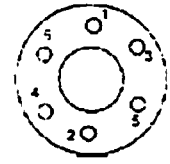
SFI-Rated Flexplate Installation Instructions

Parts List	Quantity
FLEXPLATE	1
SFI 29.1, 29.2, or 29.3 Sticker	1

Step 1
Clean and inspect all parts (verify that the serial number on the sticker matches the SFI number engraved on the flexplate).
Step 2
If not already completed, punch out the date on the SFI Decal and apply to the flexplate.
Step 3
Use a rubber mallet or block of wood to tap the flexplate into place onto the flange of the crankshaft. Tap it evenly and flush upwards alongside the crankshaft flange. DO NOT draw the flexplate unto the crank with bolts or impact wrench.



Step 4
After the flexplate has been placed onto the crankshaft, use thread locker on the flexplate bolts and torque to OEM specifications. To receive proper torque on the bolts, follow the torque pattern below, use flat washers only.
Step 5
Hand turn the crankshaft to verify there is no wobble in the ring gear and to make sure it clears the housing. NOTES: 1) Welding weights on the flexplate for engine balancing is not recommended and voids warranty; 2) drilling holes for balance is permissible, but not recommended; 3) high performance and racing applications new flexplate bolts with a rating of 180,000 PSI or higher is recommended.

SPECIAL NOTE: Ford SB & BB Stock Torque Converter – remove standard drain plug and replace with special Allen Head drain plug to preclude interference with flywheel. The use of a GM Converter requires a Flexplate and Crank Adapter

CUMMINS and DODGE DIESEL FLEXPLATES

There are many variations and combinations of Cummins diesel engines and transmissions between 1989 and 2005+. The flexplate for this application is designed for high performance and racing. Do not install this flexplate if there is less than 0.125" clearance between the torque converter and flexplate. Confirm center-bore hole size matches the flexplate being replaced, prior to attempting installation. Check for proper fitment of any aftermarket 6-bolt torque convertor to bolt properly to the flexplate; prior to installation. Remove the factory flexplate and shim. Torque the eight (8) factory bolts in a crisscross pattern to the factory specifications as outlined below.

Starter Alignment and Shimming

1. Begin the shimming process, if needed, by using a feeler gauge to measure the flexplate 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 flexplate teeth and starter teeth. You are looking for a clearance between 0.035" to 0.065". If clearance is too close, you will need to add shims to where the starter mounts to the block. 2. If shimming the starter is necessary, be sure that the starter-mounting surface is clean from any excessive gunk or paint. After cleaning reinstall the starter and recheck the clearance between the starter teeth and flexplate teeth. 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 on your block. 4. After adding the shim or shims, recheck the clearance in several different locations, preferably 120 degrees apart. 5. One more critical location to check is the clearance between the flexplate 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 flexplate may be warped and you should return it to your dealer. Although we check each flexplate that we manufacture for run out, the flexplate could have been damaged during shipping. Possible Causes for Damaged Flexplates 1. Not installing flexplate perpendicular to crankshaft flange 2. Engine or torque converter out of balance 3. Worn front pump bushing 4. Too much end play on the crank from excessive thrust bearing wear 5. Improper bolt torque and, or not in proper order according to OEM specs 6. A bad starter can wear or break off the teeth on the ring gear 7. Not properly shimming the starter, if needed, to align with the starter ring STOP!!!!

SPECIAL NOTES: Before installing this flexplate, make certain that the application is correctly identified for your vehicle's engine and that the counterweight is correct for your application, the flexplate bolt pattern is correct for your make and model, and ring gear tooth count is correct.