

# Cessna 152 Make and Model

This form is to be used as an aid in reviewing FAR Part 91 fundamental specifications, mechanical systems, and procedures of the aircraft being flown. Utilize all available aircraft documents to aid in this review, (i.e., Owner's Manual Operator's Manual, placards, markings, or listings).

Pilot: Blake Shumway Date: 6/14/22  
Aircraft Make and Model: Cessna 152

1. How many fuel tanks are there? 2
2. What is the capacity of each fuel tank? 13 gal What is the total fuel capacity? 26
3. What is the total usable fuel? 24.5
4. What is/are the usable fuel grade(s)? 100LL Color(s)? Blue
5. Where are the fuel drains/sumps located? Each wing and bottom Cowling
6. When are they drained? Before each flight or after getting fuel
7. What is the recommended grade and type of oil during engine break in? SAE 40 Mixed Oil
8. What is the recommended grade and type of oil after break in? SAE 40 Dispatch 10.3 (10.3/10.3)
9. What is the minimum operating oil level? 4 - 6 qts / 7 max
10. What is the aircraft's basic empty weight? 1200
  - a. Does basic empty weight include oil? yes
  - b. Does basic empty weight include unusable fuel? yes
11. What is the useful load? 493.8 470
12. Give the following weights;
  - a. Maximum Takeoff Weight: 1670.0
  - b. Maximum Landing Weight: 1670.0
  - c. Maximum Ramp Weight: ~~1670.0~~ 1675
13. What is the center of gravity range at Maximum Takeoff Weight? 32.6 - 36.05
14. Please do the following weight and balance problem;
  - a. Half tanks fuel 144 6630 g
  - b. Solo flight (your weight) 170 5760 g
  - c. Fifteen pounds of baggage 960
    - i. What is the takeoff weight? 1529
    - ii. Where is the CG? 32.6
    - iii. Are you within limits? yes
15. What is the recommended short-field final approach speed? 54 Flap Setting? 30°
16. What is the recommended short-field landing procedure?  
Cable tied Flaps 30° at 54 KIAS main followed by nose
17. What is the recommended short-field takeoff procedure? 100ft + DFL  
in Standard 10° Flaps Throttle full check for climb 54 KIAS, Retract off 60°
18. What is the recommended short-field climbout speed 60 Flap Setting? Flaps at
19. What is the recommended soft-field final approach speed? 55-65 Flap setting? 30°
20. What is the recommended soft-field landing procedure?  
Normal approach 3° flaps over nose 55-65, touch main down gently, keep nose off as long as possible

# Cessna 152 Make and Model

21. What is the recommended soft-field takeoff procedure? 10° flaps  
Control full aft, stay in ground effect, climbout at 65-75 kts
22. What is the recommended soft-field climbout speed? 65-75 55 kts Flap Setting? 0-10
23. What is the recommended normal approach speed? 60 Flap Setting? 0-10
24. What is the recommended climbout approach speed? 65-75 55 kts Flap Setting? 10°
25. What is the best rate (Vy) of climb at sea level? 67 At 10,000MSL? 61
26. What is the best angle (Vx) of climb? 55 - 10000 ft
27. What is the maneuvering speed (Va) range? 104-93 Depends on Weight
28. What effect does reducing gross weight have on Va? Lowers Va
29. What is the stall speed in the landing configuration (Vso)? 35
30. What is the stall speed in the landing configuration with a 60 degree bank? 44-49
31. What is the maximum demonstrated crosswind component? 12
32. What is the purpose of flaps? Increase lift without speed, lift/drag less speed
33. What are the indications of carburetor ice? Rough running engine, drop in RPM → potential engine loss
  - a. In the event of carburetor ice, what is the proper procedure?  
Carb heat, engine prob. will get worse the better, full Ram in
34. What is the power setting, fuel consumption and true airspeed for the following;
  - a. 65% Power, 7,500', Standard temperature;
    - i. RPM? 2400
    - ii. Fuel consumption? 5.3
    - iii. True airspeed? 99
35. What would be the indication of an alternator or generator malfunction?  
loss of Amperage
36. What is the "Go Around" procedure? 20°  
Power full, pitch to horizon, Landing (Reduce flaps to 0 flaps) Climb at Vy, then up
37. Calculate the following takeoff distances;
  - a. Max gross weight, calm wind, sea level, standard temperature 725 600 ft, 1330.50 ft
  - b. Max gross weight, 4 knot tailwind, 4500', 100F, 50' obstacle? 1302.5, 2491.50 ft 3114.50 ft
38. When are passengers required to have their seat-belts fastened? Takeoff, Landing
39. What aircraft documents must be onboard during flight?  
Aircraft, Register, Ops Handbook, WTB info
40. Provide the basic VFR weather minimums for flight in Class E airspace below 10,000';
  - a. Visibility? 3
  - b. Ceiling? 1000 agl - 3000 USU
  - c. Cloud Clearance;
    - i. Above? 1000
    - ii. Below? 500
    - iii. Horizontal? 2000
41. VFR cruising altitudes are required above what altitude? 3000 ft agl
42. What inspections are required for this aircraft?  
Annual, Transponder, ELT, 100hr
43. Does this aircraft have an alternate static source? no Where? Perch VSI
  - a. What instruments will be affected by the use of an alternate static source?  
VSI, AS, Alt

1352.5

Cessna 152 Make and Model

- b. What changes will be experienced if you use your alternate static source in flight?

Alt will be higher, AS will be faster, VSI momentary climb then 0  
(Break VSI momentary descent 420)

Reviewed by: \_\_\_\_\_



Date: 6 / 14 / 2022

