WEN Drill Press

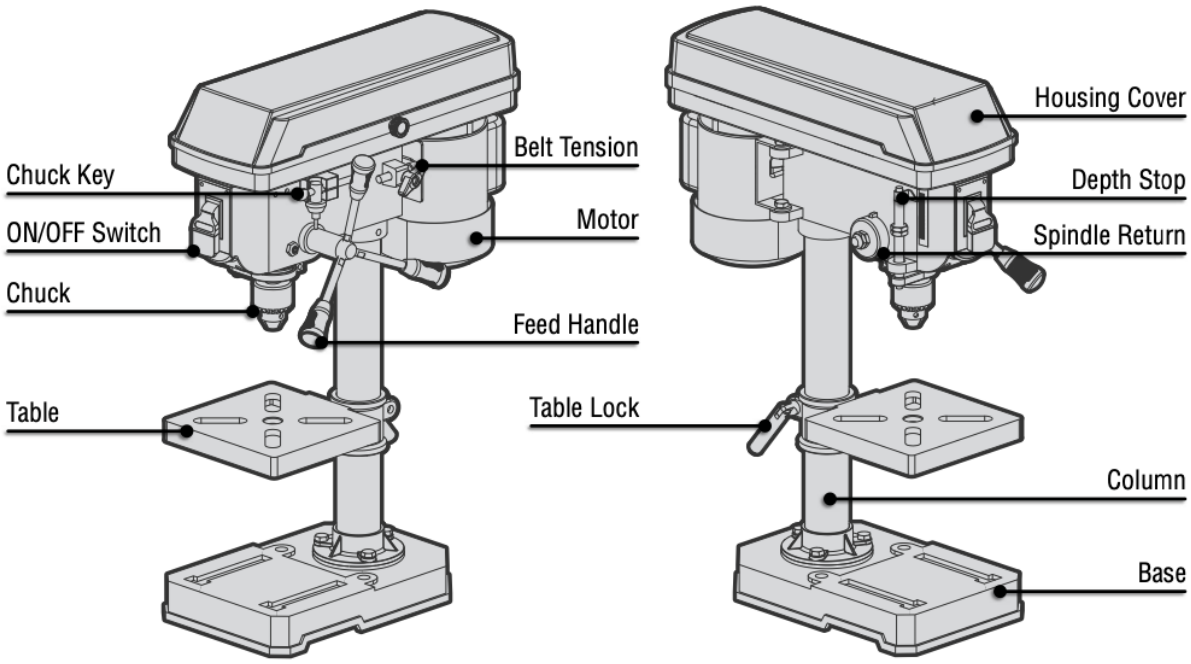
Model 4208 8”, 5-speed

- Connect with Idea Shop staff for assistance with this machine.
- Never turn the drill press on until the table is clear of all foreign objects (tools, scraps, etc.).
- Always keep hands and fingers away from the drill bit.
- Do not drill materials without a flat surface unless a suitable support is used (clamp or vice).
- Never start the drill press with the drill bit pressed against the workpiece.
- Make sure the table lock is tightened before starting the drill press.
- Never layout, assemble, or set-up any work on the table while the drill is on.
- Make sure the drill bit is securely locked in the chuck.
- Make sure the chuck key is removed from the chuck before turning power on.
- Adjust the table or depth stop to avoid drilling into the table.
- Always stop the drill before removing scrap pieces from the table.
- Use clamps or a vise to secure a workpiece to the table. This will prevent the workpiece from rotating with the drill bit.
- Do not wear gloves or long sleeves when operating a drill press.
- Set the drill press to the speed that is appropriate for the material being drilled. See *Drill Press Speed Chart* for suggested drill speeds. Request assistance from Idea Shop staff if needed.
- If any part of the drill press is missing/damaged or if the electrical components fail to perform properly, shut the power OFF, unplug the drill press and inform Idea Shop staff.
- Before leaving the machine, shut the power off, remove the drill bit and clean the table.
- Remove your materials so the machine is available for the next user.

TECHNICAL DATA

Model: 4208
Motor: 120V, 60 Hz, 2.3A, 1/3 HP
Chuck Capacity: 1/2 inch
Spindle Stroke: 2 inches
Spindle Taper: JT33
Speeds: 740, 1100, 1530, 2100, 3140 RPM
Swing: 8 inches
Table Size: 6-1/2 x 6-1/2 inches
Base Size: 11 x 7 inches
Total Height: 23-1/8 inches
Weight: 34.2 lbs.

User Manual [pdf]



Drill Press Speed Chart

Always wear safety glasses and clamp work at all times.


Twist bit


Bullet pilot -point bit


Brad-point bit

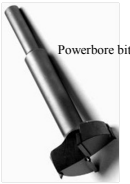

Forstner bit


Glass and tile bit


Hole saw


Multi spur bit


Left: Spade bit
Right: Spade bit with spurs


Powerbore bit


Circle cutter


Shear-cutting countersink

Recommended operating speeds (RPM)							
Accessory	**Softwood (Pine)**	**Hardwood (Hard Maple)**	**Acrylic**	**Brass**	**Aluminum**	**Steel**	**Shop Notes**
Twist drill bits							
1/16" - 3/16"	3000	3000	2500	3000	3000	3000	Lubricate drill with oil when cutting steel 1/8" or thicker. Use center punch on all holes to prevent drill from wandering.
1/4" - 3/8"	3000	1500	2000	1200	2500	1000	
7/16"- 5/8"	1500	750	1500	750	1500	600	
11/16" - 1"	750	500	NR	400	1000	350	
Bullet pilot-point bits							
1/8" - 3/16"	3000	3000	3000	2000	1500	3000	Good all-around bit. These cut more quickly than brad points and twist drills.
1/4" - 3/8"	3000	3000	2400	1500	1000	2000	
1/2"	3000	1500	1600	1500	750	1200	
Brad-point bits							
1/8"	1800	1200	1500	NR	NR	NR	Raise 1/4" and smaller bits often to clear shavings and prevent heat build-up.
1/4"	1800	1000	1500	NR	NR	NR	
3/8"	1800	750	1500	NR	NR	NR	
1/2"	1800	750	1000	NR	NR	NR	
5/8"	1800	500	750	NR	NR	NR	
3/4"	1400	250	750	NR	NR	NR	
3/8"	1200	250	500	NR	NR	NR	
1"	1000	250	250	NR	NR	NR	
Forstner bits							
1/4" - 3/8"	2400	700	NR	NR	NR	NR	Raise 1/4"-3/8" bits often to clear shavings and prevent heat build-up. Make several shallow passes with larger bits; allow bit to cool between passes.
1/2" - 5/8"	2400	500	250	NR	NR	NR	
3/4" - 1"	1500	500	250	NR	NR	NR	
1 1/8" - 1 1/4"	1000	250	250	NR	NR	NR	
1 3/8" - 2"	500	250	NR	NR	NR	NR	
Glass-and-tile bits (Listed speeds are for glass and tile– not softwood.)							
1/8"	750	NR	NR	NR	NR	NR	Use drill press only. Do not apply excessive pressure. Lubricate with water while drilling. Reduce quill pressure when bit tip emerges from back side.
3/16"	600	NR	NR	NR	NR	NR	
1/4"	500	NR	NR	NR	NR	NR	
5/16"	400	NR	NR	NR	NR	NR	
3/8"	350	NR	NR	NR	NR	NR	
1/2"	200	NR	NR	NR	NR	NR	
Hole Saws							
1" - 1 1/2"	500	350	NR	250	250	NR	Do not use with brass or aluminum thicker than 1/16"
1 5/8" - 2"	500	250	NR	150	250	NR	
2 1/8" - 2 1/2"	250-500	NR	NR	150	250	NR	
Multi spur bits							
2 1/2" - 4"	250	250	NR	NR	NR	NR	Smaller sizes also available; use Forstner speeds.
Spade bits							
1/4" - 1/2"	2000	1500	NR	NR	NR	NR	Clamp work to table to improve quality of hole.
5/8" - 1"	1750	1500	NR	NR	NR	NR	
1 1/8" - 1 1/2"	1500	1000	NR	NR	NR	NR	
Spade bits with spurs							
3/8" - 1"	2000	1800	500	NR	NR	NR	Best bit for acrylic. Clamp work securely.
Powerbore bits							
3/8" - 1/2"	1800	500	NR	NR	NR	NR	Ideal for deep holes and end-grain drilling.
3/4" - 1"	1800	750	NR	NR	NR	NR	
Circle cutters							
1 1/2" - 3"	500	250	250	NR	NR	NR	Drill one side, flip material over, place center bit in its hole, and resume cut.
3 1/4" - 6"	250	250	250	NR	NR	NR	
Shear-cutting countersinks							
1/4" - 3/8"	1000 750	1000 700	700 700	700-1000 250-700	700-1000 250-700	NR NR	Cuts cleaner than traditional countersinks.
Countersinks							
2-flute	1400	1400	NR	NR	NR	NR	Raise and lower frequently for quicker cutting.
5-flute	1000	750	750	250	250	250	
Countersink screw pilot bits							
All sizes	1500	1000	500	500	NR	NR	Clear twist drill often.
Taper drill bits with countersinks							
All sizes	500	250	250	NR	NR	NR	Clear bit often to prevent heat build-up.
Plug cutters							
All sizes	1000	500	NR	NR	NR	NR	Cut to full depth so bit chamfers plug.

NR—not recommended

NOTES

- Recommendations are based on visual and tactile tests under shop conditions. Drilling faster than recommended can cause overheating. Speeds slower than recommended may cause poor-quality holes.
- All wood testing done on face grain. Reduce speed when drilling into end grain.
- Speeds based on new bits from the factory.


Countersink


Countersink screw pilot bit


Taper bit w/ countersink


Plug cutter