As an ENERGY STAR® Partner, PB Heat, LLC has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

Piping Diagrams
Peerless Combi 160
Suggested Piping Diagrams

⚠️ WARNING

This manual is a supplement to the Peerless Combi 160 Installation, Operation and Maintenance Manual (IOM), PC8000. The installer must read the IOM manual and this supplement before piping the boiler system.

⚠️ NOTICE

The drawings in this manual are concept drawings, not engineered drawings. It is not intended to describe a complete system, nor any particular system. It is up to the system designer to determine the necessary components for and configuration of the particular system being designed, including additional equipment and any safety devices which in the judgement of the designer are appropriate in order to properly size, configure and design that system and to ensure compliance with building and safety code requirements.

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Storage Water Heater Heating Side Not Used

NOTE:
- The U3 sensor placed on the minitank, must be disconnected from the rear of the connection board.
- Switch N°1 inside boiler control board, must be switched to the ON position;
Failure to follow these guidelines could result in system problems.
Indirect Water Heater and Recirculating Line – Heating Side is not Used.

NOTE:
- Disconnect the plug from the diverter valve inside the boiler to prevent water blockage for the storage. The plug must be disconnected when the boiler is in central heating function;
- The U3 sensor placed on the minitank, must be disconnected from the rear of the connection board.
- Switch N°1 inside boiler control board, must be switched to the ON position;
Failure to follow these guidelines could result in system problems.

NOTE: it is mandatory to wire the DHW circulator to a TIMER that runs the DHW circulator only for demand period.
Do not run the DHW circulator for all the time.
Multiple Boilers Installation for Instantaneous DHW and Heating. Boilers are Controlled by its Temperature Controls.

NOTE: in this configuration the boilers can produce up to 13 gal/min DHW with 75°F rise

NOTE: Manifold must be sized to provide the correct flow to the boilers and to the system.

NOTE: Provide suitable device to control the CH circulators.
Multiple Boilers Installation for Instantaneous DHW Production Only. Boilers are Controlled by own Temperature Control.

NOTE: in this configuration the boilers can produce up to 13 gal/min DHW with 75°F rise
Instantaneous DHW and Heating by Zone Pumps that are Controlled by TACO SR506 Switches. (Hydronic Schematic)
Instantaneous DHW and Heating by Zone Pumps that are Controlled by TACO SR506 Switches. (Electrical Schematic)
Heating by Zone Pumps that are Controlled by TACO SR506 Switches. (Hydronic Schematic)

NOTE: PIPING MUST BE SIZED TO PROVIDE CORRECT FLOW TO THE BOILER AND TO THE SYSTEM.

OS = OUTDOOR TEMPERATURE SENSOR (Optional)
Heating by Zone Pumps that are Controlled by TACO SR506 Switches. (Electrical Schematic)
Storage Water Heater and Recirculating Line – Heating Side is not Used.

NOTE: THE SWITCH N°1 INSIDE THE BOILER CONTROL BOARD MUST BE SWITCHED TO THE "ON" POSITION. THE TS SENSOR PLACED ON THE BOILER'S MINITANK, MUST BE DISCONNECTED FROM THE REAR OF THE CONNECTION BOARD.

NOTE: It is mandatory submit the DHW circulator to a TIMER that run the DHW circulator only for the need.

Do not run the DHW circulator for all the time.
NOTE:
- Piping heating system must be sized to provide flow for each zone.
- Provide a minimum 18Gals water buffer once only one zone can be open.
- Provide a minimum 100Gals/Hour flow to the system.
Failure to follow these guidelines could result in system problems.

Instantaneous DHW with Single Zone and Air Handler
DHW by Indirect Water Heater and Central Heating by Primary/Secondary Loop. Pumps are Controlled by TACO SR506 Switches. (Hydronic Schematic)

OS = Outdoor temperature sensor (optional);
TS = Indirect water heater temperature sensor P/N 62110071

NOTE:
- Heating system must be sized to provide correct flow for each zone;
- Disconnect the plug from the diverter valve inside the boiler to prevent water blockage for the storage. The plug must be disconnected when the boiler is in central heating function;
- The U3 sensor placed on the minitank, must be disconnected from the rear of the connection board.
- Switch N°1 inside boiler control board, must be switched to the ON position;

Failure to follow these guidelines could result in system problems.
DHW by Indirect Water Heater and Central Heating by Primary/Secondary Loop. Pumps are Controlled by TACO SR506 Switches. (Electrical Schematic)
DHW by Indirect Water Heater and Central Heating by Primary/Secondary Loop. Secondary is for Floor Radiant Heating System. (Low Temperature)

OS = Outdoor temperature sensor (optional);
TS = Indirect water heater temperature sensor P/N 62110071
RT = Room thermostat or equivalent device

NOTE:
- Heating system piping must be sized to provide correct flow;
- Disconnect the plug from the diverter valve inside the boiler to prevent water blockage for the storage. The plug must be disconnected when boiler is in central heating function;
- Switch No.1 inside boiler control board must be switched to the ON position;
- The U3 sensor placed on the munitank must be disconnected from the rear of the connection board;
- Switch No.6 inside boiler control board must be switched to the ON position to deliver lower temperatures for central heating;

Failure to follow these guidelines could result in system problems.
TS = Indirect water heater or storage tank temperature sensor (optional)
OS = Outdoor temperature sensor (optional)
Bus = PC connections or remote command connections
RT = Room thermostat connections
OT = Modulating room thermostat connections

6 = Not used
5 = Not used
4 = Not used
3 = 120 Vac Line for 3 way valve domestic command or 120Vac line for domestic pump
2 = Neutral for 3 way valve or Neutral for domestic pump
1 = 120 Vac Line for 3 way valve Central heating command
L1 = 120 Vac Line for main voltage
N = 120Vac Neutral for main voltage
= Ground connections
Peerless Combi 160

Gas Boiler

Piping Diagrams

TO THE INSTALLER:
This manual is the property of the owner and must be affixed near the boiler for future reference.

TO THE OWNER:
This boiler should be inspected annually by a Qualified Service Agency.

ASME certified

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