

STARTING ENGINE

1. Mixture -- RICH.
2. Carburetor Heat -- COLD.
3. Master Switch -- ON.
4. Prime -- AS REQUIRED (2 to 6 strokes; none if engine is warm).
5. Throttle -- OPEN 1/8 INCH.
6. Propeller Area -- CLEAR.
7. Ignition Switch -- START (release when engine starts).
8. Oil Pressure -- CHECK.

BEFORE TAKEOFF

1. Parking Brake -- SET.
2. Cabin Doors and Window(s) -- CLOSED and LOCKED.
3. Flight Controls -- FREE and CORRECT.
4. Flight Instruments -- SET.
5. Fuel Selector Valve -- BOTH.
6. Mixture -- RICH (below 3000 feet).
7. Elevator Trim and Rudder Trim (if installed) -- TAKEOFF.
8. Throttle -- 1700 RPM.
 - a. Magnetos -- CHECK (RPM drop should not exceed 125 RPM on either magneto or 50 RPM differential between magnetos).
 - b. Carburetor Heat -- CHECK (for RPM drop).
 - c. Engine Instruments and Ammeter -- CHECK.
 - d. Suction Gage -- CHECK.
9. Avionics Power Switch -- ON.
10. Radios -- SET.
11. Autopilot (if installed) -- OFF.
12. Air Conditioner (if installed) -- OFF.
13. Flashing Beacon, Navigation Lights and/or Strobe Lights -- ON as required.
14. Throttle Friction Lock -- ADJUST.
15. Brakes -- RELEASE.

TAKEOFF

NORMAL TAKEOFF

1. Wing Flaps -- UP.
2. Carburetor Heat -- COLD.
3. Throttle -- FULL OPEN.
4. Elevator Control -- LIFT NOSE WHEEL (at 55 KIAS).
5. Climb Speed -- 70-80 KIAS.

**SECTION 4
NORMAL PROCEDURES**

**CESSNA
MODEL 172N**

SHORT FIELD TAKEOFF

1. Wing Flaps -- UP.
2. Carburetor Heat -- COLD.
3. Brakes -- APPLY.
4. Throttle -- FULL OPEN.
5. Mixture -- RICH (above 3000 feet, LEAN to obtain maximum RPM).
6. Brakes -- RELEASE.
7. Elevator Control -- SLIGHTLY TAIL LOW.
8. Climb Speed -- 59 KIAS (until all obstacles are cleared).

ENROUTE CLIMB

1. Airspeed -- 70-85 KIAS.

NOTE

If a maximum performance climb is necessary, use speeds shown in the Rate Of Climb chart in Section 5.

2. Throttle -- FULL OPEN.
3. Mixture -- RICH (above 3000 feet, LEAN to obtain maximum RPM).

CRUISE

1. Power -- 2200-2700 RPM (no more than 75% is recommended).
2. Elevator and Rudder Trim (if installed) -- ADJUST.
3. Mixture -- LEAN.

DESCENT

1. Mixture -- ADJUST for smooth operation (full rich for idle power).
2. Power -- AS DESIRED.
3. Carburetor Heat -- AS REQUIRED (to prevent carburetor icing).

BEFORE LANDING

1. Seats, Belts, Harnesses -- SECURE.
2. Fuel Selector Valve -- BOTH.
3. Mixture -- RICH.
4. Carburetor Heat -- ON (apply full heat before closing throttle).
5. Autopilot (if installed) -- OFF.
6. Air Conditioner (if installed) -- OFF.

LANDING

NORMAL LANDING

1. Airspeed -- 60-70 KIAS (flaps UP).
2. Wing Flaps -- AS DESIRED (below 85 KIAS).
3. Airspeed -- 55-65 KIAS (flaps DOWN).
4. Touchdown -- MAIN WHEELS FIRST.
5. Landing Roll -- LOWER NOSE WHEEL GENTLY.
6. Braking -- MINIMUM REQUIRED.

SHORT FIELD LANDING

1. Airspeed -- 60-70 KIAS (flaps UP).
2. Wing Flaps -- FULL DOWN (40°).
3. Airspeed -- 60 KIAS (until flare).
4. Power -- REDUCE to idle after clearing obstacle.
5. Touchdown -- MAIN WHEELS FIRST.
6. Brakes -- APPLY HEAVILY.
7. Wing Flaps -- RETRACT.

BALKED LANDING

1. Throttle -- FULL OPEN.
2. Carburetor Heat -- COLD.
3. Wing Flaps -- 20° (immediately).
4. Climb Speed -- 55 KIAS.
5. Wing Flaps -- 10° (until obstacles are cleared).
RETRACT (after reaching a safe altitude and 60 KIAS).

AFTER LANDING

1. Wing Flaps -- UP.
2. Carburetor Heat -- COLD.

SECURING AIRPLANE

1. Parking Brake -- SET.
2. Avionics Power Switch, Electrical Equipment, Autopilot (if installed) -- OFF.
3. Mixture -- IDLE CUT-OFF (pulled full out).
4. Ignition Switch -- OFF.
5. Master Switch -- OFF.
6. Control Lock -- INSTALL.