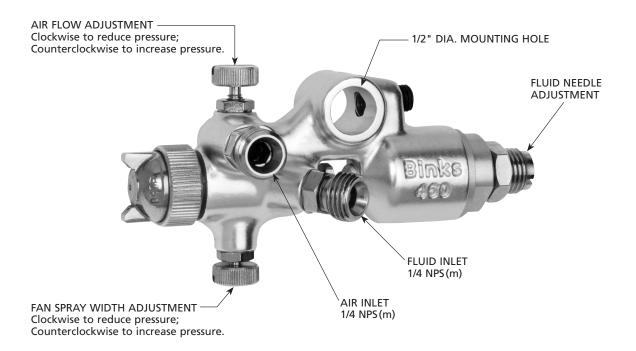
# BINKS MODEL 460 LIGHTWEIGHT AUTOMATIC SPRAY GUN



### DESCRIPTION

The Binks 460 Automatic Spray Gun is a small precision gun designed with accuracy in mind, for ease of fitting to existing automatic and semi-automatic machine. Its compact dimensions also enable the gun to be installed neatly and at close quarters, where the standard range of automatics cannot be accommodated.

### FEATURES

- Aluminum alloy body with brass air nozzle.
- Stainless steel needle valve and springs.
- Both gun operation and spray variation is controlled from a single air supply.
- Control valves for atomization fan and air flow.
- No lag, instant piston controlled "on and off".
- A range of fluid nozzles for applying many liquid coatings.



#### PROP 65 WARNING

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

#### **GUN ASSEMBLY ORDERING INFORMATION**

**6401-1800-5** 460 Gun J920SS-J92P with .020" Fluid Nozzle

**6401-1900-5** 460 Gun J930SS-J92P with .030" Fluid Nozzle

**6401-2000-5** 460 Gun J940SS-J92P with .040" Fluid Nozzle

**6401-2100-8** 460 Gun K960SS-K92P with .060" Fluid Nozzle

#### SPECIFICATIONS:

Max Air Pressure: 100 PSI/6.8 Bar Min Air Pressure: 50PSI/3.4 Bar Max Fluid Pressure: 100 PSI/6.8 Bar Air Volume Requirements: 20 SCFM Max Gun Body: Aluminum Forging Fluid Path: Stainless Steel Fluid Inlet: 1/4" NPS (M) Air Inlet: 1/4" NPS (M) Gun Weight: .43 Ibs/.2kg Gun Mounting Hole: 1/2" Dia.

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## In this part sheet, the words **WARNING**, **CAUTION** and **NOTE** are used to emphasize important safety information as follows:

# WARNING

Hazards or unsafe practices which could result in severe personal injury, death or substantial property damage.

# 

Hazards or unsafe practices which could result in minor personal injury, product or property damage.

# NOTE

Important installation, operation or maintenance information.

## 🛕 WARNING

## Read the following warnings before using this equipment.



#### **READ THE MANUAL**

Before operating finishing equipment, read and understand all safety, operation and maintenance information provided in the operation manual.



### **OPERATOR TRAINING**

All personnel must be trained before operating finishing equipment.



#### EQUIPMENT MISUSE HAZARD Equipment misuse can cause the equipment to rupture,

malfunction, or start unexpectedly and result in serious injury.



## LOCK OUT / TAG-OUT

AUTOMATIC EQUIPMENT

Failure to de-energize, disconnect, lock out and tag-out all power sources before performing equipment maintenance could cause serious injury or death.



## PRESSURE RELIEF PROCEDURE

Always follow the pressure relief procedure in the equipment instruction manual.

Automatic equipment may start suddenly without warning.



#### **KEEP EQUIPMENT GUARDS IN PLACE** Do not operate the equipment if the safety devices have been removed.



KNOW WHERE AND HOW TO SHUT OFF THE EQUIPMENT IN CASE OF AN EMERGENCY



### WEAR SAFETY GLASSES

Failure to wear safety glasses with side shields could result in serious eye injury or blindness.



## INSPECT THE EQUIPMENT DAILY

Inspect the equipment for worn or broken parts on a daily basis. Do not operate the equipment if you are uncertain about its condition.



## NEVER MODIFY THE EQUIPMENT

Do not modify the equipment unless the manufacturer provides written approval.



### NOISE HAZARD

You may be injured by loud noise. Hearing protection may be required when using this equipment.



PROJECTILE HAZARD You may be injured by venting liquids or gases that are released

under pressure, or flying debris. **PINCH POINT HAZARD** 



#### Moving parts can crush and cut. Pinch points are basically any areas where there are moving parts.

STATIC CHARGE



#### WEAR RESPIRATOR

Toxic fumes can cause serious injury or death if inhaled. Wear a respirator as recommended by the fluid and solvent manufacturer's Material Safety Data Sheet.

fire, explosion or electric shock and other serious injury.

Fluid may develop a static charge that must be dissipated through

proper grounding of the equipment, objects to be sprayed and all other electrically conductive objects in the dispensing area. Improper grounding or sparks can cause a hazardous condition and result in

#### **TOXIC FLUID & FUMES**



Hazardous fluid or toxic fumes can cause serious injury or death if splashed in the eyes or on the skin, inhaled, injected or swallowed. LEARN and KNOW the specific hazards or the fluids vou are using.



#### FIRE AND EXPLOSION HAZARD

Improper equipment grounding, poor ventilation, open flame or sparks can cause a hazardous condition and result in fire or explosion and serious injury.

#### MEDICAL ALERT

Any injury caused by high pressure liquid can be serious. If you are injured or even suspect an injury:

- · Go to an emergency room immediately.
- Tell the doctor you suspect an injection injury.
- . Show the doctor this medical information or the medical alert card provided with your airless spray equipment.
- Tell the doctor what kind of fluid you were spraying or dispensing.

#### GET IMMEDIATE MEDICAL ATTENTION

- To prevent contact with the fluid, please note the following:
- Never point the gun/valve at anyone or any part of the body.
- Never put hand or fingers over the spray tip.
- Never attempt to stop or deflect fluid leaks with your hand, body, glove or rag.
- Always have the tip guard on the spray gun before spraying.
- Always ensure that the gun trigger safety operates before spraying.

#### **PROP 65 WARNING**



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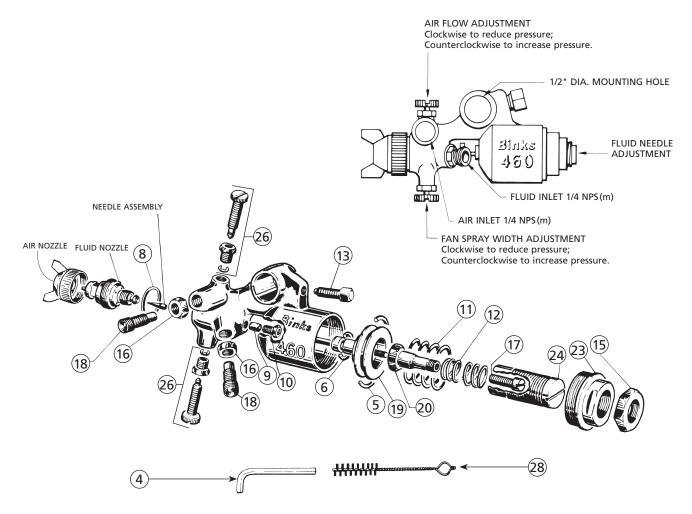
IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PROVIDE THIS INFORMATION TO THE OPERATOR OF THE EQUIPMENT. FOR FURTHER SAFETY INFORMATION REGARDING THIS EQUIPMENT, SEE THE GENERAL EQUIPMENT SAFETY BOOKLET (77-5300).

Binks reserves the right to modify equipment specification without prior notice.





## Binks MODEL 460 LIGHTWEIGHT AUTOMATIC SPRAY GUN



## PARTS LIST

When ordering, please specify Part No.

| ITEM<br>NO. | PART<br>NO. | DESCRIPTION      | ΟΤΥ.   | ITEM<br>NO. | PART<br>NO. | DESCRIPTION                   | ΟΤΥ. |
|-------------|-------------|------------------|--------|-------------|-------------|-------------------------------|------|
|             | NO.         |                  | Q I II |             |             | Deschir Hold                  | Q    |
| 1           | _           | AIR NOZZLE       | 1      | 13          | _           | 5/16"– 24 CUP POINT SET SCREW |      |
| 2           | _           | FLUID NOZZLE     | 1      |             |             | 1/2" LONG                     | 1    |
| 3           | _           | NEEDLE ASSEMBLY  | 1      | 15          | 54-2868     | LOCKNUT                       | 1    |
| 4           | _           | WRENCH, 7/32 HEX | 1      | 16          | 54-2869     | LOCKNUT                       | 2    |
| 5           | 20-2111 •   | O-RING           | 1      | 17          | 54-2870     | SCREW                         | 1    |
| 6           | 20-3236 •   | O-RING           | 1      | 18          | 54-2871     | CONNECTOR                     | 2    |
| 8           | 54-2209 •   | GASKET           | 1      | 19          | 54-2872     | PISTON                        | 1    |
| 9           | 54-2292 •   | PACKING          | 1      | 20          | 54-2873     | SPIGOT                        | 1    |
| 10          | 54-2294 •   | SCREW            | 1      | 23          | 54-2876     | COVER                         | 1    |
| 11          | 54-2860 •   | SPRING           |        | 24          | 54-2877     | SCREW                         | 1    |
| 12          | 54-2861 •   | SPRING           | 1      | 26          | 54-2879     | SIDE PORT CONTROL             | 2    |
|             |             |                  |        | 28          | OMX-88      | GUN BRUSH                     | 1    |

• 6-1302 Repair Kit (kit includes Items 5, 6, 8, 9, 10, 11 & 12)



## **INSTALLATION, OPERATION & MAINTENANCE**

#### **GUN MOUNTING**

A hexagon screw (13) will secure the spray gun to the 54-380 gun mounting rod. For special mountings, a 1/2" dia. rod will fir the hole in the top of the gun body.

#### HOSE LENGTH

Install minimum hose length from valve to gun to minimize time required for "off-on" response of gun.

#### CONNECTIONS

The air connection and fluid connection are both 1/4 NPS. The air connection is stamped "a".

#### AIR SUPPLY

Since the gun has its own control, atomizing air may be taken directly from the main line. However, if regulated air is used, 50 PSI minimum is required to actuate gun fluid valve piston. When rapid "off–on" operation is required, use a 3-way valve which exhausts to atmosphere, in place of a 2-way valve.

#### SPRAY PATTERN

The width of spray pattern is controlled by the control assembly (26). Vertical or horizontal position of the spray is obtained by rotating the air nozzle.

#### ATOMIZATION

Air volume to the nozzle is controlled by the control assembly (26) located adjacent to the air inlet connection.

#### FLUID CONTROL

The rate of fluid flow is controlled by a combination of the selection of the correct nozzle orifice size and adjustment of fluid pressure. The maximum fluid flow rate is approximately 8 fluid ounces per minute. Fine adjustment of the fluid flow can be obtained by controlling the travel of the needle valve. Clockwise rotation of the screw (24) decreases the needle travel and counterclockwise rotation increases the travel. The locknut (15) is used to lock the screw (24) after adjustment.

#### FAULTY SPRAY

Caused by improper cleaning, or dried fluid on nozzle tip or in the air nozzle. Soak these parts in solvent to soften the dried fluid and remove with a brush or cloth.

## A CAUTION

Never use metal instruments to clean air or fluid nozzles. These parts are carefully machined and any damage to them will cause a faulty spray.

If either air nozzle or fluid nozzle is damaged, the part must be replaced before a perfect spray can be obtained.

#### SPITTING

To eliminate spitting and dripping, turn on atomizing air before turning on fluid.

#### **NEEDLE ADJUSTMENT**

The correct setting is to allow approximately 1/16" piston travel before contacting NEEDLE. Adjustment is made by loosening the screw (17) on rear of needle and rotating the spring guide (20) either forward to reduce or back to increase clearance.

#### AIR LEAKAGE INTO AIR CYLINDER VENT

Remove piston (19) and inspect for dirt or damage to large o-ring (5). Clean piston and cylinder. Replace o-ring if necessary. Lubricate with white petroleum jelly.

#### AIR LEAKAGE AT FLUID NEEDLE

Remove piston (19) and inspect for dirt or damage to small o-ring (6). Replace if necessary.

#### FLUID LEAKAGE AT PACKING GLAND

Tighten screw (10) and slightly "back-off" screw to set packing. If leakage continues, replace packing.

#### CLEANING THE GUN

Under no circumstances should the complete gun be immersed in thinners or solvents.

## Binks MODEL 460 GUN FLUID NOZZLE, NEEDLE & AIR CAP SELECTION CHART

|                      |                   |                    |                     | Approx. Air Consumption SCFM<br>with Specific Dynamic Air<br>Presure (PSI) at air cap |        | Type of<br>Spray | *Max. Spray<br>Pattern Size @ |             |
|----------------------|-------------------|--------------------|---------------------|---|--------|------------------|-------------------------------|-------------|
| Fluid Nozzle         | Orifice Size      | Fluid Needle       | Air Nozzle          | 30 PSI  | 50 PSI | 70 PSI           | Pattern                       | 5" Distance |
| J920SS<br>(PN 45-84) | .020"<br>(.5 mm)  | 940<br>(PN 47-454) | J92P<br>(PN 46-131) | 6.4   | 8.5    | 10.5             | ELLIPSE /<br>STRAIGHT SIDES   | 6"          |
| J930SS<br>(PN 45-85) | .030"<br>(.75 mm) | 940<br>(PN 47-454) | J92P<br>(PN 46-131) | 6.4   | 8.5    | 10.5             | ELLIPSE /<br>STRAIGHT SIDES   | 7.5"        |
| J940SS<br>(PN 45-86) | .040"<br>(1.0 mm) | 940<br>(PN 47-454) | J92P<br>(PN 46-131) | 6.4   | 8.5    | 10.5             | ELLIPSE /<br>STRAIGHT SIDES   | 8"          |
| J940SS<br>(PN 45-86) | .040"<br>(1.0 mm) | 940<br>(PN 47-454) | J92R<br>(PN 46-126) | 4   | 6      | 8                | ROUND                         | 2"          |
| K960SS<br>(PN 45-87) | .060"<br>(1.5 mm) | 960<br>(PN 47-455) | K92P<br>(PN 46-134) | 7.2   | 10.6   | 14               | ELLIPSE /<br>STRAIGHT SIDES   | 9.5"        |

\*Spray pattern for reference only. Pattern size will vary slightly with flow and viscosity of the materials.



NOTES



## NOTES

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## WARRANTY POLICY

Binks products are covered by Finishing Brands one year materials and workmanship limited warranty. The use of any parts or accessories, from a source other than Finishing Brands, will void all warranties. For specific warranty information please contact the closest Finishing Brands location listed below.

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## BINKS

Binks is part of Finishing Brands, a global leader in innovative spray finishing technologies. For technical assistance or to locate an authorized distributor, contact one of our international sales and customer support locations below.

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