



The BD-5 People.

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FLIGHTLINE Series BD-5B Builder Assistance Options

To keep the price of the standard FLS BD-5B low, the builder must complete more of the construction and assembly work. Although our FLS BD-5B kit includes all parts and materials, and the primary structural components (fuselage, wings, flaps and ailerons, main landing gear, etc.) are predrilled, it can be time consuming to complete all the small detail tasks. The idea behind our Builder Assistance Option 1 is to extend the alignment and drilling in the FLS BD-5B to include its secondary structures while also completing some of the pre-assembly work. This will not only ensure that the parts are located properly but will also streamline construction by a few hundred hours.

Our Option 2: Advanced Quickbuild Features package includes all items in Option 1, plus adds the location and drilling of several key critical alignments, and the assembly of the fuselage to "on-the-gear" stage. This will save several hundred construction hours. At this point, the builder will complete the windshield/canopy install, rig the controls, install the engine and its systems (electrical, fuel, etc.), fit and install the wing fillets, instrument panel, and other similar construction details. To make it easier to rig the controls and install the powerplant, 4 fuselage panels are left open. While experienced builders like for us to save them construction time, it is the first time builders who especially appreciate these additional services.

Builder Assistance Option 1: Basic Quickbuild Features

The following listed sub-assemblies are made ready for installation:

1. FU35 Spreader Bar assembly.
2. Nose gear box.
3. FU12 Tee Splice.
4. FU137/138 Wing Fillet and FU141/142 Rib assembly.
5. LG97 M.L.G. Wheel Well Access Plate (2) assembly.
6. LG34 Nose Gear and Retract Mechanism assembly.
7. LG72 Nose Gear assembly.
8. LG73 Nose Gear Door assembly.
9. LG80 M.L.G. Pulley assembly.
10. LG132 M.L.G. Cable Pulley, R.H., assembly.
11. LG133 M.L.G. Cable Pulley, L.H., assembly.
12. CR33/34 Rudder Pedal/Brake assembly.
13. CR31 Rudder Stop assembly.
14. CR35 Rudder Evener System.
15. LG183 Landing Gear Handle assembly.
16. CA7 Stick and Stick Box assembly.
17. CA9 Aileron Torque Tube assembly.
18. CA23/24 Aileron Torque Tube Bracket assembly.
19. CA15 Aileron Crossover Torque Tube assembly.
20. CA13 Control Rod assembly (2).
21. CHS11/12 Aft H.S. Pulley Mount assembly.
22. Electric Trim System assembly.
23. CR4 Rudder Pulley Mount assembly.
24. CC16 Foreword Pivot Arm assembly (2).
25. CC25/FU7 Aft Pivot Arm assembly.
26. Basic cockpit floors and channels.
27. Drive support sheetmetal structure.

The following items are located and drilled in preparation for final closing or assembly. (May include dimpling, countersinking, deburring, installation of nutplates, etc. as needed.)

1. Nose gear box to fuselage"
Includes:
 - Pitot tube.
 - LG73 nose gear door to fuselage.
 - Basic cockpit floor support structure.
 - Heel skid plates to nose gear box.
2. Upper console support angles.
3. Shoulder harness/LG89A support structure.
4. Engine compartment door frames.
5. FU23/24 Longerons
6. Aft fuselage stiffeners and bulkheads.
7. NACA jet scoops.
8. Engine compartment cooling scoops.
9. Engine compartment floor and FU1 angle.
10. Forward H.S. Pulley Mount assembly.

11. Vertical stabilizer attachment bulkheads.
12. Rudder pulley assembly to vertical stabilizer.
13. CR12 forward rudder conduit support.
14. CR13 aft rudder conduit support.
15. CR7 Rudder Horn to rudder.
16. Aft horizontal stabilizer pulley assembly.
17. H.S. center spar pivot weldment to fuselage.
18. Fit H.S. center spar to pivot weldment.
19. Electric trim assembly.
20. Drive support structure to FU6 Bulkhead.
21. FU99 Center Spar to fuselage.

Builder Assistance Option 2: Advanced Quickbuild Features

Fuselage partially assembled to "On the Gear" stage. Includes all the items listed in Builder Assistance Option 1. Includes installation or assembly of the following:

Chapter 1: FUSELAGE

1. Nose gear box.
2. FU21/22 Stiffeners.
3. FU29/30 Doublers.
4. FU17/18 Longerons.
5. FU23/24 Longerons.
6. Aft fuselage vertical closure stiffeners.

Chapter 2: VERTICAL STABILIZER and RUDDER

1. Vertical stabilizer attachment bulkheads.
2. Locate and drill vertical stabilizer to support structure.

Chapter 3: WINGS

1. Wing spars honed and fitted to center spar.
2. Wings drilled to center spar.
3. Taper ream wing locating holes.

Chapter 4: FLAP and AILERONS

1. Fit flap and ailerons to wing rear spar.
2. Drill and net trim flap and aileron trailing edge.

Chapter 5: HORIZONTAL STABILATOR

1. H.S. center spar and pivot mechanism to fuselage.
2. Aft fuselage bulkheads.
3. Locate and drill H.S.'s to H.S. center spar.

Chapter 6: LANDING GEAR

1. Install and rig nose retract assembly.
2. Center spar to fuselage.
3. Main landing gear retract mechanism.
4. LG80 M.L.G. Pulley assembly.
5. M.L.G. Crossover Pulleys.

Chapter 7: CONTROL SYSTEM

1. Assembled on nose gear box:
 - Landing gear actuating handle.
 - Rudder pedals.
 - Rudder evener system.
 - Brake master cylinders.
 - Brake fluid reservoir.
 - Landing gear cable pulleys.
 - Rudder pedal outboard mounts.
2. Landing gear cables.
3. Stick box assembly with CA9 Aileron Torque Tube to fuselage.
4. CA21 Bulkhead.
5. CA23/24 Aileron Torque Tube Bracket assemblies to fuselage.
6. H.S. forward pulley system.
7. H.S. aft pulley.
8. Electric trim system

Chapter 8: COCKPIT and CANOPY CONSTRUCTION

1. Windshield attachment structure.
2. Basic cockpit floor.
3. Upper console attachment angles.

Chapter 10: POWERPLANT

1. Basic engine support structure.
2. NACA scoops and inlet ramps.
3. Extractor box.
4. Drive support to FU6 Bulkhead.
5. Drive system.
6. FU66 Bulkheads.