

Printing Problem

Inadequate Adhesion to Substrate

<i>InkRelated Possibilities</i>	<i>Corrective Action</i>
Wrong ink series was selected.	Refer to "Ink Substrate Guide" for proper ink and / or hardener series.
Incorrect ink and hardener mixing ratio.	Use a gram scale to accurately measure out ink and hardener ratios.
Insufficient curing time.	Ink manufacturers recommend 72+ hours before any quality tests are conducted.
<i>Other Related Possibilities</i>	<i>Corrective Action</i>
Insufficient heat applied for proper curing.	Increase temperature or increase amount of time in the oven.
<i>Part Related Possibilities</i>	<i>Corrective Action</i>
Parts may have surface contamination from mold release, oil, grease or dust.	Clean parts before printing.
Surface tension of the substrate is too low.	Pretreat parts to increase surface tension (typical with polypropylene and polyethylene plastics).

Troubleshooting Tip

Generally poor adhesion results from not identifying the substrate before printing. Try to identify the type of plastic or coating before printing. A quick assessment can be made in the following manner:

Using a scrap part, wipe the part with a product like C-Solv. If the plastic or surface is altered by the C-Solv the ink will most likely adhere with acceptable results. If the plastic is not affected by the C-Solv it will most likely have to have the surface tension raised by means of a pre-treatment. Remember all metal surfaces require a hardener to be added.

If you are not sure about your substrate or would like us to conduct an adhesion test for you, feel free to contact our technical support team (800) 982-1928.