

**Manual fine-pitch lead reconditioning system
quickly pays for itself in reclaimed components.**



**fancort
industries, inc.**

Circuit Board Assembly & Handling Solutions

The DANA Design MLCS-2 Manual Lead Reconditioner*:

- Restores to Jedec specifications lead spacing, sweep and minor coplanarity deviations. (NOTE: The companion system F-1B/1RC is used to restore gullwing form.)
- Conditions any TSOP or 2 or 4-sided gullwing style device from 7mm x 7mm to 32mm x 32mm, with lead pitch down to .5mm.
- Average processing time for a QFP is less than 60 seconds. Package changeover takes less than 5 minutes.
- Device is positioned securely in dedicated nest, which rotates for rapid 4-sided processing.
- Lockable adjustments for X, Y and Z settings.
- Plated steel base for stability and durability.
- Measures a compact 10" x 10", weighs 25 lbs.

F-1B/1RC Universal Reformer* to Restore Gullwing Form:

- Designed for use when the coplanarity of a device is beyond the capability of the Dana MLCS-2 lead conditioner.
- Restores severe coplanarity defects in gullwing devices by reforming legs and resetting the foot, one side at time.
- Three forming sets available. Operator quickly adjusts standoff control, body size to 60mm x 60mm, and lead material thickness. Foot and leg length can also be adjusted.
- Robust construction of chrome-plated tool steel. Aluminum hand press is activated with minimal force.

*Patent Pending

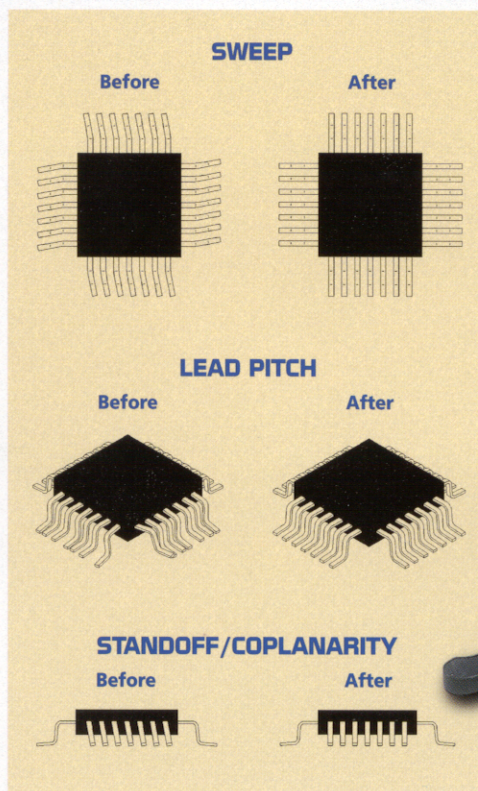
Recondition bent leads and restore tooling or automated equipment!

Manufacturers and users of fine-pitch devices constantly face the challenge of reclaiming components with bent, misaligned or mangled leads. Even if only a small percentage of incoming or outgoing parts is affected, malformed leads can cause a drain on profits due to discarded components or preventable rework. For many companies, automated lead processing systems are not a viable alternative, since their cost/benefit ratio is excessively high. Fancort now offers a viable solution with a manually operated 3-pc. lead reconditioning system, featuring the F-1B/1RC, Dana Design MLCS-2 and inspection kit. These easy-to-use precision bench-top machines rival even the most expensive systems for performance and

accuracy and are ideally suited for fine-pitch components with lead spacing down to .5mm. They simultaneously correct sweep and restore lead pitch, standoff and coplanarity to Jedec standards, and do so without requiring special tooling for any two or four-sided gullwing device from 7mm x 7mm to 32mm x 32mm. The lead-conditioning procedure is performed quickly and efficiently without stress to the component.

The lead reconditioning process:

This Fancort system should reclaim all but the most severely damaged parts for reuse on pick and place machines. While not a panacea, this process is a cost-effective alternative to lead



**The DANA Design
MLCS-2 Manual Lead
Reconditioner:**



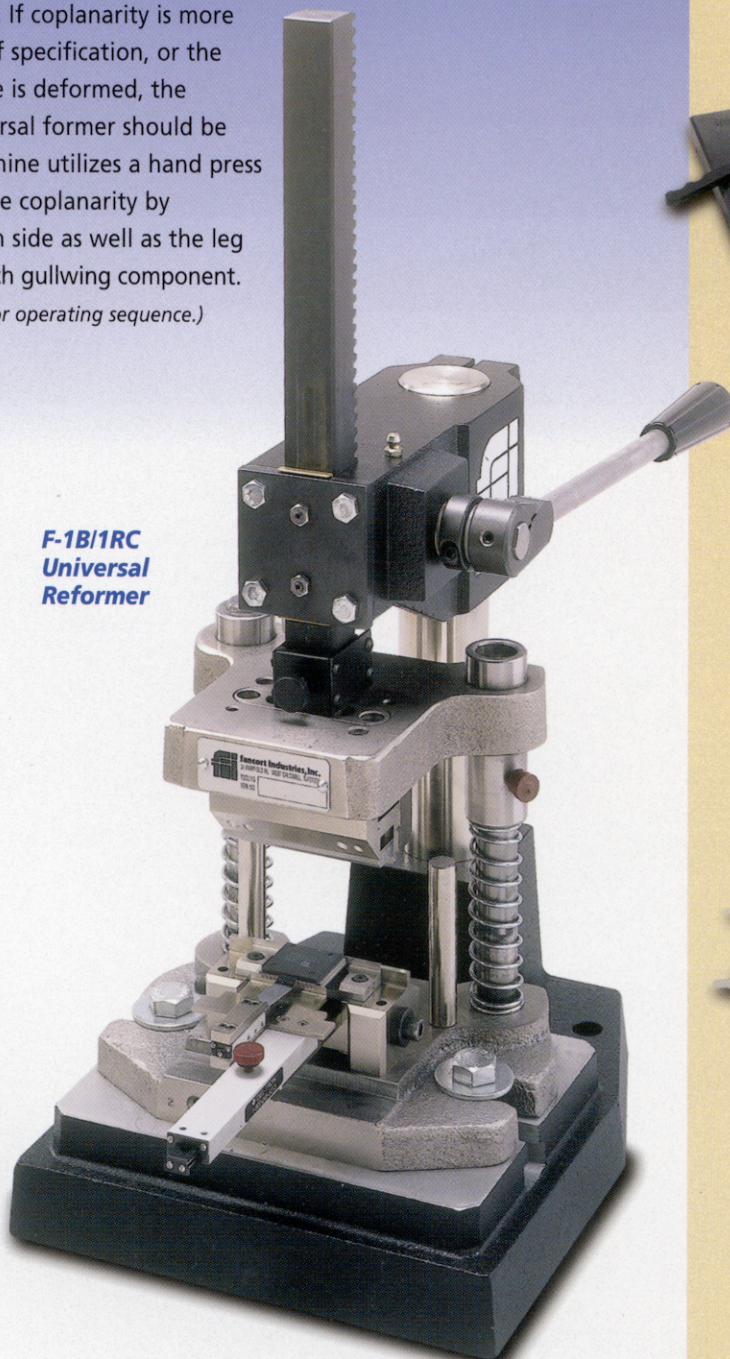
**fancort
industries, inc.**

31 Fairfield Place, West Caldwell, N.J. 07006 • 973/575-0610 •

coplanarity to Jedec standards without expensive

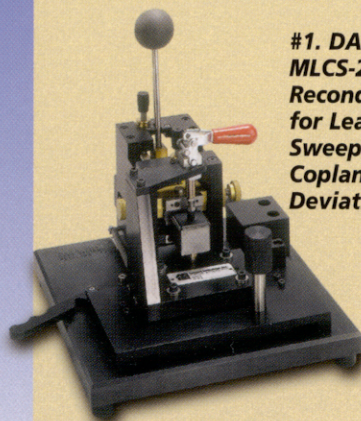
conditioning systems costing well over \$100,000. Restoration can involve three simple steps — or possibly four — depending on the extent of damage to the parts. Leads that are within ± 0.015 " from original specification can be readily corrected using the Dana Design MLCS-2 reconditioner. However, if the leads are severely skewed and touching one another — the operator must first use a hand tool to separate them. If coplanarity is more than ± 0.015 " off specification, or the gullwing shape is deformed, the F-1B/1RC universal former should be used. This machine utilizes a hand press that will restore coplanarity by reforming each side as well as the leg and foot of each gullwing component. (See back page for operating sequence.)

**F-1B/1RC
Universal
Reformer**

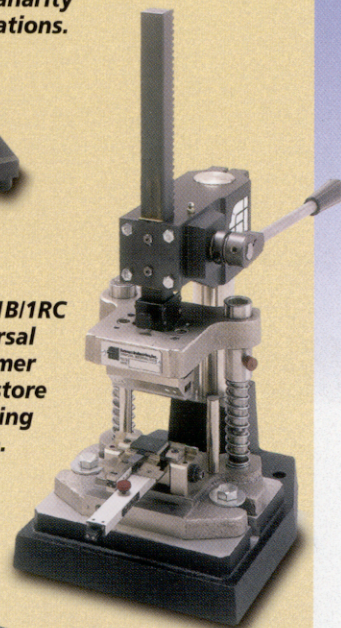


3-pc. lead reconditioning equipment package:

On-site setup and training optional.



**#1. DANA Design
MLCS-2 Lead
Reconditioner
for Lead Spacing,
Sweep and Minor
Coplanarity
Deviations.**



**#2. F-1B/1RC
Universal
Reformer
to Restore
Gullwing
Shape.**



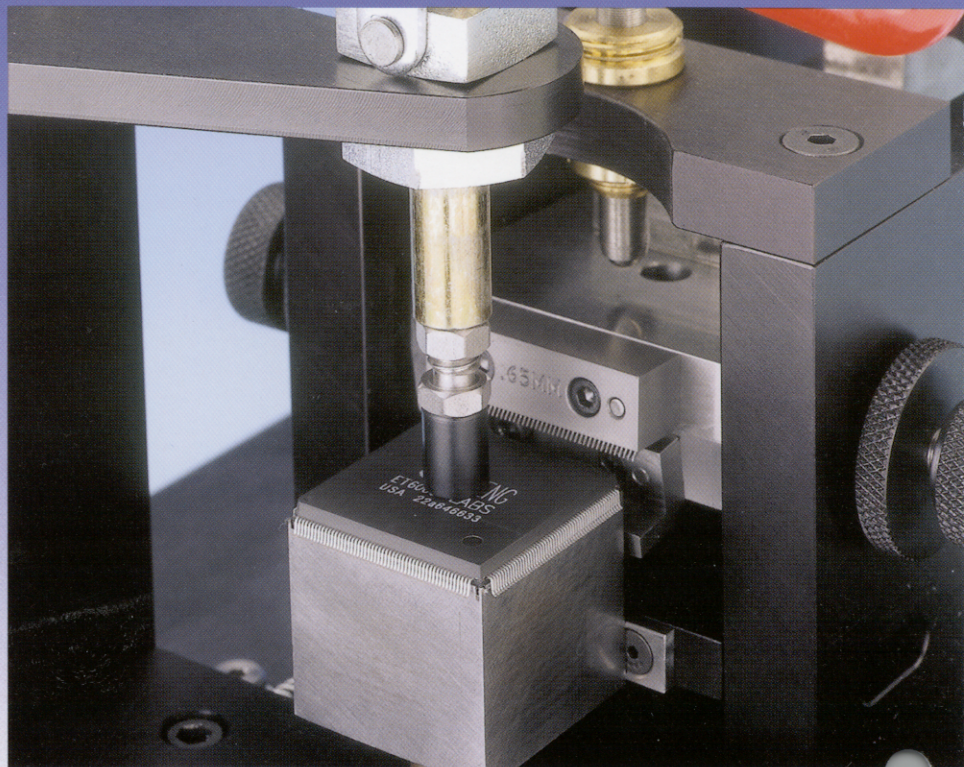
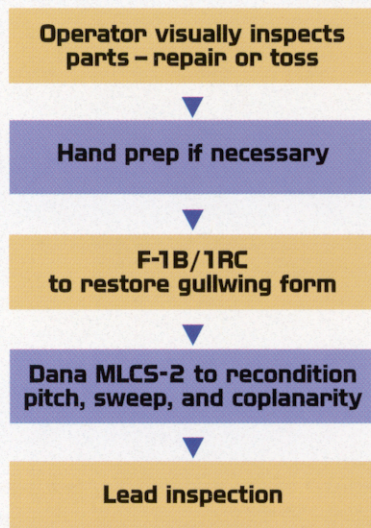
#3. The LRSK-100 Accessory Kit:
Includes 7 alignment stencils, 304 pins .5mm; 240 pins .5mm; 144 pins .5mm; 184 pins .65mm; 160 pins .65mm; 208 pins .5mm; 144 pins .65mm -- others available upon request. Also included are a pick up tool, knife, tweezers, CI-100 coplanarity mirror, razor blade, Kapton tape and a sample fine pitch device ... all in a fitted wooden case.

Recommended 4-step operating sequence: average processing time of 1 to 5 minutes.

1. Inspect the part for leads that may be crossed or touching and use handtools furnished in LRSK-100 kit to separate them. Examine the foot condition and gullwing to determine if the F-1B/1RC is needed before processing with the Dana Design MLCS-2. Use LRSK-100 handtools to separate leads.
2. Use the F-1B/1RC to reset gullwing form on each of the four sides if necessary.
3. Use the Dana Design MLCS-2 to recondition the leads. Examine the finished part to determine if any side must be redone.
4. Use the LRSK-100 kit for visual inspection of coplanarity and lead position before part is returned to production.

With experience, you may find that many components with slightly bent leads can be perfectly reformed without Step #1. Others may require all four steps, while a small percentage may be so severely damaged as to be beyond rescue. However, this much is certain: The Fancort lead reconditioning system will be a wise capital investment that will reclaim a sufficient number of components to achieve payback in short order.

LEAD CONDITIONING PROCESS



Component is seated on rotating nest in the Dana Design MLCS-2 to allow combing of each side as processing knob is engaged.

MLCS-2

Manually Operated Lead Conditioning Machine

Overall Dimensions: 10" x 10"

Weight: 25 lbs.

Combs available in following sizes: 0.025" pitch
0.5mm pitch
0.65mm pitch
0.8mm pitch

F-1B/1RC

Manually Operated Lead Reformer

Overall Dimensions: 9" x 10" x 20"H

Weight: 35 lbs.

Forming Sets in following sizes: .016" shoulder with taper
.025" shoulder
.040" shoulder

LRSK-100

Manual Inspection Kit

Optional vacuum pen HP-100.

Ask for demo video or CD of this system.