



tech tips

How to Remove a Flywheel

Tech Tip #004
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Note: Vespas have 2 different style of flywheels. One type is self-extracting and the other needs a puller. We explain both below.

Self-Extracting Flywheels

Most pre-1970 Vespa scooters have the self-extracting type. This is a very easy flywheel to remove. In the center on the flywheel you will see a nut. This is the nut that holds the flywheel on. The nut is protected from coming off by a c-clip. You can find this just in front of the nut. The c-clip is held in a small groove in the center hub in the flywheel.

To remove this type of flywheel you will need a socket set and a wrench set, and they both need to be metric. You will also need a hammer, a pair of c-clip pliers or a pair of needle nose pliers, and a 8-12 inch length of rope that will fit down the spark plug hole. (Okay, I know that you are wondering, "rope—what's he talking about?" I promise, just be patient and all will be revealed...)

Now we are ready to remove the flywheel!

First, remove the fan shroud and spark plug. (This is the rope comes in... ready?)

Turn the flywheel counterclockwise so that the piston is 3/4 of the way up the cylinder.

Next, gently push the rope into the cylinder head so that you have about 4-6 inches in.

Now turn the flywheel counterclockwise some more. (If you have done it right, the flywheel will not fully turn; it will stop part-way. The rope will keep the piston from going all the way up the cylinder and will keep the flywheel from turning and then you can loosen the nut that holds it on.)

Now we can loosen the nut that holds the flywheel.

Loosen the nut and turn it so that it backs into the c-clip. You will need to turn it tight against the c-clip. Take the hammer and strike the flywheel around the center hub. The best place to do this is on the rivet heads that surround the nut. Three to four sharp blows with the hammer should do it. (a word of caution—don't try and be Sammy Sosa and hit the flywheel as hard as you can.... you might break it in two!)

Next, turn out the nut some more and the flywheel should "pop" off. (if you are having

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trouble, just repeat the steps above and it will eventually come off... don't worry, just be patient.)

Puller Flywheel

To remove this type of flywheel you will need to purchase or borrow a Vespa flywheel puller. You will still need to do the rope trick above to remove the nut.

All you need to do is thread the puller into the flywheel (put some WD40 or oil onto the puller threads so that it will go in easier.)

Next, hold the puller by the base and turn in the main bolt on the puller and presto!Off comes your flywheel!

I know this all sounds easy on paper (or cathode ray) so, if you need help just call me on the TECHLINE (773-271-2267) and I will be happy to walk you through it.

Happy Scootering
~ Dr. Vespa