

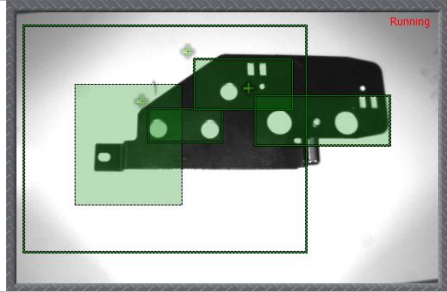
# Application Note



Title: Metal Stamped Part Inspection with Cognex 3G7

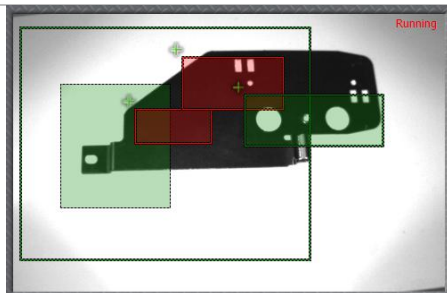
No. VS 504

**Application Overview:** Inspect parts traveling on a conveyor coming out of a press for correct form and proper number of holes. The metal parts are approximately 5" by 2" and have a number of critical punched holes that distinguish one part from another. This inspection is to make sure that the part has the correct number of holes in the correct location on the part.



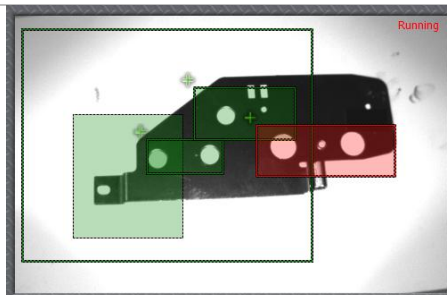
The leading edge of the part is located and three Pattern Tools are applied to detect the correct perforations on each stamped part:

All **Green Boxes** indicate a **PASSED** Inspection  
Good Part



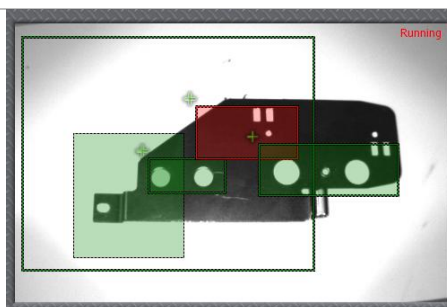
The leading edge of the part is located and two of the Pattern Tools Fail:

Pattern 1: 2 Holes missing **Red Box**  
Pattern 2: 1 Hole missing **Red Box**  
Pattern 3: All holes present **Green Box**  
**FAILED** Inspection  
Bad Part



The leading edge of the part is located and one of Pattern Tools Fail:

Pattern 1: All holes present **Green Box**  
Pattern 2: All holes present **Green Box**  
Pattern 3: 2 rectangular boxes missing **Red Box**  
**FAILED** Inspection  
Bad part



The leading edge of the part is located and one of the Pattern Tools Fail:

Pattern 1: All holes present **Green Box**  
Pattern 2: 1 hole missing **Red Box**  
Pattern 3: All holes present **Green Box**  
**FAILED** Inspection  
Bad part