

# Automatic Valve

## WS Assembly Procedure Wave Spring Design for Canister Bottom

### Step 1



Insert gasket onto canister bottom.



Gasket should be flush with shoulder.

### Step 2 Tools Required



Flat screwdriver, spring insert adapter, no-go gauge.



Spring clip, high side up.

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### Step 3



Place wave ring on tool with high side. The high side is shown in the picture when ends of spring are pointing up.

### Step 4



Insert wave spring into tool.

### Step 4



Insert canister assembly into WS body starting with the outer circle.



Ensure that the direction of the valve is as shown in the picture above.

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## Step 5



Insert tool with wave spring onto canister bottom.



## Step 6



Use screwdriver to insert spring clip into groove.



Pushing the tip of the spring into groove first.

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### Step 6 (Cont'd)



Remove the spring insert adapter out of the body.



Use the flat screwdriver to push the spring into the groove.

### Step 7



Make sure the spring is inside of groove.



Wave spring is inserted within groove.

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### Step 7 (Cont'd)



- Checking the gap between spring tips
- Place the no-go gauge perpendicular to the surface of the modulate.
- If the gauge goes into the gap, then re-check the spring fitting in the slot with a screwdriver.
- If the gauge does not go into the gap between wave spring gap, the fitting is OK.

Insert tool with wave spring onto canister

### Step 8

Ensure that the wave spring is fitted correctly with the no-go gauge.



Recheck if the gauge goes into the gap as shown in the picture above.

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### Step 8 (Cont'd)



Wave spring is fitting correctly if the gauge doesn't go into the gap as shown in the picture above.

# Wave Spring Removal Procedure

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Place screwdriver on the gap and lift the spring out.



Take the spring out using a screwdriver as shown in the picture above.



Remove the canister.