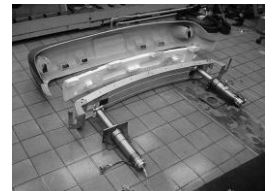




National Highway Traffic Safety Administration

Sudden Impact
Proposal – No. IS6-300
Vendor/Designer Rating



Name _____

Period _____ Table/Group # _____

Earned Points	WRITTEN REPORT REQUIREMENT	Points Possible
	Each bumper project must include a summary of the research and an analysis of the data that includes the following:	
	STEP 1: Description of Materials Used	10
	STEP 2: Description of how the bumper was designed to perform (how does your bumper reduce peak force upon impact)	10
	STEP 3: Description of how the bumper was constructed	10
	DIAGRAM REQUIRMENT	
	STEP 4: Diagram of Bumper Design (side view with labels)	10
Earned Points	PROTOTYPE REQUIREMENT	Points Possible
	Worked well with group members	10
	Constructed a bumper prototype that was designed according to the specifications in the written report.	10
//	PEAK FORCE TEST RESULT: _____ N	n/a
	Overall Performance Rating	60

_____ %

FOR NHTSA PERSONNEL ONLY:

Comments:

- ☐ Really great job! It is clear you understand the requirements of this project and the physics behind safe bumper design. Congratulations, you have been awarded the contract for this NHTSA project.
- ☐ Great job! Thank you for your input. We appreciate your commitment to this project and to understanding the physics behind safe bumper design. Unfortunately, your design did not prove to be the best for reducing peak force during impact. We will be sure to include you in future proposal requests.
- ☐ Other:

CRITERIA FOR SUCCESS:

0 pts = Not Done or Not Relevant

2 pts = Not quite there

You are missing or incorrect about the topic you were asked to write about.

4 pts = Okay

Two or more of the statements you made about the topic you were asked to write about are incorrect, or you are missing two or more key elements necessary for a thorough discussion of the topic.

6 pts = Good! Almost there!

One of the statements you made about the topic you were asked to write about is incorrect, or you are missing one of the key elements necessary for a thorough discussion of the topic.

8 pts = Great! You've got it!

You have it! You may have explained things a little bit less clearly than the next criteria describes, but you have thoroughly discussed the topic and you're at about 90% accuracy with regard to the statements you made.

10 pts = Absolutely exemplary!

You have it! You thoroughly discussed the topic you were asked to write about and you have shown 100%, RIGHT ON accuracy in your discussion.

Name: _____ Pd: _____ Date: _____

2013 Bumper Design and Prototype

Step 1: Materials

(List and provide a rationale for your materials here)

--

Step 2: Design

(Describe how the bumper will reduce the level of peak force upon impact – use vocabulary from this unit.)

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

Step 3: Construction:

(Think of this as the directions – step by step, how will you create the bumper?)

[illegible]

Step 4: Illustrate

(Draw a picture of the bumper from a side view. Be sure to include labels.)

