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1984  
**Dakota**









# Piper Aircraft Corporation

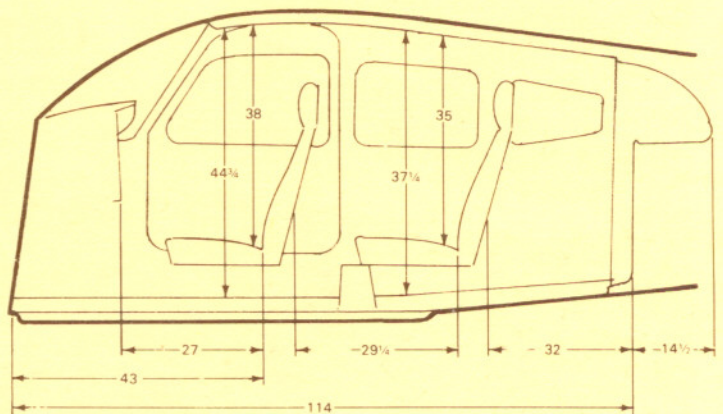
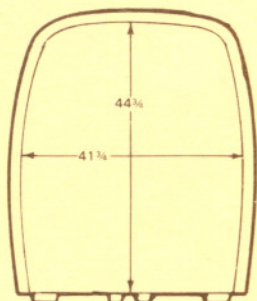
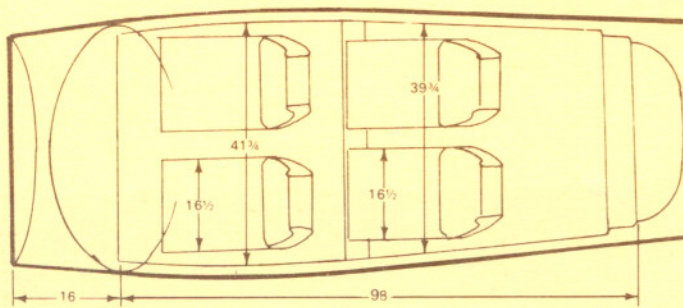
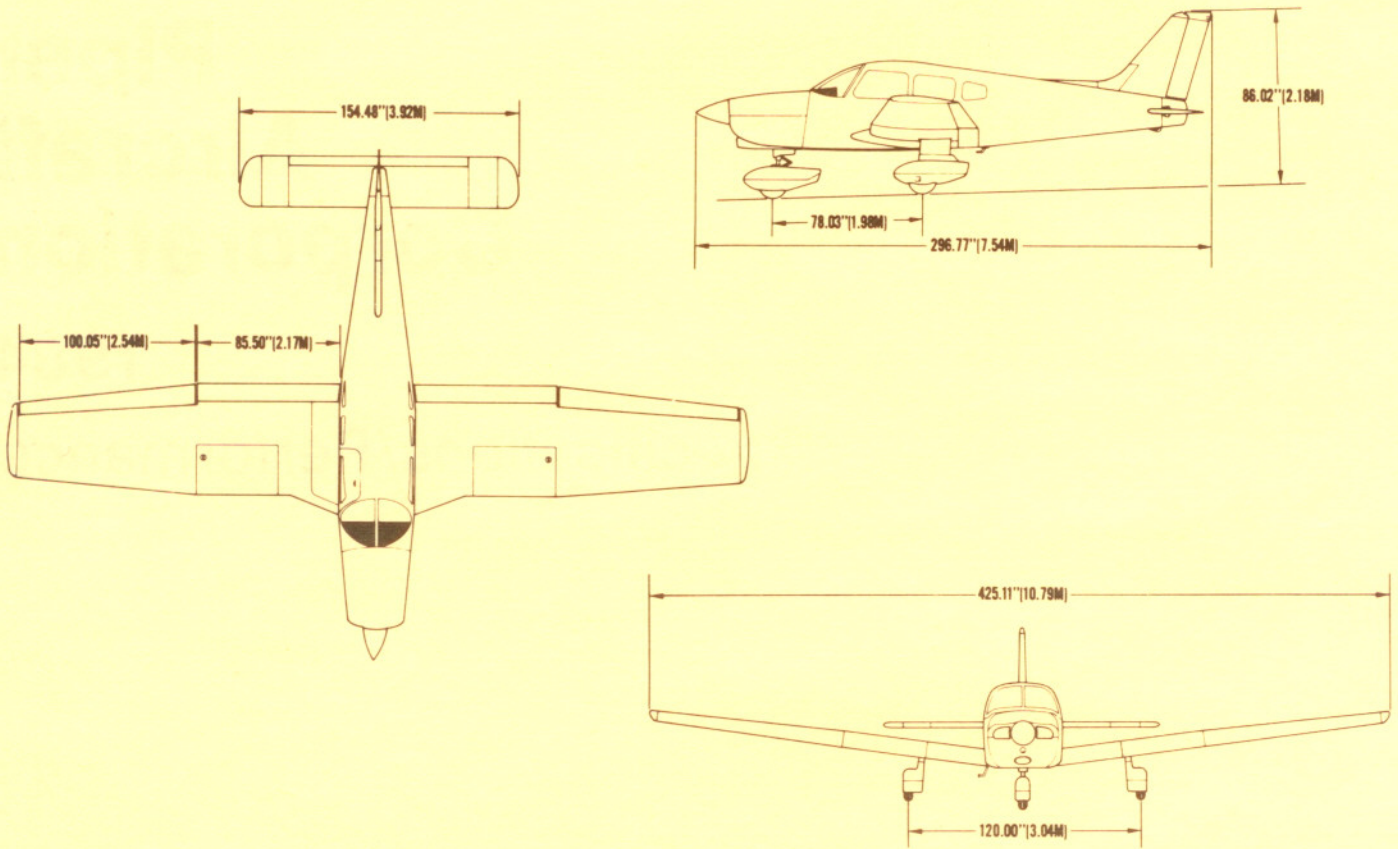
1984

Specifications/Performance

## Dakota

PA 28-236





## Specifications

### ENGINE

|                        |             |
|------------------------|-------------|
| Manufacturer           | Lycoming    |
| Model                  | O-540-J3A5D |
| Rating (hp @ rpm)      | 235 @ 2400  |
| Number of Cylinders    | 6           |
| Recommended TBO (hrs.) | 2000        |

### PROPELLER

|                  |                |
|------------------|----------------|
| Manufacturer     | Hartzell       |
| Number of Blades | 2              |
| Type             | Constant Speed |
| Diameter         | 80/203         |

### WEIGHTS

|  |           |
|--|-----------|
| Ramp Weight (lbs./kg)  | 3011/1366 |
| Gross Weight (lbs./kg)                                       | 3000/1361 |
| Standard Empty Weight (lbs./kg)                              | 1610/730  |
| (Includes unusable fuel, full oil and full operating fluids) |           |
| Standard Useful Load (lbs./kg)                               | 1390/630  |

### WING AREA AND LOADINGS

|  |           |
|--|-----------|
| Wing Area (ft. <sup>2</sup> /m <sup>2</sup> )              | 170/15.8  |
| Wing Loading (lbs./ft. <sup>2</sup> )/(kg/m <sup>2</sup> ) | 17.6/86.1 |
| Power Loading (lbs./hp)/(kg/hp)                            | 12.8/5.8  |

### DIMENSIONS

|  |                   |
|--|-------------------|
| Wing Span (ft./m)  | 35.4/10.8         |
| Length (ft./m)   | 24.7/7.5          |
| Height (ft./m)   | 7.2/2.2           |
| Cabin Length (Instrument Panel to Rear Bulkhead) (in./cm.) | 98/248.9          |
| Cabin Width (in./cm.)                                      | 41.75/106.0       |
| Cabin Height (in./cm.)                                     | 44.75/113.7       |
| Headroom (Seat to Ceiling)                                 |                   |
| Front Seats (in./cm.)                                      | 36/91.4           |
| Rear Seats (in./cm.)                                       | 36/91.4           |
| Baggage Door Size (in./cm)                                 | 22/55.9 x 20/50.8 |
| Cabin Door Size (in./cm)                                   | 36/91.4 x 35/88.9 |
| Wheel Base (ft./m)   | 6.5/1.98          |
| Wheel Tread (ft./m)  | 10/3.05           |

### FUEL CAPACITY

|                              |        |
|------------------------------|--------|
| Two 38.5 gal. tanks (gal./L) | 77/291 |
| Usable Fuel (gal./L)         | 72/273 |

### OIL CAPACITY (qts./L)

12/11.36

### BAGGAGE

|  |        |
|--|--------|
| Volume (ft. <sup>3</sup> /m <sup>3</sup> ) | 26/.74 |
| (with 2 cu. ft. hat shelf)                 |        |
| Capacity (lbs./kg)                         | 200/91 |

## Performance

### MAXIMUM SPEED (kts./kmh)

|                       |         |
|-----------------------|---------|
| (TAS at Gross Weight) | 148/274 |
|-----------------------|---------|

### CRUISING SPEEDS

| (TAS at Gross Weight) | Best Power | Best Economy |
|-----------------------|------------|--------------|
| Optimum Altitude      |            |              |
| 75% power (kts./kmh)  | 144/267    | 139/257      |
| 65% power (kts./kmh)  | 138/255    | 134/248      |
| 55% power (kts./kmh)  | 130/240    | 126/233      |

### CRUISE RANGE

(Cruising range includes 45 minutes fuel reserve at maximum range power plus allowance for fuel used during taxi, take-off, climb at MCP, cruise at optimum altitude and stated mixture plus descent)

|                   | Best Power | Best Economy |
|-------------------|------------|--------------|
| 75% power (nm/km) | 650/1204   | 710/1315     |
| 65% power (nm/km) | 710/1315   | 770/1426     |
| 55% power (nm/km) | 750/1390   | 810/1500     |

### FUEL CONSUMPTION

|                     | Best Power | Best Economy |
|---------------------|------------|--------------|
| 75% power (gph/lph) | 13.6/51.5  | 12.7/47.9    |
| 65% power (gph/lph) | 11.8/44.7  | 10.9/41.3    |
| 55% power (gph/lph) | 10.1/38.2  | 9.3/35.2     |

### RATE OF CLIMB (At Sea Level and Gross Wt.)

|                         |          |
|-------------------------|----------|
| Full Throttle (fpm/mpm) | 1110/338 |
|-------------------------|----------|

### STALL SPEED

|                                | IAS    | CAS    |
|--------------------------------|--------|--------|
| Flaps Down Full 40° (kts./kmh) | 56/104 | 58/107 |
| Flaps Up (kts./kmh)            | 65/120 | 65/120 |

### SERVICE CEILING (100 fpm) (ft./m)

17,500/5334

### TAKE-OFF DISTANCE

|   |          |
|---|----------|
| (Sea Level, zero wind, standard temperature, 25° flaps) |          |
| Ground Run (ft./m)                                      | 886/270  |
| Total over 50 ft. obstacle (ft./m)                      | 1216/371 |

### LANDING DISTANCE

|   |             |             |
|---|-------------|-------------|
| (Sea Level zero wind, standard temperature) | Std. Brakes | H.D. Brakes |
| Ground Roll (ft./m)                         | 825/251     | 640/195     |
| Total over 50 ft. obstacle (ft./m)          | 1725/526    | 1530/466    |