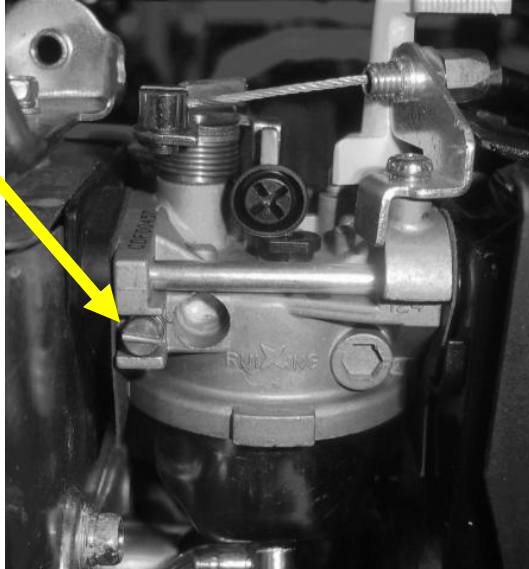


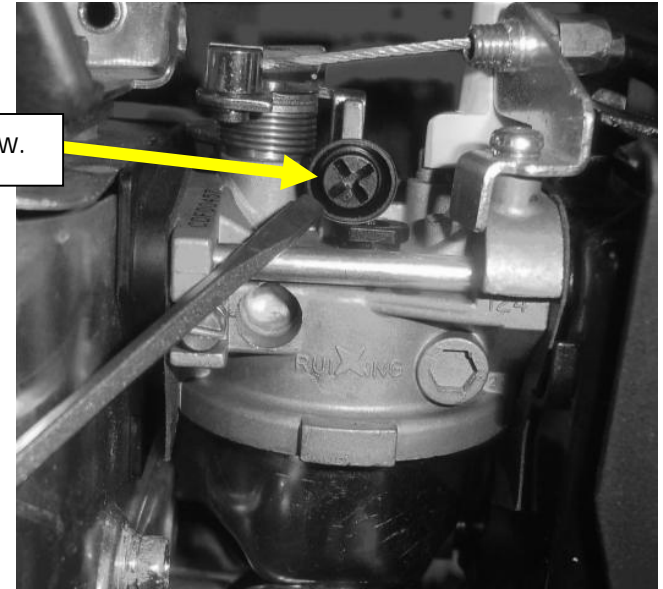
2hp engine tuning tips - 02/2/2010

- Low speed air/fuel mixture adjustment (to achieve desired throttle response).

The adjustment screw shown here is a low speed mixture screw located on the side of the carburetor. Factory setting is about (2) full turns out. This can be adjusted to fine tune your throttle response. When adjusted, you may need to readjust the idle speed screw shown in next photo.

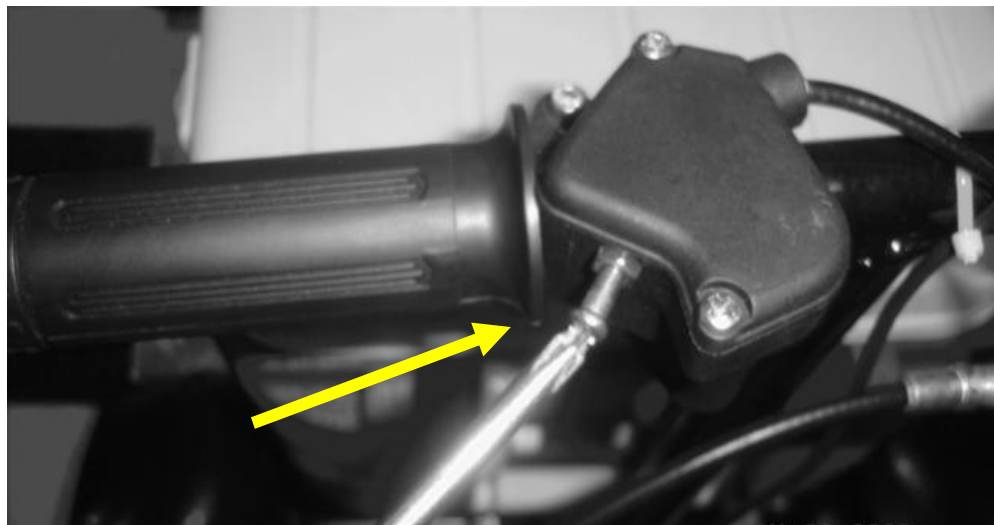


Idle speed screw.



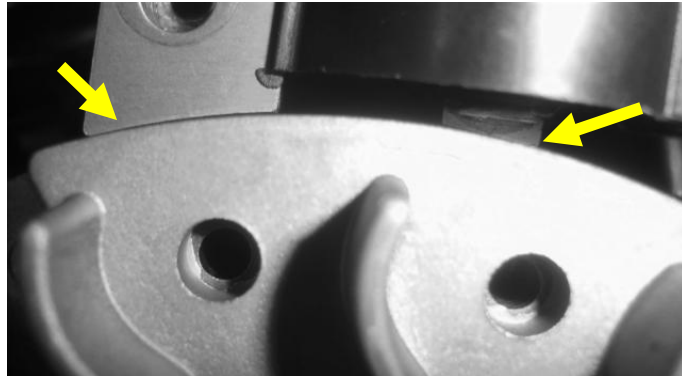
- Throttle limiter (to limit engine speed and power).

You can limit your throttle lever travel to in turn limit engine speed and power output. This is done on the throttle lever located on the handlebars. Simply loosen the adjustment jam nut, then using a Phillips screwdriver, turn the adjustable stop screw inward to reduce throttle lever travel. Then retighten jam nut.

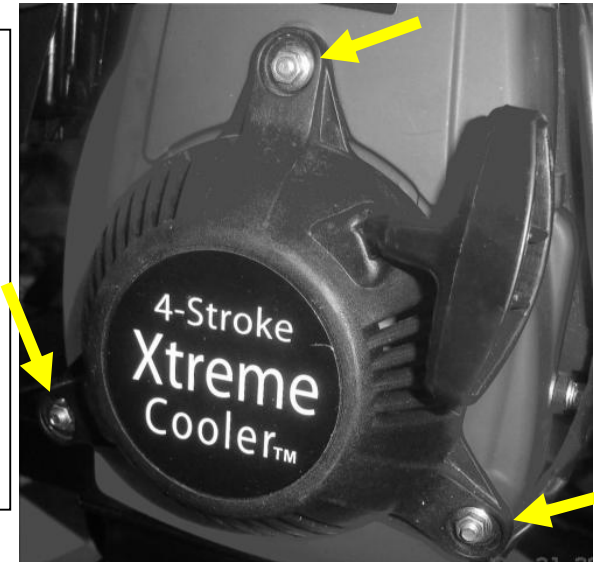


- Winter weather tuning of coil gap (for single digit or lower temperatures).

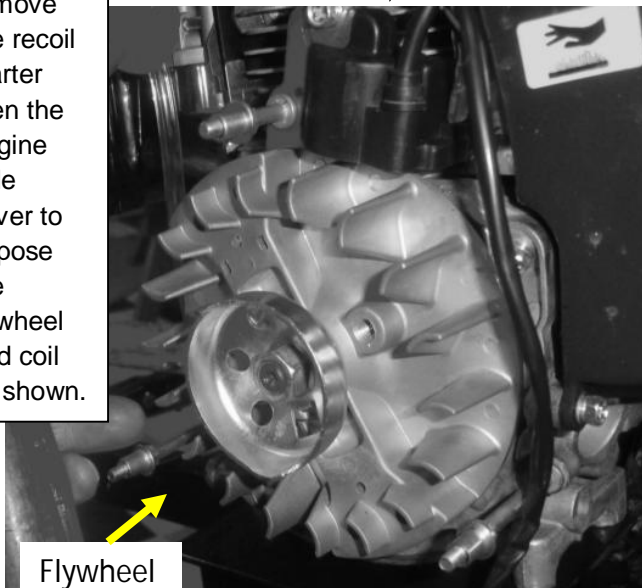
In Xtreme cold, the flywheel might actually shrink enough to cause too much gap between the ignition coil and the flywheel (see arrows). This can reduce spark energy which can cause skipping at high engine rpm.



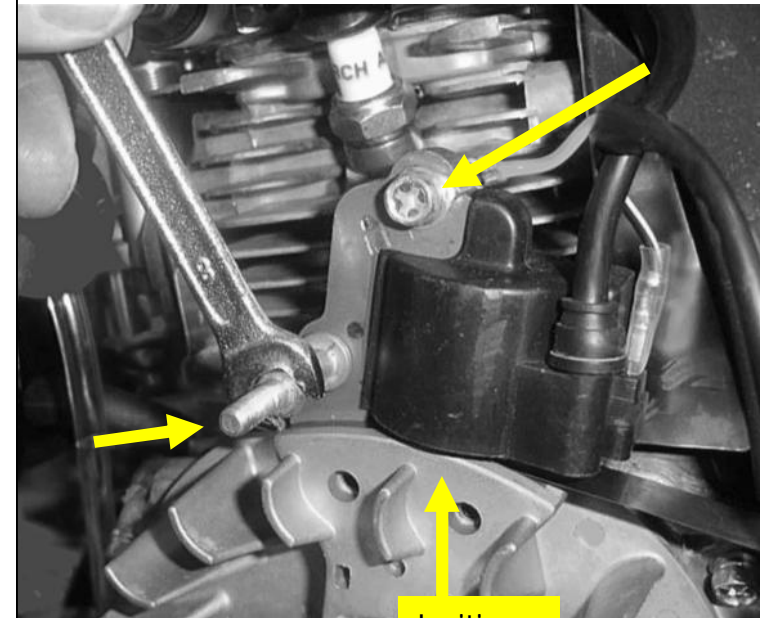
1. This coil gap can be checked and adjusted if needed, but needs to be done in a normal temperature work environment. Do by first unplugging the spark plug wire, then removing the (3) recoil starter mounting nuts shown here.



2. Now remove the recoil starter then the engine side cover to expose the flywheel and coil as shown.



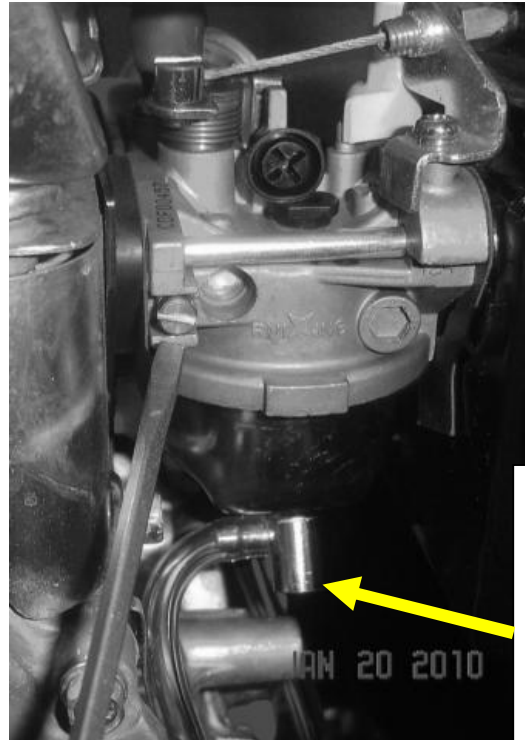
3. Next rotate the flywheel so the flywheel magnets are about to pass under the ignition coil. Lay a business card or a folded over dollar bill fully over the magnets (this equals an .008" shim for a gap gauge). Rotate the flywheel (holding shim in place) under the bottom two posts of the coil (where pointing to in the 1st photo). Next loosen the (2) coil mounting screws shown (one stud type, and one Phillips screw type) to allow the coil to drop tight onto your shim. The magnets will pull hard & hold the coil tight against the shim. CAREFULLY re-tighten the lower and upper mounting screws. Tighten screws firmly but **DO NOT OVER-TIGHTEN** or you can strip or break the engine casting. After tightening, rotate flywheel to remove your shim. Rotate flywheel completely around again and check to see if your shim will just or almost fit between the flywheel and each coil post. If OK, reassemble and connect plug wire.



Ignition coil

- Change fuel filter regularly, and drain float bowl if you find water in your gas.

Change your fuel filter regularly. If dirt gets into your carburetor the engine can quit or be difficult to start. You can purchase from XtremeCoolers.com or one like shown from your local parts supplier.



If your carburetor gets water in the bowl, the engine can quit or be difficult to start. If this happens, you can drain or remove the float bowl to clean it. Drain by loosening the drain screw within the metal tube extending down from the bottom of the float bowl. If you choose to remove the bowl, be careful not to pinch or offset the upper bowl gasket during reassembly.