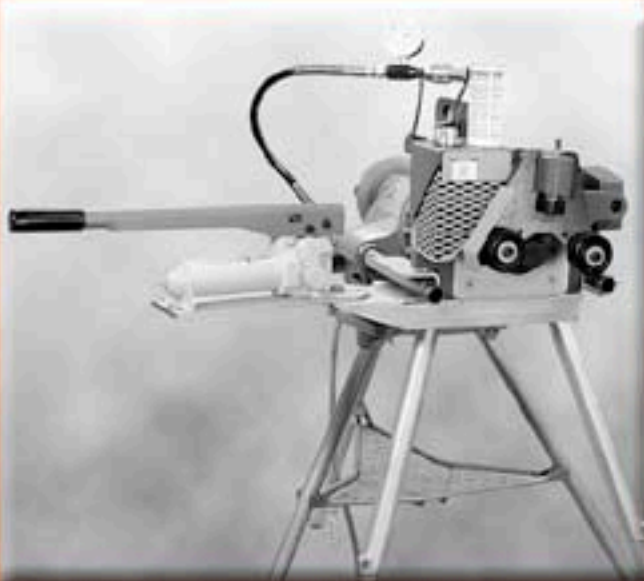
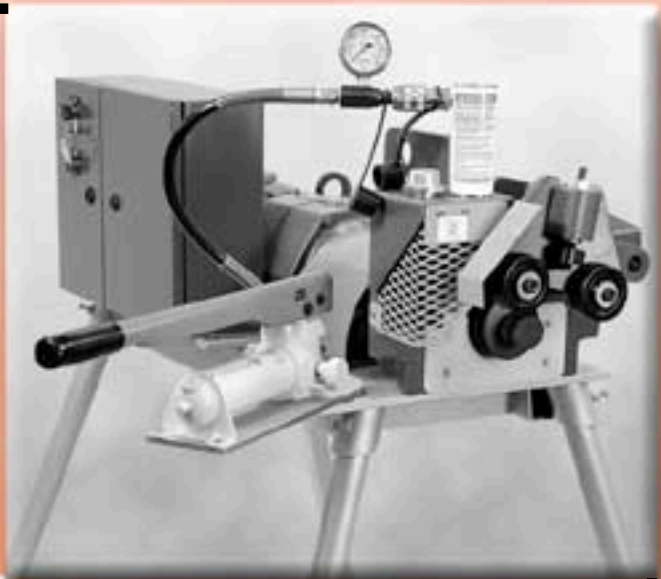




Model 1007 and Model 3007 Roll Groovers Operating Instructions

Important Safety Notice

Carefully read and understand these operating instructions before assembling and operating the Groover(s). Become thoroughly familiar with the operation of the Groover(s), usage, and possible hazards specific to the Groover(s).



www.anvilintl.com

TABLE OF CONTENTS

SECTION I - Safety Instructions	2
A) General	2
B) Operator Safety	2
C) Groover Set-Up	2
D) Groover Operation	2
E) Electrical Safety	2
SECTION II - Groover Description (Models 1007 and 3007)	3
A) Standard Equipment	3
B) Optional Equipment	3
C) Grooving Capability	3
D) Grooving Times	3
SECTION III - Groover Set-Up	4-5
A) Model 1007	4
B) Model 3007	5
SECTION IV - Pipe Set-Up and Positioning (Models 1007 and 3007)	6-7
A) Steel Pipe	6
B) Copper Tube	7
SECTION V - Setting Groove Diameter (Models 1007 and 3007)	8
Steel Pipe	8
SECTION VI - Grooving the Pipe (Models 1007 and 3007)	9-10
A) Steel Pipe	9
B) Copper Tube	10
SECTION VII - Grooving Roll Change	11-13
1. Roll Removal	11-12
A) Guide Roll Mount Plate	11
B) Top (Groove) Roll	12
C) Bottom (Drive) Roll	12
2. Roll Installation	13
A) Bottom (Drive) Roll	13
B) Top (Groove) Roll	13
C) Guide Roll Mount Plate	13
SECTION VIII - Groover Maintenance	14
SECTION IX - Replacement Parts	15-18
A) 1007 & 3007 Groover Head	15
B) 1007 Base Assembly	16
C) 3007 Base Assembly	17
D) 1007 & 3007 Steel and Copper Guide Roll Assemblies	18
SECTION X - Groove Specifications	19-20
A) IPS Steel Size Pipe	19
B) Copper Tube	20
SECTION XI - Troubleshooting	21

SECTION I - SAFETY INSTRUCTIONS



CAUTION - The Gruvlok® Model 1007 and 3007 Roll Groovers are to be used only for roll grooving of pipe. These operating instructions provide important information for the safe operation of the Groovers to protect the operator from possible, serious injury. The Groovers are designed for safe, reliable operation. However, unforeseen circumstances, impossible to predict, could result in an accident. Following the information in these operating instructions will permit safe operation of the Groover.

A. GENERAL

1. Carefully read and understand these operating instructions before assembling and operating the Groover.
2. Read and follow the safety labels on the Groover.
3. Understand the function and the location of all power and grooving controls before using the Groover.

B. OPERATOR SAFETY

1. Do not wear loose clothing, loose sleeve cuffs, loose fitting gloves, or jewelry that could get caught in moving parts.
2. Wear safety glasses and safety shoes.
3. Tie-up or cover long hair.
4. Wear ear protection if using the Groover in a high noise area or for prolonged periods of grooving.
5. Do not operate the Groover if you are tired from fatigue or medication.
6. Do not allow horseplay around the Groover.

C. GROOVER SET-UP

1. Provide a safe work area. Keep the work area well lighted and maintain a clear, uncluttered space for operation of the Groover.
2. Do not use the Groover in wet or damp locations. The floor area around the Groover must be dry and free of slippery materials.
3. Set-up the Groover on firm, level ground. Do not locate the Groover on sloped or irregular ground conditions.
4. Remove all tools, wrenches, etc., from the Groover and power drive base before applying power to the Groover.
5. Do not attempt to lift the Groover by yourself.
A hoist is recommended for lifting and moving the Groover.
6. Use the Model 3007 Groover only with a Ridgid* 300 Power Drive with 38 RPM operation.
7. The Model 3007 Groover must be properly mounted on the Ridgid 300 support arms and the Groover driveshaft firmly tightened into the Ridgid 300 chuck jaws.
8. Unplug the Ridgid 300 drive power cord on the Model 3007 Groover or switch the drive power switch to the "Off" position and lockout the switch with a padlock on the Model 1007 Groover prior to servicing or changing groover parts.
9. Tool and Ridgid 300 Power Drive must be mounted to the floor for proper operation.

D. GROOVER OPERATION

1. All safety guards must be in place. Never operate the Groover with the guards removed.
2. Do not operate the Groover without a foot switch. A foot switch is required for safe operation of the Groover.
3. Operate the Groover only from the pump side of the Groover.
4. Keep hands away from the guide and grooving rolls. The Groover is designed for "hands clear" grooving.
5. Maintain balanced footing with the foot switch within comfortable reach. Do not reach across the Groover or pipe. Keep hands and clothing away from all moving parts.
6. Do not place excessive force on the hydraulic pump handle. Follow grooving instructions for safe Groover operation.
7. Provide proper pipe support with a pipe stand fastened to the floor or ground.
8. Use the Groover only for the size and wall thickness pipe for which it was designed.
9. Do not operate the Groover if any part of the Groover is damaged or broken.
10. Do not attempt to groove pipe shorter than 5" in length.
11. Keep all visitors and bystanders at a safe distance from the Groover, pipe and power cords.

E. ELECTRICAL SAFETY

1. Ground the Ridgid 300 Power Drive (Model 3007) or drive motor (Model 1007). The power drive must be connected to an internally grounded electrical system.
2. The Model 1007 Groover must be connected to the proper power supply that matches the Groover either a 115 volt, 60Hz, single phase power supply with 30 amp capacity.
3. Use 3-wire extension cords only which have 3-prong grounding plugs and 3-pole receptacles which mate with the Groover's plug.
4. Extension cord conductor size (i.e. American Wire Gage) must be large enough to prevent significant voltage drop which could damage the Groover drive motor or cause loss of power. The chart below shows the recommended extension cord size.

Extension Cord Length**	Required Wire Size
25'	12
50'	12
100'	10

**Extension cord length greater than 100 feet is not recommended.

*"RIDGID" is a registered trade mark of Ridgid Tool of Elyria, Ohio.

SECTION II - GROOVER DESCRIPTION

A. 1007 STANDARD EQUIPMENT - Roll Groover complete with groove and drive rolls for 2" - 12" steel pipe, one and one-half horsepower electric motor drive with foot switch. Two stage hydraulic hand pump, mounting base with footed support legs. Complete set-up and operating instructions; 2" - 6" rolls on tool, 8" - 12" rolls stored in box, and three depth gages covering the range of 2" through 12" pipe are mounted on the tool.

Shipped in closed wood crate that can be used for storage or rental tool return.

Shipping Weight: 620 lbs.

A. 3007 STANDARD EQUIPMENT – Roll Groover complete with groove and drive rolls for 2" - 12" steel pipe. Two stage hydraulic hand pump, mounting base with footed support legs for direct attachment to your Ridgid* 300 Power Drive. Complete set-up and operating instructions; 2" - 6" rolls on tool; 8" - 12" rolls stored in box, and three depth gages covering the range of 2"-12" pipe are mounted on the tool. Required Ridgid 300 Power Drive not included.

Shipped in closed wood crate that can be used for storage or rental tool return.

Shipping Weight: 330 lbs.

B. OPTIONAL EQUIPMENT

- 2"– 6" Gruvlok Copper Method Grooving Assembly with groove and drive rolls, M&L copper guide roll assembly, and a 2"– 6" Universal Groove Diameter Gage.
- 2"– 6" Type K Copper Guide Roll Assembly
- 3"– 6" Type DWV Copper Guide Roll Assembly
- 2"– 12" Schedule 10 Rolls: Consisting of 2"– 6" and 8" – 12" roll sets.
- 8" Gruvlok Copper Method Assembly with groove and drive roll, hydraulic copper guide roll unit suitable for K, L, M, and DWV tubing, and an 8" Universal Diameter Gage.
- 14"– 16" Grooving Rolls (Model 1007 only)
- Optional 230 volt, 60Hz, 15 amp, single phase electrical panel with motor is available for the 1007 Roll Groover.

C. GROOVER CAPABILITY

GROOVER CAPABILITY											
Pipe Material	Pipe Size/Wall Thickness (Schedule) ^{1,2}										
	2	2½	3	4	5	6	8	10	12	14	16
Steel	Schedule 40									STD.	
Stainless Steel	Schedule 40S										
Copper	K, L, M, DWV										

1. All wall thicknesses shown are the maximum wall thicknesses for the indicated pipe material.
2. Minimum wall thickness for each pipe material and size is:
 - Steel: 2" - 12" Schedule 10
 - Stainless Steel: 2" - 12" Schedule 10S requires optional roller sets.
 - Copper: 2" - 2½" – Type M 3" - 8" – Type DWV
3. Please contact Gruvlok for information on grooving alternate materials.

D. Grooving Times – The chart below shows approximate grooving times with the groover set-up for the proper size and groove diameter and the pipe properly positioned on the groover. The times shown are average times from the start of rotation on the pipe in the grooving rolls to completed groove.

MODEL 1007/3007 STEEL PIPE GROOVING TIMES (MIN: SEC.)											
Pipe Size (Inches)/Max Steel Pipe Wall Thickness											
2	2½	3	4	5	6	8	10	12	14	16	
0:20	0:20	0:25	0:30	1:00	1:20	1:35	1:50	2:20	2:40	3:00	

SECTION III - GROOVER SET-UP



CAUTION - Removal of the Groover from the shipping box and mounting of the support legs should be accomplished only with the aid of a hoist or other lifting device. To avoid possible injury DO NOT ATTEMPT TO LIFT THE MODEL 1007 ROLL GROOVER MANUALLY.

A. MODEL 1007

1. Install a support leg tube into the receiving socket on the under side of the groover base. Push the tube fully into the receiving socket assuring that the angled cut on the tube bottoms in the receiving socket. Tighten the retaining bolt on the receiving socket. Repeat for the other three legs ($\frac{9}{16}$ " wrench).



2. The Groover should be leveled for best grooving results. Assure level position of the Groover and provide a firm fixed base location for the Groover.



3. Position the pump to the desired orientation for ease of operation. Tighten nut to lock pump in position or if desired, back off just slightly to permit pump to be oriented by operator to most comfortable position during groover operation ($\frac{15}{16}$ " wrench).



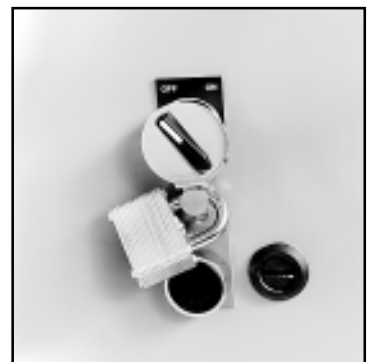
4. With a flat screwdriver, open the door to the electrical storage cabinet. Remove the power cord and foot switch from the cabinet mounted on the Groover frame. Plug the power cord into a grounded electrical outlet that matches the Groover. Power requirements: 110 volt, 30 amp or optional 230 volt.



5. Remove the padlocked lockout clip from the power switch. Turn the power switch to the "on" position.



6. Turn the power switch to the "off" position when finished grooving or when moving the groover. Install the lockout clip to the power switch and padlock the lockout clip into position. ($\frac{1}{4}$ " shank padlock).



SECTION III - GROOVER SET-UP

THE GRUVLOK® MODEL 3007 ROLL GROOVER IS DESIGNED FOR USE WITH A RIDGID* 300 POWER DRIVE.

CAUTION

CAUTION - Removal of the Groover from the shipping box and mounting of the Groover to the Ridgid 300 drive should be accomplished by 2 persons. To avoid possible injury DO NOT ATTEMPT TO LIFT THE MODEL 3007 ROLL GROOVER BY ONE PERSON.

B. MODEL 3007

1. Extend the mounting arms of the Ridgid 300 power drive, approximately 12" out from the body of the drive.

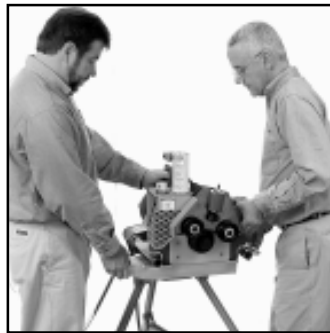
The Ridgid 300 must be mounted to the floor for continuous operation.



5. Extend the smaller diameter of the support leg by loosening the lock bolt on the support leg and sliding the smaller diameter tube to its required length. Re-tighten the lock bolt. ($\frac{9}{16}$ " wrench). The support legs must be mounted to the floor for continuous operation.



2. Grasp the Groover base on opposite sides, lift the Groover out of the shipping crate and place the mounting slots in the groover base over the extended mounting arms.



6. Loosely attach pump assembly to groover base using the $\frac{5}{8}$ " nut and bolt provided, then securely connect the coupler located on the end of the hose assembly to its mating part on the hydraulic ram.



3. Align the flats on the triangular shaft tailpiece with the Ridgid 300 chuck jaws and slide the Groover back into the chuck jaws. Securely tighten the chuck jaws. Push extension arms in flush with the Groover mounting base front.



7. The Groover should be leveled for best grooving results. Place level on top of hydraulic ram as shown and adjust the support legs as required to level the Groover and provide a firm fixed base location for both the Groover and power drive.



4. Install the larger diameter of the support leg tube into the receiving socket on the under side of the groover base. Push the tube fully into the receiving socket assuring that the angled cut on the tube bottoms in the receiving socket. Tighten the retaining bolt on the groover base. Repeat for the other leg. ($\frac{9}{16}$ " wrench).



8. Position the pump to the desired orientation for ease of operation. Tighten nut to lock pump in position or if desired, back off just slightly to permit pump to be oriented by operator to most comfortable position during groover operation. ($\frac{15}{16}$ " wrench)



SECTION IV - PIPE SET-UP AND POSITIONING (MODELS 1007 & 3007)

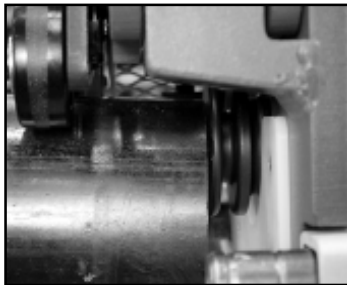
The Model 1007 and Model 3007 Groovers come with 2" through 6" IPS pipe size grooving rolls installed unless otherwise requested on your order. To change grooving rolls for other size(s) or for copper tube refer to Section VII for grooving rolls and guide roll plate changeout.

A. STEEL PIPE

1. Set both plastic guide rolls located on the front of the Groover, into the correct holes for the size pipe being grooved ($\frac{1}{4}$ " allen wrench).



2. Insert pipe over the bottom roll (groove roll) positioning the pipe flush against the front flange of the bottom roll. Be certain pipe does not override this flange.



3. Using the slot on top of the roller plate adjustment rod, raise (counterclockwise rotation) the guide roll mounting plate sufficiently to ensure that the top grooving roll makes contact with the pipe prior to guide roll contact.



4. Close the release valve on the hydraulic pump by turning the knob clockwise. Pump the hydraulic hand pump to lower the top grooving roll into light firm contact (approx. 100 psi) with the pipe.



5. Make sure the knurled stop (groove diameter stop) is not in contact with the top surface of the groover housing. If contact is noted, release hydraulic pressure by turning the release valve knob counterclockwise allowing the groover head to raise. Turn the knurled stop counterclockwise sufficiently to allow clearance between the bottom of the knurled stop and the top of the groover housing when the top grooving roll is in contact with the pipe.



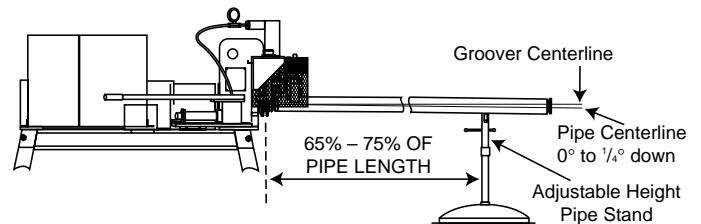
6. Using the slot on top of the Roller plate adjustment rod, lower the guide rolls into firm contact with the pipe.

NOTE: Improper tool adjustment will cause pipe flare and/or the pipe to roll out of the machine.

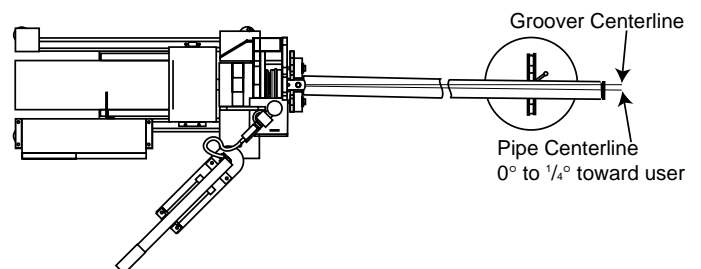


7. Adjust the outboard pipe stand to assure proper contact between the pipe and guide rolls. Pipe stand should be 65% - 75% of the pipe length away from Groover. Looking at the front of the Groover, the pipe stand should be positioned to angle the tube approximately 0° to $\frac{1}{4}^\circ$ downward, away from the front of the groover and $\frac{1}{4}^\circ$ to the left side at the Groover. See figures below.

SIDE VIEW DIAGRAM



TOP VIEW DIAGRAM



SECTION IV - PIPE SET-UP AND POSITIONING (MODELS 1007 & 3007)

To groove copper tube, the guide roll plate must be changed to match the type of copper tubing that is to be rolled. There are individual plates to roll type K tubing, to roll DWV tubing, and a third plate to roll both type M and type L tubing. Failure to use the correct guide plate will result in the tubing rolling out of the machine before a correct groove can be made. If the Groover is set-up to groove steel, it will also be necessary to change the grooving rolls to the ones required for copper. Refer to Section VII for grooving roll and guide roll plate changeout.

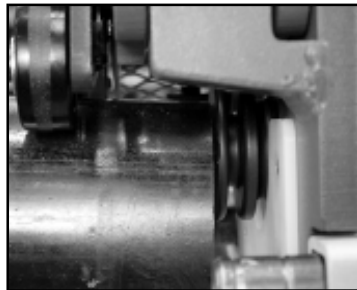
NOTE: The 2" - 6" copper option comes standard with the M&L guide plate. For other guide plates, please contact your local Gruvlok representative.

B. 2" - 6" COPPER TUBE

1. Set both plastic guide rolls located on the front of the Groover into the correct holes for the size tube being grooved.



2. Insert tube over bottom roll (groove roll) positioning the pipe flush against the front flange of the bottom roll. Be certain pipe does not override.



3. Close the release valve on the hydraulic pump by turning clockwise. Pump the hydraulic hand pump to lower the top roll (groove roll) into light firm contact (approx. 100 psi) with the pipe.



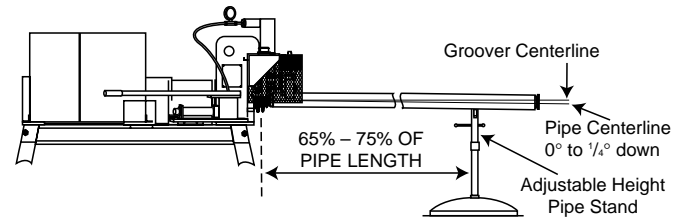
4. Knurled nut cannot be used for depth adjustment. Make certain it is clear, with no contact during grooving. A separate, universal diameter gage is used for copper. See page 10.



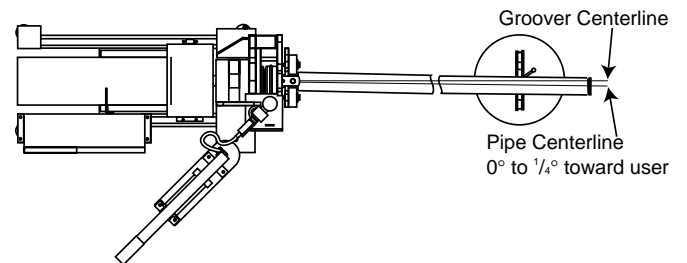
5. Adjust the outboard pipe stand to assure proper contact between the pipe and guide rolls. Pipe stand should be 65% - 75% of the pipe length away from Groover. Looking at the front of the Groover, the pipe stand should be positioned to angle the tube approximately 0° to 1/4° downward, away from the front of the groover and 1/4° to the left side at the Groover. See figures below.

NOTE: Improper tool adjustment will cause pipe flare and/or the pipe to roll out of the machine.

SIDE VIEW DIAGRAM



TOP VIEW DIAGRAM



B. 8" COPPER TUBE

Due to substantial variation in wall thickness about the tubes circumference, the 8" Copper Method guide roll assembly contains a secondary hydraulic cylinder. One guide roll assembly is utilized for rolling K, L, M, and DWV wall thickness. In addition, a set of top and bottom rolls as well as a Universal Diameter Gage have been specifically designed for the grooving of 8" copper.



Component installation is the same as that for the 2" - 6" copper with the additional hydraulic connection of the 8" copper guide roll assembly tee between the Roll Groover's pump and hydraulic ram. This connection is easily facilitated through the use of quick connect couplings.

SECTION V – SETTING GROOVE DIAMETER (MODELS 1007 & 3007)

STEEL PIPE

For proper set-up and positioning of pipe, refer to instructions as shown in Section IV.

1. Increase the pump pressure to the recommended set-up pressure shown in the chart for the size and wall thickness pipe to be grooved.

2. Slide the "C" shaped groove diameter gage, for the pipe size to be grooved under the adjustable Knurled Stop at top left side of the groover base.



Each gage is marked with two (2) pipe size ranges. Place the correct pipe size area, for the size of pipe being grooved, under the adjustable knurled nut. When grooving pipe with a diameter of 14" - 16", please use the area marked 12".

Note: The groove diameter gages are mounted on the back of the groover body.

3. Turn the Knurled Stop to snug against the surface of the groove diameter gage. Release the pump pressure by turning the pump release valve counterclockwise and remove the groove diameter gage.



RECOMMENDED SET-UP PRESSURE (BOTH MODELS)		
Pipe Size Inches	Wall Schedule	Set-up Pressure PSIG
2" – 6"	10	100
8" – 12"	10	2000
14" – 16"*	10	2000
2"	40	100
2½" – 4"	40	2500
5" – 6"	40	3600
8" – 10"	40	4000
12"	STD.	4600
14" – 16"*	STD.	4600

*1007 only.

SECTION VI – GROOVING THE PIPE (MODELS 1007 & 3007)

A. STEEL PIPE

1. Recheck for correct pipe set-up and position on the bottom roll and adjust as required. Close the relief valve on the hydraulic hand pump and increase pump pressure to 100 psi.

MODEL 3007 ONLY – Extremely Important

Check to see that the Ridgid* 300 drive directional switch is set to "reverse" position (clockwise rotation of the pipe looking at the front of Groover.)

Pipe must be square on ends.

Burrs or torch slag must be removed. Any pipe manufacturing seam, on inside or outside of pipe, must be removed.



2. Start the drive motor by depressing the foot switch to rotate the pipe. Assure that the pipe is tracking firmly against the back of the bottom roll.



3. With the pipe rotating, increase grooving force by slowly pumping the hydraulic pump handle to raise pump pressure.

Do not pump too fast.

Using the pressure gage mounted on the hydraulic ram maintain approximately the listed grooving pressures for size and wall thickness of pipe to efficiently form the groove.

RECOMMENDED GROOVING PRESSURE		
Pipe Size <i>Inches</i>	Wall <i>Schedule</i>	Grooving Pressure <i>PSIG</i>
2" – 6"	10	800 - 1000
8" – 12"	10	3000 - 3400
14" – 16"	10	3400 - 3800
2"	40	1600 - 2000
2½" – 4"	40	2600 - 3000
5" – 6"	40	3400 - 3800
8" – 10"	40	4400 - 4800
12"	STD.	4600 - 5000
14" – 16"	STD.	4600 - 5000

4. Maintain grooving force until the Knurled Stop (groove diameter stop) comes into full, firm contact with the top of the groover base head. Allow the pipe to rotate 1 to 2 revolutions assuring completion of the groove.



Release the foot switch to allow the pipe to stop rotation.

5. Open the hydraulic hand pump release valve by turning counterclockwise. Remove the pipe from the Groover. Check the groove diameter. If required, adjust the groove diameter stop to assure grooves to be within Gruvlok groove specification limits. (Grooving Specifications are shown in Section X of these instructions.)



NOTE: Adjustment of the Knurled Stop (groove diameter stop) will produce the below listed groove diameter changes.

Knurled Stop** Adjustment	Groove Diameter Change
<i>Turns</i>	<i>Inches</i>
1/8	.008
1/4	.016
3/8	.024
1/2	.032
3/4	.047
1	.062
1½	.094
2	.125

**Knurled Stop Rotation:

Clockwise rotation – Increase groove diameter
 Counterclockwise rotation – Decrease groove diameter

6. After adjustment of the Knurled Stop, if the groove diameter is large (i.e. shallow groove depth), place the pipe end back into the Groover and complete the same groove to the new diameter stop setting. If the groove diameter is small (i.e. deep groove depth), put an unfinished end into the Groover and complete the groove.

Recheck the groove diameter for conformance to grooving specifications.

SECTION VI – GROOVING THE PIPE (MODELS 1007 & 3007)

B. COPPER TUBE: GRUVLOK COPPER METHOD

1. Recheck for correct pipe set-up and position on the bottom roll and adjust as required. Close the release valve on the hydraulic hand pump and increase pump pressure to 100 psi.

MODEL 3007 ONLY – Extremely Important

Check to see that the Ridgid® 300 drive directional switch is set to "reverse" position (clockwise rotation of the pipe looking at the front of Groover.)

Tube must be square on ends.

Burrs must be removed. Any pipe manufacturing seam, on inside or outside of pipe, must be removed.



2. Start the drive motor by depressing the foot switch to rotate the pipe. Assure that the tube is tracking firmly against the back of the bottom roll.
3. Increase the pump pressure to 300 psi.
4. Smoothly increase pump pressure to the specified grooving pressure indicated on the following chart.



GRUVLOK COPPER-PREP GROOVING PRESSURE				
Copper Tube Type				
	K	L	M	DWV
Size	Pressure	Pressure	Pressure	Pressure
Inches	PSI	PSI	PSI	PSI
2"	1500	1500	1000	–
2½"	1700	1700	1500	–
3"	1700	1700	1500	1500
4"	1700	1700	1500	1500
5"	2300	2300	2300	1700
6"	2900	2600	2600	2300

5. Insert the Universal Diameter Gage from below the tubing into the groove being formed.

Holding the fixed gage arm against the far side of the groove, observe the lead edge of the moveable arm's black sleeve as it moves along the groove diameter indicator tube.



6. When the lead edge of the sleeve centers** on the appropriate groove diameter line for the tube size being grooved, stop the groover motor by releasing the foot switch. Open the hydraulic hand pump release valve by turning counterclockwise. Remove the tube from the Groover.



**May vary from leading edge to center of line depending on actual gage used.

7. Using a pi tape check the groove diameter produced and compare it to the specifications presented in Section X. If the groove diameter is small:
 - Re-insert tube into Groover.
 - Pump ram until pressure gage reads 100 psi.
 - Start the drive motor with the foot switch.
 - Quickly pump up to recommended pressure.
 - Monitor groove growth with universal diameter gage.



8. Repeat steps 1-7 for each groove.

Note: It is necessary to use the Universal Diameter Gage while grooving every tube end.

Note: If the end of the tubing becomes dented after grooving, simply place that end back into the machine and rerun at approximately 300 psi for two to three revolutions.

Note: DO NOT allow Universal Diameter Gage to become covered with dirt or grease. Provide a safe location for storage, as well as during usage.

**"RIDGID" is a registered trade mark of Ridgid Tool of Elyria, Ohio.

SECTION VII – GROOVING ROLL CHANGE (MODELS 1007 & 3007)

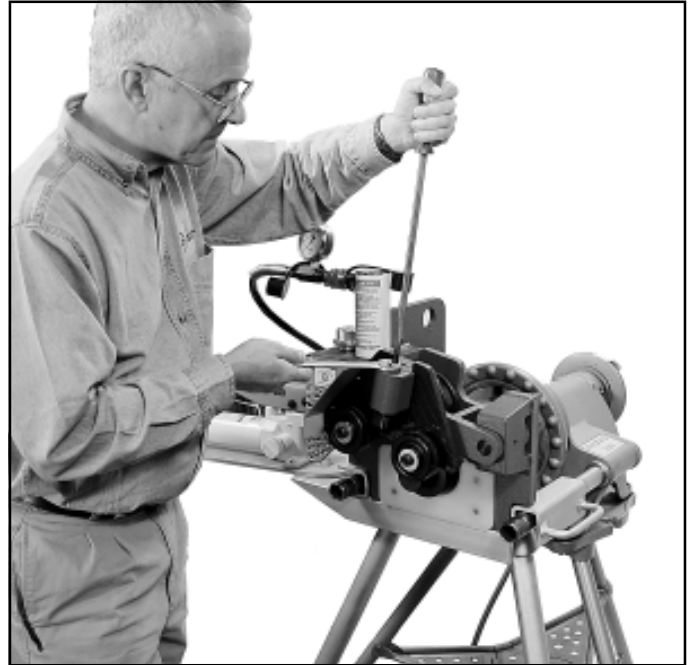
1. ROLL REMOVAL

NOTE: With 2" – 6" grooving rolls installed – remove the bottom roll first, then remove the top roll.

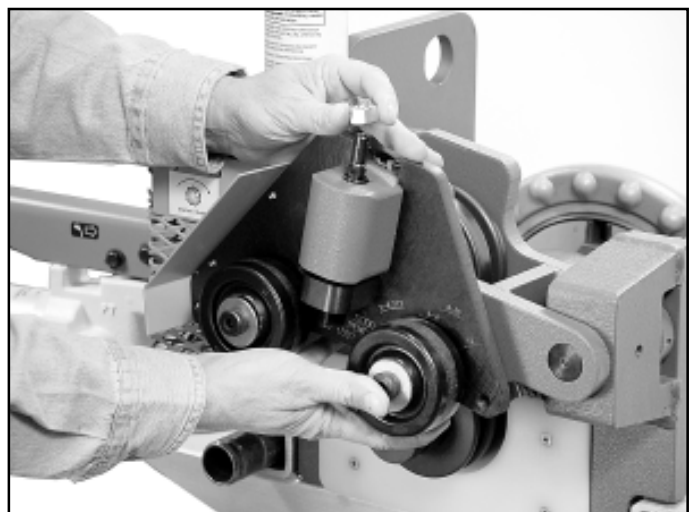
With 8" – 12" and 14" – 16" grooving rolls installed – remove the top roll first, then remove the bottom roll.

A. GUIDE ROLL MOUNTING PLATE

1. Using a large slotted screwdriver and a $\frac{3}{4}$ " wrench, loosen the hex nut located on the top of the adjustment shaft protruding from the top of the groover head.



2. Place one hand under the guide roll mounting plate and remove the hex nut from the adjustment shaft. Remove the guide roll mounting plate by lowering until fully disengaged.



TOOLS REQUIRED

(1) Large Slotted Screwdriver

(1) $\frac{3}{4}$ " Wrench

(1) $\frac{3}{16}$ " Allen Wrench

SECTION VII – GROOVING ROLL CHANGE (MODELS 1007 & 3007)

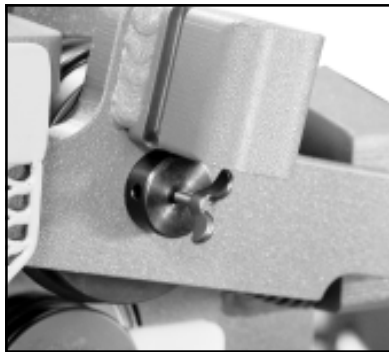
1. ROLL REMOVAL

B. TOP (GROOVE) ROLL

1. Remove the quick release pin by grasping the ring located on the end of the pin and pulling straight up.

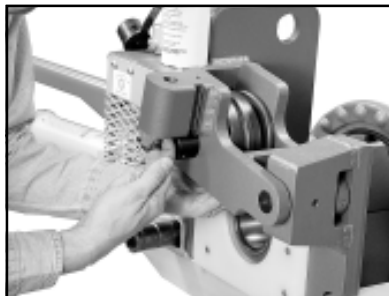


2. Screw the 1/4" - 20 thumb screw (same one that is used to secure the depth gages to the main housing) into the tapped hole in the top shaft.

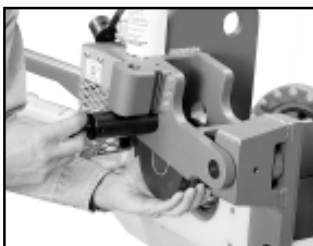


3. Cradle one hand under the top roll and pull the top roll shaft out from the front.

Caution: The top roll is heavy. Brace your hand to receive the weight of this component. As the shaft disengages, the top roll will fall into your hand. If you have not removed the bottom roll (8" – 12" and 14" – 16" roll removal) the weight of the top roll could pinch, or trap your hand against the bottom roll.

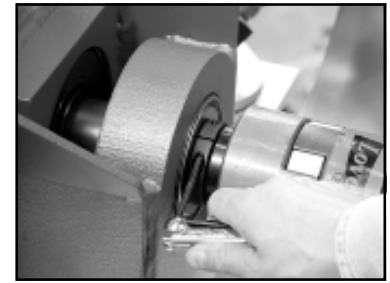


4. Remove the top roll from between the front and back plates of the grooving head. If the bottom roll has been removed, lower the roll out of the grooving head. If the bottom roll has not been removed (8" – 12" and 14" – 16" roll removal), raise the roll out of the grooving head.



C. BOTTOM (DRIVE) ROLL

1. Loosen and remove the socket cap screw to remove the hinged collar from around the bottom roll shaft at the back of the groover base (3/16" allen wrench).



MODEL 3007 ONLY

1. Release the Ridgid* 300 chuck jaws from around the tailpiece on the bottom roll.



2. Pull the bottom roll shaft out the front of the Groover.



SECTION VII – GROOVING ROLL CHANGE (MODELS 1007 & 3007)

2. ROLL INSTALLATION

NOTE: With 2" – 6" grooving rolls – Install the top roll first, then install the bottom roll.

With 8" – 12" and 14" – 16" grooving rolls – Install the bottom roll first, then install the top roll.

A. TOP (GROOVE) ROLL

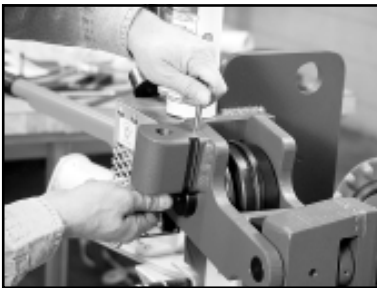
1. Thoroughly clean and inspect top shaft to ensure that it is free from all burrs and galling.

2. Position roller between the front and back plates of the grooving head aligning the rollers bushings to receive the top shaft as it is inserted from the front of the machine.

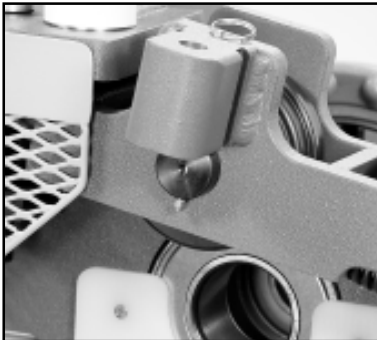


3. Push the shaft inward, through the top rollers bushings, stopping when the back of the shaft is flush with the back of the grooving head.

4. Rotate the top shaft to align the cross drilled hole with the corresponding hole in the groover head. Remove thumb screw from top shaft and return it to its proper storage position.



5. Insert the quick release pin. When properly installed, the spring loaded locking ball on the bottom portion of the pin will extend below the bottom of the top shaft.



NOTE: Top rollers for the Copper-Method utilize a spherical bearing that the top shaft passes through. This bearing must be aligned such that the top shaft hole is perpendicular to the face of the roll prior to pin installation. **DO NOT FORCE TOP SHAFT.** When properly aligned, the top shaft will slide in with little effort.



B. BOTTOM (DRIVE) ROLL

- 1A. Insert the bottom roll shaft through the front of the groover base exposing the triangular shaped tailpiece at the back of the Groover.



- 1B. Lubricate shaft for ease of installation.

2. MODEL 1007 ONLY

Align the flats on the triangular shaft with the motor drive coupling and insert the shaft into the coupling.



NOTE: Push the shaft in from the front to fully expose the collar receiving slot at the back end of the Groover.

3. Insert the hinged collar into the shaft slot and tighten the socket cap screw ($\frac{3}{16}$ " allen wrench).

4. MODEL 3007 ONLY

Align the flats on the triangular shaft with the Ridgid 300* chuck jaws. Slide the Groover back on the mounting arms to insert the triangular shaft tailpiece into the chuck jaws. Securely tighten the Ridgid 300 chuck jaws.



C. GUIDE ROLL MOUNTING PLATE

NOTE: Select the correct mounting plate for either steel pipe or for copper tube.

1. Insert the adjustment shaft from the bottom, into the hole in the mounting block at the front of the groover head. Slide the shaft up to expose threaded portion above the top of the mounting block and install the hex nut.



2. Using a large slotted screwdriver and a $\frac{3}{4}$ " wrench, lightly snug the hex nut in place.



SECTION VIII - GROOVER MAINTENANCE

Due to the use of sealed bearings, the 1007 and 3007 Roll Groovers require very little maintenance.

A. General

1. Periodically unplug and thoroughly clean your Roll Groover.
2. A protective film of light oil should be applied to all rollers and guide roll mounting plates. Frequency of application will vary due to environmental conditions but shall be sufficient to prevent the formation of surface rust.

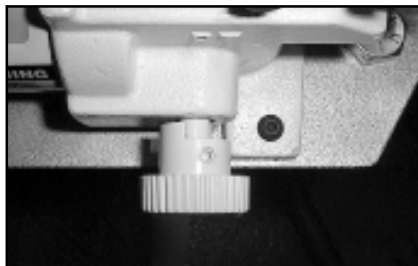
B. Replacement Parts

Please contact your local Gruvlok branch to purchase replacement parts and accessories for the Roll Groover. To facilitate ordering, an exploded drawing of each machine along with replacement parts listings are presented in the next section.

C. Hydraulic Maintenance

If you are having problems achieving or maintaining hydraulic pressure, the following user serviceable items should be checked:

1. Verify that the release valve knob on the pump is not hitting the pump housing prior to the valve closing completely. There should be a slight gap



between the stop located on the knob and the pump body. If there is not, loosen the two set screws using a 1/8" allen wrench and reposition knob accordingly.

2. Check hydraulic fluid level. Fully retract hydraulic ram piston by turning pump release valve counterclockwise. Remove filler cap from the rear of the reservoir body. The fluid level



should come to the bottom edge of the filler hole when the pump is level and resting horizontally on its base. Mobil DTE 24 hydraulic oil or its ISO 32 equivalent should be used.

3. Bleeding air from the system is necessary. Air can accumulate in the system through prolonged use as well as repeatedly making-up the quick connect coupling to the hydraulic ram.

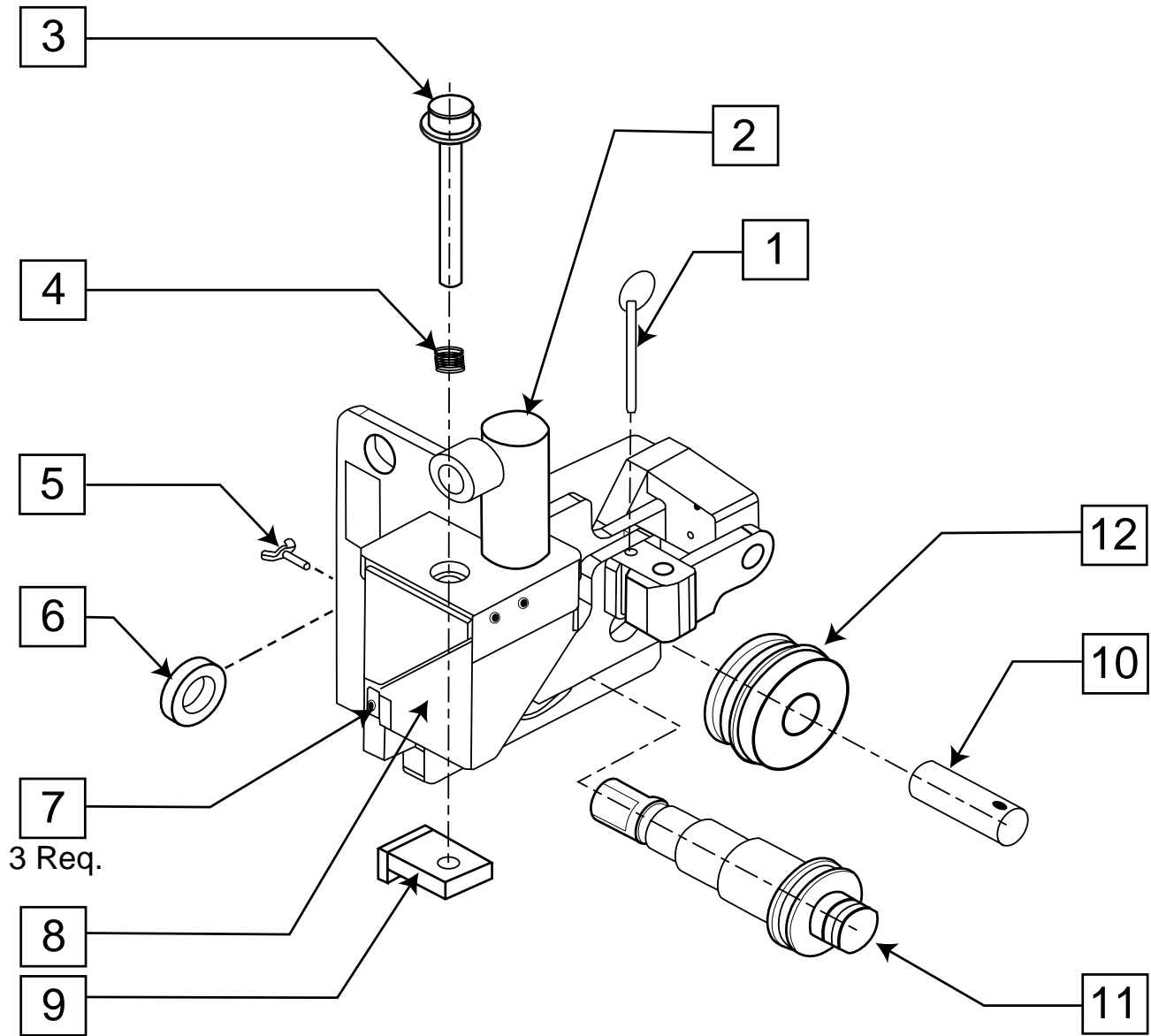


Bleeding procedure is as follows:

- Disconnect quick connect coupling and remove hydraulic ram from the top of the Roll Groover.
- Reconnect hydraulic ram to pump and allow hose and ram to hang down.
- Close release valve on pump and pump to fully extend hydraulic ram. Tilt pump to the right (hose side) to eliminate high point in hose and open release valve allowing the hydraulic ram to return to above its fully retracted position. Repeat the above procedure fully extending and retracting the hydraulic ram several times, thereby releasing the trapped air into the pump reservoir.
- Recheck fluid level and add as required.

SECTION IX - REPLACEMENT PARTS

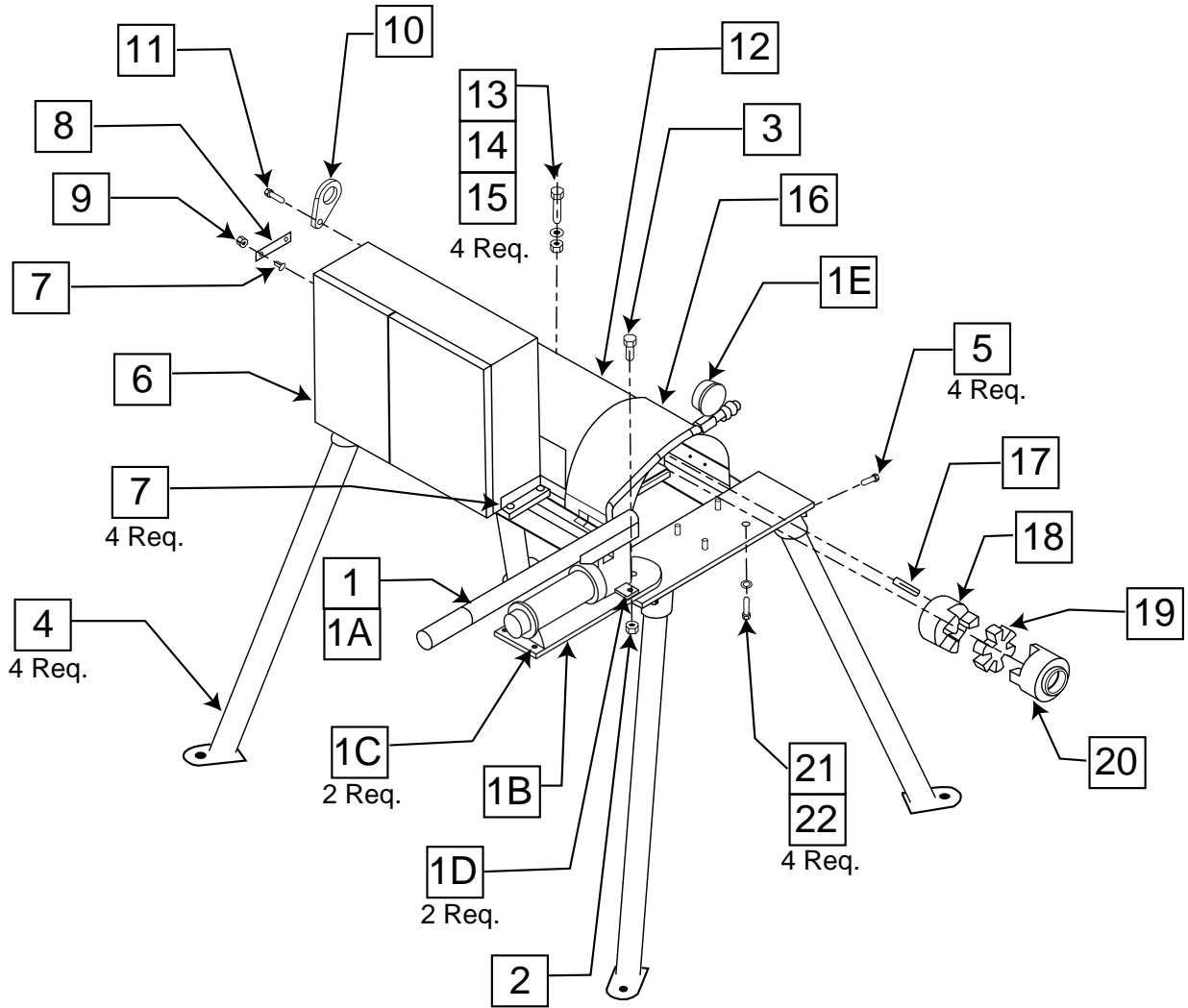
A. 1007 & 3007 GROOVER HEAD



ID No.	Part Name	Part No.	ID No.	Part Name	Part No.
1	Quick Release Pin	GL11775	11	Bottom Roller:	
2	Hydraulic Ram Assembly	GL11095		2"-6" Steel	GL11114
3	Knurled Stop Assembly	GL11035		8"-12" Steel	GL11119
4	Spring	GL11065		14"-16" Steel (optional)	GL11337
5	Thumb Screw	GL11056		2"-6" Copper (optional)	GL11121
6	Hinged Shaft Collar	GL 11194		8" Copper (optional)	GL11584
7	Cap Screw, 1/4"-20, L=3/8"	GL11767	12	Top Roller:	
8	Safety Mesh	GL11313		2"-6" Steel	GL11110
9	Stop Plate Assembly	GL11467		8"-12" Steel	GL11117
10	Top Shaft	GL11039		14"-16" Steel (optional)	GL11335
				2"-6" Copper (optional)	GL11122
				8" Copper (optional)	GL11586

SECTION IX - REPLACEMENT PARTS

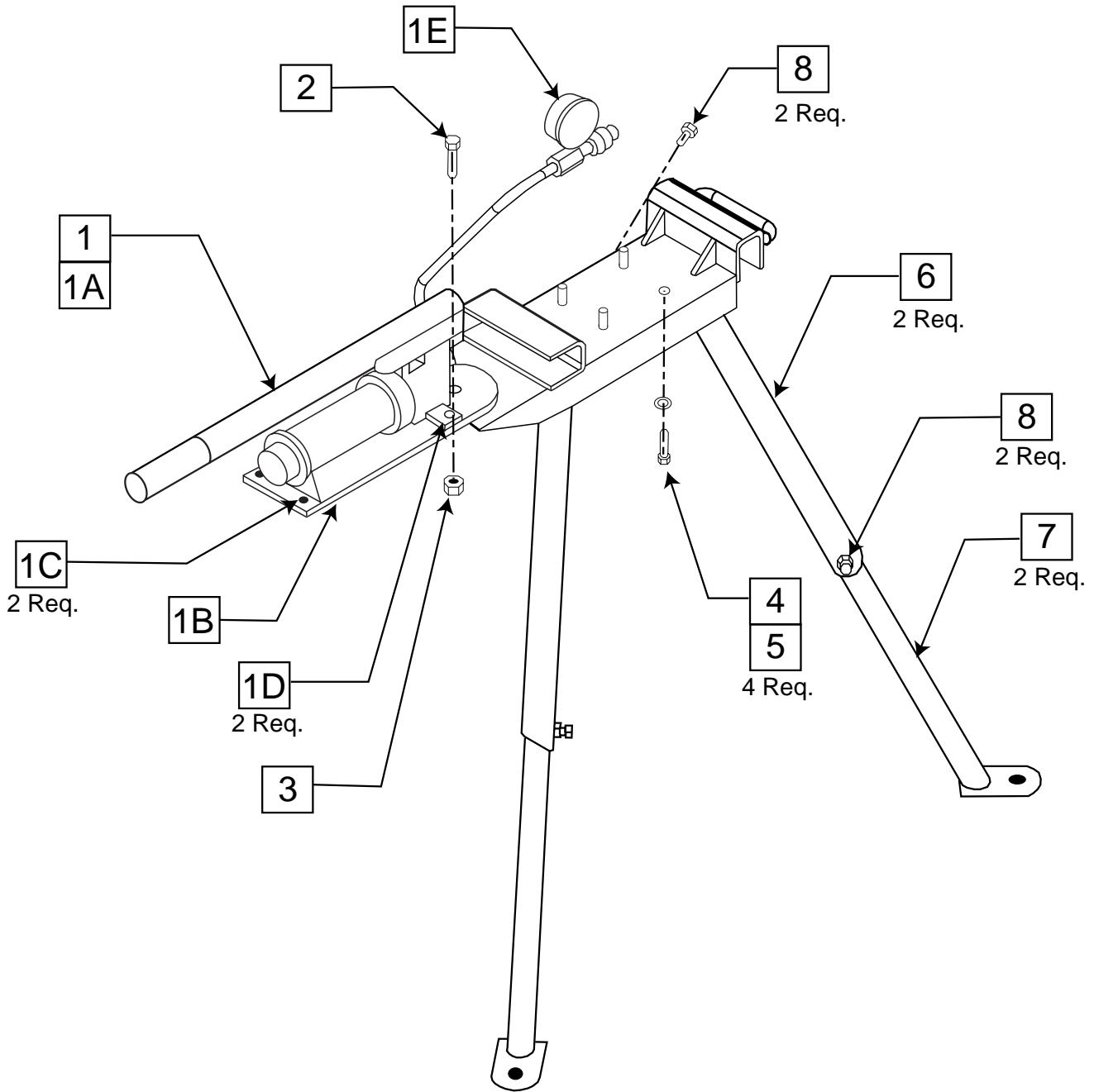
B. 1007 Base Assembly



ID No.	Part Name	Part No.	ID No.	Part Name	Part No.
1	Pump Assembly	GL11081	8	Elect. Box Brace	GL11219
Pump Assembly Consists of the Following:			9	Hex Nut, $\frac{5}{16}$ "-18	GL11221
1A	Hydraulic Pump	GL11082	10	Lifting Lug	GL11220
1B	Pump Plate	GL11090	11	Cap Screw, M10X1.5	GL11314
1C	Cap Screw, $\frac{1}{4}$ "-20, L= $\frac{1}{2}$ "	GL11230	12	Motor & Gear Reducer	GL11164
1D	Cap Screw, $\frac{1}{4}$ "-20, L= $\frac{5}{8}$ "	GL11093	13	Bolt, $\frac{1}{2}$ "-13, L= $2\frac{1}{2}$ "	GL11174
1E	Hydraulic Pressure Gage	GL 11084	14	Lockwasher, $\frac{1}{2}$ " ID	GL11197
2	Hex Bolt, $\frac{5}{8}$ "-11, L= $1\frac{1}{2}$ "	GL11091	15	Hex Nut, $\frac{1}{2}$ "-13	GL11198
3	Hex Nut, $\frac{5}{8}$ "-11	GL11313	16	Shaft Safety Cover	GL11200
4	Leg Weldment	GL11161	17	Gearbox Key	GL11175
5	Hex Bolt, $\frac{3}{8}$ "-16, L=1"	GL11150	18	Flexible Coupling Body	GL11171
6	Electronic Control Panel	GL11168	19	Spider	GL11173
7	Hex Bolt, $\frac{5}{16}$ "-18, L= $\frac{1}{2}$ "	GL11217	20	Shaft Coupling Assembly	GL11195
			21	Lockwasher, $\frac{3}{8}$ " ID	GL11076
			22	Hex Bolt $\frac{3}{8}$ "-16, L= $1\frac{1}{4}$ "	GL11074

SECTION IX - REPLACEMENT PARTS

C. 3007 Base Assembly

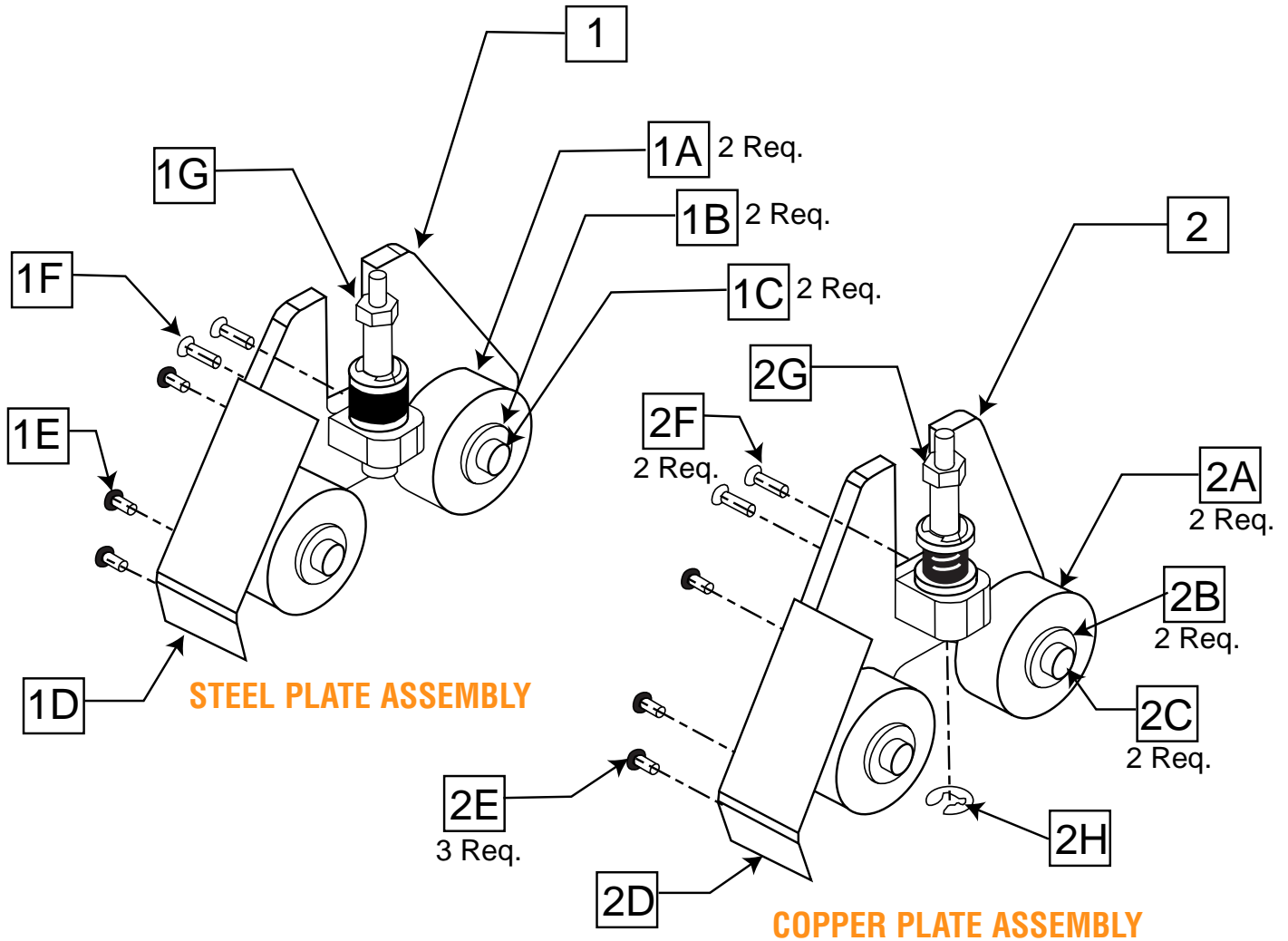


ID No.	Part Name	Part No.
1	Pump Assembly	GL11081
Pump Assembly Consists of the Following:		
1A	Hydraulic Pump	GL11082
1B	Pump Plate	GL11090
1C	Cap Screw, 1/4"-20, L=1/2"	GL11230
1D	Cap Screw, 1/4"-20, L=5/8"	GL11093
1E	Hydraulic Pressure Gage	GL 11084

ID No.	Part Name	Part No.
2	Hex Bolt, 5/8"-11, L=1 1/2"	GL11091
3	Hex Nut, 5/8"-11	GL11092
4	Lockwasher, 3/8" ID	GL11076
5	Bolt, 3/8"-16, L=1 1/4"	GL11074
6	Upper Leg Weldment	GL11145
7	Foot-Leg Sub-Assembly	GL11147
8	Hex Bolt, 3/8"-16, L=1"	GL11150

SECTION IX - REPLACEMENT PARTS

D. 1007 & 3007 Steel and Copper Guide Roll Assemblies



ID No.	Part Name	Part No.
1	2"-12" Steel Guide Roll Assembly	GL11100

ID No.	Part Name	Part No.
2	2"-6" M&L Copper Guide Roll Assembly	GL11128

Steel Guide Roll Assembly Consists of the Following:

1A	Guide Roll	GL11106
1B	Washer, 1/2"	GL11109
1C	Shoulder Bolt, 1/2"	GL11107
1D	Guide Roll Guard	GL11304
1E	Cap Screw, 1/4"-20, L=1/2"	GL 11230
1F	Flat Head Screw, 1/4"-20, L=3/4"	GL11108
1G	Hex Nut, 1/2"	GL11198

Copper Guide Roll Assembly Consists of the Following:

2A	Guide Roll	GL11106
2B	Washer, 1/2"	GL11109
2C	Shoulder Bolt, 1/2"	GL11107
2D	Guide Roll Guard	GL11304
2E	Cap Screw, 1/4"-20, L=1/2"	GL 11230
2F	Flat Head Screw, 1/4"-20, L=3/4"	GL11108
2G	Hex Nut, 1/2"	GL11198
2H	E-Ring	GL11078

Options:

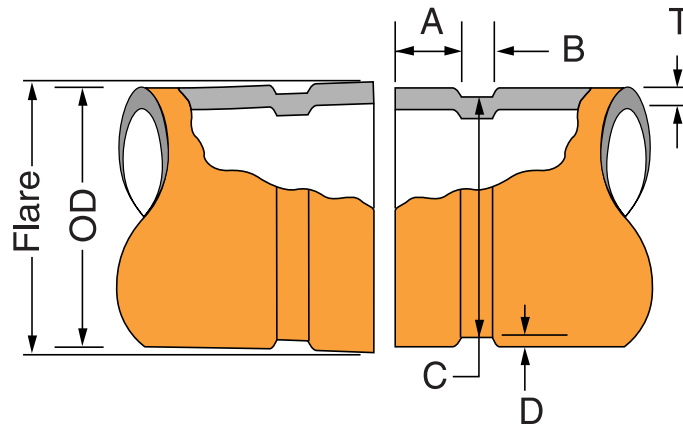
14"-16" Steel Guide Roll Assembly	GL11333
-----------------------------------	---------

Options:

2"-6" K Copper Guide Roll Assembly	GL11232
3"-6" DWV Copper Guide Roll Assembly	GL11234
8" Copper Guide Roll Assembly	GL11583

SECTION X – GROOVE SPECIFICATIONS

GRUVLOK® ROLL GROOVE SPECIFICATIONS



GRUVLOK STANDARD ROLL GROOVE SPECIFICATION FOR STEEL & OTHER IPS										
-1- Nominal IPS Pipe Size	-2- Pipe OD		-3- Gasket Seat "A"	-4- Groove Width "B"	-5- Groove Diameter "C"	-6- Groove Depth "D"	-7- Min. Allow. Wall Thick. "T"			-8- Max. Flare Dia.
In./DN(mm)	Actual	Tolerance	±0.030 ±0.76	±0.030 ±0.76	Actual Tol. +0.000 (Ref. Only)	In./mm	In./mm	In./mm	In./mm	In./mm
2	2.375	+0.024 -0.024	0.625	0.344	2.250 -0.015	0.063	0.065	2.480		
50	60.3	+0.61 -0.61	15.88	8.74	57.15 -0.38	1.60	1.7	63.0		
2½	2.875	+0.029 -0.029	0.625	0.344	2.720 -0.018	0.078	0.083	2.980		
65	73.0	+0.74 -0.74	15.88	8.74	69.09 -0.46	1.98	2.1	75.7		
3	3.500	+0.035 -0.031	0.625	0.344	3.344 -0.018	0.078	0.083	3.600		
80	88.9	+0.89 -0.79	15.88	8.74	84.94 -0.46	1.98	2.1	91.4		
3½	4.000	+0.040 -0.031	0.625	0.344	3.834 -0.020	0.083	0.083	4.100		
90	101.6	+1.02 -0.79	15.88	8.74	97.38 -0.51	2.11	2.1	104.1		
4	4.500	+0.045 -0.031	0.625	0.344	4.334 -0.020	0.083	0.083	4.600		
100	114.3	+1.14 -0.79	15.88	8.74	110.08 -0.51	2.11	2.1	116.8		
5	5.563	+0.056 -0.031	0.625	0.344	5.395 -0.022	0.084	0.109	5.660		
125	141.3	+1.42 -0.79	15.88	8.74	137.03 -0.56	2.13	2.8	143.8		
6	6.625	+0.063 -0.031	0.625	0.344	6.455 -0.022	0.085	0.109	6.730		
150	168.3	+1.60 -0.79	15.88	8.74	163.96 -0.56	2.16	2.8	170.9		
8	8.625	+0.063 -0.031	0.750	0.469	8.441 -0.025	0.092	0.109	8.800		
200	219.1	+1.60 -0.79	19.05	11.91	214.40 -0.64	2.34	2.8	223.5		
10	10.750	+0.063 -0.031	0.750	0.469	10.562 -0.027	0.094	0.134	10.920		
250	273.1	+1.60 -0.79	19.05	11.91	268.27 -0.69	2.39	3.4	277.4		
12	12.750	+0.063 -0.031	0.750	0.469	12.531 -0.030	0.109	0.156	12.920		
300	323.9	+1.60 -0.79	19.05	11.91	318.29 -0.76	2.77	4.0	328.2		
14 OD	14.000	+0.063 -0.031	0.938	0.469	13.781 -0.030	0.109	0.156	14.100		
350	355.6	+1.60 -0.79	23.83	11.91	350.04 -0.76	2.77	4.0	358.1		
16 OD	16.000	+0.063 -0.031	0.938	0.469	15.781 -0.030	0.109	0.165	16.100		
400	406.4	+1.60 -0.79	23.83	11.91	400.84 -0.76	2.77	4.2	408.9		

COLUMN 1: Nominal IPS Pipe size.

COLUMN 2: IPS outside diameter.

COLUMN 3: Gasket seat must be free from scores, seams, chips, rust or scale which may interfere with proper sealing of the gasket. Gasket seat width is to be measured from the pipe end to the vertical flank in the groove wall.

COLUMN 4: Groove width is to be measured between vertical flank of the groove size walls

COLUMN 5: The groove must be of uniform depth around the entire pipe circumference. (See column 6).

COLUMN 6: Groove depth: for reference only. Groove must conform to the groove diameter "C" listed in column 5.

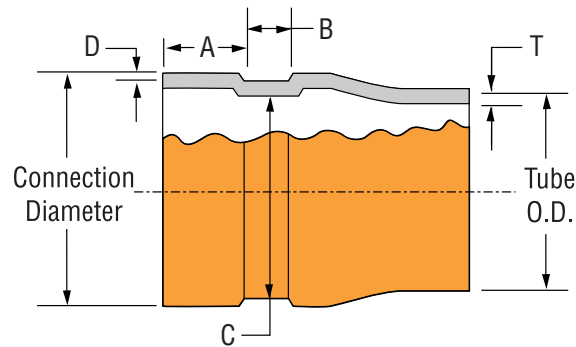
COLUMN 7: Minimum allowable wall thickness which may be roll grooved.

COLUMN 8: Maximum allowable pipe end flare diameter. Measured at the most extreme pipe end diameter of the gasket seat area.

- Out of roundness: Difference between maximum OD and minimum OD measured at 90° must not exceed total OD tolerance listed.
- For IPS pipe, the maximum allowable tolerance from square cut ends is 0.03" for 2" thru 3½"; 0.045" for 4" thru 6"; and 0.060" for sizes 8" and above measured from a true square line.
- Beveled End Pipe in conformance with ANSI B16.25 (37½°) is acceptable, however square cut is preferred.

SECTION X – GROOVE SPECIFICATIONS

GRUVLOK® COPPER-METHOD: COPPER PREP SPECIFICATIONS



GRUVLOK COPPER PREP ROLL GROOVE SPECIFICATIONS FOR TYPES K, L, M AND DWV COPPER TUBING

-1-	-2-		-3-		-4-	-5-	-6-		-7-	-8-	-9-		
Nominal Tubing Size	Tubing Outside Diameter Actual	Tolerance		Tube End Connection Diameter Actual	Tolerance		Gasket Seat A	Groove Width B	Groove Diameter "C" Tol.	Groove Depth D (Ref. Only)	Allow Wall Thick T	Max. Flare Dia.	
In./DN(mm)	In./mm	+In./mm-In./mm		In./mm	+In./mm-In./mm		±.030 ±.77	±.030 ±.77	Actual +0.000 -In./mm	In./mm	In./mm	In./mm	
2	2.125	0.002	0.002	2.375	0.045	0.024	0.625	0.344	2.250	-0.015	0.063	0.059	2.447
50	54.0	0.05	0.05	60.33	1.14	0.61	15.88	8.74	57.15	-0.381	1.60	1.50	62.15
2 1/2	2.625	0.002	0.002	2.875	0.029	0.029	0.625	0.344	2.720	-0.018	0.077	0.065	2.962
65	66.7	0.05	0.05	73.03	0.74	0.74	15.88	8.74	69.09	-0.46	1.96	1.65	75.23
3	3.125	0.002	0.002	3.500	0.035	0.031	0.625	0.344	3.344	-0.018	0.078	DWV	3.566
80	79.4	0.05	0.05	88.90	0.89	0.79	15.88	8.74	84.94	-0.46	1.98		90.58
4	4.125	0.002	0.002	4.500	0.045	0.031	0.625	0.344	4.334	-0.020	0.083	DWV	4.576
100	104.8	0.05	0.05	114.30	1.14	0.79	15.88	8.74	110.08	-0.51	2.11		116.23
5	5.125	0.002	0.002	5.562	0.056	0.031	0.625	0.344	5.395	-0.022	0.084	DWV	5.650
125	130.2	0.05	0.05	141.27	1.42	0.79	15.88	8.74	137.03	-0.56	2.13		143.51
6	6.125	0.002	0.002	6.625	0.063	0.031	0.625	0.344	6.455	-0.022	0.085	DWV	6.719
150	155.6	0.05	0.05	168.28	1.60	0.79	15.88	8.74	163.96	-0.56	2.16		170.66
8	8.125	0.002	0.004	8.625	0.063	0.031	0.750	0.469	8.441	-0.025	0.092	DWV	8.719
200	206.4	0.05	0.10	219.08	1.60	0.79	19.05	11.91	214.40	-0.64	2.34		221.46

- Notes:
- Out of roundness: Difference between maximum OD and minimum OD measured at 90° must not exceed tolerance listed.
 - The maximum allowable tolerance from square cut ends is 0.030" for 2" thru 3" and 0.045" for 4" thru 6"; measured from a true square line.

COLUMN 1: Nominal ASTM B88 copper tubing size.

COLUMN 2: Outside diameter of copper tubing in accordance with ASTM B88.

COLUMN 3: Outside diameter of Copper Prep roll grooved copper tubing.

COLUMN 4: Gasket seat and groove must be free from scores, seams, chips, or corrosion which may interfere with proper coupling assembly.

COLUMN 5: Groove width is to be measured between vertical flank of the groove size walls.

COLUMN 6: The groove must be of uniform depth around the entire tubing circumference. (See column 7).

COLUMN 7: Groove depth: for **reference only**. Groove must conform to the groove diameter "C" listed in column 6.

COLUMN 8: Minimum allowable copper tube wall thickness which may be prepared to Gruvlok Copper-Prep specifications.

COLUMN 9: Maximum allowable end flare diameter. Measured at the most extreme tubing end diameter of the gasket seat area.

SECTION XI - TROUBLESHOOTING

TROUBLESHOOTING INSTRUCTIONS		
Problem	Possible Cause	Solution
1. Pipe will not stay in grooving rolls	<p>Incorrect pipe positioning.</p> <p>Improper grooving technique.</p> <p>Power drive running counterclockwise Model 3007.</p>	<p>See "Pipe Set-up & Positioning"</p> <p>See "Grooving Pipe"</p> <p>Rigid 300 check setting in reverse Clockwise rotation of pipe</p>
2. Pipe stops rotating during grooving.	<p>Rust or dirt has built up on lower roll.</p> <p>Worn grooving rolls.</p> <p>Rigid 300 chuck jaws not engaged properly on Model 3007.</p> <p>Steel Pipe – Groove Diameter Stop improperly adjusted.</p> <p>Copper Pipe – Groove Diameter Stop making contact with top surface of Groover.</p>	<p>Remove accumulation from lower roll with stiff wire brush.</p> <p>Inspect lower rolls for worn knurls, replace if worn.</p> <p>See "Groover Set-up"</p> <p>Adjust Groove Diameter Stop to correct IPS.</p> <p>Verify Groove Diameter Stop Nuts are fully backed off.</p>
3. Pipe flare excessive	<p>Pipe stand adjusted too high.</p> <p>Tool is tilted forward.</p> <p>Incorrect pipe stand offset positioning. Pipe is over "tracking".</p> <p>Warped bottom roll shaft</p>	<p>See "Pipe Set-up & Positioning"</p> <p>See "Groover Set-up"</p> <p>See "Pipe Set-up & Positioning"</p> <p>Replace damaged bottom roll shaft. The hinged collar may be missing. Replace damaged parts.</p>
4. While grooving loud squeaks echo through the pipe.	<p>Pipe or Tube not square cut.</p> <p>Incorrect pipe roller offset positioning Pipe is over "tracking".</p>	<p>Cut pipe or tube ends squarely.</p> <p>Move pipe stand for proper offset. See "Pipe Set-up & Positioning"</p>
5. During grooving loud thumps or bangs occur about once every revolution of the pipe.	<p>Pipe has a pronounced weld seam.</p>	<p>Grind welds flush with pipe surface inside & out 2" back from pipe end.</p>
6. Tool won't groove pipe.	<p>Hand pump is low on oil.</p> <p>Air in hydraulic system.</p> <p>Pipe wall thickness exceeds tool's capability.</p>	<p>See "Groover Maintenance"</p> <p>See "Groover Maintenance"</p> <p>See "Groover Description"</p>



ANVIL[®]
INTERNATIONAL, INC.

Corporate Offices
110 Corporate Drive, Suite 10 • P.O. Box 3180
Portsmouth, NH 03802-3180
Tel: 603-422-8000 • Fax: 603-422-8033
E-mail address — Webmaster@anvilintl.com
www.anvilintl.com

ANVIL MANAGEMENT TEAM

Thomas E. Fish *President*
Bob Arison *Regional Vice President*
Ernie Chuter *Director, Marketing*
Ken Dangelmaier *Vice President, International Business Development*
Laura DiLiegro *Director, Human Resources*
Bob Kim *Vice President, Manufacturing*
John Martin *Vice President, National Accounts*
Ron Pound *Director, National Operations*
William Strouss *Vice President, Finance*
Dean Taylor *Regional Vice President*
Tom Ward *Regional Vice President*

ANVIL MANUFACTURED PRODUCTS

Columbia, PA Foundry

1411 Lancaster Avenue
Columbia, PA 17512
Tel: 717-684-4400 • Fax: 717-684-6868
Paul Benos — Plant Manager

Henderson, TN Plant

2870 Old Jackson Road
Henderson, TN 38340
Tel: 731-989-3551 • Fax: 731-989-4144
Rich Brooks — Plant Manager

Canvil

390 Second Avenue
Simcoe, ON Canada N3Y 4K9
Tel: 519-426-4551 • Fax: 519-426-5509
Brent Widdifield — Plant Manager

Longview, TX Plant

305 Simms
Longview, TX 75604
Tel: 903-759-4417 • Fax: 903-759-1782
Van O'Keefe — Plant Manager

J.B. Smith

6618 Navigation
Houston, TX 77011
Tel: 713-928-5460 • Fax: 713-928-6733
Ray Mullenix — Plant Manager

North Kingstown, RI Plant

160 Frenchtown Road
North Kingstown, RI 02852
Tel: 401-886-3001 • Fax: 401-886-3010
Robert Taylor — General Manager

ENGINEERED PIPE SUPPORTS

- Structural Fabrication
 - Field Services
 - Non-destructive Testing
- Contact: North Kingstown, RI Plant
401-886-3001

ANVIL RESEARCH AND DEVELOPMENT

20 Thurber Blvd.
Smithfield, RI 02917
Tel: 401-349-3020
Fax: 401-349-3021

ANVIL NATIONAL ACCOUNTS

John Martin — Vice President National Accounts
Tel: 303-394-2856
Fax: 303-394-3520

NORTH EAST REGION

Regional Service Center: Servicing Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, East Pennsylvania, Rhode Island, Vermont
2530 Pearl Buck Road
Bristol, PA 19007
Tel: 215-788-4056 • Fax: 215-788-4475
Tom Ward — Regional Vice President

Sales Offices

792 S. Main Street
Mansfield, MA 02048
Tel: 508-261-4050 • Fax: 508-261-4046
1234 Route 23 North
Butler, NJ 07405
Tel: 973-696-0600 • Fax: 973-696-5124

SOUTH EAST REGION

Regional Service Center: Servicing Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, Virginia
6344 Cash Court
Norcross, GA 30071
Tel: 770-662-8177 • Fax: 770-662-0284
Tom Ward — Regional Vice President

Sales Office

1202 Tech Blvd., Suite 103
Tampa, FL 33619
Tel: 800-429-0703 • Fax: 813-663-0811

MID WEST REGION

Regional Service Center: Servicing Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North and South Dakota, Ohio, West Pennsylvania, West Virginia, Wisconsin
750 Central Avenue
University Park, IL 60466
Tel: 708-534-1414 • Fax: 708-534-5441
Toll Free: 1-800-301-2701
Dean Taylor — Regional Vice President

Sales Office

321 North Point Drive
Pittsburgh, PA 15233
Tel: 412-321-6544 • Fax: 412-321-6643
Toll Free: 1-800-441-1352

Satellite Offices

1201 W. 96th Street
Bloomington, MN 55431
Tel: 952-884-7131 • Fax: 952-887-1501
Toll Free: 1-800-733-7131

9530 Le Saint Drive
Fairfield, OH 45014
Tel: 513-682-2330 • Fax: 513-870-0109
Toll Free: 1-800-837-2424

8615 East 33rd Street
Indianapolis, IN 46226
Tel: 317-895-2424 • Fax: 317-895-2430
Toll Free: 1-800-837-1515

1930 Warren Street
Kansas City, MO 64116
Tel: 816-474-0500 • Fax: 816-221-7150
Toll Free: 1-800-877-7007

24600 Northline
Taylor, MI 48180
Tel: 313-292-3800 • Fax: 313-292-1821
Toll Free: 1-800-279-1601

SOUTH WEST REGION

Regional Service Center: Servicing Arkansas, Colorado, Louisiana, New Mexico, Oklahoma, Texas, Wyoming
1313 Avenue R
Grand Prairie, TX 75050
Tel: 972-343-9206 • Fax: 972-641-8946
Bob Arison — Regional Vice President

Satellite Offices

6999 Old Clinton Rd
Houston, TX 77020
Tel: 713-675-6371 • Fax: 713-678-7858
2600 W. 42nd Street
Odessa, TX 79764
Tel: 915-366-2803 • Fax: 915-366-0890
3131 W. Thomas Road
Phoenix, AZ 85017
Tel: 602-272-6535 • Fax: 602-278-3792
4200 Holly Street
Denver, CO 80216
Tel: 303-394-2178 • Fax: 303-321-3050

WESTERN REGION

Regional Service Center: Servicing Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington
1385 Greg Street • Sparks, NV 89431
Tel: 775-353-7366 • Fax: 775-331-2810
Shipping/Receiving Fax: 775-331-3645
Bob Arison — Regional Vice President

Sales Office

1600 Sacramento Inn Way, Suite 202
Sacramento, CA 95815
Tel: 916-641-0166 • Fax: 916-641-0560

Satellite Offices

P.O. Box 10206 • Portland, OR 97210
Tel: 503-223-7101 • Fax: 503-223-7130
23285 "A" Eichler Street
Hayward, CA 94545-2750
Tel: 510-887-8700 • Fax: 510-887-6815
14103 Borate St. • Sante Fe Springs, CA 90670
Tel: 562-802-7459 • Fax: 562-802-7519
8212 S. 196th Street • Kent, WA 98032
Tel: 425-251-9585 • Fax: 425-251-5489

CANADA — MUELLER-FLOW CONTROL

Kevin Fullan — Vice President • 416-251-4171

Alberta

Calgary — Tel: 403-246-0033 • Fax: 403-246-0051
Edmonton — Tel: 780-452-9841 • Fax: 780-452-9873

British Columbia

Delta — Tel: 604-940-1449 • Fax: 604-940-9878
Nanaimo — Tel: 250-758-1551 • Fax: 250-758-1160
Prince George — Tel: 250-561-1219 • Fax: 250-561-7358
Vancouver City — Tel: 604-875-6990 • Fax: 604-875-6962

Manitoba

Winnipeg — Tel: 204-774-3461 • Fax: 204-786-5044

Ontario

Stoney Creek — Tel: 905-664-9230 • Fax: 906-664-9556
Toronto — Tel: 416-251-4171 • Fax: 416-251-7087
Sarnia — Tel: 519-336-7690 • Fax: 519-336-1621
Sudbury — Tel: 705-671-9600 • Fax: 705-671-8082

Quebec

Montreal — Tel: 514-342-2100 • Fax: 514-342-2177
Ste-Foy — Tel: 418-650-5766 • Fax: 418-266-0252

Saskatchewan

Regina — Tel: 306-543-5536 • Fax: 306-545-0390
Saskatoon — Tel: 306-242-6788 • Fax: 306-242-5089