

Fort Smith and Laporte combine to improve FIP door handling

In November 2004, a team began an investigation of damage to foamed-in-place (FIP) doors used as service parts on side-by-side refrigerators. These parts are manufactured at the Ft. Smith, Arkansas, plant to fill the orders transmitted from Laporte. The average cycle time of a door from order to delivery at the servicer originally ranged from 4-6 weeks, and the service parts often arrived with damage.

A cross-functional team was assembled to evaluate the order process and packaging design with a goal of improving cycle time and reducing the damage incurred during the shipping and handling process.

To address the cycle time issue, a new process was created to handle FIP doors. This process expedites the order through the Whirlpool parts system and drops the order to Ft. Smith within 24 hours. Ft. Smith builds the door and then drop ships it directly to the customer or the servicer, if desired. The improvements to the process took the cycle time down to an average of 14 days for current models. (Cycle time improvements primarily affect current production models. Doors for units no longer in production will take longer than the average.)

The team's approach to the damage issue was to start by recreating the failure of doors using rough handling. They were able to damage doors 100% of the time. Some critical thinking along with mapping both internal and external processes allowed them to generate prototype packaging designs. To test the designs, doors were put through 'round robin trials' - shipping doors across the country to expose them to all the potential sources of damage then returning them to Ft. Smith for evaluation. The feedback from these trials allowed Ft. Smith engineers, working with packaging suppliers, to test multiple packaging revisions. In mid-March, revision 4 went into place. (See attached photo) Based on feedback from several Trade Partners and Service Companies, the revision has eliminated the majority of the damage.

The engineering team would appreciate your feedback. Have you seen improvement in the cycle time to complete an FIP door service call? Have you seen an improvement in the condition of doors after shipping? If you still are receiving damaged doors, could you provide specific information on the type of damage? Photos are also appreciated.

To provide feedback, please e-mail clyde_d_bailey@whirlpool.com.

Thank you!

