



Masport Waimakariri Catalytic Combustor Guide for Service technicians and Chimney Sweep

Only a service technician or a chimney sweep should perform the following maintenance tasks. The catalytic combustor, baffle, air tube, & bricks must be removed during the annual chimney sweep.

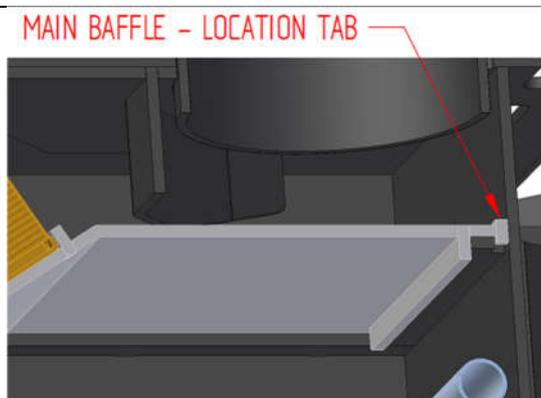
The procedure for removing & installing the combustor is specific to the Masport Waimakariri model

Step 1 – Remove the Flame Arrester Plate

- First of all, gently lift the damper handle to the "OPEN" position and leave it in that position
- Use the flame plate removal tool supplied with your burner or a small-size flat screwdriver.
- Insert the tool into the holes in the center of the arrester plate and lift the plate upwards, pull forward, and lower the plate out gently.

Step 2 – Remove the Catalytic Combustor from Masport Waimakariri firebox

- After removing the arrester plate, remove the front air tube.
- Remove the R-Clip on the left. Then push the tube towards the right to disengage the tab.
- Tilt and drop down the tube from the left side till it comes out of the hole on the right of the firebox.
- Next, place your hand up into the baffle gap and onto the top of the catalyst,
- First, push the combustor towards the right to exit the left stopper plates fully.
- Then roll it through 90° in the forward direction on the baffle flange. Gently pull it forward till it tips over the front edge of the baffle. Care should be taken so that the combustor does not drop down.
- Once tipped over, slowly and gradually remove it from the front baffle and front air deflector gap. Keep it on a flat surface for inspection and cleaning.



Step 3 – Remove the baffle

- Disengage the baffle from the slot by giving a tap on the back of the baffle from the bottom.
- Slide it forward, lift one side of the baffle and move it to the raised side. Then lower the other side and bring it further down till it is clear of side supports. Now lower the higher side and remove it out of the firebox.
- Remove all the bricks, keep them in a safe place and empty the firebox.
- This will enable to drop and collect all the chimney dirt into the firebox without removing the main flue pipe.

The fire is now ready for the chimney sweep operation.

Step 4 – Cleaning the catalytic combustor - Handle the catalytic combustor carefully.

- Use a paint-brush or soft-bristled brush and dust the combustor.
- Use a vacuum cleaner in low to medium suction mode to remove any build-up of fly-ash accumulated on the surface of the combustor.
- Never use water, cleaning solvents, or spray to clean the catalytic combustor. Never use high-pressure air to clean as this may damage the fine plates of the combustor. Do not scrape the inside walls of the combustor with any hard tool. The use of such a method will void the warranty of the Waimakariri ULEB.
- If the combustor mesh is damaged severely, replace it with the help of an authorised Masport dealer

Step 5 – After the Chimney has been swept – Clean the firebox chamber thoroughly and install the removed bricks, baffle, air tubes, combustor, and the arrester plate in the reverse removal order. Note the various location pins, tabs, and notches shown in the next page's schematics for the location of the main baffle, front baffle, locating combustor on the front baffle, and locking arrester plate on the front baffle.

Step 6 – Installing combustor **catalytic combustor carefully.**

- Hold the cleaned combustor vertically with both hands in front of the door. Hold the combustor more towards the right, so it does not hit the left front stopper plate (1&2).
- Lift and insert the combustor into the gap between the baffle and air inlet plate. Rotate while lifting so that the top face of the combustor lands on the angled flange of the baffle. Position the combustor against the right front and right end pins (4&5). The combustor leans forward while sitting on the angled flange of the baffle.
- Push the combustor on the baffle back to the rear stopper strip (3). Then push it towards the left, so the combustor locks between the front and rear stopper plates (1&2) on the firebox left wall. Note these are angled forward at

the top.

- Once locked into the left side, push the right end of the combustor towards the rear so that on the right, it is between the rear strip (3) and the right front stopper pin (4).

The combustor should be fully pushed left and leaning forward at the top. Cross-check it is positioned correctly

Step 7 – Installing flame arrester plate

- Take the stainless steel flame arrester plate and hold vertically, ensuring flange with notches is at the bottom.
- Lift the arrester into the baffle gap until it hits the damper plate. Then position the bottom of the plate onto the front edge of the baffle.
- Push the plate to the left and the rear. Make sure that the plate notches locate on two location pins (6&7) on the baffle front flange and that the top of the arrester plate is resting on the rear of the front air deflector.

