

Clean And Cool

BY STEVE LITA

DON'T FORGET ABOUT YOUR ANTIFREEZE

IF YOU RIDE A WATER-COOLED BIKE, WHEN was the last time you looked at the green goo in your radiator? As long as the bike runs at the proper temperature, you probably don't think about it much. But refreshing the coolant from time to time is a quick and easy process, and it will help ensure that you get the best performance out of your engine.

Today's motorcycle coolants generally have a long service life, but they still lose potency over time and can pick up impurities. That's why your service manual will likely call for replacing the coolant at certain intervals. So, we've penned this article to give you some helpful tips on getting the job done.

You can check the condition of your coolant with an inexpensive hydrometer, which tests the specific gravity of the fluid to measure its effectiveness. In general, you'll want your coolant to work in the range of -20 to $+240$ degrees F, but consult your owner's manual for specifics. While you probably don't ride in sub-zero conditions, if your bike is stored in a cold garage over the winter, a deteriorated coolant may freeze and cause the block, head, or radiator to crack.

Which coolant should you use? There are as many opinions on this as there are people who ride water-cooled bikes. Search any online owners forum, and you're likely to end up in the middle of the Next Great Motorcycle Coolant Debate. For my bikes, I only use motorcycle-specific coolant purchased at my local dealer. It costs more than car coolant, but my bikes are worth it.

The task is fairly straightforward. When the bike is cold, drain as much fluid as you can, being sure to remove any core plugs in the engine block or frame. When you're done, inspect the drain plug(s) and gasket(s) and reinstall them. It's a good idea to add new crush washers every time you flush your system. Next, refill the cooling system from the highest point on the motorcycle to avoid developing any air pockets. Sometimes the highest point isn't the radiator, so consult your manual. And if you bought a concentrated formula, premix the fluid before refilling your system.

Some motorcycles have bleeder valves that let every last bit of air out of the system while you're filling it. After you're done, you can leave these valves open slightly while starting the bike. As the engine reaches normal operating temperature, the last air bubbles will seek out the valve and "burp." Close the valve once there's a steady stream of fluid and no more air is coming from the bleeder



1 Drain the system entirely, or as much as possible. Don't forget that some bikes have multiple drain points.



2 Anytime you're using a funnel to pour fluids into a system, it's a good idea to clean it first. We used spray brake cleaner.



3 The highest point in the system is usually the radiator.



4 Don't forget to replace the radiator cap! Don't laugh... it happens to the best of us.

valve. Finish by topping off the coolant reservoir bottle with fresh juice. If your bike doesn't have a bleeder valve, fill the system as much as you can, and then start the bike and bring it up to temperature. Then recheck the coolant level in the reservoir and add fluid if necessary.

Finally, be sure to dispose of the old coolant in an environmentally friendly way. The EPA provides a number of guidelines online (www.epa.gov/epaoswer/non-hw/muncpl/antifree.htm). **RB**