

AeroDynamic's Cessna 172M Checklist

Preflight Inspection	
Documents (AROW)	On board
Control wheel lock	Removed
Ignition switch	Off
Avionics	Off
Master switch	On
Fuel quantity	Check
Flaps	Down
Lights & Pitot Heat	Check
Master switch	Off
Hobbs & tach	Record
<i>External walkaround</i>	<i>Complete</i>
BEFORE START	
Passenger brief	Complete
Seats & seatbelts	Adjusted
Brakes	Test & Set
Avionics	Off
Circuit breakers	Check in
Electrical equipment	Off
Fuel selector	Both
STARTING ENGINE	
Primer (cold engine)	2-3 strokes
Primer (hot engine)	0-1 strokes
Carb heat	Cold
Throttle	Open 1/4 inch
Mixture	Rich
Master switch	On
Beacon light	On
Prop area	"Clear"
Ignition/Mags	Start
Throttle	Slowly advance
AFTER START	
Throttle	800-1000 RPM
Oil pressure	Check
Avionics	On
Mixture	Lean for taxi
Flaps	Up
Transponder	ALT + 1200
ATIS/AWOS/ASOS	Check

TAXI	
Brakes	Check
Turn coordinator	Check
Vacuum instruments	Check
RUN-UP	
Brakes	Set
Seats & seatbelts	Secure
Doors & windows	Closed & locked
Flight controls	Free & correct
Trim	Set for takeoff
Instruments	Check & set
Fuel selector	Both
Mixture	Rich
Primer	In & locked
Throttle	1700 RPM
- Ignition/mags	Test R & L
- Carb heat	Test
- Suction gauge	Check
- Engine & ammeter	Check
Throttle	Idle, then 800-1000 RPM
Throttle friction	Adjusted
BEFORE TAKEOFF	
Radios	Set
Transponder	ALT + code
Flaps	Set
Mixture	Best power
Carb heat	Cold
Lights	As Required
Time	Note
NORMAL TAKEOFF	
Throttle	Full forward
Oil pressure/temp	Check
Lift nosewheel	60 MPH
Climb - V _Y	75-85 MPH
ENROUTE CLIMB	
Airspeed	80-90 MPH
Engine gauges	Check
Mixture	Rich < 3000'

CRUISE

Throttle (<75% power)	Set
Mixture	Lean for alt
Engine instruments	Check
Flight instruments	Check
Fuel selector	Both

DESCENT

ATIS/AWOS/ASOS	Check
Flight instruments	Check
Approach briefing	Complete
Mixture	Richen
Fuel quantity	Check
Carb heat	As required

BEFORE LANDING

Seats & seatbelts	Adjusted
Fuel selector	Both
Mixture	Rich
Carb heat	On
Flaps	As required
Airspeed (flaps up)	70-80 MPH
Airspeed (flaps down)	65-75 MPH

AFTER LANDING

Flaps	Up
Mixture	Lean for taxi
Carb heat	Cold
Lights	As required
Trim	Takeoff

SHUTDOWN

Avionics & electrical	Off
Throttle	1000 RPM
Mixture	Idle cutoff
Ignition/mags	Off
Master	Off
Fuel selector	Left or Right
Control lock	Install
Sunshade	Install
Pitot cover & tiedowns	Install
Hobbs & tach	Record
Doors	Locked

SHORT-FIELD TAKEOFF

Flaps	Up or 10°
Brakes	Apply
Throttle	Full open
Engine instruments	Check
Brakes	Release
Climb	68 MPH
Once obstacles clear:	
Airspeed	V _Y
Flaps	Up

SOFT-FIELD TAKEOFF

Flaps	10°
Control wheel	Full aft
Brakes	Minimize use
Throttle	Full open
Engine instruments	Check
After liftoff, maintain ground effect until:	
Airspeed	Climb V _X or V _Y
Flaps	Retract

SHORT-FIELD LANDING

Airspeed	70-80 MPH
Flaps	40°
Airspeed	70 MPH
Brakes	Apply
Flaps	*Retract

SOFT-FIELD LANDING

Touchdown	Nose high
Control wheel	Aft
Brakes	Minimize

GO AROUND

Throttle	Full power
Carb heat	Cold
Flaps	Retract to 20°
Climb speed	65 MPH
Once clear of obstacles:	
Airspeed	V _X or V _Y
Flaps	10°
Once at safe altitude:	
Flaps	Up

ENGINE FIRE (during start)

Continue cranking engine to start
 -- If engine starts:
 Throttle 1700 RPM for a few minutes
 Shutdown engine & inspect

-- If engine fails to start:

Throttle	Full open
Mixture	Idle cutoff
Cranking	Continue
Fire extinguisher	Obtain
Master switch	Off
Ignition/mags	Off
Fuel selector	Off
Fire	Extinguish
Fire damage	Inspect

ENGINE FIRE (in flight)

Fuel selector	Off
Mixture	Idle cutoff
Ignition/mags	Off
Cabin heat & air	Off
Airspeed	120 MPH

-- Fire extinguished or landing imminent:
 Forced Landing checklist ----- Complete

ENGINE FAILURE (after takeoff)

Airspeed	75-70 MPH
Fuel selector	Off
Mixture	Idle cutoff
Flaps	As required/40°
Master switch	Off

ENGINE FAILURE (restart)

Airspeed	80 MPH
Primer	In & locked
Master switch	On
Ignition/mags	Both or start
Carb heat	On
Mixture	Rich
Fuel selector	Both

-- If no restart:
 Forced Landing checklist ----- Complete

FORCED LANDING

Seats & seatbelts	Secure
Airspeed	75-70 MPH
Fuel selector	Off
Mixture	Idle cutoff
Ignition/mags	Off
Radios	MAYDAY call
Transponder	Squawk 7700
Flaps	As required
Master switch	Off
Doors	Unlatched

ELECTRICAL FIRE

Master switch	Off
Vents, cabin air & heat	Closed
Fire extinguisher	Use as needed
Avionics	Off
Electrical equipment	Off

-- If fire appears out:

Master switch	On
Circuit breakers	Check, no reset
Radios	Off
Avionics	On

Radios & electrical --- Turn on req. items
 one at a time to isolate source of fire

Vents, cabin air & heat	Open
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LOW VOLTAGE

Ammeter shows a discharge:

Electrical equipment	Off
Avionics	Off
Alternator breaker	Check in
Master switch	Off
Master switch	On
Ammeter	Check positive
Low-voltage light	Check out
Avionics	On

-- If still low voltage:




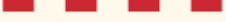

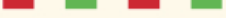
Alternator	Off
Noncritical electrical	Off

Land as soon as practical
 Be prepared for lost communications

VFR Lost Communications Procedures

Audio Panel Set on appropriate Comm channel
 Power..... Check and verify comm “ON”
 Ammeter Verify positive charge
 Com Volume and Squelch..... Check
 Com Frequencies..... Try Others That May Work
 Lost Comm Transponder Code (7600)..... Squawk, if Necessary
 Nearest voice-capable VOR frequency..... Listen for ATC
 If landing at a towered airport:

1. Remain clear of Class D airspace until direction of traffic flow is noted
2. Join the traffic pattern and maintain visual contact with the tower
3. Watch for light signals and obey them
4. Acknowledge light signals by rocking wings (day) or flashing your lights (night)

Color and Type of Signal	Movement of Vehicles, Equipment and Personnel	Aircraft on the Ground	Aircraft in Flight
Steady green 	Cleared to cross, proceed or go	Cleared for takeoff	Cleared to land
Flashing green 	Not applicable	Cleared for taxi	Return for landing (to be followed by steady green at the proper time)
Steady red 	Stop	Stop	Give way to other aircraft and continue circling
Flashing red 	Clear the taxiway/runway	Taxi clear of the runway in use	Airport unsafe, do not land
Flashing white 	Return to starting point on airport	Return to starting point on airport	Not applicable
Alternating red and green 	Exercise extreme caution!!!!	Exercise extreme caution!!!!	Exercise extreme caution!!!!

IFR Lost Communications Procedures

Lost Comms (VFR).....Land at Nearest Airport
 Lost Comms (IMC) Fly the appropriate route and altitude per segment as follows:
Loss of Communications under IFR (14 CFR 91.185)

Route:

Altitude:
Choose highest of the following for route segment being flown

Clearance limit is fix from which approach begins?

Yes

No

Start descent and approach as close as possible to the EFC time if one has been received, or if one has not been received, as close as possible to the ETA from the filed or amended ETE.

Leave clearance limit at the EFC time or upon arrival over the clearance limit. Proceed to a fix from which an approach begins and commence descent and approach as close as possible to the ETA as calculated from the filed or amended ETE.