

IRON BALTIC

VAUHTI VARIKKO

CLUTCH KIT STAGE 3 TRAIL

MULTILINGUAL MANUAL



code.ironbaltic.com/u/WecQSR5M

SEGWAY SNARLER AT5 Code 80.8700

Version 15072024



IRON BALTIC

VAUHTI VARIKKO

Distributor **IronBaltic, Estonia**

Producer **Vauhti Varikko, 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	Spring (ORANGE-BLACK marked)	80.1601	1
2	Weight (RED marked)	80.104	6
3	Washer 1 mm	80.102	1
4	Helix 40° - 48°	80.1151	1
5	Bolt M6x60 DIN933	OT.02.02.140	1
6	Sticker (VauhtiVarikko)	PM.13.05.024	1
7	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 Segway distributors. Correctly installed upgrade kit will not cause any damages to your vehicle. The manufacturer of the clutch 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 Segway dealer.

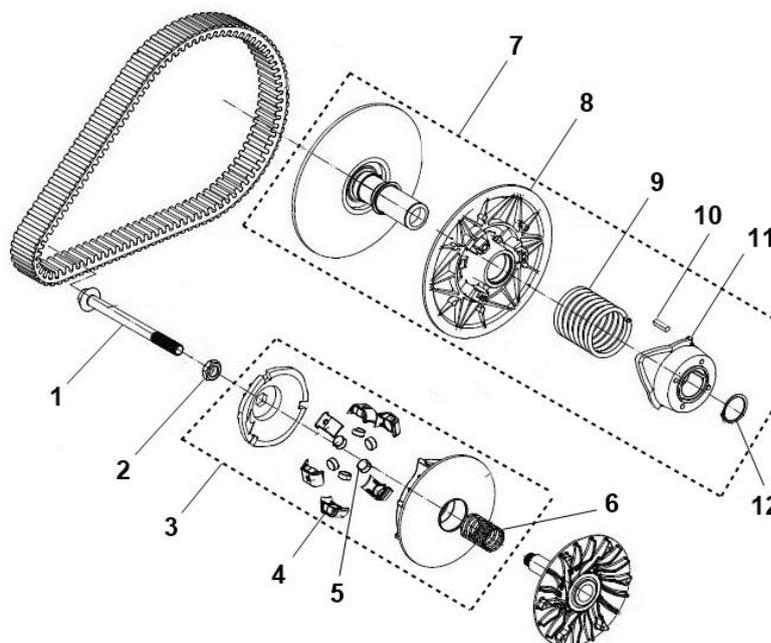
Stage 3 Trail Kit (Tires 25"-28")

- Our most popular, best all-around use kit helps to transfer the engine power better to the wheels!
- BEST for trail riding, occasional mud and sand riding, ploughing and hauling.
- Smoother engagement!
- The lower part of Helix will let you drive at low speed with higher rpm and therefore gives you more HP and Torque to the wheels.
- The higher part of the helix is designed to give more, more and more upshifting with the same rate as your engine is making more power!
- Better acceleration and overall feeling.
- Quicker backshift which results in crisp throttle response!
- Reduces belt slip and heat.
- If you are not sure what kit to choose, then TRAIL kit is what you want.

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

Clutch kit is designed for Segway original belts, when using aftermarket belts make sure that its same width than original. Wider belts may need one extra washer to have right engage rpm. Washer is sold separately (P/N 80.102)

- 1 – Clutch bolt
- 2 – Cover plate nut
- 3 – Primary clutch
- 4 – Weight slider
- 5 – Weight
- 6 – Clutch spring
- 7 – Secondary clutch
- 8 – Sliding flange
- 9 – Secondary clutch spring
- 10 – Key
- 11 – Helix
- 12 – Retaining ring

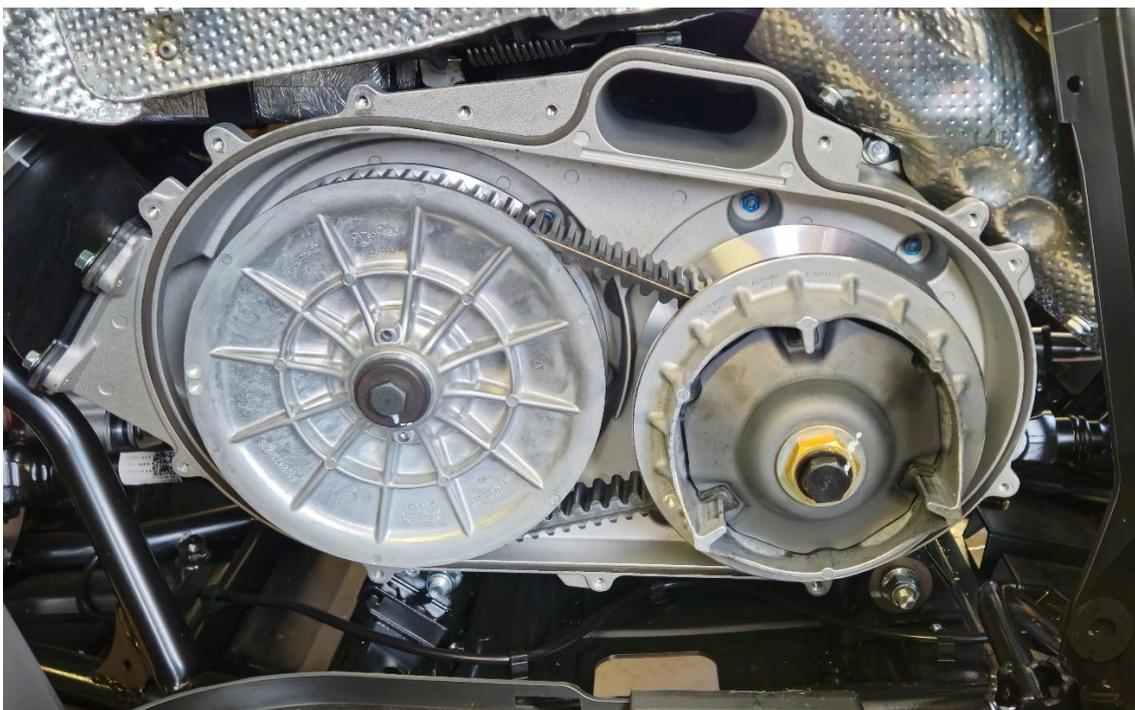


NB! Pictures in this manual are for illustrative purposes and may differ from your machine, but the installation procedure and steps remain the same!

1. Remove plastic cover around the CVT.



2. Open CVT cover.



80.8700 SEGWAY SNARLER AT5

3. Install the clutch holding tool (80.1700).



4. Remove the secondary clutch bolt. Use a 18 mm wrench.



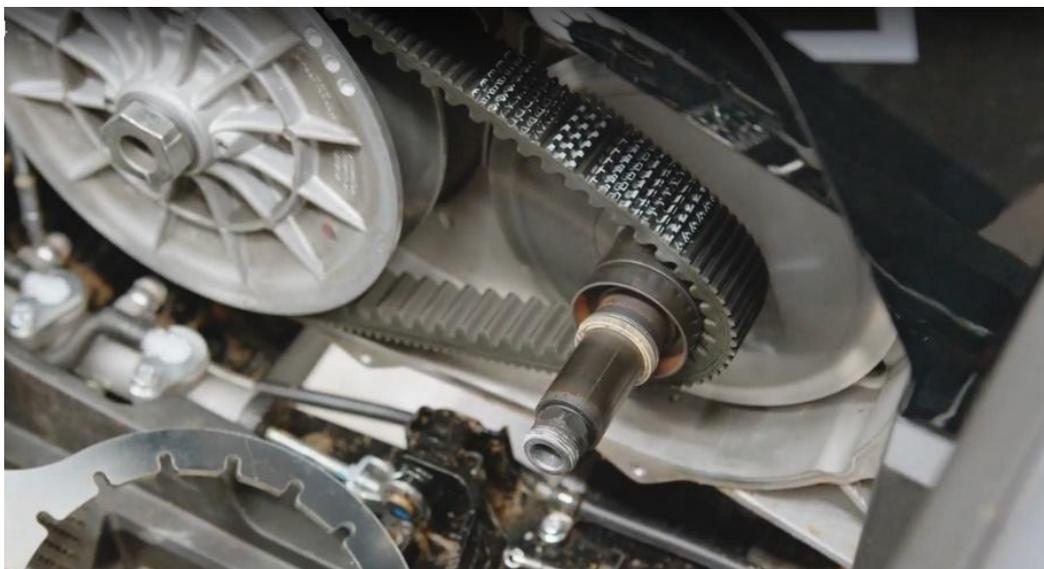
5. Remove the clutch bolt. Use 21 mm wrench. **NB! Bolt has left hand thread!**



6. Remove the cover plate nut. Use 32 mm wrench. **NB! Nut has left hand thread!**



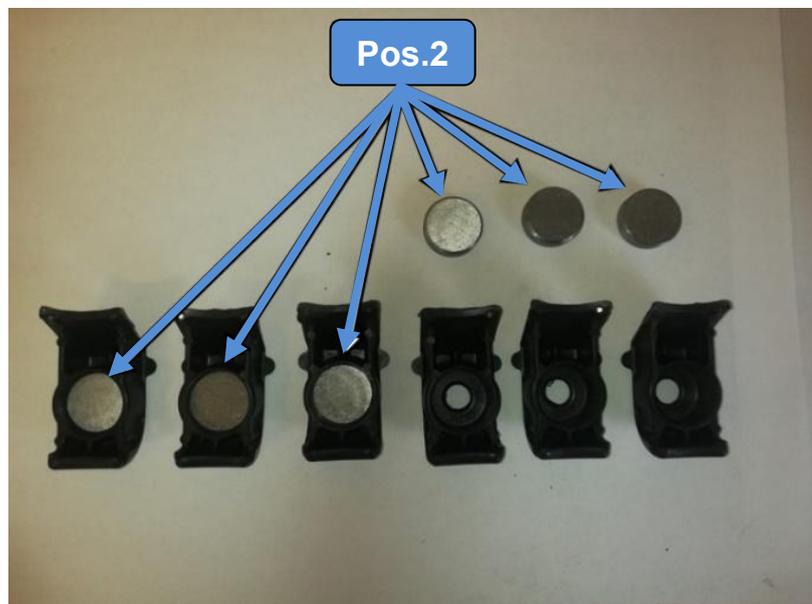
7. Remove primary clutch and original clutch spring.



8. Remove the weight sliders from the primary clutch.



9. Remove original weights and replace them with new weights (Pos.2).



10. Reassemble the primary clutch.

11. Loosen variator belt by screwing M6 bolt into the secondary clutch at the locations shown in the picture. Remove the secondary clutch. Make sure you don't lose the original washer!



12. Open secondary clutch.
A special tool (clutch spring compression tool: 80.400) is required.
a. Place the secondary clutch to tool



b. Lower the helix with the compression tool until the retaining ring appears.



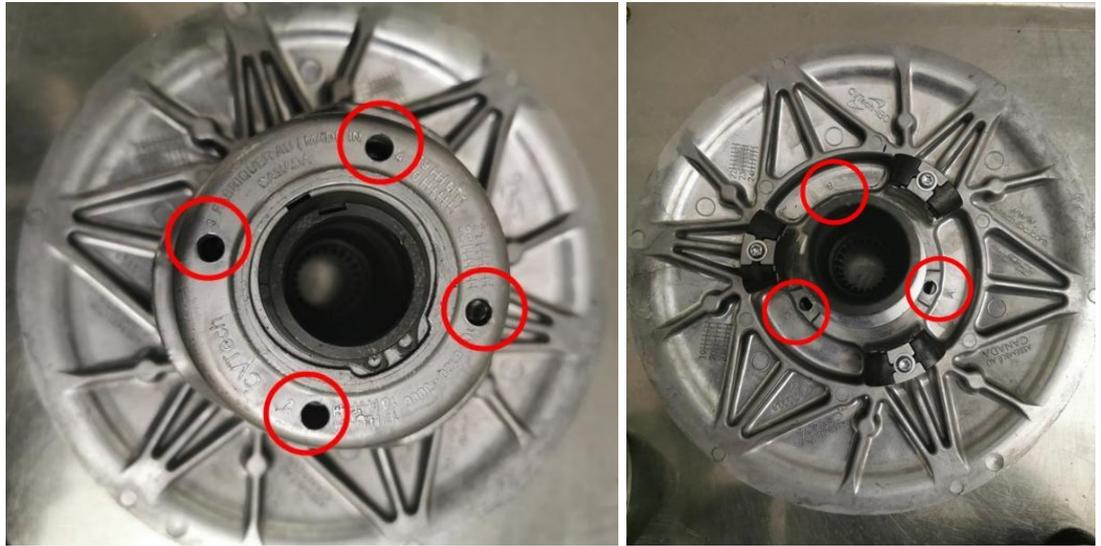
c. Remove the retaining ring. Use an appropriate pair of pliers.



d. Raise the compression tool slowly until the spring pressure is completely loosen and you can remove the helix. Be careful of the loaded spring!



13. There are holes in the helix and sliding flange for position the spring.
In the helix, the holes are marked with numbers (1,2,3,4) and in the sliding flange, the holes are marked with letters (A, B, C).



14. Set the secondary clutch spring to position **B-1** with new multiangle helix!
NB! If using secondary spring 80.1000 then also set the spring to **B-1** position!



15. Reassemble the secondary clutch.

a. Press the helix with compression tool.



b. Align the keyways and insert the key.



c. Turn the helix counterclockwise to pre-stress the spring to the position. Make sure that the helix goes to the right side of the cam shoes.



Spring zero position



Spring pre-stressed position

d. Press the helix with compression tool until you can install the retaining ring back.

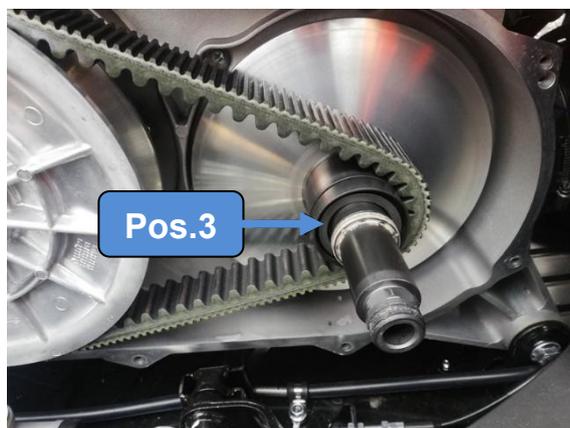


e. Remove the compression tool.

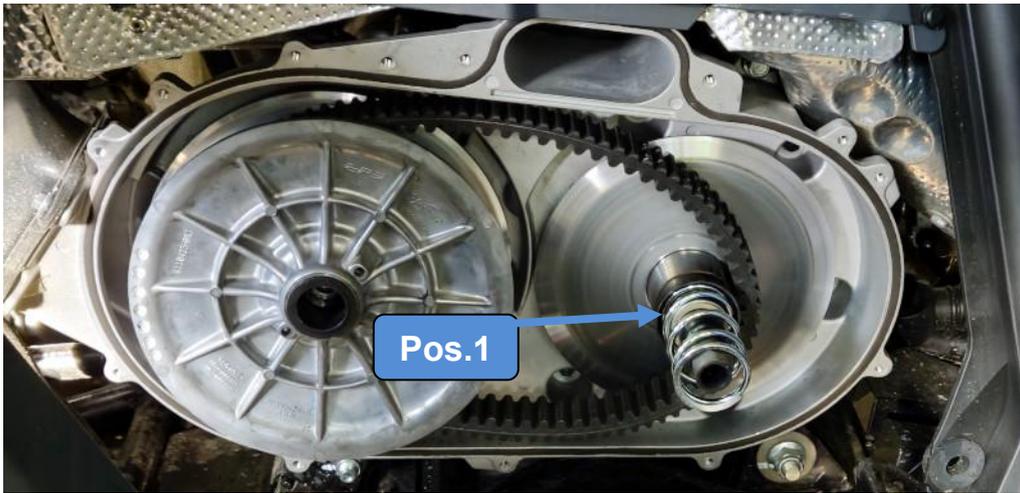
16. Re-install the secondary clutch and variator belt.



17. Install washer (Pos.3) under clutch spring (engine side).



18. Install new spring (Pos.1).



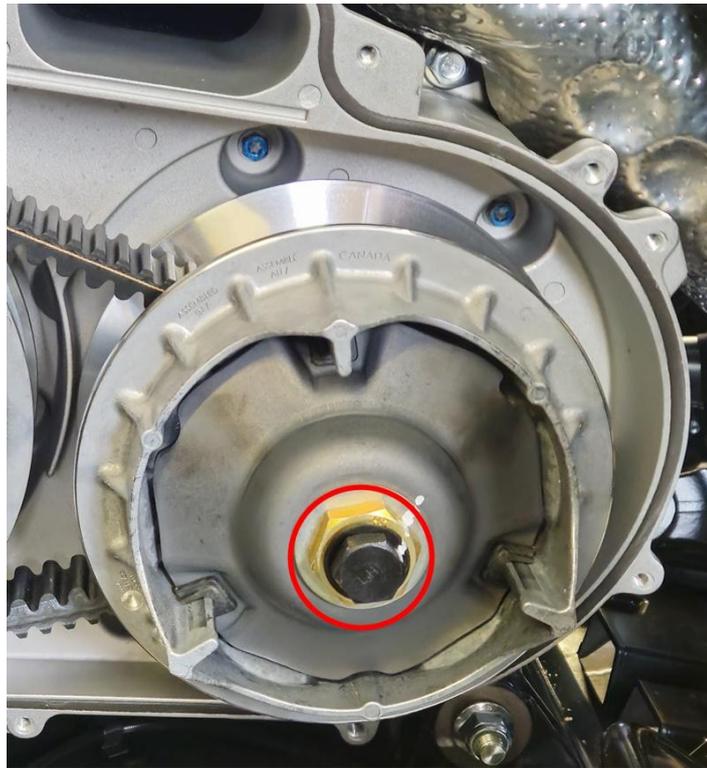
19. Re-install the primary clutch in place.



20. Reinstall the back plate nut. Do not tighten it. Use thread-lock glue. **NB! Nut has left hand thread!**



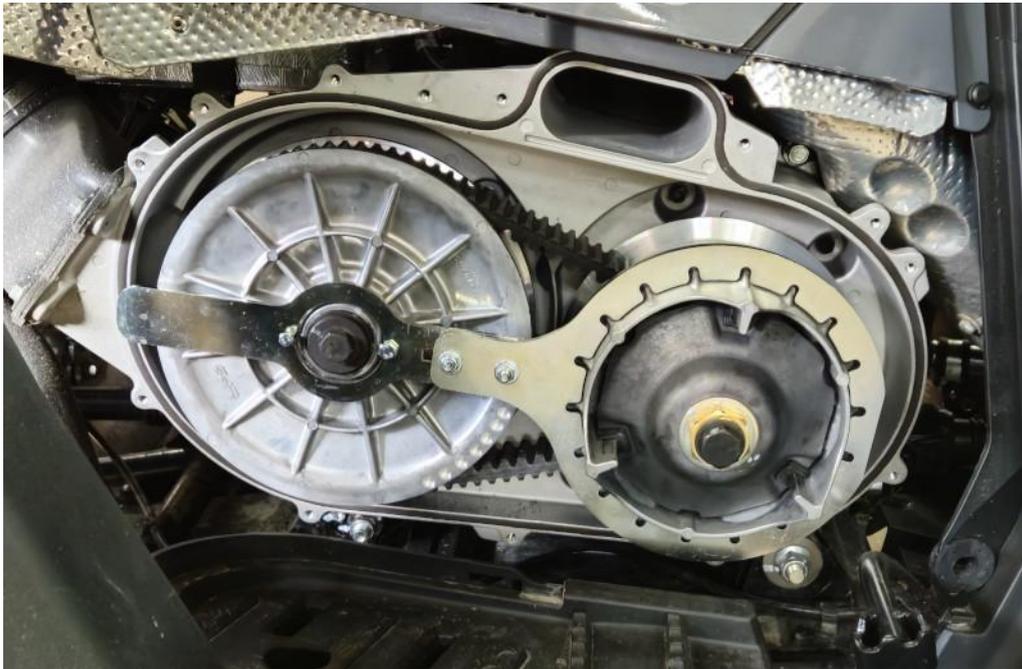
21. Reinstall the Clutch Bolt. Do not tighten it. Use thread-lock glue. **NB! Bolt has left hand thread!**



22. Reinstall secondary clutch bolt. Do not tighten it. Use thread-lock glue.



23. Install the clutch holding tool (80.1700)



24. Tighten the bolts / nuts.

a. Use 32 mm wrench and tighten **primary clutch back plate nut** to 110 Nm.

NB! Nut has left hand thread!

b. Use 21 mm wrench and tighten the **primary clutch bolt** to 110 Nm.

NB! Nut has left hand thread!

c. Use 18 mm wrench and tighten the **secondary clutch bolt** to 80 Nm

25. Remove clutch holding tool. Check that everything is secured and install CVT cover back.

You are ready to test drive!

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