

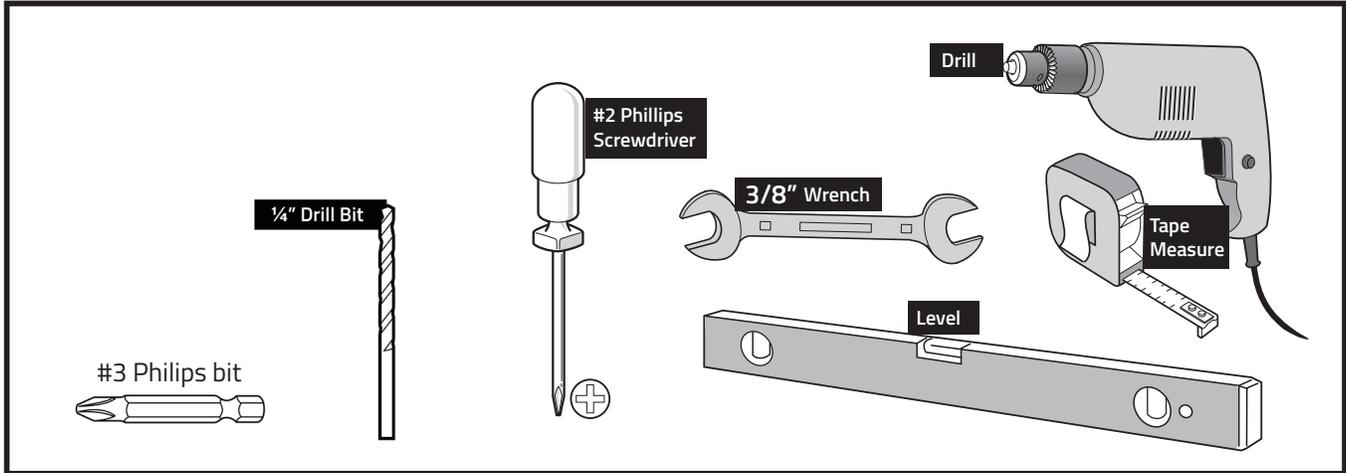
INSTRUCTION MANUAL
for Installing
NO.1 PUTNAM ROLLING
LADDERS AND HARDWARE

PL.210, PL.230 (Top Guide Assemblies)
PL.270-S, PL.270-C (Bottom Wheel Assemblies)



Instruction Manual for No.1 Putnam Rolling Ladders and Hardware

Installation Tools Needed:



Hardware Kits vary. See Page 9 for different hardware components.

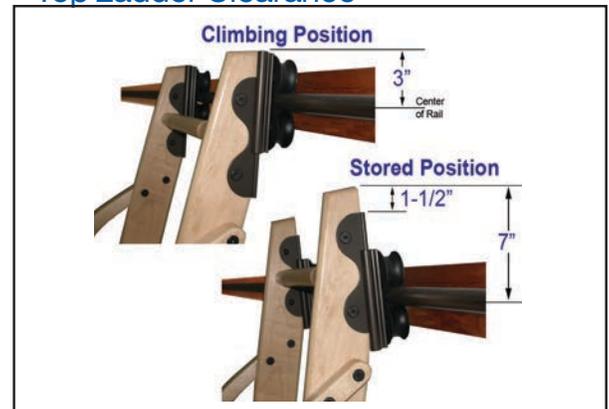
Step 1: Rail Installation

Special application notes/cautions:

- Leave at least 7" of clearance between the center of the rail and the ceiling, crown molding or other overhanging protrusions when the ladder is in the stored position (close to the wall/cabinet/bookshelf). In the climbing position, a minimum 3" clearance between the center of the rail and any upper cabinet doors is required to be able to open the upper cabinet doors (see figure 1).
- Do not mount rail brackets directly onto a drywall surface. Always mount these brackets to solid wood, pre-drilling the holes in the wood is advisable to avoid splitting the wood.
- Do not use rail brackets as a splice between 2 rails (instead, use the supplied wooden dowels for this purpose)
- Do not use hook-style ladder hardware with curved rails.

Figure 1

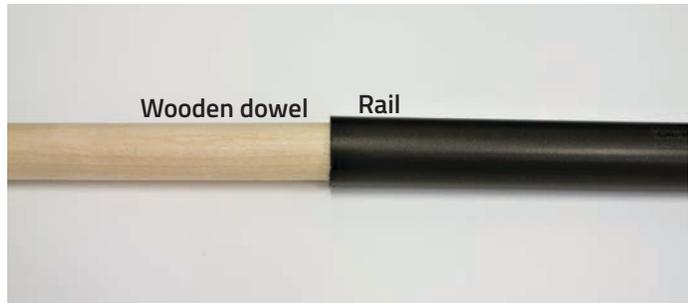
Top Ladder Clearance



1. Establish the height where the center of the rail is to be installed, then mark the location where the bottom of the mounting bracket will be located (depending on which type of bracket is used, the distance between the center of the rail and the bottom of the bracket will change, see dimensional specs on the bracket for those measurements). Verify with a quality leveling device that the horizontal locations of the brackets are level and true.

Figure 2

2. Splice the sections of rails together using the supplied wooden dowels. Do not put rail brackets in the area where the splices will be located (see figure 2).



3. Install rail brackets
 - a. For vertical brackets (PL.14 series): Drive the brackets into the slotted rail and align them with the uprights/stiles on the shelving unit. Mark the fastener locations and pre-drill the holes in the wood to avoid splitting. Secure the brackets using the supplied screws (be sure to use the tapped and threaded brackets for the ends of the rails, see vertical brackets below).
 - b. For horizontal brackets (PL.27 series): Separate the bracket and fasten the back plate to the shelving unit or horizontal trim board in the desired location, no more than 36" from center to center (pre-drill the holes in the wood to avoid splitting). Drive the bracket fronts into the track and align with the mounted backs, then reassemble the brackets with the rail attached (use the left and right brackets with the attached end caps fits the ends of the rails).

To install a PL.210 roller type ladder onto the rail when using the horizontal brackets:

 - Separate one of the outside brackets with end cap attached.
 - Slide the front portion of the bracket off the rail.
 - Install ladder onto the rail and reinstall the end bracket.

Vertical Brackets

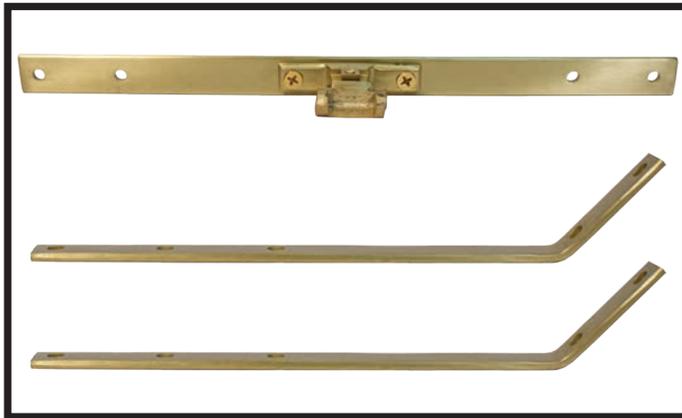


Horizontal Brackets



- c. For corner brace/bracket (PL.40CRVBKT series) used in conjunction with the 30" radius curved rails: Separate the rail bracket and drive the front piece of the bracket into the curved rail, positioning it halfway on the rail. Attach the brace to the shelving unit in the desired location, reattach the center rail bracket, and add two additional brackets towards each end of the curved rail. Secure these brackets to the shelving unit.

Corner Brace/Bracket



Step 2: Attaching the Hardware to the Ladder

1. Install the upper roller and hook assemblies.
 - a. Center the upper assembly around the top turned dowel. Measure down from the top of the ladder to the top of the Upper Assembly hardware (approx. 1½"). This measurement should be the same on both wood side rails (*see figure 3*).

Figure 3a



Figure 3b



- b. Using a Vix bit or similar self-centering drill guide, drill a pilot hole into the edge of the ladder for the (2) #10 x ¾" Flat-head, Phillips-drive screws and secure each Upper Assembly to the top of the ladder (*see figure 4*).

PLEASE NOTE: *Pre-drilling is essential to prevent splitting the wood.*

Figure 4a



Figure 4b



Figure 4c



c. Using a $\frac{1}{4}$ " drill bit, drill out the through holes for the $\frac{1}{4}$ -20 Phillips, pan-head $1 \frac{3}{8}$ " long bolts. We recommend this procedure:

- Using the holes in the upper assembly as a drill guide, drill a $\frac{1}{4}$ " hole halfway through the thickness of the ladder slide rail.
- Drill the same hole on the opposite side of the Upper Assembly, producing a straight $\frac{1}{4}$ " through hole in the ladder side rail.
- Follow this same procedure for all 4 through holes and finish by securing the upper assemblies with the supplied $\frac{1}{4}$ -20 Phillips drive, pan-head bolts and acorn nuts.

Note: For the PL.210 series Upper Roller Assembly, the larger diameter wheel is on the top (see figure 5).

Figure 5a



Figure 5b



Figure 5c



Figure 5d



2. Install the bottom wheel assemblies

- a. Place the bottom wheel assembly onto the bottom of the ladder using the "U" bracket portion of the housing. Verify that the bracket is flush with the bottom of the ladder. (Because of the 12-degree angle of the bottom of the ladder, this will align the housing diagonally across the ladder side rail).
- b. Mark the location of the "U" bracket on the bottom of the ladder, this will be approximately 2" in from the front of the rail. At the same time, mark the location on the side of the ladder for the top and middle mounting holes of the bottom wheel assembly. Measure these marks and transfer these measurements to the other ladder side rail so that the hardware will mount identically on both ladder side rails (*see figure 6*).
- c. Using a $\frac{1}{4}$ " drill bit, drill through holes in the ladder side rail for the $\frac{1}{4}$ -20 pan-head bolts (*see figure 6*).



Figure 6a



Figure 6b



Figure 6c



Figure 6d



- d. Pre-drill the ladder side rail for the #10 Flat-head, Phillips drive $\frac{3}{4}$ " screw (see figure 7). **PLEASE NOTE: Pre-drilling is essential to prevent splitting the wood.**
- e. Install the bottom wheel assemblies using the included screws, bolts, and acorn nuts.

Figure 7a



Figure 7b



Figure 7c



3. Install the Truss Rods

- a. Drive in the threaded insert using a rubber mallet (see figure 8).
- b. Slide the threaded rod through the hole in the ladder side rail and tighten with a $\frac{3}{8}$ " socket or open-end wrench.

Figure 8a



Figure 8b



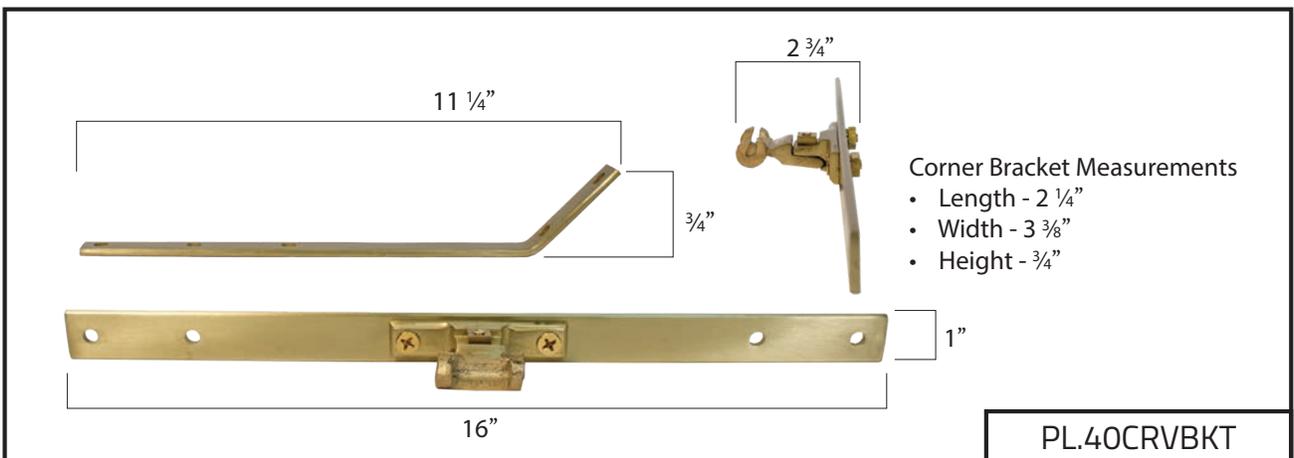
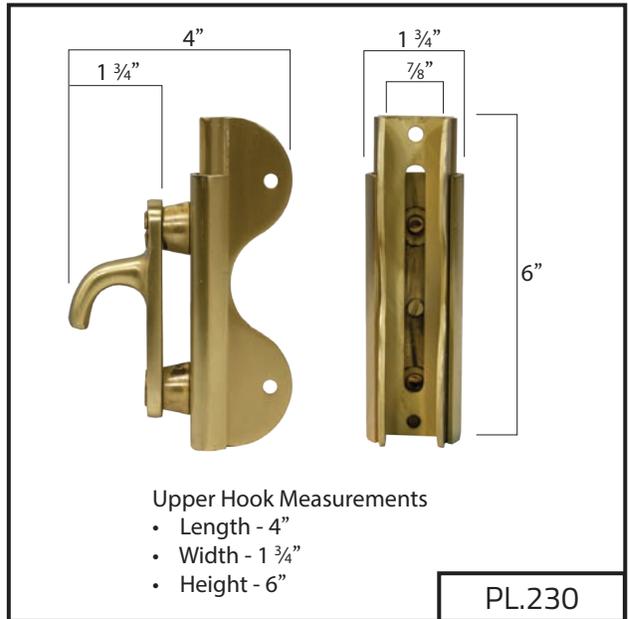
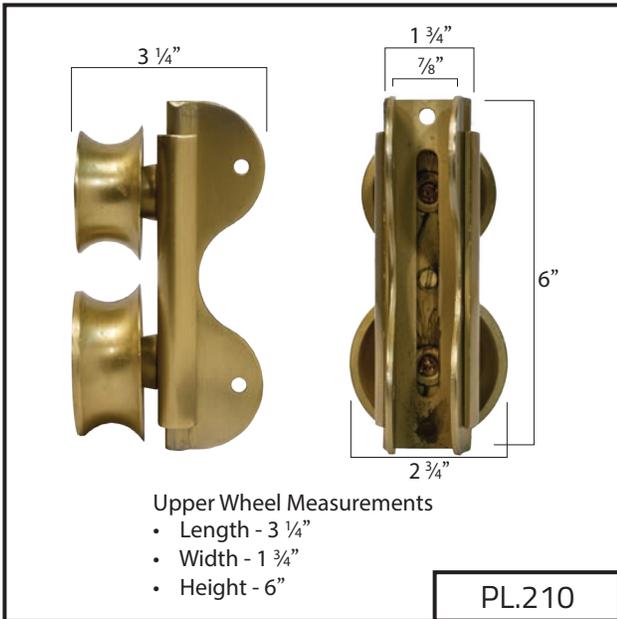
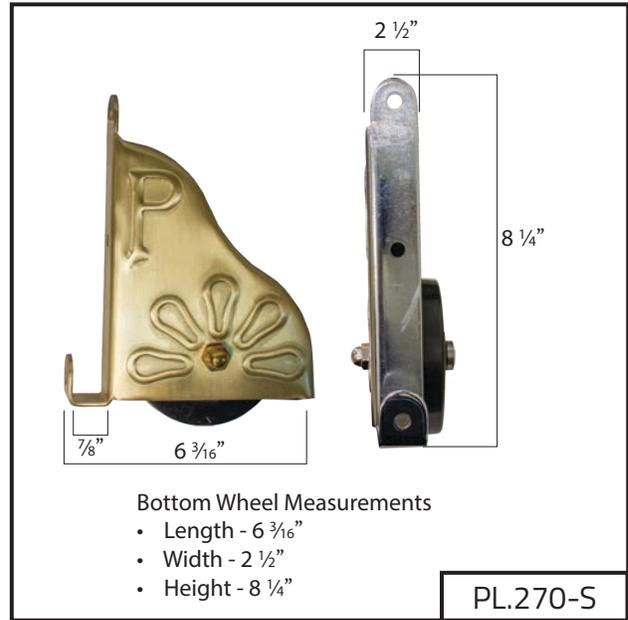
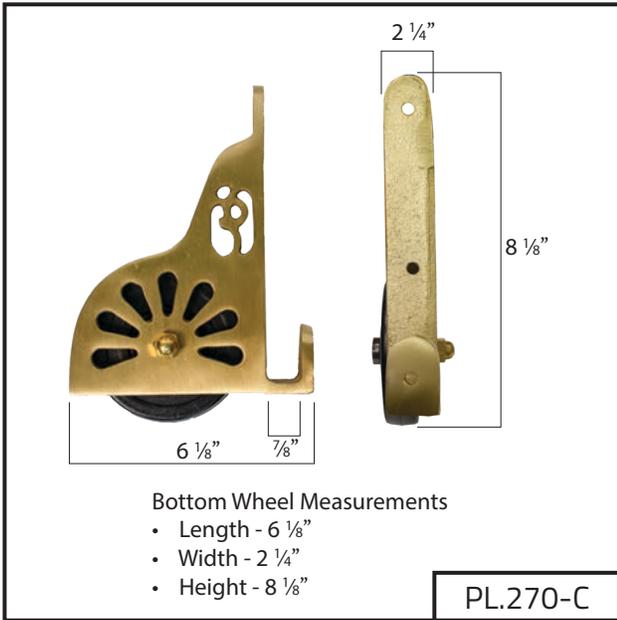
Figure 8c



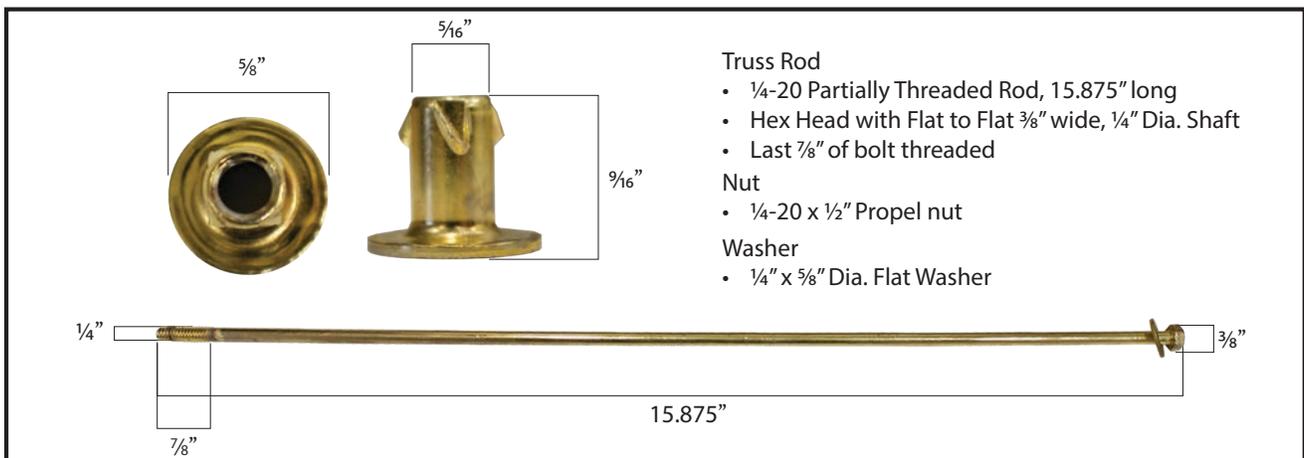
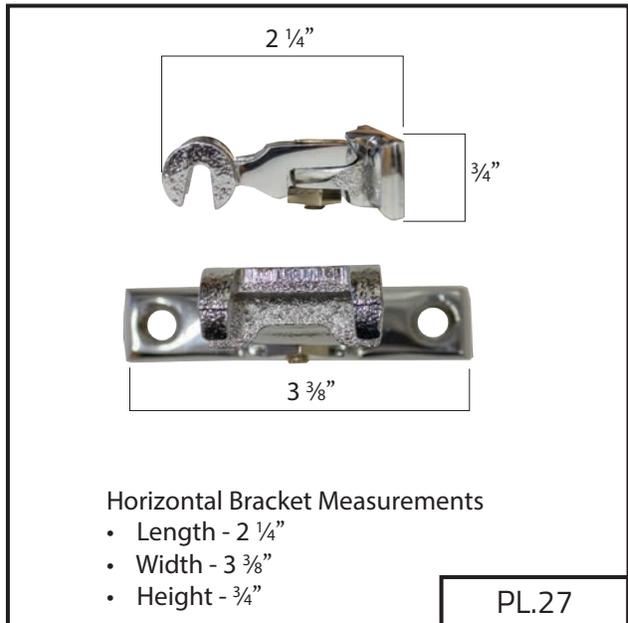
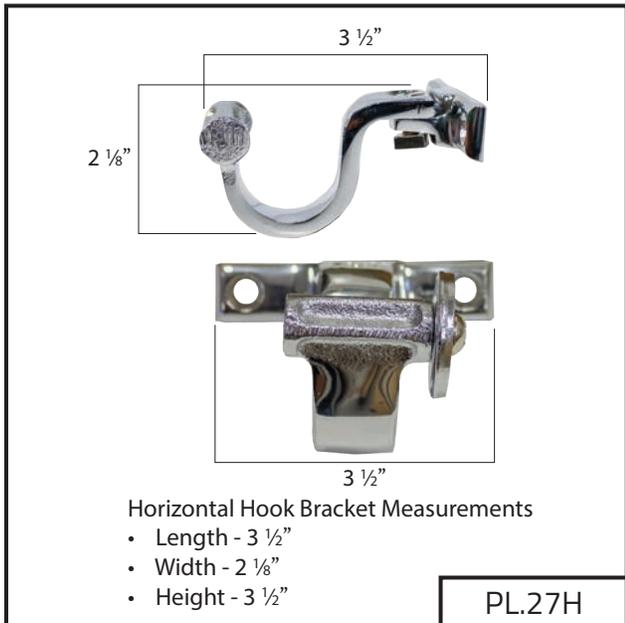
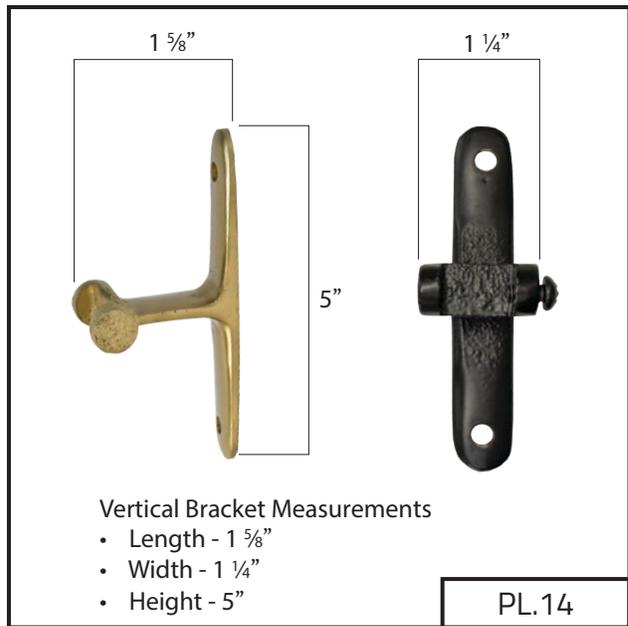
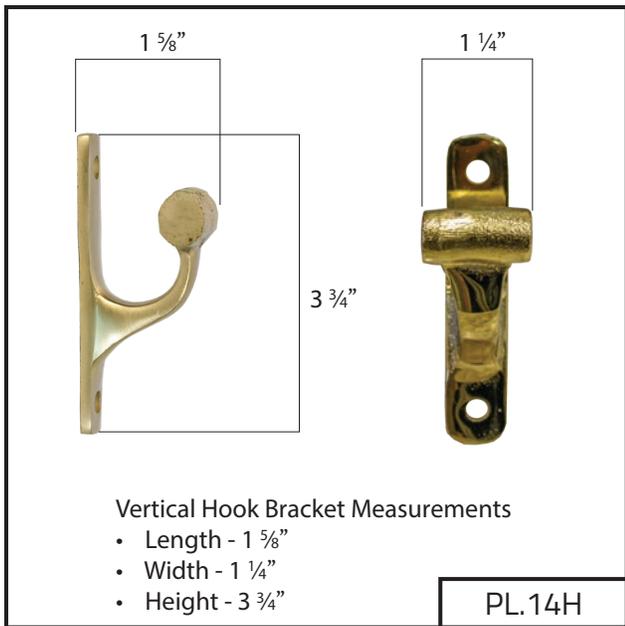
...and your Putnam Ladder is complete!



Hardware Dimensions



Hardware Dimensions



Putnam Ladder Application Images



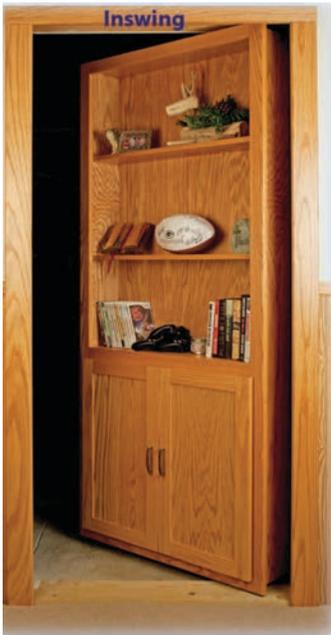
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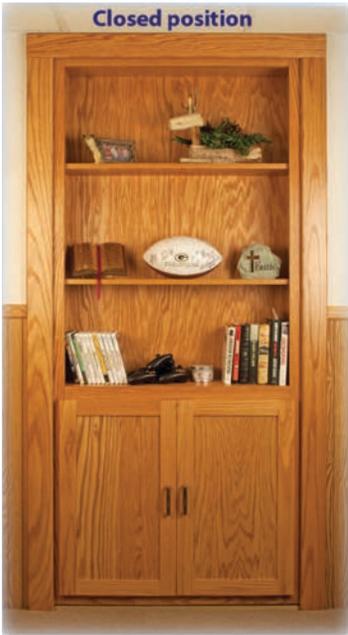
Mini Barn Door Hardware



Rolling Barn Door Hardware



Inswing



Closed position



Outswing

InvisiDoor



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