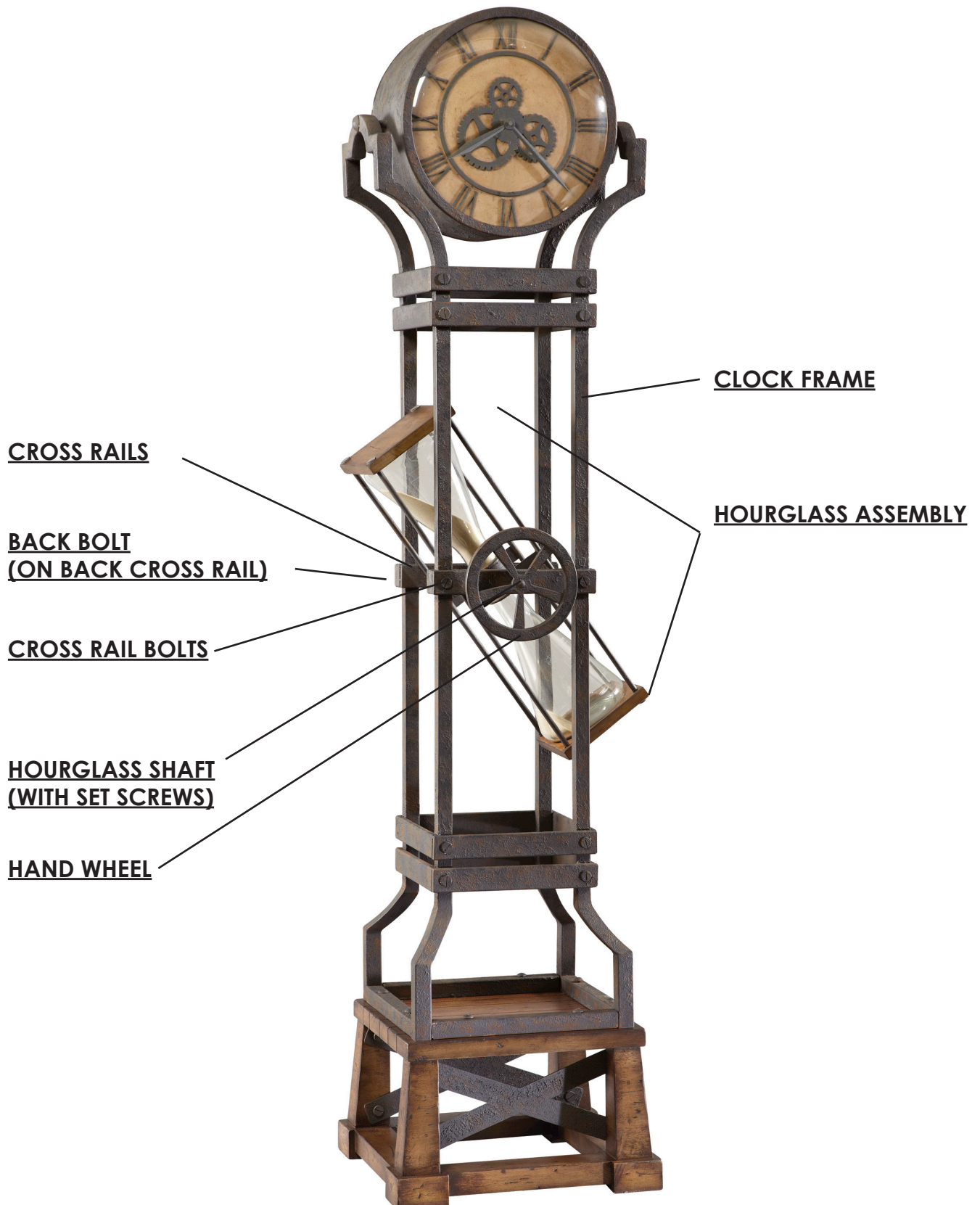


# STEP-BY-STEP INSTRUCTIONS FOR REPLACING THE HOURGLASS IN THE HOWARD MILLER 615074 CLOCK



# HOWARD MILLER 615074 HOURGLASS

## ASSEMBLY REPLACEMENT PARTS

Hand wheel (note the two machined flats on the bolt for set screws).



Hourglass, pictured with inner cross rails on the hourglass shaft.



Two (2) inner cross rails



Two (2) outer cross rails



Assembly hardware  
Four (4) cross rail bolts  
One (1) back bolt for hourglass shaft  
Four (4) set screws for hourglass shaft

## **DISASSEMBLE THE CLOCK HOURGLASS ASSEMBLY**

1. Remove the two small set screws on the hourglass shaft with a 3/32" hex wrench. One is located behind the hand wheel, between the cross rails. The second is located between the back set of cross rails.
2. Remove the back bolt from the center of the back cross rail with a regular screw driver.
3. Loosen and remove the hand wheel from the hourglass shaft by turning the wheel to the left.
4. Hold and support the hourglass assembly and remove the two bolts from the front cross rails with a regular screw driver.
5. Continue to support the hourglass as you remove the front cross rails from the clock frame.
6. Remove the hourglass from the clock frame.
7. Remove the back cross rail bolts and cross rails from the clock frame.



**STEP 1**



**STEP 2**

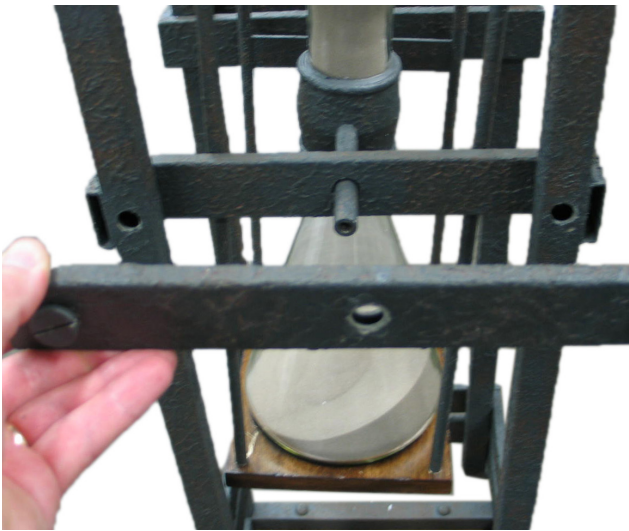


**STEP 3**



**STEP 4**





**STEP 5**



**STEP 6**



**STEP 7**

## **INSTALL THE NEW HOURGLASS ASSEMBLY**

1. Install a new inside and outside cross rail on the back of the clock frame using the new cross rail bolts provided. Tighten the cross rail bolts securely, being careful not to mar the finish.
2. Place a new inside cross rail on the hourglass shaft of the hourglass. This rail will be the inside rail on the front of the clock. Lift the hourglass into the clock frame. Insert the hourglass shaft into the hole in the center of the back cross rails.
3. While supporting the hourglass, rotate the inside cross rail and line up the threaded inserts on the cross rails with the holes on the clock frame. Align the new outside cross rail, and attach it to the clock frame using the new bolts provided. Be careful not to mar the finish when tightening the bolts.
4. Thread new hand wheel onto the hourglass shaft, noting the flats on the bolt. These flats must line up with the set screw holes on the hourglass shaft. Turn the wheel until it stops, then back off the hand wheel until the set screw holes line up with the flats on the bolt.
5. Insert new back bolt into the back side of the hourglass shaft and tighten.
6. Insert and tighten the four set screws into the hourglass shaft with a 3/32" hex wrench.
7. Make sure all hardware is tight. Slowly rotate hand wheel and inspect the new assembly. The replacement is now complete.



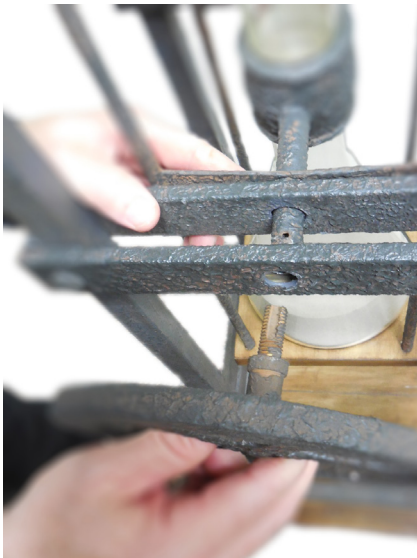
**INSTALL STEP 1**



**INSTALL STEP 2**



**INSTALL STEP 3**



**INSTALL STEP 4**



**INSTALL STEP 5**



**INSTALL STEP 6**