



MATRIXTM570G

Installation Manual for Blanchard REB.1 controller

MATRIXTM AUTOMATIC BOOM SECTION CONTROL

This installation manual covers installation of **MATRIX™** or CenterLine 230BP with Blanchard REB.1 controllers. We have endeavoured to deliver a fault free product. To ensure optimal use of the equipment, we ask you to pay great attention when reading this manual. Regarding responsibility for use of the product, we refer to our sales and delivery terms - especially paragraph 7, which follows:

7. Product usage.

7.1 Any use of the product is at the sole risk of the buyer. The buyer is therefore not entitled to any form for compensation caused by, for example, any of the following:

- Disturbance to/from any electronic services or products that do not confirm to the standards for CE marking,
- Missing or poor signal coverage or a succession hereof from external transmitters/receivers, used by the buyer,
- Functional faults, which apply to or from a PC-program or PC-equipment, not delivered by the seller.
- Faults that may arise from the buyers negligence to react to warnings and fault messages from the product, or which can be traced to negligence and/or absent constant control of the work carried out in comparison to the planned job.

7.2 When implementing any new equipment the buyer must take great care and pay attention. Any doubts as to correct operation/use should result in contacting TeeJet Technologies.

Kind regards,



Mølhavevej 2
9440 Aabybro
Denmark
Tel. +45 9696 2500
Fax +45 96962501
www.teejet.com

INTRODUCTION TO CENTERLINE 230BP

The **MATRIX™** and Centerline 230BP are combined Guidance and Automatic Boom Section Control (ABSC) devices that features control of up to 15 boom sections. The **MATRIX™** or the Centerline 230BP connects in parallel to the existing wiring loom to the section valves.

PRINCIPLE OF OPERATION

The **MATRIX™** or Centerline 230BP control the sections valves according to the GPS position and the GPS guidance makes it possible to avoid overlaps or skips.

The **MATRIX™** or Centerline 230BP controls the section valves in automatic mode, and the controller section switches should be set to *off* unless the operator wants to override the auto mode and thus force spraying.

The **MATRIX™** or Centerline 230BP monitors the controller section switches that controls the valves in manual mode. The Master switch can be used both in automatic mode as well as in manual mode.

Required Parts

To add Automatically Boom Section Control to a Blanchard REB.1 controller the following part numbers are required:

MATRIX™:

Part No.	Description
* XXX-XXX	MATRIX™ Guidance controller kit
903-335	ABSC adapter box kit for Blanchard REB.1, max. 9 sections
45-05626	Power/CAN/Data cable for MATRIX™ (Pos. 2 - System Overview drawing next page)

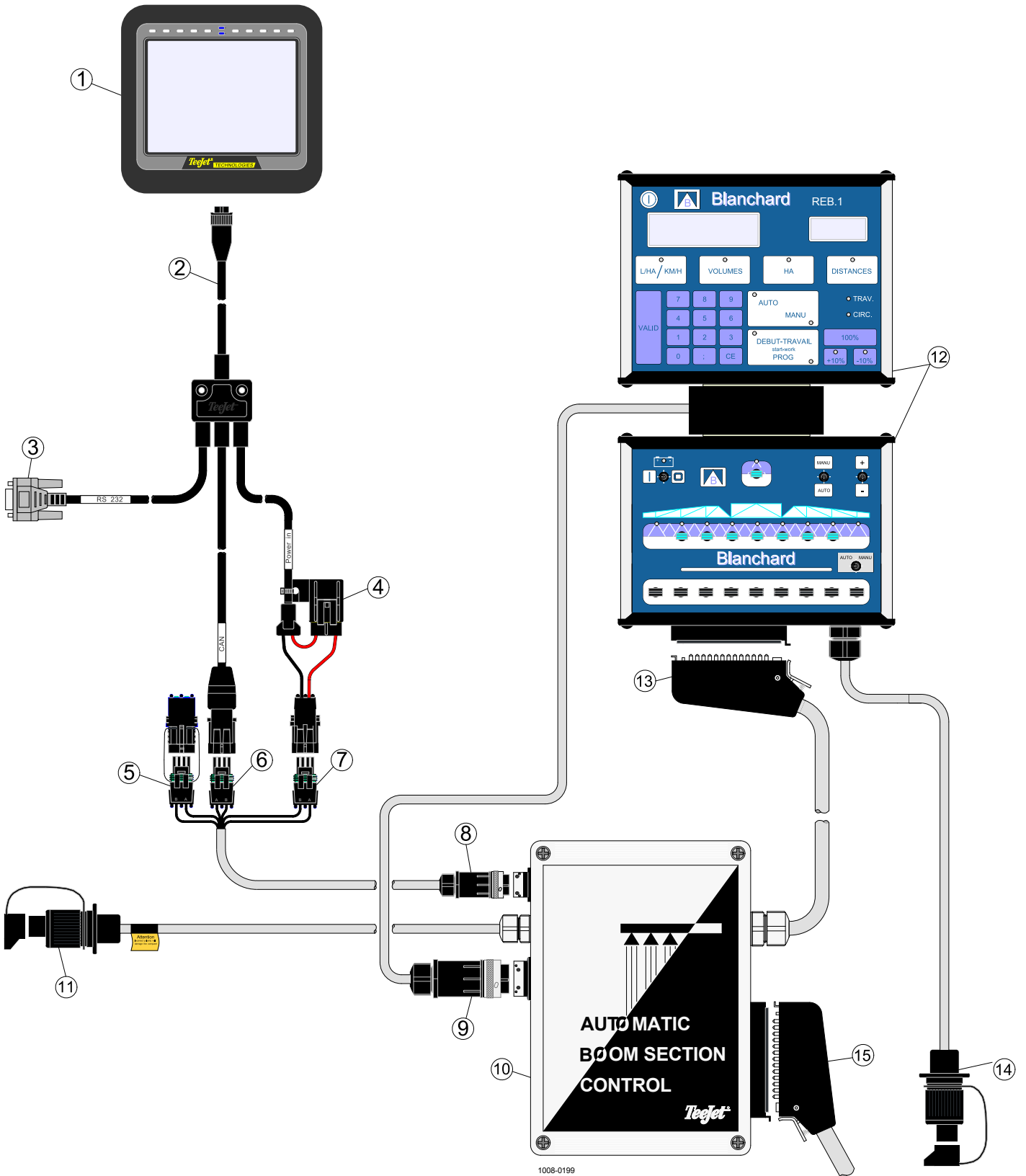
* Refer to the MATRIX™ pricelist

CL230:

Part No.	Description
* XXX-XXX	CL230 Guidance controller kit
903-335	ABSC adapter box kit for Blanchard REB.1, max. 9 sections

* Refer to the CL230BP pricelist

SYSTEM OVERVIEW, MATRIX™:

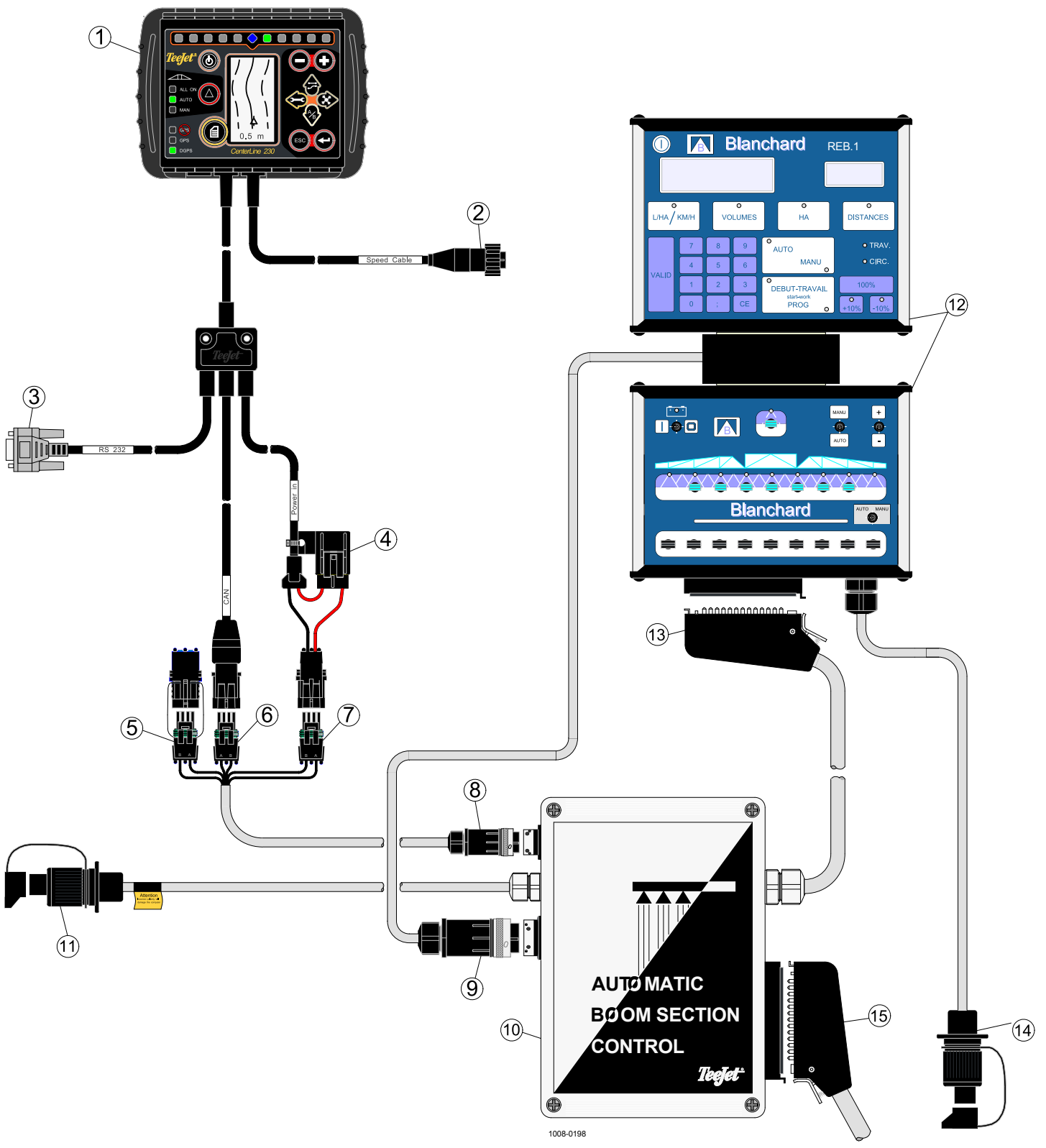


Note: MATRIX™ is powered by the ABSC adapter box.

SYSTEM DESCRIPTION, MATRIX™:

POS	DESCRIPTION
1	MATRIX™ Guidance Controller
2	Power/CAN/Data cable for MATRIX™, PN 45-05626
3	RS232 port (Programming and GPS input)
4	Fuse 3A
5	Foot switch connector 2P (Foot switch is optional)
6	CAN connector 4P
7	Power connector 2P
8	BoomPilot adapter cable, PN 199-263
9	Adapter cable, PN 198-094
10	ABSC adapter box, PN 902-365
11	Power connector, ABSC adapter box
12	Blanchard REB.1 controller/Switch box
13	Machine connector from ABSC box
14	Power connector, Blanchard REB.1
15	Machine connector from Sprayer

SYSTEM OVERVIEW, CL230:



Note: CenterLine 230 is powered by the ABSC adapter box.

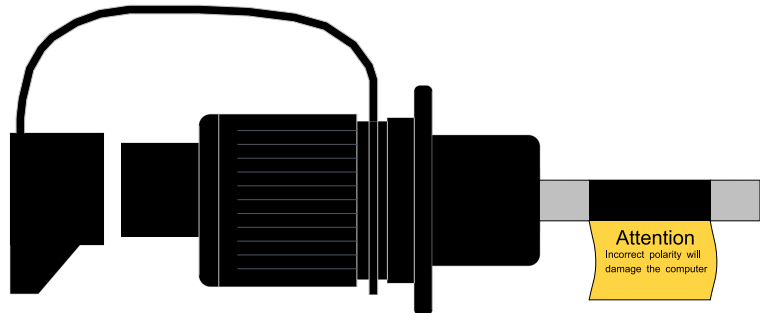
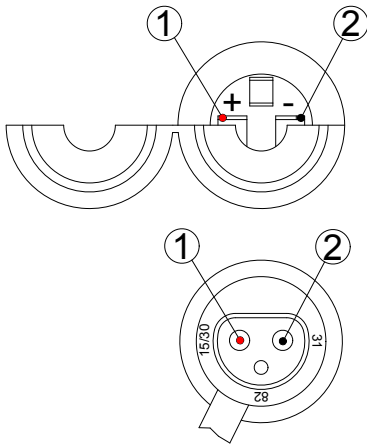
SYSTEM DESCRIPTION, CL230:

POS	DESCRIPTION
1	CenterLine 230BP Guidance Controller
2	Speed output connector
3	RS232 port (Programming and GPS input)
4	Fuse 3A
5	Foot switch connector 2P (Foot switch is optional)
6	CAN connector 4P
7	Power connector 2P
8	BoomPilot adapter cable, PN 199-263
9	Adapter cable, PN 198-094
10	ABSC adapter box, PN 902-365
11	Power connector, ABSC adapter box
12	Blanchard REB.1 controller/Switch box
13	Machine connector from ABSC box
14	Power connector, Blanchard REB.1
15	Machine connector from Sprayer

INSTALLING THE Blanchard REB.1 KIT

Connect the Automatic Boom section kit as show on the system overview drawing. The kit includes all necessary connectors to get electrical contact with the Blanchard REB.1 system.

CONNECTING POS. 11 & 14 TO POWER:



! When connecting the system to 12V power it's very important that the polarity is correct, if not the system will be damaged.

POS	DESCRIPTION
1	+12V (15/30)
2	Ground (31)

BATTERY CABLE (OPTION):

The power supply must be strong enough to operate the Section and Master valves. The total current will depend on the used valve type.

If a power connector (Socket) isn't available in the tractor cabin, a optional battery cable can be used (PN 96ET14).



SYSTEM CHECK:

After connecting the two power connectors, it's time to make a system check. To check the system it's necessary to have full GPS signal so the vehicle must be placed outside.

Check AUTO mode:

Blanchard REB.1 Controller:

- Set the section switch's off
- Set the Master switch on
- Turn the Blanchard REB.1 on

MATRIX™ or CL230:

- Turn the Guidance controller on
- Encode the number of sections and the width of each (Refer to the MATRIX™ or CL230 user manual)
- Wait for GPS signal
- Set the mode to AUTO
- Drive forward (> 2 km/h)
- Observe that all sections and the master valve open.
- Check that the Master valve closes when the Master switch is set off.
- Check hectare counter in the MATRIX™ or CL230 against the Blanchard REB.1 controller.

Check MAN mode:

MATRIX™ or CL230:

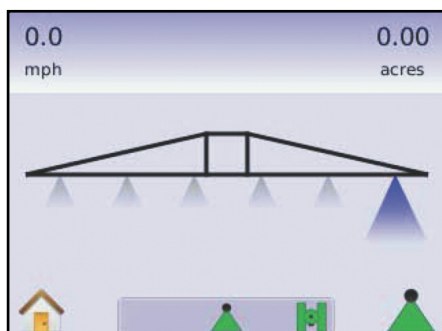
- Set the mode to MAN

Blanchard REB.1 Controller:

- Set the section switch's on
- Set the Master switch on
- Observe that all sections and the master valve open.

Check in the 'Boom Section Control Screen' that the section icons turn off and on according to the valve/switch status.

MATRIX™:



CL230:

