

CHECK AND ADJUST YOUR SUREFLY TIMING

1. Obtain the following tools:

- a. An inexpensive dial indicator (example, Amazon B07HFV25M9, or Harbor Freight 63521.)



Make sure to Loctite and tighten the probe tip to prevent it from falling into cylinder

- b. A 9V battery
- c. 2x alligator clip leads (example, Amazon B072174XRB or Harbor Freight 66717)



2. Remove the inline fuse from the power wire connecting the SureFly to the battery.
3. Using the 1st alligator clip lead, attach the battery positive terminal to the TIMING post on the SureFly.
4. Using the 2nd alligator clip lead, attach the battery negative terminal to a case bolt on the SureFly.



5. Clear the propeller and turn the ignition key or toggle switch to enable (un-ground) the SureFly (L if SIM on left, R if SIM on R).
6. Witness the LED on the SureFly illuminate and stay lit.
7. Remove the top sparkplug from #1 cylinder. Using your thumb to find compression, turn the propeller to bring the #1 piston to compression stroke.
8. Using a flashlight to see into the spark plug hole, turn the propeller and witness #1 piston crown at TDC.
9. Turn the propellor backwards by approx. 10 degrees to bring the piston back down before TDC.
10. Insert dial indicator probe into spark plug hole so that dial indicator probe touches the top of the piston. Brace the body of the dial indictor to prevent it from moving.
11. Slowly turn the propellor in direction of normal rotation and witness dial indicator pointer move.
12. Continue turning the propellor until dial indicator pointer stops and begins rotating in opposite direction. Note reading on dial indicator bezel where this occurs – this is TDC.
13. Turn the propellor backwards by approx. 5 degrees to bring the piston back down before TDC.
14. Slowly turn the propellor in direction of normal rotation and stop when dial indicator pointer reaches TDC reading on bezel.
15. #1 cylinder is now positioned exactly at TDC. Do not move propeller if SureFly needs adjustment.
16. If the LED on the SureFly does not extinguish exactly at TDC, slightly loosen the nuts holding the SureFly to the engine and rotate the SureFly until the LED does extinguish.
17. Tighten the SureFly back down ensuring the LED stays extinguished. Torque nuts to 150-160 inch-lbs.
18. Remove dial indicator, 9V battery and clip leads.
19. Turn ignition key switch to OFF, reinstall spark plug and SureFly power wire fuse.