Electric Heater Lead Welding Instructions

Gas Weld

1. Place coil end parallel to the rod and tie the coil lead to the rod with nichrome wire to hold the lead in place while welding. (See Figure 1).

2. To weld the coil to the rod, use an oxyacetylene flame. For filler rod, use excess heater coil wire. Use a soft flame to melt filler rod and fill in around coil leads to form a “ball”. Do not try to weld the coil leads directly to the rod. No flux is required. (See Figure 2).

CAUTION: Too hot a flame or applying too much heat to the coil leads can burn them off or cause crystallizing. Keep flame moving.

3. When the coil leads have been built up by the application of filler rod, increase flame heat. Apply the flame to the rod and add filler between the rod and built-up leads, gradually fusing them together. (See Figure 3).
TIG Weld

Joint
Type of Welded Joint: J-Groove
Backing Material: No

Base Metal
Sheet steel to SS Rod (support steel)

Filler Metal
Specification: If required, chromel lead wire
Classification: Same as heater lead

Gas
Shielding Gas: Argon
Percent Mixture: 100% Argon
Flow Rate: 10-14 CFH

Coating
Type: None

Preheat
Preheat Temperature Min: None

Technique

<table>
<thead>
<tr>
<th>Pass No.</th>
<th>Tungsten Size</th>
<th>Welding Current</th>
<th>Travel Speed</th>
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<tbody>
<tr>
<td></td>
<td>with 3/8” nozzle</td>
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<tr>
<td>1</td>
<td>.062 diameter</td>
<td>60-78, 60 nom.</td>
<td>N/A</td>
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1. Start puddle.
2. Before melting wire use a slight weave.
3. Once you start melting wire, lead the puddle with torch.

Hold torch perpendicular to work
14 gauge Chromel Lead Wire

1/2” SS Rod

FIGURE 4