TR Engine Start up Procedure

Engine start up procedure.

TR engines, like all engines, are most vulnerable to damage at the point of initial start up. If the following steps are adhered to, the likelihood of early failure will be minimised.

1. During installation ensure all orifices are sealed off. As inlet manifolds etc. are fitted to the engine, reseal off to avoid ingress of foreign bodies.

2. With the ignition deactivated and spark plugs removed squirt 6 pumps of engine oil into each bore.

3. Fill with run in or standard (non synthetic) oil to the high mark. Fill the water system with plain water.

4. Turn the engine over for 30 seconds. Stop the engine and check for leaks, particularly on the oil gauge line and water hoses. Don’t forget the heater and heater hoses. Top up with water and oil as necessary. Leave the radiator cap off.

5. Turn over the engine again for 30 seconds. Let the starter motor and battery cool down for 10 minutes.

6. Repeat this exercise until oil pressure is achieved. The engine will noticeably slow down and of course pressure will be recorded on the gauge. If necessary recharge the battery as required.

7. Check ignition setting is correct. Check fuelling is reasonably correct and be quite sure the fuelling is not wildly rich or lean.

8. Fit plugs and reinstate ignition connections.

9. Start the engine. Are all cylinders firing? If not stop the engine and cure the problem.

10. Run the engine until it reaches its operating temperature. Stop the engine, allow to cool, recheck levels of oil and water.

11. Restart the engine and check temperature around the engine checking for cold spots. If the temperature is not even, consider disconnecting a hose from the back of the engine and firing water in, and air out, with mains water pressure.

12. Restart the engine and allow to tick over observing water level. Air will bubble out until the system is air free. Fit the radiator cap.
13. Tune the engine as soon as possible as a lean burn will quickly destroy the exhaust valves and a rich mixture will quickly wash oil from the bores, resulting in rapid wear.

14. Road test the engine. After 80 kilometres (50 miles) change the oil and filter. Drain the water system and refill with antifreeze mix.

15. Retighten head and reset valve clearances at 150 kilometres. Change oil and filter still using standard (non synthetic) oil.

16. Run the engine by driving without heavy load for 1500 km. Avoid sitting at a constant speed, use up to 3000 RPM initially and then 3500 but on a light load.

17. During the whole process continuously check for leaks and any other problems. Always stop the engine and investigate and rectify any problems at first opportunity.

IF IN DOUBT STOP THE ENGINE AND CHECK OUT YOUR CONCERNS.

Remember for the first 80 kilometres there is only plain water in your water system – avoid sub zero temperatures or take suitable precautions.