

# **ALTERNATOR DROPOUT INSTRUCTIONS**

### **Alternator Dropout Instructions**

At Salsa, we believe that a sense of adventure makes life better. The bicycle can be so much more than just a bike; it's a path to new places, new people, and amazing experiences.

Thank you for your purchase. We hope it makes a good riding experience even better!

Salsa. Adventure by bike.®

▲ WARNING: CYCLING CAN BE DANGEROUS. BICYCLE PRODUCTS SHOULD BE INSTALLED AND SERVICED BY A PROFESSIONAL MECHANIC. NEVER MODIFY YOUR BICYCLE OR ACCESSORIES. READ AND FOLLOW ALL PRODUCT INSTRUCTIONS AND WARNINGS INCLUDING INFORMATION ON THE MANUFACTURER'S WEBSITE. INSPECT YOUR BICYCLE BEFORE EVERY RIDE. ALWAYS WEAR A HELMET.

# Compatibility

Alternator Dropouts are only compatible with Salsa frames designed for Alternator Dropouts with 135/142, 170/177, or 190/197 mm rear dropout spacings. The swing plates featured on the Alternator Dropout are part of a modular design system which allows for replacement in the event of damage/loss and also to accommodate various hub and drivetrain configurations. Available aftermarket swing plate options are: (Refer to figure at right)

- (1) Driveside, 10 mm QR, geared
- (2) Non-driveside, 10 mm QR
- (3) Driveside, 10 mm QR, single-speed
- (4) Non-driveside, Rohloff OEM2 with fender mount
- 5 Driveside, 10 mm QR, single-speed w/ fender mount
- 6 R/L pair, 10 mm QR w/ hanger & fender mount
- (7) Driveside 12 mm TA, geared, TP=1.75
- 8 Driveside 12 mm TA, geared, TP=1.50
- 9 Driveside 12 mm TA, singlespeed, TP=1.75
- (10) Driveside 12 mm TA, singlespeed, TP=1.50
- (11) Non-driveside, 12 mm TA, (all TPs)

### **Required Tools**

10 mm box-end wrench

3, 5, & 6 mm hex wrenches

Torque wrench with 5 & 6 mm hex bits

Thread-locking compound

#### Hardware Kit(s)

A replacement hardware kit for attaching swing plates to frame plates is available and includes the following:

- (12) Cup washer (qty 2)
- (13) Swing plate fixing bolt (qty 2), M8 x 1.25, 16 or 18 mm

- (14) Upper pivot bolt, driveside, M6 x 1.0 w/ washer, 16 or 18 mm
- (15) Lock Nut, M6 x 1.0
- Upper pivot bolt, non-driveside, M6 x1 .0 w/ washer,
  22 or 24 mm

And comes in two variations:

Short (16 & 22 mm) - for all steel frames and Ti frames with cast frame plates.

Long (18 & 24 mm) - for all aluminum frames and Ti frames with welded-hood frame plates

**Tension Screws**(Pairs are sold separately from the Hardware Kits)

(17) Set screw (qty 2) M4 x 0.7, 18 mm

# Not Included but Needed for Assembly

- (18) I.S. disc brake adaptor (per brake manufacturer's specifications.
- 19 Disc brake adaptor fixing bolt (per brake manufacturer's specifications)

**NOTE:** Alternator dropouts are not compatible with 140 mm rotor/ disc brake setups.





## **Alternator Reduction Plate Installation**

#### Compatibility

Alternator Reduction Plates are only compatible with Salsa Alternator Dropouts.

#### Intended Use

Alternator Reduction Plates are designed to reduce the distance between the Alternator Dropouts by 6 mm on Boost-designed frames that use non-Boost drivetrains.

#### Hardware Kits

- 2x Alternator Reduction Plates
- 2x M8 x 1.25–20L Socket Head Cap Screw
- 2x M8 x 1.25–22L Socket Head Cap Screw
- 1x M6 x 1.0–20L Socket Head Cap Screw
- 1x M6 x 1.0–22L Socket Head Cap Screw
- 1x M6 x 1.0–25L Socket Head Cap Screw
- 1x M6 x 1.0–30L Socket Head Cap Screw
- 4x M6 Close Fit Washer

#### Installing The Alternator Dropout Boost Reduction Plates

Tools: 5 & 6 mm hex wrenches

- 1. Remove the 10 mm nut used for shipping from the nondriveside upper pivot bolt. Set it aside as a spare to the driveside nut.
- 2. Separate the Alternator Dropouts from the frame with a 5 mm hex wrench on the top bolt, and a 6 mm for the bottom bolt.
- 3. Discard the current bolts as you'll be using the new longer ones provided with the kit.
- 4. Place the Alternator Reduction Plates between the frame's dropouts and the Alternator Dropout (Fig. 1).
- 5. Reinstall the Alternator Dropouts and Reduction Plates to the frame with the new bolts provided with the kit—do not tighten them fully.

**WARNING:** Only use hardware with the Salsa Alternator Dropout that is provided with the Alternator Dropout kit, or sold by Salsa specifically for the Alternator Dropout. Do not use any other hardware.

**WARNING:** Use only the appropriate length hardware according to frame material to attach swing plates. Using the incorrect or different length hardware could lead to damage, failure, or interference of moving parts, all of which could cause serious harm to the bicycle and rider.



Figure 1

Refer to Figure 1 above	Hardware for Steel & Ti Frames	Hardware for Aluminum & Pre-2012 Ti Frames
Driveside, Upper Pivot Bolt (#1)	M6 x 1.0–20 mm	M6 x 1.0-22 mm
Driveside, Swing Plate Fixing Bolt (#2)	M8 x 1.25–20 mm	M8 x 1.25–22 mm
Non-driveside, Upper Pivot Bolt (#3)	M6 x 1.0–25 mm	M6 x 1.0–30 mm
Non-driveside, Swing Plate Fixing Bolt (#4)	M8 x 1.25–20 mm	M8 x 1.25–22 mm



# **Disc Brake Mount Installation**

Tools: 5 & 6 mm hex wrench, 10 mm box-end wrench, thread-locking compound

- 1. Remove the nut used for shipping from the non-driveside upper pivot bolt. Set it aside as a spare to the driveside nut (Fig 2).
- 2. Mount your disc brake adapter using the same upper pivot bolt and 1 of the 2 bolts supplied with the brake adapter. Apply thread locking compound to both bolts. Secure the lower adapter bolt to the brake according to manufacturer's specification. Tighten the upper pivot bolt just enough to complete brake caliper installation. You will fully tighten it later after dropout adjustment is completed (Fig 3).
- 3. Install the rear brake caliper, rear wheel, and then align and secure the brake caliper to the rotor per the brake manufacturer's instructions (Fig 4).
- 4. Proceed to Dropout Adjustment section.

### Dropout Adjustment

Tools: 3, 5, & 6 mm hex wrenches

- 1. Slightly loosen the upper pivot bolts and the lower fixing bolts on both the driveside and non-driveside dropouts (Fig 5).
- 2. Install and secure the rear wheel properly into the dropouts
- 3. For geared setups using thru-axle or QR swing plates:
  - Push the swing plates all the way forward (Fig 6)
  - Check for adequate (~6 mm min) tire clearance to the stays and front derailleur
  - If clearance is adequate, proceed to Securing Dropouts
  - If clearance is not adequate, proceed to the next section
- 4. For singlespeed, Rohloff, and geared setups with clearance issues:
  - Install the provided tension screws into the swing plates
  - Turn the driveside tension screw until proper chain tension is achieved and/or adequate tire clearance is reached (Fig 7)
  - Turn the non-driveside tension screw until proper wheel alignment is reached
  - Proceed to Securing Dropouts

### Securing Dropouts

Tools: 3 mm hex wrench, torque wrench with 5 & 6 mm hex bits

With the wheel properly installed and secured and the dropouts properly adjusted:

- 1. Tighten the upper fixing bolts and both lower fixing bolts to 8 Nm (Fig 5).
- 3. If present, tighten both tension screws 1/8 turn to prevent them from rattling out during use (Fig 5).
- 4. Check wheel alignment and tire clearance again.
- 5. If applicable, check for proper chain tension again.
- 6. Check brake caliper alignment and security.





Figure 2







Figure 4

Figure 5





Figure 6

Figure 7

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**A WARNING:** Use only the appropriate length hardware according to frame material to attach swing plates. Using the incorrect or different length hardware could lead to damage, failure, or interference of moving parts, all of which could cause serious harm to bicycle and also to the rider.



# **ALTERNATOR DROPOUT INSTRUCTIONS**

**A WARNING:** Do not use fender mounts for securing racks or any other load bearing systems/accessories. Doing so could lead to damage failure, or interference of moving parts, all of which could cause serious harm to the bicycle and also the rider.

### Thru-Axle Sizing:

When thru-axle swing plates are fitted to Alternator Dropoutequipped frames (regardless of frame material), the resulting axle size is required:

El Mariachi, Fargo, & Vaya Travel (142 x 12)

12 x 174 Long, Thread Pitch = 1.75, Thread Length = 20 Mukluk (177 x 12)

12 x 208 Long, Thread Pitch = 1.50, Thread Length = 20

Blackborow (197 x 12)

12 x 129 Long, Thread Pitch = 1.50, Thread Length = 20

**Note:** The thread pitch listed is what the stock frameset/bike includes. Using a different thread pitch axle is possible (with the correct swing plate) but the axle length and thread length must also be matched.

### **Ongoing Maintenance**

Periodically check to make sure all of the Alternator Dropout bolts are properly torqued.

### **Warranty Information:**

Proof of purchase is required before a warranty claim is processed. Salsa Cycles therefore strongly encourages warranty registration at salsacycles.com. Failure to register will not affect consumer rights, so long as the consumer can show in a reasonable manner proof of original ownership and the date the Salsa Cycles product was purchased.

If you have any questions contact warranty@salsacycles.com or visit www.salsacycles.com/support for more warranty information.

SALSA CYCLES 6400 West 105th Street, Bloomington, MN 55438 Tel: 877-668-6223 Fax: 952-983-6210 www.salsacycles.com