

# Pilot Valve Installation and Adjusting Instructions

## Pilot Valve Installation

- Place ball into pilot hole in body. Hand tighten pilot cap assembly into pilot hole body then back out  $\frac{1}{4}$  turn and tighten differential lock nut "D".
- Turn unloader assembly into pilot cap assembly (approximately four turns for 125 PSI cut-out pressure) and tighten pressure lock nut "B".
- Check operation of pilot valve and adjust (if required) as detailed in "Pilot Valve Adjusting Instructions" below.

## Pilot Valve Adjusting Instructions

- Operation: Pilot valves are used on gas engine or electric motor driven compressors, where the compressor is to maintain a constant pressure range while running continuously. The pilot valve may be used to operate a discharge line unloader or an unloading device in the compressor head. Unloading occurs when the receiver reaches a preset cut-out pressure. The pilot valve opens, actuating the unloading device and allows the compressor to run in an unloaded mode. When the receiver pressure drops to the preset cut-in pressure, the pilot valve closes allowing the unloading device to close and the compressor once again pumps into the receiver.
- Pressure Adjustment: Loosen pressure lock nut "B" and adjust pressure adjusting nut "A" to desired cut out pressure. Turn pressure adjusting nut "A" clockwise to increase pressure and counter clockwise to decrease pressure. After setting pressure tighten pressure lock nut "B".
- Differential Adjustment: Loosen differential lock nut "D" and adjust differential nut "C" to desired differential. Turn differential nut "C" counter clockwise to decrease differential and clockwise to increase differential. If pilot valve "chatters" increase differential.
- Manual Lock Lever (gas model): Allows you to manually unload the compressor (for starting or warm-up) with air pressure in the tank. To unload, flip lever to in-line position. Be sure to return lever to "Operating" position after starting engine or the pump will not operate at preset pressures.

