

LEAF BLOWERS

The Grounds Maintenance Division is responsible for providing daily service and mowing operations, as well as trail, playground and horticultural maintenance, for over 250 parks containing 20,000+ acres, over 211 miles of trails, 311 playgrounds, and hundreds of horticultural beds. Historically, leaf blowers were powered by 2-stroke engines which were lightweight, easy to maintain and carry. But since the early-1990s, manufacturers have been under regulatory pressure to achieve lower exhaust emissions. Four-stroke engines offer a much cleaner burning alternative in providing lower emission levels.

LEAF BLOWER ENGINES

There are three types of leaf blower engines; gas, electric and propane. Gas leaf blowers have traditionally been 2-stroke engines, but 4-stroke engines were introduced to address air pollution concerns. Electric leaf blowers tend to have less power than their gas-powered counterparts, but they also make less noise and are somewhat less awkward to use as there is no need for a fuel tank. The electric cord blowers are not feasible for our use as we do not have access to an electric source or hundreds of feet of extension cords to run them. Battery-operated electric leaf blowers do not have the capacity to blow leaves, dirt or grass off the sidewalks or flower beds. Another issue is the run-time for the rechargeable batteries; they generally can only be used for up to 15 minutes before it needs to be recharged. Leaf blowers that use propane gas generally run on a 2-hour bottle, they are handheld and are cumbersome.

USE

Leaf blowers in the Division are used for a variety of assignments, such as for trails mowing and daily service maintenance (blowing off leaves, grass clippings and debris from parking lots, sidewalks, driveways, etc.), maintenance tasks (cleaning equipment, blowing out rain gutters, etc.), horticultural responsibilities (general cleanup of horticultural beds and vacuum leaves), and playground operations (cleaning play components and safety surfaces). Leaf blowers save staff time and labor instead of raking or sweeping.

INVENTORY

There are 119 leaf blowers in the Division. They are distributed as:

STAFF	MAKE MODEL	NUMBER	ENGINE
South-Central District	Stihl BR600*	45	4 stroke
Northeast District	Stihl BR600	9	4 stroke
	Echo PB620ST	8	2 stroke
Northwest District	Echo PB770T	15	2 stroke
	Shindaiwa EB854	7	2/4 stroke
	Stihl BR600	6	4 stroke
	Stihl BR420	5	2 stroke
Trails	Stihl BR600	6	4 stroke
Horticulture	Stihl BR600	8	4 stroke
	Stihl BR420	3	2 stroke
	Shindaiwa EB3410**	1	2/4 stroke
	Stihl SH 56C	1	2 stroke
	Toro Ultra Blower Vac	1	Electric
Playground	Stihl BR500	2	4 stroke
	Stihl BR600	2	4 stroke
TOTAL		119	

SUMMARY

Leaf blowers are an essential tool for staff to use to save time, money and labor when performing their duties in the parks. The Grounds Division is constantly monitoring the industry's design and function improvements for leaf blowers to reduce emissions and noise production. In the meantime, we are being proactive into phasing out the 2-stroke engine leaf blowers with 4-stroke engine leaf blowers.

*Stihl's Hybrid 4-MIX engine is a four-stroke engine that has low emissions, increased fuel efficiency, low noise, and decreased maintenance.

**Shindaiwa's Hybrid 4 Engine has low emission levels, better fuel economy, and longer engine life due to dual-stage air filtration.