

TOSHIBA

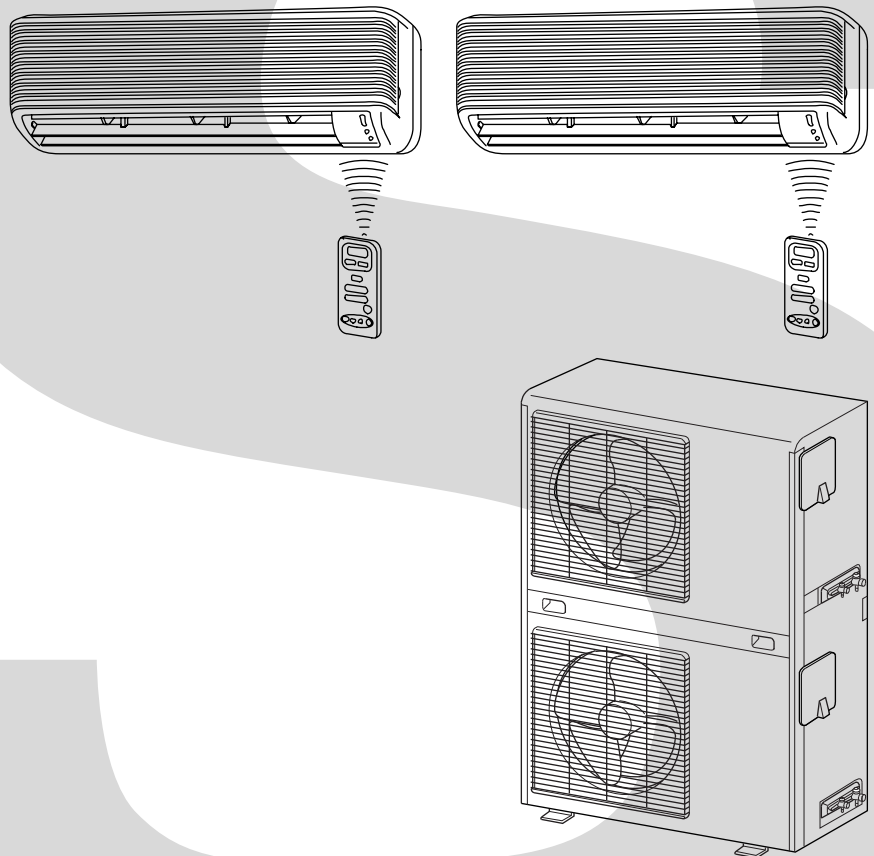
FILE NO. A03-9802
SUPPLEMENT

SERVICE MANUAL

AIR-CONDITIONER

MULTI SPLIT WALL TYPE

RAS-13SKH-E x2/RAS-M26SAH-E



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This supplement is prepared for similar model RAS-13SKH-E x 2 / RAS-M26SAH-E.
Be sure to refer to the service manual shown in the table below for other informations.

| MODEL NAME | SERVICE MANUAL FILE No. |
|------------------------------------|-------------------------|
| RAS – 13SKH – E RAS – 13SAH – E | A00 – 9627 |
| RAS – 13SKHX RAS – 13SAHX | |

SUMMARY

- The lower part RAS-13SAH-E can be used as a double decker under the combination name RAS-M26SAH-E with two indoor units RAS-13SKH-E.

- Reference pages ; 4, 7, 56 and 61

1. SPECIFICATIONS

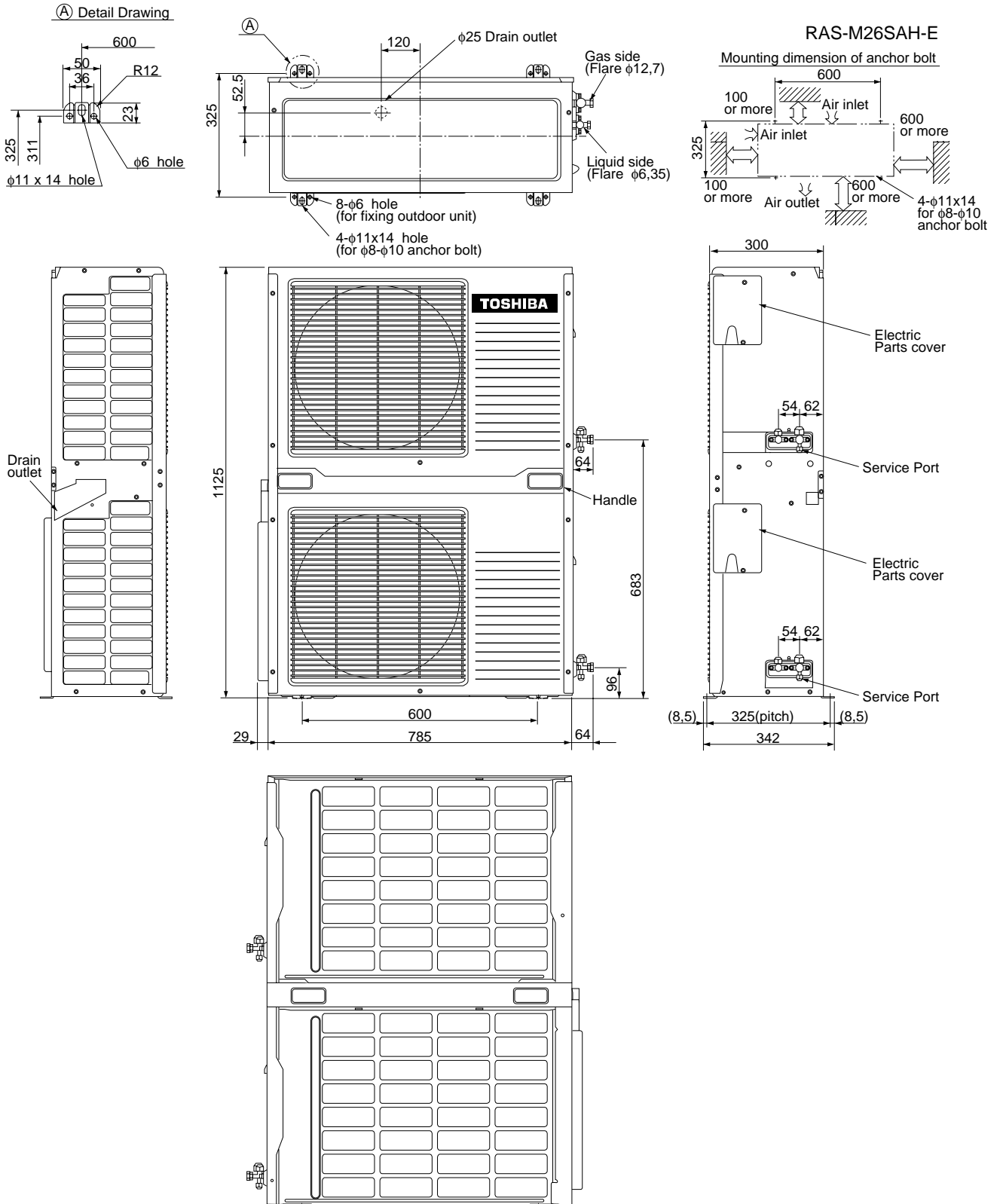
| Item | | Model | RAS-13SKH-E (2 units)/RAS-M26SAH-E | | | | | | | | | | | | |
|----------------------------------|---------------------------|-------------------------------------|------------------------------------|---------------|---------------|---------------------------|----------------|---------------------------|---------------|---------------|---------------------------|----------------|----------------|--|--|
| | | | Cooling | | | | | Heating | | | | | | | |
| | | | 1 Indoor unit (A or B) | | | 2 Indoor units (A + B) | | 1 Indoor unit (A or B) | | | 2 Indoor units (A + B) | | | | |
| Capacity | *1 kW | 220V | 230V | 240V | 220V | 230V | 240V | 220V | 230V | 240V | 220V | 230V | 240V | | |
| | | 3,45 | 3,50 | 3,50 | 6,90 | 7,00 | 7,00 | 4,00 | 4,05 | 4,10 | 8,00 | 8,10 | 8,20 | | |
| Power source | Phase | Single | | | | | | | | | | | | | |
| | V | 220/230/240 | | | | | | | | | | | | | |
| | Hz | 50 | | | | | | | | | | | | | |
| Power consumption | kW | 220V | 230V | 240V | 220V | 230V | 240V | 220V | 230V | 240V | 220V | 230V | 240V | | |
| | | 1,26 | 1,28 | 1,30 | 2,52 | 2,56 | 2,60 | 1,19 | 1,23 | 1,27 | 2,38 | 2,46 | 2,54 | | |
| Power factor | % | 98 | 96 | 92 | 98 | 96 | 92 | 95 | 95 | 93 | 95 | 95 | 93 | | |
| Running current | A Indoor/Outdoor | 0,15/ 5,70 | 0,15/ 5,66 | 0,15/ 5,75 | 0,30/ 11,4 | 0,30/ 11,32 | 0,30/ 11,50 | 0,15/ 5,54 | 0,15/ 5,48 | 0,15/ 5,54 | 0,30/ 11,08 | 0,30/ 10,96 | 0,30/ 11,08 | | |
| Starting current | A | 50 (25 x 2) | | | | | | | | | | | | | |
| Moisture removal | lit/h | 4,0 (2,0 x 2) | | | | | | | | | | | | | |
| Noise | Indoor (H/M/L) | dB | | | | | | | | | | | | | |
| | Outdoor (220/230/240V) | dB | | | | | 50 / 51 / 52 | | | | | 51 / 52 / 53 | | | |
| Refrigerant | Name of refrigerant | R-22 | | | | | | | | | | | | | |
| | Rated volume | kg | | | | | | | | | | | | | |
| Refrigerant control | | Capillary tube | | | | | | | | | | | | | |
| Interconnection pipe | Gas side size | mm | | | | | | | | | | | | | |
| | Connection type | Flare connection | | | | | | | | | | | | | |
| | Liquid side size | mm | | | | | | | | | | | | | |
| | Connection type | Flare connection | | | | | | | | | | | | | |
| | Maximum length (One way) | m | *2 | | | | | | | | | | | | |
| | Maximum height difference | m | 6 | | | | | | | | | | | | |
| Condensate drain pipe | Outer diameter | mm | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | |
| INDOOR UNIT | | RAS-13SKH-E | | | | | | | | | | | | | |
| Dimensions | Height | mm | | | | | | | | | | | | | |
| | Width | mm | | | | | | | | | | | | | |
| | Depth | mm | | | | | | | | | | | | | |
| Net weight | kg | 8 | | | | | | | | | | | | | |
| Evaporator type | | Finned tube | | | | | | | | | | | | | |
| Indoor fan type | | Cross flow fan | | | | | | | | | | | | | |
| Air volume | High fan | m ³ /h | | | | | | | | | | | | | |
| | Medium fan | m ³ /h | | | | | | | | | | | | | |
| | Low fan | m ³ /h | | | | | | | | | | | | | |
| Fan motor output | W | 19 | | | | | | | | | | | | | |
| Air filter | | Polypropylene net filter (Washable) | | | | | | | | | | | | | |
| OUTDOOR UNIT | | RAS-M26SAH-E | | | | | | | | | | | | | |
| Dimensions | Height | mm | | | | | | | | | | | | | |
| | Width | mm | | | | | | | | | | | | | |
| | Depth | mm | | | | | | | | | | | | | |
| Net weight | kg | 92 | | | | | | | | | | | | | |
| Condenser type | | Finned tube | | | | | | | | | | | | | |
| Outdoor fan type | | Propeller | | | | | | | | | | | | | |
| Airflow volume | m ³ /h | (1710 x 2) | | | | | | | | | | | | | |
| Fan motor output | W | 28 | | | | | | | | | | | | | |
| Compressor | Model | PH170T2-4L2 x 2 | | | | | | | | | | | | | |
| | Output | W | | | | | | | | | | | | | |
| Safety device | | Fuse, Overload relay | | | | | | | | | | | | | |
| Auto louver | | Yes | | | | | | | | | | | | | |
| Usable outdoor temperature range | °C | 21 ~ 43 | | | | | - 5 ~ 21 | | | | | | | | |

Specifications are subject to change without notice.

2. CONSTRUCTION VIEWS

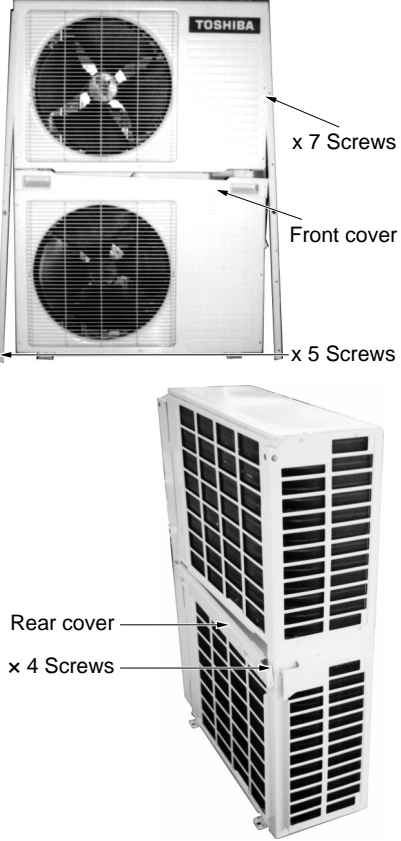

2-2. Outdoor Unit

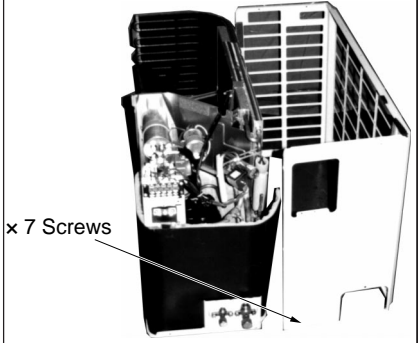
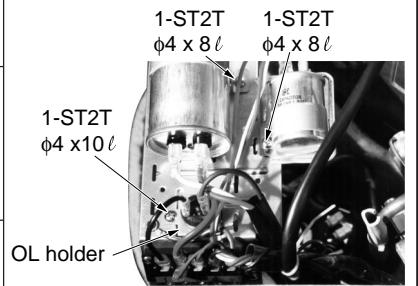
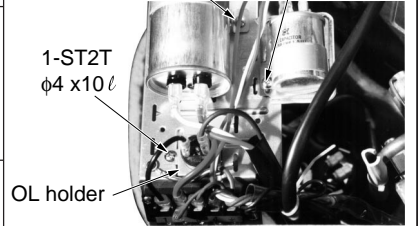
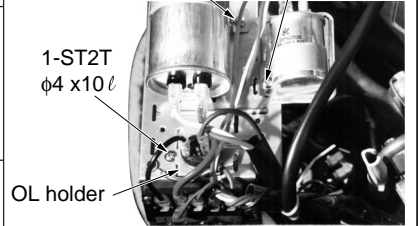
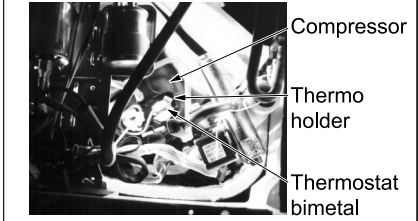
RAS-M26SAH-E



10. PART REPLACEMENT

10-3. Outdoor Unit (RAS-M26SAH-E)

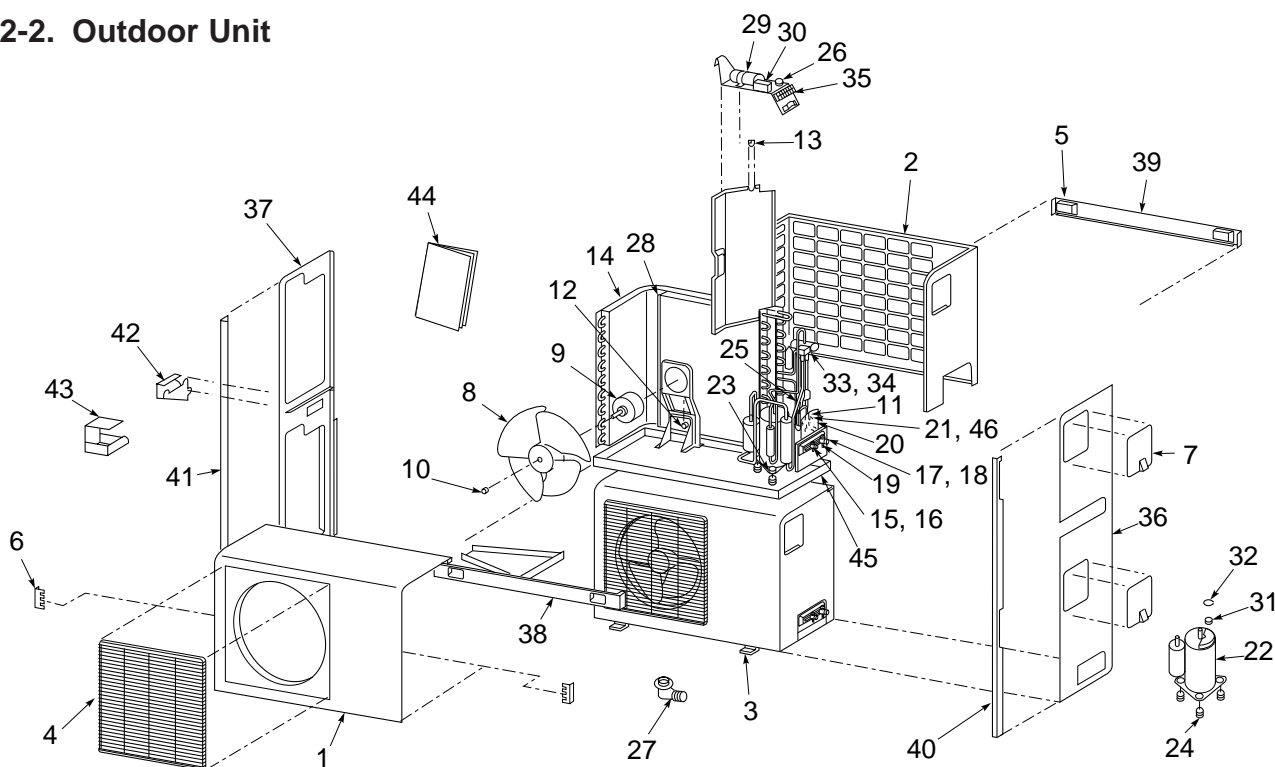
| No. | Part name | Procedure | Remarks |
|-----|-------------|--|---|
| ① | Front panel | <ol style="list-style-type: none"> 1) After stopping the operation of the air conditioner, be sure to turn off main power supply switch and breaker of indoor unit. 2) Remove the L-shape holder (Right). (7 screws) 3) Remove the L-shape holder (Left). (5 screws) 4) Remove the front cover. 5) Remove the rear cover. (4 screws) 6) Remove the electrical parts cover. <ul style="list-style-type: none"> (Upper unit: 2 screws) (Lower unit: 2 screws) 7) Remove the cord clamps. <ul style="list-style-type: none"> (Upper unit: 2 screws) (Lower unit: 2 screws) 8) Remove the front cabinet. <ul style="list-style-type: none"> (Upper unit: 3 screws) (Lower unit: 3 screws) <ul style="list-style-type: none"> • Pull the front lower position toward you, and remove it putting out upward. |  |
| ② | Upper unit | <ol style="list-style-type: none"> 1) Perform the process ① above. 2) Remove the base plate (Right). (2 screws) 3) Remove the base plate (Left). (3 screws) 4) Remove the upper unit pulling it toward you. |  |

| No. | Part name | Procedure | Remarks |
|-----|------------------------------|---|---|
| ②-1 | Back cabinet Side cabinet | 1) Remove the back cabinet and side cabinet. (4 screws) |  |
| ②-2 | Capacitor for compressor | 1) Perform the process ① above. 2) Remove the fixing screw securing the capacitor band. (1- ST2T $\phi 4 \times 8 \ell$) 3) Remove the cable connected to the terminal. |  |
| ②-3 | Capacitor for fan motor | 1) Perform the process ① above. 2) Remove the fixing screw. (1- ST2T $\phi 4 \times 8 \ell$) 3) Remove the cable connected to the terminal. |  |
| ②-4 | Overload relay | 1) Perform the process ① above. 2) Remove Fastons of leads. 3) Remove the fixing screw. (1- ST2T $\phi 4 \times 10 \ell$) 4) Pull OL-Holder up and remove Overload relay from OL-Holder. |  |
| ②-5 | Thermostat bimetal | 1) Perform the process ① above. 2) Remove terminal cover of compressor. 3) Remove thermo holder and pull thermostat bimetal up. 4) Remove Fastons of leads. |  |
| ③ | Lower unit | 1) Perform the process ①, ② above. 2) Remove the base plate (Right). (3 screws) 3) Remove the drain guide. (2 screws) 4) Remove the base plate (Left). (2 screws) | |

* The method of replacing parts of lower unit is the same as upper unit.

12. EXPLODED VIEWS AND PARTS LIST

12-2. Outdoor Unit



| Location No. | Part No. | Description |
|--------------|----------|----------------------------------|
| 1 | 43005144 | Cabinet, Front |
| 2 | 43005143 | Cabinet Side |
| 3 | 43042446 | Base |
| 4 | 43T19001 | Guard Fan |
| 5 | 43115663 | Hanger |
| 6 | 43T19002 | Stopper, Guard |
| 7 | 43T62007 | Cover, Electric Parts |
| 8 | 43020302 | Propeller Fan |
| 9 | 43021984 | Motor Fan |
| 10 | 43T47001 | Flange, Nut |
| 11 | 43T46005 | Checked Valve |
| 12 | 43T63004 | Lead-Wire Clamp |
| 13 | 43T96001 | Bushing |
| 14 | 43043609 | Condenser |
| 15 | 43T46002 | Packed Valve, 6,35 |
| 16 | 43T47003 | Bonnet, 6,35DIA |
| 17 | 43T46004 | Packed Valve, 12,7 |
| 18 | 43T47018 | Bonnet 12,7DIA |
| 19 | 43047607 | ASM, Packed Valve Cap 12,7, 6,35 |
| 20 | 43T47007 | Capillary Tube 1,2DIA |
| 21 | 43T47014 | Capillary Tube 1,7DIA |
| 22 | 43041764 | Compressor, AC 220/240V, 1100W |
| 23 | 43T97001 | Nut |

| Location No. | Part No. | Description |
|--------------|----------|--|
| 24 | 43T49008 | Cushion, Rubber |
| 25 | 43045085 | Dryer |
| 26 | 43054398 | Relay Over Load |
| 27 | 43T79004 | Nipple, Drain |
| 28 | 43043610 | Condenser, Sub |
| 29 | 43055496 | Capacitor, Plastic Film, 35MFD, 400V |
| 30 | 43T55009 | Capacitor, Electrolytic, EEP2H155 HQA107 1,5MF, 500V |
| 31 | 43T50002 | Thermostat, Bimetal CS-7 125 |
| 32 | 43T63005 | Holder Thermostat, Bimetal |
| 33 | 43146482 | 4-Way Valve |
| 34 | 43046255 | Solenoid Coil |
| 35 | 43060049 | Terminal Block, 5P |
| 36 | 43002129 | Cabinet, Side, Right |
| 37 | 43002130 | Cabinet, Side, Left |
| 38 | 43005292 | Front Panel |
| 39 | 43005293 | Rear Panel |
| 40 | 43002131 | Plate, Support, Right |
| 41 | 43002132 | Plate, Support, Left |
| 42 | 43079243 | Guide, Drain |
| 43 | 43079244 | Box, Drain |
| 44 | 43T85028 | Owner's Manual |
| 45 | 43042453 | Base |
| 46 | 43T47017 | Capillary Tube 0,6DIA |

TOSHIBA CORPORATION

1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO, 105-01, JAPAN