



Installation Instructions Flexplates

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By Marketing Speedmaster

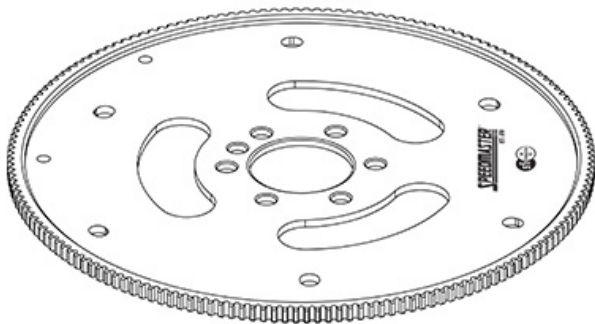
Warning! These instructions must be read and fully understood before beginning the installation. Failure to follow

these instructions may result in poor performance, vehicle damage, personal injury, or death. If these instructions

are not fully understood, installation should not be attempted.

Introduction

Speedmaster Flexplates make excellent upgrades to your stock design, built to withstand the extreme power and rpm of today's engines.



Recommendations

Speedmaster recommends the following:

- Ensure that the supplied flexplate is correct for the intended application prior to the commencement of installation. Consult your supplier or Speedmaster tech support if unsure of application compatibility.
- Professional installation by a qualified technician.
- Do not reuse the original flexplate bolts. Speedmaster supplies flexplate bolts as a separate accessory. Please contact your Speedmaster reseller or Speedmaster technical support for

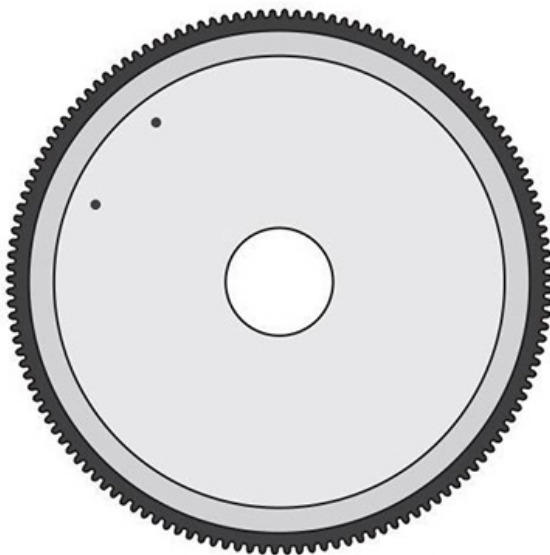
more information. Alternatively, source new OEM bolts or an appropriate alternative from other bolt manufacturers. Refer to your OEM recommendations regarding bolt strength grade.

Package Contents

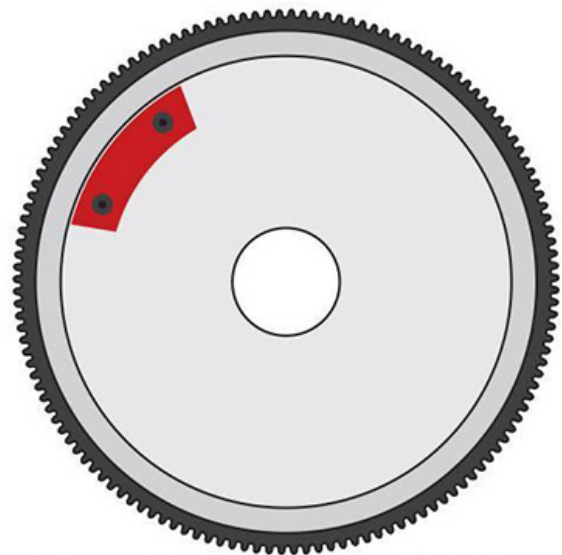
Each Speedmaster DNA flexplate kit includes:

- CNC machined and zero balanced billet steel flexplate.
- Factory compatible starter motor ring gear. The ring gear is machined onto the flexplate from a single piece of billet.
- External balance weights (if applicable).

External Balancing weights installation



Internally Balanced (Counter Weight Off)

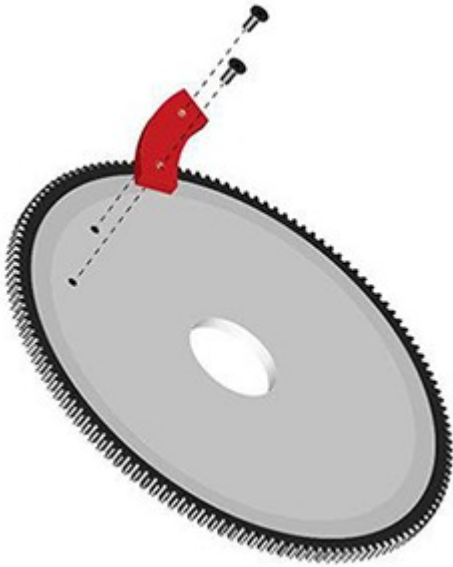


Externally Balanced (Counter Weight On)

Please note: The counter weight is not installed, for engines with external balance (counter weight on); the counter weight will need to be installed.

How to Install Counter Weight for Externally Balanced Applications.

The counter weight must be attached to the flywheel using the 2x allen head bolts provided.



Installation Instructions

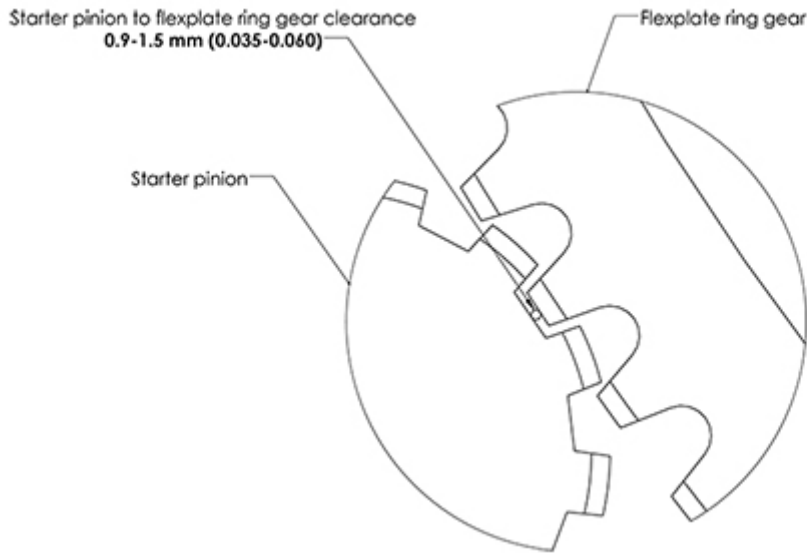
- Once the original flexplate is removed. Inspect the mounting surface on the rear of the crankshaft for any corrosion. Clean the mounting face appropriately and ensure that the surface is free of any rust and is flat.
- Inspect the flexplate bolt threads on the rear of the crankshaft. Ensure that the threads are corrosion free and without any internal debris.
- The flexplate is shipped with a corrosion preventative coating. Ensure that the flexplate surface is cleaned by wiping it with a cloth damped with an appropriate degreasing solution such as brake cleaner or lacquer thinner. Then, wipe the flexplate face with a clean dry cloth.
- Align the flexplate mounting holes with the mounting holes on the rear of the crankshaft. Ensure that the flexplate is flat against the crankshaft and that the bolt holes line up.
- Repeat the same process against the torque converter. The torque converter mounting faces have to flat and parallel.
- Insert flexplate bolts in the crankshaft and hand-tighten in a circular order. Do not re-use original flexplate bolts.
- Torque bolts to 15 Nm in a cross-star pattern.
- Remove one bolt at a time and apply Loctite 243 blue thread-locker (or equivalent) to flexplate bolt threads. Then, re-install the bolt and torque to 15 Nm. Repeat process for all flexplate bolts.
- Once the thread-locker application process is complete, refer to your factory manual and continue to torque the flexplate bolts according to manufacturer's specifications. Do not use an impact driver to tighten the flexplate bolts.

Special Instructions

It is important to properly mount the starter to ensure proper engagement with flexplate ring gear. Correct mounting will also ensure a trouble free installation and reduce the chance of premature wear pinion and ring gear teeth. Perform the following clearnace checks in at least 3 locations at 120° apart.

Pinion clearance

While the starter is in the off position (retracted away from flexplate), measure the clearnace between the rear face of the flexplate (crankshaft side) to the front edge of the teeth on the starter pinion. Generally, a clearance of 1.5-3.5mm is recommended. Consult manufacturer specifications for OEM applications. If installation is not in spec, ensure that the flexplate is mounted correctly.



Pinion engagement

Engage the starter pinion mechanically to ensure correct teeth engagement with ring gear. Use a wire gauge to check for proper clearance between the ring gear and starter pinion. Generally, a clearance of 0.9-1.5mm is recommended. Consult manufacturer specifications for OEM applications. If clearance is too small, add shims between the starter and the engine block to bring clearance into specified range.

