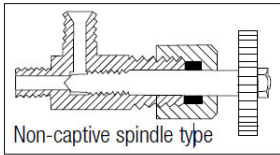
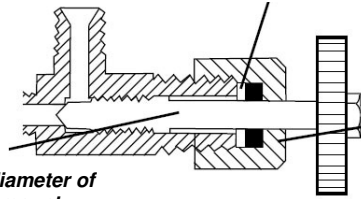


CAPTIVE VALVE SPINDLE

The Boiler Test Code requires that screw operated valves should have captive spindles. The following sketches show how one type of existing valve can be adapted to a captive spindle without too much work, assuming the existing spindle is of sufficient diameter to permit the modification. **Ensure the reduced valve spindle diameter is not too weak for use.**



Insert washer - the hole of which just clears the reduced valve spindle but doesn't allow the threaded portion to pass through.



Make new nut with smaller hole to fit valve spindle or, if space permits, insert another washer the other side of the packing and use the existing nut.

Turn down valve spindle to the core diameter of the threaded portion leaving a small amount behind the thread not reduced - this non-reduced non-threaded portion prevents possible engagement of the thread with the washer.

Captive valve spindle arrangement from Mike Leahy.

Some letters published in the ME have mentioned captive valve spindles. The recommendation for them is that they 'should' not screw out of the valve. However, in many existing boilers and published boiler designs spindles are not necessarily captive. This arrangement offered by Mike Leahy shows how a modification to the existing non-captive spindles may be made.