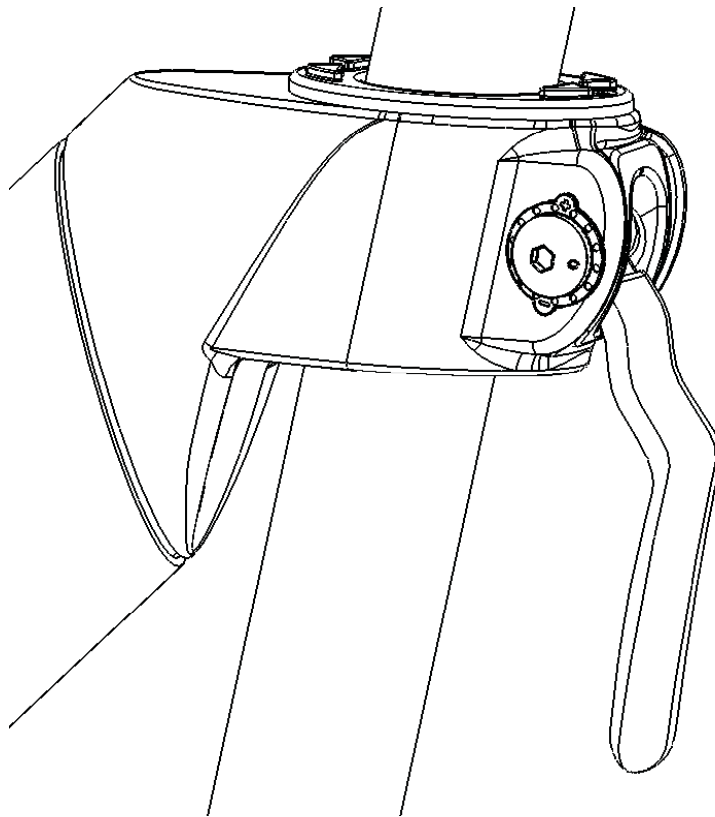




Cam Handle Service Guide



•Page 2. Introduction

•Page 3. Troubleshooting guide

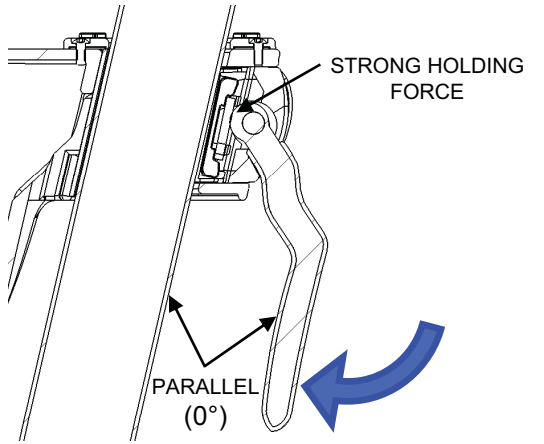
•Page 4-5. Adjusting the clamp force

•Page 6-7. Disassembling, greasing and replacing components

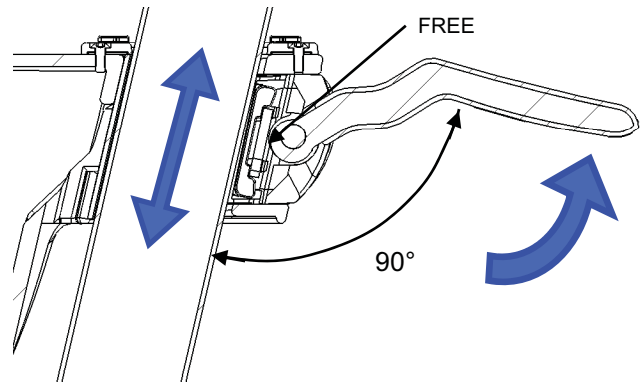
•Page 8-9. Replacing the post bearings

How the cam handle works

The head of the dipped handle has an eccentric surface. As the handle is pushed down, the head forces the post plunger assembly inwards. The post is clamped between the post plunger assembly and the post bearing. The post handle pin can be rotated to adjust the clamping force of the handle.

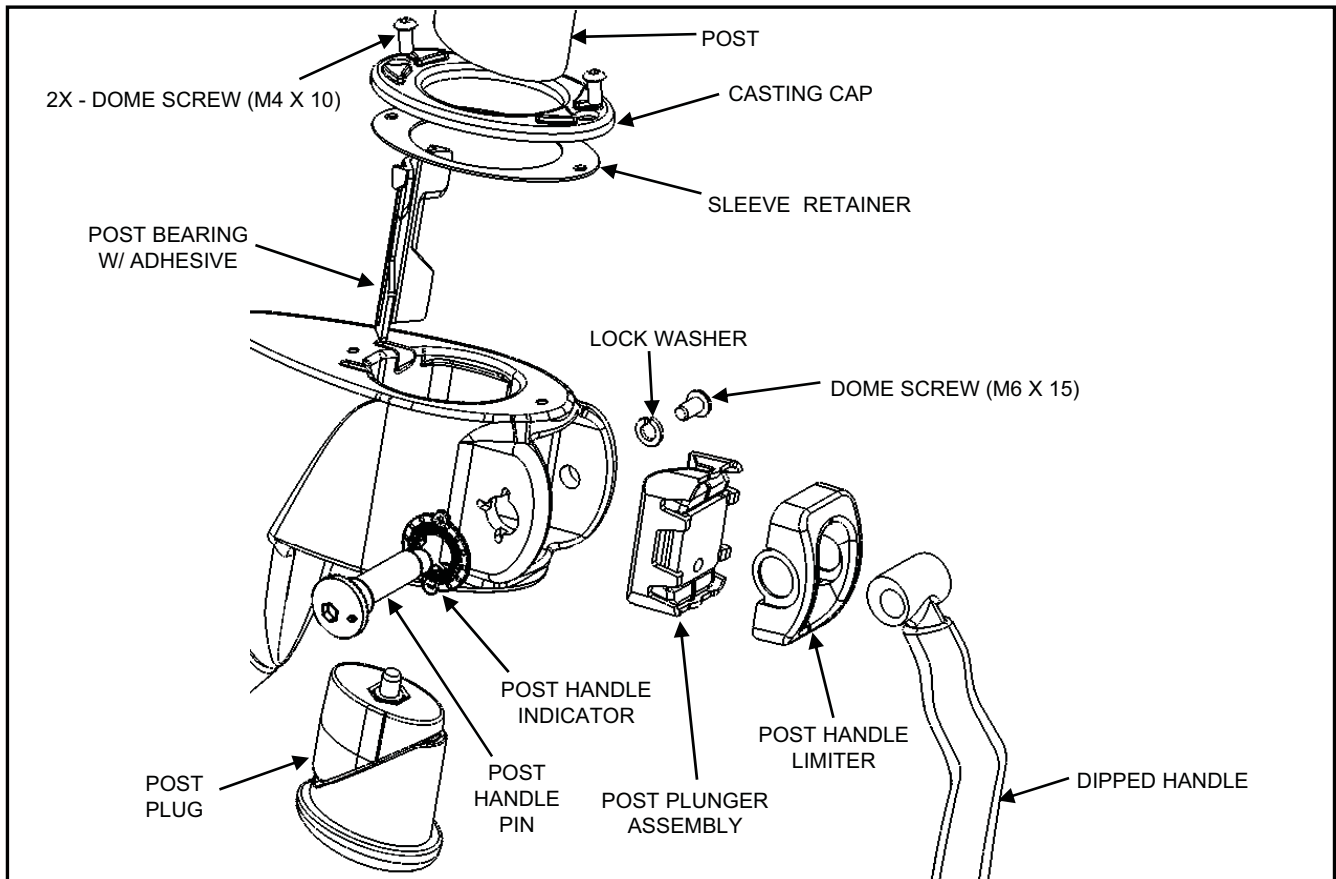


Fully down = locked position



Fully up = un-locked, able to slide post up and down

Parts breakdown (same mechanism for both seat and handlebar clamps)



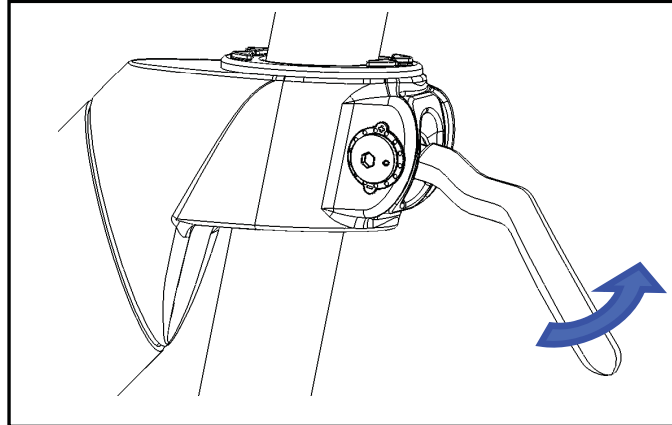
Troubleshooting guide

Symptom	Possible Cause	Solution
Post slips down with handle clamped down completely (0°)	Clamp force adjusted too light	Adjust (increase) clamp force (see pages 4-5)
Post slips down with handle clamped down completely (0°)	Broken or missing post bearing	Replace post bearing (see pages 8-9)
Post slips down and handle will not close completely	Clamp force adjusted too tight and clamp is not locking down	Adjust (decrease) clamp force (see pages 4-5)
Handle feels rough to open and close	Needs lubrication, excess wear on parts	Add grease, replace rough parts as necessary (see pages 6-7)
Grinding or squeaking sound from handle during opening and closing	Needs lubrication, excess wear on parts	Add grease, replace rough parts as necessary (see pages 6-7)
Clamping assembly loosens after several uses	Dome screw backs due to the post handle pin being rough and rotating with the handle.	Replace post handle pin, re-grease and reassemble (see pages 6-7)

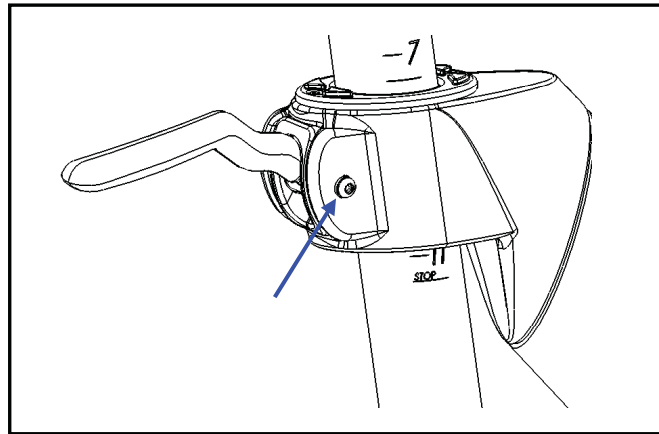
Adjusting handle clamping force

(From the factory the clamp should be set around 30-38 lbs to open and close)

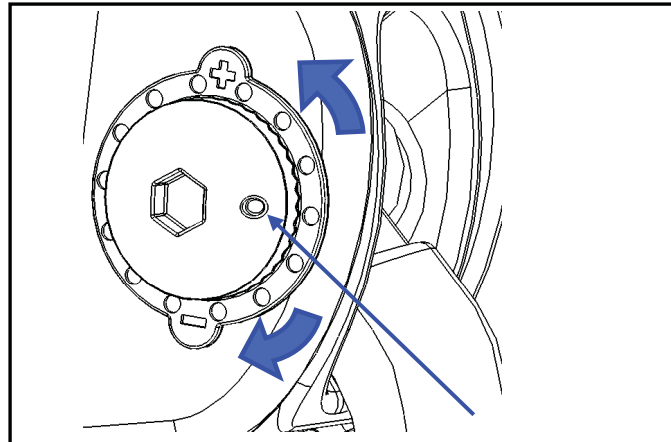
1. Lift handle up (90°) to fully release clamping force.



2. Using a 3mm hex wrench, loosen the M6x15 dome screw to free the post handle pin. Loosen the screw about 2-3 full turns, do not remove completely. Push on dome screw to disengage teeth on opposite side.

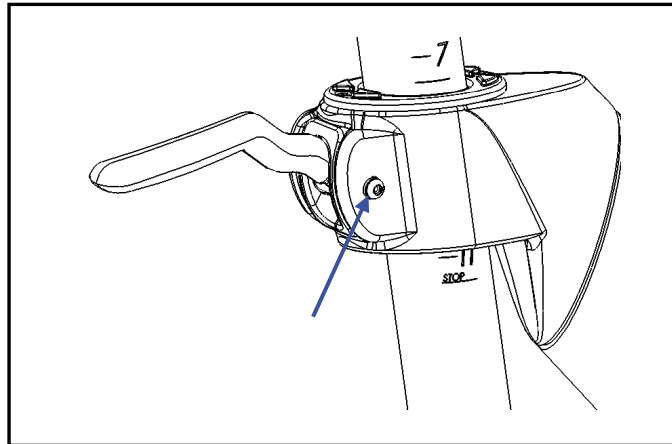


3. Using a 6mm hex wrench, turn the head of the post handle pin. Turn the indicator point on the head of the pin towards the plus sign to add clamp force, or towards the minus sign to remove clamp force. There are each tooth represents a change in clamp force.

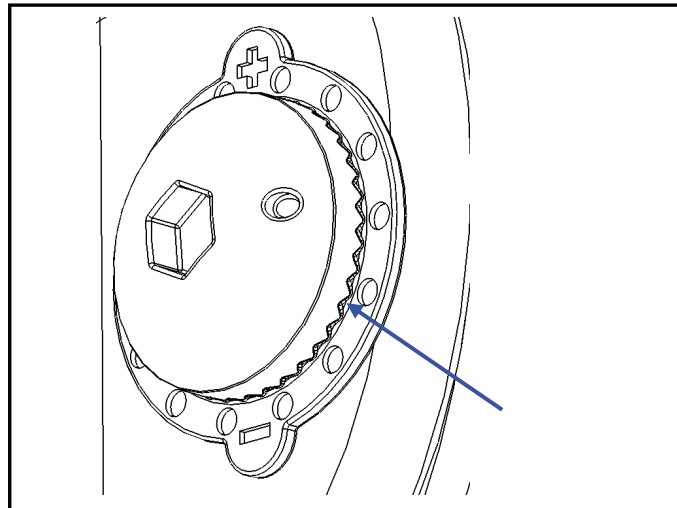


NOTE: Do not rotate head while teeth are still engaged.

4. Tighten the M6x15 dome screw to secure pin position.

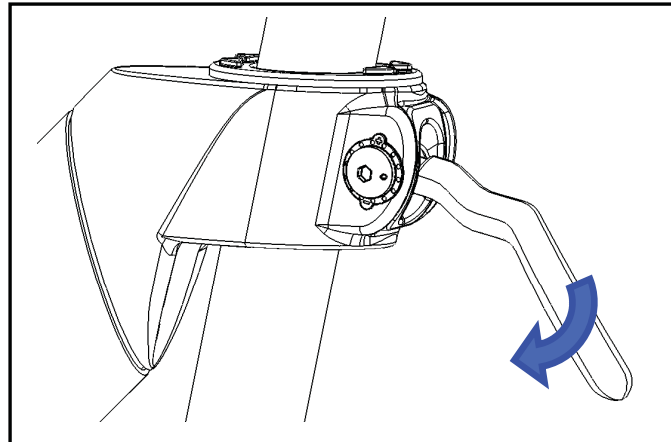


5. Be sure that teeth are fully engaged to prevent the post handle pin from losing its position.



6. Test clamping force by closing handle. The clamp should be set strong enough to hold the user's weight, yet be easy enough for all users to close. Repeat steps 1-6 until desired clamp force is set.

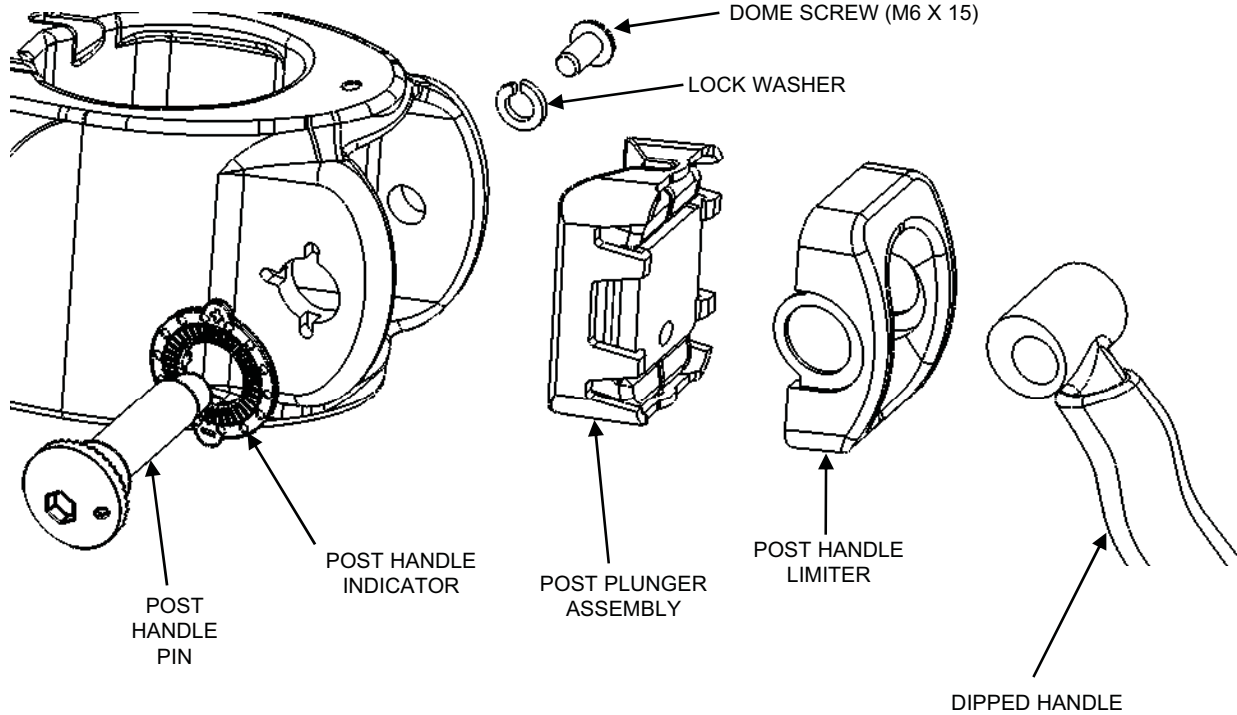
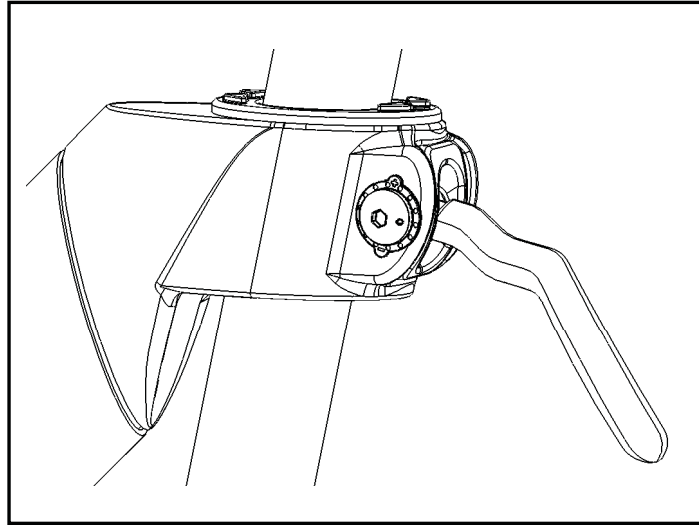
NOTE: Proper adjustment should require about 30-38 lbs of force to close handle.



Replacing and re-greasing parts

1. Disassemble handle assembly.

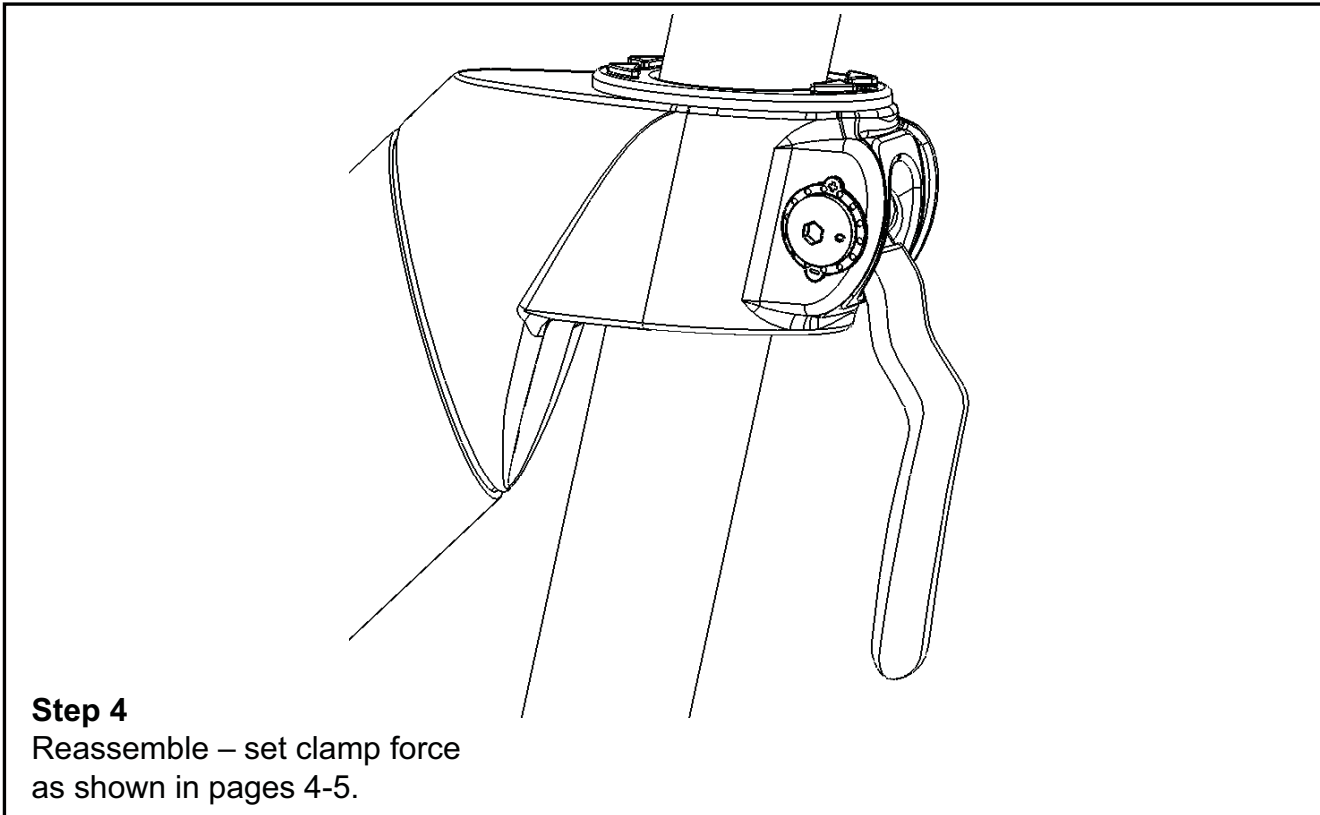
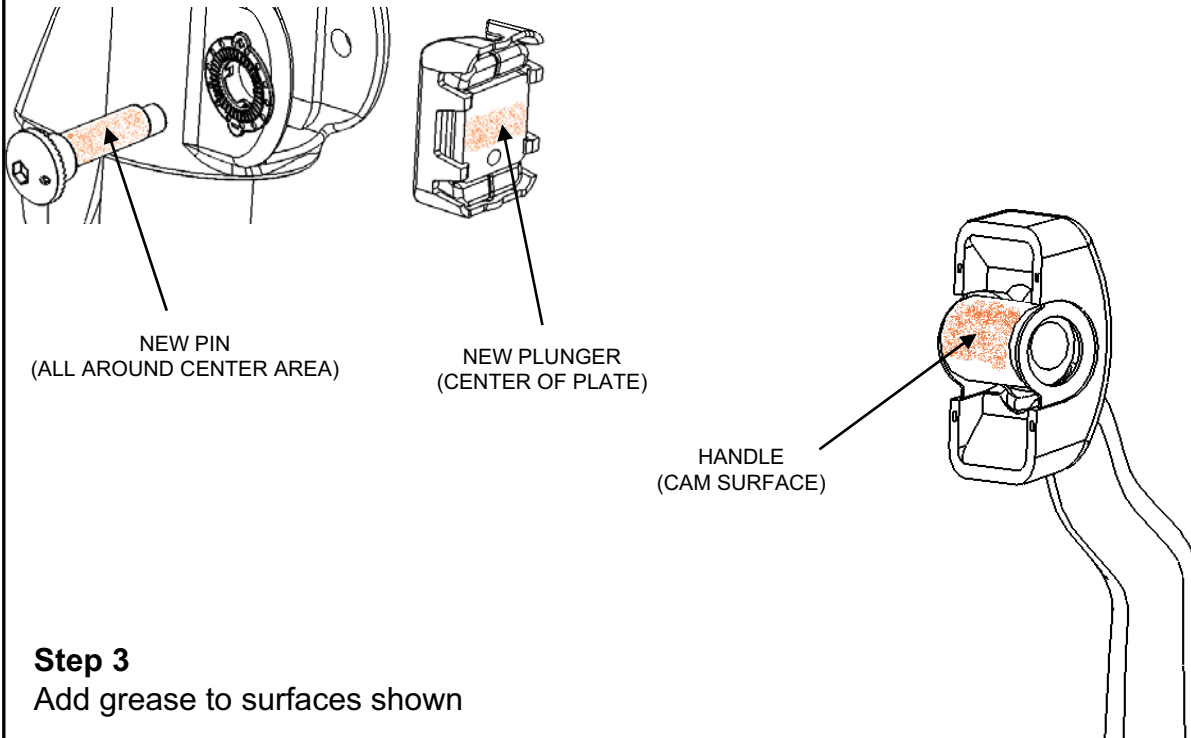
Tools needed
(1) 6mm hex,
(1) 3mm hex



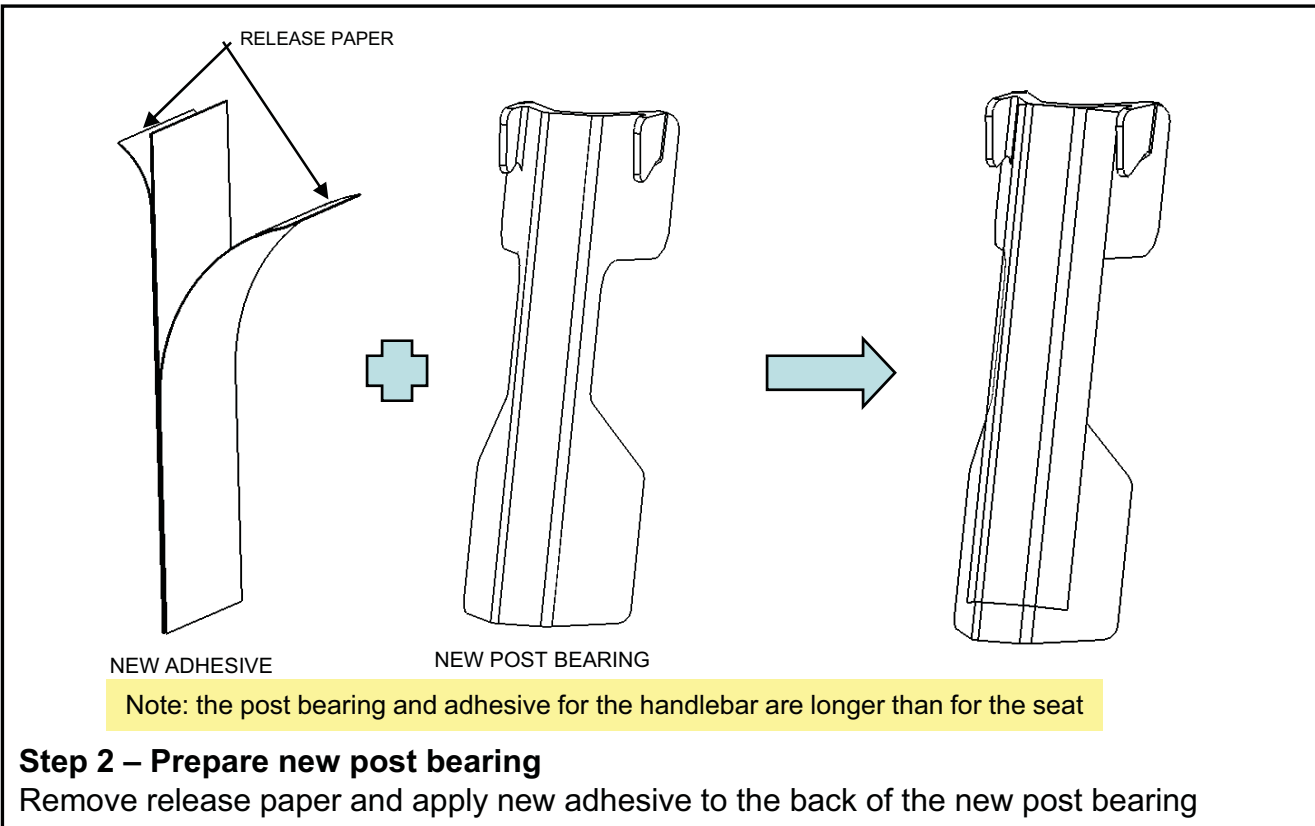
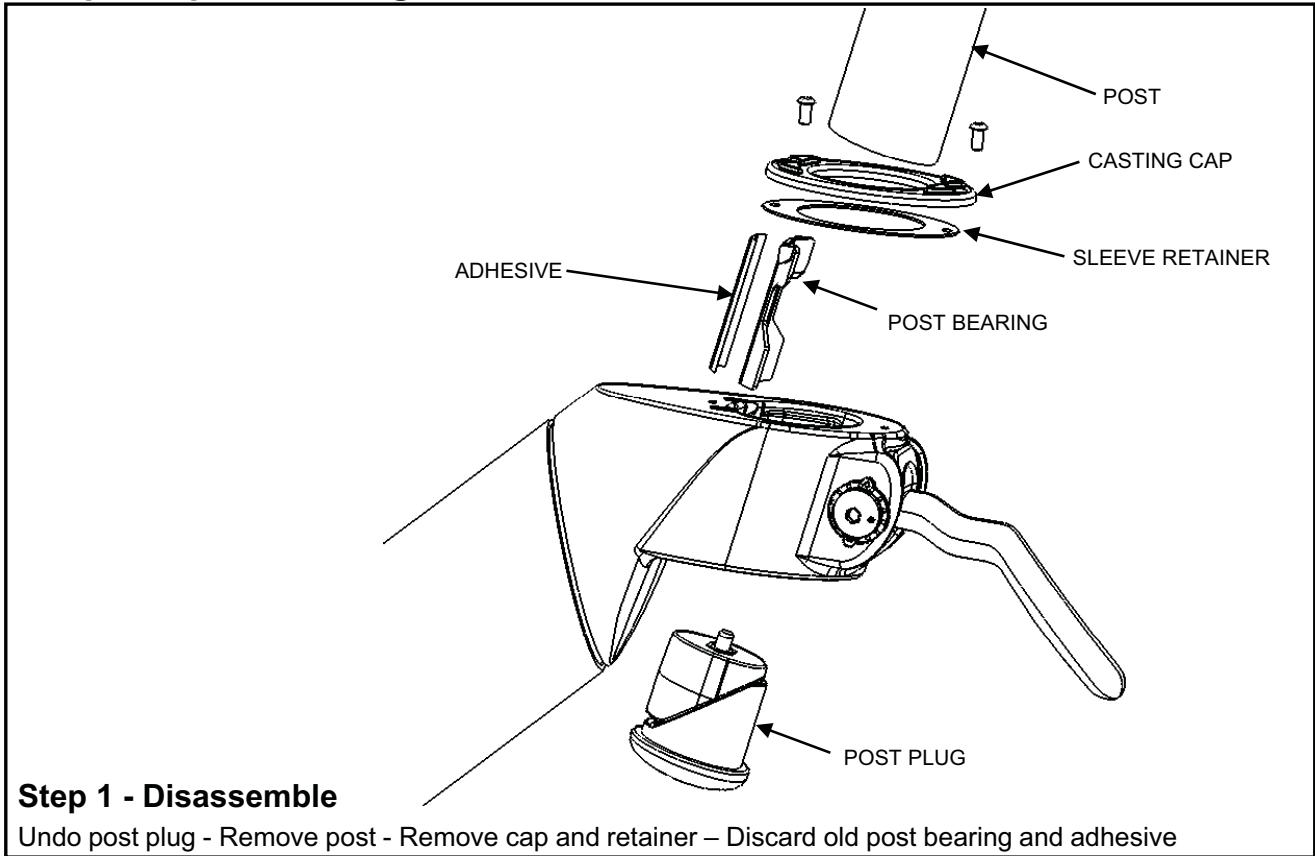
Step 2

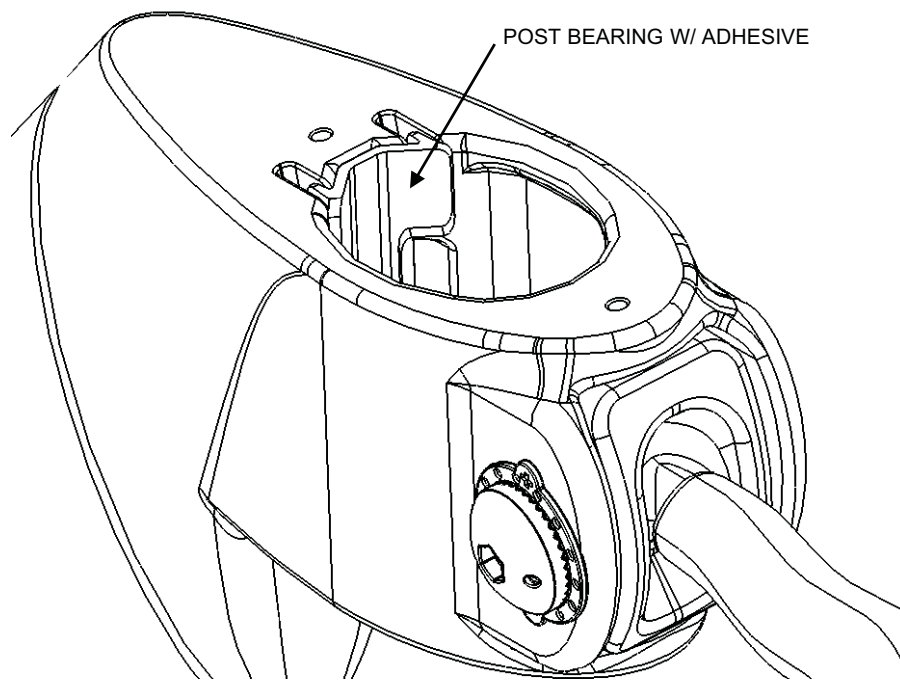
Keep: handle indicator, handle, handle limiter

Replace: pin, plunger assembly, washer, fastener



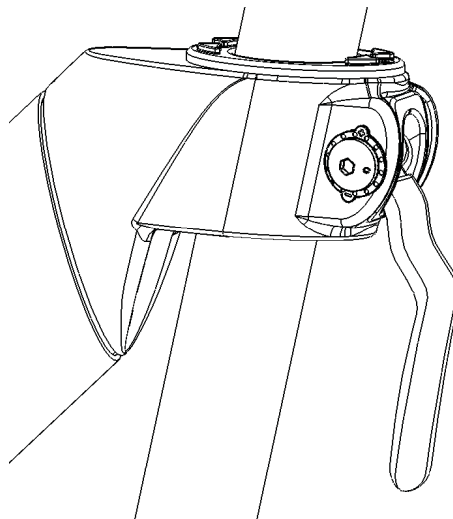
Replace post bearings





Step 3 – Install new post bearing

Put new post bearing in aligning the tabs. Press bearing with adhesive against inside wall to secure in place.



(Steps 1-4 will be the same for both the seat and the handlebar post bearings)

Step 4 – Reassemble

Put parts back together, clamp force should be set from before but if needed, follow instructions on pages 4-5.



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Service Bulletin

RevMaster Pro – Post Bearing & Plug Upgrade

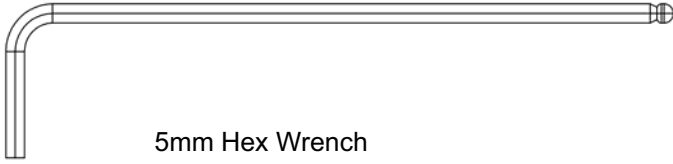
Reason for service:

- Replace plastic post bearings with overmolded bearings with metal holding tabs.
- Replace existing post plug assembly with updated post plug assembly.

Action Steps:

- Remove post plug
- Remove handlebar or seat post
- Replace plastic bearing with overmolded bearing
- Reassemble with updated post plugs

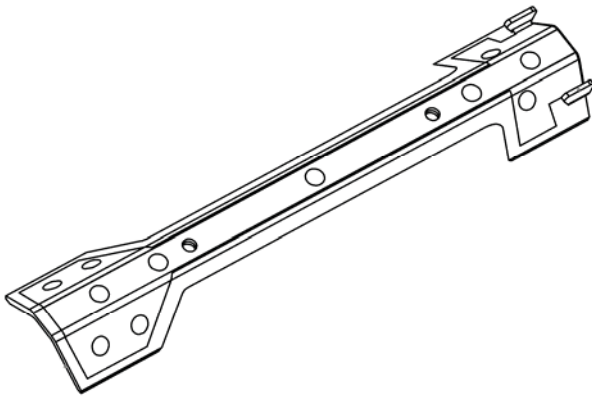
Tools / Parts List



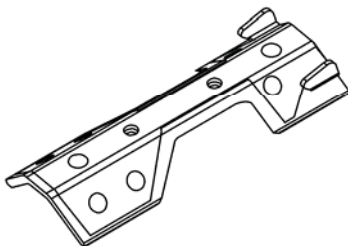
5mm Hex Wrench



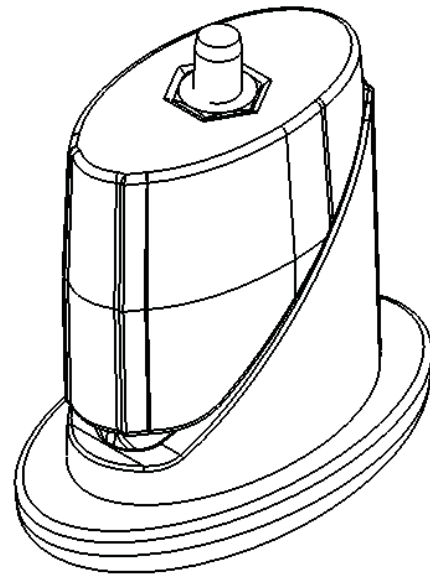
2.5mm Hex Wrench



Handlebar Post Bearing

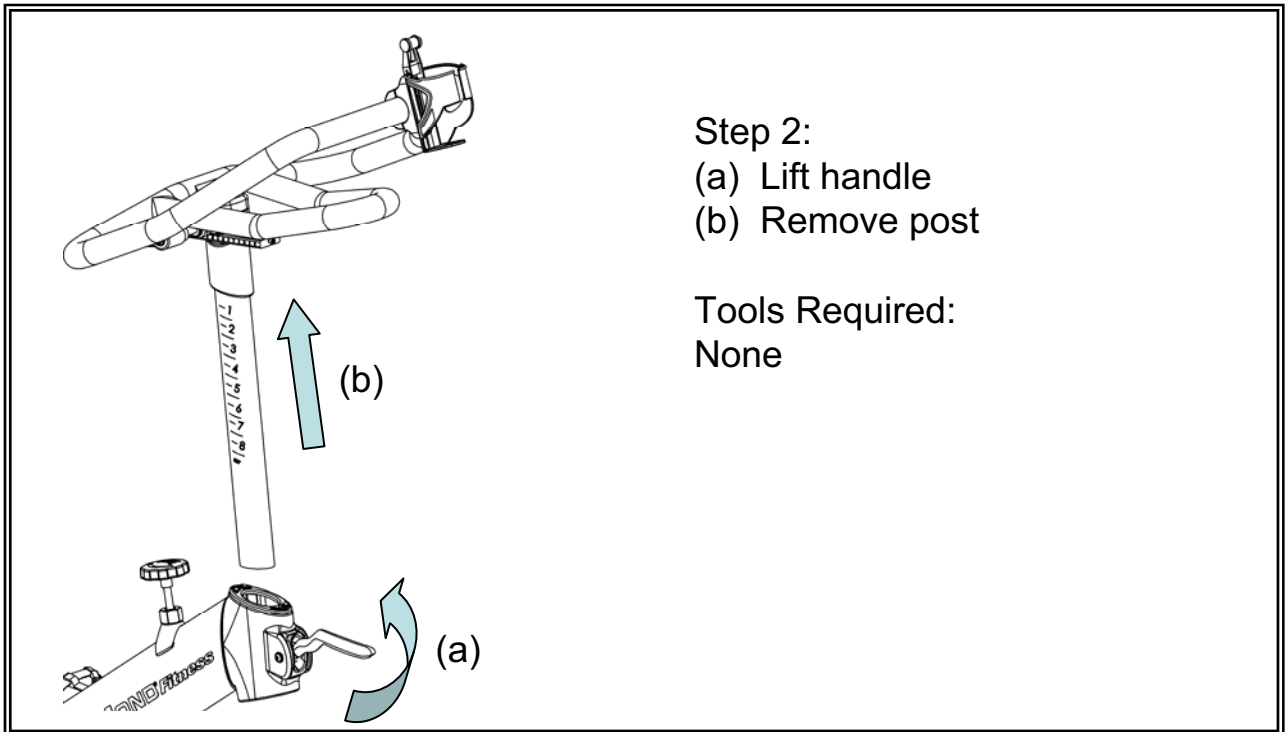
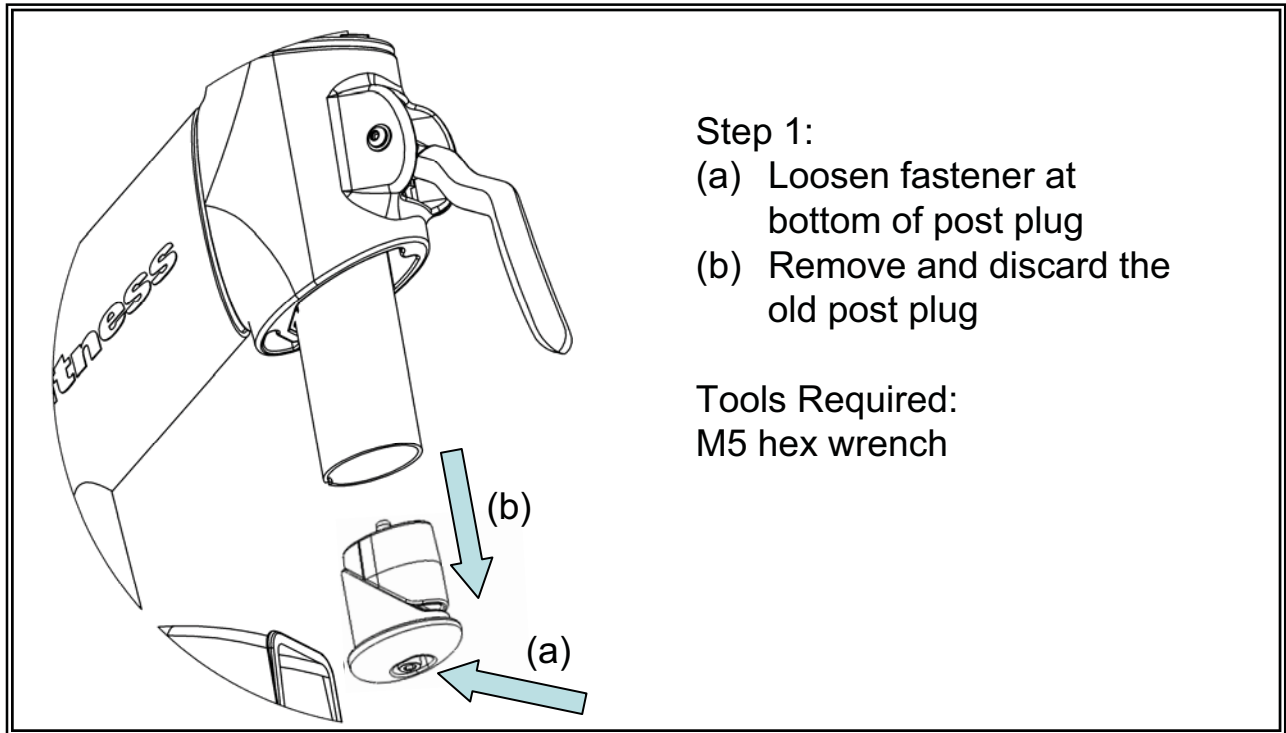


Seat Post Bearing

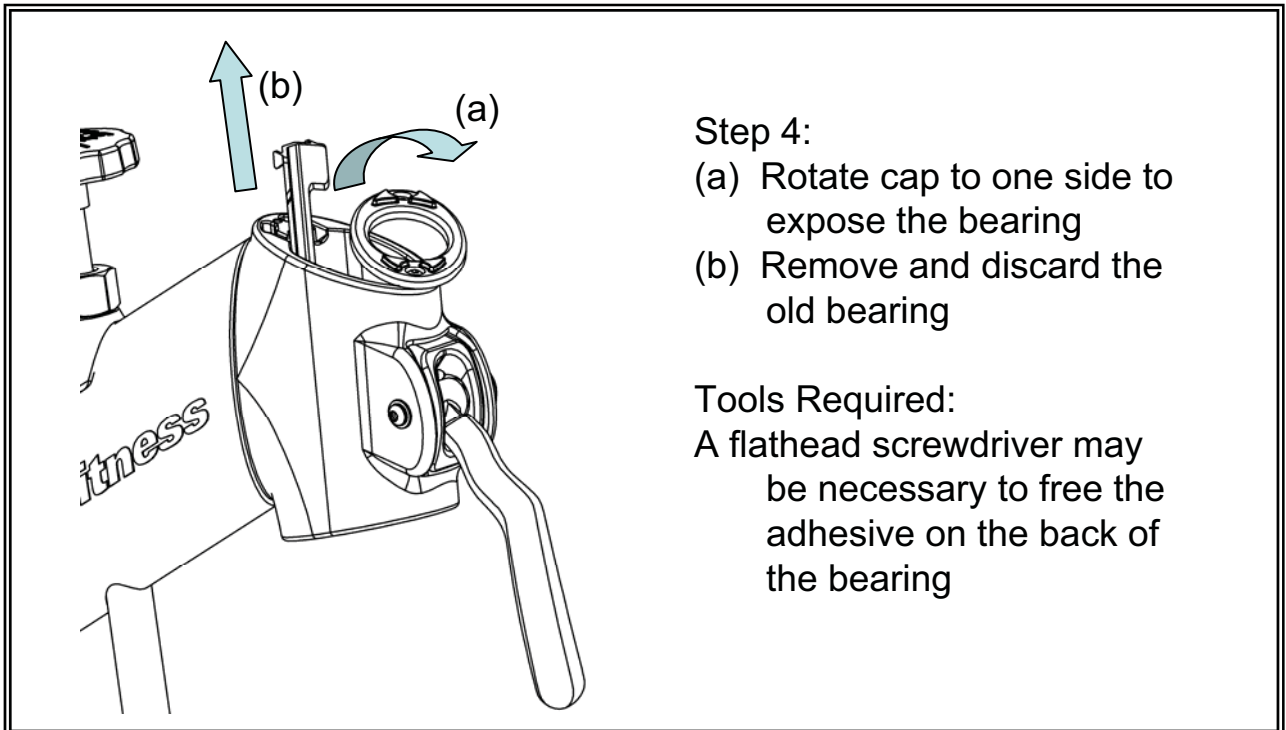
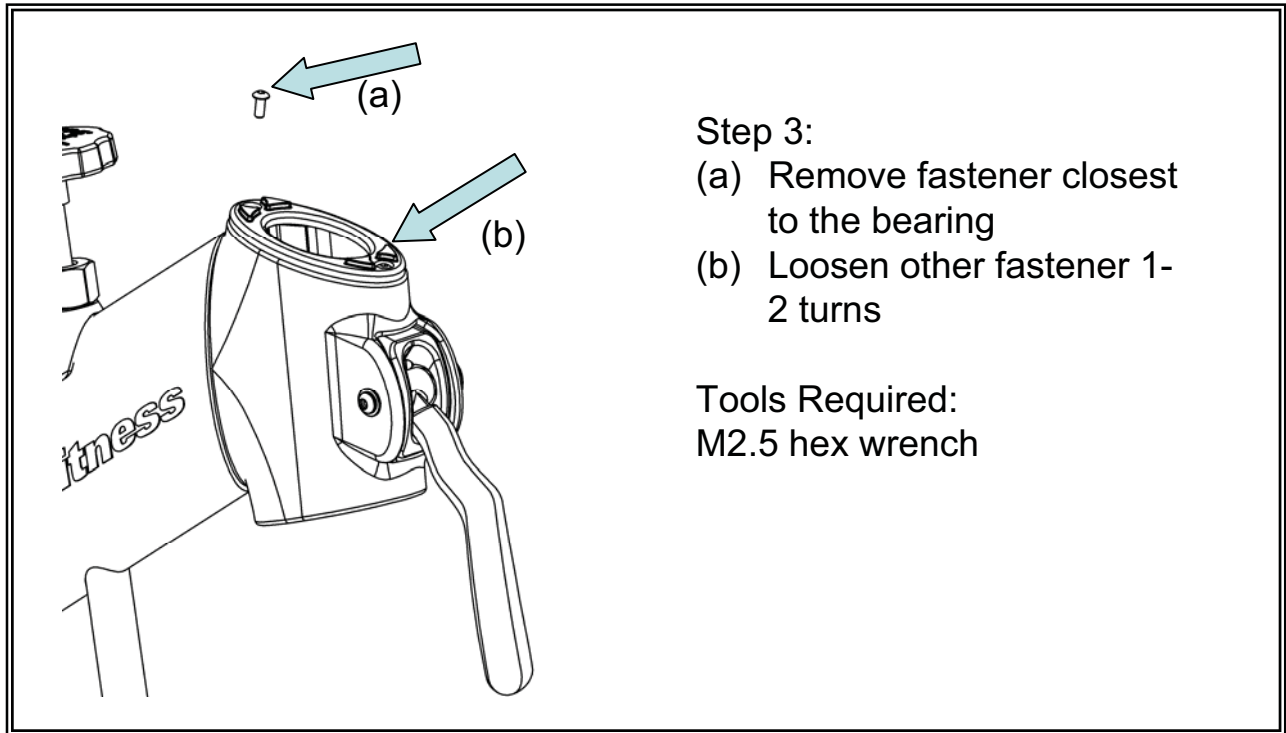


Post Plug (2X)

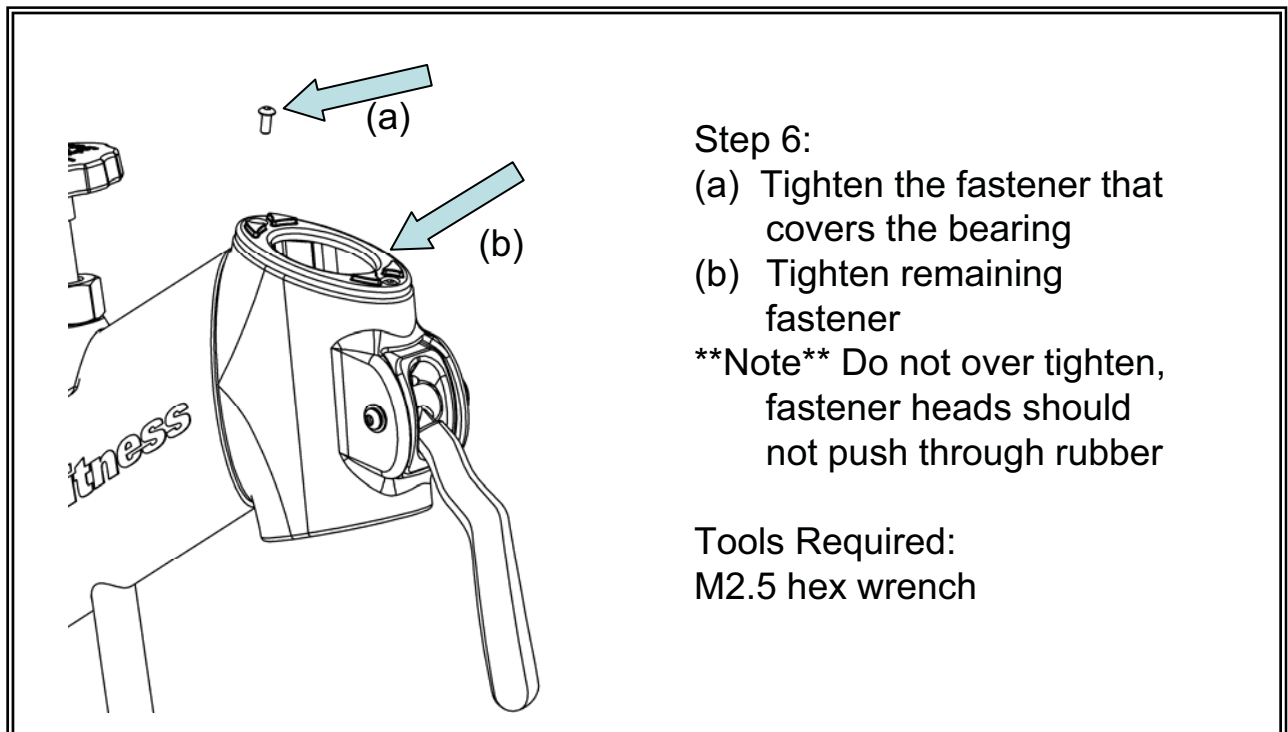
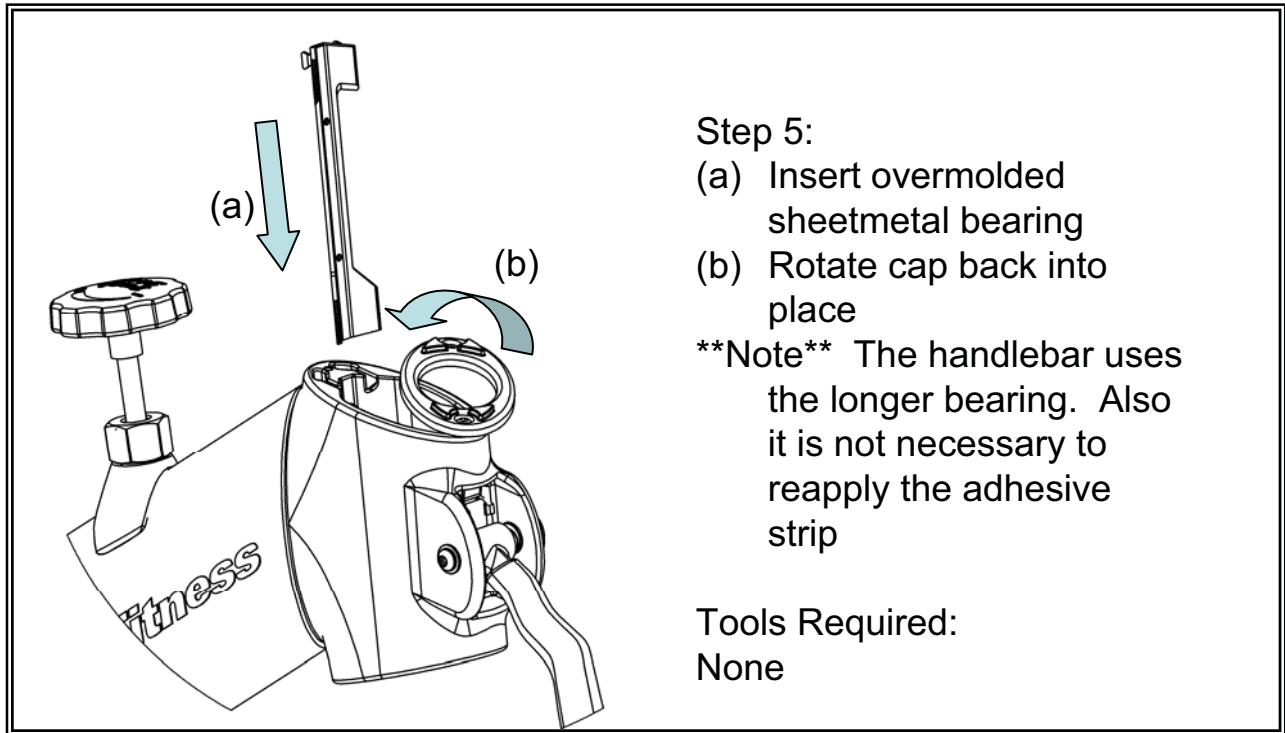
Replacement Steps



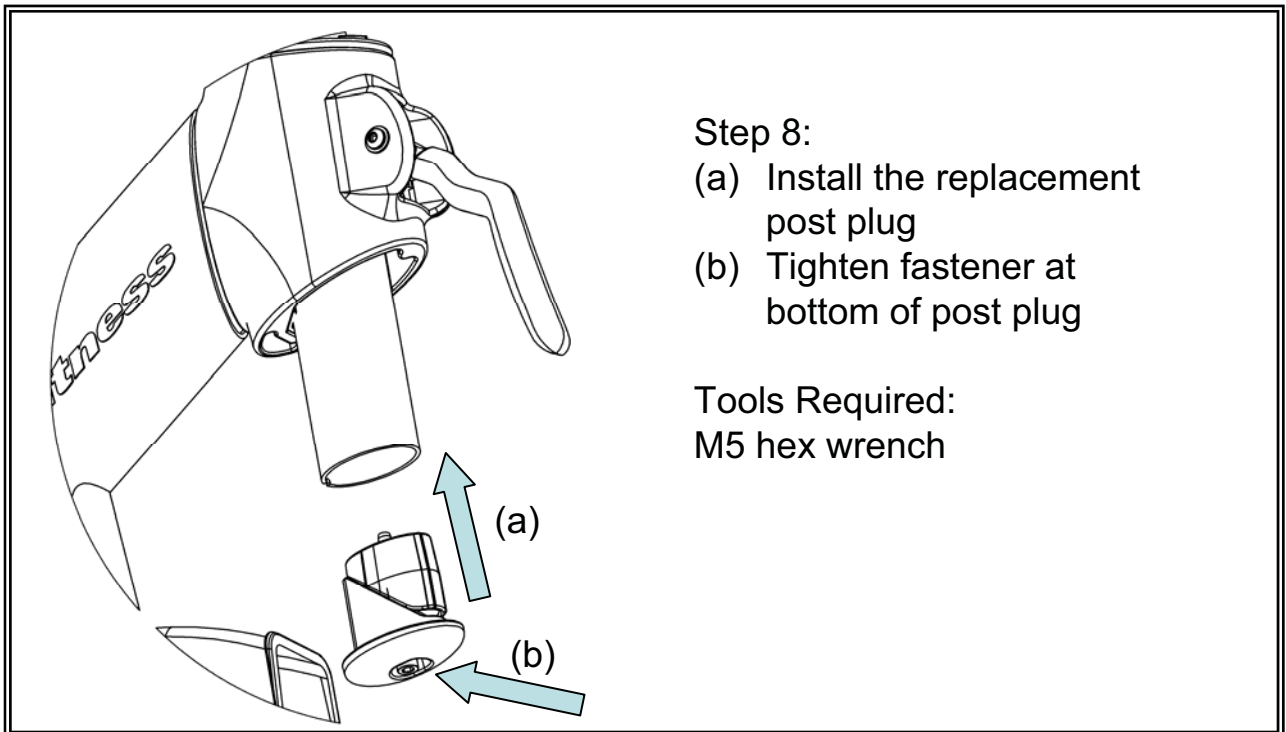
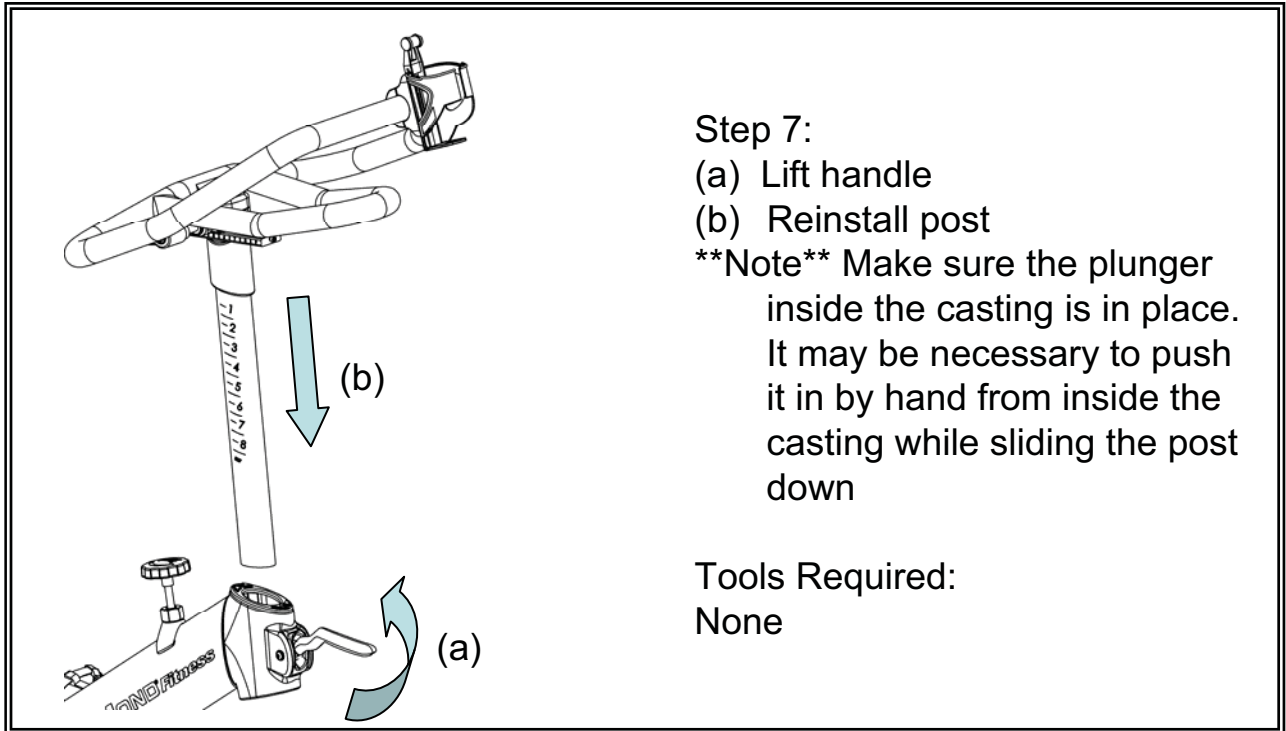
Replacement Steps



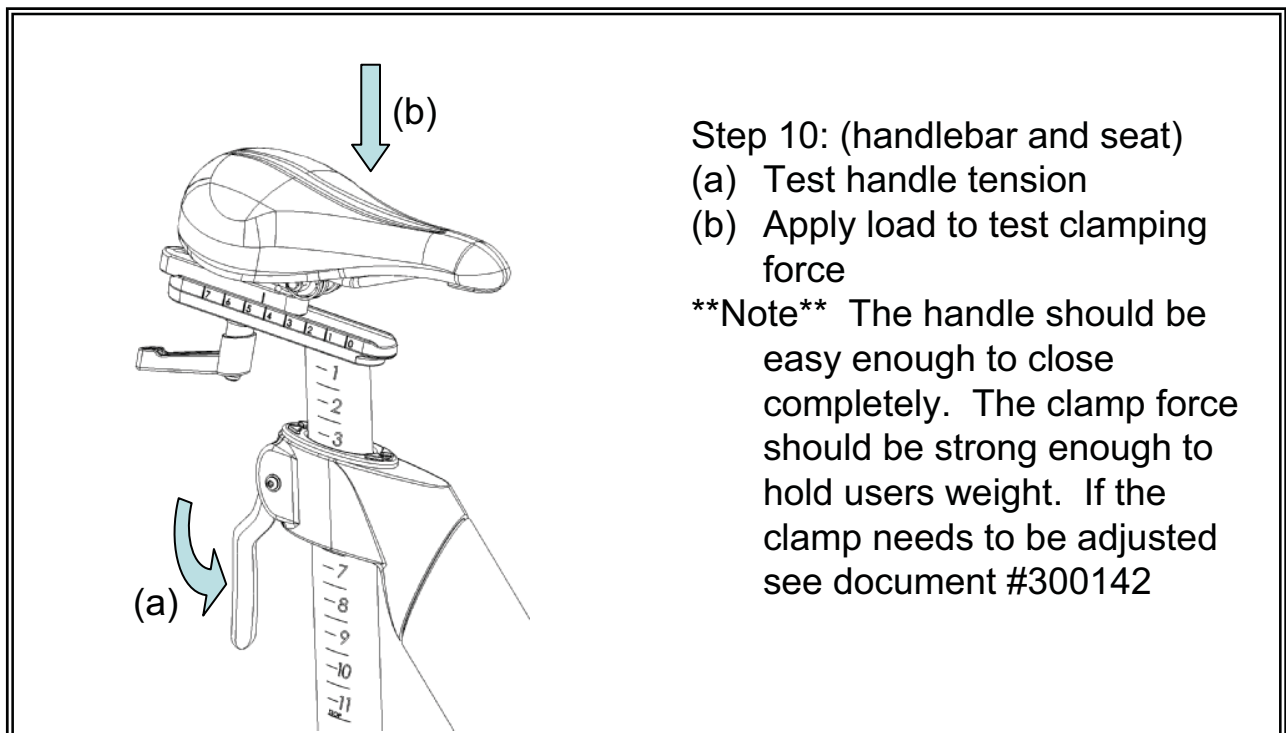
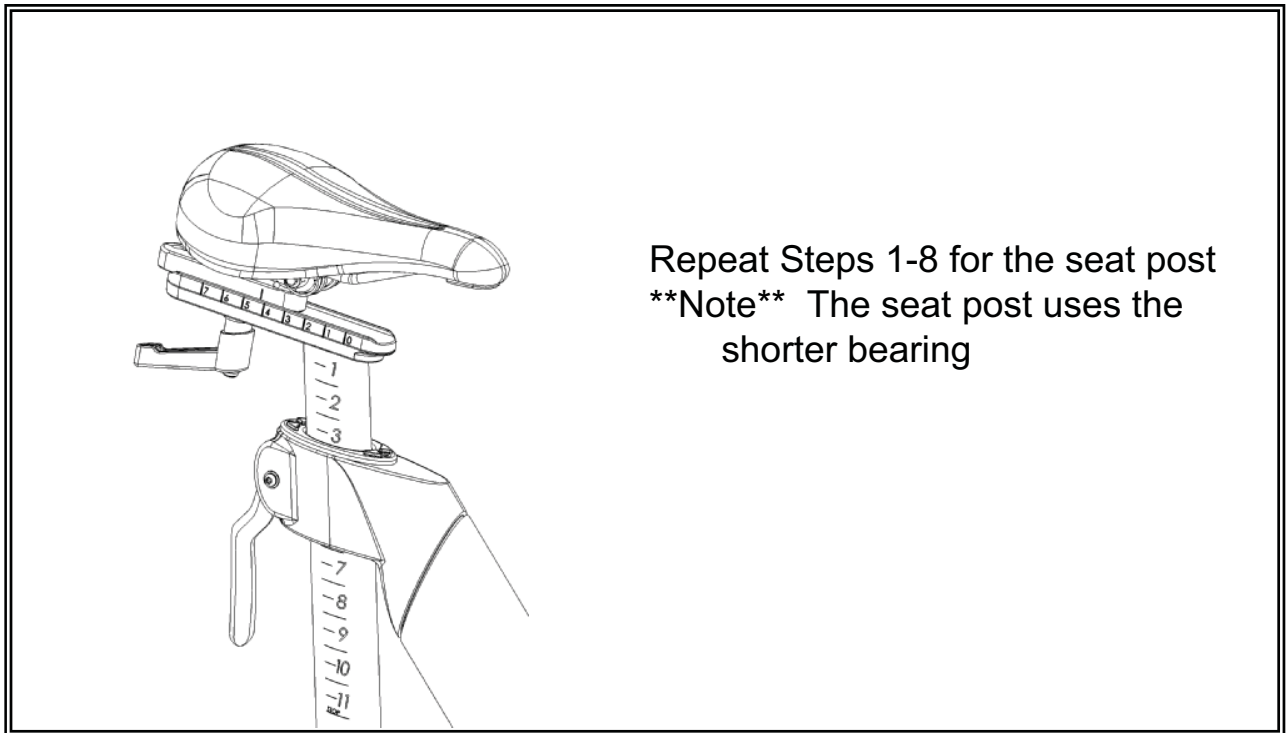
Replacement Steps



Replacement Steps



Replacement Steps





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Service Bulletin

RevMaster Pro – Bottom Bracket Rework

Reason for service:

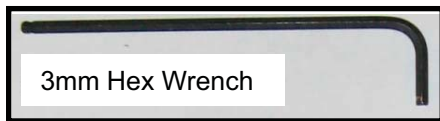
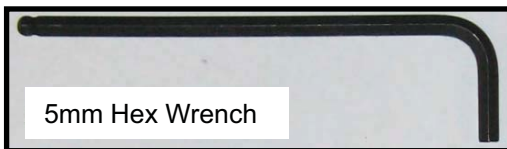
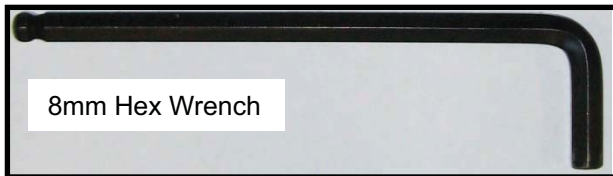
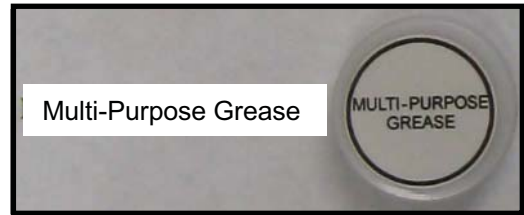
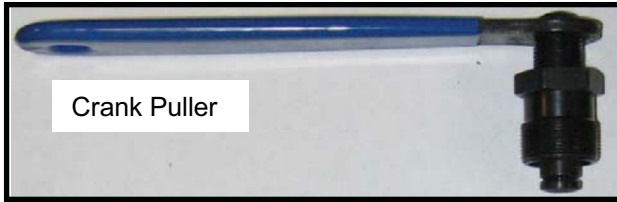
There has been cases where the bottom bracket has come loose and the cranks can potentially shift over to rub the belt cover.

Action Steps:

- Disassemble – Belt cover, belt, cranks, bottom bracket
- Wipe parts clean
- Add Loctite to bottom bracket cups
- Reassemble

Doc. 300603 Rev 02
Dev-02-2008

Tools / Parts List



Disassembly Steps

(1) Remove Belt Cover



Tool – 3mm Hex Wrench
Remove screws (3x).

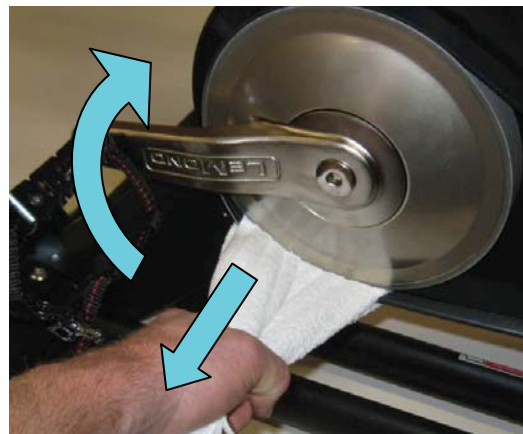


Tool – 5mm Hex Wrench
Remove bolts (4x).

(2) Remove Belt



Wrap towel around belt and
pull away from pulley.



Rotate crank clockwise as
you continue to pull towel
away from pulley.

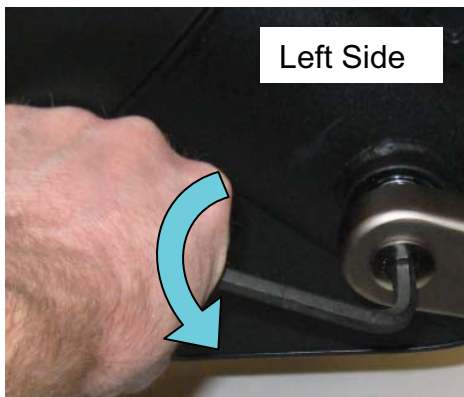


Rotate crank until belt
comes free.

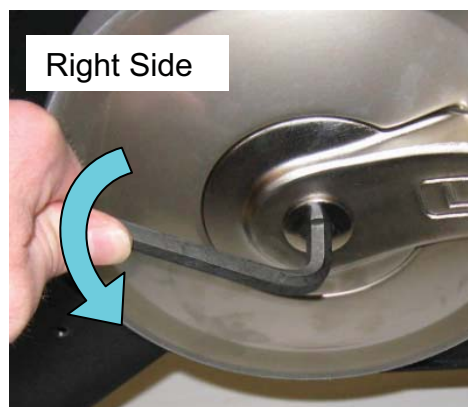
*** Special Note: Using the towel to help pull the belt off will keep fingers away from pinch points. *The high tension of the belt and the sharp pulley teeth may cause serious injury.***

Disassembly Steps

(3) Remove Crank Bolts



Tool – 8mm Hex Wrench
Counter-Clockwise to
loosen bolts.

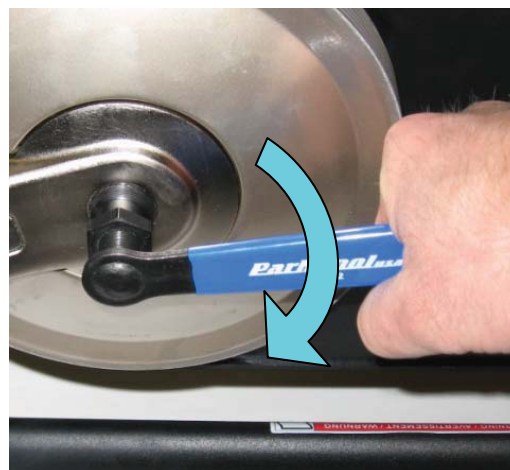


Tool – 8mm Hex Wrench
Counter-Clockwise to
loosen bolts.

(4) Remove Cranks



Tool – Crank Puller
Thread puller all the way
into crank.



Turn puller clockwise to
remove crank.

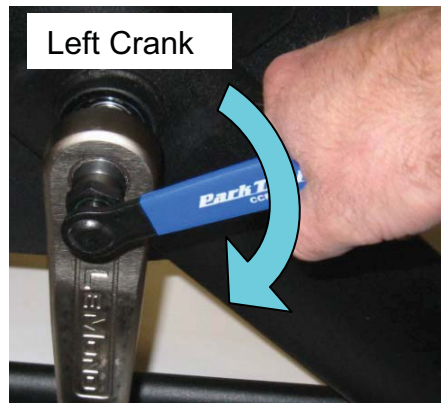
*** Special Note: Be sure to thread puller tool all the way into the crank threads. More thread engagement will improve the life of the puller tool and help prevent stripping the threads in the cranks.**

(continued on next page)

Disassembly Steps



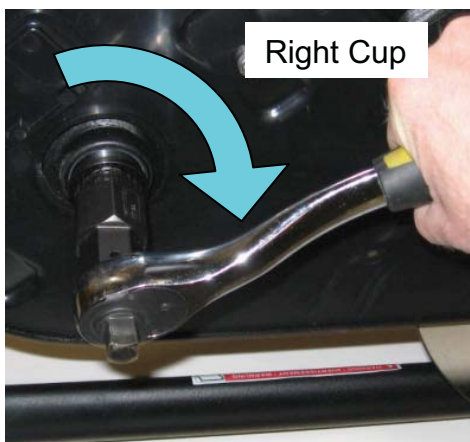
Remove crank form bike.



Repeat steps on other side.

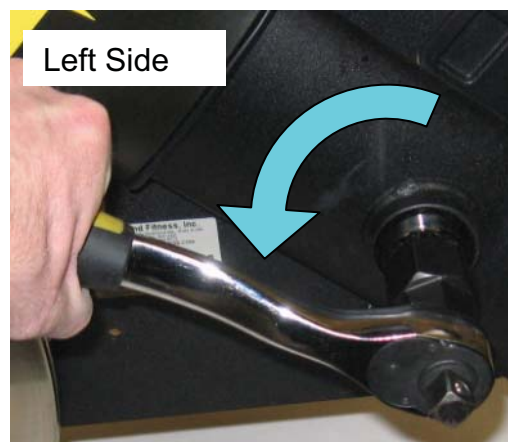
*** Special Note: Pay attention to the wear on the puller tool. If the teeth start to wear it is best to throw away and use a new puller. This will help avoid stripping the threads on the cranks.**

(5) Remove Bottom Bracket



Tool – Bottom Bracket Tool
Rotate Clockwise to remove
right side cartridge.

** right cup is reverse threaded*



Tool – Bottom Bracket Tool
Rotate Counter-Clockwise
to remove left side cup.

Cleaning Steps

(1) Clean Bottom Bracket Cups and Frame Shell



Wipe Bottom Bracket Cartridge with towel to remove any oil.



Repeat for left cup.

(2) Clean Frame Shell



Wipe Shell threads with towel to remove any oil.



Repeat for left side.

Re-installing Bottom Bracket Steps

(1) Start threading in cups



Install Right Side Cartridge
1-2 threads.



Install Left Side Cup 1-2
threads.

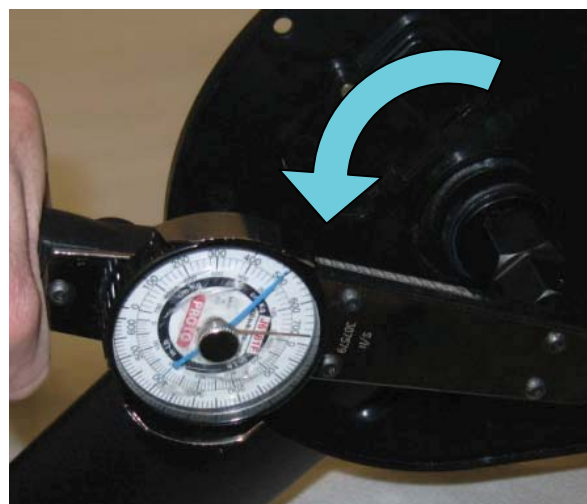
(2) Add Loctite and finish installing Bottom Bracket



Apply a solid bead of Loctite 242
3-5 threads in width all around
cup.

** Apply closer to the frame so as
you install the cup the Loctite will
spread across all threads.*

** Loctite will drip so it is best to
place paper towels below to
catch falling drops.*



Thread in right side completely
(counter-clockwise) and torque to
175 in*lbs.

*** Special Note: Always install
right side all the way to the
shoulder before installing left
side.**

(continued on next page)

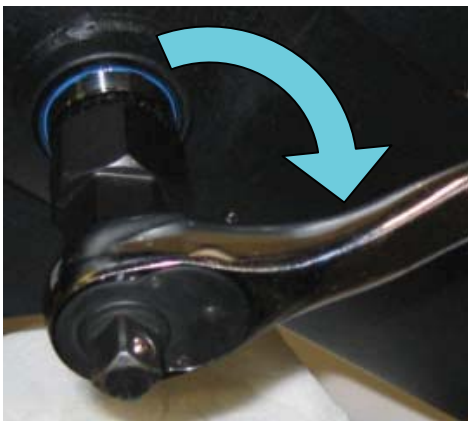
Re-installing Bottom Bracket Steps



Wipe away excess Loctite.



Apply Loctite 242 to Left Cup.
** Again, apply closer to the frame so as you install the cup the Loctite will spread across all threads.*

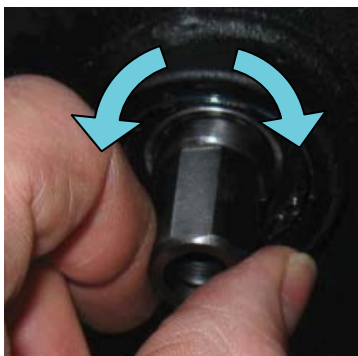


Thread in left cup completely.
(clockwise) and torque to 175 in*lbs



Wipe away excess Loctite.

(3) Check Spindle for smooth rotation



Turn spindle back and forth to make sure spindle rotates freely. If rough feeling then the bearings are damaged and a new bottom bracket is needed.

Re-assembling the bike

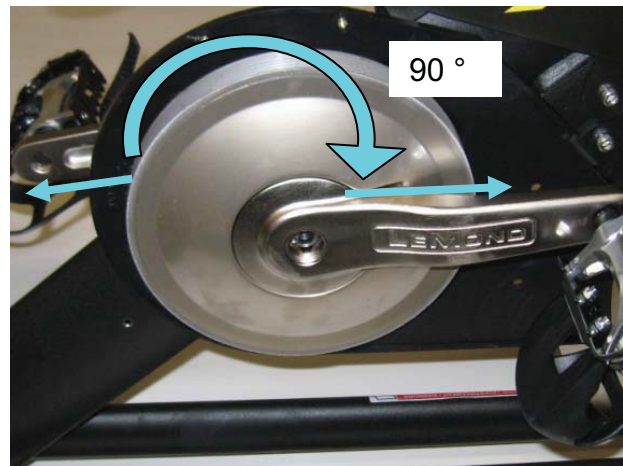
(1) Install the cranks



Grease both sides of the spindle to help the cranks go on completely.



Put the cranks on the spindle.



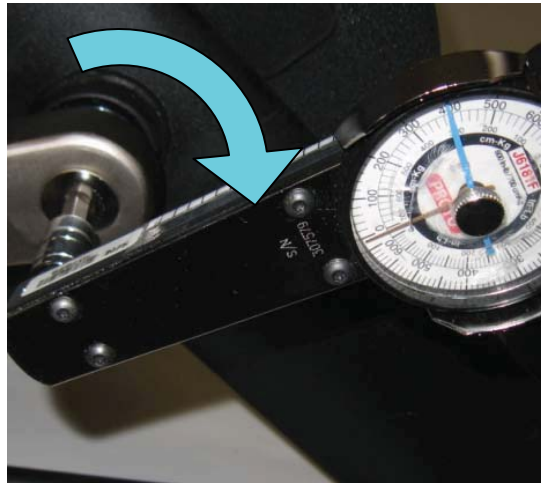
Be sure the cranks are 90° from each other.

Re-assembling the bike

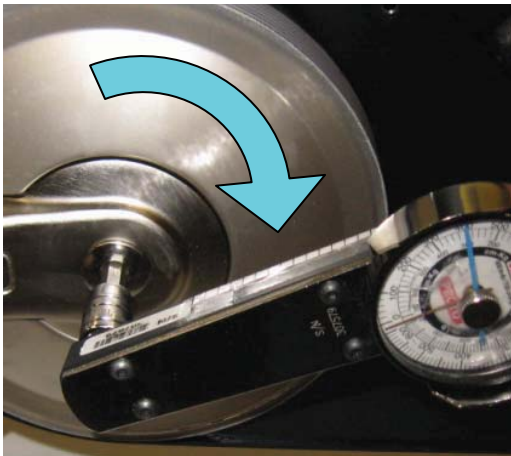
(2) Install the crank bolts



Insert crank bolts.
** Check that the blue nylok patch is present. If the patch is missing, either use a new crank bolt or add a drop of liquid Loctite 242.*



Install crank bolt (clockwise).
Torque to minimum 410 in*lbs.



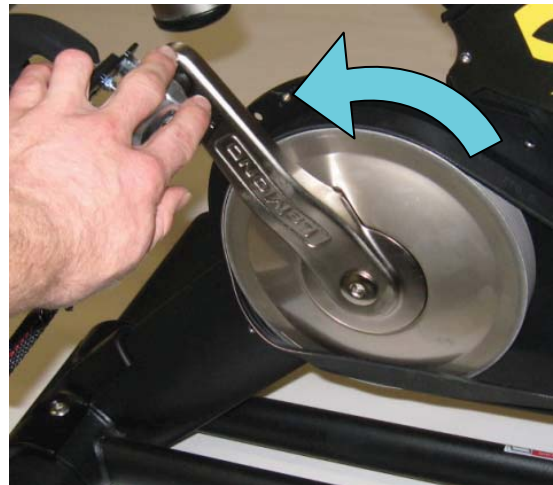
Repeat on other crank.
Torque to 410 in*lbs.

Re-assembling the bike

(3) Install belt



Wrap belt around flywheel pulley and idler. Start belt on upper part of crank pulley.



Rotate crank pulley (counter-clockwise) to walk belt onto crank pulley.



Continue until belt is completely on the pulley.

*** Special Note: Keep fingers clear of belt and pulley. The high tension of the belt and the sharp pulley teeth may cause serious injury.**

(4) Re-install belt cover



Tool – 5mm Hex Wrench
Install screws (4x).



Tool – 3mm Hex Wrench
Install screws (3x).

LEMOND[®] REVMaster PRO[®]
LEATHER BRAKE PAD LUBRICATION PROCEDURE

Tools Required:

- 4mm Allen Key
- 5mm Allen Key

INSTRUCTIONS

A) If the pad is new and making noise – and very little oil is visible on the pad.

1. Remove fender assembly

- Use 4mm and 5mm Allen Keys to remove the fender pivot bolts.
- Remove fender assembly from the bike.



2. Oil brake pad leather

- Place fender assembly with leather pad facing up. Apply brake pad oil supplied with the bike to the leather pad, enough to cover pad evenly, and allow oil to soak into leather.
- Repeat several times until the leather is saturated and is no longer absorbing oil.
- Wipe away excess oil that may have run off of the pad.

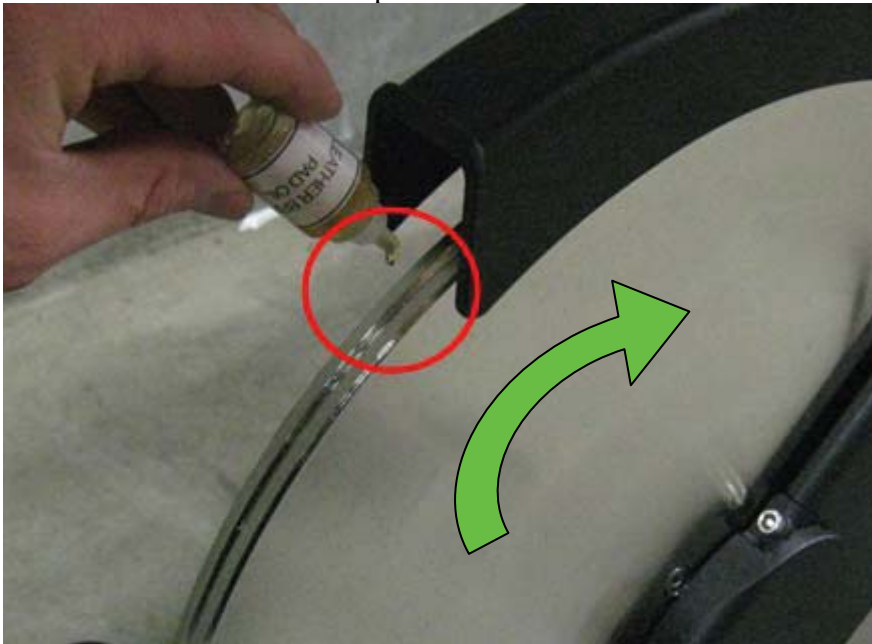
3. Reinstall fender assembly

- Use 4mm and 5mm Allen Keys to re-install the fender pivot bolts.

B) If the pad has been used (maintenance)

1. Apply oil to maintain leather brake pad

- Apply oil directly to the front of the flywheel and rotate the flywheel backward so the oil lubricates the leather pad.



- Apply as necessary to eliminate noise and improve smooth operation.
- Regular maintenance checks will improve performance and help increase the life of the leather pad. Suggested check frequency is weekly.

For telephone assistance, please contact your local distributor or the Customer Service Department of LeMond Fitness Inc. at 1-425-482-6773 from 0800AM – 1700PM PST Monday through Friday.

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LEMOND[®] REVMaster PRO[®]
MAGNET ORIENTATION CHANGE PROCEDURE

Tools Required:

- 2.5mm Allen Key
- 3mm Allen Key

Only bikes prior to serial number:
LF3507081006206
must follow this procedure.

Bikes after this serial number already have the magnet in
the correct position/orientation.

INSTALLATION INSTRUCTIONS

1. Remove transmitter (if present)

- Use 2.5mm Allen Key to remove transmitter door. (one fastener)



- Use 3mm Allen Key to remove transmitter. (two fasteners)



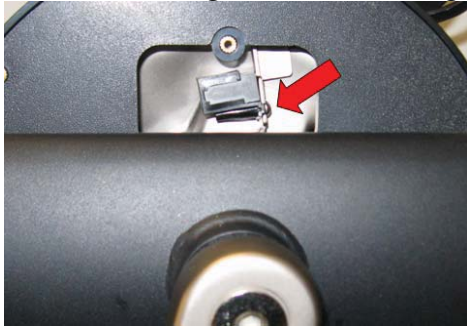
2. Remove battery cover door

- Use 2.5mm Allen Key to remove battery cover door. (one fastener)



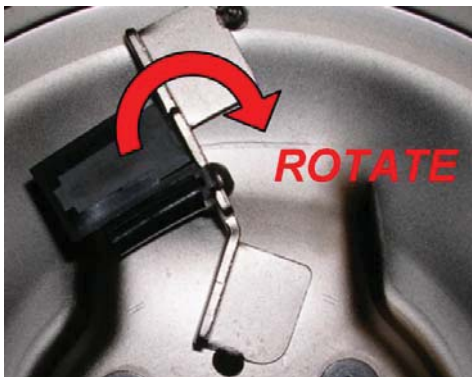
3. **Remove magnet, change orientation and re-install**

- Use 3mm Allen Key to loosen the fastener holding the magnet housing to the pulley. Only loosen enough to allow the magnet to slide out freely.

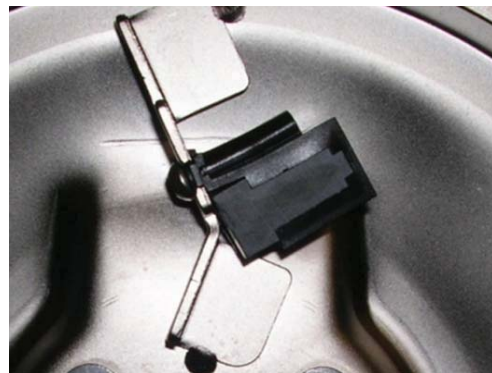


- Change from original orientation to the orientation shown below. The new positions will depend on which pulley configuration you have. Pay close attention to the pictures.

Sheet Metal Bracket Configuration:



BEFORE



AFTER

Die Cast Bracket Configuration:



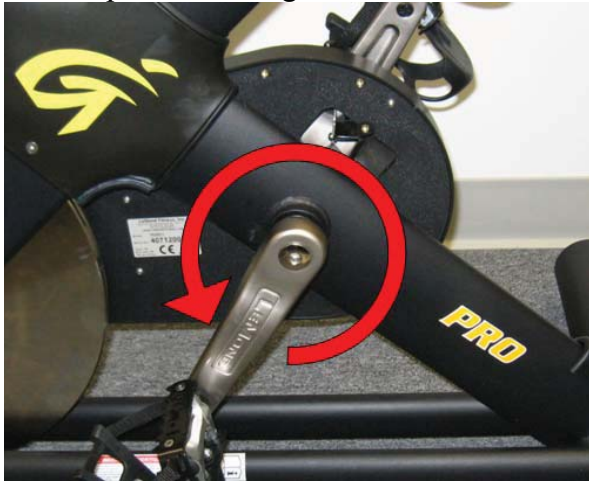
BEFORE



AFTER

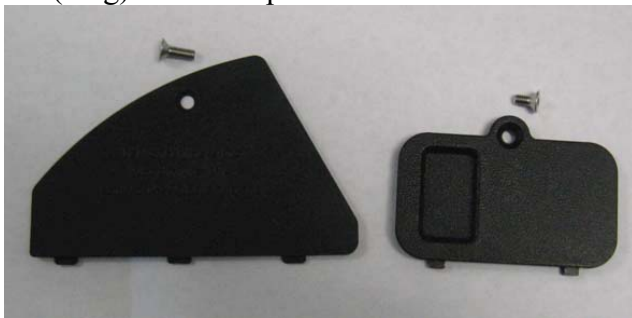
- When in new position, use the 3mm Allen Key to tighten the fastener. Tighten enough to secure the magnet but not enough to crack the plastic housing.

- Rotate the crank slowly by hand to test and make sure the magnet does not contact any other components through the full rotation.



4. Install covers and transmitter

- Reinstall covers and transmitter in the reverse order that they were removed. Pay attention to the length of the fasteners to use the correct length on the magnet door (short), and transmitter door (long). Refer to picture for reference.



For telephone assistance, please contact your local distributor or the Customer Service Department of LeMond Fitness Inc., at 1-425-482-6773 x109 from 0800AM – 1700PM PST Monday through Friday.

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LEMOND[®] REVMAS[®]TER PRO[®]
FRONT AND REAR STABILIZERS INSTALLATION PROCEDURE

Tools Required:

- 6mm Allen Key

INSTALLATION INSTRUCTIONS

1. Setup

- Place front stabilizer at the front of the bike. *(with wheels forward)*
- Place rear stabilizer at the rear of the bike. Note hole positioning.



2. Attach front and rear stabilizers – TOP BOLTS ONLY

- Set the frame up on the front and rear stabilizers.
- Attach the top four M8 fasteners with star washers. Install most of the way, do not tighten.
- **WARNING:** *START BY HAND, IF POWER TOOLS USED TO START THREADS, THEN THE TAPPED HOLE CAN BE STRIPPED AND THE STABILIZER WILL HAVE TO BE REPLACED.*



3. **Tilt bike and install bottom bolts**

- Tilt bike forward to access the bottom bolt holes. A box may be needed to rest the bars or track on to protect more fragile items such as the water bottle holder, cadence meter or handles.



- Attach the bottom four M8 fasteners. Depending on the accessory kit, there may be star washers or curved solid washers available. The stabilizer may need to be rotated to get the holes to align. This is the reason for not fully tightening the top bolts in Step 2. If using the curved washers, align the curve of the washer to match the curve of the frame.



- ***WARNING:*** START BY HAND, IF POWER TOOLS USED TO START THREADS, THEN THE TAPPED HOLE CAN BE STRIPPED AND THE STABILIZER WILL HAVE TO BE REPLACED.
- Once all 8 bolts are threaded in, follow up with a 6mm Allen Key and torque to 100-150 in*lbs.

4. **Attach stretch pad**

- Place stretch pad over the rear stabilizer/frame junction.
- Install two M8 fasteners. Secure but do not over tighten to the point that the rubber is pinched.



For telephone assistance, please contact your local distributor or the Customer Service Department of LeMond Fitness Inc., at 1-425-482-6773 x109 from 0800AM – 1700PM PST Monday through Friday.

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