

## Fuelling the Discussion

Changes to engine legislation will affect many machines regularly used by landscapers and arborists, including chippers. Timberwolf's 'white paper' provides a guide to what is happening and how the company will continue to offer the best range of chippers on the market.

### The Legislation

Recognition that diesel engines emit damaging compounds in their exhaust gases has led to an ongoing programme of legislation to limit emissions. This requires engine manufacturers to develop new models to meet this legislation. Machinery manufacturers are obliged to fit the compliant engines to new machines within a specific timescale.

New legal standards have been introduced in 'tiers' or 'stages' to encompass specific groups and power ratings of engines. Regulation (EU) 2106/1628 now extends this to include engines used in 'non-road mobile machinery'. The key date is 1st January 2019, when 'stage V' requirements come into force.

'Non-road mobile machinery' includes a range of equipment commonly used by landscapers and arborists, powered by engines within the range of 19-37kW (25-49hp). Examples include mowers, self-propelled aerators, stump grinders and chippers.

### Impact on wood chipper machines

Within the industry, most existing hydraulic chippers will fall outside the requirements of the new regulations. **This means Timberwolf and other manufacturers' machine ranges will either require petrol or new type Stage V diesel engines to be installed, requiring a redesign for our current product offerings.**

### Timescales

Current diesel engines can be supplied until the end of 2018, unless they are within what is known as the transition engine scheme, which most of our range is, being Stage IIIB engines. **These can be supplied until mid-2020.**

### How Timberwolf is tackling this issue

**Timberwolf will naturally be offering machines with Stage V diesel engines, but we would also like to offer the customer the option of petrol engines.**

**Stage V diesel engines will be more expensive than the current diesel offerings due to the mechanical fuel systems being replaced with more complex and costly fuel and emission cleaning systems. In addition, the new diesel engines will not be able to run on rebated fuel ('red diesel') due to the emissions legislation and engine configuration. Thus, the running costs of new diesel engines will also increase, meaning petrol units will be the most cost effective option to run (when taking into account the full cost of ownership).**

## **The Timberwolf Range**

We aim to supply a range of chippers to allow customers to choose between petrol and diesel-engine formats. Engines are always selected to run to the duty cycles required, so petrol engines will be equally durable and suited to the professional working environment.

**All engines selected by Timberwolf are capable of lasting as long as the rest of the machine if serviced and maintained correctly.**

**There are further benefits to using petrol engines - a number of cities have banned diesel usage within their limits, or plan to in the future, but petrol machines can still be used in these locations.**

In addition, petrol engines do not require a diesel particulate filter (DPF). DPFs can get blocked if not used regularly in accordance with manufacturer's instructions, which can incur significant service costs to the end user.

## **Existing Machines on the Market**

Customers with existing Timberwolf diesel chippers will still be free to use their machines under the new legislation and will be able to sell on or trade in a second-hand machine. It will also still be possible to purchase a second-hand diesel chipper from the trade and Timberwolf Dealers.

## **Other Considerations**

Petrol is widely and conveniently available for landscapers and tree surgeon crews, compared with red diesel. For more information on fuel storage and supply see the HSE website

<http://www.hse.gov.uk/fireandexplosion/petroleum.htm>