



COMPRESSION AND LEAKDOWN  
**Outdoor Power and Recreation Equipment**  
SECONDARY

# Compression and Leakdown

Do not start this lab until told that the competition is ready to start.

**If there is something that you don't understand, you may ask for clarification from a judge.**

You will be performing Compression and Leak-down tests on this Motorcycle to diagnose a poor running condition. Follow this sheet, as well as any other documents supplied for the proper inspections, procedures, and specifications.

**\* All measurements and specifications must be in Metric\***

**Use the special tools provided with care.**

Ensure you have the judge verify your work at the appropriate times indicated.

## **Compression Test:**

Following the procedures in the service Manual, perform a compression test.

**Results:**

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**What is the standard compression test reading?**

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**What page in the Manual did you find the specification?**

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**What are the possible causes of a low compression reading?**

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- Put Motorcycle in top gear, and adjust the rear brake by hand, until the brake shoes are applied. (Ask Judge for assistance doing this)
- Remove inspection plug from center of the Magneto cover, and using the appropriate size socket and ratchet, turn the engine over until you reach TDC on the Compression stroke.

**What direction of rotation does this engine turn? Clockwise or Counterclockwise?**

**Please circle your answer**

**Next page....**

- Perform the leak-down test, using the attached instructions.
- What are your results?

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- What is the cause of the problem?

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- Repair the problem, and perform the tests again to confirm your diagnosis.
- What are your final readings?

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**You are now finished the Lab. Clean your work area and return special tools.**

