

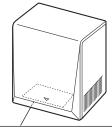
876HE3901

## **Jet Towel** Hand dryer

#### **MODEL**

## JT-S1AP-W-NA JT-S1AP-S-NA

Unit colour -W (White) -S (Silver)



Location of Name plate indicating Model name and Electrical ratings

Input Power: 120 Vac Single-phase Indoor use only

## **INSTALLATION MANUAL**

## For Dealers and Installers

Read the manual thoroughly before beginning installation to ensure the unit is installed safely and correctly. Installation shall comply with local requirements and Electrical Code and be performed by the dealer or a qualified professional in accordance to local jurisdiction.

#### The "INSTRUCTION MANUAL" is for the customer. Be sure to hand it to the customer.

## INDEX

Safety Precautions2
Pre-installation checks3
■ Checking the installation environment
■ Checking the unit, accessories and items required for installation
Names of parts and external dimensions 2
Installation conditions5
■ Required space for installation5
Suitable walls5
■ Making the unit easier to use5
Installation method 6 - 12
Checking after installation 12
■ Removing the front cover after installation12
Test Run13
Instructions given to customer 13

# **Safety Precautions**

• The dangers arising from improper handling and the extents of the dangers are classified and explained as shown below.



The following may lead to death or serious personal injury if handled incorrectly.



- Do not install in locations where they may be leakages of combustible gas. This may cause fires.
- Do not install in locations where salt damage may occur or where corrosive, neutral or reductive gases are present. This may cause malfunctions.
- Do not scratch, damage, process, excessively bend, pull, twist or bundle the power cable.

Please also refrain from placing heavy objects onto it or trapping it.

Failure to do so may damage the power cable, causing fires or electric shocks.



instructions.



disassemble

Do not attempt any disassembly or modification of the unit that is not expressly stated in this manual. Doing so may result in fires, electric shocks or injuries.



in the baths/ shower room. Do not use in a hot location such as a shower room, where condensation may form on the unit or where water may splash directly onto the unit.

This may cause electric shocks or malfunctions.

- Wiring work shall be done by a licensed electrician in accordance with electrical and building codes.
  - Incorrect wiring work may cause electric shocks or fires.
- Use single-phase 120 Vac power. Using the incorrect power supply may cause fires, electric shocks or malfunctions.
- Use delicated wiring for the power source.

Using this unit with other devices on the same branch circuit may cause abnormal heat, which may cause fires.

- The unit shall be installed in accordance with appropriate wiring regulations in accordance to local jurisdiction.
- A means for disconnection must be incorporated in the fixed wiring in accordance with wiring rules.
- The disconnecting device shall be of all-pole disconnection.
- This hand dryer must have its own dedicated branch circuit using AWG #12 or #14 copper wire.



## Caution

The following may lead to injuries or damage to property if the unit is handled incorrectly.



Do not install when the unit (power cable) is energized.

Doing so may result in electric shocks.



Important! Follow instructions. Install securely in a location strong enough to support the weight of the

Injuries may be caused if the unit falls off the wall.

Wear gloves when installing the unit. Not doing so may result in injuries.

## **Pre-installation checks**

# **Marning**

Input Power: 120 Vac Single-phase is used.

Using the incorrect power supply may cause fires, electric shocks or malfunctions.

## Checking the installation environment

Do not install the unit in the following types of locations.

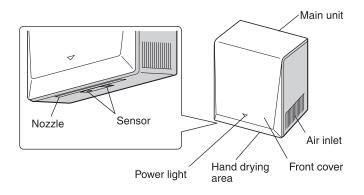
(This may cause malfunctions.)

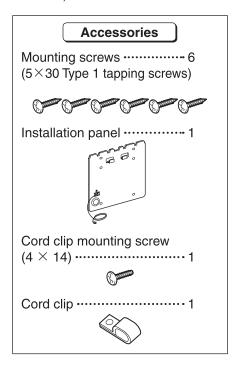
- Outdoors
   Locations where the temperature could be lower than 32°F (0°C).
- Locations where there is a lot of dust.
   Locations where the temperature could be higher than 104°F (40°C).
- Locations where there is a lot of condensation.
   Locations where salt damage may occur.
- Locations where the unit is in direct or strong sunlight (may cause the sensor to malfunction).
- In vehicles (including ships and airplanes)
- Locations where corrosive, neutral or reductive gasses are present.
   (This may shorten the working life of the unit and/or cause malfunctions.)
- Near food or tableware
   Locations where the unit may come into direct contact with water.
- Kitchens
  - (Where there is a risk of water splashing.)
- Rooms that have a sterilization basin, swimming pools and baths.

## ■ Checking the unit, accessories and items required for installation

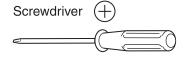
Unit

\* Shaded areas in the figure indicate antibacterial material (excluding outlet nozzle areas).





#### Recommended tools and hardware to be used for installation



Pen

To mark position to insert metal screw plugs in the wall.

Prepare if required

Single wire for internal wiring

(Cable core: between AWG#12 and AWG#14)

Screw anchor ····· 6

Wall reinforcement



Not needed if the internal wiring is complete.

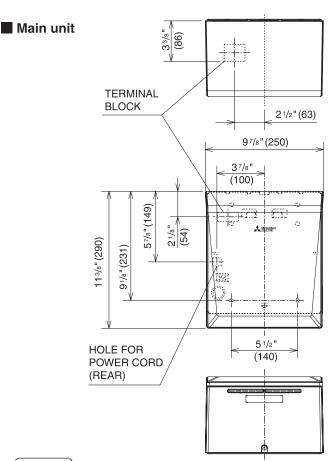


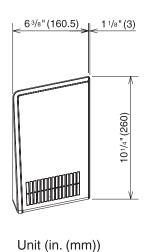
W Use on concrete walls



※ Reinforces walls made of materials other than concrete.

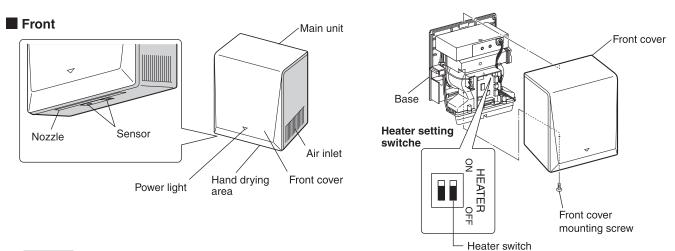
# Names of parts and external dimensions





NOTE

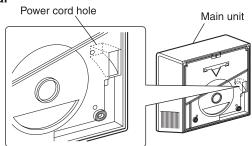
• Confirm the details in the "Installation conditions" (Page 5).



NOTE

- Prevent scratching on the front cover. Rust may form on the scratched area.
- Please refer to "Heater ON/OFF setting" (Page 11) while turning the heater on/off.
- The unit cannot change the air speed.

#### Rear



## Installation conditions

## Required space for installation

Caution Be sure to secure at least the distances listed in the righthand table from walls, flammable (combustible) materials and so on.

#### Suitable walls

- When installing on a wall, select a wall with a flat and even surface.
- When installing on a concrete wall, use commercially available metal screw plugs.
- Reinforce any walls made with materials other than concrete before installation.

## Left side Right Front side Air inlet Main unit Below side

Top side

	Unit (in. (mm))
Location	Isolation distance
Above	5 15/16" (150)
Left	3 15/16" (100)
Right	3 15/16" (100)
Front	Open
Below	Open

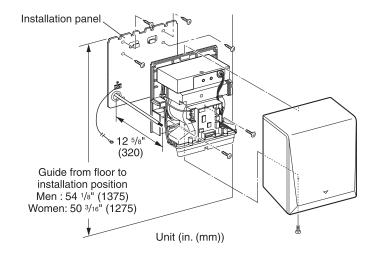
## Making the unit easier to use

 Refer to the "Installation position guide" and "Installation diagram" while installing the unit in order to make it easier to use.

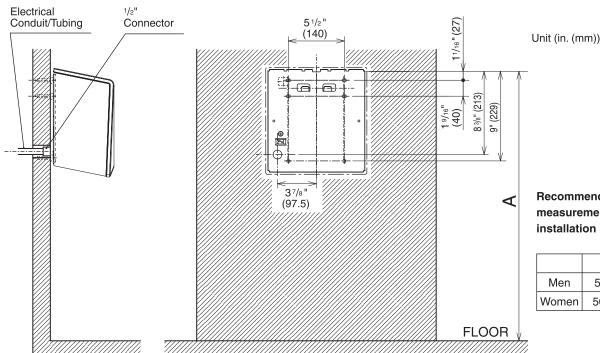
If it is installed at a low position, it may become wet when the sink is being washed. If water enters the unit, it may cause damage or cause the acoustic materials to absorb water and allow bacteria to grow.

- Do not install the main unit in locations such as those near mirrors or walls. This may lead to water drops flying to undesirable areas during the drying of the hands.
- Do not install the main unit in locations such as those near food or eating utensils. This may lead to water drops flying to undesirable areas during the drying of the hands.
- Avoid locations where people or doors might bump into the unit.

#### Installation position guide



#### Installation diagram



Recommended A measurements during installation

Unit (in. (mm))

	А
Men	54 <sup>1</sup> /8" (1375)
Women	50 3/16" (1275)

## Installation method

#### For confirmation

- ☐ Input Power: 120 Vac Single-phase power is being used (using the incorrect power supply may cause fires, electric shocks or malfunctions).
  - The ground fault circuit interrupter is attached (not attaching a ground fault circuit interrupter may result in electric shocks).
- ☐ A single wire (AWG #12 or #14 copper wire) is being used for the power cable.

# $\triangle$

# Warning.

- This hand dryer must have its own independent branch circuit using AWG #12 or #14 copper wire.
- Use 120 Vac power.

Using the incorrect power supply may cause fires, fumes, electric shocks or malfunctions.



 Do not install when the unit (power cable) is electrified.

Doing so may result in electric shocks.

- 1. Confirm that the severing of wires during fixed wiring work is in accordance with wiring regulations.
  - Follow the illustration on the right for the internal wiring.
  - The power cable forces out the main unit and does not allow proper installation if the conduit tube is not used.
- Electrical Conduit/Tubing Connector 51/2" (140)

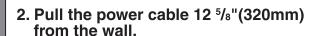
  Terminal block (140)

  Power cord hole (rear) (97.5)

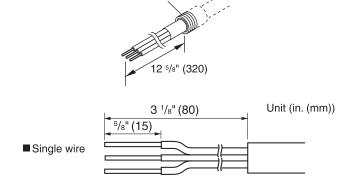
  Unit external shape

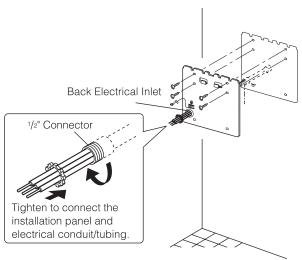
  Unit (in. (mm))

Back Electrical Inlet



- 3. Remove <sup>9</sup>/<sub>16</sub>"(15mm) of wire sheath from the end.
- 4. Position the installation panel on wall so that the back electrical inlet can be connected to the pre-installed electrical conduit/tubing with the 1/2" (16mm) connector.





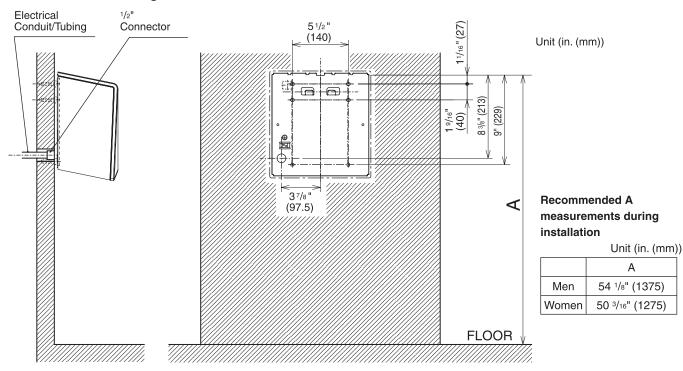
## Fixing the installation panel

Fix the installation panel onto the wall with 4 accessory mounting screws  $(5\times30)$ .

- The "Installation position guide" illustrated on the right is recommended.
- When installing on a wall, select a wall with a flat and even surface.
- When installing on a concrete wall, use commercially available metal screw plugs.
- Reinforce any walls made with materials other than concrete before installation.

# Installation panel Mounting screws (5×30) (Accessories) Ground wire Power cable

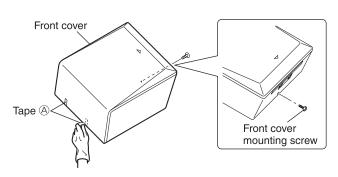
#### **■** Installation diagram

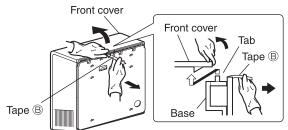


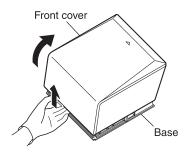
#### NOTE

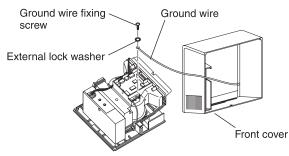
- Prevent scratching on the front cover. Rust may form on the scratched area.
- 1. Remove the tape (A), then remove the front cover mounting screw (1).
- 2. Disengage the tab of the upper part of the front cover.
  - ① Pull the tape <sup>®</sup> on the installation panel to remove the front cover from the hook section of the base.
  - 2 Remove the front panel from the base.
  - ③ Remove tape ⑤ from the installation panel.
- 3. Remove the ground wire fixing screw (1) from the base and remove the front cover.

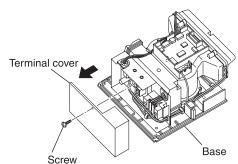
- 4. Remove the terminal cover mounting screw (1) and remove the terminal cover.
  - \* Be careful not to lose the cord bushing.





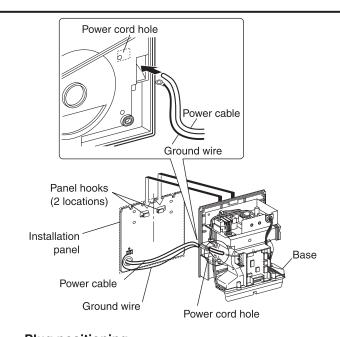


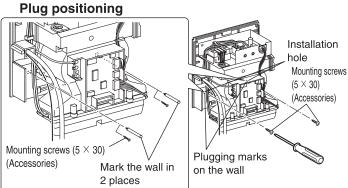




## Fixing the base

- 1. Push the power cable for exclusive wiring through the power cord hole at the rear of the base.
- 2. Engage the base with the 2 hooks on the installation panel.
- 3. Check that the 2 hooks on the front cover are hooked in the base.
- 4. Check that the power cable is not trapped behind the base.
- 5. While lightly pressing the base against the wall, fix it with the accessory mounting screws (5x30) (2).
  - To install the unit on a concrete wall, before fixing the base, embed commercially available wall plugs into the wall with the following procedure.
    - 1 Temporarily put the base on the installation panel.
    - ② Mark the position of the hole in the wall through the mounting screw hole with a pen.
    - ③ Remove the base and embed the commercially available wall plugs into the marked positions.
  - Reinforce any walls made with materials other than concrete before installation.





# **⚠** Warning-

■ Input Power: 120 Vac Single-phase is used.

Using the incorrect power supply may cause fires, electric shocks or malfunctions.

**⚠** Caution-

 Make sure that the main unit does not fall as the base is not attached to the wall with screws.
 Injuries may be caused if the unit falls off the wall.

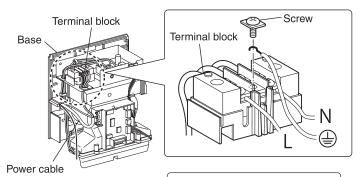
Wire the power cable to the terminal block.

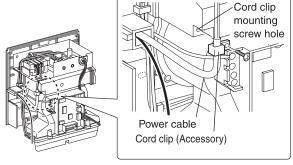
1. Remove 1/2"(12mm) (single wire).

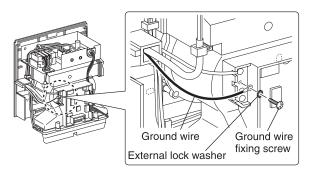
3 ¹/<sub>8</sub>" (80) Unit (in. (mm))

■ Single wire

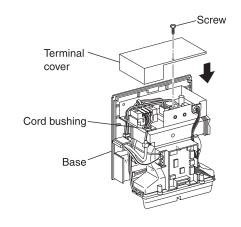
- 2. Fix the power cable to the terminal block.
  - When stranded wire is used for the power cable, attach an insulated ring tongue terminal using an appropriate tool.
  - Proper torque is 11 13 lbf·in(1.2 1.5N·m)
- 3. Fix the ground wire to the terminal block.
  - Proper torque is 11 13 lbf·in(1.2 1.5N·m)
- 4. Check that the power cable and ground wire are securely fixed to the terminal block.
- 5. Fix the power cable and ground wire using the accessory cord clip, mounting screw (4x14) and cord clip mounting screw hole.
  - Proper torque is 1.2N⋅m
  - Clip the sheathed portions of the power cable and ground wire with the cord clip.
- 6. Screw the ground wire to the installation panel of the base.
  - Proper torque is 11 lbf⋅in(1.2N⋅m)
- 7. Check that the ground wire is securely fixed to installation panel of the base.







- 1. Pass the power cable through the cord bushing and fix it to the base again with the terminal cover mounting screw.
- 2. Check that the power cable and wires are not pinched anywhere.



6

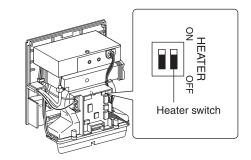
## Checking the setting

- Customer is not allowed to change the setting. The installer should change the initial setting if necessary.
- The initial setting is as shown in the table below.

#### Initial setting

Туре	Heater
JT-S1AP	ON

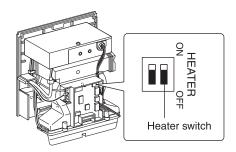
- The unit cannot change the air speed.
- 1. Check the heater setting.
  - To change the heater setting, refer to "Heater ON/OFF setting".



## ■ Heater ON/OFF setting

- 1 Turn the heater switch "ON".
- The heater may not operate during continued use as there is the danger of scalding when the temperature of the warm air rises.

The air may not feel warm when the room temperature is low (20°C or below).



## Attaching the front cover

NOTE

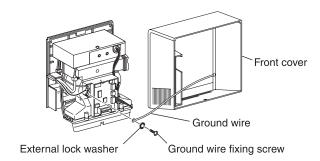
- Prevent scratching on the front cover. Rust may form on the scratched area.
- 1. Fix the ground wire removed in step 2 to the base again.

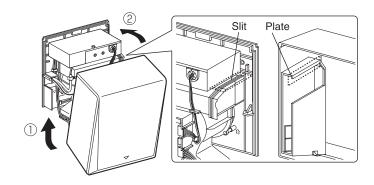
### 2. Attach the front cover to the base.

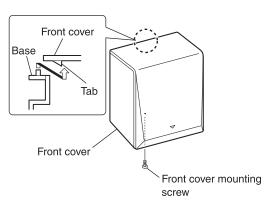
- ① Fit the front cover to the bottom of the base.
- ② Align the plate inside the front cover with the slit on the right of the base and mount the front cover.
- Do not push the front cover unless the plate inside it is aligned with the slit on the right of the base.

Doing so may damage the product.

- 3. Fix the front cover with the front cover mounting screw (1).
  - The screw hole is on the bottom.
- 4. Check that the tab of the front cover is securely engaged.







# Checking after installation

• When finishing the installation work, check the items in the table below again. Be sure to solve a problem if any.

(Otherwise the expected performance and safety cannot be ensured.)

#### Points to be checked

	Item	Description	Check
1	Wiring	Check that the wiring conforms to the extension rules of the technical standards for electrical equipment.  (If not, fire may occur.)	
2	Fixation of the main unit	Check that the main unit is securely fixed on a strong surface. (If not, personal injury may occur or the product may fail.)	
3	Power supply voltage	Check that the voltage is 120 Vac. (If not, the product may fail.)	
4	Grounding	Check that JT-S1AP is securely grounded. (If not, the product may malfunction or fail.)	
5	Setting	Check that the setting is correct. Customer is not allowed to change the setting. Be sure to check the operation if the initial setting is changed. The initial setting is heater "ON".	

## Removing the front cover after installation



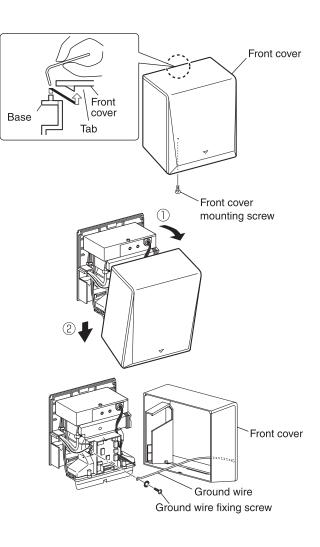
## **Caution**

 Do not install when the unit (power cable) is electrified.

Doing so may result in electric shocks.

#### NOTE

- Prevent scratching on the front cover. Rust may form on the scratched area.
- 1 Remove the front cover mounting screw (1) on the bottom of the main unit.
- 2 Insert a thin stick or the like into near the tab of the upper part of the front cover and disengage the tab.
- **3** Remove the ground wire fixing screw (1) from the base and remove the front cover.
- 4 Perform checking after installation.
  - Check the "Points to be checked".
- **5** After inspection, attach the front cover in the reverse order.



## **Test Run**

	Step	What to check for	Check
1	Check the power supply voltage	Is the proper power being used? ( Single-phase 120V Vac ) Incorrect power supply may cause malfunctions or low wind power.	
2	Turn the ground-fault circuit interrupter "ON"	Are any lights in the display on?	
3	Insert your hands to check if air is being blow.	Is the air blowing?	
		Is warm air blowing? (Even if the heater switch is "ON", the heater may not operate if it is used continually.)  ** As the heater is a simple heater, the air may not feel so warm if the room temperature is low (20°C or below).	
4		Is the unit mounted securely without any vibration or abnormal noises?	

# Instructions given to customer

- Explain how to use the jet dryer to customer according to the instruction manual. Especially request customer to observe the important safety instructions in "Safety Precautions".
- Provide customer with this installation manual after completing installation.
- If user is not there, give instructions to caretaker.

## MITSUBISHI ELECTRIC CORPORATION

Tokyo Building 2-7-3, Marunouchi, Chiyoda-ku, Tokyo 100-8310, Japan