





ТМ

Commercial Condensing Gas-fired water boilers

SlimFit ™ 550/750 Cleanout Plate Addendum

KEEP THIS ADDENDUM WITH BOILER MANUAL

This Addendum adds to and super cedes items in the "SlimFit™ (previously Ultra Commercial) Boiler Manuals" (Part Number 550-100-086) and previously released Addenda's.

NOTICE It is recommended that you obtain a Weil-McLain Boiler Annual Maintenance Kit P/N 383-600-079, or 383-600-040, 5-Section Complete Kit or 383-600-041, 6-Section Complete Kit before attempting this procedure, to ensure all parts that may be needed are available.

Disconnect power before servicing

- **AWARNING** Electrical shock hazard Disconnect all electrical power to the boiler before attempting maintenance procedures. Failure to complete could result in severe personal injury, death or substantial property damage.
- 1. Shut down boiler:
 - a. Follow "To Turn Off Gas to Appliance" instructions on boiler and Operating instructions.
 - b. Do not drain boiler unless it will be exposed to freezing temperatures. If using freeze prevention fluid in system, do not drain.
- 2. Close the external manual gas valve.
- 3. Allow time for boiler to cool to room temperature if it has been firing.
- 4. Rotate the two rotary latches on the front door. Tilt the top of the door forward, then lift up. Use the cleanout plug in the flue pipe to rinse debris into the condensate drain.

Remove heat exchanger cleanout plate and burner

- 1. Use a 13-mm wrench or socket to remove the nuts that secure the heat exchanger cleanout plate to the heat exchanger Figure 1.
- 2. Remove the cleanout plate. Handle the cleanout plate cord carefully to avoid damage.



AWARNING

These instructions must only be used by a qualified installer/service technician. Read all instructions completely before beginning the installation. Failure to follow all instructions can cause severe personal injury, death or substantial property damage.

Hazard definitions

The following defined terms are used throughout these Instructions to bring attention to the presence of hazards of various risk levels or to important information concerning the life of the product.

Indicates presence of hazards that can cause severe personal injury, death or substantial property damage.

NOTICE

Indicates special instructions on installation, operation or maintenance that are important but not related to personal injury or property damage.



- 3. Follow the procedure on page 81 of Boiler manual to remove the burner, piping end combustion chamber access plate and the blower/venturi/mixing tube assembly.
- **AWARNING** The boiler contains ceramic fiber materials. Use care when handling these materials per instructions on page 78 of Boiler manual. Failure to comply could result in severe personal injury.

Use heat exchanger cleaning tool

- 1. Use the heat exchanger cleaning tool (supplied with the boiler) or a piece of 20-gauge or lighter sheet metal ³/₄" wide by about 18 inches long to loosen deposits.
- 2. Slide the cleaning tool through the heat exchanger pins in the three directions shown in Figure 2.
- 3. Vacuum the debris out of the base through the flue inspection opening.

Water spray the heat exchanger

- 1. Disconnect the condensate line at the bottom of the heat exchanger so debris will not clog the trap.
 - a. Loosen the hose clamps at both ends of the condensate line.
 - b. Remove the line and place a pan under the trap connection.
- 2. Use the burner openings to spray water down onto the heat exchanger pins. Continue spraying until all debris on the pins has been flushed into the base.
 - a. Spray water into the flue inspection opening to flush remaining sediment to the condensate outlet.
 - b. Spray water through the condensate line to clean it thoroughly.
 - c. Remove the pan and re-install the condensate line.
 - d. Re-install the flue inspection plug.

Figure 2 Cleaning heat exchanger with cleaning tool



Replace cleanout plate gasket

- 1. Replace the red silicone cord with new from Annual Maintenance kit or cover plate replacement kit.
- 2. Make sure any old silicone has been properly removed.
- 3. Make sure cover plate gasket is in the groove of the heat exchanger.
- 4. When installing the silicone cord gasket, the seam should start at the top middle of the gasket groove, see Figure 1. Place a dab of silicone on the seam at start and end, see Figure 1.

Cleanout plate gaskets — Replace silicone cord gasket before placing the boiler back in operation.

To install the silicone cord gasket:

When installing the silicone cord gasket, the seam should start at the top middle of the gasket groove. See Figure 1.

Carefully place the cord in the groove all around the cleanout plate.

Place a dab of silicone on the seam at start and end. See Figure 1.

Do not splice pieces together. The gasket must be installed as one piece.

When inserting the gasket, do not stretch the cord or stretch around corners. This could cause the cord not to seal correctly, resulting in possible flue gas or condensate leakage.

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

Re-install cleanout plate

- 1. Re-install the cover plate following the sequence shown in the appropriate illustration, Figure 3 or Figure 4, page 3.
- 2. Re-install the hex head nuts on the cover plate mounting studs and tighten in the staggered pattern shown for the boiler model (Figure 3, or for SF-550 or Figure 4, page 3 for SF-750) until the cover plate is uniformly tightened.

AWARNING Gradually tighten the cleanout plate nuts in the sequence shown. Torque to 18 N-m/160 in-lbs/13 ft-lbs.

If the tightening is not done using this top-tobottom, center out method, the plate could buckle, allowing a flue gas leakage.



Figure 3 Nut tightening sequence — SF-550 Gradually tighten the nuts, repeating the sequence shown below until the torque reaches 160 inch-pounds +/- 10 inch-pounds / 18 N-m +/- 1 N-m



Figure 4 Nut tightening sequence — SF-750 Gradually tighten the nuts, repeating the sequence shown below until the torque reaches 160 inch-pounds +/- 10 inch-pounds / 18 N-m +/- 1 N-m



Re-install burner, mixing tube and blower assembly

- 1. Follow the procedure on page 81 of Boiler manual to re-install the burner, and other components.
- 2. Reconnect wiring, including the ignitor ground wire connection to the top ignitor mounting screw.

Restart and test the boiler

- 1. Restore gas supply and power to the boiler.
- 2. Start the boiler and verify operation following the procedures given in this manual.

Perform startup and check/out

AWARNING

Removing and reinstalling components can change boiler behavior.

After any maintenance procedure, you must verify operation after servicing. To do so, follow the complete procedure for boiler and system startup, beginning on page 70 of the Boiler manual. Failure to comply could result in severe personal injury, death or substantial property damage.





Weil-McLain 500 Blaine Street Michigan City, IN 46360-2388 *http://www.weil-mclain.com*

Part Number 550-100-161/1014