

## Right Angle Screwdriver

**Week 14** – December 4 to December 10, 2009

**Team Members:** Scott Carpenter - Team Leader  
Charles Donaldson – Communicator  
John McGuire – BSAC  
Nathan Retzlaff – BWIG

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### **Problem Statement:**

The aim of this project is to design a right angle screwdriver for use in surgery for facial fractures. The current procedure attaches titanium plates to the mandible by making a small incision on the exterior of the face, which makes it difficult to position the screwdriver effectively and leaves a scar. The right angle screwdriver must be able to fit through a standard incision and provide enough torque to tighten the screws down on the plate.

### **Restatement of Last Week's Goals:**

The team's goals this past week was to finish the remaining deliverables and wrap up the semester.

### **Summary of Accomplishments:**

- Final report completed
- Peer evaluations, design notebooks, client evaluation completed
- Final report sent to client

### **Team Goals:**

- Attend design next semester

**Activities:**

Scott	12/7/2009	Team meeting – final report, finish design notebooks	1.5 hr	3 hr
	12/9/2009	Finish final report and other deliverables	1.5 hr	
Charles	12/7/2009	Team meeting – final report, finish design notebooks	1.5 hr	3 hr
	12/9/2009	Finish final report and other deliverables	1.5 hr	
John	12/7/2009	Team meeting – final report, finish design notebooks	1.5 hr	1.5 hr
Nathan	12/7/2009	Team meeting – final report, finish design notebooks	1.5 hr	3.5 hr
	12/9/2009	Edited final report	2 hr	

**Difficulties:**

None at this time.

**Project Timeline:**

	September				October					November				December		
Tasks	4	11	18	25	2	9	16	23	30	6	13	20	27	4		
Project Research	█	█	█	█	█	█	█									
Brainstorming	█	█	█	█	█	█	█									
PDS		█	█	█	█	█	█	█								
Prototype design				█	█	█	█	█	█							
Prototype building						█	█	█	█	█						
Actual device design						█	█	█	█	█	█					
Ordering							█	█	█	█	█					
Expected Shipping							█	█	█	█	█					
Device manufacturing										█	█	█	█	█		
Testing											█	█	█	█		
Re-designing											█	█	█	█		
Re-testing													█	█		
Presentation							█								█	
Progress report	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Website	█	█	█	█	█	█	█	█	█	█	█	█	█	█		

**Expenses:**

\$31.43 – Materials for rough model

\$279.55 – Materials for prototype