br/>example) 021E31</p> <p>Result)</p> <p>Go to 4th step if it displays as shown in the right<br/>(The number increases from 1~9, and A, b, C, d, E, F whenever pressing the key.)</p>            |  |  |

| Remote controller operation method as per the step   | Applicable key   | Display status  |
|--|--|---|
| <p>4th step Method)</p> <p>After completion of 3rd step, and if the MODE KEY is pressed once, —</p> <p>① 1~3 steps are saved internally</p> <p>② If the first number at the time is "1", it is correct and so go to 5th step</p> <p>✱ If pressing mode key and the first digit becomes 0, the screen of 1~3 steps can be seen.</p> |   |    |
| <p>5th step Method)</p> <p>Pressing the marked key to input the option number. example) 142285</p> <p>Result)</p> <p>If it displays as shown in the right go to the 6th step</p>   |    |   |
| <p>6th step Method)</p> <p>When pressing the operation ON/OFF key with the direction of remote controller for set, the sound "Ding, or Diriring is heard and then the input of option is completed.</p> <p>✱ Refer to the right side if the error appears.</p>   | <p>ERROR MODE</p> <p>1. When the lamp(STANDARD(☹), NATURE(☹), TIMER(☹)) is flickering → failure of option input</p> <p>After removing the set power cord and insert it again, pressing the operation on/off key to retry and if the condition is same, EPROM is deffcective or misinsertted. So replace the PCB.</p> | <p>2. When all lamps (☹☹☹☹☹) are flickering with the sound of Dididiring,</p> <p>→ The current option input is different from that of already input one: Check the option number correctly and if it is correct, press the key once more to input the option. (check correctly)</p> <p>→ If the option is not input at the time and the all lamps are continuously flickering ; since it is the case that the option number is out of the input range, check the option number again and do again the steps from 1 - 6steps</p> |

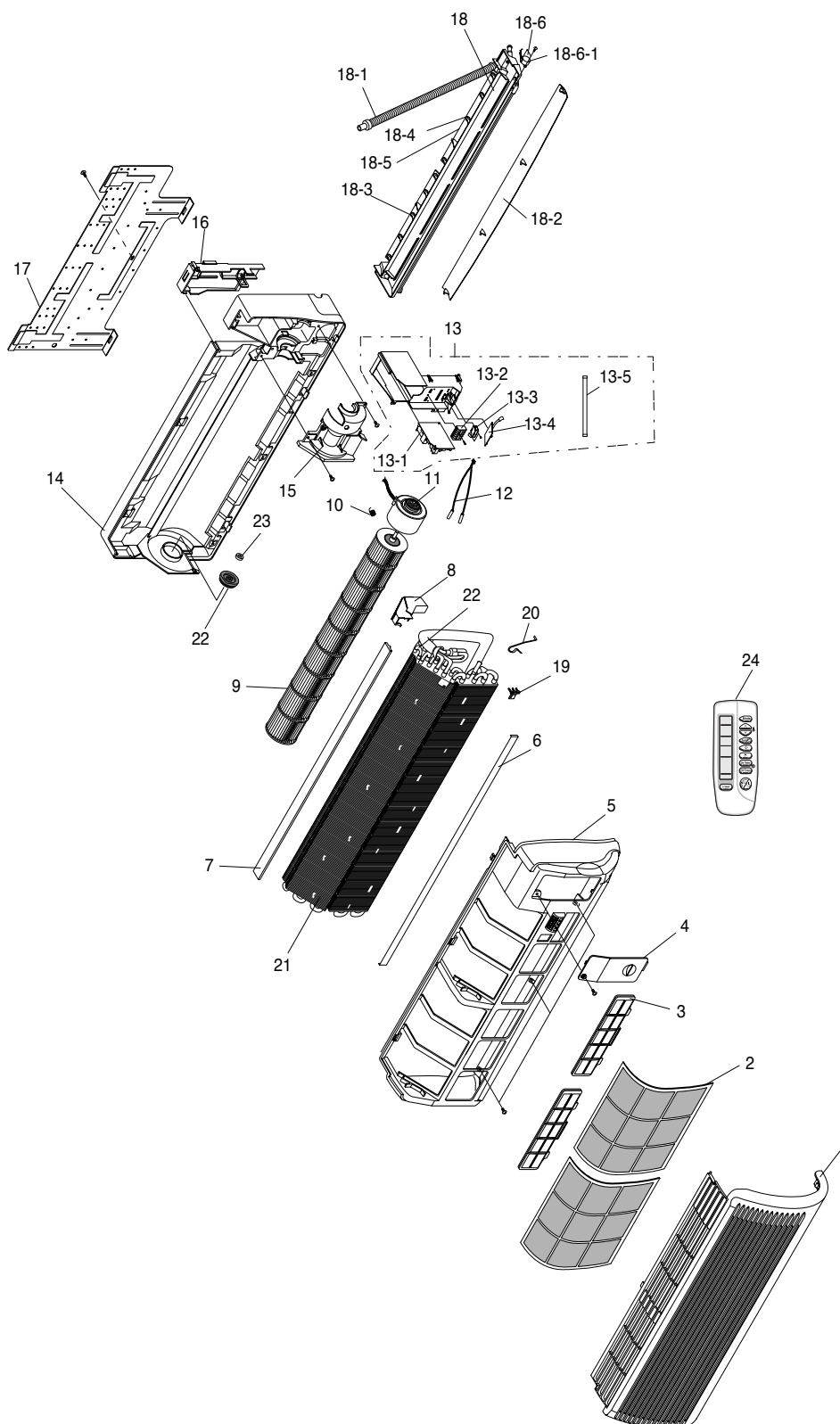
<Table of the option code>

| MODEL                     | OPTION CODE   |
|---------------------------|---------------|
| AS12*5MB                  | 010000-17021f |
| AS12*6MB                  | 000000-17021f |
| AS12*5ME                  | 010000-17021d |
| AS12*6ME                  | 000000-17021d |
| AS09*5ME<br>SC09Z*5       | 010000-1700d9 |
| AS09*6ME<br>SC09Z*6       | 000000-1700d9 |
| AS07*5ME/A<br>SC07Z*5     | 010000-1500b7 |
| AS07*6ME/A<br>SC07Z*6     | 000000-1500b7 |
| AS09*7ME/D/B/A<br>SC09Z*7 | 010000-1700d9 |
| AS09*8ME/D/B/A<br>SC09Z*8 | 000000-1700d9 |
| AS07*7ME/D/B<br>SC07Z*7   | 010000-1700b7 |
| AS07*8ME/D/B<br>SC07Z*8   | 000000-1700b7 |
| AS12*9ME<br>SC12Z*9       | 017d25-17021d |
| AS12*0ME<br>SC12Z*0       | 007d25-17021d |

# MEMO

## 6. Exploded Views and Parts List

### 6-1 Indoor Unit



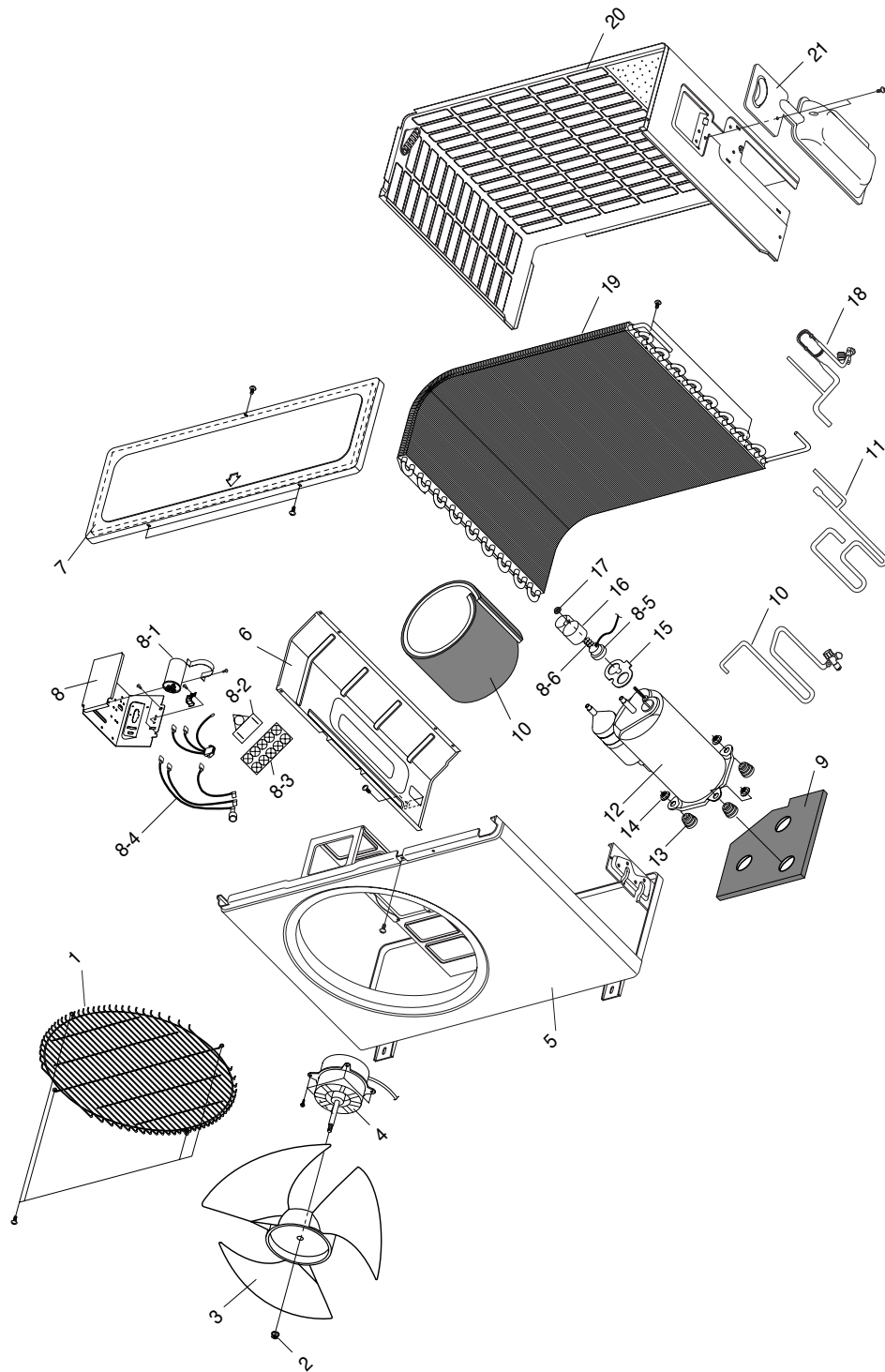
## ■ Parts List

① AS\*\*A\*M\*/SC\*\*ZA\* ② AS\*\*B\*M\*/SC\*\*ZB\*

| No.    | CODE NO     | Description                  | Q'TY        |                           |                           |                           |                               |                               |                           |             |             | Remark |
|--------|-------------|------------------------------|-------------|---------------------------|---------------------------|---------------------------|-------------------------------|-------------------------------|---------------------------|-------------|-------------|--------|
|        |             |                              | AS12*5(6)MB | AS12*5(6)ME<br>SC12Z*5(6) | AS09*5(6)ME<br>SC09Z*5(6) | AS07*5(6)ME<br>SC07Z*5(6) | AS09*7(8)ME/B/D<br>SC09Z*7(8) | AS07*7(8)ME/B/D<br>SC07Z*7(8) | AS12*9(0)ME<br>SC12Z*9(0) | AS09*5(6)MA | AS07*5(6)MA |        |
| 1      | DB64-00085A | GRILLE AIR INLET (①)         | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           | OPTION |
|        | DB64-00256A | GRILLE AIR INLET (②)         | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 2      | DB63-00064A | GUARD-AIR FILTER             | 2           | 2                         | 2                         | 2                         | 2                             | 2                             | 2                         | 2           | 2           |        |
| 3      | DB74-00011A | FILTER CLEANER ASS'Y         | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 4      | DB63-00067A | COVER TEMINAL                | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 5      | DB92-00031E | ASS'Y PANEL (①)              | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
|        | DB92-00031T | ASS'Y PANEL (②)              | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 6      | DB67-00051A | SPACER EVAP LOW              | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 7      | DB67-00032A | SPACER EVAP UP               | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 8      | DB63-00083A | COVER U BEND                 | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 9      | DB94-00040E | ASS'Y FAN CROSS(SF)          | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 10     | DB60-20011A | BOLT SPECIAL                 | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 11     | DB31-00033A | MOTOR FAN IN                 | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | -           | -           |        |
|        | DB31-00033B | MOTOR FAN IN                 | -           | -                         | -                         | -                         | -                             | -                             | -                         | 1           | 1           |        |
| 12     | DB32-00020A | THERMISTOR WIRE ASS'Y        | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 13     | DB93-00458A | ASS'Y CONTROL IN             | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | -           | -           |        |
|        | DB93-00270G | ASS'Y CONTROL IN             | -           | -                         | -                         | -                         | -                             | -                             | -                         | 1           | 1           |        |
| 13-1   | DB93-00438A | ASS'Y PCB MAIN               | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | -           | -           |        |
|        | DB93-00266D | ASS'Y PCB MAIN               | -           | -                         | -                         | -                         | -                             | -                             | -                         | 1           | 1           |        |
| 13-2   | DB65-00032A | TERMINAL BLOCK ASS'Y         | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 13-3   | DB61-00227A | HOLDER WIRE CLAMP            | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 13-4   | DB93-00268A | ASS'Y PCB DISPLAY            | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | -           | -           |        |
|        | DB93-00268E | ASS'Y PCB DISPLAY            | -           | -                         | -                         | -                         | -                             | -                             | -                         | 1           | 1           |        |
| 13-5   | DB39-00147A | CONNECT WIRE PCB             | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 14     | DB94-00056A | ASS'Y BACK BODY(RIGHT SIDE)  | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 15     | DB61-00162A | HOLDER MOTOR                 | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 16     | DB61-00165A | HOLDER PIPE                  | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 17     | DB70-00036A | PLATE HANGER                 | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 18     | DB94-00058B | ASS'Y TRAY DRAIN(RIGHT SIDE) | -           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | -           | -           |        |
|        | DB94-00058D | ASS'Y TRAY DRAIN(RIGHT SIDE) | 1           | -                         | -                         | -                         | -                             | -                             | -                         | 1           | 1           |        |
| 18-1   | DB94-00062E | ASS'Y DRAIN HOSE             | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 18-2   | DB66-00127B | BLADE H                      | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 18-3   | DB66-00128A | BLADE V,A                    | 3           | 3                         | 3                         | 3                         | 3                             | 3                             | 3                         | 3           | 3           |        |
| 18-4   | DB66-00128B | BLADE V,B                    | 6           | 6                         | 6                         | 6                         | 6                             | 6                             | 6                         | 6           | 6           |        |
| 18-5   | DB63-00082A | SCREEN SAFETY WIRE           | -           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 18-6   | DB95-20138A | ASS'Y MOTOR STEPPING         | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 18-6-1 | DB31-10129A | MOTOR STEPPING; GSP 24RW     | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 19     | DB61-40251A | HOLDER SENSOR                | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 20     | DB67-60030A | SPRING SENSOR                | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 21     | DB96-00784A | EVAPORATOR ASS'Y             | 1           | 1                         | -                         | -                         | -                             | -                             | 1                         | -           | -           |        |
|        | DB96-00783B | EVAPORATOR ASS'Y             | -           | -                         | 1                         | 1                         | 1                             | 1                             | -                         | 1           | 1           |        |
| 22     | DB94-40003A | RUBBER BEARING               | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 23     | DB94-40007A | BARING                       | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |
| 24     | DB93-00251K | ASS'Y REMOCON                | 1           | 1                         | 1                         | 1                         | 1                             | 1                             | 1                         | 1           | 1           |        |

## 6-2 Outdoor Unit

- US12\*5(6)MB(E)

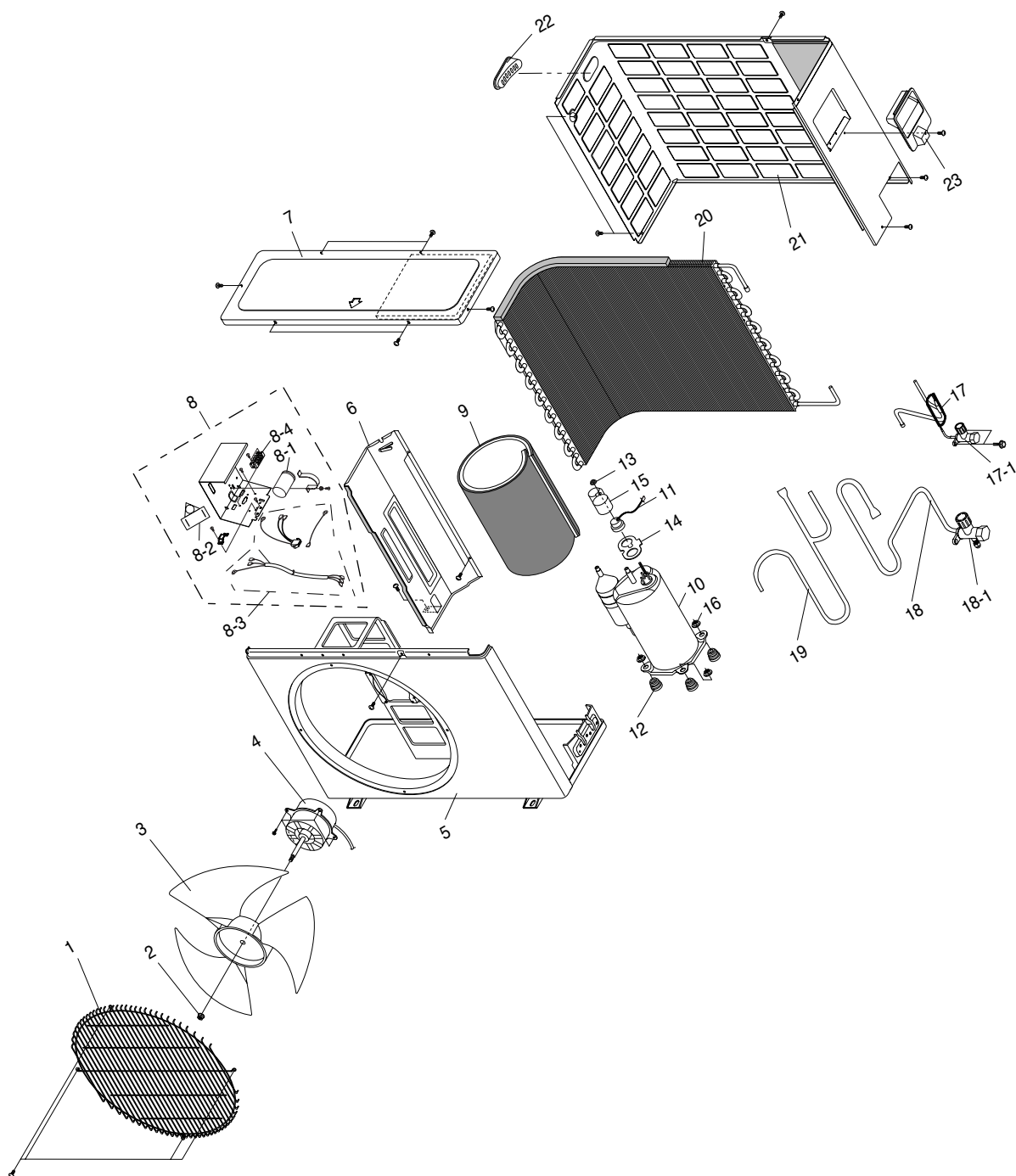




## ■ Parts List (OUTDOOR UNIT)

| No. | CODE NO                    | Description        | Specification  | Q'TY        |             | Remark |
|-----|----------------------------|--------------------|--|-------------|-------------|--------|
|     |                            |                    |  | US12*5(6)MB | US12*5(6)ME |        |
| 1   | DB63-00071A                | GUARD FAN          | HSER   | 1           | 1           |        |
| 2   | DB60-30004A                | NUT FLANGE         | 2C SM20C M6 NTR  | 1           | 1           |        |
| 3   | DB67-50063A                | PROPELLER-FAN      | AS+G/F, Ø405   | 1           | 1           |        |
| 4   | DB31-10058C                | MOTOR FAN OUT      | ASSO20WTVA   | 1           | 1           |        |
| 5   | DB90-00272A                | ASS'Y FRAME(PAINT) | ASS'Y  | 1           | -           |        |
| 6   | DB94-50077A                | ASS'Y PARTITION    | ASS'Y  | 1           | 1           |        |
| 7   | DB90-00085B                | CABINET UPPER      | SECC-P   | 1           | 1           |        |
| 8   | DB93-00452C                | ASS'Y CONTROL OUT  | ASS'Y  | 1           | -           |        |
|     | DB93-00477C or DB93-00452A | ASS'Y CONTROL OUT  | ASS'Y $\begin{cases} 2 \text{ stage OLP} \\ \text{Single OLP} \end{cases}$                           | -           | 1           |        |
| 8-1 | 2501-001226                | CAPACITOR COMP     | 25µF 370VAC  | 1           | -           |        |
|     | 2501-001236                | CAPACITOR COMP     | 30µF 450VAC  | -           | 1           |        |
| 8-2 | 2301-001377                | CAPACITOR MOTOR    | 1.2µF 450VAC   | 1           | 1           |        |
| 8-3 | DB65-40049E                | TERMINAL BLOCK     | 4P DFT-20A   | 1           | 1           |        |
| 8-4 | DB93-00480A or DB93-00412A | ASS'Y LEAD WIRE    | ASS'Y $\begin{cases} 2 \text{ stage OLP} \\ \text{Single OLP} \end{cases}$                           | 1           | 1           |        |
| 8-5 | DB47-20001G/L              | O L P              | MRA12002-9200/MRA12002-12008   | 1           | -           |        |
|     | DB35-00015G or DB35-00010B | O L P              | RAC12030-9622 $\begin{cases} 2 \text{ stage OLP} \\ \text{Single OLP} \end{cases}$<br>MRA12030-12008 | -           | 1           |        |
| 8-6 | DB67-60020A                | O L P SPRING       | STS304   | 1           | 1           |        |
| 9   | DB72-50574D                | CLOTH COMP BOTTOM  | FELT   | 1           | 1           |        |
| 10  | DB96-00489A                | ASS'Y SUCTION      | ASS'Y  | 1           | -           |        |
|     | DB96-00538A                | ASS'Y SUCTION      | ASS'Y  | -           | 1           |        |
| 11  | DB96-00488A                | ASS'Y DISCHARGE    | ASS'Y  | 1           | -           |        |
|     | DB96-00539A                | ASS'Y DISCHARGE    | ASS'Y  | -           | 1           |        |
| 12  | 48A135IV1EL                | COMPRESSOR         | 220V 60Hz  | 1           | -           |        |
|     | 48A124JV1EL                | COMPRESSOR         | 220V-240V/50Hz   | -           | 1           |        |
| 13  | DB73-10004B                | GROMMET-ISOLATOR   | SILICON  | 3           | 3           |        |
| 14  | DB60-30028A                | NUT-WASHER         | HEX 2C MB ZPC  | 3           | 3           |        |
| 15  | DB63-20002A                | GASKET             | EPDM   | 1           | 1           |        |
| 16  | DB63-10165D                | COVER TERMINAL     | PBT  | 1           | 1           |        |
| 17  | DB60-30018A                | NUT-FLANGE         | M5, SM20C  | 1           | 1           |        |
| 18  | DB96-00492B                | ASS'Y-CAPILLARY    | ASS'Y(1.7 ×1100)   | 1           | 1           |        |
| 19  | DB96-00510B                | ASS'Y COND         | ASS'Y(SF)  | 1           | -           |        |
|     | DB96-00510A                | ASS'Y COND         | ASS'Y  | -           | 1           |        |
| 20  | DB64-00136B                | CABINET SIDE       | ASS'Y(BENDING)   | 1           | 1           |        |
| 21  | DB67-90025A                | HANDLE CABI, RH    | ABS  | -           | 1           |        |
|     |                            |                    |  |             |             |        |

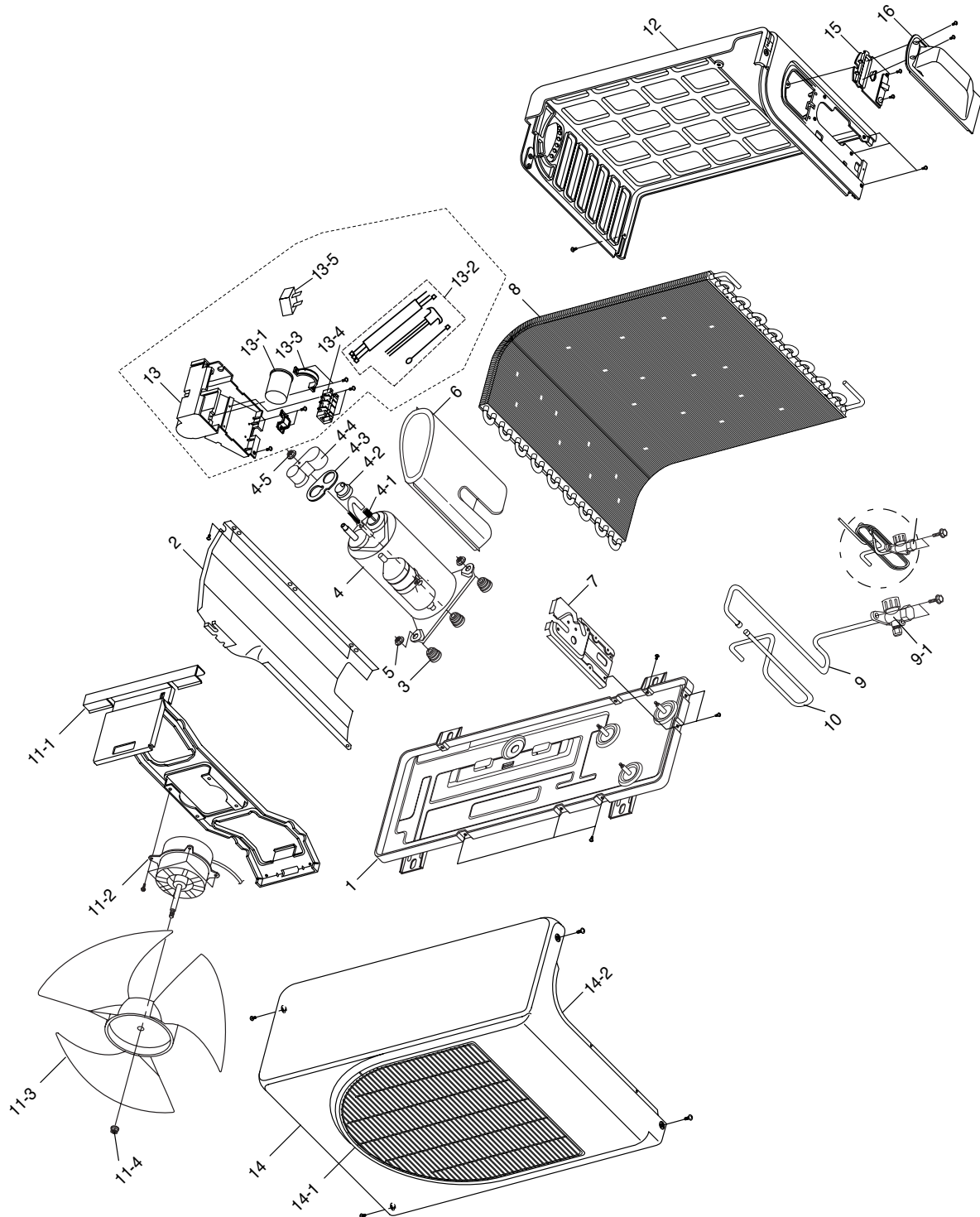
- US07\*5(6)ME/A
- SC07Z\*5(6)X
- US09\*5(6)ME/A
- SC09Z\*5(6)X



## ■ Parts List

| No.  | CODE NO      | Description          | Specitication                         | Q'TY                       |                            |             |             |
|------|--------------|----------------------|---------------------------------------|----------------------------|----------------------------|-------------|-------------|
|      |              |                      |                                       | US07*5(6)ME<br>SC07Z*5(6)X | US09*5(6)ME<br>SC09*A5(6)X | US07*5(6)MA | US09*5(6)MA |
| 1    | DB63-00086B  | GUARD-FAN            | HSWR, IP2, 5&3, SC-90073T, 375FAN     | 1                          | 1                          | 1           | 1           |
| 2    | DB60-30004A  | NUT-FLANGE           | 2C, M6, SM20C, NTR                    | 1                          | 1                          | 1           | 1           |
| 3    | DB67-00036A  | FAN-PROPELLER        | AS+G/F20%, PI 375, BLK                | 1                          | 1                          | 1           | 1           |
| 4    | DB31-10058C  | MOTOR-FAN OUT        | AMASS-020WTVA, FAN OUT, 220/240V      | 1                          | 1                          | -           | -           |
|      | DB31-10058G  | MOTOR-FAN OUT        | AMASS-020EREA, FAN OUT, 115V          | -                          | -                          | 1           | 1           |
| 5    | DB90-00264A  | ASS'Y FRAME (PAINT)  | SC-90073T                             | 1                          | 1                          | 1           | 1           |
| 6    | DB94-00078A  | ASS'Y PARTITION      | ASS'Y 620mm COND                      | 1                          | 1                          | 1           | 1           |
| 7    | DB90-00077B  | ASS'Y CABI-UPPER     | ASS'Y P                               | 1                          | 1                          | 1           | 1           |
| 8    | DB93-00477B  | ASS'Y CONTROL OUT    | ASS'Y 2 Stage OLP                     | 1                          | -                          | -           | -           |
|      | DB93-00452H  | ASS'Y CONTROL OUT    | ASS'Y Single OLP                      | -                          | -                          | 1           | -           |
|      | DB93-00477A  | ASS'Y CONTROL OUT    | ASS'Y 2 Stage OLP                     | -                          | 1                          | -           | -           |
|      | DB93-00452G  | ASS'Y CONTROL OUT    | ASS'Y Single OLP                      | -                          | -                          | -           | 1           |
| 8-1  | 2501-001228  | C-OIL (COMP)         | 35μF, 370VAC                          | 1                          | -                          | -           | -           |
|      | 2501-001226  | C-OIL (COMP)         | 25μF, 370VAC                          | -                          | -                          | 1           | -           |
|      | 2501-001229  | C-OIL (COMP)         | 40μF, 370VAC                          | -                          | 1                          | -           | -           |
|      | 2501-001230  | C-OIL (COMP)         | 45μF, 370VAC                          | -                          | -                          | -           | 1           |
| 8-2  | 2301-001375  | C-OIL (MOTOR)        | 1.0μF, 450VAC                         | 1                          | 1                          | -           | -           |
|      | 2301-001379  | C-OIL (MOTOR)        | 4.0μF, 450VAC                         | -                          | -                          | 1           | 1           |
| 8-3  | DB93-00480A  | ASS'Y LEAD WIRE      | V2 P/D (105°C)                        | 1                          | 1                          | -           | -           |
|      | DB93-00412A  | ASS'Y LEAD WIRE      | V2 P/D (105°C)                        | -                          | -                          | 1           | 1           |
| 8-4  | DB65-40049E  | TERMINAL BLOCK       | 4P, (N1), 1, 2, 3, AWG16, 67.5 x 29.4 | 1                          | 1                          | 1           | 1           |
| 9    | DB72-00453A  | CLOTH-COMP           | T8, 425, 225, 44F COMP                | 1                          | 1                          | 1           | 1           |
| 10   | 44B080 JW1EL | ROTARY COMP          | 1Ph, 50Hz, 220-240V                   | 1                          | -                          | -           | -           |
|      | 44A072HW1EB  | ROTARY COMP          | 1Ph, 60Hz, 115V                       | -                          | -                          | 1           | -           |
|      | 44B102 JW1EL | ROTARY COMP          | 1Ph, 50Hz, 220-240V                   | -                          | 1                          | -           | -           |
|      | 44B092HW1EL  | ROTARY COMP          | 1Ph, 60Hz, 115V                       | -                          | -                          | -           | 1           |
| 11   | DB35-00015F  | PROTECTOR O/L        | RAC 12086-9622 2 Stage OLP            | 1                          | -                          | -           | -           |
|      | DB47-20001V  | PROTECTOR O/L        | MRA98706-12008 Single OLP             | -                          | -                          | 1           | -           |
|      | DB35-00015B  | PROTECTOR O/L        | RAC 12086-9622 2 Stage OLP            | -                          | 1                          | -           | -           |
|      | DB47-20066E  | PROTECTOR O/L        | MRA12093-12007 Single OLP             | -                          | -                          | -           | 1           |
| 12   | DB73-10004A  | GROMMET-ISOLATOR     | EPDM                                  | 3                          | 3                          | 3           | 3           |
| 13   | DB60-30018A  | NUT-FLANGE           | PI0.8, M5, SM20C                      | 1                          | 1                          | 1           | 1           |
| 14   | DB63-20002A  | GASKET               | EPDM, T0.8                            | 1                          | 1                          | 1           | 1           |
| 15   | DB63-10165D  | COVER-TERMINAL       | PBT                                   | 1                          | 1                          | 1           | 1           |
| 16   | DB60-30028A  | NUT-WASHER           | HEX, 2C, M8, ZPC                      | 3                          | 3                          | 3           | 3           |
| 17   | DB96-00553A  | ASS'Y TUBE CAPILLARY | ID1.5 x 900+1/4"                      | 1                          | 1                          | -           | 1           |
|      | DB96-00553B  | ASS'Y TUBE CAPILLARY | ID1.42 x 800+1/4"                     | -                          | -                          | 1           | -           |
| 17-1 | DB62-00254B  | VALVE-SERVICE        | 1/4INCH                               | 1                          | 1                          | 1           | 1           |
| 18   | DB96-00585A  | ASS'Y -SUCTION       | ASS'Y                                 | 1                          | 1                          | -           | 1           |
|      | DB96-00615A  | ASS'Y -SUCTION       | ASS'Y                                 | -                          | -                          | 1           | -           |
| 18-1 | DB62-40073B  | VALVE-SERVICE        | 3/8INCH                               | 1                          | 1                          | 1           | 1           |
| 19   | DB96-00514A  | ASS'Y -DISCHARGE     | ASS'Y                                 | 1                          | 1                          | -           | 1           |
|      | DB96-00616A  | ASS'Y -DISCHARGE     | ASS'Y                                 | -                          | -                          | 1           | -           |
| 20   | DB75-00029B  | ASS'Y COND           | 1.5D-FIN, 620mm                       | 1                          | 1                          | 1           | 1           |
| 21   | DB64-60171B  | CABINET-SIDE         | SECC-P, T 0.8, A-P/J                  | 1                          | 1                          | 1           | 1           |
| 22   | DB67-00091A  | HANDLE-CABI LF       | PP                                    | 1                          | 1                          | 1           | 1           |
| 23   | DB63-10443C  | COVER-E, PARTS ASS'Y | SC-90073R                             | 1                          | 1                          | 1           | 1           |

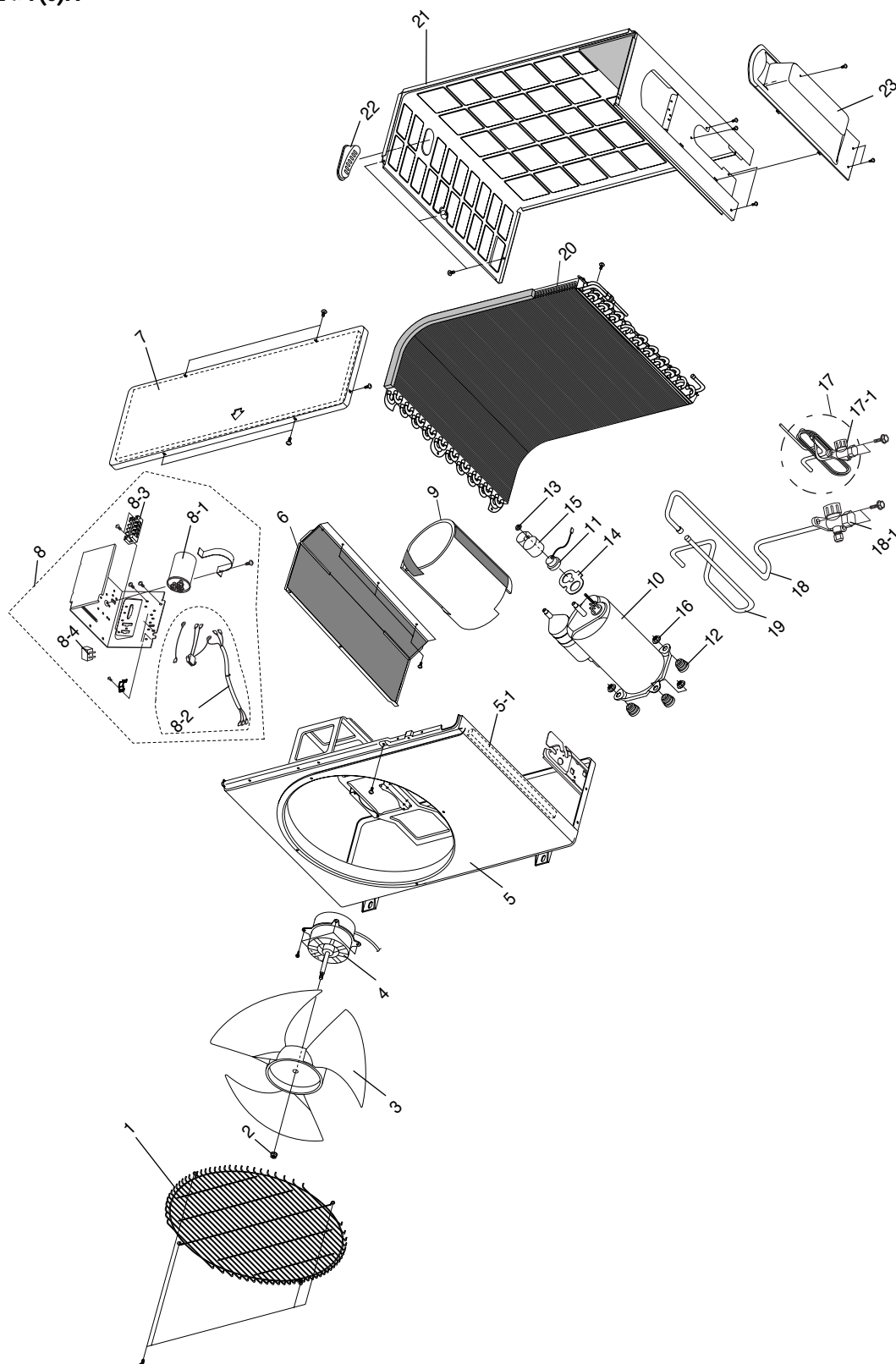
- SC07Z\*7(8)X/US07\*7(8)M\*
- SC09Z\*7(8)X/US09\*7(8)M\*



## ■ Parts List

| No.  | CODE NO        | Description                              | Q'TY                       |                            |             |             |             |             |
|------|----------------|--|----------------------------|----------------------------|-------------|-------------|-------------|-------------|
|      |                |  | Mold                       |                            |             |             |             |             |
|      |                |  | US09*7(8)ME<br>SC09Z*7(8)X | US07*7(8)ME<br>SC07Z*7(8)X | US09*7(8)MD | US07*7(8)MD | US09*7(8)MB | US07*7(8)MB |
| 1    | DB90-00262A    | ASS'Y BASE OUT                           | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 2    | DB94-00045A    | ASS'Y PARTITION                          | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 3    | DB73-10004A    | GROMMET ISOLATOR:EPDM                    | 3                          | 3                          | 3           | 3           | 3           | 3           |
| 4    | 44B102JW1EL    | ROTARY COMP                              | 1                          | -                          | -           | -           | -           | -           |
|      | 44B080JW1EL    | ROTARY COMP                              | -                          | 1                          | -           | -           | -           | -           |
|      | 44B0102MW1EL   | ROTARY COMP                              | -                          | -                          | 1           | -           | -           | -           |
|      | 44A070MW1EB    | ROTARY COMP                              | -                          | -                          | -           | 1           | -           | -           |
|      | 44B102JW1EL    | ROTARY COMP                              | -                          | -                          | -           | -           | 1           | -           |
|      | 44072IW1EB     | ROTARY COMP                              | -                          | -                          | -           | -           | -           | 1           |
| 4-1  | DB68-60020A    | SPRING OLP                               | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 4-2  | DB35-00015B    | PROTECTOR O/L RAC12054-9622 2 stage OLP  | 1                          | -                          | -           | -           | -           | -           |
|      | DB35-00010E or | PROTECTOR O/L MRA12110-12008 Single OLP  | -                          | -                          | -           | -           | -           | -           |
|      | DB35-00015F or | PROTECTOR O/L MRA12086-12008 2 stage OLP | -                          | -                          | -           | -           | -           | -           |
|      | DB35-00010F or | PROTECTOR O/L MRA12086-12008 Single OLP  | -                          | -                          | -           | -           | -           | -           |
|      | DB35-00011A    | PROTECTOR O/L MRA12067-12007             | -                          | -                          | 1           | -           | -           | -           |
|      | DB47-20001X    | PROTECTOR O/L MRT12AMM-12008             | -                          | -                          | -           | 1           | -           | -           |
|      | DB35-00010D    | PROTECTOR O/L MRA12049-12008             | -                          | -                          | -           | -           | 1           | -           |
|      | DB35-00010C    | PROTECTOR O/L MRA12043-12008             | -                          | -                          | -           | -           | -           | 1           |
| 4-3  | DB63-20002A    | GASKET : EPDM                            | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 4-4  | DB63-10165D    | COVER TERMINAL (PBT)                     | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 4-5  | DB60-30018A    | NUT FLANGE                               | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 5    | DB60-30028A    | NUT WASHER                               | 3                          | 3                          | 3           | 3           | 3           | 3           |
| 6    | DB72-00453A    | CLOTH COMP SIDE                          | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 7    | DB61-00168A    | BRACKET VALVE                            | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 8    | DB75-00029A    | CONDENSER ASS'Y                          | 1                          | 1                          | 1           | 1           | -           | -           |
|      | DB75-00029B    | CONDENSER ASS'Y                          | -                          | -                          | 1           | -           | 1           | 1           |
| 9    | DB96-00557A    | ASS'Y SUCTION                            | 1                          | 1                          | 1           | -           | 1           | -           |
|      | DB96-00558A    | ASS'Y SUCTION                            | -                          | -                          | -           | 1           | -           | 1           |
| 9-1  | DB62-00251A    | VALVE SERVICE                            | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 10   | DB62-00556A    | TUBE DISCHARGE                           | 1                          | 1                          | 1           | -           | 1           | -           |
|      | DB62-00624A    | TUBE DISCHARGE                           | -                          | -                          | -           | 1           | -           | 1           |
| 11-1 | DB90-00110A    | ASS'Y BRACKET MOTOR                      | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 11-2 | DB31-00034A    | MOTOR FAN OUT                            | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 11-3 | DB67-00036A    | FAN PROPELLER                            | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 11-4 | DB60-30004A    | NUT FLANGE                               | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 12   | DB90-00109A    | ASS'Y CABI SIDE                          | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 13   | DB93-00667A or | ASS'Y CONTROL OUT 2 stage OLP            | 1                          | -                          | -           | -           | -           | -           |
|      | DB93-00434A    | ASS'Y CONTROL OUT Single stage OLP       | -                          | -                          | -           | -           | -           | -           |
|      | DB93-00667B or | ASS'Y CONTROL OUT 2 stage OLP            | -                          | 1                          | -           | -           | -           | -           |
|      | DB93-00434B    | ASS'Y CONTROL OUT Single stage OLP       | -                          | -                          | -           | -           | -           | -           |
|      | DB93-00434C    | ASS'Y CONTROL OUT                        | -                          | -                          | 1           | -           | -           | -           |
|      | DB93-00434D    | ASS'Y CONTROL OUT                        | -                          | -                          | -           | 1           | -           | -           |
|      | DB93-00434E    | ASS'Y CONTROL OUT                        | -                          | -                          | -           | -           | 1           | -           |
|      | DB93-00434F    | ASS'Y CONTROL OUT                        | -                          | -                          | -           | -           | -           | 1           |
| 13-1 | 2501-001229    | C OIL : 40μF,370VAC                      | 1                          | -                          | 1           | -           | -           | -           |
|      | 2501-001228    | C OIL : 35μF,370VAC                      | -                          | 1                          | -           | -           | -           | -           |
|      | 2501-001225    | C OIL : 20μF,370VAC                      | -                          | -                          | -           | 1           | -           | 1           |
|      | 2501-001226    | C OIL : 25μF,370VAC                      | -                          | -                          | -           | -           | 1           | -           |
| 13-2 | DB93-00480A or | ASS'Y LEAD WIRE < 2 stage OLP            | 1                          | 1                          | 1           | 1           | 1           | 1           |
|      | DB93-00412A    | ASS'Y LEAD WIRE Single stage OLP         | -                          | -                          | -           | -           | -           | -           |
| 13-3 | DB61-00174A    | HOLDER CAPACITOR                         | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 13-4 | DB65-40049D    | TERMINAL BLOCK                           | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 13-5 | 2301-001375    | C OIL : 1.5μF,450VAC                     | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 14   | DB90-00108B    | ASS'Y CABI FRONT                         | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 14-1 | DB63-00099A    | GUARD FAN WIRE                           | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 14-2 | DB61-00173A    | GUIDE BELL MOUTH                         | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 15   | DB90-00152A    | ASS'Y COVER CONTROL                      | 1                          | 1                          | 1           | 1           | 1           | 1           |
| 16   | DB94-00021A    | ASS'Y COVER VALVE                        | 1                          | 1                          | 1           | 1           | 1           | 1           |

- US12\*9(0)ME
- SC12Z\*9(0)X

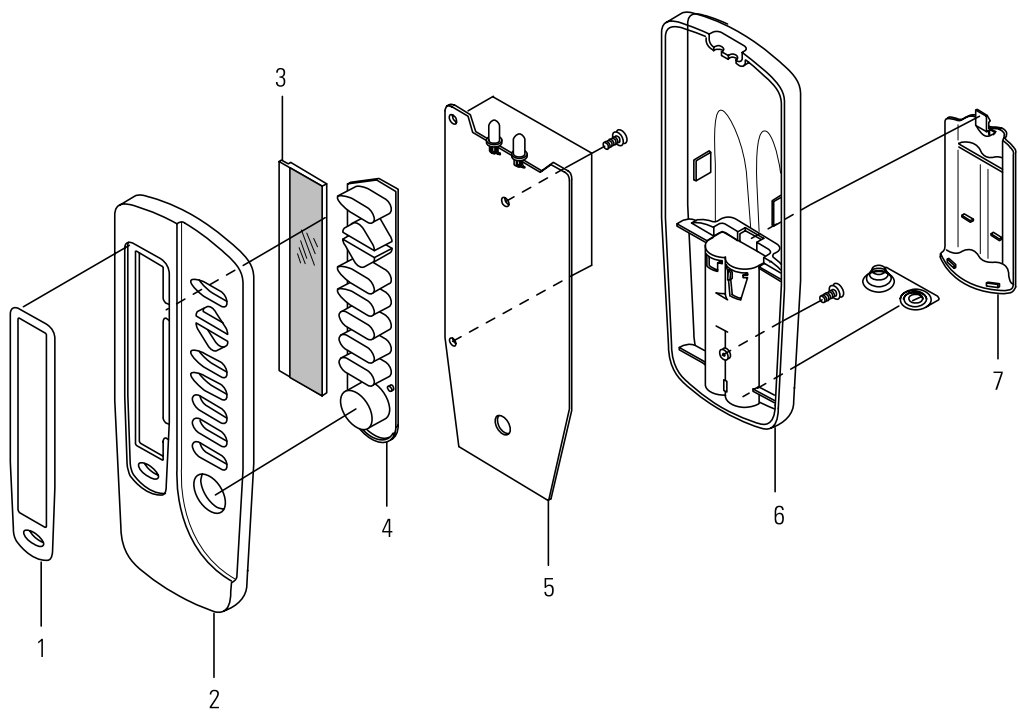


## ■ Parts List

| No.  | CODE NO                          | Description          | Specitication  | Q'TY                       | Remarks |
|------|----------------------------------|----------------------|--|----------------------------|---------|
|      |                                  |                      |  | US12*9(0)ME<br>SC12Z*9(0)X |         |
| 1    | DB63-00071A                      | GUARD-FAN            | HSER, IP2, SC-90073T, NEW V-P/J 405FAN   | 1                          |         |
| 2    | DB60-30004A                      | NUT-FLANGE           | -, 2C, M6, -, SM20C, NTR   | 1                          |         |
| 3    | DB67-50063A                      | FAN-PROPELLER        | AS+G/F20%, PI 405, BLK   | 1                          |         |
| 4    | DB31-10058C                      | MOTOR-FAN OUT        | AMASS-020WTV, FAN OUT, 220/241   | 1                          |         |
| 5    | DB90-00372A                      | ASS'Y FRAME          | V2 P/D, 48F, SAMSUNG, SILK ELCOMP  | 1                          |         |
| 5-1  | DB72-00194J                      | SEAL-FRONT, RH       | 30FOAM-PU, T15, 15, 400, BLK, -  | 1                          |         |
| 6    | DB94-00098A                      | ASS'Y PARTITION      | V2 P/D, 12K, 2ROW COND   | 1                          |         |
| 7    | DB90-00374A                      | ASS'Y CABI-UPPER     | V2 P/D, SC90073 T+FOAM-PU  | 1                          |         |
| 8    | DB93-00477C<br>or<br>DB93-00452A | ASS'Y CONTROL OUT    | <div> <div>2 stage OLP</div> <div>Single OLP</div> </div>                              | 1                          |         |
| 8-1  | 2501-001236                      | C-OIL                | 30μF, 450VAC   | 1                          |         |
| 8-2  | DB93-00480A<br>or<br>DB93-00412A | ASS'Y LEAD WIRE      | <div> <div>2 stage OLP</div> <div>Single OLP</div> </div>                              | 1                          |         |
| 8-3  | DB65-40049E                      | TERMINAL BLOCK       | 4P, (N1), 1, 2, 3  | 1                          |         |
| 8-4  | 2301-001377                      | C-OIL                | 1.2μF, 450VAC  | 1                          |         |
| 9    | DB72-00453A                      | CLOTH-COMP SIDE      | 8t   | 1                          |         |
| 10   | 48A124JV1EL                      | ROTARY COMP          | 1ph, 208-240V-, 50Hz, 124000BTU  | 1                          |         |
| 11   | DB35-00010A<br>or<br>DB35-00010B | PROTECTOR O/L        | <div> <div>RAC02030-9622 2 stage OLP</div> <div>MRA12030-12008 Single OLP</div> </div> | 1                          |         |
| 12   | DB73-10004B                      | GROMMET-ISOLATOR     | SILICON  | 3                          |         |
| 13   | DB60-30018A                      | NUT-FLANGE           | PI0.8, -, M5,-, SM20C,-  | 1                          |         |
| 14   | DB63-20002A                      | GASKET               | EPDM, TO.8, -, -, -  | 1                          |         |
| 15   | DB63-10165D                      | COVER-TERMINAL       | PBT  | 1                          |         |
| 16   | DB60-30028A                      | NUT-WASHER           | HEX, 2C, MB, ZPC, -, -   | 3                          |         |
| 17   | DB96-00350C                      | ASS'Y TUBE CAPILLARY | ID1.7*1200+1/4"  | 1                          |         |
| 17-1 | DB62-00254A                      | VALVE-SERVICE 1/4"   | ASS'Y, -, 1/4", 45KG/CM2G, -   | 1                          |         |
| 18   | DB96-00761A                      | ASS'Y TUBE SUCTION   | ASSY   | 1                          |         |
| 18-1 | DB62-00251A                      | VALVE-SERVICE        | 1/2"+9.52, 45/30KG   | 1                          |         |
| 19   | DB62-00762A                      | TUBE-DISCHARGE       | ASSY   | 1                          |         |
| 20   | DB96-00291A                      | ASS'Y COND           | 1.7D-FIN, NORMAL   | 1                          |         |
| 21   | DB64-00090A                      | CABINET-SIDE         | SECC-P, T 0.8, -, SC-90073T, NEW V-P/J, -  | 1                          |         |
| 22   | DB67-90024A                      | HANDLE-CABI LF       | ABS, T2, -   | 1                          |         |
| 23   | DB63-00070A                      | COVER VALVE          | V2 P/D, PP   | 1                          |         |

### 6-3 Remote Control & PCB Box

#### 6-3-1 ASS'Y REMOCON : DB93-00251K



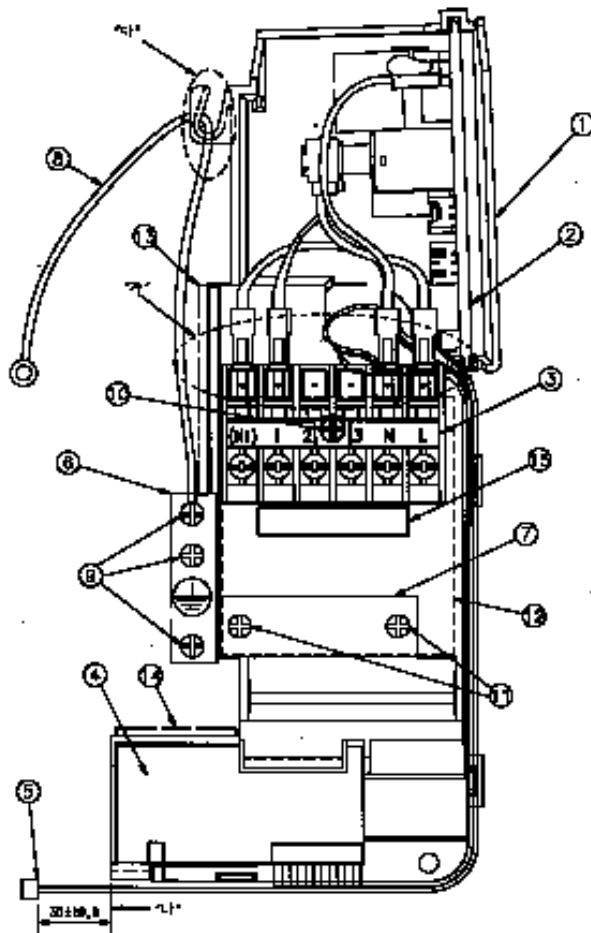
■ Parts List

| No | Description       | Q'TY | Remark |
|----|-------------------|------|--------|
| 1  | INLAY LCD         | 1    |        |
| 2  | CASE TOP          | 1    |        |
| 3  | LCD               | 1    |        |
| 4  | KEY RUBBER        | 1    |        |
| 5  | ASS'Y PCB REMOCON | 1    |        |
| 6  | CASE LOW          | 1    |        |
| 7  | BATTERY COVER     | 1    |        |



## 6-4 Indoor Control Unit

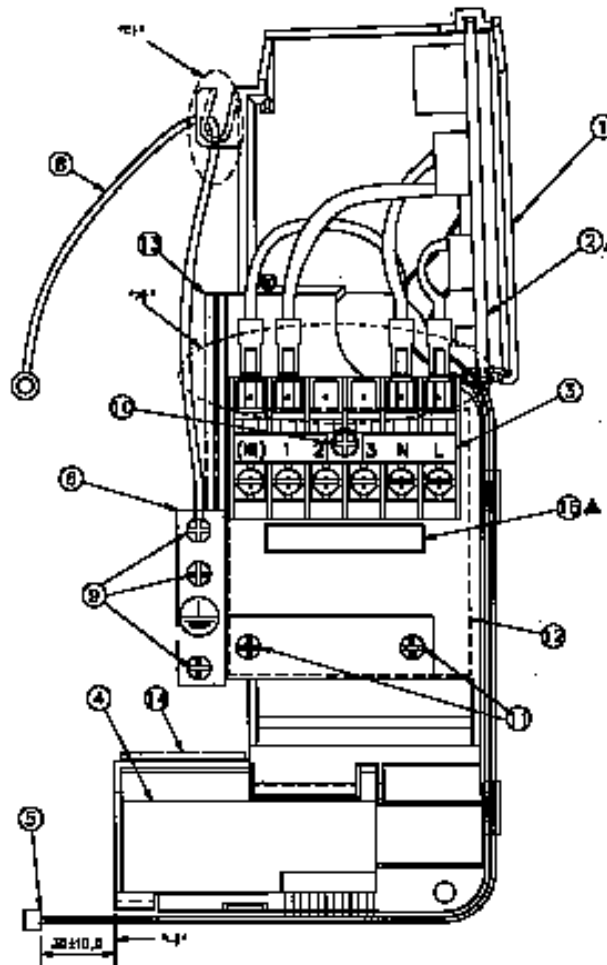
### 6-4-1 ASS'Y CONTROL-IN : DB93-00458A(AS\*\*\*\*ME/D/B, SC\*\*\*\*\*)



#### ■ Parts List

| No | Description            | Specification                   | Remark |
|----|------------------------|---------------------------------|--------|
| 1  | HOLDER CONTROL         | ABS                             |        |
| 2  | ASS'Y MAIN PCB         |                                 |        |
| 3  | ASS'Y TERMINAL BLOCK   | 6P                              |        |
| 4  | ASS'Y DISPLAY PCB      |                                 |        |
| 5  | CONNECTOR WIRE PCB U/D | 5P                              |        |
| 6  | BRACKET EARTH          | SGCC-M                          |        |
| 7  | HOLDER-WIRE CLAMP      |                                 |        |
| 8  | CONNECTOR WIRE EARTH   | AWG#16                          |        |
| 9  | SCREW                  | WP, TH + M4 x L8, ZPC(WHT), T.C |        |
| 10 | SCREW                  | PH, M3 x L22                    |        |
| 11 | SCREW                  | TH + M4 x L16, ZPC(YEL), SWRCH  |        |
| 12 | HOLDER CLAMP IN        |                                 |        |
| 13 | SEAL-PANEL FRONT RH    |                                 |        |
| 14 | SEAL-H/CONTROL FRONT   |                                 |        |
| 15 | LABEL                  |                                 |        |

## 6-4-2 ASS'Y CONTROL-IN : DB93-00270G (AS\*\*\*\*MA)

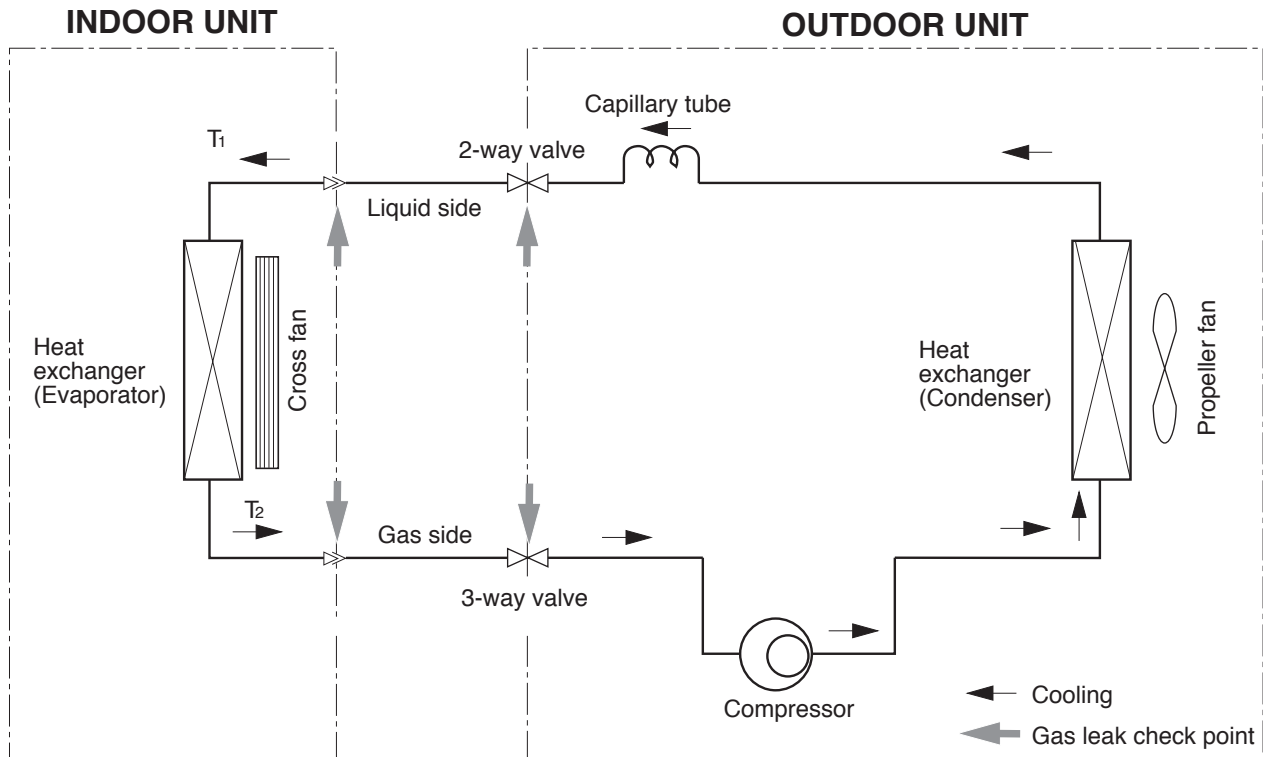


### ■ Parts List

| No | Description            | Specification                   | Remark |
|----|------------------------|---------------------------------|--------|
| 1  | HOLDER CONTROL         | ABS                             |        |
| 2  | ASS'Y MAIN PCB         |                                 |        |
| 3  | ASS'Y TERMINAL BLOCK   | 6P                              |        |
| 4  | ASS'Y DISPLAY PCB      |                                 |        |
| 5  | CONNECTOR WIRE PCB U/D |                                 |        |
| 6  | BRACKET EARTH          | SGCC-M                          |        |
| 7  | HOLDER-WIRE CLAMP      |                                 |        |
| 8  | CONNECTOR WIRE EARTH   | AWG#16                          |        |
| 9  | SCREW                  | WP, TH + M4 x L8, ZPC(WHT), T.C |        |
| 10 | SCREW                  | PH, M3 x L22                    |        |
| 11 | SCREW                  | TH + M4 x L16, ZPC(YEL), SWRCH  |        |
| 12 | HOLDER CLAMP IN        |                                 |        |
| 13 | SEAL-PANEL FRONT RH    |                                 |        |
| 14 | SEAL-H/CONTROL FRONT   |                                 |        |
| 15 | LABEL                  |                                 |        |

## 7. Block Diagrams

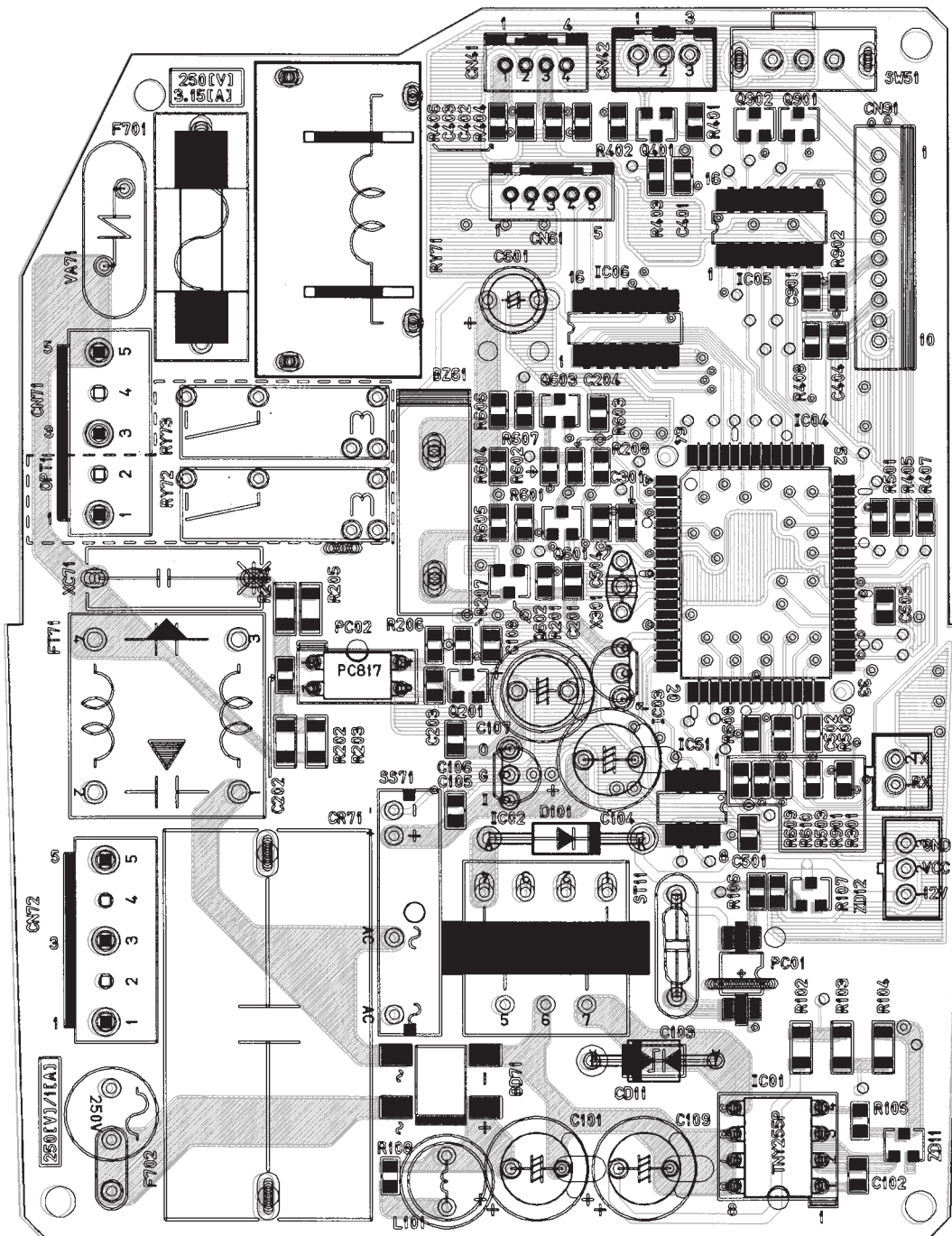
### 7-1 Refrigerating Cycle Block Diagram



## 8. PCB Diagrams

### 8-1 ASS'Y MAIN PCB; DB93-00438A(AS\*\*\*\*ME/D/B, SC\*\*\*\*\*)

■ TOP PATTERN

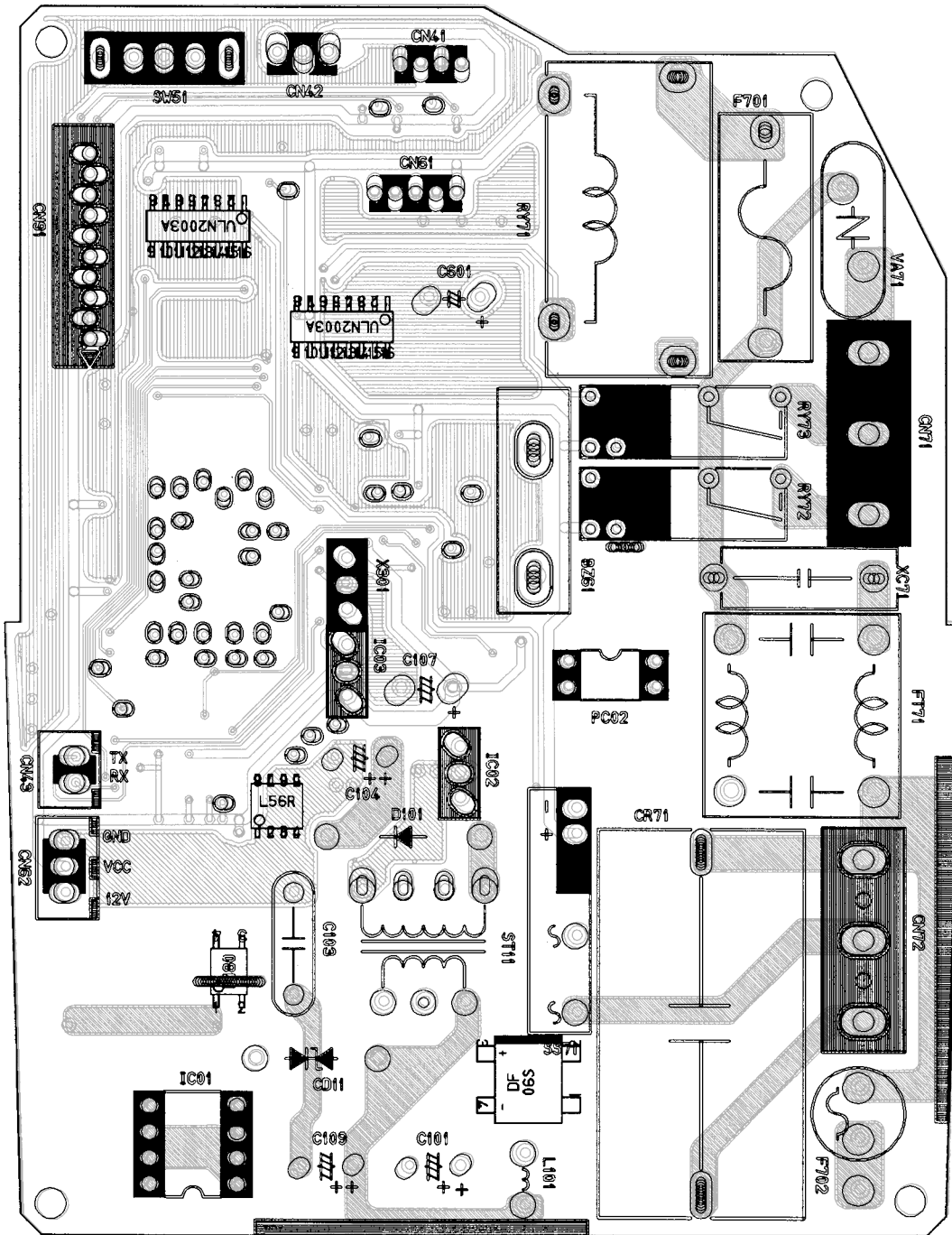


## ■ Parts List

| No | Description       | LOCATION NO.  | Specification                |
|----|-------------------|---|------------------------------|
| 1  | PCB               |   | FR-4, T1.6                   |
| 2  | IC-MCU            | IC04  | S3C8469X21-QTR9(STM-0015-OA) |
| 3  | SSR               | SS71  | G3MB202PL                    |
| 4  | IC VOLT REGULATOR | IC02  | KA78L05AZ                    |
| 5  | IC-RESET          | IC03  | KA7533Z                      |
| 6  | PHOTO-COUPLER     | PC02  | TLP620GR<br>PC814X1          |
| 7  | FR-DIODE          | D101  | UG2B                         |
| 8  | T.V.S             | CD11  | ST02D-220                    |
| 9  | VARISTOR          | VA71  | INR14D561K                   |
| 10 | RESONATOR         | X301  | 10MHz                        |
| 11 | SW TRANS          | ST11  | EI1916(12V, 15V)-"I" TYPE    |
| 12 | FILTER NOISE      | FT71  | 250V/1.0A HP1-P10            |
| 13 | COIL              | L101  | 5mH, 50mA                    |
| 14 | EEPROM            | OC51  | 93LC56B-I/SN                 |
| 15 |                   |   |                              |
| 16 | RELAY POWER       | RY71  | 20A, 12Vdc                   |
| 17 | BUZZER            | BZ61  | CBE2220BA                    |
| 18 | HOLDER FUSE       | F701  | FB58(FH-51H)                 |
| 19 | FUSE              | F701  | 250V, 3.15A                  |
| 20 | FUSE              | F702  | 250V, 1A                     |
| 21 | CONNECTOR HEADER  | CN71  | YW396-03AV BLU               |
| 22 | CONNECTOR HEADER  | CN72  | YW396-05AV WHT               |
| 23 | CONNECTOR HEADER  | CN91  | SMW200-10P WHT               |
| 24 | CONNECTOR HEADER  | CN61  | SMW200-05P WHT               |
| 25 | CONNECTOR HEADER  | CN42  | SMW250-03P BLU               |
| 26 | CONNECTOR HEADER  | CN41  | SMW200-4P WHT                |
| 27 | C-FILM            | CR71  | 1.2 $\mu$ F/450Vac           |
| 28 | C-ELEC            | C104  | 1000 $\mu$ F / 450Vac        |
| 29 | C-ELEC            | C601  | 47 $\mu$ F 50V               |
| 30 | C-ELEC            | C107  | 470 $\mu$ F 16V              |
| 31 | C-ELEC            | C101, C109  | SD 6.8 $\mu$ F 450V          |
| 32 | C-CERAMIC         | C103  | SDE2G222M112BL1              |
| 33 | C-FILM            | XC71  | 104M 275V x 2                |
| 34 | TR SWITCH         | IC01  | TNY255P                      |
| 35 | TR SMALL SIGNAL   | Q603  | MMST2907A                    |
| 36 | TR SMALL SIGNAL   | Q201, Q401, Q601, Q602  | 2SC2412K                     |
| 37 | TR DIGITAL        | Q901, Q902  | DTA114EKA                    |
| 38 | PHOTO COUPLER     | PC01  | TLP181                       |
| 39 | IC DRIVE          | IC05, IC06  | ULN2003AFW                   |
| 40 | C-CHIP            | C102, 105, 106, 108, 201, 202, 301, 402, 403, 501, 502, 503, 504, 901 | CS2012Y5V104Z500             |
| 41 | C-CHIP            | C203, C204, C401  | CL21C103K                    |
| 42 | C-CHIP            | C404  | CS2012X7R102K5               |
| 43 | R-CHIP            | R102, R103, R104  | 220K, 1/8W-J                 |
| 44 | R-CHIP            | R402  | RMC 1/10 6.8K-J              |
| 45 | R-CHIP            | R202, R203, R204, R205  | 100K, 1/8W-J                 |
| 46 | R-CHIP            | R405, R407  | 330K, 1/10W-J                |
| 47 | R-CHIP            | R108, R901, R603  | RMC 1/10 6.8K-J              |
| 48 | R-CHIP            | R107, R106  | 220, 1/10W-J                 |
| 49 | R-CHIP            | R105, R604, R605  | 470, 1/10W-J                 |
| 50 | R-CHIP            | R206, 501, 502, 503, 602, 609, 610, 902                               | RMC 1/10 10K-J               |
| 51 | R-CHIP            | R404, 406   | RMC 1/10 6.8K-F              |
| 52 | R-CHIP            | R201, 207, 208, 301, 401, 403, 408, 601, 607, 608                     | RMC 1/10 1K-J                |
| 53 | R-CHIP            | R606  | 1/10W 560 $\Omega$ -J        |
| 54 | ZENER DIODE       | ZD12  | BZX84-C11                    |
| 55 | ZENER DIODE       | ZD11  | BZX84-C3V6                   |
| 56 | DIODE BRIDGE      | BD71  | DF06S                        |

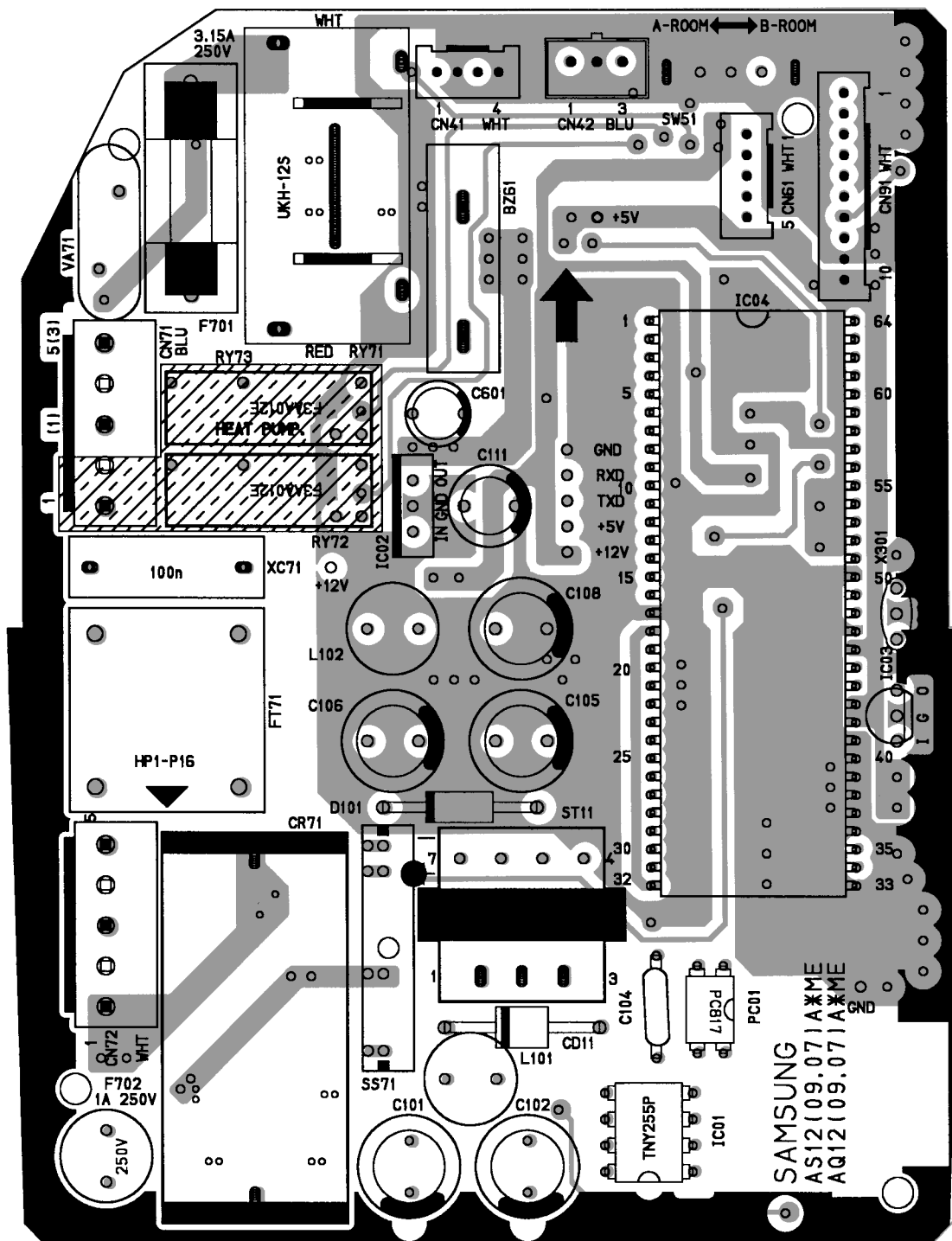
## 8-2 ASS'Y MAIN PCB;DB93-00438A

### ■ BOTTOM PATTERN



## 8-3 ASS'Y MAIN PCB;DB93-00266D(AS\*\*\*MA)

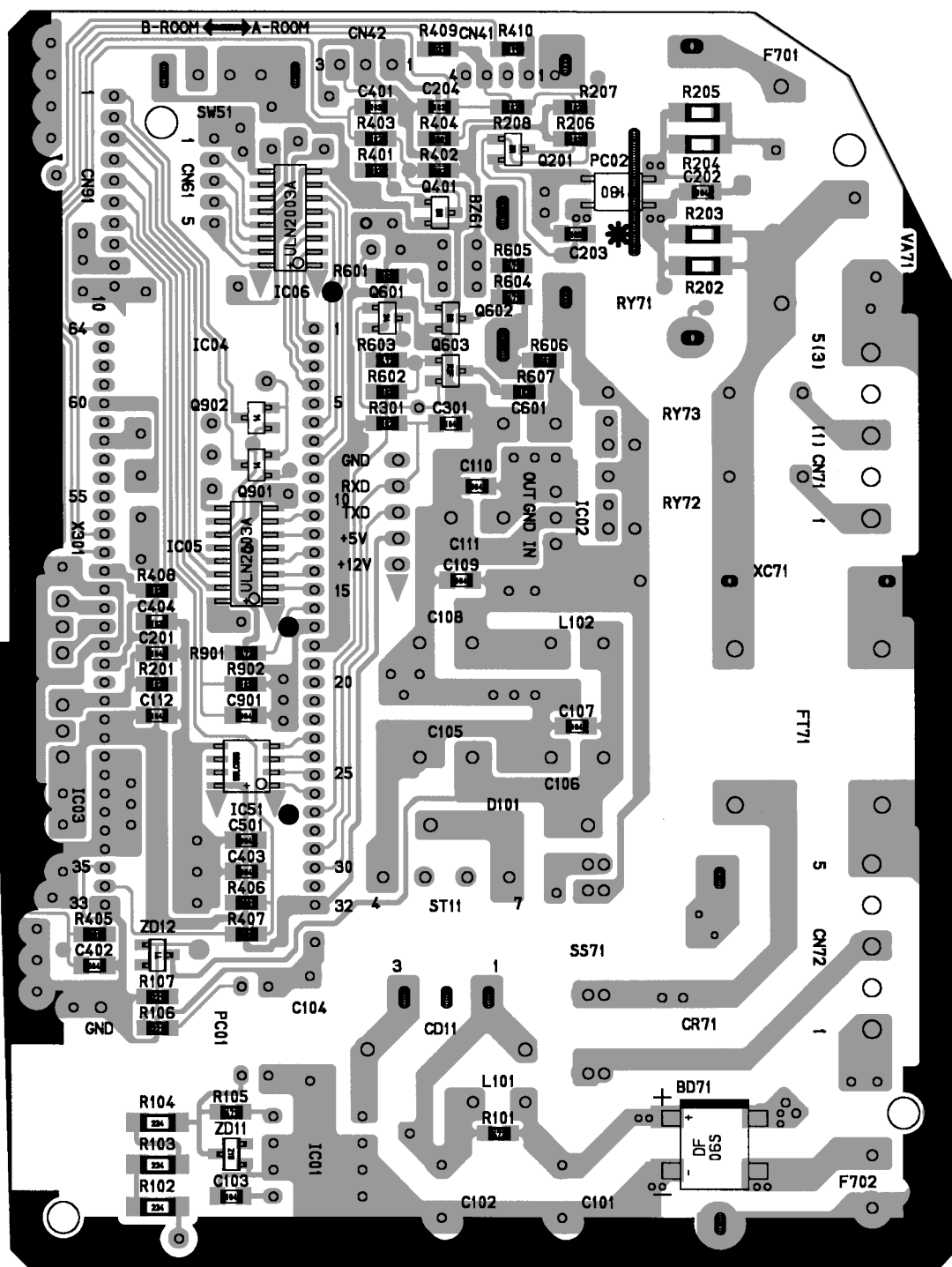
### ■ TOP PATTERN



## ■ Parts List

| No | Description       | LOCATION NO.     | Specification       |
|----|-------------------|------------------|---------------------|
| 1  | PCB               |                  | 120*93              |
| 2  | IC-MCU            | IC4              | UPD780024CW         |
| 3  | SSR               | SSS71            | G3MB202PL           |
| 4  | IC VOLT REGULATOR | OC02             | KA7805A             |
| 5  | IC-RESET          | IC03             | KA7533Z             |
| 6  | PHOTO-COUPLER     | IC01             | PC817               |
| 7  | FR-DIODE          | D101             | UG2B                |
| 8  | T.V.S             | CD11             | SYT02D-200          |
| 9  | VARISTOR          | VA71             | INR14D471K-BS       |
| 10 | RESONATOR         | X301             | 4MHz                |
| 11 | SW TRANS          | ST11             | V2(JT1916-1701P)    |
| 12 | FILTER NOISE      | FT71             | HP1-P10             |
| 13 | COIL              | L101             | 5mH, 50mA           |
| 14 | COIL              | L102             | 4.7 $\mu$ H 0.5A    |
| 16 | RELAY POWER       | RY71             | YKH-12S             |
| 17 | BUZZER            | BZ61             | CBE2220BA           |
| 18 | HOLER FUSE        | F701             | FB58(FH-51H)        |
| 19 | FUSE              | F701             | 250V, 3.15A         |
| 20 | FUSE              | F702             | 250V, 1A            |
| 21 | CONNECTOR HEADER  | CN71             | YW396-03AV BLU      |
| 22 | CONNECTOR HEADER  | CN72             | YW396-05AV WHT      |
| 23 | CONNECTOR HEADER  | CN91             | SMW200-10P WHT      |
| 24 | CONNECTOR HEADER  | CN61             | SMW200-05P WHT      |
| 25 | CONNECTOR HEADER  | CN42             | SMW250-03P BLUE     |
| 26 | CONNECTOR HEADER  | CN41             | SMW200-4P WHT       |
| 27 | C-FILM            | CN71             | 4 $\mu$ F 450V      |
| 28 | C-AL              | C105, C106, C108 | SD 470 $\mu$ F 25V  |
| 29 | C-AL              | C601             | 47 $\mu$ F 50V      |
| 30 | C-AL              | C111             | 470 $\mu$ F 16V     |
| 31 | C-ELEC            | C101, C102       | SD 6.8 $\mu$ F 450V |
| 32 | C-CERAMIC         | C104             | SDE2G222M12BL1      |
| 33 | C-FILM            | XC71             | 104M 275V x2        |
| 34 | TR SWITCH         | IC01             | TNY255P             |
| 35 |                   |                  |                     |
| 36 |                   |                  |                     |
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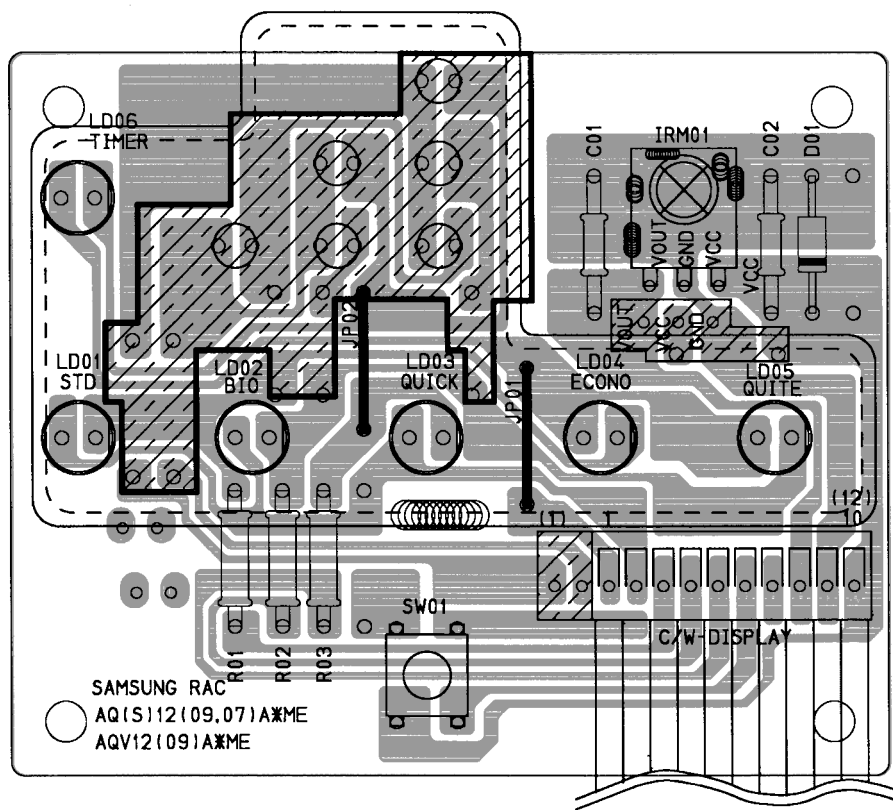




## ■ Parts List

| No | Description     | Location No.  | Specification    |
|----|-----------------|---|------------------|
| 1  | TR SMALL SIGNAL | Q603  | MMST2907A        |
| 2  | TR SMALL SIGNAL | Q201, Q401, Q602  | 2SC2412K         |
| 3  | TR DIGITAL      | Q901, Q902  | DTA114EKA        |
| 4  | TR DIGITAL      | Q601  | DTC114EKA        |
| 5  | IC DRIVE        | IC05, IC06  | ULN2003AFW       |
| 6  | C-CHIP          | C103, C107, C109, C110, C112, C201, C202,<br>C301, C402, C403, C501, C901 | CS2012Y5V104Z500 |
| 7  | C-CHIP          | C203, C204, C401  | CS2012Y5V104Z500 |
| 8  | C-CHIP          | C404  | CS2012Y7V102K500 |
| 9  | R-CHIP          | R102, R103, R104  | R3216 220kΩ ±5   |
| 10 | R-CHIP          | R402  | R2012 6.8kΩ ±5   |
| 11 | R-CHIP          | R202, R203, R204, R205  | R3216 100kΩ ±5   |
| 12 | R-CHIP          | R405, R407, R409  | R2012 330kΩ ±5   |
| 13 | R-CHIP          | R101, R901, R603  | R2012 4.7kΩ ±5   |
| 14 | R-CHIP          | R107, R106  | R2012 220kΩ ±5   |
| 15 | R-CHIP          | R105, R604, R605  | R2012 470kΩ ±5   |
| 16 | R-CHIP          | R206, R601, R602, R902  | R2012 10kΩ ±5    |
| 17 | R-CHIP          | R404, R406  | R2012 6.8kΩ ±1   |
| 18 | DIODE DRIDGE    | R201, R207, R208, R301, R401, R403,<br>R408, R607                         | R2012 1kΩ ±5     |
| 19 | R-CHIP          | R410  | R2012 0kΩ ±5     |
| 20 | R-CHIP          | R606  | R2012 560kΩ ±5   |
| 21 | DIODE DRIDGE    | DB71  | OF06S            |
| 22 | PHOTO COUPLER   | PC02  | TLP180(GB-TPL)   |
| 23 | ZENER DIODE     | ZD12  | BZX84-C11        |
| 24 | ZENER DIODE     | ZD11  | BZX84-C3V6       |
| 25 | EEPROM          | IC51  | 93LC56B-I/SN     |

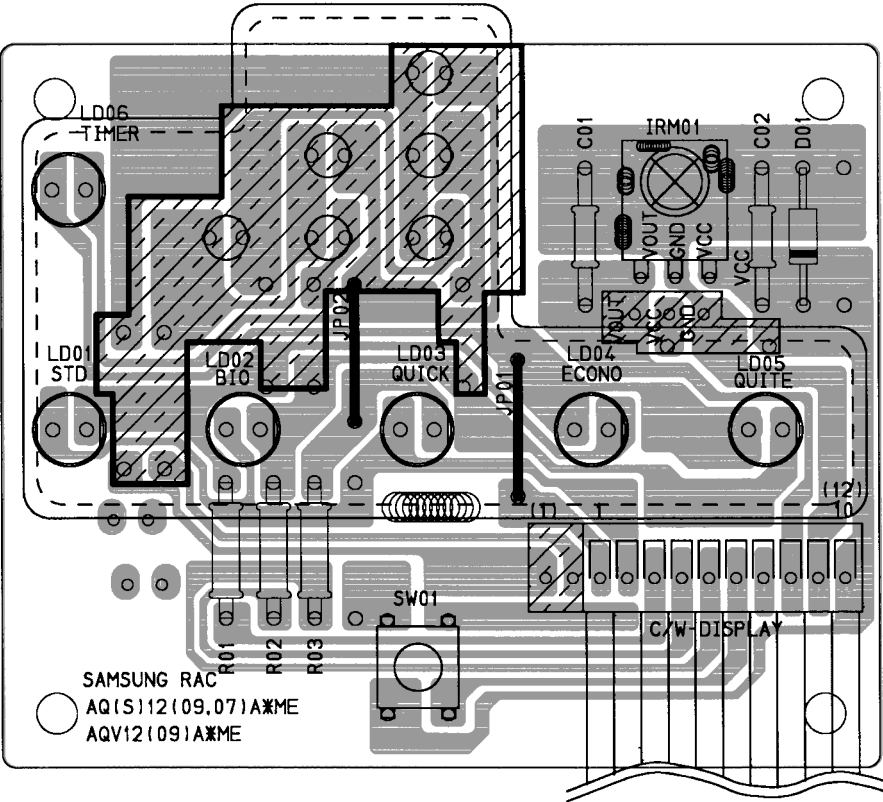
8-4 ASS'Y DISPLAY PCB;DB93-00268A(AS\*\*\*\*ME/D/B, SC\*\*\*\*\*)



■ Parts List

| No | Description      | Specification    | Q'TY | Remark |
|----|------------------|------------------|------|--------|
| 1  | PCB-DISPLAY      | FR-1 T1.6        | 1    |        |
| 2  | LED-LAMP         | SY5511(YEL)      | 1    |        |
| 3  | LED-LAMP         | S05511(ORG)      | 5    |        |
| 4  | MODULE REMOCON   | KSM-713TH5       | 1    |        |
| 5  | C-CERAMIC        | CA 0A 50V 102K   | 1    |        |
| 6  | C-CERAMIC        | CA 0A 50V 104Z   | 1    |        |
| 7  | R-CARBON         | 470 1/2W 5%      | 3    |        |
| 8  | DIODE SWITCHING  | 1N4148           | 1    |        |
| 9  | JUMP-WIRE        | 10mm             | 2    |        |
| 10 | TACT SWITCH      | KPT-1105A        | 1    |        |
| 11 | COVER DISPLAY UP | ABS              | 1    |        |
| 12 | C/W DIS & MODULE | UL1007 AWG#26/10 | 1    |        |
| 13 | JUMP-WIRE        | 7.5mm            | 1    |        |
| 14 | LED-LAMP         | SR3511(RED)      | 0    |        |
| 15 | JUMP-WIRE        | 7.5mm            | 0    |        |
| 16 | JUMP-WIRE        | 10mm             | 0    |        |

8-5 ASS'Y DISPLAY PCB;DB93-00268E(AS\*\*\*\*MA)

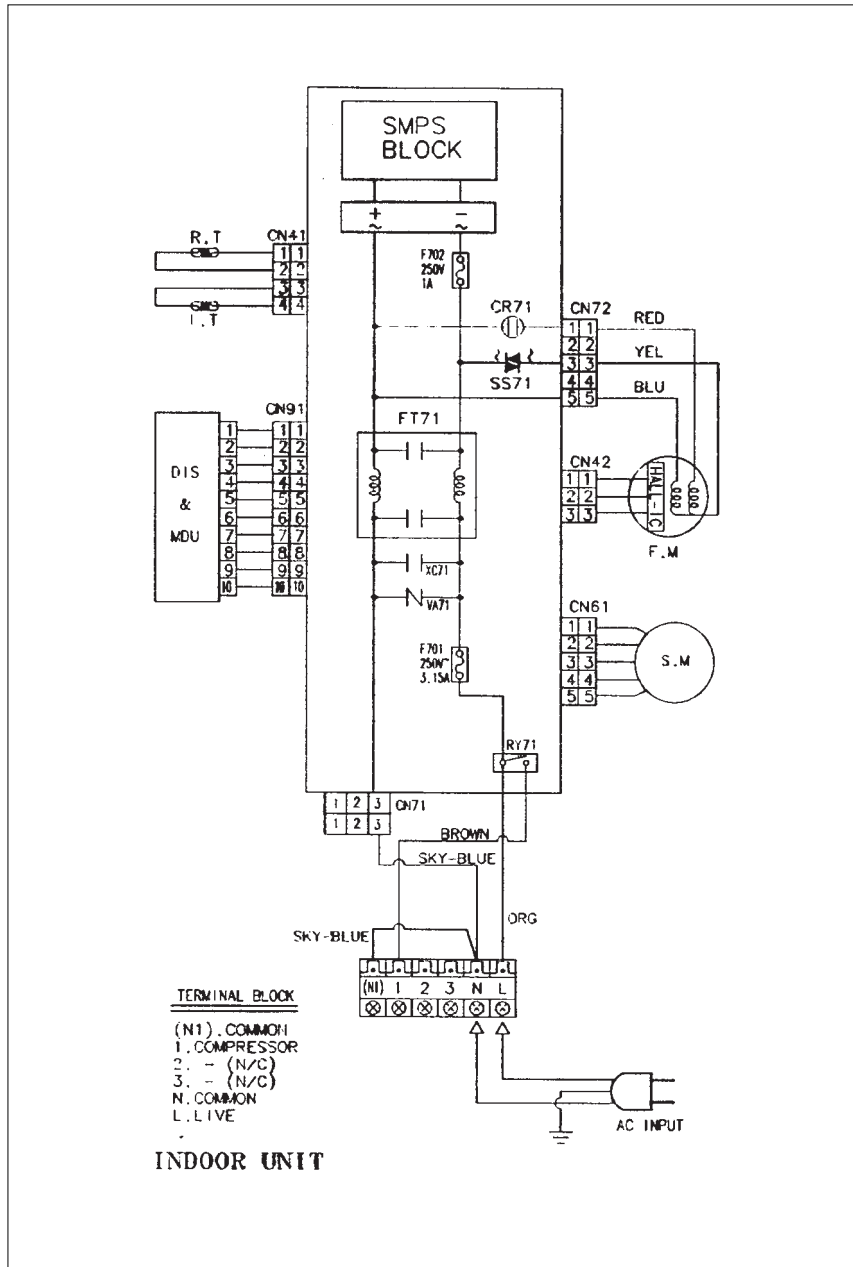


■ Parts List

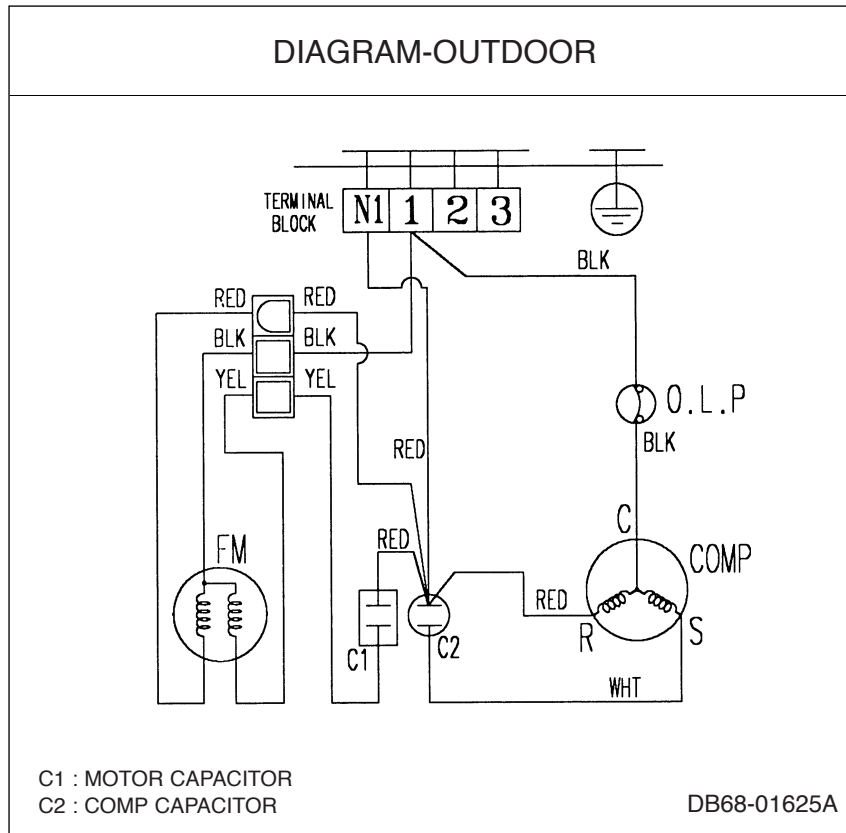
| No | Description      | Specification    | Q'TY | Remark |
|----|------------------|------------------|------|--------|
| 1  | PCB-DISPLAY      | FR-1 T1.6        | 1    |        |
| 2  | LED-LAMP         | SY5511(YEL)      | 1    |        |
| 3  | LED-LAMP         | S005511(ORG)     | 5    |        |
| 4  | MODULE REMOCON   | PNA4612MOOHB     | 1    |        |
| 5  | C-CERAMIC        | CA 0A 50V 102K   | 1    |        |
| 6  | C-CERAMIC        | CA 0A 50V 104K   | 1    |        |
| 7  | R-CARBON         | 470 1/2W 5%      | 3    |        |
| 8  | DIODE SWITCHING  | 1N4148           | 1    |        |
| 9  | JUMP-WIRE        | 10mm             | 2    |        |
| 10 | TACT SWITCH      | KPT-1105A        | 1    |        |
| 11 | COVER DISPLAY YP | ABS              | 1    |        |
| 12 | C/W DIS & MODULE | UL1007 AWG#26/10 | 1    |        |
| 13 | JUMP-WIRE        | 7.5              | -    |        |
| 14 | LED-LAMP         | SR3511(RED)      | -    |        |
| 15 | JUMP-WIRE        | 7.5mm            | -    |        |
| 16 | JUMP-WIRE        | 10mm             | -    |        |

## 9. Wiring Diagrams

### 9-1 Indoor Unit



## 9-2 Outdoor Unit



# UPDATE LOG SHEET

| Application date | Page | Part# | Note(Cause & Solution) | S/Bulletin# |
|------------------|------|-------|------------------------|-------------|
|                  |      |       |                        |             |
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Use this page to keep any special servicing information. (Service Bulletin, etc.)  
 If only parts number changes, Just change parts number directly on parts list.  
 And if you need more information, please see the service website.

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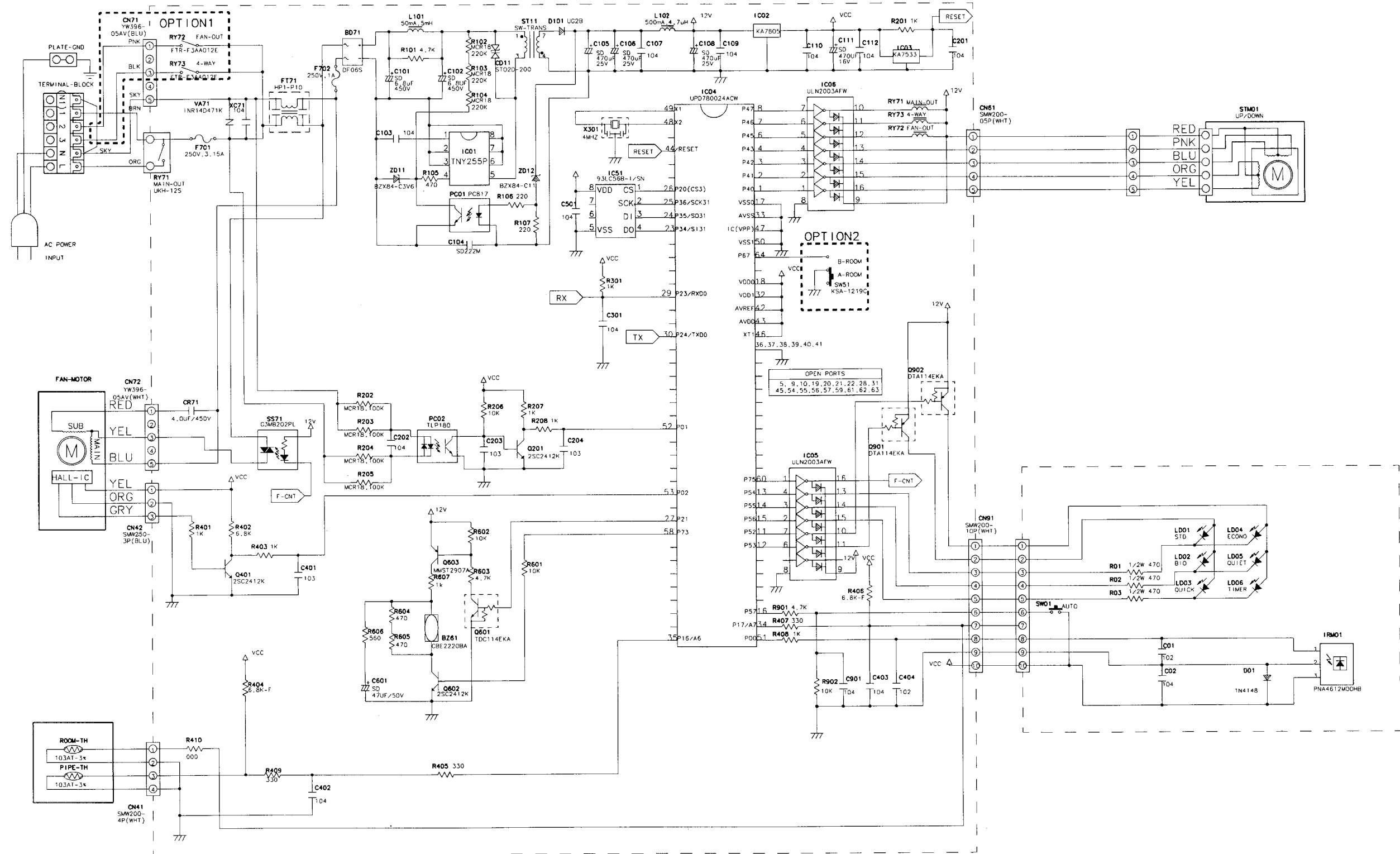
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# 10. Schematic Diagrams

## 10-1 Indoor Unit

¥ AS\*\*\*MA





SC\*\*\*\*\*

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