

P/N 145-10 Airspeed Indicator

Per Sequoia Aircraft Drawing No. 145, Detail H.

Approved instrument models:

- (1) IFR 20-25 airspeed indicator marked as shown
- (2) United Instruments UI8030-B806 airspeed indicator marked as shown

White arc: 53 to 97.5 kts (flaps 20°)
53 to 87 kts (flaps full)

Green arc: 65 to 161 kts

Yellow arc: 161 to 208.5 kts

Red line: 208.5 kts

Maneuvering speed, acrobatic: 135 kts

Maneuvering speed, utility: 122 kts

Gear speed: 108.5 kts

Dial colors (per Cessna CES-1206 color chart):

White characters on black background

Black: FED-STD-595 Black, Color #37038

White: FED-STD-595 White, Color #37875

Red: FED-STD-595 Red, Color #38905

Green: FED-STD-595 Green, Color #38901

Yellow: FED-STD-595 Yellow, Color #38907

Characters:

Numerals "5, 10, 15, 20": 18 pt Helvetica Medium numerals

Letters "KNOTS": 12 pt Helvetica Medium caps

Characters "X10": 8 pt Helvetica Medium numerals & caps

Letters "G, MU, MA": 6 pt Helvetica Medium caps

Graduation dimensions:

(Graduations centered on 1.900" dia)

Major graduations: .22" long x .03" wide

Minor graduations: .12" long x .02" wide

Red line: .25" long x .06" wide

Single width arc (green & yellow): .120" wide and centered on major graduations.

Multiple width arc (white): .120" wide and drop in .040" step where applicable.

P/N 145-11 Artificial Horizon

Approved instrument models:

- (1) Instruments & Flight Research IFR-85. Blue and black colors
- (2) R. C. Allen RCA 22

(Note. Sigma-Tek 23-501-06-16 is too long for the Falco.)

P/N 145-12A Altimeter

0 to 20,000 feet

With barber pole

Barometric setting: inches Hg

Approved instrument models:

- (1) Instruments & Flight Research IFR-41-20
- (2) United Instruments 5934P-1

P/N 145-13 Turn & Bank

12 volt

2 minute turn

Approved instrument models:

- (1) Instruments & Flight Research IFR-52-12. White ball, Standard terminals.
- (2) R. C. Allen RCA 56 supplied with MS3106A-10SL-3A connector

P/N 145-13A Turn Coordinator

11-30 volts DC, Not lighted.

Approved instrument models:

- (1) R. C. Allen RCA 82, supplied with MS3106A-10SL-3A connector

P/N 145-13B Turn & Bank—2-1/4"

14 volts DC

Approved instrument models:

- (1) A.I.D./R. C. Allen A1050-2, supplied with MS3106A-10SL-3A connector

P/N 145-15 Directional Gyro

Approved instrument models:

- (1) Instruments & Flight Research IFR-80
- (2) R. C. Allen RCA 11A-8

P/N 145-15 Rate of Climb

0 to 2,000 feet per minute

Approved instrument models:

- (1) Instruments & Flight Research IFR-33
- (2) United Instruments 7000

P/N 145-16A Manifold Pressure/Fuel Pressure

(For Lyc. 0-320 series engines)

Per Sequoia Aircraft Drawing No. 145, Detail G

Approved instrument models:

- (1) IFR-50 marked as shown
- (2) R. C. Allen RCA 21-1000-12 marked as shown
- (3) R. C. Allen RCA 21-1000-16 marked as shown

Manifold pressure: 10 to 35 inches Hg

Fuel pressure:

Red line: .5 psi

Green arc: .5 to 8 psi

Red line: 8 psi

Dial Colors (per Cessna CES-1206 color chart):

White characters on black background

Black: FED-STD-595 Black, Color #37038

White: FED-STD-595 White, Color #37875

Red: FED-STD-595 Red, Color #38905

Green: FED-STD-595 Green, Color #38901

Needle colors:

Black 12 pt Helvetica Medium caps on white background

Characters:

Numerals "0...8, 10...35": 18 pt Helvetica Medium numerals

Letters "MANIFOLD PRESSURE, FUEL PRESSURE": 12 pt Helvetica Medium caps

Letters "IN. HG, PSI": 8 pt Helvetica Medium caps

Graduation dimensions:

Major graduations: .03" wide on 2.00" I.D.
 Minor graduations: .02" wide on 2.25" I.D.
 Red lines: .06" wide on 2.00" I.D.
 Green arc: on 2.25" I.D.

P/N 145-16B Manifold Pressure/Fuel Pressure

(For Lyc 10-320 series engines)

Per Sequoia Aircraft Drawing No. 145, Detail G

Approved instrument models:

- (1) IFR-50 marked as shown
- (2) R. C. Allen RCA 21-1000-12 marked as shown
- (3) R. C. Allen RCA 21-1000-16 marked as shown
- (4) United Instruments U16333-H190

Manifold pressure: 10 to 35 inches Hg

Fuel pressure:

Green arc: 0 to 7 psi

Red line: 7 psi

Dial colors, characters, graduation dimensions, etc. same as P/N 145-16A.

P/N 145-17 Tachometer

Per Sequoia Aircraft Drawing No. 145, Detail F

Green arc: 500 to 2,700 rpm

Red line: 2,700 rpm

Hourmeter reading speed: 2,400 rpm

Dial colors (per Cessna CES-1206 color chart):

White characters on black background

Black: FED-STD-595 Black, Color #37038

White: FED-STD-595 White, Color #37875

Red: FED-STD-595 Red, Color #38905

Green: FED-STD-595 Green, Color #38901

Characters:

Numerals "5. . .35": 24 pt Helvetica Medium numerals

Letters "RPM": 12 pt Helvetica Medium caps

Characters "X100, HOURS, 1/10": 8 pt Helvetica Medium numerals & caps

Graduation dimensions:

Major graduations: .040" wide x .312" long

Minor graduations: .030" wide x .190" long

Red line: .060" wide x .312" long & centered on 2700 rpm

P/N 145-18 Accelerometer

Per Sequoia Aircraft Drawing No. 145, Detail C

Approved instrument models:

- (1) Instruments & Flight Research IFR-12 marked as shown
- (2) R. C. Allen RCA 10-100 marked as shown

Green arc: +4.4 to -2.2g

Red line (utility): +4.4 g

Red line (acrobatic): +6 g

Red line (utility): -2.2 g

Red line (acrobatic): -3 g

Dial colors (per Cessna CES-1206 color chart):

White characters on black background

Black: FED-STD-595 Black, Color #37038

White: FED-STD-595 White, Color #37875

Red: FED-STD-595 Red, Color #38905

Green: FED-STD-595 Green, Color #38901

Characters:

Numerals "-4...12": 12 pt Helvetica Medium numerals

Letters "ACCELERATION": 12 pt Helvetica medium caps

Letters "G UNITS": 8 pt Helvetica Medium caps

Letters "A, A, U, U": 6 pt Helvetica Medium caps

Graduation dimensions:

Major graduations: .03" wide on 1.50" I.D.

Minor graduations: .02" wide on 1.60" I.D.

Red lines: .06" wide on 1.40" I.D.

Green arc: on 1.60" I.D.

P/N 145-19 Suction Gauge

U.M.A. Inc. 3-200-12 suction gauge

Green arc: 4.5 to 5.4 inches Hg

P/N 145-20A Volt-Ammeter

(For use with 70 amp alternators)

Per Sequoia Aircraft Drawing No. 145, Detail D

Approved instrument models:

(1) A.I.D. P/N 12-2004-7 marked as shown

0 to 80 amps

0 to 30 volts

(Note: If possible a scale of 0 to 20 (or so) would be preferable for this 14 volt application.)

Red line: 70 amps

Yellow arc: 56 to 70 amps

Green arc: 0 to 56 amps

Dial colors (per Cessna CES-1206 color chart):

White characters on black background

Black: FED-STD-595 Black, Color #37038

White: FED-STD-595 White, Color #37875

Red: FED-STD-595 Red, Color #38905

Green: FED-STD-595 Green, Color #38901

Yellow: FED-STD-595 Yellow, Color #38907

Characters:

Letters "ALT AMPS, VOLTS": 10 pt Helvetica Medium caps

Numerals "0...80, 0...30": 10 pt Helvetica Medium caps

Letters "PUSH FOR VOLTS": 6 pt Helvetica Medium caps

Graduations dimensions:

As per A.I.D. instrument

Sender:

P/N 116-62 Shunt (Empro MLA 80A-50MV), 80 amp, 50 millivolt rating.

P/N 145-20B Volt-Ammeter

(For use with 60 amp alternators)

Per Sequoia Aircraft Drawing No. 145, Detail D

Approved instrument models:

(1) A.I.D. P/N 12-2004-7 marked as shown

Same as P/N 145-20A except:

Red Line: 60 amps

Yellow arc: 48 to 60 amps

Green arc: 0 to 48 amps

Sender:

P/N 116-62 Shunt (Empro MLA 80A-50MV), 80 amp, 50 millivolt rating.

P/N 145-21 Engine Instrument Cluster

Per Sequoia Aircraft Drawing No. 145, Detail A
 Rochester Gauges of Texas instrument marked as shown
 CYLINDER HEAD TEMPERATURE (P/N 145-22)

Green arc: 150° to 435° F
 Yellow arc: 435° to 500° F
 Red line: 500° F

OIL TEMPERATURE (P/N 145-23)

Green arc: 100° to 245° F
 Red line: 245° F

OIL PRESSURE (P/N 145-24)

Red line: 25 psi
 Yellow arc: 20 to 60 psi
 Green arc: 60 to 90 psi
 Yellow arc: 90 to 100 psi
 Red line: 100 psi

AMMETER (P/N 145-25)

Marked as shown on drawing

FRONT FUEL GAUGE (P/N 145-26)

Red arc: 0 to 3 gal
 Green arc: 3 to 21 gal

AFT FUEL GAUGE (P/N 145-27)

Red arc: 0 to 3 gal
 Green arc: 3 to 19-7/8 gal

Dial colors (per Cessna CES-1206 color chart)

White characters on black background

Black: FED-STD-595 Black, Color #37038
 White: FED-STD-595 White, Color #37875
 Red: FED-STD-595 Red, Color #38905
 Green: FED-STD-595 Green, Color #38901
 Yellow: FED-STD-595 Yellow, Color #38907

Characters:

Letters "CYL TEMP, OIL TEMP, OIL PRESS, AMPS, FRONT FUEL, AFT FUEL":

12 pt Helvetica Medium caps

Characters "150, 435, 500, 100, 245, 25, 60, 100, -60, 0, +60, E, 5, 10, 15, 20, E, 5, 10, 15, °F, °F, PSI, 21 U.S. GAL, 19 U.S. GAL":

8 pt Helvetica Medium numerals & caps

Graduation dimensions:

All graduations .125" high and positioned on dial face as shown.

(Note: pilot's eye is 30° above horizontal plane.)

Senders:

Cylinder head temperature:

P/N 116-55 Temperature Sensor (Rochester P/N 3080-00038, brass construction with 177S34 thermister 2%, range 200°F to 550°F)

Oil temperature:

P/N 116-57 Temperature Sender (Rochester P/N 3080-00037, brass construction with 117S3 thermister 2%, range 200°F to 250°F.)

Oil Pressure:

P/N 116-56 Pressure transducer, (Rochester P/N XD0311-02001) (obsolete?)

P/N 116-56(A?) Sender (Rochester R.G. 3080-0018 Sender, ("K" curve)/

Ammeter:

P/N 116-61 Shunt (Empro P/N MLA 80A-100 MV), 80 amp, 100 millivolt rating

Front fuel gauge:

P/N 729-13 Sender, (Rochester P/N 7740-00320)

Sender readings:

Empty:	.1 Ohms
3 gal:	10 Ohms
5 gal:	18 Ohms
10 gal:	35 Ohms
15 gal:	58 Ohms
20 gal:	83 Ohms
Full (21-1/8 gal):	91 Ohms

Aft fuel gauge:
P/N 728-10 Sender, (Rochester P/N 7740-00321)

Sender readings:

Empty:	.2 Ohms
3 gal:	4.8 Ohms
5 gal:	14 Ohms
10 gal:	32 Ohms
15 gal:	56 Ohms
Full (19-7/8 gal):	86 Ohms

P/N 145-30 Compass

Approved instrument models:

- (1) Airpath C-2400-L4P1, 12 volt, lighted.

Notes:

(1) Instrument paint colors listed above are for FED-STD-595 numbers. These replace the previous color specifications, which were

Color	FED-STD-595 numbers	Previous specification
Black:	FED-STD-595 Black, Color #37038	Dull black
White:	FED-STD-595 White, Color #37875	Nazdar DL-112
Red:	FED-STD-595 Red, Color #38905	Switzer Bros. 66-13
Green:	FED-STD-595 Green, Color #38901	Switzer Bros. 66-18
Yellow:	FED-STD-595 Yellow, Color #38907	Switzer Bros. 66-46