Burner Door

REPLACEMENT INSTRUCTIONS

Kit Name	Burner Door Replacement Kit
Kit Part Number and Compatible Rinnai Products	• 803000073 for Rinnai Commercial Boiler Model: RCB301AN • 803000074 for Rinnai Commercial Boiler Model: RCB399AN

⚠ WARNING Failure to correctly assemble the components according to these instructions may result in electric shock, injury, or death.

⚠ CAUTION

To protect yourself from harm, follow the steps below before proceeding.

- Disconnect the electrical power supply by turning off the electricity at the circuit breaker.
- Shut off the gas at the gas valve, usually located near the gas connection at the appliance.
- Turn off the water by closing manual ball valves at the return and supply piping connections at the appliance.

Items Inside Product Box

Before installation, please make sure all parts are located inside the product box.

Table 1

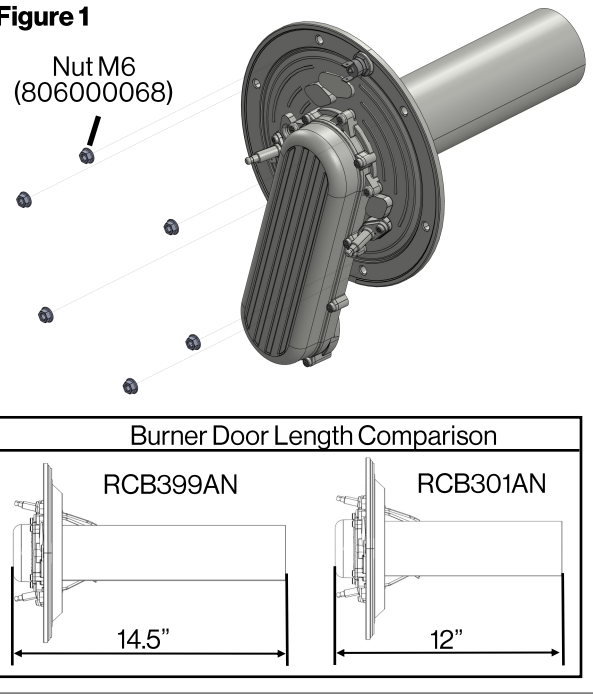
Item #	Item (Part Number)	Qty
1	Buner Door Assembly- RCB301AN (803000073)	1
	Buner Door Assembly- RCB399AN (803000074)	

*Nut M6: Six (6) pieces included with the kit.

TOOLS/MATERIALS REQUIRED

- ❒ Phillips Head Screwdriver
- ❒ 8 mm & 10 mm Nut Driver/Wrench
- ❒ Tongue and Groove Plier
- ❒ Adjustable Wrench
- ❒ Tongue and Groove Plier

Figure 1



Instructions:

IMPORTANT

When following the instructions in this document, inspect any existing O-rings and/or gaskets carefully, taking care not to scratch, damage, or misplace the O-rings and/or gaskets.

1. Turn off and disconnect 120 V power supply.
2. Turn off water supply.
3. Turn off gas supply.

⚠ CAUTION Confirm gas valve is turned off and not leaking. Use gas valve switch to prevent gas valve from being turned on.

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4. Use a Philips head screw driver to remove two screws located on the bottom of the appliance securing the front panel (Figure 2A). Pull out the bottom of the front panel to clear the display assembly (Figure 2B), then move the front panel up to clear the pins located on top of the appliance (Figure 2C).

Figure 2A

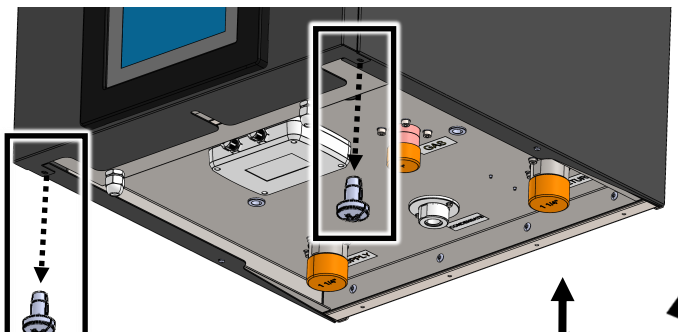


Figure 2B

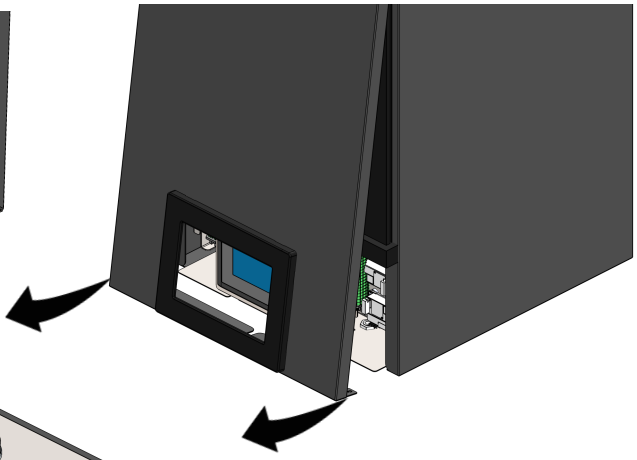
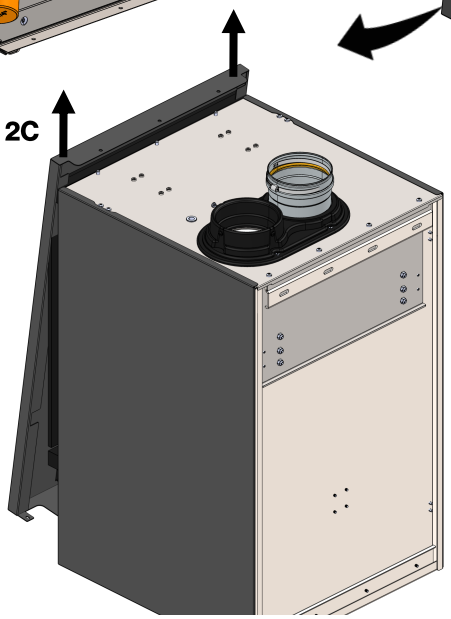


Figure 2C



5. Use a Phillips head screw driver to remove three screws holding left side panel (Figure 3A). Rotate the side panel out (Figure 3B), push the panel up to clear the cutout located on back side of boiler, and pull the side panel out (Figure 3C).

Figure 3A

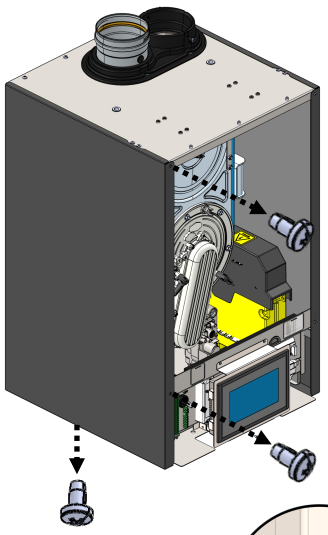


Figure 3B

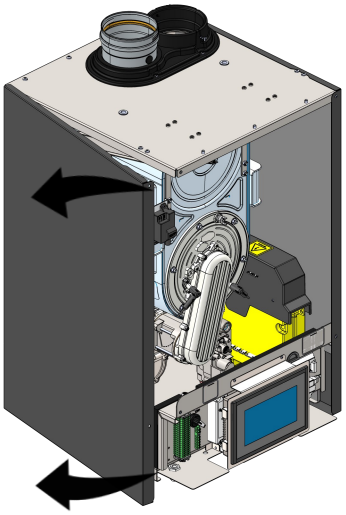
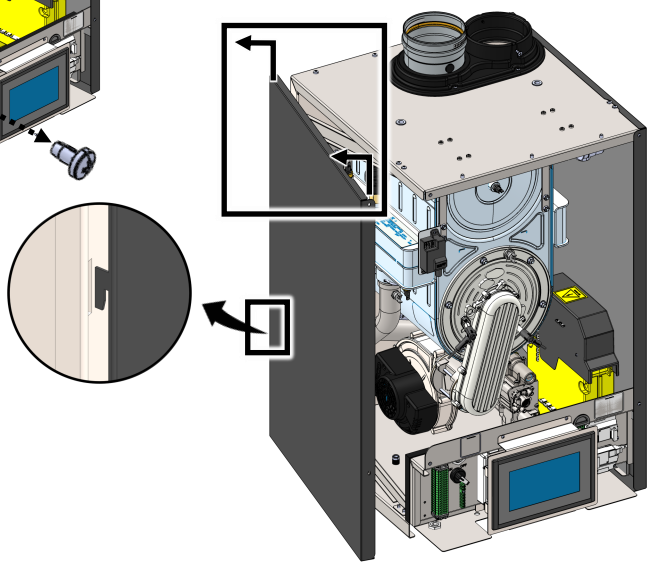


Figure 3C



6. Disconnect the fan power and fan PWM connectors from Fan (Figure 4).
7. Disconnect flex pipe from venturi. Ensure venturi gasket is stored at secured location to be reinstalled (Figure 5).

Figure 4

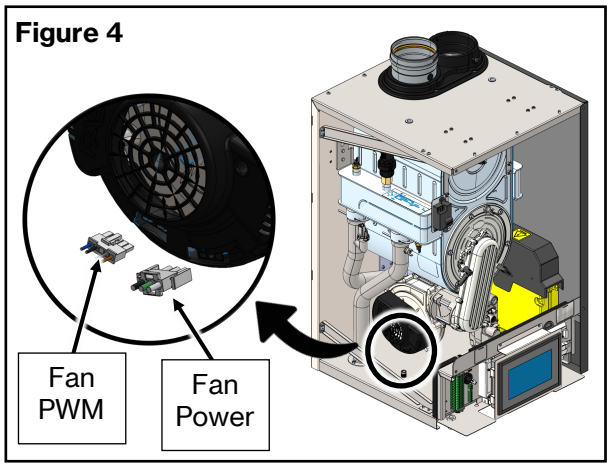
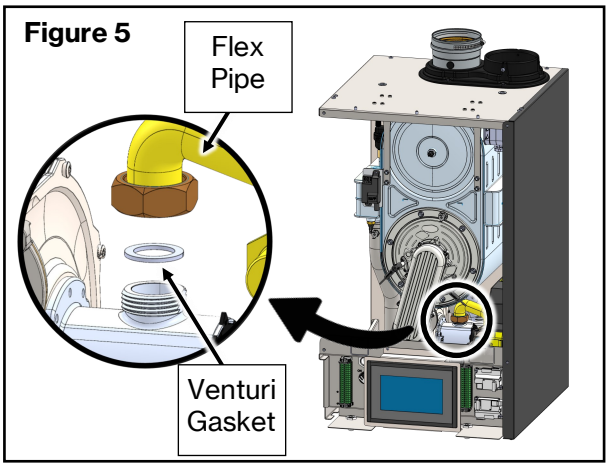
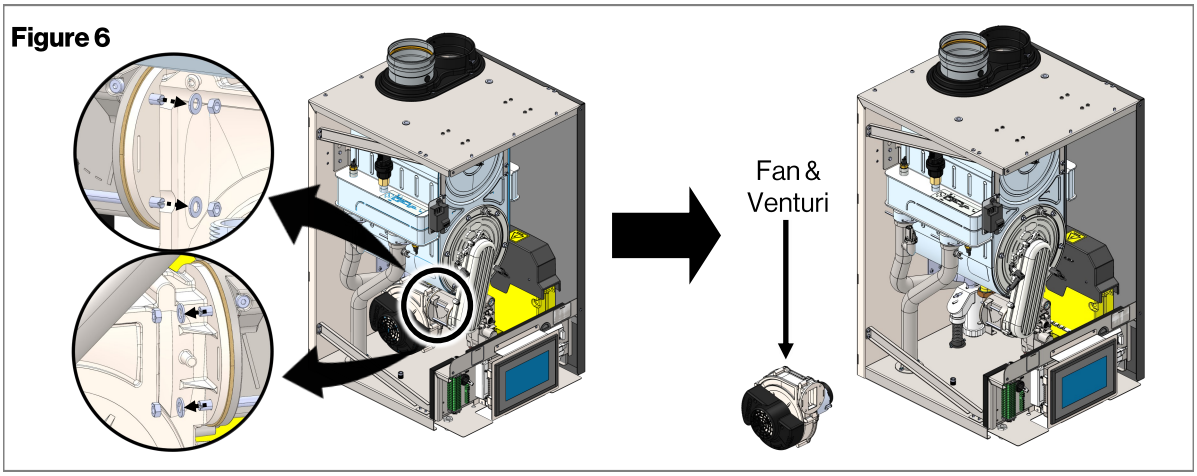


Figure 5



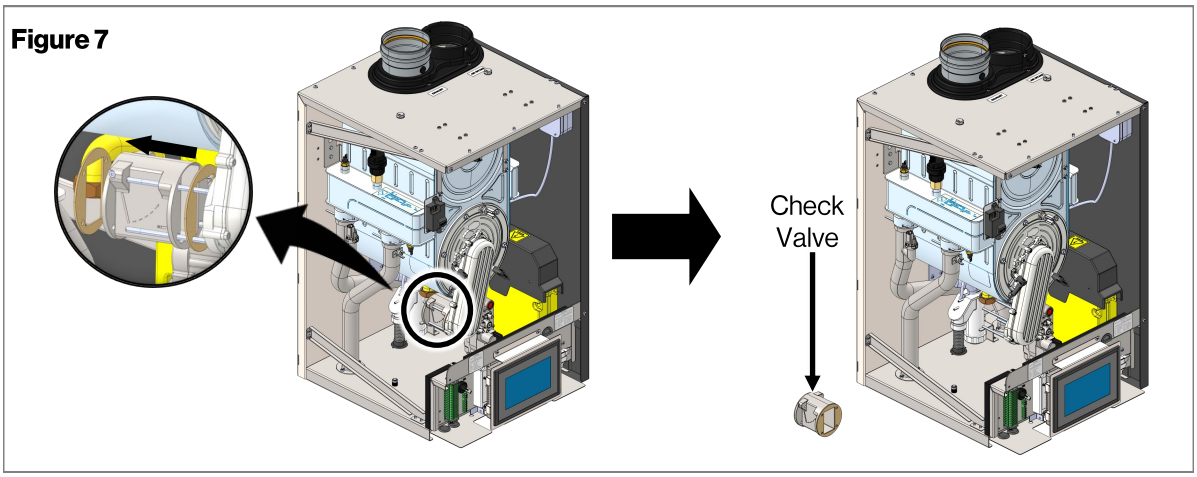
8. Use a 8mm nut driver to remove four nuts and washers securing fan to check valve assembly. Remove fan with venturi to gain access to check valve assembly (Figure 6).

Figure 6



9. To remove the check valve assembly from the unit, slide it on the four threaded rods towards the back of the appliance (Figure 7).

Figure 7



10. Disconnect ignition electrodes cable and ground terminal, flame rod cable, and burner door switch terminals from burner door (Figure 8).
11. Using a 10mm nut driver/wrench, remove six (6) M6 nuts securing burner door to the heat exchanger (Figure 9).

Figure 8

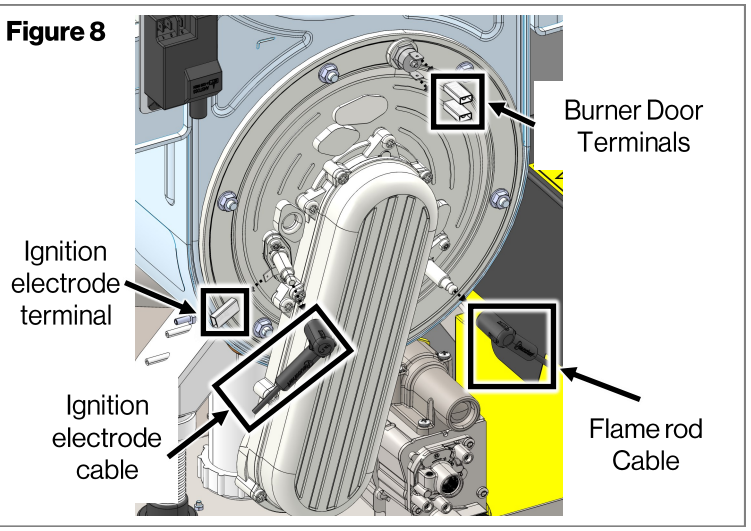
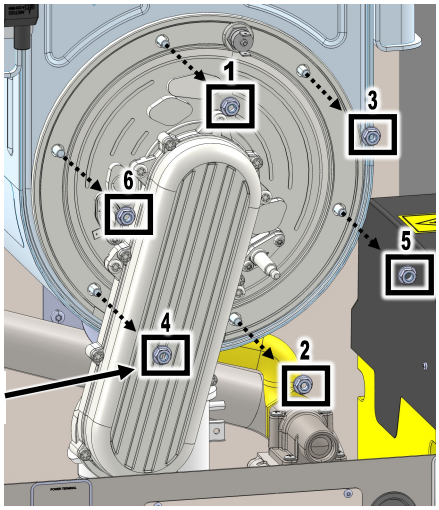
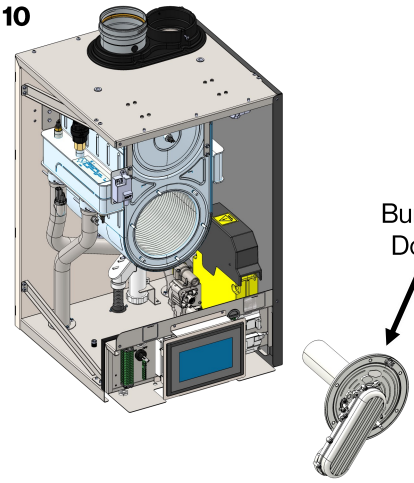


Figure 9



12. Carefully pull out the burner until it clears the studs on the heat exchanger, then rotate while pulling out burner door assembly from the unit (Figure 10).

Figure 10



Burner Door Reassembly

1. Install the new burner door on the heat exchanger studs (Figure 10).
2. Secure new burner door using new M6 nuts. Ensure to follow torque sequence (Figure 9).
3. Reconnect ignition electrodes cable, and ground terminal, flame rod cable, and burner door switch terminals to burner door (Figure 8).
4. Reinstall the check valve assembly and gaskets by sliding them on the four threaded rods. **NOTE:** Ensure to install check valve in the correct orientation (arrow facing burner inlet channel). Failure to install check valve assembly properly will block airflow and cause ignition issue (Figure 11). Also, ensure gaskets are installed in the correct orientation (matching the opening on the check valve assembly). Failure to install gasket(s) correctly will block air flow air reduce boiler input rate (Figure 12).

Figure 11

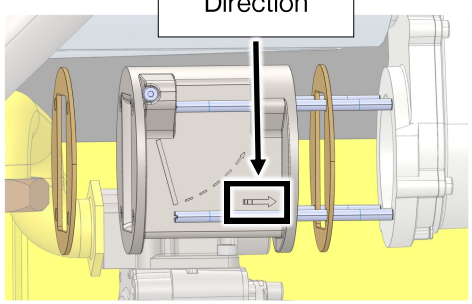
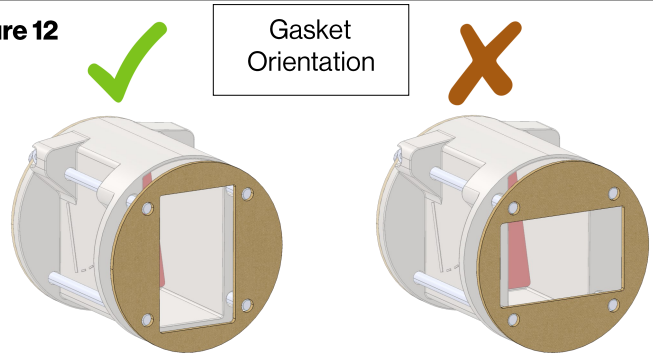


Figure 12



5. Reinstall the fan assembly using four nuts and washers as shown in Figure 6. **NOTE:** Ensure gasket is installed correctly (Figure 12).
6. Reconnect the flex pipe on venturi (Figure 5). NOTE: Ensure the gasket is installed.

⚠ WARNING Missing gasket between flex pipe and venturi can cause a gas leak. Failure to install venturi gasket will cause gas leaks which may result in property damage, injury, or death.

7. Reconnect fan power and fan PWM connectors (Figure 4).
8. Restore water and gas supply.
9. Turn on and connect 120 V power supply.
10. Operate the boiler and perform gas leak detection test for gas.
11. Line up left side panel with slots located on back side of boiler and secure it using three screws (Figure 3A, 3B and 3C).
12. Line up front panel assembly with pins located on top of the boiler and secure it using two screws on bottom. (Figure 2A, 2B and 2C).