## PROJECT 7

## **General Lubrication**



Time: 30 minutes



**Tools:** Assorted wrenches, cable lubrication tool, cable lube, chain lube, chain cleaner, molybdenum-based



Talent:



Cost: \$



Parts Required: None

grease, WD-40, small paintbrush



Tip: Lube the chain when it is warm for maximum penetration.

In most owner's manuals, the maintenance chart lists general lubrication as one of the activities. Since few people actually read their owner's manual, and even fewer follow the periodic maintenance intervals, some important motorcycle parts degrade quicker due to simple neglect. For the average rider, lubing your bike three times a season (the beginning, middle, and end) will suffice. If you ride the wheels off your motorcycle, give it a quick lube job every 7,500 miles. By performing this simple maintenance on a regular basis, you prolong the life of the bike's components, ensure that everything works the way it should, and may even catch a problem as it starts.

Lubing your motorcycle's cables should take no more than 15 minutes, and pays dividends every time you operate a control. For the throttle cables, unscrew the throttle housing on the grip and adjust the cables for maximum slack. After you release one of the cables, the other will slip right off. For the clutch cable, screw the adjuster all the way in for maximum slack but line up the slot in the adjuster with the slot of the lever holder. You should be able to pull the end of the cable free of the adjuster and release the cable.

For quick work on the cables, nothing beats a pressure cable luber from accessory companies like Motion Pro or Lockhart Phillips. Basically, you clamp a rubber stopper over one end of the cable, insert a tube from a can of silicon-based cable lubricant into a little hole, and give the nozzle a squeeze. The can's pressure forces the lubricant through the cable. Apply the lubricant in short bursts until the bottom end of the cable begins to bubble or drip. A well-placed rag can catch the drips before they make a mess of the engine.

Before you reassemble each cable, be sure to apply a dab of grease to all the places the cable might rub. The fittings at the cable ends need grease, and any exposed sections of the cable should receive a protective coating too. A small paint-brush will help you grease parts in tight places.

Don't forget the choke cable or the speedometer cable. Lubricate the choke cable like all the others. Mechanical speedometer cables (a dying breed on sportbikes) should be unhooked from the speedometer. Pull out the inner cable and pack the cable top with molybdenum grease. Slide the cable back into place. Any time the front wheel is removed, pack some moly grease into the drive mechanism.

Now go over your bike and lubricate every part that moves. Unscrew the handlebar lever pivots and brush on some grease. Apply a couple drops of oil to the side stand pivot. Give the rider and passenger pegs a quick squirt of WD-40 or oil. Remove the shifter pivot and clean any grit out of the works. Apply grease to the pivot, but be sure to keep the pivot's threads clean and dry. Some manufacturers recommend a drop of nonpermanent thread-locking agent, such as a Loctite compound, on the threads to make sure the pivot bolt doesn't back out after reassembly. Be sure to torque it to the proper spec. Follow the same precautions for the brake pedal.

Although you'll want to perform most of these chores before a ride, save lubing the chain until the end of a ride when the chain is hot—the lube soaks in better that way. Before you lube the chain, spray a clean rag with WD-40 and wipe all of the dirt and grit from the chain. If your chain is really grungy, Motorex makes a chain cleaner that will strip the mung without harming the O-rings. It even smells nice.

A cable luber forces the lubricant through the cable, making sure the entire length of the cable is protected. Do not use chain lube on cables.



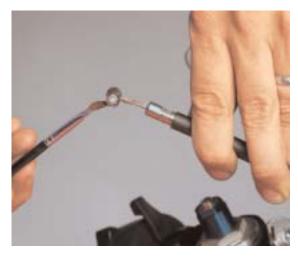
Do *not* succumb to the temptation of using the engine to rotate the chain while you wipe it. The many mechanics missing fingers or parts of fingers can attest to the foolishness of this technique.

Once you've cleaned the chain, apply a coat of quality chain lube to the space between the links where the O-rings reside, spraying from the inside run of the chain to allow centrifugal force to push it through to the other side. (Motorex makes handy small chain lube containers that make it easy to get the spray where you want it. The little containers are then refilled with a large can—very clever.) Don't worry if you spray on too much chain lube. After the lube has had a chance to set, but before you ride your bike again, take another clean rag dampened with WD-40 and wipe off the excess lube before it has a chance to get flung onto your clean wheels out. Lubricate your chain every 400 miles or so, but any time your bike is ridden in the rain or is exposed to salt spray from the ocean, you should lube the chain as soon as possible. Take care of your chain, and it will take care of you.



Before lubing pivot points, wipe them clean of any dirt or grit. Keep the threads clean and dry. Retorque the fasteners to the proper spec to keep them from vibrating loose.





Apply a protective coat of grease to all exposed sections of cables. Don't forget to lube the fittings, so they will move freely within their mounts.



All moving parts, such as peg pivots and side stands, will benefit from a shot of WD-40 or a few drops of oil to keep them working freely. If you're particularly fastidious, you can disassemble the parts and grease them.

Lubricate the chain when it is warm, but then let it sit until it cools off and the lube sets. To help keep your wheels clean, wipe off the excess lube before your next ride.