CLAIMS

1. A breathing assistance apparatus comprising:

   a housing comprising an engagement feature;

   an electrical component in the housing, the electrical component comprising a receptacle;

   a removable component comprising an electrical connector that is configured to be a close or tight fit in the receptacle of the electrical component to assist with holding the removable component in connection with the electrical component, the removable component comprising a gas port, wherein the removable component further comprises a tab with a terminal end portion that can be flexed relative to the rest of the removable component, wherein an engagement feature is provided on the terminal end portion of the tab and is configured to engage with the engagement feature of the housing such that the removable component is inhibited from disconnecting from the housing in the absence of actuating the terminal end portion of the removable component to flex the tab.

2. The breathing assistance apparatus according to claim 1, wherein the tab comprises a thinned portion adjacent the terminal end portion.

3. The breathing assistance apparatus according to claim 1 or 2, wherein the engagement feature of the removable component comprises a protrusion, and wherein the engagement feature of the housing comprises a complementary engagement recess.

4. The breathing assistance apparatus according to claim 3, wherein the protrusion extends outwardly from a side of the terminal end portion.

5. The breathing assistance apparatus according to claim 4, wherein the housing and removable component each have two of said engagement features, wherein the engagement features of the removable component comprise two protrusions extending outwardly from opposite sides of the terminal end portion, and wherein the housing comprises two complementary engagement recesses.

6. The breathing assistance apparatus according to any one of claims 1 to 5, wherein the engagement features are configured such that inserting the

removable component into the housing will cause the terminal end of the tab to flex.

7. The breathing assistance apparatus according to any one of claims 1 to 6, wherein the electrical component comprises a socket, and wherein the removable component comprises a seal that is configured to engage against a portion of the socket.

8. The breathing assistance apparatus according to claim 7, wherein the seal comprises a wiper seal.

9. The breathing assistance apparatus according to claim 7 or 8, wherein the seal comprises one or more sealing elements.

10. The breathing assistance apparatus according to any one of claims 7 to 9, wherein the seal comprises an overmoulded seal.

11. The breathing assistance apparatus according to claim 10, wherein the electrical connector comprises a printed circuit board (PCB) electrical connector, wherein the PCB electrical connector is partly housed in a cavity of the removable component, and wherein the removable component comprises a moulded base member that is integrally moulded with the seal and that covers a part of the PCB electrical connector that is housed in the cavity.

12. The breathing assistance apparatus according to any one of claims 1 to 11, wherein the removable component is a removable elbow.