TEAM INFORMATION

Team Name/Project Title: The Missing Lynx/ SAE Mini Baja

Department: Mechanical Engineering

Faculty Advisor(s): Joseph F. Cullen, Dr. Ronald Rorrer, Sean McDonough

Team Members: Scott Bolin, Eric Losty, Nathan Ortiz, Nick Paris, Stanislav Severyanov, Matthew Reed, Kevin Walker

PROJECT INFORMATION

Description:

The SAE® mini Baja competition is a premier design series that challenges teams to design, build, test, and promote a single-seat all-terrain vehicle for competition.

Abstract:

The Baja SAE® competition challenges university teams from around the world to design and build cutting edge off-road vehicles. Using a competition mandated 10 hp engine, teams construct rugged, light and maneuverable vehicles that can traverse various types of hostile terrain. The University of Colorado, Denver, Baja 2014 team has designed, and prototyped a vehicle that utilizes the adaptability of a continuously variable transmission, has a 6 ft 2 in. turning radius, total vertical wheel travel of nearly 12 in., and static ride height of 11 in. The dry weight for this vehicle is 400 lb, producing a total weight of 600 lb with driver. Additionally, the vehicle has been designed, and fabricated, with a custom cutter brake system, the ability to withstand 4 ft vertical drops without failure, and has an anticipated top speed of 26 mph on flat ground.