

HITACHI

SERVICE MANUAL

TECHNICAL INFORMATION

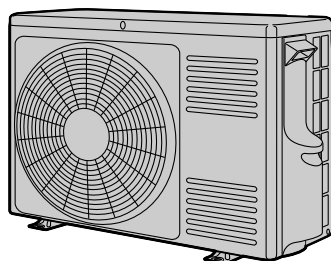
SM0007

RAS-D10EX5/RAC-D10EX5
RAS-D14EX5/RAC-D14EX5

REFER TO THE FOUNDATION MANUAL



RAS-D10EX5
RAS-D14EX5



RAC-D10EX5
RAC-D14EX5

SPECIFICATIONS

| TYPE | | DC INVERTER (WALL TYPE) | | | |
|-----------------|-------------------|-------------------------|-------------------|-------------------------|------------------|
| | | INDOOR UNIT | OUTDOOR UNIT | INDOOR UNIT | OUTDOOR UNIT |
| MODEL | | RAS-D10EX5 | RAC-D10EX5 | RAS-D14EX5 | RAC-D14EX5 |
| POWER SOURCE | | 1 PHASE, 50Hz, 220-230V | | 1 PHASE, 50Hz, 220-230V | |
| COOLING | TOTAL INPUT (W) | 690 (400 - 1120) | | 1080 (400 - 1300) | |
| | TOTAL AMPERES (A) | 3.70 - 3.52 | | 5.17 - 4.94 | |
| | CAPACITY | (kW) | 2.50 (1.6 - 3.1) | | 3.50 (1.6 - 3.8) |
| (B.T.U./h) | | 8,530 (5,459 - 10,577) | | 11,940 (5,459 - 12,966) | |
| HEATING | TOTAL INPUT (W) | 880 (400 - 1160) | | 1100 (400 - 1400) | |
| | TOTAL AMPERES (A) | 4.71 - 4.50 | | 5.26 - 5.03 | |
| | CAPACITY | (kW) | 3.40 (1.70 - 4.0) | | 4.20 (1.7 - 5.0) |
| (B.T.U./h) | | 11,600 (5,800 - 13,648) | | 14,330 (5,800 - 17,060) | |
| DIMENSIONS (mm) | W | 790 | 750(+91)* | 790 | 750(+91)* |
| | H | 298 | 548 | 298 | 548 |
| | D | 210 | 288(+47)* | 210 | 288(+47)* |
| NET WEIGHT (kg) | | 10 | 33 | 10 | 33 |

* After installation

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

ROOM AIR CONDITIONER

INDOOR UNIT + OUTDOOR UNIT

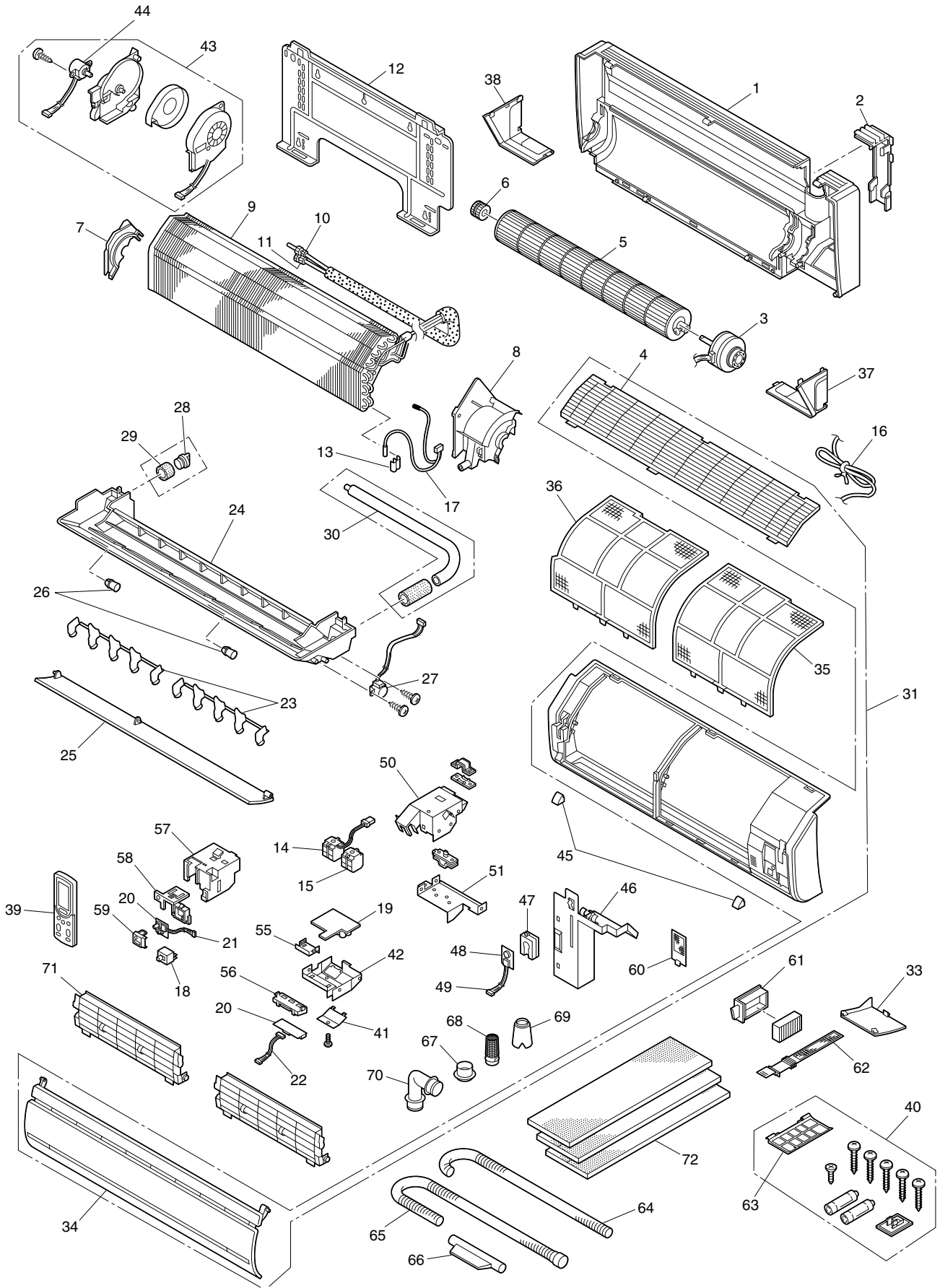
DECEMBER 2007

Hitachi Household Appliances (Wuhu) Co., Ltd.

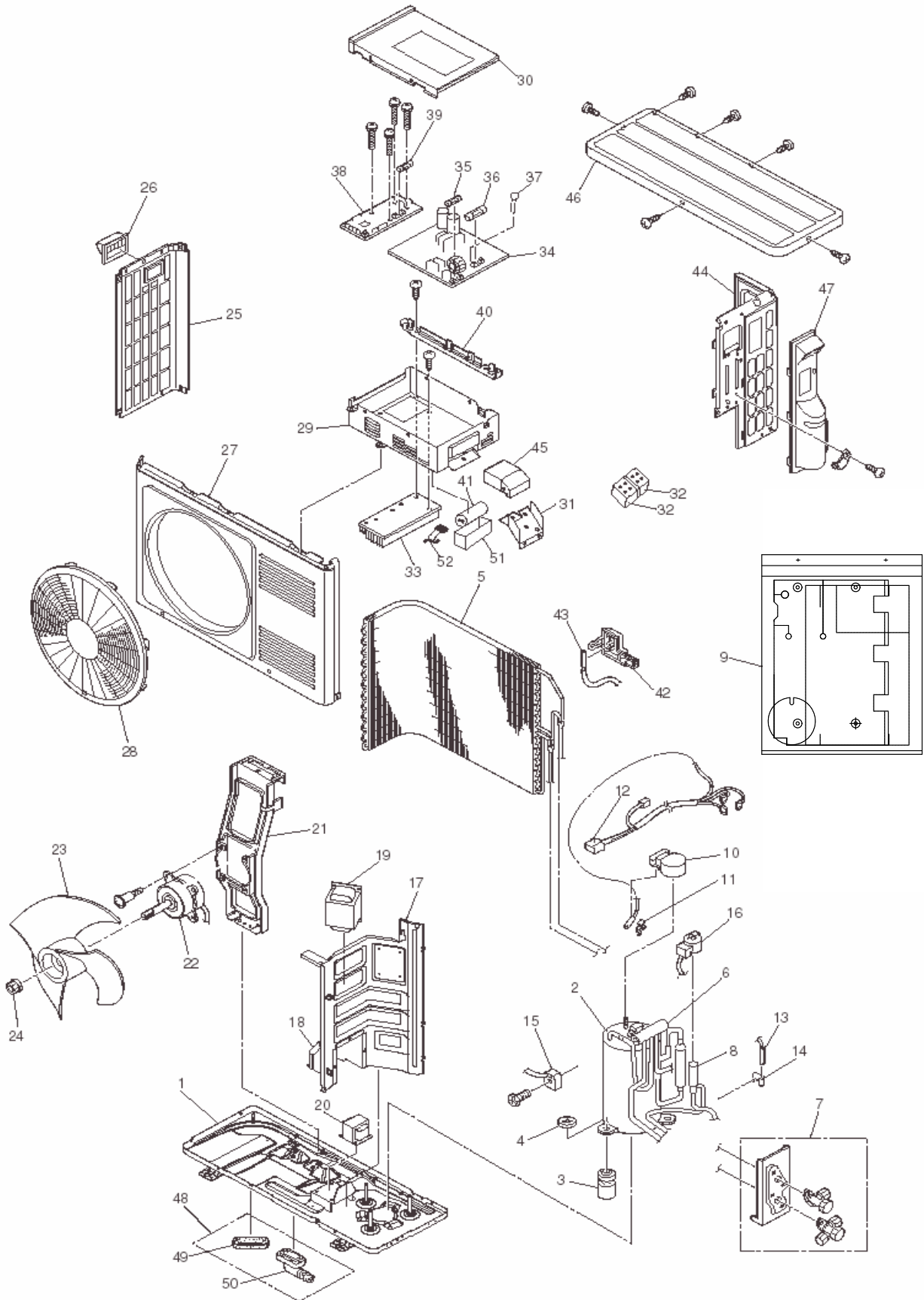
PARTS LIST AND DIAGRAM

INDOOR UNIT

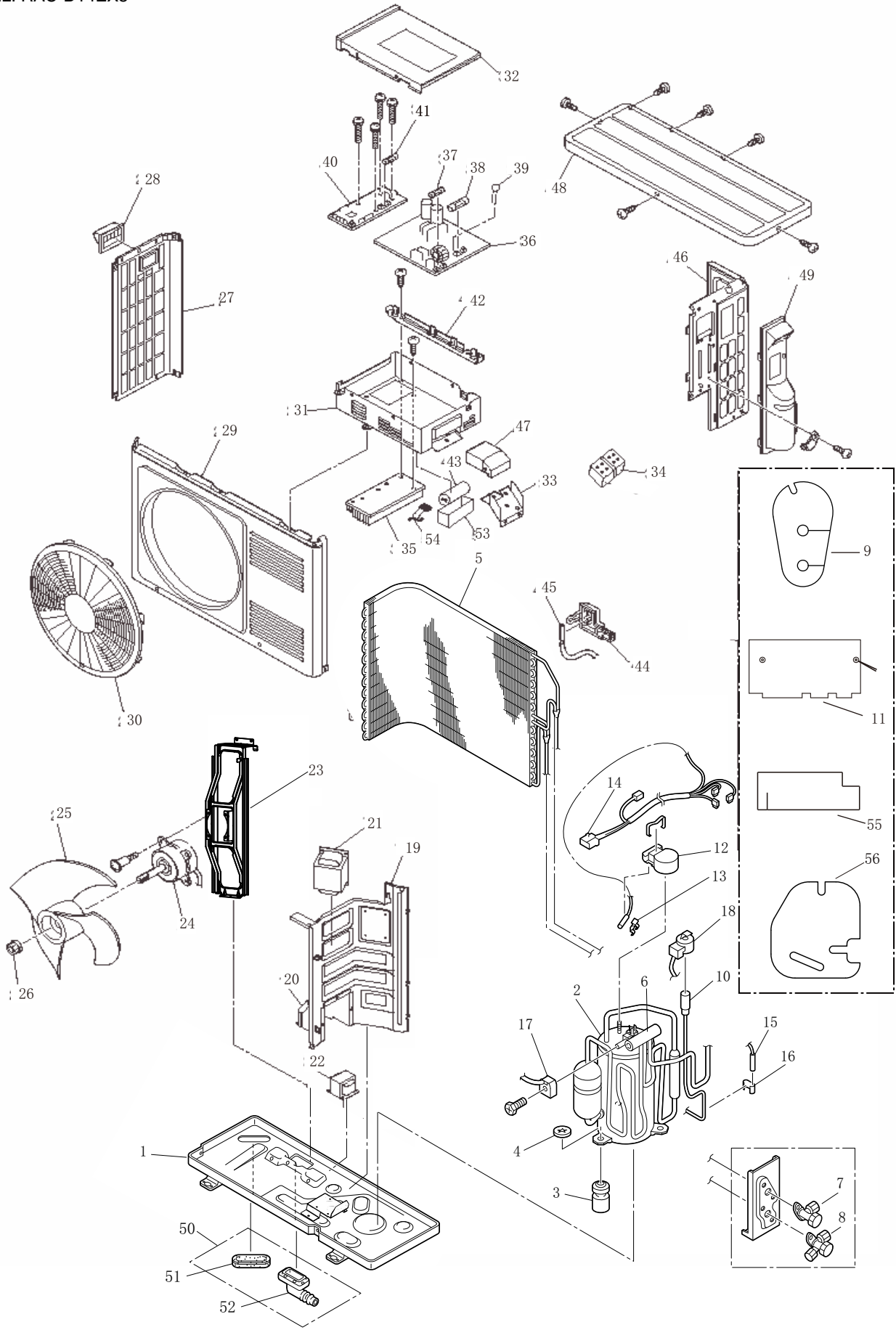
MODEL: RAS-D10EX5, RAS-D14EX5



OUTDOOR UNIT
MODEL: RAC-D10EX5



OUTDOOR UNIT
 MODEL: RAC-D14EX5



| RAS-D10EX5 | | |
|-------------------|--------------------------------|----------------|
| 1 | CABINET WHITE COLOR (ROHS)* | HWRAS25JX5A06 |
| 2 | COVER UPPER WHITE COLOR * | HWRAS25JX5A09 |
| 3 | FAN MOTOR 25W (ROHS) | HWRASD10EXA03 |
| 4 | GRILLE (ROHS) | HWRASD10EXA04 |
| 5 | TANGENTIAL FLOW FAN (ROHS) | HWWSI425A05 |
| 6 | SUPPORT FAN (BEARING) (ROHS) | HWRASD10EXA05 |
| 7 | COVER FAN (ROHS) | HWRASD10EXA06 |
| 8 | SUPPORT FAN MOTOR (ROHS) | HWRASD10EXA07 |
| 9 | EVAPORATOR ASSY (ROHS) | HWRASD10EXA08 |
| 10 | UNION 2 (l=6,35MM) (ROHS) | HWRAS25YH4A12 |
| 11 | UNION 3 PIPE SET (OUT) (ROHS) | HWRAS25YH4A13 |
| 12 | MOUNTING PLATE (ROHS) | HWRASD10EXA10 |
| 13 | SUPPORT THERMISTOR (ROHS) | HWRAS25YH4A15 |
| 14 | TERMINAL BOARD (2P) (ROHS) | HWRASD10EXA11 |
| 15 | TERMINAL BOARD (2P) (ROHS) | HWRAS25YH4A17 |
| 16 | CORD POWER SUPPLY (ROHS) | HWRASD10EXA12 |
| 17 | THERMISTOR ASSEMBLY (ROHS) | HWRASD10EXA13 |
| 18 | SWITCH POWER (ROHS) | HWRASD10EXA14 |
| 19 | PWB (MAIN) | RASD10EX5001 |
| 20 | PWB INDICATION (9PIN) (ROHS)* | HWRASD10EXA16 |
| 21 | CORD 3 PIN PWB INDICATION * | HWRASD10EXA17 |
| 22 | CORD CONNECTING (9P) (ROHS) | HWRASD10EXA18 |
| 23 | DELECTOR AIR VERTICAL (ROHS) | HWRASD10EXA19 |
| 24 | DRAIN PAN (ROHS) | HWRASD10EXA20 |
| 25 | AIR DEFLECTOR HORIZONT.(ROHS) | HWRASD10EXA21 |
| 26 | SUPPORT DEFLECTOR (ROHS) | HWRAS25YH4A28 |
| 27 | MOTOR AUTO SWEEP (ROHS) | HWRASD10EXA22 |
| 28 | RUBBER CAP DRAIN l=20MM (ROHS) | HWRAS25YH4A30 |
| 29 | HEAT INSULATOR PIPE (ROHS) | HWRAS25YH4A31 |
| 30 | DRAIN HOSE (ROHS) | HWRASD10EX2A02 |
| 31 | FRONT COVER ASSY (ROHS) | HWRASD10EXA24 |
| 33 | COVER SWITCH WHITE (ROHS) | HWRASD10EXA26 |
| 34 | FRONT PANEL (ROHS) | HWRASD10EXA27 |
| 35 | AIR FILTER RIGHT | HWRAS10JH2002 |
| 36 | AIR FILTER LEFT | HWRAS10JH2003 |
| 37 | COVER LOWER R WHITE COLOR * | HWRAS25JX5A07 |
| 38 | COVER LOWER L WHITE COLOR * | HWRAS25JX5A08 |
| 39 | REMOTE HANDSET RAR3E1 (ROHS) | HWRASD10EXA32 |
| 40 | SCREW ASSEMBLY (ROHS) | HWRASD10EXA33 |
| 41 | COVER TERMINAL (ROHS) | HWRASD10EXA34 |
| 42 | COVER ELECTRIC UPPER (STEEL) | HWRASD10EXA35 |
| 43 | UNIT SUPPLY AIR+EXHAUST(ROHS) | HWRASD10EXA36 |
| 44 | MOTOR STEPPING DAMPER (ROHS) | HWRAS25YH4A29 |
| 45 | SCREW COVER FRONT (ROHS) | HWRASD10EXA38 |
| 46 | COVER PIPE RIGHT (ROHS) | HWRASD10EXA39 |
| 47 | COVER GAS SENSOR (ROHS) * | HWRASD10EXA40 |
| 48 | PWB GAS SENSOR (ROHS) | HWRASD10EXA41 |
| 49 | CORD 3 PIN PWB GAS SENSOR * | HWRASD10EXA42 |
| 50 | COVER UPPER ELECTRIC (ROHS) | HWRASD10EXA43 |
| 51 | COVER ELECTRIC LOWER (STEEL) | HWRASD10EXA44 |
| 55 | COVER POWER SWITCH METAL(ROHS) | HWRASD10EXA48 |
| 56 | SUPPORT INDICATION PWB (ROHS) | HWRASD10EXA49 |

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| 57 | SUPPORT MAIN PWB (ROHS) | HWRASD10EXA50 |
| 58 | SUPPORT POWER SWITCH (ROHS) | HWRASD10EXA51 |
| 59 | COVER TEMPORARY SWITCH (ROHS) | HWRASD10EXA52 |
| 60 | FILTER EXHAUST 70X40MM (ROHS) | HWRASD10EXA53 |
| 61 | HOLDER FILTER AIR CLEAN(ROHS)X | HWRASD10EXA54 |
| 62 | FILTER SUPPLY AIR (ROHS) | HWRASD10EXA55 |
| 63 | PIPE SUPPORT (REAR) (ROHS) | HWRASD10EXA56 |
| 64 | AIR DUCT (D=20MM) (ROHS) | HWRASD10EXA57 |
| 65 | AIR DUCT (D=25MM) (ROHS) | HWRASD10EXA58 |
| 66 | AIR DUCT (ROHS) | HWRASD10EXA59 |
| 67 | JOINT (AIR DUCT) (ROHS) | HWRASD10EXA60 |
| 68 | STRAINER INSECT REPELL.(ROHS) | HWRASD10EXA61 |
| 69 | HOOD REPELLENT STRAINER(ROHS) | HWRASD10EXA62 |
| 70 | ELBOW JOINT AIR DUCT (ROHS) | HWRASD10EXA63 |
| 71 | CASE (AIR CLEAN.FILTER)(ROHS) | HWRASD10EXA64 |
| 72 | HEAT INSULATOR SHEET (ROHS) | HWRASD10EXA65 |

| RAS-D14EX5 | | |
|-------------------|--------------------------------|----------------|
| 1 | CABINET WHITE COLOR (ROHS)* | HWRAS25JX5A06 |
| 2 | COVER UPPER WHITE COLOR * | HWRAS25JX5A09 |
| 3 | FAN MOTOR 25W (ROHS) | HWRASD10EXA03 |
| 4 | GRILLE (ROHS) | HWRASD10EXA04 |
| 5 | TANGENTIAL FLOW FAN (ROHS) | HWWSI425A05 |
| 6 | SUPPORT FAN (BEARING) (ROHS) | HWRASD10EXA05 |
| 7 | COVER FAN (ROHS) | HWRASD10EXA06 |
| 8 | SUPPORT FAN MOTOR (ROHS) | HWRASD10EXA07 |
| 9 | EVAPORATOR ASSY (ROHS) | HWRASD10EXA08 |
| 10 | UNION 2 (∅=6,35MM) (ROHS) | HWRAS25YH4A12 |
| 11 | UNION 3 PIPE SET (OUT) (ROHS) | HWRAS25YH4A13 |
| 12 | MOUNTING PLATE (ROHS) | HWRASD10EXA10 |
| 13 | SUPPORT THERMISTOR (ROHS) | HWRAS25YH4A15 |
| 14 | TERMINAL BOARD (2P) (ROHS) | HWRASD10EXA11 |
| 15 | TERMINAL BOARD (2P) (ROHS) | HWRAS25YH4A17 |
| 16 | CORD POWER SUPPLY (ROHS) | HWRASD10EXA12 |
| 17 | THERMISTOR ASSEMBLY (ROHS) | HWRASD10EXA13 |
| 18 | SWITCH POWER (ROHS) | HWRASD10EXA14 |
| 19 | PWB (MAIN) | RASD10EX5002 |
| 20 | PWB INDICATION (9PIN) (ROHS)* | HWRASD10EXA16 |
| 21 | CORD 3 PIN PWB INDICATION * | HWRASD10EXA17 |
| 22 | CORD CONNECTING (9P) (ROHS) | HWRASD10EXA18 |
| 23 | DELECTOR AIR VERTICAL (ROHS) | HWRASD10EXA19 |
| 24 | DRAIN PAN (ROHS) | HWRASD10EXA20 |
| 25 | AIR DEFLECTOR HORIZONT.(ROHS) | HWRASD10EXA21 |
| 26 | SUPPORT DEFLECTOR (ROHS) | HWRAS25YH4A28 |
| 27 | MOTOR AUTO SWEEP (ROHS) | HWRASD10EXA22 |
| 28 | RUBBER CAP DRAIN ∅=20MM (ROHS) | HWRAS25YH4A30 |
| 29 | HEAT INSULATOR PIPE (ROHS) | HWRAS25YH4A31 |
| 30 | DRAIN HOSE (ROHS) | HWRASD10EX2A02 |
| 31 | FRONT COVER ASSY (ROHS) | HWRASD10EXA24 |
| 33 | COVER SWITCH WHITE (ROHS) | HWRASD10EXA26 |
| 34 | FRONT PANEL (ROHS) | HWRASD10EXA27 |
| 35 | AIR FILTER RIGHT | HWRAS10JH2002 |
| 36 | AIR FILTER LEFT | HWRAS10JH2003 |
| 37 | COVER LOWER R WHITE COLOR * | HWRAS25JX5A07 |
| 38 | COVER LOWER L WHITE COLOR * | HWRAS25JX5A08 |
| 39 | REMOTE HANDSET RAR3E1 (ROHS) | HWRASD10EXA32 |
| 40 | SCREW ASSEMBLY (ROHS) | HWRASD10EXA33 |
| 41 | COVER TERMINAL (ROHS) | HWRASD10EXA34 |
| 42 | COVER ELECTRIC UPPER (STEEL) | HWRASD10EXA35 |
| 43 | UNIT SUPPLY AIR+EXHAUST(ROHS) | HWRASD10EXA36 |
| 44 | MOTOR STEPPING DAMPER (ROHS) | HWRAS25YH4A29 |
| 45 | SCREW COVER FRONT (ROHS) | HWRASD10EXA38 |
| 46 | COVER PIPE RIGHT (ROHS) | HWRASD10EXA39 |
| 47 | COVER GAS SENSOR (ROHS) * | HWRASD10EXA40 |
| 48 | PWB GAS SENSOR (ROHS) | HWRASD10EXA41 |
| 49 | CORD 3 PIN PWB GAS SENSOR * | HWRASD10EXA42 |
| 50 | COVER UPPER ELECTRIC (ROHS) | HWRASD10EXA43 |
| 51 | COVER ELECTRIC LOWER (STEEL) | HWRASD10EXA44 |
| 55 | COVER POWER SWITCH METAL(ROHS) | HWRASD10EXA48 |
| 56 | SUPPORT INDICATION PWB (ROHS) | HWRASD10EXA49 |
| 57 | SUPPORT MAIN PWB (ROHS) | HWRASD10EXA50 |

GENERAL SERVICE

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|----|--------------------------------|---------------|
| 58 | SUPPORT POWER SWITCH (ROHS) | HWRASD10EXA51 |
| 59 | COVER TEMPORARY SWITCH (ROHS) | HWRASD10EXA52 |
| 60 | FILTER EXHAUST 70X40MM (ROHS) | HWRASD10EXA53 |
| 61 | HOLDER FILTER AIR CLEAN(ROHS)X | HWRASD10EXA54 |
| 62 | FILTER SUPPLY AIR (ROHS) | HWRASD10EXA55 |
| 63 | PIPE SUPPORT (REAR) (ROHS) | HWRASD10EXA56 |
| 64 | AIR DUCT (D=20MM) (ROHS) | HWRASD10EXA57 |
| 65 | AIR DUCT (D=25MM) (ROHS) | HWRASD10EXA58 |
| 66 | AIR DUCT (ROHS) | HWRASD10EXA59 |
| 67 | JOINT (AIR DUCT) (ROHS) | HWRASD10EXA60 |
| 68 | STRAINER INSECT REPELL.(ROHS) | HWRASD10EXA61 |
| 69 | HOOD REPELLENT STRAINER(ROHS) | HWRASD10EXA62 |
| 70 | ELBOW JOINT AIR DUCT (ROHS) | HWRASD10EXA63 |
| 71 | CASE (AIR CLEAN.FILTER)(ROHS) | HWRASD10EXA64 |
| 72 | HEAT INSULATOR SHEET (ROHS) | HWRASD10EXA65 |
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| RAC-D10EX5 | | |
|-------------------|--------------------------------|----------------|
| 1 | BASE | RAC35AVZ001 |
| 2 | COMPRESSOR | RAC35AVZ002 |
| 3 | COMPRESSOR RUBBER | RACA25BXA003 |
| 4 | PUSH NUT | RACA25BXA004 |
| 5 | CONDENSER | RAC35AVZ003 |
| 6 | VALVE REVERSING | RAC35AVZ004 |
| 7 | SERVICE VALVE ASSEMBLY | RAC35AVZ005 |
| 8 | EXPANSION VALVE ELECTRIC | RAC35AVZ006 |
| 9 | COVER ASSEMBLY SOUNDPROOF | RAC35AVZ007 |
| 10 | COVER O.L.R | RAC35AVZ008 |
| 11 | THERMISTOR O.H | RACA25BXA011 |
| 12 | CORD CONNECTION COMPRESSOR | HWRAC25YHA1A01 |
| 13 | THERMISTOR(DEFROST) | RACA25BXA013 |
| 14 | THERMISTOR SUPPORT | RACA25BXA014 |
| 15 | COIL REVERSING VALVE | RACA25BXA015 |
| 16 | COIL EXPANSION VALVE (ROHS)* | HWRACE08HA09 |
| 17 | PARTITION | RACA25BXA017 |
| 18 | REACTOR COVER | RACA25BXA018 |
| 19 | REACTOR 1 | RACA25BXA019 |
| 20 | REACTOR 2 | RACA25BXA020 |
| 21 | FAN MOTOR SUPPORT | RACD10EX5001 |
| 22 | FAN MOTOR 40W | RACA25BXA022 |
| 23 | PROPELLER FAN | RAC35AVZ011 |
| 24 | NUT(PROPELLER FAN) | RACA25BXA024 |
| 25 | SIDE COVER (L) | RACA25BXA025 |
| 26 | HANDLE | RACA25BXA026 |
| 27 | FRONT COVER | RACA25BXA027 |
| 28 | DISCHARGE GRILL | RACD10EX5002 |
| 29 | ELECTRIC PARTS PLATE (ROHS) | HWRAC25YH4A29 |
| 30 | COVER ELECTRIC PARTS (ROHS) | HWRACD10EXA13 |
| 31 | TERMINAL PLATE (ROHS) | HWRAC25YH4A31 |
| 32 | TERMINAL BOARD (2P) (ROHS) | HWRAC25YH4A32 |
| 33 | HEAT SINK (REGULATOR 1)(ROHS) | HWRAC25YH4A33 |
| 34 | PWB POWER (ROHS) | HWRACD10EX2A08 |
| 35 | FUSE 15A (ROHS) | HWRACE08HA11 |
| 36 | FUSE 3A (22MM) SOLDER (ROHS) | HWRACD10EX2A09 |
| 37 | VARISTOR (ROHS) | HWRAC25YH4A37 |
| 38 | PWB(MAIN) | RACD10EX5003 |
| 39 | FUSE 1A (ROHS) | HWRACD10EX2A11 |
| 40 | SUPPORT PWB (ROHS) | HWRAC25YH4A40 |
| 41 | CAP 45MF 200V (COMP) (ROHS) | HWRAC25YH4A41 |
| 42 | COVER (OUTDOOR THERMISTOR) | RACA25BXA043 |
| 43 | THERMISTOR(OUTDOOR TEMPERATURE | RACD10EX5004 |
| 44 | SIDE COVER (R) | RAC35AVZ012 |
| 45 | COVER TERMINAL | RACA25BXA046 |
| 46 | TOP COVER | RACA25BXA047 |
| 47 | SERVICE VALVE COVER | RACA25BXA048 |
| 48 | BUSH ASSEMBLY | RACA25BXA049 |
| 49 | BUSH | RACA25BXA050 |
| 50 | DRAIN PIPE | RACA25BXA051 |
| 51 | COVER (CAPACITY) | RACA25BXA052 |
| 52 | CORD ASSEMBLY | RACD10EX5005 |

| RAC-D14EX5 | | |
|-------------------|--------------------------------|----------------|
| 1 | BASE | RAC35AVZ001 |
| 2 | COMPRESSOR | RAC35BVY001 |
| 3 | COMPRESSOR RUBBER | RACA25BXA003 |
| 4 | PUSH NUT | RACA25BXA004 |
| 5 | CONDENSER | RAC35AVX001 |
| 6 | REVERSING VALVE | RACD14EX5001 |
| 7 | VALVE 2S | RAC25BVX003 |
| 8 | VALVE 3S | RAC25BVX004 |
| 9 | COVER SOUNDPROOF | RAC35BVY003 |
| 10 | ELECTRIC EXPANSION VALVE | RAC35AVX003 |
| 11 | COVER SOUNDPROOF | RAC35BVY004 |
| 12 | COVER O.L.R | RAC35AVZ008 |
| 13 | CORD CONNECTION COMPRESSOR | HWRAC25YHA1A01 |
| 14 | CONNECTING CORD(COMP) | RAC35BVY005 |
| 15 | THERMISTOR(DEFROST) | RACA25BXA013 |
| 16 | THERMISTOR SUPPORT | RAC35AVX004 |
| 17 | COIL REVERSING VALVE | RACA25BXA015 |
| 18 | COIL EXPANSION VALVE | RACA25BXA016 |
| 19 | PARTITION | RAC35BVY006 |
| 20 | REACTOR COVER | RACA25BXA018 |
| 21 | REACTOR 1 | RACA25BXA019 |
| 22 | REACTOR 2 | RACA25BXA020 |
| 23 | FAN MOTOR SUPPORT | RACD14EX5002 |
| 24 | FAN MOTOR 40W | RACA25BXA022 |
| 25 | PROPELLER FAN | RAC25BVX008 |
| 26 | NUT(PROPELLER FAN) | RACA25BXA024 |
| 27 | SIDE COVER (L) | RACA25BXA025 |
| 28 | HANDLE | RACA25BXA026 |
| 29 | FRONT COVER | RACA25BXA027 |
| 30 | DISCHARGE GRILL | RACD10EX5002 |
| 31 | ELECTRIC PARTS PLATE (ROHS) | HWRAC25YH4A29 |
| 32 | COVER ELECTRIC PARTS (ROHS) | HWRACD10EXA13 |
| 33 | TERMINAL PLATE (ROHS) | HWRAC25YH4A31 |
| 34 | TERMINAL BOARD (2P) (ROHS) | HWRAC25YH4A32 |
| 35 | HEAT SINK (REGULATOR 1)(ROHS) | HWRAC25YH4A33 |
| 36 | PWB POWER (ROHS) | HWRACD10EX2A08 |
| 37 | FUSE 15A (ROHS) | HWRACE08HA11 |
| 38 | FUSE 3A (22MM) SOLDER (ROHS) | HWRACD10EX2A09 |
| 39 | VARISTOR (ROHS) | HWRAC25YH4A37 |
| 40 | PWB (MAIN) | RACD14EX5003 |
| 41 | FUSE 1A (ROHS) | HWRACD10EX2A11 |
| 42 | SUPPORT PWB (ROHS) | HWRAC25YH4A40 |
| 43 | CAP 45MF 200V (COMP) (ROHS) | HWRAC25YH4A41 |
| 44 | COVER (OUTDOOR THERMISTOR) | RACA25BXA043 |
| 45 | THERMISTOR(OUTDOOR TEMPERATURE | RAC25BVY006 |
| 46 | SIDE COVER (R) | RAC25AVX002 |
| 47 | COVER TERMINAL | RACA25BXA046 |
| 48 | TOP COVER | RACA25BXA047 |
| 49 | SERVICE VALVE COVER | RACA25BXA048 |
| 50 | BUSH ASSEMBLY | RACA25BXA049 |
| 51 | BUSH | RACA25BXA050 |
| 52 | DRAIN PIPE | RACA25BXA051 |
| 53 | COVER (CAPACITY) | RACA25BXA052 |
| 54 | CORD ASSEMBLY | RAC25BVX013 |
| 55 | COVER SOUNDPROOF | RAC35BVY009 |
| 56 | COVER SOUNDPROOF | RAC35BVY010 |