

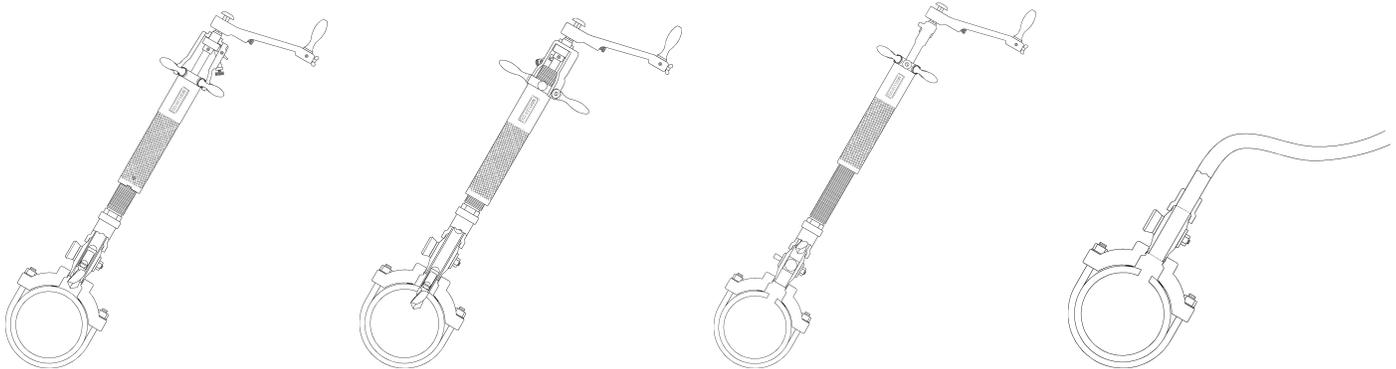
Mueller Co. manufactures several different small drilling machines for drilling holes from 7/16" to 2" in all types of pipe. Machines are available in hand or power operated models with a selection of drills and shell cutters for the type of pipe you are using.

Small drilling machines are primarily used with service clamps and corporation stops to make service connections on mains under pressure. This method of making service connections is especially recommended for use where the main is too small, thin or weak to permit direct tapping. Mueller® Small Drilling Machines can also be used to drill through any valve or fitting to which they can be attached.

Mueller Co. has built these machines to take the rough handling such equipment usually receives during normal use. They are designed to provide years of service with a minimum of maintenance. Another important advantage of Mueller machines is the similarity in basic design and operating procedures for each machine. This makes it easier to train personnel in the use of the various drilling machine models.

These machines are part of a complete system of equipment, products and methods developed by Mueller Co. to perform the variety of operations needed to install, extend and maintain today's water systems. The designed-in compatibility of each part of this system helps everything go together efficiently for strong, leak-tight installations.

The Mueller method of making a main to service connection using the Mueller E-5™ Small Drilling Machine



- With the service saddle attached to the main, the corporation stop is threaded into the clamp. The machine is then mounted on the corporation stop using an adapter nipple, and the stop is opened.
- The main is drilled out under pressure.
- The boring bar of the machine is retracted and the corporation stop is closed to control the water. The machine is removed.
- The service line is attached to the outlet of the corporation stop and the stop is opened to activate service.

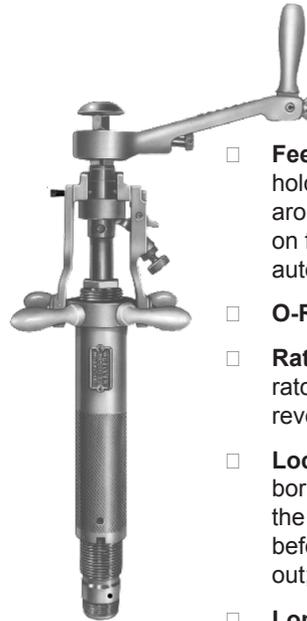
Small drilling machine selection guide

Machine	Drill and cutter capacity	Maximum pressure	Operation	Type of pipe	Recommended uses
E-5	7/16"-1-7/8"	500 psig (3450 kPa/34.50 bar)	Hand or power	Cast iron, cement-lined cast iron, ductile iron, cement-lined ductile iron, A-C, concrete, steel, and PVC	Making main to service connections in pressurized mains
D-5	5/8"-2"				
Mega-Cut	7/16"-1-7/8"	200 psig (1380 kPa/13.80 bar)	Hand	PVC	
Tru-Cut	11/16"-7/8"				
PL-2	11/16" and 7/8"				

Rev. 4-01 Shaded area indicates changes

Mueller® Mega-Cut™ Machine features


- **Independent Tool Feed & Cutting Sleeve** - manual feed yoke allows independent control for smooth cutting.
- **Feed Sleeve Connector** - permits the boring bar to be positioned in either its forward or rearmost position quickly and easily.
- **O-Ring Seal** - for positive sealing.
- **Compact Design** - robust yet lightweight for easy use.
- **2" Capacity** - makes cuts through corporation valves up to 2".
- **Standard Size Drive Nut** - use any 7/8" socket wrench.
- **Anti-Friction Thrust Collar** - fluorocarbon impregnated steel bearing sealed in a steel case; no lubrication required.
- **E-5™ Tool Capability** - for use on PVC as well as ductile iron, cast iron, steel, & A/C pipe materials.
- **Long Feed Sleeve** - helps protect acme threads on body and automatically cleans the threads as the feed sleeve is rotated.

Mueller E-5™ and D-5™ Machine features


- **Anti-Friction Thrust Collar** - fluorocarbon impregnated steel bearing sealed in a steel case; no lubrication required.
- **Feed Nut & Yoke** - spring detents hold feed yoke securely in place around boring bar. Square shank on feed yoke fits power operator for automatic feed.
- **O-Ring Seal** - for positive sealing.
- **Ratchet Handle** - fully enclosed ratchet; easily lubricated; quick reverse button.
- **Locking Mechanism** - secures the boring bar to the feed yoke to prevent the drill from spiralling into the pipe before the hole is completely drilled out; helps prevent tool breakage.
- **Long Feed Tube** - helps protect acme threads on body and automatically cleans the threads as the feed tube is rotated.

Mueller Tru-Cut™ Machine features


- **Independent Tool Feed & Cutting Sleeve** - manual feed yoke allows independent control for smooth cutting.
- **Feed Sleeve Connector** - permits the boring bar to be positioned in either its forward or rearmost position quickly and easily.
- **O-Ring Seal** - for positive sealing.
- **Wrench Flats** - aid in attachment and removal of shell cutters.
- **Anti-Friction Thrust Collar** - fluorocarbon impregnated steel bearing sealed in a steel case; no lubrication required.
- **Long Feed Sleeve** - helps protect acme threads on body and automatically cleans the threads as the feed sleeve is rotated.
- **Compact Design** - robust yet lightweight for easy use.

Mueller PL-2™ Machine features


- **Controlled Feed** - threaded boring bar provides positive controlled feed.
- **O-Ring Seal** - for positive sealing.
- **Disengagement Nut** - permits the boring bar to be positioned in either its forward or rearmost position quickly and easily.
- **Tru-Cut** - tool Compatibility.
- **Boring Bar Drive Hex** - permits operation with a standard 3/8" drive ratchet handle and 7/16" socket.
- **Wrench Flats** - aid in attachment and removal of shell cutters.
- **Economical** - compact, lightweight design makes this an ideal machine for contractors.

NOTE: Machines not shown to size.

Mueller E-5 Drilling Machine - for drilling operations under pressure - 1/2" to 2" inclusive

- Catalog number E-5 (Part number 39330)**
- Hand or power operation
- Designed for use on pressurized or dry mains
- Used to drill through 1/2" to 2" corporation stops and service saddles
- 12-1/8" (308 mm) boring bar travel
- Has boring bar locking mechanism
- Use on cast iron or ductile iron pipe • cement lined cast iron or ductile iron pipe
• A-C pipe • cast iron O.D. PVC pipe • steel pipe • concrete pipe
- 500 psig (3447 kPa) maximum working pressure at 100 F (38 C)
- 250 F (121 C) maximum working temperature at 375 psig (2586 kPa)



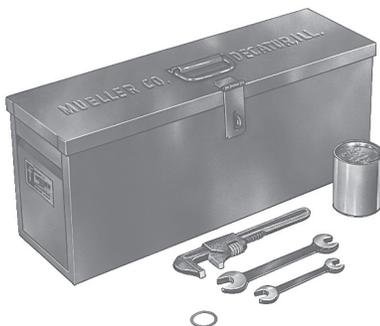
NOTE: The working pressure or temperature rating is reduced accordingly if any attachment, valve, or fitting subjected to pressure or temperature during the drilling operation has a maximum working pressure or temperature rating less than that specified above.

Equipment furnished with each E-5 machine:

- Metal storage case
- Reversible ratchet handle
- Body gasket
- Adjustable wrench
- Two double open end wrenches
- Cutting grease
- Instruction manual (Form #9335)

Equipment to be selected :

- Drills and drill holders – page 2.4
- Shell cutters, cutter holders and pilot drills – page 2.5
- Drilling machine adapters – page 2.6
- Power operators – page 2.13



	E-5
Total shipping weight	59.5 lbs. (27 kg)
Machine only weight	25 lbs. (11 kg)
Shipping length	22"
Extended length	32"

Rev. 11-18 Shaded area indicates changes

Mueller E-5 Drilling Machine tools

Maximum drill size is specified for each corporation stop in section 5. Smaller drills may be used if desired.

Mueller E-5 / Mega-Cut Machine Tool Kit for PVC Pipe - 682297

Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.
3/4" PVC equipment	-	1" PVC equipment	-	1-1/2" PVC equipment	-	2" PVC equipment	-
11/16" shell cutter	681919	7/8" shell cutter	681920	1-7/16" shell cutter	528087	1-3/4" shell cutter	528088
Holder for 681919	507634*	Holder for 681920	507634*	Holder for 528087	508198*	Holder for 528088	508198*
3/4 corp adaptor†	52019	1" corp adaptor†	36750	1-1/2" flare corp adaptor	501947	2" flare corp adaptor	508201
-	-	-	-	1-1/2" 110 corp adaptor	501949	2" 110 Corp Adaptor	508199

† Adapters fit Flare, CTS 110, CTS Pack Joint, CTS Grip, and CTS Q Line

* Only one of each provided in kit

Mueller E-5 / Mega-Cut Machine Tool Kit for DI Pipe Drilling - 682298

Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.
3/4" DI equipment	-	1" DI equipment	-	1-1/2" DI equipment	-	2" DI equipment	-
11/16" drill bit	36037	7/8" drill bit	33253	1-7/16" shell cutter	682287	1-3/4" shell cutter complete	682289
Holder for 36037	61981	Holder for 33253	61993	Holder for 682287	502900*	Holder for 682289	502900*
3/4 corp adaptor†	52019	1" corp adaptor†	36750	1-1/2" flare corp adaptor	501947	2" flare corp adaptor	508201
-	-	-	-	1-1/2" 110 corp adaptor	501949	2" 110 Corp Adaptor	508199

† Adapters fit Flare, CTS 110, CTS Pack Joint, CTS Grip, and CTS Q Line

* Only one of each provided in kit



Drill Holder

Drills

Corporation stop size	Drill size	Drill type and part number					
		Regular† (used on steel pipe)	CEM-RES (used on A-C, and cement lined cast or ductile iron pipe)	Tungsten carbide tipped (used on concrete or A-C Pipe)	Insert	Torx screw	Drill holder
1/2"	7/16"	61879*	79175*	-	-	-	-
5/8"	9/16"	62011*	-	-	-	-	-
3/4"	11/16"	61992	36037	83142**	31270	312722	61981
1"	7/8"	61990	33253	-	-	-	61993
	15/16"	61989	36039	83143**	312711	312723	

† Using regular drills on A/C or cement lined pipe will void the warranty.

* Combined drill and holder.

** These pilot drills have tungsten carbide tips held securely in place with screws. Tips are available as replacement parts.



Combined drill and holder

Adapters E-5 drills to D-5 machine	
5-1/2" long	40438
9-3/4" long	36324

Note: Mueller recommended cutting grease is available in pints (88366).



Shell cutters for PVC pipe

Corporation stop size	Shell cutter size	Maximum plastic pipe wall thickness	Shell cutter	Shell cutter holder	Shell cutter with holder	Optional coupon removal tool
3/4"	11/16"	1.125"	681919**	507634	581760	681242
1"	7/8"	1.125"	681920**	507634	581761	681242
1-1/2"	1-7/16"	1.125"	528087	508198	-	681243
2"	1-3/4"	1.125"	528088	508198	-	681243

** Shell cutters furnished with lock washer.



Shell cutters for cement lined, cast iron , ductile iron, A-C and steel pipe

Corporation stop size	Shell cutter size	Shell cutter	Arbor	Pilot drill	Set screw	Shell cutter complete	Shell cutter holder
1-1/2"	1-7/16"	528157	528156	501641	37802	682287	502900
2"	1-7/8"	528159	528156	501641	37802	682289	502900

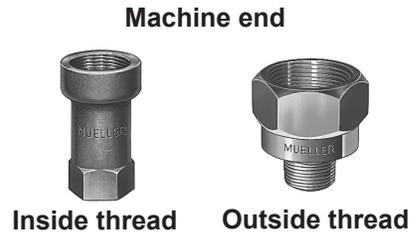
Note: Mueller recommended cutting grease is available in pints (88366).

⚠ WARNING: Use on A-C pipe, which contains a known carcinogen, requires appropriate protective equipment and procedures be employed.

Rev. 11-18 Shaded area indicates changes

Mueller E-5 Drilling Machine adapter nipples

Drilling machine adapter nipples are used to adapt a drilling machine to the outlet of a corporation stop. Each adapter fits a specific machine to a specific size and type of corporation stop outlet. Some corporation stop outlets require a gasket to be used between the outlet and adapter. Gaskets are ordered separately (see below).



Type adapter thread-corporation stop outlet thread	Maximum press. & temp. rating	Size of corporation stop outlet connection						
		1/2"	5/8"	3/4"	1"	1-1/4"	1-1/2"	2"
Copper flare connection	200 psig @ 100 F	63796	-	52019	36750	682256Δ	501947	508201
CTS Mueller 110® Conductive Compression*		63796	-	52019	36750	682256Δ	501949	508199
CTS Mueller Pack Joint Connection*		-	-	52019	36750	-	501949	508199
CTS Mueller Grip		-	-	52019	36750	-	501949	508199
CTS QLine		-	-	52019	36750	-	-	-
IPS Mueller Grip		-	-	508919	682256Δ	-	-	-
PVC Plastic Pack Joint Compression Connection***		-	-	508919	682256Δ	-	682257Δ	682258Δ
IPS PE Pack Joint Compression Connection***		-	-	508919	682256Δ	-	508199	682258Δ
IPS PE Mueller 110 Compression Connection***		-	-	508919	508920	-	-	-
Mueller Coupling thread		75493	75494	75495	75496	-	-	-
IP copper flare connection		-	-	43900	43870	-	-	-
Insulated end (fits union end on valve body) must be used with 502938		-	-	528723	528724	-	-	682649
MIP thread outlet	1200 psig @ 100 F	36966	-	36919	36917	36928	501948	508200
FIP thread outlet	1000 psig @ 500 F	36967	-	36920	36918	36733	503435	78907

*For type "K" copper service tubing or plastic tubing having the same O.D.
 ***For PE plastic pipe, meeting specifications ASTM D-2239.
 ****IPS Polyvinylchloride (PVC) Per ASTM D-1785
 Δ Adapters Furnished with Gaskets
 NOTE: PN 502938 Adapter, adapts D-5 machine adapters to E-5 machine.

Machine adapter nipple gaskets

Several types of machine adapter nipples require a gasket to seal the adapter to the outlet of the corporation stop. These gaskets are ordered separately from the following chart.



Machine adapter nipple part number	63796	43900	52019	36750	43870	45385
Gasket part number	1/2" (H-15053)*	3/4" (H-15053)*	3/4" (H-15053)*	1" (H-15053)*	1" (H-15053)*	1-1/4" (H-15053)*
Machine adapter nipple part number	508920	501947	501949	508199	508201	508919
Gasket part number	500846**	1-1/2" (H-15053)*	1-1/2" 507646**	2" 507647**	2" (H-15053)*	1" (H-15053)*

* Copper
 ** Rubber

Shaded area indicates change Rev. 4-17

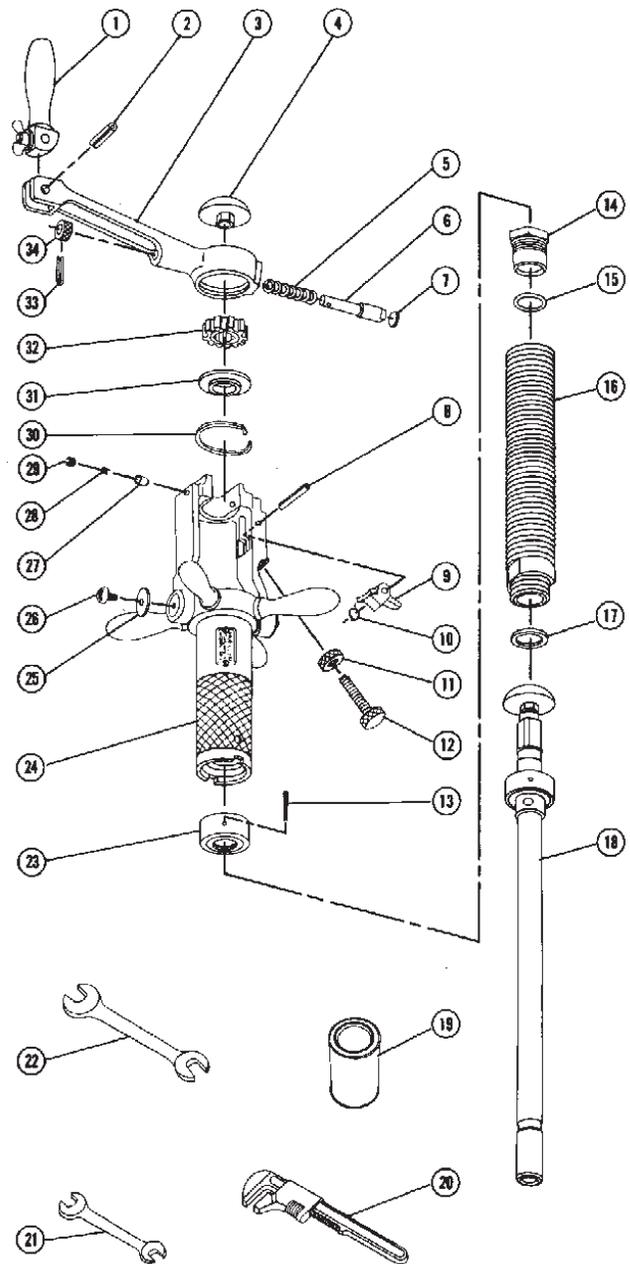
Item Number	Part Number	Part Name
-	580897	Handle complete
1	80085*	Crank handle
2	500635*	Handle pin
3	51484*	Handle
4	83431*	Knob
5	37883*	Spring
6	51426*	Ratchet dog
7	51427*	Plug
8	502027	Pivot arm pin
9	502025	Pivot arm
10	502026	Pivot arm spring
11	502029	Lock nut
12	502028	Operating screw
13	48130	Friction collar pin
14	51432	Packing gland
15	46726	O-ring
16	503159	Body
17	47756	Body gasket
18	580999	Boring bar complete
19	88366	Cutting grease
20	91664	Wrench
21	59787	Wrench
22	96536	Wrench
23	580610	Friction collar
24	580895	Feed tube and yoke
25	50133	Washer
26	79745	Retaining screw
27	500851	Detent pin
28	59810	Spring
29	305006	Screw
30	51428*	Retaining ring
31	503163*	Wheel bushing
32	503162*	Ratchet wheel
33	500803*	Operating pin
34	37863*	Detent knob

Operating instruction manual form number 9335; page 2.3

* Included with handle complete

Repair Kit

Item Number	Part Number	Part Name
	681846	Complete Kit includes the following
13	48130	Friction collar pin (1)
15	46726	O-ring (1)
17	47756	Body gasket (1)
19	88366	Cutting grease (1)
23	580610	Friction collar (1)



Storage chest 580971 (not illustrated)

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)

Rev. 7-16 Shaded area indicates changes

Mueller D-5 Drilling Machine - for drilling operations under pressure - 3/4" to 2" inclusive

- Catalog number D-5 (Part number 39305)
- Hand or power operation
- Designed for use on pressurized or dry mains
- Used to drill through 3/4" to 2" corporation stops and service saddles
- 14" (356 mm) boring bar travel
- Has boring bar locking mechanism
- Use on cast iron or ductile iron pipe • cement lined cast iron or ductile iron pipe
 - A-C pipe • PVC pipe • steel pipe • concrete pipe
- 500 psig (3447 kPa) maximum working pressure at 100 F (38 C)
- 250 F (121 C) maximum working temperature at 375 psig (2586 kPa)



NOTE: The working pressure or temperature rating is reduced accordingly if any attachment, valve, or fitting subjected to pressure or temperature during the drilling operation has a maximum working pressure or temperature rating less than that specified above.

Equipment furnished with each D-5 machine:

- Metal storage case
- Ratchet handle (85308)
- Body gasket (33278)
- Adjustable wrench (91664)
- Two double open end wrenches (58196)
- Cutting grease (88366)
- Instruction manual (Form #9335)

Equipment to be selected:

- Drills and drill holders – page 2.9
- Shell cutters, cutter holders and pilot drills – page 2.10
- Drilling machine adapter nipples – page 2.11
- Power operators – page 2.13



	D-5
Total shipping weight	60.5 lbs. (27 kg)
Machine only weight	35 lbs. (16 kg)
Shipping length	22-1/2"
Extended length	37"

Mueller D-5 Drilling Machine tools

Maximum drill size is specified for each corporation stop in section 5. Smaller drills may be used if desired.

Mueller D-5 Machine Tool Kit for DI 682299

Description 3/4" DI equipment	Part Number	Description 1" DI equipment	Part Number	Description 1-1/2" DI equipment	Part Number	Description 2" DI equipment	Part Number
11/16" drill bit	36037	7/8" Drill Bit	33253	1-7/16" shell cutter complete	682287	1-7/8" shell cutter complete	682286
Holder for 36037	36998	Holder for 33253	37032	Holder for 682287	502900*	Holder for 682286	33314
3/4" corp adapter†	37902	1" corp adapter†	37903	1-1/2" flare corp adapter	37905	2" flare corp adapter	37906
-	-	-	-	1-1/2" 110 corp adapter	507644	2" 110 corp adapter	507645

† Adapters fit Flare, CTS 110, CTS Pack Joint, CTS Grip, and CTS Q Line

* Boring bar adapter 40438 must be used with this shell cutter holder

Mueller D-5 Machine Tool Kit for PVC 682300

Description 3/4" PVC equipment	Part Number	Description 1" PVC equipment	Part Number	Description 1-1/2" PVC equipment	Part Number	Description 2" PVC equipment	Part Number
11/16" shell cutter	681919	7/8" shell cutter	681920	1-7/16" shell cutter	528087	1-3/4" shell cutter	528088
Holder for 681919	507634*	Holder for 681920	507634*	Holder for 528087	508198*	Holder for 682286	508198*
3/4" corp adapter†	37902	Boring bar adapter	40438*	Boring bar adapter	40438*	Boring bar adapter	40438*
Boring bar adapter	40438*	1" corp adapter†	37903	1-1/2" flare corp adapter	37905	2" flare corp adapter	37906
-	-	-	-	1-1/2" 110 corp adapter	507644	2" 110 corp adapter	507645

† Adapters fit Flare, CTS 110, CTS Pack Joint, CTS Grip, and CTS Q Line

*Only 1 of each is provided in kit

Drills

Corporation stop size	Drill size	Drill type and part number					Drill Holder
		Regular† (used on Steel Pipe)	CEM-RES (used on A-C and Cement Lined Cast or Ductile Iron)	Tungsten carbide tipped (used on Concrete or A-C Pipe)	Insert	Torx Screw	
3/4"	11/16"	61992	36037	83142**	312710	312722	36998
1"	7/8"	61990	33253	-	-	-	37032
1-1/4"	1-1/16"	33530	-	-	-	-	33555
1-1/2"	1-7/16"	33536	36056	83144**	312716	312547	33316
2"	1-7/8"	33540*	36069*	83193**(*)	312721	312547	33314

† Using regular drills on A/C or cement lined pipe will void the warranty.

* When using these tools with a power operator, hand feed only.

**These pilot drills have tungsten carbide tips held securely in place with screws. Tips are available as replacement parts.

Adapters E-5 to D-5 Machine	
5-1/2" Long	40438
9-3/4" Long	36324

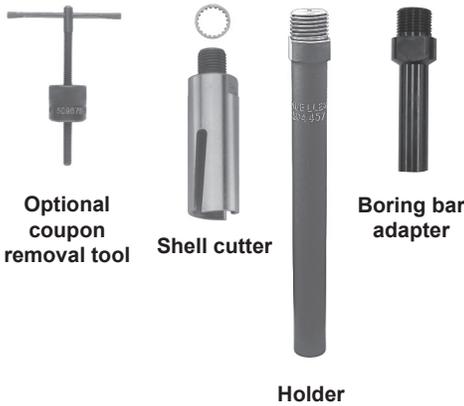


Drill



Holder

Rev. 2-18 Shaded area indicates changes



Shell cutters for cast iron O.D. PVC plastic pipe

Corporation stop size	Shell cutter size	Maximum plastic pipe wall thickness	Shell cutter	Shell cutter holder	Boring bar adapter	Shell cutter with holder**	Optional coupon removal tool
3/4"	11/16"	1.125"	681919**	507634	40438	581760	681242
1"	7/8"	1.125"	681920**	507634	40438	581761	681242
1-1/2"	1-7/16"	1.125"	528087	508198	40438	-	681243
2"	1-3/4"	1.125"	528088	508198	40438	-	681243

** Shell cutters furnished with lock washer.



Shell cutters for cement lined, cast iron , ductile iron, A-C and steel pipe

Corporation stop size	Shell cutter size	Shell cutter	Arbor	Pilot drill	Set screw	Shell cutter complete	Shell cutter holder
1/2"	1-7/16"	528157	528156	501641	37802	682287	502900***
2"	1-7/8"	528159	528155	501641	37802	682286	33314

*Use 2" 79280 shell cutter on steel pipe only (with wall thickness less than 3/8").

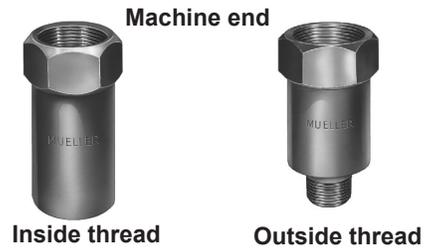
*** Boring bar adapter 40438 must be used with this shell cutter holder.

Note: Mueller recommended cutting grease is available in pints (88366).

WARNING: Use on A-C pipe, which contains a known carcinogen, requires appropriate protective equipment and procedures be employed.

Mueller D-5 Drilling Machine adapter nipples

Drilling machine adapter nipples are used to adapt a drilling machine to the outlet of a corporation stop. Each adapter fits a specific machine to a specific size and type of corporation stop outlet. Some corporation stop outlets require a gasket to be used between the outlet and adapter. Gaskets are ordered separately (see below).



Corporation stop outlet thread	Maximum press . & temp. rating	Size of corporation stop outlet connection					
		3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"
Copper flare connection	200 psig @ 100 F	37902	37903	682259	37905	37906	-
CTS Mueller 110® Conductive Compression Connection*		37902	37903	-	507644	507645	-
CTS Mueller Pack Joint Connection*		37902	37903	-	507644	507645	-
CTS Mueller Grip		37902	37903	-	507644	507645	-
CTS QLine		37902	37903	-	-	-	-
IPS Mueller Grip		508917	682259	-	-	-	-
PVC Plastic Pack Joint Compression Connection****		508917	682259	-	682033	682034	-
IPS PE Pack Joint Compression Connection***		508917	682259	-	507645	682034	-
IPS PE Mueller 110 Compression Connection***		508917	508918	-	-	-	-
Mueller Coupling thread		61165	77375	-	-	-	-
F.I.P. copper flare connection		-	51104	-	-	-	-
Insulated end (fits union end on valve body)		528723	528724	-	-	682649	-
M.I.P. thread outlet		1200 psig @ 100 F	36910	36911	36912	36913	36525
Outside thread-F.I.P. thread outlet	1000 psig @ 100 F	33556	36323	36195	36196	36188	36975

*For type "K" copper service tubing or plastic tubing having the same O.D.
 **For PE plastic pipe, meeting specifications ASTM D-2239.
 ***IPS Polyvinylchloride (PVC) Per ASTM D-1785
 NOTE: PN 502938 Adapter, adapts D-5 machine adapters to E-5 machine.

Machine adapter nipple gaskets

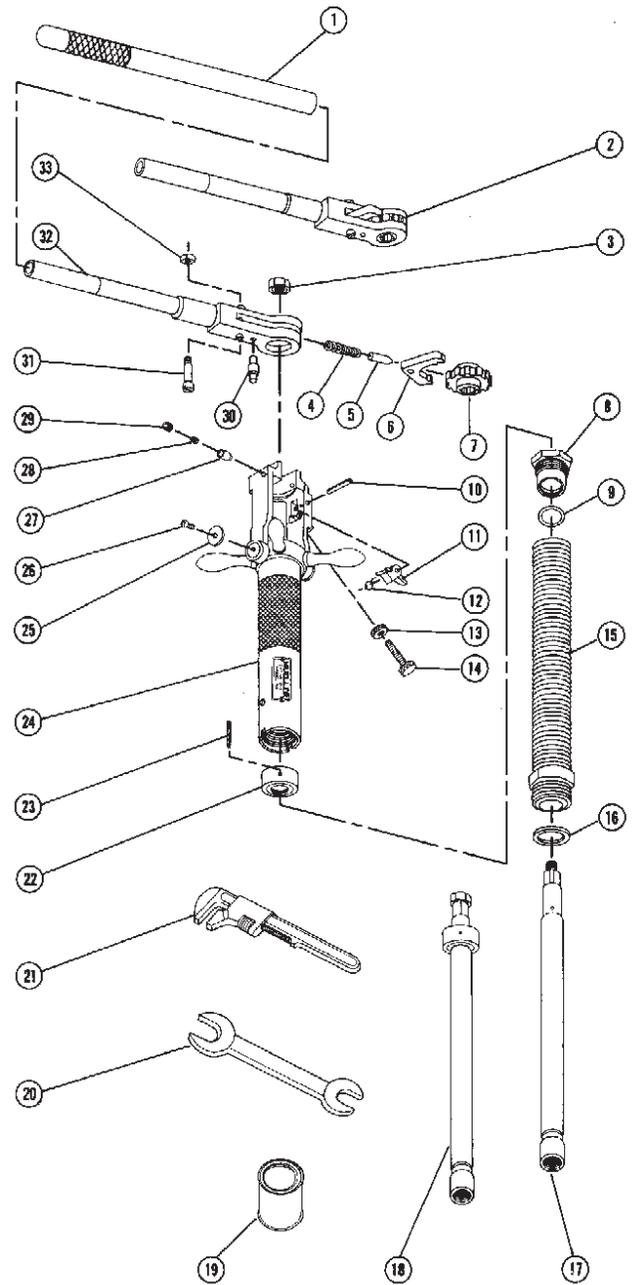
Several types of machine adapter nipples require a gasket to seal the adapter to the outlet of the corporation stop. These gaskets are ordered separately from the following chart.



Machine adapter nipple part number	37902	37903	682259	37905	37906
Gasket part number	3/4" (H-15053)	1" (H-15053)	1-1/4" (H-15053)	1-1/2" (H-15053)	2" (H-15053)
Machine adapter nipple part number	508918	51104	507644	508917	507645
Gasket part number	500846	1" (H-15053)	1" (507646)	1" (H-15053)	2" (507647)

Rev. 4-17 Shaded area indicates changes

Item Number	Part Number	Part Name
1	86391	Handle extension
2	85308	Ratchet handle complete
3	46029*	Retaining nut
4	40007*	Spring
5	40006*	Spring pin
6	40004*	Ratchet dog
7	40137*	Ratchet wheel
8	51377	Packing gland
9	51458	O-ring
10	502027	Rollpin
11	502025	Pivot arm
12	502026	Pivot arm spring
13	502029	Lock nut
14	502028	Operating screw
15	36758	Body
16	33278	Body gasket
17	503141	Boring bar
18	580945	Boring bar complete
19	88366	Cutting grease
20	58196	Wrench
21	91664	Wrench
22	580610	Friction collar
23	48130	Friction collar pin
24	580946	Feed tube & yoke complete
25	537126	Washer
26	312443	Retaining screw
27	500851	Detent
28	59810	Detent spring
29	305006	Detent screw
30	40139*	Stud
31	40138*	Bolt*
32	40177*	Handle bar
33	46255*	Nut



Storage chest 580969 (not illustrated)

*Order both parts when replacing either one
(Operating instruction manual form number 9335)

* Included with ratchet handle complete

Repair Kit

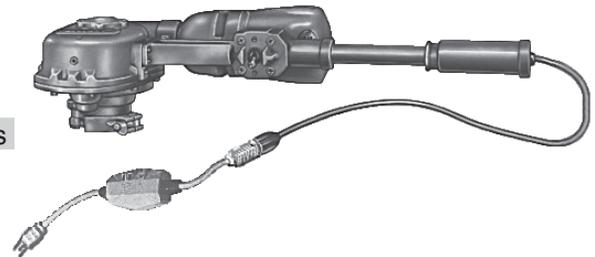
Item Number	Part Number	Part Name
	681846	Complete Kit includes the following
9	51458	O-ring
16	33278	Body gasket
19	88366	Cutting grease
22	580610	Friction collar
23	48130	Friction collar pin

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)

H-603 electric power operator

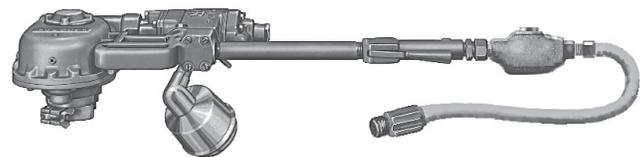
- Catalog number H-603**
- Ground fault interrupter included
- Mounts directly to B-100/B-101, A-3 and E-5/D-5 machines without special adapters
- Can be set to automatically advance boring yoke assembly bar while drilling
- Reversible 35 RPM maximum free speed
- Reversible 3/4 horsepower electric motor
- Ground fault interrupter complies with NEC article 305-6(a) and OSHA article 1926.404bii
- Circuit breaker with manual reset
- Power supply required: 1200 watts minimum at 110 - 120 volts A.C. or D.C., 10 amps minimum capacity
- Total shipping weight 41 lbs. (19 kg)
- Machine only weight 35 lbs. (16 kg)
- Shipped in a sturdy wooden storage chest #311793
- Operating instructions form #11758



H-603 electric power operator

H-604 air power operator

- Catalog number H-604**
- Mounts directly to B-100/B-101, A-3 and E-5/D-5 machines without special adapters
- Can be set to automatically advance boring bar yoke assembly while drilling
- Reversible air motor-can withdraw tool under power
- Constant feed lubricator (shipped loose)
- 35 RPM maximum free speed
- Air supply: 55 cubic feet of free air per minute at 90 psig
- Total shipping weight 42 lbs. (19 kg)
- Machine only weight 37 lbs. (17 kg)
- Shipped in a sturdy wooden storage chest #311794
- Operating instructions form #11758



H-604 air power operator

IMPORTANT: MAINTAIN PRESSURE OF 90 PSIG - THE USE OF A GAGE AT THE THROTTLE TO DETERMINE THE ACTUAL PRESSURE OF AIR AT THE POWER OPERATOR IS RECOMMENDED. PROPER USE OF OILER IS REQUIRED TO MAINTAIN OPERATOR WARRANTY.

H-704 hydraulic power operator

- Catalog number H-704**
- Reversible operation.
- Use with Mueller® D-5, E-5 Drilling Machines, and Mueller® B-101 and A-3 Drilling and Tapping Machines.
- Removable handle for efficient storage in its sturdy container.
- Preset safety relief valve prevents over torque conditions.



Rev. 7-16 Shaded area indicates changes

Mueller MEGA-CUT Drilling Machine - for drilling operations under pressure - 7/16" to 1-7/8" inclusive

- Catalog number MEGA-CUT (Part number 39432)
- Hand operation
- Drive nut accepts a standard 7/8" socket wrench
- Designed for use on pressurized or dry mains
- Used to drill through 1/2" to 2" corporation stops and service saddles
- 12-1/8" (308 mm) boring bar travel
- Two retaining arms on feed sleeve safely retain the boring bar and help prevent line pressure from pushing the boring bar up once the cut is complete
- Use on cast iron O.D. PVC pipe, as well as cast iron or ductile iron pipe • cement lined cast iron or ductile iron pipe • A-C pipe • steel pipe • concrete pipe
- 200 psig (1380 kPa/13.80 bar) maximum working pressure
- 150F (66C) maximum temperature rating

NOTE: The working pressure or temperature rating is reduced accordingly if any attachment, valve, or fitting subjected to pressure or temperature during the drilling operation has a maximum working pressure or temperature rating less than that specified above.



Equipment furnished with each Mega-Cut machine:

- Wooden storage container #311841
- Body gasket #47756
- Operating instructions (Form #12092)

Equipment to be selected :

- Drills and drill holders—page 2.15
- Shell cutters, cutter holders and pilot drills—page 2.15-2.16
- Drilling machine adapters—page 2.17

	Mega-Cut
Total shipping weight	29 lbs. (13 kg)
Machine only weight	19 lbs. (9 kg)
Shipping length	21-1/2"
Extended length	32"

Mueller MEGA-CUT Drilling Machine

Maximum drill size is specified for each corporation stop in section 5. Smaller drills may be used if desired.

Mueller Mega-Cut / E-5 Machine Tool Kit for PVC Pipe Drilling 682297

Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.
3/4" PVC equipment	-	1" PVC equipment	-	1-1/2" PVC equipment	-	2" PVC equipment	-
11/16" shell cutter	681919	7/8" shell cutter	681920	1-7/16" shell cutter	528087	1-3/4" shell cutter	528088
Holder for 681919	507634*	Holder for 681920	507634*	Holder for 528087	508198*	Holder for 528088	508198*
3/4 corp adaptor†	52019	1" corp adaptor†	36750	1-1/2" flare corp adaptor	501947	2" flare corp adaptor	508201
-	-	-	-	1-1/2" 110 corp adaptor	501949	2" 110 Corp Adaptor	508199

† Adapters fit Flare, CTS 110, CTS Pack Joint, CTS Grip, and CTS Q Line

* Only one of each provided in kit

Mueller Mega-Cut / E-5 Machine Tool Kit for DI Pipe Drilling 682298

Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.
3/4" DI equipment	-	1" DI equipment	-	1-1/2" DI equipment	-	2" DI equipment	-
11/16" drill bit	36037	7/8" drill bit	33253	1-7/16" shell cutter	682287	1-3/4" shell cutter complete	682289
Holder for 36037	61981	Holder for 33253	61993	Holder for 682287	502900*	Holder for 682289	502900*
3/4 corp adaptor†	52019	1" corp adaptor†	36750	1-1/2" flare corp adaptor	501947	2" flare corp adaptor	508201
-	-	-	-	1-1/2" 110 corp adaptor	501949	2" 110 Corp Adaptor	508199

† Adapters fit Flare, CTS 110, CTS Pack Joint, CTS Grip, and CTS Q Line

* Only one of each provided in kit



Drills

Corporation stop size	Drill size	Drill type and part number					
		Regular† (used on steel pipe)	CEM-RES (used on A-C, and cement lined cast or ductile iron pipe)	Tungsten carbide tipped (used on concrete or A-C Pipe)	Insert	Torx screw	Drill holder
1/2"	7/16"	61879*	79175*	-	-	-	-
5/8"	9/16"	62011*	-	-	-	-	-
3/4"	11/16"	61992	36037	83142**	31270	312722	61981
1"	7/8"	61990	33253	-	-	-	61993
	15/16"	61989	36039	83143**	312711	312723	

† Using regular drills on A/C or cement lined pipe will void the warranty.

* Combined drill and holder.

** These pilot drills have tungsten carbide tips held securely in place with screws. Tips are available as replacement parts.

Adapter E-5 drills to D-5 machine	
5-1/2" long	40438
9-3/4" long	36324

Rev. 2-18 Shaded area indicates changes



Shell cutters for PVC plastic pipe

Corporation stop size	Shell cutter size	Maximum plastic pipe wall thickness	Shell cutter	Shell cutter holder	Shell cutter with holder**	Optional coupon removal tool
3/4"	1 1/16"	1.125"	681919**	507634	581760	681242
1"	7/8"	1.125"	681920**	507634	581761	681242
1-1/2"	1-7/16"	1.125"	528087	508198	-	681243
2"	1-3/4"	1.125"	528087	508198	-	681243

** Shell cutters furnished with lock washer.



Shell cutters for cement lined, cast iron , ductile iron, A-C and steel pipe

Corporation stop size	Shell cutter size	Shell cutter	Arbor	Pilot drill	Set screw	Shell cutter complete	Shell cutter holder
1-1/2"	1-7/16"	528157	528156	501641	37802	682287	502900
2"	1-7/8"	528159	528156	501641	37802	682289	502900

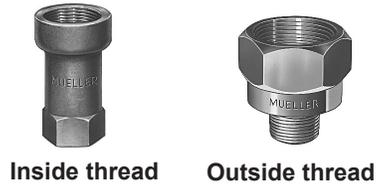
Note: Mueller recommended cutting grease is available in pints (88366).

WARNING: Use on A-C pipe, which contains a known carcinogen, requires appropriate protective equipment and procedures be employed.

Mueller MEGA-CUT Drilling Machine adapter nipples

Drilling machine adapter nipples are used to adapt a drilling machine to the outlet of a corporation stop. Each adapter fits a specific machine to a specific size and type of corporation stop outlet. Some corporation stop outlets require a gasket to be used between the outlet and adapter. Gaskets are ordered separately (see below).

Machine end



Type adapter thread-corporation stop outlet thread	Maximum press. & temp. rating	Size of corporation stop outlet connection						
		1/2"	5/8"	3/4"	1"	1-1/4"	1-1/2"	2"
Copper flare connection	200 psig @ 100 F	63796	-	52019	36750	682256Δ	501947	508201
CTS Mueller 110® Conductive Compression*		-	-	52019	36750	-	501949	508199
CTS Mueller Pack Joint Connection*		-	-	52019	36750	-	501949	508199
CTS Mueller Grip		-	-	52019	36750	-	501949	508199
CTS QLine		-	-	52019	36750	-	-	-
IPS Mueller Grip		-	-	508919	682256Δ	-	-	-
PVC Plastic Pack Joint Compression Connection***		-	-	508919	682256Δ	-	682257	682258
IPS PE Pack Joint Compression Connection***		-	-	508919	682256Δ	-	508199	682258
IPS PE Mueller 110 Compression Connection***		-	-	508919	508920	-	-	-
Mueller Coupling thread		75493	75494	75495	75496	-	-	-
IP copper flare connection		-	-	43900	43870	-	-	-
Insulated end (fits union end on valve body) must be used with 502938		-	-	528723	528724	-	-	-
MIP thread outlet	1200 psig @ 100 F	36966	-	36919	36917	36928	501948	508200
FIP thread outlet	1000 psig @ 500 F	36967	-	36920	36918	36733	503435	78907

*For type "K" copper service tubing or plastic tubing having the same O.D.
 ***For PE plastic pipe, meeting specifications ASTM D-2239.
 ****IPS Polyvinylchloride (PVC) Per ASTM D-1785
 NOTE: PN 502938 Adapter, adapts D-5 machine adapters to E-5 machine.

Machine adapter nipple gaskets

Several types of machine adapter nipples require a gasket to seal the adapter to the outlet of the corporation stop. These gaskets are ordered separately from the following chart.



Machine adapter nipple part number	63796	43900	52019	36750	43870	45385
Gasket part number	1/2" (H-15053)	3/4" (H-15053)	3/4" (H-15053)	1" (H-15053)	1" (H-15053)	1-1/4" (H-15053)
Machine adapter nipple part number	501949	508199	508920	508919	501947	508201
Gasket part number	507646	507647	500846	1" (H-15053)	1-1/2" (H-15053)	2" (H-15053)

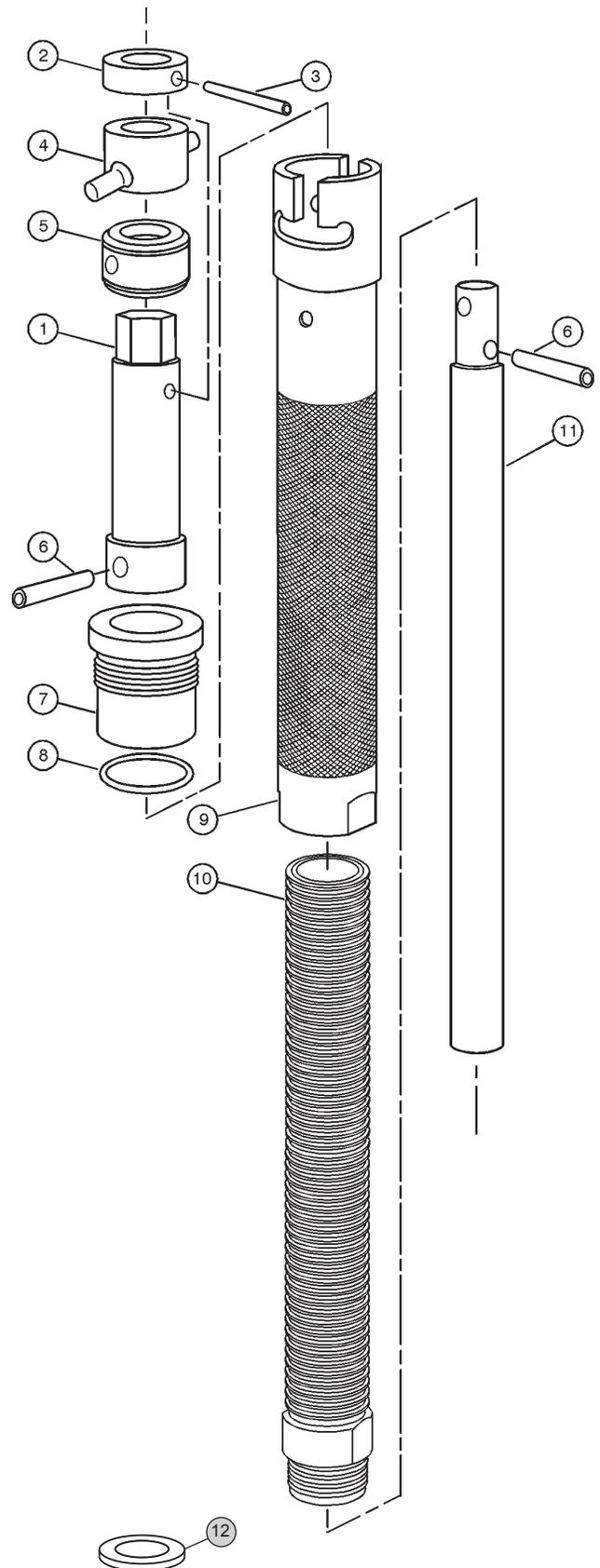
Rev.4-17 Shaded area indicates changes

Item Number	Part Number	Part Name
1	528094	Handle extension
2	52809	Retaining collar
3	48130	Pin
4	682091	Connector assembly
5	580610	Bearing assembly
6	503158	Pin
7	51432	Packing gland
8	46726	O-ring
9	528095	Feed sleeve
10	503159	Body
11	503161	Boring bar tool end
12	47756	Body gasket

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.

Body Extensions

Part Number	Part Name
506363	1-15/16" Long body extension



**Mueller Tru-Cut Machine for drilling operations underpressure on PVC pipe -
11/16" and 7/8" inclusive**

- Catalog number TRU-CUT (Part number 39431)**
- Hand operation
- Drive nut accepts both a standard 3/8" ratchet and a 3/4" socket/box wrench
- Designed for use on pressurized or dry mains
- Used to drill through 3/4" and 1" corporation stops and service saddles
- 7" (178 mm) boring bar travel
- Two retaining arms on feed sleeve connector retain the boring bar and help prevent line pressure from pushing the boring bar up once the cut is complete
- Used to cut PVC pipe only
- 200 psig (1379 kPa) maximum working pressure
- 150 F (66 C) maximum temperature rating

NOTE: The working pressure or temperature rating is reduced accordingly if any attachment, valve, or fitting subjected to pressure or temperature during the drilling operation has a maximum working pressure or temperature rating less than that specified above.



Equipment furnished with each Tru-Cut machine:

- Body gasket #58733
- Operating instructions (Form #11941)

Equipment to be selected:

- Shell cutters – page 2.20
- Drilling machine adapters – page 2.20
- Accepts both a standard 3/8" ratchet and a 3/4" socket/box wrench

	Tru-Cut
Machine only weight	5 lbs. (2.3 kg)
Shipping & extended length	18-1/2"

Mueller Tru-Cut machine tool kit - 682296

Description	Part Number
Tru-Cut Machine	39431
3/4" equipment	
11/16" shell cutter for PVC	681919
3/4" corp adapter†	507632
1" equipment	
7/8" shell cutter for PVC	681920
1" corp adapter†	507633

† Adapters fit Flare, CTS 110, CTS Pack Joint, CTS Grip, and CTS Kitec

Rev. 11-18 Shaded area indicates changes



Mueller TRU-CUT Drilling Machine tools

Shell cutters for the Mueller TRU-CUT Machine are specially designed to direct the pipe chips inside the cutter where they are retained by the pipe coupon .

An optional coupon removal tool is available to aid in the quick, safe removal of the coupon from the shell cutter. The use of this removal tool is recommended.

Shell cutters

Corporation stop size	Shell cutter size	Maximum plastic pipe wall thickness	Shell cutter part number*	Optional coupon removal tool
3/4"	11/16"	1.125*	681919	681242
1"	7/8"	1.125*	681920	681242

*Shell cutters furnished with lock washer.



Machine adapter nipples

Drilling machine adapter nipples are used to adapt a drill to the outlet end of a corporation stop. Each adapter fits a specific machine to a specific size and type of corporation stop outlet. Some corporation stop outlets require a gasket to be used between the outlet and adapter. Gaskets are ordered separately from the adapter (see below).

Corporation stop outlet thread	Maximum pressure and temperature rating	Plastic pipe maximum wall thickness	Size of corporation stop outlet connection		
			3/4"	1"	1-1/4"
Copper flare Connection	200 psig @ 100F	1.125"	507632	507633	682032
CTS Mueller 110® Conductive Compression Connection*		1.125"	507632	507633	-
CTS Mueller Pack Joint Connection*		1.125"	507632	507633	-
CTS Mueller Grip		1.125"	507632	507633	-
CTS QLine		1.125"	507632	507633	-
IPS Mueller Grip		1.125"	509050	682290	-
IPS-PE Mueller 110® Compression Connection***		1.125"	509050	509051	-
Plastic Pack Joint - Compression connection - PVC****		1.125"	509050	682290	-
IPS-PE Pack Joint - Compression Connection***		1.125"	509050	682290	-
M.I.P. thread outlet		1.125"	507630	507631	-
F.I.P. thread outlet	1.125"	538275	538276	-	

*For type "K" copper service tubing or plastic tubing having the same O.D. (PE or PB).

***For PE plastic pipe meeting specifications AS™ D-2239 (SDR-7) 160 psig.

****IPS Polyvinylchloride (PVC) Per ASTM D-1785

△ Adapters furnished with gaskets



Machine adapter nipple gaskets

Several types of machine adapter nipples require a gasket to seal the adapter to the outlet of the corporation stop. These gaskets are ordered separately from the following chart.

Machine adapter nipple part number	507632	507633	509050	509051	682290
Gasket part number	3/4" (H-15053)	1" (H-15053)	1" (H-15053)	1" (500846)	1" (312118)



TRU-CUT Machine optional equipment

- 3/8" square drive reversible ratchet handle only—PART NUMBER: 507095

Note: Mueller recommended cutting grease is available in pints (88366).

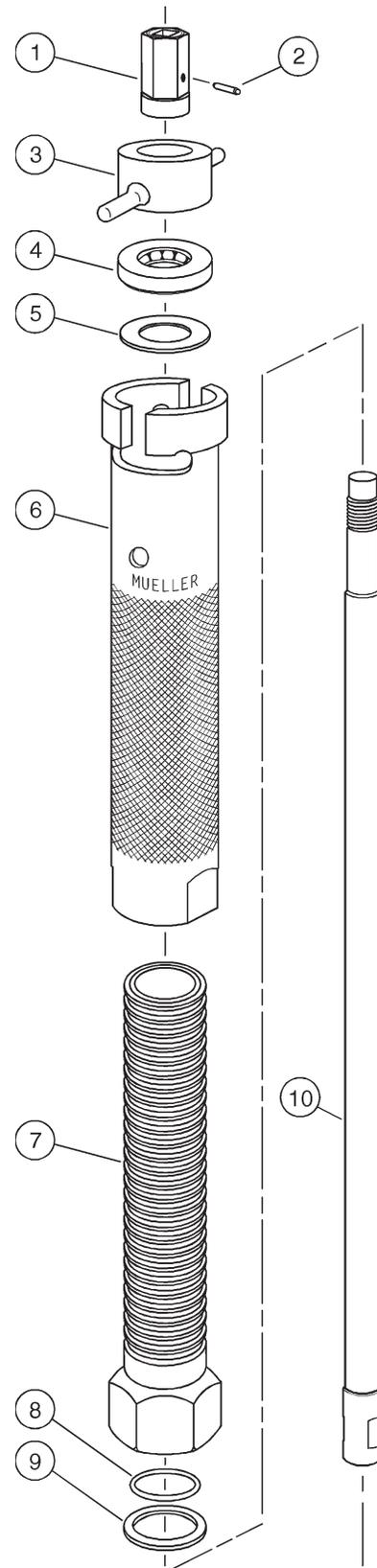
Item Number	Part Number	Part Name
-	039431	Machine Complete
1	528716	Drive nut
2	507143	Pin
3	89073	Grooved feed sleeve connector
4	528571	Thrust bearing
5	78856	Collar
6	528725	Feed sleeve
7	528717	Body
8	78858	O-ring
9	58733	Gasket
10	528718	Boring bar

Body Extension

Part Number	Part Name
506363	1-15/16" Ling Body Extension

Repair Kit

Item No.	Part Number	Part Name
-	682632	Complete kit
1	528571	Thrust bearing
2	78858	O-ring
3	58733	Gasket
4	88366	Cutting grease



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)

Rev. 2-18 Shaded area indicates changes

Mueller PL-2 Machine for drilling operations under pressure on plastic pipe - 1 1/16" and 7/8" cutters inclusive.

- Catalog number PL-2 (Part number 39502)
- Hand operation
- 7/16" drive hex
- Designed for use on pressurized or dry mains
- Used to drill through 3/4" and 1" corporation stops and service saddles
- 7" (178 mm) boring bar travel
- Used to cut PVC pipe only
- 200 psig (1379 kPa) maximum working pressure
- 150 F (66 C) maximum temperature rating

NOTE: The working pressure or temperature rating is reduced accordingly if any attachment, valve, or fitting subjected to pressure or temperature during the drilling operation has a maximum working pressure or temperature rating less than that specified above.



Equipment furnished with each PL-2 machine:

- Body gasket #58733
- Operating instructions (Form #10292)

Equipment to be selected:

- Shell cutters—page 2.23
- Drilling machine adapters—page 2.23
- Ratchet handle and socket—2.23

	PL-2
Machine only shipping weight	3 lbs. (1.4 kg)
Shipping & extended length	17-1/2"

Mueller PL-2 machine tool kit - 682295

Description	Part Number
PL-2	39502
3/4" equipment	
1 1/16" shell cutter for PVC	681919
3/4" corp adapter†	507632
1" equipment	
7/8" shell cutter for PVC	681920
1" corp adapter†	507633

† Adapters fit Flare, CTS 110, CTS Pack Joint, CTS Grip, and CTS Kitec



2-Tooth
shell cutter



Optional
coupon
removal tool

Mueller PL-2 Drilling Machine tools

Shell cutters for the Mueller PL-2 Machine are specially designed to direct the pipe chips inside the cutter where they are retained by the pipe coupon.

An optional coupon removal tool is available to aid in the quick, safe removal of the coupon from the shell cutter. The use of this removal tool is recommended.

Corporation stop size	Shell cutter size	Maximum plastic pipe wall thickness	Shell cutter part number*	Optional coupon removal tool
3/4"	11/16"	1.125*	681919	681242
1"	7/8"	1.125*	681920	681242

*Shell cutters furnished with lock washer.



Machine adapter nipples

Drilling machine adapter nipples are used to adapt a drill to the outlet end of a corporation stop. Each adapter fits a specific machine to a specific size and type of corporation stop outlet. Some corporation stop outlets require a gasket to be used between the outlet and adapter. Gaskets are ordered separately from the adapter (see below).

Corporation stop outlet thread	Maximum pressure and temperature rating	Plastic pipe maximum wall thickness	Size of corporation stop outlet connection		
			3/4"	1"	1-1/4"
Copper flare Connection	200 psig @ 100F	1.125"	507632	507633	682032
CTS Mueller 110® Conductive Compression Connection*		1.125"	507632	507633	-
CTS Mueller Pack Joint Connection*		1.125"	507632	507633	-
CTS Mueller Grip		1.125"	507632	507633	-
CTS QLine		1.125"	507632	507633	-
IPS Mueller Grip		1.125"	509050	682290	-
IPS-PE Mueller 110® Compression Connection***		1.125"	509050	509051	-
Plastic Pack Joint - Compression connection - PVC****		1.125"	509050	682290	-
IPS-PE Pack Joint - Compression Connection***		1.125"	509050	682290	-
M.I.P. thread outlet		1.125"	507630	507631	-
Outside thread-F.I.P. thread outlet		1.125"	538275	538276	-

*For type "K" copper service tubing or plastic tubing having the same O.D. (PE or PB).

***For PE plastic pipe meeting specifications ASTM D-2239 (SDR-7) 160 psig.

****IPS Polyvinylchloride (PVC) Per ASTM D-1785

△ Adapters furnished with gaskets



Machine adapter nipple gaskets

Several types of machine adapter nipples require a gasket to seal the adapter to the outlet of the corporation stop. These gaskets are ordered separately from the following chart.

Machine adapter nipple part number	507632	507633	509050	509051	682290
Gasket part number	3/4" (H-15053)	1" (H-15053)	1" (H-15053)	1" (500846)	1" (312118)



PL-2 Machine optional equipment

- Ratchet handle complete with socket—PART NUMBER: 581536
- 3/8" square drive reversible ratchet handle only—PART NUMBER: 507095
- 7/16"x3/8" square drive socket-fits 7/16" hex on PL-2 Drilling machine boring bar—PART NUMBER: 507096

Note: Mueller recommended cutting grease is available in pints (88366).

Rev. 11-17 Shaded area indicates changes

Repair Kit

Item Number	Part Number	Part Name
Complete Kit	681847	Complete kit includes the following:
1	507144	Disengagement nut
3	79344	O-ring
4	58733	Body washer
6	88366	Cutting grease

Body Extensions

Part Number	Part Name
506363	1-15/16" Long body extension

Item Number	Part Number	Part Name
1	502144	Disengagement nut
2	509312	Body
3	79344	O-ring
4	58133	Body washer
5	526598	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.

