

WARNING - HORIZONTAL BORING AUGER "PRAIRIE DOG PUP"

Any piece of equipment can be dangerous if not operated properly. **YOU** are responsible for the safe operation of this equipment. The operator must carefully read and follow any warnings, safety signs and instructions provided with or located on the equipment. Do not remove, defeat, deface or render inoperable any of the safety devices or warnings on this equipment. If any safety devices or warnings have been removed, defeated, defaced or rendered inoperable, **DO NOT USE THIS EQUIPMENT!!!**

Boring Machines Can Be Dangerous If Operated Improperly - So Follow These Instructions

⚠️ WARNING: Operating, servicing and maintaining this equipment can expose you to chemicals including engine exhaust, carbon monoxide and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize your exposure, avoid breathing exhaust, do not idle the engine except as necessary, operate and service your equipment in a well-ventilated area and wear gloves or wash your hands frequently when servicing your equipment. For more information go to www.P65warnings.ca.gov

Always keep the motor out of the water and mud and never set the engine down in water at anytime. Water and mud will cause severe damage to the engine and this damage is not covered by the Equipment Protection Plan!

Warning metal conducts electricity. Do Not use this Boring Machine where it may come into contact with underground power lines or other electric circuits. Failure to comply to this warning will result in serious personal injury or death.

Smart digging means calling 811 before each job. Whether you are a homeowner or a professional excavator, one call to 811 gets your underground utility lines marked for FREE

SAFETY INSTRUCTIONS

1. Only the Operator should be allowed near the machine. ***Never operate indoors or without proper ventilation.***
2. NEVER STAND, or allow anyone else to stand near the boring machine when rotating.
3. KEEP ALL GUARDS and shields in place while machine is running.
4. SHUT OFF ENGINE before leaving machine.
5. ALWAYS STOP engine before servicing machine.
6. REMOVE spark plug wire when leaving machine unattended.
7. ALLOW ENGINE TO COOL before refueling.
8. WEAR TIGHT FITTING CLOTHES when using boring machines & keep your hands, feet, & clothing away from moving parts.
9. KNOW what is down there before you bore. If necessary, get clearance from the phone company, power company, community water & sewer departments.
10. MOVE SLOWLY when starting to bore.
11. USE THE "BUDDY SYSTEM". Do not work alone in isolated areas.

* SPECIAL CAUTION *

12. **ALWAYS, ALWAYS, ALWAYS** stay at the controls of the machine. You may have to stop suddenly to avoid danger. Staying at the controls will also keep you away from the dangerous part of the machine.

PLEASE observe these instructions. They are considered common sense by professional boring contractors. There is just no substitute for a careful, safety minded operator. **SERIOUS INJURY OR DEATH COULD RESULT FROM FAILURE TO FOLLOW THESE SUGGESTIONS!**

WARNING WARNING WARNING WARNING WARNING WARNING WARNING

The "Prairie Dog Pup" boring machine Model 140EW is a water lubricated boring machine. It must not be run dry or without water. This boring machine will not bore properly without water as a lubricant. The unit is designed to use water to keep the bit clean and make a slurry of the ground bored to facilitate a good clean hole. No exceptions. Thank You.

OPERATING INSTRUCTIONS

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ABOVE GROUND OPERATION:

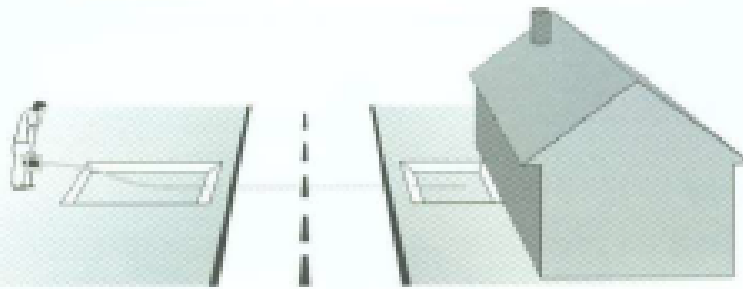
First measure the distance to be bored (Maximum of 20'), being sure this section is allowed to sag to a point equal to a distance from A to B so that this section is level. Holding the "Pup" firmly with both hands engage the throttle. The drill stem will turn automatically. The "Pup" has a centrifugal clutch, allowing the drill stem to rotate only if the throttle is pressed. **DO NOT FORCE!!!**. If the drill stem is forced too hard you may bend the drill stem. Also, if the drill stem stops turning and you continue to press the throttle you could burn the clutch up or break the pipe. Feed slowly allowing the pilot bit to make its own way.

BELOW GROUND OPERATION:

The machine is hand held firmly and the operator gets into the ditch, the drill stem is attached in the length that has previously been selected (They can be cut in length 2', 3', 4' or whatever the operator desires from ½" pipe. Maximum length is 20') After the drill stem section has been attached the pilot bit is installed onto the drill stem. The operator then starts the "Pup" and holds it as level as possible. They then pull the throttle to start the drill bit to turning then they slowly push the drill rod forward until the first length of rod is in the hole. They then unscrew the rod from the "Pup" and add on another length of drill stem. This process is repeated until the bit comes out on the other side, as desired.

After the hole is complete the pipe can be pulled back through the hole.

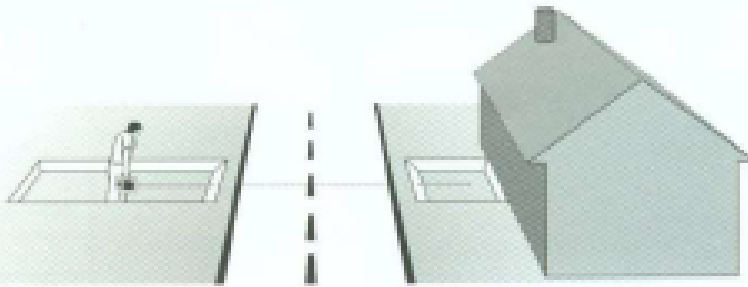
ABOVE GROUND OPERATION.



< 20 feet max >



BELOW GROUND OPERATION.



< 20 feet max >



STANDARD OPERATING PROCEDURES FOR THE "PRAIRIE DOG PUP"

Make sure to grease the front bearing at least once a day when in use. One shot is enough.

Now let's begin to bore. Ascertain what depth is necessary to bore under the set of obstructions (sidewalk, driveway, road, apron, or possibly a building) to reach the come-out hole. Then dig a small trench to the desired depth. The length of the trench depends a great deal on the length of pipe being used to bore the hole. If boring while holding the "Pup" in a standing position, the "Pup" should be held approximately waist high so the natural bend of the pipe will allow the last 3 to 4 feet to lie horizontal with the ground. Align the bore with a stake from one side to the other; this will help increase your accuracy. Now, start the engine and turn the water on at the ball valve just before starting to bore, making sure water is coming out of the bit. Now start the bit at the desired depth and slowly walk it forward 2' to 3' then back 2' to 3'. This will help keep the bit clear. We recommend putting a level on the pipe outside your hole at this time. If it is level, then you may proceed at the desired depth to the come-out hole. Make sure to proceed slowly enough, and do not allow the clutch to slip. Forcing the machine can cause the clutch to slip and damage the "Pup". You should always have a small amount of water coming back out the entry point. If you notice no water, or slurry, coming out the entry hole, stop and check for an obstruction in the pipe or bit. Once the obstruction is cleared, proceed again. Also if there is no water or slurry coming out the entry hole, it's possible the come-out hole has been reached. If so, stop the water at the "Pup" and proceed with completing the job. A good way to maintain a good degree of accuracy is; for every one foot of depth, maintain 20 feet behind the entrance hole. Do not force the pipe to bend by trying to stand up-right all the way to the entry hole. Putting too much stress on the natural sway of the pipe, and not maintaining proper distance behind your entrance hole will result in bent pipe or an increase in the depth of the bore.

In tough soil conditions with multiple obstructions, it may be advantageous to dig a trench large enough for one person to get in and long enough to allow shorter lengths of pipe to be used. When pit boring like this, it is more operator friendly to dig a small pit lower than the launching pit this allows the slurry, or water, to run into the secondary pit. This helps to keep the work area relatively dry.

When pit boring, some of the same principles as boring in a standing position are still applied. Line your machine up with a stake at starting point on top of your pit and another at the desired point on the come out side. Put a level on the pipe, if it is level, proceed with assurance that the desired come out depth will be reached. It is also a good idea to lay out enough sections of pipe by your trench to equal the distance of your hole to be bored. This will help you determine when the bit has come through the come-out hole.

After putting the drill pipe on the machine, add your 2" pilot bit to the end of the pipe. Now start the engine. Turn on the water at the ball valve, and advance the machine. When the first section of pipe has about 6" to 12" remaining out of the hole, turn off the "Pup" and the water supply at the ball valve. Attach your next section of pipe and make sure to turn the water on at the ball valve, once the engine is running. Proceed with your boring until the pipe disappears. Once your bit has traveled to the come-out hole, shut the "Pup" and water supply off. Where a 4" hole is necessary, remove the pilot bit and install the 4" back reamer, turn the "Pup" and the water on at the ball valve, and slowly pull the bit back through the hole. When the first section of pipe has about 6" to 12" coming out of the hole, turn the "Pup" and water supply off at the ball valve and remove that section of pipe. Make sure to turn the water on at the ball valve and continue this process until your hole is complete.

If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. **If** there is any doubt as to the operation or safety of the equipment. **DO NOT USE!!! CALL A TOOL SHED IMMEDIATELY!!!**
FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN INJURY OR DEATH