

# SERVICE MANUAL

## R410A

**Outdoor unit**
**[model names]**
**PUHZ-RP35VHA**
**PUHZ-RP50VHA**
**PUHZ-RP60VHA**
**PUHZ-RP71VHA**
**PUHZ-RP100VHA**
**PUHZ-RP125VHA**
**PUHZ-RP140VHA**
**PUHZ-RP100YHA**
**PUHZ-RP125YHA**
**PUHZ-RP140YHA**
**[Service Ref.]**
**PUHZ-RP35VHA**
**PUHZ-RP50VHA**
**PUHZ-RP50VHA<sub>1</sub>**
**PUHZ-RP60VHA**
**PUHZ-RP60VHA<sub>1</sub>**
**PUHZ-RP71VHA**
**PUHZ-RP71VHA<sub>1</sub>**
**PUHZ-RP100VHA**
**PUHZ-RP125VHA**
**PUHZ-RP125VHA<sub>1</sub>**
**PUHZ-RP140VHA**
**PUHZ-RP140VHA<sub>1</sub>**
**PUHZ-RP100YHA**
**PUHZ-RP125YHA**
**PUHZ-RP140YHA**

Revision:

 PUHZ-RP50VHA<sub>1</sub>

 PUHZ-RP60VHA<sub>1</sub>

 PUHZ-RP71VHA<sub>1</sub>

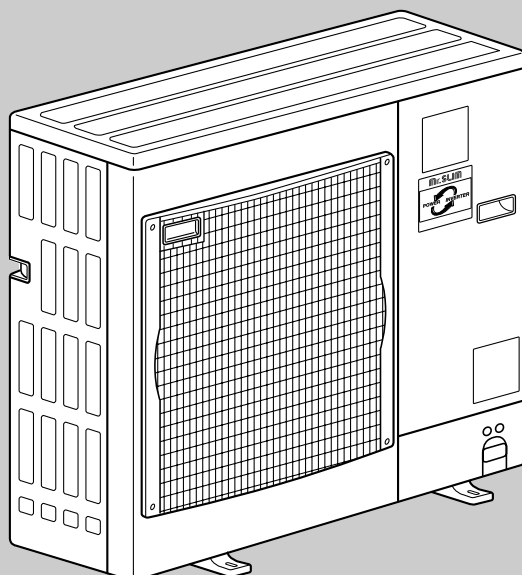
 PUHZ-RP125VHA<sub>1</sub>

 PUHZ-RP140VHA<sub>1</sub> are added  
in REVISED EDITION-A.

 •Some descriptions have been  
modified.

•Please void OC334

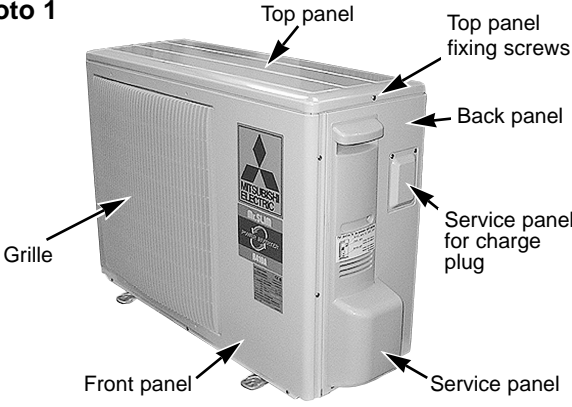
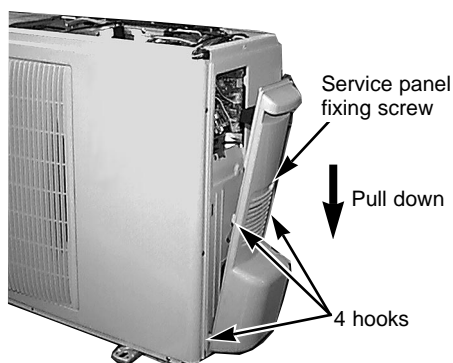
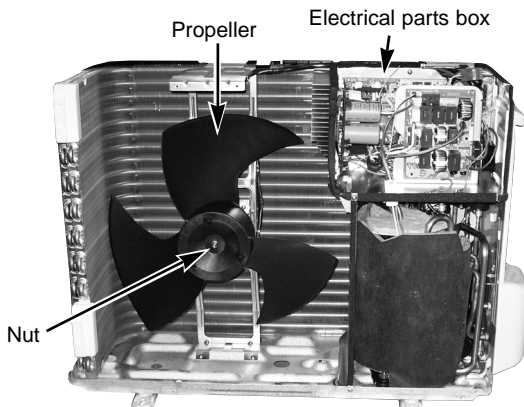
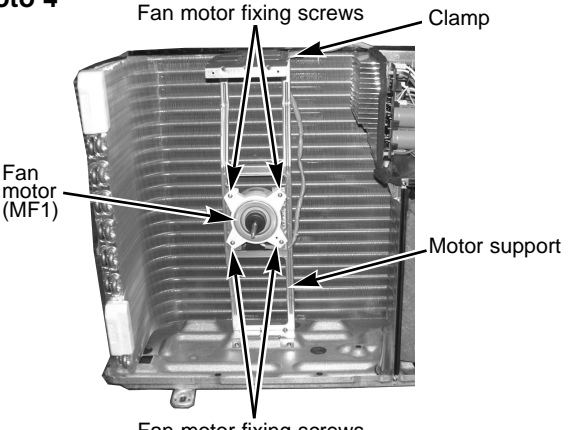
NOTE:

 This manual describes only  
service data of the outdoor  
units.

**PUHZ-RP60VHA  
PUHZ-RP71VHA**

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PUHZ-RP35/50VHA PUHZ-RP50VHA<sub>1</sub>

OPERATING PROCEDURE	PHOTOS
<p><b>1. Removing the top panel, service panel, front panel and back panel</b></p> <p>(1) Remove the top panel fixing screws (4 X 10), one from the right and two from the left side, and detach the top panel.</p> <p>(2) Remove 1 service panel fixing screw (4 X 10) and detach the service panel by pulling it downward. (See photo 2.)</p> <p>(3) Remove the front panel fixing screws (4 X 10), 5 from the front, 2 from the right and 2 from the left side, and detach the front panel.</p> <p>(4) Remove the back panel fixing screws (4 X 10), 4 from the right and 3 from the rear side, and detach the back panel.</p>	<p><b>Photo 1</b></p>  <p><b>Photo 2</b></p> 
<p><b>2. Removing the fan motor</b></p> <p>(1) Remove the top panel. (See photo 1.)</p> <p>(2) Remove the front panel. (See photo 1.)</p> <p>(3) Remove 1 nut (M6, left-screw) and detach the propeller.</p> <p>(4) Disconnect the connector CNF1 on the controller circuit board in the electrical parts box.</p> <p>(5) Loosen the clamp for the lead wire in the motor support.</p> <p>(6) Remove 4 fan motor fixing screws (4 X 18) and detach the fan motor. (See photo 3.)</p>	<p><b>Photo 3</b></p>  <p><b>Photo 4</b></p> 

## OPERATING PROCEDURE

### 3. Removing the electrical parts box

- (1) Remove the service panel. (See photo 2.)
- (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<Discharge>, 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 and LEV-B)
  - Thermistor <Outdoor pipe> (TH3)
  - Thermistor <Discharge> (TH4)
  - Thermistor <Outdoor 2-phase pipe, Outdoor> (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 <Outdoor 2-phase pipe> (TH6) and thermistor <Outdoor pipe> (TH3)

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

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

## PHOTOS

Photo 5

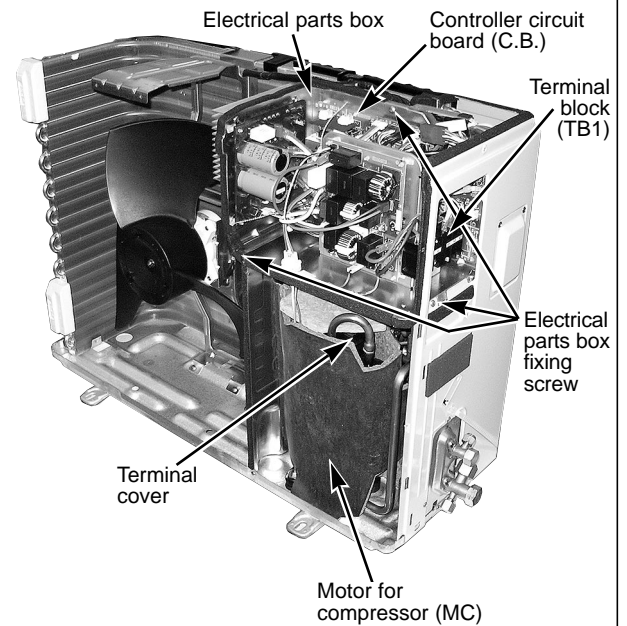
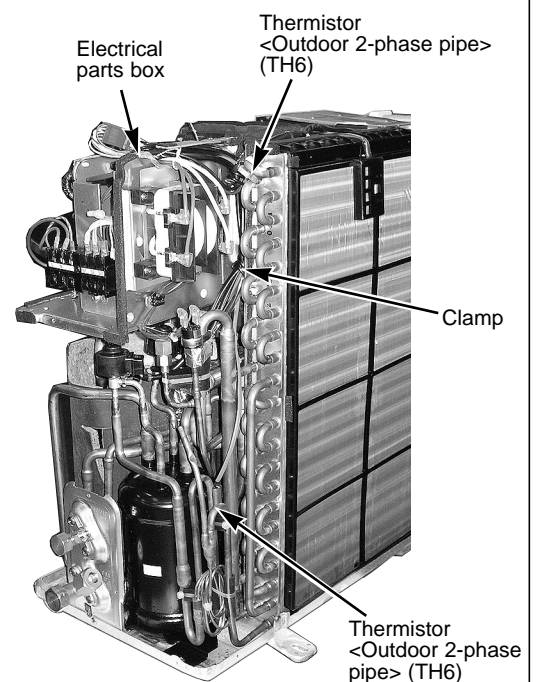


Photo 6



## OPERATING PROCEDURE

### 5. Removing the thermistor <Outdoor> (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 <Outdoor> (TH7) from the sensor holder.

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

### 6. Removing the thermistor <Discharge> (TH4)

- (1) Remove the service panel. (See photo 2.)
- (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) Pull out the thermistor <Discharge> (TH4) from the sensor holder. (See photo 8.)

\* When attaching the thermistor <Discharge> (TH4), place it to its original position.

### 7. Removing the solenoid valve coil <Four-way valve> (21S4) and linear expansion valve coil (LEV (A), LEV (B))

- (1) Remove the service panel. (See photo 2.)
- (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.)

[Removing the solenoid valve coil <Four-way valve> (21S4)]

- (6) Remove 1 solenoid valve coil <Four-way valve> fixing screw (M4 X 6).
- (7) Remove the solenoid valve coil <Four-way valve> by sliding the coil to the right.

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

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

## PHOTOS

Photo 7

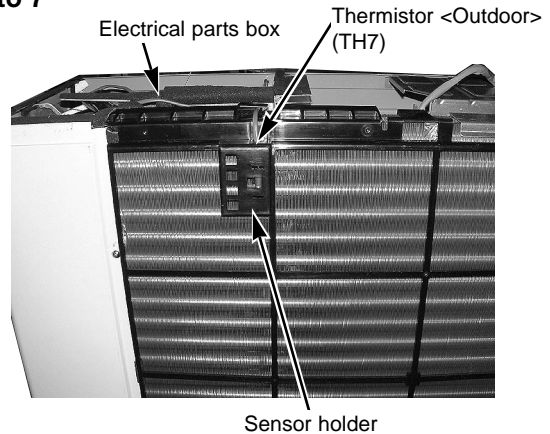


Photo 8

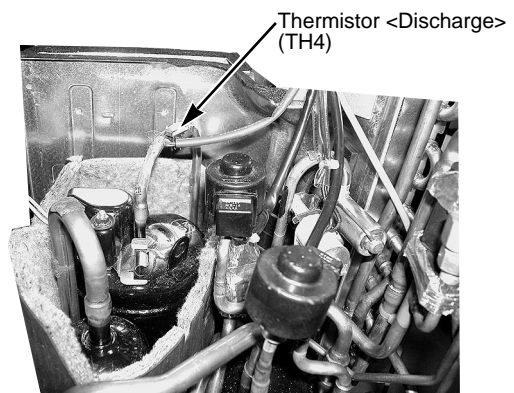
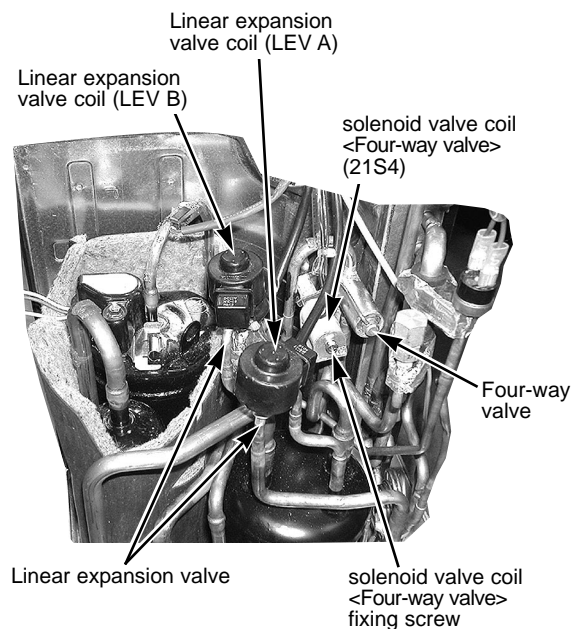


Photo 9



## OPERATING PROCEDURE

### 8. Removing the four-way valve

- (1) Remove the service panel. (See photo 2.)
- (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 solenoid valve coil <Four-way valve> (See photo 8.)
- (7) Collect the refrigerant.
- (8) Remove the welded part of four-way valve.

**Note 1: Collect 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 (120°C 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 photo 2.)
- (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 linear expansion valve coil . (See photo 8.)
- (7) Collect the refrigerant.
- (8) Remove the welded part of linear expansion valve.

**Note 1: Collect 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 (120°C or more), then braze the pipes so that the inside of pipes are not oxidized.**

### 10. Removing the high pressure switch (63H)

- (1) Remove the service panel. (See photo 2.)
- (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) Pull out the lead wire of high pressure switch.
- (7) Collect the refrigerant.
- (8) Remove the welded part of high pressure switch.

**Note 1: Collect 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 (100°C or more), then braze the pipes so that the inside of pipes are not oxidized.**

### 11. Removing the reactor (ACL)

- (1) Remove the service panel. (See photo 2.)
- (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 X 20) and remove the reactor.

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

## PHOTOS

Photo 10

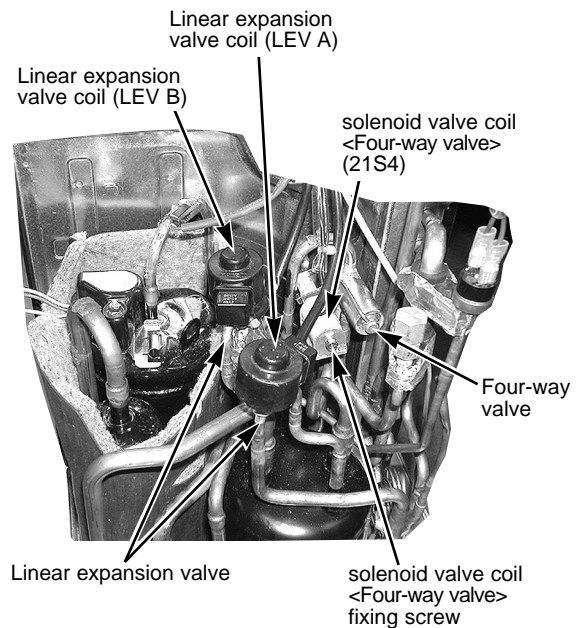


Photo 11

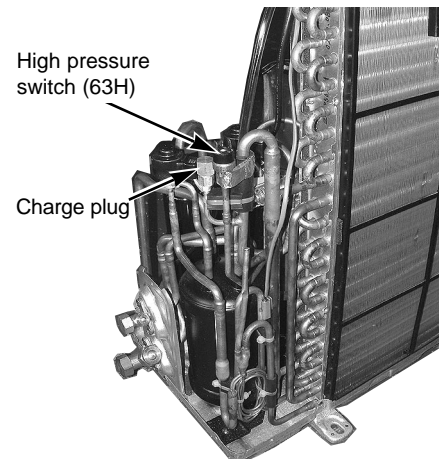
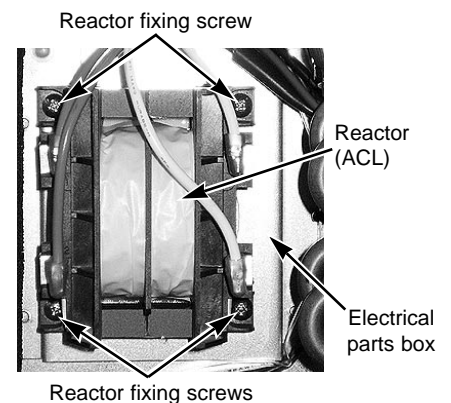


Photo 12



## OPERATING PROCEDURE

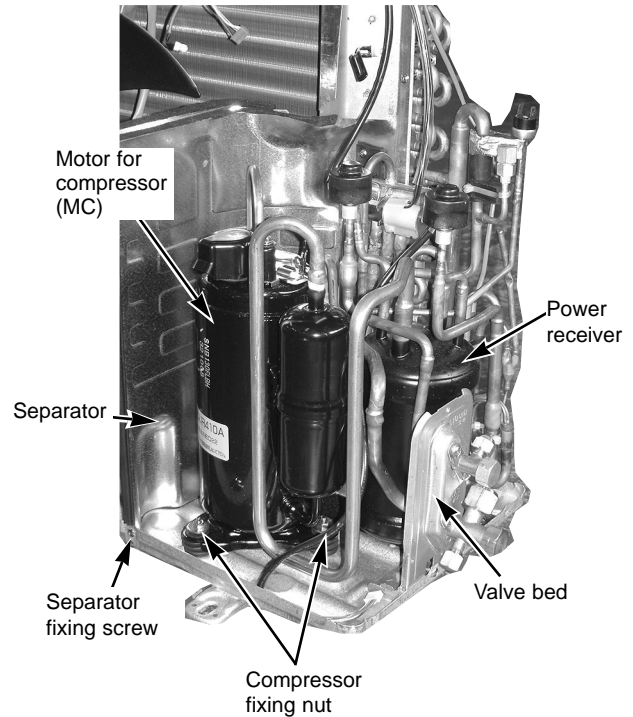
### 12. Removing the motor for compressor (MC)

- (1) Remove the service panel. (See photo 2.)
- (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 3 separator fixing screws (4 X 10) and remove the separator.
- (7) Collect the refrigerant.
- (8) Remove 3 compressor fixing nuts by using a spanner or a monkey wrench.
- (9) Remove the welded pipe of motor for compressor inlet and outlet.

**Note: Collect refrigerant without spreading it in the air.**

## PHOTOS

Photo 13

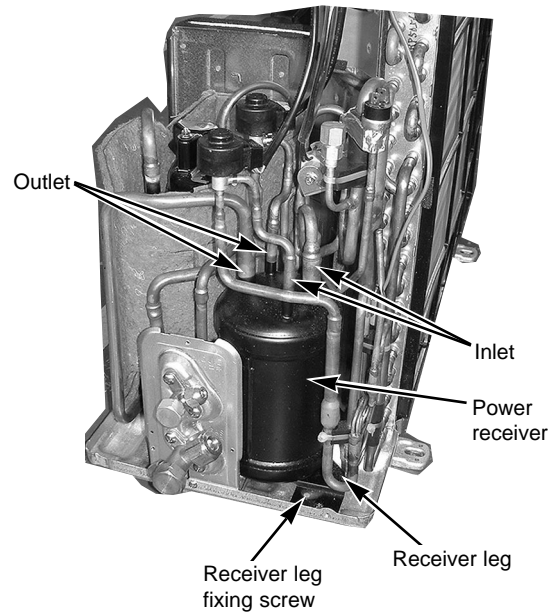


### 13. Removing the power receiver

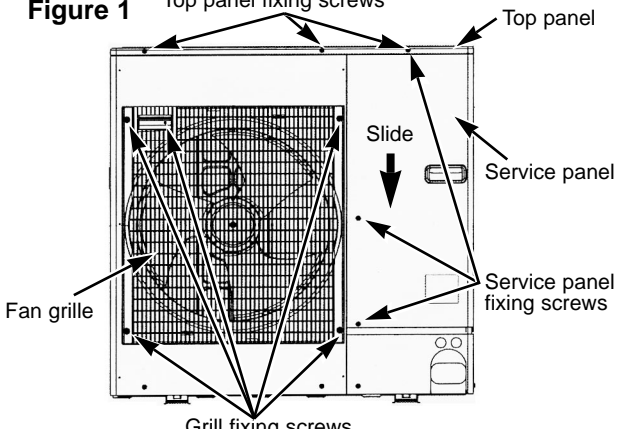
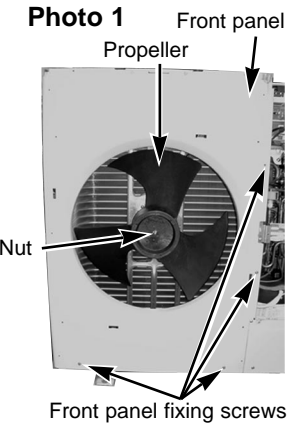
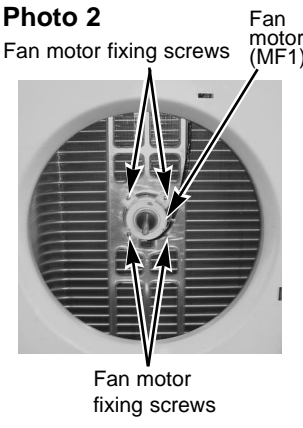
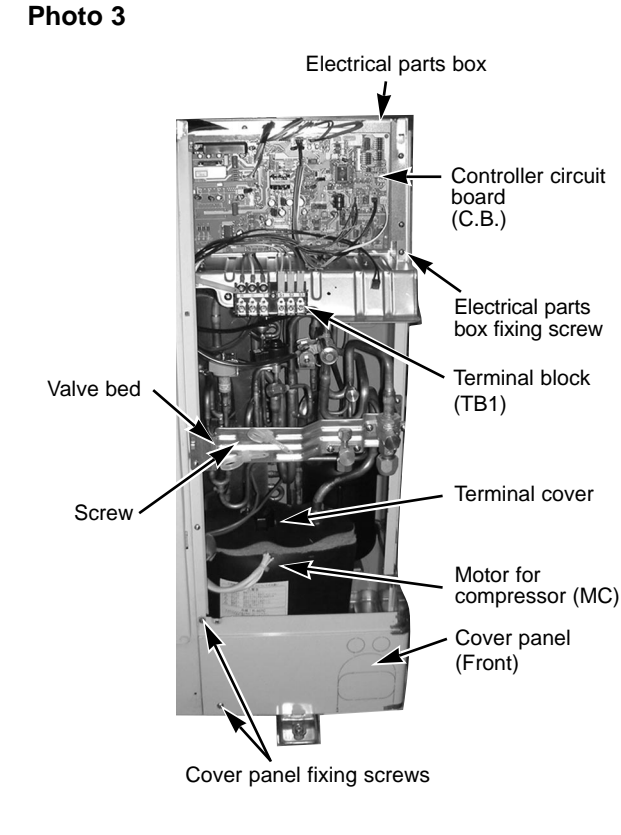
- (1) Remove the service panel. (See photo 2.)
- (2) Remove the top panel. (See photo 1.)
- (3) Remove the front panel. (See photo 1.)
- (4) Remove the back panel. (See photo 1.)
- (5) Remove the electrical parts box. (See photo 5.)
- (6) Collect the refrigerant.
- (7) Remove 4 welded pipes of power receiver inlet and outlet.
- (8) Remove 2 receiver leg fixing screws (4 X 10).
- (9) Remove the power receiver together with the receiver leg.

**Note: Collect refrigerant without spreading it in the air.**

Photo 14



## PUHZ-RP60/ 71VHA PUHZ-RP60/ 71VHA<sub>1</sub>

OPERATING PROCEDURE	PHOTOS & ILLUSTRATION
<p><b>1. Removing the service panel and top panel</b></p> <ol style="list-style-type: none"> <li>(1) Remove 3 service panel fixing screws (5 X 10) and slide the hook on the right downward to remove the service panel.</li> <li>(2) Remove screws (3 for front, 3 for rear/5 X 10) of the top panel and remove it.</li> </ol>	<p><b>Figure 1</b></p> 
<p><b>2. Removing the fan motor (MF1)</b></p> <ol style="list-style-type: none"> <li>(1) Remove the service panel. (See figure 1.)</li> <li>(2) Remove the top panel. (See figure 1.)</li> <li>(3) Remove 5 fan grille fixing screws (5 X 10) to detach the fan grille. (See figure 1.)</li> <li>(4) Remove a nut (for right handed screw of M6) to detach the propeller. (See photo 1.)</li> <li>(5) Disconnect the connector CNF1 on controller circuit board in electrical parts box.</li> <li>(6) Remove 4 fan motor fixing screws (5 X 25) to detach the fan motor. (See photo 2.)</li> </ol>	<p><b>Photo 1</b></p>  <p><b>Photo 2</b></p> 
<p><b>3. Removing the electrical parts box</b></p> <ol style="list-style-type: none"> <li>(1) Remove the service panel. (See figure 1.)</li> <li>(2) Remove the top panel. (See figure 1.)</li> <li>(3) Disconnect the indoor/outdoor connecting wire from terminal block.</li> <li>(4) Remove all the following connectors from controller circuit board; fan motor, linear expansion valve, thermistor&lt;Outdoor pipe&gt;, thermistor&lt;Discharge&gt;, thermistor&lt;Outdoor 2-phase pipe&gt;, thermistor&lt;Outdoor&gt;, thermistor&lt;Heat sink&gt;, high pressure switch, four-way valve and bypass valve. Then remove a screw (4 X 8) from the valve bed to remove the lead wire. Pull out the disconnected wire from the electrical parts box. &lt;Diagram symbol in the connector housing&gt; <ul style="list-style-type: none"> <li>• Fan motor (CNF1)</li> <li>• Linear expansion valve (LEV-A and LEV-B)</li> <li>• Thermistor &lt;Outdoor pipe&gt; (TH3)</li> <li>• Thermistor &lt;Discharge&gt; (TH4)</li> <li>• Thermistor &lt;Outdoor 2-phase pipe, Outdoor&gt; (TH6/7)</li> <li>• Thermistor &lt;Heat sink&gt; (CN3)</li> <li>• High pressure switch (63H)</li> <li>• Solenoid valve coil &lt;Four-way valve&gt; (21S4)</li> <li>• Solenoid valve coil &lt;Bypass valve&gt; (SV2)</li> </ul> </li> <li>(5) Remove the terminal cover and disconnect the compressor lead wire.</li> <li>(6) Remove an electrical parts box fixing screw (4 X 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.</li> </ol>	<p><b>Photo 3</b></p> 

## OPERATING PROCEDURE

### 4. Removing the thermistor <Outdoor 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 <Outdoor 2-phase pipe> (TH6) from the sensor holder.

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

### 5. Removing the thermistor <Outdoor> (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 <Outdoor> (TH7) from the sensor holder.

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

### 6. Removing the thermistor <Outdoor pipe> (TH3) and thermistor <Discharge> (TH4)

- (1) Remove the service panel. (See figure 1.)
- (2) Disconnect the connectors, TH3 (white) and TH4 (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 <Outdoor pipe> (TH3) and thermistor <Discharge> (TH4) from the sensor holder.

## PHOTOS

Photo 4

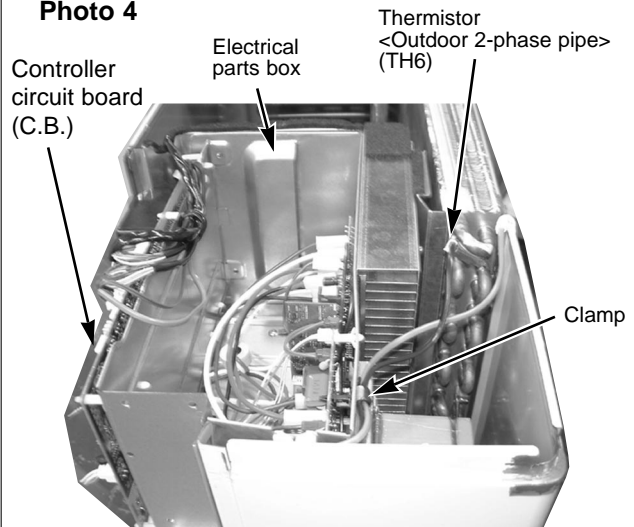


Photo 5

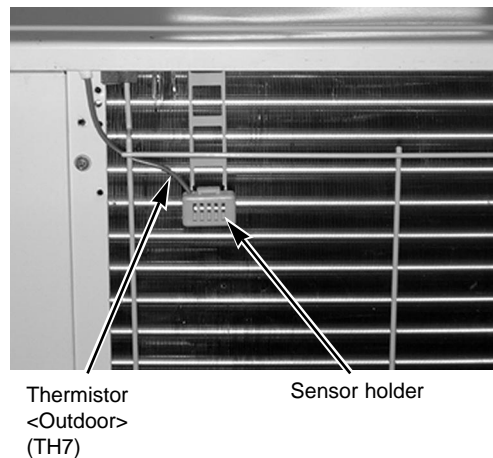
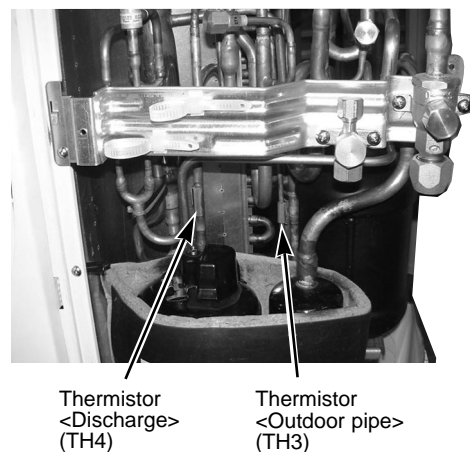


Photo 6







**OPERATING PROCEDURE**

**7. Removing the solenoid valve coil <Four-way valve> (21S4), linear expansion valve coil (LEV(A), LEV(B)) and solenoid valve coil <Bypass valve> (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 solenoid valve coil <Four-way valve>]**

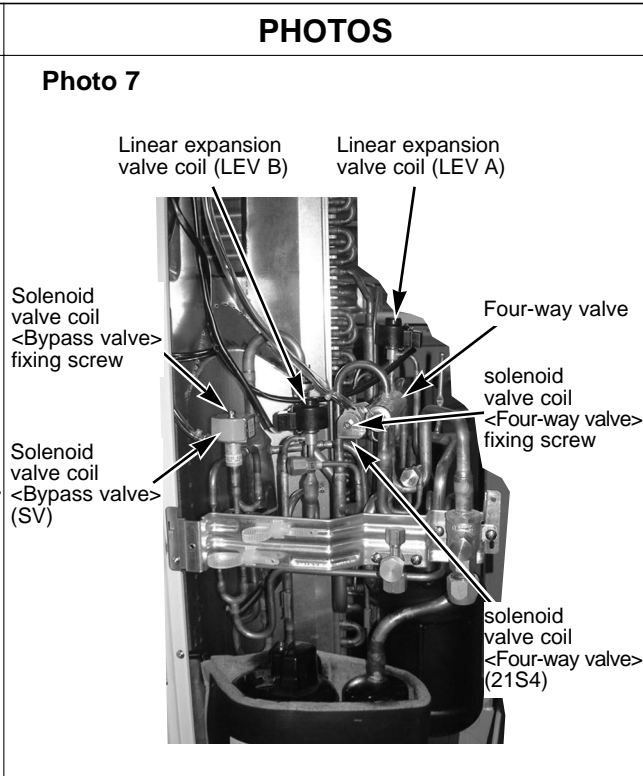
- (4) Remove solenoid valve coil <Four-way valve> fixing screw (M4 X 6).
- (5) Remove the solenoid valve coil <Four-way valve> by sliding the coil toward you.
- (6) Disconnect the connector 21S4 (green) on the controller board in the electrical parts box.

**[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) and LEV B (red), on the controller circuit board in the electrical parts box.

**[Removing the solenoid valve coil <Bypass valve>]**

- (4) Remove the solenoid valve coil <Bypass valve> fixing screw (M4 X 6).
- (5) Remove the solenoid valve coil <Bypass valve> by sliding the coil upward.
- (6) Disconnect the connector SV2 (blue) on the controller circuit board in the electrical parts box.



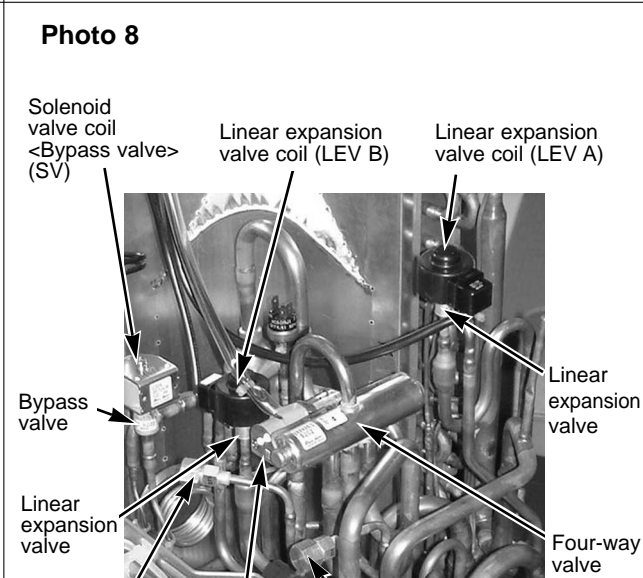
**8. Removing the four-way valve**

- (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 X 10) and 4 ball valve and stop valve fixing screws (5 X 16) and then remove the valve bed.
- (5) Remove 3 right side panel fixing screw (5 X 10) in the rear of the unit and then remove the right side panel.
- (6) Remove the solenoid valve coil <Four-way valve>. (See photo 7.)
- (7) Collect the refrigerant.
- (8) Remove the welded part of four-way valve.

**Note 1: Collect 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 (120°C or more), then braze the pipes so that the inside of pipes are not oxidized.**



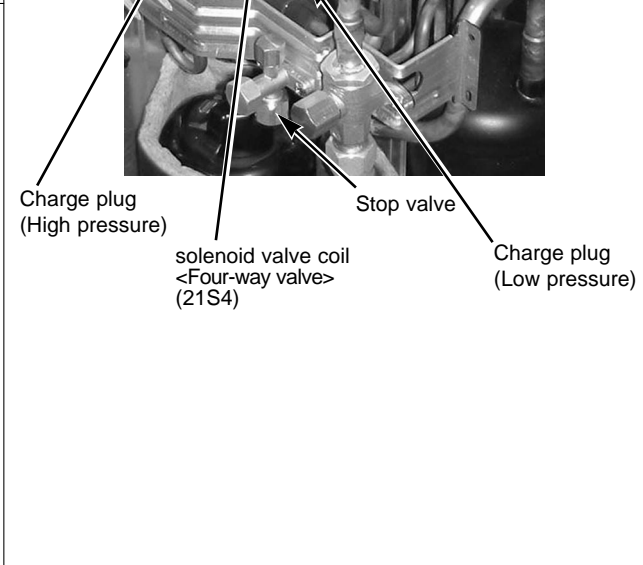
**9. Removing the linear expansion valve**

- (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 X 10) and 4 ball valve and stop valve fixing screws (5 X 16) and then remove the valve bed.
- (5) Remove 3 right side panel fixing screw (5 X 10) in the rear of the unit and then remove the right side panel.
- (6) Remove the linear expansion valve. (See photo 7.)
- (7) Collect the refrigerant.
- (8) Remove the welded part of linear expansion valve.

**Note 1: Collect 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 (120°C or more), then braze the pipes so that the inside of pipes are not oxidized.**



## OPERATING PROCEDURE

### 10. Removing the bypass valve

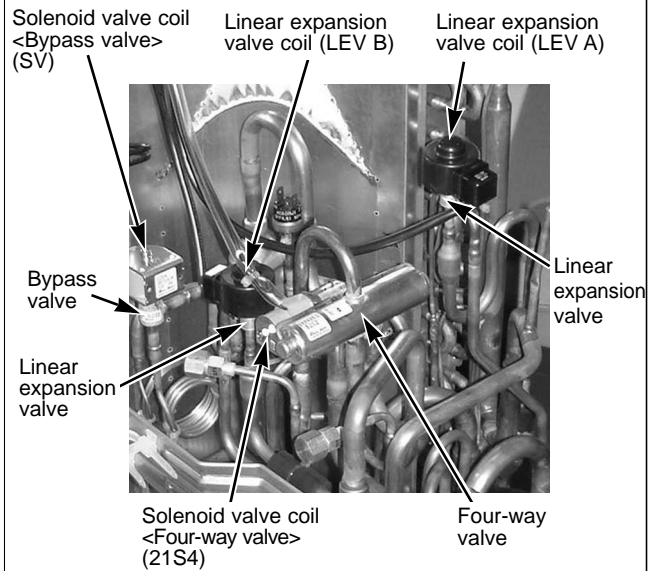
- (1) Remove the service panel. (See figure 1.)
- (2) Remove the top panel. (See figure 1.)
- (3) Remove the electrical parts box. (See photo 3.)
- (4) Remove 3 right side panel fixing screws (5 X 10) in the rear of the unit and remove the right side panel.
- (5) Remove the bypass valve solenoid coil. (See photo 7.).
- (6) Collect the refrigerant.
- (7) Remove the welded part of bypass valve.

**Note 1: Collect refrigerant without spreading it in the air.**

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

## PHOTOS

**Photo 9**



### 11. Removing the high pressure switch (63H)

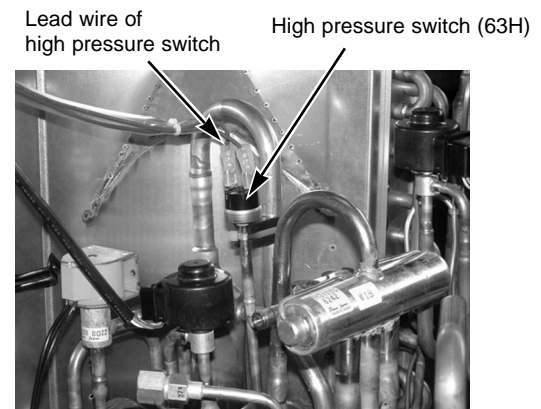
- (1) Remove the service panel. (See figure 1.)
- (2) Remove the top panel. (See figure 1.)
- (3) Remove the electrical parts box. (See photo 3.)
- (4) Remove 3 right side panel fixing screws (5 X 10) in the rear of the unit and remove the right side panel.
- (5) Pull out the lead wire of high pressure switch.
- (6) Collect the refrigerant.
- (7) Remove the welded part of high pressure switch.

**Note 1: Collect 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 (100°C or more), then braze the pipes so that the inside of pipes are not oxidized.**

**Photo 10**

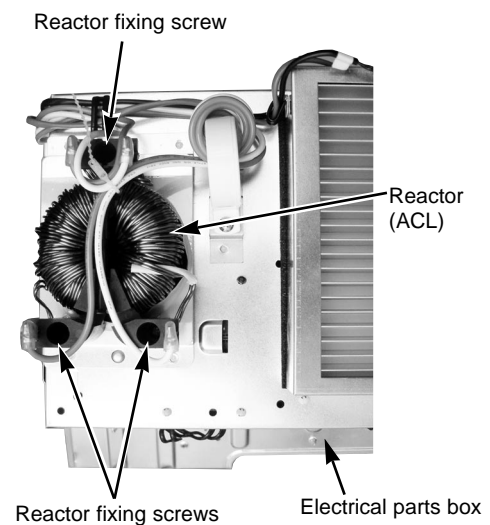


### 12. Removing the reactor (ACL)

- (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 X 16) and remove the reactor.

\* The reactor is attached to the rear of the electrical parts box.

**Photo 11**



## OPERATING PROCEDURE

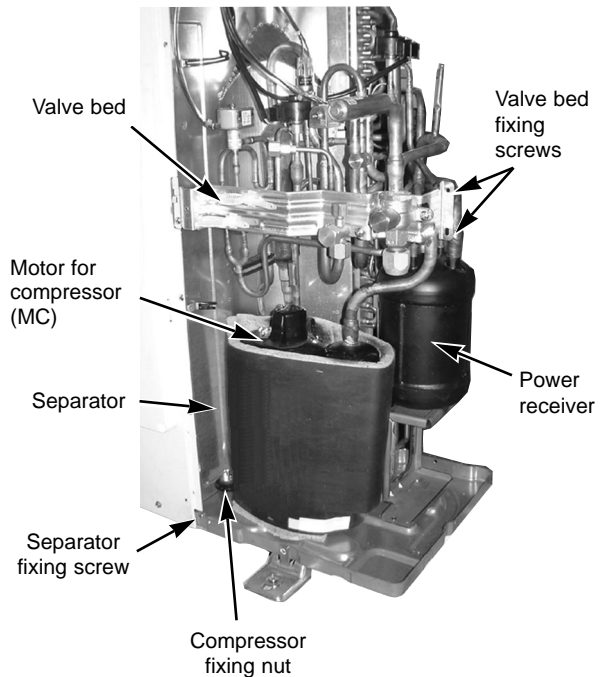
### 13. Removing the motor for compressor (MC)

- (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 X 10) and remove the front cover panel. (See photo 3.)
- (4) Remove 2 back cover panel fixing screws (5 X 10) and remove the back cover panel.
- (5) Remove the electrical parts box. (See photo 3.)
- (6) Remove 3 valve bed fixing screws (4 X 10) and 4 ball valve and stop valve fixing screws (5 X 16) and then remove the valve bed.
- (7) Remove 3 right side panel fixing screw (5 X 10) in the rear of the unit and then remove the right side panel.
- (8) Remove 3 separator fixing screws (4 X 10) and remove the separator.
- (9) Collect the refrigerant.
- (10) Remove the 3 points of the motor for compressor fixing nut using a spanner or a monkey wrench.
- (11) Remove the welded pipe of motor for compressor inlet and outlet and then remove the compressor.

**Note: Collect refrigerant without spreading it in the air.**

## PHOTOS

Photo 12

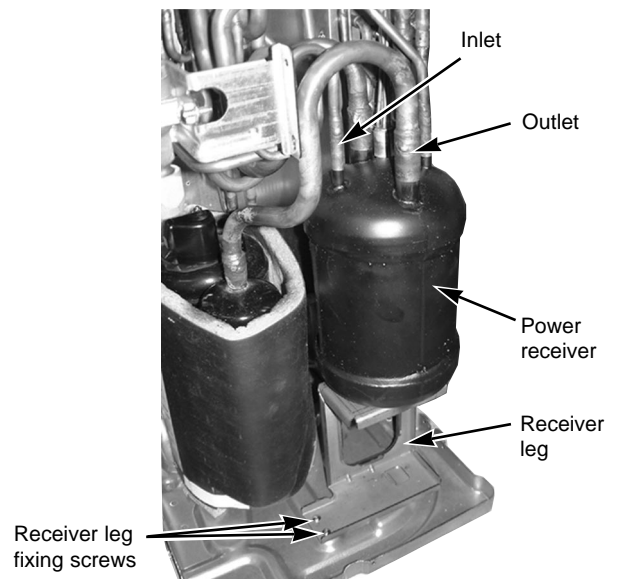


### 14. Removing the power receiver

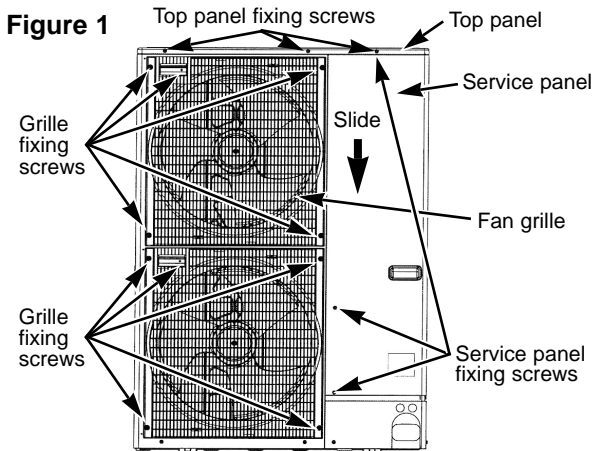
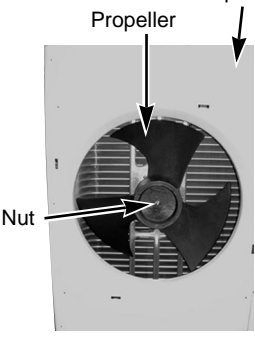
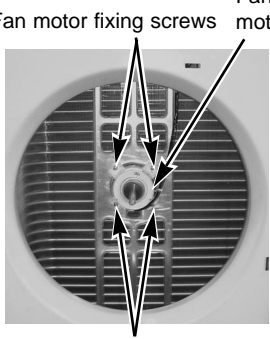
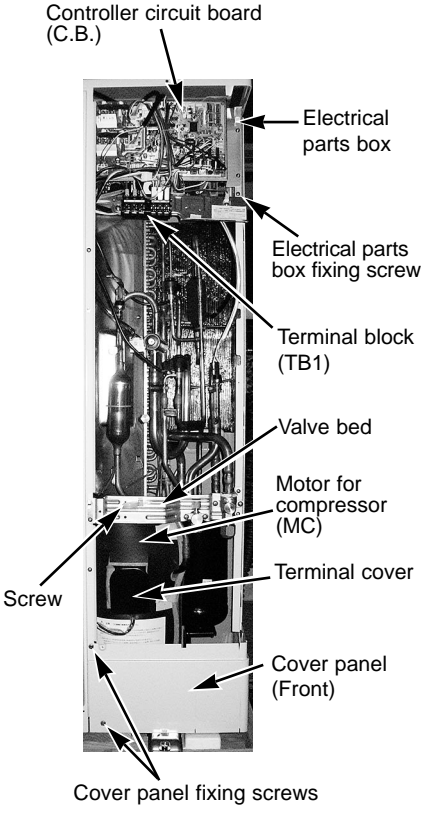
- (1) Remove the service panel. (See figure 1.)
- (2) Remove the top panel. (See figure 1.)
- (3) Remove 2 front cover panel fixing screws (5 X 10) and remove the front cover panel. (See photo 3.)
- (4) Remove 2 back cover panel fixing screws (5 X 10) and remove the back cover panel.
- (5) Remove the electrical parts box. (See photo 3.)
- (6) Remove 3 valve bed fixing screws (4 X 10) and 4 ball valve and stop valve fixing screws (5 X 16) and then remove the valve bed.
- (7) Remove 3 right side panel fixing screw (5 X 10) in the rear of the unit and then remove the right side panel.
- (8) Collect the refrigerant.
- (9) Remove 4 welded pipes of power receiver inlet and outlet.
- (10) Remove 2 receiver leg fixing screws (4 X 10).

**Note: Collect refrigerant without spreading it in the air.**

Photo 13



**PUHZ-RP100/ 125/ 140VHA PUHZ-RP125/ 140VHA<sub>1</sub>**

OPERATING PROCEDURE	PHOTOS & ILLUSTRATION
<p><b>1. Removing the service panel and top panel</b></p> <p>(1) Remove 3 service panel fixing screws (5 X 10) and slide the hook on the right downward to remove the service panel.</p> <p>(2) Remove screws (3 for front, 3 for rear/5 X 10) of the top panel and remove it.</p>	<p><b>Figure 1</b></p> 
<p><b>2. Removing the fan motor (MF1, MF2)</b></p> <p>(1) Remove the service panel. (See figure 1.)</p> <p>(2) Remove the top panel. (See figure 1.)</p> <p>(3) Remove 5 fan grille fixing screws (5 X 10) to detach the fan grille. (See figure 1.)</p> <p>(4) Remove a nut (for right handed screw of M6) to detach the propeller. (See photo 1.)</p> <p>(5) Disconnect the connectors, CNF1, CNF2 on controller circuit board in electrical parts box.</p> <p>(6) Remove 4 fan motor fixing screws (5 X 25) to detach the fan motor. (See photo 2.)</p>	<p><b>Photo 1</b></p>  <p><b>Photo 2</b></p> 
<p><b>3. Removing the electrical parts box</b></p> <p>(1) Remove the service panel. (See figure 1.)</p> <p>(2) Remove the top panel. (See figure 1.)</p> <p>(3) Disconnect the indoor/outdoor connecting wire from terminal block.</p> <p>(4) Remove all the following connectors from controller circuit board; fan motor, linear expansion valve, thermistor &lt;Outdoor pipe&gt;, thermistor &lt;Discharge&gt;, thermistor &lt;Outdoor 2-phase pipe&gt;, thermistor &lt;Outdoor&gt;, high pressure switch, low pressure switch, solenoid valve coil &lt;Four-way valve&gt; and solenoid valve coil &lt;Bypass valve&gt;. Then remove a screw (4 X 8) from the valve bed to remove the lead wire. Pull out the disconnected wire from the electrical parts box. &lt;Diagram symbol in the connector housing&gt;</p> <ul style="list-style-type: none"> <li>• Fan motor (CNF1, CNF2)</li> <li>• Linear expansion valve (LEV-A and LEV-B)</li> <li>• Thermistor &lt;Outdoor pipe&gt; (TH3)</li> <li>• Thermistor &lt;Discharge&gt; (TH4)</li> <li>• Thermistor &lt;Outdoor 2-phase pipe, Outdoor&gt; (TH6/7)</li> <li>• High pressure switch (63H)</li> <li>• Low pressure switch (63L)</li> <li>• Solenoid valve coil &lt;Four-way valve&gt; (21S4)</li> <li>• Solenoid valve coil &lt;Bypass valve&gt; (SV2)</li> </ul> <p>(5) Remove the terminal cover and disconnect the compressor lead wire.</p> <p>(6) Remove an electrical parts box fixing screw (4 X 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.</p>	<p><b>Photo 3</b></p> 

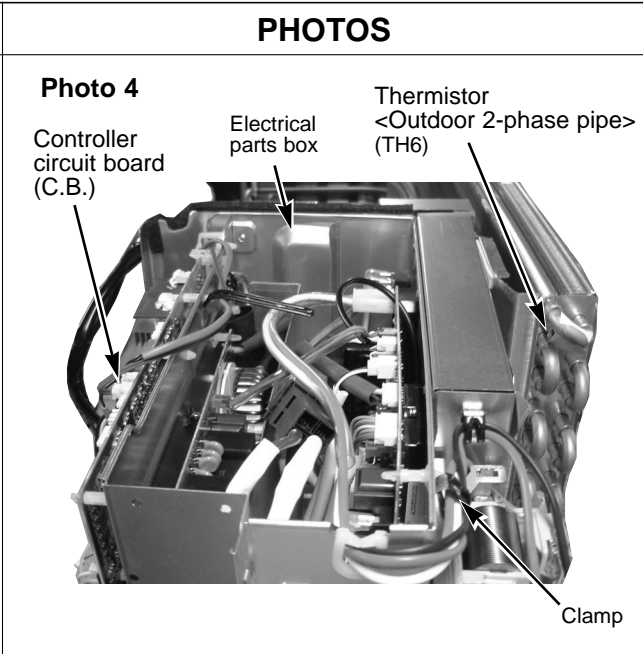


**OPERATING PROCEDURE**

**4. Removing the thermistor <Outdoor 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 <Outdoor 2-phase pipe> (TH6) from the sensor holder.

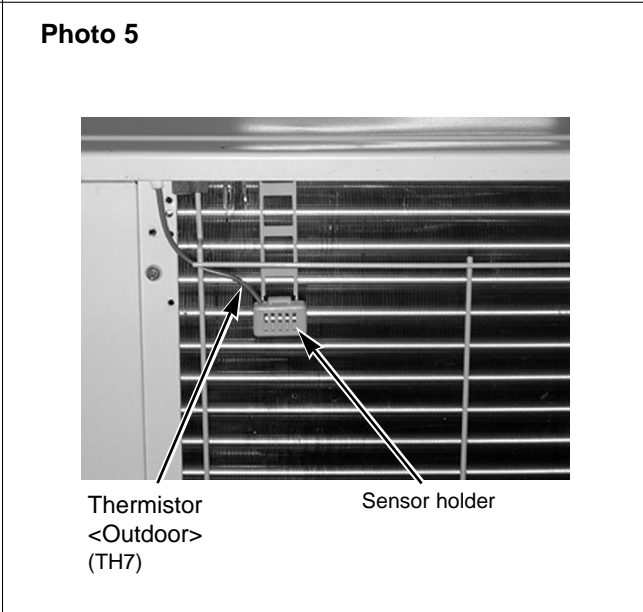
**Note: In case of replacing thermistor <Outdoor 2-phase pipe> (TH6), replace it together with thermistor <Outdoor> (TH7) since they are combined together. Refer to No.5 below to remove thermistor <Outdoor>.**



**5. Removing the thermistor <Outdoor> (TH7)**

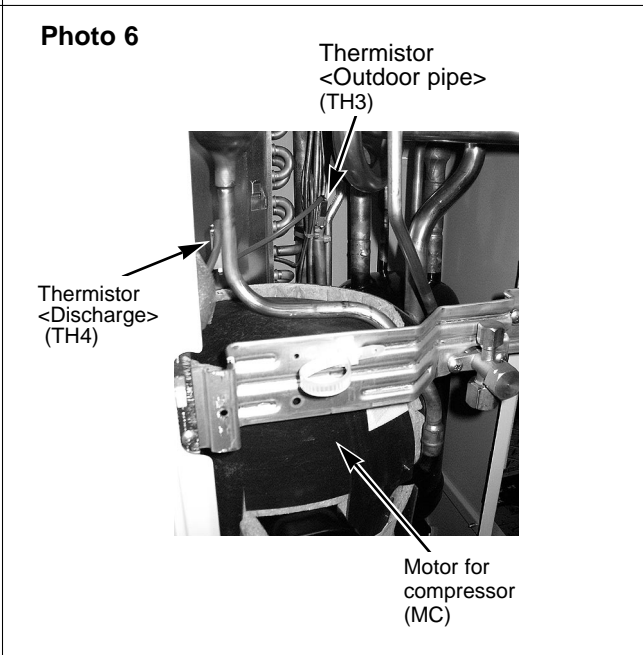
- (1) Remove the service panel. (See figure 1.)
- (2) Remove the top panel. (See figure 1.)
- (3) Disconnect the connector TH7 (red) on the controller circuit board in the electrical parts box.
- (4) Loosen the clamp for the lead wire in the rear of the electrical parts box. (See photo 4.)
- (5) Pull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

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



**6. Removing the thermistor <Outdoor pipe> (TH3) and thermistor <Discharge> (TH4)**

- (1) Remove the service panel. (See figure 1.)
- (2) Disconnect the connectors, TH3 (white) and TH4 (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 <Outdoor pipe> (TH3) and thermistor <Discharge> (TH4) from the sensor holder.



## OPERATING PROCEDURE

### 7. Removing the solenoid valve coil <Four-way valve> (21S4), and linear expansion valve coil (LEV(A), LEV(B))

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

#### [Removing the solenoid valve coil <Four-way valve>]

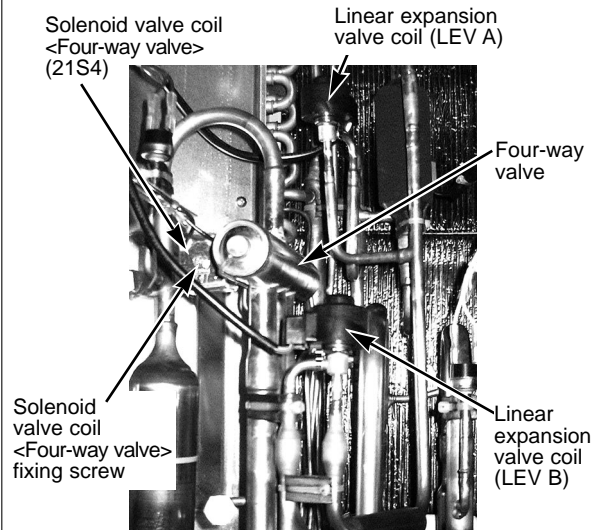
- (3) Remove four-way valve solenoid coil fixing screw (M4 X 6).
- (4) Remove the solenoid valve coil <Four-way valve> by sliding the coil toward you.
- (5) Disconnect the connector 21S4 (green) on the controller circuit board in the electrical parts box.

#### [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) and LEV B (red), on the controller circuit board in the electrical parts box.

## PHOTOS

Photo 7



### 8. Removing the four-way valve

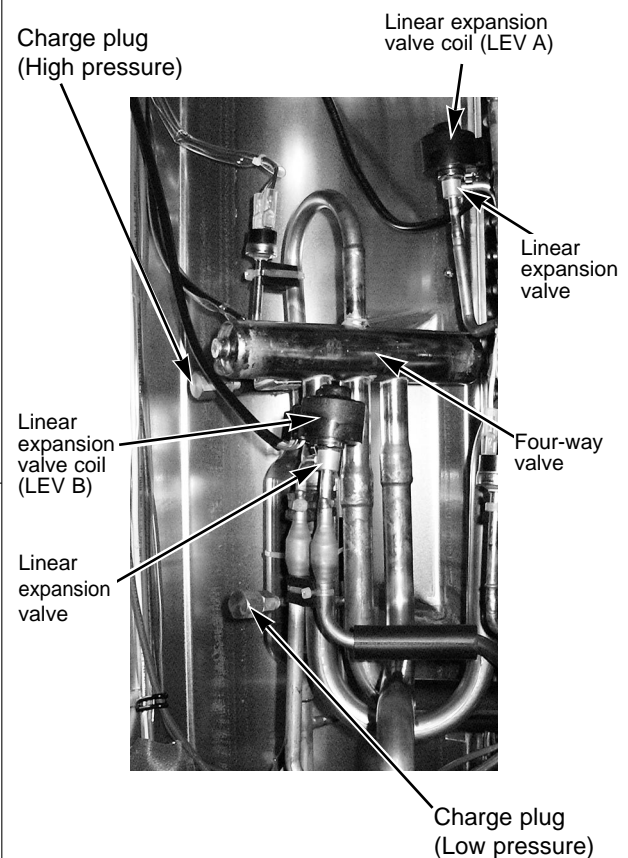
- (1) Remove the service panel. (See figure 1.)
- (2) Remove the top panel. (See figure 1.)
- (3) Remove 3 valve bed fixing screws (4 X 10) and 4 ball valve and stop valve fixing screws (5 X 16) and then remove the valve bed.
- (4) Remove 4 right side panel fixing screw (5 X 10) in the rear of the unit and then remove the right side panel.
- (5) Remove the solenoid valve coil <Four-way valve>. (See photo 7.)
- (6) Collect the refrigerant.
- (7) Remove the welded part of four-way valve.

**Note 1: Collect 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 (120°C or more), then braze the pipes so that the inside of pipes are not oxidized.**

Photo 8



### 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 X 10) and 4 ball valve and stop valve fixing screws (5 X 16) and then remove the valve bed.
- (4) Remove 4 right side panel fixing screw (5 X 10) in the rear of the unit and then remove the right side panel.
- (5) Remove the linear expansion valve. (See photo 7.)
- (6) Collect the refrigerant.
- (7) Remove the welded part of linear expansion valve.

**Note 1: Collect 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 (120°C or more), then braze the pipes so that the inside of pipes are not oxidized.**

## OPERATING PROCEDURE

### 10. Removing solenoid valve coil <Bypass valve> (SV) and bypass valve

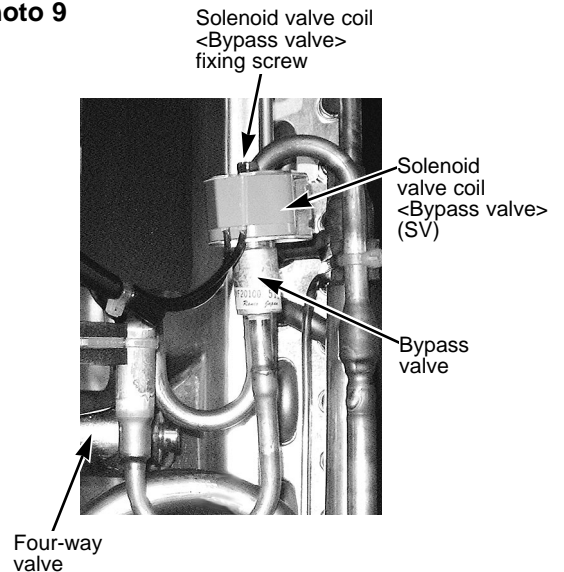
- (1) Remove the service panel. (See figure 1.)
- (2) Remove the top panel. (See figure 1.)
- (3) Remove 3 right side panel fixing screws (5 X 10) in the rear of the unit and remove the right side panel.
- (4) Remove the bypass valve solenoid coil fixing screw (M4 X 6).
- (5) Remove the solenoid valve coil <Bypass valve> by sliding the coil upward.
- (6) Disconnect the connector SV2 (blue) on the controller circuit board in the electrical parts box.
- (7) Collect the refrigerant.
- (8) Remove the welded part of bypass valve.

**Note 1:** Collect refrigerant without spreading it in the air.

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

## PHOTOS

Photo 9



### 11. Removing the high pressure switch (63H) and low pressure switch (63L)

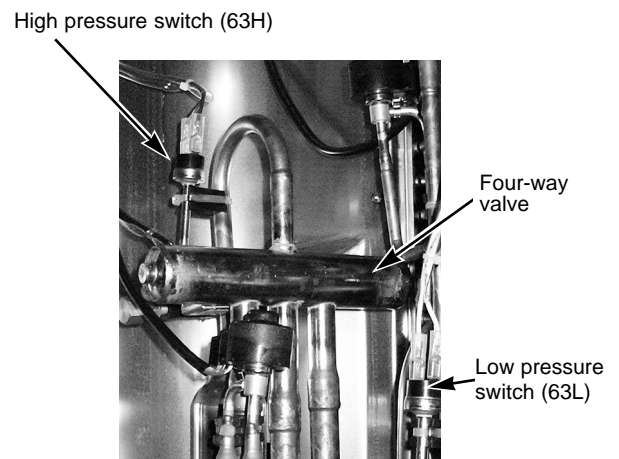
- (1) Remove the service panel. (See figure 1.)
- (2) Remove the top panel. (See figure 1.)
- (3) Remove 3 right side panel fixing screws (5 X 10) in the rear of the unit and remove the right side panel.
- (4) Pull out the lead wire of high pressure switch and low pressure switch.
- (5) Collect the refrigerant.
- (6) Remove the welded part of high pressure switch and low pressure switch.

**Note 1:** Collect 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 (100°C or more), then braze the pipes so that the inside of pipes are not oxidized.

Photo 10

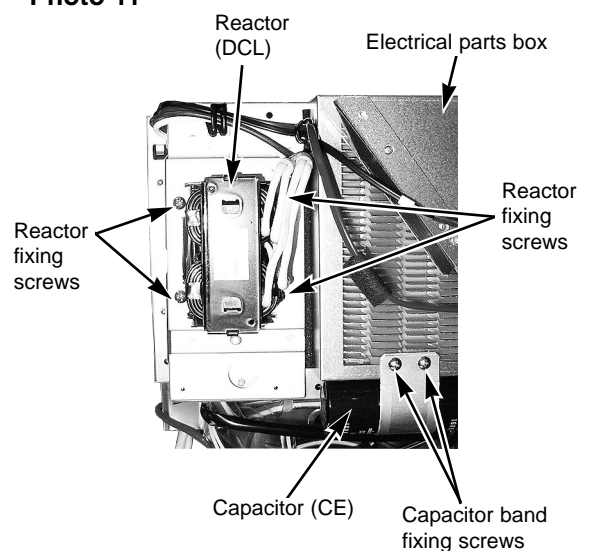


### 12. Removing the reactor (DCL) and capacitor (CE)

- (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 X 10) and remove the reactor.
- <Removing the capacitor>
- (4) Remove 2 capacitor band fixing screws (4 X 10) and remove the capacitor.

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

Photo 11



## OPERATING PROCEDURE

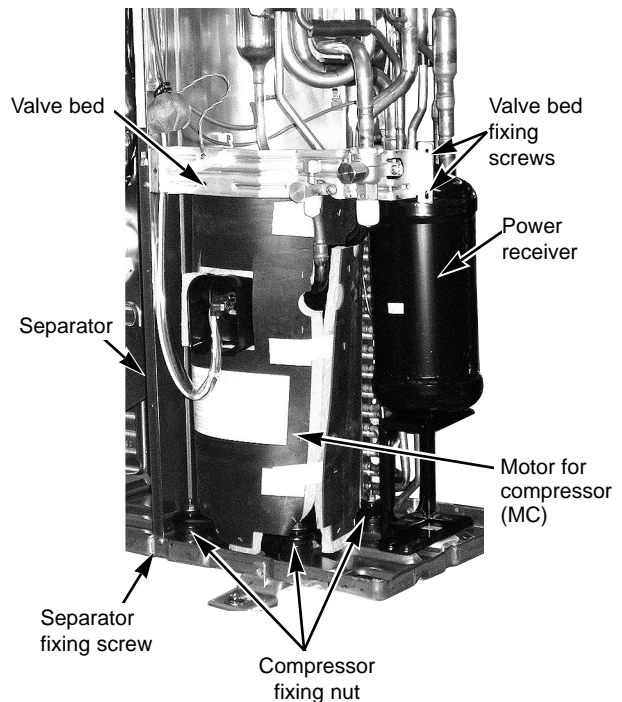
### 13. Removing the motor for compressor (MC)

- (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 X 10) and remove the front cover panel. (See photo 3.)
- (4) Remove 2 back cover panel fixing screws (5 X 10) and remove the back cover panel.
- (5) Remove the electrical parts box. (See photo 3.)
- (6) Remove 3 valve bed fixing screws (4 X 10) and 4 ball valve and stop valve fixing screws (5 X 16) and then remove the valve bed.
- (7) Remove 3 right side panel fixing screw (5 X 10) in the rear of the unit and then remove the right side panel.
- (8) Remove 3 separator fixing screws (4 X 10) and remove the separator.
- (9) Collect the refrigerant.
- (10) Remove the 3 points of the motor for compressor fixing nut using a spanner or a monkey wrench.
- (11) Remove the welded pipe of motor for compressor inlet and outlet and then remove the compressor.

**Note: Collect refrigerant without spreading it in the air.**

## PHOTOS

Photo 12

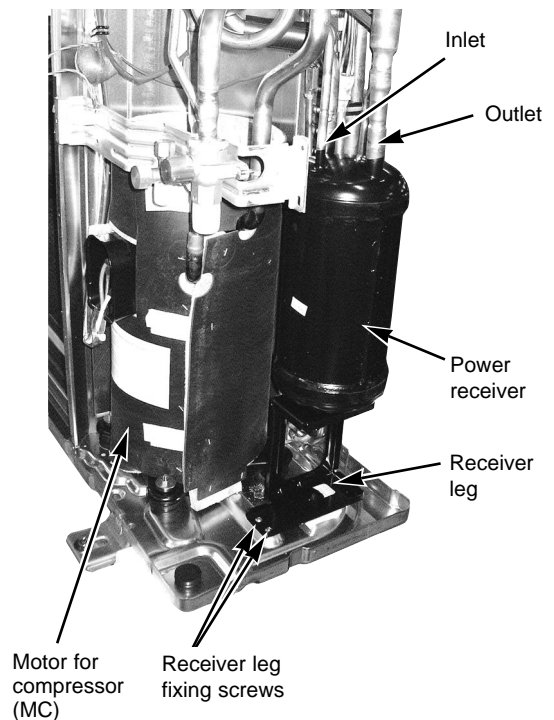


### 14. Removing the power receiver

- (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 X 10) and remove the front cover panel. (See photo 3.)
- (4) Remove 2 back cover panel fixing screws (5 X 10) and remove the back cover panel.
- (5) Remove the electrical parts box. (See photo 3.)
- (6) Remove 3 valve bed fixing screws (4 X 10) and 4 ball valve and stop valve fixing screws (5 X 16) and then remove the valve bed.
- (7) Remove 3 right side panel fixing screw (5 X 10) in the rear of the unit and then remove the right side panel.
- (8) Collect the refrigerant.
- (9) Remove 4 welded pipes of power receiver inlet and outlet.
- (10) Remove 2 receiver leg fixing screws (4 X 10).

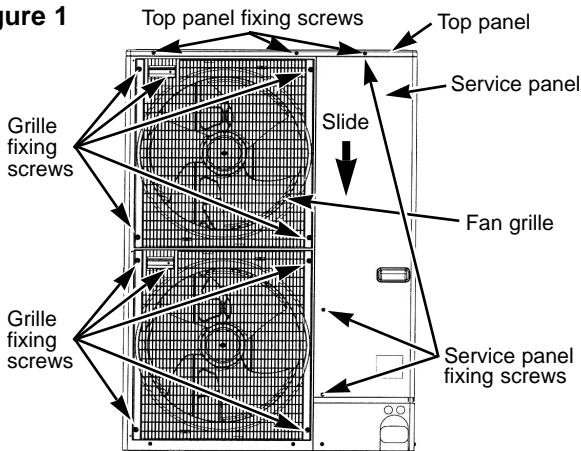
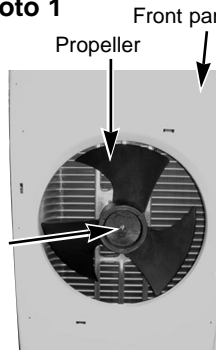
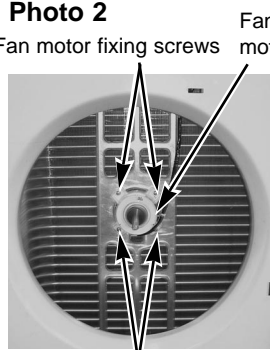
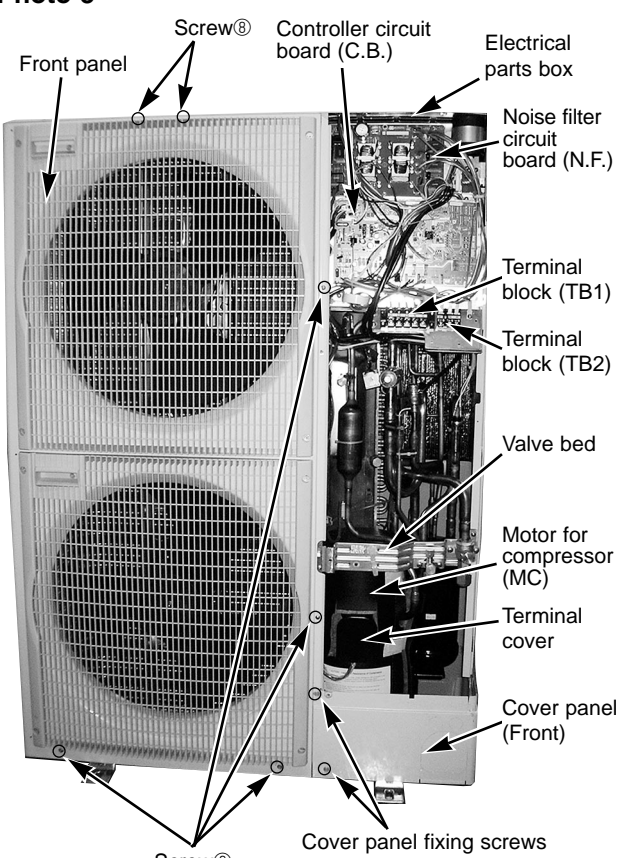
**Note: Collect refrigerant without spreading it in the air.**

Photo 13





**PUHZ-RP100YHA PUHZ-RP125YHA PUHZ-RP140YHA**

OPERATING PROCEDURE	PHOTOS & ILLUSTRATION
<p><b>1. Removing the service panel and top panel</b></p> <p>(1) Remove 3 service panel fixing screws (5 X 10) and slide the hook on the right downward to remove the service panel.</p> <p>(2) Remove screws (3 for front, 3 for rear/5 X 10) of the top panel and remove it.</p>	<p><b>Figure 1</b></p> 
<p><b>2. Removing the fan motor (MF1, MF2)</b></p> <p>(1) Remove the service panel. (See figure 1.)</p> <p>(2) Remove the top panel. (See figure 1.)</p> <p>(3) Remove 5 fan grille fixing screws (5 X 10) to detach the fan grille. (See figure 1.)</p> <p>(4) Remove a nut (for right handed screw of M6) to detach the propeller. (See photo 1.)</p> <p>(5) Disconnect the connectors, CNF1 and CNF2 on controller circuit board in electrical parts box.</p> <p>(6) Remove 4 fan motor fixing screws (5 X 25) to detach the fan motor. (See photo 2.)</p>	<p><b>Photo 1</b></p>  <p><b>Photo 2</b></p> 
<p><b>3. Removing the electrical parts box</b></p> <p>(1) Remove the service panel. (See figure 1.)</p> <p>(2) Remove the top panel. (See figure 1.)</p> <p>(3) Disconnect the indoor/outdoor connecting wire from terminal block.</p> <p>(4) Disconnect the connector CNF1, CNF2, LEV-A and LEV-B on the controller circuit board.</p> <p>&lt;Symbols on the board&gt;</p> <ul style="list-style-type: none"> <li>• CNF1, CNF2 : Fan motor</li> <li>• LEV-A, LEV-B : Linear expansion valve</li> </ul> <p>(5) Disconnect the pipe-side connections of the following parts.</p> <ul style="list-style-type: none"> <li>• Thermistor &lt;Outdoor pipe&gt;(TH3)</li> <li>• Thermistor &lt;Discharge&gt;(TH4)</li> <li>• Thermistor &lt;Outdoor 2-phase pipe&gt;(TH6)</li> <li>• Thermistor &lt;Outdoor&gt;(TH7)</li> <li>• High pressure switch (63H)</li> <li>• Low pressure switch (63L)</li> <li>• Solenoid valve coil &lt;Four-Way Valve&gt;(21S4)</li> <li>• Solenoid valve coil &lt;Bypass Valve&gt;(SV)</li> </ul>	<p><b>Photo 3</b></p> 

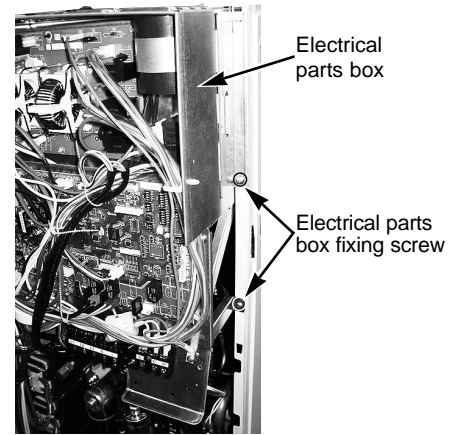
From the previous page.

## OPERATING PROCEDURE

- (6) Remove the terminal cover and disconnect the compressor lead wire.
- (7) Remove 2 electrical parts box fixing screws (4 X 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.

## PHOTOS & ILLUSTRATION

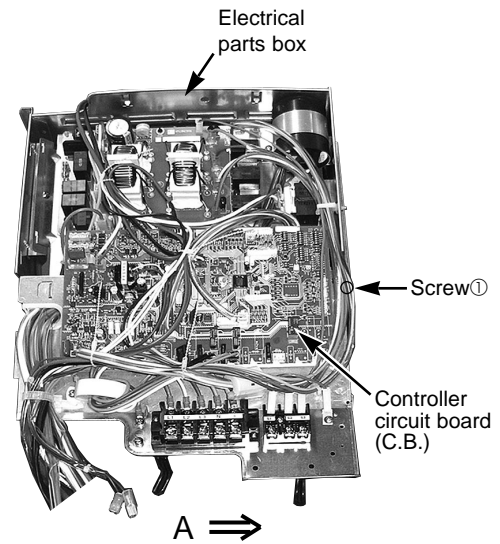
**Photo 4**



### 4. Disassembling the electrical parts box

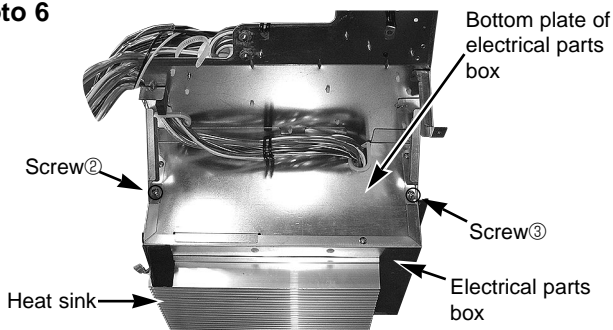
- (1) Disconnect all the connectors on the controller circuit board.
- (2) Remove the 3 screws, screw ①, ② and ③, that fix the plate equipped with the outdoor controller circuit board, and the electrical parts box, screw ① from the front and the screw ② and ③ from the bottom of the electrical parts box. (See photo 5 and 6.)
- (3) Slide the plate in the direction of the arrow A and remove it. (See photo 5.)
- (4) Remove the lead wires from the clamp on the bottom of the electrical parts box. (See photo 7.)
- (5) Remove the 3 screws, screw ④ and ⑤, that fix the bottom side of the electrical parts box and remove the bottom side plate by sliding in the direction of the arrow B. (See photo 7 and 8.)
- (6) Remove the 2 screws, screw ⑥ and ⑦, that fix the plate equipped with the noise filter circuit board and converter circuit board. (See photo 9.)

**Photo 5**

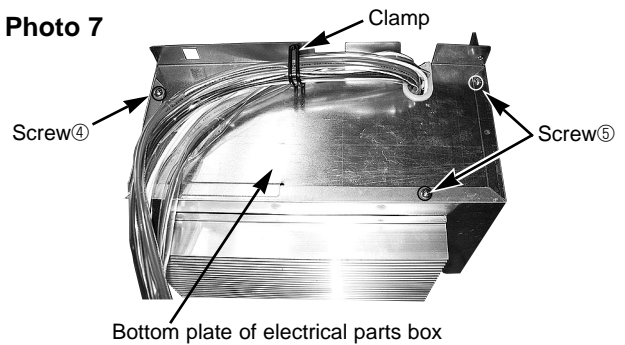


**Note: When reassembling the electrical parts box, make sure the wirings are correct.**

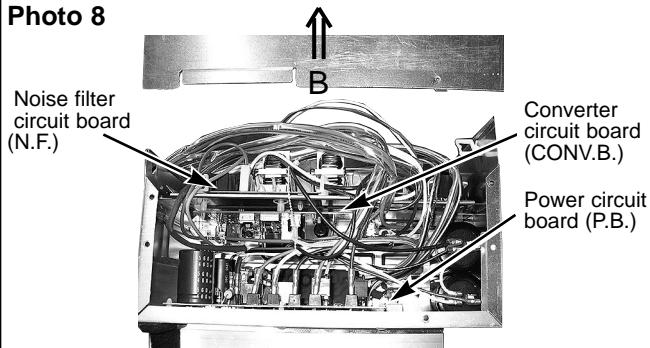
**Photo 6**



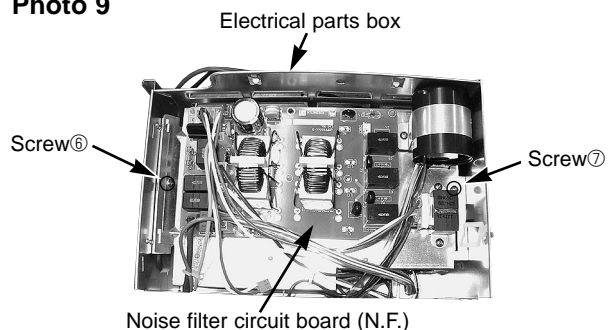
**Photo 7**



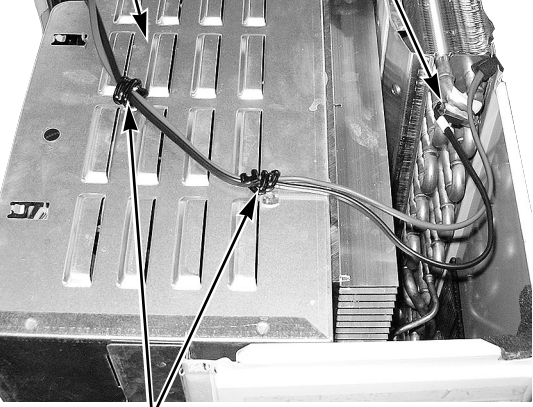
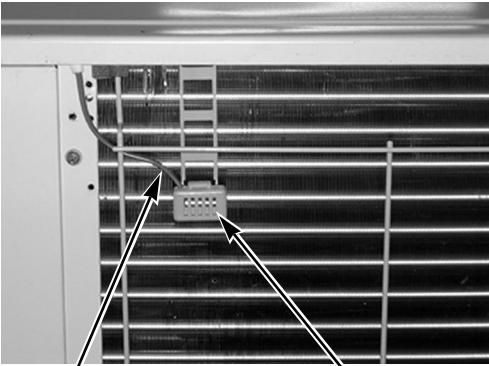
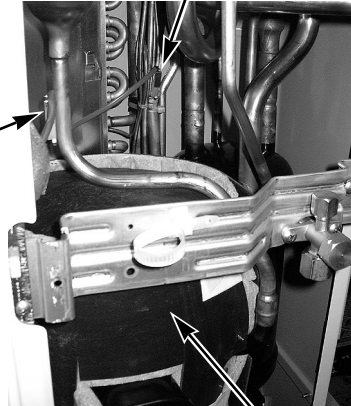
**Photo 8**



**Photo 9**





OPERATING PROCEDURE	PHOTOS
<p><b>5. Removing the thermistor &lt;Outdoor 2-phase pipe&gt; (TH6)</b></p> <ol style="list-style-type: none"><li>(1) Remove the service panel. (See figure 1.)</li><li>(2) Remove the top panel. (See figure 1.)</li><li>(3) Disconnect the connectors, TH6 and TH7 (red), on the controller circuit board in the electrical parts box.</li><li>(4) Loosen the 2 wire clamps on top of the electrical parts box.</li><li>(5) Pull out the thermistor &lt;Outdoor 2-phase pipe&gt; (TH6) from the sensor holder.</li></ol> <p><b>Note:</b> In case of replacing thermistor &lt;Outdoor 2-phase pipe&gt; (TH6), replace it together with thermistor &lt;Outdoor&gt; (TH7) since they are combined together. Refer to No.6 below to remove thermistor &lt;Outdoor&gt;.</p>	<p><b>Photo 10</b></p>  <p>Electrical parts box</p> <p>Thermistor &lt;Outdoor 2-phase pipe&gt; (TH6)</p> <p>Clamp</p>
<p><b>6. Removing the thermistor &lt;Outdoor&gt; (TH7)</b></p> <ol style="list-style-type: none"><li>(1) Remove the service panel. (See figure 1.)</li><li>(2) Remove the top panel. (See figure 1.)</li><li>(3) Disconnect the connector TH7 (red) on the controller circuit board in the electrical parts box.</li><li>(4) Loosen the 2 wire clamps on top of the electrical parts box. (See photo 10.)</li><li>(5) Pull out the thermistor &lt;Outdoor&gt; (TH7) from the sensor holder.</li></ol> <p><b>Note:</b> In case of replacing thermistor &lt;Outdoor&gt; (TH7), replace it together with thermistor &lt;Outdoor 2-phase pipe&gt; (TH6), since they are combined together. Refer to No.5 above to remove thermistor &lt;Outdoor 2-phase pipe&gt;.</p>	<p><b>Photo 11</b></p>  <p>Thermistor &lt;Outdoor&gt; (TH7)</p> <p>Sensor holder</p>
<p><b>7. Removing the thermistor &lt;Outdoor pipe&gt; (TH3) and thermistor &lt;Discharge&gt; (TH4)</b></p> <ol style="list-style-type: none"><li>(1) Remove the service panel. (See figure 1.)</li><li>(2) Disconnect the connectors, TH3 (white) and TH4 (white), on the controller circuit board in the electrical parts box.</li><li>(3) Loosen the clamp for the lead wire in the rear of the electrical parts box. (See photo 4.)</li><li>(4) Pull out the thermistor &lt;Outdoor pipe&gt; (TH3) and thermistor &lt;Discharge&gt; (TH4) from the sensor holder.</li></ol>	<p><b>Photo 12</b></p>  <p>Thermistor &lt;Outdoor pipe&gt; (TH3)</p> <p>Thermistor &lt;Discharge&gt; (TH4)</p> <p>Motor for compressor (MC)</p>

## OPERATING PROCEDURE

### 8. Removing the solenoid valve coil <Four-way valve> (21S4), and linear expansion valve coil (LEV(A), LEV(B))

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

#### [Removing the solenoid valve coil <Four-way valve>]

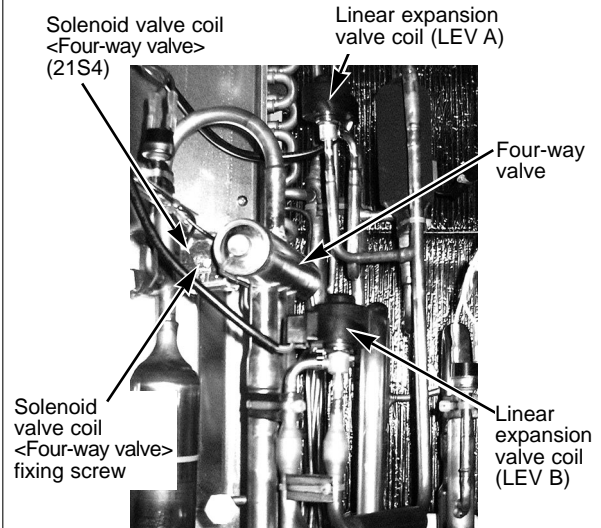
- (3) Remove four-way valve solenoid coil fixing screw (M4 X 6).
- (4) Remove the solenoid valve coil <Four-way valve> by sliding the coil toward you.
- (5) Disconnect the connector 21S4 (green) on the controller circuit board in the electrical parts box.

#### [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) and LEV B (red), on the controller circuit board in the electrical parts box.

## PHOTOS

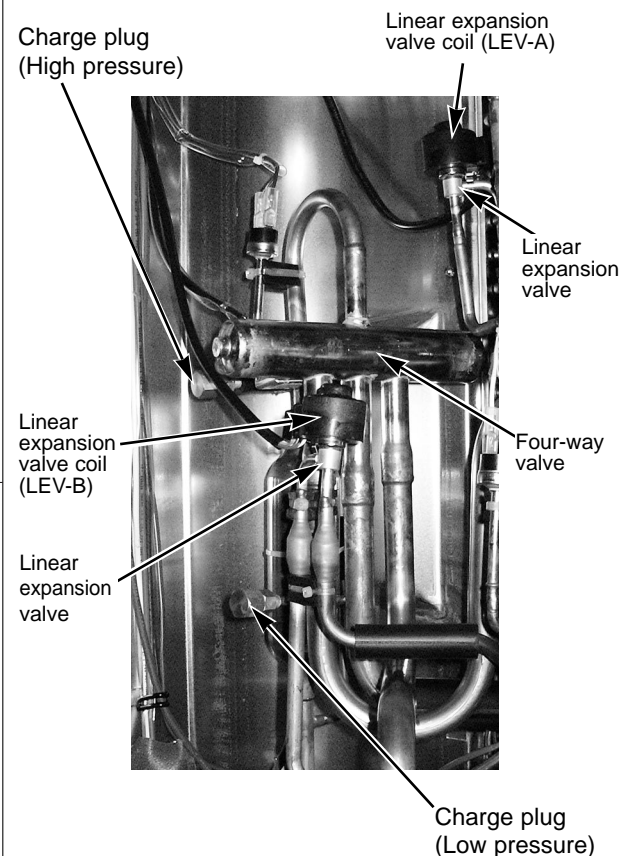
Photo 13



### 9. Removing the four-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 X 10) and 4 ball valve and stop valve fixing screws (5 X 16) and then remove the valve bed.
  - (4) Remove 4 right side panel fixing screw (5 X 10) in the rear of the unit and then remove the right side panel.
  - (5) Remove the solenoid valve coil <Four-way valve>. (See photo 13.)
  - (6) Collect the refrigerant.
  - (7) Remove the welded part of four-way valve.
- Note 1: Collect 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 (120°C or more), then braze the pipes so that the inside of pipes are not oxidized.**

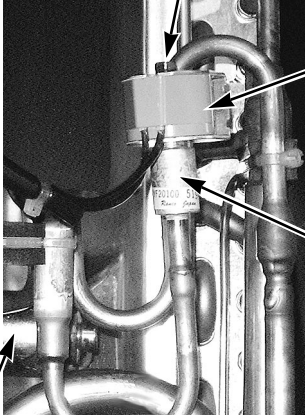
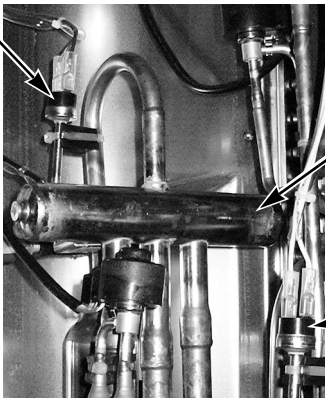
Photo 14



### 10. 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 X 10) and 4 ball valve and stop valve fixing screws (5 X 16) and then remove the valve bed.
  - (4) Remove 4 right side panel fixing screw (5 X 10) in the rear of the unit and then remove the right side panel.
  - (5) Remove the linear expansion valve. (See photo 13.)
  - (6) Collect the refrigerant.
  - (7) Remove the welded part of linear expansion valve.
- Note 1: Collect 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 (120°C or more), then braze the pipes so that the inside of pipes are not oxidized.**



OPERATING PROCEDURE	PHOTOS
<p><b>11. Removing solenoid valve coil &lt;Bypass valve&gt; (SV) and bypass valve</b></p> <ol style="list-style-type: none"><li>(1) Remove the service panel. (See figure 1.)</li><li>(2) Remove the top panel. (See figure 1.)</li><li>(3) Remove 3 right side panel fixing screws (5 X 10) in the rear of the unit and remove the right side panel.</li><li>(4) Remove the bypass valve solenoid coil fixing screw (M4 X 6).</li><li>(5) Remove the solenoid valve coil &lt;Bypass valve&gt; by sliding the coil upward.</li><li>(6) Disconnect the connector SV2 (blue) on the controller circuit board in the electrical parts box.</li><li>(7) Collect the refrigerant.</li><li>(8) Remove the welded part of bypass valve.</li></ol> <p><b>Note 1: Collect refrigerant without spreading it in the air.</b> <b>Note 2: The welded part can be removed easily by removing the right side panel.</b></p>	<p><b>Photo 15</b></p>  <p>Solenoid valve coil &lt;Bypass valve&gt; fixing screw</p> <p>Solenoid valve coil &lt;Bypass valve&gt; (SV)</p> <p>Bypass valve</p> <p>Four-way valve</p>
<p><b>12. Removing the high pressure switch (63H) and low pressure switch (63L)</b></p> <ol style="list-style-type: none"><li>(1) Remove the service panel. (See figure 1.)</li><li>(2) Remove the top panel. (See figure 1.)</li><li>(3) Remove 3 right side panel fixing screws (5 X 10) in the rear of the unit and remove the right side panel.</li><li>(4) Pull out the lead wire of high pressure switch and low pressure switch.</li><li>(5) Collect the refrigerant.</li><li>(6) Remove the welded part of high pressure switch and low pressure switch.</li></ol> <p><b>Note 1: Collect refrigerant without spreading it in the air.</b> <b>Note 2: The welded part can be removed easily by removing the right side panel.</b> <b>Note 3: When installing the high pressure switch, cover it with a wet cloth to prevent it from heating (100°C or more), then braze the pipes so that the inside of pipes are not oxidized.</b></p>	<p><b>Photo 16</b></p>  <p>High pressure switch (63H)</p> <p>Four-way valve</p> <p>Low pressure switch (63L)</p>

## OPERATING PROCEDURE

### 13. Removing the reactors (ACL1, ACL2, ACL3)

- (1) Remove the service panel. (See figure 1.)
- (2) Remove the top panel. (See figure 1.)
- (3) Remove the 6 screws, screw ⑧ and ⑨ (5 X 10), that fix the front panel and remove the front panel. (See photo 3.)
- (4) Remove the 2 screws, screw ⑩ and ⑪ (both 4 X 10), that fix the separator, screw ⑩ from the valve bed and screw ⑪ from the bottom of the separator, and tilt the separator to the side of the fan motor slightly. (See photo 17.)
- (5) Disconnect the lead wires from the reactor and remove the 4 screws, screw ⑫, that fix the reactor to remove the reactor. (See photo 18 and 19.)

**Note 1: The reactor is very heavy (4kg)! Be careful when handling it.**

**Note 2: The reactor box is also removable.**

## PHOTOS

Photo 17

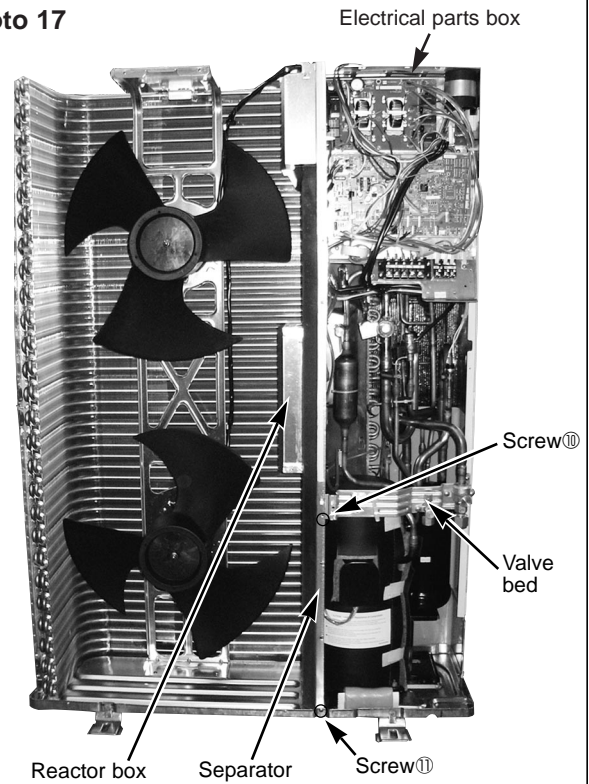


Photo 18

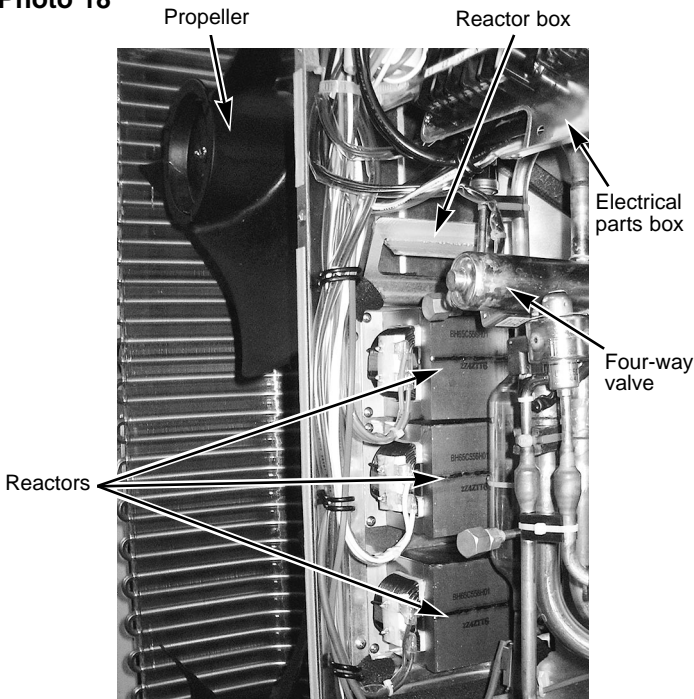
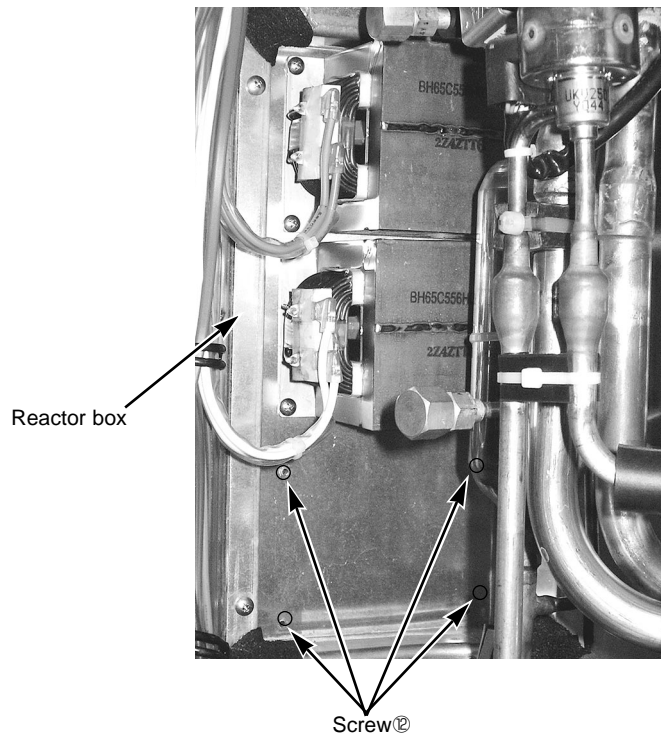


Photo 19



## OPERATING PROCEDURE

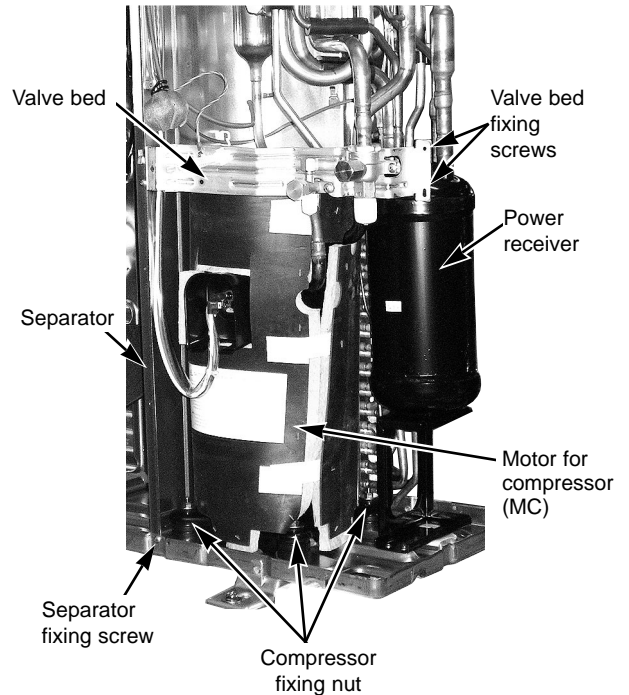
### 14. Removing the motor for compressor (MC)

- (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 X 10) and remove the front cover panel. (See photo 3.)
- (4) Remove 2 back cover panel fixing screws (5 X 10) and remove the back cover panel.
- (5) Remove the electrical parts box. (See photo 3.)
- (6) Remove 3 valve bed fixing screws (4 X 10) and 4 ball valve and stop valve fixing screws (5 X 16) and then remove the valve bed.
- (7) Remove 3 right side panel fixing screw (5 X 10) in the rear of the unit and then remove the right side panel.
- (8) Remove 3 separator fixing screws (4 X 10) and remove the separator.
- (9) Collect the refrigerant.
- (10) Remove the 3 points of the motor for compressor fixing nut using a spanner or a monkey wrench.
- (11) Remove the welded pipe of motor for compressor inlet and outlet and then remove the compressor.

**Note:** Collect refrigerant without spreading it in the air.

## PHOTOS

Photo 20

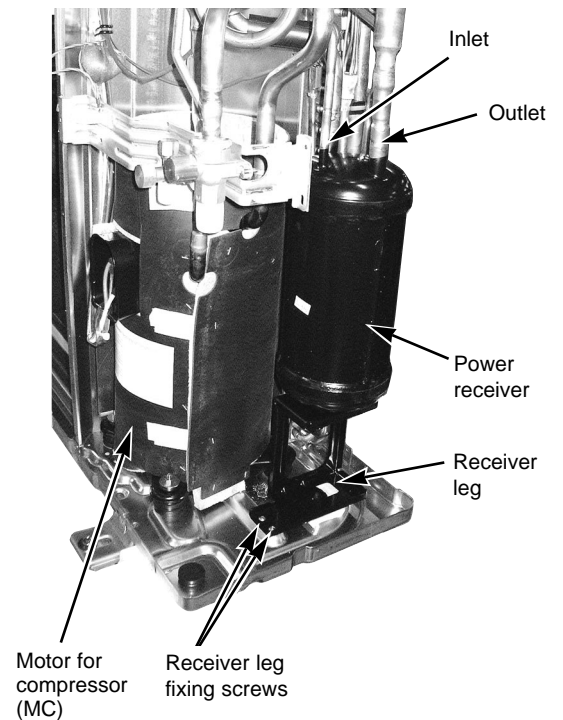


### 15. Removing the power receiver

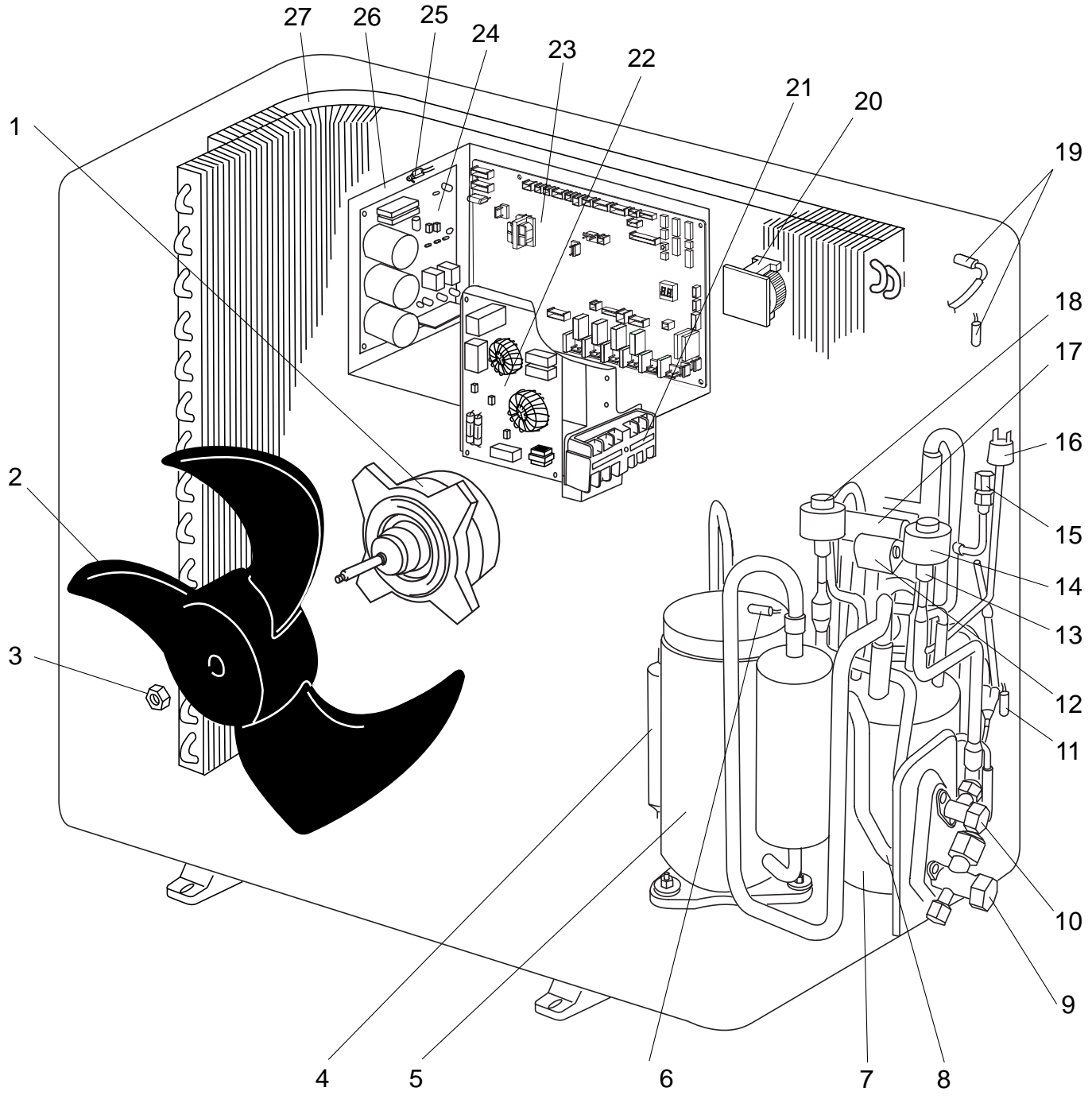
- (1) Remove the service panel. (See figure 1.)
- (2) Remove the top panel. (See figure 1.)
- (3) Remove 2 front cover panel fixing screws (5 X 10) and remove the front cover panel. (See photo 3.)
- (4) Remove 2 back cover panel fixing screws (5 X 10) and remove the back cover panel.
- (5) Remove the electrical parts box. (See photo 3.)
- (6) Remove 3 valve bed fixing screws (4 X 10) and 4 ball valve and stop valve fixing screws (5 X 16) and then remove the valve bed.
- (7) Remove 3 right side panel fixing screw (5 X 10) in the rear of the unit and then remove the right side panel.
- (8) Collect the refrigerant.
- (9) Remove 4 welded pipes of power receiver inlet and outlet.
- (10) Remove 2 receiver leg fixing screws (4 X 10).

**Note:** Collect refrigerant without spreading it in the air.

Photo 21



FUNCTIONAL PARTS  
PUHZ-RP35/ 50VHA  
PUHZ-RP50VHA<sub>1</sub>

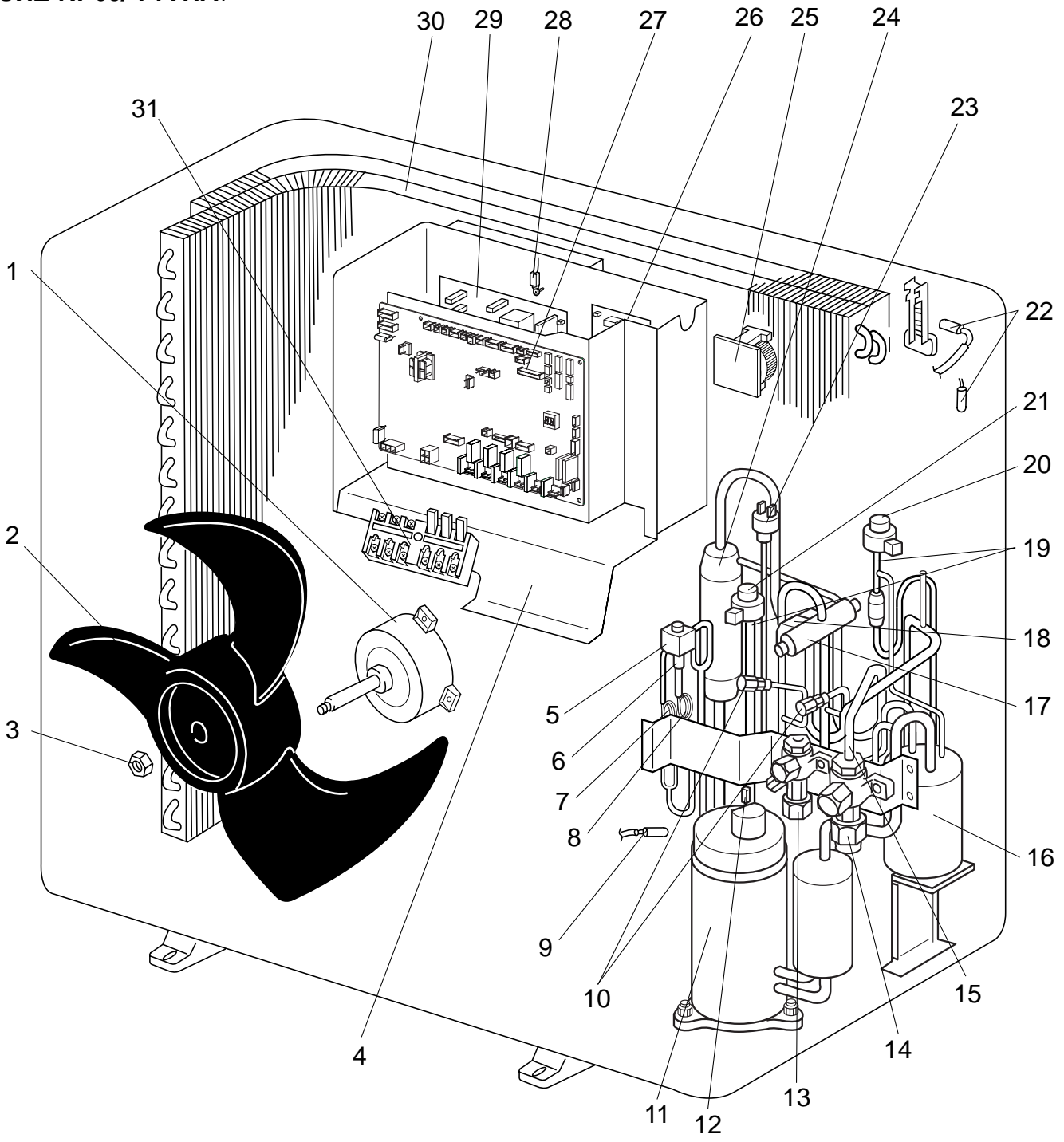




Part numbers that is circled is not shown in the figure.

No.	Part No.			Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
						PUHZ-RP					Unit	Amount
						35/50VHA	50VHA <sub>1</sub>					
1	R01	E40	221	FAN MOTOR		1	1		MF1			
2	R01	E02	115	PROPELLER FAN		1	1					
3	R01	E04	097	NUT		1	1					
4	R01	E09	467	MUFFLER		1	1					
5	T97	420	210	MOTOR FOR COMPRESSOR	SNB130FLBH Including RUBBER MOUNT	1	1		MC			
6	R01	E03	201	THERMISTOR (DISCHARGE)		1	1		TH4			
7	R01	E15	440	POWER RECEIVER		1	1					
8	R01	30L	450	STRAINER		1	1					
9	R01	E08	410	STOP VALVE (GAS)	1/2	1						
	R01	E11	410	STOP VALVE (GAS)	1/2		1					
10	R01	E08	411	STOP VALVE (LIQUID)	1/4	1	1					
11	R01	E56	202	THERMISTOR (OUTDOOR PIPE)		1	1		TH3			
12	T7W	E11	242	SOLENOID VALVE COIL (FOUR-WAY VALVE)		1			21S4			
	T7W	E16	242	SOLENOID VALVE COIL (FOUR-WAY VALVE)			1		21S4			
13	R01	E39	401	EXPANSION VALVE		2	2					
14	R01	E16	242	LINEAR EXPANSION VALVE COIL		1	1		LEV(A)			
15	R01	E10	413	CHARGE PLUG		1	1					
16	T7W	E02	208	HIGH PRESSURE SWITCH		1			63H			
	R01	E04	208	HIGH PRESSURE SWITCH			1		63H			
17	R01	E08	403	FOUR-WAY VALVE		1	1					
18	R01	E17	242	LINEAR EXPANSION VALVE COIL		1	1		LEV(B)			
19	R01	E69	202	THERMISTOR (OUTDOOR 2-PHASE PIPE, OUTDOOR)		1	1		TH6,7			
20	R01	E06	259	REACTOR		1	1		ACL			
21	T7W	E21	716	TERMINAL BLOCK	6P(L,N,⊙,S1,S2,S3)	1	1		TB1			
22	T7W	E05	346	NOISE FILTER		1			N.F.			
	T7W	E11	346	NOISE FILTER			1		N.F.			
23	T7W	E28	315	CONTROLLER CIRCUIT BOARD		1			C.B.			
	T7W	E38	315	CONTROLLER CIRCUIT BOARD			1		C.B.			
24	T7W	E17	313	POWER CIRCUIT BOARD		1			P.B.			
	T7W	E19	313	POWER CIRCUIT BOARD			1		P.B.			
25	R01	E65	202	THERMISTOR (HEAT SINK)		1	1		TH8			
26		—		ELECTRICAL PARTS BOX		1	1	(RG00N040G12)				
27	R01	E48	408	HEAT EXCHANGER		1	1					
28	T7W	520	239	FUSE	250V 6.3A	4			F1,2,3,4			
	R01	E02	239	FUSE	250V 6.3A		4		F1,2,3,4			

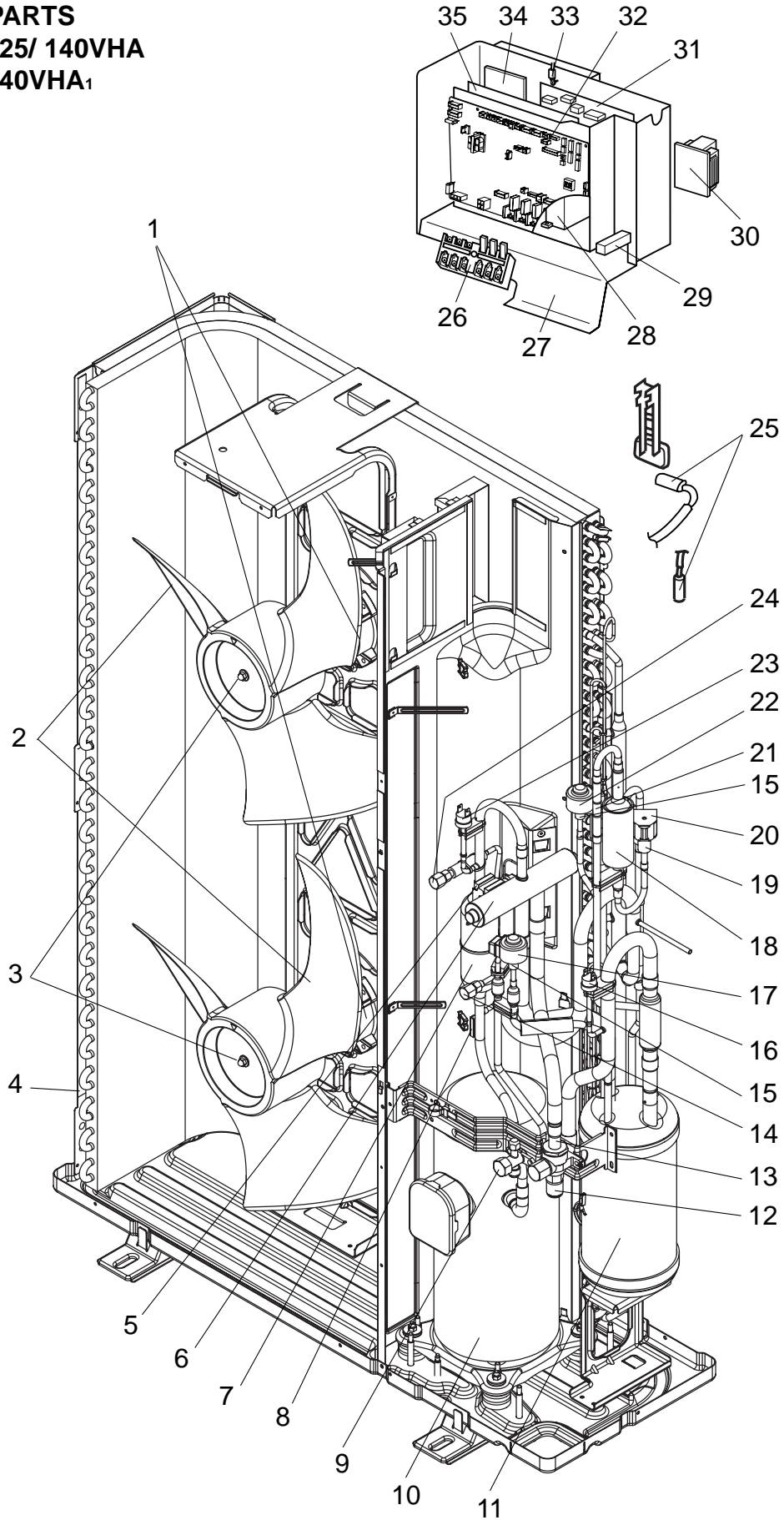
**FUNCTIONAL PARTS**  
**PUHZ-RP60/ 71VHA**  
**PUHZ-RP60/ 71VHA<sub>1</sub>**



Part numbers that is circled is not shown in the figure.

No.	Part No.			Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wining Diagram Symbol	Recom- mended Q'ty	Price	
						PUHZ-RP60/71					Unit	Amount
						VHA	VHA <sub>1</sub>					
1	R01	E41	221	FAN MOTOR		1			MF1			
	T7W	E27	763	FAN MOTOR	EHDS81A86MS		1		MF1			
2	R01	E01	115	PROPELLER FAN		1	1					
3	R01	E02	097	NUT		1	1					
4	—			ELECTRICAL PARTS BOX		1	1	(BK00B055G21)				
5	T7W	E00	242	SOLENOID VALVE COIL <BYPASS VALVE>		1			SV			
	T7W	E15	242	SOLENOID VALVE COIL <BYPASSVALVE>			1		SV			
6	R01	E03	428	BYPASS VALVE		1						
	R01	E11	428	BYPASS VALVE			1					
7	R01	E15	425	CAPILLARY TUBE	φ4.0 X φ2.4 X 500mm	1	1					
8	R01	E16	425	CAPILLARY TUBE	φ2.5 X φ0.6 X 1000mm	1	1					
9	R01	17T	201	THERMISTOR (DISCHARGE)		1	1		TH4			
10	R01	E10	413	CHARGE PLUG		2	2					
11	T97	410	240	MOTOR FOR COMPRESSOR	TNB220FMBH Including RUBBER MOUNT	1	1		MC			
12	R01	E71	202	THERMISTOR (OUTDOOR PIPE)		1	1		TH3			
13	R01	E09	410	STOP VALVE	3/8	1	1					
14	R01	E05	410	BALL VALVE	5/8	1	1					
15	R01	36L	450	STRAINER		1	1					
16	R01	E13	440	POWER RECEIVER		1	1					
17	R01	E09	403	FOUR-WAY VALVE		1	1					
18	T7W	E11	242	SOLENOID VALVE COIL <FOUR-WAY VALVE>		1	1		21S4			
19	R01	E34	401	EXPANSION VALVE		2	2					
20	R01	E16	242	LINEAR EXPANSION VALVE COIL		1	1		LEV(A)			
21	R01	E17	242	LINEAR EXPANSION VALVE COIL		1	1		LEV(B)			
22	T7W	E43	202	THERMISTOR (OUTDOOR 2-PHASE PIPE, OUTDOOR)		1	1		TH6,7			
23	T7W	E02	208	HIGH PRESSURE SWITCH		1			63H			
	R01	E04	208	HIGH PRESSURE SWITCH			1		63H			
24	R01	E01	490	OIL SEPARATOR		1	1					
25	R01	E17	259	REACTOR		1	1		ACL			
26	T7W	E03	346	NOISE FILTER CIRCUIT BOARD		1			N.F.			
	T7W	E13	346	NOISE FILTER CIRCUIT BOARD			1		N.F.			
27	T7W	E28	315	CONTROLLER CIRCUIT BOARD		1			C.B.			
	T7W	E38	315	CONTROLLER CIRCUIT BOARD			1		C.B.			
28	R01	E65	202	THERMISTOR (HEAT SINK)		1	1		TH8			
29	T7W	E18	313	POWER CIRCUIT BOARD		1			P.B.			
	T7W	E20	313	POWER CIRCUIT BOARD			1		P.B.			
30	R01	E44	408	HEAT EXCHANGER		1	1					
31	T7W	E16	716	TERMINAL BLOCK	6P(L,N,⊙,S1,S2,S3)	1	1		TB1			
32	T7W	520	239	FUSE	250V 6.3A	4			F1,2,3,4			
	R01	E02	239	FUSE	250V 6.3A		4		F1,2,3,4			

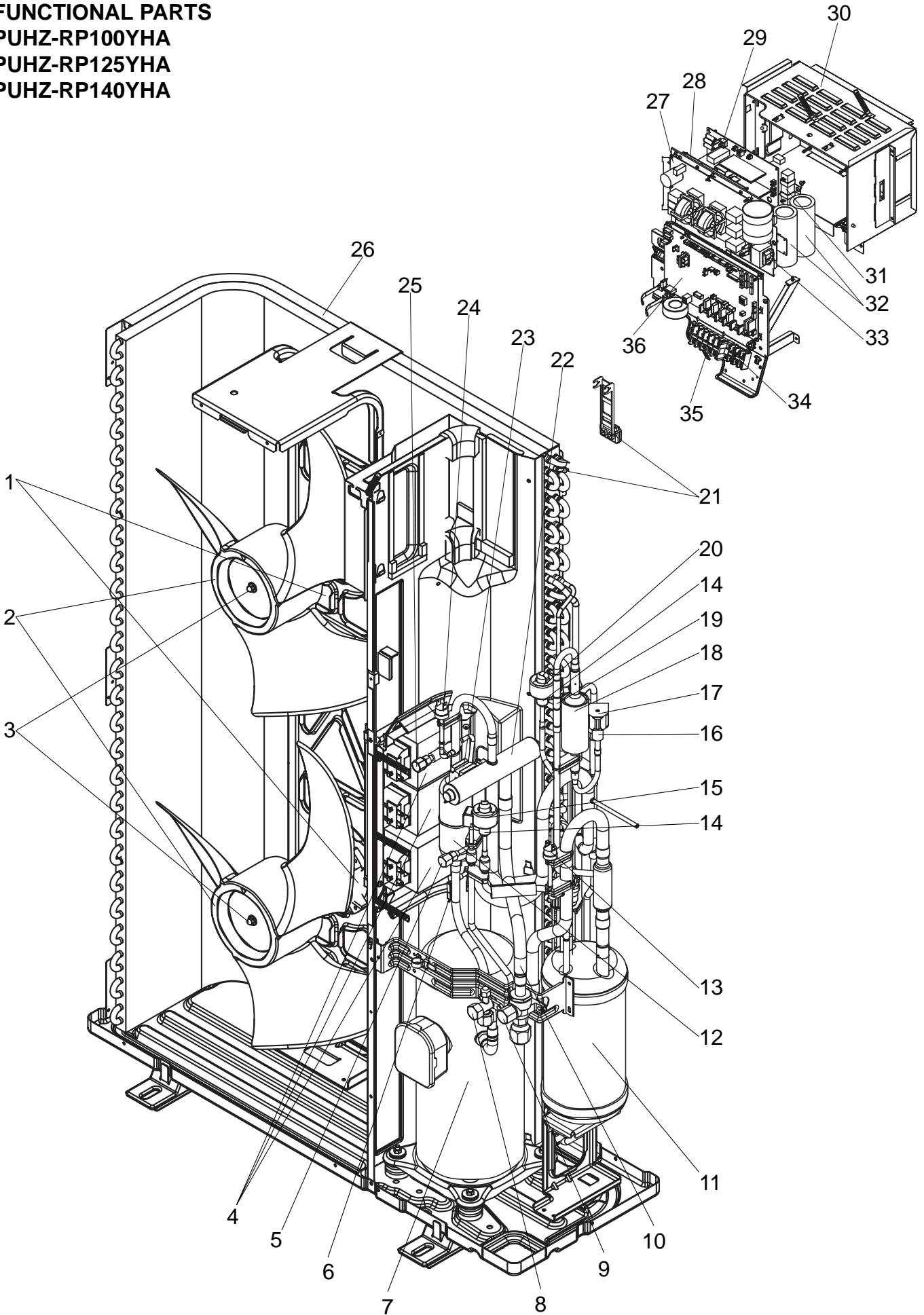
**FUNCTIONAL PARTS**  
**PUHZ-RP100/ 125/ 140VHA**  
**PUHZ-RP125/ 140VHA<sub>1</sub>**



Part numbers that are circled are not shown in the figures.

No.	Part No.	Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PUHZ-RP					Unit	Amount
				100/125/140 VHA	125/140 VHA <sub>1</sub>					
1	R01 E41 221	FAN MOTOR		2			MF1,2			
	T7W E27 763	FAN MOTOR			2		MF1,2			
2	R01 E01 115	PROPELLER FAN		2	2					
3	R01 E02 097	NUT		2	2					
4	R01 E58 408	HEAT EXCHANGER		1	1					
5	T7W A01 242	SOLENOID COIL <FOUR-WAY VALVE>		1			21S4			
	T7W E11 242	SOLENOID COIL <FOUR-WAY VALVE>			1		21S4			
6	R01 E24 403	FOUR-WAY VALVE		1						
	R01 E26 403	FOUR-WAY VALVE			1					
7	R01 E05 467	MUFFLER		1	1					
8	R01 17T 201	THERMISTOR (DISCHARGE)		1	1		TH4			
9	R01 E09 410	STOP VALVE	3/8	1	1					
10	T97 410 745	MOTOR FOR COMPRESSOR	ANV33FDDMT Including RUBBER MOUNT	1	1		MC			
11	R01 E28 440	POWER RECEIVER		1	1					
12	R01 E05 410	BALL VALVE	5/8	1	1					
13	R01 36L 450	STRAINER		1	1					
14	R01 E05 413	CHARGE PLUG		1	1					
15	R01 E55 401	EXPANSION VALVE		2	2					
16	R01 25T 209	LOW PRESSURE SWITCH		1	1		63L			
17	R01 E26 242	LINEAR EXPANSION VALVE COIL		1	1		LEV(B)			
18	—	REPLACE FILTER		1	1	(BK00C119G02)				
19	R01 E11 428	BYPASS VALVE		1	1					
20	T7W E10 242	SOLENOID VALVE COIL <BYPASS VALVE>		1	1		SV			
21	R01 E02 418	RESTRICTOR VALVE		1	1					
22	R01 E28 242	LINEAR EXPANSION VALVE COIL		1	1		LEV(A)			
23	T7W E02 208	HIGH PRESSURE SWITCH		1			63H			
	R01 E04 208	HIGH PRESSURE SWITCH			1		63H			
24	R01 E08 413	CHARGE PLUG		1	1					
25	T7W E43 202	THERMISTOR (OUTDOOR 2-PHASE PIPE, OUTDOOR)		1	1		TH6,7			
26	T7W E16 716	TERMINAL BLOCK	6P(L,N,⊕,S1,S2,S3)	1	1		TB1			
27	—	ELECTRICAL PARTS BOX		1	1	(BK00B055G25)				
28	T7W E02 259	CONTACTOR		1	1		52C			
29	T7W E01 234	RESISTOR		1	1		RS			
30	T7W E03 259	REACTOR		1	1		DCL			
31	T7W E15 313	POWER CIRCUIT BOARD		1			P.B.			
	T7W E21 313	POWER CIRCUIT BOARD			1		P.B.			
32	T7W E30 315	CONTROLLER CIRCUIT BOARD		1			C.B.			
	T7W E39 315	CONTROLLER CIRCUIT BOARD			1		C.B.			
33	R01 E65 202	THERMISTOR (HEAT SINK)		1	1		TH8			
34	T7W E00 233	ACTIVE FILTER MODULE		1	1		ACTM			
35	T7W E10 346	NOISE FILTER CIRCUIT BOARD		1			N.F.			
	T7W E14 346	NOISE FILTER CIRCUIT BOARD			1		N.F.			
36	T7W 520 239	FUSE	250V 6.3A	4			F1,2,3,4			
	R01 E02 239	FUSE	250V 6.3A		4		F1,2,3,4			
37	R01 E66 202	THERMISTOR (OUTDOOR PIPE)		1	1		TH3			
38	T7W E05 254	MAIN SMOOTHING CAPACITOR		1	1		CB			

**FUNCTIONAL PARTS**  
**PUHZ-RP100YHA**  
**PUHZ-RP125YHA**  
**PUHZ-RP140YHA**

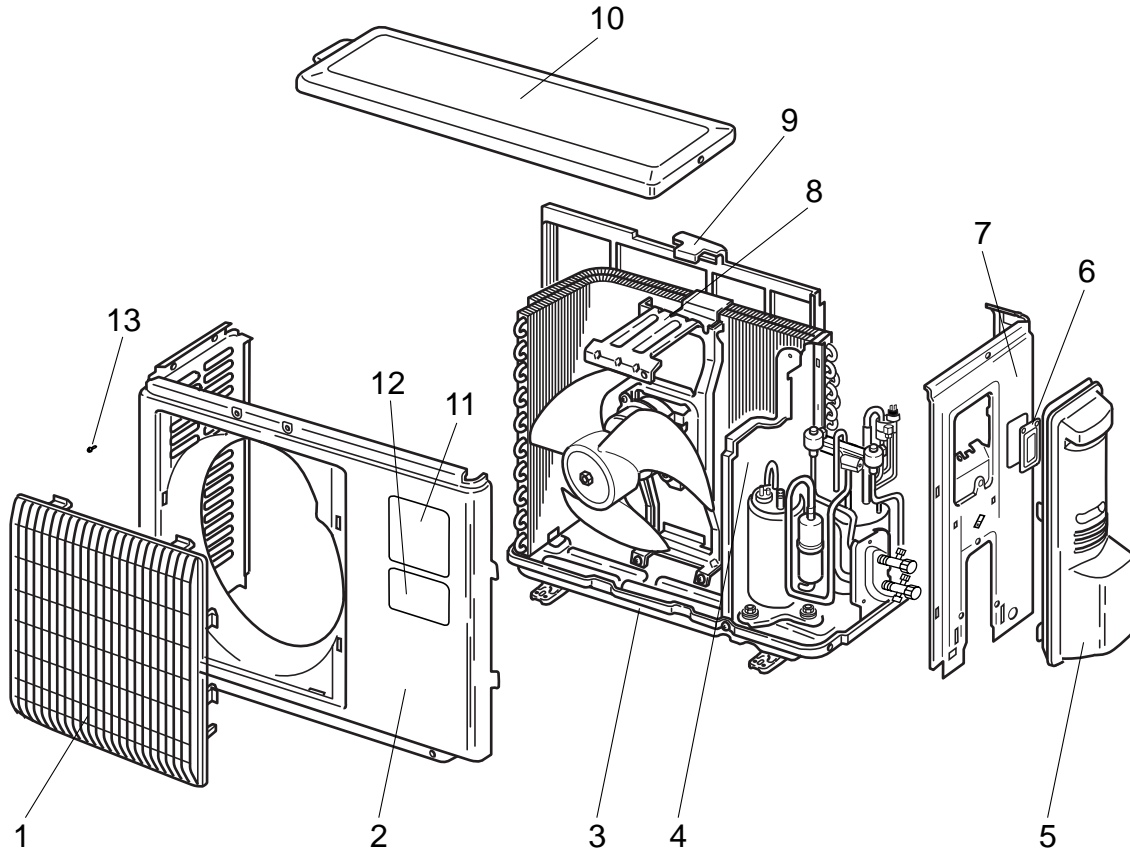




Part numbers that are circled are not shown in the figures.

No.	Part No.	Part Name	Specification	Q'ty/set			Remarks (Drawing No.)	Wining Diagram Symbol	Recom- mended Q'ty	Price	
				PUHZ-RP						Unit	Amount
				100	125	140					
				YHA							
1	R01 E41 221	FAN MOTOR		2	2	2		MF1,2			
2	R01 E01 115	PROPELLER		2	2	2					
3	R01 E02 097	NUT		2	2	2					
4	T7W E07 259	REACTOR		3	3	3		ACL1,2,3			
5	R01 E05 413	CHARGE PLUG		1	1	1					
6	R01 A19 201	THERMISTOR (DISCHARGE)		1	1	1		TH4			
7	T97 410 743	MOTOR FOR COMPRESSOR	ANV33FDBMT Including RUBBER MOUNT	1	1	1		MC			
8	R01 E09 410	STOP VALVE	3/8	1	1	1					
9	R01 E05 410	BALL VALVE	5/8	1	1	1					
10	R01 36L 450	STRAINER		1	1	1					
11	R01 E28 440	POWER RECEIVER		1	1	1					
12	R01 E05 467	MUFFLER		1	1	1					
13	R01 25T 209	LOW PRESSURE SWITCH		1	1	1		63L			
14	R01 E55 401	EXPANSION VALVE		2	2	2					
15	R01 E26 242	LINEAR EXPANSION VALVE COIL		1	1	1		LEV(B)			
16	R01 E11 428	BYPASS VALVE		1	1	1					
17	T7W E10 242	SOLENOID VALVE COIL <BYPASS VALVE>		1	1	1		SV			
18	—	REPLACE FILTER		1	1	1	(BK00C119G02)				
19	R01 E02 418	RESTRICTOR VALVE		1	1	1					
20	T7W E09 242	LINEAR EXPANSION VALVE COIL		1	1	1		LEV(A)			
21	R01 E75 202	THERMISTOR (OUTDOOR 2-PHASE PIPE, OUTDOOR)		1	1	1		TH6,7			
22	R01 E24 403	FOUR-WAY VALVE		1	1	1					
23	T7W A01 242	SOLENOID COIL <FOUR-WAY VALVE>		1	1	1		21S4			
24	T7W E02 208	HIGH PRESSURE SWITCH		1	1	1		63H			
25	R01 E08 413	CHARGE PLUG		1	1	1					
26	R01 E58 408	HEAT EXCHANGER		1	1	1					
27	T7W E08 346	NOISE FILTER CIRCUIT BOARD		1	1	1		N.F.			
28	T7W E39 310	CONVERTER CIRCUIT BOARD		1	1	1		CONV.B.			
29	T7W E13 313	POWER CIRCUIT BOARD		1	1	1		P.B.			
30	—	ELECTRICAL PARTS BOX		1	1	1	(BK00C410G04)				
31	R01 E08 233	RESISTOR		1	1	1		RS			
32	T7W E03 254	MAIN SMOOTHING CAPACITOR		2	2	2		CB1, CB2			
33	T7W E06 259	REACTOR		1	1	1		ACL4			
34	T7W E22 716	TERMINAL BLOCK	3P (S1,S2,S3)	1	1	1		TB2			
35	T7W E06 716	TERMINAL BLOCK	5P (L1,L2,L3,N,⊙)	1	1	1		TB1			
36	T7W E29 315	CONTROLLER CIRCUIT BOARD		1	1	1		C.B.			
37	R01 E02 239	FUSE	250V 6.3A	4	4	4		F1,2,3,4			
38	R01 E66 202	THERMISTOR (OUTDOOR PIPE)		1	1	1		TH3			
39	T7W E06 254	CAPACITOR		1	1	1		CK			

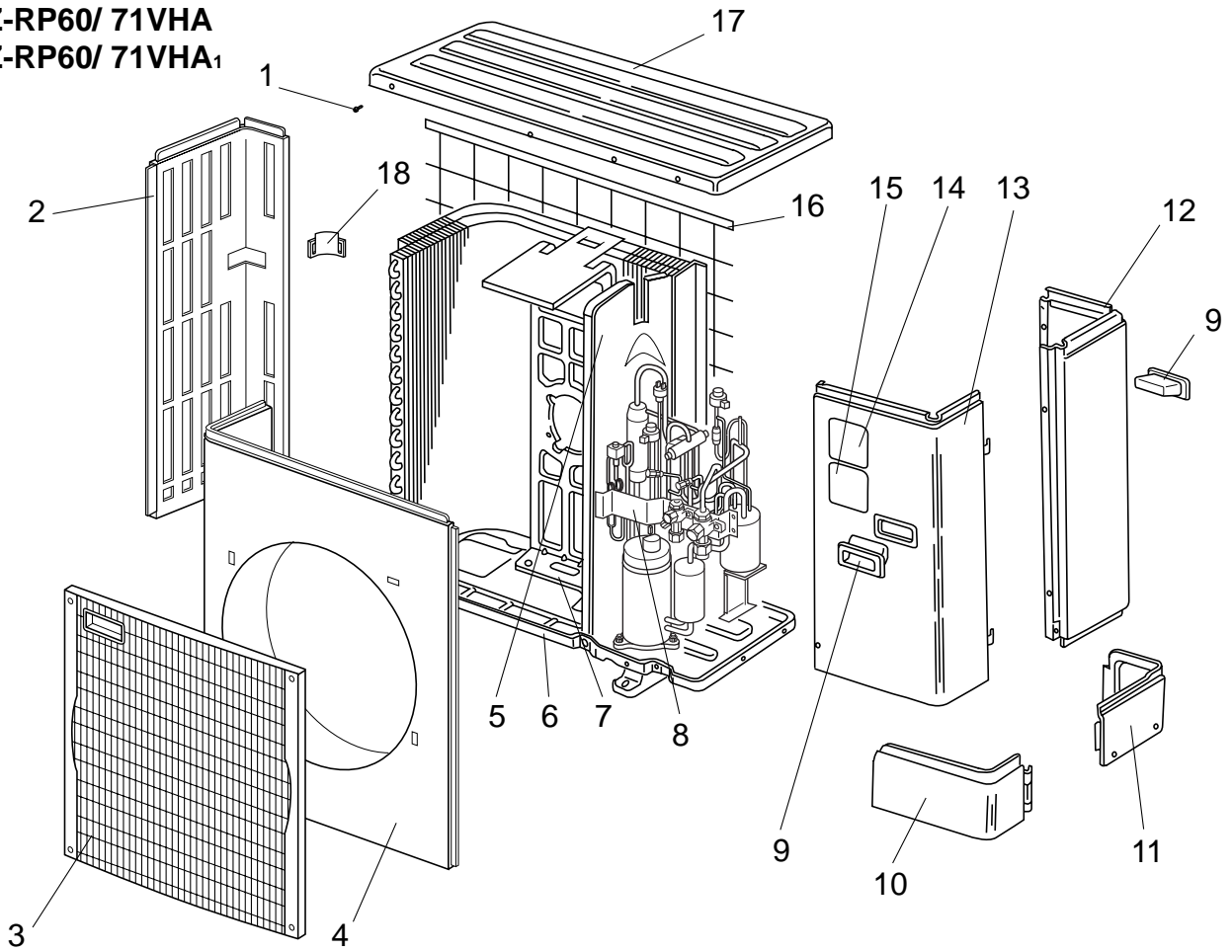
**STRUCTURAL PARTS**  
**PUHZ-RP35/ 50VHA**  
**PUHZ-RP50VHA<sub>1</sub>**



No.	Part No.	Part Name	Specification	Q'ty/set	Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PUHZ-RP35/50VHA PUHZ-RP50VHA <sub>1</sub>				Unit	Amount
1	R01 E10 691	GRILLE		1					
2	R01 E02 668	FRONT PANEL		1					
3	R01 E15 686	BASE ASSY		1					
4	—	SEPARATOR		1	(SU00B229G35)				
5	R01 E02 667	SERVICE PANEL		1					
6	R01 E00 518	SERVICE PANEL		1					
7	R01 E02 682	BACK PANEL		1					
8	R01 E21 130	MOTOR SUPPORT		1					
9	R01 E01 684	CONDENSER NET		1					
10	T7W E01 641	TOP PANEL		1					
11	—	LABEL (MITSUBISHI)		1	(DG79R130H01)				
12	—	LABEL (INVERTER)		1	(BK79C208G02)				
13	—	F.ST SCREW	(4X10)	12	(Z504K189H37)				



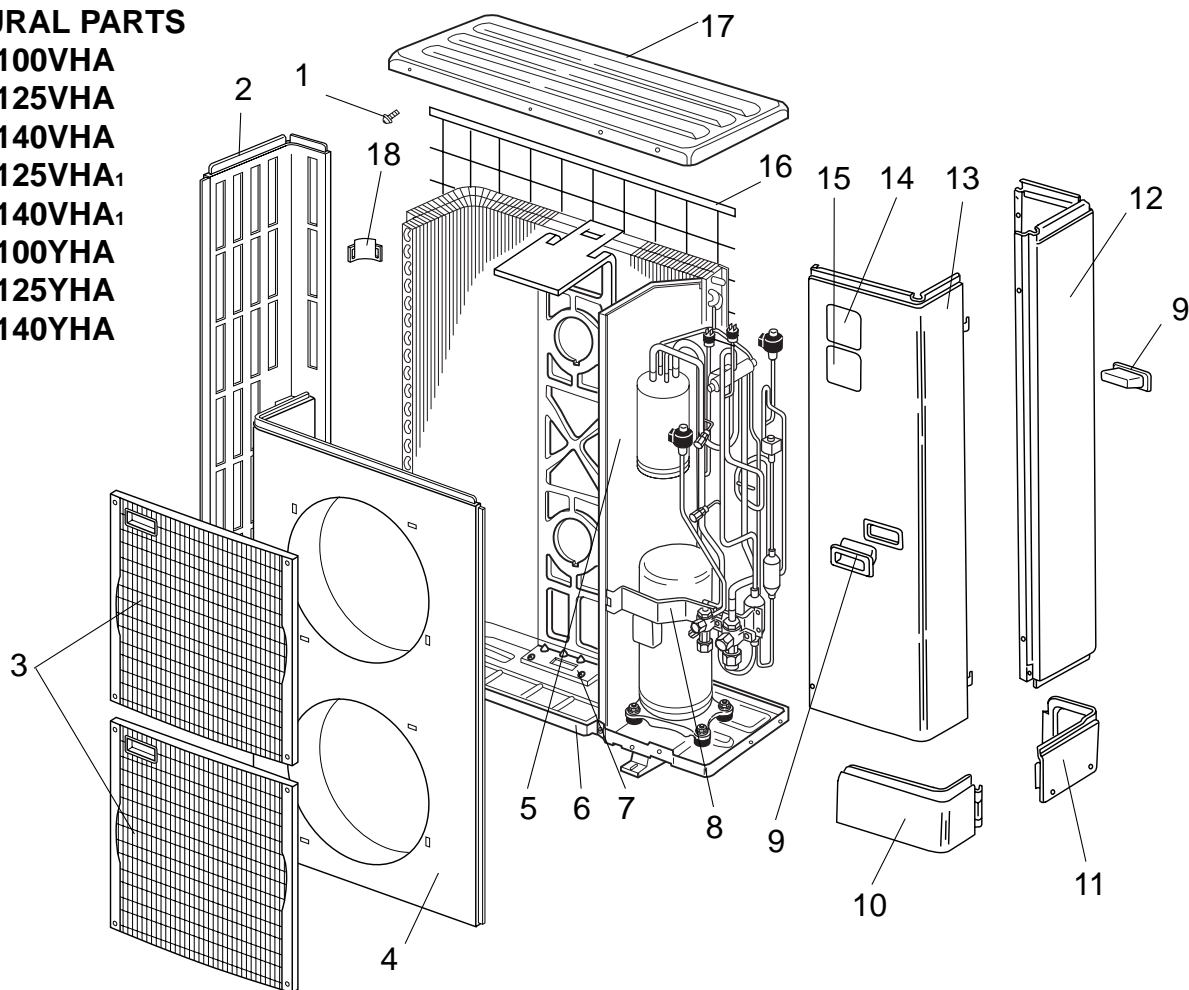
**STRUCTURAL PARTS**  
**PUHZ-RP60/ 71VHA**  
**PUHZ-RP60/ 71VHA<sub>1</sub>**



No.	Part No.	Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PUHZ-RP					Unit	Amount
				60/ 71	VHA <sub>1</sub>					
1	—	F.ST SCREW	(5X10)	31	31	(DG12F536H10)				
2	R01 E01 662	SIDE PANEL (L)		1	1					
3	T7W E02 691	FAN GRILLE		1	1					
4	T7W E01 667	FRONT PANEL		1	1					
5	—	SEPARATOR		1	1	(BK00C143G71)				
6	R01 E13 686	BASE ASSY		1	1					
7	R01 E06 130	MOTOR SUPPORT		1	1					
8	—	VALVE BED ASSY		1	1	(BK00C142G16)				
9	R01 30L 655	HANDLE		2	2					
10	R01 E02 658	COVER PANEL (FRONT)		1	1					
11	R01 E01 658	COVER PANEL (REAR)		1						
	R01 E05 658	COVER PANEL (REAR)			1					
12	R01 E03 661	SIDE PANEL (R)		1	1					
13	T7W E02 668	SERVICE PANEL		1	1					
14	—	LABEL (MITSUBISHI)		1	1	(DG79R130H01)				
15	—	LABEL (INVERTER)		1	1	(BK79C208G02)				
16	R01 E00 698	REAR GUARD		1	1					
17	R01 E04 641	TOP PANEL		1	1					
18	R01 E00 655	HANDLE		1	1					

## STRUCTURAL PARTS

PUHZ-RP100VHA  
 PUHZ-RP125VHA  
 PUHZ-RP140VHA  
 PUHZ-RP125VHA<sub>1</sub>  
 PUHZ-RP140VHA<sub>1</sub>  
 PUHZ-RP100YHA  
 PUHZ-RP125YHA  
 PUHZ-RP140YHA



No.	Part No.	Part Name	Specificatio	Q'ty/set			Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PUHZ-RP						Unit	Amount
				100/ VHA	125/ YHA	140/ VHA <sub>1</sub>					
1	—	F.ST SCREW	(5×10)	38	38	38	(DG12F536H10)				
2	R01 E02 662	SIDE PANEL (L)		1	1	1					
3	T7W E02 691	FAN GRILLE		2	2	2					
4	T7W E02 667	FRONT PANEL		1	1	1					
5	—	SEPARATOR		1	1	1	VHA (BK00C143G78) YHA (BK00C409G03)				
6	R01 E14 686	BASE ASSY		1	1	1					
7	R01 E25 130	MOTOR SUPPORT		1	1	1					
8	—	VALVE BED ASSY		1	1	1	(BK00C142G16)				
9	R01 30L 655	HANDLE		2	2	2					
10	R01 E00 658	COVER PANEL (FRONT)		1	1						
	R01 E04 658	COVER PANEL (FRONT)				1					
11	R01 E01 658	COVER PANEL (REAR)		1	1						
	R01 E05 658	COVER PANEL (REAR)				1					
12	T7W E15 661	SIDE PANEL (R)		1	1	1					
13	T7W E03 668	SERVICE PANEL		1		1					
	T7W E04 668	SERVICE PANEL			1						
14	—	LABEL (MITSUBISHI)		1	1	1	(DG79R130H01)				
15	—	LABEL (INVERTER)		1	1	1	(BK79C208G02)				
16	R01 E01 698	REAR GUARD		1	1	1					
17	R01 E04 641	TOP PANEL		1		1					
	R01 E08 641	TOP PANEL			1						
18	R01 E00 655	HANDLE		1	1	1					



**Mr. SLIM™**

 **MITSUBISHI ELECTRIC CORPORATION**

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