

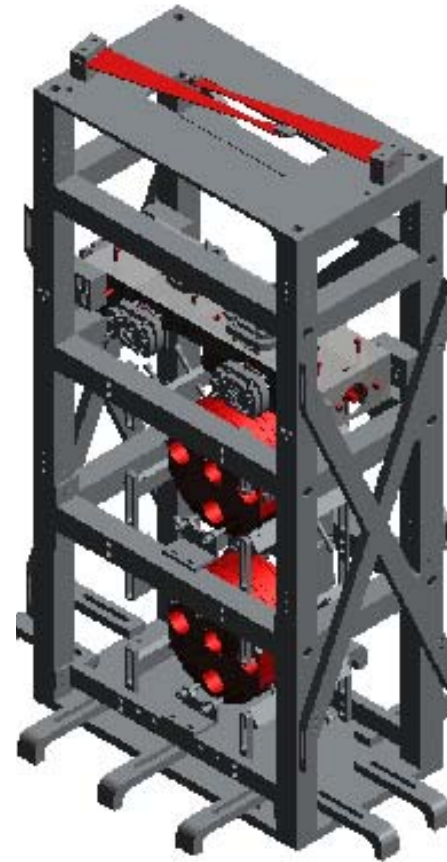
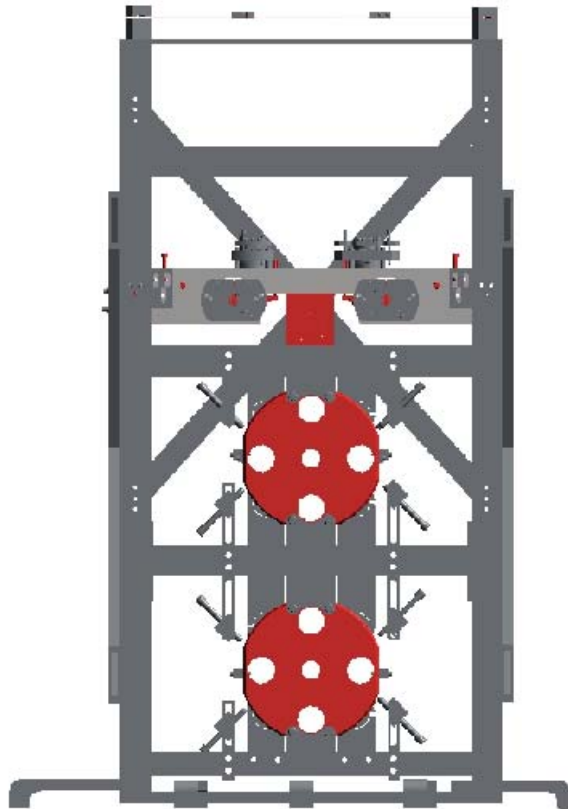
# Methods of Adjustment used in the Controls Prototype Mode Cleaner Suspension at Caltech

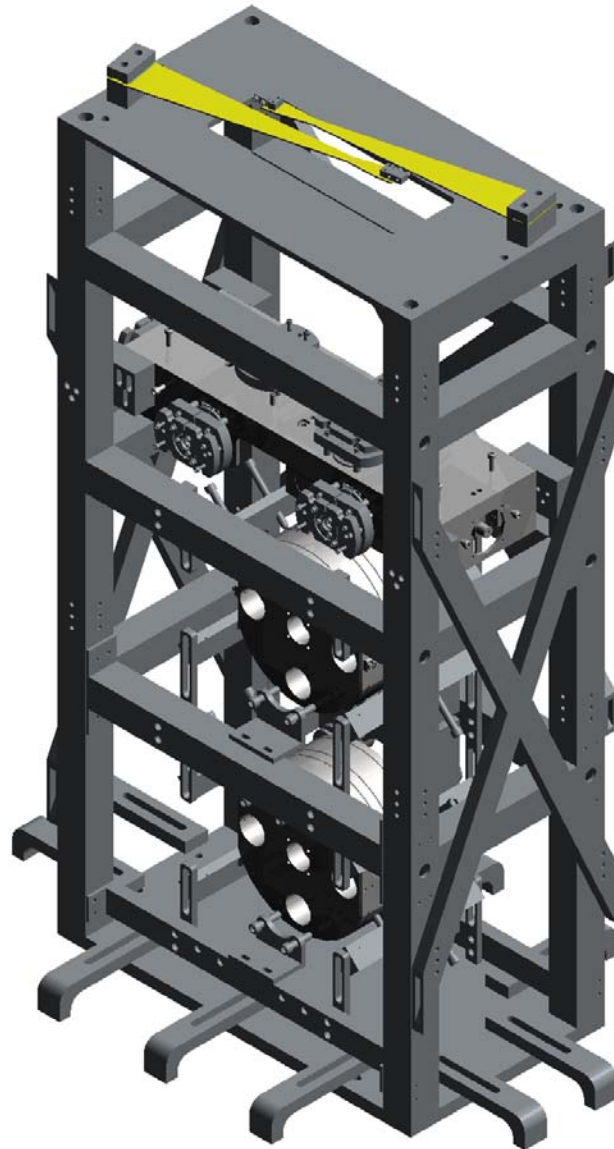
1. VERTICAL
2. PITCH, ROLL and YAW
3. LONG, TRANSVERSE and YAW

Calum Torrie, CALTECH  
Mike Perreur-Lloyd UNI of GLASGOW

**ALUK GLASGOW MEETING AUGUST 2003**

# MODE CLEANER SUSPENSION



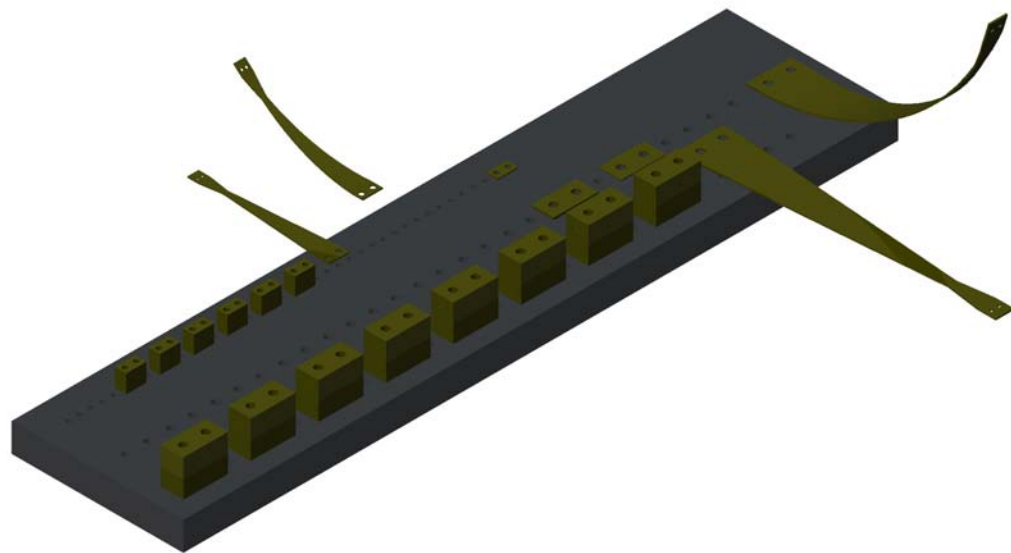


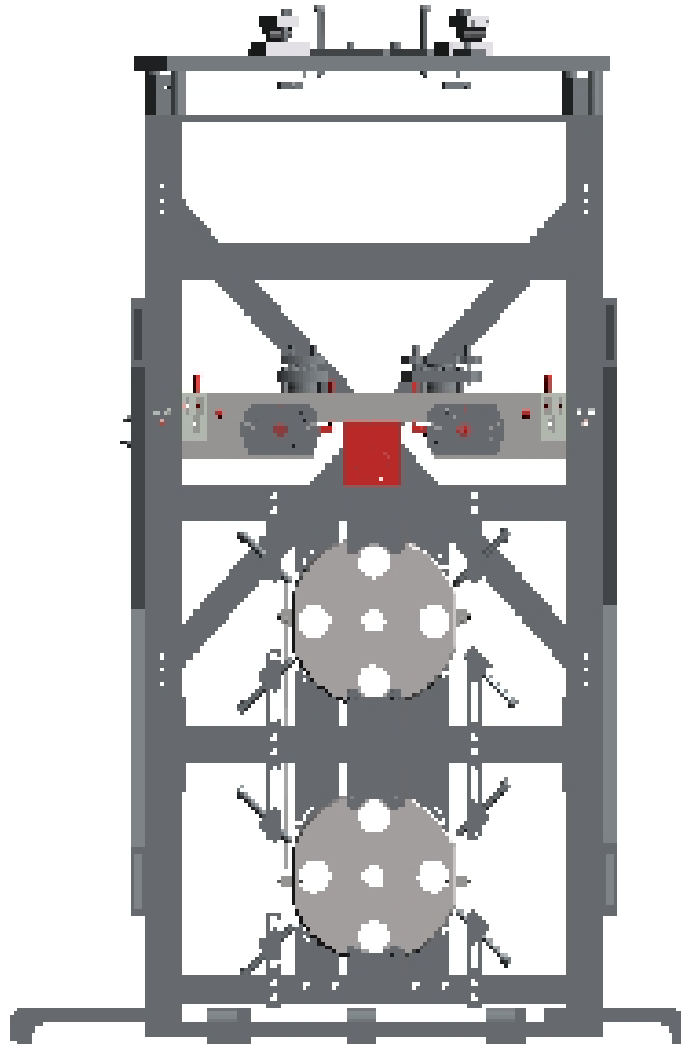
LIGO-G030388-02

ALUKGLA0034aAUG03

3

UPPER CANTILEVER BLADES

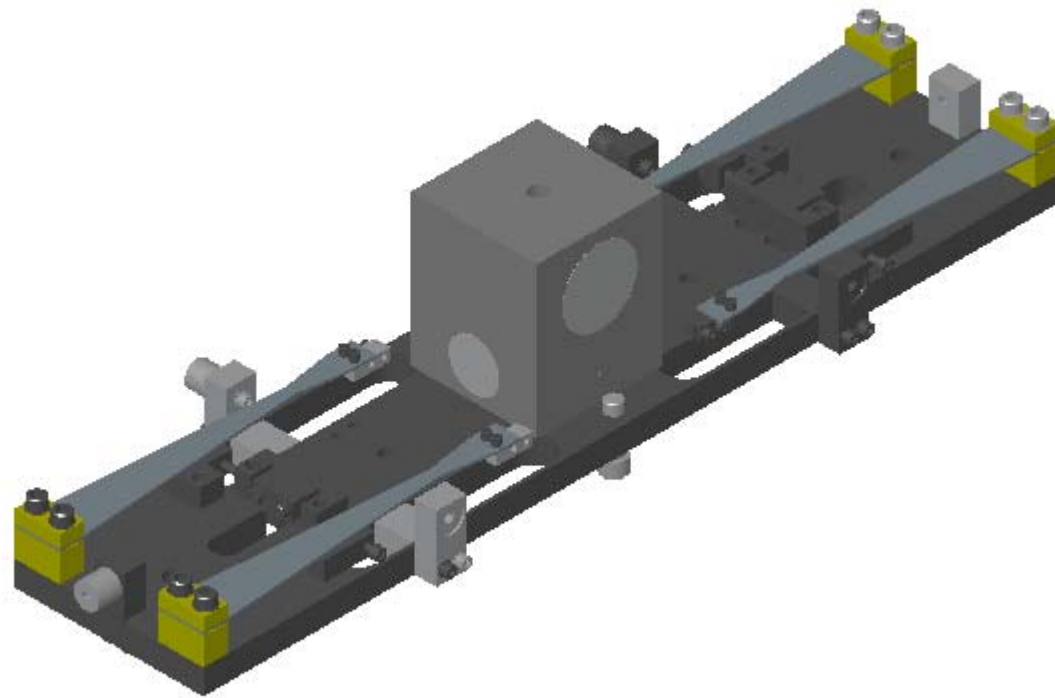


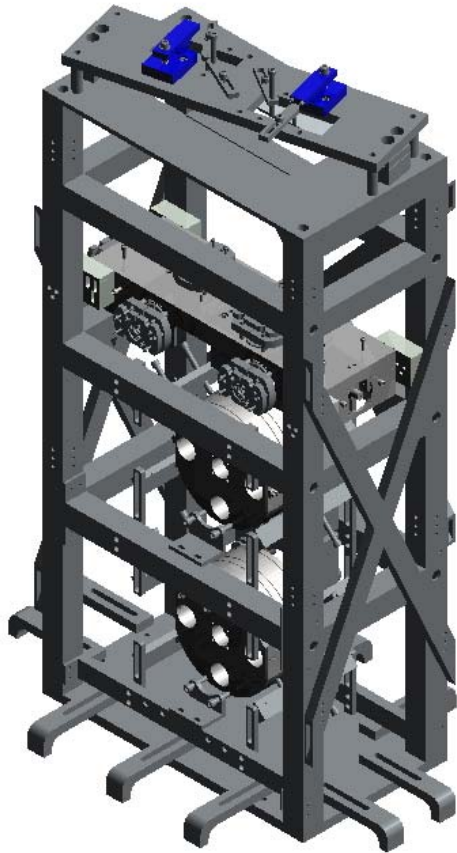


LIGO-G030388-02

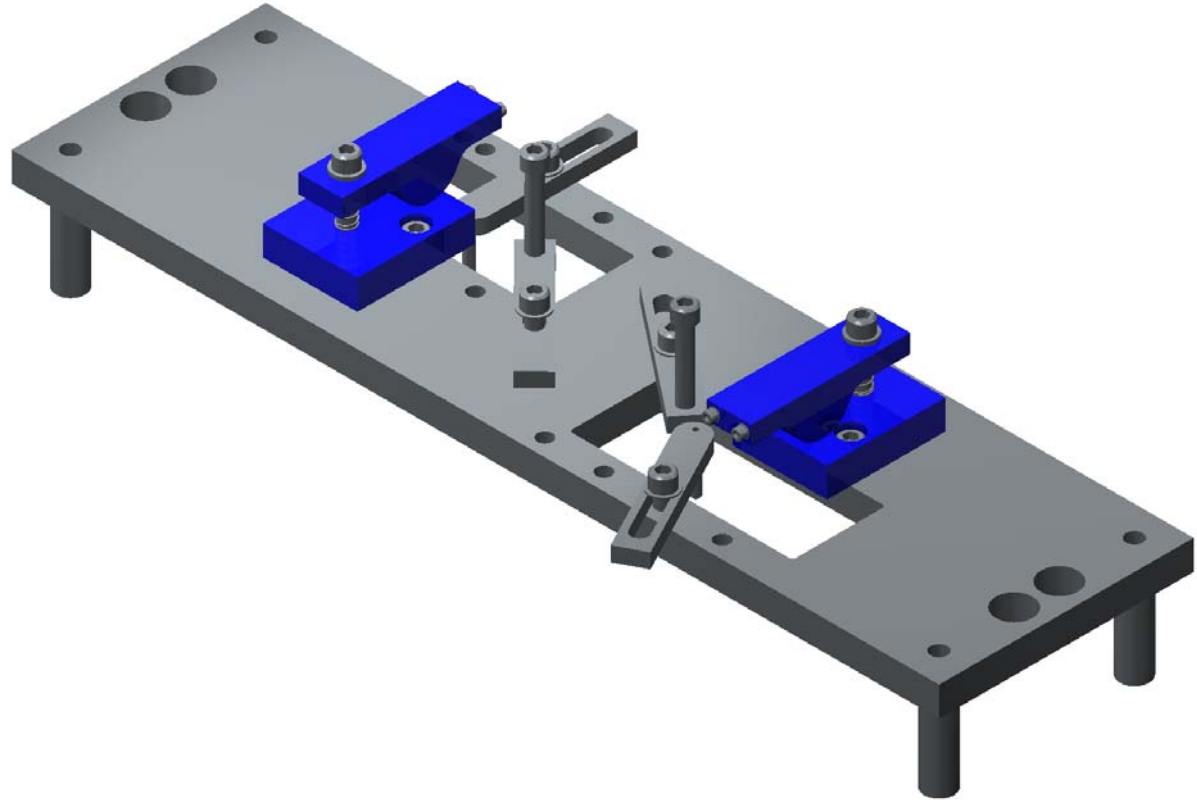
ALUKGLA0034aAUG03

5  
UPPER MASS, 3kg



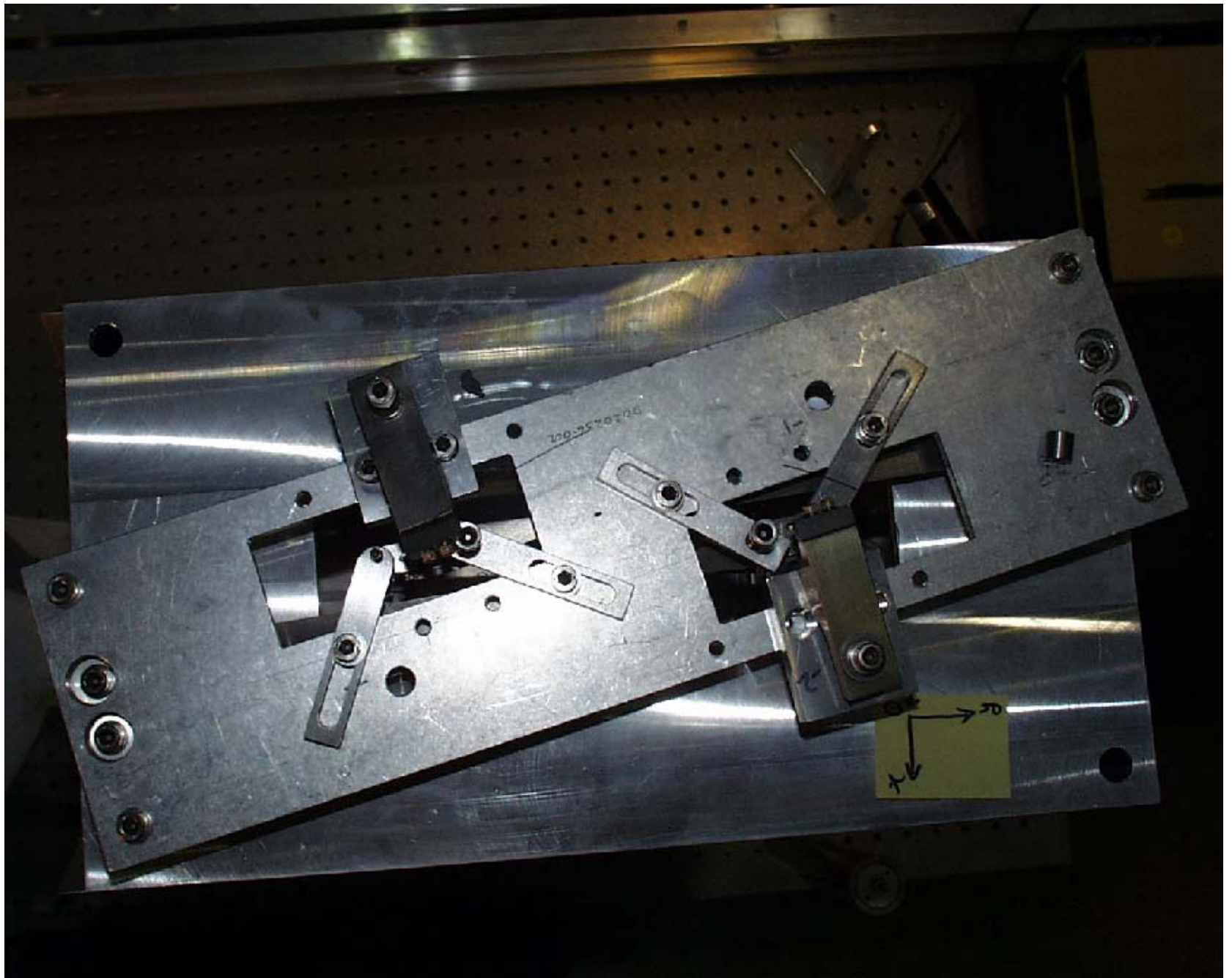


LIGO-G030388-02

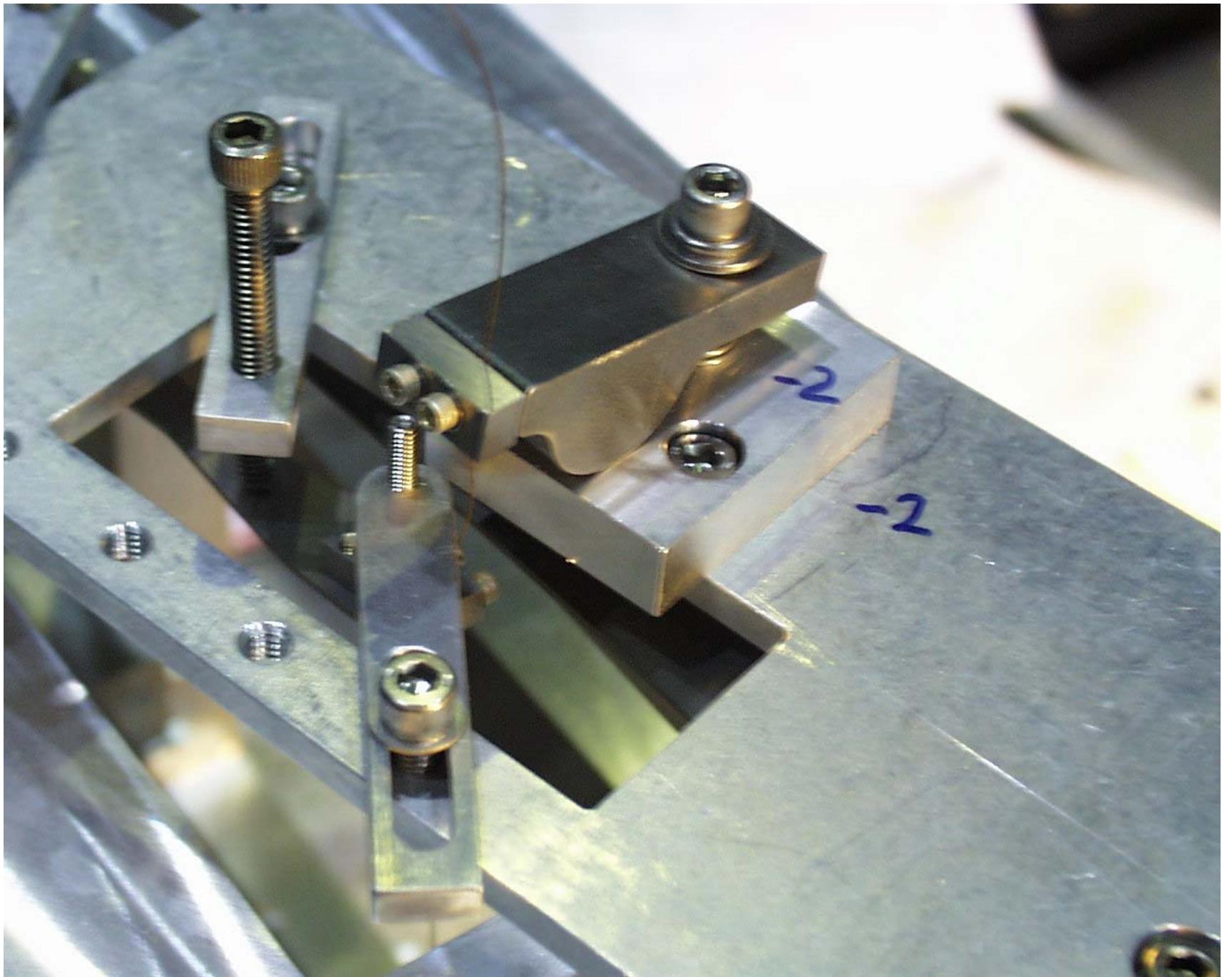


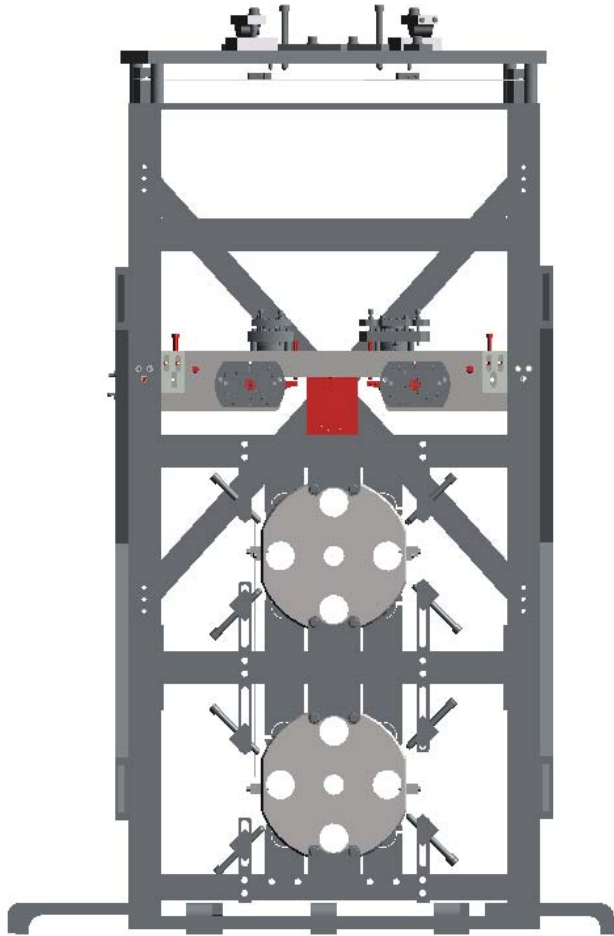
ALUKGLA0034aAUG03

UPPER WIRE WINCH (SHORTEN ONLY)

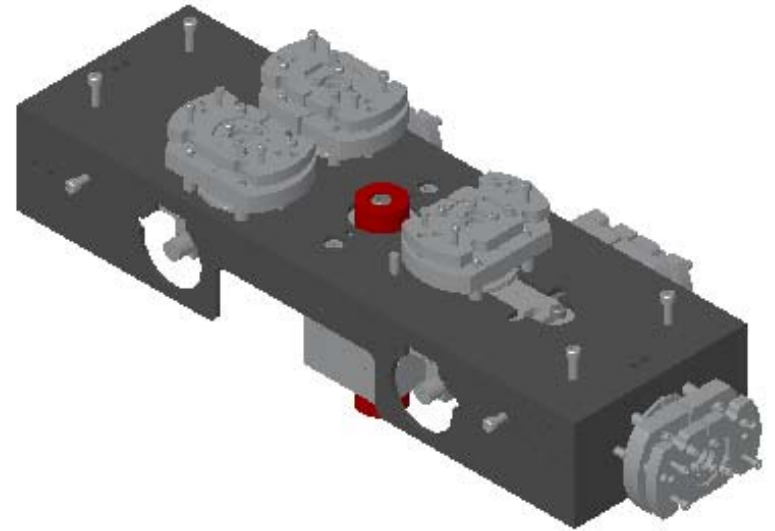








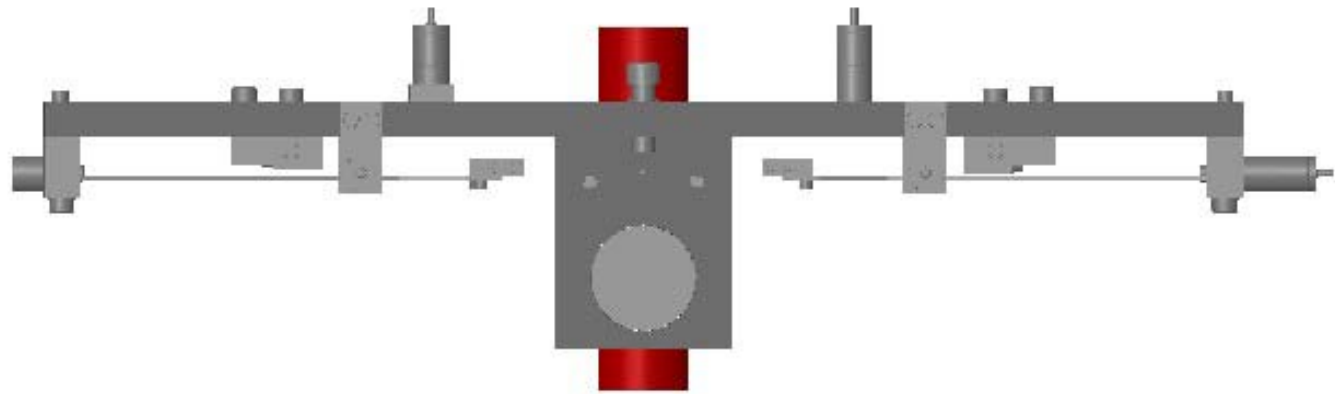
LIGO-G030388-02



ALUKGLA0034aAUG03

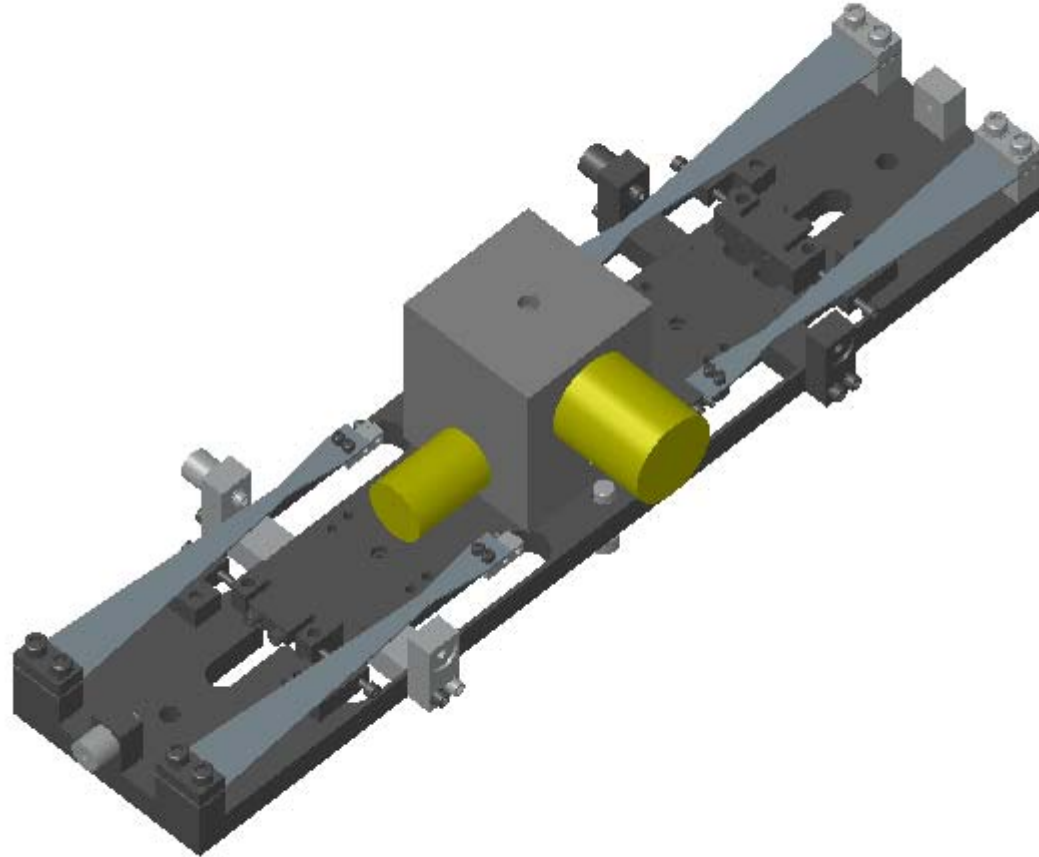
10

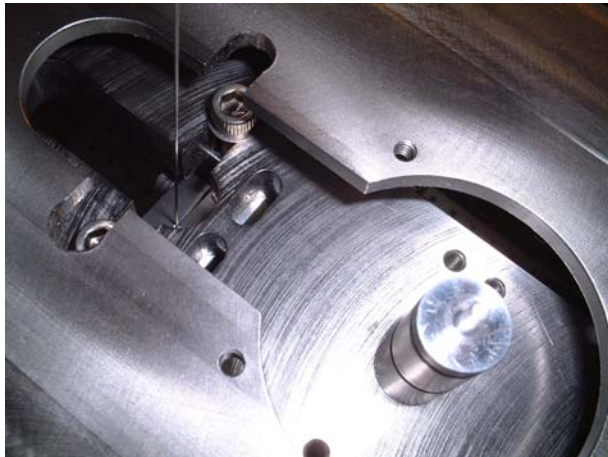
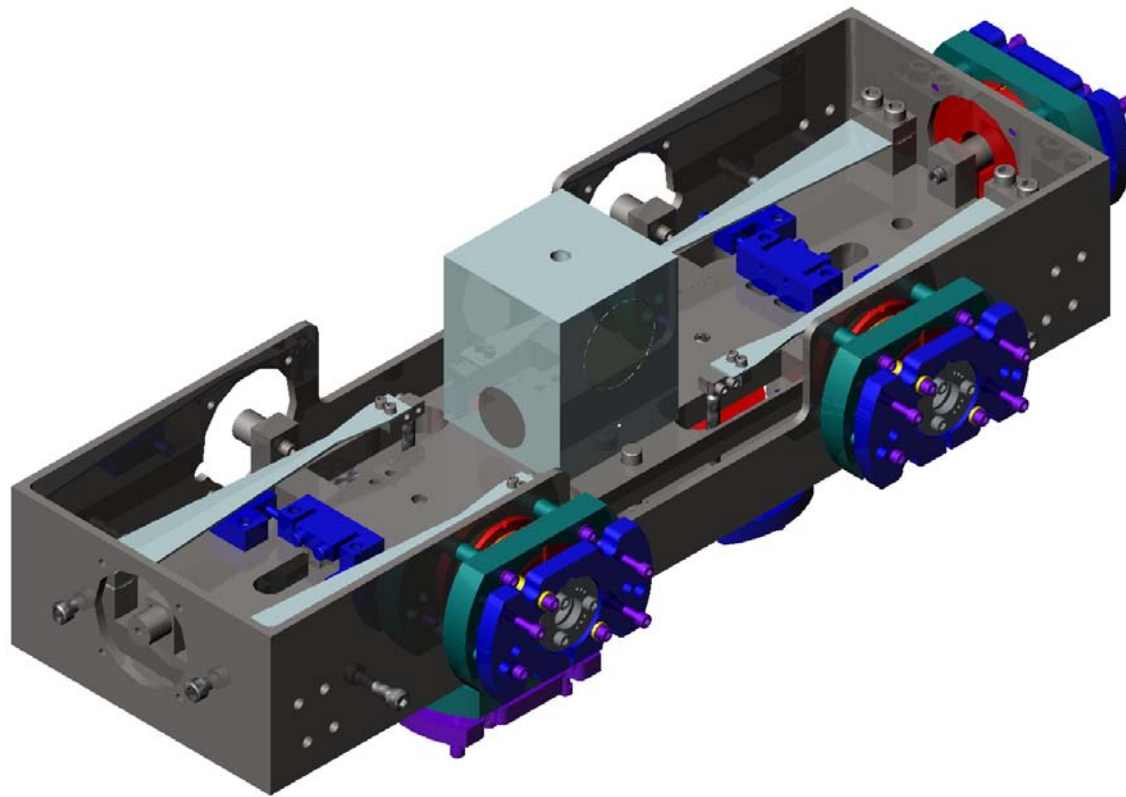
**FIXED MASS ON UPPER MASS**



LIGO-G030388-02

**FIXED MASS ON UPPER MASS**





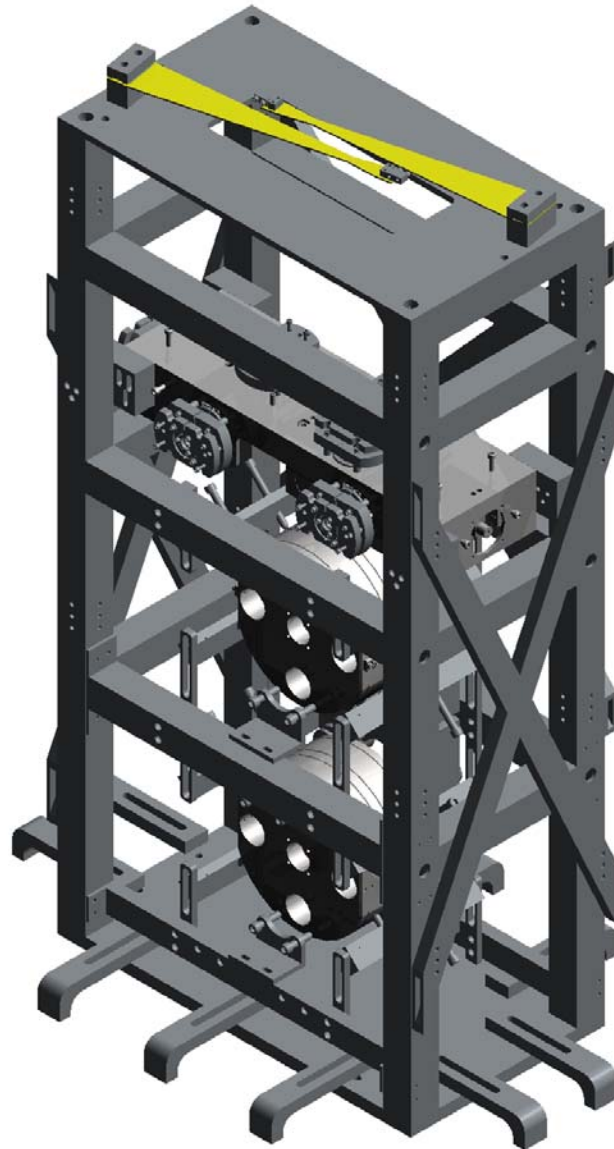
LIGO-G030388-02



ALUKGLA0034aAUG03

## FINE PITCH ADJUSTMENT



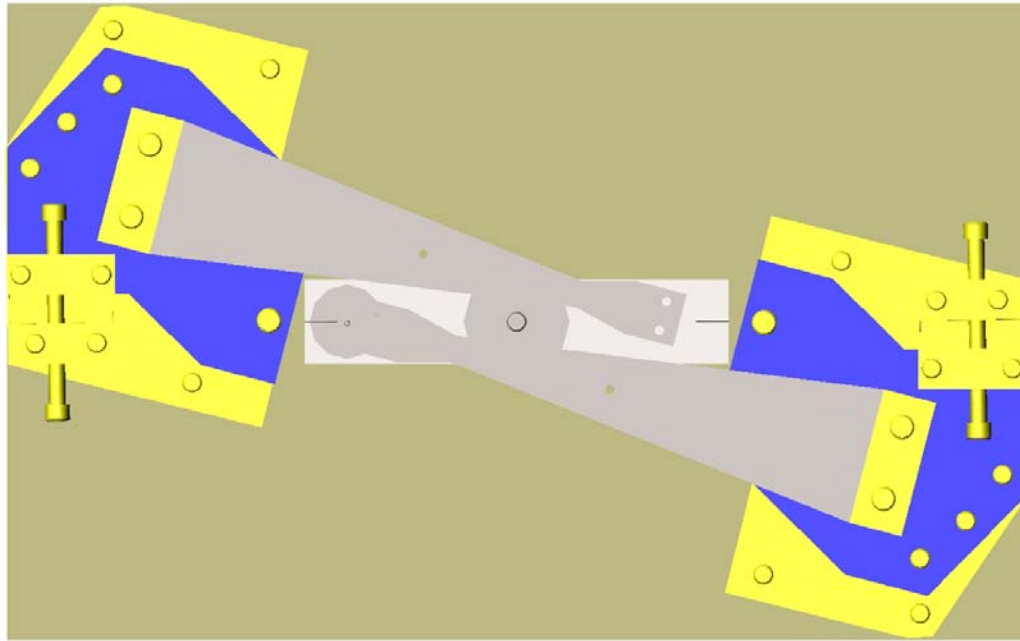


LIGO-G030388-02

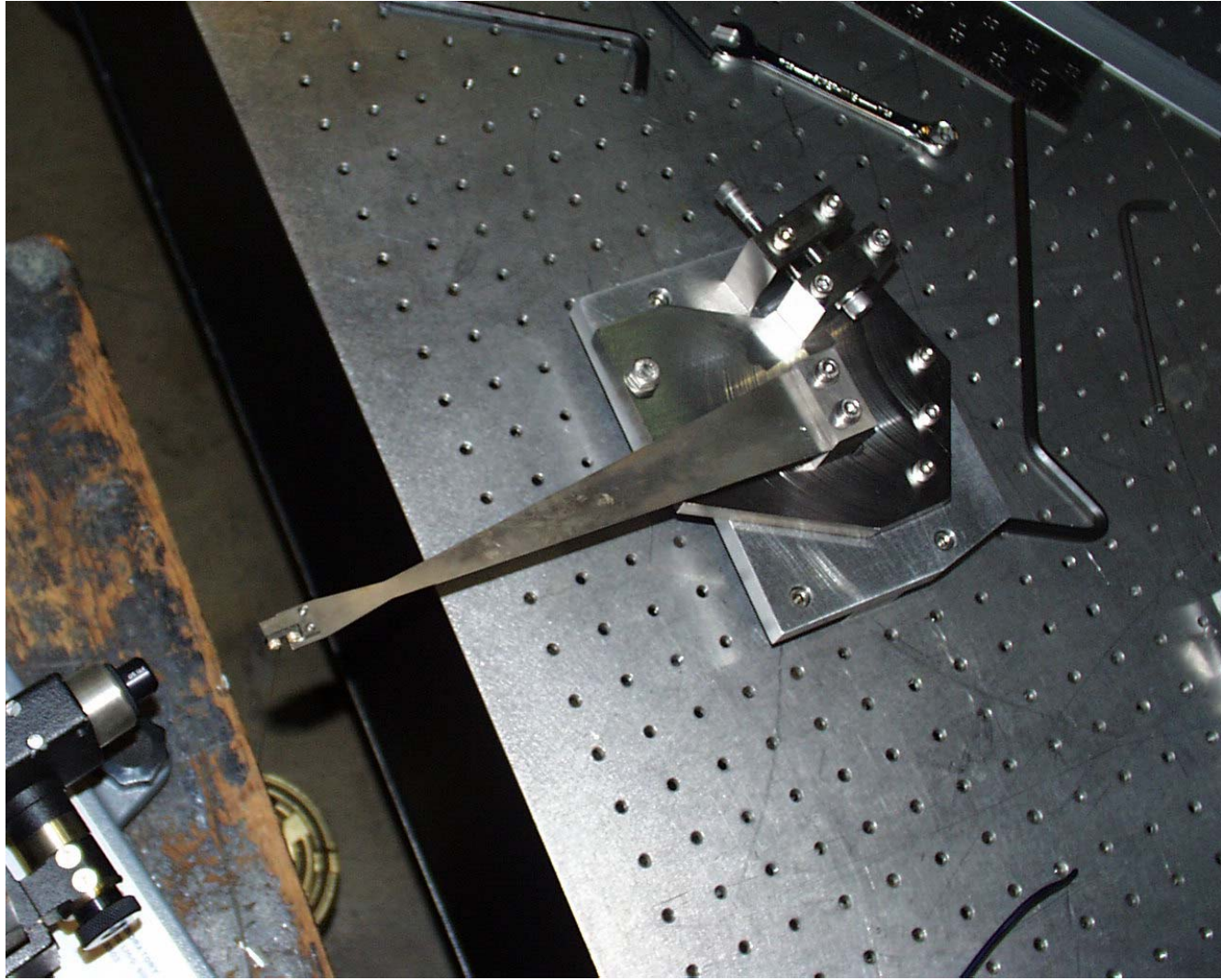
ALUKGLA0034aAUG03

15

**UPPER CANTILEVER BLADES**





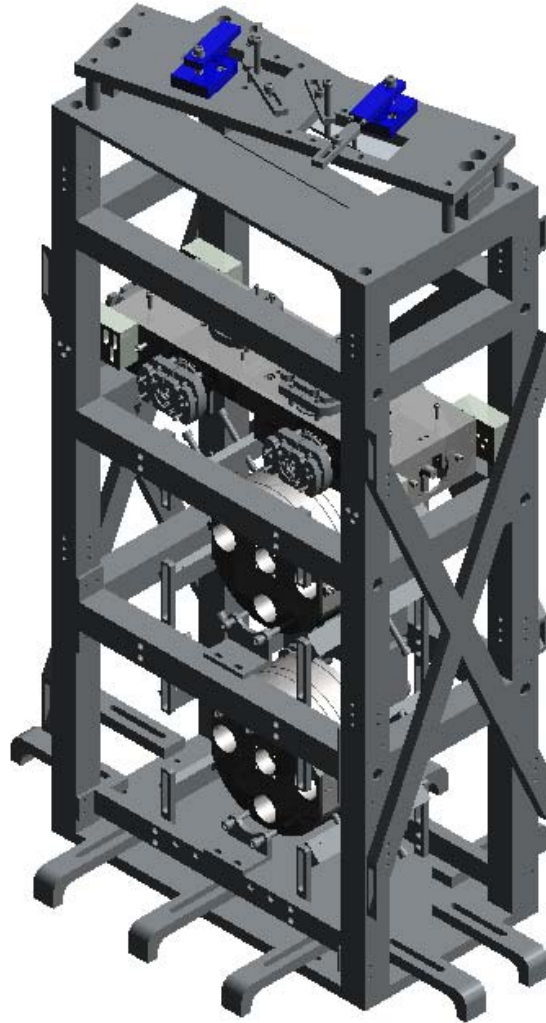


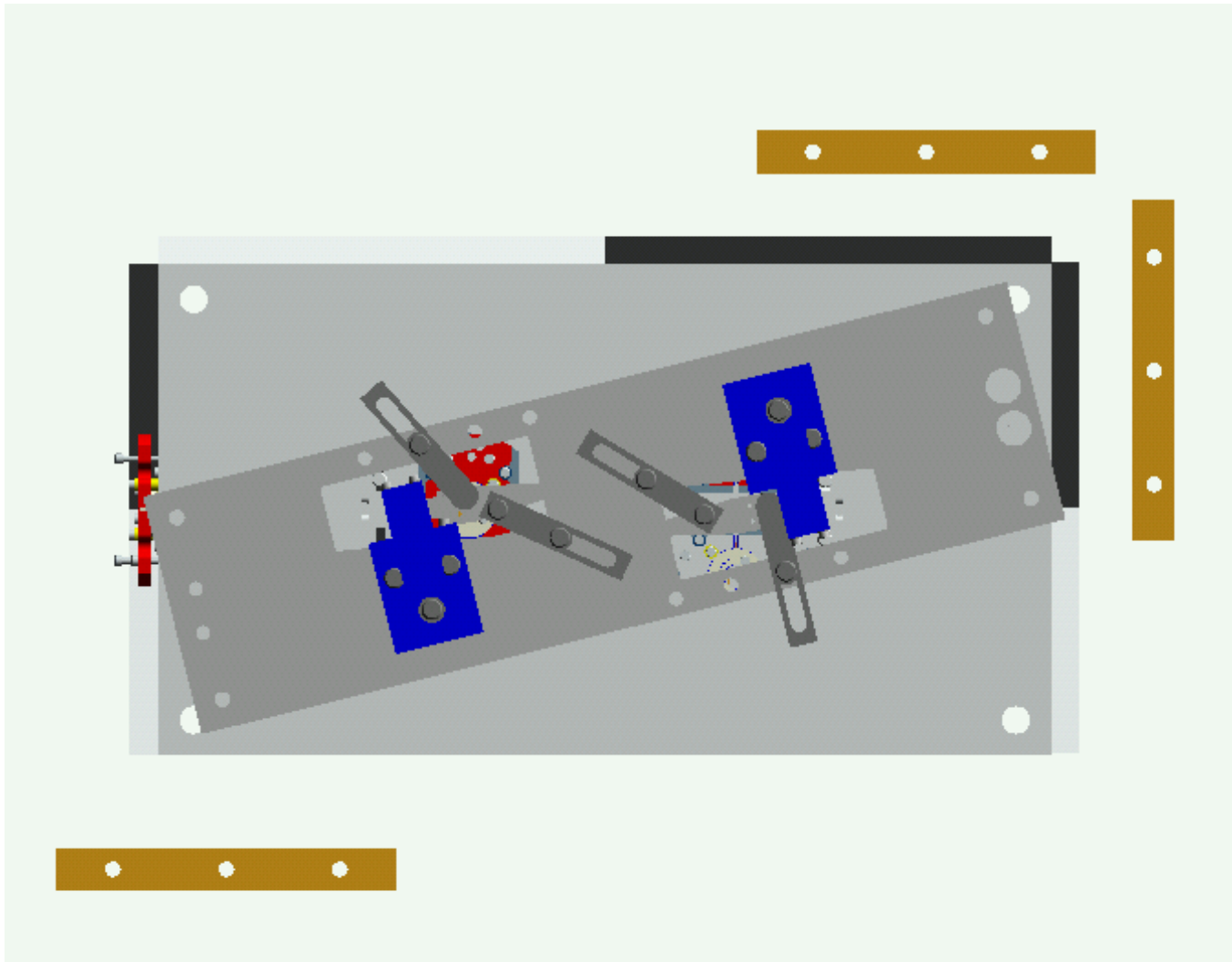
LIGO-G030388-02

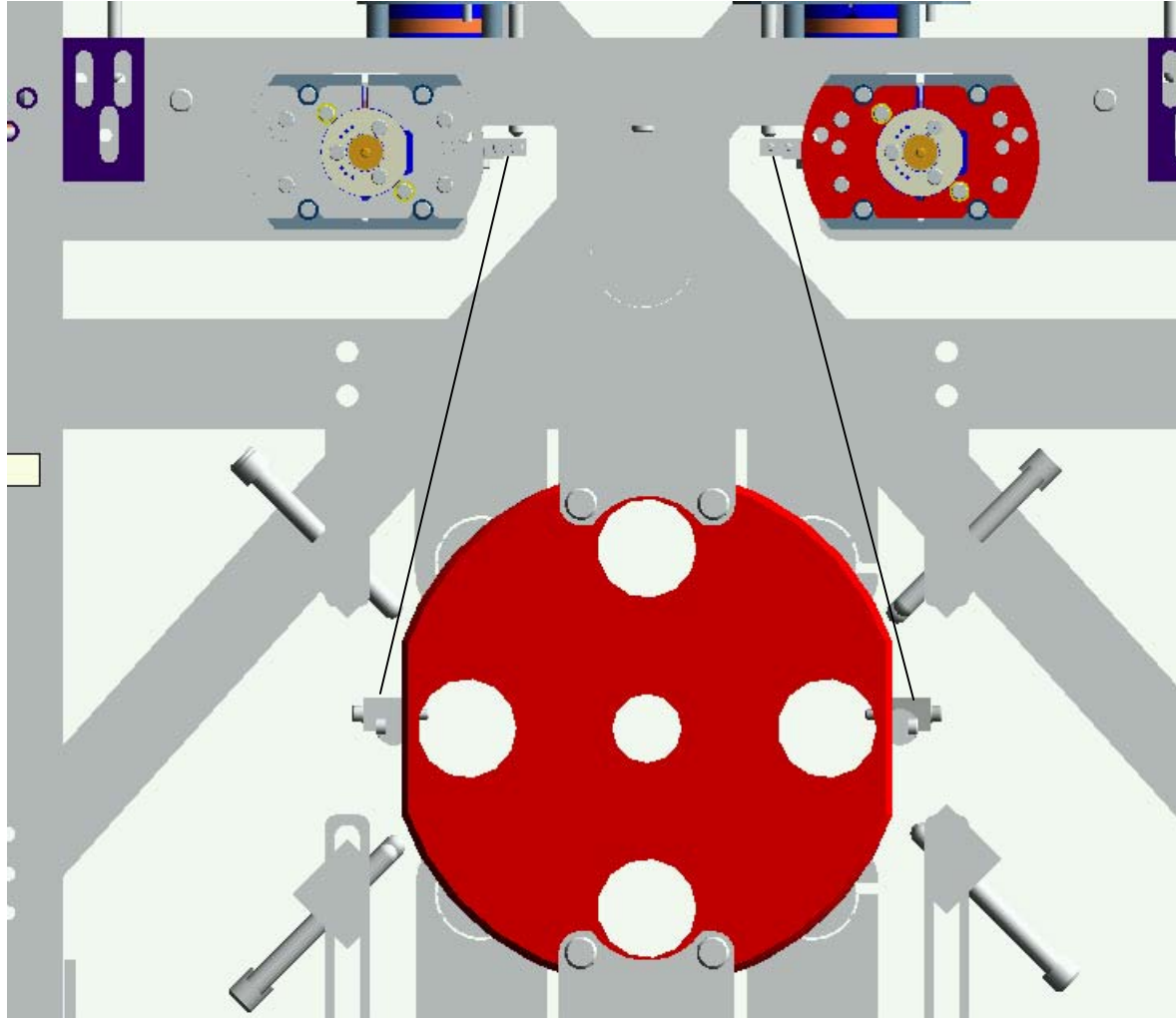
ALUKGLA0034aAUG03

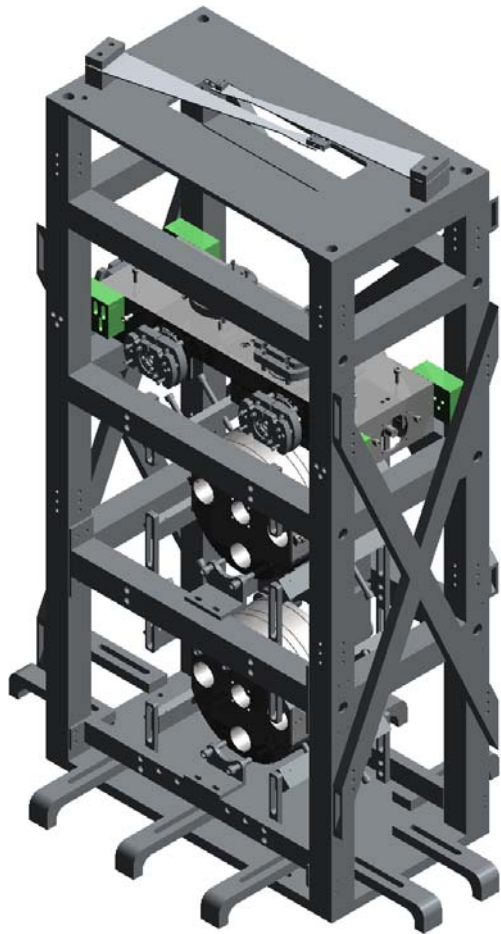
17

**PROTOTYPE YAW ADJUSTMENT**

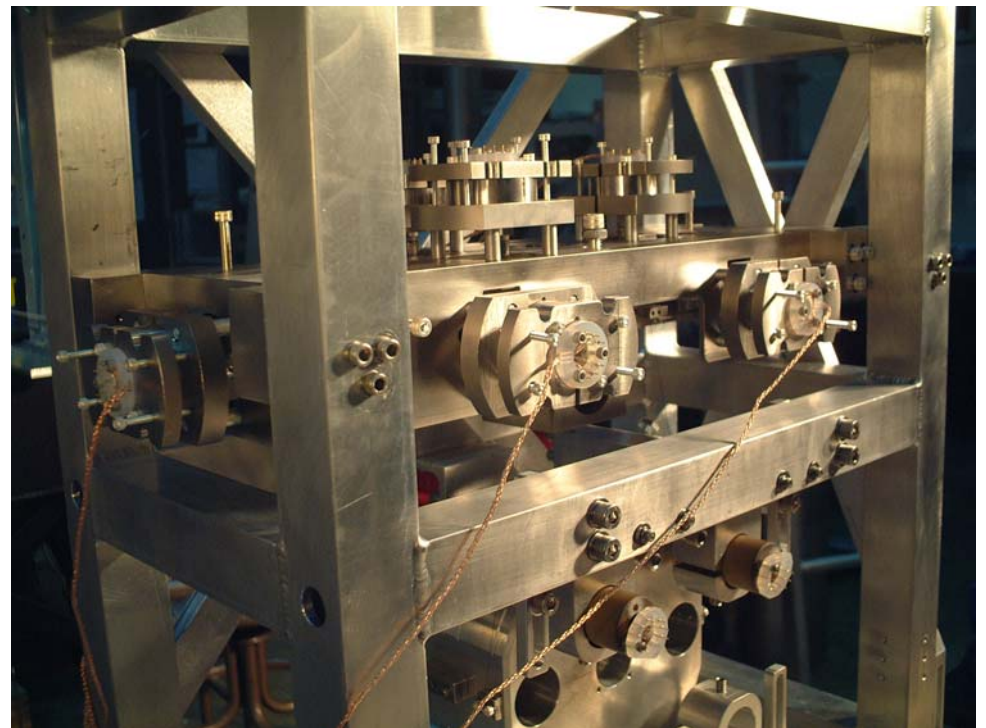




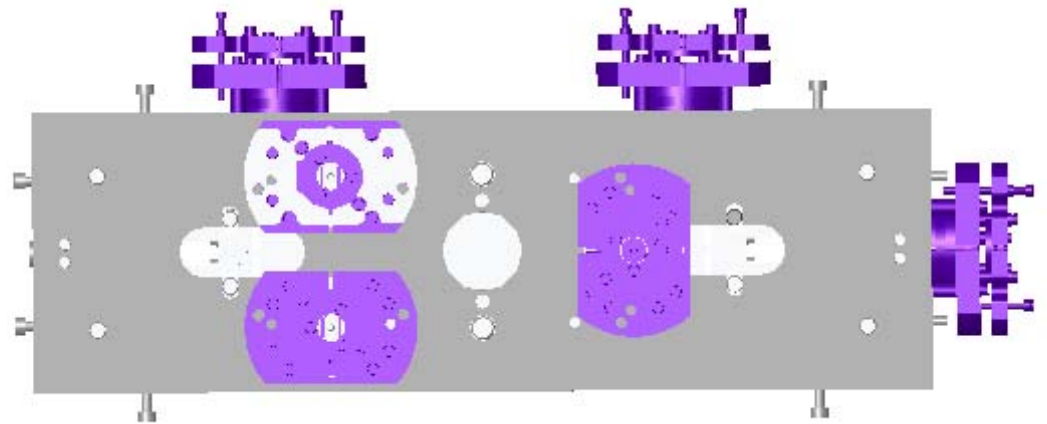
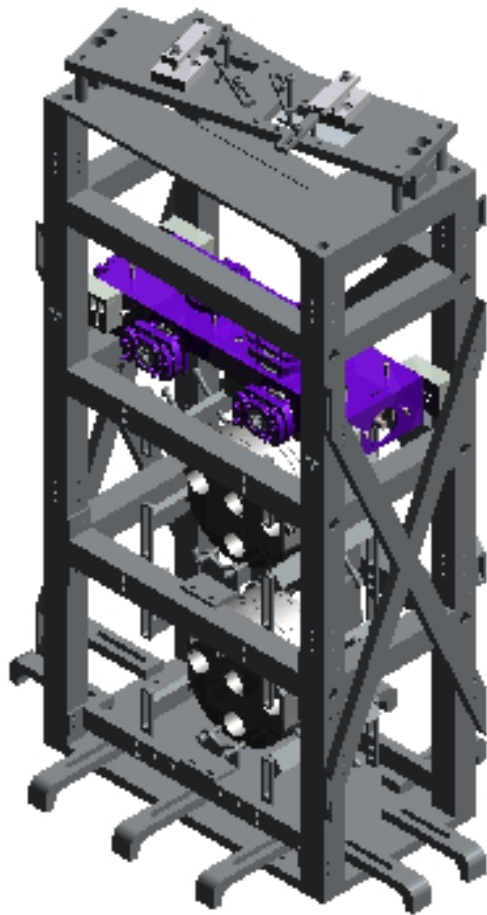




LIGO-G030388-02

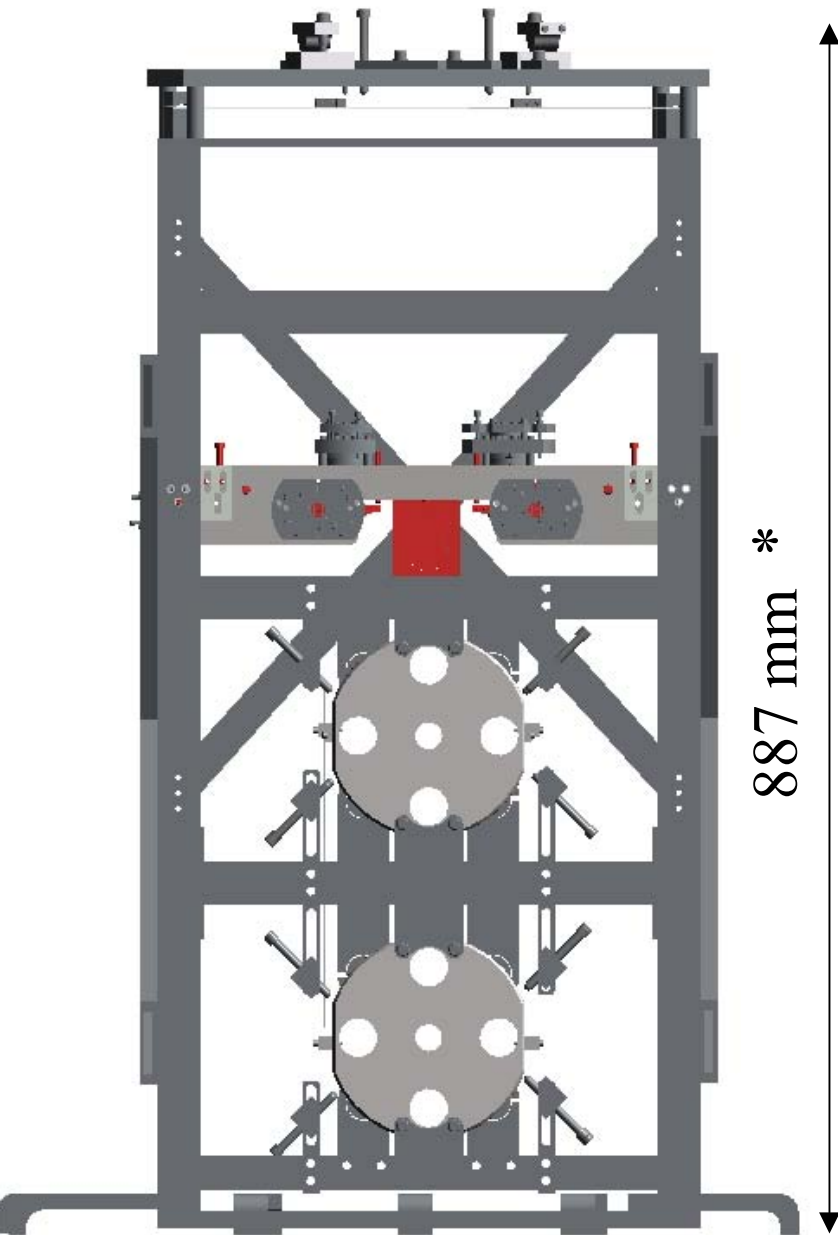


ALUKGLA0034aAUG03



LIGO-G030388-02

SWITCH TO TALK ON COILS & ECDs



\* NO SHIM UNDER STRUCTURE

