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Mercury in Automobiles

1. I've heard that autos have mercury switches; what are mercury switches and why are they there?

- Mercury switches are used in autos to operate convenience lights such as trunk and hood lights, to operate antilock braking system (ABS) systems, antitheft systems, and rarely, some airbag systems. Here's what a typical switch looks like.



The left object is a mercury switch. The center object is a ball bearing switch with no mercury. The dime is shown for the purpose of size comparison.

- Each mercury switch contains about 1.2 grams of liquid mercury
- These switches are usually easily located and can be removed within a matter of several minutes.
 - § A ball bearing switch can be identified by the sound of the ball bearing rattling when the switch is shaken.
- Depending on the automobile's make and model, the entire housing or sensor must often be removed to remove the mercury switch. Fortunately, almost all manufacturers stopped using mercury switches in new cars in 2003. However, many older model cars used these switches.
- The department strongly encourages auto recycling operators to remove all mercury switches from vehicles before the vehicles are crushed or sent to a metals recovery facility such as an electric arc furnace steel mill.
 - § Mercury left in auto scrap can be released to the environment in the steel mill smelting operation.

2. Are there other mercury-containing devices in cars I need to be aware of?

- Yes. High Intensity Discharge (HID) lamps contain a small amount of mercury and should also be removed from a vehicle before crushing or being sent to the mill. Navigation displays often have one or two cold cathode fluorescent lamps (CCFLs) to backlight the display. CCFLs contain a small amount of elemental mercury as vapor. These lamps or the entire display should also be removed before crushing or smelting.

3. If I remove the switches how can I dispose of them correctly?

- The department recommends these switches be managed as mercury-containing items using the Universal Waste Rules in Title 128, Chapter 25. See our Guidance Document “Universal Waste Regulations” on our web site.
- Have a mercury spill kit available.
- If not managed as Universal Waste, the mercury-containing items must be managed as hazardous waste.
- If managed as hazardous waste you will need to contract a waste service provider

RESOURCES:

- NDEQ Home Page <http://deq.ne.gov/>

Contacts:

- NDEQ Waste Management Section (402) 471-4210
- NDEQ Toll Free Number (877) 253-2603
- NDEQ Hazardous Waste Compliance Assistant (402) 471-8308
- Email questions to: NDEQ.moreinfo@nebraska.gov

NDEQ Publications:

- NDEQ Guidance Document – Waste Service Providers Directory
Guidance is available on the NDEQ Home Page under “Publications & Forms”.
- [Title 128 – Nebraska Hazardous Waste Regulations](#)
- [Title 132 – Integrated Solid Waste Management Regulations](#)
Titles are available on the NDEQ Home Page under “Laws/Regs & EQC”, “Rules & Regulations”