

## Cylinder/Piston Kit Warranty Information

To ensure that your machine starts and stays running for a long time you **must perform the following tests** before installing your new part.

In any 2-cycle engine you have two compression tests to perform, **primary** and **secondary**. Most people only do the secondary compression test. The **secondary compression test** is done by screwing a compression tester into the spark plug hole and pulling the starter rope until you reach the highest reading. This test will only tell you the condition of the upper cylinder.

The **primary compression tests** are in the lower end of the crankcase. This test consists of **vacuum** and **pressure tests**. All 2-cycle engines must be air tight to perform correctly in operation. There cannot be any air leaks or vacuum leaks. Failure to perform the **vacuum** and **pressure tests** will **void your warranty**.

This testing information is true for all 2-cycle engines. Before any new parts are installed, whether OEM or aftermarket, these checks must be performed or there is a good possibility the engine will fail again. **If you don't KNOW why your piston or cylinder was damaged the first time, don't just replace it or the same thing will happen, these parts die for a reason. The most common reasons for scoring are bad fuel, improperly adjusted carburetors, and air leaks.**

Possibilities the engine could have failed:

- Carburetor was improperly adjusted
- Improper fuel mixture
- Mechanical failure
- Loose cylinder bolts
- Leaking gaskets
- Impulse line
- Leaking intake manifold
- Carburetor inlet screen has debris causing fuel starvation
- Dirt ingestion
- Leaking oil seals
- Defective fuel line
- Ethanol-based gas sat too long
- Dull saw chain causing the engine to overheat

In addition to the compression tests, you should also check your **crankcase pulse**. Primary compression is one part of crankcase pulse; the other part is cylinder, piston and ring condition. Crankcase pulse is necessary for the fuel pump, which is built into the carburetor, to pump fuel from the tank for the engine to run. To check the crankcase pulse, remove the carburetor and spark plug, apply some oil inside the impulse line and pull the starter handle. Oil should pulsate inside the hole. If you don't have good crankcase pulse the carburetor will not perform correctly to keep the engine running at peak performance.

We recommend having a qualified technician perform these tests and install your parts.

**Our cylinder kits are covered by 30-day warranty.  
Failure to perform these checks will void your warranty.**