



Diamond DA-42 Twin Star Checklist

SAFETY CHECK

Parking Brake ON
 Gear/Flap Handles CHECKED
 Hobbs Meter CHECKED
 Emergency Equipment CHECKED
 Papers ABOARD
 Electrical Master ON
 Fuel/Tach CHECKED
 Stall Warn/Lights CHECKED
 Electrical Master OFF

If Icing Conditions Exist

De-Ice Fluid CHECK Full
 De-Ice HIGH/CHECK/OFF
 External Ice Lights ON/CHECK/OFF
 Pitot Heat ON/CHECK/OFF
 Stall Warning CHECK

Flight Instruments (say Brief*)

Check, set

Flight Instrument Brief

-Airspeed inactive-Attitude inline with horizon
 -Altimeter within 75ft of fld elevation
 Turn Coord. Level, ball centered
 -Heading Indicator aligned with compass
 -Vertical Speed indicator at zero point

BEFORE START

Pre-flight Check COMPLETE
 Baggage/Tow Bar SECURED
 Fuel Selector(2) ON
 Power Levers IDLE
 Parking Brake SET
 Alternate Air CLOSED
 Manual Gear Extension Handle PUSHED
 Gear Selector DOWN
 Avionic Master OFF
 Electric Master OFF
 Engine Master (2) OFF
 Pitot Heat OFF
 Alternate Static CLOSED
 Alternators (2) ON
 ECU Swap (2) AUTO
 All Light Switches OFF
 Emergency Switch OFF/GUARDED
 ELT Armed
 Circuit Breakers CHECKED IN
 Flap Selector UP
 Electric Master ON
 Rudder, Trim, Controls CHECKED
 Gear Warning (Fire Detector) TEST

If Icing Conditions Exist

De-Ice ANNUN TEST ON
 De-Ice Level LO caution CHECKED ON
 Windshield De-Ice PUMP 1 + 2 CHECKED

FIRST FLIGHT OF THE DAY

Variable Elevator Backstop CHECK
 Flaps LDG
 Control Stick LIGHTLY HOLD AFT
 Power Levers MAX
 Check Backstop Limit Decreasing
 Power Levers IDLE
 Check Backstop Limit Increasing

Flaps UP
 Seat Belts/Shoulder Harnesses FASTENED
 Passengers BRIEFED
 Rear Door LATCHED
 Front Canopy POS 1 or 2
 G1000 POWERED
 PFD/MFD BACK-UP MODE
 MFD ENGINE – FUEL
 Fuel Quantity CHECKED, RESET/SET IF REQ.
 Fuel Temperature CHECKED
 MFD ENGINE – SYSTEM

If Icing Conditions Exist

De-Ice Pressure LO caution CHECKED ON
 De-Ice ANNUN TEST OFF

ENGINE START

ACL (Strobe) ON
 Engine Master ON
 Annunciations/Eng. Instruments CHECKED
 Glow Indication OFF
 Prop CLEAR
 Start Key START
 Oil Pressure OUTSIDE RED within 3 sec.
 Voltage, Electrical Load CHECKED
 Annunciations/Eng. Instruments CHECKED

AFTER START

Oil Pressure Green
 RPM 900 +/- 20
 Avionics Master ON

WARM UP TIME

Idle 2 minutes
 1400 RPM until Oil >50°
 until Coolant >60°

Fuel Selectors (2) X-FEED
 Pitot Heat ON, ANNUNCIATION/AMPS, CHECK
 Pitot Heat OFF
 PFD/MFD NORMAL MODE



FMS Setup.....COMPLETED
 Auto Pilot Test* COMPLETED
 Position LightsON as Required
 Fuel Selectors (2)..... ON/FUEL RST
 Altimeters (3)SET
 Standby Horizon CHECKED
 Transponder ON/CHECKED
 Parking Brake RELEASED
 Taxi Lights.....ON as Required

BEFORE TAKEOFF

Parking BrakeSET
 Flight Controls CHECKED
 Seat Belts SECURE
 Elevator Trim T/O SET
 Fuel Selectors (2)..... ON
 Power Levers (2) IDLE
 Rudder TrimSET
 Doors/Canopy LOCKED
 Warning LightsOFF
 Flaps UP
 Engine Instruments CHECKED
 Fuel Temperature MIN 5°C
 Circuit Breakers CHECKED
 ECU Test PERFORM

ECU TEST

ECU test buttonPress & Hold
 "L/R ECU A/B Fail"ON
 RPM Increasing
 OFF
 "L/R ECU B Fail"ON
 Prop Cycling
 OFF
 "L/R ECU A Fail"ON
 Prop Cycling
 OFF
 RPM IDLE
 ECU Test Button RELEASE

ECU Swap (2) ECU B, ENGINES CHECKED
 ECU Swap (2) AUTO
 Pitot Heat/Ice Protection AS NECESSARY
 Flight Instruments CHECK
 Radio/Nav Freq. SET
 Transponder CODE/MODE
 Depart Plan/Verify Rwy BRIEF
 Parking Brake RELEASED

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(Review by flow before crossing hold short line)

Fuel SelectorsON
 FlapsUP
 GearDOWN
 Doors ClosedWARNING LIGHT OFF
 Landing LightON

AFTER TAKEOFF

Power90%
 Gear UP
 Flaps UP
 Landing LightOFF

CRUISE

PowerSET
 Engine System CHECKED
 Fuel TRANSFER IF NECESSARY

DESCENT AND APPROACH

COM/NAV/FMSSET
 Altimeter (3)SET
 Seat BeltsON
 Fuel Qty/Selectors (2) CHECKED
 Approach Brief COMPLETE
 Passenger Brief COMPLETED
 Exterior LightsON
 Parking Brake CHECK RELEASED

LANDING

Flaps APPROACH SETTING
 Gear 3 GREEN

AFTER LANDING

Flaps UP
 External Lights AS REQUIRED
 Pitot Heat OFF
 De-Ice Systems OFF

SHUTDOWN

Parking BrakeSET
 Power Levers IDLE 2 MIN.
 Avionic Master OFF
 Electrical Equip OFF
 Engine Masters (2) OFF
 ACL (strobe) OFF
 Tach Reading RECORDED
 Electric Master OFF
 Interior Light OFF
 Start Key REMOVED

Controls SECURED
 Aircraft TIED DOWN
 Discrepancies NOTED