



Installation Instructions

829 YZ 450F 03-05 / 827 YZ 250F 03-09

Bolt-on Flywheel Weight

Carefully read these instructions before you begin installing the flywheel weight. If you do not have the mechanical abilities or proper tools take it to a professional who can do it right. If the flywheel weight is not installed and maintained according to these instructions it could result in engine damage and/or a serious crash.

1. Remove the ignition cover from the left side of the engine after you drain the oil or lay the bike on its side. Take care not to tear the gasket or have a new gasket available (we supply one gasket, but you need two).
2. Remove the flywheel nut. The nut is a normal thread, so turn it counterclockwise to remove. Nut removal can be tricky because the whole flywheel assembly turns when you try to loosen the nut. You will have to use your own ingenuity to find a way to lock up the engine, but we have listed some ideas below. Some of these **could cause damage** if you are not careful, use at your own risk.
 - A. Put a 5mm T-handle Allen wrench in the engine case bolt at the front of the engine and hold it tight. As the engine rotates the counter balancer will bump into the Allen wrench and stop the rotation.
 - B. Use an air impact wrench to loosen the nut, you should not need to lock up the engine.
 - C. Put the transmission in high gear and hold the rear brake on. Be careful, if you over torque or get too rough you could break your brake caliper bracket.
3. Remove the washer that is underneath the flywheel nut. **Never use a washer with the flywheel weight.**
4. Check the end of the crankshaft to make sure it is not bent and that the threads are not damaged.
5. Bolt on the special tool to the outer face of the flywheel using the two 1/4" bolts.
6. Install the flywheel weight by screwing it clockwise onto the end of the crankshaft. Make sure it makes solid contact against the ignition flywheel at the same spot where the stock nut makes contact. Use a 1/2" drive torque wrench to tighten to approximately 40 foot pounds. (See step 2 for engine lock up techniques.)
7. Remove the special tool and two 1/4" bolts. Keep the special tool in a safe place in case you need to remove the weight at a later date.
8. Screw in the four set screws and just barely snug them down. Finish tightening them by working back and forth diagonally (like torquing a head) until they are all equally tight. Tighten until you get about 4mm (3/16") flex on the end of the supplied hex key. **It is very important to recheck the set screw tightness after the first 1/2 hour of riding and on a regular maintenance schedule of about every 8 to 10 hours of riding.** Do not remove the set screws, the threads have been staked (punched with a special chisel) to prevent them from coming out. We do not recommend thread lock compound (Loctite) on the set screws because it may cause them to seize.
9. Install the ignition cover using the aluminum spacer plate with a gasket on each side of the plate.
10. Maintenance - A smart rider checks all of his nuts and bolts regularly. Make checking your flywheel weight and tightening your set screws part of your regular maintenance. If you do a lot of huge jumps, that is going to prematurely stress your flywheel weight (along with everything else on your bike) and you should check it more often and be aware that it may shorten the life of your flywheel weight.

WARNING: This product will change the power characteristics of your engine. Adding flywheel weight results in smoother, more tractable power delivery by causing the engine to rev less quickly (slower increase in engine RPM). If your engine has low power because of engine wear, lack of maintenance, improper jetting, engine modifications, or any other reason, adding flywheel weight could exaggerate the problem causing bogging or hesitation. **Use caution when riding until you are fully familiar with the power changes.**

Guarantee - Since we have no control over installation, application, or use of our flywheel weights they are sold as is. No warranty is expressed or implied. Steahly Products Inc. may, at our discretion, repair or replace a flywheel weight that we believe is defective, however, our liability extends only to the flywheel weight and does not in any event include incidental or consequential damages.

