

Progress Hybrid Maintenance Kit Instructions

Please review all instructions before you begin. Confirm you have all the necessary tools and gaskets required. If you have any questions, please feel free to call us toll free at 1-800-866-4344, Monday-Saturday 9:00 – 5:00 Eastern Time.

The gaskets in your kit have been roughly cut to size and are marked with the diameter and length. To determine the exact length needed, dry fit the gasket in the appropriate location and then recut to fit. Gasket glue or stove cement, as noted in individual instructions, will then be applied to the channels to hold the gasket in place. The steel wool provided can be used to buff out scratches or stains in the surface of the soapstone panels. Use a vacuum to contain the dust. High temperature stove paint for touch up is available in colors to match your cast iron frame. It is Stove-Bright, from Forrest Paint company, a high temperature stove paint. We carry it in 12 oz spray cans, or you may be able to find it locally.

In your kit you will find:

9 ft .500 graphite gasket for the **loading door** and the **ash pan door**

13 ft .250 white gasket for **behind the catalytic combustor** and the **flue block off/flue collar**

2 ft .312 to **tuck in the top of the catalytic combustor** IF you have the version with the welded flange

8 ft .375MX white dense gasket to go around the **under the griddle**

2 ft .187 to **tuck in if your catalytic combustor does NOT have the flange welded** on the top front edge

13 ft adhesive backed **window gasket** for windows, and a **short strip (about 10.5") for the loading door**

4 ft .250 gasket for **Bypass Cover**

- 2 bottles heat safe gasket glue
- 1 tube stove cement
- steel wool

Instructions:

Loading door

Ash pan

Griddle

Combustor

Flue collar and flue block off

Windows

Bypass Cover

Replacing the Loading Door Gasket

Tools Needed:

- Scissors
- Flat Blade Screwdriver
- Caulking Gun
- Putty Knife

Materials Needed:

- .500 Graphite Gasket – 4 ft
- stove cement
- gasket glue
- adhesive backed flat graphite gasket- 1 ft

1. Hold the door open by at the bottom edge, and remove the lower hinge pin. Keep the door from tilting while removing the upper hinge pin. You may have to wiggle the door up and down slightly to loosen the pins. Lay the door on a bench to work on.





Note- there may be one or two small washers on the door-frame side of the hinge. These must be returned to their original location for proper alignment when the door is reinstalled (see photo)

2. Pull the old gasket out of the channel in the door. Thoroughly remove the furnace cement in the channel using a flat blade screwdriver. (If you use a Dremel type grinder, use a particulate facemask and eye protection. Be careful to just grind away the furnace cement and not the metal) It is important to remove all of the old cement to achieve a proper fit of the new gasket.
3. Peel the adhesive backing off of the flat gasket and apply to the spine of the door alongside the gasket channel, centering the gasket on the edge. Wrap 'around' the edge of the cast so as to allow $\frac{1}{2}$ the gasket to extend into the gasket channel. Cut to fit the edge. (see photo) Place a small bead of gasket glue along the edge of the auxiliary gasket towards the spine of the door, (edge that will rub on the door frame the most).



4. Apply a ¼” bead of cement around the perimeter of the gasket channel. To install the gasket, start at the bottom, center, of the door and lay the gasket in all the way around. Be sure the corners of the channel are filled with the gasket. Cut the gasket ¼” longer than you need and back it up into the cemented channel. Press the ends together for a good seal where they meet. Use a putty knife to tuck in any loose ends. (gasket shown is white for better clarity- gasket actually used in the channel and provided is gray.)



5. Install the door on the frame using the two hinge pins and the lower washer as applicable. Start the lower pin first, with the washer set on the doorframe. Once the lower pin drops in, tip the door up to insert the upper pin.
6. Close the door in order to compress the gasket. This should be quite tight with the new gasket. The gasket will harden during the first few normal fires and create a recess groove in the gasket where the door seats onto the frame.
7. Paper test the seal by placing a strip of paper at various points around the frame. The paper should be hard or impossible to tug out.

Replacing the Catalytic Combustor Gasket

Tools Needed:

- Scissors
- Putty Knife

Materials Needed:

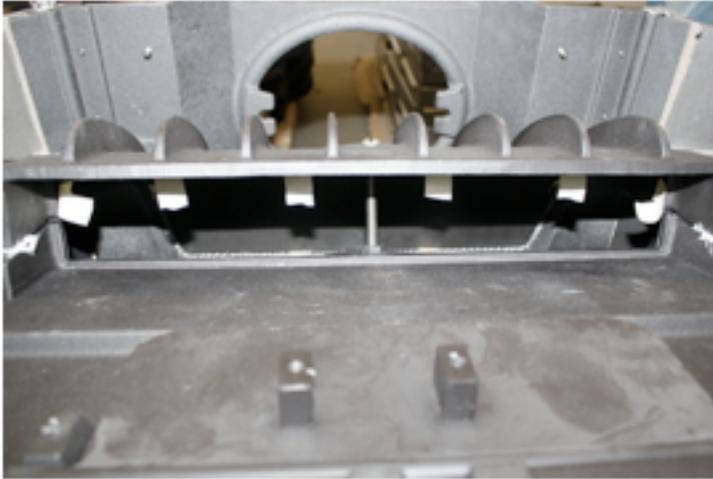
- 1/4" gasket
- Gasket Glue
- Masking Tape

The gasket behind the catalytic combustor is a critical component to the efficiency and low emissions of your Progress Hybrid wood stove. The gasket should be inspected at every combustor cleaning and replaced if worn or dislodged.

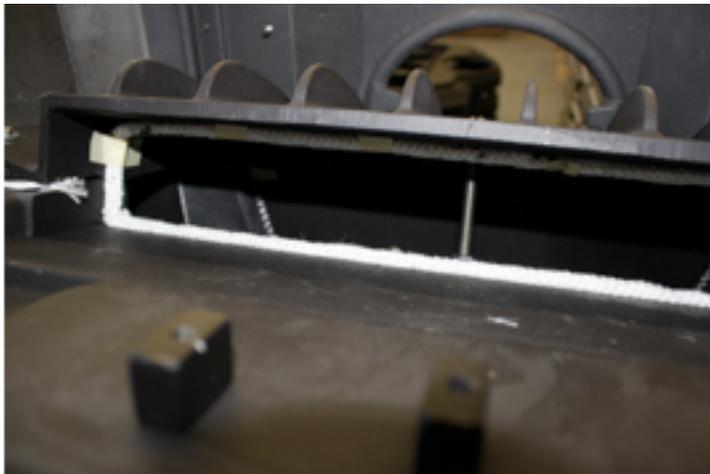
1. Be sure the stove is cool. Remove the top stones and cast iron cook top lid to access the catalytic combustor.
2. Remove the catalytic combustor, then remove the gasket behind the combustor by simply pulling it out. Use a putty knife to clean out any gasket and/or glue residue. Make sure gasket channel is completely free of loose ash or debris or the new glue will not adhere properly.
3. Dry fit the replacement gasket and cut it to length. Always leave about 1/4" extra to ensure a good seal where the ends meet.
4. Cut 6 pieces of masking tape approximately 1 1/2" long. Place the tape along the underside top edge of the combustor housing as shown in the photo below. Place the tape to the rear of the gasket channel. Apply a bead of gasket glue into the gasket channel.
5. Press the replacement gasket into the channel and lightly secure it with the masking tape. Work quickly as the glue may start to drip from the top side of the gasket channel.
6. Firmly press the catalytic combustor back into position against the gasket. It is very important that the combustor is seated firmly against the gasket to prevent any gasses/smoke from making their way around the perimeter of the catalytic combustor. Tuck or lay external gasket behind welded ridge along top edge as you slide combustor back into place.



Take the top stones off the lid and lift the cast iron griddle top. Remove catalytic combustor to expose gasket area behind it.



Place tabs of masking tape at the top upper area of the combustor hood.



Masking tape can stay in place as it will simply burn off when stove is lit.
Push catalytic combustor back in place, seating it snugly against gasket.



Replacing the Window Gasket

Tools Needed:

- 1/8" hex key (Allen Head Wrench)
- 1/4 " " hex key (Allen Head Wrench)
- 1/2 " socket and ratchet
- sharp scissors

Materials Needed:

- 12 ft adhesive backed window gasket
 - Rope or nylon strap (long enough to go around the body of the stove)
1. Tie a piece of rope around the stove so as to hold all exterior components together when the top frame is removed. The rope should be located about 1/3 of the way down from the top of the stove.
 2. Use a 1/8" hex key (Allen Head Wrench) to loosen the set screws at the top of the front casting corners. Once the set screws are loosened try to remove the corners by lifting them straight upward and swinging the lower end outward. (If they cannot be removed this way, then locate the tie rod end under the base of the stove. (see 3, below- The pipe may need to be disconnected if you are top venting.)



3. The tie-rods are fastened with a 1/2" hex nut, which is located close to the leg bolts. Loosen the tie rod by loosening the nut- about 5-6 1/4 turns of the ratchet should do it.



4. Locate the four Allen nuts that fasten the cast window frame front to the stove. There are two on each side of the frame.
5. Use ¼” hex key (Allen Head Wrench) to loosen the four nuts. You can hold pressure against the glass with your knee as you do this. It is very helpful to have a second set of hands as you remove the front frame assembly.



6. Note: The assembly consists of a cast iron frame and two panes of glass. On top of the assembly sits the 'over the front stone' that will also come loose when the front assembly is removed. If the stone is dropped it may result in damage. One person should hold the stone upward while the other removes the front assembly. The stone can then be set aside.



7. **IMPORTANT NOTE:** Keep the glass panels in the same position during this process. The outer face of the inner pane has an infrared coating. This coating protects the area directly in front of the stove from excessive radiant heat. **When the glass panes are removed from the frame put a small piece of masking tape on each marking them interior and exterior so that they can be re-installed correctly. The inner pane must be re-installed with the exact same side facing the fire due to the infra-red coating on it.**
8. The gasket is adhesive backed. Peel off the paper backing as you go along to expose the adhesive. Start at one corner of the pane and fold the gasket evenly over the edge. Cut the gasket to length as you return to the starting point. Start the gasket in the opposite corner for the second pane.
9. Hold the top front stone in position as the front assembly is lined up with the studs in the stove body. Make sure the glass panes stay aligned to each other, that the inner infrared coated one is on the inside and that they stay inside the window frame.
10. Fasten the front assembly to the stove with the four allen nuts using a 1/4" hex key. Tighten them evenly by alternating left to right and top to bottom.
11. Place the two cast corners into position. Push each corner inward and under the rope.
12. Re-tighten the front draw rods using a 1/2" socket and ratchet.
13. Use the 1/8" hex key to tighten the set screws on the corners and lock them in place.
14. Remove the rope.
15. Your stove is ready for immediate use.

Ash Pan Door Gasket Replacement

Tools Needed:

- Putty Knife
- Scissors
- Small flat blade screwdriver

Materials Needed:

- .500 Graphite Gasket -4ft
- - Gasket Glue

1. Open ash door and locate the gasket around the inner perimeter.
2. Pull out the original gasket out of the gasket channel. Use a flat blade screwdriver or putty knife to clean any residual glue from the channel. Vacuum out any debris. Gasket channel must be absolutely clear of any ash and debris for glue to adhere securely.
3. Apply 1/4" bead of gasket glue into the channel. (You can be generous with the glue.)
4. Press the replacement gasket into the glued channel starting at the center bottom, and continue around the gasket channel. It is important to 'bunch' the gasket slightly as you make your way around the perimeter. Make sure you fill the corners completely with the gasket. When you get to the starting point, cut the gasket about 1/4" longer than needed and then back it up a little bit to snug it up against the other end. Press the two ends together. Use the putty knife to tuck in any loose ends.

5. Close the ash door to finish seating the gasket. Leave the door closed for at least an hour to allow the gasket glue to dry.



Note: Gasket shown in photo is white for better procedural clarity- gasket actually used and provided is gray-graphite.

Replacing the flue collar and cover plate gaskets:

Tools needed:

- 1/2" wrench or socket and ratchet
- Sharp scissors

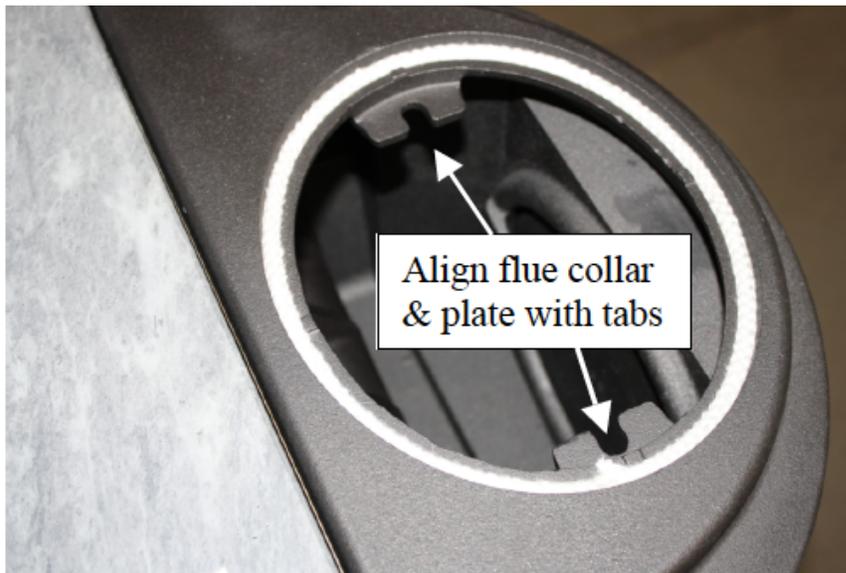
Materials Needed:

- .250 gasket 3 ft for each area
- Gasket glue

Note: It will be necessary to disconnect the pipe from the flue collar to access the hardware that holds the cover plate and flue collar in place.



1. Remove the connector pipe from the flue collar. Reach into the stove through the flue collar and use a 1/2" wrench or socket to remove the two bolts and washers that secure the cover plate.
2. Repeat the process for the flue collar.
3. Pull the existing gasket out of the gasket channels under the flue collar and cover plate. Clean any residue out of each channel.
4. Dry fit the gasket into each channel allowing about a 1/4" overlap at the ends. Cut to length.
5. Apply a 1/8" bead of gasket glue into the gasket channel. Press the pre-cut gasket into the glued channel.
6. Return the flue collar and cover plate to their original positions. Align the holes in each part with the tabs at the left and right of the stove openings. BE sure each part is seated firmly in the gasket. Tighten the bolts evenly with a 1/2" wrench or socket.



Tools needed:

- 7/16" wrench or socket
- Putty Knife

Materials Needed:

- .250 gasket, 4 ft
- Gasket glue

1. Remove the three top stones and set them aside. Lift the griddle top up and off of stove, set it aside as well.
2. Loosen the two retainer bolts on either side of the bypass cover tabs with a 7/16" socket or wrench, and swing out of the way.

Note: If the bolt resists after slightly loosening- stop! Now retighten the bolt, follow with loosening again. Repeat this process until the bolt becomes easier to remove. The bolt may be somewhat corroded after exposure to extreme heat and could break if not handled with care.



Bypass retainer nut is loosened so it can 'swing' out of the way for removal of bypass door.

3. Remove the retainer over the shaft by taking off the nuts with a 7/16" socket or wrench.



4. Lift the door up and out from under the bypass activation shaft.



5. Remove the old gasket material and clean the channel. Dry fit the new gasket in the channel, starting in the middle at the front of the stove, under the bypass rod, making sure to completely fill the corners, continue around to meet the first end. Cut gasket about $\frac{1}{4}$ " longer. Remove gasket and set aside.



6. Run a small bead of gasket glue (about $\frac{1}{8}$ " inch) all around the gasket channel. Again, starting in the middle of the front, lay the gasket in the channel, being sure to fill the corners completely. Tuck the two ends together. Use the putty knife to tuck in any loose ends.
7. Replace the door under the shaft. Replace the shaft retainer, and then secure the two side tab retainers. Shut the bypass door and let dry about 15-20 minutes before using stove.

Progress Hybrid Griddle Gasket Replacement

Tools Needed:

- Scissors
- Putty Knife

Materials Needed:

- .375 MX white gasket- 8 ft
- Gasket Glue

1. Remove the three top stones from the top of your stove and set them aside.
2. Remove the cast iron griddle and set aside. You may want to lay it down on newspaper or an old towel, as the underside may be quite sooty.
3. Pull the old gasket out of the channel. Clean up any residual gasket glue with a small wire brush or the flat edge of your putty knife.
4. Run a bead of gasket glue all around the channel.
5. Starting at the center back edge, lay the gasket in. Pinch the top edge of the gasket as you push it into the channel. Work a few inches at a time around the channel, laying the gasket in place, and bunching it just slightly to gain some height on the gasket. The channel is not very deep, so be careful not to 'pop up' the gasket as you are working it in. Make sure the corners are filled. Tuck it in securely by holding the outer edge with your fingers, and 'rolling' in the inside edge with a putty knife. (See photo 2 below)



Photo 2:



6. When you get to the starting point, back up the gasket just slightly to meet the beginning and tuck the ends in with the putty knife.
7. Set cast iron griddle top back in place, pulling all the way forward to allow adequate room for the three stones to fit securely on the top.
8. Replace the three top stones.
9. Your stove is ready to use.

Updated 4/2019