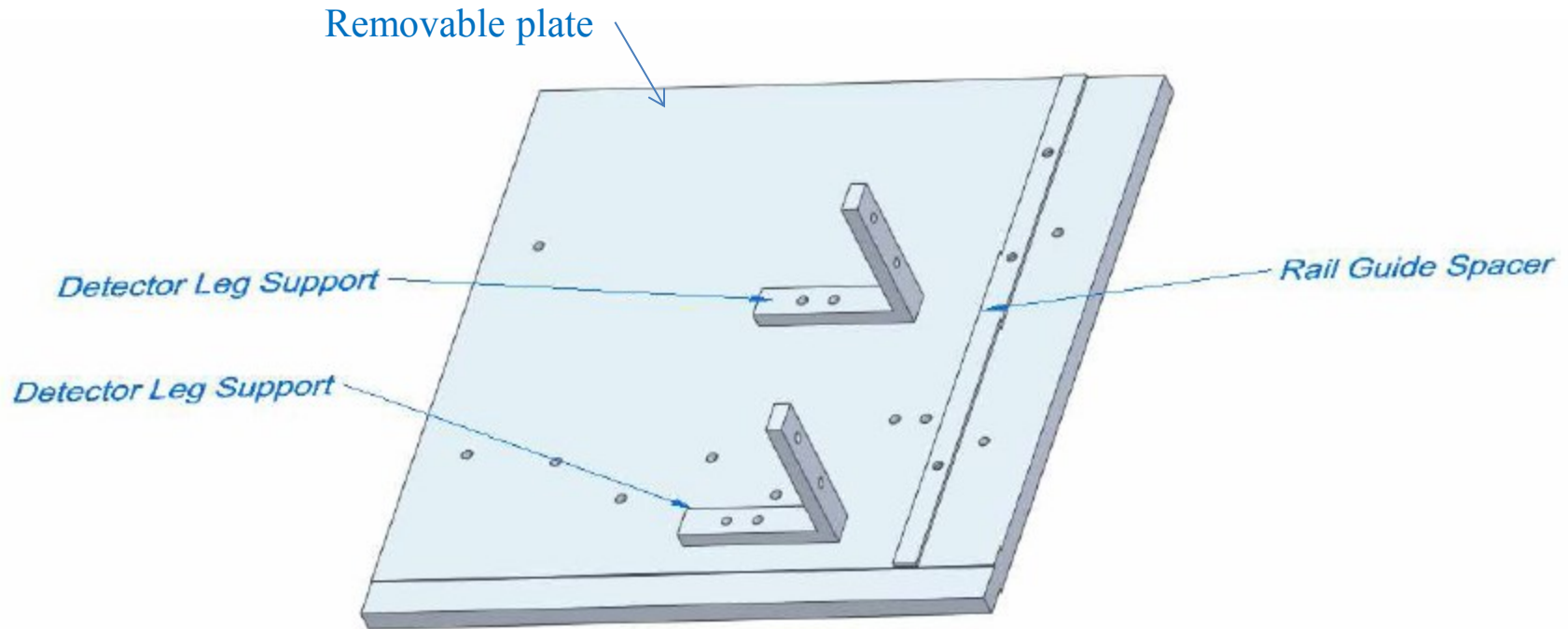


# Polarimeter build up and details

Robert Lee

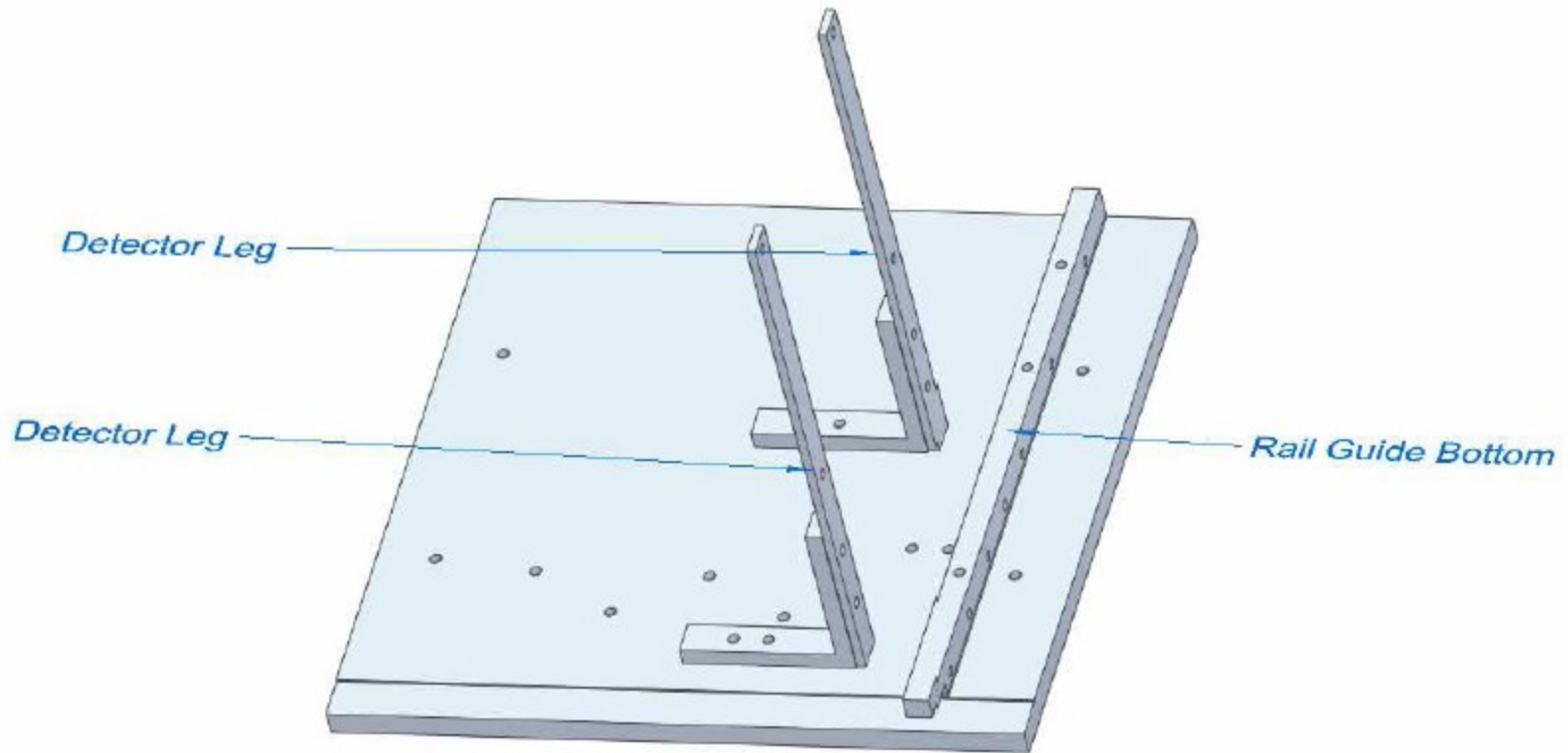


# View 1



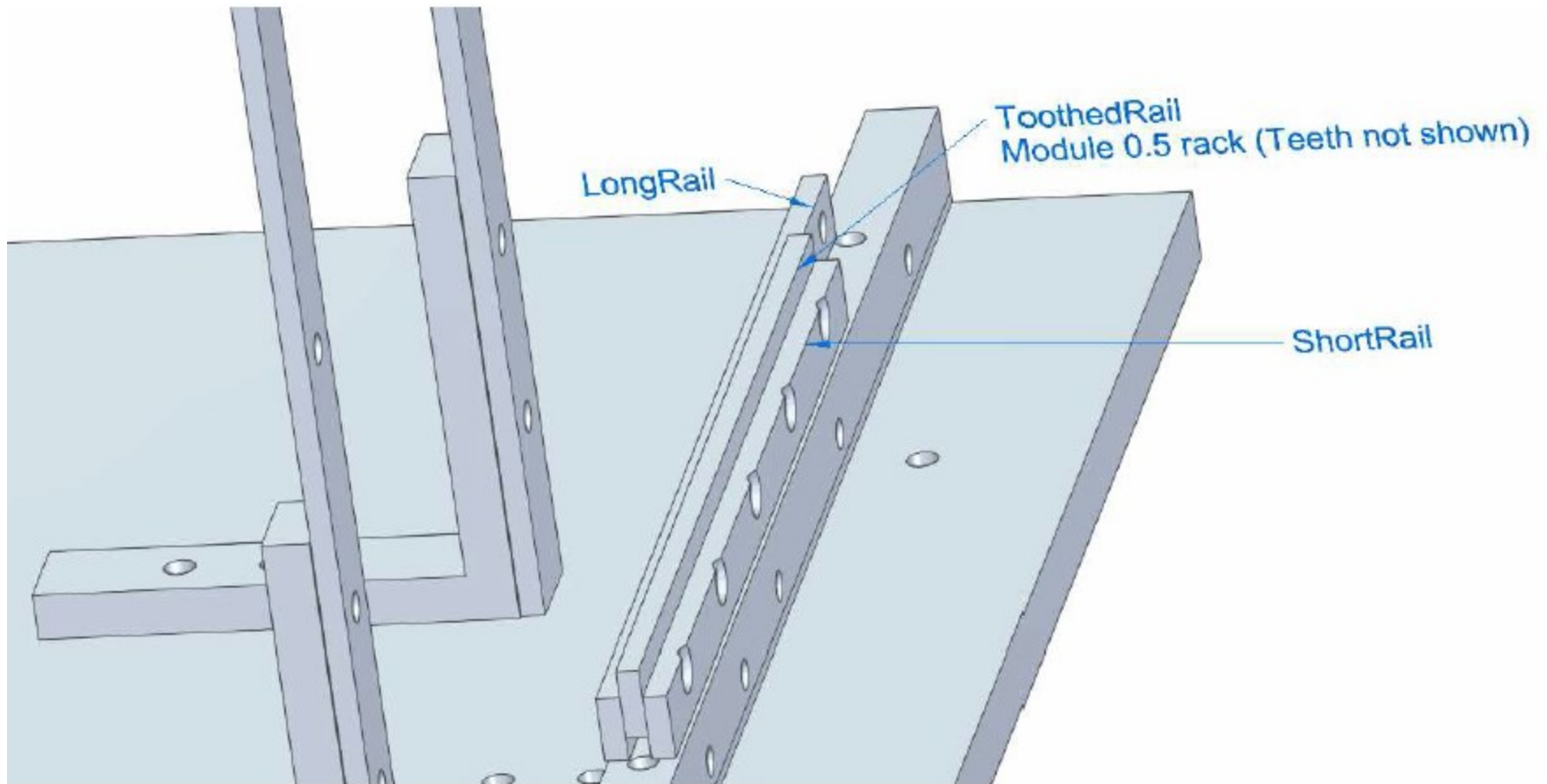
- Material (Removable plate, leg supports and rail guide spacer): Aluminum
- Leg supports attached to removable plate using #8 fasteners

# View 2



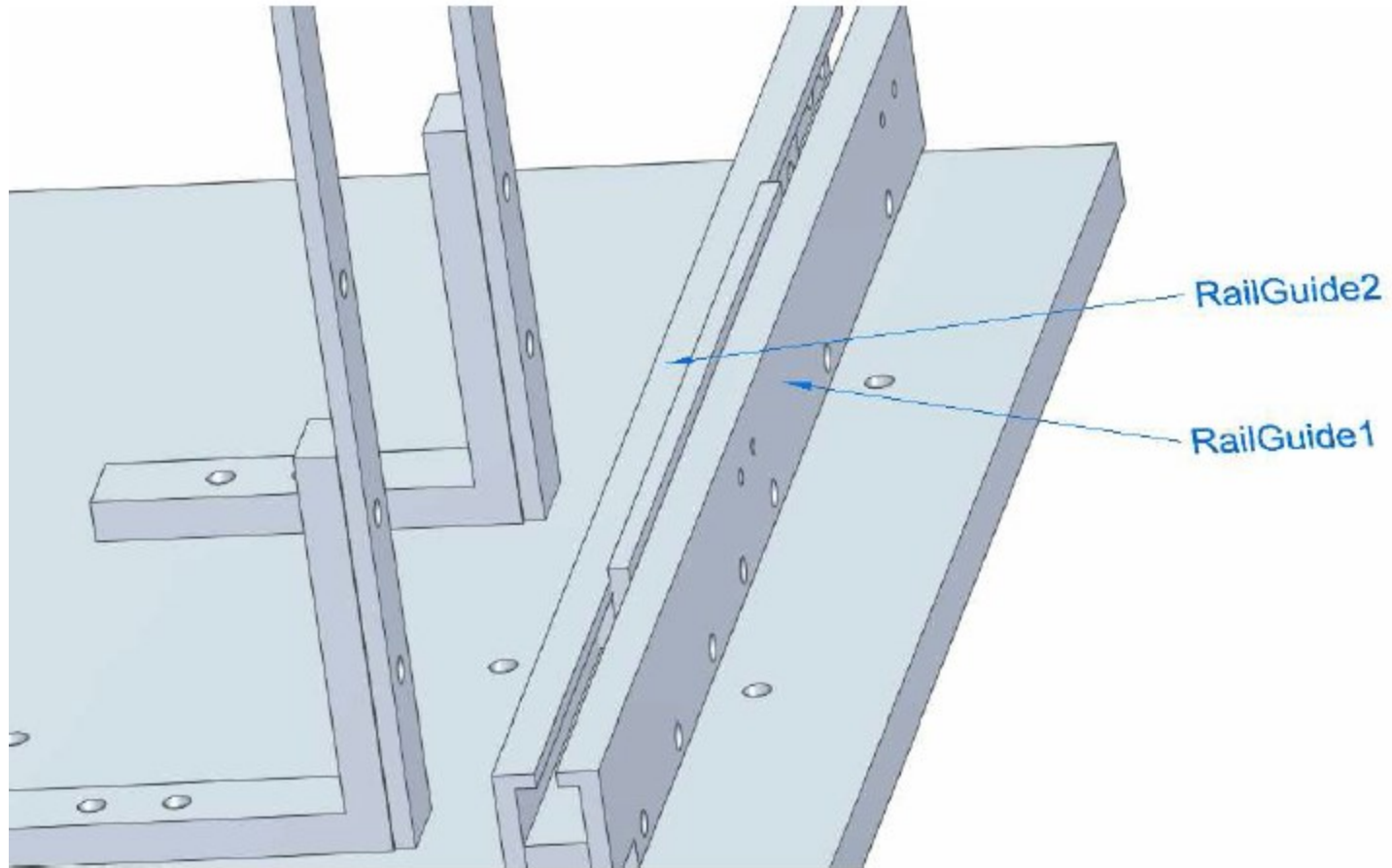
- Material (Detector Leg and rail guide bottom): Aluminum
- Detector Legs attached to supports using #8 fasteners
- Rail guide bottom tapped for #8-32 screw
- Rail guide bottom attached to removable plate using #8-32 screws

# View 3



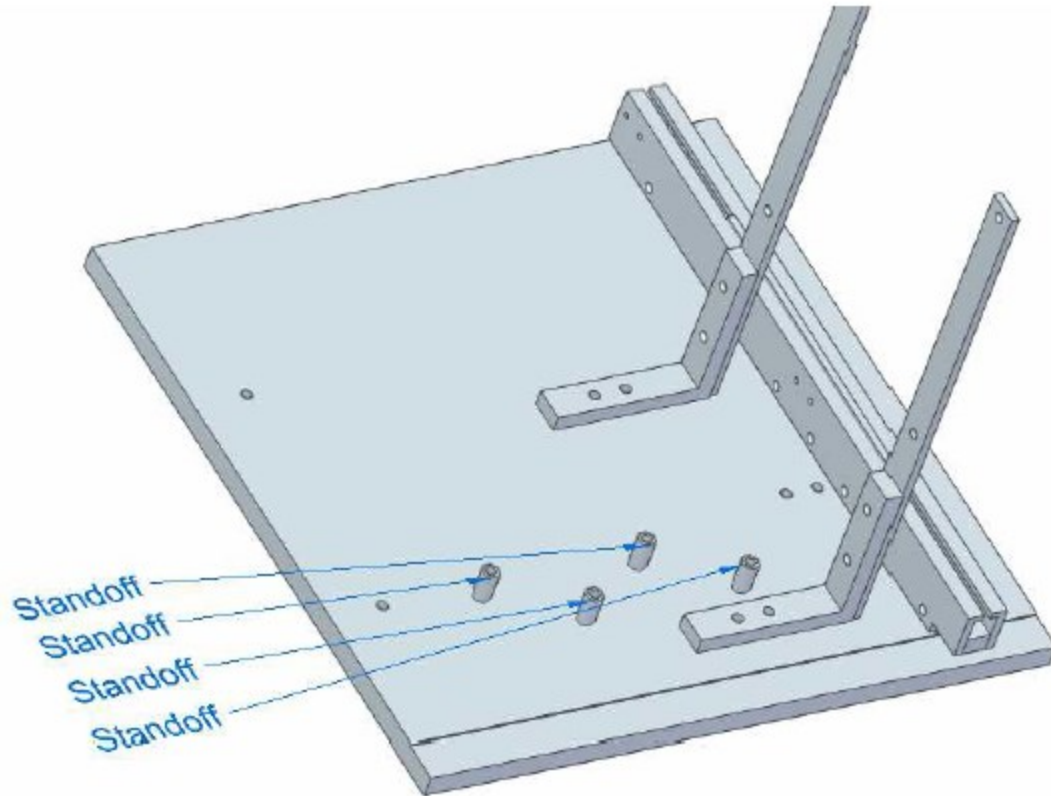
- Material (Short and Long rails): Aluminum
- Material (Toothed rail): Steel
- Long rail tapped for #4-40 screw
- Toothed rail: Module 0.5 rack, pitch height 9.5 mm
- Long rail, toothed rail and short rail put together using #4-40 screws

# View 4



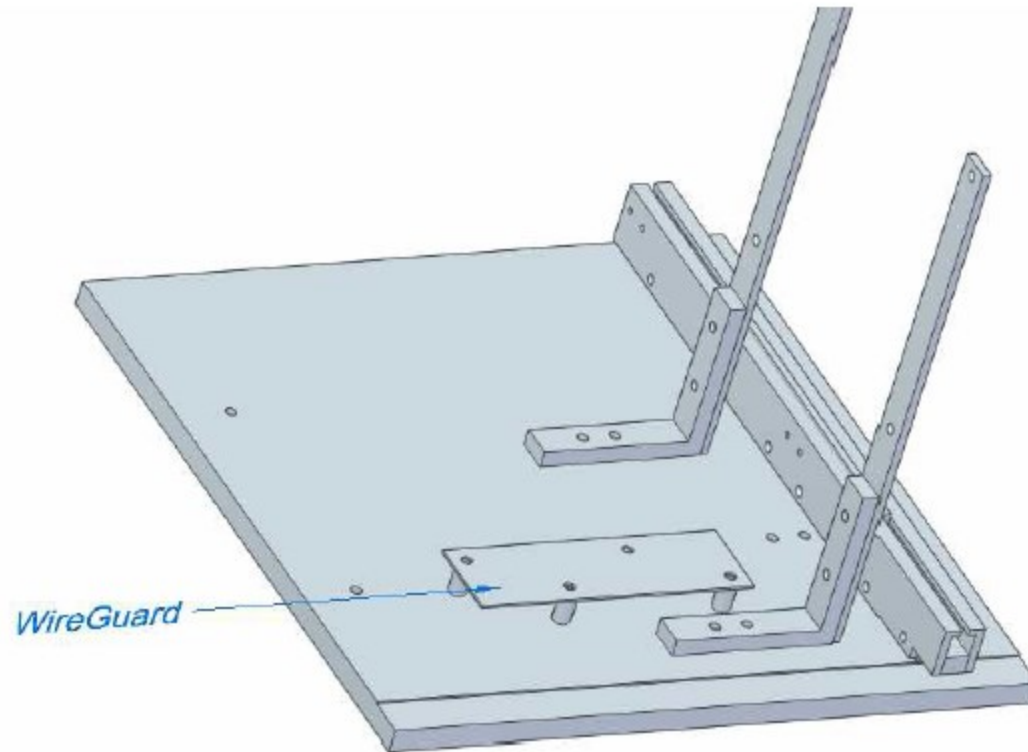
- Material (rail guides): Aluminum

# View 5



- Material (standoffs) : Aluminum

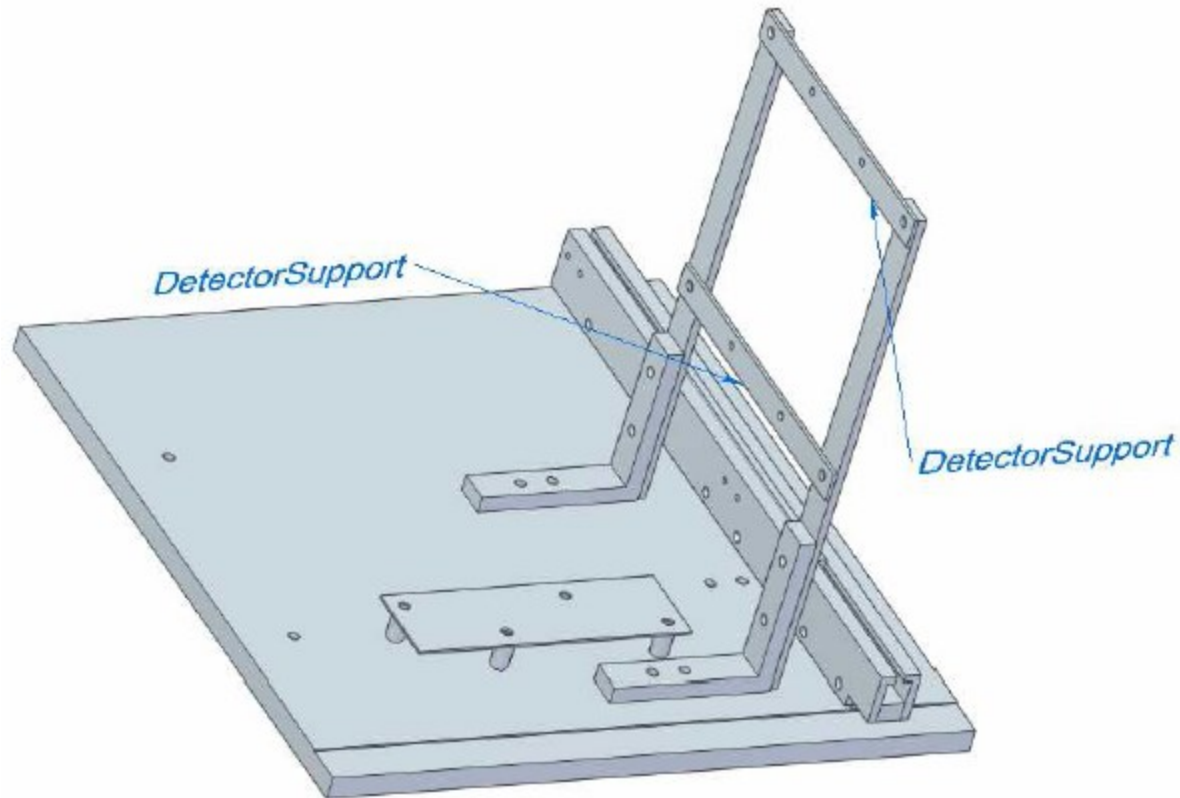
# View 6



- Material (wire guard) : Aluminum
- Wier guard attached to plate using #8 fasteners



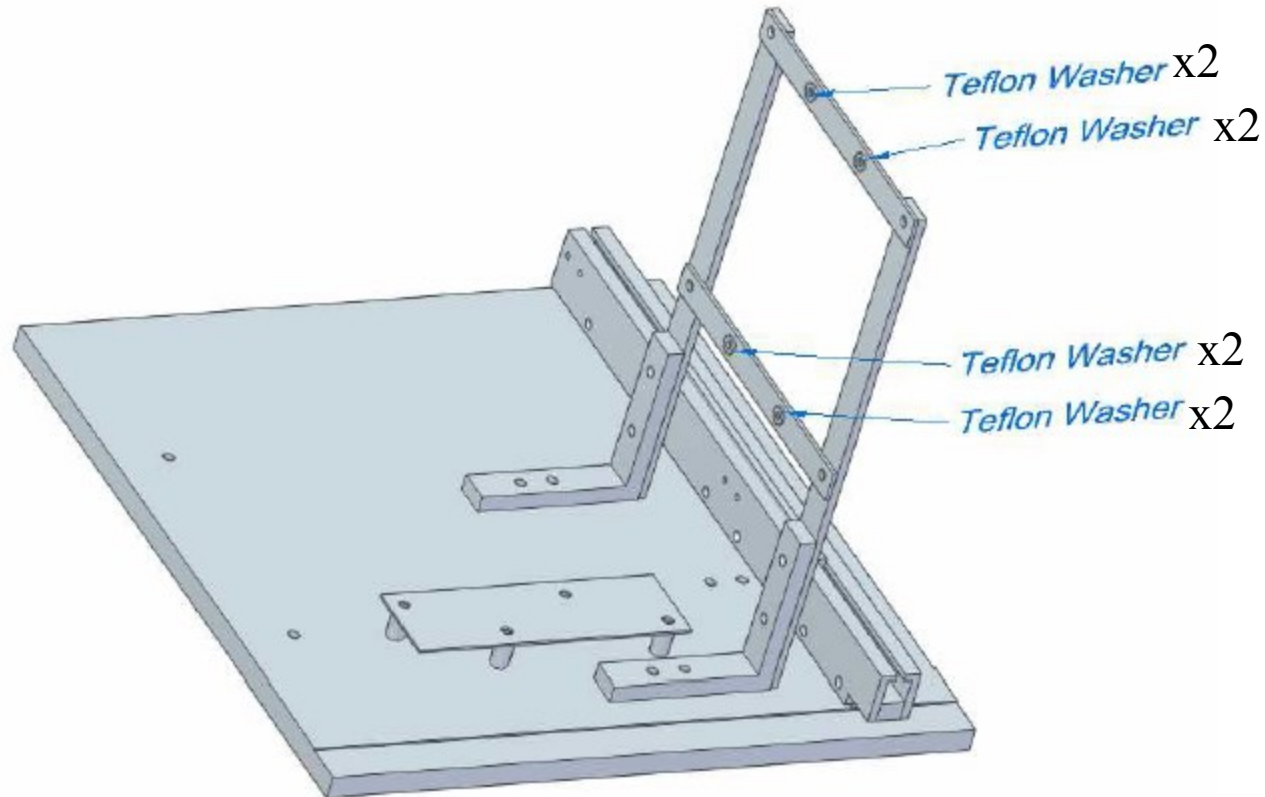
# View 7



- Material (detector supports) : Aluminum
- Detector supports attached to legs using #8 fasteners

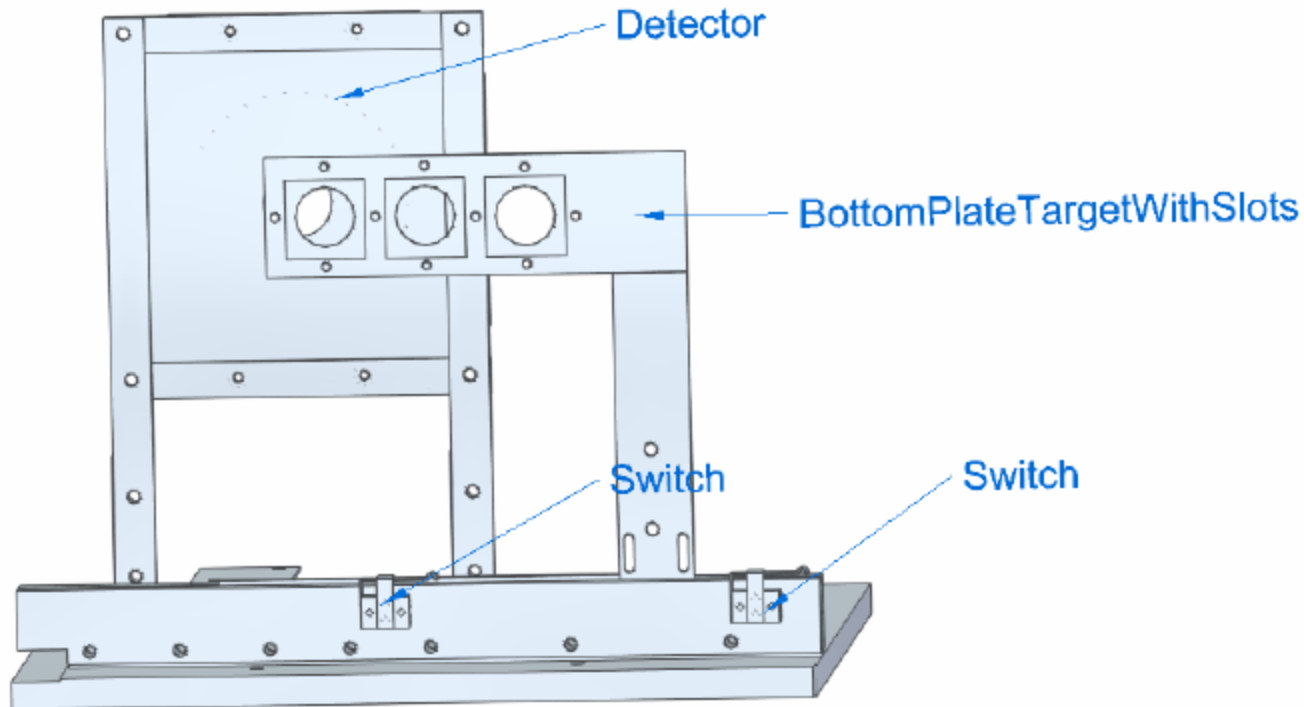


# View 8



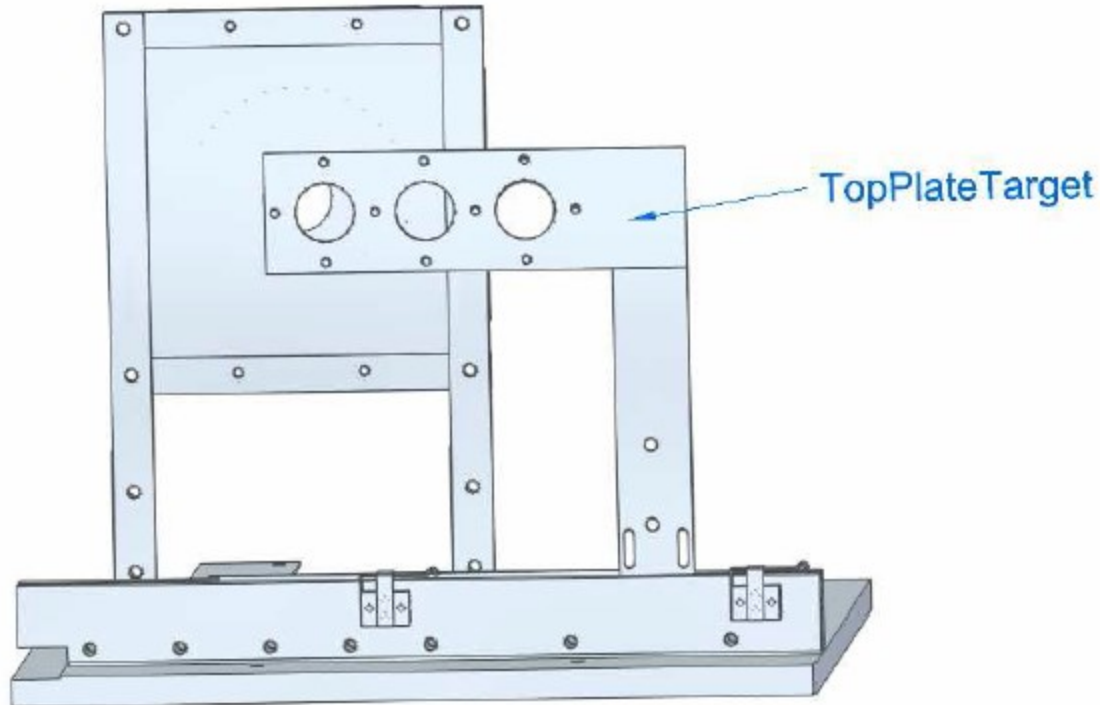
- Material (washers) : Teflon
- Washers: Inner diameter 3.2 mm, outer diameter 7 mm, thickness 0.5 mm

# View 9



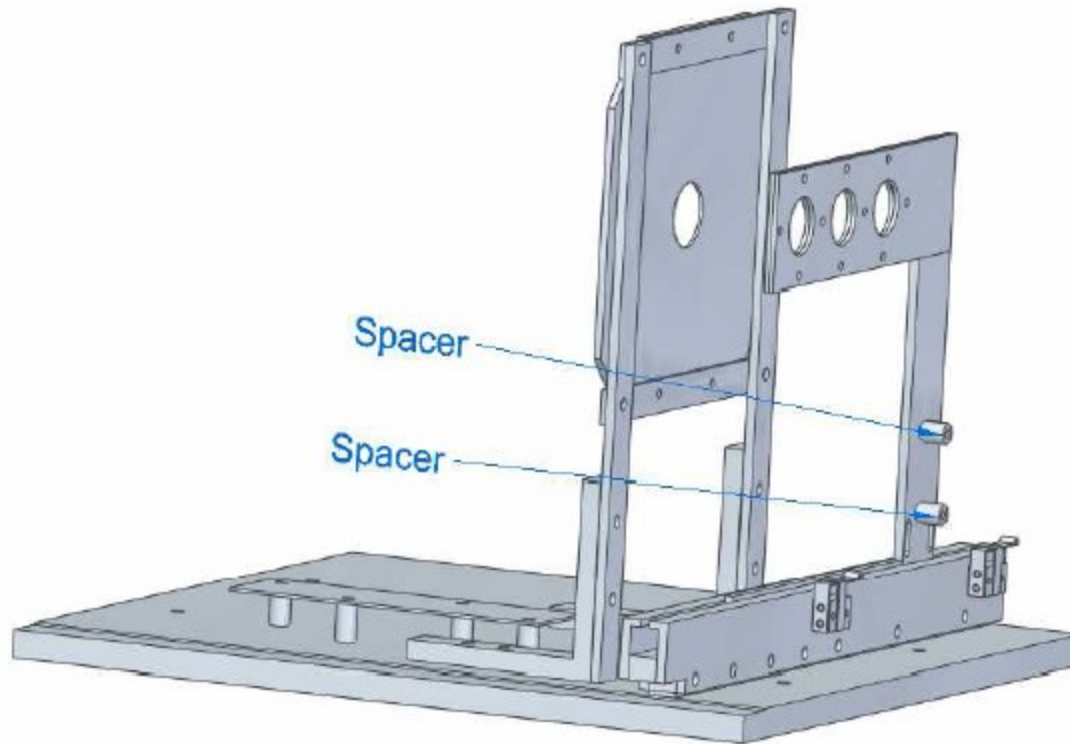
- Material (Bottom plate targets with slots) : Aluminum
- Bottom plate attached to long rail using #8-32 screws
- Detector: Micron Semi-Conductor model S3 1034 micron thick
- Switches: Allectra: Model 363-switch-1
- Switches attached to rail guide using 2.5 mm fasteners
- Detector attached to detector support using M3 teflon fasteners

# View 10



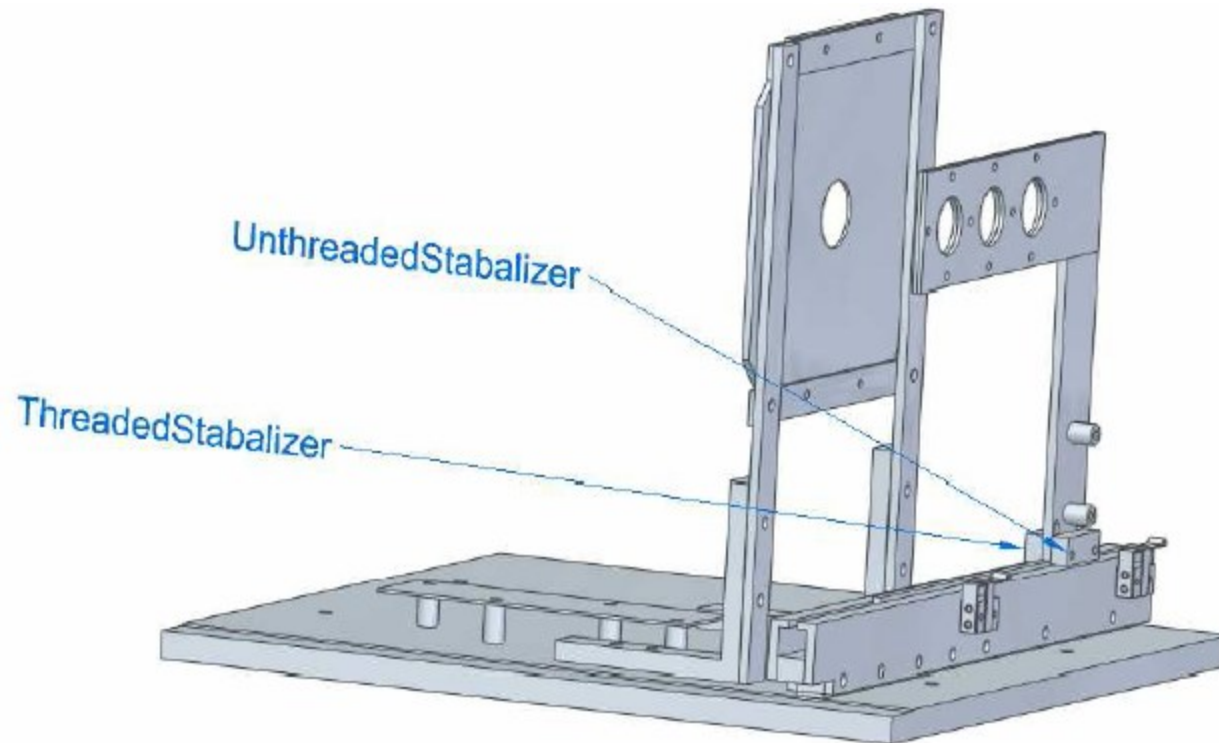
- Material (top plate target) : Aluminum
- Top plate target attached to bottom plate target using #4-40 screws
- Bottom plate target has tapped holes (for #4-40 screws) for holes matching those from the top plate target

# View 11



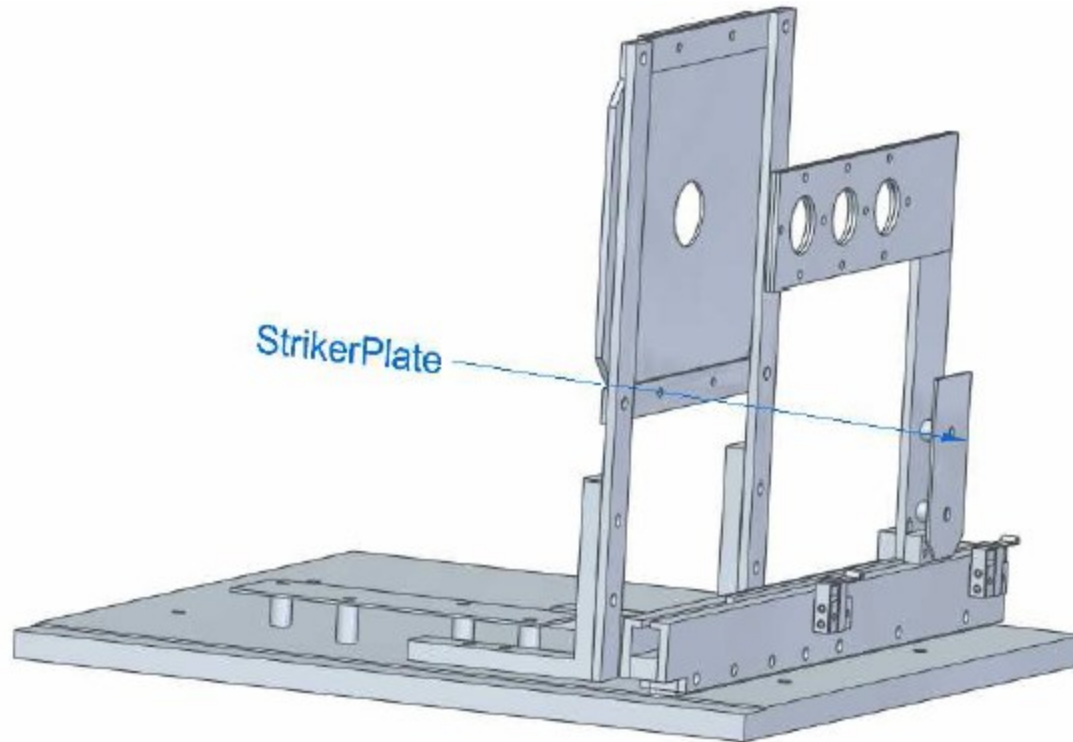
- Material (spacer) : Nylon

# View 12



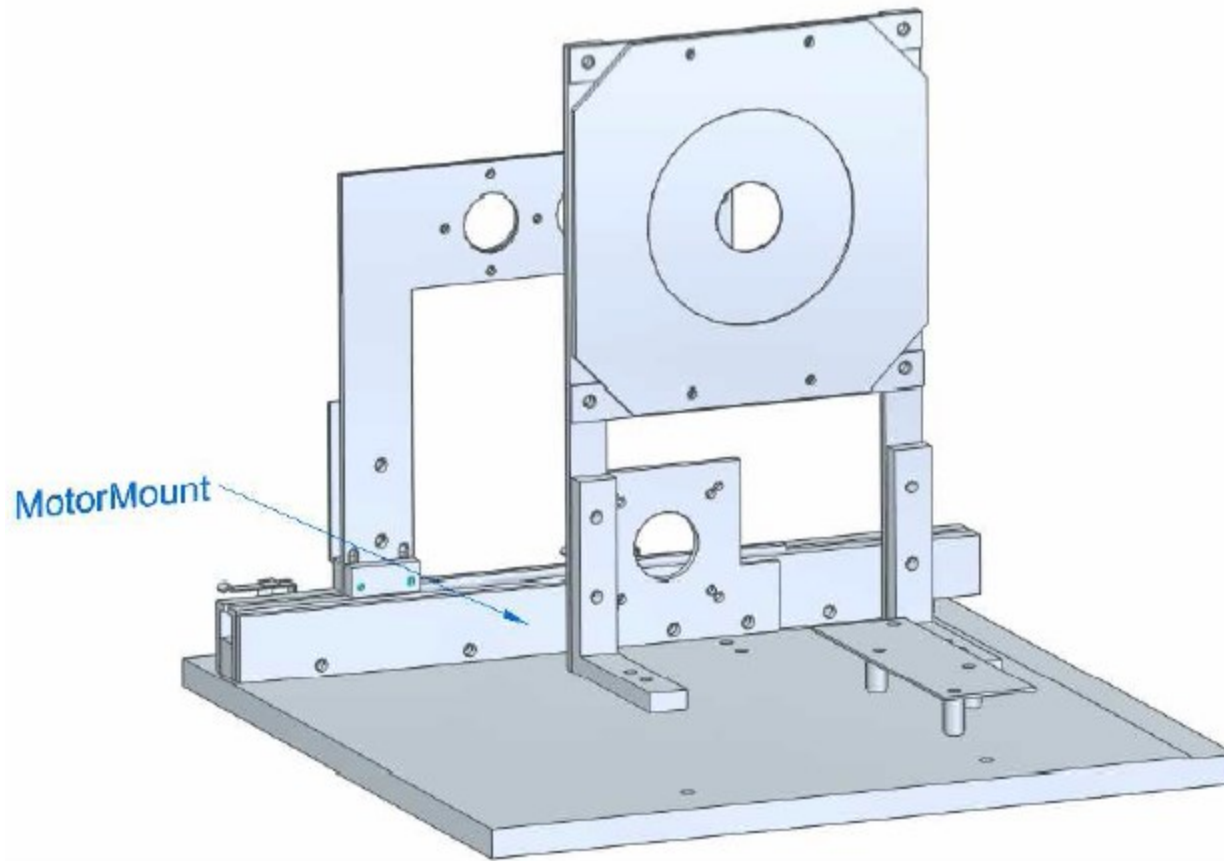
- Material (stabalizers) : aluminum
- Stabilizers attached to one another using #4-40 screws

# View 13



- Material (striker plate) : aluminum
- Striker plate attached to bottom plate target using #6 nylon fasteners

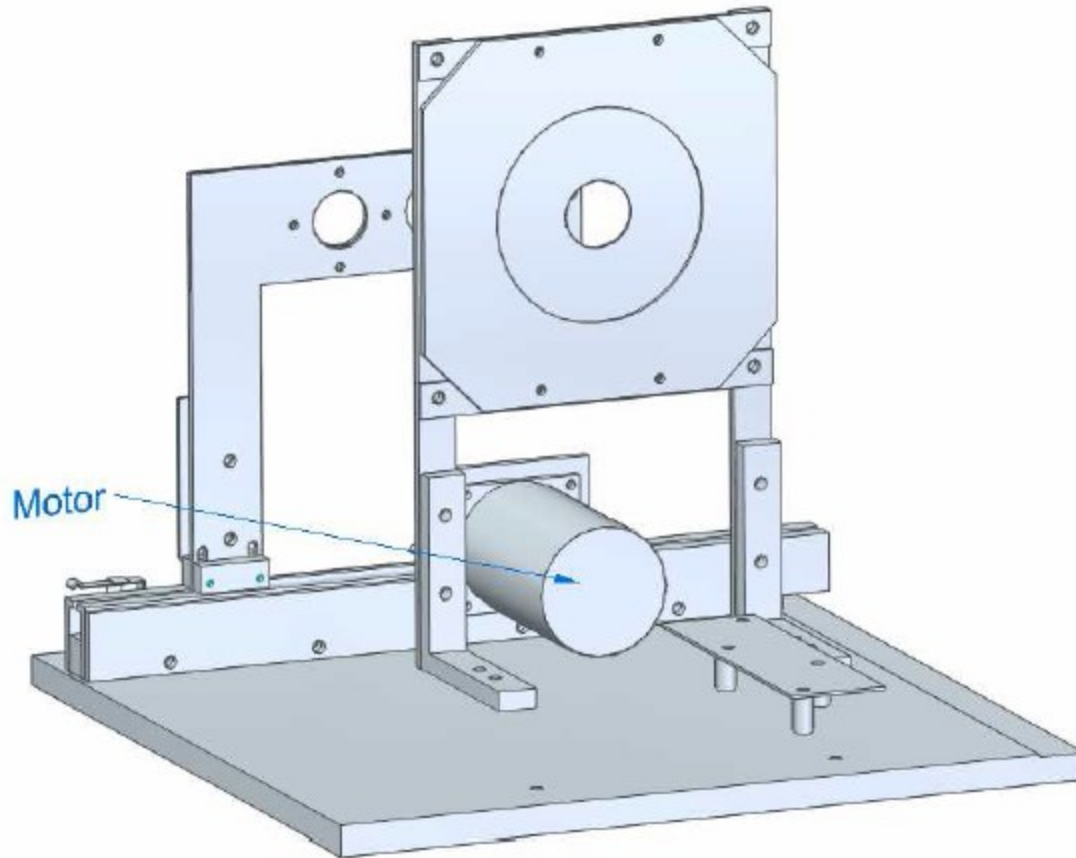
# View 14



- Material (motor mount) : aluminum
- motor mount attached to rail guides using #8 fasteners

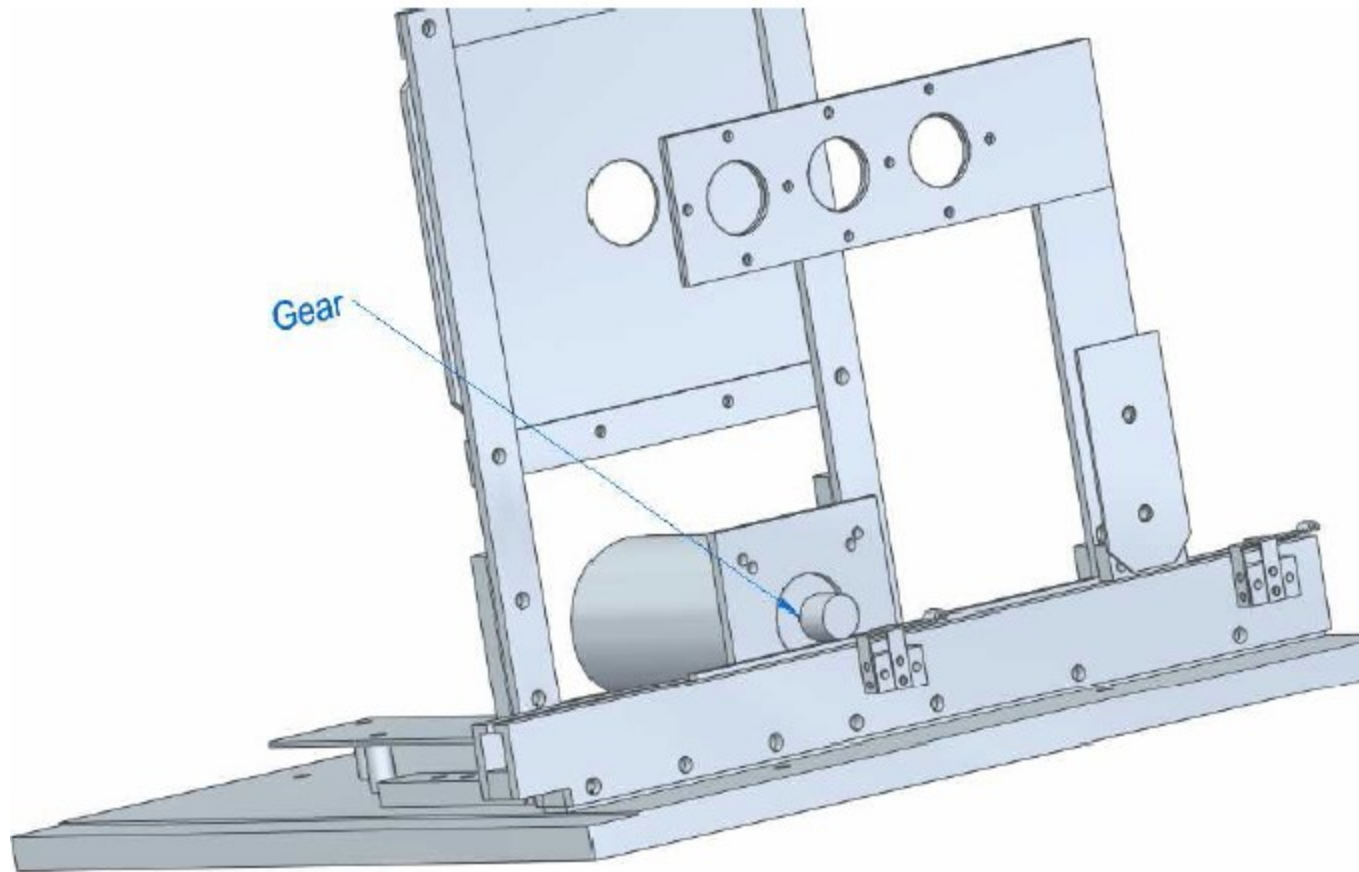


# View 15



- Motor: Vacuum rated and radiation hardened Phytron stepper motor VSS 43.200.1.2-UHVG
- Motor attached to motor mount using M3 fasteners

# View 16



- Material (gear): Aluminum
- Gear: Module 0.5, 22 teeth, outer diameter 12 mm, pitch diameter 11 mm, bore 5 mm, face width 3 mm, overall width 10 mm, hub diameter 10 mm