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N/SC Cylinder Coating

Your cylinder has been coated with a Nickel - Silicon Carbide (N/SC) composite coating. N/SC is a premium, long lasting, highly wear-resistant surface, and will help your engine operate at lower temperatures. Along with the natural absorbency of Silicon Carbide, honing a crosshatch pattern into the N/SC assures that your cylinder walls will retain more oil. Another advantage to N/SC is that it can be removed and re-applied to the same cylinder multiple times. So in the event of a future cylinder failure, we can recoat it. Please note that N/SC is NOT Chrome, and is safe to be used with most rings. Feel free to contact us with any questions regarding rings or otherwise.

Assembly & Break-In

Before installing your cylinder, be sure to wash it with hot soapy water. The crosshatch in your N/SC surface will trap dirt & grime, so please be very thorough. Less than thorough cleaning could result in scuffing, scoring, irregular wear, or seizure of the piston to cylinder walls. After washing, use compressed air to blow out all orifices and passages in the cylinder to ensure it is completely dry. Always wear eye protection when using compressed air.

Threads should be chased with a tap to ensure proper threading of any thread or bolt. Use compressed air to blow out any debris in thread holes.

Ring end gap clearance should always be checked prior to installation of the cylinder head. Gap clearances will vary from piston size and manufacturer, so always refer to the spec sheet provided with your piston. Place the ring in the cylinder and use your piston top to make sure it is level. Use a feeler gauge to determine the distance between the two ends of the ring. You should feel a light drag when pulling the gauge through the gap.

Upon assembly, make sure all gasket surfaces are thoroughly cleaned to ensure a proper seal. When installing the piston to the connecting rod, be sure to lubricate wrist pin and pin bearing with generous amounts of engine oil. When installing the circlips, face the open end of the clip toward the crankshaft. Also note the arrow on top of the piston and refer to manufacturer specifications to ensure it is facing the proper direction.

Before placing the cylinder onto the piston, it is essential that you lubricate both the piston and the cylinder. Generous amounts of assembly lube or engine oil should be used. After installing the cylinder and you are ready to assemble the head, again make sure that all gasket surfaces are clean. Properly install all gaskets and be sure to follow manufacturer recommendations for torque specs on all bolts.

Finally, be sure to turn the motor over by hand prior to starting. In the event of an increased bore size case modifications may be required. After assuring all these steps have been followed, let engine run at IDLE speed for 10 to 15 minutes. This will ensure proper seating of the piston rings to the cylinder walls. After the break-in period, allow the motor to cool completely and then re-torque cylinder head bolts to manufacturer specifications. After that is complete, you may proceed by following the manufacturers recommended break-in procedures.

- Be sure to use a clean air filter before you start the break-in process.
- Some re-jetting may be required. If your bore and/or stroke size was increased, you will need to jet leaner on the air side and richer on the fuel side to accommodate the increased air supply.
- Low-tension chrome rings are acceptable to run on N/SC as well as any rings that are sent with the kit that you have.
- Always wear proper eye protection when using compressed air.