MATTOC

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TRAVEL ADJUST GUIDE

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INTRODUCTION

This manual is intended to guide the user through the steps necessary to internally adjust the travel of the Mattoc Pro and Expert forks. **NOTE:** This manual does not cover the steps need to convert the fork from one wheel size to another. Please see the Mattoc Service Guide for instructions on how to perform this.

WARNING We highly recommend that service to this fork be performed by a certified bicycle mechanic. Failure to follow instructions presented in this manual could lead to serious injury or death. Any questions about the servicing of this fork or the manual itself should be directed to Manitou Customer Support at:
Phone: 888-686-3472
Email: techsupport@hayesbicycle.com

WARNING Suspension forks by design can contain preloaded springs, gases and fluids under extreme pressures. Warnings contained in this manual must be observed to avoid damage to fork, serious injury or even death.

REQUIRED TOOLS

Below is a list of tools necessary for changing the travel of the Mattoc fork.

Safety Glasses
Nitrile Gloves
Lint-Free Rags
Torque Wrench
M-Prep Grease - Manitou part number 85-0031
Semi-bath Oil - Manitou part number 85-0023

Mattoc Service Tool Kit - Manitou part number 172-31133
This kit contains all tools below for servicing the Mattoc fork:
- Mattoc 8mm Thin Wall Socket
- Mattoc Cassette Tool
- Mattoc Flat Ground 24mm Socket

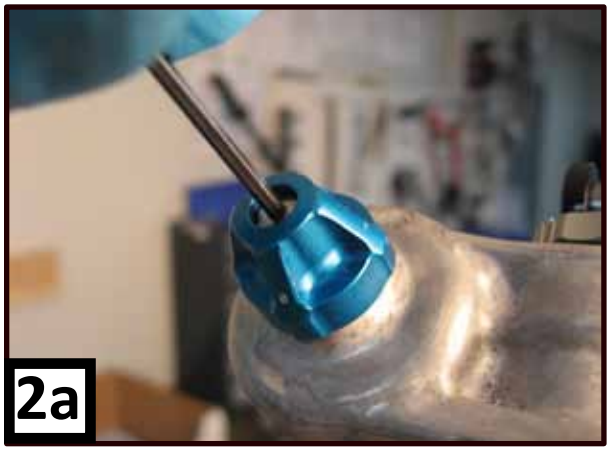
8mm Allen Wrench
8mm Allen Socket
2mm Allen Wrench
2mm Allen Socket
3mm Allen Wrench (optional)
4mm Allen Wrench (optional)
Fork/Shock Pump

SECTION 1 - FORK DISASSEMBLY

1. Remove air valve cap.

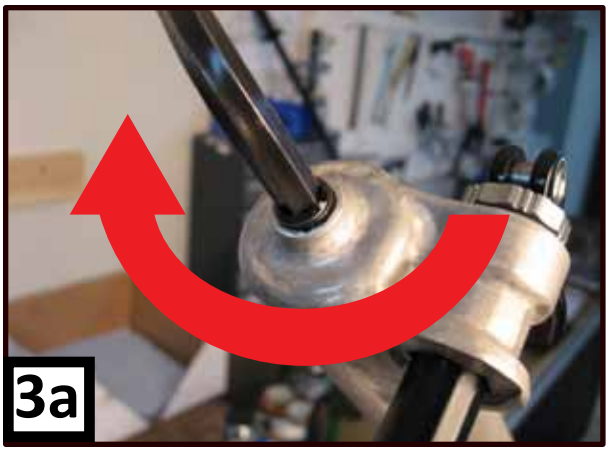


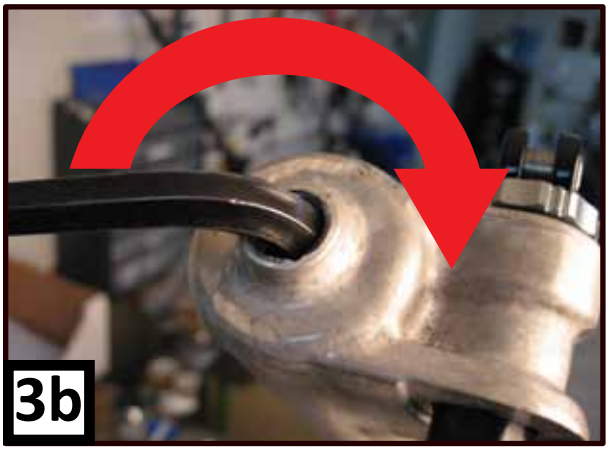
2. Using a 2mm Allen wrench, remove the rebound damper knob.





3. Insert an 8mm Allen wrench into the end of the rebound damper rod. Turn wrench **clockwise** until damper rod can be pushed into fork casting.







4. Using the Mattoc 8mm Thin Wall Socket, turn the compression rod **clockwise** until compression rod is disengaged from the casting threads.



5. Remove casting from the fork. It is recommended that this be done over a drain pan as there is semi-bath oil in the lower legs that will be released when casting is removed.



6. Attach shock pump to the air valve on the compression rod and use the pressure release button to release all air pressure from the fork. If your shock pump does not have a pressure release on it you can use a 3mm Allen wrench to depress the valve core and release the air.



WARNING Air pressure must be released prior to disassembly of the fork. Failure to properly and fully release air pressure could result in serious injury or death.

7. With shock pump still attached and pressure release button depressed, compress the compression rod assembly into the upper stanchion of the fork. Compress rod until bottom out bumper is contacting the end cap. If your shock pump does not have a pressure release button use a 3mm Allen wrench to depress the valve core while pushing compression rod into stanchion.



8. Place Mattoc Cassette Tool into the compression rod assembly end cap.



9. Using an adjustable wrench or similar tool, turn the cassette tool counter clockwise to remove compression rod assembly from fork stanchion.



10. Remove compression rod assembly from fork.





11. Using the Mattoc 24mm Flat Ground Socket slowly remove the air cap from the fork.
NOTE: A standard socket can be used as well however the rounded edges of a standard socket can cause the socket to jump off of the air cap while turning causing cosmetic damage to the fork.

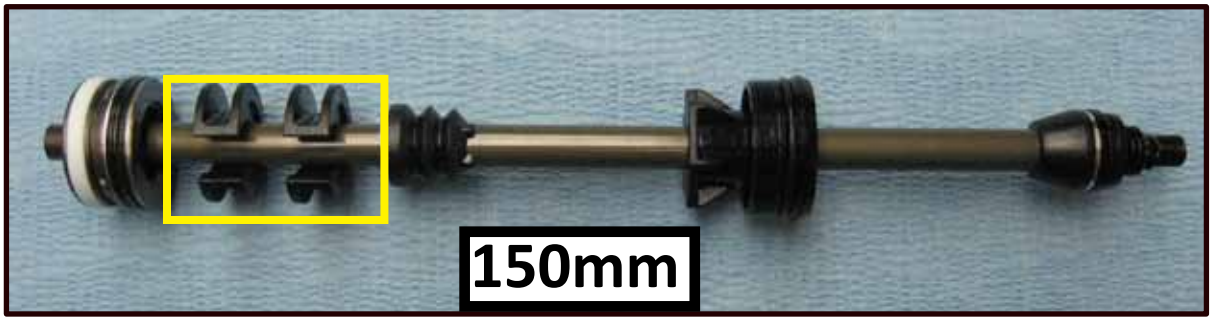




SECTION 2 - TRAVEL ADJUST, 26” FORKS

The below photos show the different travels achievable on the Mattoc 26” forks by adding and removing the travel spacers on the compression rod assembly. Travel spacers are boxed in yellow below for reference. When setting the fork at 170mm you will remove all travel spacers from the compression rod.







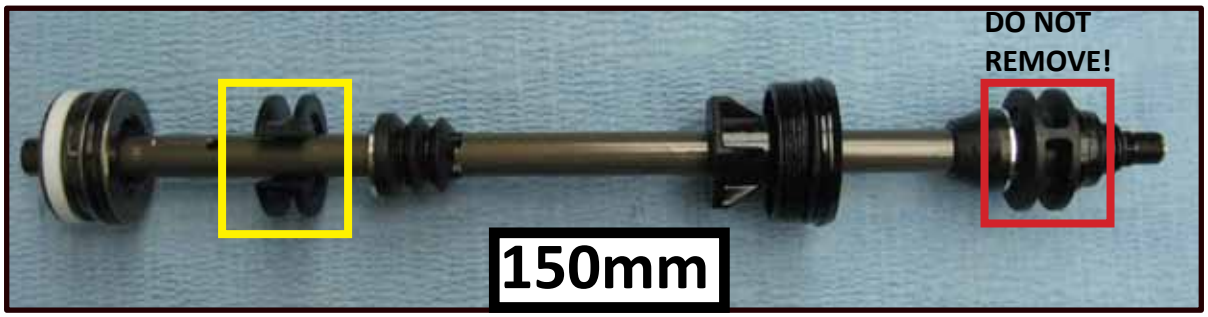


SECTION 3 - TRAVEL ADJUST, 27.5” FORKS

The below photos show the different travels achievable on the Mattoc 27.5” forks by adding and removing the travel spacers on the compression rod assembly. Travel spacers are boxed in yellow below for reference. When setting the fork at 160mm you will remove all travel spacers from the compression rod.

WARNING The bottom spacer on the Mattoc 27.5” compression rod is required to maintain proper tire clearance from the crown. Removing this spacer could cause the crown to contact the tire during riding and cause serious injury or death.







SECTION 4 - FORK ASSEMBLY

1. Apply a thin coat of M-Prep grease to air piston seal and glide ring.

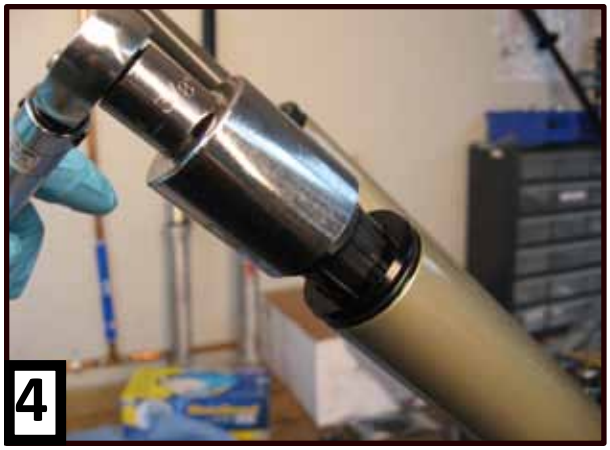


2. Slide compression rod end cap to the very bottom of the rod assembly until the bottom out bumper contacts end cap. Insert assembly into fork stanchion. Thread the end cap in a few turns by hand.





4. Using the Mattoc Cassette Tool and a torque wrench (a socket will fit over the Cassette Tool, shown in picture) tighten the compression rod end cap down to:
60-80 in lbs. [6.8-9.0 Nm]



5. Rotate fork to riding position and insert 7cc's of Manitou Semi-bath oil into the stanchion on top of the compression rod air piston.



6. Install Air Cap using the Mattoc Flat Ground 24mm Socket and torque wrench. Tighten cap to 60-80 in lbs. [6.8-9.0 Nm].





7. Invert fork and attach shock pump to the air valve. Depress the air release button on the pump and pull compression rod out to fully extended position. If your shock pump does not have an air release button use a 3mm Allen wrench to depress valve core and extend compression rod.





8. Using a shock pump pressurize the air chamber. Put in 20-50 PSI.
NOTE: This is to only help hold the compression rod in place for casting installation.

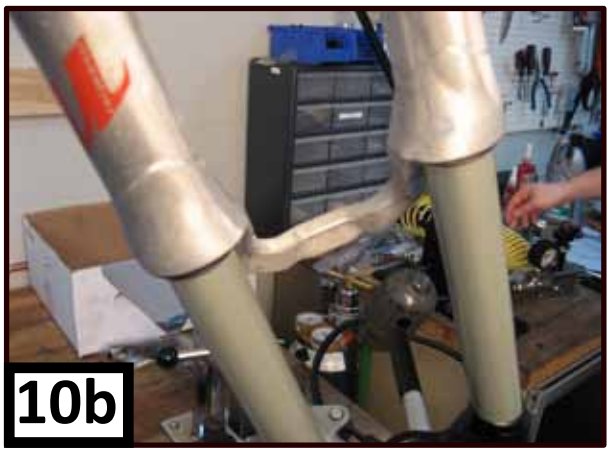


9. Ensure rebound damper rod is pulled out to full extension.



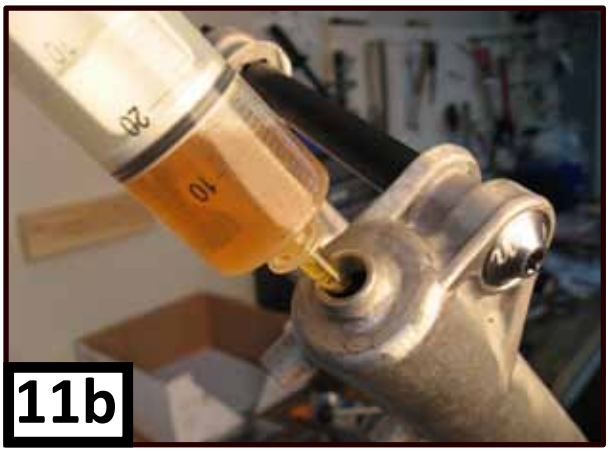
10. Slide casting onto fork uppers. Be careful not to fold over the lips of the dust seals and inner oil seals during installation. Only slide them on about halfway at this point.





11. Insert 15cc's of Manitou Semi-bath oil into each side of the casting.

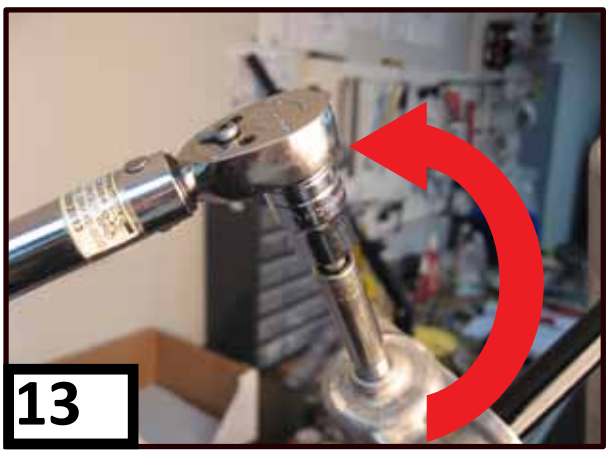




12. Slide casting down until it contacts the rebound and compression rod assemblies. Using a 8mm Allen socket and a torque wrench, tighten the rebound damper rod by turning it **counter-clockwise**. Tighten to 30-40 in lbs. [3.5-4.5 Nm].

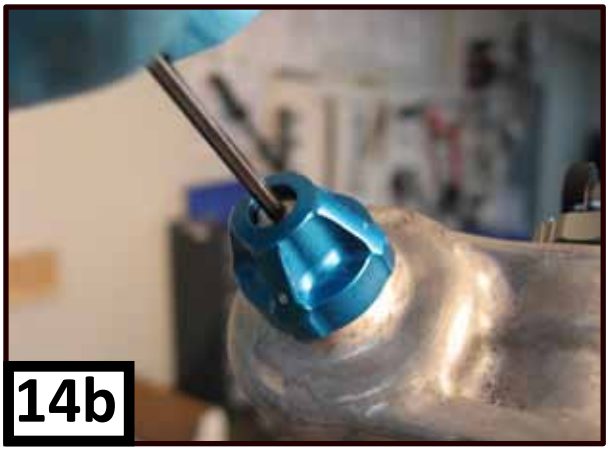


13. Using the Mattoc 8mm Thin Wall socket and torque wrench, tighten the compression rod into the casting by turning it **counter-clockwise**. Tighten to 30-40 in lbs. [3.5-4.5 Nm].



14. Install rebound damper adjust knob and using a 2mm Allen wrench tighten to 4-6 in lbs. [0.5-0.7 Nm].





15. Using a shock pump and the Mattoc set-up guide (available online at www.manitoumtb.com), pressurize fork to your optimum PSI and install air cap.

