

# INSTALLATION INSTRUCTIONS

## TrueTracker™ Manual Steering Joystick

**Version 5.00**

Revision A

March 2014

Part number 92485-06-E05



## Legal Notices

### Agriculture Business Area

Trimble Agriculture Division  
10368 Westmoor Drive  
Westminster, CO 80021-2712  
USA  
[www.trimble.com](http://www.trimble.com)

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Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and the receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.
- Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission rules.

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c/o Menlo Worldwide Logistics  
Meerheide 45  
5521 DZ Eersel, NL



# Safety Information

Always follow the instructions that accompany a Warning or Caution. The information they provide is intended to minimize the risk of personal injury and/or damage to property. In particular, observe safety instructions that are presented in the following format:



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**WARNING** – This alert warns of a potential hazard, which, if not avoided, can cause severe injury.

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**CAUTION** – This alert warns of a hazard or unsafe practice which, if not avoided, can cause injury or damage.

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**Note** – An absence of specific alerts does not mean that there are no safety risks involved.

## Warnings



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**WARNING** – When you are working on the vehicle's hydraulic systems, vehicle attachments that are suspended can drop. If you are working around the vehicle, you could suffer serious injury if an attachment dropped on you. To avoid this risk, lower all vehicle attachments to the ground before you begin work.

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**WARNING** – If someone else attempts to drive the vehicle while you are working on or under it, you can suffer serious or fatal injuries. To avoid this possibility, install a lockout box on the battery terminal to prevent the battery from being reconnected, remove the key from the vehicle's ignition switch, and attach a "Do not operate" tag in the cab.

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**WARNING** – Agricultural chemicals can pose serious health risks. If the vehicle has been used to apply agricultural chemicals, steam clean the vehicle to remove any chemical residue from the areas of the vehicle where you will be working.

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**WARNING** – Vehicle cabs can be quite high in the air. To avoid potentially serious injury through falling from this height, always use the steps and handrails, and face the vehicle, when you enter or exit it.

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## Cautions



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**CAUTION** – When the vehicle has been running, parts of the vehicle, including the engine and exhaust, can become extremely hot and can cause serious burns. To avoid burns, allow hot machine parts to cool before you begin working on them.

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**CAUTION** – The system installation may bring you into contact with chemical substances, such as oil, which can cause poisoning. Wash your hands thoroughly after you finish working on the system.

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**CAUTION** – Battery posts, terminals, and related accessories contain lead and lead compounds, which can cause serious illness. To avoid ingesting lead, wash your hands thoroughly after touching the battery.

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**CAUTION** – Always wear protective equipment appropriate to the job conditions and the nature of the vehicle. This includes wearing protective glasses when you use pressurized air or water, and correct protective welder's clothing when welding. Avoid wearing loose clothing or jewelry that can catch on machine parts or tools.

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**CAUTION** – Parts of the vehicle may be under pressure. To avoid injury from pressurized parts, relieve all pressure in oil, air, and water systems before you disconnect any lines, fittings, or related items. To avoid being sprayed by pressurized liquids, hold a rag over fill caps, breathers, or hose connections when you remove them. Do not use your bare hands to check for hydraulic leaks. Use a board or cardboard instead.

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**CAUTION** – Do not direct pressurized water at:

- electronic or electrical components or connectors
- bearings
- hydraulic seals
- fuel injection pumps
- any other sensitive parts or components

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Set the hose pressure as low as practicable, and spray at a 45° to 90° angle. Keep the nozzle of the power washer away from the machine at the distance recommended by the manufacturer.

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**CAUTION** – To prevent damage to the system, make sure that no wires or hoses interfere with or catch on any mechanical linkages, or contact any machine parts that get hot.

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## Introduction

The TrueTracker™ manual steering joystick allows for manual manipulation and remote engagement of the TrueTracker system.

## Technical assistance

If you have a problem and cannot find the information you need in the product documentation, contact Trimble technical support:

1. Log into <http://agpartners.trimble.com>.
2. Click the *Feedback* link at the right of the screen. A form appears.
3. Complete the form and then click **Submit Feedback**.

## Preparing the vehicle for installation

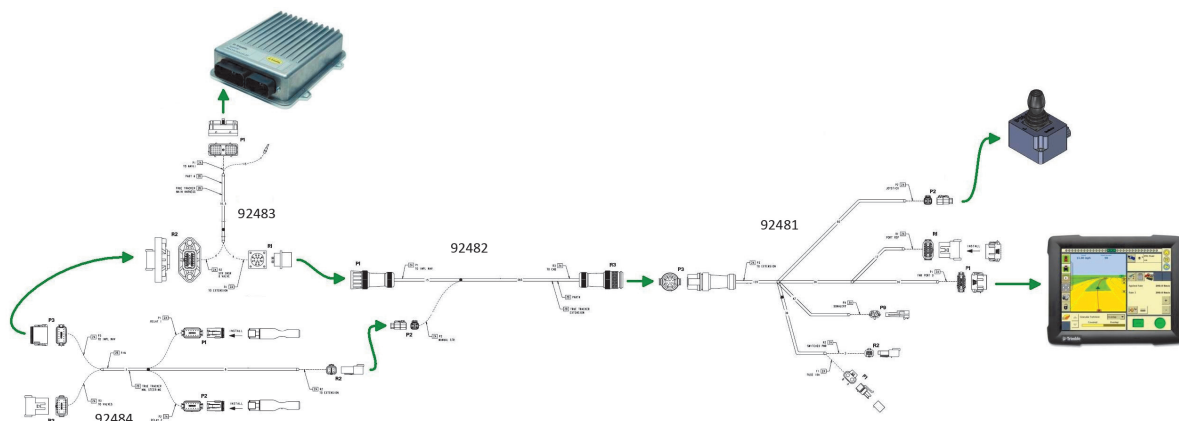
**Note** – *The left and right sides of the vehicle are referenced while standing behind the unit, facing the normal direction of travel.*

1. Park the vehicle on a hard, level surface. Block the front and rear wheels.
2. Align the steering straight ahead. On an articulated vehicle, install the articulation locks.
3. Remove all dirt and debris from the areas of the vehicle where the Autopilot system will be installed.
4. Open all kit boxes and check the contents of the box against the packing list/s. Lay all of the parts out on a clean workbench.

## Required components

Part number	Component
92485	TrueTracker Joystick
92491	TrueTracker Joystick Mounting kit
92481	TrueTracker in cab harness
94282	TrueTracker extension cable
94283	TrueTracker NavController II main harness
92484	TrueTracker Manual steering relay harness

## System schematic



## Installing the joystick

To install the joystick, some existing TrueTracker cables must be replaced:

1. Cable P/N 92481 replaces cable P/N 67092 in the cab. Remove cable 67092 and lay in the new cable 92481 in the same fashion. Note that cable 92481 has an additional 4-pin connector (P2) for the joystick and is slightly longer on the main harness. Route P2 to the desired location of the joystick.
2. Cable P/N 92482 replaces the main extension cable P/N 0793-8740-450. Remove cable 0793-8740-450 and replace it with cable 92482. Make sure that the cable is routed in a fashion that will not pinch or snare and the breakaway connector can freely come apart if needed.
3. Cable P/N 92483 replaces P/N 67612. Open the NavController II enclosure, remove the 12 pin Deutsch bulkhead and round bulkhead from the enclosure. Remove the 40-pin connector from the Nav Controller II. Reinstall the same bulkheads on cable 92483 in the same location and then attach the 40-pin connector on cable 92483 to the NavController II.
4. Insert cable P/N 92484 between the NavController II enclosure and the valve drive/sensor cabling. Remove the 12-pin Deutsch connector with the valve drive and sensor cabling from the enclosure and plug P3 off of the 92484 cable into the enclosure. Plug the 12-pin Deutsch connector from the valves/sensor cable into R3 on cable 92484. Plug the 4-pin R2 receptacle on to the 4-pin plug on the main harness.

5. In the cab, locate the desired mounting location for the TrueTracker joystick. Use either the magnetic mount, fastening hardware, or the very high bond plate and magnetic mount to attach the joystick to the mounting location.
6. Connect the 4-pin plug P2 on cable 92481 to the joystick.
7. Make sure that all cables are connected properly, and routed and secured in such a fashion that they will not be pinched or damaged by movement of the tractor or the implement.

## Operation

- The joystick can only be used with implement Vehicle Database Files (VDBs) that have the + manual label at the end in VDBs v4.5 or later. Using older implement VDBs will cause faults in the system.
- When moved left and right the joystick will manipulate the implement but only when the power bus is supplying power to the joystick, and the TrueTracker control valve has pressure to it (the SCV is to providing oil flow). No satellite reception or active guidance line is required.
- If TrueTracker system is engaged, it will be disengaged when the joystick is used. The user may use the button on the top of the joystick to reengage the TrueTracker system if engagement criteria are met.



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**WARNING –** Using the TrueTracker joystick while the machine's cab is unattended could cause serious or fatal injuries. To avoid this possibility, make sure that someone is in the machine cab at all times when operating the joystick.

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**WARNING –** Make sure that the oil flow to the control valve is turned off for road travel either by turning off the SCV remote providing oil or closing shut-off valves to the steering control valve (not provided in kit). Failure to do so could cause serious or fatal injuries and/or damage to the machine.

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