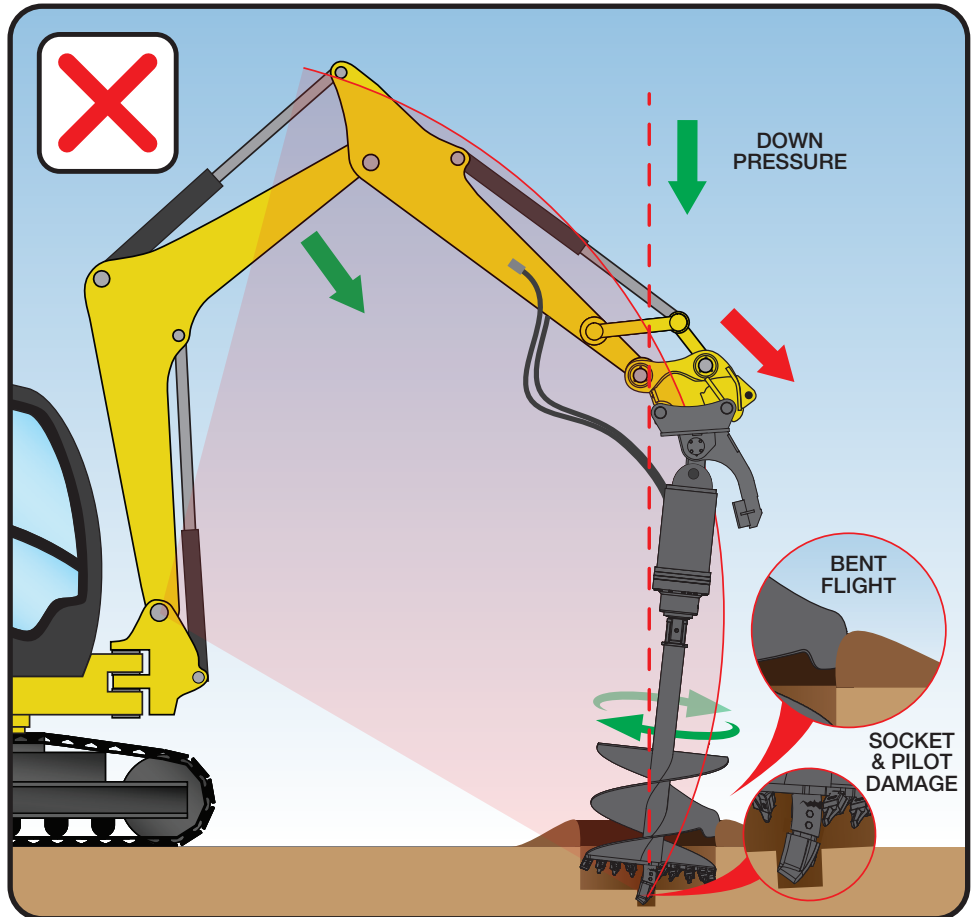
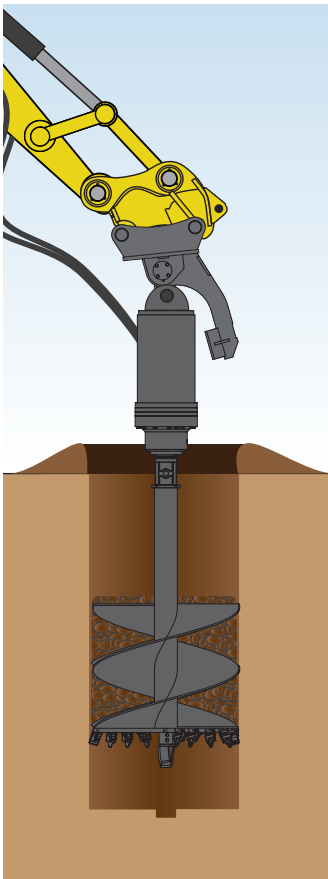
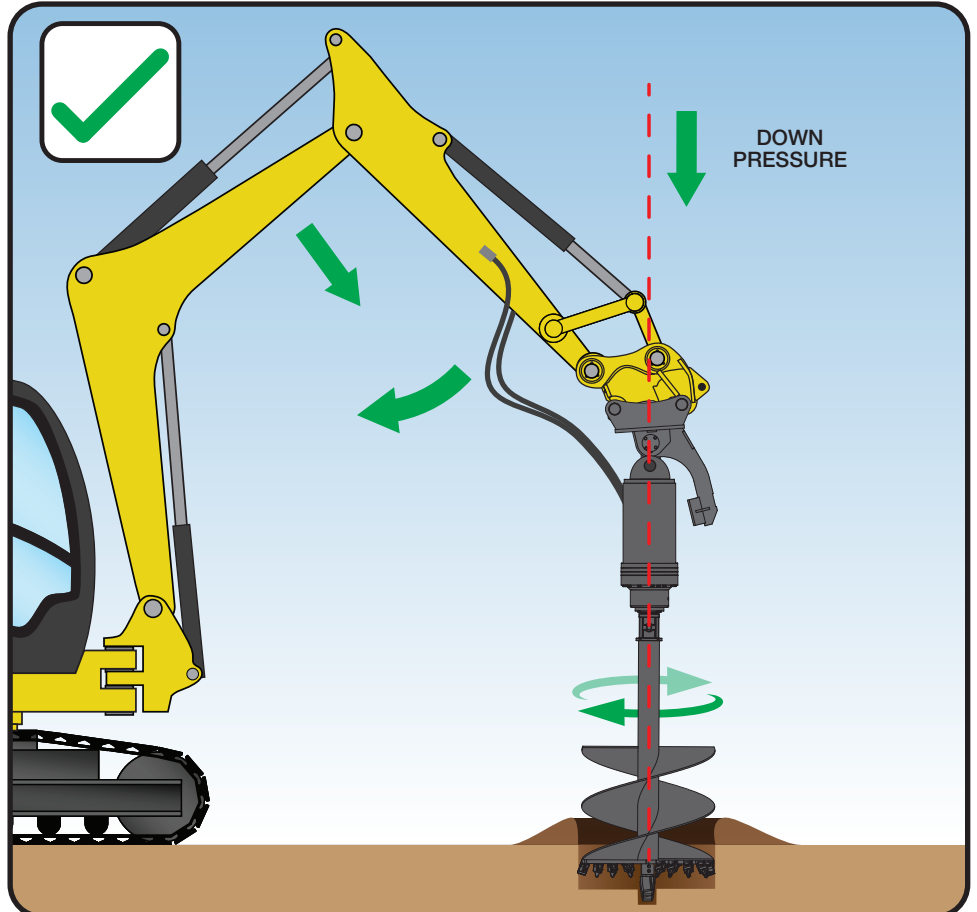
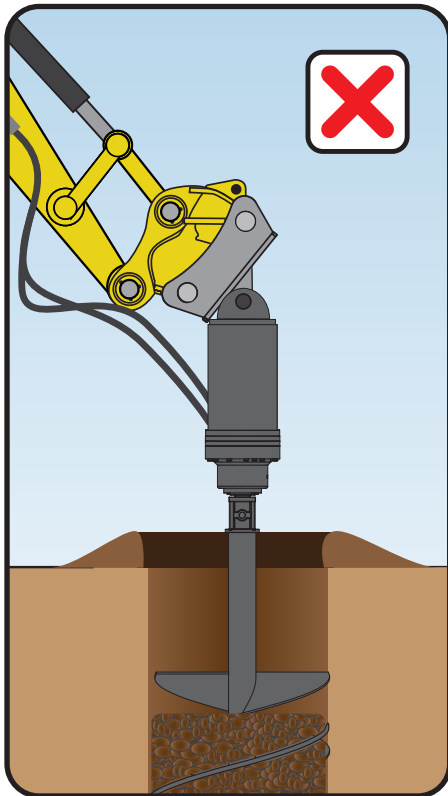
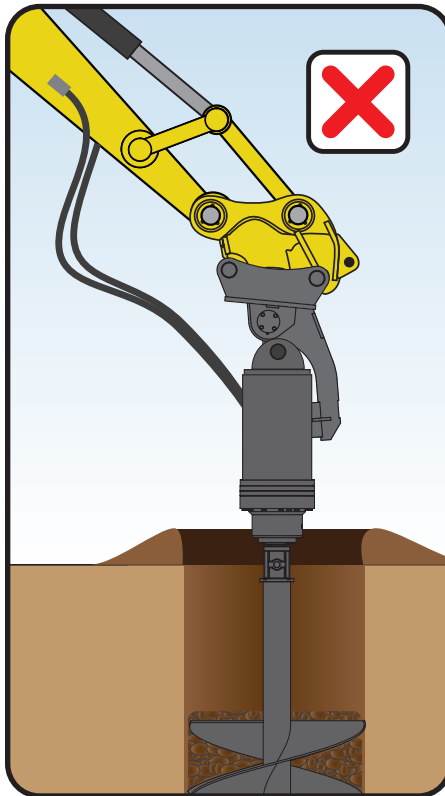
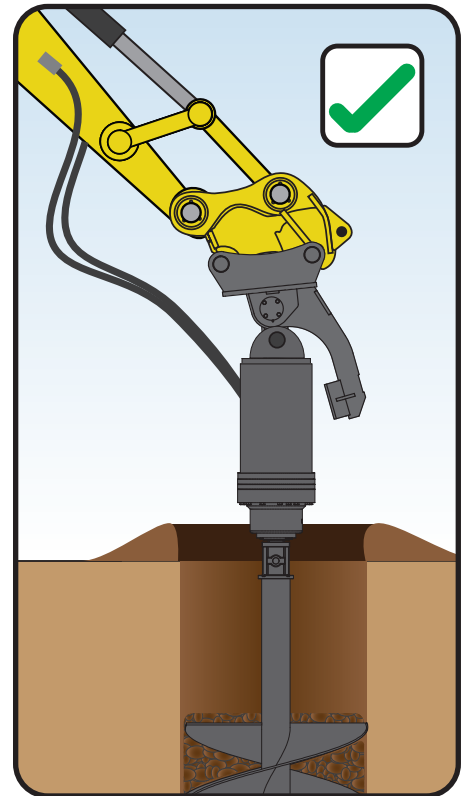


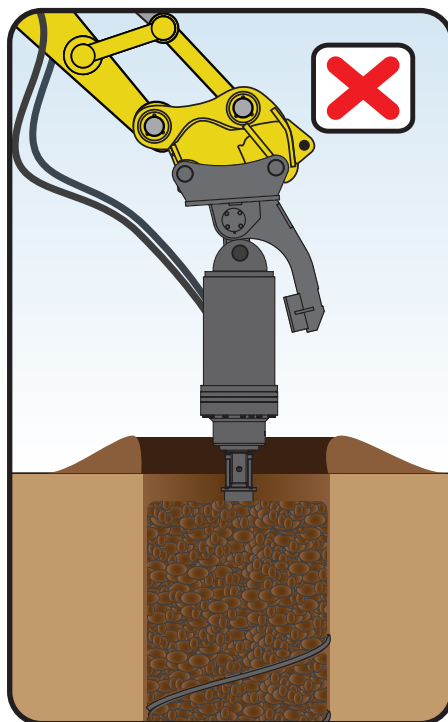
Natural arc movement of the boom causes the dipper arm to move out of vertical alignment as it is raised or lowered. Constant operator adjustments are required to maintain vertical alignment. Failure to do so will create significant side load on the auger drive and auger.

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.



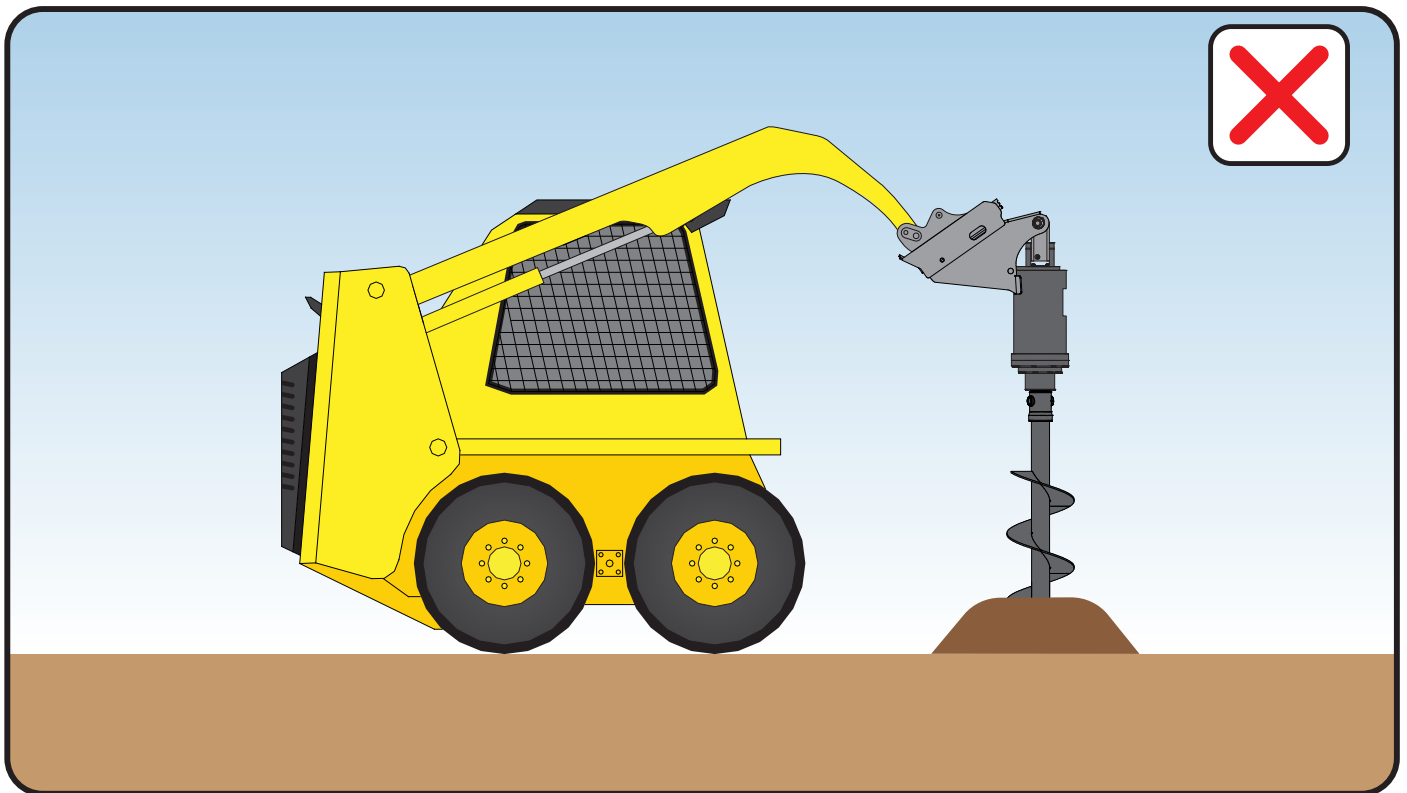


Pendulum drills, as their name implies, are designed to hang freely from the hitch without any interference/ contact from hitch or cradle (if using a cradle hitch). Placing the hitch or cradle against the drive hood or linkage restricts the natural motion of the auger drive, leads to the creation of destructive side loads on the auger drive. The side loads generated from the hitch or cradle contacting the drive can result in damage to the drive or auger, in severe cases, sideloading and restriction of the pendulum motion can cause the hood lid and or hood ears of the drive to peel off. Additionally, excessive side loads can bend augers, damage seals, and bearings, ultimately leading to gearbox failures.

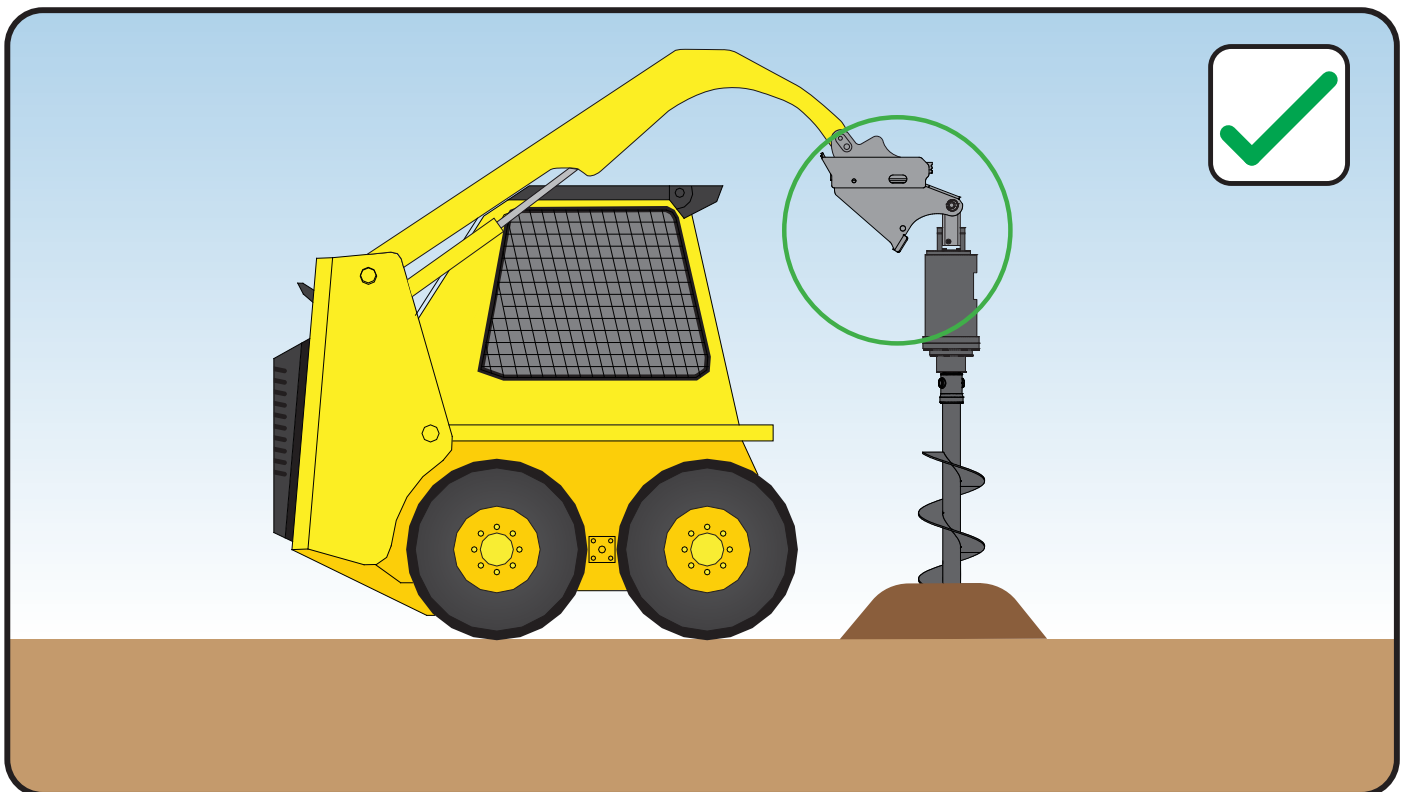


Auger flights are designed to move soil away from the cutting head for more efficient drilling. They are not intended to carry excessive spoil from the hole. Never fill the auger past the level of the last flight. Attempting to pull an auger out of the hole with spoil over the last flight may result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

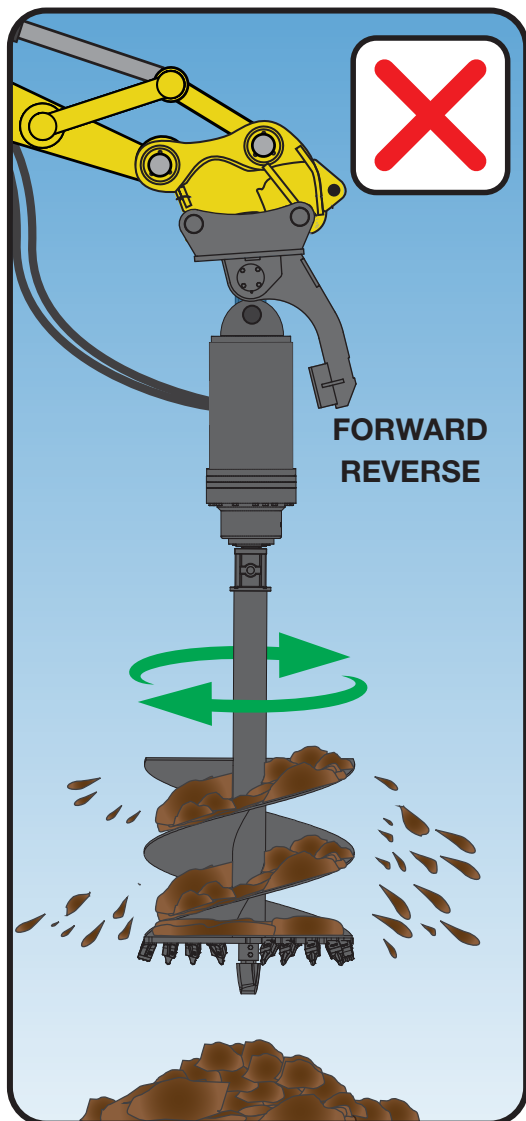
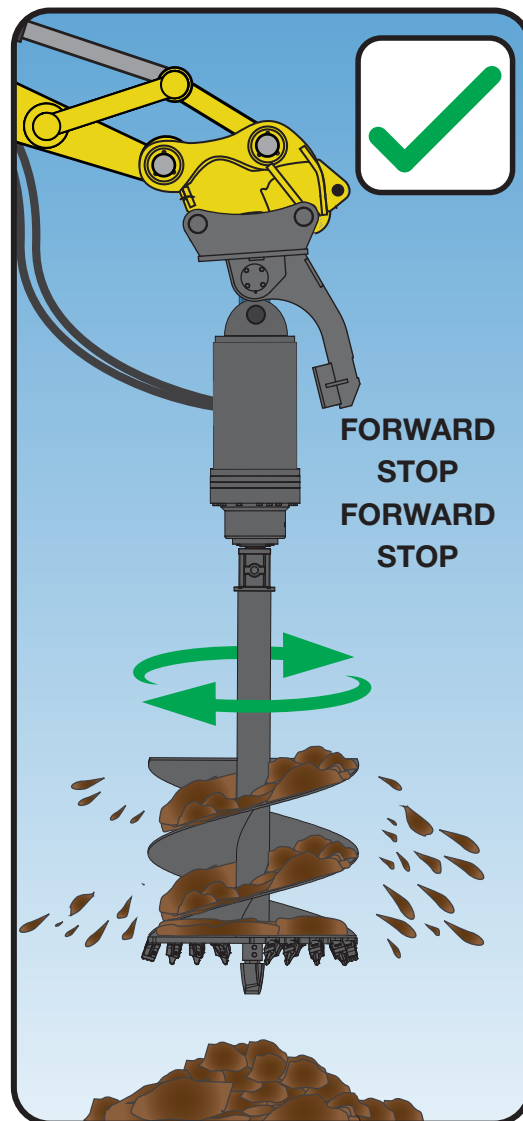
Do not drill with the cradle resting against the drive unit. This will damage your drive unit or cradle.



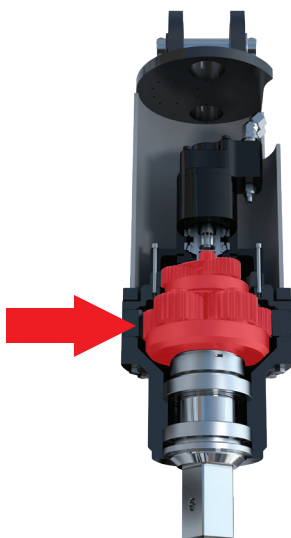
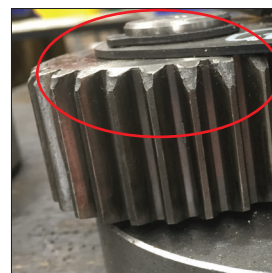
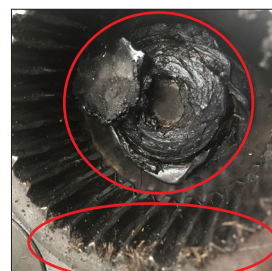
The correct drilling operation is with the cradle positioned up and away from the drive unit allowing the drive and auger to swing freely left, right, forward & back.



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

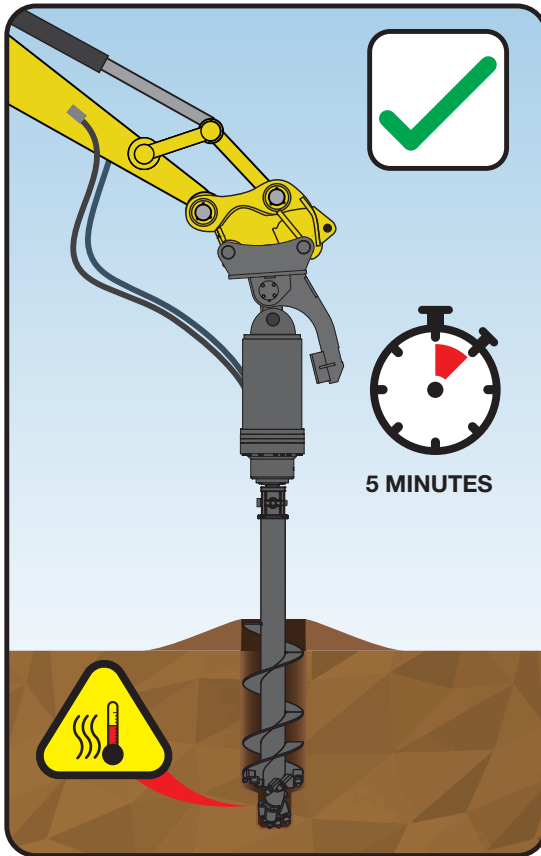
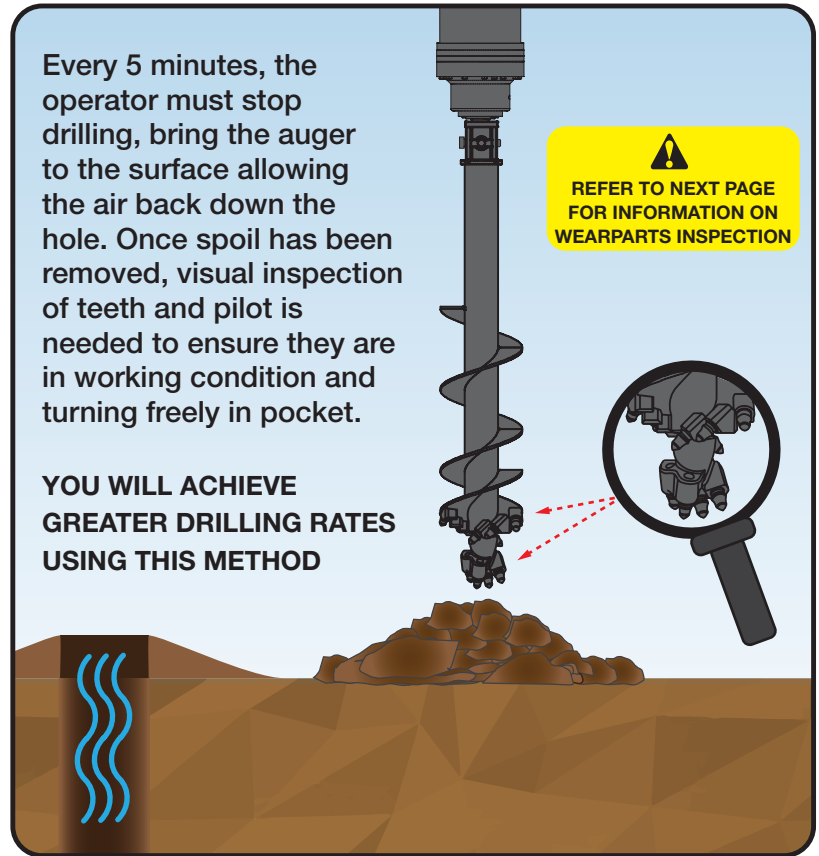
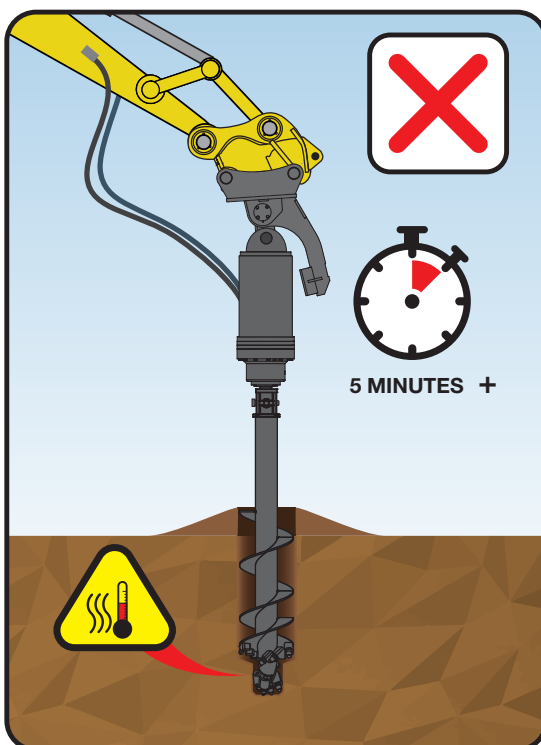


ENGAGING IN
FORWARD/REVERSE WILL
CAUSE TORQUE RELATED
STRESS ON THE DRIVE UNIT
GEARBOX WHICH WILL LEAD
TO PREMATURE FAILURE.



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 minimum of 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.



A flat spot on the tooth indicates the tooth has stopped rotating. If this occurs, you must free up the tooth by hitting it with a copper or dead blow hammer. In some cases, the tooth may need to be removed and reinstalled to clear obstruction. If the tungsten tip has been worn down and flattened. We recommend replacing the tooth.

TIP

TIP: PERIODICALLY USE A SOFT COPPER OR DEAD BLOW HAMMER TO TAP ALL TEETH ENSURING THEY ARE ROTATING FREELY IN THEIR POCKETS. THIS WILL ENCOURAGE EVEN WEARING AROUND THE TOOTH



REPLACE WORN TEETH IMMEDIATELY

USE A COPPER OR DEAD BLOW HAMMER



REMOVING TEETH

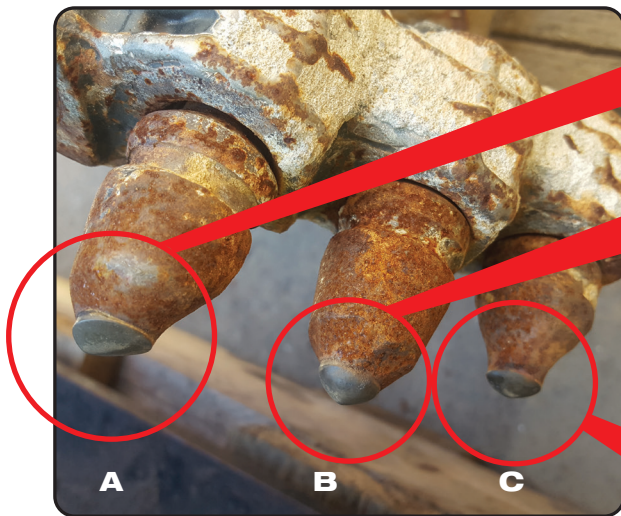


Use a punch or a rotating pick removal tool to remove teeth.

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



WHEN TO CHANGE A TOOTH?



Tooth **A** has not been rotating in the pocket and as a result the tooth is uneven and will cut poorly. We recommend changing this tooth.

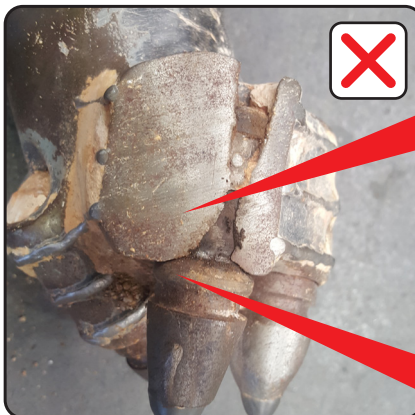
Tooth **B**, indicates that it has been rotating in the pocket and “self sharpening”. Tooth is good.

Tooth **C**, has 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.

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.

Failure to regularly remove the auger during drilling will result in premature pilot damage.