

Mueller Co.

Operating Instructions for

TRU-CUT™ DRILLING MACHINE

Mueller Co.

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Decatur, Illinois 62522

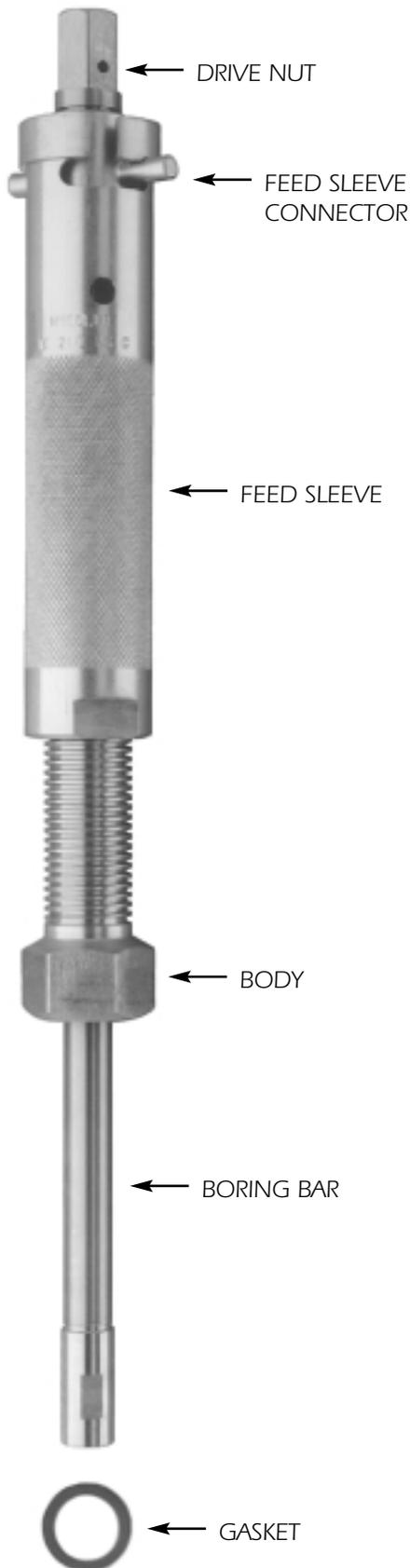
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! WARNING

1. Read and follow instructions carefully. Proper training and periodic review regarding the use of this equipment is essential to prevent possible serious injury and/or property damage.
2. Do not exceed the pressure ratings of any components or equipment. Exceeding the rated pressure may result in serious injury and/or property damage.
3. Safety goggles and other appropriate protective gear should be used. Failure to do so could result in serious injury.
4. Inspect cutting tools and replace damaged or dull tools. Use of damaged or dull tools can have detrimental effects on the pipe or equipment, or cause equipment failure.

All warranties, expressed or implied, for MUELLER® Drilling Machines are rendered null and void if the machines are used with shell cutters or equipment manufactured by someone other than MUELLER CO.

TRU-CUT™ DRILLING MACHINE



INSTALLATION OF CORPORATION VALVE WITH SERVICE CLAMP ON PVC PLASTIC WATER MAIN

The Mueller® Tru-Cut™ Drilling Machine is used to install corporation valves using a service clamp on PVC plastic water main with a wall thickness up to 1-1/8". The machine operates easily by hand, and allows independent control of tool rotation (cutting action) and boring bar feed (tool advancement). It includes a feature that allows the boring bar to be disconnected from the feed sleeve and repositioned quickly.

CAUTION: Use of serrated jaw wrenches or pipe wrenches on any machine parts or accessories may result in deformation or other damage which would render the machine or an accessory unusable. Use only smooth jawed wrenches with this equipment.

OTHER EQUIPMENT REQUIRED

The following items are not supplied with the machine and are purchased separately, according to the application — see the current Mueller Water Distribution Products Catalog.

MACHINE ADAPTER

MACHINE ADAPTER GASKET (Supplied with Adapter)

SHELL CUTTER

LOCK WASHER (Supplied with Cutter)

DRILLS/CUTTING EQUIPMENT

CUTTING GREASE

Also needed: smooth jawed wrenches to tighten Machine Adapter and Shell Cutter to Tru-Cut™ Drilling Machine, and Adapter to corporation valve outlet; wrench to drive Boring Bar (Machine Drive Nut will accommodate 3/4" socket, 3/4" wrench, or 3/8" socket drive); and Drift Pin (part no. 63264) and hammer, or Coupon Removal tool (part no. 681242) to remove coupon from Shell Cutter.

TRU-CUT™ DRILLING MACHINE

MACHINE SET UP

1. Attach service clamp and corporation valve at the appropriate angle to the water main using accepted installation procedures, and tighten all components to specified torque requirements. Make sure corporation valve is in fully open position.
2. Attach proper Machine Adapter and Gasket to Machine Body wrench tight using a smooth jawed wrench. Selection of Adapter depends upon the type and size of outlet connection on the corporation valve.
3. Attach proper cutting tool. (Use wrench flats on Shell Cutter and Machine Body to tighten Shell Cutter securely — do not use any tool in the slots of the Shell Cutter.)
4. Lightly lubricate outside of cutting tool using Mueller® Cutting Grease.
5. Disengage Feed Sleeve Connector from Feed Sleeve and pull Boring Bar to the rearmost position, and hold in this position during the next step.
6. Check to be sure corporation valve is open. Attach Machine assembly (with Cutter, Adapter, and Gasket) to corporation valve outlet and tighten wrench tight.
7. Push Boring Bar forward until Feed Sleeve Connector can be engaged in slot at top of Feed Sleeve (turn the Sleeve counter-clockwise if necessary).
8. Turn Connector clockwise in slot, then advance Feed Sleeve by turning clockwise until Cutter contacts main.
9. Cut hole by turning Boring Bar clockwise, while turning Feed Sleeve clockwise a little at a time. Do not force Cutter into the main. Use a light even feed at the start, then a somewhat heavier feed and finish with a light even feed. Completion of hole through the main will be accompanied by an obvious reduction in resistance felt while turning Boring Bar and Feed Sleeve.

IMPORTANT: Continue turning Boring Bar and Feed Sleeve a few additional revolutions to make sure the coupon is completely removed from the wall of the main.

CAUTION: Once hole has been completely cut through the wall of the main, the Boring Bar will be under full line pressure, resulting in a piston action that will tend to force the Boring Bar to the rearmost position. Control or restrain rearward movement of Boring Bar at all times by keeping the Feed Sleeve Connector engaged with the Feed Sleeve, and by turning the Feed Sleeve in a counter-clockwise direction to back the Cutter out of the main and clear of the corporation valve. To avoid possible injury, keep head and body away from the end of Boring Bar at all times.

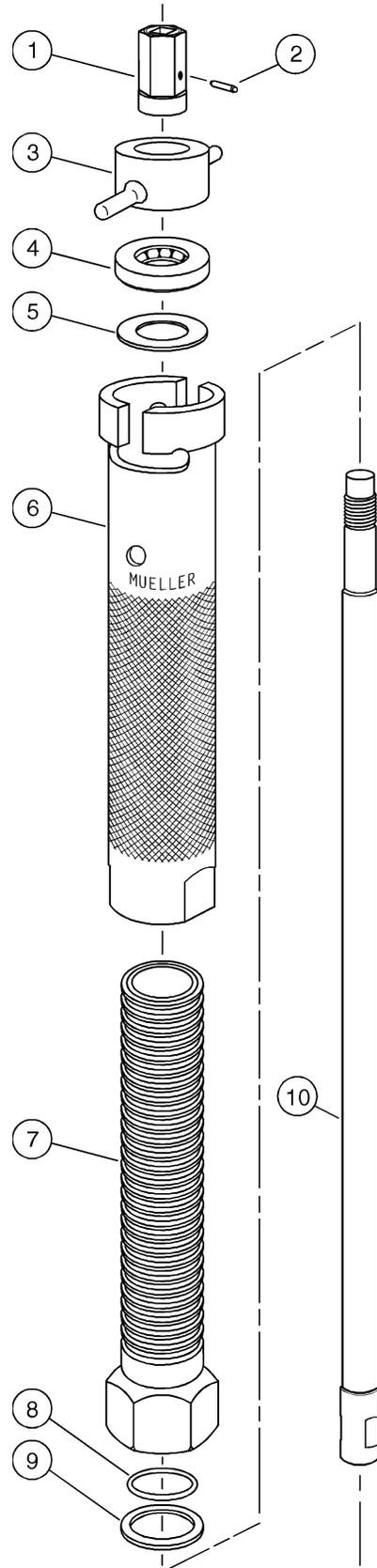
10. Using both hands, turn Feed Sleeve in counter-clockwise direction to move Boring Bar to the rearmost position and retract Cutter from main. For larger holes or thicker pipe, a smooth jawed wrench may be used on Feed Sleeve flats to facilitate turning Feed Sleeve.
11. Make sure Cutter is clear of corporation valve, then close valve and remove Machine and Adapter as a unit.
12. Remove plastic coupon using one of the following methods:
 - a. Use Drift Pin (part no. 63264) to pry between the coupon and the top (or root) of the cutter slot and push the coupon from the cutter. If plastic fills the entire slot area, engage the plastic in the slot with the tip of the Drift Pin and use a hammer to drive the coupon from the cutter.
 - b. With the cutter removed from the machine, use a Coupon Removal Tool (part no. 681242) inserted through the tapped hole in the cutter shank to drive the coupon out of the cutter.
13. Remove all remnants of plastic material from interior of Cutter and relubricate its exterior before using Machine to make another cut.

CAUTION: Prying against the sides of the cutter slot or using a prying tool that is wider than the slot can damage the cutter and make it unusable.

TRU-CUT™ DRILLING MACHINE

Parts

Item No.	Part No.	Part Name
—	039431	Machine Complete
1	528716	Drive Nut
2	507143	Pin
3	89073	Connector
4	78855	Bearing
5	78856	Collar
6	528725	Feed Sleeve
7	528717	Body
8	78858	O-Ring
9	58733	Gasket
10	528718	Boring Bar



NOTE: These illustrations are for parts identification only. DO NOT use these illustrations for assembly or disassembly of machine. MUELLER CO. offers a machine repair service. Contact MUELLER Customer Service Center for details.

TO ORDER, SPECIFY QUANTITY, PART NUMBER AND PART NAME (include catalog number and model number of machine).