Project Identity

Adjustable Art table  
Week 11 – April 10th, 2006  
Richard Sierra

Work Completed

During the past week, I worked on the problem with the unibearing legs. They would constantly slide against each other and create a lot of friction as to inhibit successful raising of the table. I then ended up just taking out the screw in one of the sliding legs and attaching a corner bracket underneath the upper sliding leg. This setup can be seen in figure 1. This bracket served as a stopper as well as a provider of easier movement of the tabletop upwards. For the other unibearing leg, I left the screw in place, but I took out the nut which was in between the two sliding legs. This nut was causing a great amount of friction when the table was being raised up. In order to keep the screw in place, I placed a single square bracket on the outside of the upper extrusion which ended up covering almost half of the screw head. The other end of the screw was screwed flush with a t-nut inside the lower sliding leg. This setup can be seen in figure 2. This setup enabled the two sliding legs to constantly stay apart during the whole lifting process without a nut in between them.

Figure 1: Bracket below the upper sliding leg
I also worked on the maintenance section of the owners manual with the rest of the group. This consisted of letting the user know what steps to take in order for efficient function of the table. The maintenance section was the section which I focused on in particular. This section can be seen below:

**Maintenance**

As with every mechanical device out there today, a regular maintenance would assure that it is kept functioning properly. The maintenance with this table is relatively simple. The proper maintenance for this table goes hand in hand with its ease in using it. If maintained properly, the table should last a lifetime.

**Routine Maintenance**

- Apply a thin coating of generic grease or WD-40 to the sliding leg which attaches at the base as often as necessary. Make sure the table is fully extended when this is performed.

- Wash the tabletop completely with a generic cleaning solution when necessary to ensure the integrity of the tabletop does not decrease over time. This will also ensure that the tabletop stays flat and smooth since previously spilt liquids may induce flaws inside the surface over time.

- Dust and brush away small particles outside the sliding legs as well as the gas springs once a month. This will ensure that no excessive buildup of dust or small
particles will occur in between the sliding legs as well as on the gas spring’s sliding pistons. If the debris inside the lubricating fluid of the gas springs is kept to a minimum, the gas springs will always function at an optimal level.

- Check for any loose connections once every couple months. This includes any connection underneath the tabletop as well as between the gas springs and sliding legs with the base. If a connection is loose, you will need either a flat head screw driver or a 5/32” allen wrench. These tools will tighten any loose screws that come about with the table. This checkup will ensure the table’s stability and proper lifting when in use.

**Replacement of Parts**

If failure of the brakes occurs (part # 6850):
  - Contact
  
  **Air Inc** 1 800 341 2800 [sales@airinc.net](mailto:sales@airinc.net)

If failure of the single side long unibearing occurs (part # 6762):
  - Contact

  **Air Inc** 1 800 341 2800 [sales@airinc.net](mailto:sales@airinc.net)

If failure of simple components occurs:
  - Ex: screws, nuts, brackets
  - You can obtain similar sized parts at your local hardware stores

  **Home Depot** **Lowes**

After the owners manual was completed, the I started working on the final report along with the rest of the group. The section of the report I will be focusing on consists of the base components, the framing setup, the connection of the framing to the tabletop, as well as the tabletop itself.

**Future Work**

During the next week, I plan to continue working on my sections of the final report. I also plan to meet with Bruce on Tuesday when a student from the Center for Students with Disabilities will be trying out our table. By the end of next week, the final report should be completed. Once this is done, I will work with the rest of the group on the power point presentation.

**Project Review**

As of this past week, the art table is completely finished. It is at its optimal adjusting potential for the user. The owners manual is also completed and gives a detailed explanation of each component as well as how fix and problems which may occur over time. The completed final report is in the making and will be completed within the following week. Everything for this project is still on schedule as planned.
Hours Worked

Week 11 – 8 hours