

## SECTION "J"- TROUBLE SHOOTING

<i>PROBLEM</i>	<i>CAUSE</i>	<i>SOLUTION</i>
<i>UNEVEN PENETRATION DEPTH</i>	<ul style="list-style-type: none"> <li>- INADEQUATE TONNAGE</li> <li>- RAM NOT PARALLEL TO BED</li> <li>- PUNCHES SHARPENED BUT NOT SHIMMED</li> </ul>	<ul style="list-style-type: none"> <li>-CHECK TONNAGE REQUIREMENT</li> <li>- ADJUST PRESS GIBBS.</li> <li>- CENTER TOOLING LOAD UNDER RAM</li> <li>- ADD SHIM TO PUNCH (ES)</li> </ul>
<i>KNOCKOUTS CUT THROUGH</i>	<ul style="list-style-type: none"> <li>- RAM DEPTH SET TO DEEP</li> <li>- RAM OVER TRAVEL</li> </ul>	<ul style="list-style-type: none"> <li>- INCREASE SHUT HEIGHT</li> <li>- ADD PRESS STOP BLOCKS</li> </ul>
<i>HOLE PATTERN NOT CONSISTANT WITH EDGE OF SHEET</i>	<ul style="list-style-type: none"> <li>- GAGE POSITION</li> <li>- PART LOADING</li> <li>- IMPROPER GAGE POSITION</li> </ul>	<ul style="list-style-type: none"> <li>- RECHECK BLANK SHEAR SIZE</li> <li>- REVIEW PART DESIGN PRINT AND TEMPLATE LAYOUT</li> <li>- VERIFY GAGE LOCATIONS</li> </ul>
<i>STRIP FEED STICKS TO DIE BUSHING</i>	<ul style="list-style-type: none"> <li>- STRIP BURR CATCHES IN DIE</li> </ul>	<ul style="list-style-type: none"> <li>- ADD LIFTERS TO RAISE STRIP WHEN MOVING</li> </ul>
<i>WORKPIECE DOES NOT STRIP FROM PUNCH</i>	<ul style="list-style-type: none"> <li>- TONNAGE</li> <li>- FATIGUED STRIPPERS</li> </ul>	<ul style="list-style-type: none"> <li>- RECALCULATE TONNAGE</li> <li>-REPLACE STRIPPER OR SPRINGS</li> </ul>
<i>BROKEN PUNCHES</i>	<ul style="list-style-type: none"> <li>- ROCKING OF PUNCH DURING PUNCHING</li> <li>- TEMPLATE BENT SO PUNCHES ARE NOT VERTICAL</li> <li>-SLUGS UNDER DIE RETAINER</li> </ul>	<ul style="list-style-type: none"> <li>- RAM MOVING F-B, OR L-R UNDER LOAD. STOP BLOCKS AND CENTER LOAD UNDER RAM</li> <li>-STRAIGHTEN / REPLACE TEMPLATES</li> <li>- CLEAN PRESS BED SURFACE THOROUGHLY</li> </ul>

<i>PROBLEM</i>	<i>CAUSE</i>	<i>SOLUTION</i>
<i>EXCESSIVE BURR ON WORKPIECE</i>	<ul style="list-style-type: none"> <li>-DULL PUNCHES OR DIES</li> <li>-EXCESSIVE DIE CLEARANCE</li> <li>- WORN POST ASSEMBLIES</li> <li>- RAM/BED OF PRESS NOT PARALLEL UNDER LOAD</li> <li>-WORKPIECE MOVING DURING PUNCHING</li> </ul>	<ul style="list-style-type: none"> <li>- <i>REPLACE OR SHARPEN PUNCHES OR DIES</i></li> <li>-<i>CHECK MATERIAL TYPE &amp; THICKNESS ADJUST CLEARANCE AS NECESSARY.</i></li> <li>- <i>STOP PRESS AT BOTTOM OF STROKE. MEASURE RAM TO BED DIMENSION AT 4 CORNERS. USE STOP BLOCKS OR REPAIR PRESS.</i></li> <li>-<i>VERIFY PUSHERS ARE INSTALLED AND FUNCTIONING</i></li> </ul>