Picker up down sensor upgrade
FCO CA010840

1. PRODUCTS AFFECTED

- *Kodak Trendsetter* Autoloader
- *Kodak Trendsetter* NEWS

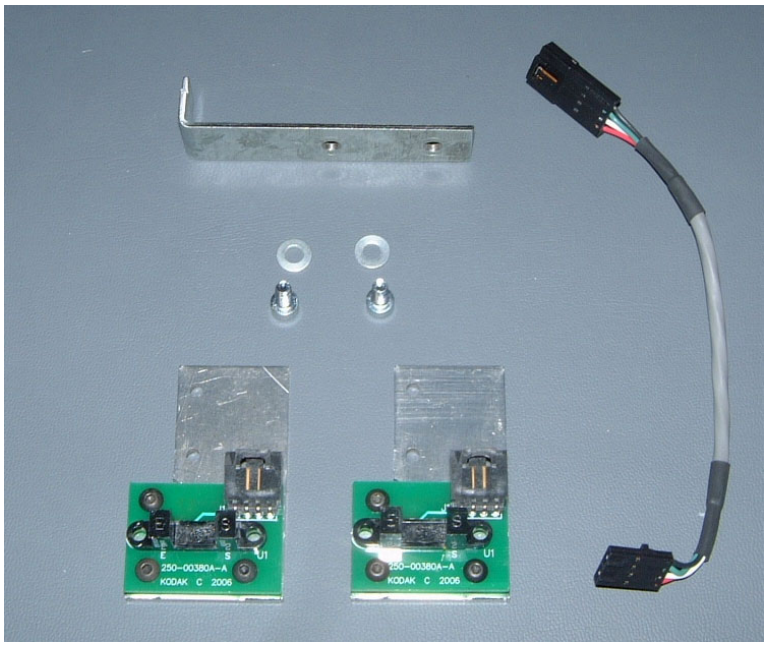
2. BACKGROUND

This FCO upgrade is to improve the reliability of the picker up and down sensing.

3. PARTS REQUIRED

518-01911A - KIT,SENSOR,OPTICAL INT,PICKER UP-DN,TS8 that includes:

Part Number	Part name	Quantity
719-00736A	DOC,PROC,U/G,PICKER UP/DOWN SENSOR	1
500-03817A	ASSY,SENSOR,OPT INTERUPT,PICKER UP-DN	2
252-11474B	FAB,SENSOR TAB,OPT INTERUPT,PICKERUP-DN	1
52-4459	SCRW,M4*8,SOCK-CAP,S-PLATED	2
52-4261	WASH,M4,BEL,HDS,4.3*9*1,S-PLATED	2
220-01840A	CAB,ASSY,EXTENSION,PICKER DN SENSOR,TS8	1



4. TOOLS REQUIRED

- Metric hex keys
- Metric wrench

5. GETTING STARTED

Note: Use the SIO key switch when performing this procedure.

1. Use the **`table down`** command to lower the unload table.
2. Remove all covers and panels needed to access the picker.





Note: Disconnect the solenoid cable when removing the post covers.



6. INSPECTING THE PICKER RAIL ALIGNMENT

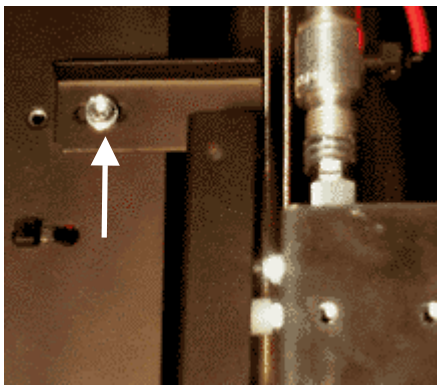
To check the alignment of the picker rails on both sides:

1. Move the picker up by pressing the blue button on the **picker move** solenoid.

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

2. Adjust the rails from side-to-side until you can see the same amount of slot showing under the top M5 screw head and washer.

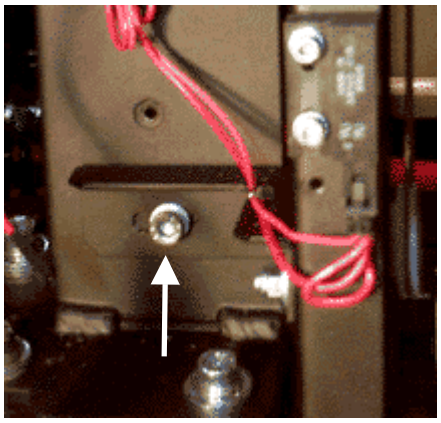
The picker head should have 1mm of side-to-side play in the rails.



3. Loosen the bottom of one of the rails.

   You are about to move the picker down so you want to be sure that the rails are not angled towards each other causing the picker to bind.

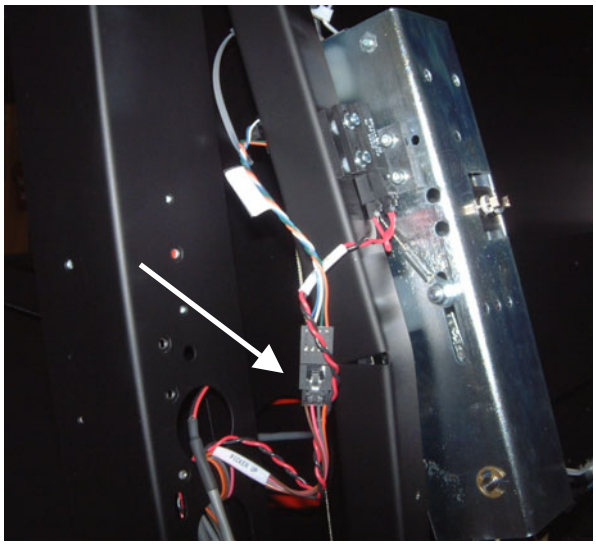
4. Move the picker down by pressing the blue button on the **picker move** solenoid.
5. Adjust the bottom of the rails so that the M5 screws and washers are in equal positions in the rail slots and there is still 1mm of side-to-side play in the picker.
6. Move the picker up and again check the side-to-side play.



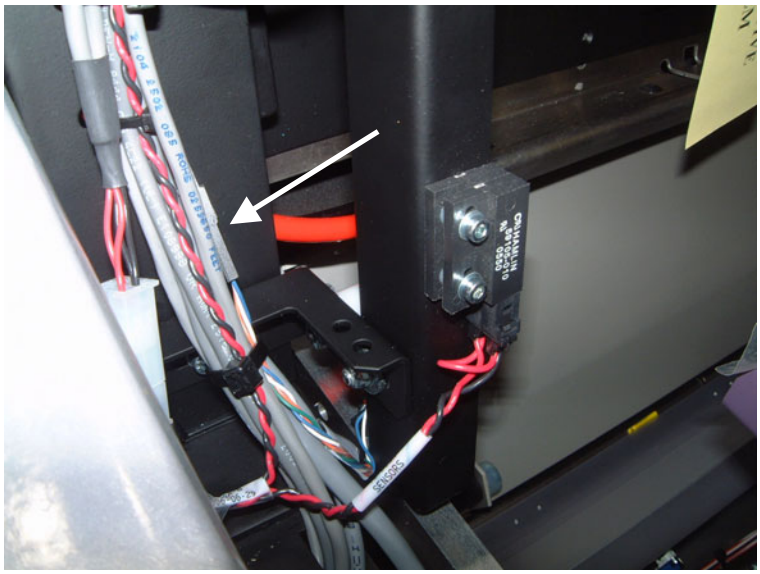
7. Turn the main air pressure switch off.

7. UPGRADING THE SENSORS

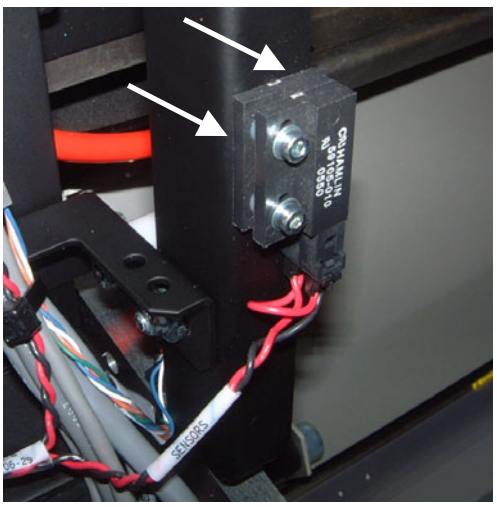
1. Unplug the cable connected to the picker up sensors.

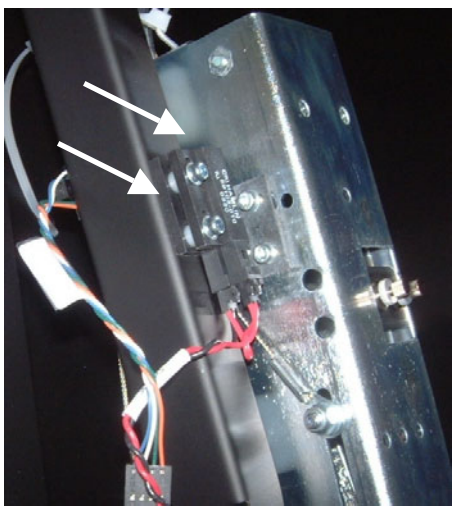


2. Unplug the cable connected to the picker down sensors.



3. Make marks around the up and down magnetic sensors before removing them so that you can install the magnetic sensors and the new optical sensors in the same location.





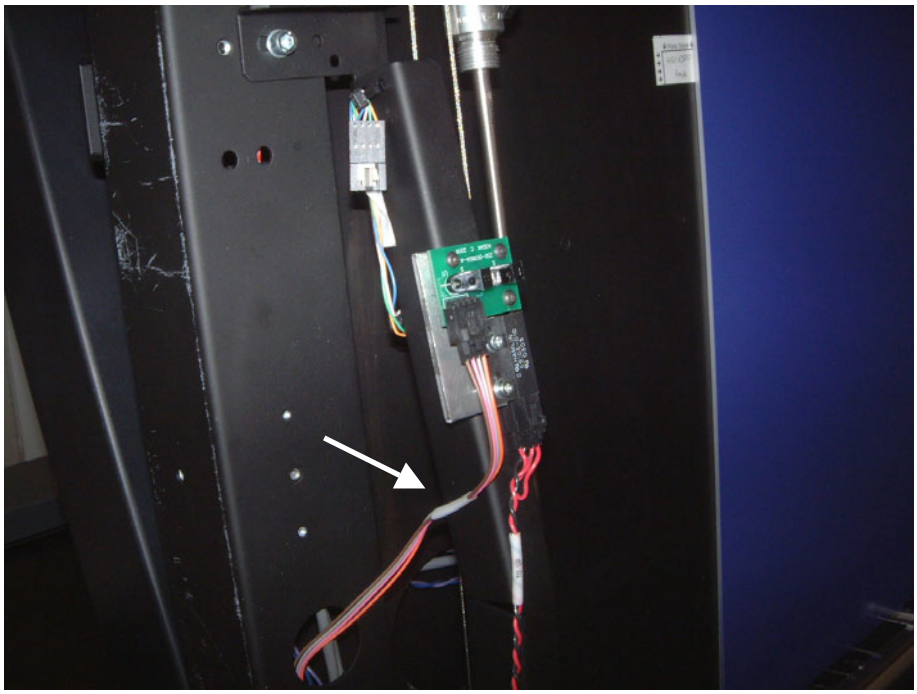
4. Remove the mounting screws on the stacked magnetic sensors.

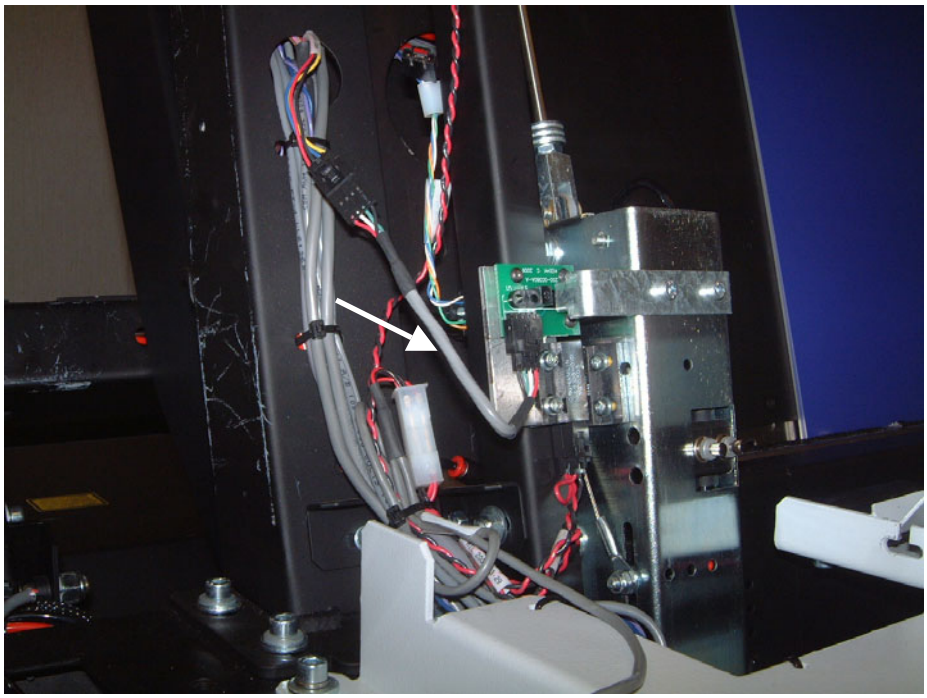
Note: Discard the two nylon spacers that are sandwiched between the two magnetic sensors.

5. Use the same mounting screws to mount the new up and down sensor assemblies (500-03817A).

Note: The bracket on the sensor assembly should be installed between the two magnetic sensors.

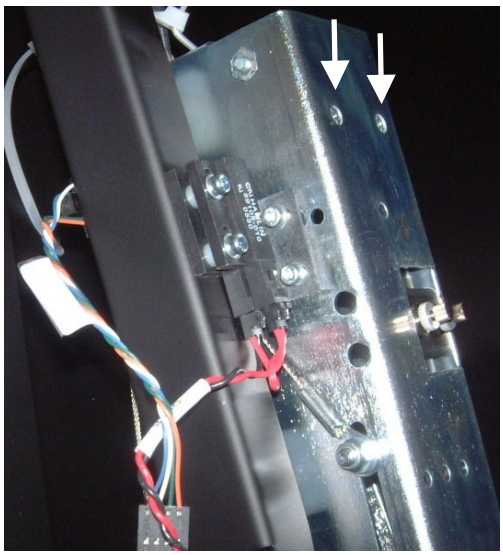
You may need to use the adapter cable (220-01840A) in the kit as shown in the following photos if the existing cable is too short.

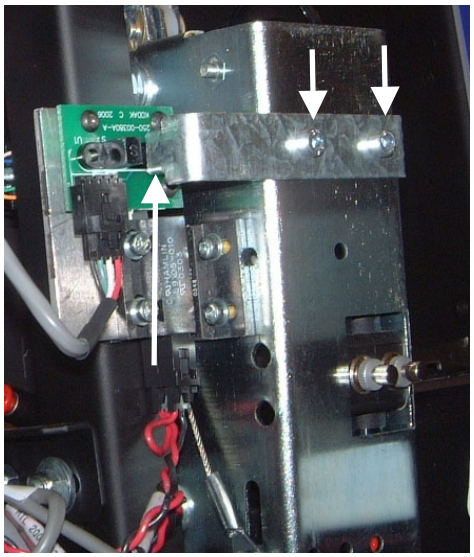




6. Ensure that the up and down magnetic sensors are in alignment with the magnetic sensors on the picker head.

7. Mount the metal flag (252-11474B) on the picker head using the M4 screws (52-4459) and M4 washers (52-4261) as shown in the photo.





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

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

8. TESTING

1. Turn on the device.

2. Turn on the air supply to the device.
3. Cycle the picker up and down using the following commands to verify that the sensors are functioning:
   - **`Picker up`** – send the picker up
   - **`Picker`** – checks the sensor status
   - **`Picker down`** – sends the picker down
4. Use the **`load calibrate`** command to calibrate the automatic loading position.
5. Replace all covers and panels.

9. MARKING THE 100 LABEL

1. Mark check box **7** on the NEWS/Autoloader 100 label (72-3744A) on the back of the load table.
2. For *Trendsetter* AL, mark check box **26** on the Autoloader 100 label (72-3582B) on the side of the power box.

   For *Trendsetter* NEWS, mark check box **30** on the NEWS 100 label (72-3582B) on the side of the power box.