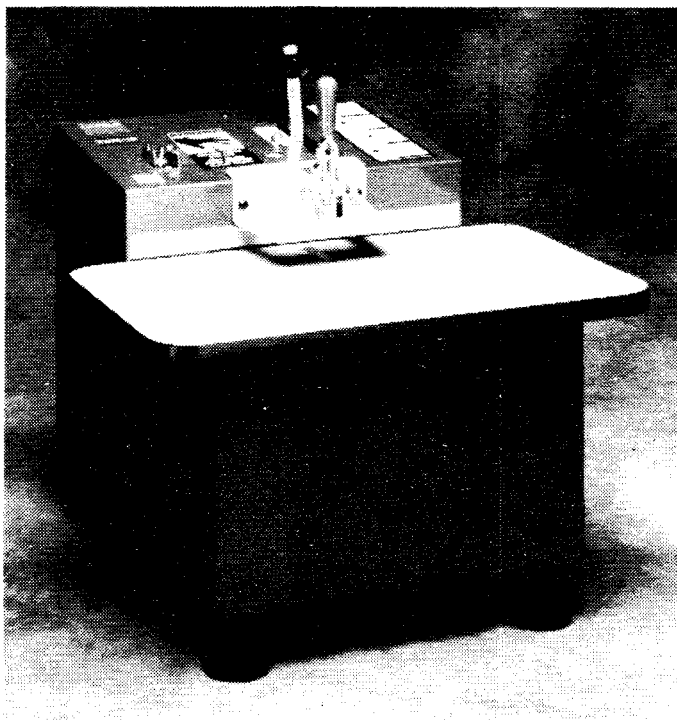




TSM-10 BENCH TOP CASTLE POCKET MACHINE



Patent No. 4603719

OPERATOR'S MANUAL

TSM 10 BENCH TOP CASTLE POCKET MACHINE

OPERATOR'S MANUAL

IMPORTANT - - - READ CONTENTS COMPLETELY BEFORE OPERATING THE TSM-10

WARNING:

DO NOT PLUG MACHINE INTO ELECTRICAL OUTLET UNTIL MACHINE IS FULLY ASSEMBLED AND YOU HAVE READ THIS ENTIRE MANUAL.

NEVER ALLOW MACHINE TO GET WET OR BE USED IN A WET ENVIRONMENT.

Your TSM-10 will pocket any material you would normally route. It is designed for materials from 15/16" down to 1/2". Materials thinner than 1/2" are not recommended. Every TSM-10 machine is factory adjusted and tested with sample material. If you should find a small amount of saw dust in the bottom of your TSM-10, please don't be alarmed.

SAFETY:

- 1 - Do not plug in machine until ready to operate.**
- 2 - Always wear eye protection when operating or servicing mechanical equipment.**
- 3 - Always wear hearing protection when motors are turned on.**
- 4 - Do not put hand under guard, in path of router bit or drill bit.**
- 5- Familiarize yourself with the clamping action, routing and drilling functions before plugging the machine into electrical power supply.**
- 6 - Always be sure to securely clamp stock before routing or drilling any material.**
- 7 - Always plug TSM-10 into 110 volt grounded power outlet.**

PACKAGE CONTENTS:

- 1 - TSM-10 machine.
- 2 - TSM -10 Melamine work top.
- 3 - Four 1/4 -20 x 5/8" Phillips machine screws.
- 4 - Router motor with router bit (installed in machine).
- 5 - Drill motor with drill bit (installed in machine).
- 6 - Tools: (3) wrenches for routers, 3/16" Hex wrench for removal of drill motor.
- 7 - Sample square drive screws and (1) 6" square driver bit.
- 8 - Manual with Warranty Activation Card.

WARRANTY INFORMATION:

Castle Inc. uses only the highest quality materials available for the construction of our machine. Your TSM-10 Bench Top Pocket Machine is warranted for 1 full year from date of purchase against workmanship or material defects under normal use and service. We are not responsible for negligence, misuse or accidents. CASTLE INC. warrants the (2) motors for 1 year from date of purchase. We suggest you keep your receipt in a safe place as you will need a copy for any repair or replacements. Should you have trouble with either of the two routers in your TSM-10 machine, after the 1st year, check the Porter Cable motor booklets (enclosed) for the service station nearest you. It is recommended that periodically (at least once per hour of operation) you blow out all air passages on both motors with compressed air. **CAUTION: ALWAYS WEAR SAFETY GOGGLES WHILE USING COMPRESSED AIR. NEVER USE BOTTLED COMPRESSED AIR.**

ELECTRICAL INFORMATION:

Your TSM-10 is designed to run on a 110 volt - 15 AMP standard 3 prong power supply. 2 prong power adapters are not recommended for use on this machine and could cause electric shock to the user. Be sure your unit is grounded properly. See a "qualified electrician" if you are in question about your electrical safety compliance.

WARNING:

DO NOT PLUG MACHINE INTO ELECTRICAL OUTLET UNTIL MACHINE IS FULLY ASSEMBLED AND YOU HAVE READ THIS ENTIRE MANUAL.

ASSEMBLY:

- 1 - Place machine case on its back (see figure 1).
- 2 - Place Melamine work top into position and secure with enclosed 1/4-20 Phillips screws (see figure 2) Note: All four screws should be partially started before tightening them.
- 3 - Inspect motor cords to see that they are plugged into duplex power outlet box inside machine and that they are clear of any moving parts. (see figure 3)

WARNING:

WEAR EYE PROTECTION AND HEARING PROTECTION WHILE USING THIS MACHINE

- 1 - Check to be sure switch on top of machine is in the off position and then plug your TSM-10 into a 110 volt grounded power supply.
- 2 - Place material to be pocketed on work table under clamp and against rear fence.
- 3 - Push forward on clamp lever (red handle), confirm that clamping is secure by manually pulling on the material. If material is loose, adjust foot bolt on clamp as necessary to assure material is held securely.
- 4 - To operate, move switch to the on position. Router motors will start.

- 5 - Push the black knob forward (briskly) until it hits the stop - this routs the pocket. (See figure 4) If you release the black knob, the machine will move to the neutral position on its own. It is not necessary to release the black knob before proceeding to step 6..
- 6 - Pull black knob toward you (briskly) until it hits the stop. - This drills the pilot hole. (See figure 5)
- 7 - Release the black knob. (The operating lever returns to the neutral position by itself)
- 8 - Pull toward you on the clamp lever (red handle) to release the material clamp.
- 9 - For additional pockets repeat steps 2 through 8.

GENERAL INFORMATION: The hand clamp should be tight enough for a "Brisk" travel of both the routing and drilling strokes. If your material moves, adjust the foot bolt to make clamping slightly tighter.

Note: Bit "burning" (router or drilling bits) is caused by either dull tooling or too slow a movement of the operating lever or both. Remember, the TSM-10 is powered by two high speed routers and is designed to aggressively enter the material being pocketed..

SERVICE:

WARNING:

Service should be performed only when the machine is disconnected from the electrical power outlet.

ROUTER BIT REPLACEMENT:

- A. Removal of motor: Unplug TSM-10 from electrical outlet.
- B. Lay machine on its back so bottom of machine is accessible. Loosen black tee knob 4 turns counter-clock wise, pull out, to remove large router motor. (See figure 6)

C. **Bit changing:** Remove router bit using wrenches provided. Replace new bit with, Castle part # HCB-38. Place router bit all the way to the bottom of the router collet chuck and tighten collet nut with same wrenches provided.

D. Replace motor back into machine until motor is in (yellow) carriage as far as it will go. Tighten Black tee knob until motor is firmly secure.

PILOT HOLE DRILL BIT REPLACEMENT:

A. **Removal of motor:** Unplug TSM-10 from electrical outlet. Lay machine on its back so bottom of machine is accessible. Reaching over top of machine, remove (counter clockwise) socket head cap screw with 3/16" hex wrench (provided). (See figure 7) Motor is now free and can be removed from the bottom of the machine.

B. **Changing the Pilot Drill Bit.** Remove drill bit with wrenches (provided) and replace with Castle part # CDB-964. Place drill bit all the way to the bottom of collet chuck and tighten collet nut securely with same wrenches.

C. Replace motor into machine and tighten cap screw in reverse of step A.

Caution: Do not over tighten cap screw.

POCKET HOLE ALIGNMENT:

Pocket and pilot drill hole alignment (See figure 8) for correct position). If hole is off center of pocket to left, loosen lock nut and adjust brass screw by turning clockwise, 1/2 turn. Then retest by pocketing another piece of material. If hole is still off to left, turn screw 1/2 turn again until hole is in the center of the pocket. If the hole is off to the right, turn the same screw counter clockwise in 1/2 turn increments. When the pilot hole is positioned correctly, tighten locking nut to secure brass screw in position.

Note: The brass screw is designed to ride along the wall of machine. Do not try to bend it away.

To move the pocket (routed portion) closer to or further from the edge of the material, use a 7/16" wrench and loosen the Nylock nut next to the operating handle (See figure 9) Moving the nut away from you will make the pocket cut closer to the edge of the material, pulling the nut toward will make the pocket farther from the edge of the material. (Tighten the nut each time before testing) This is a trial and error method until you get the pocket where it suits you best. *Note:* This is usually not a necessary step as the TSM-10 is adjusted to proper distance from the factory.

Adjusting for thinner materials: Build a shim the size of the work top from 1/8 plywood material. Lay it on the work table and then place the 1/2" material on the 1/8" plywood. Adjust your clamp hold down arm if necessary and rout through both pieces. When done, just remove the 1/8 plywood and re-adjust clamp if necessary. You are again ready for your regular thickness material.

SAFETY TIPS:

Always use eye protection when using any machinery.

Always use hearing protection when using machinery.

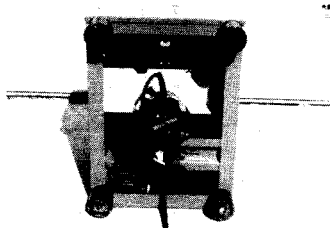
Never work on machinery before disconnecting the electrical source.

Never wear long sleeves or loose garments while using machinery.

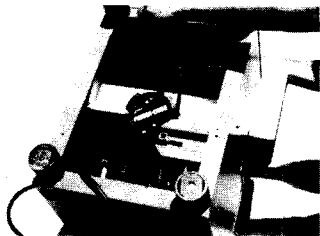
Never place any body parts near cutting areas of machinery.

Never horseplay near or around working machinery.

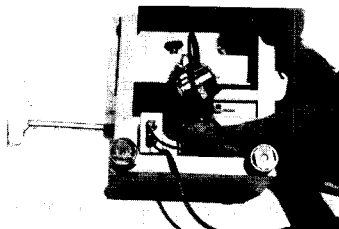
TIPS: If you think your tooling is burning while using the TSM-10 machine, chances are, YOU ARE PROBABLY NOT MOVING THE OPERATING LEVER FAST ENOUGH!



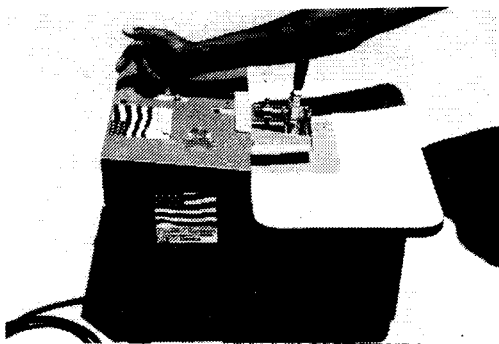
(Fig. 1)



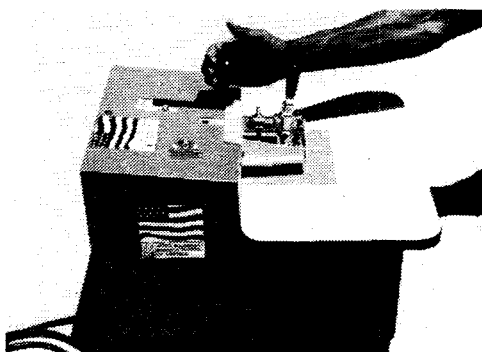
(Fig. 2)



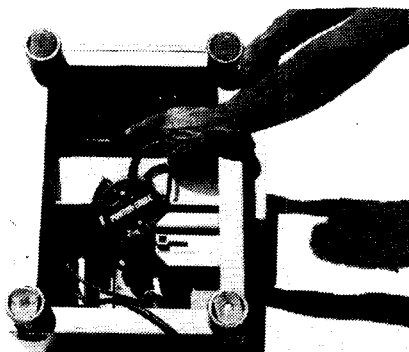
(Fig. 3)



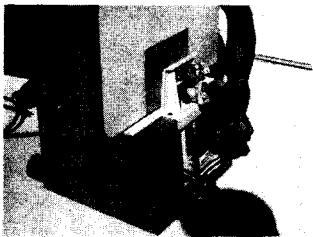
(Fig. 4)



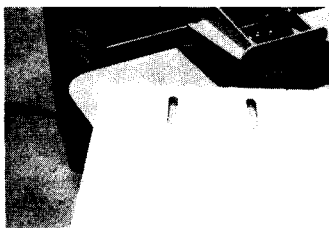
(Fig. 5)



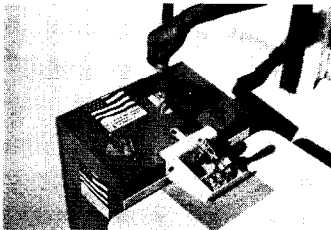
(Fig. 6)



(Fig. 7)



(Fig. 8)



(Fig. 9)

NOTES