Paasche®
RAPTOR

WARNING: Spray materials may be harmful if inhaled or allowed to come into contact with the skin or eyes. Consult the product label and Material Safety Data Sheet supplied for the spray material. Follow all safety precautions. **CAUTION:** Well Ventilated Area Required to remove fumes, dust or overspray. Secure airhose to Airbrush with V-62 Wrench for safety and to prevent air leaks. **Maximum Air Pressure 75 P.S.I.**

Double Action-Gravity feed -Internal Mix PTFE Packings. Size #1 Needle,Tip,and Aircap Installed

INTRODUCTION:

Prime Characteristics of the Paasche® RAPTOR Airbrush include a 1/10th ounce gravity cup and the ability to spray fluids requiring fine detail and shading work. The Double Action, Internal mix feature permits flexibility in regulation of color and air without work stoppage.

RG Specifications:

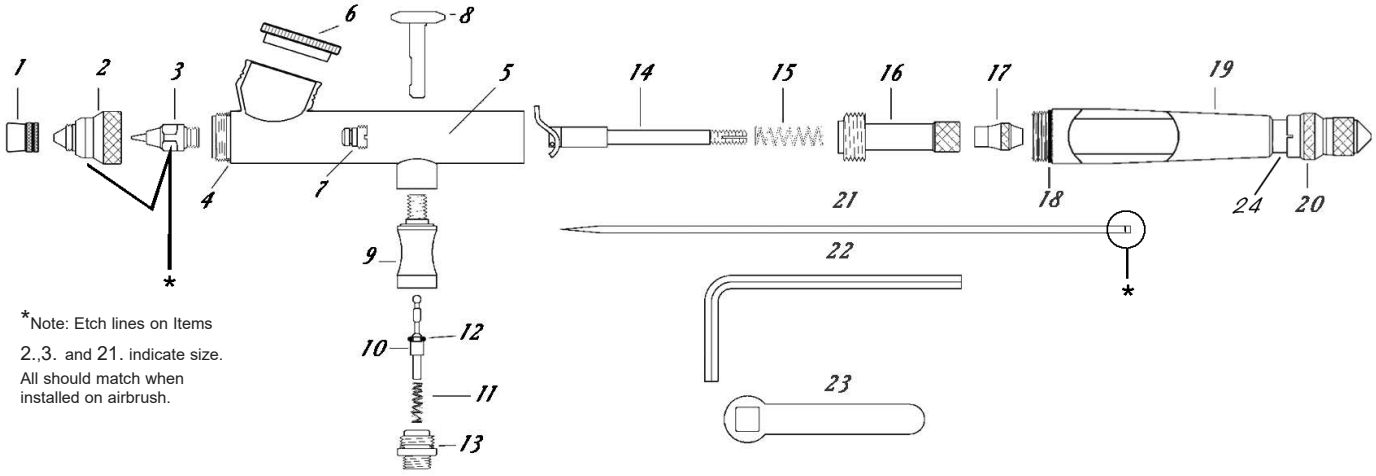
- Head Size .25mm (TT-1 tip, TN-1 needle and TA-1 Aircap) Great for "Super" fine detail
- 1/10th Ounce Gravity Cup
- Hair Line to 1-1/2 Inches
- Crown Cap (optional) note: crown cap is for needle tip protection and can be removed for fine detail
- Cutaway Handle with Pre-set Needle Stop New Style Trigger and Piston

Options for Raptor :

.2mm head (TT-0 tip, TN-0 needle and TA-1 Aircap
.38mm head (TT-2 tip, TN-2 needle and TA-2 Aircap) - Great for jobs requiring fine detail.
.66mm head (TT-3 tip, TN-3 Needle and TA-3 Aircap) - Great for spraying Metallics, Pearlescent and Thicker Paints.

Working Pressures:

- Operating pressures 15-55 PSI; Maximum pressure 85 PSI.
- 20-30 PSI is best for detail spraying w/ properly thinned paint
- Use the higher pressures for thicker material where fine detail is not critical or thin the paint to allow lower pressures.



*Note: Etch lines on Items 2.,3. and 21. indicate size. All should match when installed on airbrush.

NO.	PART	DESCRIPTION
1.	XI-41	Needle Protection Cap
2.	TA-1	Air Cap
3.	TT-1	Fluid Tip
4.	MIL-12	"O" Ring
5.	RG-30	Shell
6.	RG-8	Cup Cover
7.	TAL-8	Packing Assembly PTFE
8.	TAL-37	Trigger
9.	TAL-14	Valve Casing
10.	TAL-36	Valve Plunger
11.	A-22	Air Valve Spring
12.	TAL-26	"O" Ring
13.	TAL-15	Valve Adapter
14.	TAL-18	Rocker Assembly
15.	MIL-11	Needle Spring
16.	TAL-17	Spring Housing
17.	TAL-19	Needle Locknut
18.	MIL-12	"O" Ring
19.	RG-20	Handle
20.	TAL-33	Needle Stop
21.	TN-1	Needle
22.	TAL-35	Allen Wrench
23.	TAL-28	Wrench
24.	3A-4	"O" Ring

REMOVING / REPLACING THE NEEDLE AND HANDLE:

1. Unscrew the handle and loosen the Locknut- #TAL-19 by turning counterclockwise. Depress the Trigger- #TAL-37 and hold in down position while removing or inserting the needle. This assures the needle moves freely through the trigger. Gently remove the needle, rotating if necessary.
2. Inspect the condition of the needle. If it is bent or misshapen in any way, replace it with a new needle. A bent needle can damage or split the Tip- #TT causing bubbles or a rough spray pattern.
3. Hold trigger in down position, insert the new needle into the Rocker Assembly- #TAL-18. Gently push needle forward until the needle stops in the front of the tip.
4. Release trigger and tighten locknut by turning clockwise.

REPLACING THE FINGER LEVER ASSEMBLY:

If the Trigger- #TAL-37 is removed, it is easiest to replace before the Rocker Assembly- #TAL-18 is inserted. The needle must be removed.

1. Hold trigger so the round side of the stem is to the front and flat side to the back of the airbrush
2. Insert trigger straight DOWN through the opening in the top of the airbrush shell.
3. You want the bottom of the trigger to cover the round ball on top of the exposed plunger. Once the connection is made you should have spring action when pushing down on the trigger. Proceed to replace Rocker Assembly- #TAL-18 and balance of parts as above. When the needle is inserted it will prevent the removal of the trigger.

REPLACING THE TIP:

1. Remove handle, loosen Locknut- #TAL-19 and withdraw needle about one inch (1”).
2. Un-screw the Aircap- #TA and remove. The Tip- #TT can now be unscrewed with Wrench- #TAL-28.
3. Replace tip and tighten with wrench. The tip must be wrench tight. Push needle forward and lock.

ADJUSTING WORN PACKING WASHER:

1. If Packing Assembly- #TAL-8 becomes worn or loose it must be tightened or replaced.
2. Tighten packing nut with small screwdriver. To reach packing all internal parts must be removed.
3. Replace needle and make sure packing nut is not too tight. Slight resistance is needed when needle passes through.

CLEANING THE AIRBRUSH:

1. Spray airbrush cleaner through airbrush until it has no more color spraying out of airbrush.
2. Remove needle and wipe clean then replace.
3. If paint has dried for a time you can remove the front tip, and aircap for soaking or soak just the front of the airbrush in cleaner.
4. Any paint cleaner is fine. Keep trigger area dry if soaking.

PERSONAL SETTINGS:

Spring Housing- #TAL-17 Used to increase or decrease spring tension for the trigger pull back. Thread into the shell until the trigger stroke feels comfortable. Threading in until it stops can cause the trigger to jam.

TROUBLESHOOTING:

Bubbling in cup:

1. Aircap- #TA needs to be tightened
2. Tip- #TT needs to be tightened further

Skipping or Spitting:

1. Paint too thick -reduce with thinner
2. Tip not seated -tighten Tip- #TT with wrench
3. Tip split or damaged needle -replace tip or needle
4. Needle or tip dirty -clean and replace
5. Air pressure too low -increase pressure or thin paint further (need 20 or more PSI to spray most paints)

Airbrush Not Spraying:

1. Clogged Tip- #TT -remove tip and clean
2. Needle not moving -tighten needle locknut
3. Low air pressure -increase pressure (need 20 or more PSI to spray most paint)

Sprays double line or heavy to one side:

1. Split Tip- #TT or bent Needle- #TN - replace
2. Dirty tip or needle - remove and clean

Jammed trigger or poor trigger motion:

1. Adjust Spring Housing- #TAL-17 - screw or unscrew the spring housing to lessen or increase tension on trigger motion
2. Paint leaking to trigger area - remove guts of airbrush and slightly tighten packing or replace if needed
3. Lubricate needle and trigger - apply Paasche Airbrush Lube (AL-2) to needle shaft and trigger slot area.