

# User Guide

### PROCEDURE

1. Connect spray probe to regulated helium using the 10 ft. tubing and fitting provided. For the P104871, the helium inlet pressure must be 10 psig or lower. For other models, the inlet pressure can be up to 250 psig. The maximum pressure rating of the P105182, P107388 reservoir is 250 psig. Evacuation of the reservoir before filling is not required, but is recommended. All fitting connections should be leak tight.
2. For P105182 and P107388 models, adjust regulator to achieve a light flow of helium. For P104871 model, no regulator is supplied with the spray probe, so a customer supplied regulator should be used to adjust to the correct helium spray pressure.
3. For gross leak testing, the helium spray output pressure can be adjusted between 0-5 psig.
4. For pin-pointing leak locations, use low helium pressure. By spraying with the spray probe tip placed in a small cup of water, the amount of helium gas being released from the tip can be seen and gauged.
5. The P107388 can be connected to the supplied aluminum reservoir or can be directly connected to a helium source via the supplied 10' hose. A refill adapter is supplied for the filling the reservoir from the helium source. Spare canisters can be purchased from us, call 505-872-0037.

### SPRAYING PRACTICES

1. When spraying helium over the test part, use the lowest practical flow of helium. For determining if a leak exists, a larger flow may be appropriate. However, for pinpointing leak location, reduce the helium flow to around 1-3 bubbles per second when submersing the probe tip in liquid.
2. To assist in pinpointing a leak location, spray the suspect leak location in short spurts. Note the response time of the leak detector as well as the magnitude of the signal that appears. A short response time and a large signal indicate a location close to the spray point.
3. When leak testing a part with multiple potential leak locations, start by spraying locations at the top of the part and work down to the bottom of the part. Helium will rise and can give a misleading location of the leak.
4. Compressed air can be used on the part to dissipate the helium trapped on or near the part. This may help reduce the helium signal to the leak detector to make leak location quicker.



P104871  
Spray Probe  
(no regulator)



P105182  
Spray Probe  
& Regulator



P107388  
Spray Probe,  
Regulator and Helium Reservoir



Spray Probe  
with rigid &  
flexible tip

### USE OF PROBE TIPS

The spray probe is supplied with rigid and flexible tips. The rigid tip is used for general spraying and the flexible tip is for leak testing hard-to-reach areas.

- The flexible tip can be bent, but do not over-bend the tip. Make sure the probe tip does not get plugged.
- To change the tips, remove the nut from the end of the probe and replace with a different tip. Tighten nut slightly past hand tight.
- To avoid damage to the plastic sleeve of the flexible tip, do not over bend near the swaged connection.

### CAUTION

- Follow precautions to ensure safe operation.
- Do not inhale helium gas. Helium is non-toxic, but may cause suffocation. Lack of sufficient oxygen can cause serious injury or death. Refer to Material Safety Data Sheet.
- **Always use regulated helium.** Do not exceed 60 psig when operating the spray probe. Never connect the spray probe directly to a helium bottle.