



## Livernois Ford 3.5L Ecoboost Head Stud Kit

This stud kit is designed to work with the Ford 3.5L Ecoboost Engine. It replaces the factory bolts with upgraded studs. This stud kit allows for greater clamping force to keep the cylinder heads in place under high loads typical of modified Ford Ecoboost engines.

The kit includes the following components-

**Studs (16)**  
**Nuts (16)**  
**Washers (32)**

***Most 3.5L Ecoboost Blocks do not have the very last threads in the bottom of the bolt hole tapped. This causes the stud to sit slightly higher in these blocks. For these applications use two washers under the nut.***

When installing studs in place of factory bolts please follow the directions listed to ensure proper performance and to prevent possible engine damage from incorrect procedures.

1. Remove all factory bolts
2. Clean all threads with a cleaner (solvent, brake clean, lacquer thinner, etc.) and a pipe cleaner style brush to ensure the threads are completely clean.
3. Thoroughly clean the new studs, nuts and washers to remove all the anti-corrosion film and debris from packing on them.
4. Install the studs into the block with a light amount of oil on the threads.
5. When screwing the studs in be sure to only screw them in until they just bottom out, then back them off about 1/2 turn.
6. After installing the cylinder heads proceed to installing all of the washers.
7. Using the supplied lube, apply the lube to the threads of the stud as well as the face of the washer.

8. Install all nuts hand tight

9. Starting with the inside studs in the middle of the head and working your way in a crisscross pattern outwards tighten them in sequence to 40 ft lbs.

10. The final pass is to torque all of the nuts to 70 ft lbs.

**Notes-**

We recommend "burnishing" in threads of the nuts and studs by torquing them slightly beneath their torque values 1-2 times before fully torquing them. This will yield a more accurate final torque value which better equalizes fastener preload.

While this kit can be installed without performing machine work we always recommend double checking your bores for round and concentricity. The increased clamping load offered by the studs can distort the bore out of round.

