

# Hand Wheel Kit Installation

The Hand Wheel Kit contains everything you need to add a hand wheel to the backing pole. When used in combination with the hand wheel on the take-up pole, it will be easier to advance the quilt on the frame.

## Contents of the Hand Wheel Kit

### Studio Frame Hand Wheel Kit (#QF09324)

Quantity	Description
1	Outside pole end
1	V bearing
1	Large washer
1	Small washer
1	Nylon lock nut
1	Inside pole end long-bolt wedge
1	Hand wheel
1	Hand wheel knob
1	Hand wheel insert
1	Hand wheel bolt

## Tools Needed

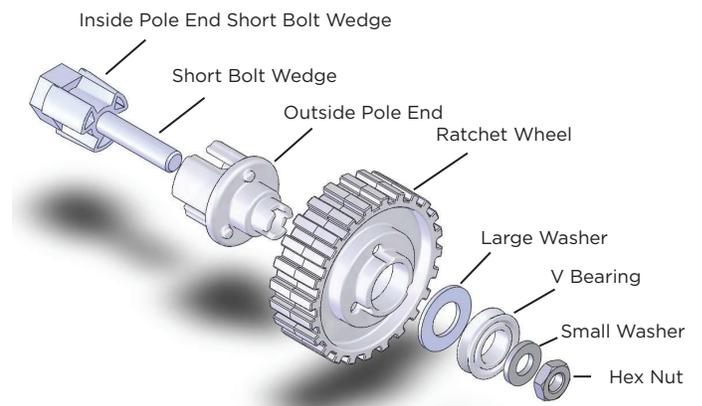
- 13/17 mm wrench (came with the frame) or a 17 mm socket wrench with ratchet
- Small hammer
- Punch or screw driver

## Installing a Hand Wheel to the Backing Pole

To remove the existing pole end:

1. Remove the leader from the backing pole and the backing pole from the front of the frame. Use a utility knife to carefully slice the Velcro between the 4-foot pole section where you'll be adding the hand wheel and pole section it is attached to. Remove the 4-foot pole section by pressing the spring button and sliding the section out.
2. Remove the hex nut, small washer, V bearing, large washer, and ratchet wheel from the ratchet end of the backing pole.

**NOTE:** You will reuse the ratchet wheel.



3. Remove the outside pole end and inside pole end short-bolt wedge. Place the nut on the end of the bolt and turn it couple times to protect the end of the bolt (in case you ever want to reuse it). Hit the nut with a small hammer until the bolt loosens. Remove the nut. Push the bolt into the pole until the wedge loosens, then remove the pole end parts. If necessary, loosen or remove the nut.
4. If the short-bolt wedge did not loosen sufficiently to be released during step 2, place the end of the punch or screw driver through the hole where the bolt was and hit the inside pole end short-bolt wedge until the outside pole end is loose and can be removed. Remove the pole end parts.



*Place the screw driver or punch here to dislodge the wedge from the pole end. If necessary, hit the end of the screw driver or punch with the hammer.*

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⚠ **IMPORTANT:** You will reuse the ratchet wheel along with the new parts from the Hand Wheel Kit. Do not use the regular nut, the outside pole end, or the short-bolt wedge. Place them in a bag with the other used parts in case you need them in the future. Except for reusing the ratchet wheel, do not mix old and new parts because it may adversely affect the way the parts fit into the pole end.

1. Add the hand wheel assembly to the long-bolt ratchet-wheel assembly as shown, aligning the three tabs on the hand-wheel insert with the three notches on the outside pole end. It is important that the three tabs engage so turning the hand wheel will turn the pole. If the three tabs are not properly aligned, the hand wheel will spin freely, independent of the pole.

2. While holding the outside pole end, push the nut end of the bolt toward the opposite end of the assembly until the inside pole end short-bolt wedge slides out. This makes the outside diameter of the outside pole end narrower and ready to be inserted into the end of the backing pole.
3. Slide the long-bolt ratchet wheel and hand wheel assembly into the open end of the 4-foot pole. While holding the complete assembly tightly in the open end of the pole, tighten the nut using the 13/17 mm wrench that came with the frame (or a 17 mm socket wrench with ratchet). Ensure that the hand wheel engages the ratchet wheel assembly and does not spin loosely and that the three tabs of the outside pole end align with the three holes in the ratchet wheel.
4. Reattach the 4-foot pole section to the rest of the backing pole and replace the pole on the frame. Reattach the leader. You should now be able to use the hand wheel on the backing pole.

