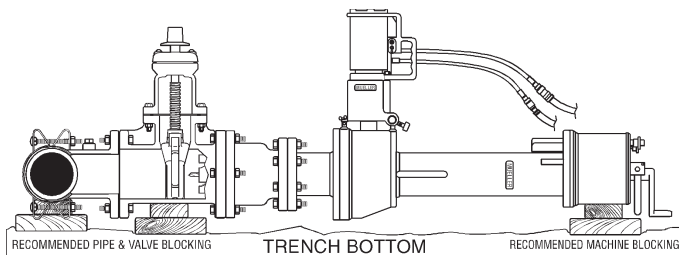


Large Drilling Machines are used for making 2" to 24" lateral connections on water mains under pressure. These machines are available with the tools and accessories for cutting a wide variety of pipe. These large drilling machines are built to take the hard use and rough handling that is unavoidable when working on mains. They need only minimum maintenance to provide long life and satisfactory use. The various drilling machines are simple to operate and, because they are similar in design and

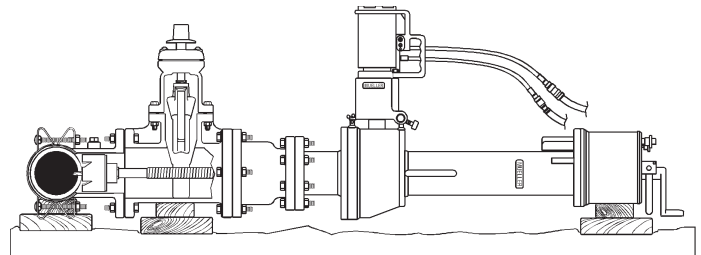
operation, training operators to use them is an easy task.

These machines are part of a complete selection 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 the MUELLER selection helps everything go together easily for strong, leak-tight installations. MUELLER methods and equipment let you work on pressurized water mains without interrupting flow.

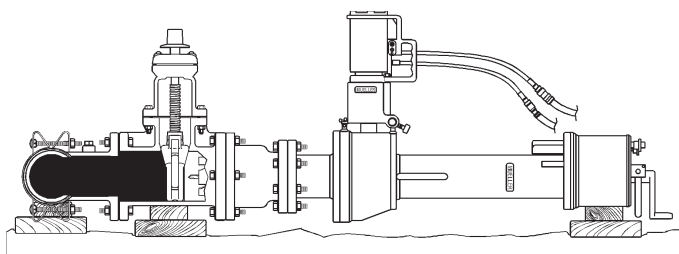
The MUELLER method for making a lateral connection (MUELLER® CL-12™ Drilling Machine shown)



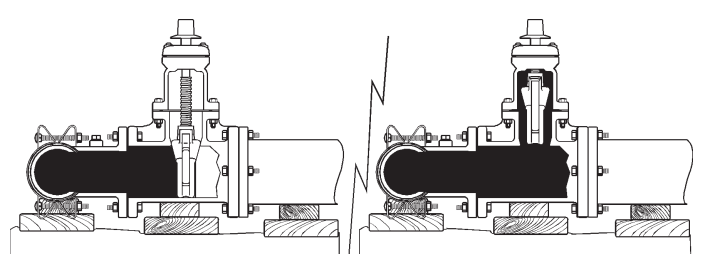
- 1** The tapping sleeve and valve are first attached to the main and tested. Then the drilling machine, with a shell cutter attached to the boring bar, is attached to the tapping valve using an adapter. The assembly should be pressure tested prior to making the cut.



- 2** With the tapping valve open, the shell cutter and boring bar are advanced to cut the main.



- 3** The boring bar is retracted and the tapping valve closed to contain the water pressure.



- 4** With the machine removed, the lateral is connected and the tapping valve opened to pressurize the lateral and place it in service.

Large drilling machine selection guide

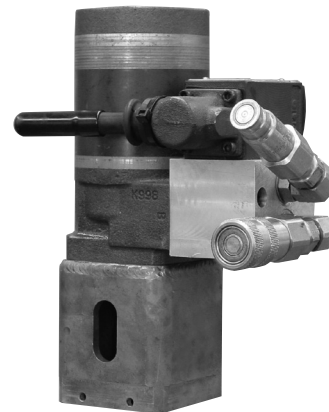
Machine	Tapping valve size range	Maximum pressure	Operation	Recommended uses
CL-12™	2"-12"	250 psig (1724 kPa)	Hand or Power	For making lateral connections or inserting valves under pressure
C-1-36-99002	2"-24"	500 psig (3447 kPa)	Hand or Power	
Mega-Lite™	3"-12"	250 psig (1724 kPa)	Hand or Power	

H-605 AIR POWER OPERATOR

- ☐ Catalog number H-605
- ☐ Attaches directly to Mega-Lite Machine
- ☐ 52 RPM maximum free speed
- ☐ Required air pressure - 90 psig
- ☐ Air consumption at maximum power - 36 scfm
- ☐ Stall torque 254 ft-lbs
- ☐ Operator weight is 15 lbs
- ☐ Shipped in a wooden storage chest

**H-705 HYDRAULIC POWER OPERATOR**

- ☐ Catalog number H-705
- ☐ Attaches directly to Mega-Lite Machine
- ☐ Flow range: 3-5 GPM
- ☐ 51 RPM at 4 GPM
- ☐ Maximum continuous operating pressure 850 psig
- ☐ Maximum intermittent pressure 1950 psig
- ☐ Operator weight is 30 lbs
- ☐ Shipped in a wooden storage chest



POWER OPERATORS (AIR & HYDRAULIC) FOR CL-12™ AND C1-36-99002 DRILLING MACHINES

Mueller Co.

3.23

Rev. 1-09

H-614 AIR POWER OPERATOR

- ❑ Catalog number H-614
- ❑ Attaches directly to CL-12 machine
- ❑ Attaches to C1-36-99002 machine using optional adapter 580815
- ❑ Non-reversible air motor
- ❑ 82 RPM maximum free speed; 51 RPM minimum speed under full load
- ❑ Air supply: 90 cubic feet of free air per minute at 90 psig (full load)
- ❑ Total shipping weight 65 lbs. (26 kg)
- ❑ Machine only weight 28 lbs. (13 kg)
- ❑ Shipped in a wooden storage chest

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.

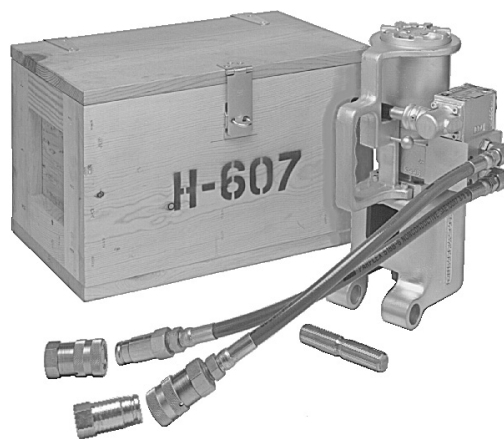
Note: The H-600 and H-601 air power operators are no longer available but may still be repairable; contact your local Mueller representative for details on our repair program.



**Optional adapter
580815**

H-607 HYDRAULIC POWER OPERATOR

- ❑ Catalog number H-607
- ❑ Attaches directly to CL-12 machine
- ❑ Attaches to C1-36-99002 machine using optional adapter 580815
- ❑ 61 RPM at 8 GPM
- ❑ Flow range: 7 - 9 GPM / 26-34 lpm
- ❑ 1500 psig/105 bar maximum working pressure at up to 397 ft/lbs of torque
- ❑ Open center system type
- ❑ Operator only weight 31 lbs. (14 kg)
- ❑ Flush-faced hydraulic fittings keep lines contamination-free
- ❑ 15" (approximate) non-conductive hoses
- ❑ Integral carrying handle
- ❑ Shipped in a wooden storage chest

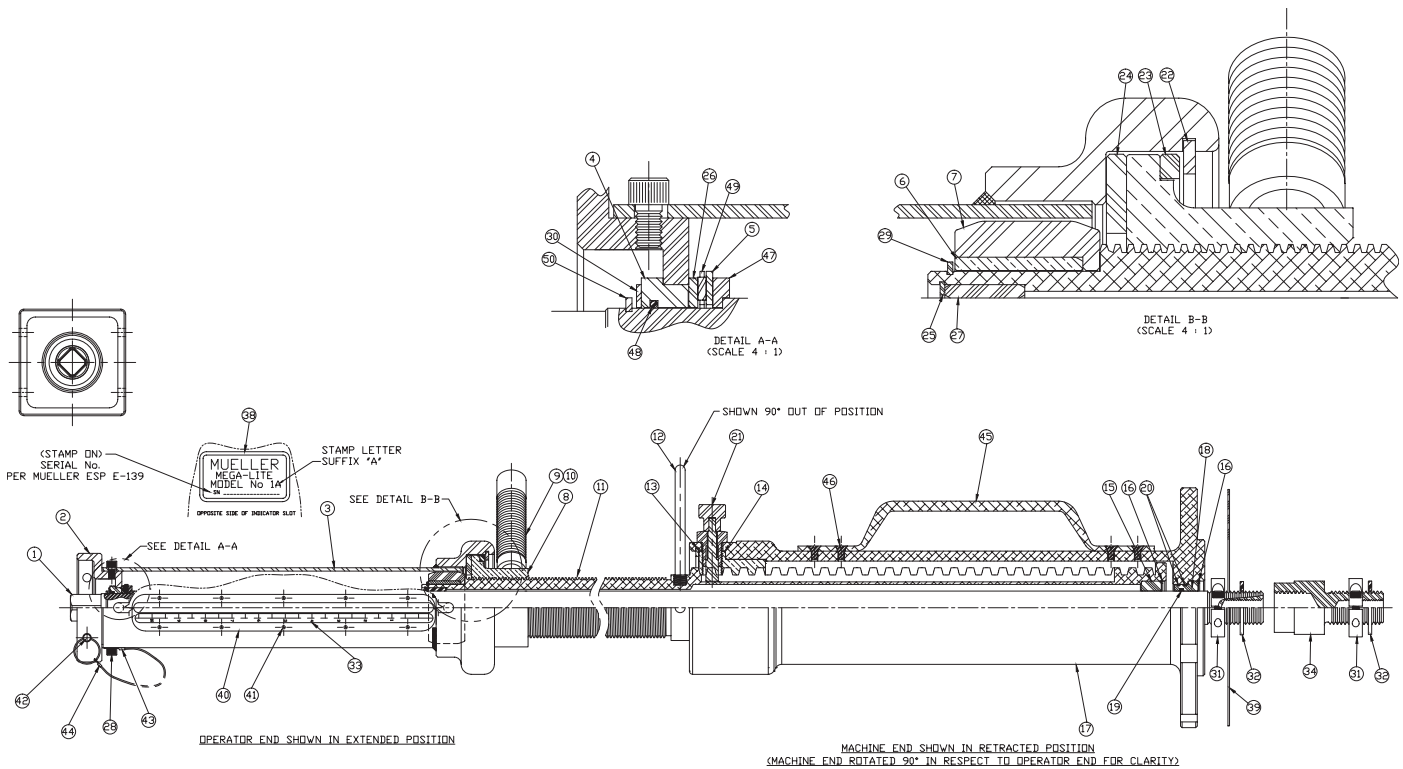


H-607 hydraulic power operator



**Optional adapter
580815**

Note: The redesigned H-607 replaces the old H-607 and H-608 models.



Item No.	Qty.	Part Number	Part Name	Item No.	Qty.	Part Number	Part Name
1	1	537000	Boring Bar	26	1	537368	Upper Thrust Washer
2	1	537001	Operator Adapter Plate	27	1	537029	Body Top Bearing
3	1	682570	Square Feed Connector Sub Assy	28	4	301123	Hex Socket Head Cap Screw
4	1	312690	Adapter Plate Bushing	29	1	537032	Square Bearing Retaining Ring
5	1	312862	Bearing Washer	30	1	537367	Retaining Ring Washer
6	1	537006	Inner Square	31	2	537034	Collar
7	1	537007	Square Plastic Bearing	32	2	537035	Washer
8	1	537092	Feeding Nut	33	1	537036	Ruler Strip
9	4	537009	Feeding Nut Handle	34	1	537043	Boring Bar Extension
10	4	537010	Grip	35	8	54804	Bolt with Heavy Nut
11	1	537011	Machine Body	36	16	55409	Washer
12	2	537083	Fast Feed Handle	37	1	537079	Tee Handle Hex Wrench
13	1	537013	Threaded Insert Retaining Ring	38	1	312130	Nameplate
14	1	537093	Threaded Insert	39	1	55449	Gasket
15	1	537015	Body Bottom Bearing	40	1	537084	Cover
16	2	537016	Body Bearing Retaining Ring	41	10	37806	Machine Screw
17	1	537018	Flanged Cylinder	42	2	537085	Lock Pin
18	1	537020	Pressure Bearing	43	2	537091	Ring Terminal
19	2	503218	O-Ring (124)	44	2	537086	Lanyard
20	2	537022	O-Ring (030)	45	1	537087	Handle
21	1	682639	Stop Bolt Assembly	46	4	52220	Machine Screw
22	1	537024	Feed Nut Retaining Ring	47	1	537369	Lower Thrust Washer
23	1	537025	Feed Nut Lower Bearing Washer	48	1	307365	O-ring
24	1	537026	Feed Nut Upper Bearing Washer	49	1	312692	Bearing
25	1	537027	Body Top Bearing Ret. Ring	50	1	312689	Retaining Ring

MUELLER® MEGA-LITE DRILLING MACHINE SHELL CUTTERS, DRILLS AND ADAPTERS

Mueller Co.

3.21

Rev. 9-09

Shell cutters and drills

Material of pipe to be cut	Tool	Size of valve or fitting					
		3"	4"	6"	8"	10"	12"
		Drill or shell cutter size					
		2-1/2"	3-1/2"	5-1/2"	7-1/2"	9-1/2"	11-1/2"
Cast iron, ductile iron, cement-lined cast iron, cement-lined ductile iron, A-C, concrete, steel	Shell cutter* & hub	537071	537072	537073	537074	537075	537076
	Pilot Drill Assembly†	682573	682573	682573	682573	682573	682573
	Pilot Drill Extensions	-	-	-	537044	537045	537046
PVC/PEP	Shell cutter** & hub	-	537052	537053	682574	682575	682576
	Pilot Drill Assembly	-	681919	681919	681919	681919	681919
	Pilot Drill Extensions	-	537047	537048	537048	537049	537049

*Mounts directly to boring bar

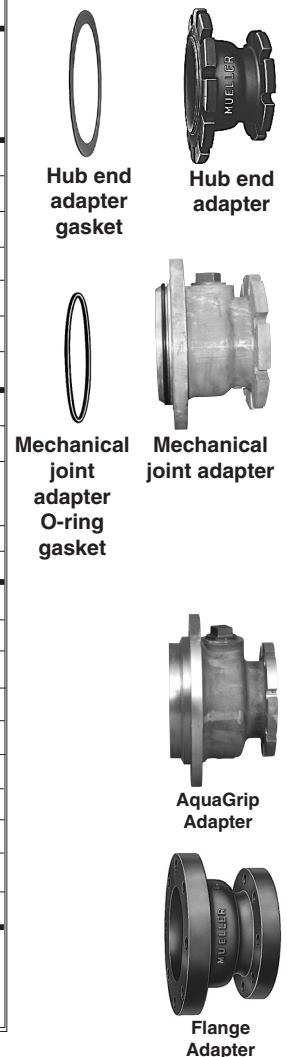
**Mounts directly to boring bar. Designed to cut up to DR9 PEP. Wall thickness 1.125 Max.

†Replaceable high speed tool steel drill tip - 537019.



MUELLER® Mega-Lite Drilling Machine adapters

Tapping valve information	*Max. working pressure	Adapter part		Size of tapping valve					
				3"	4"	6"	8"	10"	12"
Valve end connection									
A-C or hub	200 psig @ 100F	Adapter complete		83361	83362	83363	83364	83365	83366
		Adapter only		54560	54527	54515	54537	54658	54548
		Adapter gasket		59772	59773	59774	59775	54677	54686
		Adapter bolts & nuts	Part no.	56682	56682	54162	54162	94407	94407
			Quantity	6	6	6	6	8	10
		Washers	Part no.	58321	58321	92576	92576	98919	98919
			Quantity	12	12	12	12	16	20
Mechanical Joint** Mfg. Aluminum	200 psig @ 100F	Adapter complete		83367†	682589	682590	682591	682592	682593
		"O"-Ring adapter gasket		307925	307926	307927	307928	307929	307930
		Adapter bolts and nuts	Part no.	054804	Bolts and nuts are furnished with each mechanical joint tapping valve in these sizes				
			Quantity	8					
		Washers	Part no.	55409	55409	55409	55409	55409	55409
AquaGrip**		Adapter complete		-	682352	682353	682354	682383	682384
		Adapter only		-	528224	528225	528226	528320	528313
		Adapter Bolts	Part	-	194541	194541	194541	194541	194541
			Quantity	-	4	4	6	8	8
		Adapter Nuts	Part	-	195237	195237	195237	195237	195237
			Quantity	-	4	4	6	8	8
		Washer	Part	-	092576	092576	092576	092576	092576
			Quantity	-	4	4	6	8	8
		Plug	Part	-	36950	36950	36950	36950	36950
Adapters for flanged gate valves and standard flange fittings having ANSI 125/150 pound inlet flange	230 psig @ 100 F	Adapter only		89433	89434	89435	89436	89437	89438



* This is the maximum working pressure of the adapter at 100F (38C). This working pressure must be reduced accordingly if any attachment, valve, fitting or machine subjected to pressure during the use of this adapter, has a maximum working pressure less than that specified above.

**Aluminum with 2" Chip Flushing Boss.

†3" is Cast Iron.



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

Rev. 9-09

MUELLER Mega-Lite Drilling Machine -

- ☐ Catalog Number Mega-Lite (part # C39550)
- ☐ Power Operation
- ☐ Used to cut 1-1/2" to 11-1/2" holes
- ☐ 25" (635mm) boring bar travel
- ☐ Use on plain or cement lined ductile or cast iron, A/C, steel, PVC or HDPE pipe
- ☐ Will make cuts through tapping valves from 3" to 12"
- ☐ O-ring sealed boring bar - line pressure does not enter case
- ☐ Travel distance scale
- ☐ 250 psig (1724 kPa) maximum working pressure
- ☐ 125F (51C) maximum working temperature

Equipment furnished with each MUELLER Mega-Lite Drilling Machine

- ☐ Wooden storage chest (not shown)
- ☐ Allen Head Wrench
- ☐ Pilot Drills
- ☐ Pilot Drill Extensions
- ☐ Adapter bolts and nuts
- ☐ Cutting grease #88366
- ☐ Instruction manual (Form # 12360)

Equipment to be selected

- ☐ Shell cutters, drills, pilot drills, arbors, and hubs - page 3.22
- ☐ Machine adapters - page 3.22
- ☐ Power operators - page 3.24



	Mega-Lite™
Total shipping weight	162 lbs. (75 kg)
Machine only weight	65 lbs. (30 kg)

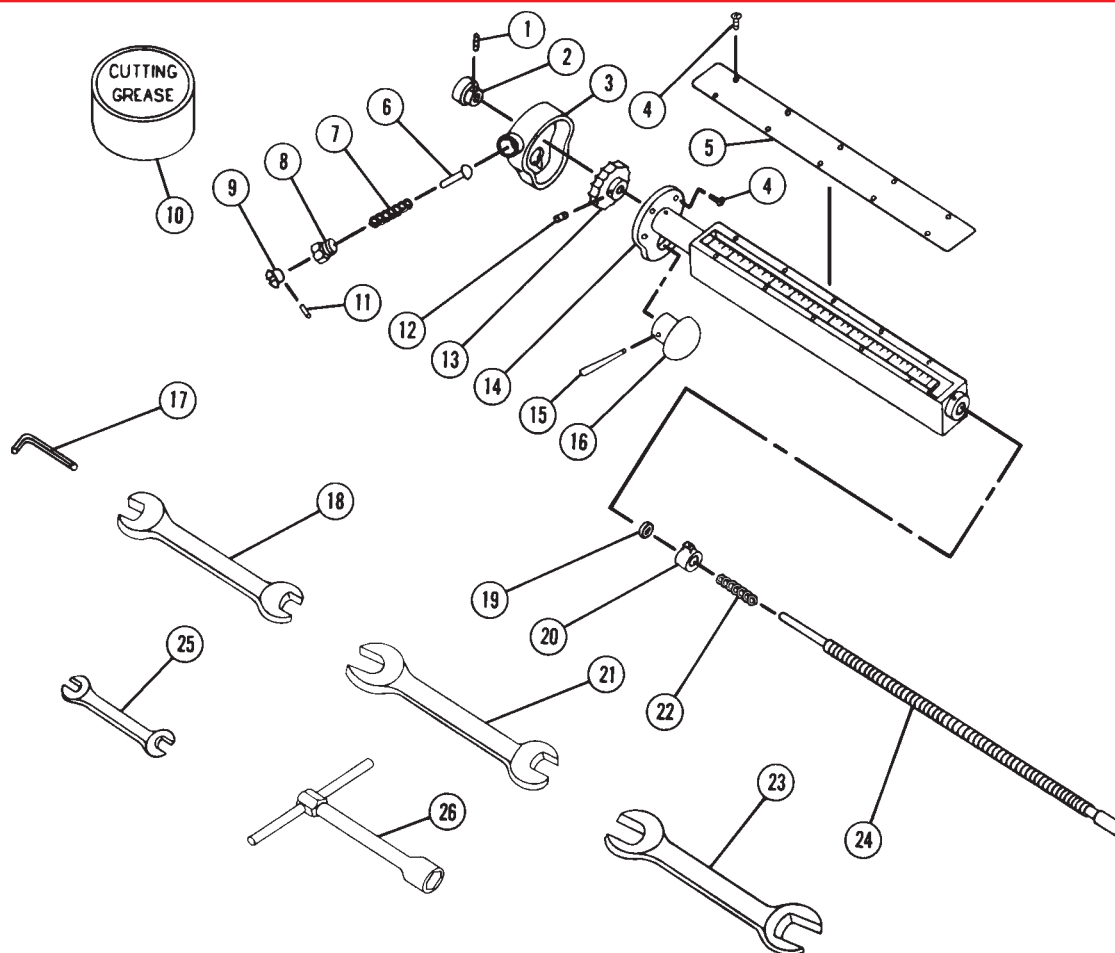
MUELLER® CC-25™ DRILLING MACHINE*

REPAIR PARTS

Mueller Co.

3.19

Rev. 4-01

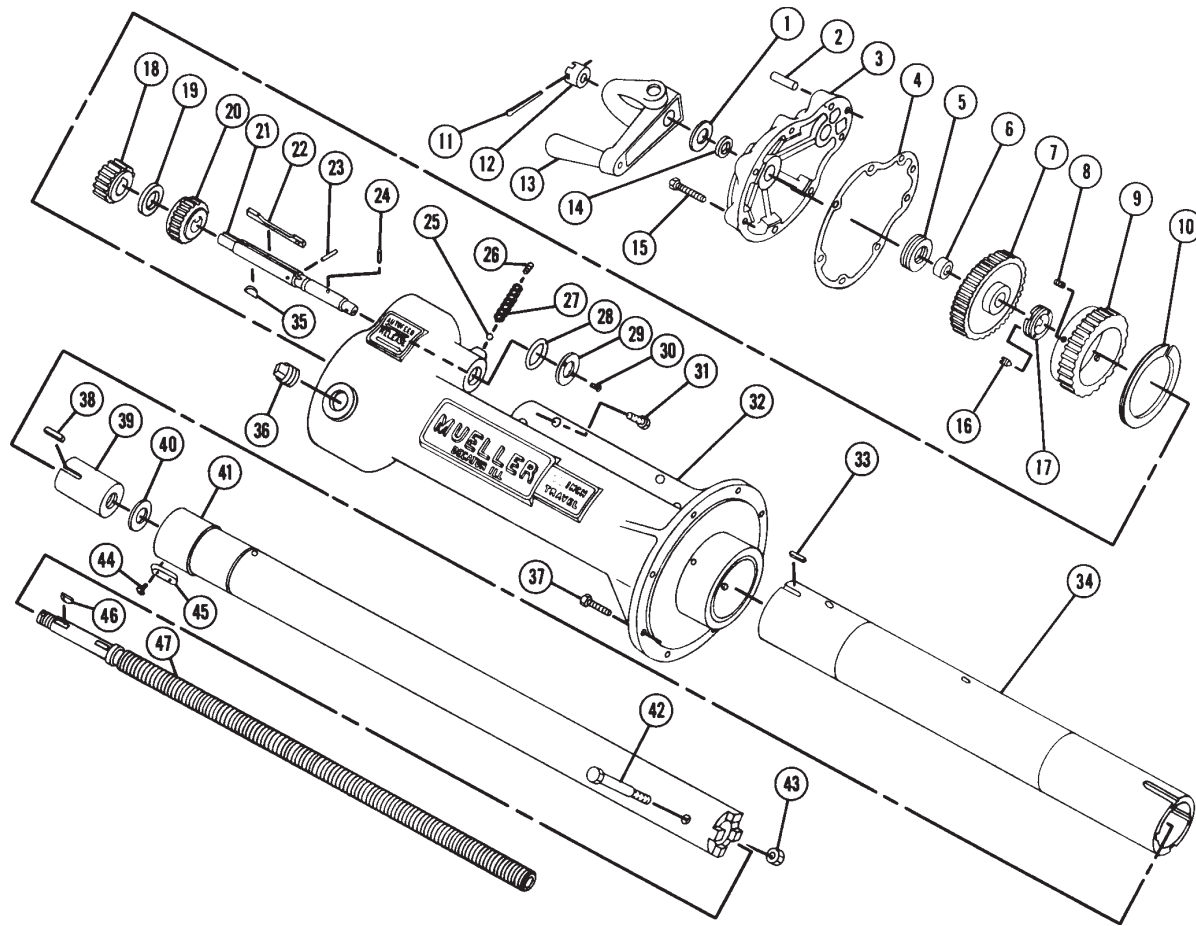


NOTE: These illustrations are for parts identification only. DO NOT use these illustrations for assembly or disassembly of machine. MUELLER CO. offers a machine repair service. Contact MUELLER® Customer Service Center for details.

***THE "CC-25" MACHINE IS NO LONGER AVAILABLE; UNTIL FURTHER NOTICE, MUELLER WILL CONTINUE TO PROVIDE SPARE PARTS FOR THIS PRODUCT. CONTACT YOUR MUELLER REPRESENTATIVE ABOUT OTHER MACHINES THAT PERFORM WITHIN THE SPECIFICATIONS OF THIS MACHINE.**

Item No.	Part Number	Part Name	Item No.	Part Number	Part Name	Item No.	Part Number	Part Name
1	99023	Set screw	10	88366	Cutting grease	19	54549	Washer
2	54551	Knob	11	56392	Pin	20	54519	Indicator nut
3	54446	Cover plate	12	97763	Set screw	21	58196	Wrench
4	37804	Screw	13	54523	Wheel	22	33083	Spring
5	33084	Shield	14	54516	Indicator body	23	55726	Wrench
6	36361	Plunger	15	53747	Knob pin	24	54517	Indicator screw
7	36362	Spring	16	54454	Knob	25	96536	Wrench
8	36360	Body	17	90322	Allen wrench	26	59839	Socket wrench
9	36359	Detent knob	18	56680	Wrench			

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



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Item No.	Part Number	Part Name	Item No.	Part Number	Part Name	Item No.	Part Number	Part Name
1	33090	Thrust washer	17	54433	Lock nut	33	54466	Key
2	54545	Dowel	18	55446	Idler pinion	34	55561	Drive tube
3	508433	Rear cover	19	54471	Spacer	35	300190	Key
4	33080	Gasket	20	55432	Idler pinion driven	36	64134	Plug
5	55569	Thrust bearing	21	54470	Idler shaft	37	55098	Cap screw
6	54630	Washer	22	54469	Dive key	38	54445	Key
7	55567	Feed screw gear	23	63477	Pin	39	55546	Feed nut
8	98873	Set screw	24	54538	Pin	40	54418	Washer
9	55564	Drive tube feed gear	25	54702	Ball	41	89094	Boring bar
10	54425	Thrust washer	26	99022	Set screw	42	311866	Bolt
11	98928	Pin	27	55610	Spring	43	58849	Nut
12	55601	Nut	28	508434	Oil seal	44	52182	Screw
13	88150	Crank	29	508435	Oil seal retainer	45	54482	Key
14	508432	Rear cover seal	30	95257	Screw	46	98225	Key
15	504333	Screw	31	92375	Screw	47	55565	Feed screw
16	98956	Set screw	32	88199	Torque tube			

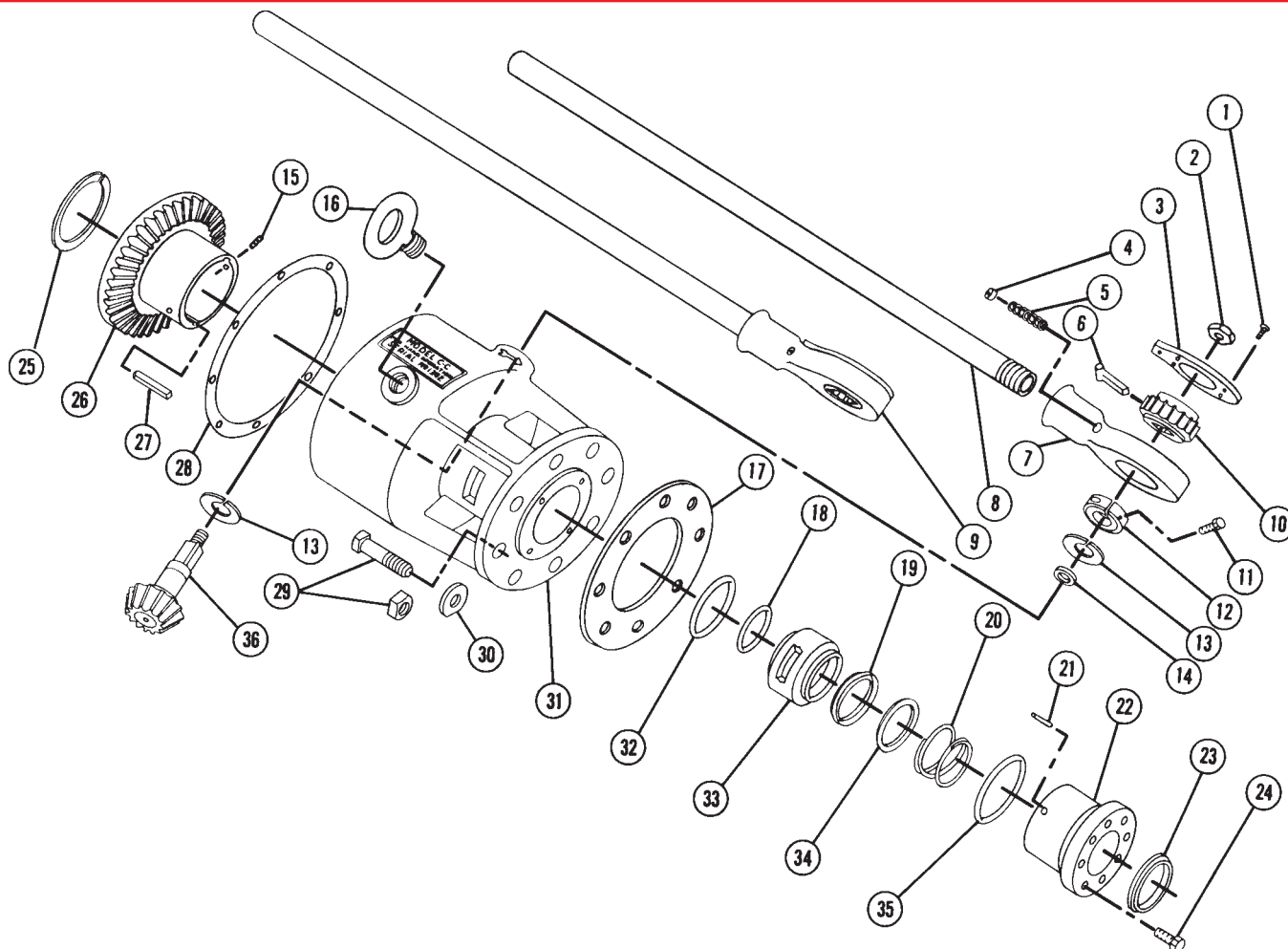
**TO ORDER SPECIFY QUANTITY, PART NUMBER AND PART NAME
(include catalog number and model number of machine).**

MUELLER® CC-25™ DRILLING* MACHINE REPAIR PARTS

Mueller Co.

3.17

Rev. 4-01

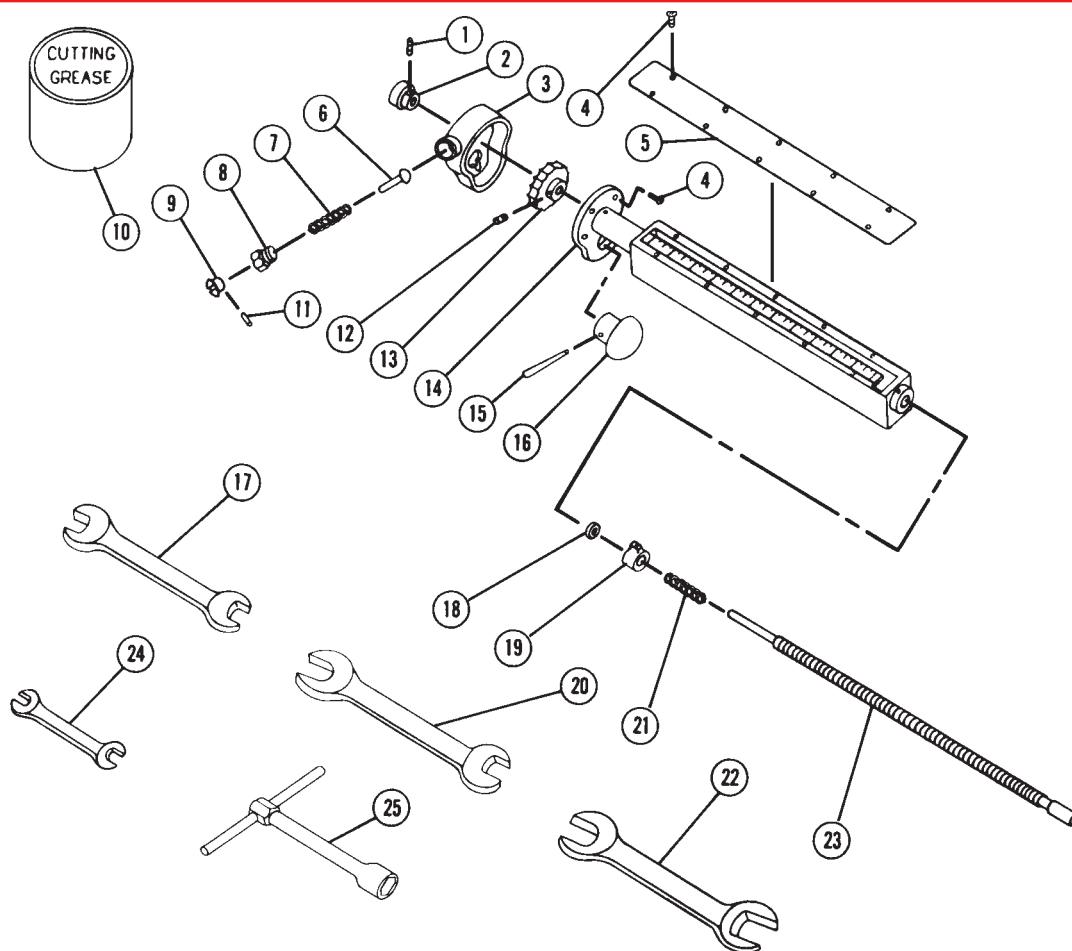


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***THE "CC-25" MACHINE IS NO LONGER AVAILABLE; UNTIL FURTHER NOTICE, MUELLER WILL CONTINUE TO PROVIDE SPARE PARTS FOR THIS PRODUCT. CONTACT YOUR MUELLER REPRESENTATIVE ABOUT OTHER MACHINES THAT PERFORM WITHIN THE SPECIFICATIONS OF THIS MACHINE.**

Item No.	Part Number	Part Name	Item No.	Part Number	Part Name	Item No.	Part Number	Part Name
1	52207	Screw	13	63842	Thrust washer	25	54426	Thrust washer
2	46029	Nut	14	508431	Oil seal	26	63844	Bevel gear
3	63851	Plate	15	90472	Set screw	27	54467	Key
4	56039	Spring screw	16	63846	Eyebolt plug	28	55609	Gasket
5	56774	Spring	17	55449	Gasket	29	56682	Bolt & nut
6	581959	Dog	18	508430	Boring bar seal	30	55409	Washer
7	57655	Body	19	45115	Packing ring	31	508428	Drive box
8	56632	Handle bar	20	98000	Spring	32	508429	Drive box seal
9	88148	Handle complete	21	47092	Rollpin	33	508427	Seal retainer & spacer
10	55790	Wheel	22	501151	Packing gland	34	44245	Convex follower
11	92754	Allen screw	23	501158	Wiper ring	35	52162	Gland seal
12	63848	Collar	24	55098	Cap screw	36	63845	Bevel pinion

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



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.

Item No.	Part Number	Part Name	Item No.	Part Number	Part Name	Item No.	Part Number	Part Name
1	99023	Knob set screw	10	88366	Cutting grease	19	501073	Indicator nut
2	54551	Indicator knob	11	56392	Pin	20	58196	Wrench
3	54446	Cover plate	12	97763	Wheel set screw	21	33083	Spring
4	37804	Screws (14)	13	54523	Wheel	22	55726	Wrench
5	33084	Indicator shield	14	54516	Indicator body	23	501077	Indicator screw
6	36361	Plunger	15	53747	Crank rollpin	24	96536	Wrench
7	36362	Spring	16	54454	Knob	25	59839	Socket wrench
8	36360	Body	17	56680	Wrench			
9	36359	Detent knob	18	54549	Thrust washer			

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

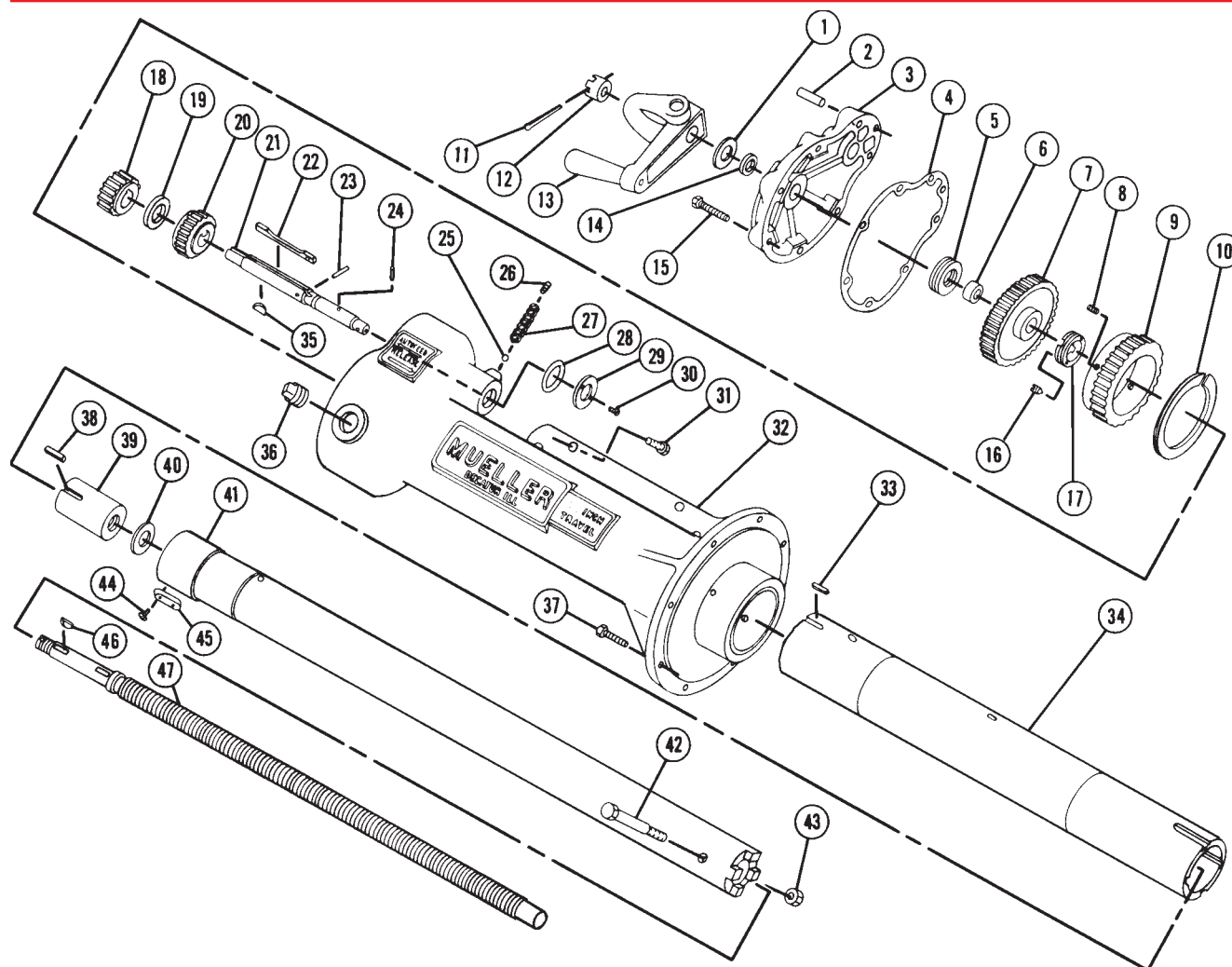
MUELLER® C1-36-99002

DRILLING MACHINE REPAIR PARTS

Mueller Co.

3.15

Rev. 4-01

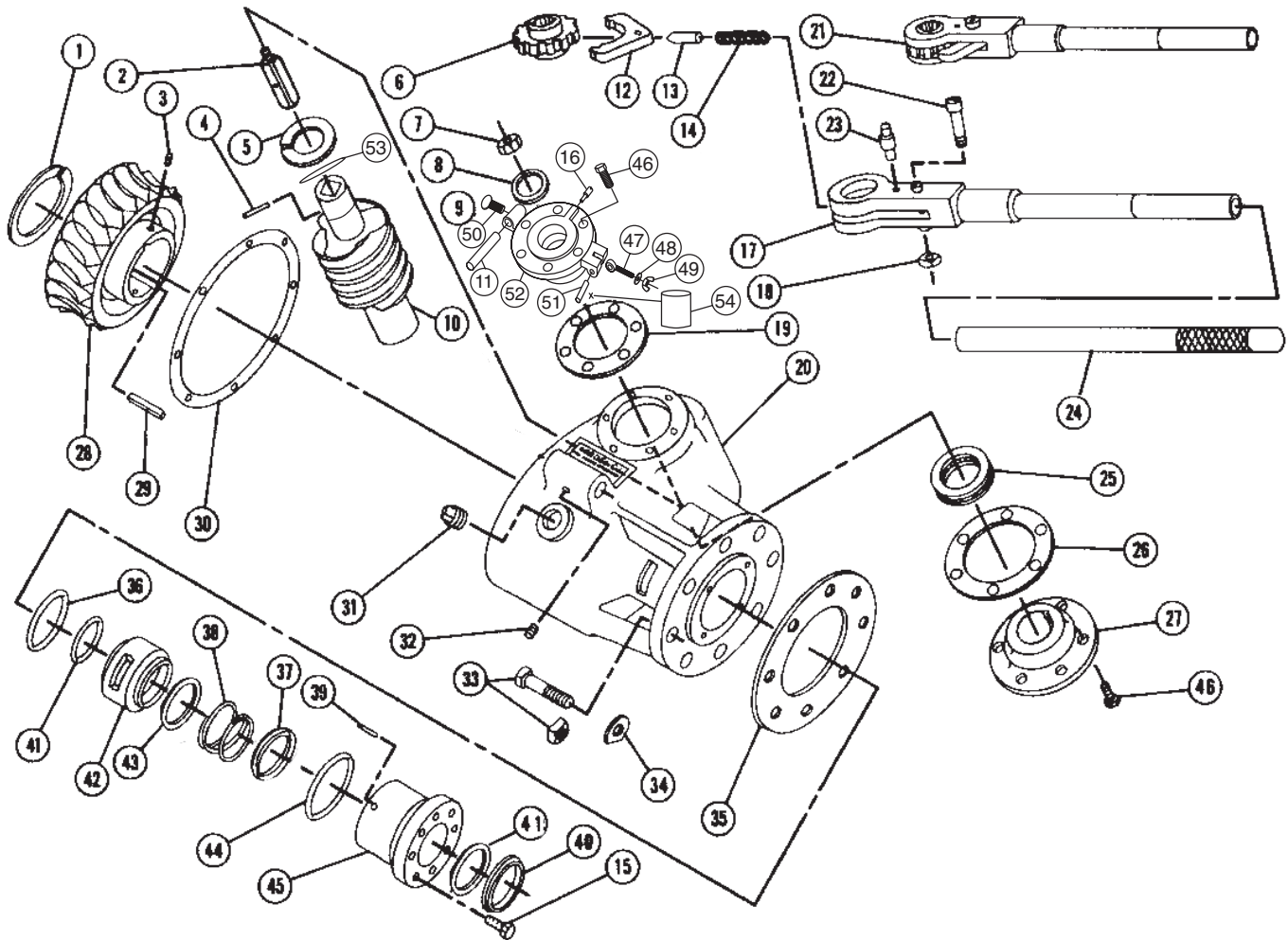


NOTE: These illustrations are for parts identification only. DO NOT use these illustrations for assembly or disassembly of machine. MUELLER CO. offers a machine repair service. Contact MUELLER® Customer Service Center for details.

Item No.	Part Number	Part Name	Item No.	Part Number	Part Name	Item No.	Part Number	Part Name
1	508438	Thrust washer	17	54433	Lock nut	33	54466	Feed gear key
2	54545	Dowel pin	18	501074	Idler pinion	34	33923	Drive tube
3	508433	Rear cover	19	54471	Idler spacer	35	300190	Key
4	33080	Rear cover gasket	20	55432	Idler pinion driver	36	64134	Plug
5	55569	Thrust bearing	21	54470	Idler shaft	37	55098	Cap screw
6	54630	Bushing	22	54469	Drive key	38	54445	Feed nut keys (2)
7	55567	Feed screw gear	23	63477	Drive key pin	39	33404	Feed nut
8	98873	Set screws (2)	24	54538	Indicator drive pin	40	54418	Feed nut washer
9	55564	Drive tube feed gear	25	54702	Ball detent	41	88331	Boring bar assembly
10	54425	Feed gear thrust washer	26	99022	Set screw	42	311866	Bolt
11	98928	Cotter pin	27	55610	Detent spring	43	58849	Nut
12	55601	Feed screw nut	28	508434	Idler oil seal	44	52182	Screws (4)
13	88150	Crank & hoisting yoke	29	508435	Oil seal retainer	45	54482	Keys (2)
14	311332	Oil seal O-ring	30	95257	Screws (2)	46	98225	Keys (2)
15	504333	Screw	31	92375	Screws (4)	47	43964	Feed screw
16	98956	Set screws (2)	32	88481	Torque tube assembly (w/ bushings)		89346	Lubricant

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

Rev. 8-04 Shaded area indicates change



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.

Item No.	Part Number	Part Name	Item No.	Part Number	Part Name	Item No.	Part Number	Part Name
1	54426	Thrust washer	17	80111	Handle	35	55449	Gasket
2	507160	Drive shaft	18	46255	Nut	36	508429	O-ring
3	90472	Set screw	19	55467	Top bearing gasket	37	44245	Convex follower
4	507162	Rollpin	20	526512	Drive box	38	98000	Spring
5	54472	Thrust washer	21	85308	Ratchet complete	39	47092	Rollpin (2)
6	40137	Ratchet wheel	22	40138	Bolt	40	501158	Wiper ring
7	94825	Nut	23	40139	Stud	41	508430	O-ring (2)
8	78827	O-ring	24	86391	Handle extension	42	508427	Spacer
9	580815	Top bearing complete (includes: 8, 11, 16, 46, 47, 48, 49, 50, 51, 52)	25	55541	Ball bearing	43	45115	Packing ring (4)
10	507161	Worm	26	55478	Bottom bearing gasket	44	52162	Gland seal o-ring
11	54488	Pivot	27	54443	Bottom bearing	45	501151	Packing gland
12	40004	Ratchet dog	28	55563	Worm gear	46	55098	Socket head cap screw (6)
13	40006	Spring pin	29	54467	Key	47	52389	Eyebolt
14	40007	Spring	30	55609	Gasket	48	54012	Washer
15	55098	Hex cap screw (4)	31	64134	Plug	49	94341	Wing Nut
16	72484	Latch	32	98957	Set screw	50	91665	Thumb Screw
			33	56682	Bolt and nut (8)	51	48131	Roll Pin
			34	55409	Washer (8)	52	502707	Bearing

* Order both parts when replacing either one.

MUELLER® C1-36-99002 SHELL CUTTERS, DRILLS & DRILLING MACHINE ADAPTERS

Mueller Co.

3.13

Rev. 9-09

Shell cutters to install gate valves or standard fittings on steel pipe

Material of pipe to be cut	Equipment	Size of valve or fitting											
		2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
Size of shell cutter or drill		1-1/2"	2-1/2"	3-1/2"	5-1/2"	7-1/2"	9-1/2"	10-13/16"	12"	14-1/2"	17-1/2"	18-1/2"	18-1/2"
Steel	Shell cutter	-	33518	33519	36004	33999	33244	33243	80549**	83911*	89883	83915*	83915*
	Cutter hub	-	88338	88340	63978	33996	33250	33107	54491	83909	581577	83917	83917
	Pilot drill	-	33976	33976	36005	64244	36338	36338	74871	83910	83916	83916	83916
	Drill	88341	-	-	-	-	-	-	-	-	-	-	-

MUELLER C1-36-99002 Drilling Machine adapter

Adapters are required to permit the C1-36-99002 drilling machine to be attached to tapping valves, gate valves and standard flanged fittings.



Tapping Valve Information		Maximum Working Pressure†	Adapter Part	Size of valve or fitting												
Valve end connection	Valve catalog no.			2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	
A-C or hub	H-637, H-643, H-645, H-660, H-662, H-663, H-681, H-698	200 psig @ 100F	Adapter complete		-	83361	83362	83363	83364	83365	83366	-	-	-	-	-
			Adapter only		-	54560	54527	54515	54537	54658	54548	580521	83908	580479	89114	-
			Adapter gasket		-	59772	59773	59774	59775	54677	54686	501716	501065	505025	501091	-
			Adapter bolts & nuts	Part no.	-	56682	56682	54162	54162	94407	94407	90222	53987	90223	90223	-
				Quantity	-	6	6	6	6	8	10	12	14	14	14	-
			Washer	Part no.	-	58321	58321	92576	92576	98919	98919	98919	92576	98919	98919	-
				Quantity	-	12	12	12	12	16	20	24	28	28	28	-
Mechanical Joint	H-665, H-667, H-668, H-687, H-699, T-2360	200 psig @ 100F	Adapter complete		83432	83367	83368	83369	83370	83371	83372	-	-	-	-	-
			Adapter only		52161	46269	46268	46267	46266	46265	46264	580521	83907	580479	83919	580762
			O-ring Adapter gasket		307923	307925	307926	307927	307928	307929	307930	501716	501064	505004	501092	502539
			Adapter bolts & nuts††	Part no.	503708	Bolts and nuts are furnished with each mechanical joint tapping valve in these sizes										
				Quantity	2											
Mechanical Joint Mfg. Aluminum		-	Adapter only		-	-	537038	537040	537041	537050	537051	-	-	-	-	-
AquaGrip Aluminum		-	Adapter complete♦		-	-	682352	682353	682354	682383	682384	-	-	-	-	-
			Adapter only♦		-	-	528224	528225	528226	528320	528313	-	-	-	-	-
			Adapter bolts	Part no.	-	-	194541	194541	194541	194541	-	-	-	-	-	-
				Quantity	-	-	4	4	6	8	8	-	-	-	-	-
			Adapter nuts	Part no.	-	-	195237	195237	195237	195237	-	-	-	-	-	-
				Quantity	-	-	4	4	6	8	8	-	-	-	-	-
			Washers	Part no.	-	-	092576	092576	092576	092576	-	-	-	-	-	-
				Quantity	-	-	4	4	6	8	8	-	-	-	-	-
			Plug	Part no.	-	-	36950	36950	36950	36950	-	-	-	-	-	-
Quantity	-	-		4	4	6	8	8	-	-	-	-	-			
Adapters for flanged gate valves and standard flange fittings having ANSI 125/150 pound inlet flange		230 psig @ 100F	Adapter only		89432	89433	89434	89435	89436	89437	89438	681577	89267	682031	89114	-

*Tungsten carbide tipped tool.

**High speed steel tipped - DO NOT use on cement lined pipe, A-C pipe or concrete pipe.

† This is the maximum working pressure of the adapter at 100F (38C). This working pressure must be reduced accordingly if any attachment, valve, fitting or machine subjected to pressure during the use of this adapter, has a maximum working pressure less than that specified above.

†† Two of the four bolts and nuts needed to attach the adapter to the tapping valve are supplied with the adapter when ordered complete, or can be ordered separately.

♦NOTE: These Adapters use the intermediate ring and O-ring from the valve to create a seal between the adapter and the valve end. The AquaGrip adapter comes tapped with a 2" IP thread and plug so a chip flushing valve can be utilized during the cut (valve not provided.)



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

MUELLER C1-36-99002 Drilling Machine tools

The MUELLER C1-36-99002 Drilling Machine equipment shown below is used to make lateral connections to mains by cutting through tapping sleeves and valves, gate valves and standard fittings.

**Pilot
drill****Shell****Cutter****Drill****Shell cutters and drills to install tapping sleeves and valves**

Material of pipe to be cut	Equipment	Size of valve or fitting														
		2"		2-1/4"	3"		4"		6"		8"		10"		12"	
Size of shell cutter or drill		1-1/2"	2"	2-1/4"	2-1/2"	3"	3-1/2"	4"	5-1/2"	6"	7-1/2"	8"	9-1/2"	10"	10-13/16"	12"
Cast or ductile iron pipe	Shell cutter	-	-	-	51899	55693	51903	50816	63787	55266	51897	52754	-	80547	80548**	80549
	Cutter hub	-	-	-	88338	88101	88340	54526	63978	54501	33996	54653	-	54661	33107	54491
	Pilot drill	-	-	-	33976	33976	33976	59844	59845	59845	64245	64245	-	74871	74871	74871
	Drill	88341	88346	88342	-	-	-	-	-	-	-	-	-	-	-	-
Size of shell cutter or drill		-	-	-	-	-	3-1/2"	4"	5-1/2"	6"	7-1/2"	8"	9-1/2"	10"	11-1/2"	12"
Cement-lined cast or ductile iron, A-C and concrete pipe	Shell cutter†	-	-	-	-	-	83203*	83114	83134*	80545	83135*	80546	83140*	80547	83141*	80549
	Cutter hub	-	-	-	-	-	83202	54526	63740	54501	63739	54653	64240	54661	33107	54491
	Pilot drill	-	-	-	-	-	83201*	59844	83056*	74869	83056*	64245	83137*	74871	83139	74871
Size of shell cutter or drill		-	-	-	-	-	3-1/2"	4"	5-1/2"	6"	7-1/2"	8"	9-1/2"	10"	11-1/2"	12"
Cement-lined cast or ductile iron, A-C and concrete pipe	Equipment Kit	-	-	-	-	-	682324		682325		682326		682327		682328	
	Shell cutter***	-	-	-	-	-	83203		83134		83135		83140		83141	
	Cutter Hub***	-	-	-	-	-	83202		63740		63739		64240		33107	
	Pilot drill***	-	-	-	-	-	83201		83056		83056		83137		83139	
	MJ Valve Adapter***	-	-	-	-	-	83368		83369		83370		83371		83372	
Shell cutter OD††		-	-	-	-	-	3.3"		5.0"		6.6"		8.3"		10.0"	
PVC/PEP	Shell cutter	-	-	-	-	-	537061		537062		682581		682583		682585	
	Pilot shell cutter	-	-	-	-	-	681919		681919		681919		681919		681919	
	Pilot Drill Extension	-	-	-	-	-	537068		537069		537069		537070		537070	
	Pilot Drill Holder	-	-	-	-	-	537082		537082		537082		537082		537082	
	Cutter Hub	-	-	-	-	-	83202		83202		83202		83202		83202	

Shell cutters to install tapping sleeves and valves

Material of pipe to be cut	Equipment	Size of valve or fitting				
		14"	16"	18"	20"	24"
Size of shell cutter or drill		12"	14-1/2"	17-1/2"	18-1/2"	18-1/2"
Cast or ductile iron pipe	Shell cutter	80549**	83911*	89883*	83915*	83915*
	Cutter hub	54491	83909	581577	83917	83917
	Pilot drill	74871	83910	83916	83916	83916
Size of shell cutter or drill		-	14-1/2"	17-1/2"	18-1/2"	18-1/2"
Cement-lined cast or ductile iron, A-C and concrete pipe	Shell cutter†	-	83911*	89883*	83915*	83915*
	Cutter hub	-	83909	581577	83917	83917
	Pilot drill	-	83910	83916	83916	83916

*Tungsten carbide tipped tool.

**High speed steel tipped - DO NOT use on cement lined pipe, A-C pipe or concrete pipe.

***Included in the Equipment Kit

†The outside diameter of these shell cutters is 1/2" less than the nominal size of the valve or fitting. This greatly reduces the wear on the outside edge of these cutters when making a lateral connection the same size as the main to be cut. It also reduces travel required to make a cut.

††Shell cutters for use on plastic pipe only.

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® C1-36-99002 DRILLING MACHINE

Mueller Co.

3.11

Rev. 9-09

MUELLER® C1-36-99002 Drilling Machine - for drilling operations under pressure - 1-1/2" to 18-1/2" inclusive

- ☐ Catalog number C1-36-99002 (part number 39262)
- ☐ Hand or power operation
- ☐ Designed for use on pressurized or dry mains
- ☐ Used to cut 1-1/2" to 18-1/2" holes
- ☐ 36" (914 mm) boring bar travel
- ☐ Use on cast iron or ductile iron pipe • cement lined cast iron or ductile iron pipe • A-C pipe • concrete pipe • steel pipe
- ☐ Will make cuts through tapping valves from 2" to 24"
- ☐ Feed over-travel feature prevents damage to equipment
- ☐ 500 psig (3447 kPa) maximum working pressure at 100 F (38 C)
- ☐ 500 F (260 C) maximum working temperature at 250 psig (1724 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 MUELLER C1-36-99002 Drilling Machine

- ☐ Wooden storage chest (not shown)
- ☐ Ratchet handle
- ☐ T-handle Socket wrench
- ☐ Four double open end wrenches
- ☐ Eight machine to adapter bolts and nuts
- ☐ Eight D-type machine to adapter washers
- ☐ Machine to adapter gasket
- ☐ Cutting grease
- ☐ Instruction manual (Form #8513)

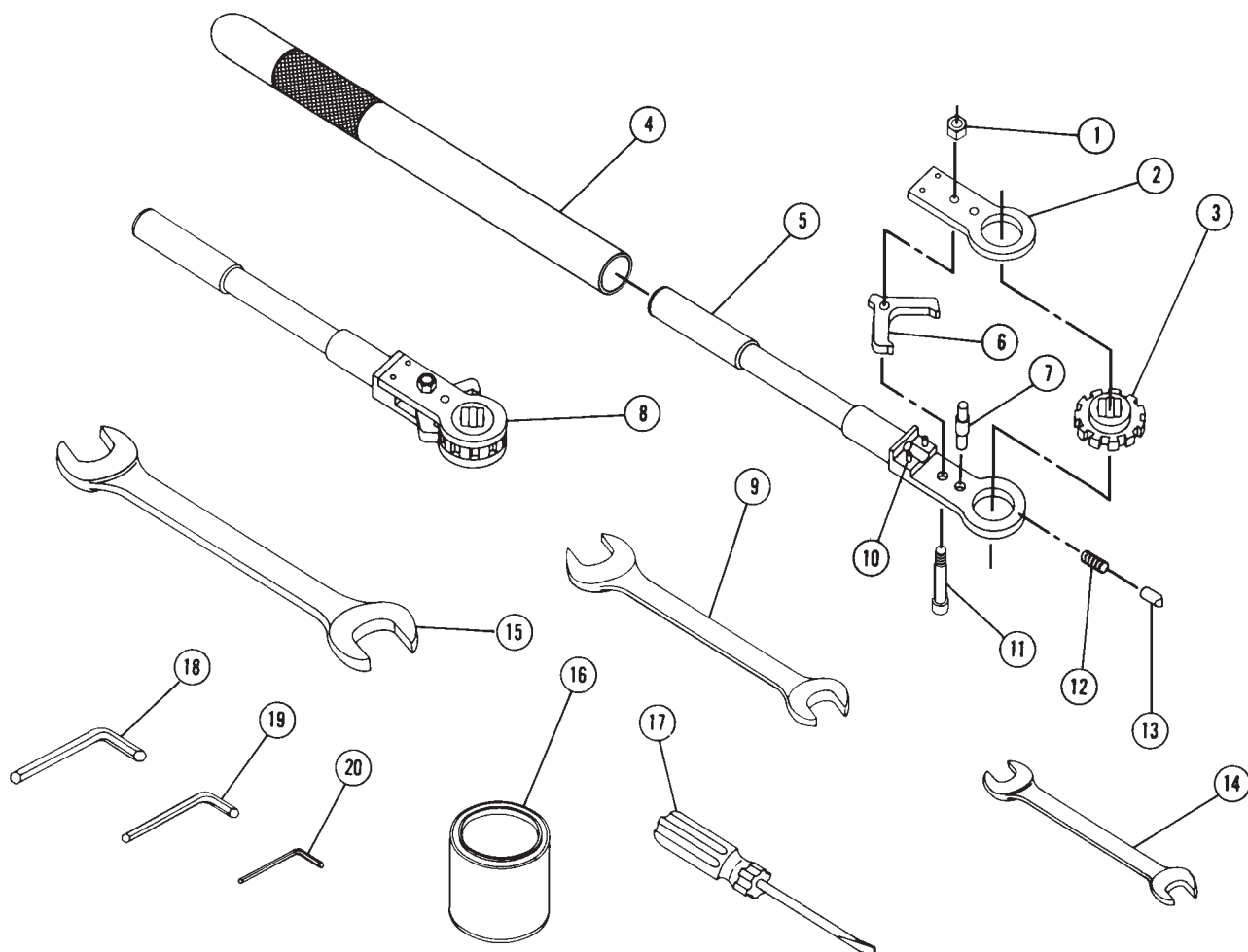


Equipment to be selected

- ☐ Shell cutters, drills, pilot drills, cutter arbors, and cutter hubs—page 3.12
- ☐ Machine adapters—page 3.13
- ☐ Power operators—page 3.23

	C1-36-99002
Total shipping weight	424 lbs. (191 kg)
Machine only weight	270 lbs. (120 kg)

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



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.

Item No.	Part Number	Part Name	Item No.	Part Number	Part Name	Item No.	Part Number	Part Name
1	46255	Nut*	8	85308	Ratchet complete	15	48309	Wrench
2	40136	Ratchet handle plate	9	58196	Wrench	16	88366	Cutting grease
3	40137	Ratchet wheel	10	40140	Dowel pin	17	90409	Screwdriver
4	86391	Handle extension	11	40138	Bolt*	18	99803	Allen wrench
5	40177	Handle bar	12	40007	Spring	19	90325	Allen wrench
6	40004	Ratchet dog	13	40006	Spring pin	20	90322	Allen wrench
7	40139	Stud	14	96536	Wrench			

*Order both parts when replacing either one.

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

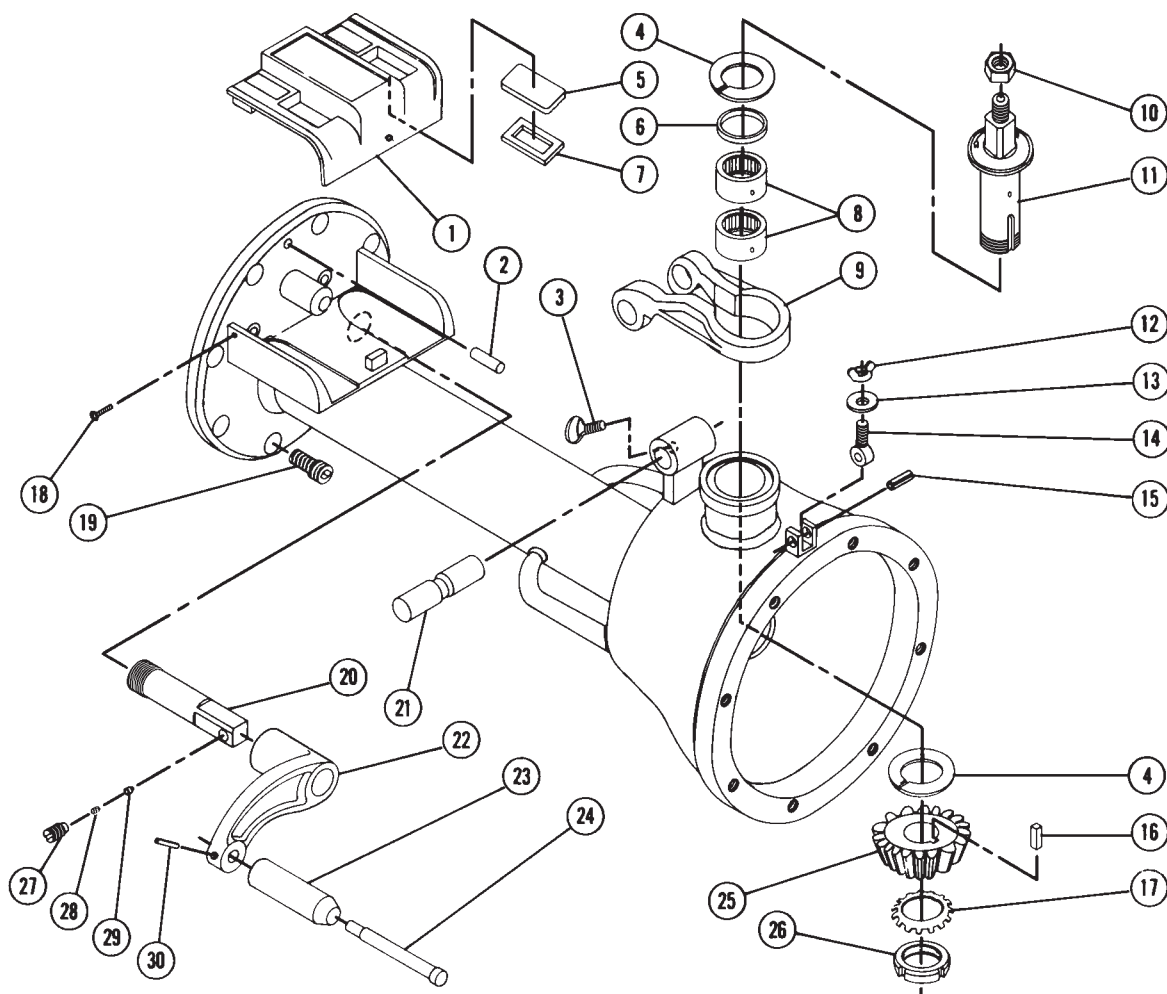
MUELLER® CL-12™ DRILLING MACHINE

REPAIR PARTS

Mueller Co.

3.9

Rev. 4-01

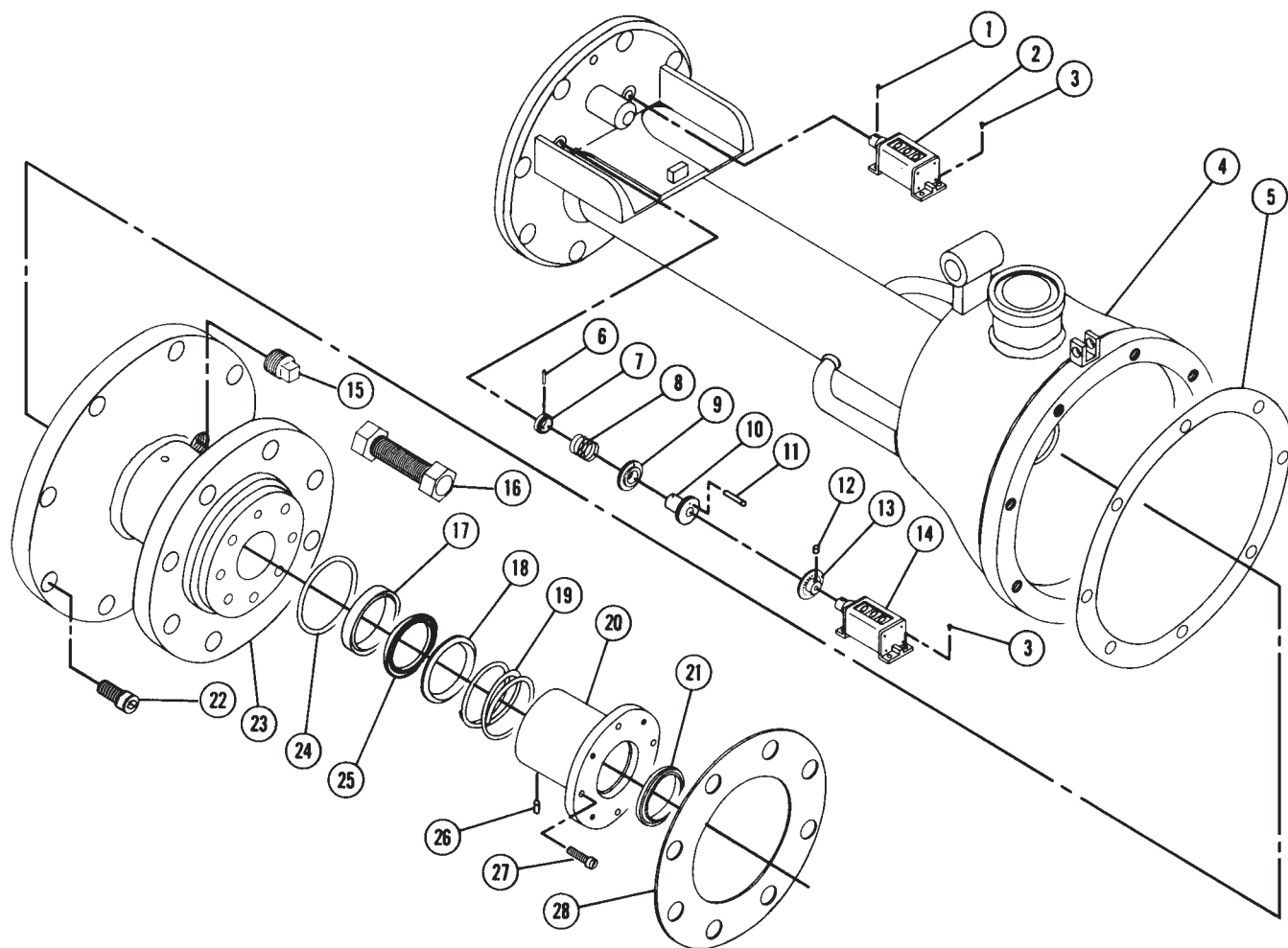


NOTE: These illustrations are for parts identification only. DO NOT use these illustrations for assembly or disassembly of machine. MUELLER CO. offers a machine repair service. Contact MUELLER® Customer Service Center for details.

Item No.	Part Number	Part Name	Item No.	Part Number	Part Name	Item No.	Part Number	Part Name
1	48102	Cover	11	48188	Bevel pinion shaft	21	48144	Pivot
2	54545	Dowel pin	12	94341	Wing nut	22	48164	Crank
3	91665	Thumb screw	13	54012	Washer	23	48163	Handle
4	48187	Thrust washer	14	52389	Eyebolt	24	54477	Stud
5	48141	Shield	15	500635	Rollpin	25	500637	Bevel pinion
6	500632	Seal	16	48189	Key	26	48190	Lock nut
7	48142	Gasket	17	48191	Lock washer	27	501498	Retainer
8	500633	Bearing	18	48143	Cover screw	28	59810	Detent spring
9	48205	Front lift yoke	19	98570	Cap screw	29	501497	Detent
10	46029	Nut	20	48145	Plug	30	53747	Pin

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

Rev. 1-09 Shaded area indicates change



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.

Item No.	Part Number	Part Name	Item No.	Part Number	Part Name	Item No.	Part Number	Part Name
1	48061	Pin	12	301780	Set Screw	23	83592	Front Flange
2	48139	Travel indicator	13	500778	Sleeve	24	48296	O-ring*†
3	37804	Screw	14	48140	Auto-feed indicator	25	45121	Packing ring*†
4	83591	Body	15	64134	Plug	26	47092	Pin
5	48091	Gasket	16	56682	Bolt and nut	27	92754	Gland cap screw
6	48081	Pin	17	44978	Concave follower*	28	55449	Gasket
7	500775	Fixed collar	18	44320	Convex follower*	29	79270	O-ring*†
8	500774	Spring	19	98001	Spring*	580473		Metallic and Soft Repair Kit includes*
9	500776	Moveable collar	20	48138	Packing gland*	682612		Soft Repair Kit includes†
10	500777	Sleeve	21	48137	Wiper ring*†			
11	500779	Pin*	22	98570	Cap Screw			

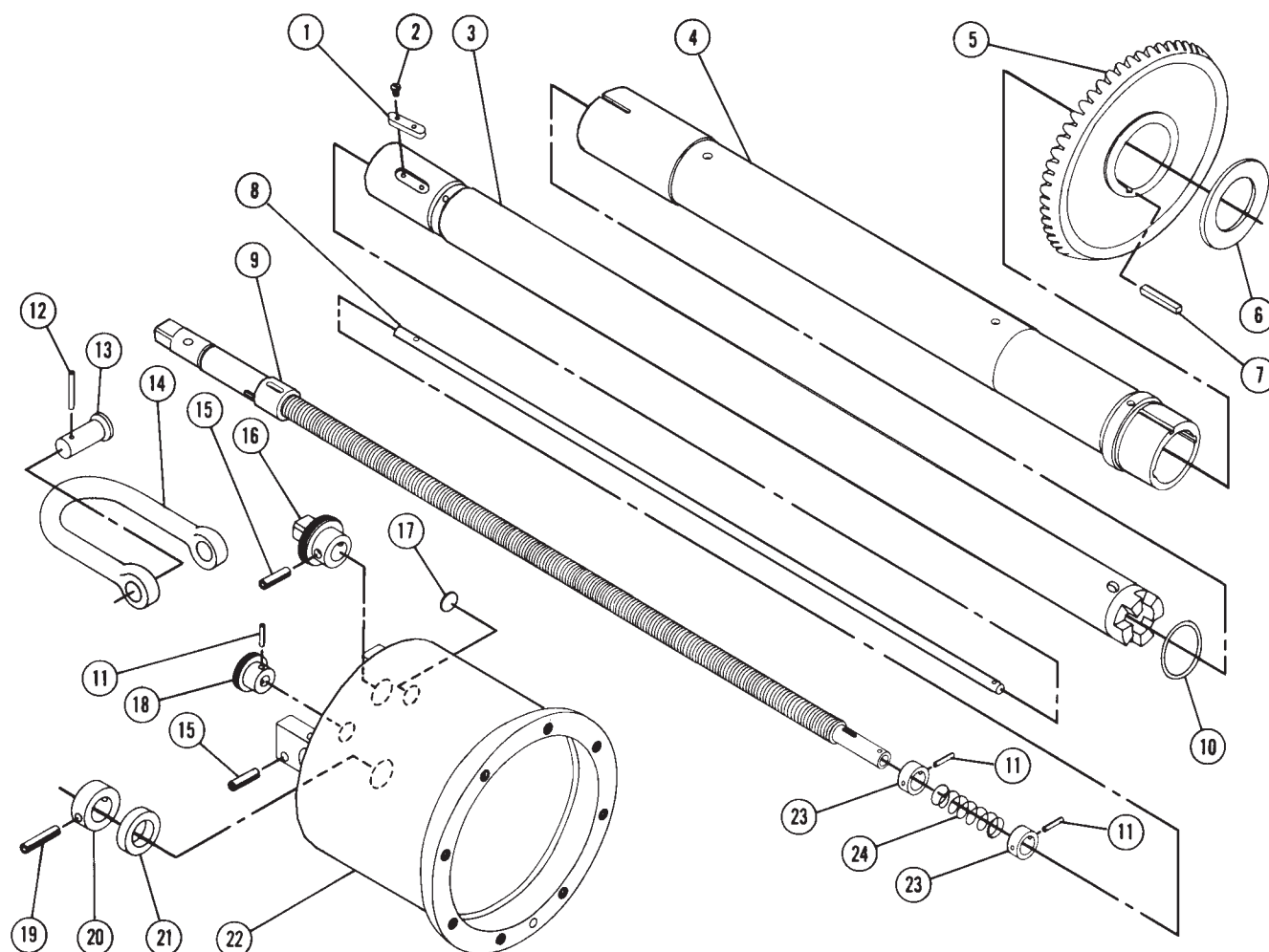
MUELLER® CL-12™ DRILLING MACHINE

REPAIR PARTS

Mueller Co.

3.7

Rev. 4-01



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.

Item No.	Part Number	Part Name	Item No.	Part Number	Part Name	Item No.	Part Number	Part Name
1	54482	Key	9	507572	Feed screw	17	48129	Freeze plug
2	52181	Screw	10	78828	Boring bar seal	18	48136	Auto-feed knob
3	83589	Boring bar	11	53747	Pin	19	48134	Pin
4	48185	Drive tube	12	48130	Pin	20	48133	Collar
5	500636	Bevel gear	13	48165	Shaft	21	48132	Spacer
6	48178	Thrust washer	14	500889	Rear lift yoke	22	83581	Rear cover
7	48192	Key	15	48131	Pin	23	48100	Collar
8	48092	Overtravel rod	16	48135	Idler shaft knob	24	48101	Spring

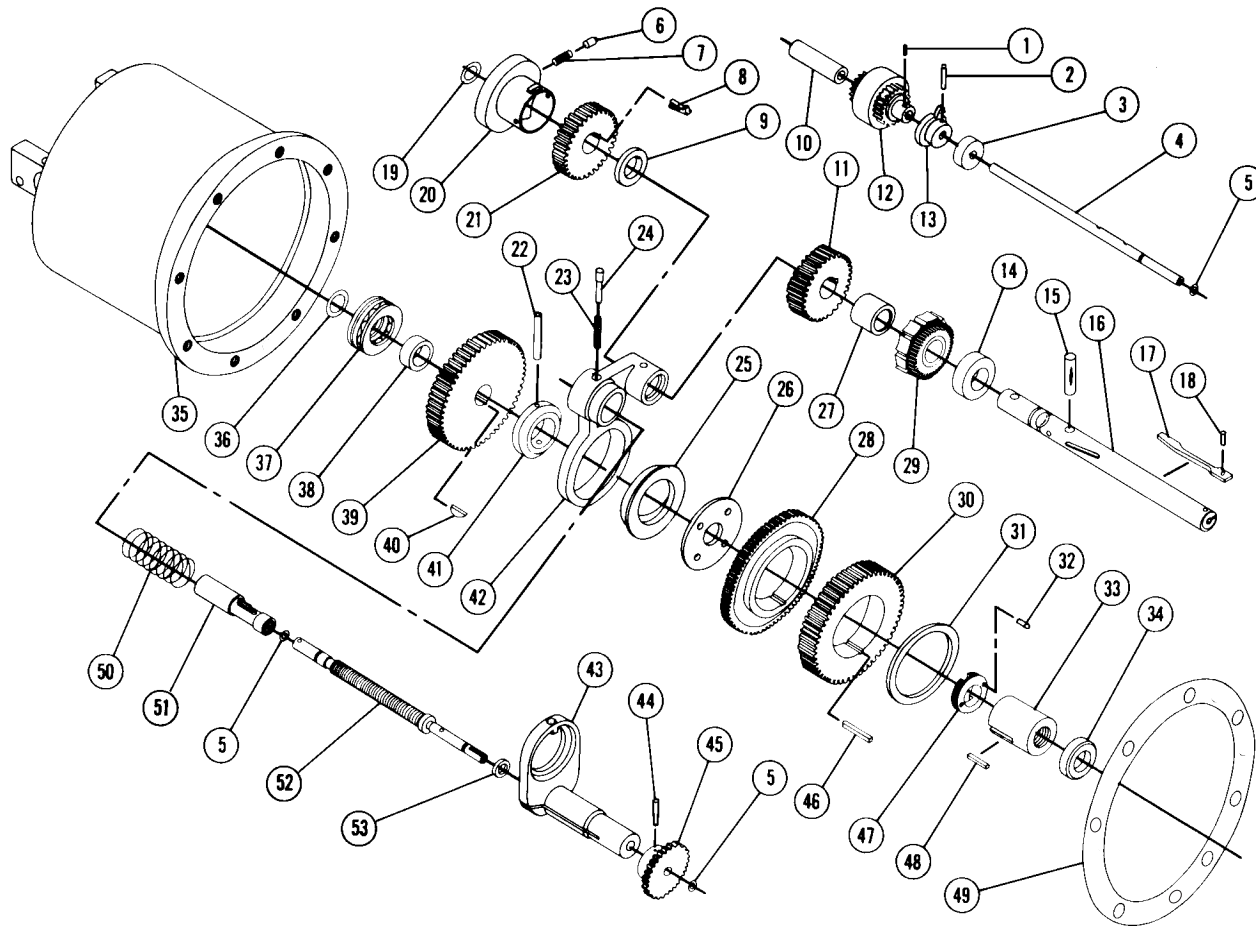
TO ORDER SPECIFY QUANTITY, PART NUMBER AND PART NAME
(include catalog number and model number of machine).

3.6



MUELLER® CL-12™ DRILLING MACHINE REPAIR PARTS

Rev. 4-01



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.

Item No.	Part Number	Part Name	Item No.	Part Number	Part Name	Item No.	Part Number	Part Name
1	60350	Pin	19	79344	O-ring	37	40854	Thrust bearing
2	53747	Pin	20	83587	Auto-feed cam	38	48125	Bushing
3	48154	Spacer	21	48117	Feed screw pinion	39	48169	Feed screw gear
4	48062	Travel indicator shaft	22	48094	Pin	40	300190	Key
5	43973	O-ring	23	48157	Spring	41	48093	Collar
6	500853	Detent	24	48158	Plunger	42	48156	Overtravel link
7	500872	Detent spring	25	48095	Bushing	43	83579	Auto-feed tube
8	48170	Key	26	48096	Drive tube thrust washer	44	48123	Pin
9	48159	Collar	27	48105	Collar	45	48122	Gear
10	48124	Sleeve	28	48089	Drive tube indicator gear	46	48087	Key
11	48104	Drive tube pinion	29	83595	Idler shaft indicator gear	47	48097	Nut
12	83582	Travel indicator gear unit	30	48088	Drive tube gear	48	54445	Key
13	48153	Single tooth gear	31	48086	Drive tube gear thrust washer	49	48127	Gasket
14	48168	Spacer	32	301567	Set screw	50	35994	Spring
15	48160	Pin	33	48098	Feed nut	51	48120	Auto-feed nut
16	48103	Idler shaft	34	48099	Collar	52	48119	Auto-feed indicator shaft
17	54469	Dive key	35	83581	Rear cover	53	48121	Thrust washer
18	63477	Dive key pin	36	41301	Feed screw seal			

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

MUELLER® CL-12™ DRILLING MACHINE ADAPTERS

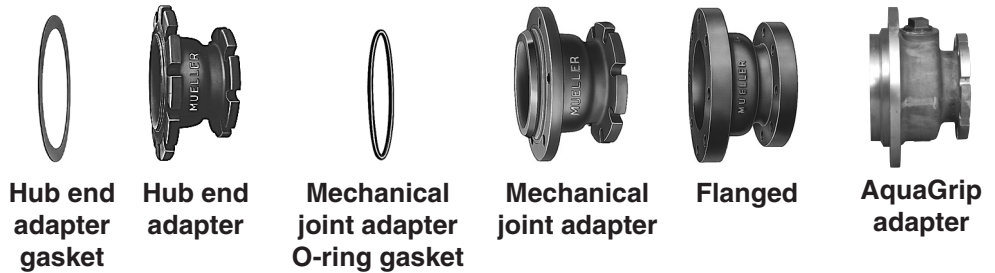
Mueller Co.

3.5

Rev. 9-09

MUELLER CL-12 Drilling

Adapters are required to permit the CL-12 drilling machine to be attached to tapping valves, gate valves and standard flanged fittings.



Mueller CL-12 Drilling Machine Adapters

Tapping Valve Information		Maximum Working Pressure*	Adapter Part		Size of valve or fitting							
Valve end connection	Valve catalog no.				2"	2-1/4"	3"	4"	6"	8"	10"	12"
A-C or hub	H-640 H-642	200 psig @ 100F	Adapter complete		83770	-	83361	83362	83363	83364	89480	89481
			Adapter only		47980	-	54560	54527	54515	54537	504109	504110
			Adapter gasket		59771	-	59772	59773	59774	59775	504454	504455
			Adapter bolts and nuts	Part no.	54806	-	56682	56682	54162	54162	94407	94407
				Qty.	6	-	6	6	6	6	8	10
			Washer	Part no.	54597	-	58321	58321	92576	92576	98919	98919
				Qty.	12	-	12	12	12	12	16	20
	H-637 H-643 H-645 H-660 H-662 H-663 H-681 H-698	200 psig @ 100F	Adapter complete		83770	-	83361	83362	83363	83364	83365	83366
			Adapter only		47980	-	54560	54527	54515	54537	54658	54548
			Adapter gasket		59771	-	59772	59773	59774	59775	54677	54686
			Adapter bolts and nuts	Part no.	54806	-	56682	56682	54162	54162	94407	94407
				Qty.	6	-	6	6	6	6	8	10
			Washer	Part no.	54597	-	58321	58321	92576	92576	98919	98919
				Qty.	12	-	12	12	12	12	16	20
Mechanical Joint	H-665, H-667, H-668, H-687, H-699, 2360 Series	200 psig @ 100F	Adapter complete**		83668	83669	83367	83368	83369	83370	83371	83372
			Adapter only		47981	47982	46269	46268	46267	46266	46265	46264
			O-ring adapter gasket		307923	307924	307925	307926	307927	307928	307929	307930
			Adapter bolts and nuts**	Part no.	36445	36445	Bolts and nuts are furnished with each mechanical joint tapping valve in these sizes					
				Quantity	2	2						
Mechanical Joint Mfg. Aluminum	-	-	Adapter only		-	-	-	537038	537040	537041	537050	537051
AquaGrip Aluminum	-	-	Adapter complete◆		-	-	-	682352	682353	682354	682383	682384
			Adapter only◆		-	-	-	528224	528225	528226	528320	528313
			Adapter bolts	Part no.	-	-	-	194541	194541	194541	194541	194541
				Quantity	-	-	-	4	4	6	8	8
			Adapter nuts	Part no.	-	-	-	195237	195237	195237	195237	195237
				Quantity	-	-	-	4	4	6	8	8
			Washers	Part no.	-	-	-	092576	092576	092576	092576	092576
				Quantity	-	-	-	4	4	6	8	8
			Plug	Part no.	-	-	-	36950	36950	36950	36950	36950
Quantity	-	-		-	4	4	4	6	8			
Adapters for flanged gate valves and standard flange fittings having ANSI 125/150 pound inlet flange		230 psig @ 100F	Adapter only		89432	-	89433	89434	89435	89436	89437	89438

* This is the maximum working pressure of the adapter at 100F (38C). This working pressure must be reduced accordingly if any attachment, valve, fitting or machine subjected to pressure during the use of this adapter, has a maximum working pressure less than that specified above.

** Two of the four bolts and nuts needed to attach the adapter to the tapping valve are supplied with the adapter when ordered complete, or can be ordered separately.

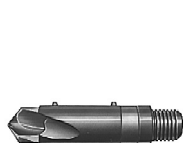
♦NOTE: These Adapters use the intermediate ring and o-ring from the valve to create a seal between the adapter and the valve end. The AquaGrip adapter comes tapped with a 2" IP thread and plug so a chip flushing valve can be utilized during the cut (valve not provided.) Aluminum Construction.



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

MUELLER CL-12 Drilling Machine tools

The CL-12 Drilling Machine equipment shown below is used to make lateral connections to mains by drilling through tapping sleeves and valves, gate valves, or standard fittings.



**Pilot
drill**



Shell cutter



**Cutter
Hub**



Drill

Shell cutters and drills

Material of pipe to be cut	Equipment	Size of valve or fitting								
		2"	2-1/4"	3"	4"	6"	8"	10"	12"	
Size of shell cutter or drill		1-3/4"	2"	2"	2-1/2"	3-1/2"	5-1/2"	7-1/2"	9-1/2"	11-1/2"
Cast iron, ductile iron pipe, cement-lined cast iron or cement-lined ductile iron, A-C, concrete, and steel pipe	Shell cutter*†	-	-	-	83617	83203	83134	83135	83140	83141
	Cutter hub	-	-	-	83599	83671	83673	83676	83679	83682
	Pilot drill*	-	-	-	83954	83954	83955	83956	83957	83958
	Pilot drill**	-	-	-	83634	83634	83639	83675	83678	83681
	Drill	33539	33541	33541	-	-	-	-	-	-
	Boring bar adapter	83666	83666	83666	-	-	-	-	-	-
	Equipment Kit Includes the following:	-	-	-	682318	682319	682320	682321	682322	682323
	Shell cutter	-	-	-	83617	83203	83134	83135	83140	83141
	Cutter Hub	-	-	-	83599	83671	83673	83676	83679	83682
	Pilot drill	-	-	-	83634	83634	83639	83675	83678	83681
	MJ Valve Adapter	-	-	-	83367	83368	83369	83370	83371	83372
Shell cutter OD††		-	-	-	-	3.3"	5.0"	6.6"	8.3"	10.0"
PVC/PEP	Shell cutter	-	-	-	-	537061	537062	682581	682583	682585
	Pilot Drill (Shell Cutter)	-	-	-	-	681919	681919	681919	681919	681919
	Pilot Drill Extension	-	-	-	-	537068	537069	537069	537070	537070
	Cutter Hub	-	-	-	-	83671	83671	83671	83671	83671

* These shell cutters and pilot drills are tungsten carbide tipped.

** These pilot drills can be used on cast or ductile iron pipe, cement-lined cast or ductile iron pipe, and steel pipe.

† The outside diameter of these shell cutters is 1/2" less than the nominal size of the valve or fitting.

†† Shell cutters for use on plastic pipe only.

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

MUELLER CL-12 Drilling Machine – for drilling operations under pressure – 2" to 12" inclusive

- ❑ Catalog number CL-12 (part # 39295)
- ❑ Hand or power operation
- ❑ Designed for use on pressurized or dry mains
- ❑ Used to cut 1-3/4" to 11-1/2" holes
- ❑ Will make cuts through tapping valves from 2" to 12"
- ❑ 25" (635 mm) boring bar travel
- ❑ Use on cast iron or ductile iron pipe • cement lined cast iron or ductile iron pipe • A-C pipe • concrete pipe • steel pipe • cast iron O.D. PVC
- ❑ 250 psig (1724 kPa) maximum working pressure at 100 F (38 C)
- ❑ 500 F (260 C) maximum working temperature at 150 psig (1034 kPa)

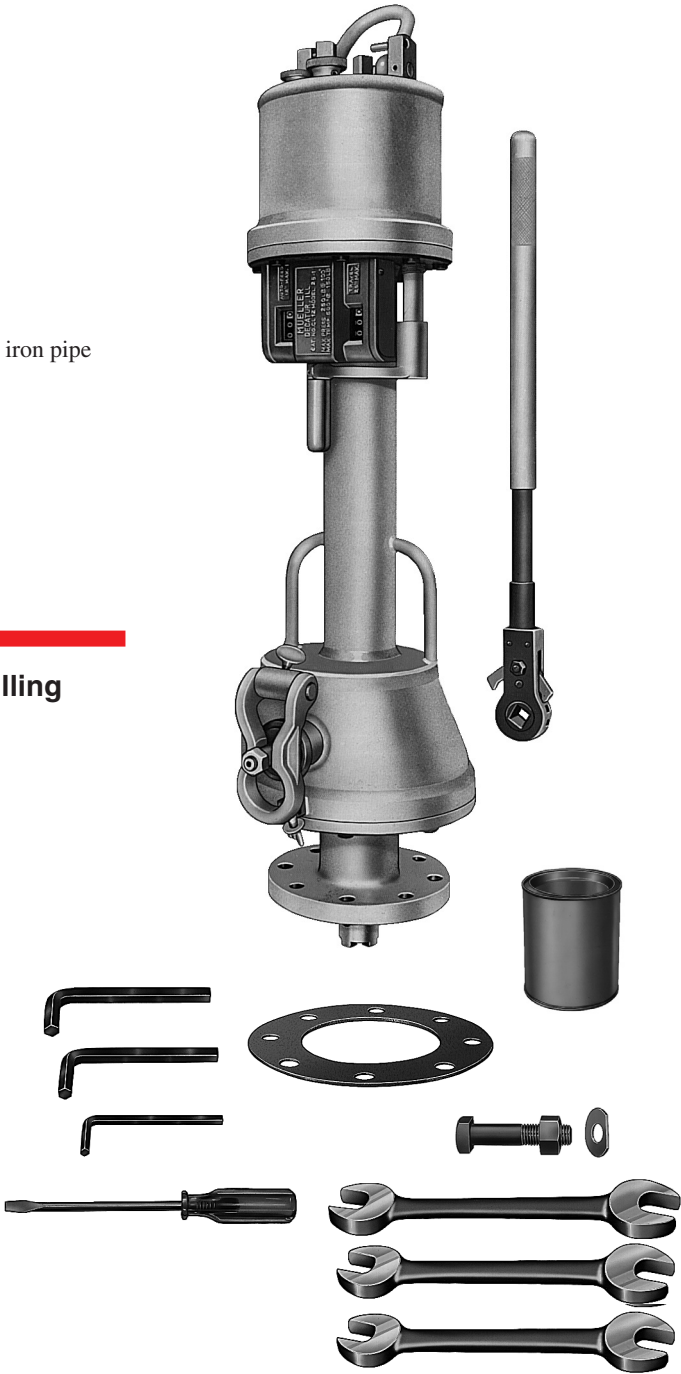
NOTE: The working pressure or temperature rating is reduced accordingly if any attachment, valve or fitting subjected to pressure or temperature during the drilling operation has a maximum working pressure or temperature rating less than that specified above.

Equipment furnished with each MUELLER CL-12 Drilling

- ❑ Wooden storage chest (not shown)
- ❑ Ratchet handle
- ❑ Screw driver
- ❑ Double open end wrenches
- ❑ Allen wrenches
- ❑ Machine to adapter bolts and nuts
- ❑ Machine to adapter D-type washers
- ❑ Machine to adapter gasket
- ❑ Cutting grease #88366
- ❑ Instruction manual (Form # 8895)

Equipment to be selected

- ❑ Shell cutters, drills, pilot drills, arbors, and hubs – page 3.4
- ❑ Machine adapters – page 3.5
- ❑ Power operators – page 3.23



	CL-12
Total shipping weight	400 lbs. (180 kg)
Machine only weight	270 lbs. (120 kg)

MUELLER CL-12™ Machine features

- ❑ **AUTOMATIC FEED- SETTING** - the amount of travel required in automatic feed can be quickly and accurately set in inches and tenths of an inch. This amount is clearly shown on the automatic feed travel indicator to assure accurate settings every time.
- ❑ **AUTOMATIC FEED DIS-ENGAGEMENT**- when the preset travel in automatic feed is completed and the indicator reads zero, the tool feed is automatically disengaged.
- ❑ **AUTOMATIC FEED TRAVEL INDICATOR** -as the cut progresses, the direct reading indicator automatically subtracts, always showing the amount of travel remaining in automatic feed. You always know just how much of the cut remains to be made.
- ❑ **RUGGED ALL-STEEL CONSTRUCTION** - all working parts are totally enclosed in a strong steel case to permit complete lubrication and prevent damage from dirt and other foreign matter.
- ❑ **HAND OR POWER OPERATION** - may be hand operated with ratchet handle provided or power operated with MUELLER H-614 air power operator or H-607 hydraulic operator.



- ❑ **RAPID HAND TRAVEL** - when not cutting, the boring bar can be quickly and easily advanced or retracted by hand. Rapid advancement and retraction of the boring bar reduces time of operation.
- ❑ **AUTOMATIC TOOL POSITION INDICATOR** - direct reading indicator continually shows the position of the pilot drill and shell cutter in relation to their fully retracted or rearmost position. Large numerals read in inches and tenths of an inch and automatically add as the tool is advanced, and subtract as the tool is retracted. Eliminates tool position guesswork.
- ❑ **RATCHET HANDLE** - all working parts are totally enclosed; easily lubricated.
- ❑ **HANDLING EASE** - telescopic design reduces overall length and weight. Conveniently placed handles and front and rear lifting yokes aid in handling the machine. The front lifting yoke may also be used to lock the boring bar while attaching or removing tools.
- ❑ **SELF-ADJUSTING BORING BAR PACKING** - high temperature chevron packing is spring-loaded to ensure positive, leakproof sealing without packing adjustments. Line pressure does not enter case.