Recommendations for repair of cast iron shoes
Gorham Howe Truss

**Cast iron shoe. (In preparation for repair, dye penetrant non-destructive testing will be performed to identify cracks.)**

**Joint preparation for braze welding begins with chipping using a pneumatic hammer to produce a joint that has a good anchor pattern. (Photo shows a previous repair.)**

**The joint profile must provide sufficient surface area for a successful braze weld.**

**The cast iron shoe will be placed in a steel firebox for pre-heating.**

**Comments**

1. Dye penetrant non-destructive testing (NDT) will be performed to identify cracks.

2. Filler metal from previous repairs must be removed before the recommended profile can be made. The dimensions of the previous repair may affect the dimensions of the new profile.

3. Braze welding begins when the cast iron shoe is removed from the fire box. Recommended filler metal: 3/8” silicon bronze. Once the brazing is complete, the cast iron shoe is placed back in the fire box without the charcoal and covered with a fire blanket until completely cooled.

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Preheat the cast iron shoe at 1200 °F for 6 – 8 hours. Industrial bulk charcoal provides the fuel for the heating process.

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