



**New 1.5"/2" PE Series valves – Frequently Asked Questions:**

**1. What are the 1.5"/2" PE Series valves affected by this change?**

| DESCRIPTION   | PART NUMBER |
|---|-------------|
| 1.5" PEB, NPT, ELECTRIC 24VAC                                     | B34383      |
| 1.5" PEB, BSP, ELECTRIC 24VAC                                     | B34083      |
| 1.5" PESB, NPT, ELECTRIC 24VAC                                    | B35113      |
| 1.5" PESB, BSP, ELECTRIC 24VAC                                    | B37083      |
| 1.5" PESB-R, NPT, RECLAIMED WATER, ELECTRIC 24VAC                 | B37300      |
| 1.5" PESB-R, BSP, RECLAIMED WATER, ELECTRIC 24VAC                 | B37310      |
| 2" PEB, NPT, ELECTRIC 24VAC                                       | B34583      |
| 2" PEB, BSP, ELECTRIC 24VAC                                       | B34093      |
| 2" PESB, NPT, ELECTRIC 24VAC                                      | B35213      |
| 2" PESB, BSP, ELECTRIC 24VAC                                      | B37102      |
| 2" PESB-R, NPT, RECLAIMED WATER, ELECTRIC 24VAC                   | B37400      |
| 2" PESB-R, BSP, RECLAIMED WATER, ELECTRIC 24VAC                   | B37410      |
| 1.5" PEB, BSP, WITH INTEGRATED CONTROL MODULE                     | G34155IC    |
| 2" PEB, BSP, WITH INTEGRATED CONTROL MODULE                       | G34157IC    |
| 1.5" PESB, NPT, WITH INTEGRATED CONTROL MODULE                    | G37115IC    |
| 2" PESB, NPT, WITH INTEGRATED CONTROL MODULE                      | G37117IC    |
| 1.5" PESB, BSP, WITH INTEGRATED CONTROL MODULE                    | G37155IC    |
| 2" PESB, BSP, WITH INTEGRATED CONTROL MODULE                      | G37157IC    |
| 1.5" PESB-R, NPT, RECLAIMED WATER, WITH INTEGRATED CONTROL MODULE | G37515IC    |
| 2" PESB-R, NPT, RECLAIMED WATER, WITH INTEGRATED CONTROL MODULE   | G37517IC    |
| 1.5" PESB-R, BSP, RECLAIMED WATER, WITH INTEGRATED CONTROL MODULE | G37555IC    |
| 2" PESB-R, BSP, RECLAIMED WATER, WITH INTEGRATED CONTROL MODULE   | G37557IC    |

**2. What are the improvements in the new 1.5"/2" PE Series valves?**

The new valves have two significant improvements:

- The body-bonnet seal of the valves has been tremendously improved. The new valves feature improved diaphragm materials which are designed to undergo very minimal shape changes during extreme temperature swings and high pressures.
  - **Customer benefit** – long service periods without maintenance calls or need to tighten nuts.
- The bonnets are stronger and tougher. They are up to 15% stronger than our older and competitive bonnets. They are designed to be manufactured consistently with excellent flatness and uniformity. They are also designed to have the stresses uniformly distributed.
  - **Customer benefit** – higher resistance to water hammer, cyclic surges and higher burst strength.

**3. What was the reason for the improvements?**

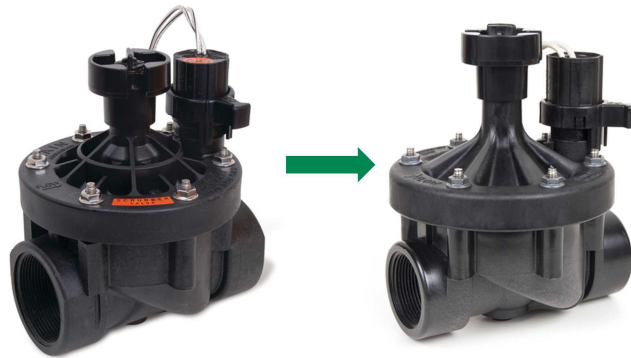
These improvements are part of Rain Bird's commitment to continuous improvements in quality.

#### 4. When were these improvements implemented?

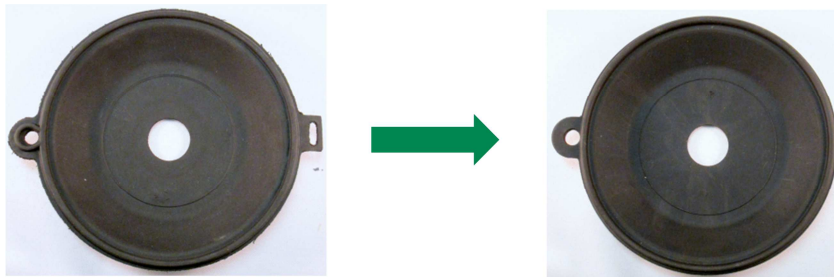
Rain Bird started shipping the new and improved valves to the Rain Bird distribution centers on December 13, 2015. This is a rolling change and hence customers will continue to see the older valves until the Rain Bird distribution centers run out of stock of the older valves.

#### 5. How can the old and new valves be recognized?

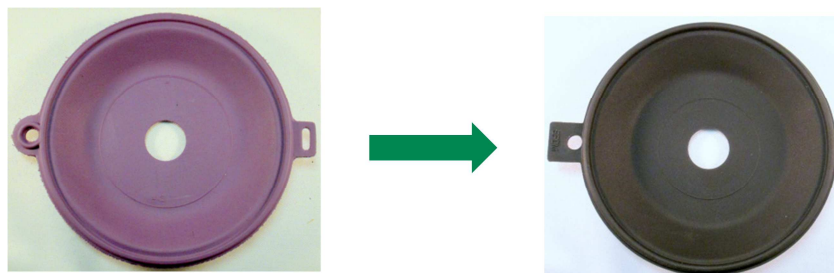
The new and old valves are easily distinguished by the appearance of the bonnets as shown below:



The old and new diaphragms for the PEB and PESB valves are distinguished by the absence of a rectangular tab as shown below:



The old diaphragm for the PESBR is purple and has two tabs – one rectangular and one circular. The new diaphragm for the PESBR is black and has only one tab which is rectangular as shown below:



#### 6. How is the maintenance of these valves impacted?

The new diaphragm assembly and the new bonnet are compatible with installed valves. However, new bonnet/old diaphragm assembly and old bonnet/new diaphragm assembly combinations are not allowed. This is due to the fact

that the diaphragm bead size and bonnet bead groove have been made larger. If the diaphragm assembly or bonnet assembly of already installed valves have to be changed, **they will BOTH need to be changed at the same time.** In order to facilitate this, Rain Bird now offers both the diaphragm assembly and bonnet assembly in a combination pack at the same price as older diaphragm assemblies.

The old bonnet assembly has been discontinued as a spare and will not be available. The following table lists the old and new spares:

| Old        |             |                                | New          |             |                                |
|------------|-------------|--------------------------------|--------------|-------------|--------------------------------|
| Model      | Part Number | Description                    | Model        | Part Number | Description                    |
| 150PEDIAPH | 234882S     | DIAPHRAGM ASSY 150 PEB         | 150PE DIBO   | 236482      | DIA ASSY + BONNET ASSY 150PEB  |
| 150PESDIAP | 23486602S   | DIAPHRAGM ASSY', 150 PESB      | 15PESBDIBO   | 23648401    | DIA ASSY + BONNET ASSY 150PESB |
| 150PESRDIA | 23486604S   | DIAPHRAGM ASSY, 150 PESB-R     | 15PSBRDIBO   | 23648402    | DIAASSY + BONNET ASSY 150PESBR |
| DIAPH150PE | 208605      | SP, DIAPHRAGM ASSY,200 PEB     | 20PEBDIBO    | 236483      | DIAASSY + BONNET ASSY 200PEB   |
| DIAPHRAGMA | 20851802    | SP, DIAPHRAGM ASSEMBLY 200 PES | 20PESBDIBO   | 23648501    | DIAASSY + BONNET ASSY 200PESB  |
| 200PESBRDA | 20851804S   | 1.5" & 2" PESBRDia Assy        | 20PSBRDIBO   | 23648502    | DIAASSY + BONNET ASSY 200PESBR |
| BONNET1502 | 20936702    | BONNET ASSEMBLY-150/200PEB     | DISCONTINUED |             |                                |

**7. What will happen if an old bonnet is used with a new diaphragm assembly?**

Since the older bonnets have a shallower groove and since the new diaphragm has a larger bead, this will lead to pinching of the bead and leaks.

**8. What will happen if a new bonnet is used with an old diaphragm assembly?**

Since the new bonnets have a deeper groove and since the old diaphragm has a smaller bead, this will lead to inadequate sealing and leaks.

**9. Will these changes be made to the 1" PE series valves also?**

It is not contemplated at this time since there is no need for this due to the smaller size of the bonnet. Diaphragm material changes (with no accompanying dimensional changes) leading to enhanced sealing capabilities have already been implemented in April 2014 for the 1" PE Series valves. As part of this release, changes leading to improved low flow performance were also implemented.

**10. Is the maintenance of the 1" PE series valves affected by the diaphragm material changes?**

No, since there were no changes to the 1" bonnet and since there were no dimensional changes to the diaphragm.

**11. Is there a summary table of the improvements and impacts?**

See the table below:

| Valve                   | Improvements  | Implementation date | Impact on maintenance   |
|-------------------------|---|---------------------|---|
| 1"<br>PEB/PESB/PESB-R   | <ul style="list-style-type: none"><li>Improved body-bonnet seal</li><li>Improved low flow performance</li></ul> | 3/15/2015           | No impact on maintenance procedure  |
| 1.5"<br>PEB/PESB/PESB-R | <ul style="list-style-type: none"><li>Improved body-bonnet seal</li><li>Stronger bonnet</li></ul>               | 12/13/2015          | Bonnet assembly and diaphragm assembly have to be replaced simultaneously |
| 2"<br>PEB/PESB/PESB-R   | <ul style="list-style-type: none"><li>Improved body-bonnet seal</li><li>Stronger bonnet</li></ul>               | 12/13/2015          | Bonnet assembly and diaphragm assembly have to be replaced simultaneously |

**12. Can the diaphragm assemblies for the 1.5" and 2" valves be interchanged (PEB/PESB/PESB-R)?**

No. Even though the diameters of these diaphragms are the same, the diaphragm *assembly* for the 1.5" PEB is different from that of 2" PEB; the diaphragm *assembly* for the 1.5" PESB is different from that of 2" PESB; the diaphragm *assembly* for the 1.5" PESBR is different from that of 2" PESBR.

**13. Can the diaphragm assemblies for the PEB and PESB be interchanged (1.5" or 2")?**

No. The scrubber valves have stainless steel filters that are designed to work with the scrubber fingers in the body.

**14. Can the diaphragm assemblies for the PESB and PESB-R be interchanged (1.5" or 2")?**

No. The reclaimed water valves have diaphragm material and diaphragm assembly components designed to withstand chlorine in the reclaimed water.