

MowerMagic



SOS

Safety - Operation - Service

Guide

PETROL MACHINES - FUEL AND OIL MAINTENANCE



4-Stroke



Four Stroke Engine Maintenance

Four-stroke engines are fitted to the majority of garden tractors, lawn mowers, cultivators, scarifiers, etc. Before starting, fill the engine sump with the correct quantity and grade of oil (as detailed in the owner's manual). Check the oil level is correct on the dipstick to the full mark when the machine is on a flat level surface. When you subsequently use the machine, before starting always check that the oil is to the correct level and where necessary top up to the full mark. Failure to observe the above may result in premature engine damage, which is not covered by the manufacturers warranty. Oil changing and filter replacement (if applicable) should be carried out annually, or at set hourly intervals. For more information refer to engine owner's manual.

Fuel Storage Tips

All four-stroke petrol engines manufactured since 1980 are designed to run with regular unleaded petrol. It should be noted that unleaded petrol is notorious for going stale, and engine manufacturers advise storage life should not exceed 30 days. We therefore, recommend the following:-

- Engines stored over 30 days need to be protected, or drained of fuel to prevent gum forming in the fuel system, carburettor, petrol pump, etc. For engine protection we recommend the use of Briggs & Stratton fuel stabiliser (part number 999005). Mix fuel stabiliser with fuel in fuel tank, or storage containers. Run engine for a short time to circulate the stabiliser through the carburettor. Engine and fuel can now be stored for up to 12 months.
- If fuel stabiliser is not used and machine is to be stored for over 30 days, we strongly recommend that all fuel is removed from the fuel tank and that the engine is run until it stops from lack of fuel. Failure to observe the above may cause corrosion to essential carburettor parts that may necessitate replacement at owner's expense.



2-Stroke



Two Stroke Engines – (petrol oil mixture)

Two-stroke engines are fitted to most chainsaws, hedge trimmers, blowers, brush cutters etc. All manufacturers recommend the use of unleaded petrol and that storage should not exceed 30 days. Please observe the following:-

- Only mix small quantities of two-stroke mixture to prevent fuel mixture becoming stale. Fuel mixture should be disposed of after 30 days.
- Fuel can be stored for up to 90 days if treated with fuel stabiliser (as detailed above).
- Only use a good quality approved two-stroke oil to a minimum specification API TB and mixed at a ratio recommended by the manufacturer. We do not recommend the use of SAE30 as lubrication oil.

GENERAL TIPS & HINTS

- By maintaining your machine correctly you will prolong its serviceability and life e.g. sharpen blade regularly, maintain engine air filter, clean and inspect machine after use, check engine oil every time before machine is used, observe and comply with manufacturer's operator's manual guidance.
- In certain grass cutting conditions, dust/debris can accumulate around engine air intake and cooling fins. This should be removed to prevent engine overheating, which can cause premature engine failure. Check engine owner's manual.
- When using petrol lawn mowers and garden tractors, always check that the cutting area is free from foreign solid objects before you start work. Be extra vigilant around exposed tree roots, manhole covers, paths, drive edges, etc. Rotary mowers and garden tractors striking solid objects will incur damage, which is not covered by manufacturer's warranty and may have personal safety implications to the operator, or bystanders.
- Damage to drive belts is not subject to manufacturer's warranty. If the machine is used incorrectly, misused or abused, i.e. in the event of cutting blade becoming jammed by grass or solid objects on a garden tractor, this will result in drive belt failure due to overheating, the replacement of which is not covered by warranty.
- Always store your machine in a dry secure area away from direct sunlight when not in use. During prolonged periods of non-use (winter), either drain fuel or add storage additive, (see "fuel storage tips"). Take care that your storage area is free from vermin (mice, rats, etc) who will eat rubber components.
- Rechargeable battery operated machinery requires full conditioning charge prior to the first use and we strongly advise the machine is used until battery is completely discharged. Battery should then be fully charged, where possible repeat this process periodically to extend and maximise battery life and performance (see manufacturer's manual for details).
- For chainsaws always use the correct grade of chain lubrication oil as recommended in the owner's manual. Keep chainsaw chain correctly sharpened and tension adjusted as outlined in owner's manual. We strongly advise the wearing of correctly fitting chainsaw safety equipment, including safety boots, gloves, leggings and helmet assembly. Full details available on request.
- We strongly recommend that all powered garden machines are stored in a locked, alarmed building in order to deter theft. At customer's request we will engrave your post-code onto the engine, or body of the machine. In the event of theft, recovered goods can then be returned to the lawful owner. For garden tractors, we recommend the addition of a security wheel clamp, full details available from our Sales department. With expensive single items (garden tractor) we recommend you advise your insurance providers.
- With all electric machines we strongly recommend the use of an RCD (residual current device), or power-safe cut out. These units protect the user from a potentially lethal electric shock in the event of an insulation failure, or accident. Never clean electric machines with water.



UNDERDECK CLEANING OF PETROL LAWMOWERS

Engine air filters can become contaminated by oil or petrol i.e. if a pedestrian mower is turned on its side for under deck cleaning, the air filter may be contaminated by oil or petrol, replacement of which is chargeable. As a general rule we recommend that paper element air filters are removed from the machine before under deck cleaning and that engines are tipped to ensure the exhaust is uppermost. Please refer to specific manufacturer owner's manual. Change paper type air filter annually, or as directed by the engine manufacturer.

ELECTRIC START MACHINES

Machines fitted with electric start engines must have the battery fully condition charged before use. During prolonged periods of non-use or storage over 30 days, it is necessary to disconnect the battery, condition charge in accordance with manufacturers recommendations and store in an area above sub-zero temperature. When the machine is re-commissioned after storage condition charge the battery for best performance and extended battery life. Many machines are now fitted with sealed "gel type" batteries; these must only be charged with the appropriate "multi-stage chargers" and on no account should they be charged with a standard 12v battery charger, as this will irreparably damage the battery. All batteries are covered by 12 months manufacturers warranty, however failure to observe manufacturers guidelines will reduce battery life expectancy and may result in warranty rejection.

PUNCTURES AND PUNCTURE PROOFING

Most modern garden machinery, including tractors, are fitted with tubeless tyres. When operating in a garden environment they are prone to punctures from brambles, thorns, etc. To prevent the majority of punctures occurring we recommend all pneumatic tyres have preventative puncture proof sealant applied. Puncture proof sealant should be injected into the tyre before punctures occur, thus eliminating tyre deflation. This product will seal the majority of holes in the contact tread area of up to 5mm in an off road environment; it will however not seal against sidewall punctures. Tyre sealant is easily installed by the customer, or tyres can be puncture proofed during routine service, or at the time of purchase, for minimal cost. We recommend for standard garden tractors, 0.5 litre per front tyre and up 1 litre per rear tyre. Please note that full specifications are available from product manufacturer.

CLEANING GARDEN MACHINERY

We strongly recommend against cleaning any garden machinery with high pressure washers as this may cause water damage to various components, including electrical systems, fuel systems, bearings, spindles, pulleys etc, due to corrosion, which is not covered under the manufacturers warranty. We recommend that cleaning is carried out by vacuuming grass and debris, or by careful use of a high-pressure airline. Under deck cleaning is best achieved by using a plastic spatula to remove cut grass and prevent damage to paint-work of the cutter deck.

The above information in no way substitutes manufacturers guidelines; please always refer to your owner's manual BEFORE USING YOUR MACHINE.

The above notes will help you extract the best from your machine, and our staff will be glad to elaborate on any point or query you may have.

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