Replacement Contacts for Westinghouse Circuit Breakers

Application / Description
Replacing stationary and moving arcing contacts with higher quality ABB contacts can restore power circuit breaker capability to original performance levels and often beyond. Replacing contacts, the most critical component of circuit breakers, could avoid derating the breaker and could avert a catastrophic failure.

ABB supplies replacement contacts for virtually all oil circuit breakers originally manufactured by Westinghouse. In all cases, the contacts are manufactured with high quality OEM materials to precise dimensions.

Features and Benefits
- Extensive historical database - assures compliance to original specification and allows upgraded materials, tolerances and performance requirements to be built in
- Over one million design records in print and microfilm
- ABB High Voltage Service’s research library includes: engineering directives, drawings, product advisories, and parts lists
- Parts kits are individually tailored to the breaker serial number for precise fit and application
- Replacement contacts extend equipment life and improve reliability
- Standard and expedited shipping available
- Parts include one year warranty

Contacts (below) are a critical component of the above circuit breaker. Replacement parts must be made to the strictest tolerances to maintain equipment reliability. Even the slightest deviation in quality can lead to a functional or catastrophic failure.
## Contact Comparison

Compare ABB replacement contacts with those made by a competitor.

<table>
<thead>
<tr>
<th>ABB contact cutaway</th>
<th>Competitor's contact cutaway</th>
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<tbody>
<tr>
<td>90% or greater braze bond area.</td>
<td>30-50% braze bond area with one having a .25&quot; x .06&quot; gap between tip and base. Joint heating and resultant thermal failure likely.</td>
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<tr>
<td>All dimensions accurately controlled.</td>
<td>Length and other dimensions incorrect. Wrong tip chamfer angle will result in reduced contact engagement and significantly reduced contact life. Reduced tip diameter would reduce contact spring pressure. Heating and resultant thermal failure likely.</td>
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<tr>
<td>Chrome-copper base material has a Rb hardness of 74 or greater.</td>
<td>Chrome-copper base material softened by excessive heating to Rb of 50 to 65. A softened contact could cause tip cracking or bending, resulting in jamming, thus preventing contact engagement.</td>
</tr>
</tbody>
</table>

**Conclusion:** A quality contact.

**Conclusion:** Unacceptable and unsafe for use in a high voltage circuit breaker.

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