

## MUELLER® C1-36™ Machine Features



- ❑ **Automatic Feed Setting** – the amount of travel required in automatic feed can be quickly and accurately set in inches. This amount is clearly shown on the automatic feed travel indicator to assure accurate settings every time.
- ❑ **Rapid Hand Travel** – when not cutting, the boring bar can be quickly and easily advanced or retracted by hand, reducing time of operation.
- ❑ **Automatic Feed Travel Indicator** – as the cut progresses, the direct reading indicator automatically shows the amount of travel remaining in automatic feed. How much of the cut remains to be made is always known.
- ❑ **Rugged Construction** – all working parts are totally enclosed in a strong metal housing 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 power operator

hydraulic power operator.

- ❑ **O-Ring Boring Bar and Seal**
- ❑ **Handling Ease** – conveniently placed handles and rear lifting yoke aid in handling the machine.
- ❑ **Feed "Over Travel"** – feature prevents damage to equipment.

Rev. 11-18 Shaded area indicates changes

## Mueller® C1-36 Drilling Machine – for drilling operations under pressure – 1-1/2" to 12" inclusive

- Catalog number - **39260** / 6:1 feed ratio
- Hand or power operation
- Designed for use on pressurized or unpressurized mains
- Used to cut 1-1/2" to 12" holes
- 36" (914 mm) boring bar travel
- Use on cast iron pipe • ductile iron pipe • steel pipe
- Will make cuts through line stopper fittings, flanged tees and nipples from 3" to 12"
- 500 psig (3447 kPa) maximum working pressure at 100 F (38 C)

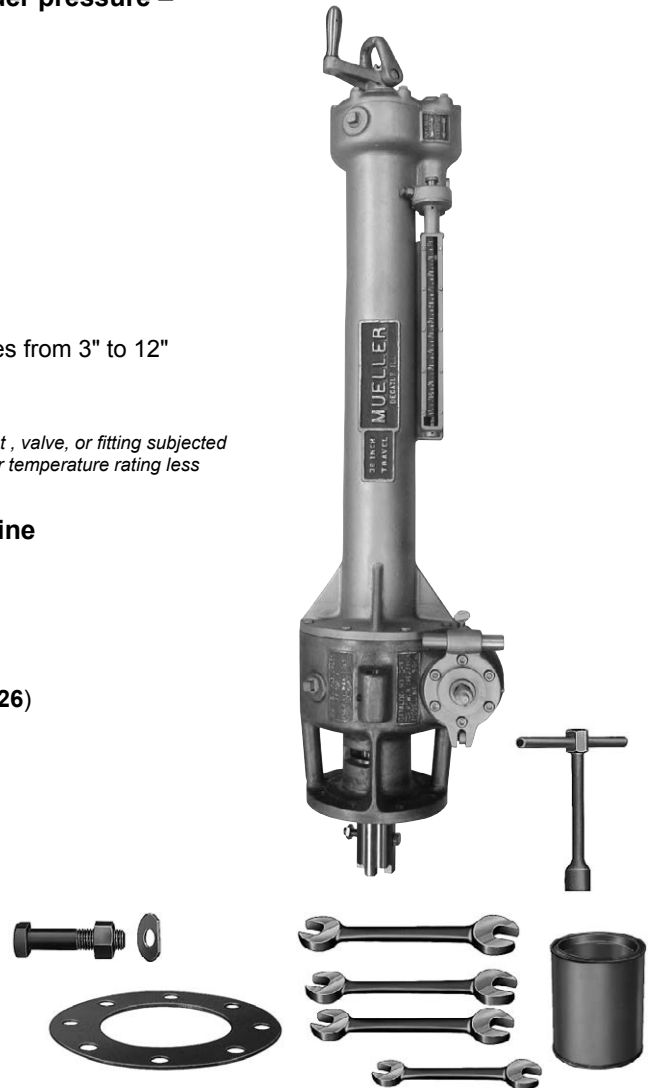
*NOTE: The working pressure or temperature rating is reduced accordingly if any attachment, valve, or fitting subjected to pressure or temperature during the drilling operation has a maximum working pressure or temperature rating less than that specified above.*

### Equipment furnished with each Mueller C1-36 Drilling Machine

- Wooden Storage Chest (**680285** not shown)
- Ratchet Handle (**85308**)
- T-handle Socket Wrench (**59839**)
- Four Double Open End Wrenches (**96536, 56680, 58196, and 55726**)
- Eight Machine to Adapter Bolts and Nuts (**56682**)
- Eight Machine to Adapter Washers (**55409**)
- Machine to Adapter Gasket (**55449**)
- Cutting Grease (**88366**)
- Instruction Manual Form **8513**

### Equipment to be selected

- Shell cutters, drills, pilot drills, cutter arbors, and cutter hubs
- Machine adapters
- Power operators
- Optional: 10" long crank handle and lifting yoke (**681520**)



Weight	
Total shipping weight	424 lbs. (191 kg)
Machine only weight	270 lbs. (120 kg)
Machine length	51 1/2"

### Operations that can be performed using the MUELLER C1-36 Drilling Machine

Fitting type	Size* of fitting						Operation
	3"	4"	6"	8"	10"	12"	
Regular Line Stopper Fittings	X	X	X	X	X	X	Cut main
Bottom Out Stopper Fittings	X	X	X	X	X	X	Cut main
Thin Wall Line Stopper Fittings			X	X			Cut main
Extension Stopper Fittings	X	X	X	X			Cut main
Flanged Tees	X	X	X	X			Cut main
Save-A-Valve® Drilling Nipple		X	X	X			Cut main

\* Nominal size

Note: Gear Oil is recommended and available in pints (part no. 89273), gallons (part no. 89347) and 7-pint container (part no. 89346).

**Mueller® C1-36-99002 Drilling Machine - for drilling operations under pressure - 1-1/2" to 12" inclusive**

- Catalog number **C1-36-99002** (part number **39262**) / 8:1 feed ratio
- Hand or power operation
- Designed for use on pressurized or unpressurized mains
- Used to cut 1-1/2" to 12" holes
- 36" (914 mm) boring bar travel
- Use on cast iron pipe • ductile iron pipe • steel pipe
- Will make cuts through line stopper fittings, flanged tees and nipples from 3" to 12"
- 500 psig (3447 kPa) maximum working pressure at 100 F (38 C)

*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 (**682085** not shown)
- Ratchet handle (**85308**)
- T-handle Socket wrench (**59839**)
- Four double open end wrenches (**96536, 56680, 58196, & 55726**)
- Eight machine to adapter bolts and nuts (**56682**)
- Eight machine to adapter washers (**55409**)
- Machine to adapter gasket (**55449**)
- Cutting grease (**88366**)
- Instruction manual (**Form #8513**)

**Equipment to be selected:**

- Shell cutters, drills, pilot drills, cutter arbors, and cutter hubs
- Machine adapters
- Power operators
- Optional: 10" long crank handle and lifting yoke (**681520**)



Weight	
Total shipping weight	424 lbs. (191 kg)
Machine only weight	270 lbs. (120 kg)
Machine length	51 1/2"

Rev. 11-18 Shaded area indicates changes

### Mueller C1-36 Drilling Machine Shell Cutters, Pilot Drills and Cutter Hubs used to install Mueller Line Stopper Fittings

These shell cutters, pilot drills and cutter hubs are used with the Mueller C1-36 drilling machine to install 3"-12" Mueller line stopper fittings.



Tipped shell cutter      Pilot drill      Shell cutter      Cutter hub

#### Shell cutters, hubs and pilot drills

		Line stopper unit number						
		2	2, 3SW and 3SW-500	3, 3SW and 3SW-500			4SW	
Line stopper fitting size*		3"	4"	6"	6" (thin wall)	8"	8" (thin wall)	10" & 12"
Size of shell cutter ----->		3-1/4"	4-1/4"	6-1/4"	6-1/2"	8-1/4"	8-1/2"	12-1/2"
Equipment	Tipped shell cutter	—	682879	682885	682876	682877	682878	682780 † 682884
	Shell cutter	36463	36472	36548	63146	36521	63115	—
	Cutter hub	88101	54526	54501	83760	54653	83762	682782
	Pilot drill	36464	580585*	580585*	83639	580586 ††	83675	682781

† 682780 - good up to .375" wall pipe  
682884 - good up to .406" wall pipe

\*Alternate drill with coupon retaining threads # 36338  
††Alternate drill with coupon retaining threads # 36572

### Mueller C1-36 Drilling Machine Line Stopper adapters

These adapters are required to permit the C1-36 drilling machine to be attached to MUELLER gate valves when cutting 3"-12" Mueller line stopper fittings.



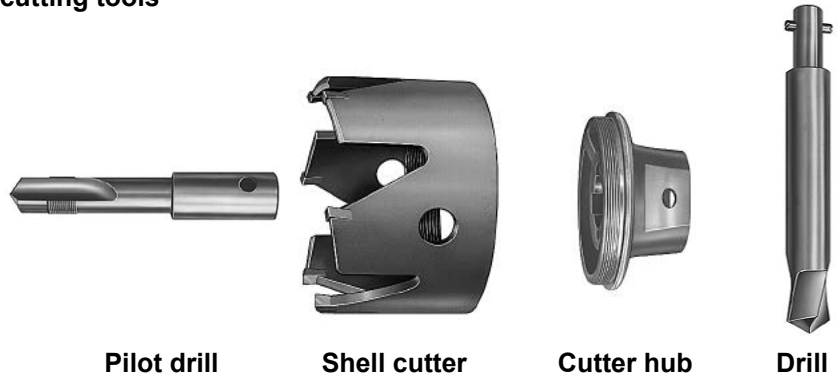
Line Stopper Fitting adapter

Line stopper unit number:	No. 2	No. 3	No. 3SW	No. 3SW-500	4SW
Size of fitting*	3" and 4"	6" and 8"	4", 6" and 8"	4", 6" and 8"	10" and 12"
Adapter part number	36343	36545	36545	83730	83323
Maximum working pressure*	275 psi	275 psi	275 psi	500 psi	500 psi

\* Nominal size

**Mueller C1-36 Drilling Machine drilling and cutting tools**

The Mueller C1-36 Drilling Machine equipment shown below is used to cut through Mueller Save-A-Value® Drilling Nipples, Extension Stopper Fittings, and Flanged Tees.



**Shell cutters, hubs and drills**

Material of pipe to be cut	Equipment	Sizes* of fitting					
		3"	4"	6"	8"	10"	12"
<b>Size of shell cutter-----&gt;</b>		<b>2-1/2"</b>	<b>3-1/2"</b>	<b>5-1/2"</b>	<b>7-1/2"</b>	-	-
<b>Cast or ductile iron pipe</b>	Shell cutter	51899	51903	63787	51897	-	80548
	Cutter hub	88338	88340	63978	33996	-	33107
	Pilot drill	33976	33976	59845	64245	-	54489
	Set Screw	33509	33509	-	-	-	-
<b>Size of shell cutter-----&gt;</b>		<b>2-1/2"</b>	<b>3-1/2"</b>	<b>5-1/2"</b>	<b>7-1/2"</b>	<b>9-1/2"</b>	<b>10-13/16"</b>
<b>Steel pipe</b>	Shell cutter	33518	33519	36004	33999	33244	33243
	Cutter hub	88338	88340	63978	33996	33250	33107
	Pilot drill	33976	33976	36005	64244	36338*	36338*
	Set Screw	33509	33509	-	-	-	-

\*Alternate drill with detents # 580585

**Mueller C1-36 Drilling Machine Flanged Adapters**

These adapters are required to permit the C1-36 Drilling Machine to be attached to tap through extension stopper fittings and for lateral tapping operations.



**Flanged Adapter**

Adapter description	Maximum working pressure**	Sizes* of fitting					
		3"	4"	6"	8"	10"	12"
Steel flanged adapter with <b>class 150</b> inlet flange	275 psi @ 100°F	89433	89434	89435	89436	89437	89438
Steel flanged adapter with <b>class 300</b> inlet flange	600 psi @ 100°F	89440	89441	89442	89443	89444	89445
Steel flanged adapter with <b>class 400</b> inlet flange	800 psi @ 100°F	89440	89441	89442	89443	89444	89445
Steel flanged adapter with <b>class 600</b> inlet flange	1200 psi @ 100°F	89440	89446	89447	89448	89449	89450

\*Nominal size

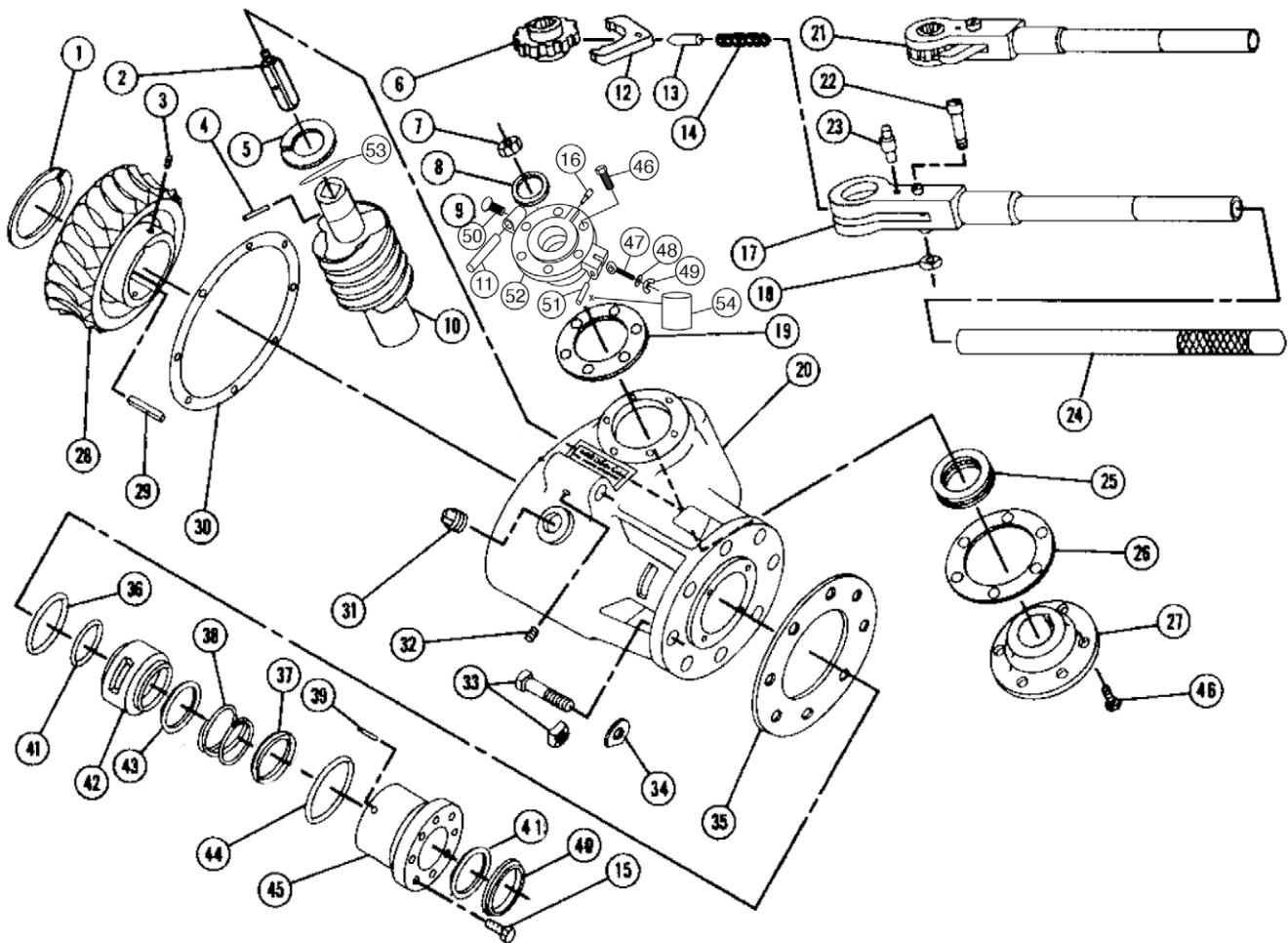
\*\* This is the maximum working pressure of the adapter at 100°F (38°C). This maximum working pressure must be reduced accordingly if any attachment, valve, fitting or machine subjected to pressure during the use of this adapter, has a maximum working pressure less than that specified above.

# 10.6



# MUELLER® C1-36™ DRILLING MACHINE REPAIR PARTS

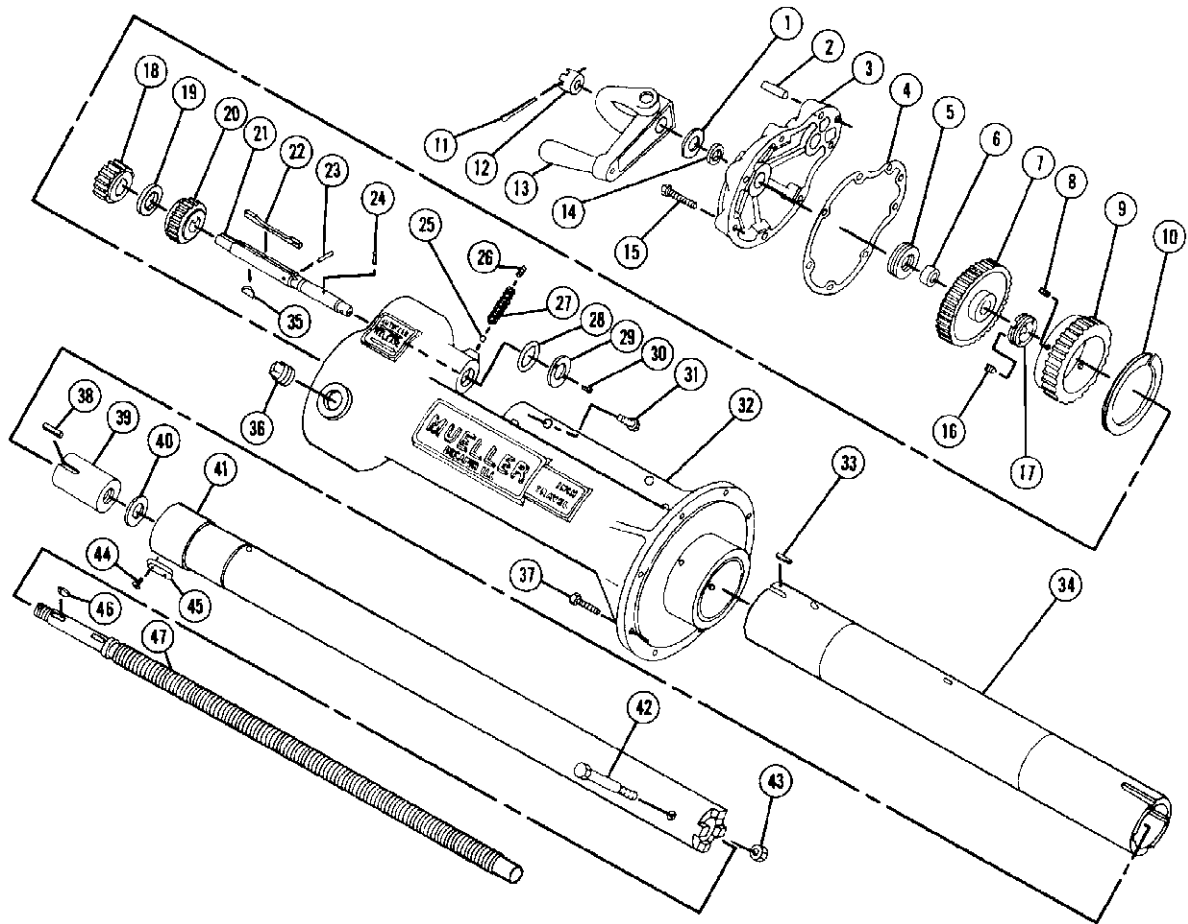
Rev. 10-21 Shaded area indicates changes



**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	19	55467	Top bearing gasket	37	44245	Convex follower
2	507160	Drive shaft	20	526512	Drive box	38	98000	Spring
3	90472	Set screw	21	85308	Ratchet complete	39	47092	Rollpin (2)
4	503963	Rollpin	22	40138	Bolt*	40	501158	Wiper ring
5	54472	Thrust washer	23	40139	Stud	41	312619	Quad ring (2)
6	40137	Ratchet wheel	24	86391	Handle extension	42	508427	Spacer
7	94825	Nut	25	55541	Ball bearing	43	45115	Packing ring (4)
8	78827	O-ring	26	55478	Bottom bearing gasket	44	52162	Gland seal o-ring
9	580815	Top bearing complete	27	54443	Bottom bearing	45	581974	Packing gland
10	507161	Worm	28	55563	Worm gear	46	55098	Socket head cap screw (6)
11	54488	Pivot	29	54467	Key	47	52389	Eyebolt
12	40004	Ratchet dog	30	55609	Gasket	48	54012	Washer
13	40006	Spring pin	31	64134	Plug	49	94341	Wing nut
14	40007	Spring	32	98957	Set screw	50	91665	Thumb screw
15	55098	Hex cap screw (4)	33	56682	Bolt and nut (8)	51	48131	Roll pin
16	72484	Latch stud	34	55409	Washer (8)	52	502707	Bearing
17	80111	Handle	35	55449	Gasket	53	51458	O-ring
18	46255	Nut*	36	508429	O-ring	54	312169	Bearing

**TO ORDER SPECIFY, 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	33923	Drive tube
3	508433	Rear cover	19	54471	Idler 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 (8)
6	54630	Bushing	22	54469	Dive key	38	*54445	Key (2)
7	55567	Feed screw gear	23	63477	Pin	39	*55546	Feed nut
8	98873	Set screw (2)	24	54538	Pin	40	*54418	Washer
9	55564	Drive tube gear	25	54702	Ball detent	41	*88331	Boring bar
10	54425	Thrust washer	26	99022	Set screw	42	311866	Bolt
11	98928	Cotton pin	27	55610	Spring	43	58849	Nut
12	55601	Feed screw nut	28	508434	O-ring	44	52182	Screw (4)
13	88150	Crank	29	508435	Retainer	45	*54482	Key (2)
14	311332	O-ring	30	95257	Screw (2)	46	537394	Key (2)
15	504333	Screw	31	92375	Screw (4)	47	33924	Feed screw
16	*98956	Set Screw (2)	32	88481	Torque tube			

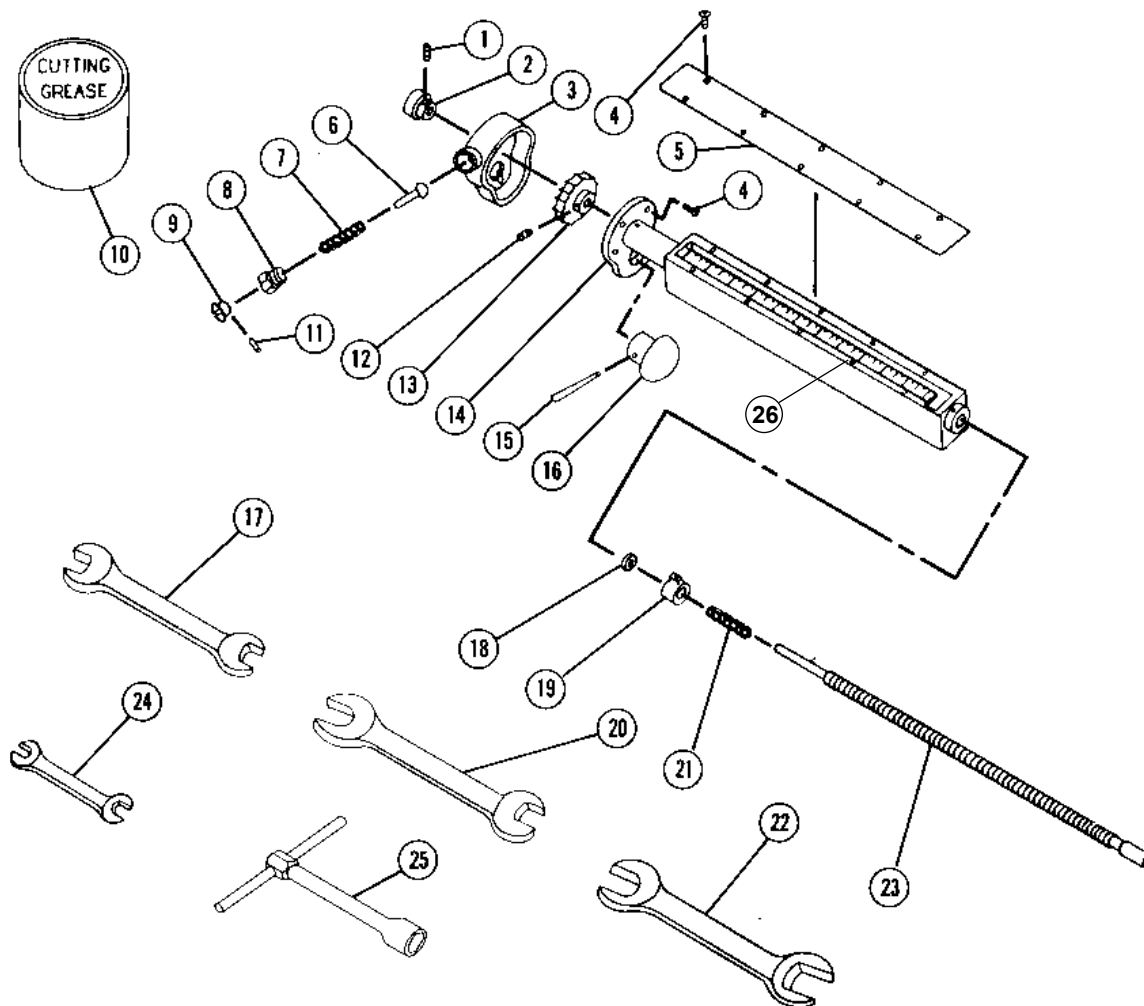
\*Included in 89095 Boring Bar Complete

# 10.8



## MUELLER® C1-36™ DRILLING MACHINE REPAIR PARTS - MODEL 6

Rev. 3-08 Shaded area indicates changes



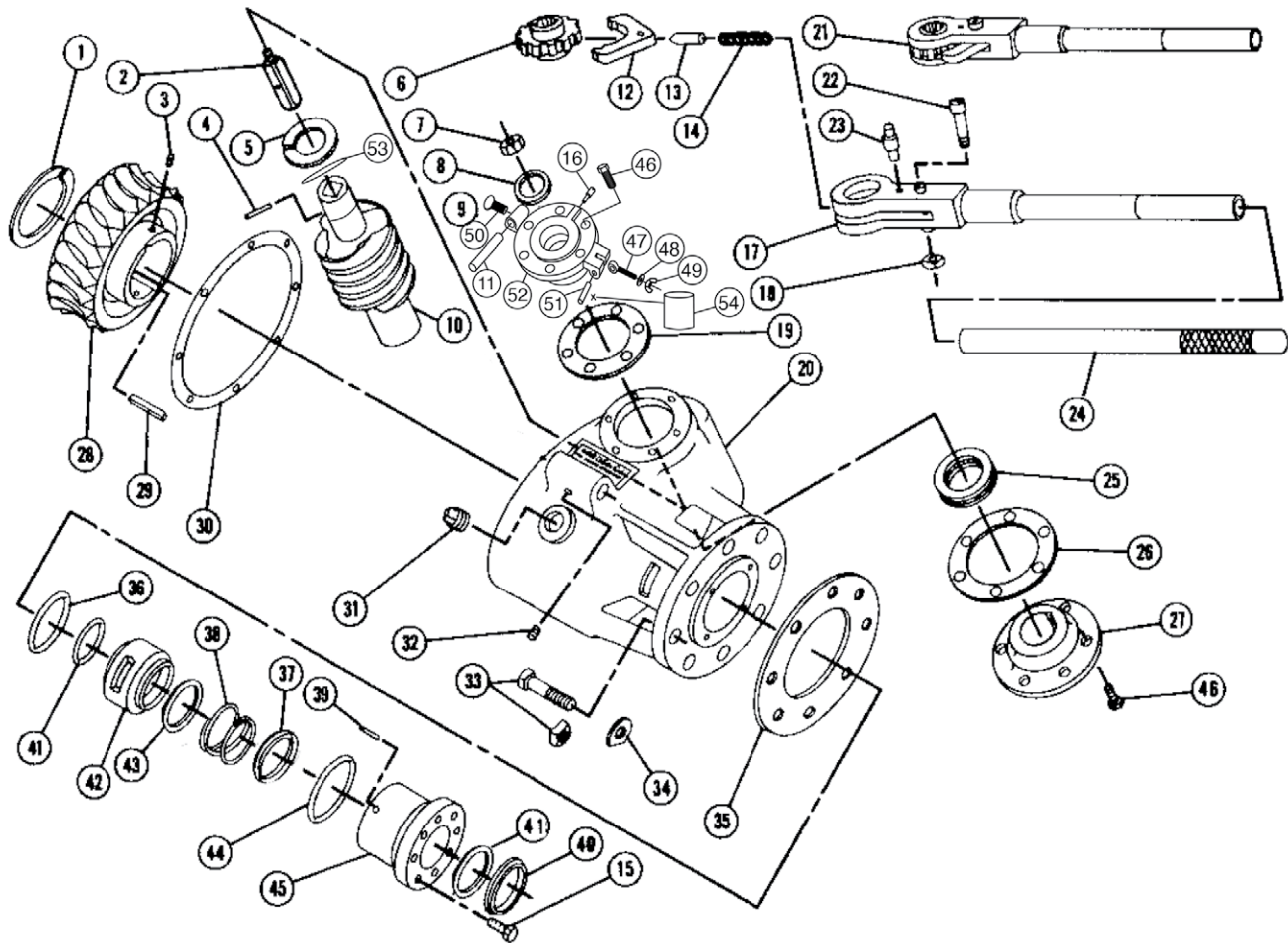
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Item No.	Part number	Part name	Item No.	Part number	Part name	Item No.	Part number	Part name
1	99023	Set screw	10	88366	Cutting grease	19	54519	Indicator nut
2	54551	Knob	11	*56392	Pin	20	58196	Wrench
3	54446	Cover plate	12	97763	Set screw	21	33083	Spring
4	37804	Screw	13	54523	Wheel	22	55726	Wrench
5	33084	Shield	14	54516	Indicator body	23	54517	Indicator screw
6	*36361	Plunger	15	53747	Knob pin	24	96536	Wrench
7	*36362	Spring	16	54454	Knob	25	59839	Socket wrench
8	*36360	Body	17	56680	Wrench	26	312257	Indicator scale
9	*36359	Detent knob	18	54549	Thrust washer			

\*Included in 88484 kit (Detent Sub Assembly)

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





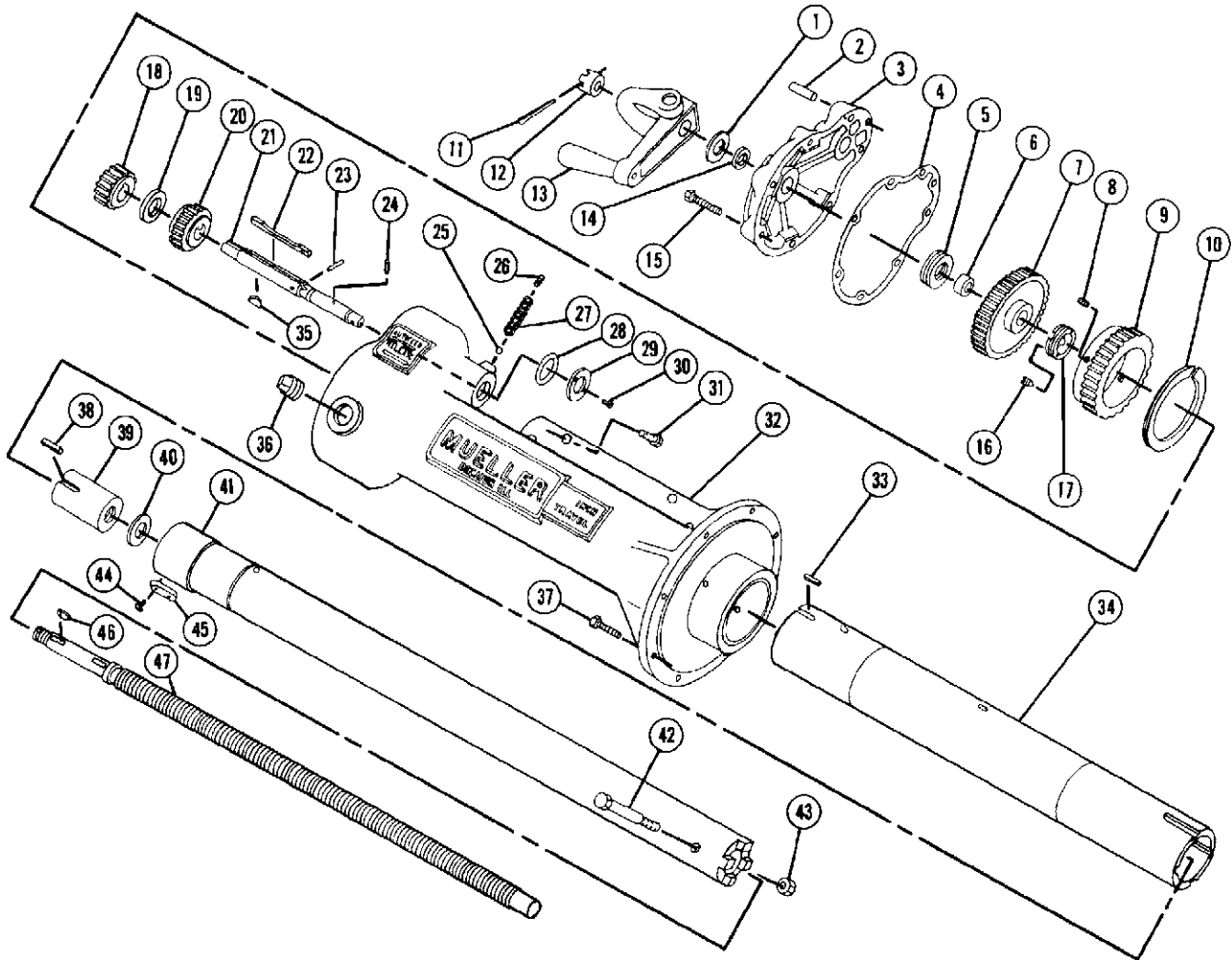
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Item NO.	Part Number	Part Name	Item NO.	Part Number	Part Name	Item NO.	Part Number	Part Name
1	54426	Thrust washer	17	80111	Handle	35	55449	Gasket
2	507160	Drive shaft	18	46255	Nut	36	508429	O-ring37
3	90472	Set screw	19	55467	Top bearing gasket	37	44245	Convex follower
4	503963	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.

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Rev. 12-12 Shaded area indicates changes

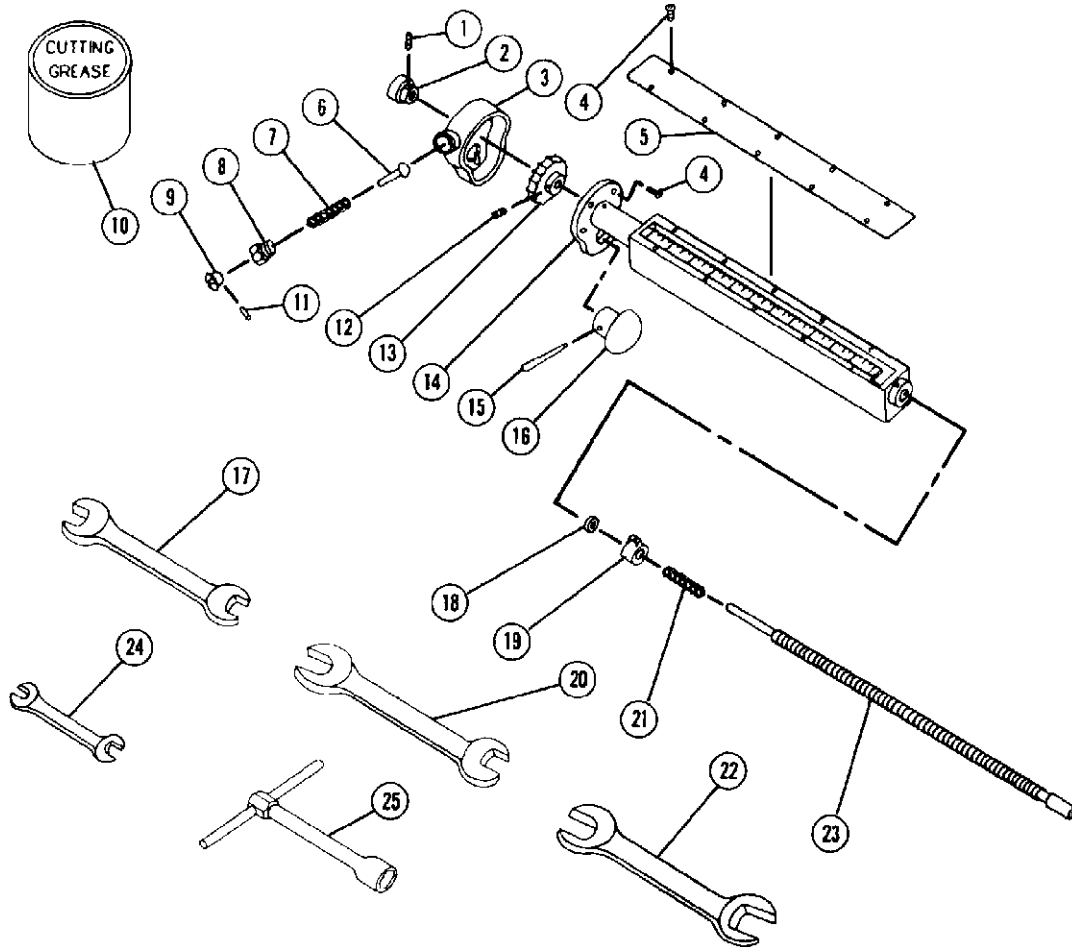


**NOTE:** These illustrations are for parts identification only. DO NOT use these illustrations for assembly or disassembly of machine. Mueller Co. offers a machine repair service. Contact Mueller Customer Service Center for details.

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

\*Included in 83941 Boring Bar Complete

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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			

\*Included in 88484 kit (Detent Sub Assembly)

Rev. 3-08 Shaded area indicates changes

**H-614 Air Power Operator**

- Catalog number
- Non-reversible air motor
- 82 RPM free speed
- Air supply: 90 cubic feet of free air per minute at 90 psig (full load)
- Total shipping weight 57 lbs. (25 kg)
- Machine only weight 28 lbs. (12 kg)
- Shipped in a wooden storage chest (312171)
- 1/2" In Line Lubricator Assembly Included (311817)

**IMPORTANT: MAINTAIN PRESSURE OF 90 PSIG – THE USE OF A GAUGE AT THE THROTTLE TO DETERMINE THE ACTUAL PRESSURE OF AIR AT THE POWER OPERATOR IS RECOMMENDED.**

*Note: The H-601 air power operator is no longer available, but may still be repairable. Contact your local Mueller representative for details on our repair program.*



**H-614 Air Power Operator**



**Optional adapter 580815**  
(Used to adapt H-614 to old style C1-36 machine)

**H-607 Hydraulic Power Operator**

- Catalog number **H-607**
- Attaches to older C1-36 machine using optional adapter 580815
- 61 RPM at 8 GPM
- Flow range: 7 - 9 GPM / 26-34 1pm
- 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

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

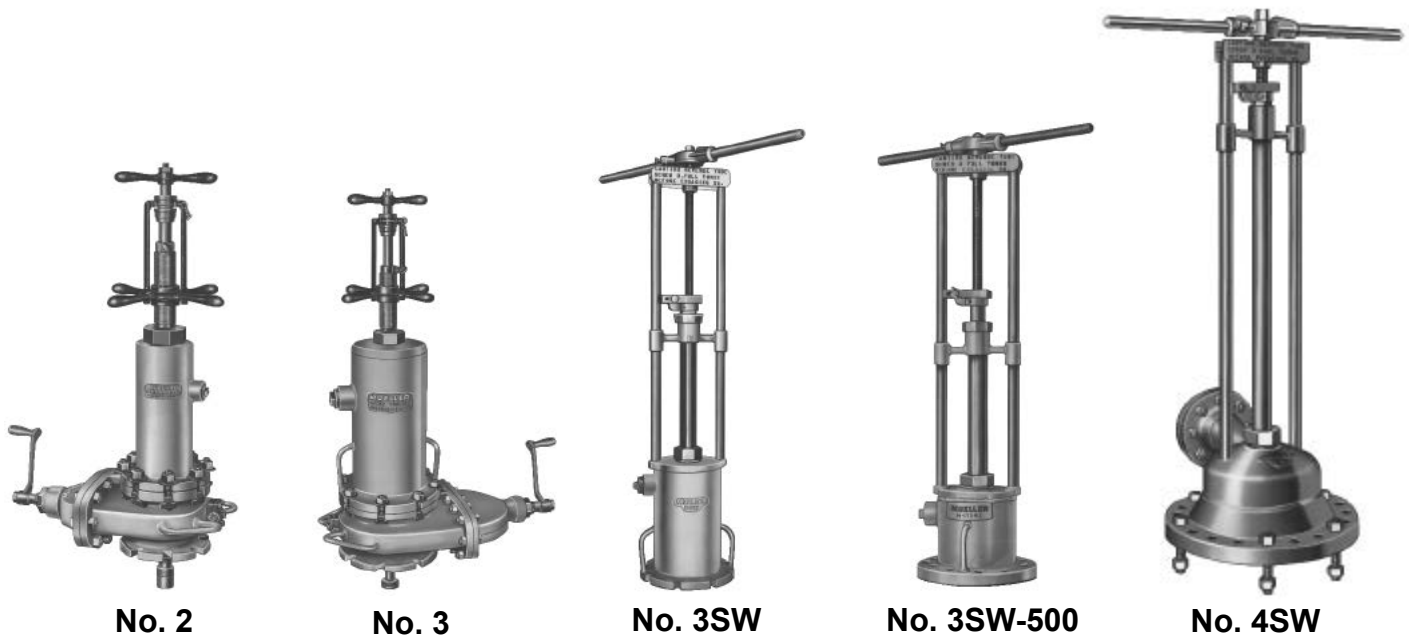


**H-607 Hydraulic Power Operator**



**Optional adapter 580815**  
(Used to adapt H-607 to old style C1-36 machine)

**Typical Stopping Machines**



The **Mueller Line Stopper Unit Numbers 2, 3, 3SW, 3SW-500, and 4SW** stopping and completion machines are an assembly of tools and methods that provide a means to install and stop-off 3" to 12" line stopper fittings having flanged completion caps.

This equipment is not sold as a unit. Due to the variations in tools required for the different sizes, pressure classes, and styles of fittings, machines and tools are purchased individually. Each line stopper fitting is illustrated with an accompanying list of equipment that is used to install and stop it off.

These line stopper units can be used with Mueller split (two sided) weld type or mechanical joint type line stopper fittings, flanged tees and Save-A-Valve® Drilling Nipples.

The combination of stopping and completion machines, tools, fittings and methods result in the MUELLER NO-BLO® System of line stopping. This system, through decades of successful application and reliable operation, has proven to be the system of choice by most gas utilities.

Line stopping units are often used for replacing or repairing a section of pipe line without interrupting service to customers. This is done by using two line stopper fittings to isolate the section of pipe and running a bypass line around the isolated section. These stopping machines have an integral bypass connection that allows the bypass line to be connected between the two machines. Specially designed rubber stoppers are used to stop-off the line to isolate the section of pipe that is to be replaced or repaired, while permitting flow to be channeled through the bypass line to continue uninterrupted service to customers.

Three styles of fittings and equipment are available--- regular bypass (bypass line between machines), side out bypass (side bypass constructed between fittings), and bottom out bypass (bottom bypass constructed between fittings). The bottom out bypass is generally used when a pipeline grade change is required.

Since many stop-offs are made under emergency conditions, this equipment should be considered emergency equipment and maintained in good condition. Crews should be trained on the proper use of the equipment and an adequate stock of machines, tools and fittings should be maintained.

Rev. 11-18 Shaded area indicates changes

### Mueller H-17235 Unit No. 2 Stopping Machine

- Catalog number – **H-17235**
- Hand operation
- Used to stop-off 3" and 4" Line Stopper Fittings and Flanged Service Tees
- Body has integral 1-1/4" F.I.P. thread bypass connection
- Has feed yoke locking mechanism for safe and positive operation
- Used in conjunction with control valve – 5" gate valve (**88611**)
- Comes in compact wooden storage chest (**302550**)
- Includes operating instruction manual (Form **8524**)
- 100 psig (690 kPa) maximum working pressure at 100F (38C)

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



**H-17235**

(Shown with 88611 Gate Valve,  
purchased separately)

### Mueller NO-BLO® operations performed by the MUELLER H-17235 Stopping Machine

Item	Size* of fitting		Mueller NO-BLO Operation
Mueller Line Stopper Fittings	3"	4"	Stop-off fitting
Mueller Flanged Tees	3"	4"	Stop-off tee

\* Nominal size



Solid Rubber Stopper

**Solid Rubber Stopper**

The solid rubber stoppers is used to make one sided stop-offs in Mueller line stopper fittings.

Size*	Stopper Complete	Replacement Rubber
3"	88610	36443
4"	88614	36471



Full Bypass Rubber Stopper

**Full Bypass Rubber Stopper**

This stopper has a full slot to allow for either top bypass through the two Mueller Unit Number 2 Machines or a bottom bypass through the Mueller Bottom Out Line Stopper Fittings. These are used in pairs to isolate a section of pipe so repairs or modifications can be made while maintaining service to customers.

Size*	Stopper Complete	Replacement Rubber
3"	680514	509447
4"	680515	509448

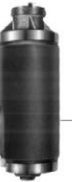


Top Bypass Rubber Stopper

**Top Bypass Rubber Stopper**

This stopper is used in pairs for a bypass line to be directed through the two Mueller Unit Number 2 Stopping Machines to isolate a section of pipe so repairs or modifications can be made while maintaining service to customers.

Size*	Stopper Complete	Replacement Rubber
3"	88609	36439
4"	88613	36467



Bottom Bypass Rubber Stopper

**Bottom Bypass Rubber Stopper**

This stopper is used in pairs for a bypass line to be directed through the two Mueller Bottom Out Line Stopper Fitting to isolate a section of pipe so repairs or modifications can be made while maintaining service to customers.

Size*	Stopper Complete	Replacement Rubber
3"	80064	36439
4"	81496	36467



Bottom Out Rubber Stopper

**Bottom Out Rubber Stopper**

This stopper is used in Mueller Bottom Out Line Stopper Fitting when the outlet is the section to be isolated so repairs or modifications can be made while maintaining service to customers. (Form 11967)

Size*	Stopper Complete
3"	681990
4"	681991



Flanged Tee Stopper

**Flanged Tee Stopper**

This stopper is used to stop-off Mueller Flanged Service Tees which allows service and lateral connections to be isolated without disrupting flow through the existing main.

Size*	Stopper Complete	Replacement Rubber
3"	83504	53195
4"	83506	53407

\* Nominal size

Rev. 11-18 Shaded area indicates changes

### Mueller H-17246 Unit No. 2 Completion Machine

- Catalog number **H-17246**
- Hand operation
- Used to align, insert and extract completion plugs on 3" and 4" Line Stopper Fittings, Flanged Service Tees and Save-A-Valve® Drilling Nipples
- Used in conjunction with Control Valve – 5" Gate Valve (**88611**)
- Comes in compact wooden storage chest (**306043**)
- Includes operating instruction manual (Form **8524**)
- Balanced pressure feature
- Included with machine: **83520** Inserting Tool, **83521** Extracting Tool, **83522** Alignment Tool, and **36404** Completion Plug Wrench.
- 100psig (689 kPa) maximum working pressure at 100F (38C)

*NOTE: The working pressure or temperature rating is reduced accordingly if any attachment, valve, or fitting subjected to pressure or temperature during the drilling, stopping or completion operations has a*



**H-17246**

*maximum working pressure or temperature rating less than that specified above.*

Item	Size* of fitting		Mueller NO-BLO Operation
Mueller Line Stopper Fittings	3"	4"	Align, insert and extract completion plug
Mueller Flanged Tees	3"	4"	
Mueller Save-A-Valve Drilling Nipples	3"	4"	

### Mueller NO-BLO® Operations performed by the Mueller H-17246 Completion Machine

*\*Nominal size*



**Alignment Tool**

Alignment tools are used with the completion plug to align the line stopper machine and equipment with the installed line stopper fitting, flanged tee or Save-A-Valve® Drilling Nipples.

Tool Complete	Fork	Collar	Set Screw	Set Screw	Spring	Shank
83522	53858	53507	97970	502754	46696	53859



**Alignment Tool**

**Mueller E-Z Release® Inserting Tool**

Inserting tools are used to insert completion plugs in Mueller line stopper fittings, flanged tee or Save-A-Valve® Drilling Nipples under pressure.

Tool Complete	Fork	Collar	Set Screw	Spring	Shank
83520	53509	53507	97970	46696	53490



**E-Z Release Inserting Tool**

**Extracting Tool**

Extracting tools are used to remove completion plugs from Mueller line stopper fittings, flanged tee or Save-A-Valve® Drilling Nipples under pressure.

Tool Complete	Fork	Collar	Set Screw	Spring	Shank
83521	53508	53507	97970	46696	53490



**Extracting Tool**

**Completion Plug Wrench**

Completion plug wrench is used to “final” tighten the completion plug before the completion cap is attached and is also used to “break” the plug loose prior to removal using the extracting tool.

Tool Complete
36404



**Completion Plug Wrench**

**Thread Cleaning Tool**

Thread cleaning tool is used to remove any pipe chips or other drilling debris from the completion plug threads in the fitting prior to installation of the completion plug.

Size	Tool Complete	Shank	Washer	Hex Cap Screw	Brush	Spacer Bar	Bolt	Coupling Nut
3"	89316	503953	45556	98570	305744	503936	503955	-
4"	89317	503953	45556	98570	301919	503954	503955	46694



**Thread Cleaning Tool**

**Inserting Bar Extension Spacer and Sleeve**

The inserting bar extension spacer and sleeve are used together to increase the stopping machine inserting bar length for stopping off certain fittings, tees and nipples.

Size*	Inserting Bar Extension Spacer	Inserting Bar Extension Sleeve
3"	505554	505555
4"	79403*	79402*



**Inserting Bar Extension Spacer**



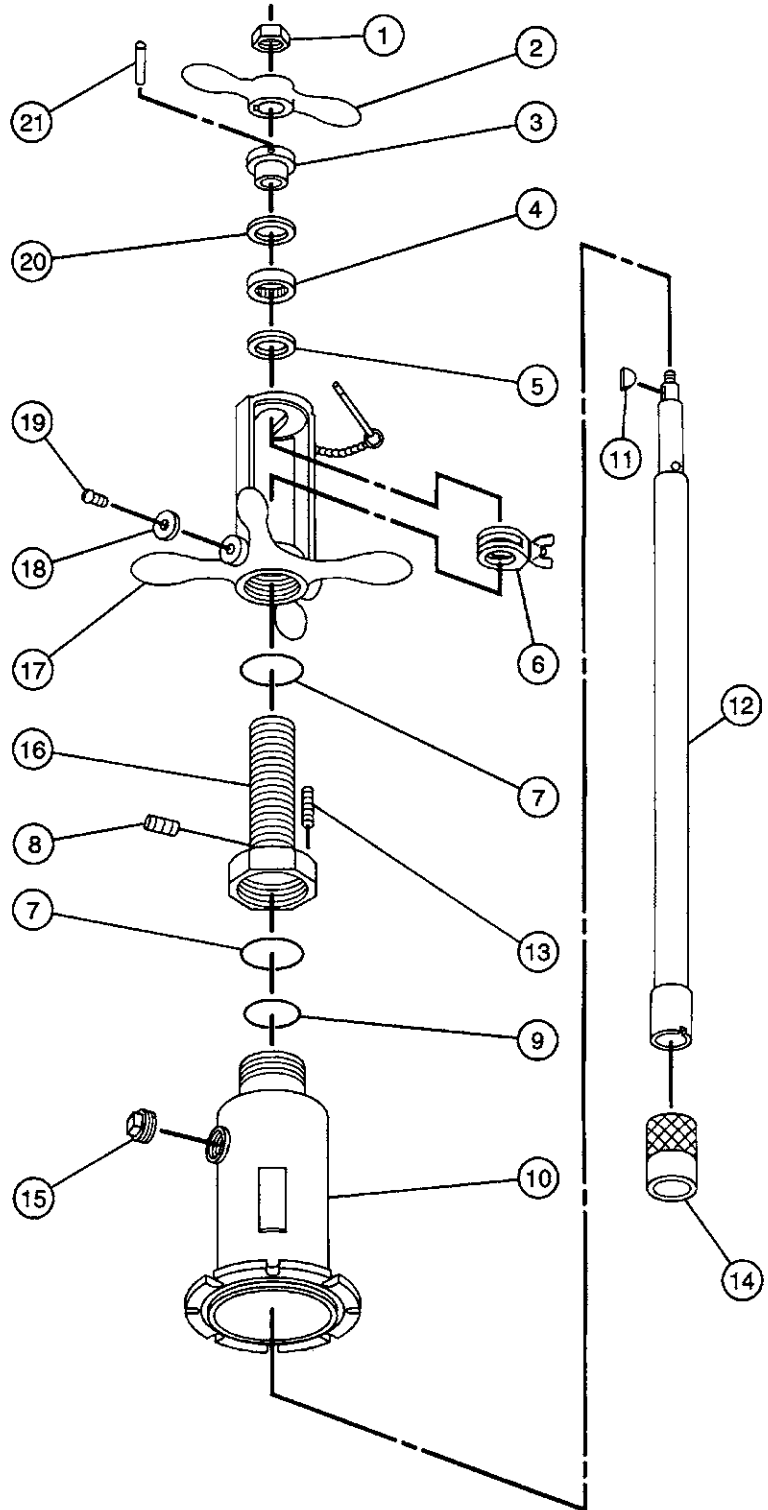
**Inserting Bar Extension Sleeve**

The 4" spacer and sleeve are only used with 4" Class 300 and above.

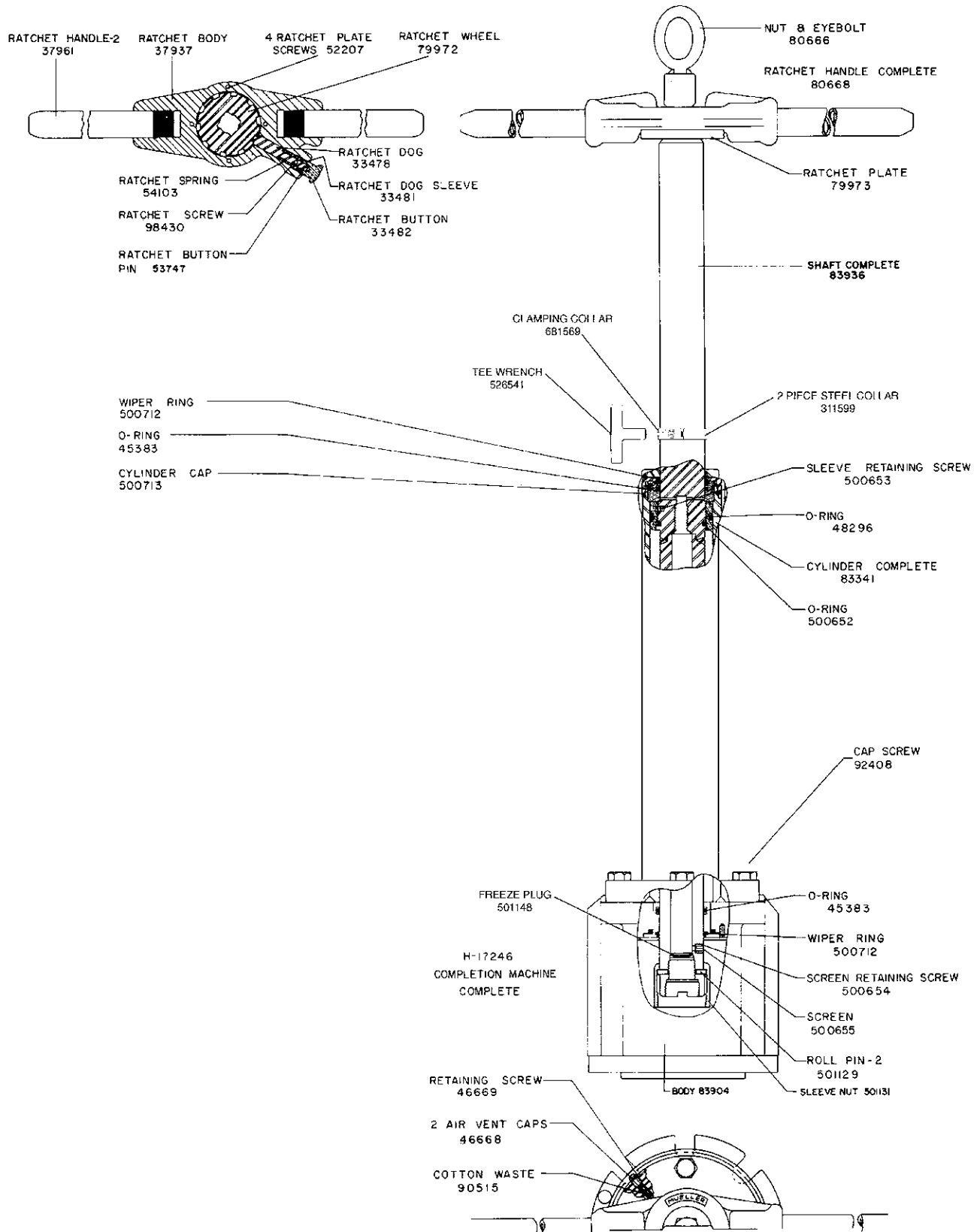
\*Nominal size

Rev. 6-10 Shaded area indicates changes

Item No.	Part Number	Part Name (quantity)
1	52178	Nut
2	36437	Handle
3	36434	Retaining collar
4	36436	Thrust bearing
5	36433	Thrust collar
6	83544	Clamping collar assembly
7	51458	O-ring (2)
8	41435	Plug
9	78827	O-ring
10	81440	Body
11	98941	Key
12	36423	Inserting bar
13	92926	Set screw
14	36432	Coupler sleeve
15	51263	Plug
16	501680	Feed sleeve
17	88607	Feed nut and yoke assembly (includes 18 and 19)
	36426	Feed nut only
	36427	Yoke only
	36444	Pin only
	48610	Ring only
	504225	Chain only
	94005	Rivet only
18	50133	Washer (2)
19	79745	Sems fastener (2)
20	36483	Bearing collar
21	503715	Retaining pin
<i>Items not shown</i>		
	302550	Wooden storage chest
	F8524	Operating instruction manual

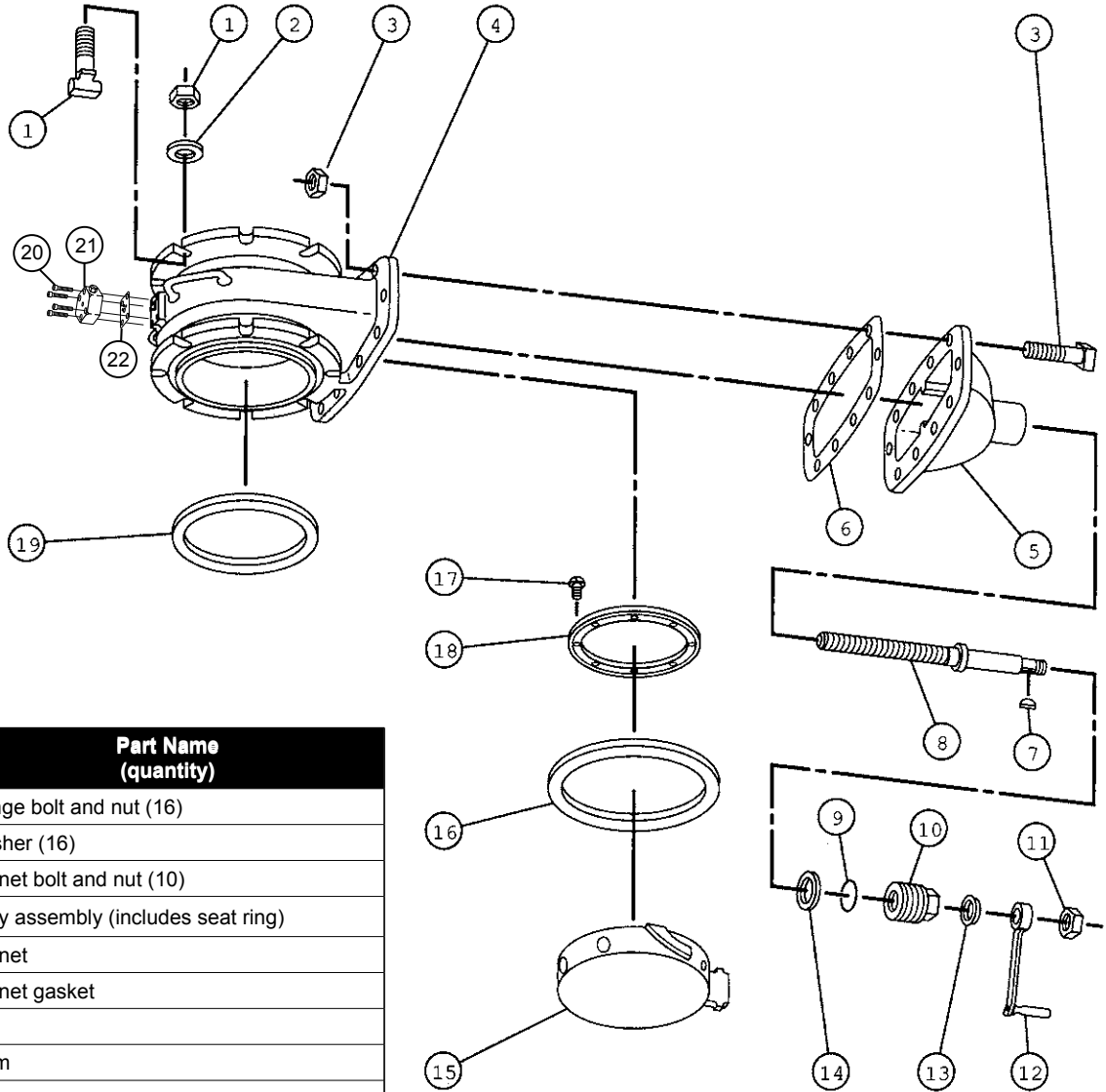


NOTE: These illustrations are for parts identification only. DO NOT use these illustrations for assembly or disassembly of machine. Mueller Co. offers a machinerepair service. Contact Mueller Customer Service Center for details.



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

Rev. 6-10 Shaded area indicates changes



Item No.	Part Number	Part Name (quantity)
1	36446	Flange bolt and nut (16)
2	92576	Washer (16)
3	54804	Bonnet bolt and nut (10)
4	83029	Body assembly (includes seat ring)
5	36448	Bonnet
6	36449	Bonnet gasket
7	98229	Key
8	36456	Stem
9	40709	O-ring
10	501295	Packing nut
11	52180	Nut
12	83973	Handle assemble
13	501274	Wiper ring
14	36453	Gasket
15	*	Gate (can not be purchased)
16	36579	Seat washer
17	313059	Socket Head Machine Screw (8)
18	36616	Seat washer retainer
19	36377	Flange gasket (2)
20	311888	Screw (4)
21	682272	Bypass stop assembly (includes 20 and 22)
22	36623	Gasket
Items not shown		
-	304672	Wooden storage chest (not shown)

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

**Mueller H-17335 Unit No. 3 Stopping Machine**

- Catalog number – **H-17335**
- Hand operation
- Used to stop-off 6" and 8" Line Stopper Fittings and Flanged Service Tees
- Body has integral 2" F.I.P. thread bypass connection
- Has feed yoke locking mechanism for safe and positive operation
- Used in conjunction with Control Valve – 9-1/4" Gate Valve (**83953**)
- Comes in Wooden Storage Chest (**304673**)
- Includes Operating Instruction Manual (Form **8571**)
- 100 psig (690 kPa) maximum working pressure at 100F (38C)

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



**H-17335**

**Mueller NO-BLO® Operations performed by the Mueller H-17335 Stopping Machine**

Item	Size* of Fitting		Mueller NO-BLO Operation
Mueller Line Stopper Fittings	6"	8"	Stop-off fitting
Mueller Flanged Tees	6"	8"	Stop-off tee

\*Nominal size



**Solid Rubber Stopper**

### Solid Rubber Stopper

The solid rubber stopper is used to make one sided stop-offs in Mueller line stopper fittings.

Size*	Stopper Complete	Replacement Rubber
6"	682365	37202
8"	88699	37208



**Full Bypass Rubber Stopper**

### Full Bypass Rubber Stopper

This stopper has a full slot to allow for either top bypass through the two Mueller Unit Number 3 machines or a bottom bypass through the Mueller Bottom Out Line Stopper Fittings. These are used in pairs to isolate a section of pipe so repairs or modifications can be made while maintaining service to customers.

Size*	Stopper Complete	Replacement Rubber
6"	682364	509449
8"	680517	509450



**Bottom Out Rubber Stopper**

### Bottom Out Rubber Stopper

This stopper is used in Mueller bottom out line stopper fitting when the outlet is the section to be isolated so repairs or modifications can be made while maintaining service to customers. (Form 11967)

Size*	Stopper Complete
6"	681993
8"	682634 *150 Class Line Stopper Fittings
8"	681995



**Flanged Tee Stopper**

### Flanged Tee Stopper

This stopper is used to stop off Mueller flanged service tees which allows service and lateral connections to be isolated without disrupting flow through the existing main.

Size*	Stopper Complete	Replacement Rubber
6"	682337	53439
8"	682339	53447

\*Nominal size

**Mueller H-17345 Unit No.3 Completion Machine**

- Catalog number **H-17345**
- Hand operation
- Used to align, insert, extract Completion Plugs in 6" and 8" Line Stopper Fittings, Flanged Service Tees and Save-A-Valve® Drilling Nipples
- Positive mechanical feed mechanism, with locking feed yoke
- Used in conjunction with Control Valve – 9-1/4" Gate Valve (**83953**)
- Comes in Wooden Storage Case (**304666**)
- Includes Operating Instruction Manual (Form **8571**)
- Included with machine: **83517** Inserting Tool, **83518** Extracting Tool, **83519** Alignment Tool, and **36424** Completion Plug Wrench.
- 100 psig (690 kPa) maximum working pressure at 100F (38C)

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



**H-17345**

**Mueller NO-BLO® Operations performed by the Mueller H-17345 Completion Machine**

Item	Size* of Fitting		Mueller NO-BLO Operation
Mueller Line Stopper Fittings	6"	8"	Align, insert or extract completion plug
Mueller Flanged Tees	6"	8"	
Mueller Save-A-Valve Drilling Nipples	6"	8"	

\*Nominal size

Rev. 12-06 Shaded area indicates changes

### Alignment Tool

Alignment tools are used with the completion plug to align the line stopper machine and equipment with the installed line stopper fitting, flanged tee or Save-A-Valve® Drilling Nipples.



Alignment Tool

Tool Complete	Fork	Collar	Set Screw	Set Screw	Spring	Shank
83519	53862	46695	53857	98429	46696	53861

### Mueller E-Z Release® Inserting Tool

Inserting tools are used to insert completion plugs in Mueller line stopper fittings, flanged tee or Save-A-Valve® Drilling Nipples under pressure.



E-Z Release Inserting Tool

Tool Complete	Fork	Collar	Set Screw	Spring	Shank
83517	46697	46695	98429	46696	53513

### Extracting Tool

Extracting tools are used to remove completion plugs from Mueller line stopper fittings, flanged tee or Save-A-Valve® Drilling Nipples under pressure.



Extracting Tool

Tool Complete	Fork	Collar	Set Screw	Spring	Shank
83518	46698	46695	98429	46696	53513

### Completion Plug Wrench

Completion plug wrench is used to “final” tighten the completion plug before the completion cap is attached and is also used to “break” the plug loose prior to removal using the extracting tool.



Completion Plug Wrench

Tool Complete
36424

### Thread Cleaning Tool

Thread cleaning tool is used to remove any pipe chips or other drilling debris from the completion plug threads in the fitting prior to installation of the completion plug.



Thread Cleaning Tool

Size*	Tool Complete	Shank	Washer	Hex Cap Screw	Brush	Spacer Bar	Bolt	Coupling Nut
6" & 8"	89318	503953	45556	98570	301919	503956	503955	-

### Inserting Bar Extension Spacer and Sleeve

The inserting bar extension spacer and sleeve are used together to increase the stopping machine inserting bar length for stopping off certain fittings, tees and nipples.



Inserting Bar Extension Spacer



Inserting Bar Extension Sleeve

Size*	Inserting Bar Extension Spacer	Inserting Bar Extension Sleeve
6" & 8"	36991	36992

### Tool Adapter

This tool adapter is used for certain applications to adapt the stopping machine inserting bar to alignment, inserting and extracting tools.



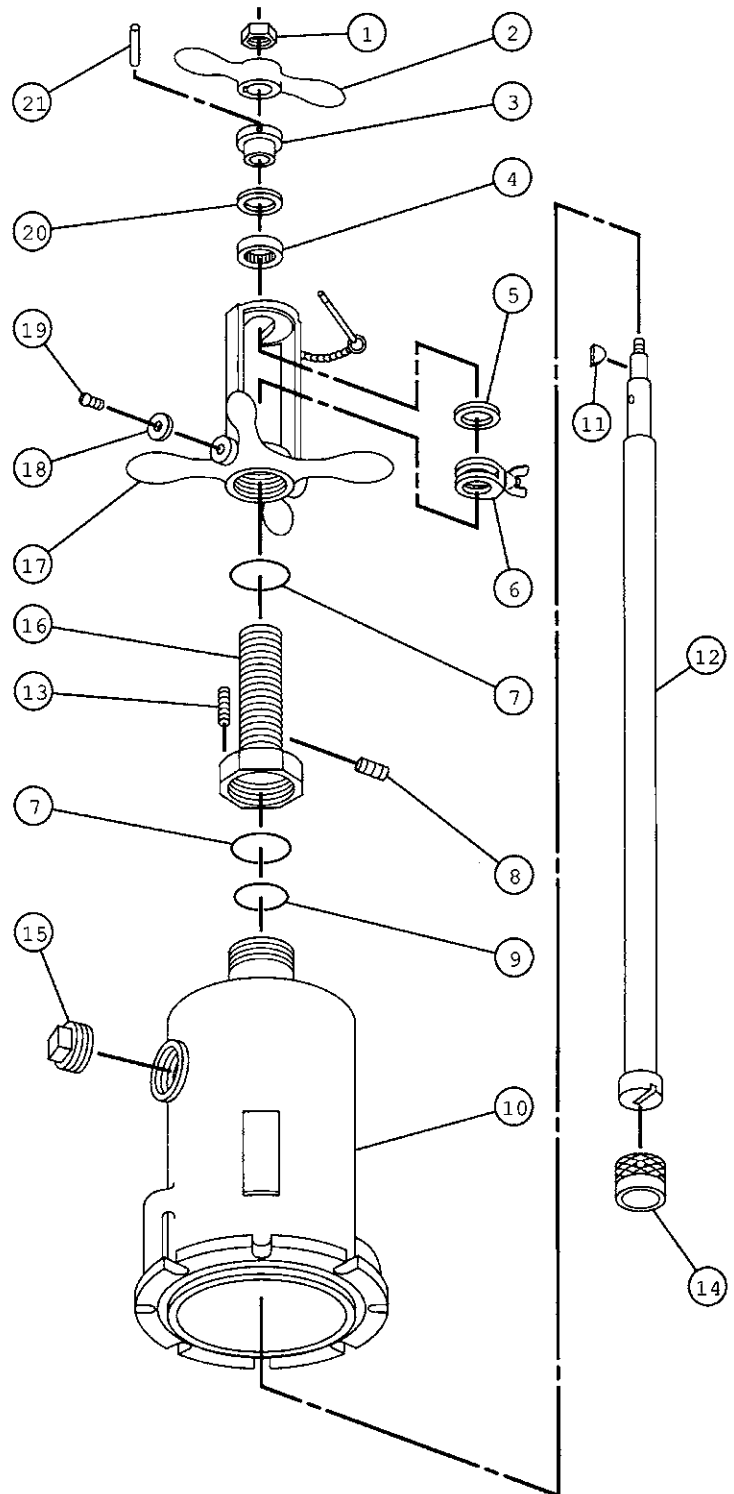
Tool Adapter

Tool Complete
37197

\*Nominal size



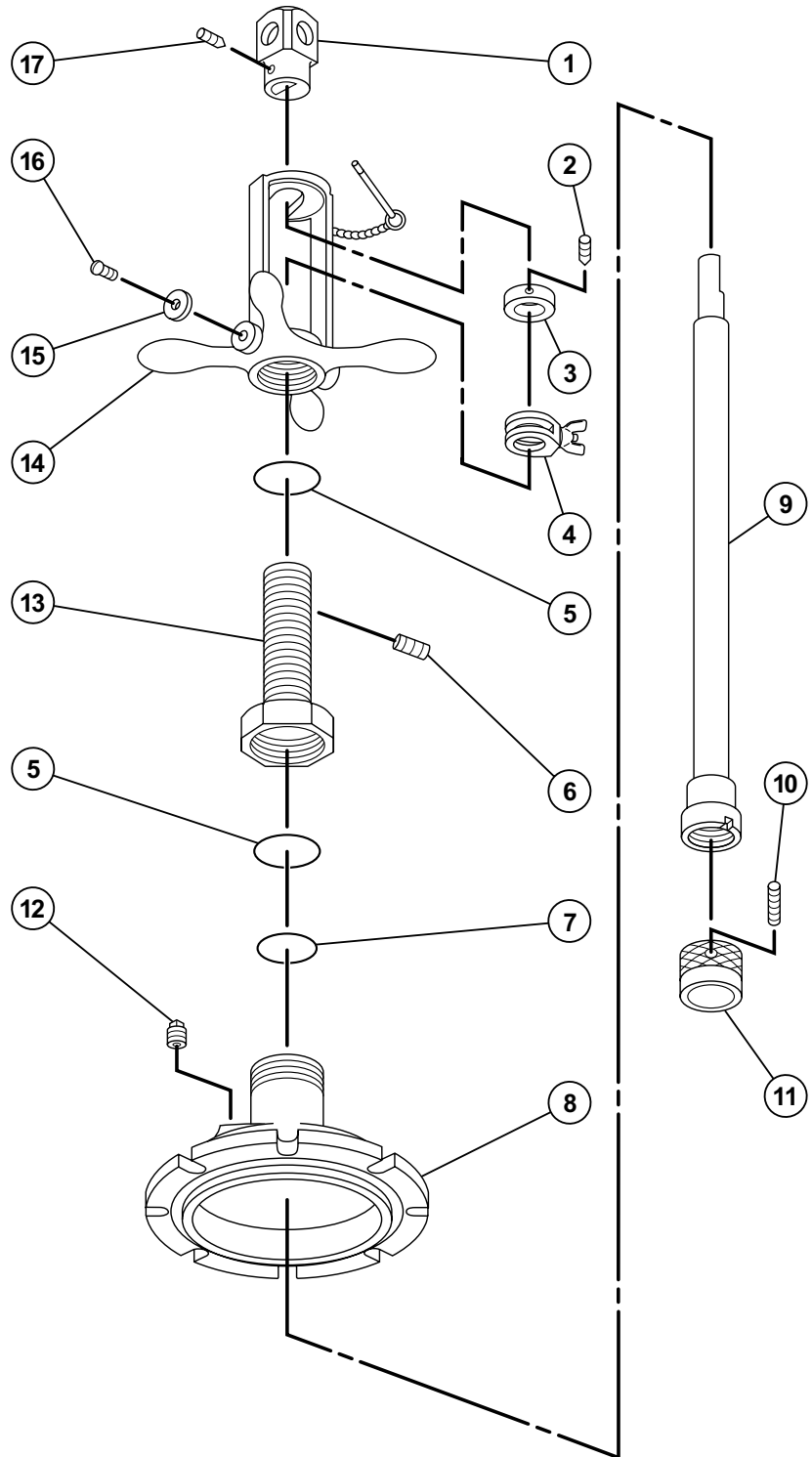
Item No.	Part Number	Part Name (quantity)
1	52178	Nut
2	36437	Handle
3	36434	Retaining collar
4	36436	Thrust bearing
5	36433	Thrust collar
6	83544	Clamping collar assembly
7	51458	O-ring (2)
8	41435	Oil Plug
9	78827	O-ring
10	80010	Body
11	98841	Key
12	88627	Inserting bar
13	92928	Set screw
14	36722	Coupler sleeve
15	52916	Plug
16	501680	Feed sleeve
17	88807	Feed nut and yoke assembly (includes 18 and 19)
	36426	Feed nut only
	36427	Yoke only
	36444	Pin only
	48810	Ring only
	504225	Chain only
	94005	Rivet only
18	50133	Washer (2)
19	79745	Semis fastener (2)
20	36483	Bearing collar
21	503715	Retaining pin
Items not shown		
-	304673	Wooden storage chest (not shown)
-	F8571	Operating instruction manual (not shown)



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.

Rev. 12-12 Shaded area indicates changes

Item No.	Part Number	Part Name (quantity)
1	36677	Bar head
2	40013	Screw (2)
3	36678	Friction collar
4	83544	Clamping collar assembly
5	51458	O-ring (2)
6	41435	Oil plug
7	78827	O-ring
8	36679	Body
9	53512	Inserting bar
10	92926	Screw
11	36722	Coupler nut
12	64134	Plug
13	501680	Feed sleeve
14	88807 *	Feed nut and yoke assembly
15	50133	Washer (2)
16	79745	Sems fastener
17	58458	Screw
-	304666	Wooden storage chest (not shown)
-	F8571	Operating instruction manual (not shown)



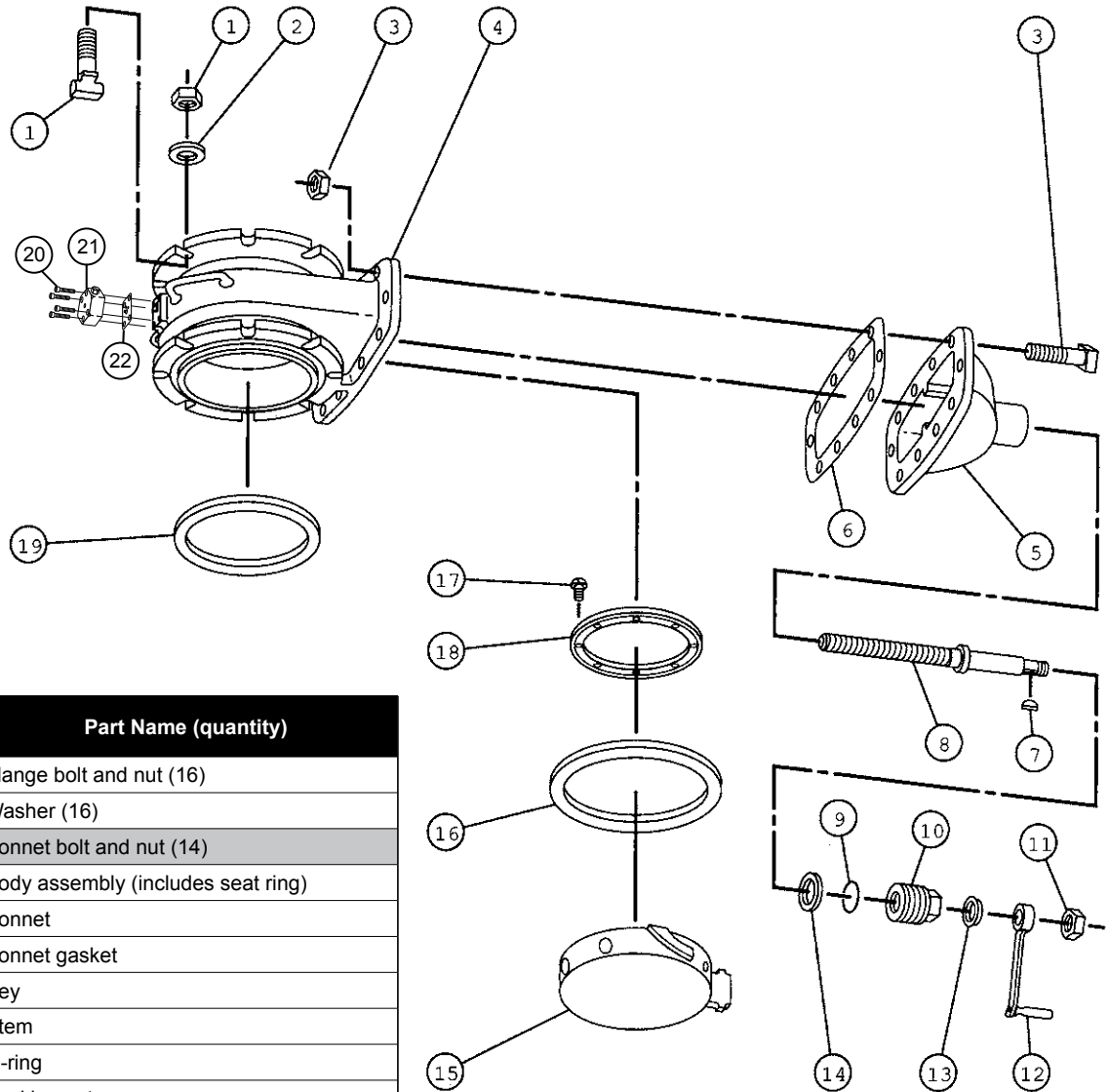
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# 83953 UNIT NO. 3 GATE VALVE REPAIR PARTS

**MUELLER**

# 10.27

Shaded area indicates change Rev. 6-10



Item No.	Part Number	Part Name (quantity)
1	36446	Flange bolt and nut (16)
2	92576	Washer (16)
3	54804	Bonnet bolt and nut (14)
4	83952	Body assembly (includes seat ring)
5	36636	Bonnet
6	36538	Bonnet gasket
7	98229	Key
8	36541	Stem
9	51458	O-ring
10	501296	Packing nut
11	52180	Nut
12	83973	Handle assemble
13	501273	Wiper ring
14	36539	Gasket
15	*	Gate (can not be purchased)
16	36581	Seat washer
17	313059	Socket Head Machine Screw (12)
18	36560	Seat washer retainer
19	63094	Flange gasket (2)
20	311888	Screw (4)
21	682272	Bypass stop assembly (includes 20 and 22)
22	36623	Gasket
<i>Items not shown</i>		
	304671	Wooden storage chest (not shown)

*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.*

Rev. 12-06 Shaded area indicates changes

## Mueller H-17340 Unit No. 3SW Stopping Machine

- Catalog number **H-17340**
- Hand operation or Power Operation (H624)
- Used to stop-off 4", 6" and 8" Line Stopper Fittings and Flanged Service Tees
- Body has integral 2" F.I.P. thread bypass connection
- Used in conjunction with Control Valve – 9-1/4" Gate Valve (**83953**)
- Comes in Wooden Storage Chest (**96824**)
- Includes Operating Instruction Manual (Form **8834**)
- 275 psig (1898 kPa) maximum working pressure at 100F (38C)

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



**H-17340**

## Mueller NO-BLO® Operations performed by the Mueller 89366 Stopping Machine

Item	Size* Of Fitting			Mueller NO-BLO Operation
Mueller Line Stopper Fittings	4"	6"	8"	Stop-off fitting
Mueller Flanged Tees	4"	6"	8"	Stop-off tee

\*Nominal size



Steel Wedge Stopper

**Steel Wedge Stopper**

Mueller polyurethane covered steel wedge stoppers are mechanically retracted and expanded for positive operation. These stoppers are made to be used with the full line of Mueller flanged line stopper fittings. (Polyurethane covered cylinder replacement kits and Positive Control™ Cover kits are available from Mueller Co.)

Size*	Stopper Complete	Pipe Wall
4"	89694	Standard
6"	89696	Standard
6"	89700	Thin
8"	89698	Standard
8"	89702	Thin

See next page for steel wedge stopper replacement parts and repair kits.



Bottom Out Rubber Stopper

**Bottom Out Rubber Stopper**

This stopper is used in Mueller Bottom Out Line Stopper Fitting when the outlet is the section to be isolated so repairs or modifications can be made while maintaining service to customers. (Form 11967)

Size*	Stopper Complete
4"	681992
6"	681994
8"	681996



Flanged Tee Stopper

**Flanged Tee Stopper**

This stopper is used to stop off Mueller Flanged Service tees which allows service and lateral connections to be isolated without disrupting flow through the existing main.

Size*	Stopper Complete	Replacement Rubber
4"	83506	53407
6"	682337	53439
8"	682339	53447

\*Nominal size

**Power Operators for Mueller 3SW, 3SW-500, & 4SW Machines**

**H-624 Air Power Operator**

- Reversible air motor
- 17 RPM free speed
- Air supply: 33 SCFM at 90 psig (full load)
- Machine only weight 17 lbs. (8 kg)
- Shipped in a wooden storage chest complete with inline lubricator
- IMPORTANT:** Read operating instructions (form 13866)

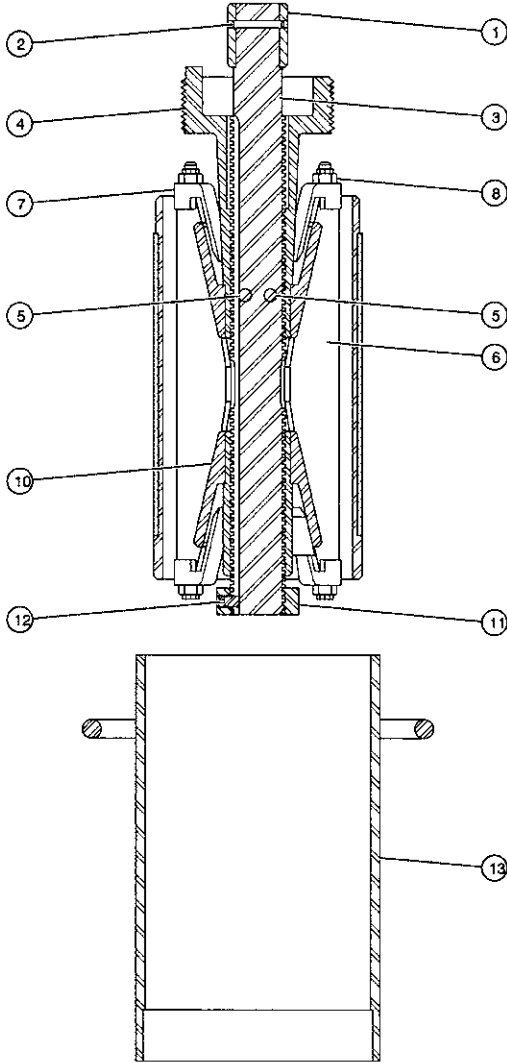
**IMPORTANT: MAINTAIN PRESSURE OF 90 PSIG – THE USE OF A GAUGE AT THE THROTTLE TO DETERMINE THE ACTUAL PRESSURE OF AIR AT THE POWER OPERATOR IS RECOMMENDED.**

Note: Used to lower and raise stoppers. Not to be used for expansion or retraction of stoppers.



H-624 Air Power Operator

Rev. 12-06 Shaded area indicates changes



### Mueller Steel Wedge Stopper Replacement Parts

Item No.	Part Name	No. Req'd	With Polyurethane Cover for Use With Gas or Petroleum				
			Standard			Thin	
			4"	6"	8"	6"	8"
	<b>Stopper complete</b>		<b>89694</b>	<b>89696</b>	<b>89698</b>	<b>89700</b>	<b>89702</b>
1	Driving square	1	53558	-	-	-	-
2	Retaining pin	1	53747	-	-	-	-
3	Expander screw	1	506851	506853	506853	506853	506853
4	Top wedge expander	1	580645	580646	580646	580646	580646
5	Top wedge retainer pins	2	502069	502069	502069	502069	502069
6	Cylinder and webs	1	580639	580640	580641	89187	89188
7	Clamp bars	12	502064	502065	502065	502065	502065
8	Clamp bar retainer nuts	12	502753	310784	310784	310784	310784
10	Bottom expander wedge	1	580643	580644	580644	580644	580644
11	Expander screw lock nut	1	506852	506854	506854	506854	506854
12	Lock nut set screw	1	301170	301169	301169	301169	301169
13	Protector sleeve	1	53905	580725	580726	580727	580728

### Replacement DIY Kits

Stoppers with polyurethane covers may be returned to the factory for recovering — Contact your Mueller distributor, sales representative or Gas Customer Service for details. The factory can also convert to polyurethane older steel wedge stoppers that have Positive Control™ or Neoprene covers. (Form 12327)

Polyurethane Covered Cylinder for Gas or Petroleum Use	Size*	Part #	Wall
	4"	682201	-
6"	682204	Standard	
6"	682207	Thin	
8"	682210	Standard	
8"	682213	Thin	

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.

**Mueller H-17346 Unit No. 3SW Completion Machine**

- Catalog number **H-17346**
- Hand operation
- Used to align, insert and extract 4", 6", and 8" Completion Plugs in Line Stopper Fittings, Flanged Service Tees and Save-A-Valve® Drilling Nipples
- Used in conjunction with Control Valve – 9-1/4" Gate Valve (**83953**)
- Comes in Wooden Storage Chest (**304772**)
- Includes Operating Instruction Manual (Form **8834**)
- Completion Plug Wrench (**36424**) included
- Inserting Tool (**83237**) included
- Extracting Tool (**83238**) included
- Tools for 4" Applications Sold Separately**
- Balanced pressure feature
- 275 psig (1898 kPa) maximum working pressure at 100F (38C)

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



**H-17346**

**Mueller NO-BLO® Operations performed by the Mueller H-17346 Completion Machine**

Item	Size* of Fitting			Mueller NO-BLO Operation
Mueller Line Stopper Fittings	4"	6"	8"	Align, insert and extract completion plug
Mueller Flanged Tees	4"	6"	8"	
Mueller Save-A-Valve Drilling Nipples	4"	6"	8"	

### Alignment Tool

Alignment tools are used with the completion plug to align the line stopper machine and equipment with the installed line stopper fitting, flanged tee or Save-A-Valve® Drilling Nipples.

Size*	Tool Complete	Fork	Collar	Set Screw	Set Screw	Spring	Shank	Nut
4"	83774	53858	500038	97970	53857	46696	500036	46694
6" & 8"	83250	53862	46695	98429	53857	46696	60326	46694



Alignment Tool

### Mueller E-Z Release® Inserting Tool

Inserting tools are used to insert completion plugs in Mueller line stopper fittings, flanged tee or Save-A-Valve® Drilling Nipples under pressure.

Size*	Tool Complete	Fork	Collar	Set Screw	Spring	Shank	Nut
4"	83772	53509	500038	97970	46696	500037	46694
6" & 8"	83237	46697	46695	98429	46696	50024	46694



E-Z Release  
Inserting Tool

### Extracting Tool

Extracting tools are used to remove completion plugs from Mueller line stopper fittings, flanged tee or Save-A-Valve® Drilling Nipples under pressure.

Size*	Tool Complete	Fork	Collar	Set Screw	Spring	Shank	Nut
4"	83773	53508	500038	97970	46696	500037	46694
6" & 8"	83238	46698	46695	98429	46696	50024	46694



Extracting Tool

### Completion Plug Wrench

Completion plug wrench is used to "final" tighten the completion plug before the completion lid is attached and is also used to "break" the plug loose prior to removal using the extracting tool.

Size*	Tool Complete
4"	36404
6" & 8"	36424



Completion  
Plug Wrench

### Thread Cleaning Tool

Thread cleaning tool is used to remove any pipe chips or other drilling debris from the completion plug threads in the fitting prior to installation of the completion plug.

Size*	Tool Complete	Shank	Washer	Hex Cap Screw	Brush	Spacer Bar	Bolt	Coupling Nut
4"	680360	503959	45556	98570	301919	503954	503955	46694
6" & 8"	89319	503957	45556	98570	301919	503956	503955	46694

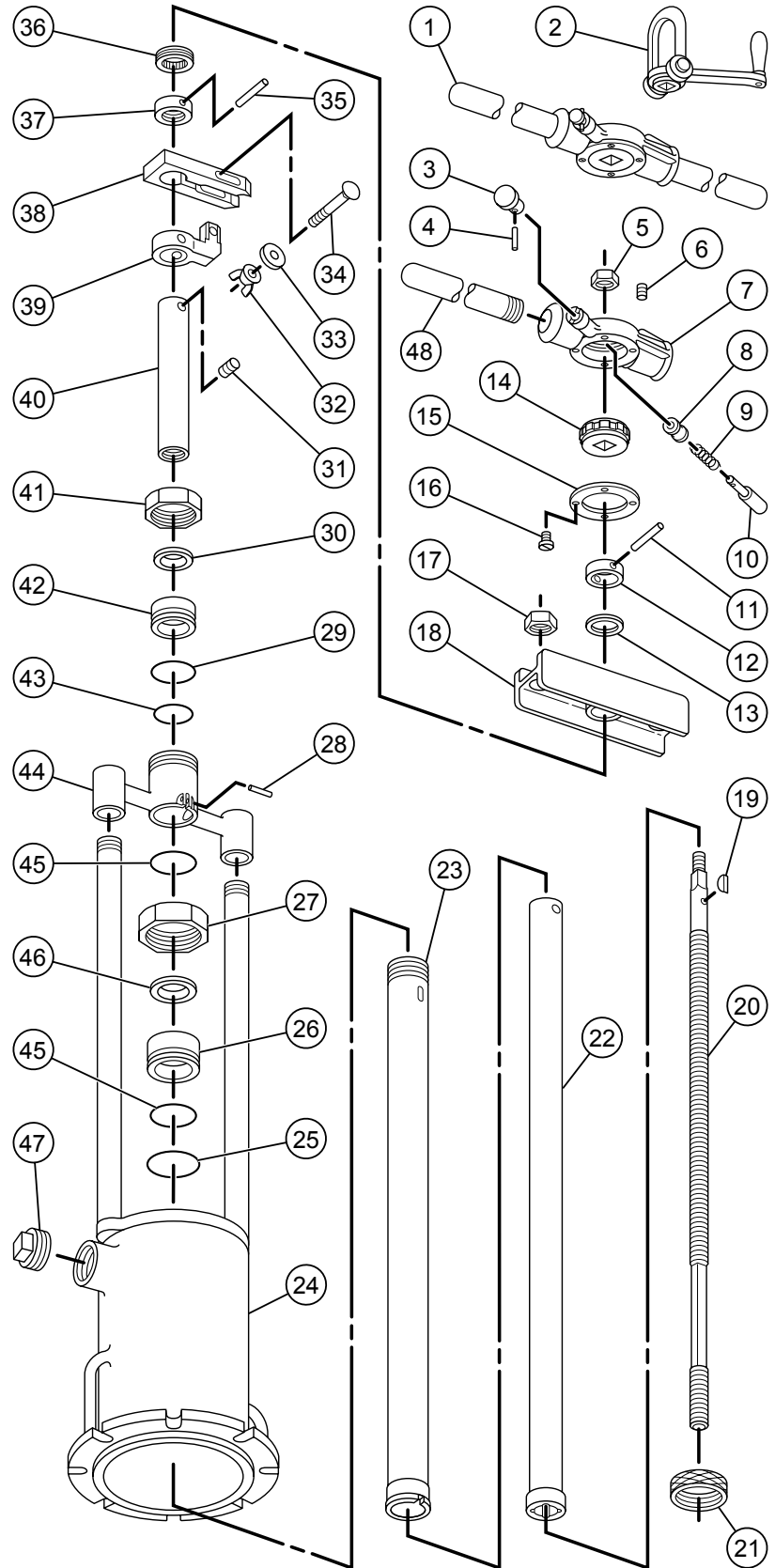


Thread  
Cleaning Tool

\*Nominal size



Item NO.	Part Number	Part Name (quantity)
1	80668	Ratchet handle complete
2	83111	Crank/lift handle assembly
3	33482	Ratchet button
4	53747	Pin
5	46028	Nut
6	98430	Screw (2)
7	37937	Ratchet handle body
8	33481	Ratchet dog sleeve
9	54103	Ratchet spring
10	33478	Ratchet dog
11	60507	Pin
12	44268	Collar
13	45215	Trust washer
14	79972	Ratchet wheel
15	79973	Ratchet plate
16	52207	Screw (4)
17	52055	Nut (2)
18	83108	Guide post tie bar assembly
19	79987	Key
20	45111*	Operating tube screw
21	79981	Coupler nut
22	83106	Operating tube
23	44280	Guide tube
24	83101	Pressure Chamber assembly
25	501419	O-ring
26	508537	Lower packing gland
27	44168	Body packing nut
28	60350	Pin
29	78828	O-ring
30	48137	Upper wiper ring
31	98522	Screw (3)
32	94720	Wing nut
33	45556	Washer
34	90103	Bolt
35	503699	Pin
36	45120	Thrust bearing
37	44266	Collar
38	44277	Clamp bar
39	83110	Operating tube clamp
40	45114	Operating tube nut
41	60345	Packing nut
42	508538	Upper Packing gland
43	79506	O-ring
44	83109	Guide tube cap assembly
45	40855	O-ring (2)
46	501158	Lower wiper ring
47	52916	Plug
48	37961	Handle
-	96824	Wooden storage chest (not shown)
-	F8834	Operating instruction manual (not shown)

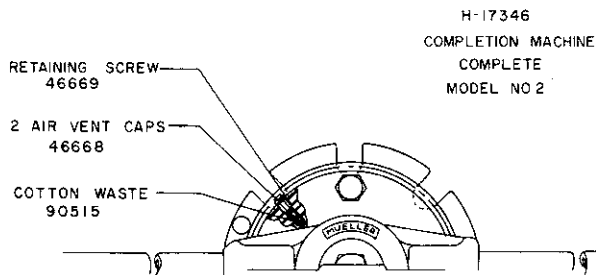
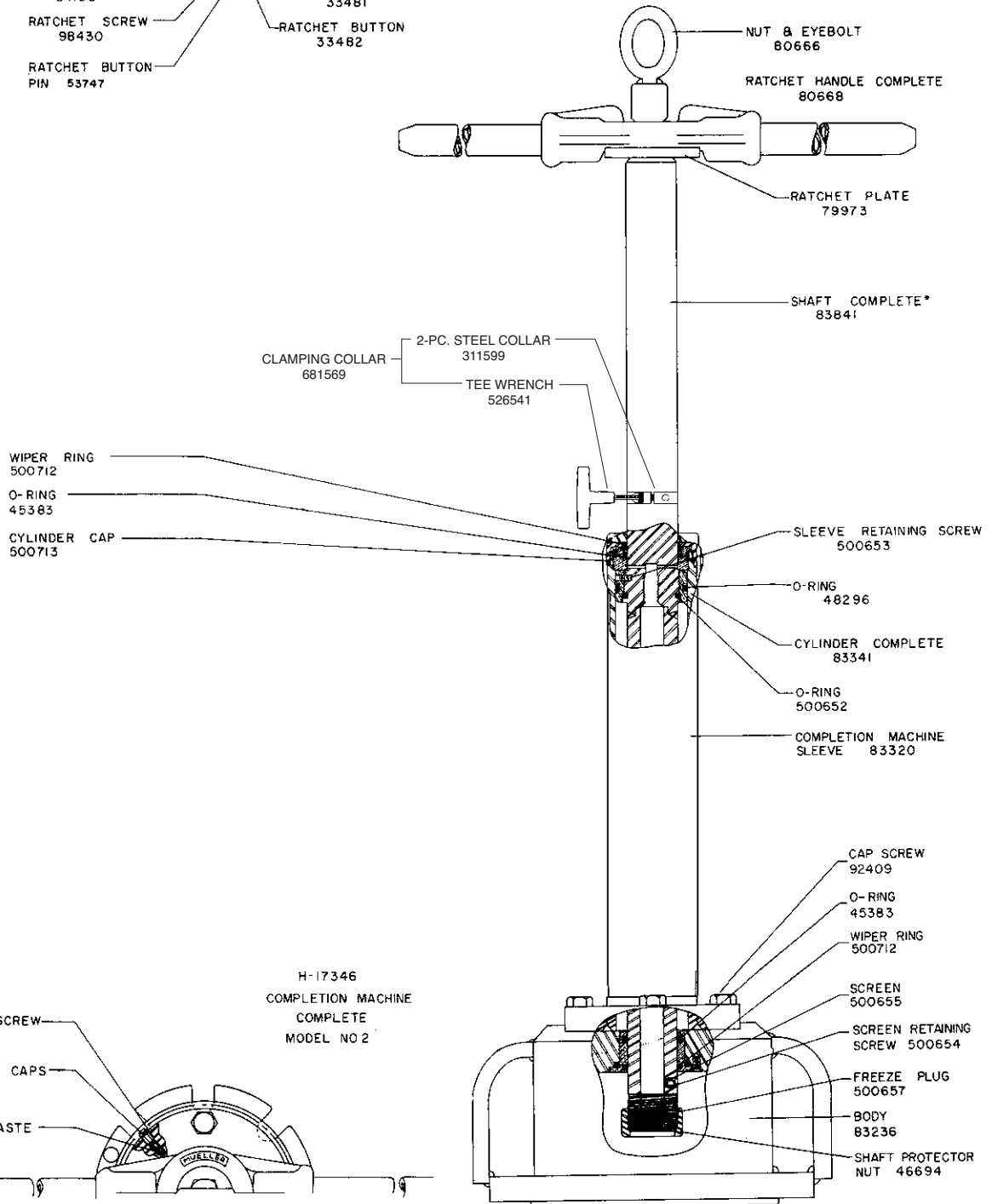
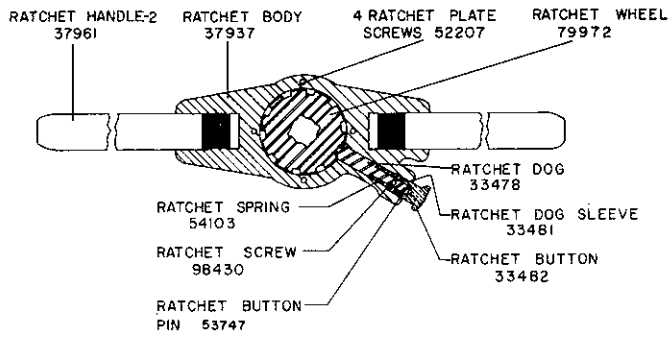


\* Not sold individually

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, PART NUMBER AND PART NAME (include catalog number and model number of machine)**

Rev. 6-10 Shaded area indicates changes



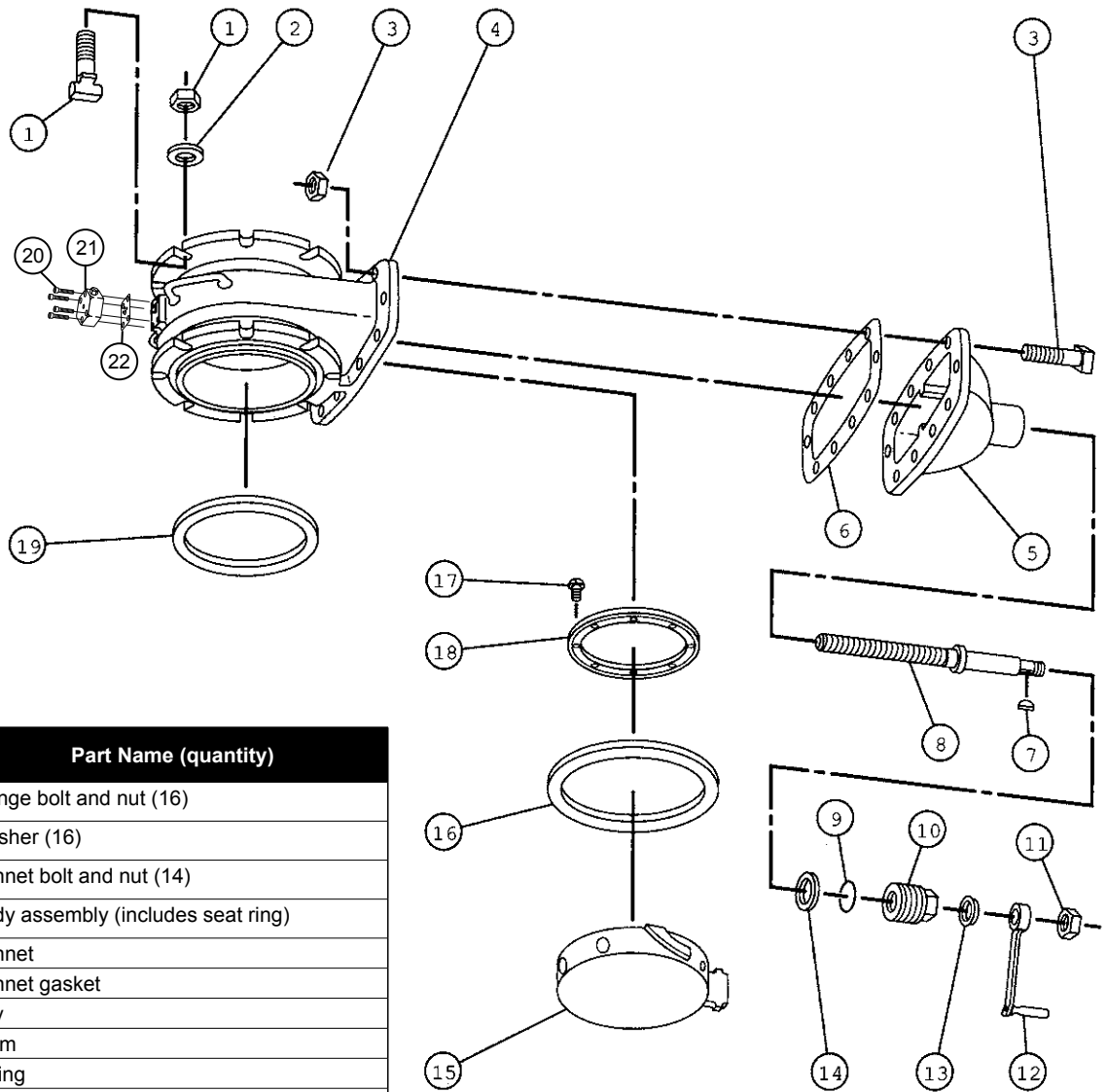
NOTE: These illustrations are for parts identification only. DO NOT use these illustrations for assembly or disassembly of machine. Mueller Co. offers a machine repair service. Contact Mueller Customer Service Center for details.

# 83953 UNIT NO. 3SW STOPPING MACHINE GATE VALVE REPAIR PARTS

**MUELLER**

# 10.35

Shaded area indicates change Rev. 6-10



Item No.	Part Number	Part Name (quantity)
1	36446	Flange bolt and nut (16)
2	92576	Washer (16)
3	54804	Bonnet bolt and nut (14)
4	83952	Body assembly (includes seat ring)
5	36636	Bonnet
6	36538	Bonnet gasket
7	98229	Key
8	36541	Stem
9	51458	O-ring
10	501296	Packing nut
11	52180	Nut
12	83973	Handle assemble
13	501273	Wiper ring
14	36539	Gasket
15	*	Gate (can not be purchased)
16	36581	Seat washer
17	313059	Socket Head Machine Screw (12)
18	36560	Seat washer retainer
19	63094	Flange gasket (2)
20	311888	Screw (4)
21	682272	Bypass stop assembly (includes 20 and 22)
22	36623	Gasket
<i>Items not shown</i>		
	304671	Wooden storage chest

\*Not available as a replacement part. Shown for clarity only.

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

Rev. 3-08 Shaded area indicates changes

### Mueller H-17342 Unit No. 3SW-500 Stopping Machine

- Catalog number **H-17342**
- Hand operation or Power Operation (H624)
- Used to stop-off 4", 6" and 8" Line Stopper Fittings and Flanged Service Tees
- Body has integral 2" F.I.P. thread bypass connection
- Used in conjunction with Control Valve – 9-1/4" Gate Valve (83721)
- Come in Wooden Storage Case (**304673**)
- Includes Operating Instruction Manual (Form **9067**)
- 500 psig (3450 kPa) maximum working pressure at 100F (38C)

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



**H-17342**

### Mueller NO-BLO® Operations performed by the Mueller H-17342 Stopping Machine

Item	Size* of Fitting			Mueller NO-BLO Operation
Mueller Line Stopper Fittings	4"	6"	8"	Stop-off fitting
Mueller Flanged Tees	4"	6"	8"	Stop-off tee

\*Nominal size



Steel Wedge Stopper

**Steel Wedge Stopper**

Mueller polyurethane covered steel wedge stoppers are mechanically retracted and expanded for positive operation. These stoppers are made to be used with the full line of Mueller flanged line stopper fittings. (Polyurethane covered cylinder replacement kits and Positive Control™ Cover kits are available from Mueller Co.)

Size*	Stopper Complete	Pipe Wall
4"	89694	Standard
6"	89696	Standard
6"	89700	Thin
8"	89698	Standard
8"	89702	Thin

See next page for steel wedge stopper replacement parts and repair kits.



Bottom Out Rubber Stopper

**Bottom Out Rubber Stopper**

This stopper is used in Mueller bottom out line stopper fitting when the outlet is the section to be isolated so repairs or modifications can be made while maintaining service to customers. (Form 11967)

Size*	Stopper Complete
4"	681992
6"	681994
8"	681996

\*Nominal size

**Power Operators for Mueller 3SW, 3SW-500, & 4SW Machines**

**H-624 Air Power Operator**

- Reversible air motor
- 17 RPM free speed
- Air supply: 33 SCFM at 90 psig (full load)
- Machine only weight 17 lbs. (8 kg)
- Shipped in a wooden storage chest complete with inline lubricator
- IMPORTANT:** Read operating instructions (form 13866)

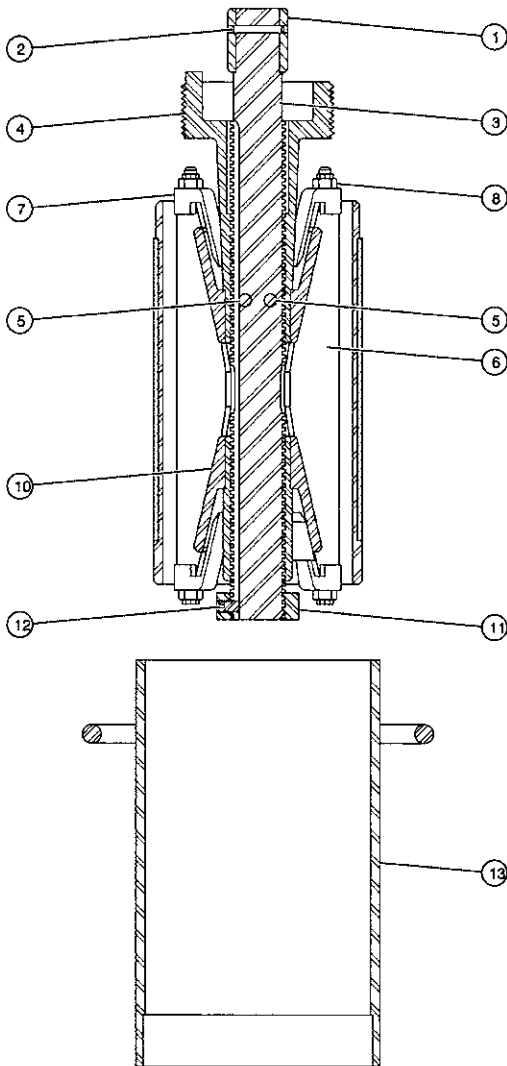
**IMPORTANT: MAINTAIN PRESSURE OF 90 PSIG – THE USE OF A GAUGE AT THE THROTTLE TO DETERMINE THE ACTUAL PRESSURE OF AIR AT THE POWER OPERATOR IS RECOMMENDED.**

Note: Used to lower and raise stoppers. Not to be used for expansion or retraction of stoppers.



H-624 Air Power Operator

Rev. 12-06 Shaded area indicates changes



### Mueller Steel Wedge Stopper Replacement Parts

Item No.	Part Name	No. Req'd	With polyurethane Cover for use with gas or petroleum				
			Standard			Thin	
			4"	6"	8"	6"	8"
	<b>Stopper complete</b>		<b>89694</b>	<b>89696</b>	<b>89698</b>	<b>89700</b>	<b>89702</b>
1	Driving square	1	53558	-	-	-	-
2	Retaining pin	1	53747	-	-	-	-
3	Expander screw	1	506851	506853	506853	506853	506853
4	Top wedge expander	1	580645	580646	580646	580646	580646
5	Top wedge retainer pins	2	502069	502069	502069	502069	502069
6	Cylinder and webs	1	580639	580640	580641	89187	89188
7	Clamp bars	12	502064	502065	502065	502065	502065
8	Clamp bar retainer nuts	12	502753	310784	310784	310784	310784
10	Bottom expander wedge	1	580643	580644	580644	580644	580644
11	Expander screw lock nut	1	506852	506854	506854	506854	506854
12	Lock nut set screw	1	301170	301169	301169	301169	301169
13	Protector sleeve	1	53905	580725	580726	580727	580728

### Replacement DIY Kit

Stoppers with polyurethane covers may be returned to the factory for recovering — Contact you Mueller distributor, sales representative or Gas Customer Service for details. The factory can also convert to polyurethane older steel wedge stoppers that have Positive Control™ or Neoprene covers. (Form 12327)

	Size*	Part #	Wall
Polyurethane covered cylinder for gas or petroleum use	4"	682201	-
	6"	682204	Standard
	6"	682207	Thin
	8"	682210	Standard
	8"	682213	Thin

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.

**Mueller H-17347 Unit No. 3SW-500 Completion Machine**

- Catalog number **H-17347**
- Hand operation
- Used to align, insert and extract Completion Plugs in Line Stopper Fittings, Flanged Service Tees and Save-A-Valve® Drilling Nipples
- Used in conjunction with Control Valve – 9-1/4" Gate Valve (**83721**)
- Comes in Wooden Storage Chest (**304772**)
- Includes Operating Instruction Manual (Form **9067**)
- Completion Plug Wrench (**36424**) included
- Inserting Tool (**83237**) included
- Extracting Tool (**83238**) included
- Tools for 4" Applications Sold Separately**
- Balanced pressure feature
- 500 psig (3450 kPa) maximum working pressure at 100F (38C)



**H-17347**

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

**Mueller NO-BLO® Operations performed by the Mueller H-17347 Completion Machine**

Item	Size* of Fitting			Mueller NO-BLO Operation
Mueller Line Stopper Fittings	4"	6"	8"	Align, insert and extract completion plug
Mueller Flanged Tees	4"	6"	8"	

\*Nominal size

### Alignment Tool

Alignment tools are used with the completion plug to align the line stopper machine and equipment with the installed line stopper fitting.

Size*	Tool Complete	Fork	Collar	Set Screw	Set Screw	Spring	Shank	Nut
4"	83774	53858	500038	97970	53857	46696	500036	46694
6" & 8"	83250	53862	46695	98429	53857	46696	60326	46694



**Alignment Tool**

### Mueller E-Z Release® Inserting Tool

Inserting tools are used to insert completion plugs in Mueller line stopper fittings under pressure.

Size*	Tool Complete	Fork	Collar	Set Screw	Spring	Shank	Nut
4"	83772	53509	500038	97970	46696	500037	46694
6" & 8"	83237	46697	46695	98429	46696	50024	46694



**E-Z Release  
Inserting Tool**

### Extracting Tool

Extracting tools are used to remove completion plugs from Mueller line stopper fittings under pressure.

Size*	Tool Complete	Fork	Collar	Set Screw	Spring	Shank	Nut
4"	83773	53508	500038	97970	46696	500037	46694
6" & 8"	83238	46698	46695	98429	46696	50024	46694

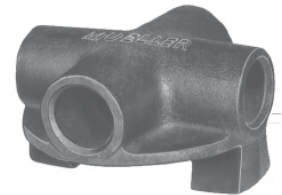


**Extracting Tool**

### Completion Plug Wrench

Completion plug wrench is used to "final" tighten the completion plug before the completion cap is attached and is also used to "break" the plug loose prior to removal using the extracting tool.

Size*	Tool Complete
4"	36404
6" & 8"	36424



**Completion  
Plug Wrench**

### Thread Cleaning Tool

The Thread Cleaning Tool is used to remove any pipe chips or other drilling debris from the completion plug threads in the fitting prior to installation of the completion plug.

Size*	Tool Complete	Shank	Washer	Hex Cap Screw	Brush	Spacer Bar	Bolt	Coupling Nut
4"	680360	503959	45556	98570	301919	503954	503955	46694
6" & 8"	89319	503957	45556	98070	301919	503956	503955	46694



**Thread  
Cleaning Tool**

\*Nominal size

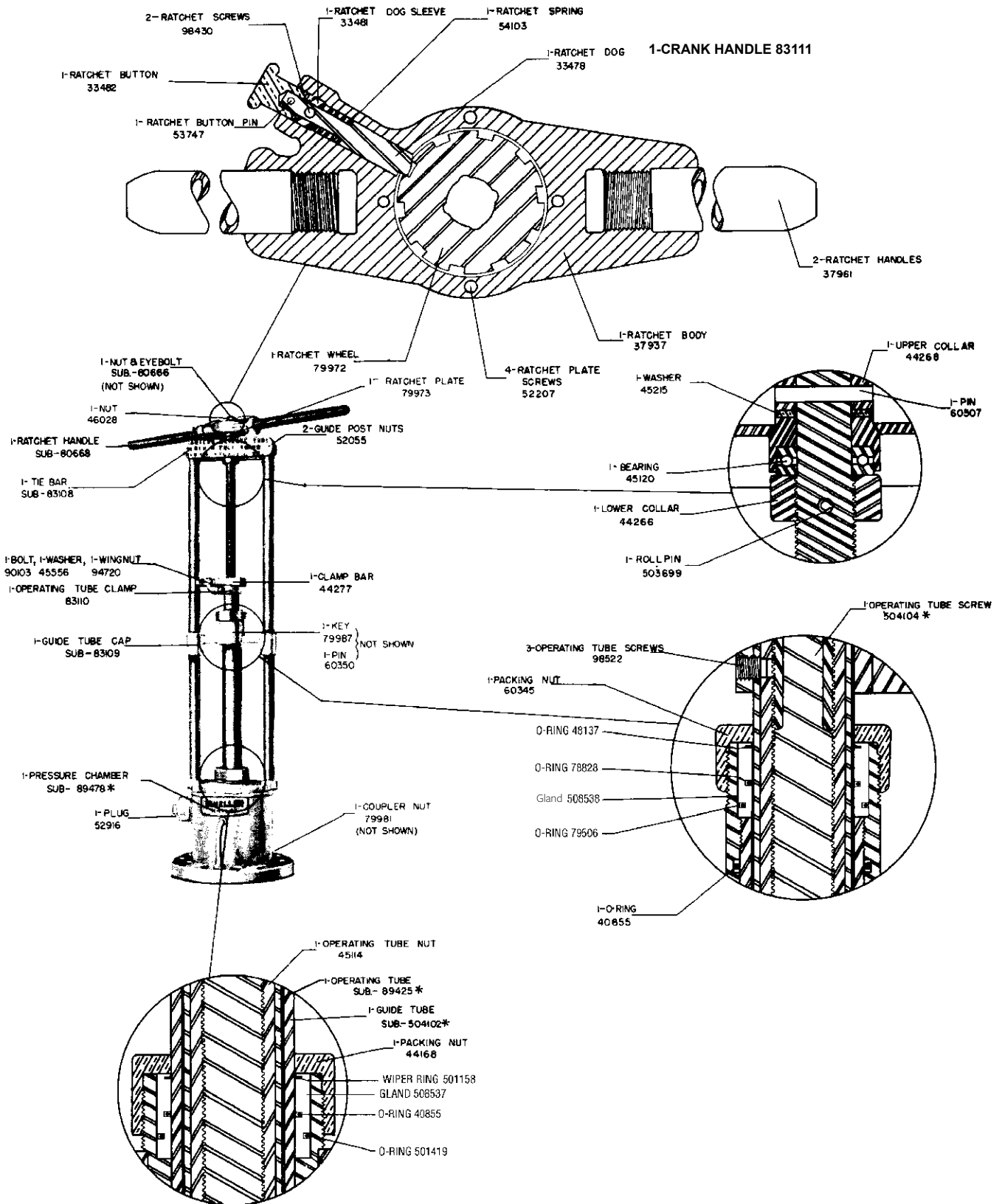


**H-17342 UNIT NO. 3SW-500  
STOPPING MACHINE REPAIR PARTS**

**MUELLER**

**10.41**

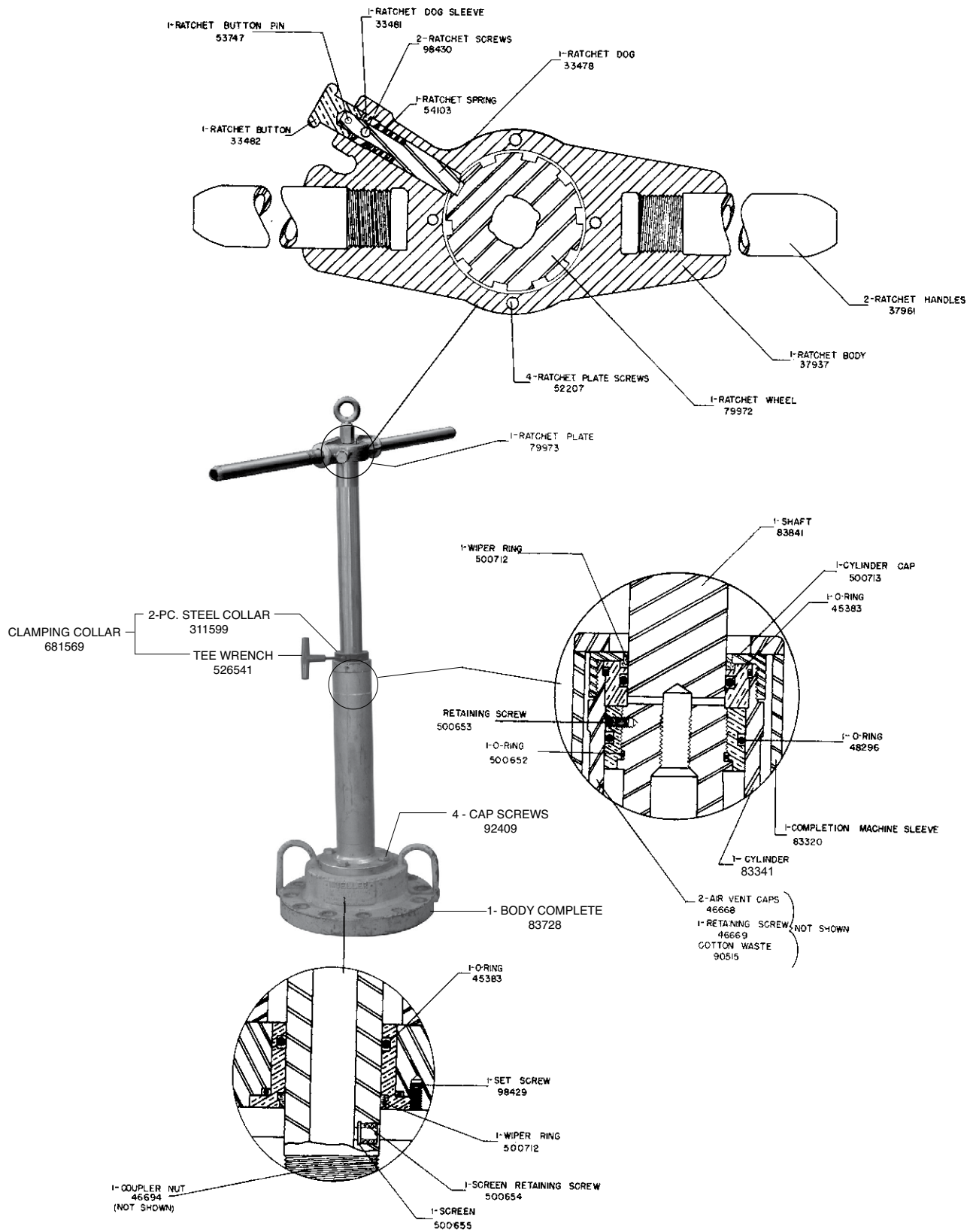
Shaded area indicates change Rev. 6-10



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, PART NUMBER AND PART NAME (include catalog number and model number of machine)**

Rev. 6-10 Shaded area indicates changes



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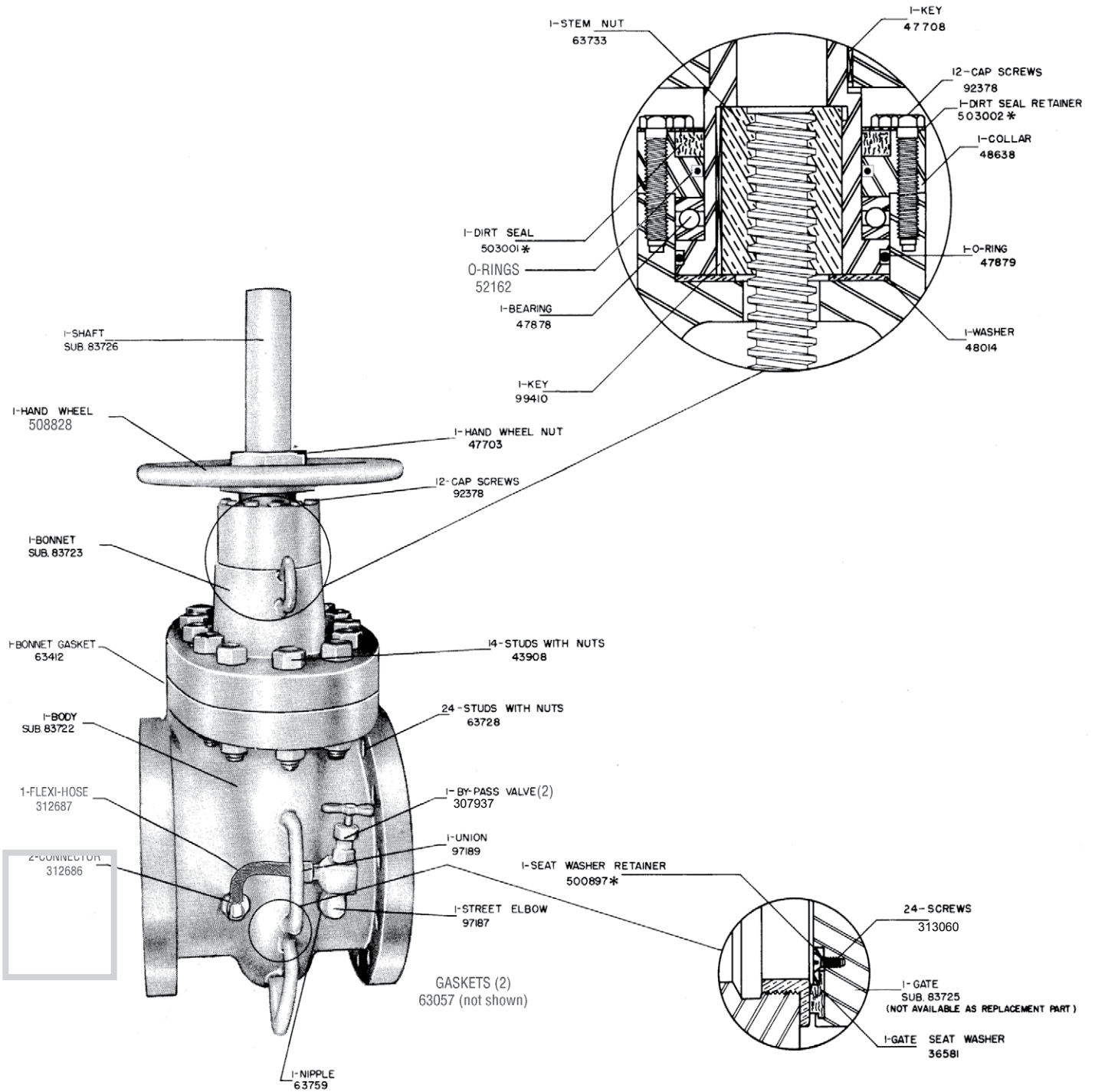
TO ORDER SPECIFY, PART NUMBER AND PART NAME (include catalog number and model number of machine)

# 83721 UNIT NO. 3SW-500 STOPPING MACHINE GATE VALVE REPAIR PARTS

**MUELLER**

# 10.43

Shaded area indicates change Rev. 12-12



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, PART NUMBER AND PART NAME (include catalog number and model number of machine)**

Rev. 11-18 Shaded area indicates changes

### Mueller H-17440 Unit No. 4SW Stopping Machine

- Catalog number **H-17440**
- Hand operation or Power Operation (H624)
- Used to stop-off 10" and 12" Line Stopper Fittings
- Body has integral 4" CL300 flanged bypass connection
- Used in conjunction with Control Valve – **CL400 14" Gate Valve (83318)**
- Alternate Control Valve for CL150 Operations - 14" Gate Valve **(83565)**
- Includes Operating Instruction Manual (Form **8972**)
- 500 psig (3450 kPa) maximum working pressure at 100F (38C)

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

#### Order Separately

- Eyebolt (**63846**)
- 1-11/16" Open End Wrench (**49211**)
- 2" Box Offset Pattern & 2" Open End Wrench (**49212**)



**H-17440**

### Mueller NO-BLO® Operations performed by the Mueller 89430 Stopping Machine

Item	Size* of Fitting		Mueller NO-BLO Operation
Mueller Line Stopper Fittings	10"	12"	Stop off fitting

\*Nominal size



**Steel Wedge Stopper**

Mueller polyurethane covered steel wedge stoppers are mechanically retracted and expanded for positive operation. These stoppers are made to be used with the full line of Mueller flanged line stopper fittings. (Polyurethane covered cylinder replacement kits and "positive control" cover kits are available from Mueller Co.)

Size*	Stopper Complete	Pipe Wall
10"	89704	Standard
12"	89704	Standard

See next page for steel wedge stopper replacement parts and repair kits.

**Steel Wedge Stopper**



**Bottom Out Rubber Stopper**

This stopper is used in Mueller bottom out line stopper fitting when the outlet is the section to be isolated so repairs or modifications can be made while maintaining service to customers. (Form 11967)

Size*	Stopper Complete
10"	681997
12"	681997

Used only on 10" & 12" 1999 or later enhanced fittings.

\*Nominal size

**Bottom Out Rubber Stopper**

**Power Operators for Mueller 3SW, 3SW-500, & 4SW Machines**

**H-624 Air Power Operator**

- Reversible air motor
- 17 RPM free speed
- Air supply: 33 SCFM at 90 psig (full load)
- Machine only weight 17 lbs. (8 kg)
- Shipped in a wooden storage chest complete with inline lubricator
- IMPORTANT:** Read operating instructions (form 13866)

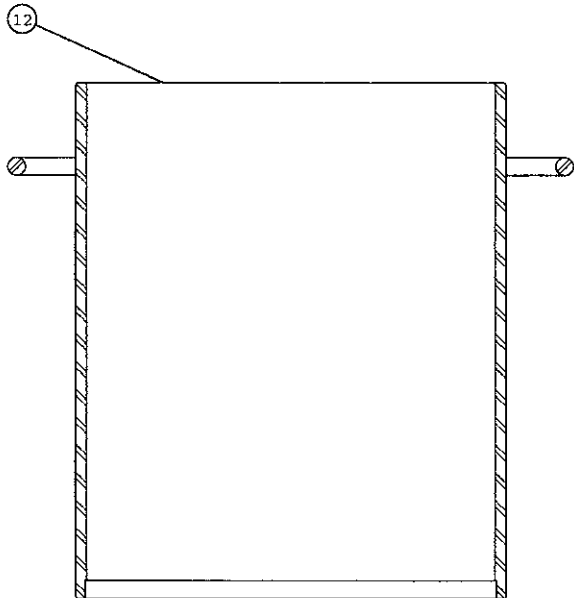
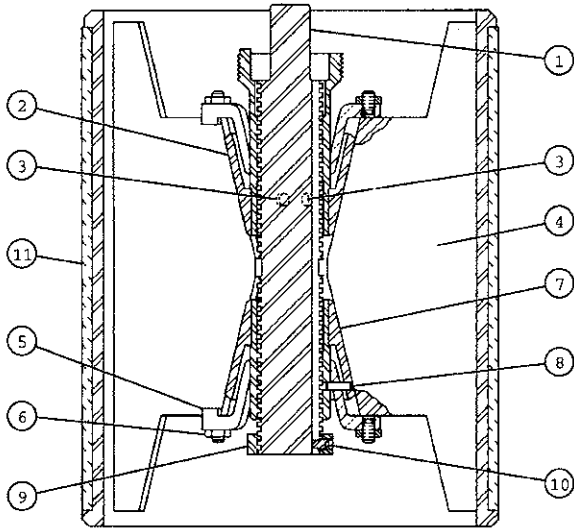
**IMPORTANT: MAINTAIN PRESSURE OF 90 PSIG – THE USE OF A GAUGE AT THE THROTTLE TO DETERMINE THE ACTUAL PRESSURE OF AIR AT THE POWER OPERATOR IS RECOMMENDED.**

Note: Used to lower and raise stoppers. Not to be used for expansion or retraction of stoppers.



**H-624 Air Power Operator**

Rev. 12-12 Shaded area indicates changes



### Mueller Steel Wedge Stopper Replacement Parts

Item No.	Part Name	No. Req'd	With polyurethane Cover for use with gas or petroleum
1	Expander screw	1	506853
2	Top wedge expander	1	580646
3	Top wedge retainer pins	2	502069
4	Cylinder and webs	1	580642
5	Clamp bars	18	502065
6	Clamp bar retainer nuts	18	310784
7	Bottom expander wedge	1	581261
8	Retaining pin	1	502068
10	Expander screw lock nut	1	506854
11	Lock nut set screw	1	301169
12	Protector sleeve	1	83156

### Replacement DIY Kit

Stoppers with polyurethane covers may be returned to the factory for recovering — Contact your Mueller distributor, sales representative or Gas Customer Service for details. The factory can also convert to polyurethane older steel wedge stoppers that have Positive Control™ or Neoprene covers. (Form 12327)

Polyurethane Cover for use with gas or petroleum	
Replacement cover kit*	682216

*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.*

**Mueller H-17445 Unit No. 4SW Completion Machine**

- Catalog number **H-17445**
- Hand operation
- Used to align, insert and extract 10" and 12" Completion Plugs in Line Stopper Fittings
- Used in conjunction with Control Valve – 14" CL400 Gate Valve (**83318**)
- Alternate 14" CL150 Gate Valve (**83565**) **681528** Adapter Ring used to adapt 083318 to CL150 fittings
- Sold Separately: **83237** Inserting Tool, **83238** Extracting Tool, **83250** Alignment Tool, and **36424** Completion Plug Wrench.
- Balanced pressure feature
- 500 psig (3450 kPa) maximum working pressure at 100F (38 C)



**H-17445**

*NOTE: The working pressure or temperature rating is reduced accordingly if any attachment, valve, or fitting subjected to pressure or temperature during the drilling, stopping or completion operations has a*

*maximum working pressure or temperature rating less than that specified above.*

**Mueller NO-BLO® Operations performed by the Mueller H-17445 Completion Machine**

Item	Size* of Fitting		Mueller NO-BLO Operation
Mueller Line Stopper Fittings	10"	12"	Align, insert and extract completion plug

\*Nominal size

Rev. 12-06 Shaded area indicates changes

### Alignment Tool

Alignment tools are used with the completion plug to align the line stopper machine and equipment with the installed line stopper fitting.

Size*	Tool Complete	Fork	Collar	Set Screw	Thumb Screw	Spring	Shank	Nut
10" & 12"	83250	53862	46695	98429	53857	46696	60326	46694



**Alignment Tool**

### Mueller E-Z Release® Inserting Tool

Inserting tools are used to insert completion plugs in Mueller line stopper fittings under pressure.

Size*	Tool Complete	Fork	Collar	Set Screw	Spring	Shank	Nut
10" & 12"	83237	46697	46695	98429	46696	50024	46694



**E-Z Release  
Inserting Tool**

### Extracting Tool

Extracting tools are used to remove completion plugs from Mueller line stopper fittings under pressure.

Size*	Tool Complete	Fork	Collar	Set Screw	Spring	Shank	Nut
10" & 12"	83238	46698	46695	98429	46696	50024	46694



**Extracting Tool**

### Thread Cleaning Tool

Thread cleaning tool is used to remove any pipe chips or other drilling debris from the completion plug threads in the fitting prior to installation of the completion plug.

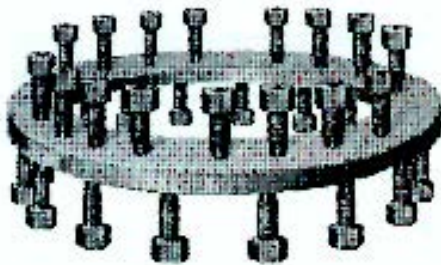
Size*	Tool Complete	Shank	Washer	Hex Cap Screw	Brush	Spacer Bar	Bolt	Coupling Nut
10" & 12"	89321	503957	45556	98570	301919	503958	503955	46694

\*Nominal size



**Thread  
Cleaning Tool**





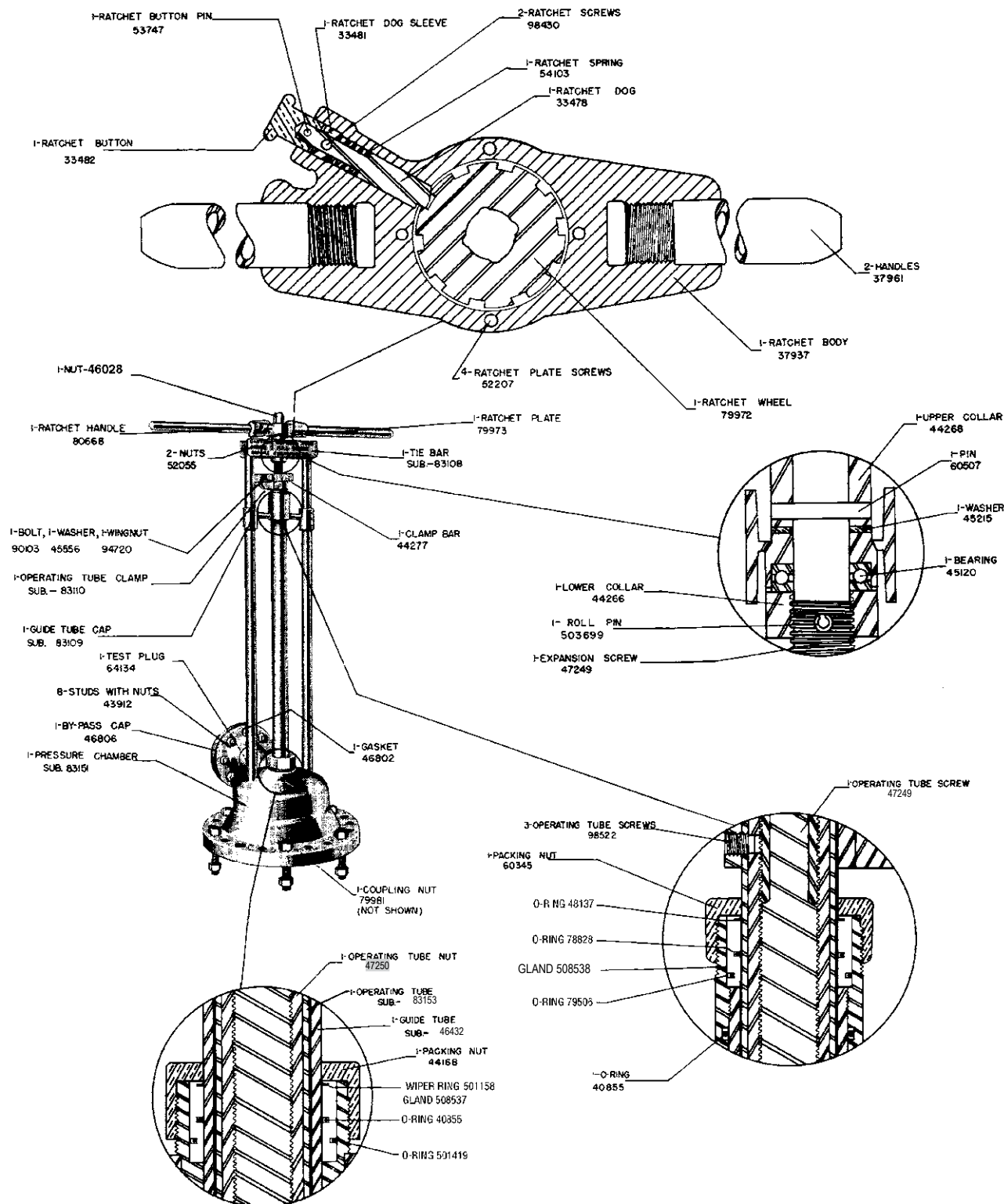
Adapter Ring

**Adapter Ring**

This adapter ring is used to adapt a 4SW gate valve (83318) to a Class 150 flanged 10" or 12" line stopper fitting.

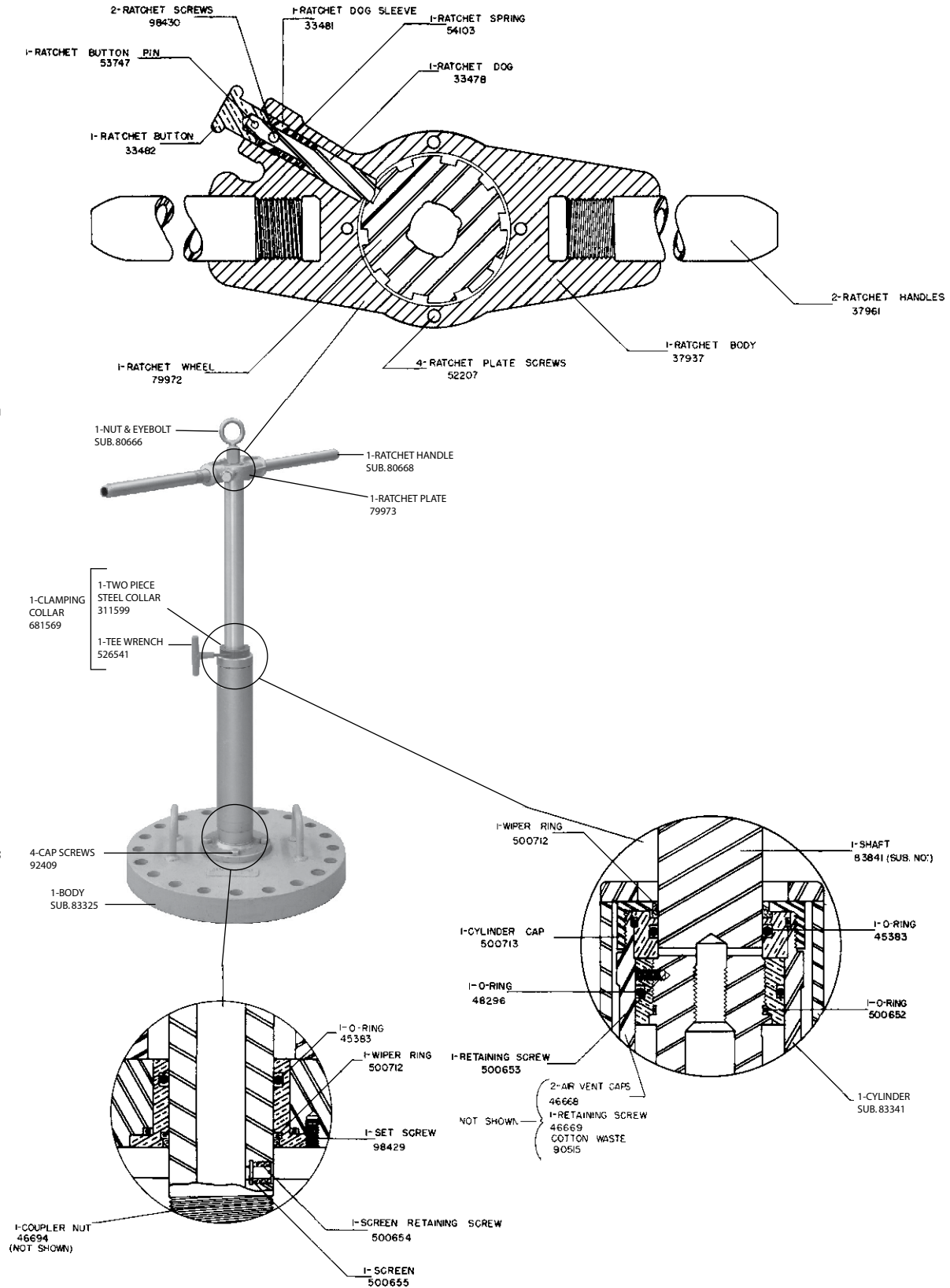
Adapter Ring	Valve	Fittings
681528	4SW gate valve (83318)	10" and 12" fittings

Rev. 7-16 Shaded area indicates changes



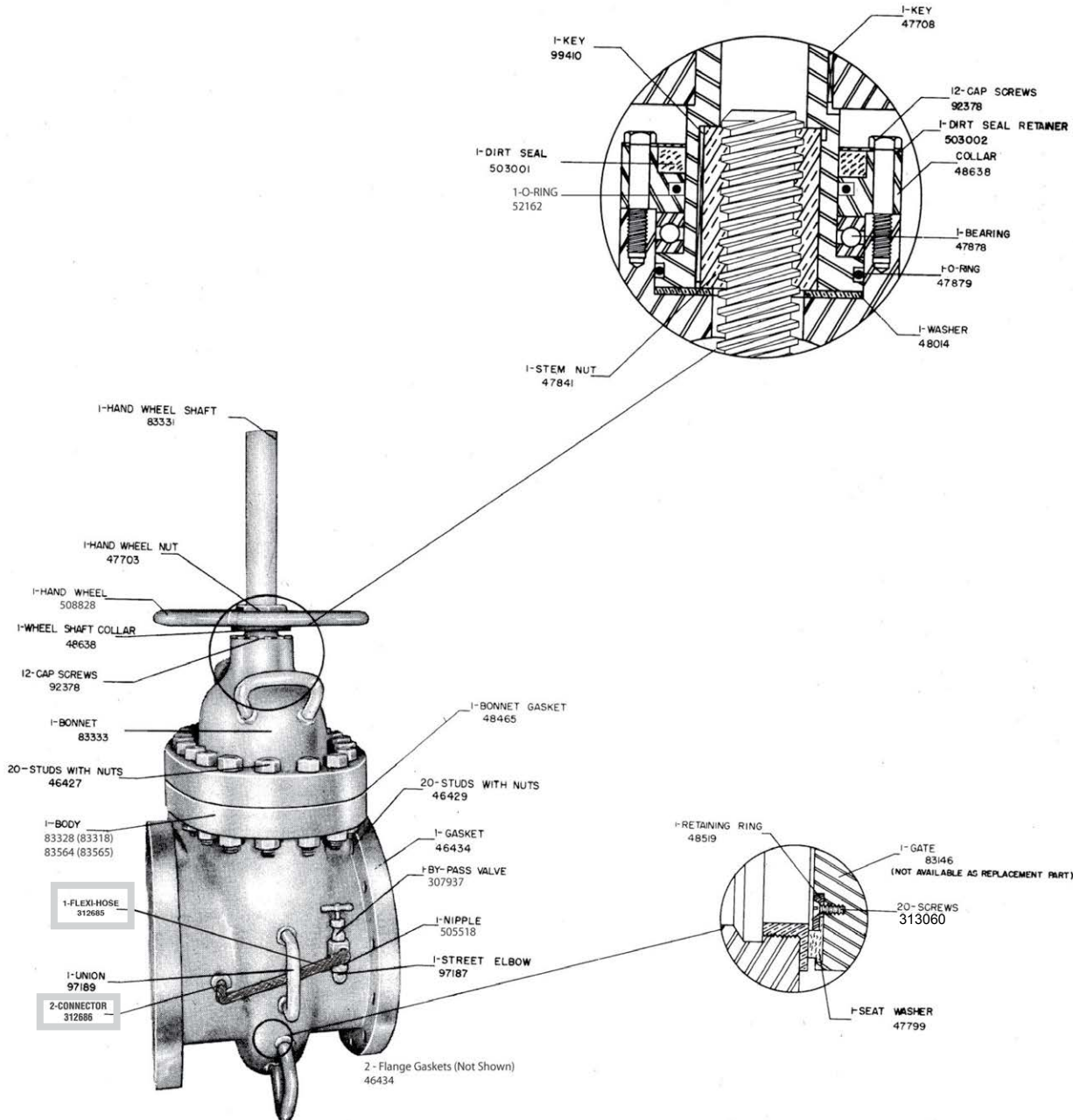
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TO ORDER SPECIFY, PART NUMBER AND PART NAME (include catalog number and model number of machine)



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.

Rev. 10-21 Shaded area indicates changes



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

**H-17619 Inspection Flange**

500 psig (3447 kPa) Maximum Working Pressure Pressure, 100F (38C) Maximum Temperature Rating\*

**H-17619 Inspection Flange**

The H-17619 inspection flange is for visually determining the condition of the inside of line stopper fittings after the drilling operation is completed. This may be done under pressure with no blowing of gas. The flange contains a pressure-tight plastic window of sufficient strength to withstand a gas pressure of 500 psig. The retrieving rod has a ball-joint type of pressure seal permitting it to be raised or lowered, rotated or moved from side to side.

The H-17619 inspection flange is used with line stopper units no. 1, 2, 3 3SW, 3SW-500 and 4SW.

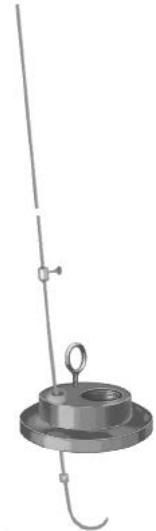
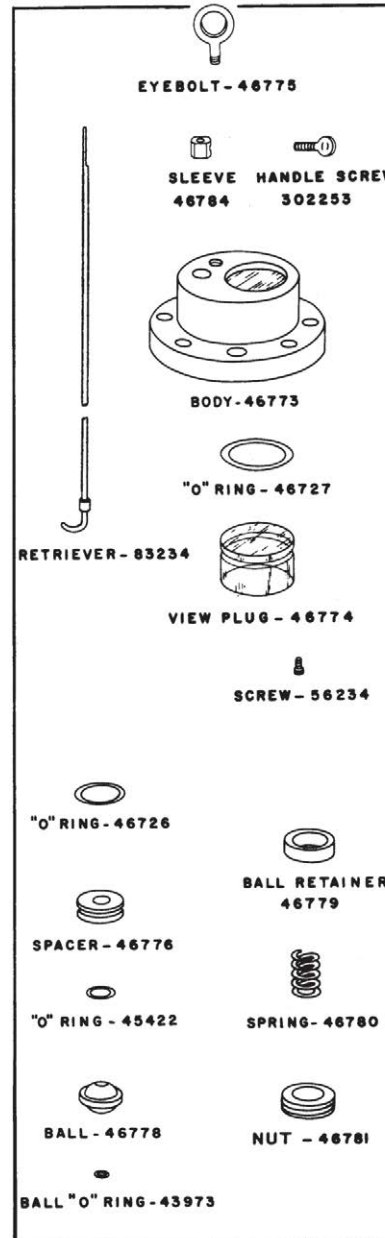
For line stopping unit no. 1, It is used with the special inspection flange adapter, 83204, shown below.

For line stopping units no. 2, 3, 3SW, 3SW-500 and 4SW, it is used with the drilling machine adapter attached to the line stopper unit gate valve.

The gate valve is then opened permitting visual inspection of the inside of the fitting, including the hole drilling through the pipe. The retrieving rod may be used to locate, raise and hold above the gate valve any object which might interfere with the operation of the stopper such as chips, scale or a section of the pipe. The gate valve is then closed and the inspection flange and any objects held by the retrieving rod are then removed from the adapter.

*\*The working pressure or temperature rating is reduced accordingly if any attachment, valve or fitting subjected to pressure or temperature has a maximum working pressure or temperature rating less than that specified above.*

The following attachments are required for using the **H-17619** inspection flange with line stopping unit no. 1 (1-1/2", 2", 2-1/4" and 2-1/2" line stopper fittings).



**H-17619  
Inspection Flange**



**54804  
Bolts & Nuts**



**55449  
Gasket**



**83204  
Inspection Flange  
Adapter**



**500557  
Bushing**

- 55409:** Washers (8 Required)
- 54804:** Bolts and Nuts for Inspection Flange Adapter (8 Required)
- 55449:** Gasket for Inspection Flange
- 83204:** Inspection Flange Adapter
- 500557:** 3" x 2-1/2" Bushing

*This Bushing is used to adapt the Inspection Flange Adapter to the 3" Gate Valve when using a 2 1/2" H-17155, 2' H-17125, 1-1/2", 2", or 2-1/4" H-17165 Line Stopper Fittings.*

**10.54**

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Rev. 12-12 Shaded area indicates changes

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