

# Calibration

## Calibration - Primary setup for 07 440/800

I need a set-up for my primary on my (07 440 / 05-800 engine). I'm using the 440 primary and don't know where to start to get it to work with the 05 800 ptek motor. I like the set-up and what it can do in your bud "bigdrinkerca" you tube video of his 07 800xrs with a dj clutch kit (which I have for my project!) but i need to do something about the primary. any help would be great!! James

Hi James, Remove the 427 or 435 ramps and pick up any of these 3 sets of ramps - 413 or 414 or 415. Use the primary spring pink/pink 230/350 BRP #415074800. with the 1.75 track and your present gearing you can go in clicker 3 with 23g for start and go from there. If you find the rpms are low, then reduce the flyweight down to 22 or 21.5. -Joey

## Calibration - Squawking and Rattling under the hood

Question) I don't know if this is an issue but I am getting a lot of squawking and rattling from the primary. I have pulled it apart and everything looks good.

Answer) Squawking from under the hood is usually from over tight belt deflection which will cause high heat on the primary shaft when the engine idles for a long time. OR, can be caused from drastic misalignment to which you'll observe black ring colors down at the bottom of the primary on one sheave or another or both sheaves.

Rattling under the hood can be caused from the engine being at too low of idle rpms, thus causing vibration forcing the TRA levers to displace back and forth at the same frequency of engine power pulses, prematurely wearing the TRA lever arm bushings. OR, can be caused from the roller washer thickness is too thin or the washer's are worn thin and allow the roller to vibrate back and forth with a displacement causing the rattling noise. I would check roller clearance between the washers and lever forks. OR, can be caused from excessive piston to cylinder wall clearance. The piston rings slap the bottom of the cylinder every engine down stroke = Remove primary clutch and start engine up and let idle. If you hear the same rattling, shut engine off, take to an engine technician and perform a leak down test.

## Example Calibration Procedure

The grams and clicker values are used as an example for lack of better numbers. The values are for illustration only to show a direction on a way to calibrate.

Example 1 engine; 2002 800 is known to run at 7850 rpms. Knowing tachs read about 150 rpms high then would calibrate the flyweight so you would observe 8000 rpms on the tach. 7850 actual = 8000 Tach.

One way to calibrate; If you are aiming for running a final calibration in clicker 3(Three).

You could set 17g in clicker 2(two) and make a full throttle pull and watch for about 7800 rpms on the tach.

When you reach 7800 rpms under full throttle in clicker 2 and the engine won't rev higher, then at that time you are near correct of flyweight mass to be able to run in clicker 3(three)

Achieving (7800 rpms) in clicker 2(two), then you would simply clicker up to 3(three) and now go do a pull and should be able to hit 8000 on the tach and not have to calibrate anymore.

Example 2 engine: 2007 800 known to run at 8150 rpms. Knowing tachs read about 150 high, then would calibrate the flyweight so you would observe 8300 rpms on the tach.  $8150 \text{ actual} = 8300 \text{ Tach}$ .

One way to calibrate; If you are aiming for running a final calibration in clicker 4(four). You could set 17g in clicker 3(three) and make a full throttle pull and watch for about 8100 rpms on the tach.

When you reach 8100 rpms under full throttle in clicker 3(three) and the engine won't rev higher, then at that time you are near correct of flyweight mass to be able to run in clicker 4(four)

Achieving (8100 rpms) in clicker 3(three) then you would simply clicker up to 4(four) and now go do a pull and should be able to hit 8300 on the tach and not have to calibrate anymore.