

# Changing Oil

Changing your oil is the easiest maintenance you can perform on your Gold Wing. But it is often neglected. There are two parts that have oil that needs to be changed: the engine and the final drive.

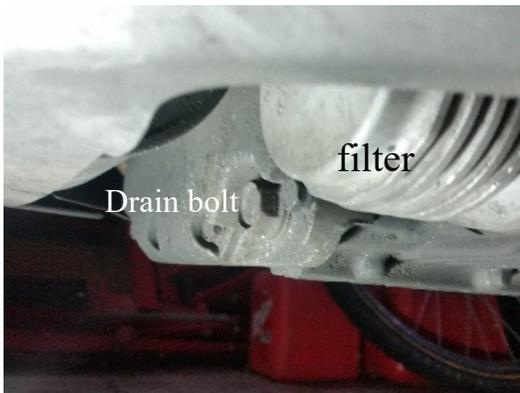
Honda specifies that the engine oil and filter should be changed every 8000 miles and the final drive oil every 24,000. But you should replace the final drive oil every 8000 miles. This is because metal shavings can tear up the seals in the final drive causing it to fail. Replacing it every 8000 miles mitigates this issue.

Your choice of oil need not be difficult. I use Shell Rotella T6 Full Synthetic 5W-40. This is certified for motorcycles. I use it in both my bikes. Walmart carries it. So it's a good choice if you prefer synthetic oil. If you do so you can extend the drain interval somewhat as synthetic oil maintains its viscosity longer than dino oils. But there are the issues of suspended contaminants and acid neutralization, etc. So I don't recommend this. If you use dino oil, any good quality 10W-40 oil will do. If you have a newer wing that uses 30 weight oil you're on your own. You can't use an oil that is Energy Conserving so you may be stuck buying a motorcycle oil.

As for oil filters there are many choices. The bike takes a 6606 size filter. The Honda filter is a good quality filter. Motorcycle oil filters do not necessarily have better filtration media but they do have thicker cases since they are more exposed to the environment than are car filters. I have used many different filter brands from Fram to Super Tech and haven't had a problem with any. Please don't look at websites where people cut open filters to rate them. The internal construction has nothing to do with their filtration ability.

Final drive oil is an easy choice. I use Mobil 1 75W-90 synthetic gear oil. Any gear oil in that viscosity range is fine.

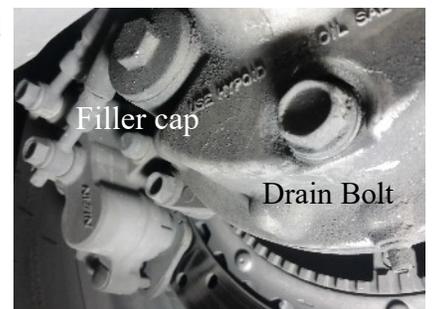
Now to changing the engine oil. You'll need an oil filter wrench of your choice and a 17 mm wrench for the drain bolts. The engine should be at operating temperature. I usually drain the oil just after a ride. With the bike on the center stand, lay down on your back on the left side with your head where the lower cowl meets the engine. You will see the filter with the drain bolt to its right. With a drain pan nearby, loosen the drain bolt and the oil filter.



Put the pan in position then first remove the oil filter. I do this first so I don't drop the oil filter into a pan full of oil. Then remove the drain bolt and drain the oil. Put some clean oil on the new filter's gasket and install it until hand tight. Replace the aluminum drain bolt crush washer and install it. I usually tighten these by hand. If you prefer to torque these you'll have to remove the lower cowl's side bolt and maybe the first bolt on the front to provide room for a torque wrench. Torque values are 20 lb-ft for the filter and 25 lb-ft for the drain bolt.

Remove the right engine side cover and dip stick. Pour in the oil using a funnel. Capacity after a filter change is 3.9 qt's. So I pour about 8 oz of oil out of a one gallon bottle then pour the rest into the crankcase. Run the engine again then let the bike sit overnight. Check the oil level and add more oil until it's full. To check the oil level remove the oil filler dipstick, wipe it off then put it back in without screwing it down.

For the final drive oil, buy a hose at an auto parts store that fits the gear oil bottle. I have one that has a valve at the cap and a plug at the end of the hose that screws on to the bottle. This can remain on the bottle until you use up the oil. Put a drain pan under the final drive and remove both the drain bolt and the wide diameter filler cap with the 17 mm wrench. Give the rear wheel a few turns to make sure you get out all the oil. When drained, clean the metal shavings off the end of the drain bolt (it is magnetic) and install it with a new crush washer. To refill the final drive, put the end of the gear oil hose into the opening and squeeze the bottle filling the drive until oil starts to spill out of the opening (about 4 oz.). Give the wheel a few turns and do this again. Install the cap with clean oil on the gasket. Torque values are 9 lb-ft for the filler cap and 14 lb-ft for the drain bolt.



Ellary Kahan