~~CLAIMS~~

What is claimed is:

1. A bonnet assembly of a diaphragm valve, the bonnet assembly comprising:

a handwheel;

a housing, wherein the housing includes a housing base, and the housing base is rectangular in shape with no recesses and includes a top, a bottom, and four sides;

wherein , ~~body stud heads of body studs of a body assembly are in contact with an edge of the top of the housing base and~~ the bonnet assembly is configured to secure to ~~the~~ a body assembly with ~~the~~ body stud heads ~~at least partially~~ of the body assembly in contact with an outer edge of the top of the housing base with the body stud heads and body stud necks exposed and outside of the base.

~~2. The bonnet assembly of claim 1, wherein the housing base further includes key hooks, the key hooks project along the surface of each of the four sides of the housing base and curve towards an adjacent side of the housing base, the bonnet assembly further comprising:~~

~~keyholes defined by walls of the housing base and walls of the key hooks of the bonnet assembly, wherein the walls of the housing base and the walls of the key hooks define a first slot with a first diameter, a second slot with a second diameter, and an opening for each keyhole, the second diameter is smaller than the first diameter, and the walls of the housing base and the walls of the key hooks define stud head wells on a top of each key hook and the respective adjacent side of the housing base, and the body stud heads are in contact with the stud head wells.~~

~~3.~~2. The bonnet assembly of claim ~~2~~1, wherein ~~the body studs further include a body stud neck,~~ the body stud heads have a ~~third~~ first diameter, the body stud necks have a ~~fourth~~ second diameter, and the ~~third~~ first diameter is larger than the ~~fourth~~ second diameter~~, the body studs vertically pass through a portion of the keyholes, and the body stud necks contact the key hooks and the body stud heads contact the stud head walls~~.

~~4. The bonnet assembly of claim 3, wherein the stud head wells have a circular outline with a fifth diameter and the fifth diameter is larger than the third diameter of the body stud head.~~

~~5. The bonnet assembly of claim 3, wherein the second diameter of the second slots is larger than the fourth diameter of the body stud necks.~~

~~6.~~3. The bonnet assembly of claim 1, wherein a diaphragm assembly is attached to the bonnet assembly.

~~7. The bonnet assembly of claim 2, wherein the body studs are configured in a rectangular pattern on the body assembly with an angle of 0 degrees between sides of the rectangular pattern and sides of the body assembly.~~

~~8.~~4. The bonnet assembly of claim 1, wherein the body studs are configured in a rectangular pattern on the body assembly with an angle of 0 degrees between sides of the rectangular pattern and sides of the body assembly.

~~9.~~5. A connect system for a diaphragm valve, the connect system comprising:

a bonnet assembly, wherein the bonnet assembly includes a handwheel and a housing, wherein the housing includes a housing base, and the housing base is rectangular in shape with no recesses and includes a top, a bottom, and four sides; and

a body assembly, wherein the body assembly includes body studs, the body studs each include a body stud head, the body stud heads are in contact with an outer edge of the top of the housing base, and the bonnet assembly is secured to the body assembly with the body stud heads ~~at least partially~~and body stud necks exposed and outside of the base.

~~10.~~6. The system of claim ~~9~~5, further comprising a diaphragm assembly, wherein ~~a~~ the diaphragm assembly is attached to the bonnet assembly.

~~11. The system of claim 9, wherein the housing base further includes key hooks, the key hooks project along the surface of each of the four sides of the housing base and curve towards an adjacent side of the housing base, walls of the housing base and walls of the key hooks define keyholes, wherein the walls of the housing base and the walls of the key hooks define a first slot with a first diameter, a second slot with a second diameter, and an opening for each keyhole, the second diameter is smaller than the first diameter, and the walls of the housing base and the walls of the key hooks define stud head wells on a top of each key hook and the respective adjacent side of the housing base, and the body stud heads are in contact with the stud head wells.~~

~~12~~7. The system of claim ~~11~~5, wherein ~~the body studs further include a body stud neck,~~ the body stud heads have a ~~third~~ first diameter, the body stud necks have a ~~fourth~~ second diameter, the ~~third~~ first diameter is larger than the ~~fourth~~ second diameter~~, the body studs vertically pass through a portion of the keyholes, and the body stud necks contact the key hooks and the body stud heads contact the stud head walls~~.

~~13. The system of claim 12, wherein the stud head wells have a circular outline with a fifth diameter and the fifth diameter is larger than the third diameter of the body stud head.~~

~~14. The system of claim 12, wherein the second diameter of the second slots is larger than the fourth diameter of the body stud necks.~~

~~15~~8. The system of claim ~~12~~5, wherein the body studs are configured in a rectangular pattern on the body assembly with an angle of 0 degrees between sides of the rectangular pattern and sides of the body assembly.

~~16~~9. A method to secure a bonnet assembly to a body assembly, the method comprising:

contacting body stud heads of body studs of a body assembly with an outer edge of a top of a housing base of a bonnet assembly, wherein the housing base is rectangular in shape with no recesses and includes a top, a bottom, and four sides and the bonnet assembly includes a handwheel; and

rotating the handwheel of the bonnet assembly, wherein the rotation of the handwheel applies a force from the bonnet assembly to the body assembly to secure the body stud heads to the outer edge of the top of the housing base and secure the bonnet assembly to the body assembly with the body stud heads ~~at least partially~~and body stud necks exposed and outside of the base.

~~17. The method of claim 16, wherein the housing base further includes key hooks, the key hooks project along the surface of each of the four sides of the housing base and curve towards an adjacent side of the housing base, walls of the housing base and walls of the key hooks define keyholes, wherein the walls of the housing base and the walls of the key hooks define a first slot with a first diameter, a second slot with a second diameter, and an opening for each keyhole, the second diameter is smaller than the first diameter, and the walls of the housing base and the walls of the key hooks define stud head wells on a top of each key hook and the respective adjacent side of the housing base, the method further comprising, prior to rotating the handwheel:~~

~~passing the body studs through a portion of keyholes; and~~

~~rotating the bonnet assembly to contact body stud necks of the body studs with the key hooks and to contact the body stud heads with the stud head wells.~~

~~18~~10. The method of claim ~~16~~9, further comprising attaching a diaphragm assembly to the bonnet assembly prior to ~~passing~~ contacting the body ~~studs~~ stud heads with the outer edge of the top of the housing base~~body assembly through a portion of keyholes~~.

~~19~~11. The method of claim ~~17~~9, wherein the body studs are configured in a rectangular pattern on the body assembly with an angle of 0 degrees between sides of the rectangular pattern and sides of the body assembly.

~~20. The method of claim 17, wherein the stud head wells have a circular outline with a third diameter and the third diameter is larger than a fourth diameter of the body stud head.~~