FCO CA11580: Upgrading MPE Picker Up and Down Sensors

Document number: 719-00806A-EN Rev A

Product

- Kodak® Trendsetter® 3230/3244, 400/800 (MPE)
- Kodak® Trendsetter® NEWS

FCO priority

Next failure

Output devices affected

- TS3, TS4, TS8 MPE and NEWS MPE devices
- Serial numbers begin with S, TF, TE, TN or Heidelberg serial numbers

Background

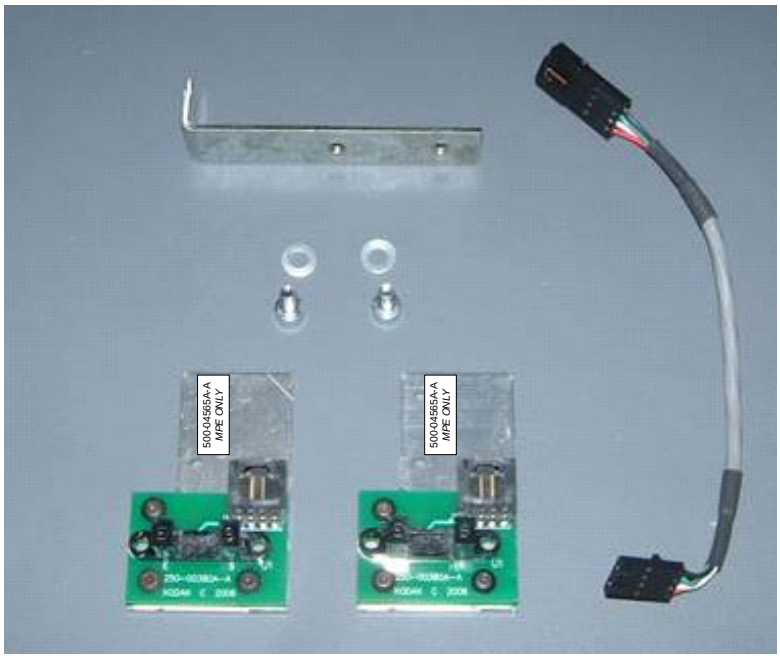
The optical reflective sensors currently used for up and down picker sensing in Trendsetter MPE Autoloader and NEWS devices are not reliable.

Solution

Replace the optical reflective sensors with optical interrupter sensor boards that are similar to that used for MCE devices.

Parts required

Part Number	Part Name	Quantity
518-02218A	KIT,SENS,OPTICAL INT,PICKER UP-DN,MPE,TS	1



Tools required

- Metric hex keys
- Metric wrench

Preparing for Sensor Replacement

DANGER: To prevent exposure to potential electrical shock hazards, you must follow proper lockout procedures. Turn off the AC power to the device and unplug the power cord before starting to service the device.

It is *mandatory* to follow safe lockout procedures during maintenance activity. For safety requirements, see the *Safety Policies for Service Engineers* at http://techplanet.creo.com/output/computer_to_plate/all_ctp/nav/safety.htm

1. Turn off the Trendsetter device.
2. Turn off the air supply to the device.

   Note: The unload table will come down when all air pressure reaches zero.

3. Remove all load table covers. When removing the side cover, disconnect the solenoid cable.







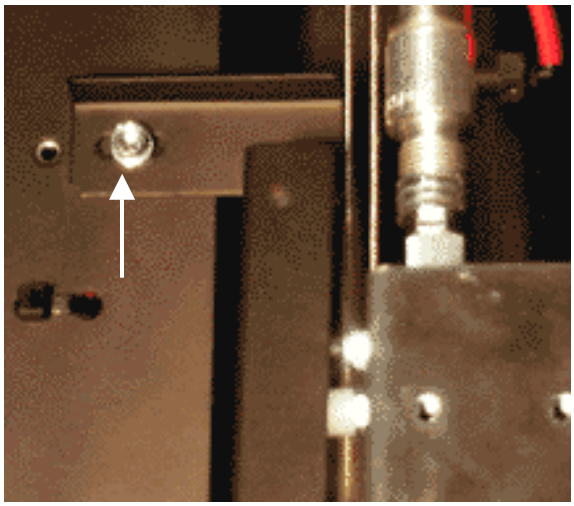
Inspecting Picker Rail Alignment

Note: The picker will be moving up and down during this procedure.

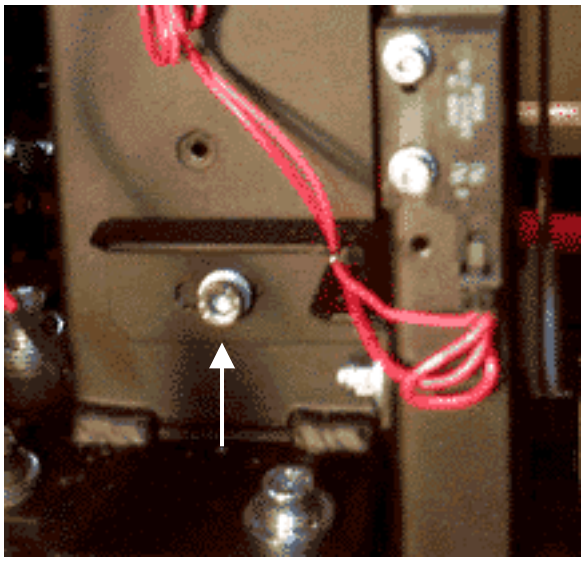
1. Turn the main air pressure switch on.
2. Check to make sure that the alignment of the picker rails on both sides is centered:
   a. Move the picker up by pressing the blue button on the picker move solenoid.

Note: It is very important that the picker be in the exact center of the load table (within 2 mm), otherwise it will catch on the side post covers.

b. Adjust the rails from side-to-side until you can see the same amount of the slot showing under the top M5 screw head and washer. The picker head should have 1 mm of side-to-side play in the rails.



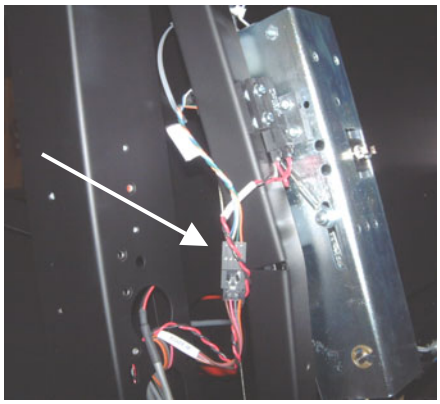
3. Loosen the bottom of one of the rails. Because you are about to move the picker down, you must be sure that the rails are not angled towards each other. This could cause the picker to bind.
4. Move the picker down by pressing the blue button on the picker move solenoid.
5. Adjust the bottom of the rails so that the M5 screws and washers are in equal positions in the rail slots and there is still 1mm of side-to-side play in the picker. Move the picker up and again check the side-to-side play.



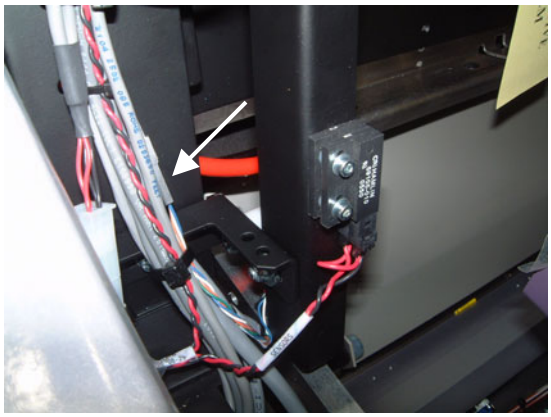
6. Turn the main air pressure switch off.

Replacing the Sensors

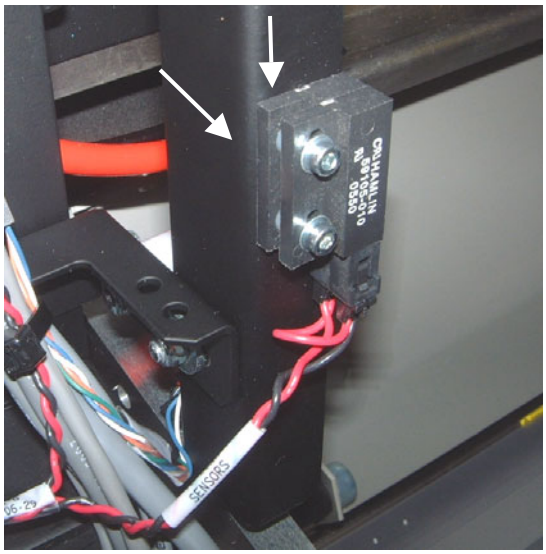
1. Unplug the cable that connects to the picker up sensors.

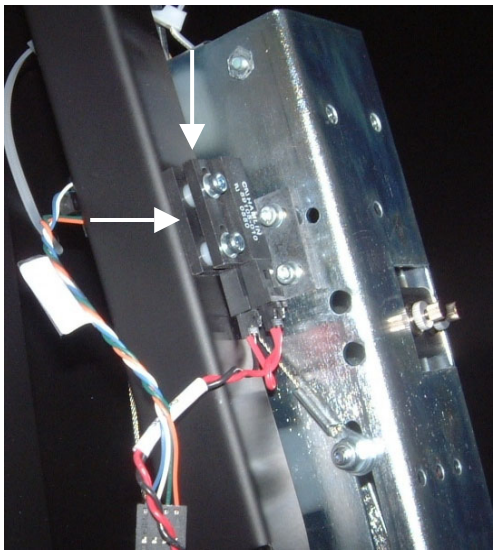


2. Unplug the cable that connects to the picker down sensors.



3. Mark the location (horizontal and vertical) of the safety magnetic sensors before removing them so that you can install the magnetic sensors and new optical sensors in the same location.



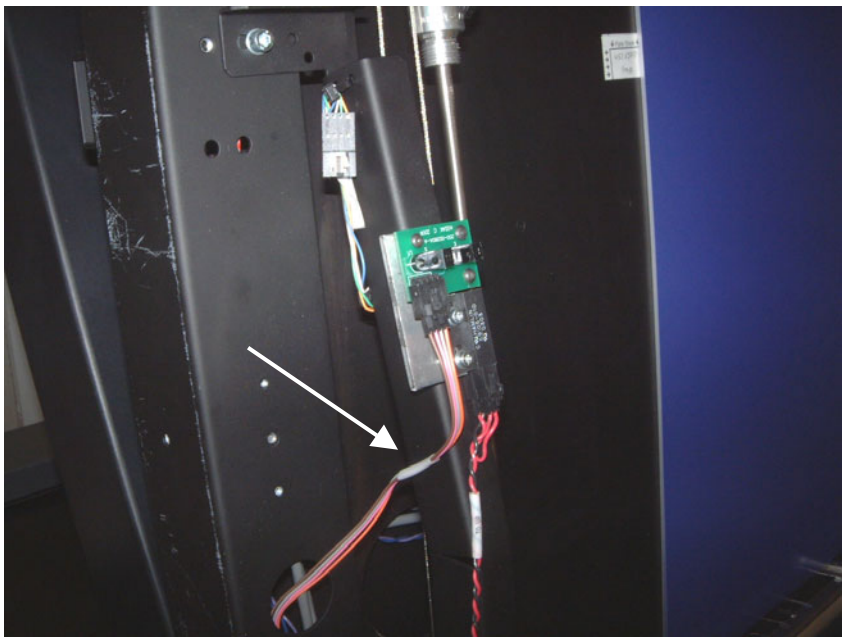


4. Remove the mounting screws on the stacked magnetic sensors.

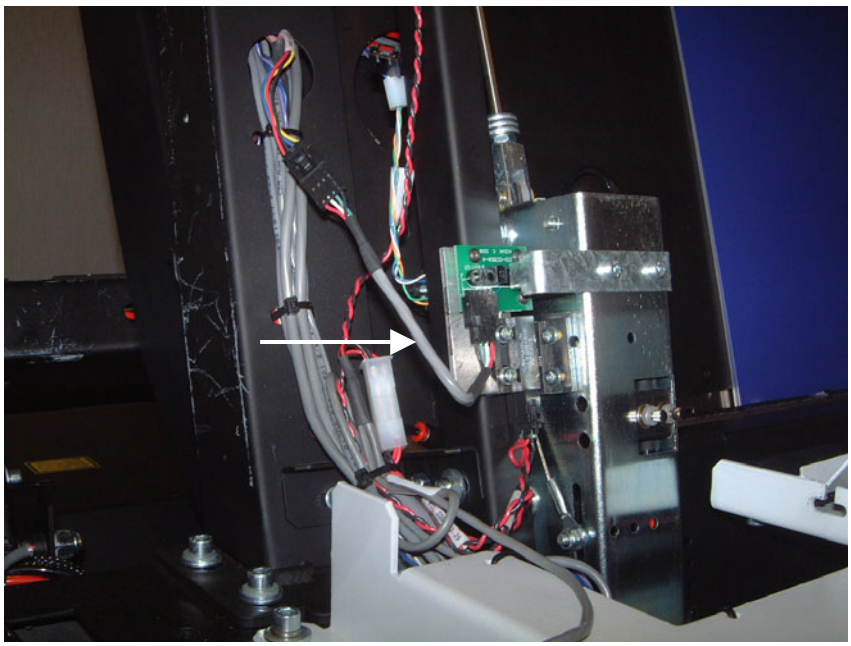
   Note: Discard the two nylon spacers that are sandwiched between the two magnetic sensors.

5. Use the same mounting screws to mount the new up and down sensor assemblies (500-04565A) and, use the adapter cable (220-01840A) if necessary, as shown in the following photos.

   Note: Install the bracket on the new sensor assembly between the two magnetic sensors

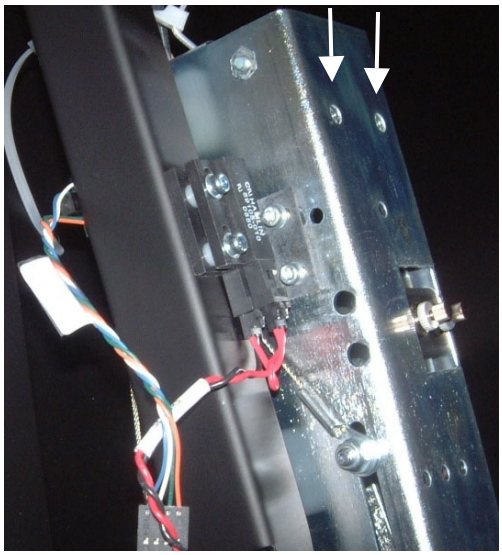


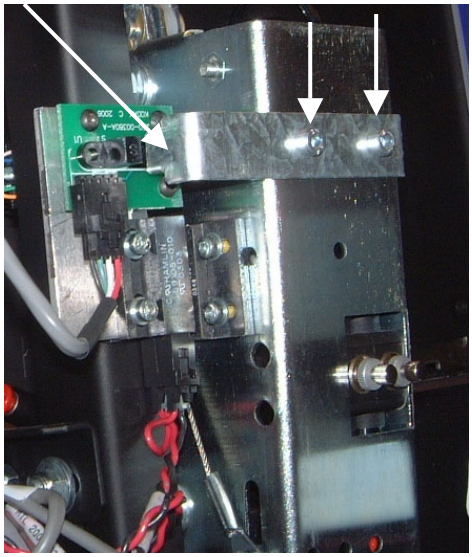
Use the adapter cable (220-01840A) for either the up or down sensor if the existing cable is too short.



6. Ensure that the up and down magnetic sensors are in alignment with the magnetic sensors on the picker assembly.
7. Mount the metal flag (252-11474B) on the picker head using the M4 screws (52-4459) and M4 bel washers (52-4261) as shown in the following photos.

   Note: Ensure that the metal flag is in the middle of the sensor.





8. Ensure that the metal flag passes through both new optical interrupt sensors without touching them

Testing the Device

1. Turn on the Trendsetter.
2. Turn on the air supply
3. Verify that the sensor are functional by cycling the picker up and picker down using the following commands:
   - `Picker up` –moves the picker up
   - `Picker` – check the sensor's status
   - `Picker down` – moves the picker down
4. Use `load cal` to calibrate the automatic loading position.

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