

November 1970

Brief 70-10549

# NASA TECH BRIEF



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## Miniature Spray-Painting Booth

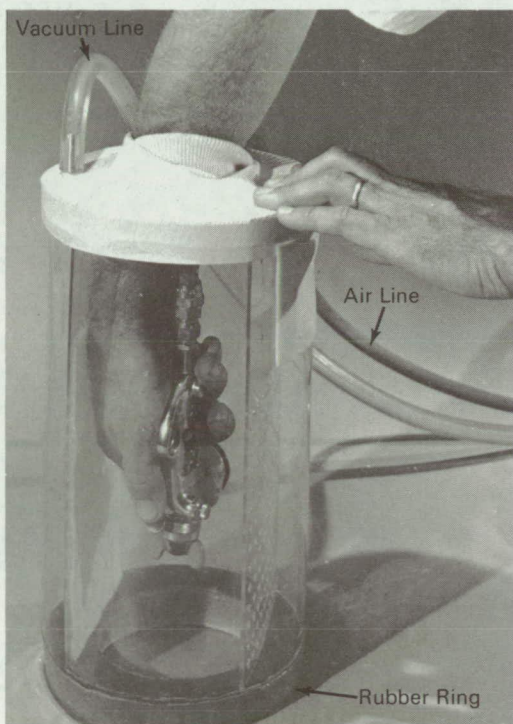


Figure 1. Booth in Use

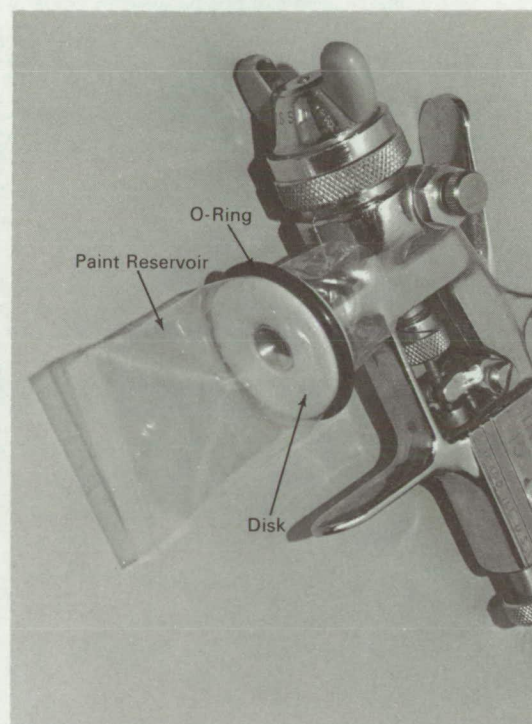


Figure 2. Complete Spray Gun

The prototype miniature transparent spray booth provides a method for quality painting and repair of surfaces in clean room and other specialized environments. Overspray and virtually all contaminating vapor and odor can be eliminated. Touch-up painting is achieved with a spray gun which uniformly blends the paint with the surrounding surface. A small chamber is used with the gun for containing the overspray. This item could serve in auto shops, labora-

tories, showrooms, and in all industries which require specialized painting.

One end of a 13-in. length of 7-in.-diameter transparent plastic (such as polymethyl methacrylate) tubing is mounted on a heavy rubber ring, preferably faced with sponge rubber (see Fig. 1). Two vertical baffles of perforated plastic sheet are set within the tube. A sleeve of material is taped over the other end of the tube. A plastic tube runs through a small side

(continued overleaf)

hole in the sleeve to a vacuum pump for the purpose of carrying wastes away from the painting.

A polyethylene paint reservoir (approximately 2-oz capacity) is mounted on a commercial spray gun by means of a disk of polytetrafluoroethylene, drilled and tapped to match the thread of the gun's paint nipple, and an O-ring or rubber band clamps the reservoir over the disk's edge, as shown in Figure 2. To operate, the miniature spray booth is held in the left hand and the vacuum hose is connected to the exhaust fitting. The spray gun is connected to a source of adjusted air (10 to 12 psi). The booth is held against the area to be touched-up with the left hand, and the right hand is inserted into the booth to perform the touch-up painting. Quality of the interior finish over damaged areas is assured. Before removing the booth from

the touched-up places, about 10 seconds should be allowed to permit all dust to be removed by the vacuum.

**Note:**

No additional documentation is available. Specific questions, however, may be directed to:

Technology Utilization Officer  
Manned Spacecraft Center, Code BM7  
Houston, Texas 77058

Reference: B70-10549

**Patent status:**

No patent action is contemplated by NASA.

Source: Kenneth W. Fee of  
North American Rockwell Corp.  
under contract to  
Manned Spacecraft Center  
(MSC-15811)