



	Moment change due to retracting landing gear (+2776 in. -lb.)		
Empty weight C.G. range	None		
*Maximum weight	Normal category 2800 lb.		
Number of seats	4 (2 at sta. +93.0), 2 at sta. +145.0)		
Maximum baggage	120 lb. (+154.5 fwd. of wheel well, +178.5 aft of wheel well)		
Fuel capacity	<u>S/N F177RG0001 through F177RG0062</u> 51 gal. (two 25.5 gal. fuel bays in wing at sta. +112; 50 gal. usable).		
	<u>S/N P177RG0063 and on:</u> 61 gal. (two 30.5 gal. fuel bays in wing at sta. +112; 60 gal. usable).		
	See Note 1 for data on unusable fuel.		
Oil capacity	<u>Without oil filter:</u> 8 qt. (+44), (2 qt. unusable)		
	<u>With oil filter:</u> 9 qt. (+45). (3 qt. unusable; 2 qt. in sump plus 1 qt. in oil filter).		
	See Note 1 for data on undrainable oil.		
Control surface movements	Wing Flaps	Down	30° + 2°
		Up	-0°
	Aileron	Up	20° ± 2°
		Down	15° ± 2°
	Stabilator	Up	20° ± 1°
		Down	5° ± 1°
	Stabilator tab	Up	5° ± 1°
		Down	13° ± 1°
	Rudder (measured perpendicularly to hinge line)	Right	24° ± 1°
		Left	24° ± 1°
Serial Numbers Eligible:	F177RG0001 through F177RG0177		

**DATA PERTINENT TO ALL MODELS**

Datum	54.0 forward of front face of lower portion of firewall
Leveling means	Jig located nutplates and screws at sta. +213.0 and sta. +238.0 on left of tailcone.
Certification basis	Part 23 of the Federal Aviation Regulations dated 1 February, 1965 as amended by 23-1 thru 23-6. Application for Type Certificate dated 26 April 1971. Type Certificate No. A26EU issued 17 May 1971 obtained by the manufacturer under delegation option procedures.
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following item of equipment is required:  1. Stall warning indicator, Cessna dwg 2070002

**NOTES**

NOTE 1. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification.

The certificated empty weight and the corresponding center of gravity locations must include undrainable oil of 0.0 lb. at 44.0 and unusable fuel of 6 lb. at 100.0

NOTE 2. The following placards must be displayed as indicated:

A. Applicable to Model F177RG

(1) In full view of the pilot:

"This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings and manuals.

MAXIMUMS

Maneuvering speed	130 MPH-CAS (113 knots)
Gear extension speed	140 MPH-CAS (122 knots)
Gross weight	2800 lb.
Flight load factor	Flaps up +3.8, -1.52
	Flaps down +2.0

No acrobatic maneuvers, including spins, approved. Altitude loss in a stall recovery 190 ft.  
Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate:

IRF - VFR - DAY - NIGHT (AS APPLICABLE).

(2) On control lock: "Control lock - remove before starting engine"

(3) By fuel valve (at appropriate locations):

a. S/N F177RG0001 through F177RG0062:

"ON - 50 GAL."

"OFF"

b. S/N F177RG0063 and on:

"BOTH - 60 GAL."

"LEFT - 30 GAL."

"RIGHT - 30 GAL."

"Use both for take-off and landing."

"When switching from a dry tank, turn auxiliary pump on and use full rich mixture until power is restored."

(4) Aft of fuel tank cap:

a. S/N F177RG0001 through F177RG0062:

"Service this airplane with 100/130 grade aviation gasoline."

"Total capacity 25.5 gal."

"Capacity to line of holes inside filler neck, 22.0 gal."

b. S/N F177RG0063 and on

"Service this airplane with 100/130 grade aviation gasoline."

"Total capacity 30.5 gal."

"Capacity to line of holes inside filler neck, 22.0 gal."

(5) In baggage compartment:

a. "120 lb. maximum baggage."

b. "For additional loading instructions see weight and balance data."

(6) Next to door ventilation windows: "Do not open window above 120 m.p.h. or when using alternate static source."

(7) On airspeed indicator:

a. Radial red line	195 m.p.h. (CAS)
b. Yellow arc	160 - 195 m.p.h. (CAS)
c. Green arc	70 - 160 m.p.h. (CAS)
d. White arc	60 - 110 m.p.h. (CAS)

- (8) On oil temperature gage:
- "Red line at 245°F.
  - Green arc 100° to 245°F.
- (9) On oil pressure gage:
- "Red line at 25 p.s.i.
  - Green arc 60 p.s.i. to 90 p.s.i.
  - Red line at 100 p.s.i."
- (10) Tachometer:
- |                   |                                  |
|-------------------|----------------------------------|
| "Normal operating | - 2100 - 2500 r.p.m. (green arc) |
| Caution           | - 1400 - 1750 r.p.m (yellow arc) |
| Maximum allowable | - 2700 r.p.m. (red line)"        |
- (11) On fuel flow gage:
- "Red line 10 p.s.i.
  - Green arc 6 to 13 g.p.h."
- (12) Near fuel flow gage:
- "Max. power
  - Mixture
- |      |      |      |      |       |
|------|------|------|------|-------|
| Alt. | S.L. | 4000 | 8000 | 12000 |
| GPH  | 17   | 15   | 13   | 10"   |
- (13) a. "0 to 10° - T.O. (Takeoff range with blue color code and 150 m.p.h. callout; also mechanical detent at 10°.
- b. 10° - 20° - 30° (Indices at these positions with white color code and 110 m.p.h. callout; also, mechanical detent at 20°)."
- (14) Proximity of tachometer:
- "Avoid continuous operation between 1400-1750 r.p.m. with less than 10" manifold pressure."
- (15) On cylinder head temperature gage:
- "Red line at 475°F."
  - Green arc 200° to 475°F."
- (16) On instrument panel (S/N F177RG0001 through F177RG0042 only):
- "Do not turn off alternator in flight except in emergency."
- (17) On Emergency Landing Gear Pump Handle Cover:

"EMERGENCY HAND PUMP  
PULL UP

TO EXTEND GEAR MANUALLY:

- Place gear lever in down position.
- Extend pump handle.
- Pump approximately 40 pressure strokes.
- Stop when resistance becomes heavy.
- Verify gear is down by observing green light.

IMPORTANT

To permit gear retraction after hand pump use full relief valve knob for a minimum period of five seconds. Then move gear lever to the UP position."

- (18) On manifold pressure gage:
- "15 to 25 in.hg. (green arc)."

NOTE 3. The cylinder head probe location for the Model F177RG is No. 1 cylinder.

In addition to the placards specified above, the prescribed operating limitations indicated by an asterisk (\*) under Section I of this Data Sheet must also be displayed by permanent markings.

.....END.....