

ROCKWELL COMMANDER 112TC Flight Checklist

Preflight Inspection:

1. Aircraft Records..... CHECK
 Tach RECORD
 VOR Log (IFR Flight)..... VOR CURRENT
2. Landing Gear Switch DOWN
3. Ignition Switch OFF
4. Master Switch ON
5. Landing Gear Indicator Lights (3) GREEN
6. Fuel Quantities (L) (R) CHECK
7. Check Flaps Down, verify flap switch returns to center
8. Master Switch OFF

Before Starting Engine:

1. Preflight Inspection COMPLETE
2. Parking Brake SET
3. Cowl Flaps OPEN
4. Cabin Doors CLOSED
5. Seats, Seat Belts SECURE
6. Circuit Breakers CHECK IN
7. Battery ON
8. Check Flaps UP, Verify flap switch remains up until manually returned to center, Verify or monitor flap position by indicator CHECK UP
9. Radio Master ON
10. ATIS / Weather OBTAIN
11. Clearance OBTAIN
12. Radio Master / Electrical Equipment OFF

Starting Engine:

1. Alternate Induction Air Control COLD
2. Prop HIGH RPM
3. Anti-collision Light ON
4. Fuel Selector BOTH
5. Prop Area "CLEAR"

COLD (NORMAL) START:

- a. Throttle CLOSED
- b. Mixture ENRICHEN TO "H"
- c. Fuel Boost Pump ON Check Pressure
- d. Prime Button momentary (2 sec.) DEPRESS
- e. Fuel Boost Pump OFF
- f. Ignition ENGAGE
6. Throttle 800 to 1000 RPM
7. Oil Pressure GREEN (within 30 seconds)
8. Mixture LEAN FOR TAXI

9. Alternator ON
10. Radio Master ON
11. Lights AS REQ
12. Parking Brake RELEASE
13. Brakes / Steering TEST ON TAXI

Runup:

1. Parking Brake SET
2. Flight Controls FREE & CORRECT
3. Elevator Trim TAKEOFF RANGE
4. Rudder Trim NEUTRAL
5. Mixture ENRICHEN TO "H"
6. Throttle 2200 RPM
 - a. Mags CHECK, 175 MAX DROP / 50 DIFF
 - b. Propeller CYCLE (3x first flight)
 - c. Alternate Air CYCLE, FULL HOT / FULL COLD
 - d. Voltmeter CHECK
 - e. Vacuum Gauge 4.5" - 5.2"
 - f. Throttle at IDLE (600 to 700 RPM) CHECK
 - g. Mixture LEAN UNTIL CLEARED FOR TAKEOFF

Before Takeoff:

1. Instruments and radios CHECK / SET
2. Flaps (Visually check position & ind.) CHECK / SET
3. Transponder ALT / SET
4. Seat Belts / Shoulder Harnesses SECURE
6. Cabin Doors & Windows SECURE
7. Strobes / Landing Light ON
8. Fuel Boost Pump ON
9. Mixture ENRICHEN TO "H"
10. Prop / Alternate Air FORWARD
11. Takeoff / Emergency Proc BRIEFED
12. Brakes RELEASED
13. Vr 65 KIAS

After Takeoff:

- P Positive Climb Rate VERIFY
U Undercarriage UP
P Power 36" / 2575 (400' & clear of obstacles)
S Switches:
 - a. Flaps UP
 - b. Landing Light OFF

Speeds:

- Vy (flaps up) 86 KIAS
Vx (flaps 20° / up) 65 / 72 KIAS

Level Off / Cruise:

1. Fuel Boost Pump..... OFF
2. Power SET (see table)
3. Mixture LEAN
4. Cowl Flaps (Max 130 KIAS) AS REQUIRED

Descent:

1. Cowl Flaps.....CLOSED
 2. Mixture ENRICHEN
 4. Flight Instruments CHECK
 5. Avionics SET
- Note: Avoid shock cooling with 1" M.P. / minute

Before Landing:

- G Gas (Fuel Selector) BOTH
- U Undercarriage (< 130 KIAS) DOWN (verify 3 GREEN)
- M Mixture ENRICHEN TO "H"
- P Propeller HIGH
- A Alternate Air HOT
- F Flaps 10°
- S Seats/Safety/Switches:
 - a. Seatbelts SECURE
 - b. Landing Light ON
 - c. Fuel Boost pump ON

After Landing and Clear of Runway:

1. Flaps UP
2. Strobes / Landing Light..... OFF
3. Fuel Pump OFF
4. Cowl Flaps..... OPEN
5. Mixture LEAN MAX RPM
6. Throttle (5 Min. Cool Down).. 800-1000 RPM THEN IDLE
7. Alternate Air..... COLD

Shutdown:

1. Radio Master and Electrical Switches OFF
2. Beacon ON
3. Mixture IDLE CUTOFF
4. Magnetos OFF
5. Battery / Alternator Switches OFF
6. Fuel Selector..... OFF
7. Tach RECORDED
8. Doors SECURED
9. Chocks and tie downs.....INSTALLED

Short Field Takeoff:

1. Flaps 20°
2. Brakes..... HOLD
3. Throttle (<8000 ft) 42" / 2575 RPM
4. Brakes..... RELEASE
5. Rotate 62 KIAS, climb at 65 KIAS (50ft height)
6. Landing GearRETRACT (When safely airborne)
7. Flaps (When obstacle cleared & 86 KIAS)..... RETRACT
8. Normal climb 100 KIAS (Transition as soon as practical)

Short Field Landing:

1. Flaps FULL
2. Airspeed ... 70 KIAS min (Smooth-otherwise +5 to +15)
3. Flaps RETRACT
4. Braking..... MAXIMUM

Soft Field Landing:

1. Flaps FULL
2. Airspeed 82 KIAS
3. Touchdown..... MAIN WHEELS FIRST
4. Rollout..... NOSE HIGH

V Speeds & Performance

V Speeds @ 2850 lbs (KIAS):

V_{so} Stall, Flaps Down53	V_s Stall, Flaps Up.....58
V_x Climb, Best Angle.....86	V_{fe} Max. Flap Extend..... 150
V_y Climb, Best Rate 100	V_{ie} Max. Gear Extend..... 130
V_a Maneuvering..... 110	V_{APP} Approach, Flaps Up .. 110
V_{ne} Never Exceed..... 180	V_{REF} Short field, Flaps Dn... 70
V_{no} Normal Operating 143	Best Glide Speed75
V_{REF} Normal Land, Flaps Dn ..82	Max Side Window Open ... 130

This checklist is for training purposes only! Please refer to POH for more complete information.

Emergency Procedures

Manual Gear Extension:

Prior to extension procedure:

1. Master Switch VERIFY ON
2. Landing Gear Circuit Breaker VERIFY IN
3. Landing Gear Indicator Bulbs CHECK

If gear does not check down and locked:

- a. Gear selector DOWN
- b. Throttle..... IDLE
- c. Airspeed LESS THAN 76 KIAS
- d. Rudder Trim NEUTRAL
- e. Emergency Ext. Valve Knob PULL OUT AND DOWN

Note: Approximately 10 seconds may be required for extension

Engine Failure:

1. Trim for 75 KIAS (Glide approx 1.4 SM per 1000 ft above terrain)
2. Fuel Selector... FULLEST TANK (check other 2 positions)
3. Fuel Boost Pump.....ON
4. Mixture FULL RICH / THEN LEAN TIL SMOOTH
5. Alternate Air HOT
6. Ignition Switch BOTH (check left and right)
7. If power is not restored, select suitable landing site.

Power OFF Landing:

1. Trim for 75 KIAS (Glide approx 1.4 SM per 1000 ft above terrain)
2. Select suitable landing site
3. Make emergency radio call

When committed to land:

4. Gear Selector DOWN
5. Ignition Switch OFF
6. Master Switch OFF
7. Fuel Selector..... OFF
8. Mixture IDLE CUTOFF
9. Seat Belts / Shoulder Harnesses..... SECURE
10. Cabin Door UNLATCHED

Unintentional Spins:

1. Throttle..... IDLE
2. Rudder Full opposite to direction of rotation
3. Control Wheel Forward
4. Rudder Neutral when rotation stops
5. Control Wheel as required to smoothly regain level flight

Alternator Failure:

1. Reduce electrical load
2. Main Alternator Circuit Breaker RESET
3. ALT Switch OFF for one second, then ON

If the ammeter continues to indicate no output, or alternator will not stay reset:

1. Reduce electrical load
2. Alternator Field Current Circuit Breaker PULL
3. ALT Switch OFF
4. Land as soon as practical; All electrical power is being supplied by the battery

Engine Roughness:

1. Alternate Air HOT
2. Mixture Adjust for smoothness
3. Fuel Boost Pump ON
4. Fuel Selector..... Change Tanks
5. Magnetos Switch Left or Right
6. Engine Gauges CHECK

If roughness continues, prepare for a precautionary landing as soon as practical

Propeller Over speed:

1. Throttle RETARD
2. Oil Pressure CHECK
3. Prop Control FULL DECREASE
4. Prop Control INCREASE SLOWLY
5. Airspeed REDUCE
6. Throttle AS REQ for RPM < 2575

Commander 112TC Emergency Procedures (cont.)

Fire, Electrical:

1. Master Switch OFF
2. Vents..... OPEN
3. Cabin Heat OFF
4. Defroster..... OFF
5. Land as soon as practical

Fire, Engine In Flight:

1. Fuel Selector..... OFF
2. Throttle.....CLOSE
3. MixtureIDLE CUTOFF
4. Heater OFF
5. Defroster..... OFF
6. Execute Emergency Descent / Power Off Landing

Fire, Engine On Ground:

If engine not started:

1. MixtureIDLE CUTOFF
2. Throttle..... OPEN
3. Continue to operate starter to pull fire into engine
If engine started, continue operating to pull fire into engine

If fire continues:

1. Fuel Selector..... OFF
2. MixtureIDLE CUTOFF
3. Master Switch OFF
4. Exit airplane and extinguish fire with extinguisher

Loss of Oil Pressure:

If partial loss of pressure, suspect a malfunction of the oil pressure regulating system. Loss of oil pressure is usually accompanied by an increase in oil temperature.

If complete loss of pressure occurs, accompanied by an increase in oil temperature, anticipate that the engine will seize in a short period of time. Be prepared to execute a power off landing.

High Oil Temperature:

An abnormally high oil temperature may be caused by a low oil level, an obstruction in the oil cooler, damaged or improper baffle seals, a defective gauge, or other causes. Land as soon as practical.

A steady, rapid rise in oil temperature is a sign of trouble. Land at the nearest airport. Watch for an accompanying loss of oil pressure.

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