Installation Scheme of Zhengzhou Huaxin Export Truck Scale

Firstly Construction of Truck Scale Foundation

 Location of truck scale: The installation position of truck scale should have good drainage channel, and it will not be flooded by heavy rain or mountain torrents.
In addition, there must be a flat road of sufficient length at both ends of the weighing scale for the car to go up and down.

2. Foundation form: There are two types of foundation pit for truck scale, no foundation pit or shallow foundation pit. The truck scale without foundation pit is installed above ground, which can be cleaned regularly, without water accumulation and is cheaper. The shallow foundation pit, i.e. the truck scale, is installed in the foundation pit, and the surface of the scale platform is equal to the ground.

3. Please refer to our company's basic drawings for foundation construction. The general construction cycle plus maintenance period takes about 20 days before and after construction. The concrete foundation poured by the ground scale must be excavated below the local frozen soil line. The concrete label should be guaranteed in the construction. The geometric dimensions of the pre-embedded parts should be guaranteed, such as the level and position, so as to ensure that the pre-embedded parts will not be displaced. After the foundation is poured, it should be maintained in accordance with the standard specifications. Only when the concrete reaches the design strength index, can the floor weight be installed.



Second <u>Installation of Weighing Body of Automobile Scale</u>

1. Major Machinery Equipment Tables



No.	Machine name	number	Remarks
01	Crane	1	
02	Lifting jack	1	
03	A wire rope	Some	
04	A hook	Some	
05	spanner	2	

2. Assembly of weighing table



2.1 Identify accessories:

2.1.1 Identify the number and length of each weighing platform.

2.1.2 Determine the location of the junction box: The junction box is the contact point between the weighing body and the sensors. It is connected with the weighing instrument through a main line. The location of the junction box is generally near the side of the weighing room in the middle section of the weighing body.

2.1.3 Prepare support for scale body: Before installation, support should be placed according to the length and position of each scale platform (such as bricks, square wood, etc.). It is convenient to install sensors. After installation of sensors, all support should be cleaned up. There should be no debris under the scale body, so as to avoid errors in weighing.

2.2 Weighing table installation

2.2.1 Draw the middle line above the foundation (no obstacles on both sides of the foundation), measure the edge line when there are obstacles, and set a reasonable distance with the obstacles (more than 2 meters). The purpose of wire drawing is to make the scale more intuitive and reasonable.

2.2.2 The steel wire rope is firmly fixed at the opening of the weighing platform, and the weighing platform is lifted smoothly into the foundation pit with a crane. When hoisting, the angle of wire rope should not be less than 45 degrees.



2.2.3 Install the scale in sequence (A1A2-B1B2-C1C2-D1D2). Use sleepers, etc. to cushion the base plates. \rightarrow Installation of Limiting Bolts for Two-End Scale Platform \rightarrow Put the weighing blocks in order



2.3 Sensor Installation

2.3.1 In order to facilitate on-site installation, the sensor has been tested before leaving the factory. From one side of the scale body, the sensors are placed in order of numbering, so that the steel ball is in the center of the sensor groove and perpendicular to the weight bearing point of the scale body.

2.3.2 The weighing platform is lifted by the jack in turn, and the sensor assembly is placed in the appropriate position in the connecting block.

2.3.3 After all the sensors are put in place, the balance platform is leveled. Notice for leveling: whether the steel balls are stressed by hand is touched, and the steel balls are centered; if the sensor is not loaded or not, the thin steel plate in the accessories is used to pad the sensor; ensure that all the sensors are uniformly loaded. 2.3.4 Thread: After the sensor is installed, the signal lines of each sensor are passed through the pipeline on the outside of the scale, and all of them converge to the junction box. In the process of threading, the signal lines of each sensor should be marked to prevent misconnection. The order of connection is as follows:



2.4 Adjustment

2.4.1 Adjust the height of the platform and the gap between the platform and the foundation.

2.4.2 Adjust the limit bolt to ensure the clearance of about 3mm between each limit bolt and the panel

2.4.3 After the measurement performance test is correct, the cover plate is installed.

Last <u>Debugging and maintenance</u>

After the sensor is connected with the junction box, the weighing instrument is connected. Make sure that the instrument is energized after the connection is correct. See if the instrument shows zero, can return to zero and change the weight on the scale, and the connection is correct. The specific steps are as follows:Before debugging, users should provide repeated weighing scales on the weighing platform of the heavy truck, so that the weighing parts can be closely contacted. After several weighing scales, once again check whether the force of each sensor is uniform, and adjust to the best state.

First, the simulation calibration is carried out on the heavy truck which is more than 50% of the full weight, and then the bias load and angle difference are pre-adjusted. The specific steps of calibration refer to the technical specifications of weighing instruments.