

# JACK SL DROPPER POST SETUP GUIDE



### MANITOU

5800 W Donges Bay Rd Meguon, WI 53092

manitoumtb.com

888.686.3472

Support: manitoumtb.com/support

### WARRANTY

For full warranty information please visit havesbicycle.com/warranty

### INTRODUCTION

Thank you for purchasing one of the most innovative hydraulic dropper posts on the market - the Manitou Jack SL Dropper Seat Post. Your new seatpost is warranted for a period of two years from the date of purchase. The warranty is limited to the repair or replacement of the defective part and is the sole remedy of the warranty. The warranty applies only to the original owner and is not transferrable. Proof of purchase is required to validate warranty eligibility. The warranty does not cover normal wear and tear, routine maintenance, improper installation or improper use of the seatpost. Modification of the seatpost in any manor shall void the warranty. shall not be responsible for incidental or individual costs incurred by the warranty service provider that are not covered by this warranty. The user assumes the risk of any personal injury or property damage, including damage to the seatpost, and any other losses, if the seatpost is modified or improperly used at any time. This warranty gives the consumer specific legal rights and those rights vary from to This warranty does not affect the statutory rights of the consumer.

This is a high performance product. It will give you reliable service if installed properly and regularly maintained by an authorized service center. Read through these instructions fully and follow them carefully before installing and/or using your new seatpost. Any questions about the servicing of this fork or the manual itself should be directed to Haves Customer Support at:

Hayes	5800 W Donges			
Bicycle	Phone: 888.686			
USA	Email: techsupp			
Hayes	Dirnismaning 20			
Bicycle	Phone: +49 89 2			
Europe	Email: techsupp			
Hayes	16F, No. 37, Sec			
Bicycle	Taipei City 1047			
Asia	Phone: 886-2-2			













REYNOLDS +++++++++=

### **AWARNING A**

Bay Road Mequon WI 53092 .3472

port@hayesbicycle.com

0 a 85748 Garching (b. Munich) Germany 203237450

portEU@hayesbicycle.com

c. 3 Mincyuan E. Rd. Zhongshan District 76 Taiwan ROC 2518-1108

### **A**WARNING **A**

Your Jack SL Dropper Seatpost must be regularly maintained by a qualified service technician. If you need assistance locating a qualified service technician, more information can be found at www.manitoumtb.com. Do not disassemble your seatpost by yourself Disassembly could cause damage and severe personally injury as some of the contents are under pressure. Alway wear suitable safety gloves and safety glasses, when working on your seatpost!

### NOTICE

Please read the following instructions carefully and install your Jack SL Dropper Seatpost according to the steps detailed below. Your Jack SL Dropper Seatpost is a precision piece of cycling equipment that requires a specific understanding of bicycle maintenance and assembly to install. If you are not certain that you have the appropriate skills or tools to properly install or service this product, please contact your local bicycle dealer or service provider for assistance.

Jack SL Dropper Seatpost models use internal cable routing and are designed to be compatible with bicycle frames that feature such cable routing.

### DO NOT DRILL OR MODIFY YOUR FRAME IN ANY WAY. Doing so will void the Warranty of and in most cases void the warranty of your bicycle. Modification of your frame in any way may result in frame failure which could result in injury or death.

If you are unsue whether your Jack SL Dropper Seatpost is compatible with your frame, contact your bicycle frame manufacturer or Manitou directly.

### **TABLE OF CONTENTS**

SECTION
Before Installing the Seatpost
<u>Installation</u>
<u>Usage</u>
<u>Service</u>
FAQ
<u>Troubleshooting</u>
Exploded View

Thank you for choosing a Manitou dropper seatpost.

To ensure maximum and enduring performance with your Jack or Jack SL, please read and follow this manual carefully and keep it for future reference.

If you purchased your seatpost separately, you will find instructions on how to install it. Please note that your Jack SL requires regular maintenance and care - see the corresponding chapter in this manual.

You can also find many important and useful tips in our service app or on www.manitoumtb.com.

Happy trails Your Manitou team



PAGE NUMBER
6
7
15
18
20
22
23

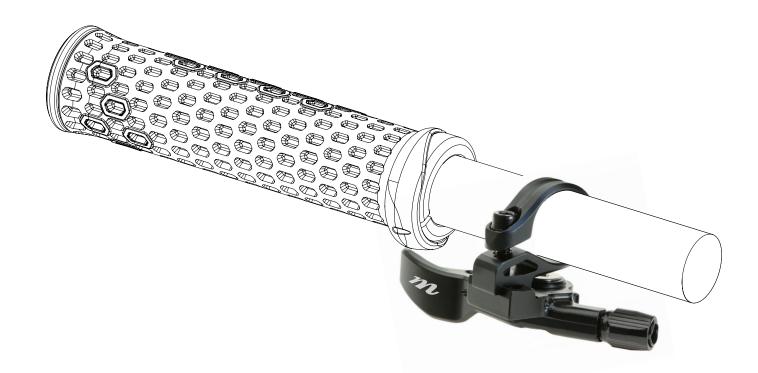
# **BEFORE INSTALLING THE SEATPOST**

Please be sure that your new Jack SL Dropper Seatpost will fit in your frame. All Jack SL Dropper Seatpost models are designed to fit either 30.9mm or 31.6mm seat tube inner diameters in frames, originally designed for internal cable routing. Improper fit may cause slippage, faulty performance, injury or death and may result in void of warranty.

### **INSTALLATION**

### INSTALLING MANITOU UNDERBAR REMOTE LEVER

Manitou Underbar Lever remote can be installed with a stand alone clamp on your handlebar, or an adapter directly on your brake using the Hayes Peacemaker clamp. Use a maximum torque of 1.5 Nm on the pinch bolt on the clamp. Manitou Underbar Lever remotes can only be installed on the left side of the handlebar.



### 

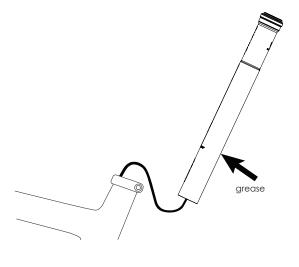
Manitou DOES NOT recommend modification or alteration of your frame in any way. Doing so may void your frame or bicycle's warranty and may result in frame failure which could lead to injury or death.

#### **AWARNING**

Make sure that your seat tube is clean and free of debris and that the inside of your seat tube is smooth and free of any object that may score the seatpost!

### **ÀWARNING À**

Apply a heavy suitable grease on the lower tube of the post to avoid galvanic corrosion inside the frame use friction paste instad of grease only if the post can not be clamped properly. Avoid using any paste, that could be aggressive towards frame and/or post.





### **CONNECTING CABLE TO SEATPOST**

1. Feed the cable housing (#5) through your frame.

2. Remove the connector nut (#2) from inside the end of the dropper post with installation tool (#6).

3. Install the special endcap (# 4) onto the housing. Push the housing endcap all the way onto the housing.

4. Slide the connector nut (#2) onto the inner cable (#1) and then feed the inner cable all the way through the housing.

5. Push the plunger (#3) through the holes in the connector nut (#2).

6. Use the included installation tool (#6) to screw the connector nut with plunger and inner cable into the bottom of the seat post. No more torque than handtight is required.

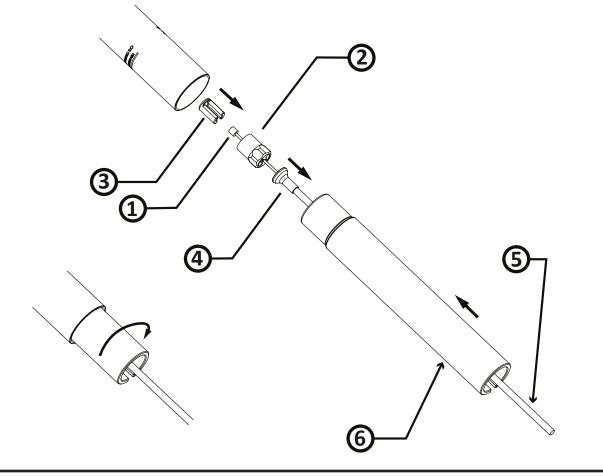
### INSTALLATION

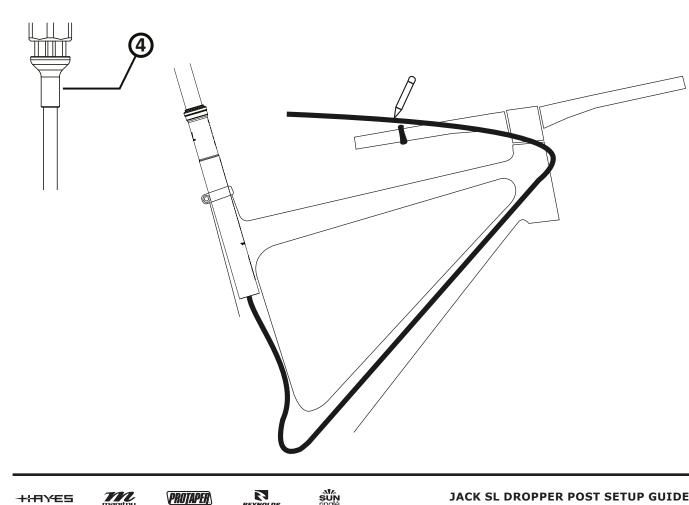
7. Keep a little tension on the inner cable too, to avoid accidental disconnection of endcap (#4) and housing (#5). Secure the post in position

8. Hold the outer housing to the access point of your remote and rotate your handlebar at least 90° in both directions to simulate the desired cable length. Make a mark on the outer housing, where you find it the perfect length for your application.

9. Remove the post from the seattube to shorten the housing and pull the inner cable out of the housing, too. Trim the outer housing to length without cutting the inner cable.

10. Re-insert and secure the post into the seattube to its final position. The Endcap (#4) has to touch the plunger (#3). Make sure to always keep a little tension on the inner and outer cable, so all parts stay together.







### **CONNECTING CABLE TO SEATPOST (CONTINUED)**

#### **INNER CABLE ADJUSTING** 3

1. Insert the inner cable through the remote lever and insert the cable housing into its seat. Make sure that there is no slack in the inner cable. Tighten the pinch bolt on the Manitou lever with 2 Nm.

2. Adjust the tension with the cable tensioner on the lever, so there is no play in the cable. If the tension is too high, it will permanently activate the post. A low tension will cause cable play, and the post will not reach its full speed.

3. Cut the inner cable and secure it with an end cap.

# adjust cable tension 2Nm

### INSTALLATION

### 4

### **MINIMUM INSERTION DEPTH**

All seatpost models must be inserted into the bicycle's seat tube while covering the minimum insertion line indicated on the seatpost.

Insufficient seatpost insertion into the bicycle frame's seat tube could result in damage to the seatpost and/or bicycle, causing loss of control, which could lead to serious injury or death. In case your frame requires more minimum insertion depth than the post, follow the frame specification.

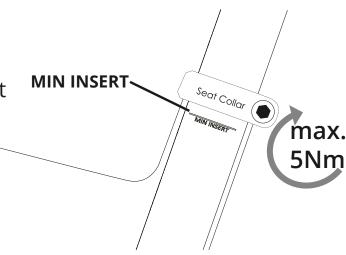
Do not over-torque your frame's seat clamp as this may inhibit proper function of your seatpost. Use as little torque as possible. Your post should not move into the frame while riding, but it is okay for it to rotate under impact to avoid damage by overload.

> **SEAT CLAMP TORQUE:** Tighten your frame's seat clamp to a **maximum** torque of 5 Nm.



#### **AWARNING**

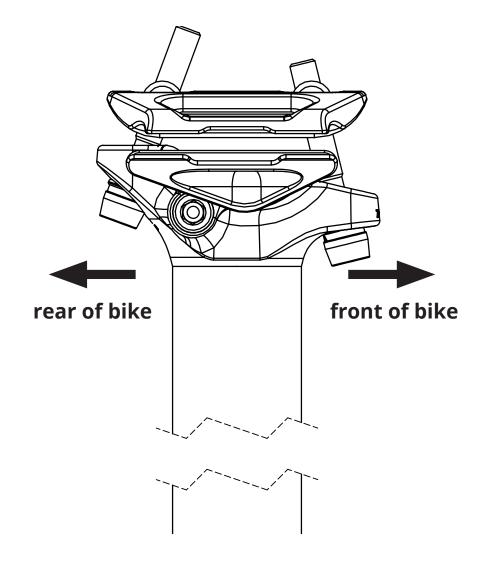
### 



5

### **INSERTING SEATPOST**

There is only one position for seatpost direction, saddle and saddle clamp orientation.



### INSTALLATION

#### **INSERTING SEATPOST (CONTINUTED)** 5

Insert the seatpost into your seat tube. When inserting or extending, make sure you do not pull too hard on the outer housing, as doing so may pull the ferrule out of the cable stop.

Insert slowly and carefully! When inserting, make sure there are no such things as pivot points, bent tubes, etc inside your seattube that can interfere with the seatpost.

You should always use a good quality grease on contacting faces between seatpost and seattube in order to prevent corrosion. Use friction paste only if proper clamping is impossible with greased components. Contact us before applying friction paste.

### **AWARNING**

Make sure your post does not slip inside the seat tube when sitting on it, before going out for a real ride.

Over-tightening your frame's seat clamp might lead to a stuck post and/or increased wear. Use only as much torque as you need to keep the post in place during normal riding. It is appropriate for the post to rotate or slip under higher input forces to prevent overload. Never exceed 5 Nm of torque!



#### **AWARNING**

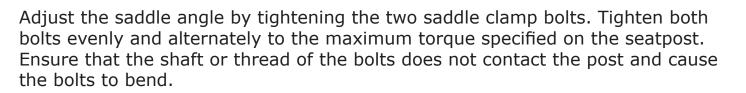
### 

### 

### SADDLE INSTALLATION

Remove the saddle clamp bolts, barrel nuts, and upper and lower saddle clamps with a T25 Torx wrench.

To install the saddle, replace the two saddle clamp bolts, barrel nuts, upper and lower saddle clamps in the order they were removed. Ensure that the rails of your saddle rest in the channel provided by the upper and lower saddle clamps before tightening.



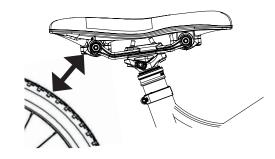
### Jack SL saddle clamp works with standard rails, oval rails and carbon rails.

### 

### GREASE SHOULD NOT BE USED ON THE THREADED CONNECTIONS!

### **ÀWARNING À**

With seatpost fully dropped and rear suspension fully compressed, make sure there is sufficient clearence between the saddle and the tire



barrel nut

clamp

bolts

clamp

lower saddle

upper saddle

saddle clamp

Torx T25

### **USAGE**

### **DROP AND EXTEND**

The saddle can be dropped by

- (1) Unweighting it
- (2) Pushing the trigger
- (3) Sitting on the saddle firmly

Ensure smooth action and reduce wear on pins and bushings inside the post by applying force only in the direction of the seat tube axis.

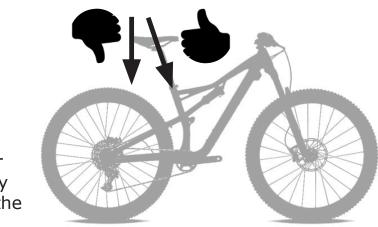
To raise the saddle, push the trigger with unweighted saddle. Once the desired position is reached, release the trigger. You can set the saddle height infinitely in any position within the post's travel range.

Your post might need to be manually broken loose if it hasn't been used or adjusted for a long time, since the seals tend to stick to the contacting surfaces.

For this initial "break-away" just push the remote and then gently push or pull the saddle until the post starts moving.

**TIP:** Always store the bike with the dropper not fully extended. This will prevent the remote from stiffening up due to temperature changes (hydro-lock). Dropping the post about 1/2"-1" is plenty enough.





### **ADJUSTING RETURN SPEED / TECH CLIMB FEATURE**

Jack SL is designed with the tech climb feature, that allows the post to act like a spring after hard impacts on the saddle. This serves for extra comfort on technical climbs with partially dropped saddle and to protect the post from peak loads. The threshold for this feature depends on the air pressure in the post.

Reducing the air pressure will lower the threshold (less force required to cause movement), increasing the air pressure will raise the threshold limit.

The pressure inside the post can be adjusted within a range of 250 psi to a **maximum of 350 psi (factory setting = 300 psi)** to accommodate to the riders speed and lever force preferences.

Higher pressure = Higher overload threshold and higher return speed

**Lower pressure** = Lower overload threshold, lower return speed, lower lever force

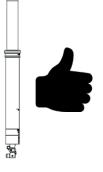
#### CAUTION

Safety glasses and gloves must always be worn when adjusting the air pressure, since the dropper post contains high pressures and suspension fluid

#### **A**WARNING **A**

Keep your post right side up and fully extended, when adjusting air pressure. Never operate the air valve, while the post is laying horizontally or upside down or you will cause suspension fluid to leak out of the post under high pressure! This can cause severe injuries!





### USAGE

### ADJUSTING RETURN SPEED / TECH CLIMB FEATURE (CONTINUED)

1. Extend the post completely.

2. Remove saddle clamps and remove valve cap.

3. Attach the air valve adapter and then attach the shock pump onto the adapter. Make sure not to overtight the shock connection.

4. Pump the post to desired pressure. We do not recommend pressures lower than 250 psi, since it can make the post become very slow and not supportive enough. Maximum pressure is 350 psi. We recommend to use a high quality shock pump with a 2-step valve to avoid air loss, when detaching the pump.

5. Remove pump and adapter from the post.

6. Clean your post from any excessive suspension fluid.

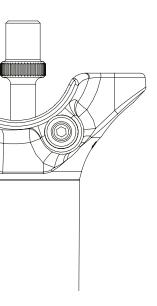
7. Reinstall all previously remove parts in the order they were removed.

shock pump adapter









### MAINTENANCE

You can expect reliable service from this high-performance product if properly installed and regularly maintained by an authorized Manitou service center or a qualified service technician.

For assistance locating a qualified service technician, visit www.manitoumtb.com.

### **AWARNING**

Do not disassemble your seatpost by yourself unless you are a skilled and authorized technician! Failure to follow these warnings and instructions will immediately void your warranty!

### CAUTION

When working on the seatpost, gloves and safety glasses must always be worn! As some of the components are under high pressure, disassembling the seatpost may cause damage and severe personal injury.

Besides routine maintenance, the operator must check the seatpost every time it is used to ensure proper operation.

Your new seatpost is warranted for a period of two years from the date of purchase. The warranty is expressly limited to the repair or replacement of the defective part and is the sole remedy of the warranty.

# **SERVICE**

### MAINTENANCE

	SERVIC
EVERY RIDE	<ul> <li>CHECK SADDLE</li> <li>INSPECT THE P</li> <li>CHECK FUNCTI</li> <li>GENTLY WIPE C</li> <li>MAKE SURE NC</li> <li>CAUSE CORROS</li> <li>STORE BIKE IN</li> </ul>
EVERY 5 RIDES	UNTHREAD WII     CLEAN AND RE
MINIMUM EVERY 12 MONTHS OR AFTER 100 HOURS OF OPERATION*	LOWER TUBE S
UPON NEED	FULL CARTRIDO

\*whichever comes first

### \*\* Complete maintenance plan, instructions and video tutorials can be found on www.bikeyoke.com!

Before longer periods of non-use (>1 month), be sure to carry out a service on the lower tube unit to prevent corrosion damage due to humidity.

Depending on the amount of use and riding conditions, a shorter maintenance interval may be necessary in order to ensure a smooth function of your Manitou seatpost!



### E INTERVALS

CLAMPS FOR PROPER FIT

OST FOR DAMAGE

ON

OFF DIRT & WATER (NO POWER WASH!)

) WATER ENTERS THE FRAME DURING WASHING (HUMIDITY CAN SION)

A DRY PLACE

PER COLLAR GREASE BUSHING / WIPER AREA

ERVICE\*\*

GE SERVICE\*\*

### **IS THERE A WEIGHT LIMIT ON THE JACK SL DROPPER POST?**

Our Jack / Jack SL has a maximum rider weight of 115kg (253lbs).

### CAN I USE OTHER REMOTES THAN MANITOU?

We support all commonly available cable dropper remotes. To provide full return speed and smooth drop feel, your remote should have a least 10 mm of cable pull for Jack and at least 5 mm of cable pull for Jack SL.

### CAN I MOUNT SADDLES THAT HAVE CARBON RAILS AND/OR HIGH-OVAL RAILS TO MY POST?

Our Jack SL droppers are compatible with standard 7x7 mm and oval rails 7x9 or 7x10 mm made from carbon or alloy.

### CAN I CLAMP MY MANITOU SEATPOST IN THE ASSEMBLY STAND?

We recommend to clamp only the lower tube unit with care.

### CAN I GET SPARE PARTS FOR MY JACK SL?

We have all important spare parts available in our online shop, at our distributors and listed Manitou dealers. Other parts are available on demand.

### IS THERE ANYTHING I NEED TO CONSIDER WHEN LOWERING MY POST?

Before pushing the remote lever, slightly unweight your saddle. Always apply the drop force along the seat tube direction!

### FAQ

### **MY POST SLIGHTLY COMPRESSES UNDER LOAD. IS THAT NORMAL?**

A small amount of compression movement is absolutely normal and harmless, and can be up to 1-2 mm.

### WHAT DO I HAVE TO CONSIDER WHEN INSTALLING THE SADDLE?

Alternately tighten the clamping bolts to the torque specified on the dropper post. IMPORTANT: Do not grease the saddle clamp bolts.

### CAN I LIFT MY BIKE ON THE SADDLE?

It is acceptable for Manitou droppers to carefully lift the bike on the saddle.

### IS IT OKAY TO USE T-BAR LIFTS WITH MY MANITOU SEATPOST?

Manitou generally advises against using t-bar lifts. In addition to the obvious risk of scratching the post's coating, the multitude of lift variants result in incalculable loads on the post, which can lead to possible late effects. Any use of our seatposts on t-bar lifts is expressly at the user's own risk and voids the warranty.

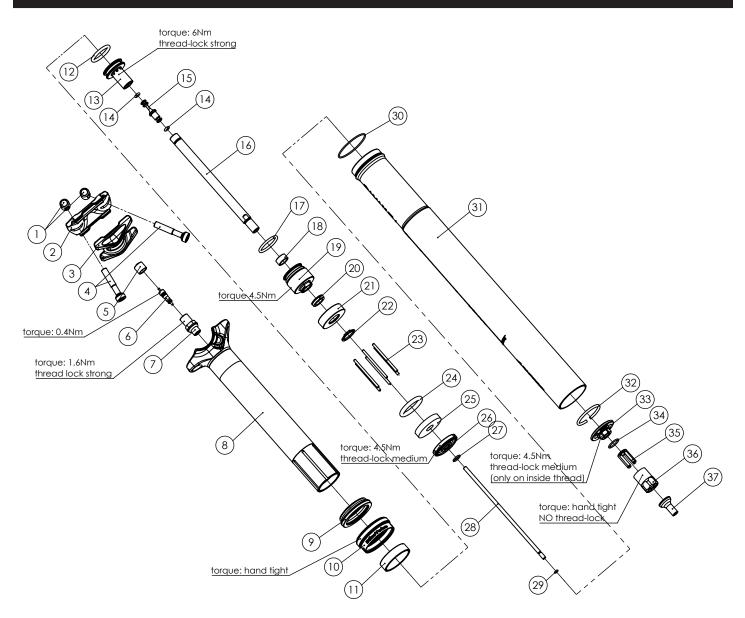
### FOR MORE ANSWERS AND QUESTIONS CHECK OUT OUR WEBSITE.



# TROUBLESHOOTING

ISSUE	POTENTIAL CAUSE	SOLUTION		
	Actuator lever (#48) or plunger (#32)	Properly clean and grease actuator lever and		
Remote lever	are seized	plunger (use thick grease, not suspension grease)		
does not return	Seized inner cable due to corrosion	Replace inner and outer cable		
Remote lever is hard to push	Riding in low temps, then going back inside will let oil expand and cause extensive pressure inside inner chamber Oil betwen piston shaft (#29) and push	Use 4mm Allen Key to engage reset function -> pressure will equalize. Advise to drop the post before storing the bike after coming back from rides in cold temps to avoid this happening again		
	rod $(#30)$ -> defective seal $(#53)$ ?	Full rebuild and replacement of defective seal		
	Water or dirt or corrosion inside lower tube or lack of grease	Lower tube service		
	Foam ring (#45) clogs breathing holes at	Clean or replace foam ring, if neccessary perform		
	bottom of post	lower tube service		
Sticky or ow	Pressure is too low	Reset pressure to 260 psi		
movement	Cable tension too low	Increase cable tension		
	Seat collar torque too high	Check seat collar (max 5Nm)		
	Post clamped too close to collar	Move post out of seattube by 2mm		
	Outside temperature too low	Post should normally work fine until as low as -10° C (with original oil)		
Airlookaga	Schrader valve or O-rings (#17 or #18)	Tighten or replace schrader valve and/or full		
Air leakage	not tightened or defective	cartrideg rebuild with replacement of defective parts		
Oil leakage	Defective O-ring #53 or defective lower seal head assembly	Full rebuild with replacement of defective parts		
	Defective O-rings #16, #21, #24 or #27	Full rebuild with replacement of defective parts		
Post sinks owly	Cable tension too high	Reduce cable tension		
under load	Outer housing endcap is diocated (after post adjustment in frame)	Relocate the outer housing endcap in ist seat		
Deet endu	Defective O-rings #16, #21, #24 or #27	Full rebuild with replacement of defective parts		
Post owly	Cable tension too high	Reduce cable tension		
extends by itself	Outer housing endcap is diocated (after post adjustment in frame)	Relocate the outer housing endcap		
Post requires frequent resets	Post is early version without microvalve (#54)	This is normal, if the post is stored and/or actuated upside down Upgrading with new inner tube (#22) and microvalve will make the post less prone to air ingestion		
Reset lever does not return	Reset axle (#8) is seized	Make sure set screw (#5) is not clamping the axle, remove, clean and grease reset axle		
	Pressure is too low	Set pressure to 260 psi		

# EXPLODED VIEW



POS	part name	qty.	13	piston	1	26	inner retaining plate	1
1	saddle clamp nut	2	14	o-ring 2.5x1.5	2	27	o-ring 6x1	1
2	upper saddle clamp	1	15	main valve	1	28	actuator rod	1
3	DIVINE (SL) lower saddle clamp	1	16	piston shaft	1	29	o-ring 2x1	1
4	saddle clamp bolt	2	17	o-ring 17x2	1	30	o-ring 29x1	1
5	valve cap	1	18	shaft bushing	1	31	lower tube	1
6	valve core	1	19	cartridge sealhead	1	32	retaining ring	1
7	valve housing	1	20	u-cup seal	1	33	outer retaining plate/nut	1
8	upper tube unit	1	21	lower bushing	1	34	o-ring 9.5x1	1
9	wiper	1	22	lower bushing circlip	1	35	actuating plunger	1
10	wiper collar	1	23	guiding pins	6	36	connector nut	1
11	upper bushing	1	24	o-ring 18x3.5	1	37	housing endcap	1
12	o-ring 16x2.5	1	25	foam cover ring	1			





REYNOLDS

PROTAPER.

-HAYES

23

# GLOBAL HEADQUARTERS & HAYES BICYCLE GROUP USA

5800 W. Donges Bay Rd. Mequon, WI 53092

### HAYES BICYCLE GROUP EU

Dirnismaning 20 a 85748 Garching (b. Munich) Germany

### HAYES BICYCLE GROUP ASIA

16F, No. 37, Sec. 3 Mincyuan E. Rd. Zhongshan District



facebook.com/ManitouMTB instagram.com/ManitouMTB

#ScienceofSmooth

