

1967 Super III A2324 Musketeer Checklist

Operational Checklist BEECHCRAFT Musketeer Super III

AIRSPEEDS FOR SAFE OPERATION

Take-off
Lift-off 80 mph
50 Ft. 95 mph

Maximum Climb
Best Rate (Vy) 91 mph
Best Angle (Vx) 83 mph

Cruise Climb 110 mph

Maximum Turbulent Air
Penetration 140 mph

Balked Landing 77 mph

Landing Approach 81 mph

Maximum Demonstrated
Crosswind 20 mph

POWER PLANT DATA

LYCOMING IO-360-A2B
TYPE 4 CYL / FUEL INJECTED
HORSEPOWER 200
FUEL REQUIREMENT 100/100LL

PREFLIGHT INSPECTION

COCKPIT CHECK

Parking Brake..... SET
Control Lock.....REMOVE
All Switches..... OFF

EXTERIOR CHECK

RIGHT FUSELAGE

Baggage DoorCHECK
Static Air Button UNOBSTRUCTED

EMPENNAGE

Control SurfacesCHECK
Tie DownREMOVE
Position Light.....CHECK

LEFT FUSELAGE

Static Air Button UNOBSTRUCTED
All Antennas.....CHECK

LEFT WING TRAILING EDGE

FlapCHECK
Fuel Vent Line UNOBSTRUCTED
AileronCHECK
Wing Tip.....CHECK
Position Light.....CHECK

LEFT WING LEADING EDGE

Pitot Tube..... CHECK, (Remove Cover)
Landing Light.....CHECK
Tie Down and Chocks.....REMOVE
Stall Warning.....CHECK for movement of vane
Fuel Tank CHECK QUANTITY & SECURE

LEFT LANDING GEAR

Tire and Brake.....CHECK
Fuel Sump..... DRAIN

NOSE SECTION

Left Cowl SECURE
Induction Air Intake CLEAR,
AirFilter..... CHECK for condition and secure
Propeller..... CHECK, General Condition, Nicks,etc.
Tire and Nose Gear.....CHECK
Engine Oil..... CHECK Cap and Dipstick & SECURE
Right Cowl..... SECURE
Fuel Strainer..... DRAIN

Preflight

Chocks REMOVE

RIGHT LANDING GEAR

Fuel Sump.....DRAIN
Tire and Brake..... CHECK

RIGHT WING LEADING EDGE

Fuel Tank CHECK QUANTITY & SECURE
Tie Down and Chocks REMOVE
Wing Tip CHECK
Position Light..... CHECK

RIGHT WING TRAILING EDGE

Aileron CHECK
Flap CHECK
Fuel Tank Vent Line UNOBSTRUCTED

Preflight

BEFORE STARTING

Seats POSITION AND LOCK
Parking Brake SET
All Avionics OFF
Circuit Breakers IN
Flaps UP
Light Switches AS REQUIRED
BATTERY & ALT Switch ON
Fuel Boost Pump...ON (Check for operation, then OFF)
Fuel Selector ROTATE thru 360° and check for freedom of movement.

STARTING

Cold Start

Mixture FULL RICH
Throttle FAST IDLE position
Fuel Boost Pump..... ON (max. of 3 sec. Then OFF)
Mixture Lean
Magneto/Start Switch START position,
RELEASE to both when engine fires

Hot Start

Mixture FULL RICH
Throttle FAST IDLE position
Fuel Boost Pump..... ON (max. of 5 sec. Then OFF)
Mixture IDLE CUT-OFF
Throttle FAST IDLE -position
Magneto/Start Switch ENGAGE
Mixture ADVANCE MIXTURE SLOWLY when engine starts firing regularly

Preflight

Flooded Engine

Mixture IDLE CUT-OFF
Throttle FULL OPEN
Magneto/Starter Switch ENGAGE
Mixture ADVANCE MIXTURE SLOWLY when engine starts firing regularly
Throttle RETARD (to fast idle position)
Oil Pressure YELLOW ARC (30 Seconds)
Warm-up 1000 to 1200 RPM
Engine Instruments CHECK
Throttle 1500 RPM
Ammeter CHECK (1/4 Scale After 2 Min.)
Throttle IDLE

AFTER STARTING. AND BEFORE TAXI

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

BEFORE TAKEOFF

Parking Brake SET
Seat Belts CHECK
Flaps CHECK and SET
Flight Controls CHECK FREE and CORRECT
Avionics CHECK
Engine Instruments CHECK
Flight Instruments CHECK AND SET
Throttle 2000 RPM
Magnetos CHECK at 2000 rpm, maximum drop of 50 rpm on each magneto, variance between individual magnetos should not exceed 25 rpm
Throttle 1500 RPM
Ammeter CHECK (1/4 Scale After 2 Min.)
Throttle FAST IDLE
Stabilator Trim TAKE-OFF RANGE (Green Mark)
Mixture FULL RICH (or as required)
Doors and Window Secure
Parking Brake RELEASE
Engine Instruments CHECK (Green Arc)

Takeoff

Landing

TAKEOFF

Takeoff & CLIMB Full Throttle
(or 2700 RPM)
Rotate at 80
Climb at 95 for best rate

CAUTION

Do not takeoff or land with the Fuel Boost Pump ON. The Fuel Boost Pump should be used only for starting and in the event of an emergency.

Power SET Takeoff Power and Mixture
Brakes RELEASE
Airspeed ACCELERATE to and maintain take-off speed.
Airspeed ESTABLISH DESIRED CLIMB

CLIMB

Flaps UP
Power AS REQUIRED
Mixture LEAN AS REQUIRED
Temperature MONITOR

CRUISE

Power SET AS DESIRED
Mixture LEAN AS REQUIRED

DESCENT

Altimeter SET
Power AS REQUIRED
Mixture ENRICH AS REQUIRED

BEFORE LANDING

Seat Belts SECURE
Fuel Selector SELECT FULLEST TANK
Mixture FULL RICH (as required)
Landing and Taxi Lights AS REQUIRED
Flaps DOWN
Airspeed ESTABLISH LANDING APPROACH
SPEED

BALKED LANDING

Mixture FULL RICH (or as required)
Power FULL THROTTLE or 2700 RPM
Airspeed 77 mph until clear of obstacles
Flaps UP

AFTER LANDING

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

SHUTDOWN

Parking Brakes SET
Electrical and Avionics Equipment OFF
Throttle CLOSE
Mixture IDLE CUT-OFF
Magneto/Start Switch OFF, after engine stops
BATTERY & ALT Switch OFF
ALT Switch OFF
Control Lock INSTALL
Aircraft TIE DOWN

Prior to engine shut-down the engine speed should be maintained between 1000 and 1200 RPM until the operating temperatures have stabilized. At this time the engine speed should be increased to approximately 1800 RPM for 15 to 20 seconds, then reduced to 1000 to 1200 RPM and shut-down immediately using the mixture control. (Optional but helps clean plugs)

Shutdown

--- EMERGENCY PROCEDURES ---

EMERGENCY AIRSPEEDS

Emergency Descent 175 mph
Glide 94 mph
Emergency Landing Approach 81 mph

NOTE

Stall warning horn is inoperative when BATTERY & ALT switch is turned off.

ENGINE FAILURE

DURING TAKE-OFF GROUND ROLL

Throttle CLOSED
Braking MAXIMUM

NOTE

Conduct the following procedures immediately if it appears certain that the airplane will run off the runway. (Otherwise conduct these procedures at the pilot's discretion.)

Fuel Selector Valve OFF
BATTERY & ALT OFF
ALT OFF
FUEL BOOST switches OFF
Magneto/Start Switch OFF

AFTER LIFTOFF AND IN FLIGHT

Landing straight ahead is usually advisable. if sufficient altitude is available for maneuvering, accomplish the following:

Fuel Selector Valve SELECT OTHER TANK
(Check to feel detent and check visually)
Fuel Boost Pump ON
Mixture FULL RICH, then LEAN as required
Magnetos CHECK LEFT/RIGHT, then BOTH

NOTE

The most probable cause of engine failure would be loss of fuel flow or improper functioning of the ignition system.

Emergencies

Emergencies

IF NO RESTART

Establish maximum glide 94 mph
Throttle CLOSE
Fuel Selector Valve OFF
Mixture IDLE CUT-OFF
Magneto Start Switch OFF
BATTERY & ALT, ALT switches OFF
FUEL BOOST switch OFF

When certain of reaching the selected landing site:

Airspeed 81 mph
Flaps AS REQUIRED
BATTERY & ALT and ALT switches OFF

ENGINE DISCREPANCY CHECKS

ROUGH RUNNING ENGINE

Mixture..... FULL RICH, then LEAN as required
Magneto/Start Switch - CHECK LEFT,RIGHT,
then BOTH

LOSS OF ENGINE POWER

Fuel Flow or Fuel Pressure Indicator..... CHECK

If fuel flow is abnormally low:

Mixture..... FULL RICH
Fuel Boost Pump..... ON (Lean as required)
Fuel Boost Pump..... OFF if performance does
not improve in a few moments
Fuel Quantity Indicator CHECK for fuel supply
in tank being used

If tank being used is empty:

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

AIR START PROCEDURE

Fuel Selector ValveSELECT TANK MORE
NEARLY FULL (check to feel detent and check
visually)
Throttle AS REQUIRED
Mixture..... FULL RICH
Fuel Boost Pump..... ON or OFF as required
Magneto/Start switch..... BOTH

NOTE

When engine starts, adjust throttle, and mixture controls.

ENGINE FIRE IN FLIGHT

The ventilation controls must be closed to shut off all heating system outlets so that smoke and fumes will not enter the cabin. The control labeled CABIN AIR must be pulled aft to close. The control labeled DEFROST must be pushed forward to close. In the event of an engine fire, shut down the engine as follows and make a landing:

Fuel Selector Valve OFF
Mixture..... IDLE CUT-OFF

Emergencies

Emergencies

Throttle CLOSE
 Cabin Air Control pull OFF
 Defrost Valve push OFF
 BATTERY & ALT switch OFF
 Magneto/Start Switch OFF

Do not attempt to restart engine

ENGINE FIRE ON THE GROUND

Fuel Selector Valve OFF
 Throttle CLOSED
 Mixture IDLE CUT-OFF
 BATTERY & ALT Switch OFF
 Magneto/Start Switch OFF
 Extinguish with Fire Extinguisher.

Emergencies

EMERGENCY DESCENT

Throttle IDLE
 Airspeed ESTABLISH /175 mph
 (Smooth Air)

MAXIMUM GLIDE CONFIGURATION

Flaps UP
 Airspeed 94 mph

NOTE

Glide distance (in Zero Wind Conditions) is approximately 1.7 nautical miles (2 statute miles) per 1000 feet of altitude above the terrain.

EMERGENCY LANDINGS

When assured of reaching the selected landing site, and on final approach:

Airspeed 81 mph
 Throttle CLOSED
 Fuel Selector Valve OFF
 Mixture IDLE CUT-OFF
 Magneto/Start Switch OFF
 Flaps AS REQUIRED
 BATTERY & ALT, ALT, and FUEL BOOST Switches OFF

SYSTEMS EMERGENCIES
ALTERNATOR-OUT PROCEDURE

NOTE

A failure of the alternator will place the entire electrical operation of the airplane on the battery. Alternator failure will be indicated by a discharging or fluctuating ammeter.

ALT switch..... OFF
All nonessential electrical loads OFF

WARNING

Deactivation of the battery switch, alternator switch, or alternator circuit breaker during flight is prohibited, except as required by an actual emergency.

EMERGENCY STATIC AIR SOURCE

Emergency Static Air Source Switch to ON
(Lower Sidewall Adjacent to Pilot)

NOTE

For Airspeed Calibration and Altimeter Correction, refer to PERFORMANCE section of the Pilots Operating Handbook.

Emergency Static Air Source Switch to OFF
(As required)