

## PRECISION SQUARE CALIBRATION PROCEDURES # 5

### ENVIRONMENT:

The environment must be relatively dust free, clean the surrounding area with Citri-clean, and clean all inspection tools.

### A. VISUAL INSPECTION

1. Inspect the measuring surfaces for nicks, burrs, and file if necessary.
  - Spray toolmakers ink on the measuring surface, let dry – 2 minutes.
  - Remove the burrs with a small file.
  - Inspect the surface using a straight edge/light penetration
  - Remove any high spots.
2. Inspect the casting body for cracks, nicks.
3. Inspect the blade for wear, nicks, burrs and readability.
  - a. File or replace if necessary.
4. Inspect the Clamping Bolt Assembly for excessive wear.
  - a. Replace components as required.

### B. CLEANING

1. Clean all components.
  - a. Use WD-40 for cleaning the components.
  - b. Remove excess WD-40 with a clean, dry, lint free cloth.
  - c. Assemble components.

### C. INSTRUMENT PERFORMANCE

1. Inspect the function of the Clamp Assembly, ensure blade clamps tightly.
2. Ensure blade slides smoothly when unclamped.

**CALIBRATION**

1. Clean Angular Gauge Block – Use alcohol based cleaner and a lint free cloth.
2. Clean 90B Precision Square – Use Alcohol based cleaner and a lint free cloth.
3. Ensure measuring surfaces on calibration and measuring instruments are clean.
  - a. Measure 90B outside surface – record findings in Inspection Report.
  - b. Measure 90B inside surface – record findings in Inspection Report.
  - c. Measure 45B surface – record findings on Inspection Report.