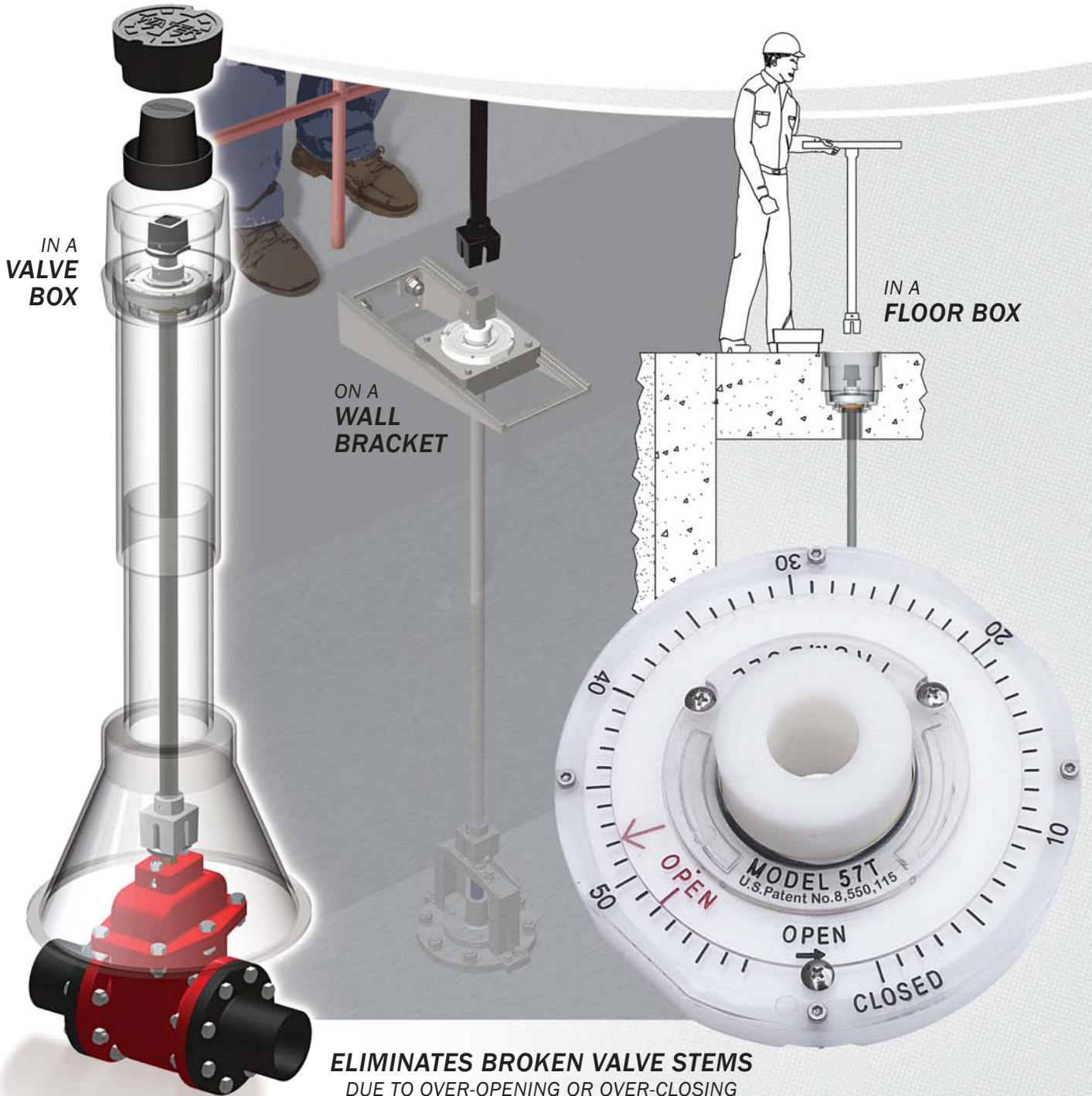


TRUMBULL

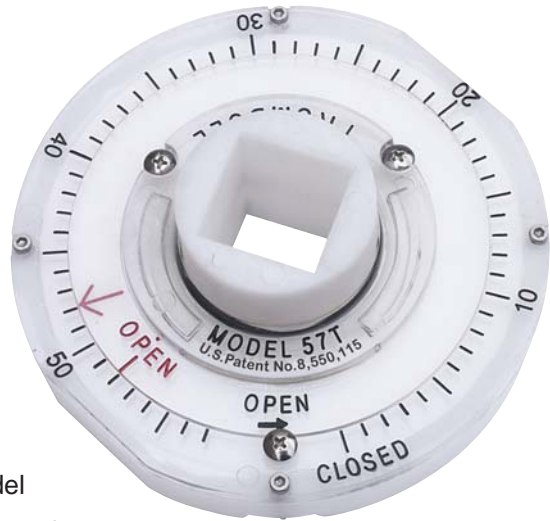
— VALVE —

POSITION INDICATORS



Valve Position Indicators

Buried Service - 1-1/4" SQUARE Extension Stems



- Eliminates broken valve stems caused by over-opening or over-closing
- Field-adjustable for any number of turns within the range of each model
- Constructed of heavy-duty, non-corrosive Dupont Delrin polymer, providing high-impact resistance even in cold climates
- Double O-ring seals keep out water and dirt
- 3rd-party tested to over 1 million revolutions
- Provided with stainless steel hardware
- Also available for use above ground in the floor or with Wall Brackets (see pages 8 to 11)

Ordering Instructions

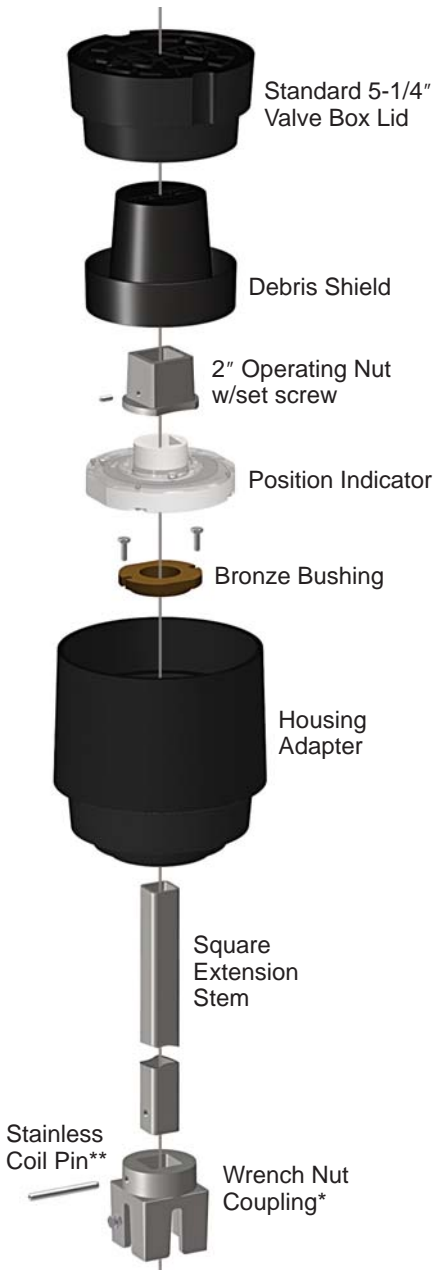
1. Specify direction of open (open left or open right)
2. Model required (available in 57, 275 or 870 turns)

Model Number	Number of Turns	Open Left	Open Right
		Trumbull Item No.	Trumbull Item No.
57T	0 - 57	367-9394	367-9393
275T	0 - 275	367-9396	367-9395
870T	0 - 870	367-9400	367-9399

3. Extension Stem required (1-1/4" square)
 - a. Length required (provide "A" dimension on the illustration shown on right side of page 3)
 - b. Carbon steel or stainless steel
 - c. Tubing or solid bar
4. Debris Shield, item **367-9415** recommended for buried service

Exploded View

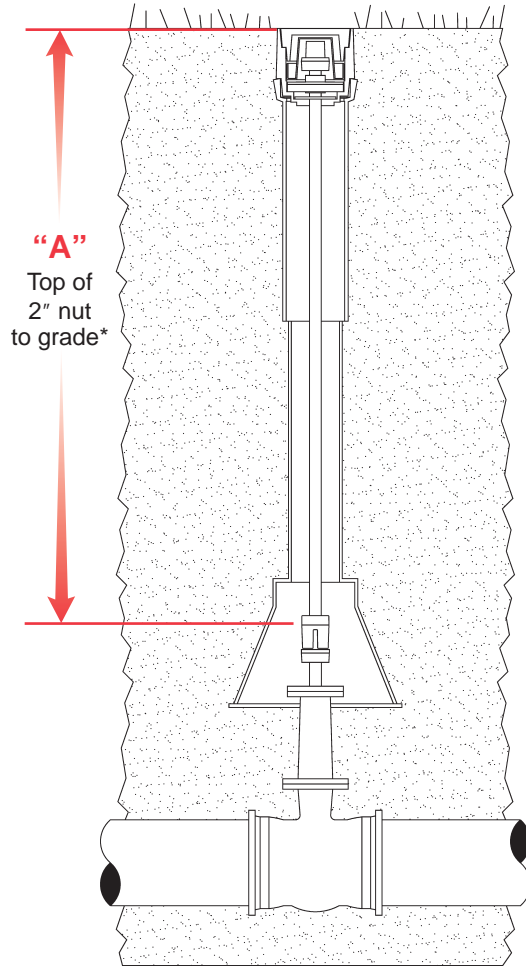
Square Extension Stem
for Buried Service



SQUARE EXTENSION STEM

Product Notes

- * Wrench nut coupling welded to stem at factory.
- ** When bottom coupling is purchased separately, pin is provided.



* The dimension from top of 2" valve nut to grade is used to determine Extension Stem length, per ordering instructions on page 2.

Extension Stem Torque Ratings

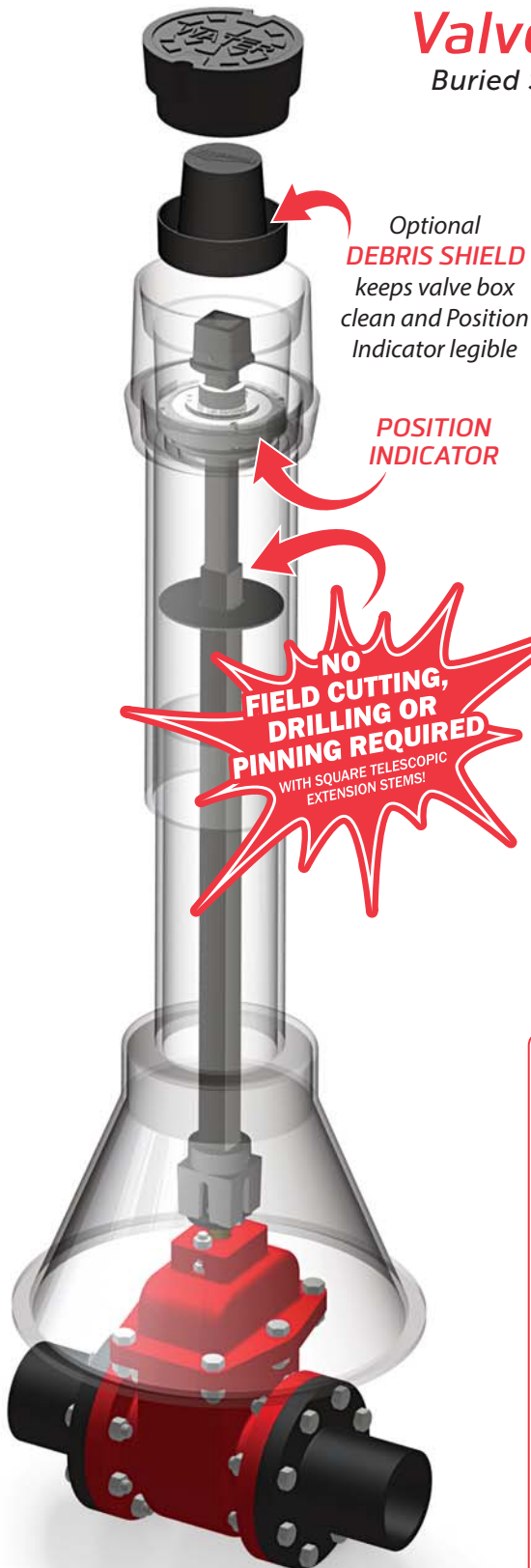
Extension Stems rated for a minimum of 300 ft-lb.
For higher torque capacity, consult Trumbull.



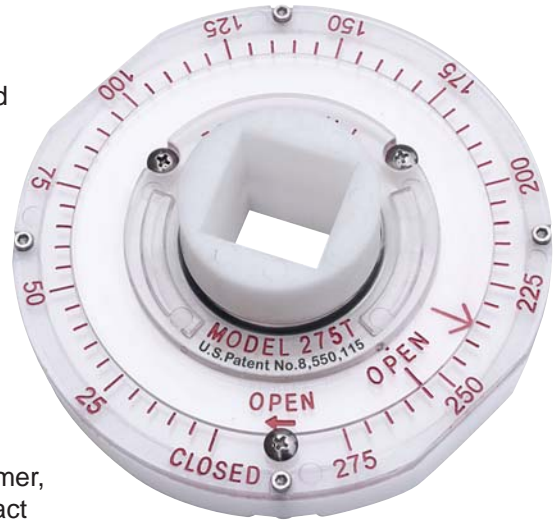
Installation animations online:
www.youtube.com/trumbullmfg

Valve Position Indicators

Buried Service - **TELESCOPIC** Extension Stems



- Eliminates broken valve stems caused by over-opening or over-closing
- Field-adjustable for any number of turns within the range of each model
- Constructed of heavy-duty, non-corrosive Dupont Delrin polymer, providing high-impact resistance even in cold climates
- Double O-ring seals keep out water and dirt
- 3rd-party tested to over 1 million revolutions
- Provided with stainless steel hardware
- Also available for use above ground in the floor or with Wall Brackets (see pages 8 to 11)
- Telescopic stem eliminates the need for precise field measurement of extension stems and provides for ground movement caused by freezing and thawing



Ordering Instructions

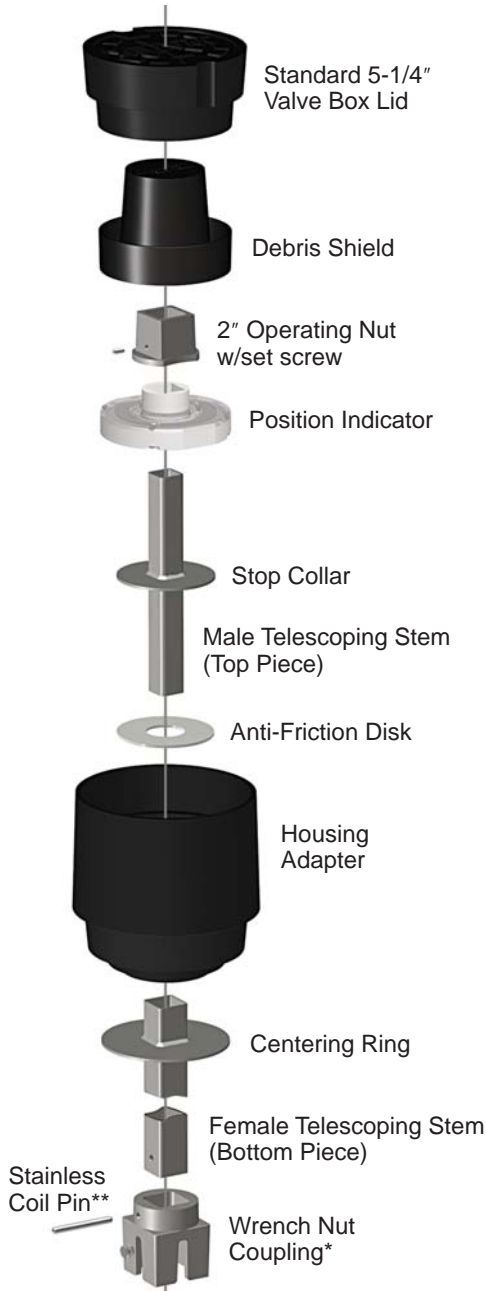
1. Specify direction of open (open left or open right)
2. Model required (available in 57, 275 or 870 turns)

Model Number	Number of Turns	Open Left	Open Right
		Trumbull Item No.	Trumbull Item No.
57T	0 - 57	367-9394	367-9393
275T	0 - 275	367-9396	367-9395
870T	0 - 870	367-9400	367-9399

3. Extension Stem required (telescopic)
 - a. Length required (provide "A" dimension on the illustration shown on right side of page 5)
 - b. Carbon steel or stainless steel
4. Debris Shield, item **367-9415** recommended for buried service

Exploded View

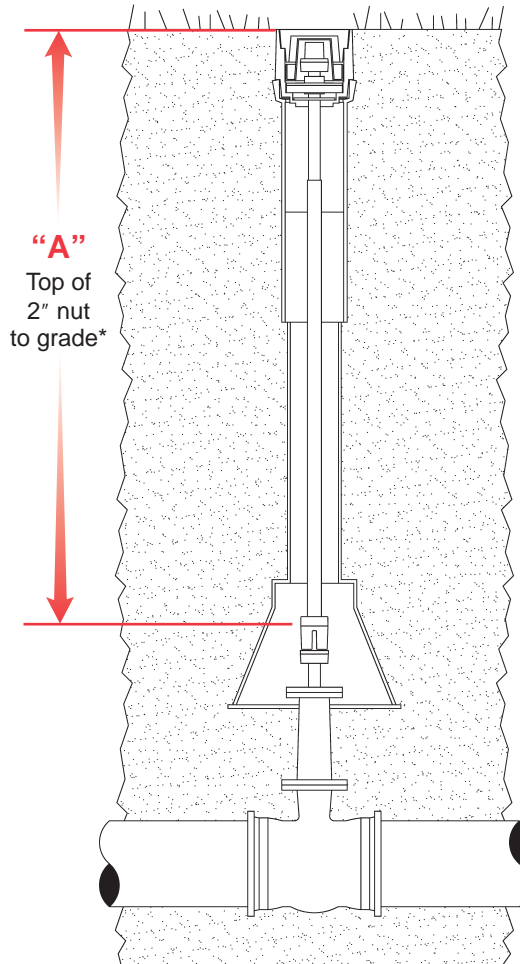
Telescopic Extension Stem
for Buried Service



TELESCOPIC EXTENSION STEM

Product Notes

- * Wrench nut coupling welded to stem at factory.
- ** When bottom coupling is purchased separately, pin is provided.



* The dimension from top of 2" valve nut to grade is used to determine Extension Stem length, per ordering instructions on page 4.

Extension Stem Adjustment Ranges & Torque Ratings

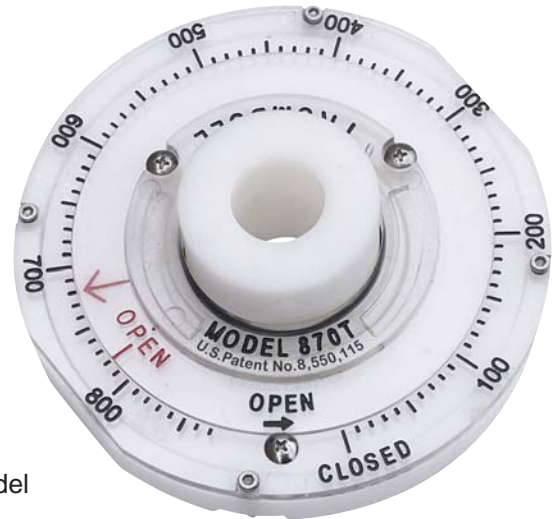
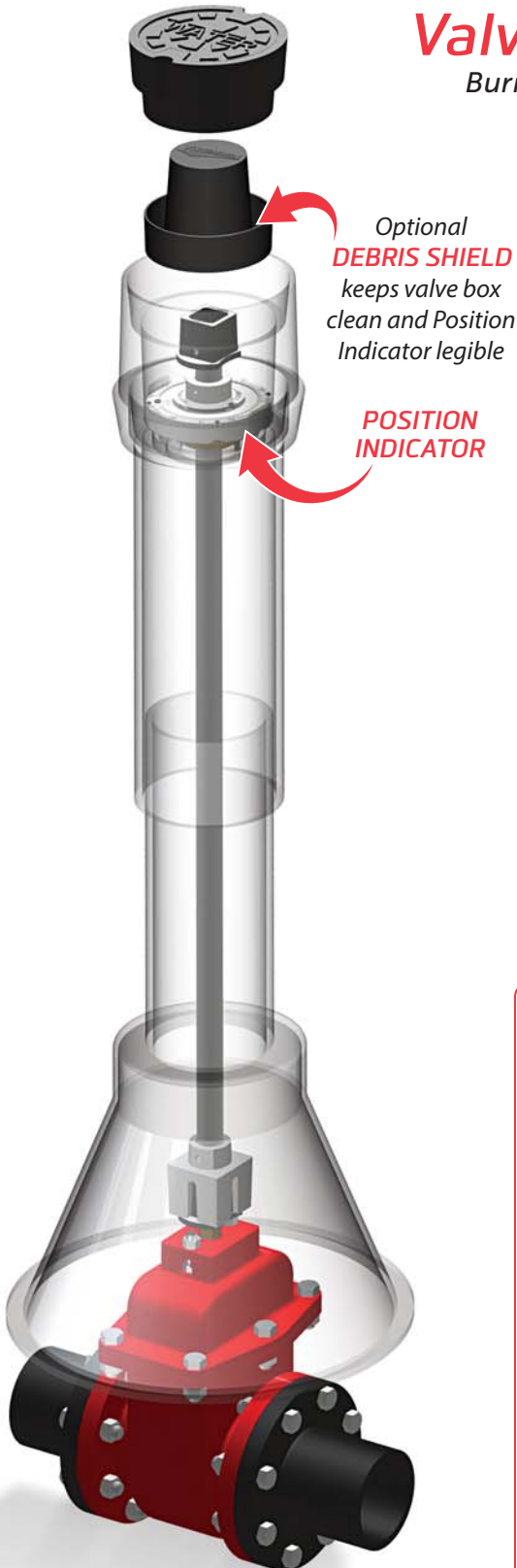
For Telescopic Extension Stems

Range of Dimension "A"		Square Telescopic Extension Stems		
Minimum	Maximum	Length of 1-1/4" Top Part	Length of 1-1/2" Bottom Part	Torque In ft-lb
3 ft.	4-1/2 ft.	30"	30"	300 ft-lb
4-1/2 ft.	6 ft.	30"	48"	300 ft-lb
6 ft.	7-1/2 ft.	30"	66"	300 ft-lb
7-1/2 ft.	9 ft.	30"	84"	300 ft-lb
9 ft.	10-1/2 ft.	30"	102"	300 ft-lb

Other stem ranges available upon request.

Valve Position Indicators

Buried Service - **ROUND** Extension Stems



- Eliminates broken valve stems caused by over-opening or over-closing
- Field-adjustable for any number of turns within the range of each model
- Constructed of heavy-duty, non-corrosive Dupont Delrin polymer, providing high-impact resistance even in cold climates
- Double O-ring seals keep out water and dirt
- 3rd-party tested to over 1 million revolutions
- Provided with stainless steel hardware
- Also available for use above ground in the floor or with Wall Brackets (see pages 8 to 11)

Ordering Instructions

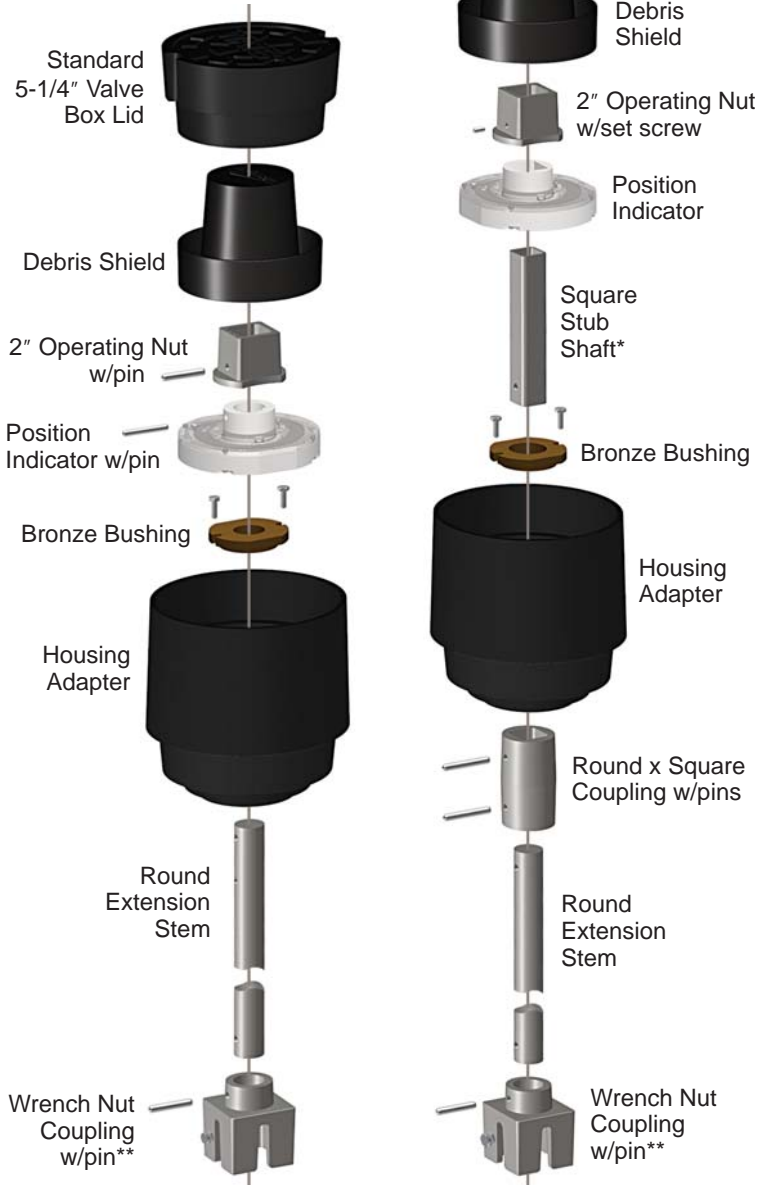
1. Specify direction of open (open left or open right)
2. Model required (available in 57, 275 or 870 turns)

Model Number	Number of Turns	Open Left	Open Right
		Trumbull Item No.	Trumbull Item No.
57T	0 - 57	367-9404	367-9403
275T	0 - 275	367-9406	367-9405
870T	0 - 870	367-9410	367-9409

3. Extension Stem required (round)
 - a. Length required (provide "A" dimension on the illustration shown on right side of page 7)
 - b. OD required (maximum OD of 1.75")
 - c. Carbon steel or stainless steel
4. Debris Shield, item **367-9415** recommended for buried service

Exploded Views

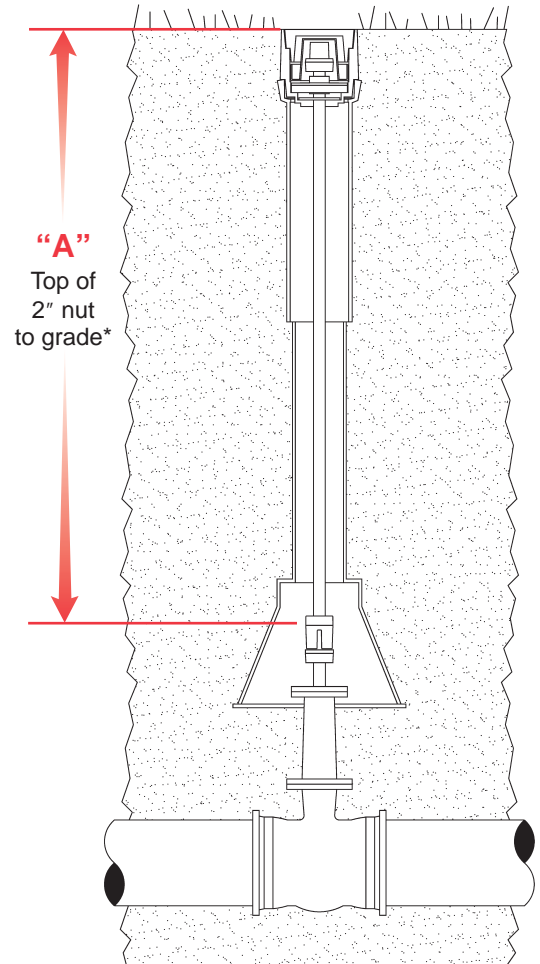
Round Extension Stems
for Buried Service



ROUND EXTENSION STEM or **ROUND EXTENSION STEM with Square Stub Shaft***

Product Notes

- * Using a square stub shaft saves field drilling and installation of pins inside housing adapter.
- ** Wrench nut coupling normally furnished pinned to stem.



* The dimension from top of 2" valve nut to grade is used to determine Extension Stem length, per ordering instructions on page 6.

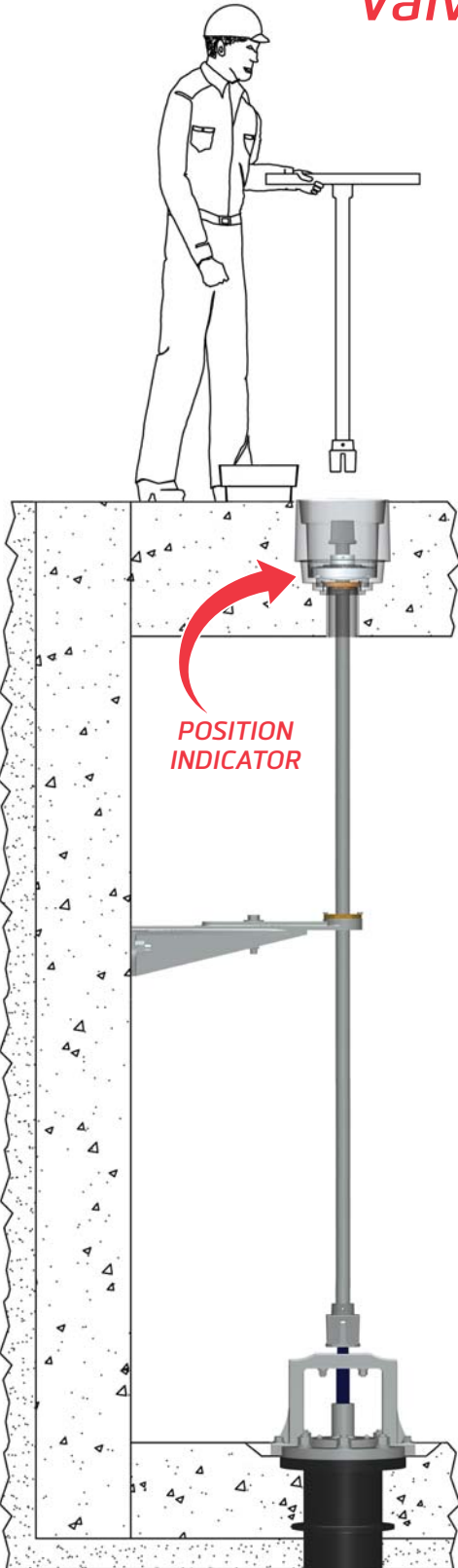
Consult your Trumbull Rep for torque ratings.



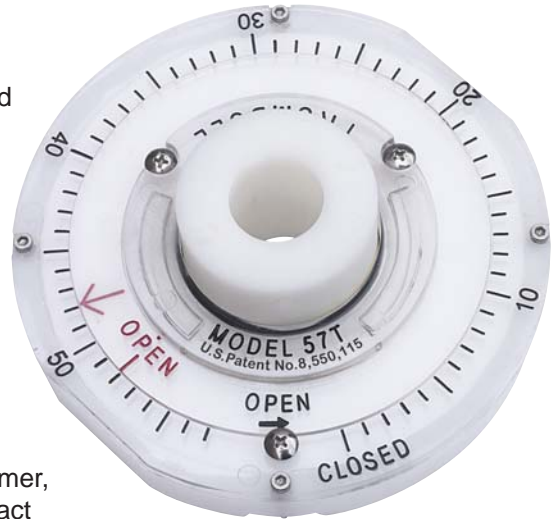
Installation animations online:
www.youtube.com/trumbullmfg

Valve Position Indicators

Installation in **FLOOR**



- Eliminates broken valve stems caused by over-opening or over-closing
- Field-adjustable for any number of turns within the range of each model
- Constructed of heavy-duty, non-corrosive Dupont Delrin polymer, providing high-impact resistance even in cold climates
- Double O-ring seals keep out water and dirt
- 3rd-party tested to over 1 million revolutions
- Provided with stainless steel hardware
- Also available with Wall Bracket for mounting to tank walls (pages 10 to 11), and in Valve Boxes for buried service (pages 2 to 7)

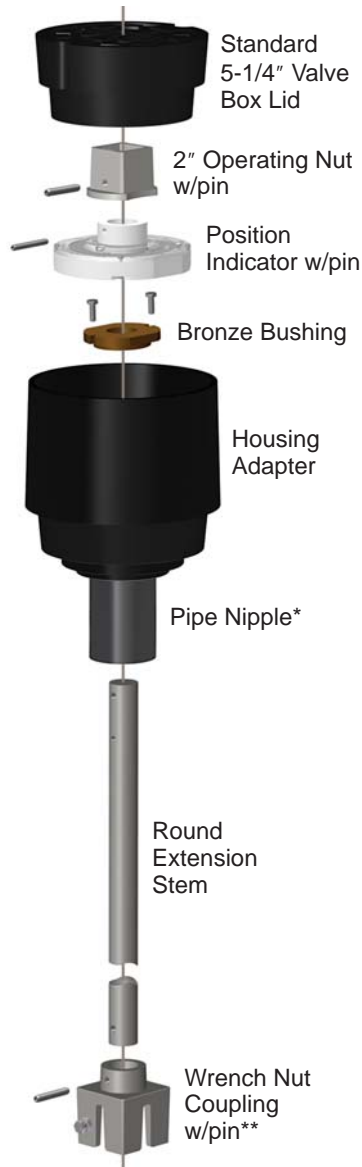


Ordering Instructions

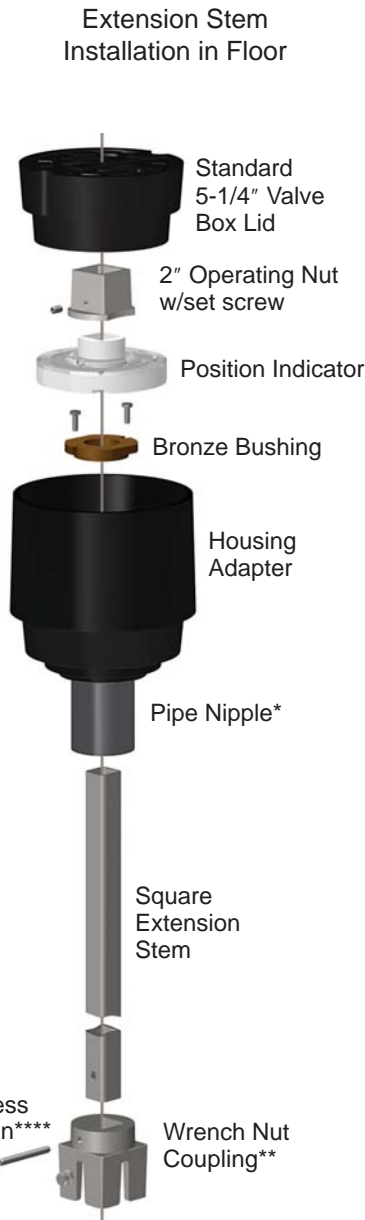
1. Specify direction of open (open left or open right)
2. Model required (available in 57, 275 or 870 turns, shown below)
3. Extension Stem required
 - a. Length required
 - b. Round (maximum OD of 1.75"), 1-1/4" square, or round x square stem (see reverse for details)
 - c. Carbon steel or stainless steel
4. Housing Adapter - Floor Box style
 - a. Cast iron housing (unsealed)
 - b. Carbon steel or stainless steel (sealed), see page 16

Model Number	Square Ext. Stem		Round Ext. Stem	
	Open Left	Open Right	Open Left	Open Right
57T	367-9394	367-9393	367-9404	367-9403
275T	367-9396	367-9395	367-9406	367-9405
870T	367-9400	367-9399	367-9410	367-9409

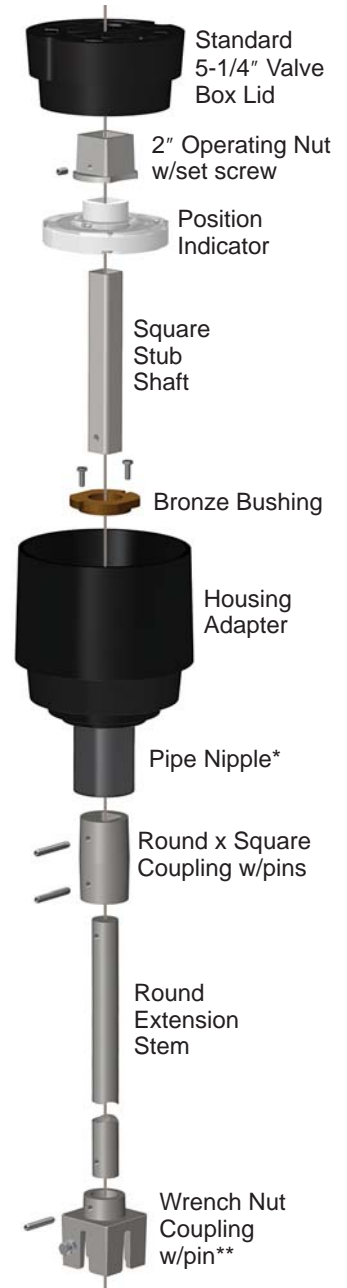
Exploded Views



ROUND EXTENSION STEM



SQUARE EXTENSION STEM***



ROUND EXTENSION STEM*
with Square Stub Shaft**

Product Notes

- * Use a pipe nipple 5/8" longer than the increase in floor slab thickness required, as the tapped thread is 5/8" deep.
- ** Wrench nut coupling normally furnished pinned to round stems, and factory welded on square stems.
- *** Using a square Extension Stem, or a round Extension Stem with a square stub shaft saves field drilling and installation of pins inside floor box.
- **** When bottom coupling is purchased separately, pin is provided.

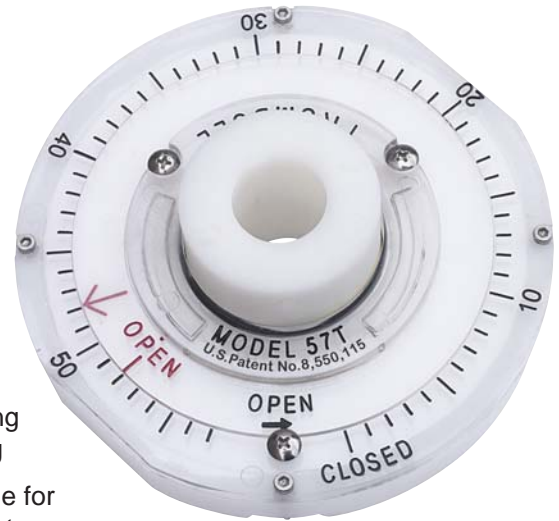
Valve Position Indicators

Installation with **WALL BRACKET** (Patent Pending)



WALL BRACKET

Ductile Iron
367-2450
 Cast 316 Stainless
367-2460



- Eliminates broken valve stems caused by over-opening or over-closing
- Field-adjustable for any number of turns within the range of each model
- Constructed of heavy-duty, non-corrosive Dupont Delrin polymer, providing high-impact resistance even in cold climates
- Double O-ring seals keep out water and dirt
- 3rd-party tested to over 1 million revolutions
- Provided with stainless steel hardware
- Also available for use in the floor (pages 8 to 9), and in Valve Boxes for buried service (pages 2 to 7)

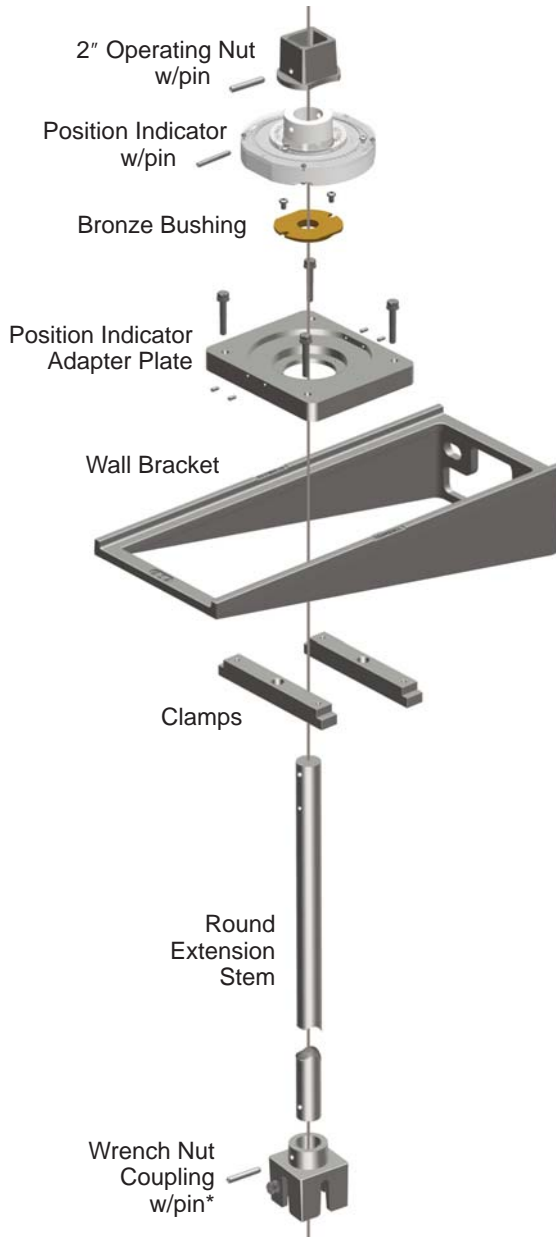
Ordering Instructions

1. Specify direction of open (open left or open right)
2. Model required (available in 57, 275 or 870 turns)
3. Extension Stem required
 - a. Length required
 - b. Round (maximum OD of 1.75") see next page for details
 - c. Carbon steel or stainless steel

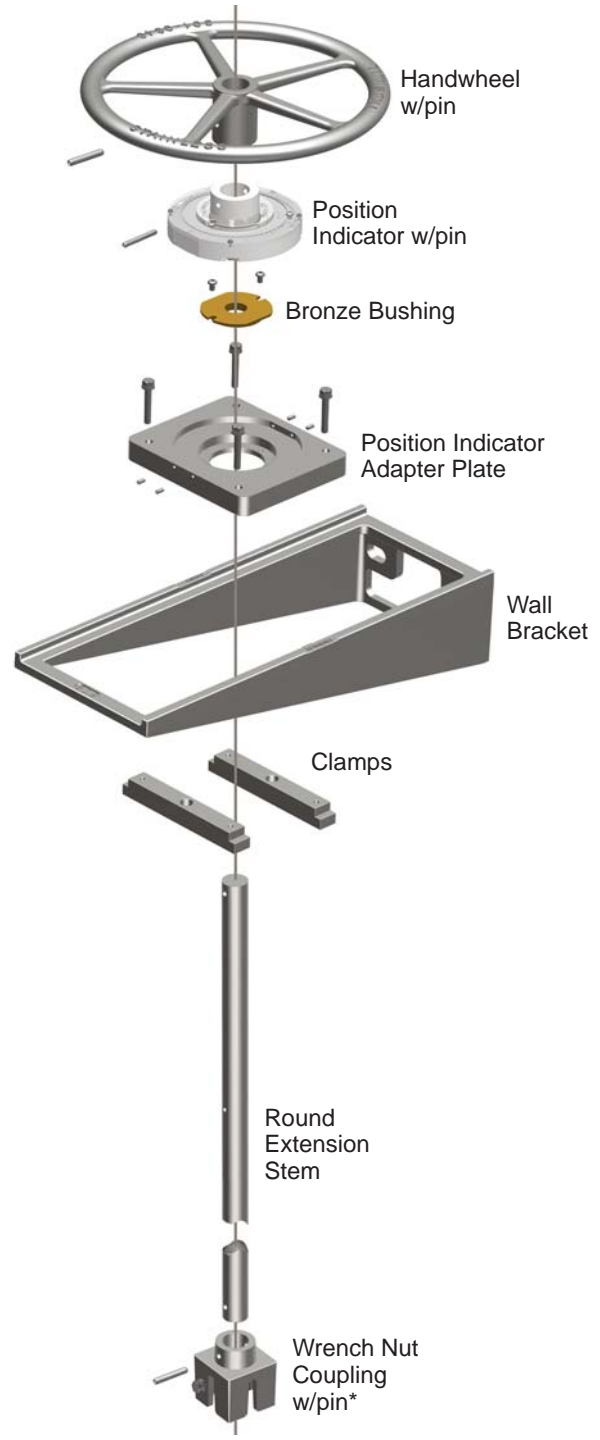
Model Number	Number of Turns	Open Left	Open Right
		Trumbull Item No.	Trumbull Item No.
57T	0 - 57	367-9404	367-9403
275T	0 - 275	367-9406	367-9405
870T	0 - 870	367-9410	367-9409

Exploded Views

Round Extension Stems
 Installation with Wall Bracket



ROUND EXTENSION STEM
 with 2" Operating Nut



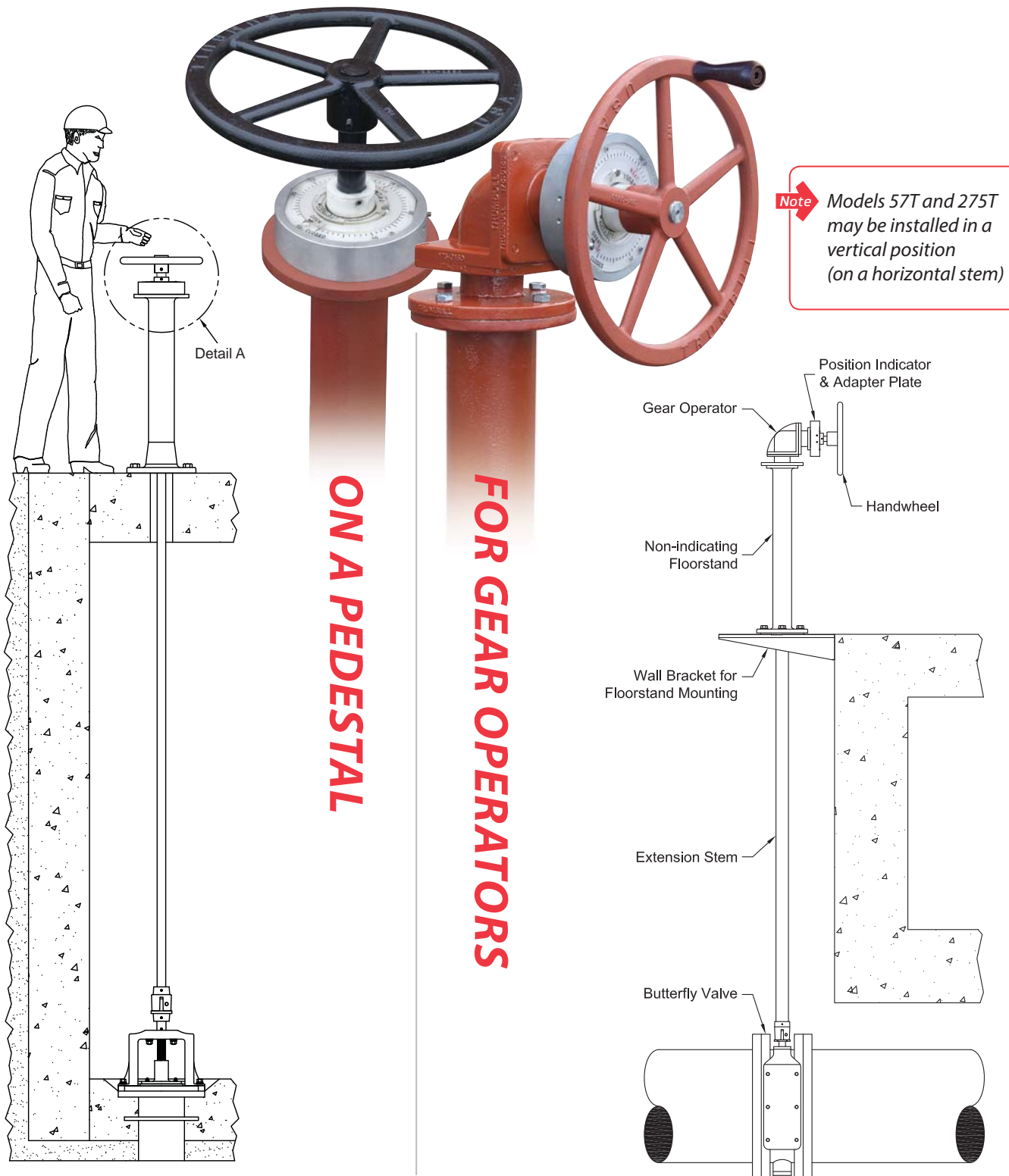
ROUND EXTENSION STEM
 with Handwheel

Product Note

* Wrench nut coupling normally furnished pinned to stem.

Valve Position Indicators

Installation with FLOORSTANDS



Feature Comparison of "Turn Count" Scales

TRUMBULL



Permanently molded markings. Large numerals and characters make it easy to see the valve's position.

Other Design "A"



Adhesive labels can peel off in high temperature or humidity.

Other Design "B"



Precise position of valve is difficult to determine.



The Trumbull Debris Shield

TRUMBULL



DEBRIS SHIELD keeps dirt off of Position Indicator, as the composite image shows above. Note how white color illuminates inside valve box!

Other Design "A"



Other Design "B"



The two simulations above show how dirt and debris can accumulate on the Position Indicator **WITHOUT** a Debris Shield.

Cyclic Environmental Testing

Independent Testing



- Coarse Arizona sand mixed with water and aerated for 4 hours.
- Mixture heated to 110°F for 4 days.
- Above process repeated several times, attempting to pass debris through the o-ring seals.
- Disassembly conducted after 302,500 revolutions.

RESULTS: Only minimal particles of sand were present, with no effect on function!
Double O-ring seals keep out water and debris (see image on the next page).

Life Cycle Testing

Independent Testing

Model 57T



RESULTS:

After 1,026,000 revolutions,
no sign of wear on any component.

Model 275T



RESULTS:

After 1,204,500 revolutions,
no sign of wear on any component.

Model 870T



RESULTS:

After 1,131,000 revolutions,
no sign of wear on any component.

Submersion Testing

In-House Testing

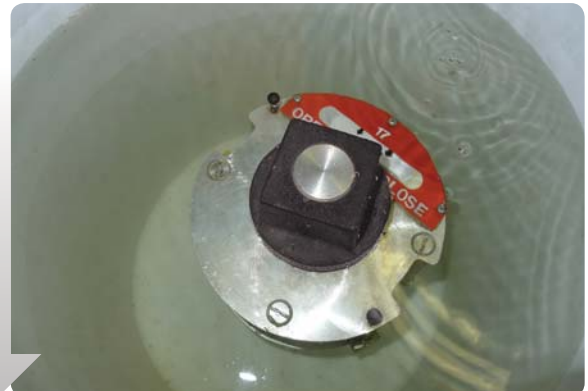
TRUMBULL POSITION INDICATOR

Other Design

Indicator Submerged



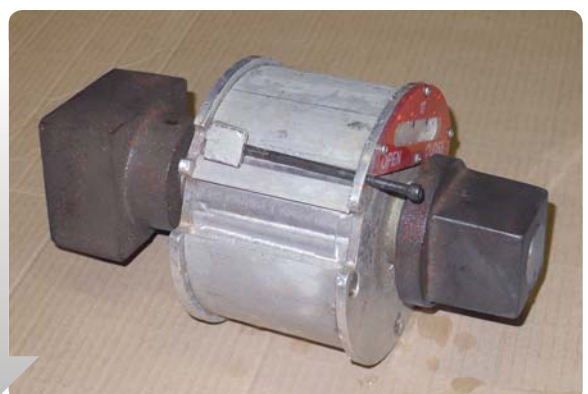
Indicator Submerged



After 24 Hours



After 24 Hours



Disassembly



Disassembly



RESULTS:

- No corrosion, due to POLYMER CONSTRUCTION
- No debris, due to DOUBLE O-RING SEALS
- Only a few drops of water were present inside the assembly

RESULTS:

- Aluminum housing showed oxidation
- Iron castings showed corrosion
- No debris
- Several ounces of water were present inside the assembly (potential freezing hazard)

Sealed Floor Boxes

Can be Used with Valve Position Indicator

Ideal to prevent fluids from penetrating the floor slab from either direction.
Available in cast stainless steel and carbon steel.

