

Dalton Black / Violet - Optional Secondary Spring

Optional Dalton Secondary Clutch Spring- Can Am Outlander / Renegade /Maverick, etc. See applications described on Dalton website and in the appropriate instruction manuals. Most often for very large tires or very high elevations. Only use where specified.

The DB1000/850 series clutch kits include adjustable flyweights. When using this optional secondary spring, follow the “flyweight set up guide” of your clutch kit instruction manual for the tires and applications.

For some kits, there is a section in the instructions of the clutch kit for **different flyweight settings when using this spring**. Read “set up guide” carefully and be certain you are using the guide for this spring.

This spring is a torsion/compression spring and is specific to the models described. This spring is for use with extreme mud tires in larger sizes. Normally, for smaller tires and applications, the best set up is to use the stock secondary spring that came on your 1000/850 model or as otherwise specified in the instructions of the clutch kit.

FAQ : *“I’m a quite heavy trail rider and do some mud with 27-28” trail mix tires, and I plow snow in winter. I like the best I can get, and more parts is usually better ...so should I add this secondary spring ?”*

ANSWER : *No. if we do not specify to use this spring, the stock secondary spring or what is described in the kit, set up as the instructions say, is more efficient and the best for your application. Our kits and components have descriptions based on our test results.*

WARNING

Read this before installing

Clutch components should only be installed by factory trained mechanics and service personnel with a complete knowledge of snowmobile / ATV Variable Rate Belt Transmissions. Make sure your clutches have been properly inspected for fatigue, cracks, wear, etc. ATV clutches are assembled under spring pressure. **DO NOT** attempt to disassemble clutches if you are not qualified, serious personal injury could result. Special holding tools are required to torque clutches properly.

This is a performance kit and is intended for the use of Experienced Adult Riders, who are trying to obtain a higher level for racing, etc. . Dalton Industries has no control over the use or misuse of these components and assumes no responsibility for any injury or damage.

Note: Installing the secondary spring is best done with the help of an extra set of hands. Some models have a spring that is also very strong compression. Consult service manual for more detailed procedure.

Continued

Installing Secondary Spring - Can Am 1000/850 models (Dealer recommended)

- 1) After removing CVT covers and preparing the vehicle for installation (after step #7 in the DBO 1000R clutch kit instructions) remove the belt and prepare to remove the center bolt for the secondary clutch. Use CAUTION, as the secondary is under spring pressure.
- 2) While holding pressure against the secondary clutch, remove the center bolt and slowly release the clutch.
- 3) As you can see, this spring is a combination of compression and “torsion” style. This type of spring is very sensitive to change. Spring design methods can create very different effects on both the upshift and backshift pattern of the clutch system. This spring is of a different wire diameter and design. Take note of the tangs on the spring, their locations in the helix and the clutch. It can help to make a mark for later reference, as it is very important to be sure the male/female points of the helix are engaged correctly in the clutch.
- 4) Change to the new secondary spring. Make sure that the helix is all the way onto its splines and that the tangs of the spring are correctly situated on each end.



- 5) Line up the helix to the corresponding voids in the clutch ramp. You will see that the spring has a slight bit of preload “twist” built into it. The clutch needs to be turned just slightly clockwise to align the helix points properly with the voids in the clutch. You can feel the voids by hand. It is important to make sure they stay aligned as you tighten the clutch back on. Next, apply blue loctite to threads and assemble.
- 6) ***Secondary must be torqued to factory spec of “15 ft/lbs, + 180 degrees rotation”** This is a common torque method for some critical engine components. A degree wheel is applied to the torque wrench and after it clicks 15 ft lbs (+/- 1 lb), you add 180 degrees of rotation of the bolt tighter (+/- 5 degrees). Consult factory service manual.
- 7) **Failure to torque this clutch properly can result in the clutch coming off and serious damage could result. BRP recommend a new secondary clutch bolt after each removal, this is a torque to yield type of bolt. BLUE loctite 243 is recommended on the threads of the bolt before installing.**

* On Maverick models there was a bulletin (Can Am service #2014-6, May 2014) that updated the single secondary clutch bolt to a stud assembly with two locking nuts. Be sure to confirm the update and see new torque procedure. The driven pulley first nut is still the same above torque procedure, then a lock nut (26 ft lbs for the second nut). Some new models may come with the stud and double nut assembly. Always confirm torque procedure in your dealer service manual.