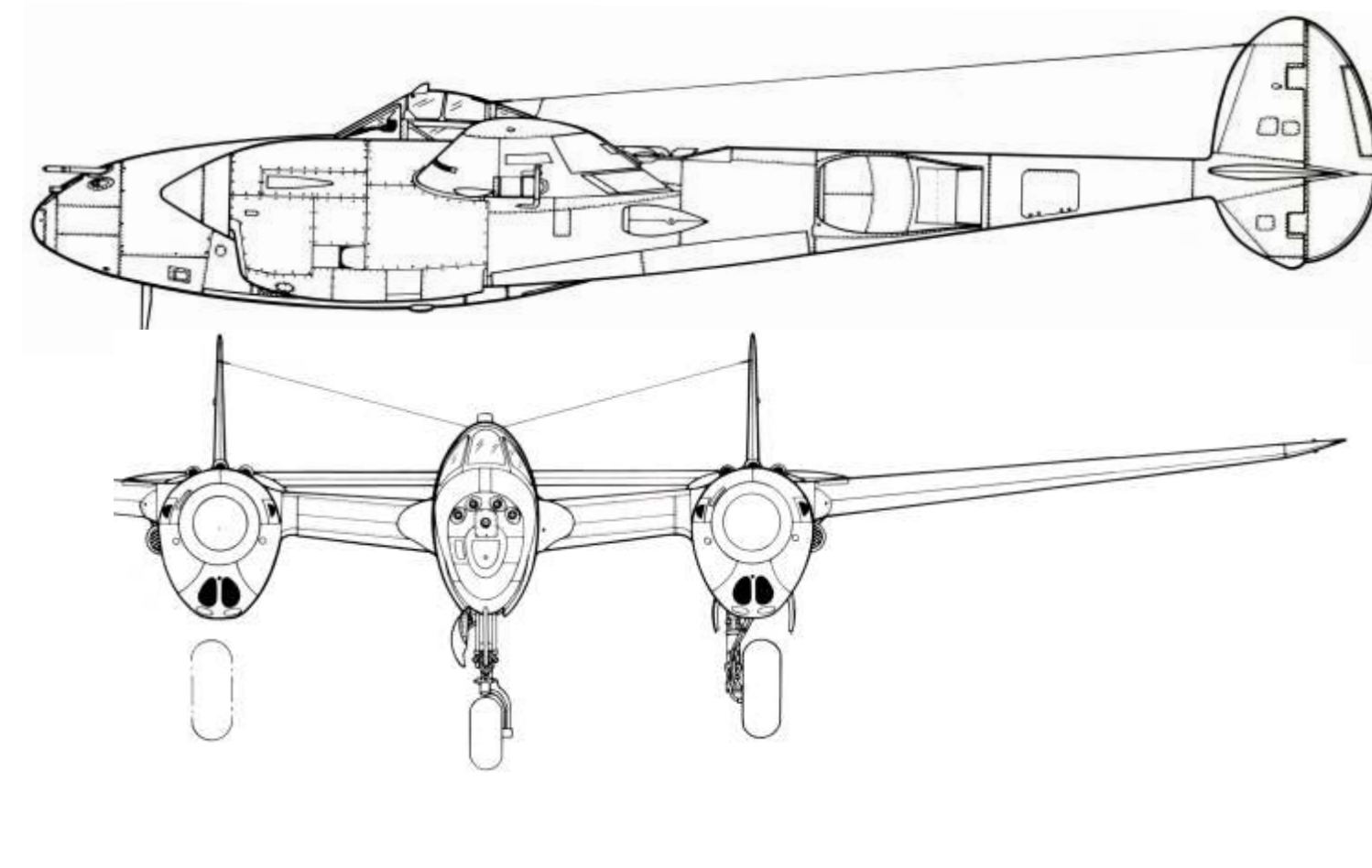


# P-38 LIGHTNING

Radio control model

## INSTRUCTION MANUAL



Wingspan approx. 83 in.  
 Fuselage length approx. 57.5 in.  
 Glow Engine 7.45cc 2T (11.5cc 4T (X2))  
 Electric Motor 870 Watt Brushless motor x2  
 Radio 6 Channel / 10 Servos

**WARNING!** This radio controlled model is NOT a toy. If modified or flown carelessly it could go out of control and cause serious human injury or property damage. Before flying your airplane, ensure the air field is spacious enough. Always fly outdoors in safe areas and seek professional advice if you are inexperienced.

### REQUIRED ITEMS

Minimum 6 channel radio for airplane / 8-10 servos. 46 - 50 cc (x2) 7.45cc (x2) 60 - 70 cc (x2) 10cc - 11.5cc (x2)

Electric Retract: VQ-ARE 185  
 Nose gear: Extracraft/Motors  
 Main gear: Extracraft/Motors

Connector  
 Silicone tube  
 Extension cord

### GLUE

Cyanoacrylate Glue (CA)  
 Silicon Glue  
 Epoxy A  
 Epoxy B (5min-Typ)

Hobby knife  
 Phillips screw driver  
 Hex Wrench  
 Needle nose Pliers  
 Scissors  
 Awl  
 Sander  
 Wire Cutters

If exposed to direct sunlight and / or heat, wrinkles can appear. Storing the model in a cold place will let the wrinkles disappear. Otherwise, remove wrinkles in covering film with a hairdryer, starting with low temperature. You can fix the corners by using a hot iron.

Drill holes using the stated size of drill  
 Take particular care here  
 Hatch-in areas: remove covering film carefully  
 Check during assembly that these parts move freely, without binding (in the case 1.5 mm Ø)  
 Assemble left and right sides the same way  
 These parts must be purchased separately

### CONVERSION TABLE

1.0mm = 3/64"	3.0mm = 1/8"	10mm = 13/32"	25mm = 1"
1.5mm = 1/16"	4.0mm = 5/32"	12mm = 1/2"	30mm = 1-1/8"
2.0mm = 5/64"	5.0mm = 1/4"	15mm = 9/16"	45mm = 1-5/16"
2.5mm = 3/32"	6.0mm = 1/5"	20mm = 13/16"	50mm = 1-7/16"

### 1-Wing

1A: Install the push rod connector onto the aluminum hole of the flap servo arm.

1B: Turn the center wing over. Turn the four screws and move the hatch out of the wing. Attach the flap servo onto the servo mount with the flap push rod attached as shown. Using the pencil, trace around the servo, where it meets the servo mount.

1C: Remove the servo out of the wing. Place the servo into the adhesive tape as shown. With the pencil, trace around the servo, where it meets the adhesive tape.

1D: Adhesive tape. Peel the bottom cover.

1E: Adhesive tape. Peel the top cover.

1F: Servo mount. Pencil line.

1G: Adhesive tape. Peel the top cover.

1H: Servo mount. Pencil line.

1I: Nylon cable tie (included). Move the flap servo arm a few times to make sure it moves freely with out any binding. Do the same way with the left and the right wing.

### 2-Wing

CENTER WING - Bottom-view  
 The center wing with the flaps in closed position.

Note: Do not close the hatches in this time.

CENTER WING - Top-view  
 The center wing with the flaps in open position.

Cut away the covering for the extension cord cut.

Adhesive tape (trace the extension in place).

700mm extension.

CENTER WING - Top-view

### 3-Wing

3A: Connector. Note the connector is left-handed. Note the connector is left-handed.

3B: Servo mount. Note the connector is left-handed. Note the connector is left-handed.

3C: Flap push rod. Note the connector is left-handed. Note the connector is left-handed.

3D: Flap servo. Note the connector is left-handed. Note the connector is left-handed.

3E: Flap servo. Note the connector is left-handed. Note the connector is left-handed.

3F: Flap servo. Note the connector is left-handed. Note the connector is left-handed.

3G: Flap servo. Note the connector is left-handed. Note the connector is left-handed.

3H: Flap servo. Note the connector is left-handed. Note the connector is left-handed.

3I: Flap servo. Note the connector is left-handed. Note the connector is left-handed.

3J: Flap servo. Note the connector is left-handed. Note the connector is left-handed.

3K: Flap servo. Note the connector is left-handed. Note the connector is left-handed.

RIGHT WING - Bottom-view

### 4-Wing

4A: CENTER WING - Bottom-view. 700mm extension.

4B: CENTER WING - Bottom-view. 700mm extension.

4C: CENTER WING - Bottom-view. 700mm extension.

4D: CENTER WING - Bottom-view. 700mm extension.

4E: CENTER WING - Bottom-view. 700mm extension.

4F: CENTER WING - Bottom-view. 700mm extension.

4G: CENTER WING - Bottom-view. 700mm extension.

4H: CENTER WING - Bottom-view. 700mm extension.

4I: CENTER WING - Bottom-view. 700mm extension.

4J: CENTER WING - Bottom-view. 700mm extension.

4K: CENTER WING - Bottom-view. 700mm extension.

4L: CENTER WING - Bottom-view. 700mm extension.

4M: CENTER WING - Bottom-view. 700mm extension.

4N: CENTER WING - Bottom-view. 700mm extension.

4O: CENTER WING - Bottom-view. 700mm extension.

4P: CENTER WING - Bottom-view. 700mm extension.

4Q: CENTER WING - Bottom-view. 700mm extension.

4R: CENTER WING - Bottom-view. 700mm extension.

4S: CENTER WING - Bottom-view. 700mm extension.

4T: CENTER WING - Bottom-view. 700mm extension.

4U: CENTER WING - Bottom-view. 700mm extension.

4V: CENTER WING - Bottom-view. 700mm extension.

4W: CENTER WING - Bottom-view. 700mm extension.

4X: CENTER WING - Bottom-view. 700mm extension.

4Y: CENTER WING - Bottom-view. 700mm extension.

4Z: CENTER WING - Bottom-view. 700mm extension.

### 5-Wing

5A: CENTER WING - Bottom-view. 700mm extension.

5B: CENTER WING - Bottom-view. 700mm extension.

5C: CENTER WING - Bottom-view. 700mm extension.

5D: CENTER WING - Bottom-view. 700mm extension.

5E: CENTER WING - Bottom-view. 700mm extension.

5F: CENTER WING - Bottom-view. 700mm extension.

5G: CENTER WING - Bottom-view. 700mm extension.

5H: CENTER WING - Bottom-view. 700mm extension.

5I: CENTER WING - Bottom-view. 700mm extension.

5J: CENTER WING - Bottom-view. 700mm extension.

5K: CENTER WING - Bottom-view. 700mm extension.

5L: CENTER WING - Bottom-view. 700mm extension.

5M: CENTER WING - Bottom-view. 700mm extension.

5N: CENTER WING - Bottom-view. 700mm extension.

5O: CENTER WING - Bottom-view. 700mm extension.

5P: CENTER WING - Bottom-view. 700mm extension.

5Q: CENTER WING - Bottom-view. 700mm extension.

5R: CENTER WING - Bottom-view. 700mm extension.

5S: CENTER WING - Bottom-view. 700mm extension.

5T: CENTER WING - Bottom-view. 700mm extension.

5U: CENTER WING - Bottom-view. 700mm extension.

5V: CENTER WING - Bottom-view. 700mm extension.

5W: CENTER WING - Bottom-view. 700mm extension.

5X: CENTER WING - Bottom-view. 700mm extension.

5Y: CENTER WING - Bottom-view. 700mm extension.

5Z: CENTER WING - Bottom-view. 700mm extension.

### 6-Engine mounts

6A: TOP view. 6B: BOTTOM view.

Align the mark on both mounts with the center mark on the bulk head.

Align the mark on both mounts with the center mark on the bulk head.

4x30mm screw  
 1 Engine thrust on bulk head is already adjust at factory

### 8-Electric Motor

8A: TOP view. 8B: BOTTOM view.

Align the mark on the motor mounting plate with the motor mark on the bulk head.

Using an aluminum motor mounting plate as a template, mark the plywood motor mounting plate where the four holes are to be drilled. Remove the aluminum motor mounting plate and drill a 1/8"(3mm) hole through the plywood at each of the four marks marked. Note: The aluminum motor mounting included with electric motor set.

8C: SIDE-VIEW. 8D: SIDE-VIEW.

Align the mark on both mounts with the center mark on the bulk head.

4x30mm screw  
 5x20mm screw  
 Washer 32

### 10-Hatch

Bottom hatch. 30x4mm nylon tool.

Cut away only the covering.

FUSELAGE - Bottom view. Secure the Bottom hatch in place using the 30x4mm nylon tool.

### 11-Servos

11A: RIGHT FUSELAGE - Top view. Throttle servo tray. Note: Turn the throttle servo tray for other engine if needed.

11B: RIGHT FUSELAGE - Top view. Throttle servo, Elevator servo, Rudder servo.

11C: RIGHT FUSELAGE - Top view. Throttle servo, Elevator servo, Rudder servo.

30x4mm nylon tool

### 12-Rudder

3x20mm screw

2mm

15mm

2mm

### 13-Fixed gear

13A: Main landing gear. 13B: Main landing gear. 13C: Main landing gear. 13D: Main landing gear.

3x12mm screw  
 3x15mm screw  
 3x20mm screw  
 Nylon gear strap  
 Ply gear mount plate x 2  
 Gear support x 2  
 Main landing gear

### 14-Nose gear

4.7mm nose gear. 7mm gear arm. Nose gear push rod. Nose gear rest (plastic). Nose gear rest arm. Nose gear mount. Nose gear arm.

3x20mm screw  
 Washer 4  
 Nut 3mm 4  
 3x3mm screw  
 Nose gear arm

Cut the opening.

3mm

MAIN FUSELAGE - Bottom view

### 15-Main gear (Electric retract)

Must be purchased separately.

FUSELAGE - Bottom view

### 16-Nose gear (Electric retract)

Must be purchased separately.

FUSELAGE - Bottom view

### 17-Horizontal Stabilizer

ABS balance. HORIZONTAL STABILIZER - Top-view.

2mm

Cut away only the covering.

ABS balance

3x20mm screw

### 18-Horizontal Stabilizer

LEFT FUSELAGE. RIGHT FUSELAGE.

Secure the aluminum tube and wooden dowel in place using THIN CA glue.

6x60mm wooden dowel  
 6x60mm aluminum tube  
 6x60mm wooden dowel  
 Aluminum tube 12x105mm

### 19-Horizontal Stabilizer

LEFT FUSELAGE. RIGHT FUSELAGE.

Horizontal stabilizer

### 20-Horizontal Stabilizer

Horizontal stabilizer. 3x15mm screw. 3x15mm screw.

20A: TOP view. 20B: BOTTOM view.

2mm  
 2mm  
 3x15mm screw  
 3x15mm screw

Note: The holes on the bottom of the Horizontal stabilizer are pre-drilled at factory.

### 21-Installing the wing

TOP. BOTTOM.

WING. RIGHT / LEFT FUSELAGE (TAIL BOOM).

6x40 Nylon bolt  
 6x40 Nylon bolt

### 22-Installing the wing shield

RIGHT / LEFT WING SHIELD. WING. RIGHT / LEFT FUSELAGE (TAIL BOOM).

Secure the wing shield in place using 2.2x12mm screws.

### 23-Installing the main fuselage

6x50mm plastic bolt. WING. FIBER GLASS MAIN FUSELAGE.

### 24-Installing the cockpit

Secure the cockpit in place using 2x8mm screws.

FIBER GLASS COCKPIT. FIBER GLASS MAIN FUSELAGE.

### 25-Cowling

2.5x12mm screw. 2.5x12mm screw.

Note: The "L" Cowling for LEFT fuselage and "R" Cowling for RIGHT fuselage (looking from REAR to FRONT and TOP views).

### 26-Gear door

26A: Gear door. 26B: Gear door.

2mm

### 27-Gear door

27A: Gear door. 27B: Gear door.

2mm

### 27B

27B: Gear door. 27C: Gear door.

2mm

### 27C

27C: Gear door. 27D: Gear door.

2mm

### 28-Gear door

28A: Gear door. 28B: Gear door.

2mm

### 28B

28B: Gear door. 28C: Gear door.

2mm

### 28C

28C: Gear door. 28D: Gear door.

2mm

### 29-Gear door

29A: Gear door. 29B: Gear door.

2mm

### 29B

29B: Gear door. 29C: Gear door.

2mm

### 29C

29C: Gear door. 29D: Gear door.

2mm

### 30-Canopy

2x8mm screw. 2x8mm screw.

### 31-Decal

31A: Decal. 31B: Decal.

2mm

### 32-Decal

32A: Decal. 32B: Decal.

100  
 162  
 162  
 100

IMPORTANT: Please do not clean your model with pure alcohol, gasoline or strong solvents, only use benzene or liquid soap with water or use glass cleaner to clean on surface of your model to keep the colour not fade.

32A: Decal is only for one side. 32B: Decal is only for one side. 32C: Decal is only for one side.

1.2.3.4  
 Full top sticker (for all versions)

### 33-Installing the guns

33A: Gun. 33B: Gun.

### 34-Balance

115-120mm. WING RODD.

The Seal C.G. position is 115 - 120mm behind the leading edge.

### 35-Control ranges

AILERON. FLAP. RUDDER. ELEVATOR.

10mm  
 10mm  
 30-35mm  
 25-30mm  
 10-12mm  
 10-12mm