



INSTRUCTIONS

PLATINUM TOOLING

ProMAXX® Platinum ProDrill™ bits are precision machine grade tooling and engine turned from industrial high-quality micro grain carbide. These bits are used in specialized machining operations where precision boring through extreme hard material is required, such as titanium fasteners or even a broken screw extractor. With increased hardness capability, comes increased brittleness, so respecting their capability and handling them delicately is recommended. Moreover, following these specific instructions will yield the best results and provide the means of making a difficult repair without the unnecessary step of removing a cylinder head and sourcing it to a machine shop for repair. First, check your surrounding area with your air-drill attached to an airline to ensure there are no obstructions that will encumber your ability to machine straight and perpendicular to the head. Tooling bit breakage is most often due to the tooling bit or air supply line hitting an obstruction. ProMAXX® highly recommends the PPD350 ProDial™ and super flexible PFX375 ProFlex™ hose with swivel to reduce tooling breakage and frustration when making this repair.

FOR MACHINING A BROKEN STUD/BOLT:

Measure the depth of the tapped exhaust manifold mounting hole and transfer that measurement to the bit to ensure safe machining without interference with the cylinder head. Secure the platinum tooling bit into an air powered angle drill and place one drop of the ProMAXX® ProLube™ on the tip of the bit and bit shaft. Once secured, insert the mounted ProDrill™ Platinum bit into the appropriate size ProBushing™ first by manually turning your drill chuck slowly until the ProDrill™ slips into the bushing and contacts the surface of the damaged stud. While applying light pressure, activate your drill both on and off for approximately ten one second intervals. This initial process is critical in that it creates a “seat” for the bit to rest and ensures that the bit will stay on the stud center and not follow the angular surface of the damaged stud. Moreover, it allows full integration of the cutting edge preserving the micro point that is machined in each tooling bit. This reduces the probability of tooling bit breakage and drilling off center of the damaged stud. Begin drilling continuously running your drill at the proper RPM according to the chart below progressively applying more pressure until complete. If the tooling bit flutes become not visible, extract the bit slightly while it is turning, maintaining it in the bushing to allow the bit to “clean” cutting debris from this operation. Repeat this step as necessary until the tooling bit exits the bottom of the damaged stud. Repeat this process for sequential machining to the size necessary to complete the repair. ProMAXX® platinum drill bits are available for all ProMAXX® bushings.

FOR MACHINING A BROKEN SCREW EXTRACTOR:

Insert the double-ended ProMAXX® ProMill™ into an air-powered angle drill. Add one drop of ProMAXX® ProLube™ to only the shaft portion of the ProMill™ and not the cutting edge. Insert the ProMill™ into the mounted PPB2125 (SML) ProBushing™ first by manually turning your drill chuck slowly until the ProMill™ slips into the bushing and contacts the surface of the damaged screw extractor. While applying medium pressure, activate your drill both on and off for approximately ten one second intervals. Remove the ProMill™ and follow the instructions above for machining a broken stud/bolt.

USE ONLY GENUINE PROMAXX® PARTS

Tooling cutting speeds (Under load):


PLT125 @600 RPM | PLT188@300 RPM | PLT270@200 RPM

NEED HELP? WE LOVE HELPING OUR CUSTOMERS!

DIAL 724-941-0941

We are only successful when you are

 1121 Boyce Rd Suite 2000, Pittsburgh, PA 15241

 (724) 941-0941

 www.promaxxtool.com

