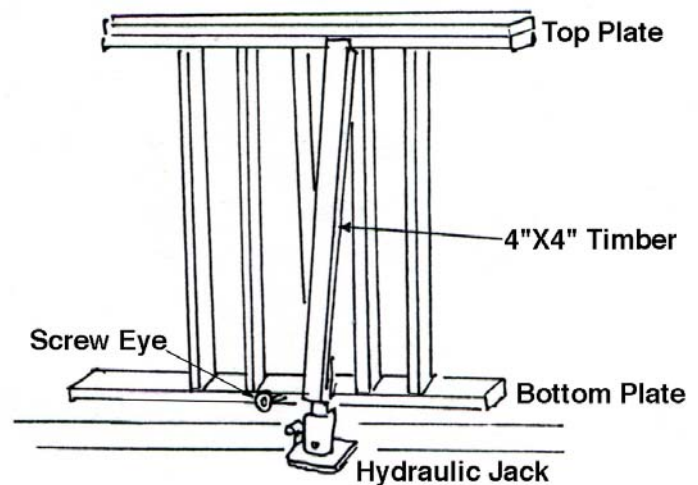




## **GARAGE WALL REPAIR**

Many older garages were built much like sheds and pole barns. The studs were set into the soil and siding was attached; if you were lucky, there was a bottom plate that sat directly on the dirt. Later, an asphalt or concrete floor may have been poured, covering the bottom plate (if there was one) and the lower portions of the studs. Over time, exposure to ground moisture may cause deterioration of the bottom plates (sill plates) and the bottom portions of the studs. Repairing this part of the framing isn't a complex project, but there are a few tricks that will make the job easier.

The first task is to cut out the lower portion of each stud, so that the new sill plate can be inserted between the bottom edge and the floor. The easiest way to do this is to jack up the roof an inch or so and support it while you're doing the job. You can use a hydraulic bottle jack along with some posts made by nailing two 2 x 4's together – one that will fit between the jack and the doubled header (top) plate of the wall, and two long enough to wedge between the floor and the top plate. Position the jack on the garage floor at one end of the wall; using that shorter post, slowly lift up the roof on that side. When it is up about an inch, wedge the longer post in place to support the roof at that height. Move the jack to the other side of the wall, raise the roof there to an equal height, and wedge the second post in place.



While the roof is supported, you can make the necessary repairs to the wall. Lay the new sill plate (a length of 2 x 4 Wolmanized lumber will do) on the floor beside the wall and mark its height along each stud. Then, using a reciprocating saw (Sawzall™), cut along the lines and remove the bottom portion of each stud. (If the stud is buried in concrete or asphalt, a bit of “persuasion” can be exerted with a small sledgehammer.) Once the bottom portions are out, you can insert the Wolmanized board below the remaining studs and lower the wall back into place, atop the new sill plate. Secure the sill plate to the concrete or asphalt floor with masonry anchors or Tapcon™ screws, and then toenail (nail diagonally) through the bottom of each stud into the sill plate.

If more than the bottom few inches of the old stud have rotted out, you can insert a small piece to support the rest of the stud; then, you'll need to “sister” a new full-length board along side the existing one, and nail the two boards together. (Code requires that studs be all one piece.) This sistering should be done before the wall is lowered back into place.

This same procedure can be utilized for other common garage repairs. If you have a bowed-out wall (usually caused by someone backing up just a little too far) that needs to be pulled back onto the foundation, jack it up as described above. Once the wall is swinging freely, thread a screw eye into the sill plate and use a come-along (cable hoist) to pull the wall back into position. Release the jack; the come-along will hold the wall in place while you drive concrete anchors through the bottom plate into the foundation to keep the wall from moving again.

You can also jack up a garage wall while you add or replace concrete footers beneath it, if you dig out and pour one side at a time.