MAXI-MISER®
3000 PRO BY APOLLOSPRAYERS

Instruction Manual

This manual contains important warnings and instructions. Please read these instructions carefully and keep for your reference.

Table of Contents

1. Safety

Read all instructions and safety precautions before operating the unit.

⚠ DANGER

Indicates a hazardous situation, which, if not avoided, will result in death or serious injury. Indicates a

⚠WARNING

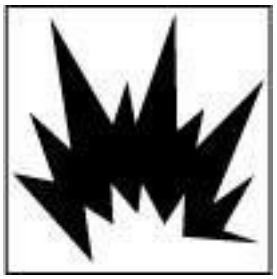
hazardous situation, which, if not avoided, could result in death or serious injury.

⚠CAUTION

Indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury. NOTICE

Indicates a situation that could result in damage to the equipment or other property.

⚠WARNING

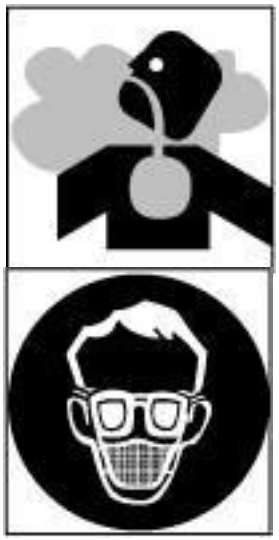


Risk of fire or explosion! Solvent and paint fumes can explode or ignite, causing severe injury and property damage.

Paints and solvents containing HALOGENATED HYDROCARBONS can react explosively with aluminum. Always check the product's label before using these materials in the unit.

Hazardous vapors: Paint, solvents, insecticides and other materials may be harmful if inhaled, causing severe nausea, fainting or poisoning.

Make sure the room is well ventilated. Avoid all ignition sources, such as static electricity, sparks, open flames, hot objects, sparks from connecting and disconnecting power cords, and working light switches.



Follow the material and solvent manufacturers' safety precautions and warnings. Do not use liquids with flash points less than 100° F (38° C).

Static electricity can be produced by HVLP spraying. Make sure any electrically conductive object being sprayed is grounded to prevent static sparking. The sprayer is grounded to prevent static sparking. The sprayer is grounded through the electrical cord.

Use a respirator or mask whenever there is a chance that vapors may be inhaled. Read all instructions with the mask to ensure that the mask will provide the necessary protection against the inhalation of harmful vapors.

Do not carry the turbine while spraying.

Keep the turbine at the maximum distance from the spraying area.

NOTICE

- Tipping the spray gun causes the spray gun to clog. Dried spray material also clogs the pressure delivery tube and fittings. The spray gun does not function when clogging occurs.
- When not in use, be sure to disconnect the hose and place the spray gun into the Handi-Hold™ Docking Station on the turbine to avoid tipping.

⚠ DANGER

Improper installation of the ground plug can result in the risk of electrical shock. If repair or replacement of the plug or cord is necessary, do not connect the ground wire to either flat blade terminal. The wire with green insulation (with or without a yellow stripe) is the grounding wire.

1. For any question regarding proper installation of the ground plug, consult a qualified (licensed or certified) electrician.

2. Do not modify the plug provided. If the plug does not fit the outlet, have the proper outlet installed by a qualified electrician.

3. This product is for use on a nominal 110-volt circuit and has a grounding plug that looks like the plug in Figure 2. Make sure that the product is connected to an outlet having the same configuration as the plug. Do not use adapters with this product.

4. If an extension cord is required, use only a three-wire extension cord that has the same configuration as the unit cord, including the (round) ground terminal. Make sure that the extension cord is plugged into a properly grounded receptacle.

5. When using an extension cord, be sure it is in good condition and heavy enough to meet the specifications in the chart below. If an extension cord is needed the following wire sizes must be used.

25' cord (7.62m) ……	10, 12, or 14 Gauge
50' cord (15.24m) ……	10 or 12 Gauge
100' cord (30.48m) …… ……	10 Gauge

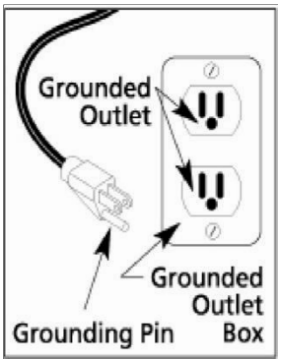


Figure 2

Grounding instructions for all countries using a 2-pronged plug configuration.

⚠CAUTION

This product must be properly grounded. In the event of an electrical short circuit, grounding reduces the risk of electrical shock by providing an alternate path for the electrical current.

This product is equipped with a cord that has a ground wire and an appropriate ground plug. Plug the unit into an outlet that is properly installed and grounded in accordance with local codes and ordinances.

Safety Note: Users in countries in continental Europe and Australia and anywhere that offers a two-pronged plug must be aware that this configuration does not provide grounding.

2. Maxi-Miser® Spray Finishing Systems

CONGRATULATIONS!! You have just purchased the Maxi-Miser 3000 PRO HVLP turbo spray system, the finest spray system available to spray cars, boats and airplanes. You are about to enjoy the great benefits of the Maxi-Miser™ system. Our designs are the result of over 50 years of experience in manufacturing HVLP turbo spray systems and spray guns. We have progressively worked and consulted with professional spray finishers in your industry to bring you this versatile, well-engineered tool.

Whether you are new to spray finishing, you have spray finished before, or are just new to Maxi-Miser spray systems; there are some basic spray finishing guidelines that will help you to achieve the best results and optimum success from your new equipment. Reading this information carefully and following these simple steps will ensure that you get the best performance and results from your new TrueHVLP™ spray system.

Check the contents of your box. The following are included:

(1) Maxi-Miser® 3000 Turbo Unit
(1) PBC-GTO™ Clearcoat Spray Gun
(1) PBC-GTO™ Basecoat Spray Gun
(1) PBC-GTO™ Primer Spray Gun
(1) 37' Flex-Air Hose
(1) Instruction Manual
(1) Wrench
(1) Spray Gun Lube
(1) Blow-off Tool
(1) Cleaning Brush
(1) Electric Cord
(1) Booth Installation Kit

3. How Your Maxi-Miser™ Turbo Spray System Works

We have designed 3 PBC-GTO spray guns for spraying various automotive finishes. Each of the spray guns are designated with a different colored handle to help you keep track of which gun is for what material.

The PBC-GTO spray guns with the GREEN handle are for spraying Base coats. Most basecoats spray very nicely with the 0.8mm needle and nozzle set up along with the B-HS air cap. This is the standard size for the basecoat spray gun.

The PBC-GTO spray guns with the GREY handle are for spraying Primers. Most primers spray nicely using a 1.0mm needle and nozzle set up along with the B-HS air cap. This is the standard size in the primer spray gun.

The PBC-GTO spray guns with the matte brown spray head and the BLACK handle are for spraying clear coats. Depending on if you are spraying spot repairs or larger areas you could have one of two different size needles, nozzles or air caps. For spot repairs we recommend the 0.5mm with our “CC” air cap. For spraying 2 or more panels or large areas we recommend the 0.8mm needle and nozzle with the B-HS air cap.

Your Maxi-Miser® system has three components: the **turbo unit** (your air supply) (1), **spray gun** (2) and **air hose** (3). The turbo unit, when connected to single phase 240 volt power supply and with the on/off switch in the “on” position, provides a continuous source of clean, warm, dry, High Volume Low Pressure (HVLP) air. The air hose connects the turbine unit to the spray gun. Air flows through the hose to the nozzle of the specially designed TrueHVLP™ spray gun. Atomization of the coating is achieved when the air mixes with the stream of fluid passing through the tip/nozzle. This low-pressure atomization principle achieves minimum misting (overspray) to the spray environment and maximum savings in paint.

4. How Your PBC-GTO Spray Gun Works

Your Apollo Maxi-Miser® PBC-GTO™ spray gun operates like a typical compressed air spray gun with some minor differences. The cup on your PBC-GTO™ spray gun is pressurized through the air feed tube. This will help deliver fluid to the nozzle and produce a larger fan pattern. It is possible to use the PBC-GTO™ spray gun without the air feed tube connected, but only with certain types of paints and using larger needle and nozzle sizes. You will notice a much smaller fan pattern when using the spray guns without the air feed tube connected. It is always recommended to use the spray gun with the air hose attached.

When the material adjustment screw is opened and the trigger pulled back, fluid flows through the nozzle mixing with the air flow delivered from the air cap and projects a fine atomized mist to your work piece. You can adjust the fluid flow by opening or closing the material adjustment screw to your liking. The fan adjustment ring is located at the front of the spray gun. Locate the adjustment marks on the side of the spray gun body. Turn the fan control ring up to achieve a smaller fan or down to achieve a larger fan.

5. Preparing to Use Your Maxi-Miser® Turbo System

Connect the male end of the air hose to the turbo system. Pull back the spring loaded quick disconnect coupler and insert the male connector on the air hose into the turbine connector. Release the ring. Your air hose will be locked into place. To release the air hose, pull back on the spring-loaded quick coupler ring with your fingers and pull.

Connect female end of air hose to your spray gun using this same procedure.

Plug the power cord into a single phase 240 volt outlet that is properly installed and grounded in accordance with local codes and ordinances. Your Maxi-Miser® system is rated for 240 volts. Plugging the turbo system into the wrong voltage will damage the motor and void your warranty.

NOTICE!
Do not cover or enclose the turbine. It is important to draw cool/ambient air through the unit for optimum performance. Avoid placing the turbine in a warm environment or in direct sunlight. Do not spray in ambient temperatures above 90 degrees. If you want to be able to spray in hotter temperatures, we recommend placing a fan in front of your turbine to help it pull in cool air or place it in an air conditioned environment.

6. Setting up Your PBC-GTO Spray Guns

Good quality results with your TrueHVLP™ spray finishing equipment are a combination of careful preparation of your project, a proper spraying environment, a basic knowledge of the coatings you will be using and how these coatings work with your Maxi-Miser™ finishing equipment.

Your PBC-GTO spray guns come with a 600cc gravity feed cup assembly standard. Some minor assembly is required:

1. Screw the cup to the material connector on the top of the spray gun body. Tighten with (spanner) wrench only as shown in the “correct” picture.

DO NOT tighten by holding the cup in the “incorrect” picture.

NOTE: Failure to tighten correctly can result in damaging the seal at the base of the cup.

3. Screw the air feed connector (A5211N) onto the side of the spray gun body.

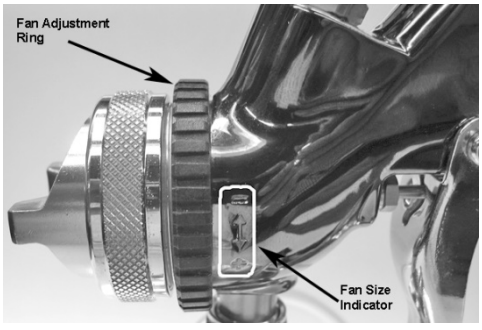
4. Push the air feed tube onto the air feed connector

5. Push the other end of the air feed tube onto the cup lid connector.

NOTE: Make sure you attach the air feed tube so that the black end of the air valve is pointing towards the cup lid as shown in the illustration.

NOTE: Above the non-return valve you will see an air relief valve. The purpose of this valve it to release pressure from the cup prior to opening the cup lid to prevent paint splatter. To release the pressure all you need to do is turn the air relief valve.

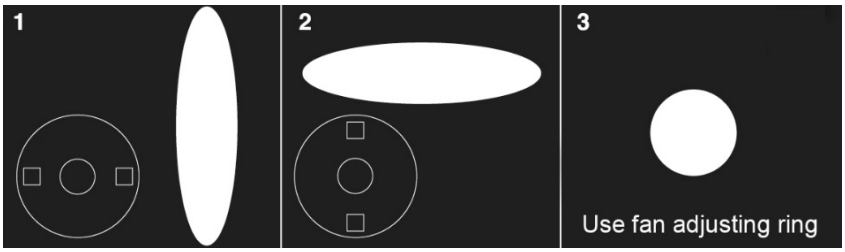
6.1 Operating your PBC-GTO Spray Gun



The PBC-GTO spray gun has a unique and simple fan pattern control. Locate the Fan Adjustment Ring in the front of the spray gun. Turn the spray gun on its side and notice the fan size indicator stamped into the spray head casting, just to the right of the fan adjustment ring. You will notice that there is a (-) sign at the top and a (+) sign at the bottom with two arrows indicating the direction of rotation. Rotating the ring UPWARD will begin to reduce the size of the fan pattern until the pattern is round. Rotating the ring DOWNWARD will provide a

full, open, wide pattern. (Relative to the distance the spray gun is held from the work surface).

To adjust the direction of the fan pattern, rotate the air cap ears (Fig. 2) clockwise to either a vertical or horizontal position as noted in the diagram. This will provide your vertical or horizontal fan pattern.



Spray Patterns

Fig. 1 Use this position when spraying across from side to side
Fig. 2 Use this position when spraying from top to bottom
Fig. 3 Use this position for spotting small objects, corners and sharp angles and touch up

Install the appropriate fluid nozzle, needle assembly and color-coded air cap (A, B, C or D) for the viscosity of the fluid being sprayed. See Chart B for recommendations. Prepare your coating as you would normally, (Thinning if necessary). Filter and pour into spray gun cup.

Chart A:

Nozzle, Needle and Air Caps for PBC7600-GTO™ Spray Guns

Tip/Needle Size	Application	Air Cap
0.5MM (.019)	Clearcoats	CC
0.8MM (.031)	Clearcoats and Basecoats	B-HS
1.0MM (.039)	Basecoat, single stage	B-HS
1.3MM (.051)	Single Stage, Primers	B-HS
1.5MM (.059)	Single Stage, Primers	C-HS
1.8MM (.070)	Primers, Truck Bed Liner	C-HS
2.0MM (.079)	Primers, Truck Bed Liner	C-HS
2.5MM (.098)	Gelcoat or under sealant	D

Viscosity chart should be used as a guide to thinning various coatings. Follow reduction guidelines provided by paint manufacturer. Using a **slow** reducer or hot temperature reducer will enhance results with turbo spray technology and is strongly recommended.

Chart B:

Viscosity Cup Comparison

Zahn Cup sec (#2)	Zahn Cup sec (#4)	Ford cup sec (#3)	Ford cup sec (#4)	Poise P	Centi-poise cP	Krebs KU	Say bolt SSU
16			5	0.1	10		60
17			8		15		80
18		12	10	0.2	20		100
19		15	12		25		130
20		19	15	0.3	30		150
22		25	17	0.4	40		210
24		29	19	0.5	50	30	250
27		33	21	0.6	60	33	320
30		36	23	0.7	70	35	370
34		41	26	0.8	80	37	430
37		45	29	0.9	90	38	480
41	10	50	31	1	100	40	530

6.2 Spray Gun Technique

Connect the appropriate air hose to the spray gun. Begin turning the material adjustment screw (#19) anti or counterclockwise 1 – 2 full turns. Look at the size of the fluid pattern and flow volume. Adjust before applying material to your substrate. If you have too much fluid flow, turn the material adjustment screw clockwise. If you do not have enough fluid flow, adjust the material adjustment screw anti/counterclockwise. Hold spray gun 4" – 6" (10cm-15cm) from your work surface depending on the size of your substrate. Closer is generally preferred for highest efficiency and the least amount of overspray. Follow the proper spray technique as outlined in the spray technique diagram. You can increase or decrease the fluid flow as desired as well as the distance from your work surface as necessary. Adjust the Fan Adjustment Ring as desired.

Like any skill, practice makes perfect. Never try to rush the spray finishing process. Learn the characteristics of the coating you will be spraying. Build up layers of material. Sand between coats and allow proper drying time between applications.

Here are some general guidelines for effective spray finishing:

1. Remember to always keep the distance between the spray gun and the surface the same when moving across your work, (or up and down) called a "pass". Do not rotate or turn your wrist from side to side. See Chart C below.

2. Move the spray gun across your work from end to end.

3. Be sure to maintain the same speed of movement. This ensures an even application of coating.

4. At the end of a "pass" always release the trigger. To continue, spray in the opposite direction and overlap your previous coat by 50-75%

5. When finished you should have an even wet coat on your work. If you have dry spots, you have overlapped too wide. If you have heavy or wet spots, you have overlapped too much or moved the spray gun too slow.

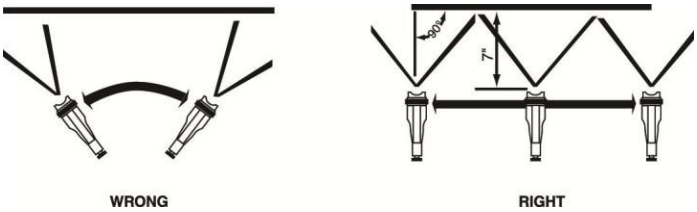
6. When spraying cars start at the top and work down. This will stop any overspray from landing on your previously sprayed panels.

7. Try to spray the hard to reach and underneath surfaces first.

Common sense and some forethought will prevent errors. Remember, that a light wet film will generally produce better results than a heavy wet coat. When spraying a vertical surface, it is advisable to apply a thin/light “tack” coat first, followed by a normal light wet coat. This technique will help prevent “runs” and “sags”.

Chart C

Spray Gun Technique



When using your Spray Gun, you control five variables:

1. Fluid flow.

2. Distance of the spray gun from your work. 4”-6” (10-15cm) is ideal. Closer if necessary.

3. Pattern direction (vertical, horizontal and round).

4. Speed of application.

5. Fan pattern size.

NOTE: Items 1, 2, and 4 directly relate to each other.

6.3 Cleaning Your PBC-GTO Spray Gun

After you are finished spraying, follow these instructions to clean your PBC7600-GTO spray gun(s):

6.3.1 Partial Cleaning

Cleaning your PBC-GTO spray gun does not have to be a difficult task. Often, when spraying a variety of clearcoats, thorough rinsing and wiping of basic parts is all that may be necessary. The basic steps below are for simple and easy cleaning of your PBC-GTO spray gun.

1. Empty any unused material (paint) from the cup and wash out any residue with an appropriate cleaner compatible with the coating, or water if using water-based material. Partially fill the cup with cleaner and spray through the gun to flush out the material passages.

2. Remove the Air Cap (#2) and clean. Ensure that all the air holes in the air cap are clean.

3. Using a brush and solvent, remove any paint deposits on the outer surface of the tip/nozzle (#3). (Apollo FS1900 cleaning brush kit recommended).

4. Unscrew and remove the Material Adjustment Screw (#19).

5. Remove the needle spring (#20).

6. Pull the trigger and then pull the needle (#21) out through the back of the spray gun.

7. Remove the fluid nozzle (#3) with the wrench (spanner) provided.

8. Clean both fluid nozzle and needle assembly using cleaner or water and a brush.

9. Reassemble following the instructions in the next section for thorough cleaning. Make sure to oil the needle spring (#20), the Air Valve Stem (#14) and the Gland Seal (#24) to prevent the needle from sticking.

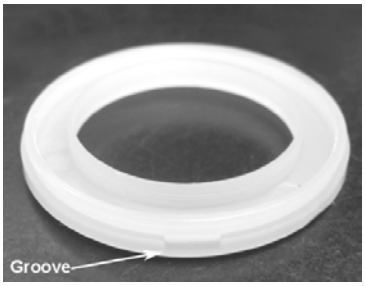
10. To adjust the Gland nut (#23) tighten slightly until you feel tension on the needle. Do not over tighten the gland nut or the needle will stick. Do not under tighten the gland nut or the gland seal will leak.

11. Check the Cup Top Gasket and replace it if damaged. Always seat the cup top gasket flat in the cup groove. Failure to do this will allow the cup to drip and impair the spray pattern due to loss of cup pressure.

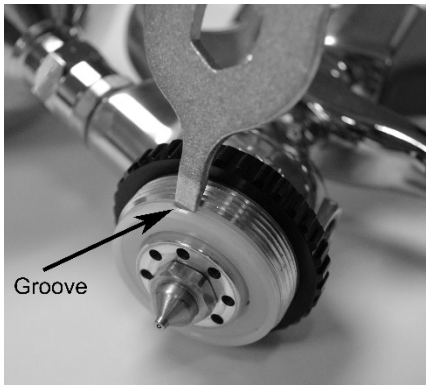
6.3.2 Thorough Cleaning

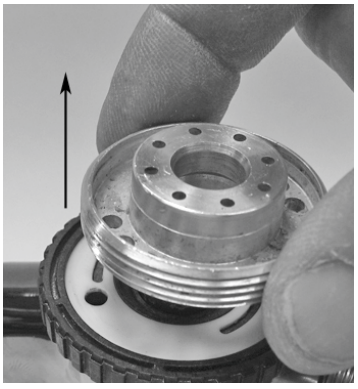
To further disassemble the spray gun now that you have already removed the air cap ring (#1), air cap (#2), fluid nozzle (#3) and needle (#21), locate the air cap seal (#4). To remove the air cap seal, lay the spray gun on its side.

1. Locate the small groove on the air cap seal. You can rotate the groove to a comfortable position for removal. (3 o'clock or 9 o'clock).



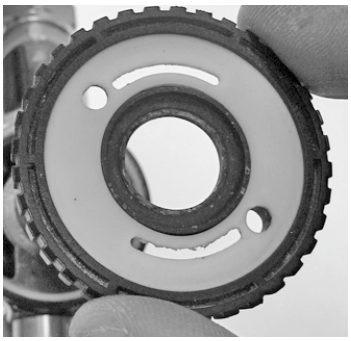
2. Place the flat tip of the wrench (spanner) in the air cap seal groove. Push in and pry up until the air cap seal pops out. (Clean if necessary).



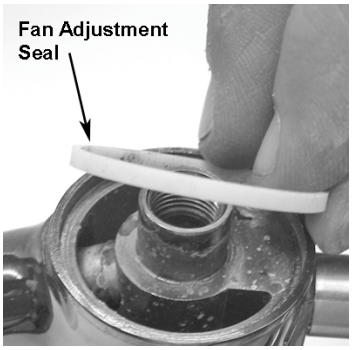


3. Remove the air distributor (#6) and clean if necessary.

4. Remove the fan adjustment ring (#8) and air distributor plate (#7). The air distributor plate is attached to the ring. These two pieces are separate. Clean them both if necessary.



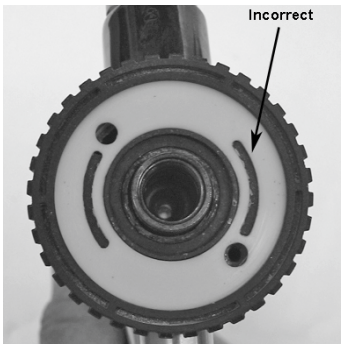
Note: Make sure you reassemble the two pieces correctly or you will only get a round fan pattern.



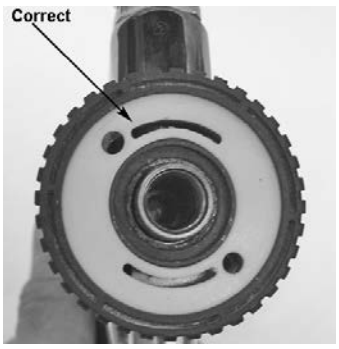
5. Remove the fan adjustment seal (#9). Clean if necessary.

6.3.3 Re-Assemble the Spray Gun

1. Insert the fan adjustment seal (#9). Place back down with thin edge going down into the gun head.



2. Insert the fan adjustment ring and air distributor plate. (#7 and #8). If you have separated these two pieces it is critical that the white air distributor plate is correctly re-inserted into the fan adjustment ring. Note that the open slots on the air distributor plate must be visible through the holes of the fan adjustment ring.



3. Using the back end of the needle, move the distributor plate so that the round screw hole is at the 5 o'clock position. DO NOT put the distributor plate and fan adjustment ring together as shown in the picture marked "incorrect".

4. Place the Air Distributor (#6) on top of the paired fan adjustment ring and Air Distributor plate.

5. Align the screw hole in the Air Distributor with he holes in the fan adjustment ring

6. Holding the head of the spray gun facing you, place the Air Distributor Assembly onto the body of the spray gun aligning the round hole with the locating pin in the spray gun body at the 5 o'clock position.

7. Screw the fluid nozzle (#3) back onto the spray gun, finger tight. Rotate the fan adjustment ring to be sure it rotates freely and easily. Tighten the nozzle slightly more with the wrench (spanner). Rotate fan adjustment ring again. Do not over tighten the fluid nozzle as it will stop the fan adjustment ring from rotating. If too tight, back off slightly. Be sure that the fluid nozzle is not too loose, or leaking will occur.

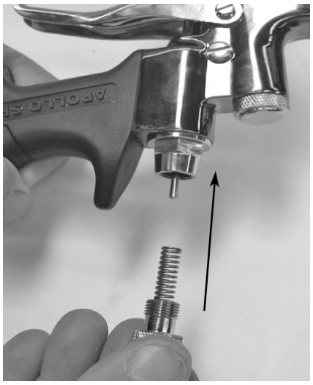
8. Insert the air cap seal (#4). To insert, observe both sides of the seal. One side should have three small circles. This side goes toward the spray gun. Snap the air cap seal onto the air distributor (#6).

9. Push the needle (#21) back into the spray gun.

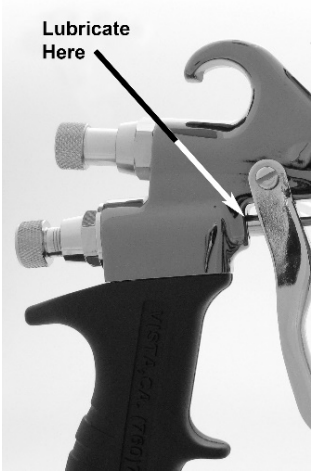
10. Insert the Needle Spring into the Material Adjustment Screw (#19).

11. Install the Material Adjustment Screw with Needle Spring (#20).

12. Install air cap and air cap ring. Spray gun is now re-assembled and ready to use.



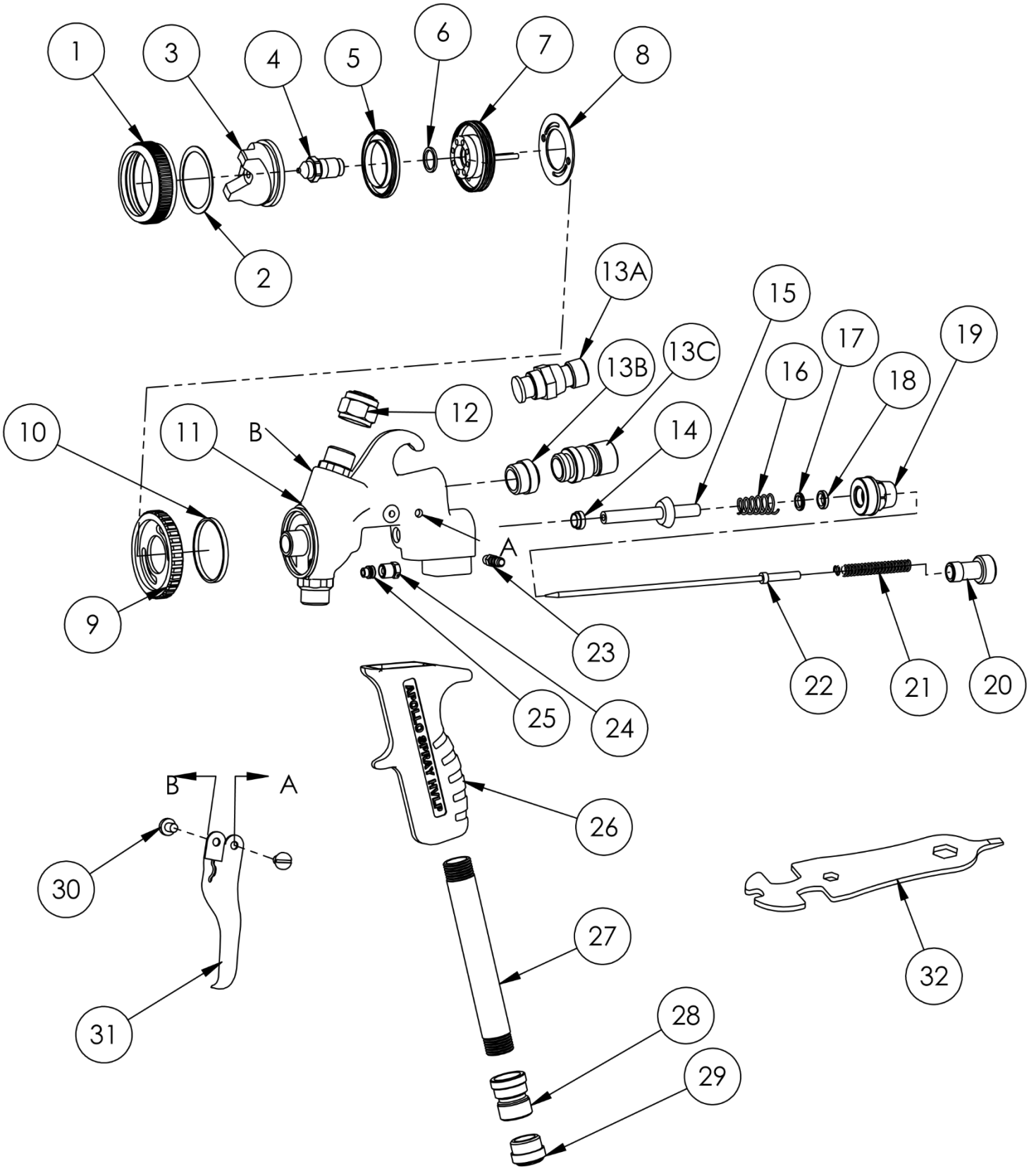
NOTE: Periodically, use Apollo lubricant to lubricate the air valve bushing as shown.



⚠CAUTION

Pressure will remain in the spray cup when the unit is off. If you pull the trigger back, a stream of fluid will flow. To prevent accidents, turn material flow screw clockwise until it is completely closed. The trigger is now locked in the closed position.

To relief the cup pressure prior to opening the cup use the twist connector located between the check valve and the cup lid. Undo the connector and the air pressure will exhaust through the tube. If you don't relieve the air pressure prior to opening the lid on the cup, paint can fly out and down the side of the cup.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APOLLO SPRAY MVLP
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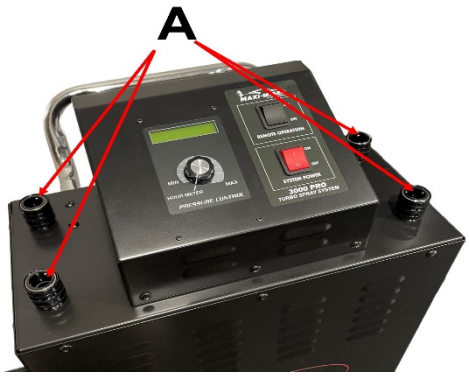
7700T Parts List			
ITEM #	QTY	PART #	DESCRIPTION
1	1	A7501-NS	AIR CAP RING
2	1	A7501-GK	AIR CAP RING GASKET
3	1	A7502-05-HS	AIR CAP - SIZE 0.5MM "CC-HS"
3	1	A7502-08	AIR CAP - SIZE 0.8MM "A"
3	1	A7502-10	AIR CAP - SIZE 1.0MM, 1.3MM, 1.5MM "B"
3	1	A7502-10-HS	AIR CAP - SIZE 1.0MM, 1.3MM, 1.5MM "B-HS"
3	1	A7502-18	AIR CAP - SIZE 1.8MM, 2.0MM "C"
3	1	A7502-18-HS	AIR CAP - SIZE 1.8MM, 2.0MM "C-HS"
3	1	A7502-25	AIR CAP - SIZE 2.5MM "D"
3	1	A7502-25-HS	AIR CAP - SIZE 2.MM "D-HS"
4	1	A7503-05	FLUID NOZZLE - SIZE 0.5MM
4	1	A7503-08	FLUID NOZZLE - SIZE 0.8MM
4	1	A7503-10	FLUID NOZZLE - SIZE 1.0MM
4	1	A7503-13	FLUID NOZZLE - SIZE 1.3MM
4	1	A7503-15	FLUID NOZZLE - SIZE 1.5MM
4	1	A7503-18	FLUID NOZZLE - SIZE 1.8MM
4	1	A7503-20	FLUID NOZZLE - SIZE 2.0MM
4	1	A7503-25	FLUID NOZZLE - SIZE 2.5MM
5	1	A7504	AIR CAP SEAL
6	1	A7556	AIR DISTRIBUTOR GASKET
7	1	A7506-NS	AIR DISTRISBUTOR
8	1	A7507	AIR DISTRIBUTOR PLATE
9	1	A7508	FAN ADJUSTMENT RING
10	1	A7509	FAN ADJUSTMENT SEAL
11	1	A7510	SPRAY GUN BODY
12	1	A7533	MATERIAL BLANKING CAP
13A	1	A7546	OS CONTROL (OPTIONAL)
13B	1	A7513-HX	AIR BLANKING CAP (UPPER PORT)
13C	1	A7543	UPPER PORT HOSE COUPLER (OPTIONAL)
14	1	A7514	AIR VALVE BUSHING
15	1	A7515	AIR VALVE STEM
16	1	A7516	AIR VALVE RETURN SPRING
17	1	A7518	AIR VALVE RETAINING NUT GASKET
18	1	A7517	AIR VALVE SEATING GASKET
19	1	A7519	AIR VALVE RETAINING NUT
20	1	A7522	MATERIAL ADJUSTMENT SCREW
21	1	A7521	NEEDLE SPRING
22	1	A7520-05	NEEDLE ASSEMBLY - SIZE 0.5MM
22	1	A7520-08	NEEDLE ASSEMBLY - SIZE 0.8MM
22	1	A7520-10	NEEDLE ASSEMBLY - SIZE 1.0MM
22	1	A7520-1315	NEEDLE ASSEMBLY - SIZE 1.3MM
22	1	A7520-1315	NEEDLE ASSEMBLY - SIZE 1.5MM
22	1	A7520-1820	NEEDLE ASSEMBLY - SIZE 1.8MM
22	1	A7520-1820	NEEDLE ASSEMBLY - SIZE 2.0MM
22	1	A7520-25	NEEDLE ASSEMBLY - SIZE 2.5MM
23	1	A5211N	AIR FEED CONNECTOR
24	1	A7528	GLAND SEAL NUT
25	1	A7527	GLAND SEAL
26	1	A7524	HANDLE
27	1	A5226	HANDLE TUBE
28	1	A7526-HX	MALE QUICK CONNECT (TURBINE AIR)
29	1	A7544	AIR BLANKING CAP, HANDLE (OPTIONAL)
30	2	A7531	TRIGGER SCREW
31	1	A7532	TRIGGER
32	1	A7534	WRENCH

7. Get to Know Your Maxi-Miser® Turbo Spray System



Handi-Hold™ Spray Gun Docking Station:

Your Maxi-Miser® turbo spray system comes equipped with Four (4) Handi-Hold™ Spray Gun Docking Stations (Figure A). This feature can store, hold, or transport your spray gun in a vertical position with no risk of falling over. Ready to spray when you are! Disconnect the air hose from your spray gun and insert the spray gun handle coupler into the Handi-Hold™ Spray Gun Docking Stations (Figure A), as shown.

8. Maxi-Miser® 3000 PRO Operation

The Maxi-Miser® 3000 PRO turbo spray system is the newest HVLP technology patented by Apollo Sprayers International, Inc. The 3000 PRO's Precision Air Control Technology (PACT) accurately enables you to control the air pressure from the turbo system to within 1/10th of a PSI. The 3000 PRO comes supplied with three 7600 PBC-GTO™ spray guns and a 37' ultra-flex™ air hose.

To operate the Maxi-Miser™ 3000 PRO it is important to connect the air hose and spray gun. The turbine will not operate correctly without back pressure to the motor, which means the spray gun and air hose need to be connected. The 3000 PRO is NOT compatible with "Bleeder" style spray guns (spray guns with continuous air flow from the air cap).

To operate your turbo spray system, connect the male end of your air hose to the turbo spray system. Next, connect the female end to the spray gun handle coupler to the other end of your hose. Your air hose is now connected to the turbo system and the spray gun. Next, plug the turbo spray system into single phase 240 volt electrical outlet. Next, push the power ON/OFF switch to the ON position. The factory has calibrated your turbine motor for the maximum output pressure possible. To get an accurate stable spraying pressure it is advised that you let the turbo system warm up for about 5-10 minutes prior to spraying as you flow pressure will drop slightly as the turbo motors warm up. Once the turbine motor is warm the LCD will give you an accurate pressure reading to 1/10th PSI with little or no fluctuation.

It is important to understand the difference between static or sealed pressure vs. flow pressure. When setting the air pressure for spraying you should always set the flow pressure. You can set the flow pressure by connecting the spray gun and air hose and turning the system on. Turn the material flow screw on the spray gun about 2 full turns counterclockwise (with the start position all the way closed). Make sure you don't have any material in the cup or, you don't pull the trigger back all the way. If you do, you will release the material in the cup. You only need to release the air pressure from the spray gun, not the material in order to set the flow pressure. **This is why it is preferable to set the pressure without any material in the cup**. Pull the trigger and release the air from the spray gun. While continuing to pull the trigger, adjust the pressure on the turbine to the spraying pressure of your choice. Once you have set the pressure release the trigger. The pressure will stay where you set it. Pull the trigger again and watch the LCD screen. You will notice the air pressure drop and then go back to where you set the pressure. This will work for any pressure setting. NEVER set the air pressure at full power with the spray gun closed. This will not give you any additional spraying pressure and will only overwork and possibly overheat your turbo system motor when not being used.

The control board will automatically adjust the motor speed to compensate for barometric pressure and elevation. The pressure reading in the LCD will always be accurate. To decrease the pressure from the maximum setting simply turn the knob underneath the LCD pressure display counterclockwise, toward "MIN". To increase the pressure once reduced, turn the knob clockwise, toward "MAX". As you turn the knob, the pressure will increase or decrease accordingly. The scale behind the knob is there only to indicate the direction to increase and decrease the pressure. It does not represent any settings for the air pressure, this is only to indicate the direction of increased or decreased air pressure.

The viscosity of the coating you want to spray will determine the amount of air pressure needed. The thicker your viscosity, the more pressure you will need to atomize it properly. For highest efficiency, use the lowest pressure that produces the best atomization and finish results. If you experience "Orange Peel", increase the pressure. If you have too much overspray, decrease the pressure.

The Maxi-Miser® 3000 PRO is equipped with an “Overheat” system. The Overheat system works to help prevent overheating your motor. To prevent damage to the motor the turbine will shut itself down if it gets too hot. Overheating is usually caused by clogged or dirty filters. The more the filters are restricted the hotter the motor will run. Once the overheating point has been reached the turbine will shut off until the temperature inside the unit has cooled enough for the motor to once again operate normally. When this happens an “OVERHEAT” message is displayed in the LCD screen. Do not ignore this warning. Clean or change all your filters to prevent this from happening again.

The 3000 PRO, also equipped with an hour meter, which records the use of the turbo spray system in whole hours. To see how many hours of use your turbine has, turn the power control knob counterclockwise until the indicator mark on the knob lines up with the line for the Hour Meter. The LCD will then display the hours of use rather than the pressure.

9. Turbo Air Pressure and Viscosity

When using your Maxi-Miser® 3000 PRO it is important to understand the nature of the coating you are spraying and the viscosity. Fairly thin materials like Basecoats can generally be sprayed with approximately 4-6 PSI. Medium bodied materials such as sealers will require more air pressure, approximately 6-8 PSI. High Solids and heavy viscosity materials are going to require 8 PSI or more to atomize them nicely. Always use the minimal amount of air pressure possible to achieve the best results.

Chart E

Turbine Performance

Suggested Flow Air Pressure	Coating Types
2-4 PSI	Low-Medium Viscosity Materials
4-6 PSI	Medium Viscosity Materials
6+ PSI	High Viscosity Materials

10. Turbine Maintenance and Cleaning

⚠CAUTION

Always unplug your turbine from the main electrical supply before doing any maintenance or repairs.

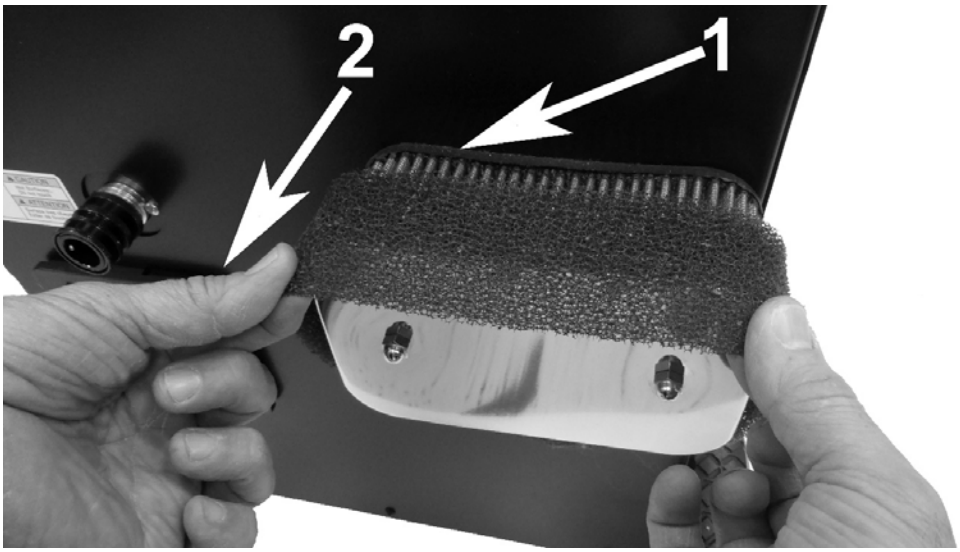
After Each Use:

Your Apollo turbine system requires very little maintenance. The turbine motor has sealed bearings that are lubricated for life. The only maintenance that you will need to perform is checking, cleaning and replacing your filters and pre-filters as required. It is very important that your motor has cool, clean air to operate efficiently. If you maintain your filters and pre- filters well, you will enjoy many years of long service from your turbine motor.

NOTICE
Always use genuine Apollo filters and pre-filters. Other types of filters and pre-filters may prevent proper air flow to the motor, resulting in premature motor failure and voiding your warranty.

10.1 Pre-filter Maintenance

We recommend that you remove your pre-filters after each use. To remove the pre-filters: push your finger between the filter (1) and pre-filter (2) until you can curl it up and pull the pre-filter off, rotating your finger around the pre-filter as you pull. Do not pull hard as you will break the glue line on the pre-filter. Make sure you check all three pre-filters as they can get dirty at different intervals. If they appear to be a little dirty or clogged, you can wash them out using a mild soap and warm water. If they are not cleanable you need to install new pre-filters.

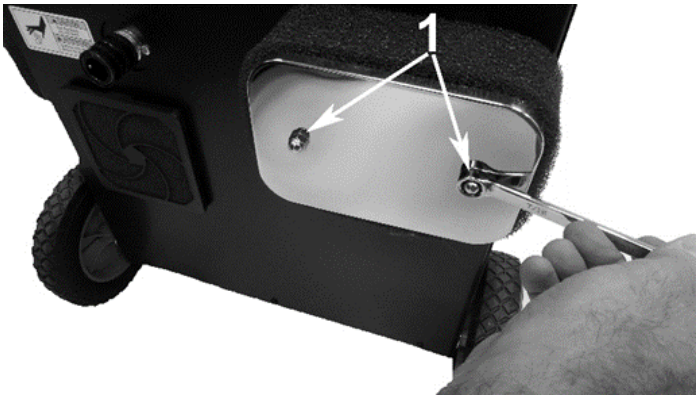


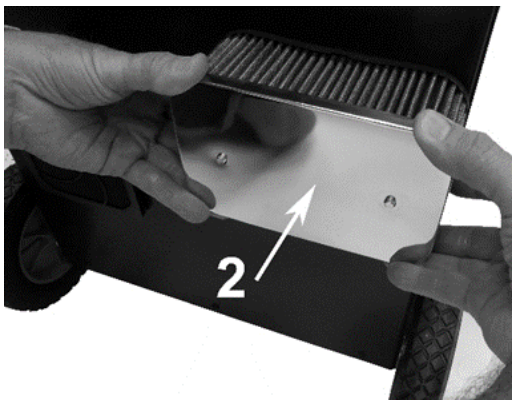
To reinstall the pre-filters, hold one in both hands and apply the top first, moving your fingers around the inside as you slide it back over the filter cartridge from top to bottom. NEVER operate your turbine without both filters and pre-filters installed and clean.

10.2 Filter Maintenance

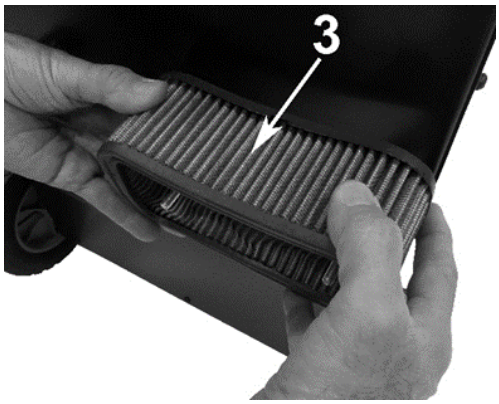
There are three filters on your Maxi-Miser® 3000 PRO. Visually check all your filters when you remove your pre-filters for cleaning. Check for accumulated material in the filter element. If you suspect they may be dirty, or if you can see material building up, don't take a chance, remove the filters, and hold it up to the light.

To remove your filters, remove the two dome nuts (1) and pull filter plate (2) off. Filter plate can hang up on the threads so make sure you pull it off straight.





Remove filter (3). If filter is stuck to the side of the case, gently tap the side with your hand.



To check your filters, hold them up to a light, similar to your car air intake filter. If you cannot see light through more than 50% of the filter you need to wash it or replace the filter element.

NOTICE
Filter element may be damaged if more than 30 PSI of air pressure is used to blow out filter element.

If they appear to be dirty, you can tap them gently on a flat surface to remove any debris. If you have compressed air available, you can also blow them off with air. If you use compressed air to clean your filters, make sure you blow the air from the inside out and never use more than 30 PSI or this will damage the filter element. You can also use a filter cleaner and wash your filters. Follow normal cleaning instructions of the bottle of cleaner you are using.

To reinstall the filters, reverse the instructions above. Make sure that the filters are **dry** if you washed them with water and you line the filter up with the filter plate first. This will help to keep it straight when replacing the dome nuts.

10.3 Fan Filter Maintenance

In addition to the main motor filters there are also two additional fan filters that need to be cleaned and periodically replaced. One of the fan filters is located underneath the house outlet (1) on the turbo unit itself and the other on the back of the control panel (2).

Fan filter – back

Fan filter – control panel

To clean the fan filter, remove the plastic fan guard by pulling it free. You will notice there are four tabs located at the edges. Pry these tabs out and the guard will pop free. Remove the filter element and wash with mild soap and water as necessary. If the filter can't be cleaned replace it.

NOTICE:
Failure to clean the fan filters will result in electronic failure of the turbo system and void your warranty. Make sure you check and clean the filters regularly.

11. Record of Turbine Use

Record Of Turbine Use		
Model	**Serial #**	**Date Purchased**
Date	**Hours Of Use**	**Total Hours**

Turbine Recommended Maintenance: Clean and/or change pre-filters and/or cartridge filters every 10 hours or when necessary. See Accessories Page for appropriate filter replacement for your model.

12. Record of Turbine Maintenance

Record Of Turbine Maintenance	
Date	**Maintenance Performed**

13. Genuine Maxi-Miser® Accessories

FS1680 – Pack of 5, 12” Air feed tubes for 90,250 and 600cc gravity cups

FS1900 - Deluxe Cleaning Kit, Lifetime Warranty

A4096 - Pre-Filters

A4098 - Replacement Filters

FS1670 - Filter Stand, Fits 1 & 2 Quart (1 & 2 Liter) Cups.

Gravity Cup Assemblies

A7555A - non-teflon 90cc cup assembly
A5033A - non-teflon 250cc cup assembly
A5034A - non-teflon 600cc cup assembly
A7536A - non-teflon 1000cc cup assembly

14. Limited Warranty

2 Year Limited Warranty

All MAXI-MISER® paint spray system are WARRANTED by APOLLO SPRAYERS INTERNATIONAL, INC. for a total period of TWO YEARS from the ORIGINAL date of purchase by the ORIGINAL PURCHASER. Proof of purchase to be included and all SHIPPING CHARGES to be pre-paid.

All MAXI-MISER® system warranties can be verified by registering your purchase using our online registration page located at www.hvlp.com/warranty-registration/ within 30 days of your purchase.

APOLLO SPRAYERS INTERNATIONAL INC., upon examination of the machine/equipment will replace or repair at their discretion any defects in material or workmanship.

This WARRANTY DOES NOT include misuse, damage, neglect, alterations, disassembled equipment or modifications, lack of maintenance, cleaning, water damage to electrical parts, INCORRECT VOLTAGE CONNECTION.

This Warranty is in lieu of all other express warranties, any WARRANTY implied by law, including but not limited to, implied Warranties of merchantability or fitness, is excluded to the maximum extent permitted by law and, if not excludable, is limited to the duration of the express Warranty.

No representative or person is authorized to extend this Warranty or to create for APOLLO SPRAYERS INTERNATIONAL, INC. any other liability in connection with the sale of any APOLLO SPRAYERS product. APOLLO SPRAYERS INTERNATIONAL, INC. shall not be liable for any consequential, incidental or special damages of any kind directly or indirectly resulting from breach of any express or implied warranty.

Some states do allow the exclusion or limitation of incidental or consequential damages or limitations on the length of any Warranty so that the above limitations and exclusions may not apply to you: however, to the maximum extent permitted under applicable law, the only rights and remedies shall be to obtain a replacement for any defective product.

This Warranty gives you specific legal rights and you may also have other rights which vary from State to State.

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www.hvlp.com

WARNING:

This product can expose you to chemicals including Chromium, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.