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## PRODUCT SERVICE BULLETIN

### PRODUCT TYPE SERIES COVERED BY BULLETIN

S301D      S301F      S301P & S301HP      S302P & S302HP

### PRODUCTION DATES

Product Manufactured in January, February, March and April 2009

### BACKGROUND

Emerson Process Management Regulator Technologies Inc. (Fisher) has recently investigated some incidents involving S301D regulators installed in systems where the downstream external relief valve vented gas. Our investigation concluded that the regulator did not regulate under certain conditions which resulted in the activation of a downstream relief valve. See INVESTIGATION RESULTS. This is not a safety issue, except potentially for regulators used in Monitor applications as the primary overpressure protection device or in installations with inadequate secondary overpressure protection devices.

The types S301F, S301P, S301HP, S302P and S302HP use a stem guide similar to the one used in the S301D.

### RECOMMENDATION

If you have regulators listed above along with service conditions similar to the ones described in INVESTIGATION RESULTS, you should review your system makeup for adequate overpressure protection and consider replacing the Delrin stem guide, Figure 1, with the aluminum stem guide. See NO CHARGE REPLACEMENT PARTS for replacement part numbers.

**Replace** the Delrin stem guide, Figure 1, with the aluminum stem guide if your regulators are used as a Monitor or a Wide Open Monitor regulator as the primary overpressure protection device or if your regulators are installed with inadequate secondary overpressure protection devices.

### No Charge Replacement Parts

Contact your local Fisher Business Partner for no-charge replacement stem guide.

Type Number	Replacement Aluminum Stem Guide, Figure 1
S301D	GG03261X012
S301F, S301P & S301HP, S302P & S302HP	T1178809022

## INVESTIGATION RESULTS

The incidents had the following similar operating conditions:

1. Occurred on relatively new installations either at start up or shortly after start up
2. Cold temperatures were encountered during the incident period,
3. S301D Regulators built with an out of tolerance Delrin stem guide
4. S301D Regulators were manufactured between January and April 2009.

Our laboratory tests revealed that under low temperature conditions the out of tolerance stem guide would shrink and seize to the stem. At flows less than 50 scfh, this seizure occurred at about 5°F (-15°C). At higher flows the seizure did not occur until below -20°F (-29°C).

The test regulators with out of tolerance stem guides worked properly at temperatures above 5°F (-15°C).

Similar testing using an in tolerance stem guide showed no seizure at temperatures down to -40°F/°C.

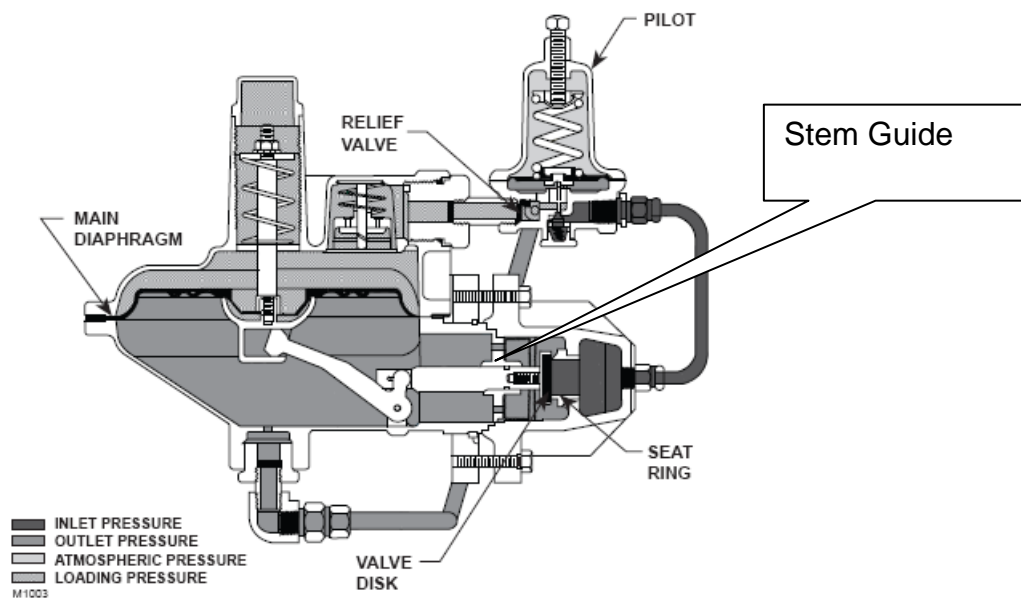


Figure 1 S301D Regulator