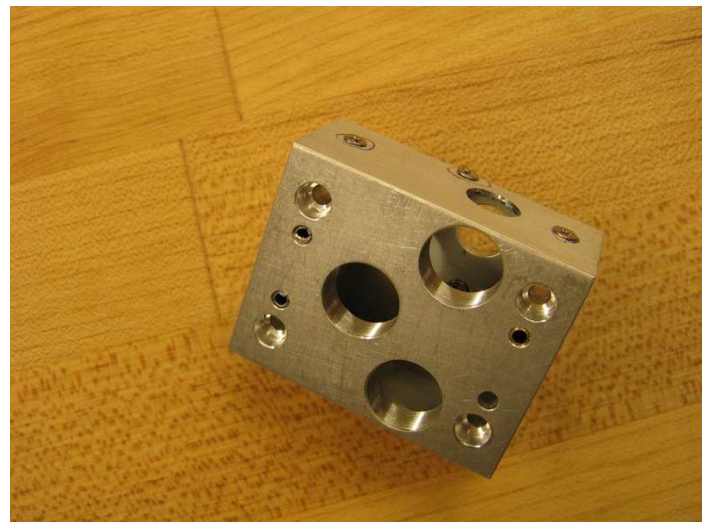
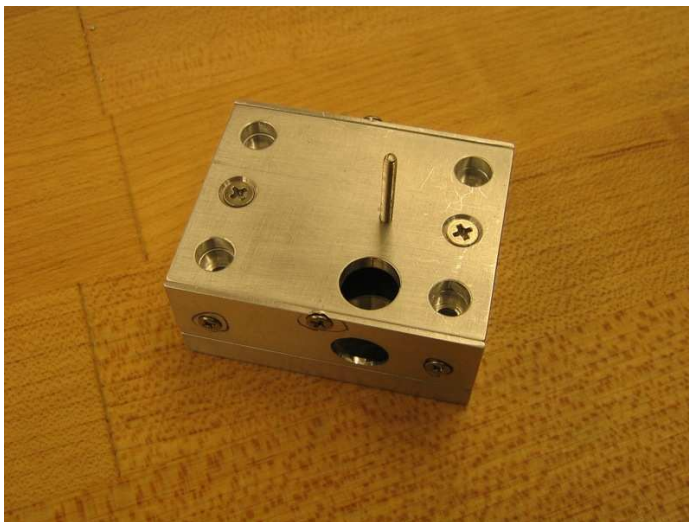


The purpose of this test is to check if the machined parts fit together.
First, assemble machine parts without optics to check fit of machined parts.
Note certain holes in the prism box must be countersunk or tapped by the assembler (you) and certain holes in the framework must also be drilled and tapped. These holes must be located after partial assembly of the components.

Prism Box. See "Prism_Box" assembly for orientation of parts shown in pictures.
Mechanical assembly includes fitting dowel pins and pressing parts together: (A) Get the dowel pins made from brass tubing (B) Press pins into holes using guide to keep them straight (C) Press side bars down onto pins until parts joined
Mechanical assembly requires countersinking 8 holes for flat-head screws. First countersink six 2-56 clearance holes in Prism Box Front/Back for 2-56 Flat Head screws.

Next countersink 1/16" hole in cover for 2-56 FH and then tap remaining depth as 2-56 thread.

Insert and screw in a 2-56 x 3/4" FH SS screw pointing outward from the Prism Box Cover. This screw will be used to attach the Beam Block assemblies.



Framework parts include:

Hexagon Base
Hex spacer (5)
Hex Spacer with Clip Holes
Fluidic Leg (3)
Saran Wrap Spacer (3)
8-32 x 1.25 SS set screw (6)
Ribbon Cable Clamp (2)
6-32 x 3/8" SS Allen Cap screw (4)
Side Panel (3)
Side Panel with Holes (1)

Side Panel with Notches (1)
Side Panel with Holes and Notches(1)
4-40 x 3/16" SS Allen Cap screw (12)
Four extra holes must be drilled and tapped in hexagon spacers to support Force Detector Crossbars. See Framework Assembly page.

Lower Optical Train:

Prism Box Spacer (6)
Light Lever Prism Spacer (2)
Assembled Prism Boxes (2)
6-32x7/8 SS Allen Cap Screw (16)
Light Lever Pickoff Tube (2)
Light Lever Mirror Bracket (2)

Objective Centering Assembly:

Objective Centering Bracket
Objective Centering Mount
4-40x1/2" SS Allen Cap screw (7)
#4 SS washer, 3/8" OD, (4)
1/8" x 3/8" SS dowel pin (2)
8-32 x 5/8" SS Allen Cap screw (2)

Objective Sliding Mount:

DS40-X stage from Newport
6-32 x 3/8" SS Allen Cap screw (4)
Objective Mount Rail
6-32 x 1/4" SS FH screw (3)
Objective Mount
8-32 x 1/4" SS set screw
Worm Gear Bracket
Worm gear set
4-40 x 3/8" SS Allen Cap Screw (2)

Wiggler Mounts:

Kinematic Riser Block (2)
8-32 x 1" SS Allen Cap screw (4)
Kinematic Mount Bracket (2)
8-32 x 3/4" SS Allen Cap screw (4)

Force Detectors:

PSD Holder (2)
8-32 X 3/4" (2)
PSD Holder Handle (2)
Crossbar Slider (2)
8-32 X 3/4" (2)
8-32 X 5/8" (2)

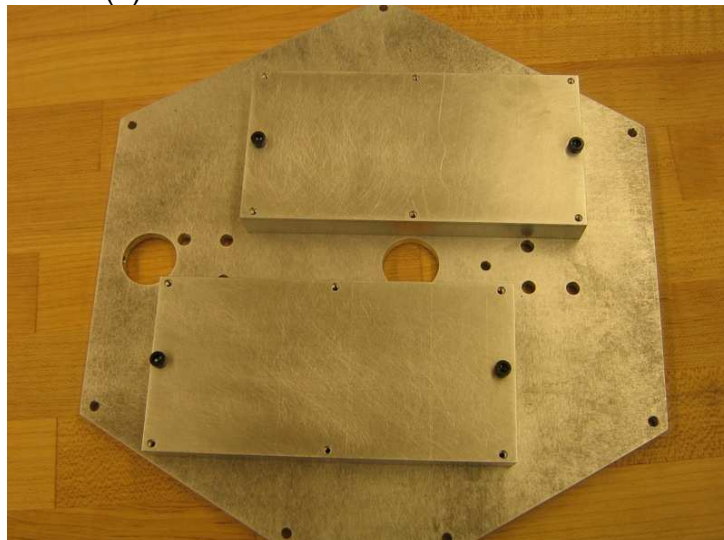
#8 SS washer (2)
Detector Crossbar (2)
Crossbar bracket (4)
4-40 x 1/2" SS Allen Cap screw (8)

Relay Lens Holder

Relay Lens Standoff Spacer
8-32 X 3/8" (2)
8-32 X 5/8" (2)

Hexagon Top with Laser Mounts:

Hexagon Top
Laser Base (2)
Laser Cable Clamp (2)
4-40 x 1/2" SS FH screw (2)
Laser Base Cover (2)
4-40 x 3/16" SS Allen Cap screw (16)
Fiber Feedthrough Plate (2)
Fiber Adapter
2-56 x 1/8" SS FH screw (4)



Position Detector Adjustment Mirror:

Mirror Offset Riser (2)

Mirror Mount, 2-screw (2)

Screw SS Allen Cap 8-32 x 3/4" (4)

