

# JingZhun Machinery

## Yarn Storage Feeder Installation Instructions

### 1. Specifications

*Voltage: DC57V*

*Current: 0.3A (Depends on actual application)*

*Max Power: 60W*

*Average Power: 17W (Depends on actual application)*

*Yarn Diameter Allowance: 20D – 1000D*

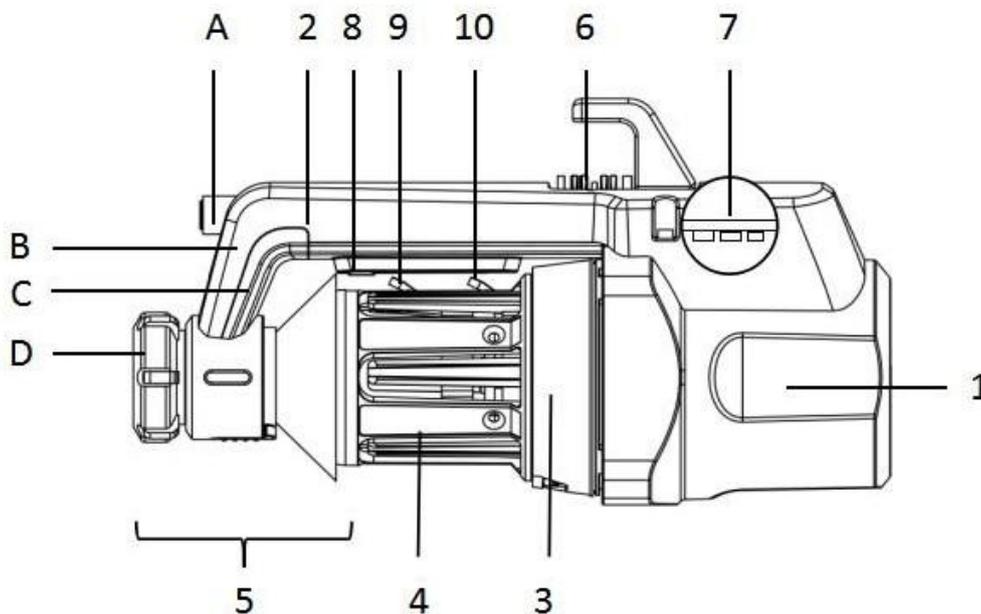
*Max Yarn Feeding Speed: 1100 meter/min*

*Weight: 1.8 Kg*

## 2. Main Parts & Switches

Main parts:

- |  |                                 |
|--|---------------------------------|
| 1. <i>Motor</i>                                | 6. <i>Pin Connector</i>         |
| 2. <i>Pedestal</i>                             | 7. <i>PCB</i>                   |
| 3. <i>Yarn twist Disc</i>                      | 8. <i>Yarn Feeding Sensor</i>   |
| 4. <i>Bobbin</i>                               | 9. <i>Yarn Storage Sensor</i>   |
| 5. <i>Yarn Feeding Tension Adjustment Unit</i> | 10. <i>Yarn Incoming Sensor</i> |



<i>Switches / Sockets</i>	<i>Function</i>
<i>A.Power Button</i>	<i>Power on/off in total; Reset after alarm launched.</i>
<i>B.Signal/data port</i>	<i>Data transfer with Computer</i>
<i>C.Signal Light</i>	<i>Show the conditions of Storage Feeder working.</i>
<i>D.Tension adjusting button</i>	<i>Adjust feeding yarn's tension</i>

Accessories

1. *Power supply Cables & Signal cables*
2. *Yarn threading hook*
3. *Backup Spare parts: Tension cover lid.*

### 3. Installation and Assembly

Obey following steps to accomplish the installation correctly:

Connect and tighten the Yarn Storage Feeder with pedestal or frame by screw and install cables in proper position.

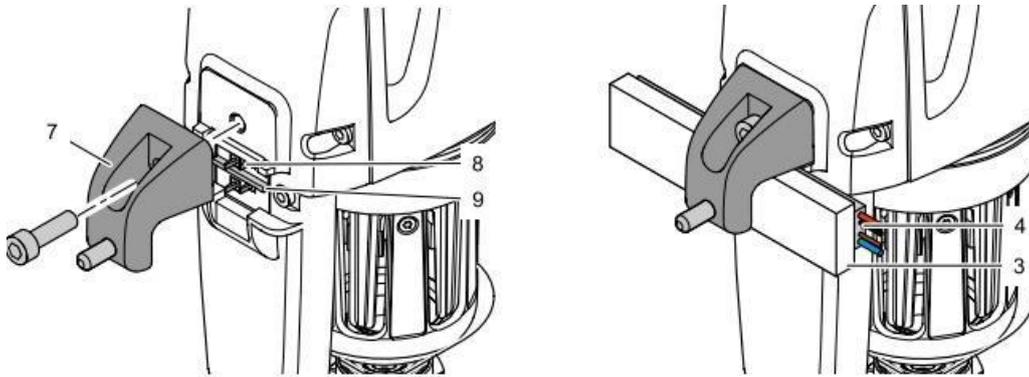
**Caution:** There is risk of damaging electronic components if you don't obey the guidance as below sentences and pictures show:

#### Vertical Hanging:

The Blue cable should be at the same side as signal light (bottom side in the right-side picture). The Red cable should be at the same side as motor (Top side in the right-side picture).

After installation, there is Nothing in between Power & Signal Cable (No.4 in below right-side picture) and Pin Connector of Yarn Storage Feeder.

The straight shape of cable should match straight shape of pin connector groove. No obliquely assembly between cable and pin groove.

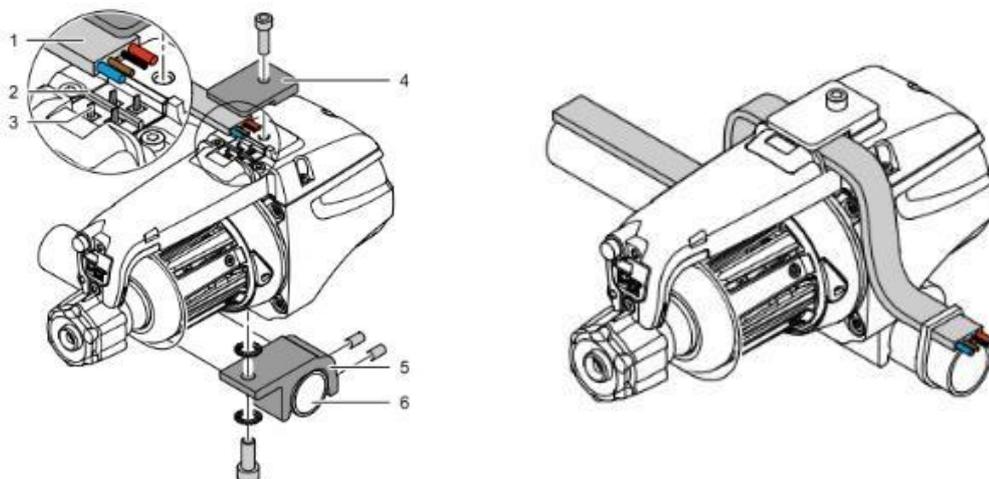


#### Horizontal Hanging:

The Blue cable should be at the same side as signal light (left side in below left-side picture). The Red cable should be at the same side as motor (right side in below left-side picture).

After installation, there is Nothing in between Power & Signal Cable (No.1 item in below left-side picture) and Pin Connector (No.2 & 3 items) of Yarn Storage Feeder.

The straight shape of cable should match straight shape of pin connector groove. No obliquely assembly between cable and pin groove.

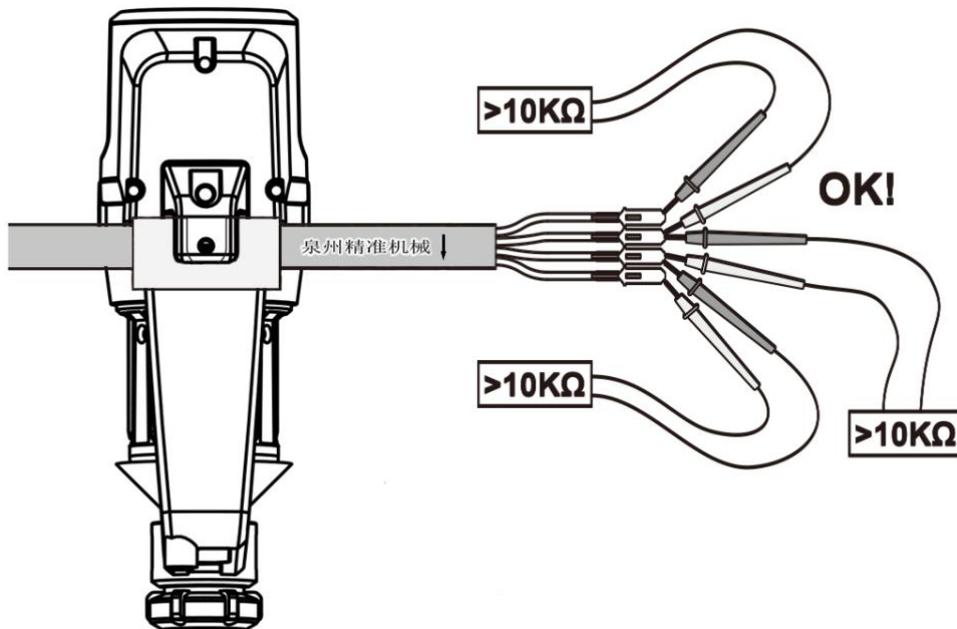


## Check after installation:

*Cable and Installation position:*



*The resistances are more than 10KΩ when cables connect with pins correctly.*



*Corresponding connection of cables:*



*Switch on power after cables are connected according to the guidance in above picture.*

*After Power is switched on, the pilot lamps flash red and green color in turns several times if power cables are connected correctly.*

*Checking the STOP signal of Yarn Storage Feeder: Switch on power of Yarn Storage Feeder to check, actively make Yarn Storage Feeder launch its alarm by running yarn storage function but no yarn incoming and stored. Measure resistance values between two alarm cables by a multimeter (Red probe contact black cable. Black probe contact brown cable). The value should be 80 to 120  $\Omega$  if signal cables are connected correctly and working properly. If the value is out of above resistance range, check Pins are connected properly, check multimeter working and contact properly, check the Yarn Storage Feeder's alarm signal working properly and so on. Don't connect alarm cable of machines with Yarn Storage Feeder until all signal cables and power cables on Yarn Storage Feeder are all checked in above method and working well.*

## **4. Operation and Maintenance**

### **Initiating**

*Put the yarn through each Yarn Storage Feeder, Switch on the start button, Yarn Storage Feeder is ready for incoming yarn storage. There will be enough circles of yarn on the bobbin. Otherwise, make enough yarn circles(length)on the bobbin to make Yarn Storage Feeder ready for running.*

### **Putting incoming Yarn through the Storage Feeder**

*Firstly insert the yarn hooking tool through the ceramic eye(hole) on Yarn Twisting Disc (No.3 item in 1st picture of this Menu). Continuously, insert this yarn hooking tool through the yarn incoming ceramic eye(hole)at the end side of Yarn Storage Feeder. Secondly, hook the yarn and pull the yarn hooking tool backwards till yarn go through ceramic eye on Yarn Twisting Disc in order to make the incoming yarn installed properly.*

*3<sup>rd</sup>, insert the yarn hooking tool through the ceramic eye(hole) on the Yarn Feeding Tension Adjustment Unit. Continuously, don't stop inserting this yarn hooking tool until it reaches the joint position between the Tension Cover Lid and the Bobbin. 4<sup>th</sup>, hook the yarn and pull the yarn hooking tool backwards till yarn go through ceramic eye on the Yarn Feeding Tension Adjustment Unit in order to make the incoming yarn installed properly.*

*5<sup>th</sup>, press the button lightly, the Yarn Storage Feeder twists the incoming yarn on Bobbin automatically.*

### **Tension Adjustment on Feeding Yarn**

*Adjust the yarn tension referring to the yarn's type and hardness.*

*Turn the tension adjusting button left or right to set up the tension properly.*

*Tension comes from the pressure on the Bobbin from the Tension Cover Lid.*

*Increase / decrease the pressure by turning button in different directions.*

**Caution:** *Try making yarn tension even and stable. Make sure the effective connection of the tension adjusting button with the Yarn Feeding Tension Adjustment Unit.*

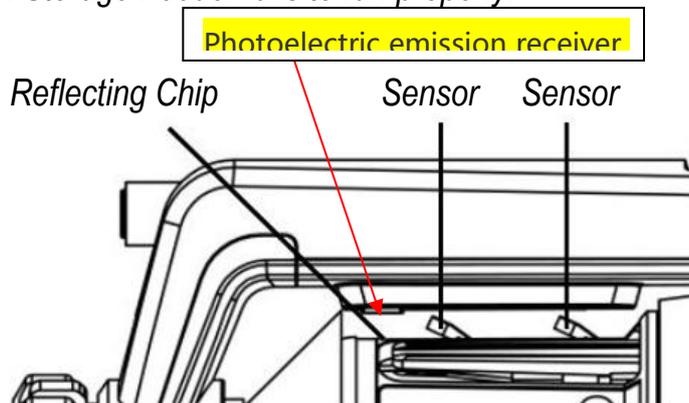
## Change or Clean the tension cover lid

The lid can be taken off from the Yarn Storage Feeder to clean or change new one. Pull out the tension adjusting button towards yarn feeding direction. Take out the Tension cover lid in between the Yarn Feeding Tension Adjustment Unit and Bobbin for cleaning or change.

## Sensors Cleaning

Turn the Bobbin till the sensors are facing outside. Strongly recommend that only use pneumatic gun to blow dirt and flow away. Clean the reflecting chip on yarn feeding sensor by Non-woven fabrics with water, **Swab the** Photoelectric emission receiver head **with water/alcohol**.

**Caution:** Turn the sensors back to its original position after cleaning otherwise the Yarn Storage Feeder fails to run properly.



## Operation & Working Status

*There are 4 status after plug in:*

- 1. Power off - indicating light off*
- 2. Yarn storage ready– Yarn Twisting Disc rotates for 7 seconds, indicating light in Red, no alarm signal output.*
- 3. Abnormal status – Sensors detect signal of improper running status, motor stops, indicating light in Red and launch the alarm.*
- 4. Proper running status – motor and bobbin turning in a suitable speed to feed the yarn properly.*

*After plug in, the indicating light flashes in Green/Red colors for few seconds. At power off status, switch on power-on button, the Yarn Storage Feeder is ready for yarn storage.*

*At any status, press on power-off button for 2 seconds, the Yarn Storage Feeder is power-off.*

*After power-on, the Yarn Storage Feeder turns automatically its motor and bobbin to stores up incoming yarn at about 7 seconds. The indicating light flashes in Green if storage successfully. Otherwise, it flashes in Red and launch the alarm.*

*At working status, the indicating light flashes in Red and launch alarm signal if sensors detect abnormal running in motor. (eg. Too high resistance force from incoming yarn to be driven by the motor)*

*At working status, the indicating light flashes in Red and launch alarm signal if sensors detect abnormal incoming yarn (eg. Broken yarn).*

*When the indicating light in Red, press the power button, the Yarn Storage Feeder turns automatically its motor and bobbin to stores up incoming yarn at about 7 seconds again. The indicating light flashes in Green if storing up successfully. Otherwise, it flashes in Red and launch the alarm.*

*When the motor or bobbin are jammed, the indicating light flashes in Red and launch the alarm. After fixing the problem causing jam, press the power button, the Yarn Storage Feeder turns automatically its motor and bobbin to stores up incoming yarn at about 7 seconds again. Make sure the reason of causing jam is correctly found and problem fixed (eg. Yarn twisted in somewhere improperly), otherwise it still flashes in Red and launch the alarm after restart.*