

Guide

for Vehicle
Salvage Yards

2020



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Guide for Vehicle Salvage Yards 2020

Department of Environment

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About this guide

This guide provides general information for educational purposes. The wording may differ from those contained in the actual laws and regulations.

Do you need an environmental approval?

You need an approval to construct, operate, or reclaim a vehicle salvage yard—called a “facility” in the laws and standards.

The environmental approval concerns itself with protection of the environment.

Size is the deciding factor. Your vehicle salvage yard needs an environmental approval if it exceeds 0.25 hectares (0.62 acres) in area.

Is the area of your vehicle salvage yard more than 0.25 hectares / 0.62 acres? When calculating size, include all areas that will be used for salvage activities:

- receiving area
- dismantling area
- hulk storage area
- waste and vehicle parts storage areas
- crushing/shredding areas

If yes, then you need to apply for an environmental approval. This guide can help.

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Environmental Rules for Salvage Yards

Vehicle salvage yard operators need to know about environmental rules. These rules and regulations help protect the environment and human health.

Know the rules

Rules you must operate under:

- Your approval to operate a salvage facility
 - Contains terms and conditions that must be followed
 - Includes a renewal date—10 years from your approval date
- Standard for Commercial Vehicle Salvage Facilities
novascotia.ca/nse/pubs/docs/Salvage-Facility-Standard.pdf
- Dangerous Goods Management Regulations
novascotia.ca/just/regulations/regs/envdgm.htm
- Ozone Layer Protection Regulations
novascotia.ca/just/regulations/regs/env5495.htm
- Contingency Plan for Spills at Commercial Vehicle Salvage Facilities—downloadable template:
<https://novascotia.ca/nse/dept/docs.policy/appendix-a-contingency-plan-template-for-commercial-salvage-facilities.pdf>

Other rules and regulations might also apply to your yard:

- underground tank systems: Petroleum Management Regulations
- aboveground tank systems greater than 4000 litres: Petroleum Management Regulations
- burning of used crankcase oil: Used Oil Regulations
- transportation of dangerous goods such as batteries: Canada's Transportation of Dangerous Goods Regulations
- use and storage of combustible materials: National Fire Code of Canada

Learn about environmental standards

New standards came into force on December 1, 2019.

They set out what you must do when you site, construct, operate, or rehabilitate a commercial vehicle salvage yard.

Standard for Commercial Vehicle Salvage Facilities:
novascotia.ca/nse/pubs/docs/Salvage-Facility-Standard.pdf



Applying for an Environmental Approval

Apply for an approval

Application for Approval
Division 4 - Dangerous Goods/Waste Dangerous Goods/Salvage Facility

OFFICE USE ONLY	
Date Received: (yyyy/mm/dd)	Application #

Please Print or Type.
Complete Sections 1, 2, 3, 4 and 7 for ALL Applications.
Complete areas of Sections 5 and 6 that are applicable to the specific activities of this application only.

Type of Application:
 New Application Renewal Amendment Transfer
If applicable, provide the previous Approval # _____

SECTION 1 – APPLICANT
If there is more than one applicant, the first applicant listed will be considered the primary applicant for this project. Click on the button below to add another applicant or attach a complete list of applicants with the information below.

Applicant 1

Company/Organization/Municipality _____

Business Number (BN) if applicable _____

First Name _____ Middle Initial _____ Last Name _____

Primary Phone Number _____ Ext. _____ Secondary Phone Number _____ Ext. _____ Fax _____

E-mail _____

Civic/Street Address _____

Mailing Address (if different than Civic) _____

County _____ Community _____

Province _____ Postal Code _____ Country _____

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Link to application form:

<https://www.novascotia.ca/nse/resources/permits.asp#dangerous.goods>

Contingency Plan for Spills at Commercial Salvage Facilities Handling Vehicles

Business name: _____ Date of plan: _____
Site address: _____

Instructions

- All relevant sections of this contingency plan must be completed. This template is designed for a broad range of vehicle salvage facilities. Modifying this plan to reflect site-specific hazards and business practices of your facility is recommended.
- The Approval Holder is responsible for the contents and annual updates of the plan.
- A completed plan must be submitted with an application for approval or renewal.
- The plan must be updated annually, kept on site and made available upon request from Nova Scotia Environment (NSE) or fire and emergency personnel.
- The Approval Holder is responsible to ensure that the contents of the plan, as updated, are communicated to staff working at the facility.

Emergency Numbers and Spill Reporting

If a spill occurs, the facility's Spill Contact Person will be notified along with the required agencies at the appropriate emergency numbers. The Spill Contact Person will have the authority to carry out response actions.

Spill contact person: _____ Phone: _____
Owner: _____ Phone: _____
Manager: _____ Phone: _____
Other: _____ Phone: _____

Nova Scotia Environment 1-800-565-1633 Immediately contact the 24/7 Environmental Emergencies Reporting Line if any of the following volumes are spilled: <ul style="list-style-type: none">• Gasoline or diesel fuel 100 L or more• Used oil 100 L or more• Battery acid 5 L or more• Regulated refrigerant 25 kg or more• Solvent 100 L or more Also report any spill into the environment that may cause an adverse effect.	Police, Fire, Emergency Health Services 911 Spills threatening your health, safety or property and you need help right away. Local non-emergency numbers: Police: _____ Fire: _____
Canutec 613-996-6666 or 1-888-CAN-UTEC (226-8832) or *666 on cellular	Poison Control Centre 24/7 1-800-565-8161

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Link to contingency plan template:

<https://www.novascotia.ca/nse/forms/docs/Commercial-Salvage-Spills-Contingency-Plan.pdf>

Submit supporting documents with your application

Checklist for your approval application – documents you need to submit

<input type="checkbox"/> Property deed or lease	Prove you own the property or have the legal right to conduct the activity on the site
<input type="checkbox"/> Site plan or survey prepared by a registered Nova Scotia land surveyor	<p>Show the planned salvage footprint for the facility, property boundaries, designated crushing areas, and all existing and planned structures and installed equipment for the salvage facility</p> <p>Show that separations distances will be met:</p> <ul style="list-style-type: none">• 30.5 m from watercourses, wetlands, and marine water bodies• 61 m from wells• 90 m from offsite residences <p>To request a reduced separation distance to wells and offsite residences: see section 3 of the Standard for Commercial Vehicle Salvage Facilities</p>
<input type="checkbox"/> Detailed plans/ specifications	<p>Give details on the dismantling pad and the storage facilities for automotive fluids, batteries, mercury switches and sensors, and regulated refrigerants—include the size, the location (whether indoor or outdoor), and material used for construction</p> <p>Give the types and capacity of storage containers/tanks for automotive fluids, batteries, mercury switches and sensors, and regulated refrigerants</p>
<input type="checkbox"/> Detailed description of activity	<p>Describe the types of vehicles and other material that will be salvaged</p> <p>Include whether crushing or shredding will occur onsite</p>
<input type="checkbox"/> Substance descriptions and controls	<p>Describe the measures you will take to control, contain, or prevent the release of substances to the environment:</p> <ul style="list-style-type: none">• during removal and handling of automotive fluids, batteries, regulated refrigerants, and mercury switches and sensors• during dismantling, storing, crushing, or shredding <p>State if automotive fluids and batteries will be reused onsite or if they will be sent for recycling or disposal</p> <p>State how refrigerants and mercury will be sent for recycling or disposal</p>
<input type="checkbox"/> Description of adverse effect	Confirm in writing that the location of the facility will be outside the separation distance for municipal drinking water supplies as described in section 3(4) and 3(5) of the Standard for Commercial Vehicle Salvage Facilities
<input type="checkbox"/> Contingency plan for spills	Use the fillable template to describe your plan OR prepare a document that contains the same information
<input type="checkbox"/> Municipal zoning approval	Attach a letter OR current zoning map from the municipal planning authority confirming that vehicle salvage activity is allowed on the proposed property or properties

Update your contingency plan every year

Your contingency plan needs to be updated annually and communicated to staff at the yard, so they understand what to do if there is a spill.

The plan needs to be

- available on site
- available to Nova Scotia Environment and fire and emergency personnel
- submitted with your application for renewal every 10 years

Renew your approval every 10 years

Your approval needs to be renewed every ten years. If there has been no change to your yard, you can request a waiver of the documents.



Operating Your Site to Meet the Standards

Check your site operations for compliance

Checklist for site operations

Receiving area

Inspect each item received for leaks—vehicle, wet part, vehicular battery, and refrigeration and air conditioning equipment

Stop leaks immediately—drain, repair, or remove

Place items so that leaks are easy to spot—off the ground and with an unobstructed view underneath and around each item

Make sure that any hulks in this area are also placed so that leaks are easy to spot—not on the ground, not stacked or piled



□ Dismantling area

Ensure that your dismantling pad is intact—free of cracks, rust, and deterioration—and continues to meet the construction standard:

- is large enough for an entire vehicle
- is made of one of the following:
 - concrete
 - steel
 - asphalt with an automotive fluid resistant coating
 - at least one metre of low permeability material (1 x 10⁻⁶ cm/sec or lower)
- is sloped or bermed when outdoors to allow releases to be captured
- is able to capture and hold fluids accidentally released

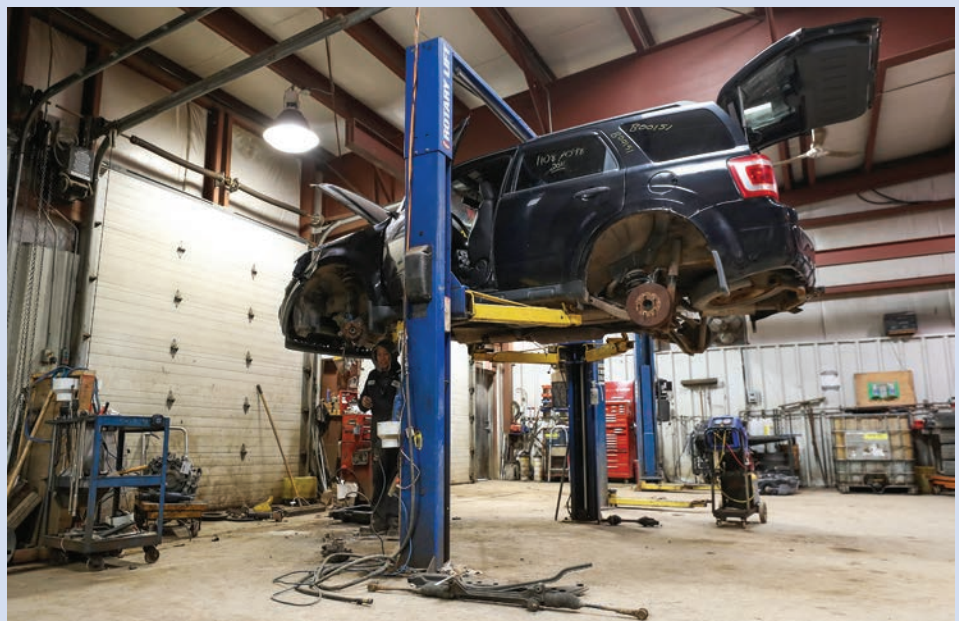
Remove automotive fluids, including windshield washer fluid, and wet parts on the dismantling pad, except drained:

- radiator, power steering reservoir, or power brake reservoir
- power steering pump
- differential

Capture automotive fluids in one of the following:

- leak proof drip-pans
- containers
- pump out equipment that prevents a release to the environment

It is best not to mix automotive fluids so they can be reused or recycled. For example, windshield washer fluid and antifreeze can be reused.



□ **Hulk storage area**

Store vehicles here only after the following are removed:

- automotive fluids
- batteries
- regulated refrigerants
- mercury switches and sensors



□ **Crushing areas**

Crush only in locations designated on your site plan or stated in the approval

Remove the following before crushing:

- automotive fluids
- batteries
- regulated refrigerants
- mercury switches and sensors
- tires



Handling and Storing Automotive Materials

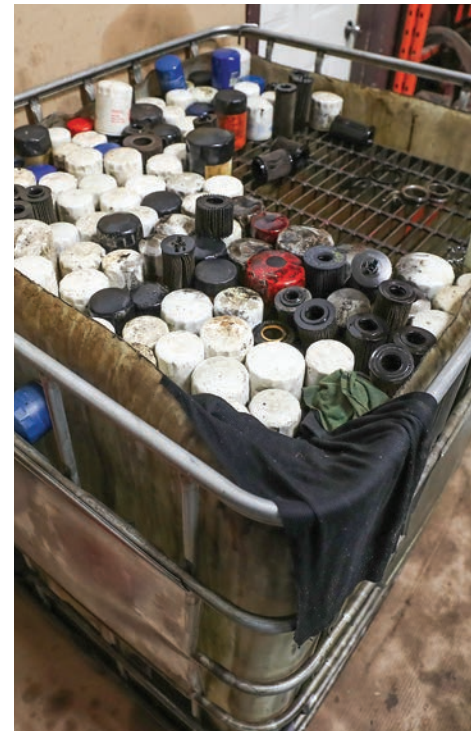
Select the appropriate container for automotive materials

TYPE OF MATERIAL	TYPE OF CONTAINER
Automotive fluids—gasoline, diesel fuel, used crankcase oil, antifreeze, brake fluid, windshield wash fluid, hydraulic fluid, gear oil, transmission fluid, and power steering fluid	<ul style="list-style-type: none">• plastic or steel drums• intermediate bulk containers• plastic buckets, pails, or cans• steel, fibreglass, or plastic tanks
Drained used oil filters	<ul style="list-style-type: none">• a leak-proof container
Mercury switches and sensors	<ul style="list-style-type: none">• a heavy plastic bucket or pail
Refrigerants	<ul style="list-style-type: none">• refillable cylinders marked with CSA certification
Leaking automotive batteries	<ul style="list-style-type: none">• a plastic container lined with a neutralizing agent (baking soda or lime)

Check your containers for compliance

Containers must be

- leak proof
- in good condition with no bulges, dents, gouges, significant rust, or other damage
- stored in an area with a solid surface, like a concrete or metal floor
- placed so visual inspection for leaks, corrosion, and damage can be done, such as on a pallet
- positioned so that they do not collapse or spill
- capped or closed tightly
- left with enough space inside to allow for liquids to expand with temperature changes (for example, gasoline expands in hot weather)
- free of residual or spilled material on the outside
- labeled clearly and accurately



Apply container labels to identify contents

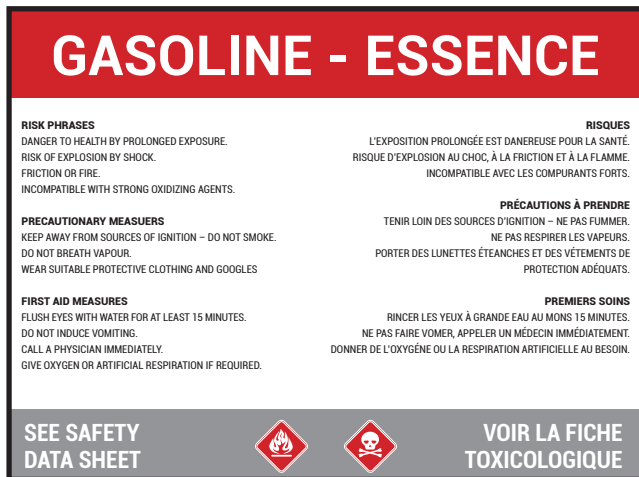
Container labels must indicate the contents. Labels meeting the following are appropriate:

- Federal Transportation and Dangerous Goods Regulations (TDG)
- Workplace Hazardous Materials Information System (WHMIS) Regulations

Label examples

Class 3 flammable liquids like gasoline and diesel fuel

- WHMIS supplier label gasoline
- WHMIS supplier label diesel fuel
- WHMIS workplace label
- WHMIS label for hazardous waste indicating contents
- TDG label



WHMIS supplier label



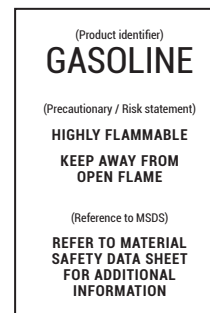
WHMIS – label for hazardous waste indicating contents



WHMIS - label for hazardous waste indicating contents



TDG label

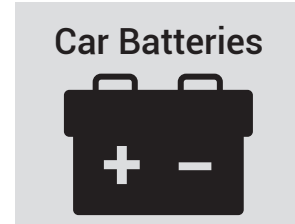


WHMIS workplace label



Lead acid batteries

- TDG label
- WHMIS label for hazardous waste indicating contents



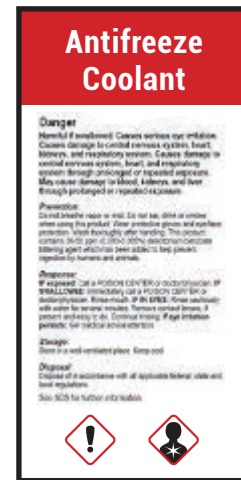
WHMIS label for hazardous waste indicating contents

Antifreeze

- WHMIS label for hazardous waste indicating contents
- WHMIS supplier label antifreeze



WHMIS - label for hazardous waste indicating contents



WHMIS supplier label

Used oil

- Label indicating contents



Windshield washer fluid

- Label indicating contents example



Label indicating contents

Mercury switches and sensors

- Label indicating contents example



Refrigerants

- Label indicating contents



Check that gasoline containers are certified

Containers that contain flammable or combustible liquids like gasoline must be marked with an applicable certification—these are applied or imprinted by the container maker:

- UN
- CSA
- ULC/ORD

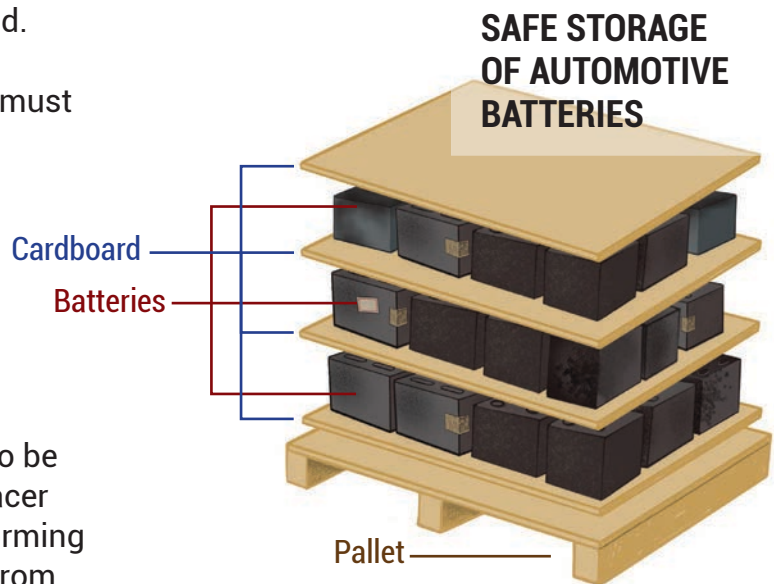
Store automotive batteries safely

Automotive batteries contain sulfuric acid.

To prevent leaks and other dangers, you must keep them

- upright
- away from other waste—like gasoline
- away from any ignition sources—sparks, smoking

Stacked automotive batteries should also be separated with cardboard or another spacer that prevents an electrical circuit from forming between them and to prevent terminals from puncturing the casing of other batteries.



Store like fluids with like—for safety and for recycling

Do not mix unlike fluids such as used crankcase oil, gasoline, antifreeze, or solvent cleaners:

- Mixing can be dangerous—more toxic, more explosive
- Mixing makes recycling difficult or impossible

Separate incompatible materials to avoid explosions

Certain materials cannot be stored side by side—for example, keep corrosives like battery acid away from flammables like gasoline.

Store fluids that may freeze in heated areas to prevent cracking

Materials like windshield washer fluid and oil with water need to be stored in a heated location in winter to prevent freezing. Automotive fluids mixed with water expand as they freeze. Freezing will crack containers, causing leaks.

Check your storage area for compliance

Checklist for storage area

Danger placards



Place a danger placard on the door or entry to each structure and storage area:

- buildings
- rooms
- trailers
- other structures
- outdoor areas

Ventilation

Allow air circulation in enclosed areas

Spill kit

Keep spill kit available for use and suitably stocked:

- absorbent material
- neutralizing agent for battery acid, such as baking soda or lime
- shovel, broom, gloves, paper towel, rags
- the right kind of container for the material
- drain cover
- list of items in spill kit

Protected from vandalism

Prevent unauthorized people from entering the yard

Keep dangerous materials in locked areas—locked inside a building, room, trailer, bin, or cage

Protected from vehicle traffic, including forklifts

Keep containers isolated from vehicle traffic, including forklifts, using large rocks, secure posts, or other barriers

Empty containers

- Capped and closed tightly
- Stored out of the weather
- Contents sent for hazardous waste disposal if contaminated with water

Reusing, Recycling, and Disposing of Automotive Fluids and Batteries

Reuse

Automotive fluids and batteries may be reused.

Send for recycling or disposal

If not reused on site, automotive fluids and batteries must be sent for recycling or disposal. You must do this at least once every two years. Keep your recycling and disposal records.

Keep records for two years

You must keep all paperwork/records from the hazardous waste company for two years. Records can include waybills or receipts.

Your paperwork must detail each of the following:

- volume (L) or weight (kg) of automotive fluids, contaminated soil and clean-up materials; number of batteries and tires
- date of removal from the salvage yard
- name of the hazardous waste management company

Dealing with Used Oil and Glycol— banned from landfills

Used oil and glycol, their empty containers, and used oil filters are banned from landfills in Nova Scotia. They cannot be put in the garbage.

Deal with used oil and glycol, their empty containers, and used oil filters by registering for the free collection service.

You can burn used crankcase oil if you have a certified used oil furnace and have notified NSE.

Register for free collection service

The Used Oil Management Association (UOMA) – Atlantic will collect and recycle these materials. Collection is free to businesses.

Register in the program or find a collector or collection facility near you:

www.uoma-atlantic.com

Burn used crankcase oil in a certified furnace only

If you have a certified used oil furnace, you can burn used crankcase oil:

- look for a label on the furnace showing that it meets CSA or UL/ULC standards
- label the containers used to collect used crankcase oil clearly—so that nothing else is added accidentally
- follow the manufacturer's instructions for burning—Do NOT burn crankcase oil in a regular home furnace: It might explode; It might release dangerous chemicals and ash

Notify government: If you burn used oil, you must send notice in writing to Nova Scotia Environment. Contact your local Nova Scotia Environment office for further information: <https://novascotia.ca/nse/dept/regional-office-locations.asp>

Warning: Do not burn other fluids in your used oil furnace. Other fluids can harm the furnace and release toxins to the environment. For example, burning brake fluid or solvents such as MEK (methyl-ethyl ketone) can emit hydrochloric acid. The acid corrodes furnace parts and harms Earth's ozone layer.

Dealing with Mercury Switches and Sensors

Some makes and models of vehicles made in 2003 or earlier have mercury capsules in convenience lighting switches and ABS (anti-lock braking system) sensors.

Switches and sensors that contain mercury must be removed before a vehicle is crushed or shredded.

Check older vehicles for mercury switches

GM	2002 and older
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Ford	2001 and older
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Chrysler	1998 and older
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Volvo	1991 and older
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Audi	1977–1988 Audi 100 1980–1988 Audi 200
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Mazda	1993–1997 Navajo 1995–1999 B-Series pickup
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Porsche	1976–1991
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Check older vehicles for mercury sensors

Audi	1987–1993 Audi 80/90 1987–1993 Audi 100/Avant 1989–1995 Audi V8 1987–1991 Audi 200 1987–1992 Audi Coupe Quattro
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Chrysler	1992–1996 4WD Dodge Stealth 1992 Eagle 200 GTX AWD 1992–2001 Jeep Cherokee 1993–2001 Jeep Grand Cherokee 1992–1995 Jeep YJ 1997–2003 Jeep TJ
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Ford • Mazda • Mercury	1993–1997 Ford Bronco 1993–2002 Ford Explorer and Mazda Navajo 1995–2001 4×4 Ford Ranger and Mazda B-Series Pick-Up 1997–2002 AWD Mercury Mountaineer
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Mitsubishi	1990 Galant 4WD 1991 3000GT 4WD, Expo 4WD/Expo LVR 4WD, Eclipse 4WD, Galant 4WD 1992 3000GT 4WD, Expo 4WD/Expo LVR 4WD, Eclipse 4WD, Galant 4WD 1993 3000GT 4WD, Expo4WD/Expo LVR 4WD 1994 3000GT 4WD
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Nissan	1996 Nissan Pathfinder 4X4
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Subaru	1990–1995 Subaru Legacy with 5MT AWD 1993–1996 Subaru Impreza with 5MT AWD
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Remove mercury-containing switches and sensors safely

Switches and sensors that contain mercury must be removed before a vehicle is crushed or shredded. It is a good practice to remove them when the fluids are being removed.

Take care not to break open the sensor module or switch. Find more information on the End of Life Vehicle Solutions (ELVS) website:

"Removing Mercury Switches": elvsolutions.org/?page_id=620

"Removing the ABS Sensor ...": elvsolutions.org/?page_id=9

How to remove hood and trunk light switches:

- disconnect the battery
- locate the switches
 - under the hood
 - in the trunk
- cut the power supply wire and remove fasteners
- remove the entire switch—take care not to break it open
- place it in the mercury storage bucket or pail
- write on the vehicle in permanent marker: "mercury removed on yyyy/mm/dd"

How to remove ABS sensor modules:

- disconnect the battery
- locate the sensors in one of four places depending on the make and model of the vehicle:
 - right front wheel apron
 - drive tunnel
 - left frame rail (directly below the driver)
 - below the rear seat on the floor pan
- remove the entire sensor module—take care not to break it open
- place it in the mercury storage bucket or pail
- write on the vehicle in permanent marker: "mercury removed on yyyy/mm/dd"

Send for safe disposal—hazardous waste

Never put switches or sensors in the regular garbage. Anything with mercury in it must be collected by a hazardous waste management company. Some companies provide a container and a courier service to collect it when full.

Keep disposal records for two years

You must keep all paperwork/records from the hazardous waste company for two years. Records can include waybills or receipts.

Your paperwork must detail each of the following:

- weight (kg) of mercury containing material
- date of removal from the salvage facility
- name of the hazardous waste management company

Dealing with Refrigerants

Avoid releasing or venting refrigerants into the air:

- **Legal obligation:** Ozone depleting refrigerants like CFC-12 (commonly called R-12 or Freon-12) must be recovered, stored properly, and recycled or reclaimed. It would typically be found in vehicles manufactured before the mid-1990s. CFC-12 is no longer used.
- **Best practice:** HFC-134a (R-134a) and other refrigerants are now in use. While these other refrigerants are not covered by our regulations, it is good practice to capture them instead of releasing into the air because they are strong greenhouse gases.

Work safely with ozone depleting refrigerants like CFC-12

A person who installs, services, and removes equipment with ozone depleting refrigerants must have completed an environmental awareness course. You must either train someone for this work or hire someone with this course.

Find an environmental awareness course

The Nova Scotia Community College delivers Canada's Ozone Layer Protection Awareness Program in Nova Scotia for the Heating, Refrigeration, and Air Conditioning Institute of Canada.

This is a one-day course with an exam. Those who achieve 75% or higher receive a wallet-sized card, called an Ozone Depleting Substances card. This card is needed for working with CFC-12 and is recommended for working with other refrigerants.

https://www.nsc.ca/learning_programs/coned/Course.aspx?!=003777

Recover refrigerants with care

Recover refrigerants with specialized equipment before a vehicle is stored, crushed, or shredded. You should do it before storing the vehicle.

Do not cut or puncture refrigerant lines. After refrigerants are recovered, seal all air conditioner openings. This prevents releasing residual oils from the lines.

Keep disposal records

It is good practice to keep paperwork/records showing:

- where refrigerants have been sent for reclamation, recycling, or disposal
- copies of wallet cards held by employees who have taken the environmental awareness course
- invoices from a company contracted to complete refrigerant removal

Cleaning up spills

Follow your contingency plan during a spill or release of automotive fluids, battery acid, regulated refrigerants, and other substances.

Stop the leak

Drain automotive fluids or batteries or repair the wet part.

Clean up spilled fluids

Use your spill kit:

- absorbent materials
- neutralizing agents
- shovels
- containers compatible for the substance being handled

