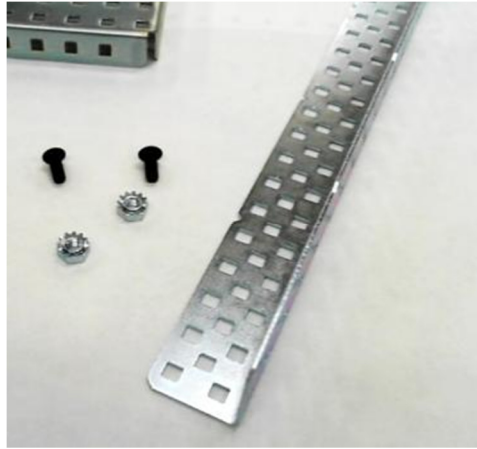


Simple Machine Investigation

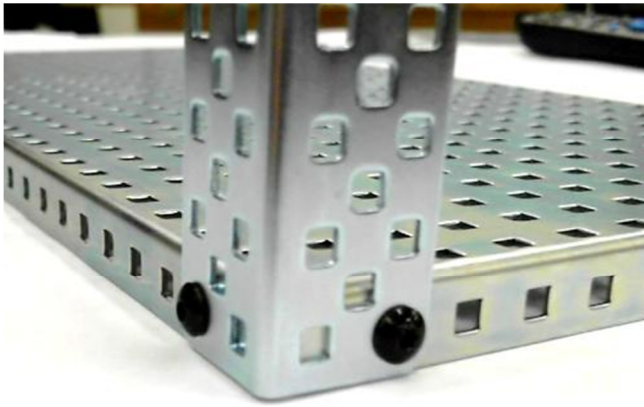
Build and Measurement Instruction for LEVERS

LEVERS ASSEMBLY

1. Gather Parts for Tower



2. Attach tower to base plate



3. Gather parts for fulcrum and lever arm



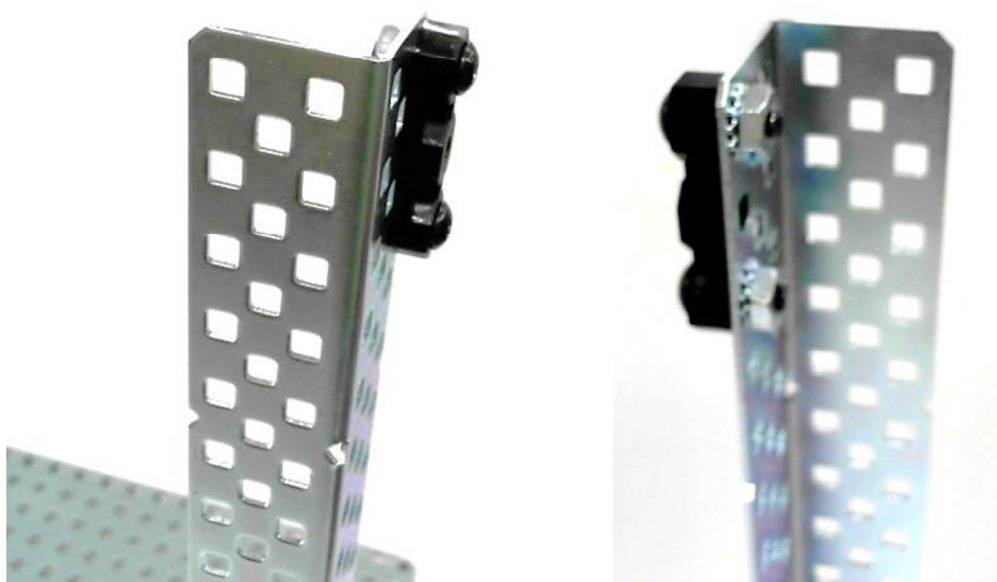
4. Attach bearing to lever arm with pop rivets.



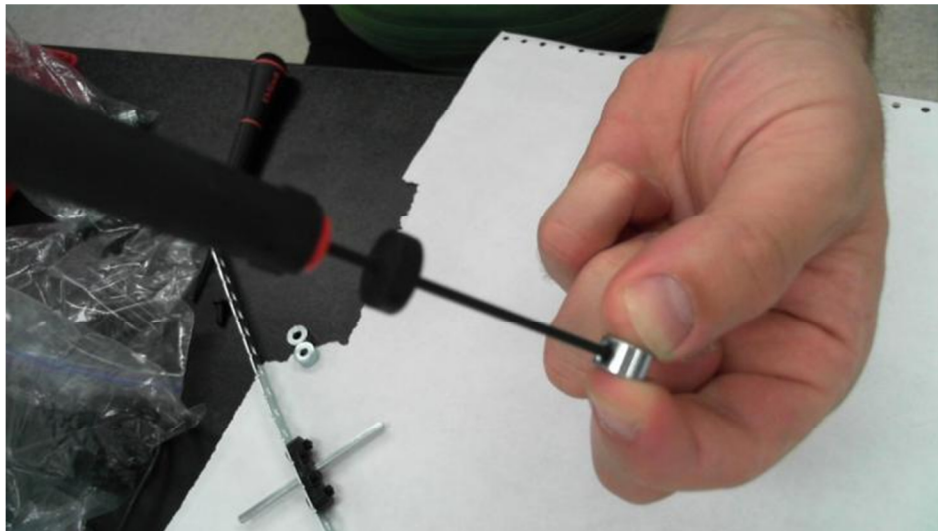
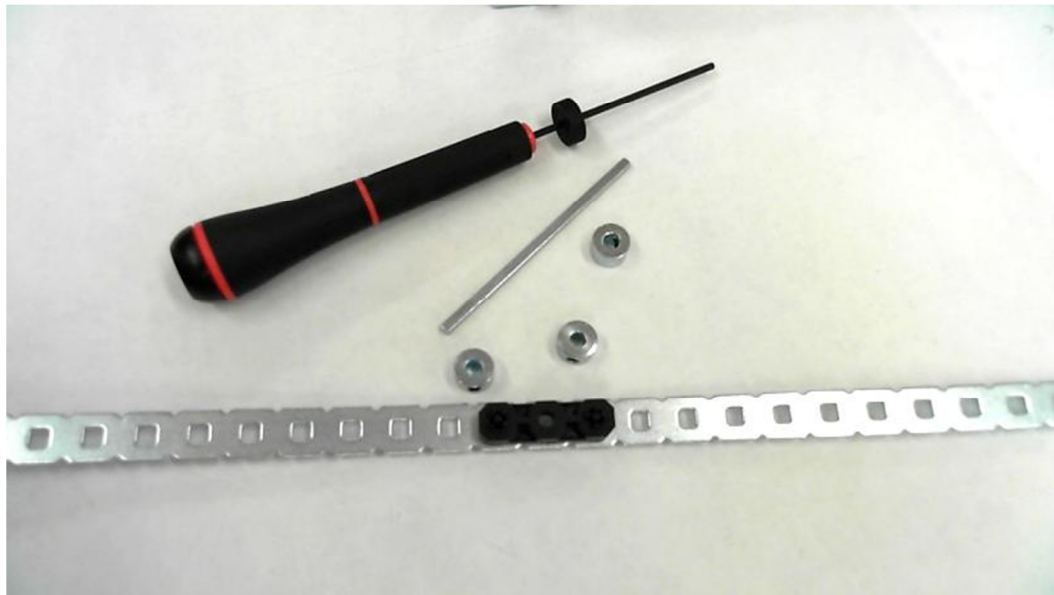
5. Gather parts for the other half of the fulcrum.



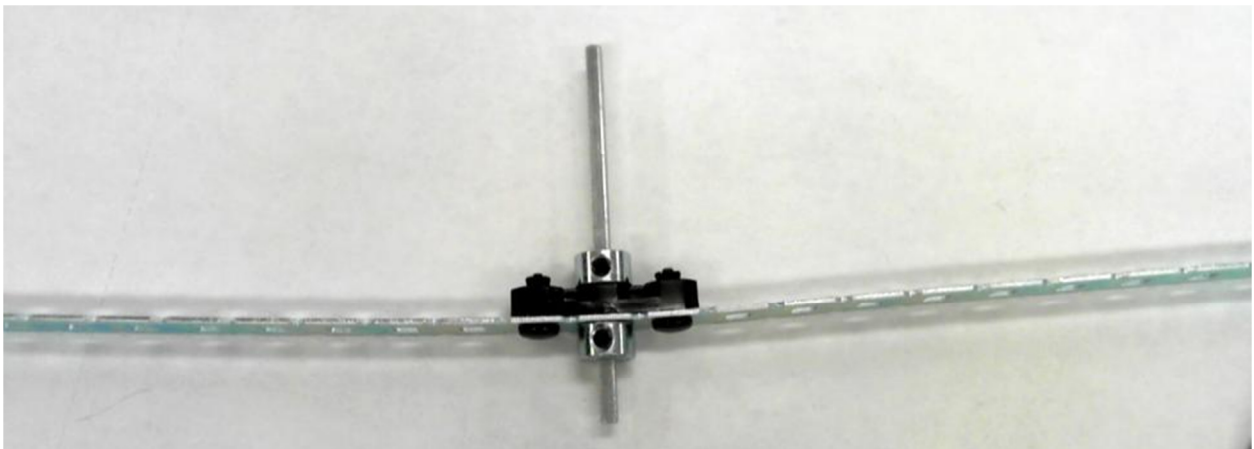
6. Attach to tower



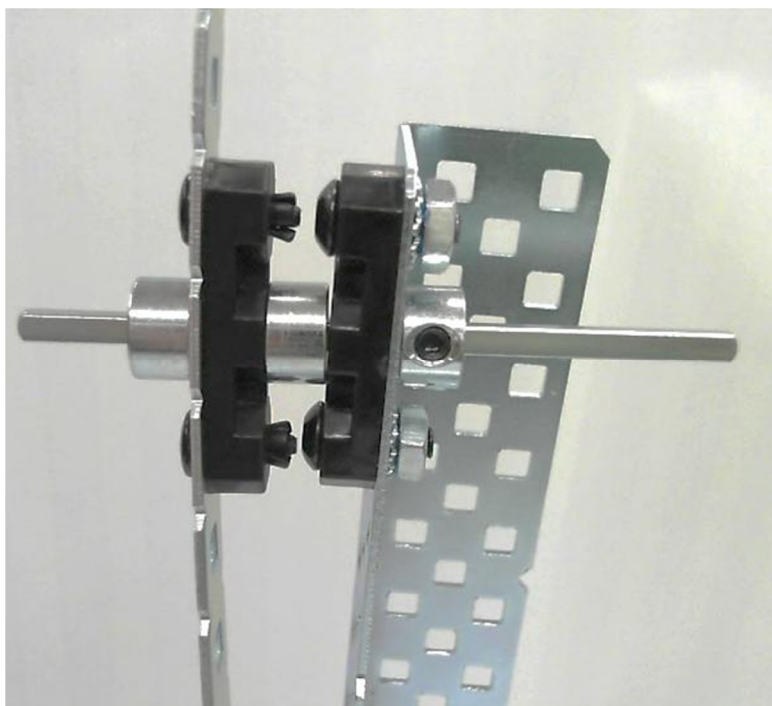
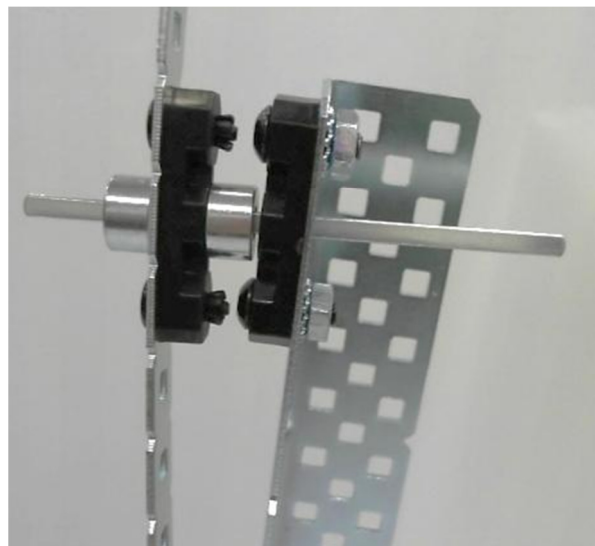
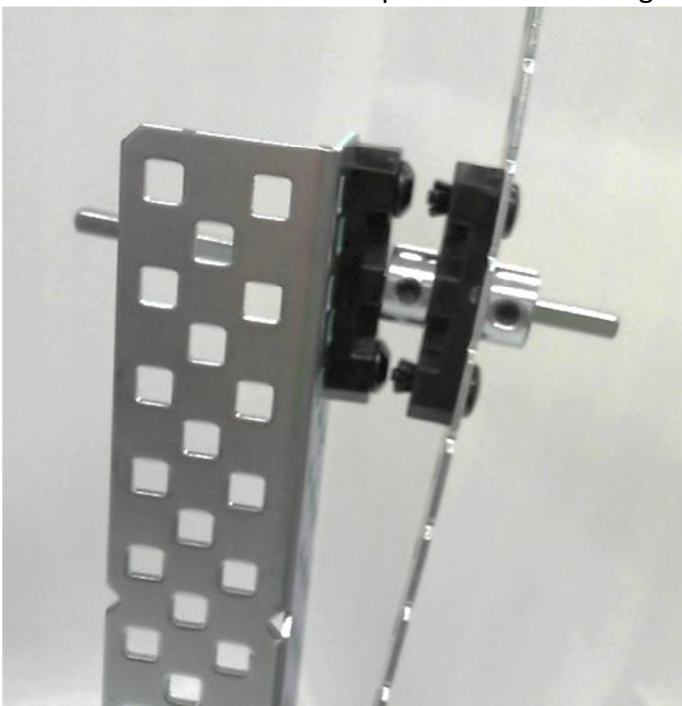
7. Gather parts—shaft, 3 shaft collars, lever arm, 5/64 wrench for adjusting set screws in shaft collar.



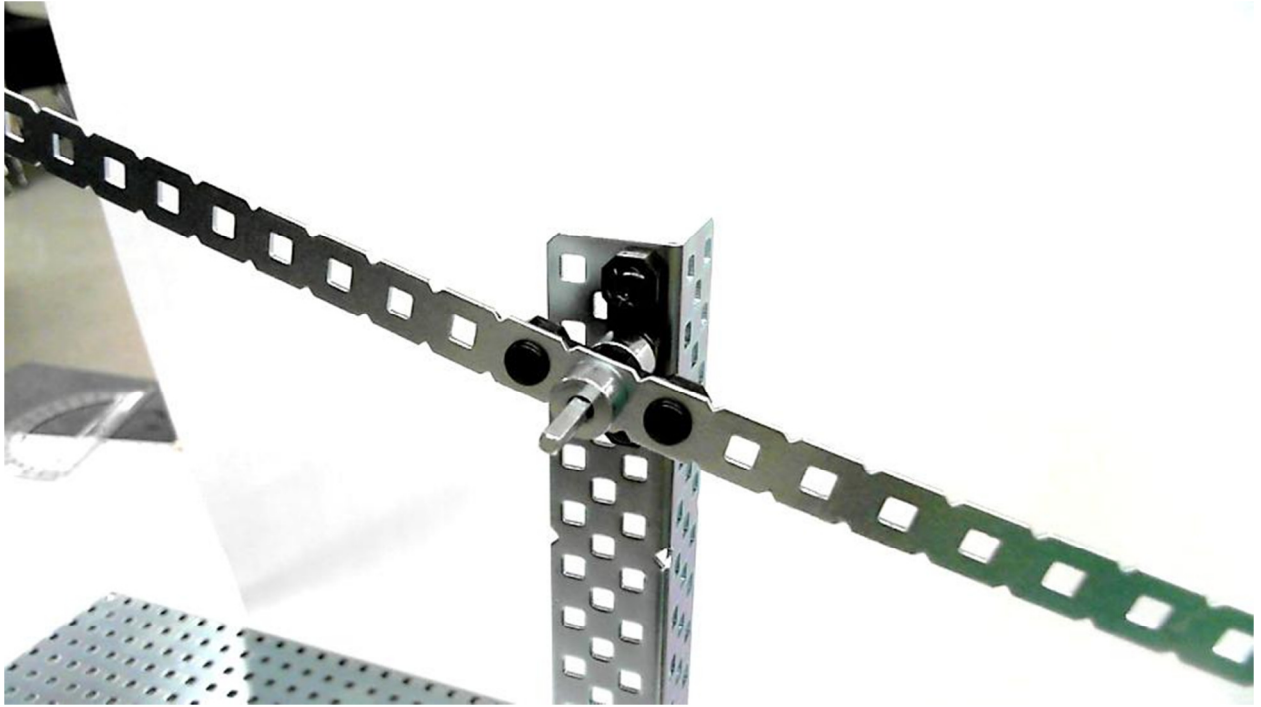
8. Attach lever arm to shaft and secure with 2 shaft collars.



9. Attach to tower and secure in place with remaining shaft collar.



10. Your lever is now complete.



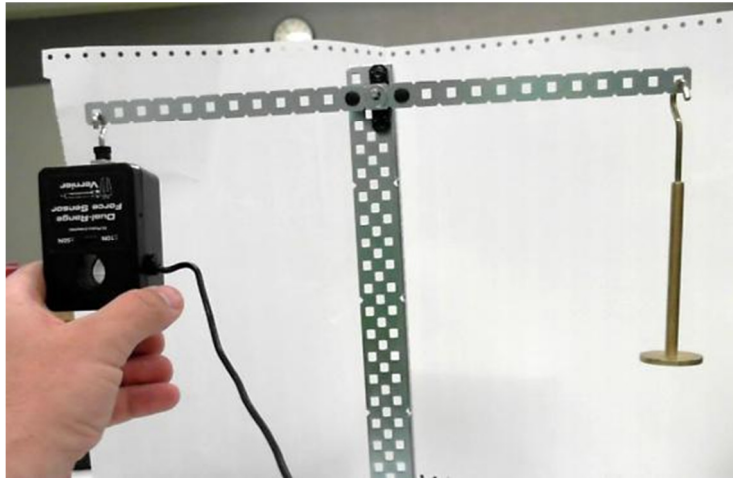
11. This set-up can be used as a 1st class, 2nd class, or 3rd class lever by simply changing the locations of the effort force (force sensor), and resistance force (mass hanger).



LEVER MEASUREMENTS AND DATA COLLECTION

Use these instructions along with your Simple Machine Investigation Data Sheet Part 1-Levers

Example of 1st Class Lever set-up



Example of 2nd Class Lever set-up



Example of 3rd Class Lever set-up

