#### Assembly Instructions for Bailey ST-100, ST-200, Pro-X, Pro-XL Pottery Wheels

**Tools Required:** 

(1/2") socket wrench, or (1/2") wrench, or small crescent wrench

Medium flat head screw driver

1/8" allen wrench (supplied for large pulley)

3/16" T-handle allen wrench (supplied for wheel head)

#### **Materials for Assembly**

(7) 5/16" x 1" bolts

(1) 5/16 x 3/4" bolt (for small belt guard)

(8) 5/16" flat washers

(14) 5/16" lock washers

(2) 1/4" wing nuts, locks, and bolts

(1) controller & pedal

(1) Cable Connection Kit (cable + two screws)

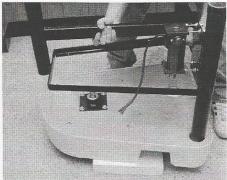
- (1) large pulley
- (4) drive belts
- (1) corrugated hose with pipe clamp
- (1) large belt guard
- (1) small belt guard
- (2) top caps (for Pro Series Only)



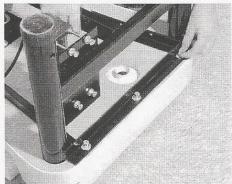
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Place the Counter Pan upside down on top of the styrofoam panels used in packing. **Note:** the **Pro Wheel is pictured above.** ST wheels will not have the holes shown in the corners.



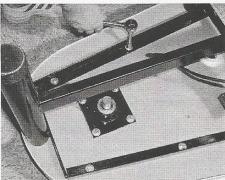
Holding the frame upside down, insert the tubes into the holes and seat the frame down onto the Medex wood counter. Align the frame holes with the counter pan holes.



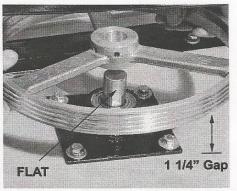
Insert and start threading in the three 5/16" x 1" bolts with a lock washer and flat washer. Do not tighten these bolts yet. Leave them loose until all seven frame bolts are in place.



Next, (4) 5/16" x 1" bolts are used to hold the frame to the counter and retain the large belt guard. These bolts must have **the exact order** shown: (1) flat washer followed by (2) lock washers. The two lock washers will provide a gap in which to insert the plastic belt guard between the steel frame and the flat washer.

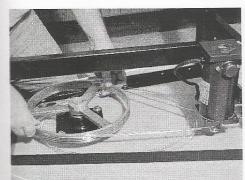


These same four bolt assemblies depicted in the previous frame are used to bolt the rest of the frame to the counter. Hand tighten all (4) bolts in place as indicated above before using a 1/2" wrench to tighten all (7) frame bolts. Be careful to not overtighten these bolts. Stop when they are snug.



Place the large reduction pulley as shown, aligning the <u>flat of the shaft</u> with single set screw. It is crucial that you tighten the pulley on the flat of the shaft, <u>never on the round</u> area of the shaft!!

Using the 1/8" allen wrench (supplied), firmly secure the set screw on the <u>flat</u> of the shaft. Maintain a 1 1/4" gap from the underside edge of the pulley to the wood counter as shown. The belts should align perfectly with the small motor pulley



Place the four tubular belts over the large pulley as shown. Place the first belt around the top groove of the small motor pulley and then rotate it in position around the same groove of the large pulley. Continue attaching the remaining 3 belts.



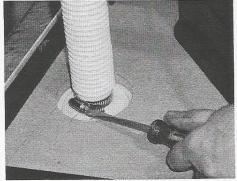
Secure the small section of the belt guard as shown. Important: use only the 5/16" x 3/4" long bolt with a lock and flat in this position. You will need to spread the guard slightly to fit it over the belts. Tighten until snug only. Do not use a 1" bolt!



Insert the large belt guard over the large pulley and tuck the notched sides of the guard under the flat washers that are elevated slightly above the metal frame.



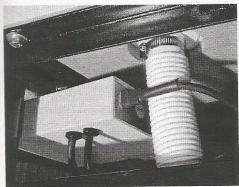
This shows how the knotched guard should fit under the washers. Compress the guard side to side by squeezing it and tuck the opposite side knotches in position under the other two flat washers.



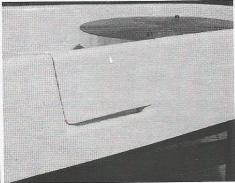
Seat the smooth sleeve of the corrugated hose over the drain spout until it touches the pan and secure it with the pipe clamp. **DO NOT OVER-TIGHTEN THE PIPE CLAMP**. The hose is long enough to accommodate extension legs. You will have to trim it for use without leg extensions.



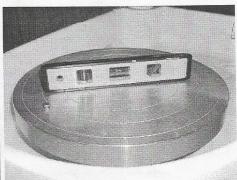
Using the (2) 1/4" bolts, locks and wing nuts, attach the controller to the frame. Insert a lock washer on the bolt before pushing it from behind the frame through the hole so that the threads extend in view. Thread on the two 1/4" wing nuts and hand tighten.



Place the wheel upright and plug in the motor cord as shown. If the plug won't insert, check that the inner pins are straight in the motor plug. Gently pry them in position with a needle tool if necessary. Take note of the configuration of the socket shape and plug shape for alignment.



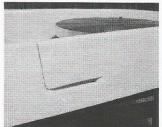
This **Side Discharge Panel** is purposefully designed to fit "short" of reaching the base of the counter pan. The reason for this "short" fit is to provide a gap that will act as a overflow to prevent water from building up and getting into the bearings. Never attempt to tape this panel in place so that the relief feature is bypassed.



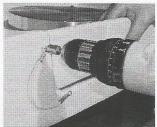
To throw a pot properly, it is very important that the wheel head is level in all directions. Rotate the wheel with the level in place to make adjustments. Shim under the legs, or adjust the (optional) leg extensions to achieve the proper settings.

## Optional Connection Cable (included) Tools required: Screw gun and 1/4" driver

Schools may want to consider incorporating the following option to prevent the loss of the side discharge panel. The connection cable permanently attaches the side panel so that it can hang from the wheel when it is not in place.



This shows the side panel in normal position. Note the gap that exists at the bottom that acts as a water overflow to protect the bearings.



Use the self tapping screws to attach the connecting cable. This screw is located 3/4" down and 3/4" over from the edge. Drill slowly.



Locate the other screw in the same relative position on the panel. Both screw should be loose enough to allow the cable "eyes" to rotate freely.



When the panel is out, it hangs on the side and can not be misplaced.



## Installing Top Caps (PRO Series only)

Press the two plastic top caps over the open metal tubes that extend through the top of the counter-pan.

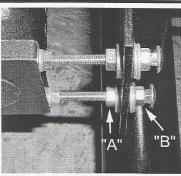


## Adjusting Pedal Tension

Using two 9/16" wrenches, turn the center pivot bolt clock-wise to increase the tension, or counter clockwise to release tension in the pedal. There is no need to open the pedal for any other adjustments.

#### **General Information**

- 1. Place a bucket under the drain hose to collect water. Check it daily to prevent over flow. **Do not push large chunks of clay down the drain as it can build up on the inside of the hose.** Use the *side discharge outlet* for removal of clay and trimmings.
- 2. Never plug the drain.
- 3. In classroom situations, set a procedure for your students to clean the collection bucket after every use.
- 4. Use a large sponge (8" or more) to clean the wheel quickly.
- 5. Never pour gallons of water in the wheel for cleaning as is could overflow and possible get into the bearings.
- 6. Turn your wheel off when not in use, or in lightning storms.
- 7. Do not exceed the recommendations of centering capacity of your specific model.
- 8. Do not leave clay on the wheel head overnight (or extended periods of time) as it can oxidize the aluminum and stain it.



# Adjusting Belt Tension Belts can stretch depending

on use. If your belts start to slip, adjust the tension by adjusting motor mount bracket tensioning nuts.

The Tensioning Nuts sandwich a rubber grommet which is mounted in the motor mount plate. To increase tension in the belt,

back off nut "A" approximately 1/4" at all four bolts and then tighten nut "B" until the flat washer makes contact with the rubber grommet. Do not crush the rubber grommet. Tighten until snug only. Only adjust these nuts enough to prevent slippage of the belts. Note: The tensioning nuts on your model may be located in a different position, but the procedure is the same.



Place a collection bucket under the corrugated hose.

- 1) Turn the lighted on/off switch to the illuminated "on" position.
- 2) Set the directional toggle switch to the desired rotation position. Note: there is a **neutral position** that must be entered first before switching to the opposite direction.
- 3) Place a bat on the pins and you are ready to make a pot.

#### Warranty

Bailey wheels are warrantied to the original purchaser for a period of 2 years. Any warranty claim must be presented to Bailey Pottery Equipment Corporation for evaluation. Unauthorized repairs will not be honored.



### **IMPORTANT!**

#### Removing the Head

If you need to remove the wheel head, it is crucial that it be positioned properly when re-fitting it.

The set screw must be aligned perfectly with the flat of the shaft. Add oil over the shaft & secure the head with the 3/16" allen wrench. Tightening on the "round" of the shaft will make it

impossible to remove the head without causing damage.

#### The Importance of Posture.

Everyone has a different body proportion. Using the *short leg* extensions (**ordered separately**), you can tailor your Bailey wheel to your specific body proportions to avoid accumulative back strain in a sitting position.



The potter sitting down is 5'11" tall. Notice his posture. The arc of his back is at an extreme angle when his hands are at the center of the wheel head. This posture is unhealthy, and adds to back strain.



Now the wheel has been raised 9" with the short extension legs. At this adjusted height, notice how the arc of the back is now at an improved angle, reducing stress. His hands are still on the center of the wheel head. With this healthy approach it is just as easy throw a pot.

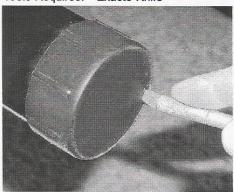
Tape Measure



If a tall form is required in this high sit position, then lean against the side of the wheel (which has excellent support) and continue to throw. Notice that the wheel is leaning against the wall for added support. Remember, the short leg extension can be adjusted to a height that fits your body.

#### **Attaching Leg Extensions (optional)**

Tools Requires: Exacto Knife



Place the wheel on it's side without any extension counter in place. Lean it on cardboard to prevent scratching the plastic.

Using an exacto knife, cut out the inner area of the floor cap. Slide the knife into the inner cap area and use the inner shape of the steel tube leg as a guide for cutting the circle.

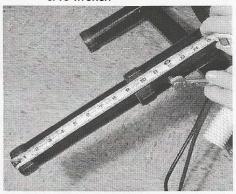
Small Level



Take the flanged t-nut and place it into the open leg through the hole. Hold it in place with your finger while threading in the 3/8" bolt from the outside. Pull back on the bolt to get the inner flange to conform to the contour of the inner tube.

Insert the extension leg. If it is obstructed by the t-nut, you need to reposition the nut for a better fit.

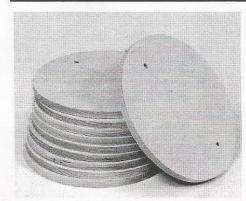
9/16 wrench



Using a tape measure, decide on an appropriate extension height. Using a 9/16" wrench, tighten the bolt until it is quite snug.

Continue this process on the remaining three legs. Place the wheel upright. Level the wheel head and adjust the height as necessary.

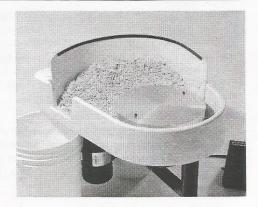
#### Other great Bailey Products



Bailey Baltic Bats: 3/4" thick, absorbent like plaster, won't warp, won't check or splinter, affordable.

**Trim Shield:** Keep all those trims in the pan and off the floor!

Wheel Head Extension: In several seconds you can raise the head 1" to throw bats over 16" diameter.



#### Attaching a Pro Counter to the Bailey Pro Series Wheel

Tools required: Exacto Knife, 1/2" wrench or socket, Masking Tape Materials for Assembly:

(4)

T-nuts (2)

(2)

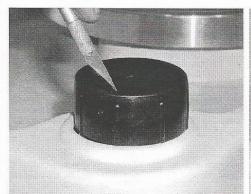
(2)L-Brackets (800) 431-6067 (845) 339-3721

Questions? Call:

- - 5/16" x 3/4" bolts.

5/16" lock washers

(4)



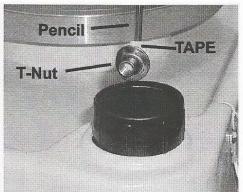
Threaded Knobs

Take an exacto knife and carefully cut out the inner area of the plastic cover on the far end of the wheel. "Saw" in an up and down motion as you follow the inner tube shape.

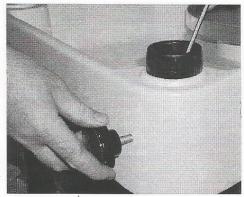


The final form will look like this.

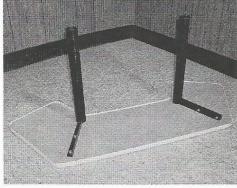
Taking a piece of masking tape, roll it up with the sticky side out and attach one side to a pencil or the 3/16" allen



tool. Then attach one of the t-nuts to the other side of the tape and lower it down into the tube and into the the inner drilled hole located below. Hold the t-nut in place.



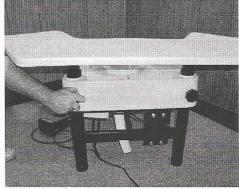
Taking a threaded knob, insert it into the counter pan hole and thread it into the t-nut. Do not allow the threaded area to extend through the t-nut. The contour of the t-nut should fit the curve of the inner tube. Complete the other side with a knob and t-nut.



Placing the counter upside down, locate and bolt in place the two support brackets with the 5/16" bolts and lock washers. Do not over-tighten these bolts. Compress the lock washers and stop.



Lower the counter tubes into the wheel tubes. The wheel t-nuts must be pulled back into the contour of the tube with the threaded rod retracted out of the way for the counter tubes to slide beyond the t-nuts.



Once in place, select a comfortable height and tighten the knobs in place. Be sure to check out other Bailey Wheel Accessories.

Bailey Baltic Bats: 3/4" thick and far superior to Medex or masonite bats. No warpage and great absorbancy!

Trim Shield: Keeps all the trims in the wheel and the floor clean!

Wheel Head Extension: in 20 seconds you can raise the height of the head (1") and throw on large bats 16" or larger.