## Model 40 Barracuda $21 / 2^{\prime \prime \prime}-8 "$



## Product Overview

> Production of the Model 40 (Barracuda) began in 2018.
> The "X" series come in 6" sizes only. This indicates internal check valves that are larger than line size. For example 6" uses $8^{\prime \prime}$ parts.

## Single Access Cover Removal

> The access cover is secured by bolts and oring 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.


## 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

> Note: 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

> Note: 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.

## Second Check Installation

Note: 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

Note: 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.


## 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 Eclip 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.

## 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.

## RV Reassembly Notes

$>$ Lubricate the RV body o-ring.
$>$ Reattach the complete RV to the assembly body.


