



# Landscaping and Turf Service Parts Booklet

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[LRNelson.com](http://LRNelson.com)

Effective 8/30/2001

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### Ordering Information

- Nelson Landscape and Turf distributors can place service parts orders with:

Customer Service  
 One Sprinkler Lane  
 Peoria, IL 61615  
 888-NELSON-8  
 8:00 A.M. - 5:00 P.M. (CST)  
 Fax 309-692-9152

4780 Eucalyptus Ave.  
 Chino, CA 91710  
 800-800-0993  
 8:00 A.M. - 5:00 P.M. (PST)  
 Fax 909-631-5025

- Refer to Distributor Terms (999-00020) for additional information.

### Consumer Ordering Information

- Parts orders can be placed with:

Consumer Service  
 One Sprinkler Lane  
 Peoria, IL 61615  
 1-800-635-7668  
 8:00 A.M. - 5:00 P.M. (CST)

- (a) VISA  MasterCard   
 Card Number \_\_\_\_\_  
 Exp. Date: \_\_\_\_ / \_\_\_\_  
 Phone # \_\_\_\_ - \_\_\_\_ - \_\_\_\_\_

- (b) Check or Money Orders

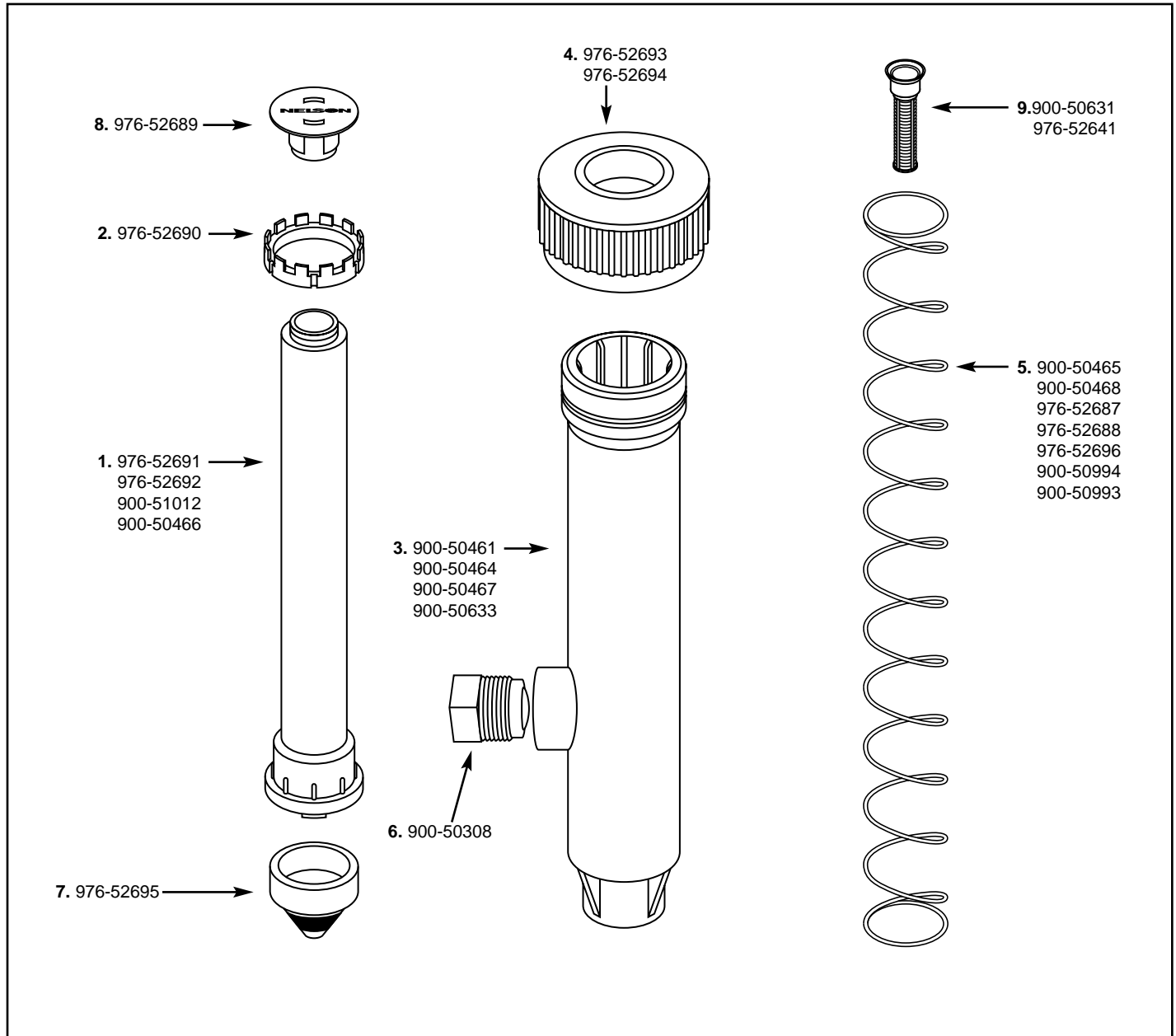
- Please include U.P.S. Charges:

Order Value:	U.P.S.
\$00.00 - \$10.00	\$1.75
\$10.01 - \$35.00	\$3.00
\$30.01 - \$50.00	\$4.00
\$50.01 and up	\$5.25



# Pop-Up Spray Sprinklers

Models: 6302, 6304, 6306, 6312  
6404-ADV, 6406-ADV, 6412-ADV

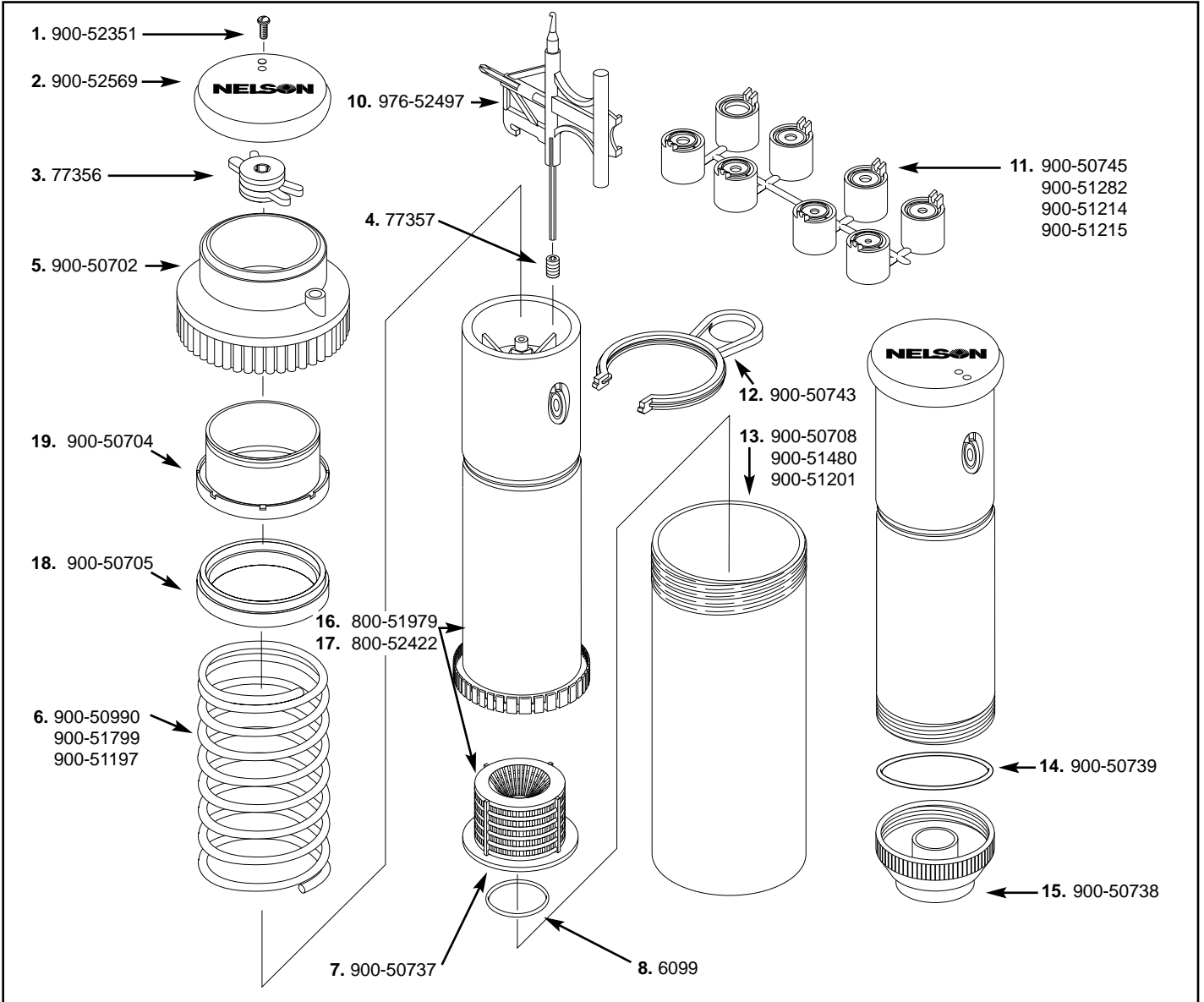


Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty.
976-52691	Piston 2-1/2" (6302)	1	1	976-52688	Compression Spring (6304)	5	1
976-52692	Piston 4" (6304 & 6404-ADV)	1	1	976-52687	Compression Spring (6404)	5	1
900-51012	Piston 6" (6306 & 6406-ADV)	1	1	900-50465	Compression Spring (6306)	5	1
900-50466	Piston 12" (6312 & 6412-ADV)	1	1	900-50993	Compression Spring (6406-ADV)	5	1
976-52690	Friction Collar	2	1	900-50468	Compression Spring (6312)	5	1
900-50633	Housing 2-1/2" (6302)	3	1	900-50994	Compression Spring (6412-ADV)	5	1
900-50461	Housing 4" (6304 & 6404-ADV)	3	1	900-50308	Cap Plug (6312 Only)	6	1
900-50464	Housing 6" (6306 & 6406-ADV)	3	1	976-52695	Anti Drain Valve	7	1
900-50467	Housing 12" (6312 & 6412-ADV)	3	1	976-52689	Pull-up Tool	8	1
976-52693	6300 Series Cap/Seal	4	1	900-50631	Fixed Pattern nozzle filter (white)	9	1
976-52694	6400 Series Cap/Seal	4	1	976-52641	Multi-Arc™ nozzle filter (grey)	9	1
976-52696	Compression Spring (6302)	5	1				



# Gear-Driven Sprinklers

Models: 5500, 5501, 5512-ADV, 6000, 6001, 6002  
6005-ADV, 6012-ADV, 6500-ADV

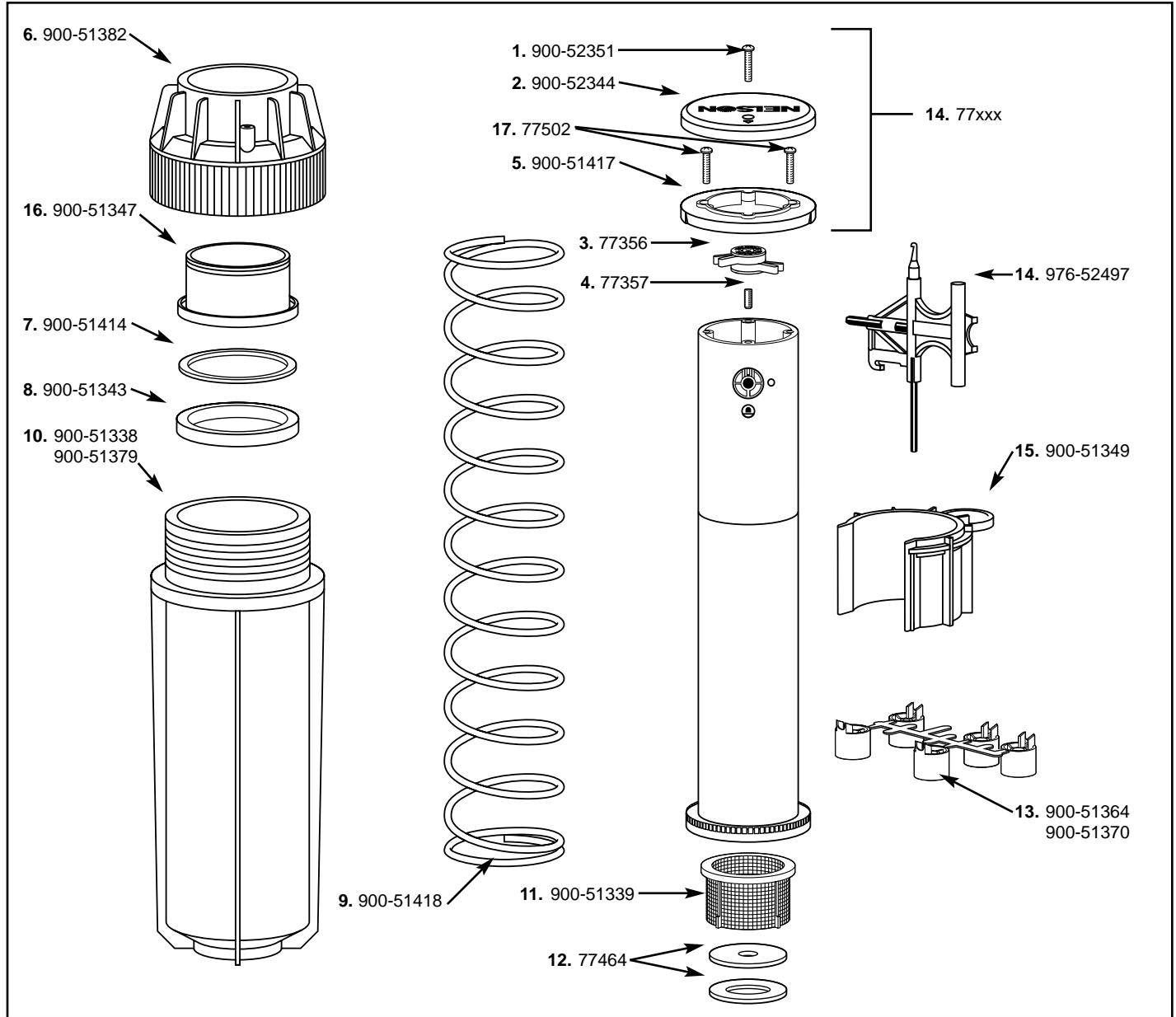


Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty.
900-52351	Locking Screw	1	1	900-51282	Nozzle Set (4) (5500,5501,5512)	11	1
900-52569	5500, 6000 and 6500 Series Protective Cap	2	1	900-51214	Nozzle Set - Low Angle (8) (6000,6001,6005,6012)	11	1
77356	Click-Set® Disc	3	1	900-51215	Nozzle Set (4) (6500, 6503, 6505)	11	1
77357	Nozzle diffuser screw (bag of 10)	4	1	900-50743	Piston Retaining Clamp	12	1
900-50702	Pop-Up Cap W/Seal	5	1	900-50708	Body Canister (5500, 6000, 6002)	13	1
900-51799	Retraction Spring (5500, 6000)	6	1	900-51201	Body Canister (5512, 6012)	13	1
900-50990	Retraction Spring (5505, 6002, 6005, 6500)	6	1	900-51480	Ribbed Body Canister (6500)	13	1
900-51197	Retraction Spring (5512, 6012)	6	1	900-50739	Riser Adapter Seal (5501-6001)	14	1
900-50737	Filter Screen	7	1	900-50738	Shrub Riser Adapter (5501-6001)	15	1
6099	Anti-Drain Valve (bag of 50)	8	1	800-51979	Drive Assembly (5500)	16	1
976-52497	Gear Drive All-In-One Wrench	10	1	800-52422	Drive Assembly (6000)	17	1
900-50745	Nozzle Set (8) (6000,6001,6005,6012)	11	1	900-50705	Spring Retainer	18	1
				900-50704	5500, 6000 & 6500 series seal	19	1



# Gear-Driven Sprinklers

Models: 7000, 7005, 7500, 7503, (BSP Models 7010, 7015, 7510, 7513)

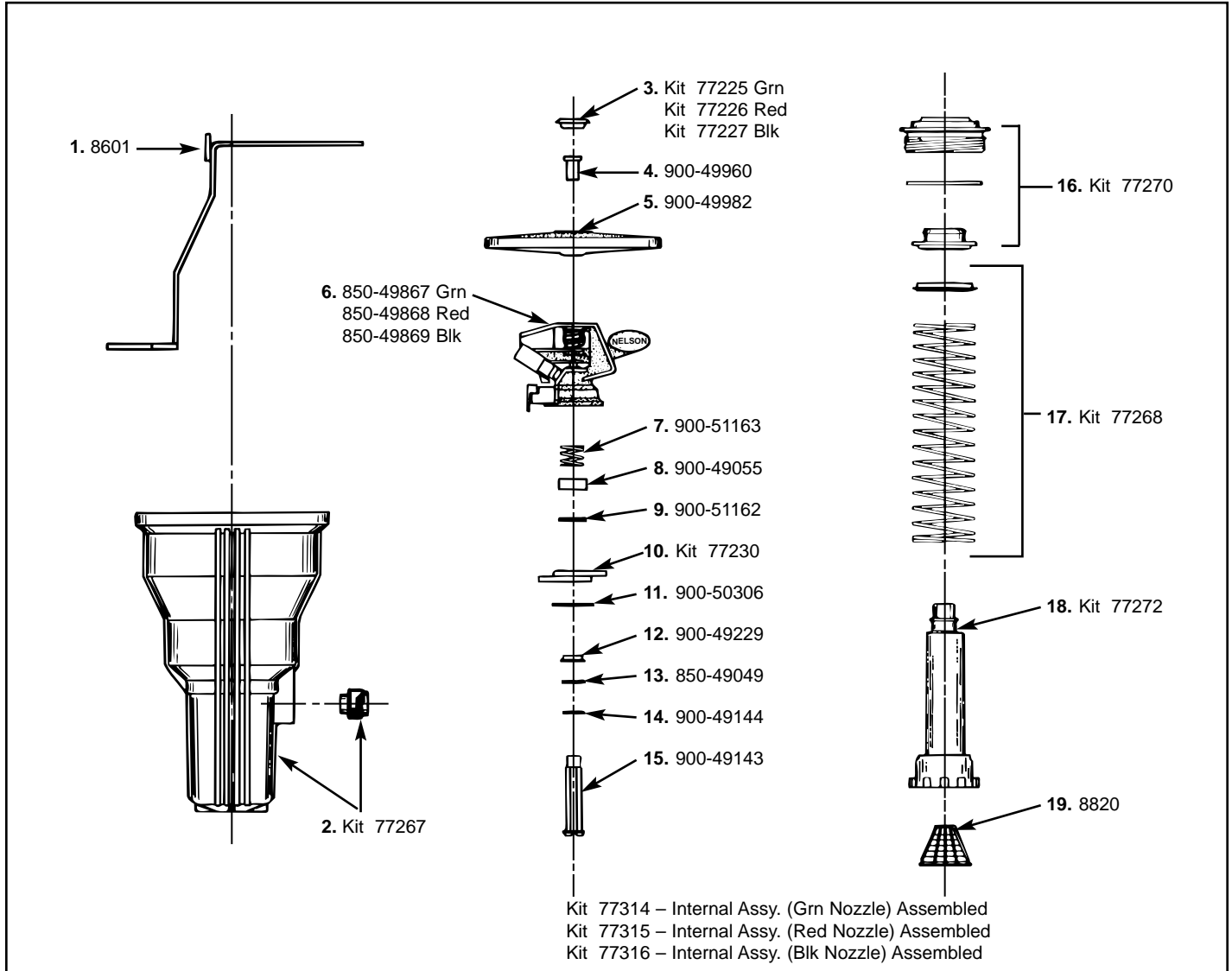


Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty.
900-52351	Locking Screw	1	1	900-51338	Case (7000, 7005, 7500, 7503)	10	1
900-52344	7000/7500 Protective Cap	2	1	900-51379	Case (7010, 7015, 7510)	10	1
77356	Click-Set® Disc	3	1	900-51339	Filter	11	1
77357	Nozzle diffuser screw (bag of 10)	4	1	77464	7000/7500 ADV Kit	12	1
900-51417	Plate (7000, 7005, 7010, 7015, 7500, 7503, 7510)	5	1	900-51364	Nozzle Tree (5) (7000, 7005, 7010, 7015)	13	1
900-51382	Cap & Seal	6	1	900-51370	Nozzle Tree (6) (7500, 7503, 7510)	13	1
900-51414	Spring Retainer, Washer	7	1	976-52497	Gear Drive All-In-One Wrench	14	1
900-51343	Spring Retainer	8	1	900-51349	Piston Retaining Clamp	15	1
900-51418	Spring (7000/7500 Series)	9	1	900-51347	7000/7500 series seal	16	1
				77502	7000/7500 Plate screws	17	2
				77xxx	S.S. plate, screws, protective cap	18	1



# Impact Sprinklers

## Rotor Pop-Up Models: 6702, 6703, 6704

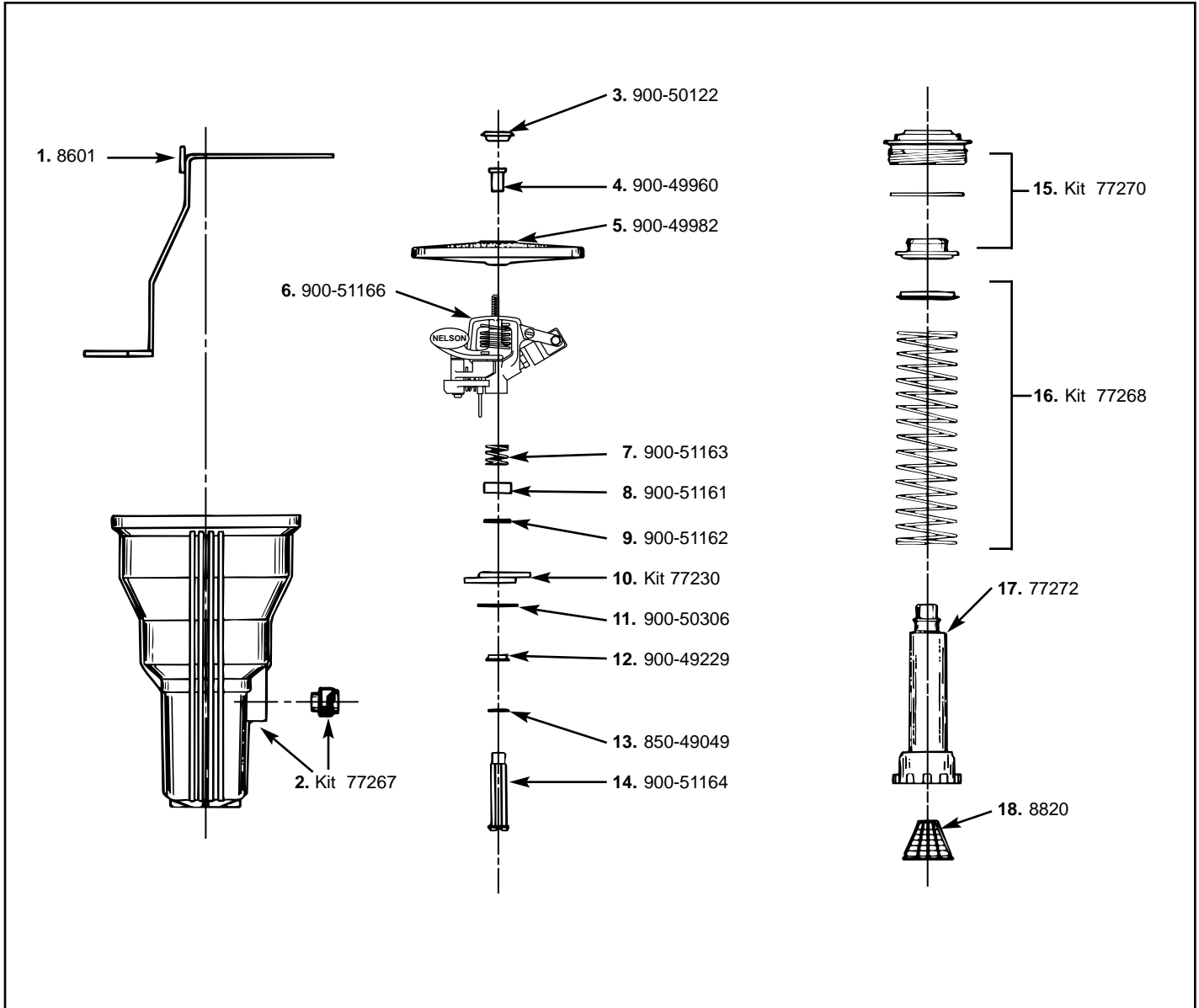


Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
8601	Wrench	1	1	900-50306	Washer	11	6
77267	Housing W/Plug	2	1	900-49229	White Shoulder Washer	12	1
77225	Plug (Grn)	3	6	850-49049	Black Rubber Washer	13	1
77226	Plug (Red)	3	6	900-49144	White Rubber Washer	14	1
77227	Plug (Blk)	3	6	900-49143	Bearing Spindle	15	1
900-49960	Nut	4	1	77270	Retainer Nut,O-Ring Kit, Seal Kit	16	1
900-49982	Lid	5	1	77268	Ret./Spring Kit	17	1
850-49867	Head Assy. (Grn)	6	1	77272	Piston Kit	18	2
850-49868	Head Assy. (Red)	6	1	8820	Anti Drain Valve/Filter Screen Assy.	19	1
850-49869	Head Assy. (Black)	6	1	77314	Internal Assy. (Grn)	6-19 Assembled	
900-51163	Spring	7	1	77315	Internal Assy. (Red)	6-19 Assembled	
900-49055	Spring Hood	8	1	77316	Internal Assy (Blk)	6-19 Assembled	
900-51162	Washer	9	1				
77230	Trip Collar Kit	10	2				



# Impact Sprinklers

## Rotor Pop-Up Models: 6764-1992 and later

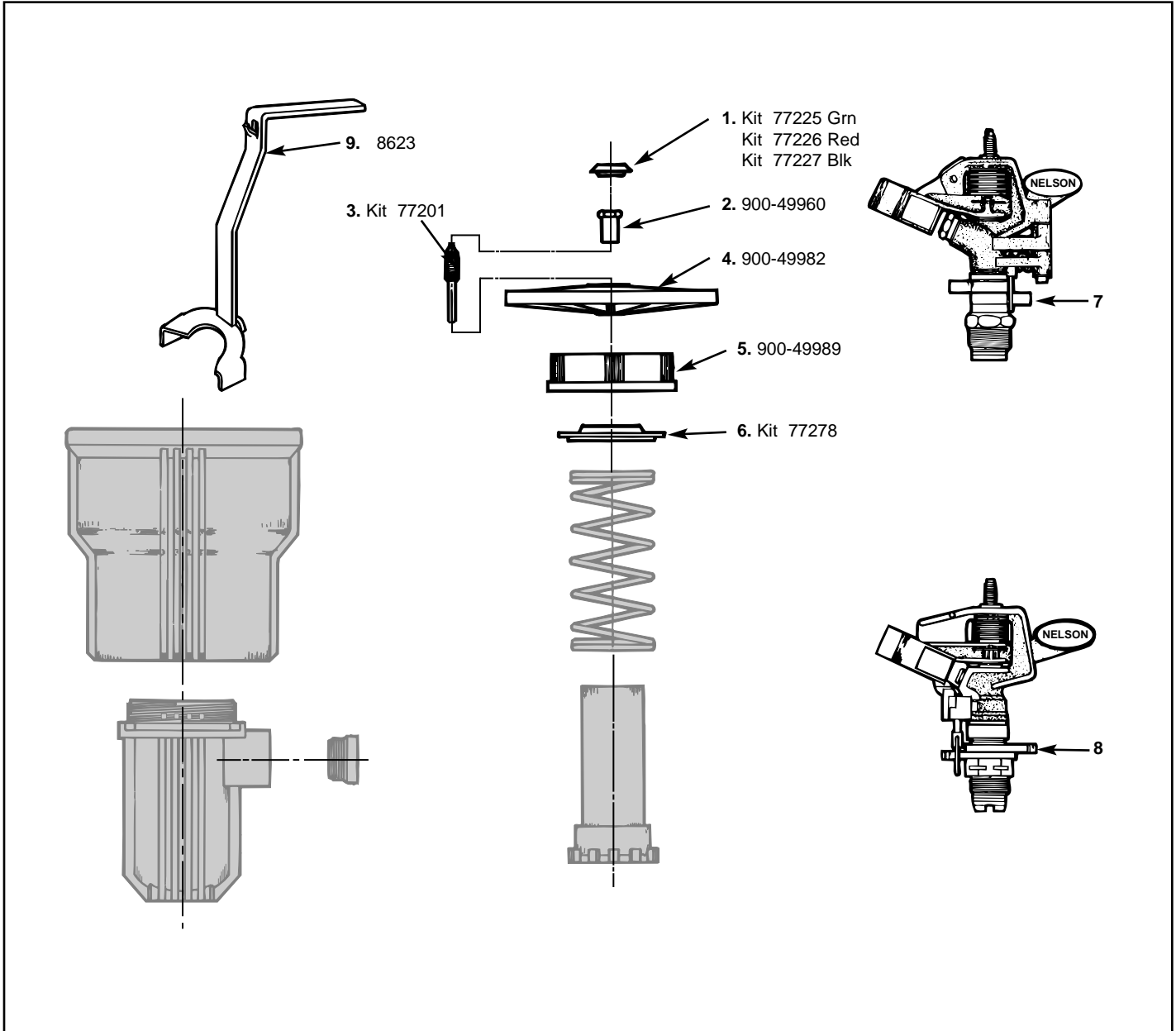


Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty.
8601	Wrench	1	1	900-50306	Washer	11	1
77267	Housing W/Plug	2	1	900-49229	White Shoulder Washer	12	1
900-50122	Plug (Bronze)	3	1	850-49049	Black Rubber Washer	13	1
900-49960	Nut	4	1	900-51164	Bearing Spindle	14	1
900-49982	Lid	5	1	77270	Retainer Nut, O-ring kit, Seal kit	15	2
900-51166	Head Assy. (Brass)	6	1	77268	Ret./Spring Kit	16	1
900-51161	Bearing Hood	8	1	77272	Piston (Machined)	17	1
900-51162	Washer	9	1	8820	Anti Drain Valve/Filter Screen Assy.	18	1
77230	Trip Collar Kit	10	2				



# Impact Sprinklers-Prior to 1992

## Heavy Duty Rotor Models: 6732, 6733, 6734, 6764, 6765



Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
77225	Plug (Grn)	1	6	77278	Seal Kit (Bag of 6)	6	6
77226	Plug (Red)	1	6	77279	Spring Kit	8	6
77227	Plug (Blk)	1	6	1318	Impact Ab Arm Part Circle (Brass)	7	1
900-49960	Retainer Nut	2	1	1322	Beta Impact (Plastic) Grn Nozzle	8	1
77201	Fulcrum Pin Kit	3	6	1323	Beta Impact (Plastic) Red Nozzle	8	1
900-49982	Lid	4	1	1324	Beta Impact (Plastic) Blk Nozzle	8	1
900-49989	Cap	5	1	8623	Wrench	9	1





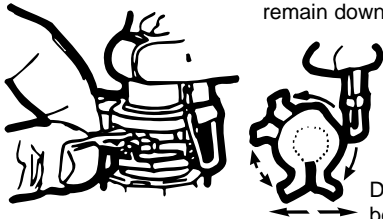
# Operating and Servicing Instructions Beta Plastic Impacts

Model .....6702                    6703                    6704  
 Nozzle.....Green                    Red                    Black

### How to adjust for part circle

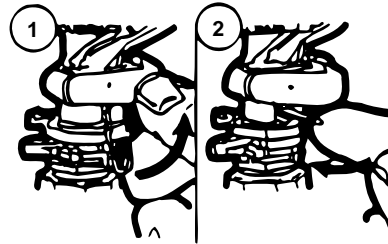
#### To Set Arc

Gently separate trip collars by pushing ends outward with thumb and set to any part of a circular pattern. Trip pin must remain downward for part circle operation.



Distance of travel for trip pin between collars determines arc.

### How to adjust for full circle



#### Up

Pull metal trip pin upwards to a right angle from plastic arm.

#### Over

Push metal pin to the left. This achieves full circle operation in forward (clockwise) motion.

### Stream Breakup/Distance Control:

While the head is operating turn the adjustable diffuser pin into or out of the nozzle stream for the desired stream breakup and distance of throw.

### Internal Assembly & Case

To Remove:

1. Pry up lid
2. Insert special wrench (#8601) around the hex on the retainer nut and place the bottom edge of lid over tab at top of wrench. (Metal trip pin should be up and pushed to left to clear trip collars.)
3. Turn wrench in a counterclockwise direction until the internal assembly can be removed from the case.

To Replace:

1. Place wrench around hex of the retainer nut and push nut downward until tab at top of wrench can engage bottom edge of lid.
2. Insert assembly into case, engage threads and tighten in a clockwise direction.

### Filter Screen

To Remove:

1. Pry from piston using a small screwdriver or similar tool.

To Replace:

1. Simply press screen into piston.

### Sprinkler Head Assembly & Piston Assembly

To Remove:

1. Remove filter screen.
2. Insert handle end of special wrench into piston and engage slots in spindle with end of handle.

3. While wrench is held in firm engagement with slots, turn sprinkler head in a counterclockwise direction (metal trip pin should be up and pushed to left to clear trip collars). Spindle will drop free of piston when wrench is removed. Should it be necessary to replace the spindle washer (press fit inside of piston) insert a screwdriver or similar tool into the top of piston and push out washer.

To Replace:

1. Hold piston assembly in inverted position and drop spindle in place (white rubber washer should be against head of spindle with black rubber washer on top - if spindle washer was removed it should be on top of black rubber washer.)
2. Insert handle of special wrench into piston and engage slots of spindle.
3. While wrench is held in firm engagement with slots, right side the piston assembly and install spring, hood and upper bearing washer and thread sprinkler head onto spindle and tighten in a clockwise direction.
4. Replace the filter screen.

### Piston Assembly

Dis-Assembly:

1. Separate ends of trip collars and lift from piston. Washer, retainer unit, and spring can then be removed from piston

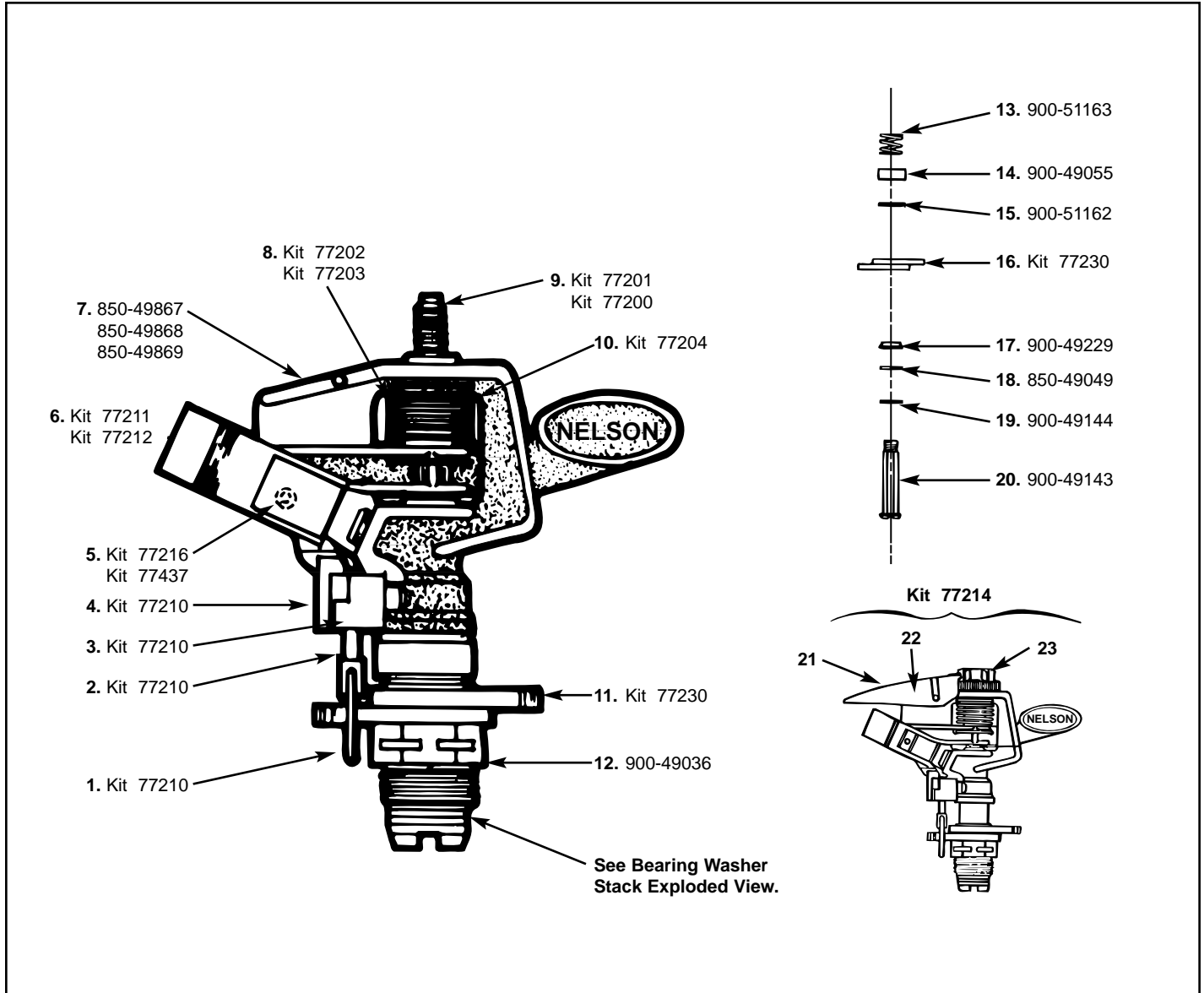
Assembly:

1. Place spring over piston. Set Retainer nut on spring and push downward over piston. Install washer and replace trip collars



# Sprinkler Heads (Plastic 1/2")

Models: 1322, 1323, 1324, 1372, 1373, 1374

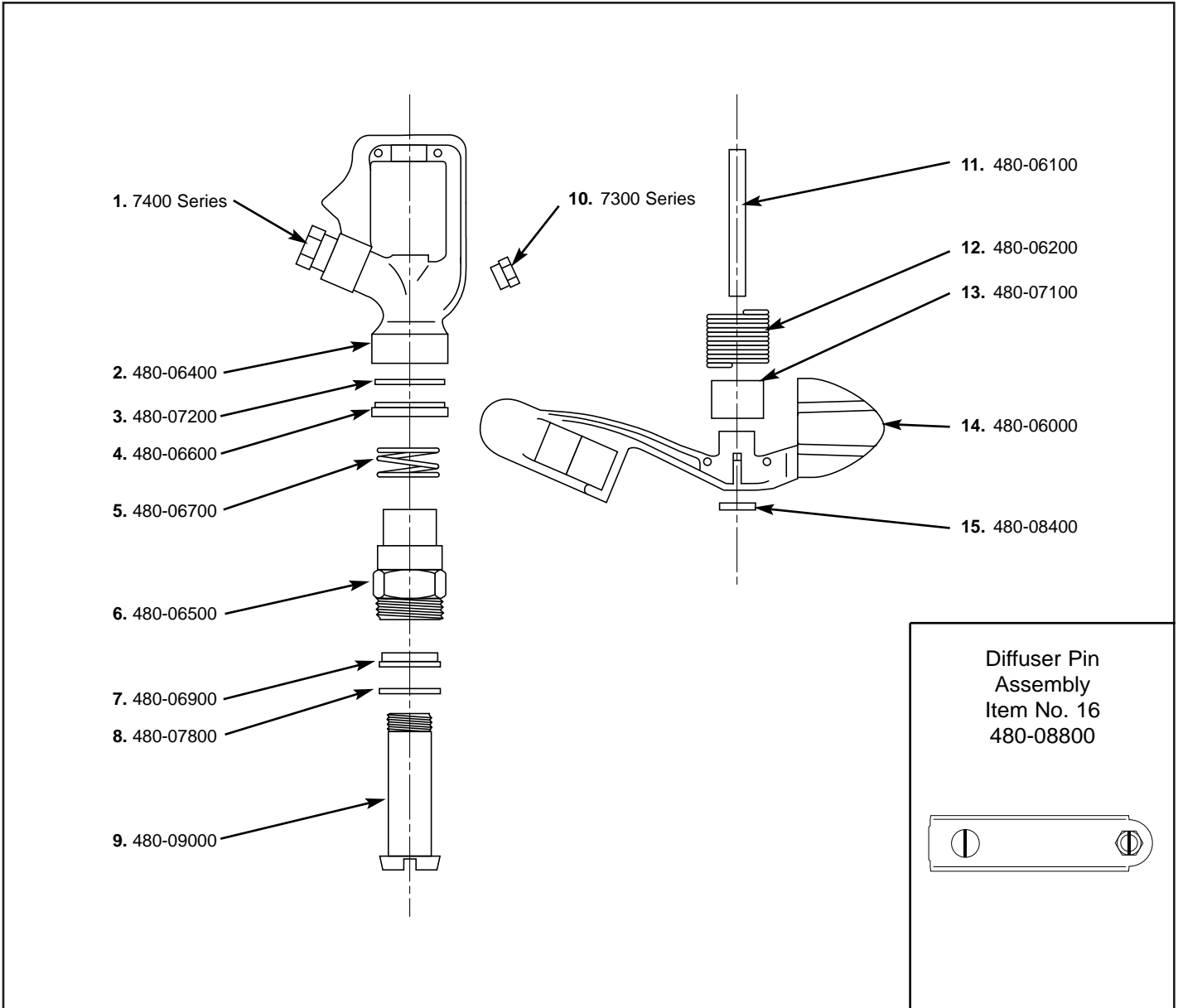


Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
77210	Trip Assembly	1,2,3,4	1	77204	Arm Hood Kit	10	2
77216	Plastic Dif. Pin	5	6	77230	Trip Collar Kit	11	2
77437	Metal Dif. Pin	5		900-49036	Bearing Spindle Housing	12	1
77211	Arm Kit (Blk)	6	2	900-51163	Spring	13	1
77212	Arm Kit (Grn, Red)	6	2	900-49055	Spring Hood	14	1
850-49867	Green Head Assembly	7	1	900-51162	Large White Washer	15	1
850-49868	Red Head Assembly	7	1	77230	Trip Collar Kit	16	2
850-49869	Blk Head Assembly	7	1	900-49229	White Shoulder Washer	17	1
77202	Sprg Kit Grn, Red	8	6	850-49049	Black Rubber Washer	18	1
77203	Sprg Kit Red, Blk	8	2	900-49144	White Rubber Washer	19	1
77200	Std. Fulcrum Pin	9	2	900-49143	Bearing Spindle	20	1
77201	Threaded Fulcrum Pin	9	6	77214	Deflector Shield	21,22,23	1



# Sprinkler Heads (Brass 3/4")

## Full Circle Model: 1561

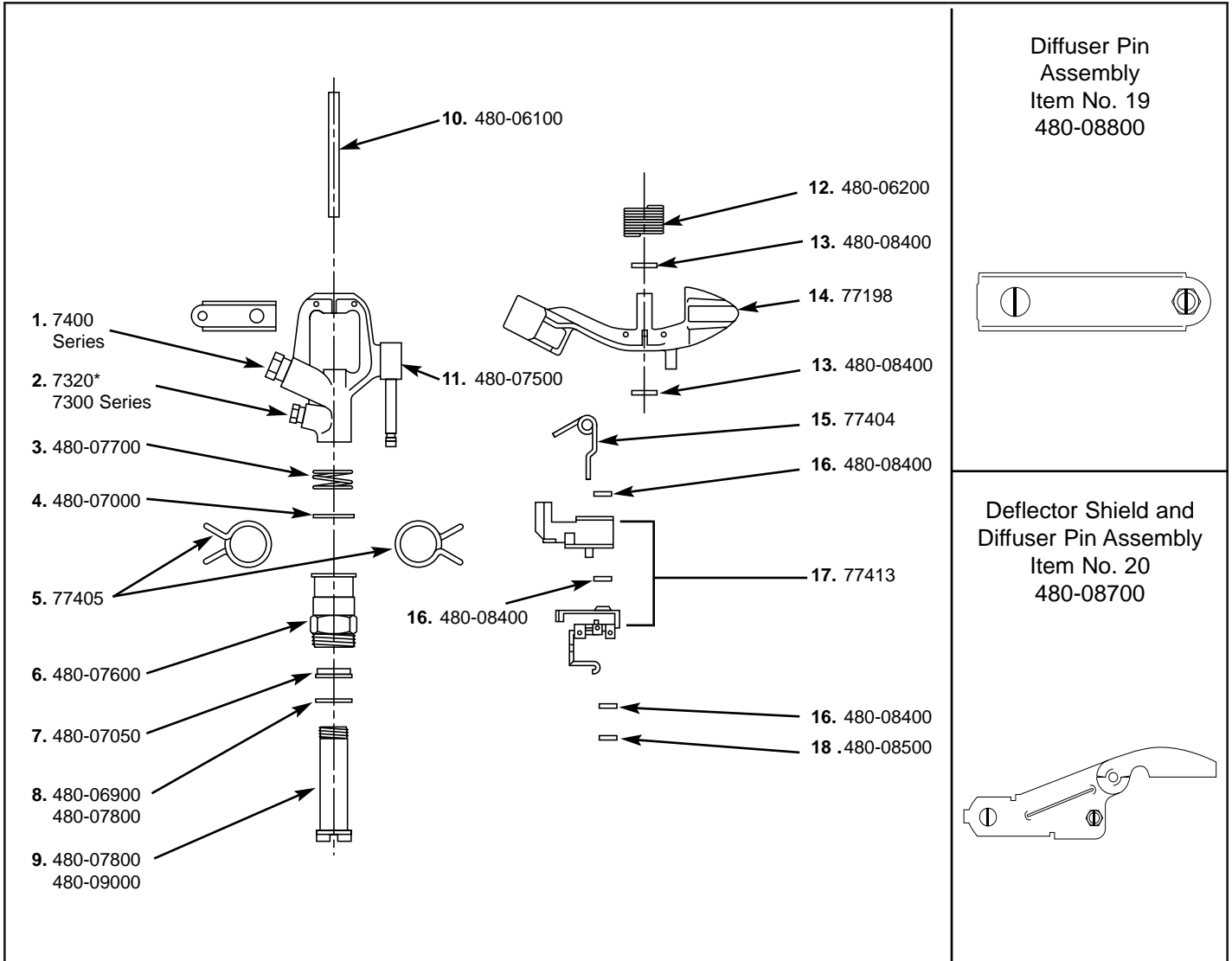


Item No.	Description	Part No.	Item No.	Description	Part No.
1	Brass Nozzle 2RB	7400 Series	10	Brass Nozzle 1RB (Or Brass Plug)	7300 Series 7320
2	Body 25° Angle	480-06400	11	Driver Arm Pin	480-06100
3	Teflon Washer	480-07200	12	S.S. Spring-Driver Arm	480-06200
4	Hood Spring	480-06600	13	Hood-Driver Arm	480-07100
5	Pressure Spring	480-06700	14	Driver Arm	480-06000
6	Housing with Sealed Bearing	480-06500	15	Brass Washer	480-08400
7	Spindle Washer	480-06900	16	Diffuser Pin Assembly	480-08800
8	Spindle Washer	480-07800			
9	Spindle with Sealed Bearing	480-09000			
*Parts available in Repair Kit 5BSK-S202					



# Sprinkler Heads (Brass 3/4")

## Part Circle Models: 1601, 1616, 1618



Diffuser Pin  
Assembly  
Item No. 19  
480-08800

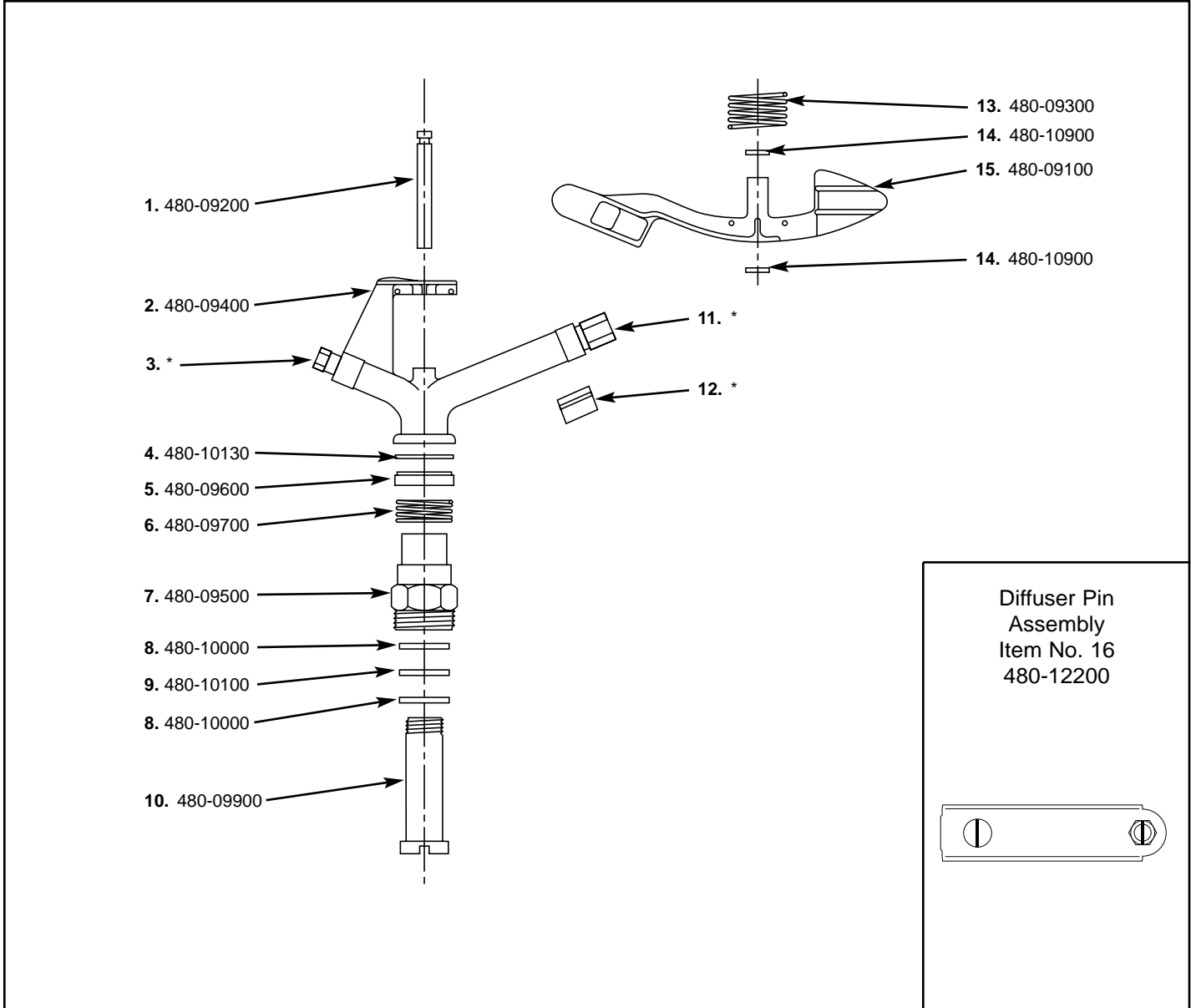
Deflector Shield and  
Diffuser Pin Assembly  
Item No. 20  
480-08700

Item No.	Description	Part No.	Item No.	Description	Part No.
1	Brass Nozzle	7400 Series	11	Body	480-07500
2	Brass Plug (Or Brass Nozzle 7300 Series)	7320*	12	S.S. Spring-Driver Arm	480-06200
3	Pressure Spring	480-07700	13	Brass Washer Driver Arm	480-08400
4	Teflon Washer	480-07000	14	Driver Arm AB	77198
5	Friction Collar	77405	15	Trip Spring	77404
6	Housing with Plain Bearing (Or Housing with Sealed Bearing)	480-07600	16	Washer Trip Spacer	480-08400
7	Teflon Washer	480-07050	17	Trip Assembly kit	77413
8	Spindle Washer (Or Comp. Washer Plain Bearing)	480-06900 480-07800	18	"E" Clip	480-08500
9	Spindle with Plain Bearing (1601) (Or Spindle with Sealed Bearing)	480-07800 480-09000	19	Diffuser Pin Assembly	480-08800
10	Pin Driver Arm Shaft	480-06100	20	Deflector Shield & Diff. Pin Assy.	480-08700
*See Latest Catalog for Items					



# Sprinkler Heads (Brass 1")

## Full Circle Model: 1621

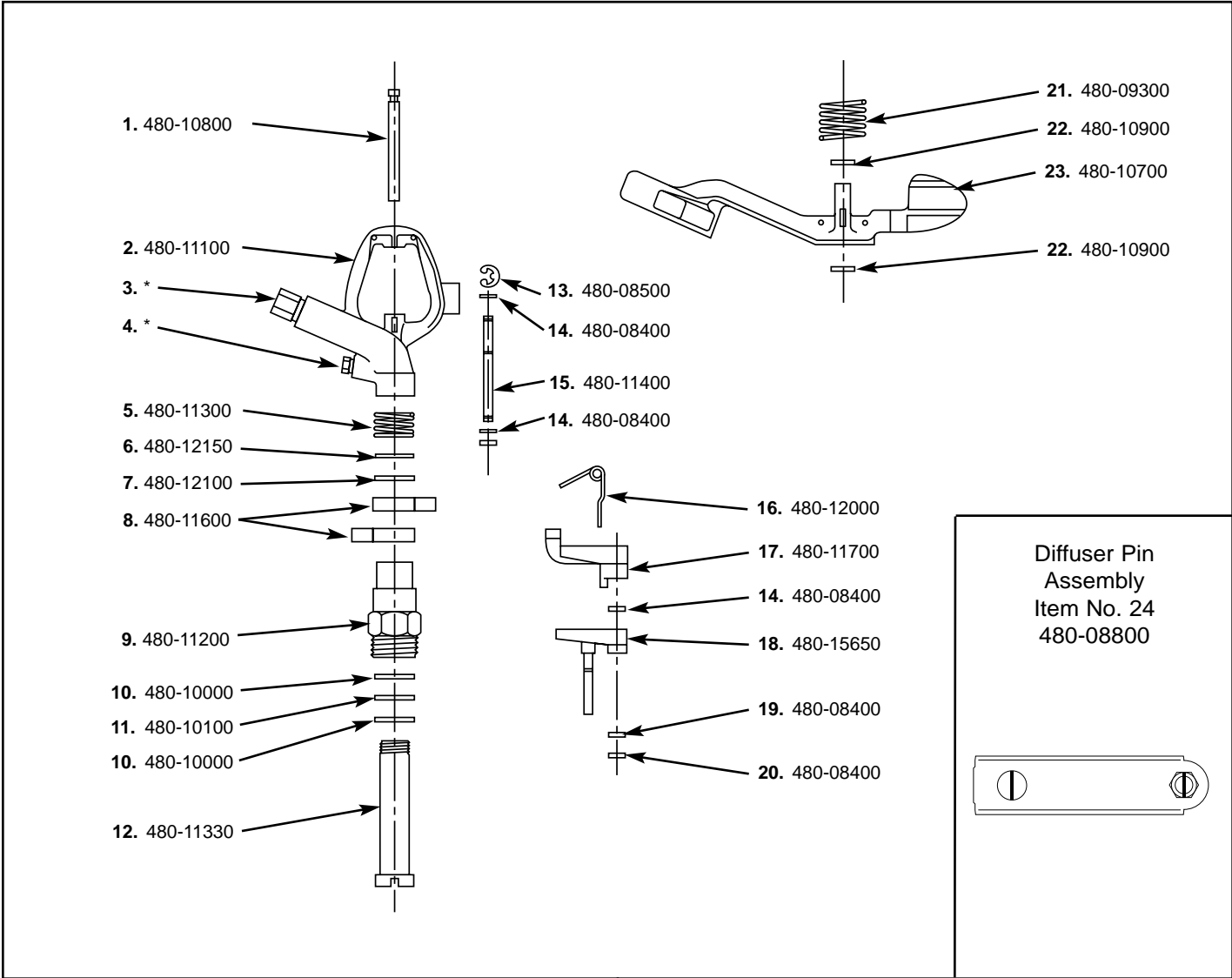


Item No.	Description	Part No.	Item No.	Description	Part No.
1	Pin Driver Arm Shaft	480-09200	11	Nozzle Range	7500 Series
2	Brass Body	480-09400	12	Stream Straight Vane	*
3	Driver Nozzle	*	13	Spring-Driver Arm	480-09300
4	Washer Pressure Spring	480-10130	14	Upper and Lower Washers	480-10900
5	Pressure Spring Hood	480-09600	15	Driver Arm	480-09100
6	Pressure Spring	480-09700	16	Diffuser Pin Assembly	480-12200
7	Housing	480-09500	*See Latest Catalog for Items		
8	Buna-"N" Washer	480-10000			
9	Teflon Washer	480-10100			
10	Spindle	480-09900			

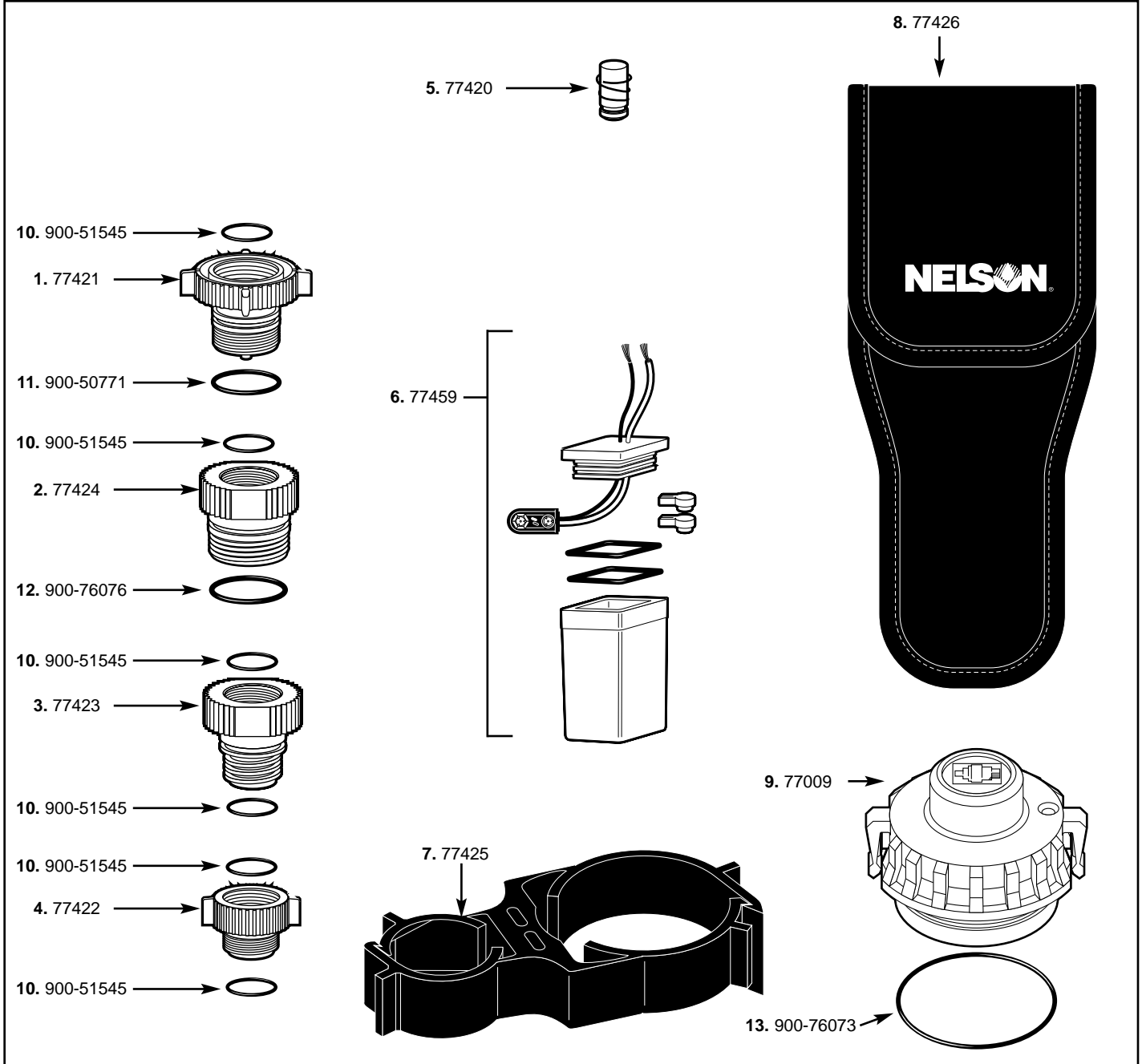


# Sprinkler Heads (Brass 1")

## Part Circle Model: 1641



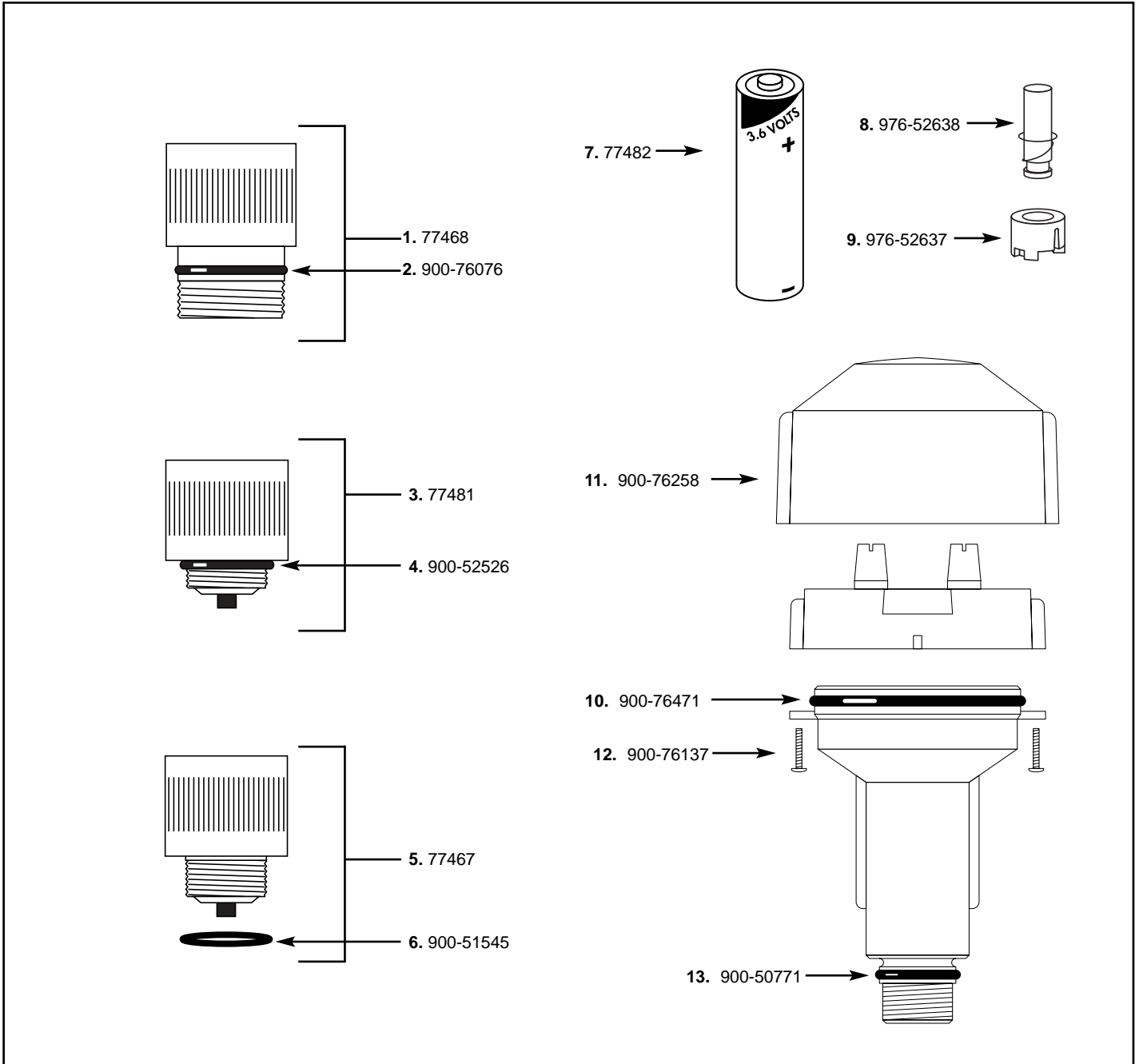
Item No.	Description	Part No.	Item No.	Description	Part No.
1	Pin-Driver Arm Shaft	480-10800	14	Washer Trip Spacer	480-08400
2	Body	480-11100	15	Trip Assembly Shaft	480-11400
3	Nozzle Range	7500 Series	16	Trip Spring	480-12000
4	Inner Nozzle Plug	7300 Series	17	Upper Trip Casting	480-11700
5	Pressure Spring	480-11300	18	Lower Trip Assembly	480-15650
6	Teflon Spring Washer	480-12150	19	Washer	480-08400
7	Brass Spring Washer	480-12100	20	Space Washer	480-08400
8	Friction Collar	480-11600	21	Spring Driver Arm	480-09300
9	Housing	480-11200	22	Upper and Lower Washer	480-10900
10	Buna-"N" Washer	480-10000	23	Driver Arm	480-10700
11	Teflon Washer	480-10100	24	Diffuser Pin Assembly	480-08800
12	Spindle	480-11330			
13	"E" Clip	480-08500			
* See Latest Catalog for Item					



Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
77421	Nelson Adapter Assembly Kit	1	1	77425	Mounting Clip for PG	7	1
77424	RB Adapter Assembly Kit	2	1	77426	Vinyl Jacket	8	1
77423	TO Adapter Assembly Kit	3	1	77009	PG Plug thru Cover	9	1
77422	HD Adapter Assembly Kit	4	1	900-51545	O-Ring	10	1
77420	Plunger Assembly Kit	5	1	900-50771	O-Ring	11	1
77459	8010/8030 Battery case and cover replacement kit	6	1	900-76076	O-Ring	12	1
				900-76073	O-Ring	13	1

## SoloRain

Models: 8014, 8015, 8015E, 8014SR



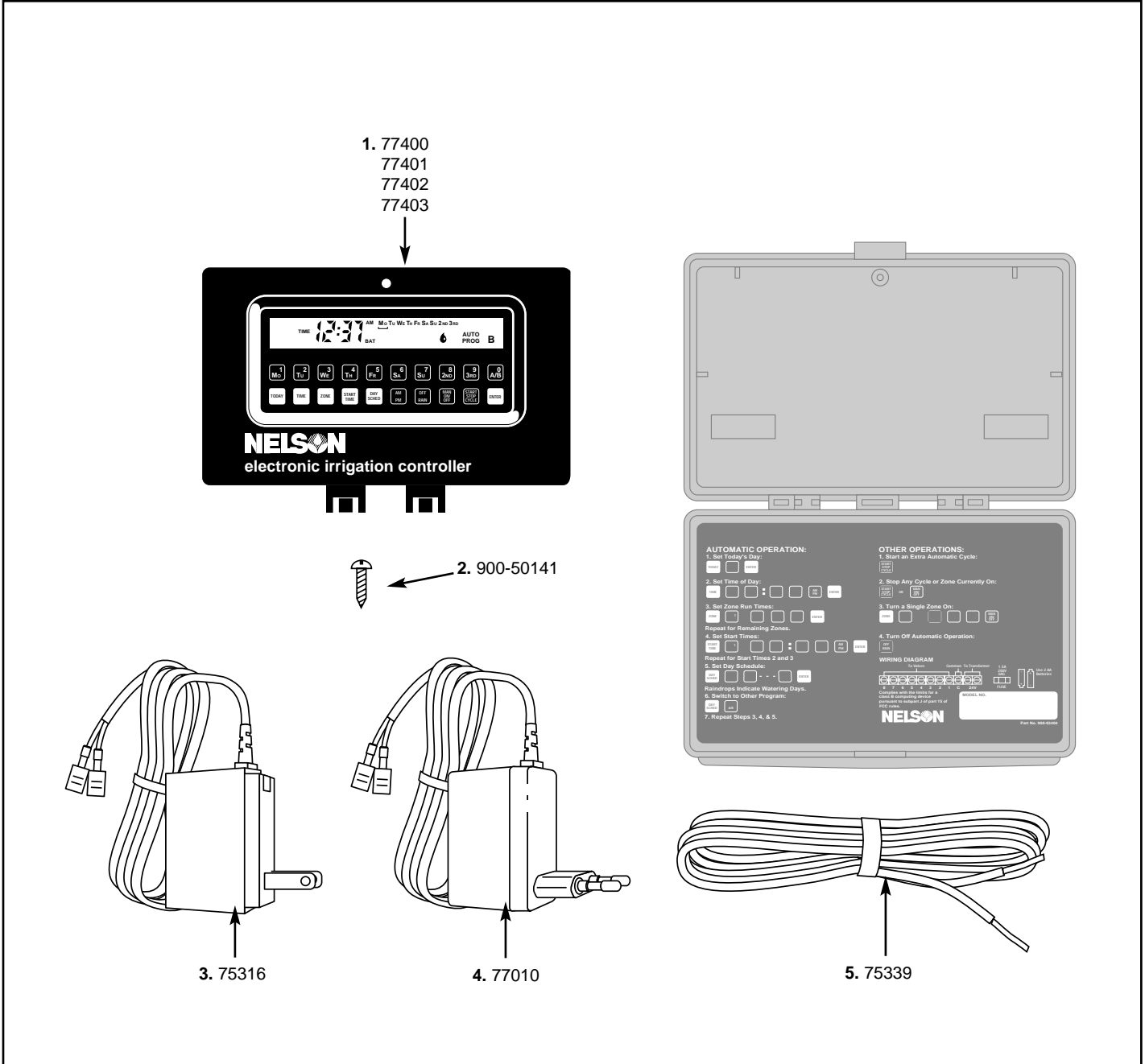
Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
77468	Rainbird Adapter Assembly Kit	1	1	976-52638	Plunger with spring	8	1
900-76076	Rainbird adapter o-ring	2	1	976-52637	Plunger retainer	9	1
77481	Weathermatic Adapter Assembly Kit	3	1	900-76471	Body o-ring	10	1
900-52526	Weathermatic Adapter o-ring	4	1	900-76258	Protective Cover	11	1
77467	Irritrol Adapter Assembly Kit	5	1	900-76137	Body screws	12	2
900-51545	Irritrol Adapter o-ring	6	1	900-50771	O-ring	13	1
77482	3.6V Lithium battery	7	1				





# Controllers

Models: 8424, 8425, 8426, 8427, 8428, 8429 discontinued

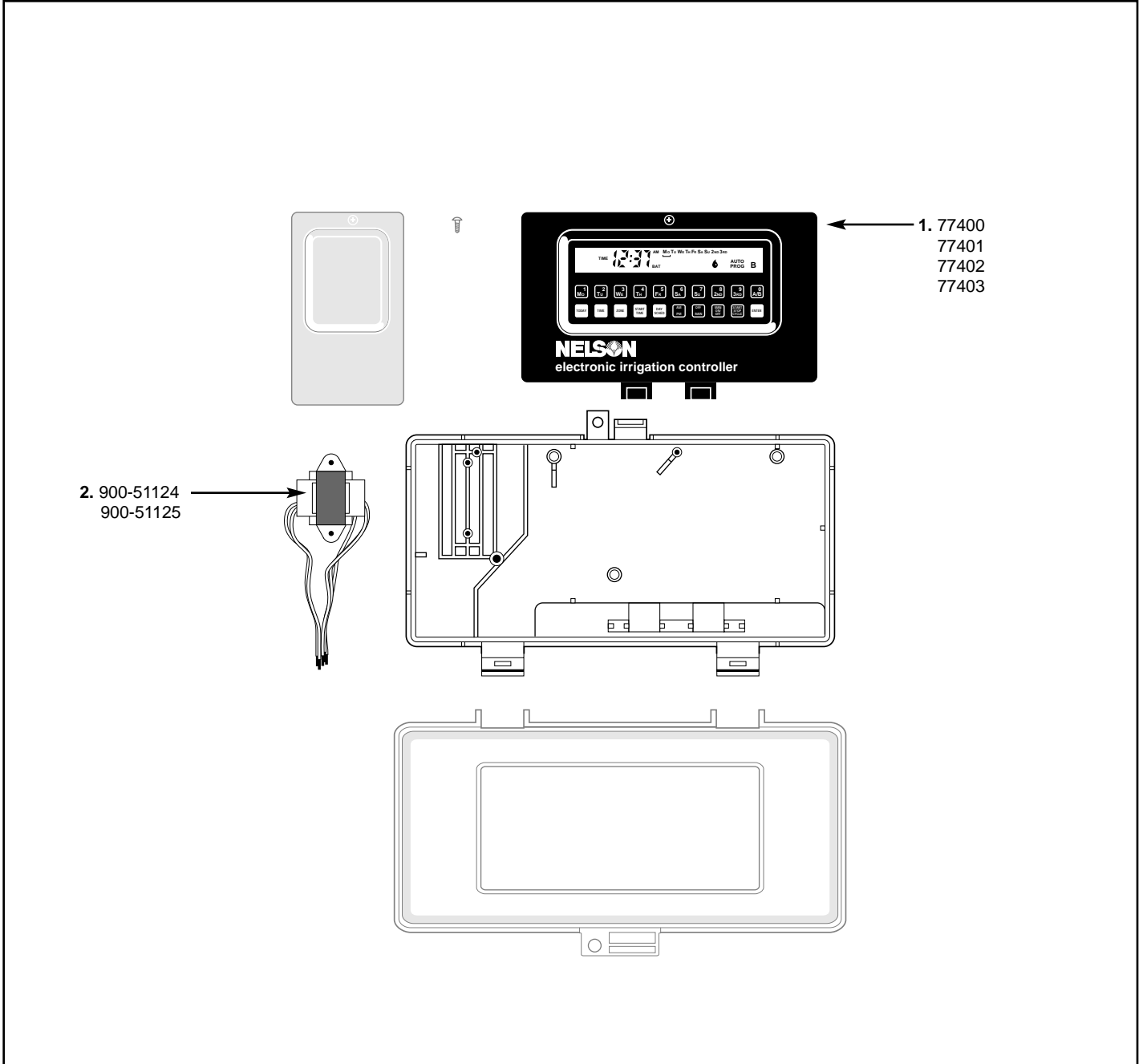


Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
77400	Panel PCB Assy. (8424)	1	1	900-50141	Panel Screw	2	1
77401	Panel PCB Assy. (8425)	1	1	75316	115V Transformer	3	1
77402	Panel PCB Assy. (8427, 8426)	1	1	77010	230V Transformer	4	1
77403	Panel PCB Assy. (8429, 8428)	1	1	75339	Black Wire	5	1



## Controllers

Models: 8434, 8435, 8436, 8437, 8438, 8439 discontinued

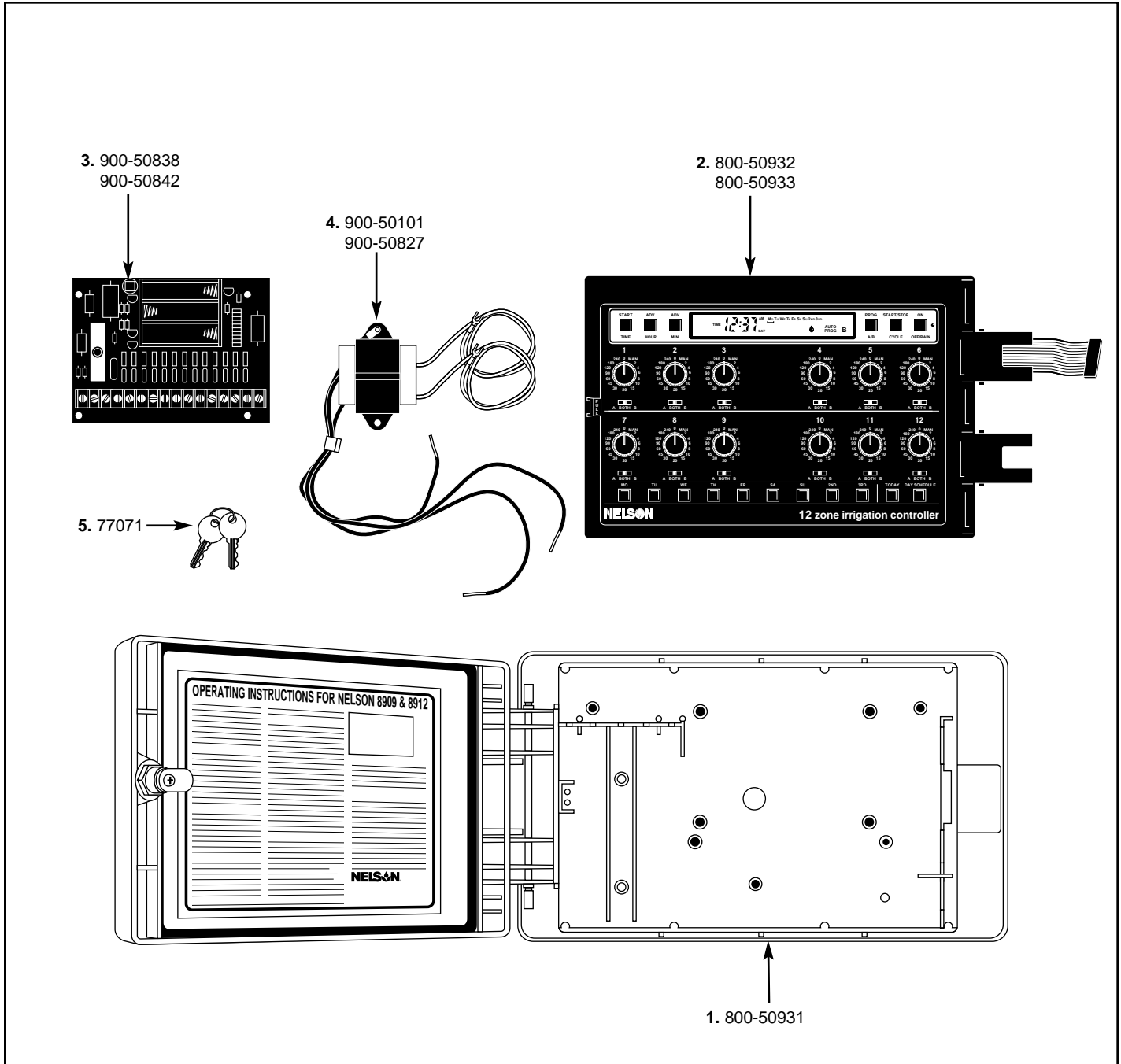


Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
77400	Panel PCB Assy. (8434)	1	1	77403	Panel PCB Assy. (8439, 8438)	1	1
77401	Panel PCB Assy. (8435)	1	1	900-51124	Transformer – 115V	2	1
77402	Panel PCB Assy. (8437, 8436)	1	1	900-51125	Transformer – 230V	2	1



# Controllers

## Models: 8908, 8912 discontinued



Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
800-50931	Box Assembly	1	1	900-50842	Rear PCB Assy. – 12 Zone	3	1
800-50932	Front Panel Assy. – 8 Zone	2	1	900-50101	Transformer – 115V	4	1
800-50933	Front Panel Assy. – 12 Zone	2	1	900-50827	Transformer – 230V	4	1
900-50838	Rear PCB Assy. – 8 Zone	3	1	77071	Keys	5	1

## 8100 Series Irrigation Controller

**1. 77485 (120V)**

**2. 77486 (230V Int'l)**

**3. 77500 (230V Australia)**

**4. 976-52629**

**5. 976-52630**

**6. 976-52635**

**7. 976-52639**

**8. 976-52631**

**9. 976-52632**

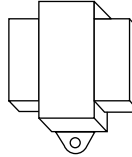
Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
77485	8100 Controller 120V Plug-in transformer		1	976-52635	8100 1/2 amp fuse	6	1
77486	8100 Controller 230V Plug-in transformer		2	976-52639	8100 Battery cover	7	1
77500	8100 Controller 230V (Australia) Plug-in transformer		3	976-52631	8100 3-language reference card	8	1
976-52629	8100 Wire skirt		4	976-52632	8100 2-language reference card	9	1
976-52630	8100 Instruction manual		5				



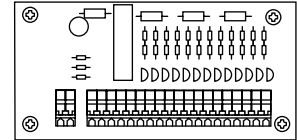
# SmartZone™ EZ Irrigation Controller



- 1. 77434 - 4 Zone Front Panel
- 77435 - 6 Zone Front Panel
- 77436 - 8 Zone Front Panel
- 77419 - 12 Zone Front Panel

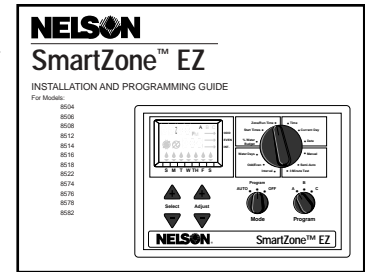


- 3. 77005 (120V)
- 77006 (230V Intr'l)



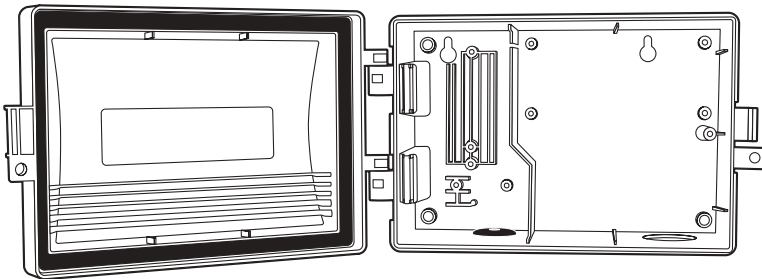
- 2. 77418, 4 Zone Interconnect Board
- 77431, 6 Zone Interconnect Board
- 77432, 8 Zone Interconnect Board
- 77433, 12 Zone Interconnect Board

- 4. 900-04862 →
- 900-04856 (Intr'l)



10. 900-51853

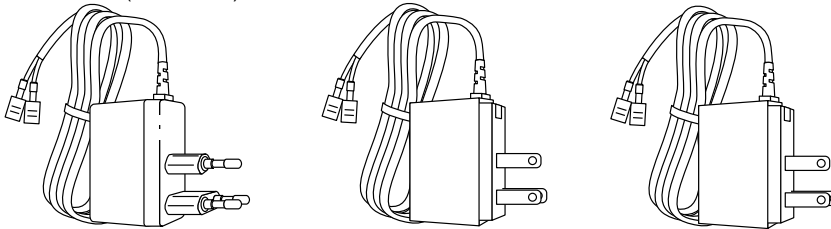
9. 900-51852



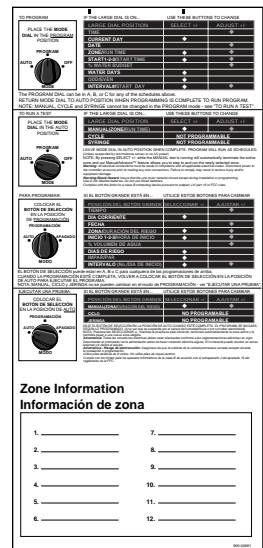
6. 77010  
(230V Intr'l)

7. 77515  
(120V)

8. 77501  
(230V Australia)



- 5. 900-04864 →



Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
77434	4 Zone Front Panel	1	1	77006	Transformer-230V 50Hz	3	1
77435	6 Zone Front Panel	1	1	900-04862	Instruction Book (Eng/Span)	4	1
77436	8 Zone Front Panel	1	1	900-04861	Hang Card (Eng/Span)	5	1
77419	12 Zone Front Panel	1	1	900-04856	Instruction Book (Fr/Gr/Pt/It)	5	1
77418	4 Zone Interconnect Board	2	1	77010	230V Transformer	6	1
77431	6 Zone Interconnect Board	2	1	77515	120V Grounded Transformer	7	1
77432	8 Zone Interconnect Board	2	1	77501	240V Transformer (Australia)	8	1
77433	12 Zone Interconnect Board	2	1	900-51852	SmartZone EZ Box (outdoor)	9	1
77005	Transformer-120V 60Hz	3	1	900-51853	SmartZone EZ Lid	10	1

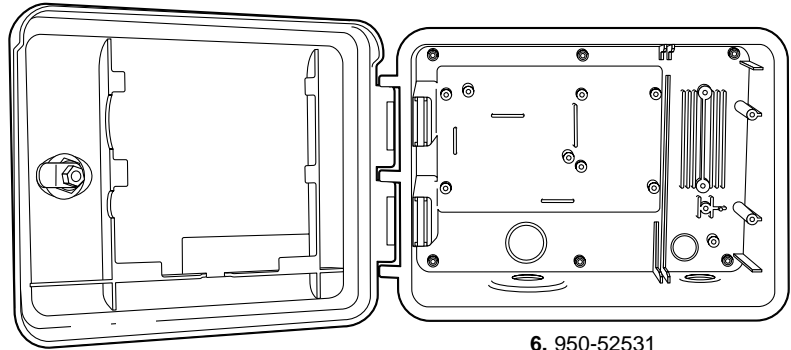


# EZ Pro™ Irrigation Controller

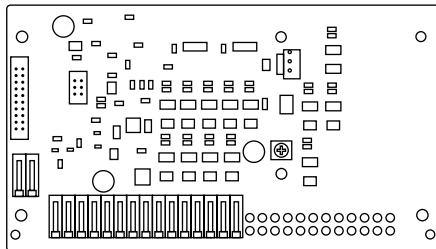
## EZ Command™ Remote Programmer



1. 77473, EZ Pro Front Panel  
NOTE: Adapts to any 4 thru 24 zone interconnect board



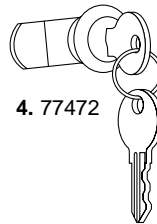
6. 950-52531



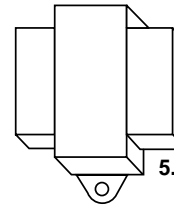
2. 77474, EZ Pro 4 Zone Interconnect Board  
77475, EZ Pro 6 Zone Interconnect Board  
77476, EZ Pro 8 Zone Interconnect Board  
77477, EZ Pro 12 Zone Interconnect Board  
77478, EZ Pro 16 Zone Interconnect Board  
77479, EZ Pro 20 Zone Interconnect Board  
77480, EZ Pro 24 Zone Interconnect Board



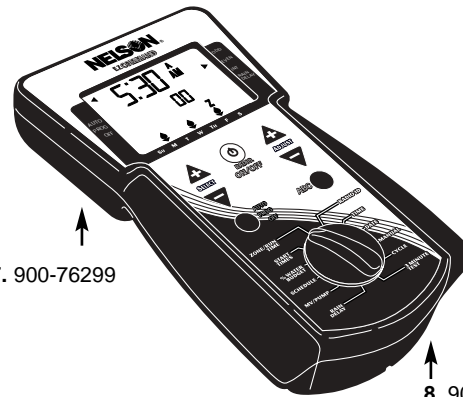
3. 77471



4. 77472



5. 77469 (120V)  
77470 (230V Intr'l)



7. 900-76299

8. 900-76300

9. 900-60150

Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
77473	EZ Pro front panel	1	1	77471	Plastic lock	3	1
77474	EZ Pro 4 Zone Interconnect Board	2	1	77472	Metal lock and key	4	1
77475	EZ Pro 6 Zone Interconnect Board	2	1	77469	EZ Pro 120V AC Transformer	5	1
77476	EZ Pro 8 Zone Interconnect Board	2	1	77470	EZ Pro 230V AC Transformer	5	1
77477	EZ Pro 12 Zone Interconnect Board	2	1	950-52531	EZ Pro Box Assembly	6	1
77478	EZ Pro 16 Zone Interconnect Board	2	1	900-72699	Bottom Housing	7	1
77479	EZ Pro 20 Zone Interconnect Board	2	1	900-76300	Battery Cover	8	1
77480	EZ Pro 24 Zone Interconnect Board	2	1	900-60150	Screws	9	1

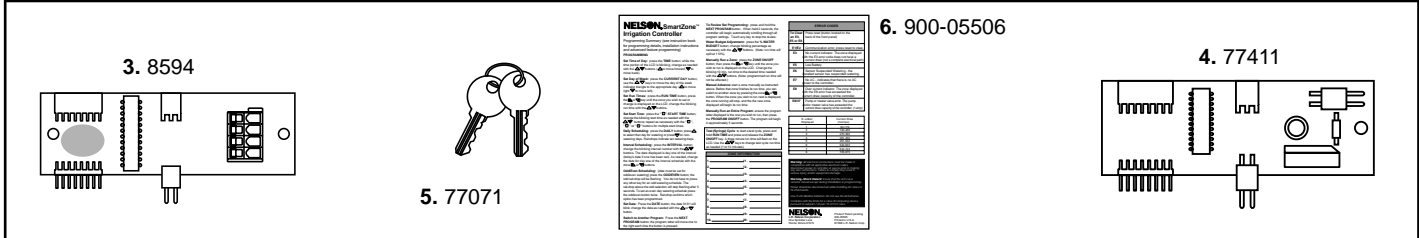
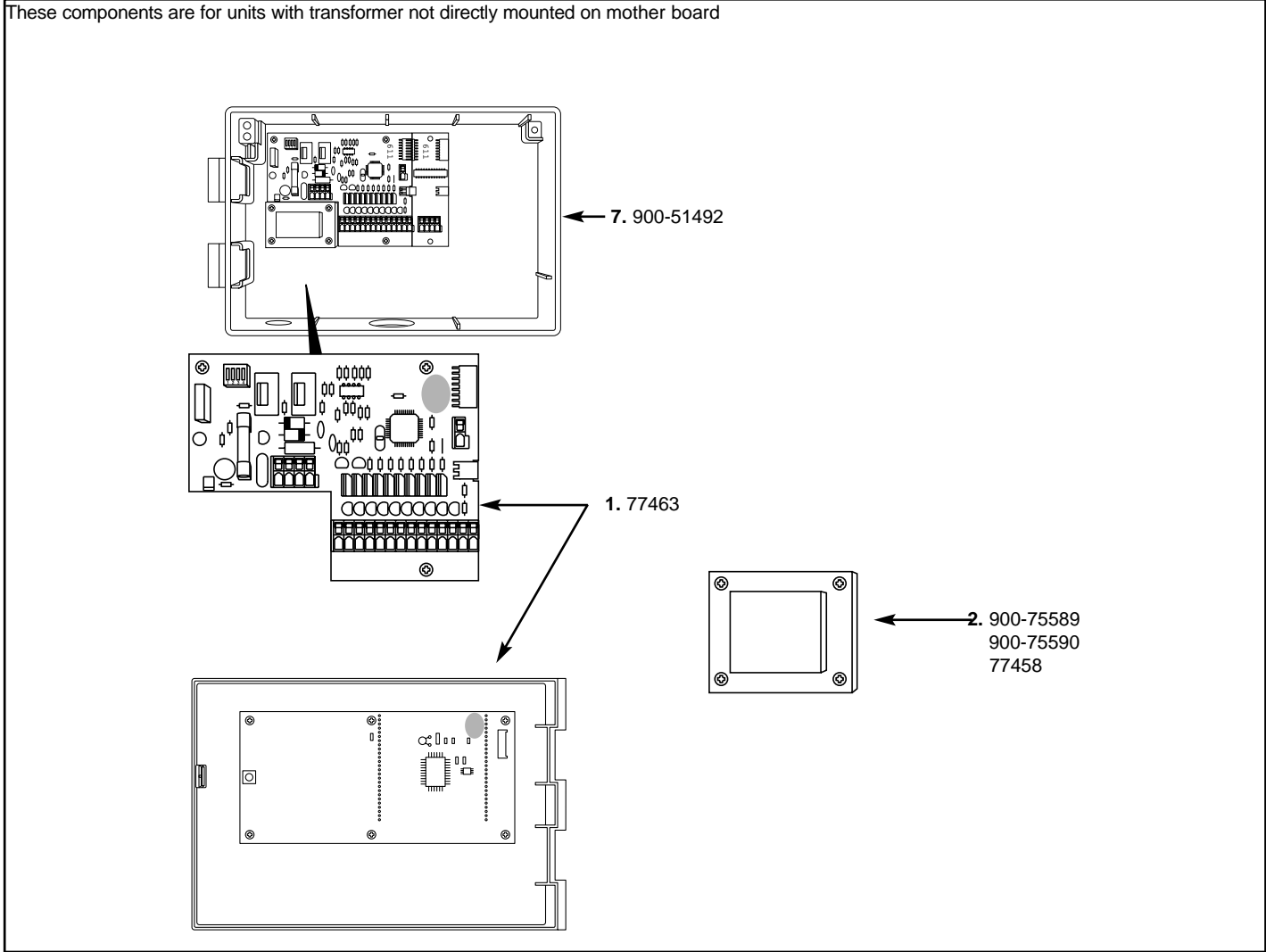


# SmartZone™ Service Parts

**Models: 8520, 8536 (SZ820 & SZ836)  
8570, 8586 (SZ870 & SZ886) export**

Do not mix components

These components are for units with transformer not directly mounted on mother board



Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
77463	Front Panel (Rev 4) & Mother Board (Rev 6)	1	1	8594	PLUS4 Board	3	1
900-75589	Transformer 120V (8520,8536)	2	1	77411	Buffer Board (8536)	4	1
900-75590	Transformer 230V (8570,8586)	2	1	77071	Keys	5	1
77458	Transformer HV 240V	2	1	900-05506	Hang Card	6	1
				900-51492	SmartZone Box (plastic)	7	1



# 8401 Rain Train® Turf Traveler

## Operating Instructions – Series E/G/H



### Operating Instructions Rain Train 400 Series “E”, “G”, “H”

#### To Set:

- (1) Determine the starting and stopping locations of the Rain Train such that the cable will lay in a straight line along the required travel path for the coverage desired. Be sure that the hose length will reach to both locations and that there are no obstacles to interfere with the required movement of the hose. The maximum travel distance is obtainable when the water supply outlet is near the center of the length of area to be sprinkled.
- (2) Connect hose to water supply and lay it out to the travel path and then along the side of the travel path back to the starting location of the Rain Train.
- (3) Place the Rain Train in the starting location and connect to end of hose.
- (4) Push in on the “ON-OFF Bumper” to close the shut-off valve.
- (5) Pull out on the “Drum Release Knob” (located on the right side of the cable drum) and turn slightly to hold release.
- (6) Unwind the cable from the drum and lay cable along the travel path by walking with the cable tow handle to the stopping location. Be sure the stopping location is not beyond the point that the hose length will reach.
- (7) Put the long end of the stake through the ring end of the cable tow handle and push the stake into the ground to the depth of the foot bar on the stake. The short end of the stake should be toward the direction of pull.

#### To Start Operation:

- (1) Turn on the water at the hose supply outlet.
- (2) Turn the “Drum Release Knob” to engage pin into the drive wheel.
- (3) Turn the “Drum Hand Crank” until lock plunger engages in the drum.
- (4) Rewind any slack cable onto the drum with the “Drum Hand Crank”.
- (5) Hold the sprinkler arm and stand aside of the discharge stream.
- (6) Turn on by pulling out the “ON-OFF” Bumper.

#### To Stop Operation:

- (1) The Rain Train is automatically shut off at the end of travel by the stake depressing the “ON-OFF Bumper” to close the valve.
- (2) To manually stop at any time, push in on the “ON-OFF Bumper”.

## Adjustments

#### Travel Rate:

Turn the “Speed Control Valve” (#26871) (located to the left side of the shut-off valve) out (counterclockwise) to increase speed, and in (clockwise) to decrease speed.

#### Drum Friction:

If the drum turns too freely, allowing the cable to slack as it is payed from the drum, tighten the “Drum Friction-Adjusting Screw” (#25604) to increase the spring force on the friction plunger against the drum.

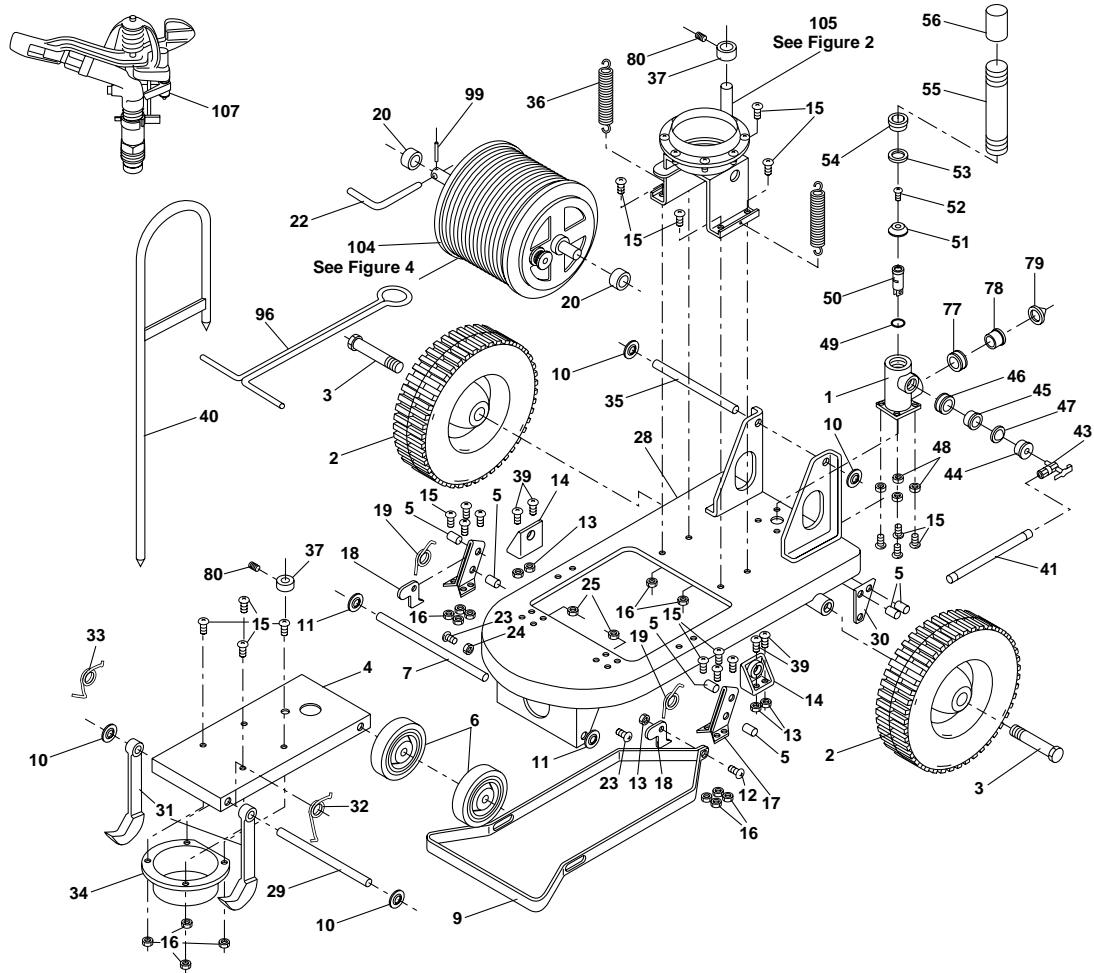
#### Pawl Engagement:

The “Pawl Engagement Adjusting Collars” (#49271) located on the control shaft (#26724) determine the travel distance of the driving pawls. This is factory set to engage three notches and will seldom need adjustment. If the pawls become worn and an adjustment is needed, simply loosen the set screw and position the adjusting collars such that the pawls will properly engage three teeth per cycle. Be sure the lower adjusting collar is positioned high enough on the control shaft so that as the lid is returned to horizontal position it contacts the adjusting collar thus causing the valve to trip just before the lid comes to rest against the upper diaphragm support (#25894).

If the bottom collar is moved the top adjusting collar must also be adjusted. While the unit is operating under load (pressure with hand can be applied to crank handle of the cable drum) check for engagement of the pawls (#25441) so that they engage not more than three teeth on the drive wheels (#25571 and #25581).

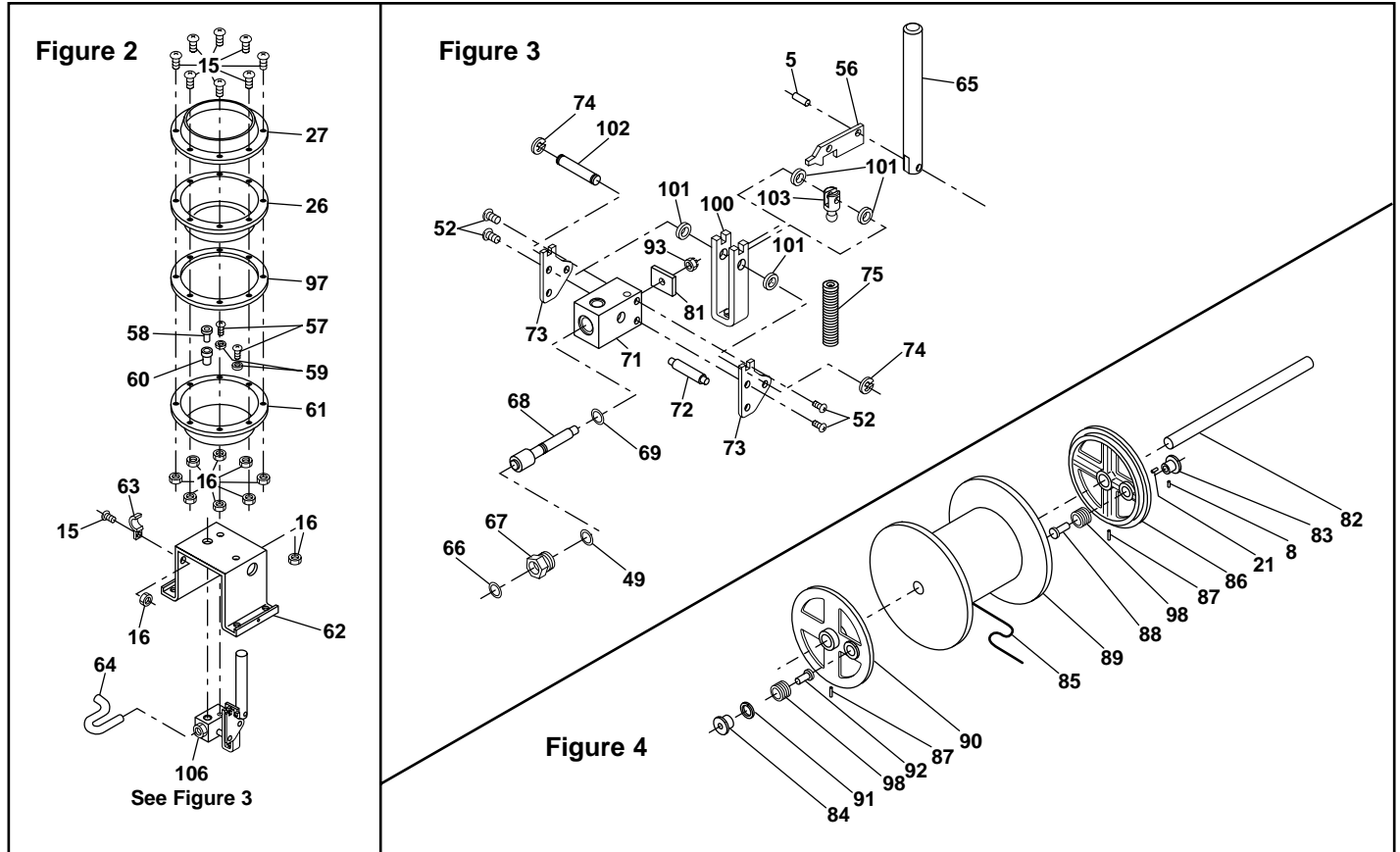
The top collar must not allow the lid to raise higher than to allow the diaphragm to be exposed more than 1/4" to 1/2" above upper diaphragm support (#25894) edge and piston cup (#25484), when viewed from the front of the unit and with the diaphragm completely filled. If it is allowed to go higher the diaphragm may rupture prematurely. Even if the pawls will not engage three teeth on the drive wheels do not allow the lid to go higher than stated above.





Item No.	Description	Part No.	Qty	Item No.	Description	Part No.	Qty
1	Shut-Off Valve Body	934-27131	1	35	Lid Axle (Rear)	941-26794	1
2	Rear Wheel	935-25715	2	36	Lid Return Spring	935-25904	2
3	Rear Axle Bolt	931-25724	2	37	Adjusting Collar	900-49271	2
4	Lid	800-51410	1	39	Screw	945-27144	4
5	Roll Pin	935-26994	6	40	Stake	943-25964	1
6	Front Wheel	950-25685	2	41	Hose Assembly	480-49075	1
7	Axle (Front Wheel)	941-26784	1	43	Speed Control	935-26871	1
9	Bumper	800-26674	1	44	Male End	911-27061	1
10	Pushnut	945-26884	2	45	Shank	911-40441	1
11	Pushnut	945-43284	2	46	K-Nut	900-37110	1
12	Bolt	945-26144	1	47	Filter Washer	935-27239	1
13	Locknut	945-26044	5	48	Lock Washer	935-26914	4
14	Drum Support Bracket	942-25834	2	49	O-Ring	934-20825	1
15	Screw	945-25464	16	50	Valve Stem	931-26751	1
16	Nut	945-25474	12	51	Stem Cap	931-26761	1
17	Anti-Reverse Bracket	942-25794	2	52	Retainer Screw	935-30314	4
18	Anti-Reverse Dog	942-25814	2	53	Washer	934-26855	1
19	Dog Spring	935-26174	2	54	Washer Retainer	911-27051	1
20	Drive Wheel Spacer	941-25824	2	55	Riser	800-51408	1
22	Crank	942-25844	1	56	Riser Coupling	800-51409	1
23	Cam Screw	935-41684	2	77	Nut	911-00611	1
24	Washer	979-26832	2	78	Valve Shank	911-25411	1
25	Locknut	935-26964	2	79	1" Filter Washer	935-26069	1
28	Frame	800-51407	1	80	Set Screw	900-49272	2
29	Lid Axle (Front)	941-26774	1	96	Tow Handle	943-26284	1
30	Shut-Off Valve Link	942-26684	1	99	Pin	945-26244	1
31	Pawls	851-25441	2	104	Drum and Cable Assembly	480-25510	1
32	Pawl Spring (Left)	935-26154	1	105	Diaphragm Support		
33	Pawl Spring (Right)	935-26164	1		Bracket Assembly	850-27240	1
34	Piston Cup	942-25484	1	107	Model 1641 Impact	1641	1

## Rain Train® Turf Traveler Model: 8401



Item No.	Description	Part No.	Qty	Item No.	Description	Part No.	Qty
5	Roll Pin	935-26994	2	73	Side Plate	932-26614	2
8	Pin	945-26254	1	74	E Ring	935-26984	2
15	Screw	945-25464	16	75	Trip Spring W/Washer	850-27330	1
16	Nut	945-25474	12	81	Trip Plate	932-26604	1
21	Pin	945-25664	1	82	Drum Axle*	941-25564	1
26	Diaphragm	932-25885	1	83	Knob	941-26264	1
27	Upper Diaphragm Support	942-25894	1	84	Friction Adj. Screw	941-25604	1
49	O-Ring	934-20825	1	85	Cable	935-25649	1
52	Retainer Screw	935-30314	4	86	Drive Wheel (Right)	934-25571	1
56	Stop Arm	480-26620	1	87	Pin*	945-26534	2
57	Screw	935-26904	2	88	Lock Plunger	931-26274	1
58	Diaphragm Screw	931-26694	1	89	Drum	942-25524	1
59	Rolled Washer	979-26802	2	90	Drive Wheel (Left)*	934-25581	1
60	Headed Sleeve	979-26812	1	91	Lock Nut	941-25614	1
61	Lower Diaphragm Support	942-26594	1	92	Friction Plunger	979-25591	1
62	Diaphragm Support Brkt.	800-51396	1	93	Lock Nut	935-26944	1
63	Tube Clamp	945-27004	1	97	Gasket	932-26316	1
64	Exhaust Tube Assembly	850-27260	1	98	Compression Spring	935-26304	2
65	Control Shaft	931-26724	1	100	Trip Arm	480-27170	1
66	O-Ring	934-14585	1	101	Spacer Washer	979-26822	4
67	End Plug	911-27041	1	102	Pin	931-26744	1
68	Valve Stem Assembly	480-27160	1	103	Spring Arm	480-27180	1
69	O-Ring	934-34945	1	106	Tripping Valve Assembly	850-27250	1
71	Valve Body (Tripping)	931-27101	1				
72	Stop Pin	931-26714	1				

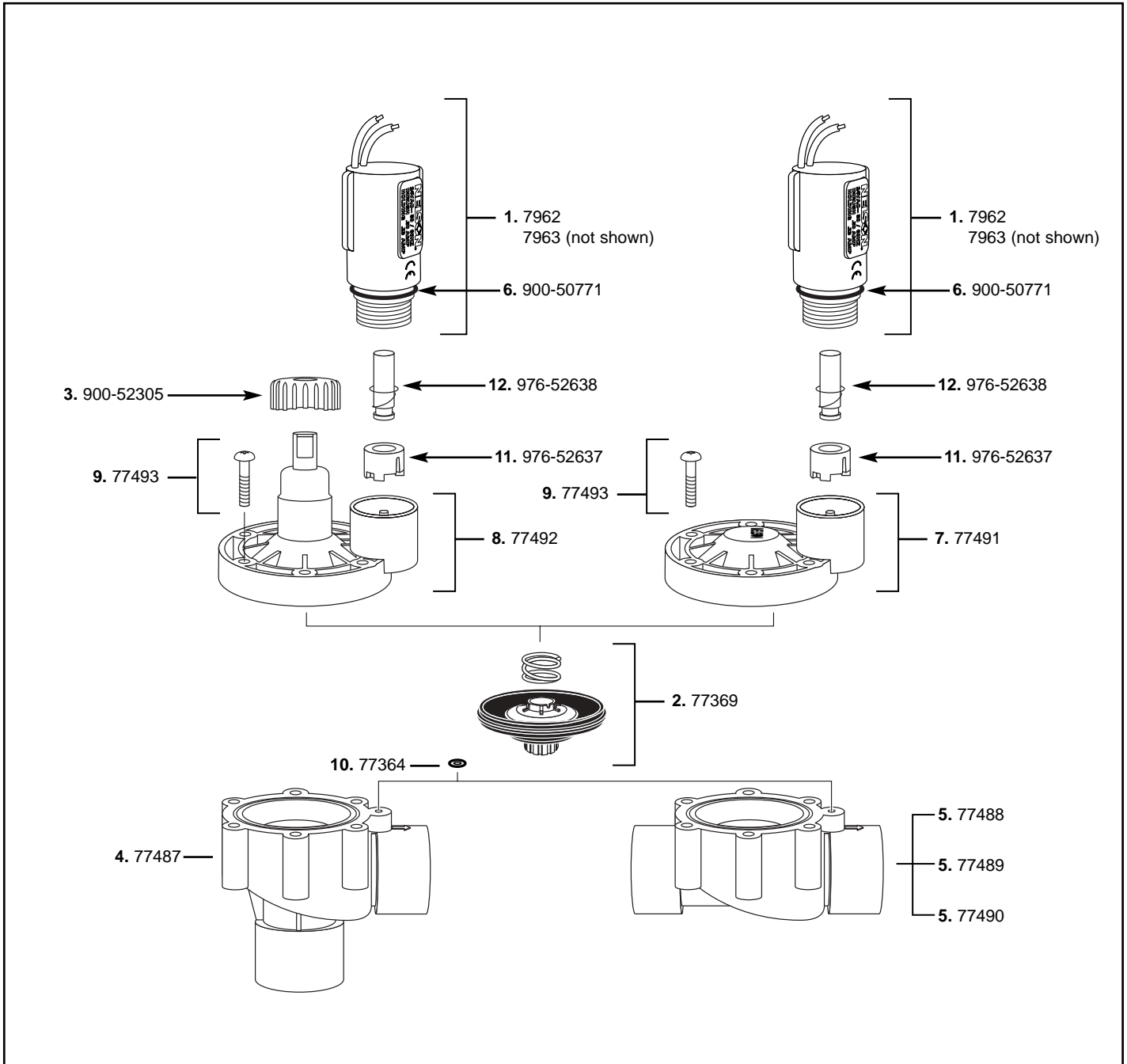
\* The drum axle (#25564) and the left drive wheel (#25581) require drilling of a 3/16" hole after assembly for insertion of the pin (#26534).



# 1" PVC Electric Valve

## Model 9001, 9002, 9005, 9011, 9012, 9015

### (BSP Models 9003, 9013)

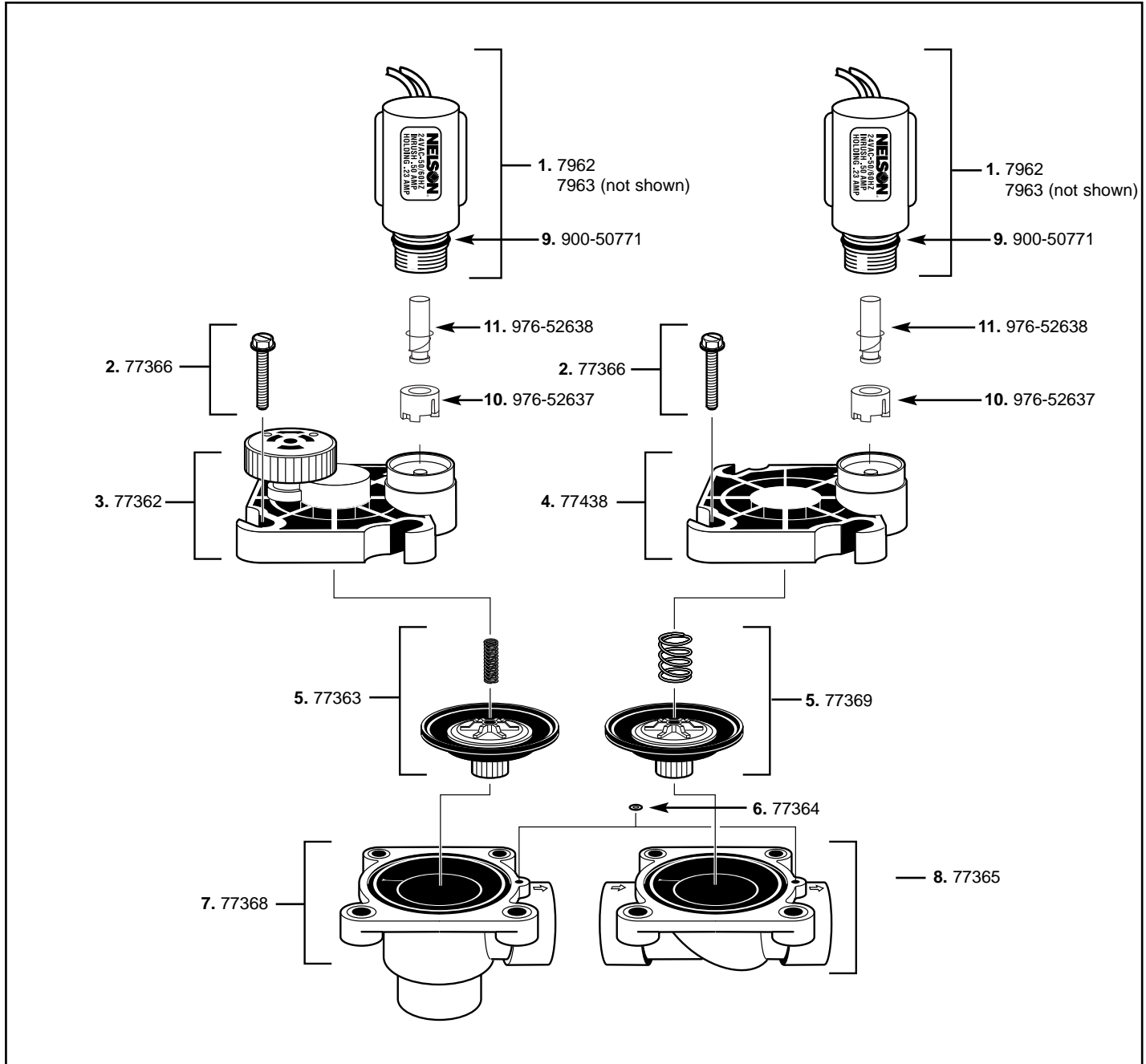


Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
7962	Solenoid (Standard 24V)	1	1	900-50771	O-Ring	6	1
7963	Solenoid (115V)	1	1	77491	9000 Valve Bonnet	7	1
77369	Diaphragm Assembly	2	1	77492	9000 Valve bonnet with F/C stem	8	1
900-52305	F/C Knob	3	1	77493	9000 Valve self-tapping screws	9	6
77487	9000 Valve NPT angle body	4	1	77364	Body O-ring	10	1
77488	9000 Valve Slip body	5	1	976-52637	7962 Plunger retainer	11	1
77489	9000 Valve NPT body	5	1	976-52638	7962 Plunger with spring	12	1
77490	9000 Valve BSP body	5	1				



# 1" Heavy Duty Electric Valves

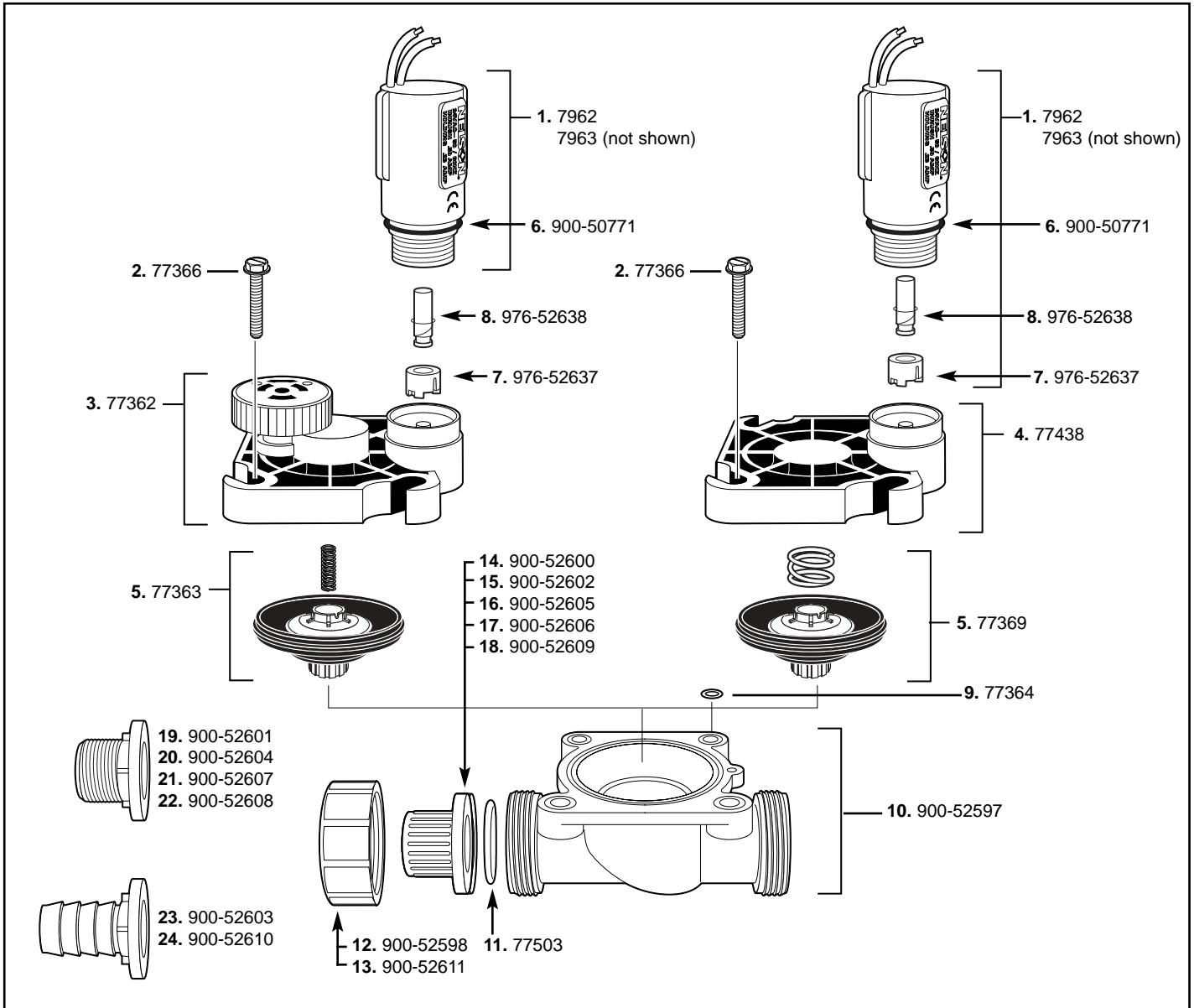
## Models 7901, 7911, 7931, 7941 (BSP Models 7916, 7917)



Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
7962	Solenoid (Standard 24V)	1	1	77363	Diaphragm & Spring (7911, 7917, 7931)	5	1
7963	Solenoid (115V) & Bleed Collar	1	1	77369	Diaphragm & Spring (7901, 7916, 7941)	5	1
77366	Bolts (bag of 4)	2	1	77364	Body O-Ring	6	1
77362	Bonnet Assembly	3	1	77368	1" Angle Body	7	1
77438	Non-Bonnet Assembly	4	1	77365	1" Globe Body	8	1
				900-50771	O-ring	9	1
				976-52637	7962 Plunger retainer	10	1
				976-52638	7962 Plunger with spring	11	1



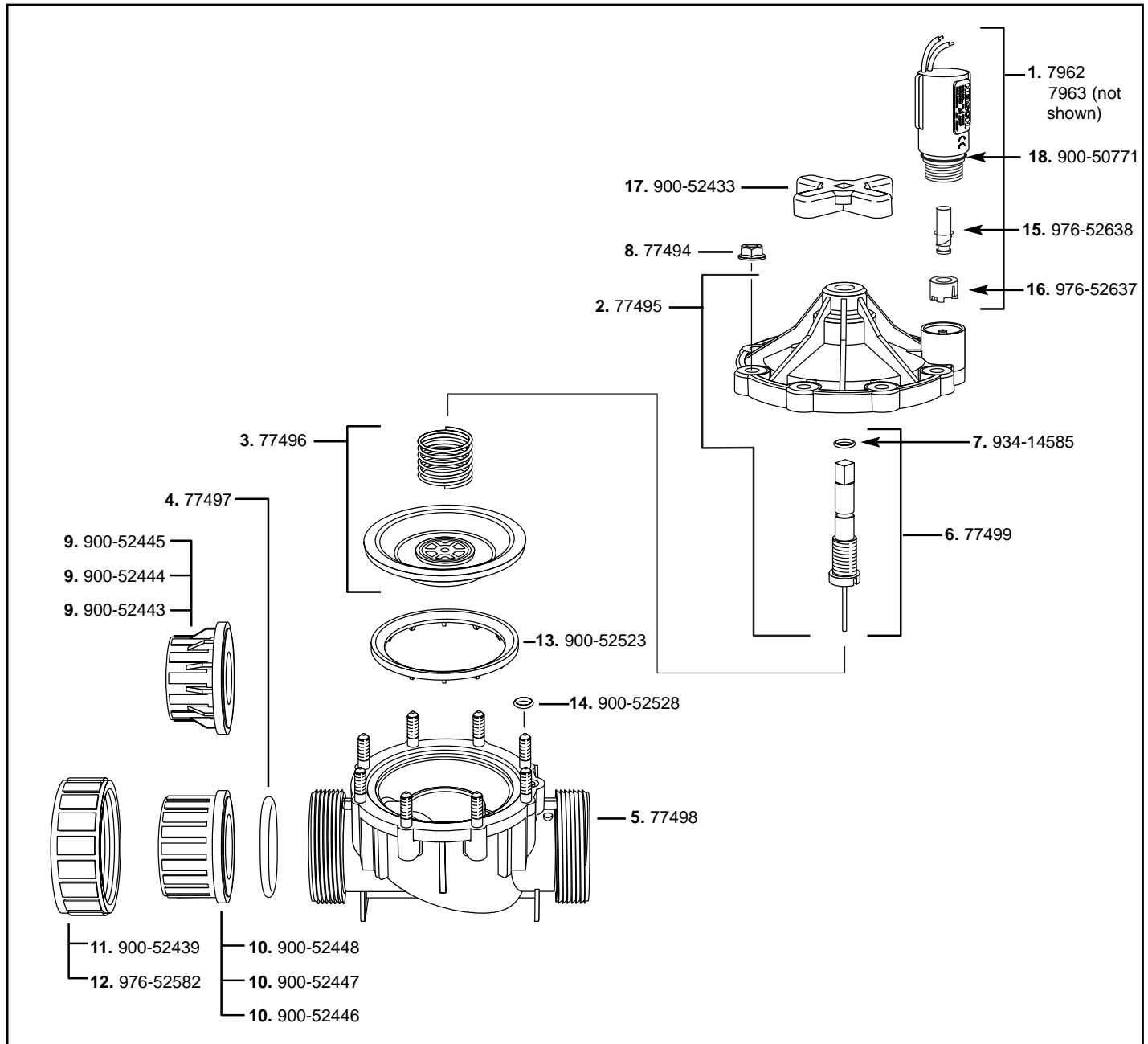
# 1" Heavy Duty Electric Valve Model 9501 Series



Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
7962	Solenoid (Standard 24V)	1	1	900-52598	Coupling Nut	12	1
7963	Solenoid (115V) & Bleed Collar	1	1	900-52611	Lavender Coupling Nut	13	1
77366	Bolts (bag of 4)	2	1	900-52600	3/4" NPT-BSP female fitting	14	1
77362	Bonnet Assembly	3	1	900-52602	3/4" Slip female fitting	15	1
77438	Non-Bonnet Assembly	4	1	900-52605	1" NPT female fitting	16	1
77363	Diaphragm & Spring	5	1	900-52606	1" BSP female fitting	17	1
77369	Diaphragm & Spring	5	1	900-52609	1" Slip fitting	18	1
900-50771	O-ring	6	1	900-52601	3/4" BSP male fitting	19	1
976-52637	Plunger retainer	7	1	900-52604	3/4" NPT male fitting	20	1
976-52638	Plunger with spring	8	1	900-52607	1" BSP male fitting	21	1
77364	Body O-ring	9	1	900-52608	1" NPT male fitting	22	1
900-52597	Union Globe Body	10	1	900-52603	3/4" Barb fitting	23	1
77503	Valve, Large O-ring	11	1	900-52610	1" Barb fitting	24	1



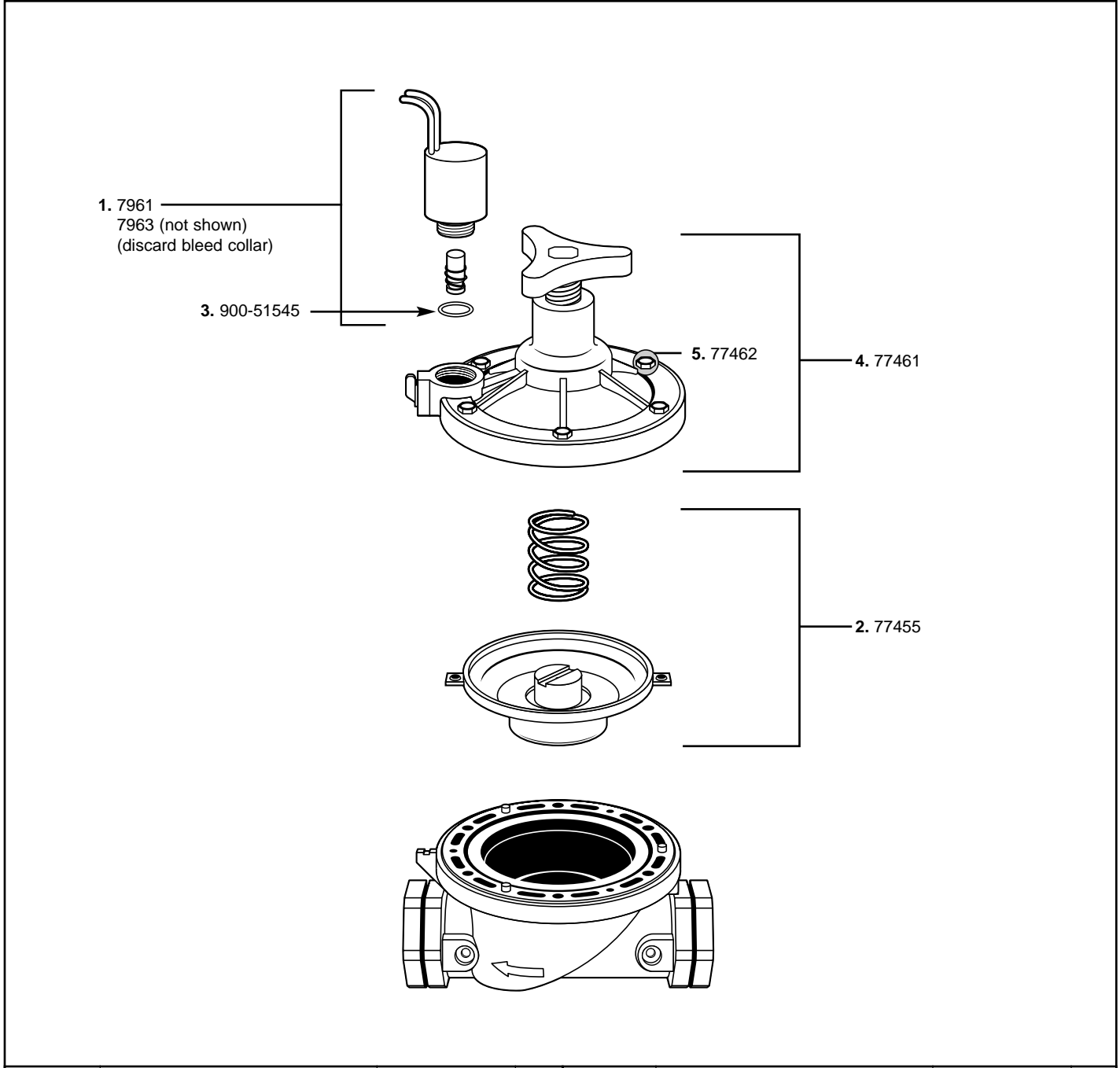
# 1 1/2" & 2" Heavy Duty Electric Valve Model 9502 Series



Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
7962	Solenoid (Standard 24V)	1	1	900-52443	1 1/2" Slip flange	9	1
7963	Solenoid (115V) & Bleed Collar	1	1	900-52448	2" BSP flange	10	1
77495	Valve Bonnet with F/C stem	2	1	900-52447	2" NPT flange	10	1
77496	Valve Diaphragm with spring	3	1	900-52446	2" Slip flange	10	1
77497	Valve large white o-ring	4	2	900-52439	Coupling nut	11	1
77498	Valve 2" body	5	1	976-52582	'Reclaimed water' coupling nut	12	1
77499	Valve F/C stem with o-ring	6	1	900-52523	Valve diaphragm support ring	13	1
934-14585	Valve F/C stem o-ring	7	1	900-52528	Valve body o-ring	14	1
77494	Valve 1/2" nuts	8	8	976-52638	Plunger with spring	15	1
900-52445	1 1/2" BSP flange	9	1	976-52637	Plunger retainer	16	1
900-52444	1 1/2" NPT flange	9	1	900-52433	F/C Knob	17	1
				900-05771	O-ring	18	1



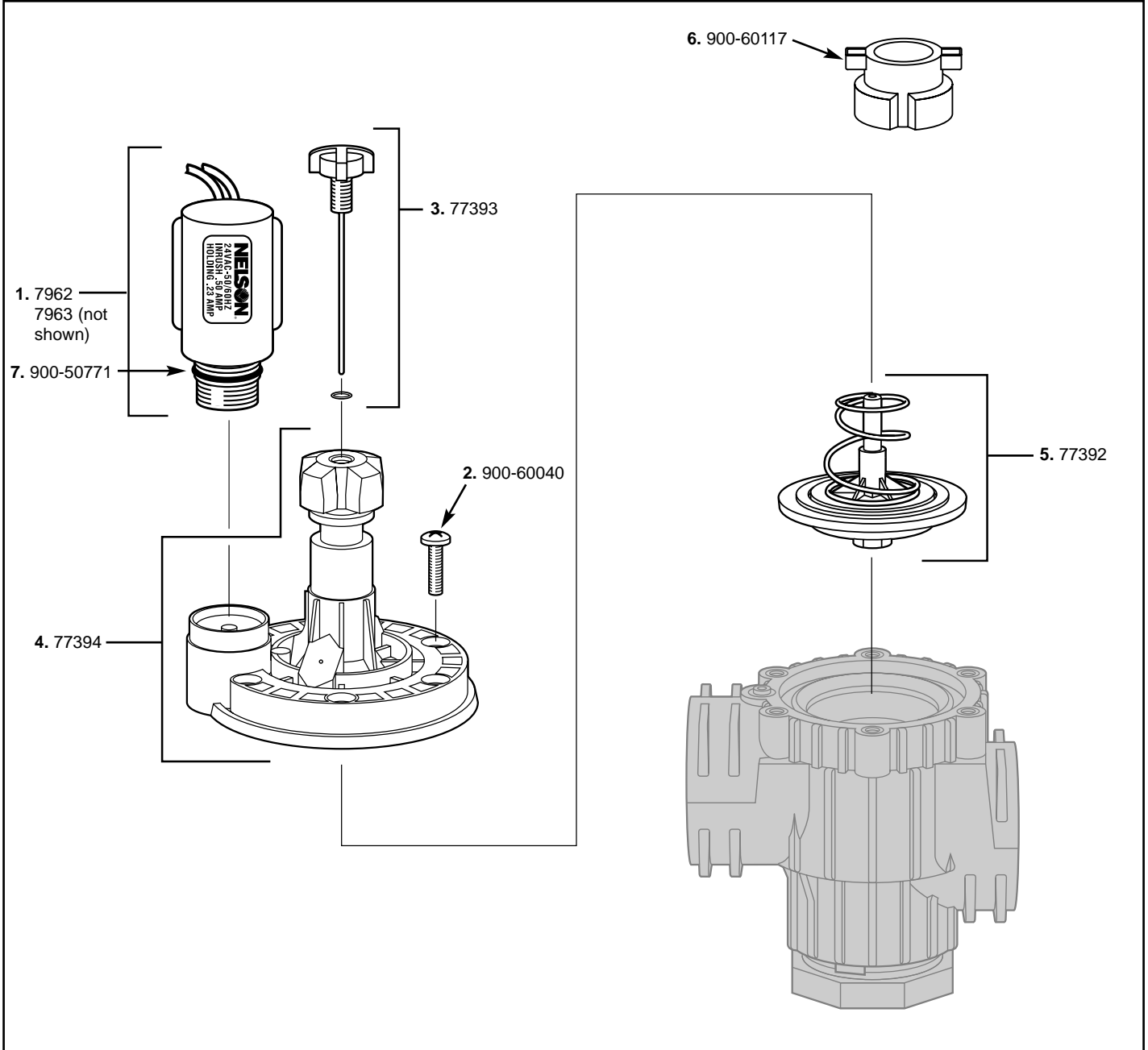
# 1 1/2" & 2" Heavy Duty Electric Valve Model 7981, 7982 (BSP Models 7991, 7992)



Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
7961	Solenoid (Standard 24V)	1	1	900-51545	O-Ring	3	1
7963	Solenoid (115V)	1	1	77461	Bonnet Assembly Kit	4	1
77455	Diaphragm Assembly	2	1	77462	Bolts Kit	5	6



# 1 1/2" Heavy Duty Electric Valve Model 7951 (BSP Model 7971)

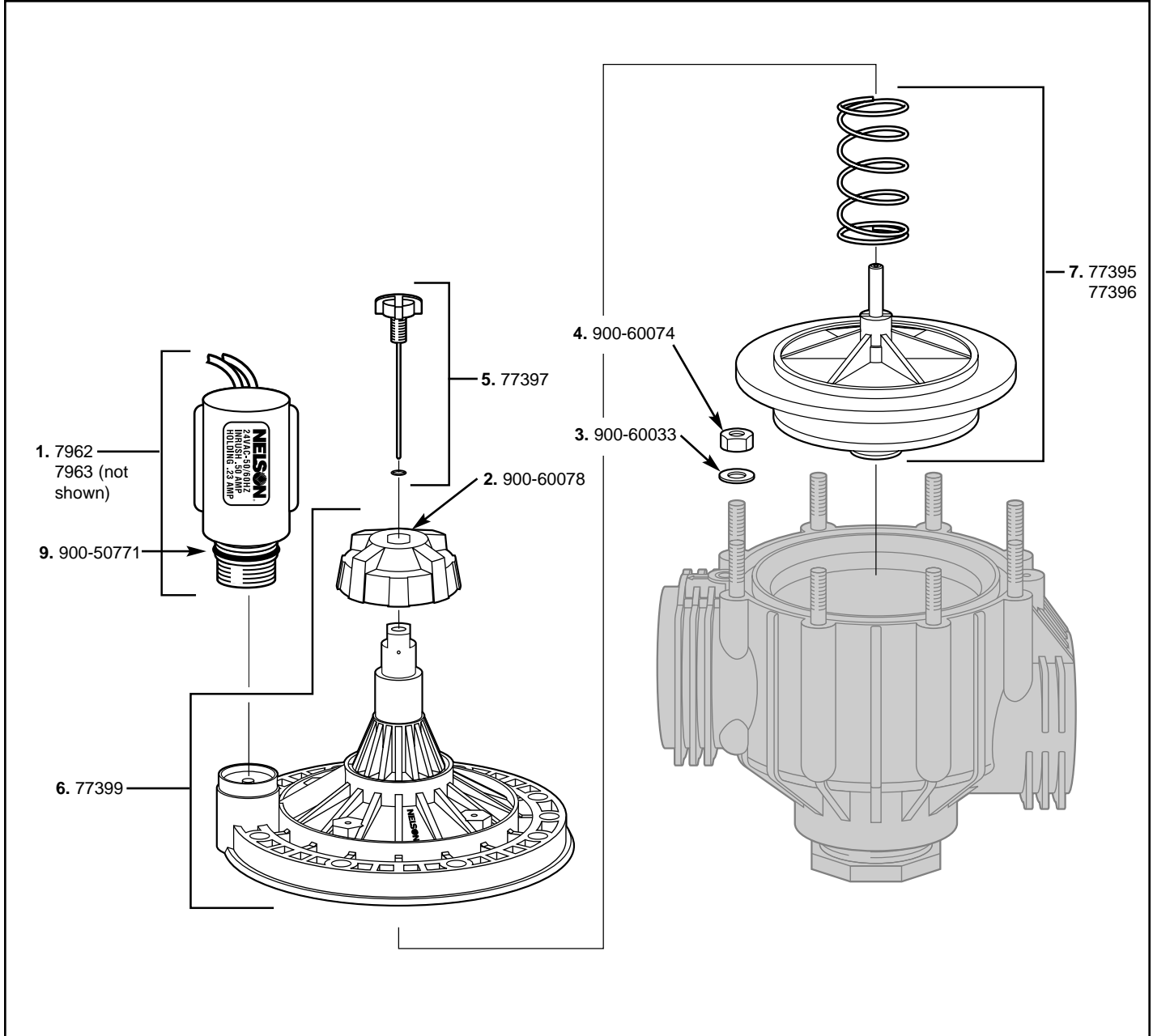


Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
7962	Solenoid (Standard 24V)	1	1	77394	Bonnet Assembly	4	1
7963	Solenoid (115V) & Bleed Collar	1	1	77392	Diaphragm Assembly	5	1
900-60040	Screw	2	6	900-60117	Valve Handle Adapter	6	1
77393	Metering Rod Assembly	3	1	900-50771	O-ring	7	1





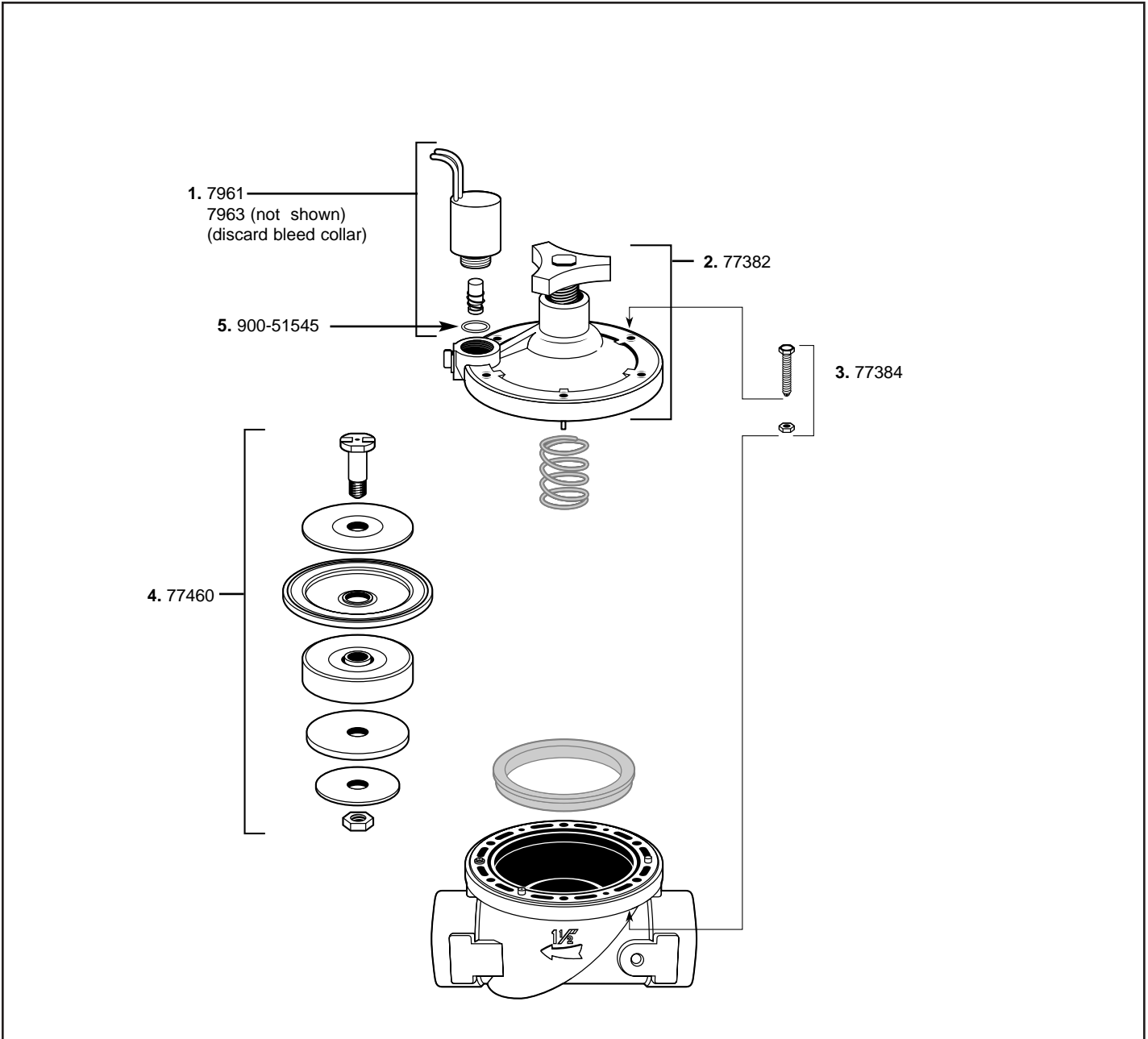
## 2" & 3" Heavy Duty Electric Valves Models 7952, 7953 (BSP Models 7972, 7973)



Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
7962	Solenoid (Standard 24V) & Bleed Collar	1	1	77397	Metering Rod Assembly	5	1
7963	Solenoid (115V) & Bleed Collar	1	1	77399	Bonnet Assembly	6	1
900-60078	Flow Control Knob	2	1	77395	Diaphragm Assembly (2")	7	1
900-60033	Washer	3	8	77396	Diaphragm Assembly (3")	7	1
900-60074	Nut	4	8				

## Plastic Electric Valves

### Models 7937 (1 1/2"), 7938 (2") NPT (BSP Models 7987, 7988)

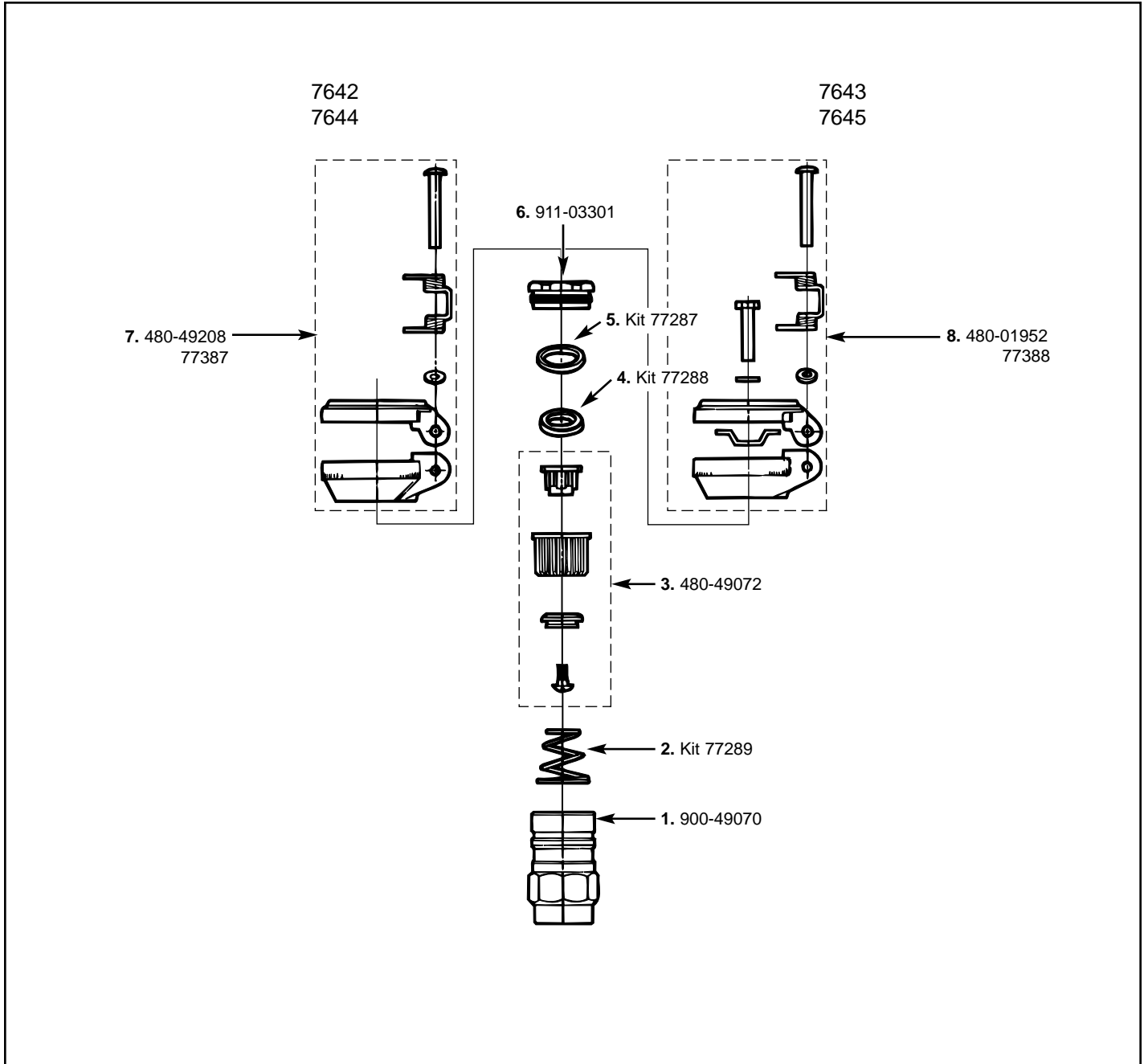


Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
7961	Solenoid (Standard 24V)	1	1	77381	Screws	3	6
7963	Solenoid (115V)	1	1	77460	Diaphragm Kit	4	1
77382	Bonnet Assembly	2	1	900-51545	O-ring	5	1
77384	Bolt and Nut Kit	3	6				



# Quick Coupling Valves

## Models: 7642, 7643, 7644, 7645 (1")



Part No.	Description	Item Nos.	Qty	Part No.	Description	Item Nos.	Qty
900-49070	Body	1	1	911-03301	Retainer Nut	6	1
77289	Spring Kit	2	2	480-49208	Guard & Lid Assy. (7642)	7	1
480-49072	Sleeve Assembly	3	1	77387	Guard & Lid Assy. – Purple (7644)	7	1
77288	U Cup Seal Kit	4	6	77388	Locking Guard Assy. – Purple (7645)	8	1
77287	Washer Kit	5	6	480-01952	Locking Guard Assy. (7643)	8	1



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