

# Application Note



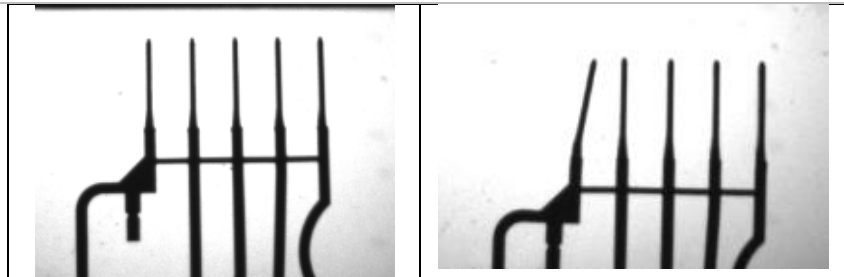
Title: Metal Stamping Error Proofing with Cognex 3G7

No. VS 502

**Application Overview:** When metal stamping customers form thin gauge intricate parts, keeping the formed shape can be a challenge with the many subsequent handling operations. In this application, error proofing required a dimensional check for bent pins just prior to the shipment. Here is an example of how the higher resolution 3G7 can perform a critical higher level of inspection.

## Application Requirements

- Inspect parts prior to final packing
- Inspect for bent pins
- Rejects contained and documented
- 3 rejects in a row, stops the press for investigation
- Part of corrective action to satisfy customer



Good Part

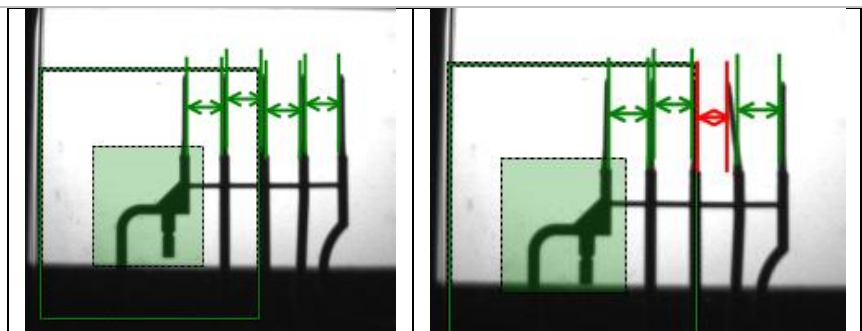
Bad Part

Bent pins are not acceptable for this metal formed progressive die thin gauge intricate part.

## Cognex 3G7 Sensing Solution

- Enhanced dimensional part gauging
- Caliper tool easy for customer to apply
- Robust and reliable
- Flexible measuring capabilities

Parts are on a backlit conveyor and inspected just prior to tray packing. Customer has to insure that quality parts are being shipped. Previously used manual inspections were not repeatable and reliable to meet zero-tolerance.



Good Part – All Pins Pass

Bad Part – 4<sup>th</sup> Pin Bent

The Cognex 3G7 Checker applied in Measurement personality allows for fast and accurate dimensional gauging of the critical portions of this metal formed part. The sensitivity was easily set to eliminate nuisance faults but catch all out-of-tolerance bent pin conditions.