



# INSTRUCTIONS

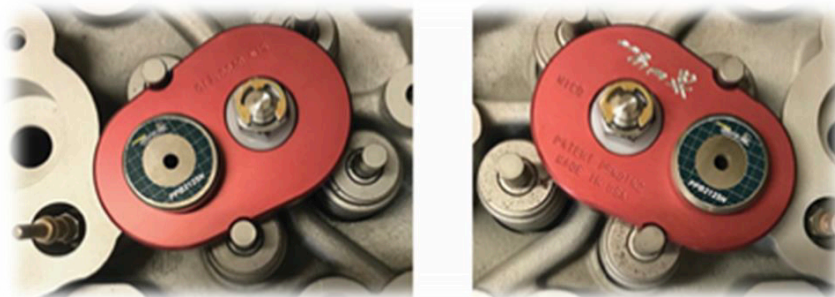
## NICO™ PROKIT - FORD 6.7L POWER STROKE® DIESEL HOLD-DOWN BOLT

**Thank you for investing in the ProMAXX® NICO™ fuel injector hold-down bolt repair kit.** We engineered the device to speed the repair in the Ford 6.7L Power Stroke™ diesel engine without removing the cylinder head. Used properly, NICO™ will deliver excellent results and provide years of reliable cost-effective repairs for you and your operation. **This is a critical machining operation. It is imperative you follow the instructions precisely to get the best results.**



Remove fuel lines and fuel injectors on engine side set for repair with the optional ProMAXX® PowerPull™ fuel injector PowerLift™ and/or PowerHammer™ kit (see enclosed). Remove the valve cover and only those corresponding valve train components necessary to gain access to the broken injector hold-down bolt. Cover/protect all open cylinder head cavities from cutting debris and remove any remaining portion of the fastener that protrudes above the surface of the cylinder head so it is flush with the head. Remove any remaining debris on the cylinder head and thoroughly clean the injector passage hole with an appropriate solvent prior to mounting the NICO ProPlate™ Assembly. Once cleaned, insert the ProPlate™ nylon flange side down as shown below, (ProMAXX® logo down for LEFT side, ProMAXX® logo up for RIGHT side) into the injector passage of the cylinder head carefully slipping the NICO™ assembly between two exhaust valves as shown below.

Using a 9/16" boxed wrench or deep socket and hand operated ratchet (do not use an electric or air powered ratchet or damage to the NICO™ expandable flange will result) and tighten the chrome hex nut (PHX375) until the ProPlate™ is securely anchored in the cylinder head so it does not move. Once anchored, turn one-quarter to one-half additional. Insert ProBushing™ PPB2125 into the NICO™ assembly™ until it seats into the ProPlate™. Check the depth of an open injector hold down bolt hole and mark your tooling bit accordingly to eliminate damage the cylinder head. Measure 2.00 inches from the tip of the ProMAXX® tooling drill bit up the shank and mark the dimension with a line and/or wrap the tooling bit with tape to ensure proper clearance and avoid damage to the cylinder head. The line/tape will act as a visible depth stop for this operation. Once set, select the included ProDrill™ SPJC125 machine tooling bit and insert it into a 3/8" capacity air or electric drill. Open the cap on the ProLube™ PPL001 machine tap and cutting fluid and insert the small tooling bit in through the cap and gasket and retract. The bottle is designed to deliver the right amount of oil necessary for the operation. For larger tooling and subsequent machining, place just one drop on the end of the ProDrill™ and ProBushing™ and repeat as necessary. **AVOID PENETRATING OIL/SPRAY.** Insert the SPJC125 machine tooling into the bushing first by manually turning your drill chuck with the mounted tooling bit by hand until the tooling drill rests on top of the damaged bolt. Before drilling continuously, **CRITICAL** – turn/toggle/bump your drill on and off five to six one-second intervals applying light pressure on the drill. This process will create a divot that will keep the tooling drill bit from walking, maintain precise alignment, and allow the cutting edge to fully engage in the cutting surface. This will provide far more effective cutting action, precision, and prolong bit life. Once complete, begin drilling continuously and **regulate drilling speed to approximately 300 RPM or damage to the tooling bit may result.** Remove and replace the SPJC125 machine tooling bit with the SPJC188 bit, the PPB2125N ProBushing™ with the PPB2188O ProBushing™, and repeat the process above. Repeat the steps once again utilizing the PPB2266O ProBushing™ and SPJC266 ProDrill™ tooling using a slower RPM of approximately 150-250 for the largest bit. Once drilling is complete, clear all debris once again to ensure the surface is clean of all debris. Lastly, insert the final PPB2320O ProBushing™ and using a 3/8" drive tap holder or tap handle attach to the ProTap™ PPT008 precision machine tooling tap included. Add two drops of ProMAXX® ProLube™ drill and tapping fluid to two opposing flutes of the tap. Insert the ProTap™ PPT008 into the bushing slowly turning the tap until it rest on the head and slowly by hand turn clockwise, then counterclockwise, 1/4 turn at a time, stopping frequently and using forced air via blow gun, send compressed air down two opposing flutes of the tap to clear debris. Repeat this process frequently and carefully until the tap stops cutting. **DO NOT OVER-TORQUE TAP.** To prolong tap life, remove and clean debris from tap and bushing when finished. Once complete, remove the ProPlate™ from the cylinder head by loosening the chrome hex nut until it spins freely. It may be necessary to lightly tap the top of the ProArbor™ with a plastic faced hammer to unlock it from the cylinder head. In the unlikely event a tap is fractured, visit [www.promaxxtool.com](http://www.promaxxtool.com) and purchase the ProTap™ extractor kit. For technical support, visit [www.promaxxtool.com](http://www.promaxxtool.com), or call 724-941-0941.

ProMAXX® tooling included in your kit are precision-machine production grade quality made in the USA and engineered as a complete system to ensure complete success and repair of the cylinder head without removal. It is specifically engineered to controlled precision tolerance of (+) .000"/ (-) .001" to ensure accurate and repeatable results using your new NICO™ tool. SPECIFY PROMAXX® GENUINE REPLACEMENT PARTS AND TOOLING FOR OPTIMUM PERFORMANCE AND EXTENDED WARRANTY COVERAGE.



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

 (724) 941-0941  
 [www.promaxxtool.com](http://www.promaxxtool.com)

For video instruction, check out the QR code. Simply hover your phone camera over the image and it will connect you to our fast, easy Youtube tutorial.

