



## TECHNICAL SERVICE BULLETIN

TSB 2016-1002 Level: 2

Effective December 1, 2016

Topic	Overtightening of 4-in-1 Ball Valve Tool (Core Removal Tool) can lead to failure and potential venting of the system under service.
Affected Units	4-in-1 Ball Valve Tool, All Models
Resolution	This tool should be tightened by hand only as shown in procedure below.

### ISSUE:

When using the 4-in-1 Ball Valve Tool, proper tightening procedures must be followed to avoid the potential of the tools separating and ultimately venting the system.

### ROOT CAUSE ANALYSIS:

In testing, it was determined that over-tightening this tool during installation can cause failure resulting in the potential venting of the system under service.

**INSTRUCTIONS:** Listed below is the proper attachment procedure.

#### FOR PROPER ATTACHMENT:

1. ASSURE PROPER ALIGNMENT AND ACCESS TO THE SIDE PORT AND VALVE HANDLE BEFORE TIGHTENING THE TOOL (Figure 1)
2. TIGHTEN BY HAND ONLY (Figure 2)
3. IF ANY LEAKAGE OCCURS, REPLACE THE GASKET WITH P/N 18973 (5 PACK) (Figure 3)



Figure 1



Figure 2



Gasket P/N—18973

Figure 3

**DO NOT:**

1. TIGHTEN WITH ANY TOOL  
(Figure 4)



**Figure 4**

2. USE ANY ATTACHMENT TO THE  
SIDE PORT FOR ADDITIONAL  
LEVERAGE TO TIGHTEN THE  
TOOL  
(Figure 5)



**Figure 5**