

F-Series Firmware Release

5418-2724 Revision C
5418-2725 Revision C

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5418-2724 Rev. C & 5418-2725 Rev. C

General

August 2009—Woodward has released application firmware 5418-2724 rev C for F-Series FSTP controller, and 5418-2725 rev C for ModAct controller. This application note describes the changes made to those revisions of firmware. The changes described here impact F-Series ITBs configured for a 4–20 mA position command input control signal. To support the firmware changes, the F-Series PC Service tool 9927-1419 was also updated. The latest version of 9927-1419 is available on the internet at www.woodward.com and supports revisions B and C of the 5418-2724 and 5418-2725 firmware.

Description of Firmware Changes

The new firmware is based on the existing firmware (5418-2724 rev B and 5418-2725 rev B), with the changes described below. All of the listed changes are included with the firmware upgrade. Individual change selection is not possible, but feature-disabling instructions are provided where applicable.

1) Incorrect Throttle Position Signal (TPS) Indicated

For F-Series ITBs with Normally Open valves, an incorrect Throttle Position Signal (TPS) is indicated on occurrence of a shutdown fault when the F-Series ITB is set for a 4–20 mA position command input control signal. The TPS is determined by two components: the demand signal and value of the non-linear demand curve. With the previous firmware, on shutdown the value for the non-linear demand curve was still in effect. The software was modified to set the value of the non-linear demand curve to the correct value (0) at shutdown.

2) Position Error Alarm Incorrectly Indicated

For F-Series ITBs configured for a 4–20 mA position command input control signal, after a power cycle, a Position Error alarm is indicated when the demand signal value is smaller than 20 mA. The problem occurred because there was not a valid position feedback signal the first time through the slow rate group (which contains the position fault algorithm). The code was modified so that a valid position feedback signal is available at start-up.

Compatibility with Existing Controls

Revision C of the 5418-2724 firmware will operate with all existing F-Series FSTP controllers. Revision C of the 5418-2725 firmware will operate with all existing F-Series ModAct controllers. Version 3 of the 9927-1419 F-Series PC Service tool is required to support revisions B and C of the 5418-2724 and 5418-2725 firmware. The latest version of 9927-1419 PC Service Tool is available on the internet at www.woodward.com/software.

Firmware Identification

The F-Series (FSTP or ModAct) firmware version can be viewed by selecting the "Details..." button located at the bottom middle left of the F-Series PC Service tool screen.

How to Upgrade

The F-Series firmware (5418-2724 FSTP rev C and 5418-2725 ModAct rev C) can be field upgraded, but this requires specialized software tools and must be performed by authorized Woodward personnel. If you have any questions about this issue or wish to upgrade, please contact one of our Woodward facilities and refer to this Application note number (51367).

We appreciate your comments about the content of our publications.

Send comments to: icinfo@woodward.com

Please reference publication **51367.**



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