

SEARS
OWNERS
MANUAL

MODEL NO.
919.155160

IMPORTANT:
Read the Safety Guidelines
and All Instructions
Carefully Before Operating.



PROFESSIONAL MODEL
CRAFTSMAN SPRAY GUN
WITH A DRIP-FREE CUP

INSTALLATION
OPERATION
MAINTENANCE
PARTS LIST

Sears, Roebuck and Co., Chicago, IL 60684 U.S.A.

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FULL ONE YEAR WARRANTY CRAFTSMAN SPRAY GUNS

If this Craftsman Spray Gun fails due to a defect in material or workmanship within one year from the date of purchase, RETURN IT TO THE NEAREST SEARS SERVICE CENTER/DEPARTMENT THROUGHOUT THE UNITED STATES AND SEARS WILL REPAIR IT, FREE OF CHARGE.

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

Sears, Roebuck and Co., Sears Tower, Dept. 698/731A, Chicago, IL 60684

SAFETY GUIDELINES

This manual contains information that is important for you to know and understand.

This information relates to YOUR SAFETY and PREVENTING EQUIPMENT PROBLEMS.

To help you recognize this information, we use the following symbols. Please read the manual and pay attention to those sections.

WARNING

**IMPORTANT SAFETY INFORMATION – A
HAZARD THAT *MIGHT* CAUSE SERIOUS
INJURY OR LOSS OF LIFE.**

CAUTION

**Information for preventing damage to
equipment.**

Note

Information that you should pay special attention to.

WARNING

**HAZARDS CAN OCCUR DURING NORMAL USE OF THIS EQUIPMENT.
PLEASE READ THE FOLLOWING CHART**

WHAT TO LOOK FOR	WHAT COULD HAPPEN	HOW TO PREVENT IT
Flammable Spray Materials	When paints or materials are sprayed, they are broken into very small particles and mixed with air. This will cause certain paints and materials to become extremely flammable.	Never spray near open flames or pilot lights in stoves or heaters. Never smoke while spraying. Provide ample ventilation when spraying indoors.
Toxic Vapors	Some paints and coatings may be harmful if inhaled or allowed to come into contact with skin or eyes.	Be certain to read the safety labels or data sheet from the material you are spraying. Follow all safety precautions. Use a mask or respirator whenever there is a chance that you might inhale anything you are spraying. Read all instructions so that you know your mask will protect you from what you are spraying.
Compressed Air	Compressed air may propel dirt, metal shavings, etc. and possibly cause an injury.	Never point any nozzle or sprayer toward a person or part of the body. Always wear safety goggles or glasses when spraying.
Pressurized Parts	Certain parts are under pressure whenever the gun is connected to a pressurized air line. These parts may be propelled if the gun is disassembled.	Disconnect the gun from the air line, or completely depressurize the air line whenever the gun is to be disassembled.
Explosion Hazard – Incompatible Materials	The solvents 1,1,1-Trichloroethane and Methylene Chloride can chemically react with the aluminum used in most spray equipment, and this gun and cup, to produce an explosion hazard.	Read the label or data sheet for the material you intend to spray. 1. Do not use any type of spray coating material containing these solvents. 2. Do not use these solvents for equipment cleaning or flushing. 3. If in doubt as to whether a material is compatible – contact your material supplier.

AIR REQUIREMENTS

Minimum SCFM required @ 40 PSI

9.6

GENERAL INFORMATION

SPRAY GUN

Your professional model Craftsman spray gun is supplied complete with a drip free cup and air cap, and is ready for use. The standard air cap, fluid tip, and needle combination furnished with the spray gun are ideal for suction feed spraying on medium to large objects where a high quality finish is desired, such as automobile and boat refinishing. An optional air cap is available for smaller painting jobs, and/or use with lower HP compressors. A kit is also available for converting the spray gun for use with a remote pressure feed tank. The part numbers of these accessories are given in the back of this manual (page 11).

This Spray Gun is a non-bleeder type which is compatible with Sears and most other modern compressors. The gun has a built in air valve which shuts off the air flow through the gun whenever the trigger is released. A non-

bleeder type gun is normally used when air pressure to the gun is accurately controlled by an air regulator in such a manner that releasing the trigger will not cause a pressure build up in the air line. The air is normally supplied from an air compressor having either an automatic start/stop arrangement or an automatic unloader.

Note

This gun may be used with most all common coating and finishing materials. However, it is not designed for use with corrosive, rust inducing or highly abrasive materials. If used with materials such as these, you must clean frequently and thoroughly. It may be necessary to replace parts more often.

AIR CAPS

External Mix – The air and material are mixed outside the air cap. This type of cap is best suited for quick drying paints, such as high quality latex, lacquers, etc., and is capable of professional finishes.

To change air caps, turn the retaining ring (1) counter-clockwise and remove from gun. Remove air cap and replace with different cap. Reassemble in reverse order.

Note

External mix air cap and fluid tip combinations are recommended for optimum performance and are available as accessories (see page 11 for a listing of optional air caps and fluid tips). The fluid tip is removed with a 1/2" socket. When assembling be sure the copper gasket is in place and the tip is not cross threaded or over tightened (160-200 in. lbs. Torque).

PREPARATION FOR SPRAYING

Refer to picture on page 6.

Your Craftsman spray gun is shipped completely assembled, and set-up for siphon/suction feed spraying. Installation is accomplished by connecting an air line to the air inlet nipple (13).

This spray gun should be flushed with solvent prior to spraying with paint.

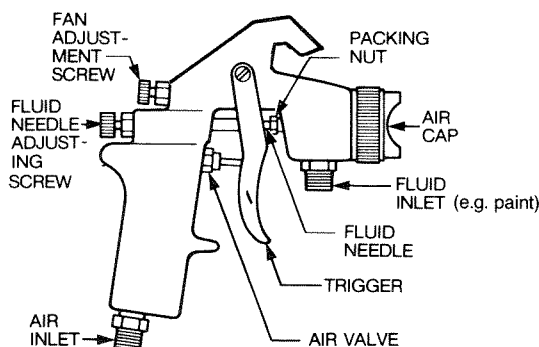
The fluid needle packing in this gun may be loose when received. Tighten the packing until it grabs and holds the fluid needle, then back off the packing retainer (approx. 1/4 turn) until the fluid needle is free to move.

Be sure the surface to be sprayed is dry and free of all dirt, grease, oil and loose paint. Mix and prepare the paint according to the manufacturer's instructions. The use of a Sears viscosimeter can be very helpful. Strain the material to be sprayed through a 60 to 90 mesh screen or equivalent.

Set air pressure at 40 psi as a starting point.

CONVERTING TO REMOTE PRESSURE FEED

1. Remove suction cup and lid assembly by loosening & removing the swivel nut (30). This will require a $\frac{3}{4}$ " open end wrench.
2. The spray gun is now ready to be connected to any pressure feed tank with a standard $\frac{3}{8}$ " straight pipe female connection (not included).



Refer to this picture when reading the "Preparation for Spraying" and "Operation" sections.

OPERATION

1. Shut off fluid flow through gun by turning fluid needle adjusting screw (18) clockwise as far as it will go. Do not force.
2. Keep the air pressure as low as possible.
3. For fan pattern open (turn counterclockwise) the fan adjustment screw until it stops. This is the full open position. For round pattern, the fan adjustment screw should be turned clockwise until the desired pattern is achieved.
4. Hold the trigger back and gradually open the fluid needle adjusting screw until a desired pattern is obtained.
5. Trigger the gun quickly (one second on, then release). Spray a small test pattern.
6. If the gun sprays too fast (paint runs or sags), lower the air and fluid pressure. If too slow, increase pressure. Adjust to balance pressure.

Note

Refer to the troubleshooting guide on page 8. This guide is useful in setting up your spray gun as well as troubleshooting problems.

HINTS FOR GOOD SPRAYING RESULTS

- Hold the gun perpendicular to the surface, 6" to 8" distance.
- Follow contour of object being sprayed.
- Overlap each stroke 50%.
- Ends are feathered by triggering. That is, begin stroke before pulling trigger and releasing just before ending the stroke.
- Spray edges and corners first. This will reduce over-spray while providing good coverage on corners.
- Don't arc strokes, move gun parallel to work.

Your pattern should normally be shaped like this.



If not, see Troubleshooting guide, pg. 8.

MAINTENANCE

The recommended cleaning procedures for suction feed and pressure feed are given below. The air cap cleaning and lubrication procedure are the same regardless of the type of feed set-up used. Be sure to follow these instructions after each use.

SPRAY GUN CLEANING

Suction Feed Clean-Up

1. Turn off air supply, and remove cup from lid.
2. Empty the material from cup and rinse with a clean solvent.
3. Fill cup with solvent and attach to the lid.

Note

Always clean with reduced air pressure. An air pressure no greater than 15 to 20 PSI will allow quick and thorough cleaning of the cup and gun.

4. Turn on the air supply and spray solvent through the spray gun. While spraying, shake the gun up and down to remove all excess material from the lid. Repeat Steps 1-4 above with a clean solvent until all traces of material are removed.
5. Turn off air supply to gun.
6. To clean vent hole, shut off air to gun, hold the trigger back and invert cup over solvent container. Allow solvent to drip out vent hole in lid until clear solvent is seen.
7. Wipe the outside of the spray gun and cup with a solvent soaked cloth.
8. Clean air cap and lubricate gun per instructions given in "Air Cap Cleaning."

Pressure Feed Clean-Up:

1. First, turn off air supply to material source (cup, tank or pump). Release material pressure from the system by opening relief valve or pulling trigger on gun.
2. On a pressure cup or tank, material in hoses may be drained back. Lid must be loose and all air pressure off. Keep gun higher than container and pull the trigger. Allow material to drain back into the container. Pour off remaining material.

Note

Do not immerse the gun in solvent – this will wash out the lubricants and dry out packings.

3. Equipment, such as a commercial hose cleaner, can be used to clean inside of fluid hose, gun and fluid tube in cup or tank. Connect fluid hose to hose cleaner. Open air valve at hose cleaner. Pull trigger on gun and slowly open cleaning solvent valve on hose cleaner. Flush until clean. Shut off mixing valve when solvent and air discharge is clear. Allow air to dry passages and then shut air valve at hose cleaner. To clean cup or tank lid, repeat with hose connected to hose cleaner. Lid of cup or tank should be set on a waste container or off to one side of the tank shell.

Note

The hose cleaner cannot be used with a pump. Pump must be run with proper solvent to clean.

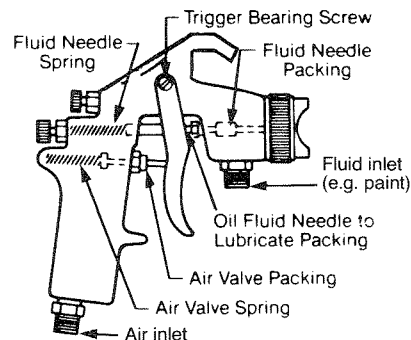
4. Clean inside of container and lid. Wipe down gun with a rag dampened with cleaning solvent.
5. Without a hose cleaner, remove excess material from cup or tank and clean. Set up cup, tank or pump to operate with clean cleaning solvent. Turn off atomization air to gun. Trigger gun into a waste container. Continue flushing until cleaning solvent is clear. Blow air through hose to dry. Wipe hose and gun with a rag dampened with cleaning solvent.
6. Clean air cap and lubricate gun per instructions given below.

AIR CAP CLEANING






Remove the air cap and, if dirty with dry paint, let it soak in clean solvent. Later, brush and wipe off the air cap. If any holes in the cap are clogged, probe them with a toothpick. Don't use wire, nails, or metal tools. This may damage the holes and result in imperfect spray patterns.

Lubrication:

After each use, place drop of oil on points shown. Springs behind the fluid needle and air valve should have a light coat of grease.



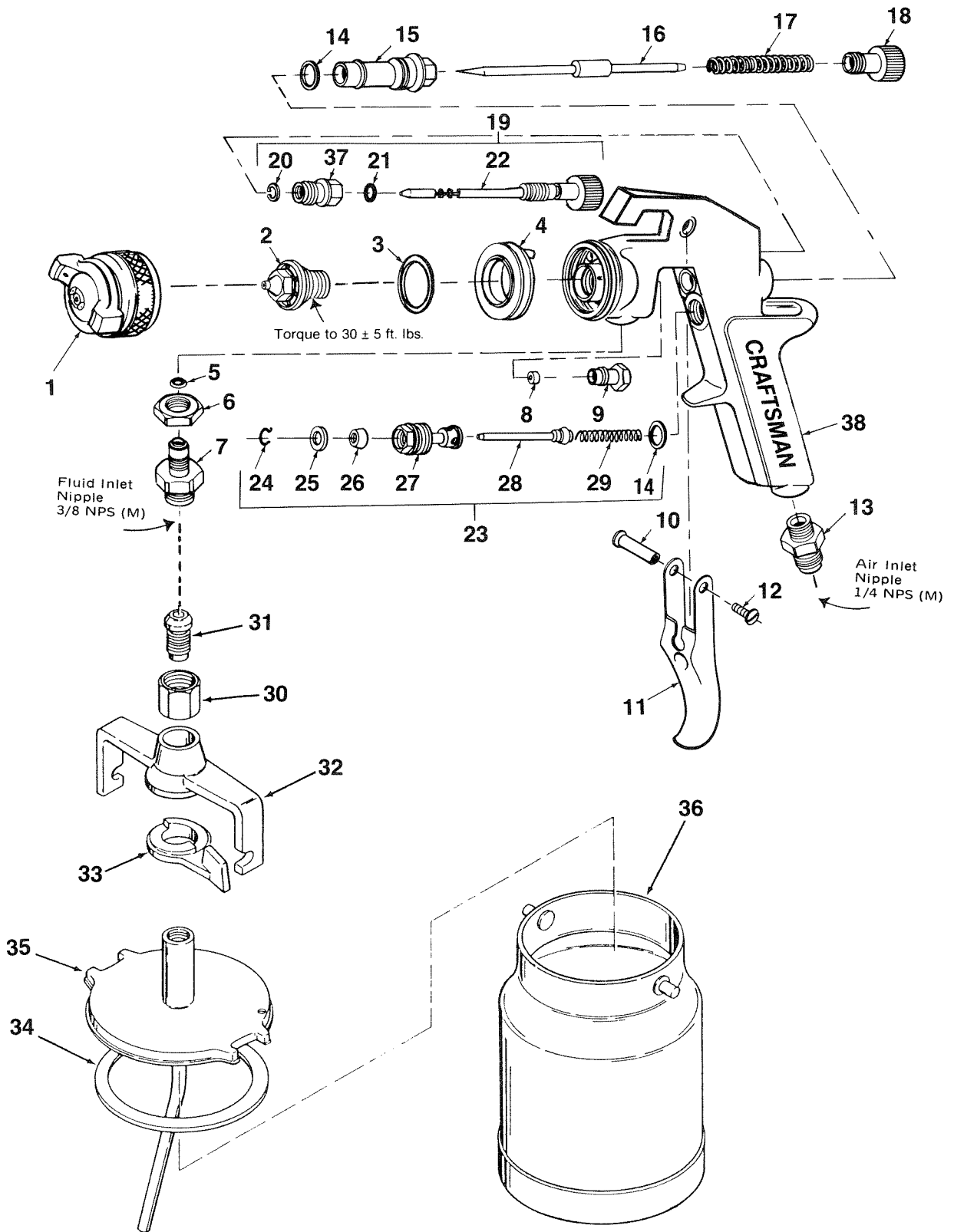
TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	CORRECTION
Heavy top or bottom pattern. 	Material build-up on air cap or fluid tip. Partially plugged horn holes, center holes or fluid tip hole.	Determine where material build-up is by inverting cap and test spraying. If pattern shape stays in same position, the condition is caused by material build-up on fluid tip. If pattern changes with cap movement, the condition is in the air cap. Soak cap or tip in suitable solvent and wipe clean. To clean orifices use a broom straw or toothpick. Never use a wire or hard instrument. This damages holes and distorts spray pattern.
Heavy right or left side pattern. 		
Heavy center pattern. 	Too much material. Material too thick.	Reduce fluid flow or increase air pressure. Thin material.
Split spray pattern. 	Not enough material.	Reduce air pressure or increase fluid flow.
Jerky or fluttering spray. 	Insufficient material.	Fill material container.
	Gun with cup tipped at excessive angle.	Do not tip excessively or rotate fluid tube.
	Obstructed fluid passage or hose.	Clean.
	Loose fluid tip or damaged tip seat. (Most common cause.)	Tighten or replace.
	Loose or cracked fluid tube in cup or pressure tank.	Tighten or replace.
	Too heavy fluid for suction feed.	Thin material or change to pressure feed.
	Dry or worn packing or loose packing nut.	Lubricate or replace. Tighten.
Improper spray pattern.	Gun improperly adjusted.	Readjust gun following instructions carefully.
	Dirty air cap.	Clean air cap.
	Fluid tip obstructed.	Clean.
	Sluggish needle.	Lubricate.
Unable to get round spray.	Fan adjustment stem not seating properly.	Clean or replace.
Will not spray.	No air pressure at gun.	Check air lines.
	Internal mix air cap used with suction feed.	Change to pressure feed.
	Fluid pressure too low with internal mix cap and pressure tank.	Increase fluid pressure at tank.
	Screw not open enough.	Open fluid adjusting screw.
	Fluid too heavy for suction feed.	Change to pressure feed.

TROUBLESHOOTING GUIDE (continued)

PROBLEM	CAUSE	CORRECTION
Fluid leakage from packing retainer nut.	Packing nut loose.	Tighten, but not so tight as to grip needle.
	Packing worn or dry.	Replace packing or lubricate. See "Maintenance." See page 7.
Dripping from fluid tip.	Dry packing.	Lubricate. See page 7.
	Sluggish needle.	Lubricate. See page 7.
	Tight packing nut.	Adjust. See page 5.
Runs and sags.	Too much material for spray pace.	Reduce pressure and readjust.
	Material too thin.	Remix or spray light coats.
	Gun tilted on an angle.	Hold gun at right angle to work.
Excessive overspray.	Too much atomization air pressure.	Reduce.
	Gun too far from surface.	Check distance. See "Hints for Good Spraying Results" on page 6.
	Improper stroking, i.e., arcing, moving too fast.	Move at moderate pace, parallel to work surface. See "Hints for Good Spraying Results" on page 6.
Excessive fog.	Too much or quick drying thinner.	Remix.
	Too much atomization air pressure.	Reduce.
Thin, sandy coarse finish drying before it flows out.	Gun too far from surface.	Move gun closer to surface. See "Hints for Good Spraying Results" on page 6.
	Too much air pressure.	Reduce pressure.
	Improper thinner.	Follow paint manufacturer's instructions.
Thick dimpled finish "orange peel." Too much material coarsely atomized.	Gun too close to surface.	Move gun away from the surface. See "Hints for Good Spraying Results" on page 6.
	Air pressure too low.	Increase air pressure or reduce fluid pressure.
	Improper thinner.	Follow paint manufacturer's instructions.
	Material not thoroughly mixed.	Mix thoroughly.
	Surface rough, oily, dirty.	Properly clean and prepare surface.

SPRAY GUN DIAGRAM



PARTS LIST

KEY NO.	PART NUMBER	DESCRIPTION	KEY NO.	PART NUMBER	DESCRIPTION
1	SGE-4039-180	Air Cap/Retaining Ring (Suction Feed)	● 20	STD583031	Retaining Ring
2	AV-601-EX	Fluid Tip (Suction Feed)	● 21	STD302008	O Ring
● 3	AV-1	Gasket	22	JGA-4003	Adjusting Screw Assy.
4	JGA-1225	Baffle	23	JGS-449	Air Valve Assembly (incl. Key #24-29 & 14)
● 5	23165-001	O-Ring	24	JGA-14	Snap Ring
6	JGA-51	Lock Nut	25	JGA-15	Washer
7	P-JGA-2-2	Nipple	● 26	JGS-26	U Cup Seal
● 8	JGA-7	Packing	27	JGK-10	Valve Body
9	34411-122	Packing Nut	● 28	JGS-431	Air Valve Assembly
● 10	JGA-35	Trigger Bearing Stud	● 29	MBD-12	Spring
11	JGA-108	Trigger	30	SGE-48	Swivel Nut
● 12	A-42	Screw	31	SGE-47	Adapter
13	SGE-37	Nipple	32	SGE-27	Yoke
● 14	JGS-72	Gasket (2 used)	33	SGE-15	Cam
15	JGA-17	Bushing	34	SGE-45	Gasket
16	JGA-402-DEX	Fluid Needle	35	SGE-405	Lid/Tube Assembly
● 17	MBD-19	Spring	36	SGE-403	Cup Assembly
18	JGS-16	Adjusting Screw	37	JGS-143-1	Valve Body
19	JGA-4004	Fan Adjustment Assembly (incl. Key # 20-22 & 37)	38	SGE-410	Gun Body

- 9-15968 **Repair Kit** This kit contains all the O-rings, gaskets, and packing parts necessary to keep your spray gun in top working condition. (Includes Key Nos. 3, 5, 8, 10, 12, 14, 17, 20, 21, 26, 28 & 29.)

OPTIONAL ACCESSORIES

The following parts may be ordered from your Sears Service Center to add to the versatility of your gun.

PART NO.	DESCRIPTION	USES
SGE-439-158	Air Cap & Retaining Ring Assembly	This is an external mix, suction feed air cap assembly which is ideal for small painting jobs such as lawn and garden equipment and auto repair and touch up. Air usage is lower (requires 6.4 SCFM @ 40 PSI) than the air cap assembly supplied on your gun. This air cap assembly is used with the fluid tip and needle supplied on the gun.
KK-4474	Conversion Kit	This kit contains an air cap, retaining ring, fluid tip and fluid needle which are the optimum combination for painting with a paint tank (pressure feed). This kit will help you control your paint flow better. It is especially good for spraying thinned lacquers on large jobs, such as auto refinishing. It also works well with heavier bodied paints like primer and latex. Air requirements are 12.4 SCFM @ 40 PSI.

NOTE: YOU SHOULD NEVER USE COMBINATIONS OTHER THAN STATED IN ABOVE CHART OR AS PROVIDED STANDARD ON YOUR GUN. YOU MAY NOT GET GOOD PERFORMANCE WITH OTHER COMBINATIONS.

SEARS

OWNERS MANUAL

SERVICE

**MODEL NO.
919.155160**

**HOW TO ORDER
REPAIR PARTS**

CRAFTSMAN SPRAY GUN

Now that you have purchased your Craftsman Spray Gun, should a need ever exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. stores. Be sure to provide all pertinent facts when you call or visit.

The model number of your Craftsman Spray Gun will be found stamped on the gun handle. Always mention the model number in all correspondence when ordering repair parts.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PART NUMBER
- PART DESCRIPTION
- MODEL NUMBER
- NAME OF ITEM

All parts listed may be ordered from any Sears Service Center and most Sears stores.

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for handling.

Sears, Roebuck and Co., Chicago, IL 60684 U.S.A.