

Appendix D: REACTION 54 COMPLETE PARTS LIST

Some parts may be stuck together with a spray adhesive used in manufacturing. They should be easy to pry apart. Sand them lightly to remove residue.

BALSA STICKS

4	3/32 x 3/8 x 36	Balsa	Capstrips, Wiring Rack
4	3/16 x 3/8 x 36	Balsa	Trailing Edge Spars
3	5/16 x 5/16 x 36	Balsa	Longerons, Rudder Caps, Braces
1	5/16 x 1/2 x 36	Balsa	Fin Posts, Temporary Braces
1	1/4 x 1 x 36	Balsa	Wiring Rack, Tank Rails, Tube Guides
1	3/8 x 3/8 x 36	Balsa	Stabilizer Leading Edge
2	3/8 x 3/8 x 36	Balsa	Shaped Leading Edges
2	1/2 x 9/16 x 24	Balsa	Shaped Trailing Edges - Outboard
2	1/2 x 11/16 x 24	Balsa	Shaped Trailing Edges - Inboard
4	1/2 Triangle x 36	Balsa	Corner Reinforcements
2	1/2 Triangle x 36	Balsa	Corner Reinforcements (trimmed edge)
1	3/4 Triangle x 18	Balsa	Landing Gear Mount Reinforcements

HARDWOOD STICKS

2	1/8 x 3/8 x 12	Lite-Ply	Reinforcements
2	1/4 x 3/8 x 12	Bass	Servo Rails, Rear Hatch Rails, J-Bolt Pads
4	1/4 x 1/2 x 36	Spruce	Top Main Spar, Top & Bottom Stub Spar
2	1/4 x 1/2 x 36	Spruce	Bottom Main Spar (beveled edge)
2	1/4 x 1/2 x 12	Spruce	Top Main Spar Doubler
2	1/4 x 1/2 x 12	Spruce	Bottom Main Spar Doubler (beveled edge)

BALSA SHEETS

6	3/32 x 3 x 36	Balsa	Trailing Edge Sheeting, Shear Webs
6	3/32 x 4 x 7-1/2	Balsa	Wingtip Sheeting, Fuselage Sheeting
18	3/32 x 4 x 36	Balsa	LE & Center Sheeting, Fuselage Sheeting
4	1/4 x 4 x 36	Balsa	Fuselage Sheeting

WING RIBS

2	3/32 x 20-1/4	Balsa	W-1 Wing Rib
2	3/32 x 19-3/4	Balsa	W-2 Wing Rib
2	3/32 x 19	Balsa	W-3 Wing Rib
2	3/32 x 18-1/2	Balsa	W-4 Wing Rib
2	3/32 x 17-3/4	Balsa	W-5 Wing Rib
2	3/32 x 17	Balsa	W-6 Wing Rib
2	3/32 x 16-1/4	Balsa	W-7 Wing Rib
2	3/32 x 15-1/2	Balsa	W-8 Wing Rib
2	3/32 x 15-1/2	Balsa	W-9 Wing Rib
2	3/32 x 14-1/2	Balsa	W-10 Wing Rib
2	3/32 x 13-3/4	Balsa	W-11 Wing Rib
2	3/32 x 13	Balsa	W-12 Wing Rib
2	3/32 x 12-3/8	Balsa	W-13 Wing Rib
2	3/32 x 12-1/4	Balsa	W-14 Wing Rib

FUSELAGE PARTS BAG

2	5/16 x 2-1/2 x 2-1/2	Balsa	Servo Mount Braces (big triangles)
2	1/8 x 1-5/8 x 2-3/4	Lite-Ply	D-1 Receiver Shelf Positioner
2	1/8 x 2-1/4 x 3-5/8	Lite-Ply	D-2 ECU Shelf Positioner
1	1/8 x 2 x 3-1/2	Lite-Ply	H-2 Hatch Bulkhead
1	1/8 x 1-5/8 x 2-1/2	Lite-Ply	F-1
1	1/8 x 4-1/2 x 6-7/8	Lite-Ply	F-3 & H-3 (to be separated by builder)
1	1/8 x 5 x 8	Lite-Ply	F-4 & H-4 (to be separated by builder)
1	1/8 x 5 x 8-3/8	Lite-Ply	F-5
2	1/8 x 1-3/4 x 5	Lite-Ply	F-5D (doublers for F-5)
1	1/8 x 5 x 5-1/2	Lite-Ply	F-6
1	1/8 x 1-1/2 x 4-3/8	Lite-Ply	F-7 Front Turbine Mount Bulkhead
1	1/8 x 1-1/2 x 3-7/8	Lite-Ply	F-8 Rear Turbine Mount Bulkhead
1	1/8 x 2-1/2 x 4-3/4	Lite-Ply	Servo Mount
1	1/8 x 2-1/2 x 3	Lite-Ply	Servo Mount Doubler
2	1/8 x 2 x 3	Lite-Ply	Hatch Tongues
1	1/8 x 3-3/4 x 4-1/4	Lite-Ply	Receiver Shelf
1	1/8 x 3-7/8 x 4-3/4	Lite-Ply	ECU Shelf
1	1/8 x 5 x 8-7/8	Lite-Ply	Tank Compartment Top
1	1/32 x 1/2 x 1	AC Ply	Rear Hatch Tab
1	3/32 x 4-1/4 x 5	AC Ply	Turbine Mount
2	3/16 x 5/8 x 1-1/4	AC Ply	Latch Retainers (grooved edge)
1	3/16 x 1-1/2 x 4	AC Ply	Turbine Mount Doubler
1	1/4 x 1/2 x 3	AC Ply	H-1 Front Hatch Bulkhead
1	1/4 x 1-1/2 x 3-1/2	AC Ply	F-2 Nose Retract Mount
1	3/8 x 1-1/2 x 2-3/8	AC Ply	Wing Mount
1	3/8 x 3/4 x 1	Poplar	Pushrod Housing Clamp
1	3/8 x 2 x 2	Poplar	Thrust Wedge

WING PARTS BAG

1	3/8 x 1-1/4 x 3	Balsa	Material for Fuselage Fairing Sides
2	1/8 x 4-1/2 x 5-1/2	Lite-Ply	Wheel Well Frames and Floors
4	1/8 x 2-1/4 x 5-1/2	Lite-Ply	W-6D Rib Doublers
2	1/8 x 2-3/4 x 3-1/2	Lite-Ply	Dowel Block Doublers (partial rib)
2	1/8 x 2-3/8 x 3	Lite-Ply	Flap Servo Mounts
2	1/8 x 2-7/8 x 4	Lite-Ply	Aileron Servo Mounts
2	1/8 x 1/2 x 4-1/2	Lite-Ply	Wing Hatch Rails
2	1/8 x 2-1/2 x 3	Lite -Ply	SWDG Shear Web / Dihedral Gauge
1	1/8 x 1-1/2 x 5-1/2	Lite-Ply	Fuselage Fairing Face Plate
6	1/16 x 1 x 1	AC Ply	Control Horn Pads
1	3/32 x 15/16 x 2-1/4	AC Ply	Wing Bolt Plate
2	1/8 x 4-1/2 x 4-1/2	AC Ply	Retract Mounts
4	1/8 x 1/3/4 x 5-1/2	AC Ply	Retract Mount Doublers
2	1/4 dia. x 4	Birch	Wing Dowels

REACTION 54 PARTS LIST - CONTINUED

MACHINED Balsa FUSELAGE PARTS

2	1/4 x 4 x 36	Balsa	SIDE-1 (notched, left and right)
2	1/4 x 1 x 10	Balsa	SIDE-2
2	1/4 x 4 x 36	Balsa	SIDE-3
2	1/4 x 2 x 19	Balsa	SIDE-4
2	1/4 x 4 x 27	Balsa	Hatch Side/SIDE-5
1	1/4 x 3 x 13-1/2	Balsa	Stabilizer Mount
1	2-1/4 x 3 x 3	Balsa	Nose Block

MACHINED Balsa FIN/RUDDER PARTS

1	5/16 x 3 x 10	Balsa	FIN-1
1	5/16 x 3 x 8-1/2	Balsa	FIN-2
1	5/16 x 3 x 6-3/4	Balsa	FIN-3
1	5/16 x 3 x 5-1/4	Balsa	FIN-4
1	5/16 x 3 x 3-1/2	Balsa	FIN-5
1	5/16 x 3 x 1-3/4	Balsa	FIN-6
1	5/16 x 2 x 25	Balsa	FIN-7 Fin Front
1	5/16 x 3 x 10-3/8	Balsa	Rudder (tapered and beveled)

MACHINED Balsa STAB/ELEVATOR PARTS

2	3/8 x 2-1/4 x 5	Balsa	STAB-1
1	3/8 x 2-3/4 x 22	Balsa	STAB-2
3	3/8 x 2-3/4 x 26	Balsa	STAB-3
2	3/8 x 2-2/4 x 9-1/2	Balsa	STAB-4 Stabilizer Tips
1	3/8 x 2-1/4 x 26	Balsa	Elevator (tapered and beveled)

MACHINED Balsa WING PARTS

2	1 x 2-1/2 x 3	Balsa	Wing Dowel Supports
1	1 x 3 x 4	Balsa	Wing Bolt Supports
2	1-1/2 x 2 x 15-1/2	Balsa	Wingtips
2	5/8 x 2-1/2 x 6	Balsa	Tip TE Extensions (tapered)
1	5/8 x 2-1/2 x 30	Balsa	Ailerons (tapered and beveled)
2	3/4 x 3 x 3-1/2	Balsa	Root TE Extensions (tapered)
1	3/4 x 3 x 32-1/2	Balsa	Flaps (tapered and beveled)

LOOSE PLYWOOD PARTS

2	1/8 x 7-1/4 x 35	Lite-Ply	Fuselage Doublers
2	1/8 x 3-3/4 x 10	Lite-Ply	Boat Tail Sides
2	1/8 x 5-1/4 x 9-1/2	Lite-Ply	Boat Tail Formers
1	1/8 x 2-3/4 x 9-1/2	Lite-Ply	Boat Tail Jig
2	1/32 x 1-7/8 x 12	AC Ply	Wheel Well Liner
1	1/4 x 2 x 10	AC Ply	Rear Dihedral Brace
1	1/4 x 2 x 15	AC Ply	Front Dihedral Brace

HARDWARE

12	#2 x 3/8 Truss Head	Steel	Sheet Metal Screw (wing hatches)
4	#2 x 1/2 Pan Head	Steel	Sheet Metal Screw (rudder control horn)
20	#2 x 3/4 Pan Head	Steel	Sheet Metal Screw (all other control horns)
2	#4 x 3/4 Flat Head	Steel	Sheet Metal Screw (wire rack)
4	#6 x 1 Pan Head	St Steel	Sheet Metal Screw (turbine mount)
6	4-40	Steel	Hex Nuts (use for clevis jam nuts)
2	1/4 -20 x 3 Rd Head	Alum	Wing Bolts (may be shortened to 2.5")
2	1/4 i.d. x 3/4 o.d.	Nylon	Flat Washers (for wing bolts)
2	4-40	Steel	Threaded Couplers (elevator, rudder)
6	4-40	Steel	Solder Clevis (1 per control surface)
6	4-40	Steel	Sure-Lock Clevis (1 per control surface)
6	3/16 x 1/4	Steel	Locking Clips (1 per clevis)
3	Short (3/4")	Steel	Control Horns (2 flap, 1 rudder)
3	Long (1-1/8")	Steel	Control Horns (2 aileron, 1 elevator)
6	5/8 x 7/8	Nylon	Control Horn Backing Plates
1	5/8 x 1-7/8	Metal	Hatch Latch (assembled)
4	4-40 x 6	Steel	Threaded Rod (2 aileron, 2 flap)
8	5/8"	Brass	Cup Hooks (4 rear hatch, 4 hold downs)
1	1/2" i.d. x 1" o.d.	Rubber	Grommet (for turbine wiring at fuselage)
20	#10	Rubber	Rubber Bands (wire rack, rear hatch)
32	3/4 x 1	Secret	Sig Easy Hinges (one extra)

MISCELLANEOUS

4	36 x 48	Paper	Full-Size Plans - Wing Panels, Fuselage
1	24 x 36	Paper	Full-Size Plan - Stabilizer
1	40 Pages	Paper	Instruction Book with Color Photos
3	8-1/2 x 14	Paper	Servo Lead Tubes
1	60 oz.	Nylon	Du-Bro Fuel Tank (with hardware)
1	3/16 x 3 x 3	Foam	Fuel Tank Pad - Front
1	1/2 x 4-3/4 x 9	Foam	Fuel Tank Pad - Top
1	.003 x 6 x 8	St Steel	Heat Shield Material
1	1-1/2 x 10	Alum	Tape (to finish edge of heat shield)
1	2 x 56	Glass	Fiberglass Tape (for wing center joint)
1	1-3/4 x 16	Vinyl	Graphic - Reaction 54 Logo (black)
1	2-1/2 x 9	Vinyl	Graphic - BTE Logos (black)
1	3/32 dia. x 98	Steel	Stranded Cable (elev & rud linkage)
1	3/16 o.d. x 98	Nylon	Cable Housing (nylon tube)
1	4-1/4 x 11	Paper	Template Sheet (blue card stock)
1	.090	Alum	Turbine Mounting Bracket*

*Several Styles Available to Suit Different Turbines