



REV. 10/12/2022

**Cessna Skyhawk N737KZ
172N (C172)**

Preflight Inspection

CABIN

Documents (ARROW).....ON BOARD
 Next Maintenance.....CHECK TACH
 Control Lock.....REMOVE
 Ignition Switch.....OFF
 Avionics Master Switch.....OFF
 Auto Pilot.....OFF
 Battery Master Switch.....ON
 Fuel Quantity.....CHECK
 Wing Flaps.....DOWN
 Lights.....CHECK
 Pitot Heat.....CHECK
 Battery Master Switch.....OFF
 Alternate Static Source.....NORMAL (IN)
 Fuel Selector Valve.....BOTH
 Trim.....NEUTRAL

EMPENNAGE

Horizontal Stabilizer.....CHECK
 Elevator.....FREE / SECURE
 Vertical Stabilizer.....CHECK
 Rudder.....FREE / SECURE
 Tail Tie-Down.....REMOVE
 Beacon.....CHECK
 ELT & VOR Antennas.....CHECK

RIGHT WING

Wing Flap.....SECURE
 Aileron.....FREE / SECURE
 Wing Tip / Light.....CHECK
 Wing Tie-down.....REMOVE
 Leading Edge.....INSPECT
 Main Tire (38 PSI) / Brake.....CHECK
 Fuel Sump.....DRAIN / CHECK
 Fuel Quantity / CAP.....CHECK / SECURE

NOSE

Windshield.....INSPECT / CLEAN
 Engine Oil.....6-8 qts (7 min X-Country)
 ASK FOR ASSISTANCE TO FILL
 Fuel Strainer.....PULL OUT 3 SEC
 Exhaust.....INSPECT / SECURE
 Nose Wheel (45 PSI) / Strut.....CHECK
 Propeller / Spinner.....CHECK
 Alternator Belt.....CHECK
 Air Filter.....CHECK
 Static Port.....CLEAR

LEFT WING

Main Tire (38 PSI) / Brake.....CHECK
 Fuel Sump.....DRAIN / CHECK
 Fuel Quantity / CAP.....CHECK / SECURE
 Pitot Tube / Cover.....CHECK
 Fuel Vent.....CLEAR
 Wing Tie-down.....REMOVE
 Stall Warning Opening.....CHECK
 Leading Edge.....CHECK
 Wing Tip / Light.....CHECK
 Aileron.....FREE / SECURE
 Wing Flap.....SECURE
 Baggage Door.....CLOSED

**This checklist is not a substitute for the 1978 Cessna 172N Owner's Handbook.
 All Information contained herein is deemed accurate but not guaranteed.**

Preflight Inspection

Before Engine Start

Preflight Inspection.....COMPLETE
 Passenger Briefing.....COMPLETE
 SPOT Unit.....ON / TRACK
 Seats/ Belts / Shoulder Belts.....ADJUST
 Doors.....CLOSED / LOCKED
 Fuel Selector Valve.....BOTH
 Avionics Master Switch.....OFF
 Auto Pilot.....OFF
 Lights.....OFF
 Circuit Breakers.....IN
 Brakes.....SET / HOLD

Engine Start

Mixture.....RICH
 Throttle.....OPEN 1/8 INCH
 Carburetor Heat.....OFF
 Beacon.....ON
 Master Switch (Batt/ALT).....ON
 Propeller Area.....CLEAR
 Prime (1-hot, 2 cold).....AS NEEDED
 Ignition Switch.....START
 Throttle.....800-1000 RPM
Oil Pressure.....Up within 20 sec.
 NAV Lights.....ON
 Avionics Master Switch.....ON

Before Taxi

Mixture.....LEAN for Taxi
 Wing Flaps.....RETRACT
 Radios.....SET / VOLUME Adjust
 Transponder.....ALT / As Required
 Landing Light.....ON
 Brakes.....RELEASE / CHECK
 ATIS and Clearance.....OBTAIN

Normal Takeoff

Wing Flaps.....UP
 Carburetor Heat.....OFF
 Power.....FULL THROTTLE
 Rotate.....55 KTS
 Climb.....70-80 KTS

Before Takeoff

Brakes.....SET / HOLD
 Doors / Windows.....CLOSED / LOCKED
 Flight Controls.....FREE / CORRECT
 Elevator Trim.....SET for TAKEOFF
 Fuel Selector Valve.....BOTH

RUN-UP

Mixture.....RICH
 Throttle.....1700 RPM
 Mixture.....SET for Density Alt.
 Carburetor Heat.....CHECK RPM DROP
 Magnetos.....CHECK RPM DROP
 Max drop: 125, Difference: 50
 Engine Gauges/Ammeter.....CHECK
 Suction.....CHECK
 Flight Instruments.....SET / CHECK
 Throttle.....IDLE / Check Smooth
 Throttle Friction Lock.....ADJUST
 Radios.....SET
 Takeoff Procedure.....BRIEFED
 Transponder.....ALT
 Takeoff Time.....RECORD
 Clearance.....OBTAINED
 Lights.....ALL ON
 Brakes.....RELEASE

Missoula ATIS.....	126.65
Missoula Ground.....	121.90
Missoula Tower.....	118.40
NorthStar Jet Unicom.....	123.30
Stevensville.....	122.80

Short Field Takeoff

Wing Flaps.....UP (10° soft or rough)
 Carburetor Heat.....OFF
 Brakes.....HOLD
 Power.....FULL THROTTLE
 Mixture.....SET for maximum RPM
 Brakes.....RELEASE
 Elevator.....SLIGHTLY NOSE HIGH
 Rotate.....55 KTS
 Climb.....**Vx 60 KTS**
55 KTS if flaps are used
 WHEN CLEAR OF OBSTACLE
 Wing Flaps.....RETRACT
 Airspeed.....**Vy 70 KTS**

Start / Taxi / Before Takeoff / Takeoff

Normal Climb

Wing Flaps.....UP / VERIFIED
Airspeed.....70-85 KTS
Power.....FULL THROTTLE
Mixture.....LEAN above 1000' AGL
Engine Gauges.....CHECK / MONITOR

Cruise

Power (65%-75%).....2200-2700 RPM
Mixture.....LEAN rich of peak RPM
Elevator Trim.....ADJUST
Heading Indicator.....SET
Landing Light.....OFF

Descent

Carburetor Heat.....ON below green arc
Power.....AS DESIRED
Mixture.....ENRICH as required
Landing Light.....ON
Radios / ATIS.....SET / OBTAIN

Before Landing

Fuel Selector Valve.....BOTH
Mixture.....ADJUST for field elev.
Carburetor Heat.....ON
(before closing throttle)
Lights.....ALL ON
Seat Belts / Shoulder Harness.....ON
Wing Flaps.....AS DESIRED
(below 85 KTS)

Go-Around

Power.....FULL THROTTLE
Carburetor Heat.....OFF
Wing Flaps.....20°
Airspeed.....55 KTS
Wing Flaps.....RETRACT SLOWLY
Airspeed.....70-85 KTS

Climb / Cruise / Landing / Shutdown

Normal Landing

Airspeed.....60-70 KTS (flaps UP)
Wing Flaps.....AS DESIRED
(below 85 KTS)
Airspeed.....55-65 KTS (flaps DOWN)

Short Field Landing

Airspeed.....60 KTS
Wing Flaps.....30°
Brakes.....APPLY
Wing Flaps.....RETRACT for max braking

After Landing

Strobe Light.....OFF
Carburetor Heat.....OFF
Wing Flaps.....RETRACT
Mixture.....LEAN for Taxi
Transponder.....ALT / As Required
Radios / Clearance.....SET / OBTAIN

Shutdown / Secure

Flight Plan.....CLOSED
Avionics Master Switch.....OFF
Auto Pilot.....OFF
Lights (except for beacon).....OFF
Throttle.....IDLE
Mixture.....IDLE CUT-OFF
Ignition Switch.....OFF
Beacon.....OFF
Master Switch.....OFF
Control Lock.....INSTALL
Fuel Selector Valve.....LEFT or RIGHT
SPOT Unit.....OFF
Pitot Cover.....INSTALL

Aircraft Tach / Chocks / Tie-down Post-Flight Walk-Around

Missoula ATIS.....126.65
Missoula Ground.....121.90
Missoula Tower.....118.40
NorthStar Jet Unicom.....123.30
Stevensville.....122.80

Fires

During Start on the GROUND

Continue Cranking to suck fuel and flames through carburetor into the engine

If Engine Starts:

Throttle.....1700 RPM for few minutes
Engine.....SHUTDOWN

If Engine Fails to start:

Throttle.....FULL
Mixture.....IDLE CUTOFF
Continue Cranking.....30-60 Seconds
Master Switch.....OFF
Ignition Switch.....OFF
Fuel Selector Valve.....OFF
Exit & Activate Fire Extinguisher

Engine Fire in Flight

Mixture.....IDLE CUTOFF
Fuel Selector Valve.....OFF
Master Switch.....OFF
Cabin Heat and Air.....OFF
Airspeed.....100 KTS
(if not extinguished increase speed)
Execute Forced Landing

Electrical Fire in Flight

Master Switch.....OFF
All Switches except Ignition.....OFF
Cabin Heat / Air / Vents.....OFF
ACTIVATE FIRE EXTINGUISHER
If Fire is out:
Cabin Heat / Air / Vents.....OPEN
Master Switch.....ON
Circuit Breakers.....CHECK
Electrical Switches.....ON (one at a time)
LAND AS SOON AS POSSIBLE

Cabin Fire

Master Switch.....OFF
Cabin Heat / Air / Vents.....OFF
ACTIVATE FIRE EXTINGUISHER
LAND AS SOON AS POSSIBLE

Emergency Procedures

Engine Failures

Take-Off Roll

Throttle.....IDLE
Brakes.....APPLY
Wing Flaps.....RETRACT
Mixture.....IDLE CUT-OFF

Immediately After Take-Off

Airspeed.....65 KTS
Wing Flaps.....AS REQUIRED
LAND STRAIGHT AHEAD
Mixture.....IDLE CUT-OFF
Fuel Selector Valve.....OFF
Ignition Switch.....OFF
Master Switch.....OFF

During Flight

Airspeed.....65 KTS
Fuel Selector Valve.....BOTH
Mixture.....RICH
Carburetor Heat.....ON
Throttle.....AS REQUIRED
Ignition Switch.....BOTH
(START if Prop has Stopped)
Primer.....IN & LOCKED

Forced Landing

Without Power

Airspeed.....65 KTS (flaps up)
60 KTS (flaps down)
Landing Location.....SELECT
Mixture.....IDLE CUT-OFF
Fuel Selector Valve.....OFF
Ignition Switch.....OFF
Wing Flaps.....AS REQUIRED
Master Switch.....OFF
Doors.....UNLATCHED
Touchdown.....SLIGHTLY NOSE HIGH

Landing With a Flat Tire







Approach.....NORMAL
Touchdown.....GOOD TIRE FIRST
Hold the Airplane OFF FLAT TIRE as Long
as Possible

V Speeds

Cessna 172N Airspeeds

V Speed	KTS
V _{GLIDE}	65
V _{SO}	41
V _S	47
V _R	55
V _X Sea Level	59
V _X 10,000'	61
V _Y Sea Level	73
V _Y 10,000'	68
V _{FE}	85
V _{NO}	128
V _{NE}	160
Max X-wind	15 KTS
V _A - 2300 lbs	97

Light Gun Signals

GROUND	SIGNAL	AIR
Cleared for Takeoff		Cleared to Land
Cleared to Taxi		Return for Landing
STOP		Give Way Continue Circling
Taxi Clear of Runway		Airport Unsafe DO NOT LAND
Return to Starting Point on Airport		Not Applicable
Exercise EXTREME CAUTION		Exercise EXTREME CAUTION

Density Altitude Chart

