

Evacuating - Toshiba RAS-24PAVSG-E Installation Manual

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Bookmarks



Tightening connection

Align the centers of the connecting pipes and tighten the flare nut as far as possible with your fingers. Then tighten the nut with a spanner and torque wrench as shown in the figure.

Half union
Externally threaded side
Use a wrench to secure.

CAUTION

Do not apply excess torque. Otherwise, the nut may crack depending on the conditions.

Outer dia. of copper pipe

Ø6.35 mm

Ø9.52 mm

Ø12.70 mm

• Tightening torque of flare pipe connections

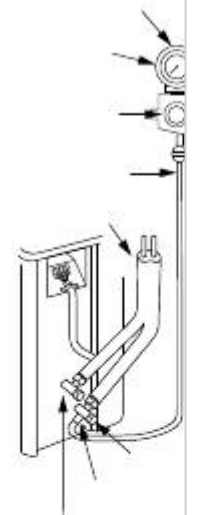
The operating pressure of R32 is

higher than that of R22 (approx.

1.6 times). It is therefore necessary

to firmly tighten the flare pipe

connecting sections (which connect



the indoor and outdoor units) up to the specified tightening torque. Incorrect connections may cause not only a gas leakage, but also damage to the refrigeration cycle.

Evacuating

After the piping has been connected to the indoor unit, you can perform the air purge together at once.

AIR PURGE

Evacuate the air in the connecting pipes and in the indoor unit using a vacuum pump. Do not use the refrigerant in the outdoor unit. For details, see the manual of the vacuum pump.

Using a vacuum pump

Be sure to use a vacuum pump with counter-flow prevention function so that inside oil of the pump does not flow backward into pipes of the air conditioner when the pump stops.

(If oil inside of the vacuum pump enters the air conditioner, which use R32, refrigeration cycle trouble may result.)

1. Connect the charge hose from the manifold valve to the service port of the packed valve at gas side.
2. Connect the charge hose to the port of the vacuum pump.
3. Open fully the low pressure side handle of the gauge manifold valve.
4. Operate the vacuum pump to start evacuating. Perform evacuating for about 15 minutes if the piping length is 20 meters. (15 minutes for 20 meters) (assuming a pump capacity of 27 liters per minute) Then confirm that the compound pressure gauge reading is -101 kPa (-76 cmHg).
5. Close the low pressure side valve handle of the gauge manifold valve.
6. Open fully the valve stem of the packed valves (both gas and liquid sides).
7. Remove the charging hose from the service port.
8. Securely tighten the caps on the packed valves.

Flare nut

Internally threaded side

Use a torque wrench to tighten.

(Unit : N·m)

Tightening torque

16 to 18 (1.6 to 1.8 kgf·m)

30 to 42 (3.0 to 4.2 kgf·m)

50 to 62 (5.0 to 6.2 kgf·m)

Flare at

indoor unit side

Flare at

outdoor unit side

Compound pressure gauge

-101 kPa

(-76 cmHg)

Handle Lo

Charge hose

Connecting pipe

Service port (Valve core (Setting pin))

Packed valve at liquid side

CAUTION

- KEEP IMPORTANT 5 POINTS FOR PIPING WORK.

- (1) Take away dust and moisture (inside of the connecting pipes).
- (2) Tighten the connections (between pipes and unit).
- (3) Evacuate the air in the connecting pipes using a VACUUM PUMP.
- (4) Check gas leak (connected points).
- (5) Be sure to fully open the packed valves before operation.

Packed valve handling precautions

- Open the valve stem all the way out, but do not try to open it beyond the stopper.

Pipe size of Packed Valve

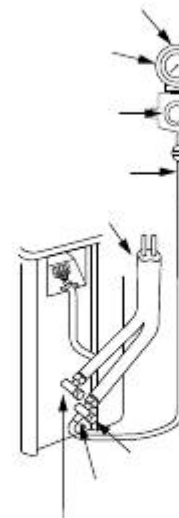
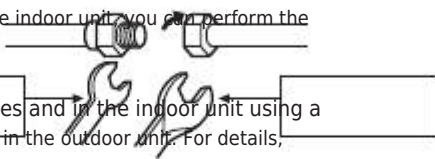
12.70 mm and smaller

15.88 mm

- Securely tighten the valve cap with torque in the following table:

Cap

Valve Rod Cap



Service Port Cap

Service Port Cap

11

Pressure gauge

Manifold valve

Handle Hi

(Keep full closed)

Charge hose

Vacuum pump adapter for

counter-flow prevention

Vacuum

pump

Packed valve at gas side

Size of Hexagon wrench

A = 4 mm

A = 5 mm

Cap Size (H)

Torque

14~18 N·m

H17 - H19

(1.4 to 1.8 kgf·m)

33~42 N·m

H22 - H30

(3.3 to 4.2 kgf·m)

8~12 N·m

H14

(0.8 to 1.2 kgf·m)

14~18 N·m

H17

(1.4 to 1.8 kgf·m)

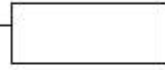
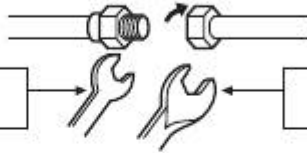
Hexagon wrench

is required.

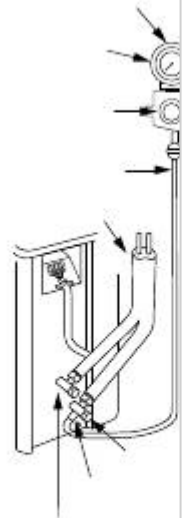
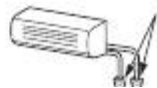
A

H

Valve Rod Cap



8~12 N·m	
H14	
(0.8 to 1.2 kgf·m)	
14~18 N·m	
H17	
(1.4 to 1.8 kgf·m)	



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Related Manuals for Toshiba RAS-24PAVSG-E

[Air Conditioner Toshiba RAS-18PAVSG-E Owner's Manual](#)

(168 pages)

[Air Conditioner Toshiba RAS-18PKVSG-E Service Manual](#)

(137 pages)

[Air Conditioner Toshiba RAS-B22PKVSG-TR Service Manual](#)

(134 pages)

[Air Conditioner Toshiba RAS-B22PKVSG-E Installation Manual](#)

(22 pages)

[Air Conditioner Toshiba RAS-24PKVSG-E Owner's Manual](#)

(7 pages)

[Air Conditioner Toshiba RAS-22 Owner's Manual](#)

(7 pages)

[Air Conditioner Toshiba RAS-18PACVG -T Owner's Manual](#)

Split type (8 pages)

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(26 pages)

[Air Conditioner Toshiba RAS-18UKHP-ES Owner's Manual](#)

(18 pages)

[Air Conditioner Toshiba RAS-18SK Series Owner's Manual](#)

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Split wall type (92 pages)

[Air Conditioner Toshiba AS-24UKHP-ES3 Service Manual](#)

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[Air Conditioner Toshiba RAS-18BKS Series Installation Manual](#)

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[Air Conditioner Toshiba RAS-24J2KVG-E Owner's Manual](#)

For general public use (6 pages)

[Air Conditioner Toshiba RAS-24S3KHS-EE Owner's Manual](#)

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Related Content for Toshiba RAS-24PAVSG-E

[RAS-07G3KVSG-TR Evacuating](#)

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[RAS-B16J2AVSG-E Evacuating](#)

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[RAS-B22N3KV2-E1 Evacuating](#)

Toshiba RAS-B22N3KV2-E1

[RAS-16N3KV2 Series Evacuating](#)

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Toshiba RAS-07S3KHS-EE

This manual is also suitable for:

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