# You and your Domestic Petrol Lawn Mower

Some basic maintenance, and correct operating procedure will reduce the stress and problems that go with owning a petrol operated Lawn Mower.

## **Safety**

- Always wear shoes or boots. Do NOT wear jandals or slippers.
- Wear safety glasses, and with a petrol mower ear muffs are a good idea.
- Do NOT refuel a machine when it is running.
- Refuel a machine in an open area, not in your basement or garage. Petrol fumes can accumulate and can cause an explosion.
- Do NOT run the mower in-doors. The carbon monoxide gas will kill you.

# Operating a petrol engined walk behind mower

A lot of starter problems can be avoided by following the following tips.

- Pull the rope in a straight line with rope eyelet, this avoids wear on the rope.
- Don't snatch the rope, engage the starter first, then pull the rope progressively.
- Do NOT drop the rope when started, follow the rope back into the starter. Dropping the rope can cause the spring to wind back on its self and require replacing.

## **Starting procedure Petrol mower.**

- Open throttle, always give a couple of pulls on the rope before using the choke/ primer, just incase petrol has accumulated in the carburetor during transit. It may start
- Put on choke or prime. Pull rope.
- As soon as the engine fires turn off choke, it will probably start next pull.

### **Stopping the motor.**

- Allow motor to idle briefly before turning off.
- Do NOT pull the plug lead off when running. This will damage the ignition coil.

#### Settings and procedure.

- Do not mow lower then necessary, bad for the grass and hard on the mower.
- If you are not using a catcher, make sure that the flap is down, or that you have a deflector fitted. Consider a side throw or mulching mower.
- Avoid tree roots and stones, they can bend the blade and/or crankshaft.
- Run motor at not more than 3600 RPM

### Basic maintenance.

Air Filter

- Foam filters can be washed out in warm water and detergent. Dry thoroughly then add 1 tea spoon of engine oil squeezed evenly into the sponge.
- If you feel a lump in the sponge it means that there are blocked cells and the filter must be replaced.
- Paper filters can be tapped out gently, or cleaned gently with compressed air.

## Spark plugs

- Do not remove a plug from a very hot motor, it could strip out the threads. Always
  oil the threads and screw the plug in by hand before applying a spanner, this avoids
  cross threading.
- Do NOT clean a spark plug with sand paper. The sand will find its way into the cylinder. I have seen motors wear out in 30 minutes because of this, also a Honda Civic
- Do NOT use the small spark plug cleaners which are available at hardware stores, they have grit in them.
- Clean with detergent and a nail brush, or use oven cleaner. Examine it for cracks and chips in the ceramic insulator. If the plug is very dirty it should be replaced. Make sure that it is the correct type for your machine.

### Oil and lubrication.

- Four strokes use SAE30 motor oil. If this is not available use 20/50 multigrade.
- For domestic use, change oil during the winter, ready for summer. Drain when warm. If the oil is black and smelly, change more often.
- Two strokes The oil is mixed with the petrol, the ratio depends on the oil being used. Mineral oil is mixed at about 25:1. Synthetic oil at about 50:1 Always read the instructions on the container. Some oils are self mixing, some need to be shaken before use.

#### Fuel

 Use unleaded 91 octane Petrol. If you are keeping it for a long time add 'STA-BIL' (see 'lubricants general' on the Products Tab) which will keep the fuel fresh for as long as two years.

## **Blades**

There are different types of blade assembly.

- Solid steel bar type blade. The solid steel blade probably does a better job, but if it strikes any solid object it will bend the crankshaft. It also has to be kept sharpened and balanced.
- Swing back blades mounted on a disc are popular these days. These have 2 or 4 thin steel blades pivoted to a circular or oval disc. The blades are kept extended by centrifugal force, and will fold upon striking a solid object. This eliminates the danger of damage to the crankshaft. Also the thin blades do not need sharpening.

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