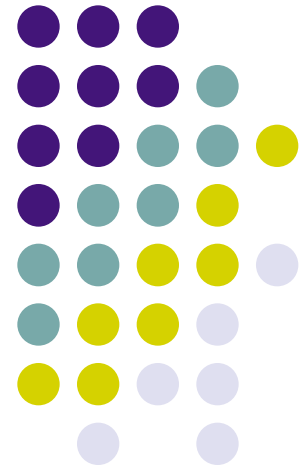
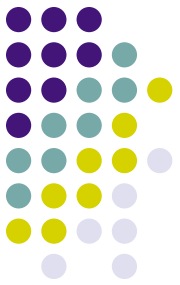


Golf-Ball Launcher



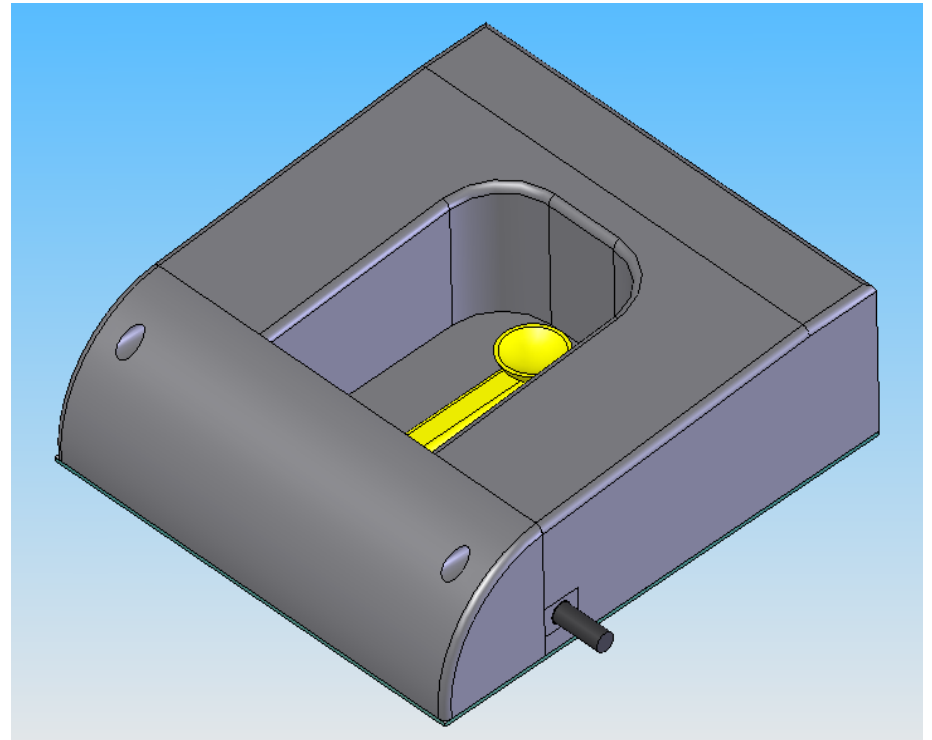
RED A

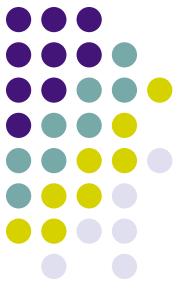




The Golf Ball Launcher

- Catapult that launches golf ball 200 yards
- Minimal strike on back pad releases catapult.
- Lightweight and Portable





Why golf?

- 10% of US population plays golf
- Few disabled can play

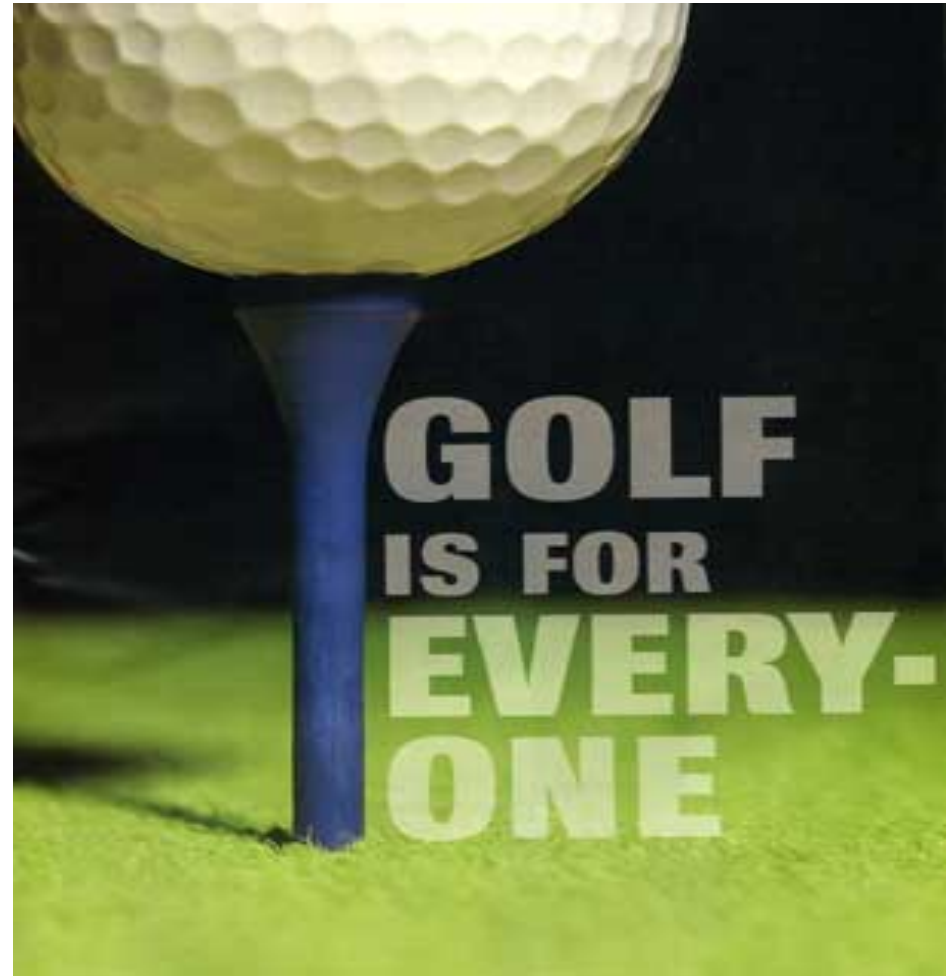
“It’ s our belief, that it’ s one of the best sports for people with disabilities...anyone with a disability.”

Bob Hope, *East Amputee Golf Assoc*

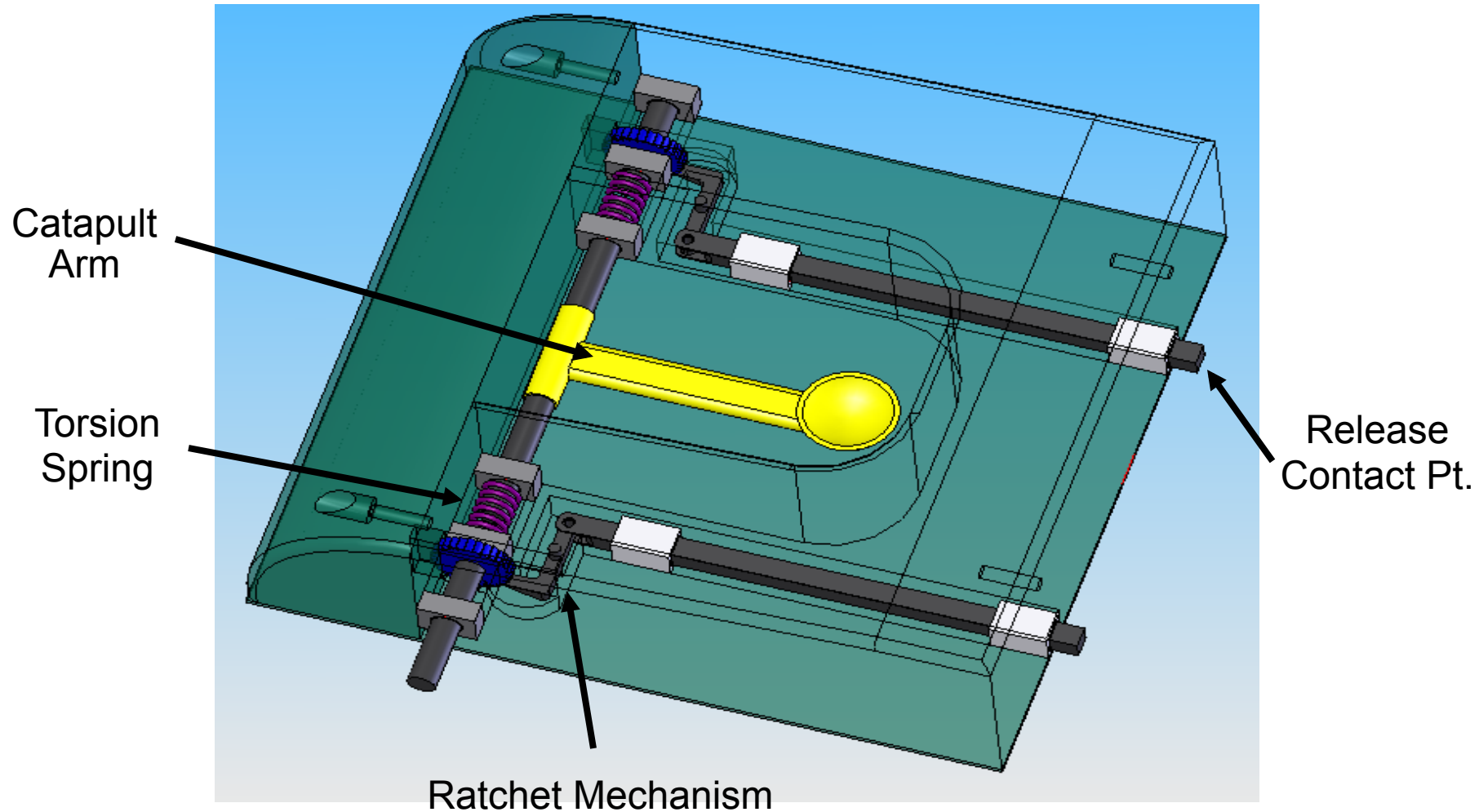
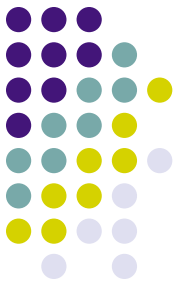


Target Market

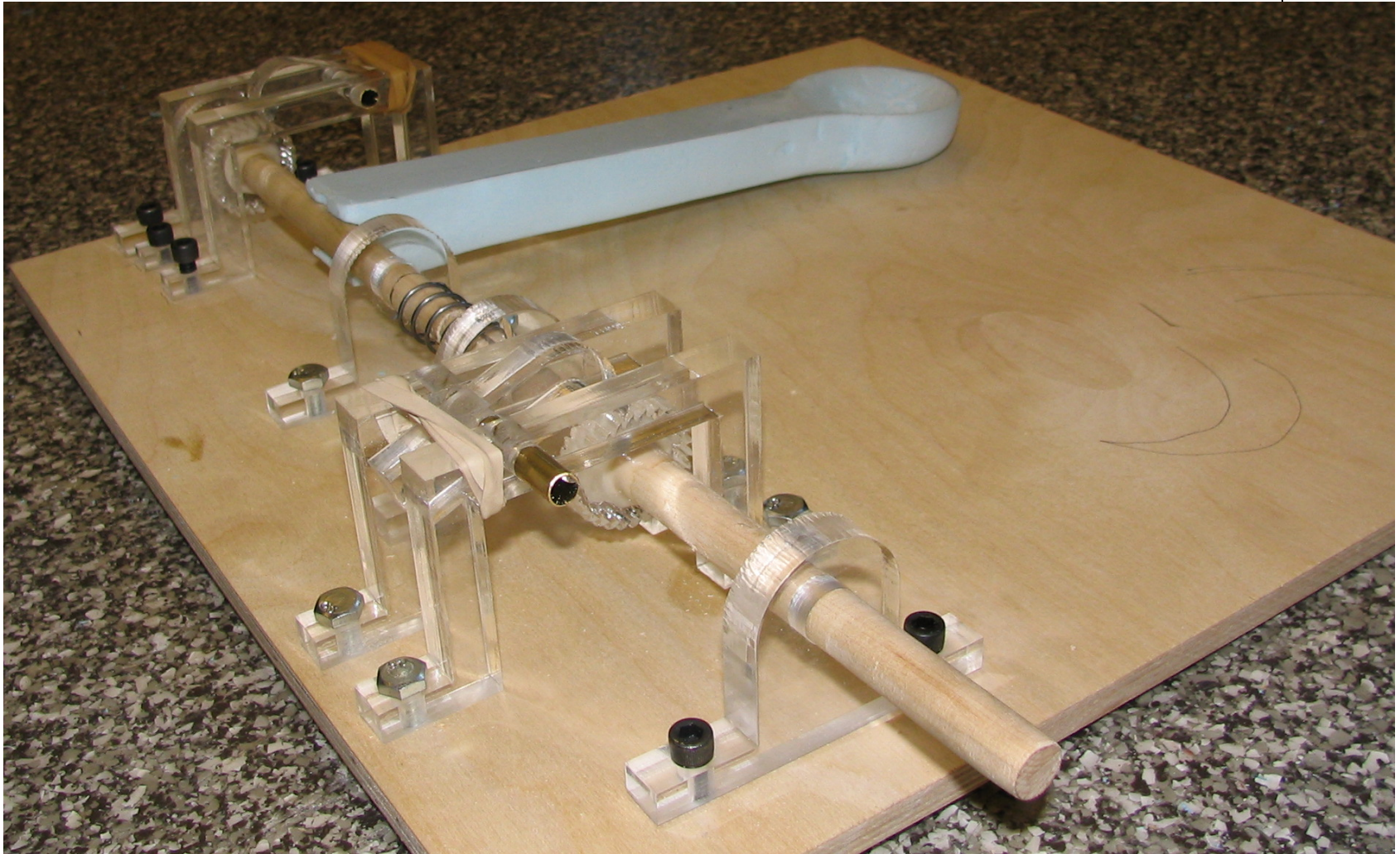
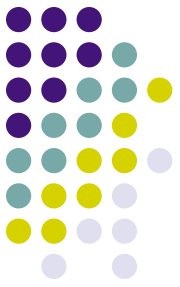
- Physically and Mentally Disabled w/ Nonsevere Disabilities
- Current Market: 8.2 Million
- Estimate 10% or 800,000 interested
- Contacts: PCGA and Cardinal Cushing



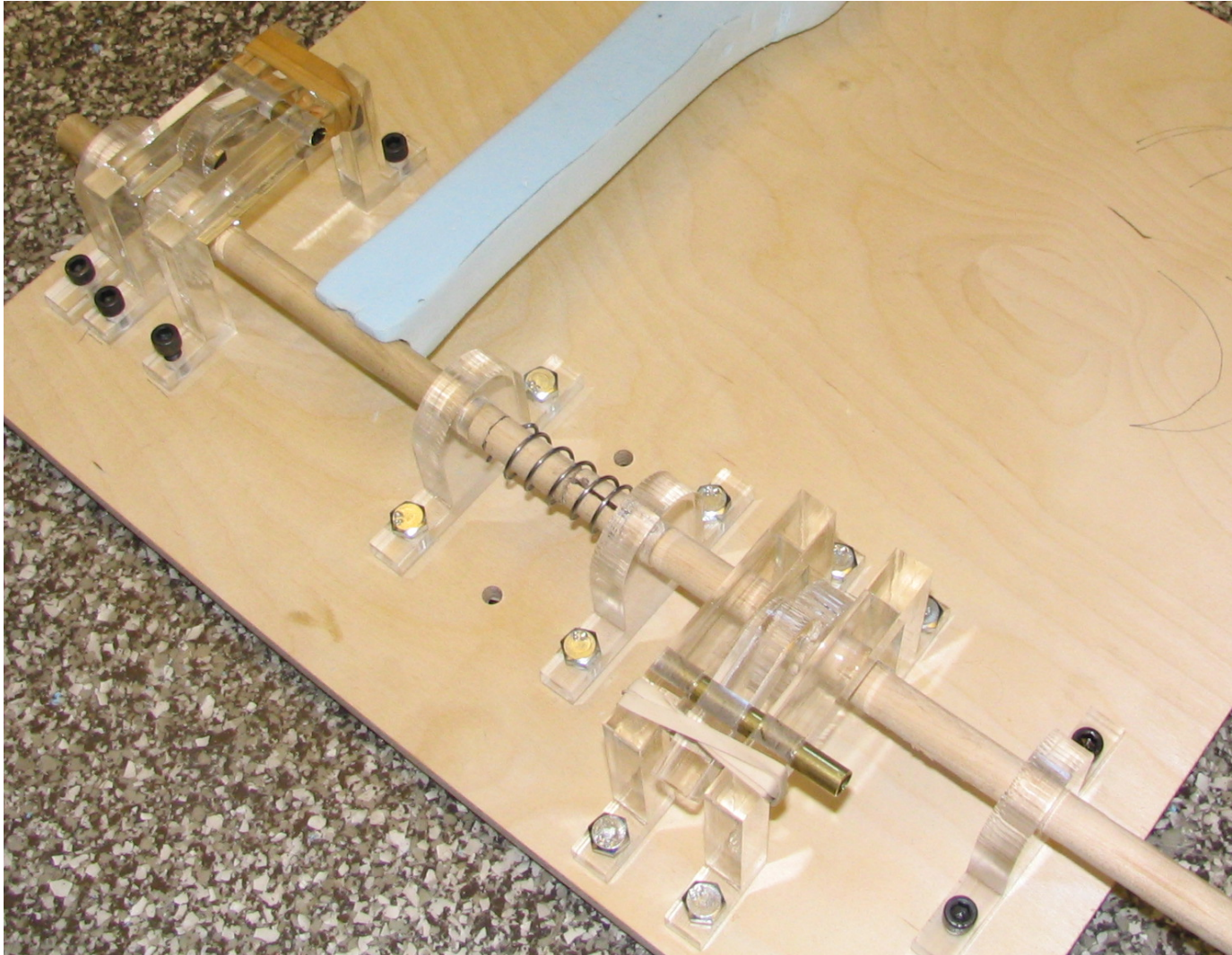
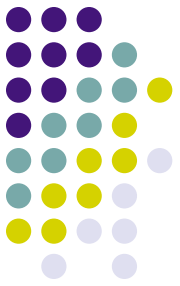
How it works:



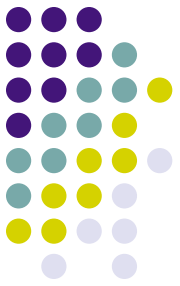
Demonstration

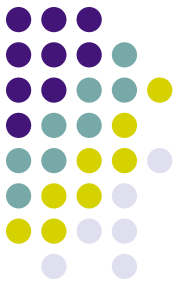


Demonstration



In Use



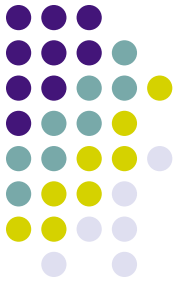
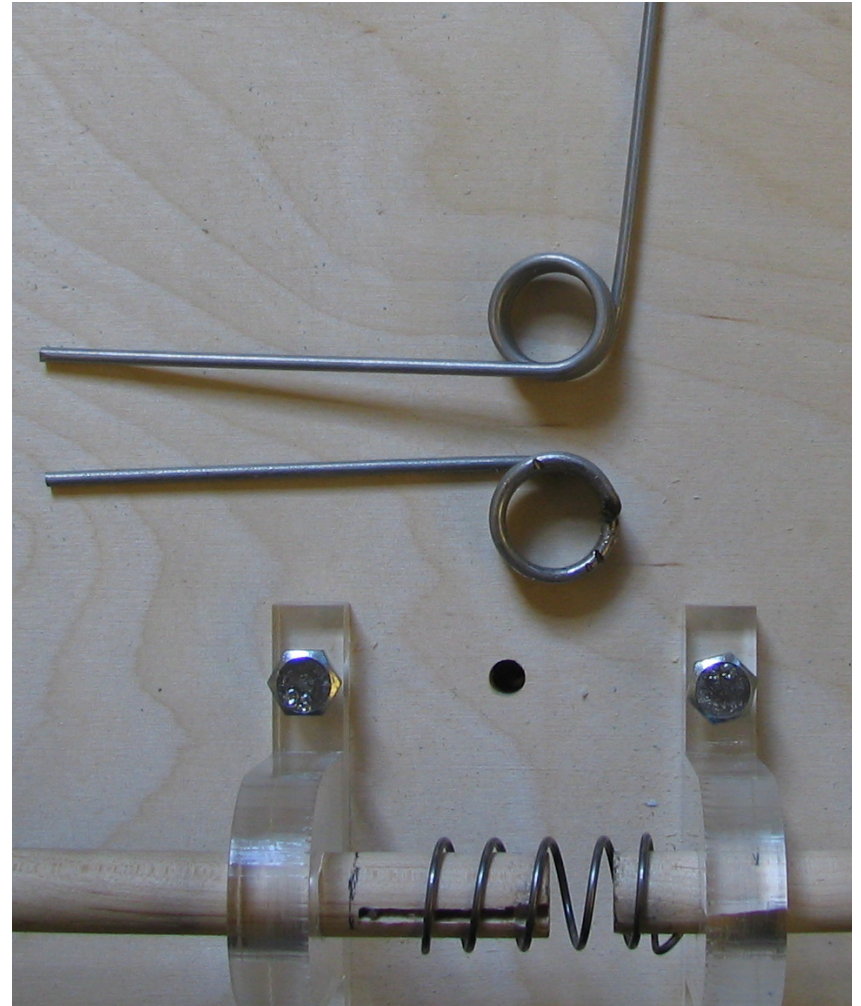


Feasibility: *Beyond Foam*

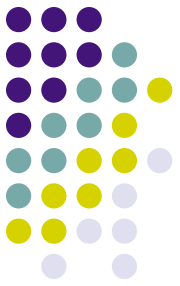
- Energy Conservation
- Spring PE = Golf Ball KE
 - $k\theta^2 = mv^2$
- For 200 yd Launch:
 - *Torsion Springs w/ $k = 35.3 \text{ N-m}$*
- Special order...but feasible

Take-A-Ways

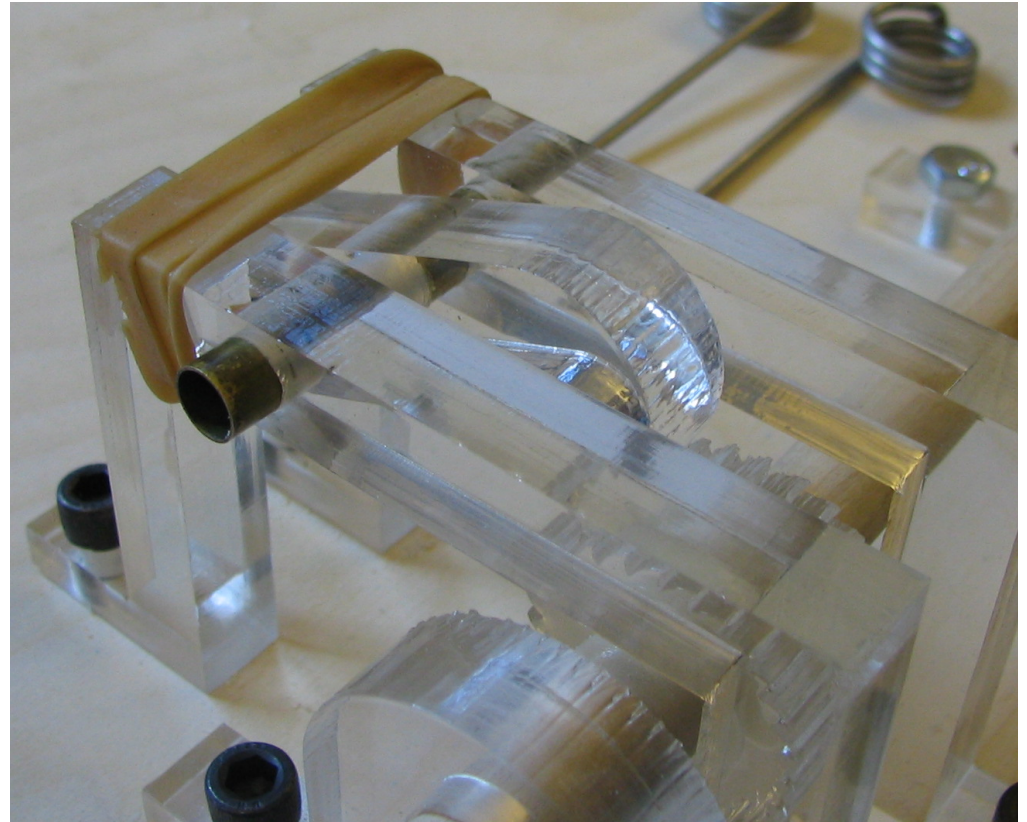
- Spring needs custom manufacturing
- Destroyed Springs

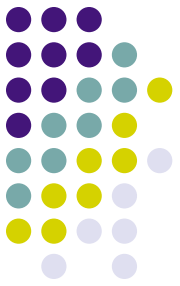


Take-A-Ways



- Release Mechanism needs force to keep pin in place
- Rubber Bands





Future Consideration

- Structurally Stable
- Trajectory/Distance adjustments
- Load Ball Automatically
- Alternative Launching Mechanisms