

DA-42 Minimum Operational Equipment (Serviceable)

The following equipment listing in addition to the items listed in §91.205 are required for flight:

NOTE

Many minimum equipment items listed are integrated in the G1000

| | Day VFR | Addition for Night VFR | In Addition for IFR |
|-------------------------------------|--|---|--|
| Flight Navigation Instruments | <ul style="list-style-type: none"> ◆ PFD ◆ MFD ◆ Audio Panel ◆ Air Data Computer ◆ Slip-Skid Indicator (Ball) (G1000 or Backup) • Airspeed (PFD or Backup) • Altimeter (PFD or Backup) • Magnetic Compass • Headset | <ul style="list-style-type: none"> • AHRS • GPS (1) • VSI • AI • Turn & Bank Indicator • Directional Gyro • OAT Indicator • Clock • VHF Radio • VOR Receiver • XPDR (Mode A & C) | <ul style="list-style-type: none"> • 2nd Attitude Indicator • 2nd Airspeed Indicator • 2nd Altimeter • 2nd GPS • 2nd VHF Radio • VOR-LOC • Marker Beacon RCVR |
| Engine Instruments | <ul style="list-style-type: none"> • Fuel Indicators x 2 • Oil Pressure x 2 • Oil Temp x 2 • Manifold Pressure x 2 • Prop RPM x 2 • Annunciator Panel | <ul style="list-style-type: none"> • Ammeter • Voltmeter | |
| Lighting | <ul style="list-style-type: none"> • Strobe Lights (Anti-collision) Lights (§91.205) | <ul style="list-style-type: none"> • Position lights • Landing light • Instrument Lighting • Flood light • Flashlight | |
| Other Operational Minimum Equipment | <ul style="list-style-type: none"> • Stall warning system • Fuel quantity measuring device • Safety belts for each occupied seat • Airplane flight manual | <ul style="list-style-type: none"> • Pitot heat • Alternate static valve | <ul style="list-style-type: none"> • Emergency Backup Battery • Static Dischargers (7) |

Equipment identified by ◆ are required by Sky Safety to conduct flight operations in this aircraft.

- Specific equipment, if inoperative, may not cause the airplane to be grounded. However, you may not be able to complete a lesson or operate the airplane under the existing conditions.
- For a pilot practical test, (Checkride) the airplane must comply with 14 CFR §61.45, which means everything listed above must be in operable condition.

Warning Caution & Status Messages

| PFD Warning Annunciations – RED | |
|---|--|
| AP TRIM FAIL | Autopilot trim is inoperative |
| DOOR OPEN | Canopy &/or rear door &/or nose baggage door(s) not closed & secured |
| L/R OIL PRES LO | Oil pressure less than 25 psi |
| L/R FUEL PR LO | Fuel pressure less than 14 psi |
| L/R FUEL PR HI | Fuel pressure greater than 35 psi |
| L/R ALTERNATOR | Alternator Failure |
| L/R STARTER ENGD | Operation of the starter without the key in the start position, or failure of the starter motor to disengage from the engine after starting. |
| GPS ENR | G1000 no longer providing GPS navigation |
| LARGE RED X THRU AIRSPEED OR ALTIMETER | System not receiving data from ADC |
| LARGE RED X THRU HDG or Attitude Indicator | System int receiving data from the AHRS |
| OAT, TAS, VERT SPEED FAIL | Display not receiving info from ADC |
| WARN | RAIM position warning. Nav deviation bar removed. |
| XPDR FAIL | System not receiving valid transponder information |
| Caution Annunciations – Yellow (Amber) | |
| GEAR CHECK | Landing gear not down & Locked |
| L/R AUX FUEL E | L/R Aux tank is empty but FUEL TRANSFER PUMP is ON |
| L/R FUEL LOW | Fuel quantity is below 4 ± 1 gal usable fuel in main tank |
| L/R VOLTS LOW | Bus voltage drops below 25 volts |
| PITOT HT OFF | Pitot heat is not switched on |
| PITOT FAIL | Fault in the pitot heating system |
| STAL HT FAIL | Stall heater has Failed |
| STAL HT OFF | Stall heater is off |
| STICK LIMIT | Stick limiting System has failed |
| Advisory Annunciations - White | |
| L/R FUEL XFER | Fuel XFER from Left or Right Aux Tank to corresponding Main tank is in progress |
| PFD FAN FAIL | Cooling fan for PFD is INOP |
| MFD FAN FAIL | Cooling fan for MFD is INOP |
| GIA FAN FAIL | Cooling fan for GIA is INOP |

| Fuel Quantity Indications | | | |
|----------------------------------|---------------|-----------------|-------------|
| | Main Tanks | Auxiliary Tanks | Total |
| Total Fuel Quantity | 2 x 26 US Gal | 2 x 13.7 US Gal | 79.4 US Gal |
| Usable Fuel | 2 x 25 US Gal | 2 x 13.2 US Gal | 76.4 US Gal |
| Max Diff L/R | 5.0 Gallons | | |