Harvest
Radiant

Abbreviated Installation Manual

A full installation manual can be found here:

SCAN ME

1.1. Before You Begin

Always check for the most up-to-date installation information, which can be found at http://docs.harvest-thermal.com/. Similarly, all SANCO2 installation material provided in this manual is for convenience only. Refer to SANCO2 for the most up-to-date and complete installation information of the SANCO2 Heat Pump Water Heater and tank.

A full installation manual can be found here:

System Overview

Floor Design and Sizing

The Harvest Radiant system is considered a low-temperature radiant system. As such, there are a few practices that can help get the best performance out of a lower temperature radiant floor:

- Use longer loop length than typical to help achieve a low return temperature, e.g., 250-500 ft length.
- Use a “double back” layout, i.e. the warm supply pipe is always next to the cooler return pipe to achieve a uniform temperature across the floor

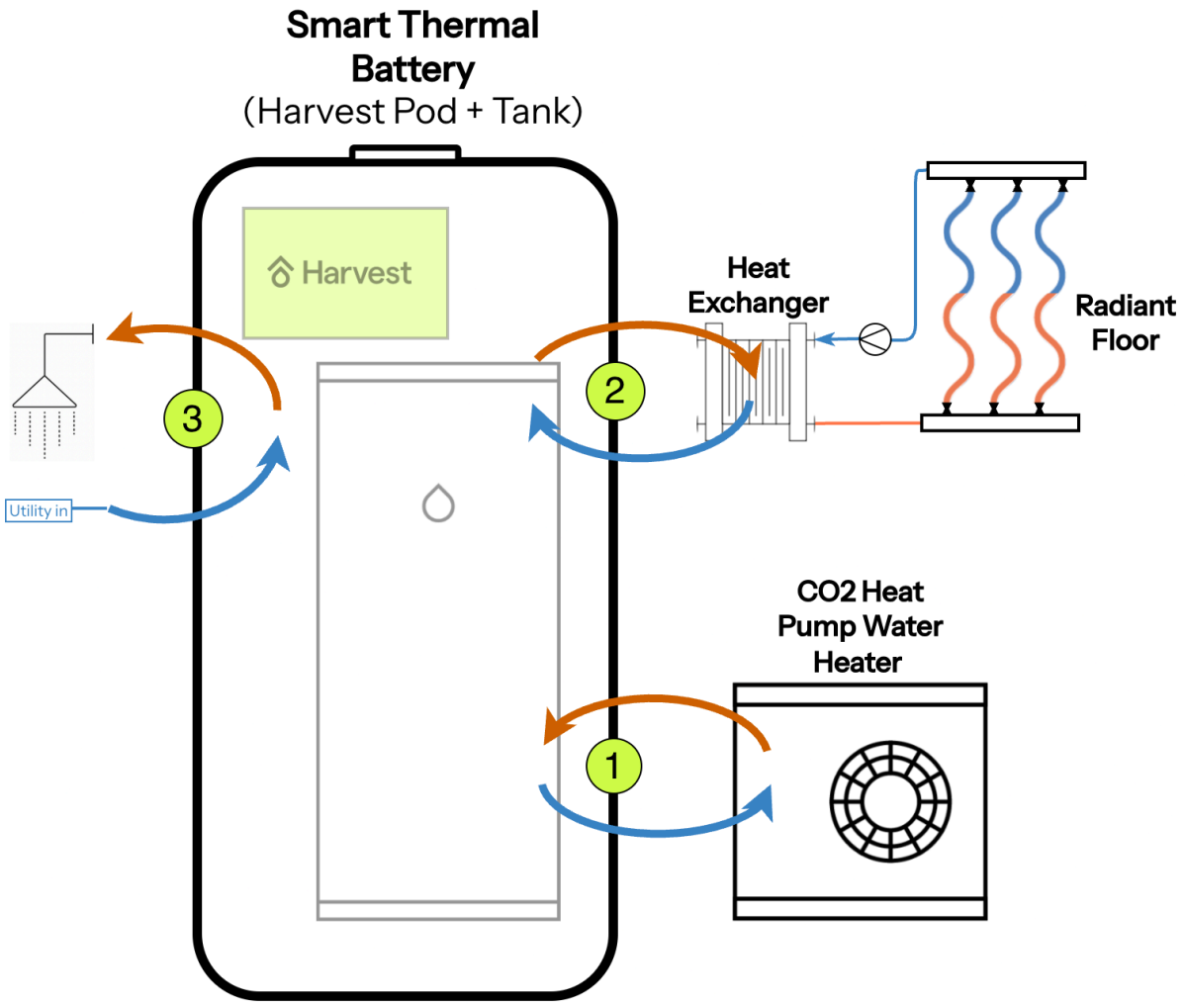
Optimal piping layout

The higher the radiative transfer capacity of the floor, the better system performance and efficiency will be. In addition, the calculated heating capacity of the floor should always exceed the design load of the building.

Calculate the heating capacity of the floor: *Floor capacity = heat flux (BTU/sqft/hr) * heated floor area (sqft)*

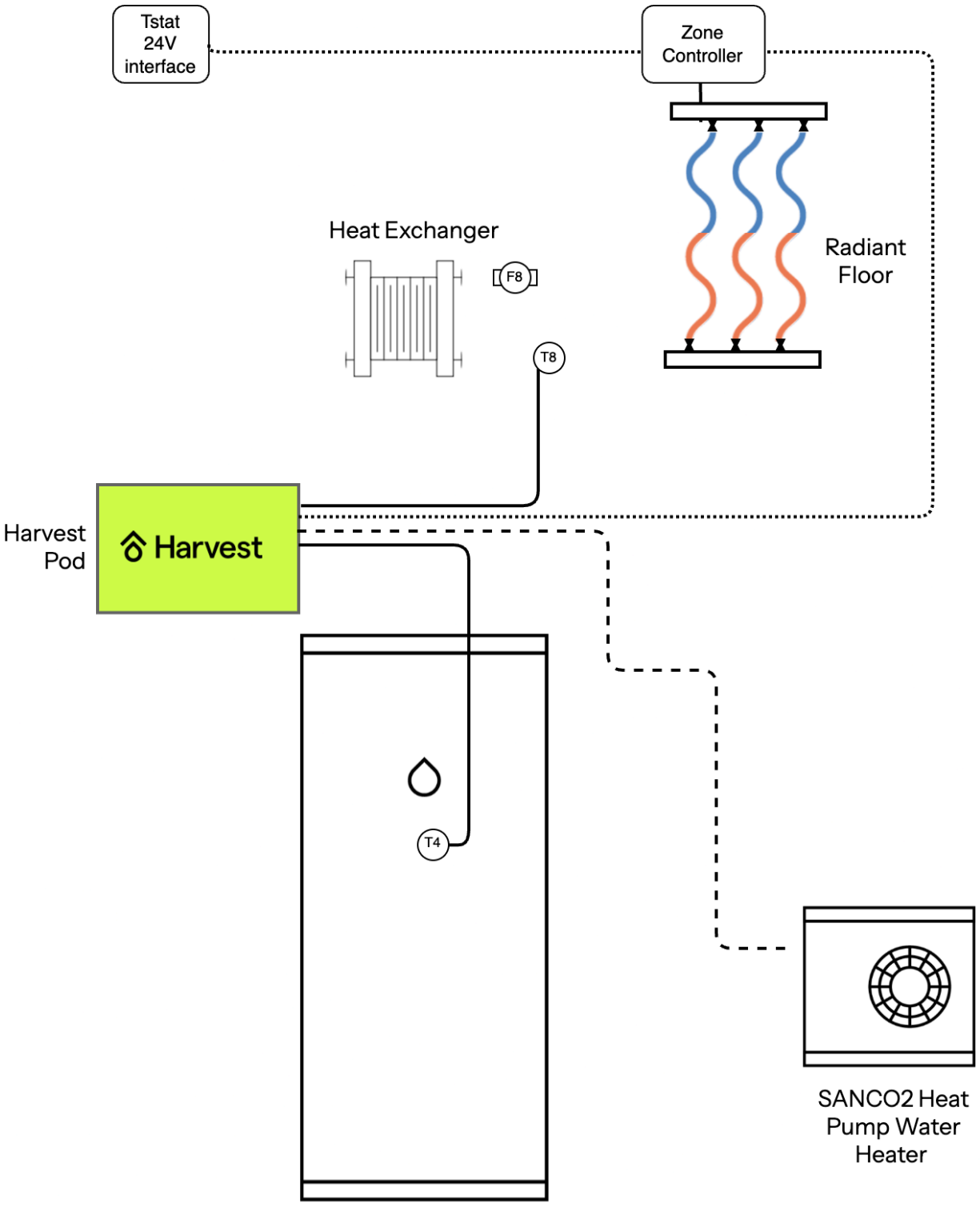
Heat Flux (BTU/sqft/hr)		Flooring		
		Polished concrete or tile	Wood	Carpet or area rug
Radiant transfer material	Concrete	30	15	5
	Engineered radiant	20-30	10-15	3-5
	Staple-up	10	5	2

Plumbing Overview



1. CO2 HPWH adds thermal energy to the Thermal Battery
2. Radiant floor Heat Exchanger removes thermal energy from the Thermal Battery for heating
3. DHW removes both water and thermal energy from the Thermal Battery

Wiring Overview


Tstat
24V
interface
Zone
Controller
Heat Exchanger
F8
T8
Radiant
Floor
Harvest
Pod
Harvest
T4
SANCO2 Heat
Pump Water
Heater

Compatibility

Harvest Radiant is compatible with:

SanCO2 heat pumps and tanks for hydronic heating and hot water

Concrete/gypcrete and engineered radiant floor systems

Up to two SanCO2 heat pumps

Up to two thermal storage tanks

On-demand hot water recirculation pumps

Solar PV, batteries, smart electric panels (not required)

Harvest Radiant is NOT compatible with:

Non-SANCO2 heat pumps and tanks for hydronic heat and hot water

Staple-up radiant systems

Continuous or timer-controlled hot water recirculation pumps

Solar thermal integrated with the Harvest system

Refer to Harvest Radiant Technical Specifications for equipment specifications and to aid in full system design.

Safety

Danger

HAZARD WARNINGS: These symbols call attention to warnings, electric shock hazards, and gas hazards respectively, and directions that must be followed for safety reasons.

Danger

WARNING: The installation manual instructions are intended as an aid to qualified service personnel for proper installation, adjustment and operation. Read these safety requirements thoroughly before attempting installation or operation. It is the responsibility of the installer to follow all national codes, standards and local ordinances. The installation must comply with regulations of the local building, heating, plumbing, and other codes. where local codes are not applicable, the installation must comply with the national codes and any and all authorities having jurisdiction. Failure to follow these requirements may result in improper installation, adjustment, service or maintenance, possibly resulting in fire, electrical shock, carbon monoxide poisoning, explosion, property damage, personal injury or death.

Danger

California Proposition 65 WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm

Safety Requirements

General

Danger

ELECTRICAL SHOCK HAZARD: Confirm all circuits are de-energized before performing any wiring activity

Heat Pump/Tank

> **Caution**
>
> WARNING: Use caution when installing heavy equipment. To avoid injury, follow the manufacturer's installation instructions regarding all safety protocols.

Radio Interference

> **Caution**
>
> WARNING: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no gurantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try and correct the interference by one or more of the following measures:
>
> - Reorient or relocate the receiving antenna.
> - Increase the separation between the equipment and the receiver.
> - Connect the equipment into an outlet of on a circuit different from that to which the receiver is connected.
> - Consult the dealer or an experienced radio/TV technician for help.

Harvest Thermal

https://www.harvest-thermal.com/

declare under our sole responsibility that the product

Harvest Pod

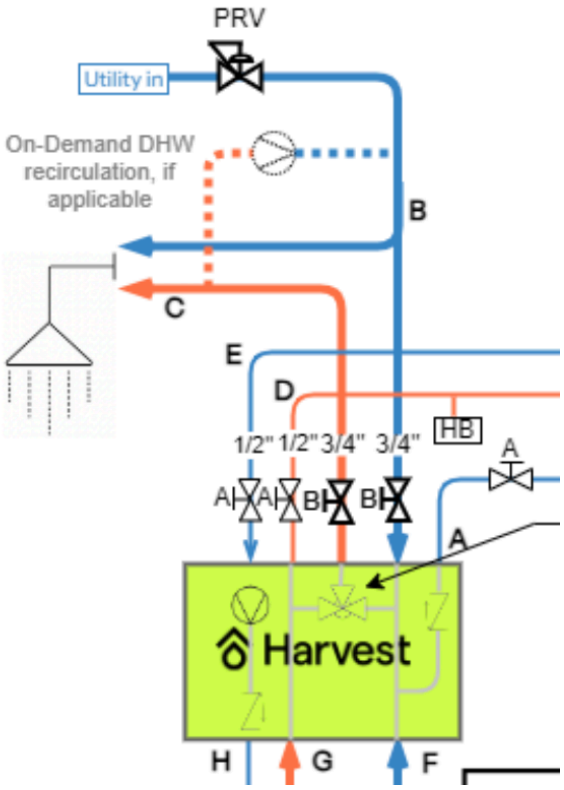
complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation

Integrating DHW Recirculation

On-demand DHW recirculation can work with a Harvest Thermal Battery system.

As shown in the Plumbing System Diagram, a DHW recirculation pump must be connected "outside" of the Harvest Pod Thermal Battery system, between the utility cold water coming into the Pod (B) and the DHW exiting the Pod (C).



Danger

WARNING: Always-On and Timer-Based DHW recirculation systems will destratify the storage tank and cripple the Thermal Battery system operation. ONLY use On-Demand DHW recirculation.

Here are some examples of on-demand DHW recirculation systems that work well with the Harvest Thermal Battery System.

For homes with a dedicated return line:

Smart Aquastat Control 32 , from Leridian Dynamics, is a controller that will sense when a DHW call is made and turn on the pump. This means that a short use of any hot water tap is equivalent

to pushing a button to start the recirculation pump. Choose a recirculation pump that will move 2-4 gpm of water, so that once a hot water tap is initially turned on and off, water is recirculated as quickly as possible.

Smart Aquastat 32 Controller Settings

- Temperature Range: 80F - 90F. When the temperature is below 80F at the recirculation pump, the pump will turn on when triggered by the flow sensor, and will then turn off when the temperature reaches 90F at the recirculation pump.
- Max Pump Run Time: 3 min. It rarely takes longer than 3 minutes to circulate water in the dedicated return line, and this setting helps to minimize any issues if the temperature sensor is not reading accurately.

Instructions on how to reconfigure a Smart Recirculation Control 32 as a Smart Aquastat Control 32

- The firmware can be updated via the smartphone app
  - Start the app and connect to your controller
  - There is a Firmware menu button at the bottom right of the app.
  - There is an option on the firmware update screen to “Show All Firmware Versions” which will display the firmware from our entire product line.
  - Select the Smart Aquastat 32 firmware and install that.
- One of the temperature sensors needs to be disconnected.
  - There are two temperature sensors plugged into an RJ-14 splitter.

Disconnect the temperature sensor that is on the plumbing line C, coming out of the Pod.

The remaining temperature sensor should be on the dedicated return line right next to the recirculation pump.

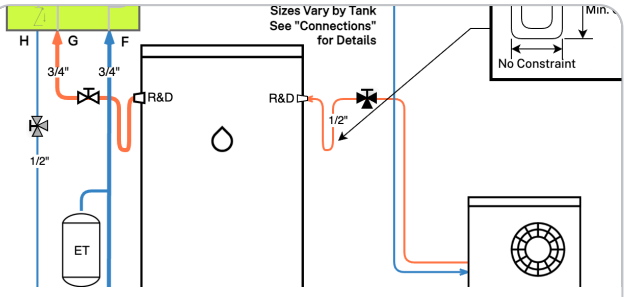
- Follow the instructions above to apply the right Settings for the Smart Aquastat 32 Controller

For homes without a dedicated return line

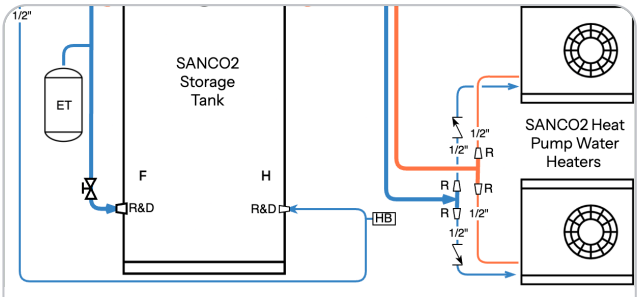
The Smart Thermostatic Control, from Leridian Dynamics, is good option for an on-demand recirculation pump which works with the included high flow cross-over valve kit which gets installed under a remote kitchen or bath fixture.

Plumbing

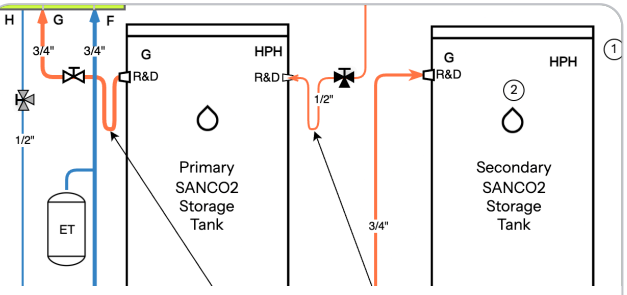
SANCO2 HPWH + Tank



Single SANCO2 Plumbing Diagram

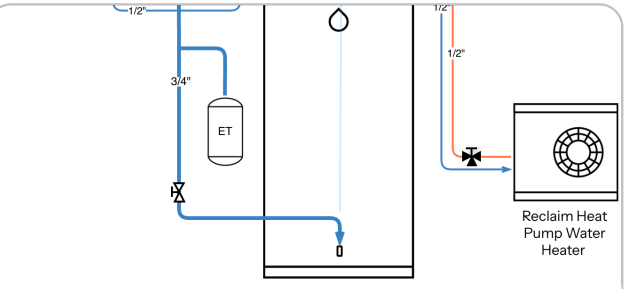


Twin SANCO2 Plumbing Diagram

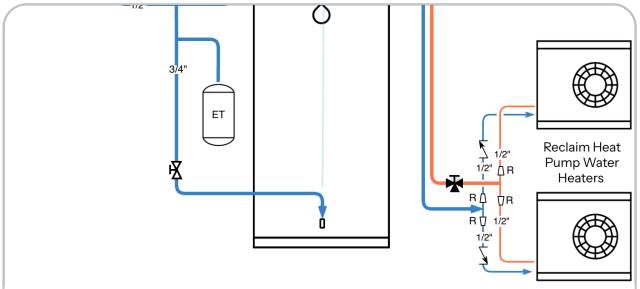


Double-Tank Plumbing Diagram

Reclaim HPWH + Tank

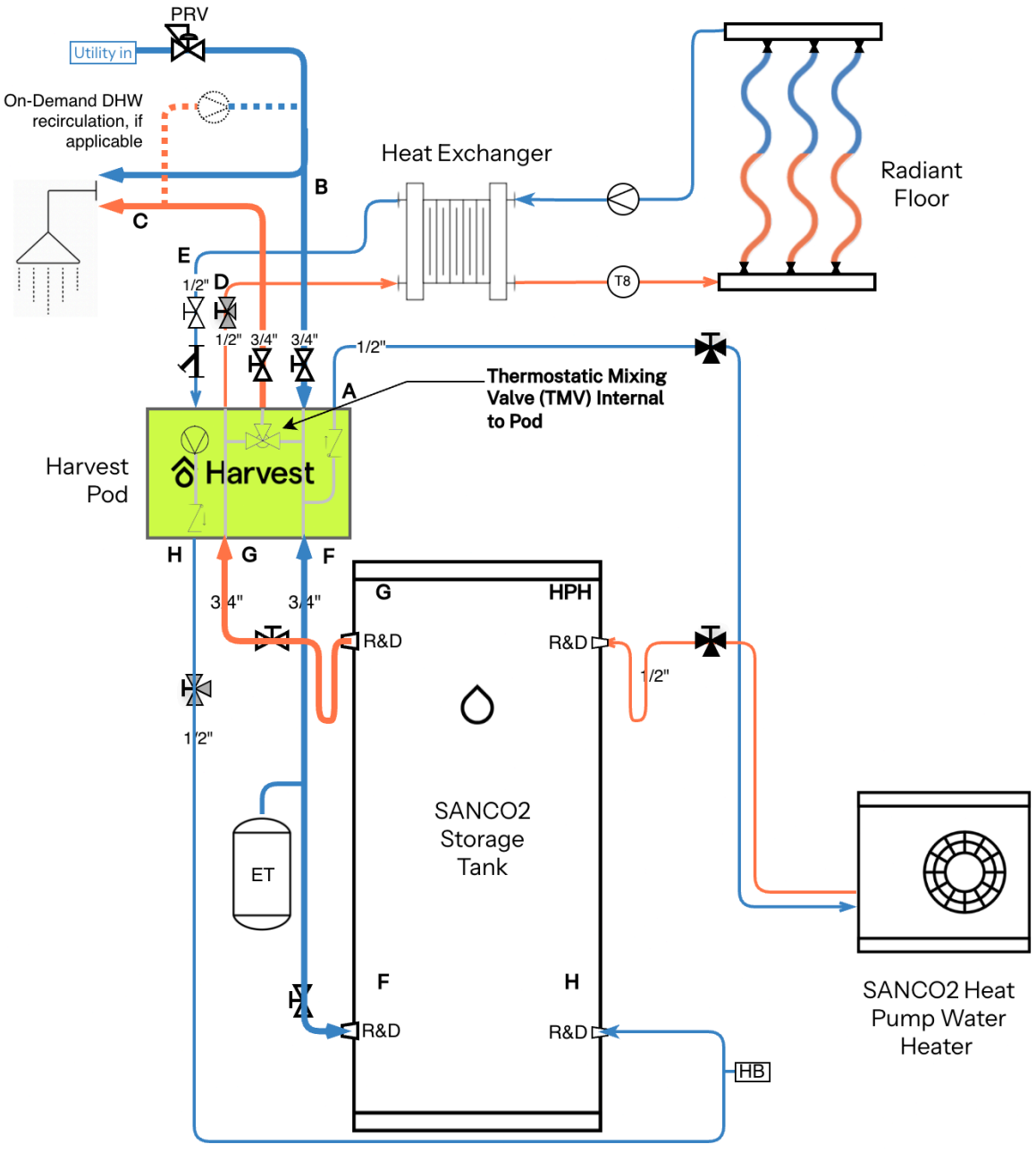


Single Reclaim Plumbing Diagram



Twin Reclaim Plumbing Diagram

Single SANCO2 Plumbing Diagram



Legend					
	1/2" Ball Valve	R&D	Reducer and Dielectric Union		Supply Piping
	3/4" Ball Valve	R	Reducer		Return Piping
	Harvest 1/2" Service Valve with drain **(provided)**	ET	Expansion Tank		
	SANCO2 1/2" Service Valve with drain	HB	Hose Bibb		
PRV	Pressure Regulating Valve		Y Strainer **(provided)**	T8	T8 Temperature Sensor **(provided)**

Note

Only Harvest-provided fittings and 3rd party circulation pump are shown on the radiant floor loop. Follow best practices for remaining plumbing and fittings for the radiant floor loop.

Caution

Only install additional plumbing features, such as DHW recirculation pumps, on plumbing lines B and C.

Caution

WARNING: Maximum incoming pressure not to exceed 75 PSI with pressure reducing valve.

Caution

WARNING: Be sure to include all valves, meters, sensors and heat traps shown in the drawings in this manual. The system will not operate properly without these, and in some cases, may not operate safely.

Caution

WARNING: Before performing any plumbing work, ensure the Pod is completely powered off and the front cover is securely in place. Failure to do so may result in water damage to the Pod's electronics, which is **not covered under warranty.**

Note

NOTE: See Harvest Radiant Tech Specs for full plumbing schedule

See links for the:

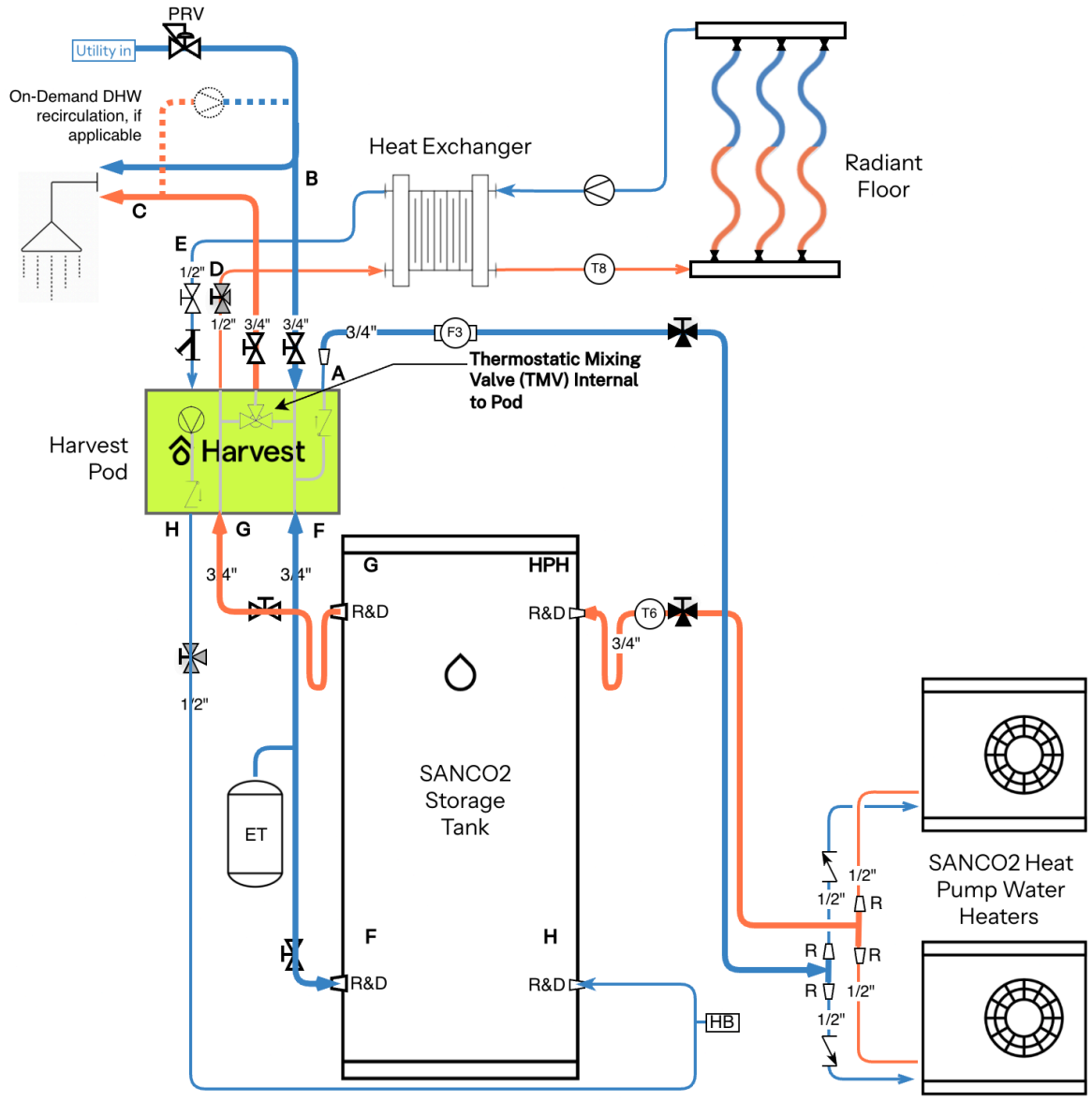
Plumbing Connections for the CO2 HPWH

Plumbing Connections for the Tank

Plumbing Connections for the Harvest Pod

Plumbing Connections for the Radiant Heat Exchanger

Twin SANCO2 Plumbing Diagram



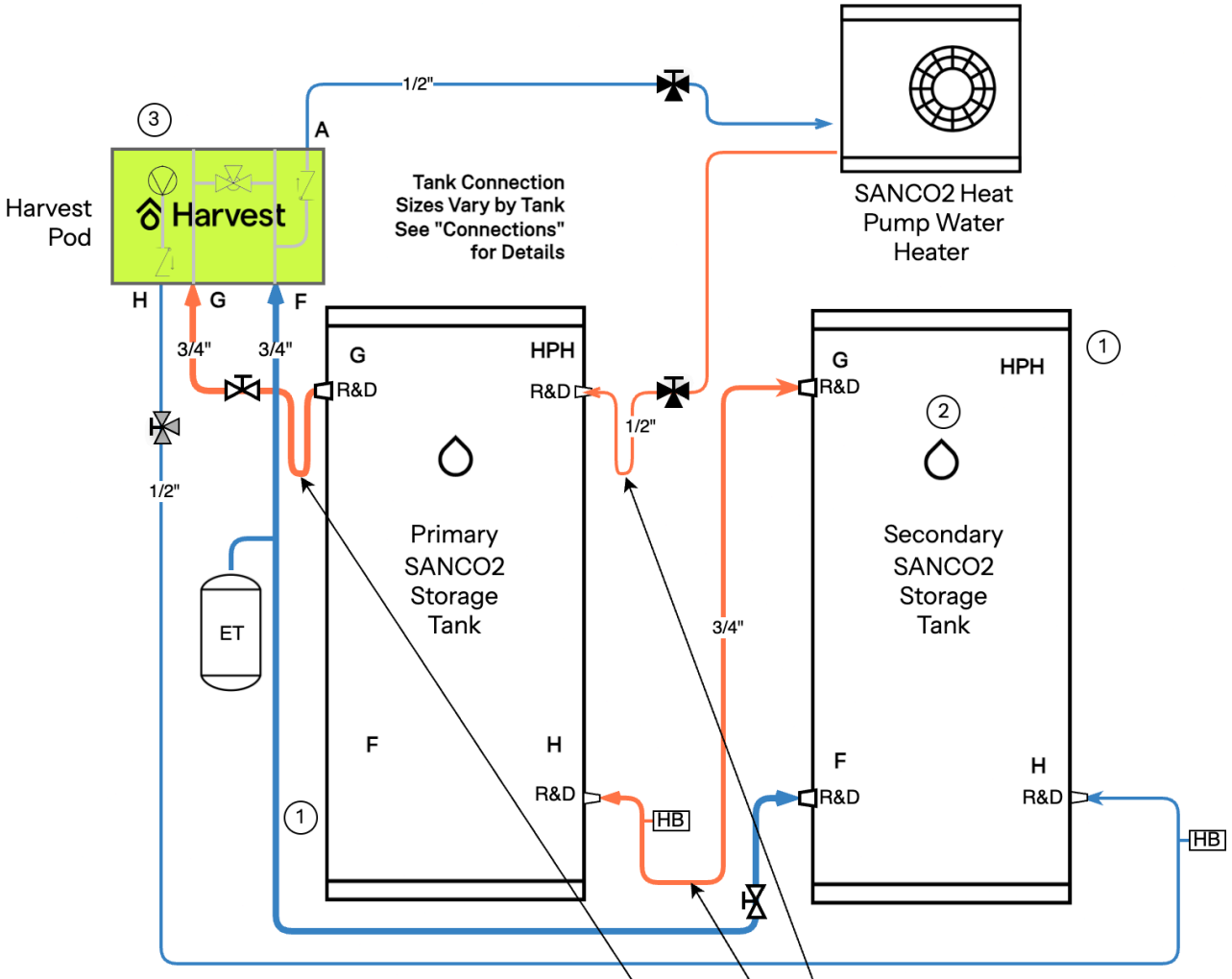
Legend					
	1/2" Ball Valve	R&D	Reducer and Dielectric Union		Supply Piping
	3/4" Ball Valve	R	Reducer		Return Piping
	Harvest 1/2" Service Valve with drain **(provided)**	ET	Expansion Tank	F3	F3 Flow Meter **(provided)**
	SANCO2 1/2" Service Valve with drain	HB	Hose Bibb		1/2" Swing Check Valve **(provided)**
PRV	Pressure Regulating Valve		Y Strainer **(provided)**	T8	T8 Temperature Sensor **(provided)**

A Twin HPWH system changes the plumbing only around the heat pumps.

- **Calculate line effective length:** add up the length of 1⁄2" and 3⁄4" pipe from heat pump to Pod/heat pumps, and add 1⁄2 ft per short-radius elbow (large-radius elbows don't count): this should be **60' or less**. *L_Effective(ft) = L_3/4 + 0.5 * (qty 3⁄4" elbows) + L_1/2 + 0.5 * (qty 1⁄2" elbows)*
- The effective lengths for each heat pump should be maintained within 10% of each other.
- Install *swing* check valves on cold side of each 1⁄2" heat pump line
- Install flow meter near pod connection A (on HP cold line) on the common 3⁄4" line, oriented to measure flow out of the pod.
- Install thermistor T6 on the common heat pump hot line
    - Attach thermistor to pipe using foam tape or tie down with zip tie
    - Insulate the thermistor generously to ensure it is not affected by air temperature

Double-Tank Plumbing Diagram

> **Caution**
>
> WARNING: Failure to minimize fittings and bends of the “bridge pipe” between the primary and secondary tank may significantly impact system performance.
>
> It is **HIGHLY** recommended to use either a single piece of 3/4” PEX, or 3/4” copper with a long radius elbows to minimize the pressure drop along this bridge pipe.

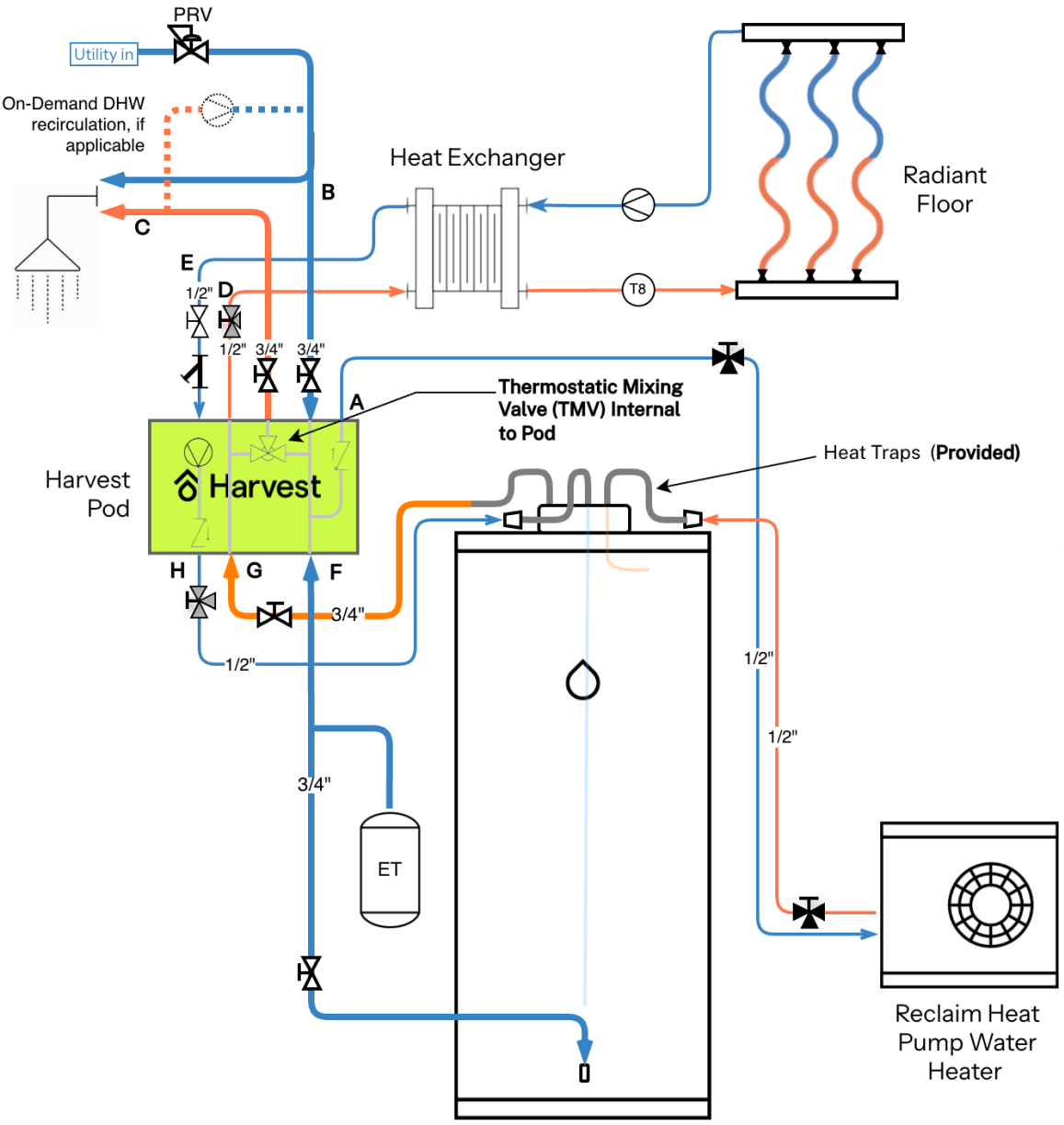


Notes:

1. Cap unused tank connection
2. No TPV valve is needed on the secondary tank if no valves are placed on the bridge pipe between H of the primary tank and G on the secondary tank
3. Heating loop, utility in, and DHW plumbing not shown for clarity. Refer to overall plumbing diagram

Legend					
	1/2" Ball Valve	R&D	Reducer and Dielectric Union		Supply Piping
	3/4" Ball Valve	R	Reducer		Return Piping
	Harvest 1/2" Service Valve with drain **(provided)**	ET	Expansion Tank		
	SANCO2 1/2" Service Valve with drain	HB	Hose Bibb		
PRV	Pressure Regulating Valve				

Single Reclaim Plumbing Diagram



Legend					
	1/2" Ball Valve			Supply Piping	
	3/4" Ball Valve	R	Reducer	Return Piping	
	Harvest 1/2" Service Valve with drain **(provided)**	ET	Expansion Tank		
	SANCO2 1/2" Service Valve with drain		Heat Trap **(provided)**		
PRV	Pressure Regulating Valve		Y Strainer **(provided)**	T8	T8 Temperature Sensor **(provided)**

Note

Only Harvest-provided fittings and 3rd party circulation pump are shown on the radiant floor loop. Follow best practices for remaining plumbing and fittings for the radiant floor loop.

Caution

Only install additional plumbing features, such as DHW recirculation pumps, on plumbing lines B and C.

Caution

WARNING: Maximum incoming pressure not to exceed 75 PSI with pressure reducing valve.

Caution

WARNING: Be sure to include all valves, meters, sensors and heat traps shown in the drawings in this manual. The system will not operate properly without these, and in some cases, may not operate safely.

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WARNING: Before performing any plumbing work, ensure the Pod is completely powered off and the front cover is securely in place. Failure to do so may result in water damage to the Pod's electronics, which is **not covered under warranty.**

Note

NOTE: See Harvest Radiant Tech Specs for full plumbing schedule

See links for the:

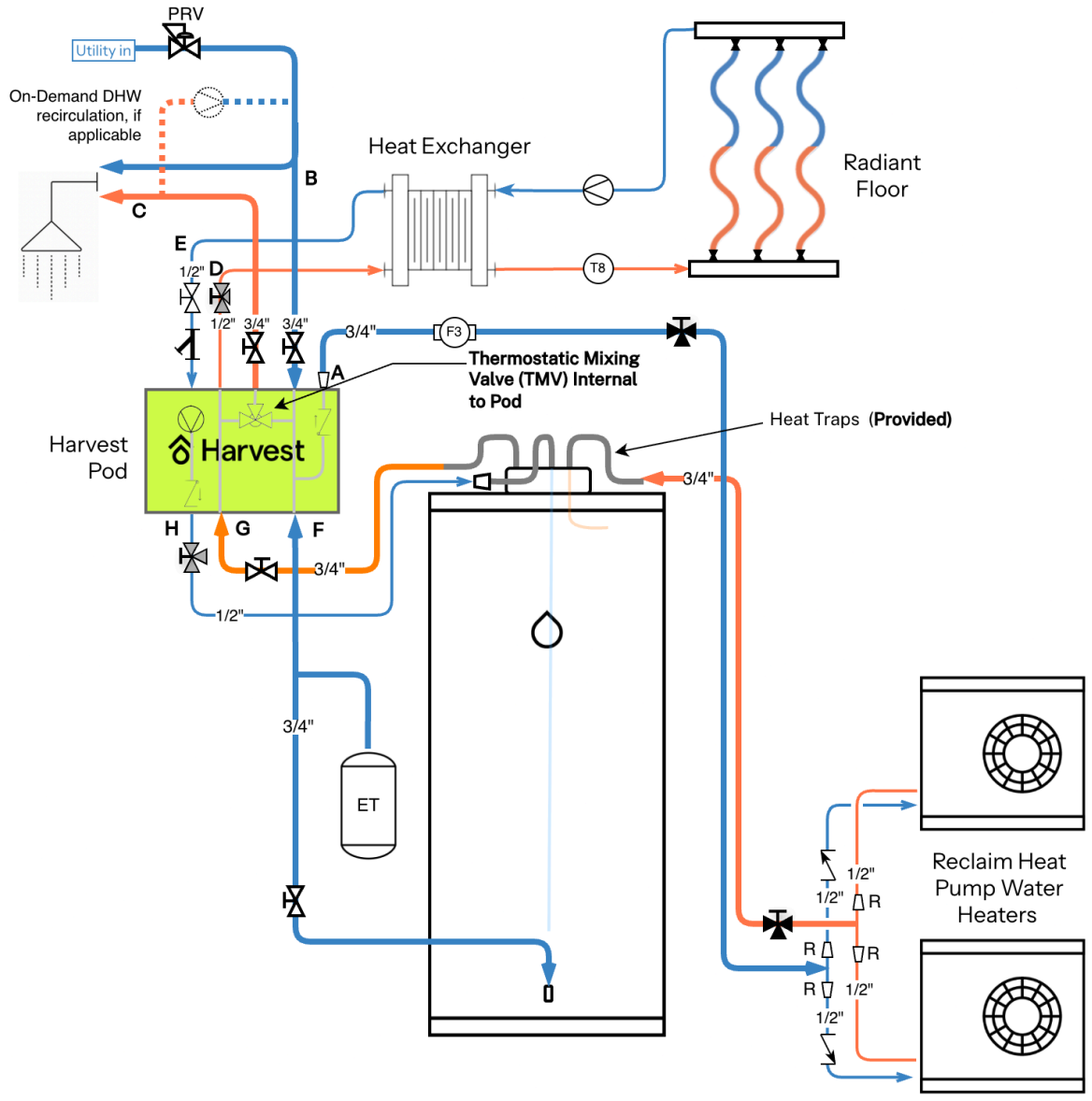
Plumbing Connections for the CO2 HPWH

Plumbing Connections for the Tank

Plumbing Connections for the Harvest Pod

Plumbing Connections for the Radiant Heat Exchanger

Twin Reclaim Plumbing Diagram

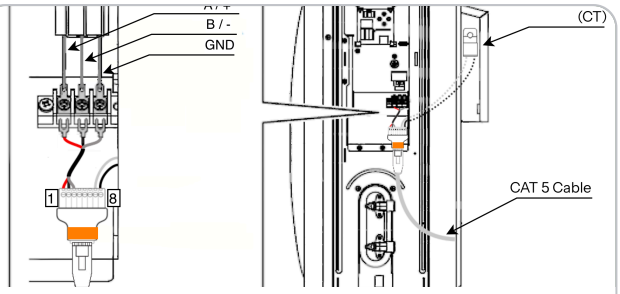


Legend					
	1/2" Ball Valve			Supply Piping	
	3/4" Ball Valve	R	Reducer	Return Piping	
	Harvest 1/2" Service Valve with drain **(provided)**	ET	Expansion Tank	F3	F3 Flow Meter **(provided)**
	SANCO2 1/2" Service Valve with drain		Heat Trap **(provided)**		1/2" Swing Check Valve **(provided)**
PRV	Pressure Regulating Valve		Y Strainer **(provided)**	T8	T8 Temperature Sensor **(provided)**

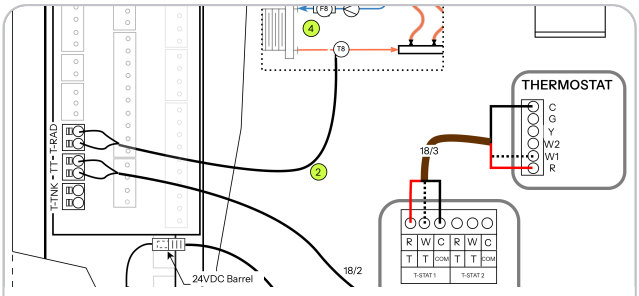
A Twin HPWH system changes the plumbing only around the heat pumps.

- **Calculate line effective length:** add up the length of 1/2" and 3/4" pipe from heat pump to Pod/heat pumps, and add 1/2 ft per short-radius elbow (large-radius elbows don't count): this should be **60' or less**. *L_Effective(ft) = L_3/4 + 0.5 * (qty 3/4" elbows) + L_1/2 + 0.5 * (qty 1/2" elbows)*
- The effective lengths for each heat pump should be maintained within 10% of each other.
- Install *swing* check valves on cold side of each 1/2" heat pump line
- Install flow meter near pod connection A (on HP cold line) on the common 3/4" line, oriented to measure flow out of the pod.
- Install thermistor T6 on the common heat pump hot line
    - Attach thermistor to pipe using foam tape or tie down with zip tie
    - Insulate the thermistor generously to ensure it is not affected by air temperature

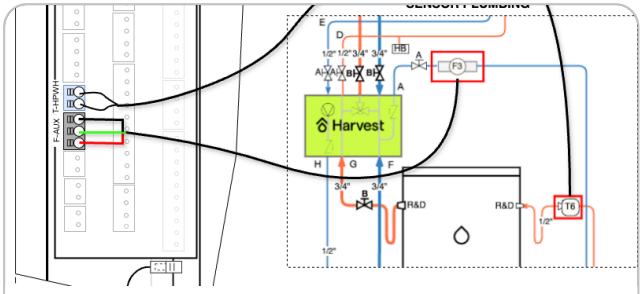
Low Voltage Wiring and Sensors



CO2 HPWH Low Voltage Wiring



Pod Low Voltage Wiring



Twin CO2 HPWH Additional Sensor Wiring

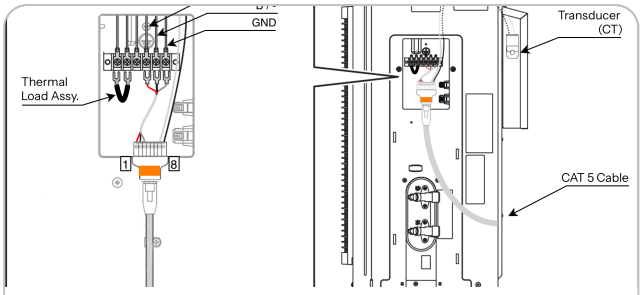
CO2 HPWH Low Voltage Wiring

> **Note**
>
> The Harvest Install kit includes a wiring harness to connect the Cat5 cable from the Pod to the CO2 Heat Pump Water Heater (HPWH).

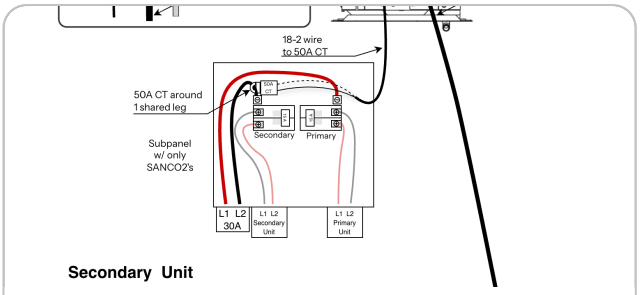
> **Caution**
>
> WARNING: Failure to properly purge air from the CO2 HPWH may cause the circulation pump inside the heat pump to run dry, operate improperly, or sustain damage. Improper air removal can also result in unstable water temperatures during operation.

Two communication protocols can be used to control the CO2 HPWH.

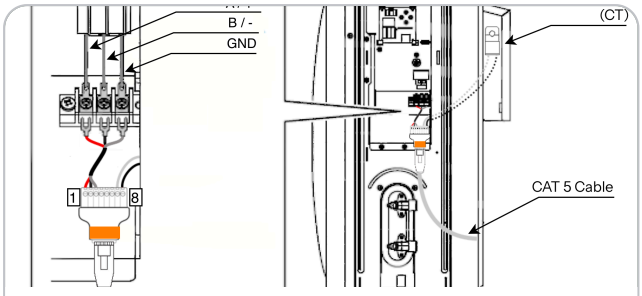
- **Modbus** communication with the CO2 HPWH is specific to **HarvestPods with S/N 1900 and above**
- The **legacy protocol is a dry-contact**-based communication, specific to **SANCO2 HPWHs** and must be used for **HarvestPods with S/N 1200–1899**



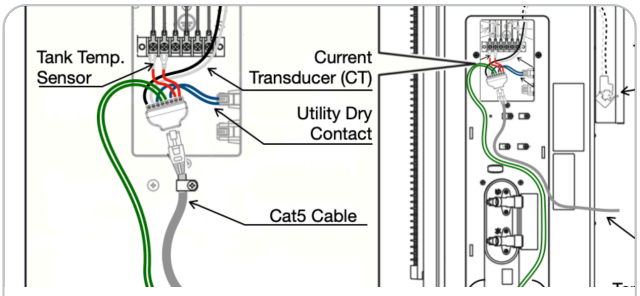
Modbus: Single SANCO2 CO2 HPWH wiring



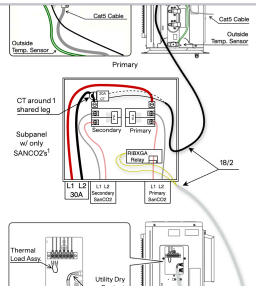
Modbus: Twin SANCO2 CO2 HPWH wiring



Modbus: Single Reclaim CO2 HPWH wiring



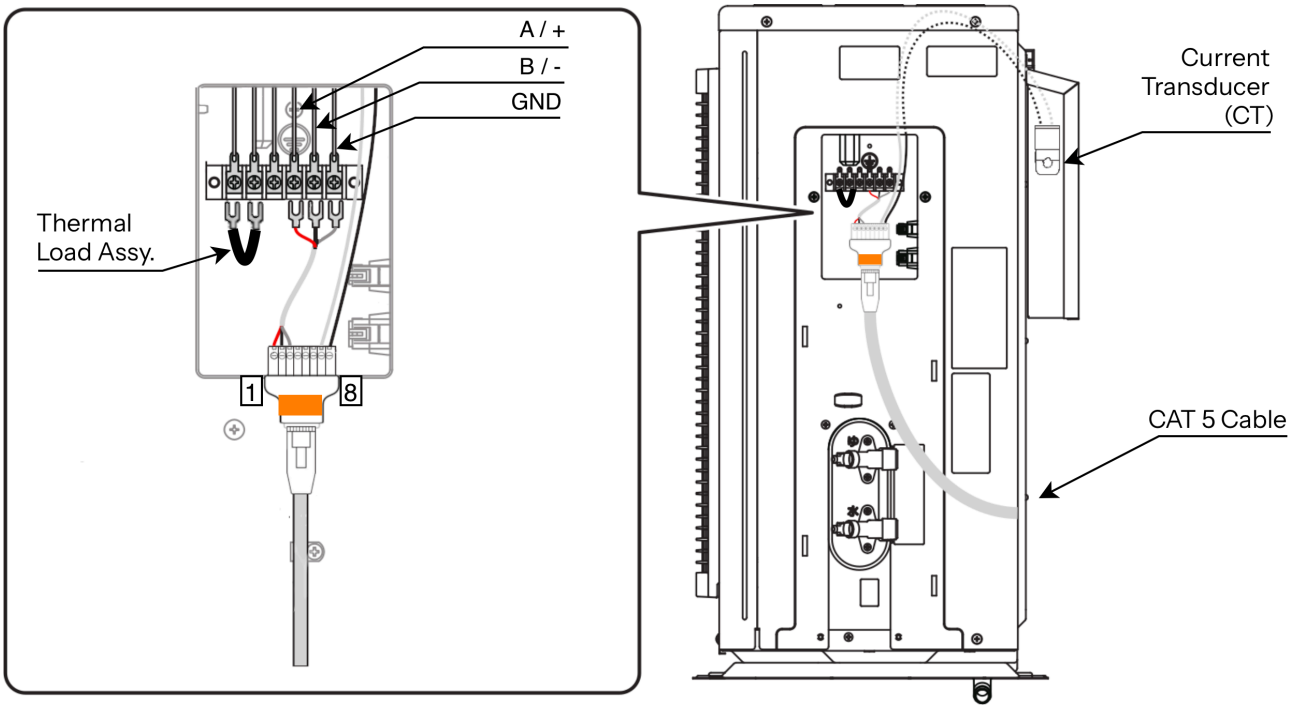
Legacy: Single SANCO2 CO2 HPWH wiring



Legacy: Twin SANCO2 CO2 HPWH wiring

Modbus: Single SANCO2 CO2 HPWH wiring

Harvest wiring harness connections inside the signal box of the Modbus CO2 HPWH



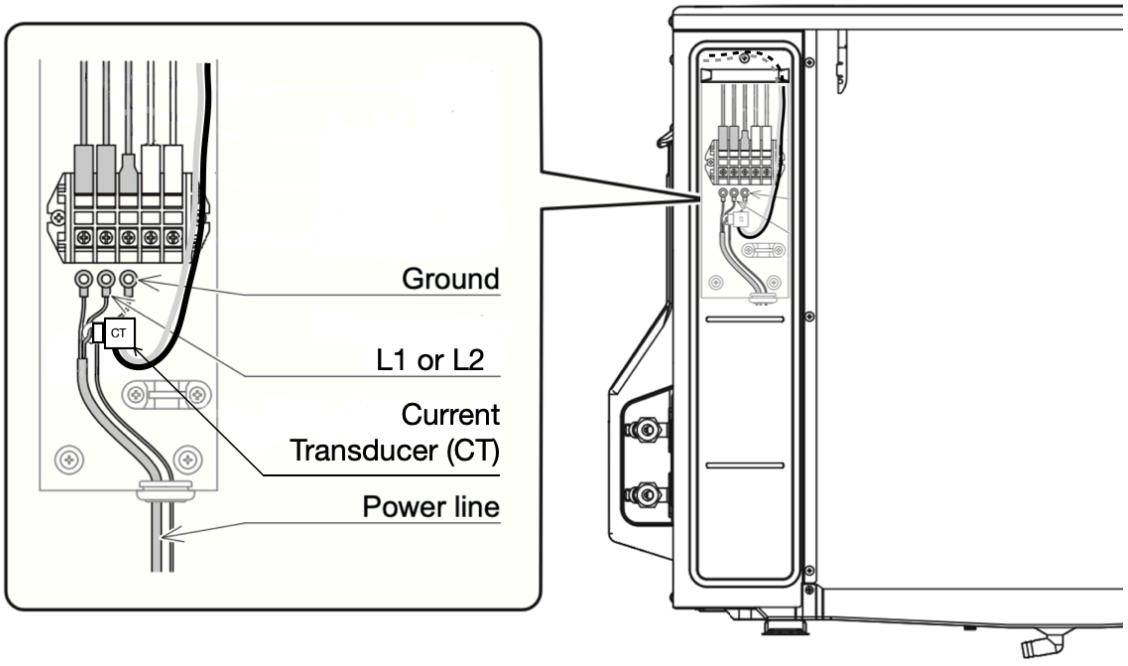
Modbus Wiring:

- **Red** → A / +
- **Black** → B / -
- **Bare wire** → GND
- Install the **BLACK** thermal load assembly on the left-most terminals.

Current Transducer inside the power box

The current transducer is clipped around **either** the L1 or L2 power line. The CT leads can be threaded through the inside of the CO2 HPWH to enter the signal box, and reconnected to the wiring harness.

> **Note**
>
> The polarity of the CT leads matters. The **black** CT lead connects to **pin 8** of the wiring harness.



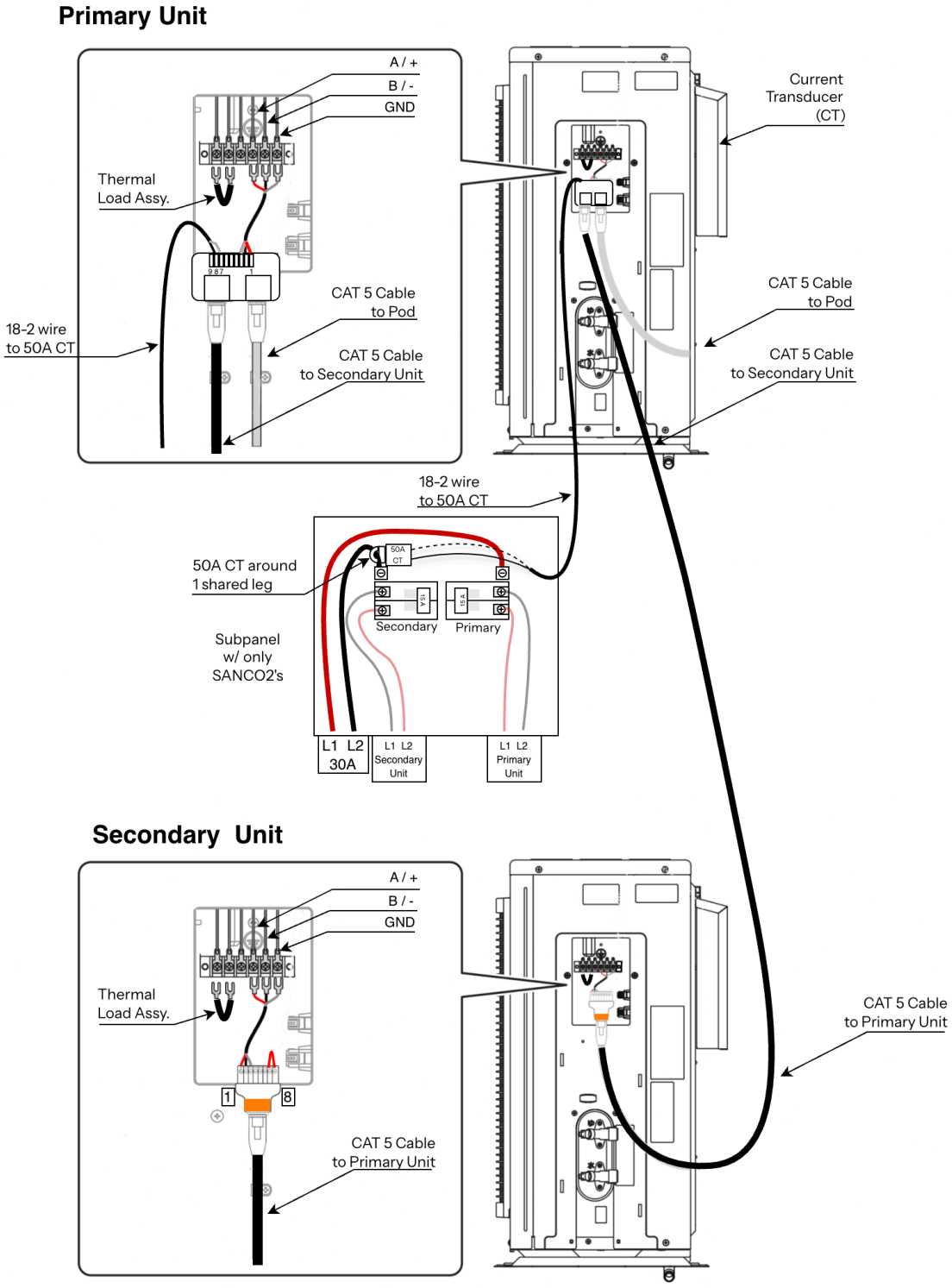
Background Source: SANCO2 GS4 Installation Manual

Note

NOTE: see Powering the SANCO2 documentation for high voltage wiring.

Modbus: Twin SANCO2 CO2 HPWH wiring

A twin installation uses two SANCO2 CO2 HPWH units on a single Modbus connection to the Pod. Wire each unit's signal box the same way as a single unit, daisy-chain the two units together with CAT 5, and use one shared 50 A current transducer.



Twin SANCO2 Modbus wiring.

> **Caution**
>
> Give each unit a **unique Modbus address** on its control panel (see Hydronic System Start-Up): set the **primary unit to ID 1** and the **secondary unit to ID 2**.

Signal box wiring — both units

Wire the signal box of **both** the primary and secondary units the same as the Modbus: Single SANCO2 CO2 HPWH wiring setup:

- **Red** → A / +
- **Black** → B / -
- **Bare wire** → GND
- Install the **BLACK** thermal load assembly on the left-most terminals.

Modbus daisy-chain

Chain the two units on the Modbus bus with CAT 5 cable:

- **Pod → Primary unit**
- **Primary unit → Secondary unit**

Current transducer — one shared 50 A CT

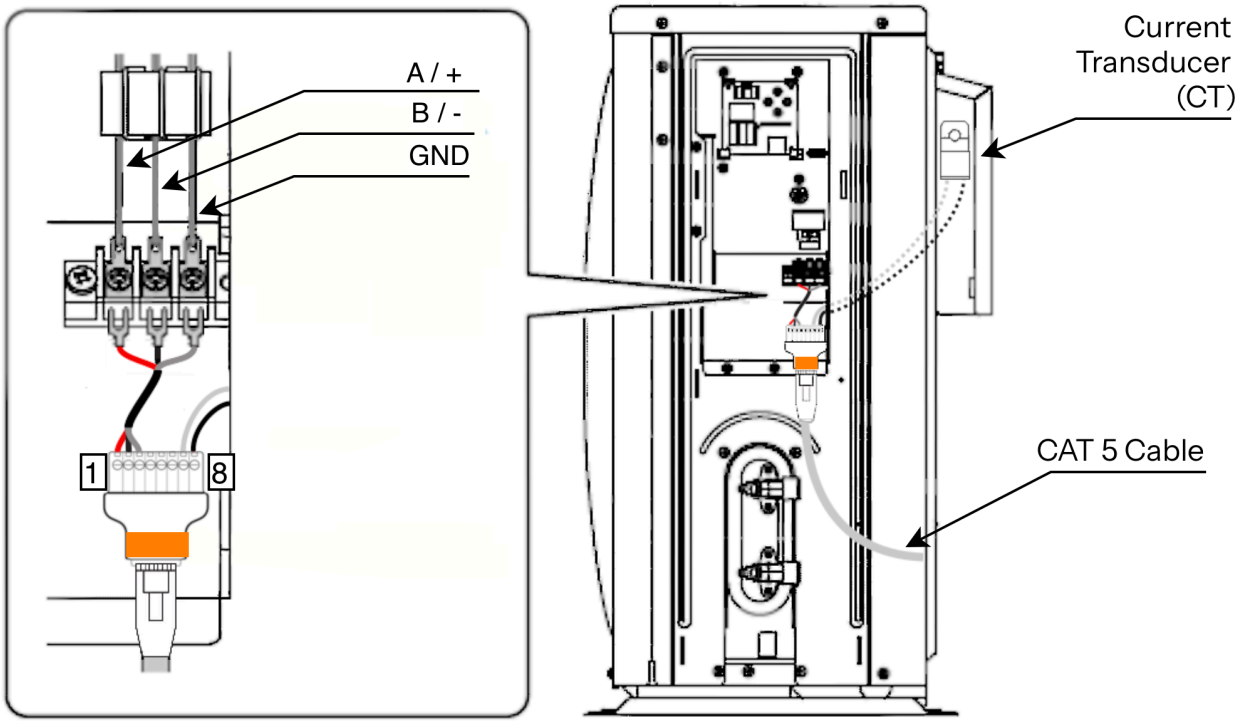
A twin install uses a **single 50 A CT**, not one per unit. In the subpanel that feeds the two SANCO2 units:

- Clamp the 50 A CT around **one shared power leg** (the common leg feeding both 15 A unit breakers off the 30 A supply).
- Run the CT leads to the **primary** unit with 18-2 wire. The **black** CT lead connects to **pin 8** of the primary unit's wiring harness.

> **Note**
>
> NOTE: see Powering the SANCO2 documentation for high voltage wiring.

Modbus: Single Reclaim CO2 HPWH wiring

Harvest wiring harness connections inside the signal box of the Modbus CO2 HPWH



Modbus Wiring:

- **Red** → A / +
- **Black** → B / -
- **Bare wire** → GND

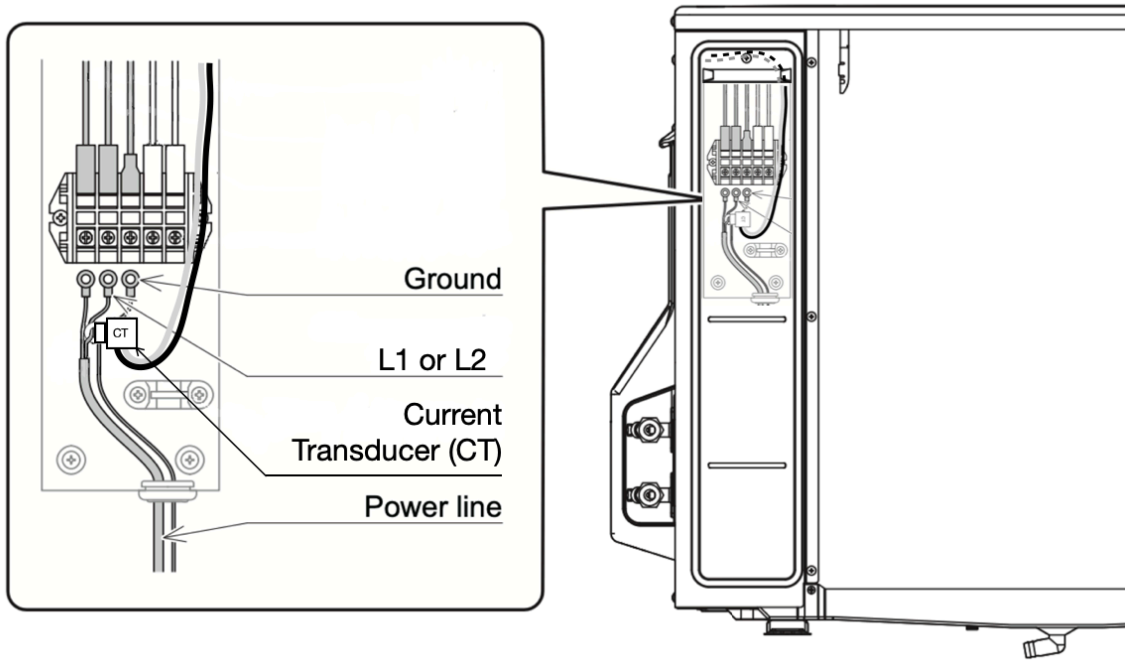
> **Note**
>
> NOTE: The **BLACK** thermal load assembly that you may have in the kit is **NOT** used for the Reclaim heat pump.

Current Transducer inside the power box

The current transducer is clipped around **either** the L1 or L2 power line. The CT leads can be threaded through the inside of the CO2 HPWH to enter the signal box, and reconnected to the

wiring harness.

> **Note**
>
> The polarity of the CT leads matters. The **black** CT lead connects to **pin 8** of the wiring harness.

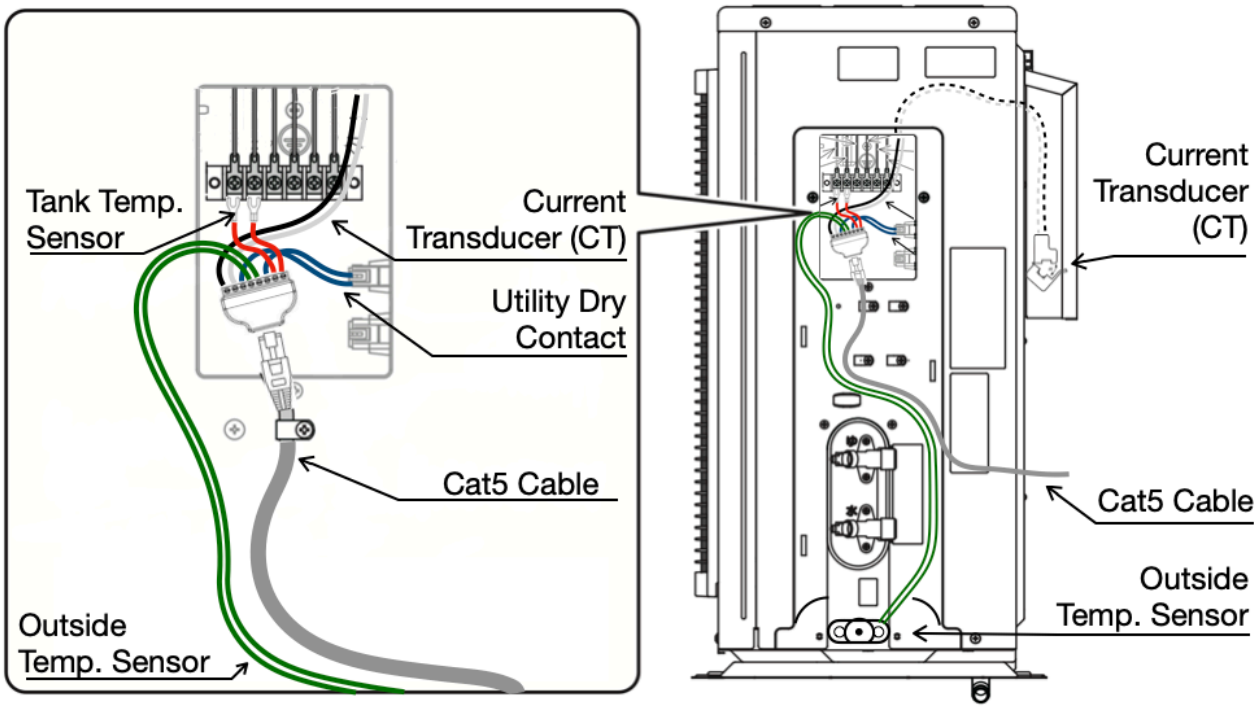


Background Source: SANCO2 GS4 Installation Manual

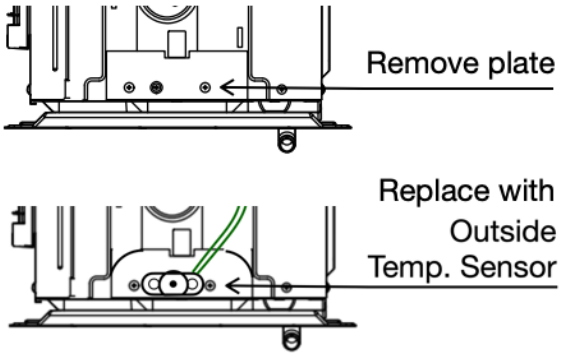
> **Note**
>
> NOTE: see Powering the Reclaim documentation for high voltage wiring.

Legacy: Single SANCO2 CO2 HPWH wiring

Harvest wiring harness connections inside the signal box of the SANCO2



Replace the existing plate directly below the plumbing fixtures of the SANCO2 heat pump with the Outdoor Temperature Sensor plate that comes connected to the wiring harness.



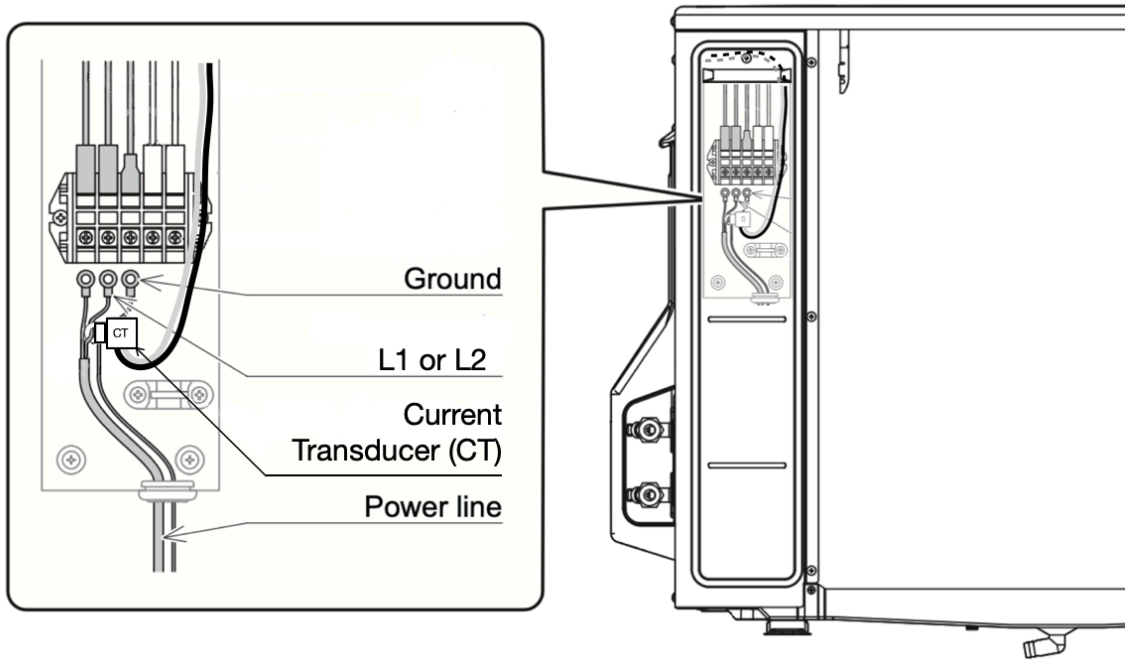
SANCO2 Gen5

Current Transducer inside the power box

The current transducer is clipped around **either** the L1 or L2 power line. The CT leads can be threaded through the inside of the SANCO2 to enter the signal box, and reconnected to the

wiring harness.

> **Note**
>
> The polarity of the CT leads matters. The **black** CT lead connects to **pin 8** of the wiring harness.



Background Source: SANCO2 GS4 Installation Manual

> **Note**
>
> NOTE: see Powering the SANCO2 documentation for high voltage wiring.

Legacy: Twin SANCO2 CO2 HPWH wiring

Harvest wiring harness connections inside the signal box of the primary SANCO2 heat pump

Follow the diagram for the Modbus: Single CO2 HPWH wiring setup, except for the 20 A CT.

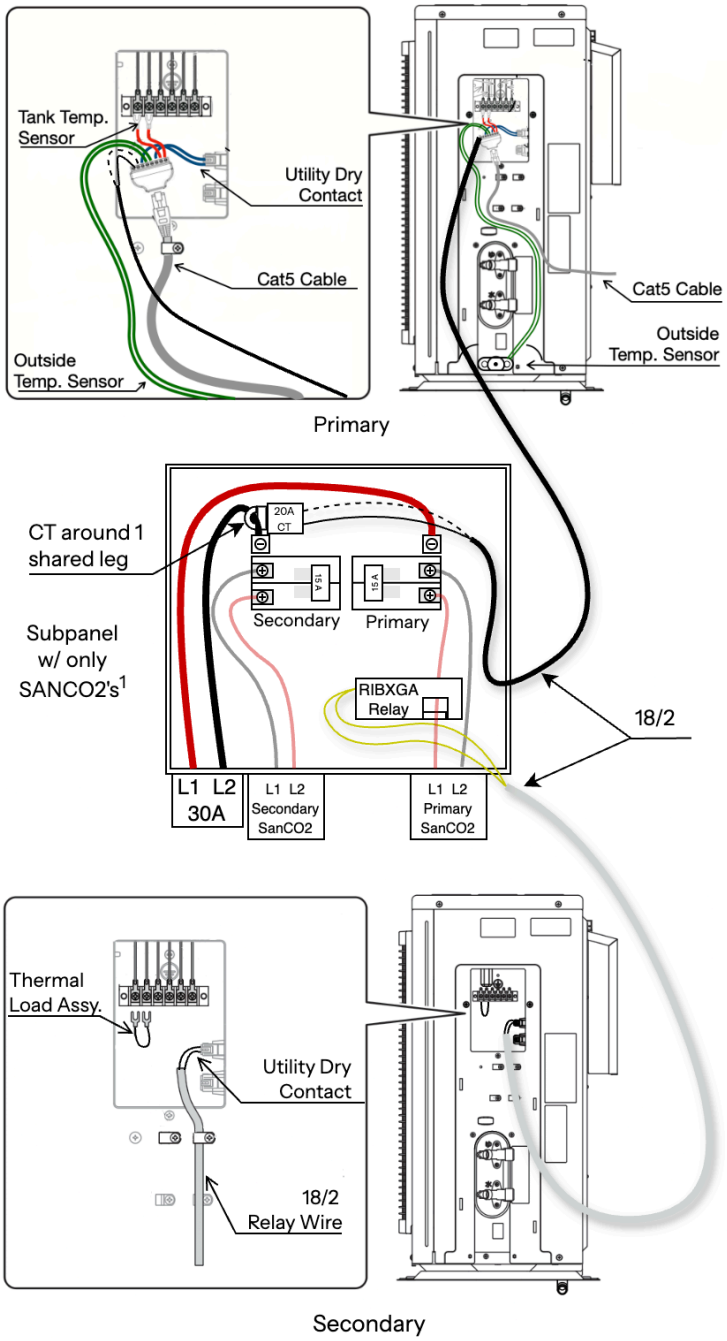
Current Transducer inside the electrical subpanel box

1. Install the 20A CT on either the L1 or L2 incoming 30A power wires within the subpanel. This will require extending the length of the CT wires which can be done with 18/2 thermostat wire.

2. Install current sensing switch (RIBXGA Relay) within electrical subpanel on **one** 15A power wire powering the primary SANCO2 heat pump.

3. Cut the dry contact loop (white wire) inside the signal box of the secondary heat pump, and connect up to the current sensing switch. This will require extending the length of the current sensing switch, which can be done with 18/2 thermostat wire.

4. Connect the thermistor load assembly (7.5k ohm resistor) to the “temperature” terminals within the secondary SANCO2’s signal box.



Notes:

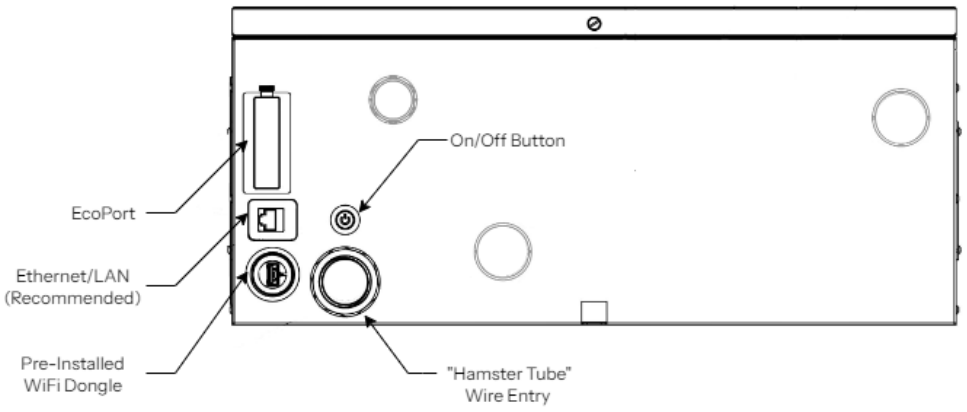
1. SANCO2 power wires to SANCO2's not shown for clarity. Refer to "Powering the SANCO2".

Pod Low Voltage Wiring

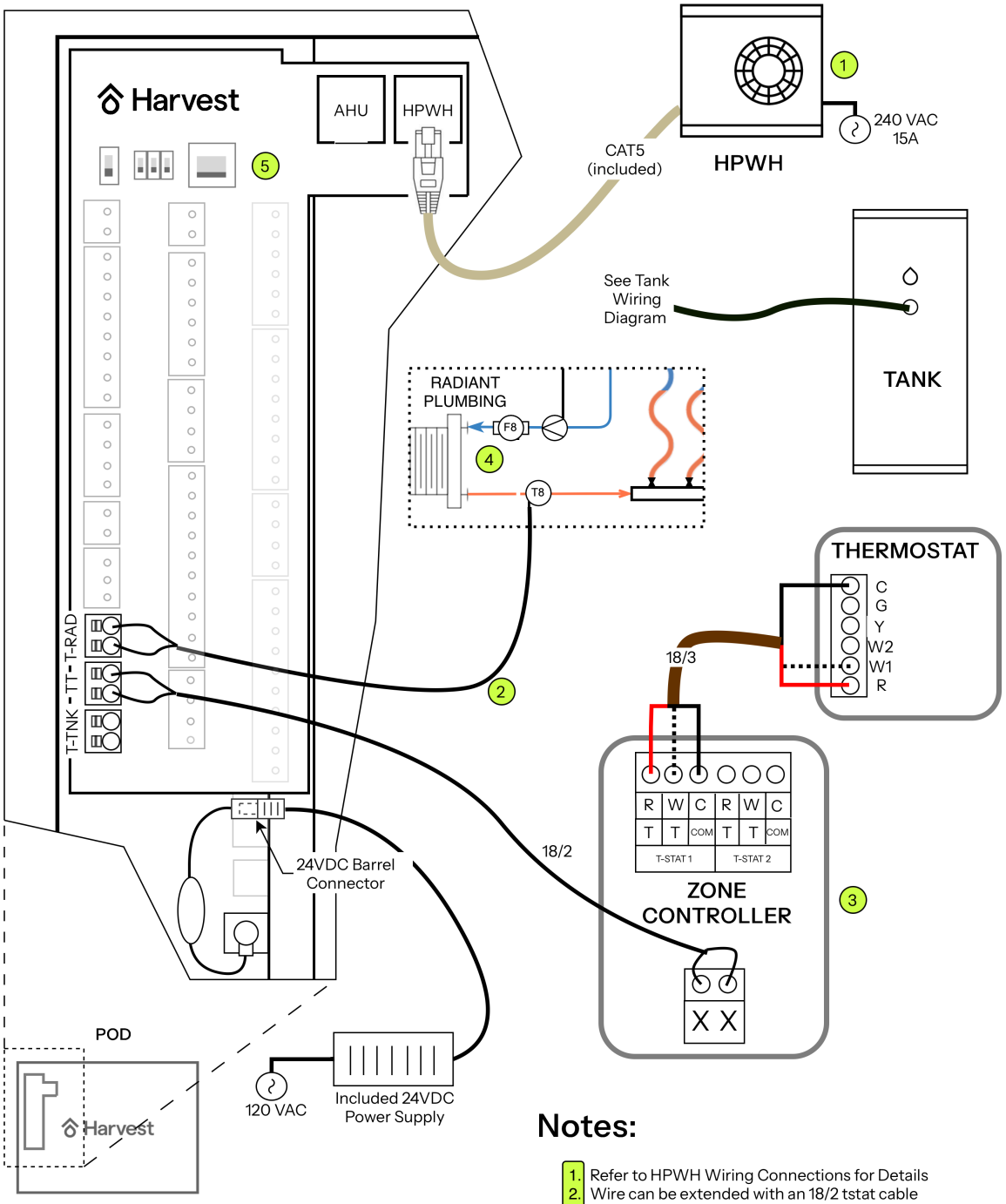
> **Caution**
>
> WARNING: Do not power the Harvest Pod or 3rd Party Air Handler until all wiring is complete and correct. Wiring Harvest Pod incorrectly may damage the Pod.

1. Remove the thumb screws at the bottom and top of the pod to remove the front panel of the Pod and access the wiring connections.

2. To make internal wiring connections, push wires through the “hamster tube” from underside of the pod.



3. Wire the Pod according to the following diagram:



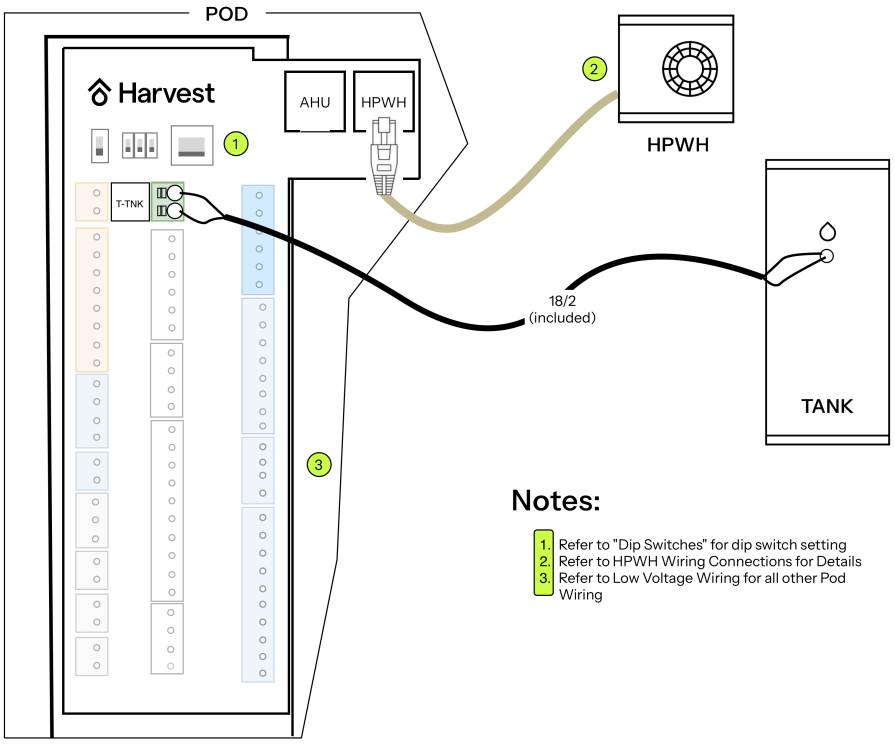
Notes:

1. Refer to HPWH Wiring Connections for Details
2. Wire can be extended with an 18/2 tstat cable
3. Zone controller wiring to secondary pump not shown. Follow manufacturer's guidelines
4. F8 is a visual flow meter
5. Refer to "Dip Switches" for dip switch configuration

Tank Wiring

SanCO2 Tank Wiring

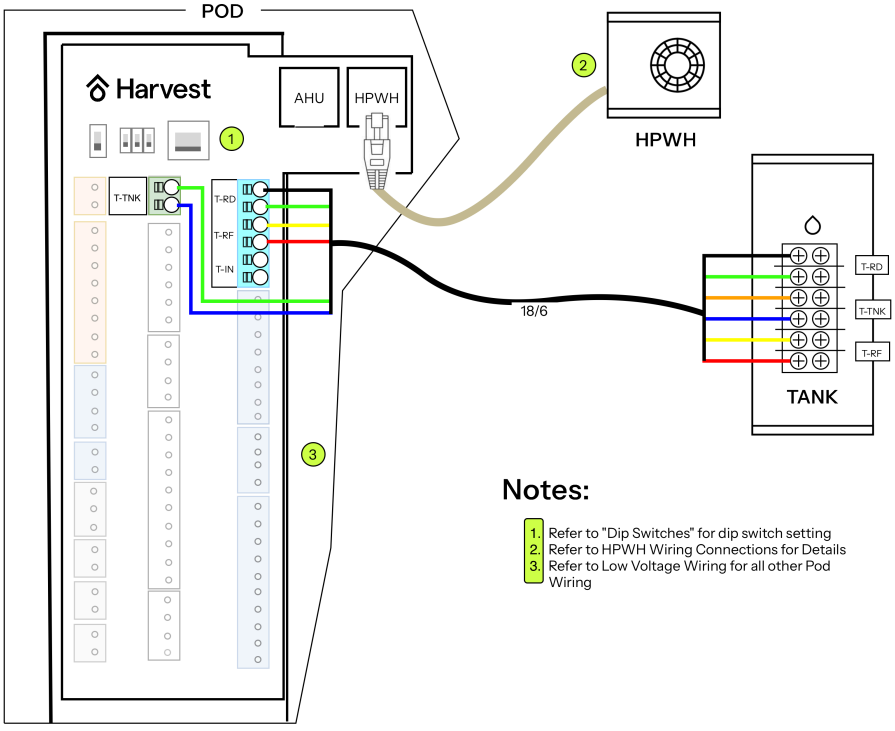
Open System



SANCO2 Tank

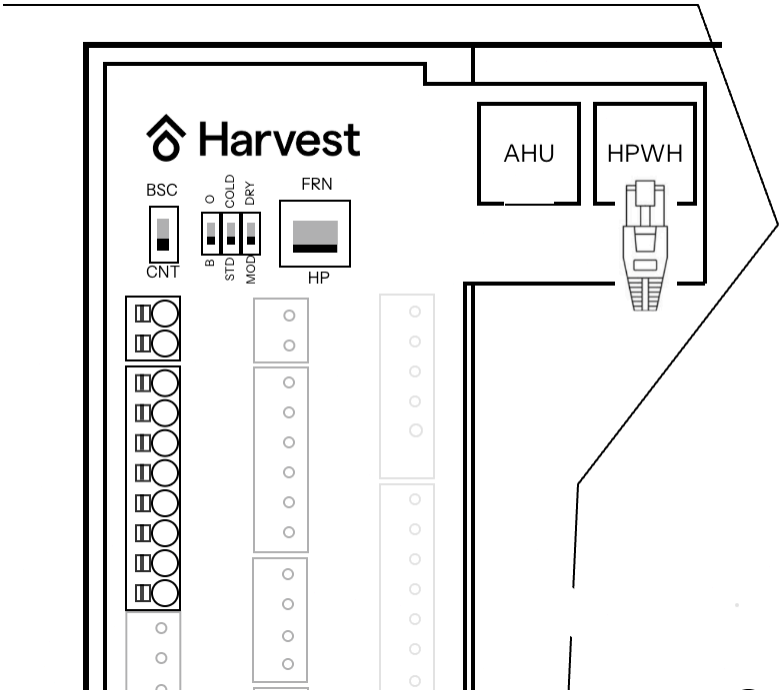
Reclaim Tank Wiring

Open System



Reclaim Tank

Dip Switches



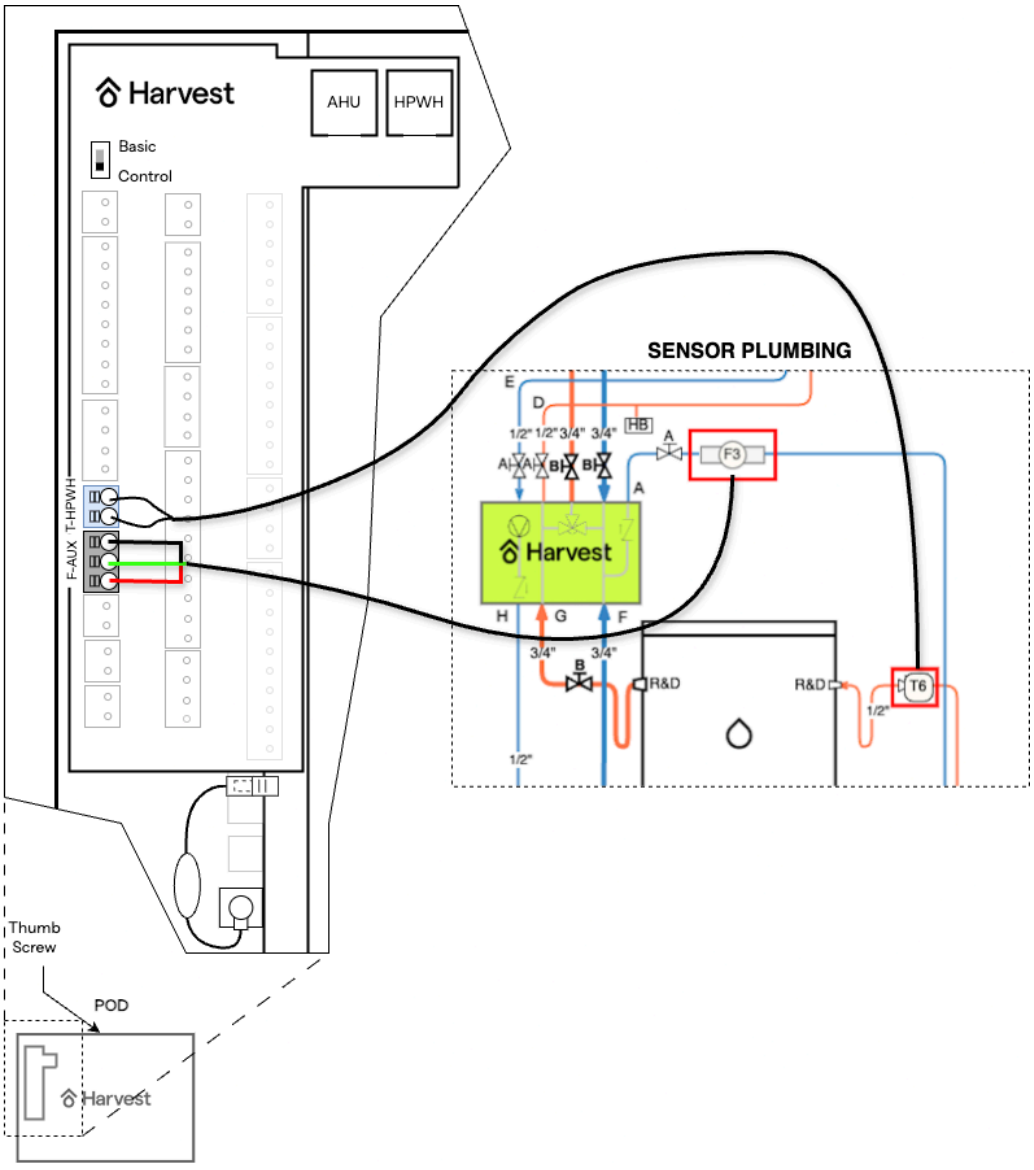
- CNT/BSC switch: CNT (Control) enables smart thermal battery functionality. BSC (Basic) enables DHW and limited heating with no smart thermal battery functionality. Basic can provide service continuity in case of controller issues until those issues are fixed.
- O/B switch: Set is not used in this configuration
- STD/COLD switch: Set to STD unless you are in a climate with a heating design temperature below 20F.
- MOD/DRY switch: Set to MOD for modbus control of the heat pump unless you are using the legacy dry-contact method for SANCO2 HPWHs.
- FRN/HP switch: This switch is not used in this configuration

Twin CO2 HPWH Additional Sensor Wiring

> **Note**
>
> A Twin-HPWH install kit is required for installation

Directly measuring the heat output of the combined heat pumps enables better control of the state of charge of the thermal battery.

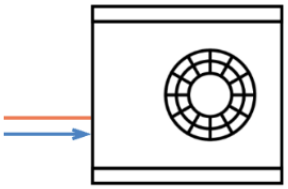
Install and wire the flow meter (F3) and the temperature sensor (F6), provided as part of the kit, as shown in the figure below.



> **Caution**
>
> The flow meter has a flow direction marked. It should point towards the CO2 HPWH.

> **Note**
>
> Use tstat wire (18/x) to extend the thermistor or flow meter wires if needed

Start Up



Hydronic System Start Up

Thermal Battery System Start Up

Hydronic System Start Up

Domestic Hot Water

1. Ensure all plumbing and wiring involving the CO2 HPWH and the Pod are correct and complete.

2. Fill the tank by opening valves on lines B and F (see Plumbing System Diagram).

3. Open PRV to allow air to exit the system. Leave open until water comes out of the relief valve.

4. Open the remaining valves (see Plumbing System Diagram).

5. Open the hot water faucets to bleed air from the house piping system. Close the hot water faucets after no air is seen in the water.

6. Open the three water bleed valves on the CO2 HPWH. Two are on the water connections, and the third is underneath the heat pump. Close the bleed valves after no air is seen in the water.

> **Caution**
>
> WARNING: Failure to properly purge air from the CO2 HPWH may cause the circulation pump inside the heat pump to run dry, operate improperly, or sustain damage. Improper air removal can also result in unstable water temperatures during operation.

7 Power the CO2 HPWH outdoor unit.

Upon powering on, a SANCO2 CO2 HPWH undergoes an automatic 5-minute air bleed cycle, displays “12:00” on the screen, and begins to run. The 5-minute air bleed cycle on a Reclaim CO2 HPWH is started via the Harvest App.

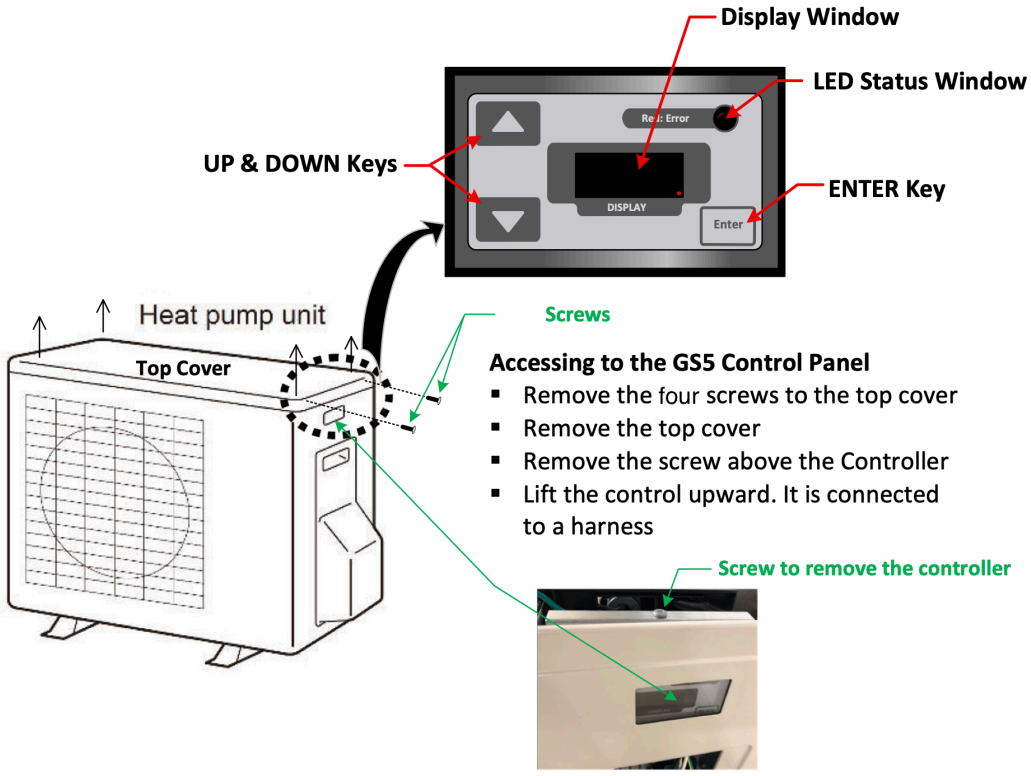
Next, set up communication between the CO2 HPWH and the Pod for the connection type used in your wiring:

Dry-contact (legacy) connection

No additional programming is required on the heat pump.

Modbus connection

Program the Modbus communication settings on the SANCO2 GS5 control panel. Remove the top cover and lift out the controller to reach the keypad (see figure), then:



SANCO2 GS5 control panel and how to access it.

1. Press and hold the **Up** and **Down** keys together to enter Commissioning mode.
2. Use the **Up** and **Down** keys to find the Communication Setting Mode **[C_SE]** and press **ENTER**.
3. Use the **Up**/**Down** keys to toggle between **Modbus Off** and **Modbus On**, then press **ENTER** to confirm your choice.

4. Use the **Up** and **Down** keys to find the Modbus ID Setting Mode **[id]** and press **ENTER**.
5. Use the **Up**/**Down** keys to set the Modbus ID to **1** and press **ENTER** to confirm the value.
6. Hold the **ENTER** key for 10 seconds to exit Commissioning mode.

> **Tip**
>
> At this point, hot water will accumulate in the tank. It will take ~1 hour for the hot water tank to accumulate enough hot water for domestic hot water service to be usable.

Radiant Heat Exchanger

For the heat exchanger to operate, all air must be purged from the hydronic coil loop.

> **Note**
>
> NOTE: A check valve inside the Pod means that purging the hydronic coil plumbing loop at the highest point of the system will not be effective.

1. Close the shut-off valve at the tank on line H (see Plumbing System Diagram).

2. Open the Hose Bib (HB) drain on line H to purge the hydronic coil and circulation pump. Continue purging until no air more air bubbles are visible in the water.

3. Close the drain and **re-open** the shut-off valve on line H.

> **Caution**
>
> WARNING: Failure to properly purge air from the hydronic heating loop may cause the Harvest Pod circulation pump to run dry, operate improperly, or sustain damage.

Thermal Battery System Start Up

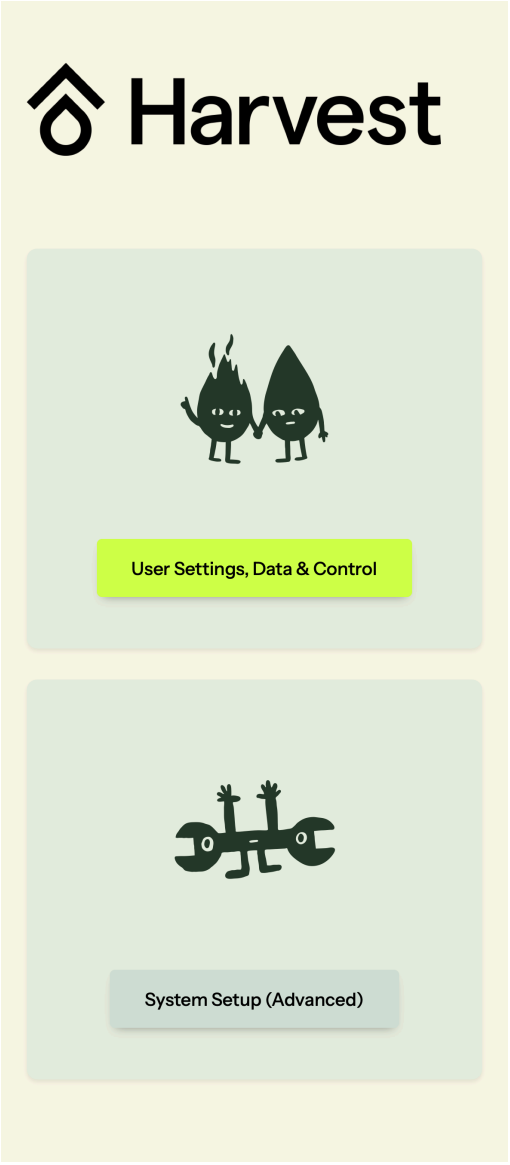
System Commissioning with the Harvest Tech App

1. Power on the Harvest Pod.

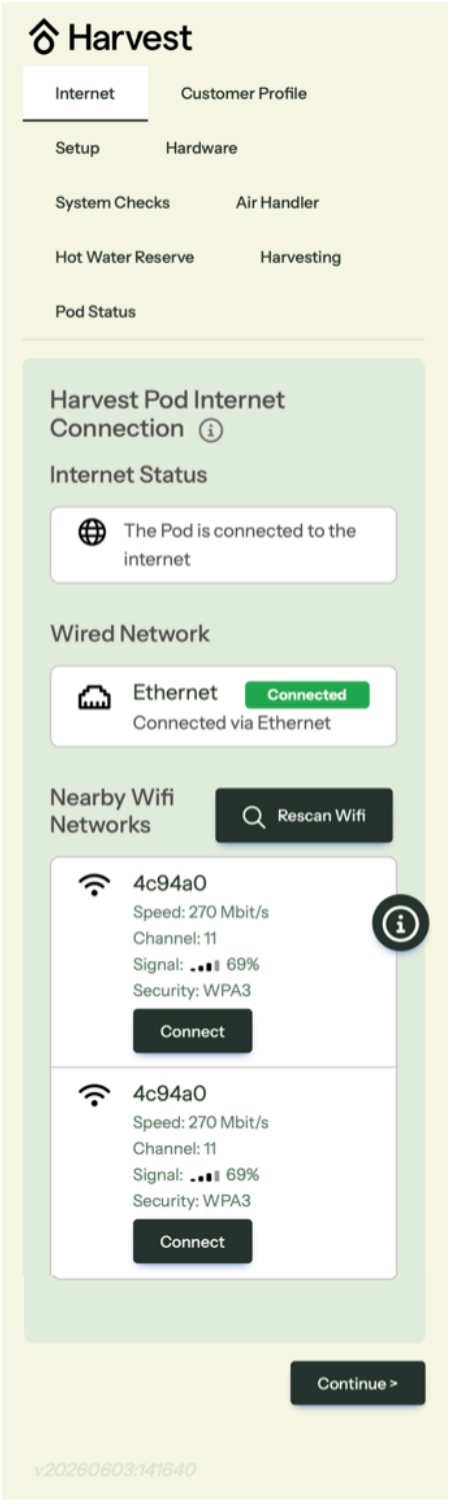
2. Connect your phone/tablet/laptop to the Harvest Pod's WiFi access point
    - The network name (HarvestPodXXXX) and password can be found on the label on the bottom of the Pod
    - Wait at least 5 minutes after powering the pod before attempting to access the Harvest Tech App.

3. Navigate to "http://harvestpodXXXX.local" using an internet browser, where "XXXX" is the same as the name of the network.

4 Select System Setup (Advanced)



5 Configure the Internet Connection, and look for a green “Connected” indicator:



6 Please follow the prompts through the rest of the Harvest App to test and commission the system.