



Hydrant Parts & Accessories

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October 2, 2006

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VALVE BOX RISERS

Municipal Water Departments, Private Water Companies, Paving and Highway Contractors

All sizes of Trumbull risers accept standard 5-1/4" lids; no need to purchase special 1" riser lids.

All six sizes of TRUMBULL RISERS (1" thru 6") fit into the top sections of Tyler, Bingham & Taylor, Opelika, Foundry, Central Foundry and many other manufacturers' valve boxes, and accept their lids as well.

-- MADE IN THE U.S.A. --

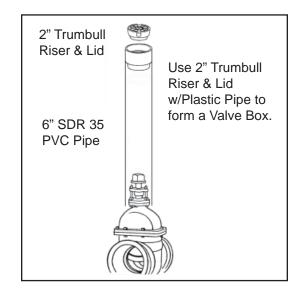


When you have to raise existing valve boxes to the new grade of a road to be paved - SAVE TIME AND MONEY - Avoid needless breaking-up of old concrete to raise the valve box - INSTEAD use TRUMBULL VALVE BOX RISERS. Simply remove the existing valve box lid, insert the riser and place the existing lid into the riser.

Trumbull Item No.	Size	Weight
367-5030	1"	6 lbs.
367-5031	1-1/2"	9 lbs.
367-5032	2"	9-1/2 lbs.
367-5034	3"	14 lbs.
367-5036	4"	20 lbs.
367-5038	6"	33 lbs.

Valve Box Risers for special sizes and shapes of valve boxes are available. Minimum order quantities are required.

Please refer to separate sheets for "RITE-HITE" Paving Adapter, TRUMBULL Valve Box Lids and TRUMBULL Locking Valve Box Lids.



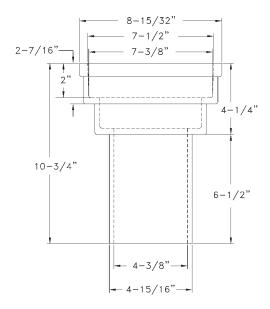
www.trumbull-mfg.com -

RITE-HITE ADAPTERS

Slide-type "Rite-Hite" paving adapter Trumbull Item Number 367-5050



The "RITE-HITE" adapter provides a method for adjusting valve boxes to pavement level. The adjustment range is from 2-1/2" to 8"



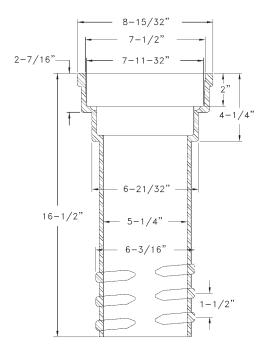
If the existing valve box is too low, place the "RITE-HITE" inside the existing box, pour stiff cement mortar around it and push down until the "RITE-HITE" is flush with the pavement surface.

If the existing valve box is too high, break off the top of the valve box and insert the "RITE-HITE". Then pour stiff cement mortar around it and push down until the "RITE-HITE" is flush with the pavement surface.

Screw-type "Rite-Hite" paving adapter, No. T-69
Trumbull Item Number 367-5060

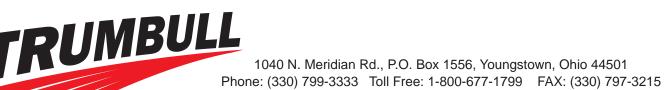


This type adapter screws into the top section of the valve box. The adjustment range is from 2-1/2" to 8".



Adjustable adapters accept standard valve box covers, as made by Bingham & Taylor, Central Foundry, Tyler, etc.

Please refer to the separate product literature sheets for Valve Box Risers (1", 1-1/2", 2", 3", 4" and 6"), and for Trumbull Valve Box Lids.

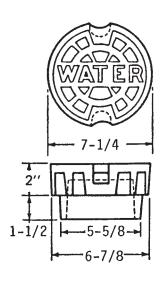


VALVE BOX LIDS

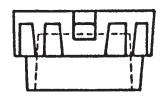
Standard and Locking Types

STANDARD LIDS

For 5-1/4" shaft Buffalo style valve boxes, TRUMBULL risers and "RITE-HITE" adapters.







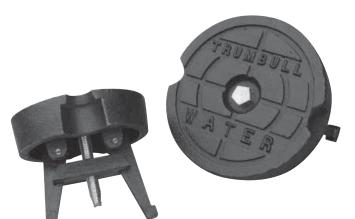
Long skirt helps keep the lid from popping out of the valve box.

Trumbull Item No. Lettering Weight 367-5044 WATER 13# 367-5046 SEWER 13# 367-5048 GAS 13# NON-POTABLE WATER 367-5049 13#

Call for special lettering (on quantities of 100 or more.)

LOCKING LIDS

Available for 4-1/4" and 5-1/4" Buffalo style Valve Boxes



Locking Lids discourage unauthorized access to valve boxes. Tightening standard brass pentagon screw causes jaws to expand, bearing against inside of valve box.

Trumbull Item No.	Lettering	Weight
367-5047	4-1/4"	8#
367-5045	5-1/4"	13#

Please refer to the separate product literature sheets for "RITE-HITE" Adapters and Valve Box Risers (1", 1-1/2", 2", 3", 4" and 6").

CURB BOX REPAIR LIDS

When you have any of these problems...



LOST LID

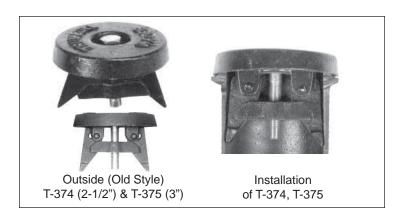




BROKEN LUG BROKEN TOP

Use Trumbull Curb Box Repair Lids to solve the problem of lost lids — broken shafts on 2-1/2" and 3" Buffalo style curb boxes.





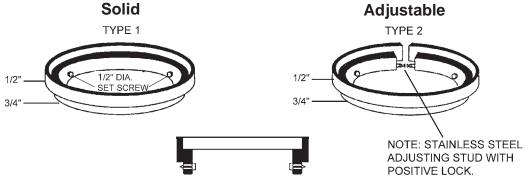
All 3 styles of repair lids feature a brass screw, assembled after painting, to facilitate operation. To install, insert the two jaws into the shaft and tighten the screw with a standard pentagon key. The jaws expand to bear against the inside of the curb box. Designed to fit most makes of curb boxes, both old and new.

Free samples upon request.

Trumbull Item No.	Model No.	Weight	Description
367-4281	T-373	2.25#	2-1/2" Inside (New Style)
367-4282	T-374	2.25#	2-1/2" Outside (Old Style)
367-4283	T-375	3.50#	3" Outside

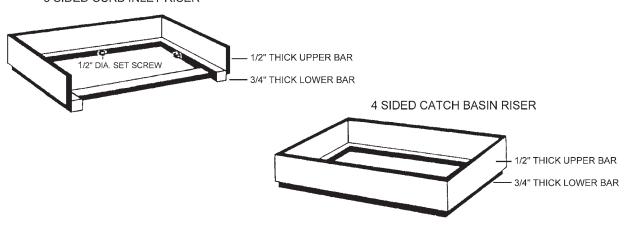
HEAVY DUTY MANHOLE & CATCH BASIN RISERS

MANHOLE RISERS 2 Basic Types



CATCH BASIN RISERS

3 SIDED CURB INLET RISER



Made in USA with Domestic A-36 Steel Coated with Bituminous Asphalt Based Paint

Also available: Trumbull Cast Iron Valve Box Risers

All manhole and catch basin risers are made to order and are non-cancellable and non-returnable.

Please use order form on reverse side showing dimensions required.

TRUMBULL INDUSTRIES, INC

** 4 SIDED CATCH BASIN RISER ** 3 SIDED CURB INLET RISER Grate Type 3* Type 4* Type 5* Type 1 \sim 1040 N. Meridian Rd., P.O. Box 1556, Youngstown, Ohio 44501 Phone: (330) 799-3333 Toll Free: 1-800-677-1799 FAX: (330) 797-3215 Type Ledge Sided** Width 3 or 4 Thickness Thickness Cover Grate ORDER FORM "B" ۺۣ Dia. (Lid) Bottom "AA" **Grate Bottom** Dimension "AA" Lid Top "A" Dia. Dimension **Grate Top** Adjustable | Amount Rise "A" of Amount Solid Rise oţ Quantity Quantity Zip CATCH BASIN RISERS MANHOLE RISERS Customer Name: Location Location Ordered By: Telephone: P.O. No. : Address: State: City:

_ □ □

I understand the above material is "made to order" and not subject to return or cancellation.



VALVE & CURB KEYS & SHUTOFF RODS

T-HANDLE MAIN VALVE KEY

Stocked in lengths 2' thru 12'. Available in other lengths on special order. Shafts of 1" Schedule 40 Steel Pipe.

Trumbull Item No.	Length	Weight
367-5016	2'	12#
367-5017	3'	13#
367-5018	4'	14#
367-5019	5'	15#
367-5020	6'	16#
367-5021	7'	17#
367-5023	8'	18#
367-5026	10'	20#
367-5028	12'	22#

Ductile iron socket fits 2" square operating nut & features mud slots. (See close-up below).



#1302 CURB STOP WRENCH



Designed to shut off 3/4" thru 2" curb stops. This wrench fits directly on tee head of curb stops.

See chart below for stock lengths; other lengths available on special order

Made of 5/8" round carbon steel with ductile iron end casting.



Trumbull Item No.	Length	Weight
367-4293	3'	4#
367-4294	4'	6#
367-5025	6'	8#
367-4296	8'	10#

CURB BOX ROD for BUFFALO TYPE BOX

Stocked in 30" and 36" lengths. Other lengths available on special order.

Furnished with brass cotter pin.

Made of 1/2" square carbon steel with ductile iron end casting.

Trumbull Item No.	Length	Weight
367-4230	30"	3.0#
367-4232	36"	3.5#

#1306 & #1322 CURB BOX KEYS for ERIE & MINNEAPOLIS TYPE BOXES

Made of 5/8" carbon steel.



Socket end of #1306 key fits the plug in a curb box lid with a pentagon nut. (See close-up of #1305 socket at right). The fork end of both keys fits in a curb box lid with 2 holes.

The pick end is used to clear ice and dirt from the box lid.

The end of both keys are slotted for use on Erie & Minneapolis style rods and will fit inside a curb box with a 1" pipe upper section.

		Trumbull Item No.		
Length	Weight	#1306	#1322	
3'	7#	367-4278	367-5278	
4'	9#	367-4280	367-5280	

See separate literature on Curb Boxes for rods that fit inside boxes with 1" pipe upper sections.

PENTAGON HAND KEY

Plated Carbon Steel



Trumbull Item No. 367-4298

Weight 0.85 lbs.

#1305 COMBINATION CURB KEY for BUFFALO TYPE BOXES

Made of 5/8" carbon steel.

#1305 Style

#1321 Style

Keys made of 5/8" round carbon steel with ductile iron combination casting.

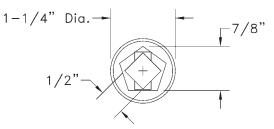
Plain Tee handle

One end has point for digging dirt or ice away from lid; other end is flattened, like a chisel.

The casting on the bottom of the keys (see photo below) is a multi-purpose tool. It can be used on a pentagon nut as well as a 1/2" square rod, and will fit directly on the tee head of a curb or meter stop. When used on pentagon bolt of meter box covers automatically attaches to lift and hold the lid.



#1305 socket



End view of #1305 socket

Stocked in the following lengths. (Longer lengths available on special order.)

Ter	ımb	 ltem	NIA
		пеп	14()

Length	Weight	#1305	#1321	
1'	3#	367-4295	367-5295	
3'	5#	367-4291	367-5291	
4'	6#	367-4292	367-5290	
6'	8#	367-4297	367-5297	



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ADJUSTABLE HYDRANT WRENCH

Entire wrench is zinc-chromate plated for corrosion resistance.



Ductile iron head with heavy wall thickness.

16" long handle with knurled grip. 7/8" diameter, high-tensile steel.

Fits pentagon nuts up to 1-1/2" (point to flat) and square nuts up to 1-1/4" (flat to flat). Spanner fits both lug and pin styles of hose couplings.

Trumbull Item No. 377-5960

Weight: 4.5 lbs.

Also available:

NON-ADJUSTABLE HYDRANT OPERATING WRENCH

Non-adjustable, 1-piece ductile iron casting available with square or pentagon opening to fit specific operating nut size. Ideal for square operating nuts.

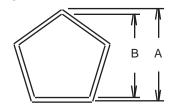




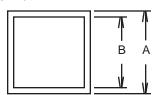
Also serves as a spanner wrench to attach or remove hose couplings (both pin and rocker type). Overall length 15". Enamel finish.

Normally stocked in the following models. Other sizes and shapes available upon special request. Please give dimensions measuring "point to flat" for pentagon nuts or across center from "flat to flat" for square and hexagon nuts.

Pentagon Nut



Square Nut



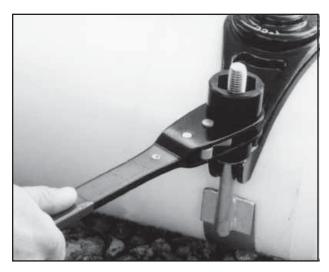
Model No.	"A" Base	"B" Top	Trumbull Item No.
B41	1-5/8"	1-1/2"	377-5952
B31	1-3/8"	1-5/16"	377-5955
B24	1-5/16"	1-1/4"	377-5954
B18	1-3/8"	1-1/4"	377-5953
B11	1-3/16"	1-1/8"	377-5956
A12	1-1/8"	1"	377-5951
А3	1"	7/8"	377-5947
	No. B41 B31 B24 B18 B11	No. Base B41 1-5/8" B31 1-3/8" B24 1-5/16" B18 1-3/8" B11 1-3/16" A12 1-1/8"	No. Base Top B41 1-5/8" 1-1/2" B31 1-3/8" 1-5/16" B24 1-5/16" 1-1/4" B18 1-3/8" 1-1/4" B11 1-3/16" 1-1/8"

Weight: 4 lbs.

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TRUMBULL DOUBLE SOCKET RATCHET WRENCHES

Our heavy-duty, double socket, ratchet wrenches can tighten nuts on long bolts or all-thread rod without bottoming out and have a simple lever operated reverse feature.



The heavy-duty ratchet mechanism is sandwiched between steel plates for strength and protection.

Trumbull Item No.	Grip Color	Large Socket	Small Socket	Large Socket Fits Hex Size	Small Socket Fits Hex Size	Examples of Large Socket Applications	Examples of Small Socket Applications
364-9982	blue	1-1/4"	1-1/16"	3/4" Heavy	5/8" Heavy	4" thru 24" MJ Ftgs., 3/4" Hex Bolts with Heavy Hex	3" MJ Ftgs., Cast Couplings, Clamps, Tapping Sleeves
364-9985	green	1-1/8"	15/16"	3/4" Standard	5/8" Standard	3/4" Flange Bolts with Standard Hex	5/8" Flange Bolts with Standard Hex, 14" thru 24" Hymax® Couplings
364-9983	yellow	7/8"	3/4"	9/16" Standard & 1/2" Heavy	1/2" Standard & 7/16" Heavy	6" thru 12" Hymax® & other Couplings with 1/2" Heavy Hex	1-1/2" thru 4" Hymax [®] Couplings, 1-1/2" thru 24" MaxiFit™

The handle is covered with a resilient material to improve the grip and help resist slippage during use.



Carrying Case with 3 wrenches 364-9986

To assure long service life and reliable operation, clean and oil mechanism regularly.

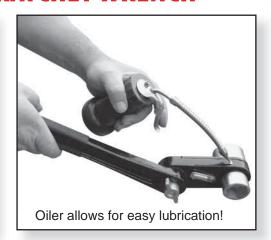


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ADJUSTABLE HANDLE DOUBLE SOCKET RATCHET WRENCH



Adjustable head helps get to those hard-to-reach nuts and bolts!



Slip resistant resilient grip.

The heavy duty 12" ductile iron handle is locked to the ratchet head with a plated steel bolt and wingnut.

This socket fits Heavy Hex Nuts on 5/8" Bolts used on Clamps, Couplings, Saddles and 3" Mechanical Joints.

This socket fits Heavy Hex Nuts on 3/4" bolts, used on 4" thru 24" Mechanical Joints. —



Easy action lever reverses direction.



The new OILER feature allows for easy lubrication without disassembly.

Wing nut and bolt can be installed from either side of assembly to minimize interference with joint.

- Heavy-duty double socket incorporates a through design which can tighten nuts on long bolts or all-thread rod without bottoming out.
- Double socket permits use on either 5/8" or 3/4" Heavy Hex Nuts without changing sockets. Also eliminates the common misplacement of loose sockets and introduction of dirt into the mechanism while changing sockets in the field.
- Increased number of socket teeth requires less stroke to ratchet.
- Improved heavy-duty ratchet mechanism is lubricated and enclosed in a sealed ductile iron casting to prevent debris from jamming. Now includes an oiler that allows lubrication without disassembly!

 Size
 Socket Sizes
 - fits Nut Size
 Weight
 Color

 364-9984
 16" O.A.L.
 1-1/16" - (5/8" Heavy Hex Nut)
 4 lb. 8 oz.
 Black

 1-1/4" - (3/4" Heavy Hex Nut)
 1-1/4" - (3/4" Heavy Hex Nut)
 1-1/4" - (3/4" Heavy Hex Nut)
 1-1/4" - (3/4" Heavy Hex Nut)



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TRUMBULL RATCHET BOX WRENCH

Enclosed Heavy-Duty Design

Our heavy-duty, ratcheting, box end wrench can tighten nuts on long bolts or all-thread rod without bottoming out and has a simple flip-over reverse feature. They have no loose sockets that can be misplaced and the enclosed design prevents rocks, pebbles or debris from entering the mechanism.



The small end has a 1-1/16" socket which fits heavy hex nuts on 5/8" bolts, used on clamps, couplings, saddles and 3" Mechanical Joints.

The large end has a 1-1/4" socket which fits heavy hex nuts on 3/4" bolts, used on 4" thru 24" Mechanical Joints.

Compare

Our improved design



Enclosed design keeps debris from jamming the mechanism.

Triple rivets keep plates from spreading under your heaviest tightening job.

Competitive design



Open design allows debris to jam mechanism.

Single rivet provides less protection against side plates from spreading and possible failure.

Trumbull Item No. 364-9980

Size 17-3/16" O.A.L. Socket Sizes - fits Nut Size

1-1/16" - (5/8" Heavy Hex Nut) 1-1/4" - (3/4" Heavy Hex Nut) Weight 2 lb. 15 oz.

See pages C-4 and C-5 for other models and sizes of ratchet wrenches.

To assure long service life and reliable operation, clean and oil the wrench regularly.

MANHOLE COVER HOOKS

The manhole cover hook is made of 5/8" hexagonal tool steel. The 1/2" point engages the cover of the manhole casting. Hooks are painted with blue enamel paint to resist rusting.



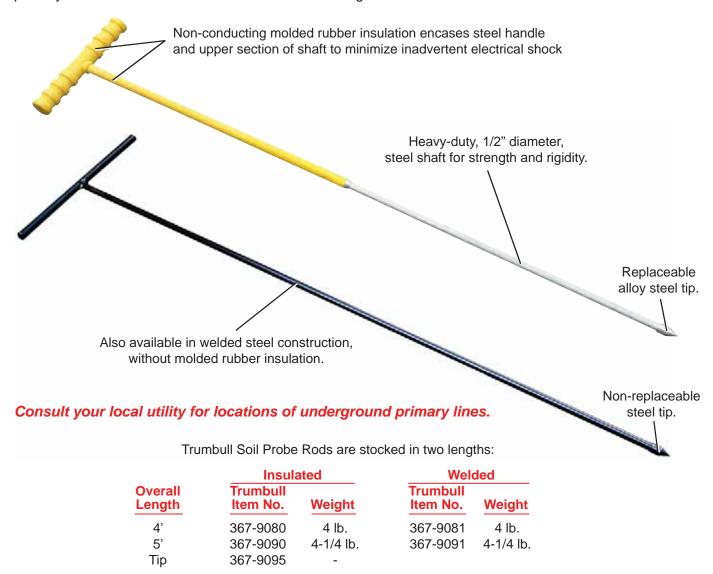


TRUMBULL SOIL PROBE RODS

Used in locating buried lines

Offered in both insulated and non-insulated styles.

Insulated Probe Rod features non-conducting, molded rubber handle and shield on upper section of shaft. Molded rubber coverings have been laboratory tested to assure protection against electrical shock from accidental contact with buried **secondary** electrical lines. Note: The insulation will not provide protection against contact with **primary** voltages. Please consult your local utility for locations of underground primary lines. Handle is 1-3/16" diameter x 9-1/2" long.



Always consult power company for existence of underground electrical lines before digging.



www.trumbull-mfg.com -

DIAMETER TAPE

1/4" x 10'

Most competitive models of diameter tapes can measure up to 20" or 24" pipe. Trumbull's tape will measure diameters up to and including 36" ductile iron pipe.



Available with **CUSTOM LOGOS!**



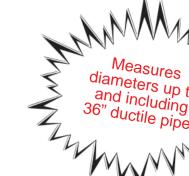
Pipe OD Chart on reverse

Trumbull Item No.

217-6653

217-6656

217-6659



Meas	sure	men	t
Sca	les T	Tvpe	

Linear Inch x Diameter Inch Linear Metric x Diameter Metric Diameter Inch x Diameter Metric

Length

10 Feet 3 Meters 10 Feet

First 12 inches of front measures to 1/32nds. Balance of front measures to 1/16ths.

Diameter on back to 100ths of inches.



Linear marking



DIAMETER TAPE

A necessity for any water utility or waterline contractor! Know your pipe diameters in order to size your clamps, couplings and tapping sleeves accurately! Gift Boxed.

Automatically converts circumference of a pipe to its diameter. Yellow tape with black markings. Spring action returns blade to case.

Boxed Weight: 2-1/2 oz.

DON'T buy a tape that may not be long enough to do the job.



Trumbull 10 foot tapes can measure the outside diameter of 36" ductile pipe (38.30" O.D.)



Woight

DETECTABLE WARNING TAPE

For Locating Non-Metallic Pipes Buried Underground



Tape is manufactured of an aluminum core encased in plastic. Stocked in 1,000 foot rolls in standard industry colors:

Trumbull Item No.	Color	Buried Line Type	Width	Length of Roll	per 1000 Ft. Roll
364-4950	Blue	Water Line	2"	1000'	5.0#
364-4955	Blue	Water Line	3"	1000'	7.5#
364-4966	Blue	Water Line	6"	1000'	15.0#
364-4951	Green	Sewer Line	2"	1000'	5.0#
364-4956	Green	Sewer Line	3"	1000'	7.5#
364-4967	Green	Sewer Line	6"	1000'	15.0#
364-4958	Lavender	Reclaimed Water	3"	1000'	7.5#
364-4968	Lavender	Reclaimed Water	6"	1000'	15.0#
364-4970	Red	Electrical	3"	1000'	7.5#

For installations 30" or shallower, 2" wide tape should be used. For deeper installations, 3" tape should be used. Use electronic pipe/cable locators for best results and not valve box or metal locators. Non-detectable, yellow "CAUTION" tape is also available... Trumbull Item No.: 165-5201



COPPER STRAIGHTENER & REPOUNDER (CSR)

Re-rounds 1-1/2" and 2" oval tubing anywhere along its length, so cutter tracks and fittings seal properly.

Especially useful on wet tubing or in tight quarters-provides a solid grip when straightening or fitting up.

4 to 5 times faster unrolling and straightening a 40' coil of soft copper.

Safe, firm grip when using hammer flare tools.

Full utility is best appreciated by using these tools.

Tools pay for themselves in labor savings in the first few jobs.

Also available for 3/4" and 1" copper tubing.

Trumbull

Item No.

368-9028

368-9029

368-9030

Model

Number

CSR-3/4"

CSR-1"

CSR-2"

CSR₂ Quick-release jaws open for easy placement along run. One shot rounding CSR2 includes inserts for 1-1/2" K copper **Fits** K Copper 3/4" 1-1/2" & 2" CSR3/4 and CSR1 are useful for straightening when tubing is wet or when

See Reverse Side for Instructions for Use of CSR Tools.

100206

working in tight quarters.



www.trumbull-mfg.com —

Crimstrate Tube Rounder

The use of this tool can save you time and material in a very short time, to more than cover the cost of the tool. The Tube Rounder has been engineered and built for rugged use. It's all steel with ductile iron jaws construction will last for years under normal use. **90-Day satisfaction guaranteed or full refund**.

The **CSR-2 Tube Rounder** is supplied with an insert set to allow rounding of 1-1/2 and 2 inch K-Copper. These two popular sizes of copper are a problem in the field, due to out-of-roundness, difficulty of fit-ups and handling. The **CSR-2** Tube Rounder solves these kinds of problems.

Instructions for Use

The **CSR-2 Tube Rounder** has been engineered for simplicity, and successful use of the tool is almost self-explanatory. However, there is one precaution which must be understood by the user. The tool develops the force necessary to round the tubing thru an adjustable knuckle action toggle. The adjustment is provided by means of a setscrew at the base of one of the handles. The setscrew should be tightened to require approximately 40 pounds of force to close the handles with a tube in the jaws. Over tightening the adjusting screw can cause improper rounding or may damage the tool. Your Tube Rounder has been adjusted at the factory to properly round 1-1/2 inch K-Copper tubing.

When using your Tube Rounder, care should be taken to insure that the tubing to be rounded extends at least half way through the jaws. The tool works best when the jaws are fully engaged over the tubing to be rounded.

To convert your **CSR-2 Tube Rounder** for 2 inch K-Copper, remove the two allen head screws near the center of the jaws and pop out the 1-1/2 inch inserts. Slight adjustment may be required as described above. If rounding is required some distance from the end of the tube, it is not necessary to thread the tool over the end of the tube. Remove the hinge pin in the upper jaw and swing the jaws open. With the handles open, place the Tube Rounder over the area to be rounded and re-insert the hinge pin, being careful to engage the jaw-aligning tooth. The hinge pin will not go in unless the aligning tooth is engaged.

All moving parts of your **CSR-2 Tube Rounder** have been lubricated at the factory; however, periodic lubrication and maintenance is required, as would be for any fine hand tool.

We wish you many years of satisfactory use with your CSR-2 Tube Rounder.



www.trumbull-mfg.com -

Knuckle SAVER® 3-in-1 FLARING TOOL

w/Re-Rounding & Pressure Relieving Features

Whether you are flaring Type K soft copper, or using it to "re-round" copper for use with compression fittings, the KnuckleSAVER flaring tool provides safety from injuries.

The shank of the flaring tool is drilled out and provided with a pressure relieving hole, to allow for use with lines that cannot be shut down.



LONG SHANK

Helps re-round kinked or bent copper.

Ideal with compression brass!

DRILLED TOOL END

Allows water pressure to be relieved through **HOLE ON SIDE**.

Useful when flaring must be done under pressure.



Trumbull Item No.	Model#	Size	Weight
368-0500	FRP-075	3/4"	0.75 lbs.
368-0502	FRP-100	1"	0.90 lbs.
368-0504	FRP-150	1-1/2"	2.02 lbs.
368-0506	FRP-200	2"	3.48 lbs.

BRASS HAMMER

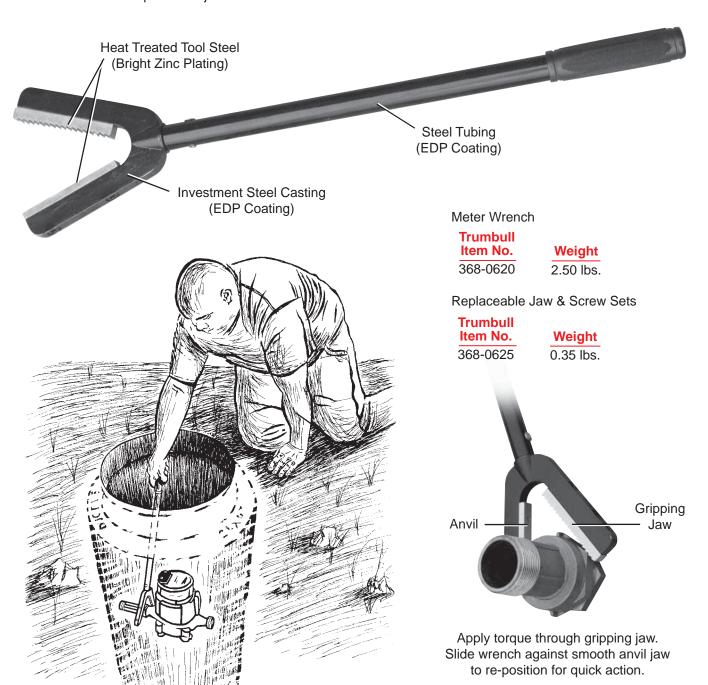
Trumbull Item No.	Model#	Size	Weight
207-7088	Brass	3 lbs.	3.20 lbs.





TRUMBULL METER WRENCH

The TRUMBULL meter wrench is used to install and remove meter couplings in buried meter boxes and meter pits. The 16" handle allows worker easy access into these confined areas. Works with 1/2" through 1-1/2" meter couplings. Special features include resilient grip on handle and replaceable jaws.





www.trumbull-mfg.com -

DISTANCE MEASURING WHEEL **WITH STORAGE BAG**

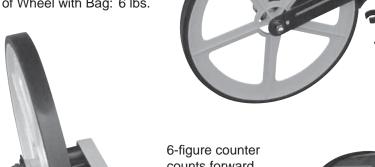
TRUMBULL's heavy-duty distance measuring wheel is ideal for laying out and measuring utility lines, road work, and other types of construction. Lightweight design makes it easy to use, reducing fatigue. Folding handle design requires minimal storage space and fits conveniently inside padded storage bag.

Internal axle bearings provide for long life under a wide variety of applications. Six figure counter records long distances up to 100,000 ft. over most types of terrain. Large counter makes reading measurements easy. Hand-grip brake eliminates unwanted measurement at turns or when maneuvering around objects not to be measured.

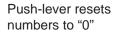
Handle, front forks, and kickstand are coated carbon steel. Wheel rim and hand grip brake made of ABS, in fluorescent green. Tire is made of 90-Durometer Black PVC.

Trumbull Item No.: 217-1235

Wheel Diameter: 12-1/2" Extended Length: 3'8" Weight of Measuring Wheel: 5 lbs. Weight of Carrying Bag: 1 lb. Weight of Wheel with Bag: 6 lbs.



counts forward or backward.





Folding-handle design fits neatly inside storage bag.

www.trumbull-mfg.com -

SHUTOFF TOOL for POLYETHYLENE WATER TUBING

The TRUMBULL shutoff tool can be used on polyethylene water service tubing for making emergency shutoffs where curb stops or other valves are not readily accessible.

Tool is hinged on one end, allowing tool to open for use on 3/4" and 1" polyethylene. Latch on opposite ends keeps tool closed during repair. Zinc chromate plated with knurling to grab onto polyethylene during crimping of tubing.



ADJUSTABLE STORZ HYDRANT WRENCH



Works on 4" and 5" Storz caps.



Wide bearing surface on wedge nut grips and retains operating nuts better than conventional threaded handles.



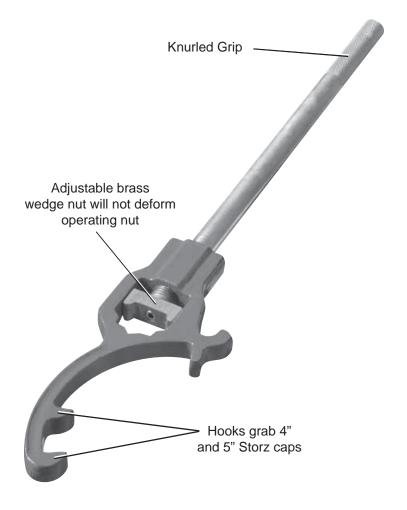
Works on hydrant adapters and hose couplings, both pin and lug type.

This TRUMBULL wrench works on 4" and 5" Storz caps, rocker lug and pin-type fittings and hydrant adapters.

Adjustable brass wedge nut grips a variety of sizes and shapes of operating nuts, up to 1-3/4" pentagon and 1-1/4" square. Head is made of cast steel; handle made of high-tensile steel.

Trumbull Item No. 377-5970

Weight 5.65 lbs.



www.trumbull-mfg.com

POLYETHYLENE ENCASEMENT TUBING

Made in U.S.A.

8 Mil Linear Low Density "Polywrap" for Ductile Iron Pipe

Polyethylene Encasement Tubing protects metallic pipe in corrosive soils. The tubing is slipped over the pipe, extended and taped. An overlap of approximately two feet should be figured in calculating the total polywrap required. For example, about 20 feet of polywrap is required for each 18 foot length, or 22 feet for each 20 foot length.



BLACK POLYWRAP

per ANSI/AWWA C105/A21.5-99

		Continuous		Perforated @ 20'		Perforated @ 22'		Rolls of Tape	
Pipe Size	Layflat Width	Weight #/ft.	Trumbull Item No.	Roll Length	Trumbull Item No.	Roll Length	Trumbull Item No.	Roll Length	required per 1,000'
3"-6"	16"	0.106	use 20"	-	388-9942	300	use 20"	-	3
3"-8"	20"	0.132	388-9989	300	388-9943	300	388-9961	308	3
10"	24"	0.159	use 27"	-	388-9945	300	388-9951	308	4
10"-12"	27"	0.179	388-9993	300	388-9952	300	388-9962	308	4
14"-16"	34"	0.225	388-9996	300	388-9955	300	388-9966	308	6
18"-20"	41"	0.271	388-9998	300	388-9957	300	388-9969	308	7
24"	54"	0.358	388-9999	150	388-9958	160	388-9970	154	8
30"	67"	0.444	388-9985	150	*	*	*	*	10
36"-42"	81"	0.536	388-9986	150	*	*	*	*	15
48"	95"	0.629	388-9980	150	*	*	*	*	17
54"-60"	108"	0.715	388-9982	150	*	*	*	*	20
64"	121"	0.801	388-9984	150	*	*	*	*	21

COLORED POLYWRAP

Colored Polywrap stocked "Continuous" as shown below:

Pipe Size	Layflat Width	Weight #/ft.	BLUE (water) Item No.	GREEN (sewer) Item No.	LAVENDER (reclaimed water) Item No.	Roll Length	Rolls of Tape required per 1000' of pipe
3"-8"	20"	0.132	388-8705	388-8755	388-8805	300	3
10"-12"	27"	0.179	388-8710	388-8760	388-8810	300	4
14"-16"	34"	0.225	388-8715	388-8765	388-8815	300	6
18"-20"	41"	0.271	388-8717	*	388-8817	150	7
24"	54"	0.358	388-8720	388-8770	388-8820	150	8
30"	67"	0.444	*	*	388-8825	150	10

MISCELLANEOUS

Item No.	Pipe Size	Layflat	Mils	Color	Roll Length	Perf. @	Comments
388-8605	8"	20"	12	Clear	200'	20'	Marked "WATER PIPE"
388-8610	12"	30"	12	Clear	200'	20'	Marked "WATER PIPE"
364-9941	4"	12"	8	Black	408'	12'	For 4" CI Soil Pipe

Consult price list for current sizes, colors and configurations stocked.

TAPE

364-9975

2" x 100' Black Polyethylene Tape, 10 mils thick

For installation instructions, see ANSI/AWWA C-105/A21.5-99, dated January 1, 2000.

100206 D-1

^{*} Indicates other sizes, types and colors that are available as "special order"; 4000# minimum per color, or size.

T-HEAD BOLTS & NUTS

STAINLESS STEEL TYPE 304 and 316

The 3/4" x 4" bolt is threaded 1/2" longer than the standard to permit use as a 3/4" x 3-1/2" bolt. Heads are stamped with the type of stainless. Ideal for corrosive soils. Provided with coated heavy hex nut to prevent galling.



ANTI-ROTATION BOLTS (CORTEN)

Also known as "Lugged T - Bolts"



Used on slotted opening in the MJ bells of hydrants and valves.

Square neck on shank of bolt locks in slot to prevent rotation when nut is tightened.

Provided with heavy hex nut.

Trumbull Item No.

	STAN T - Head E	ANTI-ROTATION T - Head Bolts & Nuts	
Size	Type 304 Stainless Steel	Type 316 Stainless Steel	Corten
3/4" x 3-1/2"	364-3487	364-3387	364-3390
3/4" x 4"	364-3488	364-3388	364-3392
3/4" x 4-1/2"	364-3489	364-3389	-
3/4" x 5"	364-3493	364-3393	-
1" x 6"	-	364-3394	-

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www.trumbull-mfg.com -

TRUMBULL ANODE CAPS

Sacrificial Zinc Anodes

Trumbull Anode Caps are designed for fighting corrosion of underground bolts and nuts, and iron pipe and fittings.

These threaded, hex head caps, when secured to a bolt or stud, form a galvanic cell, similar to a battery. As part of this cell, the Zinc cap becomes the sacrificial anode, corroding, while the remaining metal parts are protected.

This corrosion protection continues until the Zinc is consumed.

THEORY OF OPERATION:

Corrosion is an electrochemical process in which metal parts form a galvanic cell when they are in contact with moisture. Using the common battery as an example, moisture becomes the electrolyte while the different metals in the system (such as bolts, nuts, fittings, etc.) become the positive and negative ends of the battery. The composition of the materials determines which is the more negative, Zinc being much more negative than most other materials.

The "more negative" component loses material thru corrosion while protecting the "positive" component, which becomes shielded; the protected component is essentially immune to corrosion as long as there is Zinc remaining to consume.

Zinc Anode Caps offer protection for other system components made of steel, cast iron, ductile iron, brass and copper.

The quantity of Zinc Anode Caps used determines the service life of the protected component.

Table 1 – Practical Galvanic Series

Metal	Volts
Zinc (Mill Spec Anodes) Commercially Pure Aluminum Mild Steel (Clean) Mild Steel (Rusted) Cast Iron Lead Mild Steel in concrete Copper, Brass, Bronze High silicon cast iron	-1.1 -0.8 -0.5 to -0.8 -0.2 to -0.5 -0.5 -0.5 -0.2 -0.2 -0.2

Trumbull Zinc Anode Caps are made from high grade Zinc that conforms to the chemical requirements of both ASTM B418-88, "Galvanic Zinc Anodes", and, U.S. Navy Specification Mil-18001 H.





SMALL ZINC ANODE CAP, 2.5 oz.

Trumbull Item No.	Description
364-1004	5/8"-11, N.C.
364-1006	3/4"-10, N.C.





LARGE ZINC ANODE CAP, 2.5 oz.

Trumbull Item No.	Description
364-1008	5/8"-11, N.C.
364-1010	3/4"-10, N.C.
364-1012	1"-8, N.C.

For heavier Anode Caps, please inquire.



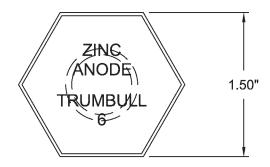
Typical installation of Zinc Anode Caps.

100206 D-3

Material: High Grade Zinc Conforms to chemical requirements of ASTM B418-88, "Galvanic Zinc Anodes", and, U.S. Navy Specification, Mil-18001 H

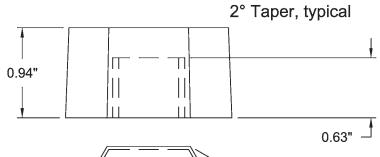
Item No. Tapped Wei	ight (oz.)
364-1004 5/8"-11 NC	2-1/2
364-1006 3/4"-10 NC	2-1/2
364-1008 5/8"-11 NC	6
364-1010 3/4"-10 NC	6
364-1012 1"- 8 NC	6

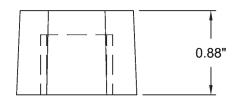
Large Anode Cap 6 ounces

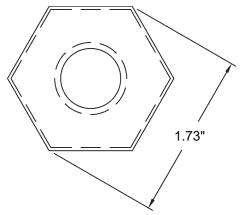


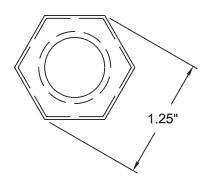
Small Anode Cap 2-1/2 ounces











Drawn:	Drawing Revision:	
Date	Rev.	Date
6/28/94	K	09/01/05

TRUMBULL INDUSTRIES
P.O. Box 1556

1040 N. Meridian Rd. Youngstown, Ohio 44501

Drawn to Scale		
ZINC ANODE CAPS		



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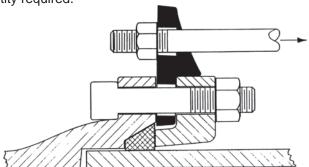
TIE-LUGS

Trumbull Tie-Lugs are made from Ductile Iron for use in restraining mechanical joint valves, fittings, pipe and hydrants with threaded rod.

Cast from high strength Ductile Iron with a tensile strength of 80,000 psi and a yield strength of 60,000 psi.

Trumbull Tie-Lugs are intended for use between MJ bell and gland in sizes 4" through 16".

NOTE: Quantity that should be used on each joint depends on pipe diameter, line pressure and other factors; consult your Engineer for quantity required.



Tie-Lugs and Tie-Bolts are particularly useful to extend threaded rod laterally to span across valves and other components.

Trumbull Item No.	Description	Weight
364-3395	Tie-Lug (domestic)	0.8#
364-9035	Tie-Lug (imported)	0.8#





Typical Installation

TIE-BOLTS

Trumbull Item No.	Description	Weight
364-4000	3/4" Tie-Bolt, Low Carbon Steel, less nut	1.0#
364-3399	3/4" Tie-Bolt, Corten Steel, less nut	1.0#
112-1328	3/4" Heavy Hex Nut (plated carbon steel)	0.2#



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SOCKET CLAMPS

Also commonly known as "retainer clamps" or "friction clamps" For use in retaining underground pipe joints from separation.

Trumbull Item No.	Size	Bolt Size	Stock Size	Weight
364-3401	3"	5/8" x 3"	3/8" x 2"	8#
364-3402	4"	5/8" x 3"	1/2" x 2"	10#
364-3403	6"	5/8" x 3"	1/2" x 2"	12#
364-3404	8"	5/8" x 3"	1/2" x 2"	14#
364-3405	10"	5/8" x 3"	1/2" x 2"	16#
364-3406	12"	5/8" x 3-1/2"	1/2" x 2"	17#
364-3428	14"	7/8" x 4"	3/4" x 3"	49#
364-3429	16"	1" x 4-1/2"	3/4" x 4"	70#
364-3430	18"	1-1/4" x 4-1/2"	3/4" x 4"	79#
364-3431	20"	1-1/4" x 4-1/2"	3/4" x 4-1/2"	91#
364-3432	24"	1-1/2" x 5"	3/4" x 5"	118#

Trumbull Item No.

Description

364-9000 Washer for 3" - 12" socket clamps

All socket clamps include two steel half clamps, two bolts and nuts and two cast iron washers. Used with all thread-rod, Trumbull tie-lugs or tie-bolts for joint restraint. See photos for typical installations.

See separate literature on Trumbull tie-lugs and tie bolts.



Typical Installation



100206 E-2



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METER COUPLINGS & FLANGES

With Rubber Gasket



METER COUPLINGS UNS C84400 Cast Semi-Red Brass. Swivel nut is drilled. Includes rubber gasket.

Trumbull Item No.	Fits Meter Size	Male Thread	Weight	Lining Length
368-0602	5/8" x 1/2"	1/2"	0.30 lbs.	2-3/8"
368-0604	5/8" x 3/4" & 3/4"	3/4"	0.45 lbs.	2-1/2"
368-0606	1"	1"	0.70 lbs.	2/5/8"
368-0608	1-1/2"	1-1/2"	2.30 lbs.	2-7/8"
368-0650	2"	2"	3.28 lbs.	3"

METER FLANGES UNS C84400 Cast Semi-Red Brass. Includes one flange and one gasket.

Trumbull Item No.	Size	Fits Meter Size	Weight
379-1005	1-1/2"	1-1/2"	2.00 lbs.
379-1006	2"	2"	2.14 lbs.

METER FLANGE KITS

UNS C84400 Cast Semi-Red Brass. Boxed kit includes 2 flanges, 2 gaskets & 4 plated bolts and nuts.



TI GIII DGII			
Item No.	Size	Fits Meter Size	Weight
379-2005	1-1/2"	1-1/2"	5.12 lbs.
379-2006	2"	2"	5.40 lbs.

METER WIRE 1,000' Per Roll

Trumbull

Trumbull Item No. Description Weight 379-0530 22 Gauge, 3 Conductor 15.00 lbs.

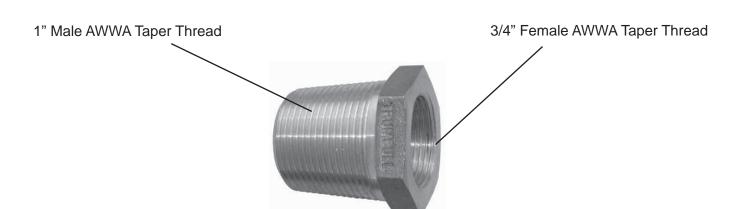
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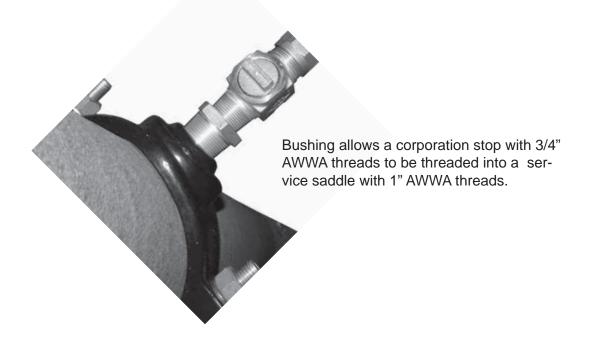


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BRASS HEX BUSHING

Brass Bushing for Corporation Stops and Service Saddles





Trumbull Item No. 368-1000

Outside Thread 1" Male AWWA Taper Thread Inside Thread 3/4" Female AWWA Taper Thread

Weight 0.45#

100206 F-2



METER BOX COVERS

Double Lid Style

Trumbull Meter Box Covers feature worm gear and standard 27/32" brass pentagon bolt.

Double Lid Meter Box Covers provide both physical and frost protection for underground meters. The insulating air space captured in the Ductile Iron base casting, between the Ductile Iron lid assembly and the plastic frost liner, helps keep the ground heat inside the meter chamber to reduce the chance of freezing. The internal plastic frost liner is molded with a central hub to permit easy removal. The double lid style uses 11-1/2" solid lids; lids drilled for touch-read meters are available.







Frost Liner

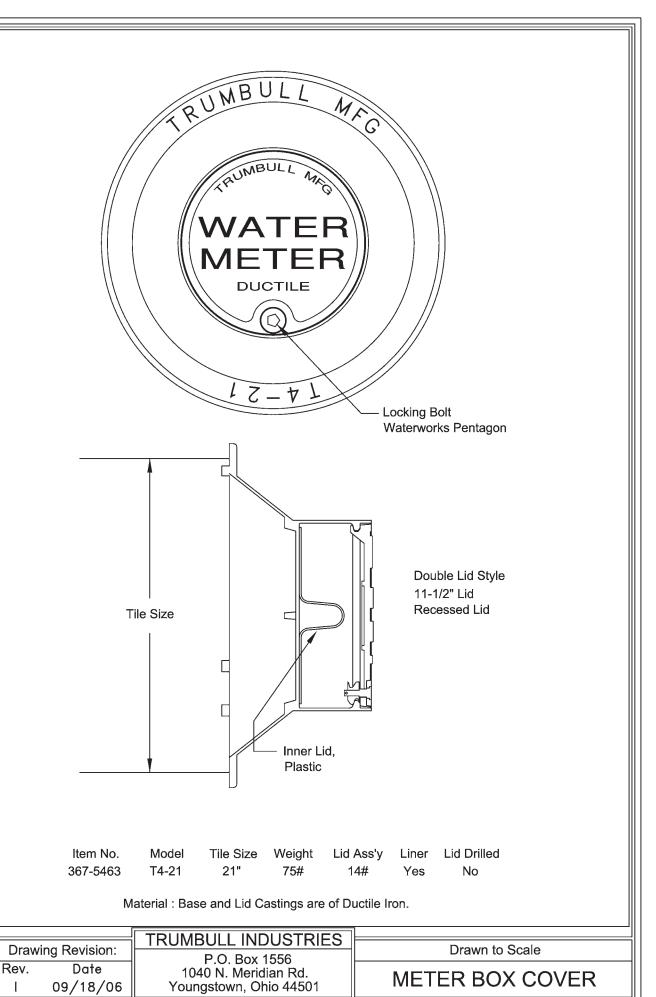
Liner Installed

Meter Box Cover Assembly

Trumbull Item No.	Description	Lid Size	Tile Size	Weight
367-5463	Model T4-21 Meter Box Cover Assembly	11-1/2	21	75#
367-5461	Lid Assembly	11-1/2	-	14#
367-5462	Frost Liner	11-1/2	-	10 oz.

Other sizes are available; minimum order quantity required. See reverse side for drawing.

100206 F-3



100206 F-4

Drawn:

Date

1/9/04

1040 N. Meridian Rd., P.O. Box 1556, Youngstown, Ohio 44501 Phone: (330) 799-3333 Toll Free: 1-800-677-1799 FAX: (330) 797-3215

www.trumbull-mfg.com -

VALVE EXTENSION STEMS

Trumbull Valve Extension Stems are used to raise the elevation of both buried and "in-plant" valves having a 2" square operating nut.

The extension stem is made up of an extension rod (or pipe), a 2" square wrench nut (or handwheel) at the top, and a wrench nut coupling at the bottom. The wrench nut coupling fits over the 2" square nut of the valve stem being raised and is held to the nut by a set screw threaded in the wrench nut coupling.

The wrench nut (or handwheel) and wrench nut coupling are pinned to the extension rod (or pipe) which is drilled to receive steel drive pins. The wrench nut and wrench nut couplings are available in either ductile iron, grade 65-45-12, or stainless steel, Type 316.

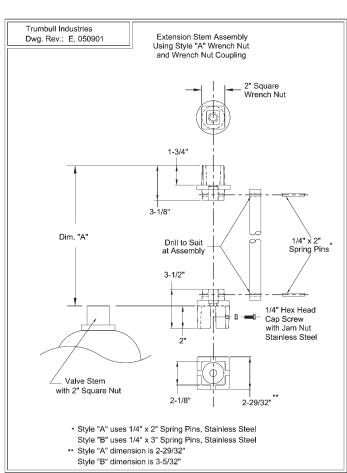
The pinned connections permit the removal of the castings so the rod can slide through Trumbull floor boxes and stem guides. Extensions can easily be shortened by cutting the stem and re-drilling for the pin.

Extension stems are normally furnished complete with rod, coupling, wrench nut (or handwheel), set screw and pins; however, wrench nut and coupling are also available for separate sale as listed under "Ordering Information".



Photo illustrates Style B wrench nut and wrench nut coupling.

Photo illustrates optional handwheel and Style A wrench nut coupling.



Style A wrench nut and wrench nut coupling shown.

See reverse side.

ORDERING INFORMATION

FOR COMPLETE EXTENSION STEMS:

- 1. Quantity
- 2. Overall length See "A" dimension on reverse side. Solid carbon steel rod and steel pipe are normally available in 20 foot and 21 foot lengths respectively. For longer lengths, stem couplings are required.
- 3. Type of stem: Specify solid rod or steel pipe. Steel pipe furnished unless otherwise specified.
 - a. For solid rod: Specify diameter. Hot rolled carbon steel furnished unless otherwise specified.
 - b. For steel pipe: Specify nominal pipe size. Sch 40 furnished unless otherwise specified.
- 4. For top nut and bottom coupling specify material type, ductile iron, grade 65-45-12, or stainless steel, type 316.
- 5. Any special requirements, such as cold rolled solid rod, Sch 80 pipe, brass or stainless stems, handwheels, valve box centering rings, or special coatings.

WHEN ONLY ORDERING COMPONENTS:

- 1. Quantity of top nuts, bottom couplings, handwheels and stem couplings. Top nut and handwheel furnished with pin. Bottom coupling furnished with pin and set screw.
- 2. For ductile iron top nut and bottom coupling select from chart below, based on type and diameter of extension being used. Stainless steel top nut and bottom coupling are normally furnished to fit 1-1/4" solid rod or 1" sch 40 pipe. Specify if larger bore sizes are required, up to a maximum of 2".

Ductile Iron Components:

Nut)	Counting
	Coupling)
367-4953	367-4963
367-4954	367-4964
367-4955	367-4965
367-4956	367-4966
367-4957	367-4967
367-4958	367-4968
367-4959	367-4969
	Nut) 367-4953 367-4954 367-4955 367-4956 367-4957 367-4958

Ductile iron top nuts and bottom couplings are available in two styles: Style A for smaller diameters and Style B for larger diameters. See drawing on front.

Stainless Steel Components:

Extension Stem Material				(Wrench	(Wrench Nut
Solid Rod	Steel Pipe	Bore Dia.	Style*	` Nut)	Coupling)
1-1/4"	1"	-		367-4933	367-4943

Handwheels:

Trumbull Item No. 367-4961

Handwheels are 14" diameter cast iron, with "open left" directional arrow, unless otherwise specified.

Handwheels are bored to specific diameter required, up to 2" I.D. maximum. See separate literature on Trumbull Floor Boxes, Stem Guides and Mud Valves.



Bottom

UNIVERSAL FLOOR BOX

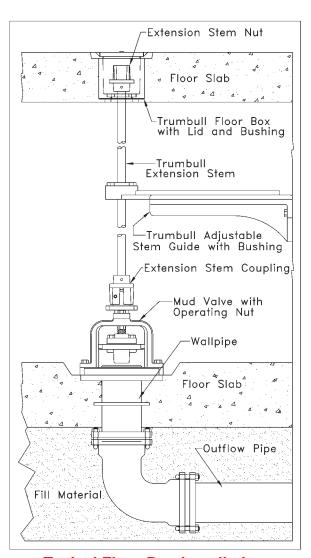
Trumbull Floor Boxes are designed for installation in concrete floors or slabs to provide support for extension stems of the non-rising type, and to provide a cover for the operating nut on the extension stem.

Trumbull cast iron floor boxes are designed for varying slab thicknesses. Overall length is 6", but the underside is tapped to accept 2-1/2" NPT steel pipe nipples for floors thicker than 6". When necessary to convert a floor box to thicker floors, use a 2-1/2" pipe nipple 1/2" longer than the increase required as the threads on the underside of the floor box are 1/2" deep. For example, for an 8" floor thickness, use a 2-1/2" x 2-1/2" nipple. For a 10" floor, use a 2-1/2" x 4-1/2" nipple.

When a stem is required that is larger than the 2-1/2" pipe I.D., a 3" pipe nipple will be welded to the bottom of the floor box.

All Trumbull Floor Boxes are furnished with a removable brass bushing for which the maximum drilling is normally 2-1/4" Dia. For larger drillings, please contact Trumbull. However, when used with floors thicker than 6", clear opening is limited to the I.D. of the pipe nipple.





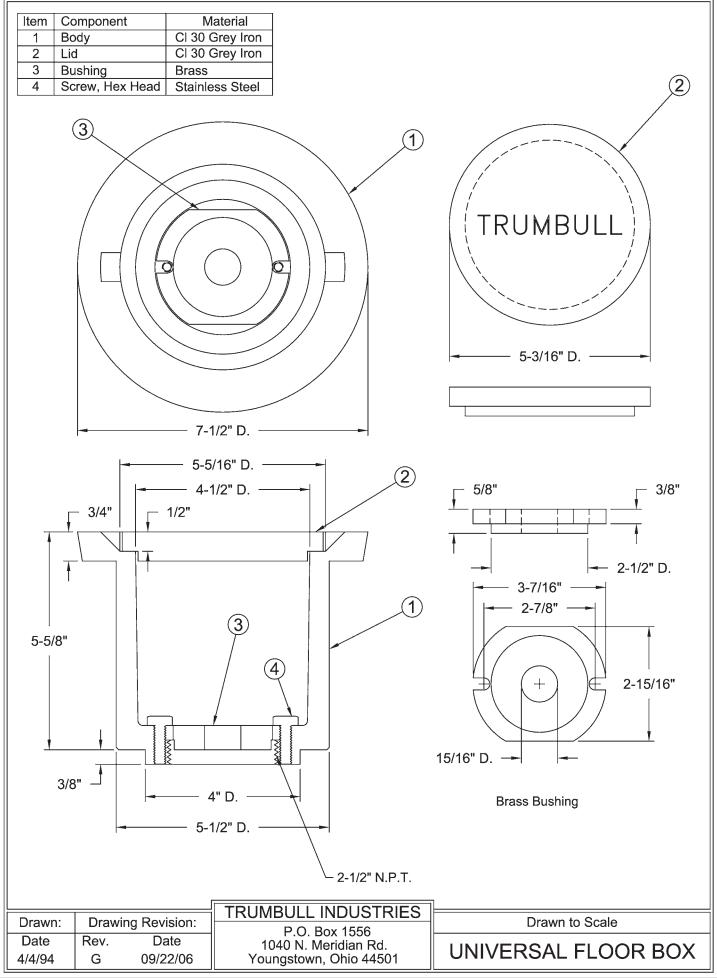
Typical Floor Box installation.

Ordering Information:

- 1. Quantity
- 2. Thickness of floor slab.
- 3. O.D. of stem being used, or desired bushing hole size (15/16" D. supplied if not specified.)

See separate literature on Trumbull Extension Stems, Stem Guides and Mud Valves.

See reverse side for drawing.



100206



ADJUSTABLE STEM GUIDES

Ductile Iron or Stainless Steel

Trumbull Stem Guides are designed as wall brackets for installation in treatment plants and pump stations to provide support for valve extension stems.

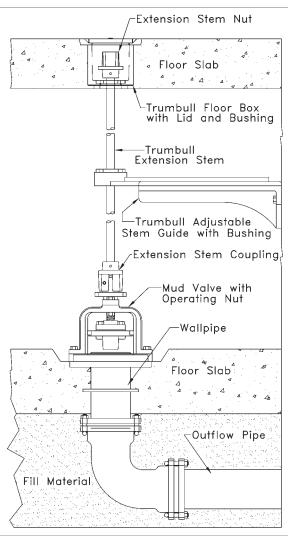
These stem guides are adjustable for stems as close to the wall as 2", or as far away as 36". They are available as follows:

Trumbull Item No.	Material	Adjustment	Weight
367-4960	Ductile Iron	2" - 26"	25#
367-4970	Ductile Iron	2" - 36"	28#
367-5960	Stainless 316	2" - 26"	28#
367-5970	Stainless 316	2" - 36"	32#

Stem guides are generally recommended at 6' to 8' intervals. Bronze bushings can be drilled up to a 2-1/8" bore dia. for 2" O.D. stems. By removing the bushing larger stems can be accomodated, up to 2-3/8" O.D. See separate literature on Stem Guides for larger diameter stems.







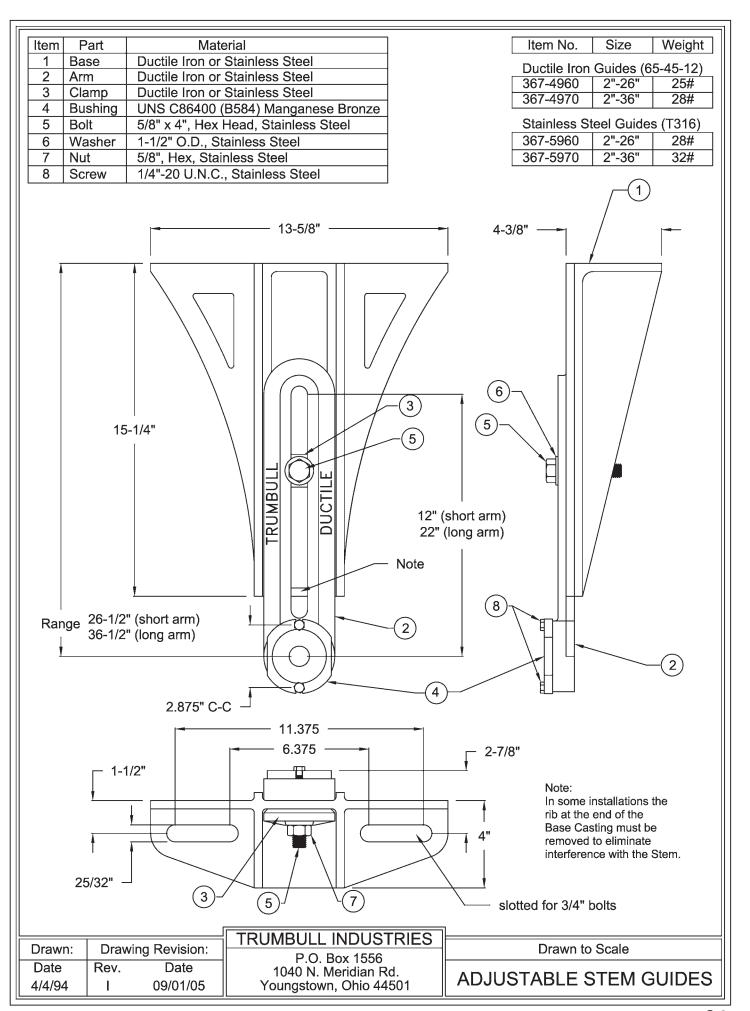
Typical Stem Guide installation.

Ordering Information:

- 1. Quantity.
- 2. Trumbull item number.
- 3. O.D. of stem being used, or desired bushing hole size (15/16" D. supplied if not specified.)

See separate literature on Trumbull Floor Boxes, Extension Stems, Mud Valves and Stem Guides for Large Diameter Stems.

See reverse side for drawing.



Phone: (330) 799-3333 Toll Free: 1-800-677-1799 FAX: (330) 797-3215

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ADJUSTABLE STEM GUIDES for LARGE DIAMETER STEMS

Trumbull Stem Guides are designed as wall brackets for installation in treatment plants and pump stations to provide support for valve extension stems.

This ductile iron Stem Guide accomodates larger stem diameters, expanding the bore capacity of our Adjustable Stem Guide product line. Furnished with a split bronze bushing to fit stem sizes from 2" to 4" outside diameters. The adjustment range will allow stem centerlines as close to the wall as 2-3/4", or as far as 17-1/4".

Trumbull Item No.

Adjustment

Weight

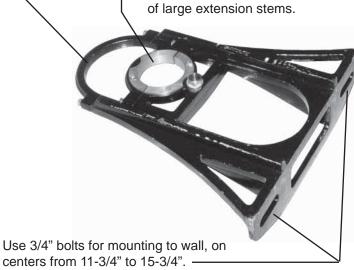
2-3/4" - 17-1/4" 367-6960

40#

Stem guides are generally recommended at 10 feet intervals.

End Cap design provides a safety restraint for large or unwieldy stems during installation or maintenance.

> Split bushing simplifies the installation of large extension stems.



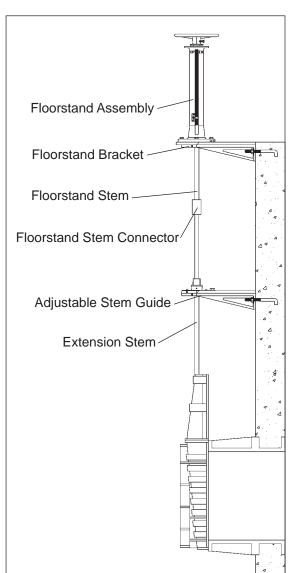


- 1. Quantity.
- 2. Trumbull item number (#367-6960).
- O.D. of stem being used, or desired bushing hole size (2-1/8" bore dia. supplied if not specified.) 3.

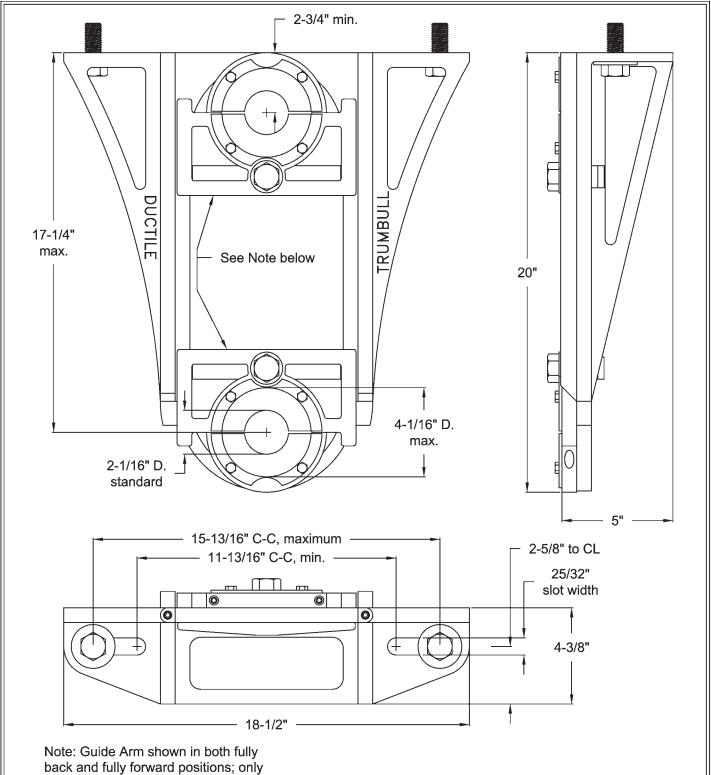
See separate literature on Trumbull Floor Boxes, Extension Stems, Mud Valves, Stem Guides for smaller stem diameters and Chainwheels.

Stem Guides are also available in Stainless Steel; please inquire.

See reverse side for drawing.



100206



back and fully forward positions; only one Guide Arm is supplied.

Mounting Bolts are not supplied.

Material:

Castings - Ductile Iron (65-45-12) Bushing - UNS C86400 Bronze Fasteners - Stainless Steel

Weight: 43# total

Drawn:	Drawing Revision:		
Date	Rev.	Date	
8/23/99	F	09/01/05	

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P.O. Box 1556 1040 N. Meridian Rd. Youngstown, Ohio 44501

Drawn	to Scal	е
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LARGE BORE STEM GUIDE

TRUMBULL MUD VALVES

Rising Stem and Non-Rising Stem Styles

Trumbull Mud Valves are designed primarily for use in settling tanks of waste water treatment plants. They are for low pressure applications only; their intended use is to drain tanks for maintenance or cleaning.

Mud valves are furnished with a 2" square operating nut; however, they can be supplied with optional extension stem or handwheel.

This valve series uses brass seats in the body and gate. The cast iron body assembly features manganese bronze stems and guides for use in submerged installations. The fasteners are furnished in stainless steel to prevent corrosion from years of service, submerged in sewage.

Note: The flange drilling is according to ANSI 125# STD. on all sizes; however, one hole under each leg of the yoke is not available for fastening to the mating flange.

Bolts and nuts for mounting to floor pipe are not furnished unless ordered separately.

See separate literature on Trumbull Floor Boxes, Extension Stems and Stem Guides.

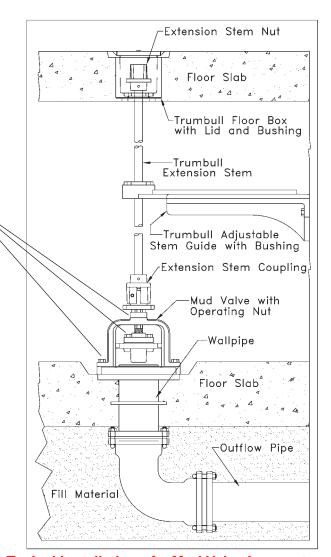




Rising Stem

Non-Rising Stem

Size	Non-Rising Stem	Weight
4"	367-1415	35#
6"	367-1416	55#
8"	367-1418	95#
10"	367-1428	152#
12"	367-1430	228#



Typical installation of a Mud Valve in a system.

 Rising Stem
 Weight

 367-1420
 35#

 367-1423
 50#

 367-1425
 85#

Mud Valves also available in Stainless Steel. Please Inquire.

See reverse side for drawing.

		Valve Size			
	4	6	8	10	12
A (open height), NRS	9-1/2	10-1/2	11-3/4	14-1/2	15-3/4
A (open height), RS	13-3/8	15-1/2	16-1/2	H	-
B (overall width at Yoke)	10	12-1/4	14-1/2	17	19-3/4
C (Stem Diameter)	1	1-1/8	1-1/4	1-3/8	1-1/2
D (Gate rise)	2-9/32	3-1/2	4-1/8	4-1/4	4-3/4
Flange O.D.	9	11	13-1/2	16	19
Bolt Circle	7.5	9.5	11.75	14.25	17.0
Bolt Hole Dia.	3/4	7/8	7/8	1	1
Turns to Open	5-1/2	8	9	12-1/2	16

Standard 125 pound drilling template. (8) C (Stem Dia.) C (Stem Dia.) 6 ΑA 1 Fully Open Fully Open B (Overall Width at Yoke) B (Overall Width at Yoke) Rising Stem Type Non-rising Stem Type

Notes:

Materials:

- 1 Body Seal ASTM B584 / UNS C83600 Red Brass
- 2 Stem ASTM B584 / UNS C86400 Manganese Bronze
- 3 Body Gray Cast Iron, Class 304 Gate Seal ASTM B584 / UNS C83600 Red Brass
- 5 Gate Gray Cast Iron, Class 30
- 6 Yoke Gray Cast Iron, Class 30
- 7 Threaded Guide ASTM B584 / UNS C86400 Manganese Bronze
- 8 Plain Guide Gray Cast Iron, Class 30
- 9 Operating Nut Gray Cast Iron, Class 30 Fasteners - Stainless Steel, Type 316

Finished with black rust preventive coating

			Trumbull Industries	
Drawn: Drawing Revision:		na Revision:	Trumbull Industries	Drawn to Scale
Diawii.	Brann	19 1 (0 1)01011.	P.O. Box 1556	Drawn to Scale
Date	Rev.	Date	1040 N. Meridian Rd.	MUD VALVES
6/28/94	N	10/06/06	Youngstown, Ohio 44501	Non-rising and Rising Stem

CAST STAINLESS STEEL MUD VALVES

Heavy-Duty Design, Type 316 Stainless Rising Stem and Non-Rising Stem Styles

Trumbull Mud Valves are designed primarily for use in settling tanks of water and wastewater treatment plants. They are for low pressure applications only; their intended use is to drain tanks for maintenance or cleaning.

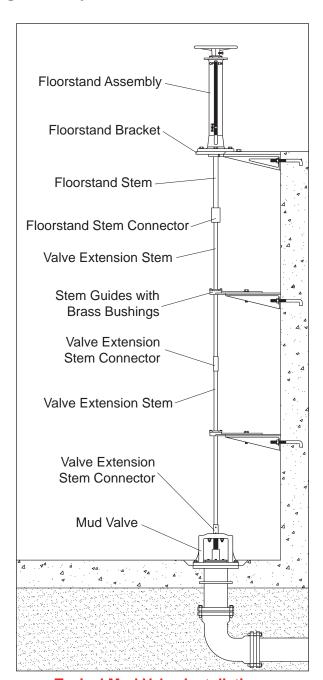
Due to the corrosive applications in which Mud Valves are used, the yoke, flange and gate are cast from type 316 stainless steel. Cast components eliminate corrosion problems frequently caused when stainless steel is welded. Heavy-duty design incorporates generous wall thicknesses and stem diameters for maximum strength and corrosion protection. Seat is SBR rubber for positive shutoff. Mechanically retained seat is field-replaceable. Fasteners are type 316 stainless.

Bolts and nuts for mounting to floor pipe are not furnished unless ordered separately.



CAST Stainless Mud Valve, Non-Rising Stem Also available in Rising Stem style, see page G-10b.

	Non-Ris	Non-Rising Stem		Rising Stem	
Size	Trumbull Item No.	Weight	Trumbull Item No.	Weight	
4"	367-1454	23.60 lbs.		23.00 lbs.	
6"	367-1455	31.95 lbs.		29.00 lbs.	
8"	367-1456	49.60 lbs.		46.00 lbs.	
10"	367-1457	90.00 lbs.		82.00 lbs.	
12"	367-1458	128.00 lbs.		120.00 lbs.	



Typical Mud Valve Installation.

See separate literature on Trumbull Floor Boxes, Extension Stems, Stem Guides and Floorstands.

See reverse side for drawings.

041307 G-10a

	Valve Size				
	4	6	8	10	12
Flange O.D.	9	11	13-1/2	16	19
B (overall width at Yoke)	10-1/4	12-5/8	15-1/8	17-3/8	19
Bolt Circle Diameter	7.50	9.50	11.75	14.25	17.00
Bolt Hole Dia.	3/4	7/8	7/8	1	1
Bolt Size & Pattern*	5/8 & 8	3/4 & 8	3/4 & 8	7/8 & 12	7/8 & 12
C (Stem Major Dia.)	1.22	1.22	1.46	1.46	1.46
Thread Type & Size**	T30 x 6	T30 x 6	T36 x 6	T36 x 6	T36 x 6
A (open height), NRS	9.59	11.34	13.33	15.34	17.66
A (closed height), NRS	9.59	11.34	13.33	15.34	17.66
A (open height), RS	12.45	15.95	19.97	23.99	28.69
A (closed height), RS	10.03	11.78	13.81	15.82	18.14
D (Valve opens), NRS	1-5/8	2-5/8	3-5/8	4-1/2	5-1/2
D (Valve opens), RS	2	3-3/4	5-3/4	7-3/4	10
Gate rise, NRS	2-1/16	3-1/16	4-1/16	4-31/32	6
Gate rise, RS	2-13/32	4-5/32	6-5/32	8-5/32	10-17/32
Turns to Open, NRS	8.7	13	17.2	21	25.4
Turns to Open, RS	10.2	17.6	26	34.6	44.7

٦	Part	Description	Mud Valve Type
\forall	1	Base Flange (Body)	Common to both types
4	<u> </u>		
╛	2	Yoke	Common to both types
	3	Gate	Rising Stem only
	4	Gate	Non-rising Stem only
	5	Seal	Common to both types
	6	Seal Retainer	Common to both types
	7	Stem	Rising Stem only
	8	Stem	Non-rising Stem only
	9	Guide, Threaded	Rising Stem only
	10	Guide, Plain	Rising Stem only
	11	Guide, Plain	Non-rising Stem only
	12	Stem Connector	Common to both types
	13	Connector Pin	Common to both types
	14	Fasteners, Guide	Common to both types
	15	Fasteners, Seal	Common to both types
:	16	Fasteners, Gate	Rising Stem only
	17	Fasteners, Yoke	Common to both types

*Standard 125 pound drilling template, with two holes covered by the Yoke.

7/24/07

Α

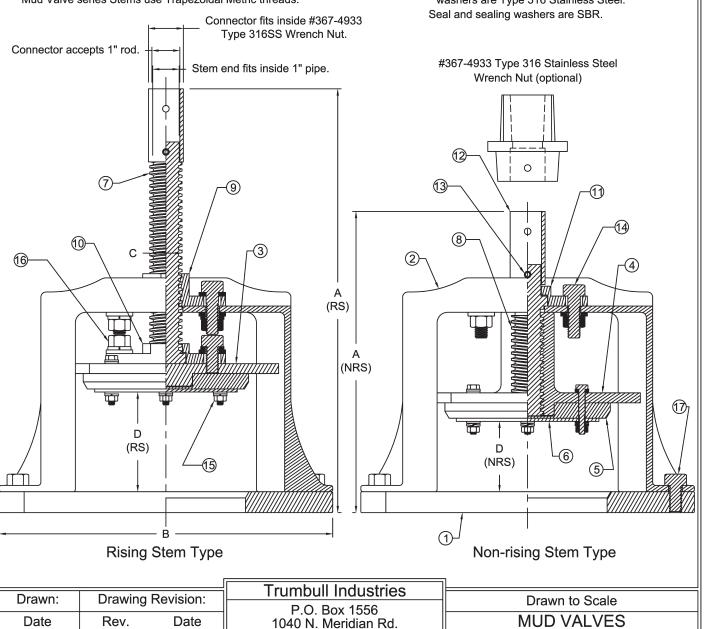
**Mud Valve series Stems use Trapezoidal Metric threads.

7/24/07

Note: All items, except for the Seal and the sealing washers are Type 316 Stainless Steel.

Seal and sealing washers are SBR.

Type 316 Stainless Steel



100206 G-10b

Youngstown, Ohio 44501

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HYDROSTATIC TANK PRESSURE RELIEF VALVES

Trumbull Tank Pressure Relief Valves are designed for use in tanks of treatment plants. These valves are for low seating or unseating pressure applications only. They will start to open at less than one foot of head.

Floor Type pressure relief valves are cast in the bottom of tanks in treatment plants to keep empty tanks from floating from an excess of groundwater beneath them.

When this condition occurs, the hydrostatic pressure will open the cover of the valve allowing water to enter, thereby equalizing pressure inside and outside the tank and preventing it from floating.

Lugs in the body prevent the cover or strainer from becoming separated from the body of the valve due to flow. Both can be removed when necessary, however, by turning to the right or left.

Floor type valves are normally stocked in 4" and 6" sizes, in both 16" and 24" lengths. They can be cut to exact length required. Specify the overall length, including the lid.

Wall Type pressure relief valves are similar to the floor type but are installed in tank side walls; the valve has a flanged base for use with a wall pipe. The flange drilling is according to ANSI 125# STD. on both sizes. The wall pipe has a wall collar and tapped bolt holes to allow the flange on the wall pipe to be set flush with the wall. The wall type valve uses a stainless steel hinge pin and has a strainer retained in the body of the valve.

In order for the wall type valve to operate properly, it must be installed so that the bolt holes straddle the centerline. Care should be used to cast the wall pipe accordingly.

Both valve types use two Buna-N seating surfaces so that, if particles of grit lodge on them, the head of liquid in the tank will force the valve closed, preventing seepage of liquid into the ground. Special square design of rubber seats surrounds valve body and cover on four surfaces to prevent separation or leakage.

Wallpipes are 18" long, overall, with a collar 6" from the face of the flange; they can be furnished cut-to-length to meet your requirements. The flange is tapped for studs.

No flange accessories will be furnished unless ordered separately.

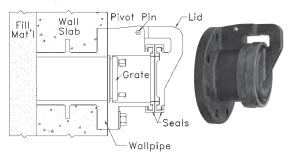
Description 6" Weight Weight Floor Valve, 9" through 16" long 367-1010 36.5# 367-1021 51# Floor Valve, 9" through 24" long 367-1020 46# 367-1022 64# Wall Valve 367-1006 367-1005 26# 40# Wall Pipe 367-1000 32# 367-1002 67#

See reverse side for drawing.

Floor Type Tank Pressure Relief Valve



Wall Type Tank Pressure Relief Valve



Typical Installation

Wall P.R.V. installed on Wallpipe



Wallpipe and wall pressure relief valve are sold separately.

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Trumbull Tank Pressure Relief Valves

Sample Specifications

<u>Purpose</u> of Tank Pressure Relief Valves is to prevent sub-grade concrete tanks from becoming buoyant and floating from hydrostatic pressure. The cover will open, allowing water to enter, to equalize pressure inside and outside of the tank. The cover will open when the external pressure exceeds internal pressure by just several inches of head.

Available in two types - floor and wall. Wall type valves are best when bottom scrapers or sweepers are used in tanks.

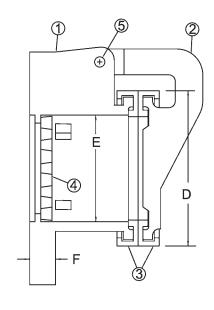
<u>Wall type</u> - shall have strainer retained inside of the wall valve, rather than in wall pipe, for easier access for maintenance purposes. Strainer can be removed by rotating in either direction, to align the valve's internal lugs with openings in the strainer. Wall pipe shall be of a gray iron casting, with bolt holes tapped for studs, to allow for flush mounting inside tank wall. Wall collar will be integrally cast. Flange on both wall pipe and wall valve shall comply with Ansi in terms of outside diameter and bolt circle, as well as thickness. Thickness for 4" and 6" flanges will be 15/16" and 1" respectively. Hinge pin connecting lid and cover shall be made of stainless steel. The use of PVC pipe for extending the length of wall pipe is NOT acceptable.

<u>Floor type</u> - Shall be cast iron with integrally cast collar. The cover can be removed by rotating in either direction, to release the locking lugs inside the valve. Strainer can be removed by rotating in either direction, by aligning the valves internal lugs with openings in the strainer. The use of PVC pipe for extending the length of floor valves is NOT acceptable.

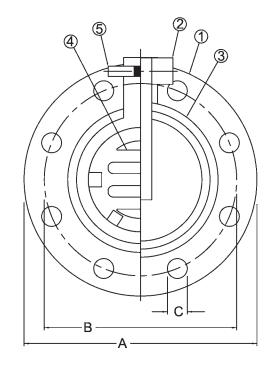
<u>Seals</u> shall be of Buna N Rubber on both body and lid. Seals shall be of a square design that surrounds body and cover on four sides to prevent separation. In addition seals shall be bonded to body and lid with adhesive. Unlike valves with bronze or lead seats, the seals of Trumbull tank pressure relief are field replaceable.

<u>Diameter</u> - Both types are available in both 4" & 6" sizes.

<u>Installation</u> - A clean pocket of clean crushed stone approximately 1" to 1 1/2" diameter should be placed at the external port of the wall pipe or floor valve. Flange accessories are not provided with wall valve and wall pipe.



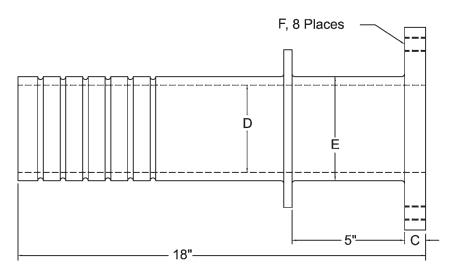
Item	Part	Material					
1	Body	Cl 30 Grey Iron					
2	Lid	Cl 30 Grey Iron					
3	Seal	BUNA - N					
4	Grate	Cl 30 Grey Iron					
5	Pin	Stainless Steel					

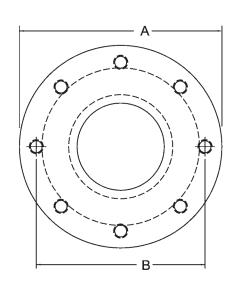


Wall Type Pressure Relief Valve

125# Template for Drilling

Size	Α	В	С	D E		F
4"	9	7.50	25/32	6	4-1/8	1
6"	11	9.50	7/8	8	6	1-1/16





Wallpipe

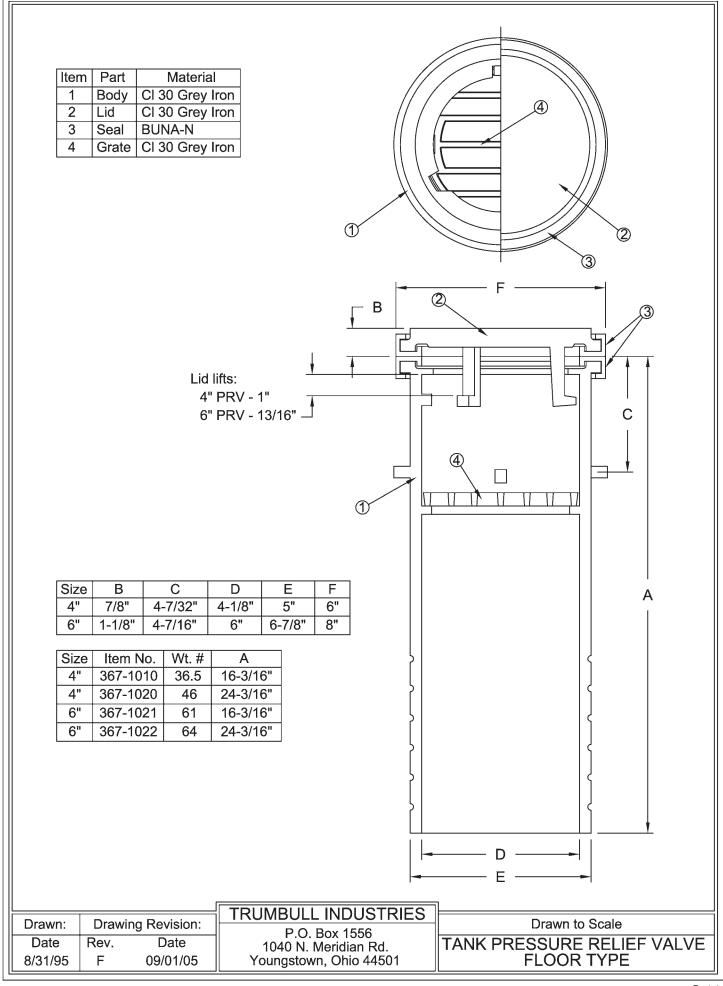
125# Template for Drilling Material: Cl 30 Grey Iron

Size	Α	В	С	D	Е	F
4"	9	7-1/2	15/16	4	4-5/8	5/8-11 UNC
6"	11	9-1/2	1	5.8	6.9	3/4-10 UNC

Drawn:	Drawi	ng Revision:
Date	Rev.	Date
8/31/95	E	09/01/05

TRUMBULL INDUSTRIES

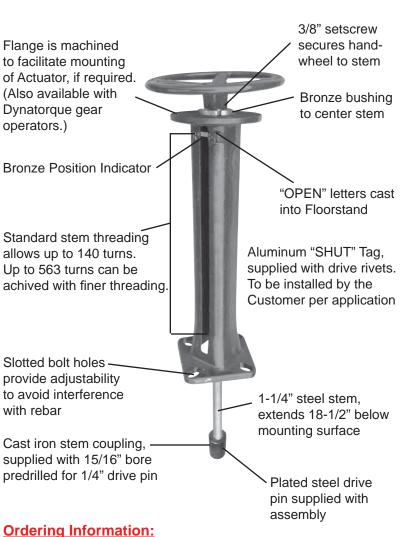
P.O. Box 1556 1040 N. Meridian Rd. Youngstown, Ohio 44501 Drawn to Scale
TANK PRESSURE RELIEF VALVE
WALL TYPE & WALLPIPE

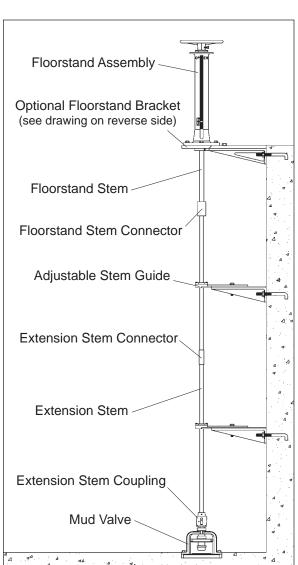




INDICATING FLOORSTAND

Trumbull Indicating Floorstands are designed for installation in treatment plants and pump stations to allow operation of valves at a lower elevation. Floorstand body is ductile iron for increased torque capacity. Our standard Floorstand is shown below; special mountings and stems are available. See reverse side for drawing of Floorstand and optional Floorstand Bracket.



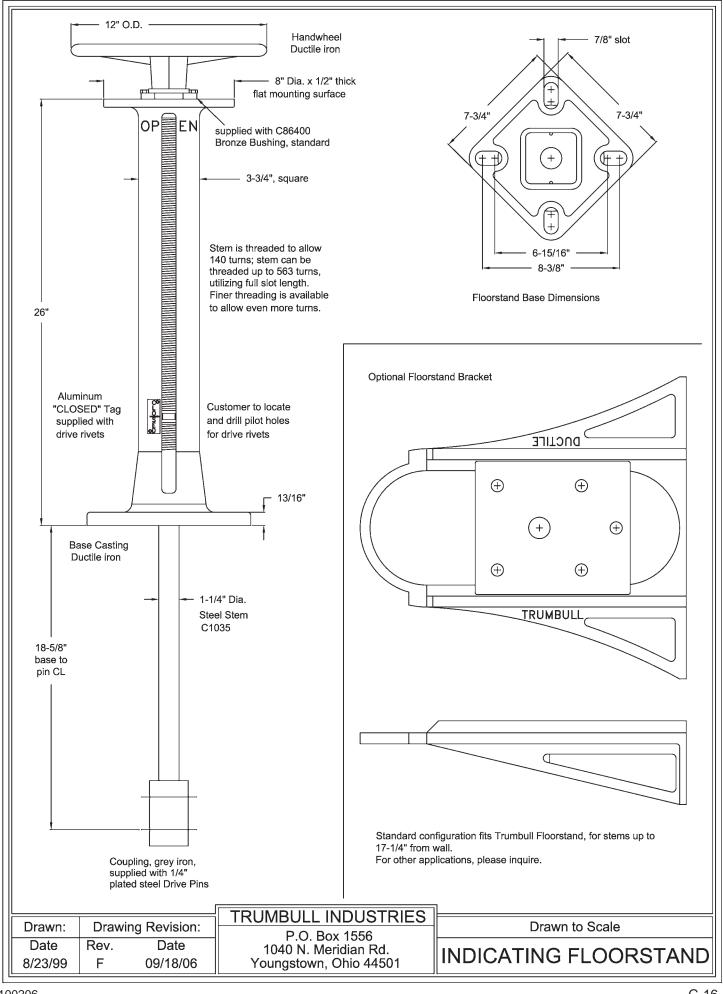


Typical Floorstand installation.

- 1. Quantity.
- 2. Trumbull item number (#367-2420).
- 3. O.D. of connecting stem being used, or desired connector hole size (15/16" bore dia. supplied if not specified.)

See separate literature on Trumbull Floor Boxes, Extension Stems, Mud Valves and Stem Guides.

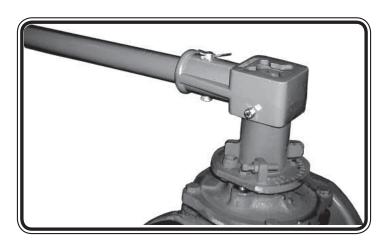
See reverse side for drawing.

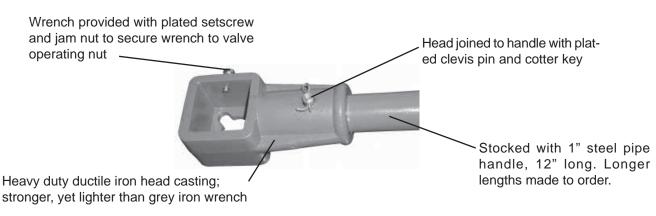




HAND LEVERS FOR 1/4 TURN, ABOVE GROUND VALVES







Trumbull Item No. 367-9986

Overall Length 14-3/4"

Length of 1" Pipe 12"

Weight 5 lb. 6 oz.

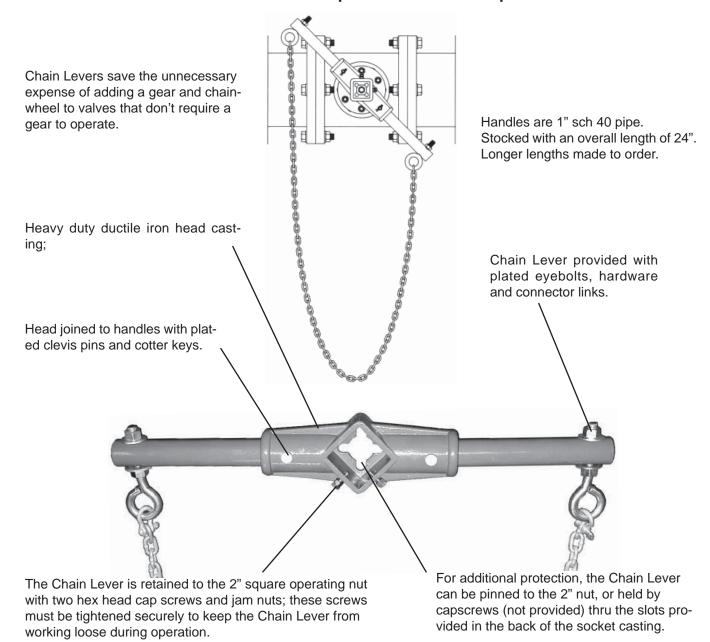


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CHAIN LEVERS FOR 1/4 TURN, ELEVATED VALVES

Chain Levers are used for manual operation of elevated quarter-turn valves.



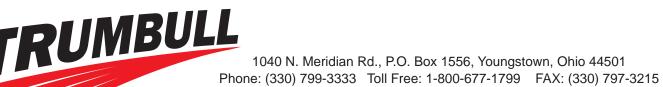
Trumbull Item No.

Description

Weight

8#

367-9988 172-1219 Chain Lever, with handles and hardware, 24" overall length Machine chain, straight link, size 2/0 (order specific quantity of chain required)



ADJUSTABLE CHAINWHEELS

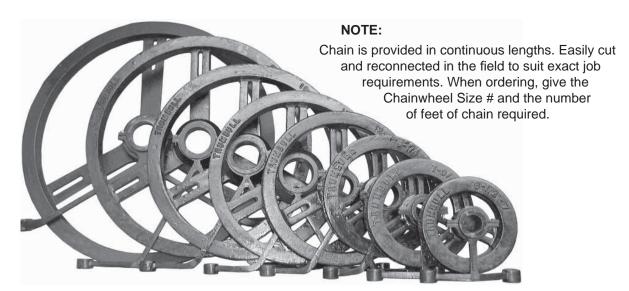
Ductile Iron To Operate Overhead Valves From The Floor.

Ductile Iron Chainwheels allow operation of valves in high, hard-to reach locations by means of a slight pull on the sprocket chain. Universal design allows Chainwheel to be clamped to handwheel, or pinned directly to valve stem.

All Chainwheels are furnished with plated steel attachment hardware for clamping to handwheel. When Chainwheel is to be pinned to valve stem, a ductile iron bushing will be provided which can be machined to suit valve stem dimensions. Bushing and Chainwheel will be pre-drilled with pin hole, and supplied with a stainless steel pin for customer mounting to valve stem. Drilling of valve stem by customer. See reverse side for illustration of bushing.

SPECIFICATIONS:

SPECIFICATION	ONS:			O.D. Range			Length
Trumbull Item No. for Chainwheel	Size No.	Diameter of Chainwheel	Boxed Weight	of Handwheels Chainwheel Will Fit	Trumbull Item No. for Galv. Chain	Chain Weight per 100'	of Chain Required (2x Drop)
367-1873	TR-0.0	4"	3.0#	2" to 4"	172-1650	10.0#	Plus 1 ft.
367-1874	TR-1.0	6"	5.0#	4-1/4" to 5-3/4"	367-1894	17.5#	Plus 1 ft.
367-1875	TR-1.5	7-1/2"	9.2#	6" to 7-1/2"	367-1894	17.5#	Plus 1 ft.
367-1876	TR-2.0	9"	12.9#	7-3/4" to 9"	367-1894	17.5#	Plus 1-1/2 ft.
367-1877	TR-2.5	12-1/2"	15.7#	9-1/4" to 12-1/2"	367-1895	30.0#	Plus 1-1/2 ft.
367-1878	TR-3.0	15-1/2"	22.0#	12-3/4" to 15-1/2"	367-1895	30.0#	Plus 2 ft.
367-1879	TR-3.5	19"	31.5#	15-3/4" to 19"	367-1895	30.0#	Plus 2-1/2 ft.
367-1880	TR-4.0	22"	41.7#	19-1/4" to 22"	367-1896	35.0#	Plus 3 ft.
367-1881	TR-4.5	26"	48.6#	22-1/2" to 26"	367-1896	35.0#	Plus 3-1/2 ft.
367-1882	TR-5.0	30"	61.0#	22-1/2" to 36"	367-1896	35.0#	Plus 4 ft.



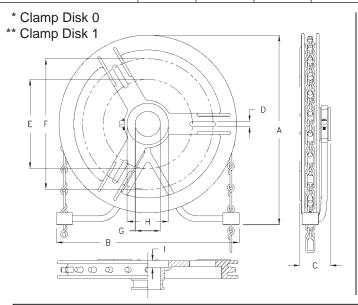
NOTE: Also available in Type 316 Stainless Steel.

Adjustable Chainwheel with Chain Guide operates overhead valves from the floor.

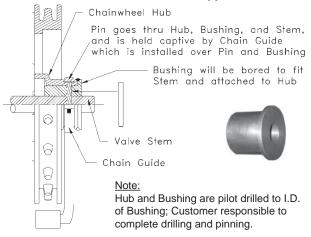


DIMENSIONS:

Chainwheel Size	TR-0.0	TR-1.0	TR-1.5	TR-2.0	TR-2.5	TR-3.0	TR-3.5	TR-4.0	TR-4.5	TR-5.0	
Item#	367-1873	367-1874	367-1875	367-1876	367-1877	367-1878	367-1879	367-1880	367-1881	367-1882	
Chainwheel Assembly Fits Handwheel O.D. Range	2" to 4"	4-1/4" to 5-3/4"	6" to 7-1/2"	7-3/4" to 9"	9-1/4" to 12-1/2"	12-3/4" to 15-1/2"	15-3/4" to 19"	19-1/4" to 22"	22-1/2" to 26"	22-1/2" to 36"	
Chain Size	Size #2		Size 1/0			Size 4/0			Size 5/0		
Chain Item#	172-1650		367-1894			367-1895			367-1896		
Attachment Set Size	CD*	CD**	,	A	В		(С			
Boxed Weight	1.8 lbs.	4.2 lbs.	9.2 lbs.	12.9 lbs.	15.7 lbs.	22.0 lbs.	31.5 lbs.	41.7 lbs.	48.6 lbs.	61.0 lbs.	
Bushing Size	no	ne	e Small			Medium			Large		
Bushing Bore, Min.	n.	a. 5/8" 15/16" 15/16"				16"					
Bushing Bore, Max.	n.	a.	1-1	1/4"	1-7	1-7/8"			2-3/4"		
A - Overall Height w/Guide	5"	6-7/8"	8-3/4"	10-3/4"	12-5/8"	16"	19"	23"	27"	30"	
B - Overall Width	4-1/4"	5-3/4"	8-9/32"	9-17/32"	11-5/16"	15-15/32"	18-7/16"	22-19/32"	26-1/2"	30"	
C - Overall Depth	1-7/8"	2-3/8"	2-1/2"	2-1/2"	2-9/16"	2-9/16"	2-9/16"	2-5/8"	2-5/8"	3-5/16"	
D - Slot Width in Arms	3/16"	3/8"	5/16"	5/16"	5/16"	7/16"	7/16"	7/16"	7/16"	9/16"	
E - Inner Bolt Circle Diam.	1-1/2"	2-3/8"	3-1/8"	3-3/8"	3-3/4"	7-1/2"	9-13/16"	12-9/16"	16-7/8"	16-1/16"	
F - Outer Bolt Circle Diam.	2"	3-7/16"	4-7/8"	5-15/16"	7-11/16"	11"	14-13/16"	17-9/16"	22-3/8"	25-11/16"	
G - Hub Bore Diam.	7/16"	13/16"	1-1/2"	1-1/2"	2-1/8"	2-1/8"	3"	3"	3"	3"	
H - Hub Recess Diam.	3/4"	1-7/16"		2-3/4"	3"	3-1/2"	5"	5"	5"	5"	
I - Hub Recess Depth	3/4"	1-3/8"		3/8"	9/16"	9/16"	13/16"	7/8"	7/8"	1-1/2"	



For Direct Mount Applications



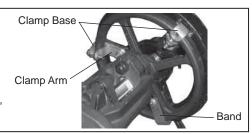
Machined Ductile Iron Bushing, shown with standard "min." round bore. Other bore sizes, shapes, tapers or keyways can be provided.



Attachment Sets

Chainwheel Sizes TR-1.5 thru TR-2.5 use two sets of Clamp Bases & Arms, plus one Band.

Chainwheel Sizes TR-3.0 thru TR-5.0 use three sets of Clamp Bases & Arms, and do not use a Band.





UNIVERSAL CHAINWHEELS

Type 316 Stainless Steel

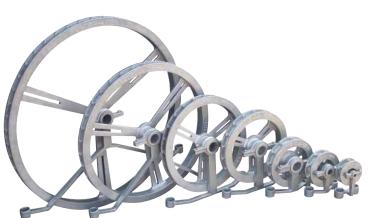
Pocket Type for TRUMBULL 316L welded machine chain

Trumbull Stainless Steel Chainwheels allow operation of overhead valves by means of a slight pull on the chain. Universal design allows Chainwheel to be clamped to handwheel, or pinned directly to valve stem.

Designed for corrosive environments, Trumbull Stainless Steel Chainwheels are Type 316 investment steel castings. Ideal in chemical processing, outdoor installations, or salt water environments.

All Chainwheels are furnished with attachment hardware for clamping to handwheel. See top of page G-22 for illustrations of clamping methods.

Pocket style chainwheels use smooth, welded link (proof coil) chain. See pages G-19 and G-20 for separate literature on Trumbull's ductile iron sprocket chainwheels using single loop chain, and bottom of page G-22 for comparison of both types.



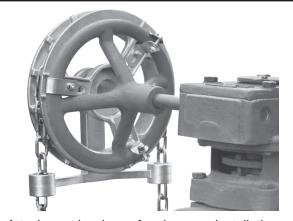
SPECIFICATIONS:

Trumbull Item No.	Size No.	Diameter of Chainwheel	9		Weight lbs.	Length of Chain Required (2x Drop)	
367-1825	TRS-4D*	4-1/8"	1-1/2" I.D.	to	4-1/2" O.D.	4.6#	Plus 1 ft.
367-1830	TRS-6D*	5-7/8"	2-1/8" I.D.	to	6-1/4" O.D.	8.4#	Plus 1 ft.
367-1833	TRS-8B	8"	7-1/2" O.D.	to	10-1/2" O.D.	13.9#	Plus 1-1/2 ft.
367-1845	TRS-12B	11-5/8"	8-1/2" O.D.	to	13-1/2" O.D.	19.1#	Plus 1-1/2 ft.
367-1850	TRS-15B	15-3/16"	9-1/2" O.D.	to	17-1/2" O.D.	23.9#	Plus 2 ft.
367-1860	TRS-22B	22-1/4"	13" O.D.	to	25" O.D.	32.6#	Plus 3 ft.
367-1870	TRS-29B	29-1/4"	17-3/4" O.D.	to	32" O.D.	44.3#	Plus 4 ft.
367-1815		316L Stainless Ste				ted 📻	
367-1816	TRS Series	Connecting Link, S	tainless Steel 🧳	-	h		2 8

The ranges above are for Size "B" attachment stampings, furnished standard with TRS-8 thru TRS-29 chainwheels. Chainwheels can fit handwheel diameters outside these ranges by using optional hardware (see Table 1 on pg.G-22). Consult your sales rep for either shorter or longer attachment set stampings.

^{*} D suffix denotes "Disc", used in lieu of standard clamping hardware; see top right of page G-22 for illustration.

^{**}Optional hardware attachment sets are available to fit different ranges of handwheels (see Table 1 on page G-22).

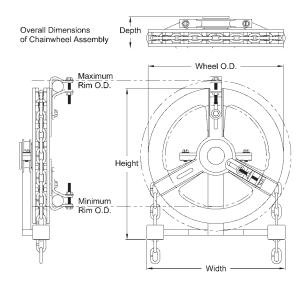


Attachment hardware for clamp-on installation. Furnished with TRS-8 thru TRS-29 chainwheels.



Clamping disc hardware for clamp-on installation. Furnished with TRS-4 and TRS-6 chainwheels. (Optional on the TRS-8.)

Optional bushing for direct mount installation is available. Consult Engineering for bushing and pin options.



Note: Chainwheels furnished standard with "B" Attachment Sets; see page G-21 for range of fit. For optional ranges, using "A" or "C" sets, see chart on right...

Overall Assembly Dimensions

Size	Wheel O.D.	Height	Width	Depth
TRS-4	4-1/8"	6-1/4"	4-5/8"	2-3/8"
TRS-6	5-7/8"	7-1/16"	6-3/16"	2-5/8"
TRS-8	8"	9"	8-7/16"	2-3/4"
TRS-12	11-5/8"	13-1/8"	12"	2-3/4"
TRS-15	15-3/16"	16-1/4"	15-5/8"	2-3/4"
TRS-22	22-1/4"	22-1/4"	22-5/8"	2-3/4"
TRS-29	29-1/4"	29-1/4"	29-1/2"	2-3/4"

TABLE 1: Handwheel O.D. ranges with optional attachment sets.

	"A" Attach	ment Set	"C" Attachment Set			
Size	Min. O.D.	Max.O.D.	Min O.D.	Max O.D.		
TRS-4	n.a.	n.a.	n.a.	n.a.		
TRS-6	n.a.	n.a.	n.a.	n.a.		
TRS-8	6"	8"	12-1/4"	15-1/2"		
TRS-12	7"	11"	13-1/4"	18-1/2"		
TRS-15	8"	15"	14-1/8"	23"		
TRS-22	11"	22-1/2"	17-1/2"	30"		
TRS-29	16"	29"	22-1/2"	37"		

Handwheels with hubs projecting above the handwheel rim may cause interference with the attachment set stampings in some instances. Please consult Trumbull or send us a drawing of your handwheel to avoid attachment problems.

Illustration shows the difference between sprocket and pocket type wheels.

Pocket Type Wheel:

Straight link machine chain fits in pockets in the wheel.



Smooth chain links provide more comfortable operation.



Sprocket Type Wheel:

Single loop chain engages teeth in the wheel.





1040 N. Meridian Rd., P.O. Box 1556, Youngstown, Ohio 44501 Phone: (330) 799-3333 Toll Free: 1-800-677-1799 FAX: (330) 797-3215

Bolts & Nuts: 316 Stainless Steel.

www.trumbull-mfg.com -

Link-Seal®

Don't be fooled by "look-alikes" Specify and use original

Link-Seal® modular seals!



Trumbull Industries

Approved Link-Seal® modular seal master distributor.

The premier method for permanently sealing pipes of any size passing through walls, floors, and ceilings.

How Link-Seal® modular seals work...



1. Link-Seal® modular seals are shipped as a belt of interconnecting rubber links.



2. Wrap the belt around the pipe and connect the first and last links together.



3. Slide the assembly into the space between the pipe and wall opening.



Model "C" Link-Seal® Modular

water, EPDM Rubber,

Model "S-316" Link-Seal® Modular Seal. For chemical processing and waste water treatment, EPDM Rubber.

Seal. For use in water and waste

Bolts & Nuts: Carbon steel, zinc dichromated with a proprietary corrosion inhibiting coating.

4. When the bolts are tightened, Link-Seal modular seals expand to create a gas and water tight seal.

Use Century-Line® Sleeves and Steel Sleeves for pipe penetrations in poured concrete walls, floors and ceilings.



Century-Line® Sleeve

- All non-metallic (HDPE).
- Lightweight, 1/8 weight of steel.
- Easy for one man to install.



Steel Wall Sleeve

An Industry Leading 16 Sizes!

Link-Seal® Model #	Model C Trumbull #	Model S-316 Trumbull #
LS-200	364-5602	364-5702
LS-275	364-5604	364-5704
LS-300	364-5606	364-5706
LS-315	364-5607	364-5707
LS-325	364-5608	364-5708
LS-340	364-5609	364-5709
LS-360	364-5613	364-5713
LS-400	364-5610	364-5710
LS-410	364-5611	364-5711
LS-425	364-5612	364-5712
LS-475	364-5614	364-5714
LS-500	364-5616	364-5716
LS-525	364-5618	364-5718
LS-575	364-5620	364-5720
LS-600	spec/order	spec/order
LS-650	spec/order	spec/order

Link-Seal® Modular Seal Sizing Charts for Standard Pipe

How to Order: Using the Provided Sizing Charts

Model LS-650 pdf file available. Visit www.linkseal.com

- 1. Locate the type and size pipe being used.
- 2. Verify that your pipe O.D. matches the actual outside diameter shown on the chart.
- 3. Determine type of wall opening (Model CS, WS or Cast/Core bit drilled).
- 4. Determine Link-Seal modular seal model to be used (See information on page 2).
- 5. To order Link-Seal modular seals: under the appropriate wall opening column, Link-Seal modular seal size (from SIZE column), Link-Seal modular seal model (C, S-316, L, LS-316, O, OS-316, T or FD/FS from page 2) and indicate number of links required per seal (from LINKS PER SEAL column),. [Example: LS-575-C-10]
- 6. To order corresponding sleeves indicate model number (from MODEL NUMBER column), length of sleeve and quantity required. [Example: CS-10-12"-1]

Note: Contact PSI (1-800-423-2410) or your local distributor if your pipe sizing solution is not listed in the provided charts.

Ductile Iron Pipe (AWWA-C900, AWWA-C905, PVC Water Pipe)

PIPE	ACTUAL	CS MODEL NON-METALLIC SLEEVE			WS MODE	EVE	CAST O	CAST OR CORE BIT DRILLED HOLE		
SIZE (Nom.)	O.D. (Inches)	MODEL NUMBER	LINK-SEAL® SIZE	LINKS PER SEAL	MODEL NUMBER	LINK-SEAL® SIZE	LINKS PER SEAL	HOLE I.D.	LINK-SEAL® SIZE	LINKS PER SEAL
2	2.500	CS-4-*	LS-300-***	6	WS-3-1/2-22-S-*	LS-200-***	8	4.000	LS-300-***	6
2-1/4	2.750	CS-4-*	LS-275-***	10	WS-4-23-S-*	LS-200-***	9	4.000	LS-200-***	9
3	3.960	CS-6-*	LS-340-***	10	ws-6-18-S-*	LS-340-***	10	6.000	LS-315-***	10
4	4.800	CS-8-*	LS-475-***	8	ws-8-18-S-*	LS-475-***	8	8.000	LS-410-***	7
6	6.900	CS-10-*	LS-475-***	10	WS-10-36-S-*	LS-410-***	10	10.000	LS-410-***	10
8	9.050	CS-12-*	LS-400-***	9	WS-12-37-S-*	LS-400-***	9	12.000	LS-400-***	9
10	11.100	CS-14-*	LS-410-***	15	WS-14-37-S-*	LS-340-***	24	14.000	LS-410-***	15
12	13.200	CS-18-*	LS-575-***	15	WS-16-37-S-*	LS-340-***	28	16.000	LS-400-***	12
14	15.300	CS-20-*	LS-575-***	17	WS-20-37-S-*	LS-575-***	17	18.000	LS-360-***	24
16	17.400	CS-22-*	LS-360-***	28	WS-22-37-S-*	LS-575-***	19	20.000	LS-360-***	27
18	19.500	CS-24-*	LS-410-***	25	WS-24-37-S-*	LS-575-***	21	22.000	LS-360-***	30
20	21.600	CS-25-*	LS-400-***	20	WS-26-37-S-*	LS-575-***	23	26.000	LS-525-***	19
24	25.800	CC-30-**	LS-400-***	23	WS-30-37-S-*	LS-400-***	23	28.000	LS-425-***	23
30	32.000	CC-38-**	LS-500-***	28	WS-36-37-S-*	LS-400-***	29	36.000	LS-575-***	34
36	38.300	CC-44-**	LS-500-***	33	WS-44-1/2-37-S-	* LS-500-***	33	43.000	LS-500-***	33
42	44.500	CC-50-**	LS-500-***	38	WS-50-37-S-*	LS-500-***	38	49.000	LS-525-***	38
48	50.800	CC-56-**	LS-500-***	43	WS-57-37-S-*	LS-500-***	43	56.000	LS-500-***	43

^{* =} Specify sleeve length in inches ** = See Cell-Cast® *** = Specify LS Model C, S-316, L...etc when ordering (Example LS-475-C-17)

Note: ws rolled sleeves (6" & 8") = .1875" wall thickness; (10") = .25" wall thickness.

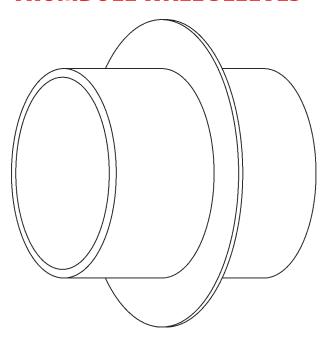
Steel and Plastic Pipe with Same Outside Diameter

PIPE	ACTUAL	CS MODEL I	NON-METALLIC SLEEVE WS MOD			L STEEL SLE	EVE	CAST OR CORE BIT DRILLED HOLE			
SIZE (Nom.)	O.D. (Inches)	MODEL NUMBER	LINK-SEAL® SIZE	LINKS PER SEAL	MODEL NUMBER	LINK-SEAL® SIZE	LINKS PER SEAL	HOLE I.D.	LINK-SEAL® SIZE	LINKS PER SEAL	
1/2	0.840	CS-3-*	LS-315-***	4	WS-2-15-S-*	LS-275-***	5	2.000	LS-200-***	4	
3/4	1.050	CS-3-*	LS-315-***	4	WS-2-1/2-20-S-*	LS-275-***	6	3.000	LS-315-***	4	
1	1.315	CS-3-*	LS-300-***	4	WS-2-1/2-20-S-*	LS-200-***	5	3.000	LS-300-***	4	
1-1/4	1.660	CS-3-*	LS-275-***	7	WS-3-21-S-*	LS-275-***	8	3.000	LS-275-***	8	
1-1/2	1.900	CS-3-1/2-*	LS-300-***	5	WS-3-21-S-*	LS-200-***	7	4.000	LS-315-***	6	
2	2.375	CS-4-*	LS-300-***	6	WS-3-1/2-22-S-*	LS-200-***	8	4.000	LS-300-***	6	
2-1/2	2.875	CS-4-*	LS-200-***	9	WS-4-23-S-*	LS-200-***	9	4.000	LS-200-***	9	
3	3.500	CS-5-*	LS-315-***	9	WS-6-28-S-*	LS-360-***	7	5.000	LS-300-***	8	
3-1/2	4.000	CS-6-*	LS-340-***	10	ws-6-18-S-*	LS-340-***	10	6.000	LS-315-***	10	
4	4.500	CS-6-*	LS-300-***	10	ws-6-18-S-*	LS-315-***	11	6.000	LS-300-***	10	
5	5.563	CS-8-*	LS-360-***	10	ws-8-18-S-*	LS-360-***	10	8.000	LS-340-***	13	
6	6.625	CS-10-*	LS-475-***	10	ws-8-18-S-*	LS-315-***	15	10.000	LS-475-***	10	
8	8.625	CS-12-*	LS-475-***	12	ws-10-25-S-*	LS-315-***	20	12.000	LS-475-***	12	
10	10.750	CS-14-*	LS-410-***	15	WS-14-37-S-*	LS-360-***	17	14.000	LS-475-***	14	
12	12.750	CS-16-*	LS-475-***	17	WS-16-37-S-*	LS-360-***	20	16.000	LS-475-***	17	
14	14.000	CS-16-*	LS-340-***	30	WS-18-37-S-*	LS-475-***	18	18.000	LS-575-***	16	
16	16.000	CS-20-*	LS-410-***	21	WS-20-37-S-*	LS-475-***	21	20.000	LS-575-***	18	
18	18.000	CS-22-*	LS-340-***	38	WS-22-37-S-*	LS-475-***	23	22.000	LS-575-***	20	
20	20.000	CS-25-*	LS-500-***	18	WS-24-37-S-*	LS-475-***	25	24.000	LS-575-***	22	
22	22.000	CS-25-*	LS-360-***	34	WS-26-37-S-*	LS-475-***	28	26.000	LS-575-***	24	
24	24.000	CC-30-**	LS-500-***	21	WS-28-37-S-*	LS-475-***	30	28.000	LS-575-***	26	
26	26.000	CC-30-**	LS-400-***	23	WS-30-37-S-*	LS-400-***	23	30.000	LS-575-***	28	
28	28.000	CC-32-**	LS-400-***	25	WS-32-37-S-*	LS-400-***	25	32.000	LS-575-***	30	
30	30.000	CC-36-**	LS-500-***	26	WS-34-37-S-*	LS-400-***	27	34.000	LS-575-***	32	
32	32.000	CC-38-**	LS-500-***	28	WS-36-37-S-*	LS-400-***	29	36.000	LS-575-***	34	
34	34.000	CC-38-**	LS-400-***	30	WS-40-37-S-*	LS-500-***	29	38.000	LS-575-***	36	
36	36.000	CC-42-**	LS-500-***	31	WS-42-37-S-*	LS-500-***	31	40.000	LS-575-***	38	
42	42.000	CC-48-**	LS-500-***	36	WS-48-37-S-*	LS-500-***	36	46.000	LS-575-***	44	
48	48.000	CC-54-**	LS-500-***	40	WS-54-37-S-*	LS-500-***	41	52.000	LS-575-***	50	

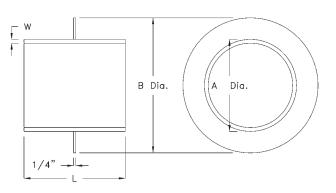
^{* =} Specify sleeve length in inches ** = See Cell-Cast® *** = Specify LS Model C, S-316, L...etc when ordering (Example LS-475-C-17)

Technically there is no limit to the pipe size that can be sealed using Link-Seal® modular seals. Please contact factory for sizes not listed and for CS model plastic sleeves for walls less than 8" thick. **Note:** ws rolled sleeves (6" & 8") = .1875" wall thickness; (10") = .25" wall thickness.

TRUMBULL WALL SLEEVES



Part No.	<u>"A" Dia.</u>	<u>"B" Dia.</u>	<u>"W" Th.</u>
TWS-0250-L	2.875	6.875	0.203
TWS-0300-L	3.500	7.500	0.216
TWS-0400-L	4.500	8.500	0.237
TWS-0600-L	6.625	10.625	0.280
TWS-0800-L	8.625	12.625	0.322
TWS-1000-L	10.75	14.750	0.365
TWS-1200-L	12.75	16.750	0.375
TWS-1400-L	14.00	18.00	0.375
TWS-1600-L	16.00	20.00	0.375
TWS-1800-L	18.00	22.00	0.375
TWS-2000-L	20.00	24.00	0.375
TWS-2200-L	22.00	26.00	0.375
TWS-2400-L	24.00	28.00	0.375
TWS-3000-L	30.00	34.00	0.375
TWS-3600-L	36.00	40.00	0.375



All Trumbull Wall Sleeves consist of a 1/4" thick steel flange continuously welded, both sides, to a heavy steel cylinder. Wall Sleeves are supplied with a black enamel rust preventive coating on all surfaces; special coatings, including epoxy are available upon request.



BRASS HYDRANT ADAPTER

Adapts 2-1/2" National Standard Threads (N.S.T.) to Male Iron Pipe Threads.

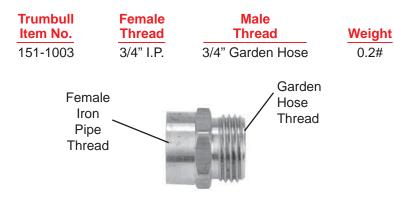
Trumbull	Female	Male *	
Item No.	Thread	Thread	Weight
377-9008	2-1/2" N.S.T.	2" I. P.	1.40 lbs.
377-9004	2-1/2" N.S.T.	1-1/2" I. P.	1.50 lbs.
377-9000	2-1/2" N.S.T.	3/4" I. P.	1.60 lbs.

^{*} Above three adapters are furnished with Male Iron Pipe threads only



Heavy duty brass construction, comes complete with gasket. Available from stock with 2-1/2" N.S.T. hose threads. Special threads are available upon request.

To connect garden hose to Item #377-9000 use the Female Iron Pipe x Garden Hose Adapter.



Solid brass construction





FIRE HYDRANT NOZZLE CAPS





2-1/2" Hose Nozzle Cap

4-1/2" Steamer Nozzle Cap

Hose and Steamer Nozzle Caps are stocked with National Standard Threads (NST), and a 1-1/2" pentagon nut, painted yellow. For caps with special threads and operating nuts, allow approximately two weeks.

Trumbull Item No.	Type of Cap	Threads*	Nut*
392-0917	2-1/2" Hose Nozzle with gasket	NST	1-1/2" Pentagon
392-0914	4-1/2" Steamer Nozzle with gasket	NST	1-1/2" Pentagon
392-0923 392-0920	Extra 2-1/2" Cap gaskets (3-1/4" O.D Extra 4-1/2" Cap gaskets (5-3/4" O.D		
392-0860	Chain, swivel and "S"-hook includes 1	10" of chain	

For other sizes of steamer nozzle caps, such as 4" or 4-1/4", please inquire.

^{*} For special threads, provide thread drawing, or sample cap. For nut sizes other than 1-1/2" pentagon, provide size and shape, or sample cap.



For Popular Make Hydrants



All Trumbull Safety Repair Kits come complete with all necessary components such as rod coupling and pins, breakable groundline flanges or coupling, bolts, nuts, gaskets and/or o-rings.

Trumbull Item No.	Repair Kit for Hydrant	Weight
378-0010	Repair Kit for 4-1/2 - 5-1/4 M&H* 929	14.0 #
378-0015	Repair Kit for M&H* 129	14.0 #
378-0023	Repair Kit for 5-1/4 U.S. Pipe* Met 250	12.5 #
378-0030	Repair Kit for 4-1/4 Clow* Eddy	13.0 #
378-0034	Repair Kit for 5-1/4 Clow* Eddy	15.0 #
378-0032	Repair Kit for 5-1/4 Clow* F2500	21.0 #
378-0038	Repair Kit for 4-1/4 Clow* Iowa F5110	15.0 #
378-0039	Repair Kit for 5-1/4 Clow* Iowa F5110	15.0 #
378-0050	Repair Kit for 4-1/2 Mueller* A421	13.3 #
378-0052	Repair Kit for 5-1/4 Mueller* A423	15.0 #
378-0054	Repair Kit for Kennedy* K81, 5-1/4"	15.0 #
377-8310	Repair Kit for American Flow Control* B84B, 5-1/4", & Mark 73	13.0 #
377-8313	Repair Kit for American Flow Control* B62B, 5-1/4"	13.0 #





Please inquire about hydrant extensions and internal repair parts for various makes of hydrants.

Trumbull Industries Making fire hydrant parts since 1990

Trumbull Industries is the original equipment manufacturer of Ludlow, Corey & Rensselaer hydrants. *Trumbull Industries is not affiliated with any of the manufacturers whose hydrants are listed above.



HYDRANT EXTENSION KITS

For Popular Make Hydrants

All Trumbull Hydrant Extension Kits come complete with all necessary components, such as rod coupling and pins, breakable groundline flanges or coupling, bolts, nuts, gaskets and/or o-rings.

Trumbull Item No.	Hydrant Manufacturer	Model	Valve Size	Length	Weight	
-	Ludlow and Renssalear	all	4"	6"	41#	
-	Ludlow and Renssalear	all	4"	12"	52#	
-	Ludlow and Renssalear	all	4"	18"	63#	
-	Ludlow and Renssalear	all	4"	24"	74#	
-	Ludlow and Renssalear	all	4"	30"	85#	
-	Ludlow and Renssalear	all	5"	6"	46#	T
-	Ludlow and Renssalear	all	5"	12"	57#	
-	Ludlow and Renssalear	all	5"	18"	68#	
-	Ludlow and Renssalear	all	5"	24"	79#	
-	Ludlow and Renssalear	all	5"	30"	90#	
378-2110	American Darling*	B62B	5-1/4"	6"	42#	
378-2111	American Darling*	B62B	5-1/4"	12"	56#	
378-2112	American Darling*	B62B	5-1/4"	18"	70#	
378-2113	American Darling*	B62B	5-1/4"	24"	84#	P. C.
378-0120	Kennedy*	K10B	5-1/4"	6"	42#	
378-0121	Kennedy*	K10B	5-1/4"	12"	56#	
378-0122	Kennedy*	K10B	5-1/4"	18"	70#	THE REST
378-0123	Kennedy*	K10B	5-1/4"	24"	84#	
378-0100	Kennedy*	K81	5-1/4"	6"	42#	
378-0101	Kennedy*	K81	5-1/4"	12"	56#	
378-0102	Kennedy*	K81	5-1/4"	18"	70#	
378-0103	Kennedy*	K81	5-1/4"	24"	84#	
378-0110	M & H*	129	5-1/4"	6"	42#	
378-0111	M & H*	129	5-1/4"	12"	56#	
378-0112	M & H*	129	5-1/4"	18"	70#	1
378-0113	M & H*	129	5-1/4"	24"	84#	
378-0115	Mueller*	A423	5-1/4"	6"	66#	
378-0116	Mueller*	A423	5-1/4"	12"	84#	
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Please inquire about hydrant safety kits and internal repair parts for various makes of hydrants.

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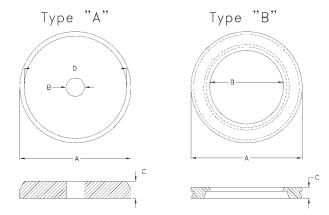
^{*} Hydrant names are registered trademarks of American Darling, McWane, Mueller or U.S. Pipe; Trumbull Industries is not affiliated with these companies.

HYDRANT VALVE RUBBERS



Please refer to the "Type" below for the pertinent dimensions in the following table.

Trumbull								
Item No.	Hydrant	Model	Valve Opening	Type	"A"	"B"	<u>"C"</u>	"D"
392-0200	Ludlow	L 75 & L 90	4"	В	5-3/8"	3-1/4"	5/8"	-
392-0201	Ludlow	L 75 & L 90	4-1/2"	В	5-3/4"	3-7/8"	5/8"	-
392-0100	Ludlow	L 75 & L 90	5"	В	6-1/2"	4-1/8"	5/8"	-
392-0202	Ludlow	L75 & L90	6"	В	7-1/2"	5-1/4"	5/8"	-
377-5692	Mueller*	A421 (Centurion)	4-1/2"	Α	5"	1"	1-1/8"	4-1/4"
377-5792	Mueller*	A423 (Centurion)	5-1/4"	Α	5-7/8"	1"	1-1/8"	5-1/8"
377-5694	Mueller*	Improved	4-1/4"	Α	4-7/8"	1"	1"	4-1/4"
377-5700	Mueller*	Improved	4-1/2"	Α	5"	1"	1-1/8"	4-1/2"
393-0255	Rensselaer	L 90A & L 90B	4"	Α	4-3/8"	2-3/8"	1"	3-7/8"
393-0260	Rensselaer	L 90A & L 90B	5"	Α	5-5/8"	2-5/8"	1-1/4"	5-3/8"
393-0265	Rensselaer	L 90A & L 90B	6"	Α	7-1/4"	4-1/8"	1-3/8"	6-3/8"
377-5702	U.S. Pipe*	Smith* H205	4-1/2"	Α	5"	2-1/4"	3/4"	4-3/4"
377-4792	Am. Darling*	B50B, 40-50-41	4"	Α	4-1/2"	2-1/16"	1"	4-1/8"
377-5492	Am. Darling*	B50B, 50-50-41	5"	Α	5-3/4"	2-1/16"	1-3/16"	5-3/16"
377-6092	Am. Darling*	B62B, 54-62-41	5-1/4"	Α	5-5/8"	1"	1"	5-3/16"
378-0204	Kennedy*	K10, K11, K81, 1080, 128	0 4-1/2"	Α	5"	15/16"	7/8"	4-5/8"
378-0208	Kennedy*	K10, K11, K81	5-1/4"	Α	5-11/16"	1-3/32"	7/8"	5-1/4"



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