

Service Bulletin: TWH-G2-33

Model: 250SX, 250SXO, 635ES, 635ESO, 2400E, 2400EO

C1, C6, & C7 Error Code Troubleshooting



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Introduction

Follow the procedures below and report results to Bosch Technical Support. This will assist in determining the cause and solution to the problem.

The C1, C6, and C7 errors are all fan-related errors.

- A C1 error indicates the fan rotation is too low at start-up.
- A C6 error indicates the fan rotation is too low during operation.
- A C7 error indicates there is no fan rotation sensed during an attempted start-up.

Fan Assembly

- The fan is a 24V DC fan that receives power and signals from the main control board.
- The fan also has its own built-in circuit board with fan counter to relay information and signals back to the control board.

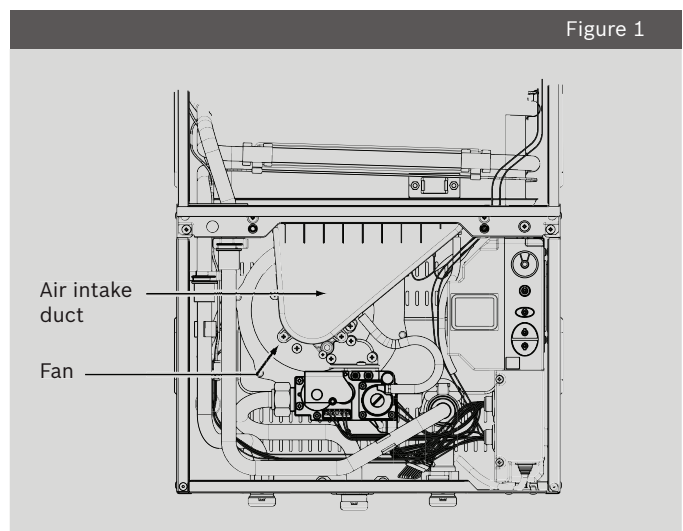
Tools needed:

- Voltmeter
- Phillips head screwdriver

Procedure

1. Press the reset button on the control panel of the heater to attempt to clear the error code. If the error code does not reset or continues to reoccur, proceed with the following troubleshooting steps.
2. Verify the heater is plugged into a properly grounded 120V AC power supply.
3. Supply the heater with electricity from a dedicated electrical circuit. Other major appliances on the same circuit may cause voltage fluctuations to the water heater, causing fluctuating power to the fan.
4. Shut off the power to the heater and check the wire connection to the fan. The wire connection is located on the back, right hand side of the fan housing (see Figure 1).
5. Check that the two wire connections to the control board are firmly attached to the board. Removal of the lower access cover on the control board is required. Refer to Bulletin TWH-G2-24.

Figure 1



6. Confirm that the exhaust vent is not blocked and does not exceed the specified maximum length of 26 feet.
7. Ensure that the 3 foot minimum separation between air intake and exhaust vents is met.
8. If error codes persist, contact Bosch Tech Support. To assist tech support in determining the cause of the error code, please document information from the following procedure:
 - a. With the heater on standby and the error code reset, turn the on/off switch to the off position (O), wait approximately three seconds, then turn the switch to the on position (I).
 - b. Quickly observe the series of letter and numbers that appear on the LCD display screen. This series will typically start with "SU" or "AF" followed by four digits. (Examples: "SU 20 18", "AF 30 05"). If necessary, repeat previous step to confirm numbers. Record these letters and numbers for reference by Bosch Tech Support.



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