

## Cessna-172 N172JD/Aspen ProMax

### Preflight Cabin

1. Pitot Tube Cover Remove
2. AROW(+ supplements) Check
3. Parking Brake Set if Not Chocked
5. Control Wheel Lock Remove
6. Fuel Selector Valve Both
7. Alternate Static Source Off
8. Elevator Trim Set for Takeoff
9. Ignition Switch Off
10. Radio Master/PFD Switch Off
11. Master Switch (Battery Only) On
12. Fuel Quantity/Annunciators Check
13. Flaps Extend
14. Pitot Heat, Lights On/Check/Off
15. Master Switch Off
16. Baggage Door Secure

### Preflight Empennage

1. Aspen OAT Check for Blockage
2. Tail Tie-Down Disconnect
3. Control Surfaces Check Freedom and Security
4. Trim Tab Check Security
5. Antennas Check Security and Condition

### Preflight Right Wing

1. Aileron Check
2. Flap Check
3. Wing Tie Down Disconnect
4. Main Wheel Tire/Brake Check
5. Fuel Quantity Check Visually
6. Fuel Drain Valve (1) Drain/Check
7. Fuel Filler Cap Secure

### Preflight Nose

1. Fuel Strainer Valve Pull to Check  
Ensure Full Closure
2. Engine Oil Dipstick Check level  
and Secure  
\*5 qt minimum  
\*Fill to 6+ for extended flights  
\*DO NOT OVERTIGHTEN
3. Engine Cooling Air Inlets Clear
4. Propeller & Spinner Check
5. Alternator Belt Check
6. Air Filter Check
7. Nose Wheel Strut and Tire Check
8. Static Source Opening Check

### Preflight Left Wing

1. Aileron Check
2. Flap Check
3. Wing Tie Down Disconnect
4. Main Wheel Tire/Brake Check
5. Fuel Quantity Check Visually
6. Fuel Drain Valve (1) Drain/Check
7. Fuel Filler Cap Secure
8. Fuel Tank Vent Check for  
Blockage
9. Stall Warning Opening Check for  
Blockage

### Before Starting Engine

1. Preflight Inspection Complete
2. Passenger Brief Complete
  - S- Seats/Seatbelts
  - A- Airvents
  - F- Fuel
  - E- Emergency
  - T- Traffic
  - Y- Your Questions
3. Seats/Seatbelts Adjust and Lock
4. Brakes Test & Set
5. Circuit Breakers Check In
6. Electrical Equipment Off

### CAUTION

**The radio master switch and PFD switch must be off during engine start to prevent possible damage to avionics.**

7. Radio Master, PFD Switch OFF
8. Fuel Selector Valve Verify Both

### Starting Engine

#### NOTE

**If engine is warm omit priming procedure**

#### PRIMING PROCEDURE

1. 1-3 Pumps IF NEEDED
2. Primer In and Locked

#### STARTING ENGINE

1. Mixture Control Full Rich
2. Carb Heat Cold
3. Throttle Pump x2
4. Throttle Open 1/8 Inch
5. Propeller Area Clear
6. Master Switch (Battery Only) On
7. Flashing Beacon On
8. Ignition Switch Start
9. Oil Pressure Check
10. Throttle 1000 RPM
11. Mixture Lean for  
Max RPM
12. Throttle 800-1000 RPM
13. Master Switch (ALT) On
13. Nav Lights OFF Except for Night
14. Radio Master/Radios On
15. PFD Switch On
16. EDM 830 Display "REFUEL?" Y/N  
See EDM830 Cheat Sheet for more
17. Flaps Retract
18. Flap handle Neutral

### Before Taxi

1. Heat / Vents / Defrost As Needed
2. Radios/Nav aids/GPS Checked / Set
3. ATIS Set BARO/ALT/HDG Bug
4. Transponder Verify ALT/SQK  
No Annunciations

### Taxi

1. Brakes Release and Test
2. Throttle Adjust for Min Brake Use
3. Check Flight Instruments
  - ASPEN PFD/STBY

### NOTE:

**This checklist is a guide to coordinate Pilot Operating Handbook and STC data applicable to this particular aircraft only. The applicable Pilot Operating Handbook and STC installations remain the official documentation for this aircraft. The pilot in command is responsible for complying with all items in the Pilot Operating Handbook and applicable STCs**

**Property of  
Black Hound  
Aviation  
Do not remove  
from N172JD**

## Before Takeoff - Run-Up

1. Parking Brake Set
2. Seats Secure
3. Seat Backs Most Upright Position
4. Seat Belts Secure
5. Cabin Doors Closed and Locked
6. Flight Controls Free & Correct
7. Flight Instruments Check & Set
8. Fuel Quantity Check
9. **Mixture Full Rich**
10. Carb Heat Cold
11. Fuel Selector Valve Both
12. Throttle 1700 RPM

### 1. Mixture: Lean for Max RPM

2. Mag Check (125/50 max)
3. Carb Heat Check RPM Drop  
CRB Temp Increase
4. Engine Instruments Check
5. Amps/Volts Check
13. Annunciators Check
14. Throttle Check Idle
15. Throttle 800-1000 RPM
16. Mixture Lean as Needed
17. Throttle Friction Lock Adjust
18. GPS CDI Select Nav Source
19. ASPEN CDI Select Nav Source
20. EDM830 Switch Select EGT
21. Elevator Trim Set for Takeoff
22. Transponder Verify ALT/SQK  
No Annunciations
23. Land/Taxi/Bcn/Strobe On  
Nav Lights Night Only
25. Carb Heat Cold
26. Parking Brake Release

## Before Takeoff- Hold Short Line

1. Frequency TWR/CTAF
2. Flaps Set for Takeoff (0°-10°)
3. Takeoff Brief

Runway/Takeoff Type/Speeds/Heading/Altitude

Lose engine on runway IDLE, EXIT RWY

Lose engine airborne rwy remaining LAND

Lose engine below 1000 AGL PUSH 70KTS

Land Straight +/-30°

Above 1000 AGL PUSH 70KTS

Consider return to airport

4. Mixture Best Power

## All speeds in KIAS

### Normal Takeoff

1. Flaps 0°-10°
2. Throttle Full Open
3. Vr 53 KIAS
4. Vy 73 KIAS

### SHORT FIELD

1. FLAPS 10°
2. Use all Available Runway
3. Hold Brakes/Full Power/Check RPM
4. Release Brakes
5. Vr 53 KIAS
6. Vx 58 KIAS
7. Obstacle Cleared 73 KIAS/Flaps UP

### SOFT FIELD

1. FLAPS 10°
2. Full Aft/No Brakes
3. Remain in Ground Effect
4. Begin Climb Vx 58 KIAS
5. Obstacle Cleared 73 KIAS/Flaps UP

### Enroute Climb

1. Airspeed 80 - 90 KIAS
2. Throttle Full Open
3. Carb Heat Cold
4. Mixture Full Rich below 3000'
5. Engine Instruments/CHT Check
6. Transponder Verify ALT/SQK

### Cruise

1. Power As Needed
2. Carb Heat As Needed
3. Elevator Trim Adjust
4. Mixture Lean as Needed
5. Lights As Needed
6. EDM830 Switch As Needed

### Before Descent

1. Weather (ATIS) Obtain
2. Altimeters Set
3. Approach Brief
4. VOR/GPS Setup As Needed
5. ASPEN and GPS CDI Select
6. Fuel Selector Valve Both
7. Mixture Adjust
8. Carb Heat As Needed

### Before Landing

1. Seat Backs Most Upright Position
2. Seats & Seat Belts Secure & Lock
3. Fuel Selector Valve Both
4. Mixture Control Richen
5. Carb Heat As Needed  
(apply full heat prior to idle)
6. Landing & Taxi Lights On

### Normal Landing

1. Airspeed 65 - 75 KIAS
2. Flaps As Needed  
Below 85 KIAS

### SHORT FIELD

1. Flaps 30°
2. Airspeed 61 KIAS
3. Aerodynamic Braking Flaps UP  
Yoke Aft  
Apply Brakes

### SOFT FIELD

1. Flaps 20° -30°
2. Hold Nosewheel Off
3. MINIMUM to NO Braking

### Balked Landing

1. Throttle Full Open
2. Carb Heat Cold
3. Wing Flaps Retract to 20°
4. Climb Speed 65 KIAS
5. Flaps Retract Slowly

### After Landing (Clear of Runway)

1. Carb Heat Cold
2. Aircraft Clear of Runway  
Full Stop
3. Throttle 1000 RPM
4. **Mixture Lean for Maximum RPM**
5. Throttle Adjust for Min Brake Use
6. Wing Flaps Up
7. Lights As Needed
8. Transponder ALT/1200
9. Pitot Heat Off
10. Taxi Clearance Brief

### Securing Aircraft

1. Parking Brake As Needed
2. Electric Equipment Off
3. PFD Switch Off
4. Radio Master Switch Off
5. Throttle Idle
6. Magnetos Check for Ground
7. Mixture Idle Cut Off
8. Magnetos Off, Remove Key
9. Master Switch Off
10. Control Wheel Lock Install
11. Parking Brake Off when Chocked
12. Fuel Selector Left or Right
13. Sun Shields Install
14. Aircraft Locked if away from Home
15. Flight Plan Closed

### V Speeds and Specs

- X-Wind (Max Demo'd) 15 Knots  
Best Glide Speed 68 KIAS (flaps up)  
Short Field Takeoff flaps10° 58KIAS  
Vx (Sea Level) 62 KIAS  
Vy (Sea Level) 73 KIAS  
Vso Stall w/ Flaps 49 KIAS  
Vs1 Stall w/o Flaps 56 KIAS  
Va (2550#) 105 KIAS  
Va (2150#) 95 KIAS  
Va (1750#) 85 KIAS  
Vno Max Structural Cruise 126 KIAS  
Vne Never Exceed 158 KIAS

### Aircraft Information

- Gross Takeoff Weight 2550 lbs  
Engine Lycoming O-360-A4M  
Max Power 180 BHP  
Max Engine Speed 2700 RPM  
Fuel Type 100LL (Blue)  
Fuel Capacity 38 Gal Usable  
Oil Capacity 8 Qts (Minimum 5)  
Electrical 14 Volt  
Tire Pressure Nose-45/ Main-38 PSI  
BEW 1488.57  
Arm 38.65  
Moment 57526.97