



AENOMALY Type 1 SwitchGrade Saddle Angle Control Installation Guide

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AENOMALY Type 1 SwitchGrade Saddle Angle Control



IMPORTANT SAFETY INFORMATION

The SwitchGrade™ is a patent-pending high-performance component and replaces a part of your bicycle's seatpost assembly. Before installing and using your SwitchGrade, carefully read this Guide to learn the correct

installation procedures. Your SwitchGrade comes pre-assembled with properly torqued screws, greased parts, and thread-locked bolts. DO NOT attempt to disassemble the SwitchGrade prior to installation.

WARNING

An improperly installed SwitchGrade can cause serious injury or death and may severely damage your bicycle. A broken or malfunctioning SwitchGrade may cause loss of bicycle control and result in **SERIOUS INJURY OR DEATH**. Modification, improper service or use of aftermarket replacement parts voids the Warranty and may cause the SwitchGrade to malfunction, resulting in loss of bicycle control and **SERIOUS INJURY OR DEATH**. Proper tools and experience are required for proper installation, therefore it is recommended that the product be installed by a qualified bicycle technician. Aenomaly Constructs assumes no responsibility for damages or injury related to improperly installed components or improper operation. Installation of the SwitchGrade assumes User's acceptance of the Warning and associated risks.

Tools Needed

- 4mm hex key
- Torque wrench
- Blue Loctite (or similar threadlocker)

SwitchGrade Parts

1. Lever
2. Base
3. Right Swingarm
4. Right Rail Clamp (threaded-side)
5. Left Swingarm
6. Left Rail Clamp (bore-side)
7. Rail Clamp Screw
8. Lever Screw
9. Front bore hole
10. Rear bore hole
11. Arc Bearing Surface
12. Air Valve Cutaway (Type 1 & 3 only)
13. 8mm Cylinder Nut (x2)
14. M5 Fastening Bolts
 - 40mm (x1)
 - 35mm (x1)
 - 30mm (x1)
 - 25mm (x1)

Optional Use Parts (not shown but included:

- Spherical Washers (x2)
- Flat Washers (x2)
- Vinyl Dust Cover for air valve (x1)
- Rubber Spacer (x1)

SwitchGrade Base Scallops

- **A.** Front Outer Scallop
- **B.** Front Inner Scallop
- **C.** Rear Inner Scallop
- **D.** Rear Outer Scallop

INSTALLATION INSTRUCTIONS

Follow these instructions to install the SwitchGrade with the Lever facing forward (under the front or “nose” of the saddle).

Step 1: Seatpost Preparation

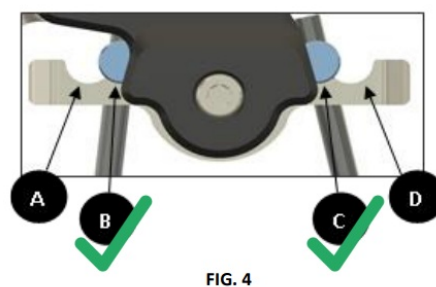
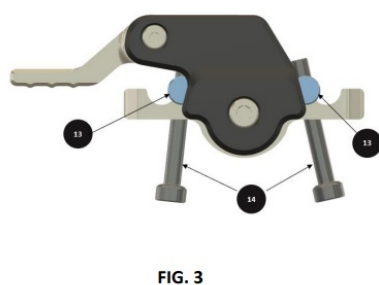
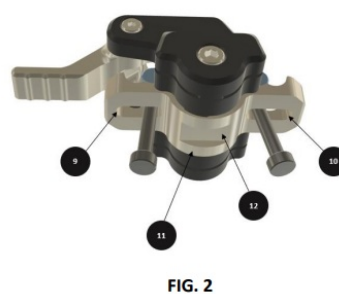
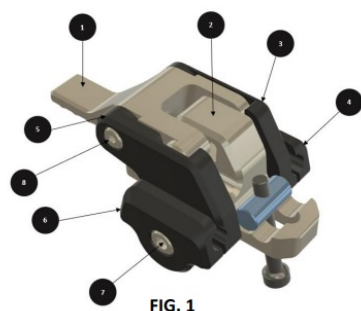
1. Remove bike saddle from seatpost.
2. Remove rail clamps and stock hardware provided with your seatpost. Exception: if you own a pre 2021 Fox Transfer or pre-2021 Raceface Turbine R, use the stock spherical washers.

For OneUp V2/V1 and PNW Loam Dropper Seatpost Owners: Replace stock air valve cover (either aluminum cap or rubber grommet) with supplied vinyl Dust Cover. Place the SwitchGrade on the posthead to ensure the Arc-shaped Bearing Surface (11) makes solid contact with the posthead. Once satisfied Go to Step 2

OPTIONAL: In case of excess interference even with the supplied vinyl Dust Cover installed, do the following to reduce the height of the air valve. NOTE: the process is similar for cartridge-style seatposts. 1) Use a pair of needle-nose pliers to remove the cartridge lockring (round aluminum piece featuring 4 cutaways). 2) Use a spanner or wrench to unscrew the actuator from the lower tube and gently pull entire cartridge assembly out. 3)

- Remove stock rubber spacer located around air valve and replace with the supplied 18mm Rubber Spacer. 4) Reinstall cartridge following steps 1) and 2) but in reverse.

Step 2: Install SwitchGrade™ on Compatible Seatpost



1. Place the SwitchGrade on the seatpost head with the Lever (1) facing forward (towards front wheel) and ensure that the Arc-Bearing Surface (11) is fully resting within the cradle.

2. Begin by installing the rear Bolt (14) and 8mm Cylinder Nut (13).

NOTE: in most cases a longer bolt will be used in the rear. Try different combinations of bolts aiming to have at least 2-3 threads showing above the cylinder nut when fully tightened. Depending on your seatpost you may need to use combinations of the supplied spacers and spherical nuts along with the bolts.

3. Place the 8mm cylinder nut into the Rear Scallop C (see Fig 4). Optionally, refer to the Compatibility Table showing recommended Scallop configurations found on our website.

4. Using a 4mm hex key, secure the SwitchGrade to the seatpost by fastening the bolt and cylinder nuts together, temporarily tightening them just enough to prevent movement. You will fully tighten and torque the bolts later when you fine-tune your middle/neutral position in “Step 4.”

WARNING: Ensure the 8mm Cylinder Nut (13) is resting fully within the Scallop and there is zero gap. Check to see that the nut is not resting on the peak between the Scallops. Failure to install properly could lead to damage to your SwitchGrade, bike or components and/or loss of vehicular control. Ensure the Bolt (14) does not contact any part of the SwitchGrade but allows complete insertion into Cylinder Nut (13). If required, you may need to try different combinations of bolts and spacers.

5. Next, install the front fastener Bolt (14) and Cylinder Nut (13) by following Steps 3 and 4 above but instead, place the cylinder nut in Front Scallop B (see Fig. 4). Most Type 1 compatible seatposts will use front Scallop B. Refer to the Compatibility Table showing recommended Scallop configurations on our website.

- **TIP:** to create more space to work with, hold the SwitchGrade down and pull up on the Lever while sliding the SwitchGrade backwards into the rear-most position (AKA ‘Descend’ position) so that the Lever is pointed up.
- **NOTE:** in most cases a shorter bolt will be used for the front fastening duties.

Step 3: Install Saddle on SwitchGrade

1. Slide the bike saddle onto the SwitchGrade with the rear of the saddle leading in first.

2. Install the left and right Rail Clamps (4) and (6). **TIP:** Run the clamp with threads on the right side, and the one with the bore hole on the left. This configuration keeps all horizontal hex bolts on one side.

3. Set your preferred fore/aft position.

4. Tighten the rail clamp screw to a maximum torque of 4 Nm.

IMPORTANT: DO NOT OVERTIGHTEN. Overtightening may impede movement of the SwitchGrade and may negatively affect performance and compromise safety

Step 4: Set Default (Middle Index) Position Follow these steps to set the default angle which will control your climbing and descending position.

1. Pull up on the SwitchGrade Lever (1) to reposition the lock into the middle (AKA neutral or level) position.

2. Alternate tightening and untightening of the front and rear fasteners until you find your preferred default ‘level’ position.

NOTE: The middle position will dictate the amount of saddle tilt up and down separated by -10 degrees in the climb mode, and 12 degrees in the descend mode. For example, if you start with 0° for the middle ‘level’ position, your climbing position will be -10° with the nose tilting down and your descending will be 12° with the

nose tilting up.

3. Once you are satisfied with your neutral setting, apply blue Loctite to both bolts and use a 4mm hex key to tighten both front and rear bolts to a maximum torque of 5 Nm. DO NOT OVERTIGHTEN.

How to Operate Your SwitchGrade

Before operating the SwitchGrade, ensure you are either off your bicycle or not fully seated with your entire weight on the saddle. **WARNING:** Do not attempt to operate the SwitchGrade when traveling at speed or during excessively technical terrain, whether ascending or descending (ie lots of rocks, roots, steep grades etc), or you risk serious damage to your property or serious injury or death.

Step 1. Place palm of your hand on the nose of saddle and locate SwitchGrade Lever (1).

Step 2. Pull and hold the Lever up and choose one of the following:

- To lock into Climb position, slide SwitchGrade forward into front index slot
- To lock into Descend position, slide SwitchGrade rearward into rear index slot
- To lock into Flat (neutral) position, slide SwitchGrade into middle index slot

Step 3. Release Lever until lock engages. You will feel and hear a click. Product features and/or specifications may be subject to change for improvements or performance. All compatibility and fit determinations have been observed solely by Aenomaly

- Constructs. Use of a SwitchGrade may void any warranty a User has with the original part manufacturer. Refer to www.aenomalyconstructs.com periodically for latest updates.
- Contact info@aenomalyconstructs.com for additional support if required.

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Documents / Resources



[AENOMALY Type 1 SwitchGrade Saddle Angle Control](#) [pdf] Installation Guide
Type 1, Type 1 SwitchGrade Saddle Angle Control, SwitchGrade Saddle Angle Control, Saddle Angle Control, Angle Control

References

- [🐘 SwitchGrade Saddle Angle Control Technology – Aenomaly Constructs](#)