

SAE CSC2004 SNOWMOBILE DESCRIPTION FORM

Please fill out the following form and return it to Lori Witting before you leave the registration area. *Answer all questions about your snowmobile as it is actually competing (not as it was intended to compete).* Please answer all questions accurately, as the responses you supply will be used to summarize your entry in the SAE CSC2004 Summary Technical Paper.

Team Name and Number: Minnesota State University – Mankato #10

Engine

Engine Cycle (2-stroke, 4-stroke, rotary) 4 stroke

Engine Displacement (cc) 683

Engine Manufacturer Polaris

Engine Modifications custom pistons, camshaft, porting, high temp. coating

Compression Ratio 8.0

Turbocharged? Supercharged? turbo charged

Engine Management System MoTec

Fuel Delivery (Carburetors, EFI, DI): EFI

Emission Control

Air/Fuel Ratio Chosen (lean, stoich?) stoich

Catalyst? Type? 3 way

Secondary Air Injection? yes

Exhaust Gas Recirculation? no

Other wide band O₂

Noise Control

Describe Strategy Sound deadening, quiet track, and stock muffler to lower radiated and mechanical noises.

Performance Maintenance

Describe Strategy Add turbo charger to gain power and lose weight to help handling.

Other Unique Features of Your Snowmobile

Describe Strategy E85 fuel to reduce emissions and gain power.

Special Measurements Needed for Acceleration Event

Inside Ski Stance 34¼ inches **Outside Ski Stance** 46¾ inches **Front Bumper Height** 21 inches