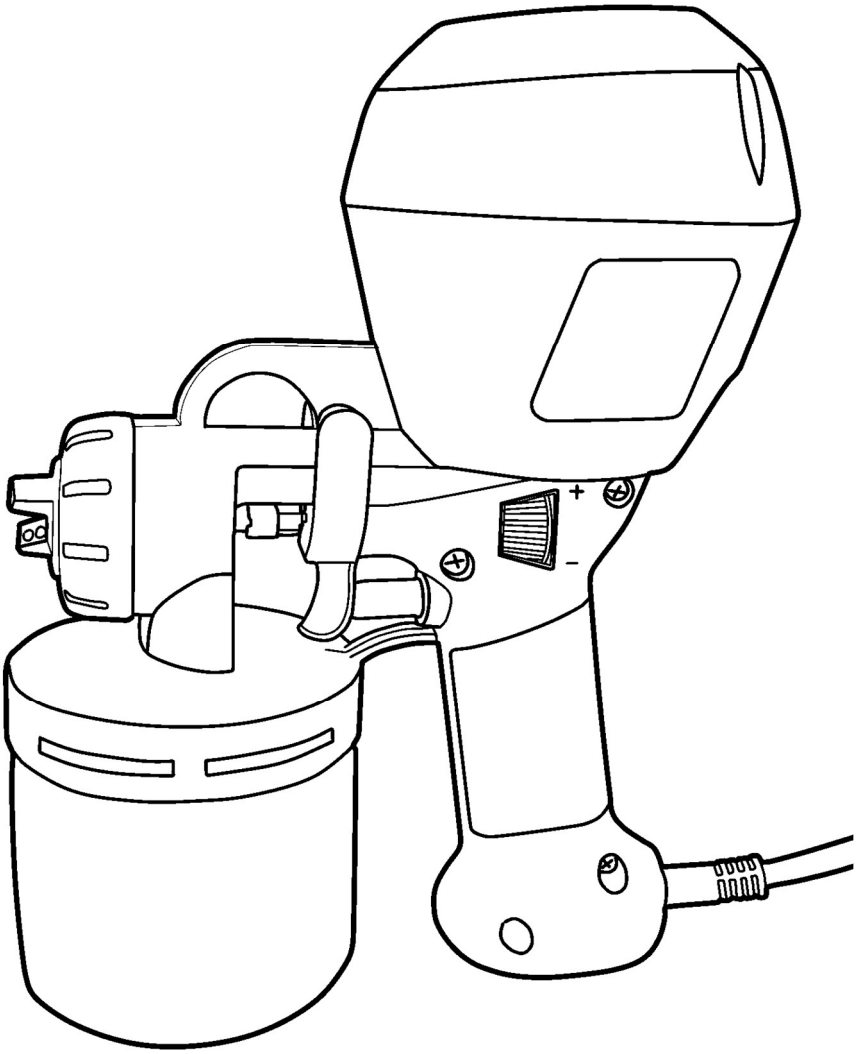
Haupon®

HVLP PAINT SPRAYER

TM-73



WARNING

TO REDUCE THE RISK OF INJURY, USER MUST READ AND UNDERSTAND INSTRUCTION MANUAL. KEEP CHILDREN AWAY FROM WORKING AREA.

MADE IN TAIWAN

PLEASE READ AND SAVE THIS INSTRUCTION MANUAL

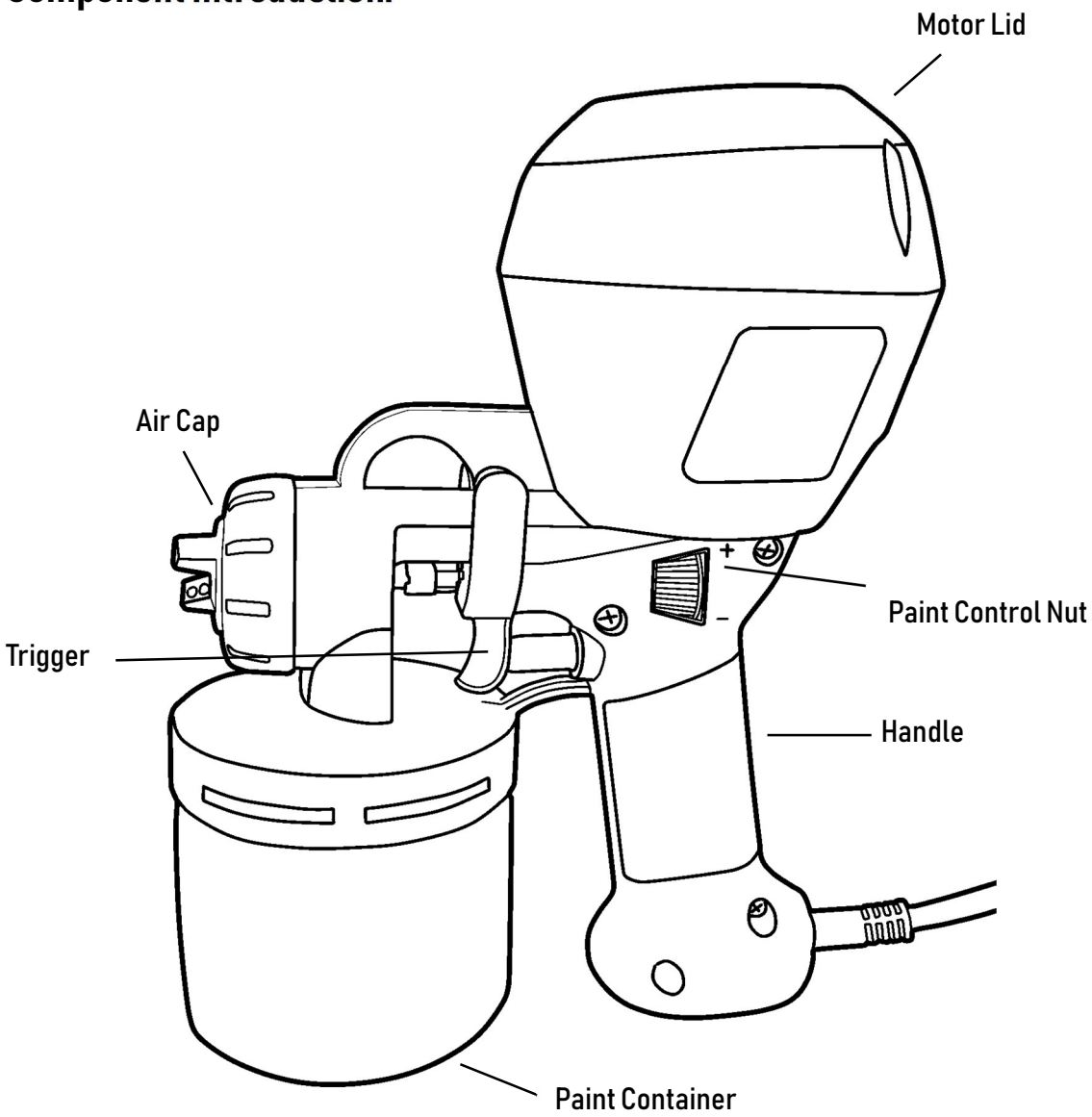
ENGLISH

ORIGIONAL INSTRUCTIONS

Specifications:

Voltage	☐ 100V-120V	☐ 220V-240V	50 Hz / 60 Hz
WATTS	300-420 watts		
Air supply	67cu.ft./min. (1.9 m3/min.)		
Container capacity	11 oz (0.3 L)		
Weight	2.2 lbs. (1kg)		
Motor speed	34,000 rpm		

Component Introduction:



Read instruction manual before operating and observe all warning.

WARNING:

DO NOT aim sprayer at yourself or anyone else at all times, in the event of an injury occurring seek expert medical consultant immediately.
DO NOT allow any part of the body to come in contact with the fluid stream.
DO NOT cover the nozzle with any part of your body, high velocity jet could cause accidental injuries.
DO NOT spray any hazardous materials (for example: easy flammable, very toxic, toxic, less toxic, corrosive or irritating substances).
DO NOT spray any textured materials containing particles or fibers such as asbestos fibers.
DO NOT spray flammable liquid.
DO NOT clean guns with flammable solvents.
DO NOT spray any material where the hazard is not known.
DO NOT use the spray gun outside when it is raining to reduce the risk of electric shock.
DO NOT use the spray gun at any stuffy area. Ensure adequate ventilation at all time when using the unit.
DO NOT disassemble the sprayer without skill's direction for avoiding danger.
DO NOT tamper with electrical motor, switch wiring or plug.
DO NOT leave your sprayer unclean or allow paint to dry in the gun. An unclean sprayer will not work next time and you could void the one-year warranty.
DO NOT use the power tool if the switch does not turn it on and off.

NEVER immerse the sprayer into water or other liquids for preventing electric shock.

ALWAYS place the sprayer upright (do not place the sprayer upside down or on its side) to prevent liquid or paints flow into motor.

ALWAYS wear mask, goggles, ear protectors and eye protectors while operating the sprayer.
ALWAYS unplug the cord to prevent accidental spraying when you stop spraying or servicing.
ALWAYS keep children and bystanders away.
USE fluids with a flashpoint above 55 degrees C.

FOR SAFE OPERATIONS:

1. **Keep work area clean**
   Cluttered or dark areas and benches invite accidents.
2. **Consider work area environment**
   Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, rain, gases or dust. Keep work area well lit. Avoid working with power tools in damp or wet areas or when perspiring. Store tools away from moisture. Do not use power tools where there is risk to cause fire or explosion. Power tools create sparks which may ignite the dust or fumes.
3. **Guard against electric shock**
   Avoid body contact with earthed or grounded surfaces (e.g. pipes, radiators, ranges, refrigerators).
4. **Store idle tools**
   When not in use, tools should be stored in a dry, high or locked up place, out of reach of children.
5. **Do not force the tool**
   It will do the job better and safer at the rate for which it was intended.
6. **Dress properly**
   Rubber gloves and non-skid footwear are recommended when working outdoors.
7. **Do not abuse the cord**
   Never carry the tool by the cord or yank it to disconnect it from the socket.
   Keep the cord away from heat, oil and sharp edges.
8. **Do not overreach**
   Keep proper footing and balance at all times.
9. **Disconnect tools**
   When not in use, before servicing or when changing accessories.
10. **Use outdoor extension leads**
    When use the tool outdoors, use only extension cords intended for outdoor use.
11. **Stay alert**
    Watch what you are doing. Use common sense. Do not operate tool when you are tired or under the influence of drugs, alcohol or medication.
12. **Have your tool repaired by a qualified person**
    This electric tool is in accordance with the relevant safety requirement. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.
13. **Do not use guns for spraying flammable materials.**
14. Do not clean guns with flammable solvents.

15. If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.
16. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.
17. Remove any adjusting key or wrench before turning the power tool.
18. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.
19. **Maintain power tools.**
    Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use.
20. Use the power tool, accessories and tool etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.

Notes:

- Please use the check valve to prevent paint from flowing into motor.
- Practice before painting. Practice spraying water on cardboard, and adjust the paint flow and turn the wings of the tip to get the desired spray pattern. (see Page 8 & 9.)
- **Keep spray tip, needle tip and check valve clean.**
  Check spray tip, needle tip and check valve for dried paint before each use.
  Before each use, lightly push the check valve by bamboo skewer or slender object to check if air can pass through. (See Check Valve, page 10)
- Make sure paint tube is inserted tightly into the intake port.
- Always clean check valve after each use. (see Check Valve, Page 10.)
- Always clean the sprayer after each use. (see Clean Up, page 11.)

Noise/Vibration Information

Measured sound values determined according to EN 60745-1 and EN 50580.
Typically, the A-weighted noise levels of the product are:
Sound pressure level 86 dB(A);
Sound power level 96 dB(A).
Uncertainty
K=3 dB.
Wear hearing protection!
Vibration total values (triax vector sum) determined according to EN 60745-1 and EN50580:
Vibration emission value ah <1.5 m/s2,
Uncertainty K =1.5 m/s2.

SERVICING OF A DOUBLE-INSULATED PRODUCT:

1. A product provided with a 2-blade polarized attachment plug shall be provided with the following instructions or the equivalent: This appliance has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

2. In a double-insulated product, two systems of insulation are provided instead of grounding. No grounding means is provided on a double-insulated product, nor should a means for grounding be added to the product. Servicing of a double-insulated product requires extreme care and knowledge of the system, and should be done only by qualified service personnel. Replacement parts for a double-insulated product must be identical to those parts in the product.
The double-insulated product shall be marked with « DOUBLE INSULATION » or «DOUBLE INSULATED » and «  ».

The Choice of Spray Tip Set Size

Spray Tip Size	Recommended Material
Ø 1.0mm	Coating, Photocatalyst, Sealer, Lacquer, Adhesive, Wood paint, Enamel paint
Ø1.3mm*	Sealer, Lacquer, Red Lead Primer, oil-based paint, Sealer, Enamel paint, Wood paint
Ø1.5mm	Sealer, Lacquer, Red Lead Primer, oil-based paint, Paint with hardener
Ø2.0mm	Solvent based Waterproof paint, Oil-based paint, Red Lead Primer, Anti-rust primer, PU paint
Ø2.5mm Ø3.0mm	Latex Paint, Waterproof paint, PU paint, Super Glue, Paint with hardener, Ready-mixed paint, Wood paint
Ø3.5mm Ø4.0mm	Recycle paint, Faux stone paint, High viscosity paint

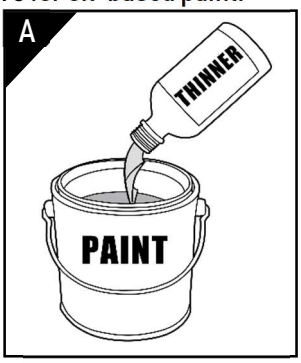
*** Ø 2.0mm is Included with TM-73**

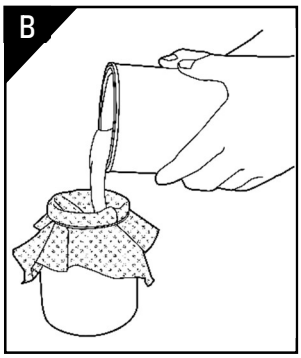
Optional Spray Tips: Ø 1.0mm, Ø 1.5mm, Ø 2.0mm, Ø 2.5mm, Ø 3.0mm, Ø 3.5mm, Ø 4.0mm

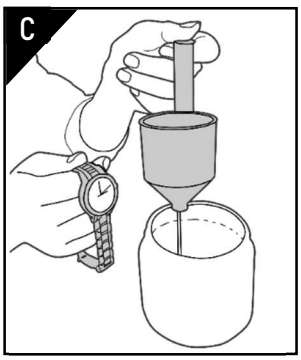
Large spray tip sets are for water-based paint (latex paint); small spray tip sets are for oil-based paint.

PAINT PREPARATION:

Most oil-based paint should be thinned with thinner before spraying. (Figure A) It might include dry paint particles which could block the spray tip. Strain the paint after thinning. Strain the paint through a fine metal sieve or nylon stocking to remove particles or fibers which could block the spray gun. (Figure B) When spraying lumps, no spray or thick spray pattern, it might be necessary to thin paint to achieve optimum spray pattern.







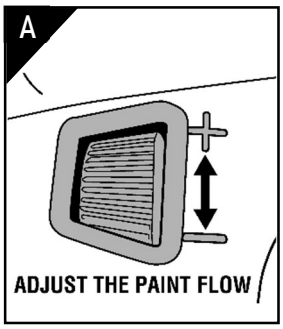
THE IDEAL CONSISTENCY FOR VARIOUS PAINTS:

Water based paint	20-35 sec.
Oil-based paint	20-30 sec.
Coating	20-30 sec.
Enamel paint	20-25 sec.
Wood stain	20-30 sec.
Metallic Paint	20-30 sec.
Clear Sealer	No thinning required
Polyurethane	No thinning required
Primer	30-45 sec.
Stain	No thinning required
Varnish	20-45 sec.

* This guide can offer only general information.
Thinning should be followed according to the stain or paint manufacturer's guideline.

The choice of needle and spray tip for different paints:

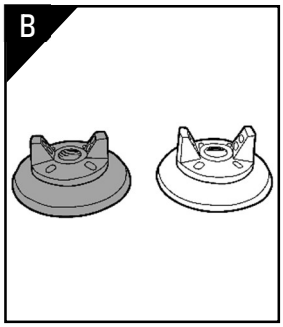
- Latex paint (All water-based paint): Ø 2.5mm (or larger) needle tip & spray tip.
- All oil-based paint: Ø 1.5mm (or smaller size) needle tip & spray tip for fine spray pattern.



Adjust the paint flow

(+) Turn the paint control clockwise for more flow. (lager spray pattern)

(-) Turn counterclockwise for less flow (finer spray pattern). (Figure A)



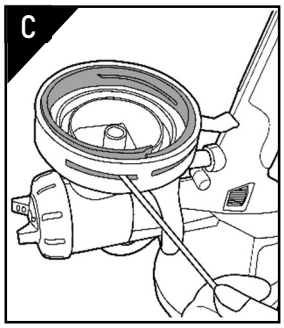
The choice of air cap (Blue air cap is optional part)

Blue air cap: Wide spray pattern. (Figure B)

Black air cap: Narrow spray pattern, fine spray pattern. (Figure B)

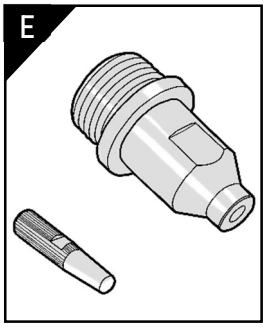
Disassemble Threaded Insert and Lid Washer

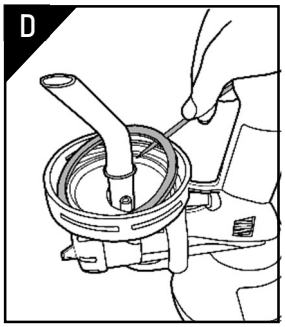
- Use a wooden chip to remove the threaded insert from lid (Figure C), and then take the lid washer out of lid (Figure D).
- Follow the direction to assemble them back. Take notice of the direction of the threaded insert.

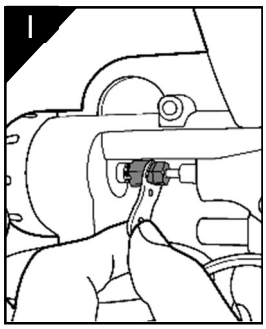


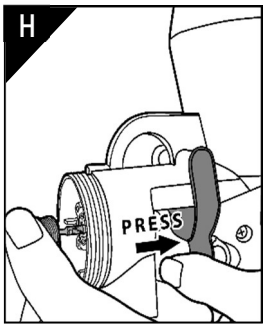
Disassemble Spray Tip and Nozzle (Please unplug the sprayer)

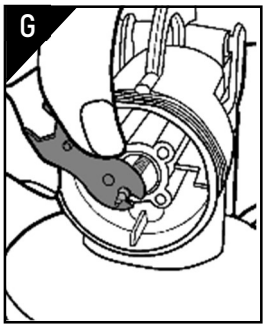
- When replacing spray tip, make sure the spray tip and needle tip are in the same size. (Figure E)
- Use the included wrench to loosen and tighten the spray tip and needle tip.
- **Do not overtighten** to prevent needle from breaking. (Figure F & G)
- When assemble the nozzle, **pull the trigger** and snug the nozzle with wrench. (Figure H)
- The wrench can also be used to loosen and tighten the needle nut. (See Figure I)

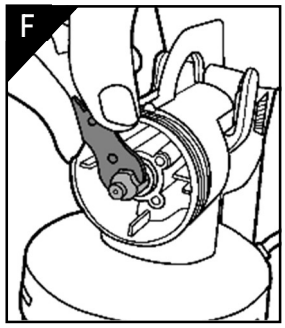








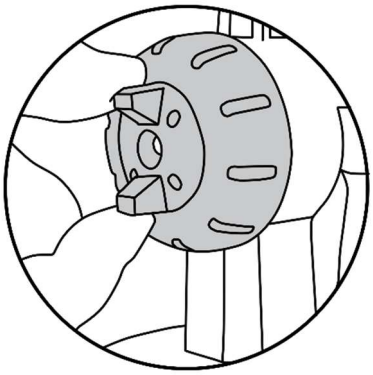


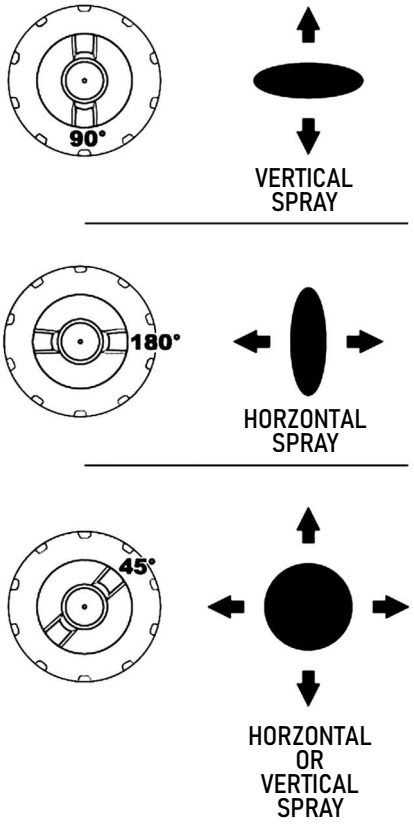


HOW TO OPERATE SPRAY GUN PROPERLY?

Adjust the Air-Cap

Slacken off the air-cap nut, turn the air-cap to the required position to produce a horizontal or vertical or round spray pattern. The horizontal spray is generally used when painting up and down, and vertical spray when painting across, and round spray when painting on the strip.



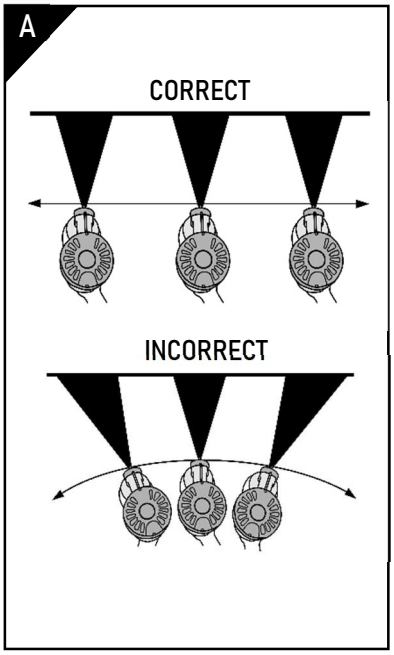


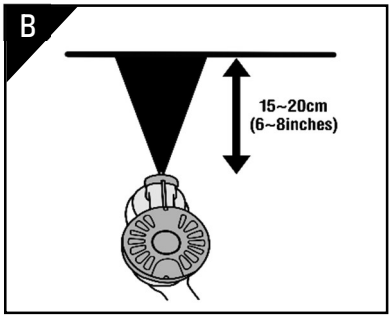
Practice before painting

1. Always hold spray gun upright and spray parallel to the painting surface. (Figure A)

2. The sprayer is with two-stage trigger design. When press the trigger, motor will start running, then paint will be spray out when press the trigger harder.

3. Test your sprayer on cardboard or scrap wood especially when you operate the sprayer first time. 15–20 cm (6–8 inches) is the best distance for spraying. (Figure B)

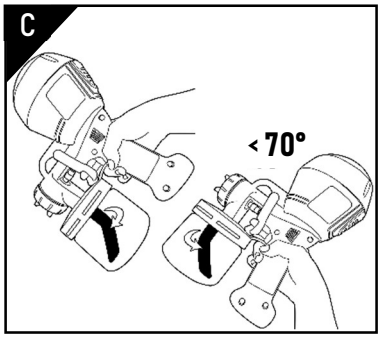




HOW TO OPERATE YOUR SPRAY GUN PROPERLY? (CONTINUED)

4. When spraying overhead (e.g. ceilings) or floors, be sure to adjust the angle of paint tube, or the sprayer may fail to get the paints from the container due to tilting. The vertical inclination should be **not more than 70°** to avoid paints running up into the motor through the air inlet. (Figure C)
5. The warm air from sprayer might cause the paint dried on the spray tip and needle tip easily, so always keep the brass needle clean with wet tissue or cloth to enable it to work longer. (Figure D)

C



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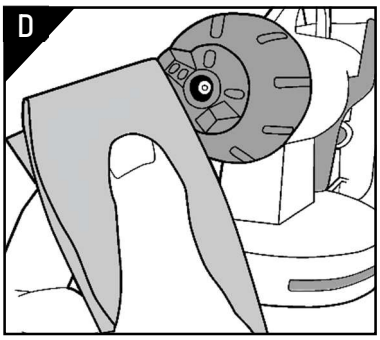


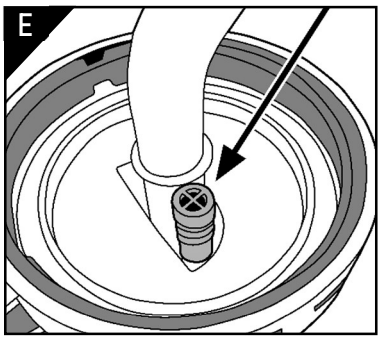
CHECK VALVE (Please use it when spraying)

Check valve prevents paint from entering the motor and causing damage to motor while tipping sprayer over.

How to assemble?

See Figure E for the assemble position. To prevent difficulty of disassembling, lightly fix it on the port.

E



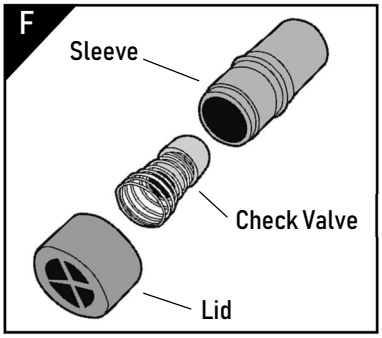
How to Clean?

Unscrew the lid then clean the check valve and sleeve. (see Figure F & G)

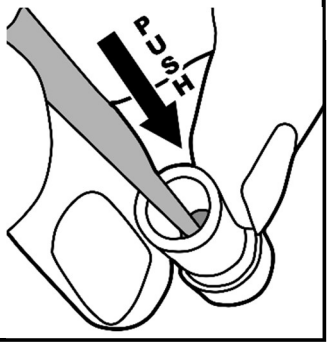
DO NOT leave check valve uncleaned or allow paint dried in it. The dried paint can cause check valve stick on the sleeve, so the sprayer will not work next time.

Notes:
When the check valve is used on the sprayer, to prevent paint from leaking out of the nozzle, **loose the paint container** to release pressure inside **while changing spray tip set**.

F

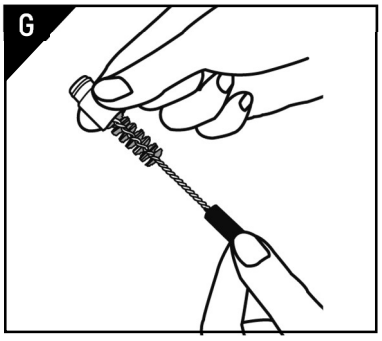


Before each use, lightly push the check valve by bamboo skewer or slender object to check if air can pass through. Always make sure the check valve does not stick on the sleeve before use.



Push from the other side of the sleeve. No need to take off the lid.

G

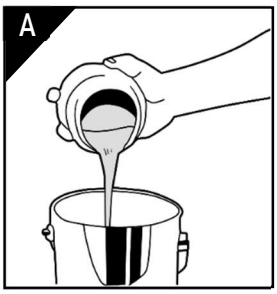


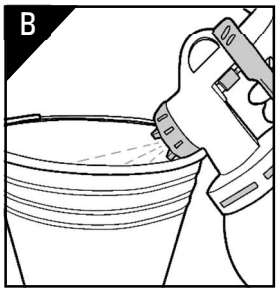
CLEANING UP

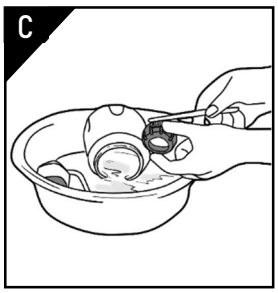
After the project has been completed or when you are going to take a longer rest, it is necessary to clean up the sprayer to prevent the paint from dried out and causing damage to the unit.

Cleaning steps:

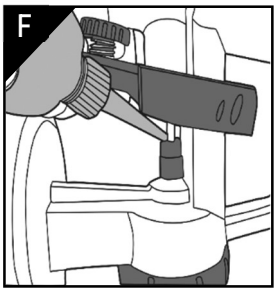
1. Unplug sprayer from electrical outlet.
2. Empty the remaining material in the container. (Figure A)
3. Fill container with some solvent (for oil-based paints) or soapy water (for water based).
4. Plug spray into an electrical outlet.
5. Spraying towards the recycling bucket for about 1~3 minutes (can't spray towards the flammable area) till the paints inside the circuit is fully clean. (Figure B)
6. Unplug sprayer and discard the remaining cleaning solution.
7. Disassemble nut, air-cap, suction tube, cup etc. Clean up them with the above cleaning solution thoroughly and then reassemble all components to the gun. (Figure C & D & E)
8. Put a small amount of light oil such as WD-40 or 3-in-one etc. into the below position (Figure F) and trigger sprayer briefly. Always clean and lubricate piston and cylinder after spraying your sprayer with water or paint for avoiding rust. (Figure F)
9. Clean the unit not enough and lubricate it with no lubricating oil which will cause cylinder rusted to seize, failure to follow the above steps will void your guarantee.

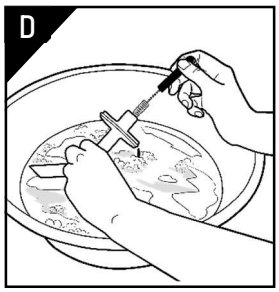






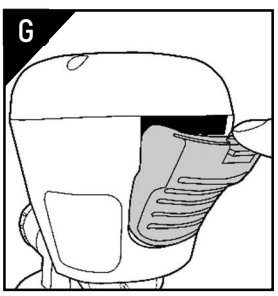
****<u>DO NOT remove the check valve while cleaning the paint sprayer.</u>** This can prevent water from flowing into motor.
Clean the check valve after the sprayer is cleaned.

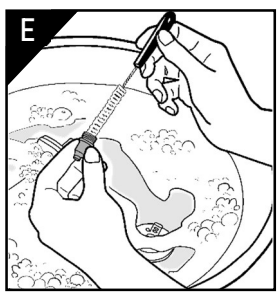




Clean Air Filter

Clean or replace air filter frequently.
An excessively dirty filter might cause damage to the unit. (Figure G)

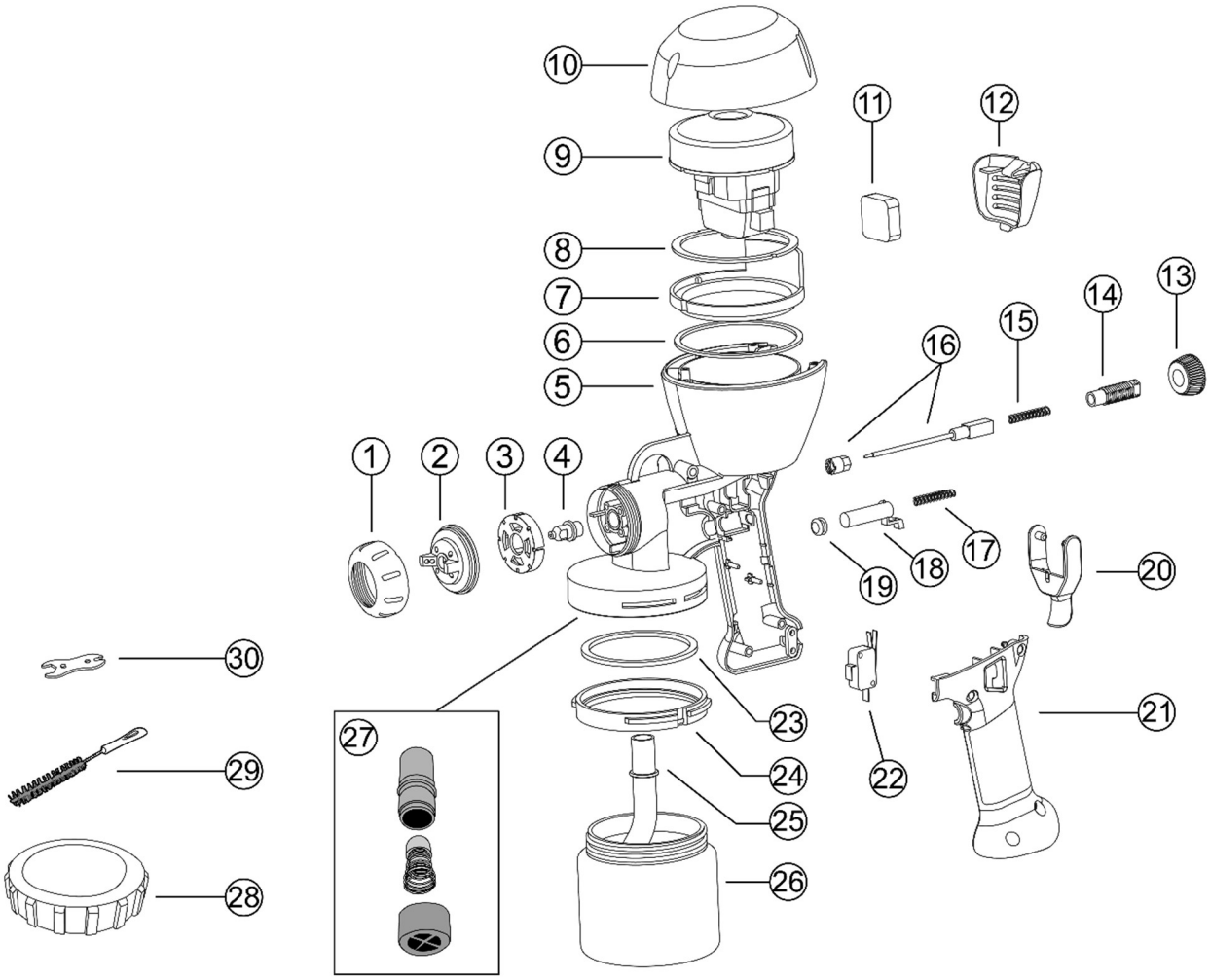




TROUBLE SHOOTING GUIDE

TROUBLE	CAUSE	REMEDY
Sags or runs	◆ Too much paint. ◆ Gun moved too slowly. ◆ Paint too thin. ◆ Gun held at incorrect angle or too close to painting surface. ◆ Spray overlaps too much.	• Turn the adjust nut counterclockwise. • Move gun faster. • Add unthinned paint to achieve correct time through viscosity test cup. • Hold gun at right angle to surface and at a distance of 15-20 cm. • Overlap spray about 1/3 width of spray pattern.
Dry spray	◆ Insufficient paint coming from the spray gun. ◆ Gun held too far from surface. ◆ Overspray from a preceding section when gun is not held at right angle to painting surface. ◆ Spray patterns not well overlapped. ◆ Air cap holes partially blocked.	• Turn the adjust nut clockwise. • Hold gun at a distance of 15-20 cm surface or closer for small objects. • Hold gun at right angle to the painting surface. • Pay attention to the gun movement path. • Determine if obstruction is on air cap or paint tip by making a test pattern, rotating air cap half turn, and spraying another test pattern. If the defect is inverted, obstruction is on air cap.
Spitting or spraying lumps	◆ Solid particles in paint. ◆ Downward spraying angle more than 90°.	• Filter paint • Do not downward the angle too much.
Motor is running but no spray	◆ Paint not thin enough. ◆ Check Valve dirty. ◆ Air partition cap missing/dirty. ◆ Loose paint container. ◆ Lid washer missing/dirty. ◆ Motor is running but the trigger does not pull the needle. ◆ Loose needle. ◆ Low volume of paint from spray gun. ◆ Paint or glue causes needle to stick, so trigger cannot pull it. ◆ The needle tip drops from the needle, so needle tip is jammed tight in spray tip. ◆ Obstruction on paint tip or dirt on air cap seat or paint tip seat.	• Add the appropriate amount of solvent to the paint. Add only a small amount of solvent to the paint at one time. • Clean check valve. • Replace/clean air partition cap. • Tighten paint container. • Replace/clean lid washer. • Increase pressure on the trigger to pull needle to shoot paint out. • Tighten needle. • Turn the adjust nut clockwise ，the release amount becomes bigger or Clean spray tip & needle to restart the trigger. • Clean spray tip & needle. • Take out needle tip and install needle tip in the needle. • Clean air cap with non-metallic instrument. If obstruction is on paint tip, check for fine burring which can be removed with 600 wet or dry sandpaper. For dried paint inside, open and wash.
Fluttering spray	◆ Jamming needle. ◆ Needle nut not seated properly. ◆ Blocked paint passages or Slide pipe not seated properly. ◆ Loose slide pipe & switch spring.	• Pull and then release trigger quickly (2-3 times) to make sure needle is seated properly. • Tighten needle nut. • Clean paint passages or Lubricate slide pipe to make sure slide pipe is seated properly. • Ensure slide pipe has to clasp spring properly.
Paint leaking from the paint container	◆ Loose paint container. ◆ Loose lid washer or worn lid washer.	• Tighten paint container . • Tighten lid washer or replace lid washer .
Paint leaking from the nozzle	◆ Loose nozzle. ◆ Needle nut is too tight, so the needle not seated properly.	• Tighten nozzle. • Loosen needle nut.

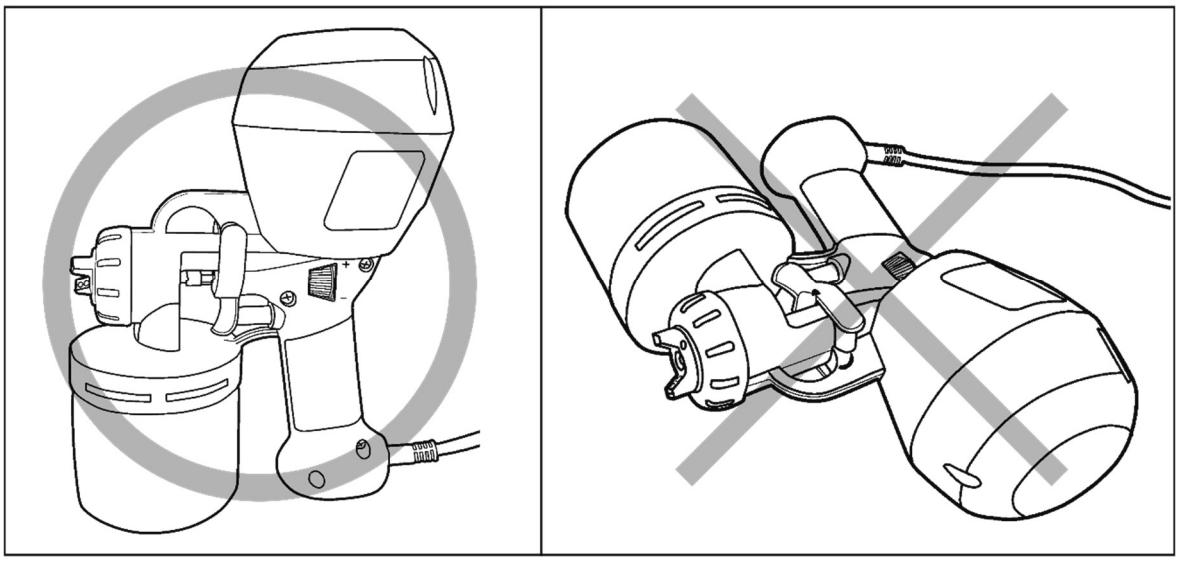
PARTS LIST



ITEM	DESCRIPTION
1	RETAINING NUT
2	AIR CAP
3	AIR PARTITION CAP
4	SPRAY TIP
5	GUN BODY
6	MOTOR WASHER
7	MOTOR PARTITION
8	MOROR WASHER
9	MOTOR
10	MOTOR LID

ITEM	DESCRIPTION
11	FILTER
12	FILTER LID
13	ADJUST NUT
14	SLIDE PIPE
15	NEEDLE SPRING
16	NEEDLE
17	SPRING FOR SLIDE PIPE
18	SLIDE FOR SWITCH
19	SEAL
20	TRIGGER

ITEM	DESCRIPTION
21	HANDLE HOUSING
22	SWITCH
23	LID WASHER
24	THREADED INSERT
25	PAINT TUBE
26	PAINT CONTAINER
27	CHECK VALVE
28	CONTAINER LID
29	CLEANING BRUSH
30	WRENCH



⚠ CAUTION: DO NOT PLACE THE SPRAYER UPSIDE DOWN.

ALWAYS place the sprayer upright to prevent liquid from entering internal wiring or motor and causing electric shock or damage.
Use the cleaning brush to clean the inlets, do not allow water flow into motor.

WEEE and RoHs

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

When replacing old appliances with new ones, the retailer is legally obligated to take back your old appliance for disposal at least for free of charge.

EC Declaration of Conformity

We declare that the unit spray gun TM-500/TM-663 conforms to 2006/42/EC, 2006/95/EC, 2004/108/EC, EN 50144-1:1998+A1:2002+A2:2003, EN 50144-2-7:2000

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MADE IN TAIWAN

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