1/4 PIPER PA-25 PAWNEE
(A318)

Requires: 50 c.c. gasoline engine, 5-channel radio w/ 8 high torque servos.

<table>
<thead>
<tr>
<th>Specifications</th>
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<tbody>
<tr>
<td>Wing Span</td>
<td>108 in / 2740 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>1643 sq in / 106 sq dm</td>
</tr>
<tr>
<td>Flying Weight</td>
<td>20.5 lbs / 9300 g</td>
</tr>
<tr>
<td>Fuselage Length</td>
<td>68.5 in / 1740 mm</td>
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</table>

* Specifications are subject to change without notice. *

Warning! This model is not a toy.
It is designed for maximum performance. Please seek advice if one is not familiar with this kind of engine powered precision model. Operating this model without prior preparation may cause injuries. Remember, safety is the most important thing. Always keep this instruction manual at hand for quick reference.
1/4 PIPER PA-25 PAWNEE

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BEFORE YOU BEGIN

1 Read through the manual before you begin, so you will have an overall idea of what to do.

2 Check all parts. If you find any defective or missing parts contact your local dealer. Please DRY FIT and check for defects for all parts that will require CA or Epoxy for final assembly. Any parts you find to be defective after the gluing process may be difficult to remove for warranty replacement. The manufacturer will replace any defective parts, but will not extend to the parts that are good before gluing to defective parts during assembly. Warranty will not cover any parts modified by customer.

3 Symbols used throughout this instruction manual comprise of the following :-

- Apply epoxy glue.
- Apply instant glue (C.A.glue, super glue.)
- Apply thread locker
- Must be purchased separately!
- Assemble left and right sides the same way.
- Ensure smooth non-binding movement while assembling.
- Peel off shaded portion covering film.
- Cut off shaded portion.
- Drill holes with the specified diameter (here: 3mm).
- Pierce the shaded portion covering film.
- Pay close attention here!
- Do not overlook this symbol!

A318PO28161303
### Parts List

1. **MAIN WING** -- 1 pair  

2. **SOCKET HEAD SCREW M4x50mm** -- 4 pcs  
   **M4 NYLON INSERT LOCK NUT** -- 4 pcs  
   **SWIVEL CLEVIS HORN FAIRING PL4610010** -- 4 sets  
   **PUSHROD M3x112mm w/ Threads** -- 2 pcs  
   **PUSHROD M3x68mm w/ Threads (For Flap)** -- 2 pcs  
   **HEAVY DUTY HORN BRACKET PL4112400** -- 4 sets  
   **HEAVY DUTY CLEVIS PL4112200** -- 8 sets  
   **HEAVY DUTY SERVO HORN PL4120300** -- 4 sets  
   **SERVO MOUNTING PANEL PL5310010 (For Elevator Servo)** -- 1 pair  
   **SERVO MOUNTING PANEL PL5310010(L) (For Flap Servo)** -- 2 pcs  
   **SCREW PW12.3x38mm** -- 16 pcs  

3. **SOCKET HEAD SCREW M3x15mm** -- 4 pcs  
   **WASHER d3xD7mm** -- 4 pcs  
   **M3 NYLON INSERT LOCK NUT** -- 4 pcs  
   **WASHER d3xD7mm** -- 16 pcs  
   **SOCKET HEAD SCREW M3x14mm** -- 4 pcs  
   **SOCKET HEAD SCREW M3x12mm** -- 4 pcs  
   **WING STRUT WIRE D2mm** -- 2 pcs  
   **WIRE BRACKET PL5330030** -- 8 pcs  
   **MAIN WING STRUT COVER** -- 2 pairs  
   **SCREW PM3x10mm** -- 4 pcs  
   **WASHER d3.2xD12mm** -- 4 pcs  
   **SCREW PA3x18mm** -- 12 pcs  
   **MAIN WING STRUTS** -- 1 pair  

4. **FUSELAGE** -- 1 pc.  
   **STABILIZER & ELEVATOR** -- 1 pc.  

5. **VERTICAL FIN & RUDDER** -- 1 pc.  

6. **TAIL LANDING GEAR PL341003Z** -- 1 set  
   **SCREW PA3x18mm** -- 3 pcs  
   **SCREW PW12.5x12mm** -- 2 pcs  
   **SPRING Ø5x50mm** -- 2 pcs  
   **COPPER PLATE (For Stays on Tail Fuselage Bottom)** 1.5x12x60mm -- 1 pc.  

7. **MAIN LANDING GEAR** -- 1 set  
   **SCREW PA3x18mm** -- 12 pcs  
   **WASHER d3xD7mm** -- 12 pcs  
   **MOUNTING PLATE PL4114020** 12x20mm -- 6 pcs  
   **TAPE 0.5x20x157mm** -- 1 pc.  

8. **WHEEL Ø118MM PL3115118** -- 1 pair  
   **SCREW PA1.7x8mm** -- 6 pcs  
   **HEEL COVER** -- 1 pair  
   **COLLAR Ø5.1mm w/ set screw** -- 4 sets  

9. **BLIND NUT M5** -- 4 pcs  
   **WASHER Ø5x12mm** -- 4 pcs  
   **SOCKET HEAD SCREW M5x50mm** -- 4 pcs  
   **THROTTLE PUSHROD Ø1.8x130mm** -- 1 pc.  
   **PLASTIC TUBE d2.5x4x120mm** -- 1 pc.  

10. **COWLING** -- 1 pc.  
    **TRANSPARENT 3D TEMPLATE** -- 1 pc.  
    **SCREW PA3x12mm** -- 6 pcs  
    **WASHER d3xD7mm** -- 6 pcs  
    **SILICON GROMMET d2.5x0.5mm PL1285135** -- 6 pcs  
    **SPINNER Ø89MM PH22W0890** -- 1 set  

11. **SOCKET HEAD SCREW M4x65mm** -- 2 pcs  
    **M4 NYLON INSERT LOCK NUT** -- 2 pcs  
    **SWIVEL CLEVIS HORN FAIRING PL46110010** -- 2 sets  
    **PUSHROD M3x112mm w/ Threads (For Elevator)** -- 2 pcs  
    **HEAVY DUTY CLEVIS PL4112200** -- 4 sets  
    **HEAVY DUTY SERVO HORN PL4120300** -- 2 sets  
    **HEAVY T HEAD SERVO BRACKET PL4112400** -- 2 sets  
    **SERVO MOUNTING PANEL PL5310010 (For Elevator Servo)** -- 1 pair  
    **SCREW PW12.3x8mm** -- 8 pcs  

12. **THREADED ROD M4x100mm** -- 1 pc.  
    **M4 NYLON INSERT LOCK NUT** -- 2 pcs  
    **SWIVEL CLEVIS HORN FAIRING PL4610020** -- 1 set  
    **HEAVY DUTY CLEVIS PL4112200** -- 2 sets  
    **HEAVY DUTY SERVO HORN PL4120300** -- 2 sets  
    **WIRE Ø1x100mm HWA201311** -- 2 pcs  
    **COPPER TUBE d2.5x2.3x8mm (For Rudder)** -- 2 pcs  

13. **WIRE Ø1x1500mm** -- 1 pc.  
    **COPPER TUBE d2.5x2.3x8mm** -- 8 pcs  
    **FLYING WIRE BRACKET** -- 6 pcs  
    **SCREW PM2x16mm** -- 6 pcs  
    **M2 NUT** -- 6 pcs  
    **WASHER d2x5mm** -- 12 pcs  
    **EYE SCREW** -- 6 pcs  
    **CLEVIS** -- 6 pcs  
    **CLIP PIN** -- 6 pcs  

14. **LINKAGE CONNECTOR Ø2.1mm w/ set screw** -- 1 set  

15. **FUEL TANK 800cc PL1111810G** -- 1 set  
    **CABLE TIE (For Fuel Tank)** 2.5x8x850mm -- 2 pcs  

16. **HEAVY DUTY SERVO HORN PL4120800** -- 1 pc.  
    **HEAVY DUTY CLEVIS PL4112200** -- 2 set  
    **EYE SCREW M2.5x8x25mm HWA202101** -- 2 pcs  
    **WIRE Ø1x100mm HWA201311** -- 2 pcs  
    **COPPER TUBE d2.5x2.3x8mm (For Rudder)** -- 2 pcs  
    **SPONGE 10x80x200mm** -- 2 pcs  
    **BATTERY TIE 200mm** -- 2 pcs  

17. **PILOT PC101110B** -- 1 pc.  
    **INSTRUMENT PANEL** -- 1 pc.  
    **DOUBLE-SIDED TAPE** -- 2 pcs  
    **PLASTIC PLATE** -- 1 pc.  
    **CABLE TIE 2.5x5x300mm** -- 2 pcs  
    **CANOPY** -- 1 pc.  

18. **WING JOINER 443x20x5mm** -- 2 pcs  
    **WING JOINER 443x15x5mm** -- 2 pcs  
    **SOCKET HEAD SCREW M3x12mm** -- 8 pcs  
    **WASHER d3xD7mm** -- 8 pcs  
    **THREADED ROD M4x25mm** -- 1 pc.  
    **M4 NYLON INSERT LOCK NUT** -- 2 pcs  
    **WASHER d4xD12mm** -- 2 pcs  
    **ALUMINIUM PLATE 2x25x85mm** -- 4 pcs  

19. **DECALS:**  
    **A318DEC** -- 1 set  

### COVERING:  
- **TOUGHSTL STL 100 WHITE**  
- **TOUGHSTL STL 424 CHECKER(FER/WHT)**  
- **LIGHTEX SGX 311 FERRARI RED**  
- **LIGHTEX SGX 201 BLACK**
1. Main Wing

- Aileron Servo Lead
  - Pre-glued
  - Bottom View

2. Aileron & Flap Servos

- M4x50mm Socket Head Screw: 4
- PWA2.3x8mm Screw: 16
- M4 Nylon Insert Lock Nut: 4

![Diagram of Aileron & Flap Servos]

- M2 Nylon Insert Lock Nut
- Heavy Duty Clevis
- M2 x 10mm Pushrod

- Heavy Duty Horn Bracket
- M4 Nylon Insert Lock Nut
- M4 x 50mm Pushrod
- M2 x 10mm PA1.7 x 8mm

- Pushrod w/ Threads (For Flap): M3 x 112mm
- Pushrod w/ Threads (For Aileron): M3 x 86mm

[Bottom View Diagram]
3 Wing Struts

- M3x15mm Socket Head Screw (4)
- M3x14mm Socket Head Screw (4)
- M3x12mm Socket Head Screw (4)
- PM3x10mm Screw (4)
- d3.2xD12mm Washer (4)
- d3xD7mm Washer (16)
- M3 Nylon Insert Lock Nut (4)

4 Stabilizer & Elevator

- Temporary install the main wing, adjust leveling of the stabilizer to make it as parallel to the main wing as possible.

- Remove coverings for all surfaces in contact before applying A/B epoxy glue.

5 Vertical Fin & Rudder

- Remove coverings for all surfaces in contact before applying A/B epoxy glue.

- Pre-glued

- Completed
6 Tail Landing Gear

PA3x18mm Screw
PWA2.5x12mm Screw

7 Main Landing Gear

PA3x18mm Screw
D3xD7mm Washer

8 Main Wheel

PA1.7X8mm Screw
D5.1mm Collar
**9 Engine**

- M5x50 SOCKET HEAD SCREW: 4
- d5xD12mm Washer: 4
- MS Blind Nut: 4

![Engine diagram]

**10 Cowling**

- PA3x12mm Screw: 6
- d2.5x8.5mm Silicon Grommet: 6
- d3xD7mm Washer: 6

![Cowling diagram]

- Please refer to the attached sheet for usage of the transparent 3D template.
- First insert the grommet to the cowling then apply screw.

![Diagram showing cowling dimensions]

- 207mm 8.15 in.
- Spinner Ø89mm
- Fuselage
- Cowling
- Washer d3xD7mm
- PA3x12mm
- d2.5x8.5mm Silicon Grommet
11 Elevator Pushrod

- M4x65mm Socket Head Screw x 2
- PWA2.3x8mm Screw x 8
- M4 Nylon Insert Lock Nut x 2
- M2x8mm Socket Head Screw
- M2 Nut
- PL4120300
- PWA2.3x8mm

12 Rudder Pullwire

- M4x100mm Threaded Rod x 1
- M4 Nylon Insert Lock Nut x 2
- Wire
- Copper Tube
- Press down the center 1/3 portion
- Rigging Coupler M2.5x8x25mm
- M2x10mm
- Copper Tube d2.5xD3.2x8mm
- M4 Nylon Insert Lock Nut M4x100mm
- Heavy Duty Horn Bracket
13 **Flying Wire**

- PM2x16mm Screw 6
- M2 Nut 6
- d2xD5mm Washer 12
- PM2x16mm
- d2xD5mm Washer
- d2.5xD3.2x8mm
- M2 NUT

Press down the center 1/3 portion wire.

Copper Tube

14 **Servo Set**

- 3x3mm Set Screw 1
- Linkage Connector 1
- M2 Nut 1
- 2mm Washer 2

Throttle Pushrod

Washer 2mm

M2 Nut

N.I. Throttle Servo.

Please refer to the attached sheet for linkage connector installation.
15 Fuel Tank

- Install and arrange the servo as shown in the diagram.

16 Radio Equipment

- Install and arrange the servo as shown in the diagram.

Front

- Throttle Pushrod Ø40x160mm
- Throttle Servo
- Plastic Tube d2xD3x350 mm
- CABLE TIE 2.5x8x500mm
- Fuel Tank 800cc

Radio Equipment

- Heavy Duty Servo Horn PL4120800
- M2x8mm
- M2x10mm
- Eye Screw M2.5x8x25mm
- Copper Tube d2.5xD3.2x8mm
- Rudder Pullwire 1.5mm
- Heavy Duty Clevis
- M2 Nut

Receiver

- Battery

- ON
- OFF

Switch

- Sponge
- Battery Tie
17 Pilot & Canopy

18 Main Wing

- M4x255mm Threaded Rod: 1
- M3x12mm Screw: 8
- M4 Nylon Insert Lock Nut: 2
- d4 x D12mm Washer: 4
- d3 x D7mm Washer: 8
- Washer d4 x D12mm
- M4x255mm

- Aluminium Plate
- d3xD7mm Washer
- M3x12mm

- Pilot Instrument panel
- Instrument panel
- Pilot
- Cable Tie
- Plastic Plate
- Double-sided Tape

- Wing Joiner 443x20x5mm
- Wing Joiner 443x15x5mm
- Plastic Plate
- Pilot & Canopy
- Cable Tie
- Double-sided Tape

- Bottom View
- Completed
- L/R

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19 Wing Setting

- Adjust the wing and fuselage configuration as shown in the diagrams.
## Control Throws

Adjust the control throws as shown in the diagram. These throws are good for general flying. You can adjust according to your personal preference.

![Control Throws Diagram]

## C.G.

The ideal C.G. position is 100mm (3.9in.) behind the leading edge measured at where the wing meets the fuselage. In order to obtain the C.G. specified, add weight to the fuselage or move the battery position. Check the C.G. before flying.

If you are converting this model to electric, please move the C.G. forward 10% of current C.G. distance from leading edge to compensate for weight of fuel.

![C.G. Diagram]

## Warning!

**Important Safety Precautions**

# First time flyer should never fly by himself / herself. Assistance from experienced flyer is absolutely necessary.

# Pre-flight adjustment must be done before flying, it is very dangerous to fly a badly pre-adjusted aircraft.

# **1/4 PIPER PA-25 PAWNEE** is specially designed to be powered by **50c.c. gasoline** engine, using a more powerful engine does not mean better performance. In fact, over powered engine may cause structural damage and injuries.

# Make sure the air field is spacious, never fly the plane too close to people and never get too close to a running propeller.

# If you find wrinkles on the covering as a result of weather changes, you can use hot iron to remove the wrinkles. Please begin with lower temperature setting and gradually raise the temperature until the wrinkles are gone. Too hot an iron may damage the covering. Don't use hot iron near the seams or edges, hot iron will melt the glue and shrink the covering at the same time, causing the seams to pull away.

# Check and re-tighten up all factory assembled screws, use thread locker if necessary.
Product Registration Form (US Customers)

We would like to share with you any relevant information regarding your model, including product news and free upgrade parts when applicable. Please fill in the following and send to AirBorne Models, 4749-K, Bennett Drive, Livermore, CA 94551 USA.

1. Name:______________________________________________
2. Address:____________________________________________
3. Phone #:____________________ E-mail:__________________
4. Model:______________________________________________
5. Date of Purchase:_____________________________________
6. Store Name: _________________________________________

Please call AirBorne Models at 925 371 0922 for any assistance in filling this form.

Thank you very much for purchasing our product.

A318PO28161303
Usage of the transparent 3D template

This transparent 3D template is used for position guidance of the actual cutting of the pre-painted cowling.

1.

2.

3.

4.

Simply cut the transparent 3D template to fit your engine and exhaust pipe, then slide onto the actual cowling and use as template to mark the openings required for final cutting.

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