



PRODUCT & SERVICE
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Heavy Duty GM LSx Engine Locking Cam Bolt Kit

Part #: PSS-001

Parts list:

#	Description
3	M8-1.25x30mm 12 point Class 12.9 flange head fastener
3	Nord-Lock washer

Required tools:

- Torque wrench
- 8mm 12 point socket

Optional tools:

- M8-1.25 tap (bottoming tap preferred)



Installation Instructions

Thank you for purchasing the Product & Service Solutions Heavy Duty GM LSx Engine Locking Cam Bolt Kit. This kit is designed to eliminate the problem of the camshaft bolts backing out on GM LSx engines. This kit is for use with three bolt camshafts and timing gears. It is not for use with single bolt camshafts. The kit features high quality Class 12.9 flange head fasteners and Nord-Lock locking washers. To further improve the fastener clamp load this kit features fasteners that are a full 30mm long, providing more thread engagement to diameter ratio than the stock length fasteners.

The first thing we recommend doing is checking the tapped thread depth in the camshaft timing gear bolt holes. This is recommended because some camshafts, especially the stock camshafts, do not always have all of the camshaft gear bolts tapped the full depth of the hole. The easiest way to do this is to thread by hand one of the supplied bolts into the three camshaft timing gear holes on the camshaft but do so with no timing gear on the camshaft. If the bolt can tighten all the way down to the face of the camshaft in each of the holes then you have more than enough thread depth. Be sure to check all three as the threaded depth may be different. If the bolt doesn't thread all the way in, thread it by hand until it stops and measure the gap between the bolt head and the camshaft. If this thickness is less than the thickness of the timing gear then you are also fine. If not you will need to re-tap the camshaft bolt holes.

Note that the supplied locking washers are actually a pair of ramped washers that are glued together to make assembly easier. The washers should be installed as a pair and should be left assembled as supplied in this kit.

Once you have made sure you have the correct length of thread in the camshaft you are ready to install the timing gear bolts. Follow your normal camshaft installation instructions until you get to the step for fastening the timing gear.

Make sure the bolt holes in the camshaft are clean and free of any debris. Lightly oil the threads of the supplied bolts with a coating of clean engine oil. Install a locking washer pair on each bolt. Loosely install each bolt into the camshaft timing gear and camshaft. Using an 8mm 12 point socket, manually tighten all three bolts and then torque each bolt to 28 lb-ft (38 NM).

