Lawnmowers

Student

Lawnmower engines need regular maintenance as covered in the rest of this course especially:

- Air filter clean or replace. These engines work in very dusty conditions.
- Fuel filters clean
- Engine oil change (4 stroke)
- Spark plug clean and gap
- Clean grass and dust from cooling fins and around the fuel tap and carburettor



In addition, lawn mowers also need the following maintenance.

- Motor controls and mountings
- Clean mower body
- Replace or sharpen blades.

Always follow the makers booklet for the way to do things and the parts you need.

Motor controls and mounts

Check all nuts, bolts and mountings – keep them tight.

Oil and/or clean controls and cables - such as throttle, cutting height adjusters

Mower body

Clean dirt and grass from the top surface around the engine.



Clean under the body:

- Remove spark plug lead from the plug to make sure the engine cannot start.
- Turn the mower on its side be careful of oil and dipstick on 4-strokes
- Scrape off all dirt and grass with a piece of wood or an old screw driver.
- Finish off with a stiff brush or a water hose if you have one.

Check the cutting blades are tight and not damaged – see next section

Clean old grass from around the wheels.

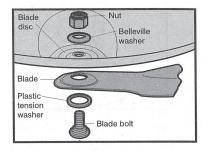
Cutting blades

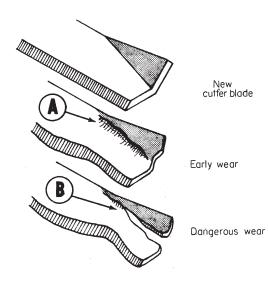
Rotary lawn mowers have two or four cutting blades that spin around under the body.

Two blades on a bar like this:

Blade Bar	
	Steel Washer
	Bolt

Or, four blades like this – bolted to a disc:





Damaged or loose blades are VERY dangerous as they can break or fly-off at great speed.

Damaged blades will also make the mower shake or vibrate because they are not in balance. The vibration may damage the engine crank-shaft if you use the mower like that for too long.

Blunt or worn-out blades will not cut grass well.

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Always check the blades for damage if you hit something hard while you are mowing.	
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Changing blades

Mower makers recommend that you change blades as a set. This makes sure the mower keeps in balance.

Use the correct size, shape and weight of blade for your model of mower.

Remove the spark plug lead from the plug - to make sure the engine cannot start.

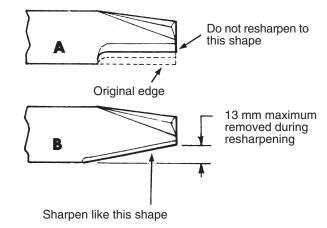
Turn the mower on its side – be careful of oil and dipstick on 4-strokes Hold the blade with a cloth – or the disc on 4-blade mowers- to stop the engine turning Undo the retaining bolt(s) Take off the blade and replace with a new one Make sure you put back all the bolts and washers in the right way.

Sharpening blades

If the blades are blunt, you can sharpen them with a file, sharpening stone or a grinder.

DO NOT sharpen damaged, cracked or broken blades. They are very dangerous!

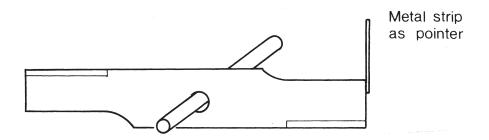
Sharpen in the shape shown in the picture



Blade balance

As you sharpen, check the balance of the blade-bar type, like this:

Put a straight thin bar or pin through the mounting hole – it should balance.



If one side drops down-

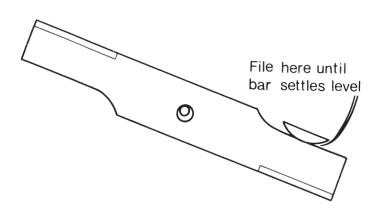
check that both sides are the same length

if not, file a little off the long end until they are the same.

Recheck balance

If one side still drops-

File off metal from the **back** of the heavy end



The better you get the balance, the smoother the engine will run.