

# HD 408 Navigation Articulated Tractor Install

Manual

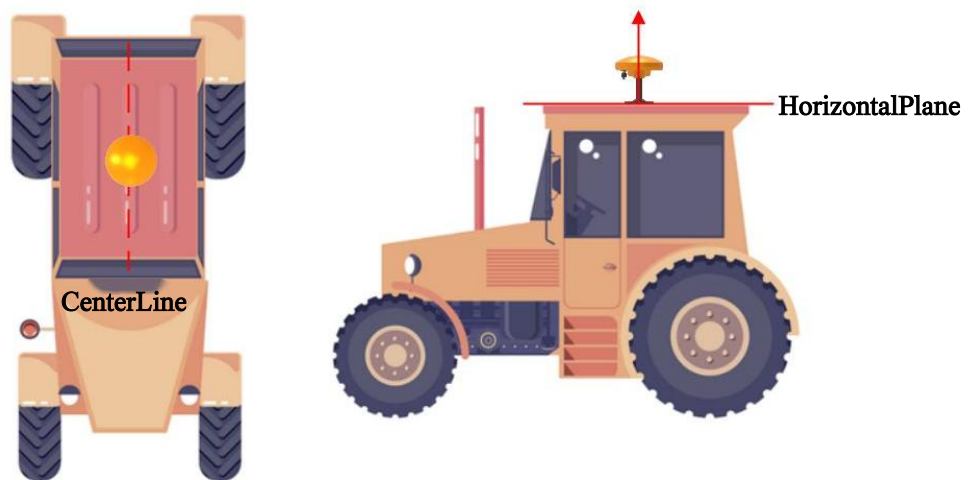


# HD 408 Navigation Articulated Tractor Install

## 1. GNSS Antenna

Selection of the GNSS antenna installation position. The GNSS antenna installation follows two basic principles:

- ①. The center point of the antenna should overlap with the left and right center lines of the vehicle;
- ②. The main body of the antenna should be kept perpendicular to the top datum of the vehicle, when the vehicle is stationary on the horizontal ground.



## 2. Radio Antenna

Radio station antenna installation location selection. The installation of the radio antenna shall follow two basic principles:

- ①. The horizontal distance of the antenna should be greater than 50 cm from the GNSS antenna.
- ②. The main body of the antenna should be kept perpendicular to the top datum of the vehicle, when the vehicle is stationary on the horizontal ground.



### 3. Remove the original car steering wheel

- ①. Use a flat port screwdriver to remove the steering wheel cover.



- ②. Find the position of the lock nut



- ③. Remove the lock nut and separate the steering wheel from the steering column



### 4. Flange selection

The mode of the flange is determined according to the steering column diameter and the key way width/number of teeth.

Pay attention to:

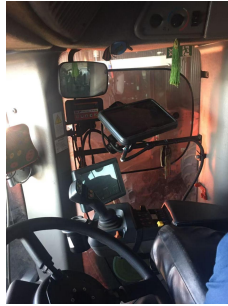
- ①. Different vehicles applicable to different flange, flange to choose suitable for the steering column, flange model and steering column mismatch will lead to steering column spline damage.
- ②. In a few cases, when the flange is adapted, the plane on the steering column spline is higher than the plane on the flange. At this time, the gasket needs to be added to ensure that the flange is equal to the spline.

### 5. Selection of the motor fixing bracket

- ①、 No.1 bracket. Specifications: Inner diameter of the hoop is 45mm and length is 100mm.
- ②、 No.1 bracket(extended version). Specifications: Inner diameter of the hoop is 45mm, and the length is 150mm/200mm.
- ③、 No.2 bracket Note: Alternative

#### 6. Display terminal Installation

On the right side of the driver's cab (as shown in the figure).



Pay attention to:

When fixing the RAM bracket with the swallow tail nail, pay attention to the wire harness and lines inside the beam/vertical beam.

#### 7. IMU Installation

The IMU installation position should be selected on the tractor floor and the floor should be flat.

Note:

- ①. The IMU has direct contact with the cab floor, with no rubber pad.
- ②. The IMU connector is facing the front (parallel to the front).
- ③. The IMU must be secured with four screws.
- ④. There can be no magnetic objects, metals and other objects that interfere with the IMU.
- ⑤. No metal and moisture shielding is allowed above the IMU.

#### 8. Gyroscope Angle Sensor Installation

Install the gyroscope in the rear half of the waist belt vehicle. When the rear wheels rotate left and right, it should also rotate left and right accordingly. And the fixing point should be as close as possible to the ball axis position.



Note:

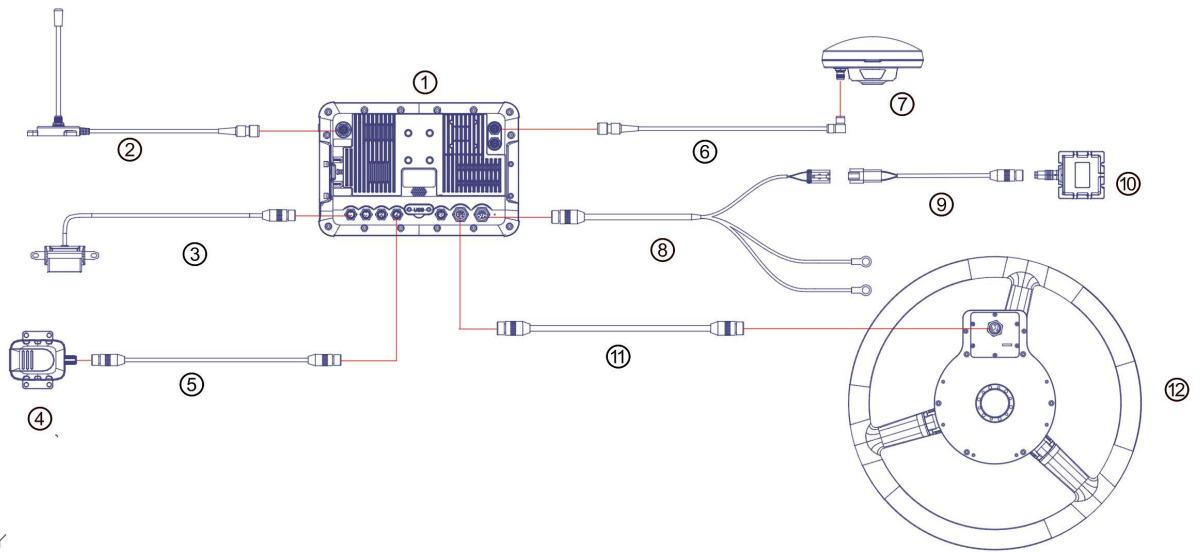
- ①. The gyroscope angle sensor wire harness should be fixed on the mounting bracket to ensure that the interface between the gyroscope and the wire harness is not pulled by external forces.
- ②. The gyroscope angle sensor shall be installed horizontally.
- ③. The harness reservation should be reasonable, not too long or too short.
- ④. Check the gyroscope angle sensor for collision in activity.

#### 9. Camera Installation

Fix the camera at the rear of the roof as shown in the figure, and adjust the appropriate angle to ensure that the rear operation situation can be seen completely during the operation.



## 10. The Wiring Harness Connection



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- ①. Display terminal
- ②. Radio Antenna
- ③. Camera
- ④. Imu
- ⑤. Imu wiring harness
- ⑥. The GNSS connecting line
- ⑦. GNSS antenna
- ⑧. Power line
- ⑨. Gyroscope thread line
- ⑩. Gyroscope
- ⑪. Motor wire
- ⑫. Motor steering wheel

Matters need attention:

- ①. All wiring harness must avoid the "heat source" to avoid wiring harness burning.
- ②. The harness should not hinder the normal work of the owner, keep simple and beautiful.

## 11. Equipment to Take Electricity

Power supply range: 9-30V

Single battery power supply:

Battery positive pole column connected to red line, battery negative pole column connected to black line, power supply voltage is 12V.

Dual battery power supply:

①. Series: the battery positive pole column connected to the starter is connected to the red line, and the battery negative pole column connected to the carbody is connected to the black line, and the power supply voltage is 24V.

②. Parallel: the positive pole column of any battery is connected to the red line, the negative pole column is connected to the black line, and the power supply voltage is 12V.

Pay attention to:

①. When the vehicle is powered by 24V(two batteries are connected in series),do not take power at one battery.

②. The electrical connection position of the equipment must be at the battery pole column.