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## INSTRUCTIONS

## Nino™ ProKit - Ford 6.7L Power Stroke® Diesel EGR

Thank you for investing in the ProMAXX® EGR Valve Tube Repair Kit (NINO). This device was engineered to facilitate a repair, versus replacement of the manifold in the Ford 6.7L diesel engine saving you valuable time and your operation unnecessary cost.

**BEFORE THE REPAIR:** Depending on the size of your angle drill, you may need to move the intake manifold to the side of the bolt closest to the intake is broken. Protect all air intake passages from cutting debris before performing any machining operation.

Figure 1:



Figure 2:



- 1. Remove any portion of the fastener that protrudes above the surface of the exhaust manifold prior to mounting the NINO™ ProBody™. Insert the ProBody™ flange side into the EGR passage in the exhaust manifold carefully centering the two bushing mounting holes over the 6MM tapped hole/damaged bolt(s). If only one bolt is broken, use the included ProPin™ PPP2750 for aligning the tool precisely over the damaged bolt. Using a 9/16" deep socket and ratchet or boxed end wrench, tighten the chrome hex nut until the ProBody™ stops moving. Once stable, turn an additional one-half turn or more until the ProBody™ assembly is firmly secure to the manifold.
- 2. Insert ProBushing<sup>TM</sup> PPB5125 into the ProBody<sup>TM</sup> over the damaged bolt (**Figure 1**) and insert the ProDrill<sup>TM</sup> SSSC125 machine grade tooling bit just <sup>3</sup>/<sub>8</sub>" into your drill chuck of a <sup>1</sup>/<sub>2</sub>" capacity air or electric drill. Bump or toggle your drill on and off for at least five one second intervals to "seat" the tooling bit prior to drilling continually. Regulate speed to approximately 500-600 RPM for the SSSC125, and 250 RPM for both the SSSC270/420. When using the SSSC270/420, mark a depth 1 <sup>3</sup>/<sub>4</sub> inch from the cutting tip of the bit to the ProDrill<sup>TM</sup> shank with a marker or tape to control depth of cut. Place one drop of ProMAXX® ProLube<sup>TM</sup> specially formulated cutting fluid to the bushing and to the bit and manually turn your drill chuck until the tooling bit rests on the damaged bolt.
- 3. Remove and replace the SSSC125 tooling bit with the SSSC270 bit (PMXSSSC280 for 100 Series), (or optional SSSC188/PPB5188 for faster repair times and longer bit life) the PPB5125 bushing with the PPB5270 bushing, and repeat the process above. Repeat with the SSSC420/ PPB5240. Clear all debris and insert the PPB5485N ProBushing™ and attach a 3/8" drive tap holder to the ProTap™ PPT012 and apply two drops of ProMAXX® ProLube™ to the tap. Insert the ProTap™ PPT012 into the bushing, slowly and carefully turning the tap by hand first clockwise ¼ turn, then counterclockwise ¼ turn, blow down the flutes of the tap to clean debris frequently and repeat this process until the tap stops cutting.
- **4.** Remove the ProBody<sup>™</sup> assembly by loosening the chrome hex nut and lightly tap the top of the ProArbor<sup>™</sup> with a plasticfaced hammer to unlock it from the manifold.
- **5.** Apply one drop of Loctite® (PMXTLF014) to the PPS006B black oxide coated ProSert™. Thread the PPS006B ProSert™ onto the Insert Tool then into the manifold until it stops flush. Once locked, the manifold is now permanently repaired **(Figure 2)**. ProMAXX® recommends adding Permatex anti-seize compound to the fasteners when re-installing the EGR tube for easier repairs in the future.

NOTE: The factory fasteners used in securing the EGR tube are an extremely hard titanium alloy compound making machining difficult. Our tooling is designed to machine the fastener. However, frequent sharpening of the tooling is recommended to keep a sharp edge and to ensure clean efficient repairs. To sharpen ProMAXX® tooling, maintain a cutting angle of 140 degrees or send them to ProMAXX® for sharpening. For even faster repairs and longer bit life, consider the optional ProMAXX® Platinum series machine tooling. Check out the Platinum PLT270 and PLT420 machine tooling bits for replacement. Platinum machine grade tooling comes standard in Platinum Plus ProKits.

SAFETY PROCEDURE: ALWAYS USE APPROPRIATE SAFETY EQUIPMENT INCLUDING OSHA APPROVED SAFETY GLASSES/GOGGLE AND PROTECTIVE GLOVES WHILE USING THIS DEVICE AND PERFORMING THIS OPERATION.



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