

# NEW SOUTH WALES FIRE BRIGADES OPERATIONS BULLETIN 2008/07 Orion Gas Detector Extension Probe



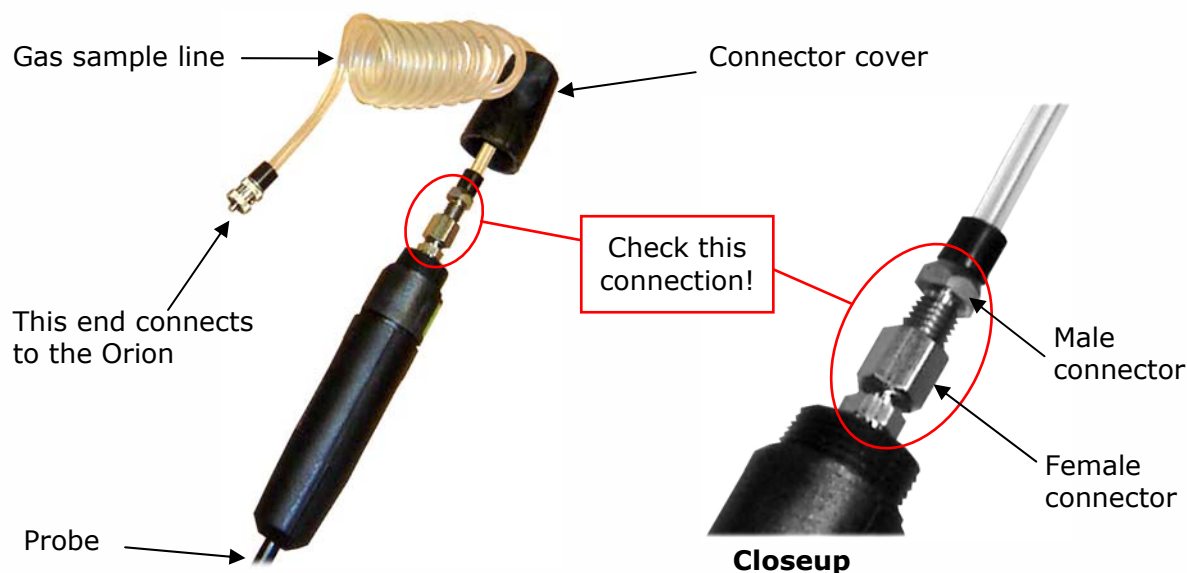
## Issue

It may be possible for a nut in the handle of the extension probe of the Orion 4-head gas detector to come loose during operation. This nut connects the gas sample line from the Orion body to the handle of the extension probe. Tests indicate that leakage in the gas line is only an issue if this connection is extremely loose. The standard pump test performed during startup of the Orion will indicate if there is any leakage in the system.

In consultation with the manufacturer, MSA, the NSW Fire Brigades has initiated a program of securing these nuts by applying a thread locker. This program is being managed by the BA/Hazmat Training Section. The thread locker is not to be applied in the field.

## Interim action

Until the thread locker is installed, all Orion extension probes must be inspected and tested prior to use.



**Figure 1: Orion extension probe inspection**

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## Orion Gas Detector Extension Probe



### Inspection procedure

1. Unscrew the connector cover on the probe closest to the detector.
2. Check if you can undo the connection with finger pressure. If you can't, the connection is okay. Go to step 4.
3. If the connection is loose, screw the female connector on the probe handle to the male connector until firmly bedded.  
Some resistance will be felt as the female connector contains an O-ring.

**Caution: Do not over tighten as you can damage the O-ring or strip the thread.**

4. Replace the connector cover.
5. Connect the extension probe to the Orion.
6. Confirm the integrity of the gas sampling circuit by performing the pump test as described in Section C:2.4: 'Test the Pump', on p 15 of [Recommended Practice: Orion Four-Head Gas Detector](#).

A successful test is indicated by the Orion going into pump alarm.

Station Commander	A	B	C	D	Other

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**Previous Operations Bulletin: 2008/06 Sampling, packaging and labelling at suspicious substance incidents**