



***NEXGEN I FIXED OUTRIGGERS***

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**IMPROVEMENT KIT**

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## ***Introduction***

The FO1.10 NEXGen Fixed Outriggers were intended for skiing forwards and did not have Twin Tips for pulling, falling or skiing backwards.



The 1/4-20 stop bolt was originally designed as a shear pin to protect the more expensive CNC ends during unintended backwards situations. We've learned use can be more unpredictable than we saw during our development and have worked through improvements based on the feedback.

The Improvement Kit adds Twin Tips to the ski tips to provide more leeway in those backwards situations. With more leeway, the 1/4-20 shear bolt could be replaced with a new Rigger Washer that ties all 3 bolts together to improve durability during falls.

*Before you install your Improvement Kit read the entire instructions first.  
Contact us if you have any questions.*

## ***Identify your Version ✓***

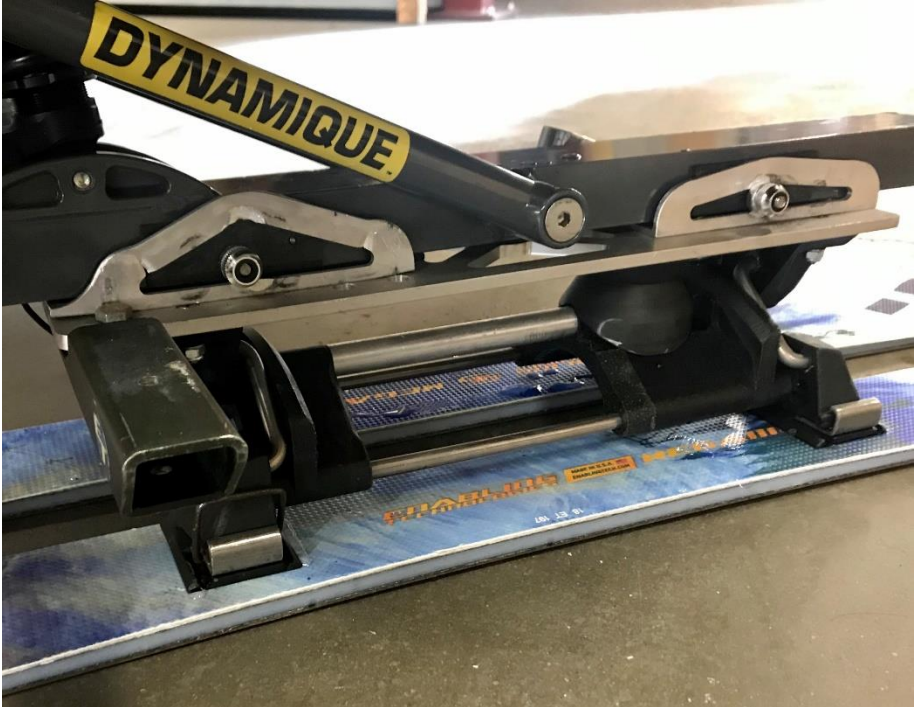
The following instructions are for improving FO1.10 NEXGen Fixed Outriggers.



- Version FO1.10 NEXGen Fixed Outriggers used a single sided design that had one 3/8-16 Grade 9 Hex Bolt (9/16" wrench), one 3/8-16 Grade 8 Hex Bolt (9/16" wrench), one 1/4-20 Hex Bolt (7/16" wrench) and no Twin Tips.
- If your NEXGen Fixed Outriggers have one 3/8-16 Grade 9 Hex Bolt (9/16" wrench) and one 5/16-18 Grade 8 Hex Bolt (1/2" wrench) you have version FO1.9. Please contact us by email at [info@enablingtech.com](mailto:info@enablingtech.com) for different improvement options.
- If your NEXGen Fixed Outriggers have a double sided design with only one 5/16" shoulder bolt (5/32" Allen Wrench) you do not need an improvement kit.

## ***Inspect your Mechanism Channels ✓***

The U-Bolt allows the NEXGen Fixed Outriggers to be used on both the Dynamique and Bi-Unique.



The photo above shows catastrophic damage to the Articulating Mechanism Channels that results when NEXGen Fixed Outriggers are skied without installing the U-Bolt.

Your Improvement Kit includes a new U-Bolt Spacer and Leash. The purpose of the new U-Bolt Spacer and leash is to further draw attention to the U-Bolt's necessity and facilitate proper setup.

If you inspect your Articulating Mechanism Channels and the center of mass adjustment slot has been warped, triangulated or bent upwards please see the Parts & Accessories section of our website for replacements.

<https://enablingtech.com/collections/dynamique-parts-accessories>

## **Parts List**



### ***NEXGen I Fixed Outriggers:***

- Rigger Ends (2)
- Rigger Mount (1)
- U-Bolt Assembly (1)

### ***Improvement Kit:***

- Rigger Washer (2)
- 1/4"-20 x 1 3/4" Grade 8 Hex Head Bolt (2)
- Twin Tip (2)
- #8 x 1/2" Stainless Flat Head Screws (6)
- U-Bolt Spacer & Lanyard (1)
- 3/16" AB 6-66 Rivet (1)

## ***Tool List***



### ***Shown in order of use from left to right:***

- Drill (*Optional*)
- Drill Adapter for 3/8" Socket Drive (*Optional*)
- 7/16" Socket
- 9/16" Socket
- 9/16" Wrench
- Philips #2 Screwdriver
- Philips #2 Drill Bit (*Optional*)
- Ratchet for 3/8" Socket Drive
- Loctite Threadlocker Blue
- Ruler or Measuring tape
- Center Punch (*Optional*)
- 3/16" HSS Drill Bit
- Pneumatic OR Hand Rivet Gun

## ***Disassemble Rigger Ends ✓***



### ***Parts:***

- Rigger Ends (2)

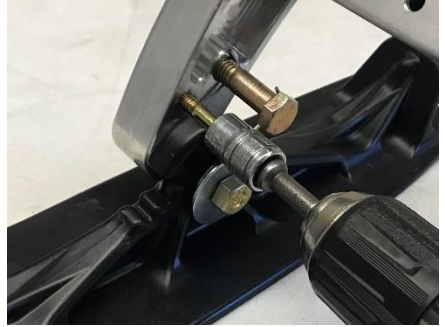
### ***Tools:***

- Drill with Adapter for 3/8" Socket Drive OR Hand Ratchet
- 7/16" Socket
- 9/16" Socket
- 9/16" Wrench



**1) Remove the 1/4-20 x 1 3/8" Grade 8 Hex Head Bolt from the Welded Rigger End using a 7/16" socket.**

Since the ski tip is spring loaded, hold the Ski Tip to prevent it from rotating.



**2) Discard the 1/4-20 x 1 3/8" Grade 8 Hex Head Bolt.**

Once removed, the Welded Rigger End will rotate towards the front of the Ski Tip as shown.



**3) Remove the rear 3/8-16 Nylock Thin Nut from the 3/8-16 x 2" Grade 8 Hex Bolt using a 9/16" socket and 9/16" wrench.**



**4) Save the 3/8-16 Nylock Thin Nut.**

It will be reused.





**5) Remove the rear 3/8-16 x 2" Grade 8 Hex Head Bolt using a 9/16" socket.**



**6) Save the 3/8-16 x 2" Grade 8 Hex Head Bolt.**

It will be reused.



**5) Remove the 3/8-16 Nylock Thin Nut from the 3/8-16 x 2" Grade 9 Hex Head Bolt using a 9/16" socket and 9/16" wrench.**



**6) Save the 3/8-16 x 2" Nylock Thin Nut.**

It will be reused.



**7) Remove the 3/8-16 x 2" Grade 9 Hex Head Bolt using a 9/16" socket.**



**8) Save the 3/8-16 x 2" Grade 9 Hex Head Bolt and discard the 3/8" Fender Washer.**

The 3/8-16 x 2" Grade 9 Hex Head Bolt will be reused. The 3/8" Fender Washer will be replaced with the new Rigger Washers.



**9) Repeat Steps 1-8 with the other Rigger End.**

**10) Set all saved parts aside to be used later.**



## ***Assemble Twin Tips to Ski Tips ✓***



### ***Parts:***

- Twin Tip (2)
- #8 x 1/2" Stainless Flat Head Screws (6)

### ***Tools:***

- Philips #2 Screwdriver
- Drill with Philips #2 Drill Bit (*Optional*)

**11) Align the Twin Tip over the Ice Screw holes in the Ski Tip.**



**12) Fasten the #8 x 1/2" Stainless Flat Head Screws into the Ski Tip using a Philips #2 Screwdriver.**

Snug the screws, but do not tighten them yet.



**13) Tighten the lower two #8 x 1/2" Stainless Flat Head Screws with an appropriately chucked drill or #2 Philips Screw Driver. Then tighten the top #8 x 1/2" Stainless Flat Head Screw.**



**14) Repeat steps 11-13 with the other Ski Tip.**



## ***Re-assemble the Improved Rigger Ends ✓***



### ***Parts:***

- Welded Rigger Ends (2)
- Flip Ski Spring (2)
- 3/8-16 x 2" Grade 9 Hex Head Bolt (2)
- 3/8-16 x 2" Grade 8 Hex Head Bolt (2)
- 3/8-16 Nylock Thin Nuts (4)
- Ski Tip with Twin Tips (2)
- Rigger Washer (2)
- 1/4"-20 x 1 3/4" Grade 8 Hex Head Bolt (2)

### ***Tools:***

- Drill with Adapter for 3/8" Socket Drive OR Hand Ratchet
- 7/16" Socket
- 9/16" Socket
- 9/16" Wrench
- Loctite Threadlocker Blue

**15) Install the spring on the Ski Tip in standard flip orientation.**

The open ends of the spring will face to the front of the Ski Tip.



**16) Fasten 3/8-16 x 2" Grade 9 Hex Head Bolt through the new Rigger Washer and into the Welded Rigger End.**

Orientate the Rigger Washer to the rear so the other 1/4" and 3/8" holes align with the threaded holes in the Welded Rigger End.



**17) Tighten the 3/8-16 x 2" Grade 9 Hex Head Bolt with a 9/16" socket using an appropriately chucked drill or hand ratchet.**

The Ski Tip should be loose enough to rotate freely, but tight enough so there isn't any side to side play.





**18) Fasten a 3/8-16 Nylock Thin Nut to the 3/8-16 x 2" Grade 9 Hex Head Bolt with a 9/16" socket on a hand ratchet and 9/16" wrench.**

Using a drill on this step will likely over tighten the 3/8-16 x 2" Grade 9 Hex Head Bolt.



**19) If necessary, adjust the 3/8-16 x 2" Grade 9 Hex Head Bolt with a 9/16" socket and hand ratchet.**

The Ski Tip should be loose enough to rotate freely, but tight enough so there isn't any side to side play.



**20) Fasten the 3/8-16 x 2" Grade 8 Hex Head Bolt through the Rigger Washer, under the Flip Ski Spring and into the Welded Rigger End.**

This is easiest to do with the Welded Rigger End rotated towards the front of the Ski Tip.



**21) Tighten the 3/8-16 x 2”  
Grade 8 Hex Head Bolt with a  
9/16” socket using an  
appropriately chucked drill or  
hand ratchet.**

Do not over tighten. The Rigger  
Washer should be parallel with the  
Welded Rigger End.



**22) Fasten a 3/8-16 Nylock  
Thin Nut to the 3/8-16 x 2”  
Grade 8 Hex Head Bolt with a  
9/16” socket using an  
appropriately chucked drill or  
hand ratchet.**

The exact tightness of the 3/8-16 x 2”  
Grade 8 Hex Bolt is not as critical as  
the 3/8-16 x 2” Grade 9 Hex Head  
Bolt.



**23) Place Loctite Threadlocker Blue in the 1/4-20 threads on the Welded Rigger End.**



**24) Fasten the new 1/4-20 x 1 3/4" Grade 8 Hex Head Bolt through the Rigger Washer and into the Welded Rigger End.**



**25) Tighten the 1/4-20 x 1 3/4" Grade 8 Hex Head Bolt with a 7/16" socket using an appropriately chucked drill or hand ratchet.**



Do not over tighten. The Rigger Washer should be parallel with the Welded Rigger End.

**26) Check that the Ski Tip rotates as intended and repeat steps 15-25 with the other Rigger End.**



## ***Install the New U-Bolt Spacer and Leash ✓***



### ***Parts:***

- Rigger Mount (1)
- U-Bolt Assembly (1)
- U-Bolt Spacer & Lanyard (1)
- 3/16" AB 6-66 Rivet (1)

### ***Tools:***

- Ruler or Measuring tape
- Center Punch (*Optional*)
- Drill with 3/16" HSS Drill Bit
- Pneumatic or Hand Rivet Gun



**27) Disassemble the U-Bolt.**  
**Save the U-Bolts and the 5/16-18 Nylock Wing Nuts. Discard the two round U-Bolt Spacers.**

The U-Bolts and 5/16-18 Nylock Wing Nuts will be reused. The two round U-Bolt Spacers will be replaced with the new U-Bolt Spacer.



**28) Disassemble the Rigger Mount.** **Save the pair of 5/16-8 x 1 3/4" Grade 8 Hex Head Bolts, 5/16" SAE Washers and 5/16-18 Nylock Wing Nuts.**

They will be reused.



**29) Measure 7/8" in from the center of the Rigger Mount hardware hole and mark where to drill using a center punch.**



**30) Drill at the marked location using a 3/16" HSS drill bit.**

Wear protective eyewear.



**31) Rivet the Leash to the rear of the Rigger Mount with the 3/16" AB 6-66 Rivet using a pneumatic or hand rivet gun.**



**32) Re-assemble the Rigger Mount with the pair of 5/16-8 x 1 3/4" Grade 8 Hex Head Bolts, 5/16" SAE Washers and 5/16-18 Nylock Wing Nuts. Install the U-Bolt through the new U-Bolt Spacer with the two remaining 5/16-18 Nylock Wing Nuts.**

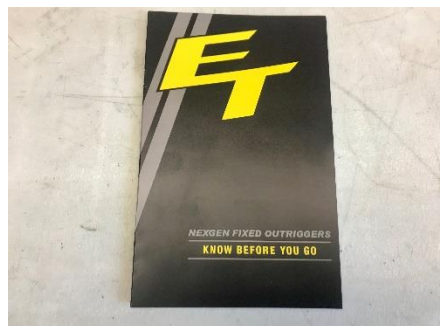


We recommend assembling with whichever U-Bolt will be most commonly used and keeping the other size in a publicly known location.



**33) See the "Know Before You Go" Manual for how to set up your NEXGen Fixed Outriggers.**

*These are only Improvement Kit assembly instructions. Every user must familiarize themselves with the Know Before You Go Manual before using the NEXGen Fixed Outriggers on snow.*





## ***Maintain your NEXGen Fixed Outriggers ✓***

In order to offer improved performance over other fixed outrigger offerings the NEXGen Fixed Outriggers require more routine attention.

Maintaining your NEXGen Fixed Outriggers is essential to ensuring safe and continued operation.

### ***Before each use:***

- Check Rigger ends for any loose fasteners.
  - Tighten as necessary.
- Inspect for damage
  - Check Rigger ends for bent fasteners.
  - Inspect that the steel Rigger Mount is straight and has not been bent.
  - Inspect that the Articulating Mechanism Channels have not been warped, triangulated or bent upwards from a loose or missing U-Bolt.

If your NEXGen Fixed Outriggers show signs of damage please contact us. We will always work with you to get your equipment back in operation as quickly and affordably as possible.

**Notes:**

***NEXGen Fixed Outriggers are covered under a Limited Warranty***

*The Limited Warranty guarantees that this skiing equipment, manufactured by Enabling Technologies, is free from defects in material and workmanship. This product is covered for one year from the date of purchase against such defects. This warranty does not cover damage caused by misuse, skier error, crashes or other damage caused by anything other than defects in materials or workmanship.*

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