

## **UG-25+ Maximum Speed Limitation Update Instructions**

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# UG-25+ Maximum Speed Limitation Update Instructions

## Issue

Maximum allowed speed limitation on UG-25+ governor for units with the small (0.625" [15.88 mm]) pump installed.

## Description

In August, 2007, the maximum allowed speed was increased from 1500 rpm to 1700 rpm (governor shaft speed), for UG-25+ governors with the 0.625" pump. Higher product speeds had been requested and, through design analysis and testing, a new speed limit was approved for the product.

## Affected Units

All production or repaired units shipped before August 2007 with the 0.625" pump installed. Units equipped with 0.875" (22.22 mm) pump are not affected.

Affected part numbers include: 8528-003 D, 8528-004 D, 8528-009 NEW, 8528-0003 NEW, 8528-0005 NEW, 8528-0008 NEW, 8528-0009 A, 8528-0011 NEW, at the listed revision or older (that is, D, C, B, A or NEW).

## Target Audience

Woodward Channel Partners and OEMs, in possession of a full communications kit and the UG-25+ Service Tool.

## Customer Action

Update of the maximum speed setting applies only to the affected part numbers and is not needed if the 1500 rpm (governor) limitation is not exceeded (gear ratio x max speed setpt < 1500 rpm).

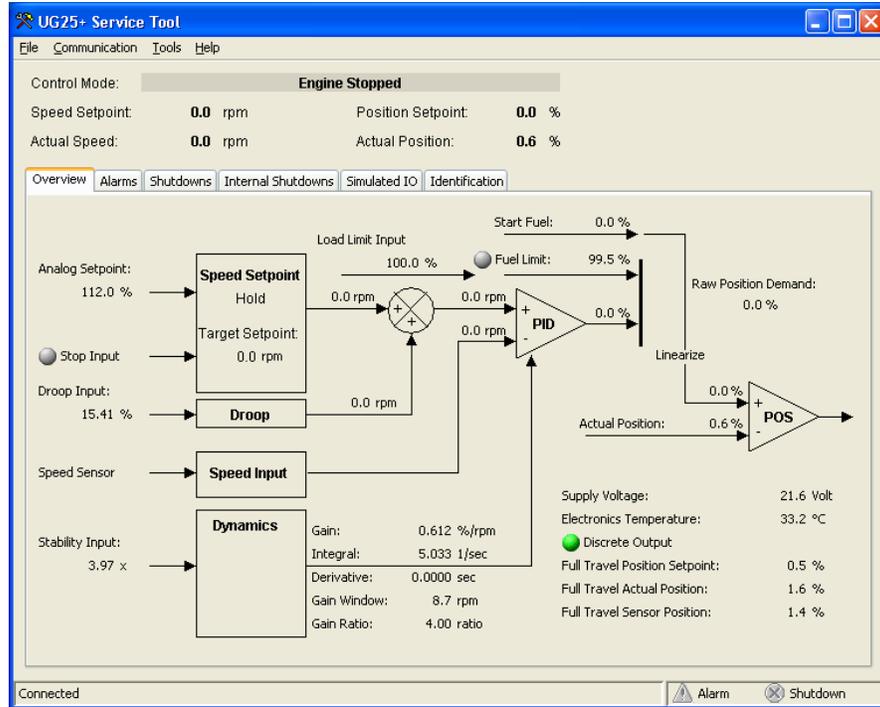
This application note includes 2 procedures, one to check the max speed limit configured in your control and another to update this limit if needed.

## Max Speed Verification

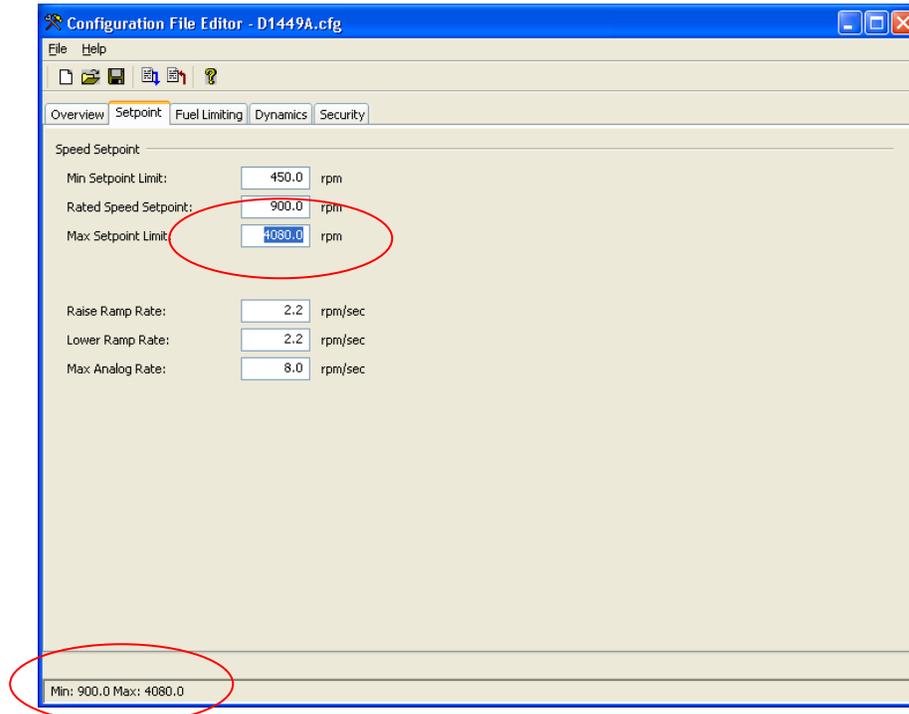
Instructions to determine the max allowed speed setting in your UG-25+ governor.

These instructions are only needed to determine the value of the maximum speed setting of the connected control and should be followed to determine if an update is needed. If a max speed update is required, refer to the section entitled **Instructions for Update**. The UG-25+ Service Tool and a full communications kit are required.

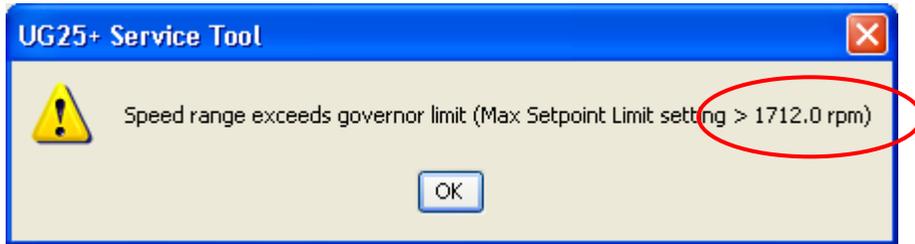
1. Install and Run the UG-25+ Service Tool (9927-1366).
2. Install communications kit and connect serial communications cable from personal computer to UG-25+. See Chapter 5 of the product manual (26330) for details.
3. Initiate serial communications (Communication/Connect). When successful, the lower left corner of the Service Tool will display 'connected'.



4. Open the governor's configuration (File/ Open Control Configuration). Select the Setpoint tab. Change the value of the Max Setpoint Limit to the max allowed—the range is displayed in the lower left hand corner of the screen. Note that the allowed limit of the max value is verified when the settings are loaded to the control, hence the max value here is much higher than actually allowed.



5. Select Load to Control from under the File menu. An error message will appear listing the value of the max allowed speed setting. The normal value for units with a 0.625" pump and a Speed Ratio of 1.000 is 1712 rpm (governor). Since this value is displayed in terms of engine speed, the Speed Ratio setting (Overview tab) will affect this limit (limit in engine rpm is equal to 'governor rpm limit' / 'Speed Ratio'). If a value corresponding to a governor speed of 1504 rpm is displayed and a limit of 1700 is desired, follow the Instructions for Update below or contact Woodward for assistance. Units with a maximum speed of 1200 rpm (governor) have the large pump (0.875") installed and should not be updated.



Select OK and close the configuration file without saving. The changes made in the previous steps were for investigative purposes only.

Exit Service Tool and remove serial connection to computer if an update is not required.

## Instructions for Update

Instructions to change the maximum speed setting.

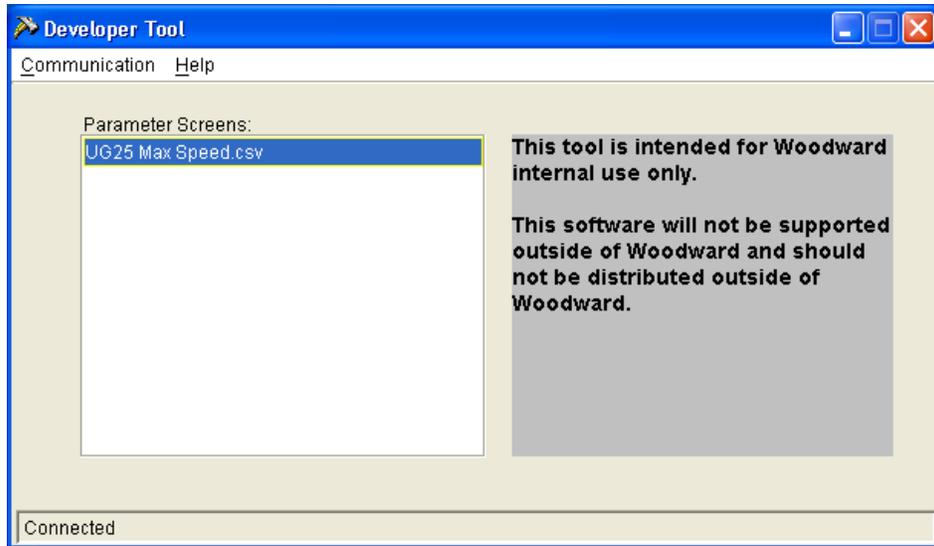


**WARNING** An unsafe condition could occur with improper use of these software tool. Only trained personnel should have access to these tools.



**WARNING** This update is to be performed only on units with a 0.625" pump installed—see list of affected units. When in doubt, contact a Woodward representative. Failure to comply can cause personal injury and/or property damage.

1. Install Woodward Developer Tool (9927-1053). Note that this is an internal development tool and is intended for use by internal developers and product support personnel only.
2. Put the UG-25+ update files (9927-1541) into the Developer Tool folder (C:\Program Files\Woodward\Developer Tool).
3. Connect serial communications cable from personal computer to UG-25+. See Chapter 5 of the product manual (26330) for details.
4. Run Developer Tool, connect to the control, and select the UG25 Max Speed parameter screen (double-click on the UG25 Max Speed.csv text). When successful, another window opens (UG25 Max Speed.csv). This window and the values within (Name) can be resized, as needed.



Name	Description	Value
_ParameterBlockSaveRequest		254
MaxPumpSpeedLimit		94

5. Change the Value for MaxPumpSpeedLimit from '94' to '107'. If the present value is not '94', your unit should not be upgraded.
6. Save the value to permanent memory by setting \_ParameterBlockSaveRequest to '1'. When the task is completed, the value automatically returns to 254.
7. Verify the value is saved by turning the control's power off and then back on. The value of MaxPumpSpeedLimit should remain at '107'.
8. Exit Developer Tool and remove serial connection to computer.
9. If the Limit was updated, the revision of the part number in the product label must be updated to reflect this change.

If you have any questions about this procedure, please contact one of our Woodward facilities and refer to this Application Note number.

We appreciate your comments about the content of our publications.

Send comments to: [icinfo@woodward.com](mailto:icinfo@woodward.com)

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