

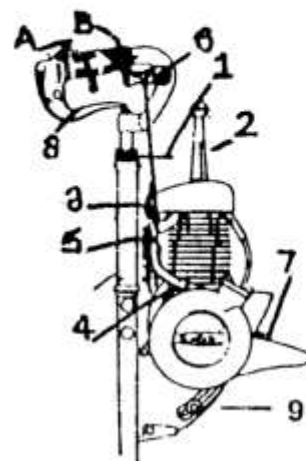
half-way or all the way around. This forces it past its contact point and risks breaking it. Light is magneto and operates only while motor is running. For night pedaling without the motor, battery operated lights are available at any bicycle store.

**FOR YOUR SAFETY, ALWAYS KEEP BOTH HANDS
ON BOTH BRAKE LEVERS WHEN RIDING**



SOLEX **-3800-**

OPERATING INSTRUCTIONS



HOOK AND UNHOOK MOTOR; set it on the front wheel by using handle #2 in diagram. If too stiff, put drop of oil on slides #9. (Don't loosen slides.) When the motor is on hook, the bicycle may be pedaled as an ordinary bicycle.

Pedal the bicycle. Get acquainted with it. Test the hand brakes to see that they hold. Check to see that the wheel nuts are tight; that the wheels are in their forks properly; that the pedals are screwed in tight, and that the frame bolts are tight. Only after you have performed a complete safety check, and have accustomed yourself to the brakes and have pedaled the bike, are you ready to consider starting the engine.

FUEL; Solex is a 2 cycle engine (like lawnmowers, boats, etc.) and requires some oil mixed with gas. The gas tank lid, held upside down, is a measuring cup. Fill lid once with 2 cycle engine oil, and pour into gas tank, together with one and one-half (1 and ½) quarts of gas. This is a tankful of fuel. Mix by shaking handlebar back and forth a few times. Use any good #30 weight 2 cycle engine oil and regular gas. Avoid premium or high octane gas.

Another Fuel Plan: Mix three caps. of oil in a one gallon can of gas, stir or shake gently, and pour into bike's tank as needed. Be sure to mix well. Simply dumping the gas and oil together will not mix it (especially so in cold weather). Don't overfill tank, which only holds about 1½ quarts of fuel. Leave at least an inch air space so the return line can breathe. On the first 10 running hours in a new engine, it is wise to add an extra ½ cup of oil to help the new parts break in. *Never operate engine with insufficient oil; damage will result.*

TIRES; Check tire pressure. 28 lbs. to 40 lbs. is o.k., depending on weight of rider. 35 lbs. is about average. Be careful when using gas station air hose, as blowouts can occur easily in inexperienced hands, due to the unexpectedly fast rate and pressure in gas station air compressors.

CHOKE; Choke lever is on carburetor #5. On a new bike, or on cold days, some choking may be necessary. Place choke lever straight up and down; after bike is started and warmed, push lever to right. If there is an arrow above the choke lever pointing to the left, do not push lever to the left as the arrow indicates. This would choke it excessively, and foul the plug. If you accidentally overchoke it, the plug can be removed and dried easily (with the tools in the tool box). Tool box is at rear carrier of bike.

REAR BRAKE; The left brake lever on the handlebar brakes the rear wheel only. Get acquainted with the cable; observe how it travels through its housing, down through the frame, to where the housing stops under the foot rest; the cable continues until it ends up on the rear wheel brake arm. Notice the brake retaining screw at the end of the cable. To tighten or loosen the brake, push the brake arm down, which slackens the cable, and lift both the screw and the cable off the arm. With the two 9mm wrenches in the tool box, loosen the brake retaining nut and screw, slide the screw forward or backwards (to tighten or loosen) about ¼ of an inch. Tighten the nut, and return to arm, remembering first to press arm downward again to make it possible to put the cable and retaining screw into place again.

FRONT BRAKE; The right brake lever on the handlebar brakes the front wheel. It can be tightened or loosened by an adjusting knob which you can see if you follow the brake cable with your eye, from the handlebar, downward, through the brake backup plate, to where it ends by winding around the knob spindle. To set brakes, push the knob in and unseat it from its retaining ring; turn left or right to tighten or loosen front brakes. Then be sure to return it to its seat. Test both front and rear brakes after adjusting them, to make sure they don't slip from improper handling.

DECOMPRESSION LEVER; Decompression lever is the grey plastic lever on the handlebar. Always use it to start the engine, and always use it to kill the engine. To start, lever must be held in, or pressed in toward the handlebar for a few moments, while pedaling. The action requires very little strength and the travel is hardly an 1/8th or ¼ of an inch action. Anything more than that is excessive and invites breakage. To kill the engine, press decompression lever in again in the same way as starting. *Never the other way.*

TWIST-GRIP THROTTLE; The twist grip throttle control on the right side of the handlebar regulates the gas flow, and therefore, is used to accelerate or decelerate. Counterclockwise is the "wide open" position. It is normal to run at wide open, because this is the cruising speed. Turn the grip clockwise to reduce speed. Observe that the travel is not great. An audible click is heard when grip is twisted to low-speed position. Trying to twist the grip harder for greater or lesser speed has no effect on the speed, but most certainly will break it. *Don't force it.* Always start bike in wide open position. There is no danger as the start is slow and easy. You will have ample time to twist the grip to a slower position, or apply brakes, once the engine is started. When the front brakes are applied the same action occurs on the carburetor as when the twist-grip is used: The carburetor spring expands and the black plastic lever on the carburetor face travels up or down (black plastic lever actually controls the gas flow and speed). You can see by this, there are two ways of controlling the gas flow on a Solex bike. Either by the twist grip, or by the brake lever alone. This is a safety feature. Whenever the front brake is applied, the engine speed is automatically reduced. When the front brake is released the engine speed resumes. You actually don't even have to use the twist grip. You can operate by the brake lever alone if you like, as it serves as a gas lever too.

TO START SOLEX BIKE MOTOR; If you have safety checked your bike, learned to hook and unhook the engine onto hook or handlebar, with one easy

motion to convert it to a bicycle, or to a motorized bike, practiced pedaling without using motor; learned to use the hand brakes, learned to use the choke lever, tested the twist grip to see if it is functioning with visible action on the carburetor (it expands the carburetor spring and lifts the black plastic lever on the carburetor a little), and if you have learned that the front brake lever performs the same task, and therefore, can be used without having to use the twist grip unless you so desire, and if you have located the decompression lever on the handlebar, and have fuel in the tank and air in the tires, then it's time to start the engine:

- 1) Unhook motor (about 1" or 1½" from end of hook).
- 2) Turn twist-grip counterclockwise. (*Don't break it.*)
- 3) Choke a little. Push choke lever on carburetor a little to the left, not more than straight up and down. After motor starts, return this to right side to avoid drowning or fouling the plug.
- 4) Prepare to pedal bike. You are going to "crank" the bike by pedaling it, briefly.
- 5) Hold in decompression lever on handlebar.
- 6) Pedal briskly while holding decompression lever in, for one or two complete revolutions of the legs, release the decompression lever, but keep on pedaling momentarily as engine fights to come to life and attains working speed. Then you can quit pedaling if you like.
- 7) Immediately place hands on both brakes. Ignore the twist grip control for the moment and simply practice slowing up and stopping. Observe especially when the right hand brake lever is applied, the engine speed is reduced, before braking occurs.
- 8) After applying brakes (which reduces engine speed as well as stops the bike), press decompression lever again while continuing to hold engine speed down. This will kill the engine. Now you are ready to start the whole procedure over again to acquire confidence. When you start it this time, practice slowing the bike with the twist grip, and speeding up again. You will probably discover the brake lever control slows the bike more effectively than the twist grip.
- 9) *Important:* Your new bike will probably stall a few times, particularly when the speed is reduced to idle, but it will quickly break in. When you stop, you do not have to set the running motor up on the hook. You need only apply the right (front) brake lever and keep it applied all the time you are waiting for the light to change green, or for whatever other reason you are stopped. *This is very important.* As long as you are holding it in, the engine roller is not rubbing the tire; because when the engine speed is so reduced it automatically disengages the centrifugal clutch; but if you merely stand still and let the roller roll briskly on one spot on the tire very long, or otherwise permit improper idling, then the roller can burn an unwanted groove in the tire at the point of contact. Repeat, keep the engine speed down and the right brake fully applied throughout the period of time you are stopped with the motor running, and no damage to the tire will occur.

10) **THE HEADLIGHT SWITCH** is on headlight cover. Turn it about 1/6th of a circle counterclockwise to turn on light. You can hear and feel it make contact. Strong hands sometimes overrun this and insist on turning the switch