## MLCS-3, Theory of Process, System and Machine Operation, including Limitations:

The component's leads cannot be touching, and should be within about .010" or less of the actual good/ ideal location prior to using the F-1B/1RC. Use the Jerry Rig and hand straightening tools to correct for this condition, prior to reforming.

- The component's leads shoulders need to be exiting the component flat and perpendicular to the parts seating plane, prior to using the F-1B/1RC. Use the Jerry Rig and hand straightening tools to correct for this condition, prior to reforming.
- The F-1B/1RC will reform the leads to improve coplanarity. We will have to increase the standoff height slightly, normally about +.002 to +.004" from the actual supplied forming dimensions of the component to accomplish this. The GOAL of this operation is to get the coplanarity with in the JEDEC spec of .004" TIR.
- The MLCS Lead Reconditioner will lead recondition the leads side to side to correct for skew, so long as they have been processed as mentioned above. Normally we move the leads about .010" side to side to correct for SKEW and or Splay, but this value should be adjusted based on the components leg length, material type and hardness.
- The MLCS Lead Reconditioner will lead recondition the leads up and down using the comb and lifter feature to help verify and set coplanarity, so long as they have been processed, as mentioned above .
- Tinned components and solder should be avoided in the machine unless the pitch is large and the customer is committed to ongoing cleaning of the combs and tooling members on both the lead reformer and lead reconditioner.
- A way of inspecting the reconditioned components is needed near the system, we use an optical comparator for the most consistent measuring and inspecting.
- Every component is different and presents unique challenges, the best part about the system is that all internal members of the system are either adjustable and/or can be replaced to allow for more control of the process and results.