A GUIDE TO MAKING THE TOUGH CALLS

They've served you well, cooking meals, washing clothes, chugging away year after year. But all good things come to an end, so when a loyal household appliance goes on the fritz, a homeowner faces a perplexing quandary. Call a repairman? Fix it? Or, just put the thing out of its misery? Every case is different, but here are rules of thumb for those Saturday morning decisions.

> **bv LOGAN WARD** illustration by C.J. BURTON

Electric Dryer

7 years \$500 7.0-cu.-ft. capacity

14 years

You don't care that the dryer's door is dented. Looks matter less than dry clothing. For years it's been delivering those toasty clothes that feel so good on a winter morning. But now things aren't so hot. Does your dryer deserve another spin?

WHY DITCH IT ...

If gas is cheaper than electricity in your region, you might save on utilities by buying a new gas dryer, though you will have the cost of adding a gasline. If you stay with an electric dryer, you still might save if you are swapping out a truly ancient appliance that uses a timer instead of a moisture sensor to end the dry cycle.

WHY FIX IT ...

A compelling fix-it reason is prompted by a change to the National Electrical Code. Electric dryers now use a four-prong instead of a three-prong receptacle. In some cases you might need to upgrade the circuit. That added cost may be reason to stay put.

YOU DO THE MATH ...

Dryer stops mysteriously Part: Motor, \$80 to \$115 Skill level: Associate degree DIY repair: Call a technician Pro repair: \$150 to \$200 FYI: Mystery stoppage and a humming sound signal an open motor winding. Remove dryer door to prevent child entrapment. Place dryer at the curb for junk haulers.

GRINDING GLIDES

Grinding/scraping noise while tumbling; damaged clothing

Part: Drum glides, \$18 Skill level: Easy, sort of DIY repair: 30 minutes Pro repair: \$100

FYI: Once you're inside, investigate. Signs of severe wear? Then ditch.

BUSTED BELT

Dryer runs but drum does not turn

Part: Belt, \$15

Skill level: Experienced DIY repair: 30 minutes

Pro repair: \$95

FYI: Are you patient? Routing the belt around the idler and motor pulleys is tricky. Check the manufacturer's Web site for a parts diagram.

THE HEAT IS OFF

Dryer tumbles but no heat

Part: Heating element, \$35 Skill level: Intuition helpful DIY repair: 45 minutes Pro repair: \$135

FYI: Frustration factor: Half the time, element access is from the front, the other half from the back. Unless you know where it is, expect more than 45 minutes of work.

Computer

5 years \$500 17-in. midsize tower 7 years

A desktop computer can always be repaired. Although external peripherals and laptops have proprietary parts that can make repairs impossible, desktop PCs are basically high-tech LEGO sets, made of industry-standard components. Whether you've crashed your hard drive or fried your processor, a repair often involves little more than snapping in a new part. But is it worth it?

WHY DITCH IT ...

If your personal computer is more than three years old, its processor is probably too slow, its hard drive capacity too small, and its other components too outdated to effectively run the latest software. Put the \$100 you would have spent on a repair toward a new PC.

Make sure you test drive a new machine before you decide.

WHY FIX IT ...

If your computer meets your needs and you're not planning to buy any power-hungry software anytime soon, a simple fix can make sense. This is especially true if you can turn the repair into an upgrade, such as adding more RAM or installing a DVD burner.

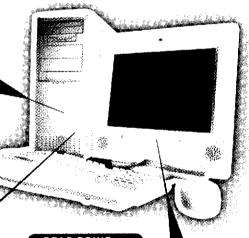
YOU DO THE MATH ...

POWER FAILURE

The system reboots without warning

Part: Power supply. \$100 Skill level: Almost anyone DIY repair: 20 minutes Pro repair: \$200

FYI: Could be a heat problem. Before replacing the power supply, buy a \$6 can of compressed air and blast clear the PC's fans and vents.



New software makes your PC run more slowly

Part: Random access memory (RAM), \$75

Skill level: Beginner DIY repair: 5 minutes Pro repair: \$125

FYI: Shop carefully: \$75 will buy either 256MB or 512MB. It all depends on the manufacturer.

An error appears onscreen when booting from hard drive Part: Hard drive, \$80 to \$400

Skill level: Master geek DIY repair: Bring your lunch Pro repair: \$180 to \$500 FYI: Now you're approaching the tipping point. A shiny new computer is calling your name.

Although access has gotten trickier, today's appliances are easier to work on once you get in there."

former major appliance instructor, Dunwoody College of Technology, Minneapolis, Minn.

Tinkerer's Friends

All they need is love.



Blender If your \$9 coupler shears after a wild night of frozen daiguiris, take two aspirin and call your parts dealer in the morning. You usually can replace this hard rubber piece, which drives the blade, by unscrewing it and screwing on a new one.



Stand Mixer

At \$200 to \$400 each, you bet they're worth fixing. The most common problem: stripped gears. A pro charges about \$60 to \$75. If you can open a sealed gearbox and grease the gears when you're done, you'll be mixing again for less than \$20.

Vacuum Cleaner

Beater-bar belts are the first thing to go. Pay a technician \$25 to install a new one, or do it yourself for the \$2 price of the part. Clean out the vacuum head while you have it open. If the motor fails (a rarity), don't bother, unless it's a high-end machine that's very powerful.



Electric Shaver

When the rechargeable battery dies, don't toss the shaver. A technician can replace the battery for about \$30. Handy with a soldering iron? Do it yourself for half that.

18 years

Electric Range

Your nine-year-old

electric range has a chipped top and a stained door, and everything comes out of it a little half-baked. Still, its harvest gold finish matches the fridge and dishwasher. Will replacing the range lead to a complete kitchen makeover? Maybe that's a good thing!

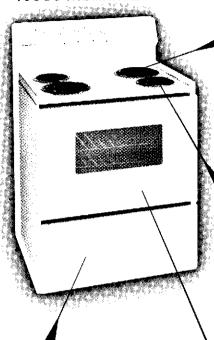
WHY DITCH IT ...

Hard-pressed for time? New ranges with a convection option bake faster and more evenly while using a bit less energy than conventional ovens. Plus, if you switch from a difficult-to-clean coil-top appliance to an easy-cleaning glass top, you might save enough time to use your new oven to do more than heat frozen pizza.

WHY FIX IT ...

An electric range has few complex parts, and the few it has are easily replaced. Ease of repair is reason enough to leave your range where It is. So is the need to upgrade its receptacle and wiring from three wires to four in many older homes. To have an electrician do this could increase the cost of the swap by \$200 or so.

YOU DO THE MATH ...



STICKY DRAWERS

Pot-and-pan drawer won't open properly

Part: Drawer glides, \$10 to \$20 Skill level: Amateur hour DIY repair: 15 minutes, tops

Pro repair: \$90

FYI: These cheaply made parts need to be replaced all too often.

BALKING BURNER

Intermittent surface burner

Part: Surface element receptacle, \$9 to \$12 Skill level: Experienced DIY repair: 30 minutes Pro repair: \$90

FYI: A moderately easy repair, but

you'll need wire strippers.

ELEMENT OUT

Surface element won't work, element gets power

Part: Burner element, \$25 Skill level: It's a snap DIY repair: 15 minutes Pro repair: \$110

FYI: You'll find lots of grease on the panel under the element, so have a grease-cutting cleaner handy. Clean up, then close up.

UNCLEAN MACHINE

Oven bakes and broils, does not engage self-clean cycle

Part: Dual-range thermostat,

\$90 to \$150

Skill level: Pros only DIY repair: See below Pro repair: \$200 and up

FYI: Toxic chemicals in the thermostat's capillary tube, difficult wiring. Who needs a repair like this? Unless you're as good as a pro, ditch.

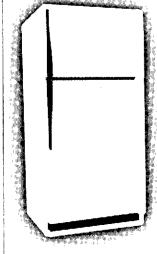


Window Air Conditioner

Window air conditioners are on their way to becoming disposable appliances. Government-mandated Seasonal Energy Efficiency Ratios (SEER) standards rise

every year, pushing energy use down, so a replacement pays its way from the moment you plug it in.

What can you fix? If the compressor runs but the fan doesn't, a fan motor is a \$100 part and a 2-hour repair. Other candidates for repair are the selector switch and thermostat, about \$40 each. You need better-thanaverage diagnostic skill for this work. Or, you've just created expensive junk.



Refrigerator

When the sealed refrigerant system goes, exercise the ditch option, Remember, take the doors off when you cart the bad boy to the curb (this avoids child-entrapment dangers). A good door with a bad cam means you're \$10 away from an easy fix. Likewise, a good bulb but a dark compartment signals a bad light switch. Pay the Parts Man \$12, pass Go, proceed directly to Fix.

Heart-Breakers

Terminate with extreme prejudice.



Countertop Microwave

Oven Even a tiny microwave has a capacitor that stores several thousand volts as part of its power supply circuit. So you're probably better off tossing it or leaving it for the pros. On the other hand, you might as well try replacing the \$3 fuse first.

Toaster Oven A broken toaster oven may be the most annoying trash bin candidate. A new heating element for any kind of toaster oven costs about \$30, if you can find it. Meanwhile, new appliances range from \$20 to \$200, with most falling in the \$40 to \$80 range.



iPod An iPod with a cracked screen or a dead battery-and an expired warranty-makes an ultrachic paperweight. A true übergeek might try to fix one, but that's not a repairthat's a hobby.



Camcorder Ed Van Alstine. an engineer, paid \$150-a third of the replacement cost-to get his three-year-old camcorder working. It quit five months later, two months after the three-month repair warranty was up.

Clothes Washer

2.9-cu.-ft. capacity

A good washer can run practically forever, Still, new front-loading models offer cool features and significant energy savings. Better yet, their prices have gone from \$1200 to about \$600 in the last five years. Is it time for an upgrade? Is that a rattle you hear from the basement?

WHY DITCH IT ...

Today's front-loaders use less water (and less heated water) and reduce drying time thanks to spin cycles of 800 to 1600 rpm (compared to 500 to 600 rpm for top-loaders). If you do a lot of laundry, the savings can pay for the machine.

WHYFIXIT

Most washer repairs are straightforward. With a few basic fixes you could keep your machine chugging along for years to come.

YOU DO THE MATH ...

NO SPIN ZONE

Washer will not spin or agitate

Part: Drivebelt, \$15 Skill level: Semipro DIY repair: 30 to 60 minutes

Pro repair: \$110

FYI: Short on time? Hire a pro. This is one repair that varies considerably depending on access.

RUSTY CLOTHES

Rust spots on washed clothing

Part: Tub, \$100 to \$200 Skill level: Forget it DIY repair: Don't make dinner

plans

Pro repair: Start at \$250 FYI: It doesn't happen often, but a badly chipped tub is the end of the line.

MINOR AGITATION

Agitator moves in only one direction during wash cycle

Part: Agitator, \$17

Skill level: Nearly klutzproof **DIY repair:** 5 minutes

Pro repair: \$100

FYI: Pop cap off agitator, remove bolt. Agitator slides out, new one slides in. There, You're a genius,

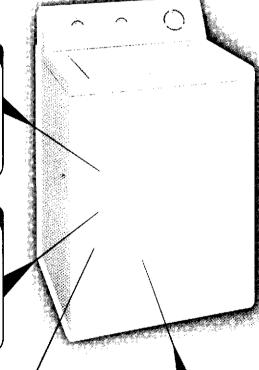
Washer won't fill

Part: Water inlet valve, \$35 Skill level: Think you're good?

Go for it.

DIY repair: 30 minutes Pro repair: \$120

FYI: Unplug, shut off water, remove hoses. Remove back, remove wires from valve and replace, Bingo.



My rule of thumb

is if your machine has reached one-half of its expected life, don't spend more than half of the replacement cost on the repair."

CHRIS HALL

veteran repair technician. president of www.repairclinic.com

Of Appliance

BE SURE IT'S REALLY BROKEN BEFORE YOU FIX IT. Reset the circuit breaker, and check that the outlet the appliance

CUT POWER AT THE SERVICE PANEL. Then unplug before servicing.

is plugged into is live.

WATER AND REPAIR WORK DON'T MIX. A wet floor is a slip hazard. Mop it dry before you work

USE A FLUORESCENT WORKLIGHT. These are cooler and safer than old fashioned incandescent bulb lights.

SAFETY GLASSES ARE A MUST. Dust, dirt, rust and tiny parts can get you right in the eyes, especially when you're crouching in close.

Dishwasher

24-in built-in

You're used to the hum and slosh of Old Faithful, but when something fails, you wonder if a quieter rinse cycle will help you sleep at night. You also look forward to loading dirty dishes directly into the appliance without rinsing them first in the sink.

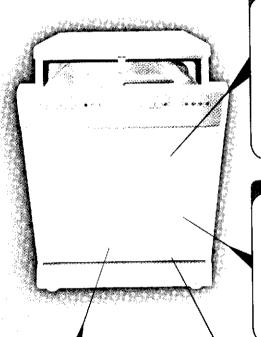
WHY DITCH IT ...

Newer dishwashers use less heated water and have more efficient pump motors, resulting in modest energy savings (slightly more if you choose an Energy Star appliance). Also a plus: guieter motors and more noise-dampening insulation.

WHY FIX IT ...

Before you base your decision on appliance sticker price alone, look into installation costs. Plumbing and electrical hookups can tack on as much as \$150, and that's if you can reuse the old water supply line. If not, you'll pay more.

YOU DO THE MATH ...



RACK RUINED

Dish rack won't roll or close properly

Part: Dish rack rollers, \$20 Skill level: No experience necessary

DIY repair: 10 minutes Pro repair: \$100

FYI: No tools needed. Rollers snap in. But if the rack itself is looking dog-eared, consider ordering a new one from the manufacturer.

WET FEET

Dishwasher leaks from door

Part: Door gasket, \$30 Skill level: Some experience DIY repair: 30 minutes

Pro repair: \$115 FYI: First, check the seal. Put a powerful flashlight inside washer; close door. Escaping light means gasket is shot or nearly so. Good to

check even if water isn't leaking.

Dishwasher won't turn on

Part: Door latch switch assembly, \$40

Skill level: Pretty darn experienced

DIY repair: 45 minutes, maybe

Pro repair: \$140 FYI: You can do this repair. Do you want to? If the machine is loud, already leaks a little and its wash ability is spotty, don't bother.

LAZY DOOR

Door drops open when unlatched

Part: Door springs, \$30 Skill level: More experience DiY repair: 30 minutes

Pro repair: \$115

FYI: Fix now, not later. Dropping action damages door hinges, and hinge trouble pushes an older appliance into the ditch category.