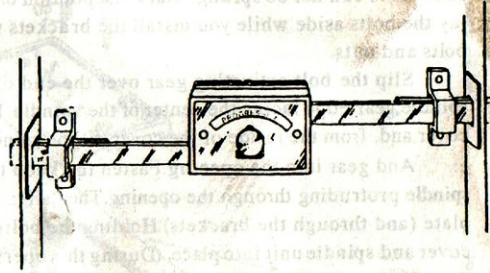


# Installing and Servicing the Double Bolt Lock



The double bolt lock, produced by Progressive Hardware Co., Inc. East Northport, NY 11731 is designed to provide maximum security for single doors. Although designed primarily for use on doors that open out, it also can be installed on other types of doors through use of special hardware.

Properly installed, the lock will work smoothly from outside the door as the key is inserted and the cylinder turned. Turning the cylinder will rotate the spindle and bolt activating gear. As the gear turns, the bolts will be retracted (to unlock), or extended (to lock), as the teeth of the gear engage the teeth on the bolts.

When operating the lock from inside the door, the knob must be pulled out slightly while turning. This is necessary to disengage the spindle from the square portion of the lock cylinder tailpiece. If this is not done, the spindle and tailpiece will be locked in position, and the spindle can not be turned to activate the bolt activator gear.

The double bolt lock uses a standard five-pin tumbler cylinder in a brass case. The tailpiece mechanism, however, differs from the usual tailpiece. The tailpiece is rigid. It is connected to the cylinder by a backplate held by two screws.

## Installation Procedure

To install the double bolt lock, drill a 1-1/2" hole in the exact center of the door, approximately 50" above the floor. From the outside of the door, insert the lock cylinder (and cylinder ring) through the hole. Position the outside steel safety plate over the cylinder face so only the keyway is accessible through the opening in the plate. (This plate prevents wrenching out of the cylinder.) Fasten the plate to the door with the four 2-1/2" x 1/4" bolts and nuts.

Working on the inside of the door, fasten the lock base to the lock cylinder with the two cylinder retaining screws. (Depending on the thickness of the door, the screws might have to be shortened, and, in the case of a panel door, a block of wood will have to be used to increase the effective thickness in the area where the base is to be fastened.) Making sure the base is level, fasten it to the door with the four 1-1/2" sheet metal screws.

Align the locking bolts on the base, extending each bolt outward to the jamb. Place the brackets over the bars as close to the jambs as possible (the manufacture recommends 1/4" between bracket and jamb) so the bars can not be sprung. Mark the position of the brackets. Then, lay the bolts aside while you install the brackets with four 3" x 5/16" bolts and nuts.

Slip the bolt activating gear over the end of the spring loaded spindle, gear edge facing the center of the spindle. Take the inside lock cover and, from the inside of the cover, fit the spindle.

And gear into the opening. Fasten the knob to the portion of the spindle protruding through the opening. Then, align the bolts on the base plate (and through the brackets). Holding the bolts in position, slip the cover and spindle unit into place. (During this operation, make sure that the cylinder tailpiece slides into the square bore of the spindle.) Fasten the cover to the base plate with two round head screws.

To install the strike plates, extend the bars against the door jambs. With a pencil, mark the position of the strike hole. Drill the strike hole deep enough to allow the bolts to protrude a minimum of 2-1/2" into the jamb. Finish the job by installing the strike plates over the holes.

#### Service Notes

Normally, the double bolt lock will need little servicing. Occasionally, however, a problem will pop up. The following are some of the common problems that you might run into:

Knob is difficult to pull out-This is caused by too much spring tension. To reduce the tension, merely cut a small portion off the spring.

Knob and bolts seem jammed-The gear and bars probably aren't meshing properly. Loosen the inside cover and jiggle the knob and spindle mechanism until the gear teeth slip into alignment with the teeth on the bolts. Then, finish by re-fastening the inside cover.

Spindle turns with difficulty-Put a drop of oil on the gear collar. Spread the oil around the gear collar by extending and retracting the bolts several times.

Knob can not make a full rotation-This is caused by the strike holes not being cut deep enough to receive the bolts. To insure proper operation, make sure the holes are at least 2-1/2" deep.

Key turns past opening position when unlocking-Turning the key 360° will retract the bolts enough so the door can be opened. To prevent any overshooting of the key when turning, install a stop screw or bolt on one of the locking bolts. To do this, turn the key 360° to unlocking position. Leaving the mechanism in this position, drill a hole in one of the locking bolts right next to the lock case. Thread the hole and insert machine screw. Positioned correctly, the key will have turned to the proper position for removal from the cylinder.

