

N2770V C-177RG – Normal Procedures Checklist – ALL SPEEDS MPH IAS

BEFORE STARTING ENGINE

Preflight inspection complete
 Fuel caps & cargo door checked & locked
 Passenger briefing as required
 Seats, belts and harnesses secured
 Landing gear lever down
 Brakes test & set
 Cabin doors closed & locked
 Avionics switch, A/P, & elec equip off
 Circuit breakers check in
 Cowl flaps open
 Fuel quantity & fuel selector check, both

STARTING ENGINE

Mixture idle cut-off
 Propeller high RPM
 Throttle open ¼ inch
 MASTER SWITCH on
 Lights as required
 Auxiliary fuel pump on
 Mixture 6 gal/hr, **then idle cut-off**

NOTE: Do not prime if engine is warm!

Propeller area clear
 Ignition switch start
 Mixture rich when engine fires
 Oil pressure check
 Auxiliary fuel pump off
 Mixture lean (out 1 inch)
 Avionics switch & electrical equipment on
 Circuit breakers check in
 Flaps up
 Comms, navs, headings, markers set

BEFORE TAKE-OFF **Denotes first-flight item**

Brakes test & set
 Cabin doors closed and locked
 Stabilator and rudder trim take-off
 Fuel quantity & fuel selector check, both
Mixture rich (below 3000')
Throttle 1800 RPM
Magnetos 150 max each, 50 differential
Propeller ... 3 cycles (MP, RPM, oil pressure)
Engine inst & ammeter check
Suction gage check
Throttle idle check, then 1000 RPM
Friction lock adjust
Mixture lean (out 1 inch)
 Flaps set 10°
 Flight controls free and correct
 Flight instruments checked & set
 Comms, navs, headings, markers set

RUNWAY ITEMS

Windows closed
 Pitot heat as required
 Lights as required
 Transponder mode C
 Mixture rich (below 3000')

TAKE-OFF

Max Performance Data

Power maximum
 Mixture lean per placard (above 3000')
 Rotate 65, **60**
 Positive rate "tap brakes, gear up"
 Climb 75 – 85, **70**
 1000 feet (or safe alt,) "flaps up, climb checklist"

CLIMB

Landing gear up, light on
 Climb 100 – 120, **95**
 Power 25" & 2500 RPM, **max & 2700**
 Mixture lean 13 gal/hr, **per placard**
 Flaps up
 Cowl flaps open as required, **full open**

CRUISE

Lights as required
 Power 15-25", 2100 – 2500 (<75%)
 Mixture lean (100°F rich of peak)
 Cowl flaps closed
 Fuel quantity & fuel selector ... check, as required

DESCENT

Power reduce 1" per minute to 15" – 20" hg
 Mixture enrichen as required
 Cowl flaps closed

APPROACH

Flight instruments checked & set
 Comms, navs, headings, markers set
 Lights as required
 Flaps 10° (as required below 150 mph)

BEFORE LANDING "Gear down, before landing checklist"

C Cowl flaps closed
G Fuel quantity & fuel selector check, both
U Landing gear three, green, no red
M Mixture rich
P Propeller high RPM
S Seats, belts and harnesses secured
 Airspeed 80 – 90 (**70** – 80 flaps DOWN)

AFTER CLEARING

Pitot heat off
 Lights as required
 Transponder stby
 Stabilator and rudder trim take-off
 Mixture lean (out 1 inch)
 Flaps up
 Cowl flaps open

SHUTDOWN AND SECURING

Lights as required
 Avionics switch, A/P, & elec equip off
 Engine 1000 RPM, mag ground check
 Mixture idle cut-off
 Ignition and MASTER SWITCH off
 Fuel selector valve off
 Control lock and pitot cover installed