

Eco Kold – HCR 4141 Installation Guide

Required Tools:

Recovery Machine, Recovery Tank	Vacuum Pump, Scale, HC Leak Detector
Monometers and Amps meter	Gloves and Eye Protection

⚠ IMPORTANT: *Eco Kold **must never** be mixed with any other refrigerant under any circumstances. Doing so may compromise system integrity and void performance. Eco Kold is fully compatible with all standard system oils - **no modifications or oil changes are required.***

⚠ Do Not Proceed If Any of the Following Conditions Exist:

- The equipment is not operating according to manufacturer specifications
- Visible refrigerant leaks are present
- Loose or damaged electrical connections
- Equipment has been modified or does not match original specifications
- Piping diameters differ from factory requirements

Step 1 - Pre-Installation Inspection

- ☐ Perform a full visual inspection of the equipment
- ☐ Look for any visible refrigerant or oil leaks
- ☐ Inspect for loose or disconnected electrical wires
- ☐ Confirm all electrical box covers are properly in place
- ☐ Attach gauges to measure system pressure. If the high-pressure port is unavailable, use the low-pressure port **only**.
- ☐ Measure system current **AMPs** and **Voltage**
- ☐ Record supply and return air **Temperature**
- ☐ Log all collected data for reference

NOTE:

⚠ ***Do not replace** the refrigerant unless the system is operating within manufacturer specifications. Refer to the factory label for reference. If the unit is operating to spec, refrigerant replacement may proceed.*

Step 2 - Refrigerant Recovery

- ☐ Connect hoses to both the recovery unit and the recovery tank
- ☐ Place the recovery tank on a scale and reset the scale to zero
- ☐ Begin the refrigerant recovery process. Ensure both **liquid and vapor** are recovered.
- ☐ Once the recovery unit stops, record the total amount recovered (in kg or lbs).
- ☐ Compare the recovered amount with the manufacturer's specified charge (found on the unit label).
- ☐ If the recovered amount is **less than the factory charge**, inspect the unit for possible **leaks or damage**.

- ☐ Properly dispose of recovered refrigerant according to local regulations
- ☐ Connect a vacuum pump and evacuate the system as per standard procedures

Step 3 - Charging Eco Kold

- ☐ **Connect** the Eco Kold tank to the gauges. **Charging must be done in the liquid phase!**
- ☐ **Slowly open** the liquid valve on the gauges to avoid hydroshock
- ☐ If the high-pressure port is unavailable, charge through the low-pressure port
- ☐ Begin charging and monitor the following key parameters:
 - ◆ Low-side pressure should stabilize between **70 - 80 PSI**
 - ◆ High-side pressure (if accessible) should read between **190 - 230 PSI**
 - ◆ Total charge should be **25 - 35%** of the weight of the recovered refrigerant
 - ◆ **AMP's draw** should be **45% - 55% lower** than with the original refrigerant (measured prior to replacement)
- ☐ Allow the unit to run for **30 minutes** to stabilize. Check the outlet temperature, **it should be equal to or lower than before.**
- ☐ Take final readings for **pressure, amperage, and temperature.**
- ☐ **Record all data** for documentation and system verification.

Step 4 - Post Installation

- ☐ Apply Eco Kold identification stickers in a visible location on the unit to clearly indicate that an alternative refrigerant is in use for future technicians.
- ☐ **Write the updated** pressure and amperage readings **directly on the sticker.**
- ☐ We recommend **rechecking the unit the following day** to ensure proper performance after the cooling space reaches the target temperature.

Important Safety Notes

- **Avoid direct exposure to high heat or open flames.**
- Eco Kold is a **stable refrigerant** composed of liquefied petroleum (LP) gases.
- Use standard industry practices and common sense when handling
- HCR 4141 is a direct drop-in replacement for conventional refrigerants; no system modifications are needed if the unit meets factory specs



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