



# Belvac Production Machinery Technical Bulletin

Information for Customers Operating & Maintaining Belvac Machines

ISSUE 3, VOLUME 12, APRIL 2009

## AUTOLUBE FILTER REGULATOR

In May 2005 Belvac introduced a pressure relief valve in the autolube air supply pump circuit to ensure no over-pressurization of the rotary unions (Part No. C48571), which are longevity sensitive to high pressures in combination with high rotational speeds. Pressures in excess of 1800 psig with speeds of 250 RPM or greater should be avoided to maintain reasonable rotary union life expectations.

There are three pressure sensitive processes involved in Belvac's necker systems:

- 1200 PSI minimum pressure to activate all injectors
- 3000 PSI maximum pressure rating of the autolube pump
- 2000 PSI maximum pressure rating of the rotary union

Belvac's rotary union is rated at 250 RPM and 2000 PSI; however the manufacturer does not recommend both conditions exist simultaneously.

From January 1, 2005 through January 1, 2009 a pressure relief valve was installed on all new Modular machines to ensure the circuit would not over pressurize the lubrication pump by limiting the air pressure to a 45 psig max (system pressure of 1800 psig after the pump). This arrangement was successful in most applications but was also found to be susceptible to tampering.

In order to upgrade the system controls in a way that will ensure the best performance of the rotary union and autolube injectors Belvac has removed the pressure relief valve and introduced a Tamperproof Filter/Regulator (Part No. C55992) to supply a non-adjustable flow of air into the lubrication pump. The new Filter/Regulator is set to provide 43 PSI air pressure to the 40:1 autolube pump, resulting in a maximum system pressure of 1720 PSI. The addition of this component ensures sufficient pressure to activate the injectors while maintaining greater life expectancy for the rotary union.

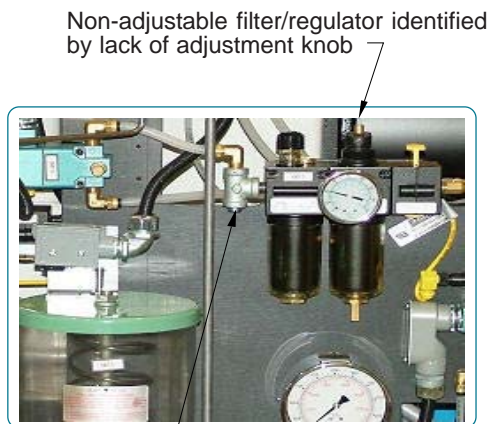
The following illustration indicates the non-adjustable filter/regulator and its location relative to the pump system, on a modular machine:



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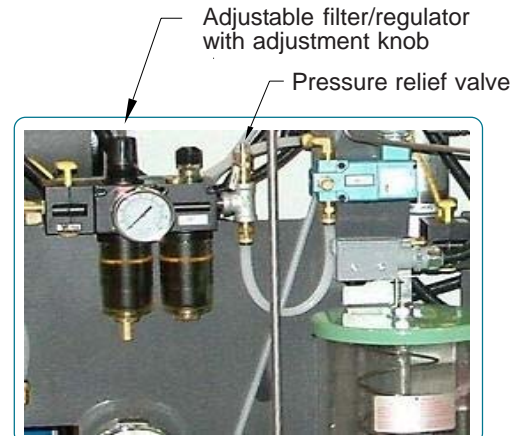
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Plug P/N H10289

*New Tamperproof arrangement*

**Picture 1**



*Adjustable filter/regulator with pressure relief (from 2005 to 2009)  
(being discontinued)*

**Picture 2**

Installation of the new filter/regulator requires approximately 20 minutes. When installed in a system that has a pressure relief valve as shown in Picture #2, the relief valve should be replaced with a plug (Part No. H10289).

*To order the non-adjustable filter/regulator and plug, specify the following:*

**Non-Adjustable Filter/Regulator Kit #2756479**

This component is standard on all new Modular 595K and 595SK Necking system machinery shipped after January 1, 2009.

This bulletin supercedes Technical Bulletin #1, vol. 8, dated May 2005.