



**ADVISORY LEVEL: Important**  
**DESCRIPTION: Fuels to use. Additives**  
**ENGINE TYPE: R2800 & R360**  
**Operational**

Fuel of choice is AVGAS.

All pre late 2005 engines (B spec) should restrict the fuel to AVGAS until such time as the ignition timing is reduced to 22 degrees.

All engines supplied beyond late 2005 (Classified C spec or above) will function on Premium unleaded fuels (95 RON or higher). These engines have the ignition timing set/Adjusted to 22 degrees to avoid any uncontrolled detonation.

Rotec recommend the use of Premium Unleaded (95 RON or higher) should be interrupted from time to time with the one or more tanks of AVGAS (one does not need to flush the unleaded fuel out of the system - the AVGAS can be added to any remaining unleaded fuel in the tank).

In using premium unleaded its wise to install a knock sensor to detect instances of uncontrolled detonation along with a close examination of the spark plugs looking for carbon build up; including a regular valve and valve seat examination looking for burning...

**Use of additives:**

Care should be taken that any additive used is compatible with AVGAS, Premium unleaded or in any mixture of the two.

One such additive tested by Rotec was Flash Lubes Valve Saver and found it very beneficial in reducing the harshness of unleaded fuels. The product was found to be compatible with Premium Unleaded and AVGAS and in any mixture of these fuels. In using Valve Saver one does not need to get involved in flushing out fuels when switching from one to the other.

Apart from less carbon on the heads and pistons, less wear on the valves and seats, Valve Saver also cleaned the fuel delivery system.

Please check the internet for availability of Flash Lubes Valve Saver.



**Warnings on unmodified engines supplied prior to "B" specification (prior to late 2005)**

If you are unsure of your engine please contact factory for support (*Technical Support Email: [rotecengineering@bigpond.com](mailto:rotecengineering@bigpond.com)*). Please quote your engine number (base and aft of the top cylinder) and provide date of purchase if possible.

For all unmodified engines supplied prior to B specification (late 2005) please contact factory for support on how to retard the engine timing down to 22 degrees.

Continued use of Premium Unleaded on pre B spec engines, without any additives, will cause piston rings to crack and valve and valve seats to wear more rapidly than expected.