

## OKL - BODYMAKER CAN TROUBLE SHOOTING GUIDE

### PROBLEM - SHORT CAN (TEAR OFF)

**Potential Cause**

<b>Cup Quality</b> <b>Evaluate</b> →	Metal	Earing	Concentricity	Lubrication	Conveying Damage	Scratches Inside or Outside of Cup			
<b>Redrawn Cup</b> <b>Evaluate</b> → ↓	Wrinkle Free	Even Across Top	Concentricity						
<b>Condition of Tooling</b> <b>Evaluate</b> →	Buildup or Damage on Dies	Buildup or Damage on Punch	Lubrication on Face of Redraw Die						
<b>Infeed Track and Infeed Timing</b> <b>Evaluate</b> →	Condition	Sharp Edges	Cup Feed Timing						
<b>Tooling Alignment</b> <b>Evaluate</b> →	Orientation of Start of Tearoff as Related to Domer Mark								
<b>Air Strip Timing and Performance</b> <b>Evaluate</b> →	Timing	Pressure	Valve Cycling	Air Leaks					
<b>Coolant Concentration, Volume, and Quality</b> <b>Evaluate</b> →	Sludge	Minimum GPM	PH	Bacteria	Concentration	Temperature			
<b>Potential Cause</b> ↓									
<b>Stripper</b> <b>Evaluate</b> →	Condition	Alignment	Sizing to Punch						

### PROBLEM - INCOMPLETE REDRAW

**Potential Cause**

↓									
---	--	--	--	--	--	--	--	--	--

<b>Cup Feed Timing Evaluate</b> →	Timing	Chain Tention	Detent Clutch if Applicable						
<b>Redraw Area Evaluate</b> →	Redraw Sleeve and Alignment	Cup Locator	Redraw Die	Redraw Pressure	Cup Quality	Cup Earing	Redraw Components	Out-of Round Cup	Infeed Track or Excessive Infeed Pressure
<b>Wrinkle Evaluate</b> →	Sidewall	Chime	Cup	Redraw Die	Open End of Redrawn Cup	Air Strip	Cup Infeed Timing/Cups Free in Track	Coolant	Redraw Components

**PROBLEM - SCRATCHES**

<b>Inside Can Evaluate</b> →	Coil Stock	Buildup on Punch	Punch Damage from Tearoff or Misfeed	Coolant	Stripper				
<b>Outside Can Evaluate</b> →	Coil Stock	Contamination	Conveying Damage	Redraw Die	Ironing Dies	Stripper Alignment	Cup Locator	Coolant	

**PROBLEM - SPLIT SIDEWALL**

<b>Evaluate</b> →	Coil Stock	Punch	Scrap Metal in Tool Pack	Cup Feed Timing	Cup Locator	Stripper	Cups	Tooling	Scratches
-------------------	------------	-------	--------------------------	-----------------	-------------	----------	------	---------	-----------

**PROBLEM - WALL VARIATION**

<b>Check</b> →	If flange wall variation is out of specification and body wall is in specification, the problem will be in the cup or redraw area. If both flange wall and body wall are out of specification, the problem will be the redraw area, tooling reduction, machine/tooling alignment, parallel motion assembly, or drive of machine.								
----------------	--	--	--	--	--	--	--	--	--

<b>Flange Wall Evaluate</b> →	Cups	Redraw Sleeve	Cup Locator	Alignment	Tooling	Coolant			
<b>Flange Wall and Body Wall Evaluate</b> →	Cups	Redraw Sleeve	Cup Locator	Alignment	Machine (Parallel Motion/Drive)	Coolant	Stripper	Tooling	

**PROBLEM - BLEED THRU**

<b>Outside of Can Evaluate</b> →	Wrinkle in Cup	Wrinkle in Redraw	Coolant	Cupper Lube	Buildup on Tooling	Post Lube			
----------------------------------	----------------	-------------------	---------	-------------	--------------------	-----------	--	--	--

**PROBLEM - DOME DEPTH VARIATION**

<b>Evaluate</b> →	Tooling Relation	Coolant Venting	Alignment	Air strip	Punch Sleeve Tightness	Redraw Components	Air Pressure		
-------------------	------------------	-----------------	-----------	-----------	------------------------	-------------------	--------------	--	--