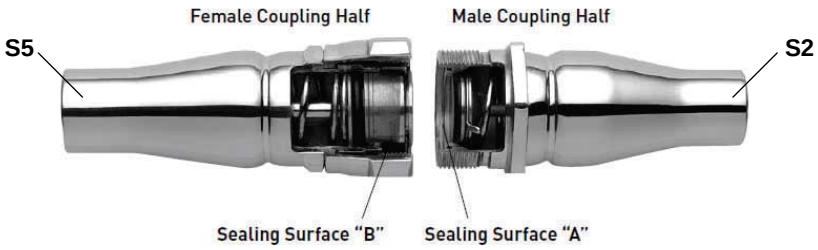
This supplemental installation guide provides information about the new Quick-Connect self-sealing couplings currently shipping with Adler/Barbour products but not yet covered in the manual *Adler/Barbour Installation Guidelines For Cooling Units and Evaporators* (L-2488)



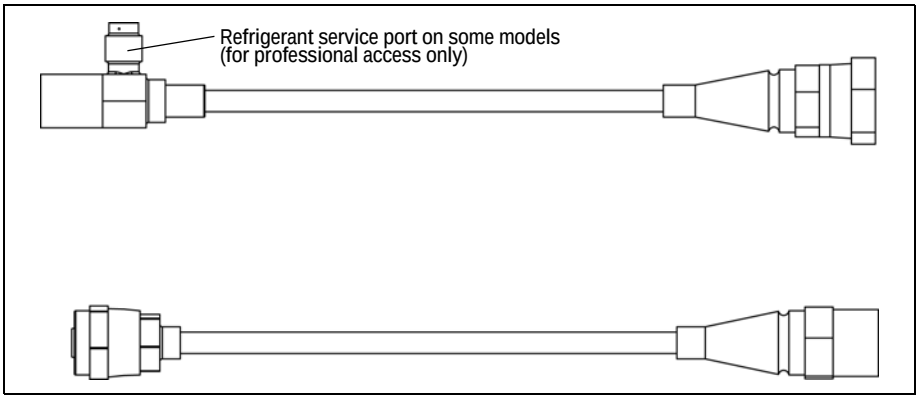
New Self-Sealing Quick-Connect Couplings

Change of Coupling Type

Previously - The Adler/Barbour cooling unit and evaporator were connected with one-shot, all-metal, piercing-type couplings. Once connected, the coupling could not be removed without losing the refrigerant that travels between the two components. (Professional installation is required to capture and recharge the refrigerant.)

Now - The new self-sealing Quick-Connect coupling uses synthetic seals and metal threads, so the couplings can be removed and reconnected as often as needed with no loss of refrigerant. (Professional installation is not required when all couplings in the system are Quick-Connect.)

Self-sealing Quick-Connect Adapter Kits (P/N 755570000) are available for replacement cooling units or evaporators that join older "one-shot" units to their new self-sealing counterparts. (Professional installation is required to capture and recharge the refrigerant.)



New Quick-Connect Adapter Kit
(P/N: 755570000)

How The Quick-Connect Couplers Work

When disconnected, spring-loaded valve assemblies in the male and female coupling halves are sealed to prevent refrigerant loss and the inclusion of air or foreign materials. A spring in the male coupling half presses the bonded poppet against sealing surface "A" of the coupling body. Likewise, a spring in the female coupling half presses the sleeve against sealing surface "B" of the stem valve head.

When partially connected, the sealing surface of the male coupling body contacts the bonded seal of the female coupling's sleeve assembly as the two coupling halves are threaded together. At the same time, the stem valve head in the female coupling assembly contacts the male coupling's bonded poppet, forcing air out of the coupling. During this stage, both coupling halves are still completely sealed, preventing leakage of refrigerant.

When fully connected, continued tightening of the union nut (female coupling) draws the couplings together, and opens the fluid passage by forcing the male coupling's poppet assembly and the female coupling's sleeve assembly open. When fully

coupled, a metal ring located in the front of the male coupling forms a leak-free metal-to-metal seal between the two coupling halves. Refrigeration professionals can use the service port (on some models) to add or remove refrigerant if necessary.

INSTALLATION PROCEDURE

Refer to the diagram at the top of page 1.

Couplings must be immaculately clean. Leaving plastic caps and plugs in place, carefully wipe off the fittings to remove dirt, dust and moisture.

Connect the lower refrigerant male to female coupling first:

1. Drill holes in bulkhead or panel to accommodate the coupling half if necessary. Remove dust cap before positioning on bulkhead.
2. Remove dust caps and plugs if used, making sure that component synthetic seals are intact.
3. Wipe off coupling seals and threaded surfaces with a clean cloth to prevent the inclusion of dirt or any foreign material in the system.
4. Generously LUBRICATE the synthetic seal and threads of fittings in both the S2 male and S5 female couplings with refrigeration oil.
5. Thread coupling halves together by hand to ensure proper mating of threads. Do not try to turn the male coupling. Just hold it with your 7/8” wrench.
6. Using the 7/8” wrench on the male coupling body hex (holding the male coupling hex stationary) and the 15/16” wrench on the female coupling nut, tighten (clockwise) the female coupling nut until the coupling halves “bottom out ” or a definite resistance is felt. *This will require about 6 full turns.*

IMPORTANT:
Do not rotate the S2 male or S5 female coupling bodies during connection. Only rotate the coupling nut on the S5 female coupler.

7. Using a marker or ink pen, mark a line lengthwise from the coupling hex to the bulkhead. then tighten an additional 1/8 to 1/4 turn. The misalignment of the line will show the degree of tightening. This final turn is necessary to ensure that the knife-edge metal seal bites into the brass seat of the coupling halves, forming the leakproof joint. If a torque wrench is used, tighten to 10-12 foot pounds.

Connect the upper refrigerant male to female couplings following the same procedure described above.

REFRIGERANT SERVICE PORT

Refer to line drawing at the bottom of page 1.

The refrigerant service port is a feature on some models. This service port is only for use by refrigeration professionals with proper equipment for adding or evacuating refrigerant.