

Cessna 182

Preflight Inspection Cockpit

Aircraft docs (ARROW) Check
 Weight & Balance Check
 Parking Brake Set
 Control wheel lock Remove
 Hobbs/Tach Check/Remove

Ignition Off
 Avionics Power Switch Off
 Circuit breakers Check In
 Master Switch On
 Fuel quantity indicators Check
 Anti-Collision / Strobe Check
 Landing /Nav Light (night) Check
 Pitot Heat On
 Static Pressure Alt Src Valve Off
 Flaps Extend
 Master Switch Off
 Pitot Tube Test for Heat
 Pitot Heat Off
 Fuel Selector Check / Set

Fuselage and Empenage

Baggage Door Closed & Locked
 Rivets Check
 Rudder Gust Lock Remove
 Tail Tie-Down Disconnect
 Control surfaces Free & Secure
 Trim Tab Check Security
 Antennas Check Security
 Beacon / Nav Light Check

Right wing

Flaps Check
 Aileron Free and Secure
 Leading Edge Check
 Nav Light Check
 Wing tie-down Disconnect
 Main wheel tire Inflated/Cond
 Brakes Not Leaking
 Fuel tank sump Sample
 Fuel Quantity Check
 Fuel Filler cap Secure

Nose

Engine oil level Check
 Fuel strainer Drain
 Propeller and spinner Check
 Alternator belt Check

Preflight/Start

Air intake Check
 Carburetor air filter Check
 Landing lights Check
 Nose wheel strut & tire Check
 Static source opening Check

Left Wing

Wing tie-down Disconnect
 Leading Edge Check
 Pitot tube Uncover and Check
 Stall warning Check
 Fuel tank vent open Check
 Nav Light Check
 Aileron Free and Secure
 Flaps Secure
 Main wheel tire Inflated/Cond
 Brakes Not Leaking
 Fuel tank sump Sample
 Fuel Quantity Check
 Fuel Filler cap Secure

Before starting engine

Preflight inspection Complete
 Passenger Briefing S-A-F-E-T-Y
 Seats, belts Adjust & Lock
 Doors Closed & Locked
 Avionics Power Switch Off
 Fuel Selector Valve Both
 Brakes Test & Set
 Tow Bar Removed

Starting Engine

Throttle Open 1/4 inch
 Mixture Rich (IN)
 Carb heat Cold (IN)
 Prime As required (3-6 strokes)
 Primer In & Locked
 Battery Master Switch On
 Beacon On
 Propeller area Clear
 Ignition Start
 Throttle Adjust 1000 rpm
 Oil Pressure Check normal
 Mixture Lean
 Alternator Master Switch On
 Avionics Master Switch On
 Radios On
 Flaps Up
 Ammeter Check Charge

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Taxi

Taxi Light (night) As-Required
 Transponder Altitude
 ATIS/AWOS/ASOS Obtain
 Departure & Taxi Clearance Contact
 Brakes Test
 Turn Instruments Check

Before Takeoff

Brake Set
 Cabin doors Closed & Locked
 Seats, belts Adjust & Lock
 Flight controls Free & Correct
 Elevator Trim Set for TAKEOFF
 Flight Instruments (6 Pack) Set
 Fuel Quantity Check
 Mixture Rich (IN)
 Fuel Selector Valve Both
 Cowl Flaps Open
 Throttle 1700 rpm
 Magnetos (125 max drop) Check

Prop Cycle 3 Times
 Suction gage Check
 Engine Instruments Check
 Ammeter Check
 Mixture Set for Density Alt
 Carb heat (rpm drop) On/Off
 Throttle 1000 rpm
 Strobe Lights On
 Landing Lights On
 Flaps Set for Takeoff (0°-10°)
 Windows Closed
 Radios/Avionics Set
 Departure Brief / Time Off

Takeoff

Flaps Up
 Carb heat Cold (In)
 Transponder Altitude
 Trim set for TAKEOFF
 Throttle Full
 Oil, Tach, Airspeed Check
 Elevator Lift at 55 KTS
 Climb (Vy) 80 KTS

Climb

Cruise Climb 90-100 KTS
 Mixture Lean above 3000'

Operation

Cruise

Pitch Set
 Throttle As required
 Trim Set
 Cowl Flaps As-Required
 Mixture Lean as required

Descent

Radios Set
 ATIS Checked
 Altimeter Set
 Mixture Richen
 Cowl Flaps Closed
 Landing light On

Before Landing Checklist

"C"arb Heat On
 "G"as (fuel selector) On Both
 "U"ndercarriage (Gear) N/A
 "M"ixture Rich
 "P"ropeller High RPM
 "S"eatbelts Fastened
 Airspeed 75 KTS (Flaps Up)
 70 KTS (Flaps Dn)

After landing

Flaps Up
 Mixture Lean
 Carb Heat Cold (In)
 Cowl Flaps Open
 Transponder Altitude
 Landing light Off
 Radio / Taxi Clearance Set

Parking

Avionics Off
 Electrical Off
 Throttle 1000 RPM
 Magnetos Ground Check
 Mixture Cut-off
 Ignition switch Off
 Master switch Off

Securing the aircraft

Control Lock Install
 Hobbs/Tach Record
 Door/Window Secure
 Tie-downs Secure

Emergency Procedures

Engine failure

TAKEOFF
 Throttle Idle
 Brakes Apply
 Flaps Retract
 Mixture IDLE cut-off
 Ignition Off
AFTER TAKEOFF
 Airspeed 70 KTS
 Mixture Idle Cut-off
 Fuel shutoff valve Off
 Ignition Off
 Flaps As Required
 Master switch Unlatch
 Cabin Doors Unlatch Ahead
 Land **Straight Ahead**

DURING FLIGHT

"A"irspeed (best glide) 70 KTS
 "B"est Field FIND
 "C"hecklist (restart)
 Fuel selector valve Both
 Mixture Rich
 Carb Heat On
 Primer In & Locked
 Master On
 Ignition BOTH / START
 "D"eclare
 Mayday Transmit 121.5
 Transponder Squawk 7700
 "E"xecute (emergency landing)
 Fuel Off
 Mixture Idle Cut-off
 Ignition Off
 Propeller Low RPM
 Flaps As Required
 Master switch Off
 Cabin Doors Unlatch
 Passengers Brief

Carburetor Icing

Throttle Full
 Carb Heat On (Out)
 Mixture Adjust

Engine Roughness

Magnetos Check
 Mixture Lean as necessary
 Carb Heat On

Engine Fire during start

Crank Continue
 Power 1700 RPM (2 min)
 Engine Shut down
 Mixture If No Start:
 Fuel Selector Idle Cut Off
 Throttle Off
 Continue Cranking Full Open
 2-3 Min

Engine Fire during flight

Fuel Off
 Mixture Idle Cut-off
 Ignition Off
 Master Switch Off
 Cabin Heat/Air Off
 Airspeed 100 KTS
 Emergency Landing Execute

Alternator Failure

Ammeter Verify Discharge
 Avionics Master Off
 Master Off
 Breakers Check
 Master On
 Alternator If still no power:
 Battery On
 Avionics Master On
 Reduce load and land

Alternator Overload

Master Switch Off
 Master Switch On
 Over-voltage light Off
 Alternator If still overload:
TERMINATE flight ASAP

Electrical Fire

Master Switch Off
 Avionics Master Off
 Cabin Heat/Air Off
 Fire Extinguish
 Breakers Check/ No Reset
 Electrical All Off
 Master/Avionics On
 Electrical On/ One at a Time

Reference

Short field take-off

Takeoff checklist Complete
 Flaps 10°
 Taxi Max runway
 Brakes Set and hold
 Throttle Full
 Brakes Release
 Elevator Lift at 55 KTS
 Climb (Vx) 60 KTS
 Flaps Retract when clear
 Airspeed (Vy) 80 KTS

Short field landing

Before-landing check Complete
 Approach 60 KTS
 Flaps 40°
 Throttle Maintain glide
 Touchdown Power Off
 Flaps Up
 Elevator Full Aft
 Braking Heavy as required

Soft field take-off

Takeoff checklist Complete
 Flaps 10°
 Taxi keep rolling
 Elevator Full Aft
 Climb Accelerate Ground Effect
 Airspeed 80 KTS
 Climb (Vy) 80 KTS
 Flaps Retract when clear

Soft field landing

Before-landing check Complete
 Throttle 1500 RPM
 Flaps 20°
 Airspeed 70 KTS
 Touchdown Main first, softly
 Landing roll Nose wheel up

Elevator Full Aft
 Braking As required

Go-around

Throttle Full
 Carb Heat Cold (in)
 Flaps 20°
 Climb 60 KTS
 Flaps 10°
 Climb 70-80 KTS
 Flaps Up
 Climb (Vy) 80 KTS

V-Speeds (knots)

Rotate	V _r	55
Max Angle	V _x	60
Max Rate	V _y	80
Maneuver Speed (heavy)	V _a	110
Maneuver Speed (light)		90
Flap (10 degree)	V _{fe}	140
Flap (20+ degree)		95
Max Structural Cruising	V _{no}	141
Never exceed	V _{ne}	176
Stall (clean)	V _s	53
Stall (dirty)	V _{so}	48
Final Approach	Flaps	70
	No flaps	75
Max Glide		70

Light Signals:

Signal	On Ground	In Flight
Steady Green	Takeoff	Land
Flashing Green	Taxi	Return to land
Steady Red	Stop	Give way
Flashing Red	Clear runway	Do not land
Flashing White	Return to ramp	--
Red/Green alternating	WARNING – USE CAUTION	

*****Emergency Procedures*****

Reference