

2599518 – RS Scale Management System Replacement

Important Disclaimer:

The parts within this kit are not compatible with scale management components purchased/used on or before August 30th, 2020. Please replace all scale management parts found on the RS Series humidifier that you are working on with the parts provided in this spare parts kit (2599518).

Please also note if the blue shutter in this spare parts kit has a slit down the side that is normal **and is not a defect**.

All steps provided in this instruction manual must be followed in addition to all installation requirements outlined in the RS Series Installation and Operation Manual:

RS Series Installation manual: <https://www.condair.com/downloads-results?s=1&tid=71&did=29>

RS Series Operation Manual: <https://www.condair.com/downloads-results?s=1&tid=71&did=1490>

If at any time you are uncomfortable or unsure on how to proceed safely with this conversion please contact Condair's Technical Services for more instructions at: (613) 822-0335 and ask for technical services or the RS Series Product Manager.

Instruction Overview:

Step 1: Removal of the scale management tank

Step 2: Removal of the steam cylinder and steam cylinder tank base

Step 3: Removal of Connection Ring

Step 4: Installation of Connection Ring

Step 5: Installation of Tank Base & Steam Cylinder

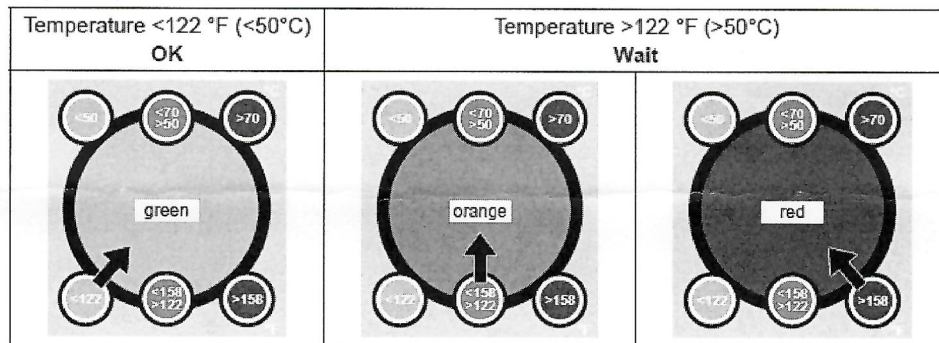
Step 6: Installation of Scale Management Tank

Installation is completed in the reverse order of removal, RS Series Installation and Operation manuals must be followed for proper installation of parts. Follow all safety precautions and guidelines set out in the installation and operation manual including safety precautions outlined in this document.

1. Drain the steam cylinder and scale collector tank:

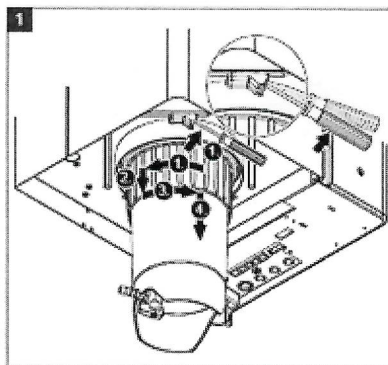
Before starting any removal work, Drain the steam cylinder and scale tank and set the Condair RS out of operation. Proceed as follows:

1. Condair RS must be switched on. Perform a draining of the steam cylinder (see chapter 4.4.3 in RS Series Operation Manual).
2. Set the steam humidifier out of operation as described in chapter 4.5. In RS Series Operation Manual.
3. Drain the scale collector tank:
 - Place a sufficient large container (capacity of approx. 2.6 gal (10 litres)) below the scale collector tank.
 - Carefully open the drain valve on the bottom of the scale collector tank, then wait until no water flows out of the drain valve.
 - The temperature of the water in the scale collector tank can be up to 203 °F (95 °C) shortly after steam has been produced.
Therefore: wear isolating gloves and open the drain valve carefully. If no water flows out from the open drain valve, the drain inside the scale collector tank is clogged and the scale collector tank may not be emptied. If this is the case, wait until the temperature indication adhesive on the scale collector tank indicates a temperature below <122 °F (<50°C) before dismantling the tank (since the scale collector tank is filled with water).
4. Wait until the temperature indication adhesive on the scale collector tank is green indicating a temperature <122 °F (<50°C)



Removal of the scale collector tank

Note: Supply water and mains power must be turned off before proceeding.)



1. Press the latch of the spring-actuated lock at the scale collector tank to the top, then turn locking ring of the scale collector tank clockwise until it comes to a stop (1.). Pull locking ring downwards until it comes to a stop (2.). Then turn locking ring counter-clockwise until it comes to a stop (3.) and remove scale collector tank downwards (4.).
2. Place the scale management aside and out of the way as it will no longer be used with the RS series humidifier.

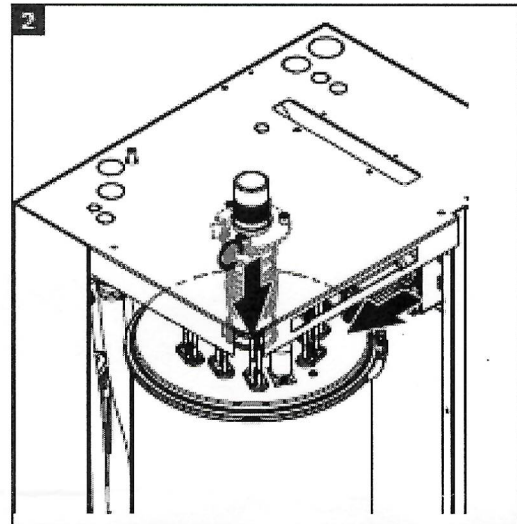
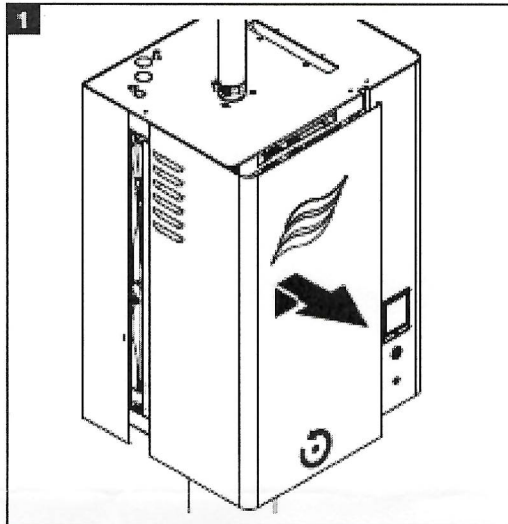
Step 2. Removal of the Steam Cylinder and Steam Cylinder Tank Base

Steam Cylinder Removal

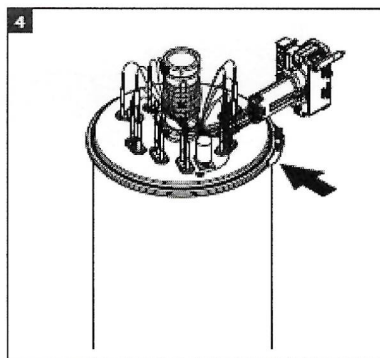
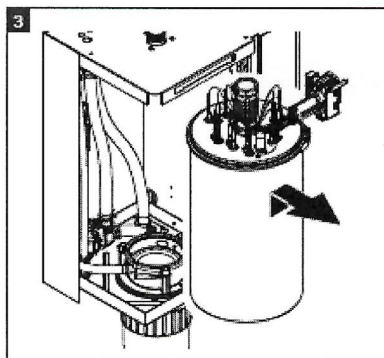


WARNING!
Danger of burning!

Before removal of the steam cylinder ensure the steam cylinder is empty and has cooled down, that no more burning danger exists.



1. Loosen retaining screw on the front door on the steam cylinder side of the unit using a screwdriver, then remove the front door.
2. Free the upper hose clamp of the steam outlet hose using a screwdriver and pull the hose downwards from the steam connector. Then, loosen the two screws fixing the heating cable plug to the plug socket and remove heating cable plug from the plug socket. Then remove the ratchet strap fastening the steam cylinder to the cabinet.



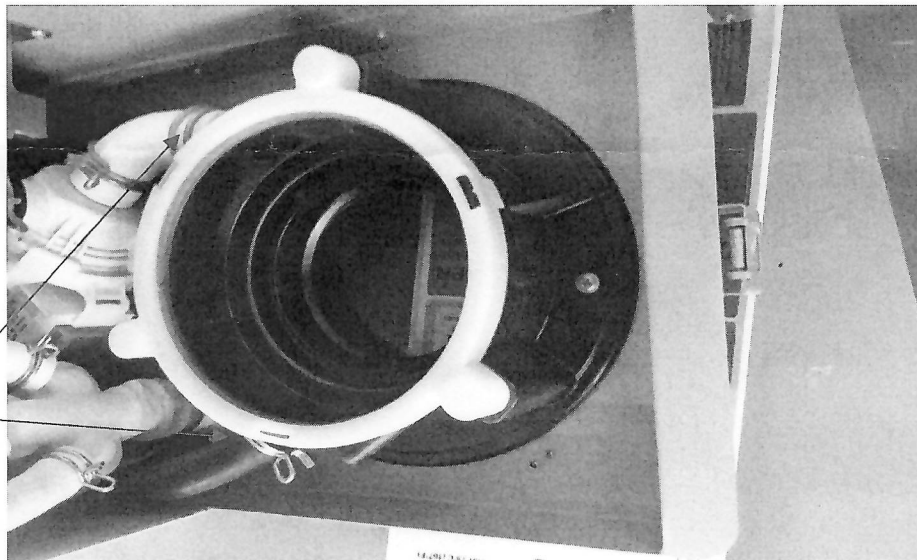
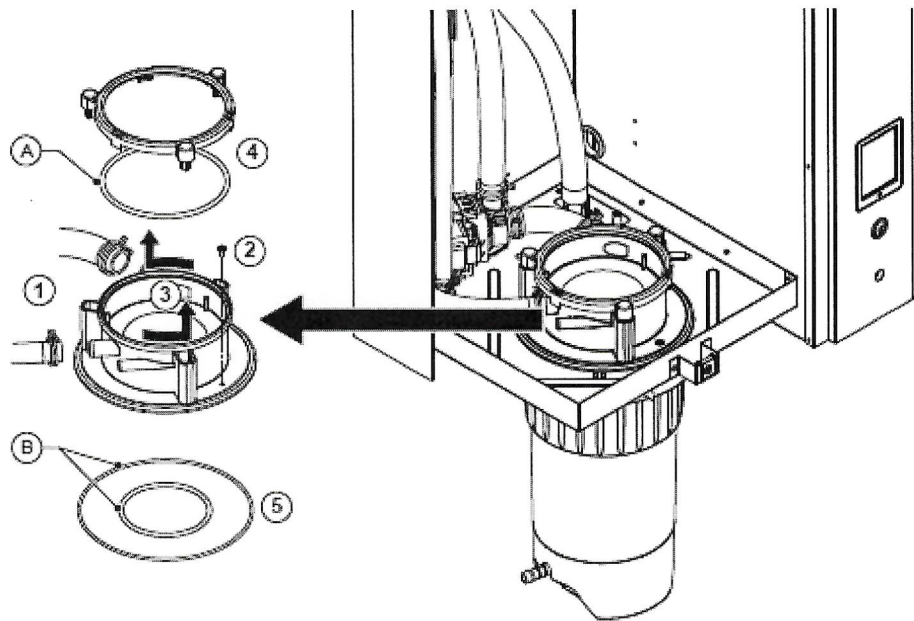
3. Carefully lift the steam cylinder out of the steam cylinder base and remove it towards the front of the unit.



CAUTION!

Set down the steam cylinder carefully to ensure the funnel on the bottom side of the cylinder is not damaged!

Steam Cylinder Tank Base Removal

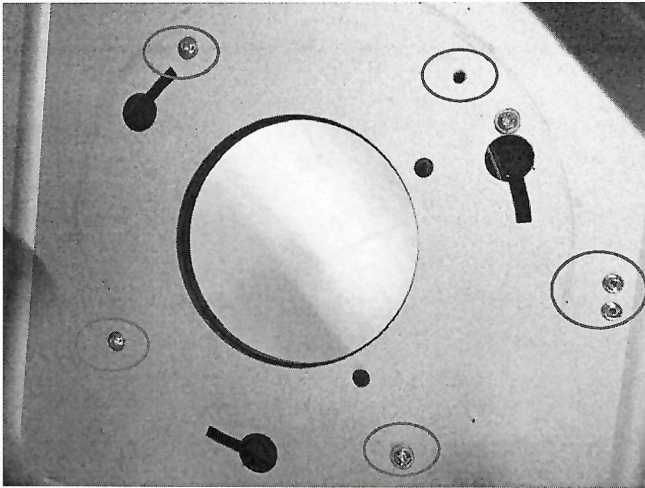


Hose Clamps
& hoses to
be removed

1. Release hose clamps and remove hoses from the connectors on the steam cylinder base (2 hoses to be removed, 1 white hose and 1 black hose)
2. Remove the screws fixing cylinder base to the bottom of the housing with Phillips screwdriver.
3. Turn cylinder base counter-clockwise to the stop and remove cylinder base upwards, place cylinder base to the side.

Step 3. Removal of The old Connection Ring

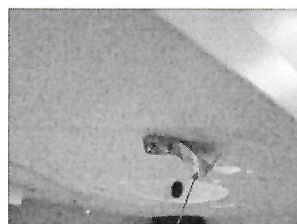
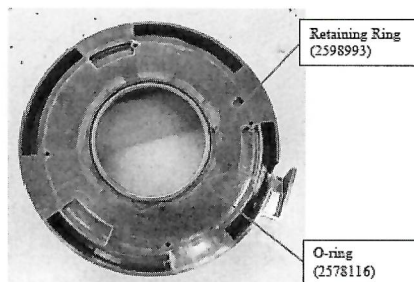
1. Remove the 4 screws fastening the connection ring to the base of the humidifier and drill out the rivets fastening the connection ring.



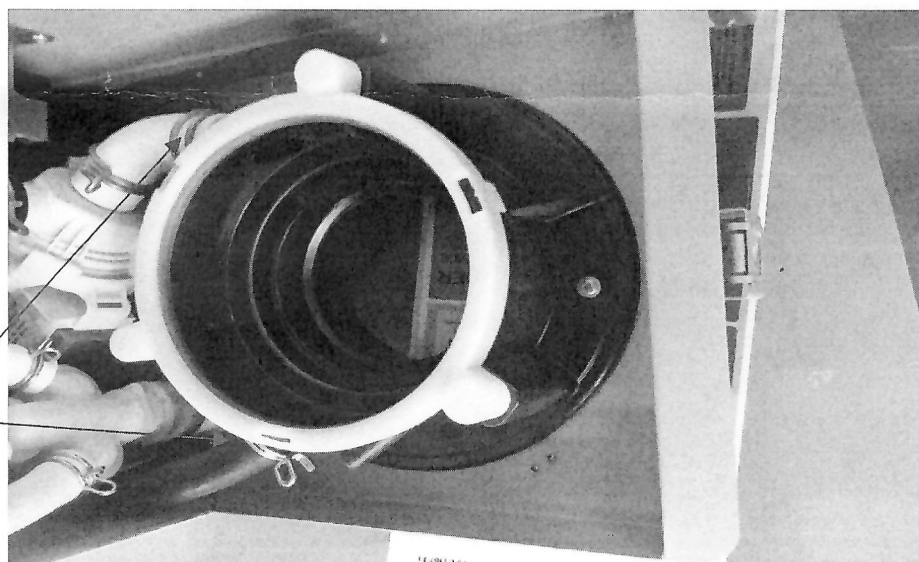
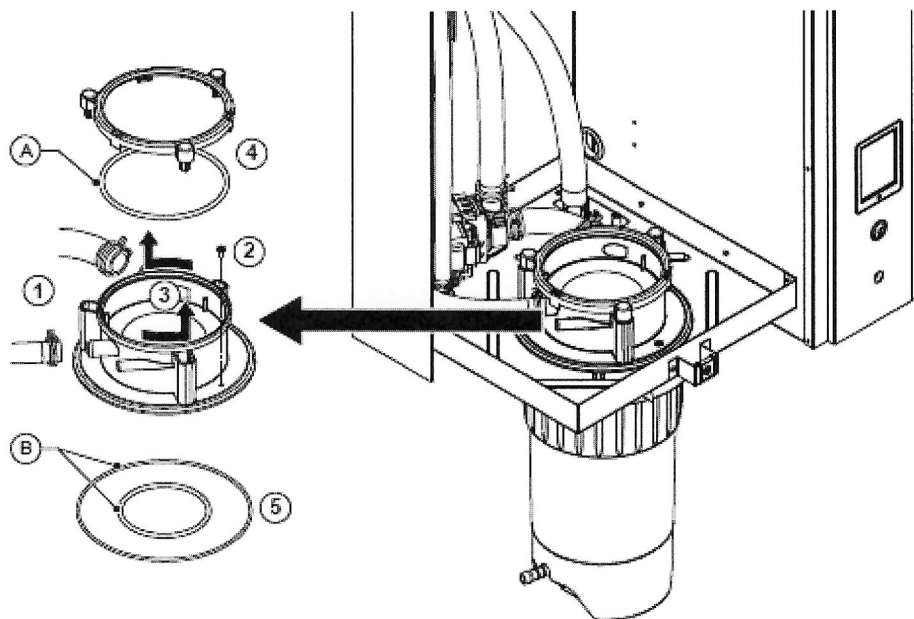
2. Set Old connection ring aside as it will be replaced with the new connection ring provided in spare parts kit 2599518.

Step 4. Installation of new Connection Ring

1. Use the rivets provided in the kit and a riveter tool to rivet the return spring seen below, back to the base of the humidifier.
2. Line the new connection rings mounting holes up with the bottom of the cabinets mounting holes.
3. Mount the connection ring to the base of the cabinet using the existing screws that were used to mount the connection that is being replaced. **Do not use grease on any components of the scale management system.**



Step 5. Installation of new Tank Base and Steam Cylinder



1. Line the steam cylinder base up with the holes in the base of Humidifier cabinetry and install steam cylinder base. Turn cylinder base clockwise to the stop and ensure that the correct inlet and outlet parts are aligned with the fill and drain hoses seen in the photo above.
2. Mount the steam cylinder base with the screws provided in the spare parts kit.
3. Install hose clamps and hoses onto the connectors on the steam cylinder base (2 hoses to be installed, 1 white hose and 1 black hose)

Installation of Steam Cylinder

Refer to section 6.4.3 of the RS Series Operation Manual for assembly of the Steam Cylinder

Assembly of the steam cylinder takes place in reverse sequence of the removal, **Please follow instructions in section 6.4.3 in reverse order for the installation of the Steam Cylinder.**

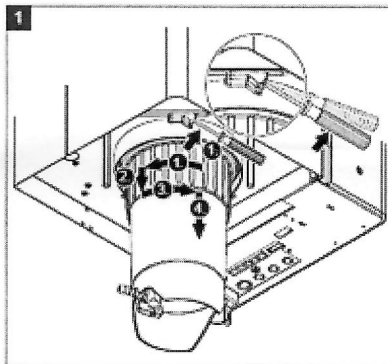
Note: Steps 4-7 in section 6.4.3 of the RS Series Operation Manual can be skipped as the steam cylinder tank has not be taken apart

Ensure that hoses are secured, not kinked and not touching the steam cylinder when it is installed.

Step 6. Installation of the new Scale Management Tank

Note: The blue shutter on the new scale management tank may have a slit down the center. This is not a defect, the shutter has been designed to operate with this slit.

Installation of the scale collector tank



Installation of the scale collector tank follows the reverse steps of removing the tank seen in step 1 one of this document. When installing the scale collector tank, do not allow the shutter to bind or twist upon installation of the scale collector tank.

Please follow RS Series Operation manual's instructions in chapter 4.3, "Commissioning after an interruption of Operation" for how to start up the RS humidifier safely after this conversion has been completed.

Observe the Unit for leaks and abnormalities as it fills and operates.

If at anytime you are unsure on how to proceed with the steps provided in this document, contact Condair's Technical Services department for further instructions at: (613) 822-0335