

## Our message to the environment

Can model engines be neglected because of their small size when we consider environmental issues?

It is our duty to conserve the natural environment so that it may be handed over to our offspring, family, friends and fellow creatures.

We at O.S. Engines are taking the first step with the introduction of the MAX-55AX-BE, which is the world's first environmentally conscious model engine.

## What is B.E.(Bio-Ethanol)?

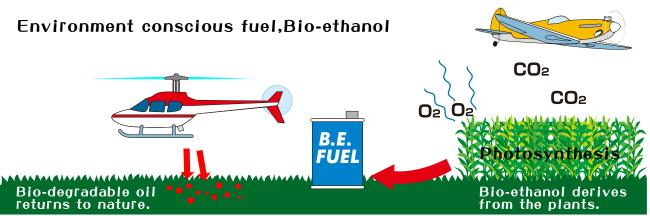
Bio-Ethanol, now being produced by O.S. is a new model engine fuel especially developed for our BE series model engines. Unlike conventional methanol based glow fuel, O.S. Bio-Ethanol fuel enables you to enjoy flying with environmental concerns in mind made possible by our upcoming new engine line-up of BE series engines



### The first O.S. original fuel About Bio-Ethanol fuel

Conventional glow fuel consists of a mixture of methanol, oil – either synthetic, castor or combination of both, and nitromethane. As such, conventional glow fuels under combustion emit unwanted by-products including formic acid, nitric acid, carbon monoxide, etc. which causes corrosion of engine internal parts such as the ball bearings. Fuel spillage and exhaust residue can also kill the grass at grass flying field sites. Because of this O.S. has chosen fuel ingredients friendly to environmental issues. After considerable research and development, O.S. has developed a special fuel for the new BE series engines that contains the following:.

- 1. Bio-Ethanol instead of methanol
- 2. Bio-Degradable lubricant derived from plants rather than a synthetic derived from petroleum.
- 3. No nitro-methane



# A point of bioethanol fuel

### Bio-Ethanol

Compared to conventional glow fuel, Bio-Ethanol is an environmentally conscious fuel that under combustion forms only carbon dioxide and water. Generally, ethanol can be mass-produced by fermentation of crops such as sugar cane, corn etc, or by hydration of ethylene from petroleum. O.S. is focusing their attention on ethanol derived from crops due to carbon dioxide emitted during the Bio-Ethanol production and during the Bio-Ethanol model engine operation, being cancelled out by the greater intake of carbon dioxide by plant photosynthesis.

### Bio-Degradable oil

Conventional synthetic oils derived from fossil fuel remain undegraded in the soil, whereas the Bio-Degradable oil used by O.S. is degradable due to microbe and returns to nature.

#### Nitromethane free

The addition of nitromethane to the model fuel will easily increase a model engine's power. However, O.S. has dared to make Bio-Ethanol fuel without nitromethane due to nitromethane's unfavorable by-products and environmental concerns in mind.

## First in the world !

# The first bio ethanol engine for models O.S.MAX-55AX-BE coming soon...

# An engine of an eco-friendly adult

O.S. bio-ethanol fuel is the product of long research and extended experimental flights to work in conjunction with, and develop, the full potential of the newly developed Bio-Ethanol engines.

### First in the world !

The first Bio-Ethanol model engine - the O.S. Max-55AX-BE will be released in Japan in this summer.

The MAX-55AX-BE has the same mount size as our best selling 46AX. As such the 55AX-BE can be installed in an existing 46AX powered aircraft, and even though burning Bio-Ethanol fuel, develop more power than the 46AX using conventional glow fuel. An added benefit - fuel consumption is approximately 40% less than the standard 55AX glow engine.

## Major merits of the 55AX-BE

1.Environmental conscious

2.Much less fuel consumption

3.Less oil exhaust

## 4.No nitric acid exhaust emission

# Specifications of MAX-55AX-BE

Although, with the exception of the green anodized drive washer, the 55AX-BE and standard 55AX have the same external appearance, the 55AX-BE cylinder head, carburetor and glowplug are completely new designs, especially the glowplug (BE3) that utilizes a different thread size than conventional glowplugs to avoid using incorrect plug.

### ●O.S. MAX-55AX-BE Spec

Displacement	8.93cc/0.545cu.in.
Bore	23mm/0.906in
Stroke	215mm/0.846in.
Output	0.95ps/10,000r.p.m.
Practical r.p.m.Range	2,000 ~ 12,000r.p.m.
Weight:Engine	Engine:404g/14.25oz. Silencer:120g/4.23oz.
Fuel	Bio Ethanol Glow Fuel BE-1

