



# Model 48 Resilient Wedge Gate Valve

### Application

Designed for installation on potable water lines, Irrigation systems, Waterworks connections, and Fire systems.

### Standards Compliance

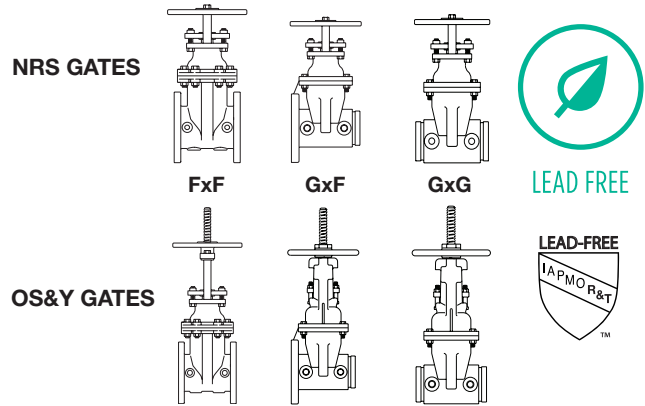
- AWWA Compliant C515, C-550
- UL® Listed
- C-UL® Listed
- FM® Approved
- Meets the requirements of NSF/ANSI 372

### Materials

Main body	Ductile Iron ASTM A 536 65-45-12
& Handwheel	Ductile Iron ASTM A 536 65-45-12
Covers	Ductile Iron ASTM A 536 65-45-12
Wedge	Ductile Iron ASTM A 536 65-45-12 W/EPDM
Coatings	AWWA C550 Compliant fusion-bond epoxy finish (meets the requirements of NSF/ANSI/CAN 61)
Internals	Stainless steel ASTM A 276 UNS S41000/ S42000
	Brass ASTM B 584 UNS C83600
Fasteners	Zinc plated steel Grade 8.8
	Brass ASTM B 584 UNS C83600
Elastomers	EPDM (FDA approved)
Stem	Stainless steel ASTM A 276 UNS S43100

### Features

Sizes:	2 1/2", 3", 4", 6", 8", 10", 12"
Maximum working water pressure	250 PSI
Maximum working water temperature	140°F
Hydrostatic test pressure	500 PSI
End connections	
	(Grooved for steel pipe)
	(Flanged bolt pattern)
	ANSI/AWWA C606
	ANSI/ASME B16.42
	Class 150

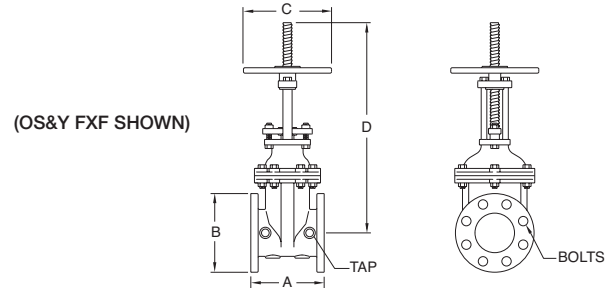


### Options

- NRS with flanged end connections (standard)
- G - NRS with grooved end connections
- GXF - NRS with grooved x flanged end connections
- PI - NRS with Post Indicator connecting flange (refer to specification sheet BF-PIWILKINS)
- OP - NRS with square operating nut
- OSY - OS&Y with flanged end connections
- OSYG - OS&Y with grooved end connections
- OSYGXF - OS&Y with grooved x flanged end connections

### Accessories

- OS&Y gate valve tamper switch (OSY-40)



### Dimensions & Weights (do not include pkg.)

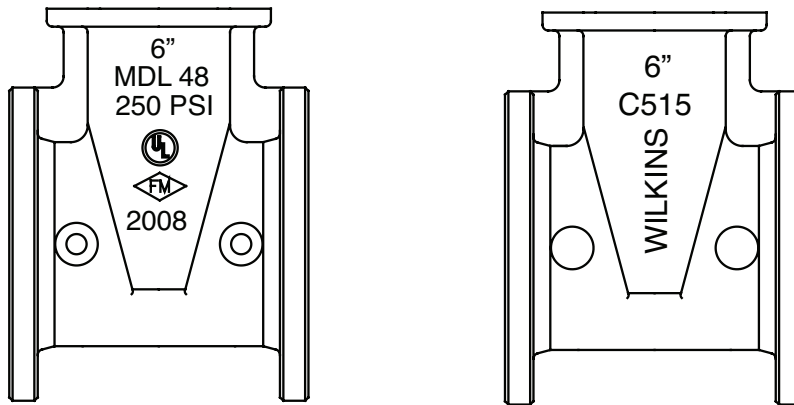
SIZE		DIMENSIONS (approximate)											
		A (all gates)		B (flanged)		C		D (NRS gates)		D (OS&Y open)		D (OS&Y closed)	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
2 1/2	65	7 1/2	191	7	178	7 7/8	200	11 1/2	292	17 3/4	451	15 3/8	391
3	80	8	203	7 1/2	191	10 1/4	260	12 3/4	324	20 1/4	514	17	432
4	100	9	229	9	229	10 1/4	260	14 1/2	368	22 1/2	572	18 1/4	464
6	150	10 1/2	267	11	279	12 1/2	318	18	457	30 1/2	775	24 1/4	616
8	200	11 1/2	292	13 1/2	343	14 3/4	375	21 1/8	537	37	940	28 1/2	724
10	250	13	330	16	406	16 3/8	416	24 3/4	629	45 5/8	1159	34 3/4	883
12	300	14	356	19	483	17 1/2	445	28	711	53	1346	40 1/2	1029

SIZE			TAP SIZE		BOLTS (flanged gates) # OF (per flange) size		WEIGHT (approximate)										
							NRS (FXF)		NRS (GXF)		NRS (GXG)		OS&Y (FXF)		OS&Y (GXF)		OS&Y (GXG)
in.	mm					lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
2 1/2	65	1/2-14NPT	4	5/8	36	17	31	14	26	12	42	19	37	17	31	14	
3	80	1/2-14NPT	4	5/8	49	22	43	20	37	17	62	28	56	25	50	23	
4	100	1/2-14NPT	8	5/8	68	31	58	26	48	22	81	37	71	32	61	28	
6	150	3/4-14NPT	8	3/4	111	50	99	45	87	40	127	57	115	52	103	47	
8	200	3/4-14NPT	8	3/4	174	79	155	70	136	62	197	89	178	81	159	72	
10	250	3/4-14NPT	12	7/8	266	121	239	108	212	96	309	140	282	128	255	116	
12	300	3/4-14NPT	12	7/8	402	182	362	164	-	-	442	200	402	182	-	-	

# ZURN WILKINS Model 48 Resilient Wedge Gate Valve Maintenance Procedures

## Valve Identification

The ZURN WILKINS Model 48 Resilient Wedge Gate Valve can be distinguished from other gate valve brands by observing the unique lettering on the valve body. One side designates the valve size, model, pressure rating, year of manufacture, and the UL/FM logos. The opposite side displays the valve size and “WILKINS” in vertical lettering. See pictures below.



Gate valves that do not contain the name WILKINS in raised cast letters on the valve body are not ZURN WILKINS brand.

## Installation Instructions

**CAUTION:** Installation of ZURN WILKINS Model 48 Gate Valves must be performed by qualified, licensed personnel.

1. Cycle valve open and closed to ensure proper operation. Check that valve end connections are clean. Fully close valve prior to installation. NOTE: For OS&Y valves, a small amount of packing rubber may exit the valve via the stem during initial operations. This is normal and does not affect valve performance. If stem leakage occurs, lightly tighten bronze gland nuts evenly until leakage stops.
2. Install valve per proper methods according to end connection type.
3. If used in buried service, a valve box or vault should be provided for each valve.
4. Ensure all bolts are sufficiently tight prior to pressurization.
5. Once pressurized, open valve and thoroughly flush line to remove debris.
6. Inspect valve for external leaks. If a leak is detected, see TROUBLESHOOTING section.
7. Fully close valve and listen for leaks past the wedge. If a leak is detected, see TROUBLESHOOTING section.
8. Fully open valve. ZURN WILKINS Model 48 Gate Valve is now in service.

⚠ **WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
⚠ **ADVERTENCIA:** Cáncer y daño reproductivo - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
⚠ **AVERTISSEMENT:** Cancer et néfastes sur la reproduction - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

# Maintenance Instructions

All ZURN WILKINS Model 48 Gate Valves must be inspected and maintained by qualified, licensed personnel at least once a year or more frequently as specified by local codes. Replacement of worn or damaged parts must only be made with genuine “ZURN WILKINS” parts.

## Servicing Wedge and Bonnet Seal:

1. Shut off main water supply. If servicing a gate valve attached to the downstream side of a backflow preventer, the upstream shut-off valve may be closed instead of the main water supply.
2. Relieve line pressure.
3. Remove bonnet nuts and bolts.
4. Slowly lift and remove bonnet assembly and wedge from valve body.
5. Clean all parts thoroughly after disassembly.
6. Carefully inspect bonnet seal and wedge for wear or damage. Replace if worn or damaged.
7. Carefully inspect body interior seating surface for coating damage and foreign debris. Clean seating surface or replace valve if necessary.
8. Reinstall wedge and bonnet assembly.
9. Tighten down bonnet nuts and bolts evenly. Do not over tighten.

## Servicing Gland Stuffing Box (OS&Y):

1. Make sure gate valve is fully open.
2. Remove gland nuts.
3. Raise gland and gland bushing.
4. Remove packing rings from stuffing box using a small pick or similar device.
5. Replace worn or damaged packing rings.
6. Lower gland and gland bushing and lightly tighten gland nuts.
7. Cycle valve fully closed to fully open.
8. If there is stem leakage, tighten gland nuts until leakage stops.

## Servicing Stem Seals (NRS):

1. Shut off main water supply and relieve line pressure.
2. Remove the bolt and washer retaining the operating nut/handwheel.
3. Remove operating nut/handwheel.
4. Remove gland flange bolts and gland flange.
5. Remove stem by turning stem clockwise.
6. Replace stem o-rings, gland flange o-ring, wiper ring, and thrust washers if necessary.
7. Reassemble in reverse order.

# Troubleshooting

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Body Leakage	<ol style="list-style-type: none"><li>1. Loose bonnet bolts</li><li>2. Dirty or damaged bonnet seal</li></ol>	<ol style="list-style-type: none"><li>1. Tighten bolts</li><li>2. Inspect bonnet seal. Clean or replace if necessary</li></ol>
2. Seat Leakage	<ol style="list-style-type: none"><li>1. Foreign debris between seat and wedge</li><li>2. Dirty/corroded seat</li><li>3. Damaged seat or wedge</li></ol>	<ol style="list-style-type: none"><li>1. Cycle valve and flush line</li><li>2. Flush line or disassemble and clean</li><li>3. Repair or replace valve</li></ol>
3. Stem Leakage	<ol style="list-style-type: none"><li>1. Packing nuts loose</li><li>2. Stem o-rings worn (NRS)</li><li>3. Packing rings worn (OS&amp;Y)</li></ol>	<ol style="list-style-type: none"><li>1. Tighten nuts</li><li>2. Replace stem o-rings</li><li>3. Replace packing rings</li></ol>

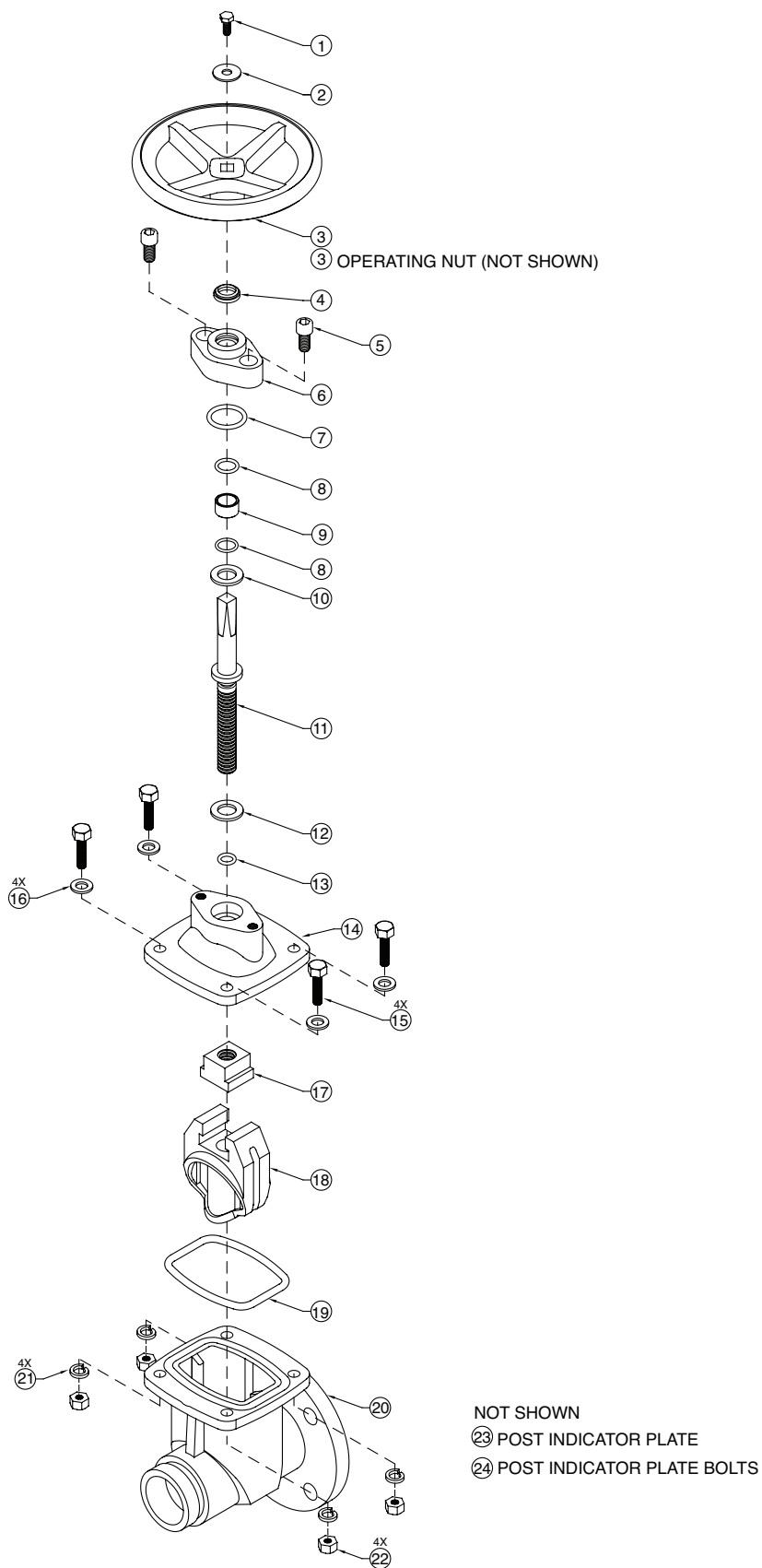
# Replacement Parts

## ZURN WILKINS 2 1/2" - 12" NRS ASSEMBLY MODEL 48

ITEM	REPLACEMENT PARTS DESCRIPTION	PART NUMBER BY VALVE SIZE						
		2 1/2"	3"	4"	6"	8"	10"	12"
1	HOLD DOWN BOLT	487A-11	489A-11	489A-11	489A-11	489A-11	489A-11	489A-11
2	HOLD DOWN WASHER	487C-14	489C-14	489C-14	489C-14	489C-14	489C-14	489C-14
3	HANDWHEEL	487NRS-6	489NRS-6	489NRS-6	4810NRS-6	4811NRS-6	4812NRS-6	4813NRS-6
3	OP NUT (NOT SHOWN)	487OP-6	489OP-6	489OP-6	4810OP-6	4810OP-6	4812OP-6	4813OP-6
4	STEM RING WIPER	487-13	488-13	489-13	4810-13	4811-13	4812-13	4813-13
5	GLAND FLANGE BOLT	489C-11	489C-11	489C-11	4810C-11	4810C-11	4810C-11	4810C-11
6	GLAND FLANGE	487-8	488-8	489-8	4810-8	4811-8	4812-8	4813-8
7	GLAND FLANGE O-RING	487C-22	489C-22	489C-22	4810C-22	4810C-22	4812C-22	4813C-22
8	STEM SEAL O-RING	487A-22	489A-22	489A-22	4810A-22	4811A-22	4812A-22	4813A-22
9	STEM SEAL BUSHING	487-4	489-4	489-4	4810-4	4811-4	4812-4	4813-4
10	UPPER THRUST WASHER	487A-14	489A-14	489A-14	4810A-14	4811A-14	4812A-14	4813A-14
11	STEM	487-5	488-5	489-5	4810-5	4811-5	4812-5	4813-5
12	LOWER THRUST WASHER	487B-14	489B-14	489B-14	4810B-14	4811B-14	4812B-14	4813B-14
13	STEM O-RING	487B-22	489B-22	489B-22	4810B-22	4811B-22	4812B-22	4813B-22
14	BONNET	487-20	488-20	489-20	4810-20	4811-20	4812-20	4813-20
15	BONNET BOLT	489B-11	489B-11	489B-11	4810B-11	4811B-11	4811B-11	4811B-11
16	BONNET WASHER	489D-14	489D-14	489D-14	4810D-14	4810D-14	4810D-14	4810D-14
17	STEM NUT	487A-9	488A-9	489A-9	4810A-9	4811A-9	4812A-9	4813A-9
18	WEDGE	487-18	488-18	489-18	4810-18	4811-18	4812-18	4813-18
19	BONNET SEAL	487D-22	488D-22	489D-22	4810D-22	4811D-22	4812D-22	4813D-22
20	BODY - FLG X FLG	487-1-010F	488-1-010F	489-1-010F	4810-1-010F	4811-1-010F	4812-1-010F	4813-1-010F
20	BODY - GRV X FLG	487-1GXF-010F	488-1GXF-010F	489-1GXF-010F	4810-1GXF-010F	4811-1GXF-010F	4812-1GXF-010F	4813-1GXF-010F
20	BODY - GRV X GRV	487-1G-010F	488-1G-010F	489-1G-010F	4810-1G-010F	4811-1G-010F	4812-1G-010F	N/A
21	BONNET LOCK WASHER	489E-14	489E-14	489E-14	4810E-14	4810E-14	4810E-14	4810E-14
22	BONNET NUT	489B-9	489B-9	489B-9	4810B-9	4810B-9	4810B-9	4810B-9
23	PI PLATE (NOT SHOWN)	487-17	488-17	489-17	489-17	489-17	4812-17	4813-17
24	PI PLATE BOLT (NO SHOWN)	489C-11	489C-11	489D-11	489D-11	489D-11	489D-11	489D-11

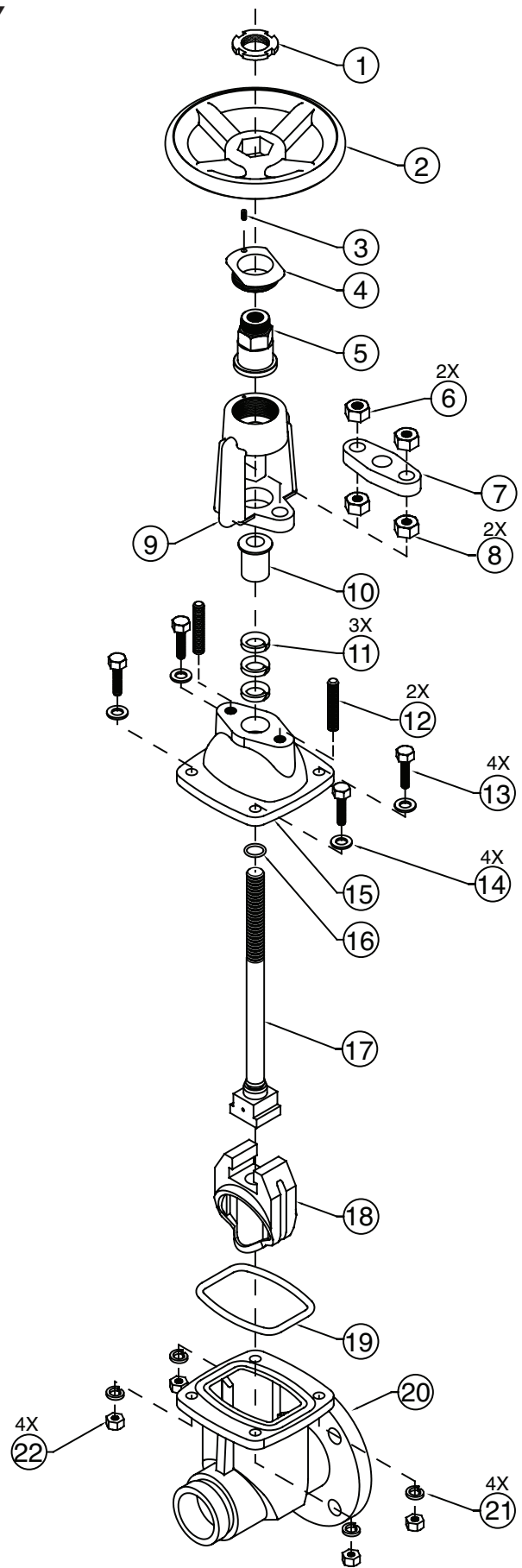
**EXPLODED ISOMETRIC VIEW ON NEXT PAGE**

# ZURN WILKINS 2 1/2" - 12" NRS ASSEMBLY MODEL 48



# ZURN WILKINS 2 1/2" OS&Y ASSEMBLY MODEL 48

	REPLACEMENT PARTS	PART NUMBERS BY VALVE SIZE
ITEM	DESCRIPTION	2 1/2"
1	HANDWHEEL NUT	487OSYD-9
2	HANDWHEEL (NOT SHOWN)	487OSY-6
3	SET SCREW	487OSYA-11
4	RETAINER	487OSY-3
5	YOKE BUSHING	487OSYA-4
6	GLAND NUT	487OSYA-9
7	GLAND FOLLOWER	487OSY-8
8	YOKE NUT	487OSYB-9
9	YOKE	487OSYB-20
10	GLAND BUSHING	487OSYB-4
11	PACKING RING	487OSYC-22
12	GLAND BOLT	487OSYC-11
13	BONNET BOLT	489B-11
14	BONNET WASHER	489D-14
15	BONNET	487OSYA-20
16	STEM O-RING	487OSYB-22
17	STEM	487OSY-5
18	WEDGE	487-18
19	BONNET SEAL	487D-22
20	BODY - FLG X FLG	487-1-010F
20	BODY - GRV X FLG	487-1GXF-010F
20	BODY - GRV X GRV	487-1G-010F
21	BONNET LOCK WASHER	489E-14
22	BONNET NUT	489B-9



# ZURN WILKINS 3" - 12" OS&Y ASSEMBLY MODEL 48

ITEM	REPLACEMENT PARTS DESCRIPTION	PART NUMBER BY VALVE SIZE					
		3"	4"	6"	8"	10"	12"
1	HANDWHEEL NUT	489OSYC-9	489OSYC-9	4810OSYC-9	4811OSYC-9	4811OSYC-9	4813OSYC-9
2	HANDWHEEL	489OSY-6	489OSY-6	4810OSY-6	4811OSY-6	4812OSY-6	4813OSY-6
3	SET SCREW	487OSYA-11	487OSYA-11	487OSYA-11	487OSYA-11	487OSYA-11	487OSYA-11
4	RETAINER	489OSY-3	489OSY-3	4810OSY-3	4811OSY-3	4812OSY-3	4813OSY-3
5	YOKE BUSHING	489OSYA-4	489OSYA-4	4810OSYA-4	4811OSYA-4	4812OSYA-4	4813OSYA-4
6	YOKE	489OSYB-20	489OSYB-20	4810OSYB-20	4811OSYB-20	4812OSYB-20	4813OSYB-20
7	YOKE BOLT	489OSYD-11	489OSYD-11	4810OSYD-11	4810OSYD-11	4810OSYD-11	4810OSYD-11
8	GLAND NUT	489OSYA-9	489OSYA-9	4810OSYA-9	4810OSYA-9	4810OSYA-9	4810OSYA-9
9	GLAND FOLLOWER	489OSY-8	489OSY-8	4810OSY-8	4811OSY-8	4812OSY-8	4813OSY-8
10	GLAND BUSHING	489OSYB-4	489OSYB-4	4810OSYB-4	4811OSYB-4	4812OSYB-4	4813OSYB-4
11	GLAND BOLT	489OSYC-11	489OSYC-11	4810OSYC-11	4811OSYC-11	4811OSYC-11	4811OSYC-11
12	PACKING RING	489OSYC-22	489OSYC-22	4810OSYC-22	4811OSYC-22	4812OSYC-22	4813OSYC-22
13	BONNET BOLT	489B-11	489B-11	4810B-11	4811B-11	4811B-11	4811B-11
14	BONNET WASHER	489D-14	489D-14	4810D-14	4810D-14	4810D-14	4810D-14
15	BONNET	488OSYA-20	489OSYA-20	4810OSYA-20	4811OSYA-20	4812OSYA-20	4813OSYA-20
16	STEM O-RING	489OSYB-22	489OSYB-22	4810OSYB-22	4811OSYB-22	4812OSYB-22	4813OSYB-22
17	STEM	488OSY-5	489OSY-5	4810OSY-5	4811OSY-5	4812OSY-5	4813OSY-5
18	WEDGE	488-18	489-18	4810-18	4811-18	4812-18	4813-18
19	BONNET SEAL	488D-22	489D-22	4810D-22	4811D-22	4812D-22	4813D-22
20	BODY - FLG X FLG	488-1-010F	489-1-010F	4810-1-010F	4811-1-010F	4812-1-010F	4813-1-010F
20	BODY - GRV X FLG	488-1GXF-010F	489-1GXF-010F	4810-1GXF-010F	4811-1GXF-010F	4812-1GXF-010F	4813-1GXF-010F
20	BODY - GRV X GRV	488-1G-010F	489-1G-010F	4810-1G-010F	4811-1G-010F	4812-1G-010F	N/A
21	BONNET LOCK WASHER	489E-14	489E-14	4810E-14	4810E-14	4810E-14	4810E-14
22	BONNET NUT	489B-9	489B-9	4810B-9	4810B-9	4810B-9	4810B-9

**EXPLODED ISOMETRIC VIEW ON NEXT PAGE**

# ZURN WILKINS 3" - 12" OS&Y ASSEMBLY MODEL 48

