ISOBUS in MY10

800 i

700 i

Version 4.xx

Januari 2010 – Rev 4

Modifications of MY10 ISOBUS software for trailed sprayers

Important:

When loading new software on a machine, the loaded language will be removed from the sprayer controller. After re-start, the display will still be in the chosen language but the sprayer will be in English. The language for the sprayer must be loaded new, using the correct language files. See the loadable language manual on Stellar Support.

Loadable Language files must have version 9.xx for MY10
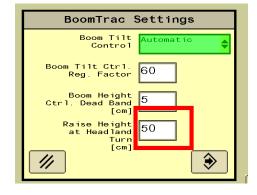
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New Features

BoomTrac for 700i-series

Same system and software code as for 800i-series.

Headland height needs small correction. Higher value (30%) needs to be programmed than actually needed
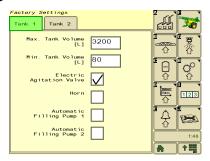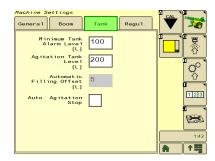

Electric agitation for 700i-series

Same system and software code as for 800i-series.

Same features (manual on/off, automatic on/off depending on tank level) as 800i-series

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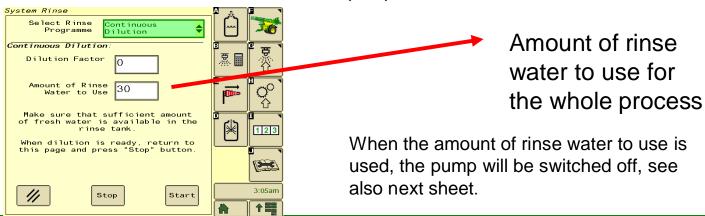# Implementation of ContinuousDilution as part of AutoDilute

System to dilute a machine, while spraying out the solution at the same time. Two different systems are available:

• **With the first step of AutoDilute:**

> • When in the screen below a value of 2 or higher is entered for the Dilution Factor, the machine will perform the first AutoDilute step. It will fill in the amount of clean water that is needed via the tank rinse nozzles and the AutoDilute pump will dilute the whole machine to a factor of x (agitation will be on, return back to tank). When done, and the master is opened while on the main page, the machine can spray out the liquid but at the same time adding rinse water to the solution tank via the tank rinse nozzles.

• **Start with dilution directly**

> •When in the screen below a value of 0 or 1 is entered, the machine will go the main page. When spraying, clean water is filled into the solution tank via the tank rinse nozzles and the AutoDilute pump.

Amount of rinse water to use for the whole process

When the amount of rinse water to use is used, the pump will be switched off, see also next sheet.

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Messages in the status line give information to the operator:

- **Continuous Dilution active**: the continuous dilution system is active. To stop, go back to Job setting, Rinsing, press stop.

- **Tank level increasing – check speed/rate**: More flow is entering the solution tank than flow going out via the spray nozzles. Operator to ensure that this is desired or not.

- **Tank level decreasing – check speed/rate**: More flow is going out via the spray nozzles than entering via the tank rinse nozzles. Operator to ensure that this is desired or not.

- **Dilution pump is stopped**: The total amount of rinse water that was to be used is used and the pump is stopped. The system will stay in the continuous dilution mode.

- **Close master to allow dilution**: To ensure that also agitation and return lines are diluted, the master must be closed regularly. This message will come after a period of time, that is depending on the flow the machine is spraying. When master is closed, agitation will go on, return will go back to tank.

    The operator is allowed to open the master sooner as the message comes and he will remain in the continuous dilution mode. The message will not come anymore if he opens/closes the master by before/after the message.

- **Open master to spray**: Spray out the diluted solution. Agitation will go off, and return will go back to suction side of pump.

- **Not all sections open – incomplete dilution**: Not all sections valves are open, which will impact the dilution of the system.
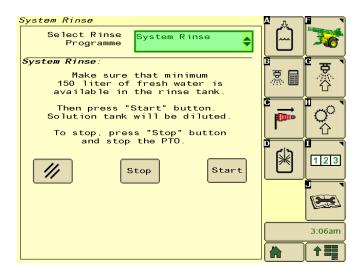
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Implementation of System Rinse (Joystick & 800i only)

System to allow to take clean water from the rinse water tank while being able to spray: Agitation can be operated as normal. To stop the system, operator has to go back to the Job settings and operate the STOP button. Also the PTO should be stopped to avoid that when the master is closed, the machine is priming again the rinsed lines.

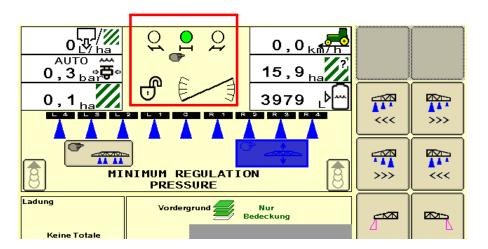Messages in the status line give information to the operator:

- **Stop Rinsing, Stop PTO**: Informs the operator to stop the PTO when the system is ready. **The operator must decide by himself when he is ready.** The message is just a reminder.

- **System Rinse is active**: Informs the operator that system rinse is engaged.
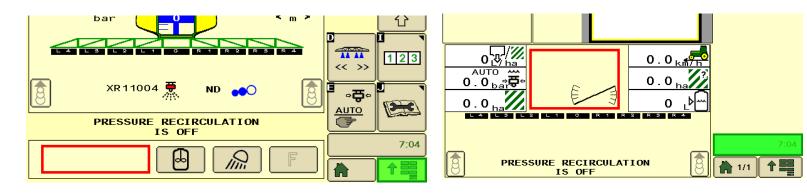
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New Features

Additional info on drawbar steering and lock on split screen

When lock and/or drawbar steering is not equipped, the lock status and drawbar status is not visible.
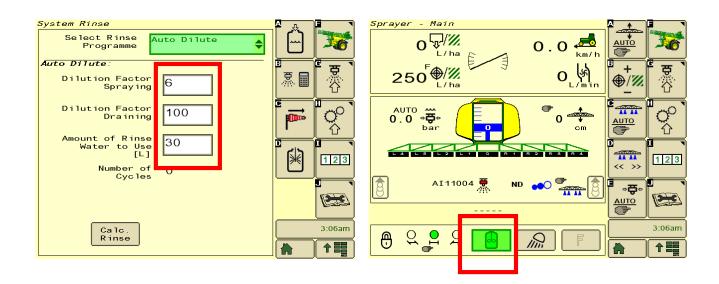
Storage of some settings at power down

Some settings are stored when the system is powered down:

- **Agitation status**

- **Dilution factor to spray (as part of the AutoDilute system)**

- **Dilution factor to drain (as part of the AutoDilute system)**

- **Amount of rinse water to use (as part of AutoDilute system)**

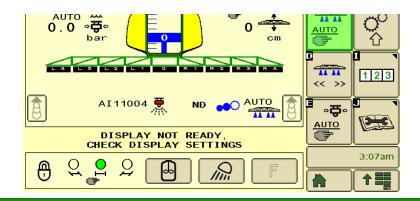# Check if system is ready for SwathPro (auto section on/off)

Messages to determine if all settings are correct to work with SwathPro (auto section on/off). The system will display some messages on the status line if settings are not correct:

• **Display not ready – Check display settings**: In the GS2 software, the SwathPro checkbox is not set. The sprayer can be set on automatic, but it will not switch off automatically. Operator must go to the SprayerPro application to set the checkbox.

Note: When the MY10 sprayer software will be released, this message will always be shown when the sprayer is on auto section on/off since this feature will only be supported by the display when the AMS SU10-1 is released.

• **AUTO SECTION MODE - TEMPORARILY DISABLED:** The sprayer is still in automatic mode, but the display is not able to command the sections due to for example GPS lost or speed too low.

Note: When the AMS SU10-1 is available, also SprayerPro will indicate that the sprayer settings are not correct when the operator sets the SwathPro checkbox and the sprayer is not in the correct mode.
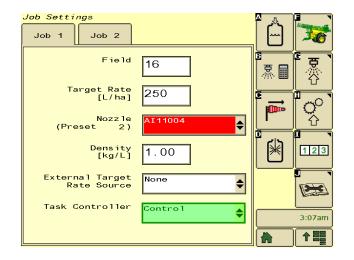
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Modified TaskController opions

Also the way to setup (or allow) auto section on/off has changed. The whole setup is now on Job Settings. A new listbox **Task Controller** has been implemented with following options:

• **Disabled**: No Task controller communication. No auto section on/off possible.

• **Control:** Auto section on/off is possible. No exchange from totals with GS2. Field 1 -16 of the sprayer documentation can be used.

• **Control & Doc**: Auto section on/off is possible. Totals will be handled by Sprayer Pro. Field 16 is visible but not selectable.
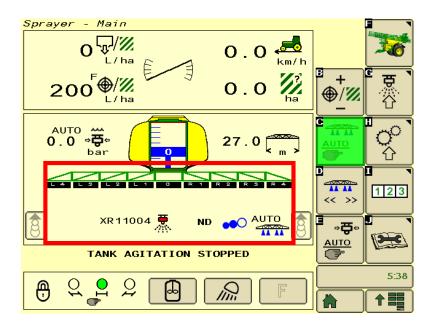
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Implementation of Standby mode for Auto section on/off

Condition to engage Auto section on/off has changed. To engage Auto section on/off the Master switch is allowed to be closed. Also, when spraying actually in Automatic mode it is allowed to switch the Master off. When switching on again, the Automatic section contol will still be active and will switch the sections (depending on GPS position).

With the Master off, and Auto section on/off on automatic, the system is in a "stand-by" mode.

In this way it is possible to drive over an already covered area (for example a headland) and no spraying (or other Master triggered actions like drawbar- and Boomtrac HMS functions) will occur.

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GS1800 display

Smaller size display as GS2600, but with the same resolution. No modifications needed in the software.
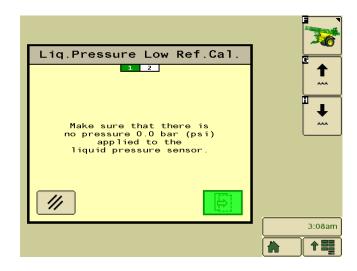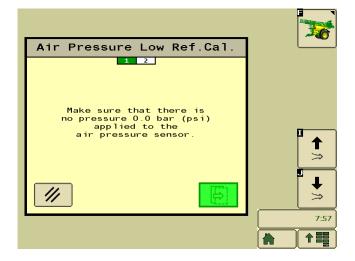

Note: Do not power down this display by removing battery power. If this has been done 10 times, the display will crash, and only AMS factory can run an update. The counter will be reset after a proper power down via ignition switching.

Softkeys added for calibration of the pressure sensors

When doing the calibration of the pressure sensors, it was not easy possible to increase or decrease the pressure. Softkeys have been added to the calibration pages to allow this.
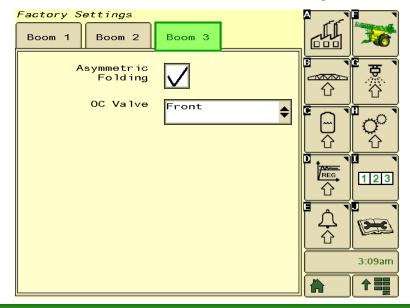
Parameters added for hydraulics

On Factory Settings, Boom settings, Tab 3 has been added with two new parameters:

• **Asymmetric Folding:** Shall be checked if a machine can fold the left and right tip independently. Not visible on a 800i-series since it has asymmetric folding in base. **When new software is uploaded on a older machine, this check should be set**. If it is already set, uncheck and check it again to ensure that a correct value in loaded into the memory. Else a error will come when changing language: 5100-IB-26.

• **OC-valve:** Defines where the OC-valve is located. Parameter has been added to allow a 800i-series machine to work with the hydraulics from the 700i-series. Shall be set to **REAR** for 800i-seriess with TFI hydraulics. Shall be set to **FRONT** when Hydac hydraulics are used. Parameter is not visible for 700i-series machines since Front is base. **When new software is uploaded on an older 800i-series, this parameter must be set correct.**

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Miscellaneous changes

Improved nozzle calculator

Modifications done in the nozzle calculator will be really used by the system only when accept is pressed. This allows to "play" with the settings without impacting the values as listed in the Job Settings. Modified nozzle height will be adapted on nozzle change.

Russian language available as loadable language

The Russian language can now also be uploaded via the loadable language feature. No special Software version needed.

Support for Tank Fill Calculator

During MY10, the Business Pack I will be released by AMS. A feature of this package is the **Tank Fill Calculator**.

The MY10 Sprayer Software will support this system by sending some data to the Tank Fill Calculator (Max. Tank size, Target rate, Remaining tank Level) and receiving some data from the Tank Fill Calculator (desired Tank Volume, new Target rate, new Density).

Nothing is visible in the sprayer application for the support.