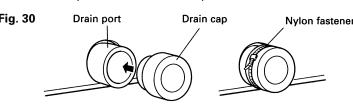


• When the unit is shipped from the factory, the drain port is on the left side (control box side).

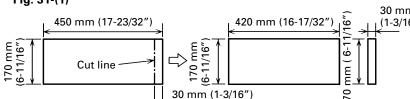
• When using the drain port on the right side of the unit, reinstall the drain cap to the left side drain port.

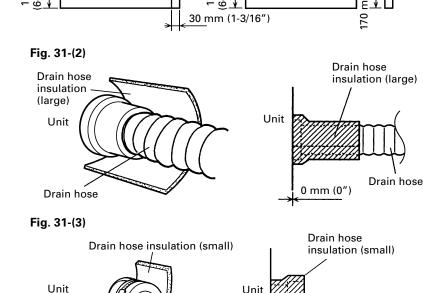


#### **CAUTION**

Always check that the drain cap is installed to the unused drain port and is fastened with the nylon fastener. If the drain cap is not installed, or is not sufficiently fastened by the nylon fastener, water may drip during the cooling operation.

- Cut the drain hose insulation at a position approximately 30 mm from the end with cutters, etc. (Fig. 31-(1))
- Stick the large drain hose insulation at the drain hose installation side. (Fig. 31-(2))
- Stick the small drain hose insulation at the drain cap side (Fig. 31-(3))





## **ELECTRICAL WIRING**

HOW TO CONNECT WIRING TO THE TERMINALS A. For solid core wiring (or F-cable)

(1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 25 mm (15/16") to ex-

(2) Using a screwdriver, remove the terminal screw(s) on the

(3) Using pliers, bend the solid wire to form a loop suitable for the terminal screw.

(4) Shape the loop wire properly, place it on the terminal board and tighten securely with the terminal screw using a screwdriver.

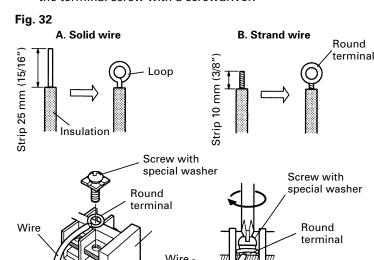
#### B. For strand wiring

(1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 10 mm (3/8") to expose the strand wiring.

(2) Using a screwdriver, remove the terminal screw(s) on the terminal board.

(3) Using a round terminal fastener or pliers, securely clamp a round terminal to each stripped wire end.

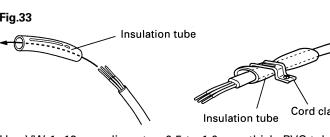
(4) Position the round terminal wire, and replace and tighten the terminal screw with a screwdriver.



## HOW TO FIXED CONNECTION CORD AND POWER

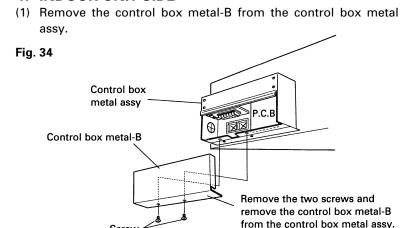
After passing the connection cord and power supply cord through the insulation tube, fasten it with the cord clamp.

**SUPPLY CORD AT THE CORD CLAMP** 



Use VW-1, 12 mm diameter, 0.5 to 1.0 mm thick, PVC tube as the insulation tube.

1. INDOOR UNIT SIDE

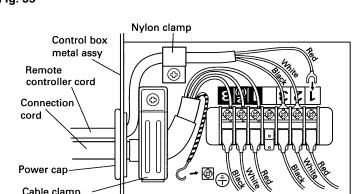


(2) Connection cord and remote controller cord connections. • Clamp the connection cord with the cable clamp and the remote

black characters on the terminal nameplate.

controller cord with the nylon clamp. • Connect the connection cord to the terminals with the white

characters on the terminal nameplate. • Connect the remote controller cord to the terminals with the



#### **CAUTION**

1) Tighten the indoor unit connection cord (to the outdoor unit) indoor and outdoor unit terminal board connections firmly with the terminal board screws. Faulty connection may cause a fire.

② If the indoor unit connection cord (to the outdoor unit) are wired incorrectly, the air conditioner may be damaged.

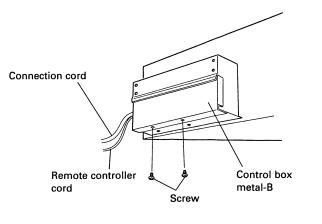
3 Wire the indoor unit connection cord (to the outdoor unit) by matching the numbers of the outdoor and indoor units terminal board numbers as shown in (Fig. 35).

Ground both the indoor and outdoor units by attaching a ground wire.

5) Unit shall be grounded in compliance with the applicable local and national codes.

(3) Control box matel-B installation

Fasten control box metal-B with the two screws. For the connection cord outlet port see Fig. 36.



#### 2. OUTDOOR UNIT SIDE

/ WARNING

1) Before starting work, check that power is not being supplied to the indoor unit and outdoor unit.

2) Match the terminal board numbers and connection cord colors with those of the indoor unit side. Erroneous wiring may cause burning of the electric

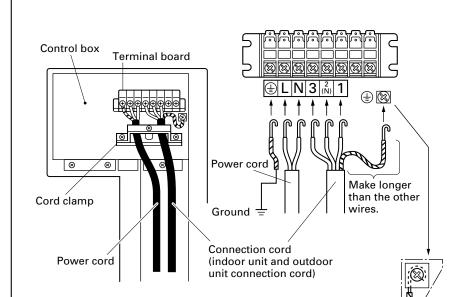
3 Connect the connection cord and the power supply cord firmly to the terminal board. Imperfect installation may cause a fire.

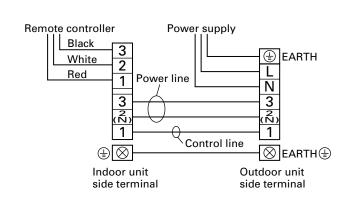
Always fasten the outside covering of the connection cord and the power supply cord with the cord clamp. (If the insulator is chafed, electric leakage may occur.)

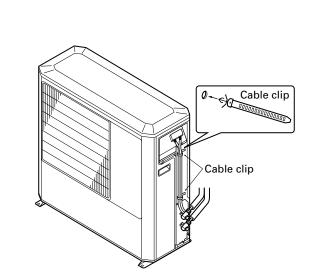
5 Always connect the ground wire.

(1) Remove outdoor unit valve cover and connect the power supply cord and the outdoor unit connection cord wired at the indoor unit. (2) Fasten the power supply cord and connection cord with cable clip

and binders as shown in (Fig. 38). Fig. 37

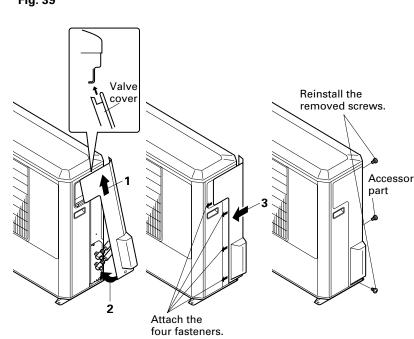






(3) Install the valve cover.

Fig. 38



REMOTE CONTROLLER

INSTALLATION

When mounting the remote controller, refer to the en-

closed REMOTE CONTROLLER INSTALLATION INSTRUC-

TION SHEET. Then, make the necessary settings on both

• Insert the end of a flat blade screwdriver at the arrow parts of the

• Disconnect the remote controller cord from the remote controller

1) Make a notch in the thin part (© part of Fig. 40) at the remote

2) Connect the remote controller cord to the remote controller

3) Clamp the remote controller cord sheath with the binder

5) Clamp the remote controller cord to a wall, etc. with the re-

Remote controller

terminal board

mote controller cord clamp furnished (Fig. 42).

Remote controller cord

controller case top and bottom with nippers, file, etc.

remote controller case top by turning the screwdriver.

groove at the side of the remote controller case and remove the

the remote controller and the main unit.

terminal board.

(1) When remote controller exposed

terminal board specified in (Fig. 41).

(small) as shown in Fig. 41.

4) Cut off the excess binder.

Binder (small)

Fig. 41

## **POWER**

Fig. 42

(2) When remote controller cord embedded

Fig. 43 [Example]

top to its original state.

1) Embed the remote controller cord and box.

terminal board specified in (Fig. 41).

2) Pass the remote controller cord through the hole at the remote

3) Connect the remote controller cord to the remote controller

• After wiring work is complete, return the remote controller case

!\ CAUTION 1) Do not bundle the remote controller cord, or wire

the remote controller cord in parallel, with the in-

door unit connection wire (to the outdoor unit) and

the power supply cord. It may cause erroneous oper-

When installing the remote controller and cord near

a source of electromagnetic waves, separate the re-

mote controller from the source of the electromag-

3 Do not touch the remote controller PC board and PC

controller case bottom and install the cord to the box. (Fig. 43)

**№ WARNING** 

netic waves and use shielded cord.

board parts directly with your hands

① The rated voltage of this product is 1ø 220-240 V 50 Hz.

② Before turning on the verify that the voltage is within the 198 V to 264 V range.

3 Always use a special branch circuit and install a special re-

ceptacle to supply power to the air conditioner 4 Use a circuit breaker and receptacle matched to the capacity of the air conditioner. (Install in accordance with

When connecting the power supply to the outdoor unit, always install a circuit breaker between the outdoor unit and the power supply. Use the circuit breaker has an isolation distance of at least 3 mm between the contacts of

Perform wiring work in accordance with standards so that the air conditioner can be operated safely and posi-

 Install a leakage circuit breaker in accordance with the related laws and regulations and electric company stan-

#### **CAUTION**

1) The power source capacity must be the sum of the air conditioner current and the current of other electrical appliances. When the current contracted capacity is insufficient, change the contracted capacity.

 When the voltage is low and the air conditioner is difficult to start, contact the power company the vol-

**TEST RUNNING** 

1. REMOTE CONTROLLER

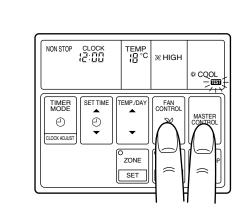
the remote controller display.

 Supply power to the crankcase heater 12 hours before the start of operation in the winter.

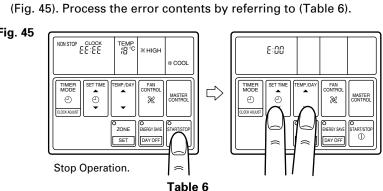
• For test running, when the remote controller FAN CONTROL button and MASTER CONTROL button are pressed simultaneously for more than three seconds when the air conditioner is not running, the air conditioner starts and TEST is displayed on

However, the TEMP./DAY setting button does not function, but all other buttons, displays, and protection functions operate (Fig. 44).

Fig. 44



• When EE: EE blinks at the current time display, there is an error inside the air conditioner. If the SET TIME button (▼) and TEMP./DAY button (▼) are pressed simultaneously for more than three seconds, the self diagnosis check will start and the error contents will be displayed at the current time display (Fig. 45). When the operation lamp lights, press the START/STOP button and after operation lamp goes off, perform the same operation



Error code	Error contents	
F:[][]	Communication error	
	(indoor unit remote controller)	
F:[] {	Communication error (indoor unit outdoor unit)	
	Room temperature sensor open	
E:02	noom temperature sensor open	
E:03	Room temperature sensor shortcircuited	
E:[]4	Indoor heat exchanger temperature sensor open	
E:05	Indoor heat exchanger temperature sensor shortcircuited	
E:05	Outdoor heat exchanger temperature sensor open	
E:[[7]	Outdoor heat exchanger temperature sensor shortcircuited	
E:08	Power source connection error	
E:09	Float switch operated	
E:[][A	Outdoor temperature sensor open	
E:Ob	Outdoor temperature sensor shortcircuited	
E:III	Discharge pipe temperature sensor open	
E:0d	Discharge pipe temperature sensor shortcircuited	
E:DE	Outdoor high pressure abnormal	
E:UF	Discharge pipe temperature abnormal	
E: { {	Model abnormal	
E: 12	Indoor fan abnormal	
E: 13	Outdoor signal abnormal	
E: /4	Outdoor EEPROM abnormal	

- To stop test running, press the START/STOP button. • For the operation method, refer to the operating manual and per-
- form operation check. • Check that there are no abnormal sounds or vibration sounds during the test running.

2. OUTDOOR UNIT

When the outdoor temperature drops, the outdoor unit's fans may switch to low speed, or one of the fans may stop intermittently.

**ERROR: HEAT & COOL (REVERSE CYCLE) MODEL ONLY** The LED lamps operate as follows (Table 7) according to the error

The LED lamps are on the outdoor unit board.

Table 7			
Error	display		
LED1	LED2	Error contents	
ON OFF OUT OF PROPERTY OF THE PROPERTY OF T	ON OFF OUICK flash continued	Model abnormal or EEPROM abnormal	
ON OS Sec.  OFF 2 Sec.  Quick flash repeated	ON OFF Lighting continued	Power source connection error	
ON 0.5 sec. OFF 2 sec. 2 quick flash repeated	ON OFF Lighting continued	Discharge temperature sensor error	
ON 1 0.5 sec. OFF 2 sec. B quick flash repeated	ON OFF Lighting continued	Outdoor heat exchanger temperature sensor error	
quick flash repeated	Lighting continued	Outdoor temperature sensor error	
quick flash repeated	Lighting continued	Communication signal error	
quick flash repeated	Lighting continued	Indoor unit error	
quick flash repeated	Lighting continued	Discharge temperature abnormal	
guick flash repeated	Lighting continued	High pressure abnormal	

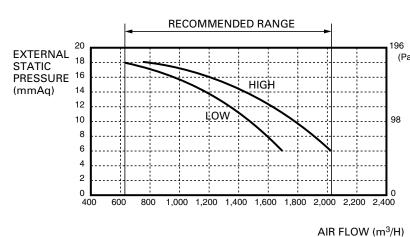
When the fault is cleared, the LED lamp goes off. However, for discharge pipe temperature abnormal and high pres-

sure abnormal, the LED lamp lights continuously for 24 hours, as long as the power is not turned off.



#### STATIC PRESSURE **CHARACTERISTIC**

Fig. 46 FAN PERFORMANCE AND AIR FLOW **EXTERNAL STATIC PRESSURE** 



# **OUTLET DUCT CONNECTION**

1. DUCT INSTALLATION PATTERN ( CUT PART)



(1) Square duct

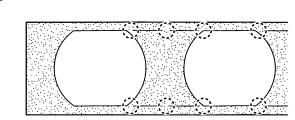
(This is the factory setting.)



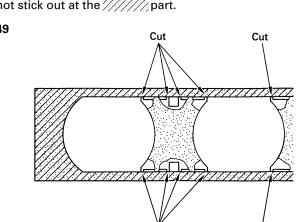
2. WHEN USING AS A SQUARE DUCT

(1) Cut the slit seam () with a cutter.

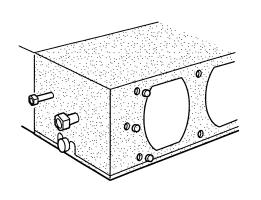
Fig. 48



(2) Turn up the insulation around the points to be cut according to the outlet port shape working points so that the insulation does not stick out at the 1/1/1/2 part.

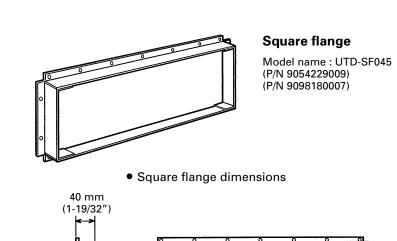


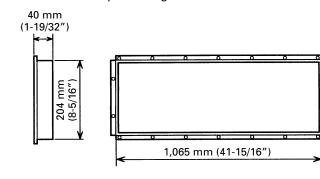
(3) Cut with nippers and remove the sheet metal. (4) Since there is a slit in the insulation, use radio pliers, tweezers, etc. to stretch tight the screw hole part used when installing the round flange and square flange when connecting the duct.

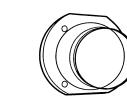


3. SPECIAL ITEMS

When connecting the square duct and round duct, use the optional square flange or round flange and flexible duct.

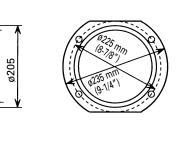






Round flange Model name: UTD-RF204 (P/M 9093160004)

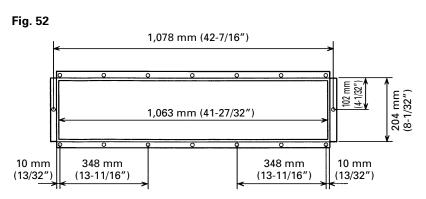
Round flange dimensions



L 2 m (78-3/4")

Flexible duct Model name : UTD-RD202

# **INTAKE PORT REAR COVER DIMENSIONS**



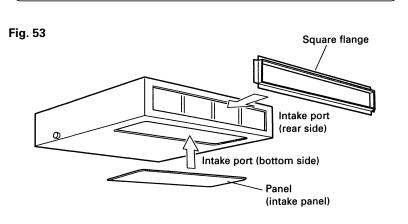
**INTAKE PORT** 

(1) The square flange (rear side) and panel (intake panel) are installed at the factory at the places shown in Fig. 53.

(2) When taking in air from the bottom side, reinstall the square flange (rear side) and panel (intake panel).

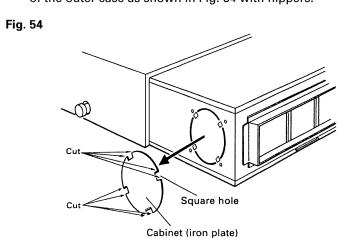
( CAUTION

When air is taken in from the bottom side, the operating sound of the product will easily enter the room. Install the product and intake grilles where the affect of the operating sound is small.





(1) When taking in fresh air, cut a slit shaped cabinet in the left side of the outer case as shown in Fig. 54 with nippers.

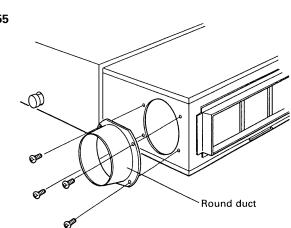


( CAUTION When removing the cabinet (iron plate), be careful not to damage the indoor unit internal parts and sur-

When processing the cabinet (iron plate), be careful not to injure yourself with burrs, etc.

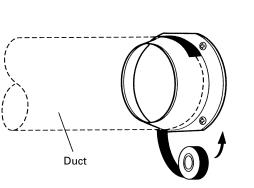
rounding area (outer case).

(2) Install the round flange (optional parts) to the fresh air intake.



(3) Connect the duct to the round flange. (4) Seal with a band and vinyl tape, etc. so that air does not leak from the connection.

Fig. 56



PART NO. 9361795037