



## Flywheel Installation Tips

- 1) Please follow the OEM recommendations for installation of your new flywheel. Pay close attention to the specific requirements of your engine (particularly if it is externally balanced). Failure to do so may cause engine damage. McLeod Flywheels are neutrally balanced so for any externally balanced applications the proper counter weight must be used. McLeod counterweight kits are available; for further information visit [mcleodracing.com](http://mcleodracing.com) or call (714) 630-2764. It is highly recommended that you have your flywheel and pressure plate balanced as a unit.
- 2) This flywheel is treated with a protective anti corrosion oil to ensure it reaches you in perfect condition. You should thoroughly clean the flywheel on both sides prior to installation with brake cleaner or engine degreaser. This will ensure your clutch disc does not become contaminated with oil.
- 3) If your application requires dowels to align the clutch, these dowels should be installed with a press or vise. You should apply a small amount of permanent Loctite on each dowel before installation (not required for step dowels).
- 4) Do not use Loctite on the crank register because it prevents the flywheel from properly seating against the crank.



5) Many flywheel applications feature a locating/alignment hole designed to match up to a factory locator dowel, boss or hole on the engine crankshaft flange and assure proper alignment of the flywheel. Make sure your flywheel is properly aligned using these locator elements when installing. On some applications the crank bolt pattern is asymmetrical (like the example to the left) so that the flywheel can only be installed in one orientation. These applications require you to “clock” or rotate the flywheel on the crank flange until ALL bolt holes align correctly before installing your crank bolts. Always use OE or higher quality hardware when installing your flywheel and clutch. Refer to your factory service manual for correct torque specs, tightening pattern, etc. **DO NOT OVERTIGHTEN CRANK OR CLUTCH BOLTS AS THIS MAY DAMAGE YOUR FLYWHEEL!**

- 6) All McLeod flywheels are designed to OE dimensions and clearances unless specifically noted. Test the flywheel and clutch that you plan to use for rotational clearance inside of the bell housing and for engine block clearance before final assembly. Normal manufacturing tolerances with the factory bell housing, oil pan, sensors, engine block and or any other area that could cause clearance problems must be checked prior to final assembly.

- 7) Some McLeod flywheels are equipped with trigger rings (like the example on the right) or the provision to accept the OE trigger rings where required. For vehicles equipped with sensors triggered off of the flywheel, measure the clearance between the flywheel and trigger/sensor before removal of the original flywheel. This clearance **MUST** be matched after installation of your new flywheel. Failure to properly set the correct trigger clearance and alignment will result in a vehicle that runs poorly or not at all.



- 8) Pilot bearing fit is not as tight in an aluminum flywheel as your OEM steel flywheel. The flywheel is designed this way to work properly as it heats up or the steel bearing may seize up causing failure. For proper installation, apply a small amount of Loctite Gap Filler to the OD of your pilot bearing when installing it in your new McLeod flywheel as this will hold it in place for correct installation.
- 9) During racing usage, inspect your flywheel whenever possible for fatigue, cracks, damage or adverse wear. Some of the most critical areas to inspect are: (1) The crankshaft register (2) Flywheel to crank mounting holes (3) Ring Gear. Extreme heat can adversely affect the dowels and permanently distort the ring gear. The use of a scatter shield or safety blanket for the clutch and flywheel area is a **MUST** in all performance/race use vehicles.
- 10) Dual Mass replacement flywheels may cause added gearbox noise. This is a normal effect that is well worth the added performance. The noise comes from the idler gears and does not pose a premature wear problem.

#### **Limited Warranty**

McLeod Racing LLC, Products are warranted to be free from defects in material and workmanship for the period of ninety (90) days, from the date of purchase. McLeod does not warrant or make any representations concerning its products when not installed and used strictly in accordance with the manufacturer's instructions for such; installation and operation, and in accordance with good installation and maintenance practices of the automotive industry. McLeod will not be held liable for the labor charges and other intangible or consequent losses that might be claimed as a result of the failure of any part, nor shall it be liable for damages or injury to persons or property resulting from the misuse or improper installation of any part subject to this warranty. No merchandise may be returned for any reason unless prior return merchandise authorization number (RMA) has been obtained from McLeod.

McLeod reserves the right to examine all parts returned for warranty claim to determine whether or not any such part has failed because of a defect in material or workmanship. McLeod obligation under this warranty shall be limited to repairing, replacing or crediting, at its option, any part found to be defective. All products returned to McLeod for warranty inspection must be prepaid by the customer under this warranty. There are no other warranties, either expressed or implied, which extend beyond those set forth in the preceding paragraph.