



**ADVISORY LEVEL: Mandatory**

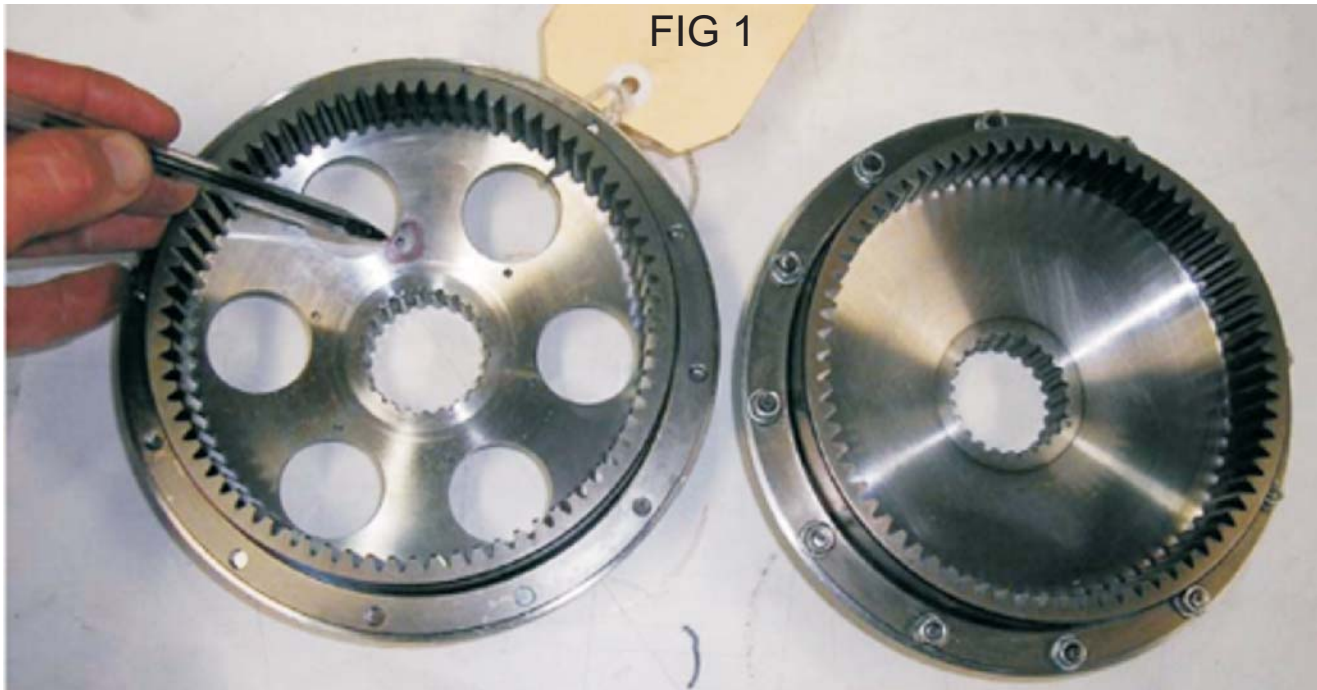
**DESCRIPTION: Bell Gear Drive Plate Cracks**

**ENGINE TYPE: R2800 / R3600**

**INSPECTION FREQUENCY: 25 Hours**

FIG 1: depicts two "Bell Gear" drive plates. The one on the left is the early version and on the right the later version which supersedes the previous.

Owners with the early version should check for cracks developing in the vicinity of the small safety wire hole as indicated by the pen. In isolated cases cracks can develop between this small safety hole and the large hole. In extreme cases the crack can bridge across the large holes severing one of the six main webs. A magnifying glass is recommended to conduct a proper visual inspection.



Rotec recommend inspection of the bell gear and PSRU on all engines, irrespective of the type of carrier plate, as such inspections provide a visual representation on the health of the engine, oil distribution and wear patterns.

On detecting anything unusual on the bell gear or PSRU please contact the Rotec Factory.

Remove the nose bowl/cone to inspect the Bell Gear and PSRU. Removal does not require dismantling the engine. It does not require removing the propeller flange and the propeller does not need to be removed.

*In removing the nose cone - TAKE GREAT CARE. DO NOT TRY TO WEDGE APART USING SCREW DRIVERS OR CHISELS... NOTE: The propellor does not need to be removed.*

'T' mark or score a line on top of nose mounting flange. On reassembly align both halves to this mark.

There is no gear timing to bother with.

Remove all 14 off M6 nyloc nuts (at the assembly stage re-tighten to 80 **inch** pounds using a torque wrench)

Gently tap with soft hammer behind prop flange.

Once the nose bowl is clear of 13mm long spigot it will come off very easy. Support the nose bowl so that when it slides off it doesn't drop to the ground.

Gentle tapping with a soft hammer will in most cases separate the surfaces. If these fails use a slide hammer using one of the 8 mm drove dowels.