



Sopwith 1 ½ Check List

Fitted with Dual Controls, Gnome Monosoupape Rotary Engine and Pressurized Fuel System utilizing Rotherham Pump

Pre-flight Inspection

1. Covering (wrinkles, rips, etc.)
2. Bungees (tension, securing cord)
3. Flying wires (tension, condition, safety wire, pins & cotters)
4. Control surfaces (attachment hardware, gust locks removed)
5. Struts (bolts, nuts & cotters)
6. Cowl (screws, safety wire, intake plugs removed)
7. Clean & inspect windscreens
8. Propeller (condition of wood & leading edges, nuts & cotters)
9. Wheels & tires (spokes, hubs, securing hardware, tire condition & pressure)
10. Top off castor oil tank
11. Check Rotherham Air Pump & top off castor oil reservoir
12. Petrol sight glass, turn on cocks and check level
13. Add Petrol, if necessary
14. Wipe commutator ring
15. Change spark plugs
16. Check battery voltage (12+)
17. Replace battery, if necessary

Pre-start

1. Wheel chocks – **SET**
2. Tampier valve – **EXERCISE**
3. Air valve – **SWITCH to HAND**
4. Hand pump, petrol tank – **PRESSURIZE TO 2.25 lbs**
5. Air valve – **SWITCH to OFF**
6. Flight control operation – **CHECK**
7. Airbrakes – **DOWN and LOCKED**
8. Trim wheel – **SET**
9. Altimeter – **SET to ZERO**
10. Clock – **WIND and SET**



Starting Sequence

1. Castor oil valve – **ON**
 2. Safety belt – **ON**
 3. Battery switch – **OFF**
 4. Ignition switch – **OFF**
 5. Half ignition switch – **OFF**
 6. Hand pump, castor oil – **TWO PUMPS**
 7. **“SWITCH OFF”**
 8. Rotate engine – **2+ TURNS**
 9. Rotate engine – until valve open on bottom cylinder
 10. Tampier valve – **HALF POSITION FOR 4 COUNT**, then off
 11. **“CONFIRM FUEL”** – ground crew confirms fuel dripping
 12. Wingmen – **IN POSITION**
 13. Rotate engine – **2+ TURNS**
 14. Rotate engine – **until valve on leading cyl open when bottom cyl straight down, then back ½ cyl**
 15. **“STAND CLEAR”** – ground crew stands clear of prop
 16. Battery switch – **ON**
 17. Ignition switch – **ON**
 18. Half ignition switch – **ON**
 19. **“SWITCH ON”** – ground crew swings prop
 20. When engine fires, smoothly advance tampier to mid-position & adjust for running
- If engine doesn't start,*
- a. Tampier valve – **OFF**
 - b. Battery switch – **OFF**
 - c. Ignition switch – **OFF**
 - d. Half ignition switch – **OFF**
 - e. **“SWITCH OFF”**
 - f. Repeat starting sequence from 14

Running Engine Check (prior to takeoff)

1. Tampier valve – **adjust for maximum rpm** (1050+ minimum)
2. Half ignition switch – **OFF**, confirm rpm drop, let engine stabilize for 30+ seconds
3. Half ignition switch – **ON**, confirm return to 1050+ rpm
4. Battery switch – **OFF**, confirm no rpm drop
5. Half ignition switch – **OFF**, confirm rpm drop



6. Half ignition switch – **ON**, confirm return to 1050+ rpm
7. Tampier valve – **advance & retard slightly** to confirm engine change without cut-out
8. Tampier valve – **adjust for maximum rpm** (1050+ minimum)
9. Blip switch – **exercise & confirm operation**
10. **Confirm return to maximum rpm** (1050+ minimum)
11. **Blip engine & wave hand** (signal for ground crew to pull chocks, holding only wings)
12. **Confirm chocks pulled & wave hand second time** (signal for ground crew release & stand clear)

Immediate Post Flight

1. Tampier valve – **OFF**
2. Ignition switch – **OFF**
3. Half ignition switch – **OFF**
4. Battery switch – **OFF**
5. Castor oil valve – **OFF**
6. **Depressurize fuel tank**
7. Petrol sight glass – **check level & turn off cocks**

Post Flight Inspection (note any items requiring attention before next flight)

1. Clean off castor oil
2. Chock wheels
3. Rotate engine until bottom cylinder straight down and valve open
4. Covering (wrinkles, rips, etc.)
5. Bungees (tension, securing cord)
6. Flying wires (tension, condition, safety wire, pins & cotters)
7. Control surfaces (attachment hardware)
8. Struts (bolts, nuts & cotters)
9. Cowl (screws, safety wire, intake plugs refitted)
10. Windscreens
11. Propeller (condition of wood & leading edges, nuts & cotters)
12. Wheels & tires (spokes, hubs, securing hardware, tire condition & pressure)
13. Rotherham Air Pump