



## Valve Installation and Maintenance Guidelines

Standard Nu-Check<sup>®</sup> and Dual-Check<sup>™</sup> valves can be mounted in any position that does not block the pilot piston vent plug or interfere with access to and function of the manual override button. The valves should be mounted, so that the warning labels can read by an operator.

### Special valve mounting requirements:

- A Nu-Check<sup>®</sup> valve with the NCP (no cracking pressure) option must be installed with the manual override button pointing down. This orientation insures the ball will always fall back onto the valve seat on its own.
- A Nu-Check<sup>®</sup> valve used in the oil lines of an air over oil system should be mounted with the manual override button pointing up. This orientation aids the purging of air from the lines on the checked side of the valve

Valves with matched mounting hole spacing can be mounted in a stack. If the valves are stacked, they should be stacked so a warning label can read by an operator.

The strength of the valve block body allows the valve to be very tightly secured to a mounting surface. For pneumatic lines attached to the valve, a tightly secured valve can be considered as a secure hold down point for the line. However, the pneumatic lines going to the valve still should be secured in a manner that does not allow too much strain on the lines at the fittings to the valve.

The valves must be mounted in a location where access for manual override of the valve keeps the operator away from any mechanical movement during the venting.

A Nu-Check<sup>®</sup> valve can be directly mounted to a cylinder port using a threaded nipple adapter. The nipple adapter needs to be strong enough to resist the stresses from the valve and the lines attached to the valve.

Beware of contaminants and burrs on the fittings and in the tubing or piping. Contaminants can foul or damage pneumatic components and valves seats. Pneumatic components, pipes, tubing, and fittings must be kept clean. Whenever possible, blow out or flush piping before installation.

Thread sealant is required for NPT fittings. Thread sealant needs to be applied in a manner that prevents it from entering and contaminating the pneumatic lines and components.

- When using a pipe dope type of sealant, engage the pipe approximately one turn before applying the pipe dope sealant to the thread.
- When using Teflon tape sealant, use care to make sure that there is no chance of the Teflon tape hanging in or breaking off inside of the valve. Apply the tape by wrapping clockwise around the threads of the male fitting, avoid applying the tape to first thread.

When the valves and lines have been connected to the pneumatic component, it is a good practice to check for leaks. In other ALADCO background information, a leak check technique, which uses a spare Nu-Check<sup>®</sup> valve, is discussed.

Nu-Check<sup>®</sup> and Dual-Check<sup>™</sup> valves do not require routine maintenance. The check valve sealing surfaces are normally self-cleaning. However, excessively high levels of solid contamination can foul the check ball. ALADCO can be contacted to discuss methods for cleaning up a contaminated pneumatic system and check valves. If the movement of the manual override button starts to slow down, add a couple drops of oil to edge of the button.