

Rheem Commercial A2W Heat Pump Retrofit Guide March 2020

Step 1: Identify model number



Old Air to Water (A2W) Heat Pump
Model Number- 953 or 95202200/XX



New Air to Water (A2W) Heat Pump
Model Number for 16kW - 953 or 952016XX



Step 2: Change old to new fittings if replacing with new 16kW HP



Old Air to Water
(A2W) Heat Pump
Fittings- Copper tail
or
RP 1 ¼ BSPF



New Air to Water 16kW
(A2W) Heat Pump
Fittings- threaded with
union
R1 ¼ BSPM

Fitting location

- Same height position
- Old model-right side
- New model-left side

Note: Relief valve not required on new models (PRV is built into the back of HX)



Step 3: Change condensate drain

Disconnect the condensate drain from old heat pump and connect to new one.



Old Air to Water
(A2W) Heat Pump
Condensate drain
20mm O.D



New Air to Water (A2W)
Heat Pump
Condensate drain
20mm O.D

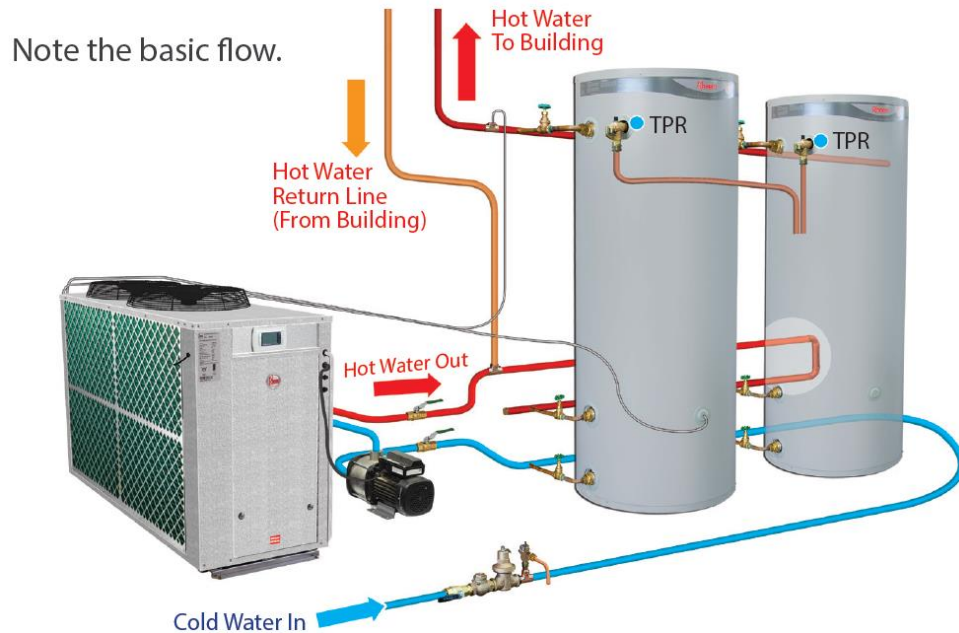
Note: Old models may not have a fall towards condensate drain but new models have fall. DO **NOT** try to level new model.



Step 4: Pump connection for new 16kW HP

Disconnect the exiting pump from old model and reconnect to new model (953 or 952016XX)

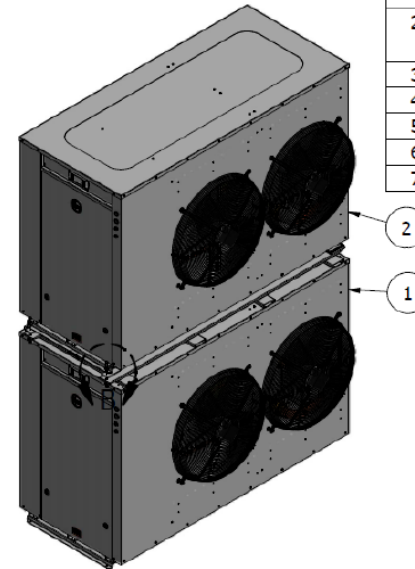
- If the exiting pump is working &
- the pump model is CM3-2 or UPS 32-80.



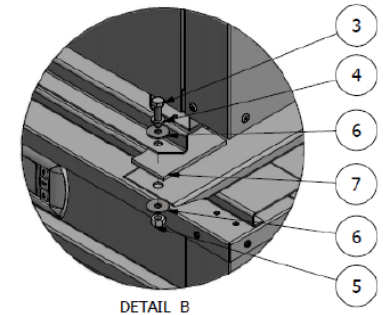
Step 4: Pump connection & stacked horizontal models

If there are multiple old stacked horizontal heat pumps to replace

- Then use new 16kW horizontal models that can be stacked two high
- New bottom model for stacking will have part number ending with HS (for example, 953016HS)
- Follow the new **Installation Instructions manual** for stackable model installations and connect pumps accordingly.



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	9530##HS / 9520##HS	RHEEM A2W HP 9530##HS / 9520##HS
2	1	9530##H0 / 9520##H0	RHEEM A2W HP 9530##H0 / 9520##H0
3	4	26090	M8 x 20mm Hex. Bolt SS
4	4	26350	M8 Spring Washer SS
5	4	26551	M8 Hex. Nut SS
6	8	26396	Flat Washer, 5/16, S/S
7	6	48042	5x50x100mm Insulation Strip

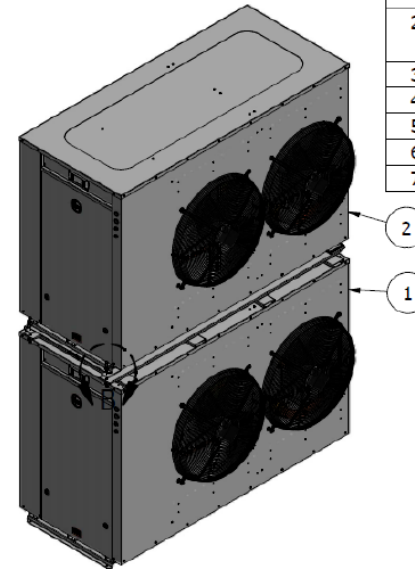


NEW

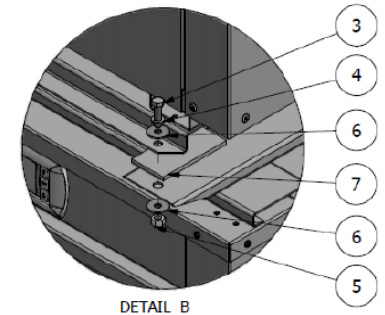
Step 4: Pump connection & stacked horizontal models

If there are multiple old stacked horizontal heat pumps and only one of these needs to be replaced

- To replace bottom model (for stacking) use model/part number ending with HS (for example, 953016HS)
- To replace top model (for stacking) use model/part number ending with H0 (for example, 953016H0)



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	9530##HS / 9520##HS	RHEEM A2W HP 9530##HS / 9520##HS
2	1	9530##H0 / 9520##H0	RHEEM A2W HP 9530##H0 / 9520##H0
3	4	26090	M8 x 20mm Hex. Bolt SS
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NEW

Step 5: Electrical connections

Follow new **Commercial - Air to Water Heat Pump System - Installation Overview** guide to connect main power and pump wiring for new models.



Old heat pump has one external controller for up to 6x heat pumps with

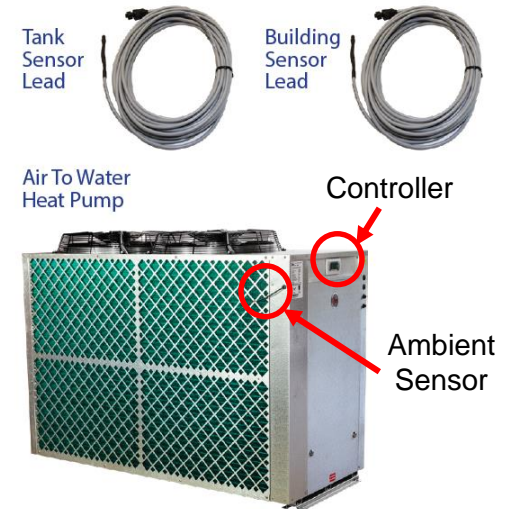
- 1x tank sensor &
- 1x ambient sensor

Disconnect old external controller. **Do not** connect with new heat pumps.

OLD

Each new heat pump has a built-in controller with

- 1x in-built ambient sensor &
- 1x separate tank sensor &
- 1x separate building sensor



Follow new **Commercial - Air to Water Heat Pump System - Installation Overview** guide to connect tank and building sensors. For multiple heat pump connections also see new **Installation Instructions manual**.



Step 5: Electrical connections

If multiple heat pumps are on site and only one heat pump needs to be replaced with a new model.

Only disconnect the heat pump and the wall controller with the same heat pump that needs replacing.

Follow new **Commercial - Air to Water Heat Pump System - Installation Overview** guide for the new heat pump model.

DO NOT disconnect the rest of the wall controllers for other heat pumps on site which do not need replacing.



Step 6: Electrical connections aux Boost

If the old heat pump has auxiliary boosting (240V connection)

- Then disconnect from old controller
- 240V output from new heat pump (each) can be used
- New heat pump model also has VFC output options
- Contact Rheem for application specific details



Step 7: Fault relay or BMS

The old heat pump has VFC fail relay for alarm or fault indication

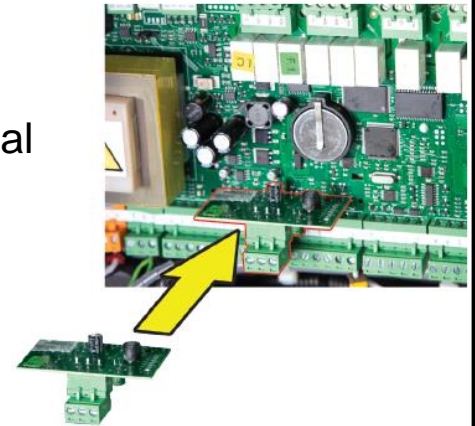
- If the relay is connected, contact Rheem for application specific details

OLD

The new heat pump model has BMS options available

- If BMS card is provided with new heat pump, insert the BMS card into the connector, taking care that the card is firmly placed as shown.

Keep the BMS card packaging, together with its instruction manual in a secure place for building managers/system owners to configure with their BMS system according to the manual.



Follow new **Commercial - Air to Water Heat Pump System - Installation Overview** guide.

NEW

