## **Flywheel Fitting Guidance Notes**

Thank you for purchasing our flywheel.

The following are offered as guidance, intended to ensure the efficient and correct fitment of the flywheel.

We recommend that an experienced Race Engine Fitter installs the flywheel. Their experience should help to ensure a trouble free and correct installation.

May we suggest some simple checks are undertaken, as follows.

Visually inspect the flywheel and where possible, compare it with the previously used flywheel. To do this place both flywheels side by side sitting on the crank mating face. If the crank face is recessed place both flywheels on a spacer of identical height.

Check that the Ring gear teeth are in the same position, the replacement flywheel may have a reduced width Ring Gear. The two ring gears should be very closely matched at the entry point of the starter. This could be from either side of the flywheel.

When an OE style clutch is being used, ensure that the clutch faces of the new and original flywheel are similar in height. If it is not correct you may have the wrong flywheel.

When the new flywheel is designed to accept a race type clutch, the clutch face may be much closer to the crank mating face. The clutch slave cylinder in this case, may require a different profile of thrust bearing, to match the clutch spring profile, and even a replacement slave cylinder positioned to suit the set up height of the flywheel and clutch.

Read the clutch fitting Instructions.

Check the clutch retaining bolts will clamp the cover by screwing home the bolt and checking that the distance under the bolt head to the flywheel is less than the thickness of the clutch cover. Check that the new clutch fits the flywheel and that fixing bolts will enter their holes. Up-rated, i.e. larger diameter, cover retaining bolts may require the cover to be drilled out. Ensure the cover is clamped down during the drilling operation and that the holes are de-burred.

De-grease the flywheel friction face.

Ensure there are no burrs or dings in the crank to flywheel mounting faces of both the crank and flywheel. Clean out the flywheel retaining tapings in the crank. It may have thread locking residue within the threads. Ensure any crank dowels are burr free and straight. If the dowels are not an original feature they may have to be removed for the flywheel to fit.

Screw the flywheel retaining bolts into the crank and check that the distance under the head to the crank face is less than the thickness of the flywheel, ensuring that the flywheel can be clamped appropriately, and that the bolts do not protrude from the back of the crank. We recommend using new flywheel to crank bolts and that, upon final assembly, they are tightened to the correct procedure and torque accordingly and a thread retainer is considered.

Trial fit the flywheel to the crank, check that it sits back onto the crank bolt face. Check that the bolt holes on the flywheel align with those of the crank. NOTE. Many cranks have un-equal bolt spacing, the flywheel may have to be rotated on the crank to find the correct alignment. As the flywheel should be a close fit on the crank, it is better to align the holes before pushing the flywheel fully home.

Now that the flywheel is correctly mounted, check that the starter pinion is in correct alignment mesh in its operating position, both 'radialy' and 'axialy'. This is simple when the starter is engine mounted but less so when bell housing mounted but it is important, particularly when non OE starters are employed. Axialy the pinion should be fully meshed with the flywheel. Radialy, as a guide, there should be no more than 1mm of pinion rotational clearance, when meshed into the flywheel. If this proves impossible to check when assembled, It is important that the fitter is certain that all is well. If it is not, irreparable damage to the flywheel teeth may occur.

When the flywheel carries the ignition pulse generator, this should be checked for both axial and radial positioning. Ensuring the air gap is to OE specification. If this is not correct the flywheel may not be correct.

If all is well the final assembly can now be undertaken, taking note of any additional guidance supplied with the Clutch.

It is important to us that the product is correct for your application and that fitting is straight forward. We would welcome notice of any problems you have in fitting and any suggestions of improvements, for this please contact your point of sale.