

N400C

NORMAL CHECKLIST

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OPERATIONAL INFORMATION

ENGINE START

CIRCUIT BREAKERS	CHECK
GEAR HANDLE	DOWN
ISOL	OFF
BATTERY	ON
GENERATOR	OFF
ANNUNCIATOR LIGHTS	CHECK
FUEL TOTALIZER	SET
FUEL SELECTOR	LEFT
ITT	<150°
DOOR	CLOSED/LATCHED
STROBES	ON
THROTTLE	IDLE
PROP	FEATHER
CONDITION LEVER	RUN
BOOST PUMP	ON
START SWITCH	START
MAX ITT	690
EHT (AS REQ'D)	<650

AFTER START

GENERATOR	ON
OIL PRESS	CHECK
BOOST PUMP/PRESS	CHECK (N1 <1%)
LOAD	<100 AMPS
AVIONICS	ON
DOOR SEAL	ON
CABIN FAN / A/C	ON/ON
CABIN CONTROLLER	SET 500' AFE
TRANSPONDER	ON
AUTOPILOT SWITCH	ON/TEST/OFF
NAV / COM	SET

BEFORE TAKEOFF

FLAPS	SET (~10°)
FLIGHT CONTROLS	CHECK
TRIM	SET
PROP	MAX/FWD
CIRCUIT BREAKERS	CHECK
PRESSURE/TEMPS	CHECK
GYROS	CAGE/LEVEL
SEAT BELTS	SECURE
ALTITUDE BUG	SET
RADALT	SET 800'
PITOT HEAT	AS REQ'D
LIGHTS	AS REQ'D

AFTER TAKEOFF

GEAR	UP < 120KTS
FLAPS	UP >120KTS
PRESSURIZATION	ON / CRZ ALT
AUX TANK PUMP	AS REQ'D
PROP	1900

10,000' CHECKS

LIGHTS	AS REQ'D
PRESSURIZATION	CHECK

18,000' CHECKS

ALTIMETER	29.92"
PITOT HEAT	ON
AUX TANK PUMP	OFF WHEN EMPTY

DESCENT

CABIN CONTROLLER	DEST +500'
WEATHER	CHECK
ALTIMETER (18,000')	SET LOCAL
PITOT HEAT	AS REQ'D
LIGHTS (10,000)	AS REQ'D

BEFORE LANDING

GEAR	DOWN
FLAPS	FULL
PROP	MAX/FWD
PRESSURIZATION	OFF
AUTOPILOT SWITCH	OFF
SEAT BELTS	SECURE
FUEL	CHECK

AFTER LANDING

LIGHTS	AS REQ'D
PITOT HEAT	OFF
DOOR SEAL	OFF

SHUTDOWN

PROP	FEATHER (40 SEC)
ELECTRONICS	OFF
AVIONICS	OFF
LIGHTS	OFF
GENERATOR	OFF
BOOST PUMP	OFF
CONDITION LEVER	CUTOFF
BATTERY	OFF

COLD CYCLE TURBINE (IF ITT > 150°)

BATTERY SWITCH	ON
THROTTLE	IDLE
PROP	FEATHER
CONDITION LEVER	VERIFY CUT OFF
FUEL PUMP	OFF
STARTER	RUN (8 SEC)

MAX CONTINUOUS POWER

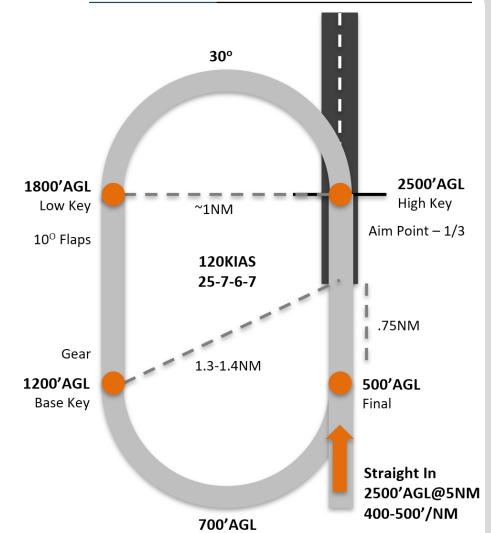
ITT	690
N1	98.2%
PROP	1750-1900
TORQUE	100% (132 PSI)

ALTITUDE	ISA	ALTITUDE	ISA
6,000	3.1	16,000	-16.7
7,000	1.1	17,000	-18.7
8,000	-0.1	FL180	-20.7
9,000	-2.8	FL190	-22.6
10,000	-4.8	FL200	-24.6
11,000	-6.8	FL210	-26.6
12,000	-8.8	FL220	-28.6
13,000	-10.8	FL230	-30.6
14,000	-12.7	FL240	-32.5
15,000	-14.7	FL250	-34.5

SPEEDS

VNE	274
VNO	220
VA	170
VFE (0°-10°)	174
VFE (11°-40°)	132
VLE	165
VLO(DN)	150
VLO(UP)	120
VY	130
VX	110
BEST GLIDE	120-125
CLIMB	160-180
DOWNWIND	150
BASE	120-130
FINAL	110-100
THRESHOLD	95

ENGINE OUT PATTERN



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ABNORMAL CHECKLIST

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LIMITATIONS

CHIP DETECTED

THROTTLE	REDUCE / MIN PRACTICAL
LAND	NEAREST SUITABLE AIRPORT

FLAMEOUT/ENGINE FAILURE

AIRPEED	PITCH FOR 120 KIAS
THROTTLE	IDLE
PROP	FEATHER
CONDITION LEVER	CUT OFF
BOOST PUMP	OFF
RADIO	MAYDAY
OXYGEN	ON >14,500' MSL
FUEL TANKS	CHECK/SELECT
HEADER TANK	CHECK LIGHT/PUSH
FUEL PUMP	ON/CHECK PRESSURE
RESTART	< 13,000' MSL (9,000' OPTIMUM)

INFLIGHT RESTART

ALTITUDE	< 13,000' MSL (< 9,000' OPTIMAL)
THROTTLE	IDLE
PROP	FEATHER
CONDITION LEVER	VERIFY CUTOFF
BOOST PUMP	ON
STARTER	ENGAGE
CONDITION LEVER	RUN @ 15% N1
ITT	< 735°

LOSS OF PRESSURIZATION

OXYGEN	ON > 14,500' MSL
RADIO	MAYDAY IF REQ'D
EMERGENCY DESCENT	IF REQ'D
FLOWPACK	CHECK ON
DOOR SEAL	CHECK ON
PRESSURIZATION CONTROLLER	CHECK / SET
CIRCUIT BREAKERS	CHECK

EMERG GEAR EXTENSION

AIRPEED	BEST GLIDE / 120 KTS
GEAR HANDLE	DOWN
HYD PUMP C/B	PULL
GEAR HAND PUMP	PUMP UNTIL 3 GREEN

ELECTRICS

VOLTS 14VOLTS	MAX DROP FOR START (4 SECONDS)
20 VOLTS	MIN FOR START
20-31 VOLTS	FOR EXTERNAL POWER START (NO LOAD)
27-29 VOLTS	NORMAL OPERATING RANGE
LOAD 100 A	MAX GEN LOAD ON GROUND
200 A	MAX GEN LOAD IN FLIGHT

ITT

>150°	COLD CYCLE PRIOR TO START
480°-520°	NORMAL IDLE
580°-650°	NORMAL START (EHT TO KEEP <650°)
660°	MAX CONTINUOUS
700°	MAXIMUM FOR EXTERNAL POWER START
710°	MAX TAKEOFF (1 MINUTE)
735°-800°	INSPECTION REQUIRED
>800°	TEARDOWN REQUIRED

N₁

16%-18%	INTRODUCE FUEL (ISOL START ONLY)
61%-63%	IDLE (65% MAX)
98.2%	MAX CONTINUOUS
99%	MAX BETA

RPM/N₂

1700-1900	TYPICAL CRUISE
1900	CLIMB
2000	MAX BETA
2080	MAX/TAKEOFF

OIL

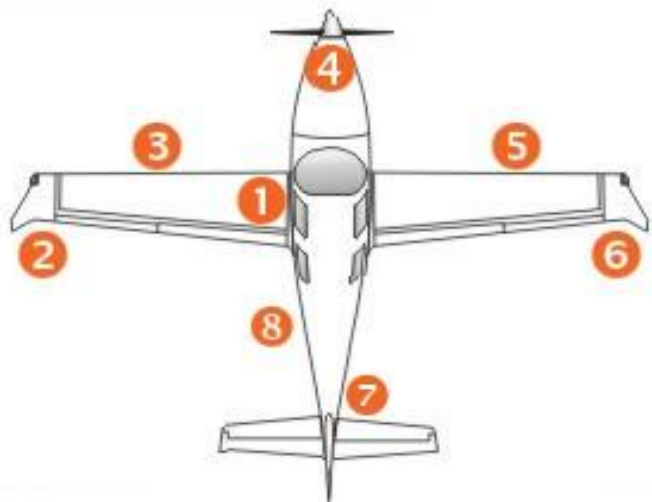
PRESS 17 PSI	MIN AT IDLE
26 PSI	MIN 80-101.5% N1
30 - 39 PSI	NORMAL RANGE
43 PSI	UPPER LIMIT (OIL TEMP 20-550C)
49 PSI	MAX (MOMENTARY)
TEMP -4°F (-20°C)	MIN FOR STARTING
68°F (20°C)	MIN FOR TAKEOFF / NORMAL OPERATION
185°F (85°C)	MAX FOR TAKEOFF / NORMAL OPERATION

FUEL

14 PSI	MIN
28 PSI	NORMAL
49 PSI	MAX

TORQUE

90%	MAX CRUISE
100%	MAX CONTINUOUS
105%	MAX TAKEOFF (1 MIN)



1. Cabin

Pitot Tube Cover	Remove
POH / Checklists	On Board
Battery Master	OFF
ISOL Switch	OFF
Circuit Breakers	Check
Landing Gear	DOWN
Battery Master	ON - 24V Min / 3 Green
Flaps	FULL
External Lights	ALL ON/CHECK
Fuel Quantity Indicators	CHECK QUANTITY
Pitot Heat	ON, INDICATED
Pitot Heat	OFF
Battery Master	OFF

2. Left Wing Trailing Edge & Wing Tip

Left Main Strut and Tire	Check
Flap	Check
Aileron	Check
Trim Tab	Check
Lift Wing Tie-down	Remove
Wing Tip	Check

3. Left Wing Leading Edge, Fuel Tank & Tire

Leading Edge	Check
Fuel Vent	Check / Clear
Fuel Quantity	Check Level / Cap Secure
Wing Fuel Drain	Test / Clear

4. Nose Section

Propeller and Spinner	Check
Propeller	Rotate
Cowl Screws	Check/Not Loose
Nose Tire and Strut	Check
Nose Gear Door	Check
Landing Lights	Check
Intakes & Exhaust	Clear / Plugs Removed

5. Right Wing Tire, Leading Edge & Fuel Tank

Wing Fuel Drain	Test / Clear
Right Main Strut and Tire	Check
Leading Edge	Check
Fuel Quantity	Check Level / Cap Secure
Fuel Vent	Check / Clear

6. Right Wing Tip & Trailing Edge

Wing Tip	Check
Aileron	Check
Right Wing Tie-down	Remove
Flap	Check
Right Gear Well	Check

7. Right Aft Fuselage & Tail Section

Leading Edge Horizontal Stab	Check
Leading Edge Vertical Stab	Check
Rudder/Elevator Hardware	Check
Rudder Surface	Check
Rudder Trim Tab	Neutral
Tail Tie-down	Remove

8. Left Aft Fuselage, Baggage Door and Cabin

Static Port	Check
Aux Tank	Secure
Baggage Light	Off
Baggage Door	Closed / Latched

FINAL WALKAROUND

Pitot Cover	REMOVED
Intake / Exhaust Plugs	REMOVED
Tow Bar	REMOVED
Chocks	REMOVED
Baggage Door	CLOSED/LATCHED
Windscreen	INSPECT
Passenger Briefing & Inspection	CONDUCT
Fire Extinguisher	ON BOARD

[1] Margins:
0.6 L & R
0.15 T & B