

# Beechcraft Bonanza G36

## Quick Reference Checklist

For simulation use only, not for real world flight

### **PREFLIGHT**

Parking Brake ..... SET  
All Switches ..... OFF  
Empennage Control Surfaces ..... CHECK  
Flaps ..... CHECK  
Ailerons ..... CHECK  
Fuel Tank ..... CHECK QUANTITY

### **BEFORE STARTING**

Parking Brake ..... SET  
All Avionics ..... OFF  
Circuit Breakers ..... IN  
Landing Gear Handle ..... DOWN  
Flaps ..... UP  
Cowl Flaps ..... OPEN  
Light Switches ..... AS REQUIRED  
Fuel Selector Valve ..... SELECT TANK MORE NEARLY FULL  
Battery and Alternator Switches ..... ON  
Fuel Quantity Indicators ..... CHECK QUANTITY

### **STARTING ENGINE**

Mixture ..... FULL RICH  
Propeller ..... HIGH RPM  
Throttle ..... FULL OPEN  
Auxiliary Fuel Pump ..... ON until fuel flow peaks then OFF  
Throttle ..... Approximately 1/4 inch open  
Magneto/Start Switch .... START position, release to BOTH position when engine fires

In Event of Overprime Condition:

Mixture ..... IDLE CUT-OFF  
Throttle ..... OPEN  
Magneto/Start Switch .... START position  
As engine fires, reduce throttle to IDLE and advance the mixture

control to FULL RICH

Throttle ..... 1000 to 1200 RPM  
Oil Pressure ..... CHECK  
External Power (if used) ..... DISCONNECT  
Alternator Switch ..... ON; CHECK FOR CHARGING  
All Engine Indicators ..... CHECK

### **AFTER STARTING, AND TAXI**

Brakes ..... RELEASE AND CHECK  
Avionics Equipment ..... ON, AS REQUIRED  
Lights ..... AS REQUIRED

### **BEFORE TAKEOFF**

Parking Brake ..... SET  
Radios ..... CHECK  
Engine Instruments ..... CHECK  
Flight Instruments ..... CHECK AND SET  
Ammeter CHECK - for stabilized indication between 0 and 25% of full charge at 1000 to 1200 rpm  
Auxiliary Fuel Pump ..... CHECK OFF  
Throttle ..... 1700 RPM  
Propeller ... EXERCISE to obtain approximately 300 to 400 rpm drop, return to high rpm  
Magnetos CHECK at 1700 rpm (variance between individual magnetos should not exceed 50 rpm, maximum drop not to exceed 150 rpm)  
Trim ..... SET  
Aileron ..... NEUTRAL  
Elevator ..... 3° (6° nose up if only front seats are occupied)  
Flaps ..... UP  
Controls ..... CHECK PROPER DIRECTION AND FREEDOM OF MOVEMENT

Mixture ..... FULL RICH (or as required by field elevation)  
Brakes ..... RELEASED  
Instruments CHECK (Make final check of manifold pressure, fuel flow, and rpm at the start of the take-off run)

### **TAKE-OFF**

Take-Off Power ..... Full Throttle, 2700 rpm  
Power .. SET TAKE-OFF POWER (Mixture - SET as required by field elevation)  
Brakes ..... RELEASE THEN ACCELERATE to recommended speed  
Landing Gear ... RETRACT (when positive rate of climb is established and insufficient runway remains for landing)  
Airspeed ..... ESTABLISH DESIRED CLIMB SPEED (when clear of obstacles)

### **CLIMB**

Maximum Continuous ..... Full Throttle, 2700 rpm  
Cruise Climb ..... 25 in. Hg (or full throttle) 2500 rpm  
Engine Temperatures ..... MONITOR  
Power ..... SET AS DESIRED  
Mixture ..... SET FUEL FLOW

### **CRUISE**

Cowl Flaps ..... CLOSED  
Power ..... SET  
Mixture ..... SET FUEL FLOW

### **DESCENT**

Altimeter ..... SET  
Cowl Flaps ..... CLOSED  
Power . AS REQUIRED (avoid prolonged idle settings and low cylinder head temperatures)  
Mixture ..... ENRICH AS REQUIRED

### **BEFORE LANDING**

Fuel Selector Valve ..... SELECT TANK MORE NEARLY FULL  
Cowl Flaps ..... AS REQUIRED  
Mixture ..... FULL RICH (or as required by field elevation)  
Landing Gear ..... DOWN and CHECK (Observe maximum extension speed)  
Airspeed ..... ESTABLISH LANDING APPROACH SPEED  
Propeller ..... HIGH RPM

### **BALKED LANDING**

Power ..... FULL THROTTLE, 2700 RPM  
Airspeed .. 76 kts until cleared of obstacles, then trim to normal climb speed  
Flaps ..... UP  
Landing Gear ..... UP  
Cowl Flaps ..... OPEN

### **AFTER LANDING**

Landing and Taxi Lights ..... AS REQUIRED  
Flaps ..... UP  
Trim Tab ..... SET TO 0°  
Cowl Flaps ..... OPEN

### **SHUTDOWN**

Brakes ..... SET  
Electrical and Radio Equipment ..... OFF  
Throttle ..... CLOSE  
Mixture ..... IDLE CUT-OFF  
Magneto/Start Switch ..... OFF, after engine stops  
Battery and Alternator Switches ..... OFF

# Emergency Procedures Checklist

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## AIRSPEEDS FOR SAFE OPERATION

Take-off	
Lift-off.....	70 kts
50 Ft. ....	78 kts
Maximum Climb	
Best Rate (V <sub>y</sub> ).....	96 kts
Best Angle (V <sub>y</sub> ).....	78 kts
Cruise Climb .....	109 kts
Maximum Turbulent Air Penetration .....	140 kts
Balked Landing .....	76 kts
Landing Approach .....	76 kts
Maximum Demonstrated Crosswind .....	17 kts

## Emergency Airspeeds

Emergency Descent .....	153 kts
Glide .....	110 kts
Emergency Landing Approach .....	81 kts

## Engine Failure During Take-Off Ground Roll

Throttle .....	CLOSED
Braking .....	MAXIMUM
Fuel Selector Valve .....	OFF
Battery and Alternator Switches.....	OFF

## Engine Failure After Ltoff and in Flights

Fuel Selector Valve..	SELECT OTHER TANKS (Check to feel detent)
Auxiliary Fuel Pump .....	ON
Mixture .....	FUEL RICH, then LEAN as required
Magnetos .....	CHECK LEFT and RIGHT, then BOTH
Alternate Air T-handle.....	PULL AND RELEASE
If No Restart:	

Select the most favorable landing site

See EMERGENCY LANDING procedure

The use of landing gear is dependent on the terrain where landing must be made

## Rough Running Engine

Mixture .....	FULL RICH, then LEAN as required
Magneto/Start Switch .....	CHECK LEFT and RIGHT, then BOTH
Alternate Air T-handle.....	PULL AND RELEASE

## Loss of Engine Power

Fuel Flow Gage .....	CHECK
If fuel flow is abnormally low:	

Mixture .....	FULL RICH
Auxiliary Fuel Pump .....	ON (Lean as required)
Auxiliary Fuel Pump...OFF if performance does not improve in a few moments	

Fuel Quantity Indicator.....	CHECK for fuel supply in tank being used
Alternate Air T-handle.....	PULL AND RELEASE

If tank being used is empty:

Fuel Tank Selector Valve SELECT OTHER FUEL TANK (feel for detent and check visually)

## Air Start Procedure

Fuel Selector Valve .	SELECT TANK MORE NEARLY FULL (check to feel detent)
Throttle .....	RETARD
Mixture .....	FULL RICH
Auxiliary Fuel Pump	ON until power is regained, then OFF (Leave on if engine driven fuel pump is inoperative)
Throttle .....	ADVANCE to desired power
Mixture .....	LEAN as required

## Engine Fire In Flight

Vent Shutoff/Firewall Air Control .....	PULL TO CLOSE
Mixture .....	IDLE CUT-OFF
Fuel Selector Valve .....	OFF
Battery and Alternator Switches OFF (Extending the landing gear can be accomplished manually if desired)	
Do not attempt to restart engine	

## Engine Fire On The Ground

Mixture .....	IDLE CUT-OFF
Fuel Selector Valve .....	OFF
Battery, Alternator and Magneto/Start Switch .....	OFF
Extinguish with Fire Extinguisher	

## Maximum Glide Configuration

Landing Gear .....	UP
Flaps .....	UP
Cowl Flaps .....	CLOSED
Propeller .....	PULL for LOW RPM
Airspeed .....	110 kts

## Emergency Descent

Power .....	IDLE
Propeller .....	HIGH RPM
Landing Gear .....	DOWN
Airspeed .....	ESTABLISH 153 kts

## Landing Without Power

Airspeed .....	81 kts
Fuel Selector Valve .....	OFF
Mixture .....	IDLE CUT-OFF
Magneto/Start Switch .....	OFF
Flaps .....	AS REQUIRED
Landing Gear .....	DOWN OR UP, DEPENDING ON TERRAIN
Battery and Alternator Switches.....	OFF

## Landing Gear Retracted - With Power

Throttle .....	CLOSED
Mixture .....	IDLE CUT-OFF
Battery and Alternator Switches.....	OFF
Fuel Selector Valve .....	OFF
Keep wings level during touchdown	
Get clear of the airplane as soon as possible after it stops	

## Propeller Overspeed

Throttle .....	RETARD TO RPM RED LINE
Airspeed .....	REDUCE
Oil Pressure .....	CHECK
Land .....	SELECT NEAREST SUITABLE SITE and follow LANDING EMERGENCIES procedure

## Alternator Overvoltage

Battery Switch and Alternator Switch ..	OFF MOMENTARILY, THEN ON (this resets the overvoltage relay)
If overvoltage condition does not recur, continue to use the alternator	
If overvoltage condition persists:	Alternator Switch .....
Nonessential Electrical Equipment	OFF to conserve battery power

## Landing Gear Manual Extension

LDG GEAR Circuit Breaker .....	OFF (PULL OUT)
Landing Gear Switch Handle .....	DOWN position
Handcrank Handle Cover (at rear of front seats) .....	REMOVE
Handcrank ENGAGE and TURN COUNTERCLOCKWISE AS FAR AS POSSIBLE (approximately 50 turns)	
If electrical system is operative, check landing gear position lights and warning horn (check LDG GEAR circuit breakers engaged)	
Check mechanical landing gear indicator .....	DOWN
Handcrank .....	DISENGAGE