**PISTON CUP COST REPORT AND COST REDUCTION SHEET**

SCHOOL NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

TEAM NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 CAR NUMBER \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (to be filled out when you arrive for competition)

**NOTE**: **This sheet MUST be completed and submitted by the competition rules. Failure to do so will result in a penalty.**

**PURPOSE: purpose of this report is to evaluate the cost of the vehicle for cost event.**

**COST EVALUATION:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **VEHICLE PARTS** | **MATERIAL** | **PROCESSES** | **FASTENERS** | **TOOLING** | **TOTAL** |
| Brake system |  |  |  |  |  |
| Engine and drivetrain |  |  |  |  |  |
| Frame and body |  |  |  |  |  |
| Miscellaneous, safety, finish and assembly |  |  |  |  |  |
| Steering system |  |  |  |  |  |
| Suspension and shocks |  |  |  |  |  |
| Instruments, wiring and accessories |  |  |  |  |  |
| Wheels, wheel bearings and tires |  |  |  |  |  |

The teams should submit the cost report at the cost report deadline. Their cost report will be compared to the cost adjustment report submitted prior to the competition. If there is a difference in the prototype cost of more that 20% plus or minus, there will be a 25-points penalty assessed to the team in the cost event.

If the prototype cost report changes more than 40% plus or minus, the cost report will be deemed incomplete and team will be excluded from the prototype cost event and will receive 0 points for the cost competition.

**COST SCORING:**

The prototype cost score is of maximum 80 points.

Scost = 80 x (Cmax - Cteam / Cmax – Cmin) + bonus point

Where,

Cteam vehicle cost,

Cmin lowest vehicle cost,

Cmax highest vehicle cost.

**COST REDUCTION:**

Each team must make a report with up to 2 ideas for cost reduction. Each idea will be worth up to 10 points.

* **FORMAT (1 point):** Teams will be judged if the cost reduction ideas are presented in a clear and concise manner.
* **RESEARCH (4 points):** teams will be judged on the various ideas that they have come up for possible cost reduction.Teams are encouraged to share several ideas that might not be fully studied but the team feels is a potential cost reduction opportunity.
* **DESIGN (2 points):** Teams will be judged on how well they explain and how fully developed their cost reduction ideas are.
* **ANALYSIS/TESTING (3 points):** Teams will be judged on the virtual analysis and/or real-world testing that they have completed on the cost reduction proposals. Teams should show how component performance, durability and other factors have been affected by their cost reduction design proposal.

Date at which the report was filled out:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**WE HAVE EXAMINED THE ABOVE INFORMATION AND TO THE BEST OF OUR KNOWLEDGE DEEM IT TO BE ACCURATE.**

 TEAM CAPTAIN \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (SIGNATURE) \_\_\_\_\_\_\_\_\_\_\_\_\_ (DATE)

FACULTY ADVISOR \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (SIGNATURE)

 \_\_\_\_\_\_\_\_\_\_\_\_\_ (DATE)