

FLAP SYSTEM MALFUNCTION

- Airspeed.....140 to 160 KIAS
- Flap Circuit Breaker.....CHECK IN
- Check that Flap Indicator and Flap
Position Agree. If there is an
Asymmetry and/or
Rolling Moment.....RETRACT FLAPS

CAUTION

Higher than normal approach speeds will be required without flap extension. Add 10 KIAS to all pattern speeds and be aware that higher deck angles and longer landing distances will result.

EMERGENCY SPEED REDUCTION

NOTE

The nature of the emergency should be considered before taking this action.

- Power Control Lever.....IDLE
- Pitch AttitudeINCREASE TO CLIMB, SITUATION
PERMITTING
- Landing GearEXTEND BELOW 150 KIAS
- Flaps.....FULL EXTEND BELOW 140 KIAS
- When Target Speed is Obtained:
 - Gear.....UP
 - Flaps.....UP

SAFE OPERATING AIRSPEEDS

NOTE

All airspeeds in this section are indicated airspeeds in Knots (KIAS) and assume zero instrument or installation error. You should make sure your system has been correctly calibrated and account for those errors as necessary.

Max Demonstrated X-WIND component	25
Rotate Speed (V_R) with flaps 24 deg.	65-80
Best Angle of Climb (V_X)	85
Best Rate of Climb (V_Y)	105
Cruise Climb	140-160
Stall Speed clean (V_S)	76
Stall Speed Landing config. (V_{SO})	61
Landing Gear Operating Speed (V_{LO})	150
Landing Gear Extended Speed (V_{LE})	165
Approach Flaps Extended	160
Full Flaps	140

PRE-FLIGHT INSPECTION

COCKPIT CHECK

Aircraft Status Log.....	CHECKED
Required Forms/Certificates	ON BOARD/CHECKED
All Electrical Switches	OFF/NORMAL
Circuit Breakers	CHECK IN
Gear Handle	DOWN
Battery Master Switch.....	ON
Aircraft Battery	CHECK 24 VOLTS MIN
Fuel Gauge.....	CHECK QUANTITY, BALANCE & RESET
Fuel Selector	FULLEST TANK
Oxygen Quantity	CHECK
Trim Servos.....	CHECK
Flaps.....	DOWN
Pitot Heat Cover.....	REMOVE/STOWED
Pitot Heat	ON (10 SEC)

Pitot Tube.....	VERIFY WARM AND CHECK CONDITION
Exterior Lights	ON & CHECK
Pitot Heat	OFF
Battery Switch.....	OFF
Propeller Heat	ON FOR 30 SECONDS, CHECK BLADES FOR HEAT

LEFT FUSELAGE

Main Entry Door	CLOSE AND CHECK EXTERNALLY
Step	SECURE
Rear Window	CHECK CONDITION
Upper and Lower Antennas	CHECK CONDITION
Static Port.....	CLEAR
A/C Vent	SCREEN CLEAR
Horizontal Stabilizer/Elevator	UPPER/LOWER SURFACES, ATTACH POINTS, FREE
Elevator Trim Tab.....	SECURE, ATTACH POINTS, FREE
Rudder.....	CONDITION, ATTACH POINTS, FREE

RIGHT FUSELAGE

Horizontal Stabilizer/Elevator	UPPER/LOWER SURFACES, ATTACH POINTS, FREE
Baggage Door	CLOSED & LOCKED
Static Port.....	CLEAR
Windows	CHECK CONDITION

RIGHT WING

Right Main Gear Door	CONDITION, ATTACH POINTS
Right Main Gear Mount.....	CHECK ATTACH POINTS, HYDRAULIC & BRAKE LINES/PADS, EXTENSION (4" MINIMUM)
Right Main Tire.....	CONDITION, INFLATION
Right Flap.....	ATTACH POINTS, MOVEMENT
Aileron Push Rod.....	CHECK CONNECTION (INSIDE WING)
Right Aileron	ATTACH POINTS, FREE
Nav / Strobe Lights	CONDITION, SECURE

NOSE

LEFT WING

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Left Main Gear Mount	CHECK ATTACH POINTS, HYDRAULIC & BRAKE LINES/PADS, EXTENSION (4” MINIMUM)
Left Main Gear Door	CONDITION, ATTACH POINTS

BEFORE ENGINE START

Wheel Chocks	REMOVED
Seat Belts/Shoulder Harness	ADJUSTED & LOCKED
Passenger Brief	COMPLETE
Emergency Gear Extension Valve	VERTICAL
Emergency Fuel Control Knob	FULL AFT & PINNED
Fuel Condition Lever	CUTOFF
Propeller Control Lever	FEATHER
Power Control Lever	IDLE (OUT OF BETA)

CAUTION

Do not move the power control lever into the reverse range (Beta) before engine start, as damage to the linkage will result. Reverse (Beta) may only be selected with the engine running and the propeller turning.

WARNING

Stabilized ground operation within the propeller restricted RPM range (400 to 1200 RPM Np) can generate high propeller stresses and result in failure and loss of control of the aircraft.

ENGINE START

Cabin Door	CLOSED & LATCHED
Cabin/Baggage Door Seal Switches ..	ON (LISTEN FOR PUMPS AND FOR PUMP SHUTOFF)
Standby Gyro Cage Knob	PULL & HOLD
Battery Switch	ON, 24V MINIMUM (RELEASE GYRO CAGE KNOB)
Landing Gear Light Test Switch	TEST & CHECK LIGHTS
Check Brakes	ENGAGED
Start Area	CLEAR
Ignition Switch	ON, LISTEN FOR FIRING, OFF

GROUND CONTROL

The aircraft is controlled on the ground using differential braking to control the castering nose gear. A little caution for the first few flights in the aircraft is all that is required to get the feel of this simple and light weight approach. Use Beta to control the taxi speed. Caution should be exercised to not ride the brakes while taxiing, use only enough power to taxi at a brisk walking pace and try to only use the brakes as necessary for steering. Under normal conditions brakes are not needed for the take-off roll once the power is applied, as rudder control becomes effective above 25-30 kts.

FLAPS

The wing flaps are electrically operated. The flaps are actuated with the flap control switch located on the lower middle of the instrument panel. It is a three position switch. Turning the switch fully up will retract the flaps to 0°. Turning the switch to the middle position will extend the flaps to the takeoff/approach position of 24°. Turning the switch fully down will lower the flaps to the landing position of 48°.

Flap position is indicated on the MFD.