

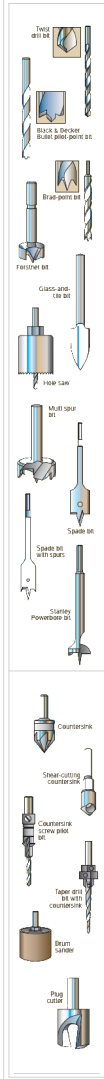
10 easy steps to adjust the fence to be parallel to the miter slot.

1. First get a piece of $\frac{3}{4}$ "x 4"x17" or longer hardwood. It should fit in to your miter slot without slop. If it does not fit without slop get a different piece of wood or use a shim on the side away from the fence.
2. Now loosen the screws that hold the fence.
3. Unlock the fence if needed.
4. Slide the fence against the board in the miter slot.
5. Take some clamps and clamp the fence to the board in the miter slot.
6. Lock the fence.
7. Tighten the screws that hold the fence.
8. Remove the clamps
9. Unlock the fence
10. Remove the wood from the miter slot.

Now if your blade is aligned to the miter slot as it should be, your fence is not parallel to the blade and it should only take you a couple of minutes to do this.

This works for me.

DRILL PRESS SPEED CHART



| 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 | |
| 1/4" - 3/8" | 3000 | 1500 | 2000 | 1200 | 2500 | 1000 | Lubricate drill with oil when cutting steel 1/8" or thicker. Use center punch on all holes to prevent drill from wandering. |
| 7/16" - 5/8" | 1500 | 750 | 1500 | 750 | 1500 | 600 | |
| 11/16" - 1" | 750 | 500 | NR | 400 | 1000 | 350 | |
| Black & Decker 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 bit | | | | | | | |
| 1/8" | 1800 | 1200 | 1500 | NR | NR | NR | |
| 1/4" | 1800 | 1000 | 1500 | NR | NR | NR | |
| 3/8" | 1800 | 750 | 1500 | NR | NR | NR | |
| 1/2" | 1800 | 750 | 1000 | NR | NR | NR | Raise 1/4" and smaller bits often to clear shavings and prevent heat build-up. |
| 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 | |
| 1/2" - 5/8" | 2400 | 500 | 250 | 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. |
| 3/4" - 1" | 1500 | 500 | 250 | NR | NR | NR | |
| 11/8" - 11/4" | 1000 | 250 | 250 | NR | NR | NR | |
| 13/8" - 2" | 500 | 250 | NR | NR | NR | NR | |
| Glass-and-tile bits (Listed speeds are for glass and tile-not softwood.) | | | | | | | |
| 1/8" | 50 | N | N | N | N | N | |
| 3/16" | 600 | R | R | R | R | R | Wear safety goggles. Use drill press only. Do not apply excessive pressure. Lubricate with water while drilling. Reduce quill pressure when bit tip emerges from back side. |
| 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" - 11/2" | 500 | 350 | NR | 250 | 250 | NR | Do not use with brass or aluminum thicker than 1/16". Avoid dense hardwoods such as hard maple. |
| 15/8" - 2" | 500 | 250 | NR | 150 | 250 | NR | |
| 21/8" - 21/2" | 250-500 | NR | NR | 150 | 250 | NR | |
| Multi spur bits* | | | | | | | |
| 21/8" - 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 | |
| 5/8" - 1" | 1750 | 1500 | NR | NR | NR | NR | Clamp work to table to improve quality of hole. |
| 11/8" - 11/2" | 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. |
| Stanley 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* | | | | | | | |
| 11/2" - 3" | 500 | 250 | 250 | NR | NR | NR | Drill one side, flip material over, place center bit in its hole, and resume cut. |
| 31/4" - 6" | 250 | 250 | 250 | NR | NR | NR | |
| Shear-cutting countersinks | | | | | | | |
| 1/4" - 3/8" | 1000 | 1000 | 700 | 700-1000 | 700-1000 | NR | Cuts cleaner than traditional countersinks. |
| 1/4" - 3/8" | 750 | 700 | 700 | 250-700 | 250-700 | NR | |
| 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. |
| Drum sanders | | | | | | | |
| Hard rubber | 750 | 1500 | 750 | NR | NR | NR | |
| Soft steeveless | 500 | 750 | 750 | NR | NR | NR | Avoid load-up and overheating. Decrease air pressure for fine contours. |
| 3" pneumatic | 1750 | 1750 | 1750 | NR | NR | NR | |
| 5" flex discs | 750 | 500 | 500 | 500 | NR | NR | Adhesive-backed discs work best. |
| Polishing wheels | 1500 | 1500 | 1500 | 1500 | 2000 | NR | Use light pressure. |
| Flap sanders | 2000 | 2000 | 2000 | 2000 | 2000 | 2400 | Hold work firmly. |
| Grinding wheels | NR | NR | NR | NR | NR | 3000 | Use 6" or smaller wheel. |
| NR - Not recommended * Back material to prevent chip-out. Always wear a face shield for optimum protection. | | | | | | | |
| Notes | | | | | | | |
| - Recommendations are based on visual and tactile tests under shop conditions. Drilling faster than recommended can cause overheating. Speeds slower than those recommended may cause poor quality holes. | | | | | | | |
| - All testing done on face grain. Reduce speed when drilling into end grain. | | | | | | | |
| - Speeds based on new bits from the factory. | | | | | | | |

