



## **VERMONT CASTINGS ENAMEL FINISH TOUCH UP PROCEDURE**

### **EXAMPLES OF ENAMEL DAMAGE**

**Non-adhesion** is a term for an enameling process failure in which the enamel finish, undercoat, or both did not bond to the cast iron or to each other. Contaminated parts, the enamel chemical mixture, or improper handling can cause non-adhesion. (Severe crazing resulting from heavy overfiring can sometimes cause large pieces of enamel to flake off as well.) Non-adhesion usually occurs on flat surfaces where you are not likely to damage the enamel, and the enamel tends to flake off in large pieces around 1" or bigger. Upon examining these areas, usually more enamel will flake off easily when pried with a fingernail or knife. Many times non-adhesion areas are too big to be covered with the touch-up paint and the affected stove part has to be replaced.

**Chipping** will occur on all our porcelain enameled stoves when they are struck on edges, corners and raised areas. Chipping can also occur in the griddle and door area from misuses or poor door fit. Be especially careful, when opening the front door wide, not to hit them on the front corners of the stove. Door pawl striker bolts aimed the wrong way when closing the right door can chip the top of the door opening or the left door.

The edges of the griddle opening are susceptible to blows when refueling the stove especially if a poker or a slicer is used through the top opening.

Chipped areas do not usually chip down to the bare cast iron. Instead the white undercoat is usually exposed. Chipping is different from non-adhesion in that it usually involves a very tiny area, 1/8", and is almost always on edges or raised areas.

The Vermont Castings warranty does not cover chipping. That is why it is extremely important that you check the enamel finish thoroughly with the customer before you leave his home or he leaves your store. Chipping occurring from damage by the freight company can be claimed under our damaged-in-transit policy.

Most chipped areas can be easily covered with a dab of touch-up paint. Deeper chipped areas can be filled first with Vermont Castings **filler** and then covered with **touch-up paint**.

**Bubbling** can occur when porcelain enamel is heated to 900 degrees f. for extended periods and the enameled surface begins to break down. Bubbling is most often found in the front door areas and the sides of the stove. As well as monitoring the stove-top temperature to guard against overfiring, it is extremely important for an owner to check his door gaskets and glass or cast panel gaskets periodically for air leaks. Air leaks can cause hot spots to develop on the surrounding areas even when the stove top temperature does not indicate overfiring. Vermont Castings warranty does not cover bubbled enamel. Bubbled enamel cannot be repaired, so affected parts will require replacing.

**Crazing** is the appearance of tiny lines or cracks in the porcelain finish. It usually cannot be felt when rubbed and does not affect the adhesion of the enameled finish. Crazing is a normal aging process of all porcelain enameled surfaces. It should be understood that crazing will occur at a much faster rate if the stove is overfired or if it has other drastic changes in temperature. The Vermont Castings warranty does not cover replacing crazed enameled parts since it is the normal aging process.

### **TOUCH-UP PAINT PROCEDURE**

When using the touch-up paint, remember that all our touch-up paint when dry will not have the shiny gloss that the porcelain enamel has.

The color will match but it will have a flat look to it. This is usually not a problem with small chipped areas, but it is unacceptable with large non-adhesion problems.

1. Clean the area to be painted of all dust and debris. Be sure that the stove is completely cold and the area is dry.
2. If filler is being used, stir contents thoroughly. Apply filler with applicator supplied. Let it dry and apply second application if necessary. Lightly sand area with sandpaper then wipe with clean cloth. Let it dry 24 hours.
3. Thoroughly shake and stir the paint.
4. Remove as much excess paint as possible from the applicator brush to avoid dripping and over-application.
5. Apply one thin uniform coat to the **damaged area only**. Do not apply over the surrounding enamel surface. Let the pain air-dry and cure for 8 hours before firing the stove.
6. **Do not use the touch-up paint as filler.** Excessive amounts of paint will cure improperly and result in bubbling. Use the enamel filler outline in #2.