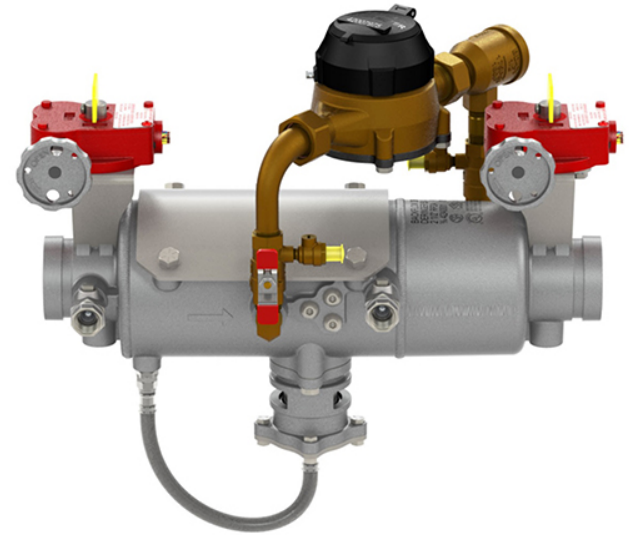
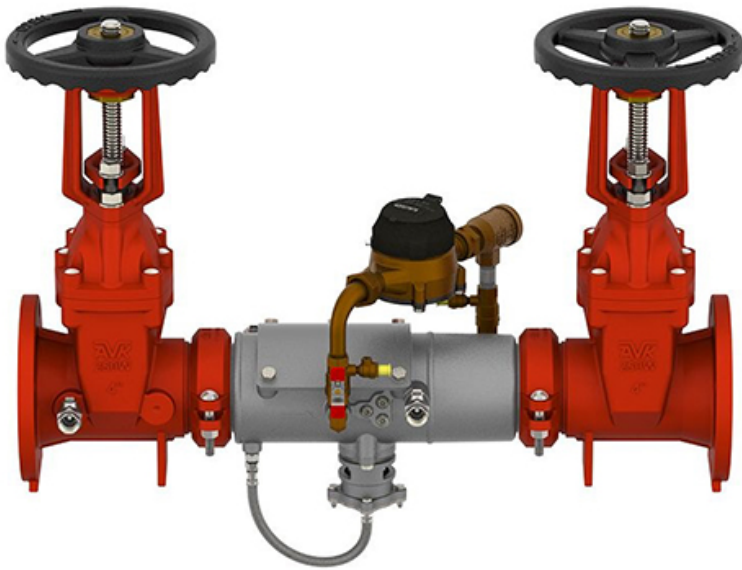


50, 50X, 50G, 50GX  
2" – 8"



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***Deringer***

# Product Overview

Production of the Model 50 (RPDA II) began in 2014.

The “X” and “GX” series come in 4” and 6” sizes only. This indicates internal check valves that are larger than line size. For example 6” uses 8” parts.

The “G” series indicates gate valve shut off valves

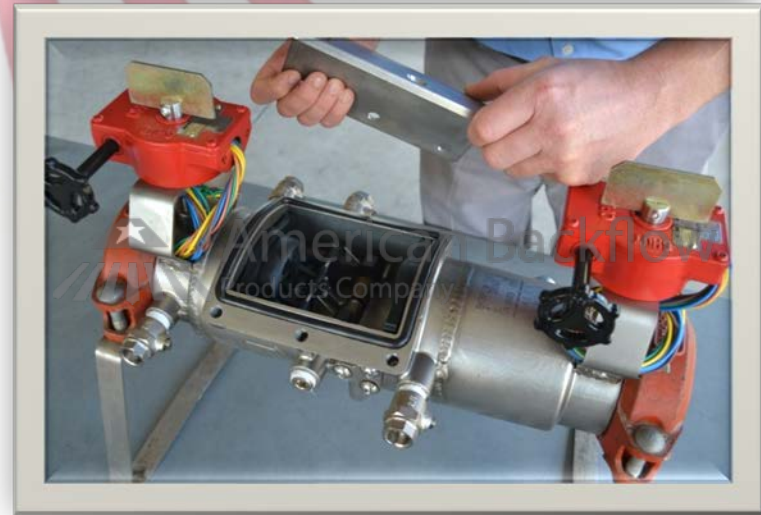
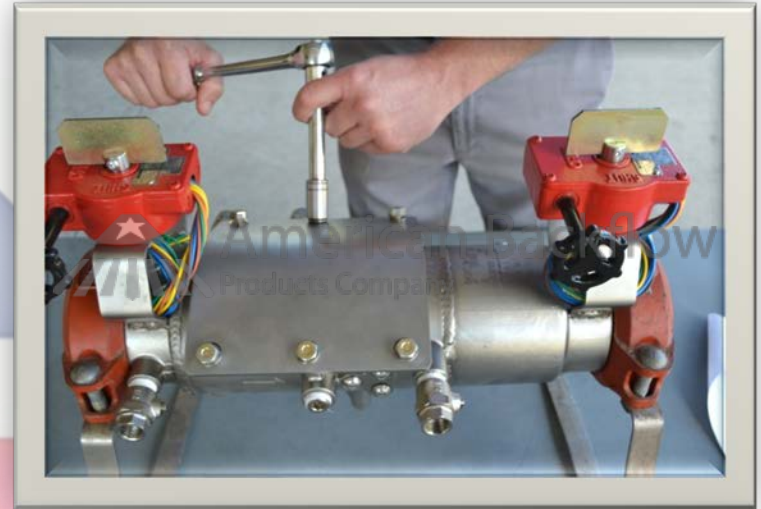
The Model 50 utilizes a testable single check for the Type 2 bypass assembly.

# Single Access Cover Removal

The access cover is secured by bolts and o-ring sealed.

There is no spring load on the cover.

Remove bolts and tapered washers.

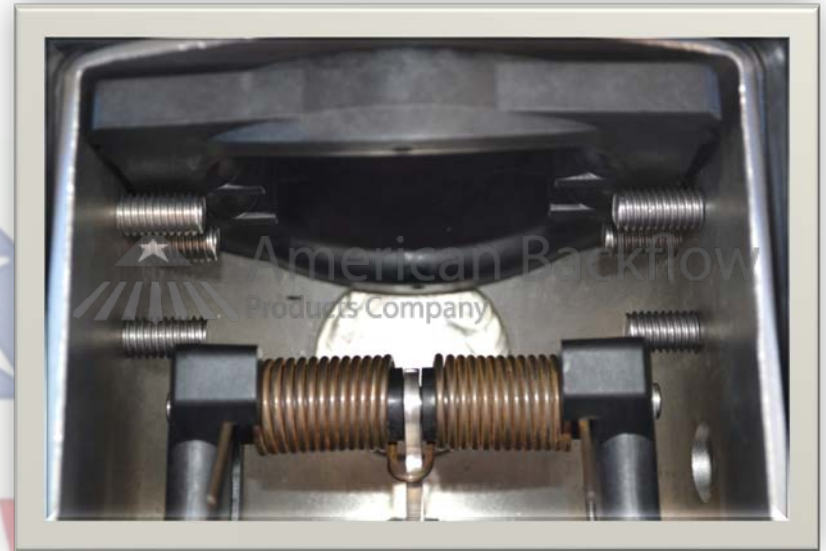


# Check Valve Removal

Modules are o-ring sealed and secured by retaining bolts located on the outside of the valve body.

2"- 4" sizes: Loosen the six 7/32" allen bolts until they are flush with the inner wall of the body.

6"- 8" sizes: Loosen the six retaining bolts.



# Check Valve Removal

Modules are o-ring sealed.

Remove check 1 first, then check 2.

Using a flat blade screwdriver, gently pry the module out of the body.



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# Check Disc Replacement

Remove 4 tower screws on the front or back of the check module.

The torsion spring is captured and does not need to be retained.

Remove the tower from the check seat.

Remove retaining screws from the disc retainer.



# Check Seat Service

The check seat is part of the module.

If seat is damaged, the entire module will have to be replaced.



# First Check Valve Reassembly

Proper orientation of the tower and seat is critical for *First* check operation.

Re-attach the tower to the seat with the spring arms and seat protrusions facing UP.





# Second Check Valve Reassembly

Proper orientation of the tower and seat is critical for *Second* check operation.

Re-attach the tower to the seat with the spring arms facing **DOWN** and seat protrusions facing **UP**.



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# Second Check Installation

Check 2 must be installed before check 1.

Insert check 2 into body with tower pointing down stream.

Push check into place until o-ring is fully seated.

Do not tighten retaining screws until check 1 is installed.



# First Check Installation

Check 2 must be installed before check 1.

Insert check 1 into body with tower pointing down stream.

Push check into place until o-ring is fully seated.



# Check Valve Reassembly Notes

Once check 1 and check 2 are fully seated, tighten the 6 retaining bolts on the outside of the body.

Make sure that the retaining bolts do not bind against the check valves.



# Access Cover Reassembly

Place the access cover on the main body.

Make sure cover o-ring maintains the correct position.

Insert cover bolts and tapered washers.

Tapered washers are necessary for water tight seal.

Tighten the cover bolts sequentially and by alternating from side to side.

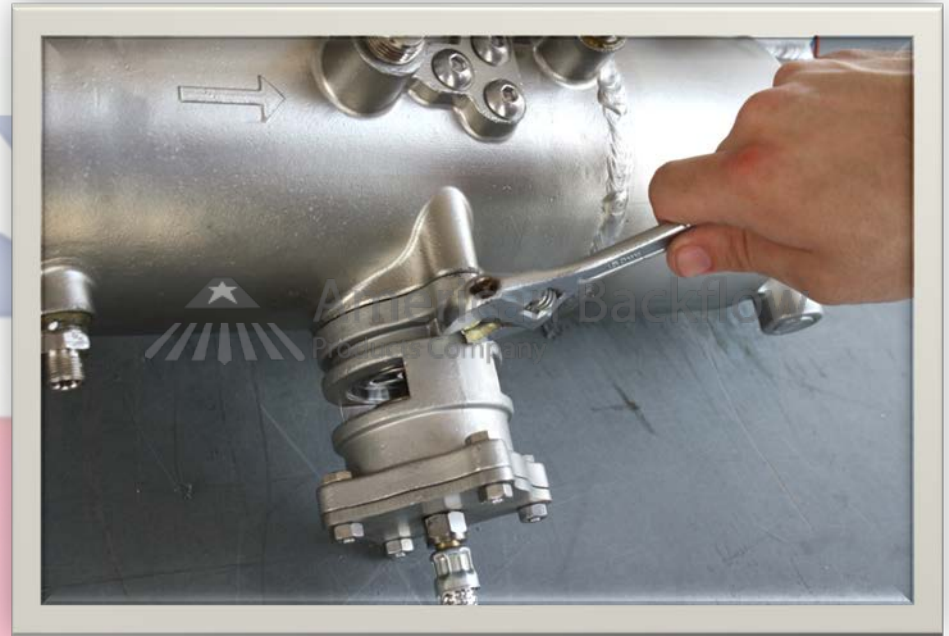


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# Relief Valve Removal

Relief valve is bolted onto body and o-ring sealed.

Disconnect sensing line hose.



# RV Disassembly

Remove the 4 cover plate bolts.

There is no spring load.

Remove the diaphragm.



# RV Disassembly

With the threaded end facing up, push the piston until the shaft with the attached E-clip is exposed.

Remove the E-clip.

Hold piston firmly as spring tension is released.





# RV Disc Replacement

The RV disc is molded onto the disc holder and must be replaced as one piece.



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# RV Seat Service

The RV seat is a machined part of the RV housing.

To replace the seat, you must replace the housing.



# RV Diaphragm Replacement

Reassemble relief valve  
in reverse order.

Form the diaphragm to  
fit over the disc holder.

Reinstall the diaphragm  
into the body.



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# RV Reassembly Notes

Lubricate the RV  
body o-ring.

Reattach the  
complete RV to the  
assembly body.



# Bypass Single Check Service (Model 50)

Cover is threaded into body and o-ring sealed.



Cover is spring loaded.



The check seat or (cage) is pushed into the body and o-ring sealed.

To replace check disc, remove screw and disc washer from poppet.

