Weekly Report 8
Monitor Lift & Paint Cap Remover
11/2/07

Team 4- Thuy Pham, Pat Keating, Dan Zachs, Katie Zilm
Monitor Lift

- Back view of mount attachment
- Guide Rails
- Guide Rail Support
- Mount Support
- Mount
- Linear Actuator
Work Accomplished

- Updated sponsor on our progress and asked for feedback to make sure we are making products they will be satisfied with.
- Secured wall mount to mount support
- Secured brackets to guide rails
- Secured guide rails to mount support
- Secured guide rails to platform
Monitor Lift

- The wall mount was secured to the mount support.
- The wall mount was positioned on the mount support so that when the monitor is attached, the monitor will rest about 0.75” above the desktop.
- This ensures that at the lowest level, the monitor will not be damaged.
- Notice that the wall mount is level as indicated by the bubble.
Monitor Lift

- Secured the platform brackets to the guide rails.
- Did this by drilling 5/16” holes and using nuts/bolts.
- The rear brackets were cut shorter so that they would not hang over the edge of the platform. An additional hole was drilled in these brackets to compensate for this.
Monitor Lift

- The guide rails were secured to the mount support.
- This was done by drilling two holes on each side of the mount support that coincide with the brackets on the rails.
- Nuts and bolts were used to secure them in place.
- Two locking washers were inserted in between the mount support and the brackets. This prevents any chance of the mount support riding along/binding on the guide rails.

Notice the gap created by the washers.
Monitor lift

- The guide rails were secured to the platform
- A total of 10 holes were drilled into the platform for the guide rail-platform brackets.
- The rails were positioned on the platform so that the mount support was perpendicular to the platform.
- On the underneath side of the platform the holes were countersunk so that the platform would lie flush with the desktop surface.
- They were secured with 5/16” bolts, locking washers and nuts.
Monitor Lift
Paint Cap Remover
Work Accomplished

- Secured clamp in place with a set screw
- Constructed an enclosure/shield for the motor and electronics
- Circuit
Paint Cap Remover

- The vise was secured in place.
- This was done with a ¼-20 set screw
Paint Cap Remover

- An enclosure for the motor/circuit area was constructed.
- This was done by bending a piece of galvanized aluminum into a square U shape.
Paint Cap Remover

- The circuit for the paint cap remover was built.
Future Work

- **Monitor Lift**
  - Create an enclosure for the switch.
  - Cut off extra platform on left side.

- **Paint Cap Remover**
  - Secure enclosure on base.
  - Build circuit on small protoboard.
  - Cut off current lever and build larger, more user friendly one.
Progress

- Monitor Lift
  The monitor lift is essentially finished. Everybody has done a great job working together to get work done in the machine shop.

- Paint Cap Remover
  The team has done a great job this week. Although more time was focused on the monitor lift, the paint cap remover project was not forgotten about. The paint cap remover is on schedule to being finished on time.
Hours Worked

- Katie - 20
- Thuy - 15
- Dan - 17
- Pat - 15