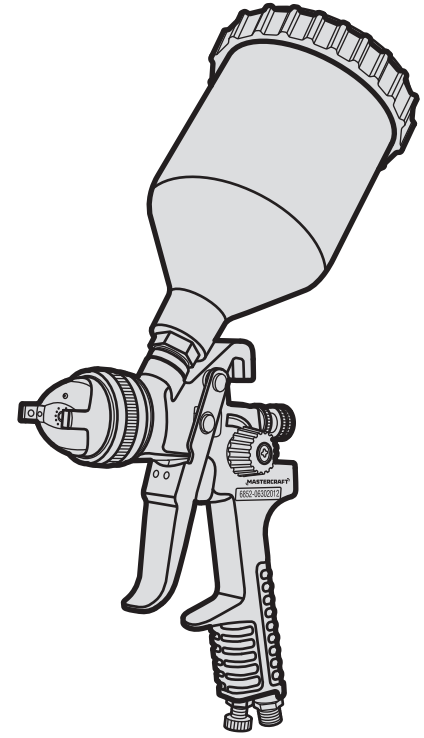
MASTERCRAFT™/MC

model no. 058-9312-8

0.6 L Air-Powered Gravity-Feed Spray Gun



IMPORTANT:
For your own safety, read and follow all of the Safety Guidelines and Operating Instructions before operating this spray gun. Keep this manual for future reference.

INSTRUCTION MANUAL

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NOTE: If any parts are missing or damaged, or if you have any questions, please call our toll-free helpline at 1-800-689-9928.

SAVE THESE INSTRUCTIONS
This manual contains important safety and operating instructions. Read all instructions and follow them with use of this product.

TECHNICAL SPECIFICATIONS

FLUID DELIVERY	Gravity
FLUID NOZZLE SIZE	1.4 mm
AIR HOSE SIZE	3/8" (9.5 mm)
PAINT VISCOSITY	Water-based paint
FINISH QUALITY	Best
AVERAGE AIR CONSUMPTION	3.4 CFM @ 40 PSI (2.8 bar)
AIR INLET	1/4"-18 NPT
PAINT CAPACITY	0.6 L
OPERATING PRESSURE	29 - 50 PSI (2.0 - 3.5 bar)
WEIGHT	1 lb 7 oz (0.65 kg)

CFM: Cubic Feet per Minute (the volumetric flow rate of air corrected to standardized conditions of temperature and pressure).

NPT: National Pipe Thread.

SAFETY GUIDEDLINES

This manual contains information that relates to PROTECTING PERSONAL SAFETY and PREVENTING EQUIPMENT PROBLEMS. It is very important to read this manual carefully and understand it thoroughly before using the product. The symbols listed below are used to indicate this information.

DANGER!
Potential hazard that will result in serious injury or loss of life.

WARNING!
Potential hazard that could result in serious injury or loss of life.

CAUTION!
Potential hazard that may result in moderate injury or damage to equipment.

Note: The word “Note” is used to inform the reader of something he/she needs to know about the tool.

PERSONAL SAFETY

These precautions are intended for the personal safety of the user and others working with the user. Please take time to read and understand them.

DANGER!

Potential hazard that will result in serious injury or loss of life.

- **Keep children away** from the work area. Do not allow children to handle power tools.
- **Do not point the tool towards yourself or other people, even when the tool has stopped**. Keep hands, feet, and all other parts of the body clear from work area.
- **Never use homogenate hydrocarbon solvent**, which can chemically react with aluminium and zinc parts and which is not chemically compatible with aluminium and zinc parts.

- **Risk of electric shock:** Do not expose a compressor to rain. Store it indoors. Disconnect the compressor from the power source before servicing. Compressor must be grounded. Do not use grounding adaptors.

- **Risk of personal injury:** Do not direct compressed air from the air hose towards the user or other persons.

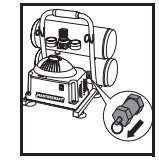
- **Risk for breathing:** Never directly inhale the air produced by the compressor. Use the spray gun in a well ventilated area.

- **Risk of burns:** The pump and the manifold generate high temperatures. In order to avoid burns or other injuries, do not touch the pump, the manifold, or the transfer tube while the compressor is running. Allow the parts to cool down before handling or servicing. Keep children away from the compressor at all times.

Note: Carefully read and understand all the instructions in this manual before using the gravity-feed spray gun. Ensure that the operator of the tool has read and understood these instructions.

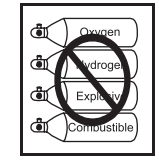
- **Risk of bursting:** Do not adjust the pressure switch or safety valve for any reason. They have been preset at the factory for this compressor's maximum pressure. Tampering with the pressure switch or the safety valve may cause personal injury or property damage.

- **Risk of bursting:** Make sure the regulator is adjusted so that the compressor outlet pressure is set lower than the maximum operating pressure of the tool. Before starting the compressor, pull the ring on the safety valve to make sure the valve moves freely. Drain water from tank after each use. Do not weld or repair tank. Relieve all pressure in the hose before removing or attaching accessories.



- **Do not use this tool in the presence of flammable liquids or gases:** Sparks that are created during use may ignite gases. Please use the tool in a well-ventilated area only and avoid any ignition sources such as smoking and open flames.

- **Do not use oxygen or any other combustible or bottled gas** to power air-powered tools. Failure to observe this warning can cause explosion and serious personal injury or death. Use only compressed air to power air-powered tools. Use a minimum of 25' (7.6 m) of hose to connect the tool to the compressor. Failure to comply will result in serious injury or loss of life.

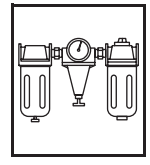


WARNING!

Potential hazard that could result in serious injury or loss of life.

- **Do not allow unskilled or untrained individuals to operate** the gravity-feed spray gun.
- **Use components recommended by manufacturers:** Never modify the tool for other applications. Use only parts, nozzles, and accessories with specifications as mentioned in this manual (see section “Technical specifications”).
- **Inspect the tool components and attachments before operation** and ensure that they are assembled properly and are not damaged. Failure to comply could lead to serious injury or loss of life.
- **Locate the compressor in a well-ventilated area** for cooling, at a minimum of 12" (31 cm) away from the nearest wall.
- **Protect the air hose and the power cord from damage and puncture. Inspect them for weak or worn spots every week**, and replace them if necessary.
- **Always wear hearing protection** when using the air compressor. Failure to do so may result in hearing loss.
- **Do not carry the compressor while it is running.**
- **Do not operate the compressor if it is not in a stable position.**
- **Do not operate the compressor on a rooftop or in elevated position** that could allow the unit to fall or be tipped over.
- **Always replace a damaged gauge** before operating the unit again.

- **Use compressed air at regulated pressure**: Always use clean, dry, and compressed air at the regulated pressure. Do not exceed the maximum operating pressure of 80 PSI (5.5 bar). Failure to comply could lead to serious injury or loss of life.

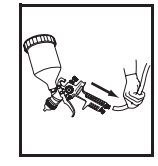


CAUTION!

Potential hazard that may result in moderate injury or damage to equipment.

- **Keep proper footing at all times in order to ensure correct balance.**
- Do not use a tool that is leaking air, that has missing or damaged parts, or that requires repairs. **Verify that all screws are securely tightened.**
- For optimal safety and tool performance, **inspect the tool daily** in order to ensure free movement of the trigger, safety mechanisms, and springs.
- **Ensure proper tool operation before painting.** Before painting, inspect to ensure free movement of the trigger and nozzle.
- **Check the tightness of screws before operating the tool.** Before operating the tool, make sure all the screws and caps are securely tightened to prevent leakage.
- **Keep the work area clean.** A cluttered or dirty workbench may lead to an accident. Floors should be kept clear.
- **Handling and storage of oil:** Use with adequate ventilation. Avoid contact of oil with eyes, skin, and clothing. Avoid breathing spray or mist. Store in a tightly closed container in a cool, dry, well-ventilated area free from incompatible substances.
- **Do not use the tool near or below freezing temperatures**, as doing so may cause tool failure.
- **Do not store the tool in a freezing environment** to prevent ice formation on the operating valves of the tool, which may cause tool failure.

- **Disconnect the spray gun from the air supply hose and turn off the compressor** before performing any maintenance, when the tool is not in use, when it is being handed to another person, and when it is left unattended. It is recommended to use a ball valve in the gun to air supply, for emergency stoppage and to prevent unintended operation.



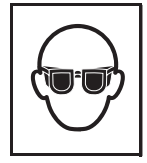
CAUTION!

Potential hazard that may result in moderate injury or damage to equipment.

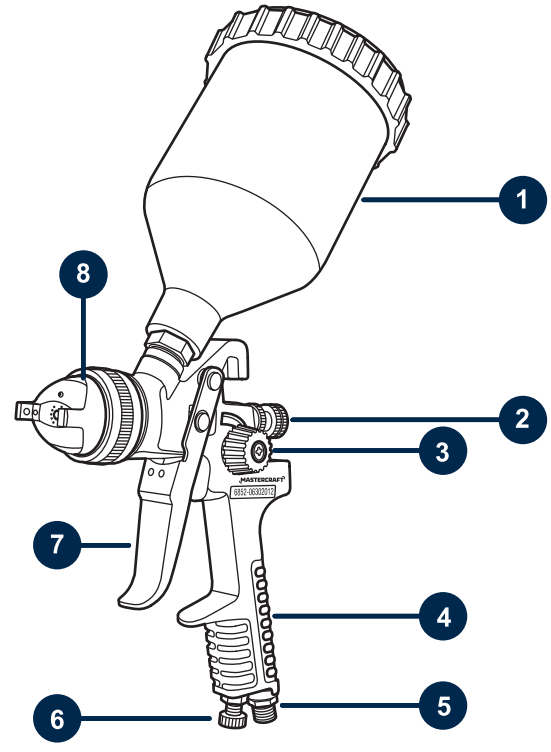
- **Use safety respirator:** Toxic vapours produced by spraying certain materials can cause serious damage to health. Always wear safety gloves and a respirator to prevent hazards caused by inhaling toxic vapour or contact of solvent and paint with eyes or skin. Failure to comply may result in moderate injury.

- **Use safety goggles and ear protection:**
  Wear safety glasses with side shields when operating the tool/compressor and verify that others in the work area are also wearing safety glasses. Safety glasses must conform to American National Standards Institute ANSI Z87.1 (or in Canada, CSA Z94.3) requirements and must provide protection from flying particles from the front and the sides.

  Air-powered tools are loud and the sound can cause hearing damage. Always wear ear protection to help prevent hearing damage and loss. Failure to comply may result in moderate injury.



Note: Recycle the unwanted materials rather than disposing them as waste. Sort tools, hoses, and packaging into separate categories and take them to the local recycling centre or dispose them in an environmentally safe way.



No.	Description	No.	Description
1	Plastic canister	5	Air inlet plug
2	Paint adjusting knob	6	Air adjusting knob
3	Pattern adjusting knob	7	Trigger
4	Gun body	8	Air cap nozzle and needle

General use

This Mastercraft® Air-powered Gravity-feed Spray Gun is an HVLP or high-volume low-pressure sprayer. This tool applies paint with less force, reducing the bounce of the material from the surface to be painted. It features a stainless steel needle and nozzle to accommodate a variety of coatings. The spray gun is capable of forming very large patterns.

Compatible compressors

GUIDELINES FOR PROPER USE AND OPERATION

Be sure to use the proper air compressor with Mastercraft® air-powered tools. The compressor should be able to supply a minimal air delivery of 4.0 CFM @ 40 PSI (2.8 bar) to ensure it can run continuously with the Mastercraft® Air-powered Gravity-feed Spray Gun. Using tools or combinations of tools that together or separately require more than the air compressor can deliver will reduce performance and could void the compressor or tool guarantee/warranty.

Air Compressor Size and Power	2 HP	2 1/2 HP	3 HP and more
5–6 Gallons	Light-duty and intermittent use	Light-duty and intermittent use	Light-duty and intermittent use
8–11 Gallons	Light-duty and intermittent use	Medium-duty and intermittent use	Medium-duty and intermittent use
15 Gallons and more	Medium-duty and intermittent use	Heavy-duty and continuous use	Heavy-duty and continuous use

Storage

- Rotate the paint adjusting knob in a counter-clockwise direction and open the knob when the gun is not in use. This will reduce spring tension on the needle fluid tip.
- Clean the Mastercraft® Air-powered Gravity-feed Spray Gun thoroughly, and slightly lubricate it, after use and before storage.

CAUTION!
Potential hazard that may result in moderate injury or damage to equipment.

- Incomplete or improper cleaning could cause function failures and a degradation of the tool. Failure to comply may result in moderate injury or damage to equipment.

Before assembly and preparation

Paint filling

- Mixing and thinning of paint should be performed in accordance with the paint manufacturer's instructions. Most materials readily spray if thinning is properly performed.

Note: Always thin the paint with care.

WARNING!
Potential hazard that could result in serious injury or loss of life.

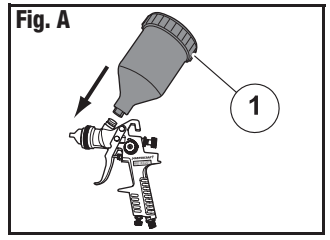
- Do not exceed the maximum pressure for the Mastercraft® Air-powered Gravity-feed Spray Gun or any other parts in the compressor system. Failure to comply could lead to serious injury or loss of life.
- Never aim or spray at yourself or anybody else as this could cause serious injury. Failure to comply could lead to serious injury or loss of life.
- After unpacking the tool, inspect it carefully and check thoroughly for any damage that may have occurred during transit. Ensure the tightness of fittings, bolts, etc., before performing service operation.

CAUTION!
Potential hazard that may result in moderate injury or damage to equipment.

- Do not exceed the thinning recommendations of the paint manufacturer. Failure to comply may result in moderate injury or damage to equipment.

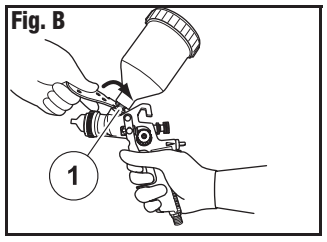
1. Attach the empty canister (1) to the spray gun by lining up the threads then holding the gun stationary and twisting the canister clockwise until snug (Fig. A).

Fig. A



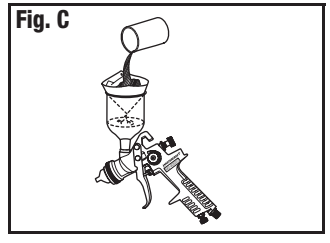
2. Use the wrench provided and tighten the nut (1) securely to ensure paint does not leak (Fig. B).

Fig. B



3. Pour paint through a strainer, cheese cloth or paint strainer to remove any foreign substances from the paint (Fig. C).
4. Fill the canister three quarters full with paint.
5. Plug in compressor, turn it on, set the pressure regulator to 40 PSI, and attach one end of the air hose to the compressor and the other end of the air hose to the spray gun. The spray gun is now ready for use.
6. After connecting the spray gun to the air supply, ensure the fluid cap, canister, and air hose are tightly connected to the Mastercraft® Air-powered Gravity-feed Spray Gun.

Fig. C



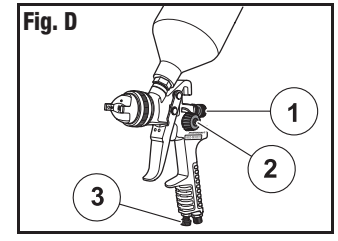
Note: Do not tighten the canister too much by hand, as doing so may break the plastic canister.

7. Use a piece of cardboard or other scrap material as a target for trial spraying and adjust for desired spray pattern.
8. Test the consistency of the paint by making a few strokes on a cardboard target. If the stroke appears to be very thick, add a small amount of thinner.

Adjustments

The gravity-feed spray gun has a pattern adjusting knob (1), a paint adjusting knob (2), and an air adjusting knob (3) that are used to obtain the desired pattern, to control the output volume of paint, and to obtain fine atomization, respectively (Fig. D).

Fig. D



PATTERN ADJUSTMENT

Rotate the pattern adjusting knob in a clockwise direction to form a circular spray pattern and rotate the knob in a counter-clockwise direction to form an elliptical spray pattern.

PAINT ADJUSTMENT

Rotate the paint adjusting knob clockwise to reduce the output volume of paint and rotate the knob in a counter-clockwise direction to increase the output volume of paint.

AIR VOLUME ADJUSTMENT

Rotate the air adjusting knob clockwise to reduce the output volume of air and rotate the knob in a counter-clockwise direction to increase the output volume of air.

Operation

1. Plug in compressor, turn it on, set the pressure regulator to 40 PSI (2.8 bar), and attach one end of the air hose to the compressor and the other end of the air hose (1) to the air tool (Fig. E).

Fig. E

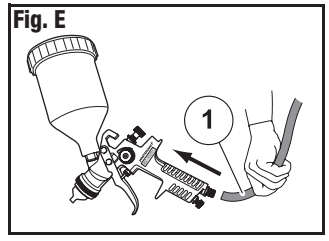
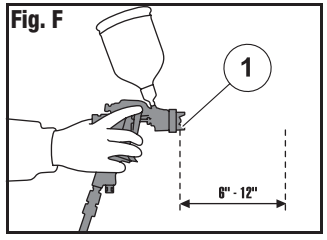


Fig. F



2. Hold the gun (1) so that the nozzle is approximately 6 to 12" (15 to 30 cm) from the work surface, perpendicular to the spraying area (Fig. F).

3. Squeeze the trigger (1) of the spray gun (2). Start moving the gun before pressing the trigger and release the trigger before stopping the gun movement at the end of each stroke. This procedure will blend each stroke with the next without overlap or unevenness (Fig. G).

Fig. G

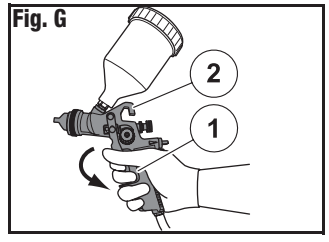
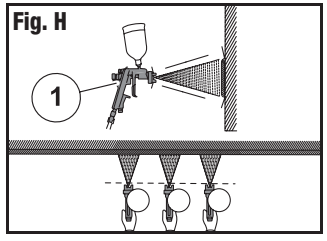


Fig. H



4. Move the gun (1) at a constant pace in a back and forth parallel direction, maintaining a uniform distance from the surface to be painted (Fig. H).

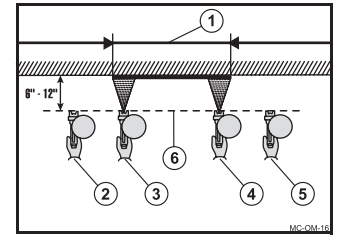
5. Repeat the strokes until a uniform coating is formed.

Note: Do some practice sprays to check and adjust the spray pattern and gun set up, using a spare surface (scrap piece of metal).

- The speed of the stroke, the distance from the work surface, and the setting of the paint adjusting knob vary the amount of paint being applied.

DO'S

Always move the gun in a parallel direction.

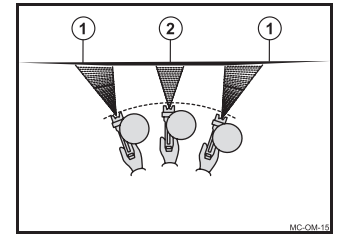


1. Uniform coating region
2. Stroke starting position
3. Trigger pressing position
4. Trigger releasing position
5. Stroke stopping position
6. Gun movement path

DON'TS

Do not press the trigger with the gun at an inclined or angled position.

Do not stop the sprayer movement in between strokes, as this will cause a build-up of paint and result in runs.



1. Improper/thin coating region
2. Uniform/thick coating region

Note: Use a piece of cardboard as a shield to capture the loss of spray paint at the ends of the workpiece to protect other surfaces from being painted.

Note: Two proper and uniform thin coats of paint, rather than one thick layer, will yield better results and reduce the chance of runs.

CAUTION!

Potential hazard that may result in moderate injury or damage to equipment.

- Do not fan the gun while painting. This will cause a build-up of paint in the centre of the stroke and an insufficient coating at the ends. Failure to comply may result in moderate injury or damage to equipment.

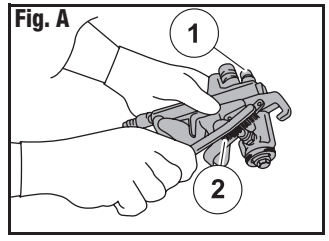
Care of spray gun

The spray gun should be cleaned at every use. The paint remaining inside the gun thickens and may damage the inner components and mechanism of the gun.

Washing procedure

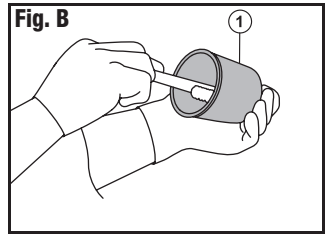
1. Cover the air cap with a cloth and pull the trigger. The air that is blown out of the paint nozzle tip enters the paint passage and cleans the inside of the gun.
2. Discard the paint remaining in the canister and add some thinner for washing and to blow out the gun.
3. Clean the inside and outside of the spray gun (1) with a brush (2) (Fig. A).

Fig. A



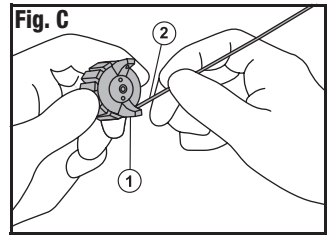
4. Clean the inside of the paint canister (1) (Fig. B).

Fig. B



5. Remove and clean the inside and outside of the air cap with a brush soaked in cleaning solvent.

Fig. C



Note: Wash the air cap (1) carefully without causing any damage to its air hole as this will affect the spraying pattern. Never use a steel wire or wire brush for cleaning. If the air hole is clogged, clean it using a wooden toothpick (2) (Fig. C).

Note: When it is hard to get rid of the stuck paint, wash it after soaking it in lacquer thinner.

MAINTENANCE REQUIRED	DESCRIPTION	TOOLS OR MATERIALS REQUIRED	MAXIMUM SERVICE INTERVAL		
			Each Use or Every 2 Hrs	Monthly	As Needed
General inspection – free movement	Trigger, spring, safety mechanism	None	X		
In-depth inspection	Worn or broken parts			X	X
Replace worn or broken parts					X
Lubrication	See below	Pneumatic tool oil	X		

CAUTION!

Potential hazard that may result in moderate injury or damage to equipment.

- Incomplete cleaning could cause function failures and a degradation of the tool. Failure to comply may result in moderate injury or damage to equipment.
- Remove the remaining paint by pouring it into another container.
- Disassemble the Mastercraft® Air-powered Gravity-feed Spray Gun. Ensure that the needle is removed before disassembling the nozzle to avoid damage to the housing of the nozzle closure.
- Clean all the paint passages, nozzle, and other components using a brush soaked in cleaning solvent.
- Reassemble the spray gun and spray a small quantity of solvent to remove any residues in the paint passages.
- Ensure that the needle is removed before disassembling the nozzle to avoid damage to the nozzle closure housing. Failure to comply may result in moderate injury or damage to equipment.

WARNING!

Potential hazard that could result in serious injury or loss of life.

- Do not use metal or other objects that could damage the holes in nozzle and cap.
- Never immerse the spray gun completely in solvent.
- Do not use components or parts that are not recommended. Failure to comply could lead to serious injury or loss of life.

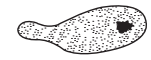
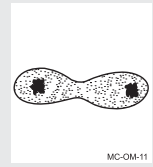
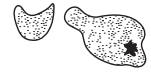
Troubleshooting

The following chart lists common issues and solutions. Please read it carefully and follow all instructions closely.

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
Fluttering or spitting  MC-OM-08	1. Paint level is too low. 2. Container is tipped too far. 3. Fluid inlet connection is loose. 4. Fluid tip/seat is loosened or damaged. 5. Fluid needle packing nut is dry or loose. 6. Air vent is clogged.	1. Add paint inside the container. 2. Hold the container in upright position. 3. Tighten the fluid connection. 4. Adjust or replace the fluid tip/seat. 5. Lubricate and/or tighten the nut. 6. Clear the vent hole.
Arc-shaped pattern  MC-OM-09	1. Fluid nozzle is worn or loose. 2. Paint has built up on air cap.	1. Tighten or replace fluid nozzle. 2. Remove obstructions from holes, but don't use metal objects to clean it.

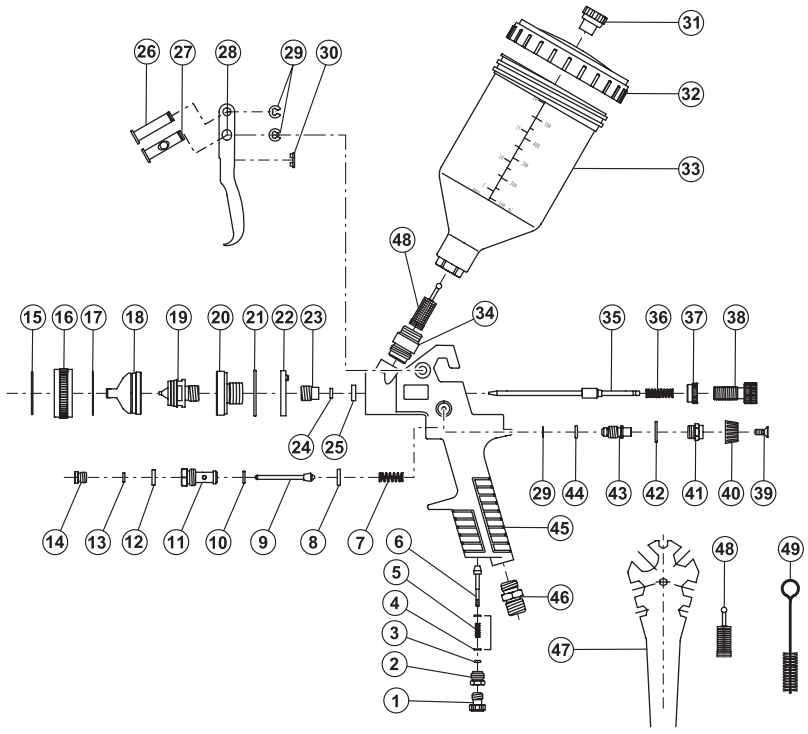
WARNING!
Potential hazard that could result in serious injury or loss of life.

- If any of these symptoms appear while the tool is in use, turn it off and disconnect it from the air supply immediately. Failure to heed this warning could result in serious personal injury.
- Disconnect electrical plug and air supply from the tool before making any adjustments.
- Repairs must be performed by a qualified service technician only.

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
Pattern is not spread uniformly  MC-OM-10	1. Paint has built up on air cap. 2. Fluid nozzle is dirty or worn.	1. Clean or replace air cap. 2. Clean or replace fluid nozzle.
Centre of pattern is too narrow  MC-OM-11	1. Paint is too thin or insufficient quantity. 2. Atomization air pressure is too high.	1. Regulate paint viscosity. 2. Reduce air pressure.
Width of spray pattern is too narrow  MC-OM-12	1. Paint is too thick. 2. Atomization air pressure is too low.	1. Regulate paint viscosity. 2. Increase air pressure.
Air leakage from air cap when trigger is not pressed	1. Air valve stem is stuck. 2. Air valve or seat is contaminated. 3. Air valve or seat is worn or damaged. 4. Air valve spring is broken. 5. Valve stem is bent.	1. Lubricate the air valve stem. 2. Clean the air valve or seat. 3. Replace the air valve or seat. 4. Replace the air valve spring. 5. Replace the valve stem.
Fluid leakage from packing nut	1. Packing nut is loose. 2. Packing nut is worn or dry.	1. Tighten, but do not restrict the needle movement. 2. Replace or lubricate (non-silicone oil).
Excessive overspray	1. Atomization pressure is too high. 2. Work surface is too far. 3. Improper stroking (arcing, gun motion are too fast).	1. Reduce the air pressure. 2. Adjust to proper distance. 3. Move at moderate pace, parallel to work surface.
No spray	1. No pressure in gun. 2. Fluid control is not properly opened. 3. Fluid is too thick or heavy.	1. Check air lines. 2. Open the fluid control. 3. Thin the fluid or change to pressure feed system.

Note: For further repair information, please call 1-800-689-9928.

EXPLODED VIEW



PARTS LIST

No.	Description	Qty.	No.	Description	Qty.
1	Air adjusting screw	1	26	Trigger pin I	1
2	Air adjusting knob	1	27	Trigger pin II	1
3	O-ring 2.5 x 2.1	1	28	Trigger	1
4	Washer	1	29	Snap retainer	3
5	Air inlet spring	1	30	Trigger washer	1
6	Air inlet valve	1	31	Ventilator head	1
7	Switch spring	1	32	Canister cover	1
8	Air valve body	1	33	Canister	1
9	Switch knob	1	34	Fluid inlet plug	1
10	O-ring 8.5 x 1.2	1	35	Fluid adjusting needle	1
11	Switch seat	1	36	Fluid needle spring	1
12	Foam washer	1	37	Joint	1
13	Washer	1	38	Fluid adjusting knob	1
14	Direction screw	1	39	Bolt	1
15	Spring	1	40	Pattern adjusting screw	1
16	Round nut	1	41	Pattern adjusting knob	1
17	Fluid cap washer	1	42	Copper washer	1
18	Atomizer	1	43	Pattern adjusting screw	1
19	Fluid nozzle	1	44	O-ring 6 x 2	1
20	Fluid nozzle joint	1	45	Gun body	1
21	Washer	1	46	Air inlet plug	1
22	Joint washer	1	47	Hex wrench	1
23	Direction screw	1	48	Filter	2
24	O-ring 3.2 x 1.9	1	49	Brush	1
25	Washer	1			

If any parts are missing or damaged, or if you have any questions, please call 1-800-689-9928

3-Year Limited Warranty

This product is guaranteed for a period of three (3) years from the date of original retail purchase against defects in workmanship and materials, except for the following component:

Component A: Accessories, which are guaranteed for a period of one (1) year from the date of original retail purchase against defects in workmanship and materials.

Subject to the conditions and limitations described below, this product, if returned to us with proof of purchase within the stated warranty period and if covered under this warranty, will be repaired or replaced (with the same model, or one of equal value or specification), at our option. We will bear the cost of any repair or replacement and any costs of labour relating thereto.

These warranties are subject to the following conditions and limitations:

a) A bill of sale verifying the purchase and purchase date must be provided.

b) This warranty will not apply to any product or part thereof which is worn or broken or which has become inoperative due to abuse, misuse, accidental damage, neglect, or lack of proper installation, operation, or maintenance (as outlined in the applicable instruction manual or operating instructions), or which is being used for industrial, professional, commercial, or rental purposes.

c) This warranty will not apply to normal wear and tear or to expendable parts or accessories that may be supplied with the product which are expected to become inoperative or unusable after a reasonable period of use.

d) This warranty will not apply to routine maintenance and consumable items such as, but not limited to, fuel, lubricants, vacuum bags, blades, belts, sandpaper, bits, fluids, tune-ups, or adjustments.

e) This warranty will not apply where damage is caused by repairs made or attempted by others (i.e., persons not authorized by the manufacturer).

f) This warranty will not apply to any product that was sold to the original purchaser as a reconditioned or refurbished product (unless otherwise specified in writing).

g) This warranty will not apply to any product or part thereof if any part from another manufacturer is installed therein or any repairs or alterations have been made or attempted by unauthorized persons.

h) This warranty will not apply to normal deterioration of the exterior finish, such as, but not limited to, scratches, dents, paint chips, or to any corrosion or discolouring by heat, or abrasives and chemical cleaners.

i) This warranty will not apply to component parts sold by and identified as the product of another company, which shall be covered under the product manufacturer's warranty, if any.

Additional limitations

This warranty applies only to the original purchaser and may not be transferred. Neither the retailer nor the manufacturer shall be liable for any other expense, loss or damage, including, without limitation, any indirect, incidental, consequential, or exemplary damages arising in connection with the sale, use, or inability to use this product.

Notice to consumer

This warranty gives you specific legal rights, and you may have other rights, which may vary from province to province. The provisions contained in this warranty are not intended to limit, modify, take away from, disclaim, or exclude any statutory warranties set forth in any applicable provincial or federal legislation.

Made in China

Imported by Mastercraft Canada Toronto, Canada M4S 2B8

WARRANTY