



# Ultra Gas-fired water boiler

## Wall mounting



(Instructions for wall mounting Ultra boilers — for use only with Weil-McLain wall-mounting kit, P/N 389-900-180)

*Ultra*  
with **PhD** PRECISION  
HYDRONIC  
DATA *technology*

**WARNING**

This document must only be used by a qualified heating installer/service technician. Read all instructions, including these instructions and the Boiler Manual, before installing. Perform steps in the order given. Failure to comply could result in severe personal injury, death or substantial property damage.

## STOP! Read before proceeding

### WARNING

The wall must be vertically plumb and capable of carrying the weight of the boiler. The operating weights are:

- 181 pounds for the Ultra-155
- 192 pounds for the Ultra-230.

- 1 Stud spacing: Bracket holes are spaced for studs on 16-inch centers. For other stud spacing, provide secure, solid mounting surface on which to attach the boiler wall-mounting bracket.
- 2 Wood stud wall: Install bracket with lag screws (3/8" x 3") included in kit, only into the studs.
- 3 Metal stud wall: Secure bracket to studs with 3/16-inch toggle bolts and 3/16-inch flat washers (not included with kit).
- 4 DO NOT attempt to attach the wall mount bracket using anchors or any means other than directly securing to the wall studs (or equivalent wood structure if studs are not on 16-inch centers).
- 5 The boiler bracket must engage with the wall-mount bracket. Make sure the brackets are not just resting edge to edge.
- 6 Mount the boiler on the wall following these instructions. Perform all procedures given in the Boiler Manual on pages 1 through 9 before mounting the boiler.
- 7 The boiler is heavy. Use caution not to drop the boiler or cause bodily injury while lifting and handling. Verify that the boiler is securely attached to prevent possibility of boiler falling after installation.

Failure to comply with above could result in severe personal injury, death or substantial property damage.

## Verify kit contents

1. Wall-mount bracket.
2. Black iron bushing, 1" x 1/8" NPT.
3. Lag screws, (2) 3/8" x 3" hex head.
4. Grommet, (1) 7/8" O.D.
5. Grommets, (2) 1 3/8" O.D.
6. Automatic air vent, 1/8" NPT.
7. Items 2 through 6 are needed only if routing piping through bottom of enclosure.
8. Verify all parts listed above are available before proceeding.

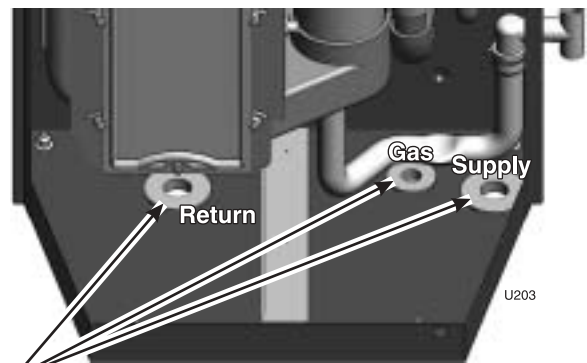
## Remove jacket front panel

1. Follow Boiler Manual instructions on pages 1 through 9, including removal of the boiler jacket front panel. This will simplify lifting and handling the boiler when mounting.

## Prepare boiler for wall mounting

1. If the piping will be routed out the top of the boiler, no special preparation is needed other than that given in the Boiler Manual.
2. To route the piping through the bottom of the boiler enclosure:
  - a. Remove knockouts for bottom piping penetrations as shown in Figure 1.
  - b. Insert grommets into the penetration holes as shown.

**Figure 1** Install bottom-piping grommets

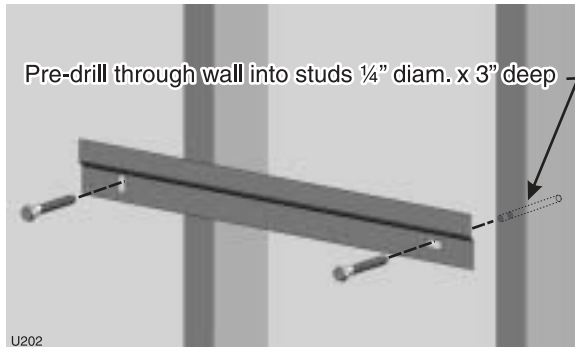


Remove knockouts for bottom piping penetrations. Insert grommets provided with wall-mounting kit.

## Install wall-mount bracket

1. Locate studs.
2. Place the wall-mount bracket on the wall, using a level to align correctly.
3. Place the bracket so the mounting slots are centered over the studs.
4. Level the bracket and trace the outline of the screw slots with a pencil.
5. Remove bracket and drill holes 1/4" diameter by 3 inches deep, centered on the screw slot outlines. (For metal stud walls, using 3/16" toggle bolts, drill required clearance holes.)
6. See Figure 2. Position bracket on wall. Insert and loosely tighten the two lag screws (or toggle bolts for metal studs).
7. Level the bracket. Then tighten screws securely. For drywall or plaster lathe installations, avoid tightening so much that brackets dig into wall surface.

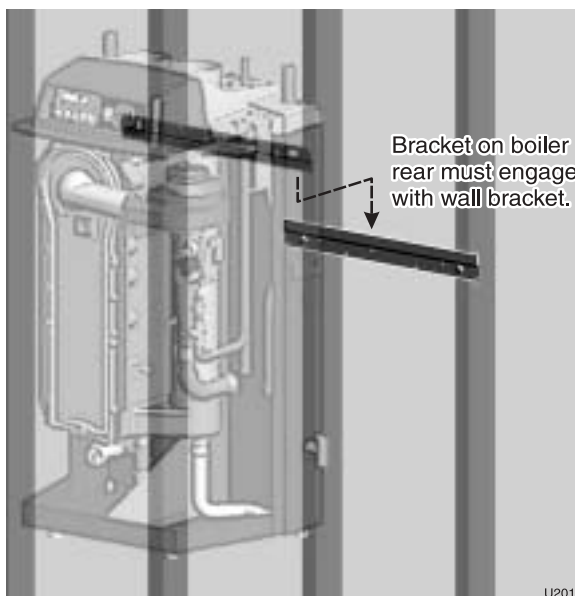
**Figure 2** Install wall-mount bracket



**Place boiler on bracket**

1. Measure 30 inches below the bottom edge of the wall-mount bracket. Strike a line or place a piece of masking tape on the wall with its top edge even with the 30-inch mark. (This line, or tape, will indicate whether the boiler has been properly seated onto the wall-mount bracket.)
2. Obtain assistance to lift the boiler into position:
  - a. See Figure 3.
  - b. Lift the boiler high enough that its rear bracket will be above the wall-mount bracket.
  - c. Let the rear of the boiler slide against the lag screw heads as you lower the boiler into place.
  - d. When the brackets are engaged correctly, the bottom of the boiler enclosure will be at or near the pencil line, or tape, you applied in step 1.
  - e. If the boiler does not slide down close to the mark, or tape, adjust until the brackets properly engage.

**Figure 3** Place boiler on wall-mount bracket



**Piping with top penetrations**

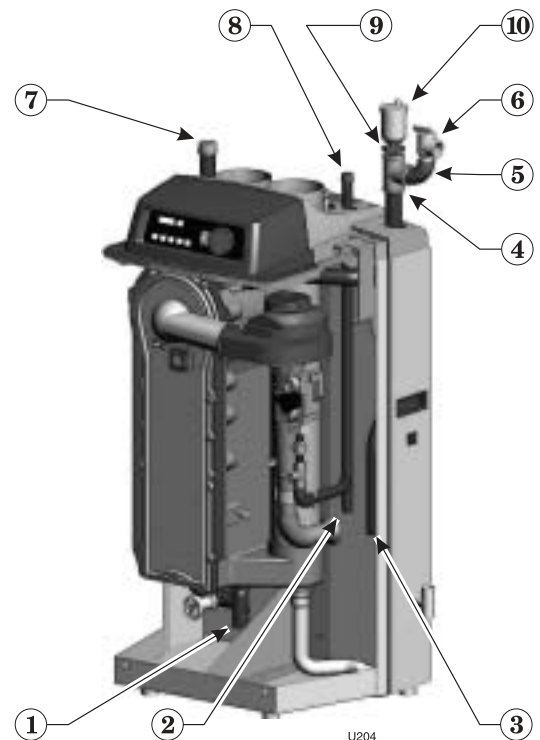
1. Follow all instructions in the Boiler Manual.

**Piping with bottom penetrations**

**WARNING** Use two wrenches when tightening piping at boiler, using one wrench to prevent the boiler pipe from turning. Failure to support the boiler piping connections to prevent them from turning could cause damage to boiler components.

1. To route piping through bottom of enclosure:
  - a. See Figure 4.
  - b. Remove pipe caps from bottoms of supply, return and gas lines to route piping through bottom.
  - c. Install 1" pipe cap on top of return pipe (Figure 4, item 7).
  - d. Install 1/2" pipe cap on top of gas line (Figure 4, item 8).
  - e. Install 1" x 1" x 3/4" tee (Figure 4, item 4), 3/4" steel elbow (item 5), relief valve (item 6), 1" x 1/8" bushing (item 9) and air vent (item 10) on top of the supply pipe as shown.
  - f. Refer to the Boiler Manual for completion of all piping. Connect piping to: 1" NPT male boiler return (Figure 4, item 1), 1" NPT male boiler outlet (item 3) and 1/2" NPT male gas (item 2). Apply pipe dope sparingly. Use pipe dope listed for use with propane gas for the gas line connections. Refer to Boiler Manual for details.
  - g. Follow all Boiler Manual instructions for piping the boiler.

**Figure 4** Bottom-piping configuration only



*Ultra* GAS-FIRED WATER BOILER — **Wall Mounting Instructions**



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