

PUZ-A18NHA6
PUY-A12/18NHA6

PUZ-A18NHA6-BS
PUY-A12/18NHA6-BS

OPERATING PROCEDURE

1. Removing the top panel, service panel, front panel and back panel

- (1) Remove the top panel fixing screws (4 × 10), one from the right and two from the left side, and detach the top panel.
- (2) Remove 1 service panel fixing screw (4 × 10) and detach the service panel by pulling it downward. (See Photo 1)
- (3) Remove the front panel fixing screws (4 × 10), 5 from the front, 2 from the right and 2 from the left side, and detach the front panel.
- (4) Remove the conduit cover and cord cover fixing screw (2 pcs. 4 × 10), and detach the conduit cover and cord cover. (See Photo 2)
- (5) Remove the back panel fixing screws (4 × 10), 4 from the right and 3 from the rear side, and detach the back panel.

PHOTOS

Photo 1

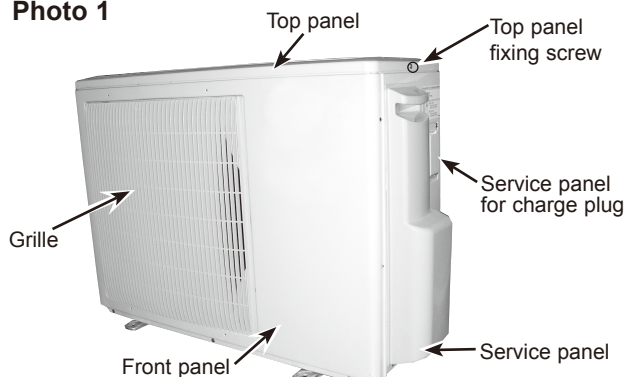
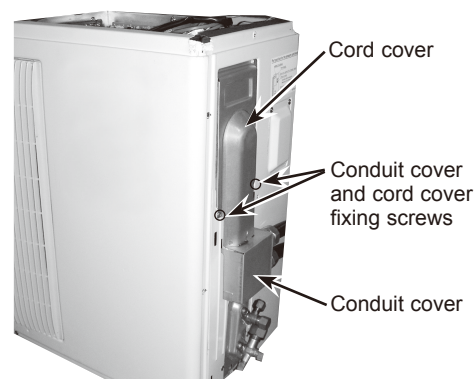


Photo 2



2. Removing the fan motor

- (1) Remove the top panel. (See Photo 1)
- (2) Remove the front panel. (See Photo 1)
- (3) Remove 1 nut (M6, left-screw) and detach the propeller.
- (4) Disconnect the connector CNF1 on the controller circuit board in the electrical parts box.
- (5) Loosen the clamp for the lead wire in the motor support.
- (6) Remove 4 fan motor fixing screws (4 × 18) and detach the fan motor. (See Photo 3)

Photo 3

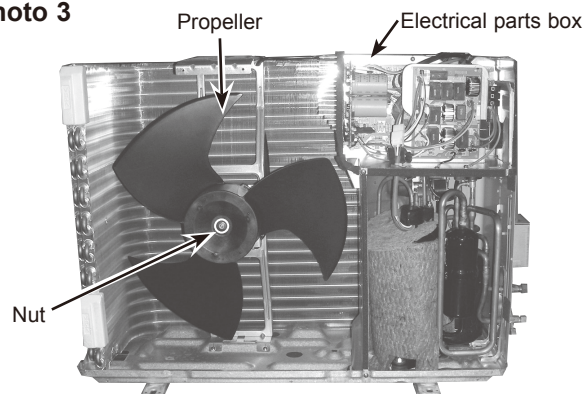
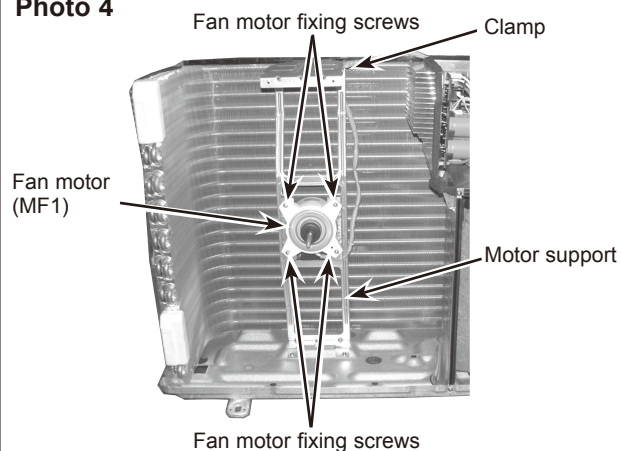


Photo 4



OPERATING PROCEDURE

3. Removing the electrical parts box

- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Remove the front panel. (See Photo 1)
- (4) Disconnect the indoor/outdoor connecting wire from terminal block.
- (5) Remove all the following connectors from controller circuit board; fan motor, linear expansion valve, thermistor<Outdoor pipe>, thermistor<Shell>, thermistor<Outdoor 2-phase pipe>, thermistor<Outdoor>, high pressure switch, four-way valve and bypass valve.
Pull out the disconnected wire from the electrical parts box.
<Diagram symbol in the connector housing>
 - Fan motor (CNF1)
 - Linear expansion valve (LEV-A)
 - Thermistor <Liquid> (TH3)
 - Thermistor <Comp. surface> (TH32)
 - Thermistor <2-phase pipe, Ambient> (TH6/7)
 - High pressure switch (63H)
- (6) Remove the terminal cover and disconnect the compressor lead wire.
- (7) Remove the electrical parts box fixing screws, 1 from the front, the right and the rear side, and detach the electrical parts box by pulling it upward.

4. Removing the thermistor <2-phase pipe> (TH6), thermistor <Liquid> (TH3) and thermistor <Suction> (TH33)

- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Remove the front panel. (See Photo 1)
- (4) Remove the conduit cover and cord cover.
- (5) Remove the back panel fixing screws, 4 from the right and 3 from the rear side, and detach the back panel. (See Photo 1)
- (6) Disconnect the connector TH3 (white) or TH6/7 (red) or TH33 (yellow) on the controller circuit board in the electrical parts box.
- (7) Loosen the clamp for the lead wire in the rear of the electrical parts box.
- (8) Pull out the thermistor <Liquid> (TH3) and thermistor <2-phase pipe> (TH6) and thermistor <suction> (TH33) from the sensor holder.

Note: Replace the thermistor <2-phase pipe> (TH6) and the thermistor <Ambient> (TH7) together since they are combined.
Refer to No. 5. to remove the thermistor <Ambient> (TH7).

PHOTOS

Photo 5

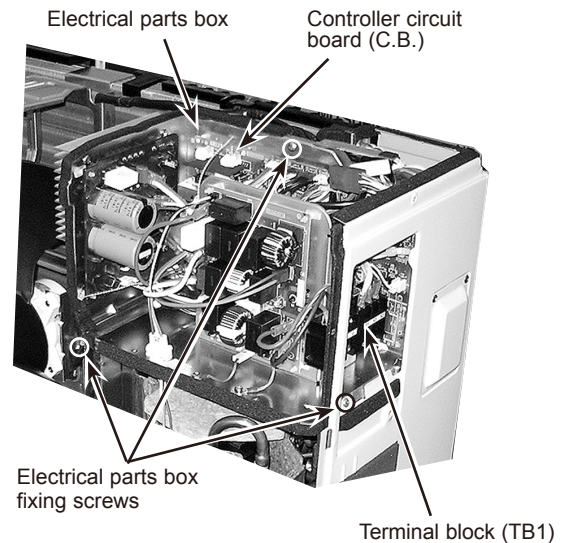
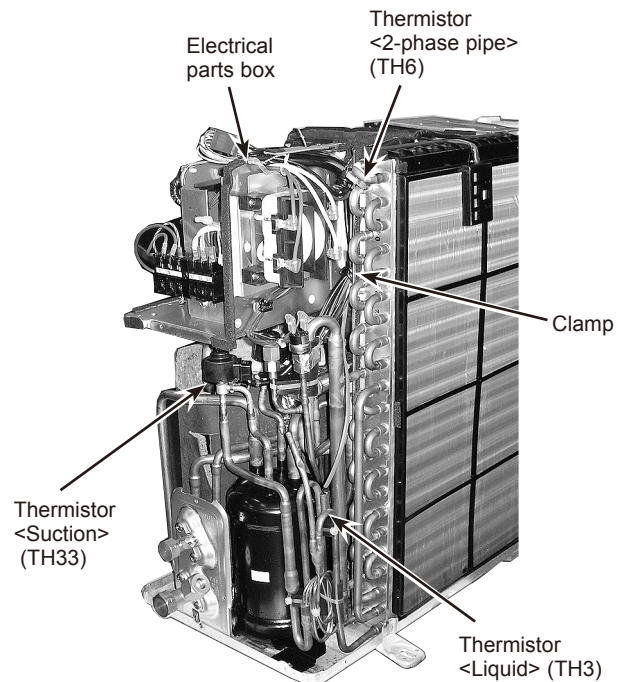


Photo 6



OPERATING PROCEDURE

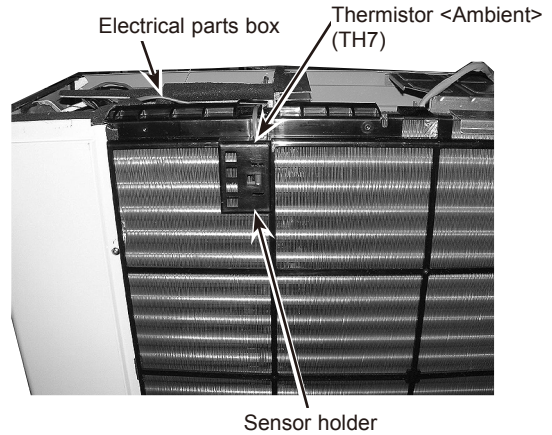
5. Removing the thermistor <Ambient> (TH7)

- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Disconnect the connector TH7 (red) on the controller circuit board in the electrical parts box.
- (4) Loosen the clamp for the lead wire in the rear of the electrical parts box. (See Photo 4)
- (5) Pull out the thermistor <Ambient> (TH7) from the sensor holder.

Note: In case of replacing thermistor <Ambient> (TH7), replace it together with thermistor <2-phase pipe> (TH6), since they are combined together.
Refer to No.4. to remove thermistor <2-phase pipe>.

PHOTOS

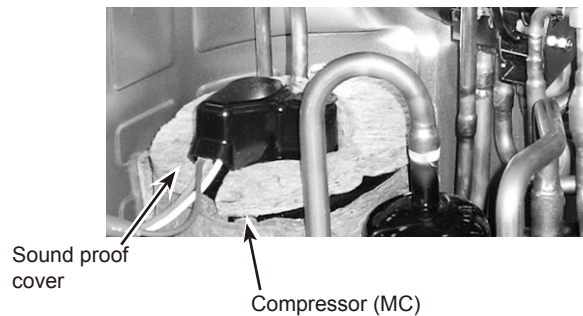
Photo 7



6. Removing the thermistor <Comp. surface> (TH32)

- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Remove the front panel. (See Photo 1)
- (4) Remove the back panel. (See Photo 1)
- (5) Remove the electrical parts box. (See Photo 5)
- (6) Remove the sound proof cover (upper) for compressor.
- (6) Pull out the thermistor <Comp. surface> (TH32) from the holder of the compressor shell.

Photo 8



7. Removing the 4-way valve coil (21S4) and linear expansion valve coil (LEV-A)

- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Remove the front panel. (See Photo 1)
- (4) Remove the conduit cover and cord cover.
- (5) Remove the back panel. (See Photo 1)
- (6) Remove the electrical parts box. (See Photo 5)

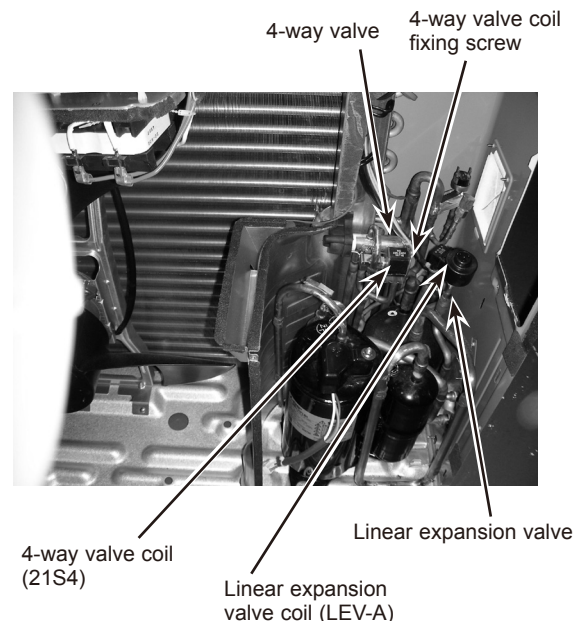
[Removing the 4-way valve coil (21S4)]

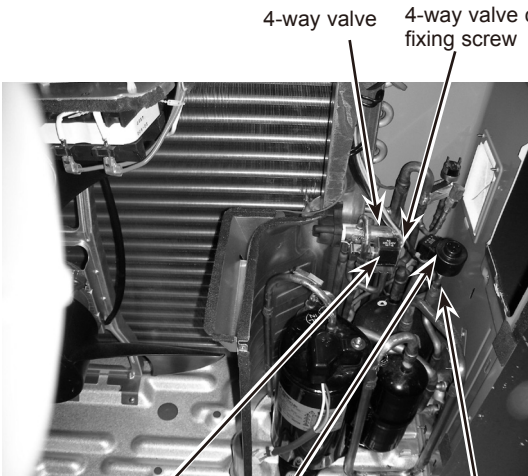
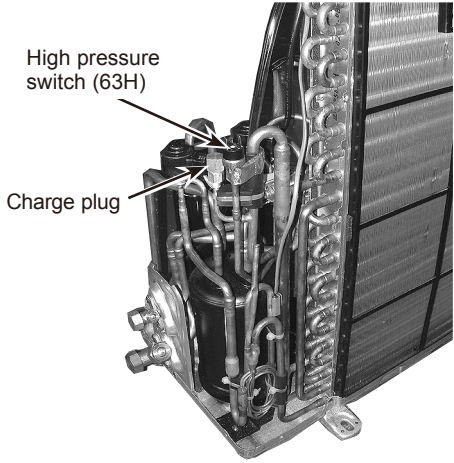
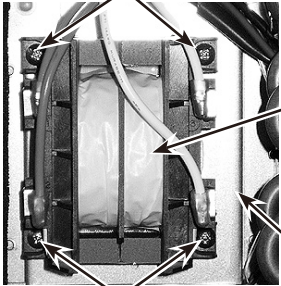
- (7) Remove 1 4-way valve coil fixing screw (M4 × 6).
- (8) Remove the 4-way valve coil by sliding the coil to the right.

[Removing the linear expansion valve coil (LEV-A)]

- (9) Remove the linear expansion valve coil by sliding the coil upward.

Photo 9



OPERATING PROCEDURE	PHOTOS
8. Removing the 4-way valve (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove the front panel. (See Photo 1) (4) Remove the conduit cover and cord cover. (See Photo 2) (5) Remove the back panel. (See Photo 1) (6) Remove the electrical parts box. (See Photo 5) (7) Remove the 4-way valve coil (See Photo 8) (8) Recover refrigerant. (9) Remove the welded part of four-way valve. Note 1: Recover refrigerant without spreading it in the air. Note 2: The welded part can be removed easily by removing the right side panel. Note 3: When installing the four-way valve, cover it with a wet cloth to prevent it from heating (250°F or more), then braze the pipes so that the inside of pipes are not oxidized.	Photo 10  4-way valve 4-way valve coil fixing screw 4-way valve coil (21S4) Linear expansion valve Linear expansion valve coil (LEV-A)
9. Removing linear expansion valve (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove the front panel. (See Photo 1) (4) Remove the conduit cover and cord cover. (See Photo 2) (5) Remove the back panel. (See Photo 1) (6) Remove the electrical parts box. (See Photo 5) (7) Remove the linear expansion valve coil . (See Photo 10) (8) Recover refrigerant. (9) Remove the welded part of linear expansion valve. Note 1: Recover refrigerant without spreading it in the air. Note 2: The welded part can be removed easily by removing the back panel. Note 3: When installing the linear expansion valve, cover it with a wet cloth to prevent it from heating (250°F or more), then braze the pipes so that the inside of pipes are not oxidized.	Photo 11  High pressure switch (63H) Charge plug
10. Removing the high pressure switch (63H) (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove the front panel. (See Photo 1) (4) Remove the conduit cover and cord cover. (See Photo 2) (5) Remove the back panel. (See Photo 1) (6) Remove the electrical parts box. (See Photo 5) (7) Pull out the lead wire of high pressure switch. (8) Recover refrigerant. (9) Remove the welded part of high pressure switch. Note 1: Recover refrigerant without spreading it in the air. Note 2: The welded part can be removed easily by removing the back panel. Note 3: When installing the high pressure switch, cover it with a wet cloth to prevent it from heating (210°F or more), then braze the pipes so that the inside of pipes are not oxidized.	Photo 12  Reactor fixing screws Reactor (ACL) Electrical parts box Reactor fixing screws
11. Removing the reactor (ACL) (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove the front panel. (See Photo 1) (4) Remove the back panel. (See Photo 1) (5) Remove 3 reactor fixing screws (4 × 20) and remove the reactor. Note: The reactor is attached to the rear of the electrical parts box.	

OPERATING PROCEDURE

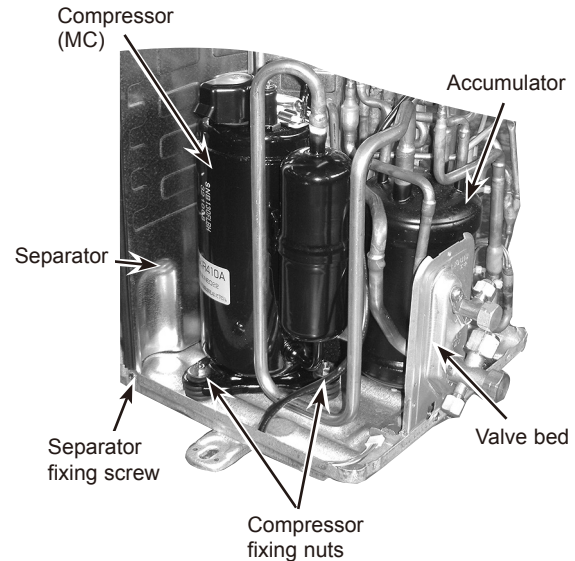
12. Removing the compressor (MC)

- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Remove the front panel. (See Photo 1)
- (4) Remove the conduit cover and cord cover. (See Photo 2)
- (5) Remove the back panel. (See Photo 1)
- (6) Remove the electrical parts box. (See Photo 5)
- (7) Remove 3 separator fixing screws (4 × 10) and remove the separator.
- (8) Remove the thermistor <Comp. surface> (TH32). (Refer to procedure 6)
- (9) Recover refrigerant.
- (10) Remove 3 compressor fixing nuts by using spanner or adjustable wrench.
- (11) Remove the welded pipe of motor for compressor inlet and outlet.

Note: Recover refrigerant without spreading it in the air.

PHOTOS

Photo 13

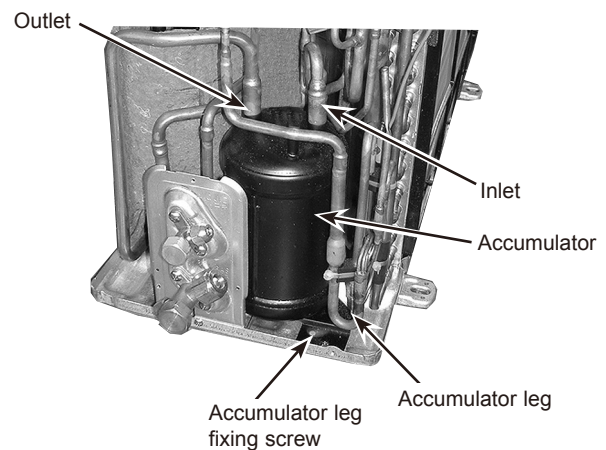


13. Removing the accumulator

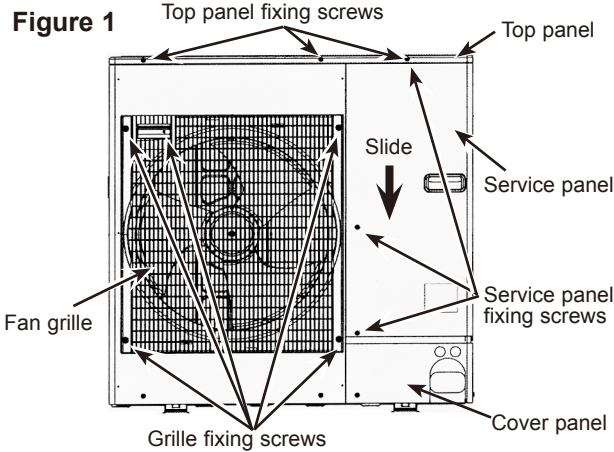
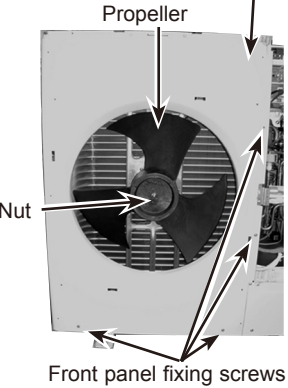
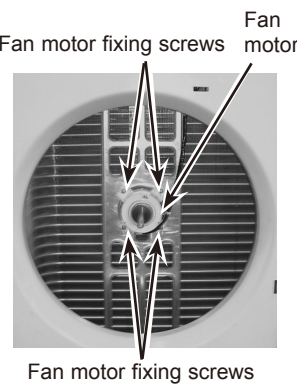
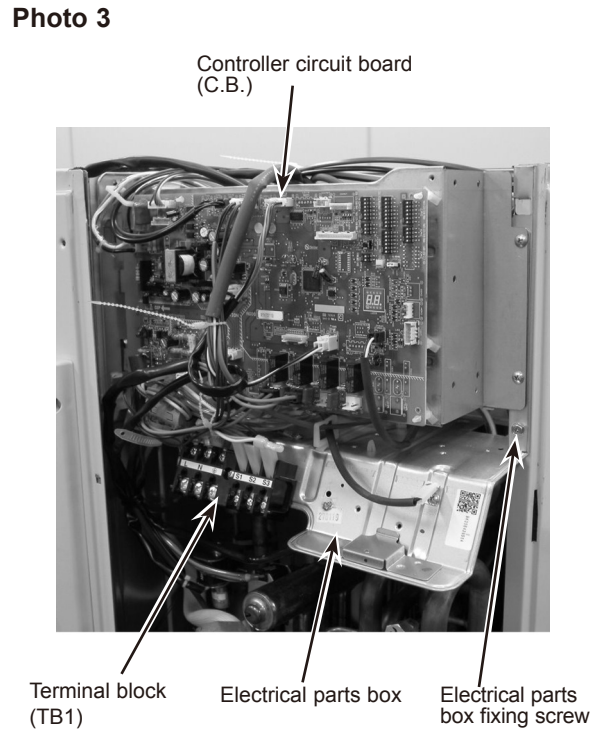
- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Remove the front panel. (See Photo 1)
- (4) Remove the conduit cover and cord cover. (See Photo 2)
- (5) Remove the back panel. (See Photo 1)
- (6) Remove the electrical parts box. (See Photo 5)
- (7) Recover refrigerant.
- (8) Remove 2 welded pipes of accumulator inlet and outlet.
- (9) Remove 2 accumulator leg fixing screws (4 × 10).
- (10) Remove the accumulator together with the receiver leg.

Note: Recover refrigerant without spreading it in the air.

Photo 14



PUZ-A24/30/36NHA6(-BS) PUY-A24/30/36NHA6(-BS)

OPERATING PROCEDURE	PHOTOS & ILLUSTRATION
1. Removing the service panel and top panel (1) Remove 3 service panel fixing screws (5 × 12) and slide the hook on the right downward to remove the service panel. (2) Remove screws (3 for front, 3 for rear/5 × 12) of the top panel and remove it.	Figure 1 
2. Removing the fan motor (MF1) (1) Remove the service panel. (See Figure 1) (2) Remove the top panel. (See Figure 1) (3) Remove 5 fan grille fixing screws (5 × 12) to detach the fan grille. (See Figure 1) (4) Remove a nut (for right handed screw of M6) to detach the propeller. (See Photo 1) (5) Disconnect the connector CNF1 on controller circuit board in electrical parts box. (6) Remove 4 fan motor fixing screws (5 × 25) to detach the fan motor. (See Photo 2)	Photo 1  Photo 2 
3. Removing the electrical parts box (1) Remove the service panel. (See Figure 1) (2) Remove the top panel. (See Figure 1) (3) Disconnect the indoor/outdoor connecting wire from terminal block. (4) Remove all the following connectors from controller circuit board, fan motor, linear expansion valve, thermistor<Liquid>, thermistor<Comp. surface>, thermistor<2-phase pipe>, thermistor<Ambient>, high pressure switch, 4-way valve and bypass valve. Pull out the disconnected wire from the electrical parts box. <Diagram symbol in the connector housing> • Fan motor (CNF1) • Linear expansion valve (LEV-A) • Thermistor <Liquid> (TH3) • Thermistor <Comp. surface> (TH32) • Thermistor <2-phase pipe, Ambient > (TH6/7) • High pressure switch (63H) • 4-way valve coil (21S4) • Bypass valve coil (SV2) (5) Remove the terminal cover and disconnect the compressor lead wire. (6) Remove an electrical parts box fixing screw (4 × 10) and detach the electrical parts box by pulling it upward. The electrical parts box is fixed with 2 hooks on the left and 1 hook on the right.	Photo 3 

OPERATING PROCEDURE

4. Removing the thermistor <2-phase pipe> (TH6)

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Disconnect the connectors, TH6 and TH7 (red), on the controller circuit board in the electrical parts box.
- (4) Loosen the clamp for the lead wire in the rear of the electrical parts box.
- (5) Pull out the thermistor <2-phase pipe> (TH6) from the sensor holder.

Note: In case of replacing thermistor <2-phase pipe> (TH6), replace it together with thermistor <Ambient> (TH7), since they are combined together.

Refer to No.5 below to remove thermistor <Ambient>.

5. Removing the thermistor <Ambient> (TH7)

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Disconnect the connector TH7 (red) on the controller circuit board in the electrical parts box.
- (4) Loosen the clamp for the lead wire in the rear of the electrical parts box. (See Photo 4)
- (5) Pull out the thermistor <Ambient> (TH7) from the sensor holder.

Note: In case of replacing thermistor <Ambient> (TH7), replace it together with thermistor <2-phase pipe> (TH6), since they are combined together. Refer to No.4 above to remove thermistor <2-phase pipe>.

6. Removing the thermistor <Liquid> (TH3)

- (1) Remove the service panel. (See Figure 1)
- (2) Disconnect the connector TH3 (white) on the controller circuit board in the electrical parts box.
- (3) Loosen the clamp for the lead wire in the rear of the electrical parts box. (See Photo 4)
- (4) Pull out the thermistor <Liquid> (TH3) from the sensor holder.

7. Removing the thermistor <Comp. surface> (TH32) and thermistor <Suction> (TH33)

- (1) Remove the service panel. (See Figure 1)
- (2) Disconnect the connector TH32 (black) or TH33 (yellow) on the controller circuit board in the electrical parts box.
- (3) Loosen the clamp for the lead wire under the electrical parts box. (See Photo 4)
- (4) Pull out the thermistor <Comp. surface> (TH32) and thermistor <Suction> (TH33) from the holder of the compressor shell. (See Photo 6)

PHOTOS

Photo 4

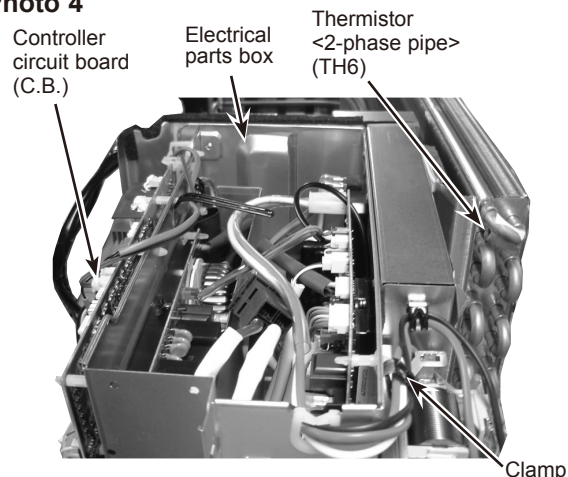


Photo 5

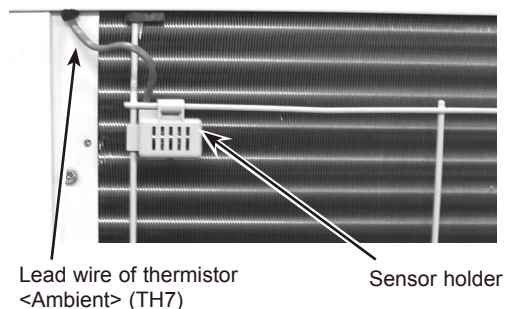


Photo 6

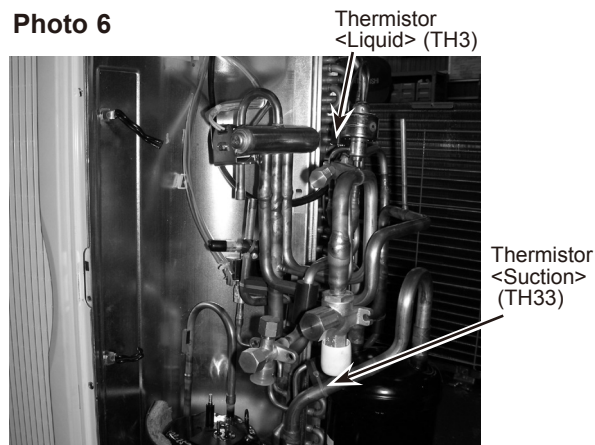
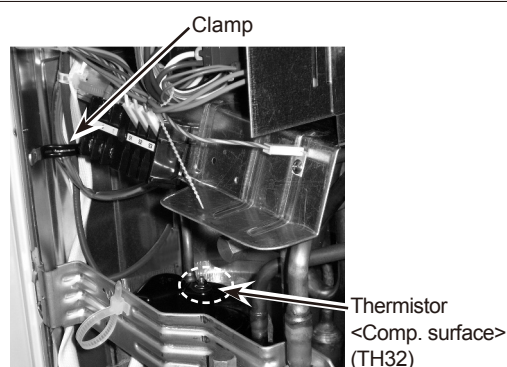
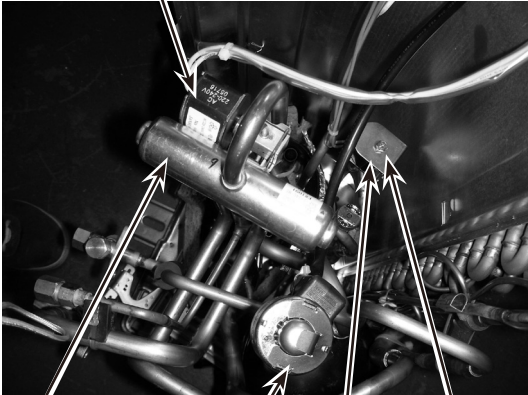


Photo 7



OPERATING PROCEDURE	PHOTOS
8. Removing the 4-way valve coil (21S4), linear expansion valve coil (LEV-A) and bypass valve coil (SV) (1) Remove the service panel. (See Figure 1) (2) Remove the top panel. (See Figure 1) (3) Remove the electrical parts box. (See Photo 3) [Removing the 4-way valve coil] (4) Remove 4-way valve coil fixing screw (M4 × 6). (5) Remove the 4-way valve coil by sliding the coil toward you. (6) Disconnect the connector 21S4 (green) on the controller circuit board in the electrical parts box. [Removing the linear expansion valve coil] (4) Remove the linear expansion valve coil by sliding the coil upward. (5) Disconnect the connectors, LEV-A (white), on the controller circuit board in the electrical parts box. [Removing the bypass valve coil] (4) Remove the bypass valve coil fixing screw (M4 × 6). (5) Remove the bypass valve coil by sliding the coil upward. (6) Disconnect the connector SV2 (blue) on the controller circuit board in the electrical parts box.	Photo 8  4-way valve coil 4-way valve Linear expansion valve coil (LEV-A) Bypass valve coil (SV) Bypass valve coil fixing screw
9. Removing the 4-way valve (1) Remove the service panel. (See Figure 1) (2) Remove the top panel. (See Figure 1) (3) Remove the electrical parts box. (See Photo 3) (4) Remove 3 valve bed fixing screws (4 × 10), 4 ball valve and stop valve fixing screws (5 × 16), then remove the valve bed. (5) Remove 3 right side panel fixing screws (5 × 12) in the rear of the unit and then remove the right side panel. (6) Remove the 4-way valve coil. (See Photo 8) (7) Recover refrigerant. (8) Remove the welded part of 4-way valve. Note 1: Recover refrigerant without spreading it in the air. Note 2: The welded part can be removed easily by removing the right side panel. Note 3: When installing the 4-way valve, cover it with a wet cloth to prevent it from heating (250°F or more), then braze the pipes so that the inside of pipes are not oxidized.	Photo 9  4-way valve Linear expansion valve coil (LEV-A) Linear expansion valve
10. Removing the linear expansion valve (1) Remove the service panel. (See Figure 1) (2) Remove the top panel. (See Figure 1) (3) Remove the electrical parts box. (See Photo 3) (4) Remove 3 valve bed fixing screws (4 × 10), 4 ball valve and stop valve fixing screws (5 × 16), then remove the valve bed. (5) Remove 3 right side panel fixing screw (5 × 12) in the rear of the unit and then remove the right side panel. (6) Remove the linear expansion valve. (See Photo 8) (7) Recover refrigerant. (8) Remove the welded part of linear expansion valve. Note 1: Recover refrigerant without spreading it in the air. Note 2: The welded part can be removed easily by removing the right side panel. Note 3: When installing the linear expansion valve, cover it with a wet cloth to prevent it from heating (250°F or more), then braze the pipes so that the inside of pipes are not oxidized.	

OPERATING PROCEDURE

11. Removing the bypass valve

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Remove the electrical parts box. (See Photo 3)
- (4) Remove 3 right side panel fixing screws (5 × 12) in the rear of the unit and remove the right side panel.
- (5) Remove the bypass valve coil. (See Photo 8).
- (6) Recover refrigerant.
- (7) Remove the welded part of bypass valve.

Note 1: Recover refrigerant without spreading it in the air.

Note 2: The welded part can be removed easily by removing the right side panel.

12. Removing the high pressure switch (63H)

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Remove the electrical parts box. (See Photo 3)
- (4) Remove 3 right side panel fixing screws (5 × 12) in the rear of the unit and remove the right side panel.
- (5) Pull out the lead wire of high pressure switch.
- (6) Recover refrigerant.
- (7) Remove the welded part of high pressure switch.

Note 1: Recover refrigerant without spreading it in the air.

Note 2: The welded part can be removed easily by removing the right side panel.

Note 3: When installing the high pressure switch, cover it with a wet cloth to prevent it from heating (210°F or more), then braze the pipes so that the inside of pipes are not oxidized.

13. Removing the reactor (ACL) (A24)

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Remove the electrical parts box. (See Photo 3)
- (4) Remove 3 reactor fixing screws (4 × 16) and remove the reactor.

Note: The reactor is attached to the rear of the electrical parts box.

PHOTOS

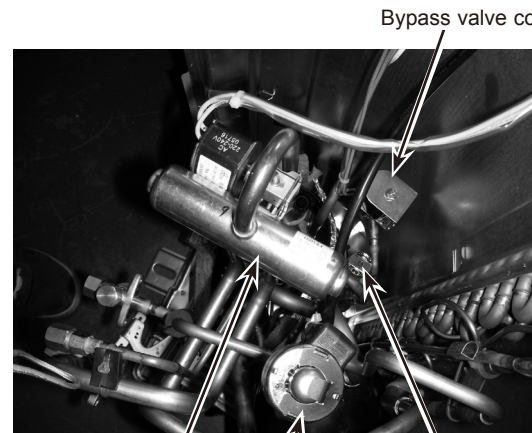
Photo 10



Bypass valve
fixing screw

Bypass valve

Photo 11



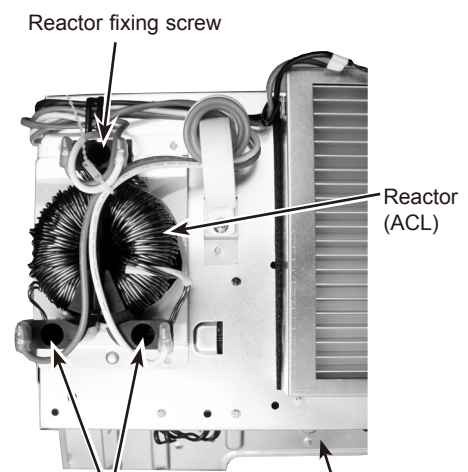
Bypass valve coil

4-way valve

Linear expansion
valve coil (LEV-A)

High pressure
switch (63H)

Photo 12



Reactor fixing screw

Reactor
(ACL)

Reactor fixing screws

Electrical parts box

OPERATING PROCEDURE

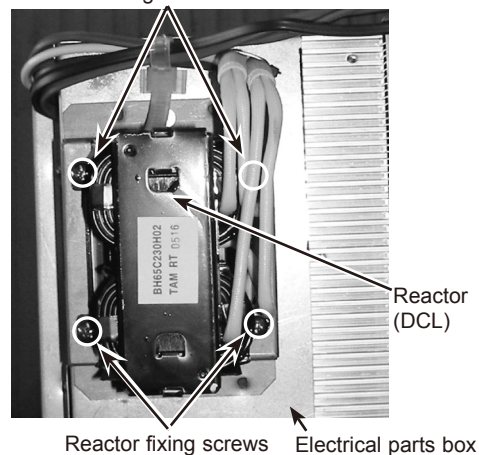
14. Removing the reactor (DCL) (A30, 36)

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Remove the electrical parts box. (See Photo 3)
- (4) Remove 4 reactor fixing screws (4 × 10) and remove the reactor.

Note: The reactor is attached to the rear of the electrical parts box.

PHOTOS

Photo 13 Reactor fixing screws

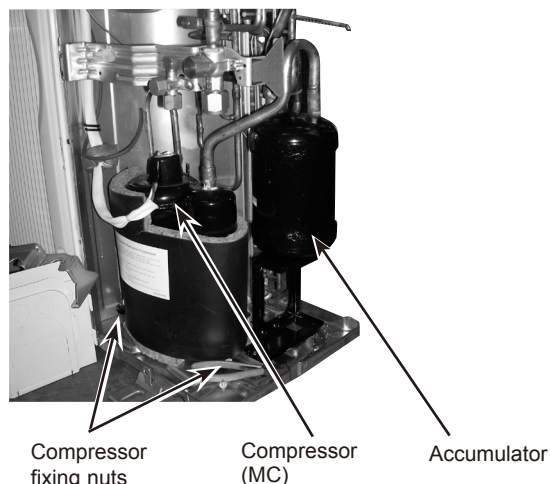


15. Removing the compressor (MC)

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Remove 2 front cover panel fixing screws (5 × 12) and remove the front cover panel. (See Figure 1)
- (4) Remove 2 back cover panel fixing screws (5 × 12) and remove the back cover panel.
- (5) Remove the electrical parts box. (See Photo 3)
- (6) Remove 3 valve bed fixing screws (4 × 10), 4 ball valve and stop valve fixing screws (5 × 16), then remove the valve bed.
- (7) Remove 3 right side panel fixing screws (5 × 12) in the rear of the unit and then remove the right side panel.
- (8) Remove 3 separator fixing screws (4 × 10) and remove the separator.
- (9) Remove the thermistor <Comp. surface> (TH32). (Refer to procedure 7)
- (10) Recover refrigerant.
- (11) Remove the 3 points of the motor for compressor fixing nut using spanner or adjustable wrench.
- (12) Remove the welded pipe of motor for compressor inlet and outlet and then remove the compressor.

Note: Recover refrigerant without spreading it in the air.

Photo 14

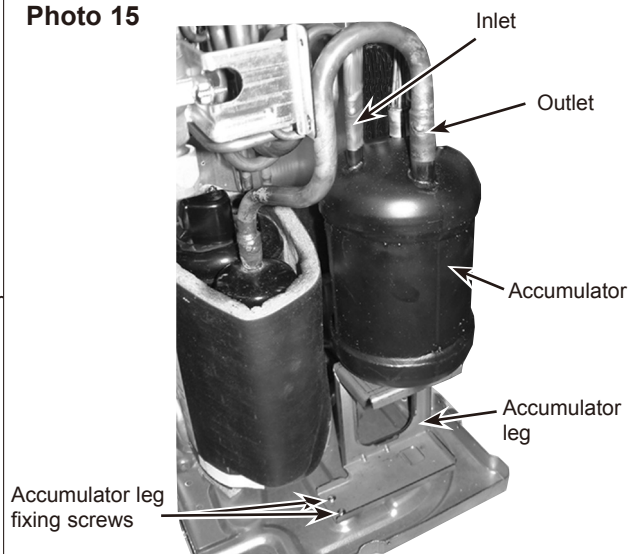


16. Removing the accumulator

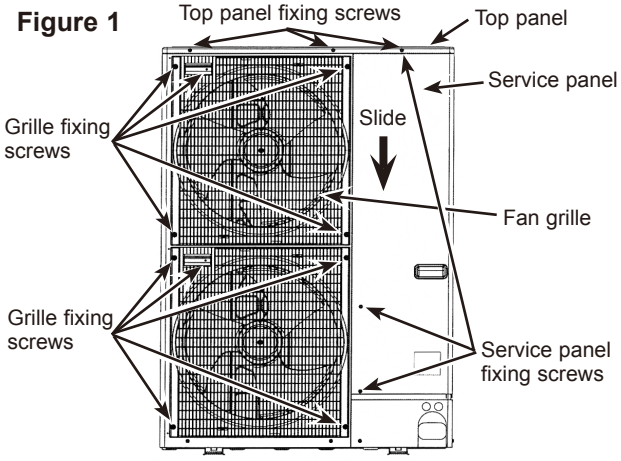
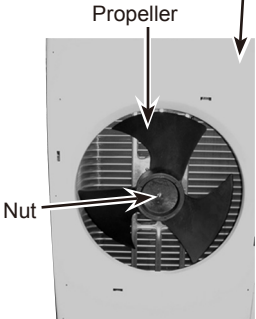
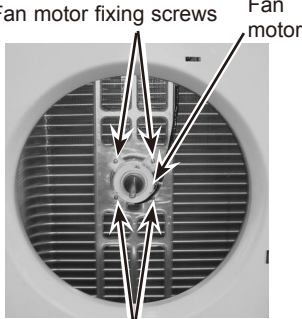
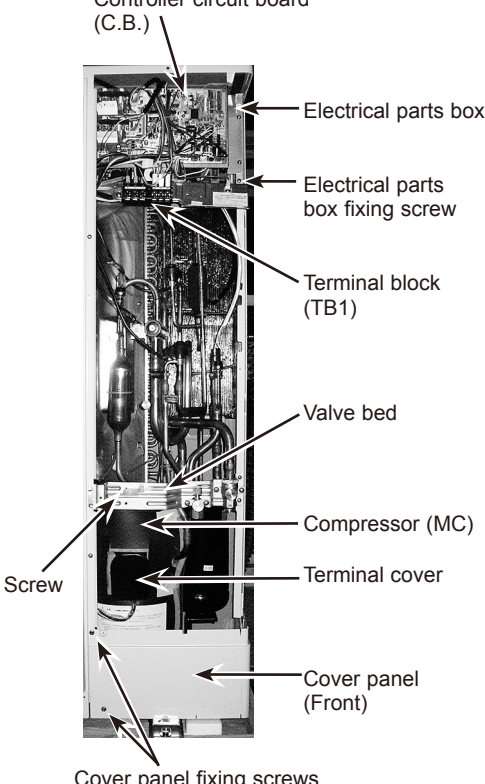
- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Remove 2 front cover panel fixing screws (5 × 12) and remove the front cover panel. (See Photo 3)
- (4) Remove 2 back cover panel fixing screws (5 × 12) and remove the back cover panel.
- (5) Remove the electrical parts box. (See Figure 1)
- (6) Remove 3 valve bed fixing screws (4 × 10), 4 ball valve and stop valve fixing screws (5 × 16), then remove the valve bed.
- (7) Remove 3 right side panel fixing screws (5 × 12) in the rear of the unit and then remove the right side panel.
- (8) Recover refrigerant.
- (9) Remove 2 welded pipes of accumulator inlet and outlet.
- (10) Remove 2 receiver leg fixing screws (4 × 10).

Note: Recover refrigerant without spreading it in the air.

Photo 15



PUZ-A42NHA6(-BS) PUY-A42NHA6(-BS)

OPERATING PROCEDURE	PHOTOS & ILLUSTRATION
1. Removing the service panel and top panel (1) Remove 3 service panel fixing screws (5 × 12) and slide the hook on the right downward to remove the service panel. (2) Remove screws (3 for front, 3 for rear/5 × 12) of the top panel and remove it.	Figure 1 
2. Removing the fan motor (MF1, MF2) (1) Remove the service panel. (See Figure 1) (2) Remove the top panel. (See Figure 1) (3) Remove 5 fan grille fixing screws (5 × 12) to detach the fan grille. (See Figure 1) (4) Remove a nut (for right handed screw of M6) to detach the propeller. (See Photo 1) (5) Disconnect the connectors, CNF1, CNF2 on controller circuit board in electrical parts box. (6) Remove 4 fan motor fixing screws (5 × 25) to detach the fan motor. (See Photo 2)	Photo 1  Photo 2 
3. Removing the electrical parts box (1) Remove the service panel. (See Figure 1) (2) Remove the top panel. (See Figure 1) (3) Disconnect the indoor/outdoor connecting wire from terminal block. (4) Remove all the following connectors from controller circuit board; fan motor, linear expansion valve, thermistor <Liquid>, thermistor <2-phase pipe>, thermistor <Ambient>, high pressure switch, low pressure switch, 4-way valve coil. Then remove a screw (4 × 8) from the valve bed to remove the lead wire. Pull out the disconnected wire from the electrical parts box. <Diagram symbol in the connector housing> • Fan motor (CNF1, CNF2) • Linear expansion valve (LEV-A) • Thermistor <Liquid> (TH3) • Thermistor <Comp. surface> (TH32) • Thermistor <2-phase pipe, Ambient> (TH6/7) • Thermistor <Suction> (TH33) • High pressure switch (63H) • Low pressure switch (63L) • 4-way valve coil (21S4) (5) Remove the terminal cover and disconnect the compressor lead wire. (6) Remove an electrical parts box fixing screw (4 × 10) and detach the electrical parts box by pulling it upward. The electrical parts box is fixed with 2 hooks on the left and 1 hook on the right.	Photo 3 

OPERATING PROCEDURE

4. Removing the thermistor <2-phase pipe> (TH6)

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Disconnect the connectors, TH6 and TH7 (red), on the controller circuit board in the electrical parts box.
- (4) Loosen the clamp for the lead wire in the rear of the electrical parts box.
- (5) Pull out the thermistor <2-phase pipe> (TH6) from the sensor holder.

Note: In case of replacing thermistor <2-phase pipe> (TH6), replace it together with thermistor <Ambient> (TH7) since they are combined together.
Refer to No.5 below to remove thermistor <Ambient>.

5. Removing the thermistor <Ambient> (TH7)

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Disconnect the connector TH7 (red) on the controller circuit board in the electrical parts box.
- (4) Loosen the clamp for the lead wire in the rear of the electrical parts box. (See Photo 4)
- (5) Pull out the thermistor <Ambient> (TH7) from the sensor holder.

Note: In case of replacing thermistor <Ambient> (TH7), replace it together with thermistor <2-phase pipe> (TH6), since they are combined together.
Refer to No.4 above to remove thermistor <2-phase pipe>.

6. Removing the thermistor <Liquid> (TH3), thermistor <Comp. surface> (TH32) and thermistor <Suction> (TH33)

- (1) Remove the service panel. (See Figure 1)
- (2) Disconnect the connectors, TH3 (white), TH32 (black) and TH33 (yellow), on the controller circuit board in the electrical parts box.
- (3) Loosen the clamp for the lead wire in the rear of the electrical parts box. (See Photo 4)
- (4) Pull out the thermistor <Liquid> (TH3), thermistor <Comp. surface> (TH32) and thermistor <Suction> (TH33) from the sensor holder.

PHOTOS

Photo 4

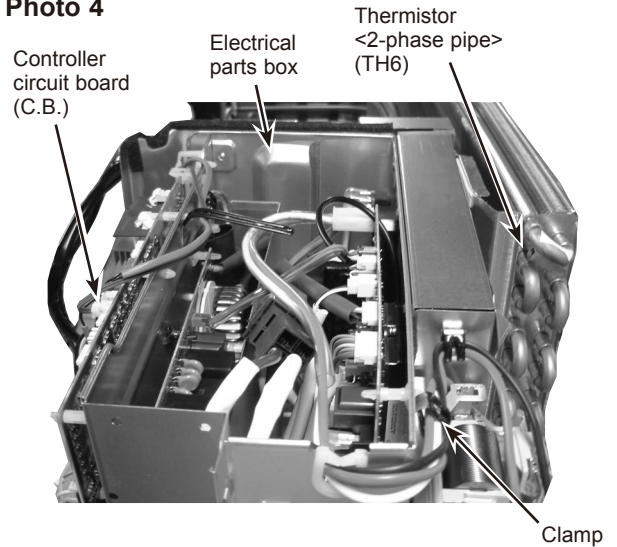


Photo 5

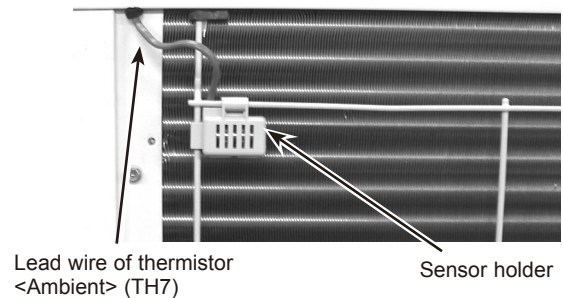
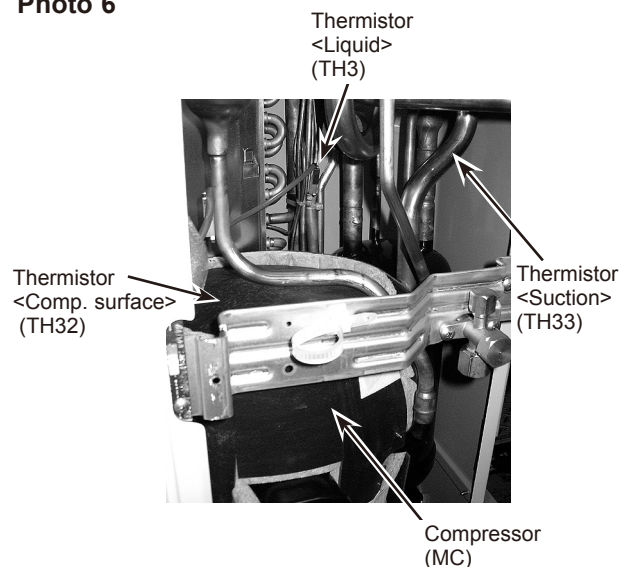


Photo 6



OPERATING PROCEDURE

7. Removing the 4-way valve coil (21S4) and linear expansion valve coil (LEV-A)

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)

[Removing the 4-way valve coil]

- (3) Remove 4-way valve coil fixing screw (M4 × 6).
- (4) Remove the 4-way valve coil by sliding the coil toward you.
- (5) Disconnect the connector 21S4 (green) on the controller circuit board in the electrical parts box.

[Removing the linear expansion valve coil]

- (3) Remove the linear expansion valve coil by sliding the coil upward.
- (4) Disconnect the connectors, LEV-A (white), on the controller circuit board in the electrical parts box.

8. Removing the 4-way valve

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Remove 3 valve bed fixing screws (4 × 10), 4 ball valve and stop valve fixing screws (5 × 16), then remove the valve bed.
- (4) Remove 4 right side panel fixing screws (5 × 12) in the rear of the unit and then remove the right side panel.
- (5) Remove the 4-way valve coil. (See Photo 7)
- (6) Recover refrigerant.
- (7) Remove the welded part of 4-way valve.

Note 1: Recover refrigerant without spreading it in the air.

Note 2: The welded part can be removed easily by removing the right side panel.

Note 3: When installing the 4-way valve, cover it with a wet cloth to prevent it from heating (250°F or more), then braze the pipes so that the inside of pipes are not oxidized.

9. Removing linear expansion valve

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Remove 3 valve bed fixing screws (4 × 10), 4 ball valve and stop valve fixing screws (5 × 16), then remove the valve bed.
- (4) Remove 4 right side panel fixing screws (5 × 12) in the rear of the unit and then remove the right side panel.
- (5) Remove the linear expansion valve. (See Photo 7)
- (6) Recover refrigerant.
- (7) Remove the welded part of linear expansion valve.

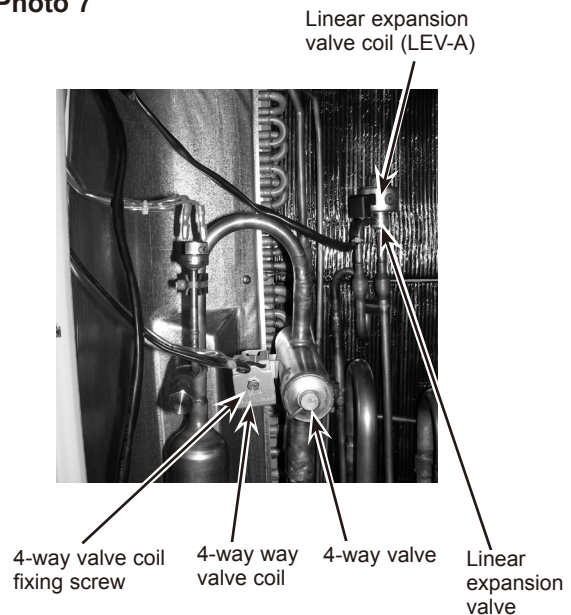
Note 1: Recover refrigerant without spreading it in the air.

Note 2: The welded part can be removed easily by removing the right side panel.

Note 3: When installing the linear expansion valve, cover it with a wet cloth to prevent it from heating (250°F or more), then braze the pipes so that the inside of pipes are not oxidized.

PHOTOS

Photo 7



OPERATING PROCEDURE

10. Removing the high pressure switch (63H)

- (1) Remove the service panel. (See photo 1)
- (2) Remove the top panel. (See photo 1)
- (3) Remove 3 right side panel fixing screws (5 × 12) in the rear of the unit and remove the right side panel.
- (4) Pull out the lead wire of high pressure switch.
- (5) Recover refrigerant.
- (6) Remove the welded part of high pressure switch.

Note 1: Recover refrigerant without spreading it in the air.

Note 2: The welded part can be removed easily by removing the right side panel.

Note 3: When installing the high pressure switch, cover it with a wet cloth to prevent it from heating (210°F or more), then braze the pipes so that the inside of pipes are not oxidized.

PHOTOS

Photo 8



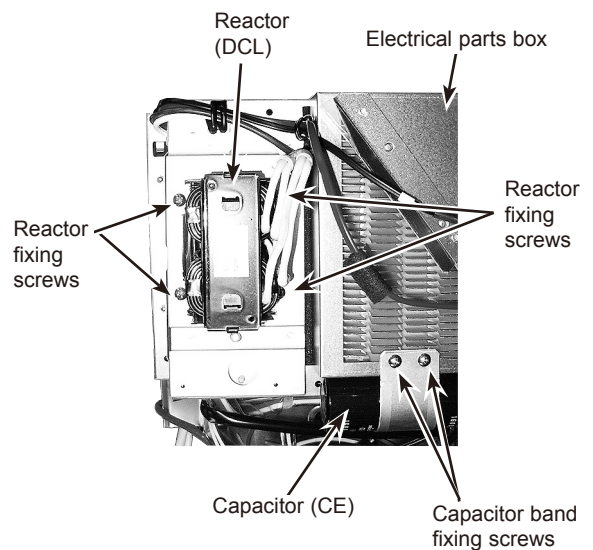
High pressure switch (63H)

11. Removing the reactor (DCL) and capacitor (CE)

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Remove the electrical parts box. (See Photo 3)
- <Removing the reactor>
- (4) Remove 4 reactor fixing screws (4 × 10) and remove the reactor.
- <Removing the capacitor>
- (4) Remove 2 capacitor band fixing screws (4 × 10) and remove the capacitor.

Note: The reactor and capacitor is attached to the rear of the electrical parts box.

Photo 9



OPERATING PROCEDURE

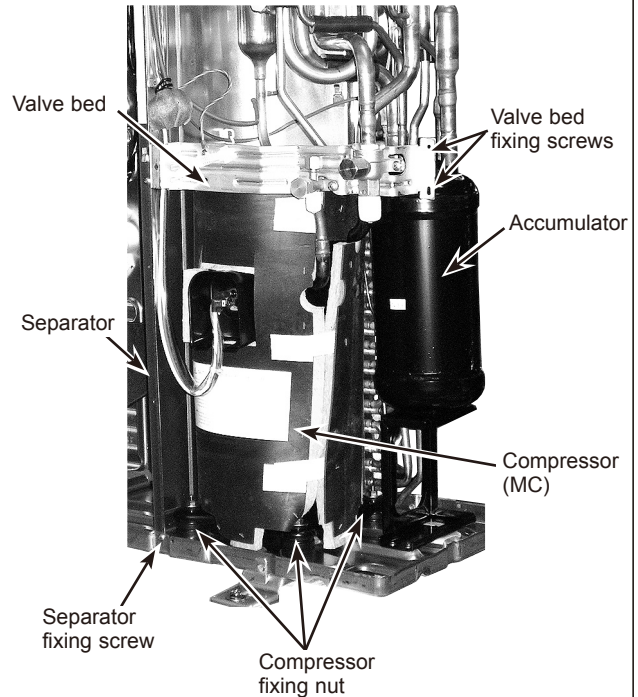
12. Removing the compressor (MC)

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Remove 2 front cover panel fixing screws (5 × 12) and remove the front cover panel. (See Photo 3)
- (4) Remove 2 back cover panel fixing screws (5 × 12) and remove the back cover panel.
- (5) Remove the electrical parts box. (See Photo 3)
- (6) Remove 3 valve bed fixing screws (4 × 10), 4 ball valve and stop valve fixing screws (5 × 16), then remove the valve bed.
- (7) Remove 3 right side panel fixing screws (5 × 12) in the rear of the unit and then remove the right side panel.
- (8) Remove 3 separator fixing screws (4 × 10) and remove the separator.
- (9) Recover refrigerant.
- (10) Remove the 3 points of the motor for compressor fixing nut using spanner or adjustable wrench.
- (11) Remove the welded pipe of motor for compressor inlet and outlet and then remove the compressor.

Note: Recover refrigerant without spreading it in the air.

PHOTOS

Photo 10

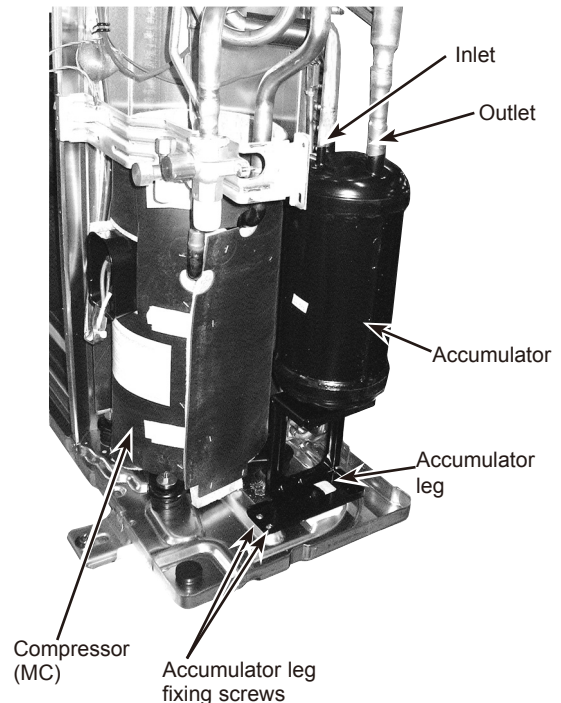


13. Removing the accumulator

- (1) Remove the service panel. (See Figure 1)
- (2) Remove the top panel. (See Figure 1)
- (3) Remove 2 front cover panel fixing screws (5 × 12) and remove the front cover panel. (See Photo 3)
- (4) Remove 2 back cover panel fixing screws (5 × 12) and remove the back cover panel.
- (5) Remove the electrical parts box. (See Photo 3)
- (6) Remove 3 valve bed fixing screws (4 × 10), 4 ball valve and stop valve fixing screws (5 × 16), then remove the valve bed.
- (7) Remove 3 right side panel fixing screws (5 × 12) in the rear of the unit and then remove the right side panel.
- (8) Recover refrigerant.
- (9) Remove 2 welded pipes of accumulator inlet and outlet.
- (10) Remove 2 accumulator leg fixing screws (4 × 10).

Note: Recover refrigerant without spreading it in the air.

Photo 11



MITSUBISHI ELECTRIC CORPORATION

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