

(IF UNABLE TO ABORT TAKEOFF)

POWER LOSS IMMEDIATELY AFTER TAKEOFF / NO RESTART

MAINTAIN AIRCRAFT CONTROL

BEST GLIDE – 73 KIAS (84 MPH) (Full Gross Weight)
 FUEL SELECTOR – OFF
 MIXTURE – FULL LEAN / IDLE CUTOFF
 FLAPS – DOWN
 GEAR – AS REQUIRED
 MASTER & MAGS – OFF

UNLATCH DOORS
PROTECT BODY

POWER LOSS IN FLIGHT

BEST GLIDE – 73 KIAS (84 MPH) (Full Gross Weight)
 CARB HEAT – ON (Also Supplies Alternate Air)
 NOTE WIND DIRECTION & VELOCITY
 PICK LANDING SITE
 MIXTURE – FULL RICH
 FUEL SELECTOR – CHECK / SWITCH / BOTH (Note Gauges)
 FUEL PRIMER – LOCKED (Try Re-Priming)
 MAGNETOS – CHECK ALL
 MASTER – ON

IF NO RESTART & TIME PERMITS

MAINTAIN BEST GLIDE
 PROP – LOW RPM (Full Aft)
 SQUAWK 7700
 DECLARE EMERGENCY (TWR, APP, Unicom, 121.5)
 MIXTURE – FULL LEAN / IDLE CUTOFF
 FUEL SELECTOR – OFF
 SEATBELTS / HARNESS
 FLAPS – AS NEEDED (Full Flaps When Field Assured)
 GEAR DOWN (Up If Very Rough or Soft Terrain)
 MASTER & MAGS – OFF
 UNLATCH DOORS
 PROTECT BODY

ELECTRICAL FIRE IN FLIGHT

ALL ELECTRICAL DEVICES + MASTER OFF (Mags-On)
 CLOSE VENTS, CABIN HEAT, & AIR
 IF FIRE OUT – MASTER ON ONLY IF CRITICAL (Vents-Open)
 THEN ONE ESSENTIAL ELECTRICAL DEVICE AT A TIME
 RESET CIRCUIT BREAKER ONLY IF CRITICAL

ENGINE FIRE IN FLIGHT

MIXTURE – FULL LEAN / IDLE CUTOFF
 FUEL SELECTOR – OFF
 MASTER – OFF
 CABIN HEAT & AIR – OFF (Except Overhead Vents)
 INCREASE AIRSPEED TO EXTINGUISH - LAND ASAP

ENGINE FIRE DURING START

CONTINUE CRANKING ENGINE
 IF START – RUN A FEW SECONDS - SHUTDOWN - INSPECT
 IF NO START – IDLE MIXTURE CUTOFF & FUEL SELECTOR OFF
 THROTTLE – FULL OPEN – CRANK ENGINE FEW SECONDS
 MASTER & MAGS – OFF
 EVACUATE / FIRE EXTINGUISHER

ICING

PITOT HEAT – ON
 CARB HEAT – ON
 CABIN HEAT & DEFROST – MAXIMUM
 STRONGLY CONSIDER 180° TURN
 ATTAIN HIGHER OR LOWER ALTITUDE
 INCREASE ENGINE & PROP SPEED
 FLAPS – NOT RECOMMENDED FOR LANDING
 LAND FASTER AS NEEDED

MANUAL GEAR EXTENSION

LANDING GEAR LEVER – DOWN
 LANDING GEAR & GEAR PUMP CIRCUIT BREAKERS – IN
 EMERGENCY HAND PUMP – EXTEND & PUMP APP. 35 CYCLES
 STOP CYCLES WHEN BECOMES HEAVY
 GEAR DOWN LIGHT – ON
 PUMP HANDLE – STOW

OTHER

AMMETER w/EXCESS RATE OF CHARGE: Alternator – Off, Pull C.B. / Nonessential Electric – Off / Terminate Flight A.S.A.P.

LOW VOLTAGE: Avionics Power Switch – Off / Alt. C.B. - In / Master – Off, then, Master – On / Ck. Volt Lt. Off / Avionics – On / If Illuminates Again: Alt. & Electric – Off / Terminate Flight A.S.A.P.

RADIO OUT: Check Circuit Breakers & VOLUME
Recycle Alternator Switch
If IFR & Still Out, Set XPDR To 7600.
(Suggested For VFR If In B, C, D Airspace.)

UNICOM: 122.7 – 122.8 – 122.95 – 123.0 – 123.05
MULTICOM: 122.9 (CTAF), 122.75, 122.85 (Air To Air)
F.S.S.: 122.000 To 122.675. Most Common - 122.2

EMERGENCY: 121.5

TOWER SIGNALS	ON GROUND	IN FLIGHT
Steady Green	Cleared For Takeoff	Cleared To Land
Flashing Green	Cleared To Taxi	Return For Landing
Steady Red	Stop	Yield & Continue Circling
Flashing Red	Taxi Clear of Landing Area	Airport Unsafe - Do Not Land
Flashing White	Return To Starting Point	N/A
Alternating Red & Green	Use Extreme Caution	Use Extreme Caution

* Every Plane Has A Different Empty Weight And Useful Load
Cessna 172 RG (Lycoming: O-360-F1A6, 180 HP)

* Empty Weight: LBS (Specific Plane Weight)
 * Max. Useful Load: LBS (Including Fuel @ 6 lbs/gal)
 Max. Baggage Area: 200 LBS (Included In Useful Load)
 Max. T.O. Weight: 2650 LBS

Fuel Type: 100 LL (Blue) / 100 (Green)
 Usable Fuel: 62 Gallons
 Oil Capacity: 8 Quarts (Minimum 5)
 Electrical: 24-28 VOLT / 60 AMP
 Tire Pressure: Nose - 40-50 PSI / Main - 60-68 PSI

INITIAL	START	RUN-UP	TAKEOFF	DESCENT	AFTER LANDING
<p>Weather & Den. Alt. Weight & Balance Performance Req. Flight Plan – File Papers – A.R.O.W. Fuel – Both Control Lock Gear Lever – Down Master – On Gear Lights – Green Flaps – Extend Pitot Heat – Test Stall Indicator – Test Lights – Int. / Ext. Fuel Gauges – True Master – Off</p> <p>EXTERIOR SUMMARY <i>After Thorough Geographical Check</i></p> <p>Fuel Quantity Fuel Quality Caps/Drains/Vents Engine / Oil / Belt Prop / Air Intake Exhaust System Surfaces & Controls Pitot & Static Ports Gear / Tires / Brakes Antennas Ties/Chocks/Towbar Baggage Door Final Walk Around</p>	<p>Seat Track/Back – Lock Cowl Flaps – Open Avionics – Off Autopilot – Off Carb Heat – Off Mixture – Full Rich Prop – High RPM Throttle – 1-2 Pumps (Fuel Pump On If Hot) Brakes Prop – Clear Master – On Beacon – On Mags – Start Oil Pressure Fuel Pump – Off Lights – As Req. Mixture – As Req.</p>	<p>Brakes Fuel – Both Trim – Takeoff Flight Controls Instruments Mixture – Best Power Fuel Pump – On Pressure Increase Fuel Pump – Off 1800 RPM Mags-Test (R-L-Both) Prop – Cycle Carb Heat – Test Vacuum Amps / Volts Oil Pressure Oil Temp Idle – Check Closed Throttle Friction</p>	<p>Full Throttle 2700 RPM (Max) Manifold Pressure Oil Pressure Rotate – * 55 (63) Vy – 84 (97) Gear – Up Flaps – Up</p>	<p>Throttle – MP As Req. Mixture – Richen Fuel – Both Carb Heat-As Req. Cowl Flaps – Close ATIS / AWOS Altimeter Instruments</p>	<p>Flaps – Up Carb Heat – Off Cowl Flaps – Open Strobes – Off Landing Light – Off Taxi Light – As Req. Pitot Heat – Off Mixture – As Req. Trim – Takeoff XPDR – Alt + Sqwk</p>
<p>INTERIOR</p> <p>Passenger Brief Hobbs / Tach Time Circuit Breakers Alternate Static Electric Trim</p>	<p>PRE-TAXI / TAXI</p> <p>Seat Belts / Harness Flaps – Up Heat / Vent / Defrost Avionics – On ATIS / AWOS Altimeter XPDR – Alt + Sqwk ADS-B – On Radio – Test Taxi Light – As Req. Brakes – Test Attitude Indic. – Test Turn Coord. – Test H.I. To Compass – Test</p>	<p>PRE-TAKEOFF</p> <p>Flaps – 0°-10° Prop – High RPM Mixture – Best Power Carb Heat-Off Or As Req. Pitot Heat – As Req. XPDR – Alt + Sqwk Heading Bug Doors / Windows Landing Light – On Strobes – As Req. Time – Note Brakes – Release Abort Plan - Ready!</p>	<p>CLIMB</p> <p>85-95 (98-109) Throttle – 25" MP Prop – 2500 RPM Mixture – As Req. Instruments Cowl Flaps – Open Taxi/Land Light – Off Flight Plan – Open</p>	<p>PRE-LANDING</p> <p>Brakes – Pedal Test Landing Light – On Autopilot – Off Seat Belts / Harness Mixture – Best Power Carb Heat – On Fuel – Both Gear – Down Flaps – As Req.</p>	<p>SECURING</p> <p>ELT – Verify Silent Avionics – Off Mixture – Full Lean Mags – Off Master – Off Fuel – Left or Right Lights – Off Cowl Flaps – Close Hobbs / Tach Time Control Lock Chocks Tie Downs Pitot Cover Baggage Door Cabin Doors</p>
			<p>CRUISE</p> <p>Throttle Prop Mixture Cowl Flaps – Close Instruments</p>	<p>LANDING</p> <p>Gear – Down Flaps – 30° Or As Req Prop – High RPM * 65 (75)</p> <p>G. U. M. P. F. S.</p> <p>GO-AROUND Power – Full Carb Heat – Off Flaps – Approach Positive Rate Climb Gear – Up (As Req.) Flaps – Up Cowl Flaps – Open</p>	<p>Close Flight Plan</p> <p>* Adjust Speed As Needed For Conditions. Check Your POH For Notes / Cautions Plus Manufacturer For Revisions.</p>

XWind • Max Demo'd – 15 (17)	V ₅₀ • Stall With Flaps – 42 (48)	Va • Max Abrupt Ctrl (2300 lbs) – 99 (114)	Vfe • 10° Flaps – 130 (150)
Vr • Rotation Speed – 55 (63)	Vs • Stall w/o Flaps – 50 (58)	Va • Max Abrupt (Full Gross) – 106 (122)	Vfe • Full Flaps – 100 (115)
Vx • Best Angle Climb – 67 (77)	Best Glide (2300 lbs) – 68 (78)	Vno • Max Structural Cruise – 145 (167)	Vlo • Max Gear Operate – 140 (161)
Vy • Best Rate Climb – 84 (97)	Best Glide (Full Gross) – 73 (84)	Vne • Never Exceed – 164 (189)	Vle • Max Gear Extended – 164 (189)

	KNOTS (MPH)	FLAPS °	– NOTES –
DEPARTURE			Short Field OR Soft Field : 0° Flaps. 63 (72) Until Clear.
Rotation *	55 (63)	0	Soft Field / Rough Field or Minimum Ground Run : 10° Flaps.
Best Angle Climb	67 (77)	0	
Best Rate Climb	84 (97)	0	
CRUISE (TAS-6,000')			
Economy	117 (135)	0	21" MP – 2100 RPM – 7.7 GPH – 56%
Normal	128 (147)	0	22" MP – 2300 RPM – 8.8 GPH – 65%
Maximum	137 (158)	0	24" MP – 2400 RPM – 10.2 GPH – 77%
ARRIVAL			
Approach	75 (86)	10-20	17" MP (Initially)
Short Final *	65 (75)	30	Prop – High RPM

WARNING: Permission to use this CheckMate® is granted to the authorized purchaser only. No warranties, either express or implied, of any kind, are made hereunder, including, but not limited to any warranties of fitness for particular use. The information contained herein varies according to individual aircraft, model, and year of manufacturer and while we believe the information to be accurate, no representations are made as to the degree of accuracy of the information. This information constitutes only partial information necessary to properly operate an aircraft and is not to be used as a substitute for the use of other information sources routinely used in the operation of aircraft or the acquisition of requisite training to operate aircraft. Purchaser assumes all risk of use in using this product. Purchaser consents to and understands that CheckMate Aviation Inc., or any related entity, bears no liability for the use of this product.

Specs Are In: LBS, KIAS, Sea Level, Standard Day, Normal Category, Max Gross Wt., No Wind, "Best Economy", New Engine. () = MPH.

© ALL RIGHTS RESERVED 7.85
CheckMate Aviation Inc. 800-359-3741 1992-2019