



Thank you for your purchase of the new ProMAXX® 200 Series Payton Exhaust Manifold Repair Kit! We engineered them for fast and easy removal and replacement of broken exhaust manifold mounting studs for the Ford Power Stroke 6.7L diesel. Mount the ProPlate™ to the cylinder head in any one of the positions shown above using the included ProFast™ PPF008500 precision stainless steel fasteners, tighten to 15ft-lbs of torque. Insert the PPB2125 (SML) ProBushing™ and corresponding ProDrill™ (see above) machine grade tooling bit into an air-powered drill and use the drill depth gauge machined into the ProPlate™ to set the proper depth of the bit. Open the cap on the ProLube™ PPL001 drilling & tapping cutting fluid and insert the mounted SSSC125 tooling bit through the gasket via the hole in the cap and retract. The bottle will deliver the precise amount of oil necessary for the operation. For larger tooling and subsequent machining, place one drop on the end of the ProDrill™ as needed. **AVOID PENETRATING OIL/SPRAY OR OTHER LUBRICANTS.** Insert the mounted ProDrill™ into the included ProBushing™ PPB2125 mounted in the ProPlate™ first by hand (manually) slowly turning your drill chuck until the ProDrill™ slips into the bushing and contacts the surface of the damaged stud. This will ensure the cutting edge is not damaged. While applying light pressure, **ACTIVATE YOUR DRILL BOTH ON AND OFF TEN TIMES IN ONE SECOND INTERVALS. THIS IS THE MOST CRITICAL STEP OF THIS REPAIR AS IT FACILITATES PRECISE ALIGNMENT BY CREATING A "SEAT" FOR THE TOOLING BIT TO STAY ON CENTER AND NOT FOLLOW THE ANGULAR BROKEN SURFACE OF THE STUD. MOREOVER, THIS STEP ALLOWS THE SURFACE OF THE STUD TO CONFORM TO THE CUTTING EDGE OF THE BIT DISTRIBUTING THE LOAD EVENLY ACROSS THE ENTIRE CUTTING EDGE OF THE BIT PROVIDING FOR CUTTING EXTREMELY HARD SURFACES.** After this initial start, begin drilling continuously running your drill at the proper RPM below applying more pressure in ten one-second intervals. While the bit is turning, extract the bit in and out of the damaged stud/bolt while maintaining it in the bushing to "clean" or excavate cutting debris from the stud. Repeat this step progressively exerting more pressure until the drill chuck contacts the bushing mounted in the ProPlate™. Once the machining operation is complete, remove the PPB2125 (SML) ProBushing™ and replace with the PPB2188 (MED) and the SSSC125 ProDrill™ with the included SSSC188 ProDrill™. Repeat the steps above including toggling your drill on and off as indicated above in red. Once complete, remove the ProPlate™ assembly and prepare the splined ProTractor™ PPT188 by placing a line approximately ¼" from the end of the extractor. Tap the ProTractor™ in to the depth of the line. **DO NOT INSERT THE PROTRACTOR ANY FURTHER THAN AS INSTRUCTED ABOVE.** Place the included slip-nut over the ProTractor™ and slide it up against the cylinder head. While holding the opposite end of the ProTractor™ and using a high-quality calibrated torque wrench, slowly and carefully apply torque, first in the clockwise direction, and then in the counter-clockwise direction to loosen the damaged stud. **DO NOT EXCEED 150 IN-LBS OF TORQUE.** Repeat this motion several times slowly increasing applied torque and being careful NOT TO EXCEED safe torque limitations stated above. If the damaged stud fails to release, **STOP** and remove the ProTractor™. In more challenging cases, ProMAXX® offers the optional ProMAXX® ProDrill™ SSSC270 (LRG) and PPB2270 (LRG) ProBushing™ tooling to follow the SSSC188. This step will leave only the threads of the broken stud remaining. Simply blow the debris clean and follow with PPB2320 ProBushing™ and PPT008 ProTap™ precision machine tooling to clean the restore the threads to factory specifications. In the unlikely event an extractor fails, contact technical support at 724-941-0941 for recommendations and procedures.

NOTE: ProMAXX® *does not* recommend tapered left-handed screw extractors as they have the potential to deform the remnant in the cylinder head increasing complexity to extract. In addition, these extractors cannot be turned clockwise to unlock the damaged remnant. Tooling cutting speeds (Under load): MIN: SSSC125/SSSC030 @350 RPM, SSSC188@200, SSSC270@150. MAX: SSSC125 @900 RPM, SSSC188@300, SSSC270@250. OPTIMUM: SSSC125/SSSC030 @600 RPM, SSSC188@250, SSSC266@200. **NOTE: Some air ratchets may not generate at sufficient RPM under load to be effective.** SEE ProMAXX® ProRatchet #PPR5260 or PowerDrill™ 2800 at www.ProMAXXtool.com for optimum efficiency. Use the optional ProPin™ where only one tapped hole is available. Simply mount the ProPlate™ with one ProFast™ fastener in any open hole and use the ProPin™ over the broken remnant.

PROMAXX™ MACHINE GRADE TOOLING IS SPECIALLY ENGINEERED TO CLOSE TOLERANCES OF (+) .000" AND (-) .001" AND GROUND STRAIGHT TO ENSURE ACCURATE AND REPEATABLE RESULTS IN USING YOUR NEW DEVICE. SPECIFY PROMAXX® GENUINE REPLACEMENT PARTS AND TOOLING FOR OPTIMUM PERFORMANCE AND EXTENDED WARRANTY COVERAGE.

- PLEASE WEAR SAFETY GLASSES. -

User Guide



ProMAXX engineered performance tools are proudly made in the United States of America by American craftsman using American materials.

PAYTON

FORD POWER STROKE 6.7L DSL

LIMITED LIFETIME WARRANTY

The ProMAXX® ProPlate™ included in this repair kit is a high-quality precision tool designed and manufactured in the USA and is backed by a LIMITED LIFETIME warranty. ProMAXX® warrants this product to the original purchaser for its useful life against deficiencies in material and workmanship. This LIMITED LIFETIME WARRANTY does not cover normal wear and tear, and if it is used incorrectly, abused, altered or repaired. Deficient products will be replaced or repaired. For more information about ProMAXX® and our line of engineered performance tools and machine tooling, visit www.promaxxtool.com.