

POWERMATIC PM2000 10" Table Saw

POWERMATIC has long enjoyed a reputation for quality, function and innovation in woodworking machines. The POWERMATIC PM2000 embodies our latest effort where quality, function and long-term durability were at the top of the design criteria list. Years of input from woodworkers helped focus the array of features that make the POWERMATIC PM2000 the new standard by which cabinet saws are judged.



Trunnion Evolution



Our worm gears are designed to work freely in the dusty environment of a table saw cabinet.

Though long regarded as the best in the industry, the POWERMATIC designers refined our heavy-duty trunnion mechanism even more. The super rigid box-style cast iron construction and high end bearings and conical-shaped worm gear drive with increased contact area that enhance the smooth, solid feel of the tilt and height adjustments remain. Adjustable backlash means that should years of use produce a small amount of play, the user can easily adjust the mechanism back to factory-fresh clearances and feel.

Most table saw mechanisms feel smooth in the showroom but it is how they function when the inevitable dust contamination sets in that really matters. The POWERMATIC PM2000 mechanism uses specially designed threads that allow it to function smoothly and accurately in the real world conditions found within a table saw cabinet.

A pair of oversized 8"-diameter cast iron hand wheels, each with large spinner handles make blade height and bevel adjustments virtually effortless. The hand wheels are as attractive as they are comfortable with painted centers and chrome plated rims. Even the center locking pins and knobs are made from cast iron, spin freely and lock the adjustment without changing the setting. To prevent long-term use from loosening the hand wheels on their shafts, they are locked in place with machined grooves and keys rather than setscrews that are so common throughout the industry.

The POWERMATIC PM2000 cabinet is fabricated from heavy gauge steel and fitted to a huge cast iron base that provides exceptional stability and virtually eliminates vibration. This cast iron base enabled the addition of a unique retractable caster system discussed in detail a little later.



Large, comfortable hand wheels and precision-machined locking pins make adjustments and locking them without correction simple.



Our full-length arbor accepts stacked dado sets up 13/16" wide.

Notice that there is no gap between the threads and arbor shank that can allow thin chippers to hang out of line.

The arbor length was designed to handle stacked dado sets at their full 13/16" width. The arbor rides in high end, pre-loaded bearings that insure super-smooth operation for decades to come.

The bevel scale on the front of the cabinet has large, easy to read numerals and an adjustable pointer. We also added a pair of markers that can be placed as needed to make returning to often-used bevel angles fast and accurate.

A large, hinged motor cover provides easy access to the cabinet interior when needed. When closed, this cover enhances dust collection.

The full-length 5/8"-diameter arbor is precision machined from stress-proof steel to exceptionally high tolerances for accuracy. The arbor threads are specially designed to eliminate the frustrating dip between them and the shaft that can allow thin dado chippers to hang out of alignment with the rest of the stack.

A high quality poly-v belt drives the arbor through fully machined pulleys that guarantee the ultimate in concentricity. Poly-v belts are far superior to regular v-belts, especially multiple v-belt configurations because they produce far less vibration. The poly-v belt also transmits more power without slippage and that translates to considerably less heat generated that could compromise the bearings. This efficiency of operation means that poly-v belts last far longer and require less maintenance.



(Left) A push button arbor lock and heavy-duty nut and washer make changing blades easy. (Right) The full-sized combination wrench included with the PM2000 is intended to make loosening or tightening the blade nut a no-strain task. The rotation of the blade works to tighten the blade nut, not loosen it so it only needs to be firmly snugged down.



A pushbutton arbor lock and the included full-sized, forged steel 27mm combination wrench make blade changing easy and safer by keeping your hands farther from the blade. The 13 1/8" length of the wrench provides tremendous leverage to make loosening or tightening the blade nut a virtual no-strain task. We do ask that you apply that leverage wisely when tightening the blade nut. The blade rotation and cutting force work to tighten the blade-retaining nut, not loosen it. You need only tighten it firmly.

Table Surface

The 22"-long by 30 1/2"-wide primary cast iron table surface expands to 42"-long when the standard cast iron extension wings are bolted up. All cast iron surfaces are finely ground to insure a smooth, mar-free work surface that provides more support for the big jobs. We even

beveled the rear edge of the primary table to eliminate the sharp corner found on many table saws where it meets the extension wings. Eliminating that corner may sound insignificant but it



(Left) A full range of throat inserts are available. (Right) The standard and dado inserts feature spring-loaded balls that keep them placed correctly and snug in the throat opening.

can gouge the wood or an errant hand. The t-shaped 3/8"-deep by 3/4"-wide miter slots are precision machined for consistent width, depth and parallelism. Standard sizing of the miter slots means they are compatible with all popular accessories.

Removing the 17 7/8"-long by 4 1/4"-wide throat plate provides increased access for blade changing and working with our unique guard and splitter system. The standard and zero-clearance (accessory) POWERMATIC PM2000 throat plates are slotted for use with the splitter or accessory riving knives installed for maximum performance and safety.

POWERMATIC PM2000 standard and dado throat plates feature a pair of spring-loaded check balls that both locate the plate in its cavity and prevent movement during use. The accessory zero-clearance insert has adjusting screws that allow precise fitting to the cavity.

Power and Control

The POWERMATIC PM2000 is available with a 3HP, single phase 230V, 5HP single phase 230V or 5HP three phase 230V motors. All POWERMATIC motors are high quality, high output and rated at their actual developed power – not the “peak” developed power.

The POWERMATIC PM2000 is equipped with a newly designed magnetic ON/OFF switch. A green pilot light within the start button indicates that the POWERMATIC PM2000 is connected to electrical power. Depressing that illuminated button starts the POWERMATIC PM2000. A large red “quick off” ring surrounds the ON button and makes shutting the POWERMATIC PM2000 down a matter of pressing the OFF ring by hand or bumping it with your leg.

To safeguard against accidental startups when you are not around we added a removable magnetic “Key” that disables the Start/Stop switch when it is not in place. When you leave the shop, you can drop the key in your pocket or stick it on a handy metal surface in the shop.

The new switch also protects against under and over voltage conditions. If the electrical power being delivered to the POWERMATIC PM2000 strays below or above safe levels, the switch automatically shuts the saw down.



The newly designed switch allows disabling the PM2000 when you are not around and protects against accidental start-ups should the power go out and come back on unexpectedly.

We also built in power outage protection that prevents the POWERMATIC PM2000 from starting unexpectedly should the electrical power be interrupted and then come back on. Once the power goes out, the POWERMATIC PM2000 will not restart until the OFF ring is depressed and then the ON button pressed to restart the saw. The safety implications here are obvious – the saw starts when you tell it to, not whenever the power comes back on.

High-Tech Guard System



(Left) Our modular blade guard system is tough, easy to use. The guard plates and anti-kickback pawls can be removed from the splitter without tools for easy blade changes. (Right) The side plates rotate up out of the way for measuring cuts.



Even the blade guard and splitter system has been given extensive engineering attention. Designed to be totally tool-free, this modular system makes it easy to configure the POWERMATIC PM2000 blade guard/splitter system and optional riving knives for the job at hand.

Independent side leaves allow the blade guard to follow the stock being cut closely and leave one side flat on the table when making narrow cuts. This increases safety and enhances dust collection by keeping more of the blade area enclosed. Both side leaves can be rotated up out of the way independently to make measuring cut widths easy and more accurate. The entire side leaf assembly can be removed from the splitter by depressing a button at the hinge point to increase access for blade changes without having to remove the splitter assembly.

When necessary for procedures like cutting dados, the splitter assembly can be removed by simply flipping its locking lever within the throat opening and lifting it out. Likewise, accessory riving knives can be installed by inserting them in the holder and pushing the locking lever closed.



The splitter and riving knives have a no-tools mount for fast, easy changing to fit the job.

Because the splitter and riving knives are mounted directly to the blade mechanism, the gap between them and the blade never changes during height or angle adjustments. This maintains the safety a splitter or riving knife affords in virtually all cutting situations.

Mobility



Our unique retractable caster system allows moving the PM2000 around the shop easy but sets the cast iron base down on the floor for the ultimate in stability.

add-on mobile bases, the saw remains perched on the four tiny contact points of the wheels during use.

For many of today's woodworkers, the ability to move large machines within the shop is important. To facilitate that, the massive cast iron base of the POWERMATIC PM2000 has a built-in retractable, four-wheel caster (patent pending) system. Pulling out on the bevel hand wheel engages the caster system drive and allows raising the base up to 1/2" above the floor.

The casters feature non-marring polyurethane tires and are fully supported by heavy-duty ball bearings. All four casters are omni-directional which allows the POWERMATIC PM2000 to move in any direction rather than having to "steer" it from one end as with common mobile bases with one set of fixed wheels.

When in the new position, retract the casters and the cast iron base is in full contact with the floor giving the POWERMATIC PM2000 rock solid stability. With



The dust shroud encloses much of the blade below the table for maximum efficiency. A quick release hose connects the shroud to a standard 4"-diameter port on the rear of the cabinet.

Dust System

To maximize dust evacuation from the POWERMATIC PM2000 we designed a shroud style collector that surrounds the lower portion of the blade below the table. This wrap-around configuration strips remarkable amounts of dust directly off the blade and dramatically reduces the amount of dust ejected off the top of the blade. It also keeps the interior of the cabinet surprisingly clean. A standard-diameter port at the rear of the POWERMATIC PM2000 cabinet makes connecting your 4" dust collector hose quick and adapter free. The internal hose even features a quick disconnect should you need to recover a dropped arbor nut!



The Powermatic Accu-Fence takes t-square fence systems to a new level of accuracy.

Accu-Fence

Note: The POWERMATIC Accu-Fence is available with 30" or 50" capacity to the right of the blade. Aside from capacity, both Accu-Fence systems are identical in construction and features.

A key feature of any table saw is the fence system. To maximize accuracy and safety, the POWERMATIC PM2000 comes with the POWERMATIC exclusive Accu-Fence. Based on the venerable T-square design, the POWERMATIC Accu-Fence takes this concept to new levels.

Even high-end fence systems are based on a length of square or rectangular steel with laminate-covered wooden faces. Manufacturing tolerances in the tubing itself require shimming to straighten the face material mated to it. POWERMATIC takes the extra step of milling the square tubing to be sure that it and the face it supports are straight without having to be shimmed.

In place of the common laminate-covered wood, the POWERMATIC Accu-Fence has a pair of $\frac{3}{4}$ "-thick HDPE (high density polyethylene) slabs that are both very rigid and have exceptional lubricity properties that allows wood to slide along them easily and predictably. The faces can be adjusted vertically to either ride just above the table or flush with the surface, whichever is safest for the material being cut. Oversized access holes along the underside of the Accu-Fence make reaching the fasteners to remove or reposition the HDPE faces much easier.



A heavy steel T-square is welded to the main fence tube and includes adjusters and a magnified cursor over the easy to read scale.



The locking handle and mechanism are simple, tough and very easy to operate.

The T-square portion of the Accu-Fence is made from heavy-gauge steel and is precisely welded to the main tube. Easy to use adjusters allow fine-tuning Accu-Fence square to the table surface (vertically) and parallel to the miter slots.

The single handle locking mechanism is made using high-tech powdered metal technology that allows forming extremely precise parts. The powdered metal process also produces exceptionally tough parts that resist wear and retain their effectiveness indefinitely.

The Accu-Fence rides on a heavy gauge steel support tube and rail system that insures precision and durability. A high-tech powder coating process keeps the guide tube and rails protected and looking great. To provide clean metal-to-metal contact areas for the fence locking

mechanism to grip along the guide tube, strips of the powder coating are precisely machined away.

Advanced Miter Gauge

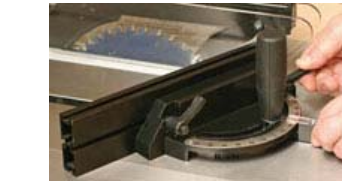
The standard miter gauge supplied with the POWERMATIC PM2000 pivots 60-degrees to either side and locks with a twist of the push handle. However, that is where the similarities with other standard models end.

The guide bar has a disk follower that engages the T-groove miter slots and prevents it from lifting during a cut. A pair of expander mechanisms allows fitting the guide bar precisely to the miter slot to eliminate side play. This enhances both safety and precise cuts in crosscut and miter modes.

The miter head has precisely located detents at 0, 30 and 45-degrees to the left and right. To make setting any required angle more precise, a special gear drive is built into the detent knob. Loosen the locking handle, pull the detent knob out to engage the gear drive and turn it to move the miter head to the exact angle needed. It simply cannot be easier or more accurate!



The miter guide bar has a pair of width adjusters to eliminate side play that could compromise cut accuracy.



(Left) The large miter gauge fence is fully adjustable so it can be positioned safely for whatever cut is being made. (Right) A built in gear drive makes dialing in precise angles fast and easy.



The large 12 $\frac{3}{4}$ "-long by 2 $\frac{3}{4}$ "-tall extruded fence can be positioned closer to or farther from the blade by releasing the two finger-operated levers. This allows setting the miter fence at the optimum distance from the blade at all cutting angles for maximum accuracy and safety.

Slots in the face and top edge of the miter gauge fence accept hex head fasteners to make attaching your custom auxiliary faces or shop-made jigs easy and very secure.

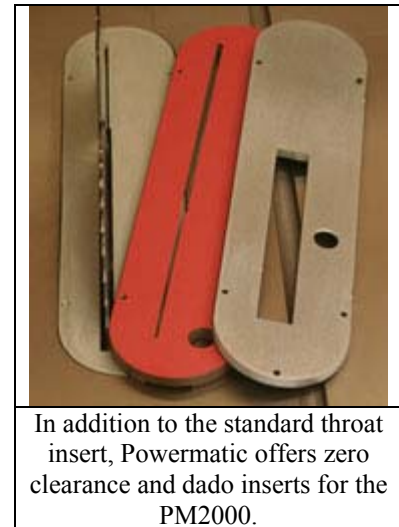
Accessories

Throat Inserts

In addition to the standard throat insert shipped with the POWERMATIC PM2000, we offer a composite zero clearance insert (#1791786) and a metal dado insert (#1791788). The dado insert is sized to accept multi-plate stacked dado sets at their full 13/16" width.

Like the standard insert, the dado version also features the spring-loaded balls that keep it snug in the opening. The zero clearance insert has adjuster screws that allow you to fine-tune its fit in the opening.

The standard and zero clearance inserts are slotted for use with the splitter and guard assembly or a riving knife installed.



Riving Knives

Full and narrow-kerf, low profile riving knives are available for the POWERMATIC PM2000 as accessories. Riving knives are most commonly used for non-through cuts because they stay just below the top of the blade. Like the full splitter assembly, a riving knife helps prevent rotational



(Left) Standard and thin kerf splitters and low profile riving knives (Right) are available, all with beveled leading edges.

kickbacks, one of the more common and most dangerous forms of this accident. If the wood is allowed to rotate into the spinning blade, the speed at which it can be snatched across the blade and ejected can drag your hand into harms way. Used correctly, the riving knife system goes a long way toward preventing these types of accidents.

Accessory Workbench Table



Our new Workbench Table will be just the thing for many shops where bench space is at a premium! a heavy-duty screw and hardwood handle.

Coming soon is the Accessory Workbench Table (#6827045) for the POWERMATIC PM2000. This bench is just the thing for the large number of woodworkers who never have enough bench space available.

The 30 ½" by 39" bowling alley-style European Beech laminated surface is tough, flat and attractive. Ten ¾"-diameter bench dog holes make clamping or holding assemblies square and secure easy. The end of the bench is bored to accept the included vise that features twin guide bars,

The Accessory Workbench Table comes sanded and ready for you to apply the finish that best matches your shop or working needs. Applying your own finish makes it easy to renew the surface after years of hard duty takes its inevitable toll.