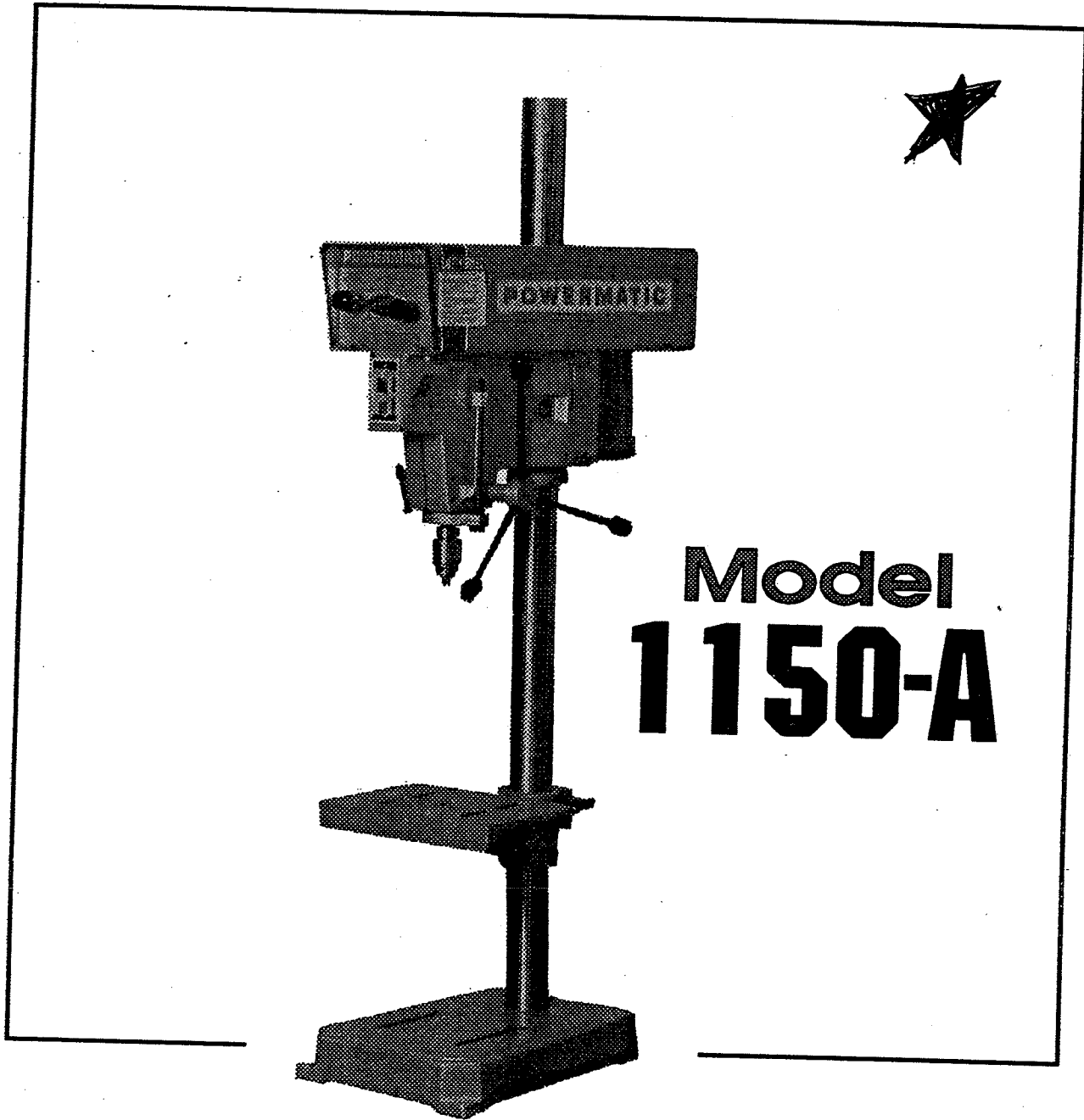


15" DRILL PRESS OPERATING INSTRUCTIONS



POWERMATIC®  **®**

McMINNVILLE, TENNESSEE 37110 ■ AC 615-473-5551

▲ SAFETY INSTRUCTIONS

1. **Read, understand, and follow the safety and operating instructions found in this manual.** Know the limitations and hazards associated with this drill press. A safety rules decal is installed on each machine to serve as a reminder of basic safety practice.

2. **Grounding of the drill press:** Make certain that the machine frame is electrically grounded and that a grounding lead is included in the incoming electrical service. In cases where a cord and plug are used, make certain that the grounding plug connects to suitable ground. Follow the grounding procedure indicated by the National Electric Code.

3. **Eye safety:** Wear an approved safety shield, goggles, or glasses to protect eyes when operating the drill press.

4. **Personal protection:** Before operating the machine, remove tie, rings, watch and other jewelry and roll up sleeves above the elbows. Remove all loose clothing and confine long hair. Protective type footwear should be worn and hearing protectors should be used where noise exceeds the level of exposure allowed in section 1910.95 of the OSHA regulations. Do not wear gloves.

5. **Work area:** Keep the floor around the machine clean and free of scrap material, sawdust, oil or grease to minimize the danger of tripping or slipping. Be sure the table is free of all scrap, foreign material and tools before starting a cut. Powermatic recommends the use of anti-skid floor strips on the floor area where the operator normally stands and that each machine's work area be marked off. Make certain the work area is well lighted and that a proper exhaust system is used to minimize dust when required. Provide for adequate work space around the machine.

6. **Guards:** Keep the machine guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards on completion of the maintenance task before using the drill press. Do not operate the machine with the guards off.

7. **Do not overreach:** Maintain a balanced stance and keep your body under control at all times. Do not over reach.

8. **Maintain tools in top condition:** Keep tools sharp and clean for safe and best performance. Dull tools increase noise levels and the possibility of pulling the part free of its holding device. Check the condition of the tools before making any cuts.

9. **Hand Safety:** Keep hands away from the spindle when the machine is under power. Never clear chips when the spindle is under power and never use the hands to clear chips; use a brush or chip rake. Chips are razor sharp and can cause serious injury. **Do not Change Tools with the Spindle Rotating Under Power.**

10. **Spindle Rotation:** Be sure spindle rotates under power in a clockwise direction when viewed from the top of the drill press using right hand tools.

11. **Machine adjustments:** Make all machine adjustments with power off except spindle speed on variable speed models.

12. **Machine capacity:** Do not make any cuts requiring more power than is available on the machine.

13. **Chuck key:** On key chuck models, make certain chuck key has been removed and returned to its station before starting the spindle.

14. **Clamp or block work securely:** Never drill freehand because a drill bit, tap or other tools can seize up causing the workpiece, jig, or fixture to rotate with the spindle resulting in serious injury.

15. **Avoid accidental starting:** Make certain the motor switch is in the "off" position before connecting power to the drill press.

16. **Careless acts:** Give the work you are doing your undivided attention. Looking around, carrying on a conversation, and "horseplay" are careless acts that can result in serious injury.

17. **Job completion:** If the operator leaves the machine area for any reason, the drill press should be turned "off" and the spindle should come to a complete stop before his departure. In addition, if the operation is complete, he should clean the drill press and the work area. Never clean the drill press with power "on" and never use the hands to clear sawdust or chips; use a brush or chip rake.

18. **Disconnect machine:** Before performing any service or maintenance and when changing tools.

19. **Replacement parts:** Use only Powermatic or factory authorized replacement parts and accessories; otherwise the drill press warranty and guarantee will be null and void.

20. **Misuse:** Do not use this Powermatic drill press for other than its intended use. If used for other purposes, Powermatic disclaims any real or implied warranty and holds itself harmless for any injury which may result from that use.

21. **Use the Proper Speed and Feed:** A table is provided in the operating instruction manual as a guide in selecting the correct speed and feed rate for a variety of materials. For materials not shown, consult the material supplier for correct speed and feed rate. Adjust speed on variable speed models only with the power on. On step cone models, make sure power is off and the spindle has come to a complete stop before opening the access door to change speeds.

22. Do not equip your drill press with motor of higher than 1 horsepower nor run the spindle in excess of 4800 r.p.m. without the express written consent of Powermatic. Doing so voids the warranty and Powermatic holds itself harmless from any injury that may result.

General Safety

Drill press safety

DRILL PRESS OPERATIONS

Familiarize yourself with all operating controls before attempting use of this machine.

CONTROLS: (See Figure 1)

1. The spindle (A) in this machine is either a No. 2 Morse Taper or a No. 33 taper type equipped with a chuck. The key type chuck is 1/2" capacity, held to the spindle by the taper and a threaded lock collar.
2. A depth stop rod (B) is provided to control hole depth and to prevent drilling through material into table surfaces.
3. A quill lock (C) is located on the left side of the head and is used to hold quill at any position.
4. The handle (D) is used to lower the spindle and quill a total depth of 6".
5. Safety collars (E) are provided to prevent head and/or table from falling when locks are released. Be sure collars are in place and securely locked; one under the head and one under the utility or tilting table. No safety collar is required for the production table as it is rack and pinion controlled.
6. Starting switch (F) is mounted on the front of drill press head within easy reach of the operator.
7. A speed selection chart (G) is located on the front of the head. This chart is to provide assistance in determining proper drill speed.

OPERATING HINTS:

1. Determine drill size, inspect for sharpness, insert and lock securely in chuck or morse taper.
2. Arrange at this point, to protect table surface from drill break-through. A piece of scrap material under the work space will prevent marring table

surface and eliminate splintering a break-through point. Lock table securely to prevent movement.

3. To prevent work from being torn from operators hand, always secure workpiece, jig fixture, or holding device to table by clamping or blocking on the table. Do NOT use the column as a stop and clamp all light work pieces, jigs, fixtures or holding devices to the table to prevent them from being picked up as the quill returns.

4. Select the proper RPM for the tool being used, the material being machined, the operation to be performed and other conditions as indicated. (See tables I, II, III pages 5, 6, and 7 for recommendations.) If drill press is the step pulley type, raise door and set drive belt in proper ratio position. If the machine is a variable speed model, turn machine on and turn control cam to proper speed. NEVER, attempt speed adjustment of variable speed machines unless machine is running. Turn machine off.

5. On tilting table models be sure to block the part or holding fixture from sliding off the table when it is used tilted at an angle. In addition, be sure the table is clamped.

6. Set depth stop for desired hole depth. Fine adjustment is made by turning the fine adjustment collar. Use upper collar to lock stop setting position.

7. If coolant is being used, start flow.

8. Turn machine on and begin drilling operation. As the break-through point is reached, always slow feed rate down slightly to assist in elimination of burring underside of work piece and to help prevent a sudden break-through which can cause the drill to grab and pull the work piece free of its clamping device.

9. Perform all operations with a minimum extension of the quill. Adjust table or head position rather than using excessive quill travel.

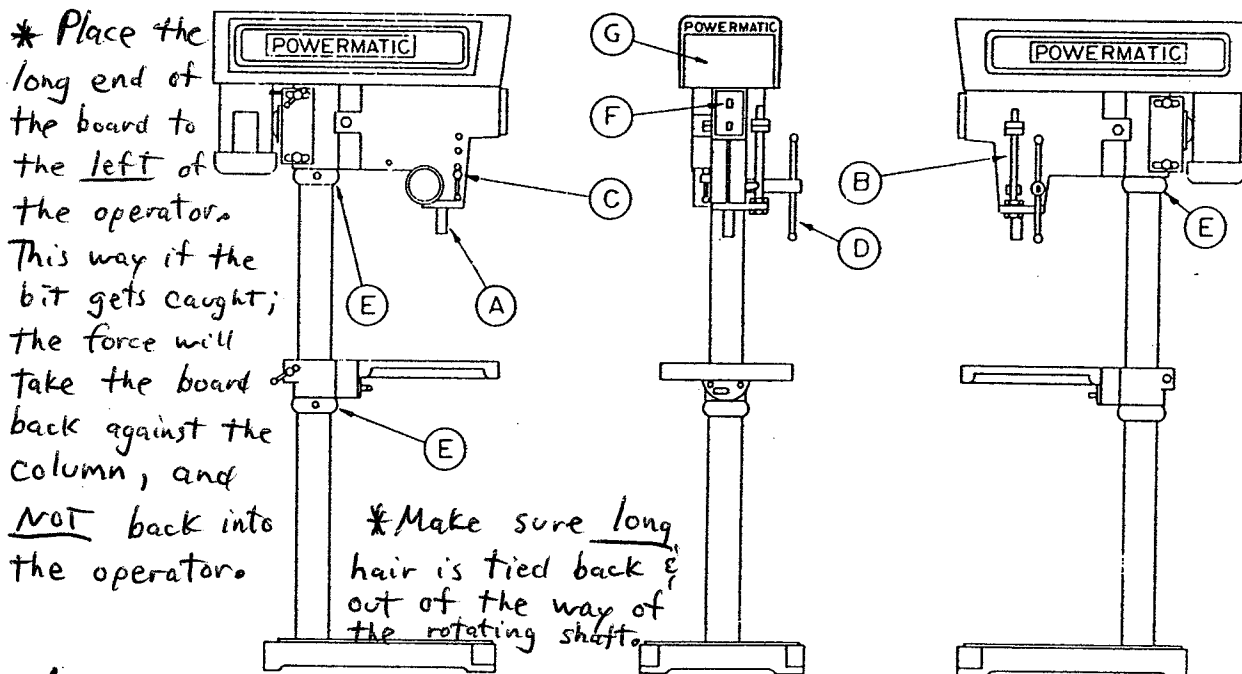


FIGURE 1