McLEOD

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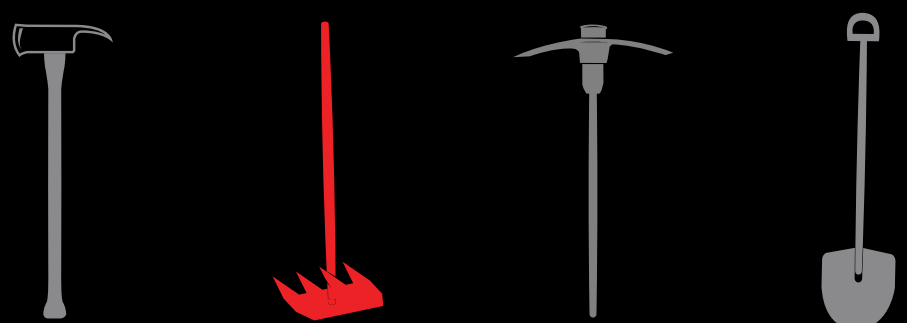

AIR CAN & PISTON SERVICE

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INTRODUCTION

This manual is intended to guide the user through the steps necessary to service the air can and air piston of the McLeod rear shock.

WARNING We highly recommend that service to this shock 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 shock or the manual itself should be directed to Manitou Customer Support at:
Phone: 888-686-3472
Email: techsupport@hayesbicycle.com

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

TABLE OF CONTENTS

REQUIRED TOOLS

Below is a list of tools necessary for servicing the McLeod shock.

- Safety Glasses
- Nitrile Gloves
- Lint-Free Rags
- Torque Wrench
- Slickoleum grease
- Air Can Wrench - Manitou part number 172-32426-K001
- Air Can Seal Install Tool - Manitou part number 172-32193-K001 (Optional)
- Plastic pick
- Side cutters
- Cloth/Nylon Lanyard

HAYES PERFORMANCE SYSTEMS WARRANTY

Limited Warranty:
HAYES warrants its products to be free from defects in materials or workmanship under normal intended use for a period of one year (two years in European Union countries) from the date of purchase, subject to normal wear and tear. Unless otherwise prohibited by law, any such defective products will be repaired or replaced at the option of HAYES when received with proof of purchase, freight prepaid. This warranty does not cover breakage, bending, or damage that may result from crashes or falls. This warranty does not cover any defects or damage caused by alterations or modifications of HAYES products or by normal wear, accidents, improper maintenance, damages caused by the use of HAYES products with parts of different manufacturers, improper use or abuse of the product, application or uses other than those set forth in the HAYES instruction manual or failure to follow the instructions contained in the applicable HAYES instruction manual. Instruction manuals can be found on-line at www.hayescomponents.com. Any modifications made by the BUYER or any subsequent user will render the warranty null and void. This warranty does not apply when the serial number or production code has been deliberately altered, defaced or removed from the product. The cost of normal maintenance or replacement of service items, which are not defective, shall be the BUYER's responsibility. If permitted by local law, this warranty is expressly in lieu of all other warranties (except as to title), express or implied, and in particular and without limitation HAYES disclaims the implied warranties of merchantability or fitness for purpose If for any reason warranty work is necessary, return the component to the place of purchase or contact your dealer or local HAYES distributor. In the USA, contact HAYES for a return authorization number (RA#) at (888) 686-3472. At that time, instructions for repair, return, or replacement shall be given. Customers in countries other than the USA should contact their dealer or local HAYES distributor.

Limitation of Liability.
Unless required by mandatory law, HAYES shall not be liable for any incidental, indirect, special or consequential damages.

This warranty does not apply to normal wear and tear. Wear and tear parts are subject to damage through normal use, failure to service according to recommendations or riding in conditions other than recommended. The cost of normal maintenance or replacement of service items, which are not defective, shall be paid for by the original purchaser. Wear and tear parts that will not be replaced under warranty include but are not limited to the following:

- Bushings
- Rear Shock Mount Hardware
- Handlebar grips
- Tubeless Valves
- Dust Seals
- Fork and Shock air Seals and/or O-rings
- Bearings
- Upper Stanchion Tubes
- Stripped or worn bolts
- Remote Lockout Cable
- Gloves
- Lower Stanchion Tubes(Dorado)

AIR CAN REMOVAL

1 Release air from air can.

2 Clamp the top cap of the shock in a vise. Be careful to clamp below the set screw to avoid damaging it.

3 Using an air can wrench or similar tool loosen the air can 2-3 turns. Do not remove the air can completely. The negative air pressure will cause the air can to pull away from the top cap threads. Removing the air can without slightly compressing the shock can damage the threads.

AIR CAN REMOVAL

4 Place shock in bench tester or bike frame and slightly compress the shock. Unthread the air can from the top cap of the shock.

5 Remove shock from tester or frame and pull air can off of the shock.

AIR CAN SERVICE

1 Remove dust seal from the air can.

2 Remove glide ring from the air can.

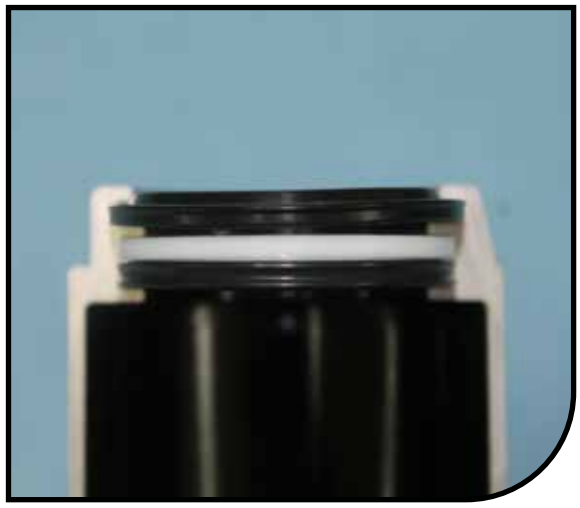
3 Remove quad ring from the air can.

AIR CAN SERVICE

4 To make air can seal installation easier you can use the Air Can Seal Install tool, Manitou part number 172-32193-K001.

5 Place the air can onto the seal tool or onto a flat surface.

6 Here is a cut away picture of the air can showing the seal placement for reference. The air can quad seal is the bottom seal followed by the white glide seal. They both sit in the lower groove. The top seal is the air can wiper seal which sits in the upper groove.

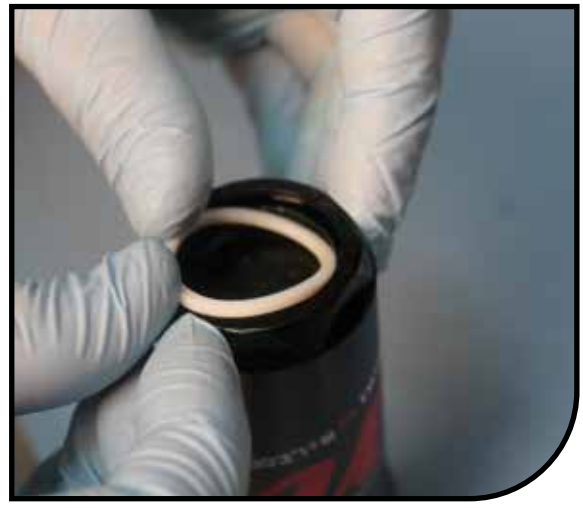


AIR CAN SERVICE

7 Remove the new air can quad ring from the seal kit and liberally apply Slickoluem grease to it.

8 Install the air can quad ring into the lower groove in the air can. Ensure it is not twisted.

9 Install the air can glide seal into the same groove as the quad ring. It will sit on top of the quad ring.



AIR CAN SERVICE

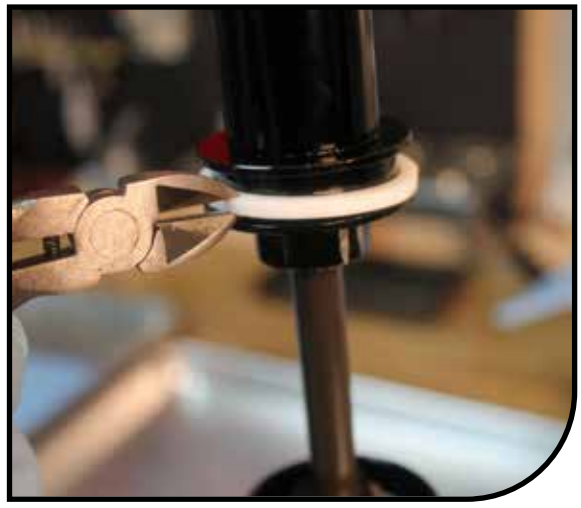
10 Install the air can wiper seal into the upper groove of the air can.

AIR PISTON SERVICE

1 Remove the split glide ring from the air piston.

2 Remove the air piston quad seal.

3 To easily remove the air piston glide ring first use a small side cutters to cut the ring about halfway through.



AIR PISTON SERVICE

4 Use a pick to break the glide ring the rest of the way and remove from the air piston. Spray the air piston with isopropyl alcohol and clean it off.

5 First we will install the new air piston glide ring. This ring can be difficult to install so here is a way to make it easier. Take a lanyard or similar item and cut it into two strips.

6 Loop the lanyard strips around the air piston glide ring.

AIR PISTON SERVICE

7 Place the piston ring in the groove on the piston opposite from user (the ring will be tipped such that it will be ½ in and ½ out of the groove). With the lanyards straps positioned between the ring and edge of the piston, pull the straps towards the user and stretch the ring over the piston. The straps will protect the piston ring from the edge of the piston as it stretches over.

AIR PISTON SERVICE

8 Slide the air can down over the air piston to size the glide ring.

9 Liberally grease the air piston quad ring.

10 Install the air piston quad ring onto the air piston.

AIR PISTON SERVICE

11 Ensure the air piston quad ring is not twisted and push it tight against the glide ring, making a space for the split glide ring.

12 Install the split glide ring onto the air piston.

AIR CAN INSTALL

1 Apply Slickoleum grease to air piston seals.

2 Install foam ring onto damper body.

3 Install air can onto shock as far as it can be easily pushed. Due to the negative chamber it can be difficult to install air can completely without mounting it in a frame or shock tester and compressing the shock.

AIR CAN INSTALL

4 Install shock into bench tester or frame and partially compress shock. Compress until air can can be threaded onto top cap.

5 Tighten air can onto shock until the hard stop. Do not tighten past this point.

6 Fill shock with air and clean.

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