

Safety Note: To be performed by certified personnel only.

HOUSING DIMENSIONS CHECK

I LINEAR DIMENSIONS

- Use three (3) inch span, 0.0001" accuracy micrometer to measure required dimensions to <0.0003."
- No measurement should contact the critical surfaces.
- Measure the total length of the machined housing starting at or near center of face of the assembled housing
- Machined housing total length to be measured with assembled housing at or near center of face.

II JIG HOLES

- With diameter gauges in place use micrometer to measure relative distance of jig holes.

III GAS INLET AND OUTLET HOLES

- Use special quartz ball diameter gauge to verify hole diameter.

IV SURFACE FLATNESS

- Use optical flat (1/20 wave length) and monochromatic light.
- Place housing surface on flat and count fringes.
- Good cleaning is required.
- The housing surfaces are specified to 1/10 fringe, however, this measurement will verify flatness to only 1/2 fringe.

V SURFACE PARALLELISM

- Use autocollimator to check parallelism of surfaces of housing blanks in four (4) relative angular orientations.
- The parallelism is specified to one arc-sec which corresponds to <10% relative displacement of the two pairs of lines in the autocollimator.

