

Fastener Installation instructions: Part # OPT-5601-UPG-220

- Always use the proper personal protective safety gear.
- Use the proper size tap to chase all threads and thoroughly clean all surfaces (it may become necessary to use compressed air to remove contaminants from any blind threaded holes) If oil films or other debris remain visible, clean with the use of a non-corrosive solvent and repeat the use of compressed air if necessary.
- Visually inspect all fasteners to ensure cleanliness and that they are free of shipping defects.
- Lubricate fasteners with True-Torq+ provided on all threaded areas of the fastener, any bolt under head areas of the fastener that will have metal contact, both sides of the washer and any internal threads of the nut. Lubricate the coarse threaded area of the fastener with a quality brand/grade of engine oil.

## \*DECREASED CLAMP LOADS OR FAILURES MAY OCCUR WHEN UTILIZING OTHER FASTENER ASSEMBLY LUBRICANTS.

Tighten the fastener in the mating thread by means of hand installation or very little tool (hand held) tightening assistance. (\*THE USE OF IMPACT AND OR OTHER POWERED INSTALLATION TOOLS CAN CAUSE POTENTIAL DAMAGE OR CROSS-THREAD THE PROVIDED FASTENERS\*)

OptiTorque recommends following the OEM fastener torque sequence whenever possible.

When installing washers into counter bored holes ensure the washer can rotate and or "float" to ensure proper clamping load.

The below torque values are a general guideline for installation. **\*\*Always consult with the manufacturer of the block, head, main cap, connecting rod, etc. to verify proper torque and clamp requirements.** 

For <sup>1</sup>/<sub>2</sub>": Tighten in step increments of 50 lbs feet , 80 lbs feet , 120 lbs feet , 120

For 9/16": Tighten in step increments of 60 lbs feet, 100 lbs feet, 150 lbs feet final torque value.

## NOTE\*\*\* (it is highly recommended to have 1 smooth steady throw motion of the tightening device to achieve the final desired torque.)

## **\*\*Warning\*\*** Over torquing may result in premature fastener failure.

For Optimum results:

A THREAD LOCK LUBRICANT IS PERMISSBALE FOR BLOCK INSTALLATION. BOTH THE BLOCK AND COURSE END OF THE FASTENER SHOULD BE WIPED CLEAN OF ALL CONTAMINANTS PRIOR TO THREAD LOCKING COMPOUND APPLICATION. OPTITORQUE RECOMMENDS THE USE OF A SLOW SET THREAD LOCKING COMPOUND TO ENSURE AN ADEQUATE TIME INTERVAL FROM APPLICATION TO FINAL TORQUING OF THE FASTENER. FAILURES OR INCONSISTENT CLAMP LOADS MAY OCCUR SHOULD THE THREAD LOCKING COMPOUND SET BEFORE TORQUING OF THE FASTENERS.

For additional product information visit <u>www.optitorque.com</u> fill out the contact us page or call 315-924-3888.