

# M400 & M750 Master Series Potter's Wheel Instruction Manual



Congratulations on your purchase of a Shimpo M400 or M750 Master Series potter's wheel! We trust you will enjoy many years of professional results from your wheel.

Please read the entire instruction manual thoroughly before initial set-up and operation; the information contained herein will aid you in operating your Shimpo Master wheel safely and with excellent results.

If you have any questions regarding our product(s), call your local Shimpo dealer or contact Shimpo Ceramics directly for assistance.

## Inspection/Standard Accessories

If upon delivery shipping damage is detected, do not operate the wheel. Notify shipping carrier immediately for damage claim instructions. Refer to product label and record serial number for future reference.

Items included with the M400 and M750 are:

- (1) T-wrench
- (1) Spanner wrench
- (3) Non-adjustable feet
- (1) Adjustable foot

## Features and Benefits

The Master Series utilizes state-of-the-art components to achieve remarkable power combined with extremely smooth speed adjustment and virtually noiseless operation. Features of the M400 and M750 include:

- Heavy-duty steel construction assures long service life
- PWM controller/industrial grade potentiometer/ribbed belt drive together maximize motor power while ensuring smooth speed adjustment and noiseless operation
- Fully enclosed body case keeps internal parts dry and clean
- Removable bottom plate permits easy access to interior
- Remote foot pedal will independently hold speed while ensuring maximum comfort and flexibility
- 14" wheel head easily accommodates large work

## Important Safety Instructions



Do not plug power cord into an extension cord (plug directly into electrical wall outlet).



Foot pedal must be fully depressed backwards before turning ON/OFF switch to ON.



Do not overload the wheel head with clay or force it to stop, as this will shorten the life of the wheel (M400: 50 lb max., M750: 100 lb max.).



After operating, before cleaning or inspection:

1. Turn ON/OFF switch to OFF (confirm green indicator light is off).
2. Unplug wheel from power source.
3. Do not tilt wheel to drain splashpan.

## Set-Up

The following steps should be followed BEFORE operating the wheel:

1. Remove shipping boards by unscrewing the 4 retaining bolts.
2. Install the adjustable foot in the right front position and the 3 non-adjustable feet in the remaining positions.
3. Place wheel on a firm and stable work surface.
4. Level the wheel:
  - a. Loosen lock nut on adjustable right front foot.
  - b. Turn screw until wheel is level.
  - c. Tighten lock nut.

A Tradition of Excellence  
**SHIMPO**

A Nidec Group Company

## Optional Accessory Installation

Shimpo offers the finest quality optional accessories to use in conjunction with our M400 and M750 Master Series wheels, including a table as well as one and two-piece splashpans.

### Mounting Table (BPB00160)

1. Turn ON/OFF switch to OFF (confirm green indicator light is off); unplug wheel from power source and remove the 2 hex-head bolts in front of wheel head (figure 1).
2. Tape halves of plastic tubes (provided) together.
3. Stand tubes upright over bolt holes.
4. Set table on top of tubes, matching table holes with threaded holes of wheel.
5. Insert bolts (provided) through washers, through table and tubes, and finally directly into potter's wheel.
6. Tighten bolts so table is firmly attached to potter's wheel.
7. Cover bolt heads with rubber caps (provided).
8. Insert rubber plugs (provided) into 2 holes of the table's surface.

**CAUTION:** Do not sit on table or use table to lift or move potter's wheel.

**NOTE:** Table cannot be used in conjunction with the two-piece splashpan.

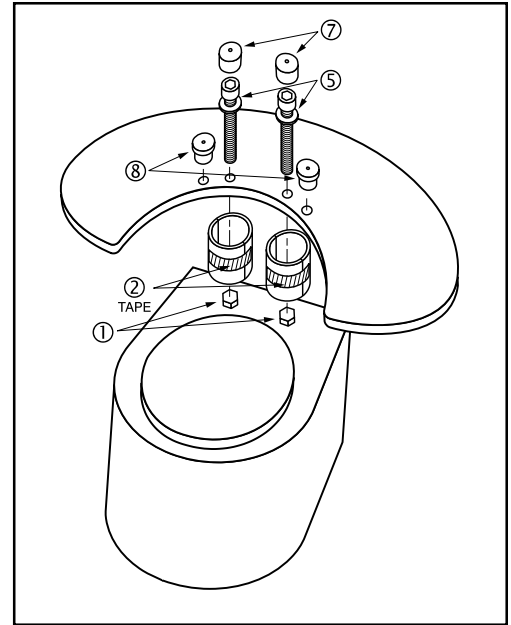


Figure 1

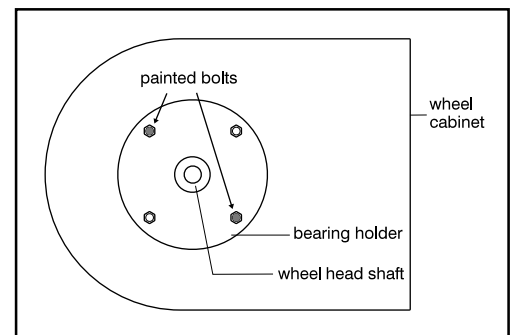


Figure 2

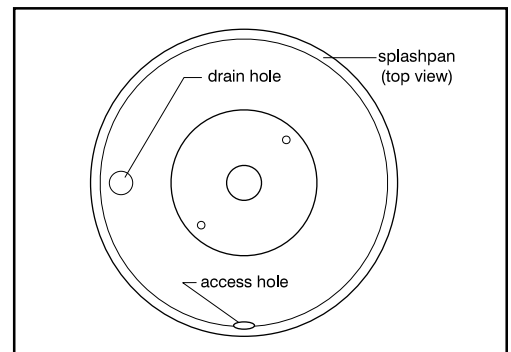


Figure 3

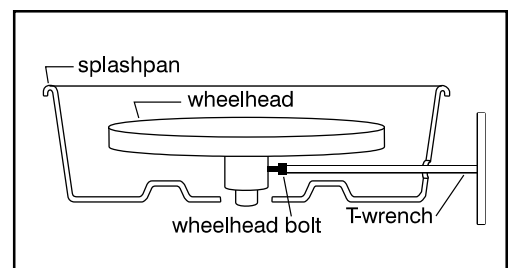


Figure 4

### Attaching Small or Large One-Piece Splashpan (SW-RKP-027/SW-RKP-027L)

1. Turn ON/OFF switch to OFF (confirm green indicator light is off).
2. Unplug wheel from power source.
3. Using T-wrench (provided), loosen wheel head bolt (figure 4).
4. Remove bolt and wheel head.
5. Using the spanner wrench (provided), remove the 2 painted bolts on bearing holder (figure 2).
6. Place splashpan (with drain hole on the left) over shaft (figure 3).
7. Replace bolts through splashpan and tighten.
8. Place wheel head on shaft.
9. Confirm that wheel head bolt and the flat face of the shaft are aligned.
10. Remove plug from access hole.
11. Insert T-wrench through access hole and tighten wheel head bolt (figure 4).

**CAUTION:** Do not tighten bolt on round surface of shaft.

12. Replace plug in access hole.

## **Operation**

1. Plug electrical cord into 115 volt outlet (standard U.S. household outlet).
2. Place clay on wheel head.  
**CAUTION:** Do not overload the wheel head with clay; (M400: 50 lb max., M750: 100 lb max.).
3. Turn ON/OFF switch to ON position (green indicator light should come on).
4. Depress foot pedal forward to desired speed.  
**NOTE:** Wheel head rotates in counter-clockwise direction only.
5. Depress foot pedal backward to reduce speed.
6. To stop the wheel, fully depress the foot pedal backwards.
7. To turn off the wheel, move the ON/OFF switch to the OFF position (green indicator light will turn off).

## **Maintenance**

With proper operation and care your Shimpo Master Series wheel will last for many years.

The wheel head and optional splashpan should be thoroughly cleaned after every use to prevent water, clay and slip from entering the unit's housing, possibly causing corrosion:

1. Turn ON/OFF switch to OFF.
2. Unplug wheel from power source.
3. With a sponge or towel, wipe down wheel head and cabinet, removing water and clay.
4. Remove the rubber plug from the splashpan.
5. Remove all clay slurry from pan and wipe dry.
6. Replace plug in splashpan.

**CAUTION:** Do not tilt wheel to drain splashpan.

## **Repair/Replacement**

### **Drive Belt Tension Adjustment**

Periodically the tension of the belt drive system will need adjustment; the length of time between adjustments depends on many factors including frequency and nature of wheel use, weight of centering loads, etc. To readjust the belt drive tension:

1. Turn ON/OFF switch to OFF.
2. Unplug wheel from power source.
3. Remove wheel head bolt and wheel head.
4. If installed, remove optional splashpan:
  - a. Remove 2 bolts holding pan in place.
  - b. Remove splashpan.
  - c. Screw bolts back in loosely.
5. Loosen all bolts in bearing holder (figure 2); belt tension will automatically adjust.
6. Reinstall splashpan:
  - a. Remove 2 bolts.
  - b. Replace splashpan.
  - c. Reinsert bolts.
7. Tighten all 4 bearing bolts.
8. Replace wheel head over shaft.
9. Confirm that wheel head bolt and the flat face of the shaft are aligned.
10. Tighten wheel head bolt (use T-wrench through access hole if splashpan is attached).

**CAUTION:** Do not tighten bolt on round surface of shaft.

### **Fuse Replacement**

To replace the fuse:

1. Turn ON/OFF switch to OFF.
2. Unplug wheel from power source.
3. Unscrew fuse cap.
4. Withdraw fuse.
5. Replace fuse.  
(For M400, order part number RPB00190)  
(For M750, order part number RPB00200)
6. Replace fuse cap.

## Troubleshooting

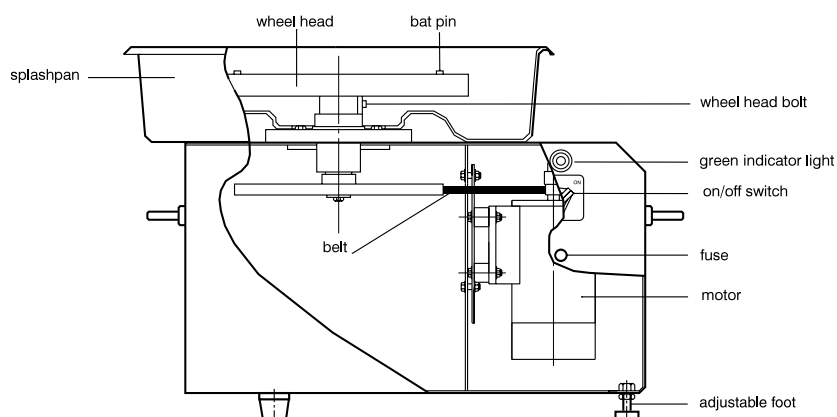
The wheel has either stopped or does not turn on:

- Confirm that all electrical components are functioning properly (power source, power cord and fuse)

The wheel experiences a drop in power:

- Confirm that all electrical components are functioning properly (power source, power cord and fuse)
- The drive belt tension may require adjustment (refer to drive belt tension adjustment section of manual)

## Dimensions and Specifications



SPECIFICATIONS		
Model	M400	M750
Motor	1/2 HP (400 W), DC	1 HP (750 W), DC
Input Power	115 VAC, 60 Hz, 6.5 A	115 VAC, 60 Hz, 10 A
Maximum Centering Weight	50 lb (23 kg)	100 lb (45 kg)
Dimension	25"L x 17"W x 19"H (635 mm x 430 mm x 480 mm)	
Ship Weight	125 lb (57 kg)	130 lb (59 kg)
Wheel Head Diameter	14" (355 mm)	
Wheel Head Material	Cast aluminum alloy, concentric circles every inch, bat pins	
Wheel Head Speed & Direction	0-250 RPM counter-clockwise (clockwise wheel rotation is an available option on all Master models)	
Drive System	Ribbed belt drive	
Speed Control	Remote foot pedal with high grade potentiometer, industrial grade PWM controller	
Standard Accessories	T-wrench, spanner wrench, (1) adjustable foot, (3) non-adjustable feet	
<b>OPTIONAL ACCESSORIES</b>		
Splashpan	SW-RKP-027 (one-piece, small), SW-RKP-027L (one-piece, large), ARKC0205011 (two-piece)	
Table	BPB00160	

## Warranty

**LIMITED EXPRESS WARRANTY:** Shimpo warrants, to the original purchaser of new products only, that this product shall be free from defects in workmanship and materials under normal use and proper maintenance for two years from the date of original purchase. This warranty shall not be effective if the product has been subject to overload, misuse, negligence, or accident, or if the product has been repaired or altered outside of Shimpo's authorized control in any respect which in Shimpo's judgment, adversely affects its condition or operation.

**DISCLAIMER OF ALL OTHER WARRANTIES:** The foregoing warranty constitutes the SOLE AND EXCLUSIVE WARRANTY and Shimpo hereby disclaims all other warranties, expressed, statutory or implied, applicable to the product, including, but not limited to all implied warranties of merchantability and fitness.

**LIMITATION OF REMEDY:** Buyer must have Shimpo's authorization before returning the product, properly repackaged, freight prepaid to Shimpo to obtain warranty service.

Under this warranty Shimpo's SOLE OBLIGATION SHALL BE TO REPAIR OR REPLACE the defective product or part, at Shimpo's option. Shimpo reserves the right to satisfy warranty obligation in full by reimbursing Buyer for all payments made to Shimpo, whereupon, title shall pass to Shimpo upon acceptance of return goods.

**INDEMNIFICATION & LIMITATION OF DAMAGES:** Buyer agrees to indemnify and hold Shimpo harmless from and against all claims and damages imposed upon or incurred arising, directly or indirectly, from Buyer's failure to perform or satisfy any of the terms described herein. In no event shall Shimpo be liable for injuries of any nature involving the product, including incidental or consequential damages to person or property, any economic loss or loss of use.

**MERGER CLAUSE:** Any statements made by the Seller's representative do not constitute warranties except to the extent that they also appear in writing in this contract.

This writing constitutes the entire and final expression of the parties' agreement.