SPLIT TYPE AIR CONDITIONER

Duct Type INSTALLATION INSTRUCTION SHEET (PART NO. 9357450049)

	A
	This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user, or damage to property.
MARNING!	This mark indicates procedures which, if improperly performed, might lead to the death or serious in- jury of the user.

	<u></u> WARNING
0	For the air conditioner to operate satisfactorily, install it as outlined in this installation instruction sheet.
0	Installation work must be performed in accordance with national wiring standards by authorized personnel only.
0	Do not turn on the power until all installation work is complete.

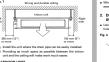
ANDARD I	PAR	TS	- 1	OUTDOOR UNIT ACC	:55U	HIES
following installation ired.	parts a	re furnished. Use them as		Name and Shape	Q'ty	Application
OOR UNIT ACCES	SORI	ES	.	Pipe (drain)	2	
Name and Shape	Qʻty	Application	Ш	Flexible tube	H	For outdoor unit dra
stallation		For positioning the	1		2	supplied, depending



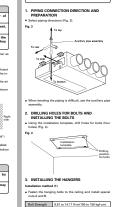
7	1	connection				
OUTDOOR UNIT ACCESSORIES						
Power cap	1	For power supply cord installation				
Auxiliary pipe assembly	1	For wiring conduit (gas side) connection (May not be supplied, depending on the model)				
Edge cover	,	For wiring conduit installation hole edge protection				
Tapping screw	2	For cabinet A and cabinet D mounting (1) Spare (1)				
Binder	1	For power supply cord binding				
Putty 🧼	,	For seating				

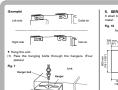
Name and Shape	Q'ty	Application					
Pipe (drain)	2						
Flexible tube	2	For outdoor unit drain piping work (May not be supplied, depending or the model.)					
Cap (drain)	2	the model.)					
SELECTING THE MOUNTING POSITION							
	HE	MOUNTING					
	CAU						

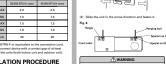
(1)	Do not install where there is the danger of combustible gas leakage.
0	Do not install the unit near heat source of heat, steam, or flammable gas.
0	If children under 10 years old may approach the unit, take preventive measures so that they cannot reach the unit.
	ide the mounting position together with the customer a
NE	OOR UNIT
	Install the indoor unit on a place having a sufficient

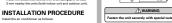


(1) Le	ave the sp	ace indicated fo	or good a	ir flow (Fig. 2).
Fig. 2	111	//////	1111	///
- 4				200 mm (12")
- 2	سقي	8800		or more
- 4	5			-1 K
- 2	10			111 12
- 21	10	AIR		111 6
1	-╚-	-0-		10 mm (0.4 or more
	m (4")	л.	1.0	0 mm (24°)
or mo	re	~		more
	-9-9-9-	777777	· · · · ·	





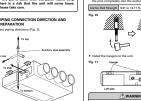




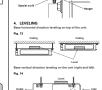


CONNECTION PIPE REQUIREMENT

ELECTRICAL REQUIREMENT



Outlet as



OUTDOOR UNIT INSTALLATION









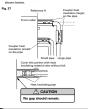
Pipe	Flare nut				
Small pipe	Small (width across flats 22 mm)				
Large pipe	Large (width across flats 35 mm)				
Action across face	L dimension Small pipe (9.52 mm dia.) 1.1 to 2.0 mm Large pipe (19.55 mm dia.) 2.6 to 2.0 mm				

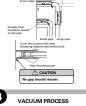


















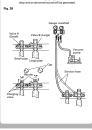
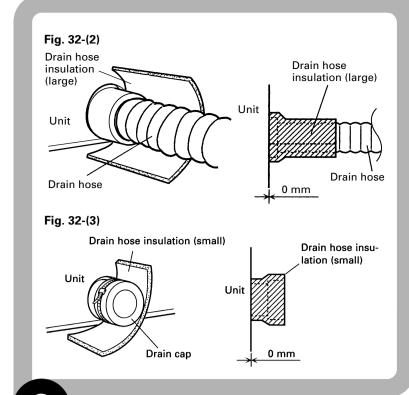


		Table	7		
Pipe length Additional softwared	20 m (66 ft)	30 m (99 ft)	40 m (132 ft)	50 m (164 ft)	g/m (oz/ft)
35,000 BTU/h class (Cooling model)	300 g (10.6 or)	600 g (21.2 az)	900 g (31.8 cz)	1,200 g (42.4 or)	30 g/m (1.06 cc/3.3 f
45,000 BTU/h class (Cooling model)					
35,000 BTU/h class (Reverse quie model)	None	400 g (14.1 az)	800 g (28.2 cz)	1,200 g (42.4 oz)	40 g/m (1.41 cq/3.3 f
45,000 BTU/h class (Reverse qu'e model)					
	- 7	L CAL	JTION		
① When cha	raina !	the ref	rineran	t alwa	vs use a

1 INSTALLING DRAIN HOSE







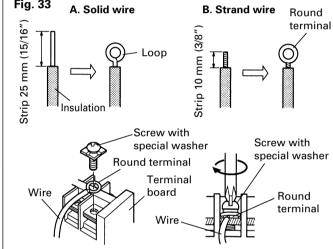
ELECTRICAL WIRING

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 expose the solid wire.
- (2) Using a screwdriver, remove the terminal screw(s) on the terminal board.
- (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.

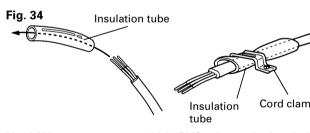
B. For strand wiring

- (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 using a screwdriver.



HOW TO FIXED CONNECTION CORD AND POWER SUPPLY CORD AT THE CORD CLAMP

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



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

/ WARNING

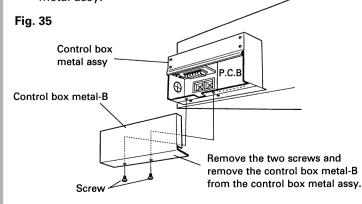
-) Before starting work, check that power is not being supplied to the indoor unit and outdoor unit.
- Match the terminal block numbers and connection cord colors with those of the indoor unit side. Erroneous wiring may cause burning of the
- Connect the connection cords firmly to the terminal block. Imperfect installation may cause a fire.
- Always fasten the outside covering of the connection cord with cord clamps. (If the insulator is clamped, electric leakage may occur.)
- 5) Always connect the ground wire.

! CAUTION

- Select power cable matched to the fuse capacity. (Install in accordance with standard.)
- Use VW-1, 12 mm diameter, 0.5 to 1.0 mm thick, PVC tube as the insulation tube.

I. INDOOR UNIT SIDE

(1) Remove the control box metal-B from the control box metal assy.



- (2) Connection cord and remote controller cord connections
- Clamp the connection cord with the cable clamp and the
- remote controller cord with the nylon clamp. Connect the connection cord to the terminals with the white characters on the terminal nameplate.

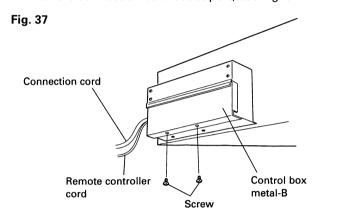
the black characters on the terminal nameplate.

Connect the remote controller cord to the terminals with

Fig. 36 metal assy controller cord

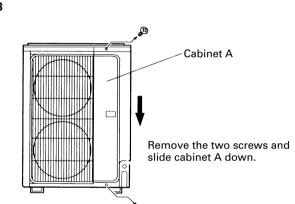
CAUTION

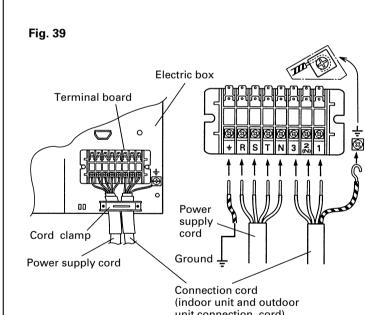
- Tighten the indoor unit connection cord (to the outdoor unit) and power supply indoor and outdoor unit terminal board connections firmly with the terminal board screws. Faulty connec-
- tion may cause a fire. ② If the indoor unit connection cord (to the outdoor unit) and power supply are wired incor-
- rectly, 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. 36.
- 4 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 metal-B installation Fasten control box metal-B with the two screws. For the connection cord outlet port, see Fig. 37.

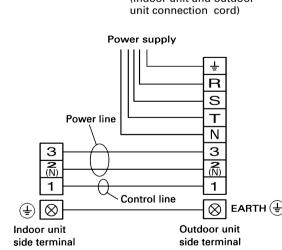


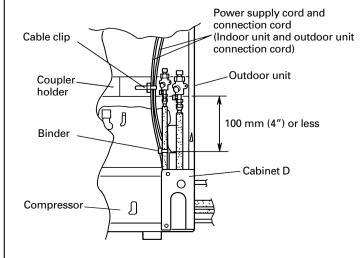
2. OUTDOOR UNIT SIDE

- (1) Remove outdoor unit cabinet A 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 clips and binders as shown in Fig. 39.







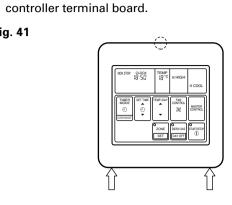


REMOTE CONTROLLER INSTALLATION

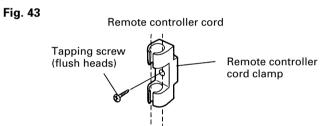
When mounting the remote controller, refer to the enclosed REMOTE CONTROLLER INSTALLATION INSTRUCTION SHEET. Then, make the necessary settings on both the remote controller and the main unit.

 Insert the end of a flat blade screwdriver at the arrow parts of the groove at the side of the remote controller case and remove the remote controller case top by turning the screwdriver. Disconnect the remote controller cord from the remote

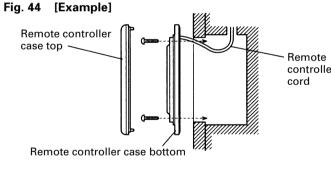
Fig. 41



- (1) When remote controller exposed
- 1) Make a notch in the thin part (part of Fig. 41) at the remote controller case top and bottom with nippers, file, etc.
- 2) Connect the remote controller cord to the remote controller terminal board specified in (Fig. 42). 3) Clamp the remote controller cord sheath with the
- binder (small) as shown in Fig. 42. 4) Cut off the excess binder.
- 5) Clamp the remote controller cord to a wall, etc. with the remote controller cord clamp furnished (Fig. 43).



- (2) When remote controller cord embedded
- 1) Embed the remote controller cord and box. 2) Pass the remote controller cord through the hole at the remote controller case bottom and install the cord to the box (Fig. 44).
- 3) Connect the remote controller cord to the remote controller terminal board specified in (Fig. 42).



• After wiring work is complete, return the remote controller case top to its original state.

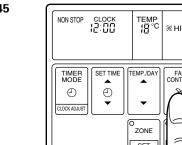
!\ CAUTION

- Do not bundle the remote controller cord, or wire the remote controller cord in parallel, with the indoor unit connection wire (to the outdoor unit) and the power supply cord. It may cause erroneous operation.
- When installing the remote controller and cord near a source of electromagnetic waves, separate the remote controller from the source of the electromagnetic waves and use shielded
- Do not touch the remote controller PC board and PC board parts directly with your hands.

1. REMOTE CONTROLLER

- 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 the remote

controller display. However, the TEMP./DAY setting button does not function, but all other buttons, displays, and protection functions operate (Fig. 45).



• 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. 46). When the operation lamp lights, press the START/STOP button and after operation lamp goes off, perform the same operation (Fig. 46). Process the error contents by referring to (Table 8).

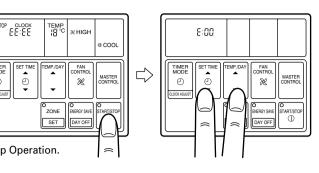


Table 8

Error cord	Error contents
E:00	Communication error
	(indoor unit remote controller)
E:[] {	Communication error (indoor unit — outdoor unit)
E:02	Room temperature sensor open
E:[]3	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:CA	Outdoor temperature sensor open
E:05	Outdoor temperature sensor shortcircuited
E:OE	Discharge pipe temperature sensor open
E:Od	Discharge pipe temperature sensor shortcircuited
E:DE	Outdoor high pressure abnormal
E:[[F	Discharge pipe temperature abnormal
E: { {	Model abnormal
E: 12	Indoor fan abnormal
E: 13	Outdoor signal abnormal
E: 14	Outdoor EEPROM abnormal

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

Table 9

ERROR : Heat & Cool model (Reverse cycle) only The LED lamps operate as follows (Table 9) according to the error contents.

The LED lamps are on the outdoor unit board.

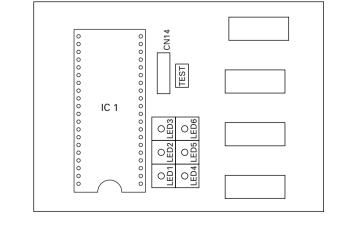
Error contents	LED1	LED2	LED3	LED4	LED5	LED6
Signal abnormal	_	_	×	0	×	×
Indoor unit abnormal	_	_	×	×	0	×
Discharge pipe temperature abnormal	_	_	×	×	×	0
Outdoor heat exchanger temperature abnormal	_	_	×	×	0	0
Outdoor temperature abnormal	_	_	×	0	×	0
Power sorce connection error	_	_	0	×	×	×
EEPROM abnormal	_	_	0	0	0	0
	0	0	0	0	0	0
Outdoor high pressure abnormal	0	_	_	_	_	_
Discharge pipe temperature abnormal	_	0	_	_	_	_

○: 0.5s ON/0.5s OFF (flash) ×: OFF

○: 0.1s ON/0.1s OFF (flash) —: Indefinite

When the fault is cleared, the LED lamp goes off. However, for discharge pipe temperature abnormal and high pressure abnormal, the LED lamp lights continuously

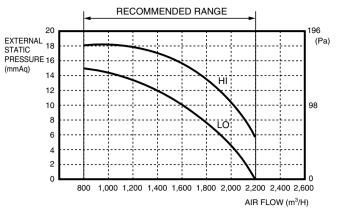
for 24 hours, as long as the power is not turned off. Fig. 47 ERROR LED DISPLAY LAYOUT

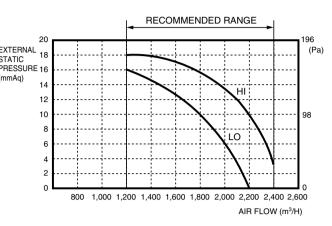


STATIC PRESSURE CHARACTERISTIC

Fig. 48 FAN PERFORMANCE AND AIR FLOW **EXTERNAL STATIC PRESSURE**

36,000 BTU/h class





1. DUCT INSTALLATION PATTERN (**CUT PART**)

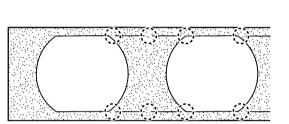






2. WHEN USING AS A SQUARE DUCT

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



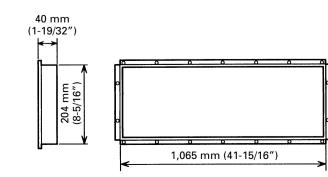
(2) Turn up the insulation around the points to be cut according to the outlet port shape working points so that the insulation does not stick out at the ######## part.

(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

Fig. 52

3. SPECIAL ITEMS

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



(3-11/32")

Flexible duct

(P/N 9074165004)

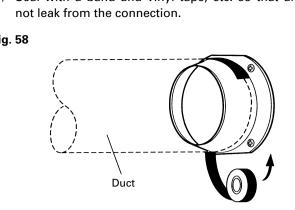
• Round flange dimensions

Round flange

Model name : UTD-RF204

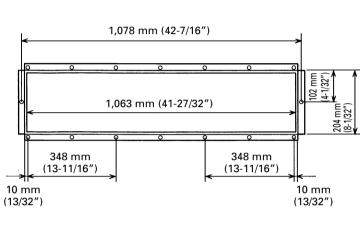
(P/M 9093160004)

Fig. 58



INTAKE PORT REAR COVER DIMENSIONS

Fig. 54



INTAKE PORT

square flange (rear side) and panel (intake panel).

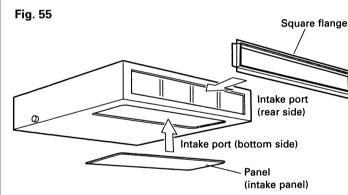
(1) The square flange (rear side) and panel (intake panel) are installed at the factory at the places shown in Fig. 55. (2) When taking in air from the bottom side, reinstall the

CAUTION

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

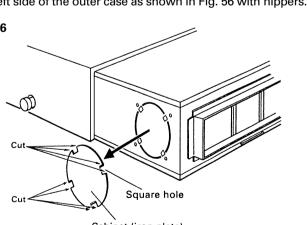


affect of the operating sound is small.

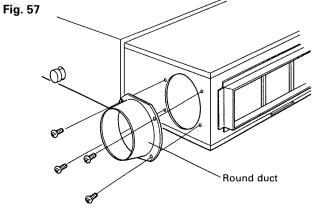


FRESH AIR INTAKE (Processing before use)

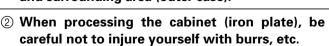
(1) When taking in fresh air, cut a slit shaped cabinet in the left side of the outer case as shown in Fig. 56 with nippers.

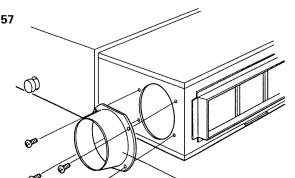


and surrounding area (outer case). When processing the cabinet (iron plate), be



CAUTION



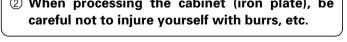


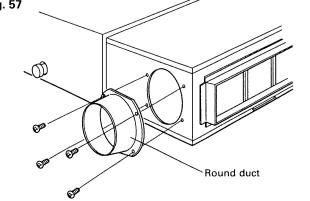
(3) Connect the duct to the round flange. (4) Seal with a band and vinyl tape, etc. so that air does

Model name: UTD-RD202

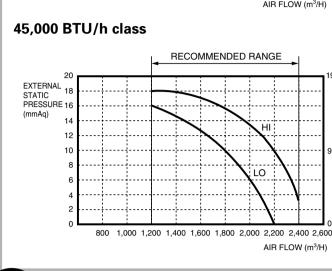
ø200 mm (7-7/8")

L2m (78-3/4")





TEST RUNNING



OUTLET DUCT CONNECTION

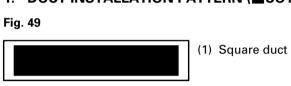
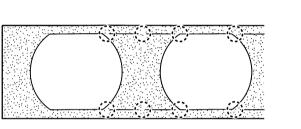
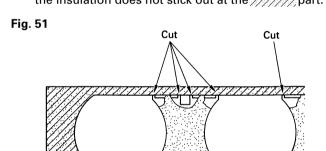




Fig. 50





when installing the round flange and square flange

