

How to Remove Mercury Switches from Vehicles

A Guide for Auto Dismantlers

State of California



California Environmental Protection Agency
Department of Toxic Substances Control
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This manual tells you how to find, remove, and recycle mercury light switches in the hoods and trunks of vehicles. It also tells you about the laws for handling mercury and mercury switches and what to do in case of a spill.

Note: This manual supersedes the June 2004 manual. If anything in this guide is inconsistent with California laws and regulations, you **MUST** follow the current laws and regulations.

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About Mercury

What is mercury?

Mercury is a metal with special properties. It is liquid at room temperature and conducts electricity. This makes it ideal for use in:

- light switches in vehicle hoods and trunks,
- anti-lock brakes,
- head lamps, and
- navigation systems.

Is mercury dangerous?

Yes. Mercury is poisonous. If it is not disposed of safely, it can be released to the environment and harm people and wildlife. Contact with mercury can cause:

- birth defects,
- nerve disorders,
- brain damage, or
- death.

How do people come into contact with mercury?

Mercury can be:

- inhaled,
- absorbed through the skin, or
- eaten (in contaminated food).

Mercury builds up in animal tissue. So, larger animals that eat other animals usually have more mercury in their tissues than smaller animals. Most people are exposed to mercury when they eat contaminated fish.

What is methyl mercury?

When mercury is in water, bacteria can turn some of it into methyl mercury. Methyl mercury is a very poisonous type of mercury often found in many fresh and saltwater fish. Some fish in California contain dangerous levels of methyl mercury.

The California Office of Environmental Health Hazard Assessment (OEHHA) has recommendations about how much fish contaminated with mercury you can eat safely. Women of childbearing age and children should be especially careful. Children and unborn babies are the most sensitive to methyl mercury.

To learn more, visit OEHHA's web site: www.oehha.ca.gov/fish/hg/index.html

How does mercury get into the environment?

Most of the mercury in the environment is put there by humans. It comes from:

- legacy wastes from abandoned mines,
- spills,
- emissions from coal-burning plants, or
- mercury products that are incinerated or sent to land fills.

Mercury can evaporate at room temperature, and even more so when heated. After it gets into the air it can fall back to the ground in rain and snow and get into lakes, rivers, and watersheds.

About 700,000 vehicles are shredded in California every year. That equals 1,500 to 3,000 pounds of mercury. Auto dismantlers and repair shops that remove and replace mercury switches must help keep this mercury from getting into the environment.

What is a mercury light switch?

A mercury light switch looks like a small capsule. Each switch contains about 1 drop of mercury. When you open the hood or trunk of your car, the mercury moves to the end of the capsule and touches an electrical contact and the light turns on. When you close the hood or trunk, the mercury moves away from the contact and the light turns off. 87% of all the mercury in cars made before 1999 can be found in the hood and trunk light switches.

Are there laws for handling mercury?

Yes. In 2001, California passed a law called SB 633 and in 2003 DTSC adopted the Mercury Waste Classification and Management regulations (MWCM). For more information on these laws and regulations, see:

- **SB 633 (Senate Bill 633):** Read "California's Mercury Reduction Act of 2001" at: www.dtsc.ca.gov/Schools/EA_FS_SB633.pdf.
- **MWCM:** Read California Code of Regulations, Title 22 (Cal. Code Regs, Tit. 22), section 66273.1 et seq.

Starting January 1, 2005, you **must** remove mercury switches from vehicles before they are crushed, baled, sheared, or shredded for recycling. You must handle vehicles and vehicle parts that contain mercury switches as hazardous or universal waste. You cannot send them to a regular landfill.

If the vehicle or vehicle parts are *not* going to be crushed, baled, sheared, or shredded, you can sell them for reuse without removing their mercury switches.

What is universal waste?

Universal waste is a type of hazardous waste. The rules for universal waste are simpler than the rules for other hazardous waste.

See pages 24-26 to learn about the requirements for hazardous and universal waste.

To learn more about universal waste, read "Managing Universal Waste in California" at: www.dtsc.ca.gov/PublicationsForms/HWM_FS_UWR.pdf

Why don't they stop putting mercury switches in vehicles?

By 2005, all new cars sold in California must be mercury-free. But, there are already millions of cars with mercury switches that will stay on the roads for years to come.

How to Remove and Recycle Mercury Switches

Starting January 1, 2005, you **must** remove the mercury switches from a vehicle before it is crushed, baled, sheared, or shredded. Removing light switches from vehicle hoods and trunks takes just a few seconds.

You can do it anytime before you decide to crush, bale, shear or shred the vehicle. Here are some suggestions on when to remove mercury switches from vehicles:

- when it gets to your facility,
- when you drain fluids, or
- when you remove the battery from the vehicle.

Which vehicle makes and models contain mercury switches?

See page 18. It lists car makes and models that contain mercury switches. The list does not cover all vehicles.

But generally speaking, if a car has a hood or trunk light, and you don't see a mechanical switch, it probably has a mercury switch.

Note: Old Volvos may use glass mercury switches. Be extra careful when you remove them.

How do I remove and recycle mercury switches?

Before you try to remove mercury switches make sure you are properly trained, have proper equipment, have personal protection and safety measures in place, and you have a storage container for the mercury switches.

Then, follow these steps for most cars:

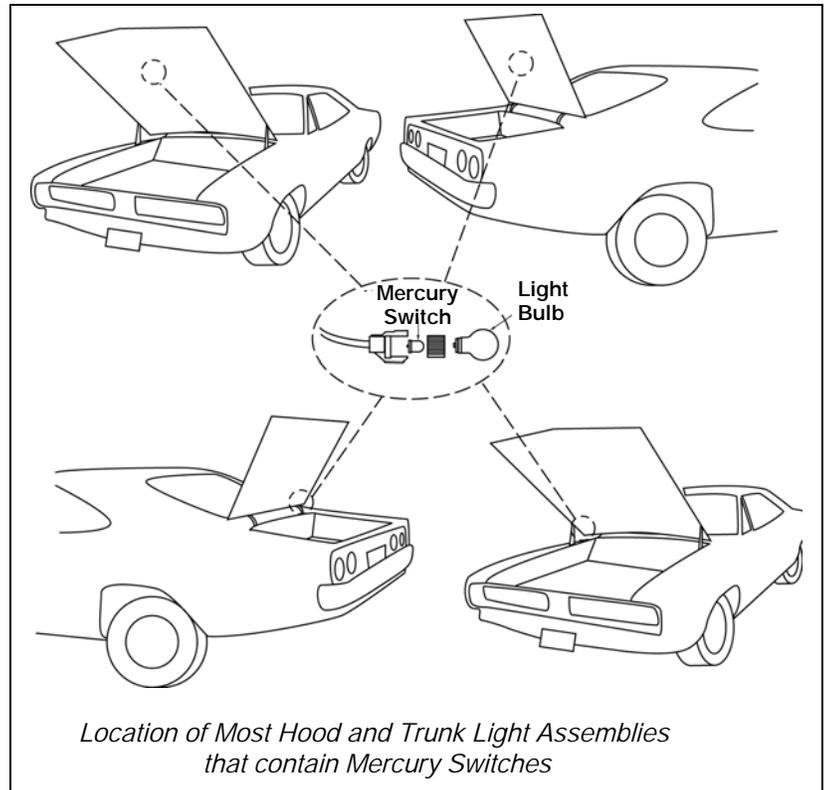
1. Remove the light assembly.
2. Take apart the light assembly.
3. Store the mercury switches in a container that is labeled and secured.
4. Recycle the mercury switches.

The next 7 pages have pictures that show you how to remove switches in specific vehicle models. If you cannot find the model you are looking for, use the pictures as a general guide.

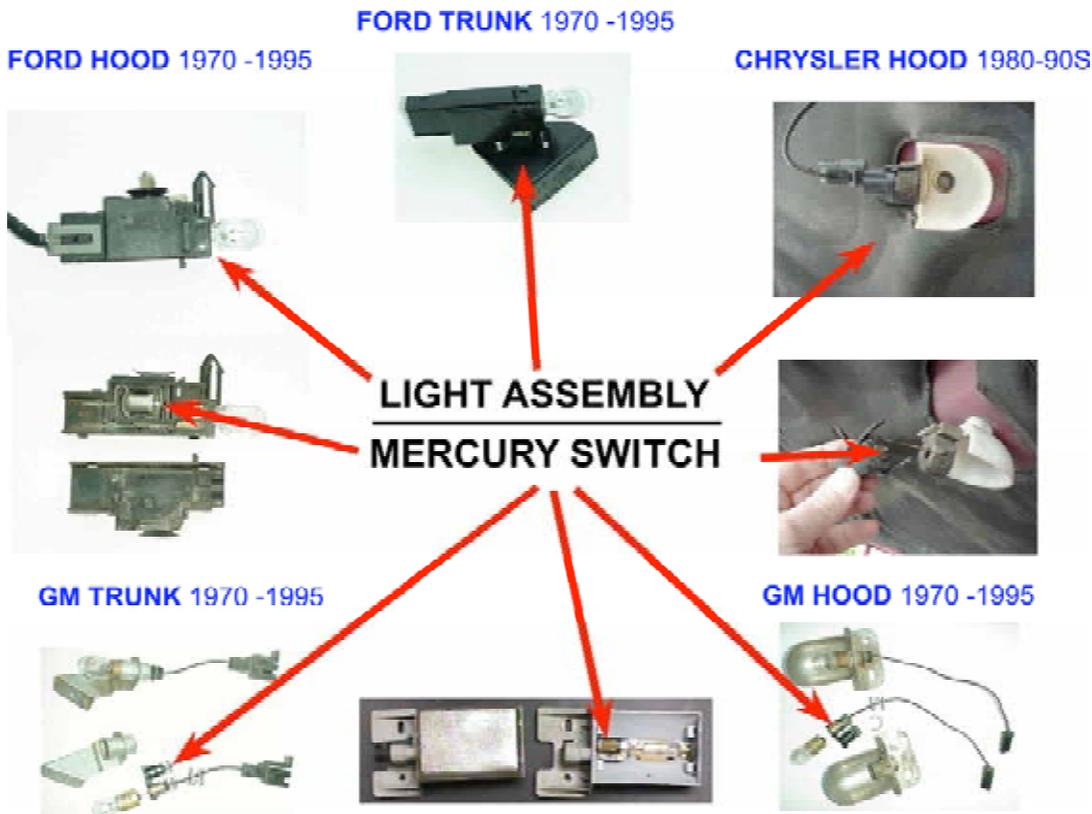
Important! If a car has a hood or trunk light, and you don't see a mechanical switch, it probably has a mercury switch. If you are not sure, assume the light assembly contains a mercury switch.

Step 1 – Remove the light assembly

- Find the small light assembly in the trunk or hood. The graphic below shows what most light assemblies look like.
- Disconnect the power supply attached to the base of the light assembly.
- Remove any fasteners.
- Separate the entire light assembly from the vehicle.
- Put the light assembly in a large, heavy plastic bin with a tight-fitting lid. Make sure the bin is properly labeled.
- Repeat for all light hood and trunk light assemblies in the vehicle.



Note: Some vehicles have mercury switches that are inside housings that are not part of the light assembly. The housing is usually attached to the trunk or hood lid hinge.



Step 2 – Take apart the light assembly

- Find the snap, latch, or clip that holds the light assembly together. Use a small screwdriver or wire cutters to remove or open it.
- Look for the small, bullet-shaped mercury switch. It looks like this:
- Use a small screwdriver to remove the mercury switch.
- Put the mercury switch in a small plastic container you can seal. Label the container using any of the following labels:

“Universal Waste – Mercury Switches,”
“Waste Mercury Switches,” or
“Used Mercury Switches.”

- Put only the switch in the container.
- You can dispose of the rest of the light assembly as non-hazardous waste **if** it is not contaminated with mercury.



Mercury Switch

Source: Pollution Probe, 2000

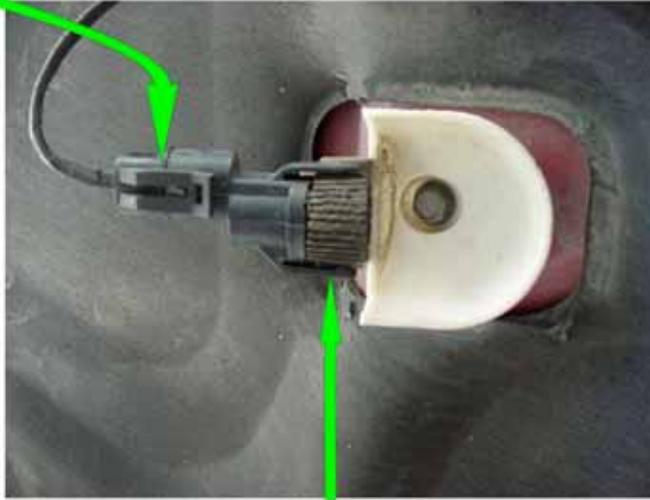
Important! You must also keep paper or electronic records for at least 3 years to keep track of the following information:

- The total number of vehicles crushed, baled, sheared, or shredded;
- The total number of vehicles destined for crushing, baling, shearing, or shredding that contained 1 or more mercury switches;
- The number of mercury switches removed from those vehicles; and
- The number of vehicles from which you were not able to remove mercury switches because of pre-existing damage to the vehicle.

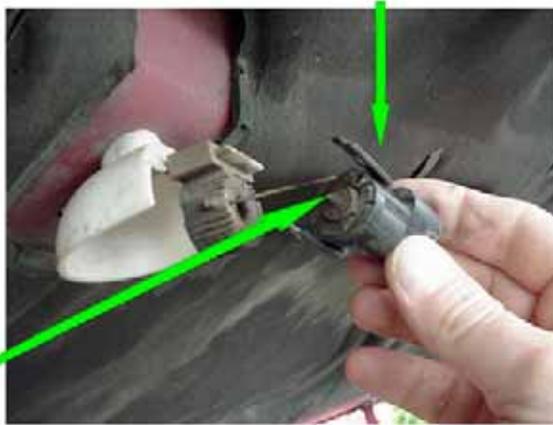
See page 23 for a sample form for keeping track of mercury switches.

1985-1995 Chrysler Remove a Mercury Switch in the Hood

- ① Use a screwdriver to detach the clip connecting the electrical wire to the light assembly.



- ② Use a screwdriver to detach the wing clips that are holding the light assembly together.



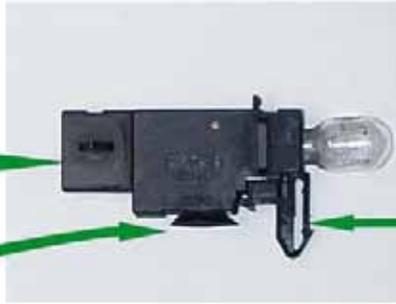
- ③ Use your hand to remove the mercury switch from the bottom portion of the assembly.
- ④ Put the mercury switch in a heavy plastic container with a tight-fitting lid. Label the container properly.

Note: Most Chrysler vehicles have molded light assemblies. These instructions are for Jeeps, Chrysler/Dodge trucks, and some SUVs made between 1985 and 1995.

Source: New York Department of Environmental Conservation, 2000. EPA, Region 5, 2003

Most Ford Vehicles Remove a Mercury Switch

① Use a screwdriver to detach the clip connecting the electrical wire to the light assembly.



② Remove the bulb.

④ Slide the plastic brace from the assembly.

③ Use a screwdriver to compress the arrow shaped leg near the bulb. Pull it out of the mounting hole.



⑤ Use a screwdriver to pry open the rear latch of the assembly.

⑥ Use a screwdriver to pry open the front latch of the assembly.

⑦ Use a screwdriver to remove the mercury switch.



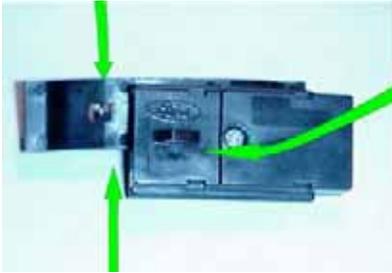
⑧ Put the mercury switch in a heavy plastic container with a tight fitting lid. Label the container properly.

Source: New York Department of Environmental Conservation, 2000. EPA, Region 5, 2003

1998 Ford

Remove a Mercury Switch in the Trunk

- ① Find the light assembly. It is on the driver's side, on the trunk lid arm. Pry the fastener off the lid arm with a screwdriver.

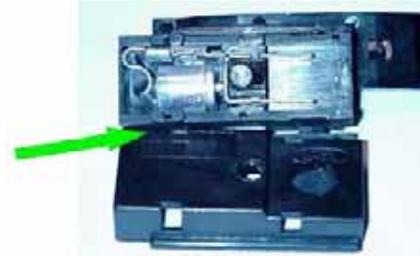


- ② To remove the power source, lift the wiring connector over the tab. Pull the wiring harness off the light switch.

- ③ Pull the bulb out of its socket.



- ④ Use a drill with a 3/8" bit to remove the head of the pop-rivet that holds the two halves together.



- ⑤ Use a screwdriver to pry the plastic casing apart.



- ⑥ Remove the mercury switch.

- ⑦ Put the mercury switch in a heavy plastic container with a tight fitting lid. Label the container properly.

Source: New York Department of Environmental Conservation, 2000. EPA, Region 5, 2003

1980-1998 GMs Remove a Mercury Switch in Rectangular Hood Lighting Assemblies

① Use a screwdriver to detach the clip connecting the electrical wire to the light assembly.

② Use your thumb and forefinger to squeeze the center of the plastic dome and remove it.

③ Use a small screwdriver to pry up the mercury switch holder.



④ Use a screwdriver to push the mercury switch out of the holder.

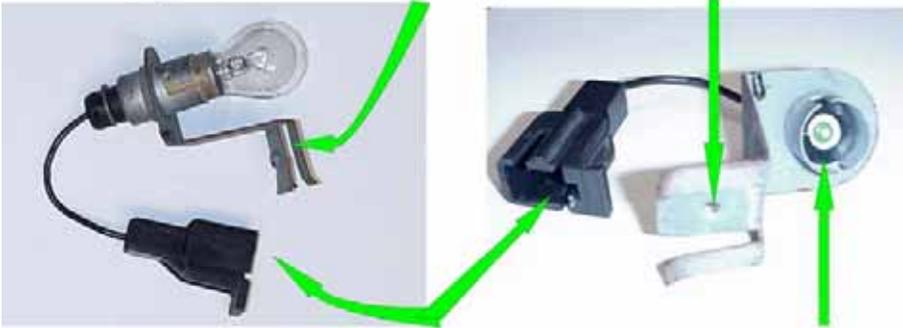
⑤ Put the mercury switch in a heavy plastic container with a tight fitting lid. Label the container properly.

Source: New York Department of Environmental Conservation, 2000. EPA, Region 5, 2003

1970-1998 GMs

Remove a Mercury Switch in the Trunk

- ① Find the light assembly. It is in a pocket next to the trunk latch. Use a 7mm hex driver to remove the fastener. Pull the assembly out of the pocket.



- ② Pull the light assembly out of its mating connector with your hand.

- ③ Press down and twist the bulb counterclockwise to remove it.

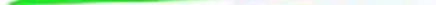
- ④ Use needle nose pliers to pull the clip off of the mercury switch housing.



- ⑤ Push the mercury switch housing out of the assembly from the wired end.



- ⑥ Slide the spring off the switch housing.



- ⑦ Use a screwdriver to pry the switch housing apart along the center line.



- ⑧ Put the mercury switch in a heavy plastic container with a tight fitting lid. Label the container properly.

Source: New York Department of Environmental Conservation, 2000. EPA, Region 5, 2003

Step 3 – How to store mercury switches

- Place removed switches in a heavy plastic container. It must be in good condition and not leak. Use a container with a tight fitting lid.
- Do not use tin or aluminum containers. Mercury can react with the metal and leak through the seams.
- Use packing material, like bubble wrap, to fill-in the empty space inside the container to keep the mercury switches from breaking or leaking.
- Label the container. Write "Universal Waste – Mercury Switches," "Waste Mercury Switches," or "Used Mercury Switches."
- Keep the container in a storage area where it will not be disturbed.
- **Do not dispose of removed mercury switches with non-hazardous waste.**

How long can I keep mercury switches?

If you handle them as universal waste, you can keep mercury switches for up to one year.

If you handle the switches as hazardous waste, you can keep them from 90 to 270 days. It depends on how much hazardous waste you produce every month.

Read Step 4 and pages 24-26 for more information.

Step 4 – Recycle Mercury Switches

You can handle mercury switches as **hazardous waste** or **universal waste**. The rules are different for each type of waste. See pages 24-26 to learn about the requirements for hazardous and universal waste.

Who can ship the mercury switches?

You can ship them yourself as long as you handle them as universal waste, and the container you are using to transport the switches is properly labeled and contains less than a pound of mercury.

You can also use a commercial ground carrier that accepts universal waste. Make sure you contact the carriers first to find out what their policies are for transporting universal waste.

Or hire a hazardous waste hauler pick up the mercury switches from your facility, and ship them to a destination facility for you. You can also check to see if your current hazardous waste hauler you may already be using will accept mercury switches.

See page 27 for a list of companies that handle and transport mercury switches from California.

Do I need a hazardous waste manifest to transport mercury switches?

If you handle the switches as universal waste you do not need a manifest unless you ship more than 1 pound of mercury. There is about 1 drop of mercury inside a mercury switch. It takes about 450 mercury switches to get a pound of mercury.

A universal waste transporter can transport them with a bill of lading.

Do I have to follow federal regulations for transporting hazardous materials?

It depends on how you ship the mercury and how much mercury you ship.

- If you ship mercury switches by **air or water**, you must follow the U.S. Department of Transportation (DOT) regulations for transporting hazardous materials.
- If you use **ground** shipment, you only have to follow the DOT regulations for transporting hazardous materials if the package of mercury switches that you are shipping contains more than 1 pound of mercury.

What if the mercury switches are transported to another state?

Make sure the transporter follows the transportation regulations of the state(s) through which he travels.

Where do I ship mercury switches to?

They must go to an authorized "destination facility." This is where the mercury is removed from the switches and recycled. You can ship the switches to the recycler directly or to a universal waste handler who later sends them to a recycler.

See page 27 for a list of companies that handle and transport mercury switches from California. You can also check to see if the hazardous waste hauler you may already be using will accept mercury switches.

See page 28 for a list of companies that recover and recycle mercury switches from California.

Do I have to keep records of the mercury switches I ship?

Yes. If you handle the switches as universal waste, keep a record (like a log, invoice, bill of lading, or other shipping document) for at least **3 years** after the mercury switches leave your shop.

Keep track of:

- The amount mercury switches you shipped,
- The date they were shipped, and
- The name and address of where they were shipped.

See page 29 for a sample of a shipping record.

Do I have to keep records of the mercury switches I receive?

If you receive mercury switches from other universal waste handlers, then you must also keep the following records for at least **3 years** from the day you received the shipment:

Keep track of:

- The name and address of the universal waste handler that sent you the mercury switches,
- The amount of mercury switches that was shipped, and
- The date you received the shipment.

Mercury Safety and What to Do After a Spill

Mercury can be dangerous. So follow safety procedures at all times!

Have a written safety plan

Write a plan of what to do if there is a mercury spill. The plan should talk about:

- Personal protective equipment,
- How to clean up a spill,
- How to manage waste,
- First aid,
- When to get emergency help (like the fire department's hazardous materials team), and
- How to dispose of mercury and clean-up residues.

Check with the fire department when you write your plan to make sure you have all the equipment you need to handle a spill, like spill clean-up kits and containers.

NOTE: When you handle mercury, have protective equipment and a mercury spill kit nearby. Make sure all employees know how to use them and what to do if there's a spill.

What NOT to do after a mercury spill

- DO NOT sweep up mercury with a broom.
- DO NOT vacuum a mercury spill.
- DO NOT wash contaminated clothes in a washing machine. Put the clothes in double garbage bags. Tie each bag separately. Dispose of the bag as hazardous waste.

What do I do if someone is exposed to mercury?

Mercury on the skin — Wash the skin with soap and water. Remove all clothes that touched the mercury. Seal the clothes in a plastic bag. Dispose of the bag as hazardous waste. See a doctor right away!

Mercury in the eye — Flush eyes with water for at least 15 minutes. See a doctor right away!

Inhaled mercury — Let the person breathe fresh air. See a doctor right away!

Swallowed mercury — Get medical help right away!

To learn more, contact a poison control center or talk to your doctor.

Where can I get more information?

To learn more about mercury and the laws for handling mercury switches, call the regional Public and Business Liaisons at: **(800) 72 TOXIC** (1-800-728-6942)

Or, go to: www.dtsc.ca.gov

Or, contact the DTSC office nearest you.

DTSC Headquarters

1001 I Street
Sacramento, CA 95814
(916) 323-2678

Sacramento Office

8800 Cal Center Drive
Sacramento, CA 95826
(916) 255-3617

Berkeley Office

700 Heinz Ave., 2nd Floor
Berkeley, CA 94710
(510) 540-3739

Clovis Office

1515 Tollhouse Road
Clovis, CA 93611-0522
(559) 297-3901

Glendale Office

1011 North Grandview Ave.
Glendale, CA 91201
(818) 551-2830

Cypress Office

5796 Corporate Avenue
Cypress, CA 90630
(714) 484-5400

For general information about mercury and mercury switches:

**U.S. EPA - RCRA,
Superfund & EPCRA Call Center**
800-424-9346, or
www.epacallcenter@bah.com

U.S. EPA
www.epa.gov/mercury/

U.S. EPA-Region 5
[www.epa.gov/region5/air/mercury/
mercury.html](http://www.epa.gov/region5/air/mercury/mercury.html)

Disclaimer:

This guide does not replace or supersede statutes and regulations. Always review the most current statutes and regulations. The Department of Toxic Substances Control does not endorse or recommend any product or brands mentioned in this guide.

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Vehicles that have Mercury Switches in the Hood or Trunk

Parent Company	Brand	Model/Line	Years*
BMW	BMW	7-Series	Before 1992; 1995-2002
	Rolls Royce	Rolls Royce	Before Mid-1960s
Daimler Chrysler	Chrysler	Ades	1975-1994
		Concorde	1993-1996
		Cordoba	1975-1994
		E Class	1983
		K Car	1987
		Laser	1975-1994
		LeBaron	1975-1994
		New Yorker	1975-1994
		Pacifica	1998; 2003
		Dodge	2500 4x4
2500 Pick up	1995		
3500 Van	1998		
Aries	1975-1994		
Aspen	1976		
Caravan	1987-1989, 2000		
Caravio	1992		
Dakota	1993-1994, 1998		
Daytona	1987, 1988, 1990		
Durango	1998, 2000		
Duster	1990		
Dynasty	1982, 1989-1992		
Intrepid	1994, 1996		
Lancer	1986		
Landan	1989		
Laser	1975-1994		
Neon	1998, 2000		
Ram Pick up	1997-1998, 2001		
Ram Pick up 1500	1997		
Roadstar	1988		
Shadow	1974-1994		
Spirit	1990-1991, 1994, 1996		
Stratus	1996		
Voyager	1986-1987, 1991		
Eagle	Medallion	1989	
	Premier	1988-1989	
	Vision	1994	
Jeep	Cherokee	1998-1999	
	Cherokee Sport	1996	
	Grand Cherokee	1993, 1995-1999	
	Grand Cherokee Wagoneer	1989	
	Wrangler	1992, 1994, 1999	
Plymouth	Acclaim	1986, 1990-1992, 1994	
	Reliant	1975-1994	
	Sundance	1975-1994	

Vehicles that have Mercury Switches in the Hood or Trunk *(cont'd)*

Parent Company	Brand	Model/Line	Years*		
Ford	Ford	Aerostar	1989		
		Bronco	1986		
		Bronco II	1974-1994; 1993-1997		
		Crown Victoria	1974-1994, 1997, 2000-2001		
		E-350	1993; 2000		
		Escort	1974-1995, 1998		
		Escort GT	1991		
		Escort LX	1991, 1992, 1995, 1997		
		Escort Pony	1991		
		Escort S/W	1995		
		Escort SE	1999		
		Escort Wagon	1997		
		Excursion	2000-2001		
		Expedition	2000-2001		
		Explorer	1991-2002		
		F-150	1988, 1990-1991 1993, 1996-1998, 2000-2001		
		F-250	1988, 1990-1993, 1995-2001		
		F-350	1988, 1996, 1999-2001		
		F-150 Supercrew	2000		
		LTD	1974-1994		
		Mustang	1986, 1989, 1992, 1995, 1996		
		Probe	1989, 1993, 1994		
		Ranger	1974-1997, 1998; 1995-2001		
		Ranger XLT	1995, 1997		
		Scorpio	1988; 1985-1993		
		Superduty	1992		
		Taurus	1974-1999		
		Tempo	1974-1994, 1996		
		Tempo GL	1988, 1993		
		Thunderbird	1974-1994		
		Van	1988, 1993, 1995		
		Windstar	1996; 2000		
		Lincoln	Lincoln	Blackwood	2001
				Continental	1988-1991, 1994-1995; 2000-2002
				Mark 7	1988
				Navigator	2000-2002
				Town Car	1994; 2002
Mazda	Mazda	Pick up	1996		
		RX-7 Turbo	1990		
Mercury	Mercury	Cougar	1974-1990, 1995		
		Grand Marquis	1985-1986, 1993, 1997, 2001		
		Mountaineer	1996-2001		
		Sable	1987-1995, 1998-1999		
		Sable LS	1994		
		Topaz	1987, 1990, 1992		
		Tracer	1988, 1993		

Vehicles that have Mercury Switches in the Hood or Trunk *(cont'd)*

Parent Company	Brand	Model/Line	Years*
Ford (continued)	Mercury	Villager XR4TI	1993; 2000 1987
	Volvo	240/260 740/760 744/764	1975-1991 1982-1990 1982-1991
General Motors	Buick	Celebrity Century Electra Fifth Avenue Firenza LeSabre LeSabre Custom Park Avenue Regal Regal Limited Riveria Roadmaster Skyhawk Skylark Ultra	1977-1990 1977-1992, 1994, 1996, 1998, 2002 1981, 1985, 1990 1985 1977-1990 1974-1994, 1996-2000 1989 1974-1991, 1998-1999, 2002 1974-1994, 1996 1991 1986-1990, 1993 1992 1977-1990 1977-1990, 1993, 1994, 1996, 1998 1998
	Cadillac	Brougham Cimarron DeVille Eldorado Escalade Seville SLS/STS Standard	1987, 1989 1979, 1998-2003 1979-1991, 1996, 2000-2002; 1998-2003 1982, 1991, 1992, 2001 2000; 1998-2003 1998-2003 1986, 1996
	Chevrolet	98 250 1500 2500 1500 4x4 3/4 Ton Pick up 3500 4x4 Avalanche Beretta Blazer Blazer 1500 Blazer S-10 C3500 Pick up Camero Caprice Caprice Classic Cavalier	1983, 1985, 1988, 1994 1998 1989, 1994 1997 1996, 1998 1994 1997 2001 1981-1990 1987, 1989, 1993-1994, 1997, 1999-2002 1991 1989-1992, 1994, 1996-1998, 2000, 2002 1989, 1991 1984, 1989 1981-1991 1984, 1988 1988-1991, 1993, 1995-1996, 2000- 2002

Vehicles that have Mercury Switches in the Hood or Trunk *(cont'd)*

Parent Company	Brand	Model/Line	Years*
General Motors (continued)	Chevrolet <i>(cont'd)</i>	Celebrity	1986-1987, 1996-1997
		Cheyenne	1996
		Corsica	1988-1993
		Express Van	2000-2002
Impala		2001	
K1500		1996, 1998	
K2500 Pick up		1991, 1994	
K3500 Pick up		1993	
Lumina		1981-1995, 1998	
Lumina Euro		1990	
Lumina Z-34		1992	
Malibu		1997	
Monte Carlo		2000	
Passport		1989	
Pick up		1988, 1989, 1991-1996, 1998, 2000-2002	
S-10 Pickup	1998, 2000		
Silverado	1999		
Suburban	1990-1991, 1994-1995, 1997-2002		
Tahoe	1995-1998		
GMC	4x4	1997-1998	
	Denali	2000	
	Envoy	1998-2001	
	G-20 Van	1995	
	Jimmy	1991, 1993, 1994, 1996, 1998-2001	
	Luxury G-Van	2002	
	Pick up 1500	1993	
	Savanna Van	2000-2002	
	Sonoma	1994	
	Yukon	1998	
Pontiac	6000	1988	
	6000 LE	1990	
	Bonneville	1984-1991, 1994, 1995, 2002	
	Firebird	1989, 1994-1995, 2002	
	Grand Am	1984-1999	
	Grand Prix	1985-1986, 1988-1996	
	Parisienne	1982	
	Sunbird	1984-1990	
	Sunfire	1997-2002	
	Trans Sport	1993, 1996	
	Vibe	2002	
Oldsmobile	88	1990-1991, 1993, 1997	
	98	1983, 1985, 1988, 1990, 1992, 1994	
	98 Regency	1985	

Vehicles that have Mercury Switches in the Hood or Trunk *(cont'd)*

Parent Company	Brand	Model/Line	Years*
General Motors <i>(continued)</i>	Oldsmobile <i>(cont'd)</i>	Achieva	1992-1993
		Aurora	2001
		Bravada	2000-2001
		Calais	1977-1991
		Ciera	1977-1991, 1993-1995
		Cutlass	1977, 1983, 1988, 1990-1992, 1996
		Cutlass Cruiser	1986, 1988, 1992
		Cutlass Supreme	1977-1996
		Delta 88	1977-1995
		Firenza	1984
		Intrigue	1999
		Omega	1980
		Royale	1982, 1986, 1989
		Regency	1977-1990
		Toronado	1977-1990
		Toronado Trofeo	1987-1988
		Wagon	1991
	Saab	9000/900	Pre-1992
Other	Nissan	SER	1993
	Porche	944	1985-1991
	Toyota	Celica GT	1990
		SR5	1986
Volkswagon	Weekender Van	Not specified	

**Note: There may be other models that contain mercury switches.*

Requirements for Handling, Transporting and Recycling Universal Waste¹

Requirements	Large Quantity Handler ²	Small Quantity Handler ²	Conditionally Exempt Small Quantity Generator ²	Transporter (Transfer Facility)
Maximum Generation Rate	None	None	Less than 220 lb of hazardous waste and less than 2.2 lb of "acutely hazardous waste" per month	None
Required Permits, Approvals and Notifications	EPA identification number	None	None	Must follow Hazardous Materials Regulations if you transport a package that contains more than 1 pound of mercury.
Labeling & Marking	Mark as universal waste. Write the date you received or removed it.	Mark as universal waste. Write the date you received or removed it.	None	Make sure it is correctly marked
On-site Storage Limit	No limit	Less than 11, 000 lb	Less than 2,200 lb of hazardous waste or less than 2.2 lb of "acutely hazardous waste"	None
Storage Time Limit	1 year. Unless you can show that you need more time to recover, treat or dispose of it properly	1 year. Unless you can show that you need more time to recover, treat or dispose of it properly.	None	10 days if transfer facility is in an industrial zone. 6 days if it is not in an industrial zone.
Training	Teach employees responsibilities: <ul style="list-style-type: none"> • What to do after a spill and • Emergency procedures 	Teach employees responsibilities: <ul style="list-style-type: none"> • What to do after a spill and • Emergency procedures 	None	None
Records	Keep basic records for 3 years: <ul style="list-style-type: none"> • log, • invoice, • bill of lading, or • other shipping document. 	Keep basic records for 3 years: <ul style="list-style-type: none"> • log, • invoice, • bill of lading, or • other shipping document 	None	Keep records of all waste received for three years
Transport	Transport yourself or use common carrier. Make sure waste is sent to appropriate handler or facility. Must comply with Hazardous Materials Regulations if you transport more than 1 pound of mercury in 1 package.			
Treatment	Not allowed except for removing mercury switches and cleaning up a release.			
Reporting	Notify the EPA that you are managing universal waste unless you have an EPA ID number	None	None	None

¹ Universal waste requirements apply only for handling and transporting hazardous waste.

² Large quantity, small quantity and conditionally exempt universal waste handlers/generators can be consolidators and collectors. A person who collects mercury switches from other people can also be a universal waste handler.

For more complete information, see: www.epa.gov/epaoswer/hazwaste/id/univwast/tecreq.htm

Requirements for Handling, Transporting and Recycling Hazardous Waste

Requirements	Large Quantity Generator	Small Quantity Generator	Conditionally Exempt Small Quantity Generator	Consolidator/Collector	Transporter	Destination Facility
Quantity Handled	<ul style="list-style-type: none"> Generates 2,200 lb or more of hazardous waste per month, or Generates 2.2 lb or more of acutely hazardous waste per month, or Has 13,200 lb or more of hazardous waste on site at any time 	<ul style="list-style-type: none"> Generates less than 2,200 lb of hazardous waste per month, or Generates less than 2.2 lb of acutely hazardous waste per month, or Never has 13,200 lb of hazardous waste on site at any time 	Generates no more than 220 lb of RCRA hazardous waste per month	No limit	No limit	No limit
Required Permits, Approvals, & Notifications	EPA identification number	EPA identification number	EPA identification number	EPA identification number; Full or Standardized permit	EPA identification number and DTSC registration	EPA identification number and Full or Standardized permit
Labeling & Marking	Write on the container: <ul style="list-style-type: none"> "Hazardous Waste," Date you first put waste in the container, Physical state of waste, Hazards, Your name and address 	Write on the container: <ul style="list-style-type: none"> "Hazardous Waste," Date you first put waste in the container, Physical state of waste, Hazards, Your name and address 	Label, mark, & pack as hazardous waste. Follow DOT regulations	Make sure waste is properly labeled	Make sure waste is properly labeled	Make sure waste is properly labeled
On-site Storage Limit	No limit	No more than 13,200 lb	Up to 2,200 lbs. of hazardous waste. OR, up to 2.2 lbs of acutely hazardous waste. Or 220 lb of spill residue from acutely hazardous waste	No limit	No limit	No limit
Storage Time Limit	90 days	180 to 270 days	None until you have 220 lb of hazardous waste or 2.2 lb of acutely hazardous waste. Then, for 180–270 days	10 days	6 days in transit. 10 days if transfer is in an industrial zone	90 days before treatment
Training	Formal training. Additional formal training every year. What to do after a spill and emergency procedures.	Informal training. What to do after a spill and emergency procedures	Informal training. What to do after a spill and emergency procedures	Initial and annual training. What to do after a spill and emergency procedures	Initial and annual training. What to do after a spill and emergency procedures	Initial and annual training. What to do after a spill and emergency procedures

Requirements for Handling, Transporting and Recycling Hazardous Waste (cont'd)

Waste Management Requirements	Large Quantity Generator	Small Quantity Generator	Conditionally Exempt Small Quantity Generator	Consolidator/Collector	Transporter	Destination Facility
Manifest Records	Manifest required. Keep records for three years	Manifest required. Keep records for three years	No manifest required if you transport up to 5 gallons or 50 lb to a household hazardous waste collection facility or a TSDf.	Manifest required. Keep records for three years	Manifest required UNLESS you are transporting up to 5 gallons or 50 lbs. of hazardous waste to a TSDf, OR you are a "conditionally exempt small quantity generator" and transport up to 5 gallons or 50 lbs of your waste to a household hazardous waste collection facility.	Manifest required. Keep records for three years
Requirements for Transporting	You must use a registered hazardous waste hauler and ship with a hazardous waste manifest.	You must use a registered hazardous waste hauler and ship with a hazardous waste manifest.	You must use a registered hazardous waste hauler and ship with a hazardous waste manifest, except if you are personally transporting up to 5 gallons or 50 lbs. of hazardous waste to a household hazardous waste collection facility.	You must use a registered hazardous waste hauler and ship with a hazardous waste manifest	You must be a registered hazardous waste hauler and a ship with a hazardous waste manifest	You must use a hazardous waste hauler and a ship with a hazardous waste manifest
Treatment	Need authorization	Need authorization	Need authorization	Not allowed	Not allowed	Need authorization and in California, a hazardous waste facility permit.
Contingency Plan & Emergency Procedures	Must have a written plan	Must have an emergency coordinator to: <ul style="list-style-type: none"> Respond to emergencies Clean spills Call fire dept. or put out fire Must post emergency contact information and make sure all employees are trained to handle spills.	None	None	Must respond to releases	Must have a plan
Exception Reports	Send DTSC an "exception report" if you do not get a copy of the hazardous waste manifest within 35 days of date transported.	Send DTSC an "exception report" if you do not get a copy of the hazardous waste manifest within 35 days of date transported.	Send DTSC an "exception report" if you do not get a copy of the hazardous waste manifest within 35 days of date transported.	None	None	None

For more complete information, see: www.epa.gov/epaoswer/hazwaste/id/univwast/tecreq.htm

Companies that Handle and Transport Mercury Switches in California

Company	Address	Contact
AERC-MTI (Advanced Environmental Recycling Co. – Mercury Technologies Int'l)	30677 Huntwood Ave. Hayward, CA 94555	Tel: 800-628-3675 Fax: 510-429-1498 www.aercrecycling.com
Chemical Waste Management	35251 Old Skyline Road Kettlemen City, CA 93239	Tel: 550-386-9711
Clean Harbors Los Angeles, LLC Los Angeles Facility	5756 Alba Street Los Angeles, CA 90058	Tel: 323-277-2500 Fax: 323-277-2523 www.cleanharbors.com
Clean Harbors of San Jose, LLC San Jose Facility	1040 Commercial St., Suite 109 San Jose, CA 95112	Tel: 408-451-5000 Fax: 408-453-6045 www.cleanharbors.com
Kinsbursky Brothers, Inc.	1314 North Anaheim Blvd. Anaheim, CA 92801	Tel: 714-738-8516 Fax: 714-441-0857 www.kinsbursky.com
Kinsbursky Environmental Management	101 North Glover Ave., Suite B Chula Vista, CA 91909	Tel: 619-409-9292 www.kinsbursky.com
Lighting Resources, Inc. Ontario Branch	805 East Francis Street Ontario, CA 91741	Tel: 888-923-7252 Fax: 909-923-7510 www.lightingresourcesinc.com
North State Environmental – Southern California	2776 South Lilac Ave. Bloomington, CA 92316	Tel: 909-875-9288 Fax: 909-875-9813 www.north-state.com
North State Environmental	5519 Clairemont Mesa Blvd. San Diego, CA 92117	Tel: 858-273-8669 Fax: 858-273-8678 www.north-state.com
North State Environmental – Northern California	90 South Spruce Ave., Ste. C3 South San Francisco, CA 94080	Tel: 650-588-2838 Fax: 650-588-1950 www.north-state.com
Onyx Environmental Services, Inc.	4227 Technology Drive Fremont, CA 94538	Tel: 510-651-2964 Fax: 510-656-4926 www.onyxes.com
Onyx Environmental Services, Inc.	1704 West First Street Azusa, CA 91702	Tel: 626-334-5117 Fax: 626-334-4563 www.onyxes.com
Onyx Environmental Services, Inc.	5202 Oceanus Drive Huntington Beach, CA 92649	Tel: 714-379-6000 Fax: 714-379-6010 www.onyxes.com
Onyx Environmental Services, Inc.	1125 Hendey Street Richmond, CA 94801	Tel: 510-233-8001 Fax: 510-235-9427 www.onyxes.com
Recyclights, Inc.	2439 Industrial Parkway West Hayward, CA 94545	Tel: 800-884-8982 Fax: 510-782-8984
Safety-Kleen Systems, Inc. Cluster II, Building 3	5400 Legacy Drive Plano, TX 75024	Tel: 800-669-5740 Fax: 972-265-2000 www.safety-kleen.com
Thomas Gray & Associates, Inc.	1205 West Barkley Ave. Orange, CA 92868	Tel: 714-997-8090 Fax: 714-997-3561 www.tgainc.com

Note: Most hazardous waste transporters registered with DTSC handle and transport mercury switches.

Disclaimer: This list includes commercial firms found to offer mercury-containing switch handling services. DTSC does not endorse or recommend any specific vendor. In addition, this list is for informational purposes only and is not meant to be a complete or up-to-date list of companies that provide mercury-handling and recycling services in California. Contact companies directly to obtain information regarding services provided, company-specific packaging and labeling requirements, and costs.

Waste Destination Facilities that Accept Mercury Switches from California ¹

Company	Address	Contact
AERC-MTI (Advanced Environmental Recycling Co. – Mercury Technologies Int'l)	2591 Mitchell Avenue Allentown, PA 18103	Tel: 800-554-2372 Fax: 610-791-7696 www.aercrecycling.com
Bethlehem Apparatus Company, Inc.	890 Front Street, PO Box Y Hellerton, PA 18055	Tel: 610-838-7034 Fax: 610-838-6333 www.bethlehemapparatus.com
Lighting Resources, Inc.	498 Park Drive Greenwood, IN 46143	Tel: 317-888-3889 Fax: 317-888-3890 www.lightingresourcesinc.com
Mercury Waste Solutions, Inc. National Processing Center	21211 Durand Avenue Union Grove, WI 53182-9711	Tel: 800-741-3343 Fax: 262-878-2699 www.mercurywastesolutions.com
NSSI Sources and Services, Inc.	P.O. Box 34042 Houston, TX 77234	Tel: 713-641-0391 Fax: 713-641-6153 www.nssihouston.com
Onyx Environmental Services, Inc. (dba: Onyx Special Services, Inc.)	5736 West Jefferson Street Phoenix, AZ 85043	Tel: 800-368-9095 www.superiorserv.com

Disclaimer: This list includes commercial firms that were found to offer mercury-containing switch recovery services. The Department of Toxic Substances Control does not endorse or recommend a specific vendor. In addition, this list is for informational purposes only and is not meant to be a complete or up-to-date list of vendors that provide mercury recovery services in California. Contact companies directly to obtain information regarding services provided, company-specific packaging and labeling requirements, and costs.

¹ These facilities have a mercury retort to recover mercury from switches.

Where to Buy Mercury Spill Kits

Company	Address	Contact
Abatix Environmental Supply	3011 East Broadway, Suite #300 Phoenix, AZ 85040	Tel: (602) 323-1941 Toll-free: (800) 889-5186 www.abatix.com
Advanced Environmental Solutions	204 First Avenue South, Third Floor Seattle, Washington 98104	Tel: 206-652-2323 Toll-free: 800-275-3549 www.advenvironmental.com
Bel-Art Products	6 Industrial Rd. Peguannock, NJ 07440-1992	Tel: (973) 694-0500 www.bel-art.com
Bethlehem Apparatus Co. Inc. Resource Recovery & Recycling Division	890 Front St., P.O. Box Y Hellertown, PA 18055	Tel: (610) 838-7034 www.mercuryrecycling.com
Fisher Scientific	2000 Park Lane Pittsburgh, PA 15275	Toll-free: (800) 772-6733 https://www1.fishersci.com
Flinn Scientific, Inc.	P.O. Box 219 Batavia, IL 60510	Toll-free: (800) 452-1261 www.flinnsci.com
Lab Safety Supply	P.O. Box 1368 Janesville, WI 53547-1368	Toll-free: (800) 356-0783 www.labsafety.com/home.htm
Lamp Recyclers of Louisiana, Inc.	46257 Morris Road Hammond, LA 70404-2962	Tel: (985) 345-4147 www.i-55.com/lamprecycler
Mallinckrodt Baker, Inc.	222 Red School Lane Phillipsburg, NJ 08865	Toll-free: (800) 582-2537 www.mallbaker.com
Sanderson Safety Supply	1101 SE 3rd Ave. Portland, Oregon 97214	Toll-free: (800) 547-0927 www.sandersonsafety.com
Thomas Scientific	99 High Hill Rd. (near Route I-295) P.O. Box 99 Swedesboro, NJ 08085	Toll-free: (800) 345-2100 www.thomassci.com
VWR Scientific Products	5 Marway Circle Rochester, NY 14624	Tel: (716) 247-0613 Toll-free: (800) 932-5000 www.vwrsp.com

Disclaimer: This list includes commercial firms known to sell mercury spill kits. The Department of Toxic Substances Control does not endorse or recommend a specific vendor. In addition, this list is for informational purposes only and is not meant to be a complete or up-to-date list of companies that provide spill kits. Contact companies directly to obtain further information.