

Vehicle Purchase for V5850

Vehicle Description and Use

Unit V5850 is a 2006 Toro 4000-D Mower with a 144-inch cutting width. It is currently used to mow Mills, Oswald and Palm Aire Village along with other districts that borrow it for mowing large areas. As such, this machine operates in a severely harsh and rough environment that requires a heavy-duty, diesel powered unit. Below is a picture of that unit.



Vehicle Condition

Unit V5850 was put in service on August 2006. This unit has been retained for two years past its recommended lifecycle replacement date.

**City of Fort Lauderdale Fleet Services
Vehicle Replacement Analysis and Summary
V5850**

<u>FACTOR</u>	<u>POINTS</u>	<u>INPUT</u>	<u>SCORING GUIDELINES</u>
Age	6	6	One point for each year of chronological age, based on in-service date.
Miles	15.60	4,680	One point for each 300 hours of use.
Type of Service	5	5	1 to 5 points are assigned based on the type of vocational use and service duty.
Reliability	4	0.92	Points are assigned as 1 to 5 depending on the frequency that the vehicle is in the shop for repair. 5 = two or more times per month average. 4 = one time per month average. 3 = once every two months average. 2 = once ever three months average. 1 = once every four months or less average. Does not include scheduled PM service.
O&M Costs	1.25	32%	Points assigned based on total life O&M costs (not including cost of repair due to accident damage) compared to vehicle's original purchase price. 1=20%, 2=40%, 3=60%, 4=80%, 5=100%.
Condition	4	Fair	Takes into consideration body condition, rust, interior condition, accident history, anticipated repairs, etc. A scale of 1 to 5 points. 1 = new, 2 = very good, 3 = good, 4 = fair, 5 = poor.
Total Points	35.85	Condition IV - Needs immediate replacement due to safety concerns or catastrophic mechanical failure	

SUMMARY

Downtime: 3,791 hours

<u>Points</u>	<u>Condition</u>	<u>Ranking</u>
<18	I	Excellent
18 to 22	II	Good
23 to 27	III	Requires replacement during current fiscal year
28 or more	IV	Needs immediate replacement due to safety concerns or catastrophic mechanical failure

Proposed Replacement

The Toro Groundsmaster 4000-D is a large area rotary mower with eleven-foot cutting width.

This unit is equipped with the “smart cool” cooling system. This newly designed cooling system allows the radiator fan to reverse airflow to remove debris and prevent such debris from clogging the radiator fins. This will reduce the potential for expensive repairs due to overheating. Such overheating issues have been a reoccurring problem for equipment operators and require labor-intensive efforts to keep the radiator fins clear of debris.

The engine of the replacement mower offers better fuel economy, lower exhaust and green house gas emissions, and a reduced carbon footprint.

An example of this rotary mower is pictured below.

