



**LV BUSWAY SYSTEM**  
**ENGINEERING INSTALLATION MANUAL**  
**VERSION ONE**

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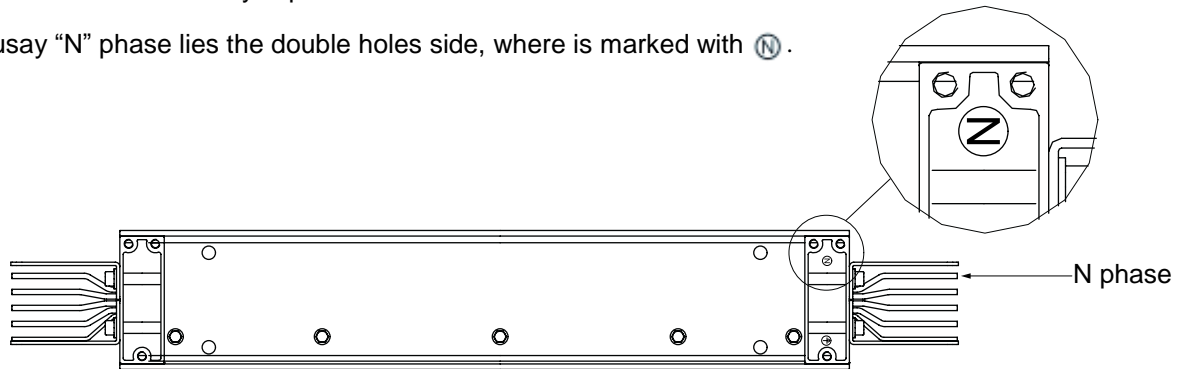
## Installation of busway and joint

### 1. Construction features identification

Maintain N phase alignment of busway and joint during installation.

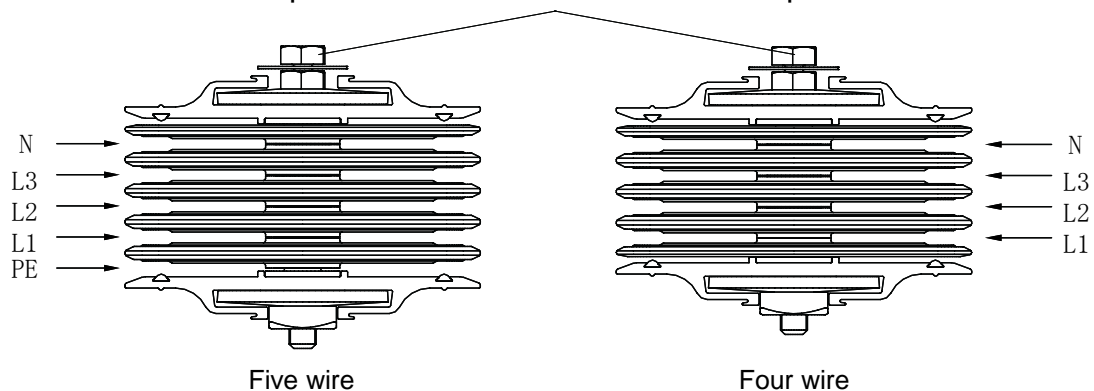
#### (1) Identification of busway N phase

Busway "N" phase lies the double holes side, where is marked with  $\text{N}$ .



#### (2) Identification of joint N phase

Joint "N" phase is on the double-headed torque bolt side.



### 2. Installation tools:

tape, megaohm,  $\phi 19$  tubular spanner, 12# ring spanner(hexagon open spanner) etc.

### 3. Installation steps

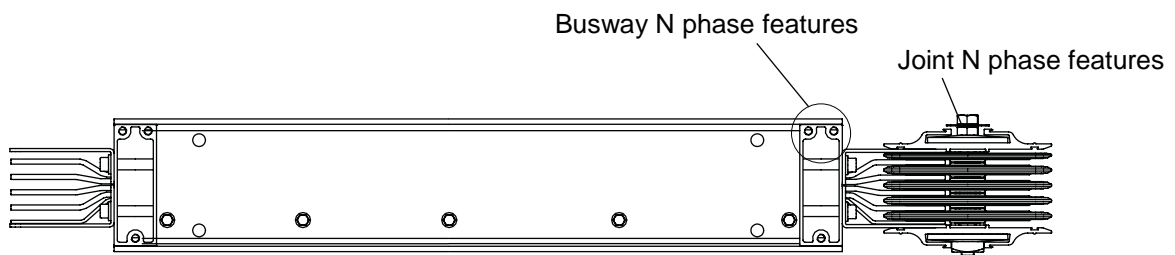
#### (1) Pre-installation procedure

- ◆ Check out the busway and joint per the installation material;
- ◆ Inspect the busway and joint, make sure they are in good condition;
- ◆ Megaohm test each busway before installation, the insulation resistance shall be more than 100M $\Omega$ ;
- ◆ Prepare to install.

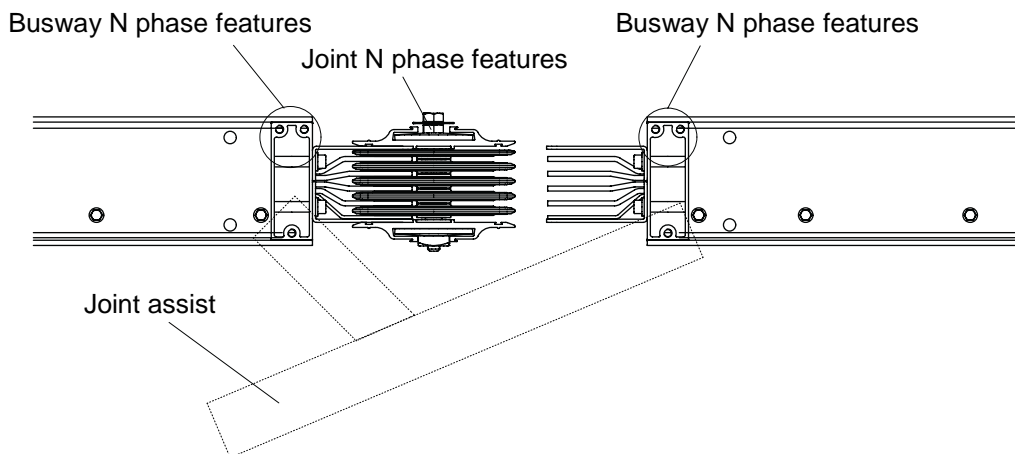
# Installation of busway and joint

(2)

- ◆ Put the busway on the overhead support;
- ◆ Loosen the double-headed torque bolt of joint;
- ◆ Assemble the joint to busway with “N” phase matching with each other ( Note: failure to fix the bolt may cause fall of joint).

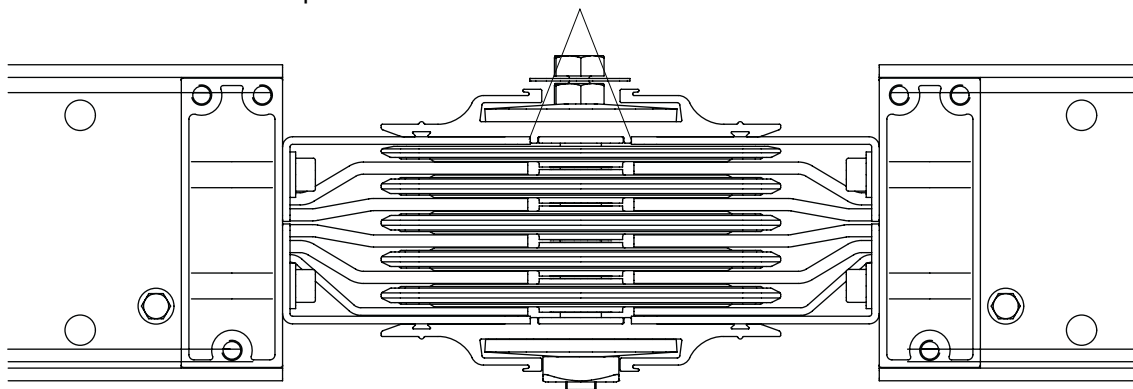


(3) Assemble the next busway to the other side of joint. (Joint assist will make the installation easier)



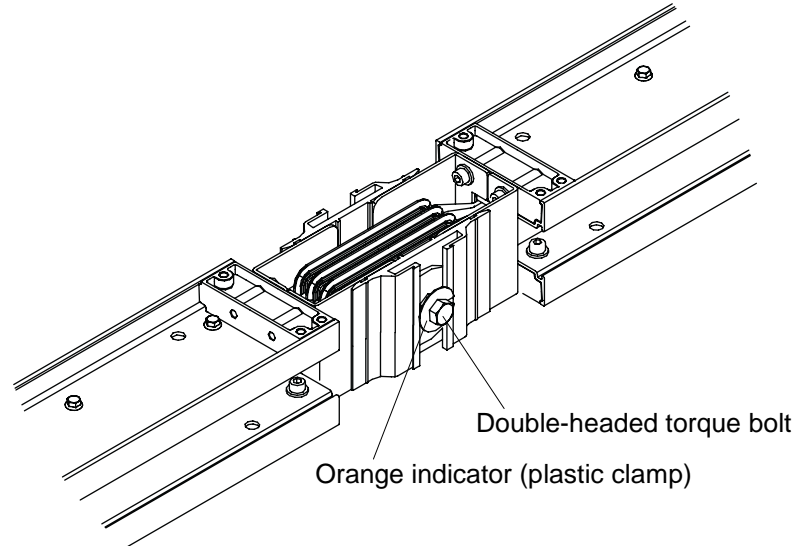
(4) Position the busway and joint to make sure reliable and complete connection.

Complete installation indicates the full connection here

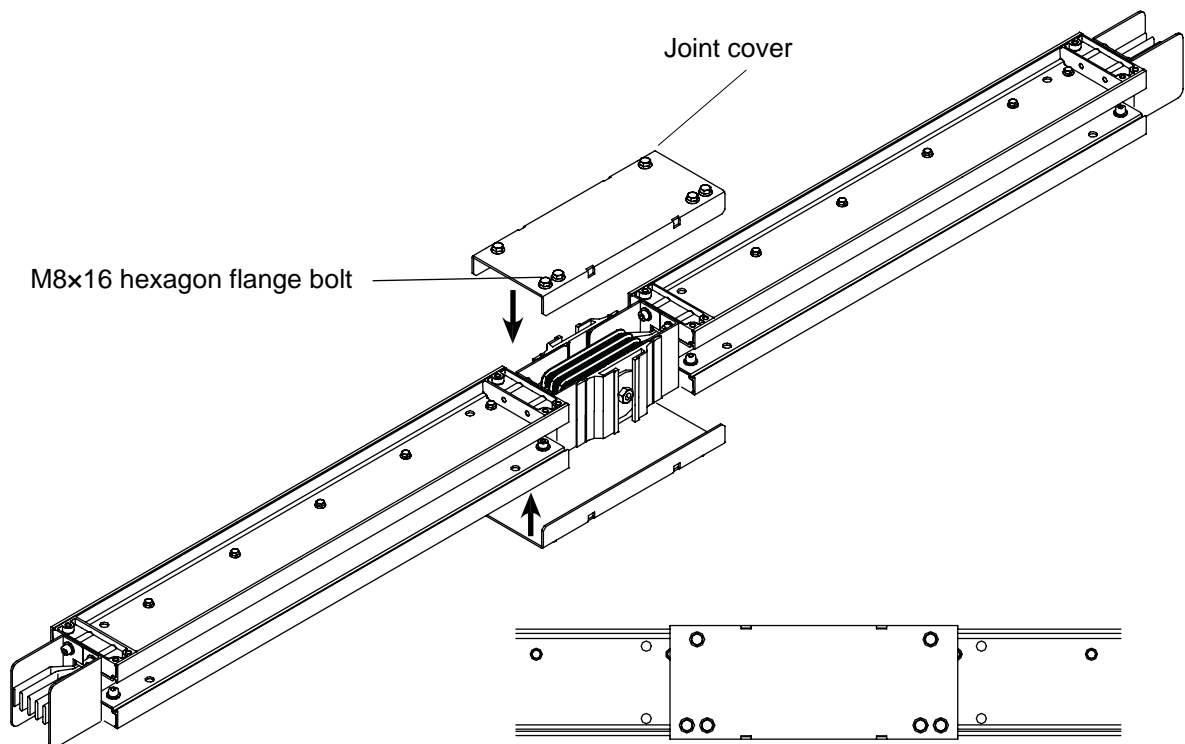


## Installation of busway and joint

(5) Tighten the double-headed torque bolt with a spanner until the top bolt head shears off and orange indicator falls off to achieve reliable connection of joint.



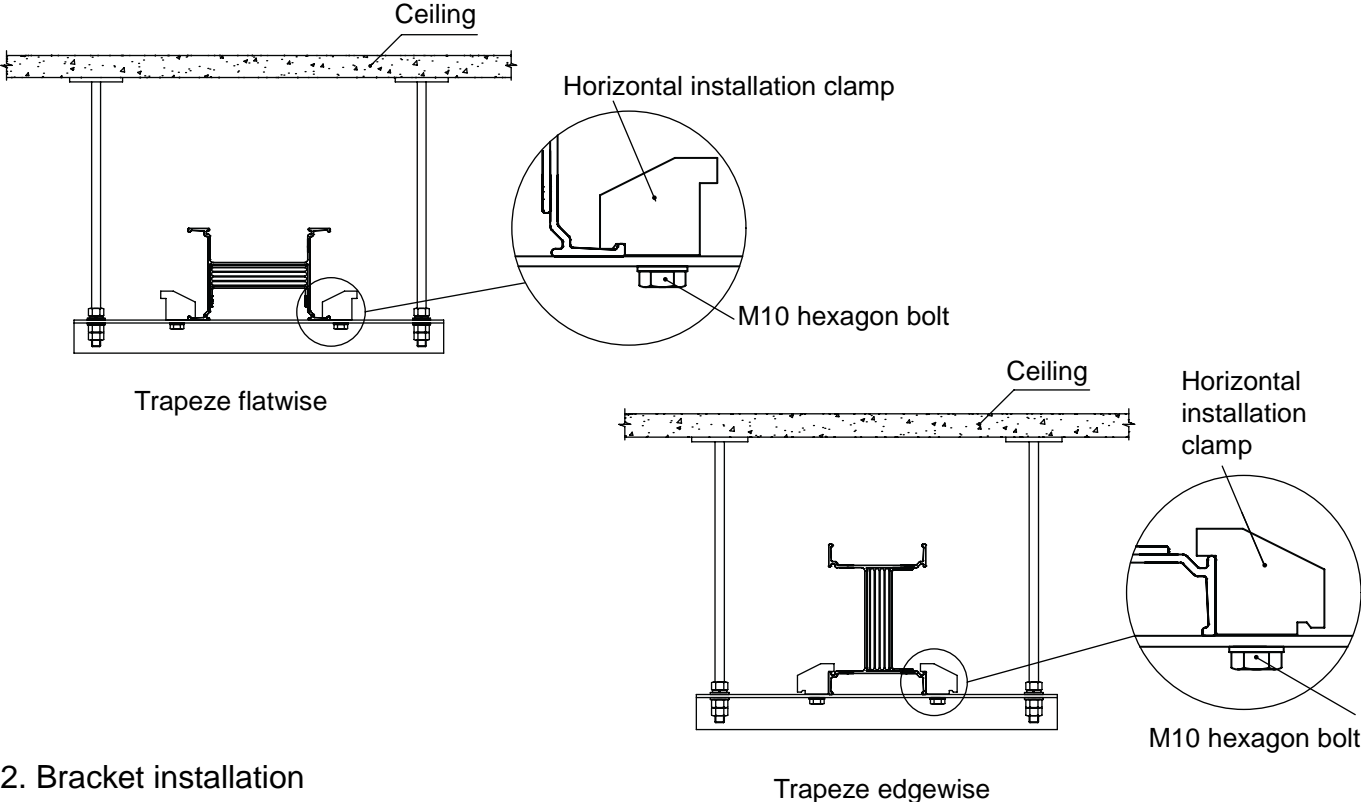
(6) Install the top, bottom cover plate and tighten the bolt by following steps shown below.



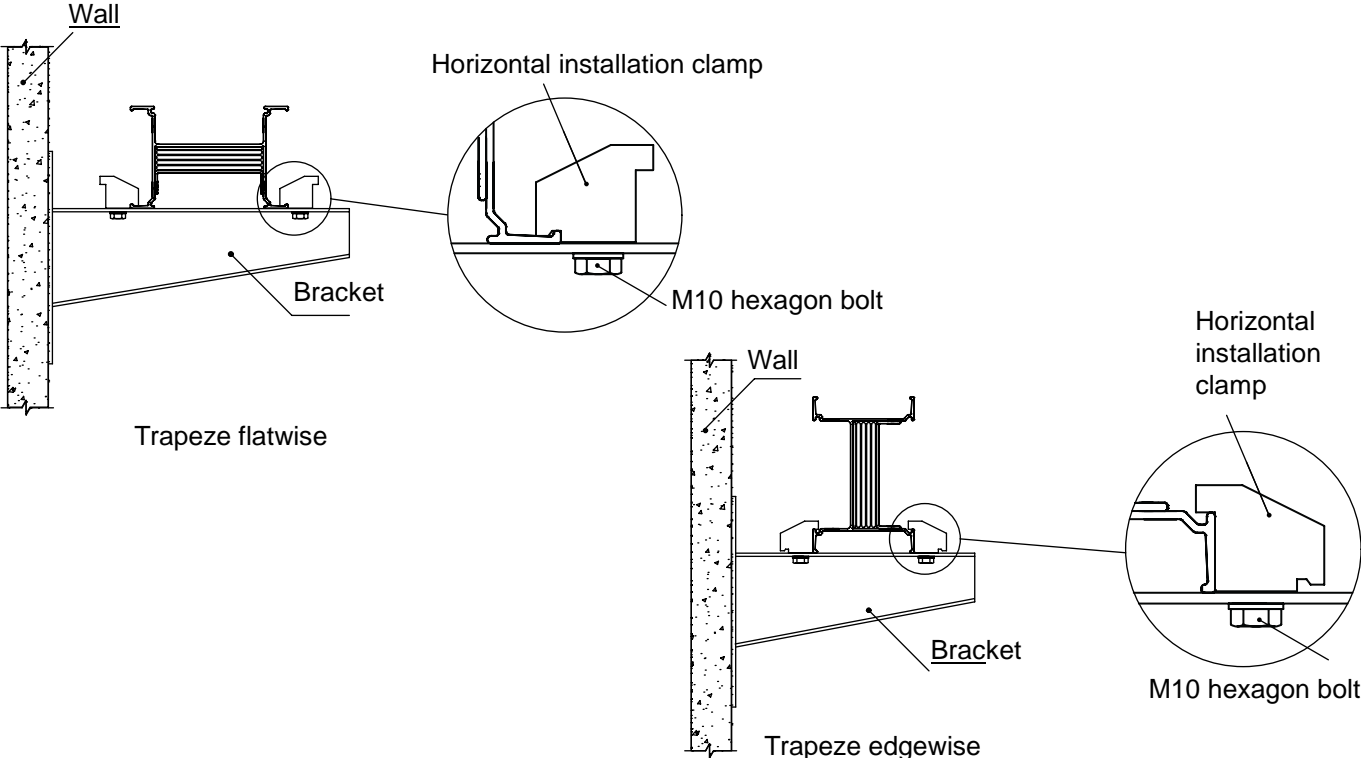
(7) Megohm the busway installed with joint, insulation resistance reading shall be more than 5 MΩ.

# Busway horizontal mounting

## 1. Overhead support mounting

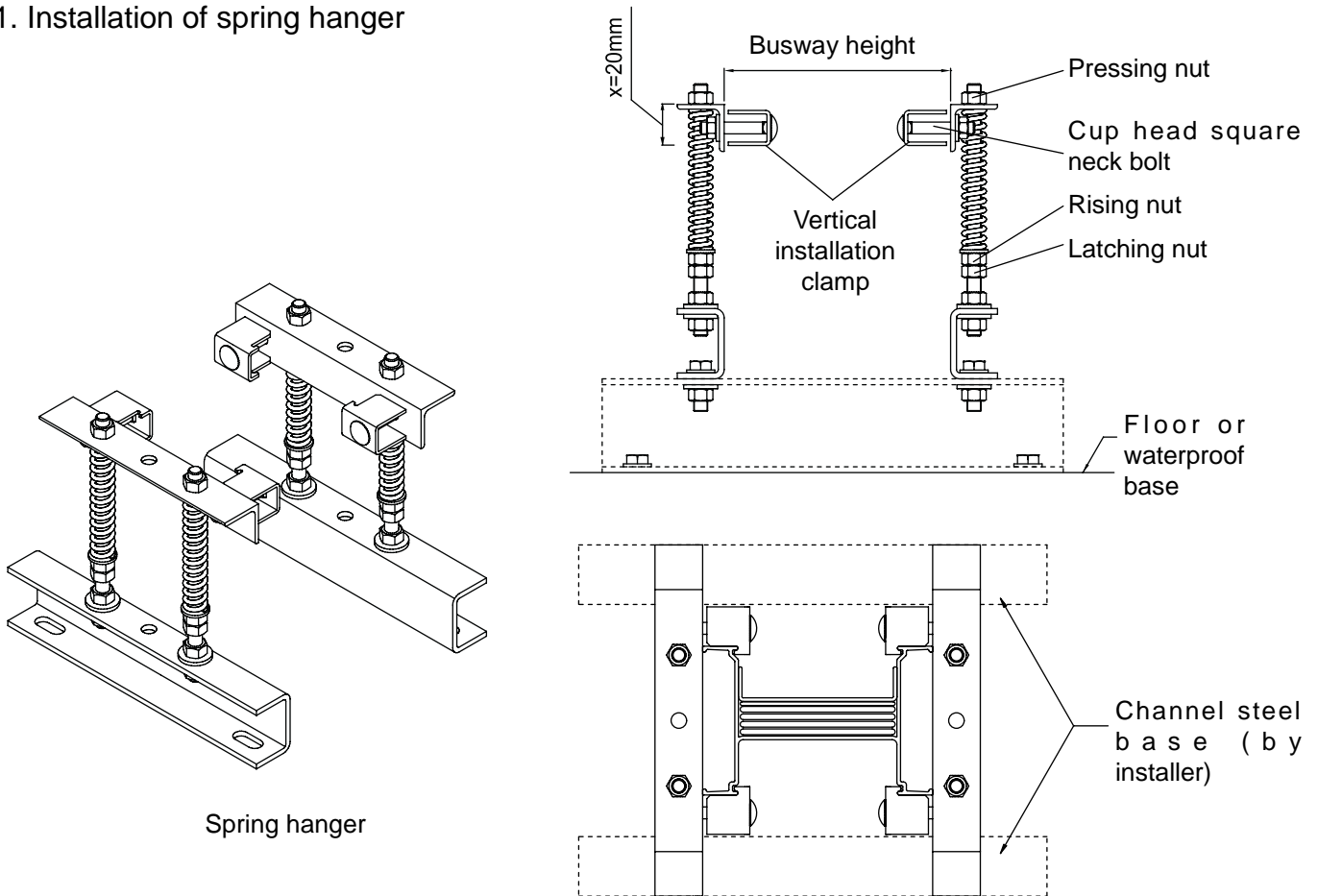


## 2. Bracket installation



## Busway vertical mounting

### 1. Installation of spring hanger



(1) Spring hanger features: (fig above)

(2) installation tool: 17# hexagon open spanner, 19# hexagon open spanner, etc.

(3) Installation steps:

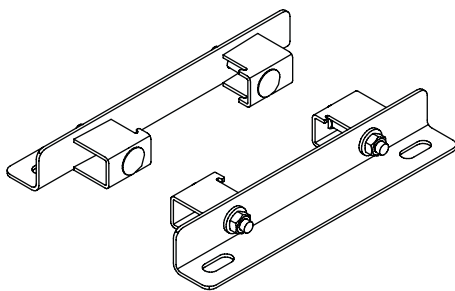
- ◆ Check the status of spring hanger;
- ◆ Position the busway as appropriate and keep its straightness;
- ◆ Adjust the pressing nut to compress the spring X about 200mm;
- ◆ Loosen the nut of cup head square neck bolt and attach the spring hanger to the busway;
- ◆ Secure the spring hanger to the channel steel base and tighten cup head square neck bolt;
- ◆ By following the steps above, after installed 4-5 floors, adjust the rising nut one by one from top floor to bottom floor to make sure spring hanger can carry the weight of busway spontaneously;
- ◆ Loosen the pressing nut as appropriate and tighten the latching nut of spring hanger.

**Note:**

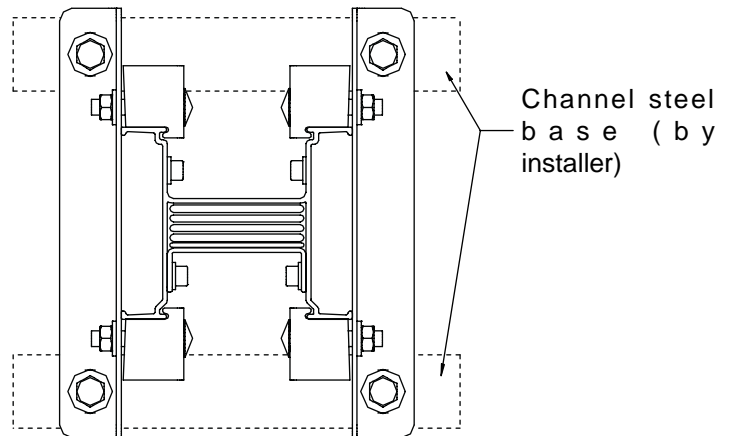
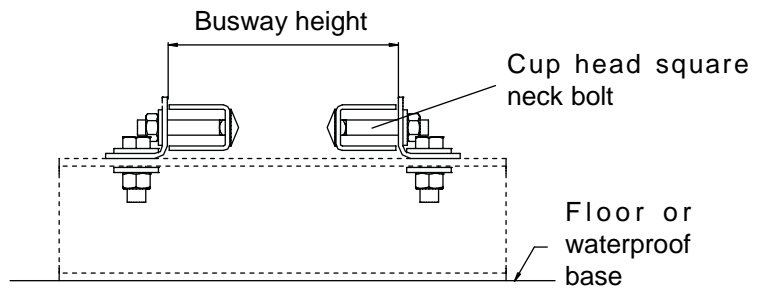
- ◆ when installation is completed, the busway offset angle shall be no more than 1 degree;
- ◆ Spacing of spring hanger shall be no more than 4 meters

# Busway vertical mounting

## 1. Fixed type support installation



Fixed type support



- (1) Fixed type support features (fig above)
- (2) installation tool: 17# hexagon open spanner, 19# hexagon open spanner, etc.
- (3) Installation steps:
  - ◆ Check the status of fixed type support;
  - ◆ Position the busway as appropriate and keep its straightness;
  - ◆ Loosen the nut of cup head square neck bolt and attach the fixed type support to the busway;
  - ◆ Secure the fixed type support to the channel steel base and tighten cup head square neck bolt.

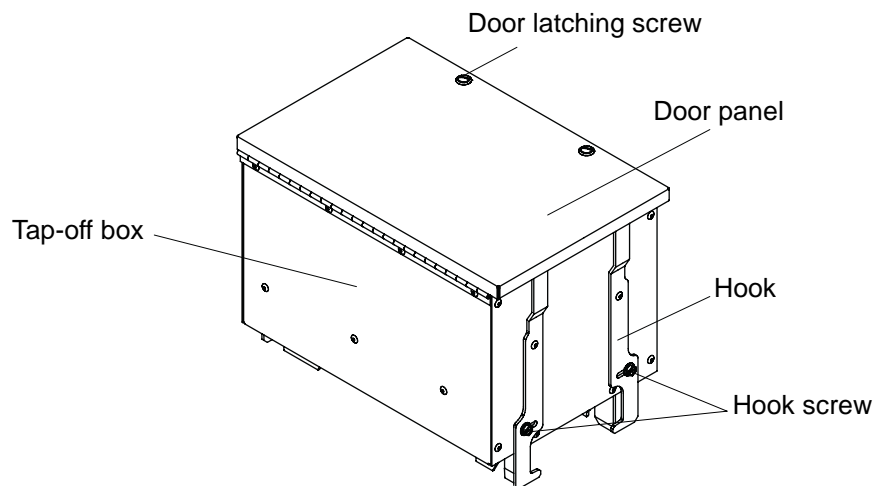
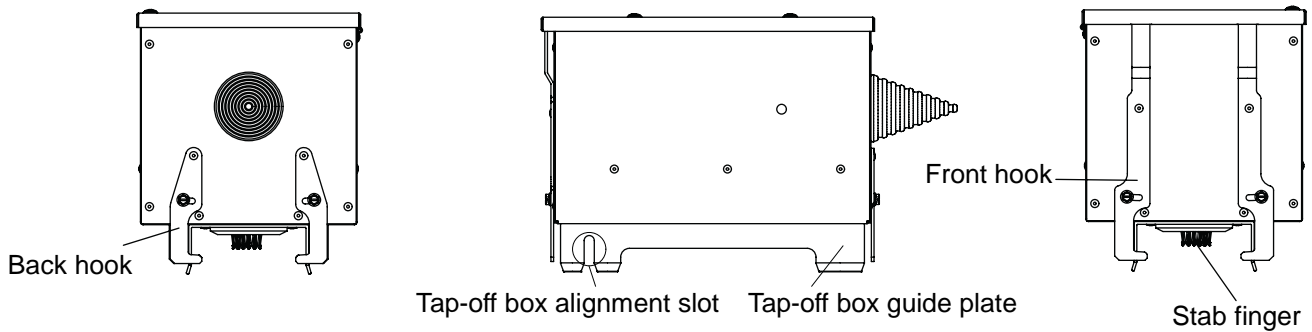
**Note:**

- ◆ when installation is completed, the busway bending angle shall be no more than 1 degree;
- ◆ Spacing of fixed type support shall be no more than 4 meters.

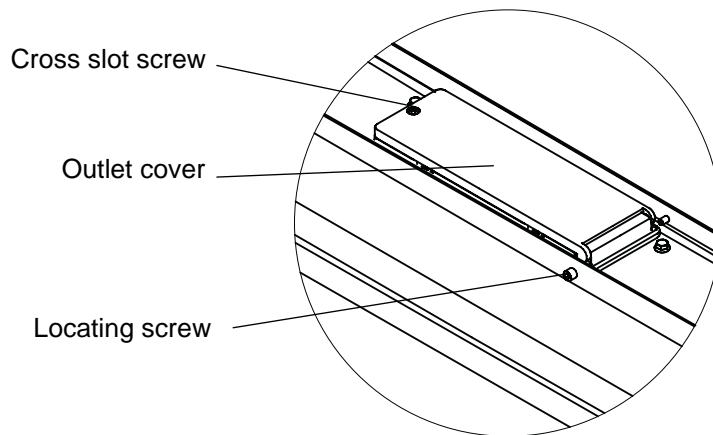
## Tap-off box mounting

### 1. Tap-off box features

#### (1) Identification of tap-off box



#### (2) Identification of plug-in busway



### 2. Installation tools:

Straight screwdriver, cross screwdriver, 10# ring spanner (hexagon open spanner) etc.

# Tap-off box mounting

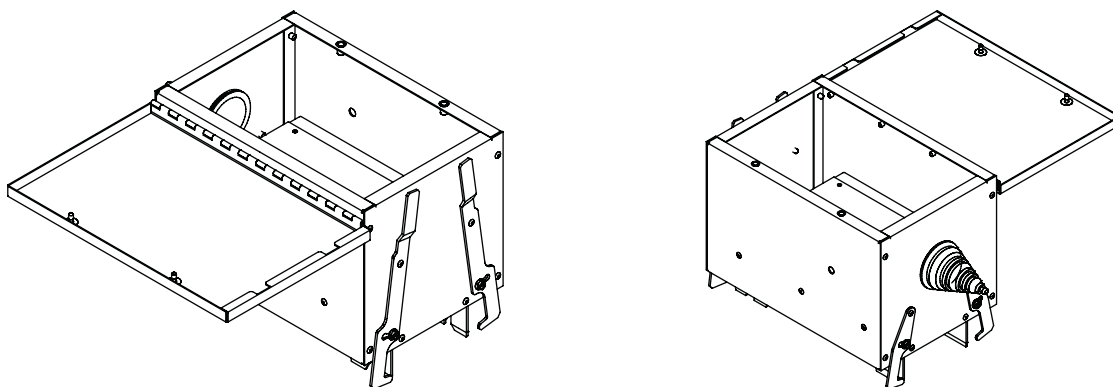
## 1. Installation steps

### (1) Pre-installation procedure

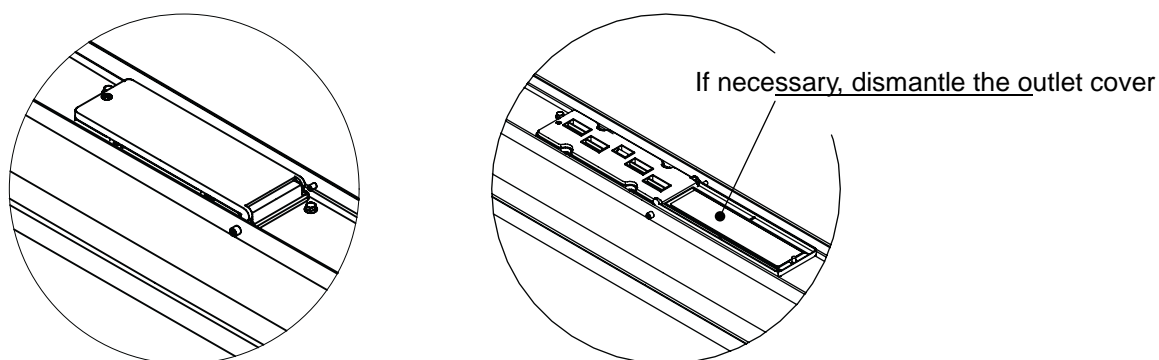
- ◆ Check out the tap-off box per the installation material;
- ◆ Check the tap-off box for possible concealed deformation;
- ◆ Prepare to install.

### (2) Loosen the latching screw and open the box;

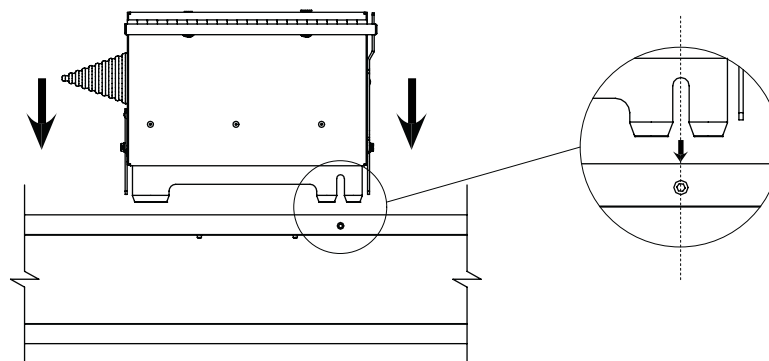
Loosen the hook screw and open both the front and back hook (Note: loosening the latching screw to an extent that hook can rotate).



### (3) Loosen the cross screw of outlet and open the outlet cover.

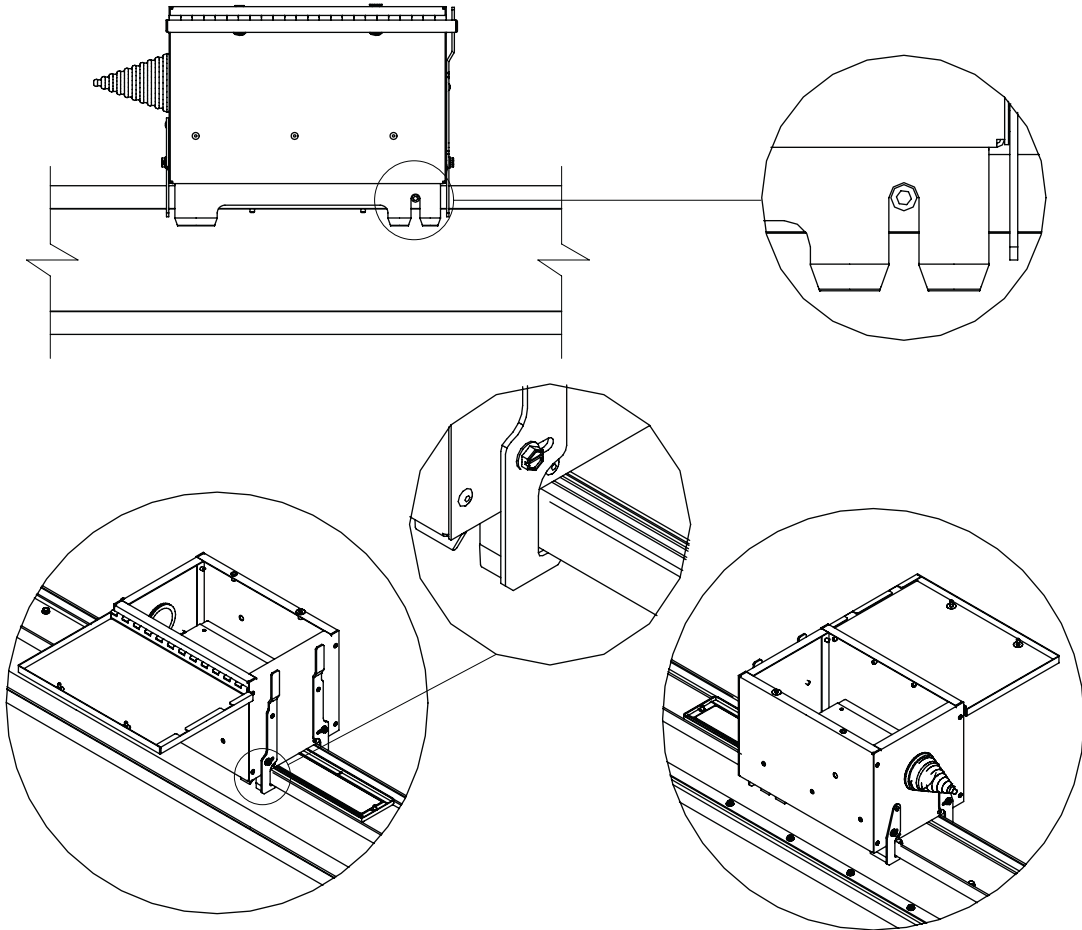


### (4) Make alignment of slot and locating screw and insert the tap-off box.

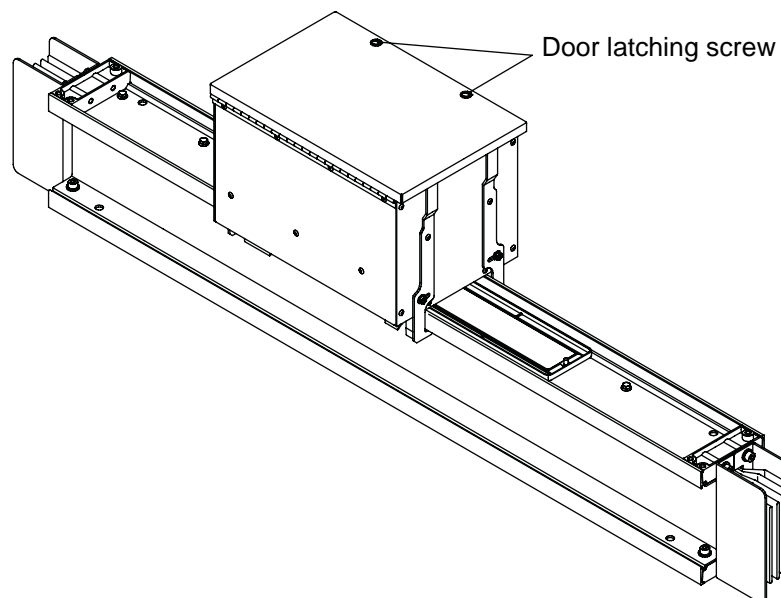


## Tap-off box mounting

(5) Reset the front and back hook and tighten the hook screw.



(6) Close the tap-off box and tighten the door latching screw.



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