

**MDW-160 & MDW-200**

(Includes 'B' and 'M' versions)

**MECHANICAL HEALTH AND FITNESS SCALE**

(Manual P.N. 4283, Revision C, July 2017)



MDW "M"



MDW "B"



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## 1. INTRODUCTION

- The MDW-160 & MDW-200 Health and Fitness Scales are mechanical scales (also known as physicians scales) which can accurately weigh a person. Models with a 'B' suffix are for weighing only. Models with an 'M' suffix also include an integrated mechanical height measurement gauge.
- The scales are easy to assemble and simple to use. 'M' versions include a wheel attachment at the base of the scale so they can be moved around more easily.
- The MDW-160 & MDW-200 scales are widely applicable for use in business, schools, hospitals, clinics and sports departments.

## 2. SPECIFICATIONS

MODEL	MDW-160M & MDW160B	MDW-200M & MDW-200B
Capacity	160 kg / 350 lb.	200 kg / 440 lb.
Readability	100 g / ¼ lb	
Platform Size	375 mm x 275 mm / 14.8" x 10.8"	
Overall dimensions	560 mm x 275 mm x 1495 mm / 20.9" x 10.8" x 58.5"	
Height measurement (‘M’ versions only)	Range: 60 cm / 23 <sup>5/8</sup> " to 210 cm / 84" Readability: 0.1 cm / 1/8"	
Gross weight	16 kg / 35 lb	

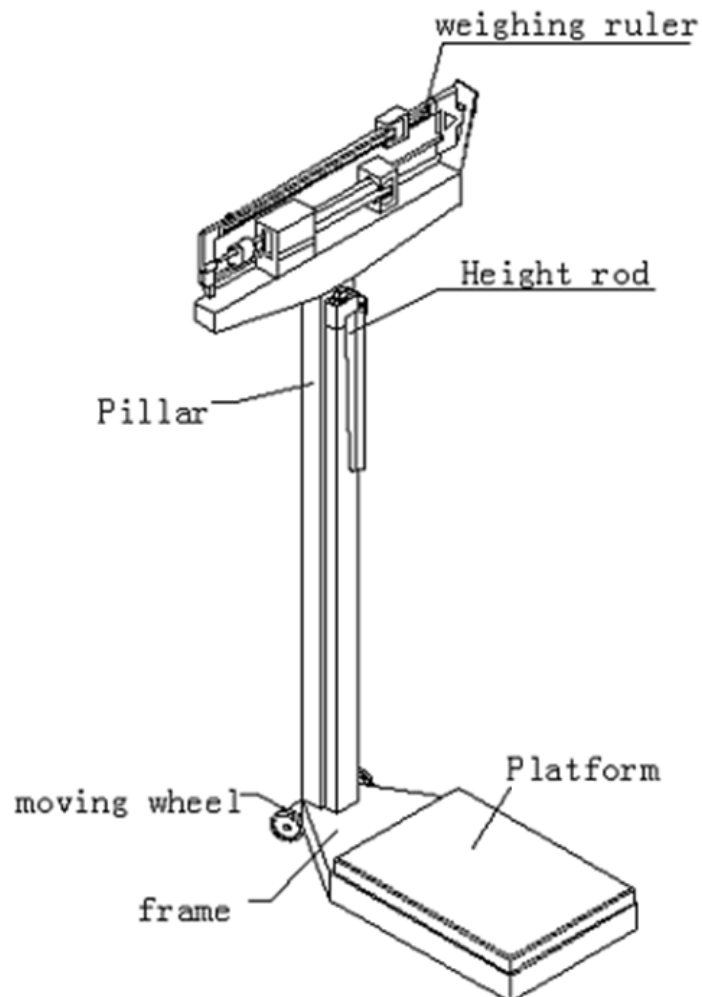
## 3. INSTALLATION

### 3.1 GENERAL INSTALLATION

This precision instrument is extremely easy to set up, as all major parts are factory pre-assembled.

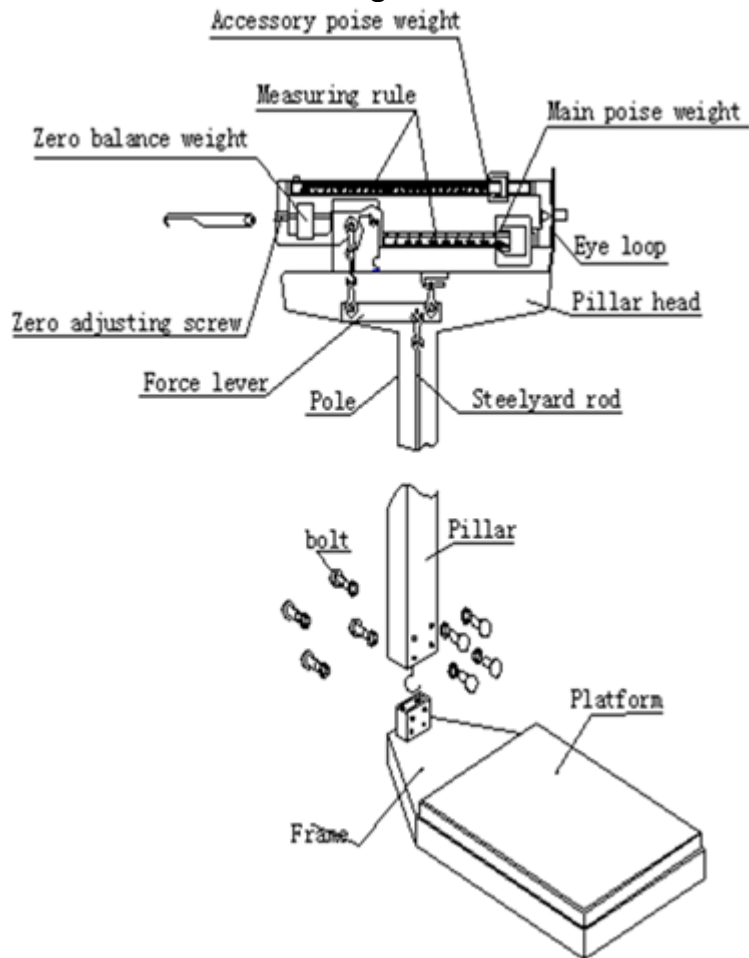
#### Hardware supplied for installation:

- Qty. 8: M5 x 10 screws
- Qty. 10: Lock washers
- Qty. 2: M6 x 10 screws
- Qty. 1: Assembly Tool (Wrench)



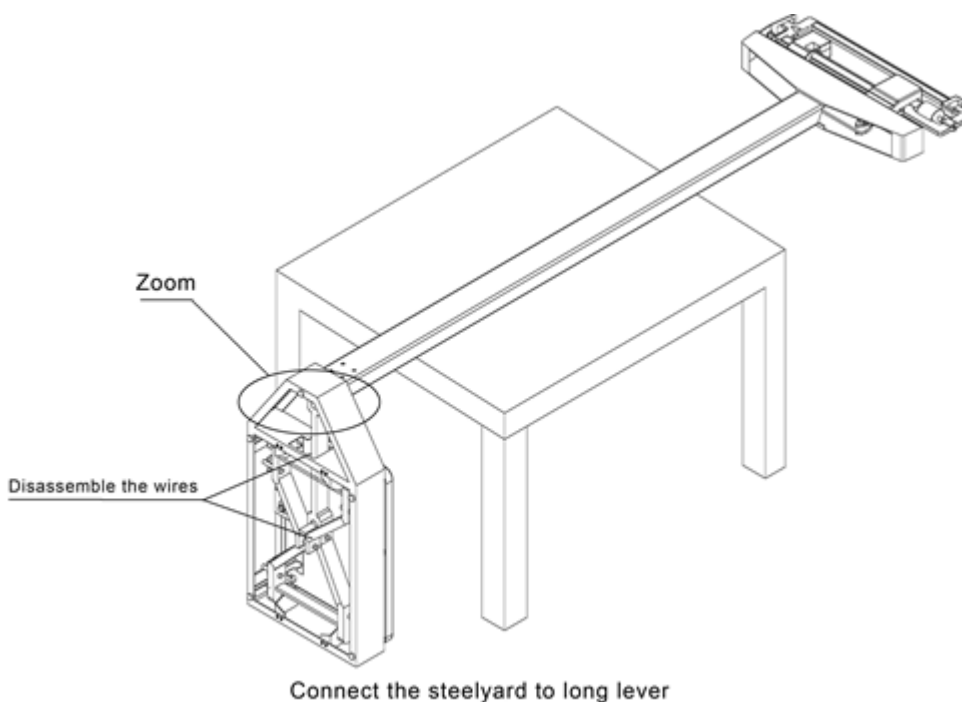
**MDW 'M' version with wheels and height rod**

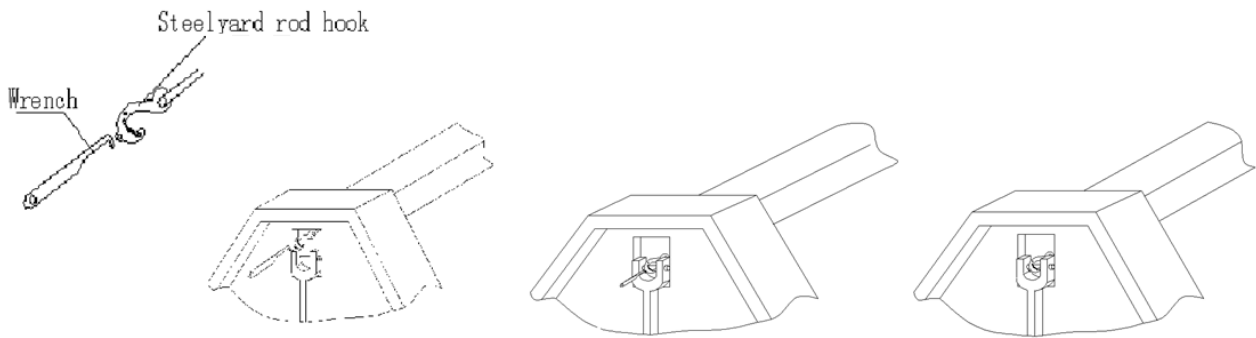
**NOTE:** If the pillar bracket is bent, straighten it before assembling.



### Pillar Installation

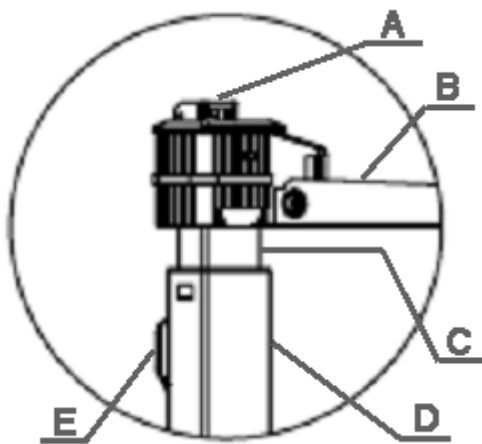
- With the scale upright, slip the pillar over the bracket on the frame.
- Use the 8 screws and lock washers to fix the pillar in a vertical position.





- Lay down the scale, with column horizontal to the floor (use a table if possible).
- Remove the wires on the levers
- Insert the assembly tool (wrench) into the small hole in front of the steelyard rod, and pull the hook of the steelyard rod with the hook of wrench
- Push the long lever frontward, then hook the bearing of the steelyard rod on the pivot of the long lever.
- Remove the wrench from the draft rod.
- Put the scale on the floor gently.

### 3.2 HEIGHT ROD INSTALLATION (*'M'* versions only)



**A.** Latch to lock/unlock the measuring arm

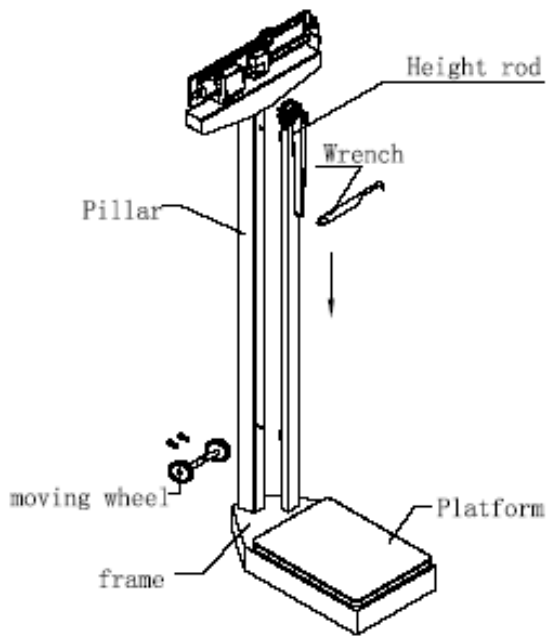
**B.** The measuring arm

**C.** The inner height rod

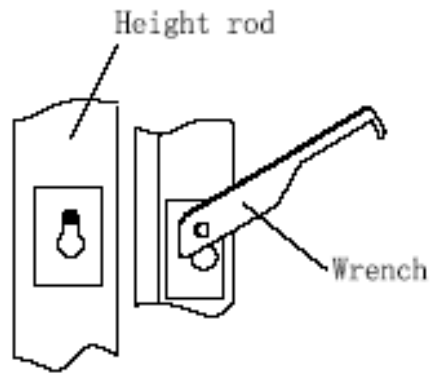
**D.** The outer height rod

**E.** Two height rod clamping brackets for fixing the height rods assembly to the pillar. One hexagonal headed screw is required for each bracket.

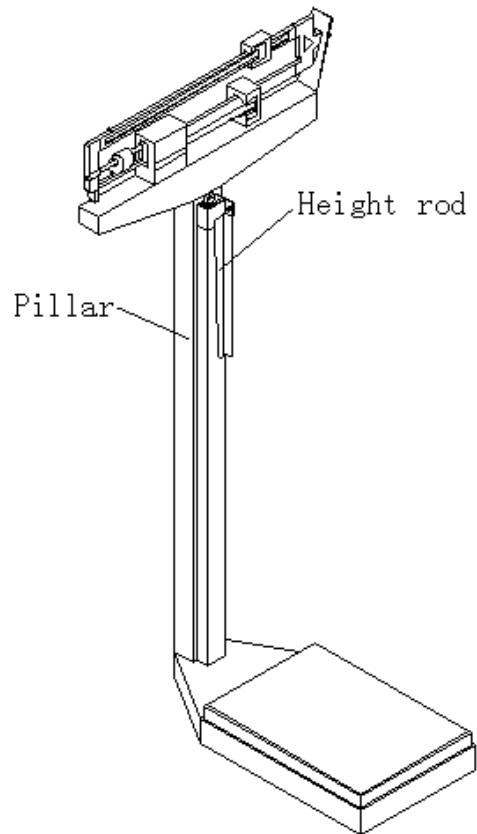
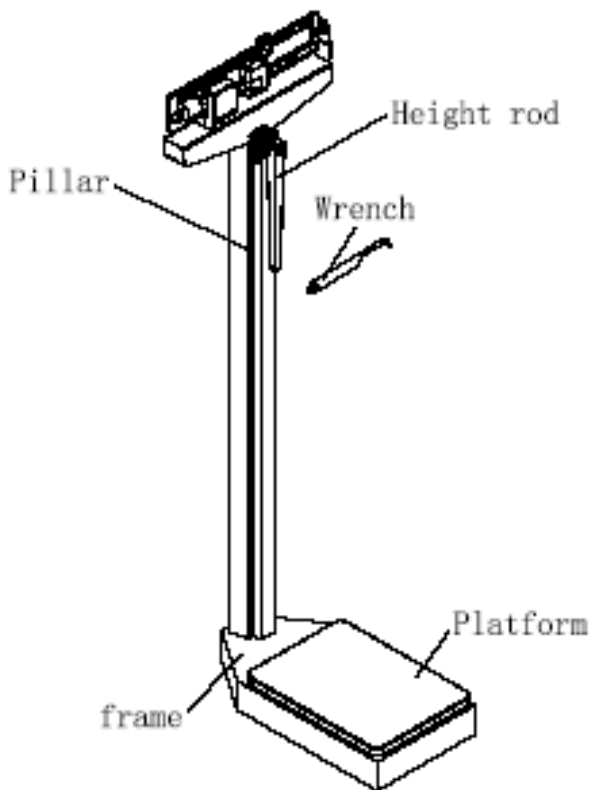




Height rod installation

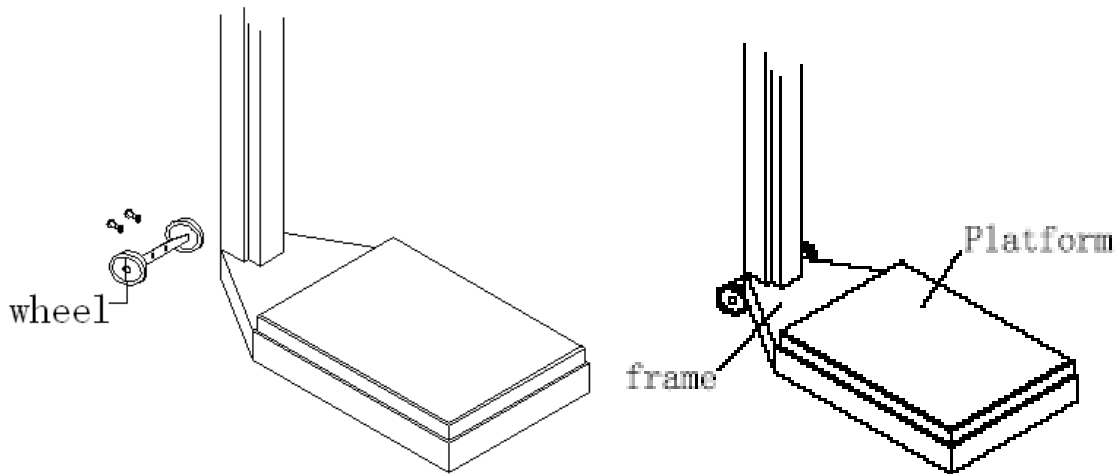


Height rod rear hole



Insert the rear holes of the height rod into the two bolts on the front of the pillar, loosen the height rod downwards on right position. Use the wrench to tighten the two hex-head screws. Do not over tighten the screws. Remove the wrench from the two hex-head screws.

### 3.3 TRANSPORT WHEEL INSTALLATION (*'M'* versions only)



- Turn the wheel bracket so with one side facing upwards, the other side with two holes should be opposite to the rear of frame.
- Use the screws and washers to fix the wheel to the platform, adjust the bracket to a level position, then tighten the screws.
- When moving the scale, hold the two side faces of the pillar to keep the front edge of the platform away from the floor.

## 4. MEASURING HEIGHT (*M' versions only*)

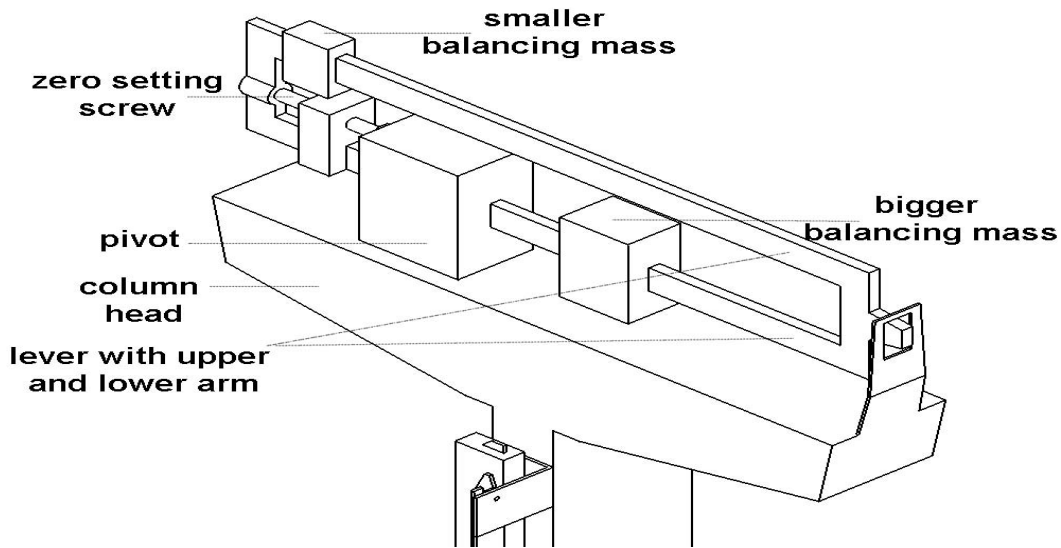
### Preparing the scale to measure the height-

- Before the person steps onto the scale platform, the measuring arm should be lifted to the horizontal position, and raised well above the person's apparent height.
- The person may now step onto the scale platform.
- The measuring arm should be held horizontal and above the person's head and should not be released.
- Carefully lower the measuring arm, while keeping it horizontal, until it rests gently upon the top of the person's head. If the person is shorter than 101.5 cm, push the latch to the right, while simultaneously pushing down the measuring arm until it rests horizontally upon the top of the person's head.

### Read the height of the person as follows:

- The rear end of the measuring arm is tapered to point at the reading on the height rods.
- If the tapered end of the measuring arm points at the outer height rod, then the height of the person is same as the reading at this point on the outer height rod.
- If the tapered end of the measuring arm points at the inner height rod, then the correct height of the person is same as the reading shown on the inner height rod where both the height rod meets, i.e., read at the top of the outer height rod (Just above the "Read" arrow marked on the outer height rod).
- While holding the measuring arm horizontally, raise the arm above the person's head. The person may now step off the scale platform. Hold the arm horizontal until the person is clear of the height rod.
- Fold the measuring arm back to the vertical position and adjust the height rod back to the rest position (i.e. the measuring arm should be locked in place within the inner height rod and the inner rod should be at its lowest position).

## 5. WEIGHING OPERATION



### To do the zero setting-

- For accurate weighing, place the scale on a levelled floor.
- Move both the balancing masses to zero when the scale platform is empty.
- If the scale is balanced, the lever will be in the horizontal position. This will be indicated by the arrow indicator being in line with the horizontal mark on the right side of the column head.
- It may be necessary to turn the zero-setting screw to the right or left until the scale balances.

## To weigh a person-

- The person to be weighed can now step onto the scale platform.
- The lever will move away from its original position.
- Move the balancing masses along the calibrated lever arms to return the lever to the horizontal position.
- For this the bigger balancing mass should be moved first and then the smaller one for finer adjustment.
- **NOTE:** While moving the lower (larger) balancing mass along the lower arm of the lever, make sure that it sits in one of the notches properly. In that case, its upper pointer will be in line with one of the markings of the lower arm of the lever. The reading at this marking will indicate the weight of the person using the larger balancing mass.
- The upper (smaller) balancing mass is now moved along the upper arm of the lever till the lever returns to its original horizontal position. This is to obtain the finer weight. The reading at this point is noted.
- The total reading of the two balancing masses will give the final weight of the person on the platform.

For example,

Lower mass 60 kg + Upper mass 2.5 kg

= Total weight of the person is 62.5 kg.

## 6. WARRANTY INFORMATION

Adam Equipment offers Limited Warranty (Parts and Labour) for the components failed due to defects in materials or workmanship. Warranty starts from the date of delivery.

During the warranty period, should any repairs be necessary, the purchaser must inform its supplier or Adam Equipment Company. The company or its authorised Technician reserves the right to repair or replace the components at any of its workshops depending on the severity of the problems. However, any freight involved in sending the faulty units or parts to the service centre should be borne by the purchaser.

The warranty will cease to operate if the equipment is not returned in the original packaging and with correct documentation for a claim to be processed. All claims are at the sole discretion of Adam Equipment.

This warranty does not cover equipment where defects or poor performance is due to misuse, accidental damage, exposure to radioactive or corrosive materials, negligence, faulty installation, unauthorised modifications or attempted repair or failure to observe the requirements and recommendations as given in this User Manual. Additionally rechargeable batteries (where supplied) are not covered under warranty.

Repairs carried out under the warranty does not extend the warranty period. Components removed during the warranty repairs become the company property.

The statutory right of the purchaser is not affected by this warranty. The terms of this warranty is governed by the UK law. For complete details on Warranty Information, see the terms and conditions of sale available on our web-site.

b-site

**ADAM EQUIPMENT** is an ISO 9001:2008 certified global company with more than 40 years' experience in the production and sale of electronic weighing equipment.

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- Analytical and Precision Laboratory Balances
- Compact and Portable Balances
- High Capacity Balances
- Moisture analysers / balances
- Mechanical Scales
- Counting Scales
- Digital Weighing/Check-weighing Scales
- High performance Platform Scales
- Crane scales
- Mechanical and Digital Electronic Health and Fitness Scales
- Retail Scales for Price computing

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