

This Instruction used for the following Pkgs:

6362-40-01 PKG X30 IN-CAB CMPNTS 6362-41-01 PKG X30 IN-CAB W/O MON

X30 CONSOLE IN-CAB COMPONENTS INSTALLATION

SERVICE INSTRUCTIONS

6000/7000 Series Air Seeders

It is recommended to carefully follow the detailed steps of the instructions. Please check crate packing list against contents to be sure all parts have been received.

On all Bourgault equipment, left and right are determined by standing behind the machine and looking forward. For this manual the drawings and instructions are given for the assembly.

For safety, maintenance, warranty policy, and operating instruction of the unit, refer to the operators manual.

All information, illustrations and specifications in this manual are based on the latest product information. Bourgault updates products continually to improve quality. We reserve the right to make changes at any time.

Assembly Instruction #: 0252-80-15

AUGUST, 2014

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1 **COMPONENTS**

1.1 X30 CONSOLE

The X30 console is a Linux based computer system contained within an ABS housing. The console has no internal moving parts and the housing is designed to ensure long life in even the toughest conditions. The console has a 12" LCD touch screen display. Connection ports located on the console's back pannel, refer to Figure 1.

- Two CAN ports are used for harness connections.
- Ethernet port allows connection to the internet, computer.
- Two USB ports can be used to connect thumbdrive or any other USB devices.



Figure 1 - X30 Console

1.2 **IN-CAB SWITCHBOX**

In-cab switchbox connects into the tractor cab.

- will control up to 8 tanks;
- alternate means of controlling the air seeder to the console touch screen;
- in-cab switchbox can be placed near tractor controls for easy access;
- functions include: master on/off, tank on/off, and customizable buttons;
- must be enabled through the X30 console.



Figure 2 - In-Cab Switchbox

1.4 HARNESSES

1.4.1 X30 MAIN HARNESS (3132-12-01)

Refer to *Figure 5*. This harness connects X30 console to power source, ISOBUS, GPS signal, remote steer engage (if unit is equipped with Topcon autosteer).

1.4.2 POWER EXTENSION HARNESS (3132-04-03)

Refer to *Figure 3*. This harness connects X30 main harness to the battery. If auxiliary power connector is available in the cab, this harness is not used.

1.4.3 X30 ISOBUS ADAPTER HARNESS (3132-62)

Refer to *Figure* 4. This harness connects X30 main harness to tractor ISOBUS system.

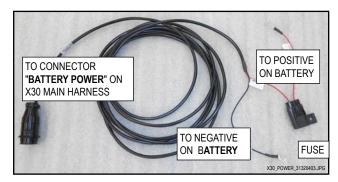


Figure 3 - Power Extension Harness (3132-04-03)



Figure 4 - X30 ISOBUS Adapter Harness (3132-62)

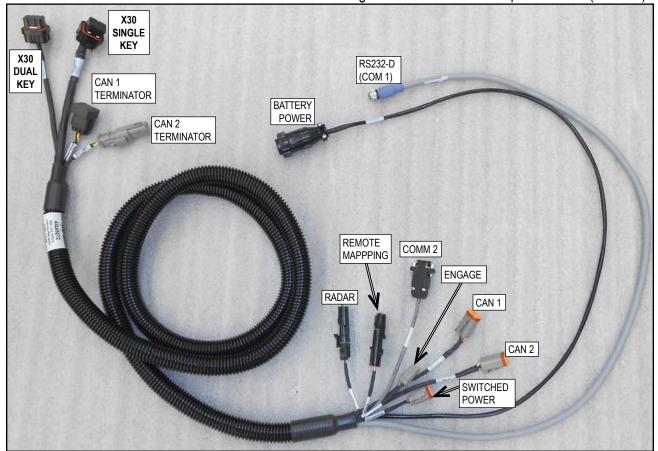


Figure 5 - X30 Main Harness (3132-12-01)

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1.4.4 IN-CAB SWITCHBOX HARNESS (3132-41)

Refer to *Figure* 7. This harness connects in-cab switchbox to 9-pin AMP ISOBUS connection in the tractor cab.

If the 9-pin AMP ISOBUS connection does not exist in the tractor cab, use switchbox ISOBUS adapter harness (3132-42) to connect into the ISOBUS in the same location as the X30 console. Also use the switchbox power harness (3132-76) to power up the switchbox from the X30 harness.

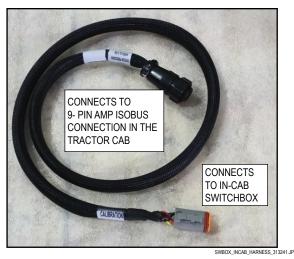


Figure 7- In-Cab SwitchBox Harness (3132-41)

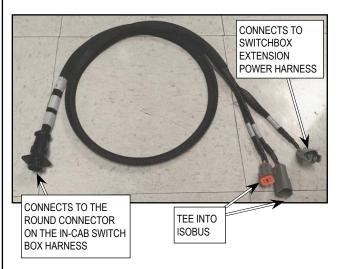


Figure 6- SwitchBox ISOBUS Adapter Harness (3132-42)

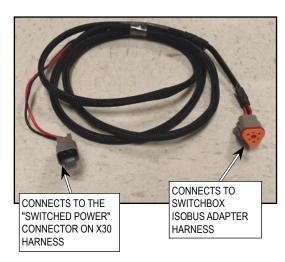


Figure 8 - SwitchBox Power Extension Harness (3132-76)

1.4.5 ADDITIONAL POWER TO THE X30 SYSTEM COMPONENTS ON THE AIR SEEDER TANK

Following components are used to supply additional power to the X30 system components located on the air seeder tank and tillage inplement:

- High Current Power Relay Harness (3132-87)
- High Current Power Tractor Harness (3132-88)
- Relay (3132-89)



Figure 9 - High Current Power Relay Harness (3132-87)



Figure 10 - Relay (3132-89)



Figure 11 - High Current Power Tractor Harness (3132-88)

1.4.6 GPS ADAPTER HARNESS (3132-04-04)

Refer to *Figure 12*. This adapter harness is always used regardless of the cables included with the GPS receiver and allows for X30 guidance to use the GPS signal. It has RS232-D to connect to X30 main harness, as well as serial and Deutsch connectors to connect either to the Topcon receiver or non-Topcon receiver. Gender change end and null modem end are included.

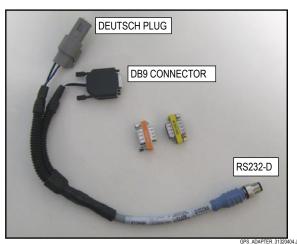
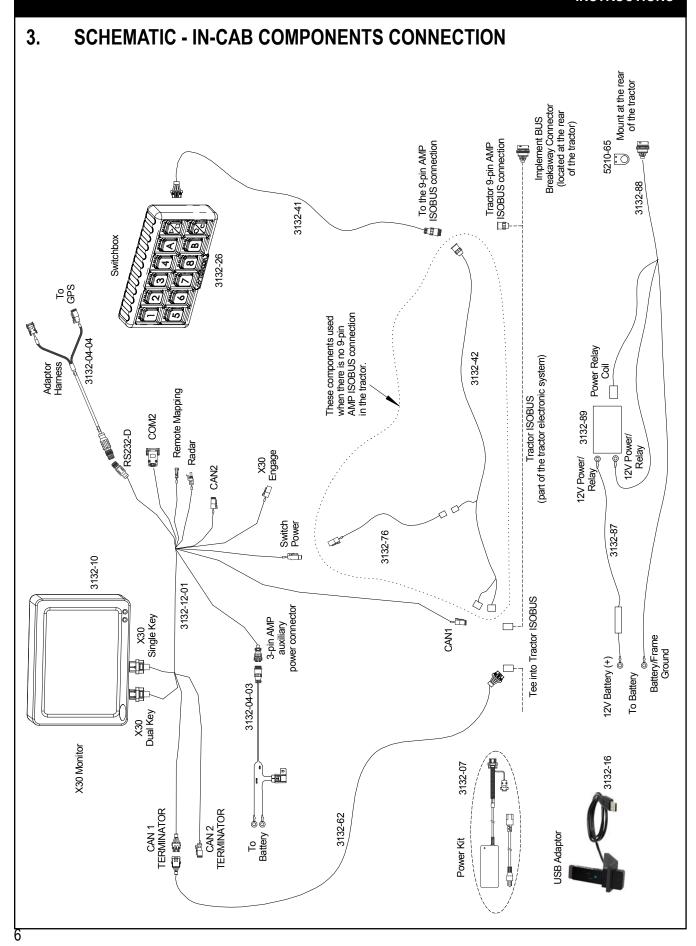


Figure 12 - GPS Adapter Harness (3132-04-04)

2 INSTALLATION

- Select location for the console and switch-box that is in easy access and in clear view of the operator. Ensure that the console and switchbox will be free of moisture, direct sun, and excessive vibration.
- 2. Use the provided large ball and socket to mount the X30 console.
- 3. Use the provided small ball and socket to mount the in-cab keypad. (ball and socket was not included with early units).
- 4. Make the following harness connections:
 - a. Connect X30 Single Key and X30 Dual Key connectors on X30 main harness (3132-12-01, *Figure 5*) to the CAN ports on the back of the X30 console, refer to *Figure 1*.
 - b. Connect Battery Power connector on X30 main harness (3132-12-01, *Figure 5*) to 3-pin AMP auxiliary power connection in the cab (if exists).
 - c. If the auxiliary power connection does not exists in the cab, connect X30 power extension harness (3132-04-03, *Figure 3*) and route/connect to battery.
 - d. Connect RS232-D (COM 1) connector on X30 main harness (3132-12-01, Figure 5) to GPS adapter harness (3132-04-04, Figure 12). DB9 connector on GPS adapter harness (3132-04-04) connects to GPS. Deutsch 3pin plug on GPS adapter harness is not used.
 - e. Connect CAN 1 connector on X30 main harness (3132-12-01, *Figure 5*) to connector on ISOBUS in the tractor cab. Refer to images for specific tractor models in *Section 4 Location of Tractor ISOBUS Connection Point*.
 - f. Remove CAN 1 terminator and connect Can 1 Terminator connector on X30 main harness (3132-12-01, *Figure 5*) to connector on X30 ISOBUS adapter harness (3132-62).
 - g. Connect X30 ISOBUS adapter harness (3132-62) to the ISOBUS in the tractor cab.

- h. **COM 2** connector on X30 main harness (3132-12-01, *Figure 5*) can be connected to any device that requires signal from GPS, but is not directly connected to GPS.
- Connectors on X30 main harness (3132-12-01, *Figure 5*) labeled Radar, Remote Mapping, and CAN 2 are not used.
- j. Connect the end labeled "calibration" on the in-cab switchbox harness (3132-41, *Figure* 7) to the **Switchbox** and plug the other end into the 9-pin AMP ISOBUS connection (if it exists).
- k. If the 9-pin AMP ISOBUS connection does not exist in the tractor, use switchbox ISOBUS adapter harness (3132-42) to connect into ISOBUS in the same location as X30 console.
- 1. Connect switchbox power harness (3132-76) to switchbox ISOBUS adapter harness (3132-42) and connect the other end to the "Switched Power" connector on the X30 harness (3132-12-01).
- m. Early units were sent out with a 3132-72 power harness that connected onto 3132-42 and the other end had individual wires. The switched power wire needs to be connected to a keyed power source and the ground wire to a ground source. Alternatively it can be wired up to the "Switched Power" connector on the X30 harness.
- n. Connect the end labelled 12V Battery "+" from 3132-87 to positive battery terminal.
 Connect the other end labelled 12V Power/ Relay to the 3132-89 relay.
- o. Mount the relay near the battery where it will be protected and the contacts will not be shorted.
- p. Connect the end labelled Battery/Frame Ground from 3132-88 to the negative battery terminal. Connect the end labeled 12V Power/Relay to the relay. Connect the end labelled Power Relay Coil to the relay. Route the other end to the hitch point and mount using mount plate (5210-65).



4. LOCATION OF TRACTOR ISOBUS CONNECTION POINT

4.1 JOHN DEERE TRACTOR

- 1. Remove power panel near the floor to the right of the operator seat.
- 2. Split the ISOBUS connection to tee X30 and if required the in-cab switchbox onto the ISOBUS.

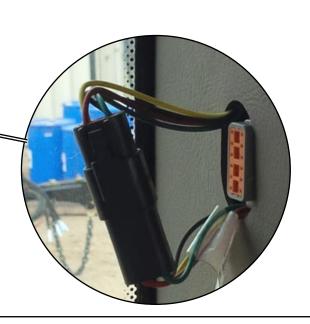




4.2 CASE/NEW HOLLAND TRACTOR

- 1. Remove cover from the right rear column to pull ISOBUS connection through access hole. Then replace cover (connectors tagged "ISOBUS").
- 2. Split this connection to tee X30 and if required the in-cab switchbox onto the ISOBUS.







NOTE

FOR ADDITIONAL INFORMATION AND QUESTIONS REGARDING X30 CONSOLE AND GPS SIGNAL REFER TO SERVICE & PARTS SECTION ON OUR WEB SITE WWW.BOURGAULT.COM

