
Cessna 172M
PH-ACT
Checklist

ATTENTION!
DO NOT
STOW THIS CHECKLIST
IN DIRECT SUNLIGHT

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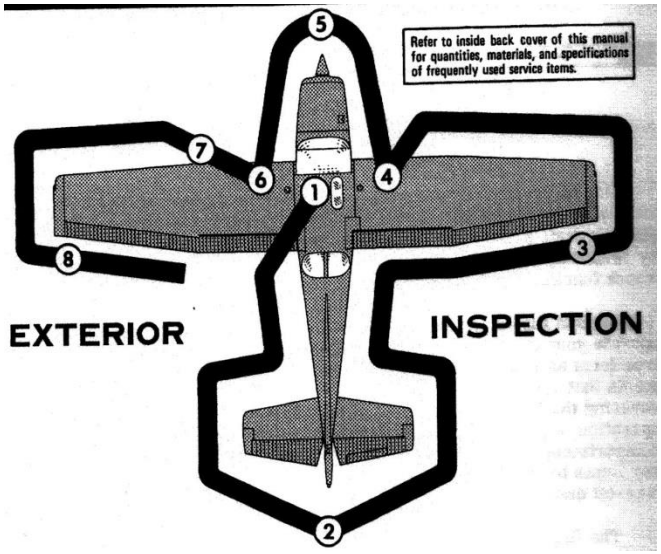
## PREFLIGHT INSPECTION




**NOTE:**
Visually check aircraft for general condition during walkaround inspection. In cold weather, remove even small accumulations of frost, ice or snow from wing, tail and control surfaces. Also, make sure that control surfaces contain no internal accumulations of ice or debris. If night flight is planned, check operation of all lights, and make sure a flashlight is available.

| 1. CABIN | |
|---|---|
| Control Wheel Lock | REMOVE |
| Ignition Switch | OFF |
| Master Switch | ON |
| Fuel Quantity Indicators | CHECK QUANTITY |
| Flaps | EXTEND |
| Master Switch | OFF |
| Fuel Selector Valve | BOTH |
| Baggage Door | CHECK **(lock with key if child's seat is to be occupied)** |

| 2. EMPENNAGE | |
|---|---|
| Rudder Gust Lock (if installed) | REMOVE |
| Tail Tie Down | DISCONNECT |
| Control Surfaces | CHECK **(freedom of movement and security)** |

| 3. RIGHT WING Trailing Edge | |
|---|---|
| Aileron | CHECK **(freedom of movement and security)** |
| Flap | CHECK **(security and condition)** |

| 4. RIGHT WING | |
|---|---|
| Wing Tie Down | DISCONNECT |
| Main Wheel Tire | CHECK **(for proper inflation)** |
| **WARNING**<br>**Before first flight of the day and after each refueling, use sampler cup and drain small quantity of fuel from fuel tank sump quick-drain valve to check for water, sediment, and proper fuel grade (red).** | |
| Fuel Quantity | CHECK VISUALLY **(for desired level)** |
| Fuel Filler Cap | SECURE |

| 5. NOSE | |
|---|---|
| Engine Oil Level | CHECK **(do not operate with less than 6 quarts. Fill to 7 quarts for extended flight)** |
| **WARNING**<br>**Before first flight of the day and after each refueling, pull out strainer drain knob for about 4 seconds to clear fuel strainer of possible water and sediment. Check strainer drain closed. If water is observed, the fuel system may contain additional water, and further draining of the system at the strainer, fuel tank sumps, and fuel selector valve drain plug will be necessary** | |
| Propeller and Spinner | CHECK **(for nicks and security)** |
| Landing Light(s) | CHECK **(for condition and cleanliness)** |
| Carburetor Air Filter | CHECK **(for restrictions by dust or other foreign matter)** |
| Nose Wheel Strut and Tire | CHECK **(for proper inflation)** |
| Nose Tie Down | DISCONNECT |
| Flight Instrument Static Source Opening (left side of fuselage) | CHECK **(for stoppage)** |

| 6. LEFT WING | |
|---|---|
| Main Wheel Tire | CHECK **(for proper inflation)** |
| **WARNING**<br>**Before first flight of the day and after each refueling, use sampler cup and drain small quantity of fuel from fuel tank sump quick drainvalve to check for water, sediment and proper fuel grade (red)** | |
| Fuel Quantity | CHECK VISUALLY **(for desired level)** |
| Fuel Filler Cap | SECURE |

| 7. LEFT WING Leading Edge | |
|---|---|
| Pitot Tube Cover | REMOVE **(and check opening for stoppage)** |
| Fuel Tank Vent Opening | CHECK **(for stoppage)** |
| Stall Warning Opening | CHECK **(for stoppage)** To check the system, place a clean handkerchief over the vent opening and apply suction; a sound from the warning horn will confirm system operation) |
| Wing Tie Down | DISCONNECT |

| 8. LEFT WING Trailing Edge | |
|---|---|
| Aileron | CHECK **(for freedom of movement and security)** |
| Flap | CHECK **(for security and condition)** |

# NORMAL CHECKLIST PH-ACT C-172M

| BEFORE STARTING ENGINE | |
|---|---|
| Preflight Check | COMPLETE |
| Aircraft Papers | ON BOARD |
| Seats, Belts, Shoulder Harnesses | ADJUST and LOCK |
| Doors | CLOSED and LOCKED |
| Passengers | BRIEFED |
| Loading | WITHIN LIMITS |
| Loose items | STOWED |
| Tacho | NOTED |
| Controls | FREE and CORRECT |
| Master Switch | ON |
| Fuel Quantity | CHECK |
| Fuel Selector Valve | BOTH |
| Radios and Electrical Equipment | OFF |
| Brakes | TEST and SET |
| Circuit Breakers | CHECK IN |

| STARTING ENGINE | |
|---|---|
| Avionics | OFF |
| Beacon | ON |
| Fuel Selector | LEFT |
| Mixture | RICH |
| Prop | FULL FINE |
| Throttle | SET **(½ cm open)** |
| Carburetor Heat | OFF (Cold) |
| Prime | AS REQUIRED **(3 strokes; none if engine is warm)** |
| Primer Lock | CLOSE and LOCK |
| Master Switch | ON |
| Propeller Area | CLEAR |
| Ignition Switch | START **(release when engine start)** |
| RPM | 1200 RPM **(cold engine 1500 RPM)** |
| Oil Pressure | CHECK **(within 30 sec)** |

| AFTER STARTING ENGINE | |
|---|---|
| Primer | LOCKED |
| Flaps | UP |
| Navigation Light | ON **(if necessary)** |
| Avionics | ON |
| Com/Nav | SET |
| Transponder | SET **(ground/standby)** |
| Altimeter and Gyro | SET |

| TAXI | |
|---|---|
| Fuel Selector | RIGHT |
| Off Block Time | Noted |
| Parking Brake | OFF |
| Brakes | CHECKED |
| Gyros | CHECKED **(during turns)** |
| Compass | CHECKED |
| Artifical Horizon | CHECK **(level)** |

| ENGINE RUN UP | |
|---|---|
| Cabin Doors and Window(s) | CLOSED and LOCKED |
| Parking Brake | SET |
| Flight Controls | CHECK **(free and correct movement)** |
| Elevator Trim | TAKE-OFF |
| Flight Instruments | SET |
| Radios | SET |
| Autopilot (if installed) | OFF |
| Fuel Selector Valve | BOTH |
| Mixture | RICH **(below 3000 feet)** |
| Throttle | 1700 RPM |
| Oil pressure & Temperature | CHECK |
| Magnetos | CHECK **(RPM drop not exceeding 125 RPM or 50 RPM differential between magnetos)** |
| Engine instruments and ammeter | CHECK |
| Carburetor Heat | CHECK **(for RPM drop, min 15 sec)** |
| Prop Pitch | CHECK **(not below 1300 RPM)** |
| Suction Gage | CHECK **(4.6 – 5.4 inch)** |
| Idle Power | CHECK **(between 500 and 800 RPM)** |
| Flashing beacon, navigation lights and/or strobelights | ON **(as required)** |
| Throttle Friction Lock | ADJUST |
| Wing Flaps | UP |
| 1200 RPM | SET |

## ONLY FOR RFI AND FI "GOPRO" SWITCH ON

| RUNWAY ITEMS | |
|---|---|
| Prop | FULL FINE |
| Mixture | RICH |
| Landing Light | ON |
| Pitot Heat | ON **(if necessary)** |
| Runway Heading | CHECK |
| Engine Instruments | CHECK **(in the green)** |

| NORMAL TAKE-OFF | |
|---|---|
| Wing Flaps | UP **(grass: 10 degrees)** |
| Carburetor Heat | COLD |
| Throtle | FULL |
| Elevator Control | Lift nose wheel at 55 KIAS |
| Rotate | 60 KIAS |
| Climb Speed | 70-80KIAS |

| AFTER TAKE-OFF (ABOVE 200 feet) | |
|---|---|
| Flaps | UP |
| Climb Power | 24,5 inch / 2500 RPM |
| Climb Speed | 70 KIAS |
| Transponder | CHECK |
| Landing Light | OFF |

| MAXIMUM PERFORMANCE TAKE-OFF | |
|---|---|
| Wing Flaps | UP |
| Carburetor Heat | COLD |
| Brakes | APPLY |
| Throttle | FULL OPEN |
| Brakes | RELEASE |
| Airplane Attitude | SLIGHTLY TAIL LOW |
| Climb Speed | 59 KIAS **(until all obstacles are cleared)** |

| CLIMB | |
|---|---|
| Airspeed | 80 KIAS |
| **NOTE:**<br>**If a maximum performance climb is necessary, use speeds shown in the maximum rate-of-climb data chart in section VI** | |
| Throttle | 24 INCH / 2400 RPM |
| Mixture | FULL RICH **(may be leaned above 3000 feet)** |

| CRUISE | |
|---|---|
| Power | 19 inch – 2300 RPM<br>**(never below 2300 RPM)** |
| Elevator Trim | ADJUST |
| Mixture | LEAN **(not below 3000 ft)** |

| DESCENT | |
|---|---|
| Mixture | RICH |
| Power | AS DESIRED |
| Carburetor Heat | AS REQUIRED **(to prevent carburetor icing)** |

| APPROACH | |
|---|---|
| Weather (ATIS) | CHECK |
| Seat Belts | FASTENED |
| Brakes | CHECKED and OFF |
| Flight Instruments | CHECK **(altimeter and compass)** |
| Navigation Instruments | SET and CHECKED |
| Engine Instruments | CHECK |
| Mixture | RICH |
| Power | AS DESIRED |
| Prop | SET |
| Carburetor Heat | AS DESIRED |
| Fuel | CHECKED |
| Fuel Selector valve | BOTH |
| Landing Light | ON |

| DOWNWIND | |
|---|---|
| Aircraft | NO LOOSE ITEMS |
| Fuel Selector Valve | BOTH |
| Carburetor Heat | ON **(full heat before closing throttle)** |
| Airspeed | 60-70 KIAS **(flaps up)** |
| Reduce power | 15 INCH |
| Prop | SET |
| Power | Approx. 2300 RPM |

| BASE | |
|---|---|
| Speed, Flaps 20 degrees | 75 KIAS |

| FINAL | |
|---|---|
| Mixture | RICH |
| Prop | FULL FINE |
| Carburetor heat | COLD |
| Speed, Flaps 30 degrees | 70 KIAS **(threshold 65 KIAS)** |
| Landing Clearance (if applicable) | RECEIVED |

| GO AROUND | |
|---|---|
| Throttle | FULL OPEN |
| Carburetor Heat | COLD |
| Wing Flaps | 20 DEGREES |
| Airspeed | 65 KIAS |
| Flaps | UP **(in stages retract slowly)** |
| Climb speed | 70 KIAS |
| Proceed with after take-off | |

| AFTER LANDING | |
|---|---|
| Transponder | STANDBY |
| Wing Flaps | UP |
| Landing Light | OFF |
| Carburetor Heat | COLD |
| Pitot Heat | OFF |

| SHUT DOWN | |
|---|---|
| Parking Brake | SET **(if necessary)** |
| Radios, electrical equipment, autopilot | OFF |
| Mixture | IDLE CUT-OFF **(pulled full out)** |
| Ignition Switch | OFF |
| Master Switch | OFF |
| On Block Time, Tacho | NOTED |
| Control Lock | INSTALL |

# FLAP SETTINGS / OPERATING SPEEDS

| T/O FLAP SETTING | |
|---|---|
| Normal take-off | UP |
| Soft, Short Field | 10 degrees |

| SPEEDS | |
|---|---|
| Max Crosswind | 15 KIAS |
| Lift-Off | 55-60 KIAS |
| Vx | 65 KIAS |
| Vy | 75 KIAS |
| Climb | 75 KIAS |
| Downwind | 80 KIAS |
| Base | 75 KIAS |
| Final | 65-70 KIAS |
| Glide | 65 KIAS |

# EMERGENCY CHECKLIST PH-ACT C-172M

**ENGINE FAILURES**

| ENGINE FAILURE DURING TAKE-OFF RUN | |
|---|---|
| Throttle | IDLE |
| Brakes | APPLY |
| Wing Flaps | RETRACT |
| Mixture | IDLE CUT-OFF |
| Ignition Switch | OFF |
| Master Switch | OFF |

| ENGINE FAILURE IMMEDIATELY AFTER TAKE-OFF | |
|---|---|
| Airspeed | 65 KIAS **(flaps UP)**<br>60 KIAS **(flaps DOWN)** |
| Mixture | IDLE CUT-OFF |
| Fuel Selector Valve | OFF |
| Ignition Switch | OFF |
| Wing Flaps | AS REQUIRED |
| Master Switch | OFF |
| Cabin Door | Unlatch |
| Land | Straight ahead |

| ENGINE FAILURE DURING FLIGHT | |
|---|---|
| Airspeed | 65 KIAS |
| Carburetor Heat | ON |
| Fuel Selector Valve | BOTH |
| Mixture | RICH |
| Ignition Switch | BOTH **(or START if propeller is stopped)** |
| Primer | IN and LOCKED |

**FORCED LANDINGS**

| EMERGENCY LANDING WITHOUT ENGINE POWER | |
|---|---|
| Airspeed | 65 KIAS **(flaps UP)**<br>60 KIAS **(flaps DOWN)** |
| Mixture | IDLE CUT-OFF |
| Fuel Selector Valve | OFF |
| Ignition switch | OFF |
| Wing Flaps | AS REQUIRED **(40 degrees recommended)** |
| Master Switch | OFF |
| Doors | UNLATCH PRIOR TO TOUTCHDOWN |
| Touchdown | SLIGHTLY TAIL LOW |
| Brakes | APPLY HEAVILY |

| PRECAUTIONARY LANDING WITH ENGINE POWER | |
|---|---|
| Wing Flaps | 20 degrees |
| Airspeed | 60 KIAS |
| Selected Field | FLY OVER **(noting terrain and obstructions then retract flaps upon reaching a safe altitude and airspeed)** |
| Radio + Electrical Switches | OFF |
| Wing flaps | 40 DEGREES **(on final approach)** |
| Airspeed | 60 KIAS |
| Master Switch | OFF |
| Doors | UNLATCH PRIOR TO TOUCHDOWN |
| Touchdown | WITH SLIGHTLY TAIL-LOW ATTITUDE |
| Ignition Switch | OFF |
| Brakes | APPLY HEAVILY |

| DITCHING | |
|---|---|
| Radio | TRANSMIT MAYDAY on 121,5 MHz, giving location and intentions |
| Transponder | Squawk 7700 |
| Heavy objects (in baggage area) | SECURE or JETTISON |
| Flaps | 20 – 40 DEGREES |
| Power | ESTABLISH 300 FT/MIN DESCENT at 55 KIAS |
| Approach | High winds, heavy seas -- INTO THE WIND<br>Light winds, heavy swells-- PARALLEL TO SWELLS |
| **NOTE:**<br>**If no power is available, approach at 65 KIAS with flaps up or at 60 KIAS with 10° flaps.** | |
| Cabin doors | UNLATCH |
| Touch down | LEVEL ATTITUDE AT ESTABLISHED DESCENT |
| Face | CUSHION **(at touchdown with folded coat or seat cushion in front of face)** |
| ELT | ACTIVATE |
| Airplane | EVACUATE **(through cabin doors. If necessary , open window and flood cabin to equalize pressure so doors can be opened)** |
| Life vest | INFLATE, **after** evacuation of cabin |

**FIRES**

| ENGINE FIRE DURING START ON GROUND | |
|---|---|
| Cranking | CONTINUE **(to get a start which would suck the flames and accumulated fuel through the carburetor and into the engine)** |
| ***If engine starts:*** | |
| Power | 1700 RPM **(for a few minutes)** |
| Engine | SHUTDOWN **(and inspect for damage)** |
| ***If engine fails to start:*** | |
| Throttle | FULL OPEN |
| Mixture | IDLE CUT-OFF |
| Cranking | CONTINUE **(for two or three minutes)** |
| Fire Extinguisher | OBTAIN **(have ground attendants obtain)** |
| Engine | SECURE<br>a. Master Switch --OFF<br>b. Ignition Switch-- OFF<br>c. Fuel Shutoff Valve --OFF |
| Fire | EXTINGUISH **(using fire extinguisher, seat cushion, wool blanket, or dirt. If practical try to remove carburetor air filter if it is ablaze)** |
| Fire damage | INSPECT **(repair damage or replace damaged components or wiring before conducting another flight)** |

| ENGINE FIRE IN FLIGHT | |
|---|---|
| Mixture | IDLE CUT-OFF |
| Fuel Selector Valve | OFF |
| Master Switch | OFF |
| Cabin Heat and Air | OFF |
| Airspeed | 100 KIAS **(if fire is not extinguished, increase glide speed to find an airspeed which will provide an incombustible mixture)** |
| Select a field | SUITABLE **(for a forced landing)** |
| Forced landing | EXECUTE **(as described in Emergency Landing Without Engine Power. Do not attempt to restart the engine)** |

| ELECTRICAL FIRE IN FLIGHT | |
|---|---|
| Master Switch | OFF |
| All other switches (except ignition switch) | OFF |
| Vents / Cabin Air / Heat | CLOSED |
| Fire Extinguisher | ACTIVATE **(if available)** |
| ***If fire appears out and electrical power is necessary for continuance of flight:*** | |
| Master Switch | ON |
| Circuit Breakers | CHECK **(for faulty circuit, do not reset)** |
| Radio/Electrical Switches | ON **(one at a time, with delay after each until short circuit is localized)** |
| Vents / Cabin Air / Heat | OPEN **(when it is ascertained that fire is completely extinguished)** |

| CABIN FIRE | |
|---|---|
| Master Switch | OFF |
| Vents/Cabin Air/Heat | CLOSED **(to avoid drafts)** |
| Fire Extinguisher | ACTIVATE **(if available)** |
| Vents/Cabin Air/Heat | OPEN |
| **WARNING**<br>**After discharging an extinguisher within a closed cabin, ventilate the cabin** | |
| Land the airplane as soon as possible to inspect for damage | |

| WING FIRE | |
|---|---|
| Navigation light switch | OFF |
| Pitot heat switch (if installed) | OFF |
| Landing and Taxi Light | OFF |
| **NOTE:**<br>**Perform a sideslip to keep the flames away from the fuel tank and cabin, and land as soon as possible using flaps only as required for final approach and touchdown.** | |

**ICING**

| FLIGHT IN ICING CONDITIONS |
| --- |
| **(1)** Turn pitot heat switch ON (if installed) |
| **(2)** Turn back or change altitude to obtain an outside air temperature that is less conducive to icing |
| **(3)** Pull cabin heat control full out and open defroster outlet to obtain maximum windshield defroster airflow. Adjust cabin air control to get maximum defroster heat and airflow. |
| **(4)** Open the throttle to increase engine speed and minimize ice build-up on propeller blades. |
| **(5)** Watch for signs of carburetor air filter ice and apply carburetor heat as required. An unexplained loss in engine speed could be caused by carburetor ice or air intake filter ice. Lean the mixture for maximum RPM if carburetor heat is used continuously. |
| **(6)** Plan a landing at the nearest airport. With an extremely rapid ice build-up, select a suitable “off airport” landing site. |
| **(7)** With an ice accumulation of ¼ inch or more on the wing leading edges, be prepared for significantly higher stall speed. |
| **(8)** Leave wing flaps retracted. With a severe ice build-up on the horizontal tail, the change in wing wake airflow direction caused by horizontal tail, the change in wing wake airflow direction caused by wing flap extension could result in a loss of elevator effectiveness. |
| **(9)** Open left window and, if practical, scrape ice from a portion of the windshield for visibility in the landing approach. |
| **(10)** Perform a landing approach using a forward slip, if necessary, for improved visibility |
| **(11)** Approach at 65 to 75 KIAS, depending upon the amount of the accumulation |
| **(12)** avoid steep turns during the landing approach |
| **(13)** Perform a landing in level attitude |

**ELECTRICAL POWER SUPLY SYSTEM MALFUNCTIONS**

| OVER-VOLTAGE LIGHT ILLUMINATES | |
|---|---|
| Master Switch | OFF **(both sides)** |
| Master Switch | ON |
| Over-Voltage Light | OFF |
| If over-voltage light illuminated again: | |
| Flight | Terminate, as soon as possible |

| AMP METER SHOWS DISCHARGE | |
|---|---|
| Alternator | OFF |
| Nonessential Electrical Equipment | OFF |
| Flight | TERMINATE **(as soon as practical)** |

**OTHER**

| STATIC SOURCE BLOCKAGE (Erroneous Instrument Reading Suspected) | |
|---|---|
| Alternate Static Source Valve | PULL ON |
| Airspeed | CONSULT **(appropriate calibration tables in section 5 of POH)** |

| LANDING WITH A FLAT MAIN TIRE | |
|---|---|
| Approach | NORMAL |
| Touchdown | GOOD TIRE FIRST **(hold airplane off flat tire as long as possible)** |