Condensate Drain Line Check Valve Instructions

For use with Weil-McLain Condensate Drain Line Check Valve Kit
Kit part # 382-200-406

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.

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

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

**CAUTION**
Indicates presence of hazards that will or can cause minor personal injury or property damage.

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

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

Table 1  
Lists parts, which are provided in the Weil-McLain Condensate Drain Line Check Valve Kit.

Figure 1  
Shows the assembly of kit parts for GV Series 1 and 2 Boilers only.

Figure 2  
Shows the assembly of kit parts for GV Series 3 and 4 Boilers only.

Table 1

<table>
<thead>
<tr>
<th>Item number</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>90° Ell, ½&quot; x ¼&quot; CPVC, with bleed hole</td>
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</tbody>
</table>
| B | Nipple, CPVC  
Series 1 — ½" x 2 ¼"  
Series 2 — ½" x 2 ½"  
Series 3 and 4 — ½" x 2 ¾" |
| C | Check valve subassembly |
| D | Nipple, CPVC  
Series 1 — ½" x 2 ½"  
Series 2 — ½" x 2 ¾"  
Series 3 and 4 — ½" x 2 ¾" |
| E | Nipple, ¼" x 2 ⅛" CPVC (Series 3 & 4 only) |
| F | Street ell, ½" (Series 3 & 4 only) |

Note:  
Kit includes three ½" x __ CPVC nipples:  
(1) 2 ½"  
(1) 2 ⅛"  
(1) 2 ¾"  
Use in designated positions as indicated in Instructions.

Figure 1  
GV Series 1 and 2 Boilers

Figure 2  
GV Series 3 and 4 Boilers

Note:
Kit includes three ½" x __ CPVC nipples:  
(1) 2 ½"  
(1) 2 ⅛"  
(1) 2 ¾"  
Use in designated positions as indicated in Instructions.
# Installation

**Step 1**  Turn off power to the boiler.

**Step 2**  If you are using this kit to replace an existing condensate drain line, detach the existing condensate drain line from the boiler at the jacket.

**Step 3**  Determine which of the nipples in the kit to use in the vertical position “B” as follows:
- GV Series 1 Boilers – 2 1/8” nipple
- GV Series 2 Boilers – 2 1/2” nipple
- GV Series 3 and 4 Boilers – 2 3/4” nipple

**Step 4**  Determine preferred routing of check valve assembly. Figure 3 and Figure 4 on the next page show acceptable methods for GV Series 1 and 2 Boilers, while Figure 5 shows the acceptable methods for GV Series 3 and 4 Boilers.

**Step 5**  Install the piping with nipple B vertical to keep the check valve assembly as close to the floor as possible.

**Step 6**  
- **GV Series 1 and 2 Boilers** – Clean items “A”, “B” and “C” with CPVC cleaner. Then pre-assemble in the desired orientation using CPVC cement on the joints. Make sure the bleed hole in elbow “A” is at the top. See Figure 1 on page 2.
- **GV Series 3 and 4 Boilers** – Clean items “A”, “B”, “C”, “E” and “F” with CPVC cleaner. Then pre-assemble using CPVC cement on the joints. Make sure the bleed hole in elbow “A” is at the top. See Figure 2, page 2.

**Step 7**  
- **GV Series 1 and 2 Boilers** – Attach elbow A to the condensate drain at the boiler jacket, using CPVC cleaner and cement. Check the bleed hole to make sure it hasn’t been blocked by cement during the assembly. Clean out if necessary by hand reaming the hole with a #46 drill bit.
- **GV Series 3 and 4 Boilers** – Attach street ell F to the condensate drain at the boiler jacket, using CPVC cleaner and cement. Check the bleed hole to make sure it hasn’t been blocked by cement during the assembly. Clean out if necessary by hand reaming the hole with a #46 drill bit.

**Step 8**  If desired, you can use nipple “D” to connect the condensate line to the check valve assembly. Clean the nipple with CPVC cleaner and cement in place with CPVC cement.

**Step 9**  Connect drain line from check valve assembly (using nipple “D” if desired) to floor drain, making sure the drain line runs level or continuously downhill. Drain line must not be higher than the check valve.

**WARNING**  Do not allow the drain line to rise above the height of the check valve assembly at any point. This could prevent the check valve from removing condensate and could damage the boiler or prevent it from operating. Failure to comply with this warning could result in severe personal injury, death or substantial property damage.

**Step 10**  If necessary, provide support(s) under the condensate drain line to make sure it remains in position.

**Step 11**  If using a condensate drain pump, connect the outlet of the check valve assembly to the inlet of the pump. Make sure the inlet of the pump is at or below the level of the check valve.
Installation continued

**Figure 3**  GV Series 1 and 2 Boilers only – Assembly parallel to jacket

**Figure 4**  GV Series 1 and 2 Boilers only – Assembly perpendicular to jacket

**Figure 5**  GV Series 3 and 4 Boilers only