

What is it?

By David J. LaBounty, CMC FBHI

This question came up a few months ago on the NAWCC Message Board* concerning a strange looking piece loosely attached to the inside of the back plate of a movement. I must admit to posing the same question the first time I ran into "it". I had disassembled a Seth Thomas hip-style movement, thinking it was just like all of the rest I'd seen. But then I had to get it back together! I can remember the frustration I had trying to get this...thing...arranged and out of the way so "it" would function in *any* capacity. At first I wanted to make "it" a strike lever return weight but the darn thing appeared to function in the opposite direction, pushing the "J" lever *away* from the strike release pins rather than drawing it towards them as is normal. No matter which way I turned "it", "it" was either in the way or apparently not functioning. So, I gave up and assembled the movement. That's when I found out what "it" was!

"It" is a counter weight with flirt, attached to the back plate and operates in such a fashion so as to allow the hands to be turned backwards. Here's how it works...

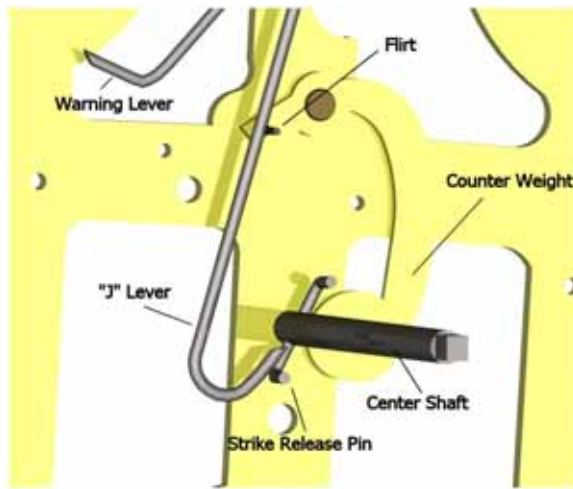


Fig. 1: Just before warning, the "J" lever is being held in the proper position by the flirt on the counter weight.

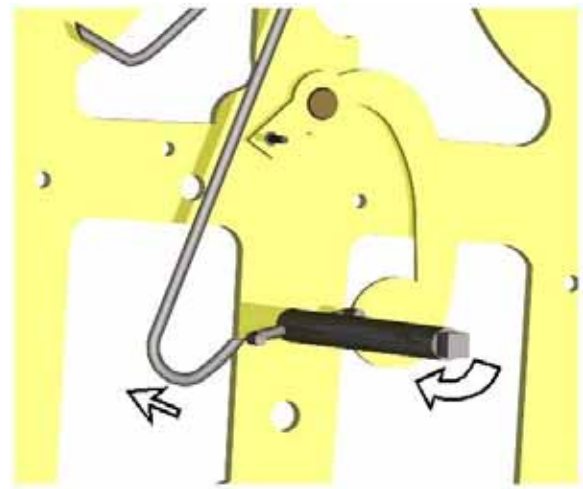


Fig. 2: As the center shaft is rotated, the strike release pin contacts the "J" lever and moves it into warning. Note: The counter weight is resting on the center shaft or another strike release pin at this point and the flirt is not in contact with the "J" lever.

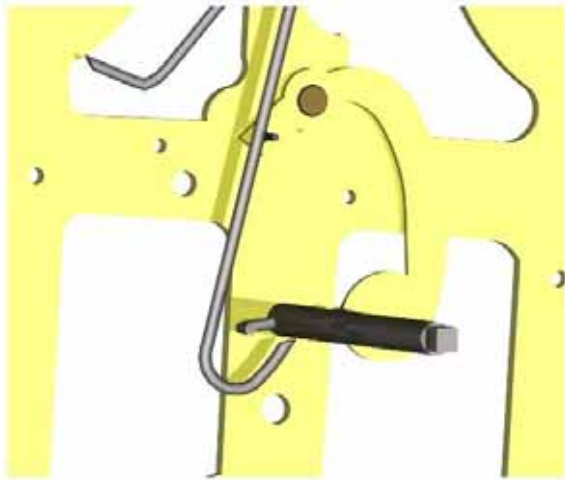


Fig. 3: Following strike release, the “J” lever has fallen off of the strike release pins and has come to rest against the counter weight flirt.

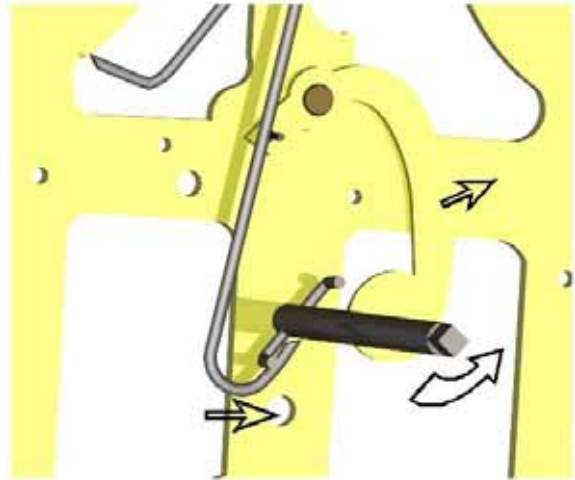


Fig. 4: Turning the hands backwards causes the strike release pins to contact the *inside* of the “J” lever and draw it towards the center shaft. The counter weight is forced away from the center shaft as a result.

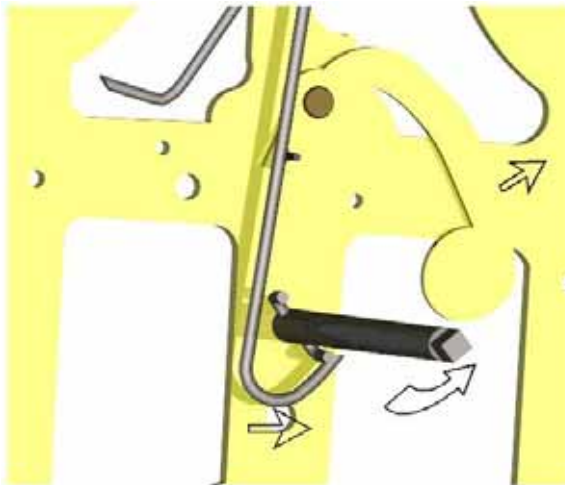


Fig. 5: As the hands are turned backwards, the “J” lever is pulled closer to the center shaft and passes underneath. The counter weight is forced further away.

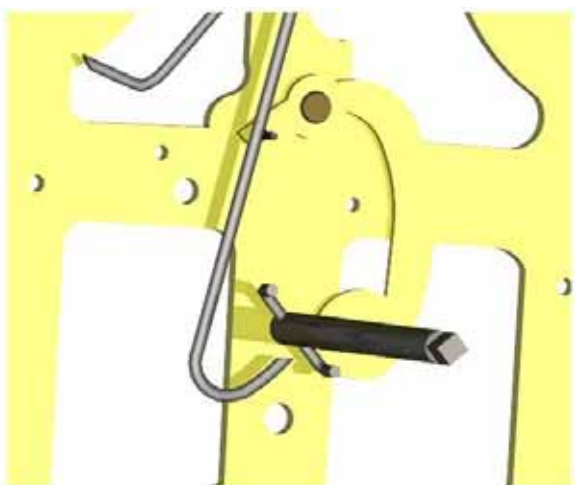


Fig. 6: The center shaft has been turned counter-clockwise to the point the “J” lever has fallen off of the strike release pin. The counter weight has returned the “J” lever to its normal operating position.

A few final things to mention to ensure proper function of this feature...

The set-back counter weight is a lever and shouldn't be oiled or it will become sticky. Also, it will not be necessary to install the usual lever return spring on the "J" lever arbor. A return spring would be counter productive since it would work against the counter weight. This could cause the "J" lever to be in a position in which it would miss the strike release pins.

* The NAWCC Message Board is a forum dedicated to horological discussions and can be found at <http://nawcc-mb.infopop.cc/eve/ubb.x>