

SAE CSC2007 SNOWMOBILE DESCRIPTION FORM

Team Name: University of Maine

Team Number: 5

Chassis-Year and Model: 2003 Arctic Cat, Trail Cat

Engine

Engine Cycle: 4-stroke

Number of Cylinders: 3

Engine Displacement: 660cc

Engine Manufacturer: Arctic Cat

Engine Modifications: N/A

Compression Ratio: 10.5:1

Turbocharged or Supercharged? No

Engine Management System: Stock and programmable microprocessor

Fuel Delivery – Carburetors: EFI

Fuel Pump Pressure: 43 psi

Fuel Type: E10

Emission Control

Air/Fuel Ratio Chosen: Rich, 12.3

Catalyst/Type: 3-way catalytic converter

Secondary Air Injection? No

Exhaust Gas Recirculation? Yes

Other:

Noise Control

Muffler Design: Stock muffler

Noise Treatment: Modified cooling, noise damping insulation

Cooling

Describe Strategy: Additional radiator, convective fan cooling to cool engine and keep below 180° F

Other Unique Features of Your Snowmobile

Describe Strategy: Modify signals to ECU to modify AFR and reduce emissions via programmable microprocessor.