INSTRUCTIONS

3.5L EcoBoost EXHAUST MANIFOLD SAVER

PMXEMS200B

The ProMaxx® ProPlate™ included in this kit was designed to be used with **Extractorless(TM)** tooling to assist in repairing the exhaust manifold rather than replacing it due to broken bolts on the turbo mounting flange. The EMS200A is a ProPlate only add-on for your 200 Series ProKit. All of the tooling from your other 200 Series ProKits (3.5L EcoBoost-Elizabeth, Ford Modular-Rocky, 6.7L Power Stroke-Payton, etc.) will be used to complete this repair.

1. Remove any portion of the fastener that protrudes above the surface of the exhaust manifold prior to mounting the ProPlate. Insert the flange side into the Turbo passage in the exhaust manifold carefully centering the bushing mounting hole over the damaged 8MM tapped hole/damaged bolt(s). 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 the PMXPPB2125 ProBushing™ and PMXSSSC125 or PMXPLTV125 ProDrill™ tooling bit into an air-powered drill.

3. Open the cap on your ProLube™ and insert the small tooling bit in through the cap, gasket, and retract. The bottle is designed to deliver the precise amount of oil necessary for the operation. For larger tooling and subsequent machining, use just one drop placed on the end of the ProDrill™ when necessary. AVOID PENETRATING OIL/SPRAY OR OTHER LUBRICANTS.

4. Insert the mounted ProDrill™ into the ProBushing™ first by slowly and manually turning the chuck until the ProDrill™ slips into the bushing and contacts the surface of the damaged stud. This will ensure the cutting edge is maintained. While applying light pressure, activate your drill both on and off in approximately one second intervals for ten seconds.

This initial process is critical in that it creates a "seat" for the bit to rest and ensures that the bit will stay on center and not follow the angular surface of the damaged bolt/stud. Moreover, this action reduces the probability of the tooling bit to break and drill off center.

5. Proceed to drill continuously at the proper RPM as provided below. Gradually apply more pressure and while the bit is turning, extract the bit slightly in and out sufficiently enough, maintaining it in the bushing to allow the bit to "clean" cutting debris from this operation. Repeat this step frequently while continuing to apply more pressure until the drill chuck rests on the bushing.

6. Remove PMXPPB2125 ProBushing™ (SML) and replace with the PMXPPB2188 (MED) and follow with the PMXSSSC188 ProDrill™ using the same procedure as above, manually inserting the ProDrill into the bushing by hand and then start and stop your drill on and off prior to drilling continuously.

7. Remove PMXPPB2188 ProBushing™ (MED) and replace with the PMXPPB2266(LRG) and follow with the PMXSSSC266 ProDrill™ using the same procedure as above, manually inserting the ProDrill into the bushing by hand and then start and stop your drill on and off prior to drilling continuously.

8. **Blow the debris clean.** Remove PMXPPB2266 ProBushing™ (LRG) and replace with the PMXPPB2320 ProBushing™ (TAP). Place one drop of ProLube™ drill and tap-cutting lubricant on the PPT008 ProTap™ and proceed to insert the tap into the bushing. Slowly begin to restore the threads by turning the tap at ¼ revolution intervals clockwise and counter-clockwise periodically stopping to blow debris from the tap through the flutes of the tap. Removing the tap is not necessary. Continue to clean the threads until the tap stops. DO NOT OVER TORQUE TAP. In the unlikely event a tap fractures, visit www.promaxxtool. com and purchase the ProTap™ extractor kit.

For technical support, visit www.promaxxtool.com, or contact us via email at info@promaxxtool.com or call 724-941-0941. The tooling included in your kit are precision-machine grade quality made in the USA and engineered as a complete system to ensure complete success and repair of the cylinder head without cylinder head removal. Be sure to specify ProMAXX® machine tooling when replacement is necessary.

USE ONLY GENUINE PROMAXX® MACHINE GRADE PARTS. Tooling cutting speeds (Under load):
MIN: PMXSSSC125@350 RPM, PMXSSSC188@200, PMXSSSC266@150.
MAX: PMXSSSC125 @900 RPM, PMXSSSC188@300, PMXSSSC266@250.
OPTIMUM: PMXSSSC125/PMXSSSC @600 RPM, PMXSSSC188@250, PMXSSSC266@200.

PROMAXX® TOOLING IS SPECIALLY ENGINEERED TO CLOSE TOLERANCES (+) .000" AND (-) .002" TO ENSURE ACCURATE AND REPEATABLE RESULTS USING YOUR NEW DEVICE. 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

To order additional tooling, check out the QR code. Simply hover your phone camera over the image and it will connect you to our fast, easy online store.