

Starting the IO 540 Fuel Injected Cessna 182T G1000

Cold Starting: First start of the day CHT below 50 deg. F.

Note: If engine is below 30 deg. F, preheat engine compartment with heater.

1. Mixture and throttle to idle cutoff, boost pump on for 12 sec. to pressurize fuel lines.
2. Throttle in to ½ of full and mixture to full rich.
3. Boost pump on for 4 seconds then off to prime engine. Note fuel flow on meter.
4. Return throttle to 1/2 in. in and mixture still full rich position.
5. Crank engine till starts. If engine falters, boost pump on to keep engine running then boost pump off. Keep engine below 900 rpms due to no oil pressure at start on a cold start.
6. After engine is running smoothly, bring mixture back to ¾ of full for taxi.
7. If engine doesn't start after 5 to 7 blades, repeat steps 2 & 3 for 3 sec.

Note: Start engine with cowl flaps closed and monitor CHT for faster warm up.

Warm Starting: First start of the day above 60 deg. F or 2 to 3 hours after shutdown.

1. Run boost pump for 10 sec. to charge fuel lines only with throttle and mixture full off.
2. Throttle to 1 in. in and mixture to full rich.
3. Boost Pump on for 2 seconds. Then boost pump off.
4. Throttle to ¼ in. in and mixture full rich.
5. Crank engine till starts, then boost pump on if engine falters. Boost pump off after engine runs smoothly.
6. Mixture to ¾ of full in for taxi.

Hot Starting: Engine re-start 20 min. - 2 hours since shut down.

1. Mixture to idle cutoff.
2. Run boost pump for 10 to 15 sec. to charge fuel lines (purge vapor from fuel lines).
3. Throttle to 3/8 in. in.
4. Crank engine, when engine starts smoothly push in mixture to full rich position.
5. When engine starts and starts to falter, boost pump on until engine runs smoothly then off.
6. Mixture to ¾ in for taxi

Text above obtained from below YouTube Video

https://www.youtube.com/watch?v=8QaQ6_cdMfU

Understanding Fuel Injected Engines:

<https://www.youtube.com/watch?v=8frPSeHJWkk>

Squadron 90's attempt at Hot Starting (AVideo):

https://drive.google.com/file/d/1HMYzd9julkZJFsATUbU5ZuD_IPiQ-EzZ/view?usp=sharing

Note: AVideo only for CAP members who are logged in to their ALWG Google email account