

User's manual

Manual del usuario

Manuel de l'utilisateur

Customer Service  
US: 1-800-645-2986

Servicio de atención al Cliente  
US: 1-800-645-2986

Service à la clientèle  
Canada: 888-645-2986

# Electric Pipe Threading Machine

Model(s): 604050



## Specifications

Pipe Diameter:	1/2" - 2"
Chuck Type:	Speed Grip Chuck w/ Replaceable Jaw Inserts
Operating Speed:	38 RPM
Motor Type:	Universal
Horsepower:	2 HP
Voltage:	110V/60Hz AC
Controls:	FOR/OFF/REV Switch and ON/OFF Foot Switch

# Manual Pipe Threader

## SAFETY INSTRUCTIONS

1. Keep your work area clean and well lit. Always keep the work area free of obstructions, grease, oil, trash, and other debris.
2. Never operate this machine in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
3. Keep bystanders, children, and visitors away while operating this machine. Distractions can lead to serious injury or property damage. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.
4. Never leave pipe threader unattended while running.
5. Do not touch grounded surfaces such as pipes, radiators, ranges, and refrigerators when operating on electrical components. There is an increased risk of electric shock if your body is grounded.
6. Do not expose the machine to water. Water entering a power tool will increase the risk of electric shock.
7. Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all local codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use adapter plugs. Check with a qualified electrician if you are unsure if the outlet is properly grounded. If the tools should electrically malfunction, grounding provides a low resistance path to carry electricity away from the user.
8. Do not use pipe threader if foot switch or FOR/OFF/REV switch does not work. Cease operation and repair switch(es) or replace pipe threader. Do not use machine if foot switch cover is damaged or missing.
9. Secure pipe threading machine to bench or stand. Support long heavy pipes with pipe supports to prevent tipping or bending.
10. Do not touch pipe while pipe threading machine is running, doing so can cause serious personal injury or permanent damage to the tool or workpiece. Allow the machine to come to a complete stop before wiping or cleaning any surfaces.
11. Do not use the machine to make or break pipe fittings, this is not an intended use of the pipe threader and can cause serious personal injury.
12. Ensure that the workpiece is properly secured and the chuck is tight before turning on the pipe threader.
13. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Cease operation and replace Power Cords immediately if damaged.
14. Disconnect power cord before making any adjustments, maintenance, or storing the machine.
15. Avoid Accidental start-ups, make sure FOR/OFF/REV switch is in the "OFF" position before plugging in the power cord.
16. Never use this machine when tired or under the influence of drugs, alcohol, or medication.
17. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts and may cause serious personal injury.
18. Use safety equipment, pipe threading machines can produce sharp chips which can cause permanent eye damage if lodged in the eye. Wear ANSI Z87+ safety glasses or goggles for protection.
19. Do not use third party or aftermarket accessories, they may impare operation of the pipe threader or malfunction during normal use.
20. Maintain all labels and nameplates on the machine so that they are clearly visible and legible.

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## OPERATION INSTRUCTIONS

### To install pipes,

1. Swing the cutter, reamer and die head out of the way so that you can access the power drive.
2. Insert the pipe into the Power Drive so that the end to be worked or the cutting mark is located about 12 inches to the front of the speed chuck jaws. If the pipe is being cut to length, mark at the desired length.
3. Insert workpieces less than 2 feet long through the front of the machine. Insert longer pipes through either end so that the longer section extends out past the rear of the Power Drive.
4. Tighten the rear centering device around the pipe by using a counterclockwise rotation of the handwheel at the rear of the Power Drive. This prevents movement of the pipe that can result in poor thread quality.
5. Secure the pipe by using repeated and forceful counterclockwise spins of the speed chuck handwheel at the front of the Power Drive. This action "hammers" the jaws tightly around the pipe.

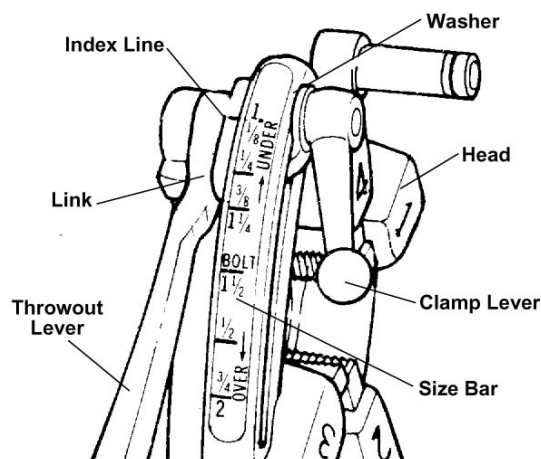
Die head is adjustable. To adjust die size, turn throwout lever to "OPEN" position and loosen clamp lever, then rotate size bar so that desired size lines up with index line.

### To cut pipe threads,

1. Check that the dies are the proper type and are not worn or chipped.
2. Lower the die head into position. Make sure the cutter and reamer are swung out of the way.
3. Adjust die head to the proper size.
4. Turn the throwout lever to the "CLOSED" position.
5. Set directional switch the the "FOR" (forward) position. Press the foot switch to begin turning the pipe and apply thread cutting oil.
6. Apply more thread cutting oil to dies. Use carriage lever to engage dies with pipe and begin cut. Continue to oil workpiece as needed throughout cut.
7. When cut is finished, turn throwout lever into "OPEN" position to retract dies. Move die assembly back using carriage lever and swing die head up to access the pipe threads.

### To replace dies if they are worn or damaged,

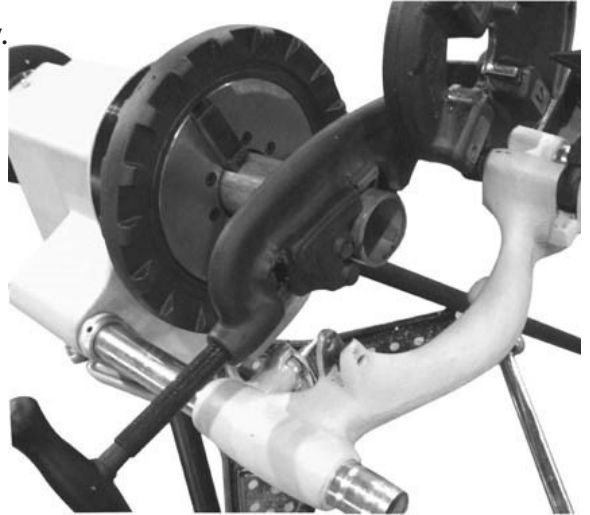
1. With machine unplugged, remove die head. Lay die head on bench with numbers face up.
2. Flip throwout lever to OPEN position.
3. Loosen clamp lever.
4. Lift tongue of clamp lever washer up and out of slot under size bar. Move throwout lever all the way to the OVER direction indicated on size bar (in direction of CHANGE DIES arrow on rear of cam plate), then pin tongue of clamp lever washer behind lip of die head so that the assembly locks in place. Remove dies from die head. Note that dies feature a number and a line mark. Die numbers 1 through 4 on the dies must agree with those on die head. Insert new dies up to line mark. Turn the throwout lever to the "CLOSE" position to capture the dies.
5. Unpin clamp lever washer tongue and drop it back into the slot under the size bar.
6. Adjust die head size bar until the index line on lock screw or link is aligned with proper size mark on size bar. For bolt threads, align index line with BOLT line on size bar, then tighten clamp lever to secure.
7. If oversize or undersize threads are required, set the index line in direction of OVER or UNDER size mark on size bar.
8. Place die head back in machine.



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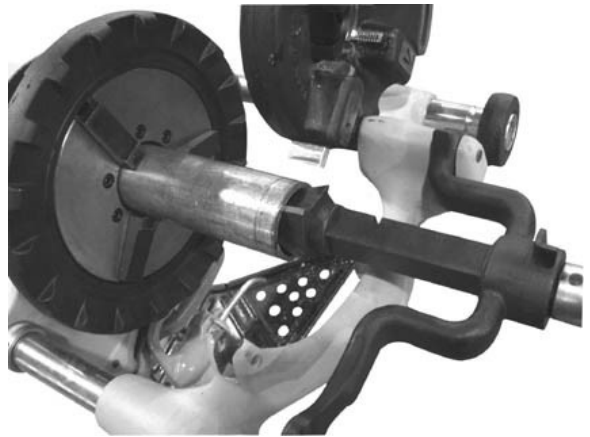
## To cut pipe,

1. Make sure the die head and reamer are swung out of the way.
2. Hold the pipe cutter just above the pipe and use carriage lever to line up cutter wheel with mark on pipe, then rest the cutter on the pipe.
3. Tighten cutter feedscrew handle while keeping the cutter wheel aligned with the mark.
4. Set directional switch the the "FOR" (forward) position. Press the foot switch to begin turning the pipe and apply coolant.
5. Holding the cutter feedscrew handle with both hands, tighten slowly and continuously until the pipe is cut. Do not force the cutter into the workpiece.
6. When cut is finished, swing cutter up to access the cut pipe.



## To ream pipe,

1. Make sure the cutter and die head are swung out of the way.
2. Lower reamer arm down into position.
3. Move reamer forward by opening reamer lock latch and sliding reamer toward pipe until latch reengages.
4. Set directional switch the the "FOR" (forward) position. Press the foot switch to begin turning the pipe and apply coolant.
5. Move reamer into pipe and begin reaming by pushing carriage lever with right hand.
6. When reaming is complete, move carriage lever back. Open reamer lock latch and retract reamer until latch reengages, then return reamer to the UP position.



## To remove pipe,

1. Set directional switch to "OFF" position.
2. Use repeated and forceful clockwise spins of the speed chuck handwheel at the front of the Power Drive to release the workpiece from the speed chuck jaws.
3. If necessary, loosen the rear centering device using a clockwise rotation of the handwheel at the rear of the Power Drive.
4. Slide the workpiece out of the Power Drive, keeping a firm grip on the workpiece as it clears the Power Drive. To avoid injury from falling parts or equipment tip-overs when handling long workpieces, make sure that the end farthest from the Power Drive is supported prior to removal.
5. Clean up any oil spills or chips on the ground surrounding the device.

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## MAINTENANCE INSTRUCTIONS

### Jaw inserts

- Clean jaw inserts daily with a wire brush.
- If jaw inserts fail to hold pipe or rod or are otherwise worn or damaged, replace them

NOTE, even if only one jaw insert is damaged, replace the entire set to ensure workpiece will be properly held throughout cutting procedures.

- To replace jaw inserts, place a screwdriver in the insert slot and turn 90 degrees in either direction, then place insert sideways on locking pin and press down as far as possible
- Hold insert down firmly with screwdriver. Turn until teeth face up.

### Lubrication

- Use cup grease to lubricate shaft bearings every 2 to 6 months depending on use. Grease fittings are located at both ends of each carriage shaft.

### Motor

- Check motor brushes every 6 months. Replace when worn to less than 1/2".
- If commutator is worn, the outer dimension of the commutator should be turned and the mica should be undercut before replacing brushes. This should only be done by qualified repair personnel.
- If motor is otherwise damaged, replace motor. To remove the motor, unplug the motor receptacle from the switch box, remove the 2 screws holding the motor, and loosen the screw in the power drive body at the neck of the motor.



## WARNING

Before performing any inspection, cleaning, or maintenance procedures, make sure the machine's power switch is in the "OFF" position and that the power cord is unplugged.