

# ANIMAL GLUE TROUBLE SHOOTING GUIDE

PROBLEM	SYMPTOMS	CAUSES	REMEDY
1. Chilled Glue Film	Glue setting (or jelling) before bond is made. Glue film feels rubbery with little or no tack. Poor transfer of glue from one side of bond to other. Bond may reopen.	<ol style="list-style-type: none"> <li>1. Room temperature or humidity too low.</li> <li>2. Glue pan temperature too low.</li> <li>3. Draft from windows.</li> <li>4. Glue concentration too heavy.</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise room temperature &amp; humidity.</li> <li>2. Raise temp. of glue pan.</li> <li>3. Add slight amount of water to slow set.</li> </ol>
2. Glue sets too slowly	Glue feels "wet" or "slippery" with little tack. Bond may reopen.	<ol style="list-style-type: none"> <li>1. Room temp. or humidity too high.</li> <li>2. Glue pan temp. too high.</li> <li>3. Glue concentration too low (too much water.)</li> <li>4. Overheating of glue in pan.</li> </ol>	<ol style="list-style-type: none"> <li>1. Decrease glue pan temperature.</li> <li>2. Reduce water content of glue.</li> <li>3. Avoid glue pan temps. In excess of 160° F.</li> </ol>
3. "Starved" glue bond	Inadequate glue at surface of bond. Glue strikes into paper or board before bond is made.	<ol style="list-style-type: none"> <li>1. Insufficient glue deposited on paper or board.</li> <li>2. Glue too thin and/or glue pan temp. too high.</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase depth of glue deposit.</li> <li>2. Increase glue concentration and/or decrease glue pan temp.</li> </ol>
4. Pre-dried glue film	Glue drying before bond is made. Glue setting too fast.	<ol style="list-style-type: none"> <li>1. Delay in making bond or too slow a machine cycle for setting speed of glue.</li> <li>2. Glue temperature too cold.</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase machine speed or retard glue setting speed by increasing pan temperature or lowering glue concentration slightly. (Add water or glycerin)</li> <li>2. Add 1 oz. glycerin to pan.</li> <li>3. Add slight amount of hot water.</li> <li>4. Apply thicker amount of glue by wheel.</li> </ol>

**Notes:**

Generally ideal gluing conditions will be obtained when room temperature is 70-80° F, relative humidity is about 50% and glue pan temp. is in range of 140 to 160° F. These conditions must be modified for each individual machine operation in order to obtain a tacky film when bond is made.

Summer conditions - relatively high room temperatures and humidity; glue sets slowly - See corrections under (2) above.

Fall and winter conditions - Room temp. & humidity low - watch for chilled glue film, too fast of set. (see #1 and 2 above under problem headings.)

Be sure to refract both pots at least twice a day and make adjustments as necessary.