

We claim:

1. A hose assembly comprising:
 - a hose including an end portion defining an inner bore and an outer surface;
 - a connector body having an outer end portion defining a fluid connector, an inner end defining a nose portion received in the inner bore of the hose end portion, and an intermediate portion including first and second annular flanges spaced apart to define a dog lock groove; and
 - a collar including an outer end portion defining an inner radial dog lock received in the dog lock groove, an annular step portion extending radially outward of and axially inward of the dog lock in axial alignment with the first annular flange, and an inner end portion extending radially outward of and axially inward from the step portion, the inner end portion being in radial compression against the outer surface of the hose end portion;

wherein the outer surface of the hose end portion has an outer diameter that is larger than an inner diameter of the step portion, such that the outer surface of the hose end portion is secured axially inward of the first annular flange.
2. The hose assembly of claim 1, wherein the hose includes a plastic core tube defining the inner bore of the hose end portion.
3. The hose assembly of claim 2, wherein the plastic core tube comprises PTFE.
4. The hose assembly of any of claims 1-3, wherein the hose includes an outer sheath defining the outer surface of the hose end portion.
5. The hose assembly of claim 4, wherein the outer sheath comprises a braided metal sheath.
6. The hose assembly of any of claims 1-5, wherein the dog lock is crimped into the dog lock groove.
7. The hose assembly of any of claims 1-6, wherein the inner end portion of the collar is crimped against the hose end portion.

8. The hose assembly of any of claims 1-7, wherein at least one of the first and second annular flanges defines a tapered side surface of the dog lock groove, with the dog lock contacting the tapered side surface of the dog lock groove.
9. The hose assembly of claim 8, wherein the second annular flange defines the tapered side surface of the dog lock groove.
10. The hose assembly of any of claims 1-9, wherein an outer surface of the first annular flange and an inner surface of the step portion define an annular radial gap.
11. The hose assembly of any of claims 1-10, wherein an inner surface of the dog lock and an outer surface of the dog lock groove define an annular radial gap.
12. The hose assembly of any of claims 1-11, wherein the intermediate portion of the connector body further includes a third annular flange spaced apart from the second annular flange to define a tool engaging groove.
13. The hose assembly of any of claims 1-12, wherein the connector body and the collar each comprise metal.
14. A hose assembly comprising:
 - a hose including an end portion defining an inner bore and an outer surface;
 - a connector body having an outer end portion defining a fluid connector, an inner end defining a nose portion received in the inner bore of the hose end portion, and an intermediate portion including first and second annular flanges spaced apart to define a dog lock groove; and
 - a collar including an outer end portion defining an inner radial dog lock received in the dog lock groove and an inner end portion extending radially outward of and axially inward of the dog lock, the inner end portion being in radial compression against the outer surface of the hose end portion;

wherein at least one of the first and second annular flanges defined a tapered side surface of the dog lock groove, with the dog lock contacting the tapered side surface of the dog lock groove to provide an electrically conductive connection between the collar end the connector body.

15. The hose assembly of claim 14, wherein the hose includes a plastic core tube defining the inner bore of the hose end portion.

16. The hose assembly of claim 15, wherein the plastic core tube comprises PTFE.

17. The hose assembly of any of claims 14-16, wherein the hose includes an outer sheath defining the outer surface of the hose end portion.

18. The hose assembly of claim 17, wherein the outer sheath comprises a braided metal sheath.

19. The hose assembly of any of claims 14-18, wherein the dog lock is crimped into the dog lock groove.

20. The hose assembly of any of claims 14-19, wherein the inner end portion of the collar is crimped against the hose end portion.

21. The hose assembly of any of claims 14-20, wherein the second annular flange defines the tapered side surface of the dog lock groove.

22. The hose assembly of any of claims 14-21, wherein an inner surface of the dog lock and an outer surface of the dog lock groove define an annular radial gap.

23. The hose assembly of any of claims 14-22, wherein the intermediate portion of the connector body further includes a third annular flange spaced apart from the second annular flange to define a tool engaging groove.

24. The hose assembly of any of claims 14-23, wherein the connector body and the collar each comprise metal.
25. A method of making a hose assembly, the method comprising:
providing a collar including an outer end portion defining an inner radial dog lock, an annular step portion extending radially outward of and axially inward of the dog lock, and an inner end portion extending radially outward of and axially inward from the step portion;
inserting a hose end into the inner end portion of the collar such that an axially outer edge of an outer surface of the hose end abuts an axially inner end of the annular step portion;
inserting a nose portion of a connector body through the outer end portion of the collar and into an inner bore in the hose end portion, such that the dog lock is axially aligned with an annular dog lock groove in an intermediate portion of the connector body; and
crimping the collar radially inward, such that the dog lock is received in the dog lock groove, and the hose end portion is radially compressed between the inner end portion of the collar and the nose portion of the connector body.
26. The method of claim 25, wherein the hose includes a plastic core tube defining the inner bore of the hose end portion.
27. The method of claim 26, wherein the plastic core tube comprises PTFE.
28. The method of any of claims 25-27, wherein the hose includes an outer sheath defining the outer surface of the hose end portion.
29. The method of claim 28, wherein the outer sheath comprises a braided metal sheath.
30. The method of any of claims 25-29, wherein the intermediate portion of the connector body includes first and second annular flanges spaced apart to define the dog lock groove.

31. The method of claim 30, wherein inserting the nose portion of the connector body through the outer end portion of the collar and into the inner bore in the hose end portion comprises axially aligning the first annular flange with the annular step portion, such that when the collar is crimped radially inward, the outer surface of the hose end portion is secured axially inward of the first annular flange.

32. The method of any of claims 30 and 31, wherein the at least one of the first and second annular flanges defines a tapered side surface of the dog lock groove, wherein crimping the collar radially inward comprises crimping the dog lock into contact with the tapered side surface of the dog lock groove.

33. The method of claim 32, wherein the second annular flange defines the tapered side surface of the dog lock groove.

34. The method of any of claims 25-33, wherein an outer surface of the first annular flange and an inner surface of the step portion define an annular radial gap.

35. The method of any of claims 25-34, wherein an inner surface of the dog lock and an outer surface of the dog lock groove define an annular radial gap.

36. The method of any of claims 25-35, wherein inserting the nose portion of the connector body through the outer end portion of the collar and into the inner bore in the hose end portion comprises abutting the outer end portion of the collar against a surface of a gauge tool assembled with the connector body.

37. The method of claim 36, wherein the intermediate portion of the connector body further includes a third annular flange spaced apart from the second annular flange to define a tool engaging groove, the method further comprising positioning the gauge tool in the tool engagement groove for abutment with the outer end portion of the collar.