



# TECH BULLETIN

**097**  
05/05

*Published regarding engineering changes and improvements*

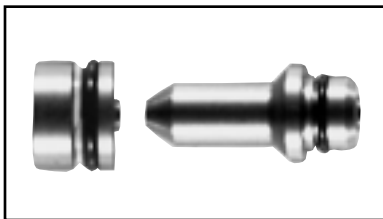
## SUBJECT: Regulator - Conical Design Piston and Seat 7001 thru 7033 and 7001.100 thru 7033.100

The 7000 series Pressure Regulating Valves are used in a wide variety of continuous-duty applications and with industrial liquids providing lower lubricating qualities. To provide longer piston and seat life, smoother operation and additional compensation for pressure spikes, we have modified the design of the piston and seat to a new conical design.

In addition, the new conical design permits lowering the by-pass requirement from 10% **down to 5%**. Regulators require a by-pass to provide smooth pressure control. With the new conical design, you now use 95% of your system output.

The new conical design piston and seat appeared in production models starting in May 2005. The adjusting cap is marked with a **“C” for identification**. When servicing, the new conical piston and seat must be **replaced as a set**. The old piston and seat will no longer be available. The new conical design piston and seat will use the same P.N.s for both the standard and the stainless steel regulator models.

**7001-7003.100**

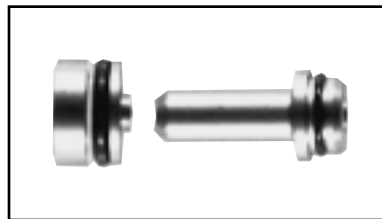


Old Style



New Style

**7011-7014**

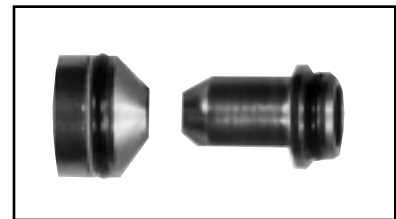


Old Style



New Style

**7021-7033.100**



Old Style



New Style

Regulator Model	7001	7002	7003	7011	7012	7013	7014	7021	7022	7023	7028	7031	7032	7033
Old Seats	30870	30870	30870	30871	30871	30871	30871	30872	30872	30872	31070	31070	31070	31070
Old .100 Seats	30169	30169	30169	30170	30170	30170	—	33872	33872	33872	—	—	—	—
New Seats	31732	31732	31732	31736	31736	31736	31736	31742	31742	31742	31748	31748	31748	31748
Old Pistons	30879	30879	30880	30881	30881	30882	30882	30883	30883	30884	31071	31071	31071	33866
Old .100 Pistons	30128	30128	30129	30144	30144	30147	—	33883	33883	33978	—	—	—	—
New Pistons	31733	31733	31734	31738	31738	31739	31739	31743	31743	31744	31749	31749	31749	31750

**CAT PUMPS**  
Technical Services Department

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