

Tender Spring Swap – Polaris RZR XP1000

Congratulations on your purchase of the 'Tender Spring Swap'. This product is made to improve some of the stock suspensions poor performance and further enhance your experience.

Please take note of the information and instructions below to get the most out of your Tender Spring Swap Kit.

Note: For instructional videos, refer to www.rockymountainatvmc.com/videos.

<i>Kit will come with one of the following Part Numbers</i>	QTY	Part Number	Description (QTY) Color
	1	1805930001	Spring (x2) Blue
	1	1805930002	Spring (x2) White
	1	1805930003	Spring (x2) Titanium



Note: Required Tools include a suitable vehicle lift, Jack Stands, basic hand tools, shock spanner wrench, Tusk Spring Compressor and a measuring tape.

Your vehicle should have the shock spanner tool located in the vehicles tool bag. If you do not have a shock spanner wrench you can find it on our website at WWW.ROCKYMOUNTAINATVMC.COM P/N:1579820001

A spring compressor will make the job much easier- We use one in our How-To video. P/N:1493410001

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Installation

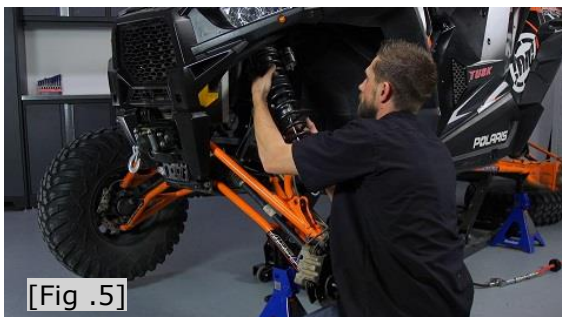
STEP 1

- Start by elevating the vehicle with a suitable lift that can support the full weight of the car safely. [Fig .1]
- Remove tires. [Fig .2]



STEP 2

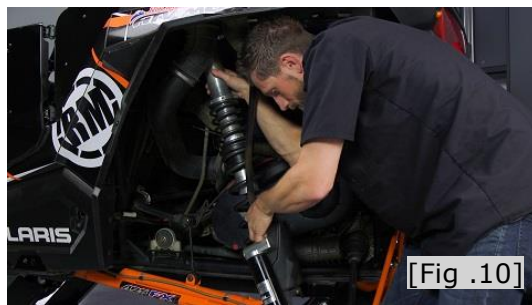
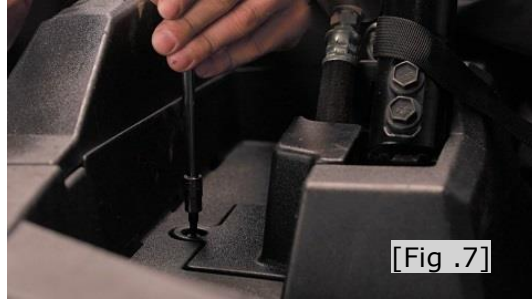
- Remove front shocks: Start by removing the lower shock bolt (note orientation of fastener). [Fig .3]
- Place a vehicle jack stand under the A-arm for support. [Fig .4]
- Remove top bolt and remove shock.
- Remove shock from vehicle. [Fig .5]
- Repeat process for the other side.



Tender Spring Swap – Polaris RZR XP1000

STEP 3

- Remove rear shocks: Start by removing the lower shock bolt (Note orientation of fasteners). [Fig .6]
- Place a vehicle jack stand under the trailing arm for support.
- Remove the rear shock's reservoir panel. [Fig .7]
- Remove the rear shock's reservoir from roll bar [Fig .8] and route down through rear body panel. [Fig .9]
- Remove upper shock bolt.
- Remove rear shock from machine. [Fig .10] Repeat process for other side.



STEP 4

- Measure spring pre-load on front shock and record measurement. [Fig .11]
- Clean & lube shock threads. [Fig .12]
- Using the shock spanner tool, back spring pre-load adjuster nut until it is at its highest point on the shock body. [Fig .13]
- Slide bump stop up shock shaft, while being careful not to scratch the shocks shaft, so spring retainer can have clearance to be removed. [Fig .14]
- Remove spring retainer. [Fig .15]
- (*NOTE: If unable to remove the spring's retainer, use a suitable spring compressor to compress the spring to allow clearance for the retainer to be removed. P/N: 1493410001)
- Remove bottom spring [Fig .16], spring divider [Fig .17] and tender spring. [Fig .18]
- Hold on to front shocks tender spring, as it will be reused to replace the rear shocks tender spring. Repeat process for the other front shock.



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[Fig .13]



[Fig .14]



[Fig .15]



[Fig .16]



[Fig .17]



[Fig .18]

STEP 5

- Reassemble front shock starting with the new tender spring [Fig .19] followed by the spring divider [Fig .20] and bottom spring [Fig .21] (**NOTE:** Spring divider has arrows on either side that indicate direction and where the spring coil ends align [Fig .20]). You will need to compress the lower spring so the spring's retainer has enough clearance to be re-installed. [Fig .22]
- Index the opening in the spring's retainer before setting preload so that it's 180 degrees away from the spring coil end. [Fig .23]
- Once springs are installed, seat the bump stop, lube shock threads and set preload to measurement taken in STEP 4.
- Front shock complete, repeat process on the other front shock, move onto rear shock.



[Fig .19]



[Fig .20]



[Fig .21]



[Fig .22]

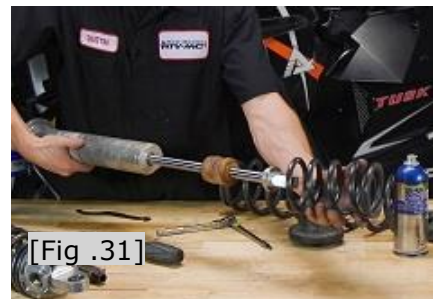
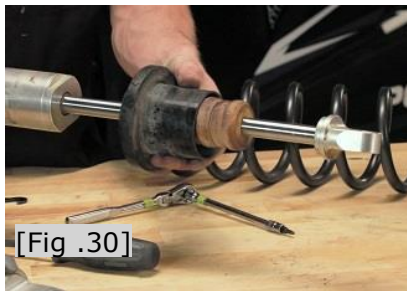
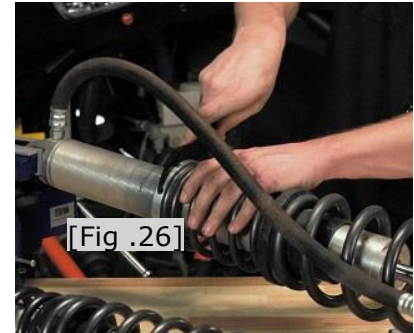
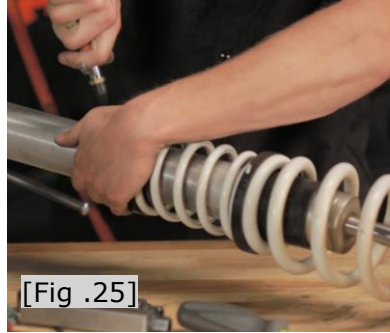


[Fig .23]

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STEP 6

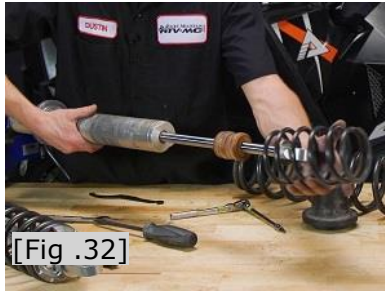
- Remove mudguard from base of shock.
- Measure spring pre-load on rear shock and record measurement. [Fig .24]
- Clean & lube shock threads. [Fig .25]
- Using the shock spanner tool, back spring pre-load adjuster until it is at its highest point on the shock body. [Fig .26]
- Slide bump stop up shock shaft, being careful not to scratch the shocks shaft, so spring retainer can have clearance to be removed. [Fig .27]
- Remove spring retainer. [Fig .28]
- Remove bottom spring [Fig .29], spring divider [Fig .30] and tender spring. [Fig .31]



STEP 7

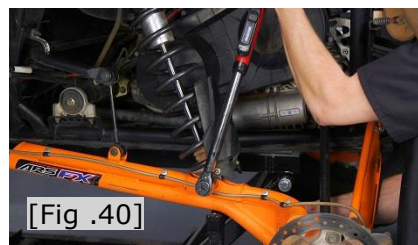
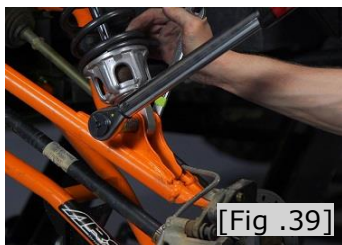
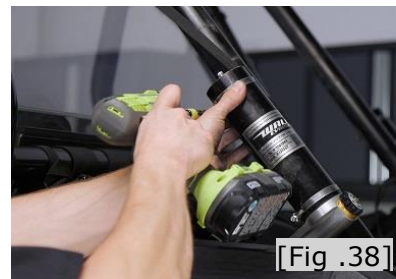
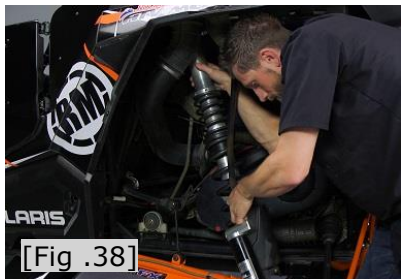
- Reassemble rear shock starting with the old tender spring pulled from front shocks [Fig .32], followed by the spring divider [Fig .33] and bottom spring [Fig .34]. (**NOTE:** Spring divider has arrows on either side that indicate direction and where the spring coil ends align)
- Install spring retainer [Fig .35] and mudguard. (**NOTE:** Pay attention to installation of mudguard bracket- make sure tabs are pointing down and in the forward facing position).
- Index opening in spring's retainer before setting preload so that it's 180 degrees away from the spring coil end [Fig .36]
- Once springs are installed, seat bump stop, lube shock threads and set preload to measurement taken in STEP 4 [Fig .37].

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STEP 8

- Once shocks have been re-assembled, install them on the machine. [Fig .38]
- Front shock upper and lower bolt torque spec: 42ft-lbs [Fig .39]
- Rear shock upper and lower bolt torque spec: 70ft-lbs [Fig .40]
- Re-install wheels and torque lugs to spec (**NOTE:** Always reference your service manual for proper torque specifications: 120ft-lbs [Fig .41])



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Step 9

- Lower machine to ground. [Fig .42]
- Measure vehicles front to rear bias after having driven machine 100 meters: Come to a slow and steady stop. [Fig .43] Make sure vehicle is on a level surface. Measure the distance from the machines skid plate to the ground at the front of machine behind the A-arm [Fig .44], record measurement. Next measure the distance from the skid plate to the ground at the rear of the machine [Fig .45], record measurement. Subtract the rear from the front, measurement needs to be 1/2 inch to no higher than 3/4 of an inch higher in the front than the rear. If front to rear bias is not in spec, elevate machine and adjust shock preload as necessary.
- Machines overall ride height should measure out between 13 to 15 inches (**NOTE:** Overall ride height results may vary if aftermarket A-arms, trailing arms and over-sized tires are being used).

