

Cessna 152 Specific Questions

What is Vso?

35 Kts

What is Vs1?

40 Kts

What is Vr?

50 Kts

What is V_x ?

55 Kts

What is V_y ?

67 Kts

What is Vglide

60 Kts

What is Vfe?

85 kts

What is V_a ?

104 Kts at 1670 lbs

What is Vno?

95-100 Kts

What is Vne?

149 Kts

What fuel grades are acceptable?

100 LL (color blue)

What type of engine oil does the 152 use?

MIL-L-22851 Ashless dispersant (From POH)

Phillips Victory 20w-50 is the modern equivalent for all temperature ranges.

**What is the minimum engine oil
operating quantity?**

4 quarts

**What is the maximum engine oil
operating quantity?**

6 quarts

What type of brake fluid is used?

Mil spec MIL-H 5606 hydraulic fluid (color is red)

Where is the brake fluid serviced at?

By the rudder pedals in cockpit

What is the normal landing gear strut extension?

4 inches

Describe the nose gear.

It is an air/oil oleo strut filled with nitrogen for extension and Mil-H-5606 for shock absorption

What tire pressure is normal?

21 psi for the mains, 30 psi for the nose

Describe the engine.

- 1.) Carbureted
- 2.) Normally aspirated
- 3.) Air cooled
- 4.) Horizontally opposed
- 5.) 4-cylinders
- 6.) Lycoming O-235-L2C

**How many magnetos does the
Continental O-235-L2C have?**

2

**How many spark plugs does the
Continental 0-235 have?**

Two spark plugs per cylinder (8 in total)

Do you need the airplane electrical system to operate the magnetos?

No, the magnetos allow engine operation independent of power from the airplane electrical system.

**How much horsepower does the
Continental O-235 produce?**

110 horsepower at 2550 RPM

What is the normal fuel burn?

5-6 gallons per hour

**What provides electrical energy to
the Cessna 150?**

The alternator

Describe the alternator?

28 V direct current 60 A alternator

What bus bars does the alternator provide power to?

Primary and avionics bus bars.

**Describe the battery in the Cessna
152**

- 1.) 24 V
- 2.) 14 Amp-hour
- 3.) Lead acid
- 4.) Located in the right-side engine compartment

**Describe what a 14 Amp-Hour means
in regard to the battery.**

- 1.) Will discharge 14 amps for one hour
- 2.) Or 28 amps for 30 mins

Describe the functions of the battery

- 1.) Absorbs system power strikes
- 2.) Provides power for engine starting
- 3.) Provides power if the alternator fails

How is an alternator failure/ problem identified?

It is indicated on the AMP meter. Amp meter shows a discharge.

What does the AMP meter indicate?

- 1.) Indicated the charging rate applied to the battery
- 2.) Or if the alternator has failed, the battery discharge rate

What is the function of the circuit breaker and/or fuses?

Circuit breakers protect the electrical system against excessive current draw

Can you reset a tripped circuit breaker?

You can reset a circuit breaker once, but wait at least two minutes for cooling

Describe the brake system.

- 1.) Single disc
- 2.) Hydraulically actuated
- 3.) One on each main landing gear

Where is the brake fluid master cylinder located?

Just forward of the pilot's rudder pedals.

Describe how the brake system works.

Depressing the brake pedal moves hydraulic fluid from the master cylinder and applies pressure to the wheel calipers and pistons via hydraulic lines.

How are the flaps operated?

Electrically

How many degrees of flaps are available?

1°-30°

Why do the ailerons have different travel amounts?

To decrease adverse yaw and ease coordination during normal maneuvers

What does the pitch trim wheel control?

A single trim tab on the elevator

What is the total capacity of the fuel system?

26 gallons (13 in each tank)

How much does 100L weigh?

6 pounds per gallon

**How many fuel sumps does your
airplane have?**

Four

Where are the fuel sumps located?

One under each wing, one activated by a lever near the oil dip stick, and one under the belly. The belly drain is an STC add on.

What drives the vacuum pump?

The engine

How much suction does the vacuum pump create?

5 inches of Hg

What does the vacuum system do?

Provides vacuum to drive the air driven instruments

What are the vacuum pump, air driven instruments?

Attitude indicator and directional gyro

Where should the airworthiness certificate be located?

Must be visible when entering the airplane.

By left hand brake pedals.

What is the usable fuel amount?

24.5 gallons total