

ABNORMAL CHECKLIST PA-34-200

ELECTRICAL FAULTS

ALTERNATOR FAILURE (SINGLE)

(ammeter indicates zero output)

ELECTRICAL LOAD (50 amp max) REDUCE
ALTERNATOR CIRCUIT BREAKERS CHECK ONLY
(DO NOT RESET)

- IF ANY ALTERNATOR CIRCUIT BREAKER IS OPEN -

AFFECTED ALTERNATOR OFF
3 MIN WAITING PERIOD COMPLETE
NEED FOR SECOND ALTERNATOR EVALUATE
CIRCUIT BREAKER..... (as required) LEAVE OUT / RESET

**- IF ALTERNATOR CIRCUIT BREAKER IS CLOSED
OR REMAINS CLOSED AFTER RESET -**

INOPERATIVE ALTERNATOR OFF, then ON
AMMETER CHECK ALTERNATOR OUTPUT

- IF ALTERNATOR OUTPUT REMAINS ZERO-

REDUCED ELECTRICAL LOAD (below 50 amps) MAINTAIN

ALTERNATOR FAILURE (DUAL)

(both ammeters indicate zero output)

ALL NON-ESSENTIAL ELECTRICAL EQUIPMENT OFF
ALTERNATOR CIRCUIT BREAKERS CHECK ONLY
(DO NOT RESET)

- IF ANY ALTERNATOR CIRCUIT BREAKERS ARE OPEN -

AFFECTED ALTERNATORS OFF
3 MIN WAITING PERIOD COMPLETE
NEED FOR ALTERNATORS EVALUATE
CIRCUIT BREAKERS (as required) LEAVE OUT / RESET

**- IF ALTERNATOR CIRCUIT BREAKERS ARE CLOSED
OR REMAIN CLOSED AFTER RESET -**

INOPERATIVE ALTERNATORS..... (one at a time) OFF, then ON
AMMETERS CHECK ALTERNATOR OUTPUT

- IF ANY ALTERNATOR OUTPUT REMAINS ZERO -

MINIMUM ELECTRICAL LOAD MAINTAIN

LAND NEAREST AIRPORT

ALTERNATOR OVERVOLTAGE (SINGLE)
(one overvoltage light illuminates)

ALL NON-ESSENTIAL ELECTRICAL LOAD OFF
(EXCEPT MASTER SWITCH)
AFFECTED ALTERNATOR OFF
AFFECTED ALTERNATOR SWITCH ON, then OFF
(OBSERVING AMMETERS)

- IF ALTERNATOR OUTPUT is EXCESSIVE -

AFFECTED ALTERNATOR LEAVE OFF
ELECTRICAL LOAD (50 amp max) MINIMIZE

ALTERNATOR OVERVOLTAGE (DUAL)
(both overvoltage lights illuminate)

ALL NON-ESSENTIAL ELECTRICAL LOAD OFF
(EXCEPT MASTER SWITCH)
BOTH ALTERNATORS OFF
ALTERNATOR SWITCHES ON, then OFF
(ONE AT A TIME, OBSERVING AMMETERS)

- IF ALTERNATORS SHOW DIFFERENT OUTPUT -

ALTERNATOR SHOWING THE LEAST OUTPUT ON
ELECTRICAL LOAD (50 amp max) MINIMIZE

- IF ALTERNATORS SHOW EQUAL OUTPUT
(less than 50 amp each) -

BOTH ALTERNATORS (one at a time) ON
AMMETERS / OVERVOLTAGE LIGHTS CHECK
REQUIRED ELECTRICAL EQUIPMENT ON

ALTERNATOR RESTART ON THE GROUND
(weak battery)

ALL NON-ESSENTIAL ELECTRICAL LOAD OFF
(EXCEPT MASTER SWITCH)
ALTERNATOR CIRCUIT BREAKERS (as req.) CHECK / RESET
AFFECTED ALTERNATOR SWITCH ON
MASTER SWITCH OFF, wait 1 MIN, then ON
ELECTRICAL LOAD (50 amp max) MINIMIZE

ENGINE, PROPELLER and INSTRUMENTS

PROPELLER OVERSPEED

THROTTLE (affected engine) IDLE
AIRSPEED (pitch for V_y and maintain) 92 KIAS
PROPELLER (affected engine) **(DO NOT FEATHER)** LOW RPM
THROTTLE (affected engine) SLOWLY INCREASE
PROPELLER (affected engine) SLOWLY INCREASE

THROTTLE (affected engine) (maintain) BELOW 2700 RPM
REDUCED AIRSPEED AND POWER MAINTAIN

UNFEATHERING / AIR RESTART

FUEL SELECTOR (inop engine) ON
FUEL PUMP (inop engine) OFF
THROTTLE (inop engine) OPEN $\frac{1}{2}$ inch
PROPELLER (inop engine) (3/4 travel) FORWARD
MIXTURE (inop engine) FULL RICH
MAGNETOS (inop engine) ON
STARTER (as required, until prop windmills) ENGAGE

- IF THE ENGINE DOES NOT START -

FUEL PUMP (inop engine) ON FOR 3 SECONDS, then OFF
STARTER (as required, until prop windmills) ENGAGE

- AFTER ENGINE STARTS -

ENGINE INSTRUMENTS CHECK
THROTTLE (affected engine) (until warm) REDUCED POWER
ALTERNATOR (affected engine) ON
COWL FLAPS ADJUSTED

LOW VACUUM INDICATION

(below 4.5 " Hg)

VACUUM ANNOUNCIATORS CHECK
ENGINE RPM INCREASE TO 2700 RPM
ALTITUDE (if possible) DESCEND
VACUUM GAUGE (4.5" hg) MONITOR

LANDING GEAR and TIRES

MANUAL LANDING GEAR EXTENSION (normal extension failed, one or more green lights fail to illuminate)

CIRCUIT BREAKERS (as required) CHECK / RESET
MASTER SWITCH ON
ALTERNATORS ON / CHECK OUTPUT
NAVIGATION LIGHTS (daytime) OFF
LANDING GEAR SELECTOR SWITCH DOWN
LANDING GEAR LIGHTS TESTED
(swap bulbs if necessary)

- IF THE BULBS ARE NOT THE PROBLEM -

AIRSPEED (max) 87 KIAS
LANDING GEAR SELECTOR SWITCH VERIFY DOWN
EMERGENCY GEAR EXTENSION KNOB PULL
LANDING GEAR LIGHTS CHECK 3 GREEN
EMERGENCY GEAR EXTENSION KNOB LEAVE OUT
(until maintenance action)

GEAR UP EMERGENCY LANDING (manual gear extension failed)

NO FLAP APPROACH EXECUTE
RUNWAY ASSURED
MASTER SWITCH (before touchdown) OFF
MAGNETO SWITCHES (4) (before touchdown) OFF
FUEL SELECTORS (2) (before touchdown) OFF
TOUCHDOWN MINIMUM AIRSPEED
EVACUATION COMPLETE

LANDING WITH A FLAT MAIN TIRE

BEFORE LANDING CHECKLIST EXECUTE
RUNWAY SELECTION CROSSWIND OPPOSITE FLAT TIRE
TOUCHDOWN POINT RWY SIDE OPPOSITE FLAT TIRE
TOUCHDOWN INFLATED TIRE FIRST
NOSEWHEEL LOWER IMMEDIATELY
AILERON (as required) LIGHTEN LOAD ON DEFECTIVE TIRE