



Welcome to the Military Visualizations P-38L Manual. We are very proud to have you as a pilot/customer!

This part of the manual only contains a quick start list, a quick weapons release/jettison list and, for those of you who buy the Tacpack edition add-on, a TP weapons release/jettison list.

Credits:

Coding: Chuck Jodry, Jon Bleeker, Jamal Ingram, Collin Beidenkapp, Federico Sucari

Flight Dynamics: Bernt Stolle, Jon Bleeker, Federico Sucari

Modelling/Painting: Kevin Miller, Dmitriy Usatiy, Jan Kees Blom

Sound: Mike Maarse

To open the Aircraft Control Manager (ACM), press shift 1. On it you will find several items that can be hidden (and unhidden).

To get to a cold start, you must turn off the aircraft first.

The yoke can be hidden by clicking on it. To unhide it, click on the oxy blinker gauge.

STARTING CHECKLIST

- 1) Close the canopy and make sure it is locked. Check to be sure that both catches of the canopy overlap and that the rear pins are securely in position.
- 2) Check for free movement of the flight controls to the extremities of their operating range. Adjust rudder pedals for correct leg length by means of the spring-loaded levers on the pedals.
- 3) Adjust trim tabs to proper setting-rudder and aileron neutral, elevator 3" back.
- 4) Fuel selectors to RESERVE.
- 5) Crossfeed switch OFF. (Crossfeed switch is replaced by cross suction position of the tank selector valves on later airplanes.)
- 6) Fuel booster pumps OFF.
- 7) Turn bomb selector switches ON and arming switch to SAFE. This is a must when carrying drop tanks or bombs so that you can get rid of them quickly if an engine fails on takeoff.
- 8) Crack throttles.
- 9) Propeller control governors full forward in takeoff position.
- 10) Propeller selector switches AUTOMATIC.
- 11) Mixture controls in IDLE CUT-OFF
- 12) Carburetor 'air filter lever as required.
- 13) Propeller circuit breakers ON.
- 14) Propeller feathering switches in NORMAL.
- 15) Set clock and altimeter.
- 16) Oxygen pressure 400 to 450 psi.
- 17) Gun switch OFF.
- 18) Wing flaps up and flap control lever in CLOSED position.
- 19) Aerial boost ON.
- 20) Radio OFF.
- 21) Test auxiliary hand hydraulic pump.

ADDITIONAL CHECK FOR NIGHT FLYING

- 1) Landing lights (not more than 5 seconds with engine not running)

- 2) Recognition lights (not more than 10 seconds on the ground).
- 3) Cockpit lights.
- 4) Fluorescent lights.
- 5) Position lights.
- 6) Spotlight,

STARTING ENGINES

If your battery' power is not sufficient for starting, use the inertia hand crank or an external energizer. Be sure you are ready to go before starting the engines, for they overheat rapidly. Always start the left engine first.

- 1) Battery and ignition switches ON. Use a battery cell if available. If you do use one, do not turn battery switch ON until after you've started the engines.
- 2) Turn generator Switches ON.
- 3) Turn booster pump ON.
- 4) Prime the engines, Cold engines require more priming than warm engines.
- 5) ENERGIZE engines.
- 6) ENGAGE the starter. Hold it until the engine definitely fires.
- 7) When the engine definitely fires, advance the mixture control to AUTO RICH. Important: If the engine dies, immediately return the mixture control to IDLE CUT-OFF.
- 8) Idle the engine at 1000 rpm above vibration and fouling point
- 9) Now, start the right engine in the same manner.

Stop the engines if the oil pressure does not register within 30 seconds.

After both engines are running smoothly:

- 1) Turn the radio ON and tune to proper frequency.
- 2) Inverter switch (or compass switch on switch box) ON.
- 3) Coolant and oil shutters in AUTOMATIC (OFF).
- 4) Intercooler shutters 'OPEN
- 5) Check gun-sight light.
- 6) Push button to test turbo or fuel warning light
- 7) Check fuel quantity gages.
- 8) Uncage gyro instruments.

Engine Warm-up

The engine warm-up is comparable to the few turns you make around the track before you really start to run. Don't exceed 1400 rpm until minimum temperatures and pressures have been reached – oil temperature at least 40c, and oil pressure between the red lines (approximately 75 psi).

Oil pressure may be high if the engines are cold and low if the engines are hot. Don't leave the line until the oil pressure is within the red line limits.

Other temperature and pressures are:

Coolant temperature - at least 85c.

Fuel pressure – between 16 and 18 psi.

Hydraulic pressure - between 1100 and 1400 psi.

After the above minimum temperatures and pressures are reached, place the coolant and oil shutters in the full open position. This helps to prevent the engines from over-heating.

Check that the mixture controls are in AUTO-RICH. The AUTO LEAN mixture position is NEVER used for any ground operations.

Weapons Quick Start

Machine Guns:

- 1) Control Column Switch Camera to Camera Gun (Click Twice)
- 2) Right hand Button on yoke to fire

Rockets:

- 1) Load Rockets Via Aircraft Control Manager
- 2) Control Column Switch set to Rockets
- 3) Armament Control Box Left Cockpit Wall:
 - A: Master Switch to ON
 - B: Single RX AUTO Switch to Auto or Single
- 4) Fire Rockets with Control Yoke Button marked Cannon

Drop Tanks and 500lb Bombs:

- 1) Load Drop Tanks or Bombs Via Aircraft Control Manager
- 2) Armament Control Box Left Cockpit Wall:
 - A: Master Switch to ON
 - B: Left and Right ARM Switch to ARM
- 3) Drop Selected Load with Control Yoke Button marked Cannon