NOTE: VKB HQ tightened the frictioner of the dry clutch to prevent it from loosening during shipping. So before you connect your Gunfighter to your PC, you will need to adjust the dry clutches for both pitch and roll axes accordingly.

NOTE: The Gunfighters ship with cams #10 (soft center detent for both axes), and springs #20 (standard strength) factory installed.

All Gunfighters come with the following cams in the box:

- #10 soft center detent (factory installed)
- #30 center detent

All Gunfighters come with the following springs in the box:

- #10 soft
- #20 standard (factory installed)
- #30 medium
- #40 strong

The Gunfighter Pro comes with an additional spring to support the extension:

• #50 - extra strong

The TM Warthog Adapter for Gunfighter comes with the following cam:

• "W" - to support the added weight of the TM Warthog grip

Accessing the Gunfighter gimbal (e.g., to replace cams or change springs):

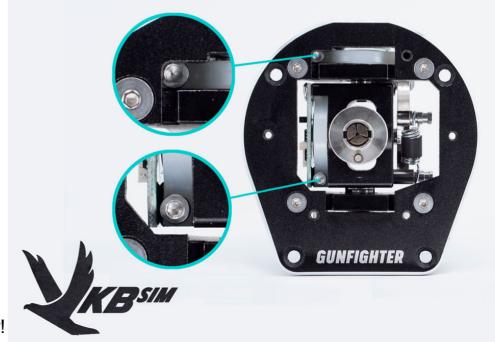
- 1. Disconnect the grip.
- 2. Unscrew the 5 screws on the dust cover ring.
- 3. Remove the ring and rubber dust cover.
- 4. Unscrew the 4 screws on the bottom plate. Remove the bottom plate.
- 5. Disconnect the 4-pin connector from the base.
- 6. Unscrew the **outer 4 screws*** on the top plate.
- 7. Remove the gimbal from the base.
- 8. When done, assemble in reverse order.



*Note: The inner 4 screws are fixed in place with locktite and are not meant to be removed by the user!

Gunfighter Dry Clutch damper adjustment: (Refer to pg. 3 on how to remove the dust cover)

- 1. Rotate the vertical nuts (see image) to adjust the damper force per axis*
- 2. Install the grip, check the operation and 'feel' of the gimbal.
- 3. If necessary, re-adjust the damper to your liking.
- 4. Reattach the dust cover and grip when done.



^{*}Attention! Do not exceed the tightening force of the damper!

Replacing the standard strength spring (#20) – do this for each axis: (Refer to pg. 3 on how to access the gimbal)

1. Use needle-nose pliers to install or remove the spring for each axis.

Replacing/Installing the stronger springs (#40; #50) – do this for each axis:

- 1. Unscrew the M4 nut (near the ball bearing).
- 2. Push the cam up carefully and pull the ball bearing

 Note: Removing the bearing first relieves some pressure on the springs.
- 3. Pay attention to the position of the washers near the ball bearing in oder to reassemble in correct order.
- 4. Replace the spring using needle-nose pliers. If necessary, two springs can be installed on each axis' cam. **Attention!** Carefully install the springs! Careless installation may scratch the working surface of the cam.
- 5. Push the cam up and carefully reinstall the ball bearing.
- 6. Install and tighten the M4 nut.

Replacing/Installing cams – do this for each axis: (Refer to pg. 3 on how to access the gimbal)

- 1. Remove the springs.
- 2. Unscrew the M4 nut and detach the cam from the gimbal.
- 3. Pay attention to the position of the washers between the cam and the bearing.
- 4. Replace the cam, tighten the M4 nut.
- 5. Install the springs.
- 6. When done, assemble in reverse order (pay attention to the washers between the cam and the bearing, as these washers need to be installed in the same location as identified in step 3 above!)

For additional support, please visit the official VKB forum:

http://forum.vkb-sim.pro/viewforum.php?f=24