

# State of North Carolina

DOT Sweeper

## Market Application Publication



### The Problem

The current system was too small for the working environment. Previous pre-cleaner bearings would freeze in less than 300 hours. This meant replacing filter elements 1 to 2 times daily.

### Why was Racor chosen as the solution?

Racor offers a new larger filter (ECO XL13 with a safety element) and a new Racor Spin-Aire pre-cleaner. They saw the benefit of a larger element with more surface area. In addition the bearing system in our pre-cleaner provided a more shielded bearing, eliminating high amounts of dust.



### Contact Information

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### How the Solution Works:

Racor's Spin-Aire pre-cleaner separates the larger amounts of dirt and spins the large dirt out before it reaches the air filter element. This reduces the amount of wear and build up on element filters allowing for extended filter element life, reducing costs and maintenance.

### Application:

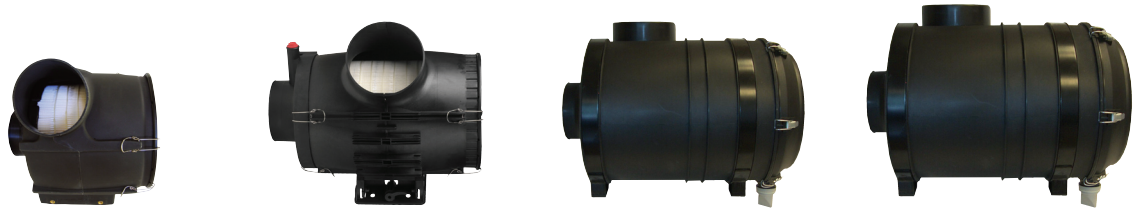
The State of North Carolina is currently utilizing both Racor's ECO XL13 with a safety element Air Filter and the new Spin-Aire pre-cleaner on a Street Sweeper.



ENGINEERING YOUR SUCCESS.

INTERNAL USE ONLY

# ECO III



Assembly Number: With Safety Filter Without Safety Filter	N/A 500235002	500250012 500251012	ECO-III-XL 13S ECO-III-XL 13	ECO-III-XL15S ECO-III-XL15
Mounting Clamps	N/A	N/A	071921010 (2 required)	071921009 (2 required)
	ECO III LH	ECO III	ECO III XL13	ECO III XL15
Primary Filter	500293112	500247012	500454001	500375001
Safety Filter	N/A	500233000	500455001	500443001
Diameter	12.3 in. (31.2 cm)	13.0 in. (33.0 cm)	13.0 in. (33.0 cm)	15.0 in. (38.1 cm)
Width	14.1 in. (35.8 cm)	20.5 in. (52.1 cm)	22.0 in. (55.9 cm)	24.0 in. (61.0 cm)
Air Flow	700 CFM (19.8 m <sup>3</sup> /min)	900 CFM (25.5 m <sup>3</sup> /min)	800 CFM (22.7 m <sup>3</sup> /min)	1,000 CFM (28.3 m <sup>3</sup> /min)
Inlet	5.0 in. (12.7 cm)	7.0 in. (17.8 cm)	6.0 in. (15.2 cm)	7.0 in. (17.8 cm)
Outlet	5.0 in. (12.7 cm)	6.0 in. (15.2 cm)	6.0 in. (15.2 cm)	6.0 in. (15.2 cm)

# Spin-Aire Pre-cleaners



Specifications	123583440	123583550	123583660	123583665	123583770	123583990
Maximum Flow Rate	300 CFM (8.5 CMM)	520 CFM (14.7 CMM)	740 CFM (21.0 CMM)	580 CFM (16.4 CMM)	1190 CFM ( 33.7 CMM)	1850 CFM (52.4 CMM)
Height	4.8 in. (12.2 cm)	7.1 in. (18.0 cm)	7.1 in. (18.0 cm)	7.1 in. (18.0 cm)	7.3 in. (18.5 cm)	8.1 in. (20.3 cm)
Weight	5.0 lbs (2.3 kg)	8.0 lbs (3.6 kg)	9.0 lbs (4.1 kg)	8.0 lbs (3.6 kg)	11.0 lbs (5.0 kg)	14.0 lbs (6.3 kg)
Diameter	8.3 in. (21.1 cm)	10.6 in. (26.9 cm)	12.3 in. (31.2 cm)	10.6 in. (26.9 cm)	14.1 in. (35.8 cm)	17.1 in. (43.4 cm)
Inlet Diameter	4.0 in. (10.2 cm)	5.0 in. (12.7 cm)	6.0 in. (15.2 cm)	6.0 in. (15.2 cm)	7.0 in. (17.8 cm)	9.0 in. (22.9 cm)

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RSL0026 Rev - 03/12



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