



# SERVICE BULLETIN 108

## INFORMATIONAL

**ISSUED:** May 1971

**REVISED:** September 2000

**SUBJECT:** Gasoline and Engine Oil Recommendations for 2 and 4-Cycle Engines

### **GASOLINE**

Tecumseh Products Company strongly recommends the use of fresh, clean, unleaded regular gasoline in all Tecumseh engines. Unleaded gasoline burns cleaner, extends engine life, and promotes good starting by reducing the build-up of combustion chamber deposits. Leaded gasoline, gasohol containing no more than 10% ethanol, premium gasoline, or unleaded gasoline containing no more than 15% MTBE (Methyl Tertiary Butyl Ether), 15% ETBE (Ethyl Tertiary Butyl Ether) or 10% ethanol, can be used if unleaded regular gasoline is not available. Reformulated gasoline that is now required in several areas of the United States is also acceptable.

**NEVER USE** gasoline, fuel conditioners, additives or stabilizers containing methanol, gasohol containing more than 10% ethanol, unleaded regular gasoline containing more than 15% MTBE (Methyl Tertiary Butyl Ether), 15% ETBE (Ethyl Tertiary Butyl Ether) or 10% ethanol, gasoline additives, or white gas because engine/fuel system damage could result.

**Specialty Fuels:** Fuels being marketed for use on small engines can have a significant affect on starting and engine performance. Prior to using any specialty fuel, the Reid Vapor Pressure (RVP) must be determined. Fuels with a rating of less than 50 kPa (7psi) should not be used in summer, and fuel with a rating of 85 kPa (12psi) should not be used during winter.

**Storage:** See instructions in Technician's Manual, Operator's Manual, or Bulletin 111. For year round fuel stability in and out of season, use "Ultra Freshä" part number 730245A.

### **FUEL ADDITIVES**

Only fuel additives such as Tecumseh's fuel stabilizer Ultra Freshä part number 730245A or liquid varieties can be used when mixed properly. For winter applications, Isopropyl alcohol fuel dryers may be used in the fuel system but must be mixed at the proper ratio recommended by the manufacturer. **NEVER USE METHANOL BASED DRYERS.**

### **OILS**

#### **2-CYCLE**

Tecumseh two cycle engines require the use of a NMMA TC-W3, TC-W11 or JASO FB or FC certified oil. **TECUMSEH RECOMMENDS USING TWO CYCLE OIL PART #730227**, which is a premium blend that ensures cylinder wall lubrication, mixes easy, does not separate and is specially formulated for use in air or water cooled two cycle engines.

The proper fuel mixture ratio of oil to gasoline for specific engines will be found in the owners operating instructions and on the decal attached to the blower housing or fuel tank of the engine.

**FOR SOME NEW ENGINES: IT IS RECOMMENDED TO USE TWICE THE NORMAL OIL QUANTITY FOR THE FIRST GALLON OF FUEL USED. SPECIFIC INSTRUCTIONS CAN BE FOUND IN THE APPROPRIATE OWNERS MANUAL.**

#### **4-CYCLE**

**TECUMSEH FOUR CYCLE ENGINES REQUIRE THE USE OF A CLEAN, HIGH QUALITY DETERGENT OIL.** Be sure original container is marked: A.P.I. service "SF" thru "SJ" or "CD". **TECUMSEH RECOMMENDS USING ONE OF THE FOLLOWING FOUR CYCLE OILS THAT ARE SPECIALLY FORMULATED TO TECUMSEH SPECIFICATIONS.**

#### **DO NOT USE SAE 10W40 OIL.**

**FOR SUMMER (Above 32°F) USE SAE30 OIL. PART #730225**

(SAE 10W30 is an acceptable substitute.) Use SAE30 oil in high temperature, high load applications. Using a multigrade oil may increase oil consumption.

**FOR WINTER (Below 32°F) USE SAE 5W30 OIL. PART #730226**

(SAE 10W is an acceptable substitute.)(BELOW 0°F ONLY): SAE 0W30 is an acceptable substitute.

**NOTE:** For severe, prolonged winter operation of the HH120 model, SAE 10W oil is recommended.