#### 5000SS 2 ½ " - 6"







### **Modification Overview**

Production for the 5000SS began in 1991 and is current.

The 5000SS currently utilizes the <sup>3</sup>/<sub>4</sub>" 4000BM3 for the bypass assembly.

## Single Access Cover Removal

Cover is secured by a grooved coupling.

Cover has no spring load.







#### **Check Valve Removal**

Check valve modules called "Cam Checks".

Checks are o-ring sealed.

 $2\frac{1}{2}$ " - 6" Cam Checks are threaded into body.

# 1 check must be removed before # 2 can be removed.

8 - 10" Checks are simply bolted into body.



#### **Check Valve Removal**

2 <sup>1</sup>/<sub>2</sub>" - 6" cam checks unscrew counterclockwise by hand "if possible".

Do not use cam arm as a handle to unscrew.





## **Check Valve Removal**

2 1⁄2" - 6" Cam Checks.

If too tight, place a drift punch or solid rod (long screwdriver) in one of the holes on the outer edge of the check module.



Tap with hammer in counterclockwise direction to loosen.

## **Check Valve Removal Notes**

 $2\frac{1}{2}$ " - 6" Cam Checks.

There are "special tools" available to help remove check modules.





## **Check Seat Removal**

Check seats are part of each module and can not be removed.

If the seat is damaged, the complete check module will need to be replaced.



## Check Disc Inspection 2 <sup>1</sup>/<sub>2</sub>" - 6"

2 <sup>1</sup>/<sub>2</sub>" - 4" - First check 6" - Check # 1 & Check # 2

Locate the stud on the outlet flange of the assembly.

Place the cam arm hole on the stud and open the check valve so that the cam arm rests between the roller and clapper.





## Check Disc Inspection 2 <sup>1</sup>/<sub>2</sub>" - 6"

 $2\frac{1}{2}$ " - 4" second checks only.

Lift the cam arm and hold in open position.

Raise the clapper so that the end of the cam arm rests between the roller and clapper.



## **Check Valve Reassembly Notes**

Lubricate check o-ring.

Reassemble check modules in reverse order.

Lubricate outside edge of groove coupler gasket.

## **Relief Valve Removal**

RV assembly is threaded onto body and o-ring sealed.

**Disconnect RV Hose.** 

Unscrew complete RV assembly from the main body.

Do not place wrench on RV housing. Place wrench on flange and cover only.







## **Relief Valve Removal**

#### Remove cover bolts.

Remove piston and sleeve by sliding them out through the flange side of the RV housing.



# **RV Seat Removal**

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

To replace the seat, you must replace the housing.





### **Relief Valve Disassembly**

Remove sleeve from piston assembly.

The piston assembly is spring loaded.

Hold the piston firmly in one hand and unscrew the hex head bolt.





## **RV Disc Replacement**

Replace the RV disc in the disc holder.

Replace the o-rings on the hex head bolt.





## **RV Diaphragm Replacement**

Reassemble the disc holder and spring to the diaphragm / piston assembly.

Slide sleeve over diaphragm.

Position the bead of the diaphragm over the edge of the sleeve.





## **RV Diaphragm Replacement**

While holding the sleeve in one hand, place the bolt end of the assembly on a flat surface.

Using the other hand, cup the palm slightly over the diaphragm to form an air trap.





# **RV Diaphragm Replacement**

Rapidly slap the diaphragm down over the piston assembly and inside the sleeve.

If the diaphragm is wrinkled, then it is not in the correct position.

Repeat this step if necessary.





## **Relief Valve Reassembly Notes**

Slide the piston assembly and sleeve into the housing in reverse order.





