




Arriva
by Coach House®

Section 5


**Plumbing / H.V.A.C
Systems**

Plumbing / H.V.A.C Systems

Furnace	.....	5-5
Suburban Furnace Manual	.....	5-7
Comfort Control System (Thermostat)	.....	5-9
Dometic Comfort Control System Manual	.....	5-11
Air Conditioner	.....	5-15
Dometic Air Conditioner Manual	.....	5-17
Fan-tastic Roof Vent Fan	.....	5-19
R.V. Toilet	.....	5-23
Thetford R.V. Toilet Manual	.....	5-25
Black and Gray Water Holding Tanks	.....	5-27
Black Water Holding Tank Flush System	.....	5-29
Black Water Backflow Preventer	.....	5-31
Tank Diagrams	.....	5-33
 PB 118 (<i>ARRIVA</i>)	.....	5-35

Furnace (L.P.G.)

Refer to the following chart for the location of your Furnace:

<u>Model</u>	<u>Placement</u>
 Arriva	In the Base of the Bed on the Driver's Side

The furnace is controlled by the comfort control center which also controls the air conditioning system. The furnace blower and automatic ignition are powered by the 12-volt DC system. The manufacturers operating instructions, enclosed in this section, should be reviewed before using the furnace. As with all L.P.G. appliances, all precautionary notes and labels should be carefully reviewed for maximum safety and comfort.



Insert Suburban 19,000 BTU Furnace Manual Here

Comfort Control System (Thermostat)

The Comfort Control System is located on the passenger side cabinet above the bed towards the rear of the motorhome. It will operate the Air Conditioner, Furnace, Heat Pump, Circulating Fan, and Speed. Read the operation instructions for optimum use.





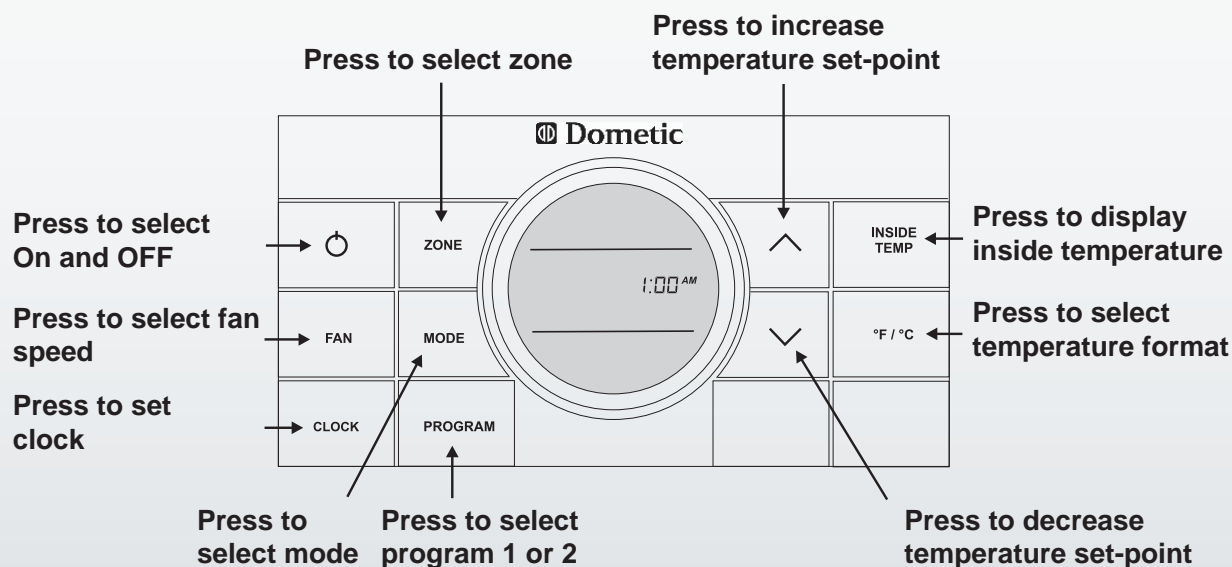
Comfort Control Center 2 Thermostat

User's Guide

Dometic Comfort Control Center 2 Thermostat Quick Start-Up

The basic steps for operating your Air Conditioner & Heat Pump (herein after referred to as the "unit"), are described in this User's Guide. For more detailed information on modes of operation and special features refer to the Operating Instructions Manual.

Quick reference to control buttons

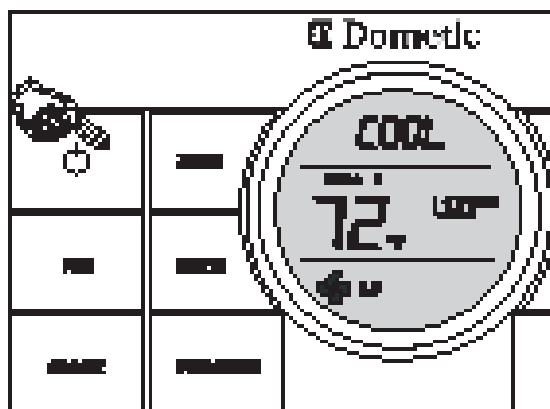


USA
SERVICE OFFICE
Dometic Corporation
2320 Industrial Parkway
Elkhart, IN 46516

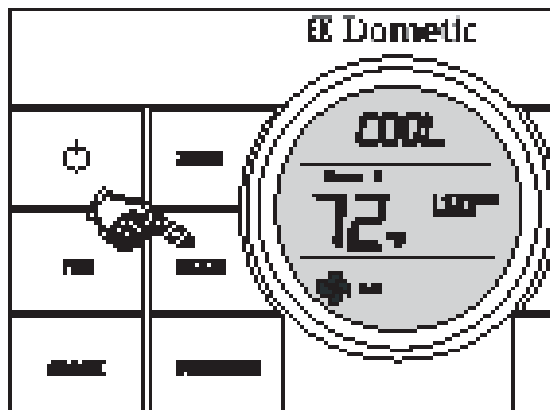
CANADA
Dometic Corporation
46 Zatonski, Unit 3
Brantford, ON N3T 5L8
CANADA

**For Service Center &
Dealer Locations
Please Visit:**
www.eDometic.com

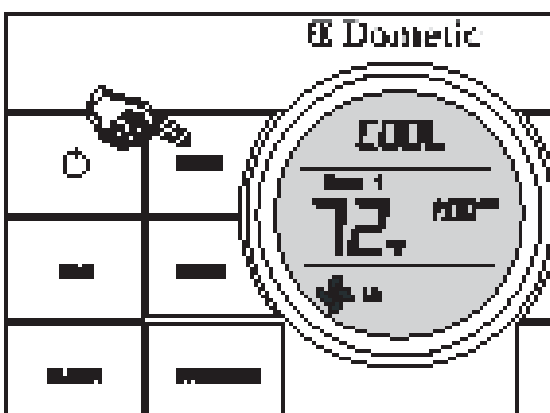
REVISION A
Form No. 3314150.016 6/14
(French 3314170.014_A)
©2014 Dometic Corporation
LaGrange, IN 46761



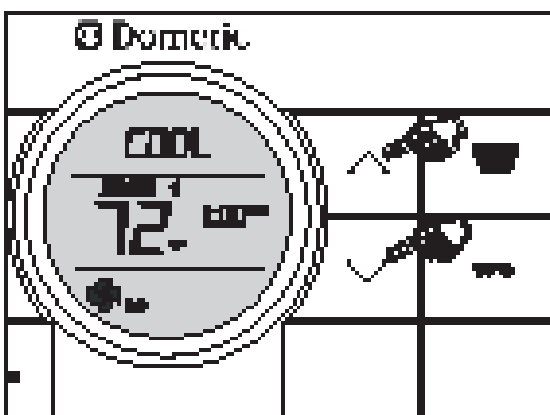
1. To turn ON the CCC 2 thermostat when the back light is off, first press any button to wake up the CCC 2 thermostat. Then press and release the ON/OFF button.





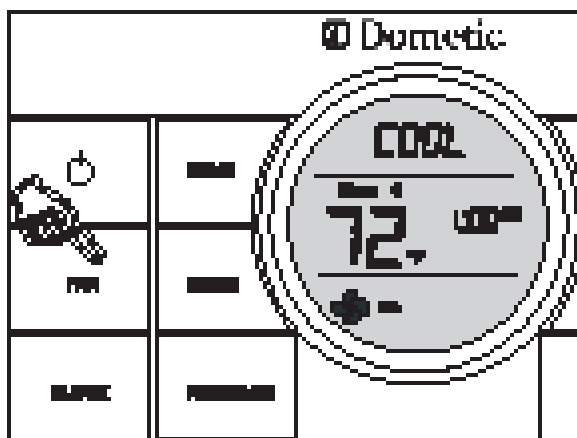
2. Press the MODE button to cycle through the mode options. A mode is an operation that can be performed by the unit and is controlled by the Dometic CCC thermostat. The available modes are: OFF, COOL, HP (HEAT PUMP), HS (Heat Strip), FAN, FURN (Furnace), and AUTO. The available modes are determined by your system options.



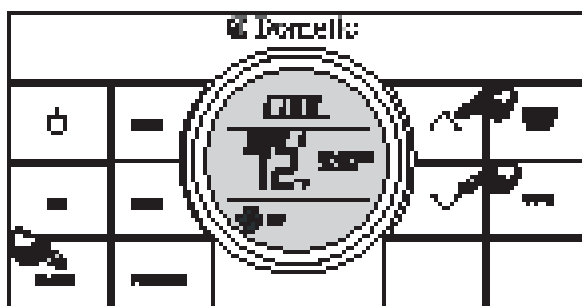
3. Press the ZONE button to cycle through the available zones to be programmed. Each zone signifies a unit designated to cool or heat a specific area of an RV. The Dometic CCC 2 thermostat can control up to four units (zones).





4. Press the UP  or DOWN  buttons to increase or decrease the room air temperature (hereinafter referred to as the set-point). The set-point is the desired inside room air temperature.



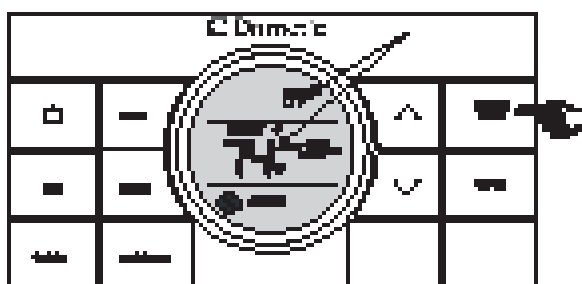
5. Press the **FAN** button to select the fan speed. The options are **AUTO**, **H1**, **MED**, or **LO**.



6. Press the **CLOCK** button to initiate the clock setting sub-menu on the CCC 2 thermostat. When entering this menu, the "hour" digits will flash first. Press the **CLOCK** button again and the "minutes" digits will flash. Press it a third time and the "AM" or "PM" icon will flash.

Press the **UP**  and **DOWN**  buttons to set the "hour", "minute", and "AM/PM" setting.

Press the **CLOCK** button one more time to store the new time in memory and exit the clock setting sub-menu.



7. Press and hold the **INSIDE TEMP** button and the LCD will display the current inside temperature recorded at the CCC 2 Thermostat (or at the optional remote indoor temperature sensor) instead of the temperature set-point. The LCD will also display "IN" to indicate that the inside temperature is being displayed. When the **INSIDE TEMP** button is released, the LCD will return to the programmed temperature set-point.

Special Features:

- Auto Fan
- Stage Select (Two air conditioners/heat pumps or models equipped with two compressors)
- Programs 1 & 2
- Auxiliary Heat (heat pump models only)
- Load Shed
- Automatic Generator Start (optional)
See Operating Instructions Manual for more information on special feature.

LCD Error Code

When the system determines that one of the faults listed below has occurred an error code will be displayed in the LCD for the zone in which the error occurred. During normal operation, a blinking zone number indicates a fault has occurred. The error code is displayed in place of the temperature set-point.

Error Code:

- E1 Loss of communication between the CCC 2 thermostat and all system power module boards. System will shut down.
- E1 Loss of communication between the CCC 2 thermostat and an individual system power module board. The LED will display error code E1 and the zone number that lost communication. Any additional zones that lose communication will blink in addition to the current zone.
- E2 Open circuit or out-of-range Indoor Temperature Sensor. All heat and cool operation will be locked out. Manual fan operation can continue.

- E3 Shorted Indoor Temperature Sensor. All heat and cool operation will be locked out. Manual fan operation can continue.
- E4 Open circuit or out of range Outdoor Temperature Sensor (select models). Heat pump operation will be locked out. Air conditioner, furnace, heat strip, and fan operation can continue to operate.
- E5 Open circuit or out of range Freeze Sensor. Air conditioner operation will be locked out. Heat pump, furnace, heat strip, and fan operation can continue to operate but displays the last temperature set-point.
- E7 Loss of 120 VAC power to all power module boards on the system. The system will shut down.
- E8 Invalid zone configuration. The heat pump and heat strip DIP switches are both set to the ON position in one zone. Heat pump, heat strip and air conditioner operation will be locked out in the affected zone.
- E9 Invalid zone configuration. The dehumidifier DIP switch and either the heat pump or heat strip DIP switches are set to the ON position in one zone. Heat pump, heat strip, and air conditioner operation will be locked out in the affected zone.

In the unlikely event you experience a system failure, refer to the "SERVICE" section of the Operating Instructions furnished with your unit.

Air Conditioner

The air conditioner for your Coach House Platinum is manufactured specifically for RV use and is located in the center of the motor home on the roof with outlets in the ceiling. The A/C selector is on the digital combo thermostat located on the sofa/dinette overhead cabinet-driver's side. The thermostat switch should be adjusted to the desired temperature level and controls the operation of the compressor.

The air conditioner operates on the 120 volt A/C system and will operate only when the external power cord is connected to a power source or when the generator is operating.



Insert Dometic A/C Manual Here

Fan-Tastic Roof Vent Fan

There is (1) Fan-Tastic Vent roof fan in your *ARRIVA* Motorhome.

The roof vent fan is located in the ceiling and is operated by cranking up the fan cover and by turning on the switch by the fan and setting the thermostat knob. The 12-volt DC system powers the fan. The fan has an automatic rain sensor.

Coach House does not use Fan-Tastic Vents with the 'Reverse' feature. For your safety, this eliminates the unlikely event that noxious fumes could permeate your motorhome while unattended, or while you are sleeping. Please disregard any reference to the 'Reverse' feature in literature from Fan-Tastic Vents.



Fan-Tastic Vent Model
6000RBTA



How to Use Your Genuine **FAN-TASTIC VENT®** Ceiling Fan



Operating Instructions:

1. Turn 3-speed knob to desired performance level (0-Off, 1-Low, 2-Medium, 3-High). This activates the fan.
2. Select UP to raise dome, DOWN to close dome.
3. With the fan blade motor reverse switch, pre-select IN or OUT (as dome opens the fan motor will turn in the pre-selected position). IN brings air into the coach from the roof through the vent. OUT brings air into the coach through slightly open window(s) and exhausts hot, stale air out through vent to the roof. When dome closes, either by selecting OFF on controller or via moisture on rain sensor, the fan blade motor shuts off. Anytime you reverse the fan blade motor while system is in operation, you must first select center (neutral position) and allow the fan blade to stop completely. Then select the opposite direction to restart the motor.
4. This fan is equipped with a built-in thermostat, ON is 22°F (deep blue) OFF is 123°F (bright red). Select a setting somewhere in between for your comfort. Fan blade will automatically turn on and off as your coach heats up and cools down. When rain sensor becomes wet, dome will close automatically and shut off fan blade, if it is on. When sensor dries, dome will reopen. If fan blade rapid cycles on/off, select a more extreme temperature setting to minimize.
5. The 6000 RBTA is also equipped with a RAIN SENSOR. When dome (lid) is open and moisture contacts the sensor, the dome closes and turns the fan blade motor off if it is running. When the rain sensor dries, the dome reopens and the fan blade motor will start if it was running when dome closed.
6. Dome adjustment or emergency close knob. To stop dome partially open; apply opposite force to slowly rotating knob, as dome is OPENING ONLY!! To adjust dome, allow it to travel all the way up automatically. Now pull knob down to "MANUAL" position. Turn knob lowering dome to desired height, then immediately push the knob back to "AUTO" position. (NOTE: at 1/3 open, fan blade exhaust efficiency is reduced to 90%). After adjusting, always check knob to ensure it is now "locked into gearbox".

Recommendations: You may use your Fan-Tastic Vent while driving or in windy conditions. In this case keep your dome fully open. When storing your Motorhome, lower your dome until it is completely closed and turn the 3 speed knob to 0-Off.

NOTE: At 1/3 dome open, exhaust efficiency is reduced to 90%.

NOTE: Fan-Tastic Vent does not recommend placing a vent cover over, or using a foam filter on your Fan-Tastic Vent. This greatly restricts airflow, causing accumulation of dust and increased sound levels.



How to Clean the Screen on Your Genuine **FAN-TASTIC VENT®**

C e i l i n g F a n



Cleaning Instructions:

1. Turn fan motor off.
2. Locate the thumb tab on the Pop 'N Lock Screen, grab and pull down to unsnap.
3. Wash Pop 'N Lock Screen and fan blade with a light non-abrasive soap, rinse and dry.
4. Re-install the Pop 'N Lock Screen by gently snapping back in place.

Suggestion: Once screen and blade are washed and dried, you may wipe or spray 303 protector (a water based protector; do not use a petroleum based protector) on the screen and blade. Buff to a high gloss. This will minimize the amount of dust and dirt build up.



Cleaning Instructions:

1. Turn fan motor off.
2. Remove 8 painted flat head Phillips screws around perimeter of screen insert.
3. Clean screen and blade with soap and water solution and reinstall.
4. Re-Install the screen by reversing step 2.

Suggestion: Once screen and blade are washed and dried, you may wipe or spray 303 protector (a water based protector; do not use a petroleum based protector) on the screen and blade. Buff to a high gloss. This will minimize the amount of dust and dirt build up.

Troubleshooting:

Fan-Tastic Vent wishes to assist any customer with any problem or need. Please call 1-800-521-0298 for assistance between 8 am and 5 pm E.S.T.

FAN-TASTIC VENT®

Brings the Outside in... Instantly®



R.V. Toilet

We have installed a gravity flush toilet in your *ARRIVA* motorhome. This quality toilet was manufactured by the THETFORD corporation.

Model

ARRIVA

Installed Toilet

Gravity Flush - Low Profile



When using the toilet, either the water demand pump should be turned on (water pump switch is located on the side of the lavatory sink cabinet) or the city water connection made and pressurized to assure a water supply to the toilet.

Gravity Flush

The gravity flush toilet in the Coach House is connected directly to a waste holding tank and has a water line routed to it for rinsing and flushing. There are separate levers on the side of the toilet for rinsing and flushing, and the instructions on the toilet should be followed for best results.

Insert Thetford Toilet Manual
Here
(Debbie Print Double Sided)

Black and Gray Water Holding Tanks

The connection for draining the holding tanks are located on the left side of the motor home. To drain the system, connect one end of an appropriate drain hose to the drain connection and the other end to a proper dump station. After the connections are made, opening the dump valve or valves can dump the system. The valves are located under the motor home on the driver's side rear and are labeled.

Dump the black water holding tank first, then dump the gray water holding tank.



Black Water Holding Tank Flush System

Drain the black water holding tank and leave valve open.



Attach garden hose to the water inlet (located behind the utility access door behind the drivers side rear tires, black cap). Turn on water (from outside source) to spray the interior of the black water holding tank. Continue to leave drain valve open until flushed. Turn off water, disconnect hose and close valve.

NOTE:

This panel is not the same on all models. Look for the Black Water Hose Inlet on your panel.



Black Water Backflow Preventer

There is a backflow preventer which prevents the black water tank from contaminating the system when flushing with a hose.



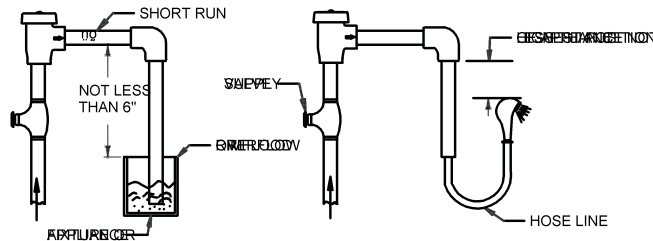
CONBRACO
INDUSTRIES INC.

38-200 SERIES ATMOSPHERIC TYPE VACUUM BREAKERS

#38-200 Series Atmospheric Type Anti-Siphon Vacuum Breaker is available in both pipe applied and deck mounted configurations and incorporates an atmospheric vent in combination with a check valve to prevent back-siphonage of polluted water into a potable water supply. The flow of water through the inlet orifice of the vacuum breaker lifts the float and seal to its seat, sealing the atmospheric vent, supplying water to downstream equipment. If a negative pressure develops in the supply line, the float will drop, sealing the orifice while at the same time the atmospheric vent opens admitting air to the system thus breaking the vacuum. The body is forged brass, the float is polypropylene and the seat disc is silicone rubber.

INSTALLATION INSTRUCTIONS

The Atmospheric Type Vacuum Breaker should be installed with the bottom of the body at least 6" above the flood rim of the fixture or appliance, (does not apply to deck mounted type). When a portable appliance is used, the breaker should be installed at least 6" above the highest point to which the portable appliance can be raised. This device shall not be subjected to continuous pressure for more than twelve (12) hours. Note: Shut-off valves are not allowed downstream of the atmospheric vacuum breaker.



TESTED AND APPROVED
IN ACCORDANCE WITH
A.S.S.E. STANDARD
#1001 AND C.S.A.
STANDARD # B64.1.1

MAINTENANCE INSTRUCTIONS

Since Atmospheric Type Vacuum Breakers are subject to normal maintenance and replacement, they should be located where emergency water spillage will not create a problem and where they can be accessible for inspection or servicing. To repair a Vacuum Breaker, remove screw, nameplate and cover, then unscrew cap. Replace the cap, cap o-ring, float, and seat disc with components from repair kits. Then replace cover, nameplate and screw.

#38-200 SERIES VACUUM BREAKER REPAIR KITS

VALVE NO.	KIT NO.	KIT COMPONENTS
38-201	38-202-RK	D-4460 Seat Disc, F-3754 Cap, D-3902 Cap O-ring, I-8551 Float
38-202	38-202-RK	D-4460 Seat Disc, F-3754 Cap, D-3902 Cap O-ring, I-8551 Float
38-203	38-203-RK	D-3306 Seat Disc, F-3752 Cap, D-3903 Cap O-ring, I-8547 Float
38-204	38-204-RK	D-4461 Seat Disc, F-3753 Cap, D-3905 Cap O-ring, I-8550 Float
38-231	38-202-RK	D-4460 Seat Disc, F-3754 Cap, D-3902 Cap O-ring, I-8551 Float
38-232	38-202-RK	D-4460 Seat Disc, F-3754 Cap, D-3902 Cap O-ring, I-8551 Float

WARNING: This product contains lead, a chemical known to the state of California to cause birth defects or other reproductive harm.

INSTALLER: California law requires that this warning be given to the consumer.

The device shall be installed in accordance with the requirements of the local plumbing code.

I-6376-00 Rev. B



CONBRACO Industries, Inc., Matthews, NC

Arriva
by Coach House

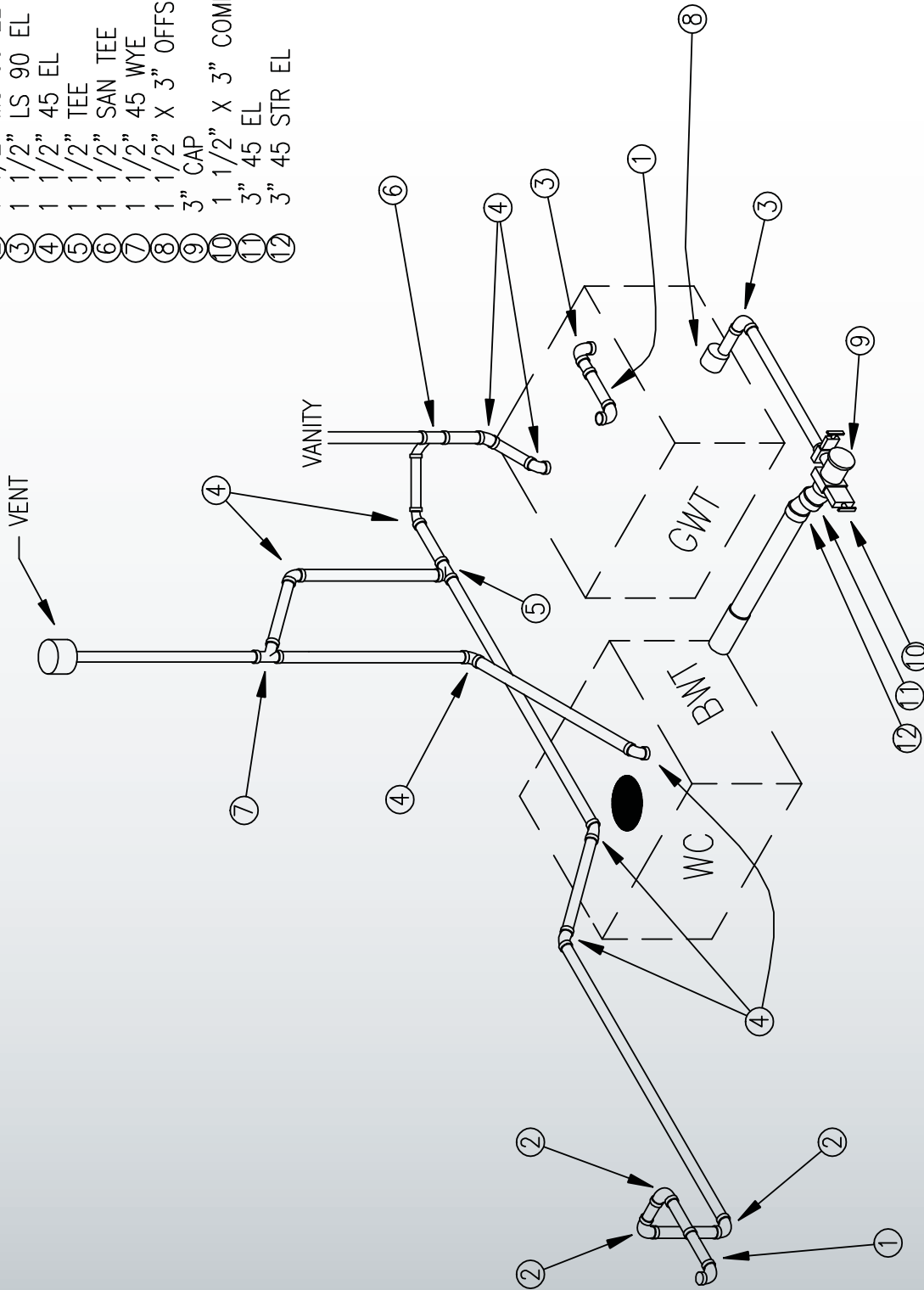
Rev: 051717

3480 Technology Drive • Nokomis • Florida
(800) 235-0984 • (941) 485-0984 • (941) 488-4095 FAX
www.coachhouserv.com

5-31

Tank Diagrams

- ① HEPVO VALVE
- ② 1 1/2" MS 90 EL
- ③ 1 1/2" LS 90 EL
- ④ 1 1/2" 45 EL
- ⑤ 1 1/2" TEE
- ⑥ 1 1/2" SAN TEE
- ⑦ 1 1/2" 45 WYE
- ⑧ 1 1/2" X 3" OFFSET
- ⑨ 3" CAP
- ⑩ 1 1/2" X 3" COMBO VALVE
- ⑪ 3" 45 EL
- ⑫ 3" 45 STR EL



ALL DIMENSIONS ARE IN INCHES

ECR	REV	DATE	DESCRIPTION
X1	1-21-14		
			MERCEDES CLASS B V24 (TB) PLUMB & TANK ISO
			Coach House Motor Homes
			No. PB118