

# UNICORN OFFICE EQUIPMENT & REPAIRS

## DRILLING TIPS



### **Keep Drill Bit Sharp**

Dull drill bits are the primary cause of drill breakage. Usually after two hours of drilling, depending on type of paper being processed, drill bits should be sharpened. Using dull drill bits results in poor work quality and will damage your drill due to excessive force placed on the drill and drill bits.

### **Keep Drill Bits Clean**

Dirty and rusty drill bits will not permit the upward passage of waste. Pressure built up by drill chips may cause a clogged bit to split or break. Keep the bit free from dirt or rust, clean the drill of all chips regularly and apply light weight oil to the inside and outside of the bit. This is particularly true if used in coated or varnished paper as the coating on the chips frequently fuses into one solid mass when the bit cools. This can cause breakage the next time the drill is used. Ideally drill bits should be stored in a bath of lightweight machine oil when not in use.

### **Lubricate Drill Bits**

Lubrication assists the passage of chips and helps prevent overheating. Use soap or lubricant sticks for this purpose. Hold the end of the stick against the side of the rotating drill bit. Also be sure to touch the cutting edge, as lubricant must make its way inside the drill bit for ease free passage of the chips through the drill bit and on the outside for smooth clean drilling.

### **Check your Drill Sharpener**

The cutting edge of the sharpening bit should be inspected frequently to make certain that it is sharp and free of nicks. Never allow a drill to drop onto the sharpening bit...it will chip the carbide tip. Use gentle pressure and allow the sharpening bit to do the work. The cutting edge of the drill bit should be razor sharp when done.

### **Set Drilling Depth Correctly**

Do not cut into the baseboard, the drill should just touch so to cleanly cut through your last sheet. During drilling, do not reset the drilling depth. Rather, change the position of the baseboard frequently. Drilling deeper into the baseboard dulls drill bits quickly. Replace Baseboards as required.

### **Check for Drill Wobble**

If spindles are badly worn or damaged, or if chucks are unable to hold the drill bit securely, or the worktable is wobbly, a broken or bent drill bit may result.

### **Important!**

To prevent drill bit from overheating, avoid drilling too slowly. With constant and even pressure, drive the drill bit through your stack of paper. Allow the drill to easily cut through the paper. Remember you are using a drill, not a punch.

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## Drill Sharpening Procedure



**NOTE: Dispose of discoloured drill bits as they do not hold their edge, get blocked easily and may damage your sharpening tool.**

1. The cutting edge on the sharpening tool should be inspected frequently to ensure it is sharp and free from nicks.
2. Place sharpening tool on the baseboard and aligned the point directly under the drill bit.
3. Turn on the drill motor.
4. Gently lower the drilling handle until a squealing sound is heard as the sharpening tool removes tiny black shavings from your drill bit.
5. Remove burrs from the cutting edge by holding the honing stone flat on the side of the rotating drill bit and then moving it downward to remove the burrs which are created during the sharpening process. Take care to hold the stone parallel to the side of the bit at all times.
6. Stop drill motor and check bit for sharpness. If necessary repeat the above.
7. Adjust the drilling dept to just mark the baseboard; do not reset depth during drilling. Rather, change the position of the baseboard. Drilling deeply into the baseboard will dull your drill bit sooner.
8. Paraffin or similar lubrication assists the passage of chits and help prevent overheating of drill bits. Regularly lubricate the cutting edge and side of the drill bit for optimum results.

**Keeping drill bits sharp will greatly improve their lifespan,  
machine wear and job quality**

**SALES, SERVICE, TRAINING  
BASEBOARD or DRILL BIT ORDERS**