1/4 PIPER PA-25 PAWNEE
(A318)

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

Specifications

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<table>
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<tbody>
<tr>
<td>Wing Span</td>
<td>108 in / 2740 mm</td>
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<tr>
<td>Wing Area</td>
<td>1302 sq in / 84 sq dm</td>
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<tr>
<td>Flying Weight</td>
<td>20.5 lbs / 9300 g</td>
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<tr>
<td>Fuselage Length</td>
<td>68.5 in / 1740 mm</td>
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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.

* Specifications are subject to change without notice. *
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!
- Warning! 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 (For Flap) -- 2 pcs
   HEAVY DUTY CLEVIS PL4112200 -- 4 sets
   HEAVY DUTY SERVO HORN PL4120300 -- 2 sets
   HEAVY DUTY CLEVIS PL4112400 -- 2 sets
   SERVO MOUNTING PANEL PL5310010 (For Elevator Servo) -- 1 pair
   SERVO MOUNTING PANEL PL5310010(L) (For Flap Servo) -- 2 pcs
   SCREW PHWA2.3x8mm -- 16 pcs

3. SOCKET HEAD SCREW M3x15mm -- 4 pcs
   WASHER d3xD7mm -- 1 pc
   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 PL5330030W -- 8 pcs
   MAIN WING STRUT COVER -- 2 pairs
   SCREW PA3x18mm -- 12 pcs
   WASHER d3xD7mm -- 16 pcs
   SCREW PA3x18mm -- 12 pcs
   SCREW PM3x10mm -- 4 pcs
   SOCKET HEAD SCREW M3x15mm -- 4 pcs
   SCREW PWA2.3x8mm -- 16 pcs
   SERVO MOUNTING PANEL PL5310010 -- 6 pcs

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

5. VERTICAL FIN & RUDDER -- 1 pc.

6. TAIL LANDING GEAR PL3410032 -- 1 set
   SCREW PA3x16mm -- 3 pcs
   SCREW PHWA2.5x12mm -- 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
   WHEEL COVER -- 1 pair
   COLLAR Ø5.1mm w/ set screw -- 4 sets

9. BLIND NUT M5 -- 4 pcs
   WASHER d6x012mm -- 4 pcs
   SOCKET HEAD SCREW M5x50mm -- 4 pcs
   THROTTLE PUSHROD Ø1.8x310mm -- 1 pc.
   PLASTIC TUBE d2.6xD4x120mm -- 1 pc.

10. COWLING -- 1 pc.
    TRANSPARENT 3D TEMPLATE -- 1 pc.
    SCREW PA3x12mm -- 6 pcs
    WASHER d3xD7mm -- 6 pcs
    SILICON GROMMET d2.5x0.6mm PL1285135 -- 6 pcs
    SPINNER Ø99MM PH22W0850 -- 1 set

11. SOCKET HEAD SCREW M4x65mm -- 2 pcs
    M4 NYLON INSERT LOCK NUT -- 2 pcs
    SWIVEL CLEVIS HORN FAIRING PL4610010 -- 2 sets
    PUSHROD M3x112mm w/ Threads (For Elevator) -- 2 pcs
    HEAVY DUTY CLEVIS PL4112200 -- 4 sets
    HEAVY DUTY SERVO HORN PL4120300 -- 2 sets
    HEAVY DUTY CLEVIS PL4112400 -- 2 sets
    SERVO MOUNTING PANEL PL5310010 (For Elevator Servo) -- 1 pair
    SCREW PHWA2.3x8mm -- 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 HORN BRACKET PL4112400 -- 2 sets
    EYE SCREW M2.5x0x25mm HW420101 -- 2 pcs
    WIRE Ø1x1000mm HWA01311 -- 2 pcs
    COPPER TUBE d2.5xD3.2x8mm (For Rudder) -- 2 pcs

13. WIRE Ø1x1500mm -- 1 pc.
    COPPER TUBE d2.5xD3.2x8mm -- 8 pcs
    FLYING WIRE BRACKET -- 6 pcs
    SCREW PM2x16mm -- 6 pcs
    M2 NUT -- 6 pcs
    WASHER d2xD5mm -- 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) 2.5x8x800mm -- 2 pcs

16. HEAVY DUTY SERVO HORN PL4120800 -- 1 pc.
    HEAVY DUTY CLEVIS PL4112200 -- 2 set
    EYE SCREW M2.5x0x25mm HW4202101 -- 2 pcs
    COPPER TUBE d2.5xD3.2x8mm (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 M4x255mm -- 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 100 WHITE
TOUGHSTL 424 CHECKER (FER/WHT)
LIGHTEX S5X 321 FERRARI RED
LIGHTEX S5X 203 BLACK
1 Main Wing

Aileron Servo Lead

Bottom View

2 Aileron & Flap Servos

M4x50mm Socket Head Screw

PWA2.3x8mm Screw

M4 Nylon Insert Lock Nut

M2 Nylon Insert Lock Nut

Heavy Duty Clevis

Pushrod

Heavy Duty Horn Bracket

M4 Nylon Insert Lock Nut

Heavy Duty Clevis

Pushrod

Pushrod w/ Threads (For Aileron)

M3x112mm

Pushrod w/ Threads (For Flap)

M3x86mm

Bottom View

Bottom View

Bottom View
3 Wing Struts

- M3x15mm Socket Head Screw: 4
- M3x14mm Socket Head Screw: 4
- M3x12mm Socket Head Screw: 4
- PM3x10mm Screw: 4
- d3.2x0.12mm Washer: 4
- d3x0.7mm Washer: 16
- M3 Nylon Insert Lock Nut: 4

4 Stabilizer & Elevator

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

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

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 3
PWA2.5x12mm Screw 2

7 Main Landing Gear

PA3x18mm Screw 12
d3xD7mm Washer 12

8 Main Wheel

PA1.7X8mm Screw 6
D5.1mm Collar 4
### Engine

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

### Cowling

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

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

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**Dimensions**

- **207mm (8.15 in.)**

**Parts**

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

- M4x65mm Socket Head Screw: 2
- PWA2.3x8mm Screw: 8
- M4 Nylon Insert Lock Nut: 2
- M2x8mm Socket Head Screw
- M2 Nut
- PL4120300
- PWA2.3x8mm Screw
- M2 x 10mm
- M2 x 10mm
- M4 x 65mm
- M2 x 10mm
- PA1.7 x 8mm
- Bottom View

12 Rudder Pullwire

- M4x100mm Threaded Rod: 1
- M4 Nylon Insert Lock Nut: 2
- M4 Nylon Insert Lock Nut
- M4x100mm Socket Head Screw
- M2 Nut
- Ø1x1000mm
- Copper Tube
- Rigging Coupler
- Rudder Pullwire Ø1x1000mm
- M4x100mm Heavy Duty Horn Bracket
- M2 x 10mm
- M2 x 10mm
- M4x8.5xD3.2x8mm
- Clevis
- Copper Tube Ø2.5xD3.2x8mm
- Wire
- Press down the center 1/3 portion
- Bottom View

L/R
13 Flying Wire

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

Press down the center 1/3 portion of the wire.

14 Servo Set

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

Throttle Pushrod

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.
19 Wing Setting

- Adjust the wing and fuselage configuration as shown in the diagrams.
20 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.

![Diagram of control throws]

21 C.G.

The ideal C.G. position is 100mm (3.9 in.) 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.

![Image of a model plane with C.G. highlighted]


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.

# 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:_________________________________________________________

   Wing QC#________  Fuselage QC#__________________________
   (QC numbers are stamped on wing and fuselage)

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.

A318PO28161303
Ducted Fan

Pattern

Warbirds

Funfly

Scale

Electric

Sports

Glider

Trainer

Boat

Accessories

Covering

(Lightex / Toughlon)