



### 4-stroke Internal Combustion Engine



### Job – Engine Cooling & Ignition System

- 1. Remove your engine's shroud.
- 2. Make a NEAT drawing (use pencil), of the engine (side view) to show the items noted below. Also, show using arrows the direction that air takes as it moves through the engine.

Label the following parts of the engine on your drawing:

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Flywheel      | <input type="checkbox"/> Starting Mechanism  | <input type="checkbox"/> Shroud          |
| <input type="checkbox"/> Flywheel Fins | <input type="checkbox"/> Cylinder/Block Fins | <input type="checkbox"/> Air Flow (show) |

Cooling System

Note – marks will be deducted for sloppy work

3. Make a NEAT drawing that shows how to adjust the armature air gap. Label all components.

**Adjusting Armature Air Gap**

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4. Describe, in sequence, the steps to follow in order to adjust the armature air gap.

First - \_\_\_\_\_

Second - \_\_\_\_\_

Third - \_\_\_\_\_

Fourth - \_\_\_\_\_

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5. Obviously the armature air gap is very important. To show that you understand why this is so, explain what the result might be in the following two situations:

Air gap is set too big

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Air gap is set too small (but it is still there)

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6. What is the manufacturer's specified air gap? \_\_\_\_\_

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7. Adjust your engine's air gap so that it meets the manufacturer's spec.

8. Replace your engine's shroud to complete this job.