



PIPE TOOLS & VISES  
SINCE 1896

# DMPVC Drilling Machine Operating Instructions

1. Select proper tools necessary to perform drilling operation.

**WARNING:** Prevent injury to eyes, hands, and other body parts. Always wear safety goggles, substantial gloves, and other required protective equipment when using this or any other tool.



- A. Service saddle.
  - B. Corporation stop.
  - C. Shell cutter sized to match corporation stop bore.
  - D. Corp adapter.
  - E. Any other necessary accessories to meet operating requirements.
2. Assemble saddle to the pipe.
    - A. Clean area of pipe where drilling is to be performed.
    - B. Assemble and position service saddle on the pipe where desired and tighten securely using manufacturer's requirements.
  3. Insert corporation stop into saddle threads.
    - A. Thread sealant may be used.
    - B. Tighten corporation stop with an adjustable wrench.  
NOTE: Make sure corporation stop valve is open.
    - C. Remove corporation stop tube nut or compression nut and gasket.
  4. Screw corp adapter onto corporation stop and tighten.
  5. Screw correct size shell cutter into boring bar and tighten on flats with wrenches.  
NOTE: Always use wrenches on the flats to tighten or loosen the shell cutters from the boring bar. Do not use flutes on shell cutter sides to tighten.
    - A. Lightly lubricate the outside of the shell cutter with Reed Tapping Compound #99140 or #98425.
    - B. Lubricate the boring bar and the feed screw of the machine with light oil. (See Fig. 1)

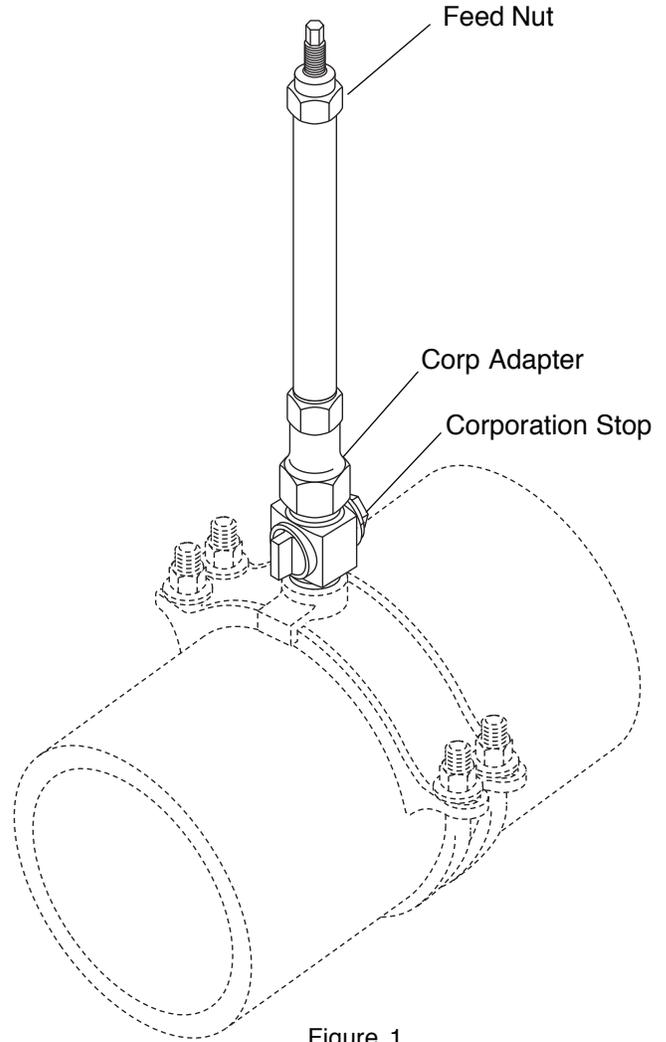


Figure 1

Prior to mid-2014, Reed's DMPVC machines had a 2-piece boring bar. Mid-2014 the design was changed to a 1-piece boring bar. If replacement parts are needed, be sure to refer to the proper design. Reference Reed RP-0414-16 for parts.

**RETROFIT THE 2-PIECE BORING BAR TO THE 1-PIECE BORING BAR:**

Unscrew the feed nut from the main body and then from the boring bar. Slide the old boring bar out the far end of the main body and replace with the new revised boring bar #94205, thread on the new feed nut #94204. The original feed nut cannot be used with the new boring bar #94205.



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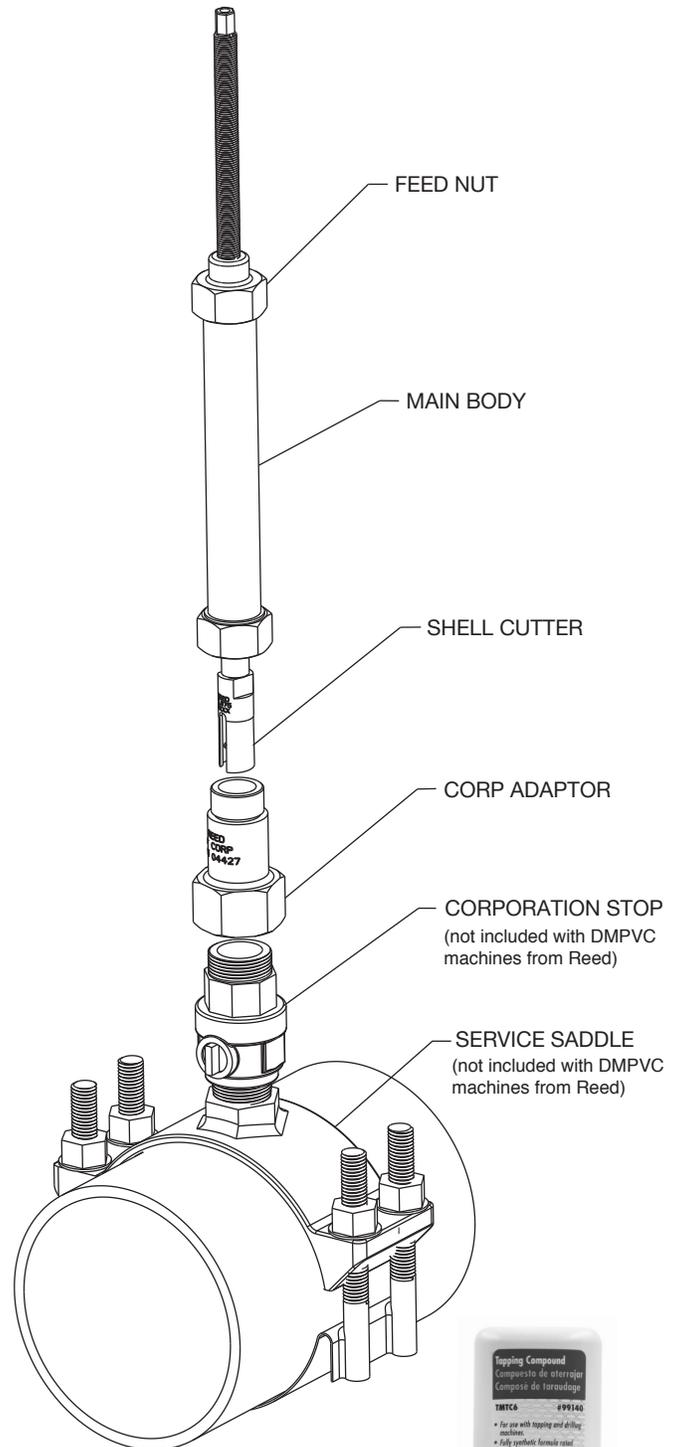
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6. Loosen the feed nut from the main body with a gloved hand and turn it down until it is near the top of the boring bar, or turn the feed screw counterclockwise using a ratchet wrench (7/16") until the screw stops.
7. (Again, make sure the corporation stop is open.) Assemble the cutter end of the machine to the corp adaptor and tighten.
8. Drilling
  - A. Screw shell cutter down until it touches the pipe. It may be best to spin the cutter down using the optional ratchet wrench.
  - B. Attach a ratchet or suitable wrench and turn clockwise until the cutter penetrates the pipe.
  - C. Retract the shell cutter by reversing the ratchet and turning counterclockwise. Continue until the bar stops.

**NOTE:** At pipe pressures of 100 psig or below, the shell cutter can be retracted by loosening the feed nut with a gloved hand and holding the feed nut while the shell cutter is withdrawing.

**WARNING:** Prevent possible personal injury or damage to the machine due to sudden withdrawal of the shell cutter under pressure when the feed nut is loosened.

- A. Allow the shell cutter to retract slowly by putting downward pressure on the feed nut with a gloved hand during withdrawal.
  - B. The feed nut must not be loosened at pipe pressures above 100 psig.
9. Close off the corporation stop using an adjustable wrench.
  10. Disassemble machine from corporation stop. Loosen the shell cutter from the boring bar using wrenches on the bar and cutter flats.
  11. Assemble tubing to corporation stop per tubing and fitting manufacturer's specifications.



## DMPVC Maintenance Instructions

### BEFORE USING

1. Clean and oil all bearing and wear surfaces and threads.
  - A. Inspect and clean shell cutters, and remove any chips or scale that might prevent proper function of the tool.
  - B. The boring bar, shell cutters, and corp adapters threaded ends should be inspected to remove any scale or chips that may interfere with thread engagement.

### AFTER USING

1. Clean the machine and oil the machined surfaces. Reed Tapping Compound #99140 or #98425 is useful in this application.
2. If necessary, flush the corp adapters with a water hose to remove any chips that may have accumulated.
3. Periodically inspect the machine's o-rings and replace if worn.
4. Carefully place the tool back in the tool box for storage.

