

Cuckoo Clock Hand Installation

Purpose: describe how to install the hands on a cuckoo clock

Objective: permit an individual who does not regularly work on cuckoo clocks to change or adjust the hands of a cuckoo clock.

Assumptions: the clock has a REGULA movement. I estimate that 90% of the cuckoo clocks I work on are made by REGULA. Hands for movements made by other manufacturers are totally different and this paper does not apply.



The photo on the left shows a cuckoo clock dial without the hands. The reader should notice that there are two concentric shafts sticking out through the dial.

The outer shaft is for the hour hand. It is tapered like a traffic cone and the hour hand is simply shoved onto the cone and held there by friction. If it's in the wrong place, the user simply rotates it to the correct place and shoves it on a little tighter.

The inside shaft is for the minute hand. It has a square shaft to make sure the hand stays in place. A hand nut is threaded on the end to make sure the minute hand is held solid.

The photo on the right shows the hands installed on the clock.

The reader will learn the steps necessary to install these hands.



These are the five components of the hand assembly. From the left, they are:

- 1 - hour hand
- 2 - square holed washer
- 3 - minute hand
- 4 - flat washer
- 5 - hand nut

They will be installed in the order shown.

The photo to the right shows the hour hand installed. It was simply pushed on to the tapered hour hand shaft. It is held on by friction. Do not worry if it shows the incorrect time at this point. We will rotate it to the correct position after we install the minute hand.





The left photo shows two views of the square holed washer. Note that there is a shoulder. The minute hand will sit on the smaller diameter. The flat side of the washer is toward the clock.

The right photo shows the washer on the minute hand shaft. The square hole matches the square on the shaft. The shoulder is facing out.



This photo shows the minute hand hung on the shoulder of the square holed washer. It is loose and may fall off. Not to worry. We are making a sandwich and this is one of the items in the sandwich. I normally let it hang straight down until I complete the sandwich and then I adjust it. Hang in there.



Now we will add the flat washer. It is hung on the minute shaft with the hand. Both are loose and may fall off so be careful.



Now we put on the top part of the sandwich: the hand nut. It is shown above. Screw it on the minute hand shaft. I usually have the hand hanging down toward the six. I tighten the nut with my fingers. That is normally enough to hold it on during the adjustment phase of this project. I normally then try to rotate the hand to see if it moves the internal pieces of the movement. Does the hand shaft rotate? You can tell if you watch the tip of the shaft. It should rotate with the hand. At this point you want to check to make sure the minute hand is sitting up on the end of the square holed washer or on the shoulder. If it is correct, there will be not be gaps in the sandwich.

We are about finished.

At this point, we have physically attached the hands to the clock.

However, in all probability they are not in the correct location to enable anyone to tell time from this clock. We will fix that.

First, we will adjust the minute hand to make sure it cuckoos on the hour (from 1 to 12 times) and on the half hour (only once). Then we will adjust the hour hand to make sure it points to the correct hour for the number of times the clock cuckoos.

To adjust the minute hand rotate it until it cuckoos once and you are sure that is the half hour i.e. it is not striking at one o'clock. At this point the hand may be pointing anywhere other than at the six.

Loosen the hand nut a little. The minute hand should be free to rotate. Rotate the minute hand to the six. Tighten the hand nut with your fingers.

Rotate the minute hand to the 12. If it is exactly on the 12 you are in great shape. In all probability, it is off a bit. Rotate the minute hand slowly until the clock cuckoos for the half hour. If it was off a bit at the 12, the hand will probably not be on the six. Loosen the hand nut, and move the minute hand to the six. Tighten the hand nut. Rotate the minute hand slowly around to see if it goes off at 12 this time. If so, you are in business and can tighten the hand nut as tight as you can with your fingers.

Try at the six again and then at the 12.

You might have to do the above several times to get the minute hand in the correct position. Be patient.

Once the minute hand is in the correct position, you must adjust the hour hand. This is the easy part.

Rotate the minute hand until the clock cuckoos on the hour. Count the number of cuckoos. Then rotate the hour hand until it points to the number of times the clock cuckoos.

Rotate the minute hand again until the clock cuckoos on the hour. Count the number of times it cuckoos. Is the hour hand in the correct positions? If not, rotate it until it is correct. Once it's correct, push the hour hand on again if you can. I usually use both thumbs.

That should be it.

Enjoy your clock.

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