

CHECKLIST for Glasair N11HC

PREFLIGHT / WALK AROUND INSPECTION

Walk-up

- If < 40°F / 4°CPreheat Engine
- FSS Called Wx, TFR, NOTAMS
- Oil Qty Check
 - 6 qt minimum (Double Ring = 6 qt)
- Fuel Qty (wing & header), 3 Sumps, 2 Vents
- Windows Clean
- Remove:
 - Rudder Control-Lock
 - Tie-downs
 - Chocks
 - Pitot Cover
 - Towbar Adaptor
- Tire Pressures 50 nose, 35 main
- Wings Level
 - Expect heavy wing on T/O if tanks not full
 - See Warning in Section 10 of POH

Cabin

- Fire Extinguisher Charged
- #1 POH ARROW
 - Airworthiness, Registration, Restrictions Letter. POH, W&B,
- #2 POH – VOR Log & GPS dB Current
- Controls Free
- Cross-Cockpit Air Vent Set
- ELT No lights
- Circuit Breakers In
- Small Toggle Switches Up, Test/Down, Down
 - IPS Switch, ADI Backup Battery, A/P Source
- Mag Switch Off, Key Handy
- Battery On
- Lights On to Check
- Power Levers Out / In / Out
- Fuel Selector Header
- Static - Alternate Air Cycle - Horz is Closed
- Pitot Heat On
- PFD Log Hobbs & Fuel
- Fuel Gauges Check
- Bat Voltage Check
- Battery Off
- Rocker Switches Off

CHECKLIST for Glasair N11HC

Left Wing / Sumps / Left Gear

- Flap.....Secure
- Aileron.....Free, Secure, Counter Wgts
- Pitot Tube..... Warm and Clear
- AOA Air/Water Separator..... Drained
- AOA Pressure Ports (2)Clear
- Fuel CapSecure
- Flap Cotter keys Installed
- Belly Panel ScrewsSecure
- Left GearCondition/Inflation (35)

Nose & Right Gear

- Nose GearCondition/Inflation (50 psi)
- Air Intakes.....Clear
- Alternator Belt Check Tension
- Header Fuel Cap.....Secure
- Oil Stick and DoorSecure
- Exhaust Pipe.....Secure
- Right Gear.....Condition/Inflation (35)
- Belly Panel ScrewsSecure

Right Wing, Fuselage

- Flap Cotter keys Installed
- Fuel CapSecure
- Aileron.....Free, Secure, Counter Wgts
- Flap.....Secure
- Static PortClear
- Elevators & RudderFree, Secure, Counter Wgts
- Static PortClear
- OAT Sensor No Damage

USE OF EXTERNAL POWER

- Location of receptacle Under Right Seat (outside)
- Location of adaptor.....In Supply Box
- Precautions..... Battery Switch First on, Last Off

CHECKLIST for Glasair N11HC

PRE-START, START & TAXI

BEFORE START

- Bath Mats Stowed
- Key In
- Master Switch On
- Exterior Preflight Complete
 - Chocks Removed
 - Oil Cap and Door In Place / Tight / Closed
- Belts, S/H Adjust and Locked
- Cockpit Organized & Secured
- Cell Phones Off
- Crew Briefing
 - Responsibilities, Who's PIC, Quiet Cockpit
 - Door Operation, Vents, Seat Belts, Fire Ext

- Control Stick Enable Rocker Switch As Desired
- Trim Set
- Fuel Selector Wing
- Power Levers In / In / Out
- Brakes Test & Set
- PFD Engine – Main Fuel Pressure Page
- PFD Engine – Fuel Set Fuel on Board

STARTING

- Strobes On
- Boost Pump On (If Req)
 - Fuel Flow goes up then down
- Mixture In / Out (If Req)
 - In until about 4.9 gph
- Boost Pump Off
- Throttle 1½ turns in from idle
 - (½ way in if Flooded or in if hot)

- Starter Engage
- Mixture into ~ 3" of Full Rich
- Throttle 900 - 1000 RPM
 - <= 1000 RPM until oil temp registering
 - < 1200 RPM until oil temp > 90°
- Oil Pressure Check
 - Idling >24 psi
 - Normal out of idle 60-90 psi
 - Minimum 55 psi
 - Maximum 95 psi

CHECKLIST for Glasair N11HC

AFTER START

- Rocker Switches As Req
- Flaps..... Up
- Mixture Lean Aggressively
- G3Xs/G430 dB currency Menu²/Aux2↓
- Transponder 1200 / Alt
- AOA Test
 - Red Tests, Black Dims
 - All lights for several sec & audio
- Autopilot AP / EFIS
Aircraft stopped before testing Autopilot
 - HDG Moves Stick
 - Alt & Vert Speed Moves Stick
 - Control Stick..... Disconnects
- Flap Switches Off
- Flight Instruments Check
 - Standby Compass Check
 - Heading Indicators (2)..... Check
 - Attitude Indicators (3) Check
 - Altimeters (3) Field Elevation ±75'

TAXI

- Parking Brake Off
- Toe Brakes..... Check
- Turning Taxi Check
 - Attitude indicators
 - Rate of Turn
 - Skid Indicator (Ball)
 - Heading indicators

CHECKLIST for Glasair N11HC

EOR (LAST CHANCE)

- Mixture As Lean As Possible
- Flight Controls..... Free and Correct
- Avionics Check & Set
 - Radios Comm & Nav
 - Altimeters..... Set
 - Altitude & Heading Preselect
 - CDI Nav Source
 - Transponder Set
 - Flight Plan Entered
 - Destination..... Correct
 - DTK, Miles, Time..... Correct
- Flight Instruments PFDs & Stby Check
- Engine Instruments.....(before > 1200 RPM) **GREEN**
- Alternator Checks Oil temp > 90°
 - MFD Engine/Elec
 - RPM 1200
 - Voltage 13.4 - 14.1 Volts
 - Amps Indicating
 - MAIN ALT Off (Checking Bat Pwr)
 - STBY ALT..... On (STBY Picks Up Load)
 - MAIN ALT On (Relieves STBY)
 - STBY ALT..... Off
- MAG / Prop Check.....MFD Engine Main
 - MFD Main (Engine instruments)
 - Mixture Full Rich
 - RPM 2200
 - Prop (If Oil Cold) Cycle Quickly
 - MAG RPM Drop & EGT Rise
- Pitot Heat, Lights, Etc As Desired
- Fuel Pump On
- Flaps..... ~20°
- Doors, Seats & Seatbelts..... Check
- Mixture Rich
- Warning/Caution Lights..... Out
- Engine Gauges (Oil Temp > 100°) Normal
- Climb Gradient Compute
 - GS / 60 x (Required Climb Gradient = Required FPM)

DOUBLE CHECK DOORS!

- If Mags check bad:
 - Mixture Full Rich.
 - Throttle.....2200 RPM.
 - Mixture Lean slowly to slight roughness.
 - Mixture Enrich slightly to obtain smooth running.
 - Timer Start, run for 60 seconds.
 - Mixture Full Rich.
 - Throttle.....2200 RPM
 - Mags Check again

CHECKLIST for Glasair N11HC

TAKEOFF, CLIMB & CRUISE

TAKEOFF - Normal

- Prepare to Abort..... Psyched
- RW Hdg Check
- R.E.A.C.T
 - RPM & MP ~2700 & ~Altimeter Setting
 - Engine Gauges Green
 - Airspeed Alive
 - Centerline.....
 - Takeoff Point
- Rotate (Vr)..... ~60 knots
 - Vy..... 108 knots
 - Va & Vclimb..... 126 knots
 - Vx, Vg, L/D_{max}, 2G – 1Y ~85 knots
 - V_s, V₁₅, V₂₅, V₄₀..... 67, 64, 60, 58 knots
4-5 KIAS Slower at 1700 lbs
- Flaps..... Up
> 90 KIAS < 122 KIAS

CLIMB

- Flap Switches Off
- Fuel Selector..... Wing
- Fuel Pump..... Off
- Power Adjust for CHTs

CRUISE

- Fuel Selector..... As Desired
- Power Set
 - Between 1800 & 2300 RPM, MP can be 4.5 above square.
 - Between 2400 & 2700 RPM, MP can be 2 above square.
 - Reference POH Section 5 Performance Chart
 - Stabilized operation is prohibited
 - > 25" MP and 2300-2350 RPM
 - < 15" MP and > 2600 RPM (white arc)
- Mixture Fine Tune
- Lights (inside & outside) As Required

Ops Check

- Fuel Pump..... Off
- Fuel Selector..... Wing
- Fuel Quantity Enough
- Engine Gauges Check
- Altimeters..... Set
- Compass vs AHARS Check
- Flap Switch Off

LEANING

- CHT No Way (Red Flash) <500°F
- CHT Too High (Red Steady) 435-499°F
- CHT High..... 400-435°F
- 75% Power 150°F ROP
- <75% Power LOP EGT
- Before increasing power ... Mixture then Prop then Throttle

CHECKLIST for Glasair N11HC

VFR DESCENT / LANDING

PRE DESCENT

- Pitot Heat & Defrost As Required
- Belts – S/HSecure
- Airport InformationStudy
- ATISCopy
- Altimeters (2) Set
- RadiosPreset

DESCENT

- AltitudePreset
- PowerCHT > 240°F
- Speed <170 KIAS
Va = 126 KIAS
- Mixture Enrich during Descent
(<50°F/min or ~ 8°/10 sec)

PATTERN

45° to Downwind



- Autopilot Off
- LightsAircraft & Runway
- Speed2G – 1Y, 90-110 KIAS

Downwind (FGuMPS)

- Flaps..... (Vfe = 122 KIAS) Set
- GasSelector & Boost
 - Header if X-Wind / slipping and ≤ 10 gal in wing tank
 - Header if slipping for > 30 seconds while on wing tank
- MixtureRich
- Propeller.....High RPM
- Switches..... Set
- Seat Belts – S/H.....Secure

Base / Final

- BaseBest Glide (2G-1Y), ~85 K
- Final..... AOA Opt App (2Y), ~75 K
 - Idle Power Approach..... Add 5 K
 - 20° Flaps 2Y or + 3 knots
 - No Flap 2Y or +10 knots

| | | | |
|---|---|----------------------------------|---|
| <p>Max Glide Range L/D Max (1Y)</p> |  | <p>Optimum Approach (2Y)</p> |  |
|---|---|----------------------------------|---|

CHECKLIST for Glasair N11HC

ROLLOUT, CLEAR OF RUNWAY AND SHUTDOWN

ROLLOUT

- Flaps.....Up

CLEAR OF RUNWAY (FGUMPS)

- Flaps.....Down
- Gas – Pump & Selector..... Off & Wing
- Mixture Lean Aggressively
- Switches..... As Req

SHUTDOWN

- P-Lead CheckMags Off & On
- Switches..... Off
- Throttle..... 1000-1200 RPM
- Mixture Cut-off
- Fuel Selector..... Off
- Trim Tab..... Set
- Postflight Fuel & Hobbs..... Log
- Master & Mags..... Off
- Cell Phone.....On
- Flight Plan..... Close

Refueling:

- Fuel Used..... Note for Top-Off
- Grounding Cable Clipped to Cap Chains
 - Hold Grounding Cable Clip onto the right cap or header cap (as appropriate) while removing caps, then clip to cap chain.
 - Header Tank Chain must be touching fuel in tank.
- If Topping off: Cycle between wings but cap low wing when about 10 gal from full
- Fuel Added..... Log Qty & Hobbs
- Fuel Qty..... Reset to Total

Debrief

- What did I do right?
- What could I have done better?
- What did I do wrong?
- Did anything surprise me?
- Did I miss anything?
- How did I recover from anything I missed?
- How can I avoid surprises and missed items in future flights?

CHECKLIST for Glasair N11HC

IFR DESCENT, APPROACH & LANDING

PRE DESCENT

- Pitot Heat & Defrost As Required
- Belts – S/H Secure
- Airport Information Study
- ATIS Copy
- Altimeters (2) Set
- Approach plate (waypoint/chart) Brief
 - Waypoint / Chart
 - Destination Airport
 - Type/Name of approach
 - Currency
 - Inbound Course
 - Comm & Nav frequencies
 - Transition (vectors / IAF)
 - Step down fixes, procedure turns, etc
 - FAF
 - DA / MDA - SET
 - Missed approach fix / procedures
- G3X FPL Load External
- 430 PROC Load Approach
- Waypoints & IAP Same
- Radios Preset

DESCENT

- Altitude Preset
- Power CHT > 240°F
- Mixture Enrich during descent (<50°/min ~8°/10 SEC)
- 430 PROC Activate Approach
- Minimums Set (Baro/Minimums)
- AP APPR OR NAV
- Comm Set
 - + Runway Lights Freq

IAF - IF

- Power 50% (110-115 K)
- Altimeters Set
- Altitudes Preset & Minimums
- Non-GPS
 - Nav Aids Freq & ID
 - Marker Beacon On
 - CDI Pointers Ready
- Radios Set Tower & Missed
- Source, Force, Course GPS-VLOC, TERM-LPV, A/P
- What's Next & After That?

CHECKLIST for Glasair N11HC

IF - FAF

- **FGuMpSS**
 - Flaps..... 15° (100 KIAS)
 - Gas Boost & Selector
 - Header If X-Wind / slipping and ≤ 10 gal in wing Tk
 - Header If slipping for > 30 seconds
 - Mixture Full Rich
 - Switches..... Set
 - Seatbelts & SH..... Secure
- Altitudes..... Preset & Minimums
- Source, Force, Course GPS-VLOC, TERM-LPV, AP
 - ILS..... VLOC - CDI, AP - LOC
 - VOR VLOC - CDI, AP-NAV
- What's Next & After That?

FAF

- Time..... Hack
- Flaps..... 25°
- Glideslope Altitude Check
- Power / Speed..... 30% / 2G ~ 90K
- Talk..... "FAF Inbound"
- Lights Aircraft & Runway
- **Source, Force, Course** GPS-VLOC, TERM-LPV, A/P
- **What's Next & After That?**

500'

- FGuMPS Last Check

Missed Approach

- Autopilot CWS / Disconnect
- Power UP, Pitch Up, Clean Up
- Suspend Press
- Speed Vy-2G / 109K
- CDI..... GPS
- Autopilot Engage / Nav
- Talk..... Missed / Climb out
- Flap Switch Off
- **Fuel Selector**..... **Wing**
- Fuel Pump..... Off
- **Source, Force, Course**
- **What's Next & After That?**

CHECKLIST for Glasair N11HC

AEROBATICS

- **HASELL**..... Check
 - **Height** <8000 MSL, > 4500 AGL
 - **Airframe** Flaps, Trim, GW < 1900#
(Empty a/c-1400#, Parachutes 15# each, 155# CFI, 220# Student, 6# trash, 23 gal fuel = 1900#)
 - **Security** Parachute Harnesses, Cockpit
 - **Engine** Boost Pump, Fuel, Mixture
 - **Location** Satisfactory
 - **Lookout** Clearing Turns
 - **G check** (Limits) +6 / -4
 - **No Rolling Recoveries.**
 - **Entry Parameters**
 - **Altitude** >5000 MSL / 3500 AGL
 - **Airspeed** 150 KIAS
 - **Over the Top** (Limits +6 to -4) 3 G then 2Y
 - **Spin Recovery** Primed
 - **Power** Off
 - **Flaps** Up
 - **Rudder** FULL Opposite Rotation
 - **Stick** Neutral (full aft for developed spin)
- As rotation stops
- **Stick** Release or Neutralize
 - **Rudder** Neutralize
 - **Dive** Recover
- **AOA** Use It

MOORING

The airplane should be moored for immovability, security and protection. The following procedures should be used for the proper mooring of the airplane:

- Head the airplane into the wind if possible.
- Retract the flaps
- Immobilize the ailerons and elevator by looping the seat belt around the control stick and pulling snug.
- Chalk the wheels
- Secure the rudder
- Secure tie-down ropes to the wing tie-down rings and to the tail tie-down ring at approximately 45° angles to the ground. Tie-down rings are usually kept in the small storage area below the baggage compartment. When using rope of non-synthetic material, leave sufficient slack to avoid damage to the airplane should the ropes shrink while drying out.

CAUTION

Use bowline knots, square knots or locked slip knots. Do not use plain slip knots.

- Install the pitot tube cover
- Close and lock the doors

