

# Identifying Your Rear MTB Hub Page 1



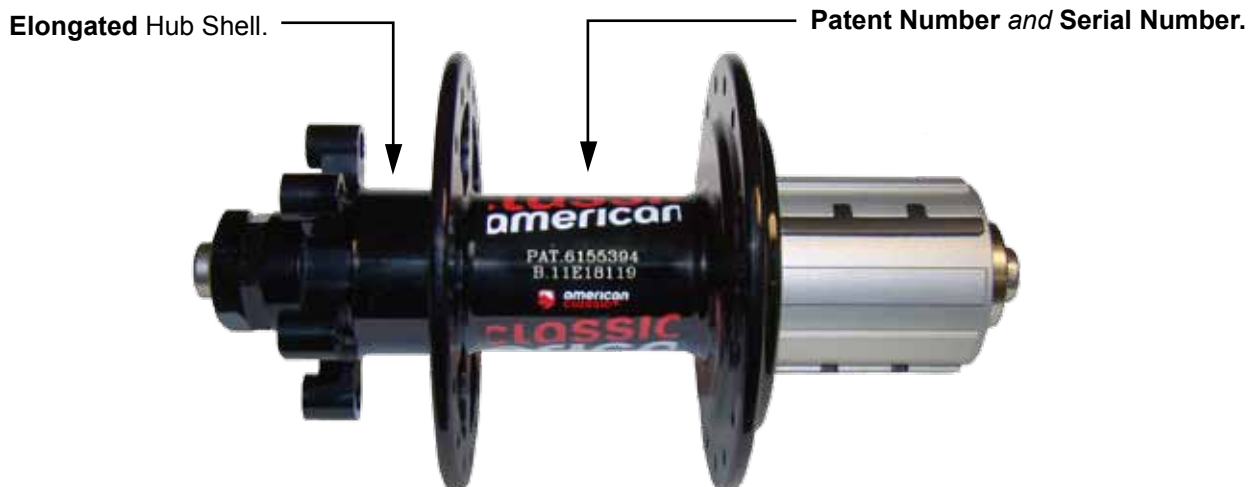
Please use this document to identify your American Classic rear MTB hub. There are 3 different rear MTB hubs:

**Currently Supported** - Disc 225 - 17mm Axle (Current Style) / Terrain Disc (Current Style)

**No Longer Supported and Discontinued** - Terrain Disc (Older Style) / Disc 225 - 15mm Axle (Old Style) See page 2.

## Disc 225 - 17mm Hub (Current Style)

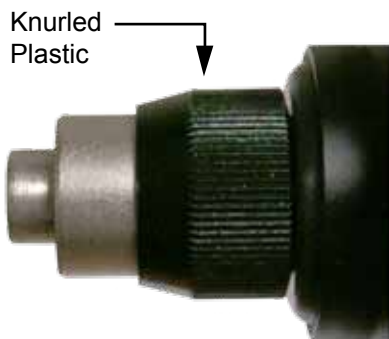
This hub uses four **6803-C3** fully sealed bearings. Two in the hub shell and two in the freehub body. Stainless steel bearings standard. Ceramic bearings are available as an upgrade. Not Campagnolo compatible.



## Terrain Hub

There are two different versions of the Terrain rear mountain hub. To identify, see the non-drive side of the hub (side without the cassette). Terrain hubs are in Terrain and Terrain Tubeless wheel sets. Some Terrain hubs say "TERRAIN" on them. **Please note**, you can not determine which bearing sizes you need from looking at the outside of the hub.

### Terrain Hub (Current Style)



### DISCONTINUED Terrain Hub (Older Style)



If you are working with a Current Style (knurled cap) hub, please go to the HELP tab and click MANUALS then click "Terrain Rear Disc: Overhaul / Bearing Change" for further information.

If you are working with an Older Style (rubber cover) hub it has been discontinued and is no longer supported by American Classic. No parts are in stock or available.

Proper re-assembly is important to rider safety.  
**All repairs should be performed by a professional bicycle mechanic.**  
sales@amclassic.com • www.amclassic.com

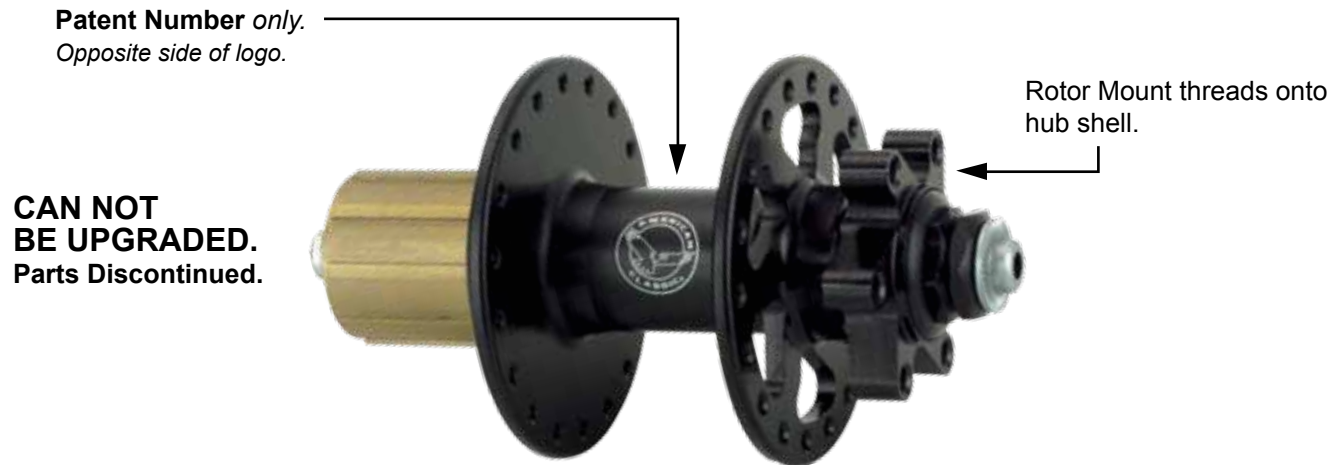
# Identifying Your Rear MTB Hub Page 2

## 15mm Hub (Old Style) Cassette Body Identification.

Please use the below image to identify if you have an older Disc 225 - 15mm rear disc hub. If your hub has any of the following features, it can not be upgraded with new parts and is **discontinued and out of stock**. We are not rebuilding wheels with the 15mm hubs. 15mm hubs are not Campagnolo compatible.

### Disc 225 - 15mm Hub (Old Style)

This hub uses four 15267 fully sealed bearings. Two in the hub shell and two in the freehub body. Ceramic bearing upgrade is not available.



## 3-Pin Style Cassette Bodies: These hubs and parts have been discontinued and out of stock.



## Grease Port Hubs: These hubs can not be upgraded with new parts and is discontinued and out of stock.

The grease port is located in the center of the hub, between the flanges and spokes.

**CAN NOT BE UPGRADED.**  
Parts Discontinued.

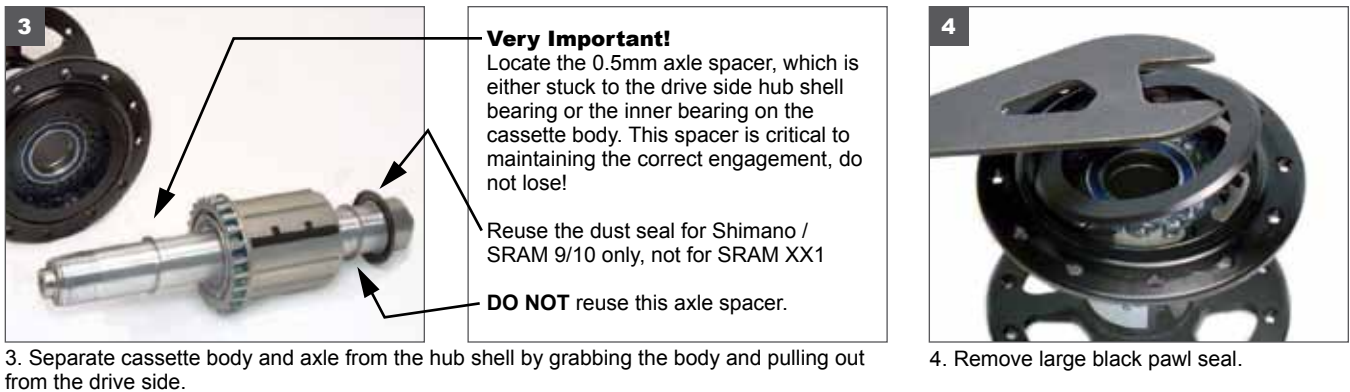
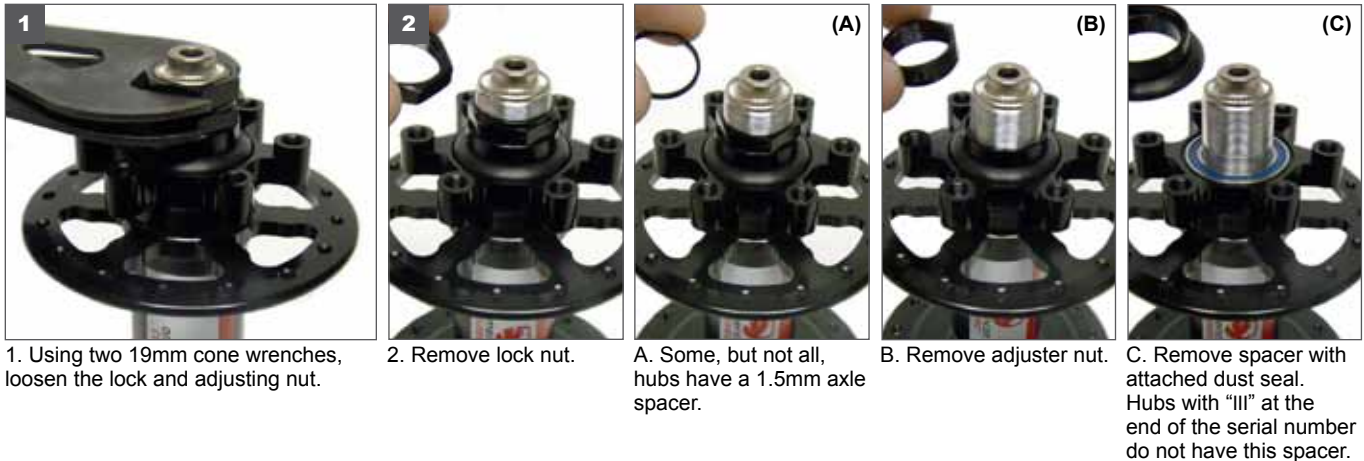


**CAN NOT BE UPGRADED.**  
Parts Discontinued.

# MTB Disc 12mm x 142mm Thru-Axle Retrofit Page 1

Making Your MTB Disc 225 Hub 12mm x 142mm Thru-Axle Compatible.

- 12mm x 142mm Thru-Axle, is compatible with the Disc 225 17mm axle hub only. Please make sure you are working with a 17mm Disc 225 hub before attempting retrofit. See manual: "Rear Cassette Hub: Which Do I Have?" at [www.amclassic.com](http://www.amclassic.com)
- **Tools Needed:** Two 19mm cone wrenches, 135mm quick release, axle vise or smooth clamp.
- **While disassembling the hub, keep all loose parts organized on a clean rag or paper towel. Do NOT modify or bend the cassette body loop spring in any way. Proper re-assembly is important to rider safety.**



**5. Shimano/SRAM 9/10 12x142mm Axle Assembly**  
With a thin layer of clean grease coating the cassette body teeth, join the axle, cassette body and spacers with the hub shell.

Order: End Cap > Spacer with Dust Seal > Shimano cassette body > 0.5mm spacer > Hub shell.



**SRAM XX1 12x142mm Axle Assembly**  
With a thin layer of clean grease coating the cassette body teeth, join the axle, cassette body and spacers with the hub shell.

Order: End Cap > Spacer NO Dust Seal > Sram XX1 body > 0.5mm spacer > Hub shell.

Continue to Page 2.

# MTB Disc 12mm x 142mm Thru-Axle Retrofit Page 2

Making Your MTB Disc 225 Hub 12mm x 142mm Thru-Axle Compatible.



**Very Important:**

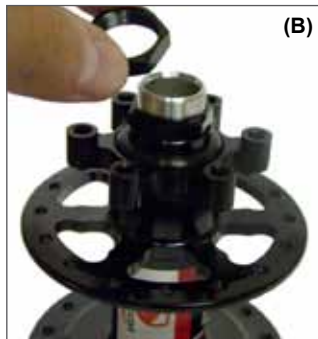
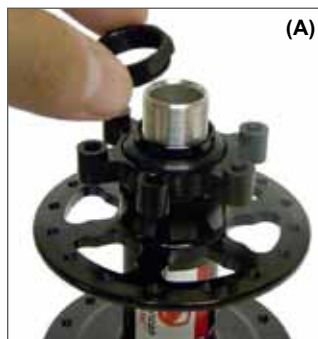
6. The large black Pawl Seal **MUST** be installed after the cassette body and axle have been joined with the hub shell.

With the axle pushed completely into the hub shell and pawls engaged with the cassette body, install the large black pawl seal.

**NOTE:** After completing Step 6, be sure the seal is securely in the groove on the cassette body and you can rotate the body freely without the seal moving.

A bit of Tri-Flow® or similar lubricant will help with friction between the groove in the body and this seal.

**Final Hub Assembly:**



7. Grease the threads and install the new spacer with dust seal **-OR-** if you have a serial "III" hub do NOT use the spacer, install dust seal onto the adjusting nut and continue. A) Finger tighten the adjusting nut with the shoulder side facing the hub shell (B) Install the lock nut and finger tighten **-OR-** if you have a serial "III" hub re-use your 6.5mm lock nut or 1.5mm spacer (Step 2A) with 5mm lock nut. (C) Using two 19mm cone wrenches, remove all play on adjusting nut, then back off one half rotation, 180 degrees.



8. Make sure the lock nut is fully threaded onto the axle and place threadless end cap on axle.



9. Pressing in the end cap.

Place a quick release through the axle with the lever on the drive side. Tighten quick release and clamp down, the end cap will partially press into the axle. Continue to tighten the quick release and clamp down until the end cap is fully pressed into the axle.

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# MTB Disc 12mm x 142mm Thru-Axle Retrofit Page 3

Making Your MTB Disc 225 Hub 12mm x 142mm Thru-Axle Compatible.

### Final Bearing Adjustment In Frame:

The purpose of adjustability is to extend the life of your bearings, reduce friction and rolling resistance to boost performance. The desired adjustment for American Classic hubs is described as “slightly more than no play” as to not overload the bearings. Some play will be removed with the clamping action of your quick release. Be sure the two outer dust seals on each end of the axle are covering the bearings completely. This adjustment is the same for road and mountain wheel sets.



10. Place the wheel in the frame and clamp down quick release. Hold the adjusting nut in place with a 19mm cone wrench, still one half rotation loose from Step 7, tighten the lock nut against the adjusting nut. Once the lock nut is tight, check for the desired adjustment by wiggling the tire at the rim to feel for “slightly more than no play.” If the adjustment is not correct continue to Step 10.



11. Hold the adjusting nut in place and loosen the lock nut. Slightly tighten or loosen the adjusting nut and hold in place. With the adjusting nut in place, tighten down the lock nut. Wiggle rim. Repeat Step 11 until the desired adjustment is achieved. Make sure the lock nut is tightened down when finished.

### Removing Syntace X12 Axle:



Removing the end cap. Using a smooth clamp, axle vise, or pliers with a rag to hold the drive side end cap, loosen the lock nut with a 19mm cone wrench. The lock nut will push the non-drive side end cap free from the axle.



Once the end cap is free from the axle follow the overhaul document: “MTB Disc Hub 17mm – Overhaul/Bearing Change” at [www.amclassic.com](http://www.amclassic.com) to put the quick release axle back in.