Service bulletin
Descaling the heat exchanger

BOSCH

Introduction

- Periodic descaling may be necessary in areas with high mineral content in the water. Scale buildup in the heat exchanger may result in lower flow rates, error codes of A7 and E9 and boiling sounds in the heat exchanger.

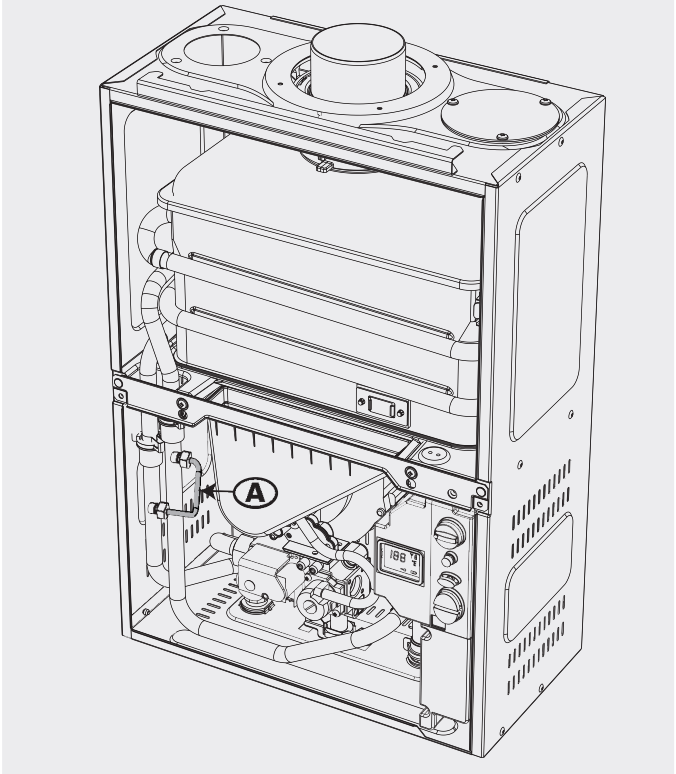
Tools/parts needed:
- Various plumbing wrenches
- Bucket for descaling solution
- Small circulator or pump
- Two M10x1 metric screws*

Preparation

1. Disconnect electrical supply from the water heater.
2. Shut off the water supply to the water heater using (installer supplied) isolation or shutoff valves.
3. Open hot water taps to drain and relieve pressure from the plumbing system.
4. Drain water from the unit's heat exchanger by disconnecting inlet and outlet water connections from the heater.
5. The water bypass pipe (Figure 1, pos. A) must be removed to allow circulation of descaling solution through the heat exchanger. Loosen two brass nuts connecting bypass tube to hot and cold water piping.
6. Replace bypass tube with two M10x1 screws* on hot and cold water pipes (Figure 1, pos. A). Pipe thread tape may be necessary to allow for a proper seal. Tighten only enough to prevent leaks. **Do not overtighten. Save bypass tube for reinstallation.**

* If not available locally, call Bosch Technical Support. Using screws that are not metric M10x1, will cause damage to the water heater.

Figure 1

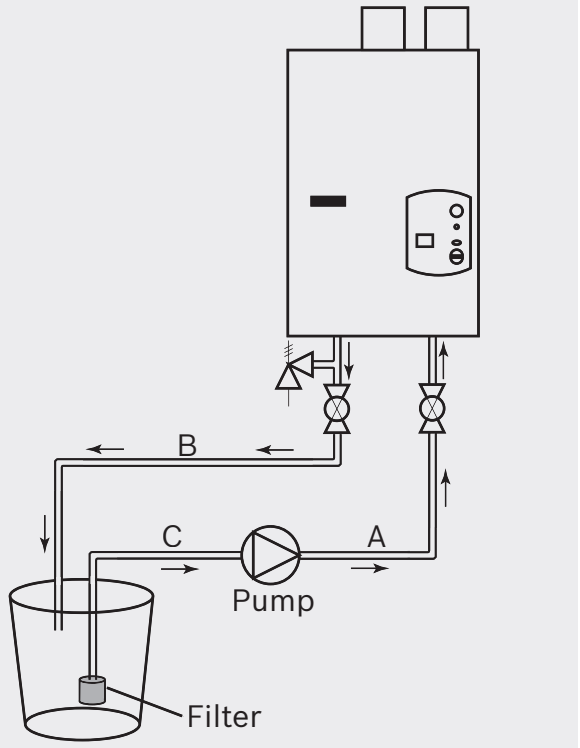


Descaling using a pump

1. Connect a line (Figure 2, pos. A) from the outlet of the circulating pump (installer supplied) to the inlet water fitting on the water heater.
2. Connect another line (Figure 2, pos. B) to the water outlet fitting on the water heater. Route the other end of this line into a descaling reservoir.
3. Using a third line (Figure 2, pos. C) from the descaling reservoir, connect to the inlet side of circulating pump. Install a filter on the end of the line in the descaling reservoir.
4. Make sure all connections are "hand tight."

5. Fill tank with descaling solution so ends of both lines are submersed. We recommend straight white vinegar. If using a commercial descalant, refer to manufacturer's instructions on dilution with water.
6. Operate the circulating pump.
7. Make sure there are no leaks and the solution is flowing from the descaling reservoir through the heater and returning to the reservoir.
8. Run solution through the heater until the solution returning to the descaling reservoir comes out clear. (Changing to a fresh solution may be necessary during this process)
9. Disconnect all lines and drain all solution from heat exchanger. Properly discard of solution.
10. Position a container below the hot water outlet and reconnect cold water supply. Open cold water supply isolation or shut off valve and flush heat exchanger with clean water.
11. Shut cold water isolation or shut off valve
12. Remove both M10x1 screws from hot and cold water pipes and reconnect bypass tube. (Figure 1, pos. A)
13. Reconnect hot water line to the water heater.
12. Reconnect electrical supply to unit, open water isolation or shut off valves, and return the unit to service.

Figure 2



WARNING

FAILURE TO REINSTALL BYPASS TUBE AFTER DESCALING WILL RESULT IN IMPROPER OPERATION OF THE WATER HEATER.

BOSCH

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