

Preparation for:
Home Repairs
Automotive Maintenance
Traffic Safety



Fix It

1 Den Meeting + homework to complete Takeaways

- Home repair knowledge and skills
- A Scout is Helpful

Do all of these:

1. **Put a Fix It Toolbox together.** Describe what each item in your toolbox can be used for. Show how to use three of the tools safely.
2. **Be Ready.** With the help of an adult in your family, do the following:
 - a. Locate the electrical panel in your home. Determine if the electrical panel has fuses or breakers.
 - b. Determine what sort of fuel is used to heat your home.
 - c. Learn what you would do to shut off the water for a sink, a toilet, a washing machine, or a water heater. If there is a main shut-off valve for your home, show where it is located.
3. Describe to your Webelos den leader how to fix or make safe the following circumstances with help from an adult:
 - a. A toilet is overflowing.
 - b. The kitchen sink is clogged.
 - c. A circuit breaker tripped, causing some of the lights to go out.
4. **Let's Fix It.** Select and do eight of the following. You will need an adult's supervision for each of these Fix It projects:
 - a. Show how to change a light bulb in a lamp or fixture. Determine the type of light bulb and how to properly dispose of it.
 - b. Fix a squeaky door or cabinet hinge.
 - c. Tighten a loose handle or knob on a cabinet or a piece of furniture.
 - d. Demonstrate how to stop a toilet from running.
 - e. Replace a furnace filter.
 - f. Wash a car.
 - g. Check the oil level and tire pressure in a car.
 - h. Show how to replace a bulb in a taillight, turn signal, or parking light, or replace a headlight in a car.
 - i. Help an adult change a tire on a car.
 - j. Make a repair to a bicycle, such as adjusting or lubricating the chain, inflating the tires, fixing a flat, or adjusting the seat or handlebars.
 - k. Replace the wheels on a skateboard, a scooter, or a pair of inline skates.
 - l. Help an adult prepare and paint a room.
 - m. Help an adult replace or repair a wall or floor tile.
 - n. Help an adult install or repair a window or door lock.
 - o. Help an adult fix a slow or clogged sink drain.
 - p. Help an adult install or repair a mailbox.
 - q. Change the battery in a smoke detector or a carbon monoxide detector, and test its operation.
 - r. Help an adult fix a leaky faucet.
 - s. Find wall studs, and help an adult hang a curtain rod or a picture.
 - t. Take an old item, such as a small piece of furniture, a broken toy, or a picture frame, and rebuild and/or refinish it. Show your work to an adult or your Webelos leader.
 - u. Do a Fix It project agreed upon with your parent or guardian.

NOTES TO DEN LEADER

This elective adventure may be covered in one meeting—with requirement 2 and at least parts of requirements 1 and 3 completed at home with the Scout's family. Or you can arrange for as many meetings as you want, inviting parents and other volunteers to help the Scouts do some Fix It projects at the meeting site.

Before starting the adventure, print out copies of the two Talk Time worksheets at the end of this packet. Give a copy to each Scout and tell him to write what he learns for requirements 2 and 3 so he can share at the meeting. He should also keep the worksheets for reference the next time one of those situations occurs at home.

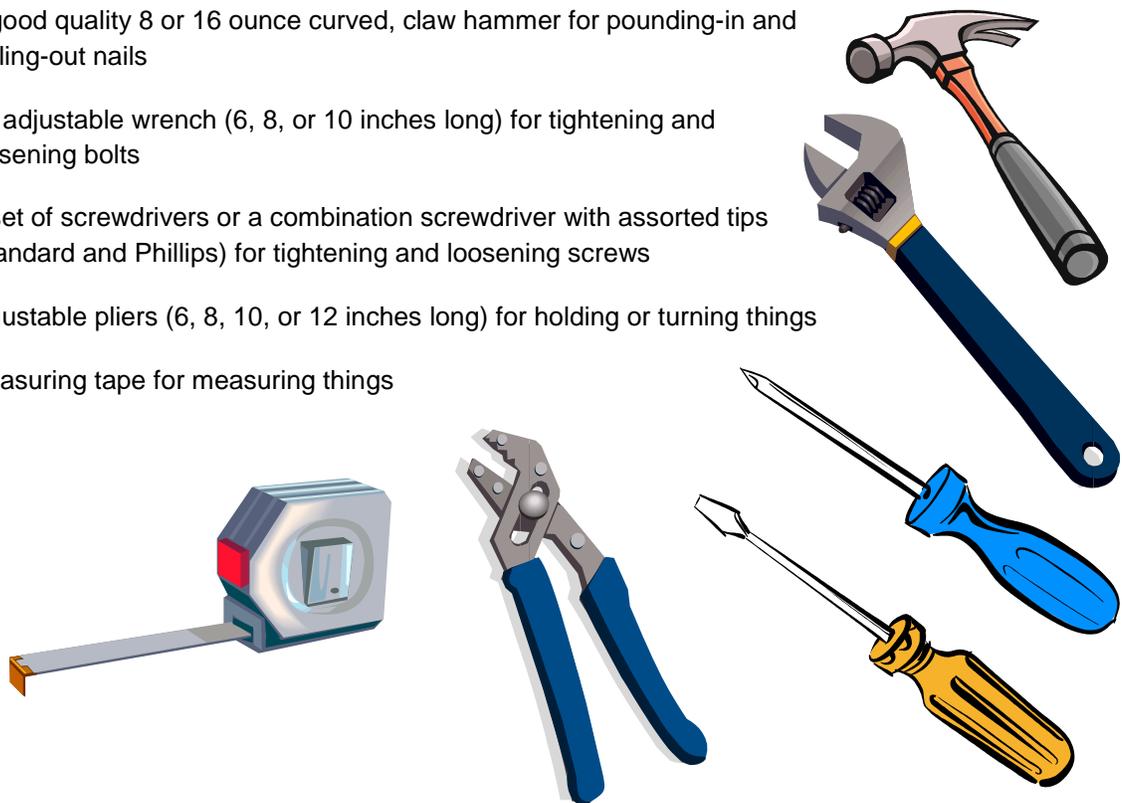
A den outing might provide more opportunities for the Scouts. Examples include a trip to a lumberyard or to a home improvement store that offers repair demonstrations. At an auto repair shop, the boys could learn how to check oil levels and tire pressure, and how to change a tire.

Make sure an adult is present to supervise all the Fix It projects in requirement 4. The safety of the Scouts is of utmost importance.

Requirement #1: Put a Fix It Toolbox together.

A tool is any mechanical implement that cuts, turns, grabs, attaches, or provides some other useful function. To fix things around your household you'll need at least a few basic tools such as screwdrivers, wrenches, hammers, drills, and pliers. There are additional tools for specific jobs, such as a toilet plunger, level, clamps, paint brushes, caulk gun, etc that should be on-hand, but this basic toolbox will help with the majority of common household repairs:

- A good quality 8 or 16 ounce curved, claw hammer for pounding-in and pulling-out nails
- An adjustable wrench (6, 8, or 10 inches long) for tightening and loosening bolts
- A set of screwdrivers or a combination screwdriver with assorted tips (standard and Phillips) for tightening and loosening screws
- Adjustable pliers (6, 8, 10, or 12 inches long) for holding or turning things
- Measuring tape for measuring things

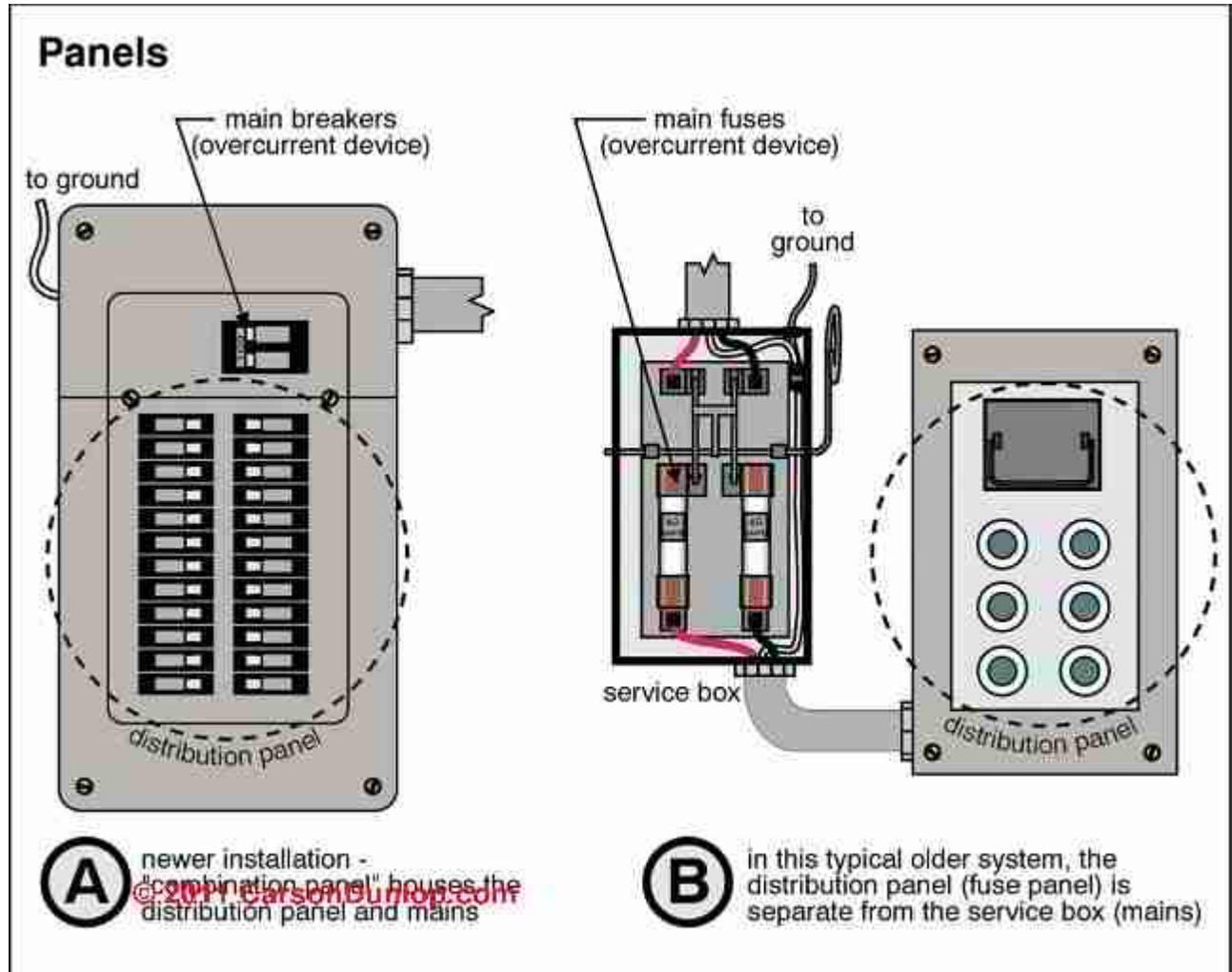


Instructions:

1. Lay out an arrangement of tools that you own and have each boy identify them, and determine which 5 or 6 tools laid out are the right ones for a Common Repairs toolbox.
2. Give the boys a copy of the top part of this page and instruct them to put together a Common Repairs toolbox for their own home, with their parent's help.
3. Have the boys bring their toolbox to the next den meeting.
4. Take time to review them along with the safety rules for each tool. Reflect on any differences between the tools from box to box; sometimes tools can serve multiple purposes.

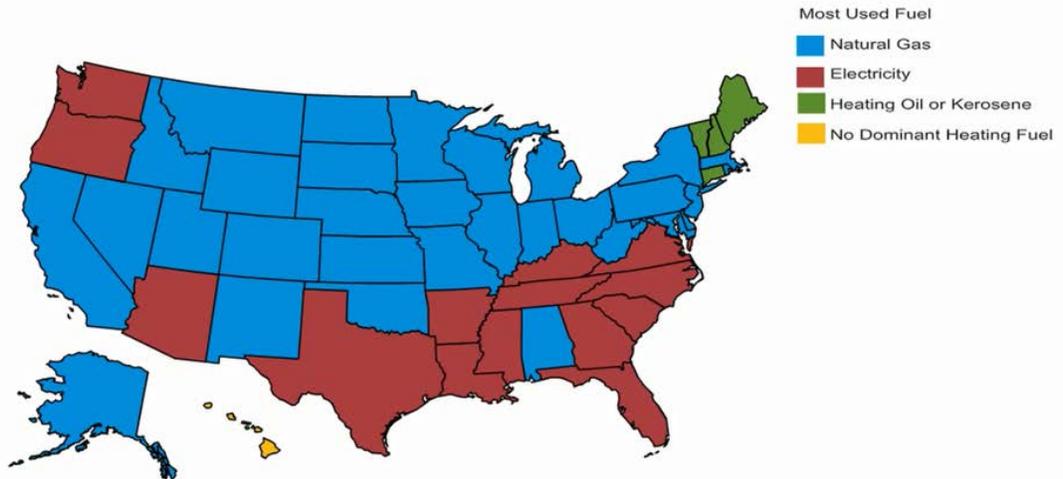
Requirement #2: Be Ready

Locate the electrical panel in your home. Determine if it uses fuses or breakers.



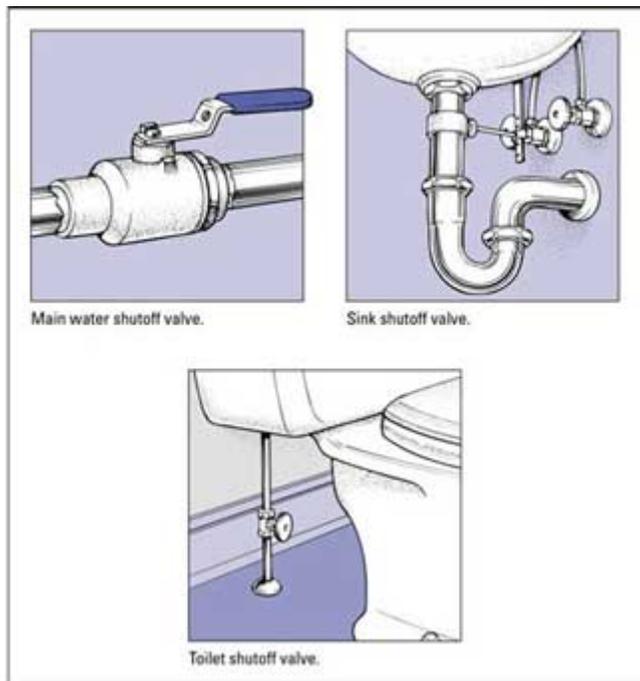
Determine what sort of fuel is used to heat your home

Most used fuels for space heating by state in 2010



Source: U.S. Census Bureau (2011). Census of Housing. Retrieved from <http://www.census.gov/hhes/www/housing/census/historic/fuels.html>

Learn how to shut off water for a sink, toilet, washing machine, or water heater. Show where the main shut off valve is located in your home (if there is one)



Requirement #3: Describe how to fix or make safe the following circumstances with help from an adult

A toilet is overflowing

1. Turn off the toilet's water supply.
2. Put on a pair of rubber gloves.
3. Use a cup or small bucket to remove excess water at the brim of the bowl.
4. If a clog has caused an overflow, a plunger will dislodge the mass and allow water to escape through the plumbing.
5. If the clog is caused by a foreign object, use a toilet auger to fish out the object.
6. Turn the water back on.
7. Pour dirty water back into the toilet and flush it down for safe disposal.
8. If overflowing is chronic, contact a plumber to check your external vents

The kitchen sink is clogged

1. Check the disposal.
2. Use a sink plunger to clear the blockage.
3. Disassemble and clean out the trap.
4. Snake the line.

A circuit breaker tripped, causing some of the lights to go out.



Requirement #4: Let's Fix It

Select a few Fix It projects from the list. The needed materials should be portable and easy to collect for the meeting. Make sure each job can be completed at the meeting location in the time allowed.

The meeting could also be done as an **outing** at a lumberyard, an auto repair shop, or a hardware or home improvement store. A store might provide meeting space and other resources like project plans and classes for children.

Identify parents or others in the pack who are handy with tools and could assist at the meeting. They could include woodworkers, carpenters, plumbers, mechanics, handymen, or anyone with practical homeowner Fix It skills.

If your den is large, you may want to arrange multiple Fix It stations and have a group of boys working at each one. Recruiting additional parents or other helpers will be critical in this situation.

Some Fix It activities that could work as stations at a group meeting site include the following:

- Requirement 4a: Bring a small light fixture and several types of light bulbs.
- Requirement 4c: Bring a drawer from a cabinet and extra knobs, and have screwdrivers on hand so Scouts can practice changing the knobs.
- Requirement 4f: Ask an adult to volunteer to have his or her car washed, and bring enough car soap, sponges, buckets, and rags for Scouts to help. Position the station near a hose.
- Requirement 4g: Have a tire pressure gauge and several rags on hand for testing the oil level and air pressure of a car.
- Requirement 4k: Bring extra wheels, new bearings, a set of wrenches, and a sample skateboard or scooter.
- Requirement 4q: Bring a smoke detector and/or a carbon monoxide detector to the meeting along with extra batteries.

“Be Ready” Worksheet (Requirement 2)*

a. My electrical panel is located in _____ .

The electrical panel has (circle one): fuses breakers

b. What type of heat does the home use _____

c. How do I shut off the water for these places?

Sinks _____

Toilet _____

Washing machine _____

Water heater _____

Is there a main shut-off valve for the water in our home? Yes No

If “Yes,” where is it located? _____

* Depending on where you live, you may not be able to check all these places. If so, go to a friend's home, a relative's home, or visit with an apartment building supervisor.

“Common Fixes” Worksheet (Requirement 3)

Describe to your Webelos den leader how to fix or make safe the following circumstances with help from an adult:

a. A toilet is overflowing.

I would _____.

b. The kitchen sink is clogged.

I would _____.

c. A circuit breaker tripped, causing some of the lights to go out.

I would _____.

If you live in a leased house, an apartment building, or other multiple-family building, whom should you call if there is a problem with the lights, heating or cooling, or the bathroom?

If my lights go out I should call _____,

whose phone number is _____.

If my heating or cooling goes off, I should call _____,

whose phone number is _____.

If my toilet or shower/tub has a problem, I should call _____,

whose phone number _____.