

Cessna-152 Checklist

Preflight Checklist

INTERIOR

- Required Documents Check (ARROW)
- Hobbs & Tach Time Check & Record times
- Flight Control Lock Remove
- Radios & Electrical Equipment **OFF** (except rotating beacon)
- Circuit Breakers Check
- Primer Locked
- Magneto Switch **OFF** - Ignition key on dash
- Master Switch **ON**
 - Fuel Gauges Check quantity
 - Flaps Down
 - Lights & Rotating Beacon Check - then **OFF**
- Master Switch **OFF**
- Fuel Selector **ON**
- Trim Set for takeoff
- Loose Articles Secure

EXTERIOR

- Left Wing Fuel Quick Drain Sump Drain & Sample
- Left Fuselage Check
- Stabilizer, Elevator & Rudder Check
- Tail Tie Down Remove
- Right Fuselage Check
- Right Wing
 - Flap & Aileron Check (rollers, hinges, weights)
 - Wing Tip, Nav Light & Leading Edge Check
 - Tie Down Remove
 - Tire, Brake, & Gear Check - inflation/wear
 - Tire Chock Remove
 - Fuel Quick Drain Sump Drain & Sample
 - Fuel Tank Quality Check - secure fuel cap
- Windshield Clean
- Right Side Nose Strut & Tire Check - inflation/wear
- Fuel Main Sump Drain & Sample
- Oil Level 4 - 6 qts
- Oil Cap & Access Door Secured

Preflight Checklist (cont)

Cowling, Intakes, Prop & Spinner Check
Alternator Belt Check for tightness
Engine Compartment Check
Taxi/Landing Light Check
Induction Air Filter Check - clear
Left Side Nose Strut & Tire Check - inflation/wear
Static Port Check

Left Wing

Fuel Tank Quality Check - secure fuel cap
Pitot Tube Check
Stall Warning Check
Fuel Vent Check
Tie Down Remove
Leading Edge, Nav Light & Wing Tip Check
Aileron & Flap Check (rollers, hinges, weights)
Tire, Brake, & Gear Check - inflation/wear
Tire Chock Remove
Walk Around Airplane for Final Check

Before Starting Engine

Seats, Belts & Harness Fasten & Adjusted
Doors Closed
Radios & Electrical Equipment **OFF**
Parking Brake Set (if desired)

Starting Engine

Mixture Full Rich
Carburetor Heat **OFF**
Prime As required – then locked
Throttle Open 1/2 inch
Rotating Beacon or Strobes **ON**
Propeller Area **“CLEAR”**
Brakes Hold
Master Switch **ON**
Magneto Switch Start
 Throttle 1000 - 1200 RPM
 Oil Pressure Check
 Ammeter Check
Flaps Up
Radios & Electrical Equipment **ON** & Set
Transponder Standby
Altimeter Set
Heading Indicator Set
Artificial Horizon Set
Magnetic Compass Check

Taxi Checks

Radio Transmit for operation
Flight Controls Position for Wind
Brakes Test on initial taxi
Instruments Check for correct movement

Engine Runup

Nose Wheel	Face wind & center nose wheel
Brakes.....	Hold
Doors & Windows.....	Closed & Latched
Trim.....	Takeoff position
Fuel Selector.....	ON
Throttle	1700 RPM
Magnetos	125 RPM - Max magneto drop
.....	50 RPM - Max differential drop
Carburetor Heat	Check for RPM drop
Mixture	Lean then Full Rich
Suction	Check
Ammeter	Check
Engine Instruments.....	Check (Oil Pressure/Temp)
Throttle	Idle
Carburetor Heat	ON - check for continued
.....	operation then OFF
Throttle	1000 - 1200 RPM
Flight Controls.....	Freedom of Movement
Flight Instruments.....	Re-check & set
Attitude Indicator	Check
Heading Indicator.....	Check
Altimeter	Check
Radios & Nav Aids	Set & Checked

Before Takeoff

Throttle Friction.....	Adjust
Seat belts & Harness	Check
Doors & Windows.....	Closed and Latched
Flaps.....	Up (or as required = 10°)
Fuel Selector.....	ON
Carburetor Heat	OFF
Transponder.....	Set to (Alt)
Landing Light	ON (if desired)
Strobe Light.....	ON (if available)
Radio.....	Broadcast Intentions
Heading Indicator.....	Runway Heading
Flight Controls.....	Position for Wind
Takeoff Time	Note & Log

Normal Takeoff & Climb

Trim..... Takeoff position
Flaps.....Up (or as required = 10°)
Carburetor Heat **OFF**
Mixture Full Rich
Throttle Full Open
Elevator Control Lift Nose @ 50 KIAS
Climb Airspeed 70 KIAS (65 - 75 KIAS)

Short Field Takeoff

Flaps..... 10 degree
Brakes..... Apply
Mixture Full Rich
Throttle Full Open
Brakes..... Release
Elevator Control Lift Nose @ 50 KIAS
Climb Airspeed55 KIAS until obstacle cleared
Flaps..... Retract slowly

Soft Field Takeoff

Flaps..... 10 degree
Mixture Full Rich
Elevator.....Full back position
Breaks.....None - rolling from taxi
Throttle Full Open
Ground RollHold nose wheel off runway
Elevator Control Remain in ground effect until V_x
Climb Airspeed (54 KIAS) until obstacle cleared
..... then V_y (67 KIAS) or normal climb
Flaps..... Retract slowly

Enroute Climb

Airspeed75 KIAS (70 - 80 KIAS)
Throttle Full Open
Landing Light **OFF**

Cruise Checklist

Engine Instruments..... Check
Throttle 2300 - 2400 RPM
Mixture Rich below 3000 ft
..... Lean above 3000 ft
Elevator Trim..... Adjust

Decent Checklist

Engine Instruments..... Check
Mixture Full Rich
Throttle 2000 - 2200 RPM
Carburetor Heat **ON** - below green RPM arc

Landing Checklist

Seats, Belts & Harness Fasten & Adjusted
Landing Light **On**
Fuel Selector.....**ON**
Mixture Full Rich
Carburetor Heat **ON** - below green RPM arc
Flaps..... As required
Airspeed - No Flap..... 60 - 70 KIAS
Full Flap..... 55 - 65 KIAS
Touchdown..... Main wheels first
Brakes..... Minimum required

Short Field Landing

Final Approach Airspeed..... 54 KIAS
Flaps..... Full Down
Power Idle after over obstacle
Touchdown..... Main wheels first
Brakes Apply heavily
Flaps Retract immediately

Soft Field Landing

Final Approach Airspeed..... 54 KIAS
Flaps..... Full Down
Power 1200 - 1500 RPM
Touchdown..... Smoothly at minimum descent rate
Landing Ground Roll Hold nose wheel off runway
Taxi Power and full back elevator

Balked Landing (go around)

Throttle	Full Open
Flaps	Retract to 20 degree
Carburetor Heat	OFF
Climb Airspeed	55 KIAS (V _x) or 67 KIAS (V _y)
Flaps	Slowly retract after safe airspeed

After Landing Checklist

Flaps	Up
Carburetor Heat	OFF
Nonessential Electrical Equip.....	OFF
Transponder.....	OFF
Landing Light	OFF
Trim.....	Take-off position
Flight Controls.....	Position for wind

Shutdown Checklist

Parking Brake	If required
Throttle	Idle - Mag grounding check
Throttle	1200 RPM
Electrical Equipment.....	OFF (except beacon)
Mixture	Idle - Cut-off
Magneto Switch.....	OFF - Key on dash
Master Switch	OFF
Fuel Selector.....	OFF

Securing Aircraft

Flight Control Wheel	Installed
Main Wheels	Chocked
Wing & Tail Tie Downs.....	Attached
Engine Plug Covers	Installed
Pitot Cover	Installed
Hobbs & Tach Times.....	Recorded
Fuel & Oil Servicing.....	Recorded
Seat belts & Harness	Stowed
Door & Window	Locked

Cessna 152 Aircraft Information

(All speeds in KIAS)

Rotate (V_r)	50 - 60
Best Rate of Climb (V_y).....	67
Best Angle of Climb (V_x)	
10° Flaps	54
Maneuvering Speed (V_a)	
At 1670 lbs	104
At 1500 lbs	98
At 1350 lbs	93
Best Glide Speed	60
Stall Speed	
Power Off, Flaps Up (V_{s1})	48
Power Off, Flaps 30° (V_{s0})	43
Approach Speed (Normal Landing)	
Flaps Up	60 - 70
Flaps 30°	55 - 65
Maximum Flaps Extended Speed (V_{fe}).....	85
Maximum Structural Speed (V_{no})	111
Never Exceed Speed (V_{ne}).....	149
Maximum Takeoff Weight	1670 lbs
Full Oil	6 qts
Fuel	
Full.....	26 gal
Useable	24.5 gal
Maximum Gross Weight (MGW)	1670 lbs
HP	110 HP
Maximum Crosswind	12



C-152 EMERGENCY PROCEDURES

Engine Fire during Start on Ground

Cranking..... Continue to suck flames into engine

If engine starts:

Power 1700 RPM for a few minutes

Engine Shutdown & inspect for damage

If engine fails to start:

Cranking..... Continue effort to start

Mixture..... Idle – Cut-off

Engine Secure

Master Switch **OFF**

Magneto Switch **OFF**

Fuel Selector **OFF**

Fire Extinguisher..... Use if necessary

Fire Damage Inspect for damage

Engine Fire in Flight

Mixture..... Idle – Cut-off

Fuel Selector **OFF**

Master Switch **OFF**

Cabin Heat & Air **OFF** (except wing root vents)

Airspeed 100 KAIS– increase if not extinguished

Forced Landing As soon as possible

Electrical Fire in Flight

Master Switch **OFF**

Radios **OFF**

Electrical Equipment/Switches **OFF**

Magneto Switch **ON**

Cabin Heat, Air, & Vents Closed

Fire Extinguisher..... Activate (if available)

If fire appears out:

Master Switch **ON**

Circuit Breakers Check for faulty circuit – do not reset

Radio **ON** – one at a time

Electrical Equipment/Switches **ON** – one at a time

Cabin Heat, Air, & Vents Open if fire extinguished

C-152 EMERGENCY PROCEDURES

C-152 EMERGENCY PROCEDURES

Cabin Fire

Master Switch	OFF
Cabin Heat, Air & Vents	Closed
Fire Extinguisher.....	Activate (if available)
Land	As soon as possible

Wing Fire

Navigation Light	OFF
Strobe Light (if installed).....	OFF
Pitot Heat	OFF

If in flight:

Side Slip	To keep flames from fuel tank
Land	As soon as possible

Engine Failure during Takeoff Run

Throttle.....	Idle
Brakes	Apply
Flaps.....	Retract
Mixture.....	Idle – Cut-off
Magneto Switch	OFF
Master Switch	OFF

Engine Failure after Takeoff

Airspeed (Best Glide).....	60 KIAS
Mixture.....	Idle – Cut-off
Fuel Selector	OFF
Magneto Switch	OFF
Flaps.....	As required
Master Switch	OFF

Engine Failure during Flight

Airspeed (Best Glide).....	60 KIAS
Carburetor Heat.....	ON
Fuel Selector	ON
Primer.....	In & Locked
Mixture.....	Full Rich
Magneto Switch	Both (Start if propeller is stopped)

C-152 EMERGENCY PROCEDURES

C-152 EMERGENCY PROCEDURES

Emergency Landing without Power

Radio.....	Transmit MAYDAY (121.5)
Transponder	Squawk 7700
Airspeed	60 KIAS
Mixture	Idle – Cut-off
Fuel Selector	OFF
Magneto Switch	OFF
Flaps.....	As required
Master Switch	OFF
Seat Belts & Harness.....	Fasten & tighten
Doors.....	Unlatch prior to touchdown
Touchdown	Slightly tail low
Brakes	Apply Heavily

Emergency Landing with Power

Airspeed (Best Guide).....	60 KIAS
Select Field.....	Fly over – note terrain / obstacles
Radio.....	Transmit MAYDAY (121.5)
Transponder	Squawk 7700
Flaps.....	As required

Prior to touchdown

Radio/Electrical Equipment	OFF
Seat Belts & Harness.....	Fasten & tighten
Doors.....	Unlatch prior to touchdown
Master Switch	OFF
Airspeed	54 KIAS
Touchdown	Slightly tail low
Mixture.....	Idle – Cut-off
Fuel Selector	OFF
Magneto Switch	OFF
Brakes	Apply Heavily

C-152 EMERGENCY PROCEDURES

C-152 EMERGENCY PROCEDURES

Over-Voltage Light

Master Switch **OFF**
Master Switch Switch back **ON**
Over Voltage Light Comes On Again Master Switch **OFF** &
..... Land as soon as possible

Ditching

Radio Transmit MAYDAY (121.5)
Transponder Squawk 7700
Heavy Objects Secure or jettison
Approach.....
 High Winds, Heavy Seas..... Into the wind
 Light Winds, Heavy Swells..... Parallel to swells
Flaps..... 30°
Airspeed / Power..... 54 KIAS – 300 ft/min descent
Seat Belts & Harness..... Fasten & tighten
Doors..... Unlatch
Touchdown Level attitude at 300 ft/min descent
Face Cushion at touchdown
Evacuate As soon as possible

Ammeter Shows Discharge

Radios **OFF**
Non-essential Electrical **OFF**
Alternator Circuit Breaker Check in
Master Switch **OFF** (both sides)
Master Switch **ON**
Low Voltage illuminates again Radio ON and
..... Land as soon as possible

Landing with Flat Main Tire

Approach..... Normal
Touchdown Good tire offset on side of runway -
..... hold off flat tire as long as possible

C-152 EMERGENCY PROCEDURES