

INSTRUCTION MANUAL

MAIN STUD KIT FOR 7.3L FORD GODZILLA

PART NUMBER MP890

XOTIC PERFORMANCE is a leading manufacturer of high-performance main studs for internal combustion engines. Our main studs are designed to replace the factory main bolts and provide superior strength, durability, and performance.

XOTIC PERFORMANCE main studs are engineered using premium steel alloys that offer superior tensile strength and durability compared to bolts. They are designed to provide a consistent and uniform clamping force on the main caps and engine block, which helps to distribute the load more evenly and reduce the risk of main bearing failure.

Our main studs are an essential component of high-performance engines, especially those that are subjected to high loads, high RPMs, or extreme conditions such as racing or towing. They are often used in conjunction with other performance upgrades such as forged internals, high-performance bearings, and upgraded oiling systems to ensure the engine can withstand the demands placed on it.

reached (i.e. keep torquing without stopping until the desired torque is achieved). If by accident, you stop short of the recommended torque, loosen the fastener and retorque.

When upgrading from factory main bolts to high-strength main studs, the increased clamping force can alter the geometry of the main bearing bores. We strongly recommend checking the bores for size and roundness after installing the studs. If necessary, perform an align hone with the same fasteners and lubricant that will be used during final assembly at the specified torque. This ensures optimal bearing clearance and long-term engine reliability.

VERIFY FIRST

Before installing any components, please verify whether this part number is compatible with the vehicle applications cited above. Inspect all package components, and clean as necessary to ensure accurate installation. Any obvious defects or shipping damages should be reported to us.

A COMMON MISTAKE TO AVOID

When torquing a fastener, do not stop short of the recommended torque until the desired torque is



KIT INCLUDES

-  **20 X** MAIN STUDS
-  **20 X** NUTS
-  **30 X** HARDENED PARALLEL WASHERS
-  **1X** FASTENER ASSEMBLY LUBRICANT
-  **3 X** SOCKET
-  **1X** ALLEN WRENCH
-  **10 X** SIDE BOLT

GET TO ACTION!

1. Clean threads in the block with a thread chaser prior to installing the studs to ensure accurate fitment and precise torque readings. You may purchase a thread chaser separately by searching **CS307 and CS319** in our catalog.
2. Using the supplied, assembly lube, apply the lubricant around the entire block-end threads.
3. Thread studs in by hand. Do not “torque” studs into the block.
4. Clean excess lube off visible areas and off any mating surfaces. Install main caps fully seated.
5. Place washers on the studs. Do not lubricate washers.
6. Brush lube evenly over the full nut engagement length.
7. Apply a thin, even film where the nut will contact the washer.
8. Bring caps down evenly. Washers should stay in place (not spin freely).
9. Orient the chamfer toward the underside of the bolt head (to clear the head radius). Do not lubricate the washer.
10. Apply lube to the side-bolt threads and under the bolt head only, then install by hand.
11. Torque main nuts using the engine builder/OEM tightening order in three equal steps up to the final torque specified below.
 - a. M10 Studs - **70 ft-lbs**
 - b. M12 Studs - **125 ft lbs**
 - c. M10 Side Bolts - **60 ft-lbs**



NEED HELP?

For technical support, please email:
tech@xotic-performance.com



WORKING ON AN EXCITING NEW PROJECT?

Show off your craft on Instagram and tag us
in your picture for a chance to be featured!

#XOTICPERFORMANCE