HOW TO REMOVE FLYWHEEL/STATOR PLATE

Tools needed to remove flywheel:

- 5mm Allen wrench (fan housing bolts)
- 6mm Allen wrench (fan pulley)
- flywheel puller or harmonic balance puller
- 24mm socket (flywheel nut)
- impact wrench if available (makes job much easier)
- 4mm Allen wrench (stator plate bolts)

Procedure:

1. Remove cover plate or recoil starter.
2. Remove fan pulley.
3. Remove flywheel nut and washer.
4. Remove fan tower or flywheel cover, the fan tower will have five 6mm bolts to remove, the flywheel cover on a free air engine will have only four 6mm bolts to remove.
5. Carefully remove the fan tower or flywheel cover to the left, keeping in mind that the stator late wires are still attached to the ignition on the piece set aside to the left.
6. Attach flywheel puller to the flywheel carefully screwing in the bolts. Be careful not to turn the bolts in too far, there is a plastic plate beyond the threads of the hole, and can be damaged if the bolts are turned too far. Also make sure that the bolts are all placed in evenly so that you will pull evenly on the flywheel.
7. Using either your impact wrench or ratchet tighten the puller bolt to press against the end of the crank (flat). Continue to tighten until the flywheel pops off (it will take a large amount of pressure to remove the flywheel).
8. To remove stator, disconnect all ignition wire leads, (there will be 2 or 4 shrink wrapped connections to disconnect), (these connections will he behind your coil assembly on a fan cooled engine). Also disconnect the 2 yellow wires connected to your regulator rectifier and or tach, remove two 5mm bolts and the stator plate will be free to remove, (you may need to carefully pry the stator plate out).

CLEANING PARTS FOR REASSEMBLY

With engine tore down completely this is also a good time for a decarbon.
You must clean all parts thoroughly before re-assembly, this is also a good time to inspect parts for any damage. The process of cleaning can be done a few different ways including: ultrasonic, chemically, and physically scraping. Make sure when using chemicals that they are safe. to use on the material being cleaned (aluminum). Once your parts are completely cleaned and dried you will be ready for reassembly.
SEIZURE ALUMINUM DEPOSITS
Slight aluminum deposits on the cylinder walls can be burned off with acid if needed. If there is scoring of the nikasil after aluminum is burnt off the cylinder will have to be replaced. DO NOT HONE OR DEGLAZE A NIKASIL CYLINDER EVER.

BOTTOM END REASSEMBLY

Materials needed:

- - assembly lube (use straight 2 cycle oil)
- - Loctite 518, 574 or equivalent
- - Acetone for cleaning mating surfaces
- - Loctite 242 or 243 blue for fasteners

Tools needed:

- - 3/8" drive 6mm Allen wrench (must fit your torque wrench)
- - W137 seal setter to set mag end seal properly
- - Plastic or rubber faced hammer
- - Torque wrench 0 - 250 in/lbs.