

Smart Words for Smart Homeowners

THE EXPERIENCE OF EXPERTS AND THEIR ADVICE ON RELEVANT HOMEOWNER TOPICS

How To Install A Lockset

Overview

Whether you're planning a major renovation or looking for a quick face-lift, changing the locksets on the doors in your home can make a substantial, but subtle, statement about you. Locksets come in a wide array of styles and finishes, but they all work the same and some are fairly simple to install yourself. [*lockset* \ 'lök, set \ : noun; a complete locking system, including knobs, plates, and a locking mechanism, esp. for a door.]

A Few Words On Quality

If you intend to stay in this home for more than a few years you should invest in a high quality lockset. If you intend recoup your effort and don't want the handle set to look shabby after just a few years do not buy the cheapest. If you become easily annoyed with things that don't operate properly after just a few months do not buy a cheap lockset. (<http://www.baldwinhardware.com/>) (<http://doorhardwareusa.com>) 'Nuff said?

One Key

If you're buying several keyed locks, and don't want a pocketful of different keys, have a locksmith re-key all locks of the same brand to use the same key. If you buy keyed locks on-line the added charge for doing this is around \$9.00 to \$14.00 each. If you're mixing brands, check with the locksmith because some can be keyed alike, some can not.

The Time It Takes

If you're replacing a lockset or installing a new one in a pre-drilled door, the installation shouldn't take more than 25 or 40 minutes, depending on the lockset, the door composition and the work space you have to work in. Cramped space is not fun. If you need to drill all the holes, give yourself 1 or 2 hours extra.

Knob Height

The two important concerns when installing any lockset are the height of the knob above the finish floor and the backset the distance from the center of

the knob to the near edge of the door. Most knobs are positioned a comfortable 36 or 38 inches above the floor; check the height of other knobs in the house and keep it the same.

Backset typically measures 2 3/8 inches for interior doors and 2 3/4 inches for exterior doors. The point at which the knob height and the backset measurements intersect represents the center of the face bore (the circular hole that houses the lockset). A second hole, the edge bore, contains the latch assembly. Most locksets come with a cardboard template to help align the two critical bores. Check the template for the lock's bore diameters and choose drill bits and hole saws accordingly.



1) Prep The Door

Open the door halfway and tap two shims (one from each side) between the floor and the door bottom to hold it stationary. Measure up from the finish floor 36 inches (or the height of other knobs in the house) and mark the door's edge. With a square, extend this mark across the door's edge and 3 inches onto one face.

2) Mark The Face.

Wrap the cardboard template supplied with the lockset around the door's edge. Align its centerline with the line drawn in Step 1.

Punch a nail (or awl) through the center of the template's face bore. This marks the center of the face bore on the door.

Do the same to the template's edge bore to mark the center of the edge bore on the door. Remove the template.

3) Drill The Face Bore.

Place the hole saw's pilot bit on the face-bore mark and drill a pilot hole. Stop when the saw's teeth touch the door's surface.

Check that all saw teeth touch the surface uniformly, then drill the bore. Remove the hole saw periodically to clear sawdust from the cut. Stop when the tip of the pilot bit breaks through.

On the opposite side of the door, align the hole saw with the pilot hole made previously, and finish drilling the face bore.

4) Drill The Edge Bore.

Position the tip of a 7/8-inch spade bit on the edge-bore mark made in Step 2.

Drill into the edge of the door at medium speed until the tip of the bit emerges in the face bore.

Reduce pressure on the drill to avoid tearing out excess wood, and finish drilling the edge bore.

5) Scribe The Latch Plate.

Insert the latch assembly into the edge bore. Be sure that the latch's bevel faces toward the doorjamb. Outline the rectangular latch plate onto the door edge with a utility knife, then remove the assembly.

6) Cut The Latch.

Using a chisel, cut along the outline as deep as the plate is thick. Then chisel to the same depth every 1/8 inch between the top and bottom of the plate outline.

Turn the chisel bevel-side down and remove the waste, working from the middle out. The plate should be flush with the door edge when inserted into the finished mortise.

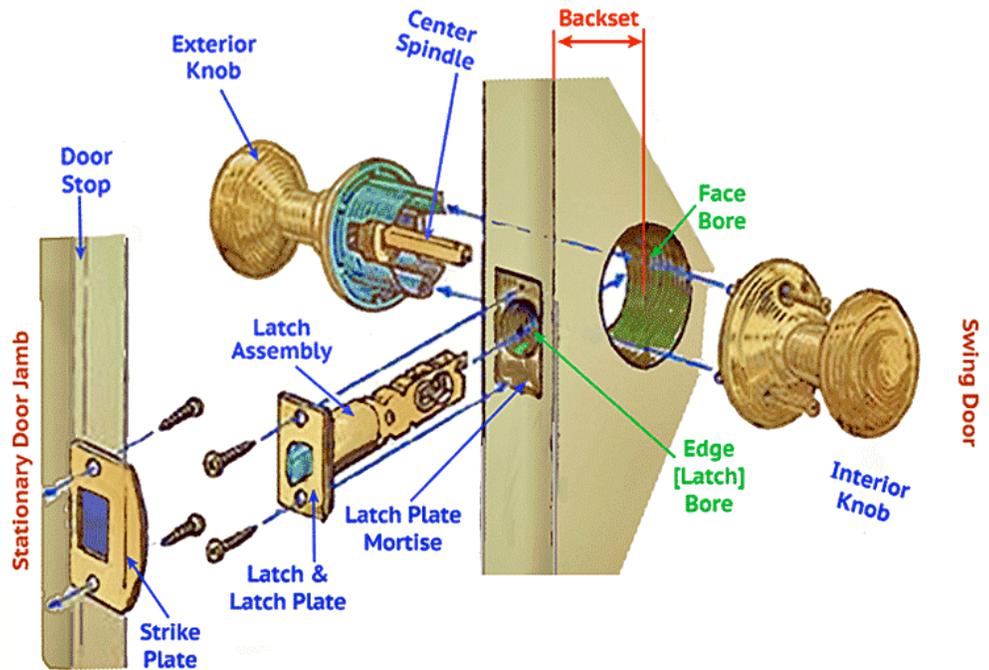
7) Cut The Latch.

Using a chisel, cut along the outline as deep as the plate is thick. Then chisel to the same depth every 1/8 inch between the top and bottom of the plate outline.

Turn the chisel bevel-side down and remove the waste, working from the middle out. The plate should be flush with the door edge when inserted into the finished mortise.

8) Install The Latch Assembly.

Reinsert the latch assembly and mark the latch plate's screw holes inside the mortise. Remove the assembly.



Drill pilot holes for the plate's two screws with a 3/32-inch bit, then reinsert the assembly and screw it in place.

Slide the outside knob with the spindle through the face bore and latch assembly. Then fit the inside knob over the spindle.

Hand-thread the mounting screws. Tighten them firmly with a screwdriver.

9) Layout The Strike Plate Mortise.

Close the door until the latch touches the edge of the doorjamb. Mark the jamb at the latch's midpoint.

With a square, extend this mark across the jamb to the doorstop. Mark the midpoint of this line.

10) Drill The Strike-Plate Mortise.

Use a 7/8-inch spade bit to drill two partially overlapping 5/8-inch-deep holes, centered above and below the midpoint (inset). Square up the sides of the mortise with a chisel, if necessary.

11) Install The Strike Plate.

Hold the strike plate over the mortise and score its outline with a utility knife. Using the technique described in Steps 5 and 6, chisel out a mortise as deep as the strike plate is thick.

Drill pilot holes for the strike plate's two screws with a 3/32-inch bit, then screw the plate in place.



TIP: If the mortise is too deep, cut a cardboard shim to bring the face of the plate flush with the edge of the door.

