

Cessna 172S

Operator's Checklists

Rev. 1 (09/07), Tim Morgan

Cockpit Interior Check

1 Pitot tube cover	REMOVE
2 Pilot's Operating Handbook	In plane
3 Weight and balance	Checked
4 Parking brake	SET
5 Control wheel lock	REMOVE
6 Ignition switch	Off
7 Avionics Master switch	Off
8 Master Switch	ON
9 Fuel gauges	Check
10 LOW FUEL annunciators	Extinguished
11 Avionics Master switch	ON
12 Avionics cooling fan	Audible
13 Avionics Master switch	OFF
14 Static Pressure Alternate Source valve	OFF
15 Annunciator Panel switch	"TST" AND HOLD, ensure all annunciators illuminate
16 Annunciator Panel switch	RELEASE, ensure only appropriate annunciators remain illuminated
17 Fuel Selector Valve	BOTH
18 Fuel Shutoff Valve	On (push full in)
19 Flaps	EXTEND
20 Pitot Heat	ON
21 Pitot tube cover	Warm to touch within 30 seconds
22 Pitot Heat	OFF
23 Master Switch	OFF

Exterior Check

1 Empennage

- | | |
|------------------------------------|---|
| a. Baggage door | Locked |
| b. Autopilot Static Source opening | Check for blockage |
| c. Rudder gust lock | REMOVE if installed |
| d. Tail tie-down | DISCONNECT |
| e. Control surfaces | Check for freedom of movement and security |
| f. Trim tab | Check security |
| g. Antennas | Check security of attachment and general condition |

2 Right wing

- | | |
|--------------------------|---|
| a. Aileron | Check for freedom of movement and security |
| b. Flap | Check for security and condition |
| c. Wing tie-down | DISCONNECT |
| d. Main wheel tire | REMOVE CHOCKS, check for inflation and condition |
| e. Fuel tank sump valves | Sample and check |
| f. Fuel quantity | Check visually |
| g. Fuel filler cap | SECURE |

3 Nose

- | | |
|-------------------------------|--|
| a. Fuel strainer drain valve | Sample and check |
| b. Engine oil dipstick | Check (min. 5 quarts, 8 for extended flights) |
| c. Engine oil filler cap | Secure |
| d. Engine cooling air inlets | Free of obstructions |
| e. Propeller and spinner | Check for nicks and security |
| f. Air filter | Check for restrictions |
| g. Nose wheel strut and tire | Check for inflation and condition |
| h. Left static source opening | Check for blockage |

Exterior Check (cont.)

4 Left wing

- a. Fuel tank sump valves
- b. Fuel quantity
- c. Fuel filler cap
- d. Main wheel tire
- e. Fuel tank vent opening
- f. Stall warning horn opening
- g. Wing tie-down
- h. Landing/taxi lights
- i. Aileron
- j. Flap

Sample and check

Check visually

Secure

Check for inflation and condition

Check for blockage

Check for blockage

Disconnect

Check for condition and cleanliness

Check for freedom of movement and security

Check for security and condition

5 Tires

Check for condition

Engine Start

1 Passengers	Briefed
2 Seats and seat belts	ADJUST and LOCK, ensure inertia reel locking
3 Brakes	TEST and SET
4 Circuit breakers	All in
5 Electrical equipment	All off
6 Avionics Master switch	Off
7 Fuel selector valve	Both
8 Fuel shutoff valve	On (push full in)
9 Avionics circuit breakers	All in
10 Throttle	CRACK
11 Mixture	Idle cutoff
12 Propeller area	Clear
13 Master Switch	ON
14 Flashing Beacon	ON
15 Auxiliary Fuel Pump switch	ON
16 Mixture	FULL RICH, ensure stable fuel flow for 3-5 seconds, then IDLE CUTOFF
17 Auxiliary Fuel Pump switch	OFF
18 Ignition Switch	START (release when engine starts)
19 Mixture	ADVANCE SMOOTHLY TO RICH when engine starts
20 Oil Pressure	Check
21 Navigation lights	ON as required
22 Avionics Master switch	ON
23 Radios	ON
24 Flaps	RETRACT
25 Mixture	LEAN at 1,200 RPM

Run-Up

1 Parking brake	SET
2 Passenger seat backs	Most upright position
3 Seats and seat belts	Check secure
4 Cabin doors	Closed and locked
5 Flight controls	FREE AND CORRECT
6 Flight instruments	CHECK AND SET
7 Fuel quantity	Check
8 Mixture	RICH
9 Fuel selector valve	Both
10 Throttle	1800 RPM
11 Magnetos	CHECK (RPM drop \leq 150, differential \leq 50)
12 Vacuum gauge	Check
13 Engine instruments and ammeter	Check
14 Annunciator panel	No annunciators illuminated
15 Throttle	\leq 1,000 RPM
16 Throttle friction lock	ADJUST
17 Strobe lights	As desired
18 Radios and avionics	SET
19 NAV/GPS switch	SET
20 Autopilot	Off
21 Manual electric trim	Check
22 Elevator trim	Set for takeoff
23 Flaps	Set for takeoff
24 Brakes	RELEASE

Takeoff

1 Flaps	Set
2 Throttle	FULL OPEN
3 Mixture	RICH (above 3,000 feet, lean to obtain max. RPM)
4 Elevator	ROTATE at 55 KIAS
5 Airspeed	70-80 KIAS
6 Flaps	RETRACT if necessary

After Takeoff & Climb-Out

1 Airspeed	70-85 KIAS
2 Throttle	FULL OPEN
3 Mixture	RICH (above 3,000 feet, lean to obtain max. RPM)

Cruise

1 Power	2100-2700 RPM
2 Elevator trim	ADJUST
3 Mixture	LEAN

Descent

1 Power	As desired
2 Mixture	ADJUST for smooth operation (full rich for idle power)
3 Altimeter	SET
4 NAV/GPS switch	SET
5 Fuel selector valve	BOTH
6 Wing flaps	As desired

Before Landing

1 Pilot and passenger seat backs	MOST UPRIGHT
2 Seats and seat belts	Secured and locked
3 Fuel selector valve	Both
4 Mixture	RICH
5 Landing/taxi lights	ON
6 Autopilot	OFF

After Landing

1 Flaps	UP
3 Transponder	STANDBY
4 Landing light	OFF

Shutdown

1 Parking brake	SET
2 Electrical equipment	OFF
3 Avionics Master switch	OFF
4 Mixture	IDLE CUTOFF
5 Ignition Switch	OFF
6 Master Switch	OFF
7 Control lock	INSTALL
8 Fuel selector valve	LEFT or RIGHT to prevent crossfeeding
9 Pitot tube cover	INSTALL
10 Airplane	TIE DOWN, CHOCK, SECURE

Engine Failure

1 Airspeed	68 KIAS
2 Landing site	CHOOSE
3 Landing turn	INITIATE
4 Wind direction	Determine
5 Fuel shutoff valve	ON (push full in)
6 Fuel selector valve	BOTH
7 Auxiliary Fuel Pump switch	ON
8 Mixture	RICH if restart has not occurred
9 Ignition Switch	BOTH or START if propeller is stopped
10 Auxiliary Fuel Pump switch	OFF

Forced Landing

1 Passenger seat backs	MOST UPRIGHT
2 Seats and seat belts	Secure
3 Airspeed	70 KIAS (flaps up) or 65 KIAS (flaps down)
4 Mixture	IDLE CUTOFF
5 Fuel shutoff valve	OFF (pull full out)
6 Ignition Switch	OFF
7 Flaps	AS REQUIRED (30° recommended)
8 Master Switch	OFF when landing is assured
9 Doors	UNLATCH
10 Touchdown	Slightly tail low
11 Brakes	APPLY HEAVILY

Engine Fire in Flight

1 Mixture	IDLE CUTOFF
2 Fuel shutoff valve	OFF (pull out)
3 Auxiliary Fuel Pump switch	OFF
4 Master Switch	OFF
5 Cabin Heat and Air	OFF (except overhead vents)
6 Airspeed	100 KIAS; increase if fire persists
7 Forced landing	EXECUTE

Electrical Fire in Flight

1 Master Switch	OFF
2 Vents, Cabin Air, Cabin Heat	CLOSE
3 Fire extinguisher	ACTIVATE
4 Avionics Master Switch	OFF
5 All other switches except ignition	OFF
6 Vents, Cabin Air, Cabin Heat	OPEN when fire is extinguished
7 Master Switch	ON
8 Circuit breakers	Locate faulty circuit
9 Radio switches	OFF
10 Avionics Master Switch	ON
11 Radio/electrical switches	ON SEQUENTIALLY until short is located

Speeds and Weights

	Std
V_{S0}	48 kts.
V_{S1}	53 kts.
V_Y	74 kts.
V_X	62 kts.
V_A	105 kts.
V_{NE}	163 kts.
V_{NO}	129 kts.
V_{FE}	110/85 kts.
GW_{max}	2550 lbs.
EW	1663 lbs.
Load	895 lbs.
Bags	120 lbs.
Fuel	56 gal.

Frequencies

OAK ATIS	133.77
OAK Clearance Delivery	121.1
OAK Ground	121.9
OAK Tower (North Field)	118.3
Bay (North)	120.9
Bay (East)	135.4
Oakland FSS	122.5
OAK VOR	116.8
SFO VOR	115.8
ILS 27R	109.9

Telephone Numbers

Flight Service	(800) WX-BRIEF
KaiserAir	(510) 569-9622
OAK ATIS	(510) 635-5850
UCFC	(510) 642-6640