



## Product/Process Change Notification

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<b>Initiation Date</b>	May 1, 2019	<b>Notification No.</b>	20190417
<b>Implementation Date</b>	June 1, 2019	<b>Initiator's Name</b>	F. Plameran
<b>Beginning Date Code of Implemented Change</b>			NA

### CHANGE DESCRIPTION:

Knowles qualified the new wire supplier for below listed wires used in telecoil assemblies. There is no change to bare wire and enamel coating materials and no change to fit, form and function of the finished goods assemblies. The new supplier's wires meet wire drawing specification. The assemblies built with new supplier's wires meet assembly drawing specifications.

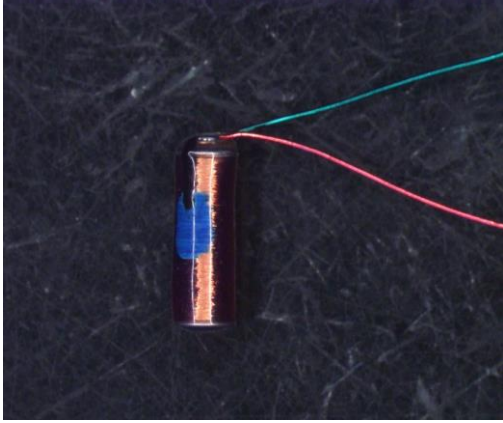
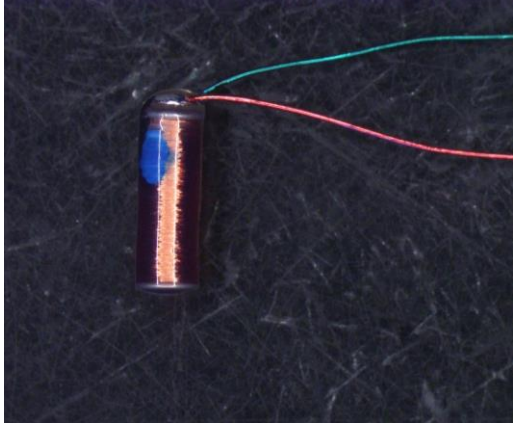
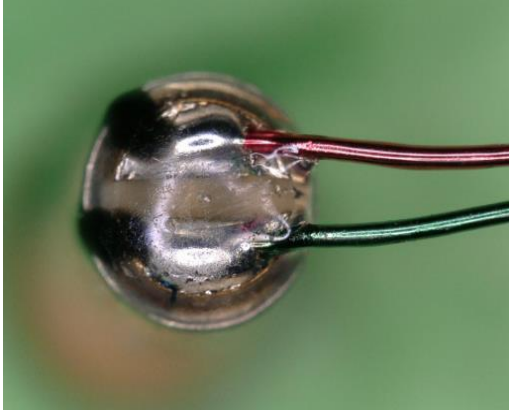
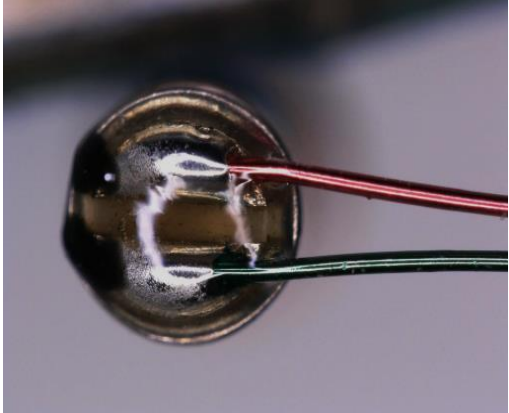
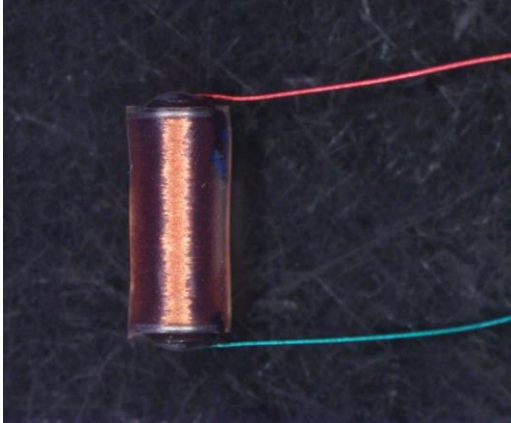
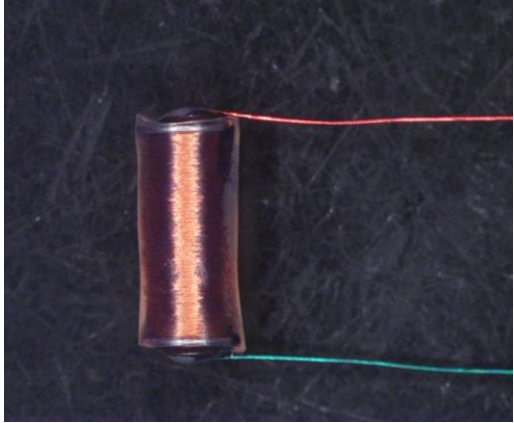
Please continue to work with your local sales manager if you have questions or concerns related to this PCN.

### MODELS AFFECTED;

Telecoil PN	Wire PN	wire AWG#/color
5100-253446	5100-029-111-4	#36/red
	5100-029-211-4	#36/green
5100-253604	5100-029-119-2	#36/red
	5100-029-219-2	#36/green
5100-253630	5100-029-150-1	#36/red
	5100-029-250-1	#36/green
5100-254056	5100-043-170-1	#40/green
	5100-043-270-1	#40/red
5300-253485	5100-029-150-1	#36/red
	5100-029-250-1	#36/green
	5100-029-350-1	#36/yellow

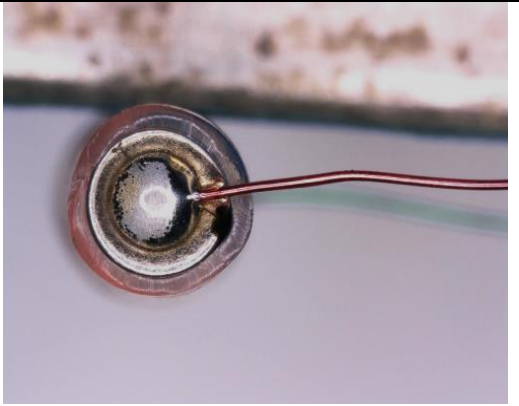
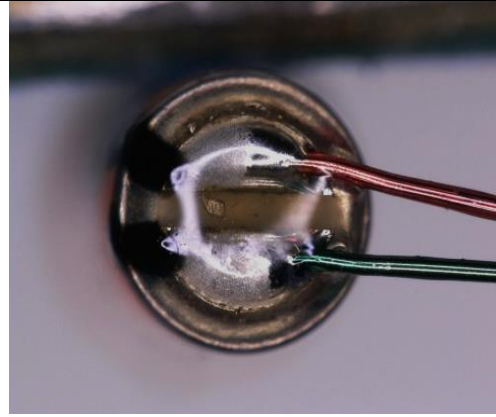
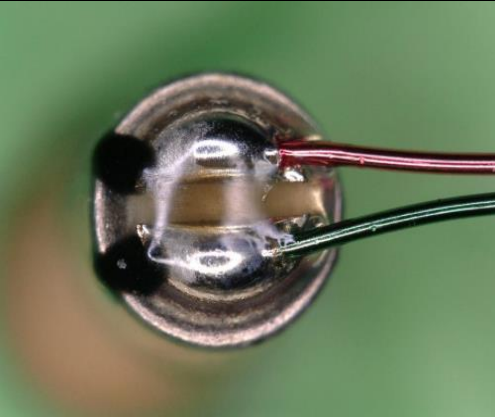
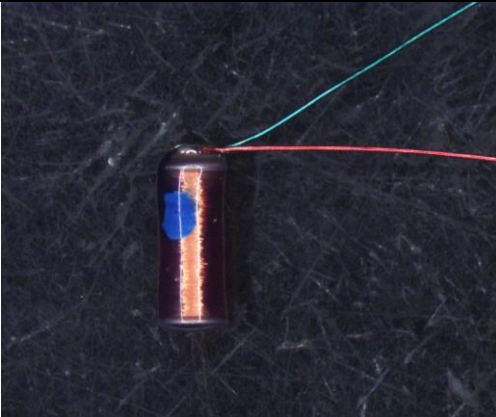
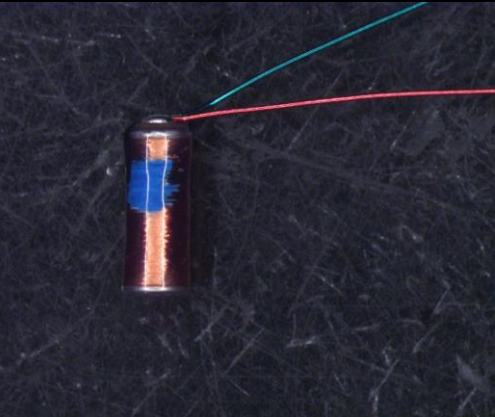
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**Comparable photos of assembled finished goods for new (trial lot) and current (control lot) wire manufacturer**

Finished Goods Comparison	New wire supplier (Trial lot)	Current wire supplier (Control lot)
5100-253446		
		
5100-253604		

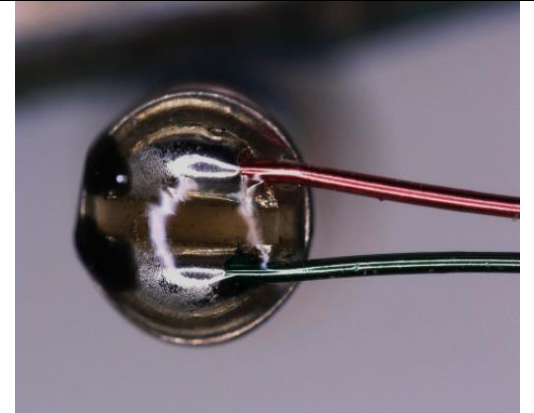
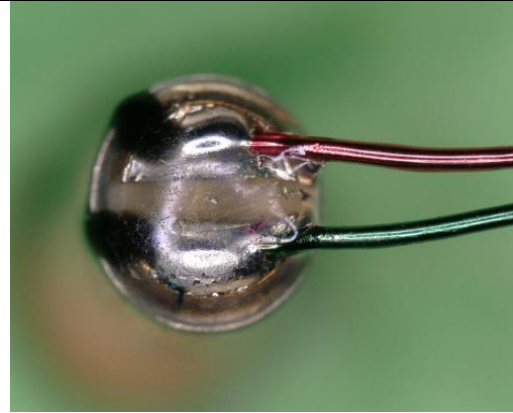
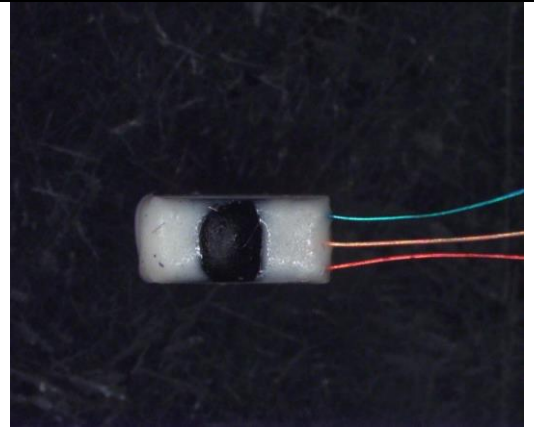
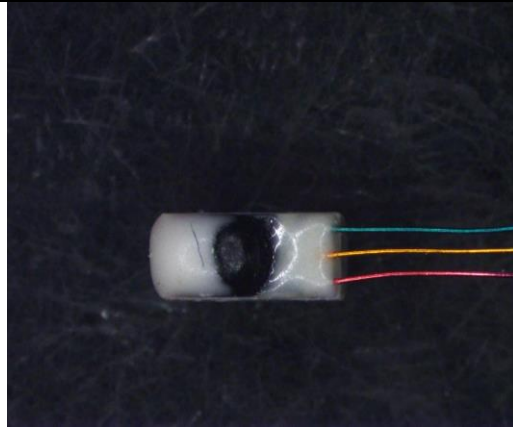
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5100-253630

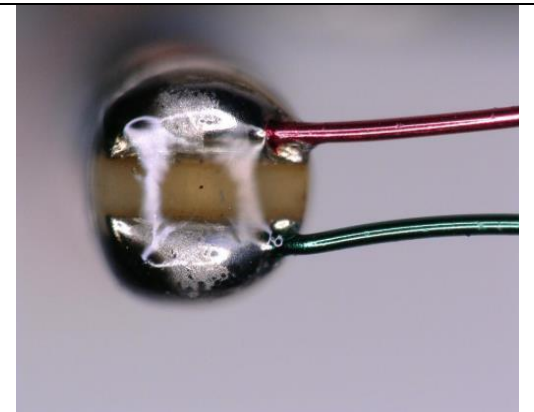
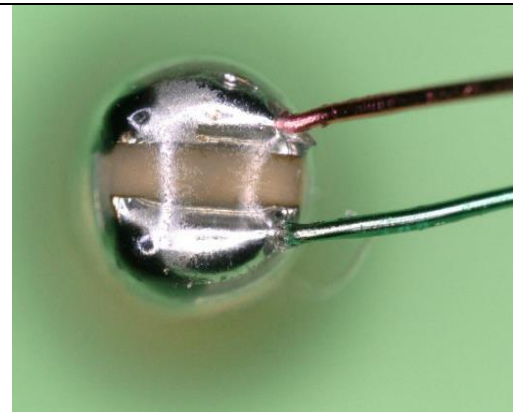
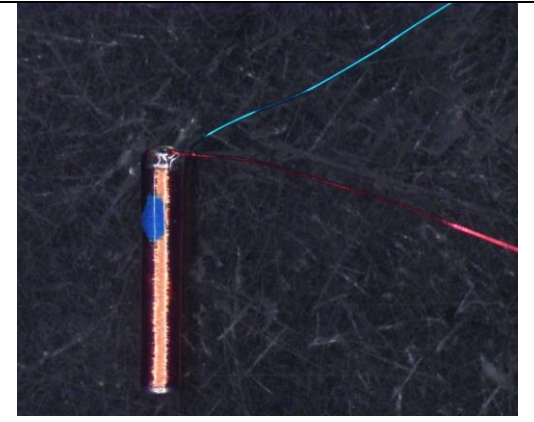
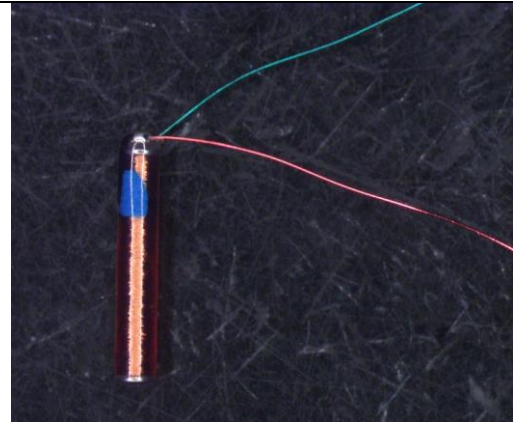




5300-253485



5100-254056



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**SUPPORT INFORMATION:**

The following qualification tests have been performed per Qualification Plan Number: R-P-18015

Tested models: 5100-253446, 5100-253604, 5100-253630, 5300-253485, 5100-254056

Control lot: Assemblies built with current supplier telecoil wire.

Trial lot: Assemblies built with new supplier telecoil wire.

**Reliability Test Results: 5100-253446**

Test Item	Sample size	Acceptance Criteria	Test Result																																							
<p>Damp Heat</p> <p>Temperature = 40° C ± 2° C; Humidity = 93 % ± 3 % RH, 21days; Recovery time 24 hrs. @ 23°C ± 5°C.</p>	<p>Control Lot: 20pcs Trial Lot: 20pcs</p>	<p>Trial group performance must be equal or better compared to control group.</p>	<p>Pass - The trial lot performance is comparable to the control lot.</p> <p>Initial</p> <table border="1"> <thead> <tr> <th>Test item</th> <th>Group</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td rowspan="2">DCR (1620-1980Ω)</td> <td>Control lot</td> <td>1791</td> </tr> <tr> <td>Trial lot</td> <td>1796</td> </tr> <tr> <td rowspan="2">Inductance (144.5- 195.5 mH)</td> <td>Control lot</td> <td>165</td> </tr> <tr> <td>Trial lot</td> <td>165.1</td> </tr> </tbody> </table> <p>10 days</p> <table border="1"> <thead> <tr> <th>Test item</th> <th>Group</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td rowspan="2">DCR (1620-1980Ω)</td> <td>Control lot</td> <td>1795.2</td> </tr> <tr> <td>Trial lot</td> <td>1801</td> </tr> <tr> <td rowspan="2">Inductance (144.5- 195.5 mH)</td> <td>Control lot</td> <td>164.52</td> </tr> <tr> <td>Trial lot</td> <td>164.41</td> </tr> </tbody> </table> <p>21 days</p> <table border="1"> <thead> <tr> <th>Test item</th> <th>Group</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td rowspan="2">DCR (1620-1980Ω)</td> <td>Control lot</td> <td>1796.9</td> </tr> <tr> <td>Trial lot</td> <td>1795.6</td> </tr> <tr> <td rowspan="2">Inductance (144.5- 195.5 mH)</td> <td>Control lot</td> <td>164</td> </tr> <tr> <td>Trial lot</td> <td>164.27</td> </tr> </tbody> </table>	Test item	Group	Average	DCR (1620-1980Ω)	Control lot	1791	Trial lot	1796	Inductance (144.5- 195.5 mH)	Control lot	165	Trial lot	165.1	Test item	Group	Average	DCR (1620-1980Ω)	Control lot	1795.2	Trial lot	1801	Inductance (144.5- 195.5 mH)	Control lot	164.52	Trial lot	164.41	Test item	Group	Average	DCR (1620-1980Ω)	Control lot	1796.9	Trial lot	1795.6	Inductance (144.5- 195.5 mH)	Control lot	164	Trial lot	164.27
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**Reliability Test Results: 5100-253604**

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**Reliability Test Results: 5100-253630**

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**Reliability Test Results: 5300-253485**

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**Reliability Test Results of 5100-254056:**

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