1. With corporation valve securely threaded into clamp boss, attach service saddle to main at desired angle following saddle manufacturer's instructions (and torque specifications).

2. Check to be sure corporation valve is fully open and remove its outlet connect parts, if removable parts are present.

3. Connect proper machine adapter (with adapter gasket) to PL-2 machine, then attach correct size shell cutter, with its lockwasher, to machine boring bar and tighten securely. **NOTE:** Use wrench flats on shell cutter to attach, tighten, and remove it – DO NOT use slot in cutter. Selection of adapter depends on type and size of corporation valve outlet.

4. Lightly lubricate outside of shell cutter and boring bar of PL-2 machine BEFORE EACH USE. Use Mueller® Cutting Grease (part no. 88366) on cutter, and light machine oil (such as 3-1 brand oil) on boring bar.

5. Loosen disengagement nut from body of PL-2 machine and spin nut until it is near top of boring bar.

6. Attach machine (with shell cutter and adapter properly installed) to corporation valve outlet and securely tighten. Push boring bar forward until shell cutter contacts main, then pull back approximately 1" and hold position while reattaching disengagement nut onto machine body.

7. Turn boring bar clockwise to drill the main.

(Continued)
8. When main is drilled, retract shell cutter from main and above corporation valve, and close valve. For quick removal of cutter (only when pressure in main is less than 100 psig), disengagement nut can be unscrewed from machine body prior to closing valve. **CAUTION:** When disengagement nut is unscrewed from machine body, water pressure from the main will create a piston action on machine boring bar and force it to its rearmost position. Be sure to control or restrain the rearward movement of the boring bar. Keep face and body clear of boring bar and any tool attached to it to avoid possible injury.

![Diagram of machine body and boring bar]

Keep face and body clear of this area.

9. Remove machine and adapter from corporation valve as a unit. Do not insert any tool through slot in shell cutter to pry out the coupon – doing so could deform the cutter. Optional coupon removal tools (catalog no. 681242) will facilitate removal of coupon from shell cutter.

10. Attach service line to corporate valve outlet using specific instruction for the type of connection used.