INSTRUCTION MANUAL

LXG HVLP SPRAY GUN

Description:

LXG- Manual Spray Guns are for use from Low to Medium Pressure with Light to Heavy Fluids. They will cover a range of materials to include Enamels, Latex, and Lacquers etc. These Models require 6 to 10 C.F.M. at 30 to 50 lbs. Air Pressure depending on Spray Head selected and Material being sprayed. Tip and needle are made of Stainless Steel and can handle water or solvent based materials.

Specification:

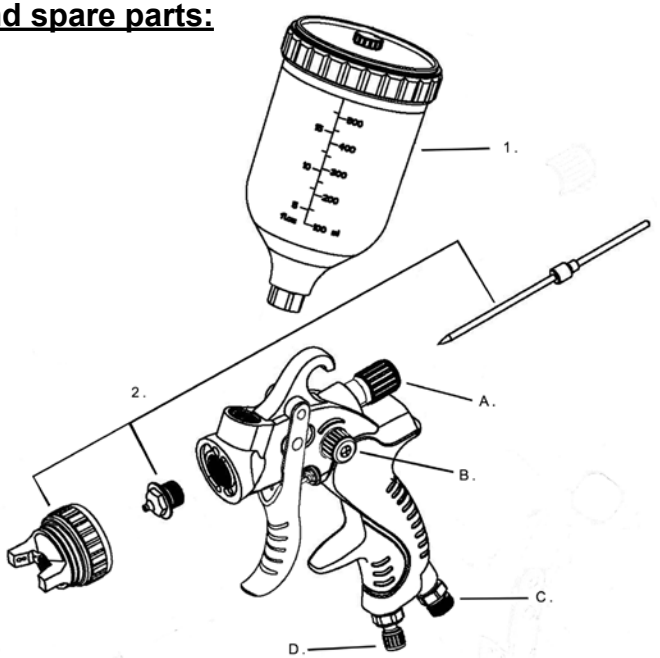
Part Number:	LXG-14
Type:	HVLP Gravity Feed
Head Size:	1.4mm (Optional sizes 1.7mm & 2.0mm)
Air Volume:	6 CFM
Air Pressure:	30-43 PSI
Air Inlet:	¼" NPT thread
Cup size:	20 Ounce (600ml)
Spray Pattern:	1" to 12"
Weight:	1.562 Lbs
Finish:	Bright Chrome with Gold Anodized trim

Setup:

1. Blow out all airline hoses before connecting to the spray gun to remove foreign particles.
2. Connect air hose to air inlet fitting.
3. Connect fluid cup or fluid hose to fluid inlet.
4. Tighten all hose connections securely.
5. Adjust air pressure to required amount at the regulator.
6. Adjust fluid volume by turning the fluid control knob.
7. The Fan pattern is controlled by turning the fan control Knob
8. Test spray on some cardboard or news paper for final adjustment before spraying your project.

Cleaning:
After each use spray your paint solvent through the spray gun and wipe off the outside with clean solvent. Never leave the entire spray gun immersed in solvent. Dirty aircaps and tips
should be cleaned by soaking in solvent and then blown clean with air. Personal safety equipment should be used at all times.

Diagram and spare parts:



1. LXG-600 20 ounce gravity cup assembly
2. LXG-3-14 Head assembly (Installed tip, needle & Aircap)
   LXG-3-17 Head assembly (Optional Head)
   LXG-3-2 Head Assembly (Optional Head)

A. Needle adjusting knob
B. Fan pattern adjustment knob
C. Air hose attachment inlet (1/4" NPT)
D. Air inlet adjustment knob

WARNING: Spray materials may be harmful if inhaled or allowed to come into contact with the skin or eyes. Consult the product label and Material Safety Data Sheet supplied for the spray material. Follow all safety precautions.
CAUTION: Well ventilated area required to remove fumes, dust or overspray. Secure airhose and fluid hose wrench tight for safety and to prevent leaks.

SAFETY PRECAUTIONS

This manual contains information that is important for you to know and understand. This information relates to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS. To help you recognize this information, we use the following symbols. Please pay particular attention to these sections.

WARNING

Important safety information - A hazard that may cause serious injury or loss of life.

CAUTION

Important information that tells how to prevent damage to equipment, or how to avoid a situation that may cause minor injury.

NOTE

Information that you should pay special attention to.

WARNING

The following hazards may occur during the normal use of this equipment.
Please read the following chart before using this equipment.

HAZARD	CAUSE	SAFEGUARDS
Fire 	Solvent and coatings can be highly flammable or combustible especially when sprayed.	Adequate exhaust must be provided to keep air free of accumulations of flammable vapors. Smoking must never be allowed in the spray area. Fire extinguishing equipment must be present in the spray area.
Solvent Spray 	During use and while cleaning and flushing, solvents can be forcefully expelled from fluid and air passages. Some solvents can cause eye injury.	Wear eye protection.
Inhaling Toxic Substances 	Certain materials may be harmful if inhaled, or if there is contact with the skin.	Follow the requirements of the Material Safety Data Sheet supplied by your coating material manufacturer. Adequate exhaust must be provided to keep the air free of accumulations of toxic materials. Use a mask or respirator whenever there is a chance of inhaling sprayed materials. The mask must be compatible with the material being sprayed and its concentration. Equipment must be as prescribed by an industrial hygienist or safety expert, and be NIOSH approved.
Explosion Hazard - Incompatible Materials 	Halogenated hydrocarbon solvents - for example; methylene chloride and 1,1,1, - Trichloroethane are not chemically compatible with the aluminum that might be used in many system components. The chemical reaction caused by these solvents reacting with aluminum can become violent and lead to an equipment explosion.	Guns with stainless steel internal passageways may be used with these solvents. However, aluminum is widely used in other spray application equipment - such as material pumps, regulators, valves, and cups. Check all equipment items before use and make sure they can also be used safely with these solvents. Read the label or data sheet for the material you intend to spray. If in doubt as to whether or not a coating or cleaning material is compatible, contact your material supplier.
General Safety	Improper operation or maintenance of equipment.	Operators should be given adequate training in the safe use and maintenance of the equipment (in accordance with the requirements of NFPA-33, Chapter 15). Users must comply with all local and national codes of practice and insurance company requirements governing ventilation, fire precautions, operation, maintenance, and housekeeping. These are OSHA Sections 1910.94 and 1910.107 and NFPA-33.
Cumulative Trauma Disorders ("CTD's") **CTD's, or musculoskeletal disorders, involve damage to the hands, wrists, elbows, shoulders, neck, and back. Carpal tunnel syndrome and tendonitis (such as tennis elbow or rotator cuff syndrome) are examples of CTD's.**	Use of hand tools may cause cumulative trauma disorders ("CTD's"). CTD's, when using hand tools, tend to affect the upper extremities. Factors which may increase the risk of developing a CTD include: 1. High frequency of the activity. 2. Excessive force, such as gripping, pinching, or pressing with the hands and fingers. 3. Extreme or awkward finger, wrist, or arm positions. 4. Excessive duration of the activity. 5. Tool vibration. 6. Repeated pressure on a body part. 7. Working in cold temperatures. CTD's can also be caused by such activities as sewing, golf, tennis, and bowling, to name a few.	Pain, tingling, or numbness in the shoulder, forearm, wrist, hands, or fingers, especially during the night, may be early symptoms of a CTD. Do not ignore them. Should you experience any such symptoms, see a physician immediately. Other early symptoms may include vague discomfort in the hand, loss of manual dexterity, and nonspecific pain in the arm. Ignoring early symptoms and continued repetitive use of the arm, wrist, and hand can lead to serious disability. Risk is reduced by avoiding or lessening factors 1-7.

TROUBLESHOOTING

CONDITION	CAUSE	CORRECTION
Heavy top or bottom pattern 	Air nozzle horn holes plugged. Obstruction on top or bottom of fluid nozzle. Air nozzle and/or fluid nozzle seat dirty.	Clean with non-metallic point. Clean. Clean.
Heavy right or left side pattern 	Left or right side horn holes plugged. Dirt on left or right side of fluid nozzle.	Clean with non-metallic point. Clean.
	Remedies for the top-heavy, bottom-heavy, right-heavy, and left-heavy patterns: 1. Determine if the obstruction is on the air nozzle or the fluid nozzle. Do this by making a test spray pattern. Then, rotate the air nozzle one-half turn and spray another pattern. If the defect is inverted, obstruction is on the air nozzle. Clean the air nozzle as previously instructed. 2. If the defect is not inverted, it is on the fluid nozzle. Check for a fine burr on the edge of the fluid tip. Remove with #600 wet or dry sand paper. 3. Check for dried paint just inside the opening; remove by washing with solvent.	
Heavy center pattern 	Fluid flow too high for atomization air. Material flow exceeds air nozzle's capacity. Side port adjustment valve set too low. Atomizing pressure too low. Material too thick.	Balance air pressure and fluid flow. Increase spray pattern width with spreader adjustment valve. Thin or lower fluid flow. Adjust. Increase pressure. Thin to proper consistency.
Split spray pattern 	Atomization air pressure too high. Fluid flow too low. Side port adjusting valve set too high.	Reduce at wall or gun. Increase fluid flow (increases gun handling speed). Adjust.
Jerky or fluttering spray 	*Loose or damaged fluid nozzle/seat. Material level too low. Container tipped too far. Obstruction in fluid passage.	Tighten or replace. Refill. Hold more upright. Backflush with solvent.
Unable to get round spray	Side port adjustment screw not seating properly. Air nozzle retaining ring loose.	Clean or replace. Tighten.
Will not spray	No air pressure at gun. Material adjusting knob not open enough. Fluid too heavy for gravity feed.	Check air supply and air lines, blow out gun air passages. Open material adjusting knob. Thin material and/or change to larger tip size.
Paint bubbles in cup	Fluid nozzle not tight.	Tighten fluid nozzle to 10-12 ft-lbs.
Fluid leaking or dripping from cup lid	Cup lid loose. Dirty threads on cup or lid. Cracked cup or lid.	Push in or tighten lid. Clean. Replace cup and lid.
Starved spray pattern	Inadequate material flow. Low atomization air pressure.	Back material adjusting knob or change to larger fluid nozzle size. Increase air pressure and rebalance gun.
Excessive overspray	Too much atomization air pressure. Gun too far from work surface. Improper stroking (arcing, gun motion too fast).	Reduce pressure. Adjust to proper distance. Move at moderate pace, parallel to work surface.
Excessive fog	Too much or too fast-drying thinner. Too much atomization air pressure.	Remix properly. Reduce pressure.
Dry spray	Air pressure too high. Gun tip too far from work surface. Gun motion too fast. Gun out of adjustment.	Reduce air pressure. Adjust to proper distance. Slow down. Adjust.
Fluid leaking from seal cartridge	Packing worn or dry.	Replace or lubricate.
Fluid leaking or dripping from front of gun	Dry seal cartridge. Fluid nozzle or needle worn or damaged. Foreign matter in fluid nozzle. Fluid needle spring broken. Wrong size needle or fluid nozzle.	Lubricate. Replace fluid nozzle and needle. Clean fluid nozzle. Replace. Replace.

CONDITION	CAUSE	CORRECTION
Fluid dripping or leaking from bottom of cup	Cup loose on gun. Cup gasket worn or missing below cup. Cup threads dirty.	Tighten. Replace cup gasket. Clean.
Runs and sags	Too much material flow. Material too thin. Gun tilted on an angle, or gun motion too slow.	Adjust gun or reduce fluid flow. Mix properly or apply light coats. Hold gun at right angle to work and adapt to proper gun technique.
Thin, sandy coarse finish drying before it flows out	Gun too far from surface. Too much air pressure. Improper thinner being used.	Check distance. Normally approx. 8". Reduce air pressure and check spray pattern. Follow paint manufacturer's mixing instrs.
Thick, dimpled finish "orange peel"	Gun too close to surface. Air pressure too low. Improper thinner being used. Material not properly mixed. Surface rough, oily, dirty.	Check distance. Normally approx. 8". Too much material coarsely atomized. Increase air pressure or reduce fluid flow. Follow paint manufacturer's mixing instrs. Properly clean and prepare.