

Rustproofing your car

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LOCAL TAXES
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Changing Times

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**GET MORE OUT OF
YOUR SAVINGS
AND YOUR CASH**



**Ways to fight
job bias**

**Choosing
a cruise**

**Make your
house quieter**

Video games

**Safe strategies
for small investors**

Books for kids

Buy your own phone?





"LET'S HAVE QUIET IN THIS HOUSE!"

*There are things you can do
to dampen the din in every room.*

Much household noise can be eliminated or sharply reduced, often with relatively simple do-it-yourself measures.

Start with appliances

BOTHERED BY NOISE at home? The problem may be more serious than you think. The racket created by appliances, TV sets, record players, yard equipment, children, pets, neighbors, traffic and aircraft can actually damage your hearing. The Environmental Protection Agency estimates that 20,000,000 or more Americans are exposed daily to noise that is permanently damaging their hearing and warns that stress produced by noise may be a factor in heart disease, ulcers and mental illness and may even harm unborn children.

Practically every appliance in your house is a noisemaker. When you buy new equipment, give quietness of operation a high priority. You can, for example, buy window air-conditioning units designed specifically for bedroom use; They may be less energy-efficient than other models, but the trade-off can be worthwhile where sleep is concerned.

Sound is measured in decibels. A soft whisper produces 30 dB at a distance of 15 feet. Freeway traffic registers 80 dB at 50 feet. A chain saw can generate 100 or more dB.

The kitchen is the noisiest room in most homes. You'll find that different makes and models of dishwashers, disposals, food processors and refrigerators have significantly different sound characteristics.

Scientists now tend to agree that a continual noise level averaging as low as 70 dB can damage the hearing of some people. Your daily routine probably exposes you to noise levels of about 70 dB even inside your house. The levels could be much higher at times and in noisy neighborhoods.

That's true of outdoor equipment, too. A gasoline-powered lawn mower with a muffler underneath the housing should be considerably less noisy than one not so equipped, and electric models are fairly quiet.

What can you do about it? Quite a lot, probably.

Unfortunately, picking the quietest household equipment may be difficult unless you compare models in operation. Noise data are usually scarce, if available at all. However, in enacting

the Noise Control Act of 1972, Congress authorized the EPA to develop a program under which products are to be labeled according to how much noise they make. The agency has begun drafting regulations and compiling a list of ten leading candidates for labeling (air-conditioners and vacuum cleaners are all but certain to be on it). Also in the works are requirements for disclosing the efficiency of products designed to reduce noise, such as acoustic tiles and engine mufflers. It will be at least a year before labels actually start appearing on products, EPA officials say.

Appliance noise is often magnified by floors or walls. You may be able to correct this by placing resilient pads or antivibration mountings under the apparatus. If an air-conditioner or exhaust fan causes a window to rattle, put a rubber pad under the unit and, where possible, slip weather stripping or rubber gaskets between the unit and the window frame. A partition or room divider stationed between a window air-conditioner and the occupants of the room may soften the sound and also diffuse drafts.

All over the house

Sound-absorbing materials, such as carpets, throw rugs, draperies, curtains and acoustic tiles, can lower high-pitched sounds in most rooms by 5 to 10 dB and low-pitched sounds by 2 or 3 dB. Storm windows and doors, preferably with rubber gaskets around the glass, deaden sounds from outside in addition to impeding heat transfer. Air-conditioning, though creating its own noise, en-

For more information

The booklets described below are available without charge from the Office of Noise Abatement and Control, Environmental Protection Agency (AW-471), Washington, D.C. 20460.

- *Quieting in the Home* contains many practical and detailed suggestions for suppressing noise around the home. Illustrated.
- *Noise: A Health Problem* discusses the various harmful effects of excessive noise on sleep, safety and mental well-being.

ables you to keep the windows closed in hot weather and thus cut down on outside noise (traffic is a leading offender).

Squeaks in stairs and floors can be cured by nailing down loose boards, inserting wedges or shimming materials, or applying mineral oil. Closing a chimney damper and covering a fireplace opening when the fireplace is not being used can muffle exterior noise. Mail slots, exhaust-fan outlets and other openings should be kept closed whenever possible. Large, slow-running fans are generally quieter than smaller models.

Plumbing and air ducts can cause vexatious noises. Vibrating pipes should be wrapped in sound-absorbing material at all points of support, and possibly additional brackets or hangers can be used. "Ticking," a sound that sometimes occurs when hot water flows into a cold pipe, causing it to expand rapidly and rub against a beam, may be halted or minimized by wedging

soft, heat-resistant material between the pipe and the structure. You can silence ducts by wrapping them with building paper, lining them with sound-absorbing material, using resilient mounts to support them and placing braces around the widest sections.

Does your toilet tank emit a whistling sound? If there's an adjustment screw on the water intake valve, change the setting. If there is no adjustment screw, partly close the shut-off valve.

Then there's "water hammer," a loud bang-



"There is someone downstairs. I told him to be quieter."

ing that sometimes occurs when valves are closed quickly, creating a sudden rise in water pressure in the pipes. Frequently this can be corrected by installing a tightly capped vertical pipe in the line to serve as an air chamber. Commercial water-hammer arresters are available from plumbing supply houses.

If you have a recreation room in the basement below sleeping or study areas, consider sound-insulating the ceiling. Foam-backed floor tiles or indoor-outdoor carpeting will cut down noise from footsteps and falling objects. Rubber or cork pads can be placed behind dartboards and in the pockets and chutes of billiard tables. A Ping-Pong tennis table can be undercoated with a liquid mastic to cut down vibration.

In home offices and dens, use pads under typewriters, mimeograph machines and other equipment. Remember that telephones are usually equipped with volume controls. The ringing of wall-mounted instruments is often louder than that of desk models because of the sounding-board effect.

The sound resistance of walls can be improved by sealing holes and cracks and by attaching additional material, such as gypsum wallboard. Solid-core doors, installed with gaskets, can be effective noise barriers and are especially appropriate for recreation rooms, kitchens, bedrooms and the hallways leading to bedrooms.

These, then, are some of the things you may be able to do for the sake of peace and quiet. You may discover others from further reading (see the

Household noisemakers

The sound levels are for someone close to or operating the appliance.

	sound level (in db)
floor fan	38 to 70
refrigerator	40
washing machine	47 to 78
dishwasher	54 to 85
clothes dryer	55
hair dryer	59 to 80
vacuum cleaner	62 to 85
sewing machine	64 to 74
food disposal	67 to 93
electric shaver	75
electric lawn edger	81
home shop tools	85
gasoline-powered mower	87 to 92
gasoline-powered riding mower	90 to 95
chain saw	100
stereo	up to 120

Source: Environmental Protection Agency

box on the opposite page). Don't expect miracles. And remember that some kinds of noise just won't go away. Soundproofing your home against the noise created by a nearby factory or low-flying aircraft could be prohibitively expensive.

Most noise problems can be alleviated, though. If you can't do it yourself, consult an acoustical contractor or a home improvement firm.

Gaining weight?

Americans are getting fatter. A survey by the National Center for Health Statistics shows that men and women in most age groups weigh more than their counterparts did in a similar survey over a decade ago. The "desirable" weights shown for a medium frame are from the Metropolitan Life Insurance Co. and assume indoor clothing, with men wearing one-inch heels and women two-inch heels. The company's booklet *Metropolitan Life's Four Steps to Weight Control* stresses that the weight that's best for you depends on your individual frame and muscular development—"it is the weight at which you look and feel your best." For a free copy of the booklet, write to the Health Publications Dept., Metropolitan Life Insurance Co., One Madison Ave., New York, N.Y. 10010.

women	desirable weight for medium frame	men	desirable weight for medium frame
height		height	
4 ft. 10 in.	95-107 lbs.	5 ft. 2 in.	118-129 lbs.
4 11	98-110	5 3	121-133
5 0	101-113	5 4	124-136
5 1	104-116	5 5	127-139
5 2	107-119	5 6	130-143
5 3	110-122	5 7	134-147
5 4	113-126	5 8	138-152
5 5	116-130	5 9	142-156
5 6	120-135	5 10	146-160
5 7	124-139	5 11	150-165
5 8	128-143	6 0	154-170
		6 1	158-175
		6 2	162-180