



SERVICE GUIDE



HAYES
PERFORMANCE SYSTEMS



HAYES



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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	Dust Seals	Stripped or Worn Bolts
Rear Shock	Fork/Shock Air Seals and/or O-rings	Remote Lockout Cable
Mount Hardware	Bearings	Gloves
Handlebar grips	Upper Stanchion Tubes	Lower Stanchion Tubes(Dorado)
Tubeless Valves	Tubeless Tape	

INTRODUCTION

This manual is intended to guide the user through the steps necessary to fully service and maintain the Jack dropper seatpost.

! 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 by design can contain pre-loaded 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.

! WARNING !

Air pressure should **NOT** be release from the cartridge before service; the cartridge is non serviceable sealed cartridge damper. If there is an issue with the cartridge damper it must be replaced. **DO NOT** add or remove air to the valve pictured below. **DOING SO WILL VOID THE WARRANTY.**



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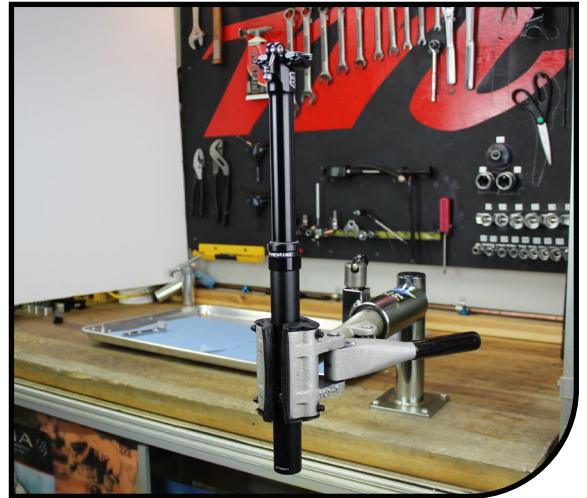
REQUIRED TOOLS AND MATERIALS

Below is a list of tools and materials necessary for servicing the Jack seatpost.

- Safety Glasses
- Nitrile Gloves
- Lint-Free Rags
- Isopropyl Alcohol
- Torque Wrench
- Slickoleum™ Grease
 - 10-OZ Tub – Manitou Part Number 20-32929
 - 5ML Tube – Manitou Part Number 141-33604-K001
- Blue Loctite™
- Jack Dropper Spanner Tool Or Spanner Wrench
 - Manitou Part Number 172-35824
- Manitou Clamp Block
 - Manitou Part Number 172-31464
- Rebuild Kit
 - Manitou Part Number 141-35749
- Replacment Cartridges
 - 125/380 – Manitou Part Number 141-35748-K001
 - 125/400 – Manitou Part Number 141-35748-K002
 - 150/450 – Manitou Part Number 141-35748-K003
- 1.3mm Hex Wrench
- 34mm Wrench
- 34mm Crow's Foot
- Ratchet
- Bench Vise
- Plastic or Metal Pick

STANCHION REMOVAL

- 1 Clamp the post with the seat clamp facing up. **Do not release air pressure.**



- 2 Remove the seat clamp from the post.

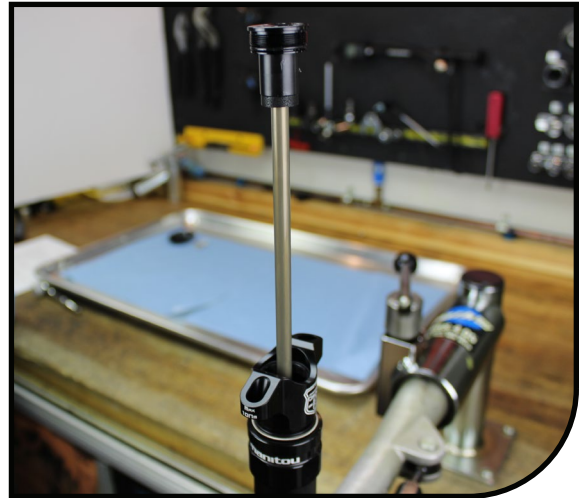


- 3 Use a spanner wrench or Jack dropper spanner tool to unthread cap.

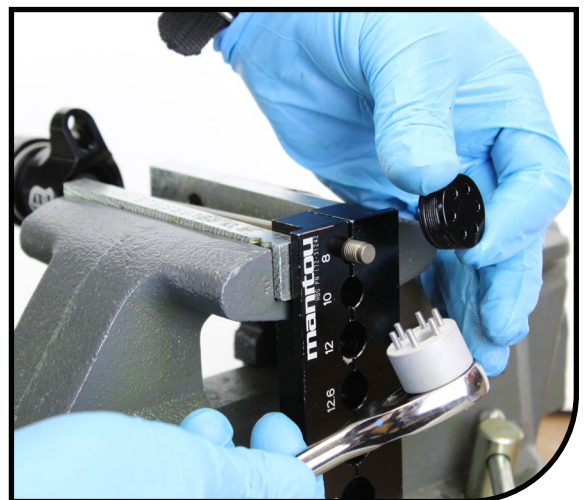


STANCHION REMOVAL

- 4 Loosen until the stanchion begins to slip down.



- 5 Use Jack spanner tool and clamp block to remove cap from cartridge damper pushrod.



KEY AND COLLAR SERVICE

- 1** Skip to next section if you only need to replace air cartridge.

Remove 1.3mm collar set screw.



- 2** Loosen collar with 34mm wrench. Place rag in between wrench and collar to protect surface finish.

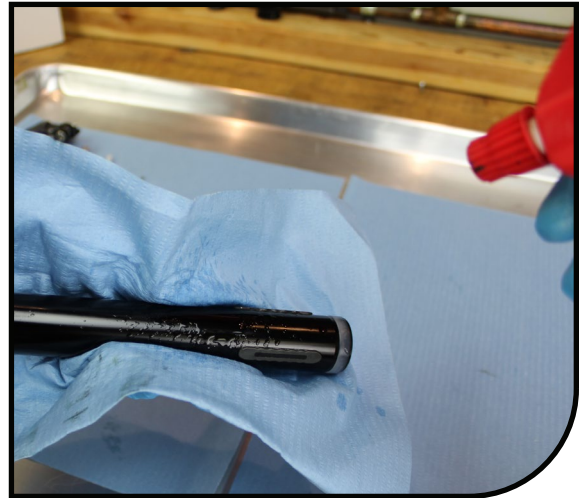


- 3** Pull stanchion up and remove from outer tube.

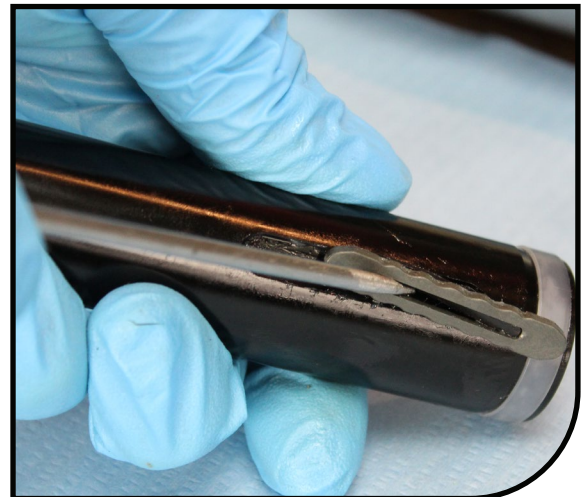


KEY AND COLLAR SERVICE

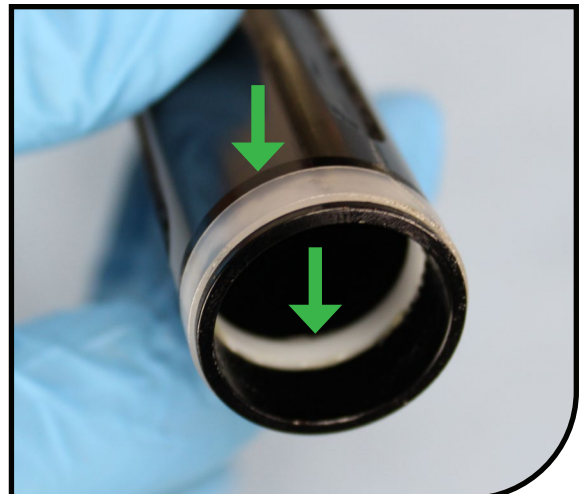
- 4** Clean throughout using Isopropyl alcohol and lint free rags.



- 5** Remove keys with a pick.



- 6** Remove collar (part one on rebuild kit diagram) from stanchion and discard. Next, remove the inner and outer glide rings with pick. Replace with new rings (parts six and seven).



KEY AND COLLAR SERVICE

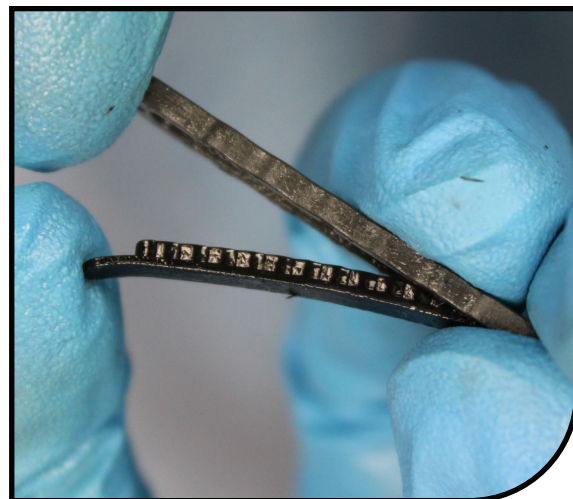
- 7** Apply generous amount of Slickoleum™ to bushing and dust seal.



- 8** Slide collar back onto the stanchion.

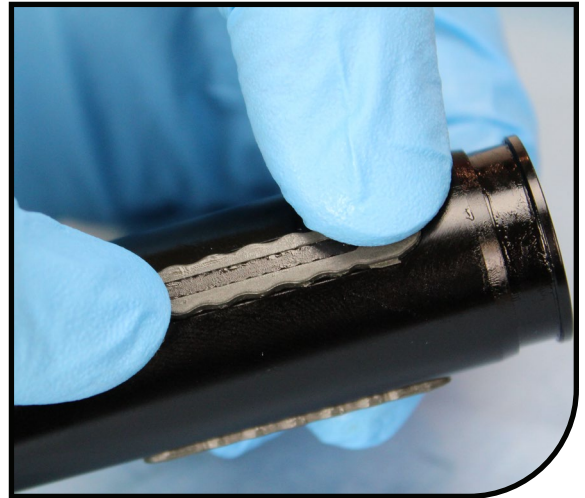


- 9** Assemble new keys as shown. Grey key on top of black key.



KEY AND COLLAR SERVICE

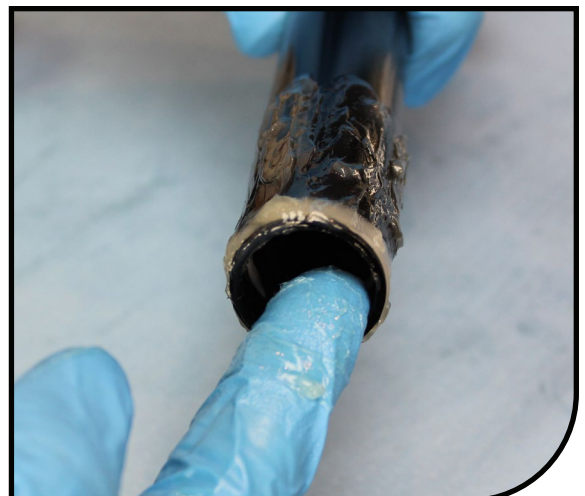
- 10** Grease key groove with a small amount of Slickoleum™ and place new key black side down.



- 11** Place key face on work bench and press down firmly. Make sure key is completely seated in groove.

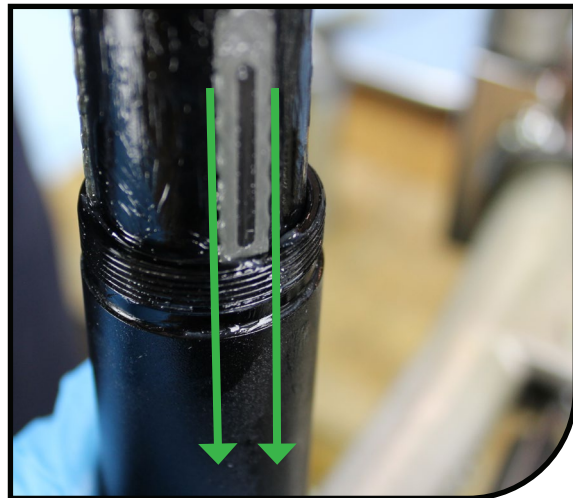


- 12** Apply a generous amount of Slickoleum™ lubrication to glide rings and keys.



KEY AND COLLAR SERVICE

- 13** Line up the keys with the three channels of the outer tube. Slide stanchion down. Be careful not to damaged the outside glide ring.



- 14** Apply blue Loctite™ to the outer tube threads.



- 15** Slide collar down and thread onto the lower tube. Torque to 43 in lbs [58.30 N m]



KEY AND COLLAR SERVICE

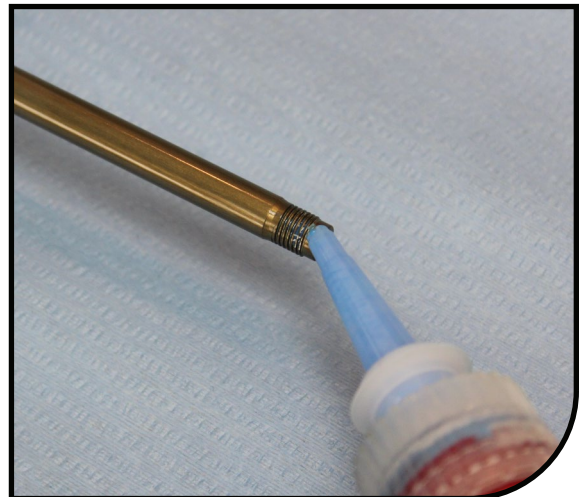
16

Apply Loctite™ to collar set screw threads. Tighten until snug.



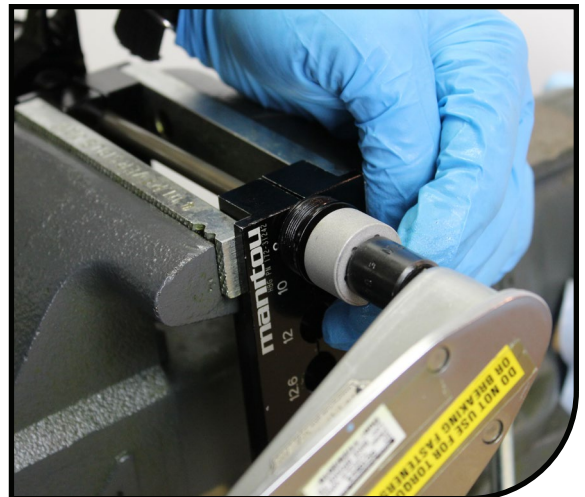
17

Apply Loctite™ to air cartridge pushrod threads.



18

Use Jack spanner tool and clamp block to install cap onto air cartridge pushrod. Torque to 60 in lbs [6.7 N m]

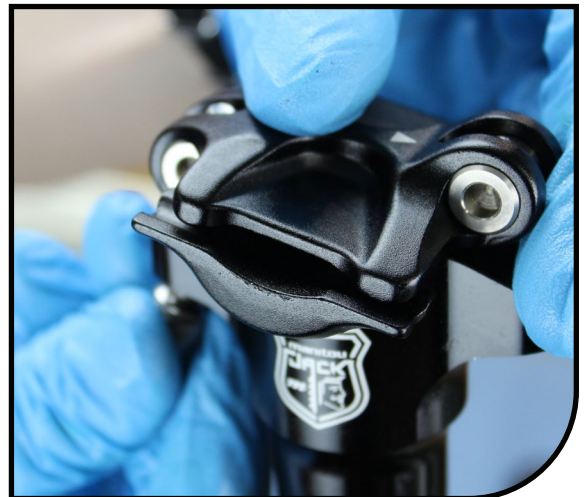


KEY AND COLLAR SERVICE

- 19 Thread air cartridge pushrod cap into top of stanchion. Torque to 60 in lbs [6.7 N m]



- 20 Install seat clamp. Be sure the white arrow on the top plate is pointing to the front of the post.



CARTRIDGE DAMPER REPLACEMENT

- 1** This section is to be used after completing the Stanchion Removal steps 1-5.

Clamp post to expose the bottom. Unthread the actuator from the bottom of the post.



- 2** Use the Jack Spanner tool to unthread the cartridge from the outer tube.



- 3** Use the Jack Spanner tool to unthread the cartridge from the outer tube.



CARTRIDGE DAMPER REPLACEMENT

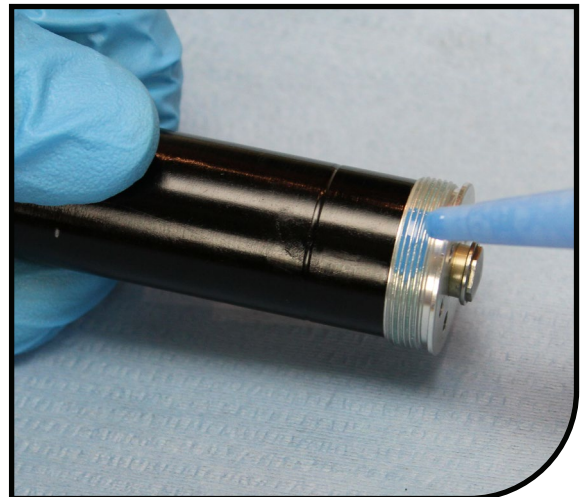
4

Thoroughly clean the inside of the outer tube with lint-free rags and isopropyl alcohol.



5

Apply blue Loctite™ to the threads of the new cartridge damper.



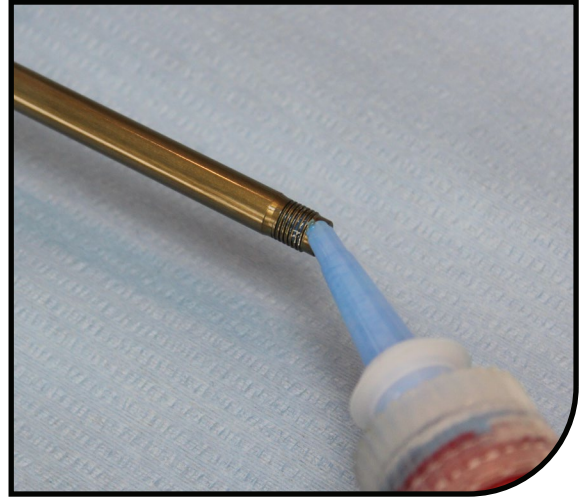
6

Transfer the two rubber bumpers to the new pushrod. Insert cartridge damper into the bottom of the outer tube. Torque to 35 in lbs [3.95 N m]



CARTRIDGE DAMPER REPLACEMENT

- 7** Apply Loctite™ to air cartridge pushrod threads.



- 8** Use Jack spanner tool and clamp block to install cap onto air cartridge pushrod. Torque to 60 in lbs [6.7 N m]

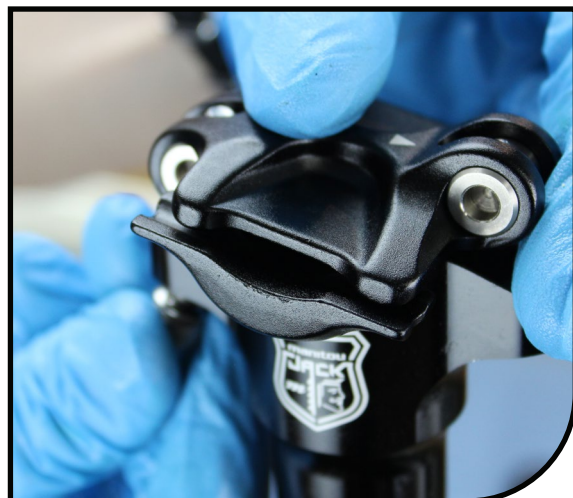


- 9** Thread air cartridge pushrod cap into top of stanchion. Torque to 60 in lbs [6.7 N m]



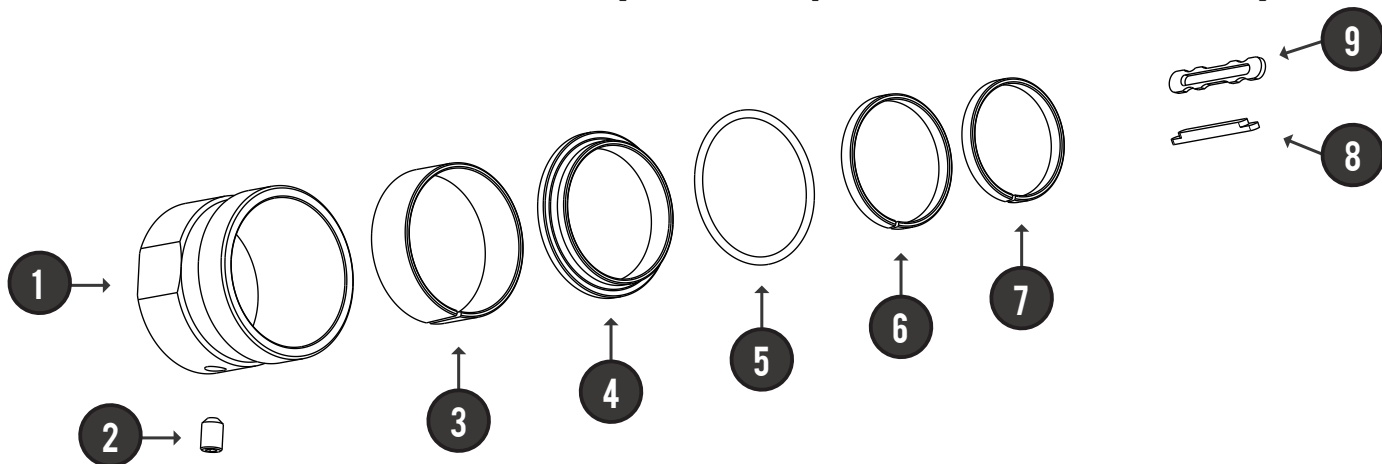
CARTRIDGE DAMPER REPLACEMENT

- 10 Install seat clamp. Be sure the white arrow on the top plate is pointing to the front of the post.



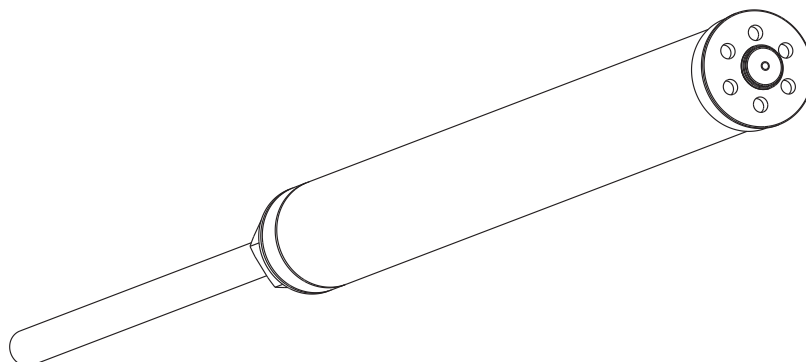
REBUILD MATERIALS EXPLODED DIAGRAMS

REBUILD KIT 141-35749 (Includes parts 1-9 shown below)



ITEM	PART NUMBER	DESCRIPTION	QTY
1	5508-01001-0017	SEAT POST COLLAR	1
2	5204-06001-0005	SCREW, HEX SET 6X6 LG	1
3	5534-02001-0001	DU BUSHING	1
4	5509-01001-0002	SEAL, SEAT POST CART	1
5	5210-03001-0064	O-RING, 18 OD X 1.5 THK	1
6	5510-02001-0004	GLIDE RING, SEAT POST 18 ID	1
7	5510-02001-0002	GLIDE RING, SEAT POST 15 ID	1
8	5520-01001-0005	RUBBER, SEAT POST KEY	3
9	5504-05001-0001	WASHER, SEAT POST KEY	3

REPLACEMENT AIR CARTRIDGES



PART NUMBER	DESCRIPTION	QTY
141-35748-K001	SEAT POST AIR CARTRIDGE 125/380	1
141-35748-K002	SEAT POST AIR CARTRIDGE 125/400	1
141-35748-K003	SEAT POST AIR CARTRIDGE 150/450	1



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