Livernois 2.3 Ford Ecoboost Head Stud Kit

This stud kit is designed to work with Ford 2.3 Ecoboost engines. It replaces the factory bolts with upgraded ARP studs. This stud kit allows for greater clamping force to keep the head in place under high loads typical of aftermarket performance Ford Ecoboost engines.

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 turn.

6. After installing the head proceed to installing all of the washers.

7. Using the supplied ARP 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. Tighten the studs in sequence to 40 ftbs

10. After the first sequence is complete, then torque again to the final torque of 80 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 housing bores and bearing bores for round and concentricity. The increased clamping load offered by the studs can distort the bore out of round.

Always double check your main bearing clearance regardless of what style of fastener is used. With tolerances and stack up between parts it is essential to always ensure that the correct amount of clearance exists

We highly recommend mocking up and installing the oil pump pickup tube to ensure adequate clearance between the oil pan pickup and the bottom of the pan. Clay works well for this. Be sure to tighten the pan with gasket in place to simulate actual installed height. Pan to pickup clearance in the range of .300-.400 will provide the proper oil pickup.

The outer main bolts are TTY (torque to yield) fasteners and only allow for 5 total torques before they should be replaced. Since they were already torqued in both machining and assembly 4 times we recommend replacing them with new bolts after using them for your mockup.