



## COMPRESSION TESTING

Compression testing your ATV engine is an important and easy way to acquire and keep track of engine data needed to make jetting adjustments, gauge engine wear and adjust engine for altitude changes.

Following are some helpful tips to get consistent and accurate measurements.

*Name Brand:* Always note the tester brand and condition. DRI recommends using a **Snap-On** Compression tester. Try to always use the same tester.

*Tester Probe:* Many compression testers have different probe designs. It is very important in achieving a correct reading that the threaded end of the probe is the same length as the spark plug. A probe too long will give a reading too high and a short probe will give a low reading. It is also important to note the location of the one-way valve in the probe. It is best if the one-way valve is at the end of the probe.

*Consistency:* The most important issue is consistency. To be able to obtain good useable data it is important to achieve consistency in your test method.

*Engine Temperature:* Engine must be cold to get proper results. Room temperature is best. Engine needs not to have been fired for at least 45 minutes.

*Throttle Position:* Throttle must be held wide open to get correct results. If test is performed with throttle valve closed a potential low reading will show on gauge.

*Number of Kicks:* If the machine being tested is of a kick-starter design it generally takes 15-20 kicks to get the engines maximum compression reading. If the machine uses an electric starter, machine should be turned over for at least 10 seconds or longer until needle on compression gauge stops moving.

*Number of Tests:* DR recommends doing at least 3 tests, 5-10 minutes apart on each cylinder. Multiple tests will help insure that correct test results are achieved.

*Helpful Hints:* For best results, it is best to test a fresh engine after it has been run at least 30 minutes. Testing a fresh motor before it has been run can and will usually lead to a low reading.

After engine break-in is complete it is advisable to do a compression test on your engine and record it for future comparison. Try to always use the same tester, and if possible have the same person perform the test.