

Removing & Cleaning The Burners

Models: 520HN, 520PN, 330PN



BOSCH



WARNING

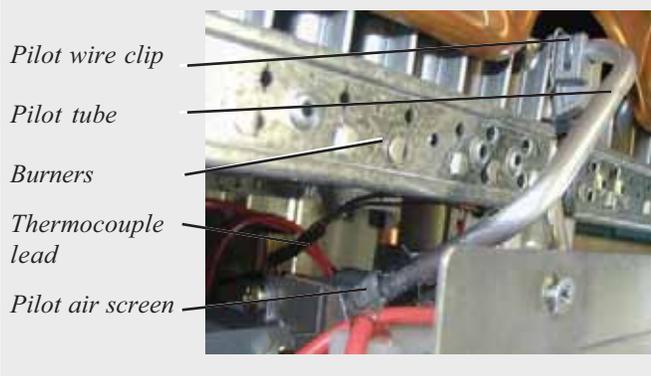
LP & NG are extremely flammable. Take extra precautions when performing any work to the heater.

Removing pilot assembly

Models: 520PN, 330PN (Fig. 1):

1. Shut off gas and water to heater, then remove front cover.
2. Remove wire clip holding top of pilot tube into bracket.
3. Move lower end of pilot tube to left to release from black clip on gas valve. Be sure to catch air screen attached to base of pilot tube.
4. Pull upwards on upper end of pilot tube to release from bracket.
5. Remove black clip from bracket to release spark electrode.
6. Gently press down on top of thermocouple to release it from bracket.

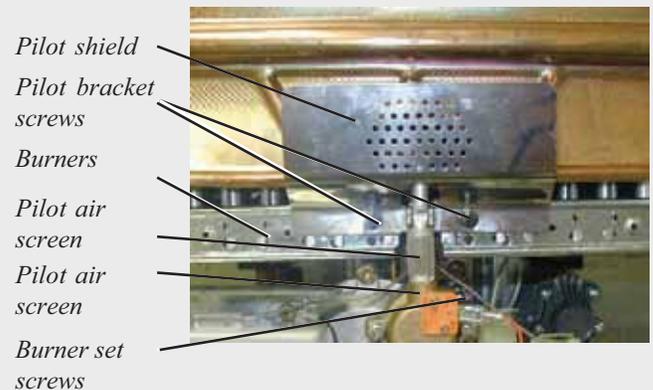
Figure 1



Models: 520HN (Fig. 2):

1. Shut off gas and water to heater, then remove front cover.
2. Remove both pilot bracket screws and pilot shield from front of burners.
3. Remove pilot assembly from burner bracket. Be sure to catch air screen secured to base of pilot assembly.

Figure 2



Removing the burners

1. Remove 2 burner set screws on the right side of the gas valve. (Fig. 2)
2. Remove four screws from both right and left burner brackets and set aside. (Fig. 3)
3. Push entire burner assembly up to separate from the gas valve.
4. Tilt right side of burners up and slide them out at an angle to the left. (Fig. 4)

Figure 3



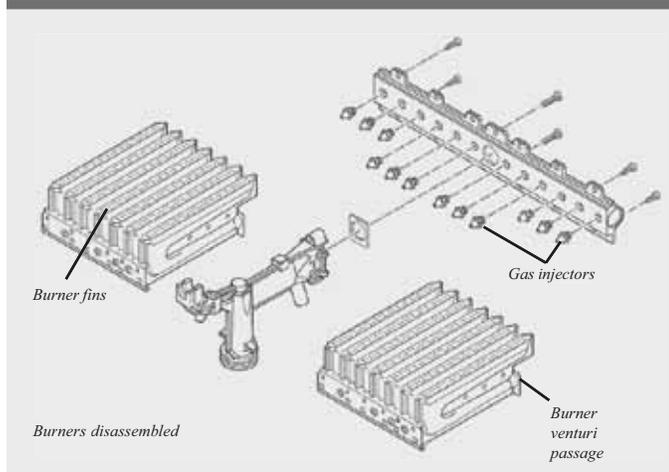
Figure 4



Cleaning the burners (Fig. 5)

1. Use a soft wire brush across burner fins to loosen any debris and then vacuum out.
2. Check to see that the 18 brass gas injectors in the rear of the burner assembly are clean. To access, remove 8 Philips head screws to the left and right of the two center brass Philips head screws at the rear of the burner. The burners should separate into two halves exposing injectors. Blow clean with compressed air or carburetor cleaner and wipe dry with cloth. Do NOT poke injectors or attempt to clean with drill bits, wires or other objects. Clean rear venturi passages with a pipe cleaner and soapy water. Rinse clean and let dry before reinstalling. Follow instructions in reverse to reconnect burner halves.

Figure 5



Reinstalling the burners

1. Reinstall burners into burner area.
2. Reinstall set screws on right side of gas valve and tighten.
3. Reinstall right and left burner brackets with the four screws. The brass screws attach to frame.

Reinstalling pilot assembly

Models: 520PN, 330PN (Fig. 1):

1. Reinsert thermocouple and snap into place. Thermocouple tip should sit 1/4" above the burner bed.
2. Put spark electrode into place and attach with clip.
3. Slide upper end of pilot tube into bracket on burner assembly and reinsert pin.
4. Slide base of pilot tube to the right into clip. Ensure pilot air screen is installed between pilot tube and pilot orifice.

Models: 520HN (Fig. 2):

1. Slide pilot air screen over pilot tube.
2. Slide pilot assembly into place. Reinsert pilot shield and secure with screws to the burner assembly.

Returning heater to service

Models 520PN, 330PN:

1. Turn on gas and light pilot. Test for possible gas leaks where burners connect to the gas valve.

Models 520HN:

1. Turn on gas and check for leaks where the burners connect to gas valve by applying leak detecting solution as you initiate water flow to activate the heater. Allow enough time to bleed all air in gas line. Bubbles are a sign of a leak.

All models:

2. If there are bubbles at either connection immediately shut off water and gas. Loosen the burner set screws on the right side of gas valve. Remove the burners and inspect the o-ring. Replace if damaged. Reseat burners and tighten set screws. Check again for leaks.
3. Replace front cover when complete.



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