

Front Fork Fluid Change

While most manuals show disassembly and repair on GL1800 front forks they mention nothing about changing the oil or how to go about it. Having done this many time I have developed my own way (*lazy man's*) quick and easy way of changing the fork oil. Why change? first off the original oil is 9w which is just to light. The front end tends to bottom out on large bumps and rebound harshly on small ones. More dampening is the answer. I change to 20w engine oil slightly more viscosity (*in my opinion*) helps keep the front end under control. Most bikes I have worked on in the past have drain plugs on the side or rear of the fork tube lowers which makes things much easier. However the 1800 drains are above the axle shaft so removal of the wheel is mandatory. I thought about drilling in a small drain hole and then adding a plug but pulling the wheel is easy so I strayed from that idea.

Tools you will need:

1. 12 & 22 mm socket
2. 5 & 6 mm allen wrench
3. phillips screwdriver
4. large straight screw driver
5. drill and 1/16th and 1/8th inch drill bits
6. air compressor
7. shop vac (*unless wife is not home then use her dust buster*)
8. pan to catch oil
9. 1 qt 20w oil
10. magnet
11. floor jack

The following procedure has been done on a **NON-ABS** 2001 - ABS models require more work to remove the front wheel - everything else is the same.

For those who question everything that is not done by the book and feel the need to get on all the user groups and "save" everyone from what they feel is "changing the design and handling properties of the motorcycle in a unsafe manner - Please EXIT now!

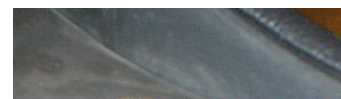
Put the bike on the center stand and lift the front wheel off the ground using the floor jack, lift just until the rear wheel touches.

Step #1:

Dash panel removal



Remove the speaker covers by pushing down on the top lip and pulling toward the rear. They pop off real easy so you don't need to use much force.



Pull out the plastic pin at the top corner of the speaker housing - pulls up about 1/8 inch.



Remove the two lower metric allen screw (5 mm) If you have a magnet probe like the one shown use it to remove the screws or you can magnetize a screwdriver and use that.

Remove the key trim piece it just pulls



up and removes easily. No need to remove the two phillips screws.

The dash panel will come loose now except for the single wire under the Mode switch panel - use a small screw driver to open the latch on the connector and pull it apart - This is the hardest part of this whole job - this single connector must hold the entire frame together - at least that is the way it is designed. You may elect to snap off the latch so it is easier next time - your call.

Now that the dash panel is off you can pull the triple cover - remove the two phillips screws and bend / twist the cover out. Now you can see the tube tops.



Front wheel removal:

Pretty easy here - remove the 4 6 mm allen screws on the front fender (A) and fender drops right off. Remove the 4 5 mm allen screws on the chrome side covers and they are off.



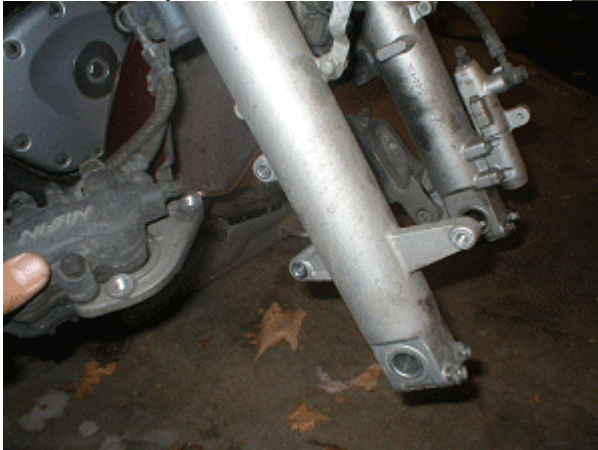
Loosen the 22mm cap bolt and remove

Loosen the 12 mm pair of pinch bolts - no need to remove just loosen is fine.

other fork tube also.

Loosen the 12 mm pair of pinch bolts on the

NON - ABS models , remove the right side brake caliper (*right side if you are sitting on the bike*) 2 - 12 mm bolts, do not remove any hoses just the two bolts. pull the caliper out of the way.



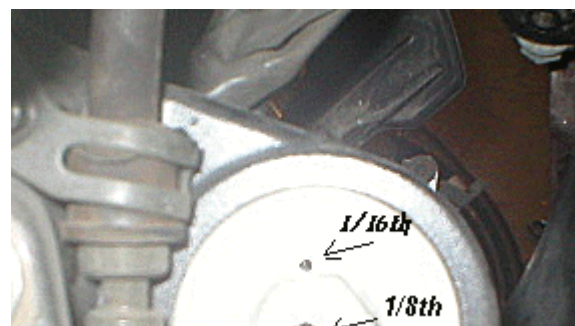
Using a phillips screwdriver in the axel end hole twist and pull the axle out - make sure you support the wheel so it does not drop down.

Now once the axle is out - hold the loose brake caliper out of the way and gently lower the front wheel while rolling it out forward. Use care to ease the wheel around the left caliper so you don't scratch the rim on the way out - if your worried about that just put some masking tape on the rim area.

To help with reinstalling the wheel - use a screwdriver to spread the brake pad apart. Do both sets.



Use a 6 mm allen wrench to pull the drain bolts out of the bottom of the fork tubes. You can see the bolt by looking up through the fork end. Make sure pan is under tubes as the left one will drain as soon as the bolt is out.



Removal of the fork caps can be tricky and putting them back even worse as the springs are under compression. To get around this I just drill a 1/8" hole straight down the center of the cap. Drill another one just above the cap nut and angle towards the center slightly. You will have to drill down an inch or so. Use the vacuum to keep chips cleaned out. The large hole will be used to squirt oil into the tube and the small one is the air vent.

You may have to use some air on the right fork to force the oil out - use only 20 lbs or so no more or you will blow out the seal. Once done reinstall the bottom drains. Now using a standard pump type oil can (5 oz or so) inject 16 oz of oil in the right tube and 18 oz into the left. This will be slightly more than a qt so have some extra oil around.



Use a #10 sheet metal screw and a #6 sheet metal screw to cap the holes - they will self tread - don't force them in or they will break off just work them a little back and fort and cut them down if they won't go - there is almost no air pressure on these bolts and it is NOT necessary to be air tight. The only reason to install the caps is to keep dust & water out and oil vapor from leaving the forks.

Last Thing: Put the wheel back on and fenders etc. - Just reverse the procedure and it's done. Total time this took me was just over an hour. I also took some time to polish the front rim with **Mothers Mag Cleaner**. Now that the holes are drilled the next time will be much faster.

Test Drive results: Drove down the road a bit and tried to hit as many bumps as possible. Going with 20w was just a guess based on past experience. I think this is the correct mix as the ride was soft and front did not bottom out as it had with the light oil. Other option is to go light with type F transmission oil but the heavier oil seem more suited to Goldwings. This same change makes a dramatic change on the 1500's as they are almost unridable with the stock light oil.

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