



STRAIGHTENING A LEANING GARAGE

Ever noticed how some garages seem to lean with the blowing wind – like a single-story Tower of Pisa? Many people are surprised to learn how simple it is to straighten their garage themselves.

First, let's look at why the garage is leaning. Many of the garages in older communities like Cleveland Heights were put up before there were building codes to control the construction process. To say they were poorly built would be putting it mildly. It was a common construction method to build directly on the ground, with a concrete floor poured as an afterthought. A lot of these buildings, therefore, have no foundation under the walls. The wall studs and rafters are often undersized by today's standards, and rarely are there diagonal corner braces (*see Illustration 2*) to support the structure properly and keep it from "racking" or twisting. Added to all this can be cobbled-up extensions tacked on later, so that the tail fins of larger cars could fit inside the garage. All these factors work together to weaken the structure.

Still, with some simple tools, these buildings can be pulled back to their original position. You'll need a pair of ratcheting cable hoists (also known as "come-alongs,") several 1/2"-diameter screw eyes, some steel or wood stakes, an electric drill, a circular saw, a hammer, and a carpenter's level. You'll also need a short list of materials: six 1 x 4's, 12-feet long, and a box of Phillips-head screws or 8d (eight penny) nails to serve as fasteners.

At each end of the wall opposite the lean angle, drill a pilot hole and thread a screw eye through the siding and into the corner stud. Hook each come-along so that it runs from one of the screw eyes to a stake driven into the soil, into a telephone pole or tree, or – if you're over the driveway – to the bumper of a truck or van (*Illustration 1*). Slowly start to ratchet in the come-alongs, first one side and then the other. As the cables are shortened, the wall will begin to straighten up. Take your time, so that the siding doesn't split. Use the carpenter's level to check when the wall is plumb (straight up-and-down).

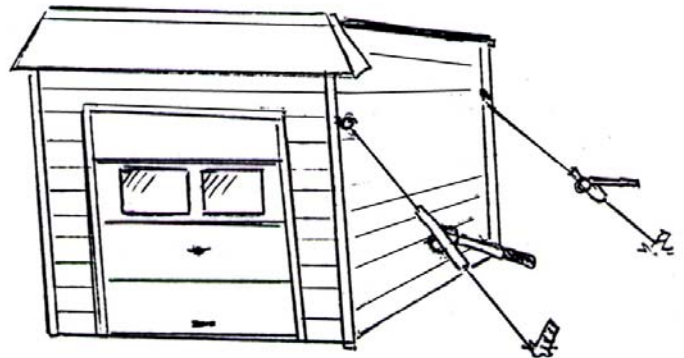


Illustration 1

With the wall held straight with the come-alongs, go inside the garage and install some diagonal corner braces. Each brace should cross at least 4 studs (*Illustration 2*). Fasten it with two nails or screws driven into each stud or plate that the brace crosses. For the strongest support, notch each stud to a depth of 3/4" with a circular saw (also called "letting-in"), and then nail the brace where it lies in the notch (*Illustration 3*). When the corner braces are secured in place, release the come-alongs and remove the stakes and screw eyes. Your garage should be standing proudly erect once again.

(continued)

Note: If the walls to your garage are bowed-out, or if the bottoms of some of the wall studs are rotted, you should repair the walls before straightening the garage. (See separate handout on "Garage Wall Repair" for how-to information.)

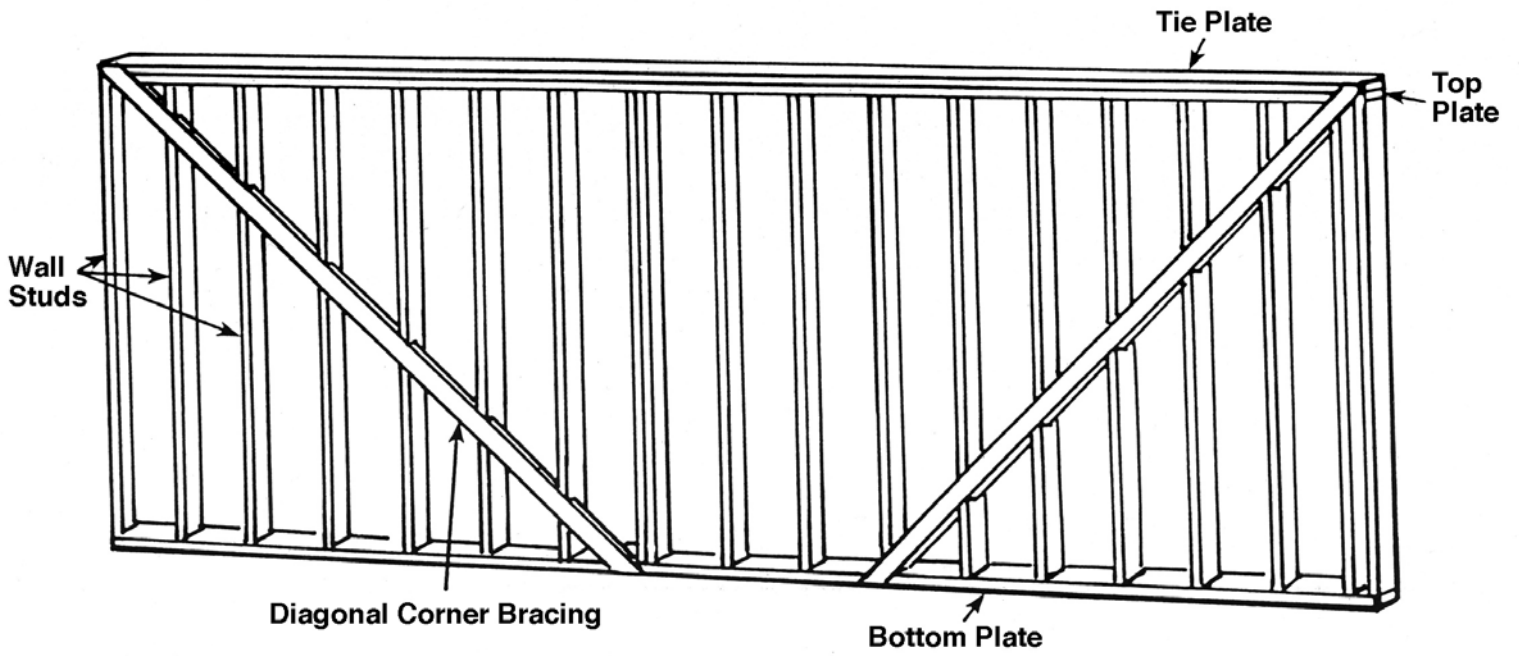


Illustration 2

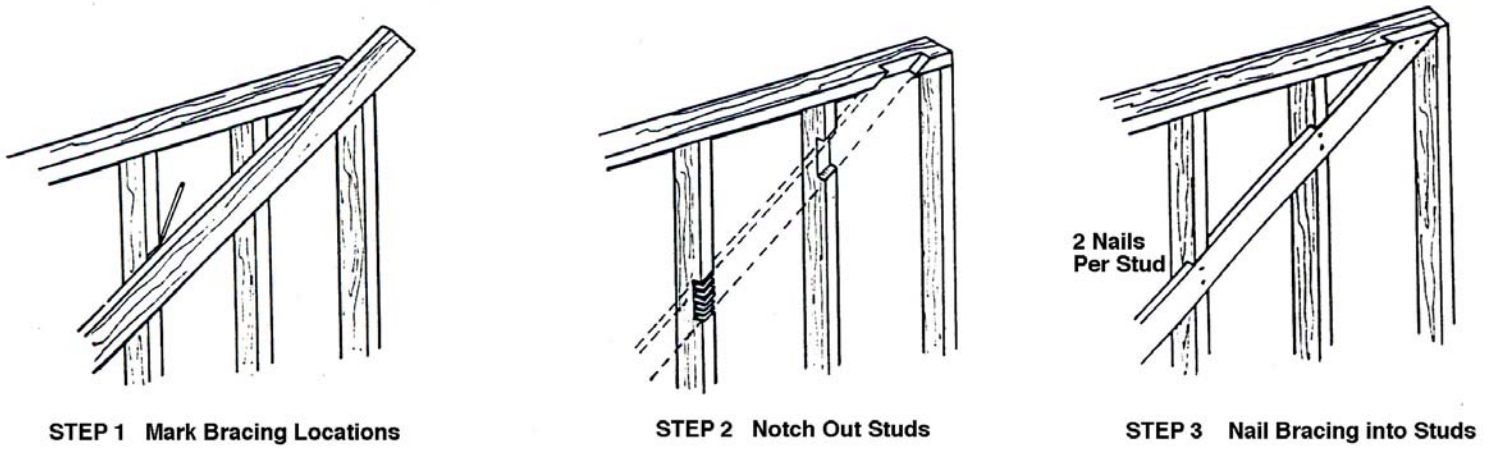


Illustration 3