



SAFETY MATTERS

Safety Matters is intended to promote discussions of safety issues among underground construction professionals. You should always read and understand the operator's manual before operating any equipment. For additional information, please e-mail safety@ditchwitch.com.

TOPIC: DRILLING ATTACHMENTS—FOR DRILLING UNDER OBSTRUCTIONS SUCH AS SIDEWALKS AND DRIVEWAYS.

Potential Hazards

- Caught in
- Struck by
- Drawn into
- Laceration
- Falls onto
- Buried utilities

Precautions

- Do not tape or tie down switch or lever.
- Operate only from the operator's station.
- Use a helper to add rods and hold rod guide.
- Improper control function can cause serious injury. If the drill attachment rotation does not stop when control is released, stop operation and have machine repaired. Do not use machine if releasing control doesn't stop turning shaft.
- Do not drill within 10 ft (3 m) of unexposed electric cables or gas pipes.
- Keep everyone at least 10 ft (3 m) away from turning drill string unless using rod guide.
- Keep everyone away from material being installed. If swivel malfunctions, material being installed can rotate.
- Use a factory provided rod guide to align drill rod when starting a bore.
 - Stand to the left of the drill string. If the rod guide were to somehow get caught, it would turn in the direction of drill string rotation.
 - Keep the guide at least 3' behind the bit.
 - Do not use guide during backreaming or pull back.
 - Do not use guide for more than 3' to 6'. If the guide contacts the drill rod joint, it can cause injury.
- Never use any part of your body to hold a drill string while turning.
- Do not assemble more than 30' of rod at a time. The drill string will bow as it experiences a load.

Information/Facts

- When drill strings are put under a load, they can jump or walk unexpectedly.
- Any part of clothing, hair or jewelry can become caught on a turning shaft.
- Most drilling attachments can turn up to 140 revolutions per minute.

- Turning shafts can kill you, remove a finger, arm or leg, break bones, cause castration, wrap up clothing tight enough to cut off circulation, tear ligaments, etc.

TALES FROM THE TRENCH

- ▣ A helper was standing on the rod as the operator started a bore. Burrs on the rods caused by breaking them apart and connecting them caught his pant cuff. The rods crawled up his leg. He had severe bruises causing concern of blood clots forming. Injured was off work for 2 weeks.
- ▣ A helpers coat was caught in the drill string as he leaned over. He was slammed into the concrete several times before the rotation was stopped. His leg was broken in several places along with many other injuries to his body.
- ▣ A worker was wearing coveralls with a frayed hole in the pant leg. The turning rods somehow caught the frayed hole and pulled him to the ground. Burrs were not found on the rods. He had severe bruising to his leg and groin.
- ▣ A crew was drilling, hit an obstruction and had to back out to reroute the bore. They had approximately 90' of exposed drill rod. A crew member had his foot on the rod as it was turning. The drill string bowed and caught his pant leg causing torn ligaments in his leg.
- ▣ A switch had been replaced and the yoke guard had been removed. An operator became tangled in the drill string and suffered severe injuries to his groin area.