

ENGINE FAILURES

ENGINE FAILURE DURING TAKEOFF ROLL

1. ThrottleIDLE
2. BrakesAPPLY
3. MixtureIDLE CUTOFF

ENGINE FAILURE AFTER TAKEOFF

1. Airspeed (V_G)85 MPH
2. Power-Off / Forced LdgEXECUTE

IF TIME & ALTITUDE ALLOW

3. Fuel Selector ValvePROPER TANK
4. Fuel PumpON
5. MixtureRICH
6. Carb HeatON
7. Ignition SwitchBOTH/START
8. Power-Off / Forced LdgEXECUTE

ENGINE FAILURE DURING FLIGHT

1. Airspeed (V_G)85 MPH
2. Fuel Selector ValvePROPER TANK
3. Fuel PumpON
4. MixtureRICH
5. Carb HeatON
6. Engine InstrumentsCHECKED
7. Ignition SwitchBOTH/START
8. Power-Off / Forced LdgEXECUTE

POWER-OFF / FORCED LANDING

1. Airspeed (V_G)85 MPH
2. Landing AreaSELECTED/DIRECT

WHEN COMMITTED TO LANDING

3. MixtureIDLE CUTOFF
4. Master SwitchOFF
5. Mags (Ignition)OFF
6. Fuel Selector ValveOFF
7. SeatbeltsTIGHT
8. FlapsAS REQ'D

ABNORMAL OIL PRESSURE / TEMPERATURE

1. PowerMINIMUM REQUIRED
2. Engine InstrumentsMONITOR
3. Power-Off / Forced LdgEXECUTE

LOSS OF FUEL PRESSURE

1. Fuel PumpON
2. Fuel Selector ValveFULLEST TANK

FIRES

ENGINE FIRE DURING START

1. StarterCONTINUE TO CRANK
2. MixtureIDLE CUTOFF
3. ThrottleOPEN
4. Fuel PumpOFF
5. Fuel SelectorOFF
6. EGRESS AIRCRAFT

ENGINE FIRE DURING FLIGHT

1. Fuel Selector ValveOFF
2. ThrottleIDLE
3. MixtureIDLE CUTOFF
4. Fuel PumpOFF
5. Heater/DefrosterOFF
6. Power-Off / Forced LdgEXECUTE

ELECTRICAL FIRE / SMOKE IN CABIN

1. Master SwitchOFF
2. VentsOPEN
3. Cabin HeatOFF
4. All Electrical EquipmentOFF

IF FIRE APPEARS OUT & PWR REQUIRED

5. Master.....ON
6. Circuit BreakersCHECKED
7. Critical EquipON (1 at a time)

ELECTRICAL

ALTERNATOR FAIL (0 Amps / Alt Light ON)

1. AmmeterTEST / APPLY LOAD
2. Electrical LoadREDUCE
3. Alt Circuit BreakerCHECK
4. Alternator SwitchRECYCLE 1 SEC

IF ANNUNCIATOR ON, OR ZERO AMPS

5. Alternator SwitchOFF
6. Non-Essential Elec EquipOFF
7. FlightTERMINATE

SPIN RECOVERY

1. Power (Throttle)IDLE
2. AileronsNEUTRAL

WHILE SIMULTANEOUSLY

3. RudderFULL OPPOSITE OF SPIN
4. ElevatorFWD OF NEUTRAL

WHEN ROTATION STOPS

5. RudderNEUTRAL
6. ElevatorAS REQ'D FOR LVL FLT

INADVERTENT ICING ENCOUNTER

1. Pitot HeatON
2. Cabin Heat / DefrostMAX
3. Icing ConditionsEXIT
4. PowerINCREASE
5. Carb HeatON
6. MixtureLEAN
7. No-Flap LandingEXECUTE

LOST COMMUNICATIONS (NORDO)

1. FlightFIND/MAINTAIN VMC
2. Radio(s)CHECK VOLUME
3. Headset(s)CHECK
4. Circuit BreakersCHECK
5. Alternator SwitchRECYCLE

ENGINE ROUGHNESS

1. Carb HeatON
2. MixtureADJUST FOR SMOOTH OPER
3. Fuel PumpON
4. Fuel Selector ValveSWITCH
5. Engine InstrumentsMONITOR
6. MagnetosCHECK L/R/BOTH

CLEANING FOULED SPARK PLUGS

1. Throttle2300 RPM
2. MixtureLEAN FOR SLIGHT RPM DROP
3. MAINTAIN FOR 60 SECONDS
4. MixtureFULL RICH
5. Magnetos (RUN-UP)CHECKED

OPEN DOOR

1. AirspeedBELOW 100 MPH
2. Cabin VentsCLOSED
3. Storm WindowOPEN
4. If Lower/Upper Latches OpenLATCH

PERFORMANCE DATA

| V SPEEDS (MPH) | | PA28-140 | PA28-151 |
|--------------------------|-----------------|----------|----------|
| Stall, Flaps DOWN | V _{SO} | 55 | |
| Stall, Flaps UP | V _{S1} | 65 | |
| Rotation | V _R | 60 | |
| Best Angle | V _X | 75 | |
| Best Rate | V _Y | 85 | |
| Best Glide | V _G | 85 | |
| Max Flap Extend | V _{FE} | 115 | 125 |
| Maneuvering | V _A | 129 | 124 |
| Max Structural Cruise | V _{NO} | 140 | |
| Never Exceed | V _{NE} | 171 | 176 |
| Max Demo Crosswind (KTS) | | 17 KT | |

Source: PA28-141/151 POH & TCDS 2A13_R63

PA28-140/151 SPECIFICATIONS

| | SPECIFICATION | PA28-140 | PA28-151 |
|--------------|----------------------|----------------|------------|
| WEIGHTS | MAX WEIGHT (NORM) | 2150# | 2325# |
| | MAX WEIGHT (UTIL) | 1950# | 1950# |
| | MAX BAGGAGE | 200# | 200# |
| | MAX USEFUL LOAD | 949# | 994# |
| FUEL AND OIL | USEABLE / TOTAL | 48 / 50 GAL | |
| | FUEL TYPE | 100LL | |
| | 75% BEST PWR | 8.4 GAL/HR | 9.2 GAL/HR |
| | 65% BEST PWR | 7.3 GAL/HR | 8 GAL/HR |
| | 55% BEST PWR | 6.2 GAL/HR | 6.7 GAL/HR |
| | OIL CAPACITY (QT) | 8 (6 USEABLE) | |
| AIRCRAFT | TIRE PSI (NOSE/MAIN) | 24 / 24 | 30 / 24 |
| | BATTERY | 12 VDC / 25 Ah | |
| | ALTERNATOR | 14 VDC / 60 Ah | |

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