



HEXAGON

HxGN AgrOn Fertilization Control MP Agro ECUv4

New Product Release - 005/2022

3rd March 2023 - Rev. 2

Introduction

Aiming to release HxGN AgrOn Fertilization Control MP Agro structures that use the ECU version 4.x. (07842 - *HxGN AgrOn ECU Controle de Fertilizacao para Ti5/TI7 v4.x*).

The ECUv4 will be used in place of the ECU 05436 - *HxGN AgrOn ECU Controle de Fertilizacao para Ti5/TI7 v3.3.X* and, for that, new structures were created based on the current structures for Fertilization Control.

Current structure	New structure	Description
05502	07846	HxGN AgrOn Controle de Fertilizacao 2M MP Agro ECUv4
05941	07847	HxGN AgrOn Controle de Fertilizacao 2M + 4S Comporta Linha Taurus MP Agro ECUv4
05942	07848	HxGN AgrOn Controle de Fertilizacao 2M Linha Taurus MP Agro ECUv4
05943	07849	HxGN AgrOn Controle de Fertilizacao 2M + 4S Comporta Linha Z/TT MP Agro ECUv4
05944	07850	HxGN AgrOn Controle de Fertilizacao 2M Linha Z/TT MP Agro ECUv4
05979	07851	HxGN AgrOn Controle de Fertilizacao 2M Esteira e Disco MP Agro ECUv4
05980	07852	HxGN AgrOn Controle de Fertilizacao 2M Esteira e Disco + Desligamento de Secoes MP Agro ECUv4
07032	07856	HxGN AgrOn Ti10 Controle de Fertilizacao 2M Esteira e Disco MP Agro ECUv4
07294	07860	HxGN AgrOn Controle de Fertilizacao 2M Esteira e Disco MP Agro AT7500 ECUv4

Both structures can be marketed, depending on the ECU available. The differences between the structures are the ECU (version 3 or 4) and the cables that are connected to the ECU.

Some ECUv3 cables are not compatible with the ECUv4 due to the differences in the pinout of the ECUs. Those differences will be detailed following.

Pinout and Cables

The pinout of the ECUv3 and ECUv4 are different in some pins, and for this reason, new cables need to be created on demand with MP Agro and Hexagon engineering team.

The pinout of CAN and External Power supply (Connector A) are the same in both ECU. However, on the ECUv3 some harnesses don't have a short-circuit between pins 1 and 3, and it is required on the ECUv4. Also, if other pins are used, it is necessary to check the compatibility.

Connector A			
Pin	ECUv3	ECUv4	Compatibility
1	V BAT-	V BAT-	✓
2	CAN HIGH	CAN HIGH	✓
3 ¹	V AUX-	V AUX-	✓
4	GND	CAN 2 HIGH	✗
5	Analog Input 2	Analog Input 2	✓
6	GND	GND	✓
7	5/12V OUT	5/12V OUT	✓
8	Analog Input 1	Analog Input 1	✓
9	5/12V OUT	CAN 2 LOW	✗
10	V AUX +	V_AUX+	✓
11	CAN LOW	CAN LOW	✓
12	V BAT +	V BAT +	✓

In Connector B, the differences are in pins 10, 11 and 12. These pins on the ECUv3 are connected to DRV+, but on the ECUv4 only pin 12 is connected to DRV+. For this reason, all cables connected to connector B need to be duplicated (new codes will be created for ECUv4) to adjust the DRV+ outputs.

Connector B			
Pin	ECUv3	ECUv4	Compatibility
1	OUTPUT 1	OUTPUT 1	✓
2	OUTPUT 2	OUTPUT 2	✓
3	OUTPUT 3	OUTPUT 3	✓
4	5/12V OUT	5/12V OUT	✓
5	Digital Input C	Digital Input C	✓
6	Digital Input B	Digital Input B	✓
7	Digital Input A	Digital Input A	✓
8	Digital Input D	Digital Input D	✓
9	GND	GND	✓
10	V DRV+	OUTPUT 6	✗
11	V DRV+	OUTPUT 7	✗
12	V DRV+	V DRV+	✓

The cables created for ECUv4 will be compatible with the ECUv3, but otherwise may not be compatible (needs to be evaluated).

Installation

The installation is the same for both versions.

Software compatibility

The software of the ECUv3 and ECUv4 are different. The ECU bootloader and Ti firmware update manages this update automatically.

¹ This pin (3) must be short-circuited on pin (1) when there is no external power supply.



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For more information, contact your Hexagon Agriculture sales or technical support.