

# Lawn mower engines: what are the choices?

**Though the engine is only part of what you'll be purchasing when you visit your lawn mower dealer, it's an important part.**

■ When buying new lawn mowers, the landscape manager faces a variety of options, ranging from deck size to ground speed to mulching capabilities. Often overlooked is the engine that is part of the mower—a very important part, indeed.

Generally speaking, landscape managers like the following attributes on their lawn mower engines:

- easy starting;
- heavy duty, long life, dependable;
- quiet running;
- good guarantees/warranties; and
- fuel efficiency.

Also, make sure the most-serviced parts on the engine offer easy access.

Time saved working on equipment in the repair shop translates into a more dollar-efficient business.

Most engine manufacturers are doing their best to meet federal and California Air Resources Board (CARB) engine emission standards before they officially go into effect (see Chart 1). The federal standards become law in 1999.

Gary Wilson of Onan in Minneapolis, Minn. says prospective buyers should also look for **broad range torque** "for the power to do the work at the widest variety of RPMs possible."

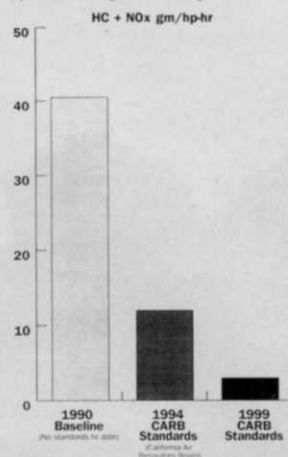
Some of the options available include **piston cooling jets** and **full pressure lubrication**, Wilson says. The piston cooling jets on larger engines (16 hp and up) can save engine wear. And full pressure lubrication will impact significantly on engine and bearing life.

Other things to look for are **electronic starter** (versus recoil) and large **gas tank capacity** (for fewer refilling stops, resulting

Chart 1

## Total Allowable Emissions

(Hydrocarbons & nitrogen oxides from engines under 225 cc.)



Source: Briggs & Stratton

in less downtime).


If you've got money to spend, an **over-head valve** is a good investment. OHV engines deliver more horsepower with less displacement and engine weight. They also run cooler, with less carbon build-up and longer life. According to some manufacturers, OHV engines are up to 30 percent more fuel efficient.

See Chart 2 for a list of the major players in the domestic lawn mower engine market.

—Jerry Roche

Chart 2

## ENGINES FOR COMMERCIAL LAWN MOWERS

Manufacturer	Model	HP	Tank size	Shaft	OHV?	Notes	Circle No.
Briggs & Stratton	Quantum	4.0,5.0	1.0-1.6 qt.	vertical	no	electric start optional easy control system auto-type air cleaner	301
	Indust. Plus	5.0-18.0	1.5-4.0 qt.	horiz.	no		
	Vanguard	4.0-18.0	5.0-7.2 qt.	both	yes		
Honda	GX series	2.2-13.0	1.5-7.4 qt.	horiz.	no	vert. shaft optional	302
Kawasaki	FA series	1.7-5.2	1.2-2.8 qt.	both	no		303
	FB460V	12.5	n/a	vert.	no		
	FC series	5.0-17.0	n/a	vert.	yes		
	FE series	3.7-11.1	2.6-6.8 qt.	horiz.	yes		
	FG series	3.6-7.5	3.2-6.3 qt.	horiz.	no		
KF100D	10.0	2.1 gal.	horiz.	no			
Kohler	Command	5.0-22.0	n/a	both	yes	auto comp. release electronic ignition	304
	Magnum	8.0-23.0	n/a	both	no		
Onan	Performer	16.0-20.0	n/a	both	no	electronic ignition aluminum block	305
	Elite	12.5-14.0	n/a	vert.	yes		
Tecumseh	Pro 5, XLPro5	5.0	1.5 qt.	vert.	no	8.46 cu. in. displacement 12.6 cu. in. displacement best for lawn tractors	306
	Vector 5	5.0	n/a	vert.	no		
	15HP OHV	15.0	n/a	n/a	yes		

Source: LM survey, February, 1993