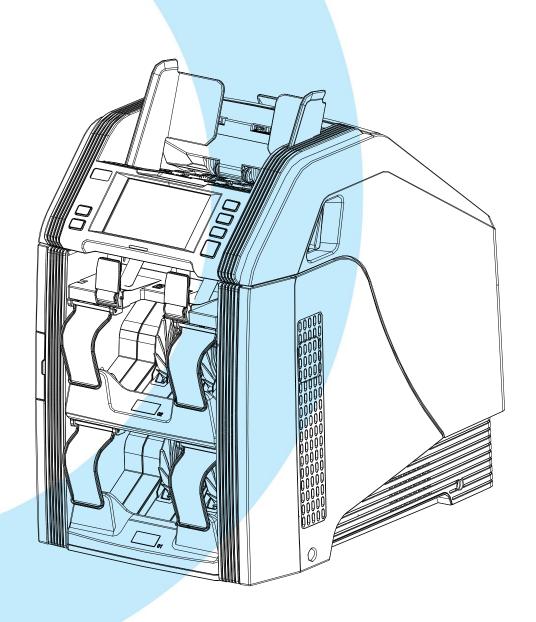


# CM200V Maintenance Manual (Secondary)



## **Document History**

No. and name	Version	Date	Revision description	Personnel involved
CM200V Maintenance Manual (Secondary)	V1.0	12-12-2013	Created	Prepared by: Chen Yinglong, Zhang Fu Approved by: Chen Baisong

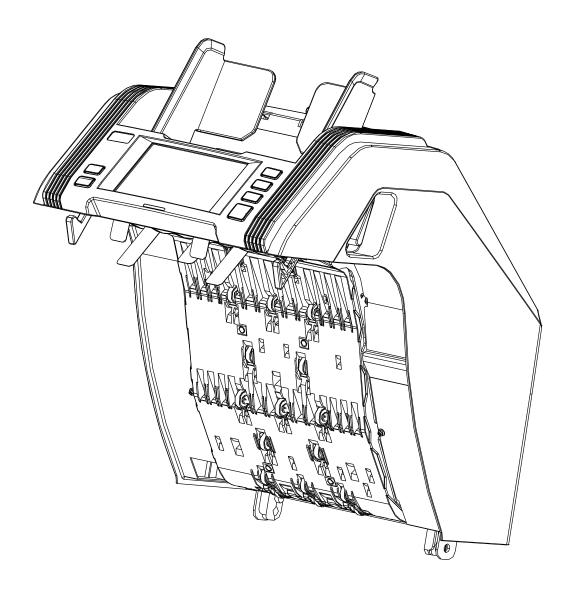
## **Contents**

1	CM200V Up Machine Unit	1
1.1	Necessary tools	
1.1.1	Standard dismounting and installation tools	2
1.1.2	Cleaning and maintenance tools	
1.2	Dismounting and installation of components and parts of up machine unit	2
1.2.1	Dismounting, installation and adjustment of width adjustment assembly	2
1.2.1.1	Dismounting and installation of width adjustment assembly	
1.2.1.2	Dismounting and installation of left and right baffles of width adjustment assembly	
1.2.2	Dismounting and installation of OP panel	4
1.2.2.1	Dismounting and installation of touch screen and key board	5
1.2.3	Dismounting and installation of note feeder assembly	7
1.2.3.1	Dismounting and installation of note inlet upper plate	7
1.2.3.2	Dismounting and installation of note return wheel support assembly	8
1.2.3.3	Dismounting and installation of clutch	.13
1.2.3.4	Dismounting and installation of brake	.15
1.2.3.5	Dismounting and installation of feeder roller shaft assembly	.16
1.2.3.6	Dismounting and installation of note pickup wheel shaft assembly	.18
1.2.4	Dismounting and installation of note return upper transport plate	
1.2.5	Dismounting and installation of upper main transport assembly	.22
1.2.6	Dismounting and installation of back assembly	.25
1.2.7	Dismounting of code disc	.27
1.2.8	Dismounting and installation of upper large buckle	.30
1.2.9	Dismounting and installation of main control board	.32
1.2.10	Dismounting and installation of synchronous belt	.33
2	CM200V Low Machine Unit	35
2.1	Necessary tools	36
2.1.1	Standard dismounting and installation tools	.36
2.2	Dismounting and installation of CM200V low machine unit	36
2.2.1	Removal of CM200V low machine unit from the complete machine	.36
2.2.2	Dismounting and installation of note return port lower plate assembly	.36
2.2.3	Dismounting and installation of upper and lower plate assembly of note stacker	.37
2.2.4	Dismounting and installation of note return port support plate assembly	.38
2.2.5	Dismounting and installation of upper plate assembly of upper outlet	.38
2.2.6	Dismounting and installation of lower plate assembly of upper outlet	.39
2.2.7	Dismounting and installation of note stacking wheel assembly	.40
2.2.8	Dismounting and installation of roof assembly of lower pinwheel	.42
2.2.9	Dismounting and installation of upper plate assembly of lower outlet	.43
2.2.10	Dismounting and installation of lower plate assembly of lower outlet	
2.2.11	Dismounting and installation of fixing frame assembly of overfill sensor	
2.2.12	Dismounting and installation of commutation block	
2.2.13	Dismounting and installation of upper and lower plate assemblies of main transport	47
2.2.14	Dismounting and installation of corner transport plate assembly	.48
2.2.15	Dismounting and installation of transport wheel assembly and synchronous belt	



## 1 CM200V Up Machine Unit

YT4.109.2183





#### 1.1 Necessary tools

#### 1.1.1 Standard dismounting and installation tools

Cross screwdriver (long-handled and short-handled), straight screwdriver, nipper plier, socket head screw wrench.

#### 1.1.2 Cleaning and maintenance tools

Banister brush, soft cloth, alcohol, lubricating grease

### 1.2 Dismounting and installation of components and parts of up machine unit

#### 1.2.1 Dismounting, installation and adjustment of width adjustment assembly

#### 1.2.1.1 Dismounting and installation of width adjustment assembly

See Maintenance Manual for CM200V (Primary) for specific adjustment steps

#### 1.2.1.2 Dismounting and installation of left and right baffles of width adjustment assembly

#### Dismounting steps:

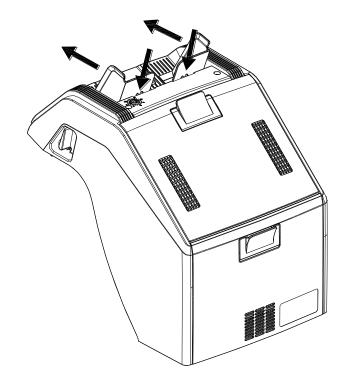
Press and hold the ejection arm pointed by the solid arrow shown in the figure behind the baffle with your finger and push the baffle forward in the direction of another solid arrow to remove.

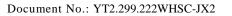
#### Assembly steps:

After aligning the tenon behind the baffle to a rack hole inside the width adjustment assembly, push inward with a little bit of force and then a crisp sound can be heard indicating that the buckle position is right, i.e. the assembly is properly completed.

#### *Note:*

Please note the "Upright" arrow on the back of the baffle and put the baffle in the direction of the arrow to avoid inverting. Please also pay attention to distinguishing the left and right baffles.







S/N	Code	Description	Remarks
1	YT8.080.615	CM200V left width adjustment plate	
2	YT8.080.616	CM200V right width adjustment plate	



## 1.2.2 Dismounting and installation of OP panel

#### Dismounting steps:

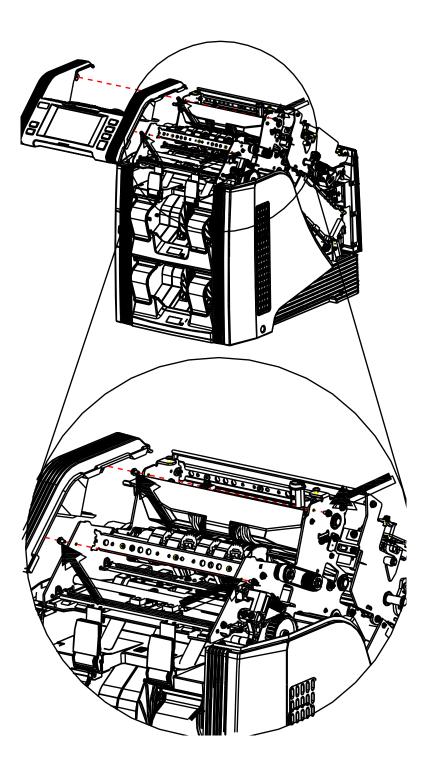
- 1. Remove the upper housing;
- 2. Remove the width adjustment assembly;
- 3. Remove the four M6X6 combination screws pointed by the four solid arrows shown in the figure.
- 4. Pull the OP panel forward gently until the short cable connecting with the OP panel assembly is almost straight.
- 5. Pull out cable plugs on the screen panel and key board one by one, after which the dismounting is completed.

#### Assembly steps:

Installation steps are reverse to dismounting steps.

#### Note:

When OP panel assembly is put 1 to the up machine unit (NV components have been installed), the upper edge of the NV lower plate must be inserted into the middle of the split of OP panel (the edge of the NV lower plate is clamped at the split of the OP panel). See dismounting note validator (NV) in Maintenance Manual for CM200V (Primary) for details.





# 1.2.2.1 Dismounting and installation of touch screen and key board

#### Dismounting steps:

- 1. Remove the OP panel assembly and put it on the desktop, facing down (it's necessary to put such articles as pearl wool on the desktop to protect the appearance of the part.)
- 2. Remove the M3x6 cross recessed round head screws shown in the figure to take out the touch screen and key board.

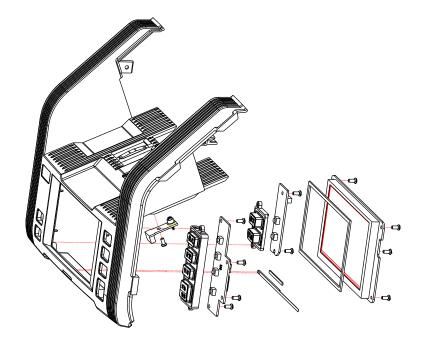
#### Assembly steps:

Dismantle the OP panel assembly and put it on the desktop, facing down (it's necessary to put such articles as pearl wool on the desktop to protect the appearance of the part.)

Put the touch screen and key board in the right positions and tighten screws to complete the assembly.

#### *Note:*

- 1. Align the two small holes on the indicator plate to the two plastic pillars on the upper lamp cover; properly arrange the indicator wire and plug it firmly in the plate socket with four keys to prevent poor contact.
- 2. When the keys have been assembled, try the keys several times to prevent keys from being stuck.





S/N	Code	Description	Remarks
1	YT6.363.1805	Hot melting assembly of CM200V-OP panel	
2	S.0072007RS	CM200V screen	
3	YT2.503.289	CM200V two-key board	
4	YT2.503.288	CM200V four-key board	
5	YT2.898.091	Note inlet sensor plate of CM200V	
6	YT2.503.290	CM200V LED panel	
7	YT4.853.6494	Cable connecting key boards	
8	YT7.840.467	Dust-proof sponge of CM200V touch screen	
9	YT7.840.471	CM200VLED sponge strip	
10	YT8.080.1244	CM200V key-P2	
11	YT8.080.1243	CM200V key-P4	



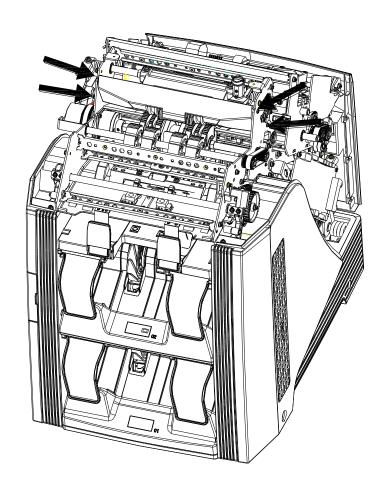
- 1.2.3 Dismounting and installation of note feeder Assembly
- 1.2.3.1 Dismounting and installation of note inlet upper plate

#### Dismounting steps:

- 1. Remove the upper housing;
- 2. Remove the width adjustment assembly;
- 3. Remove the OP panel assembly;
- 4. Remove the two M3X6 combination screws on the left and the two M3X6 cross recessed round head screws on the right pointed by the solid arrow shown in the figure.
- 5. Lift the note return support upward to remove the note inlet upper plate.

### Assembly steps:

Installation steps are reverse to dismounting steps.



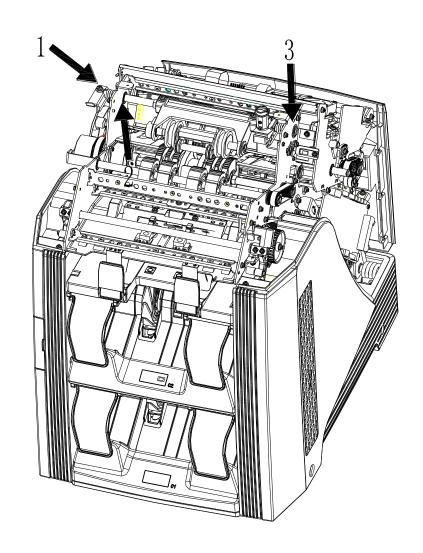
S/N	Code	Description	Remarks
1	YT8.080.1331	CM200V note inlet upper plate	

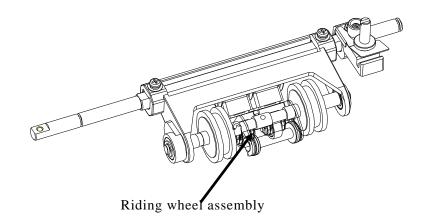


# 1.2.3.2 Dismounting and installation of note return wheel support assembly

#### **Dismounting steps:**

- 1. Remove the upper housing;
- 2. Remove the width adjustment assembly;
- 3. Remove the OP panel assembly;
- 4. Remove the note inlet upper plate;
- 5. Remove one M4X12 combination screw on the left pointed by No.1 solid arrow shown in the figure and the "torsional spring baffle of note return support" to take out the "torsional spring of note return support" on the left;
- 6. Remove E6 split washer, bearing and wave washer pointed by No.2 and No.3 solid arrows:
- 7. Take out the note return support assembly and "torsional spring of note return support" on the right;
- 8. The note return support assembly removed is shown in the figure.
- Riding wheel assembly can be 9. removed directly and the removed riding wheel assembly dismantled can be replacement of damaged components and parts one by one according to "Dismounting figure of riding wheel assembly".
- 10. The removed note return support assembly can be dismantled for replacement of damaged



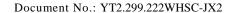






components and parts one by one according to "Dismounting figure of note return support assembly".

11. The removed note inlet pinch roller assembly can be dismantled for replacement of damaged components and parts according to "Dismounting figure of note inlet pinch roller assembly".



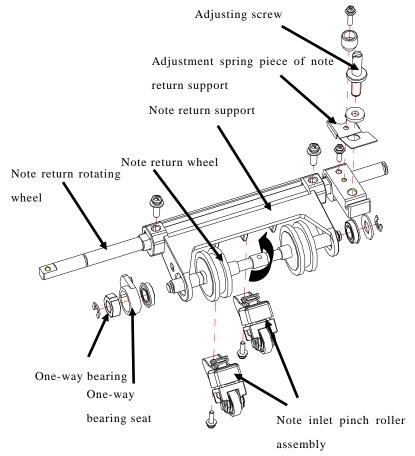


#### Assembly steps:

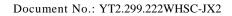
Installation steps are reverse to dismounting steps.

#### Note:

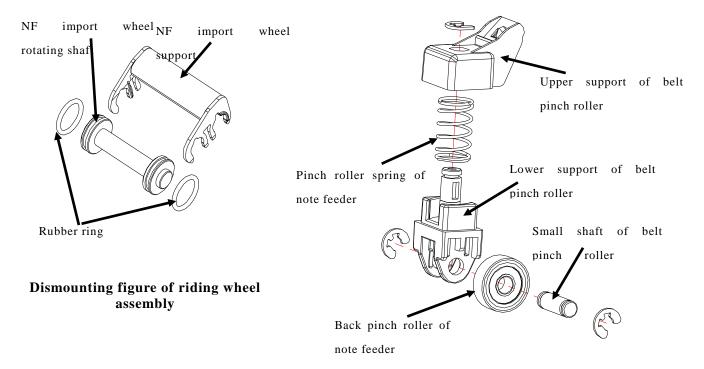
- 1. Start NV first to facilitate operations;
- 2. Before dismounting and installation, twist the adjusting screw for feeder roller clearance to the highest to maximally release torsion of the "torsional spring of note return support";
- 3. Because the torsion of two "torsional springs of note return support" is large, proper reverse torsion should be applied against the torsion from the spring to remove parts easily and hands should be also protected from being scratched by parts when the "torsional spring baffle of note return support" and bearings both ends in are removed.
- 4. Place the one-way bearing with the side with letters facing inward. The assembled reverse wheel can rotate in the direction of the solid turning arrow.



Dismounting figure of note return support assembly







Dismounting figure of note inlet pinch roller assembly



S/N	Code	Description	Remarks
1	YT8.381.554	Torsional spring of CM200V note return wheel assembly	
2	S.0040604RS	Wave washer 16MM	
3	YT8.043.3882	Adjustment spring piece of CM200VNF note return support	
4	YT8.050.786	CM200V adjusting screw	
5	YT8.080.1542	CM200V note return wheel	
6	S.0170260RS	08-14-5.4 one-way bearing (anticlockwise)	
7	YT8.080.1107	One-way bearing seat	
8	YT6.363.1549	CM200V note inlet pinch roller assembly	2 groups
9	YT8.080.1387	Upper support of CM200V belt pinch roller	
10	YT8.381.555	CM200V pinch roller spring of note feeder	
11	YT6.101.1859	Lower support of CM200V belt pinch roller	
12	S.0170310RS	Back pinch roller of note feeder	
13	YT8.300.1603	Small shaft of CM200V belt pinch roller	
14	YT6.363.1551	CM200V riding wheel assembly	
15	YT8.080.1344	CM200VNF import wheel support	
16	YT8.050.794	CM200VNF import wheel rotating shaft	
17	YT8.080.1540	Rubber ring ID12.4WD1.8	2 pieces



## 1.2.3.3 Dismounting and installation of clutch

#### Dismounting steps:

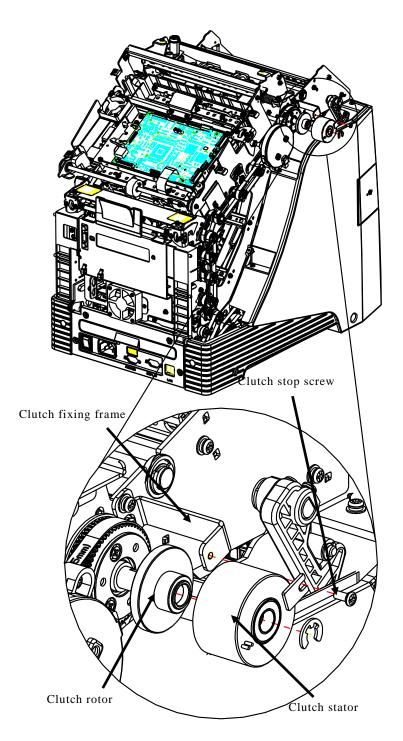
- 1. Pull out the clutch cable at the adapter;
- 2. Remove the clutch stop screw;
- 3. Remove the E6 split washer at the feeder roller shaft end;
- 4. Rotate the clutch stator to keep the stator buckle position away from the clutch fixing frame and take out the clutch stator in the direction of the shaft;
- 5. Remove the two M3 socket head cap screws of the clutch rotor fixed on the feeder roller shaft and take out the clutch rotor in the direction of the shaft;
- 6. Remove the synchronous belt M200 and take out the assembly and clearance sleeve of the clutch friction plate and synchronous pulley in the direction of the shaft;
- 7. Remove the three M2.5 countersunk head screws on the assembly of the clutch friction plate and synchronous pulley to separate the clutch friction plate from the synchronous pulley, when the clutch dismounting is completed.

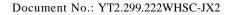
### Assembly steps:

Installation steps are reverse to dismounting steps.

#### *Note:*

Don't forget the clearance sleeve during installation.







After installation, please place the clutch cables according to the route and orientation prior to dismounting, so as to prevent the cable from being worn by such moving parts as synchronous belts.

S/N	Code	Description	Remarks
1	YT4.853.6478	Clutch (with cable)	



## 1.2.3.4 Dismounting and installation of brake

#### Dismounting steps:

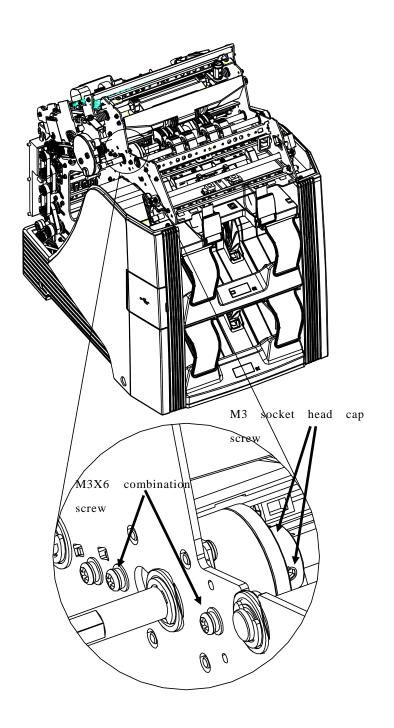
- 1. Pull out the brake cable at the adapter;
- 2. Remove the two M3X6 combination screws of the brake stator fixed on the left side plate;
- 3. Remove the two M3 socket head cap screws of the brake rotor fixed on the feeder roller shaft;
- 4. Now, the brake can move in the direction of the shaft and the brake can be removed after the feeder roller shaft assembly is dismantled.

#### Assembly steps:

Installation steps are reverse to dismounting steps.

#### *Note:*

The clearance between the brake stator and rotor should be adjusted to 0-0.2 mm during installation.



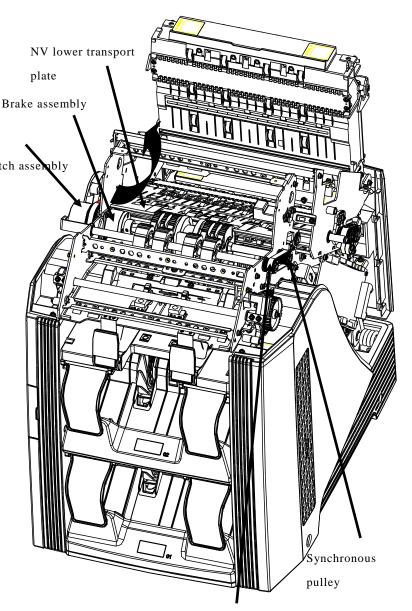
S/N	Code	Description	Remarks
1	YT4.853.6479	Brake cable	
2	S.0010410RS	Socket head cap screw M4X4	2



# 1.2.3.5 Dismounting and installation of feeder roller shaft assembly

#### **Dismounting steps:**

- 1. Remove the upper housing;
- 2. Remove the width adjustment assembly;
- 3. Remove the OP panel assembly;
- 4. Remove the note inlet upper Clutch assembly plate;
- 5. Remove the note return wheel support assembly;
- 6. Remove the clutch assembly, synchronous belt and synchronous pulley shown in the figure;
- 7. Release the set screw of the brake stator and rotor;
- 8. Remove E6 split washer, solid pin, M5 flat washer, 0814 flanged bearing and wave washer fixed on both ends of the feeder roller shaft;
- 9. Remove the four M3X6 combination screws in the front end of the first row of NV rubber wheel shaft and the three M3X6 combination screws in the front end of the second row of NV rubber wheel shaft used to fix the NV lower transport plate.
- 10. Lift the front end of the NV lower transport plate upward lightly until it is higher slightly than the maximum external diameter of the feeder roller and now, the feeder roller shaft assembly can move around in the direction of the shaft.



Synchronous belt



- 11. Move the feeder roller shaft assembly to the leftmost or rightmost to take out the assembly.
- 12. Now, take out the brake assembly.

Refer to "Adjustment of feeder roller shaft assembly" in the *Specifications* for *Debugging of CM200V Structural* Components for dismounting details of the feeder roller shaft.

#### Assembly steps:

Installation steps are reverse to dismounting steps.

#### *Note:*

- 1. When lifting the front end of the NV lower transport plate, do not apply excessive force, so as to prevent the transport plate from damage due to excessive deformation;
- 2. The wave washer should be installed on the left of the machine (the same side as the clutch).

S/N	Code	Description	Remarks
1	YT8.080.1141	Feeder roller of note pickup assembly	
2	YT8.050.793	CM200V intermediate feeder roller assembly	
3	S.0010411RS	Socket head cap screw M4X8	2
4	S.0040604RS	Wave washer 16MM	



# 1.2.3.6 Dismounting and installation of note pickup wheel shaft assembly

#### Dismounting steps:

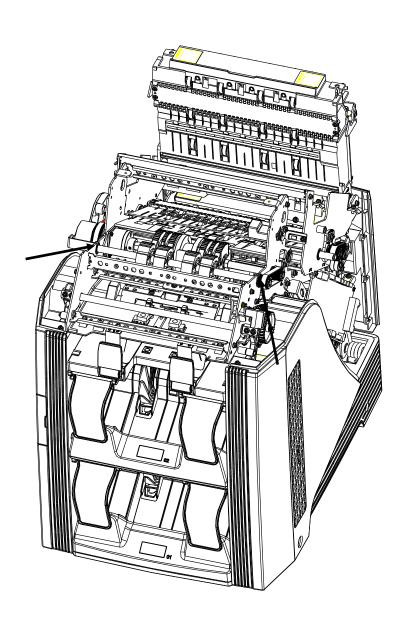
- 1. Remove the upper housing;
- 2. Remove the width adjustment assembly;
- 3. Remove the OP panel assembly;
- 4. Remove the synchronous belt, synchronous pulley, solid pin, M5 flat washer, 0814 flanged bearing and wave washer pointed by the arrows shown in the figure;
- 5. Take out the note pickup wheel shaft assembly from metal plate notches on the right and left sides, and then the dismounting is completed.

#### Assembly steps:

Installation steps are reverse to dismounting steps.

#### *Note:*

The wave washer is installed on the left side of the machine (the same side as the clutch).



S/N	Code	Description	Remarks
1	YT8.401.037	EPDM note pickup rubber wheel of note pickup assembly	
2	S.0040604RS	Wave washer 16MM	



# 1.2.4 Dismounting and installation of note return upper transport plate

#### Dismounting steps:

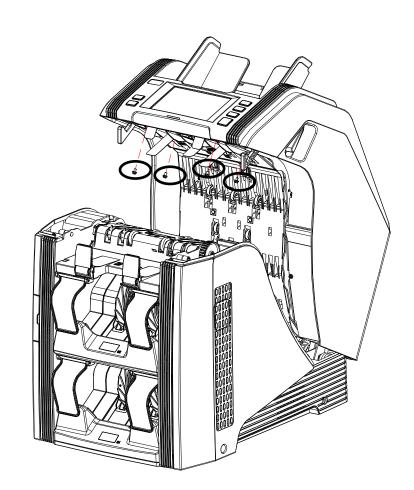
- 1. Open the upper part;
- 2. Remove the four M3X6 combination screws shown in the figure with a short-handled cross screwdriver:
- When the loosened note return 3. upper plate assembly tends to fall down, pull the assembly gently until the cable is exposed fully. Pull out the 5 sensor cables and remove the M3X6 combination screw for the ground wire at the note return upper plate with a screwdriver to remove the note return upper plate assembly from the complete machine.
- 4. The removed note return upper plate assembly can be dismantled for replacement of damaged components and parts one by one according to the figure.

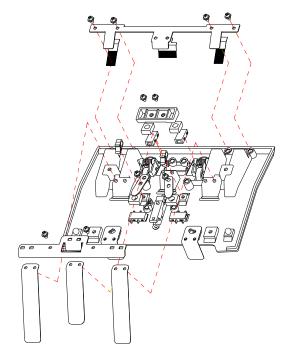
#### Assembly steps:

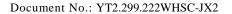
Installation steps are reverse to dismounting steps.

#### *Note:*

- 1. When pulling down the assembly after the 4 combination screws have got loose, pull it by small force and do not pull it quickly so as to prevent the cable from breaking;
- 2. When assembling, paste pre-pressed sponges to all sensor pressing plates (including metal plates and plastic plates);









- 3. Please inspect the sensor surface during the assembly process. It can be considered reasonable only when it is 0-0.1mm higher than the transport plate surface.
- 4. After assembling, please inspect whether the 2 groups of floating pinch roller assemblies move smoothly;
- 5. When assembling brushes, the brush for the middle transport shall exceed the transport plate by about 3.8mm and those for the transports at both sides shall exceed the transport plate by about 4.4mm.



S/N	Code	Description	Remarks
1	YT6.363.1363	NT floating pinch roller assembly (16-14-1)	2 groups
2	S.0070324RS	Special transmitting tube G310 (white)	2
3	S.0070325RS	Special receiving tube DIG310D (black)	2
4	YT7.840.472	CM200V pre-pressed sensor sponge	4
5	S.0070344RS	Reflection sensor KPS1006C	
6	YT7.840.494	Note guide plate-A at CM200V note return port	2
7	YT7.840.495	Note guide plate-B at CM200V note return port	
8	YT7.840.521	Stopper at note return port	2
9	YT7.840.463	Note return antistatic brush 1	
10	YT7.840.464	Note return antistatic brush 2	2
11	S-0080812ARS	Special ground wire for 18-way headplate of Murata	
12	YT4.853.6475	RCS/RES sensor cable	
13	YT4.853.6482	RCS/RES reflection sensor cable	



# 1.2.5 Dismounting and installation of upper main transport assembly

#### Dismounting steps:

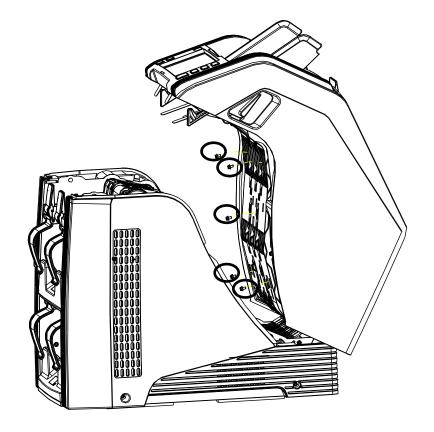
- 1. Open the upper part;
- 2. Remove the five M3X6 combination screws shown in the figure with a short cross screwdriver;
- 3. When the loosened upper main transport assembly tends to fall down, pull the assembly gently until the cable is exposed fully and pull out 4 sensor cables to remove the upper main transport assembly from the complete machine.
- 4. The removed upper main transport assembly can be dismantled for the replacement of damaged components and parts one by one according to the figure.

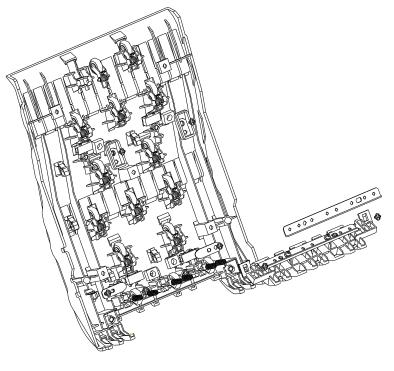
#### Assembly steps:

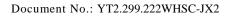
Installation steps are reverse to dismounting steps.

#### *Note:*

- 1. When pulling down the assembly after the 5 combination screws have got loose, pull it by small force and do not pull it quickly so as to prevent the cable from breaking;
- 2. When assembling, paste pre-pressed sponges to all sensor pressing plates (including metal plates and plastic plates);
- 3. Please inspect the sensor surface during the assembly process. It can be considered







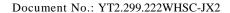


reasonable only when it is 0-0.1mm higher than the transport plate surface.

4. After assembling, please inspect whether the 12 groups of floating pinch roller assemblies move smoothly;



S/N	Code	Description	Remarks
1	YT6.363.1363	NT floating pinch roller assembly (16-14-1)	12 groups
2	S.0070324RS	Special transmitting tube G310 (white)	2
3	S.0070325RS	Special receiving tube DIG310D (black)	2
4	YT7.840.472	CM200V pre-pressed sensor sponge	4
5	YT8.381.492	NT transport floating bearing pressure spring	12
6	S.0170237RS	Bearing 05-16-05	6
7	YT4.853.6474	NT sensor cable	





# 1.2.6 Dismounting and installation of back assembly

#### **Dismounting steps:**

Refer to "Dismounting and installation of CM200V up machine unit" in the *Maintenance Manual for Note Sorter CM200V (Primary)* for dismounting of the back assembly.

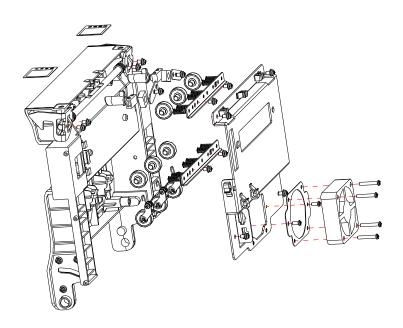
The removed back assembly can be dismantled for replacement of damaged components and parts one by one according to the figure.

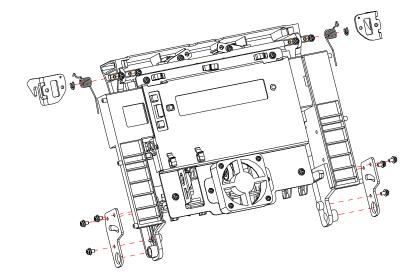
#### Assembly steps:

Refer to "Dismounting and installation of CM200V up machine unit" in the *Maintenance Manual for Note Sorter CM200V (Primary)* for installation of the back assembly.

#### *Note:*

- 1. When assembling, paste pre-pressed sponges to all sensor pressing plates;
- 2. After assembling, please inspect whether the 3 groups of floating pinch roller assemblies move smoothly;







S/N	Code	Description	Remarks
1	YT6.363.1363	NT floating pinch roller assembly (16-14-1)	3 groups
2	S.0070324RS	Special transmitting tube G310 (white)	2
3	YT7.840.472	CM200V pre-pressed sensor sponge	2
4	YT8.080.1350	Transparent cover of CM200V inclination detection sensor	2
5	YT8.381.492	NT transport floating bearing pressure spring	12
6	S.0170237RS	Bearing 05-16-05	6
7	YT8.381.552	CM200V back left torsional spring	
8	YT8.381.553	CM200V back right torsional spring	
9	TY4.853.6483	Back fan and cable	
10	YT4.853.6466	SLL/R sensor transmitting line	



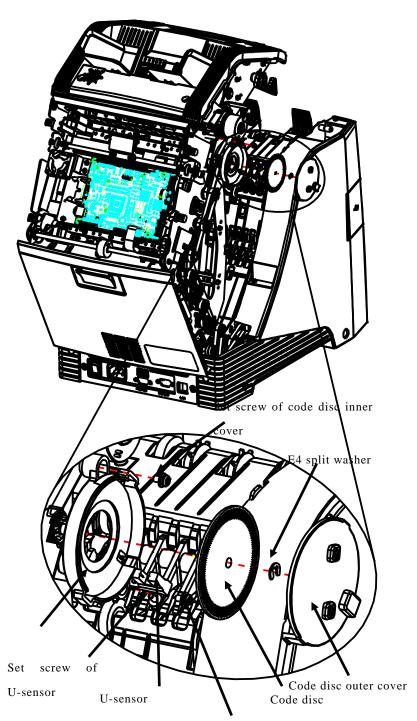
#### 1.2.7 Dismounting of code disc

#### Dismounting steps:

- Remove the upper housing;
- 2. Open the upper part;
- Pull out the U-sensor cable of 3. the code disc;
- 4. set Remove the screw ofU-sensor with a screwdriver to remove the U-sensor.
- 5. Remove the clutch cable stuck on the outer cover of the code disc;
- For removal of the code disc 6. outer cover, because the outer cover is stuck at the buckle position of the inner cover with the plastic elastic hook, it can be pulled out only with a little force; for installation, press the buckle with force and then a crisp click sound can be heard indicating the that buckle position is right while the clearance around the inner and outer cover is uniform.
- 7. Remove E4 split washer shown in the figure;
- Dismantle 2 set screws of the 8. code disc inner cover;
- 9. Pull off the code disc and outer cover in the direction of the shaft and then the dismounting of the code disc is completed.

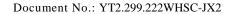
#### Assembly steps:

Installation steps are reverse to dismounting steps.



Set screw of code disc

inner cover





- 1. When removing the code disc, note the solid pin in the synchronous pulley groove behind the code disc to prevent the solid pin falling into the machine, causing difficulty in looking for it;
- 2. When the code disc is being installed, two bosses on the central cylinder of the code disc should be aligned to the synchronous pulley groove behind the code disc inner cover and the code disc can be rotated to be fit if it fails to be aligned.



S/N	Code	Description	Remarks
1	YT8.080.1341	Outer cover of CM200V code disc	
2	YT8.080.1340	Inner cover of CM200V code disc	
3	YT8.080.1245	CM200V code disc	
4	S.0070345RS	U-sensor OJ-451-J38	
5	S.0010261RS	Flanged screw M3X5	



# 1.2.8 Dismounting and installation of upper large buckle

#### Dismounting steps:

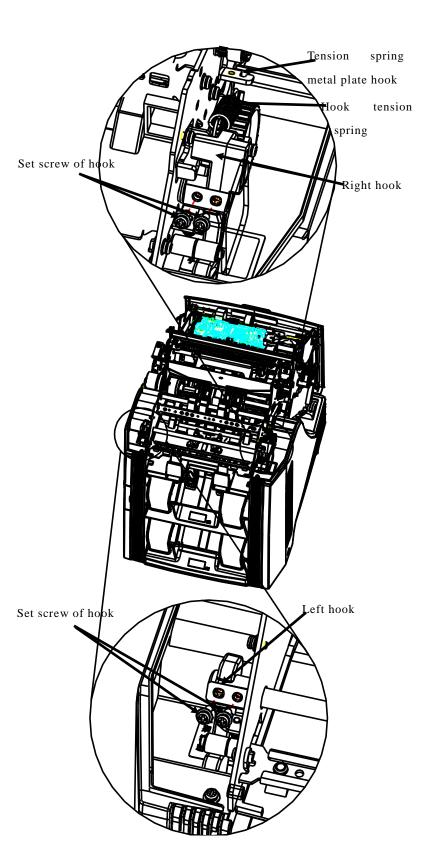
- 1. Remove the upper housing;
- 2. Remove the OP panel assembly;
- 3. Pull the tail end of the hook tension spring away from the metal plate hook with a nipper plier to take out the hook tension spring.
- 4. Remove 2 set screws of the hook with a cross screwdriver (the same for both the left and right hooks);
- 5. Take out the hook in the direction of the shaft (the same for both the left and right hooks) and then the dismounting is completed.

#### Assembly steps:

Installation steps are reverse to dismounting steps.

#### *Note:*

1. When installing the hook, tighten the screw at the round via hole first and then the one at the long round via hole.





S/N	Code	Description	Remarks
1	YT8.080.1342	CM200V right medium hook	
2	YT8.080.1343	CM200V left medium hook	
3	YT8.381.559	Tension spring of CM200V large buckle	
4	YT8.080.245	Commutation block shaft sleeve-0810F12	2



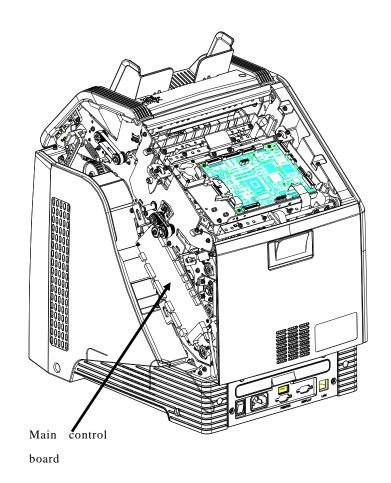
# 1.2.9 Dismounting and installation of main control board

#### **Dismounting steps:**

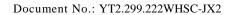
- 1. Remove the upper right housing;
- 2. Pull out all cables of the main control board socket:
- 3. Remove the four M3X6 cross recessed round head screws used to fix the main control board to remove the main control board.

#### Assembly steps:

Installation steps are reverse to dismounting steps.



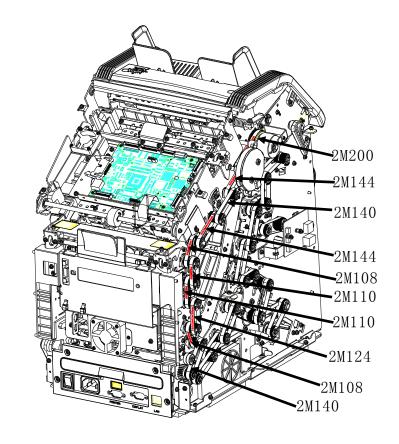
S/N	Code	Description	Remarks	
1	YT2.503.285	CM200V main control board		

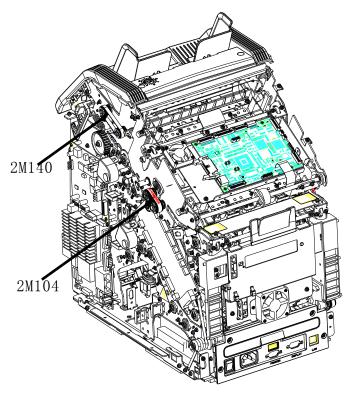




# 1.2.10 Dismounting and installation of synchronous belt

Distribution of synchronous belts of the up machine unit is shown in the figure.





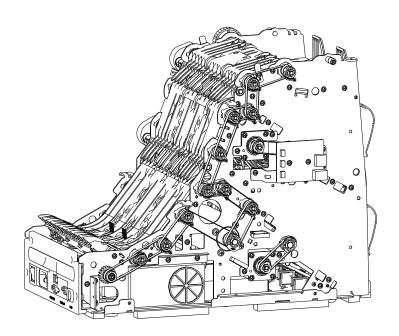


S/N	Code	Description	Remarks
1	S.0100411RS	Synchronous belt 60S2M200-G	
2	S.0100407RS	Synchronous belt 60S2M144-G	2
3	S.0100406RS	Synchronous belt 60S2M140-G	3
4	S.0100399RS	Synchronous belt 60S2M108-G	2
5	S.0100197RS	Synchronous belt 60S2M110-G	2
6	S.0100403RS	Synchronous belt 60S2M124-G	
7	S.0100196RS	Synchronous belt 60S2M104-G	
8	YT8.080.605	Synchronous pulley S2M_24_05_20	9
9	YT8.080.784	Synchronous pulley_S2M_24_05_12	2
10	YT8.080.603	Synchronous pulley S2M_27_06_13	
11	YT8.080.607	Synchronous pulley S2M_30_08_13	



#### 2 CM200V Low Machine Unit

YT4.109.2184





#### 2.1 Necessary tools

#### 2.1.1 Standard dismounting and installation tools

Cross screwdrivers (one long-handled and one short-handled)

#### 2.2 Dismounting and installation of CM200V low machine unit

#### 2.2.1 Removal of CM200V low machine unit from the complete machine

For removal of CM200V low machine unit from CM200V complete machine, see *Maintenance Manual for CM200 (Primary)* for specific operation steps and the following operations are in the case that the left and right housings of the low machine unit have been removed.

#### 2.2.2 Dismounting and installation of note return port lower plate assembly

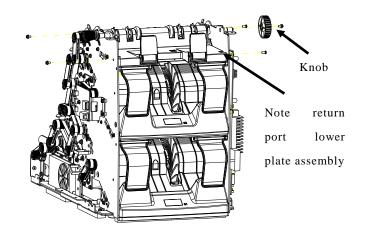
#### Dismounting steps:

- 1. Remove the right knob;
- 2. Remove the set screw on the left and right of the note return port lower plate assembly to replace or maintain the note return lower plate assembly.

#### Installation steps:

Installation is carried out through reversed steps.

- ① YT8.080.097 prism D34
- 1 YT8.080.1362 note return port lower plate
- ② YT6.363.1671 note return port stop dog assembly
- ③ YT6.363.1672 note stacker cover plate assembly





4 YT6.363.1664 note return port lower plate assembly.

## 2.2.3 Dismounting and installation of upper and lower plate assembly of note stacker

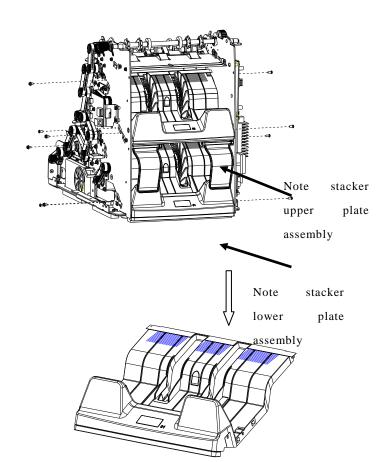
#### Dismounting steps:

- 1. Remove the set screws on the left and right (2 for each side) of the upper and lower plate assembly of note stacker;
- 2. Remove 1 ground wire set screw on the left; Pull out the digital tube cable plug;
- 3. Take out the assembly from the front side to replace or maintain.

#### Installation steps:

Installation is carried out through reversed steps.

- ① YT7.840.480 note stacker antistatic brush 2
- ② YT2.503.291 CM100V/CM200V digital tube plate
- ③ YT8.080.1286 digital tube transparent cover
- 4 YT6.363.1566 note stacker upper plate assembly
- (5) YT6.363.1663 note stacker lower plate assembly





#### 2.2.4 Dismounting and installation of note return port support plate assembly

#### Dismounting steps:

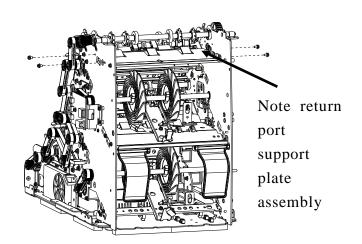
- 1. Remove the drive circuit board on the right;
- 2. Remove the set screws on the left and right of the note return port support plate assembly;
- 3. Lift up to take out.

#### Installation steps:

Installation is carried out through reversed steps.

# <u>Spare parts necessary for dismounting and installation:</u>

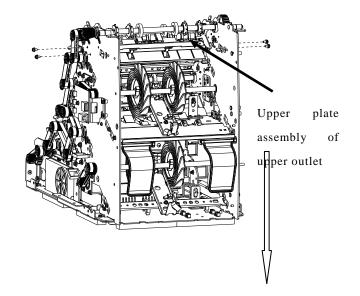
① YT7.840.479 note stacker antistatic brush



#### 2.2.5 Dismounting and installation of upper plate assembly of upper outlet

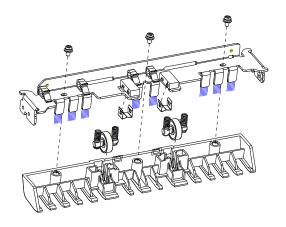
#### Replacement steps:

- 1. Refer to steps above to remove the "note return port lower plate assembly" and "note return port support plate assembly";
- 2. Remove the set screws on the left and right of upper plate assembly of upper outlet;





3. Pull out the cable plug to take out the upper plate assembly of upper outlet and protect the cable from being scratched by the metal plate.



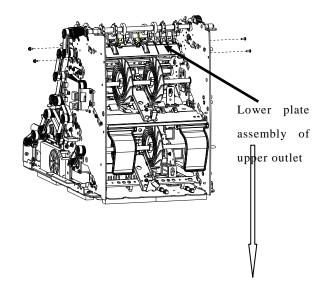
#### Spare parts necessary for dismounting and installation:

S/N	Code	Description	Remarks
1	YT6.363.1662	Upper plate assembly of upper outlet	
2	S.0070324RS	Special transmitting tube G310 (white)	
3	S.0070325RS	Special receiving tube G310 (black)	
4	YT8.381.492NT	Transport floating bearing pressure spring	
5	S.0170237RS	Bearing 05-16-05	
6	YT7.840.465	Antistatic brush 9-7-10	
7	YT8.080.1363	Upper plate of upper outlet	
8	YT4.853.6471TE S2	Sensor cable	

#### 2.2.6 Dismounting and installation of lower plate assembly of upper outlet

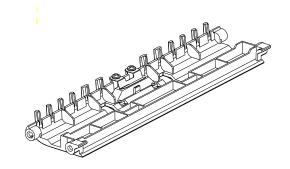
#### Dismounting steps:

1. After the "dismounting of upper plate of upper outlet", remove 4 set screws in both sides of lower plate assembly of upper outlet.





2. Take out the assembly from the front side.



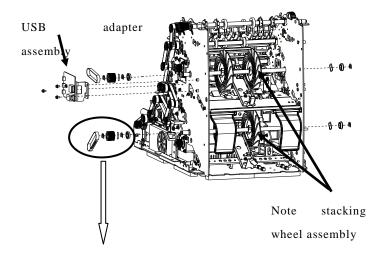
## <u>Spare parts necessary for dismounting and installation:</u>

- ① YT8.080.1568 arc prism D34
- ② YT8.080.1364 lower plate of upper outlet

#### 2.2.7 Dismounting and installation of note stacking wheel assembly

#### Dismounting steps:

- 1. After steps above, remove USB adapter plate assembly on the left of the machine;
- 2. Remove the synchronous belt, E-type circlip, dowel, synchronous pulley, dowel, E-type circlip and bearing on the left of the note stacking wheel assembly in turn;
- 3. Remove the E-type circlip, bearing and wave washer on the right of the note stacking wheel assembly in turn;





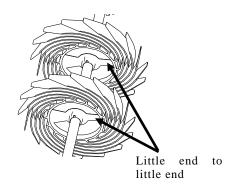
4. Take out the note stacking wheel assembly from the front side.



#### Installation steps:

Installation is carried out through reversed steps.

Note: As shown in the right figure, and pay attention to alignment during installation.



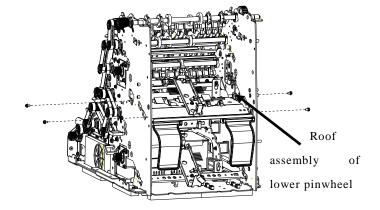
S/N	Code	Description	Remarks
1	YT8.080.607	Synchronous pulley_S2M_30_08_13	
2	YT8.401.136	Note stacking wheel	
3	S.0170233RS	Bearing 08-14-04F	
4	S.0290102	Cylindrical pin φ2X14	
5	S.0290106RS	Cylindrical pin 2X12	



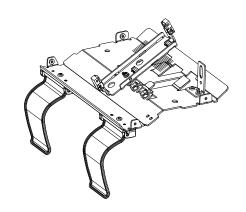
#### 2.2.8 Dismounting and installation of roof assembly of lower pinwheel

#### Dismounting steps:

1. Refer to steps above to remove the relevant assembly of "note stacker upper plate assembly" and "note stacking wheel assembly";



2. Remove the set screws on left and right of roof plate assembly of lower pinwheel and then pull out the cable plug to take out from the front side.



#### **Installation steps:**

Installation is carried out through reversed steps.

S/N	Code	Description	Remarks
1	S.0070324RS	Special transmitting tube G310 (white)	
2	S.0070325RS	Special receiving tube G310 (black)	
3	YT7.840.363	Antistatic brush 21-22-10	
4	YT7.840.479	Note stacker antistatic brush	
5	YT6.363.1567	Fixing frame assembly of overfill sensor	
6	YT4.853.6472	SES2 sensor cable	



#### 2.2.9 Dismounting and installation of upper plate assembly of lower outlet

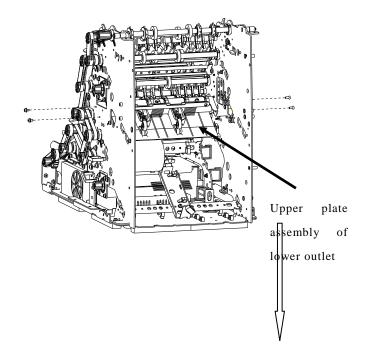
#### Dismounting steps:

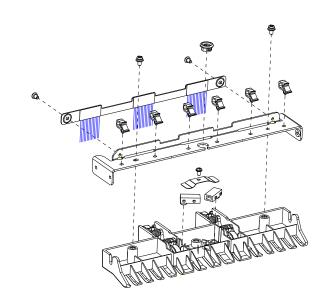
- 1. Refer to steps above to remove the relevant assembly of "note stacker upper plate assembly", "note stacking wheel assembly", and "roof assembly of lower pinwheel";
- 2. Remove 4 set screws on the left and right of upper plate assembly of lower outlet:
- 3. Pull out the cable plug to take out from the front side.

#### **Installation steps:**

Installation is carried out through reversed steps.

- ① S.0070324RS special transmitting tube G310 (white)
- ② S.0070325RS special receiving tube G310 (black)
- ③ YT7.840.363 antistatic brush 21-22-10
- 4 YT6.363.1363 NT floating pinch roller assembly (16-14-1)
- ⑤ YT4.853.6469 TES1 sensor cable



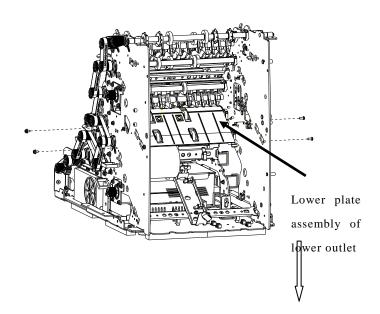




#### 2.2.10 Dismounting and installation of lower plate assembly of lower outlet

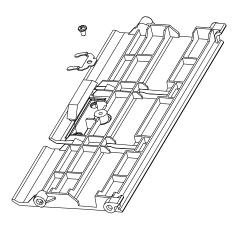
#### Dismounting steps:

- 1. Refer to steps above to remove the relevant assembly including "upper and lower plate assemblies of note stacker", "note stacking wheel assembly", "roof assembly of lower pinwheel" and "upper plate assembly of lower outlet";
- 2. Remove 4 set screws on the left and right of lower plate assembly of lower outlet:
- 3. Take out from the front side.



# <u>Spare parts necessary for dismounting and installation:</u>

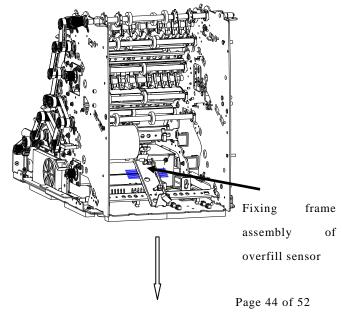
① YT8.080.097 prism D34

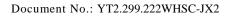


#### 2.2.11 Dismounting and installation of fixing frame assembly of overfill sensor

#### Dismounting steps:

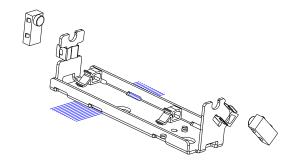
- 1. Refer to steps above to remove the relevant assembly including "note stacker lower plate assembly";
- 2. Remove 1 set screw of fixing frame assembly of overfill sensor;
- 3. Pull out the cable plug.







- ① S.0070324RS special transmitting tube G310 (white)
- ② S.0070325RS special receiving tube G310 (black)
- ③ YT7.840.363 antistatic brush 21-22-10

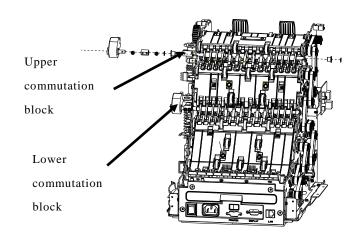




#### 2.2.12 Dismounting and installation of commutation block

#### Dismounting steps:

- 1. Pull out the cable plug of electromagnet;
- 2. Remove the electromagnet, copper bush, E-type circlip and shaft sleeve on the left and E-type circlip and shaft sleeve on the right respectively according to the right figure to take out the commutation block.

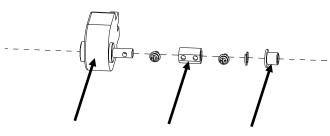


#### Installation steps:

Installation is carried out through reversed steps.

#### Note:

- 1. Adjust the angle of commutation block according to Specifications for Debugging of CM200V Structural Components;
- 2. If no jig is available, adjust to make the tip of the commutation block imbed into the lower transport plate by 3-3.5mm.
- 3. Dismounting, installation and adjustment of lower commutation block are the same.

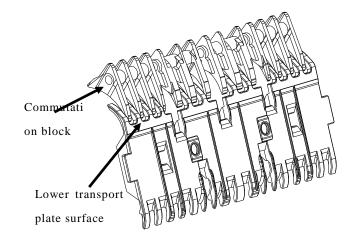


Electromagne Copper bush Bearing



Spare parts necessary for dismounting and installation:

- ① YT4.853.6480 commutator cable
- ② S.0170318RS bearing FFM-0608-08
- ③ YT6.101.1840 plastic commutation block

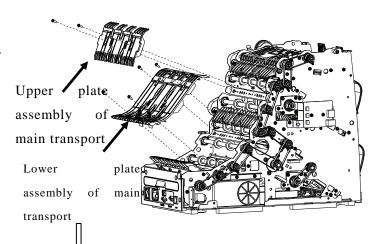


# 2.2.13 Dismounting and installation of upper and lower plate assemblies of main transport

#### Dismounting steps:

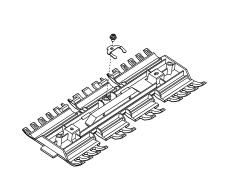
1. Remove the set screws of upper and lower plate assemblies of main transport to take it out.

Note: Dismounting of lower plate assembly of main transport is carried out after dismounting of up machine unit.



#### **Installation steps:**

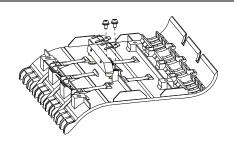
Installation is carried out through reversed steps.





# <u>Spare parts necessary for</u> <u>dismounting and installation:</u>

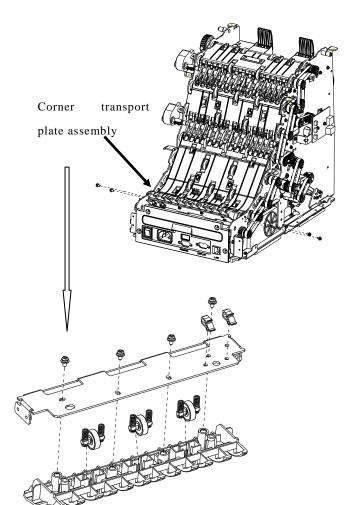
- ① YT8.080.1046 prism (center distance: 70mm)
- ② YT7.840.466 antistatic brush 12-16-12



#### 2.2.14 Dismounting and installation of corner transport plate assembly

#### Dismounting steps:

1. Remove the set screws on both sides of corner transport plate assembly



#### **Installation steps:**

Installation is carried out through reversed steps.





# <u>Spare parts necessary for</u> <u>dismounting and installation:</u>

- ① S.0170237RS bearing 05-16-05
- ② YT8.381.492NT transport floating bearing pressure spring

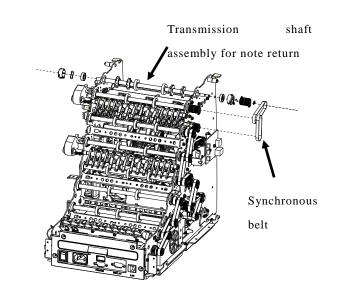
## 2.2.15 Dismounting and installation of transport wheel assembly and synchronous belt

#### Dismounting steps:

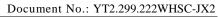
- 1. Refer to steps above to remove the "note return port lower plate assembly" and "upper and lower plate assemblies of main transport";
- 2. Remove correlative parts on both sides of synchronous belt and transport wheel assembly.

#### Note:

Dismounting of other transport wheel assembly and synchronous belts is similar.



S/N	Code	Description	Remarks
1	YT6.363.1668	Transmission shaft assembly for note return	
2	YT8.401.180	Sheet wheel-0824	
3	YT6.363.1541	Transport transmission shaft assembly	2 wheels
4	YT6.363.1543	NT transmission shaft assembly	3 wheels
5	S.0040604RS	Wave washer 16MM	
6	S.0170258RS	Rolling bearing 081605	
7	YT8.080.624	Plastic bearing sleeve-ID16-OD18-T2	
8	S.0290105	Cylindrical pin 2X10	





9	YT8.080.605	Synchronous pulley S2M_24_05_20	
10	YT8.080.606	Synchronous pulley S2M_30_08_20	The No. is shown on the wheel.
11	YT8.080.784	Synchronous pulley S2M_24_05_12	
12	YT8.080.607	Synchronous pulley S2M_30_08_13	
13	S.0100406RS	Synchronous belt 60S2M140-G	
14	S.0100403RS	Synchronous belt 60S2M124-G	
15	S.0100411RS	Synchronous belt 60S2M200-G	The real object is
16	S.0100410RS	Synchronous belt 60S2M152-G	indicated with its length.
17	S.0100398RS	Synchronous belt 60S2M98-G	
18	S.0100409RS	Synchronous belt 60S2M148-G	



# Maintenance Manual for Note Sorter CM200V (Secondary)