

**SAFETY INSTRUCTION / 安全指引**

1. Disassembly and repair should not be done unless carrying by a specialized technician (cause of fire, electric shock and injury). Please consult your MITSUBISHI ELECTRIC dealer or service center.
2. The product should not expose to water or get wet by pouring water on (cause of short circuit and electric shock).
3. Disconnect the power or break the cutout on board when cleaning is required, and do not pull its plug with wet hand (cause of electric shock and injury).

1. 不論任何情況，不應對產品進行修改，產品拆卸及維修必須交由專業技術人員負責（以免引起火警、觸電或受傷）。如有疑問，請向三菱電機經銷商或維修服務中心查詢。
2. 不應讓本機沾水，或被水潑濕（以免引致短路或觸電）。
3. 需要清潔時，請先切斷電源或關上保險開關掣。切勿以沾濕的手拔除插頭（以免觸電或受傷）。

**CAUTION / 注意事項**

1. The ventilating fan should not be installed in high humidity area because electric shock or injury may result.
2. Power supply should not exceed rated voltage.
3. The ventilating fan should not be used in where is inflammable area that may cause fire.
4. Please check the assembly parts before and after installation.
5. Please observe technique of wire installation and regulation of interior wiring ( poor connecting and fault wiring may cause danger of fire).
6. When it shall not be operated for a long time, please disconnect the plug or break the cutout on board.
7. Do not use the fan in the back flow of gases into the room.
8. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
9. Children should be supervised to ensure that do not play with the appliance.
10. If the ventilating fan can't operate or the supply cord is damaged, it must only be repaired by your MITSUBISHI ELECTRIC dealer or service center.

1. 本抽氣扇不應安裝於極度潮濕的地方，否則可能引致觸電或受傷。
2. 電源供應不得超過額定電壓。
3. 不應在易燃地方使用本抽氣扇，否則可能引起火警。
4. 安裝前後，請檢查各個裝配件。
5. 安裝時請遵照電線安裝方法及室內電線安裝守則（若電線接駁不善或接駁錯誤均可能引起火警）。
6. 若長期不用本機，請拔除電源插頭，或在配電盤切斷電流。
7. 不要把抽氣扇作為把氣體引入房間之用。
8. 此電器不是設計為以下人士(包括兒童)使用：體能、知覺或精神有障礙人士，又或欠缺知識及經驗人士。以上人士需得到其監護人的指導及監督，才可使用此電器，以保障其安全。
9. 兒童需受到監管以確保其不會玩弄此電器。
10. 若無法啟動抽氣扇或電源線受損，不應自行修理，必須送交三菱電機經銷商或維修服務中心修理。



窗口式抽氣扇

VENTILATING FAN

型號 / MODEL: V-20EWG□

**APPEARANCE**

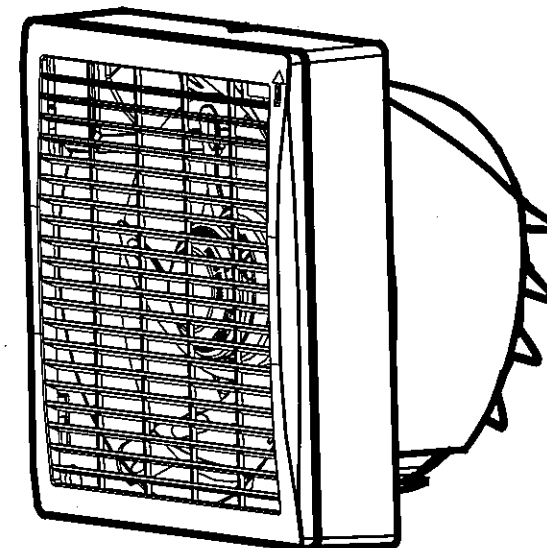
**Attachment parts**

附件

Orifice Cap A (top) : 1 pc  
面蓋夾 A (頂部): 1個



Orifice Cap B (under) : 2 pcs  
面蓋夾 B (底部): 2個



註：□ 及生產年份的代表字母

REMARK: □ IS THE ALPHABET OF DEVELOPEMENT NUMBER

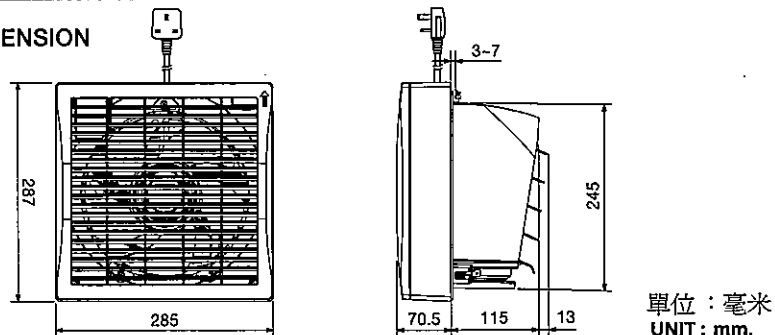
FOR SAFETY, PLEASE READ THIS MANUAL PRIOR TO INSTALL AND OPERATING

安裝及操作前請先細閱本說明書，以確保安全。

# 1. OUTSIDE DIMENSION AND SPECIFICATION / 外形尺寸及規格

## 1. OUTSIDE DIMENSION

### 1. 外形尺寸



單位：毫米  
UNIT: mm.

## 2. SPECIFICATION

### 2. 規格

Model Name 型號	Rated Voltage 電壓 (V) / (伏特)	Frequency 頻率 (Hz) / (赫茲)	Power Consumption 耗電量 (W) / (瓦特)	Air Delivery 風量 (m <sup>3</sup> /hr) / (立方米/小時)	Noise Level 噪音 (dB) / (分貝)
V-20EWG□	220	50	18	450	40
	230	50	19	460	42
	240	50	22	460	42

# 2. INSTALLATION / 安裝方法

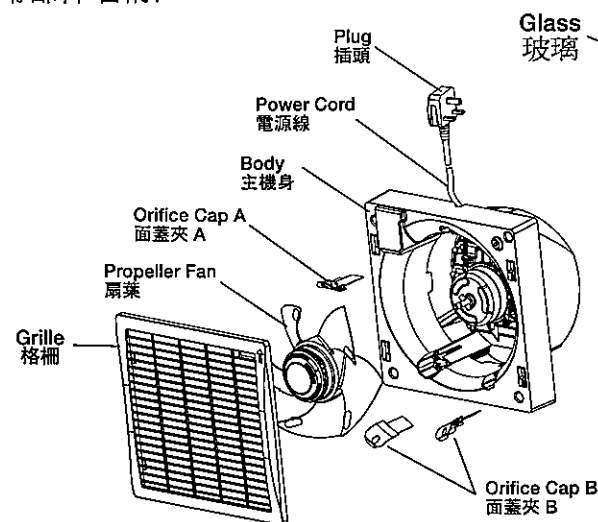
## INSTALLATION PRECAUTION

1. Install the ventilating fan in a room temperature that is not over 40°C.
2. The ventilating fan should not expose to water or very humid area because electric shock or injury may result.
3. Do not install the ventilating fan on a movable window.
4. To prevent the contact with the blade, install the ventilating fan above 2.3 m from the floor.
5. Do not attach the unit to a ceiling (attaching to glass only). (If the unit falls, it may result in injury.)
6. Attach the unit to glass with a thickness of 3 to 7mm. (Glass may be broken or installation of the unit may fail.)
7. Precautions must be taken to avoid the back-flow of gases into the room from the open flue of gas or other open-fire appliances.
8. Do not install the unit in a place subject to direct flame or in a place where soot or organics solvents are present. (Electric shock or failure may result.)
9. Electrical work carry out safely and securely by qualified personnel in accordance with the regulation of each country.  
(Bad connection and mistaken electrical work cause an electric shock or a fire.)

### 安裝前注意事項：

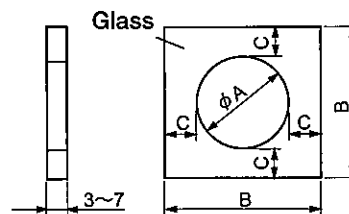
1. 安裝本抽氣扇的地方，其室溫不應高於40°C。
2. 本抽氣扇不應沾水，或安裝於極度潮濕的地方，否則可能引致觸電或受傷。
3. 請勿把本抽氣扇安裝於可活動的窗戶上。
4. 建議把本抽氣扇安裝於離地面 2.3 米之處，以避免觸碰扇葉。
5. 切勿安裝在天花板上（只適宜安裝在玻璃上）。（以免抽氣扇墜下及造成身體損傷）
6. 進行安裝時，請將抽氣扇安裝在 3 至 7 毫米厚的玻璃上。（否則，玻璃可能破裂或不能安裝）
7. 必須注意避免氣體從敞開的氣道或其他的明火設備迴流進室內。
8. 切勿安裝在可能直接觸及火焰、油煙或有機溶劑的地方。（以免導致觸電和機件故障）
9. 有關電工安裝需由專業資格的人員安全地進行安裝並符合每個國家的相關法例。  
(不良的安裝或錯誤的電動工程可導致觸電或火警)

## 零部件名稱/PART NAME



## How to install / 如何安裝

### Preparing installation / 安裝準備



單位：毫米  
UNIT: mm.

	A	B	C
247-250	Min. 330	Min. 40	
247-250	330 以上	40 以上	

This table is maximum dimension of glass for installation when we assumed maximum velocity wind at 65m/s.  
此表格為假設最大風速為每秒65米時，用作安裝的玻璃最大尺寸

Thickness 厚度	Glass dimension for installation 用作安裝的玻璃尺寸	
	Min / 以上	Max / 最大
3	□330	□330
4		□440
5		□550
6		□700
7		□850

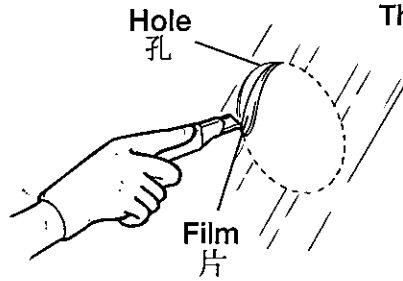
Assumed maximum velocity wind = 65 m/s.  
假設最大風速為每秒65米

Make a hole in the glass, referring to the figure at left. / 請參照左圖，在玻璃上開孔。

- This unit can be installed in the glass with a thickness of 3 to 7 mm.  
該產品可以安裝在 3 至 7 毫米厚的玻璃上。
- Cutting the glass, should consult with the glass shop.  
應委託玻璃專門店切割玻璃。
- Should install with a diameter hole 247-250 mm only.  
只應安裝在長徑 247-250 毫米的開孔上。

UNIT: mm.  
單位：毫米

2



### The next film on glass / 附在玻璃上的膠片

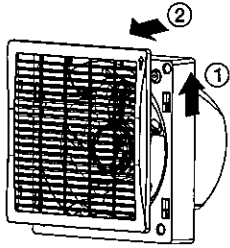
- Attached to the glass window films. (such as sun protection.)  
貼在玻璃上作遮擋太陽用途的膠片
- Cut the film as shown. ( Follow a hole.)  
切割膠片如左圖 (沿著開孔虛線)

Remove the grille and the propeller fan.  
移除格柵及扇葉

#### 1. Remove the grille

Slide the grille to upward, then remove it.

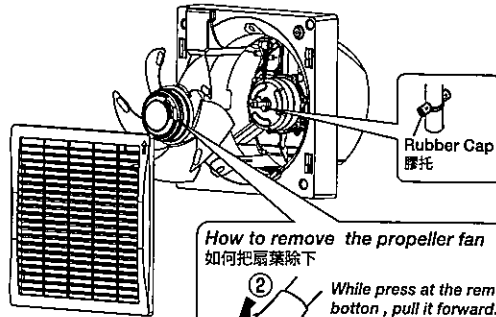
1. 移除格柵  
把格柵向上推高並移除。



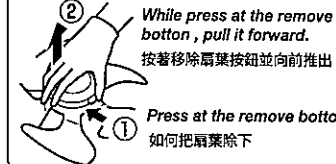
#### 2. Remove the propeller fan

Hold at the center of the propeller fan, while press at the remove botton, pull it forward.

2. 移除扇葉  
按著扇葉中央側旁的按鈕並向前輕按推出。



#### How to remove the propeller fan 如何把扇葉取下



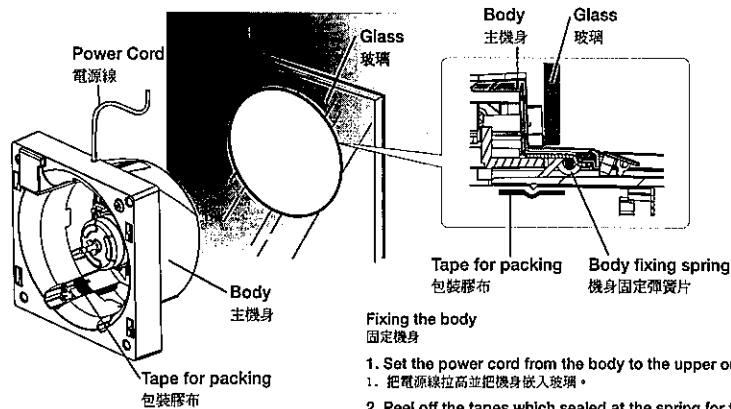
#### Note

- Please do not remove a rubber cap from the motor shaft pin.  
It may cause of abnormal noise.

注意  
- 請不要把馬達軸上的膠托除去, 否則可能會造成不正常的噪音。

## Installation the body / 本機安裝程序

1



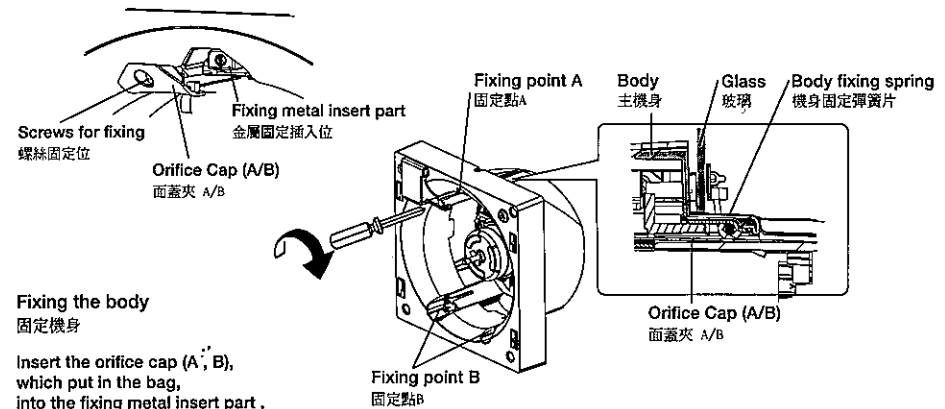
#### Fixing the body 固定機身

1. Set the power cord from the body to the upper outlet, insert body in glass.  
把電源線拉高並把機身嵌入玻璃。
2. Peel off the tapes which sealed at the spring for fixing the body (3 point).  
脫去用於固定機身的彈簧片上的膠布 (三個位置)。

3

## Installation the body (continue) / 本機安裝程序 (繼續)

2



#### Fixing the body 固定機身

Insert the orifice cap (A, B), which put in the bag, into the fixing metal insert part, then fastening screws which were equipped with the orifice cap (A, B) (For top and bottom)

把面蓋夾 (A, B) 放於金屬固定插入位, 並用螺絲固定。  
(於頂部和底部)

Fixing point A (top) : Use the orifice cap A  
固定點A (頂部) : 用面蓋夾 A

Fixing point B (bottom) : Use the orifice cap B  
固定點B (底部) : 用面蓋夾 B

#### Install the propeller fan and the grille 固定機身

1. While adjust the slot at the rear of propeller fan into the motor shaft pin, insert the center of propeller fan into the motor shaft, press it until hear "click" sound.  
把扇葉消馬達軸放入直到發出 "嗒" 一聲。

2. Lightly pull at the center of propeller to forward, in order to check that the propeller fan was securely installed.  
輕輕於扇葉中央向前拉, 檢查扇葉是否已牢固安裝。

#### Caution

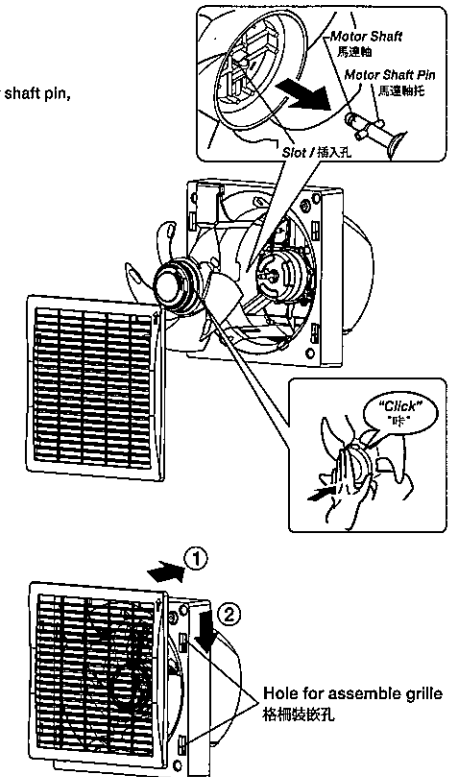
- The propeller fan that was not securely installed, may be come off while operating and cause the damage.

警告  
如扇葉沒有穩固地安裝, 可導致扇葉於運作時掉落並造成損壞。

3

#### Mounting the grille in the body 把格柵裝嵌於主機身

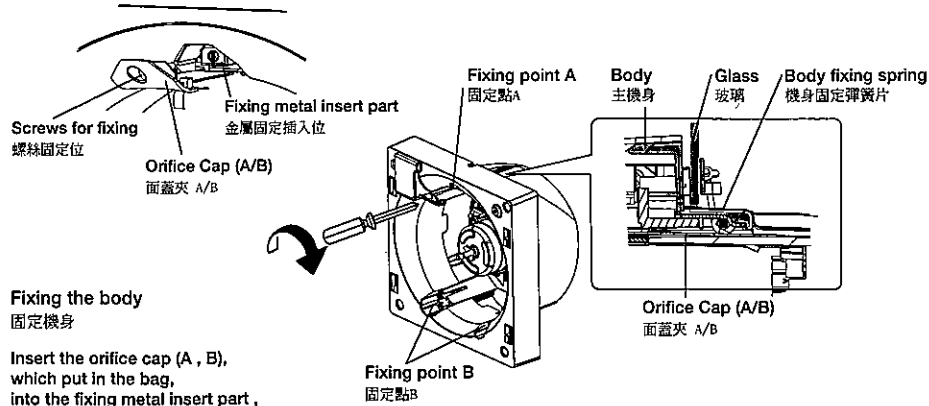
3. Place "Open" mark of the grille to the top, fit the grille nail into the hole for assemble grille with the body, then slide down the grille to fit it.  
於格柵頂部有 "開" 的標記, 把格柵嵌進主機身上的裝嵌孔, 將格柵向下推並裝上。



4

## Installation the body (continue) / 本機安裝程序 (繼續)

2



### Fixing the body 固定機身

Insert the orifice cap (A, B), which put in the bag, into the fixing metal insert part, then fastening screws which were equipped with the orifice cap (A, B) (For top and bottom)

把面蓋夾 (A, B) 放於金屬固定插入位, 並用螺絲固定。(於頂部和底部)

Fixing point A (top): Use the orifice cap A  
固定點A (頂部): 用面蓋夾 A

Fixing point B (bottom): Use the orifice cap B  
固定點B (底部): 用面蓋夾 B

### Install the propeller fan and the grille 固定機身

1. While adjust the slot at the rear of propeller fan into the motor shaft pin, insert the center of propeller fan into the motor shaft, press it until hear "click" sound.

1. 把扇葉沿馬達軸放入直到發出 "嗒" 一聲。

2. Lightly pull at the center of propeller to forward, in order to check that the propeller fan was securely installed.

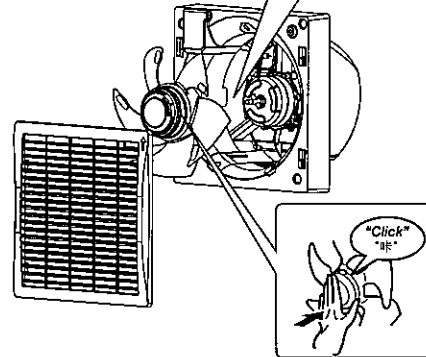
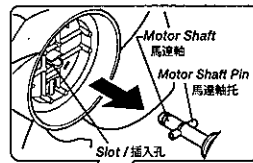
2. 輕輕於扇葉中央向前拉, 檢查扇葉是否已牢固安裝。

#### Caution

The propeller fan that was not securely installed, may be come off while operating and cause the damage.

#### 警告

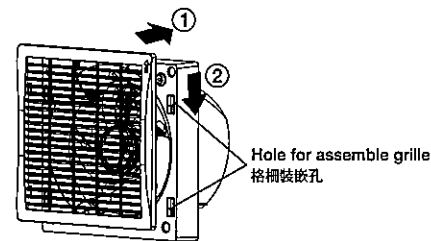
如扇葉沒有穩固地安裝, 可導致扇葉於運作時掉落並造成損壞。



### Mounting the grille in the body 把格柵裝嵌於主機身

3. Place "Open" mark of the grille to the top, fit the grille nail into the hole for assemble grille with the body, then slide down the grille to fit it.

3. 於格柵頂部有 "開" 的標記, 把格柵嵌進主機身上的裝嵌孔, 將格柵向下推並蓋上。



4

## How to install (continue) / 如何安裝 (繼續)

### Wiring installation / 電線安裝

#### WARNING / 警告

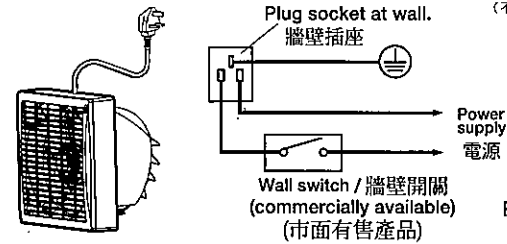
- Use the rated voltage.  
(Fire or electrical shock may result.)
- 使用指定電壓。(以免引致火災或觸電)

#### Lead wire installation cautions 安裝導線注意事項

- Electrical work carry out safely and securely by qualified personnel in accordance with the regulation of each country.  
(Bad connection and mistaken electrical work cause an electric shock or a fire.)  
有關電工安裝需由專業資格的人員安全地進行安裝並符合每個國家的相關法例 (不良的安裝或錯誤的電動工程可導致觸電或火警)

#### In case 1: Use the plug from the device.

方法1: 使用產品附設的插頭



Remark: Connect the wires indicated by thick lines.  
註: 按安裝圖的粗線指示接駁電源線。

#### In case 2: Wiring Terminal block to set the device.

方法2: 接駁電線。

(In this case, we need to install the power cord provided before installing the body.)  
(若使用此方法, 我們需先接駁電線, 然後才安裝機身。)

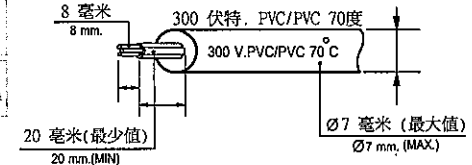
#### POWER SUPPLY CORD PREPARING FOR WIRING / 接線用的電源線

##### POWER SUPPLY CORD / 電源線

Size of conductor 0.75 mm<sup>2</sup> x 3C (BLUE, BROWN, GREEN/YELLOW)  
導體尺寸 0.75 mm<sup>2</sup> x 3C (藍色, 棕色, 綠色/黃色)

Rated Temperature 70 °C  
溫度 70 度

Rated Voltage 300 V  
電壓 300 伏特



1. Loosen the screws (4 Sets) based on the competition between the orifice and body image.  
鬆脫鎖緊面罩與機身的螺釘, 共4組。

2. Remove the orifice from the body.  
將面罩從機身上移除。

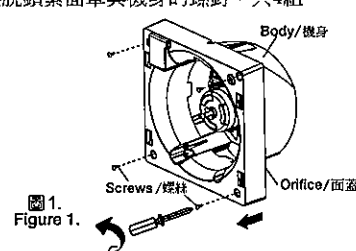


圖1.  
Figure 1.

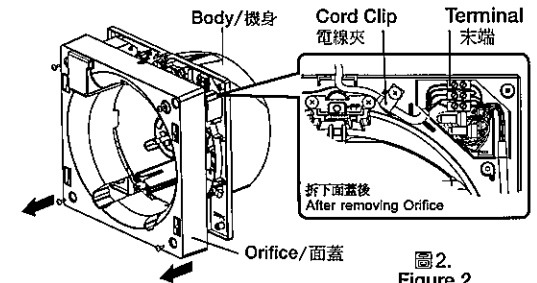


圖2.  
Figure 2.

5

# How to install (continue) / 如何安裝 (繼續)

## Wiring installation / 電線安裝

3. Loosen screw on the terminal block and cord clip in figure 2 and 3. After then remove the cord plug from the body.  
鬆脫圖 2 及圖 3 所指的電線末端盒及電線夾的螺釘。然後將電源插頭從機身上移除。

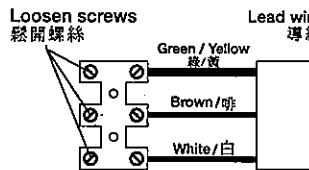


圖 3.  
Figure 3.

4. Connect the power supply cord and the earth wire into slots of the terminal block in figure 4.  
依照圖 4 指示接駁電源線及地線。

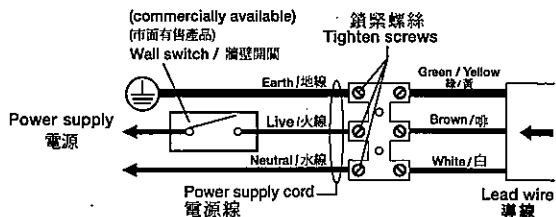


圖 4.  
Figure 4.

5. Fit the power supply cord into cord clip, then tighten a screw on cord clip in figure 5.  
將電源線完整的套在電線夾內，然後鎖緊電線夾的螺釘。如圖 5 所示。

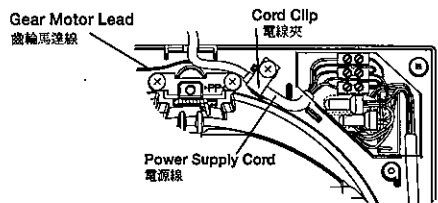


圖 5.  
Figure 5.

Please note the following points. (This may cause electric shock or fire due to damage the lead wire.)  
請留意以下事項。(可能因電線損壞而造成觸電或火警)

- Please insert the power supply lead and GM lead in the tube in order to prevent the damage.  
請插入電源線及齒輪馬達線於道管中以防止損壞
- Please do not pinch the GM lead while fixing power supply lead with cord clip.  
(Please take GM lead out from the gap of tube and through it below cord clip.)  
當固定電源線於電源夾時請不要捏齒輪馬達線。(請把齒輪馬達線於道管中取出並於電源夾下穿過)

6. Attach the orifice to the body and tighten screw follow in figure 6.  
將面罩蓋在機身上，然後鎖緊螺釘。如圖 6 所示。

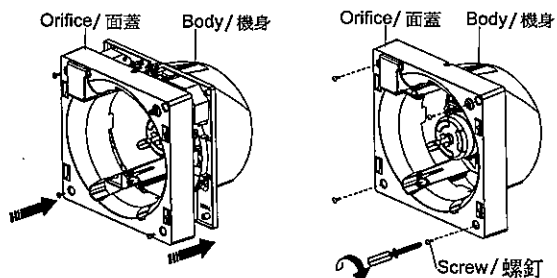


圖 6.  
Figure 6.

## 3. OPERATION / 操作方法

### OPERATING PROCEDURE / 操作程序

Remark: Installation location of switch should be easy to operate and shut off.

備註：開關應安裝於容易操作及關上掣鈕的位置。

開始排氣 START TO EXHAUST THE AIR	停止排氣 STOP TO EXHAUST THE AIR
Turn on switch / 按“開”制操作機器 關 OFF  開 ON	Turn off switch / 按“關”制停止操作 關 OFF  開 ON

### OPERATION CAUTION / 操作注意事項

- Do not insert fingers or anything into the ventilating fan while the propeller fan is rotating because the propeller fan might be damaged and injury may result.  
當扇葉轉動時，切勿將手指或其他物件放進抽氣扇，否則可能損害扇葉或引致受傷。
- Do not apply any kind of spray such as insecticide, hair dressing, etc. Otherwise, the plastic parts might be damaged or deformed.  
請勿在本機上使用任何噴霧劑，例如：殺蟲劑、噴髮膠等，否則塑料零部件可能受損或變形。
- In case there have strong wind outside, it may cause the following conditions.
  - Propeller fan stopped or reversed.  
扇葉會停止轉動或逆轉。
  - Outer wind may enter via the gap of body when ventilating fan is in off condition.  
當抽氣扇沒有運作時，室外的風可能會由主機的裂縫進入。
  - Shutter flap by the outer wind.  
葉窗會因強風而拍動
  - Not ventilate.  
不能換氣

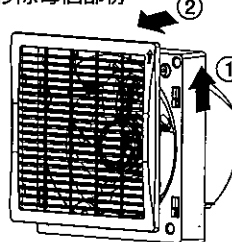
## 4. MAINTENANCE / 保養方法

### CAUTION / 注意事項

1. The fan must switch off from supply mains before removing the guard.  
1. 在移除保護罩前，必先將電風扇關閉及將電源線拔掉。
2. Wear the glove to prevent injurious on fingers.  
2. 請戴上手套，以防手指受傷。

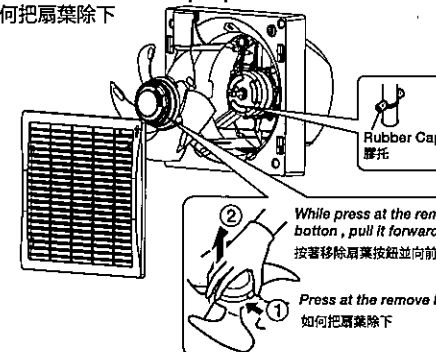
### DISASSEMBLY OF PART / 零部件拆卸方法

#### How to remove each parts 如何移除每個部份



- Remove the grille;  
After slides the grille to upward, then pull forward to remove the grille.
- 如何移除格柵;  
把格柵輕輕向上推便可移除。

#### How to remove the propeller fan 如何把扇葉除去



- Note  
- Please do not remove a rubber cap from the motor shaft pin. It may cause of abnormal noise.  
注意  
- 請不要把馬達軸上的膠托取下，否則可能會造成不正常的噪音。

## 4. MAINTENANCE (continue) / 保養方法 (續)

### CLEANING PROCEDURE / 清潔方法

1. To prevent accidents, always unplug the fan before cleaning. Also keep electrical parts out of water.
2. Clean the dirty parts (orifice, spinner, propeller fan, shutter etc.) by using soft cloth, soaked and damped in warm water or mild detergent then wipe dry with soft cloth.
3. Do not use volatile chemicals (gasoline, benzene, thinner, spray cleaner, alcohol etc.) or other chemicals (treated dust cloths, alkaline soap solutions, boiling water, cleaner etc.) for cleaning because all of these can damage the plastic parts.
4. If a large amount of dust collects on the propeller fan, it may cause overheating or excessive vibration of the motor. This can lead to burn out and other damages, so be sure to keep the propeller fan clean.

1. 為防止意外，清潔抽氣扇前，請先拔除電源插頭，並不要把通電的零部件沾濕。
2. 要清潔零部件（例如：面蓋、旋鈕、扇葉、葉窗等），請用浸過溫水或沾上溫和清潔劑的軟布拭抹，再用軟布抹乾。
3. 切勿使用揮發性化學品（例如：汽油、苯、稀釋劑、清潔噴霧劑、酒精等）或其他化學品（例如：經化學處理的除塵布、鹼性肥皂液、沸水、清潔劑等）清潔本機，以免損害塑料零部件。
4. 假如扇葉積聚大量塵埃，或會令馬達因過熱或震動過度而毀壞，又或引致其他機件損壞，所以請確保扇葉清潔。

### Assemble and check after maintenance 維修後的裝嵌和檢查

After maintenance finish, assemble procedure reverse to disassemble.  
當維修完成，裝嵌過程轉為拆卸。

1. While adjust the slot at the rear of propeller fan into the motor shaft pin, insert the center of propeller fan into the motor shaft, press it until hear "click" sound.

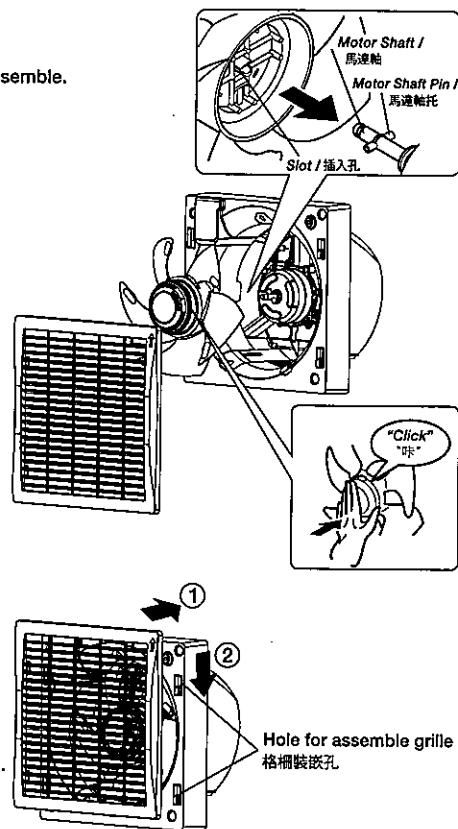
- Caution / 警告**
- The propeller fan that was not securely installed, may be come off while operating and cause the damage.
  - 如扇葉沒有穩固地安裝，可導致扇葉於運作時掉落並造成損壞。

2. Place "Open" mark of the grille to the top, fit the grille nail into the hole for assemble grille with the body, then slide down the grille to fit it.
- 於格柵頂部有“開”的標記，把格柵嵌進主機身上的裝嵌孔，並將格柵向下推並套上。

### Notes / 注意

- Lightly pull the center of the propeller fan to check the securely installed of propeller fan.
- 輕輕於扇葉中央向前拉，檢查扇葉是否已牢固安裝。
- Lightly pull the grille to check it securely locked.
- 輕輕把格柵向前拉，檢查格柵是否已牢固鎖上。
- Wipe pin plug and the surface of socket with dry cloth when they become dirty.
- 當插頭及電源插座弄髒，可用乾布輕擦。

3. Turn on power and operate check to ensure proper operation.
3. 開上電源和檢查運作是否正常。



## 5. ESSENTIAL SAFETY PRECAUTIONS / 安全須知

### SAFETY INSTRUCTION / 安全指引

1. Disassembly and repair should not be done unless carrying by a specialized technician (cause of fire, electric shock and injury). Please consult your MITSUBISHI ELECTRIC dealer or service center.
2. The product should not expose to water or get wet by pouring water on (cause of short circuit and electric shock).
3. Disconnect the power or break the cutout on board when cleaning is required, and do not pull its plug with wet hand (cause of electric shock and injury).

1. 不論任何情況，不應對產品進行修改，產品拆卸及維修必須交由專業技術人員負責（以免引起火警、觸電或受傷）。如有疑問，請向三菱電機經銷商或維修服務中心查詢。
2. 不應讓本機沾水，或被水潑濕（以免引致短路或觸電）。
3. 需要清潔時，請先切斷電源或關上保險開關。切勿以沾濕的手拔除插頭（以免觸電或受傷）。

### CAUTION / 注意事項

1. The ventilating fan should not be installed in high humidity area because electric shock or injury may result.
2. Power supply should not exceed rated voltage.
3. The ventilating fan should not be used in where is inflammable area that may cause fire.
4. Please check the assembly parts before and after installation.
5. Please observe technique of wire installation and regulation of interior wiring (poor connecting and fault wiring may cause danger of fire).
6. When it shall not be operated for a long time, please disconnect the plug or break the cutout on board.
7. Do not use the fan in the back flow of gases into the room.
8. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
9. Children should be supervised to ensure that do not play with the appliance.
10. If the ventilating fan can't operate or the supply cord is damaged, it must only be repaired by your MITSUBISHI ELECTRIC dealer or service center.

1. 本抽氣扇不應安裝於極度潮濕的地方，否則可能引致觸電或受傷。
2. 電源供應不得超過額定電壓。
3. 不應在易燃地方使用本抽氣扇，否則可能引起火警。
4. 安裝前後，請檢查各個裝配件。
5. 安裝時請遵照電線安裝方法及室內電線安裝守則（若電線接駁不善或接駁錯誤均可能引起火警）。
6. 若長期不用本機，請拔除電源插頭，或在配電盤切斷電流。
7. 不要把抽氣扇作為把氣體引入房間之用。
8. 此電器不是設計為以下人士（包括兒童）使用：體能、知覺或精神有障礙人士，又或欠缺知識及經驗人士。以上人士需得到其監護人的指導及監督，才可使用此電器，以保障其安全。
9. 兒童需受到監管以確保其不會玩弄此電器。
10. 若無法啟動抽氣扇或電源線受損，不應自行修理，必須送交三菱電機經銷商或維修服務中心修理。

