

PIRTLE, J.C.

MODELS: Pirtle (Johnson) Rocket 185, 2 PCLM

T.C. NUMBER: T.C. 776 (Approved 9/10/46)

Engine	Lycoming O-435-A or O-435-C
Engine limits	For all operations, 2550 rpm (190 hp)
Fuel	80 minimum octane aviation gasoline
Airspeed limits	Level flight or climb - 170 mph True Inc. Glide or dive - 230 mph True Ind. Flaps extended - 100 mph True Ind. Landing gear extended - 100 mph True Ind.
C.G. range	(+14.4) to (+17.7) L.G. extended Effect of retracting gear +1421 in. lbs.
Datum	L.E. of wing 12.5 in. outboard of root rib
Leveling means	Leveling lugs accessible through baggage compartment
Maximum weight	2550 lbs.
No. seats	2 at (+33)
Maximum baggage	50 lbs. (+55) (See NOTE 1.)
Fuel capacity	53 gallons total -- main tank 26 gallons (-1), seat tank 27 gallons (+36) (See NOTES 1 and 2.)
Oil capacity	3 gallons (-32)
Control surface movement	Flaps Elevators Up 17 degrees Down 45 degrees Elevator trim tab Up 19 degrees Down 17 degrees Ailerons Up 21 degrees Down 20.5 degrees Aileron trim tab Up 17 degrees Down 17 degrees Rudder Right 18 degrees Left 18 degrees Rudder trim tab Right 15 degrees Left 15 degrees
Serial numbers eligible	2 and up per NOTE A
Required equipment	1, 102, 103, 104, 105, 201, 202, 203, 301, and 302(a) or (b)

SPECIFICATIONS PERTINENT TO ALL MODELS:

Certification basis	Type Certificate No. 776 (CAR 4a)
Production basis	None (See NOTE A.)
Export eligibility	Eligible for export as follows, subject to inspection for equipment specified in Chapter 2-4 of Manual of Procedure: (a) Canada - Landplane - eligible. - Skiplane - not eligible. (b) All other countries except Australia, Great Britain and New Zealand.

EQUIPMENT:

Propellers and Propeller Accessories

- Propelles - Koppers Aeromatic 220 with
O-78 blades 48 lbs. (-57)
Diameter:
Not more than 78 inches
Not less than 76.5 inches
Pitch at 30" station:
Low 11.8 degrees
High 27.0 degrees

Engines and Engine Accessories - Fuel and Oil System

- Starter (Delco Remy 1109652 or Eclipse
type 397, model 54) 18 lbs. (-20)
- Oil radiator (G & O Mfg. Co. B-3678) 6 lbs. (-21)
- Carburetor air heater 2 lbs. (-30)
- Wobble pump (AC Model 481) 4 lbs. (+16)
- Engine driven hydraulic pump (Pesco
1P-349 FE) 4 lbs. (-25)

Landing Gear

- Main wheels (Hayes 600M) with 6.00-6
6-ply tires and tubes (wheel must
be placarded for these tires) 34 lbs. (+26)
- Nose wheel (Hayes 453M) with 5.00-4
6-ply tire and tube (wheel must be
placarded for this tire) 9 lbs. (-35)
- Hydraulic hand pump (Type 97-58024) 4 lbs. (+14)

Electrical Equipment

- Battery 12 volt, 37 amp.Hr., 5 Hr. Rate 38 lbs. (-13)
- Engine driven generator

- (a) Delco-Remy 1106704 11 lbs. (-19)
- (b) Eclipse type 307, Model 8 16 lbs. (-19)

Interior Equipment

- 401. Cabin air heater 1 lb. (-30)

NOTE A. Prior to original certification, each aircraft must satisfactorily pass:

- (a) An inspection for workmanship, materials, and conformity before any covering, metal priming or final finish is applied. All woodwork may be varnished.
- (b) A final inspection of the completed aircraft.
- (c) A check of the flight characteristics.

NOTE 1. Weight and balance report including list of equipment included in certificated weight empty, and loading instructions including the use of removable ballast and order of filling fuel tanks and using fuel when necessary, must be submitted for each aircraft with original inspector's report and each subsequent report covering change in equipment. When removable ballast is necessary a placard relative to the use thereof must be displayed in full view of the pilot and on baggage compartment. When the order of using fuel is controlled, placards relative to the order of filling tanks and using fuel must be displayed at each fuel filler opening and at the fuel selector valve.

NOTE 2. The following placards must be displayed:

- (a) At each filler opening: "80 min. octane aviation gasoline."
- (b) In full view of pilot:
 - "Intentional spins prohibited."
 - "Do not extend landing gear at speeds in excess of 100 mph."