

Chapter 1

If Your Broken Stuff Needs Repair . . .

In This Chapter

- ▶ Handling inside repairs
 - ▶ Working on household basics
 - ▶ Fixing appliances, electronics, and furnishings
 - ▶ Tending to the exterior
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Throughout the ages, people have used whatever materials were handy to build homes. They cut wood, logs, and twigs from nearby trees, moved rocks, and quarried stone to make a structural frame strong enough to support a roof. They enclosed the frame, placing layers of leaves, twigs, straw, clay, slate — whatever they had — on the roof structure and fashioned walls to keep their homes warm, dry, and safe from the elements, wild animals, and other people. From Greek temples to simple huts with mud-plastered walls and thatched roofs, to utilitarian stone fortresses, homes evolved. We've had homes made of animal skins and logs, clapboard siding, bricks, stones, concrete, cement blocks, various metals, and now even glass.

Instead of a single wall shelter we now have interior and exterior walls with the space in between stuffed with insulation and the components necessary for providing utilities throughout the house. And walls now are decorative so that they appeal to us inside and out.

Buildings, however, can only fulfill that dual function — safety and pleasure — when they're maintained and repaired as needed. To that end, owning a home is a never-ending job. Faucets start leaking and pipes get clogged. The circuit breakers keep tripping. It's too late to wish you'd paid more attention when dad or your next-door neighbor tore things apart to fix them. But even if you think you're all thumbs, you can still do a lot of repairs yourself.

When not to “leaf” things for professionals

It’s frustrating to have a minor repair and not know who to call or to hesitate about calling a repair service because of the standard minimum “walk-in” fee — generally no less than \$50.

To illustrate that point, we only have to mention a blustery autumn day some years back. Our furnace wasn’t kicking in and the house was getting very cold. Novices that we were, we naturally called for service: We wanted heat

immediately. Imagine our chagrin when we had to pay \$60 to have a large leaf removed from the mouth of the furnace’s air intake pipe. It was located on the back of the house in a corner that collected huge piles of leaves!

Not all fix-jobs are as simple as removing a leaf, but you’ll be surprised at how much you can accomplish even if you concentrate on do-it-yourself tasks for beginners.

In *How to Fix Everything For Dummies* we concentrate on simple repairs, things a novice can tackle with confidence. When possible, we give you steps that are reversible, and then options to try another fix that might be a little more complicated or require more time and tools. But these alternate fix-its are still within reason for beginners. And finally, we tell you when to call for repairs or give up and buy a replacement.



If saving money on easy fix-its isn’t enough incentive to do it yourself, think of this: When you delay doing anything around the house, it quickly evolves into a much larger project that will cost even more. An untended roof leak is a good example because it doesn’t take long before you have a damp ceiling or wall, and if the insulation and drywall or plaster get soggy, you not only have the leak to fix, but insulation that has to be replaced and drywall or plaster that have to be redone — along with priming and painting the damaged area.



As you become proficient at simple repairs, you may want to do more complicated work. In that case, we recommend the most recent editions of some of the other *For Dummies* books such as *Plumbing For Dummies* by Gene and Katie Hamilton, *Carpentry For Dummies* by Gene Hamilton, Katie Hamilton, and Roy Barnhart, *Bathroom Remodeling For Dummies* by Gene and Katie Hamilton, *Home Maintenance For Dummies* by James and Morris Carey, *Home Improvement For Dummies* by Gene and Katie Hamilton, *Upgrading and Fixing PCs For Dummies* by Andy Rathbone, or one of the dozens of other *For Dummies* titles (all published by Wiley). They go into topics covered in this book in more depth.

Following Basic Safety Tips (Before You Do Anything Else!)



When getting ready to repair something, you need to think about safety for yourself and your family. We'll call your attention to important safety issues throughout the book, but here are some basic practical safety tips that are good to know up front:

- ✓ Keep safety goggles handy and use them when there's a risk of something flying up into your face or when you're painting or fixing plaster-board ceilings.
- ✓ Keep your free hand away from the cutting edges of a bit or saw.
- ✓ Follow manufacturer directions whenever you use a power tool.
- ✓ Don't wear loose clothing or jewelry that may catch on something and result in an accident.
- ✓ Keep cords of power tools grounded in a three-prong receptacle.
- ✓ Don't use power tools if they have frayed wires.
- ✓ Use gloves when you're handling caustic or acid materials such as cleaning products, paint thinners, and some types of glue.
- ✓ Read directions that come with packages — the manufacturer has tips on how to use products and how to ensure safety.
- ✓ Don't mix ingredients. For instance, when ammonia and bleach are mixed together, they produce a dangerous gas that gets into your lungs and can cause death in a poorly ventilated area.
- ✓ If the label says work in a well-ventilated area, do just that. Open doors or windows even if it's cold outside. This is especially true if you're susceptible to asthma and other lung problems.
- ✓ If you use a pesticide, wear gloves to handle it. If the manufacturer recommends that the house or room be vacated for a period of time, go out to dinner and a movie or visit your mother-in-law.
- ✓ In most cases, more isn't helpful or healthy. For instance, if the directions say $\frac{1}{4}$ cup of ammonia in a gallon of water does the job, don't add 2 cups of ammonia.
- ✓ If you're on a ladder, never, ever lean out to the side or climb up to the top rung or step. The top rungs are meant for handholds, not feet. And have a buddy hold the ladder steady for you.
- ✓ Never step on the drop-down shelf on step ladders; the shelf is designed for holding paint buckets and tools, not people.



When you're ready to make repairs, one useful place to refer to for safety information is the Web site for the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA): www.osha.gov. The site is for professionals, but it contains valuable information on all topics of safety.

Preparing for Repairing

In order to become a successful do-it-yourselfer, you need certain tools. That doesn't mean you need a fully equipped shop or have to buy every hammer stocked in stores. But removing a screw with a kitchen knife or using plain white glue for everything is not only frustrating, but it usually won't work. So it's important to start with what you need as a novice do-it-yourselfer.

In Chapter 2 we cover tools — many of the different kinds available and what we consider absolutely essential to have on hand. We tell you why these tools are important, what to consider when you're in the store, how to judge quality, and where you'll find good bargains on tools that will last a long time. And we promise you won't break the bank to get them. We even let you know when and why it's best to rent rather than purchase tools.



Many people are often astonished to find out how many things can be fixed by simply cleaning them. Cleaning goes a long way toward repairing things, considering how hard it is (for example) for machinery to work properly when it's choked up with dust and gunk. However, you need to make sure that when you do clean something, you do it properly. Have no fear — this book explains how to clean (and subsequently fix) things correctly.

Tackling Repairs Inside Your Home

In Part II we go over some of the simplest — and most essential — repairs. In Chapter 3, we talk about what causes floors to squeak, creak, and sag. We explain how easily you can fix wood floors and stairs with as little as a couple nails or screws, a hammer, scrap lumber, or a few *shims* — those wood wedges that can be stuffed between two surfaces. We also tell you how to easily secure loose banisters to prevent accidents, using glue and wood screws, or reinforce them with scraps of wood. Going beyond wood, you can replace or refasten ceramic and clay tiles, mend vinyl flooring, and restore carpets. And it's also possible to patch and seal concrete floors; we promise you won't need a jackhammer or a truckload of concrete. Our easy-to-follow steps will show you the way to do these repairs with confidence.

Getting clues to what needs fixing

All it takes is one fussy baby — like our first — for a parent to quickly realize that creaky stairs and squeaky floors make it awfully difficult to back out of a room silently. Why do you need

silence? Because after it took so long to get baby to sleep, the last thing you want to do is wake him (or her).

In Chapter 4, we open your eyes to the wonderful world of fixing windows and doors. When doors sag, stick, and warp, you don't have to replace them; nor do you need to strain your back trying to push a window up (and then prop it with a stick so that it stays open). Getting old windows and doors back into working order takes a little time, but you can do it by following the steps in Chapter 4. And you won't need a locksmith or new locks to make your home secure again. You can realign latch plates, and lubricate and clean moving parts. That, too, is easier than you think. Forget about lifting sliding patio doors to get them open or closed. They're heavy, but fixing them costs little compared to the cost of buying a replacement. We tell you how to put in or fix cracked thresholds and give you tips for adjusting cranky casements, caulking and weather stripping openings, replacing torn screens, and maintaining automatic garage doors.

If you're tired of cracked plaster or popped nails in drywall, Chapter 5 shows you the way to get walls looking good again. We show you how easy it is to repair holes, dents, and gouges, and to lift sagging drywall. We tell you what to do when taped drywall edges come loose or droop. We also explain how to banish water stains on drywall, repair holes in ceilings, replace broken tiles, patch torn wallpaper, and restore paneling so that it looks as good as new.

Chapter 6 gives you tips that will keep your cabinets on track. Cabinets, countertops, and closets frequently need attention because of accidents, constant use, and overloaded shelves and drawers. Along with repairing warped doors, we let you know how much depends on hinges and other hardware, and screws that stay tightly fastened. Even those marred countertops — laminate and tile — can look as good as new. And if you're tired of yanking drawers open or struggling to close them, you'll be thrilled at how quickly they can be restored to working order.

From Drains to Wires: Repairing Plumbing, Wiring, and More

Part III concentrates on structural components in every home: the electrical system, heating, air conditioning, and plumbing. You can light up your life

without worrying about getting zapped if you follow the steps in Chapter 7. And you won't have to blow a fuse to do the work. To take some of the mystique out of electricity, we explain shorts, opens, fuses, circuit breakers, and service panels. We also show you how to test and replace switches, dimmers, thermostats, humidistats, and wall outlets. And then we let you in on some easy repairs for light fixtures, table lamps, fluorescent lights, doorbells, and garage door openers.

Chapter 8 is all about heating, ventilation, and air conditioning — commonly called *HVAC* by professional engineers, architects, and builders. Whether you can repair a furnace often depends on its age; the latest models very likely have electronic parts, and you need to be professionally trained to do much with them, but countless numbers of the older models are still around. We explain how to adjust and maintain furnaces, as well as furnace humidifiers on forced air systems.



Air conditioners use a lot of electricity, and if they're laboring hard because they need repairs or maintenance, it's just about the same as trying to air-condition the outdoors — expensive!

Common-sense maintenance tips include such things as cleaning out heat registers and cold air returns, and getting fans, humidifiers, and dehumidifiers to work. Chapter 8 is about improving your comfort and saving your money, even before anything breaks down.

What one problem occurs most frequently in everybody's home? "Mom, Dad! The toilet's plugged!" (Or it might be the sink, the tub, or the shower that's backed up.) You can't call a plumber every time a drain or line gets plugged. Not when a plunger costs a couple bucks and a plumbing snake just a few dollars more. Unblocking drains is grunt work; it takes a little muscle, but is well worth your time to get rid of the inconvenience right away. Chapter 9 is full of tips on what you can do. We also tell you how to unclog aerators — those strainers at the ends of faucets — and let you in on how easy it is to get rid of leaks in faucets and toilets. It's better to fix them than lose sleep wishing that nonstop drip would just disappear. This chapter also shows you how to work on hot water tanks and repair or replace sump pumps.

Knowing What to Chuck and What to Fix

Part IV is all about keeping prized possessions functioning smoothly. We discuss large and small appliances, describe ways to fine-tune expensive electronic and communication equipment, and tell you how to refurbish your favorite furnishings so that you can pass them on to your children or grandchildren.

Was Grandma's stuff made better?

Your mother or grandmother may still have the stove, fridge, or washer and dryer that she got when she first set up house. Back then, large appliances didn't have all the bells and whistles found on today's models, but they did last just about forever. That's because when they were made, manufacturers also made replacement

parts so you could easily fix whatever went wrong. Jump into the 21st century and it's a whole different game. Today you're lucky to get 20 years of service out of most appliances and if something goes wrong, you'll be even luckier to find a replacement part. They simply aren't made.

Chapter 10 is full of tips on what you can actually do for most major appliances. And the good news is that while longevity isn't prized today, most large appliances are relatively trouble free throughout their somewhat truncated lifetime. So check out what you can actually do and concentrate on providing basic maintenance to keep appliances trouble free.



If a faulty component in an appliance is electronic, forget about repairing it. Nowadays, you need a 2-year certificate to tackle most electronic repairs, so you're better off buying a replacement.

Small appliances, discussed in Chapter 11, have the same problem as do large appliances. The latest models have circuit boards and all-in-one components that a technician has to replace — if the part is available. But we explain common sources of trouble for most small appliances, what you need to test them, and how to determine when to head for the appliance store. We also describe how to check out cords and plugs. No need to throw out the toaster if all you have to do is put in a new power cord. But if you do have to replace a small appliance, take comfort in the fact that most are not big-ticket items. A new coffeepot costs little when you compare it to a new refrigerator.

If you're like most people today, you probably have thousands of dollars of electronic equipment in a super-sophisticated, surround-sound entertainment center that seems part of your house itself. You also have shelves full of DVDs, CDs, the latest video games, and powerful computer equipment and peripherals. Probably half of us want to "fix" things when one of these devices gets touchy: If you fall into this category, Chapter 12 is for you. It can help you maintain and preserve most of your communication equipment. In this chapter, we help you readjust and clean printers and copiers, work on fax machines and scanners, and clean components. We also include information about improving your satellite system, and adjusting CD, DVD, and VCR players.

Chapter 13 is all about keeping prized furniture looking good (unless you really prefer extremely distressed furniture). You put a lot of thought and care into buying furniture for your home, so it's frustrating when a piece gets scratched or nicked, a leg wobbles, or the veneer pulls loose. Instead of throwing it out or picking up the phone, fix it yourself. You may be amazed at how simple repairing furniture is and wonder why you ever considered asking someone else to do it. Getting rid of scratches takes little more than a melted crayon or colored wax. Split caning on chairs can be replaced. With the right glue, clamps, and toothpicks, you can stop legs from wobbling.



Bringing a fine chest or table back to life is an extremely rewarding task, so don't be surprised if you want to do more and start combing antique shops and estate and garage sales to find pieces with potential.

Making Repairs in the Great Outdoors

When you purchase a home, you've committed yourself to maintaining it inside and out. And it can be expensive to hire someone to do small jobs that you can handle yourself for a fraction of the cost. In Chapter 14, we tell you what to do to recondition the exterior of your home — replacing missing or melted vinyl siding, getting dents out of aluminum, repairing wood siding, filling holes and cracks in stucco, and patching the mortar between bricks. You get tips on why paint peels, blisters, and cracks, and what to do to get rid of mildew. We talk about sealing cracks that interfere with heating and cooling efficiency. And we explain how to replace and refasten roofing materials, find water leaks, and add flashing. Chapter 14 also includes information about how to repair flat roofs, revive gutters and downspouts, and replace rotted soffits.

Leisure areas and accessories need attention periodically. Decks, fences, patios, porches, grills, fountains and sprinklers, and outdoor furniture are covered in Chapter 15. We show you how to replace rotted floorboards, add joists under sagging floors, spot-treat dry rot, get rid of mildew on porch and deck floors, repair decorative columns, and replace and stabilize wood posts and bottom fence rails. We also provide information about lifting sagging gates and repairing hinges. Chain link fences last a long time before they show signs of wear, but when they do, you don't have to replace them. You can clean off rust and repaint worn spots or put in new pipes or links. We also explain how to replace burners on your gas grill and rejuvenate lawn and porch furniture.

In Chapter 16, we talk about more grunt work: repairing and patching concrete and asphalt driveways, sidewalks, stairs, and patios. We also give you information about sealing cracked concrete blocks and replacing broken blocks. You may think there's no need to worry about paving stones and

blocks, but they're susceptible to weather extremes. And after a number of years, they can crack and heave. We show you how to level and replace them. Swimming pools develop small cracks that should be patched; if you delay and water gets behind the concrete, you may end up with a much larger and more expensive repair to tackle.

The Part of Tens Chapters 17 and 18, in Part VI, are devoted to giving you tips on dealing with professionals when you don't have a choice but to hire them. So, when you have a project that you suspect needs a pro, or if you aren't sure what you ask the pros when you need them, turn to these chapters for help.

