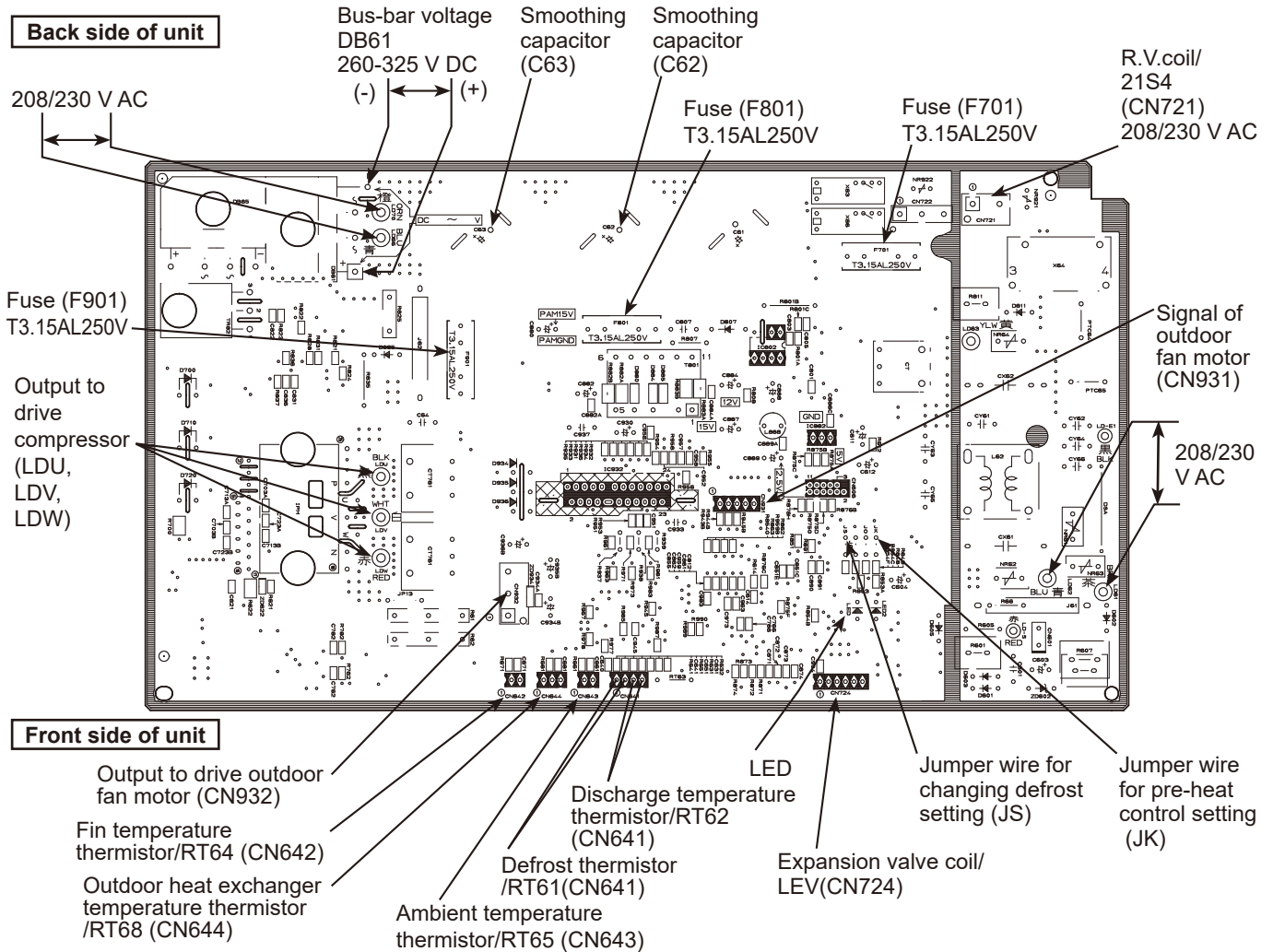
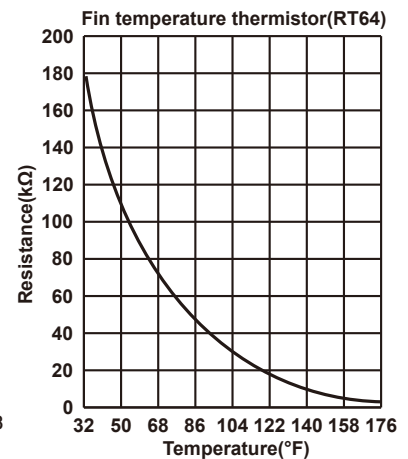
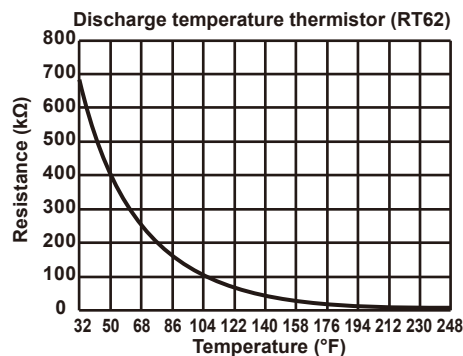
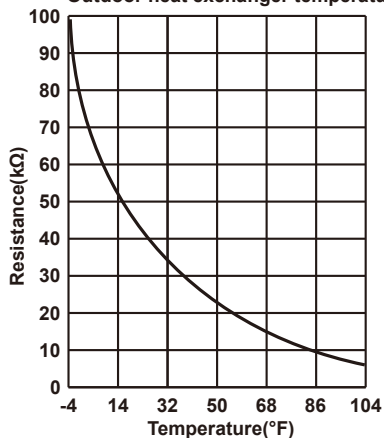


1. Inverter P.C. board

MUZ-HM09NA- U8 MUZ-HM12NA- U8 MUZ-HM09NA2- U8 MUZ-HM12NA2- U8

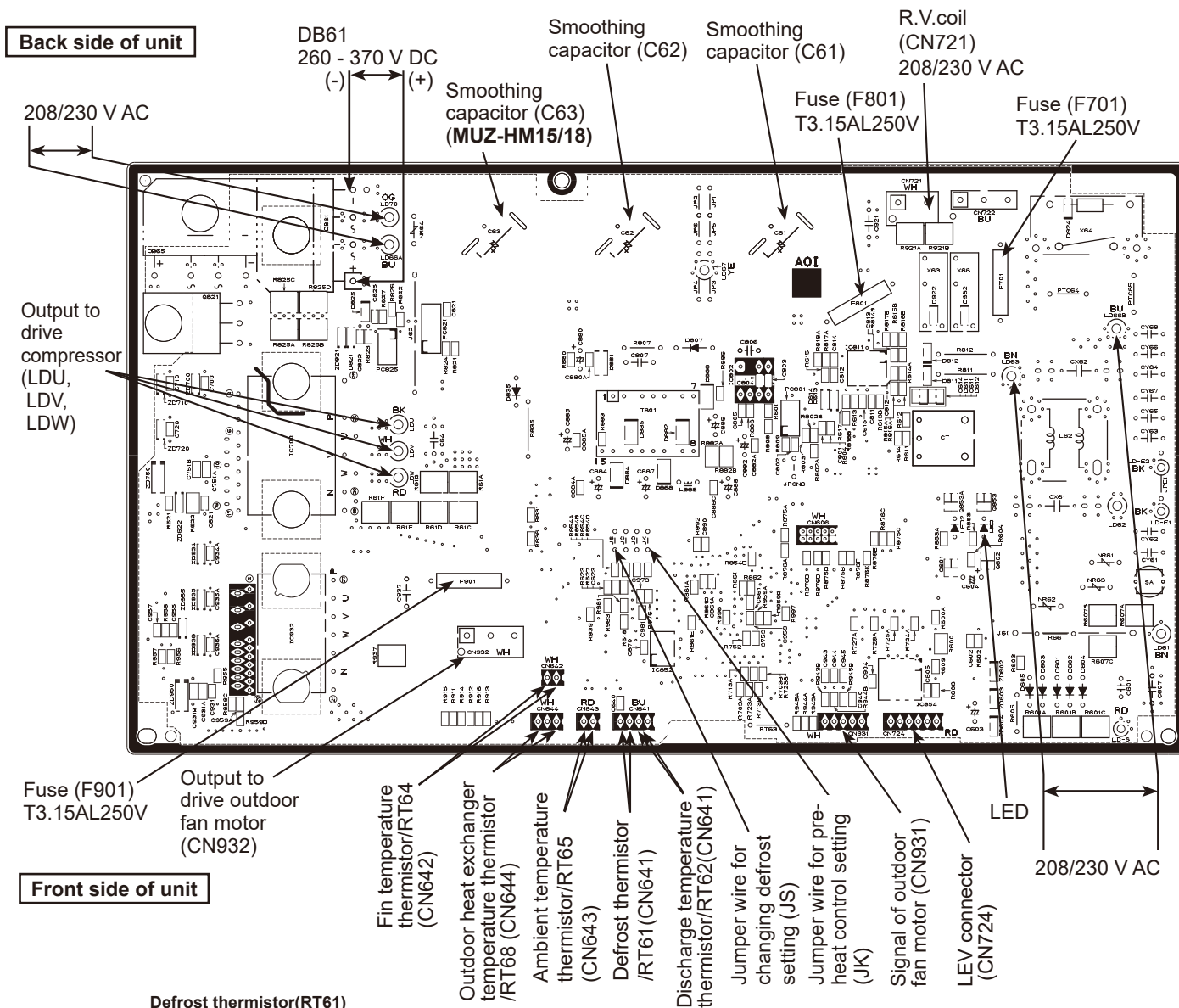


Defrost thermistor(RT61)
Ambient temperature thermistor(RT65)
Outdoor heat exchanger temperature thermistor(RT68)

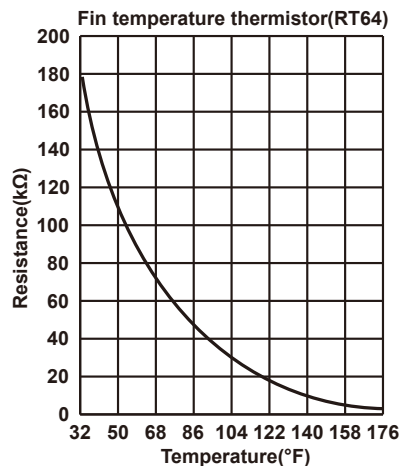
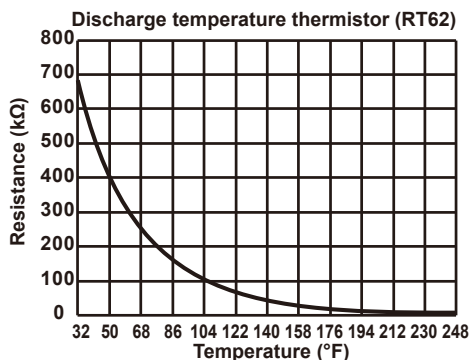
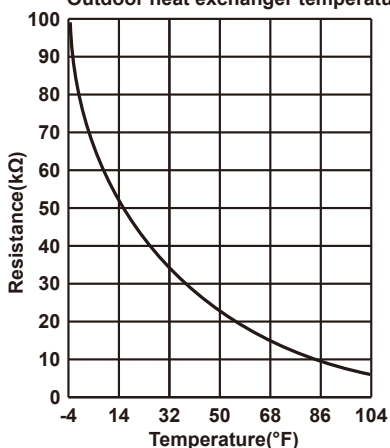


1. Inverter P.C. board

MUZ-HM09NA- U2 MUZ-HM09NAH- U1 MUZ-HM12NA- U2 MUZ-HM12NAH- U1
 MUZ-HM15NA- U2 MUZ-HM15NAH- U1 MUZ-HM18NA- U2 MUZ-HM18NAH- U1



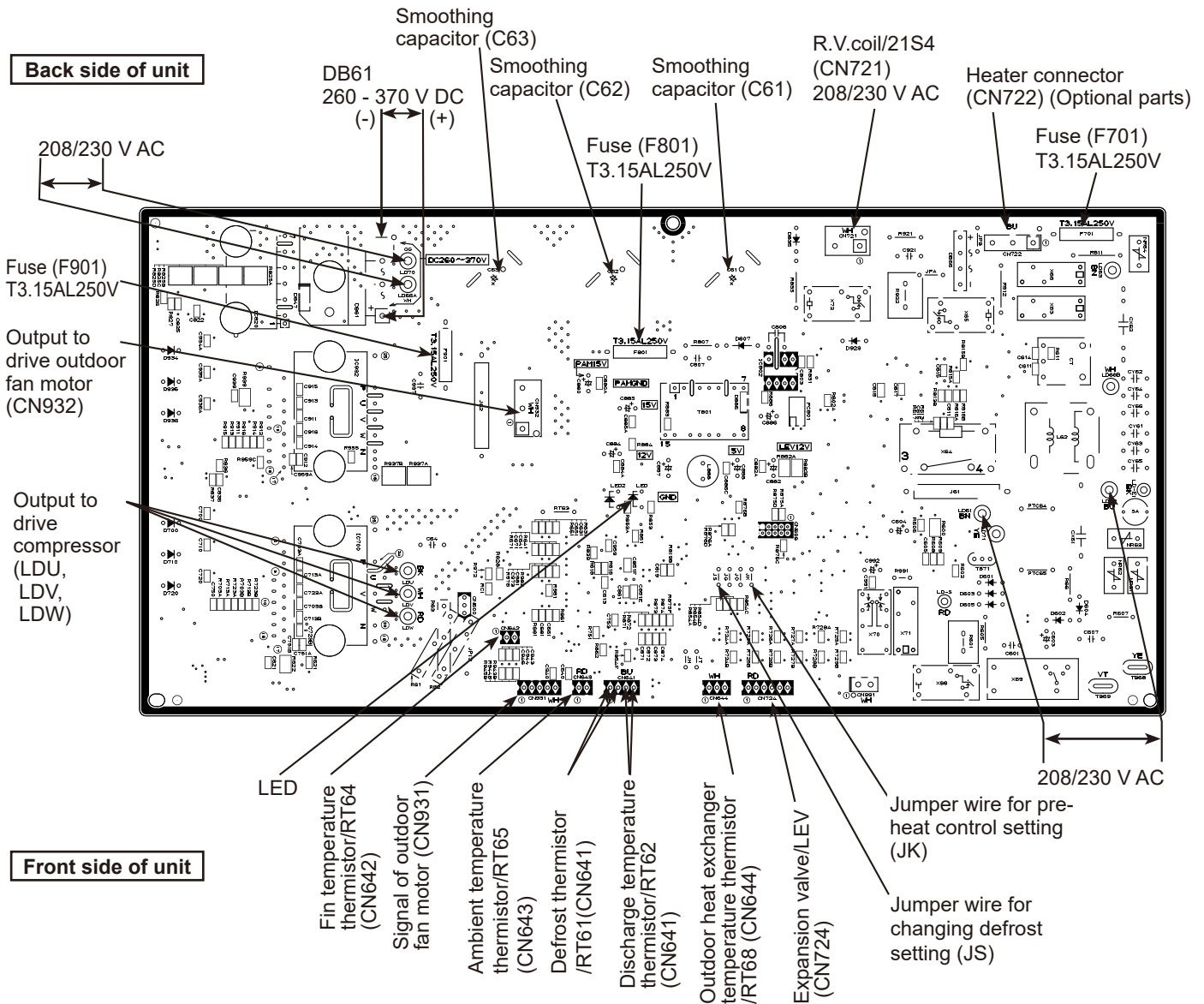
Defrost thermistor(RT61)
 Ambient temperature thermistor(RT65)
 Outdoor heat exchanger temperature thermistor(RT68)



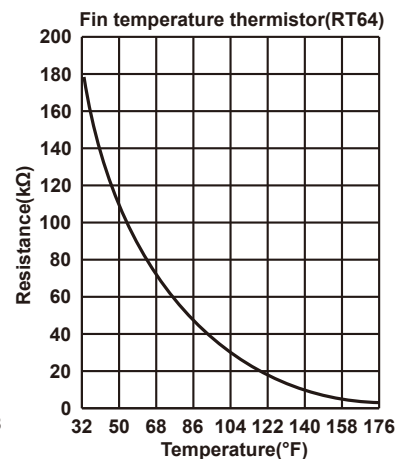
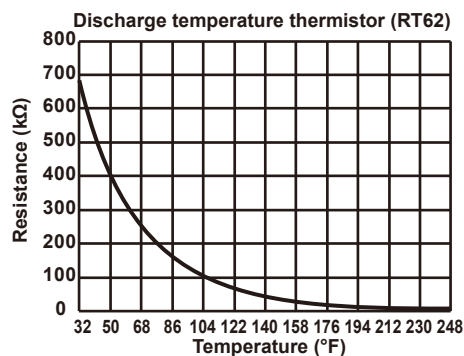
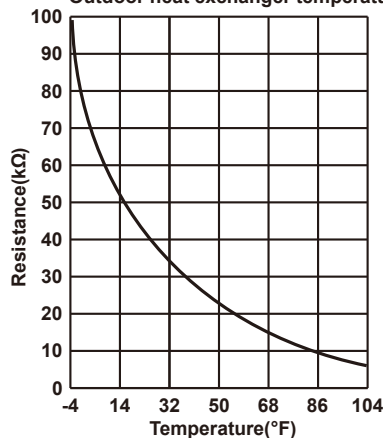
OBH747H

1. Inverter P.C. board

MUZ-HM24NA MUZ-HM24NA2 MUZ-HM24NAH



Defrost thermistor(RT61)
Ambient temperature thermistor(RT65)
Outdoor heat exchanger thermistor(RT68)



<Detaching method of the terminal with locking mechanism>

The terminal which has the locking mechanism can be detached as shown below.

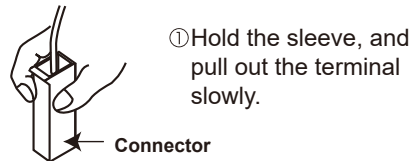
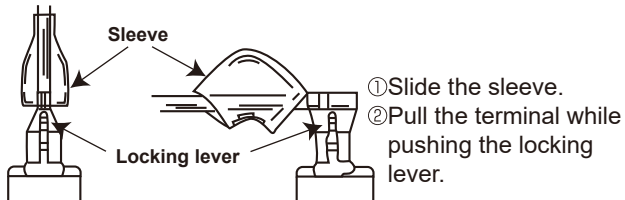
There are 2 types of the terminal with locking mechanism.

The terminal without locking mechanism can be detached by pulling it out.

Check the shape of the terminal before detaching.

(1) Slide the sleeve and check if there is a locking lever or not.

(2) The terminal with the connector shown below has the locking mechanism.



11-1. MUZ-HM09NA MUZ-HM09NA2 MUZ-HM09NAH MUZ-HM12NA MUZ-HM12NA2 MUZ-HM12NAH MUZ-HM15NA MUZ-HM15NA2 MUZ-HM15NAH MUZ-HM18NA MUZ-HM18NA2 MUZ-HM18NAH

NOTE: Turn OFF the power supply before disassembly.

—————>: Indicates the visible parts in the photos/figures.

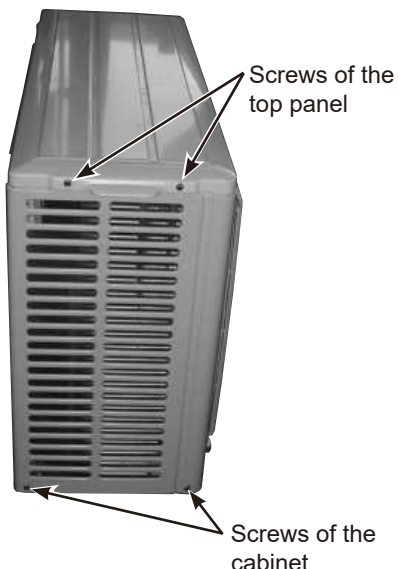
----->: Indicates the invisible parts in the photos/figures.

OPERATING PROCEDURE

1. Removing the cabinet

- (1) Remove the screw fixing the service panel.
- (2) Pull down the service panel and remove it.
- (3) Remove the screws fixing the conduit cover.
- (4) Remove the conduit cover. (Photo 4)
- (5) Remove the screw fixing the conduit plate. (Photo 5)
- (6) Remove the conduit plate.
- (7) Disconnect the power supply wire and indoor/outdoor connecting wire.
- (8) Remove the screws fixing the top panel.
- (9) Remove the top panel.
- (10) Remove the screws fixing the cabinet.
- (11) Remove the cabinet.
- (12) Remove the screws fixing the back panel.
- (13) Remove the back panel.

Photo 2



PHOTOS/FIGURES

Photo 1

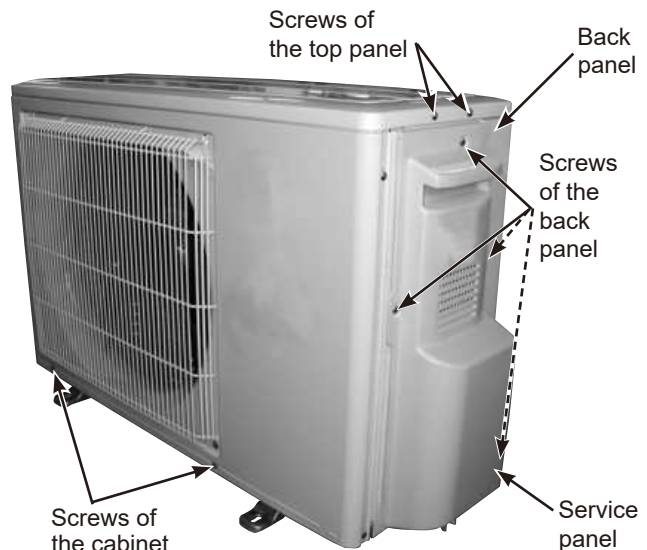
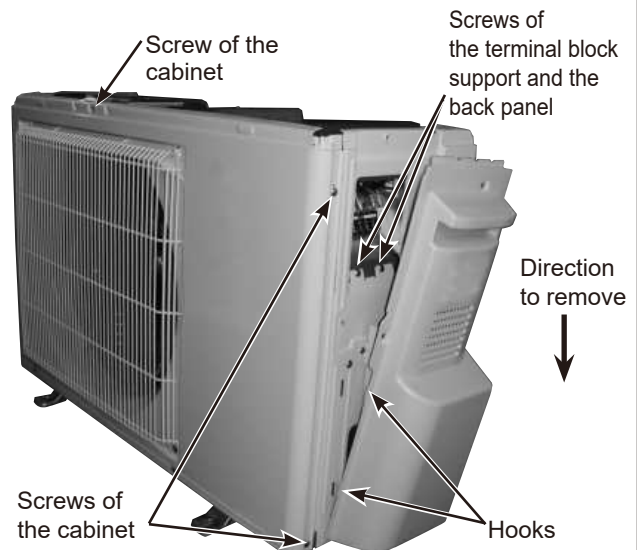
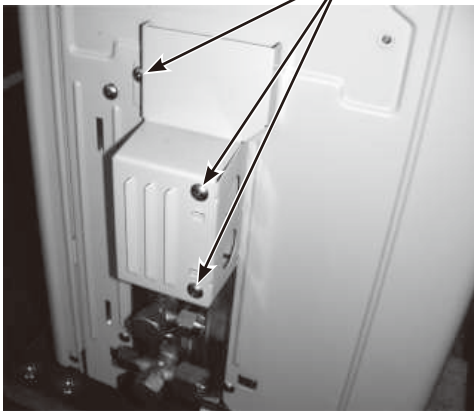


Photo 3



OPERATING PROCEDURE

Photo 4



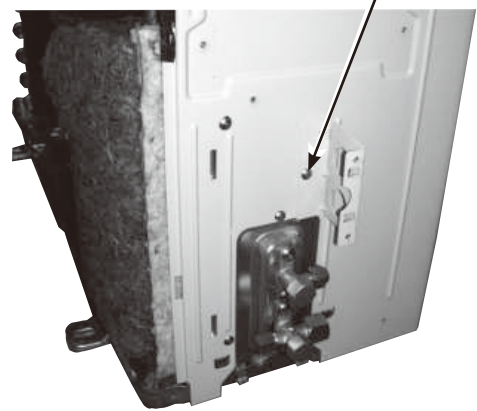
Screws of the conduit cover

2. Removing the inverter assembly, inverter P.C. board

- (1) Remove the cabinet and panels. (Refer to section 1.)
- (2) Disconnect the lead wire to the reactor and the following connectors:
 <Inverter P.C. board>
 CN721 (R.V. coil)
 CN722 (Defrost heater) (**MUZ-HM09/12/15/18NAH**)
 CN931, CN932 (Fan motor)
 CN641 (Defrost thermistor and discharge temperature thermistor)
 CN643 (Ambient temperature thermistor)
 CN644 (Outdoor heat exchanger temperature thermistor)
 CN724 (LEV)
- (3) Remove the compressor connector (CN61).
- (4) Remove the screws fixing the heat sink support and the separator.
- (5) Remove the fixing screws of the terminal block support and the back panel.
- (6) Remove the inverter assembly.
- (7) Remove the screw of the ground wire and screw of the terminal block support.
- (8) Remove the heat sink support from the P.C. board support.
- (9) Remove the screw of the inverter P.C. board and remove the inverter P.C. board from the P.C. board support.

PHOTOS/FIGURE

Photo 5

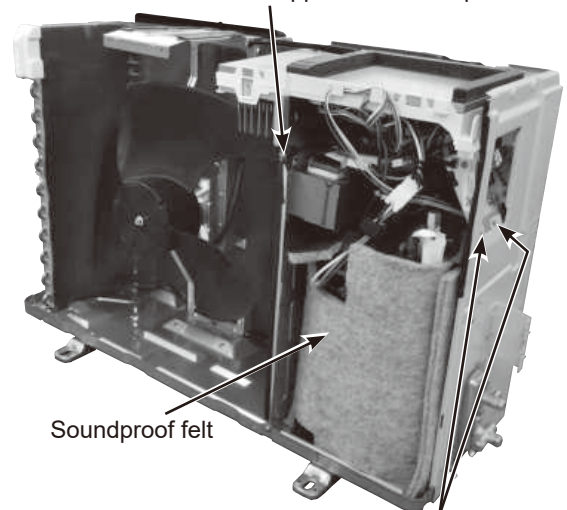


Screw of the conduit plate

Photo 6

MUZ-HM09/12/15/18NA - U2
MUZ-HM09/12/15/18/24NAH - U1

Screws of the heat sink support and the separator

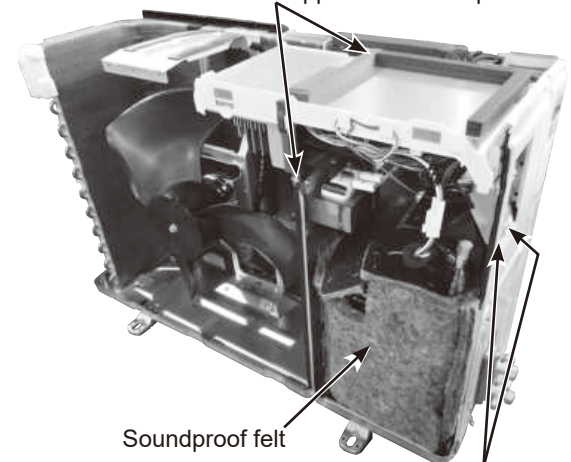


Soundproof felt

Screws of the terminal block support and the back panel

Photo 7
Other models

Screws of the heat sink support and the separator



Soundproof felt

Screws of the terminal block support and the back panel

OPERATING PROCEDURE

3. Removing R.V. coil

- (1) Remove the cabinet and panels. (Refer to section 1.)
- (2) Disconnect the following connectors:
<Inverter P.C. board>
CN721 (R.V. coil)
- (3) Remove the R.V. coil.

PHOTOS/FIGURES

Photo 8

MUZ-HM09/12/15/18NA - [U2]

MUZ-HM09/12/15/18NAH - [U1]

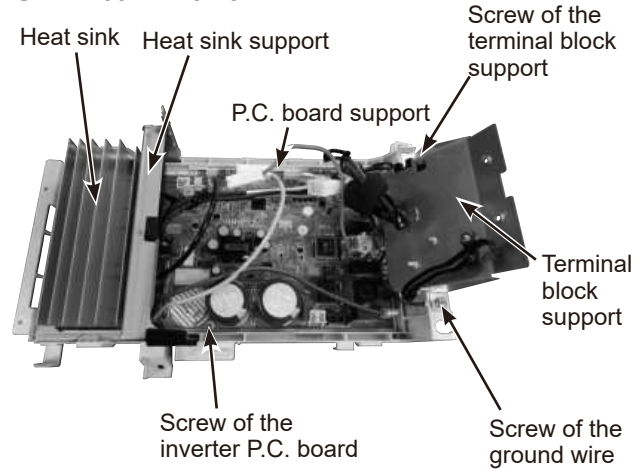


Photo 9

Other models

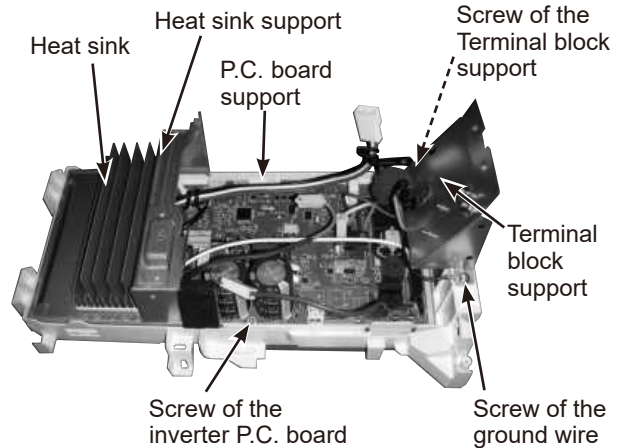
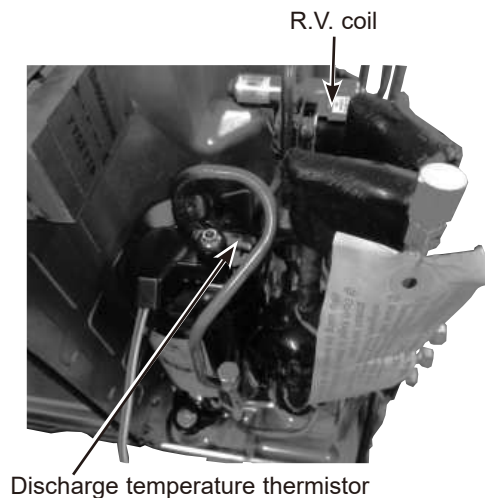
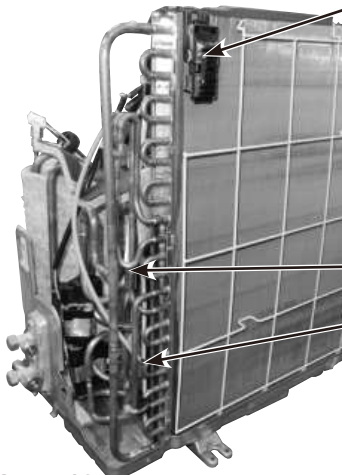
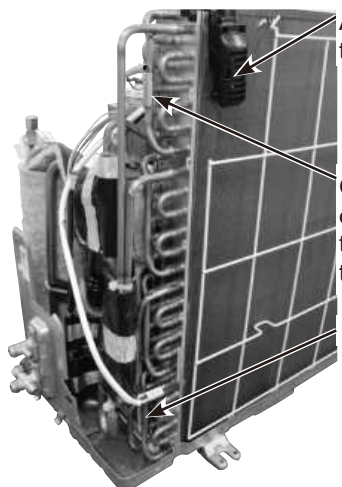
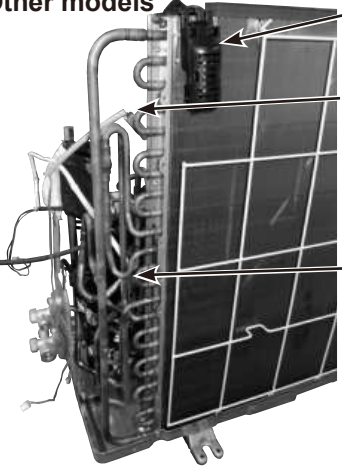


Photo 10



OPERATING PROCEDURE	PHOTOS/FIGURES
4. Removing the discharge temperature thermistor, defrost thermistor, outdoor heat exchanger temperature thermistor and ambient temperature thermistor (1) Remove the cabinet and panels. (Refer to section 1.) (2) Disconnect the lead wire to the reactor and the following connectors: <Inverter P.C. board> CN641 (Defrost thermistor and discharge temperature thermistor) CN643 (Ambient temperature thermistor) CN644 (Outdoor heat exchanger temperature thermistor) (3) Pull out the discharge temperature thermistor from its holder. (4) Pull out the defrost thermistor from its holder. (5) Pull out the outdoor heat exchanger temperature thermistor from its holder. (6) Pull out the ambient temperature thermistor from its holder.	Photo 11 MUZ-HM09/12NA - [U2] MUZ-HM09/12NAH - [U1]  Ambient temperature thermistor Defrost thermistor Outdoor heat exchanger temperature thermistor Photo 12 MUZ-HM15/18NA - [U1], [U2] MUZ-HM15/18NA2 - [U1] MUZ-HM15/18NAH - [U1]  Ambient temperature thermistor Outdoor heat exchanger temperature thermistor Defrost thermistor Photo 13 Other models  Ambient temperature thermistor Outdoor heat exchanger temperature thermistor Defrost thermistor

OPERATING PROCEDURE

5. Removing outdoor fan motor

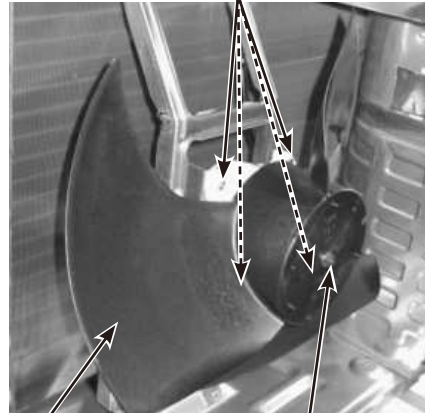
- (1) Remove the cabinet and panels. (Refer to section 1.)
- (2) Disconnect the following connectors:
<Inverter P.C. board>
CN931, CN932 (Fan motor)
- (3) Remove the propeller fan nut.
- (4) Remove the propeller fan.
- (5) Remove the screws fixing the fan motor.
- (6) Remove the fan motor.

NOTE: The propeller fan nut is a reverse thread.

PHOTOS/FIGURE

Photo 14

Screws of the outdoor fan motor



Propeller fan

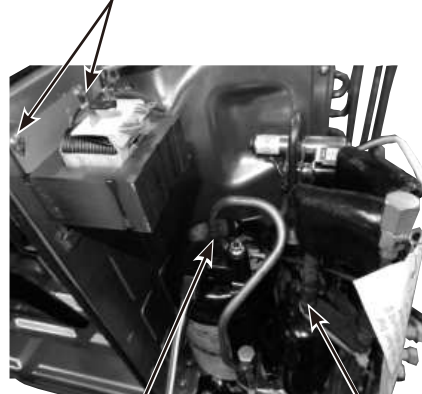
Propeller fan nut

6. Removing the compressor and 4-way valve

- (1) Remove the cabinet and panels. (Refer to section 1.)
- (2) Remove the inverter assembly. (Refer to section 2.)
- (3) Remove the screws fixing the reactor.
- (4) Remove the reactor.
- (5) Remove the soundproof felt.
- (6) Recover gas from the refrigerant circuit.
NOTE: Recover gas from the pipes until the pressure gauge shows 0 PSIG.
- (7) Detach the brazed part of the suction and the discharge pipe connected with compressor.
- (8) Remove the nuts fixing the compressor.
- (9) Remove the compressor.
- (10) Detach the brazed part of pipes connected with 4-way valve.

Photo 15

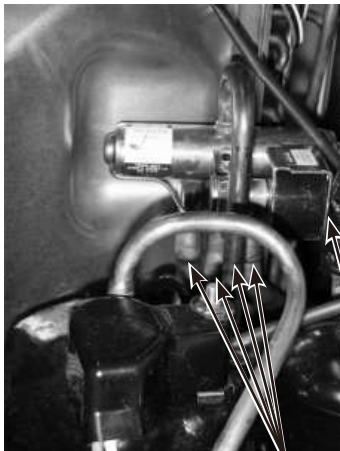
Screws of the reactor



Discharge pipe
brazed part

Suction pipe
brazed part

Photo 16

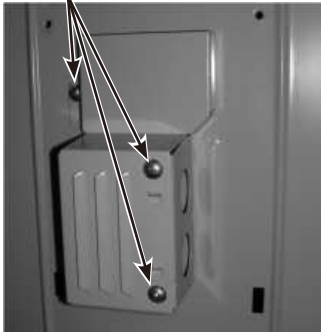
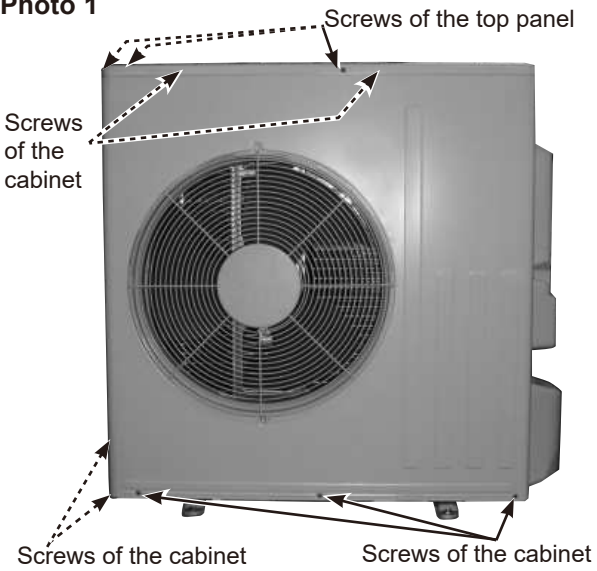
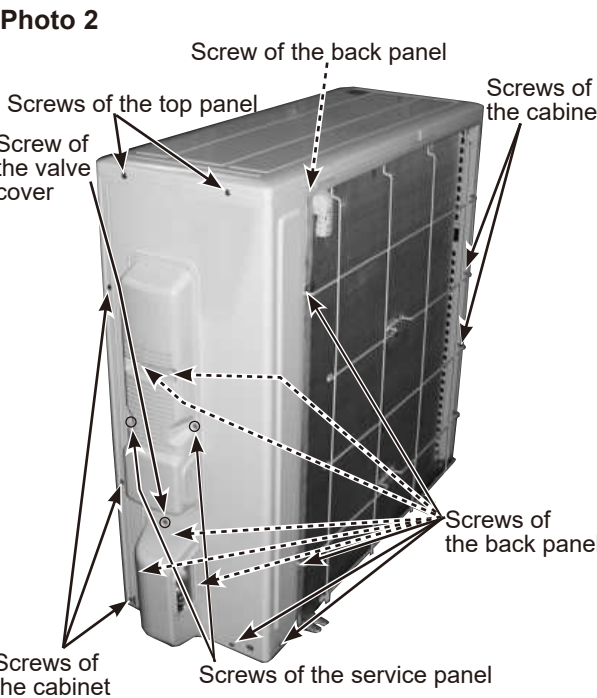


Screw of the
R.V. coil

Brazed parts of
4-way valve

11-2. MUZ-HM24NA MUZ-HM24NAH MUZ-HM24NA2

NOTE: Turn OFF the power supply before disassembly.

OPERATING PROCEDURE	PHOTOS/FIGURES
1. Removing the cabinet (1) Remove the screws of the service panel. (2) Remove the screws of the top panel. (3) Remove the screw of the valve cover. (4) Remove the service panel. (5) Remove the screws fixing the conduit cover. (6) Remove the conduit cover. (7) Remove the screw of fixing the conduit plate. (8) Remove the conduit plate. (9) Remove the top panel. (10) Remove the valve cover. (11) Disconnect the power supply and indoor/outdoor connecting wire. (12) Remove the screws of the cabinet. (13) Remove the cabinet. (14) Remove the screws of the back panel. (15) Remove the back panel. Photo 3 Screws of the conduit cover  Photo 4 Screw of the conduit plate 	Photo 1  Screws of the top panel Screws of the cabinet Screws of the cabinet Photo 2  Screw of the back panel Screws of the top panel Screw of the valve cover Screws of the cabinet Screws of the back panel Screws of the service panel Screws of the cabinet

OPERATING PROCEDURE

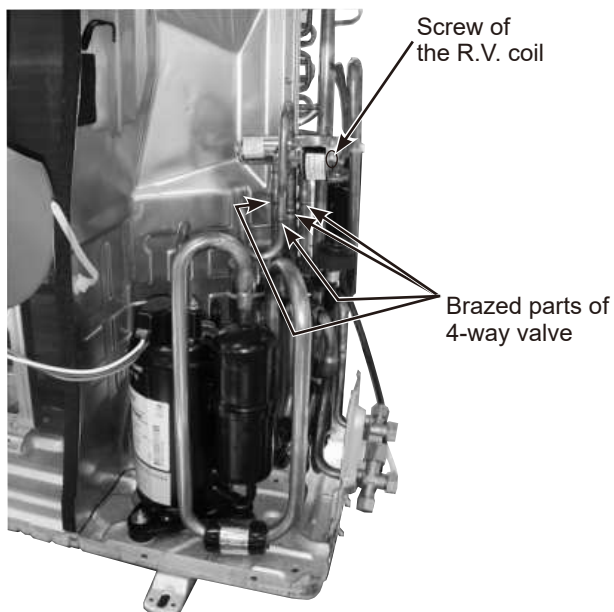
2. Removing the inverter assembly, inverter P.C. board

- (1) Remove the cabinet and panels. (Refer to section 1.)
- (2) Disconnect the lead wire to the reactor and the following connectors:
 - <Inverter P.C. board>
 - CN721 (R.V. coil)
 - CN722 (Defrost heater) (**MUZ-HM24NAH**)
 - CN931, CN932 (Fan motor)
 - CN641 (Defrost thermistor and discharge temperature thermistor)
 - CN643 (Ambient temperature thermistor)
 - CN644 (Outdoor heat exchanger temperature thermistor)
 - CN724 (LEV)
- (3) Remove the compressor connector.
- (4) Remove the screw fixing the heat sink support and the separator.
- (5) Remove the fixing screws of the terminal block support and the back panel.
- (6) Remove the inverter assembly.
- (7) Remove the screw of the ground wire, screw of the P.C. board cover and screws of the terminal block support.
- (8) Remove the heat sink support from the P.C. board support.
- (9) Remove the screw of the inverter P.C. board and the inverter P.C. board from the P.C. board support.

3. Removing R.V. coil

- (1) Remove the cabinet and panels. (Refer to section 1.)
- (2) Disconnect the following connector:
 - <Inverter P.C. board>
 - CN721 (R.V. coil)
- (3) Remove the R.V. coil.

Photo 7



PHOTOS/FIGURE

Photo 5

Screw of the heat sink support and the separator

Screws of the terminal block support and the back panel

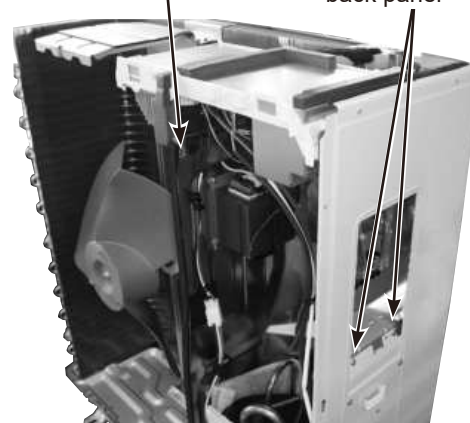
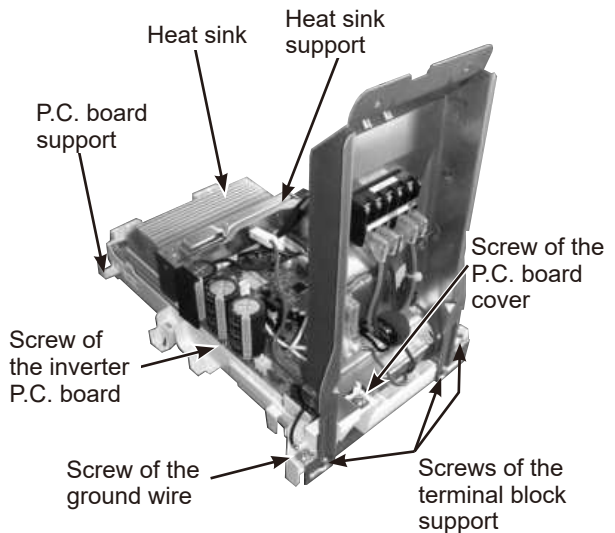
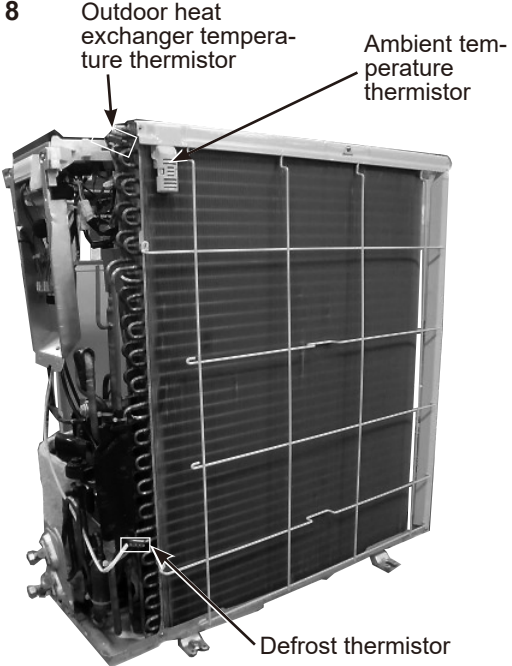
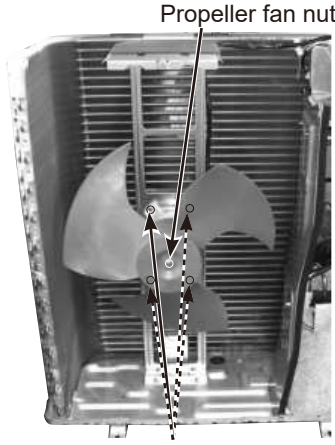
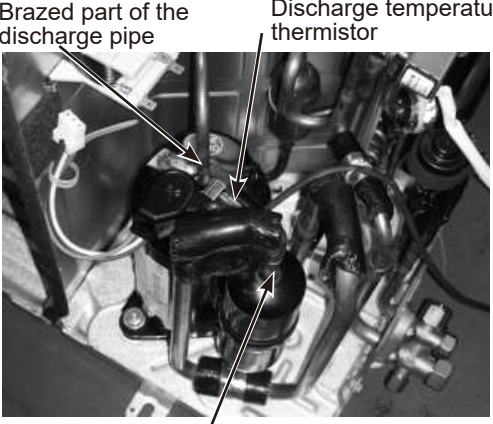


Photo 6



OPERATING PROCEDURE	PHOTOS/FIGURES
4. Removing the discharge temperature thermistor, defrost thermistor, outdoor heat exchanger temperature thermistor and ambient temperature thermistor (1) Remove the cabinet and panels. (Refer to section 1.) (2) Disconnect the lead wire to the reactor and the following connectors: <Inverter P.C. board> CN641 (Defrost thermistor and discharge temperature thermistor) CN643 (Ambient temperature thermistor) CN644 (Outdoor heat exchanger temperature thermistor) (3) Pull out the discharge temperature thermistor from its holder. (4) Pull out the defrost thermistor from its holder. (5) Pull out the outdoor heat exchanger temperature thermistor from its holder. (6) Pull out the ambient temperature thermistor from its holder.	Photo 8  Outdoor heat exchanger temperature thermistor Ambient temperature thermistor Defrost thermistor
5. Removing outdoor fan motor (1) Remove the top panel, cabinet and service panel. (Refer to section 1.) (2) Disconnect the following connectors: <Inverter P.C. board> CN931 and CN932 (Fan motor) (3) Remove the propeller fan nut. (4) Remove the propeller fan. (5) Remove the screws fixing the fan motor. (6) Remove the fan motor. NOTE: The propeller fan nut is a reverse thread.	Photo 9  Propeller fan nut Screws of the outdoor fan motor
6. Removing the compressor and 4-way valve (1) Remove the top panel, cabinet and service panel. (Refer to section 1.) (2) Remove the back panel. (Refer to section 1.) (3) Remove the inverter assembly. (Refer to section 2.) (4) Recover gas from the refrigerant circuit. NOTE: Recover gas from the pipes until the pressure gauge shows 0 PSIG. (5) Detach the brazed part of the suction and the discharge pipe connected with compressor. (6) Remove the compressor nuts. (7) Remove the compressor. (8) Detach the brazed part of 4-way valve and pipe. (Photo 7)	Photo 10  Brazed part of the discharge pipe Discharge temperature thermistor Brazed part of the suction pipe

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