

CESSNA 182 RG CHECK LIST

INTERIOR

1. Aircraft Documents
 - a. Airworthiness Certificate
 - b. Registration
 - c. Radio License
 - d. Operating Handbook
 - e. Weight and Balance
2. Hobbs time – RECORDED
3. Control Wheel Lock – REMOVED/STOWED
4. Sun visor – REMOVED/STORED
5. Ignition Switch – OFF
6. Avionics Master Switch – OFF
7. Autopilot – OFF
8. Gear Selector – DOWN
9. Battery Side of the Master Switch – ON
10. Gear Warning Horn/Lights – TEST
11. Fuel Quantity – CHECK
12. Flaps – LOWER
13. Stall Warning – CHECK
14. Lights/Pilot Heat – CHECK AS REQUIRED
15. Battery Side of the Master Switch – OFF
16. Static Pressure Alternate Source Valve – OFF
17. Fuel Selector Valve – BOTH
18. Elevator Trim – TAKEOFF
19. Rudder Trim – CHECK
20. Fuel Sample Cup – OBTAIN

FUSELAGE – LEFT SIDE & EMPERNNAGE

1. Fuel Tank Slump Quick Drain – DRAIN/CHECK
2. Main Wheel Tire, Brake & Strut – CHECK
3. Chokes/Tiedowns – REMOVE/STOW as required
4. Wheel Well – CHECK
5. Baggage Door – CHECK.LOCK
6. Fuselage Condition – CHECK
7. Control Surfaces – CHECK
8. Antennas/Lights – CONDITION CHECK
9. Tail Tie-down - DISCONNECT

FUSELAGE & RIGHT WING

1. Wheel Well- CHECK
2. Flap – CHECK
3. Aileron/Hinges – CHECK
4. Wingtip/Navigation Light/Strobe – CHECK
5. Leading Edge – CHECK
6. Wing Tie-Down/Ground Cable – REMOVE/STOW
7. Main Wheel Tire, Brake, & Strut – CHECK
8. Fuel Tank Sump Quick Drain Valve – DRAIN/CHECK
9. Fuel Quantity – CHECK VISUALLY
10. Fuel Filler Cap – SECURE & Vent Unobstructed
11. Upper Wing Surface – CHECK
12. Wing Air Intakes –CLEAR

NOSE

1. Static Port – CHECK
2. Cowl Flap - CHECK
3. Engine Oil – CHECK

NOTE

To prevent possible Oil Sump Overfilling, leave the dipstick in the engine at least 10 Seconds before checking the level.

Minimum	5
Normal	7
Maximum	8 (Extended Flight)

4. Oil Dipstick – SECURE
5. Fuel Strainer Drain Knob – DRAIN/CHECK
6. Engine Access Door – SECURE
7. Propeller and Spinner – CHECK
8. Air intake – CLEAR
9. Landing/Taxi Lights – CHECK CLEAN
10. Nose Gear Wheel Well – CLEAR/DOORS SECURE
11. Nose Wheel Tire and Strut – CHECK
12. Roll Aircraft – CHECK TIRES
13. Carburetor Air Intake/Filter – CHECK
14. Cowl Flaps – CHECK
15. Static Port – CHECK
16. Windscreen – CHECK

LEFT WING

1. Wing Air Intake – CLEAR
2. Fuel Quantity – CHECK
3. Fuel Filler Cap – SECURE & Vent Unobstructed
4. Pitot Tube – CHECK
5. Fuel Tank Vent Opening - CHECK
6. Wingtip/Navigation Light/Strobe – CHECK
7. Aileron – CHECK
8. Flap – CHECK

BEFORE STARTING ENGINE

1. Preflight Inspection – COMPLETE
2. Sterile Cockpit Procedures – BRIEFED
3. Passenger Briefing – COMPLETE
4. Seats, Seat Belts, Shoulder Harnesses – SECURE
5. Circuit Breakers – CHECK
6. Electrical Equipment – OFF
7. Cowl Flaps – OPEN
 - a. (Mover lever out of locking hole to reposition)
8. Brakes – Test and SET
9. Flight Controls – FREE AND CORRECT

WARNING

Ensure front seats are properly locked after adjustment as a inadvertent seat unlocking on takeoff may result in a stall

STARTING ENGINE

1. Prime –AS REQUIRED (2 to 3 shots when cold)
(1 or 2 shots when hot)
2. Primer – IN AND LOCKED
3. Carburetor Heat – COLD
4. Throttle – OPEN ¼ INCH
5. Propeller- HIGH RPM
6. Mixture – RICH
7. Propeller Area- CLEAR
8. Battery Side of the Master Switch – ON
9. Beacon – ON
10. Ignition Switch – START (release when engine starts)

Note

If engine has been overprimed, start with throttle ¼ to ½ open. Reduce throttle to idle when engine fires.

10. Oil Pressure – CHECK
11. Mixture – SET
12. Alternator Side of the Master Switch – ON
13. Ammeter- CHECK
14. Avionics Master Switch – ON
15. Radios – ON/SET
16. Transponder- STANDBY
17. Navigation Lights/Landing Lights – AS REQUIRED
18. Flaps – UP

TAXI

1. Clearance – OBTAIN
2. Altimeter & Heading Indicator – SET
3. Flight Controls – POSITIONED FOR THE WIND
4. Aircraft Area – CLEAR
5. Brakes – RELEASE/TEST
6. Gyros- CHECK DURING TAXI

RUN UP

1. Align Aircraft – AS REQUIRED
2. Parking Brake – SET
3. Seats, Seat Belts, Shoulder Harnesses – SECURE
4. Cabin doors- CLOSED AND LATCHED
5. Flight Controls – RECHECK FREE AND CORRECT
6. Flight Instruments – CHECK AND SET
7. Fuel Selector Valve – RECHECK BOTH
8. Auxiliary Fuel Pump – ON Pressure Check – OFF
9. Throttle – 1700 RPM
10. Mixture Set

Propeller- CYCLE (High to Low and return to High)
Magnetoës – CHECK

Maximum Drop – 175 RPM
Maximum Difference – 50 RPM

Engine Instruments and Ammeter- CHECK
Suction Gage – CHECK
Carburetor Heat- ON/CHECK DROP

11. Throttle – Full Idle then 1000 PRM
12. Carburetor Heat – OFF/COLD
13. Throttle Friction Adjustment – AS REQUIRED

BEFORE TAKE OFF

NOTE

ABOVE 3000' MSL, perform a full power run-up and adjust the mixture for maximum RPM (over smooth surfaces only) or adjust the mixture for maximum RPM during the takeoff roll.

1. Radio and Avionic – SET
2. Autopilot- RECHECK OFF
3. Strobe Lights – ON
4. Landing Light- AS REQUIRED
5. Windows – AS DESIRED
6. Trim – TAKEOFF
7. Heading Indicator- CHECK/SET
8. Transponder – ALTITUDE
9. Pitot Heat – AS REQUIRED
10. Clearance – OBTAIN/ANNOUNCE

NORMAL TAKEOFF

1. Wing Flaps – 0-20 Degrees
2. Carburetor Heat- COLD
3. Fuel Selector – BOTH
4. Throttle – FULL OPEN & 2400 RPM – POWER CHECK
5. Elevator Control – LIFT NOSE WHEEL at 50 KIAS
6. Climb Speed - 70 KIAS (flaps 20)
 - i. 80 KIAS (flaps up)
7. Brakes – TAP MOMENTARILY
8. Landing Gear – RETRACT
9. Flaps = RETRACT AS REQUIRED

Pressure Altitude	V _x	V _y
Sea level	64	88
6,000	65	80
10,000	66	74

SHORT FIELD TAKE OFF

1. Wing Flaps – 20 Degrees
2. Carburetor Heat – COLD
3. Fuel Selector – BOTH
4. Brakes – HOLD
5. Throttle – FULL OPEN & 2400 RPM – POWER CHECK
6. Brakes – RELEASE
7. Elevator Control – MAINTAIN SLIGHTLY TAIL LOW
8. Lift-off- 47 KIAS
9. Climb Speed – 55 KIAS (Until all obstacles are cleared)
10. Brakes – TAP MOMENTARILY
11. Landing Gear –RETRACT
12. Wing Flaps – RETRACT slowly after reaching 75 KIAS

NORMAL CLIMB

1. Airspeed – 90 to 100 KIAS
2. Power – 23 “HG

Balked Landing

1. Power – FULL THROTTLE and 2400 RPM
2. Carburetor Heat – COLD
3. Wing Flaps – RETRACT to 20 Degrees
4. Airspeed – 75 KIAS
5. Wing Flaps –RETRACT slowly AFTER 75 KIAS
6. Cowl Flaps – OPEN

Landing – Normal

1. Airspeed 70-80 KIAS (Flaps up)
2. Flaps – AS DESIRED
3. Airspeed – 65-75(Flaps Down)
4. Touchdown – MAIN WHEELS FIRST
5. Landing Roll – LOWER NOSE WHEEL GENTLY
6. Braking – MINIMUM REQUIRED

Landing Short Field

1. Airspeed 70-80 (Flaps UP)
2. Flaps- AS DESIRED
3. Airspeed – 63 KIAS Flaps Down
4. Power – IDLE AFTER OBSTACLE IS CLEARED
5. Touchdown – MAINS FIRST
6. Braking – MINIMUM REQUIRED
7. Flaps – RETRACT FOR MAXIMUM BRAKING

Stop & GO

1. Wing Flaps- SET
2. Cowl Flaps – OPEN
3. Carburetor Heat – COLD
4. Mixture- SET
5. Elevator and Rudder Trim- SET
6. Takeoff Airspeed- REVIEW
7. Radio- ANNOUNCE DEPARTURE

Airspeed for Emergency Operations

Engine Failure After Takeoff

Wing Flaps Up 70 KIAS

Wing Flaps DOWN 65 KIAS

Maneuvering Speed

3100 pounds 112 KIAS

2550 pounds 101 KIAS

2000 pounds 88 KIAS

Maximum Glide

3100 pounds 80 KIAS

2550 pounds 72 KIAS

2000 pounds 64 KIAS

Landing Without Power

Wing Flaps Up 75 KIAS

Wing Flaps Down 65 KIAS

Engine Failure During Takeoff Run

1. Throttle - IDLE
2. Brakes –APPLY
3. Wing Flaps – RETRACT
4. Mixture – IDLE CUT-OFF
5. Ignition Switch – OFF
6. Master Switch – OFF

Engine Failure Immediately After Takeoff

1. Airspeed - 70 KIAS (Flaps UP)
65 KIAS (Flaps DOWN)
2. Mixture – IDLE CUT OFF
3. Fuel Selector Valve – OFF
4. Ignition Switch – OFF
5. Wing Flaps – AS REQUIRED (40 Degrees recommended)
6. Master Switch – OFF
7. Land Straight Ahead if Possible

Rough Engine Operations

1. Carburetor Heat – ON
2. Mixture – RICH or AS REQUIRED
3. Fuel Selector Valve – BOTH
4. Fuel Pressure – CHECK
5. Aux Fuel Pump – AS REQUIRED
6. Ignition Switch – BOTH
7. Primer- IN and LOCKED

If still Rough

8. Ignition Switch – Check Left or Right
9. Prepare for FORCED LANDING

Engine Failure during Flight

1. Airspeed – 80 KIAS
2. Carburetor Heat – ON
3. Fuel Selector Valve – BOTH
4. Mixture – RICH or AS REQUIRED
5. Ignition Switch – BOTH
(START if propeller is stopped)
6. Primer – IN and LOCKED

Emergency Landing without Engine Power

1. Airspeed - 70 KIAS (Flaps UP)
65 KIAS (Flaps DOWN)
2. Mixture – IDLE CUT-OFF
3. Fuel Selector Valve – OFF
4. Ignition Switch – OFF
5. Landing Gear – DOWN (UP if terrain is rough or soft)
6. Wing Flaps – AS REQUIRED (40 Degrees Recommended)
7. Master Switch – OFF
8. Doors – UNLATCH PRIOR TO TOUCHDOWN
9. Touchdown- SLIGHTLY TAIL LOW
10. Brakes – APPLY HEAVILY

Precautionary Landings

1. Airspeed - 65 KIAS
2. Wing Flaps – 29 Degrees

3. Selected Field- FLY OVER
4. Electrical Switched- OFF
5. Landing Gear – Down (UP if terrain is rough or soft)
6. Wing Flaps – 40 DEGREES (On Final Approach)
7. Airspeed – 65 KIAS
8. Doors – UNLATCH PRIOR TO TOUCHDOWN
9. Avionics Power and Master Switched – OFF
10. Touchdown= SLIGHTLY TAIL LOW
11. Ignition Switch – OFF
12. Brakes – APPLY HEAVILY

Ditching

1. Radio – TRANSMIT MAYDAY on 121.5 giving location
2. Heavy Objects (in baggage area) – SECURE OR JETISON
3. Landing Gear – UP
4. Wing Flaps- 20-40 DEGREES
5. Power – ESTABLISH 300 FPM DESCENT AT 60 KIAS
6. Approach
 - a. High Winds, Heavy Seas – INTO WIND
 - b. Light Wings, Heavy Swells – PARELLEL TO THE SWELLS
7. Cabin Doors – UNLACH
8. Touchdown – LEVEL ATTITUED AT 300 FPM DESCENT
9. Airplane – EVACUATE thought cabin doors
10. Life Vest and Raft- INFLATE

Fires

1. Cranking – CONTINUE
2. Power – 1700 PRM for a few minutes
3. Engine – SHUTDOWN and inspect for damage
4. Throttle – FULL OPEN
5. Mixture – IDLE CUT-OFF
6. Cranking – CONTINUE
7. Fire Extinguisher – OBTAIN
8. Engine – SECURE
 - a. Master Switch – OFF
 - b. Ignition Switch- OFF

- c. Fuel Selector Valve – OFF
- 9. Fire – EXTINGUISH
- 10. Fire Damage- INSPECT

Engine Fire In Flight

- 1. Mixture – IDLE CUT OFF
- 2. Fuel Selector Valve- OFF
- 3. Master Switch – OFF
- 4. Cabin Heat and Air – OFF Except overhead vents)
- 5. Airspeed -100 KIAS
- 6. Forced Landings – EXECUTE

Electrical Fire in Flight

- 1. Master Switch – OFF
- 2. Avionics Power Switch –OFF
- 3. All other Switched (except ignition switch) – OFF
- 4. Vents/Cabin Air/Heat – CLOSED
- 5. Fire Extinguisher – ACTIVATE

After Fire is out

- 6. Master Switch – ON
- 7. Circuit Breakers – CHECK, do not reset faulty circuit
- 8. Avionics Power Switch – ON
- 9. Radio/Electrical Switched – ON one at a time
- 10. Vent/ Cabin Air/Heat – OPEN

Cabin Fire

- 1. Master Switch – OFF
- 2. Vents/Cabin Air/ Heat – CLOSED (to avoid drafts)
- 3. Fire Extinguisher- ACTIVATE (if available)

After Discharging with Extinguisher

- 4. Land airplane soon as possible

Wing Fire

- 1. Navigation Light Switch – OFF
- 2. Strobe Light Switch – OFF
- 3. Pilot Heat Switch – OFF

Static Source Blockage

1. Static Pressure Alternate Source Valve – PULL ON