

The following is a guideline

FUSELAGE

1. Bolt fuselage sections together (Level Fuselage, be sure that Flight Surfaces attached to frame are level)
2. Install horizontal main and aft spar carry thrus (top angles should not be installed until horizontal fwd and aft spars are in place.)
3. Fit hat sections over fuselage tubes
4. Bond hat sections in place
5. Install station #2 – formers and bulkheads
6. Install station #3 – formers and bulkheads
7. Fit side skin B/C (on LH skin cut out baggage door area if required. For V6 powered aircraft baggage area will need to be double walled.)
8. Fit side skin D
9. Fit side skins E (cut out aft baggage door, if required)
10. Fit side skins F
11. Fit forward cockpit floor & stiffener
12. Fit fwd rudder pedal aft support
13. Fit main cockpit floor & stiffeners
14. Fit forward cockpit floor side supports
15. Fit forward cockpit inner panels
16. Fit rudder pedal tracks
17. Assemble and fit center pedestal
18. Install forward rudder pedal assembly
19. Install master brake cylinders on fwd rudder pedals
20. Fit all upper bulkheads
21. Modify bulkhead U5 for instrument clearance
22. Fit instrument panel (use to stiffen U5 while attaching stringer)
23. Install stringer from U2-U5
24. Fit top skin D
25. Fit glare shield
26. Fit wind screen
27. Trim top skin D to glare shield – We recommend trimming so that the instrument panel will fit up to the glare shield. Trim along the attachment line of the side windcreens up to the instrument panel former. (Cut out access holes as desired)
28. Install top skin D
29. Install glare shield
30. Fit top skin C
31. Fit top skin B
32. Install hat sections for throttle and radiator exhaust control

33. Install rudder bellcrank – trim bulkhead L9 for clearance
34. Install elevator bellcrank
35. Install and bond forward floor, main floor & fwd cockpit interior skins
36. Install tail wheel
37. Install tail wheel retract system
38. Position bulkheads L8-L14
39. Attach flange doublers to L2, L3, L8, L9, and L10 (If using fibreglass belly, it may be best to install doublers after belly has been fit.)
40. Fit & install belly stringers
41. If radiator is going in belly area, install now, also fit and install belly stringers
42. Fit and install turtle deck (don't bond aft edge at this time, vertical fairings still need installed)
43. Fit & install outer cockpit sides
44. Remove center pedestal assembly (Install all switches and controls)
45. Install control stick assembly
46. Route radiator tubes
47. Route hydraulic lines
48. Route brake lines
49. Bond and rivet center pedestal assembly in place
50. Install baggage compartment doors and hinges
51. Route electrical wiring from tail forward
52. Fit & Install vertical stabilizer to the fuselage (use plumb bob and level to ensure vertical is plumb and true.)
53. Build horizontals in carry thru's (attach top angles once fwd & aft spars are in place.)
54. Remove horizontals
55. Install vertical stabilizer fairing skins
56. Install dorsal fin
57. Fit side skin G (Not required for fiber glass)
58. Fit belly skins (Not required for fiber glass)
59. Fit and permanently install 'K aft' skin
60. Fit and install tail wheel doors
61. Install radiator plenuming
62. Fit and permanently install 'K forward' skin
63. Install bottom aft K skin
64. Install F and G skins
65. Install side skins E
66. Install belly
67. Fit and install top skins B, C and D
68. Fit and install bottom skins B and C
69. Install instruments in instrument panel

70. Install center pedestal
71. Install Pitot static system
72. Install engine control cables
73. Install cockpit interior skins
74. Install throttle quadrants
75. Install D skins
76. Install side skins B and C
77. Install belly scoop
78. Install horizontals
79. Install instrument panel
80. Cover the rudder and elevators with fabric
81. Install elevator push/pull tubes
82. Install elevator control system
83. Install engine
84. Install engine cowling & station # 1

OUTER WING PANEL (It is recommended to build the wings while attached to the center section)

1. Fit wing ribs
2. Fit aft spars and stringers
3. Align rib #1 with inboard template
4. Fit intermediate webs
5. Assemble and fit bell crank assemblies
6. Fit doubler plates and aft spar wing fitting
7. Fit inboard aileron hinge
8. Fit outboard aileron hinge (using wingtip template)
9. Install pitot tube (right wing only)
10. Disassemble, clean, deburr, final install above items
11. Fit lower wing skin
12. Fit upper wing skin
13. Cut wing inspection holes
14. Fit flap brackets
15. Remove wings from center section at this time
16. Disassemble, clean, deburr, final install items above
17. Ailerons can be installed at this time

CENTER SECTION

1. Finish main gear and linkage assemblies, paint, etc.
2. Install main gear locks
3. Trim leading edge skins

4. Install fuel tanks
5. Install fuel lines, center section
6. Install inboard flap bracket
7. Install limit switch brackets
8. Final installation of leading edge skin and top skins
9. Fabricate main gear doors and install
10. Attach center section to fuselage.

ONCE CENTER SECTION HAS BEEN MATTED TO THE FUSELAGE

1. Install wings to trial fit the flaps and ailerons, adjust accordingly
2. With flaps in place, position the wing root fairings. (Should overlap from fwd – aft)
3. Route hydraulic, brake, and fuel lines to finish systems (bleed lines accordingly)

FINISHING AIRCRAFT ASSEMBLY

1. Position fiberglass tips and fairings – Install accordingly (Vertical and rudder tips should be at the same angle as turtle deck)

By

Date

Checked

Date

Approved

Date