



"YOUR PARTNER IN PERFORMANCE"

For tech help, contact:

PRW

Toll Free (888) 377-9779

Installation Instructions

For

PRW SFI Flywheels

Each Box Contains:

- ◆ 1 *Flywheel*
- ◆ 1 *SFI 1.1 Certification Sticker*

Step 1

Make sure your hands are clean. Do not allow any oil or grease to come in contact with the flywheel.

Step 2

Verify that the serial # on the SFI 1.1 sticker matches the engraved SFI number on the flywheel.

Step 3

Check the transmission and engine seals to insure that they are leak free. Replace any damaged seals before installing the new flywheel.

Step 4

Be sure the flywheel and pressure plate have been cleaned of any rust preventives.

Step 5

Inspect the crankshaft flange and flywheel for any burrs, rust or any other deposits. Clean or remove where necessary.

Step 6

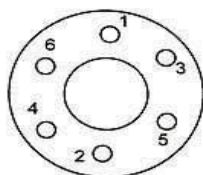
Place the flywheel in the clutch housing and place it so that the dowel pin of the crankshaft aligns and centers the flywheel.

Step 7

Follow manufacturer's instructions to apply Loctite® or similar thread locking product to the flywheel bolts.

Step 8

Tighten the flywheel bolts in a crossing pattern using the manufacturer's torque specifications and following the torque pattern detailed below. Do not use an impact wrench to mount the flywheel to the crankshaft. The use of an impact wrench and/or failure to use the manufactures recommended torque specification may damage the flywheel and/or other components.



Step 9

Place a dial indicator on the clutch housing and mount it so the button of the indicator makes contact with the machined surface of the flywheel. Use the appropriate tool to hand-turn the crankshaft to check the run-out. There should be no more than + 0.008" to - 0.008" deviation. If the run-out is excessive remove the flywheel and examine again for burrs or other interference. Then, recheck items 4 & 5 and reinstall as detailed in items 5 through 8.

Step 10

Other things that should be checked prior to reassembly are crankshaft endplay, transmission input shaft run-out and endplay, drive shaft, U-joints, constant velocity joints and boots for any wear or damage.

Fasteners-Cap Screws: SFI replacement flywheels and clutch assemblies are aftermarket products for racing applications that replace stock components. The quality of cap screws attaching the pressure plate assembly to the flywheel and the flywheel to the crankshaft is extremely important.

Because of poor strength characteristics, cap screws made from low carbon steels can cause failure. Cap screws with minimum mechanical properties of 150,000 psi (10,545kg/cm²) tensile, 130,000 psi (9,139kg/cm²) yield and 12% elongation are required. Grade 8 (Class 10.9) fasteners are recommended and meet this requirement. Aftermarket SFI flywheels may include larger diameter pressure plate mounting holes and/or different thread characteristics than OEM designs.

Note: All flywheels are balanced to factory tolerances. If your engine has been blue-printed or specially balanced, please balance your new flywheel to those special specs. PRW will not be responsible for any engine not balanced to factory specifications.

It is recommended that special care should be taken to check the balance of the flywheel being removed from any engine, and especially those that utilize externally-balanced dampers and flywheels. Changes may have been made to the engine that you are unaware of. A capable machine shop should be employed to match balance the new flywheel to the old flywheel.

Continued



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Installation Instructions

For

PRW SFI Flywheels (cont.)

Starter Alignment and Shimming

This is not an issue usually encountered, or typically related to, replacing an OEM flywheel with an aftermarket PRW flywheel. This information is provided as a courtesy, in the event that you encounter a problem with starter alignment, or in the event that you find shims after removing the starter; and were unable to identify their original location. If you are installing a new starter, follow the manufacturer's installation instructions.

Step 1

Begin the shimming process by using a feeler gauge to measure the flywheel to starter clearance with the current setup. If you don't have a set of feeler gauges, a paper clip can be used as a cheap alternative. They are normally around 0.035" thick. Insert the measuring tool between the flywheel teeth and starter teeth. You are looking for clearance between 0.035" and 0.065". If clearance is too close, you will need to add shims where the starter mounts to the block.

Step 2

If shimming the starter is necessary, be sure that the starter-mounting surface is clean by removing any excessive gunk or paint. After cleaning reinstall the starter and recheck the clearance between the starter teeth and flywheel teeth.

Step 3

After cleaning the mounting surface and rechecking the clearance, if the tooth-to-tooth clearance is still not correct, start adding one shim at a time until proper clearance is achieved. Most aftermarket starter shims are 0.015" and increase the tooth-to-tooth clearance to about 0.0075". Normally using one shim will cure the alignment problem. If more than four shims are used, there is a good chance that the mounting surface has been machined down, or it is warped. **Please refer to your local machine shop for advice if you encounter this situation.**

Step 4

After adding the shim or shims, recheck the clearance in several different locations, preferably at 120° apart.

Step 5

One more critical location to check is the clearance between the flywheel ring gear and starter. Normally this is not an issue, but make sure there is a 0.100" clearance with a variance of +/- 0.040". Again check it in several locations. If there are clearance issues the flywheel may be warped, and

should be returned to your dealer.

If you need technical information, or additional information regarding the installation of this product,

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(888) 377-9779

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