

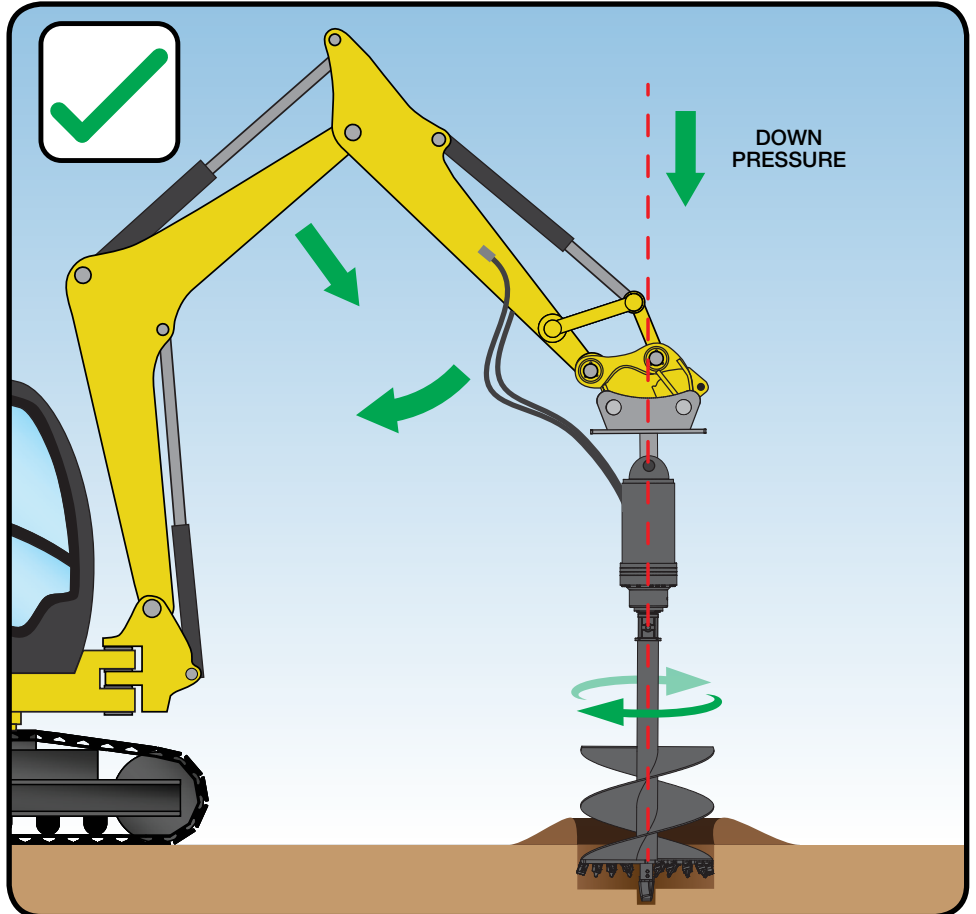
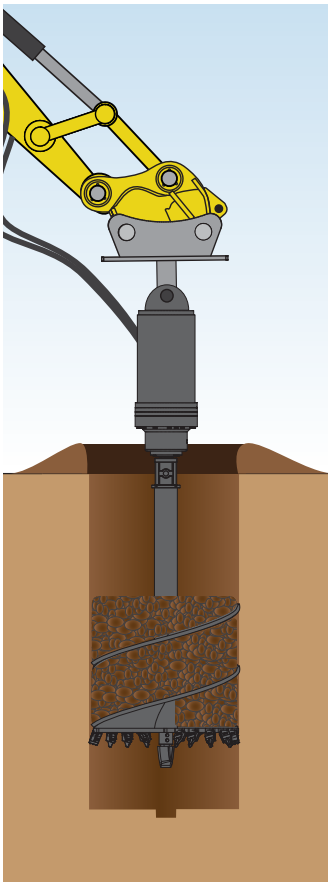
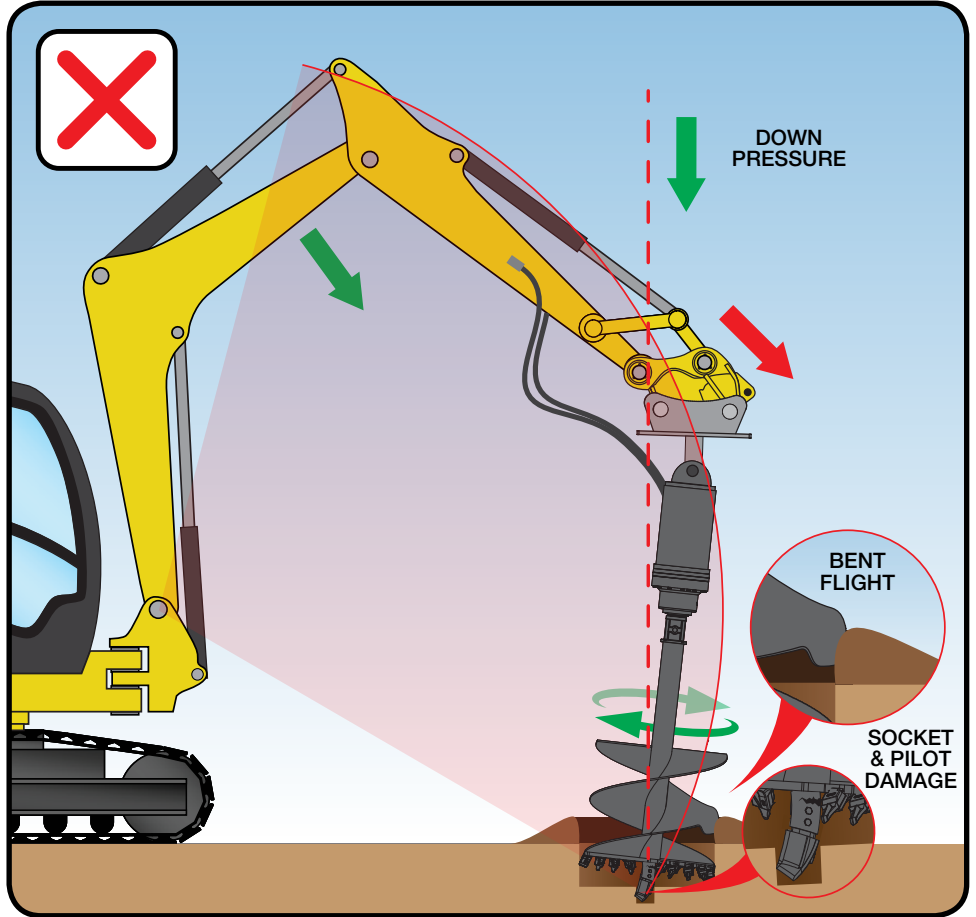
# CORRECT DRILLING PROCEDURE

## VERTICAL ALIGNMENT

# DIGGA

Natural arc movement of the boom causes the dipper arm to move out of vertical alignment as it is raised or lowered. Constant operator adjustments are required to maintain vertical alignment. Failure to do so will create significant side load on the auger drive and auger.

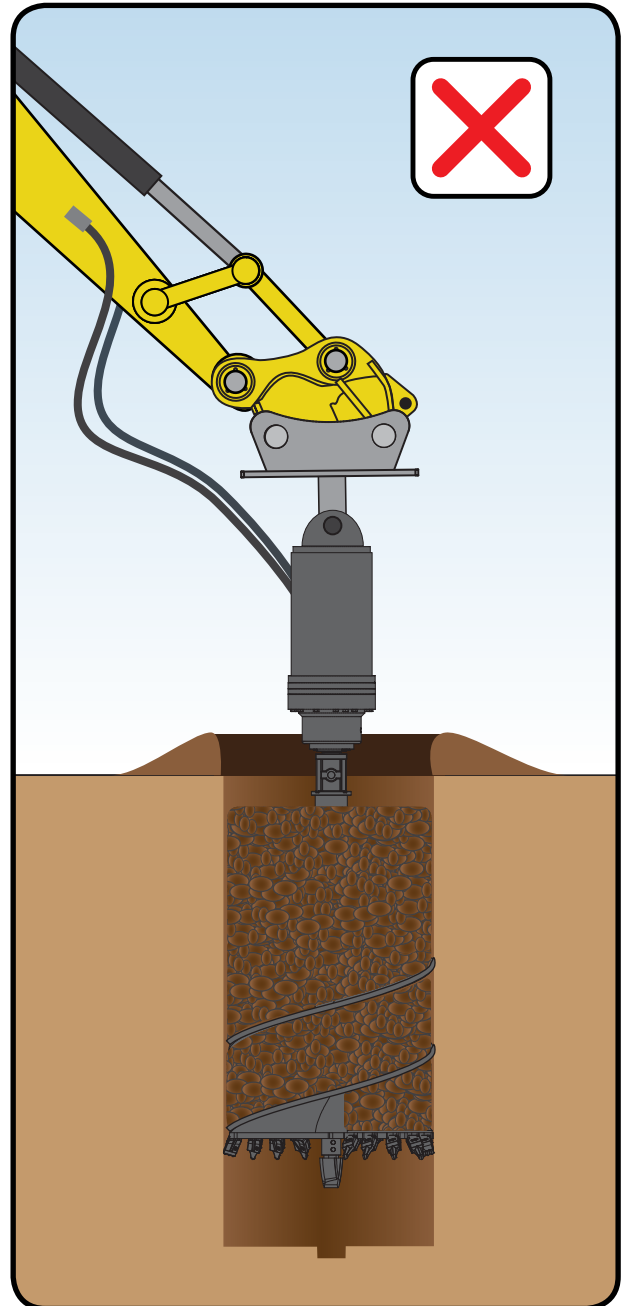
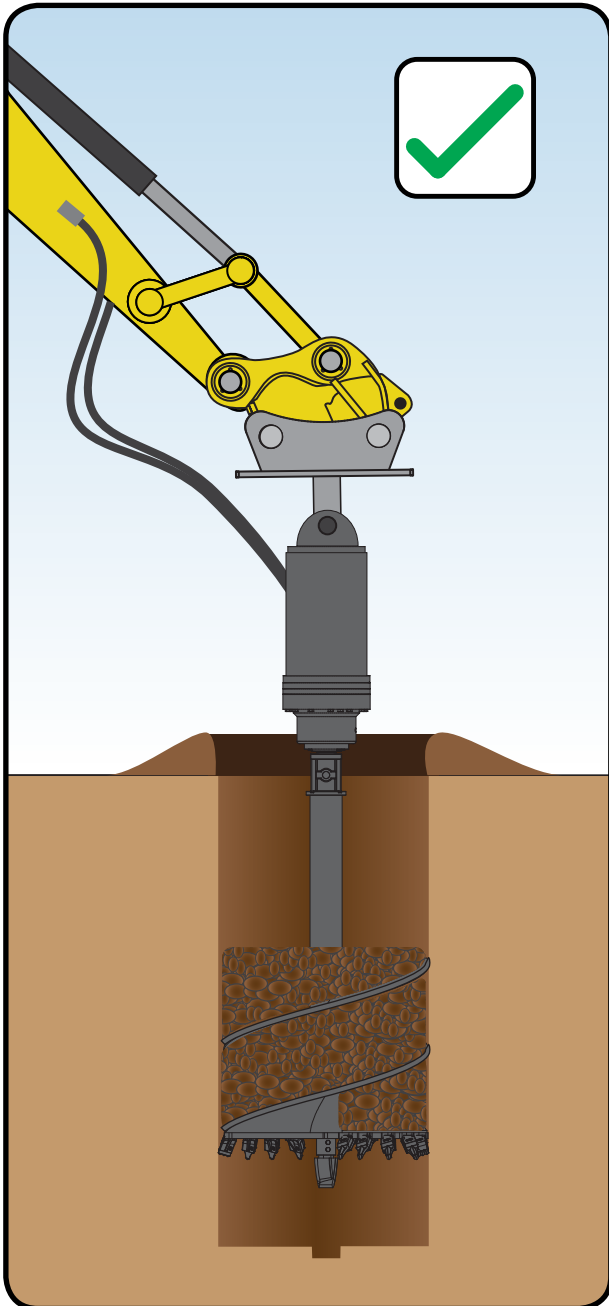
Digga auger drives are pendulum drills designed to hang freely from the excavator mount. Excessive side load may result in bent auger flights, pipe and hubs as well as potential damage to the auger drive shaft, seals and gearbox. Excessive side load may also cause socket and pilot breakage especially when drilling into hard ground.



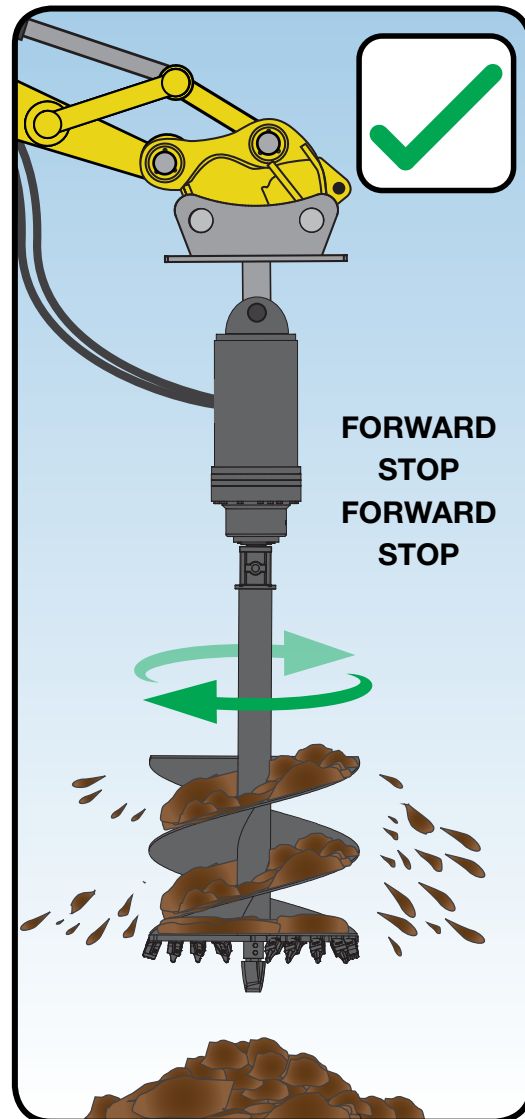
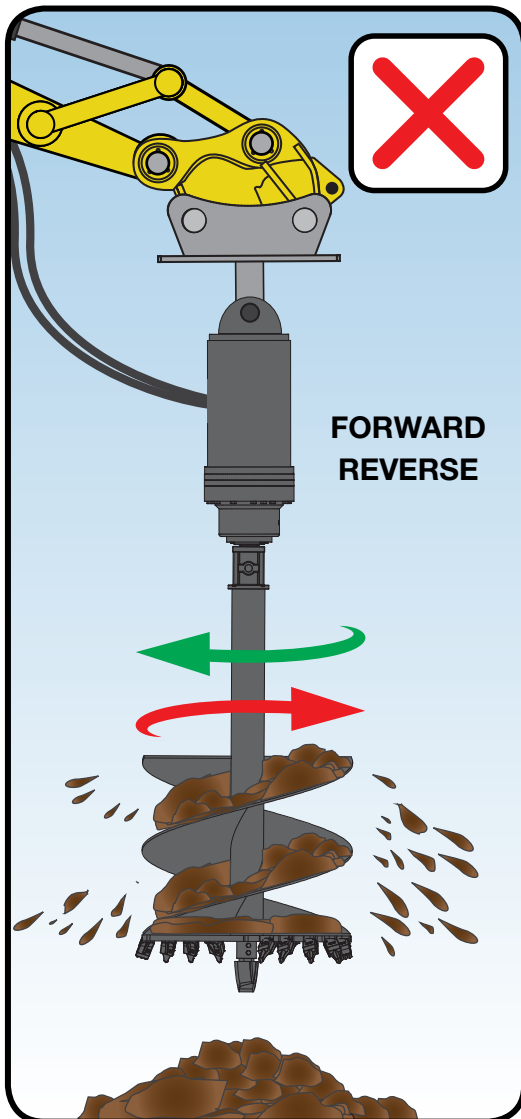
# DIGGA

PHONE: 1300 2 DIGGA EMAIL: [info@digga.com](mailto:info@digga.com) WEB: [www.digga.com](http://www.digga.com)

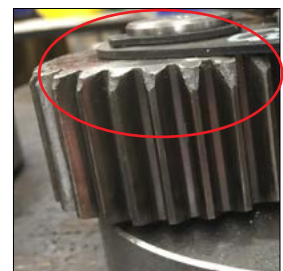
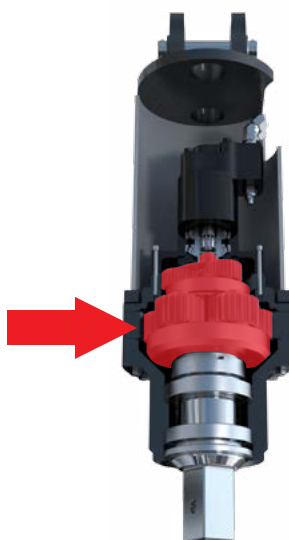
Auger flights are designed to move soil away from the cutting head for more efficient drilling. They are not intended to carry excessive spoil from the hole. Never fill the auger past the level of the last flight. Attempting to pull an auger out of the hole with spoil over the last flight may result in damage to the auger flights, hub and drive unit.



**WHEN AUGERING, DO NOT RAPIDLY ENGAGE FORWARD/REVERSE TO CLEAR SPOIL FROM AUGER**

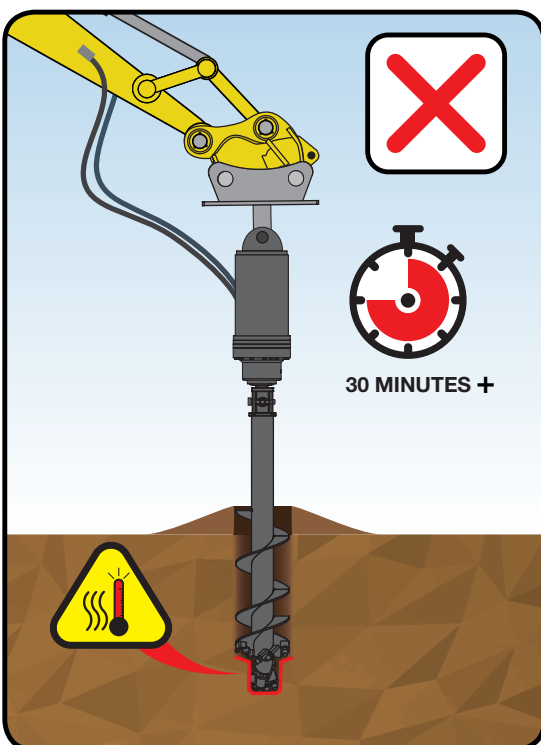
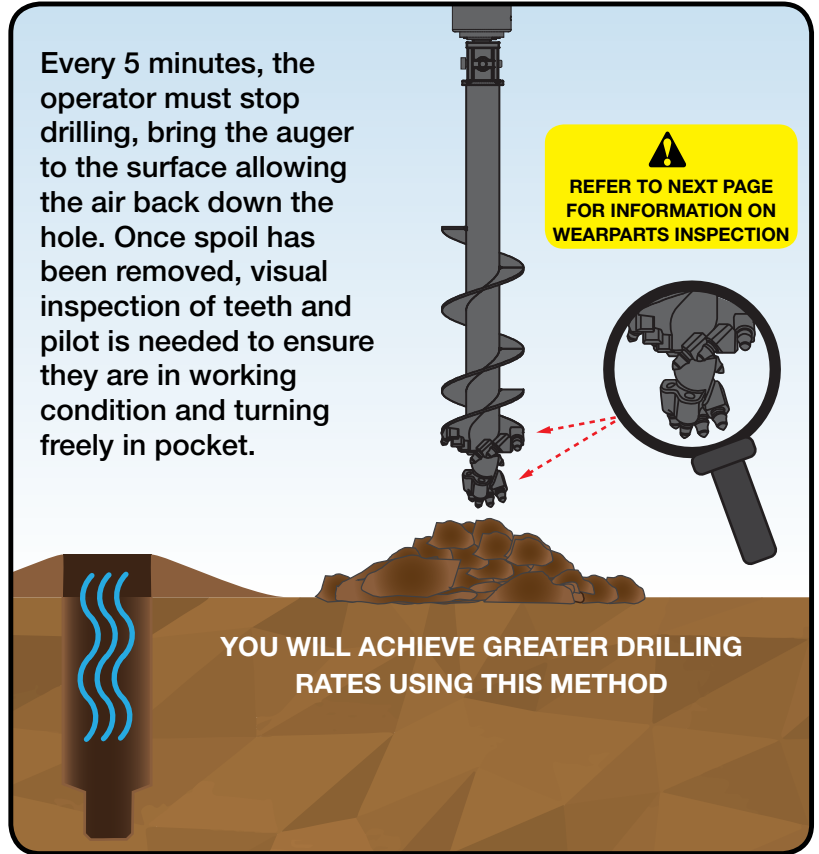
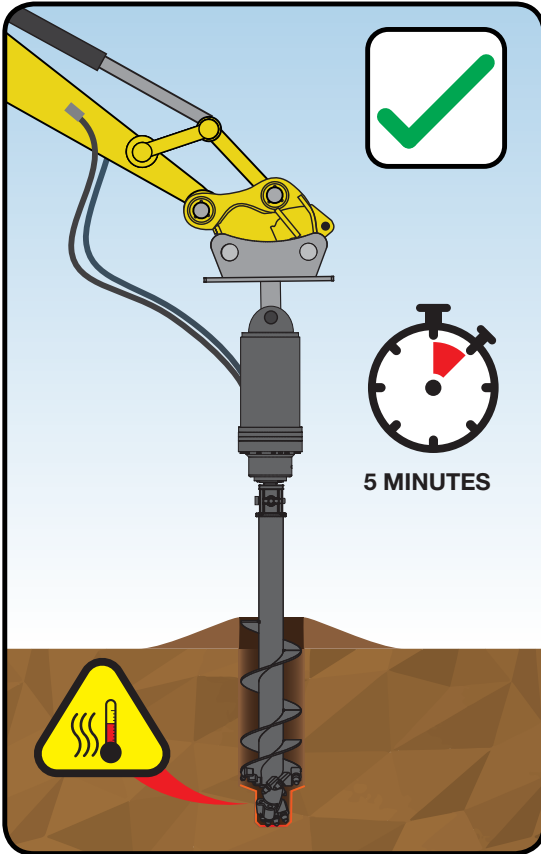


**ENGAGING IN  
FORWARD/REVERSE WILL  
CAUSE TORQUE RELATED  
STRESS ON THE DRIVE UNIT  
GEARBOX WHICH WILL LEAD  
TO PREMATURE FAILURE.**



### TEMPERATURE CONTROL

When drilling in rock for extended periods of time, air is trapped in the hole creating an “oven”, which can cause the face of the rock to “glaze over” and become even harder. For this reason, the operator needs to stop drilling and allow fresh air back in the hole every 5 minutes.



**!** DRILLING IN ROCK FOR EXTENDED PERIODS OF TIME WILL CAUSE THE WEARPARTS AND PILOT TO HEAT UP TO AN EXTREME TEMPERATURE CAUSING THEM TO MELT. THIS WILL DAMAGE THE DRILLING HEAD AND DIMINISH DRILLING PERFORMANCE.

**TIP** TIP: TRY PUTTING SOME WATER DOWN THE HOLE TO COOL IT DOWN AND TO MAKE THE SPOIL EASIER TO REMOVE



### ROTATING PICKS



The teeth need to rotate while drilling to maintain an efficient cutting tip. The tungsten tip and tooth should be evenly pointed.

Poorly maintained teeth reduce cutting efficiency and wear out faster costing time and money.



Flat spots indicate that teeth are not rotating freely in their pockets when drilling. The tungsten tip has lost its point and no longer offers the best cutting efficiency. If this occurs, replace the tooth immediately.

**TIP**

PERIODICALLY USE A SOFT COPPER HAMMER TO TAP ALL TEETH ENSURING THEY ARE ROTATING FREELY IN THEIR POCKETS. THIS WILL ENCOURAGE EVEN WEARING AROUND THE TOOTH, BETTER PERFORMANCE AND INCREASE LIFE OF WEARPARTS.



**REPLACE WORN TEETH IMMEDIATELY**



### REMOVING TEETH

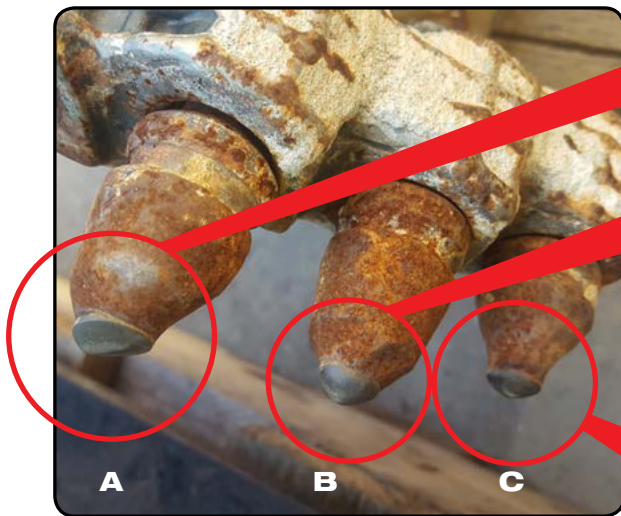


Use a punch or a rotating pick removal tool to remove teeth.

Always use a copper hammer to knock teeth into the pocket. Using a hard hammer will shatter the tungsten tip.



**WHEN TO CHANGE A TOOTH?**



Teeth that look like **A** have not been rotating in the pocket and as a result the tooth is uneven and will cut poorly . We recommend changing this tooth.

Teeth that look like **B**, indicates that they have been rotating in the pocket and “self sharpening” Tooth is good.

If teeth look like **C**, have been rotating in the pocket and wearing evenly. This tooth is still good but must be inspected regularly as it is nearing its wear life. its We recommend moving this tooth to an inner pocket.

**TIP**

TIP: THE OUTSIDE TEETH WILL WEAR THE FASTEST AS THEY ARE TRAVELLING THE GREATEST DISTANCE SO WILL NEED REPLACING MORE OFTEN. TRY SWAPPING THE OUTER TOOTH FOR AN INNER TOOTH TO KEEP THE WEAR EVEN. ALWAYS USE YOUR BEST TEETH ON THE OUTSIDE POCKETS.

**PILOTS**



Failure to change worn teeth will cause damage to the auger body and pilot requiring a new pilot or a costly repair. Always ensure the pilot teeth are rotating and in perfect condition.