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You can read the recommendations in the user guide, the technical guide or the installation guide for TOSHIBA RAS-M13SMUCV-E. You'll find the answers to all your questions on the TOSHIBA RAS-M13SMUCV-E in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual TOSHIBA RAS-M13SMUCV-E
User guide TOSHIBA RAS-M13SMUCV-E
Operating instructions TOSHIBA RAS-M13SMUCV-E
Instructions for use TOSHIBA RAS-M13SMUCV-E
Instruction manual TOSHIBA RAS-M13SMUCV-E

TOSHIBA

**INSTALLATION MANUAL
MANUEL D'INSTALLATION
G-INSTALLATIONS-HANDBUCH
MANUALE DI INSTALLAZIONE
MANUAL DE INSTALACION
ΕΓΧΕΙΡΙΔΙΟ ΕΓΚΑΤΑΣΤΑΣΗΣ
MANUAL DE INSTALACAO
РУКОВОДСТВО ПО УСТАНОВКЕ
INSTALLATIONSHANDBO**

Not accessible to the general public
Vente interdite au grand public
Kein öffentlicher Zugang
Non accessibile a clienti generici
No destinado al público en general
Μη προσβάσιμο από το γενικό κοινό
Não acessível ao público em geral
Ограничено для доступа широкой общественности
Inte tillgänglig för allmänheten

**AIR CONDITIONER (SPLIT TYPE)
CLIMATISEUR (TYPE SPLIT)
KLIMAGERÄT (SPLIT-TYP)
CONDIZIONATORE D'ARIA (TIPO SPLIT)
AIRE ACONDICIONADO (TIPO SPLIT)
ΚΛΙΜΑΤΙΣΤΙΚΟ (ΔΙΑΙΡΟΥΜΕΝΟΥ ΤΥΠΟΥ)
AR CONDICIONADO (TIPO SPLIT)
ΚΟΝΔΙΤΙΟΝΕΡ (СОСТАВНОЙ)
LUFTKONDITIONERINGSAPPARAT (SPLIT TYP)**

<4-Way Air Discharge Cassette Type>
<Type cassette à 4 voies de soufflage>
<4-Wege-Belüftungskassette>
<Tipo a cassetta con scarico d'aria a 4 vie>
<Modelo de casete de distribución de aire de 4 vías>
<Εκροή αέρα 4-Δευθύνσεων Τύπου Κασέτας>
<Descarga de ar tipo cassetta de 4 vías>
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<Apparat med 4-vägars luftutsläpp>



Indoor Unit
Unité intérieure/Raumeinheit/Unità interna/Unidad interior
Εσωτερική Μονάδα/Unidade interior/Внутренний блок/Innenhusenhet

Heat Pump Model Modèle à thermopompe Geräte mit Heizung Modello con pompa di riscaldamento Modelo con bomba de calor Μοντέλο με Αντίλο Θερμότητας Modelo de bomba térmica Модель теплового насоса Värmepumpmodell	Cooling Only Model Modèle à froid seul Geräte nur zur Kühlung Modello solo per raffreddamento Modelo de refrigeración únicamente Μοντέλο Ψύξης αποκλειστικά Modelo Apenas para Refrigeração Модель только с охлаждением Modell endast för avkylning
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RAS-M10SMUV-E RAS-M13SMUV-E RAS-M16SMUV-E	RAS-M10SMUCV-E RB-B11MC(W)E RAS-M13SMUCV-E RAS-M16SMUCV-E
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Manual abstract:

@@@ Ce manuel décrit la procédure d'installation de l'unité intérieure. Pour installer l'unité extérieure, reportez-vous au Manuel d'installation fourni avec l'unité extérieure. Bitte lesen Sie dieses Handbuch sorgfältig, bevor Sie mit der Installation des Klimagerätes beginnen. In diesem Handbuch wird die Installation der Inneneinheit beschrieben. @@@@ Le R410A est un réfrigérant qui respecte la couche d'ozone. EINFÜHRUNG EINES NEUEN KLIMAMITTELS Dies ist ein neuartiges Klimagerät. Anstatt des herkömmlichen Kältemittels R22 verwendet es das neue HFC Kältemittel R410A. R410A schont die Ozonschicht.

ADOZIONE DI UN NUOVO REFRIGERANTE Questo condizionatore d'aria di tipo nuovo e impiega il nuovo refrigerante HFC (R410A) invece del R22, tradizionalmente usato. R410A un refrigerante ecologicamente rispettoso dello strato d'ozono.

ADOPTIN DE NUEVO REFRIGERANTE Este acondicionador de aire es un tipo Nuevo que adopta el refrigerante nuevo HFC (R410A) en vez del refrigerante convencional R22. El R410A es un refrigerante que no daa la capa de ozono. Lea atentamente este Manual de instalación antes de proceder a la instalación del aparato de aire acondicionado. Este manual describe el método de instalación de la unidad interior. Para la instalación de la unidad exterior, consulte el Manual de instalación que acompaña a la unidad exterior.

... Leia atentamente o presente Manual de Instalação antes de instalar o Ar Condicionado. O presente manual descreve o método de instalar a unidade interior.

Para a instalação de uma unidade exterior, siga o Manual de Instalação que acompanha a unidade exterior. HFC (R410A) R22. R410A . ADOPO DO NOVO REFRIGERANTE O presente aparelho de ar condicionado um novo tipo que adopta o novo refrigerante HFC (R410A) em vez do refrigerante convencional R22. O R410A um refrigerante que não prejudica o ozono. ANVNDANDE AV NY KYLVTSKA Denna luftkonditioneringsapparat är en ny typ som använder den nya kylvätskan HFC (R410A) i stället för den vanliga kylvätskan R22. R410A är en kylvätska som inte är skadlig för ozonskiktet. Vnligen läs denna Installationshandbok noga innan du installerar luftkonditioneringsapparaten. Denna handbok beskriver hur inomhusenheten ska installeras. För installation av utomhusenheten, flj Installationshandboken som är ansluten till utomhusenheten.

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.. 189 SVENSKA PORTUGUS ESPAOL ITALIANO DEUTSCH FRANCAIS ENGLISH Accessory parts and Parts to be procured locally H Accessory parts
Part name Installation Manual Wireless remote controller Remote controller holder Mounting screws for remote controller holder 3,1 mm (diam.) 16 mm
Batteries (Manganese) Heat insulating pipe Installation pattern Installation gauge Pattern fixing screw Heat insulator Washer Hose band Flexible hose Heat
insulator A Heat insulator B Owner's Manual Q'ty 1 1 1 1 2 2 1 2 4 1 8 1 1 1 1 1 M5 16L ---- Shape This manual Usage (Be sure to hand over to customers) --
-- -- -- For heat insulation of pipe connecting section For confirmation of ceiling opening and main unit position For positioning of ceiling position (united
with installation pattern) For attach the installation pattern For heat insulation of drain connecting section For hanging-down unit For connecting drain pipe
For adjusting core-out of drain pipe For sealing of wire connecting port For sealing of wire connecting port (Be sure to hand over to customers) <Separate
sold parts> Part name Ceiling panel Q'ty 1 Shape Model : RB-B11MC(W)E Usage H Parts to be procured locally Connecting pipe (Liquid et basement or
expose to rain or water.

2 ENGLISH 1 1 PRECAUTIONS FOR SAFETY After unpacking the unit, examine for possible damage. Do not install in a place that might increase the
vibration of the unit. To avoid personal injury (with sharp edges), be careful when handling parts. Perform installation work properly according to the
Installation Manual.



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Incorrect installation may result in water leakage, electric shock or a fire.

When the air conditioner is installed in a small room, provide appropriate measures to ensure that in the event of a refrigerant leak the rooms does not exceed the critical level. Install the air conditioner securely in a location where the base can sustain the weight of the unit adequately. Perform the specified installation work to guard against an earthquake. If the air conditioner is not installed appropriately, accidents may occur due to the unit falling. If refrigerant gas has leaked during the installation work, ventilate the room immediately. If the leaked refrigerant gas comes in contact with fire, noxious gases may be generated. After the installation work, confirm that refrigerant gas does not leak. If refrigerant gas leaks into the room and flows near a fire source, such as a cooking range, noxious gases maybe generated. Electrical work must be performed by a qualified electrician in accordance with the Installation Manual. @@@@ Use only the specified wiring during the unit installation.

@@ Be sure to provide grounding. @@ Conform to the regulations of the local electric authority when wiring the c parts box. @@@@ Perform a specified installation work to guard against an earthquake. @@@@ Failure to do so may result in unit damage and possible human injury.

@@@@@ may be caused. @@ Do not place heavy objects on the indoor unit. @@@@ to prevent damaging the unit. @@@@ To be carried by two or more people. @@@@@@ Cut off slit section of the main unit of the installation pattern. @@@@@@ For details, consult your architect.

@@ This is to prevent possible vibration of the ceiling panels. 1. Cut and remove the ceiling material. 2. @@@@ Put washers at either side of the T-groove on the hanging bracket of the indoor unit in order to hang the unit.

Using a spirit level, check that all four sides are horizontal. (Horizontal positioned within 5 mm) Cut off the installation gauge from the installation pattern. Using the installation gauge check and adjust clearance between the indoor unit and the ceiling opening (1) (10 to 42 mm on each side). Ensure that the unit is level to the ceiling and within a distance of (2) 23 mm to 28 mm below. The installation gauge has details of how to use printed on it.

Note) Install the indoor unit so that the end part of opening does not come into contact with the drain socket piping. Hanging bolt (W3/8 or M10) Nut (W3/8 or M10) Nut (W3/8 or M10) (1) M10 flat washer (Accessory) (2) M10 flat washer (Accessory) (1) M10 washer supplied, all other material must be procured locally. (2) To ensure that the unit is mounted safely, the hanging bolt must be positioned just below the hanging bracket as shown in the diagram. Level vial (Horizontal: within 5 mm) Indoor unit Hanging metal Hanging bolt 23 to 28 mm (1) Indoor unit 10 to 42 mm (2) Installation gauge Ceiling board 1) 23 to 28 mm Ceiling board Installation gauge 2) 10 to 42 mm REQUIREMENT Before installation of the indoor unit be sure to remove the transportation cushion found between the fan and the bell mouth. Running the unit without removing the cushion may damage the fan motor. Installation of ceiling panel (Sold separately) Install the ceiling panel after completion of the installation of the indoor unit, including all piping and wiring. Install the ceiling panel as per the supplied Installation Manual. Check the installation dimensions of the indoor unit and the ceiling opening are correct and then install. REQUIREMENT Ensure the ceiling panel is mated to the ceiling surface or the indoor unit. If the panel and unit are not mated together this may result in the formation of dew condensation causing a possible water leak.

First remove the 4 corner caps from the ceiling panel and fit to the indoor unit. Be sure to remove the cushion for transportation between the fan and the bell mouth. 9 4 DRAIN PIPING WORK CAUTION Pipe material / Insulator and size The following materials for piping work and insulation are to be procured locally. Hard vinyl chloride pipe socket for VP25 Pipe material Hard vinyl chloride pipe VP25 (Outer diameter 32 mm (diam.)) Foamed polyethylene foam, thickness: 10 mm or more Install the drain piping so that the water drains effectively. Apply heat insulation to prevent dew condensation from forming. Incorrectly installed pipework may result in a water leak. Insulator REQUIREMENT Ensure insulating of the drain pipes and connecting parts on the indoor units. The drain pipe should have a downward slope of at least 1/100 and ensure there are no swells or blockages as this will cause abnormal sounds. The maximum traverse length of drain pipe is 20 m.

Provide support brackets at intervals of 1.5 to 2 m where necessary to prevent movement. Install the combined piping as shown in the illustration. Do not create an air purge in the pipework, as the water would leak from this point. As long as possible (10 cm) VP25 (Collective pipes) VP25 VP25 1. 5 m to 2 m Support bracket Heat insulator 1/100 or more downward Arched shape Trap NO GOOD Downward slope The hard vinyl-chloride pipe cannot be connected 1/100 or more directly to the drain pipe connecting port of the indoor unit. Drain pipe connecting port VP25 vinyl chloride pipe For connection with the drain pipe connecting port, (Hard socket) (Procured locally) Attached hose band Attached flexible hose ensure that the supplied flexible hose is fitted. Adhesive agent cannot be used for the pipe connecting port (hard socket) on the indoor unit. Be sure to use the supplied hose band for fixing, Socket for VP25 Soft socket Hard socket otherwise there is a risk of damage or water (Procured locally) leakage from the drain pipe connecting port. VP30 or more Adhesive agent prohibited Connection of flexible hose Insert the soft socket of the supplied flexible hose into the connecting port of the drain pipe. Align the supplied hose band to the pipe connecting port end, and tighten. max 45 NO GOOD Riser (Trap) OK max 45 Drain pipe connecting port (Transparent) 90 Bend REQUIREMENT Fix the soft socket with the supplied hose band, tighten at the upper position of the unit. The supplied flexible hose can bend up to a maximum of 45 Align the attached hose band to the end of hose, set the tightening position upward, and then tighten it. Flexible hose (Accessory) VP25 vinyl chloride pipe (Local procure) Indoor unit body Socket for VP25 vinyl chloride pipe (Local procure) 10 4 DRAIN PIPING WORK Check the draining After completion of drain piping. Check water drains away and that no water leaks from any of the connecting parts. At the same time check for any abnormal sounds from the drain pump. Ensure drainage is checked during cooling mode. Connection of drain pipe Connect the hard socket (Procured locally) to the hard socket side of the supplied flexible hose which has been installed.



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Connect the drain pipes (Procured locally) in turn to the connected hard sockets. **REQUIREMENT** Using an adhesive agent for vinyl chloride, connect the hard vinyl chloride pipes so that water does not leak. Allow sufficient time for the adhesive to set and harden.

@@board connector (CN34: Red) of the electric parts box. @@ Pour water referring to the figure. @@@@If water is poured vigorously, it is scattered inside of the indoor unit resulting in a cause of unit trouble. Attached heat insulator Heat insulator to be procured locally
Hard vinyl chloride pipe Air discharge area Drain pan Check panel Insert the leading part of the hose between the heat exchanger and the drain pan, and then bend it downward. Polyethylene hand pump for pouring water in drain pan Vessel Water (1500cc to 2000cc) 12 5 **REFRIGERANT PIPING AND EVACUATING** Flaring diam. meter size : A (Unit : mm) A Refrigerant piping 1. If the outdoor units are to be mounted on a wall, make sure that the supporting platform is sufficiently strong. The platform should be designed and manufactured to maintain its strength over a long period of time, and sufficient consideration should be given to ensuring that the outdoor unit will not fall. 2. Use copper pipe with 0.

8 mm or more thickness. 3. Flare nut and flare works are different from those of the conventional refrigerant. Take out the flare nut attached to the main unit of the air conditioner, and use it. Outer diam. of copper pipe 6.4 9.5 12.7 A R410A 9.1 13.

2 16.6 +0 - 0.4 R22 9.0 13.0 16.2 * In case of flaring for R410A with the conventional flare tool, pull it out approx. 0.5 mm more than that for R22 to adjust to the specified flare size. The copper pipe gauge is useful for adjusting projection margin size. **CAUTION IMPORTANT 4 POINTS FOR PIPING WORK 1.**

Remove dust and moisture from the inside of the connecting pipes. 2. Tight connection (between pipes and unit) 3. Evacuate the air in the connecting pipes using **VACUUM PUMP**. 4. Check the gas leakage. (Connected points) Tightening connection **CAUTION** Do not apply excessive torque. Otherwise, the nut may crack depending on the conditions. (Unit : Nm) Outer diam. of copper pipe Tightening torque 14 to 18 (1.

4 to 1.8 kgfm) 33 to 42 (3.3 to 4.2 kgfm) 50 to 62 (5.0 to 6.

2 kgfm) 6.4 mm (diam.) 9.5 mm (diam.) 12.

7 mm (diam.) Permissible piping length and heat They vary according to the outdoor unit. For details, refer to the Installation Manual attached to the outdoor unit. Flaring Insert a flare nut into the pipe, and flare the pipe. As the flaring sizes of R410A differ from those of refrigerant R22, the flare tools newly manufactured for R410A are recommended. However, the conventional tools can be used by adjusting projection margin of the copper pipe. B Projection margin in flaring : B (Unit : mm) Rigid (Clutch type) Outer diam. of copper pipe 6.4 9.5 12.

7 R410A tool used R410A 0 to 0.5 0 to 0.5 0 to 0.5 R22 (Same as left) (Same as left) (Same as left) Conventional tool used R410A 1.0 to 1.5 1.0 to 1.5 1.0 to 1.5 R22 0.

5 to 1.0 0.5 to 1.0 0.5 to 1.

0 Tightening torque of flare pipe connections Pressure of R410A is higher than that of R22. (Approx. 1.6 times) Therefore, using a torque wrench, tighten the flare pipe connecting sections which connect the indoor and outdoor units of the Flare at indoor specified tightening torque. unit side Incorrect connections may cause not only a gas leak, but also a trouble of the refrigeration cycle.

Flare at outdoor unit side Align the centers of the connecting pipes and tighten the flare nut as far as possible with your fingers. Then tighten the nut with a spanner and torque wrench as shown in the figure. Half union Flare nut Internally threaded side Use a torque wrench to tighten. Imperial (Wing nut type) Outer diam. of copper pipe 6.4 9.5 12.7 R410A 1.5 to 2.0 1.

5 to 2.0 2.0 to 2.5 R22 1.0 to 1.5 1.0 to 1.5 1.5 to 2.0 Externally threaded side Use a wrench to secure.

13 6 **EVACUATING** Packed valve handling precautions Open the valve stem until it touches the stopper. Once it is in contact with the stopper, refrain from applying any more force than is necessary. Securely tighten the valve stem cap in torque as follows: Gas side Gas side (12.7 mm (diam.)) (9.

5 mm (diam.)) 50 to 62 Nm (5.0 to 6.2 kgfm) 33 to 42 Nm (3.3 to 4.

2 kgfm) 14 to 18 Nm (1.4 to 1.8 kgfm) 14 to 18 Nm (1.4 to 1.8 kgfm) **AIR PURGE** Evacuate the air in the connecting pipes and in the indoor unit using vacuum pump. Do not use the refrigerant in the outdoor unit. For details, see the manual of vacuum pump. Use a vacuum pump Be sure to use a vacuum pump with counter-flow prevention function so that inside oil of the pump does not flow backward into pipes of the air conditioner when the pump stops. 1. Connect the charge hose from the manifold valve to the service port of the gas side packed valve.

2. Connect the charge hose to the port of vacuum pump. 3. Open fully the low pressure side handle of the gauge manifold valve. 4. Operate the vacuum pump to start for evacuating. Perform evacuating for about 35 minutes if the piping length is total 70 meters. (25 minutes for total 50 meters) (assuming a pump capacity of 27 liters per minute.) Then confirm that the compound pressure gauge reading is 101 kPa (76 cmHg). 5.

Close the low pressure side valve handle of gauge manifold. 6. Open fully the valve stem of the packed valves (both sides of Gas and Liquid). 7. Remove the charging hose from the service port.

8. Securely tighten the caps on the packed valves. Liquid side (6.4 mm (diam.)) Service port Hexagonal wrench is required.

Compound pressure gauge Pressure gauge 101kPa (76cmHg) Handle Lo Charge hose Manifold valve Handle Hi (Keep full closed) Charge hose Vacuum pump adapter for counter-flow prevention Packed valve at liquid side Vacuum pump Service port (Valve core (Setting pin)) Packed valve at gas side 14 7

ELECTRICAL WORK WARNING 1. Using the specified wires, ensure to connect the wires, and fix wires securely so that the external tension to the wires do not affect the connecting part of the terminals. Incomplete connection or fixation may cause a fire, etc. 2. Be sure to connect earth wire. (Grounding work) Do not connect the earth wire to gas pipe, city water pipe, lightning rod, or the earth wire of telephone. Incomplete grounding causes an electric shock. 3. For electric work, strictly follow the Local Regulation in each country and the Installation Manual, and use an exclusive circuit. Capacity shortage of power circuit or incomplete installation may cause an electric shock or a fire.

CAUTIONS This indoor unit has no power cord. If incorrect/incomplete wiring is carried out, it will cause an electrical fire or smoke. Be sure to install an earth leakage breaker that is not tripped by shock waves. If an earth leakage breaker is not installed, an electric shock may be caused. Be sure to use the cord clamps attached to the product. Do not damage or scratch the conductive core and inner insulator of power and inter-connecting wires when peeling them.



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Be sure to comply with local regulations on running the wire from outdoor unit to indoor unit (size of wire and wiring method etc.) Use the power cord and Inter-connecting cable of specified thickness, type, and protective devices required. REQUIREMENT Appliance shall be installed in accordance with national wiring regulations. For wiring of power supply of the outdoor units, follow the Installation Manual of each outdoor unit.

Perform the electric wiring so that it does not come to contact with the high-temperature part of the pipe. The coating may melt resulting in an accident. After connecting wires to the terminal blocks, provide a trap and fix wires with the cord clamp. Run the refrigerant piping line and control wiring line in the same line. Do not turn on the power of the indoor unit until vacuuming of the refrigerant pipes completes.

How to wire 1. Connect the connecting wire to the terminal as identified with their respective numbers on the terminal block of indoor and outdoor unit. H07 RN-F or 60245 IEC 66 (1.0 mm²) 2. Insulate the unsheathed redundant cords (conductors) with electrical insulation tape.

Process them so that they do not touch any electrical or metal parts. 3. For inter-unit wiring, do not use a wire jointed to another on the way. 15 Wire connection REQUIREMENT Be sure to connect the wires matching the terminal numbers. Incorrect connection causes a trouble. Be sure to pass the cables through the bushing of wiring connection port of the indoor unit. Keep a margin (Approx. 100mm) on a wire to hang down the electric parts box at servicing, etc. Remove the cover of the electric parts box by taking off the mounting screws (3 positions) and pushing the hooking section. (The cover of the electric parts box remains hanged to the hinge.

) Connect the indoor/outdoor connection wires to the terminal block of the electric parts box. (Do not apply tension to the connecting section of the terminal block.) Tighten the screws of the terminal block, and fix the wires with cord clamp attached to the electric parts box. (Do not apply tension to the connecting section of the terminal block.) Using the attached thermal insulation material, seal the pipe connecting port. Otherwise, dewing may be caused. Mount the cover of the electric parts box without pinching wires. (Mount the cover after cabling on the ceiling panel.) Screws Electric parts box P.C.

board Push Thermal insulation to wiring connecting port Screw Cover of electric parts box Earth screw Power supply terminal block 123 Hooking section Adhered surface Heat insulator A 123 Notched section Infrared signal receiver wiring (From ceiling panel) Cord clamp Heat insulator B Louver motor wiring (From ceiling panel) Wiring on the ceiling panel According to the Installation Manual for the ceiling panel, connect the connectors to the P.C. board in the electric parts box. Connect the sensor connector to CN201 (Blue), and the louver motor wiring connector to CN33 (White) on the P.C.

board, respectively. CN33 CN201 Cord clamp Draw and pass the sensor lead wire upper the louver motor wiring, and then close cover of the electric parts box. @@Remove a screw and then remove cover of the electric parts box. 2. Strip wire ends (10 mm).

3. @@@4. Connect the ground wires to the corresponding terminals. 5. Fix the wires with cord clamp. 6. @@@@ If the indoor unit and remote controller settings are different, the remote controller signal will not be accepted. 1. Setting the remote controller Remove the cover, and insert the batteries. Push the "CHECK" point and "MODE" button at once, for changing remote controller setting from "A" to "B".

(Priority is given to "A" setting.) 2. Setting the unit Remove the cover of the electric parts box by taking off the mounting screws (3 positions) and pushing the hooking section. @@board of the electric parts box. @@Select ON of No.4 of the selector switches (SW02). @@@@@@board of the electric parts box.

No.3 of the selector switches (SW02) is provided for the selector switch. Select ON of No. 3 of the selector switches (SW02). (OFF: setting without Auto Restart, ON: setting with Auto Restart) ON 1234 SW01 TS ADJUST ON B A ON 123 RESTART

FAN 1 FAN 2 ON OFF SW02 4 RC A/B 18 8 APPLICABLE CONTROLS To improve Cooling/Heating effect When only poor cooling/heating effect is obtained due to installation place of the indoor unit or construction of the room, the detection temperature of cooling/heating can be changed. Remove the cover of the electric parts box by taking off the mounting screws (3 positions) and pushing the hooking section. (The cover of the electric parts box remains hanged to the hinge.) There are the selector switches (SW01) on the P.

C. board of the electric parts box. The setting of the detection temperature can be changed by combining No.1 to No.4 switches of the selector switches (SW01).

Adjust the setting of the detection temperature according to the right table. COOL/DRY (C) 2 2 2 2 +4 +4 +4 +4 +2 +2 +2 +2 0 0 0 0 HEAT (C) 2 +4 +2 0 2

+4 +2 0 2 +4 +2 0 2 +4 +2 0 No.1 OFF ON OFF ON OFF ON OFF ON OFF ON OFF ON OFF ON OFF ON OFF ON No.2 OFF OFF ON ON OFF OFF ON ON OFF OFF ON ON OFF OFF ON ON No.3 OFF OFF OFF OFF ON ON ON ON OFF OFF OFF OFF ON ON ON ON No.4 OFF OFF OFF OFF OFF OFF OFF OFF ON ON ON ON ON ON ON ON ON ON Factory setting Setting at shipment ON 6H 1234 SW01 TS ADJUST ON B ON 6H SW02 19 9 TEST OPERATION

Test operation To test the system, push and hold RESET button for 10 sec. (There will be one short beep.) Check and Test operation Be sure to test the piping connections for gas leak. Check the flare nut connections, valve stem cap connections and service port cap connections for gas leak with a leak detector or soap water. Service port cap connection Valve stem cap connection Flare nut connections (Indoor unit) Flare nut connections (Outdoor unit) 10 Tools Tools Charge hose INSTALLATION / SERVICING TOOLS Applicable to R22 model Tools Applicable to R22 model Gauge manifold o o o Flare tool (clutch type) — — Gauge for projection adjustment Electronic balance for refrigerant charging Vacuum pump adapter o Torque wrench (nominal diam.

1/2, 5/8) Gas leakage detector : Newly prepared (They are special requirements for R410A, separated from those for R22.) o : Existing tools are available. For the details of the tools, refer to the Installation manual of the outdoor unit. 20 11 MAINTENANCE WARNING CAUTION Do not handle the buttons with wet hands as this will cause the risk of electric shock. Prior to maintenance, ensure the power supply is turned off. Cleaning of the air filter and other parts of the air filter involves dangerous work in high places, so be sure to have a qualified service person do it. Do not attempt it yourself. Cleaning of air filter Clean the air filters every 3 months.



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The performance of the air conditioner will degrade if the air filters are covered with dust. Clean the air filters as often as possible.

Air inlet grille Button 1 1 2 3 4 5 Open the air inlet grille. Slide the air inlet grille buttons to detach the air inlet grille from the main ceiling panel. Lower the grille slowly whilst holding. Take out the air filter. Push the extrusion of the air filter away from the grille and remove.

Cleaning with water or vacuum cleaner If dirt is heavy, clean the air filter using tepid water with a neutral detergent or just water. After cleaning with water, dry the air filter sufficiently in a shaded place. Mount the air filter. Close the air inlet grille. Close the air inlet grille, slide the button to locate into the ceiling panel fixing securely.

2 Strap to prevent falling Air filter Push 5 Air inlet grille 3 Button **Cleaning of air outlet louver** The air outlet louver can be removed to clean if necessary. 1 1 2 3 Remove the air outlet louver. Holding both ends of the air outlet louver, remove it by sagging the center downwards. Clean the air outlet louver with water. If dirt is heavy, clean the air outlet louver using tepid water with neutral detergent or just water. Mount the air outlet louver. First push in the one side, and insert the opposite side by sagging the center downwards. 1 2 Insert Insert in the louver sagging down the center downward. 2 3 Be careful to insert the louver in the correct direction. Insert the louver with the printed mark facing upwards, and the arrow on the louver pointing in the outward direction.

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