

# The More You Know



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## Threaded vs. Union Bonnets – A Question of Repair or Replace

On occasion, end-users hoping to repair or service their bronze gate or globe valves reach out to us. The repair is usually because the end-user (often a homeowner) never exercised their valve(s) until it was too late. The valve is now stuck or broken, and the end-user is thinking/hoping to just take it apart, replace the “guts”, and put it back together again. Typically, these calls involve a threaded bonnet valve.



*Threaded Bonnet  
Gate Valve*



*Union Bonnet  
Gate Valve*

Bonnets for bronze gate and globe valves come in two varieties; threaded or union. Threaded bonnet valves are slightly less expensive and widely used. Union bonnet valves are specifically designed for ease of disassembly and repair.

Union bonnets are easily “opened” to service or replace the “guts”, be it the stem and gate in a gate valve, or the stem and disc in a globe.

Threaded bonnets are not designed to be opened. But because the bonnet is threaded into the body, some maintenance techs or homeowners believe they can be

easily repaired. In reality, the threaded bonnet is simply a manufacturing assembly technique performed under controlled conditions. This threaded connection is metal-to-metal without an elastomeric seal.

Disassembling and reassembling a threaded bonnet valve will require a large wrench, and damage to the bonnet or body is likely. Therefore, getting the joint made back up to factory standards is improbable. Can it be done? Maybe. Is it a good practice? No.

Compare this to another valve type – ball valves. Two-piece valves also have a threaded joint that is assembled at the factory, but not for repair or service. Three-piece ball valves, on the other hand, are designed to be easily repaired in the field.



*Disassembled 3-Piece  
Ball Valve*



*2-Piece Threaded  
Ball Valve*

So, if repairability is the motivation, spend a few extra dollars and buy a union bonnet valve. While internal components can be provided if requested, understand the possible pitfalls and limited likelihood of success.

For more information, contact your Milwaukee Valve Customer & Field Support Representative.



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