

# PRATT®

a **MUELLER** brand

## OPERATION/MAINTENANCE MANUAL

# AWWA Swing Check Valves

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### **WARNING:**

1. Read all applicable directions and instructions prior to any maintenance, troubleshooting or installation.
2. Personnel involved in the installation or maintenance of valves should be constantly alert to potential emission of pipeline material and take appropriate safety precautions. Always wear suitable protection when dealing with hazardous pipeline materials.
3. Order parts from your local Pratt sales representative or directly from Pratt. When ordering parts, please include the serial number located on the valve tag.

**NOTE:** "WARNING" and "CAUTION" messages (flagged with an exclamation symbol) indicate procedures that must be followed exactly to avoid equipment damage, physical injury, or death.

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# MUELLER

### FUNCTIONAL DESCRIPTION

Pratt AWWA Swing Check Valves are self-contained, free-swinging disc style outside lever and weight or outside lever and spring. Valves conform to all standards as set forth in AWWA C508. Suitable for use in wastewater, water and sewage applications.

**⚠ WARNING: Valves are to be handled by experienced installers. They should never be used as structural members and should be appropriately rigged for lifting. Valves are heavy and include various accessories which should be handled with caution.**

All valves should be inspected at time of delivery for shipping damage and to confirm compliance with specifications. Whenever possible, the valves and all apparatus should be protected from the weather. Water and debris should not collect in the valve.

#### Air Cushion Functional Description

The air cushion is an air cylinder that cushions the rate of disc closure by adjusting a metering valve located at the exit port of the air cushion. When the check valve disc opens, thus allowing flow, the mechanical connection between the disc and the air cushion moves the internal cylinder piston to freely draw atmospheric air into the cylinder chamber. When the check valve closes the air cushion piston will attempt to push out the air through the metering valve. The rate of air passing through the metering valve will determine the amount of pneumatic dampening the disc will experience.

The pneumatic dampening cylinder does not require any pre-pressurization as it gains its pressure through compressing atmospheric air when the valve closes.



### INSTALLATION

**⚠ WARNING: Valves are to be handled by experienced installers. They should never be used as structural members and should be appropriately rigged for lifting. Valves are heavy and include various accessories which should be handled with caution.**

#### **Series 8001 and 9001 AWWA C508 Swing Check Valve (Lever & Weight or Lever & Spring)**

1. Check that valve end joints conform to the mating pipe and verify that ends are clean and sound. All 8001 and 9001 Series valves are supplied with flat faced flanges with ANSI Class 125 drilling. Do not mate these valves to pipe or fittings with raised face flanges.
2. Remove any material used to restrain the lever or pin during shipment and storage. Attach any outside closing mechanism in proper position manually.
3. Closing mechanism should be checked to insure freedom of motion and proper operation.
4. When handling the valve, do not use the outside mechanisms for lifting.
5. It is necessary to install the valve in

proper orientation with regard to flow direction. Please note flow arrow on side of body.

6. Prepare pipe ends per pipe manufacturer's instruction and install valve as per appropriate instructions for the specific joint. All piping should be properly supported to avoid line stress on the valve. Do not use valves as a jack to force a pipeline in position.

7. Standard wrenches and/or sockets are to be used to tighten all nuts and bolts. Fasteners are to be tightened in a star pattern to insure balance loading of bolts.

#### **Series 8501 and 9001 AWWA C508 Swing Check Valve with Air Cushion and Series 9001 AWWA C508 Swing Check Valve with 2 or 3 Stage Oil Cushion**

1. Check that valve end joints conform to the mating pipe and verify that ends are clean and sound. All 8501 Series valves are supplied with flat faced flanges with ANSI Class 125 drilling. Do not mate these valves to pipe or fittings with raised face flanges.
2. Remove any material used to

restrain the lever or pin during shipment and storage. Attach any outside closing mechanism in proper position manually.

3. The flow control device and closing mechanism should be checked to insure freedom of motion and proper operation. Cover bolts should be checked for any loose joints.

4. When handling the valve, do not use the outside mechanisms for lifting.

5. It is necessary to install the valve in proper orientation with regard to flow direction. Please note flow arrow on side of body.

6. Prepare pipe ends per pipe manufacturer's instruction and install valve as per appropriate instructions for the specific joint. All piping should be properly supported to avoid line stress on the valve. Do not use valves as a jack to force a pipeline in position.

7. Standard wrenches and/or sockets are to be used to tighten all nuts and bolts. Fasteners are to be tightened in a star pattern to insure balance loading of bolts.

### OPERATION

#### **Series 8001 and 9001 AWWA C508 Swing Check Valve (Lever & Weight or Lever & Spring)**

Once in the pipeline, the swing check valve will operate as flow conditions dictate. The valve will open as the pressure on the upstream side of the disc overcomes the downstream side. The valve will close as the situation reverses itself or the pressure equalizes.

These valves are self contained units. Outside levers, weights, springs or hinge pins should never be used to manually operate the valve or restrict its operation.

External shields and surrounding piping should not interfere with the free operation of external apparatus of the valves.

#### **Series 8501 AWWA C508 Swing Check Valve with Air Cushion**

Once in the pipeline, the swing check valve will operate as flow conditions dictate. The valve will open as the pressure on the upstream side of the disc overcomes the downstream side. The valve will close as the situation reverses itself or the pressure equalizes.

The cushioning cylinder is provided with a metering valve that is factory

set at the midpoint mark. Adjustment may be required in the field according to the back pressure that the valve will encounter. The locking nut of the metering valve is loosened and turned clockwise to increase dampening, or counterclockwise to decrease dampening. This process may regulate speed of closure also.

After correct setting is achieved at maximum head, care should be taken to tighten lock nut to insure maintained setting.

**⚠ WARNING: Metering valve should never be completely closed.**

These valves are self contained units. Outside lever, weights, springs or hinge pins should never be used to manually operate the valve or restrict its operation.

The adjustment of weight and/or the addition of springs to assist closure may be necessary.

External shields and surrounding piping should not interfere with the free operation of external apparatus of the valves.

### Series 9001 AWWA C508 Swing Check Valve with Air Cushion

Once in the pipeline, the swing check valve will operate as flow conditions dictate. The valve will open as the pressure on the upstream side of the disc overcomes the downstream side. The valve will close as the situation reverses itself or the pressure equalizes.

#### Single Air Cushion:

The cushioning cylinder is provided with a metering valve that is factory set at the midpoint mark. Adjustment may be required in the field according to the back pressure that the valve will encounter. The locking nut of the metering valve is loosened and turned clockwise to increase dampening, or counterclockwise to decrease dampening. This process may regulate speed of closure also.

#### Dual Air Cushion:

Follow instructions for single air cushion. On dual cushion systems, both metering valves must have same setting.

**⚠ WARNING: Failure to set both metering valves to the same setting can result in damage to the check valve or air cushion.**

After correct setting is achieved at maximum head, care should be taken to tighten lock nut to insure maintained setting.

**⚠ WARNING: Metering valve should never be completely closed.**

These valves are self contained units. Outside lever, weights, springs or hinge pins should never be used to manually operate the valve or restrict its operation.

### Series 9001 AWWA C508 Swing Check Valve with 2 or 3 Stage Oil Cushion

Once in the pipeline, the swing check valve will operate as flow conditions dictate. The valve will open as the pressure on the upstream side of the disc overcomes the downstream side. The valve will close as the situation reverses itself or the pressure equalizes.

The side mounted oil dashpot system is used when control of the disc movement is required during the entire cycle of the valve, thus allowing

for the ideal performance of the valve while eliminating water hammer.

The oil cushion system is a totally self-contained, enclosed system. The control media is a #31 industrial oil or any lightweight equivalent.

The oil dashpot system can be adjusted by using the Throttle/Check Flow Control Valve (Model No. 581-FC38P). This valve has a set screw in the knob which provides security against unauthorized operation. To operate the valve, rotate the set screw to release the knob. Turn the knob clockwise to close and counterclockwise to open. After reaching the desired position, resecure the knob by locking the set screw. The Throttle/Check Flow Control Valve has colored rings which indicate the relative percentage of open.

**⚠ WARNING: DO NOT fully close the throttle/check flow control. This may restrict the flow of oil beyond an acceptable level and cause damage to the main valve or oil cushion system.**

These swing check valves are self contained units. Outside levers, weights, springs or hinge pins should never be used to manually operate the valve or restrict its operation.

External shields and surrounding piping should not interfere with the free operation of external apparatus of the valve.

## MAINTENANCE

### SERIES 8001 and 9001 AWWA C508 SWING CHECK VALVE (Lever & Weight or Lever & Spring)

The system is designed to be trouble free with minimum care. Frequency of inspection should be based on the operational characteristics of the system, i.e., systems of high cycles should be inspected frequently.

At minimum semi-annual inspections are recommended. Points of inspection should be at a minimum:

1. All end joints, cover joints and packing boxes should be inspected for leakage.
2. Bolts should be checked for tightness. A torque of 90 foot-pounds is recommended for gasketed joints.
3. Inspection of the valve during operations is recommended so that the outside linkages can be inspected for proper operation.

4. O-Rings: Inspection of the packing box is required to assure no leakage is evident. If leakage exists, replace o-rings (part 351), do not tighten end plug to stop leak.

**⚠ WARNING: O-rings should not be changed or added in an active valve. Valve should be isolated to prevent injury or damage to valve and operator.**

5. Hinge Packing: If leakage exists, tighten end plug. If leakage still persists, replace hinge packing.

6. Inspection of interior of valve is not necessary unless improper operation is witnessed or leakage beyond the allowable rate is experienced. The interior of the valve and the internal components can be inspected by removing the valve cover. Cover gasket should be replaced any time this joint is broken. Never re-install a used cover gasket.

### Series 8501 and 9001 AWWA C508 Swing Check Valve with Air Cushion

The system is designed to be trouble free with minimum care. Frequency of inspection should be based on the operational characteristics of the system, i.e., systems of high cycles should be inspected frequently.

At a minimum, semi-annual inspections are recommended. Points of inspection should be at a minimum:

1. All end joints, cover joints and packing boxes should be inspected for leakage.
2. Bolts should be checked for tightness. A torque of 90 foot-pounds is recommended for gasketed joints.
3. Care should be taken to keep rod of cylinder free from dirt or other materials. Breather filters should be periodically cleaned.
4. Inspection of the valve during operations is recommended so that the outside linkages can be inspected for proper operation.
5. Inspection of interior of valve is not necessary unless improper operation is witnessed or leakage beyond the allowable rate is experienced. The interior of the valve and the internal components can be inspected by removing the valve cover. Cover gasket should be replaced any time this joint is broken. Never re-install a used cover gasket.

Good housekeeping practices should be used to prevent any debris and foreign matter from interfering

with the operation of the cylinder and possibly causing damage to the internal or external cylinder components.

At a minimum, the air cylinder should be inspected semi-annually for the following:

1. External damage to the tube and linkage connections. Any damage should be reported to Pratt for instructions or replacement of the appropriate components.
2. Inspect piston rod for signs of wear, nicks, dents, scratches, or anything that may damage the seals. Piston rod should be clean of any foreign matter or debris. In the event that the piston rod is found to be damaged, please contact Pratt for replacement information.
3. If cylinder is found to have leakage by the piston rod, contact Pratt for instructions.

### Series 9001 AWWA C508 Swing Check Valve with 2 or 3 Stage Oil Cushion

The system is designed to be trouble free with minimum care. Frequency of inspection should be based on the operational characteristics of the system, i.e., systems of high cycles should be inspected frequently.

Semi-annual inspections are recommended. Points of inspection should be at a minimum:

1. All end joints, cover joints and O-ring cartridges should be inspected for leakage.
2. Bolts should be checked for tightness. A torque of 90 foot-pounds is recommended for gasketed joints.
3. Care should be taken to keep rod of cylinder free from dirt or other materials. Breather filters should be periodically cleaned.
4. Inspection of the valve during

operations is recommended so that the outside linkages can be inspected for proper operation.

5. Inspection of the O-ring cartridge is required to assure no leakage is evident. If leakage exists, tightening of cartridge nut(s) should be performed. If leakage continues, O-rings should be replaced.

**⚠ WARNING: O-rings should not be changed or added in an active valve. Valve should be isolated to prevent injury or damage to valve and opera**

6. Inspection of interior of valve is not necessary unless improper operation is witnessed or leakage beyond the allowable rate is experienced. The interior of the valve and the internal components can be inspected by removing the valve cover. Cover gasket should be replaced any time this joint is broken. Never re-install a used cover gasket.

7. Lubrication of the cylinder level pin, cylinder rod, timing valve roller and cam is required a minimum of every six (6) months. Oil in the oil reservoir should be maintained at the proper level at all times. When required, additional oil may be added via the port in the oil reservoir.

### Lubrication

Under normal operation, lubrication is not required to maintain proper operation of components or assembled units. If packing leaks occur, then add or replace packing with new material.

The control media is a #31 industrial oil or any lightweight equivalent.

### TROUBLESHOOTING

#### SERIES 8001 and 9001 AWWA C508 Swing Check Valve

| PROBLEM                           | CAUSE  | SOLUTION   |
|-----------------------------------|--|--|
| End joint leakage                 | <ul style="list-style-type: none"> <li>Tension on bolts relaxed</li> </ul>               | <ul style="list-style-type: none"> <li>Tighten bolts in star pattern.</li> </ul>   |
| Cover gasket leakage              | <ul style="list-style-type: none"> <li>Relaxed cover bolts tension</li> </ul>            | <ul style="list-style-type: none"> <li>Tighten bolts in star pattern.</li> <li>Should leakage continue, replace gasket.</li> </ul> |
| Valve slams when closing (Spring) | <ul style="list-style-type: none"> <li>Tension on spring is loose</li> </ul>             | <ul style="list-style-type: none"> <li>Tighten spring adjustment bolt</li> </ul>   |
| Valve slams when closing (Weight) | <ul style="list-style-type: none"> <li>Weight is not located on arm properly</li> </ul>  | <ul style="list-style-type: none"> <li>Reposition weight as necessary</li> </ul>   |
| Seat leakage                      | <ul style="list-style-type: none"> <li>Seats Dirty</li> <li>Disc seat damaged</li> </ul> | <ul style="list-style-type: none"> <li>Remove inspection cover and flush</li> <li>Relpace BUNA-N insert</li> </ul>                 |
| Leak by hinge pin                 | <ul style="list-style-type: none"> <li>Cracked or broken O-ring(s)</li> </ul>            | <ul style="list-style-type: none"> <li>Replace O-ring(s)</li> </ul>  |

#### SERIES 8501 AND 9001 AWWA C508 Swing Check Valve with Air Cushion

| PROBLEM                  | CAUSE  | SOLUTION  |
|--------------------------|--|---|
| End joint leakage        | <ul style="list-style-type: none"> <li>Tension on bolts relaxed</li> </ul>   | <ul style="list-style-type: none"> <li>Tighten bolts in star pattern.</li> </ul>  |
| Cover gasket leakage     | <ul style="list-style-type: none"> <li>Relaxed cover bolts tension</li> </ul>  | <ul style="list-style-type: none"> <li>Tighten bolts in star pattern.</li> <li>Should leakage continue, replace gasket.</li> </ul>    |
| Valve slams when closing | <ul style="list-style-type: none"> <li>Weight is not located on arm properly</li> <li>Air not escaping cylinder fast enough</li> </ul> | <ul style="list-style-type: none"> <li>Reposition weight as necessary</li> <li>Open flow control valve on side of cylinder</li> </ul> |
| Seat leakage             | <ul style="list-style-type: none"> <li>Seats Dirty</li> <li>Disc seat damaged</li> </ul>   | <ul style="list-style-type: none"> <li>Remove inspection cover and flush</li> <li>Relpace BUNA-N insert</li> </ul>                    |
| Leak by hinge pin        | <ul style="list-style-type: none"> <li>Cracked or broken O-ring(s)</li> </ul>  | <ul style="list-style-type: none"> <li>Replace O-ring(s)</li> </ul>   |

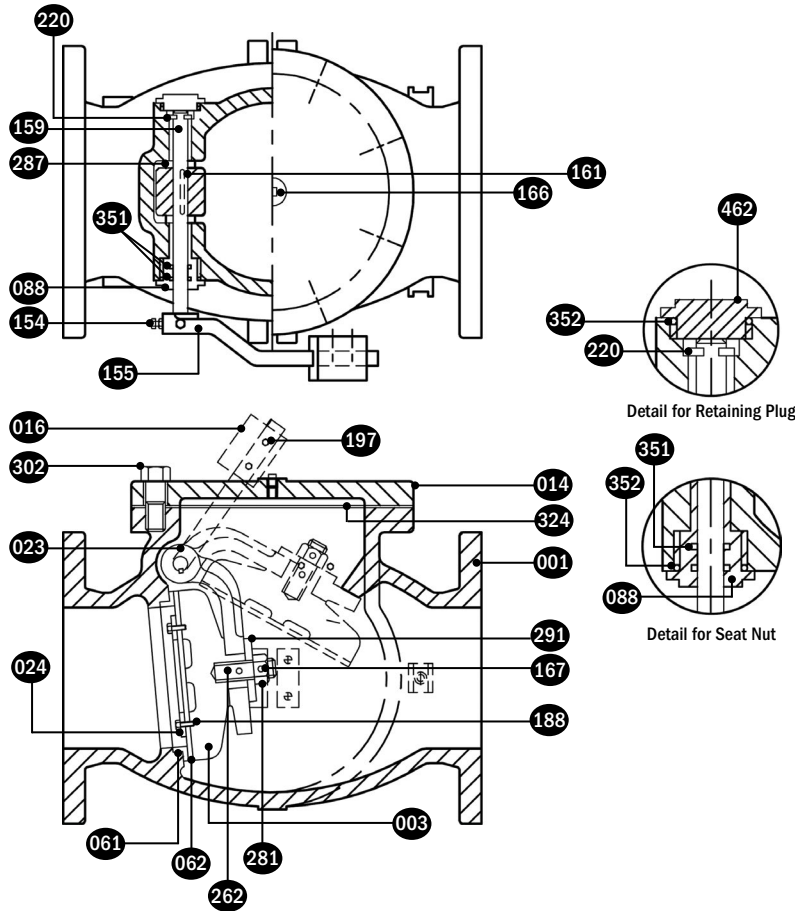
#### SERIES 9001 AWWA C508 Swing Check Valve with 2 and 3 Stage Oil Cushion

| PROBLEM                  | CAUSE  | SOLUTION   |
|--------------------------|--|--|
| End joint leakage        | <ul style="list-style-type: none"> <li>Tension on bolts relaxed</li> </ul>               | <ul style="list-style-type: none"> <li>Tighten bolts in star pattern.</li> </ul>   |
| Cover gasket leakage     | <ul style="list-style-type: none"> <li>Relaxed cover bolts tension</li> </ul>            | <ul style="list-style-type: none"> <li>Tighten bolts in star pattern.</li> <li>Should leakage continue, replace gasket.</li> </ul> |
| Valve slams when closing | <ul style="list-style-type: none"> <li>Weight not in correct position</li> </ul>         | <ul style="list-style-type: none"> <li>Adjust position of weight</li> </ul>  |
| Seat leakage             | <ul style="list-style-type: none"> <li>Seats Dirty</li> <li>Disc seat damaged</li> </ul> | <ul style="list-style-type: none"> <li>Remove inspection cover and flush</li> <li>Relpace BUNA-N insert</li> </ul>                 |
| Leak by hinge pin        | <ul style="list-style-type: none"> <li>Cracked or broken O-ring(s)</li> </ul>            | <ul style="list-style-type: none"> <li>Replace O-ring(s)</li> </ul>  |



# AWWA SWING CHECK VALVES

8001: 2" - 12" and 14" - 16" Check Valve with Lever and Weight Parts



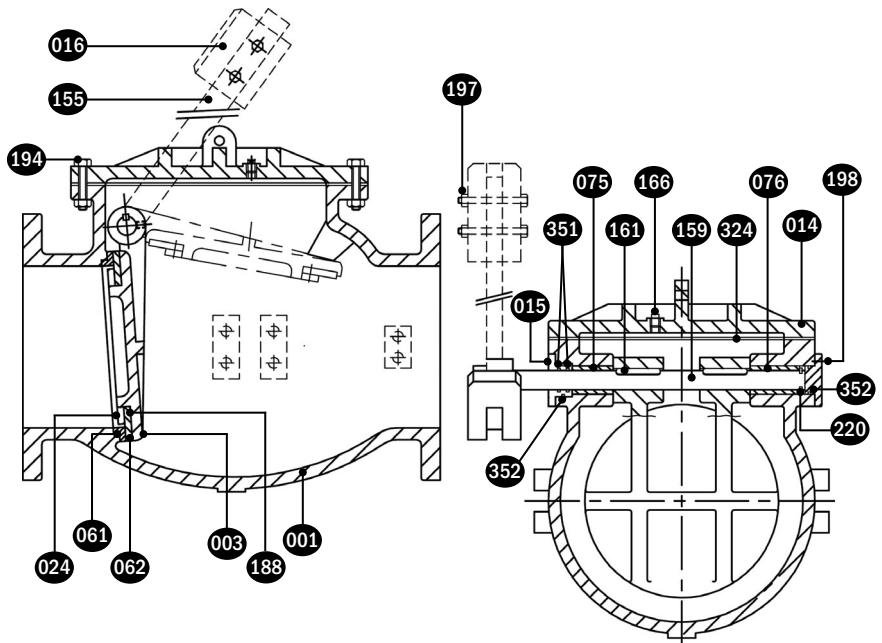
## 2" - 12" CHECK VALVE PARTS LIST

| ID  | DESCRIPTION       | MATERIAL                     |
|-----|-------------------|------------------------------|
| 001 | Body              | Cast Iron ASTM A-126 Class B |
| 003 | Disc              | Cast Iron ASTM A-126 Class B |
| 014 | Cover             | Cast Iron ASTM A-126 Class B |
| 016 | Weight            | Cast Iron ASTM A-126 Class B |
| 023 | Arm               | Ductile Iron ASTM A-536      |
| 024 | Seat Holder       | (See Note 1)                 |
| 061 | Body Seat Ring    | Bronze B                     |
| 062 | Disc Seat Ring    | Rubber BUNA-N D2000          |
| 088 | Seat Nut          | Brass                        |
| 154 | Bolt & Nut        | Steel (Zinc Plated)          |
| 155 | Weight Arm        | Ductile Iron ASTM A-536      |
| 159 | Hinge Pin         | 304 Stainless Steel          |
| 161 | Key               | 304 Stainless Steel          |
| 166 | Plug              | Malleable Iron               |
| 167 | Pin               | 304 Stainless Steel          |
| 188 | Disc Seat Bolt    | 304 Stainless Steel          |
| 197 | Weight Bolt & Nut | Steel (Zinc Plated)          |
| 220 | Snap Ring         | Stainless Steel              |
| 262 | Disc Stud         | Brass                        |
| 281 | Disc Nut          | Brass                        |
| 287 | Spacer            | Brass                        |
| 291 | Washer            | Brass                        |
| 302 | Cover Bolt        | Steel (Zinc Plated)          |
| 324 | Gasket            | Rubber BUNA-N D2000          |
| 351 | O-Ring B          | Rubber BUNA-N D2000          |
| 352 | O-Ring C          | Rubber BUNA-N D2000          |
| 462 | Retaining Plug    | Brass                        |

## 14" - 16" CHECK VALVE PARTS LIST

NOTE 1: 2" - 6" Cast Iron; 8" - 12" Ductile Iron

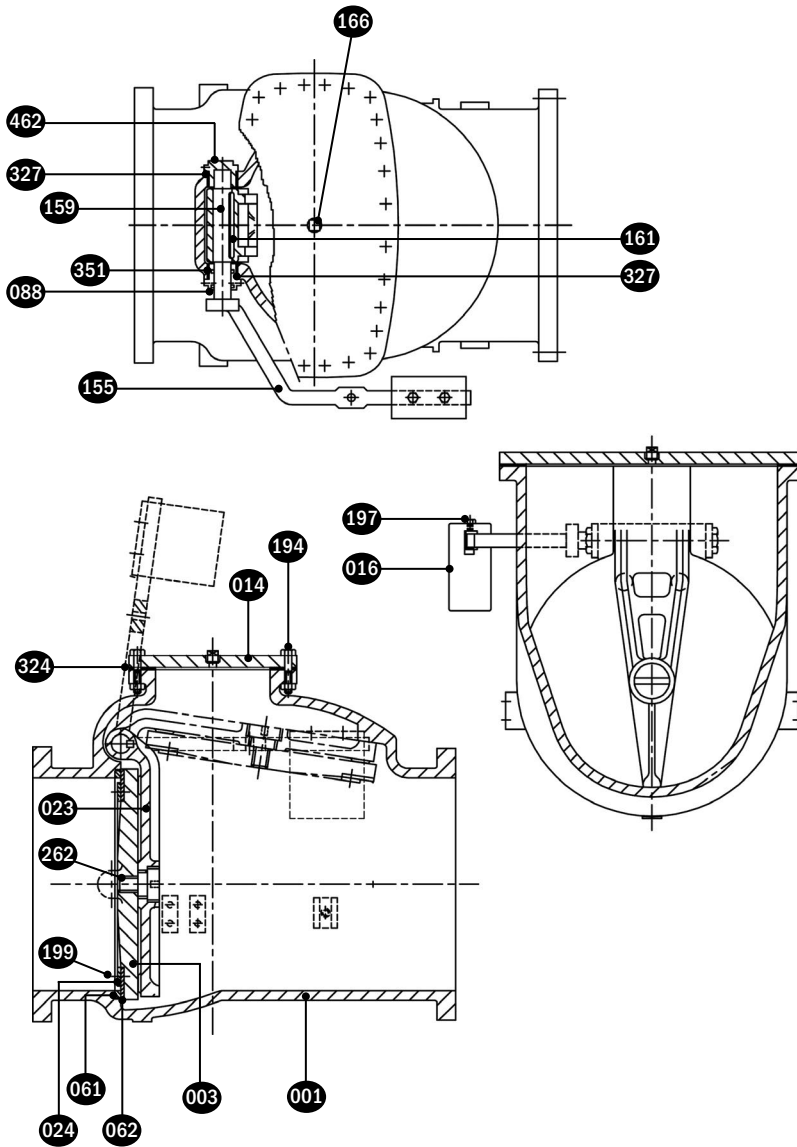
| ID  | DESCRIPTION      | MATERIAL                  |
|-----|------------------|---------------------------|
| 001 | Body             | Cast Iron ASTM A-126 CL B |
| 003 | Disc             | Ductile Iron ASTM A-536   |
| 014 | Cover            | Cast Iron ASTM A-126 CL B |
| 015 | End Plate (A)    | Bronze                    |
| 016 | Weight           | Cast Iron ASTM A-126 CL B |
| 024 | Seat Holder      | Ductile Iron ASTM A-536   |
| 057 | End Plate (B)    | Ductile Iron ASTM A-536   |
| 061 | Body Seat Ring   | Bronze                    |
| 062 | Disc Seat Ring   | Rubber BUNA-N D2000       |
| 075 | Bushing (A)      | Bronze                    |
| 076 | Bushing (B)      | Bronze                    |
| 155 | Weight Arm       | Ductile Iron ASTM A-536   |
| 159 | Hinge Pin        | 304 Stainless Steel       |
| 161 | Key              | 304 Stainless Steel       |
| 166 | Plug Ø1"         | Malleable Iron            |
| 188 | Disc Seat Bolt   | 304 Stainless Steel       |
| 194 | Cover Bolt & Nut | Steel (Zinc Plated)       |
| 197 | Weight Bolt      | Steel (Zinc Plated)       |
| 198 | End Plate Bolt   | Steel (Zinc Plated)       |
| 220 | Snap Ring        | Stainless Steel           |
| 324 | Cover Gasket     | Rubber BUNA-N D2000       |
| 351 | O-Ring B         | Rubber BUNA-N D2000       |
| 352 | O-Ring C         | Rubber BUNA-N D2000       |



# AWWA SWING CHECK VALVES

## 8001: 18" – 36" Check Valve with Lever and Weight Parts

### 18" – 36" CHECK VALVE PARTS LIST



| ID  | DESCRIPTION      | MATERIAL                  |
|-----|------------------|---------------------------|
| 001 | Body             | Cast Iron ASTM A-126 CL B |
| 003 | Disc             | Cast Iron ASTM A-126 CL B |
| 014 | Cover            | Cast Iron ASTM A-126 CL B |
| 016 | Weight           | Cast Iron ASTM A-126 CL B |
| 023 | Arm              | Ductile Iron ASTM A-536   |
| 024 | Seat Holder      | Ductile Iron ASTM A-536   |
| 061 | Body Seat Ring   | Bronze B                  |
| 062 | Disc Seat Ring   | Rubber BUNA-N D2000       |
| 088 | Seat Nut         | Brass                     |
| 155 | Weight Arm       | Ductile Iron ASTM A-536   |
| 159 | Hinge Pin        | 304 Stainless Steel       |
| 161 | Key              | 304 Stainless Steel       |
| 166 | Plug Ø1/2"       | Malleable Iron            |
| 194 | Cover Bolt & Nut | Steel (Zinc Plated)       |
| 197 | Weight Bolt      | Steel (Zinc Plated)       |
| 199 | Seat Holder Bolt | Steel (Zinc Plated)       |
| 262 | Disc Bolt        | 304 Stainless Steel       |
| 324 | Cover Gasket     | Rubber BUNA-N D2000       |
| 327 | Gasket           | Rubber BUNA-N D2000       |
| 351 | O-Ring           | Rubber BUNA-N D2000       |
| 462 | Retaining Plug   | Brass                     |

### TO ORDER PARTS

Contact our Parts Department:

Pratt  
 401 South Highland Avenue  
 Aurora, IL 60506-5563  
 ATTN: Parts Manager  
 (630) 844-4000

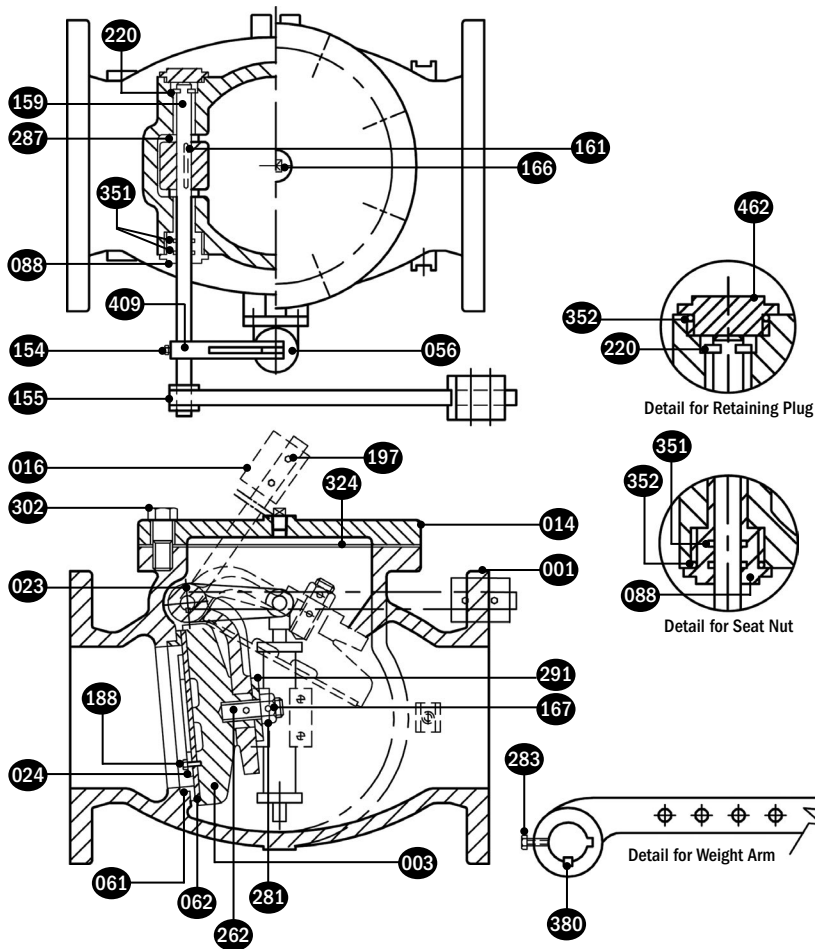
When ordering parts, please include the serial number located on the valve tag and the part description.



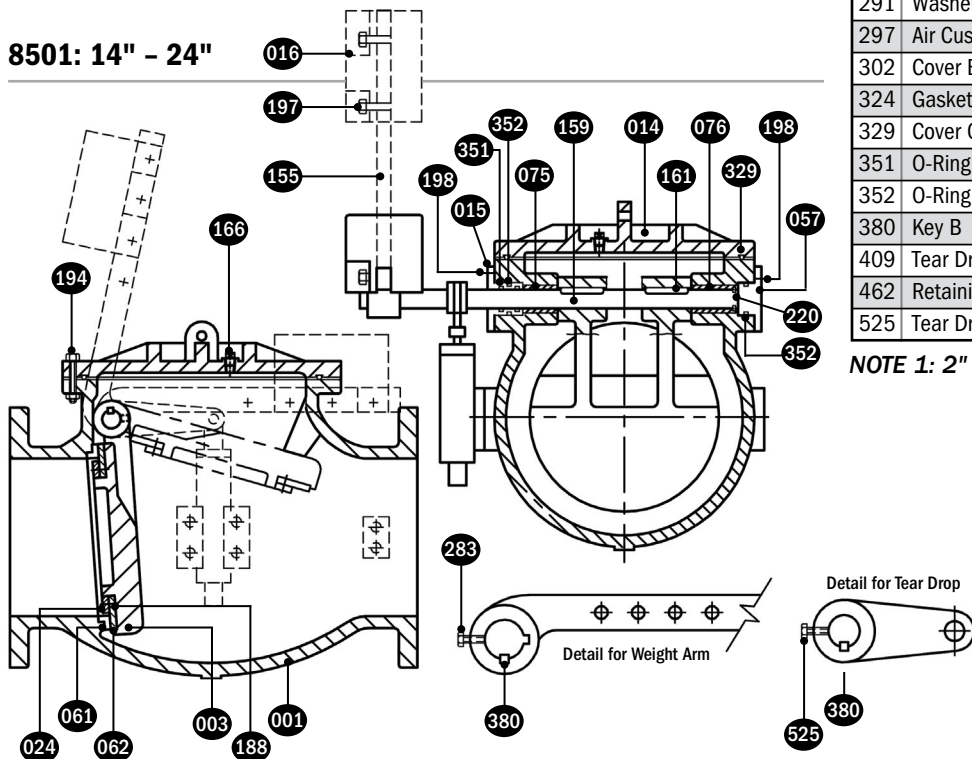
# AWWA SWING CHECK VALVES

## 8501: 3" - 12" and 14" - 24" Check Valve with Lever, Weight and Air Cushion Parts

### 8501: 3" - 12"



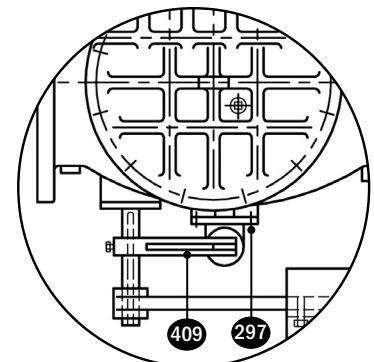
### 8501: 14" - 24"



### 8501: 3" - 24" CHECK VALVE PARTS LIST

| ID  | DESCRIPTION       | MATERIAL                  |
|-----|-------------------|---------------------------|
| 001 | Body              | Ductile Iron ASTM A-536   |
| 003 | Disc              | Ductile Iron ASTM A-536   |
| 014 | Cover             | Ductile Iron ASTM A-536   |
| 015 | End Plate (A)     | Bronze                    |
| 016 | Weight            | Cast Iron ASTM A-126 CL B |
| 023 | Arm               | Ductile Iron ASTM A-536   |
| 024 | Seat Holder       | Bronze (See Note 1)       |
| 056 | Air Cushion       | Bronze                    |
| 057 | End Plate (B)     | Ductile Iron ASTM A-536   |
| 061 | Body Seat Ring    | 316 Stainless Steel       |
| 062 | Disc Seat Ring    | Rubber BUNA-N D2000       |
| 075 | Bushing (A)       | Bronze                    |
| 076 | Bushing (B)       | Bronze                    |
| 088 | Seat Nut          | Brass                     |
| 154 | Bolt & Nut        | Steel (Zinc Plated)       |
| 155 | Weight Arm        | Ductile Iron ASTM A-536   |
| 159 | Hinge Pin         | 316 Stainless Steel       |
| 161 | Key / Key A       | 304 Stainless Steel       |
| 166 | Plug              | Malleable Iron            |
| 167 | Pin               | 304 Stainless Steel       |
| 188 | Disc Seat Bolt    | 304 Stainless Steel       |
| 194 | Cover Bolt & Nut  | Steel (Zinc Plated)       |
| 197 | Weight Bolt & Nut | Steel (Zinc Plated)       |
| 198 | End Plate Bolt    | Steel (Zinc Plated)       |
| 220 | Snap Ring         | Stainless Steel           |
| 262 | Disc Stud         | Brass                     |
| 281 | Disc Nut          | Brass                     |
| 283 | Arm Bolt          | Steel (Zinc Plated)       |
| 287 | Spacer            | Brass                     |
| 291 | Washer            | Brass                     |
| 297 | Air Cushion Bolt  | 304 Stainless Steel       |
| 302 | Cover Bolt        | Steel (Zinc Plated)       |
| 324 | Gasket            | Rubber BUNA-N D2000       |
| 329 | Cover O-Ring      | Rubber BUNA-N D2000       |
| 351 | O-Ring B          | Rubber BUNA-N D2000       |
| 352 | O-Ring C          | Rubber BUNA-N D2000       |
| 380 | Key B             | 304 Stainless             |
| 409 | Tear Drop         | Ductile Iron ASTM A-536   |
| 462 | Retaining Plug    | Brass                     |
| 525 | Tear Drop Bolt    | Steel (Zinc Plated)       |

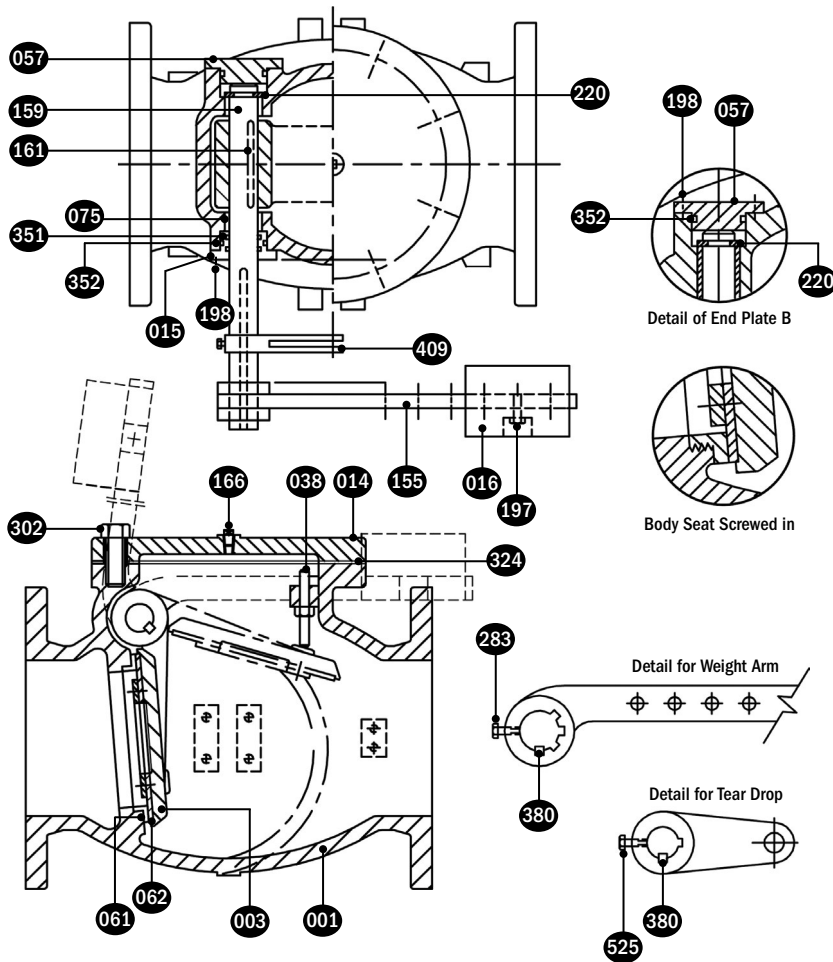
NOTE 1: 2" - 6" Cast Iron; 8" - 12" Ductile Iron



# AWWA SWING CHECK VALVES

9001: 3" - 12" and 14" - 24" Check Valve with Lever and Weight Parts

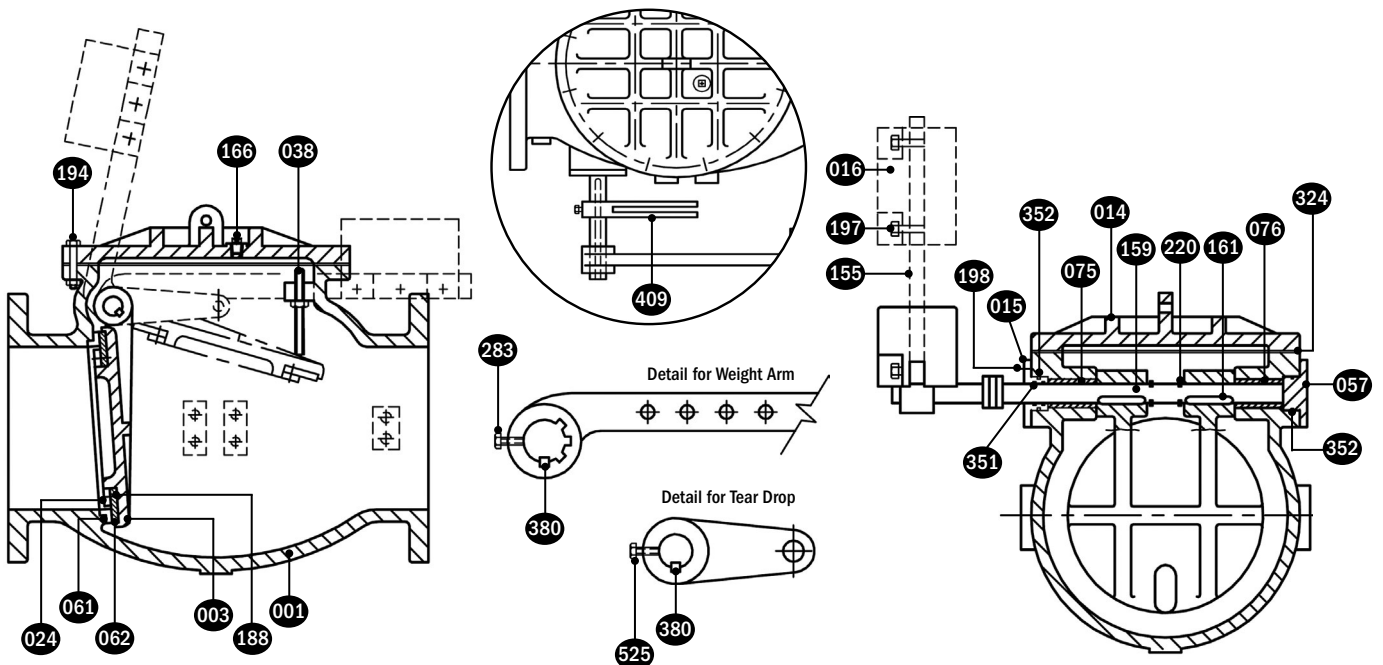
## 9001: 3" - 12"



## 9001: 3" - 24" CHECK VALVE PARTS LIST

| ID  | DESCRIPTION       | MATERIAL                  |
|-----|-------------------|---------------------------|
| 001 | Body              | Ductile Iron ASTM A-536   |
| 003 | Disc              | Ductile Iron ASTM A-536   |
| 014 | Cover             | Ductile Iron ASTM A-536   |
| 015 | End Plate (A)     | Bronze                    |
| 016 | Weight            | Cast Iron ASTM A-126 CL B |
| 024 | Seat Holder       | Ductile Iron ASTM A-536   |
| 038 | Stopper           | 304 Stainless Steel       |
| 057 | End Plate (B)     | Ductile Iron ASTM A-536   |
| 061 | Body Seat Ring    | 316 Stainless Steel       |
| 062 | Disc Seat Ring    | Rubber BUNA-N D2000       |
| 075 | Bushing (A)       | Bronze                    |
| 076 | Bushing (B)       | Bronze                    |
| 155 | Weight Arm        | Ductile Iron ASTM A-536   |
| 159 | Hinge Pin         | 316 Stainless Steel       |
| 161 | Key / Key A       | 304 Stainless Steel       |
| 166 | Plug              | Malleable Iron            |
| 188 | Disc Seat Bolt    | 304 Stainless Steel       |
| 194 | Cover Bolt & Nut  | Steel (Zinc Plated)       |
| 197 | Weight Bolt & Nut | Steel (Zinc Plated)       |
| 198 | End Plate Bolt    | Steel (Zinc Plated)       |
| 220 | Snap Ring         | Stainless Steel           |
| 283 | Arm Bolt          | Steel (Zinc Plated)       |
| 302 | Cover Bolt        | Steel (Zinc Plated)       |
| 324 | Gasket            | Rubber BUNA-N D2000       |
| 351 | O-Ring B          | Rubber BUNA-N D2000       |
| 352 | O-Ring C          | Rubber BUNA-N D2000       |
| 380 | Key B             | 304 Stainless Steel       |
| 409 | Tear Drop         | Ductile Iron ASTM A-536   |
| 525 | Tear Drop Bolt    | Steel (Zinc Plated)       |

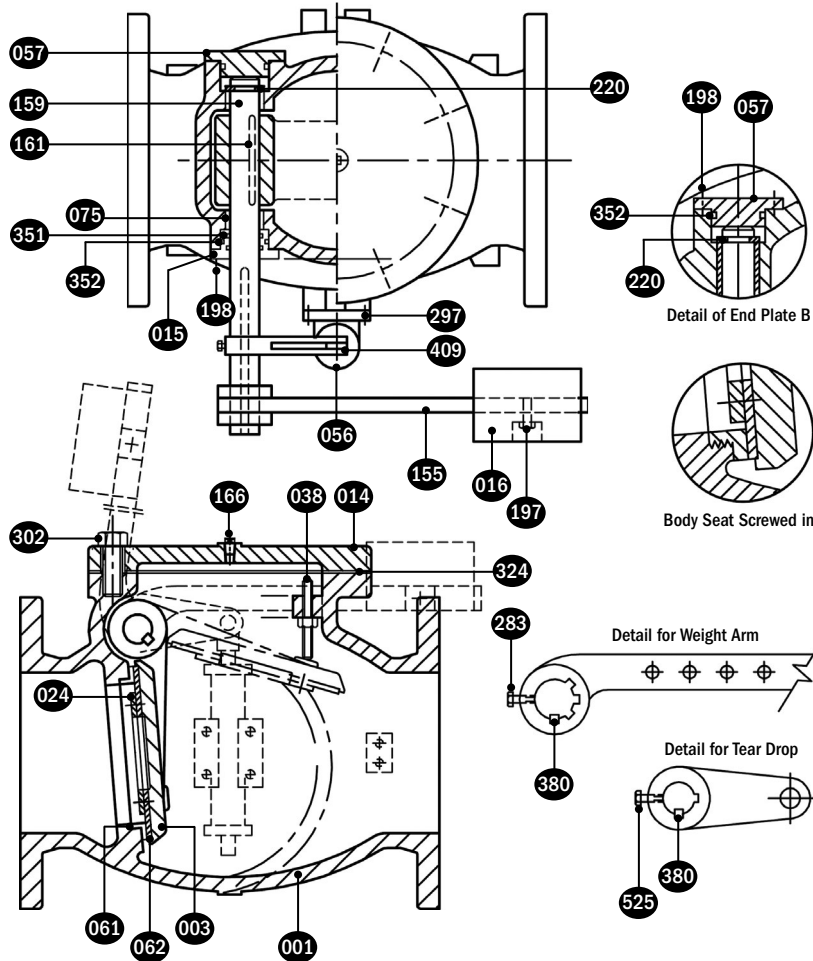
## 9001: 14" - 24"



# AWWA SWING CHECK VALVES

## 9001: 3" - 12" and 14" - 24" Check Valve with Lever, Weight and Air Cushion Parts

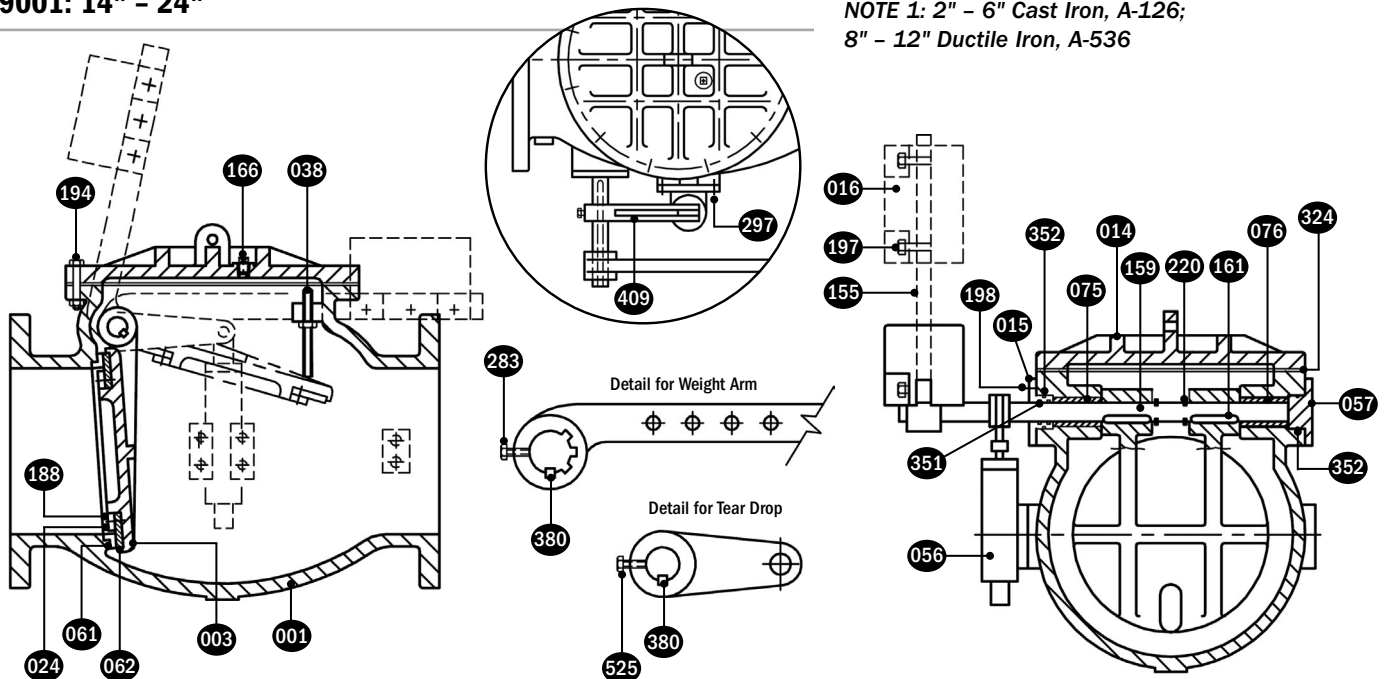
### 9001: 3" - 12"



### 9001: 3" - 24" CHECK VALVE PARTS LIST

| ID  | DESCRIPTION       | MATERIAL                  |
|-----|-------------------|---------------------------|
| 001 | Body              | Cast Iron ASTM A-126 CL B |
| 003 | Disc              | Ductile Iron ASTM A-536   |
| 014 | Cover             | Cast Iron ASTM A-126 CL B |
| 015 | End Plate (A)     | Bronze                    |
| 016 | Weight            | Cast Iron ASTM A-126 CL B |
| 024 | Seat Holder       | Bronze (See Note 1)       |
| 038 | Stopper           | 304 Stainless Steel       |
| 056 | Air Cushion       | Bronze                    |
| 057 | End Plate (B)     | Ductile Iron ASTM A-536   |
| 061 | Body Seat Ring    | 316 Stainless Steel       |
| 062 | Disc Seat Ring    | Rubber BUNA-N D2000       |
| 075 | Bushing (A)       | Bronze                    |
| 076 | Bushing (B)       | Bronze                    |
| 155 | Weight Arm        | Ductile Iron ASTM A-536   |
| 159 | Hinge Pin         | 316 Stainless Steel       |
| 161 | Key A             | 304 Stainless Steel       |
| 166 | Plug              | Malleable Iron            |
| 188 | Disc Seat Bolt    | 304 Stainless Steel       |
| 194 | Cover Bolt & Nut  | Steel (Zinc Plated)       |
| 197 | Weight Bolt & Nut | Steel (Zinc Plated)       |
| 198 | End Plate Bolt    | Steel (Zinc Plated)       |
| 220 | Snap Ring         | Stainless Steel           |
| 283 | Arm Bolt          | Steel (Zinc Plated)       |
| 297 | Air Cushion Bolt  | 304 Stainless Steel       |
| 302 | Cover Bolt        | Steel (Zinc Plated)       |
| 324 | Gasket            | Rubber BUNA-N D2000       |
| 351 | O-Ring B          | Rubber BUNA-N D2000       |
| 352 | O-Ring C          | Rubber BUNA-N D2000       |
| 380 | Key B             | 304 Stainless             |
| 409 | Tear Drop         | Ductile Iron ASTM A-536   |
| 525 | Tear Drop Bolt    | Steel (Zinc Plated)       |

### 9001: 14" - 24"



NOTE 1: 2" - 6" Cast Iron, A-126;  
8" - 12" Ductile Iron, A-536

### TO ORDER PARTS

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Contact our Parts Department:

Pratt  
401 South Highland Avenue  
Aurora, IL 60506-5563  
ATTN: Parts Manager  
(630) 844-4000

When ordering parts, please include the serial number located on the valve tag and the part description.

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**INTERNATIONAL** - 1.423.490.9555 - [www.mueller-international.com](http://www.mueller-international.com) - [international@muellercompany.com](mailto:international@muellercompany.com)

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