Ransburg

SERVICE INSTRUCTION
SI-03-03.1

SOLVENT EFFECTS ON #2 HANDGUN BELL / BRUSH WEAR

EFFECTS OF SOLVENT ON NO. 2 HANDGUN BELLS

Do Not Soak the No. 2 Handgun Bells in any solvent. Soaking will deteriorate the bell's performance and void warranty.

Comprehensive testing conducted on the No. 2 Handgun bells has determined the effect of cleaning bells in different solvents. The following will serve as a guideline for solvents selected for cleaning No. 2 Handgun bells.

- No. 2 Handgun bells should never be soaked in any solvent. Soaking will effect the electrical properties of the bell and produce poor spray performance. Soaking will also void any warranty of the bell.

- Cleaning of the No. 2 Handgun bell with any of the following solvents will have a harmful effect on the bell's conductivity.
  - **Methyl Ethyl Ketone [MEK] (141-78-6)**
  - **Acetone (67-64-1)**
  - **Methylene Chloride (75-09-2)**
  - **"Lacquer Thinner"**
  - **"Epoxy Reducers" with contain Ketones**

NOTE: Acetone has become a very popular solvent of use because of it's EPA status. This solvent should be avoided when working with the No. 2 Handgun. It not only effects the bell performance, but also has a very low flash point (-18° F). No. 2 Handgun bells should NOT be cleaned in it and the use of coatings containing Acetone should be avoided.

- Some solvent blends containing Glycol Ether will not effect the electrical conductivity of the No. 2 Handgun bell, but do cause a problem with pattern size. Glycol Ethers leave a conductive residue on the insulating hub of the bell, which leaks voltage from the rim across the probe of the bell. This results in an enlarged center hole pattern and decreased atomization. Some of these solvents are:
  - **Butyl Cellosolve (111-76-2)**
  - **Methyl Cellosolve (109-86-4)**
  - **Ethyl Cellosolve (110-80-5)**

- To avoid problems with atomization and achieve the maximum length of life for the bells, the solvents suggested for cleaning (not soaking) are:
  - **Toluene (108-88-3)**
  - **Xylene (1330-02-07)**
  - **Mineral Spirits**
  - **Solvesso-100**
  - **Solvesso-150**

In very high humidity environments spray pattern and hole size may become unacceptably large. In these instances you may wish to try the "Florida Bell" (P/N 11488-01).

NO. 2 HANDGUN BRUSH POSITIONING AND WEAR

When installing the electrical contact brush (P/N 3695-00), it is important that it is properly positioned to provide **LIGHT CONTACT** with the bell conductive coating. Excessive contact pressure from the contact brush will wear away the conductive coating or the brush tip, causing poor electrical contact. The small plastic pad at the tip of the brush arm should lightly contact the black bell coating, **not the wire**. The tip of the brush should not extend past the edge of the bell cup or into the radius at the edge (see Figure 2). The brush should normally have a slight curve to the arm. The more pressure applied the lesser the curve (see Figure 1). The tip of the brush assembly must be inspected prior to each use for wear. When one-half (1/2) of the plastic tip is worn away the brush assembly should be replaced (see Figure 3). (**Note:** When the radius portion of the plastic tip is gone, this is equal to one-half of the brush tip.)

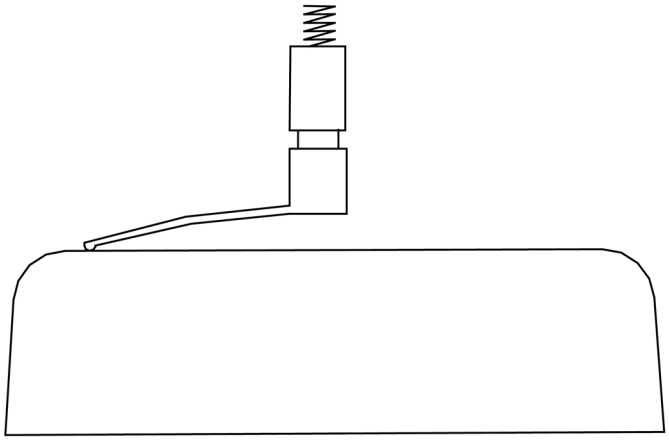

Figure 1

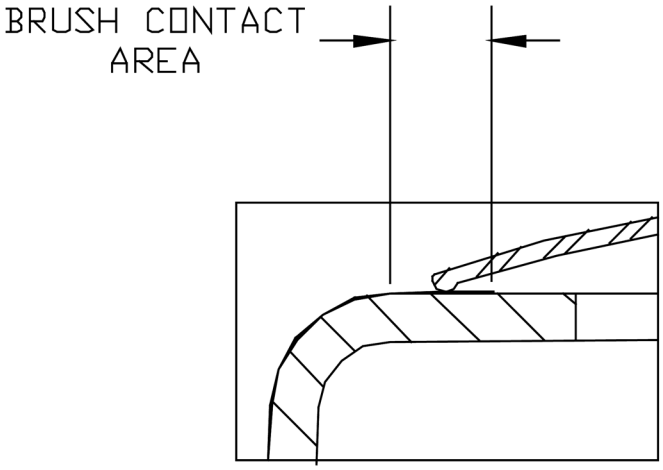

Figure 2

Figure 3

Technical/Service Assistance
Telephone: 800/ 233-3366 Fax: 419/ 470-2071

(Technical Support Representative will direct you to the appropriate telephone number for ordering Spare Parts.)

Form SI-03-03.1
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