



**SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED** type

SERVICE MANUAL

Models

| Indoor unit | Outdoor unit |
|-------------|--------------|
| RSW-9RC | ROW-9RC |
| RSW-12RC | ROW-12RC |

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SPECIFICATIONS

| | | | |
|------------------|-----|-------------------|-------------------|
| MODEL | IN | RSW-9RC | RSW-12RC |
| | OUT | ROW-9RC | ROW-12RC |
| TYPE | | COOLING & HEATING | COOLING & HEATING |
| COOLING CAPACITY | kW | 2.50 | 3.25 |
| HEATING CAPACITY | kW | 2.95 | 3.80 |

ELECTRICAL DATA

| | | | |
|---|------|-------------------|-------------------|
| POWER SOURCE | | 230V 50Hz | 230V 50Hz |
| RUNNING CURRENT (A) | COOL | 4.8 | 6.2 |
| | HEAT | 4.3 | 5.7 |
| INPUT WATTS (kW) | COOL | 1.00 | 1.31 |
| | HEAT | 0.86 | 1.22 |
| E.E.R. (kW/kW) | COOL | 2.50 | 2.48 |
| | HEAT | 3.43 | 3.11 |
| MOISTURE REMOVAL (ℓ/hr) | | 1.3 | 1.8 |
| AIR CIRCULATION-Hi (m ³ /hr) | | COOL 540 HEAT 515 | COOL 535 HEAT 545 |

COMPRESSOR

| | | | |
|----------------------|--|-----------------------|-----------------------|
| TYPE | Hermetic type, Permanet split condenser, 2 pole, Single phase, Induction motor | | |
| DISCRIMINATION | | 80603745 | 80679045Z, 80679045N |
| POWER SOURCE | | 220, 230, 240V / 50Hz | 220, 230, 240V / 50Hz |
| REFRIGERANT R-22 (g) | | 650 | 770 |

FAN MOTOR

| | | | |
|-----------------------|-----------|---------------------|---------------------|
| POWER SUPPLY (V) | | 230 | 230 |
| INDOOR UNIT (r.p.m.) | HI-SPEED | COOL 1310 HEAT 1250 | COOL 1310 HEAT 1330 |
| | MED-SPEED | COOL 1170 HEAT 1140 | COOL 1200 HEAT 1210 |
| | LO-SPEED | COOL 1030 HEAT 1020 | COOL 1090 HEAT 1090 |
| | QUIET | COOL 900 HEAT 900 | COOL 980 HEAT 980 |
| OUTDOOR UNIT (r.p.m.) | | 800 | 770 |

DIMENSIONS

| | | | |
|--------------|----------------|-----------------|-----------------|
| INDOOR UNIT | H x W x D (mm) | 257 x 808 x 187 | 257 x 808 x 187 |
| OUTDOOR UNIT | H x W x D (mm) | 535 x 650 x 250 | 535 x 695 x 250 |

WEIGHT

| | | | |
|--------------|------------------|---------|---------|
| INDOOR UNIT | NET / GROSS (kg) | 10 / 8 | 10 / 8 |
| OUTDOOR UNIT | NET / GROSS (kg) | 28 / 25 | 34 / 31 |

NOISE LEVEL

| | | | |
|-------------------|-------------|-----------------|-----------------|
| INDOOR UNIT (dB) | HI-SPEED | COOL 39 HEAT 37 | COOL 40 HEAT 40 |
| | MED-SPEED | COOL 35 HEAT 34 | COOL 39 HEAT 39 |
| | LO-SPEED | COOL 33 HEAT 31 | COOL 37 HEAT 37 |
| | SUPER QUIET | COOL 29 HEAT 27 | COOL 34 HEAT 34 |
| OUTDOOR UNIT (dB) | | COOL 46 HEAT 46 | COOL 47 HEAT 48 |

ADDITIONAL CHARGE OF REFRIGERANT

Refrigerant suitable for a piping length of 7.5m is charged in the outdoor unit at the factory.

When the piping is longer than 7.5m, additional charging is necessary. For the additional amount, see the table below.

ASY9RSJCW /AOY9RSJC

| | | |
|------------------------|------|-----|
| Pipe length | 7.5m | 10m |
| Additional refrigerant | None | 40g |

Between 7.5m and 10m, when using a connection pipe other than that in the table, charge additional refrigerant with 16g/1m as the criteria.

(The maximum length of the piping is 10m. If the units are further apart than this, correct operation can not be guaranteed.)

ASY12RSJCW / AOY12RSJC

| | | | |
|------------------------|------|-----|------|
| Pipe length | 7.5m | 10m | 15m |
| Additional refrigerant | None | 40g | 120g |

Between 7.5m and 15m, when using a connection pipe other than that in the table, charge additional refrigerant with 16g/1m as the criteria.

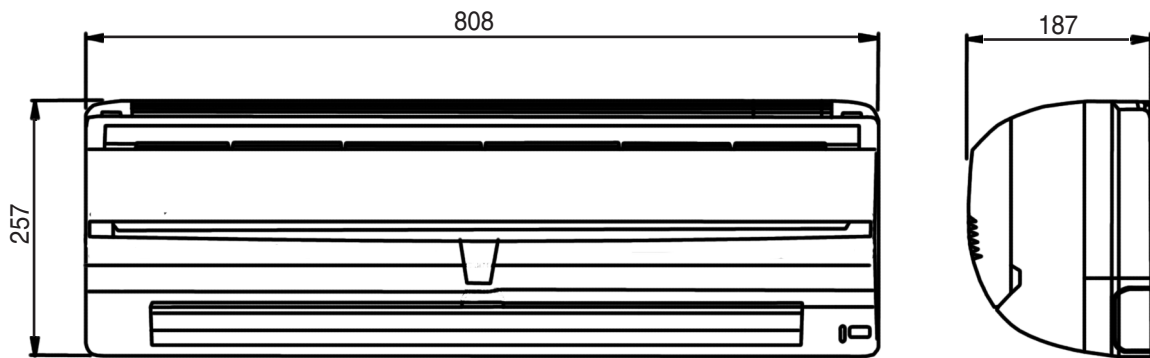
(The maximum length of the piping is 15m. If the units are further apart than this, correct operation can not be guaranteed.)

D I M E N S I O N S

INDOOR UNIT

Models : RSW-9RC
RSW-12RC

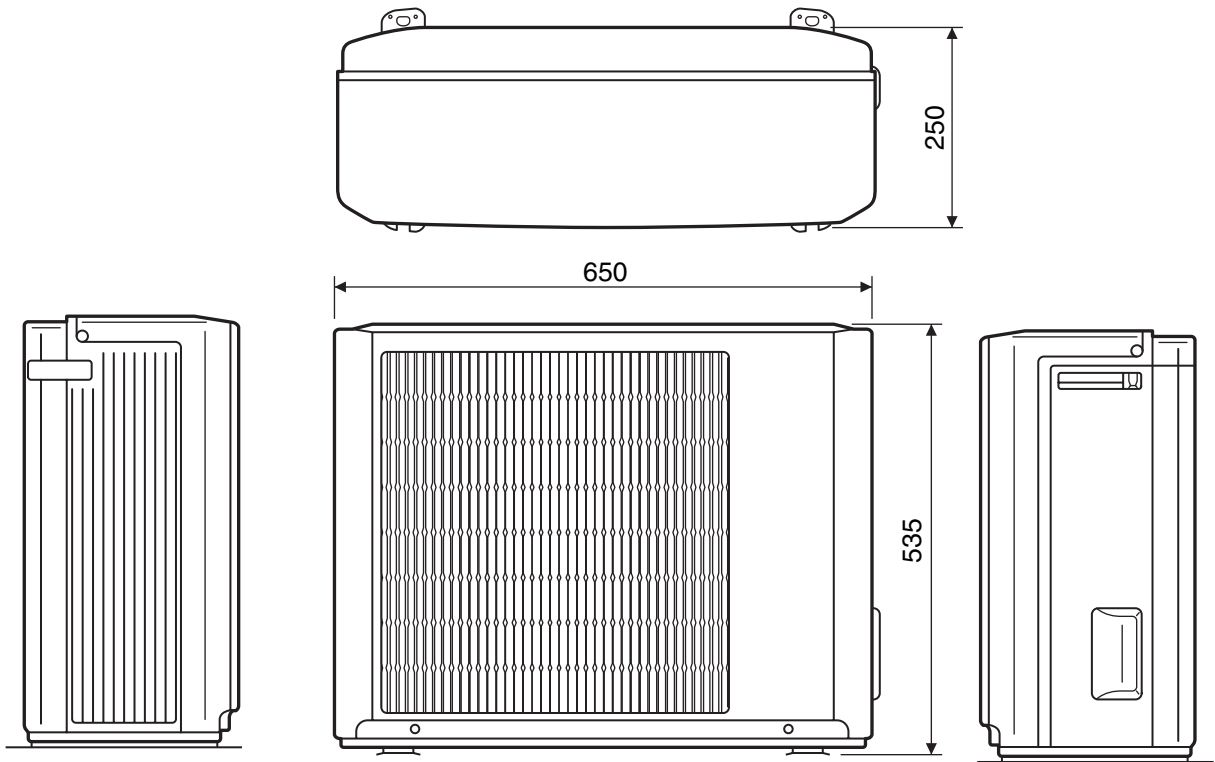
Unit : mm



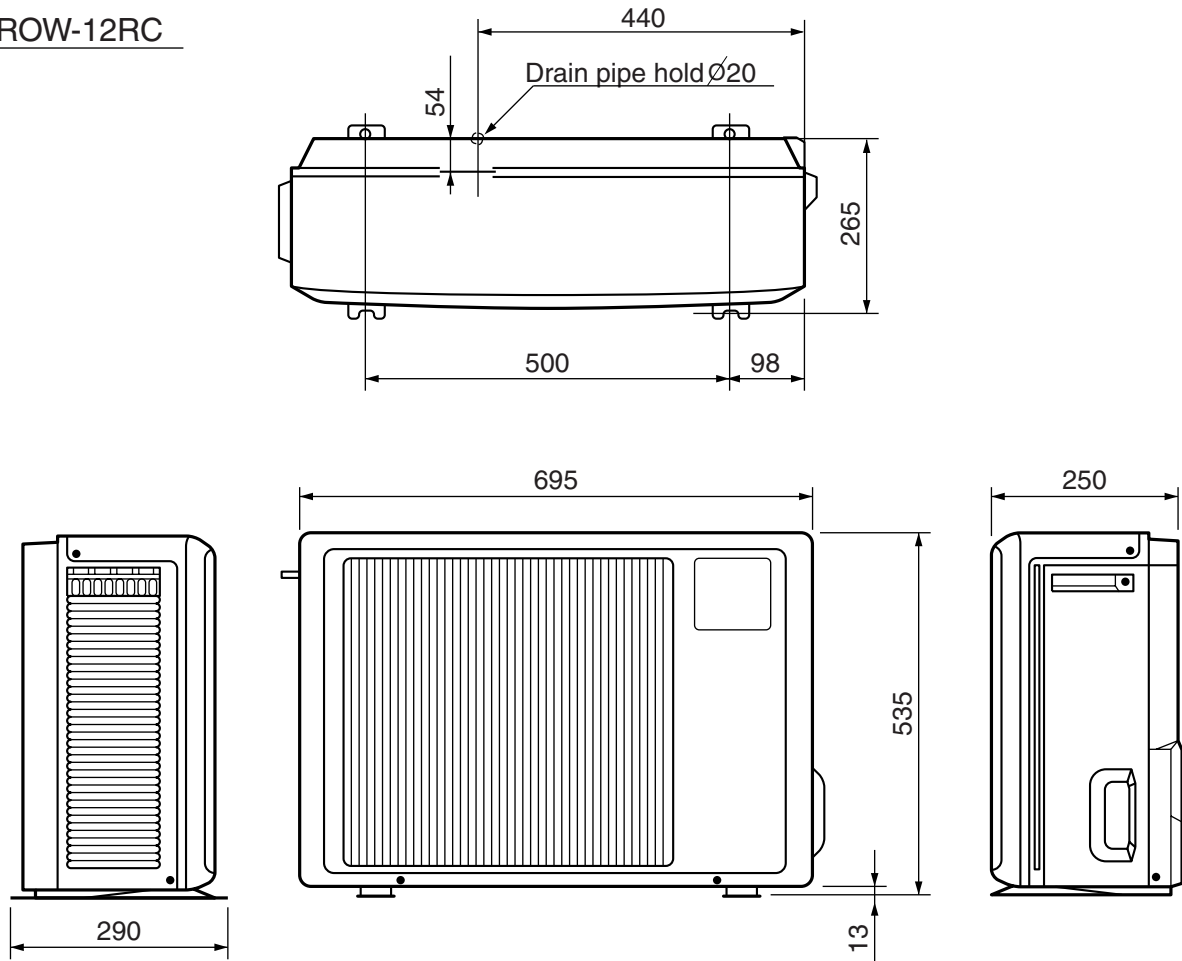
OUTDOOR UNIT

Model : ROW-9RC

Unit : mm

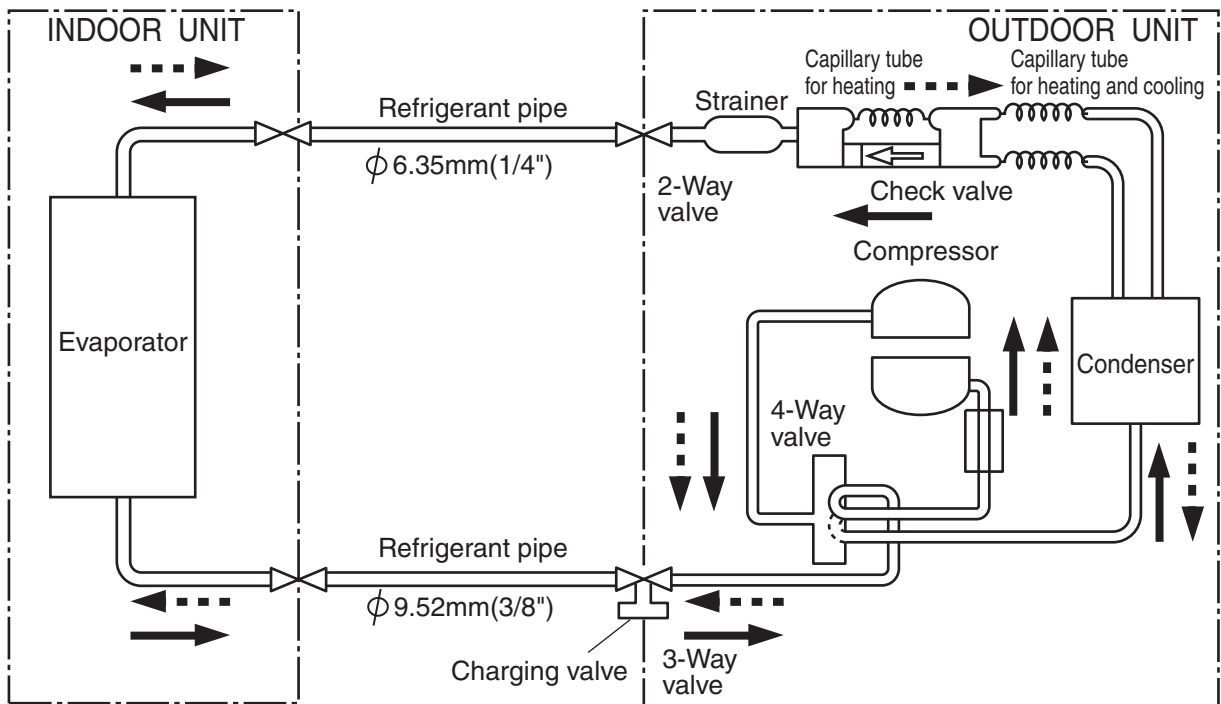


Model : ROW-12RC

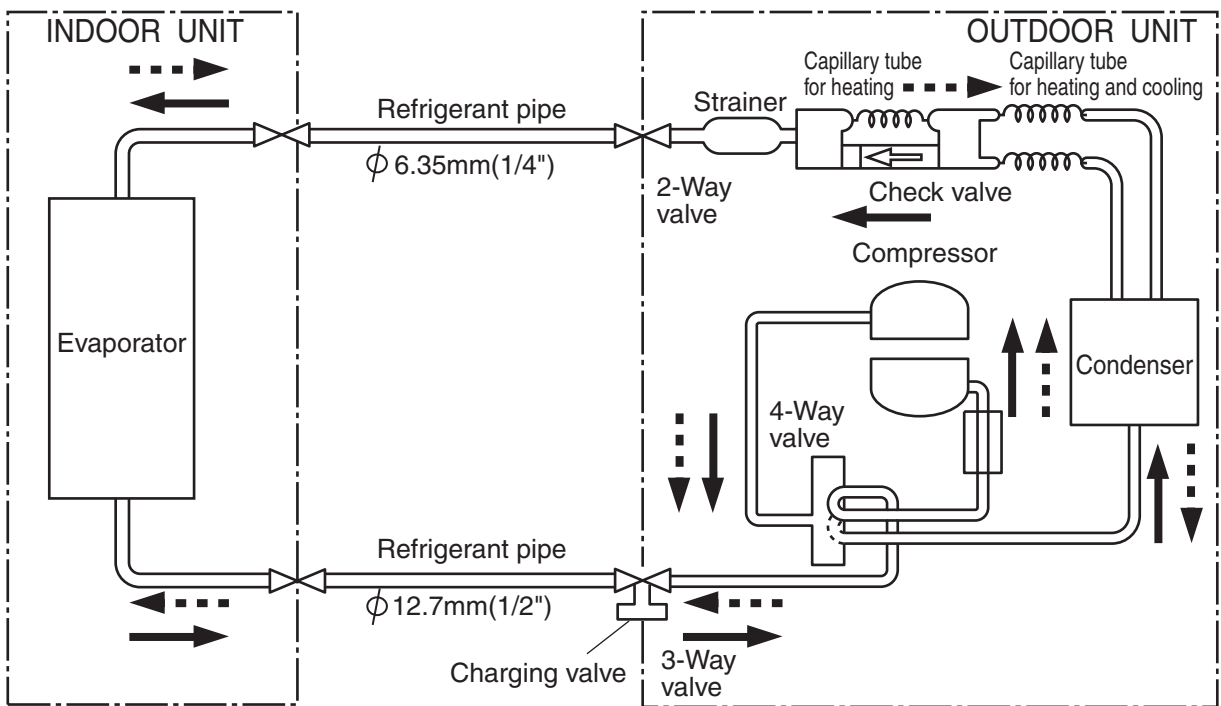


REFRIGERANT SYSTEM DIAGRAM

Models : RSW-9RC / ROW-9RC

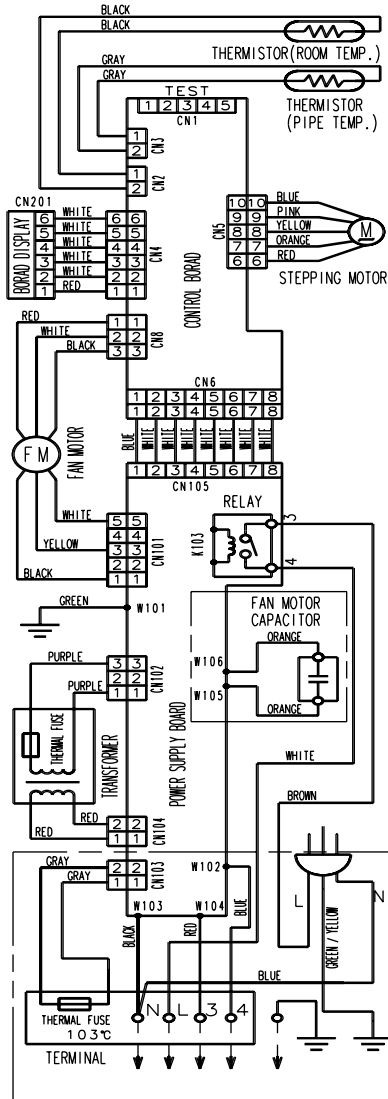


Models : RSW-12RC / ROW-12RC

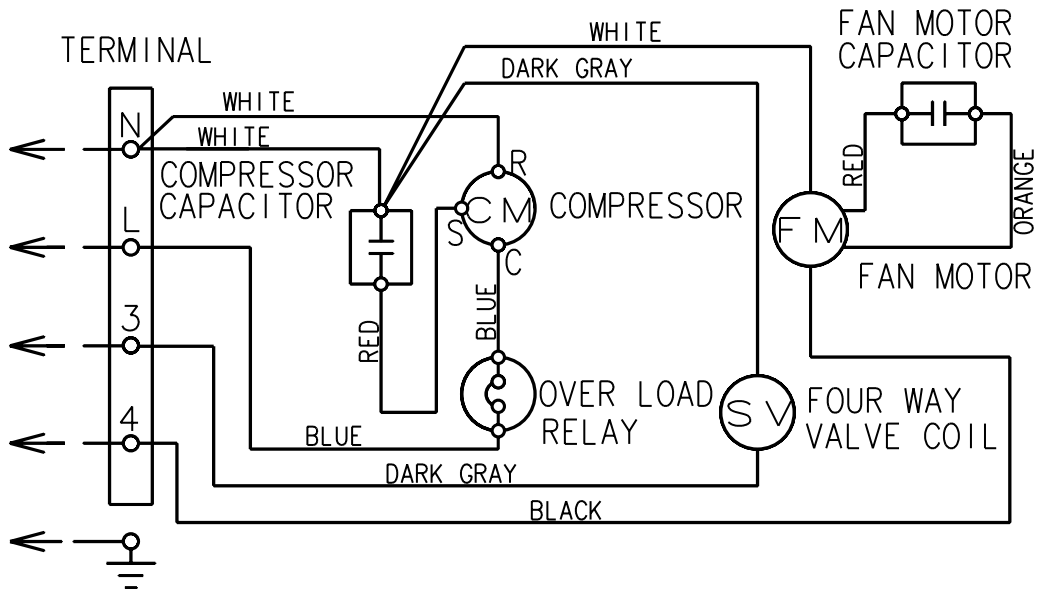


CIRCUIT DIAGRAM

Models : RSW-9RC
RSW-12RC



Models : ROW-9RC
ROW-12RC



ERROR DISPLAY

Troubleshooting check table

Operation lamp : Red lamp
 Timer lamp : Green lamp

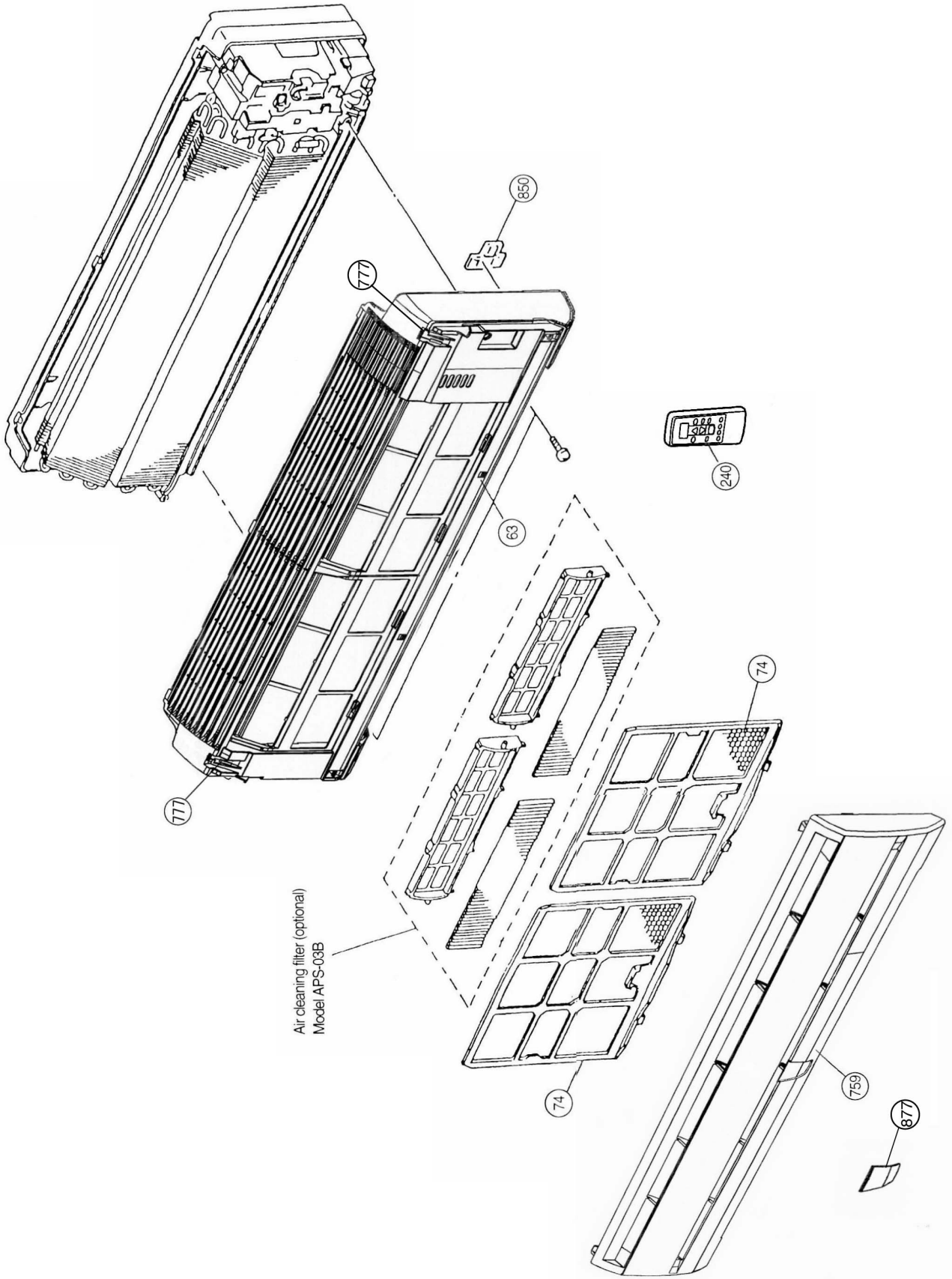
| Large division indication | | | Small division indication | | |
|--------------------------------------|----------------|-------------|-----------------------------------|----------------|-------------|
| Error contents | LED indication | | Error contents | LED indication | |
| thermistor error | RED lamp | ● (2 times) | thermistor error (room temp.) | RED lamp | ○ |
| | Green lamp | ○ | | Green lamp | ● (2 times) |
| control unit error (indoor unit) | RED lamp | ● (4 times) | thermistor error (heat exchanger) | RED lamp | ○ |
| | Green lamp | ○ | | Green lamp | ● (3 times) |
| fan motor error (indoor unit) | RED lamp | ● (6 times) | MANUAL AUTO button error | RED lamp | ○ |
| | Green lamp | ○ | | Green lamp | ● (2 times) |
| | | | power source Hz decision error | RED lamp | ○ |
| | | | | Green lamp | ● (4 times) |
| | | | lock error | RED lamp | ○ |
| | | | | Green lamp | ● (2 times) |
| | | | rpm error | RED lamp | ○ |
| | | | | Green lamp | ● (3 times) |

● : 0.5s ON/OFF repeated

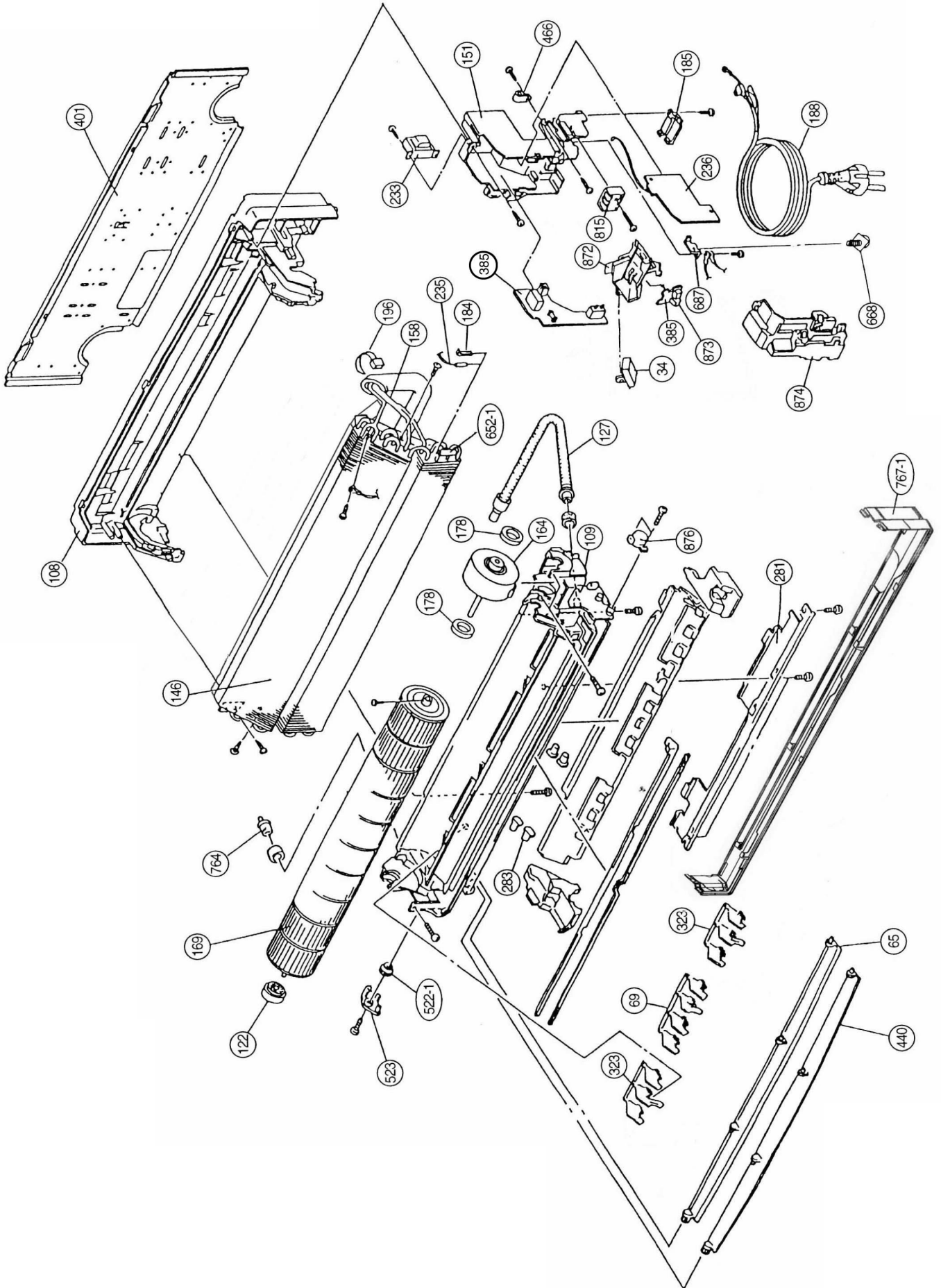
○ : 0.1s ON/OFF repeated

DISASSEMBLY ILLUSTRATION

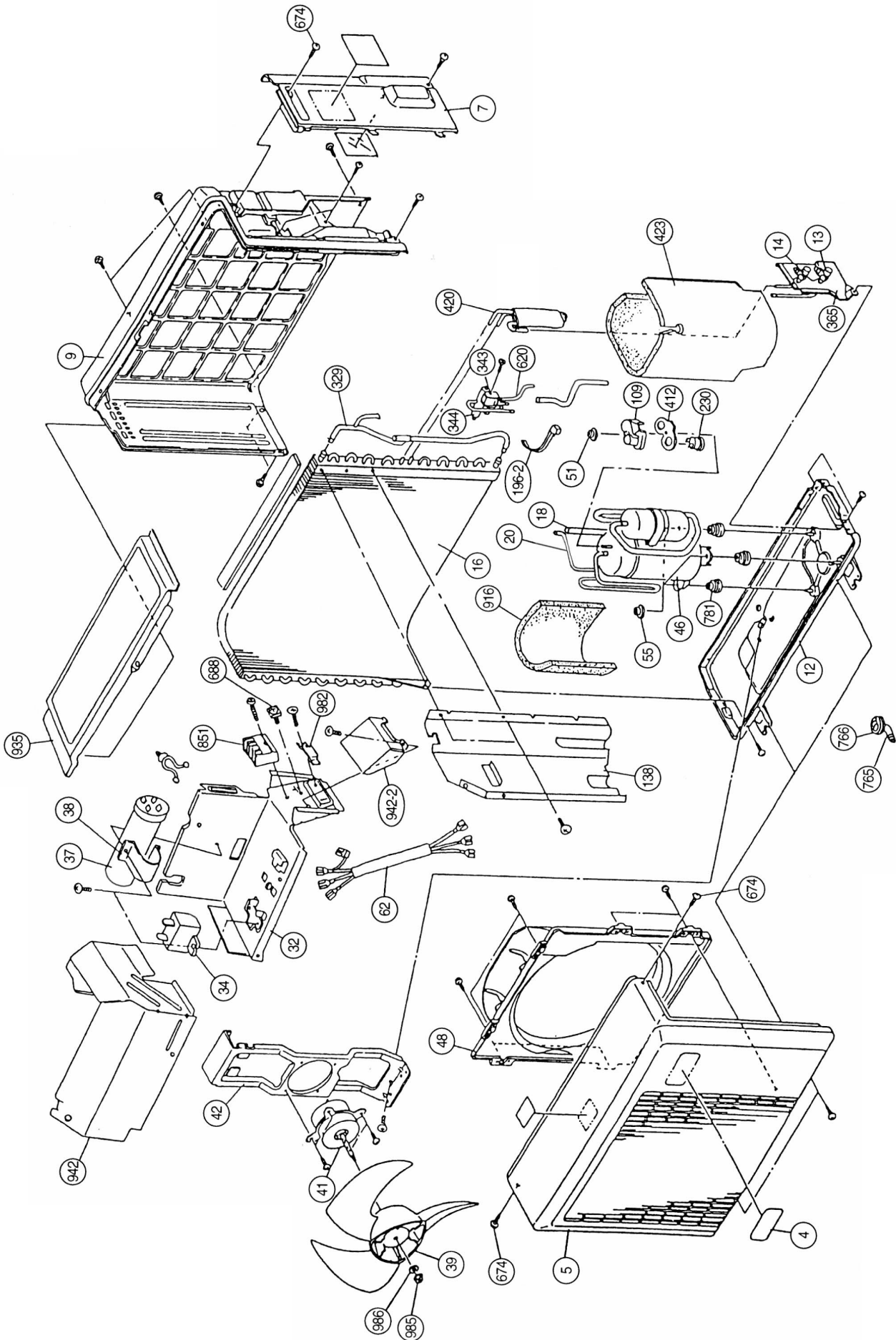
Models : RSW-9RC
RSW-12RC



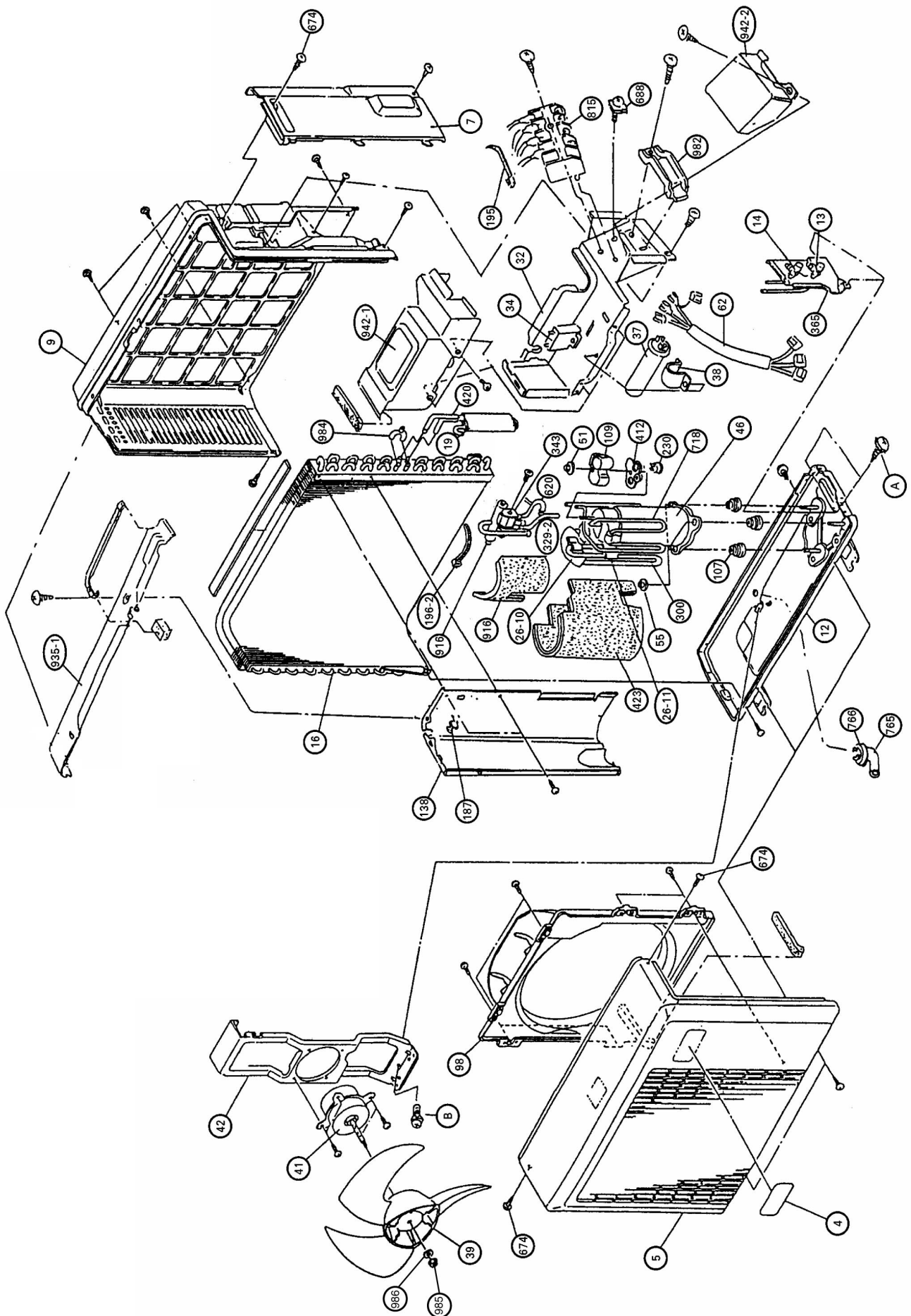
Models : RSW-9RC
RSW-12RC



Model : ROW-9RC



Model : ROW-12RC



PARTS LIST

INDOOR UNIT

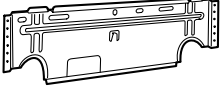


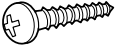

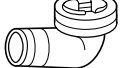

| Ref. No. | Description | Part No. | | Ord. |
|-------------|---------------------------|--------------|--------------|------|
| | | RSW-9RC | RSW-12RC | Q'ty |
| 34 | Capacitor (Fan Motor) | 9900089061 | 9900089061 | |
| 63 | Panel (Front) Total Assy | 9312417025 | 9312417018 | |
| 65 | Flow Control Panel-Z | 9306058012 | 9306058012 | |
| 69 | Louver-A | 9306055028 | 9306055028 | |
| 74 | Filter | 9305444014 | 9305444014 | |
| 108 | Base | 9309755062 | 9309755062 | |
| 109 | Casing | 9306052027 | 9306052027 | |
| 122 | Shaft Holder -B | 9303066010 | 9303066010 | |
| 127 | Drain Hose Assy | 9305550029 | 9305550029 | |
| 146 | Evaporator Assy | 9308555069 | 9308555069 | |
| 151 | Control Box | 9330007017 | 9330007017 | |
| 158 | Connecting Pipe Assy | 9306416010 | 9306699000 | |
| 164 | Fan Motor Assy-IN | 9601172017 | 9601172017 | |
| 169 | Cross-Flow Fan Assy | 9305435012 | 9305435012 | |
| 178 | Motor Cushion -M | 9601302018 | 9601302018 | |
| 184 | Thermistor Spring | 313728262708 | 313728262708 | |
| 185 | Wire Clamp | 9330015012 | 9330015012 | |
| 188 | Power Cord Assy | 9702595043 | 9702595043 | |
| 196 | Clamp SKB -150 | 313035356905 | 313035356905 | |
| 233 | Power Transformer | 9701803026 | 9701803026 | |
| 235 | Thermistor Assy -Pipe | 9702039059 | 9702039059 | |
| 236 | Controller PCB Assy | 9704865038 | 9704865014 | |
| 240 | Remote Control Unit | 9312058020 | 9312058020 | |
| 281 | Clamp Metal (Pipe) | 9306063009 | 9306063009 | |
| 283 | Bushing-A | 9303529010 | 9303529010 | |
| 323 | Louver-B | 9306056025 | 9306056025 | |
| 385 | PCB (Power and Indicator) | 9704870018 | 9704870018 | |
| 401 | Wall Hook Bracket | 9304358008 | 9304358008 | |
| 440 | Flow Control Panel-U | 9306057015 | 9306057015 | |
| 466 | Clamp NK-4N | 313714328805 | 313714328805 | |
| 522-1 | Gear-A | 9306062002 | 9306062002 | |
| 523 | Gear Bracket | 9306407001 | 9306407001 | |
| 652-1 | Thermistor Holder Pipe | 313714262805 | 313714262805 | |
| 668 | Screw w/Washer | 313681304205 | 313681304205 | |
| 687 | Earth Terminal | 9330012011 | 9330012011 | |
| 759 | Intake Grill -B | 9330002029 | 9330002029 | |
| 764 | Drain Cap Assy | 9304150008 | 9304150008 | |
| 767-1 | Bottom Cover -A | 9330004016 | 9330004016 | |
| 777 | Clamper(Grille) | 9306755010 | 9306755010 | |
| 815 | Terminal | 9900040048 | 9900040048 | |
| 850 | Window (Receiver) | 9330003019 | 9330003019 | |
| 872 | Indicator Case | 9330009011 | 9330009011 | |
| 873 | Lamp Cover | 9330014015 | 9330014015 | |
| 874 | Control Box Cover | 9330008014 | 9330008014 | |
| 876 | Step Notor | 9900139018 | 9900139018 | |
| 877 | Face Panel (Front)-B | 9330006041 | 9330006041 | |

OUTDOOR UNIT

| Ref. No. | Description | Part No. | Ord. Q'ty |
|----------|------------------------------|--------------|-----------|
| | | ROW-9RC | |
| 4 | Emblem-Rear | 9306835026 | |
| 5 | Cabinet Front Panel, Plastic | 9306016012 | |
| 7 | Connector Cover | 9306018016 | |
| 9 | Cabinet Rear Panel, Plastic | 9306017019 | |
| 12 | Base Assy, Painted | 9304806042 | |
| 13 | 3-Way Valve Assy | 9311573012 | |
| 14 | 2-Way Valve Assy | 9311571018 | |
| 16 | Condenser Assy | 9311928010 | |
| 16 | Condenser Sub Assy | 9306936051 | |
| 18 | Suction Pipe Assy | 9311092001 | |
| 20 | Discharge Pipe | 9311090007 | |
| 32 | Control Box Metal | 9306475024 | |
| 34 | Capacitor (Fan Motor) | 9900089023 | |
| 37 | Capacitor (Running) | 9307588013 | |
| 38 | Clamp Metal (Capacitor) | 313468061808 | |
| 39 | Propeller Fan | 9306565015 | |
| 41 | Fan Motor Assy-Out | 9307095016 | |
| 42 | Bracket (Motor) | 9306021016 | |
| 46 | Compressor Assy | 9312161010 | |
| 48 | Fan Ring | 9306019013 | |
| 51 | Special Nut M5 | 9312163007 | |
| 55 | Special Nut M6 | 9307615016 | |
| 62 | Wire Assy (Shield)-A | 9305791026 | |
| 109 | Terminal Cover | 9302419008 | |
| 138 | Separate Wall Metal | 9306474003 | |
| 195 | Clamp SKB-100 | 313361275805 | |
| 196-2 | Clamp SKB-3MC | 9305335008 | |
| 230 | Overload Relay | 9307750007 | |
| 343 | Solenoid Coil | 9970003011 | |
| 344 | 4-Way Valve | 9970010019 | |
| 365 | Bracket (Valve) | 9306020026 | |
| 412 | Terminal Gasket (For Comp.) | 9312162000 | |
| 420 | Capillary Assy | 9312157013 | |
| 423 | Noise Insulation -B | 9311106005 | |
| 582 | Discharge Pipe -SF | 9306115005 | |
| 674 | Screw, SUS410T + 5014 | 9305848010 | |
| 688 | Screw w/Washer | 313681304205 | |
| 781 | Rubber Cushion | 9312680016 | |
| 815 | Terminal-4P | 9306488017 | |
| 820 | Joint Pipe (Capillary) | 9305680009 | |
| 916 | Noise Insulation -A | 9311107002 | |
| 935 | Reinforcement Plate | 9306473006 | |
| 942 | Control Box Cover Metal | 9306476007 | |
| 942-2 | Control Box Cover-B Metal | 9305975006 | |
| 982 | Cord Clamp, Plastic | 9302271002 | |
| 985 | Special Nut w/Washer | 9304902003 | |
| 986 | Special Washer | 9304903000 | |
| A | Screw | 9357297002 | |

| Ref. No. | Description | Part No. | Ord. Q'ty |
|----------|--------------------------------|--------------|-----------|
| | | ROW-12RC | |
| 4 | Emblem-Rear | 9306835026 | |
| 5 | Cabinet Front Panel, Plastic | 9306386016 | |
| 7 | Connector Cover | 9306119010 | |
| 9 | Cabinet Rear Panel, Plastic | 9306385019 | |
| 12 | Base Assy, Painted | 9306118020 | |
| 13 | 3-Way Valve Assy | 9311535010 | |
| 14 | 2-Way Valve Assy | 9311533016 | |
| 16 | Condenser Assy | 9306179007 | |
| 16 | Condenser Sub Assy | 9330031012 | |
| 18 | Suction Pipe Assy | 9308036001 | |
| 20 | Discharge Pipe | 9307035012 | |
| 32 | Control Box Metal | 9305972005 | |
| 34 | Capacitor (Fan Motor) | 9900089030 | |
| 37 | Capacitor (Running) | 9307588013 | |
| 38 | Clamp Metal (Capacitor) | 313468061808 | |
| 39 | Propeller Fan | 9305538003 | |
| 41 | Fan Motor Assy-Out | 9307715013 | |
| 42 | Bracket (Motor) | 9305536016 | |
| 46 | Compressor Assy | 9310712023 | |
| 51 | Special Nut M5 | 9307091001 | |
| 55 | Special Nut M6 | 313252257701 | |
| 62 | Wire Assy (Shield)-A | 9305971026 | |
| 98 | Fan Ring | 9305581023 | |
| 107 | Rubber Seat-A | 9351813017 | |
| 109 | Terminal Cover | 9307090004 | |
| 138 | Separate Wall Metal | 9305971008 | |
| 187 | Clamp No.1219 | 313361271706 | |
| 195 | Clamp SKB-100 | 313361275805 | |
| 196 | Clamp SKB-159 | 313035356905 | |
| 196-2 | Clamp SKB-3MC | 9305335008 | |
| 230 | Overload Relay | 9352453007 | |
| 329 | Coupling Pipe Assy | 9306400002 | |
| 329-2 | Coupling Pipe -C | 9306433000 | |
| 343 | Solenoid Coil | 9970003011 | |
| 344 | 4-Way Valve | 9970010019 | |
| 365 | Bracket (Valve) | 9306748012 | |
| 412 | Terminal Gasket (For Comp.) | 9307089008 | |
| 420 | Capillary Assy | 9330032019 | |
| 423 | Noise Insulation -B | 9306424008 | |
| 582 | Discharge Pipe -SF | 9306115005 | |
| 674 | Screw, SUS410T + 5014 | 9305848010 | |
| 688 | Screw w/Washer | 313681304205 | |
| 765 | Drain Pipe (L-type) | 9301102000 | |
| 766 | Drain Pipe Packing | 9301143003 | |
| 815 | Terminal-4P | 9306488017 | |
| 916 | Noise Insulation -A | 9306362003 | |
| 935-1 | Reinforcement(Cabinet Top) | 9305973002 | |
| 935-2 | Reinforcement -F (Cabinet Top) | 9306123000 | |
| 942-1 | Control Box Cover-A Metal | 9308562012 | |
| 942-2 | Control Box Cover-B Metal | 9305975006 | |
| 946 | Inlet Pipe | 9306401009 | |
| 982 | Cord Clamp, Plastic | 9302271002 | |
| A | Screw | 9357297002 | |
| B | Screw (with Spring Washer) | 0700179013 | |

STANDARD ACCESSORIES

| Name and Shape | Part No. | |
|--|------------|------------|
| | RSW-9RC | RSW-12RC |
| Wall hook bracket  | 9304358008 | 9304358008 |
| Remote control unit  | 9312058020 | 9312058020 |
| Battery (penlight)  | 0600185534 | 0600185534 |
| Tapping screw (Ø4 x 25)  | 0700076046 | 0700076046 |
| Cloth tape  | 9308117007 | 9308117007 |
| Drain pipe (Including drain packing)  | 9303029015 | 9303029015 |
| Seal A  | ----- | 9304536000 |



MANUFACTURER :

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Tokyo, Japan

0304G2249