

SHARP SERVICE MANUAL

S72V7AY1802S/

SPLIT SYSTEM ROOM AIR CONDITIONER



AY-1802S OUTDOOR UNIT AU-1802Y

AH-180W2S

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

TABLE OF CONTENTS	
	Page
SPECIFICATIONS	2
EXTERNAL DIMENSIONS	
ELECTRICAL PARTS	4
WIRING DIAGRAMS	
MICROCOMPUTER CONTROL SYSTEM	
REFRIGERATION CYCLE	1.4
PERFORMANCE CURVES	
REFRIGERANT PIPE INSTALLATION WORKS	1 6
DISASSEMBLING PROCEDURE	17
PARTS LIST	21

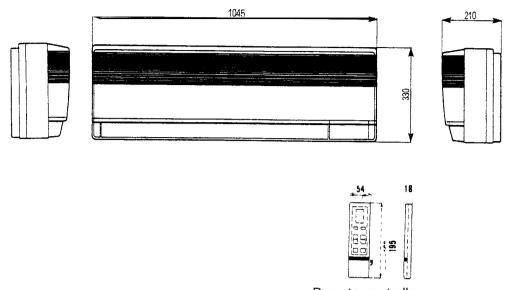
SPECIFICATIONS

ITEMS		INDOOR UNIT AY-1802S	OUTDOOR UNIT AU-1802Y		
Cooling capacity		w	5120		
		B.T.U./h	17500		
		kcal/h	4400		
Heatpump		w	5500		
Heating capacity B.T.U./h		18800			
kcal/h		4730			
Moisture removal Liters/h		2.2			
		Pints/h	4.7		
Electrical data					
Phase			Single		
Rated frequency		HZ	50		
Rated voltage range		V	207 to 264		
Rated voltage		V	230 — 240		
Maximum rated	Cool	A	10		
current	Heat	Α	9.5		
Maximum rated	Cool	w	2335		
input	Heat	W	2185	,	
Compressor	Туре		Hermetically sealed rotary type		
	Model		PH250X3-4LU		
	Oil charge		600cc(SUNISO 4GSD)		
Refrigerant system	Evaporato	r	STF fin and Grooved tube type		
,	Condenser		Corrugate fin and Grooved tube type		
	Control		Capillary tube		
	Refrigerant volume		1300 g (45.9 oz.) (Factory charged)		
	De-ice sys	stem	Micro computer controled reverse	system	
Noise level	High	dB(A)	45	_	
(at cooling, 220V)	Med.	dB(A)	43		
(at cooming, 220v)			38	-	
Low dB(A)		1 30	1		
<u>-</u>	LOW				
Fan system	Low			Direct delice	
Drive		2/n#\/:-	Direct drive	Direct drive	
Drive Air flow quantity	High	m3(cft)/min.	15 (530)	34 (1200)	
Drive		m3(cft)/min.			
Drive Air flow quantity (at cooling)	High		15 (530) 12 (424) 9.8 (346)	34 (1200)	
Drive Air flow quantity (at cooling) Fan	High Med.	m3(cft)/min.	15 (530) 12 (424)	34 (1200)	
Drive Air flow quantity (at cooling)	High Med.	m3(cft)/min.	15 (530) 12 (424) 9.8 (346) Cross flow fan	34 (1200)	
Drive Air flow quantity (at cooling) Fan Connections Refrigerant coupling	High Med.	m3(cft)/min. m3(cft)/min.	15 (530) 12 (424) 9.8 (346) Cross flow fan	34 (1200)	
Drive Air flow quantity (at cooling) Fan Connections Refrigerant coupling Refrigerant tube size	High Med. Low g	m3(cft)/min. m3(cft)/min.	15 (530) 12 (424) 9.8 (346) Cross flow fan Flare type 1/2", 1/4"	34 (1200) Propeller fan	
Drive Air flow quantity (at cooling) Fan Connections Refrigerant coupling Refrigerant tube siz Refrigerant piping s	High Med. Low g	m3(cft)/min. m3(cft)/min.	15 (530) 12 (424) 9.8 (346) Cross flow fan Flare type 1/2", 1/4" AZ-24H3F; (3m) AZ-24H5F; (5m)	34 (1200) Propeller fan n) , AZ-24H7F; (7m), AZ-24H10F; (10m)	
Drive Air flow quantity (at cooling) Fan Connections Refrigerant coupling Refrigerant tube size	High Med. Low g	m3(cft)/min. m3(cft)/min.	15 (530) 12 (424) 9.8 (346) Cross flow fan Flare type 1/2", 1/4"	34 (1200) Propeller fan	
Drive Air flow quantity (at cooling) Fan Connections Refrigerant coupling Refrigerant tube siz Refrigerant piping s	High Med. Low g	m3(cft)/min. m3(cft)/min.	15 (530) 12 (424) 9.8 (346) Cross flow fan Flare type 1/2", 1/4" AZ-24H3F; (3m) AZ-24H5F; (5m)	34 (1200) Propeller fan n) , AZ-24H7F; (7m), AZ-24H10F; (10m)	
Drive Air flow quantity (at cooling) Fan Connections Refrigerant coupling Refrigerant tube siz Refrigerant piping signs of the coupling signs of the cou	High Med. Low g	m3(cft)/min. m3(cft)/min.	15 (530) 12 (424) 9.8 (346) Cross flow fan Flare type 1/2", 1/4" AZ-24H3F; (3m) AZ-24H5F; (5m)	34 (1200) Propeller fan n) , AZ-24H7F; (7m), AZ-24H10F; (10m)	
Drive Air flow quantity (at cooling) Fan Connections Refrigerant coupling Refrigerant tube siz Refrigerant piping s Drain piping mm Others	High Med. Low g	m3(cft)/min. m3(cft)/min.	15 (530) 12 (424) 9.8 (346) Cross flow fan Flare type 1/2", 1/4" AZ-24H3F; (3m) AZ-24H5F; (5m) O.D	34 (1200) Propeller fan n) , AZ-24H7F; (7m), AZ-24H10F; (10m)	
Drive Air flow quantity (at cooling) Fan Connections Refrigerant coupling Refrigerant tube siz Refrigerant piping s Drain piping mm Others Safety device	High Med. Low g	m3(cft)/min. m3(cft)/min.	15 (530) 12 (424) 9.8 (346) Cross flow fan Flare type 1/2", 1/4" AZ-24H3F; (3m) AZ-24H5F; (5m O.D Ø 20 Compressor: Overload protector Fan motors: Thermal protector Fuse, Micro computer control	34 (1200) Propeller fan n) , AZ-24H7F; (7m), AZ-24H10F; (10m)	
Drive Air flow quantity (at cooling) Fan Connections Refrigerant coupling Refrigerant tube siz Refrigerant piping s Drain piping mm Others Safety device	High Med. Low g	m3(cft)/min. m3(cft)/min.	15 (530) 12 (424) 9.8 (346) Cross flow fan Flare type 1/2", 1/4" AZ-24H3F; (3m) AZ-24H5F; (5m) O.D	34 (1200) ——————————————————————————————————	
Drive Air flow quantity (at cooling) Fan Connections Refrigerant coupling Refrigerant tube siz Refrigerant piping s Drain piping mm Others Safety device	High Med. Low g	m3(cft)/min. m3(cft)/min.	15 (530) 12 (424) 9.8 (346) Cross flow fan Flare type 1/2", 1/4" AZ-24H3F; (3m) AZ-24H5F; (5m O.D Ø 20 Compressor: Overload protector Fan motors: Thermal protector Fuse, Micro computer control	34 (1200) ——————————————————————————————————	
Drive Air flow quantity (at cooling) Fan Connections Refrigerant coupling Refrigerant tube siz Refrigerant piping s Drain piping mm Others Safety device	High Med. Low g e Gas, Liquid sets No.	m3(cft)/min. m3(cft)/min.	15 (530) 12 (424) 9.8 (346) Cross flow fan Flare type 1/2", 1/4" AZ-24H3F; (3m) AZ-24H5F; (5m) O.D Ø 20 Compressor: Overload protector Fan motors: Thermal protector Fuse, Micro computer control Polypropylene net (Washable)	34 (1200) ——————————————————————————————————	

Note: The condition of star (*) marked item are 'IEC 378'.



EXTERNAL DIMENSIONS



Remote controller Figure E-I. INDOOR UNIT

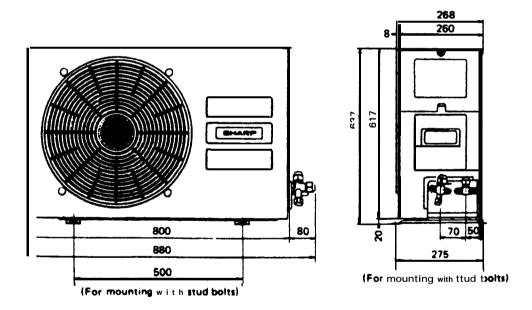


Figure E-2. OUTDOOR UNIT

WIRING DIAGRAMS

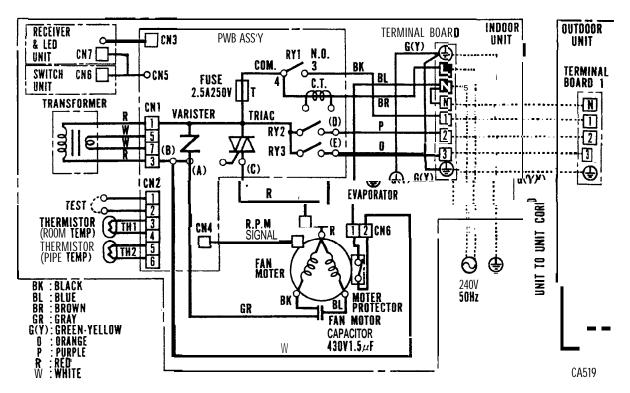


Figure W-I. Wiring Diagram for AY-1802S

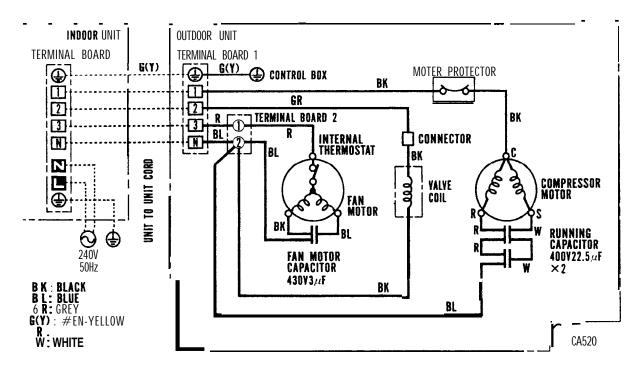
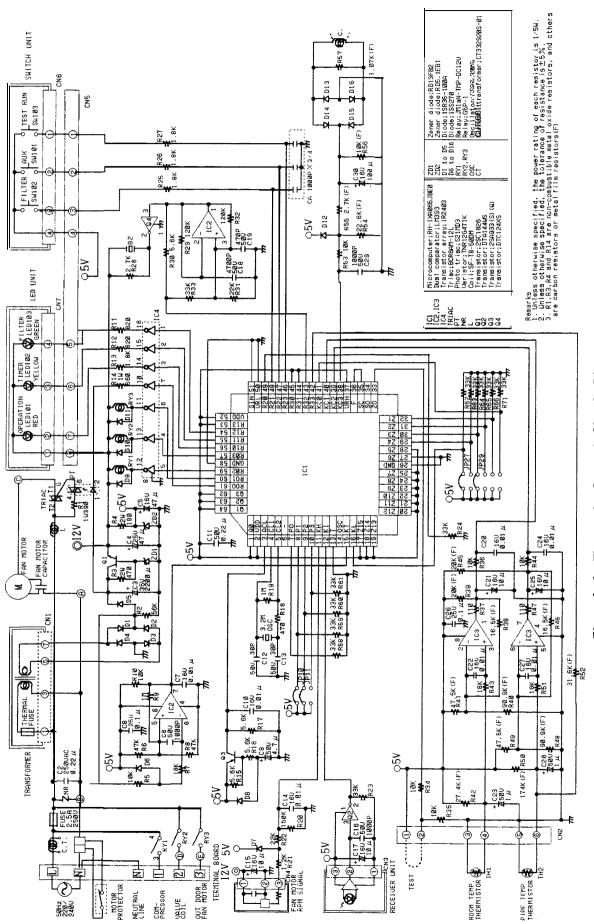


Figure W-2. Wiring Diagram for AU-1802Y

MICROCOMPUTER CONTROL SYSTEM



FigureL-1. Electronic Control Circuit Diagram

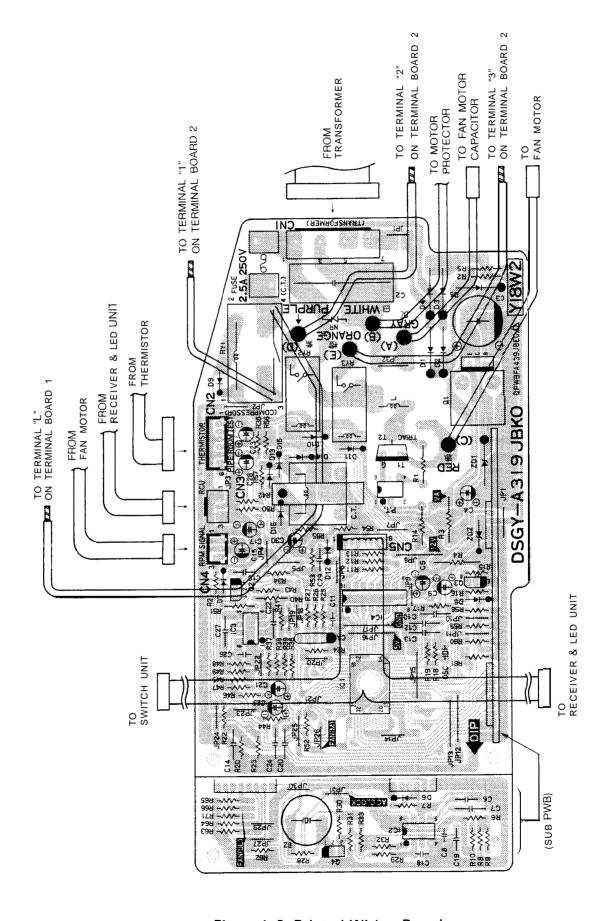


Figure L-2. Printed Wiring Board



 $\mbox{\bf Microcomputer}$ (ICI) The microcomputer is a CMOS, one chip, 4-bits microcomputer.

Microcomputer port allocation is as follows.

	Terminal /Name	Input output	Function	
1	Q0	_	(5V)	
2	VDD	-	Power supply (5V)	
3	ACL	input	Microcomputer reset input	
4	CL1		Internal osillation of the microcomputer I	
5	/CL2	-	Internal osillation of the microcomputer	
6	f	<u> </u>	(Not used)	
7	P0	Input	(0V)	
8	P1	Input	(0V)	
9	P2	Input	(5V)	
10	Р3	Input	(0V)	
11	КН	Input	R.P.M. signal	
12	KI	Input	Remote control signal	
13	T	<u> </u>	! (0V)	
14	oso		(Not used)	
15	KT	Input	AC clock input	
16		Input	(5V)	
17	Z15	output	<u> </u>	
18	Z14	Output	—	
	Z13	Output		
20	Z12	output	_	
21	Z11	Output	_	
_22	Z10	Output		
_23	Z9	Output		
_24	Z8	Output	_	
25	Z7	/output	_	
26	GND	-	Power supply (OV)	
27	Z6	output	_	
28	Z5	output	_	
29	Z4	Input	(0V)	

	T	1	
Pin No.	Terminal Name	Input output I	Function
3 0	Z3	Input	(5V)
31	Z2	Input	(0V)
3 2	Z1	Input	(0V)
33	zo	Input	Test mode
34	SO		(Not used)
35	SC	I	Connect F terminal
36	F		Connect SC terminal
37	VRF	1 —	
38	KC3	Input	Current signal
39	KC2	Input	Pipe temp. thermistor signal
40	KC1	Input	Room temp. thermistor signal
41	KC0	Input	(0V)
42	R33	output	—
43	R32	output	Buzzer signal
44	R31	ʻoutput] —
45	R30	output	_t —
46	R23	Input	Key in signal (TEST RUN)
	R22	Input	Key in signal (AUX.)
4%	R21	Input	Key in signal (FILTER)
49	R20	Input	Functional selection (OV)
50	VRL	- (
51	SIN	_	
52	VD	D -	Power supply (5V)
53	R13	output	_
5 4	R12	output	LED 103
55	RI1	output	LED 102
56	RIO	output	LED 101
57	R03	output	Valve coil control
58	GND	-	Power supply (OV)
59	R02	output	Compressor motor control
60	R01	output	Outdoor fan motor control
61	R00	Output	
62	Q3	Output	
63	Q2	Output	_
64	Q1	Output	_

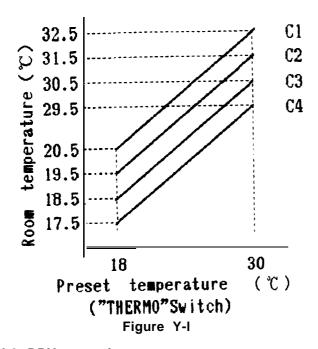


MICROCOMPUTER CONTROL SYSTEM

1. Temperature control characteristic

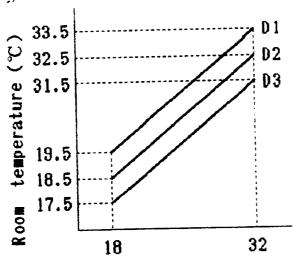
I-I COOL operation

In the "COOL" mode, the thermostat circuit is controlled by four thermostat lines (CI thru C4).



I-2 DRY operation

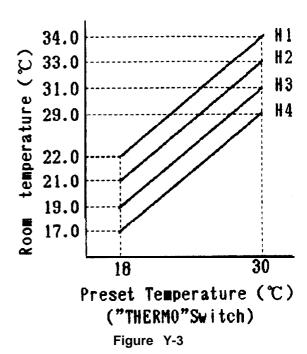
In the "DRY" mode, the thermostat circuit is controlled by three thermostat lines (D1 thru D3).



(Room Temperature At Operat ion Start) Figure Y-2

1-3 HEAT operation

In the "HEAT" mode, the thermostat circuit is controlled by four thermostat lines (HI thru H4).



2. Operation modes

2-1 COOL operation

The compressor turns on or off, at the thermostat lines C3 and C4. The outdoor fan motor is also controlled with the compressor.

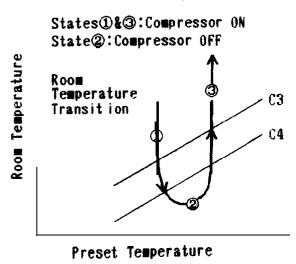


Figure Y-4

2-2 DRY operation

On the switch on, the compressor always starts to operate for 3 minutes with fan speed "D" (slower than "U L").

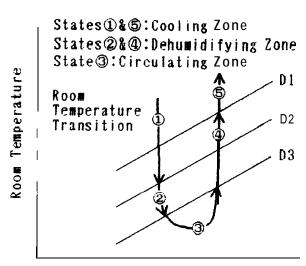
The microcomputer reads the room temperature 3 minutes after this first compressor operation.

This room temperature is set as the preset temperature automatically.

The preset temperature ranges from 18°C to 32°C.

When the room temperature is below 18°C, the preset temperature is set to 18°C, and when the room temperature is over 32°C, the preset temperature is set to 32°C

Dry operation is divided into three zones (Cooling zone, Dehumidifying zone and Circulating zone) by thermostat lines (D1 to D3), and the compressor and the fan motor are controlled in each zone as shown in Table Y-I.



Preset Terperature

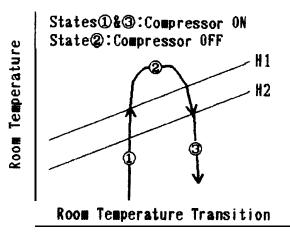
Figure Y-5

Table Y-I

	Compressor	Fan Speed
Cooling zone	ON	"UL"
Dehumidifying zone	2 min. ON 3 min. OFF Interval	"D" 2 min. 20 sec. ON 2min. 40 sec. OFF Interval
Circulating zone	OFF	

2-3 Heat operation

The indoor fan motor turns on or off, at the thermostat lines HI and H2.



Preset Temperature

Figure Y-6

3. Fan speed

Fan speeds are given by the indoor fan motor, "H", "M", "L" and "UL", which are available in the following operation mode.

Table Y-2

FAN Switch	HEAT	COOL
HIGH	Н	М
LOW	М	L
SOFT	L	UL



4. Hot-Keep

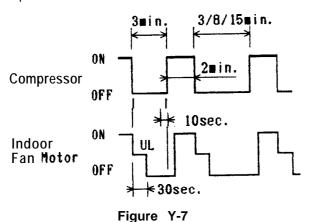
This function automatically controls the on-off operation of the indoor fan motor in accordance with the on-off operation of the compressor during the heating operation, thereby preventing the air conditioner from delivering a cold air when the compressor is off.

When the room temperature exceeds the thermostat line "HI", the compressor is turned off, and the indoor fan motor is turned off after rotating at "UL" for 30 seconds.

3 minutes after turning off the compressor, the compressor is turned on for 2 minutes.

At 10 seconds after turning on the compressor, the indoor fan motor is turned on.

The next compressor OFF time is for 3, 8 or 15 minutes according to the room temperature (the time increases with a rise of room temperature) when two minutes elapse after turning on the compressor.



5. Preheat air flow

This function is intended to prevent cold air from being discharged when the heating operation starts or when defrosting.

When the indoor pipe temperature is below 29°C at the begining of the heat operation or after defrosting, the indoor fan motor stays.

When the indoor pipe temperature gets higher than 29°C, the fan motor is turned on at speed "UL" after compensation of starting.

When the indoor pipe temperature exceeds 35°C, the specified fan speed is restored.

When the indoor pipe temperature falls below 30°C, the fan speed shifts down to "UL".

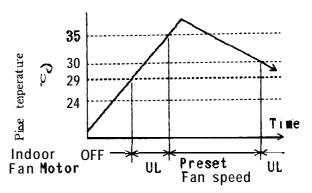


Figure Y-8

6. Overheating protection system

When overloading occurs during the heating operation, this system controls the outdoor fan motor according to the indoor pipe temperature to prevent the overloading of the compressor and restrain the rise in high pressure.

When the indoor fan speed is "L", for instance, the outdoor fan motor stops if the indoor pipe temperature exceeds 53°C, and the outdoor fan motor is turned on whether 3 minutes elapse or when the pipe temperature falls below 49°C.

7. Current control

This system, in order to prevent overcurrent during heating operation, controls the outdoor fan motor and changes the indoor fan motor speed by detecting total current.

When an excessive current is detected, it automatically stops the compressor.

The change in the indoor fan speed occurs in the following fashions; from "off" to "UL", "UL" to "L", "L" to "L", "M" to "M", "H" to "H", and vice versa.

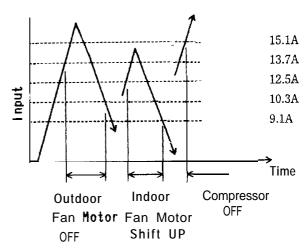


Figure Y-9



8. Anti-sweating

When the operation continues 30 minutes at the fan switch "SOFT" in cooling zone or dehumidifying zone during dry operation or in continuous compressor operation during cool operation, the fan speed of indoor fan motor shifts up, from "UL" to "L" or from "D" to "UL".

9. Freeze preventive

When the indoor pipe temperature falls below - 1 °C during cool operation or dry operation, the compressor is stopped.

10. Defrost

The defrost timer (integrating the operation time of compressor) counts time with microcomputer during heat operation.

Frost of outdoor pipe is estimated by indoor pipe temperature (TH2), room temperature (TH1) and operation state of compressor.

The defrosting is performed if the following two conditions are met during heat operation.

a) Time-up defrost timer

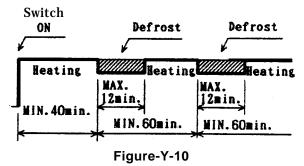
(Usually 60 minutes. 40 minutes for the first time after starting the heat operation. It is reset on starting heat operation. It is reset on starting heat operation and defrosting)

b)

In the defrost operation, first, the compressor is turned off, the fan speed is set to "UL" and the outdoor fan motor is turned off.

30 seconds later the indoor fan motor is turned off, 50 seconds later the reverse valve is turned off, and 60 seconds later the compressor is turned on.

In the end of defrosting, the compressor is turned off, the outdoor fan motor is turned on, 50 seconds later the reverse valve is turned on, 60 seconds later the compressor is turned on, starting heat operation. At this time, the indoor fan motor is turned off or the fan speed is set to "UL" if preheat air flow function is effective.



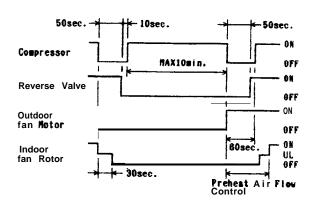


Figure Y-I 1

11. Delayed operation of the reverse valve

When the heat operation is shut down or the operating mode is switched from heat to cool or dry, or vice versa, the reverse valve does not function in the 3-minute delay period; and it functions the 3-minute delay period is over.

12. Test run

If the "TEST RUN" button in the unit is pushed during suspension of operation, cool test operation starts. At this time, the fan speed is set to "M". If this button is pushed during operation, the test operation starts in current operation mode. The operation LED (red) flickers during test run.

During cool operation and heat operation, the compressor is kept on but in dry operation it is set in the dehumidifying zone.

13. Timer

To set the timer, set the "TIMER" switch to a desired time, then push the "TIMER" button.

ON-timer or OFF-timer is automatically judged according to the operation state just when pushing the button.

When the "TIMER" button is pushed during operation, the OFF-timer is set but when this button is pushed in stop mode, the ON-timer is set.

When one hour elapsed after the OFF-timer is set, thermostat setting is automatically shifted (+ 1 °C in cool operation and dry operation, -3°C in Heat operation).



14. Automatic air conditioning

When automatic air conditioning is selected, the operation mode and preset temperature are set automatically according to the room temperature on starting operation.

Table Y-3

Room temperature at operation start	Operation Mode	Preset Temperature
Above 28°C	COOL	26°C
26 to 28°C		25°C
21 to 26°C	DRY	Room temperature at operation start
Below 21 °C	H EAT	. 23°C

When the automatic preset temperature is selected, preset temperature is automatically set as follows according to the operation mode.

Table Y-4

Operation Mode		Preset temperature
COOL	Above 28°C	26°C
	Below 28°C	25°C
DRY		Room temperature at operation start
H EAT		23°C

15. Automatic fan speed

When the automatic fan speed is selected in cool or heat operation, the fan speed is automatically changed by the thermostat lines CI to C3 in cool operation and H2 to H4 in heat operation.

a. COOL operation



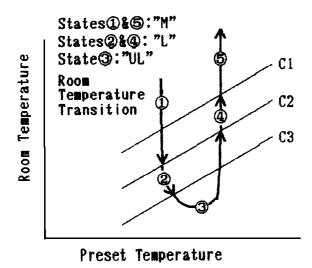


Figure Y-I 2

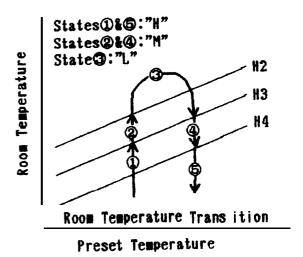


Figure Y-I 3



16. Outputs in each operation mode

Table Y-5

Model		Compressor	Outdoor Fan M otor	Indoor Fan motor	Valve coil
COOL		ON	ON	ON	OFF
		OFF	OFF	ON	OFF
H EAT	Normal	ON	ON	ON	ON
		OFF	OFF	UL(OFF)	ON
	Preheat Air Flow Control	ON	ON	UL(OFF)	ON
	On Defrost	ON	OFF	OFF	OFF
DRY	Cooling	ON	ON	L(UL)	OFF
	Dehumidifying	ON/OFF	ON/OFF	UL(D)/OFF	OFF
	Circulating	OFF	OFF	D/OFF	OFF

17. **Test mode** 17-1) TEST 1

(For control circuit operation checking) Make terminals 1 and 2 of connector CN2 short-circuited and supply the power. Hereby the timer's period becomes short-

In this test mode, the control times are changed as follows.

1/3600 (100 seconds) Filter sign: Other controls:1 /60 (ex.: 3 min. to 3 sec.)

17-2) TEST 2

(For output of each operation checking) Keep pushing both the buttons, "AUX." and "TEST RUN", and supply the power, the system will go to the test 2 mode.

In this mode, the out-put of operations is switched by the "TEST" button.

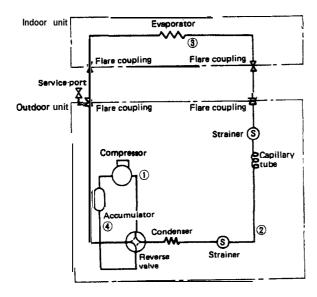
Use the "AUX." button to cancel the test mode.

Normal output is shown in Table Y-6.

Table Y-6

Step	Output for	Fan speed	Lamps		
	Outdoor Unit		RED	GREEN	YELLOW
1	OFF	D	ON/OFF	OFF	ON
2	OFF	UL	ON/OFF	ON	OFF
3	Outdoor Fan motor	L	ON/OFF	OFF	OFF
4	Compressor	М	ON/OFF	OFF	OFF
5	Reverce Valve	Н	ON/OFF	OFF	OFF
	(Black to step 1)				

REFRIGERATION CYCLE



Cycle temperature and service port pressure

(AS: Cooling	and Heatpump condition	.)
		_

No.	Condition	Cooling	Heating
1		97℃	79 ℃
2		43°C	3.€
3		9.C	46 ℃
4		15°C	-2℃
Servi	e port pressure	4.7kg/cm²G	18.9 kg/cm²G

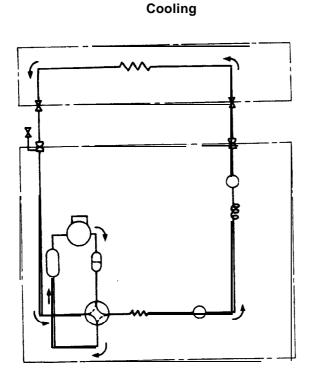
Dimension of Capillary tuba

	O.D	1.D	L
Capillary tube	ø3.2	ø1.9	500

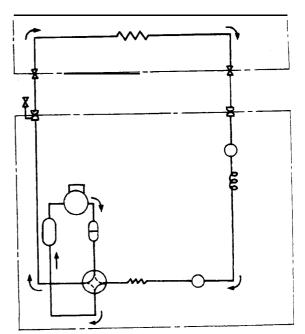
AS Cooling and Heatpump condition

	Indoor side		Outdoor side	
	Temperature	Relative humidity	Temperature	Relative humidity
	(℃)	(%)	(°C)	(%)
Cooling	27	48	35	40
Heating	21	37	7	07

Flow of refrigerant



Heating





PERFORMANCE CURVE

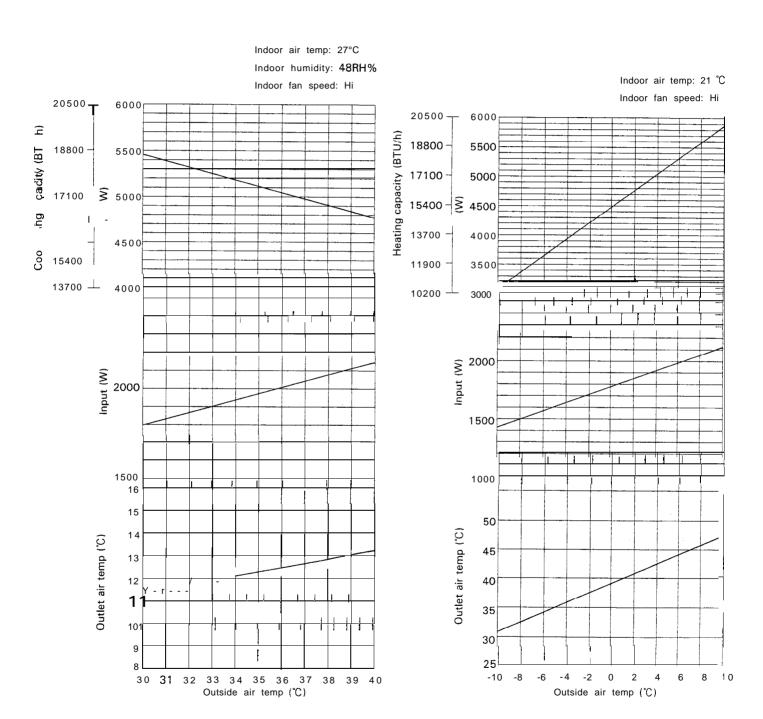


Figure P-I. At Cooling for AY-1802S

Figure P-2. At Heating for AY-1802S

REFRIGERANT PIPE INSTALLATION WORKS

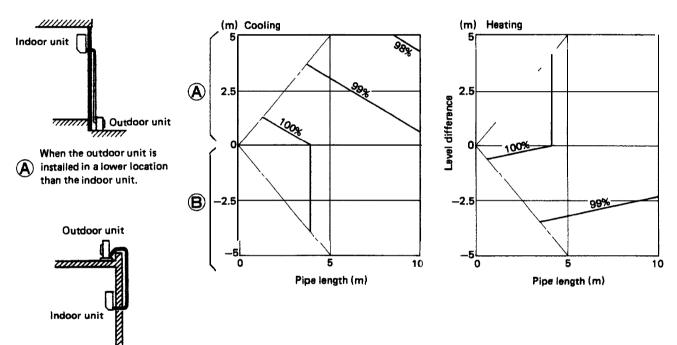
(1) Refrigerant pipe length and level difference between the indoor and outdoor units.

PIPE	SIZE	STANDARD PERMISSIBLE	PERMISSIBLE LEVEL
GAS	LIQUID	LENGTH	DIFFERENCE
1/2"	1/4"	10m (32.8ft)	5m (16.4ft)

- ★ The greater the pipe length and the level difference, the more the cooling and heating capacities decrease, See paragraph (2).
- ★ The shorter the refrigerant pipe, the highter the machine capability. Keep the pipeline as short as possible.

(2) Percentage change of the cooling and heating capacities due to the pipe length and level difference

The real cooling and heating capacities are obtained as the product of the capacities, which is read in the performance curves and the percent read in the below diagram.



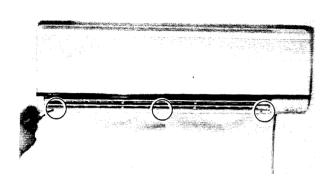
When the outdoor unit is installed in a higher location than the indoor unit.



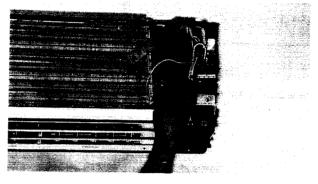
DISASSEMBLING PROCEDURE

FOR INDOOR UNIT MODEL AY-1802S

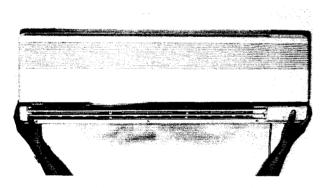
CAUTION: DISCONNECT THE UNIT FROM THE POWER SUPPLY BEFORE ANY SERVICING



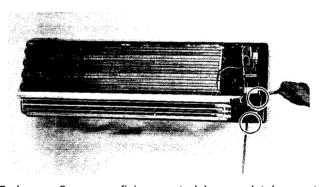
 Set the vertical adjustment louvers horizontally. Remove 3 screw covers and 3 screws. (When assembling, after fixing the front panel with 3 screws, push the center of the front panel slightly. The spring hook will secure the front panel with 3 screws.)



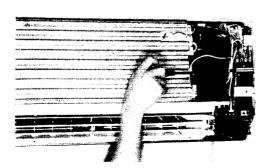
 Take out thermister holder and thermister for evaporator.
 Disconnect fan motor connector and unit-to-unit cord.



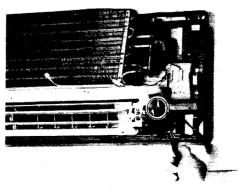
2. Remove the front panel ass'y while lifting up.



5. Loose 2 screws fixing control box and take control ass'y out.

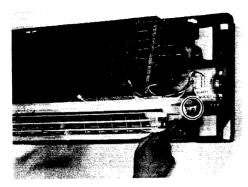


3. Loose a screw for a pipe cover and take it out.

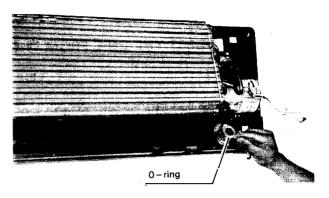


6. Loose a screw fixing drain hose.

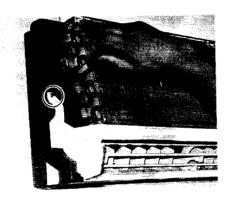




7. Loose a screw fixing drain pan ass'y. (Right side)



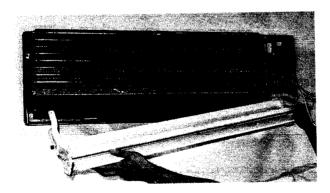
10. When assembling, make sure that O-ring is set to drain hose.



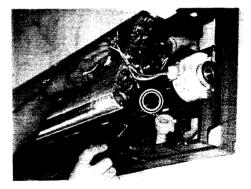
8. Loose a screw fixing drain pan ass'y. (Left side)



11 .Loose 2 screws fixing evaporator.

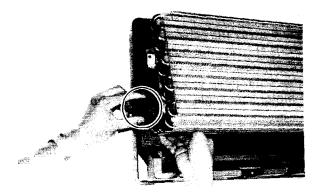


9. Take the drain pan ass'y out.

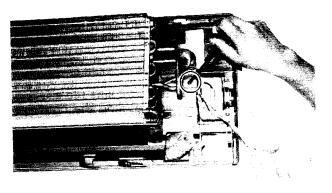


12.Loose a screw fixing cross flow fan to motor.

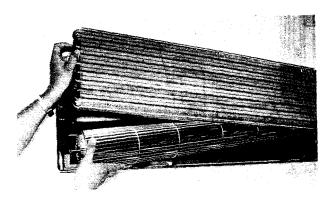




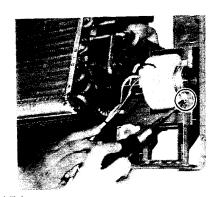
13. Take out the fan bearing ass'y.



16.Loose a screw fixing fan cover. Take the fan motor out.



14. Take out the cross flow fan while slightly lifting the evaporator.



15.Loose a screw fixing fan motor holder.



FOR OUTDOOR UNIT MODEL AU-1802Y

CAUTION: DISCONNECT THE UNIT FROM THE POWER SUPPLY BEFORE ANY SERVICING

- 1. Remove the screws holding the left side plate and pull it out.
- 2. Remove the one screw holding the control cover to the cabinet and pull it out.
- 3. Loose the screw holding the right side plate.
- 4. Remove the another screws holding the right side palte and pull it out.
- 5. Remove the another screws holding the left and right side of the cabinet .
- 6. Lift and away the cabinet.
- 7. Remove the one nut holding the fan to the fan motor shaft, now the fan is free.
- 8. Remove the three screws holding the fan motor to the motor stay angle, now the fan motor is free.

NOTE: Number as shown in following figure is the removal order.

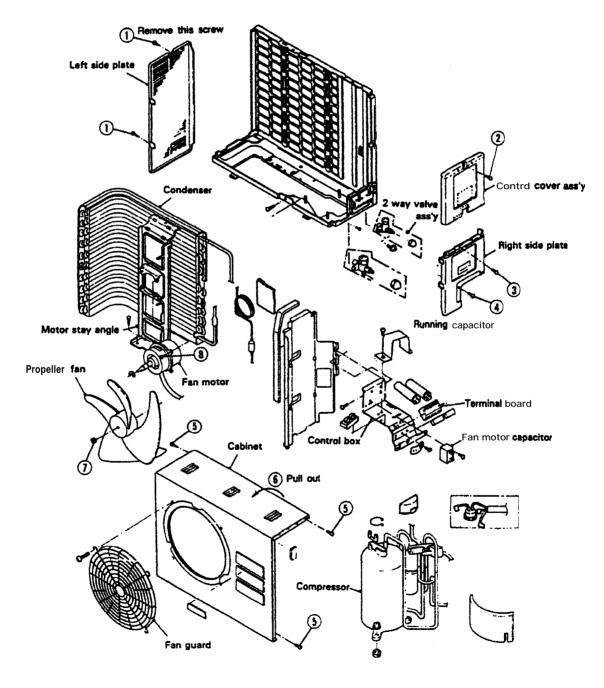


Figure D-2. OUTDOOR UNIT MODEL AU-1802Y



REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	Q′TY	CODE
MODEL AY-1802S				
1 2 3 4 5	LX-NZ0247JBEO XTTSD45P30000 CRMC-A213JBEO LX-BZA054JBEO PPLT-A012JBPO		7 6 1 1	AB AA BE AB AD
6 7 8 9 10	PPLT-A013JBPO CPIPCA163JBKO CMOTLA342JBEO PEVA-A182JBEO PSGY-A206JBKO	Fan motor	1 1 1 1	AC BC BP BU AL
11 12 13 14 15	PSGY-A205JBKO TINSEA051JBRO QTAN-A089JBEO DSGY-A319JBKO RTRN-A106JBEO	Sub-controller ass'y Operation manual Terminal board Printed wiring board ass'y Transformer	1 1 1 1	AQ AS AL BQ AW
16 17 18 19 20	RC-HZA154JBE0 RTHM-A161JBE0 LHLD-A095JBF0 PBOX-A071JBF0 NFANCA028JBE0	Thermister holder	1 1 1 1	AX AL AC AQ BH
21 22 23 24 25	CSRA-A252JBKO MJNTPA022JBFB	Mounting plate Drain pan ass'y Louvre link A Louvre link B Horizontal adjustment louvre A	1 3 1 3	AT BM AB AB AF
26 27 28 29 30	MLOV-AO87JBTC	Horizontal adjustment louvre B Vertical adjustment louvre A Vertical adjustment louvre B Louvre spring Louvre label	12 1 2 1	AF AK AU AB AG
31 32 33 34 35	LANGKA030JBP0	Louvre angle A Louvre angle B Louvre holder A Louvre holder B Louvre shaft	1 1 4 2 1	AC AC AB AC AC
36 37 38 39 40	NSFT-A025JBFO PHOS-A007JBEO PPACGA004JBEO CHLD-A045JBKO CHLD-A046JBKO	L-link Drain hose O ring Fan bearing ass'y Bearing cushion ass'y	2 1 1 1 1	AC AN AB AF AG
41 42 43 44 45	LANG-A085JBWO LHLD-A100JBFA PCOV-A108JBE0		1 1 1 2	AE AD AC AE AH
46 47 48 49 50	DCHS-A167JBKO CWAK-B208JBKO DF1L-A021JBKO HDEC-A468JBEA GFTA-A353JBTA	Front panel ass'y Air filter Display panel	1 1 2 1	BE BT AP AW AH
51 52 53 54 55	HBDG-A024JBEA PG1DMA030JBFA	SHARP badge Filter guide A Filter guide B Seal for evaporator Installation manual	1 1 2 1 1	AE AC AC AD AM
56 57 58	FCOV-A011JBEB	Screw cover Wiring diagram Name plate	3 1 1	AB AE AF



REF. NO. PART NO.	REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
-------------------	----------	----------	-------------	------	------

PWB PARTS

59	RH-IXA065JBEO	Microcomputer (IC1)	1	AU
60	RH-IZA104JBE0	Dual comparator (IC2, IC3)	2	AC
61		Transistor array (IC4)	1	AE
62	RH-SZA004JBEO		1	AF
63		Photo triac (PT)	1	AG
64	RRLYJA032JBE0	Relay (RY1)	1	AU
65		Relay (RY2, RY3)	2	AW
66		Filter coil (L)	1	AM
67	RCRS-AOO2JBEO		1	AD
68	RH-VZ0002JBE0	Varistor (NR)	1	AF
69	RC-QZA066JBEO	Capacitor (C2)	1	AK
70	QFS-AA013JBE0	Fuse (Fu)] 1	AC

MODEL AU-1802Y

2 P 3 D 4 L	PCMPRA044JBE0 PCON-A166JBP0 DVLV-A092JBKO X-NZ0133JBE0 LX-NZ0235JBE0	Compressor Condenser 2 Way valve ass'y Flare nut Valve cap	1 1 1 1 2	CP CE AW AE AG
7 D L L	PCAP-0035JBE0 DVLV-A089JBKO LX-NZ0255JBE0 LX-NZ0236JBEO PCAP-0045JBE0	Bonnet 3 Way valve ass'y Flare nut Service cap Bonnet	1 1 1 1	AB AY AH AE AD
12 P 13 F 14 P	LX-BZA072JBEO PCPY-A196JBE0 PSRN-0039JBE0 PGUMSA074JBE0 CMOTLA340JBE0	Valve set bolt Capillary tube Strainer Butyl rubber sheet Fan motor	4 1 1 1	AB AM AH AE BR
17 L 18 P 19 G	FANP0198JBFA LANGK0163JBP0 PSKR-0113JBP0 GLEG-A012JBE0 LX-NZ0233JBE0	Propeller fan Motor stay angle Bulkhead Compressor cushion rubber Compressor nut	1 1 3 3	AV AS AQ AF AC
22 P 23 M 24 C	LBSHCA004JBE0 PCOV-A014JBE0 MSPR-1070JBE0 CW-VZA092JBKO RHOG-A036JBE0	Terminal bush Terminal cover OCR spring Compressor cord ass'y Over load relay	1 1 1 1	AD AG AC AH AQ
27 R 28 R 29 Q	GPLTMA009JBTB RC-HZA153JBE0 RC-HZA156JBE0 QTAN-A087JBE0 LHLD-0261JBM0	Right side plate Running capacitor Fan motor capacitor Terminal board Cord clamp	1 2 1 1	AQ AY AV AS AB
32 33 34 G	CFTA-A127JBKO SPLTMA012JBTB GCAB-A060JBTB GGADFA008JBEB PSEL-0452JBE0	Control cover ass'y Left side plate Cabinet Fan guard Bulkhead seal	1 1 1 1	AT AV BC AX AB
37 38 39	PSPF-A203JBEO PBOX-A070JBWO BNDKA037JBP0 PSEL-0617JBE0 FSPC-B249JBRO	Sound proof cover Control box Running capacitor band Cabinet seal Name plate	1 1 1 1	AV AK AD AA AE
42 43 44	TLABCA520JBR0 LX-NZ0128JBEO TLABBA029JBRA CCHS-A042JBTA CCIL-A051JBK0	Wiring diagram Fan set nut SHARP label Chassis Reverse valve coil	1 1 1 1	AE AB AC BL AW
46 P	PVLVXA011JBE0 QTAN-0094JBE0	Reverse valve Terminal board	1	BG AF

HOW TO ORDER REPLACEMENT PARTS

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER 2. REF. NO. 3. PART NO. 4. DESCRIPTION

