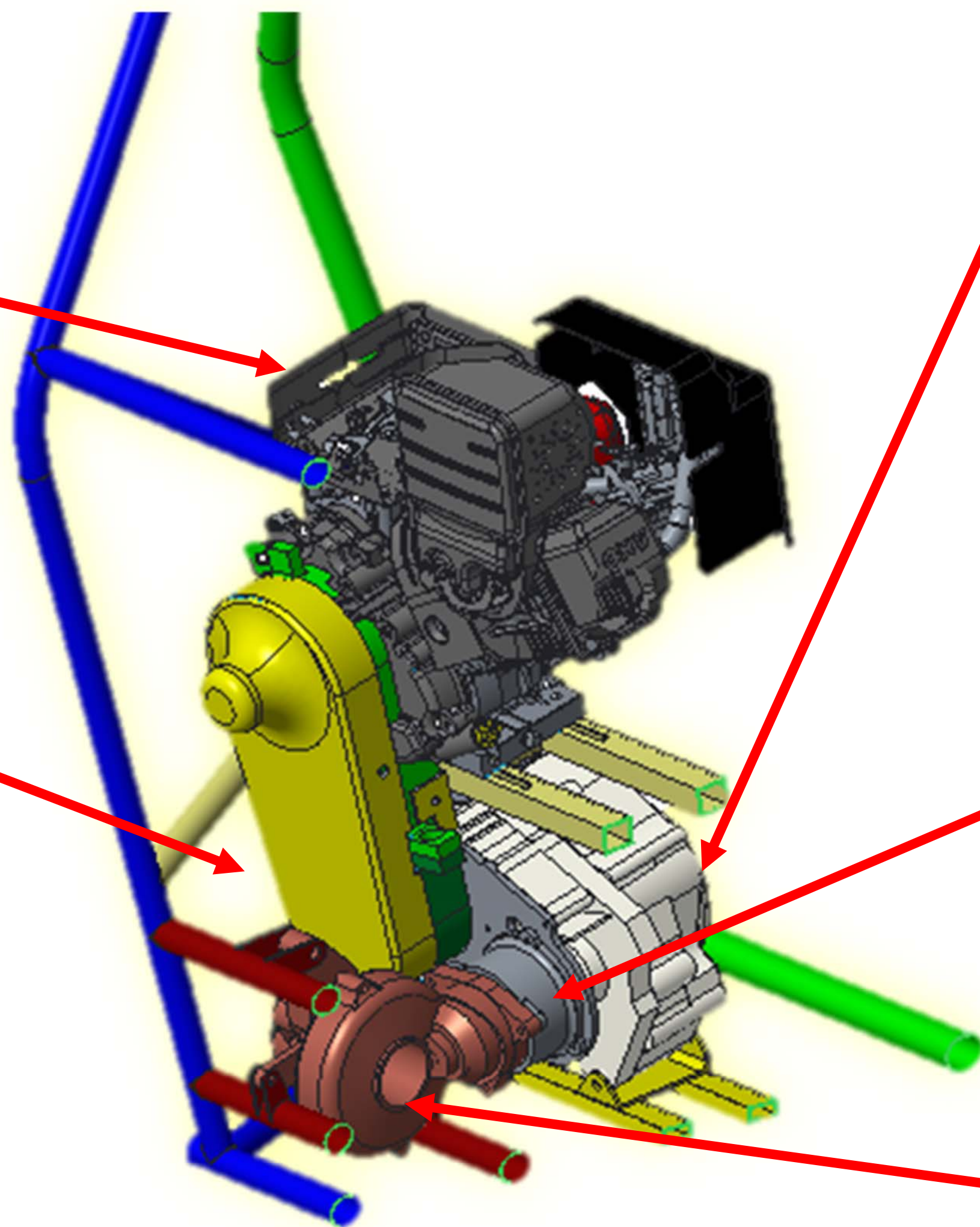


Grove City Racing 2014-2015

Objective: Design an optimized drivetrain using a pre-existing vehicle frame.

Briggs and Stratton
Engine

Gates 20mm Powergrip GT2 belt runs between the engine and transmission on custom aluminum pulleys. It is protected with a custom cover made from aluminum and thermoformed plastic.



Yamaha XT225 transmission with custom plate cover and collar tightens locational tolerances between transmission and differential.

A modified Lovejoy GS28/38B Coupling with a GS 28 Spider 64D directly connects the transmission and differential.

A Honda TRX500FE differential increases maneuverability during turns by allowing drive wheels to rotate at independent speeds.



The Magic 
 *School Bus*

Baja SAE Auburn 2015 Results

(out of 100 cars)

Acceleration	61
Hill Climb	58
Maneuverability	26
Suspension and Traction	43
Endurance	27
Overall	35

Future goals: With a car weighing 465 lbs, one of the main goals is to reduce weight in the car. One of the methods to achieve this will be to increase testing on the car in order to know where weight can be reduced while maintaining the strength and integrity of the car.



From Left to Right:

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