

MAINTENANCE SCHEDULE

MAINTENANCE DESCRIPTION	FREQUENCY (in hours)
REPLACE BATH OIL	NORMAL CONDITIONS: 50 MUDDY CONDITIONS: 30
REPLACE WIPER SEALS	NORMAL CONDITIONS: 100 MUDDY CONDITIONS: 75
CHANGE DAMPER OIL	200
CHECK FASTENERS	30
INSPECT STANCHIONS	EVERY RIDE
CLEAN DIRT AND MUD FROM STANCHIONS	EVERY RIDE
CHECK ADJUSTMENT CONTROLS	EVERY RIDE

TORQUE VALUES

FASTENER	TORQUE
COMPRESSION BOLT (DAMPER SIDE)	70-75 LB-IN 8 NM
COMPRESSION BOLT (AIR SPRING SIDE)	70-75 LB-IN 8 NM
TOP CAPS	110 LB-IN 12 NM

REGISTER YOUR FORK ONLINE AT MRPBIKE.COM

A link to registration can be found under the "SUPPORT" heading. While there check out our "TECH RESOURCES" section for more information on the tuning, maintenance, and the technology found in your MRP fork.

GET THE LATEST INFO ON MRP PRODUCTS

Follow us on:



[Facebook.com/MRPbike](https://www.facebook.com/MRPbike)



[Instagram.com/MRPbike](https://www.instagram.com/MRPbike)

MRP IS A DIVISION OF:
MOUNTAIN RACING PRODUCTS
580 N WESTGATE DR.
GRAND JUNCTION, CO 81505
970.241.3518



raven

**OWNER'S
MANUAL**

COMPRESSION ADJUSTMENT

The compression adjustment knob is located on the top of the damper-side fork leg. There are **8 clicks** of adjustment. Your fork comes from the factory in the first, least damped position.

As you turn the dial clockwise, you are adding compression damping or slowing the forks compression stroke. It is an adjustment that is subtle, and often overlooked, but can make a big difference in how your fork performs. Aggressive riders tend to like more compression damping because it provides a firmer, more supportive feel. Comfort oriented, less aggressive riders tend to like less damping in order to maximize small bump sensitivity. Do not confuse compression damping with spring rate. They are very different adjustments, and while adding compression damping may make the fork feel “stiffer”, it is not changing the spring rate.

REBOUND ADJUSTMENT

Adjustments to rebound can be made by turning the red knob on the bottom of the damper-side fork leg. The total usable range of rebound adjustment on the Raven is approximately **20 clicks**.

Rebound damping is what prevents your suspension fork from feeling like a pogo stick. It controls the rebound stroke of the fork after a compression stroke (bump) has occurred. Increasing (turn knob clockwise) rebound damping slows the rebound stroke of the fork. Decreasing (turn knob counter clockwise) rebound damping speeds up the rebound stroke of the fork. Ideally, you want to arrive at a setting that allows your wheel to track the terrain and not get bounced off line.

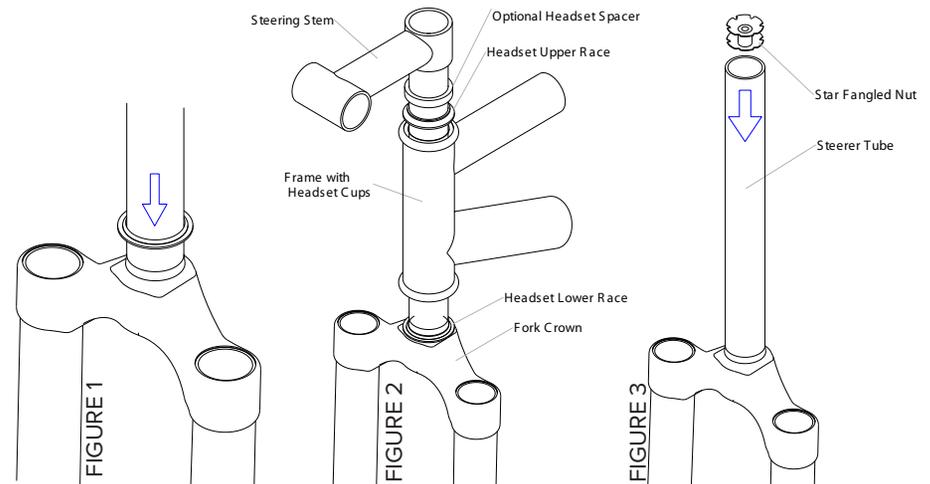
OPERATING THE BOLT-ON AXLE

1. Seat hub into the dropouts of the fork.
2. Insert axle through the disc brake side dropout, through the hub and into the captive nut on the non-disc brake side dropout.
3. Using a 6mm hex tool, thread axle into the captive nut and tighten to 12-15 Nm. **DO NOT TIGHTEN THE BOLT-ON AXLE**

USING THE 8mm HEX FITTING ON THE CAPTIVE NUT.

IMPORTANT:

WHEN INSTALLING THE WHEEL OR A NEW TIRE, CHECK FOR MINIMUM CLEARANCE. RELIEVE AIR PRESSURE IN THE AIR SPRING AND COMPRESS FORK COMPLETELY TO BOTTOM OUT. THERE MUST BE 1/8" OR 3mm OF CLEARANCE BETWEEN THE CROWN AND HIGHEST POINT ON THE TIRE AT FULL BOTTOM OUT TO ENSURE ADEQUATE CLEARANCE IN ALL RIDING CONDITIONS.



(1/8") below the mark. Consult your dealer or mechanic if you don't have the proper tools to cut the steerer tube.

6. The star-fangled nut must now be installed into the steer tube. If you don't have the set tool, we recommend dealer installation of this part. (See Figure #3)

7. Clean and grease all headset bearings and races to prepare them for assembly. Note: Replace the bearings if there is any sign of wear or corrosion.

8. Now loosely assemble the headset, stem and handle bars as done in step four.

9. Install the headset according to the manufacturer's instructions until there is no play and the fork turns smoothly.

10. Install your front brake and adjust according to the manufacturer's instructions.

11. Install the wheel on the fork. Proper installation of the axle is communicated in the next section of this manual.

12. Check to see that the brakes are adjusted and properly working.

Make sure that the brake cable does not interfere with any part of the bike and is secured under the brake hose clamp on the fork brace.

Make sure your brakes are adjusted and functioning properly, and the brake hose does not interfere with any part of the bike when the fork is compressed and released.

IMPORTANT BRAKE INFORMATION:

THE RAVEN FORK FEATURES A POST MOUNT FOR 180mm ROTORS. SHOULD YOU WANT TO USE A LARGER ROTOR, MAKE SURE TO USE THE APPROPRIATE DISC BRAKE ADAPTOR AS RECOMMENDED BY YOUR BRAKE MANUFACTURER. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR DEATH.

AIR SPRING SETUP

The Raven uses MRP's FulFill™ air spring system with independent positive and negative chambers. It is critical that you follow the steps below in order for proper suspension function.

Because the Raven is a high-performance fork and its desired feel is highly subjective, we recommend experimenting with different air pressure settings in conjunction with air-volume modifications (using the included Huck Pucks).

In testing, we've found that the common usable range for air pressure is between 48 - 150 PSI. **A good starting point for most riders on our 150 and 160mm forks seems to be a positive pressure (in PSI) equal to approximately 40-45% of body weight in pounds (lbs.).** For example, a 175 lb. rider should start with 70 PSI in the positive chamber. Shorter travel forks may require more pressure than this, and longer (170mm) forks less, but this a good baseline. Most riders like slightly more pressure in the negative chamber. You may inflate the negative chamber to as much as 10% or 10 PSI (whichever is greater) more than the positive chamber.

*If you are unfamiliar with lbs. (pounds) the conversion from kg. (kilograms) is: **kg. x 2.2 = lbs.***

Here, below, are some examples of baseline settings, including rebound settings (counted as “clicks from closed”):

WEIGHT	PRESSURE		REBOUND
	POSITIVE	NEGATIVE	
120 lbs. / 54 kg.	48	53	14
130 lbs. / 59 kg.	52	57	14
140 lbs. / 64 kg.	56	62	13
150 lbs. / 68 kg.	60	66	13
160 lbs. / 73 kg.	64	70	12
170 lbs. / 77 kg.	68	75	11
180 lbs. / 82 kg.	72	79	11
190 lbs. / 86 kg.	76	84	10
200 lbs. / 91 kg.	80	88	10
210 lbs. / 95 kg.	84	92	9

AIR PRESSURE FILL PROCEDURE

1. Unthread and remove the negative air chamber cap found on the bottom of the spring leg.
2. Attach a high-pressure, suspension specific pump to the valve and using the pump's bleed button, remove all pressure. Remove the pump.
3. Locate the positive air chamber cap at the top of the spring leg. Unthread and remove the positive air chamber cap and attach a high-pressure suspension specific pump to the valve.
4. Fill the positive air chamber to the desired pressure. Remove the pump and re-install the positive air chamber cap.
5. Return to the negative air chamber; attach the pump, fill to the desired pressure, remove the pump, and re-install the negative air chamber cap.

HUCK PUCK (AIR VOLUME) TUNING

Some Raven models come stock with Huck Pucks installed. The maximum number of huck pucks your fork can accommodate depends on chassis (wheelsize) and travel. The installation of Huck Pucks reduces the volume of the positive air spring and thereby changes the overall spring curve. With additional Huck Pucks, the biggest change occurs at the end of the stroke, where it becomes more progressive (less susceptible to bottom-out).

27.5" MODELS

170 and 160: 0 installed, 5 max.

150: 0 installed, 6 max.

140: 1 installed, 7 max

27.5+ / 29" MODELS

160: 0 installed, 5 max.

150: 0 installed, 6 max.

140: 1 installed, 7 max.

130: 2 installed, 8 max.

120: 3 installed, 8 max.

HUCK PUCK INSTALLATION OR REMOVAL

1. Release all air pressure from the negative air spring by depressing the Schrader valve core on bottom of the air leg of the fork. Repeat the same for the positive spring (at the top of the air leg of the fork). To ensure all air is released from both chambers, cycle the fork 2-3 times and depress the positive valve core again.
3. Unthread the spring-side top cap from the crown of the fork using a cassette tool.
4. With the top cap removed, install or remove Huck Pucks. Use up to a 4mm hex key or something of similar diameter inserted into the side of the pucks to tighten or loosen the pucks. Tighten any installed pucks onto the bottom of the top cap snugly so they do not come loose over time.
5. Re-install the top cap by threading it back into the fork crown and tighten to 12 Nm.
6. Inflate the air spring as outlined in the previous section. Added Huck Pucks will require slightly lower air pressure values to preserve the previous sag level.