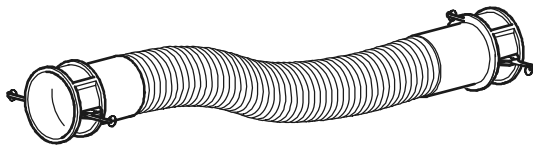


Bottom Hose Kit for the High-Density Cooling Enclosure — ARACBH1

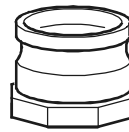
Overview

The bottom hose kit is used to connect the High-Density Cooling Enclosure (HDCE) (ARAC15000U & ARAC15000T) heat exchanger coil to the valve set assembly (ARACVB1) which controls the flow of water from the cooling bus. The hose kit comprises cooled water flow and return flexible hoses together with a hose seal (for maintaining the sealed enclosure integrity at the hose's transit point).

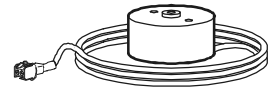
Inventory



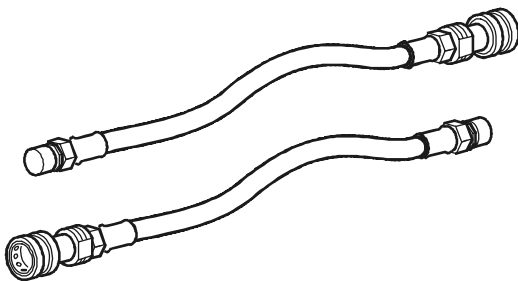
Cam-locking outer duct (1)



Cam-lock connector (1)
(attached to cam-locking
outer duct)



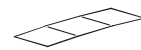
Valve box leak detection
sensor (provided with
HDCE)



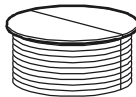
Inner hoses with self-sealing coupling (2)



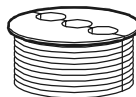
Male adapter (2) (attached to
inner hoses)



Hose/cable widening
strip (1)



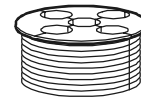
Top access hole seal (4)



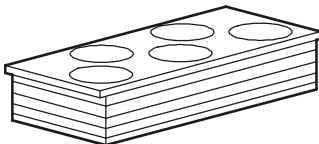
3-hole power distribution
cable seal (1)



Power distribution cable
hole plug (2)



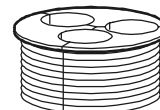
5-hole power distribution
cable seal (1)



5-hole cable access seal (2)



Cable access seal
hole plug (10)

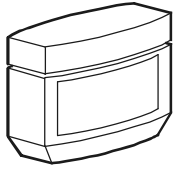


3-hole inner hose seal (1)



3-hole inner hose seal
plug (1)

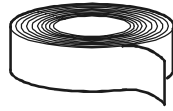
Tools required (not provided)



Petroleum jelly



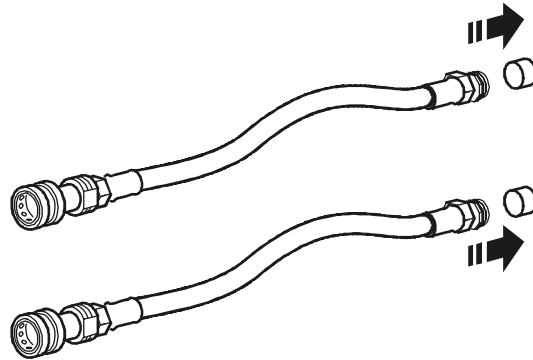
Rubber mallet



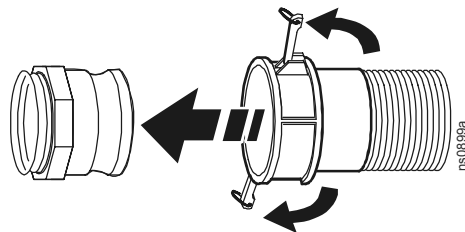
Pipe sealing tape

Before you begin

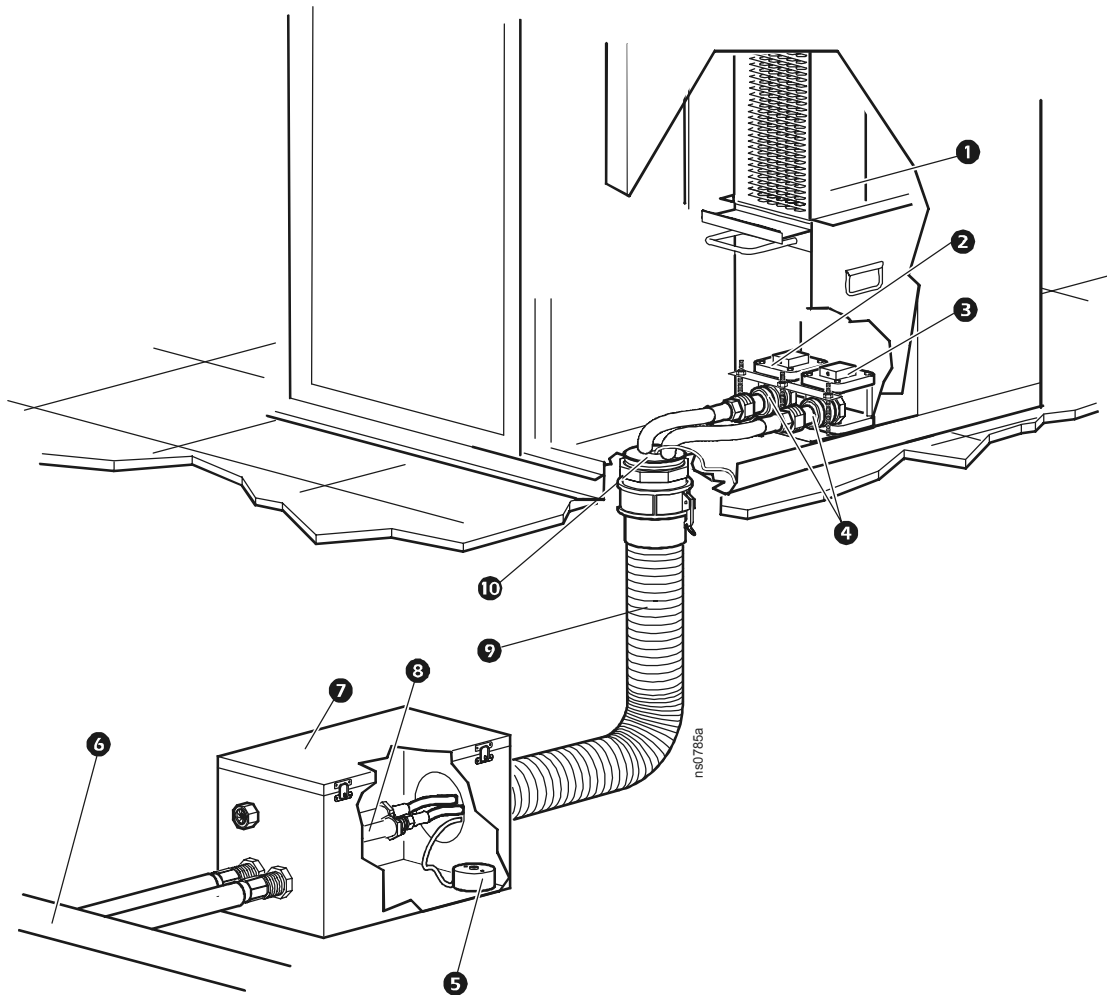
1. Remove plastic threading protection caps from all hoses.



2. Remove the cam-lock connector from the cam-locking outer duct.



Bottom hose kit overview



- | | |
|---|--------------------------|
| ❶ Cooling coil cartridge | ❹ Cam-locking outer duct |
| ❷ Chilled water return connector | ❺ 3-hole hose seal |
| ❸ Chilled water supply connector | |
| ❹ Inner hoses with self-sealing couplings | |
| ❺ Valve box leak detection sensor | |
| ❻ Cooling bus | |
| ❼ Valve box | |
| ❽ Valve assembly | |



Heavy

A bottom hose connection may require the unit to be moved. Do not attempt to move this unit without assistance.



See also

Refer to the “High-Density Cooling Enclosure Installation” manual for details about bottom access hole measurements and HDCE placement.

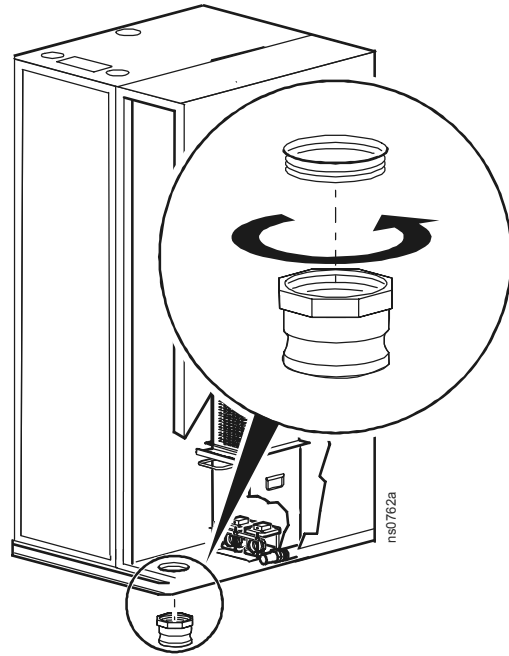


See also

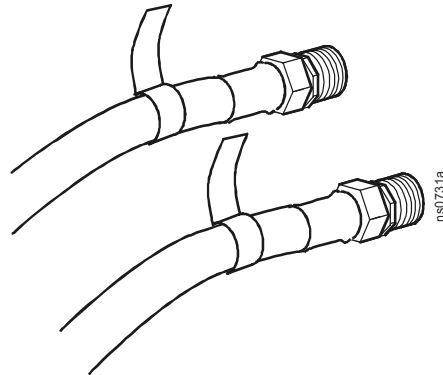
See “Valve Box Assembly for the High-Density Cooling Enclosure - ARACVB1” for detailed information on placement and installation of the valve assembly.

Installation

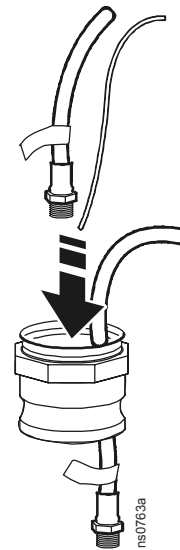
1. Screw the female threaded cam-lock connector into the bottom access hole underneath the Equipment Cooling Unit (ECU) enclosure.



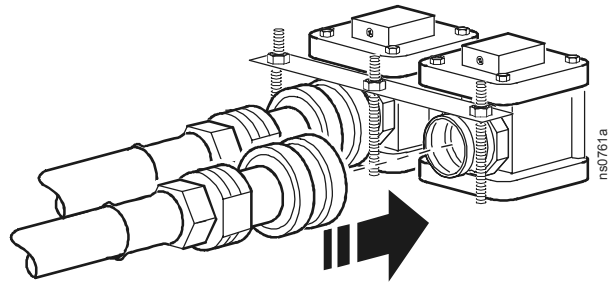
2. Before attaching the inner hoses with self-sealing couplings, label both ends of each of the hoses as chilled water supply hose and chilled water return hose for proper connection to the valve box.



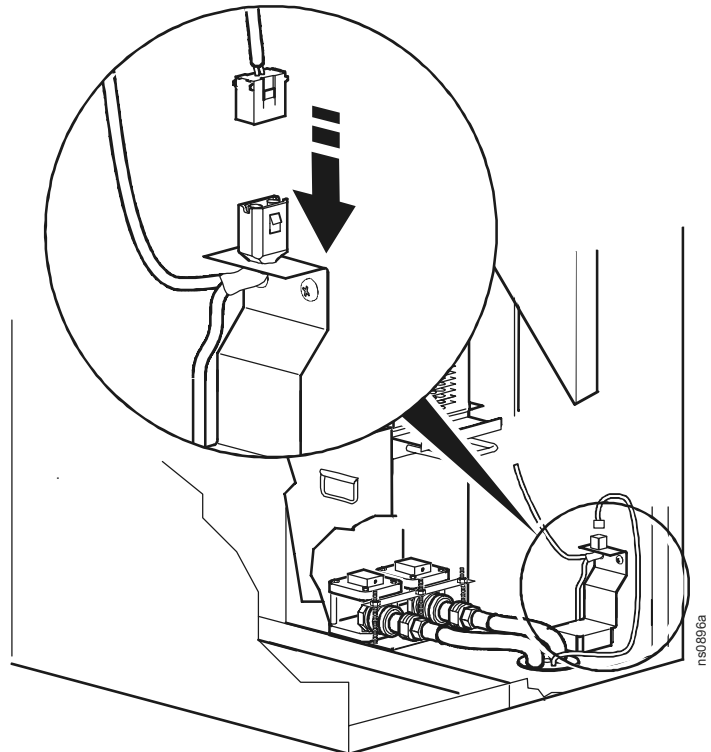
3. Lower the valve box leak detection sensor and inner hoses with self-sealing couplings through the access hole on the bottom panel of the ECU.



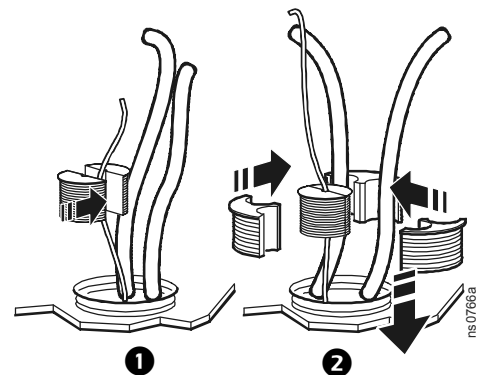
4. Attach the inner hoses with self-sealing couplings to the mating plug connectors on the lower half of the cooling coil cartridge.



5. Connect the leak detector cable to the connector adjacent to the ECU leak detection sensor.



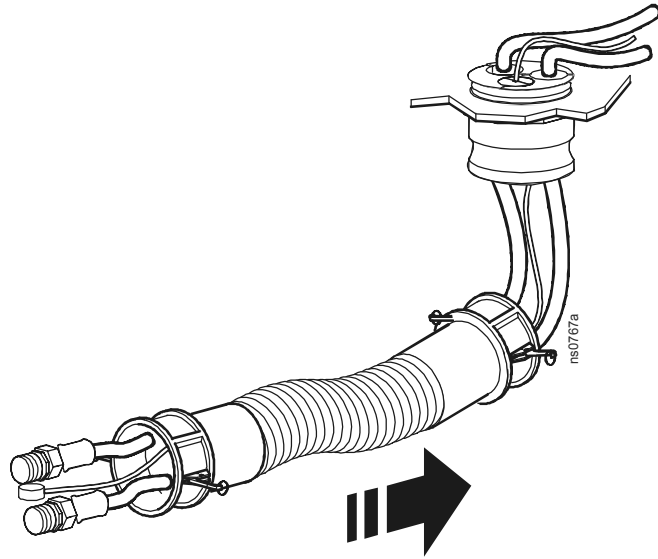
6. Lubricate the outsides of the 3-hole inner hose seal and the inner hose seal plug with petroleum jelly. Place the valve box leak detector cable between the two halves of the inner hose seal plug ❶. Place the 3-hole inner hose seal pieces around the hoses and the inner hose seal plug ❷. Push the seals into the cam-lock connector attached to the base of the ECU. Using a soft mallet, apply pressure evenly against the pieces to hammer into place.



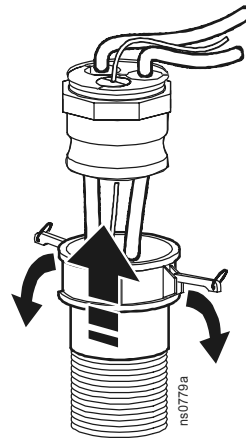
Note

If the seal is forced too far into the hole, pull on the cables to remove the seal and repeat this step.

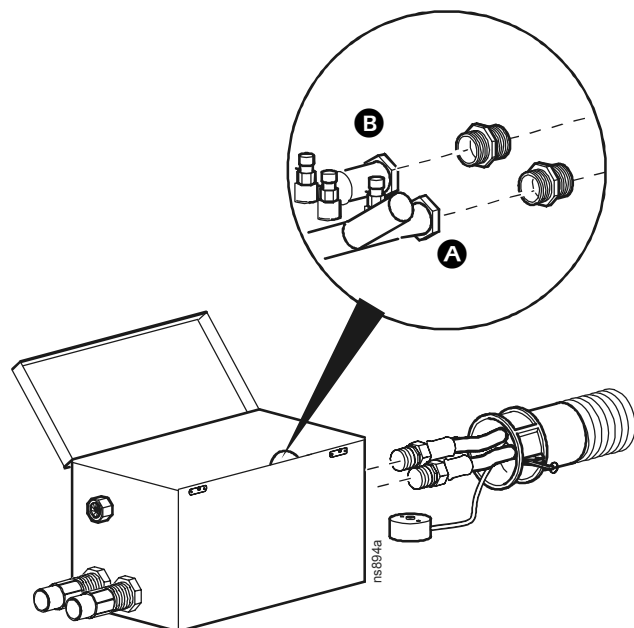
7. At the ends of the inner hoses with self sealing couplings now connected to the cooling coil cartridge, take the cam-locking outer duct and slide the duct over the two hoses and leak detection cable. Slide the duct towards the cam-lock connector.



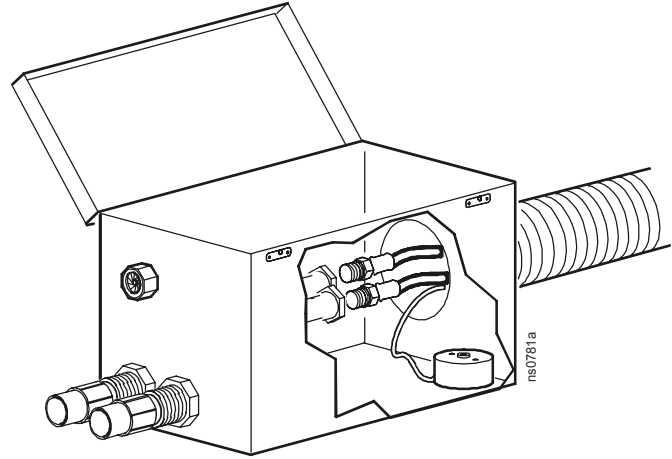
8. Secure the cam-locking outer duct in place by pushing it firmly onto the cam-lock connector. Pull the cams towards the duct to lock the duct in place.



9. From the side of the inner hoses with self-sealing couplings not attached to the valve box, remove the male adapters from the hoses and screw them into the valve box's chilled water supply valve **A** and chilled water return valve **B**. Apply pipe sealing tape as needed and then tighten joint.



- Place the valve box leak detection cable and the two hoses through the cam-lock connector and into the valve box. Connect the hoses to the male adapters now attached to the valve box's chilled water supply valve and chilled water return valve. Apply pipe sealing tape as needed and then tighten joint.



Note

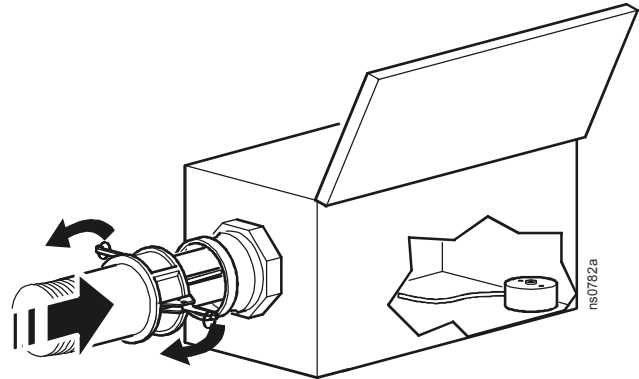
Ensure that the hoses are connected to the proper valves according to the identifying marks made earlier in step 2.



See also

Refer to the “Valve Box Assembly for the High-Density Cooling Enclosure - ARACVB1” for information on identifying parts and components of the valve assembly.

- Place the valve box leak detection sensor anywhere on the base of the inside of the valve box. Secure the cam-locking outer duct in place by pushing the duct down firmly onto the cam-lock connector. Push the cams towards the duct to lock the duct in place.



Hose specifications

Length mm (in)	I/D mm (in)	O/D mm (in)	Working Pressure (Bar)	Minimum Bend Radius mm (in)	Temperature Range °C (°F)
1879 (74)	25 (1)	34 (1.34)	10	110 (4.33)	-20 – 110 (-4 – 230)

Self-sealing coupling specifications

Pressure Ratings		Manual Connection	Spillage and Air Inclusion	
Liquid Service (Bar)	Failure (Bar)	Connect/ Disconnect Force at 0 Bar	Spillage Max per Disconnect (ml)	Air Inclusion Max per Connect (ml)
160	400	19kg	15.5	15.5

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