

# OPERATING INSTRUCTIONS AND PARTS LIST



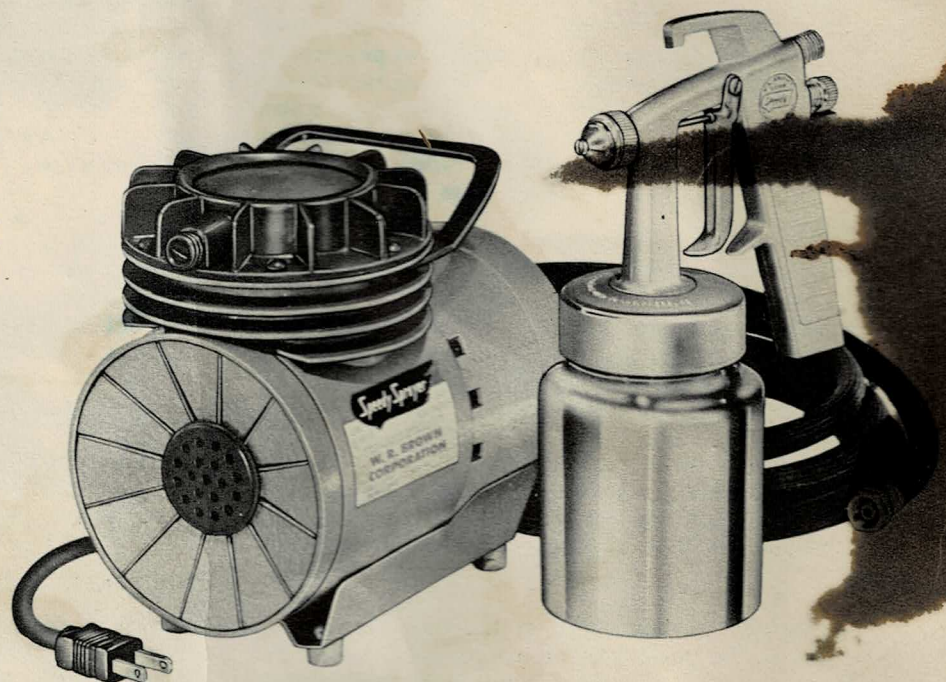
## **"COMPACT" SPRAY OUTFIT NO. 404**

MODEL 401-B  
COMPRESSOR

MODEL 222-A  
SPRAY GUN

These are the model numbers of your compressor and spray gun. Always furnish model number when writing about sprayer or ordering repair parts.

This list is valuable. It will assure your being able to obtain proper parts service at all times. We suggest you keep it with other valuable papers.



**W. R. BROWN CORPORATION**  
2701 N. Normandy Ave., Chicago 35, Ill.



## OPERATING INSTRUCTIONS

### Model No. 401-B Compressor

This compressor was thoroughly tested and was found to operate perfectly before leaving the factory.

You are now the proud owner of the latest in compact sprayer design. The perfect spray outfit for both beginners and experienced users. Careful reading of these instructions on the care and operation of your compressor and spray gun will assure you the maximum satisfaction from your sprayer and the pleasure of securing finer, smoother finishes than with any other method of painting.

The compressor is equipped with a long life "Buna-N" diaphragm with a tough nylon core. It is integrally powered by a shaded pole electric motor operating on common 115 volt, 60 cycle household current. This compressor is to be used with "bleeder" type spray guns. Never use with "non-bleeder" spray guns or air tools.

#### LUBRICATION

The compressor is equipped with grease sealed ball bearings and never requires any additional lubrication.

### Model No. 222-A Spray Gun

This gun was thoroughly tested and was found to operate perfectly before leaving the factory.

#### TYPE OF GUN

This spray gun is an "INTERNAL MIX", "PRESSURE FEED" type designed for fast application of practically all types of paint materials. Since this gun is designed primarily for use with portable air compressors that operate continuously during the spraying process there is no need for a trigger. The air flows through the nozzle continuously so the gun is known as a "BLEEDER TYPE".

There is no air control adjustment to be made on this gun. This gun has been adjusted at the factory to produce the best possible atomization for all materials. If spray gun does not atomize paint satisfactorily the paint may require additional thinning or the air or paint passages may be clogged.

This spray gun is equipped with a trigger adjusting screw to control the amount of needle valve opening. This trigger adjusting screw can be used to increase or decrease the flow of material through the liquid nozzle.

The spray gun is assembled at the factory with the lower end of the liquid tube facing forward toward the nozzle end of the gun. This position is most satisfactory for floors and vertical surfaces. For ceilings

#### AIR FILTER

The air intake filter felt and screen should be cleaned after each spraying job to assure clean air at full pressure. To clean, remove filter cap from front of compressor with a screw driver. Remove filter felt and wash out with thinner for the paint just used. Allow to dry and replace.

#### DIAPHRAGM

If diaphragm should need replacing, remove the six screws from the head and the four screws from the pull plate. Replace with new diaphragm being careful that new diaphragm is in the same position as the old one. Replace and tighten all screws before starting. The six head screws should be checked from time to time and tightened, if necessary.

If compressor should start to pump less air, examine the reed valves in the pull plate, and valve plate to see that they are in position over the valve outlets and are not bent or broken. If valves are bent, they may be turned over and used again until replacements are ordered.

screw in pipe one half turn so that lower end of liquid pipe faces rear or handle end of gun.

Before spraying, the aluminum cup should be screwed against the gasket tight enough to prevent excessive air leakage at this point. A slight amount of air leakage at this point will not prevent the gun from spraying properly, but care must be taken not to nick the top of the cup or to use defective gaskets which will permit a large air leakage, or the gun will not spray satisfactorily.

If leakage of paint occurs through packing gland around the needle pin, remove liquid nozzle and make sure packing spring is free so that the needle will still move freely. An occasional drop of light machine oil on packing leather will keep it soft and help prevent leakage.

#### SAFE WORKING AIR PRESSURES

This spray gun is designed to operate most efficiently at air pressures between 12 and 25 pounds. In no case should more than 50 lbs. pressure be used on this gun.

#### HARDENED STEEL NOZZLES

This gun is furnished with a hardened steel liquid nozzle and fan spray nozzle. A round spray and angle spray nozzle are available on special order. (See Parts List.)



## OPERATING INSTRUCTIONS

### DIRECTIONS FOR SPRAYING

1. Thoroughly mix the material, adding thinners as indicated on label. Most materials in common use will spray readily if thinned according to the manufacturer's instructions for brushing. However, if material still appears too thick, add a little more thinner, determining the amount by testing mixture in gun. Be sure the material you use for spraying is clean, and free from lumps. Strain it through cheese cloth, regular paint strainer or a piece of common screen wire.

2. Fill the cup about three-quarters full. Start electric motor. Make sure that Air Compressor is near enough to the work to allow a full movement of the gun at 4 to 8 inches from the surface to be painted. (Be sure that spray or fumes cannot reach any flame, and that there is plenty of ventilation.)

3. Make your "pattern". Hold the nozzle of the gun about 6 inches away from a sheet of cardboard or paper, pull the trigger and release it quickly as possible. The resulting pattern shows whether the gun is properly adjusted to proceed with work. The round pattern is preferred for small irregular surfaces, and the flat pattern for large areas. Practice handing the gun on cardboard or waste to get the feel of painting.

4. Begin spraying. Keep the gun at right angles to your work—by flexing your wrist at each end of every stroke. Never allow a stiffly held wrist to "arc" the stroke. This is a fault common to beginners. Arcing causes poor distribution of materials; too much at the center of each stroke.

5. Keep the distance between nozzle and work uniformly between 6 and 8 inches. Always keep the gun

in motion. If you hold it in one spot, your material will "pile up" and an uneven coating will result.

6. Learn to "trigger" your gun—to start and stop the material properly. This means the gun must be moving at the beginning of the stroke before the trigger is pulled. Likewise the trigger must be released before the gun stops moving at the end of the stroke. This "feathers" or blends each stroke with the next without showing unevenness or "laps".

7. Overlap your strokes on a flat surface just enough to secure an even coating. A few strokes on some "Practice" surface will quickly develop the needed skill.

8. Use a "frisket" or cardboard shield to catch overspray at edges of work and to protect surfaces not to be painted. Where clean separation on any job is required, as in 2-tone finishing, masking tape should be used to cover areas not to be painted.

### SPRAYING PROCEDURE FOR LACQUER

Greater care must be used when spraying lacquer than with other materials as lacquer dries very quickly and has a tendency to clog up the gun. To spray lacquer successfully the operation should be continuous, that is the gun should not be set down for over a few minutes at a time.

Immediately after spraying with lacquer the gun should be thoroughly washed out with a special lacquer cleaner.

### CLEANING INSTRUCTIONS—IMPORTANT

The spray gun must be thoroughly cleaned after using, as paint materials dry quickly in nozzle passages. To clean your Spray Gun, empty and wipe out the cup. Pour a small amount of solvent or thinner in cup, screw on tight, and hold trigger open till the thinner has been blown through the nozzle as in painting. The gun should be shaken while doing this to thoroughly wash out the cup.

Stopping and releasing the spray at the nozzle with the finger tip, causes the thinner to surge violently, and helps clean the material passages in the gun.

Finish by wiping off the air and fluid nozzles, and cup with cloth that has been moistened with solvent.

For a more thorough cleaning when paint and air passages are clogged with paint and gun is not operating

properly, disassemble gun and soak all metal parts in thinner or paint remover. After thinner or paint remover has softened paint in air and paint passages in gun handle, take a small soft wire and push this back and forth through all air and paint passages until they are open and clean. Reassemble gun after all parts have been wiped clean and place 2 or 3 drops of light machine oil on packing leather to keep it soft. If packing leather is dry and hard or worn it should be replaced.

#### CAUTION

DO NOT USE LYE OR ANY OTHER CAUSTIC ALKALI SOLUTION FOR CLEANING THE GUN OR CUP AS THEY ATTACK ALUMINUM ALLOYS.



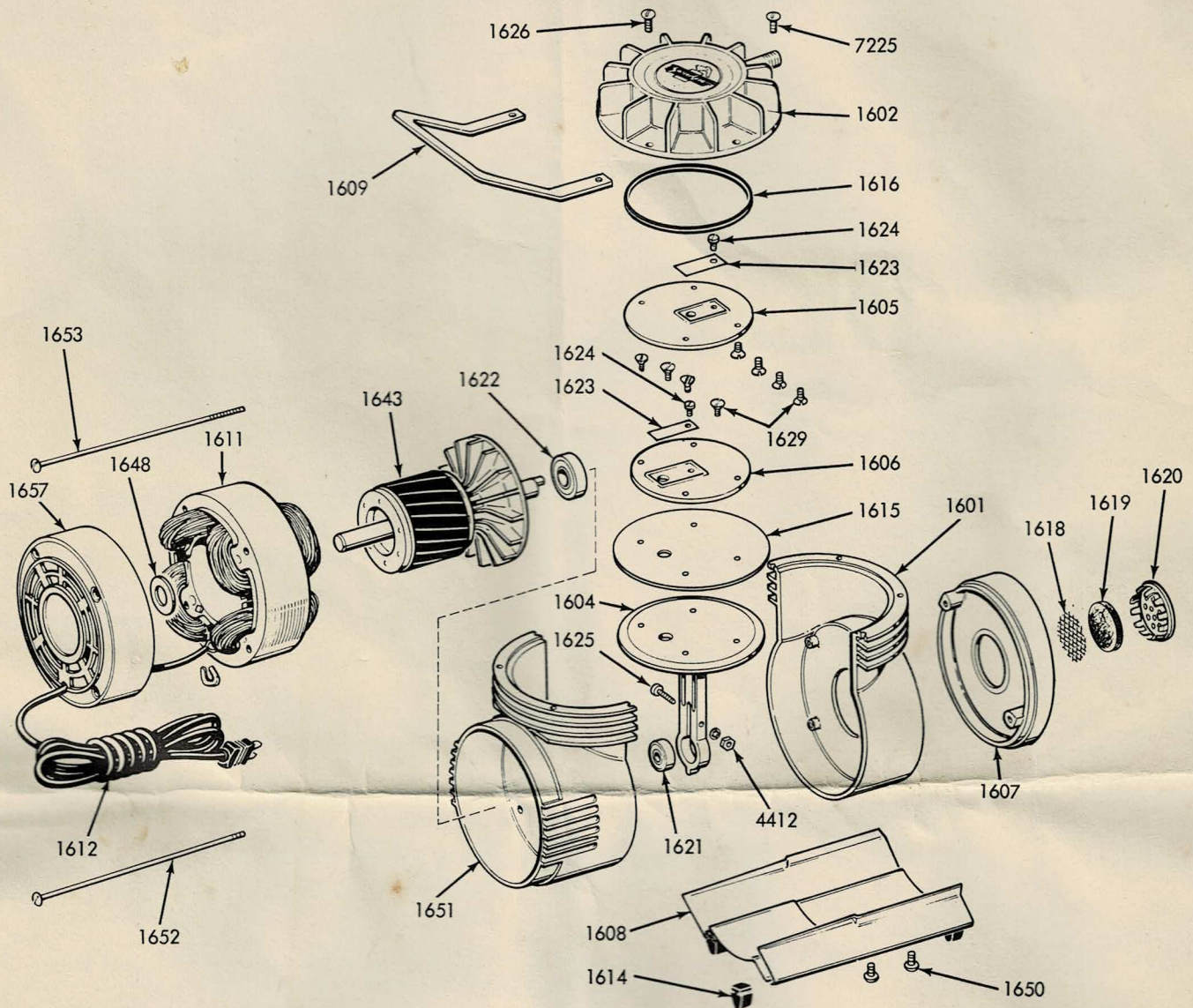
### TROUBLE CHART

TROUBLE	CAUSE
1. If gun does not operate properly, check for:	Air leaks Improperly prepared materials Improperly cleaned gun
2. If material sags or runs:	Material may be too thin Gun may be stroked too slowly Gun may be held too close to the work Trigger may be adjusted for too dense a spray
3. If material is hard to spray, check for:	Air leaks Low voltage current Thick or unstrained material
4. If spray pattern is distorted, look for:	Accumulation of material on end of fluid tip Clogged air holes in air cap Foreign matter in material Gun held at angle to surface

TROUBLE	CAUSE
5. If gun does not spray, look for:	Loose air hose connections at gun or compressor Loose paint cup Clogged passages in fluid tube or fluid tip Loose or damaged fluid tube Loose, damaged, or clogged air cap Closed fluid needle
6. If spray pattern flutters, look for:	Loose paint cup of fluid tube Dry or worn fluid needle packing Loose packing gland Improperly strained or thinned material Gun tipped too far, allowing air to enter fluid tube along with paint



## ILLUSTRATED PARTS LIST



**Model No. 401-B Compressor**

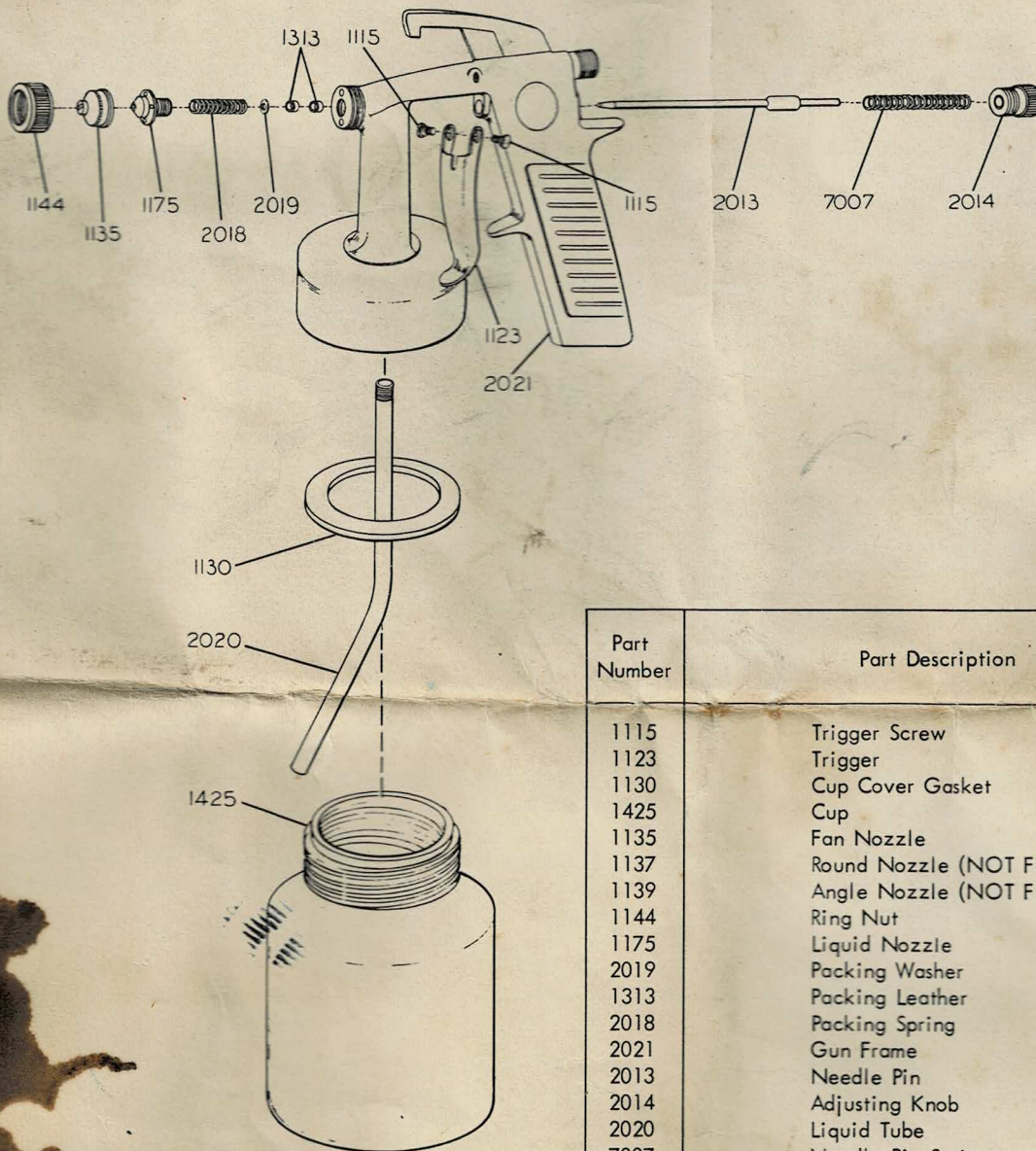
Part Number	Part Description	Selling Price (each)
1601	Body Half	\$ 1.50
1602	Dome	1.50
1604	Connecting Rod	2.00
1605	Valve Plate	.80
1606	Pull Plate	.80
1607	Face Plate	.50
1608	Base	1.00
1609	Handle	.40
1611	Motor Stator	12.00
1612	Motor Cord	1.00
1614	Rubber Feet	.10
1615	Diaphragm	1.00
1616	Valve Plate Gasket	.20
1618	Filter Screen	.10
1619	Filter Felt	.10
1620	Filter Cover	.20
1621	Connecting Rod Bearing	2.50

Part Number	Part Description	Selling Price (each)
1622	Main Bearing (1/2")	\$ 2.50
1623	Reed Valve	.15
1624	Valve Screw (#5-40)	.10
1625	Connecting Rod Screw (#8-32)	.10
1626	Head Screw (#10-24)	.10
1629	Valve Plate Screws (#8-32)	.10
1643	Motor Shaft Assembly	10.00
1648	Steel Spacer	.10
1650	Base Screws	.10
1651	Back Body Half	2.00
1652	Body Bolts (6 3/4" Lg.)	.30
1653	Body Bolts (5 3/4" Lg.)	.30
1657	Motor End Bell	2.50
7225	Head Screw (#10-24)	.10
4412	Nut for Con Rod Screw	.10
908	8 Foot Air Hose with Fittings (NOT SHOWN)	1.50



# ILLUSTRATED PARTS LIST

## Model No. 222-A Spray Gun



Part Number	Part Description	Selling Price (each)
1115	Trigger Screw	\$ 0.25
1123	Trigger	.30
1130	Cup Cover Gasket	.25
1425	Cup	1.50
1135	Fan Nozzle	1.00
1137	Round Nozzle (NOT FURNISHED)	1.00
1139	Angle Nozzle (NOT FURNISHED)	1.00
1144	Ring Nut	.35
1175	Liquid Nozzle	1.00
2019	Packing Washer	.10
1313	Packing Leather	.15
2018	Packing Spring	.15
2021	Gun Frame	4.00
2013	Needle Pin	.90
2014	Adjusting Knob	.30
2020	Liquid Tube	.40
7007	Needle Pin Spring	.10

Special nozzles for spraying "Multi-Color" paints available for #222 Spray Gun.

MC-22	Nozzle Kit (to convert #222 gun for Multi-Color)	\$2.50
MC-1135	Fan Nozzle	\$1.00
MC-1175	Liquid Nozzle	\$1.00
MC-2013	Needle Pin	\$ .90