

Cessna Grand Caravan C208B

Speeds (KIAS)

V _{MO}	175	
V _X	72	SL to 20 000'
V _Y	104	SL to 10 000'
	104-87	10 000' to 20 000'
V _R	70-75	20° flap
V _{REF}	75-85	30° flap
	100-115	No flap
V _{FE}	125	30° flap
	150	20° flap
	175	10° flap
Other		
	80	Balked landing (20°)
	97-71	Glide (8750-5000 lb)
	148	Turbulent air: 8750 lb
	112	Turbulent air: 5000 lb
Cruise climb		
	110-120	

Take-off Speeds (short, 20° flap)

Weight (lbs)	Take-off speeds (KIAS)	
	Rotate	At 50'
8750	70	83
8300	67	80
7800	64	76
7300	61	73

For normal takeoff, use 70-75 and 85-95 KIAS.

Other Speeds

Weight (lbs)	Landing	V _A	Glide
	KIAS	KIAS	KIAS
8500	78	148	95/97
8000	75	137	87/90
7500	73	125	79/82
7000	71	112	71/74

Notes:

Short landing, 30° flap. For Normal: 75-85 KIAS.

Glide speeds with/without cargo pod.

Caravan C208 Normal Checklist

Before starting engine

Preflight inspection and W&B: Complete
Doors: Unlocked
Pax. Briefing: Complete
Cabin doors: Latched
Crew doors: Unlocked
Parking brake: Set
Seats, belts, harnesses: Adjusted, secure (check pin)
Switches: Off
Ignition: Norm
Circuit breakers: Check in
Fuel tank selectors: Both on
Radar: Off
Air conditioner: Off
Inverter: Off
Bleed air: Off
Cabin Heat Mixing: Flt-Push
Emergency power lever: Normal
Power lever: Idle
Propeller: Full forward
Fuel condition lever: Cutoff
Rudder lock: Turn and push to unlock
Fuel shutoff: On (push in)
Battery switch: On
Wing flaps: Up
NS/FSB: As required
Fire detector test: Press
Annunciator panel: Test (incl. fuel warning horn)
Annunciator day/night: Set

Engine Start (Battery)

Battery: On

Volt/ammeter: Check (24 V minimum)

Emergency power lever: Normal (annunciator)

Propeller area: Clear

Fuel boost: On

AUX FUEL PUMP ON: Check On

FUEL PRESS LOW: Check Off

Fuel flow: Check none

Starter switch: Start

IGNITION ON: Check on

Engine oil pressure: Check

$N_g > 12\%$, stable: Wait

Fuel condition lever: Low idle

Fuel flow: 80 to 110 lb/hr

ITT: (1090°C, max. 2 s)

$N_g > 52\%$: Check

Starter switch: Off

STARTER ENERGISED: Check Off

Inverter: Test, select 1 or 2

Engine instruments: Check

Generator: Charging, GEN OFF extinguished

Fuel boost: Normal, AUX FUEL PUMP extinguished

Standby power: On

Avionics 1 & 2: On

Nav lights, beacon: On as required

Suction gauge: Check

Heating, ventilation, defrost: As required

Radios: As required

Taxi

Brakes: Check

Flight instruments: Check

Before takeoff (Runup)

Park brake: Set
Seats, belts, harnesses: Check secure
Flight controls: Full, free, correct
Flight instruments: Check, set
Fuel boost: Check Normal
Fuel tanks: Check both on
Fuel quantity: Checked
Fuel shutoff: Check fully on
Elevator, aileron, rudder trim: Set for takeoff
Power check: 400 ft-lb
 Suction: Check
 Volt/amps: Check, return to BATT
 Inertial separator: Check (torque drop/return)
 Engine instruments: Check
Overspeed governor: Check 1750 ±60 rpm
Power lever: Idle
Quadrant friction: Adjust
Standby power: Check
Autopilot: Preflight check
 Avionics power 1: Check on
 Gyros: Allow 3-4 minutes to stabilise
 Preflight test: Annun., Alt Select, AP 12x
 TRIM warning: Off (if not, pull AP breaker)
 Electric trim: Test (L, R, both, clutch, Disc.)
 Flight director, Autopilot: Engage
 Yaw damper: Engage
 Flight controls: Move to overpower AP
 Disconnect: Press to test
 Trim: Set for takeoff
Pitot/static heat: On if OAT < 4°C
Ice protection: As required
Avionics and radar: Check, set
GPS/Nav switch: Set
Strobe: As required
Annunciators: Extinguished or considered
Wing flaps: 20°
Cabin heat mixing: Flt-Push
Windows: Close
Brakes: Release
Fuel condition lever: High idle

Normal takeoff

Flaps: 20°

Power: Set for takeoff (See below)

Annunciators: Check

Brakes: Release

Rotate: 70-75 KIAS

Climb: 85-95 KIAS

Flaps: Retract to 10° after 85, up after 95 KIAS

Short takeoff

Flaps: 20°

Power: Set for takeoff (See below)

Annunciators: Check

Brakes: Release

Rotate: 70 KIAS (see table p. 1)

Climb: 83 KIAS until obstacles cleared (p. 1)

Flaps: Retract to 10° after 85, up after 95 KIAS

Takeoff Power Limits

Pressure Alt [feet]	Temperature [°C]	
	Max. Op.	Tq Limit
Sea Level	50	42
2000	46	36
4000	42	30
6000	38	21
8000	34	8
10 000	30	-5
12 000	26	-21

Notes:

If temperature is above Max. Op., flight is prohibited.

If temperature is above Tq Limit, see PFM p. 5-19.

Enroute climb (cruise climb)

Ice protection: As required

Pitot/static heat: On if OAT < 4°C

Airspeed: 110-120 KIAS

Propeller: 1600-1900 rpm

Torque: Set within limits (ITT, Ng, torque)

ITT < 740°C for normal operations

Enroute climb (maximum performance)

Ice protection: As required

Pitot/static heat: On if OAT < 4°C

Airspeed: 104 KIAS (to 10 000'), 87 KIAS (20 000')

Propeller: 1900 rpm

Torque: 1865 ft-lb (ITT, Ng, torque)

ITT < 740°C for normal operations

Cruise

Ice protection: As required

Pitot/static heat: On if OAT < 4°C

Propeller: 1600-1900 rpm

Power: Set per cruise power tables

ITT < 740°C for normal operations

Descent

Ice protection: As required

Pitot/static heat: On if OAT < 4°C

NS/FSB: As required

Altimeter: Set

GPS/Nav switch: Set

Power: As required

Before Landing

Seats, belts, harnesses: Secure

Fuel selectors: L on, R on

Fuel condition lever: High idle

Propeller control lever: Max (forward)

Radar: Standby/Off

Autopilot: Off

Wing flaps: As desired

Normal landing

Flaps: Full

Airspeed: 75-85 KIAS

Touchdown: Main wheels first

Power: Beta after touchdown

Brakes: As required

Note: Remove reverse before 25 kts

Short field landing

Flaps: Full

Airspeed: 78 KIAS at MAUW (see p.1)

Power: Idle after clearing obstacles

Power: Beta (against spring) after touchdown

Brakes: Heavy braking with full up elevator

Wing flaps: Retract if at light weight

Note: Remove reverse before 25 kts

Balked landing

Power: Full takeoff power

Flaps: 20°

Airspeed: 80 KIAS min. until obstacles are cleared

Flaps: Retract at safe altitude and airspeed

After landing

Flaps: Up

Ice protection: Off

Strobes: Off

Landing and taxi lights: As required

Fuel condition lever: Low idle when clear of runway

Shutdown

Parking brake: Set

Avionics: Off

Standby power: Off

Fuel boost: Off

Bleed air, ventilation fans, air conditioner: Off

Inverter: Off

Power lever: Idle

ITT: Min. temperature for 1 min

Propeller: Feather

Fuel condition lever: Cutoff

Oxygen: Off

Lights: Off

Battery: Off

Controls: Lock

Fuel tank selectors: Both off

Tiedowns and chocks: As required

External covers: Install

Fuel filter: Check bypass flag

Oil breather drain can: Drain

C208 Abnormal Checklist

Air start (Starter--Preferred)

Electrical load: Reduce

Standby power: Off

Avionics power: Off

Ignition: Normal

Air conditioner: Off

Bleed air heat: Off

Emergency power lever: Normal

Power lever: Idle

Propeller: Min. rpm

Fuel condition lever: Cutoff

Fuel shutoff: On (push in)

Fuel tank selectors: L on, R on

Battery switch: On

Fuel boost switch: On

AUX FUEL PUMP: Check on

FUEL PRESS LOW: Check off

Altitude: 20 000' maximum

Starter switch: Start

IGNITION ON: Check on

Engine oil pressure: Check

N_g: 12% minimum

Fuel condition lever: Low idle

ITT: Monitor 1090°C max.

N_g: 52% minimum

Starter switch: Off

Ignition: On if required (rain, low fuel)

Fuel boost pump: Normal, or On if cycling

Fuel condition lever: High idle

Propeller control: As desired

Power lever: As desired

Electrical equipment and avionics: As required

Air start (Windmilling)

Generator switch: Trip and release

Standby power: Off

Avionics power: Off

Air conditioner: Off

Bleed air heat: Off

Emergency power lever: Normal

Power lever: Idle

Propeller: Min. rpm

Fuel condition lever: Cutoff

Fuel shutoff: On (push in)

Fuel tank selectors: L on, R on

Battery switch: On

Fuel boost switch: On

AUX FUEL PUMP: Check on

FUEL PRESS LOW: Check off

Ignition switch: On

Airspeed: 100 KIAS minimum (140 if feathered)

Altitude: 20 000' maximum (15 000' if feathered)

N_g indicator: Check stable and non-zero

Fuel condition lever: Low idle

ITT: Monitor 1090°C max.

N_g: 52% minimum

Ignition: On if required (rain, low fuel)

Fuel boost: Normal, or On if cycling

Fuel condition lever: High idle

Propeller control: As desired

Power lever: As desired

Generator: Reset and release

Electrical equipment and avionics: As required

Asymmetric flap

Aileron: Apply to stop the roll

Flap selector: Up

Airspeed: Slow to 100 KIAS or less

If flaps retract symmetrically: Flapless landing

If flaps remain asymmetric:

Land as soon as practical

At least 90 KIAS on the approach

Avoid nose-high flare on landing

Flaps fail to extend or retract

Flap Motor/Standby Flap Motor CBs: Check in

If flaps still fail to operate:

Standby switch: Standby

Standby flap up/down: As required

Notes:

Later models require breaking safety wire.

Standby flap system has no limit switches!

Landing with flat main tyre

Fuel: Fly to lighten load on flat side

Approach: Normal (full flap)

Touchdown: Inflated tyre first

Landing with flat nosewheel tyre

Passengers and baggage: Move aft if possible

Approach: Normal (full flap)

Touchdown: Nose high

Brakes: Minimum necessary

Battery temperature high (amber)

Battery: Off

Ammeter: Check in BATT position

If ammeter shows charge:

Generator: Trip and release

Standby power: Off

All electrical switches: Off

Bus 1 Pwr/Bus 2 Pwr CBs: Pull off (6!)

Avionics switches: Off

Standby power: On

Avionics standby power: Lift guard, on

Avionics bus tie: Lift guard, on

Reinstate essential circuits: Monitor load

Land as soon as practical

Generator failure

Voltmeter: Check (annunciator failure?)

Bus 1/Bus 2 CBs: Check, do not reset!

If V < 24,5 V:

Volt/ammeter: Gen (monitor ammeter)

If generator output zero:

GEN CONT/GEN FIELD CBs: In

Generator: Reset and release

If generator output still zero:

Generator: Trip

Electrical load: Reduce

Avionics 2: Off

Flashing beacon: Off

Strobes: Off

De-icing: Off (keep 1 pitot!)

Vent fans: Off

Air cond.: Off

GEN CONT/GEN FIELD: Pull

AP CONT or AP FD: Pull

Land as soon as practical

Standby generator: Use if available

If generator output resumes: Monitor voltage

(over 29 V will probably trip again)

Inverter failure

Inverter switch: Select other inverter

Failed inverter: Repair before next flight

If INVERTER INOP remains illuminated:

Circuit breakers: Check in

Gyro flags: Check

Ignore left-hand gyros

Land as soon as practical

Starter does not disengage

Battery: Off

Auxiliary power unit: Off then disengage

Fuel condition lever: Cutoff

Engine shutdown: Complete

Upper half of cargo/airstair door open

Airspeed: Less than 100 KIAS

Wing flaps: Full (to provide downwash)

Door: Close if helper available

Land: Normal approach and landing

Lower half of airstair door open

Airspeed: Less than 100 KIAS

Return for landing

Wing flaps: Full

Land: Slightly tail low, avoid nose high flare

Crew door open

Airspeed: Less than 100 KIAS

Door: Pull closed and latch

Cargo pod door(s) open

Airspeed: Less than 100 KIAS

Land as soon as practical

Approach: Normal

Landing: Avoid nose-high flare

C208 Emergency Checklist

Emergency landing without power

Seats, belts, harnesses: Secure

Airspeed: 100 KIAS (flaps up), 80 KIAS (full flap)

Power lever: Idle

Propeller: Feather

Fuel condition lever: Cutoff

Fuel Boost: Off

Ignition: Normal

Standby power: Off

Nonessential equipment: Off

Fuel shutoff: Off (pull out)

Fuel tank selectors: Off (warning horn)

Wing flaps: As required (full recommended)

Crew doors: Unlatch before touchdown

Battery: Off when landing is assured

Touchdown: Slightly tail low

Brakes: Apply heavily

Precautionary landing

Seats, belts, harnesses: Secure

Flaps: 10°

Airspeed: 90 KIAS

Field: Select, fly over, check terrain and obstacles

Switches: All off except Generator and Battery

Flaps: Full down

Airspeed: 80 KIAS

Crew doors: Unlatch before touchdown

Generator: Trip and release

Battery: Off

Touchdown: Slightly tail low

Fuel condition lever: Cutoff

Brakes: Apply heavily

Ditching

Radio: Mayday on 121,5 MHz, squawk 7700

Heavy objects: Secure if passenger available

Seats, belts, harnesses: Secure

Flaps: Down

Power: 300 fpm descent at 80 KIAS

Approach: Into heavy wind or parallel to swells

Face: Cushion using padding

Touchdown: No flare

Evacuate

Life vests and rafts: Inflate outside cabin

Engine fire in flight

Power lever: Idle

Propeller: Feather

Fuel condition lever: Cutoff

Fuel shutoff: Off (pull out)

Cabin heat firewall shutoff: Pull off

Forward side vents: Close

Overhead vents: Open

Ventilation fans: On

Wing flaps: 20 to 30°

Airspeed: 80-85 KIAS

Forced landing: Execute

Battery overheated (red)

Battery: Off

Generator: Trip and release

Standby power: Off

All electrical switches: Off

Bus 1 Pwr/Bus 2 Pwr CBs: Pull off (6 breakers)

Avionics switches: Off

Standby power: On

Avionics standby power: Lift guard, on

Avionics bus tie: Lift guard, on

Reinstate essential circuits: Monitor load

Land as soon as practical

Electrical fire in flight

Battery: Off

Generator: Trip and release

Standby power: Off

Vents: Close to avoid drafts

Bleed air heat: Off

Fire extinguisher: Activate

Oxygen: Use until smoke clears

Avionics power: Off

All other switches: Off

If fire appears out and electrical power necessary:

Battery switch: On

Standby power: On

Generator: Reset and release

Circuit breakers: Check, do not reset

Inverter: 1 or 2 if required

Radio switches: Off

Avionics power switches: On

Radio and electrical switches: On one at a time; delay

Vents: Open when fire completely extinguished

Bleed air heat: On as desired

Cabin fire

Battery: Off

Generator: Trip and release

Standby power: Off

Vents: Close to avoid drafts

Bleed air heat: Off

Fire extinguisher: Activate

Oxygen: Use until smoke clears

Land as soon as possible

Wing fire

Pitot/static heat, Stall heat: Off

Strobe lights: Off

Navigation lights: Off

Landing and taxi lights: Off

Radar: Off

Ventilation fans: Off

Sideslip if required, land as soon as possible

Cabin fire on ground

Power lever: Idle
Brakes: As required
Propeller: Feather
Fuel condition lever: Cutoff
Battery: Off
Evacuate
Fire: Extinguish

Engine fire during start on ground

Fuel condition lever: Cutoff
Fuel boost: Off
Starter switch: Motor (within starter limits)
Fuel shutoff: Off (pull out) if fire persists
Starter: Off if fire ceases
Battery: Off
Evacuate
Fire: Extinguish

FCU pneumatic/governor malfunction

Power lever: Idle
Emergency power lever: As required ($N_g > 65\%$)

Loss of fuel pressure

Fuel boost pump: On
If FUEL PRESS LOW extinguishes:
 Monitor fuel quantity, cabin odours
 Land as soon as practical
If FUEL PRESS LOW/AUX FUEL PUMP ON:
 Monitor engine gauges for fuel starvation
 Land as soon as possible

Fuel Reservoir low

Fuel tank selectors: L on, R on
Ignition: On
Fuel boost: On
If sufficient fuel in wing tanks:
 Monitor gauges and FUEL PRESS LOW
 Land as soon as possible and investigate
If there are signs of fuel starvation:
 Prepare for forced landing

Emergency descent: Rough air

Seats, belts, harnesses: Secure

Power lever: Idle

Propeller: Full forward

Wing flaps: Up

Airspeed: V_A (148 to 112 KIAS)

Emergency descent: Smooth air

Seats, belts, harnesses: Secure

Power lever: Idle

Propeller: Full forward

Wing flaps: 10°

Airspeed: V_{MO} (175 KIAS)