CLAIMS:

1. A configurable exhale system (10) for a respirator, the system comprising:

a housing (12) having a chamber (20);

a first valve assembly (14) disposed within the chamber (20) and configured to prevent air from flowing through the first valve assembly (14) when an air pressure differential between an upstream side and a downstream side of the first valve assembly (14) is below a first opening pressure; and

a second valve assembly (16) disposed within the chamber (20) in fluid communication with the first valve assembly (14) , the second valve assembly (16) configured to prevent air from flowing through the second valve assembly (16) when an air pressure differential between an upstream side and a downstream side of the second valve assembly (16) is below a second opening pressure, where the second opening pressure is greater than the first opening pressure; characterized by:

at least one bypass opening (29) positioned adjacent the second valve assembly (16), the at least one bypass opening (29) configured to enable air to bypass the second valve assembly (16); and

a bypass member (62) positioned adjacent the at least one bypass opening (29), the bypass member (62) movable between first and second positions, wherein in the first position the bypass member (62) blocks the at least one bypass

opening (29), and wherein in the in the second position the bypass member (62) does not block the at least one bypass opening (29).

2. A configurable exhale system of claim 1, wherein moving the bypass member (62) between the first and second positions comprises axial movement of the bypass member (62).

3. A configurable exhale system of claim 1, wherein moving the bypass member (62) between the first and second positions comprises rotational movement of the bypass member (62).

4. A configurable exhale system of claim 1, wherein the system comprises a removable cartridge.

5. A configurable exhale system of claim 1, wherein the system comprises a built-in feature of a respirator.

6. A configurable exhale system of claim 1, wherein moving the bypass member (62) between the first and second positions is initiated manually by a user.

7. A method for providing a switchable exhale filter system for a respirator, the method comprising:

providing a housing (10) having a first (14) and second (16) valve assemblies in fluid communication with each other; the first valve assembly (14) configured to prevent air from flowing through the first valve assembly (14) when an air pressure differential between an upstream side and a downstream side of the first valve assembly (14) is below a first pressure; the second valve assembly (16) configured to prevent air from flowing through the second valve assembly (16) when an air pressure differential between an upstream side and a downstream side of the second valve assembly (16) is below a second pressure; the second pressure being greater than the first pressure; characterized by:

providing at least one opening (29) adjacent the second valve assembly (16) for allowing air to bypass the second valve assembly (16);

providing a bypass member (62) adjacent the at least one opening (29); and

moving the bypass member (62) between first and second positions, wherein in the first position the bypass member (62) does not block the opening (29) and allows air to flow through the opening (29) to bypass the second valve assembly (16), and wherein in the second position the bypass member (62) blocks the opening (29) to prevent air from bypassing the second valve assembly (16).

8. A method of claim 7, wherein moving the bypass member (62) between the first and second position comprises one of moving the bypass member axially and rotating the bypass member.

9. A method of claim 7, wherein the system comprises a removable cartridge.

10. A method of claim 7, wherein the system comprises a built-in feature of a respirator.

11. A method of claim 7, wherein moving the bypass member (62) between first and second positions is initiated manually by a user.

CLAIMS:

1. A configurable exhale system (10) for a respirator, the system comprising:

a housing (12) having a chamber (20);

a first valve assembly (14) disposed within the chamber (20) and configured to prevent air from flowing through the first valve assembly (14) when an air pressure differential between an upstream side and a downstream side of the first valve assembly (14) is below a first opening pressure; and

a second valve assembly (16) disposed within the chamber (20) in fluid communication with the first valve assembly (14), the second valve assembly (16) configured to prevent air from flowing through the second valve assembly (16) when an air pressure differential between an upstream side and a downstream side of the second valve assembly (16) is below a second opening pressure, where the second opening pressure is greater than the first opening pressure, the system being characterized by:

at least one bypass opening (29) positioned adjacent the second valve assembly (16), the at least one bypass opening (29) configured to enable air to bypass the second valve assembly (16); and

a bypass member (62) positioned adjacent the at least one bypass opening (29), the bypass member (62) movable between first and second positions, wherein in the first position the bypass member (62) blocks the at least one bypass opening (29), and wherein in the second position the bypass member (62) does not block

the at least one bypass opening (29), the relationship between the second valve assembly (16) and the housing (12) being such that the second valve assembly (16) remains in a fixed position relative to the housing (12) during movement of the bypass member (62) between the first and second positions.

2. A configurable exhale system of claim 1, wherein moving the bypass member (62) between the first and second positions comprises axial movement of the bypass member (62).

3. A configurable exhale system of claim 1, wherein moving the bypass member (62) between the first and second positions comprises rotational movement of the bypass member (62).

4. A configurable exhale system of claim 1, wherein the system comprises a removable cartridge.

5. A configurable exhale system of claim 1, wherein the system comprises a built-in feature of a respirator.

6. A configurable exhale system of claim 1, wherein moving the bypass member (62) between the first and second positions is initiated manually by a user.

7. A method for providing a switchable exhale filter system for a respirator, the method comprising:

providing a housing (10) having a first (14) and second (16) valve assemblies in fluid communication with each other; the first valve assembly (14) configured to prevent air from flowing through the first valve assembly (14) when an air pressure differential between an upstream side and a downstream side of the first valve assembly (14) is below a first pressure; the second valve assembly (16) configured to prevent air from flowing through the second valve assembly (16) when an air pressure differential between an upstream side and a downstream side of the second valve assembly (16) is below a second pressure; the second pressure being greater than the first pressure; the system being characterized by:

providing at least one opening (29) adjacent the second valve assembly (16) for allowing air to bypass the second valve assembly (16);

providing a bypass member (62) adjacent the at least one opening (29); and

moving the bypass member (62) between first and second positions, wherein in the first position the bypass member (62) does not block the opening (29) and allows air to flow through the opening (29) to bypass the second valve assembly (16), and wherein in the second position the bypass member (62) blocks the opening (29) to prevent air from bypassing the second valve assembly (16), and

in so arranging matters that the relationship between the second valve

assembly (16) and the housing (12) is such that the second valve assembly (16) remains in a fixed position relative to the housing (12) when the bypass member moves between the first and second position.

8. A method of claim 7, wherein moving the bypass member (62) between the first and second position comprises either moving the bypass member axially or rotating the bypass member.

9. A method of claim 7, wherein the system comprises a removable cartridge.

10. A method of claim 7 wherein the system comprises a built-in feature of a respirator.

11. A method of claim 7, wherein moving the bypass member (62) between first and second positions is initiated manually by a user.