

Lead-Free Wheel Weights in King County, WA

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Introduction

- King County is located on Puget Sound in Washington State, and covers 2,134 square miles
- King County is nearly twice as large as the average county in the United States
- With more than 1.8 million people, it also ranks as the 13th most populous county in the nation.







Introduction

- King County Fleet Administration has received numerous awards for our environmental practices dating back to 1989 when the Recycled Product Procurement Policy was enacted
- Fleet Administration Division has been recognized by EPA, DOE, and The American Lung Association for it environmental leadership







Introduction

- These efforts along with other initiatives resulted in King County being the first public agency to be inducted into the EPA Hall of Fame.
- King County Fleet Administration Division manages the acquisition, maintenance, replacement and disposal of more than 3,000 diverse vehicles and equipment.
- History of environmental leadership, including hybrids, light & medium duty, plug-in hybrids, recycled plastic dump truck sideboards, rerefined and bio based oils and lead-free wheel weights





Lead-Free Wheel Weights

- ▶ King County started testing lead-free wheel weights to reduce negative impact of lead on water quality and public health.
- ▶ King County start testing lead-free wheel weights in early 2006.
- ▶ To date we have eliminated use of several hundred pounds of lead weights







Initial Testing

- Initial testing was limited to Crown Victoria patrol cars.
- ▶ 2007 program expanded to all light duty vehicles, heavy duty truck weight introduced.
- Product King County ended using is Xact Balance
- ▶ Test Start-up, shop equipment, staff training







Current Use of Lead-Free Wheel Weights

- ➤ Xact Balance is adhesive tape-on weight with free moving steel shot in a flexible thermoplastic shell
- ▶ Benefits- reduced weight inventory, eliminate tire rebalance costs for life of tire, eliminate lead disposal costs.
- ▶ Cost- Higher than clip-on lead, approx. 15-20 percent less than coated zinc.







Experience with Lead-Free Products

- ▶ Negatives- installation takes longer, weight positioning on wheel, brake and suspension component clearance, effects from excessive heat
- ▶ Product improvements —Introduced HD truck weight, soon to be announced low profile automotive weight.







Lessons Learned and Recommendations

- ▶ Research products prior to implementation, keep all options open, involve staff, get their buy-in,
- Don't judge a book by its cover alone, determine TOTAL cost and benefits
- Lead by example and don't let the fear of failure hold you back.
- ▶ Technician "I like the clip on weight, its easier, But the Xact Balance is the RIGHT way to go"







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