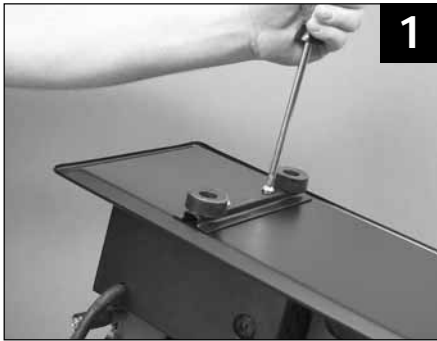


#84631 MICROLUX® 7 x 16 LATHE ASSEMBLY INSTRUCTIONS

Your MicroLux 7 x 16 Mini Lathe was assembled and tested at the factory, but was disassembled for safe shipment. Assembly is not difficult, but care should be taken to follow these instructions in the proper sequence to assure safe and successful operation of the machine. We assume you already have the usual assortment of shop tools, such as wrenches, screw drivers, pliers and hex keys, needed to assemble small machinery.

Since the machine is somewhat heavy and gets heavier as you assemble it, an assistant will most-likely be necessary to help you turn the machine over and around while you carry out the assembly procedure.

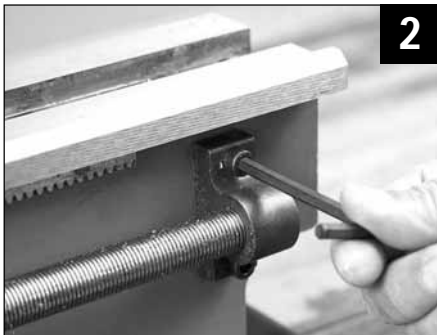
Before starting the assembly sequence, carefully unpack and clean all machine elements. For identification and location of parts, it will be most helpful to study the Assembly and Parts diagram included in the Instruction Manual.



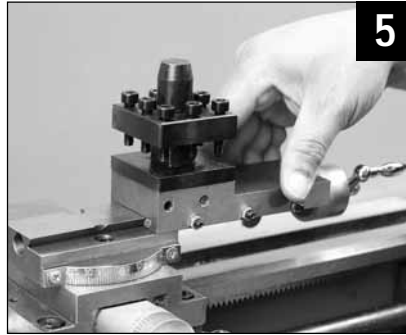
1 Carefully place the main frame of the machine upside-down on your workbench.
Install chip tray and bracing with rubber feet to bottom of machine with 4 screws.
Note...short extension of chip tray should be installed toward the back of the machine; match the position of the bracing to match position of chip tray.



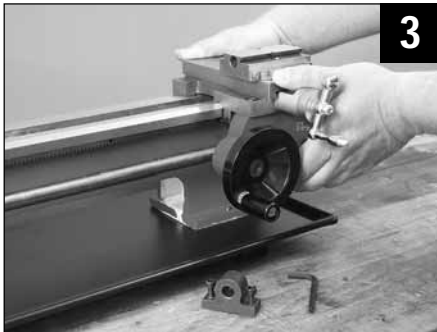
4 Reinstall the bracket loosely on the end of the lead screw. Move the carriage all the way to the right and position the bracket to allow smooth operation of the carriage, then lightly tighten the bracket screws. Engage the halfnuts on the carriage drive system, then gently tighten the bracket screws. You may have to tinker with the position of this bracket until the drive system works smoothly. Now fully tighten the bracket screws. Adjust the thread dial for proper engagement with the gear. The saddle/carriage should run smoothly through its travel with some moderate resistance. Adjust as required and oil all applicable surfaces.



2 Turn machine right-side-up on your workbench.
Remove the bracket from the right-hand end of the lead screw so that the carriage/saddle may be installed.



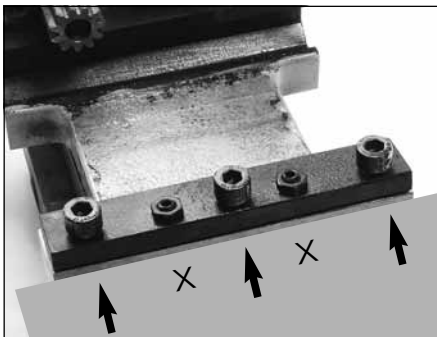
5 If necessary, re-mount the handle at the rear of the compound rest in the proper position. Then install the compound rest on the cross slide of the carriage. Adjust gibs as required to assemble and for proper operation (See manual for gib adjustment if required).



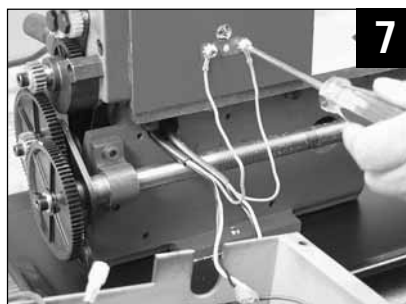
3 Install the handle and knob to the carriage/saddle apron assembly.
To install the carriage/saddle to the bedway, first be sure halfnuts are wide open so the carriage/saddle will slide onto the bedway easily; then, to facilitate the installation of the carriage on the bedway, turn the carriage upside-down on your workbench and loosen the 3 screws marked with arrows in the lower picture.
DO NOT TOUCH the two set screws marked with an "X." These are factory set and the carriage will not function properly if you disturb them. Guide the feed screw through the halfnuts and the feeding gear onto the long rack under the lip of the bed face.



6 Install drive gears (80 tooth). They are usually packed with gear box cover.
Note: The top one is comprised of two gears.



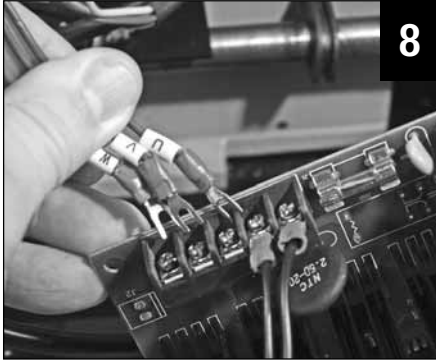
After the carriage is installed, gently snug up the 3 screws.



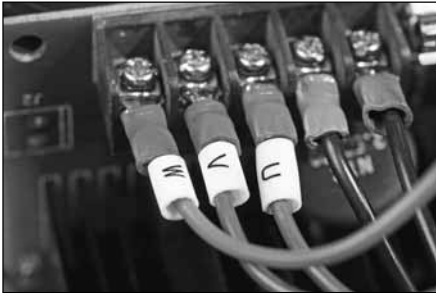
7 **IMPORTANT:** Make sure the power cord is unplugged from your wall outlet at this time.

Install Electrical Control Box as follows (Fig. 7 through 13):
Assemble 2 green ground wires to screws on front of headstock.

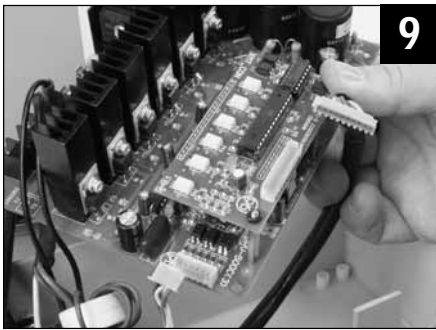
Please refer to the wiring diagram found in the instruction manual for assistance in this section.



8

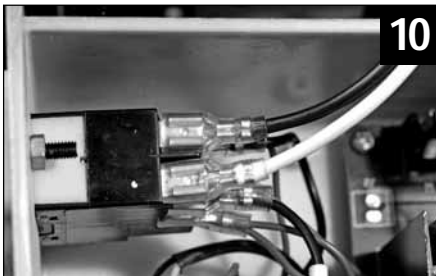


Remove the 4 screws that hold the main circuit board inside the electrical control box and gently pull out the circuit board to gain access to wire terminals. Locate the 5-slot (screw type) terminal post. N and L are already installed. Install W, V and U cables to their terminals. Note: the cables are marked accordingly.



9

Now, mate the white connectors to their appropriate slots on the boards.



10

Connect the black and the white wires to the two terminals on the safety switch as shown.



11

Install cover as shown.

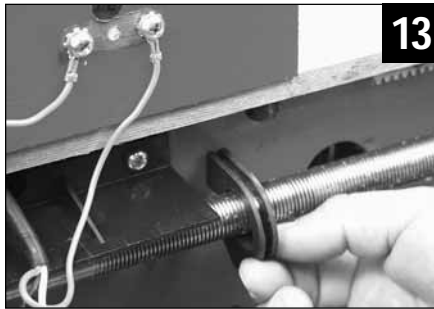


12

Check all other connections and ensure good contacts. Now, reinstall the circuit board inside the box with the 4 screws previously removed. Note: Screws may not tighten on the board; this is normal. Do not over-tighten.

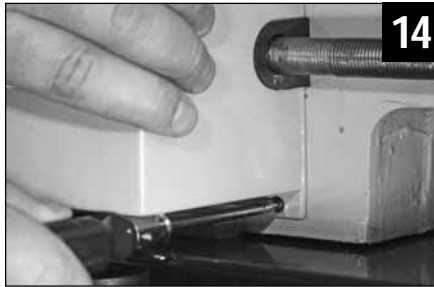
Note: You can check the operation of the machine before going further by carefully making sure all switches are set to "Off" and plugging the machine into the line power socket. Be cautious of high voltage present in the electrical box and be sure nothing touches any electrical components. Be sure the speed control is turned all the way toward "Off" (counterclockwise). Release safety switch cover by pushing in tab on left side of switch.

Place the directional switch to forward. Press the green button. Green power light should illuminate and the yellow fault light should be off. Turn up the speed control a little to view chuck rotation. If it turns counterclockwise while looking at it from the tailstock, it is turning in the correct direction. Turn down the speed control to "Off." Change directional switch to reverse and test its direction by again turning up the speed. It should turn clockwise. If all is functioning properly, then power down the controls and unplug the machine from line power.



13

Notice this rubber grommet (protective cover) on the lead screw. It will be mated with the electrical box to prevent debris from entering the box and causing damage to components.



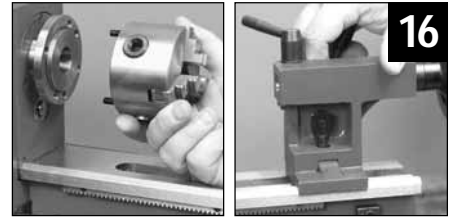
14

Install control box to headstock with 4 screws. Be sure grommet is properly engaged and wires cannot foul the lead screw. Do not over-tighten screws or you will crack the plastic control box.



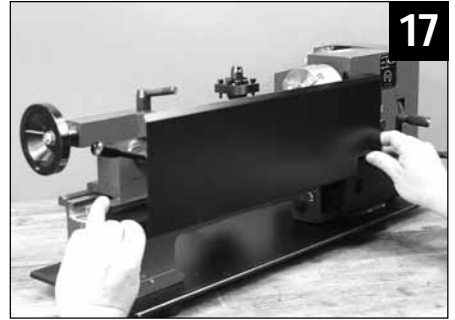
15

Install gear box cover with 2 screws.



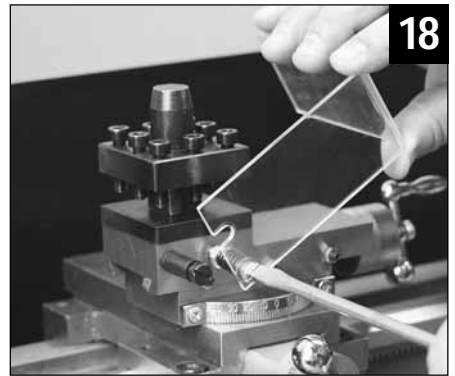
16

Install chuck and tailstock.



17

Install rear splash guard with 5 screws.



18

Install chip guard on compound rest.



19

Install all remaining handles, cranks, caps, covers and shields in the locations shown in the assembly diagram.



20

Install/mate the digital readout (optional) to its socket and test operation.

Micro-Mark®

340 Snyder Avenue, Berkeley Heights, NJ 07922
Tech Support 908-464-1094
www.micromark.com MMTechService@micromark.com