Sportsman / Scrambler clutch kit installation instructions

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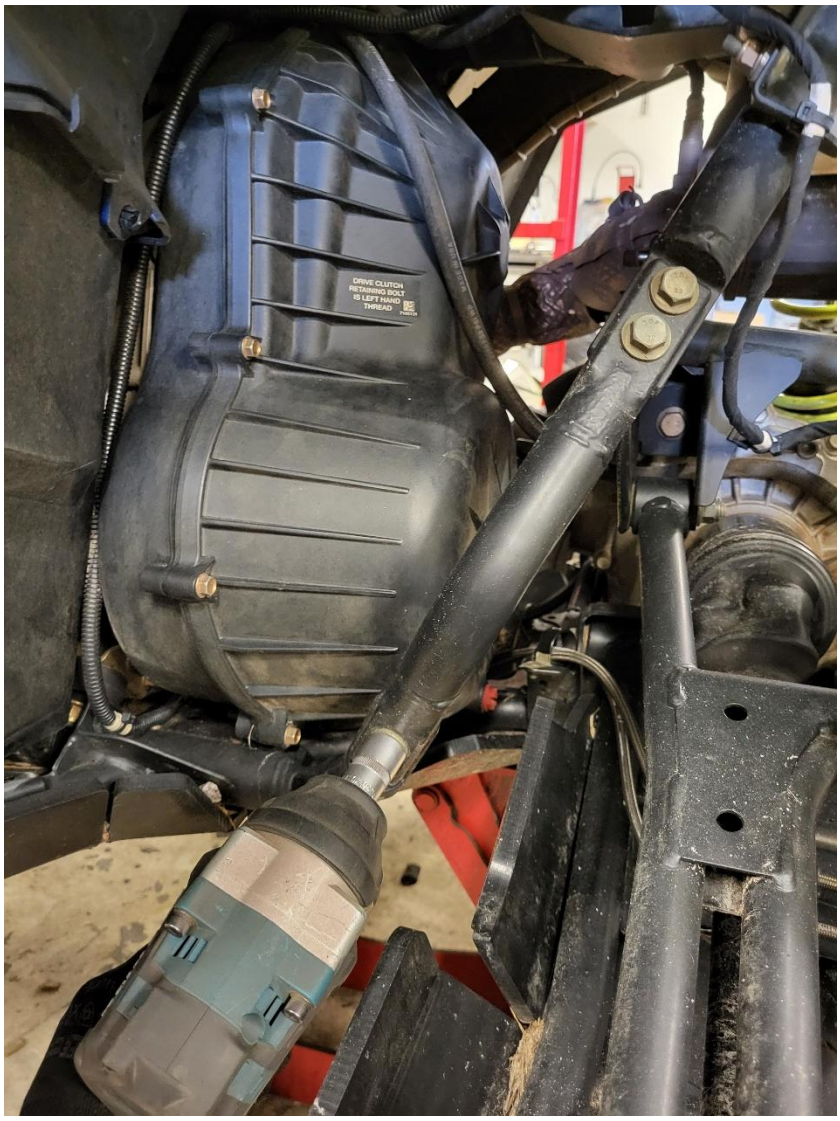
Thank You that you have chosen our clutch kit!

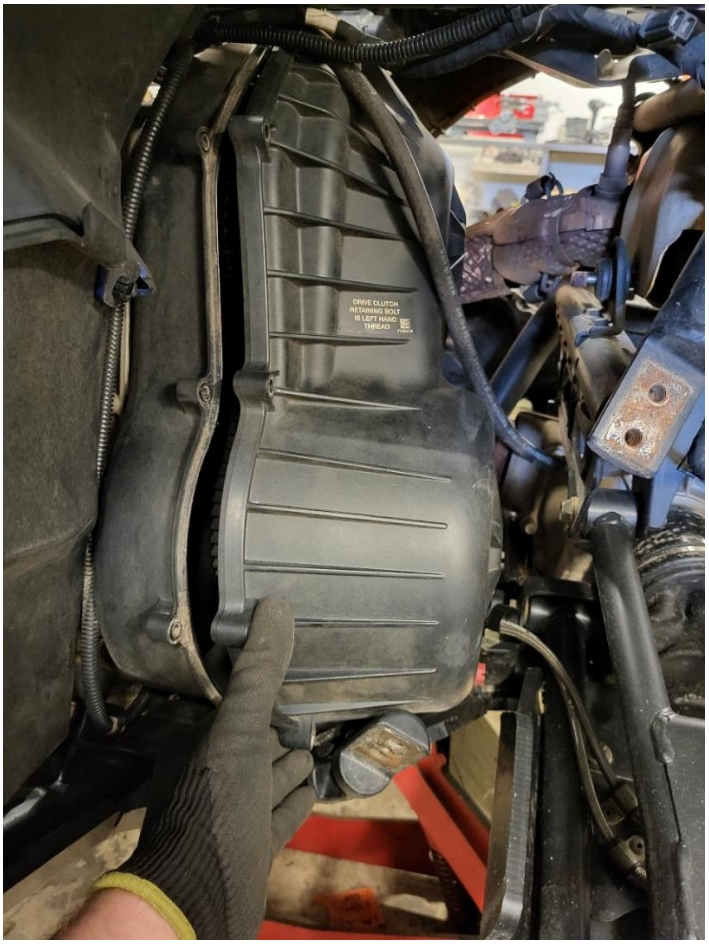
Our clutch kit helps to transfer the engine power better to the tires so you can use the engine potential more effectively and vehicle is smoother to use. We have gone through long testing period – including real life driving tests as well as the dynamometer tests - before we have chosen this specific setup combination.

CVT upgrade kits are fully tested and accepted by most POLARIS distributors. Correctly installed upgrade kit will not cause any damages to your vehicle. The manufacturer of the cvt upgrade kit is not responsible for any damage or failure of your vehicle or in case the warranty of your machine will be voided. To ensure correct installation and to avoid possible inconveniences we recommend ordering the installation from an authorized POLARIS dealer.

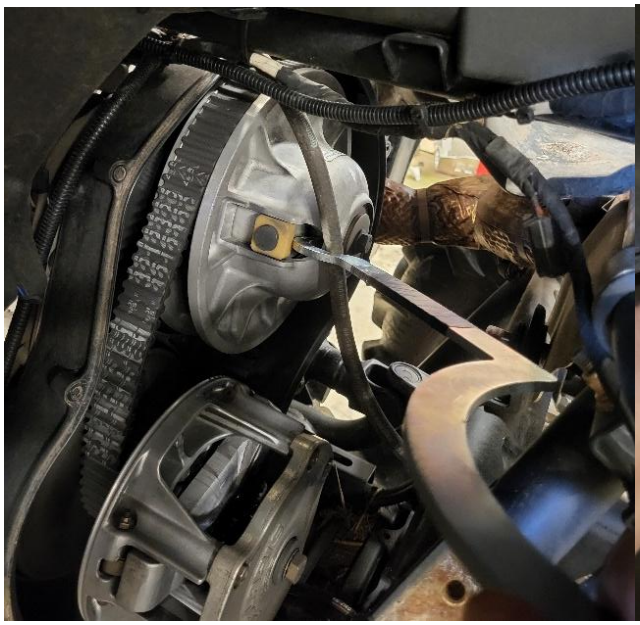
1. Remove seat.
2. Remove left rear wheel.
3. Remove lower LH frame support.

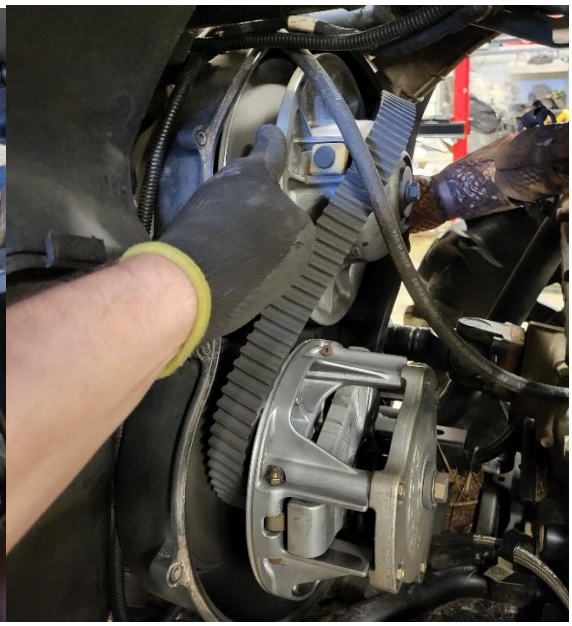


4. Remove cvt cover.

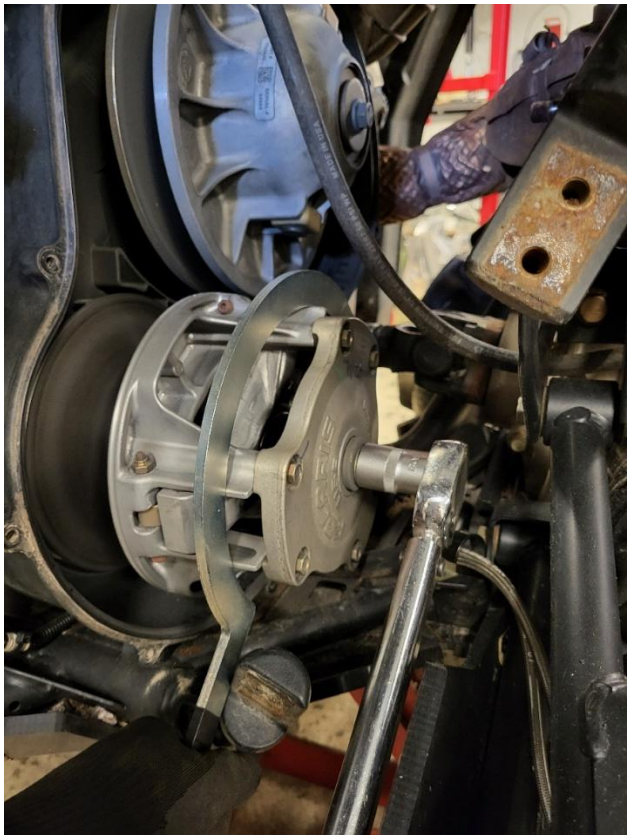


5. Remove belt by using clutch tool.

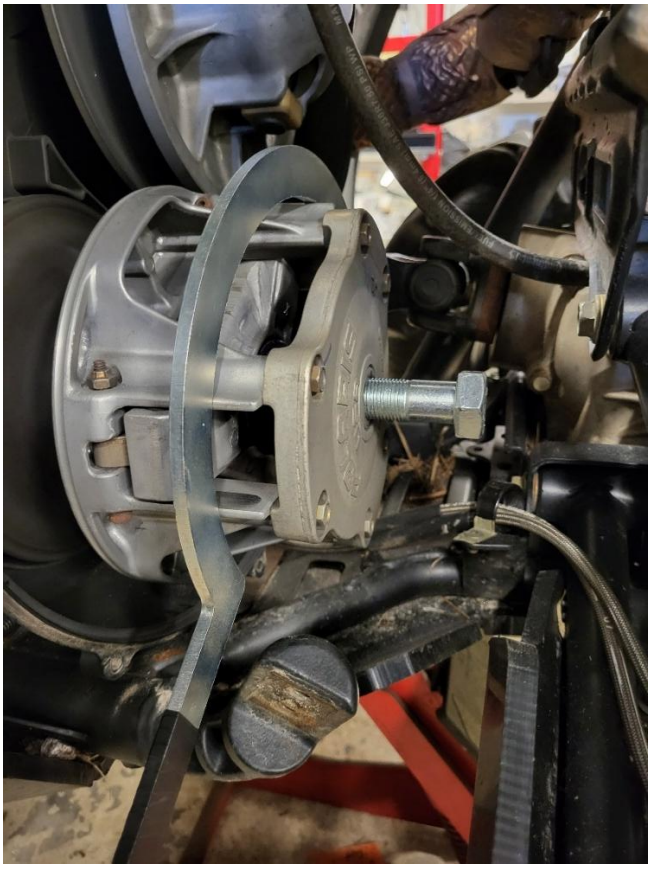




6. Open primary clutch bolt by turning the bolt in clockwise direction, use clutch tool.



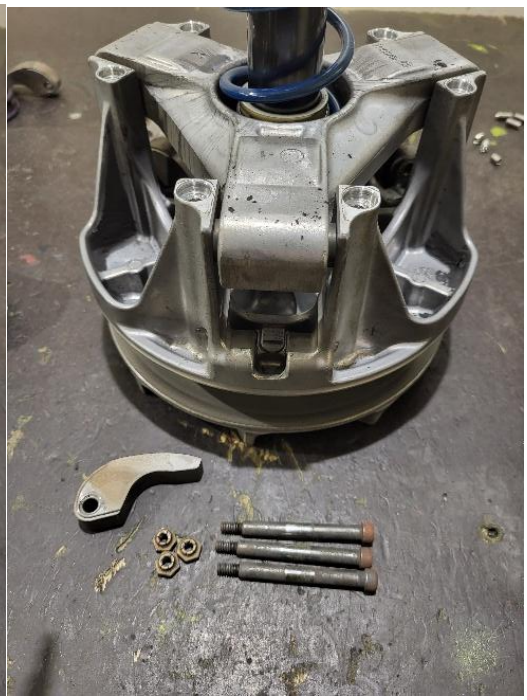
7. Insert the primary clutch puller into the primary clutch and use it to remove the clutch from the shaft.



8. Use clutch compression tool to hold cover and open cover bolts.

9. Remove primary clutch spring.

10. Remove primary clutch weight pins and original weight arms.

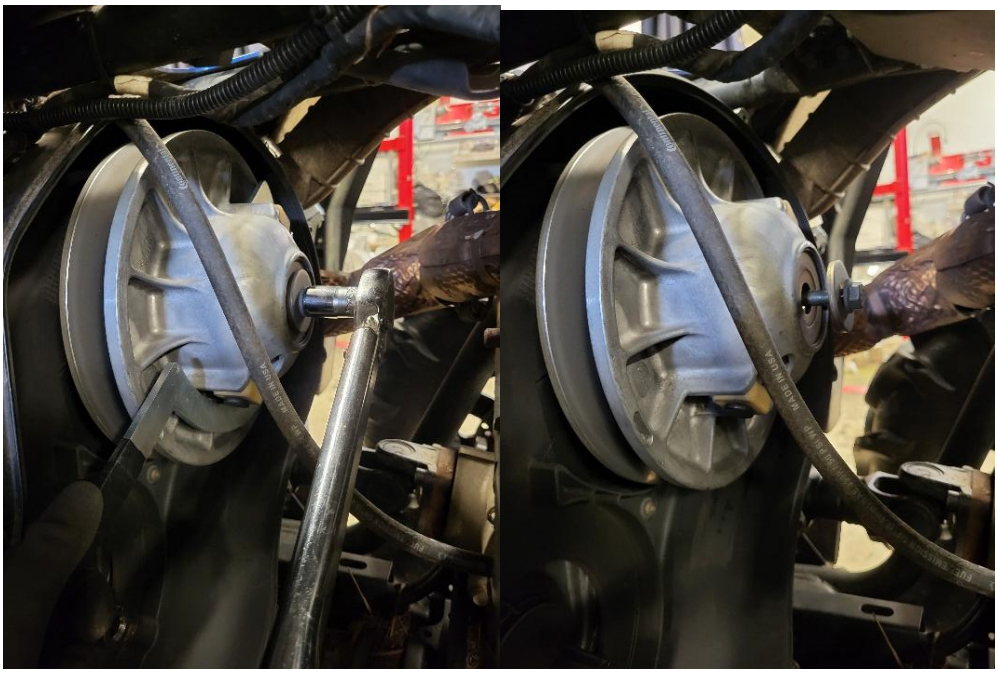


11. Assemble new weight arms (see adjustment tips) and place them into the primary clutch. Tighten pins with 15-25 in-lbs (2-3nm) torque.

12. Install new primary clutch spring.

13. Reassemble the primary clutch. Use clutch compression tool to hold cover and tighten cover bolts with 100 in-lbs (11nm) torque. NOTE! Be sure that the X marks are aligned.

14. Open secondary clutch bolt. Use clutch tool.



15. Remove secondary clutch.

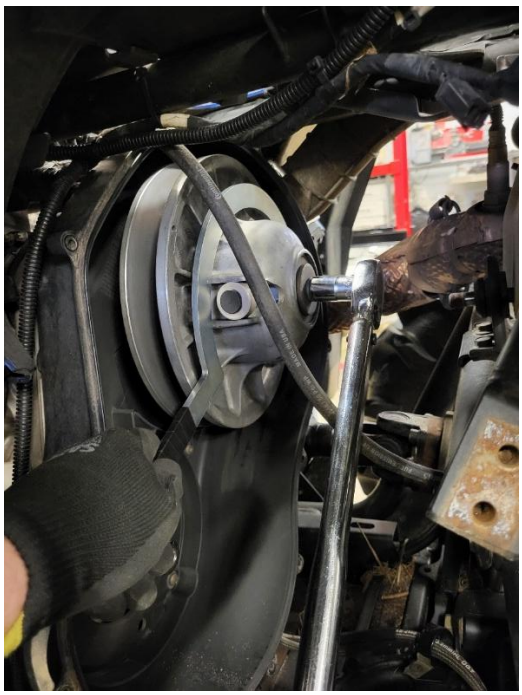
16. Use clutch compression tool and open helix bolts (T25 Torx).

17. Remove helix, spider and spring from the clutch.

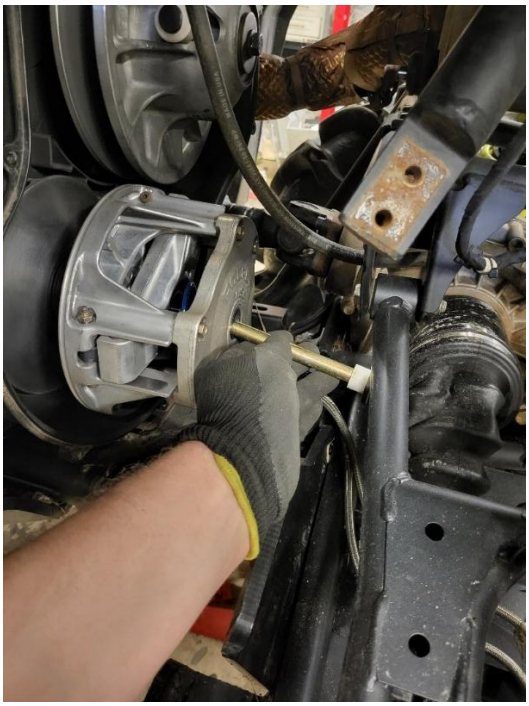
18. Install new secondary spring and spider.

19. Use clutch compression tool and reinstall the helix. Use thread-lock glue and tighten helix bolts with 47 in-lbs (5.3nm) torque. Note! Be sure that the X marks are aligned.

20. Reinstall secondary clutch back to the shaft. Use clutch holding tool and tighten clutch bolt with 37 ft-lbs (50nm) torque.



21. Insert primary clutch back the shaft. Use clutch holding tool and tighten bolt with 47 ft-lbs (64Nm) torque. NOTE! Remember bolt has left hand thread!



22. Remove clutch holding tool. Check that everything is secured and install belt back.
23. Reinstall CVT cover, lower frame support, rear wheel, seat and you are ready to test drive!

Weight arm adjustment tips!

First adjustment tips, these will get you started with adjusting the clutch.

More TIP weights increase the shift rpm, more HEEL weight lowers the engagement rpm and gives better acceleration. More weight usually lowers peak rpm, less weight increases peak rpm.

Weight arms are adjustable, allowing you to adjust the weight arm mass and get the machine in best peak rpm.

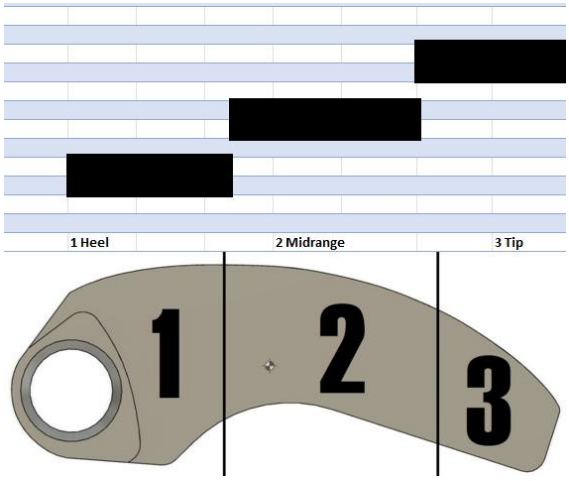
The following images will help you adjust your clutch.

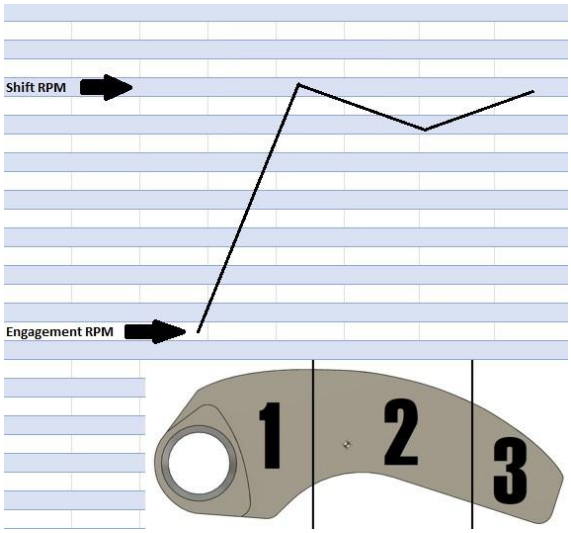
For example: top end on your machine is meant to be 130kmh (80mph). Simply divide your weight into imaginary thirds. The first third controls the RPMs for 0-44kmh (0-27mph), second third controls RPMs for 44-88kmh (27-54mph) and the final third controls RPMs for 88-130kmh (54-80mph).

You add or subtract weight to each section to make sure the engine RPMs are consistently at peak RPM for each 1/3 range.

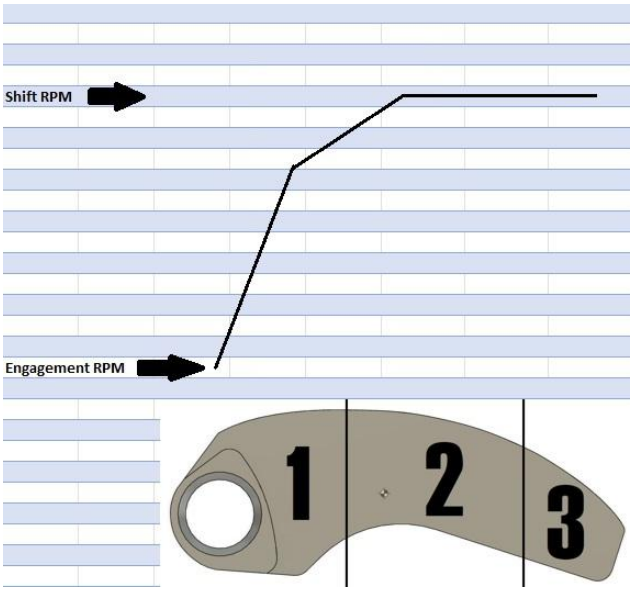
For example, if your stock arm weight is 62 gram and your Trail arm weight is 56 gram, then add 4 grams to your Trail weight. Don´t be overly concerned about exact weight placement at this time, it´s only starting point. Your machine should run in most cases 7200-7400rpm.

Look at the charts, they will help you understand how to move the weight around to achieve the desired results.

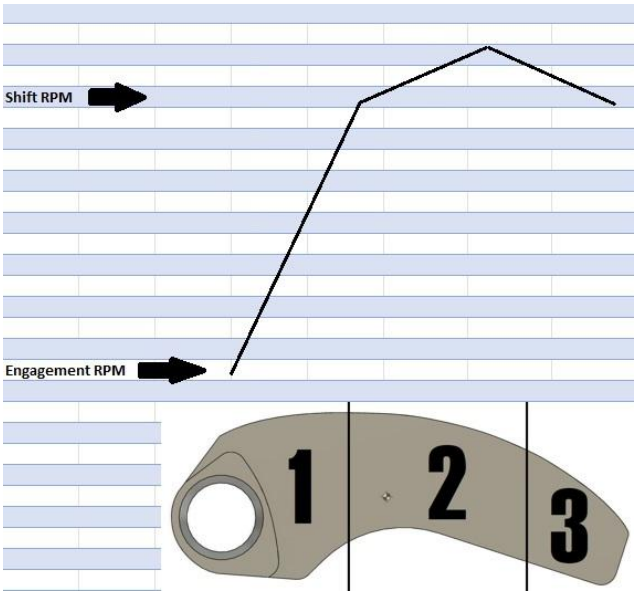




Too heavy midrange, less weight pos 2.



Too heavy heel, less weight pos. 1.



Too light midrange, add more weight pos. 2.

There is no warranty stated or implied, due the unusual stresses placed on racing/performance parts and because we have no control over how they are used. This warranty is in lieu of all other warranties expressed or implied, including the warranty of merchantability and fitness for use and all other obligations or liabilities on the company's part. The obligation of Routa Powerline under this warranty shall be limited to the part or parts shown to be defective and the company will not be responsible for any damage or loss caused by delays, failures or any consequential damage arising from any cause whatsoever, nor for labor, transportation or any other charges incurred in the replacement or repair of said defective part or parts. Off-Road use only. May affect the device's warranty.