



TURBO TAMER

pDrive Clutch Kit

Patent
Pending





“Tamers were developed out of a need for my sled to fit me. Ski-doo did an awesome job of making a generic clutch setup. The original setup works great for some but I wanted something more. Tamers allow you to take advantage and fine tune it to fit you and your style.

By adding tamers to your stock clutching you gain tunability not previously available unless you spent \$500+. You have an easily tunable system that not only allows you to perfect your stock sled, but still compliments other goodies you may add.

The turbo’s work best with clicker 1. They are a simple but very effective system. They replace the factory left hand arms of the ramp assemblies and give you two more positions to add weight and tune the clutching. The heel weight cleans up the bottom end and lowers the engagement. The tip weight allows you to fix the over revving issues, without making the mid range doggy, as if you were to add weight to your clicker bolt.

The engineers who developed the stock system did an awesome job. I wanted to find a way to fine tune it specifically to my preference and now you can too! Like our customers, we love to tune. We are testing other setups besides stock and ask customers to share their experiences and setups with us!”

Jeff Lasko, Riderz Head Mechanic.



Kit Contents

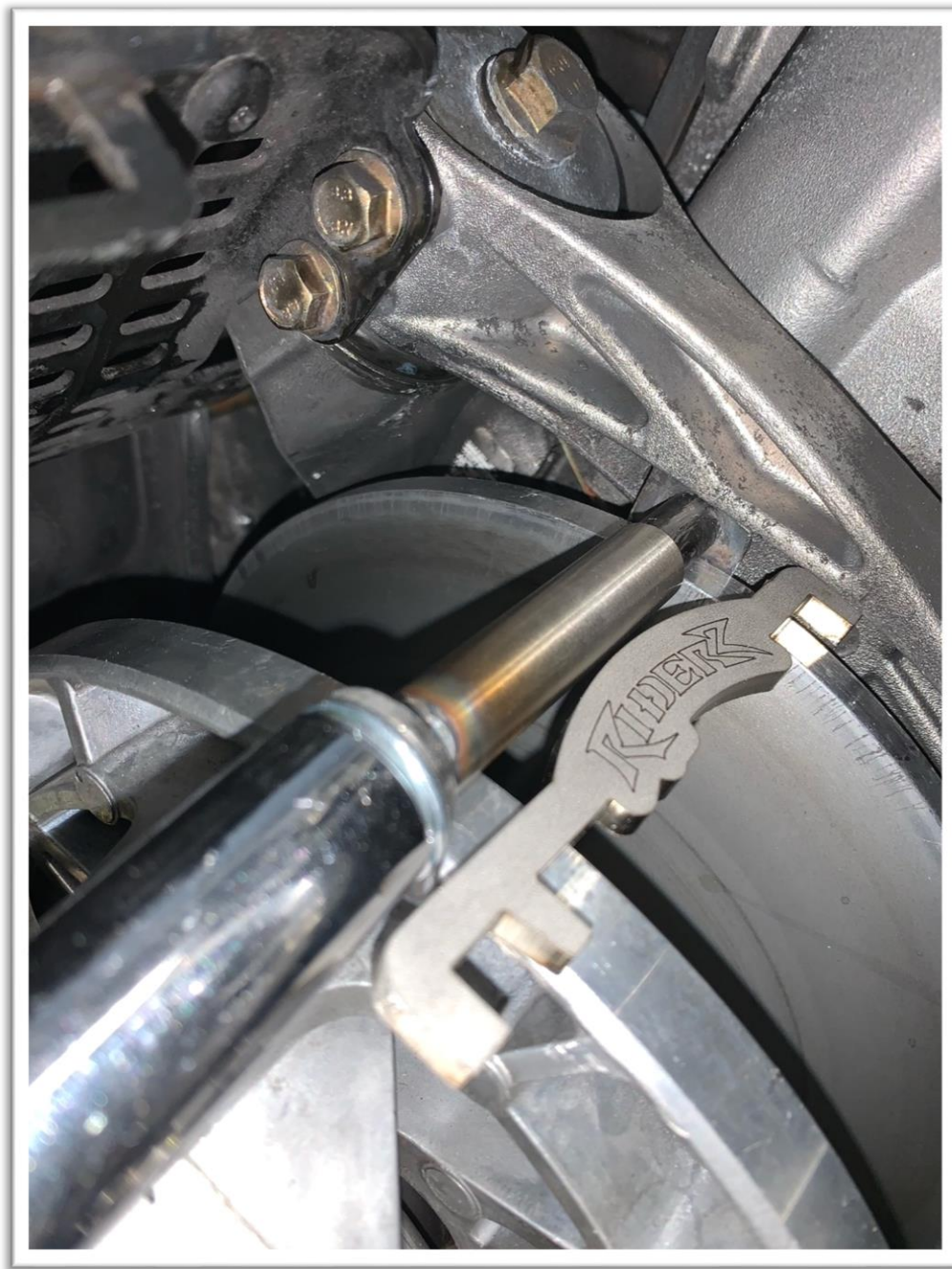
- 3 - Turbo Tamer Arms
- 1 - Clutch Compression Tool
- 1 - Clutch Holder Tool
- 1 - 5mm x 70mm Bolt, used for removing and installing Pivot Pin
- 3 - 5mm x 6mm Weight Screws (1.6 g)
- 3 - 5mm x 8mm Weight Screws (1.8 g)
- 6 - 5mm x 10mm Weight Screws (2 g)
- 6 - 5mm x 12mm Weight Screws (2.2 g)
- 3 - 5mm x 16mm Weight Screws (2.75 g)
- 3 - 5mm x 20mm Weight Screws (3.28 g)
- 6 - 5mm x 10mm x 1mm Weight Washers (0.33 g)
- 18 - 5mm x 10mm x 2mm Weight Washers (0.66g)



- After Removing LH side panel, clutch cover, and drive belt, you are ready to start removing the weights.
- Insert clutch compressor at an approximate 45° angle, as in picture. This will allow you to get it in behind the fixed sheave.
- Once it is behind the sheave, attach the other end to the sliding sheave.



- Rotate clutch, clockwise, so compressor tool gets hooked between fixed clutch sheave and motor mount frame.
- Now tighten nut to compress clutch sheaves together.



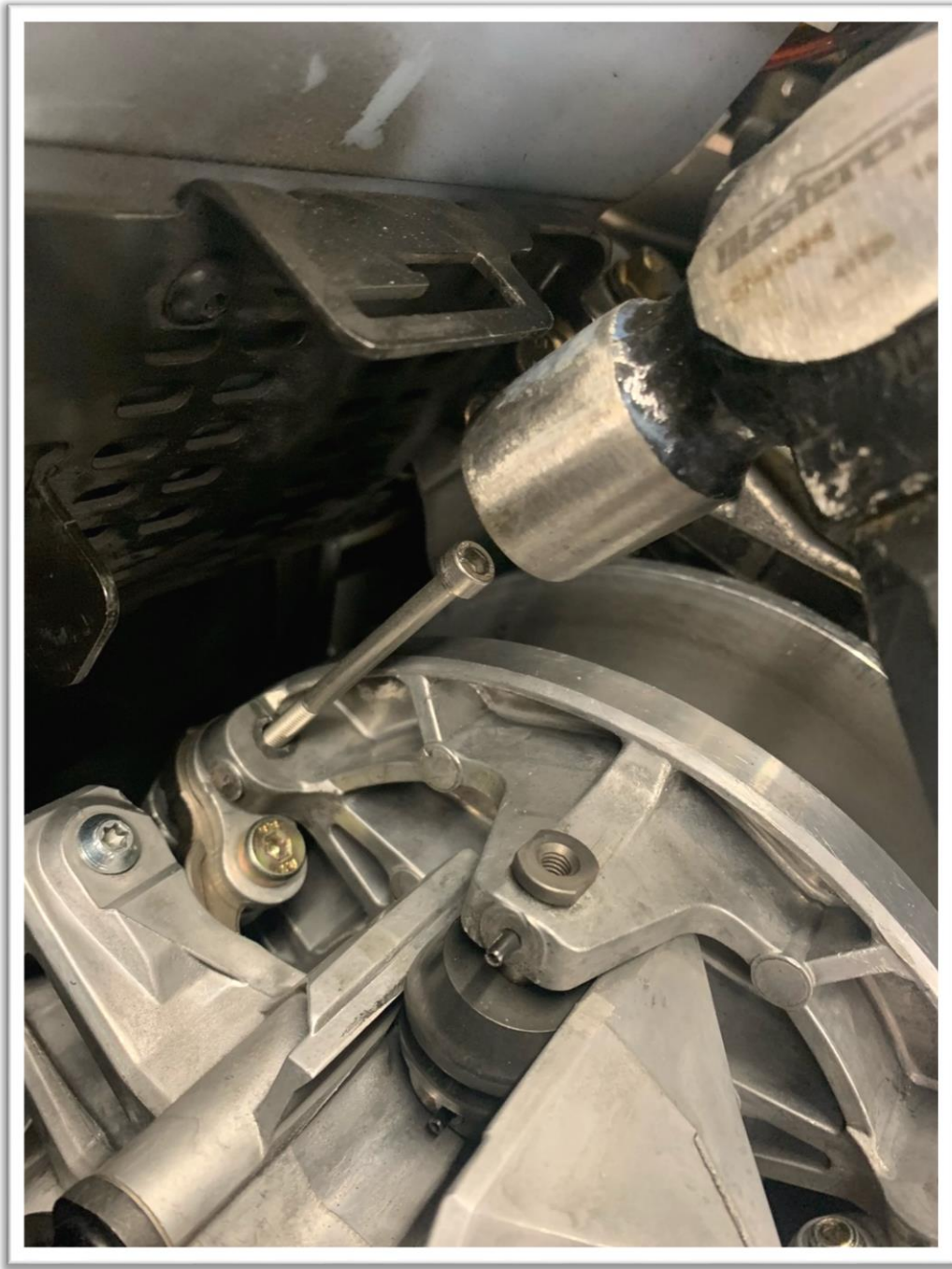
- Install clutch holder as shown. This will allow you to get holder in behind fixed sheave.
- Once behind, rotate so tab is hooking on sheave.



- Once clutch is compressed enough, make sure holder is completely positioned and you can loosen and remove compressor tool.
- Now you can rotate clutch to remove all three ramps.



- Now you will remove the silver T25 Pivot Pin screw.
- Now is also a good time to loosen the clicker bolts as well.



- Install supplied 5mm x 70mm screw, to use as a removal tool.
- Tap out pivot pin, so ramp assembly can be removed.



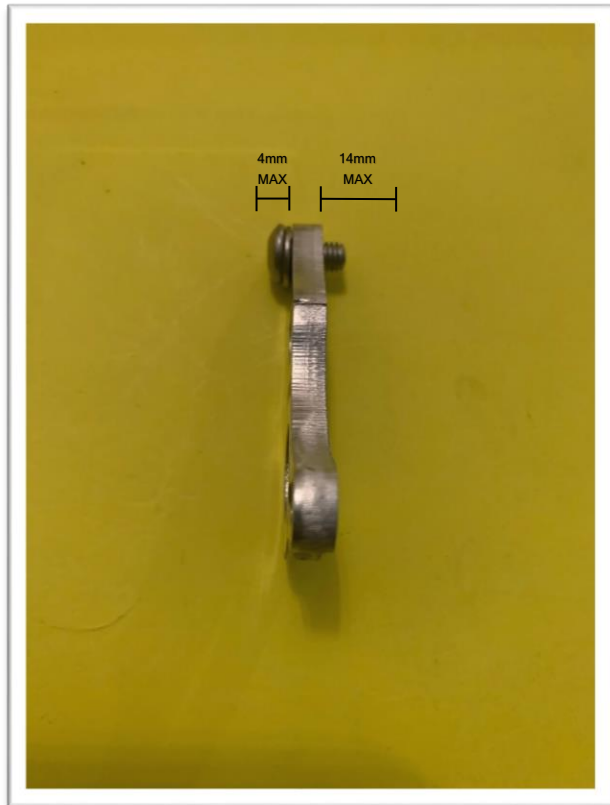
- You can now remove ramp assembly.



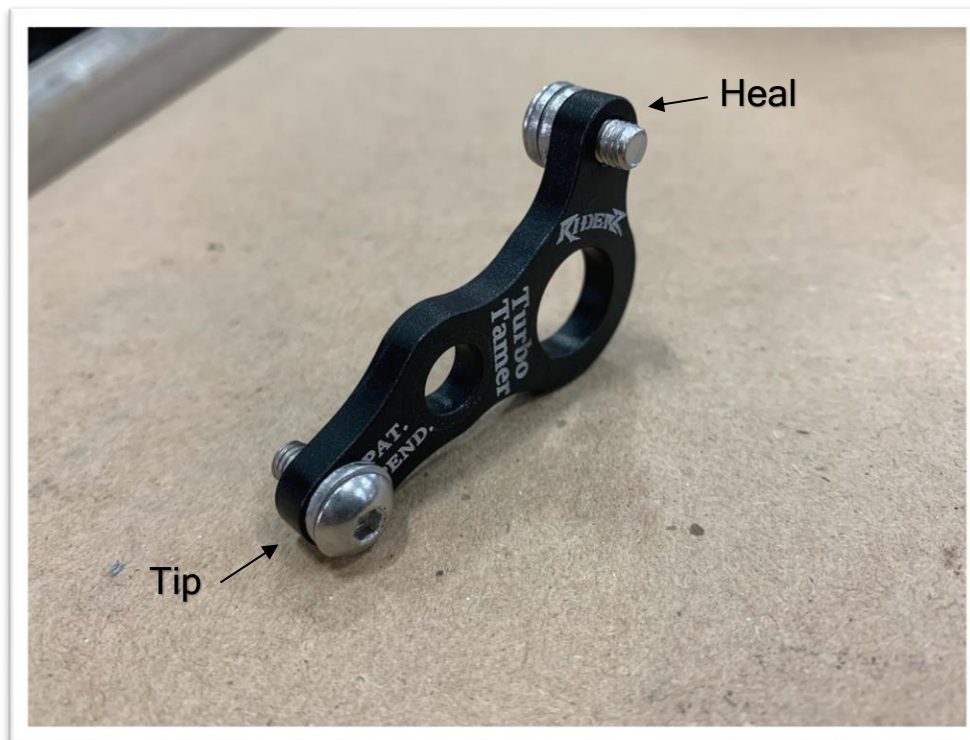
Stock Ramp Setup



Ramp with Turbo Tamers installed.



Note: Do not allow head of screw to extrude any more than 4mm.
Do not install more than 1 washer on screw.



Clutch Tuning Weight Reactions

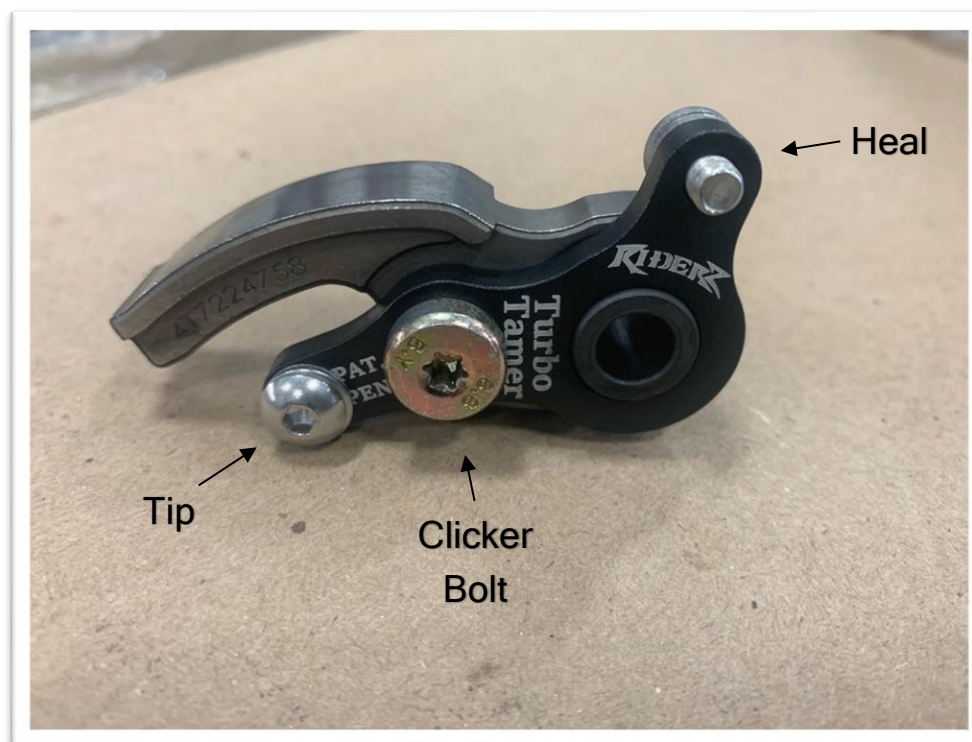
- Adding weight to the heel of the tamer will lower overall engagement
- Adding weight to the clicker position of the tamer will lower overall peak RPM
- Adding weight to the tip of the tamer will lower overall peak RPM

*Tip: If you are noticing doggy or slow rev up from the mid-range you may have added too much weight to the clicker position or tip of the tamer.

Included Screws and Washers

- 3 - 5mm x 6mm Weight Screws (1.6 g)
- 3 - 5mm x 8mm Weight Screws (1.8 g)
- 6 - 5mm x 10mm Weight Screws (2 g)
- 6 - 5mm x 12mm Weight Screws (2.2 g)
- 3 - 5mm x 16mm Weight Screws (2.75 g)
- 3 - 5mm x 20mm Weight Screws (3.28 g)
- 18 - 5mm x 10mm x 2mm Weight Washers (0.66 g)

Tamer kits will no longer contain the 1 mm thick washers for tip and heel adjustment, only the 2 mm thick washers will be included.



Riderz Recommended Initial Setup

The following charts provide initial setups for Turbos;
With stock tune, stock primary ramp and stock secondary calibration.

TURBO	Heal Weight	Clicker Weight	Tip Weight
2020.5	10 mm screw Two 2 mm washers	Stock	8 mm screw
2021	16 mm screw Four 2 mm washers	Clicker Position #2 33mm Bolt Three 1.5 mm washers	Empty
2022	16 mm screw Four 2 mm washers	Clicker position #2 33 mm bolt Three 1.5 mm washers	Empty
2023	16 mm screw Four 2 mm washers	Clicker position #3 33 mm bolt Two 1.5 mm washers	Empty



With stock tune, stock primary ramp and secondary with 46/42 Helix and Green spring.

TURBO	Heal Weight	Clicker Weight	Tip Weight
2020.5	Untested as of now	Untested as of now	Untested as of now
2021	16 mm screw Four 2 mm washers	Clicker position #2 33 mm bolt No washers	Empty
2022	16 mm screw Four 2 mm washers	Clicker position #2 33 mm bolt No washers	Empty
2023	16 mm screw Four 2 mm washers	Clicker position #4 33 mm bolt No washers	Empty

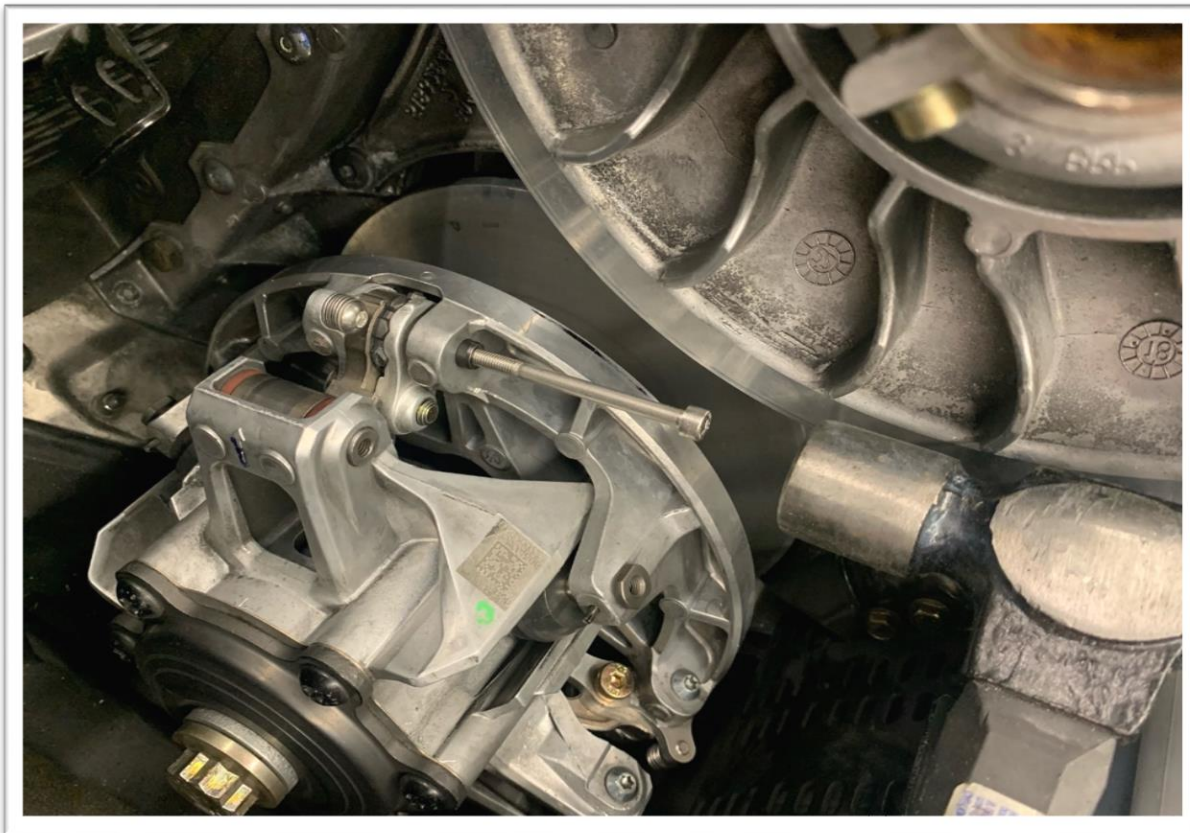
With Stage 1 tune (21 HP), stock primary ramp and secondary with 46/42 Helix and Green spring.

TURBO	Heal Weight	Clicker Weight	Tip Weight
2020.5	Untested as of now	Untested as of now	Untested as of now
2021	16 mm screw Four 2 mm washers	Clicker position #1 33 mm bolt Three 1.5 mm washers	Empty
2022	16 mm screw Four 2 mm washers	Clicker position #1 33 mm bolt Three 1.5 mm washers	Empty
2023	16 mm screw Four 2 mm washers	Clicker position #2 33 mm bolt Three 1.5 mm washers	Empty

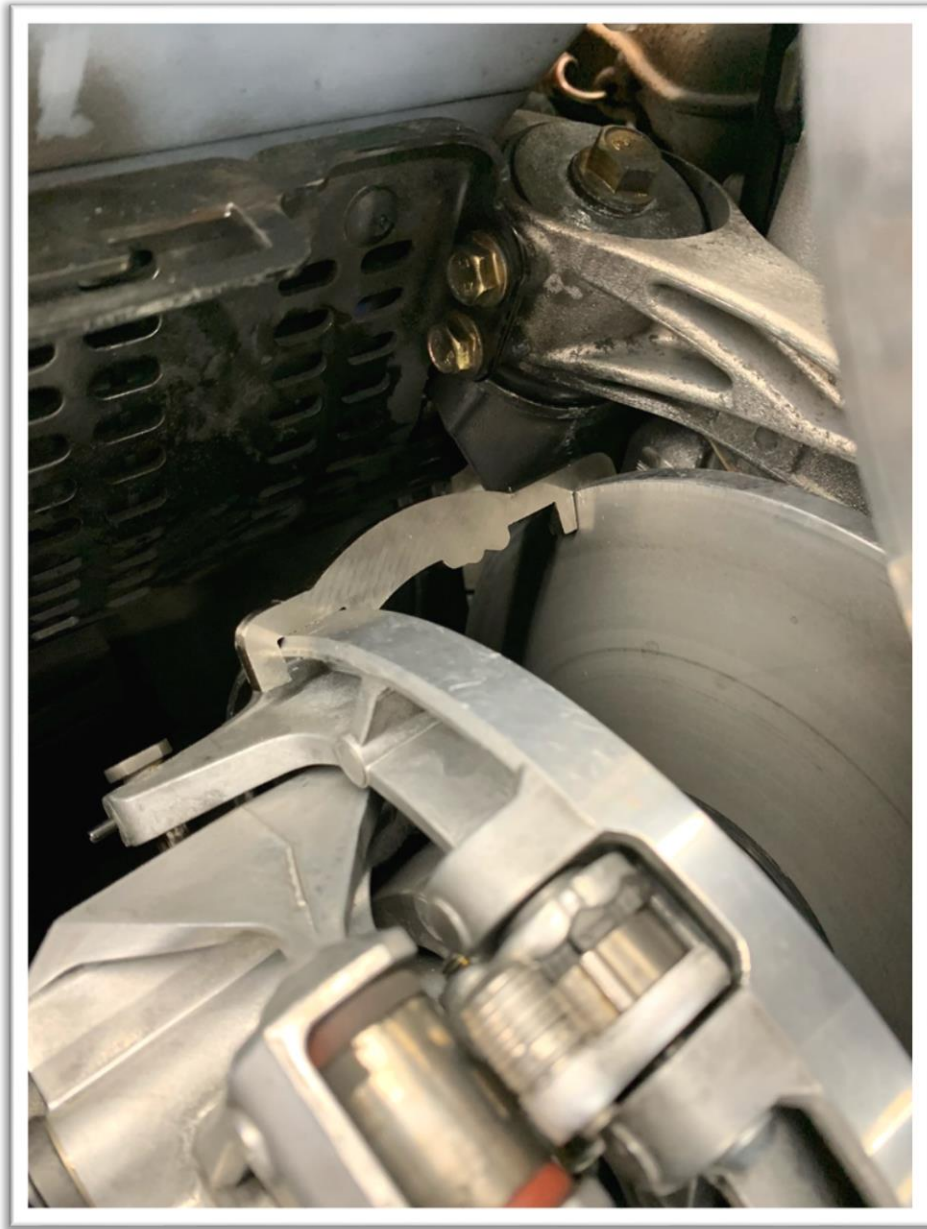
The following charts provide initial setup for your Non-Turbos;
With stock clutching components.

NON-TURBO	Heal Weight	Clicker Weight	Tip Weight
2017-2023	12 mm screw Four 2 mm washer	Stock Clicker position #3	Empty

Recommended Helix 46/42 Part # 417127426 and Spring Green Part # 417127137



- Once again, install supplied 5mm x 70 mm screw and tap pivot pin back in.
- Reinstall silver T25 screw, with blue Loctite and torque to 44 lb.in.
- Tighten clicker bolt to 71 lb.in.



- The tip weight can be adjusted while the ramp is installed. The clutch does not need to be compressed all the way; the holder can be installed as shown (lettered side facing the front of the sled).
- This will give you room to access the tip screw.



- Tip screw can be accessed once clutch is slightly compressed.