

SMALL ENGINE LUBRICANTS

National™ Outboard TC-W3® (50:1), Air Cool 2T (40:1) and FC-W™ Four Cycle



Recreational Vehicle and Small Engine Oil

National™ Two Cycle Engine Oils

Outboard TC-W3® (50:1)

In Water

The National Marine Manufacturers Association (NMMA) continuously updates the specification requirements for two cycle oils to ensure they meet the special needs and lubricity protection of evolving two cycle engine designs. National Outboard TC-W3® (50:1) oil has significantly better performance than the reference oil and the passing limit in the new, more severe, NMMA TC-W3® lubricity test.

On Snow

National Outboard TC-W3® (50:1) oil contains ash-less chemistry and can be used in two stroke snowmobile models that do not require the use of low ash oils. Although there is no industry specification for two stroke snowmobile oils, Pinnacle Oil developed its own low temperature standards to ensure oil mixes with gasoline for ease of starting and proper operation, even at the coldest temperatures.

National Outboard TC-W3® (50:1) oil has a:

- typical pour point of -45°C / -49°F
- fluidity result of 38,850 cP (many snowmobile OEM oils are about 60,000 cP) after 16-18 hours of storage at -45°C / -45°F

Air Cool 2T (40:1)

On Land

Two stroke air-cooled engines are used for recreational purposes in equipment such as motocross, motor scooters and some snowmobile models. Plus, these engines are also used for working around the house and on the job, in equipment including chainsaws, leaf blowers, generators and string trimmers. National Air Cool 2T (40:1) low ash oil is designed for these types of applications.



National™ FC-W™ Four Cycle Engine Oil

4 Stroke

In Water

Environmental and consumer concerns have influenced Marine and Personal Watercraft (PWC) manufacturers. Just a few years ago, all PWC equipment used two stroke engines. Now, there are more new PWC models with four stroke engines than either two stroke direct injection or carbureted engines.

The NMMA has a new specification for four stroke gasoline-fueled, outboard and stern drive marine engines that assigns an FC-W™ license number to certified oils. In the past, automobile oils were often used for these applications, however, the chemistry of automotive oils is changing. While formulators of oils for cars are concerned with fuel economy, those developing marine engines are concerned with rust and bearing durability. National FC-W™ Four Cycle Marine Oil is NMMA certified to protect these engines.

On Snow and On Land

Four stroke snowmobiles are just being introduced into the marketplace. The high revving engines in this equipment and the moist atmosphere in which they operate present the same needs as those for four stroke marine engines and PWCs.

Motorcycles, all-terrain vehicles and generators require oil that is very shear stable, and that will provide high bearing durability and strong antiwear protection chemistry.

National FC-W™ Four Cycle Marine Oil provides superior performance versus automotive engine oils in these applications.



PINNACLE OIL, INC.

5009 West 81st Street, Indianapolis, IN 46268
800-829-8899 • www.pinnoil.com