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Environmental Protection
Agency

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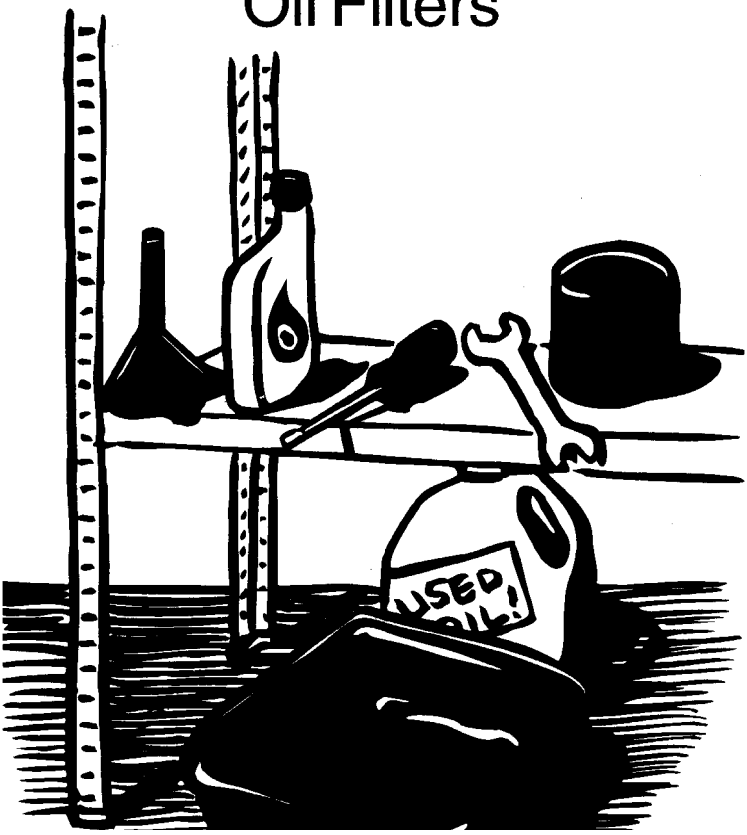
Solid Waste and Emergency Response (5305)

EPA

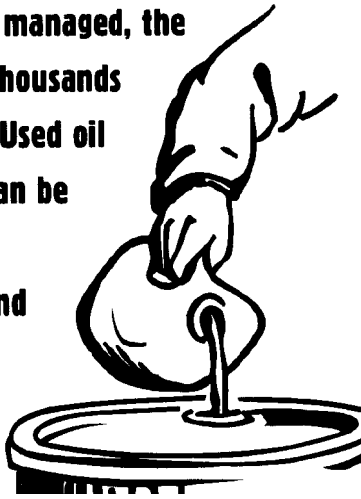
Collecting Used Oil for Recycling/Reuse

Tips for Consumers Who Change Their Own Motor Oil and Oil Filters



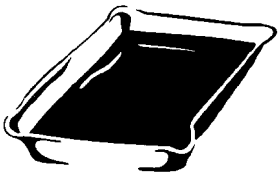
For years, motor oil commonly was reused or discarded in ways that neither protected the environment nor conserved its resource value. In the United States alone, an estimated 200 million gallons of used motor oil are improperly disposed of by being dumped on the ground, tossed in the trash (ending up in landfills), and poured down storm sewers and drains. Just one gallon of used oil has the potential to contaminate up to one million gallons of drinking water. Additionally, used oil that ends up in the country's rivers, lakes, and streams can threaten aquatic life.

If all of the used oil that is improperly disposed of were properly managed, the United States could save thousands of barrels of oil each day. Used oil that is properly handled can be re-refined into lubricants, processed into fuel oils, and used as raw materials for the refining and petrochemical industries.



CHANGING YOUR OWN MOTOR OIL

1 Turn off the engine, block the wheels, and set the parking brake before getting under your car. To avoid burns, make sure that the engine is not too hot. Consult your owner's manual for directions.



2 Remove the drain plug on the bottom of the engine's oil pan and allow the used oil to drain from your car into a suitable container, such as a drip pan.

3 If you are changing your oil filter, do it next and follow the directions below, and on the filter. Regardless, replace the drain plug in the bottom of the engine's oil pan. Make sure that it's tight.

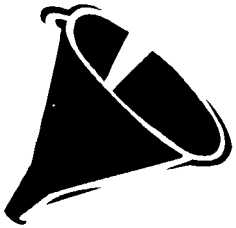
4 Carefully add the new engine oil. Although most cars take four to five quarts of oil, always check your owner's manual for the amount of oil required and the recommended grade of motor oil to be used. Do not overfill.

5 With the parking brake still set, and in a well-ventilated area, start the engine of the car. The oil pressure light may be on, but should go out after a few seconds. Once the light goes out, allow the engine to run for a few minutes.

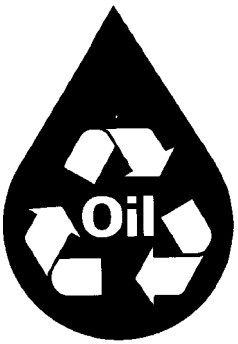
6 Turn off the engine and check the oil level. Also, check around the oil filter and drain plug for oil leaks.

7 So you know when to change your oil next, write down the date and mileage, as well as grade and brand of motor oil you installed.

8 Use a funnel or carefully pour the used oil from the drip pan into a suitable recycling container (see below). Reuse the drip pan; don't rinse the residual oil down the drain.



9 Protect the environment and conserve resources by taking your used oil to your nearest public used oil collection center, such as a service station or lube center. Also look for the "oil drop." This is a petroleum industry symbol indicating that used oil is collected for recycling/reuse.



RECYCLING YOUR USED OIL

After draining the oil from your car's crankcase, pour the oil into a clean, leakproof container with a screw-on top. Many household containers are suitable, including original motor oil containers. **Never use containers that held household chemicals, such as bleach.** Make sure that the container has a secure lid so it cannot spill.

Containers specifically designed for carrying used motor oil also may be purchased at automotive supply stores.

If you don't take your used oil to a recycling center immediately, never temporarily store it in any container that once held food, beverages, or chemicals. Regardless of the type of container used for carrying or storing used oil, be sure it is clean, clearly labeled "Used Oil," and kept out of the reach of children and pets.

Take the container to the nearest used oil collection center. If your community doesn't have a collection center, check with your local service station or an automobile maintenance facility (such as a lube center, repair shop, or car dealership).

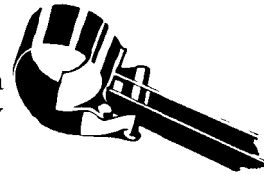
CHANGING AND RECYCLING YOUR OWN OIL FILTER

Where it's practical and cost effective, empty used oil filters are being collected for recycling. Check with the used oil collection facility where you take your used motor oil to see if it accepts used oil filters, or if it can direct you to a place that does. If you don't have any facilities in your area that recycle used oil filters, the empty used filter usually can be wrapped in newspaper and disposed of

with your regular household trash. Check with your trash collection service before discarding the filter because some states don't allow used oil filters to be landfilled.

Whether you recycle or dispose of your used oil filter, it must be drained of used oil. Special handling is required to properly drain an oil filter:

1 Use a filter wrench (if necessary) to loosen the old oil filter. Carefully remove the used filter.



2 Drain the filter of any oil. Using a sharp tool, puncture a hole in the dome end of the filter or through the antidrain back valve located on the flat end of it. The most effective method for properly draining the filter is to puncture the antidrain back valve or the filter dome and allow the used oil to flow into a container appropriate for recycling it. (Antidrain back valves are present in most automotive and light duty truck filter models. The valve consists of a rubber flap that creates a vacuum to prevent oil from draining back into the engine when it is not running. Puncturing the filter breaks the vacuum and allows the "trapped" oil to be recovered for recycling.)

3 Place the flat end of the punctured filter on the used oil collection container and drain as much used oil as possible out of the filter. It is important for used oil filters to be drained a minimum of 12 hours near engine operating temperature and above room temperature (approximately 60°F).

4 Install the new oil filter according to the manufacturer's instructions. Coat the rubber seal on it with a small amount of oil, then replace it. Do not use a filter wrench to tighten the new filter as this may damage the filter. Instead, tighten it snugly with your fingers, following the directions supplied with the filter.

HELP SAFEGUARD THE ENVIRONMENT

For further information, call your local or state government environmental agency for details regarding used oil recycling programs in your area.

Remember: environmental quality is everybody's business, and everyone can help. Developing smart recycling habits makes good sense. Recycling saves money, and it protects our environment. So become a part of the solution, recycle your used motor oil and oil filters, along with newspaper, glass, metals, plastic, yard trimmings, and other materials.

If your community has a recycling program, join it. If an existing community program doesn't include used oil recycling, expand it so that it does. If there's no program available, start one. Write for EPA's manual entitled *How to Set Up a Local Program to Recycle Used Oil* at the address below or call EPA's RCRA Hotline at 1-800-424-9346.

U.S. Environmental
Protection Agency
Office of Solid Waste
RCRA Information Center (5305)
401 M Street, SW.
Washington, DC 20460

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