

1962

CESSNA

Skylark



OWNER'S
MANUAL

CESSNA AIRCRAFT COMPANY
PRODUCT SAFETY LIBRARY
DEPT. 176

1962

175

754 2961

120

PERFORMANCE and SPECIFICATIONS

SKYLARK

GROSS WEIGHT	2450 lbs
SPEED:	
Top Speed at Sea Level	150 mph
Cruise, 75% Power at 7000 ft	142 mph
RANGE:	
Cruise, 75% Power at 7000 ft	550 mi
41.5 Gallons, No Reserve	3.9 hr
	142 mph
Optimum Range at 10,000 ft	720 mi
41.5 Gallons, No Reserve	6.9 hr
	104 mph
RATE OF CLIMB AT SEA LEVEL	950 fpm
SERVICE CEILING	17,800 ft
TAKE-OFF:	
Ground Run	600 ft
Total Distance Over 50-foot Obstacle	1205 ft
LANDING:	
Landing Roll	610 ft
Total Distance Over 50-foot Obstacle.	1200 ft
EMPTY WEIGHT (Approximate)	1410 lbs
BAGGAGE	120 lbs
WING LOADING: Pounds/Square Foot	14.1 lbs
POWER LOADING: Pounds/HP	14.0 lbs
FUEL CAPACITY: Total	52 gal.
OIL CAPACITY: Total	10 qts
PROPELLER: Constant Speed, Diameter	84 inch
POWER:	
Continental, GO-300-E Engine, 175 rated HP at 3200 RPM	

Description

CARBURETOR AIR HEAT KNOB.

The carburetor air heat knob proportions the hot and cold air entering the carburetor. Pulling the knob out provides heated air for the carburetor, while pushing it in decreases the temperature. The full-hot position is all the way out and full-cold is all the way in.

IGNITION-STARTER SWITCH.

A key-operated switch controls the magneto ignition system and functions as a starter switch when turned full clockwise and pushed in. The switch has five positions; the four positions for ignition are labeled clockwise "OFF", "R", "L" and "BOTH." The fifth position, for starting, is labeled "START PUSH." The switch is spring loaded in this fifth position; when the key is released, the switch will return to "BOTH."

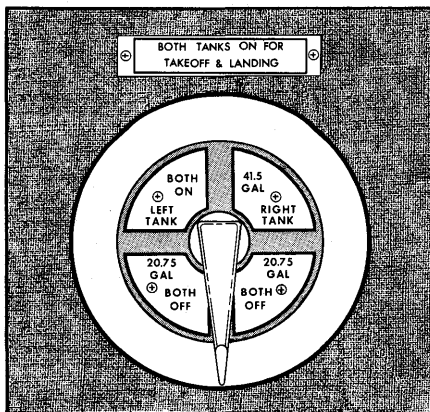
FUEL SYSTEM.

Fuel is supplied to the engine from two 26-gallon aluminum tanks, one in each wing. From these tanks, fuel flows by gravity through a selector valve and a strainer to the carburetor.

Refer to figure 1-2 for fuel quantity data. See the Servicing Diagram (figure 5-1) for a summary of fuel system servicing information.

FUEL SELECTOR VALVE.

A rotary type fuel selector valve is located at the aft end of the cabin



floor tunnel between the front seats. The valve has four positions, "BOTH OFF," "LEFT TANK," "RIGHT TANK," and "BOTH ON." The "BOTH OFF" position seals both wing tanks off from the rest of the fuel system and allows no fuel to pass beyond the selector valve. The "LEFT TANK" position allows fuel to flow from the left wing tank to the engine. The "RIGHT TANK" position permits fuel to flow from the right wing tank to the engine. The "BOTH ON" position provides fuel flow from both tanks simultaneously to provide maximum safety.

NOTE

The fuel selector valve handle indicates the setting of the valve by its position above the dial.

FUEL QUANTITY INDICATORS.

Two electrically-operated magnetic type fuel quantity indicators are pro-

FUEL SYSTEM *Schematic =*

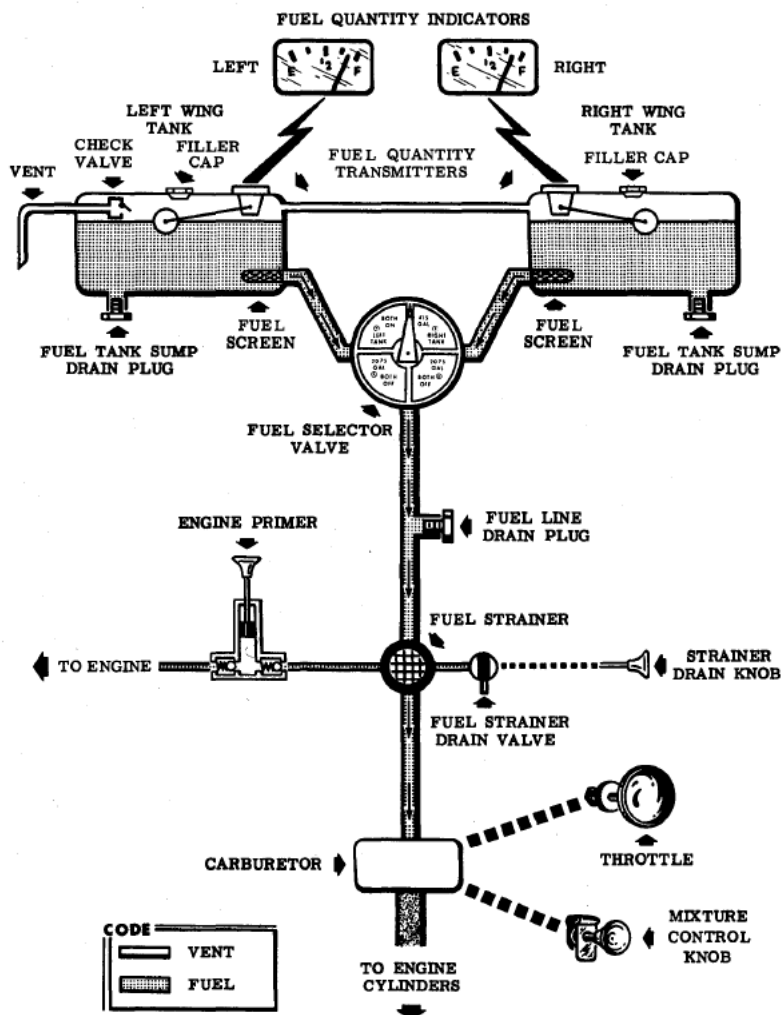


Figure 1-1.

FUEL QUANTITY DATA (U.S. GALLONS)

TANKS	NO.	USABLE FUEL ALL FLIGHT CONDITIONS	ADDITIONAL USABLE FUEL (LEVEL FLIGHT)	UNUSABLE FUEL (LEVEL FLIGHT)	TOTAL FUEL VOLUME EACH
LEFT WING	1	20.75 gal.	4.75 gal.	0.5 gal.	26.0 gal.
RIGHT WING	1	20.75 gal.	4.75 gal.	0.5 gal.	26.0 gal.

Figure 1-2.

vided, each working in conjunction with an electric fuel level transmitter in its respective fuel tank. Turned on by the master switch the indicators continue to function until the master switch is turned off.

FUEL STRAINER DRAIN KNOB.

The fuel strainer drain knob opens a valve on the bottom of the fuel strainer, to drain off any water and sediment that may have collected. The drain valve is spring-loaded; when the knob is pulled, the valve opens, and when the knob is released, the valve closes.

Before the first flight each day, and after each refueling, about two ounces of fuel (three or four seconds of drain operation) should be drained from the strainer.

ELECTRICAL SYSTEM.

Electrical power is supplied by a 12-volt, direct-current system

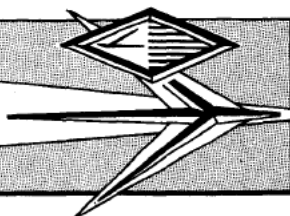
powered by an engine-driven generator. A 12-volt storage battery serves as a stand-by power source, supplying current to the system when the generator is inoperative, or when the generator voltage is insufficient to close the reverse-current relay.

FUSES.

Fuses protect the majority of electrical circuits in the airplane. The circuits controlled by each fuse are indicated above each fuse retainer. Fuse capacity is indicated on each fuse retainer cap. Fuses are removed by pressing the fuse retainers inward and rotating them counter-clockwise until they disengage. The faulty fuse may then be lifted out and replaced. Spare fuses are held in a clip on the inside of the map compartment door.

The stall warning and turn-and-bank indicator circuits are protected by an automatically resetting circuit breaker which provides intermittent

SECTION II



Operating Check List

This section lists, in Pilot's Check List form, the steps necessary to operate your airplane efficiently and safely. It is not a check list in its true form as it is considerably longer, but it does cover briefly all of the points that you would want to or should know concerning the information you need for a typical flight.

The flight and operational characteristics of your airplane are normal in all respects. There are no "unconventional" characteristics or operations that need to be mastered. All controls respond in the normal way within the entire range of operation of the airplane. All airspeeds mentioned in Sections II and III are indicated airspeeds. Corresponding true indicated airspeeds may be obtained from the Airspeed Correction Table in Section VI.

BEFORE ENTERING THE AIRPLANE.

- (1) Make an exterior inspection in accordance with figure 2-1.

BEFORE STARTING THE ENGINE.

- (1) Seats and Seat Belts - Adjust and lock.
- (2) Flight Controls - Check.
- (3) Brakes - Test and set.
- (4) Master Switch - "ON."
- (5) Trim Tab - Set.
- (6) Fuel Selector - "BOTH ON."

STARTING THE ENGINE.

- (1) Carburetor Heat - Cold.
- (2) Mixture - Rich.
- (3) Propeller - High RPM (full in).

Operating Check List

- (4) Primer - As required.
- (5) Ignition Switch - "BOTH."
- (6) Throttle - Open 1/8".
- (7) Propeller Area - Clear.
- (8) Starter - Engage.

BEFORE TAKE-OFF.

- (1) Throttle Setting - 2000 RPM.
- (2) Engine Instruments - Within green arc.
- (3) Magnetos - Check (125 RPM maximum drop).
- (4) Propeller - Cycle from high to low RPM; return to high RPM (full in).
- (5) Carburetor Heat - Check.
- (6) Flight Controls and Seat Latching - Recheck.
- (7) Wing Flaps - 0° or 20°.
- (8) Trim Tab - "TAKE-OFF."
- (9) Cabin Doors - Closed and locked.
- (10) Flight Instruments and Radios - Set.

TAKE-OFF.

NORMAL TAKE-OFF.

- (1) Flaps - Up.
- (2) Carburetor Heat - Cold.
- (3) Power - Full throttle (applied smoothly to avoid propeller surging).
- (4) Elevator Control - Lift nosewheel at 60 MPH.
- (5) Climb Speed - 80 MPH.

MAXIMUM PERFORMANCE TAKE-OFF.

- (1) Flaps - 20°.
- (2) Carburetor Heat - Cold.
- (3) Brakes - Apply.
- (4) Power - Full throttle.
- (5) Brakes - Release.
- (6) Elevator Control - Slightly tail low.
- (7) Climb Speed - 54 MPH.

CLIMB.

NORMAL CLIMB.

- (1) Airspeed - 90 to 100 MPH.

- (2) Power - 23 inches and 3000 RPM.
- (3) Mixture - Full rich (unless engine is rough).

MAXIMUM PERFORMANCE CLIMB.

- (1) Airspeed - 80 MPH at sea level to 74 MPH at 10,000 ft.
- (2) Power - Full throttle and 3200 RPM.
- (3) Mixture - Full rich (unless engine is rough).

CRUISING.

- (1) Engine Power - 2600 to 3000 RPM and 15-23 inches Hg.
- (2) Trim Tab - Adjust.
- (3) Mixture - Lean.

LET-DOWN.

- (1) Mixture - Rich.
- (2) Power - As desired.
- (3) Carburetor Heat - As required to prevent carburetor icing.

BEFORE LANDING.

- (1) Fuel Selector - "BOTH ON."
- (2) Mixture - Rich.
- (3) Propeller - High RPM (full in).
- (4) Airspeed - 70 to 80 MPH (flaps up).
- (5) Carburetor Heat - Apply before closing throttle.
- (6) Flaps - As desired (below 100 MPH).
- (7) Airspeed - 65 to 75 MPH (flaps down).
- (8) Trim Tab - Adjust.

NORMAL LANDING.

- (1) Touchdown - Main wheels first.
- (2) Landing Roll - Lower nosewheel gently.
- (3) Braking - Minimum required.

AFTER LANDING.

- (1) Flaps - Up.
- (2) Brakes - Set (at parking area).
- (3) Mixture - Full lean.
- (4) Ignition Switch and Master Switch - "OFF."