

Toshiba Carrier MCY-MAP0367HS-UL Installation Manual

Outdoor unit

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Troubleshooting

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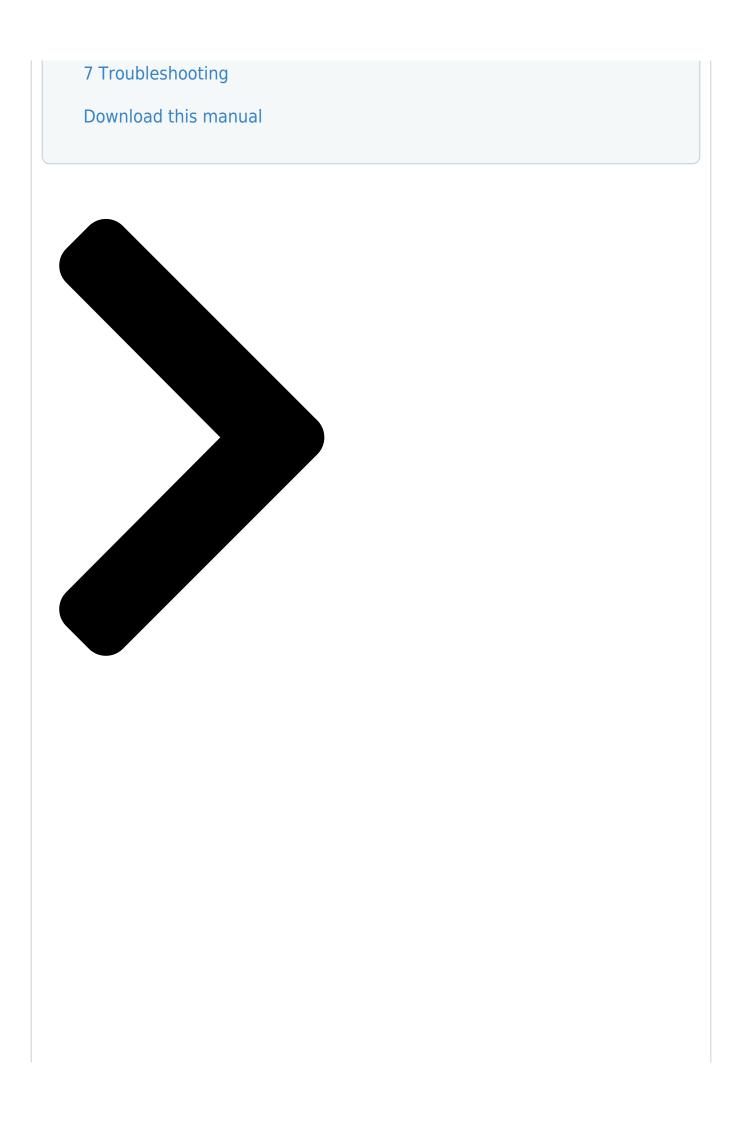
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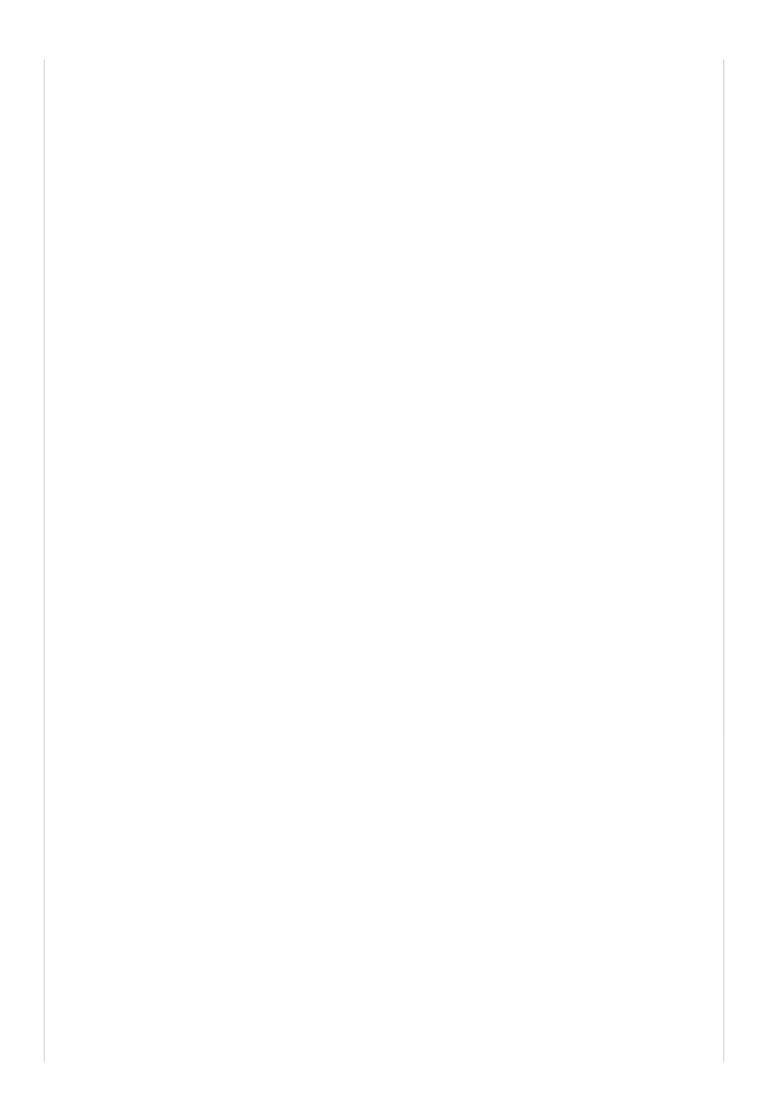
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AIR CONDITIONER (MULTI TYPE)

Installation Manual out**coor Shilba**

Model Gr**ammier** Heat Pump Model

MCY-MAP0367HS-UL

MCY-MAP0487HS-UL

MCY-MAP0607HS-UL

For OUTDOOR USE only Pour une UTILISATION EN EXTÉRIEUR uniquement Solo para USO EXTERIOR

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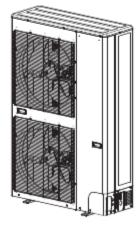


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Related Manuals for Toshiba Carrier MCY-MAP0367HS-UL

Heat Pump Toshiba Carrier MCY-MAP0367HS-UL Startup Manual 1ph heat pump (134 pages) Air Conditioner Toshiba MCY-MAP0367HS-UL Owner's Manual (56 pages) Heat Pump Toshiba ESTIA A09-01P Quick Reference Air to water heat pump (32 pages) Heat Pump Toshiba HWT-801H8W-E Installation Manual Air to water heat pump (24 pages) Heat Pump Toshiba HWT-601XWHM3W-ETR Service Manual Air to water heat pump (230 pages) Heat Pump Toshiba HWT-602S21SM3W-E(TR) Service Manual Air to water heat pump (300 pages) Heat Pump Toshiba ESTIA R32 HWT-401HW-E Manual Air-to water heat pump (92 pages) Heat Pump Toshiba HWT-601F21SM3W-E Installation Manual Air to water heat pump hydro unit -all in one type- (39 pages) Heat Pump Toshiba HWT-60 Installation Manual Air to water heat pump (40 pages) Heat Pump Toshiba Estia HWS-802XWHM3-E Owner's Manual Hydro unit air to water heat pump (58 pages) Heat Pump Toshiba HWS-802XWHM3-E Service Manual Air to water heat pump (169 pages) Heat Pump Toshiba HWS-803XWHM3-E Installation Manual Air to water heat pump (186 pages) Heat Pump Toshiba HWS-803XWHM3-E Owner's Manual Hydro unit air to water heat pump (58 pages) Heat Pump Toshiba HWS-803H-E Installation Manual Air to water heat pump (30 pages) Heat Pump Toshiba HWS-804XWHM3 series Quick Reference Manual Air to water heat pump series 4 (64 pages) Heat Pump Toshiba HWS-803H-E Quick Reference

(43 pages)

Summary of Contents for Toshiba Carrier MCY-MAP0367HS-UL

Page 1 AIR CONDITIONER (MULTI TYPE) Installation Manual Outdoor Unit For OUTDOOR USE only Pour une UTILISATION EN Model name: EXTÉRIEUR uniquement Solo para USO EXTERIOR Heat Pump Model MCY-MAP0367HS-UL MCY-MAP0487HS-UL MCY-MAP0607HS-UL English Installation Manual Français Manuel d'installation Español Manual de instalación...

<u>Page 2</u> – 1 – Installation Manual Installing, starting up, and servicing air--conditioning equipment can be hazardous due to system pressures, electrical components, and equipment location (roofs, elevated structures, etc.). ADOPTION OF NEW REFRIGERANT Only trained, qualified installers and service mechanics should install, start--up, and service this equipment. Untrained personnel can perform basic maintenance functions such as replace the indoor unit

air filter.

<u>Page 3</u> Installation Manual Precautions for Safety Electrical wiring • Only a certified installer or qualified service person is allowed to carry out the electrical work of the air conditioner. • When connecting the electrical wires, repairing the electrical parts or undertaking other electrical jobs, wear gloves to provide protection for electricians and from heat, insulating shoes and clothing to provide protection from electric shocks.

<u>Page 4</u> – 3 – Installation Manual Installation of R410A Air Conditioner CAUTION This air conditioner adopts the HFC refrigerant (R410A) which does not deplete the ozone layer. R410A Air Conditioner Installation • To prevent mixing of refrigerant or refrigerating oil, the size of the main unit's charge port or installation tool's •...

<u>Page 5</u> Installation Manual Installation Conditions [] Installation location WARNING [] Before installation Install the outdoor unit properly in a location that is durable enough to support the outdoor unit's weight. Follow these steps prior to installation. Insufficient durability may cause the outdoor unit to fall, which may result in injury. Airtight test This outdoor unit has a weight of about 311 lbs (141 kg).

<u>Page 6</u> – 5 – Installation Manual 4) Consider the wind direction during the operational season of the air conditioner, and install the unit so that the CAUTION discharge port is set at a right angle relative to the wind direction. 1. Install the outdoor unit in a location where the discharge air is not blocked. 2.

<u>Page 7</u> Installation Manual [] Necessary space for installation Obstacles in both front and rear of unit Serial installation in front and rear (Unit: in (mm)) Open above and to the right and left of the unit. Open above and to the right and left of the unit. The height of an obstacle in both the front and rear of the The height of an obstacle in both the front and rear of the Obstacle at rear side...

<u>Page 8</u> – 7 – Installation Manual Refrigerant Piping • As shown in the figure below, install vibration-proof rubber pads to directly support the bottom surface of the fixing leg. * When installing the foundation for an outdoor unit with downward piping, consider the piping work. Correct Correct [...

Page 9 Installation Manual [] Refrigerant piping connection * In case of flaring for R410A with the conventional flare tool, pull the tool out approx. 0.02" (0.5 mm) more than that for R22 to adjust it to the specified flare size. The copper pipe gauge is useful for adjusting the projection margin size. CAUTION TAKE NOTE OF THESE 4 IMPORTANT POINTS BELOW FOR PIPING WORK REQUIREMENT...

<u>Page 10</u> – 9 – Installation Manual [] Selection of pipe materials and size [] Selection of refrigerant piping Selection of pipe material Material: Phosphorus deoxidation seam-less pipe Outdoor unit Capacity code of indoor and outdoor units • For the indoor unit, the capacity code is decided at each capacity rank. •...

<u>Page 11</u> Installation Manual Allowable length / height difference of the refrigerant piping Connecting pipe size of indoor unit Capacity rank Gas pipe Liquid pipe Branching section Indoor unit 007 to 012 type \emptyset 3/8" \emptyset 1/4" \Box connecting Outdoor unit Indoor unit pipe 015 to 018 type \emptyset 1/2"...

<u>Page 12</u> – 11 – Installation Manual [] Airtight test NOTE Before starting an airtight test, tighten the spindle valves further on the gas side and liquid side. Pressurize the pipe with nitrogen gas charged from the service port to the design pressure to conduct the airtight test. If the environmental temperature changes from the moment pressure is applied to 24 hours after that, the pressure After the airtight test is completed, evacuate the nitrogen gas.

Page 13 Installation Manual [] Air purge [] Adding refrigerant After vacuuming is complete, exchange the vacuum pump with a refrigerant canister and start the additional charging of NOTE refrigerant. For the air purge at installation time (discharge of air in the connecting pipes), use the "Vacuum pump method". Calculation of additional refrigerant charge amount •...

<u>Page 14</u> – 13 – Installation Manual [] Full opening of the valve Charging of refrigerant • Keep the outdoor unit's valve closed, be sure to charge the liquid refrigerant into the service port at

the liquid side. Open the valves of the outdoor unit fully. •...

Page 15 Installation Manual Electric Wiring [] Communication Wiring Specifications Communication Wiring Design WARNING Communication Wiring Summary The equipment shall be installed in compliance with NEC and local codes. Capacity shortages of the power circuit or an incomplete installation may cause an electric shock or fire. Outdoor unit CAUTION •...

<u>Page 16</u> – 15 – Installation Manual Group control through a remote control Keep the rule of the following tables about size and length of communication wiring. Group control of multiple indoor units (8 units) through a single remote control Central control Indoor unit No.1 No.2 No.3...

<u>Page 17</u> Installation Manual Power supply wire connection 4. Connect the power supply wires and the communication wires to each terminal blocks. 1. After removing the front panel, remove the electrical control parts cover and the front pipe cover. Interface PC board Terminal block (Communication) Communication wires...

<u>Page 18</u> – 17 – Installation Manual Address Setting Communication wire connection Connect the communication wires to the communication wire terminals from under the electrical control box, and secure them with the communication cable clamps. On this unit, it is required to set the addresses of the indoor units before starting the air conditioner. Set the addresses following the steps below.

Page 19 Installation Manual [] Automatic address setting REQUIREMENT No central control (single refrigerant line): go to Address setting procedure 1 Central control of 2 or more refrigerant lines: go to Address setting procedure 2 • When 2 or more refrigerant lines are controlled as a group, be sure to turn on all the indoor units in the group before setting the addresses.

<u>Page 20</u> – 19 – Installation Manual Address setting procedure 2 Switch settings for a line (system) address on the interface P.C. board on the outdoor unit (: switch ON, : switch OFF) Set a system address for each system using SW 13 and 14 on the interface P.C. board on the outdoor unit of each system.

<u>Page 21</u> Installation Manual In all the outdoor units connected to the central control, make sure the relay connector of the interface Header unit interface P.C. board P.C. board "CN10" has not been connected to the "CN02". NOTE SW04 SW05 SW15 D600 D601 D602 D603 D604 If you connect a relay connector "CN10"...

<u>Page 22</u> – 21 – Installation Manual Switch setting (setting example when controlling 2 or more refrigerant lines centrally) [] Manual address setting using a remote control Outdoor units (setting manually) This procedure should be used if the indoor unit wiring is completed and the outdoor unit wiring has not been started. *The items in bold font must be set manually.

<u>Page 23</u> Installation Manual [] Using the remote control to How to determine an indoor unit position if review the address and position the unit address is known. CODE No. of an indoor unit This instruction works for group controlled units only. DATA SETTING UNIT No.

<u>Page 24</u> – 23 – Installation Manual [] How to change an indoor unit UNIT LOUVER How to use a single remote control to check all Push the left end of the "UNIT LOUVER " the indoor unit address when 2 or more button to review/confirm the revised addresses.

Page 25 Installation Manual Test Run [] Resetting to factory default address Method 1 Follow steps 1 through 11 by using a direct wired remote control (page 22) to reset the line (system) address, indoor CAUTION unit addresses and group addresses to "0099". TEST •...

<u>Page 26</u> – 25 – Installation Manual When a test run is executed by using the Collective test operation Push and hold SW04 for more than 10 seconds. Stop operation interface P.C. board on the outdoor unit Start operation Set the rotary switches on the interface P.C. 7-segment display board of the header unit back: Set the rotary switches on the interface P.C.

<u>Page 27</u> Installation Manual Troubleshooting Check code Indication on 7-segment display on the outdoor unit Check code name In addition to the CODE No. on the remote control of an indoor unit, you can diagnose trouble of an outdoor unit by Auxiliary code checking the 7-

segment display on the interface P.C.

<u>Page 28</u> - 27 - Installation Manual Warnings on refrigerant leakage Concentration Limit Check Important The room in which the air conditioner is to be installed requires a design that in the event of a NOTE 2 : refrigerant gas leak, its concentration will not exceed The standards for minimum room volume are as follows.

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This manual is also suitable for:

Carrier mcy-map0487hs-ulCarrier mcy-map0607hs-ul