MULTILINGUAL MANUAL

code.ironbaltic.com/u/kcqVuV6m

CLUTCH KIT

STAGE 2 TRAIL

POLARIS

SPORTSMAN 450/570 (NON-EBS)

Code 80.9000

Version 05062024

Distributer **IronBaltic, Estonia**

Producer **RoutaPowerline, Finland**

Keep this manual for future reference!

If you need any spare parts, please send this packaging data to your local dealer or to Iron Baltic sales@ironbaltic.com

SPECIFICATION

Pos.	Description	Code	Amount
1	Primary clutch spring BLACK	11012032	1
2	Secondary clutch spring SILVER-YELLOW	11012039	1
3	Washer	11012019	2
4-1	Adjustable weight arm (with five holes, 47g)	12012022	3
4-2	Set screw M6x8mm / Extra weight 1 g		15
4-3	Set screw M6x12mm / Extra weight 1,5 g		15
5	Sticker (RoutaPowerline)	PM.13.05.031	1
6	Sticker (IronBaltic)	PM.13.05.007	1

INSTRUCTIONS

Thank You that you have chosen our clutch kit. Our clutch kit helps to transfer the engine power better to the wheels 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.

Clutch 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 clutch 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.

Stage 2 TRAIL Clutch kit (Tires 28”-29”)

- Entry level and excellent choice for basic use!
- Great for trail riding, occasional mud and sand riding, ploughing and hauling.
- Soft engagement.
- Better low end and midrange responce.
- Quicker backshift which results in crisp throttle response.
- Reduces belt slip and heat.

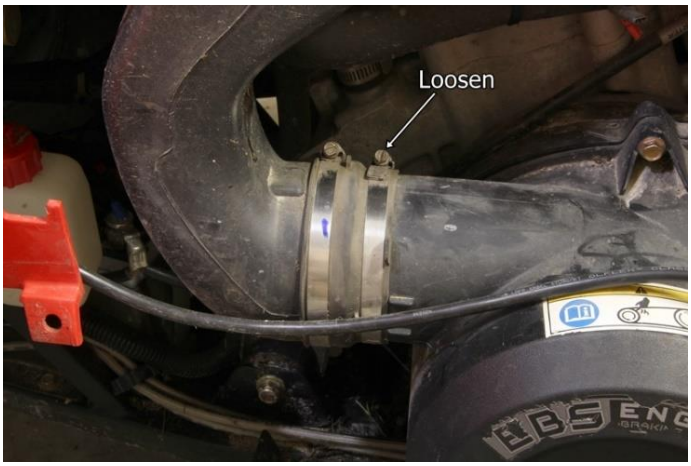
We recommend using official dealership installation services; they have the correct tools and knowledge for such installation.

All pictures in this manual are for illustration purposes only and may differ from real product due to the changes made to the product during improvements!

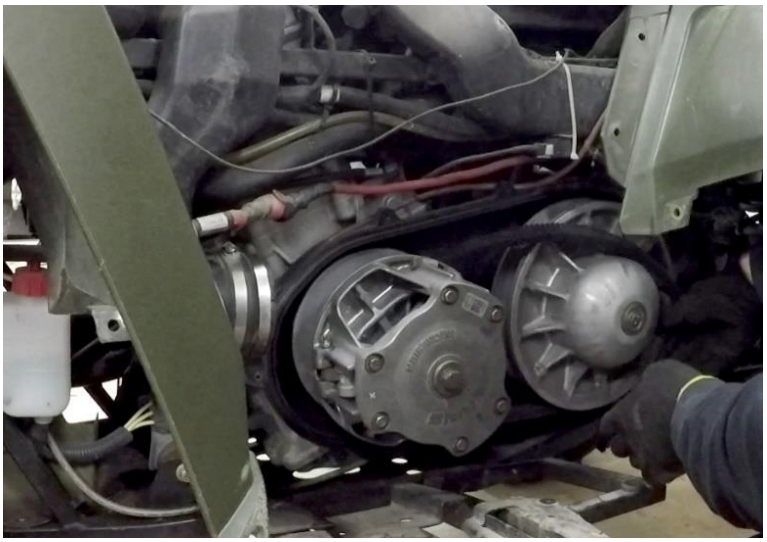
1. Remove bolts and dowel pins shown in the pictures.

2. Remove plastics.

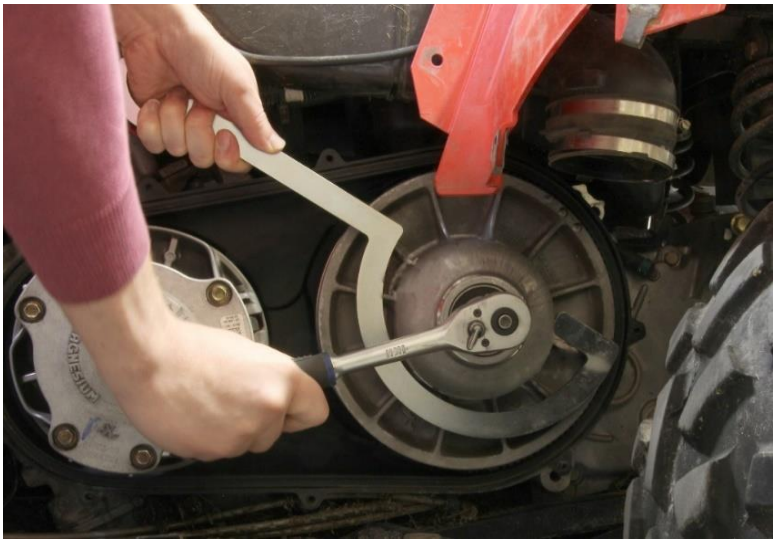
3. Loosen hose clamps and remove CVT cover bolts. Remove CVT cover.



4. Remove belt.



5. Open secondary clutch bolt and remove clutch. Use clutch tool **80.2300.**



6. Use clutch compression tool **80.400** and remove circlip.
   NB! Before removing circlip mark the helix position to the centre shaft, with (white)marker.

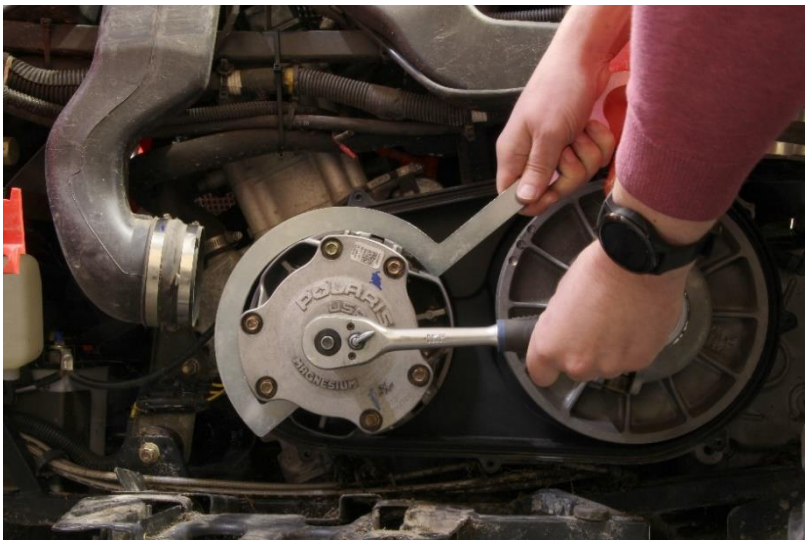
7. Slowly release the compression tool and remove helix and spring from the clutch. If the helix does not move while releasing compression tool, slightly tap its sides with hammer.

8. Install new secondary spring (Pos.2).
Images are illustrative and may not represent the spring colours included in the kit

9. Place circlip on the helix and use clutch compression tool **80.400** to press helix back to the clutch. Reinstall the circlip. **NB! Be sure that the (white) marks are aligned.**

10. Reinstall secondary clutch back to the shaft. Use clutch tool **80.2300** and tighten clutch bolt with 37 ft-lbs (50 Nm) torque. Use thread lock fluid on the bolt!

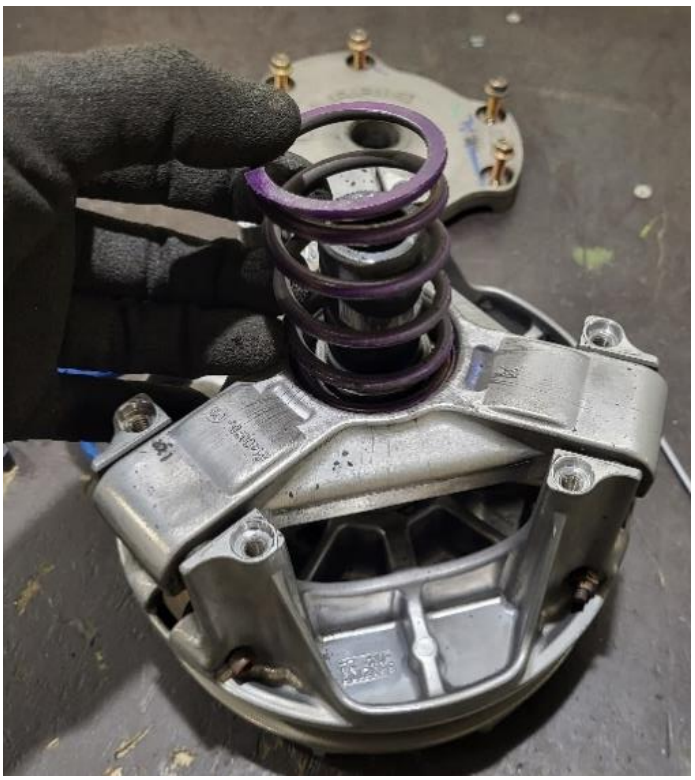
11. Open primary clutch bolt, use clutch tool **80.2300** to hold the primary clutch in place.



12. Insert the primary clutch puller **80.2400** into the primary clutch and use it to remove the clutch from the shaft. Hold the primary clutch in place with **80.2300** tool.

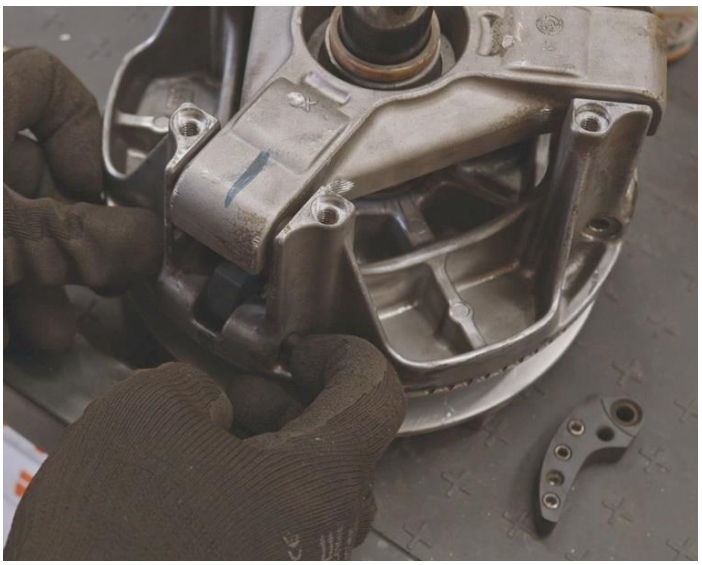
13. Use clutch compression tool **80.400** to hold the cover and open cover bolts. Release the compression tool and remove the clutch cover.

14. Remove primary clutch original spring.
    Images are illustrative and may not represent the spring colours included in the kit



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

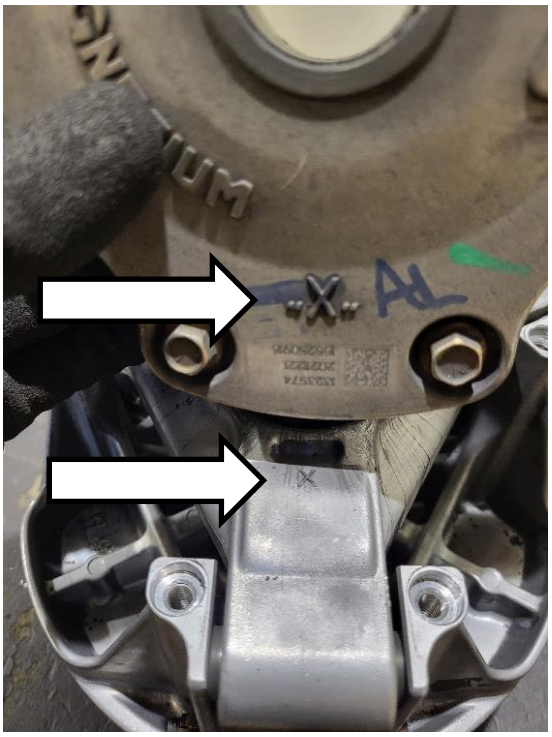
16. Assemble new adjustable weight arms (Pos.4-1) (see adjustment tips in Annex 1) and place them into the primary clutch. Tighten pins with 15-25 in-lbs (2-3Nm) torque.

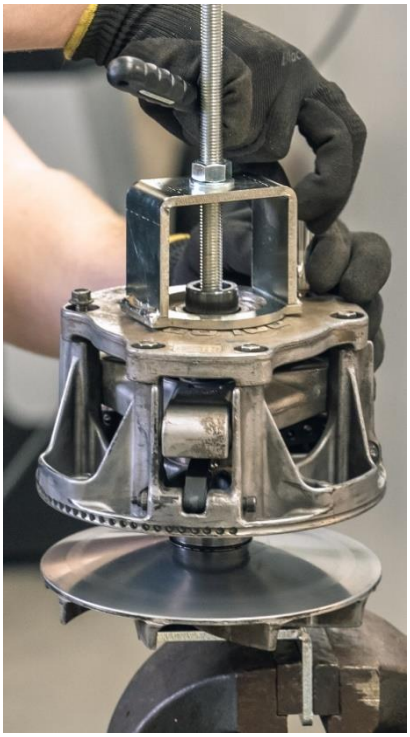


17. Install new primary clutch spring (Pos.1) and washer (Pos.3) if needed. One washer increases the clutch engagement 150-200 rpm. Install 1, 2 or no washers under the spring as needed.

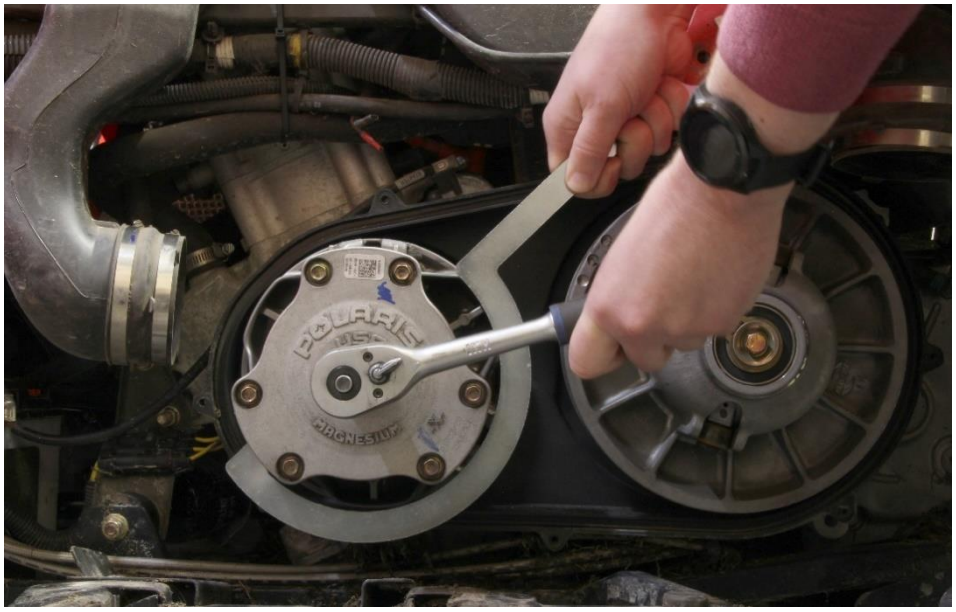
Images are illustrative and may not represent the spring colours included in the kit

18. Reassemble the primary clutch. Use clutch compression tool 80.400 to hold cover and tighten cover bolts with 100 in-lbs (11nm) torque. **NB! Be sure the X marks are aligned.**





19. Insert primary clutch back onto the shaft. Use clutch tool **80.2300** to hold the primary clutch in place and tighten bolt with 47 ft-lbs (64Nm) torque. Use thread lock fluid on the bolt!



20. Remove clutch holding tool. Check that everything is secured and install CVT belt back.

21. Reinstall CVT cover, hose clamps, plastics and you are ready to test drive!

Annex 1 – Weight arm adjustment tips

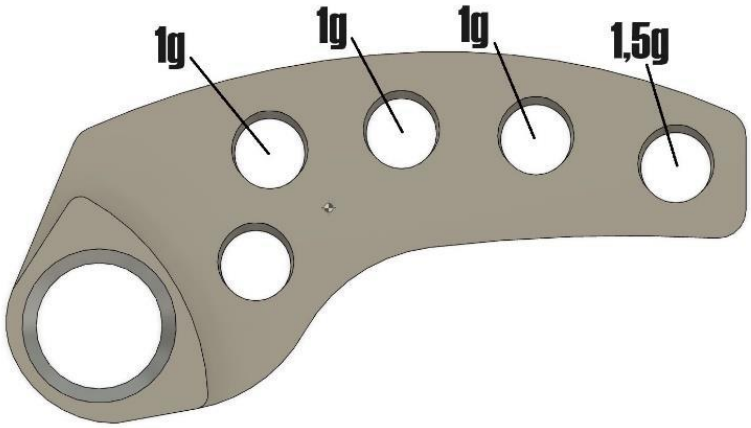
First adjustment tips, these will get you started with adjusting the clutch.

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. Use the set screws (Pos.4-2 and Pos.4-3) to add weight to weight arm.

The following images will help you adjust your clutch.

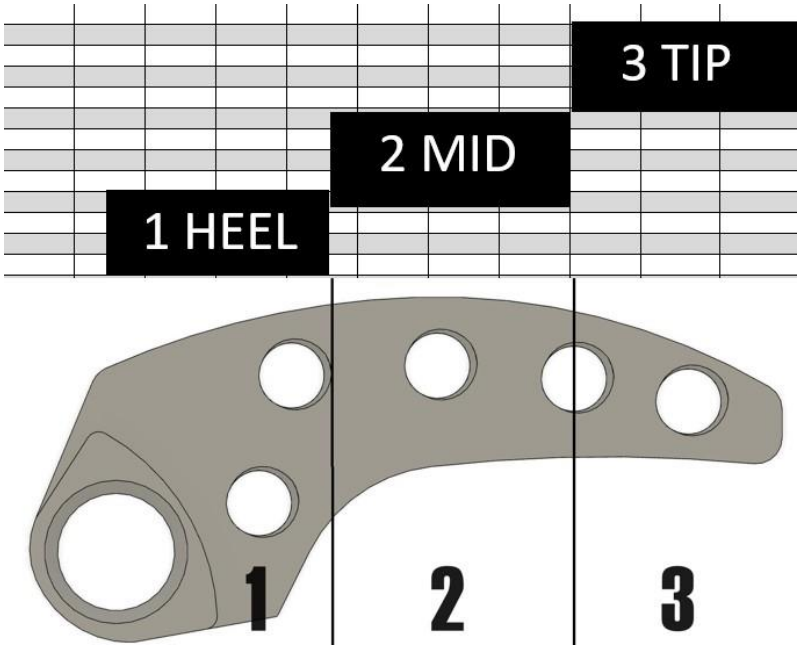
For example: top end on your machine is meant to be 130kmh (80mph). Simply divide your weight into imaginary thirds. The first third controls the RPMs for 0-44kmh (0-27mph), second third controls RPMs for 44-88kmh (27-54mph) and the final third controls RPMs for 88-130kmh (54-80mph).
You add or subtract weight to each section to make sure the engine RPMs are consistently at peak RPM for each 1/3 range.

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.

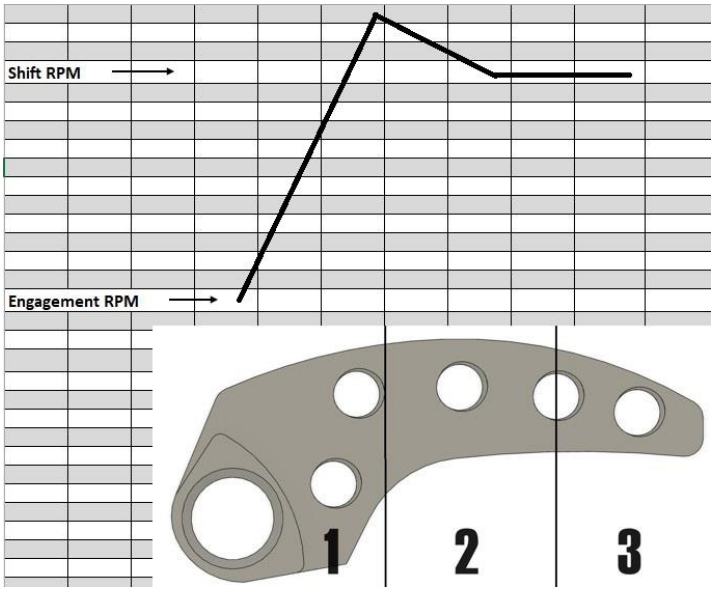


Recommended starting setup.

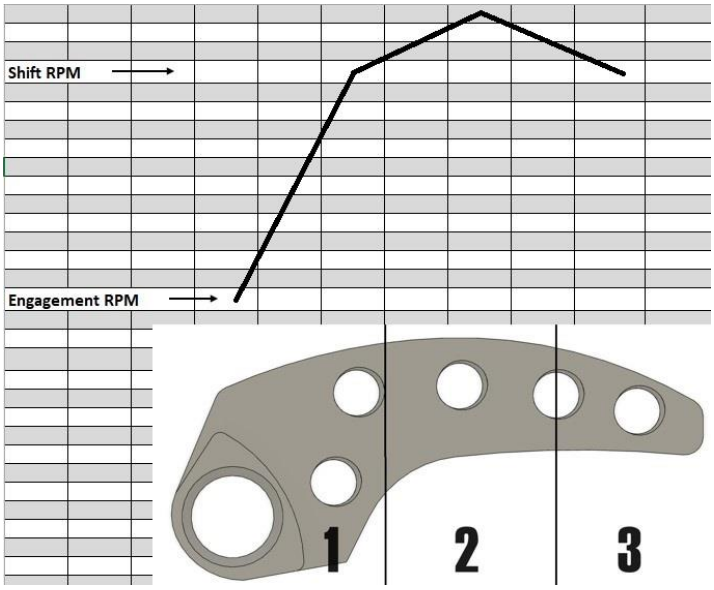
Look at the charts, they will help you understand how to move the weight around to achieve the desired results.



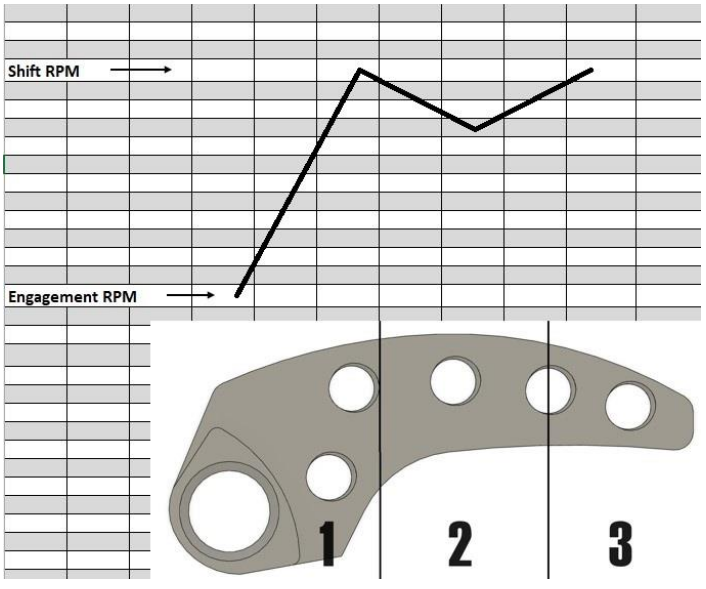
Arm divided into 3 sections.



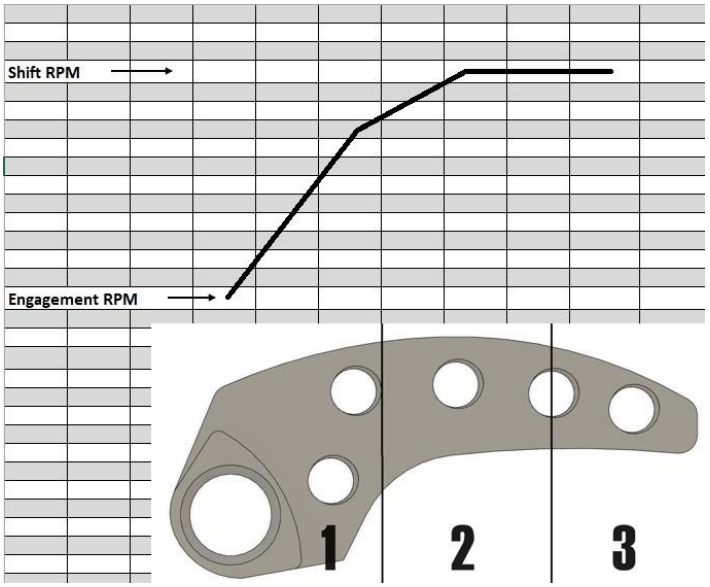
Too light heel, add more weight to section 1.



Too light midrange, add more weight to section 2.



Too heavy midrange, reduce weight on section 2.



Too heavy heel, reduce weight on section 1.

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