Kodak

Trendsetter NEWS Dual-Bay Option
FCO CA09895

1. PRODUCTS AFFECTED

Trendsetter® NEWS platesetters with Dual-Bay Option, MCE version (serial number NM*xxx*)

2. BACKGROUND

This upgrade is required to reduce plate scratching between Bay 1 and Bay 2 plates for MCE Trendsetter NEWS dual-bay machines. Upgrades include:

- Upgrading the pneumatic manifold. (See section 5.1 on page 2.)
- Replacing the plate ledge with one that has four airjets instead of two. The additional airjets improve the separation of bay 1 and Bay 2 plates while the Bay 1 plate is being picked and loaded onto the drum. (See section 5.2 on page 3.)
- Adding two extension tabs to the separator arms to improve support for the Bay 1 plates. (See section 5.3 on page 5.)
- Upgrading the MCE firmware (see section 5.4 on page 8) in order to:
  - Extend the duration `picker ajet` is turned on during Bay 1 picking
  - Add `picker stacker in` during `picker switchoverbay1` and `picker stacker out` action during `picker switchoverbay2`
  - Switch the Bay 1 plate-picking `picker wrist out`/`picker head out` sequence in order to reduce plate scratching between bay 1 and bay 2 plates

3. TOOLS REQUIRED

- Metric hex key set
- Center punch
- #2 Center Drill or equivalent
- ∅2.5mm drill bit
- M3 taping tool and tap handle
- ∅1/4” counter sink tool or equivalent
- Electric hand drill
- Loctite® 380 or equivalent
- Tube cutter

4. PREREQUISITES

This upgrade assumes that ECO/FCO CA08748 has already been installed (100 label #34). CA08747 includes the following upgrades:

- Add a cylinder sensor to sense the position of the NELA® stop cylinder (part number 500-02988A).
- Add an extension tap to enlarge contact area of switch stop block.
- Add pneumatic contact switches and modify the pneumatic plumbing to improve the reaction of the clamp cylinder and stop block cylinder.

The upgrade procedure for CA08748 can be found in document number 719-00597A.

5. UPGRADE PROCEDURE

Upgrade kit 512-00400A is required for this upgrade.

Part number	Description
512-00400A	KIT, UPGRADE, ECO CA09895, DB, NWP

Sections 5.1 to 5.4 describe the upgrade procedures for this FCO.

5.1 Upgrading the Pneumatic Manifold

Upgrade the plumbing on the pneumatic manifold (part number 50-2466) according to *Appendix A: Pneumatic Schematic 718-00039C-A* on page 10, using the following parts.

Part number	Description	Qty
55-0162	PLUG,5/32",QUICK	1
55-0805	SPEED CTRL,AIR,IN,0.3MM ORFCE,1/8",5/32	1
55-0806	SPEED CTRL,AIR,IN,0.2MM ORFCE,1/8",5/32	1
55-1211	FTG,AIR,CHOKE,0.15MMTYPE B,1/8NPT TO 4MM	1
336-00307	FTG,ADAPTOR,M5 FEM,4MM TUBE	1
336-00339	FTG, AIR,CHOKE,10-32, 0.5MM TYPE A ORIF	1

5.2 Upgrading the Plate Ledge

Perform the procedures described in sections 5.2.1 and 5.2.2 to replace the existing plate ledge with a 4-airjet dual-bay plate ledge:

Part number	Description	Qty
500-03249B	ASSY, MECH, DUAL BAY PLATES LEDGE,NWP	1

5.2.1 Removing the Existing 2-Airjet Plate Ledge

1. Move the picker up using command **`picker up`**.
2. Secure the picker in the up position by fastening it to the frame structure with cable ties. This creates the space you will need to work on the machine.
3. Turn off the air supply to the Trendsetter NEWS machine.
4. Measure the distance between each of the four plate ledge teeth and the load table. Record these distances for reference when you reinstall the plate ledge at the end of this upgrade.

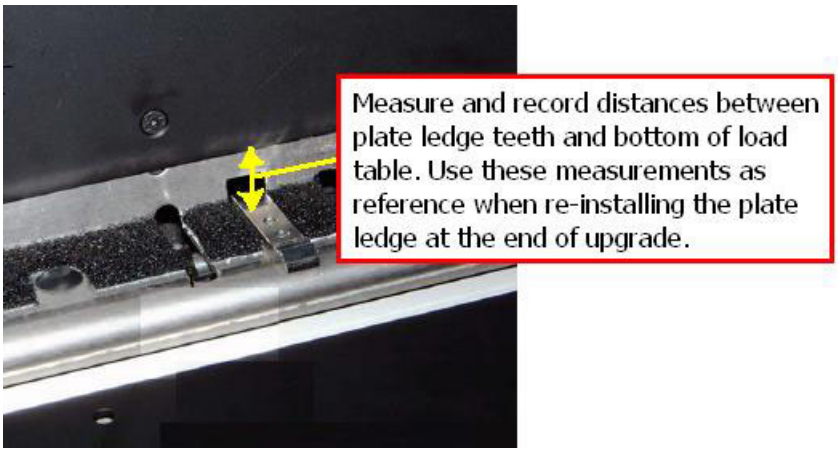


Figure 1: Measuring distances between plate ledge teeth and load table

5. Remove the home and away stacker drive shafts:

a. Remove the M4 screws that hold the home/away stacker shafts to the home/away stacker drive couplings. See Figure 2.

b. Push the load ramp to the “in” position.

c. Remove the M4 button-head screws that hold the home and away stacker shaft mounts under the plate ledge. Take care not to drop the stacker shaft mounts into the machine. See Figure 3.

d. Remove the home and away stacker shafts by pulling them out of their couplings from underneath the plate ledge.

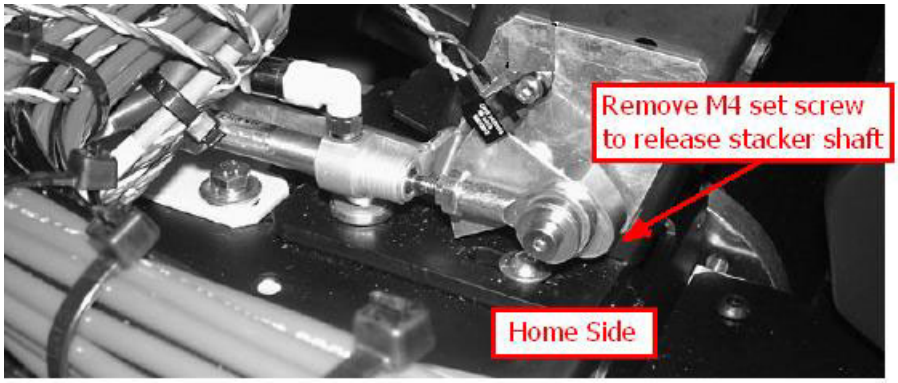


Figure 2: Removing the M4 set screw from the stacker shaft



Figure 3: Removing the M4 button-head screws from the plate ledge

6. Unplug the plate ledge’s red “picker ajet” tubes by twisting off the lure fittings on each side of the plate ledge.

7. Unplug the plate ledge’s black “ramp out” airjet tube by removing it from the Y-quick connect coupling on the away [left] side of the load table bracket.

8. Unscrew the M3 flat-head screws, rubber bumpers, and other screws that hold the plate ledge onto the load table, and then remove plate ledge.

5.2.2 Installing the New 4-Airjet Plate Ledge and Reinstall Stacker Shafts

1. Using the measurements you previously recorded of the distance between the plate ledge teeth and the load table as positional references, reinstall the plate ledge onto the load bay.

2. Slide the home/away stacker shafts back into the home/away stacker drive coupling. See Figure 2.
3. Slide the stacker shaft mounts back onto the home and away stacker shafts, and then reinstall them using the M4 button head screws. See Figure 3.
4. Position the stacker fingers back into the slots of the plate ledge, and then lock the stacker shafts back onto the stacker drive coupling. See Figure 2.
5. If there is interference between the stacker flag and the interrupt sensor (see Figure 2), loosen the M3 flat screws that secure the plate ledge onto the load table, and then slide the plate ledge sideways to provide proper spacing between the stacker flag and the interrupt sensor.
6. Reinstall the tubing for the airjets and load ramp airjet.
7. Release the picker and turn on the air supply to the Trendsetter NEWS machine.
8. Check the plate drop after reinstallation of plate ledge. See the *Load Table Adjustment* procedure on TechPlanet: http://techplanet.creo.com/output/computer_to_plate/trendsetter_2637/nav/proced.htm#load

5.3 Installing the Separator Arm Extension Tabs

To improve supports for the Bay 1 plates, add two extension tabs to the separator arms.

Part number	Part Description	Qty
252-12389A	FAB, SEP ARM EXTENSION TAB, DB, NWP	2
52-5161	SCRW,M3*5,SOCK,FLT,S,BLK	2

1. Without removing the separator from the Trendsetter NEWS machine, use the following tools to create a M3 tap hole with a small countersink on each separator arm. (Ensure that the machine is well covered to prevent metal shavings falling into it.)
   - Center drill
   - ∅2.5mm drill bit
   - M3 tap and tapping tool
   - ∅1/4” countersink tool
   - Electric drill

   See Figure 4.

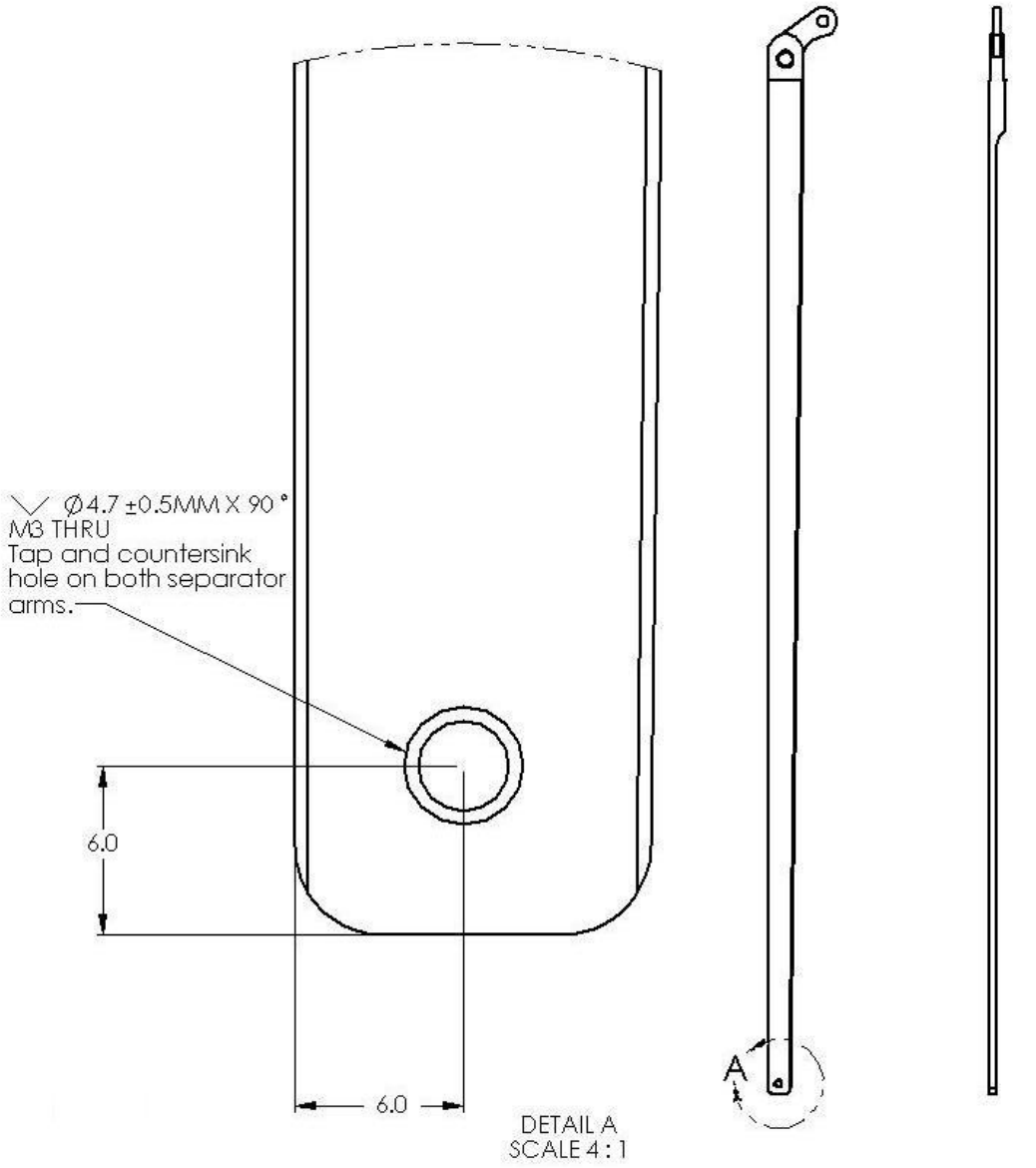


Figure 4: Creating a countersunk M3 tap hole at the ends of the dual-bay separator arms

2. Attach the separator arm extension tab to the separator arms using the M3 x 5 screws through the M3 tap holes. Apply Loctite 380 or equivalent on the surfaces between the separator arm extender tabs and the separator arms to ensure proper bonding between the two parts. See Figure 5.

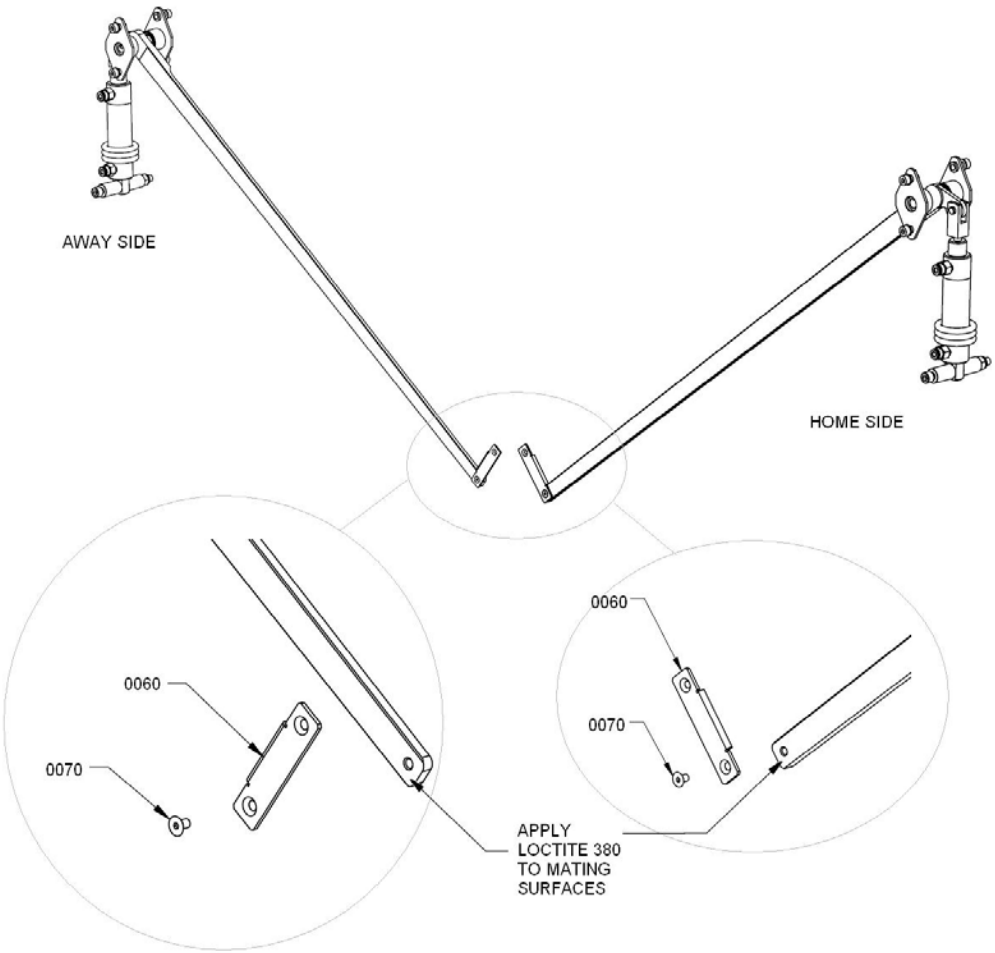


Figure 5: Attaching the extension tabs to the dual-bay separator arms

5.4 Upgrading the Firmware

Part Number	Part Name	Qty
N/A	1.42.15 dual-bay patch	1

Firmware patch **1.42.15** (also included as part of MCE Controlled Release 5.1) makes possible the following functional changes to the Trendsetter NEWS Dual-bay machine:

- After each time the bay is switched from Bay 2 to Bay 1, the plate ledge stackers will be activated to push the remaining Bay 2 plate stack all the way to the back of the Bay 2. This way, the Bay 2 plate stack will always be in a tightly stacked condition, preventing Bay 2 plates from being blown out and expended towards the back of Bay 1 plate by the airjets. This contact between Bay 1 and Bay 2 plate can cause Bay 2 plate scratching when Bay 1 plate is being picked and load into the drum.
- After each time the bay is switched from Bay 1 to Bay 2, the plate ledge stacker will be deactivated to allow for free, uninterrupted plate picking from Bay 2.
- During Bay 1 plate loading, the airjets on the plate ledge will be activated during the plate picking sequence, the plate insertion into drum sequence, and the plate wrapping around the drum sequence to aid separation between Bay 1 and Bay 2 plates.
- The sequence of `picker wrist out` and `picker out` during the Bay 1 plate picking sequence will be reversed during Bay 1 plate loading. This sequence has been altered in order to remove the unnecessary plate wristing motion for Bay 1, hence reducing the chance of Bay 1 plate scratching Bay 2 plates during plate loading

5.4.1 Firmware Patch Upgrade Procedure

1. Upgrade device firmware with NEWS patch **3244FMWp130*XX*.bin** main firmware.
2. Copy the executable file **3244FMWp130 *XX*.bin** to a local directory (for example, **D:\Firmware**). This is the executable for the master MCE main firmware and should replace existing version.
3. In Service Shell, issue the following command to the MCE board:

   `download d:\Firmware\3244FMWp130XX.bin`

4. If the platesetter is a Trendsetter NEWS 200, copy **MSFWFMWp*XXXXX*.bin** to the same local directory (for example, **D:\Firmware**).

   In Service Shell, issue the following command to the MCE2 board:

   `download d:\Firmware\MSFWFMWpXXXXX.bin`

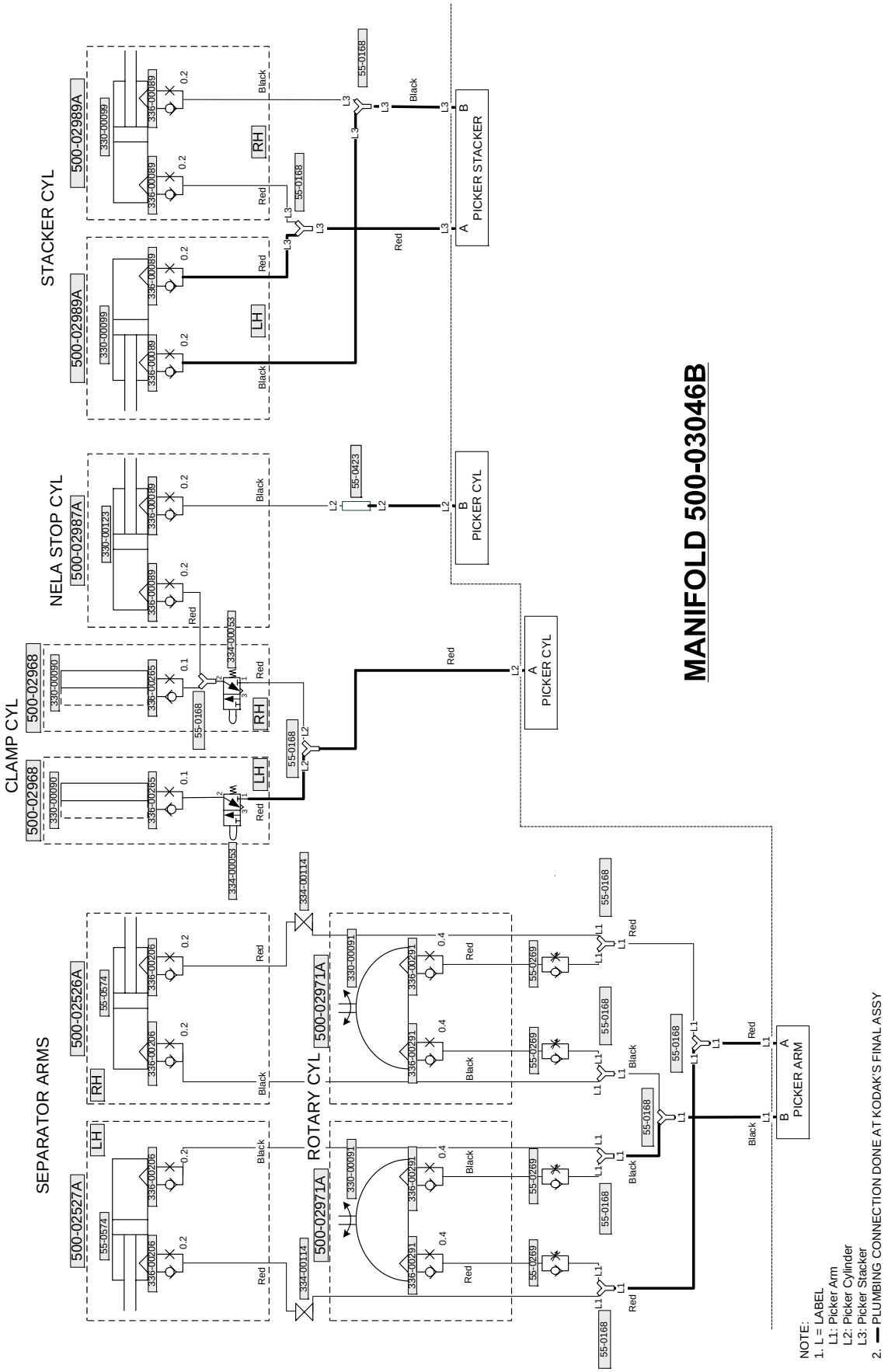
5. Make sure both the Preloader and Dual-Bay options are enabled as shown below, using the **`option`** command in Service Shell:

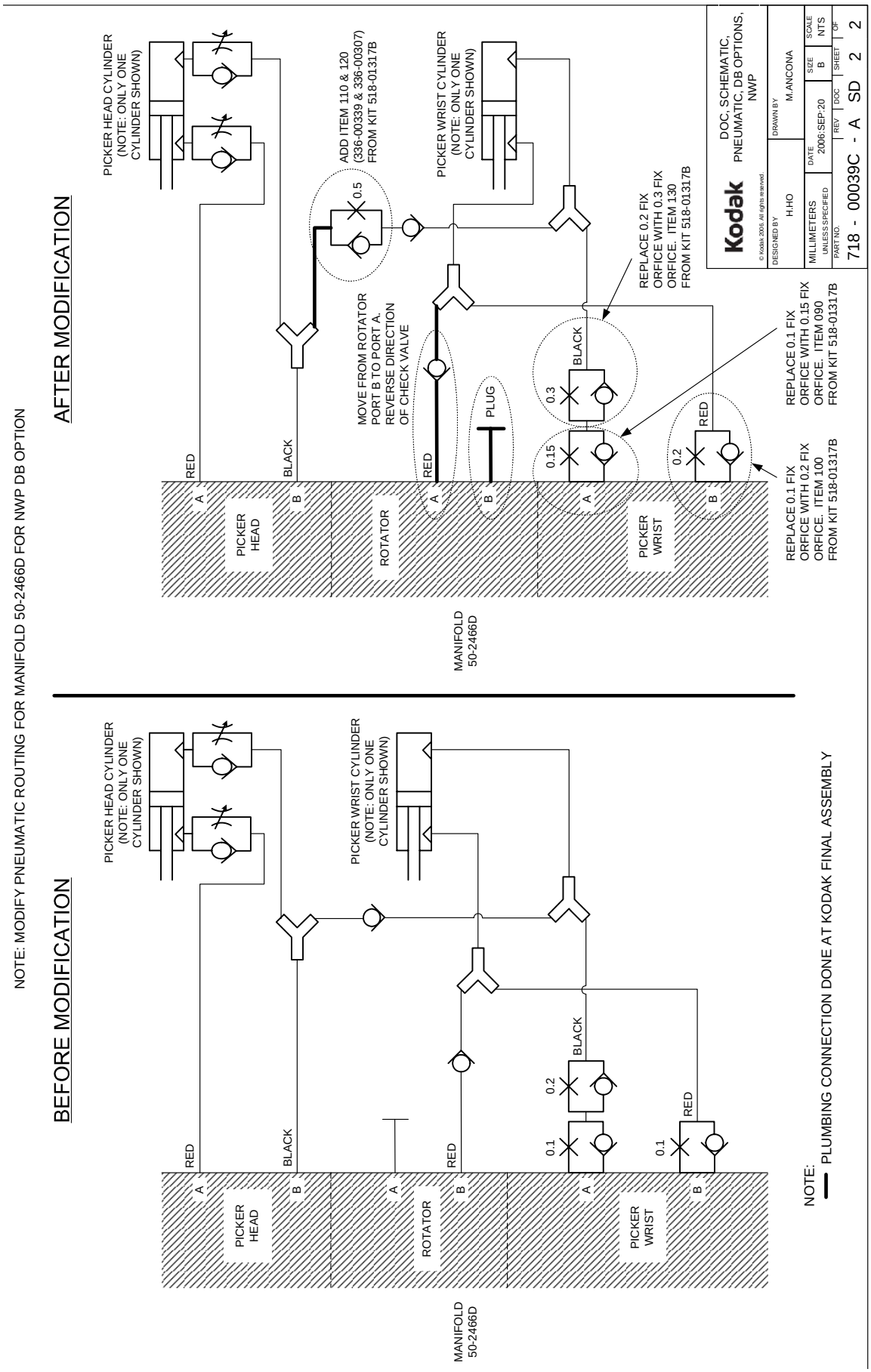
```
NEWS>> option
Available Options
-----------------
        Autoloader option is enabled
        Dual-plate option is enabled
           Rotator option is disabled
        Film-guide option is disabled
     Unload-offset option is disabled
    Separator-arms option is disabled
ProcessorInterface option is disabled
         Preloader option is enabled
         No-buzzer option is disabled
      Debris UDRCB option is disabled
      Debris UDRCL option is disabled
          Dual-bay option is enabled
  Large-Dual-plate option is disabled
*** Command Complete
```

6. MARKING THE ECO 100 LABEL

Mark #32 on the Trendsetter NEWS output device's ECO 100 label.

APPENDIX A: PNEUMATIC SCHEMATIC 718-00039C-A




NOTE: MODIFY PNEUMATIC ROUTING FOR MANIFOLD 50-2466D FOR NWP DB OPTION
AFTER MODIFICATION
PICKER HEAD CYLINDER (NOTE: ONLY ONE CYLINDER SHOWN)
ADD ITEM 110 & 120 (336-00339 & 336-00307) FROM KIT 518-01317B
PICKER WRIST CYLINDER (NOTE: ONLY ONE CYLINDER SHOWN)
0.5
MOVE FROM ROTATOR PORT B TO PORT A, REVERSE DIRECTION OF CHECK VALVE
REPLACE 0.2 FIX ORFICE WITH 0.3 FIX ORFICE. ITEM 130 FROM KIT 518-01317B
RED
BLACK
PLUG
0.3
0.15
0.2
REPLACE 0.1 FIX ORFICE WITH 0.15 FIX ORFICE. ITEM 090 FROM KIT 518-01317B
REPLACE 0.1 FIX ORFICE WITH 0.2 FIX ORFICE. ITEM 100 FROM KIT 518-01317B
A
B
PICKER HEAD
ROTATOR
PICKER WRIST
MANIFOLD 50-2466D
DOC, SCHEMATIC, PNEUMATIC, DB OPTIONS, NWP
Kodak
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DESIGNED BY H.HO
DRAWN BY M.ANCONA
MILLIMETERS UNLESS SPECIFIED
DATE: 2006:SEP:20
SIZE B
SCALE NTS
PART NO. 718 - 00039C - A
REV SD
DOC 2
SHEET 2
OF
BEFORE MODIFICATION
PICKER HEAD CYLINDER (NOTE: ONLY ONE CYLINDER SHOWN)
PICKER WRIST CYLINDER (NOTE: ONLY ONE CYLINDER SHOWN)
RED
BLACK
0.2
0.1
PICKER HEAD
ROTATOR
PICKER WRIST
MANIFOLD 50-2466D
NOTE:
PLUMBING CONNECTION DONE AT KODAK FINAL ASSEMBLY